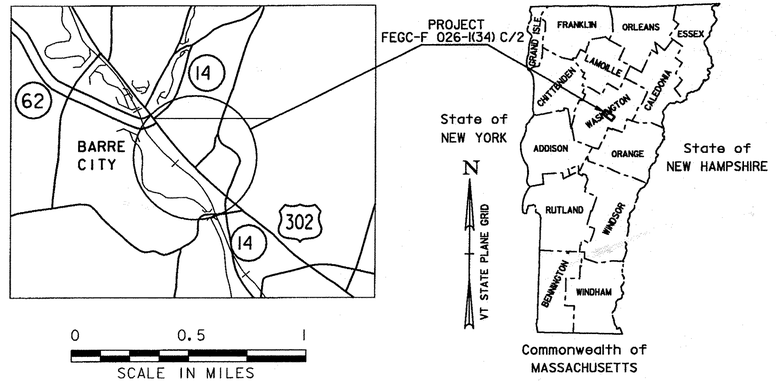
INDEX OF SHEETS

(SEE SHEET 2)

# STATE OF VERMONT
# AGENCY OF TRANSPORTATION

# PROPOSED IMPROVEMENT
# CITY OF BARRE
# COUNTY OF WASHINGTON
# U.S. RTE. 302 (MINOR ARTERIAL)




RECORD PLANS

CONTRACTOR: LUCK BROTHERS, INC. – PLATTSBURGH, NY

RESIDENT ENGINEER: RICK HALE

CONSTRUCTION BEGAN: JULY 5, 2011

CONSTRUCTION COMPLETE: JUNE 28, 2013

RECORD PLANS BY: RICK HALE & KEVIN KING

I HEREBY CERTIFY THAT ALL THE CONSTRUCTION REQUIRED BY THIS SET OF DRAWINGS HAS BEEN ACCOMPLISHED AS INDICATED HEREIN.

BY Rick Hale RESIDENT ENGINEER

DATE 05/05/2016

NOTE: Any further information concerning final quantities, amounts or other details relative to this project may be found at Central Files in the electronic archives.

PROJECT LOCATION: BEGINNING AT A POINT ON U. S. RTE. 302 IN THE CITY OF BARRE APPROXIMATELY 90 FEET WESTERLY OF THE INTERSECTION OF VT. ROUTE 62 AND NORTH MAIN STREET AND EXTENDING EASTERLY APPROXIMATELY 0.485 MILES.

PROJECT DESCRIPTION: WORK TO BE PERFORMED UNDER THIS PROJECT CONSISTS OF PAVEMENT, NEW SUBBASE, DRAINAGE, SEWER AND WATER, SIGNALIZATION, LIGHTING, SIDEWALKS, SIGNS, PAVEMENT MARKINGS, LANDSCAPING, AND OTHER RELATED ROADWAY ITEMS.

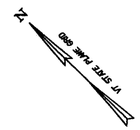
LENGTH OF PROJECT: 2,560 FT. = 0.485 MILES

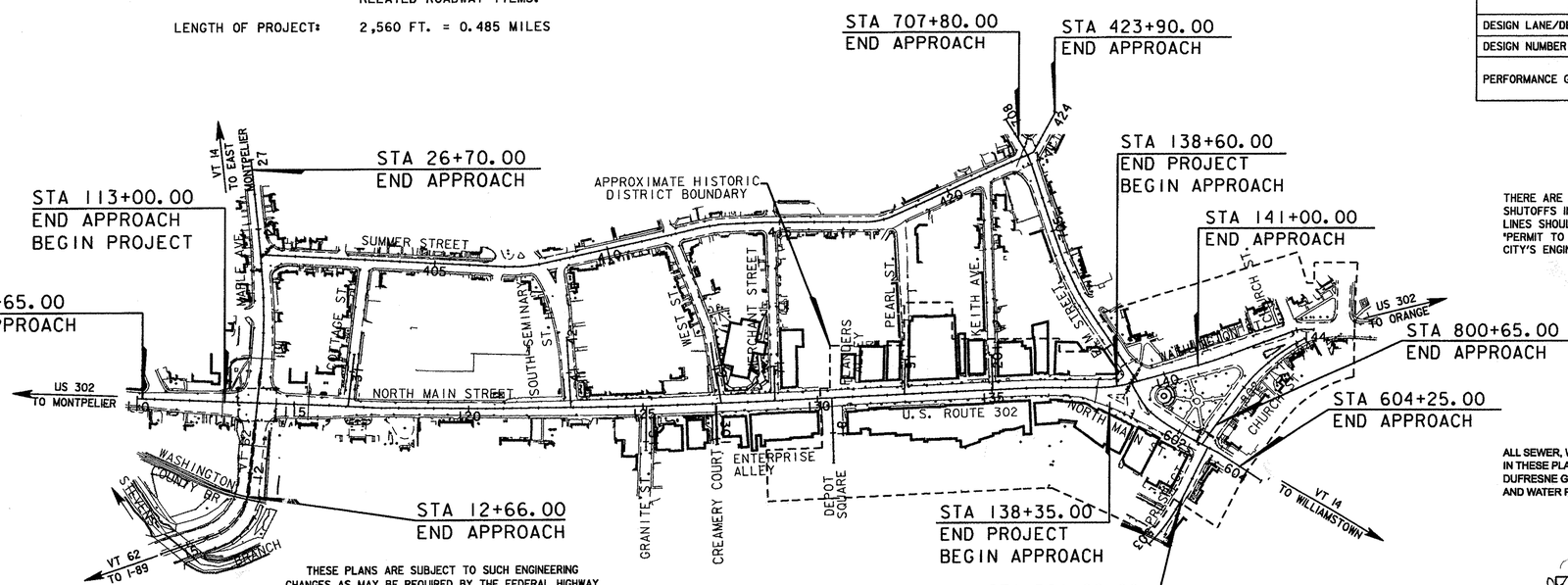
TRAFFIC DATA

2011 - AADT 18,200
2031 - AADT 20,000
2031 - ADTT 2700
2031 - DHV 1500
2031 - D% 54
2031 - T% 7.0

2031 - 20 YEARS ESAL's 10,913,000
2051 - 40 YEARS ESAL's 26,848,000

| SUPERPAVE BITUMINOUS CONCRETE PAVEMENT MIXTURE DESIGN CRITERIA | |
|---|---|
| DESIGN LANE/DESIGN LIFE ESALS | 5,893,000 |
| DESIGN NUMBER OF GYRATIONS | 80 |
| PERFORMANCE GRADE ASPHALT BINDER | SEE SECTION 490 GENERAL SPECIAL PROVISIONS |




QUALITY ASSURANCE PROGRAM: LEVEL 2

## CONVENTIONAL SYMBOLS

COUNTY LINE
TOWN LINE
LIMITS OF ACCESS
POINT OF ACCESS
FENCE LINE
STONE WALL
TRAVELED WAY
GUARD RAIL
RAILROAD
SURVEY LINE
CULVERT
POWER POLE
TELEPHONE POLE
TREES
CONTROL OF ACCESS
PROPERTY LINE
R.O.W. TAKING LINE
SLOPE RIGHTS (SR SR SR)
TOP OF CUT
TOE OF SLOPE

SURVEYED BY : VSE, Inc.
SURVEYED DATE : 1990, 2004

DATUM
VERTICAL NAVD 1929
HORIZONTAL NAD 27

THESE PLANS ARE SUBJECT TO SUCH ENGINEERING CHANGES AS MAY BE REQUIRED BY THE FEDERAL HIGHWAY ADMINISTRATION OR THE DIRECTOR OF PROGRAM DEVELOPMENT.

CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2006, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON JUNE 15, 2006 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.

**CAUTION**

THERE ARE ABANDONED INACTIVE UNDERGROUND GAS LINES AND SHUTOFFS IN PROJECT AREA. WHEN THEY ARE ENCOUNTERED THE LINES SHOULD BE HANDLED ACCORDING TO THE CITY OF BARRE'S "PERMIT TO WORK WITHIN RIGHT-OF-WAY", BY CONTACTING BARRE CITY'S ENGINEERING AND WATER DEPARTMENT BEFORE BEING DISTURBED.

ALL SEWER, WATER AND ROOF DRAIN DESIGN INFORMATION CONTAINED IN THESE PLANS HAS BEEN INDEPENDENTLY PROVIDED BY THE DUFRESNE GROUP CONSULTING ENGINEERS, AS SHOWN ON THE SEWER AND WATER PLANS PROVIDED HEREIN BY THE DUFRESNE GROUP

STATE OF VERMONT DANIEL M. PEARL NO. 010.0007.LIC PROFESSIONAL ENGINEER
3-24-2011

PLANS PREPARED BY:

VHB Vanasse Hangen Brustlin, Inc.

DIRECTOR OF PROGRAM DEVELOPMENT
APPROVED [signature] DATE 3-25-2011

PROJECT MANAGER : KEN UPMAL, P.E.

PROJECT NAME : BARRE CITY
PROJECT NUMBER : FEGC F 026-I(34) C/2

SHEET 1 OF 339 SHEETS

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## ADDITIONAL SYMBOLS

EXIST. STREET LIGHT

EXISTING SURVEY CONTROL POINTS

PROP. ORNAMENTAL STREET LIGHT

PROP. SIGNAL POLE W/LUMINAIRE

FIRE CALL BOX — FB

PROPOSED GRANITE POST AND CHAIN FENCE

EXISTING TREE TO BE REMOVED — R

PROPOSED DECIDUOUS TREE

PROPOSED DECIDUOUS TREE WITH 4'X5' TREE PIT

PROPOSED SHRUB

PROPOSED TREE PIT OR TREE LOCATION

COBBLESTONE PAVERS

IMPRINTED 5" CONCRETE SIDEWALK

CU STRUCTURAL SOIL LIMITS

SCORED CONCRETE SIDEWALK

PROPOSED STEEL BENCH WITH BACK

PROPOSED STEEL BENCH WITHOUT BACK

PROPOSED PARKING METER POST

PROPOSED TRASH RECEPTACLE — TR

PROPOSED BICYCLE RACK — UBR

PROPOSED FIRE HYDRANT

PROPOSED PULL BOX — PB

PROPOSED RECEPTACLE, WATERPROOF, DUPLEX, GFI

PROPOSED LIGHTING CONDUIT

PROPOSED WATER LINE — PW — PW —

PROPOSED SEWER LINE — PS — PS —

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_IND_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
INDEX OF SHEETS

PLOT DATE: 3/23/2011
DRAWN BY: DMP / JAR
CHECKED BY:

## MATERIAL TOLERANCES

| MATERIAL ITEM | THICKNESS TOLERANCE |
|---|---|
| PAVEMENT (TOTAL DEPTH) | ¾" |
| SUBBASE (TOTAL DEPTH) | 1" |
| SAND (TOTAL DEPTH) | 1" |

## SEEDING FORMULA URBAN AREAS

| % WT. | LBS./A. | NAME | PUR % | GERM % |
|---|---|---|---|---|
| 42.5 | 34.0 | CREEPING RED FESCUE | 98 | 85 |
| 10.0 | 8.0 | PERENNIAL RYE GRASS | 95 | 90 |
| 42.5 | 34.0 | KENTUCKY BLUE GRASS | 85 | 85 |
| 5.0 | 4.0 | ANNUAL RYE GRASS | 95 | 85 |
| 100.00 | 80.0 | | | |

## GENERAL NOTES

SEED MIXTURE: SHALL NOT HAVE A WEED CONTENT EXCEEDING 0.40% BY WEIGHT ON EXISTING PAVEMENT SURFACES AND SHALL BE FREE OF ALL NOXIOUS SEED.

SEED: TO BE APPLIED PER SEEDING FORMULA OR AS DIRECTED BY THE ENGINEER.

FERTILIZER: FORMULA 10-20-10, TO BE USED WITH SEED, APPLIED AT THE RATE OF 500 LBS./ACRE. (HYDRO SEEDERS MAY USE 19-19-19 FORMULA).

AGRICULTURAL LIMESTONE: TO BE APPLIED AT THE RATE OF 2 TONS/ACRE, OR AS DIRECTED BY THE ENGINEER.

HAY MULCH: TO BE PLACED ON EARTH SLOPES AT THE RATE OF 2 TONS/ACRE, OR AS DIRECTED BY THE ENGINEER.

TOPSOIL: TO BE USED WITH SEED AS INDICATED ON THE PLANS, OR AS DIRECTED BY THE ENGINEER.

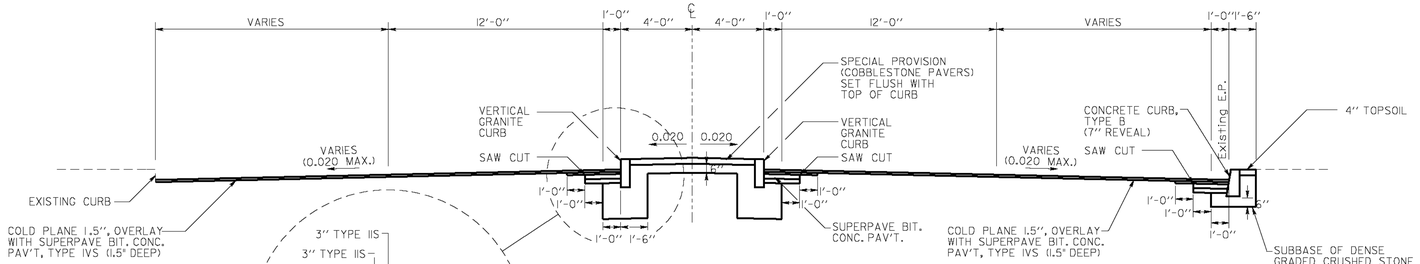
TACK COAT: EMULSIFIED ASPHALT IS TO BE APPLIED AT THE RATE OF 0.025 GAL/SY ON EXISTING PAVEMENT AND BETWEEN SUCCESSIVE COURSES OF PAVEMENT OR AS DIRECTED BY THE ENGINEER.

THE PROPOSED PAVEMENT OVERLAYS AND PAVEMENT WIDENINGS SHALL MATCH THE EXISTING ROADWAY CROSS SLOPES.

SIDEWALK RAMP DETECTABLE WARNING SURFACES SHALL BE TRUNCATED DOME DETECTABLE WARNING CAST IRON PLATES, PAINTED YELLOW. THE PLATES SHALL BE MANUFACTURED BY NEENAH FOUNDRY, OR ANOTHER EQUAL CAST IRON PLATE PRODUCT FROM THE AGENCY'S APPROVED PRODUCTS LIST.

SAWCUT OF EXISTING PAVEMENT OR SIDEWALK SHALL BE INCIDENTAL TO ALL EXCAVATION ITEMS (TYP).

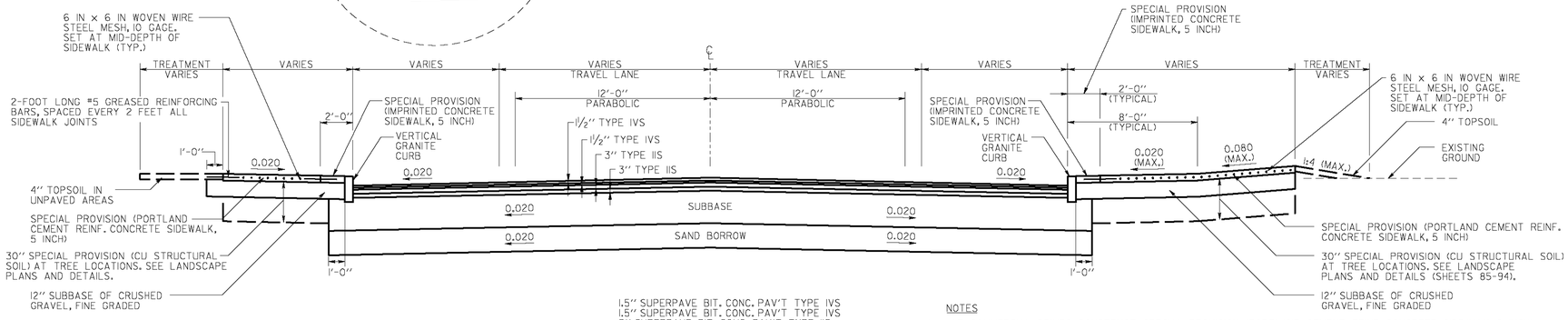
ALL THE EXISTING PAVEMENT WITHIN THE "PROJECT" LIMITS SHALL BE COLD-PLANED TO ITS FULL DEPTH.




1.5" SUPERPAVE BIT. CONC. PAV'T TYPE IVS
1.5" SUPERPAVE BIT. CONC. PAV'T TYPE IVS
3" SUPERPAVE BIT. CONC. PAV'T TYPE IIS
3" SUPERPAVE BIT. CONC. PAV'T TYPE IIS
24" SUBBASE OF DENSE GRADED CRUSHED STONE

VERMONT ROUTE 62

N.T.S.

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3" SUPERPAVE BIT. CONC. PAV'T TYPE IIS
24" SUBBASE OF DENSE GRADED CRUSHED STONE
18" SAND BORROW

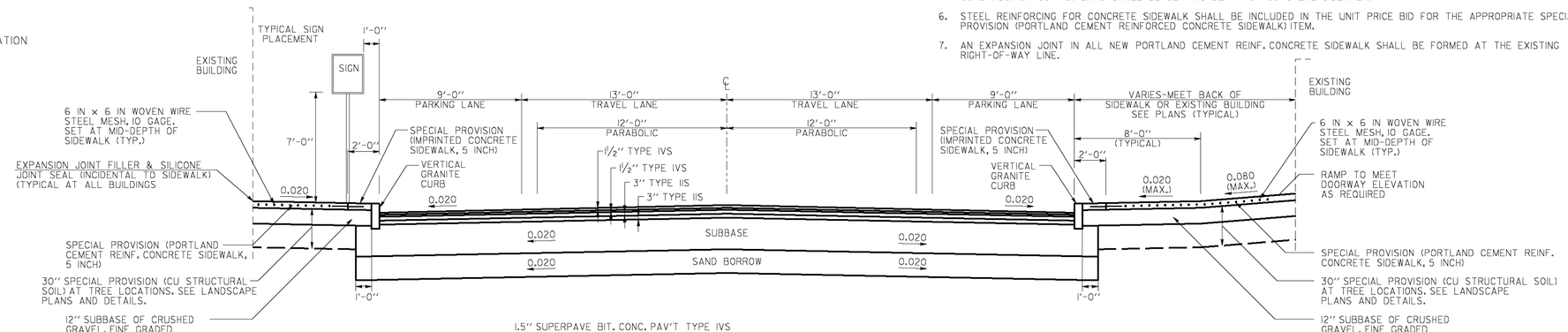
U.S. ROUTE 302 / NORTH MAIN STREET

STA. 113+00 TO STA. 123+25
STA. 136+65 TO STA. 138+60

N.T.S.

NOTES

1. AT COMMERCIAL DRIVES CONSTRUCT SPECIAL PROVISION (PORTLAND CEMENT REINF. CONCRETE SIDEWALK, 8 INCH) OVER 12" SUBBASE OF CRUSHED GRAVEL, FINE GRADED.
2. DURING CONSTRUCTION, EXISTING COBBLESTONES AND A CONCRETE BASE ARE EXPECTED TO BE FOUND WITHIN THE EXISTING PAVEMENT ALONG THE NORTH MAIN STREET CORRIDOR.
3. CONTRACTOR SHALL COORDINATE THE REMOVAL OF THE EXISTING COBBLESTONES WITH THE CITY OF BARRE. ANY COBBLES NOT REMOVED BY THE CITY SHALL BE REMOVED AT THE CONTRACTOR'S EXPENSE UNDER THE APPROPRIATE CONTRACT ITEMS.
4. ANY REMAINING EXISTING CONCRETE SUBBASE FOUND DURING THE ROADWAY CONSTRUCTION SHALL BE REMOVED AND PAID FOR UNDER ITEM 203.16 - SOLID ROCK EXCAVATION.
5. INSTALL 2-FOOT LONG #5 SMOOTH REINFORCING BARS, GREASED, SPACED 2-FEET APART AT ALL CONCRETE SIDEWALK CONSTRUCTION JOINTS. BARS SHALL BE SET MID-DEPTH OF CONCRETE SIDEWALK.
6. STEEL REINFORCING FOR CONCRETE SIDEWALK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE APPROPRIATE SPECIAL PROVISION (PORTLAND CEMENT REINFORCED CONCRETE SIDEWALK) ITEM.
7. AN EXPANSION JOINT IN ALL NEW PORTLAND CEMENT REINF. CONCRETE SIDEWALK SHALL BE FORMED AT THE EXISTING RIGHT-OF-WAY LINE.

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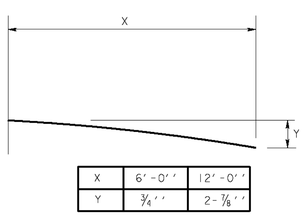
3" SUPERPAVE BIT. CONC. PAV'T TYPE IIS
24" SUBBASE OF DENSE GRADED CRUSHED STONE
18" SAND BORROW

U.S. ROUTE 302 / NORTH MAIN STREET

STA. 123+25 TO STA. 136+65
N.T.S.

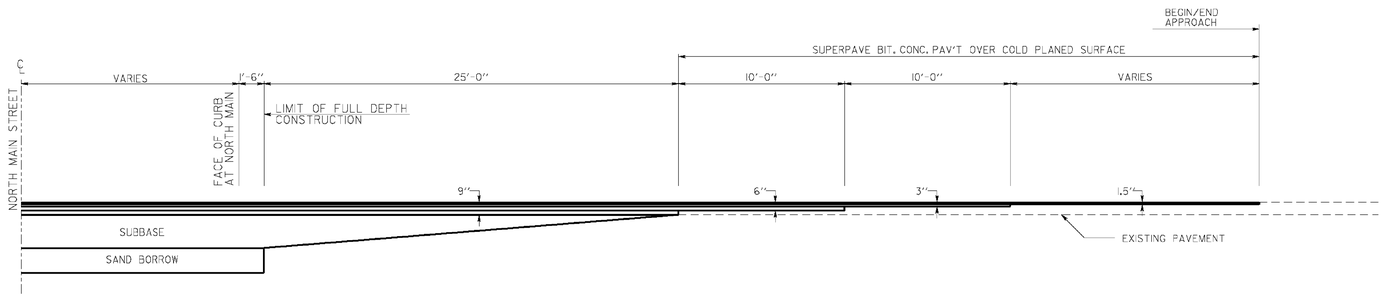



| X | 6'-0" | 12'-0" |
|---|---|---|
| Y | ¾" | 2-⅞" |

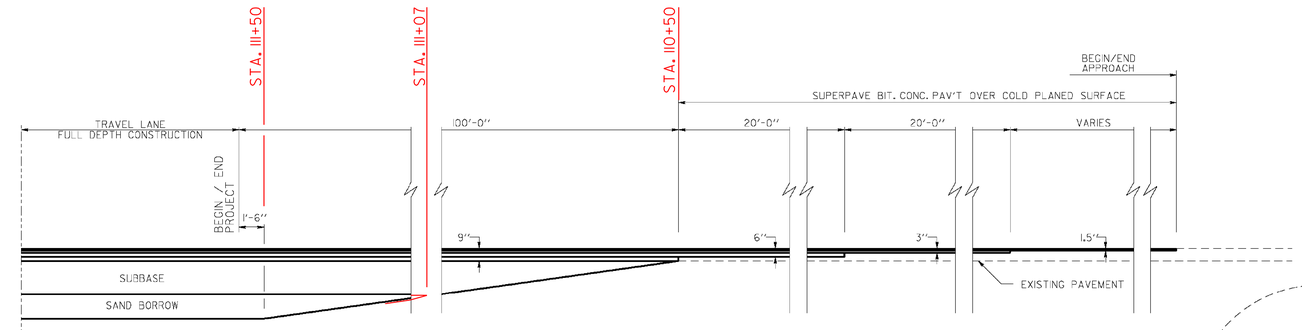
TYPICAL PARABOLIC SHAPE

| | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-1(34) C/2 |
| FILE NAME: 85D010_TYP_C2 | PLOT DATE: 3/9/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: DMP / JAR |
| DESIGNED BY: DMP / MDS | CHECKED BY: |
| TYPICAL SECTIONS #1 | SHEET 3 OF 339 |

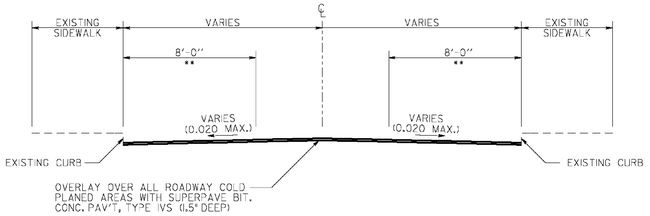
VHB Vanasse Hangen Brustlin, Inc.




SIDE STREET TRANSITION
N.T.S.



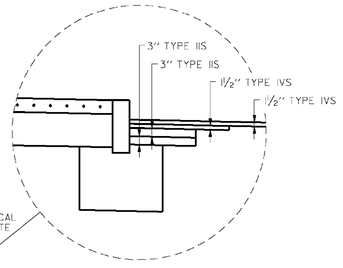

NORTH MAIN STREET TRANSITION
N.T.S.

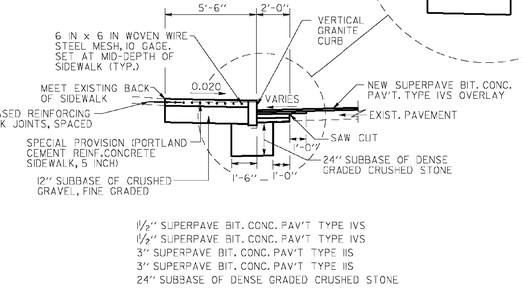



** NOTE:

THE COLD PLANING DEPTH MAY EXCEED 2" AT 8'-0" FROM THE CUTTER LINE IN ORDER TO MAXIMIZE REVEAL AT THE FACE OF EXISTING CURB (7" MAX. REVEAL).

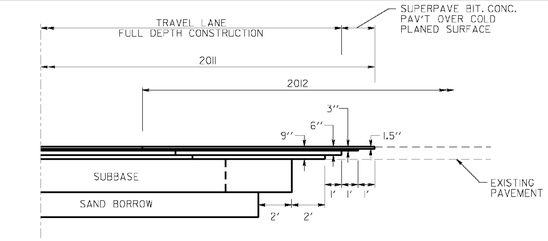
COLD PLANING / RESURFACING
SEE PLANS FOR LOCATIONS
N.T.S.



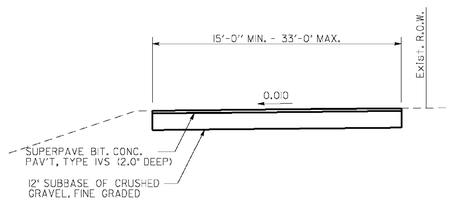




1½" SUPERPAVE BIT. CONC. PAV'T TYPE IVS
1½" SUPERPAVE BIT. CONC. PAV'T TYPE IVS
3" SUPERPAVE BIT. CONC. PAV'T TYPE IIS
3" SUPERPAVE BIT. CONC. PAV'T TYPE IIS
24" SUBBASE OF DENSE GRADED CRUSHED STONE

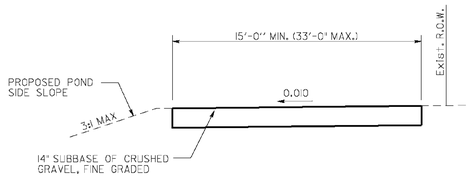
SIDEWALK CONSTRUCTION AT OVERLAY AREAS
N.T.S.



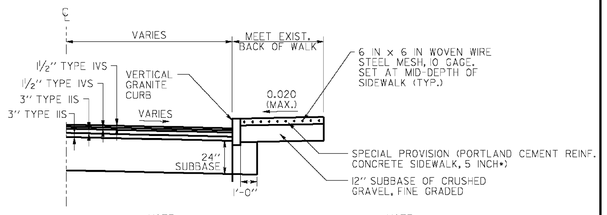

END OF SEASON PAVEMENT TRANSITION DETAIL
N.T.S.




WET POND ACCESS DRIVE (PAVED)
N.T.S.




WET POND ACCESS DRIVE (UNPAVED)
N.T.S.




NOTE:
SEE SIDE STREET TRANSITION DETAIL FOR ADDITIONAL INFORMATION

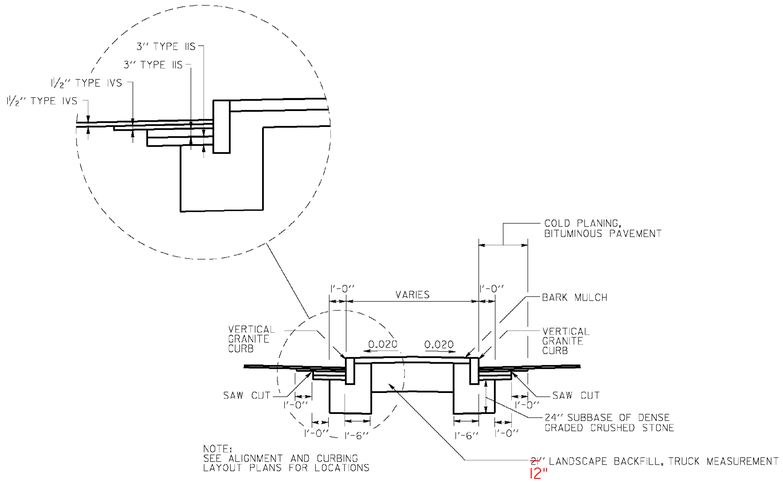
NOTE:
* AT COMMERCIAL DRIVES, USE SPECIAL PROVISION (PORTLAND CEMENT REINF. CONCRETE SIDEWALK, 8 INCH)

1½" SUPERPAVE BIT. CONC. PAV'T TYPE IVS
1½" SUPERPAVE BIT. CONC. PAV'T TYPE IVS
3" SUPERPAVE BIT. CONC. PAV'T TYPE IIS
3" SUPERPAVE BIT. CONC. PAV'T TYPE IIS
24" SUBBASE OF DENSE GRADED CRUSHED STONE

SIDE STREET (FULL DEPTH)
N.T.S.

VHB Vanasse Hangen Brustlin, Inc.

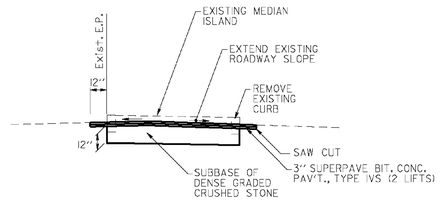
| | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-1(34) C/2 |
| FILE NAME: 85b010_TYP_C2 | PLOT DATE: 3/9/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: DMP / JAR |
| DESIGNED BY: DMP / MDS | CHECKED BY: |
| TYPICAL SECTIONS #2 | SHEET 4 OF 339 |




MEDIAN ISLAND PLANTING BED

N.T.S.

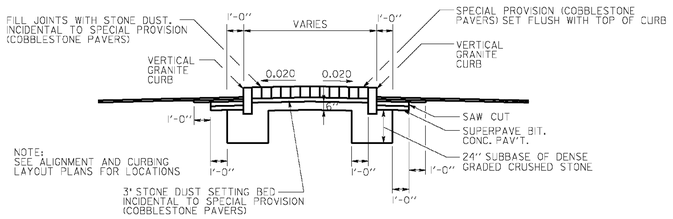
VT 62 STA 10+70 - 11+00
STA 11+52 - 11+68
MAPLE AVE. STA 20+47 - 20+75




TEMPORARY STAGING

N.T.S.

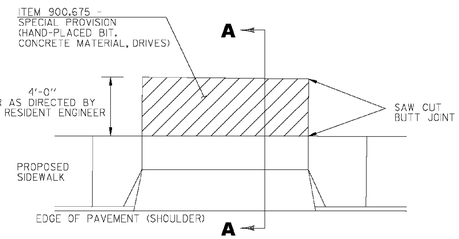
MAPLE AVE. STA 20+47 - 20+95
VT 62 STA. 10+55 - 12+63



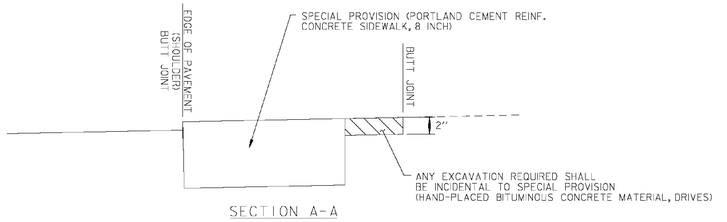

MEDIAN ISLAND COBBLESTONES

N.T.S.

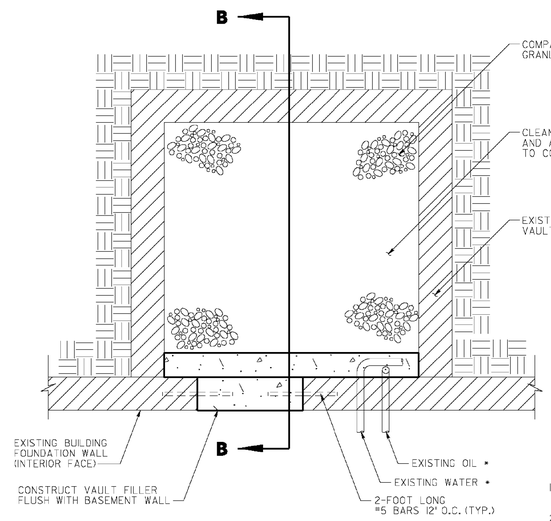
VT 62 STA 10+56 - 10+70
STA 10+82 - 11+52
STA 11+68 - 12+37
NORTH MAIN STREET STA 600+45 - 601+24




PLAN




SECTION A-A

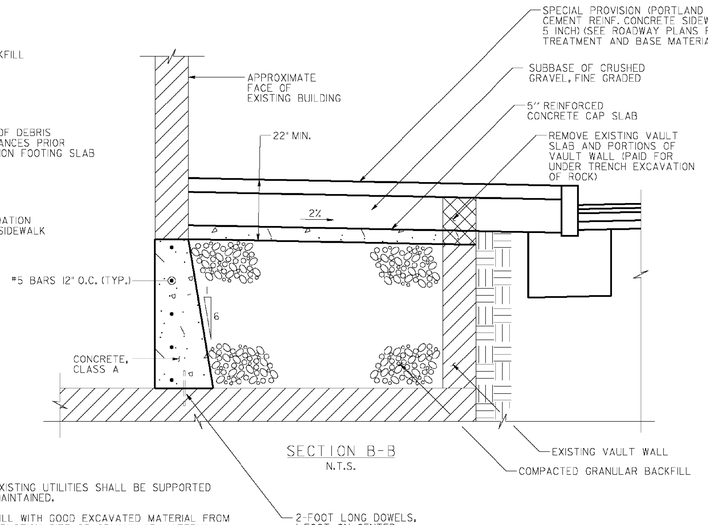



PLAN

SCHEMATIC SIDEWALK VAULT CLOSURE SECTION

N.T.S.

STA 600+50 RT.




SECTION B-B

N.T.S.

NOTES

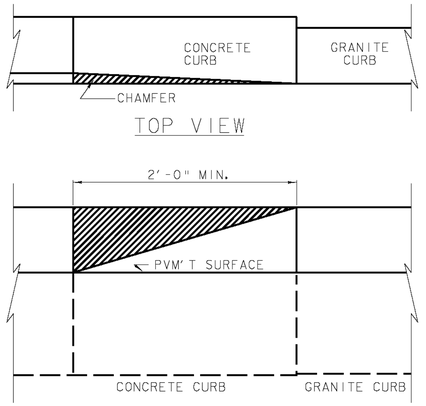
1. ALL EXISTING UTILITIES SHALL BE SUPPORTED AND MAINTAINED.
2. BACKFILL WITH GOOD EXCAVATED MATERIAL FROM CONSTRUCTION SITE, OR GRUANULAR MATERIAL (6" LIFTS), OR AS DIRECTED BY ENGINEER.
3. CONTRACTOR MAY FIND OTHER AREAS ON THE PROJECT SITE WITH SIMILAR CONDITONS UNDER THE SIDEWALK
4. ALL OF THE ABOVE WORK SHALL BE PAID UNDER THE RESPECTIVE BID ITEMS.
5. CONTRACTOR SHALL APPLY WATERPROOFING TO NEW BASEMENT CONCRETE, INCIDENTAL TO THE WORK.

HANDWORK DETAILS FOR PAVED DRIVES

| STATION | POSITION | QUANTITY (SY) |
|---|---|---|
| | | |
| 111+78 | RT | 9.9 |
| 112+02 | LT | 6.7 |
| 112+48 | LT | 14.4 |
| 112+55 | RT | 14.2 |
| SL 13+11 | RT | 319.8 |
| 114+93 | RT | 16.8 |
| 115+12 | LT | 28.7 |
| 115+60 | LT | 43.6 |
| 116+09 | LT | 52.3 |
| 116+27 | RT | 43.6 |
| 117+44 | RT | 6.5 |
| 118+49 | RT | 3.4 |
| 118+75 | RT | 241.3 |
| 120+26 | LT | 4.9 |
| 122+76 | RT | 3.3 |
| SL 41+45 | LT | 6.1 |
| 125+90 | LT | 32.0 |
| 126+49 | LT | 9.9 |
| 129+51 | LT | 3.0 |
| 131+14 | LT | 12.5 |
| 136+71 | LT | 1.7 |

VHB Vanasse Hangen Brustlin, Inc.

| | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-1(34) C/2 |
| FILE NAME: 85b010_TYP_C2 | PLOT DATE: 3/9/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: DMP / JAR |
| DESIGNED BY: DMP / MDS | CHECKED BY: |
| TYPICAL SECTIONS #3 | SHEET 5 OF 339 |

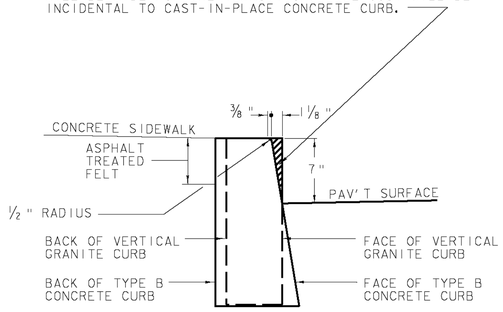



TOP VIEW




ELEVATION VIEW

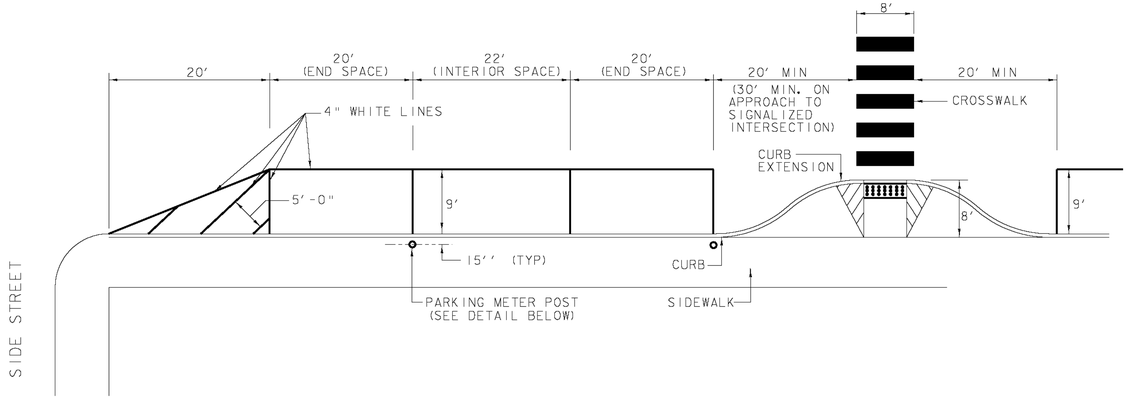
CAST CONCRETE CURB WITH CHAMFER TO MATCH GRANITE IN FIELD. CHAMFER TO MATCH AT CONCRETE/GRANITE JOINT AND BLEND TO FULL SECTION OF GRANITE CURB OVER 2'-0" MINIMUM LENGTH OF CONCRETE. NO SEPARATE PAYMENT WILL BE MADE FOR THE TRANSITION. THE COST WILL BE INCIDENTAL TO CAST-IN-PLACE CONCRETE CURB.




END VIEW

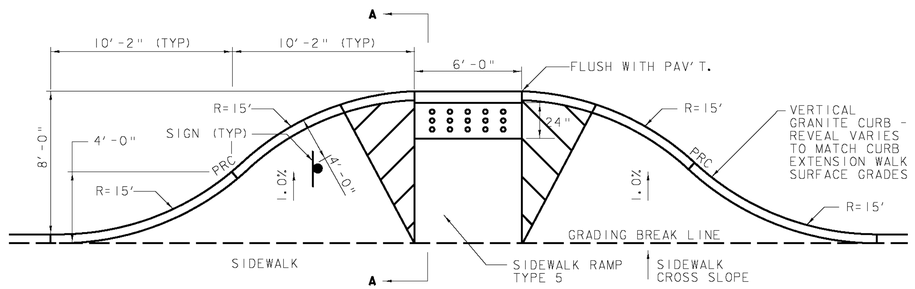
## CONCRETE TO GRANITE CURB TRANSITION
## VERMONT ROUTE 62

STA 10+64 LT
STA 11+10 RT
SIDE STREETS
N.T.S




TYPICAL PARKING SPACE AND CROSSWALK LAYOUT

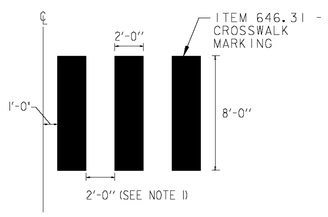
N.T.S




NOTE: REFER TO VT STANDARD SHEETS C-3A & C-3B FOR ADDITIONAL SIDEWALK RAMP CONSTRUCTION DETAILS.

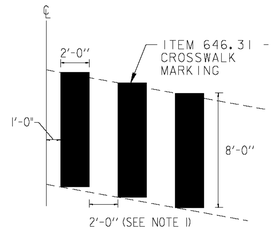
TYPICAL CURB EXTENSION

N.T.S.

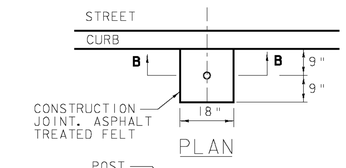



BLOCK STYLE CROSSWALK MARKING
(90 DEGREES)
N.T.S.

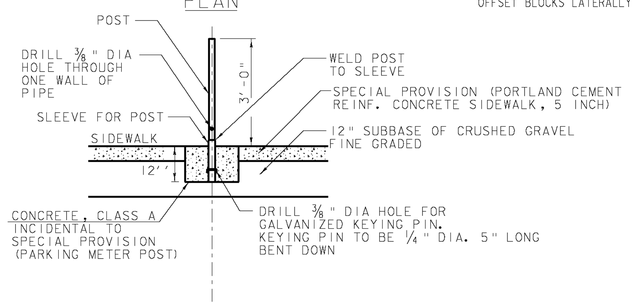
1. ADJUST SPACING (12" TO 24") TO AVOID WHEEL PATHS
2. BLOCKS SHOULD BE INSTALLED PARALLEL TO TRAFFIC FLOW. FOR SKEWED CROSSINGS, OFFSET BLOCKS LATERALLY AS NEEDED.




BLOCK STYLE CROSSWALK MARKING
(ON SKEW)
N.T.S.




PLAN



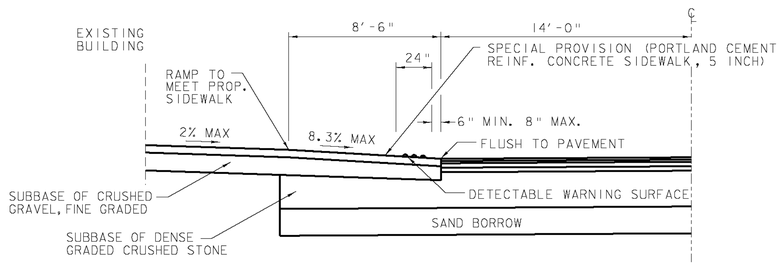

SECTION B-B

NOTE:

SEE SIGNS AND PAVEMENT MARKING PLANS FOR PARKING METER POST LOCATIONS.

PARKING METER POST INSTALLATION

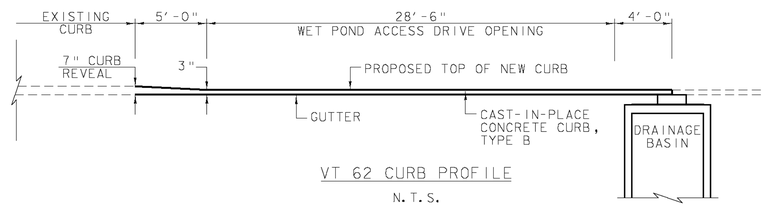
N.T.S.




NOTE:
SEE SHEETS 3-5 FOR SIDEWALK AND PAVEMENT STRUCTURES.

CURB EXTENSION SECTION A-A

N.T.S.

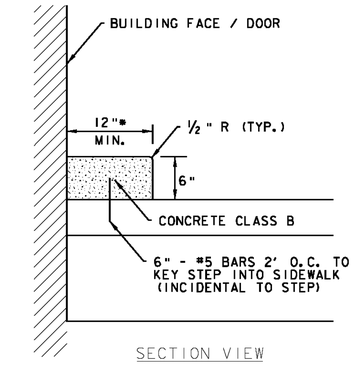



VT 62 CURB PROFILE

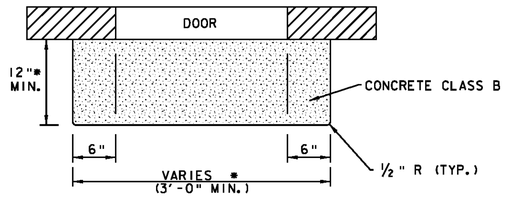
N.T.S.

| | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-1(34) C/2 |
| FILE NAME: 85D010_DET_C2 | PLOT DATE: 3/9/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: DMP / JAR |
| DESIGNED BY: DMP / MDS | CHECKED BY: |
| CONSTRUCTION DETAILS #1 | SHEET 6 OF 339 |

VHB Vanasse Hangen Brustlin, Inc.



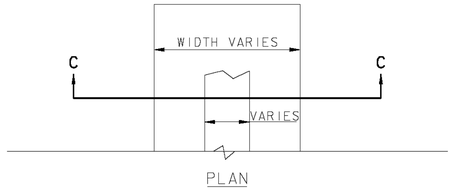

SECTION VIEW



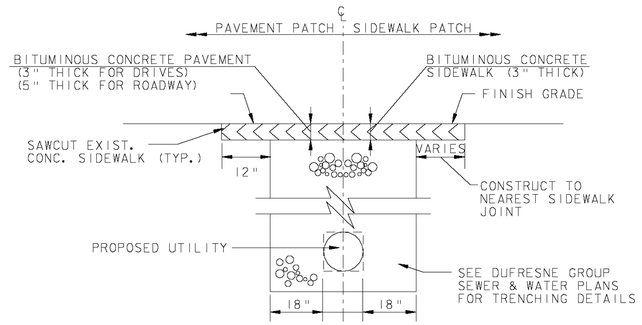

PLAN VIEW

* MATCH EXISTING
STEP DIMENSIONS

CONCRETE STEP
N.T.S.

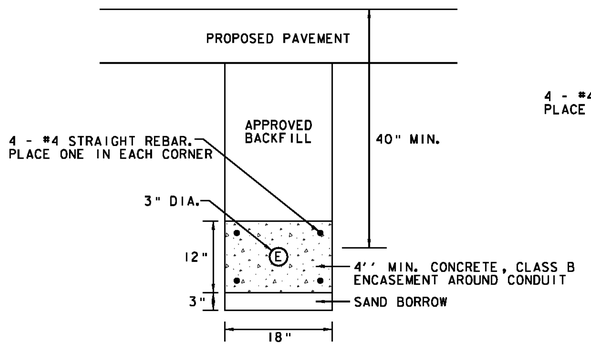



PLAN

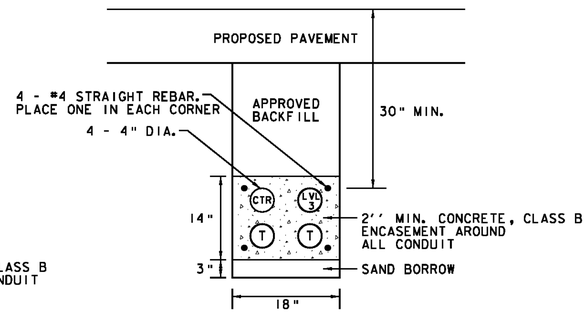



SECTION C-C

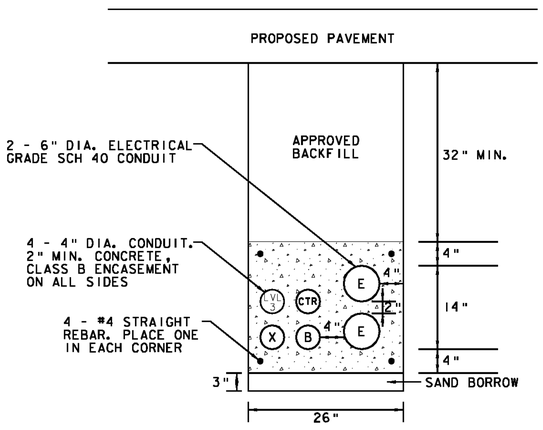
TEMPORARY BITUMINOUS CONCRETE PATCH AT UTILITY TRENCH
N.T.S.




SPECIAL PROVISION (DUCT BANK) (1 CONDUIT)
SEE GENERAL PLANS FOR LOCATIONS
N.T.S.




SPECIAL PROVISION (DUCT BANK) (4 CONDUIT)
SEE GENERAL PLANS FOR LOCATIONS
N.T.S.




SPECIAL PROVISION (DUCT BANK) (6 CONDUIT)
SEE GENERAL PLANS FOR LOCATIONS
N.T.S.

CONDUIT LEGEND

(X) (B) (T) FAIRPOINT TELECOMMUNICATIONS CONDUIT

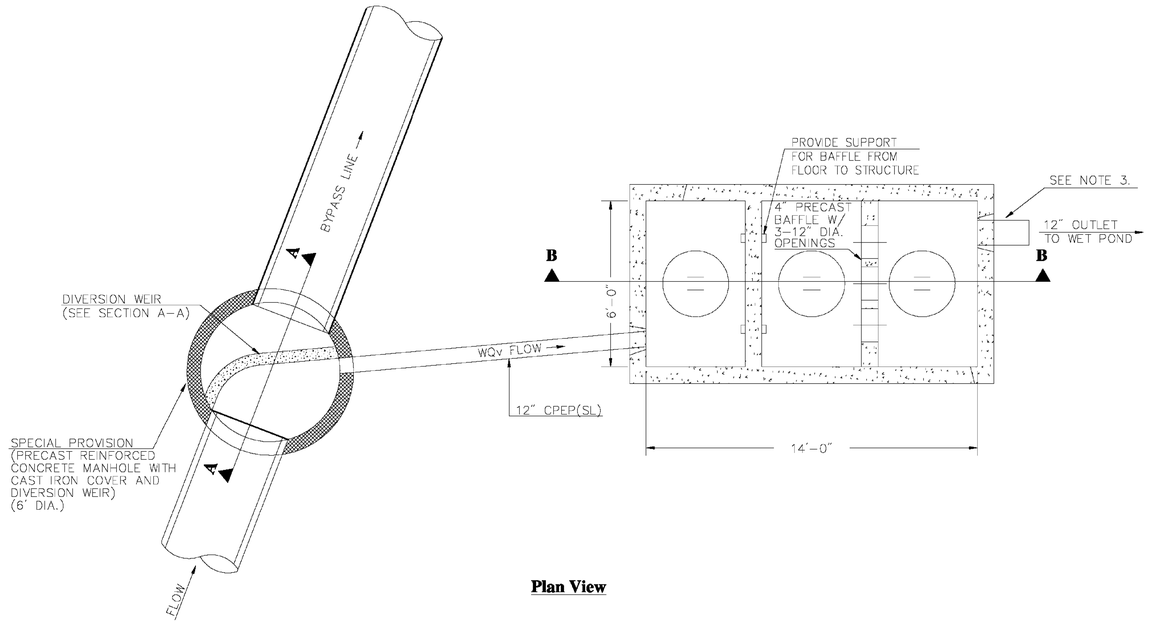
(CTR) CHARTER TELECOMMUNICATIONS CONDUIT

(LVL 3) LEVEL 3 TELECOMMUNICATIONS CONDUIT

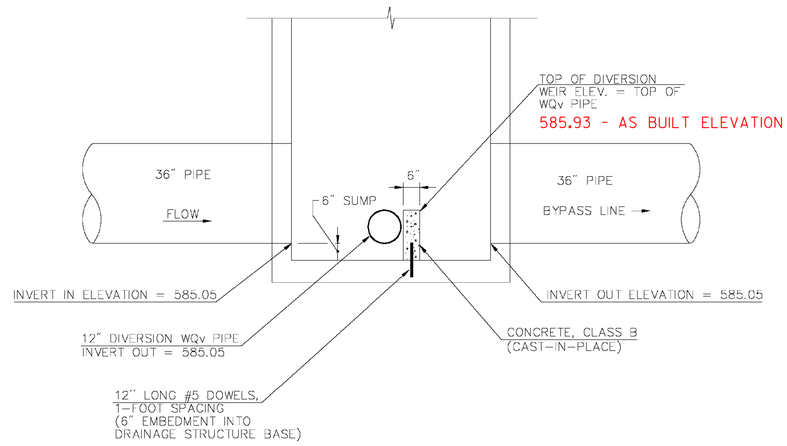
(E) GREEN MOUNTAIN POWER ELECTRICAL CONDUIT

VHB Vanasse Hangen Brustlin, Inc.

| | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-1(34) C/2 |
| FILE NAME: 85b010_DET_C2 | PLOT DATE: 3/21/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: DMP / JAR |
| DESIGNED BY: DMP / MDS | CHECKED BY: |
| CONSTRUCTION DETAILS #2 | SHEET 7 OF 339 |

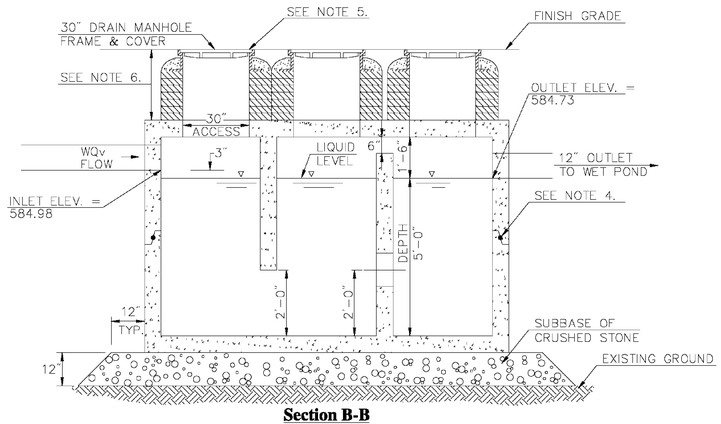



**Plan View**




**Section A-A**

SPECIAL PROVISION (PRECAST REINFORCED CONCRETE MANHOLE WITH CAST IRON COVER AND DIVERSION WEIR) (6' DIA.)




**Section B-B**

## Notes:

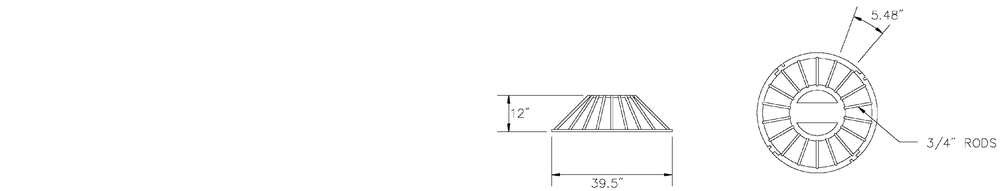
1. PARTICLE SEPARATOR SHALL BE A PRECAST TANK WITH PRECAST BAFFLES AS SHOWN.
2. STRUCTURES SHALL BE DESIGNED FOR HS-20 LOADING.
3. PROVIDE "V" KNOCKOUTS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE. MORTAR ALL PIPE CONNECTIONS.
4. JOINT SEALANT BETWEEN ALL SECTIONS SHALL BE PREFORMED BUTYL RUBBER
5. DRAIN MANHOLE FRAME AND COVER SHALL BE SET IN FULL MORTAR BED. ADJUST TO GRADE WITH EITHER GRADE RINGS OR A SYNTHETIC RISER WITH ADHESIVE
6. PRECAST CONCRETE RISERS SHALL BE USED TO BRING MANHOLE FRAMES AND COVERS TO FINISHED GRADE WHEN DEPTH TO TOP OF STRUCTURE EXCEEDS 24 INCHES.

# Special Provision (Off-Line Particle Separator)

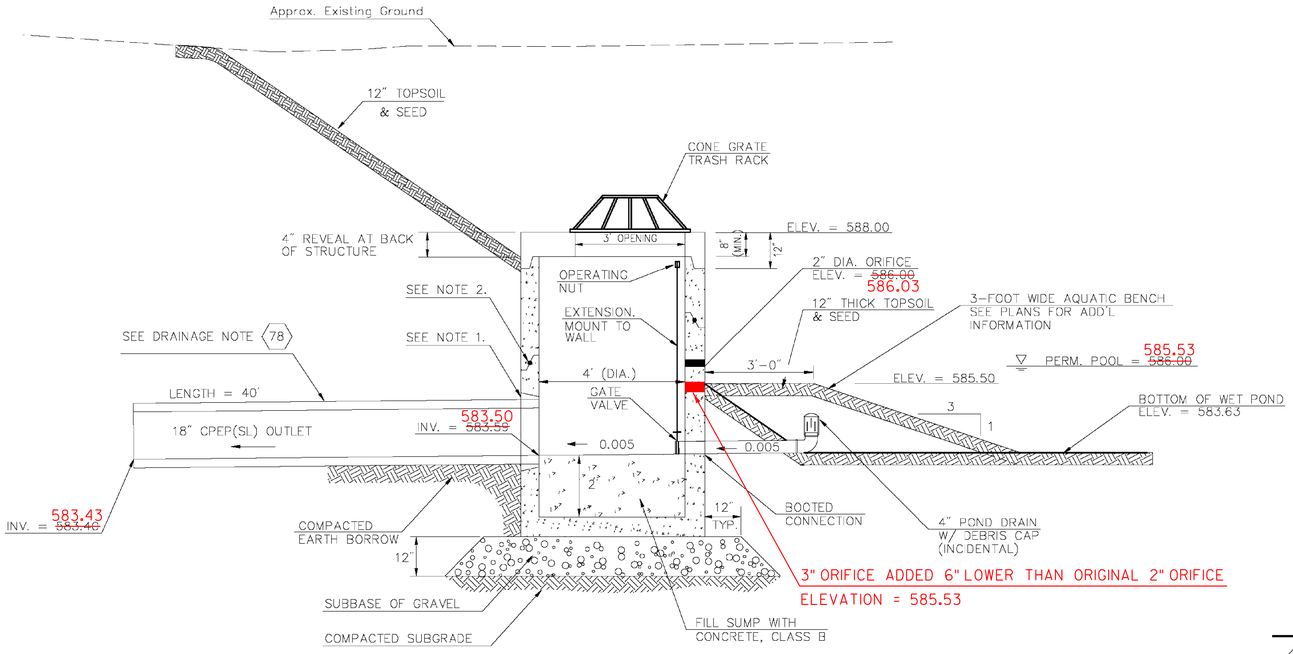
**N.T.S.**

VHB Vanasse Hangen Brustlin, Inc.

| | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-1(34) C/2 |
| FILE NAME: z85b010_DDET_C2.dgn | PLOT DATE: 3/21/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: DMP / JAR |
| DESIGNED BY: DMP / MDS | CHECKED BY: |
| DRAINAGE DETAILS #1 | SHEET 8 OF 339 |




STEEL CONE GRATE TRASH RACK DETAIL
NTS

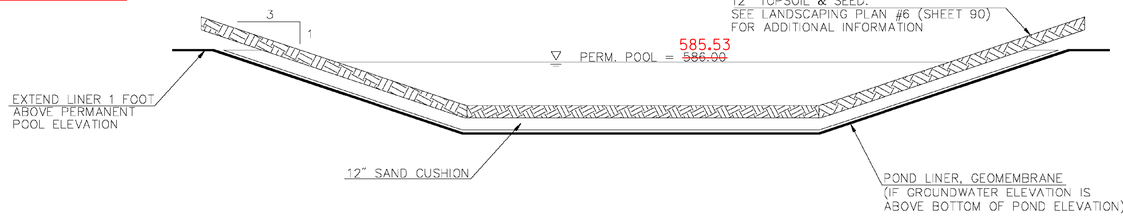



**Notes:**

1. PROVIDE "V" KNOCKOUTS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE. MORTAR ALL PIPE CONNECTIONS.
2. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PREFORMED BUTYL RUBBER.

## Special Provision (Overflow Control Structure)

**N.T.S.**

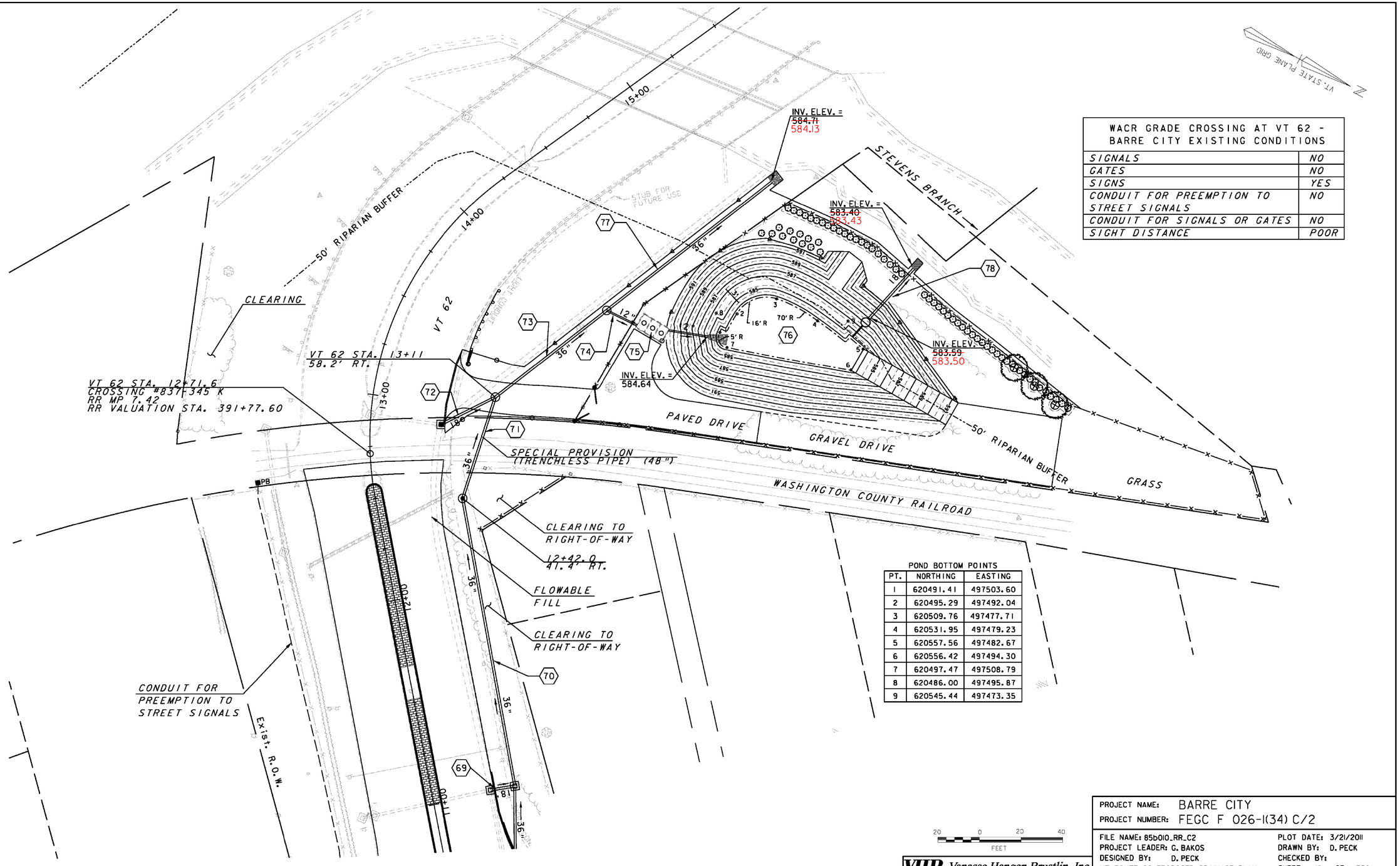



## Special Provision (Pond Liner, Geomembrane) Installation

**N.T.S.**

| | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-I(34) C/2 |
| FILE NAME: z85b010_DDET_C2.dgn | PLOT DATE: 3/21/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: DMP / JAR |
| DESIGNED BY: DMP / MDS | CHECKED BY: |
| DRAINAGE DETAILS #2 | SHEET 9 OF 339 |

VHB Vanasse Hangen Brustlin, Inc.




POND BOTTOM POINTS

| PT. | NORTHING | EASTING |
|---|---|---|
| 1 | 620491.41 | 497503.60 |
| 2 | 620495.29 | 497492.04 |
| 3 | 620509.76 | 497477.71 |
| 4 | 620531.95 | 497479.23 |
| 5 | 620557.56 | 497482.67 |
| 6 | 620556.42 | 497494.30 |
| 7 | 620497.47 | 497508.79 |
| 8 | 620486.00 | 497495.87 |
| 9 | 620545.44 | 497473.35 |

20 0 20 40
FEET

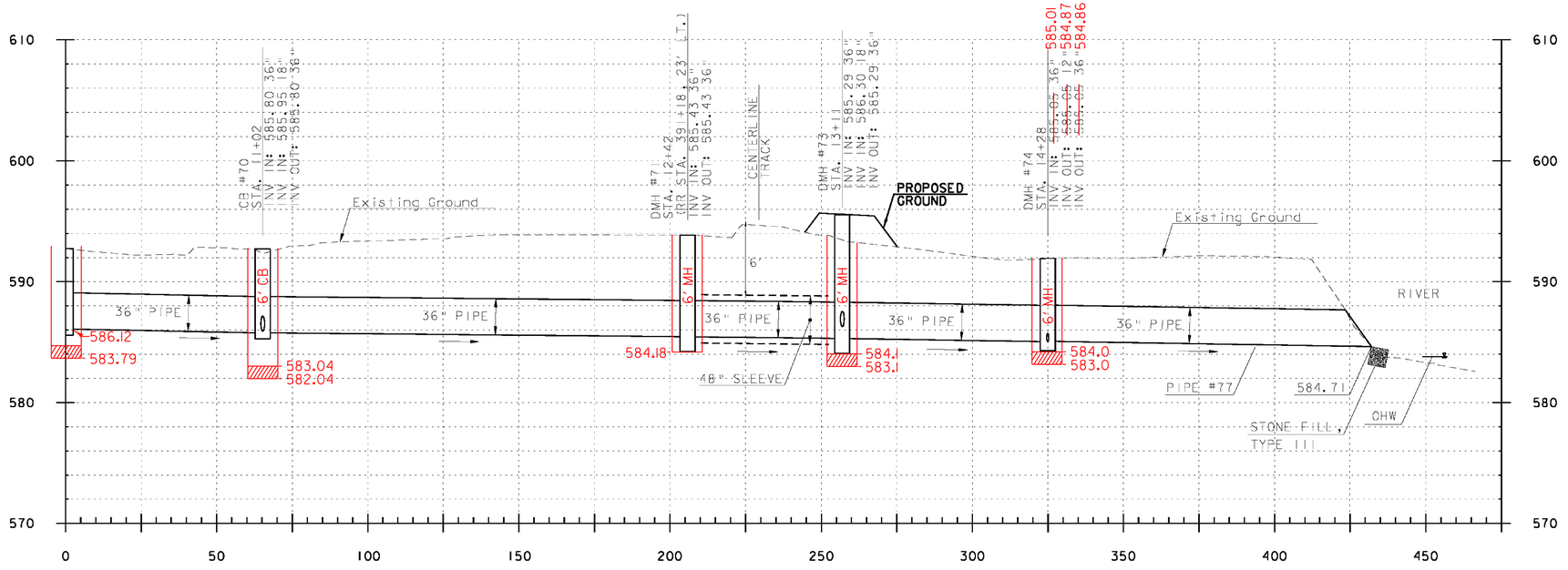
VHB Vanasse Hangen Brustlin, Inc.

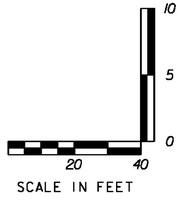
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-I(34) C/2

FILE NAME: 85b010_RR_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: D. PECK
VT ROUTE 62 PROPOSED DRAINAGE PLAN

PLOT DATE: 3/21/2011
DRAWN BY: D. PECK
CHECKED BY:
SHEET 10 OF 339

# VT 62 DRAINAGE PROFILE




DATUM

| | |
|---|---|
| VERTICAL | NAVD 1929 |
| HORIZONTAL | NAD 27 |

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

| | |
|---|---|
| FILE NAME: 85b010_RRPROF_C2 | PLOT DATE: 3/9/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: DMP / JAR |
| DESIGNED BY: DMP / MDS | CHECKED BY: |
| VT ROUTE 62 PROPOSED DRAINAGE PROFILE | SHEET 11 OF 339 |

STATE OF VERMONT
AGENCY OF
TRANSPORTATION

# QUANTITY SUMMARY SHEET

## SUMMARY OF ESTIMATED QUANTITIES

| FULL C.E. ITEMS | UTILITIES (NON-PARTICIPATING) | UTILITIES | EROSION CONTROL | LANDSCAPING | LANDSCAPING (NON-PARTICIPATING) | TRAINING | ROADWAY (NON-PARTICIPATING) | ROADWAY | GRAND TOTAL | UNIT | DESCRIPTION | ITEM NUMBER | ROUNDING |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | 1 | 1 | LS | CLEARING AND GRUBBING, INCLUDING INDIVIDUAL TREES AND STUMPS | 201.10 | - |
| | | | | | | | | 13 | 13 | EACH | REMOVING MEDIUM TREES | 201.15 | - |
| | | | | | | | | 1 | 1 | EACH | REMOVING LARGE TREES | 201.16 | - |
| | | | | | | | | 1 | 1 | EACH | REMOVING MEDIUM STUMPS | 201.20 | - |
| | | | | | | | | 27950 | 27950 | CY | COMMON EXCAVATION | 203.15 | 19.0 |
| | 100 | 100 | | | | | | 500 | 700 | CY | SOLID ROCK EXCAVATION | 203.16 | 50.0 |
| | 345 | 290 | | | | | | | 635 | CY | EXCAVATION OF SURFACES AND PAVEMENTS | 203.28 | 4.7 |
| | | | | | | | | 8000 | 8000 | CY | SAND BORROW | 203.31 | 47.3 |
| | | | | | | | | 500 | 500 | CY | GRANULAR BORROW | 203.32 | EST |
| | | | | | | | | 3800 | 3800 | CY | TRENCH EXCAVATION OF EARTH | 204.20 | 27.0 |
| | | | | | | | | 250 | 250 | CY | TRENCH EXCAVATION OF ROCK | 204.21 | 6.7 |
| | 400 | 400 | | | | | | 400 | 1200 | CY | TRENCH EXCAVATION OF EARTH, EXPLORATORY (N.A.B.I.) | 204.22 | 45.0 |
| | | | | | | | | 2000 | 2000 | CY | GRANULAR BACKFILL FOR STRUCTURES | 204.30 | 2.0 |
| | | | | | | | | 38400 | 38400 | SY | COLD PLANING, BITUMINOUS PAVEMENT | 210.10 | 37.0 |
| | | | | | | | | 1850 | 1850 | CY | SUBBASE OF CRUSHED GRAVEL, FINE GRADED | 301.26 | 48.1 |
| | | | | | | | | 10800 | 10800 | CY | SUBBASE OF DENSE GRADED CRUSHED STONE | 301.35 | 13.1 |
| | | | | | | | | 115 | 115 | CWT | EMULSIFIED ASPHALT | 404.65 | 2.8 |
| | 800 | 600 | | | | | | 60 | 1460 | TON | BITUMINOUS CONCRETE PAVEMENT | 406.25 | 2.0 |
| | | | | | | | | 1 | 1 | LU | PRICE ADJUSTMENT ASPHALT CEMENT (N.A.B.I.) | 406.50 | - |
| | | | | | | | | 12900 | 12900 | TON | SUPERPAVE BITUMINOUS CONCRETE PAVEMENT | 490.30 | 74.0 |
| | | | | | | | | 1 | 1 | LU | AIR VOIDS PAY ADJUSTMENT (N.A.B.I.) | 490.31 | - |
| | | | | | | | | 1 | 1 | LU | MAT DENSITY PAY ADJUSTMENT (N.A.B.I.) | 490.32 | - |
| | | | | | | | | 150 | 150 | LB | REINFORCING STEEL | 507.15 | 4.0 |
| | | | | | | | | 20 | 20 | LF | DRILLING AND GROUTING DOWELS | 507.16 | EST |
| | | | | | | | | 70 | 70 | LF | RESETTING RAILING | 525.11 | 2.0 |
| | | | | | | | | 5 | 5 | CY | CONCRETE, CLASS A | 541.22 | 0.4 |
| | | | | | | | | 2 | 2 | CY | CONCRETE, CLASS B | 541.25 | 0.1 |
| | | | | | | | | 40 | 40 | LF | 12" CPEP(SL) | 601.2605 | - |
| | | | | | | | | 2600 | 2600 | LF | 18" CPEP(SL) | 601.2615 | 20.0 |
| | | | | | | | | 1430 | 1430 | LF | 24" CPEP(SL) | 601.2620 | 6.0 |
| | | | | | | | | 1125 | 1125 | LF | 30" CPEP(SL) | 601.2625 | 6.0 |
| | | | | | | | | 400 | 400 | LF | 36" CPEP(SL) | 601.2630 | 13.0 |
| | | | | | | | | 100 | 100 | LF | RE-LAYING PIPE CULVERTS (18") | 601.99 | EST |
| | | | | | | | | 100 | 100 | LF | RE-LAYING PIPE CULVERTS (24") | 601.99 | EST |
| | | | | | | | | 1200 | 1200 | LF | CLEANING CULVERT PIPE IN PLACE (0-24" DIA. INCLUSIVE) | 601.995 | 38.0 |
| | | | | | | | | 67 | 67 | EACH | PRECAST REINFORCED CONCRETE DROP INLET WITH CAST IRON GRATE | 604.18 | - |
| | | | | | | | | 12 | 12 | EACH | PRECAST REINFORCED CONCRETE CATCH BASIN WITH CAST IRON GRATE | 604.20 | - |
| | | | | | | | | 13 | 13 | EACH | PRECAST REINFORCED CONCRETE MANHOLE WITH CAST IRON COVER | 604.21 | - |
| | | | | | | | | 126 | 126 | EACH | CHANGING ELEVATION OF DROP INLETS, CATCH BASINS OR MANHOLES | 604.40 | - |
| | | | | | | | | 2 | 2 | EACH | REHAB. DROP INLETS, CATCH BASINS, OR MANHOLES, CLASS I | 604.412 | - |
| | | | | | | | | 2 | 2 | EACH | REHAB. DROP INLETS, CATCH BASINS, OR MANHOLES, CLASS II | 604.415 | - |
| | | | | | | | | 34 | 34 | EACH | CHANGING ELEVATION OF SEWER MANHOLES | 604.42 | - |
| | | | | | | | | 11 | 11 | EACH | CAST IRON GRATE WITH FRAME, TYPE D | 604.47 | - |
| | | | | | | | | 2 | 2 | EACH | CAST IRON COVER WITH FRAME | 604.55 | - |

## DETAILED SUMMARY OF QUANTITIES

| QUANTITIES | UNIT | ITEMS |
|---|---|---|
| | | **COLD PLANING, BITUMINOUS PAVEMENT** |
| 729.2 | SY | NORTH MAIN STREET APPROACH |
| 843.5 | SY | WASHINGTON STREET |
| 2053.4 | SY | SOUTH MAIN STREET |
| 210.2 | SY | CHURCH STREET |
| 575.3 | SY | PROSPECT STREET |
| 1103.0 | SY | VT ROUTE 62 |
| 3207.4 | SY | MAPLE AVENUE |
| 10183.1 | SY | SUMMER STREET |
| 2903.3 | SY | ELM STREET |
| 255.5 | SY | COTTAGE STREET |
| 454.9 | SY | SOUTH SEMINARY STREET |
| 245.6 | SY | GRANITE STREET |
| 119.1 | SY | CREAMERY COURT |
| 209.9 | SY | WEST STREET |
| 122.3 | SY | MERCHANT STREET |
| 848.1 | SY | DEPOT SQUARE |
| 44.4 | SY | PEARL STREET |
| 44.8 | SY | KEITH AVENUE |
| 14210.0 | SY | NORTH MAIN STREET (COBBLESTONE REMOVAL) |
| 37.0 | SY | ROUNDING |
| **38400** | **SY** | **TOTAL** |
| | | **SUPERPAVE BITUMINOUS CONCRETE PAVEMENT** |
| 3391 | TON | FINAL ROADWAY SURFACE COURSE TYPE IVS |
| 1193 | TON | MAINLINE BINDER COURSE TYPE IVS |
| 4659 | TON | MAINLINE BASE COURSE TYPE IIS |
| 306 | TON | SIDE STREET BINDER COURSE TYPE IVS |
| 892 | TON | SIDE STREET BASE COURSE TYPE IIS |
| 10 | TON | PARKING LOT CURB INSTALLATION TYPE IVS |
| 15 | TON | PARKING LOT CURB INSTALLATION TYPE IIS |
| 836 | TON | DETOUR SHIMMING TYPE IVS |
| 1524 | TON | WINTERIZING TYPE IVS |
| 74 | TON | ROUNDING |
| **12900** | **TON** | **TOTAL** |

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: **BARRE CITY**
PROJECT NUMBER: **FEGC F 026-1(34) C/2**

FILE NAME: **z85b010_Quantity_Summary.xls**
PROJECT MANAGER: **G. BAKOS**
DESIGNED BY: **D. PECK / S. FOWLER**
**QUANTITY SHEET #1**

PLOT DATE: **3/21/2011**
DRAWN BY: **D. PECK**
CHECKED BY:
SHEET: **12** OF **339**

STATE OF VERMONT
AGENCY OF
TRANSPORTATION

# QUANTITY SUMMARY SHEET

## SUMMARY OF ESTIMATED QUANTITIES

| FULL C.E. ITEMS | UTILITIES (NON-PARTICIPATING) | UTILITIES | EROSION CONTROL | LANDSCAPING | LANDSCAPING (NON-PARTICIPATING) | TRAINING | ROADWAY (NON-PARTICIPATING) | ROADWAY | GRAND TOTAL | UNIT | DESCRIPTION | ITEM NUMBER | ROUNDING |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | 100 | 100 | HOUR | ALL PURPOSE EXCAVATOR RENTAL, TYPE I | 608.25 | EST |
| | | | | | | | | 120 | 120 | HOUR | POWER BROOM RENTAL, TYPE II | 608.31 | EST |
| | | | | | | | | 100 | 100 | HOUR | TRUCK RENTAL | 608.37 | EST |
| | | | | | | | | 1100 | 1100 | MGAL | DUST CONTROL WITH WATER | 609.10 | 18.4 |
| | | | | | | | | 20 | 20 | TON | DUST AND ICE CONTROL WITH CALCIUM CHLORIDE | 609.15 | - |
| | | | 85 | | | | | | 85 | CY | STONE FILL, TYPE I | 613.10 | 4.5 |
| | | | 5 | | | | | | 5 | CY | STONE FILL, TYPE III | 613.12 | 0.5 |
| | | | | | | | | 8150 | 8150 | LF | VERTICAL GRANITE CURB | 616.21 | 24.4 |
| | | | | | | | | 250 | 250 | LF | CAST-IN-PLACE CONCRETE CURB, TYPE B | 616.28 | EST |
| | | | | | | | | 15 | 15 | LF | REMOVING AND RESETTING CURB | 616.40 | 1.5 |
| | | | | | | | | 100 | 100 | LF | REMOVAL OF EXISTING CURB | 616.41 | EST |
| | | | | | | | | 60 | 60 | TON | BITUMINOUS CONCRETE SIDEWALK | 618.15 | 0.8 |
| | | | | | | | | 460 | 460 | SF | DETECTABLE WARNING SURFACE | 618.30 | 5.5 |
| | | | | | | | | 4 | 4 | EACH | BOLLARDS | 619.14 | - |
| | | | | | | | | 3 | 3 | EACH | YIELDING MARKER POSTS | 619.17 | - |
| | | | | | | | | 50 | 50 | LF | CHAIN-LINK FENCE, 4 FEET | 620.11 | 1.0 |
| | | | | | | | | 755 | 755 | LF | CHAIN-LINK FENCE, 8 FEET | 620.13 | 2.5 |
| | | | | | | | | 18 | 18 | LF | GATE FOR CHAIN-LINK FENCE, 8 FEET | 620.17 | - |
| | | | | | | | | 2 | 2 | EACH | BRACING ASSEMBLY FOR CHAIN-LINK FENCE, 4 FEET | 620.20 | - |
| | | | | | | | | 7 | 7 | EACH | BRACING ASSEMBLY FOR CHAIN-LINK FENCE, 8 FEET | 620.22 | - |
| | | | | | | | | 260 | 260 | LF | REMOVAL OF EXISTING FENCE | 620.55 | 1.0 |
| | | | | | | | | 1 | 1 | EACH | MANUFACTURED TERMINAL SECTION, FLARED | 621.50 | - |
| | | | | | | | | 60 | 60 | LF | REMOVAL AND DISPOSAL OF GUARDRAIL | 621.80 | 2.0 |
| | | | | | | | | 940 | 940 | LF | TEMPORARY TRAFFIC BARRIER | 621.90 | 5.0 |
| | | | | | | | | 5600 | 5600 | LF | REMOVE AND RESET TEMPORARY TRAFFIC BARRIER | 621.95 | 37.5 |
| | 100 | | | | | | | | 100 | LF | RELAYING SEWER PIPE (24") | 628.30 | - |
| | 1 | | | | | | | | 1 | LS | TRANSFER TO NEW SYSTEM, SANITARY SEWER | 628.42 | - |
| | | | | | | | | 25 | 25 | EACH | ADJUST ELEVATION OF VALVE BOX | 629.20 | - |
| | | 1 | | | | | | | 1 | LS | TRANSFER TO NEW SYSTEM, WATER SYSTEM | 629.42 | - |
| | | | | | | | | 3200 | 3200 | HR | UNIFORMED TRAFFIC OFFICERS | 630.10 | 21.0 |
| | | | | | | | | 7000 | 7000 | HR | FLAGGERS | 630.15 | - |
| 1 | | | | | | | | | 1 | LS | FIELD OFFICE, ENGINEERS | 631.10 | - |
| 1 | | | | | | | | | 1 | LS | TESTING EQUIPMENT - CONCRETE | 631.16 | - |
| 1 | | | | | | | | | 1 | LS | TESTING EQUIPMENT - BITUMINOUS | 631.17 | - |
| 9000 | | | | | | | | | 9000 | DL | FIELD OFFICE TELEPHONE (N.A.B.I.) | 631.26 | - |
| | | | | | | 1560 | | | 1560 | HR | EMPLOYEE TRAINEESHIP | 634.10 | - |
| | | | | | | | | 1 | 1 | LS | MOBILIZATION / DEMOBILIZATION | 635.11 | - |
| | | | | | | | | 1 | 1 | LS | TRAFFIC CONTROL | 641.10 | - |
| | | | | | | | | 1 | 1 | LS | PUBLIC RELATIONS OFFICER | 641.12 | - |
| | | | | | | | | 8 | 8 | EACH | PORTABLE CHANGEABLE MESSAGE SIGN | 641.15 | - |
| | | | | | | | | 4 | 4 | EACH | PORTABLE ARROW BOARD | 641.16 | - |
| | | | | | | | | 25500 | 25500 | LF | 4 INCH WHITE LINE | 646.20 | 11.0 |
| | | | | | | | | 19700 | 19700 | LF | 4 INCH YELLOW LINE | 646.21 | 40.0 |
| | | | | | | | | 90 | 90 | LF | 8 INCH WHITE LINE | 646.22 | 2.0 |

## DETAILED SUMMARY OF QUANTITIES

| QUANTITIES | UNIT | ITEMS |
|---|---|---|

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: **BARRE CITY**
PROJECT NUMBER: **FEGC F 026-1(34) C/2**

FILE NAME: **z85b010_Quantity_Summary.xls**
PROJECT MANAGER: **G. BAKOS**
DESIGNED BY: **D. PECK / S. FOWLER**
**QUANTITY SHEET #2**

PLOT DATE: **3/21/2011**
DRAWN BY: **D. PECK**
CHECKED BY:
SHEET: **13** OF **339**

STATE OF VERMONT
AGENCY OF
TRANSPORTATION

# QUANTITY SUMMARY SHEET

## SUMMARY OF ESTIMATED QUANTITIES

| FULL C.E. ITEMS | UTILITIES (NON-PARTICIPATING) | UTILITIES | EROSION CONTROL | LANDSCAPING | LANDSCAPING (NON-PARTICIPATING) | TRAINING | ROADWAY (NON-PARTICIPATING) | ROADWAY | GRAND TOTAL | UNIT | DESCRIPTION | ITEM NUMBER | ROUNDING |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | 1250 | 1250 | LF | 8 INCH YELLOW LINE | 646.23 | 42.0 |
| | | | | | | | | 1150 | 1150 | LF | 24 INCH STOP BAR | 646.26 | 41.0 |
| | | | | | | | | 265 | 265 | EACH | LETTER OR SYMBOL | 646.30 | 5 |
| | | | | | | | | 2900 | 2900 | LF | CROSSWALK MARKING | 646.31 | 30.0 |
| | | | | | | | | 12 | 12 | EACH | RAILROAD CROSSING SYMBOL | 646.32 | - |
| | | | | | | | | 8900 | 8900 | LF | TEMPORARY 4 INCH WHITE LINE | 646.600 | 57.0 |
| | | | | | | | | 12200 | 12200 | LF | TEMPORARY 4 INCH YELLOW LINE | 646.610 | 102.0 |
| | | | | | | | | 1160 | 1160 | LF | TEMPORARY 8 INCH WHITE LINE | 646.640 | 12.0 |
| | | | | | | | | 575 | 575 | LF | TEMPORARY 8 INCH YELLOW LINE | 646.650 | 2.0 |
| | | | | | | | | 475 | 475 | LF | TEMPORARY 24 INCH STOP BAR | 646.680 | 4.0 |
| | | | | | | | | 150 | 150 | EACH | TEMPORARY LETTER OR SYMBOL | 646.690 | 1.0 |
| | | | | | | | | 615 | 615 | LF | TEMPORARY CROSSWALK MARKING | 646.700 | 5.0 |
| | | | | | | | | 100 | 100 | LF | PAINTED CURB | 646.81 | EST |
| | | | | | | | | 4000 | 4000 | SF | REMOVAL OF EXISTING PAVEMENT MARKINGS | 646.85 | EST |
| | | | | | | | | 1500 | 1500 | SF | PAVEMENT MARKING MASK | 646.86 | 5.4 |
| | | | | | | | | 600 | 600 | SY | GEOTEXTILE FOR ROADBED SEPARATOR | 649.11 | 13.3 |
| | | | 635 | | | | | | 635 | SY | GEOTEXTILE UNDER STONE FILL | 649.31 | 4.9 |
| | | | 50 | | | | | | 50 | SY | GEOTEXTILE FOR SILT FENCE | 649.51 | 10.0 |
| | | | 400 | | | | | | 400 | SY | GEOTEXTILE FOR SILT FENCE, WOVEN-WIRED REINFORCED | 649.515 | 17.5 |
| | | | 65 | | | | | | 65 | LB | SEED | 651.15 | 1.1 |
| | | | 400 | | | | | | 400 | LB | FERTILIZER | 651.18 | 0.4 |
| | | | 2.0 | | | | | | 2 | TON | AGRICULTURAL LIMESTONE | 651.20 | 0.4 |
| | | | 2.0 | | | | | | 2 | TON | HAY MULCH | 651.25 | 0.4 |
| | | | | | | | | 135 | 135 | CY | TOPSOIL | 651.35 | 0.9 |
| | | | 1 | | | | | | 1 | LS | EPSC PLAN | 652.10 | - |
| | | | 500 | | | | | | 500 | HR | MONITORING EPSC PLAN | 652.20 | 20 |
| | | | 1 | | | | | | 1 | LU | MAINTENANCE OF EPSC PLAN (N.A.B.I.) | 652.30 | - |
| | | | 965 | | | | | | 965 | SY | TEMPORARY EROSION MATTING | 653.20 | 4.6 |
| | | | 350 | | | | | | 350 | CY | VEHICLE TRACKING PAD | 653.35 | 6.4 |
| | | | 65 | | | | | | 65 | EACH | INLET PROTECTION DEVICE, TYPE I | 653.40 | 4 |
| | | | | | | | | 775 | 775 | LF | BARRIER FENCE | 653.50 | 6.0 |
| | | | | 295 | | | | | 295 | EACH | EVERGREEN SHRUBS (JUNIPERUS CHINENSIS "SEA GREEN") (24"-30" HT.) (CONT.) | 656.25 | - |
| | | | | 3 | | | | | 3 | EACH | DECIDUOUS TREES (MAACKIA AMURENSIS) (3/4" - 1-1/2" CAL.) (B&B) | 656.30 | - |
| | | | | 11 | | | | | 11 | EACH | DECIDUOUS TREES (ACER RUBRUM "ARMSTRONG") (2" - 2-1/2" CAL.) (B&B) | 656.30 | - |
| | | | | 4 | | | | | 4 | EACH | DECIDUOUS TREES (ACER FREMANII "AUTUMN BLAZE") (2" - 2-1/2" CAL.) (B&B) | 656.30 | - |
| | | | | 16 | | | | | 16 | EACH | DECIDUOUS TREES (GLEDITSIA TRIACANTHOS INERMIS "SHADEMASTER") (2" - 2-1/2" CAL.) (B&B) | 656.30 | - |
| | | | | 2 | | | | | 2 | EACH | DECIDUOUS TREES (QUERCUS RUBRA) (2" - 2-1/2" CAL.) (B&B) | 656.30 | - |
| | | | | 8 | | | | | 8 | EACH | DECIDUOUS TREES (QUERCUS R X B LONG) (2" - 2-1/2" CAL.) (B&B) | 656.30 | - |
| | | | | 3 | | | | | 3 | EACH | DECIDUOUS TREES (ULMUS AMERICANA "NEW HARMONY") (2" - 2-1/2" CAL.) (B&B) | 656.30 | - |
| | | | | 1 | | | | | 1 | EACH | DECIDUOUS TREES (ULMUS AMERICANA "PRINCETON") (2" - 2-1/2" CAL.) (B&B) | 656.30 | - |
| | | | | 5 | | | | | 5 | EACH | DECIDUOUS TREES (ULMUS AMERICANA "VALLEY FORGE") (2" - 2-1/2" CAL.) (B&B) | 656.30 | - |
| | | | | 2 | | | | | 2 | EACH | DECIDUOUS TREES (ULMUS CARPINIFOLIA "ACCOLADE") (2" - 2-1/2" CAL.) (B&B) | 656.30 | - |
| | | | | 62 | | | | | 62 | EACH | DECIDUOUS SHRUBS (CORNUS RACEMOSA) (30"-36" HT.) (CONT.) | 656.35 | - |
| | | | | 600 | | | | | 600 | EACH | PERENNIALS (SCIRPUS ACTUS "HARD STEM BULLRUSH") (2" PLUGS) (PEAT POT) | 656.41 | |

## DETAILED SUMMARY OF QUANTITIES

| QUANTITIES | UNIT | ITEMS |
|---|---|---|

Vanasse Hangen Brustlin, Inc.

PROJECT NAME: **BARRE CITY**
PROJECT NUMBER: **FEGC F 026-1(34) C/2**

FILE NAME: **z85b010_Quantity_Summary.xls**
PROJECT MANAGER: **G. BAKOS**
DESIGNED BY: **D. PECK / S. FOWLER**
**QUANTITY SHEET #3**

PLOT DATE: **3/21/2011**
DRAWN BY: **D. PECK**
CHECKED BY:
SHEET: **14** OF **339**

STATE OF VERMONT
AGENCY OF
TRANSPORTATION

# QUANTITY SUMMARY SHEET

## SUMMARY OF ESTIMATED QUANTITIES

| FULL C.E. ITEMS | UTILITIES (NON-PARTICIPATING) | UTILITIES | EROSION CONTROL | LANDSCAPING | LANDSCAPING (NON-PARTICIPATING) | TRAINING | ROADWAY (NON-PARTICIPATING) | ROADWAY | GRAND TOTAL | UNIT | DESCRIPTION | ITEM NUMBER | ROUNDING |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 800 | | | | | 800 | EACH | PERENNIALS (SCIRPUS VALIDUS "SOFT STEM BULLRUSH") (2" PLUGS) (PEAT POT) | 656.41 | |
| | | | | 450 | | | | | 450 | EACH | PERENNIALS (SCIRPUS CYPERINUS "SC WOOL GRASS SEDGE") (2" PLUGS) (PEAT POT) | 656.41 | |
| | | | | 200 | | | | | 200 | EACH | PERENNIALS (PANICUM VIRGATUM "SWITCH GRASS") (2" PLUGS) (PEAT POT) | 656.41 | |
| | | | | 100 | | | | | 100 | MGAL | LANDSCAPE WATERING | 656.65 | 8.2 |
| | | | | 360 | | | | | 360 | CY | LANDSCAPE BACKFILL, TRUCK MEASUREMENT | 656.80 | 1.2 |
| | | | | 1 | | | | | 1 | LS | TREE PROTECTION | 656.85 | - |
| | | | | | | | | 1157 | 1157 | SF | TRAFFIC SIGNS, TYPE A | 675.20 | 0.41 |
| | | | | | | | | 628 | 628 | SF | TRAFFIC SIGNS, TYPE B | 675.21 | - |
| | | | | | | | | 2105 | 2105 | LF | SQUARE TUBE SIGN POSTS AND ANCHOR | 675.341 | - |
| | | | | | | | | 138 | 138 | EACH | REMOVING SIGNS (TYPE A) | 675.50 | - |
| | | | | | | | | 25 | 25 | EACH | REMOVING SIGNS (TYPE B) | 675.50 | - |
| | | | | | | | | 18 | 18 | EACH | ERECTING SALVAGED SIGNS | 675.60 | - |
| | | | | | | | | 4 | 4 | EACH | OVERHEAD TRAFFIC SIGN SUPPORT, CANTILEVER | 677.12 | - |
| | | | | | | | | 1 | 1 | EACH | OVERHEAD TRAFFIC SIGN SUPPORT, MULTI-SUPPORT | 677.13 | - |
| | | | | | | | | 1 | 1 | EACH | TRAFFIC CONTROL SIGNAL SYSTEM, INTERSECTION | 678.15 | - |
| | | | | | | | | 1 | 1 | EACH | FLASHING BEACON, AERIAL MOUNTED | 678.17 | - |
| | | | | | | | | 4900 | 4900 | LF | ELECTRICAL CONDUIT (2") (PVC) | 678.21 | 3.8 |
| | | | | | | | | 315 | 315 | LF | ELECTRICAL CONDUIT (2-1/2") (PVC) | 678.21 | 4.7 |
| | | | | | | | | 205 | 205 | LF | ELECTRICAL CONDUIT (3") (PVC) | 678.21 | - |
| | | | | | | | | 650 | 650 | LF | WIRED CONDUIT (3") (PVC) | 678.23 | 7.0 |
| | | | | | | | | 470 | 470 | LF | WIRED CONDUIT (4") (PVC) | 678.23 | 6.0 |
| | | | | | | | | 155 | 155 | LF | ELECTRICAL WIRING | 678.24 | 3.0 |
| | | | | | | | | 81 | 81 | EACH | PULL BOX, STANDARD | 678.25 | - |
| | | | | | | | | 410 | 410 | LF | ELECTRICAL CONDUIT SLEEVE (6") (PVC) | 678.30 | 4.0 |
| | | | | | | | | 320 | 320 | LF | ELECTRICAL CONDUIT SLEEVE (10") (PVC) | 678.30 | 2.0 |
| | | | | | | | | 1 | 1 | EACH | TEMPORARY TRAFFIC SIGNAL SYSTEM (NORTH MAIN ST AND MAPLE AVE / RT 62) | 678.40 | - |
| | | | | | | | | 1 | 1 | EACH | TEMPORARY TRAFFIC SIGNAL SYSTEM (NORTH MAIN ST AND ELM ST / WASHINGTON ST) | 678.40 | - |
| | | | | | | | | 1 | 1 | EACH | TEMPORARY TRAFFIC SIGNAL SYSTEM (MAPLE AVE AND SUMMER ST) | 678.40 | - |
| | | | | | | | | 1 | 1 | EACH | TEMPORARY TRAFFIC SIGNAL SYSTEM (SUMMER ST AND ELM ST / WELLINGTON ST) | 678.40 | - |
| | | | | | | | | 1 | 1 | EACH | REMOVING AND RESETTING LIGHT POLE | 679.25 | - |
| | | | | | | | | 1 | 1 | LU | PRICE ADJUSTMENT, FUEL (N.A.B.I.) | 690.50 | - |
| | | | | 6 | | | | | 6 | CY | SPECIAL PROVISION (CEDAR BARK MULCH) | 900.608 | EST |
| | 525 | 100 | | | | | | 90 | 715 | CY | SPECIAL PROVISION (CONTROLLED DENSITY (FLOWABLE) FILL) | 900.608 | - |
| | | | | 1700 | | | | | 1700 | CY | SPECIAL PROVISION (CU STRUCTURAL SOIL) | 900.608 | 38.6 |
| | 80 | | | | | | 80 | | 160 | CY | SPECIAL PROVISION (EXCAVATION OF PETROLEUM CONTAMINATED SOILS, CLASS I) | 900.608 | EST |
| | 80 | | | | | | 80 | | 160 | CY | SPECIAL PROVISION (EXCAVATION OF PETROLEUM CONTAMINATED SOILS, CLASS II) | 900.608 | EST |
| | 80 | | | | | | 80 | | 160 | CY | SPECIAL PROVISION (EXCAVATION OF CONTAMINATED SOILS, CLASS III) | 900.608 | EST |
| | | | | | | | | 5 | 5 | CY | SPECIAL PROVISION (TRENCHLESS PIPE, OBSTRUCTION REMOVAL) | 900.608 | |
| | | | | | 7 | | | | 7 | EACH | SPECIAL PROVISION (BICYCLE RACK) | 900.620 | - |
| | | | | | 106 | | | | 106 | EACH | SPECIAL PROVISION (GRANITE POST AND CHAIN FENCE) | 900.620 | - |
| | | | | | | | | 1 | 1 | EACH | SPECIAL PROVISION (LIGHTING CONTROL PANEL) | 900.620 | - |
| | | | | | | | | 1 | 1 | EACH | SPECIAL PROVISION (OFF-LINE PARTICLE SEPARATOR) | 900.620 | - |
| | | | | | | | | 76 | 76 | EACH | SPECIAL PROVISION (ORNAMENTAL STREET LIGHT) | 900.620 | - |
| | | | | | | | | 1 | 1 | EACH | SPECIAL PROVISION (OVERFLOW CONTROL STRUCTURE) | 900.620 | - |

## DETAILED SUMMARY OF QUANTITIES

| QUANTITIES | UNIT | ITEMS |
|---|---|---|

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: **BARRE CITY**
PROJECT NUMBER: **FEGC F 026-1(34) C/2**

FILE NAME: **z85b010_Quantity_Summary.xls**
PROJECT MANAGER: **G. BAKOS**
DESIGNED BY: **D. PECK / S. FOWLER**
**QUANTITY SHEET #4**

PLOT DATE: **3/21/2011**
DRAWN BY: **D. PECK**
CHECKED BY:
SHEET: **15** OF **339**

STATE OF VERMONT
AGENCY OF
TRANSPORTATION

# QUANTITY SUMMARY SHEET

## SUMMARY OF ESTIMATED QUANTITIES

| FULL C.E. ITEMS | UTILITIES (NON-PARTICIPATING) | UTILITIES | EROSION CONTROL | LANDSCAPING | LANDSCAPING (NON-PARTICIPATING) | TRAINING | ROADWAY (NON-PARTICIPATING) | ROADWAY | GRAND TOTAL | UNIT | DESCRIPTION | ITEM NUMBER | ROUNDING |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | 40 | 40 | EACH | SPECIAL PROVISION (PARKING METER POST) | 900.620 | - |
| | | | | | | | | 1 | 1 | EACH | SPECIAL PROVISION (PRECAST REINFORCED CONCRETE MANHOLE WITH CAST IRON COVER AND DIVERSION WEIR) (6' DIA.) | 900.620 | - |
| | | | | | | | | 1 | 1 | EACH | SPECIAL PROVISION (REMOVE AND RESET COMMERCIAL SIGN) | 900.620 | - |
| | | | | | | | | 1 | 1 | EACH | SPECIAL PROVISION (REMOVE AND RESET FLAG POLE) | 900.620 | - |
| | | | | | | | | 9 | 9 | EACH | SPECIAL PROVISION (REMOVE AND RESET USPS MAILBOX) | 900.620 | |
| | | | | | | | | 3 | 3 | EACH | SPECIAL PROVISION (REMOVE EXISTING LIGHT POLE) | 900.620 | - |
| | | | | | | | | 7 | 7 | EACH | SPECIAL PROVISION (REMOVE EXISTING OVERHEAD SIGN ASSEMBLY, MULTI-SUPPORT) | 900.620 | |
| | | | | | | | | 2 | 2 | EACH | SPECIAL PROVISION (REMOVING AND RESETTING GROUND/ORNAMENTAL LIGHT) | 900.620 | - |
| | | | | | 10 | | | | 10 | EACH | SPECIAL PROVISION (STEEL BENCH WITH BACK) | 900.620 | - |
| | | | | | 5 | | | | 5 | EACH | SPECIAL PROVISION (STEEL BENCH WITHOUT BACK) | 900.620 | - |
| | | | | | 19 | | | | 19 | EACH | SPECIAL PROVISION (TRASH RECEPTACLE) | 900.620 | - |
| | | | | | | | | 156 | 156 | LF | SPECIAL PROVISION (DUCT BANK) (1 CONDUIT) | 900.640 | - |
| | | | | | | | | 95 | 95 | LF | SPECIAL PROVISION (DUCT BANK) (4 CONDUIT) | 900.640 | - |
| | | | | | | | | 80 | 80 | LF | SPECIAL PROVISION (DUCT BANK) (6 CONDUIT) | 900.640 | - |
| | | | | | | | | 85 | 85 | LF | SPECIAL PROVISION (ORNAMENTAL FENCE, 4 FEET) | 900.640 | 2.0 |
| | | | | | | | | 4 | 4 | LF | SPECIAL PROVISION (GATE FOR ORNAMENTAL FENCE, 4 FEET) | 900.640 | - |
| | | | | | | | | 155 | 155 | LF | SPECIAL PROVISION (VERTICAL GRANITE CURB, UNFINISHED) | 900.640 | 5.3 |
| | 0.25 | 0.25 | | | | | | 0.5 | 1 | LS | SPECIAL PROVISION (CONSTRUCTION VIBRATION AND CRACK MONITORING) | 900.645 | - |
| | | | | | | | | 1 | 1 | LS | SPECIAL PROVISION (FURNISH AND INSTALL STORM DRAIN PIPE) | 900.645 | - |
| | | | | | | | | 1 | 1 | LS | SPECIAL PROVISION (MAINTENANCE OF PEDESTRIAN TRAFFIC) | 900.645 | - |
| | | | | | | | | 1 | 1 | LS | SPECIAL PROVISION (REMOVE AND RESET EXISTING TIMBER DECK) | 900.645 | - |
| | | | | | | | | 1 | 1 | LS | SPECIAL PROVISION (TRENCHLESS PIPE) (48") | 900.645 | - |
| | | | | | | | | 1 | 1 | LU | SPECIAL PROVISION (INCENTIVE/DISINCENTIVE) (N.A.B.I.) | 900.650 | - |
| | | | | | | | | 1 | 1 | LU | SPECIAL PROVISION (MAINTENANCE OF RAILROAD TRAFFIC) (N.A.B.I.) | 900.650 | - |
| | | | | | | | | 285 | 285 | SY | SPECIAL PROVISION (COBBLESTONE PAVERS) | 900.675 | 2.7 |
| | | | | | | | | 860 | 860 | SY | SPECIAL PROVISION (HAND-PLACED BITUMINOUS CONCRETE MATERIAL, DRIVES) | 900.675 | 7.3 |
| | | | | | | | | 700 | 700 | SY | SPECIAL PROVISION (IMPRINTED CONCRETE SIDEWALK, 5 INCH) | 900.675 | 6.2 |
| | | | | | | | | 475 | 475 | SY | SPECIAL PROVISION (POND LINER, GEOMEMBRANE) | 900.675 | 5.6 |
| | | | | | | | | 5750 | 5750 | SY | SPECIAL PROVISION (PORTLAND CEMENT REINFORCED CONCRETE SIDEWALK, 5 INCH) | 900.675 | 40.6 |
| | | | | | | | | 710 | 710 | SY | SPECIAL PROVISION (PORTLAND CEMENT REINFORCED CONCRETE SIDEWALK, 8 INCH) | 900.675 | 5.0 |
| | | | | | | | | | | | ** DUFRESNE GROUP SPECIAL PROVISIONS ** | | |
| | 250 | | | | | | | | 250 | CY | SPECIAL PROVISION (COMMON FILL) | 900.608 | - |
| | | 50 | | | | | | | 50 | CY | SPECIAL PROVISION (CONCRETE ENCASEMENT) | 900.608 | - |
| | 254 | | | | | | | | 254 | CY | SPECIAL PROVISION (EXCAVATION BELOW GRADE AND REFILL) | 900.608 | - |
| | 2 | | | | | | | | 2 | EACH | SPECIAL PROVISION (BOX CULVERT ROOF PANEL REPAIR) | 900.620 | - |
| | 2 | 6 | | | | | | | 8 | EACH | SPECIAL PROVISION (BUTTERFLY VALVE WITH VALVE BOX) (16") | 900.620 | - |
| | 1 | | | | | | | | 1 | EACH | SPECIAL PROVISION (CLEANOUT) (6") | 900.620 | - |
| | | 37 | | | | | | | 37 | EACH | SPECIAL PROVISION (CORE WALL AND CONNECT SERVICE) (SEWER) | 900.620 | - |
| | | 8 | | | | | | | 8 | EACH | SPECIAL PROVISION (CORE WALL AND CONNECT SERVICE) (SPRINKLER) | 900.620 | - |
| | | 25 | | | | | | | 25 | EACH | SPECIAL PROVISION (CORE WALL AND CONNECT SERVICE) (WATER) | 900.620 | - |
| | | 25 | | | | | | | 25 | EACH | SPECIAL PROVISION (CORE WALL AND LEAVE STUB) (ROOF DRAIN) | 900.620 | - |
| | 20 | | | | | | | | 20 | EACH | SPECIAL PROVISION (CORE WALL AND LEAVE STUB) (SPRINKLER) | 900.620 | - |

1

## DETAILED SUMMARY OF QUANTITIES

| QUANTITIES | UNIT | ITEMS |
|---|---|---|

| REVISION | BY | DATE |
|---|---|---|
| 1 | DMP | 5/9/2011 |

REVISION NO. 1: REMOVED ITEM 900.645 - SPECIAL PROVISION (MAINTENANCE OF EXISTING WASTEWATER FLOWS)

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: **BARRE CITY**
PROJECT NUMBER: **FEGC F 026-1(34) C/2**

FILE NAME: **z85b010_Quantity_Summary.xls**
PROJECT MANAGER: **G. BAKOS**
DESIGNED BY: **D. PECK / S. FOWLER**
**QUANTITY SHEET #5**

PLOT DATE: **5/9/2011**
DRAWN BY: **D. PECK**
CHECKED BY:
SHEET: **16** OF **339**

STATE OF VERMONT
AGENCY OF
TRANSPORTATION

# QUANTITY SUMMARY SHEET

## SUMMARY OF ESTIMATED QUANTITIES

| FULL C.E. ITEMS | UTILITIES (NON-PARTICIPATING) | UTILITIES | EROSION CONTROL | LANDSCAPING | LANDSCAPING (NON-PARTICIPATING) | TRAINING | ROADWAY (NON-PARTICIPATING) | ROADWAY | GRAND TOTAL | UNIT | DESCRIPTION | ITEM NUMBER | ROUNDING |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 41 | | | | | | | 41 | EACH | SPECIAL PROVISION (CORPORATION STOP) (1-1/2") | 900.620 | - |
| | | 42 | | | | | | | 42 | EACH | SPECIAL PROVISION (CURB STOP WITH VALVE BOX) (1-1/2") | 900.620 | - |
| | | 5 | | | | | | | 5 | EACH | SPECIAL PROVISION (GATE VALVE WITH VALVE BOX) (4") | 900.620 | - |
| | 30 | 20 | | | | | | | 50 | EACH | SPECIAL PROVISION (GATE VALVE WITH VALVE BOX) (6") | 900.620 | - |
| | 2 | 11 | | | | | | | 13 | EACH | SPECIAL PROVISION (GATE VALVE WITH VALVE BOX) (8") | 900.620 | - |
| | | 3 | | | | | | | 3 | EACH | SPECIAL PROVISION (GATE VALVE WITH VALVE BOX) (12") | 900.620 | - |
| | | 7 | | | | | | | 7 | EACH | SPECIAL PROVISION (HYDRANT) | 900.620 | - |
| | 2 | 20 | | | | | | | 22 | EACH | SPECIAL PROVISION (MANUAL AIR RELEASE) | 900.620 | - |
| | 50 | | | | | | | | 50 | EACH | SPECIAL PROVISION (PVC TEE/WYE FOR SERVICE) | 900.620 | - |
| | | 7 | | | | | | | 7 | EACH | SPECIAL PROVISION (REMOVE HYDRANT) | 900.620 | - |
| | | 20 | | | | | | | 20 | EACH | SPECIAL PROVISION (REMOVE SANITARY SEWER MANHOLE) | 900.620 | - |
| | 4 | | | | | | | | 4 | EACH | SPECIAL PROVISION (SANITARY SEWER MANHOLE) (4' DIA.) | 900.620 | - |
| | 8 | | | | | | | | 8 | EACH | SPECIAL PROVISION (SANITARY SEWER MANHOLE INSTALLED OVER EXISTING PIPE) (4' DIA.) | 900.620 | - |
| | 12 | | | | | | | | 12 | EACH | SPECIAL PROVISION (SANITARY SEWER MANHOLE) (6' DIA.) | 900.620 | - |
| | 2 | | | | | | | | 2 | EACH | SPECIAL PROVISION (SANITARY SEWER MANHOLE VAULT WITH CAST IRON COVER) (8' X 8') | 900.620 | - |
| | 19 | | | | | | | | 19 | EACH | SPECIAL PROVISION (WATER METER) (5/8") | 900.620 | - |
| | 12 | | | | | | | | 12 | EACH | SPECIAL PROVISION (WATER METER) (3/4") | 900.620 | - |
| | 8 | | | | | | | | 8 | EACH | SPECIAL PROVISION (WATER METER) (1") | 900.620 | - |
| | 9500 | 16000 | | | | | | | 25500 | LB | SPECIAL PROVISION (DUCTILE IRON PIPE FITTING) | 900.635 | - |
| | | 300 | | | | | | | 300 | LF | SPECIAL PROVISION (DUCTILE IRON PIPE, CEMENT-LINED) (4") | 900.640 | - |
| | 1200 | 600 | | | | | | | 1800 | LF | SPECIAL PROVISION (DUCTILE IRON PIPE, CEMENT-LINED) (6") | 900.640 | - |
| | 100 | 760 | | | | | | | 860 | LF | SPECIAL PROVISION (DUCTILE IRON PIPE, CEMENT-LINED) (8") | 900.640 | - |
| | | 100 | | | | | | | 100 | LF | SPECIAL PROVISION (DUCTILE IRON PIPE, CEMENT-LINED) (12") | 900.640 | - |
| | 360 | 2600 | | | | | | | 2960 | LF | SPECIAL PROVISION (DUCTILE IRON PIPE, CEMENT-LINED) (16") | 900.640 | - |
| | | 7 | | | | | | | 7 | LF | SPECIAL PROVISION (HYDRANT EXTENSION) | 900.640 | - |
| | | 60 | | | | | | | 60 | LF | SPECIAL PROVISION (PVC ROOF DRAIN PIPE) (4") | 900.640 | - |
| | | 1300 | | | | | | | 1300 | LF | SPECIAL PROVISION (PVC ROOF DRAIN PIPE) (6") | 900.640 | - |
| | | 1500 | | | | | | | 1500 | LF | SPECIAL PROVISION (PVC SEWER PIPE) (6") | 900.640 | - |
| | | 400 | | | | | | | 400 | LF | SPECIAL PROVISION (PVC SEWER PIPE) (6") (PRESSURE) | 900.640 | - |
| | 600 | | | | | | | | 600 | LF | SPECIAL PROVISION (PVC SEWER PIPE) (8") | 900.640 | - |
| | 380 | | | | | | | | 380 | LF | SPECIAL PROVISION (PVC SEWER PIPE) (8") (PRESSURE) | 900.640 | - |
| | 370 | | | | | | | | 370 | LF | SPECIAL PROVISION (PVC SEWER PIPE) (12") | 900.640 | - |
| | 80 | | | | | | | | 80 | LF | SPECIAL PROVISION (PVC SEWER PIPE) (15") | 900.640 | - |
| | 730 | | | | | | | | 730 | LF | SPECIAL PROVISION (PVC SEWER PIPE) (24") | 900.640 | - |
| | 2500 | | | | | | | | 2500 | LF | SPECIAL PROVISION (PVC SEWER PIPE) (30") | 900.640 | - |
| | 100 | | | | | | | | 100 | LF | SPECIAL PROVISION (REMOVE UTILITY PIPE) | 900.640 | - |
| | | 1450 | | | | | | | 1450 | LF | SPECIAL PROVISION (SEAMLESS COPPER WATER TUBE) (1-1/2") | 900.640 | - |
| | 0.5 | 0.5 | | | | | | | 1 | LS | SPECIAL PROVISION (REMOVE AND REPAIR BOX CULVERT) | 900.645 | - |
| | 1 | | | | | | | | 1 | LS | SPECIAL PROVISION (TEMPORARY BYPASS PUMPING SYSTEMS FOR WASTEWATER) | 900.645 | - |
| | 1 | | | | | | | | 1 | MFBM | SPECIAL PROVISION (PERMANENT WOOD SHEET PILING) | 900.653 | - |
| | | 80 | | | | | | | 80 | SY | SPECIAL PROVISION (INSULATION BOARD) | 900.675 | - |
| | 1 | | | | | | | | 1 | TON | SPECIAL PROVISION (PERMANENT STEEL SHEET PILING) | 900.680 | - |

## DETAILED SUMMARY OF QUANTITIES

| QUANTITIES | UNIT | ITEMS |
|---|---|---|

| REVISION | BY | DATE |
|---|---|---|
| 1 | DMP | 5/9/2011 |

REVISION NO. 1: ADDED ITEM 900.645 - SPECIAL PROVISION (TEMPORARY BYPASS PUMPING SYSTEMS FOR WASTEWATER)

Vanasse Hangen Brustlin, Inc.

PROJECT NAME: **BARRE CITY**
PROJECT NUMBER: **FEGC F 026-1(34) C/2**

FILE NAME: **z85b010_Quantity_Summary.xls**
PROJECT MANAGER: **G. BAKOS**
DESIGNED BY: **D. PECK / S. FOWLER**
**QUANTITY SHEET #6**

PLOT DATE: **5/9/2011**
DRAWN BY: **D. PECK**
CHECKED BY:
SHEET: **17** OF **339**

STATE OF VERMONT
AGENCY OF TRANSPORTATION

# ITEM DETAIL SHEET

VT 62

## CURB

| BEGIN STATION | END STATION | POSITION LEFT FT | POSITION RIGHT FT | REMARKS |
|---|---|---|---|---|
| VERTICAL GRANITE CURB | | | | |
| 111+30.6 | 111+51.5 | ~~22.7~~ 23.3 | | 6.7' @ 10'R |
| 111+56.5 | 111+91.4 | ~~34.9~~ 36.1 | | |
| 112+12.9 | 112+35.2 | ~~22.3~~ 24.6 | | |
| 112+60.7 | 113+48.3 | ~~89.3~~ 89.2 | | 24.0' @ 170'R<br>18.1' @ 40'R |
| 111+39.8 | 111+51.5 | | ~~11.7~~ 12.4 | |
| 111+56.5 | 111+69.5 | | ~~13.1~~ 14.3 | |
| 111+90.1 | 112+47.0 | | ~~56.9~~ 58.1 | |
| 112+62.5 | 113+45.5 | | ~~85.5~~ 86.4 | 30.1' @ 300'R<br>21.0' @ 35'R |
| ~~114+42.5~~<br>~~111+42.6~~ | 114+80.0 | | 38.5 | 14.5' @ 40'R 24.0' @ 200'R |
| 114+43.2 | 114+97.0 | ~~67.2~~ 57.2 | | 23.7' @ 40'R<br>23.1' @ 120'R |
| 115+07.0 | 116+04.1 | | ~~97.2~~ 96.8 | 30.4' @ 400'R |
| 115+27.0 | 115+45.2 | ~~18.2~~ 18.7 | | |
| 115+74.0 | 115+92.9 | ~~18.9~~ 20.2 | | |
| 116+25.0 | 116+39.1 | ~~15.3~~ 16.3 | | 8.8' @ 10'R |
| 116+47.2 | 117+23.4 | | ~~76.5~~ 75.7 | 6.4' @ 600'R |
| 116+47.3 | 117+24.8 | | 77.9 | BACK CURB |
| 116+73.7 | 120+06.7 | 333.8 | | 14.3' @ 15'R |
| 117+66.9 | 118+39.8 | | 72.9 | |
| 118+55.6 | 118+60.1 | | 4.6 | |
| 118+90.2 | 120+12.9 | | 122.7 | |
| 119+06.8 | 119+07.7 | | 14.8 | LOT CURB |
| 120+45.7 | 122+54.3 | 208.4 | | 6.2' @ 25'R |
| 120+66.1 | 122+51.6 | | 187.4 | 22.4' @ 15'R |
| 122+57.6 | 122+69.4 | | 16.7 | 12'R |
| 122+83.5 | 123+54.1 | | 70.6 | 15722'R |
| 123+18.6 | 125+42.2 | 225.6 | | 196.3' @ 15678'R<br>29.3'@15'R |
| 123+67.4 | 124+79.7 | | 113.0 | 100.3' @ 15722'R<br>12.7' @ 25'R |
| 125+24.6 | 125+42.2 | | 21.6 | 21.6' @ 20'R |
| 125+48.2 | 125+79.6 | 33.4 | | 11.0' @ 15678' R<br>22.4' @ 15'R |
| 125+48.2 | 126+82.5 | | 138.5 | 93.6' @ 15722'R<br>44.9' @ 15'R |
| 126+01.4 | 126+38.1 | 36.6 | | 15678'R |
| 126+59.9 | 126+84.5 | 26.6 | | 4.2' @ 15678'R<br>22.4' @ 15'R |
| 126+88.5 | 126+98.5 | | 15.7 | 10'R |
| 126+90.5 | 127+07.0 | 22.1 | | 21.2' @ 16'R |
| 127+23.1 | 128+99.6 | | 179.3 | 150.1' @ 15722'R<br>22.5' @ 15'R 6.7' @ 10'R |
| 127+31.7 | 128+66.3 | 137.2 | | 118.0' @ 15678'R<br>19.2' @ 10'R |
| 128+89.6 | 128+99.6 | 18.3 | | 15.9' @ 10'R |
| 129+05.6 | 129+44.8 | 41.2 | | 22.4' @ 15'R |
| 129+05.6 | 130+10.2 | | 108.9 | 22.4' @ 15' R<br>11.4' @ 10'R |
| 129+58.1 | 130+79.8 | 123.7 | | 22.4' @ 15'R |
| 130+69.7 | 130+79.8 | | 20 | 15.5' @ 10'R |
| 130+85.8 | 13+76.6 | | 194.9 | 44.8' @ 15'R |
| 130+85.8 | 131+07.6 | 23.8 | | 22.4' @ 15'R |
| 131+19.5 | 132+42.6 | 125.1 | | 10.9' @ 10'R |
| 132+59.3 | 132+76.6 | 24.1 | | 17.5'R |
| 132+82.6 | 134+92.6 | 214.3 | | 22.4' @ 15'R 11.3' @ 10'R |
| 132+82.6 | 135+26.5 | | 247.9 | 44.8' @ 15'R |
| 135+11.6 | 135+26.5 | 21.8 | | 15'R |
| 135+32.5 | 136+63.1 | 133.6 | | 85.6' @ 2022'R<br>22.4' @ 15'R |
| 135+32.5 | 136+92.9 | | 163.2 | 85.5' @ 1978'R<br>44.8'@ 15'R |
| 136+79.6 | 136+92.9 | 16.3 | | 15'R |
| 136+98.9 | SL 700+41.7 | 193 | | 48.8' @ 15'R |
| 136+98.9 | SL 602+50.8 | | 407.9 | 58.6' @ 500'R<br>57.7' @ 200'R 2.0' @ 20'R 22.4' @ 15'R |
| 139+70.8 | 139+79.6 | | 8.9 | 32.5'R |
| 138+32.8 | 138+82.0 | | 146.4 | ISLAND. SEE DETAILS SHEETS |
| SUBTOTAL COLUMN 1: | | 2237.7 | 2713.2 | |

## CURB

| BEGIN STATION | END STATION | POSITION LEFT FT | POSITION RIGHT FT | REMARKS |
|---|---|---|---|---|
| VERTICAL GRANITE CURB | | | | |
| SL 10+42.8 | SL 10+64.4 | ~~25.7~~ 29.0 | | 40'R |
| SL 10+53.4 | SL ~~10+86.2~~ 11+10.0 | | ~~34.3~~ 64.4 | 17.6' @ 130'R 16.7' @ 35'R |
| SL 10+56.0 | SL 12+57.2 | ~~205.0~~ 409.6 | | ISLAND. SEE DETAILS SHEETS |
| SL 10+56.0 | SL 12+57.2 | | ~~205.0~~ | ISLAND. SEE DETAILS SHEETS |
| SL 20+33.5 | SL 20+66.5 | ~~35.7~~ 34.1 | | 12.7' @ 250'R<br>23.0' @ 40'R |
| SL 20+45.3 | SL 20+82.8 | | ~~40.8~~ 39.4 | 31.8' @ 50'R |
| SL 20+47.2 | SL 20+94.6 | ~~49.8~~ 99.2 | | ISLAND. SEE DETAILS SHEETS |
| SL 20+47.2 | SL 20+94.6 | | ~~49.8~~ | ISLAND. SEE DETAILS SHEETS |
| SL 30+30.1 | SL 31+17.0 | ~~86.9~~ 85.5 | | 0.8' @ 10'R |
| SL 30+28.8 | SL ~~30+89.6~~ | ~~113.6, RT~~ | ~~61.0~~ | 5.9' @ 15'R |
| SL ~~31+26.0~~ | SL 31+42.0 | | ~~16.0~~ | |
| SL 31+27.0 | 31+42.0 | ~~15.0~~ 16.6 | | |
| SL 40+27.7 | SL 41+26.7 | 100.0 | | 16.3' @ 25'R |
| SL 40+34.6 | SL 40+58.0 | | 32.4 | 9.0' @ 15'R |
| SL 50+28.8 | SL 51+25.0 | | 98.9 | 21.8' @ 25'R |
| SL 50+28.0 | SL 50+38.9 | 11.0 | | 5.8' @ 20'R |
| SL 60+30.2 | SL 60+37.9 | | 7.7 | |
| SL 60+32.4 | SL 60+40.0 | 8.0 | | 1.6' @ 16'R |
| SL 61+40.0 | SL 61+65.0 | 25.0 | | |
| SL 70+30.2 | SL 70+55.4 | 25.2 | | 1.5' @ 10'R |
| SL 70+30.7 | SL 70+55.5 | | 24.8 | |
| SL 80+31.9 | SL 81+08.6 | 76.7 | | |
| SL 80+32.2 | SL 81+03.8 | | 71.5 | |
| SL 90+31.0 | SL 90+39.1 | 8.2 | | |
| SL 90+32.5 | SL 90+35.6 | | 3.1 | |
| SL 200+31.5 | SL 200+39.5 | | 8 | |
| SL 200+31.9 | SL 200+39.2 | 7.4 | | |
| SL 300+27.6 | SL 300+38.4 | 11 | | 4.7' @ 10'R |
| SL 300+28.0 | SL 300+30.9 | | 2.9 | |
| SL 500+53.3 | SL 500+60.3 | | 7 | |
| SL 600+44.4 | SL 600+98.2 | 60.6 | | 60.6' @ 32.5'R |
| SL 600+44.7 | SL 601+23.5 | | 167.5 | ISLAND. SEE |
| SL 602+54.7 | SL 500+49.3 | | 29.6 | 25.3' @ 20'R |
| SL 700+45.5 | SL 700+64.5 | 19.0 | | 2.1' @ 15'R |
| 120+65.1 | 121+73.5 | | 108.4 | BACK CURB |
| 120+65.1 | 121+73.5 | | 121.4 | BACK CURB |
| SL 30+50.6 RT | 120+08.2 | 343.3 | | LANDSCAPE AREA CURB |
| SL 30+50.6 RT | 120+08.2 | 339.3 | | PLAZA LOT CURB 11.8' @ 5'R |
| 120+44.2 | SL 41+31.6 | 316.4 | | LANDSCAPE AREA CURB |
| 120+44.2 | SL 41+31.6 | 315.4 | | PLAZA LOT CURB 7.9' @ 5'R |
| SUBTOTAL COLUMN 2: | | 2084.6 | 1090.1 | |
| SUBTOTAL COLUMN 1: | | 2237.7 | 2713.2 | |
| CONTRACT SUBTOTAL: | | 8125.6 | | |
| ROUNDING | | 24.4 | | |
| CONTRACT TOTAL: | | 8150 | | |
| SPECIAL PROVISION (VERTICAL GRANITE CURB, UNFINISHED) | | | | |
| 118+88.8 | 119+58.6 | | 70.9 | BACK CURB (14" REVEAL) |
| 119+68.8 | 129+13.9 | | 54.3 | BACK CURB (14" REVEAL) (3.1' @ 2'R) |
| 118+88.8 | 119+06.6 | | 24.5 | LOT CURB (14" REVEAL) (7.9' @ 5'R) |
| CONTRACT SUBTOTAL: | | | 149.7 | |
| ROUNDING: | | | 5.3 | |
| CONTRACT TOTAL: | | | 155 | |

## SIDEWALK

| BEGIN STATION | END STATION | POSITION LEFT SY | POSITION RIGHT SY | REMARKS | FINAL |
|---|---|---|---|---|---|
| SPECIAL PROVISION (PORTLAND CEMENT REINF. CONCRETE SIDEWALK, 5 INCH) | | | | | |
| ~~111+31~~ 111+15 | 111+87 | 37.0 | | | 50.99 SY |
| ~~111+40~~ 110+20 | 111+66 | | 15.9 | | 35.08 SY |
| 111+95 | 112+43 | | 32.4 | | 39.76 SY |
| 112+17 | 112+31 | 8.5 | | | 16.33 SY |
| 112+65 | SL 20+67 | 76.5 | | | 100.27 SY |
| 112+68 | SL 10+59 | | 57.2 | | 68.03 SY |
| SL 20+83 RT | 114+90 | 55.6 | | | 59.49 SY |
| SL 10+65 LT | 114+75 | | 40.9 | | 49.52 SY |
| 115+34 | 115+39 | 2.9 | | | 11.59 SY |
| 115+13 | 115+99 | | 55.7 | | 65.39 SY |
| 115+78 | 115+89 | 6.6 | | | 12.52 SY |
| 116+32 | SL 31+42 | 64.5 | | | |
| SL 30+83 RT | 120+00 | 239.5 | | | |
| SL 31+33 | SL 31+42 | | 4.8 | | |
| 116+53 | 117+19 | | 42.8 | | |
| 117+71 | 118+34 | | 41.0 | | |
| 118+95 | 120+08 | | 73.4 | | |
| 120+52 | SL 41+22 | 195.0 | | | |
| 120+71 | 122+65 | | 148.2 | | |
| 122+88 | 123+49 | | 77.6 | | |
| SL 40+58 RT | 125+75 | 265.0 | | | |
| 123+73 | SL 51+25 | | 135.8 | | |
| SL 50+39 LT | 126+98 | | 180.2 | | |
| 126+08 | 126+33 | 20.6 | | | |
| 126+66 | SL 61+13 | 106.1 | | | |
| SL 61+45 | SL 61+65 | 11.2 | | | |
| 127+20 | SL 81+04 | | 410.8 | | |
| SL 60+38 RT | SL 70+55 | 189.6 | | | |
| SL 70+55 RT | 129+38 | 85.5 | | | |
| 129+63 | 131+09 | 201.1 | | | |
| SL 81+09 LT | SL 500+60 | | 1614.5 | | |
| 130+60 | 131+10 | 51.5 | | DIAGONAL PATTERN | |
| 131+19 | 132+44 | 215.4 | | | |
| 132+59 | 134+93 | 274.1 | | | |
| 134+05 | 134+94 | 113.6 | | DIAGONAL PATTERN | |
| 135+12 | 136+60 | 233.0 | | | |
| 136+83 | SL 700+65 | 271.1 | | | |
| 139+80 | SL 600+98 LT | | 54.2 | | |
| TOTALS: | | 2723.9 | 2985.5 | | |
| CONCTRACT SUBTOTAL: | | 5709.4 | | | |
| ROUNDING: | | 40.6 | | | |
| CONTRACT TOTAL: | | 5750 | | | |
| SPECIAL PROVISION 110+80, RT | | | | | 8.68 SY |
| (PORTLAND CEMENT REINF. CONCRETE SIDEWALK, 8 INCH) | | | | | 12.84 SY |
| 111+66 | 111+95 | | 17.9 | | 12.84 SY |
| 111+87 | 112+17 | 18.3 | | | 14.27 SY |
| 112+31 | 112+65 | 20.8 | | | 16.89 SY |
| 112+43 | 112+68 | | 15.0 | | 10.77 SY |
| 114+75 | 115+13 | | 31.7 | | 24.15 SY |
| 114+90 | 115+34 | 27.0 | | | 20.00 SY |
| 115+39 | 115+78 | 24.0 | | | 21.16 SY |
| 115+89 | 116+32 | 26.6 | | | |
| 115+99 | 116+53 | | 45.2 | | |
| SL 30+83 | SL 31+33 | | 28.2 | | |
| 117+19 | 117+71 | | 43.0 | | |
| 118+34 | 118+95 | | 50.4 | | |
| 120+00 | 120+52 | 42.9 | | | |
| 120+08 | 120+71 | | 52.6 | | |
| SL 41+22 | SL 41+70 | 29.1 | | | |
| 122+65 | 122+88 | | 21.8 | | |
| 123+49 | 123+73 | | 25.6 | | |
| 125+75 | 126+08 | 31.9 | | | |
| 126+33 | 126+66 | 33.8 | | | |
| SL 61+13 | SL 61+45 | 30.9 | | | |
| 129+38 | 129+63 | 29.1 | | | |
| 131+09 | 131+19 | 20.9 | | | |
| 136+60 | 136+83 | 38.3 | | | |
| SUBTOTALS: | | 373.6 | 331.4 | | |
| CONTRACT SUBTOTAL: | | 705.0 | | | |
| ROUNDING: | | 5.0 | | | |
| CONTRACT TOTAL: | | 710 | | | |

## SIDEWALK

| BEGIN STATION | END STATION | POSITION LEFT SY | POSITION RIGHT SY | REMARKS |
|---|---|---|---|---|
| SPECIAL PROVISION (COBBLESTONE PAVERS) | | | | |
| SL 10+56 | SL 10+70 | 4.3 | 4.3 | ISLAND |
| SL 11+00 | SL 11+52 | 19.9 | 19.9 | ISLAND |
| SL 11+68 | SL 12+57 | 34.3 | 34.3 | ISLAND |
| 116+76 | 116+95 | 18.0 | | PLAZA |
| 120+66 | 120+79 | | 8.6 | |
| 122+43 | SL 40+47 | 27.8 | | |
| 124+21 | 124+84 | | 20.9 | |
| 125+60 | 125+80 | 6.8 | | |
| 126+66 | 126+89 | 7.7 | | |
| 129+57 | 130+04 | 15.7 | | |
| SL 600+45 | SL 601+23 | | 59.8 | ISLAND |
| SUBTOTALS: | | 134.5 | 147.8 | |
| CONCTRACT SUBTOTAL: | | 282.3 | | |
| ROUNDING: | | 2.7 | | |
| CONTRACT TOTAL: | | 285 | | |

119.13 SY

## SIDEWALK

| BEGIN STATION | END STATION | POSITION LEFT SY | POSITION RIGHT SY | REMARKS FINAL |
|---|---|---|---|---|
| SPECIAL PROVISION (IMPRINTED CONCRETE SIDEWALK, 5 INCH) | | | | |
| 114+24 | 114+33 | | 3.4 | 3.99 SY |
| 114+49 | 114+75 | | 4.8 | 4.87 SY |
| 115+13 | 115+99 | | 15.9 | 16.14 SY |
| 116+53 | 117+19 | | 12.3 | |
| 116+79 | 120+00 | 58.9 | | |
| 117+71 | 118+34 | | 11.7 | |
| 118+95 | 120+08 | | 21.0 | |
| 120+52 | 122+47 | 36.2 | | |
| 120+71 | 121+84 | | 21.0 | |
| 121+89 | 122+48 | | 11.2 | |
| 122+61 | 122+65 | | 0.8 | |
| 122+88 | 122+94 | | 1.3 | |
| 122+99 | 123+49 | | 9.2 | |
| SL 40+58 | SL 41+32 | 7.9 | | |
| 123+25 | 123+55 | 5.5 | | |
| 123+60 | 124+02 | 7.7 | | |
| 123+73 | 124+10 | | 6.9 | |
| 124+15 | 124+60 | | 8.5 | |
| 124+07 | 124+77 | 12.9 | | |
| 124+65 | 124+73 | | 1.5 | |
| 124+82 | 125+39 | 11.0 | | |
| 125+29 | 125+39 | | 2.0 | |
| 125+50 | 125+74 | 4.6 | | |
| 125+50 | 125+73 | | 4.3 | |
| 125+78 | 126+61 | | 15.4 | |
| 126+08 | 126+33 | 4.7 | | |
| 126+64 | 126+79 | | 2.8 | |
| 126+66 | 126+81 | 3.2 | | |
| 126+94 | 127+04 | 2.2 | | |
| 127+29 | 127+72 | | 7.9 | |
| 127+38 | 127+57 | 3.6 | | |
| 127+77 | 128+20 | | 7.8 | |
| 127+62 | 128+38 | 13.9 | | |
| 128+25 | 128+96 | | 13.4 | |
| 128+43 | 128+61 | 3.3 | | |
| 128+91 | 128+98 | 1.3 | | |
| 129+07 | 129+38 | 5.7 | | |
| 129+07 | 129+47 | | 7.5 | |
| 129+52 | 130+05 | | 9.8 | |
| 129+63 | 130+10 | 8.7 | | |
| 130+15 | 130+76 | 11.7 | | |
| 130+71 | 130+76 | | 1.6 | |
| 130+89 | 131+09 | 3.9 | | |
| 130+89 | 131+32 | | 8.3 | |
| 131+19 | 131+32 | 1.9 | | |
| 131+37 | 131+98 | 11.3 | | |
| 131+37 | 131+98 | | 11.2 | |
| 132+03 | 132+58 | | 10.1 | |
| 132+03 | 132+37 | 6.3 | | |
| 132+62 | 132+73 | 2.4 | | |
| 132+62 | 132+73 | | 2.4 | |
| 132+86 | 133+19 | | 6.5 | |
| 132+86 | 133+19 | 6.5 | | |
| 133+24 | 133+82 | 10.8 | | |
| 133+24 | 133+85 | | 11.3 | |
| 133+87 | 134+42 | 10.2 | | |
| 133+90 | 134+42 | | 9.8 | |
| 134+47 | 134+88 | 7.4 | | |
| 134+47 | 135+04 | | 10.5 | |
| 135+06 | 135+23 | | 3.0 | |
| 135+14 | 135+23 | 1.9 | | |
| 135+36 | 135+67 | 6.3 | | |
| 135+36 | 135+67 | | 6.2 | |
| 135+72 | 136+14 | 7.8 | | |
| 135+72 | 136+20 | | 8.7 | |
| 136+19 | 136+60 | 7.0 | | |
| 136+25 | 136+91 | | 12.1 | |
| 136+83 | 136+91 | 1.5 | | |
| 137+00 | 137+31 | | 5.8 | |
| 137+03 | 137+32 | 5.9 | | |
| 137+36 | 137+90 | | 10.3 | |
| 137+37 | 138+08 | 12.8 | | |
| 137+93 | 138+37 | | 9.3 | |
| 138+13 | 138+83 | 12.8 | | |
| SL 500+29 | SL 600+42 | | 2.9 | |
| SL 600+36 | SL 600+86 | | 12.9 | |
| SL 600+88 | SL 601+39 | | 11.3 | |
| SL 601+44 | SL 602+48 | | 19.5 | |
| SUBTOTALS: | | 319.7 | 374.1 | |
| CONTRACT SUBTOTAL: | | 693.8 | | |
| ROUNDING: | | 6.2 | | |
| CONTRACT TOTAL: | | 700 | | |

PROJECT NAME: **BARRE CITY**
PROJECT NUMBER: **FEGC F 026-1(34) C/2**

FILE NAME: **85B010_C2_ItemDetailSheet.xl**
PROJECT LEADER: **G. BAKOS**
DESIGNED BY: **F.SANTOS**
**ITEM DETAIL SHEET**

PLOT DATE: **3/9/2011**
DRAWN BY: **D. PECK**
CHECKED BY: **D. PECK**
SHEET **18** OF **339**

**STATE OF VERMONT**
**AGENCY OF TRANSPORTATION**

# DRAINAGE DETAIL SHEET #1

| LAYOUT CODE (#) | STATION | STATION | POS. | ASKEW | INLET/OUTLET TYPE | | DITCH | | PIPE ARCH | | | PIPE | | ALLOWABLE OPTIONS | | | | PIPE ELBOW | ES | DMH | CB | DI | PRCDT | DEPTH DI / DMH | SPECIAL PROVISION (FLOWABLE FILL) | REINF STEEL | GRATE | CHAN ELEV | CRM | TRENCH EXCAVATION | | COMM EXC | UNC CHAN EXC | STRUCT EXCAV | GRAN BKFILL STRUCT | GRAN BORR | EROS MATT | STONE FILL | | MARKER POSTS | | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | NO. DEG. | INLET | OUTLET | IN | OUT | SPAN IN | RISE IN | L FT | D IN | L FT | PCCSP TH | SPECIAL PROVISION (TRENCHLESSS PIPE) | CPEP SL | PVC | NO. DEG. | EA | EA | EA | EA | | FT | | LBS | TYPE | EA | CY | EARTH CY | ROCK CY | CY | CY | CY | CY | CY | SY | CY | TYPE | LT EA | RT EA | |
| 1 | 111+31 | | LT | | DI | | | | | | | 18 | 8 | | | | | | | | | X | | 5 | | | D | | 5.73 ~~10~~ | ~~3.2~~ 2.67 | | | | ~~5~~ 1.79 | | | | | | | REMOVE EXIST DI. NEW RCDI. CONNECT TO EXISTING 15" RCP. |
| | | | | | | | | | | | | 24 | 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 111+64 | | RT | | DI | | | | | | | | | | | | | | | | | X | | 6 | | | D | | ~~8.1 11~~ | ~~3.5~~ 2.96 | | | | ~~5~~ 1.79 | | | | | | | REMOVE EXIST DI. NEW RCDI. CONNECT EXISTING 24" & 6" PIPES. |
| 3 | 111+66 | 111+31 | LT | | DI | DI | | | | | | 18 | 32 | | | X | | | | | | X | | 5 | | | D | | 14.53 ~~20~~ | | | | | ~~13~~ 1.79 | | | | | | | NEW 18" CPEP(SL) WITH RCDI. |
| 4 | 113+37 | 113+64 | RT | | DI | MH | | | | | | 18 | ~~23~~ | 24 | | X | | | | | | X | | 7 | | | D | | 13.53 ~~4~~ | | | | | ~~2~~ 1.79 | | | | | | | NEW 18" CPEP(SL) WITH RCDI. |
| 5 | 113+38 | 113+67 | LT | | DI | MH | | | | | | 18 | ~~25~~ | 26 | | X | | | | | | X | | 7 | | | D | | 18.1 ~~7~~ | | | | | ~~3~~ 1.79 | | | | | | | NEW 18" CPEP(SL) WITH RCDI. |
| 6 | 113+64 | 111+64 | RT | | MH | DI | | | | | | 24 | ~~105~~ | 196 | | X | | | | | | | | 7 | | | | | 12.56 ~~102~~ | 12.56 | | | | ~~80~~ 0 | | | | | | | NEW 24" CPEP(SL) (OVERFLOW FOR DMH #7). |
| 7 | 113+64 | SL 11+02 | RT | | MH | CB | | | | | | 36 | ~~61~~ | 62 | | X | | | | | X | | | 7 | | | MH COVER | | 68.46 ~~35~~ | 5.33 | | | | ~~15~~ 3.01 | | | | | | | REMOVE EXIST JCT BOX & 24" RCP. NEW 36" CPEP(SL) WITH CONCRETE DMH (6'). |
| 8 | 113+67 | 113+64 | LT-RT | | MH | MH | | | | | | 30 | ~~52~~ | 56 | | X | | | | | X | | | 7 | | | MH COVER | | 39.8 ~~20~~ | 8.0 | | | | ~~16~~ 3.0 | | | | | | | REMOVE EXIST JCT BOX & 2-18" RCP'S. NEW 30" CPEP(SL) WITH CONC. DMH (6'). CONNECT EXIST 18" RCP. |
| 9 | 114+78 | 113+64 | RT | | CB | MH | | | | | | 30 | ~~110~~ | 112 | | X | | | | | | | X | 8 | | | 2-D | | 70.8 ~~52~~ | ~~4.5~~ 3.6 | | | | ~~20~~ 3.0 | | | | | | | REMOVE EXIST DI & 24" RCP. NEW 30" CPEP(SL) WITH CONCRETE CB. CONNECT EXIST 6" VCT. |
| 10 | 114+80 | 113+67 | LT | | CB | MH | | | | | | 30 | ~~100~~ | 108 | | X | | | | | | | X | 8 | | | 2-D | | 69.5 ~~62~~ | ~~4.1~~ 3.9 | | | | ~~20~~ 3.0 | | | | | | | REMOVE EXIST DI & 24" RCP. NEW 30" CPEP(SL) WITH CONCRETE CB. CONNECT EXIST 4" & 6" PIPES. |
| 11 | 115+69 | 114+78 | RT | | CB | CB | | | | | | 30 | 88 | | | X | | | | | | | X | 8 | | | 2-D | | 54 ~~43~~ | ~~4.2~~ 3.6 | | | | ~~23~~ 3.0 | | | | | | | REMOVE EXIST DI & 24" RCP. NEW 30" CPEP(SL) WITH CONCRETE CB. CONNECT EXIST DRAIN PIPE. |
| | | | | | | | | | | | | 18 | 20 | CONNECTED DI@ BURGER KING TO CB#11 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | 115+84 | 114+80 | LT | | CB | CB | | | | | | 30 | ~~101~~ | 102 | | X | | | | | | | X | 7 | | | 2-D | | 26.7 ~~44~~ | ~~4.2~~ 3.9 | | | | ~~22~~ 3.0 | | | | | | | REMOVE EXIST DI & 24" RCP. NEW 30" CPEP(SL) WITH CONCRETE CB. |
| 13 | 116+42 | 115+84 | LT | | MH | CB | | | | | | 30 | ~~53~~ | 52 | | X | | | | | X | | | 6 | | | MH COVER | | 3.8 ~~27~~ | | | | | ~~12~~ 0 | | | | | | | NEW 30" CPEP(SL) WITH CONCRETE DMH (6'). |
| 14 | 116+80 | 115+69 | RT | | CB | CB | | | | | | 30 | ~~107~~ | 108 | | X | | | | | | | X | 8 | | | 2-D | | 68.2 ~~49~~ | 3.6 | | | | ~~25~~ 3.0 | | | | | | | REMOVE EXIST DI & 24" RCP. NEW 30" CPEP(SL) WITH CONCRETE CB. CONNECT EXIST DRAIN PIPES. |
| 15 | 117+01 | 116+42 | LT | | CB | MH | | | | | | 30 | 54 | | | X | | | | | | | X | 7 | | | 2-D | | 36.7 ~~27~~ | 2.37 | | | | ~~12~~ 3.0 | | | | | | | NEW 30" CPEP(SL) WITH CONCRETE CB. |
| 16 | 117+23 | 116+80 | RT | | CB | CB | | | | | | 30 | 40 | | | X | | | | | | | X | 7 | | | 2-D | | 37.24 ~~23~~ | ~~2.3~~ 2.37 | | | | ~~12~~ 3.0 | | | | | | | REMOVE EXIST DI. NEW 30" CPEP(SL) WITH CONCRETE CB. CONNECT EXIST DRAIN PIPE. |
| 17 | 117+17 | 117+01 | LT | | DI | CB | | | | | | 18 | ~~18~~ | 12 | | X | | | | | | X | | 6.0 | | | D | | 0 ~~21~~ | 10.0 | | | | ~~15~~ 0 | | | | | | | NEW 18" CPEP(SL) WITH RCDI. |
| 18 | 117+70 | 117+23 | RT | | CB | CB | | | | | | 30 | ~~44~~ | 46 | | X | | | | | | | X | 7 | | | 2-D | | 37.25 ~~24~~ | | | | | ~~12~~ 3.0 | | | | | | | NEW 30" CPEP(SL) WITH CONCRETE CB. |
| 19 | 117+86 | 117+01 | LT | | CB | CB | | | | | | 30 | ~~81~~ | 80 | | X | | | | | | | X | 7 | | | 2-D | | 69.22 ~~33~~ | 0 | | | | ~~15~~ 3.0 | | | | | | | NEW 30" CPEP(SL) WITH CONCRETE CB. • REMOVED EXISTING 4'X4'X4' CB |
| 20 | 117+63 | 117+70 | RT | | DI | DI | | | | | | 18 | ~~13~~ | 16 | | X | | | | | | | | 7 | | | | | 10.1 ~~0~~ | | | | | ~~7~~ 0 | | | | | | | NEW 18" CPEP(SL). CONNECT TO EXIST DI. |
| 21 | 117+86 | 117+86 | LT | | DI | CB | | | | | | 18 | ~~10~~ | 20 | | X | | | | | | X | | 7.0 | | | D | | 0 ~~16~~ | 13.5 | | | | ~~9~~ 0 | | | | | | | NEW 18" CPEP(SL) WITH RCDI. REMOVED EXISTING TELEPHONE MH |
| 22 | 119+25 | 117+70 | RT | | DI | CB | | | | | | 24 | ~~151~~ | 152 | | X | | | | | | X | | 7 | | | D | | 71.04 ~~53~~ | 4.74 | | | | ~~34~~ 1.79 | | | | | | | REMOVE 2-EXIST DI'S. NEW 24" CPEP(SL) WITH RCDI. |
| 23 | 119+25 | 117+86 | LT | | CB | CB | | | | | | 30 | ~~135~~ | 136 | | X | | | | | | | X | 7 | | | 2-D | | 64.78 ~~48~~ | 2.4 | | | | ~~20~~ 3.0 | | | | | | | NEW 30" CPEP(SL) WITH CONCRETE CB. |
| 24 | 119+25 | 119+25 | LT | | DI | CB | | | | | | 18 | 10 | | | X | | | | | | X | | 7.0 | | | D | | 16.43 ~~13~~ | | | | | ~~8~~ 1.79 | | | | | | | NEW 18" CPEP(SL) WITH RCDI. |
| 25 | 120+73 | 119+25 | RT | | DI | DI | | | | | | 24 | ~~145~~ | 144 | | X | | | | | | X | | 7 | | | D | | 68.76 ~~50~~ | ~~5.0~~ 4.7 | | | | ~~20~~ 1.79 | | | | | | | REMOVE 2-EXIST DI'S. NEW 24" CPEP(SL) WITH RCDI. |
| 26 | 120+74 | 119+25 | LT | | CB | CB | | | | | | 30 | ~~146~~ | 146 | | X | | | | | | | X | 7 | | | 2-D | | 58.79 ~~40~~ | | | | | ~~10~~ 3.0 | | | | | | | NEW 30" CPEP(SL) WITH CONCRETE CB. |
| 27 | 121+70 | 120+74 | LT | | DI | CB | | | | | | 24 | ~~83~~ | 94 | | X | | | | | | X | | 7 | | | D | | 37.38 ~~32~~ | | | | | ~~17~~ 1.78 | | | | | | | NEW 24 CPEP(SL) WITH RCDI. |
| 28 | 121+75 | 120+73 | RT | | DI | DI | | | | | | 24 | ~~96~~ | 102 | | X | | | | | | X | | 7 | | | D | | 49.83 ~~37~~ | ~~2.5~~ 2.4 | | | | ~~21~~ 1.79 | | | | | | | REMOVE EXIST DI. NEW 24" CPEP(SL) WITH RCDI. |
| 29 | 120+75 | 120+74 | LT | | DI | CB | | | | | | 18 | 12 | | | X | | | | | | X | | 7.0 | | | D | | 25.27 ~~15~~ | | | | | 9 | | | | | | | NEW 18" CPEP(SL) WITH RCDI / REMOVE EXIST 8" VCT, CONNECTED EXISTING STRUCTURE TO DS#29 USING 5 LF OF 8" SDR 35 |
| 30 | 120+75 | | LT | | MH | | | | | | | | | | | | | | | | | | | | | | ~~MH COVER~~ | ELIMINATED | | | | | | | | | | | | ~~REMOVE DI GRATE AND FRAME. NEW DMH COVER AND FRAME.~~ ELIMINATED |
| 31 | 121+70 | 121+70 | LT | | DI | CB | | | | | | 18 | ~~13~~ | 14 | | X | | | | | | X | | 7.0 | | | D | | 41.00 ~~18~~ | 3.89 | | | | ~~11~~ 1.79 | | | | | | | NEW 18" CPEP(SL) WITH RCDI, TRENCH ROCK - REMOVED BURIED CONCRETE WALL |
| 32 | 122+30 | 122+45 | LT | | DI | CB | | | | | | 18 | ~~18~~ | 20 | | X | | | | | | X | | 7.0 | | | D | | 33.84 ~~21~~ | 7.56 | | | | ~~16~~ 1.79 | | | | | | | NEW 18" CPEP(SL) WITH RCDI, TRENCH ROCK - REMOVED BURIED STONE FOUNDATION |
| 33 | 122+45 | 121+70 | LT | | DI | DI | | | | | | 24 | ~~71~~ | 72 | | X | | | | | | X | | 7 | | | D | | 33.32 ~~28~~ | | | | | ~~16~~ 1.78 | | | | | | | REMOVE EXIST 12" RCP. NEW 24" CPEP(SL) WITH RCDI. |
| 34 | 122+71 | 121+75 | RT | | DI | DI | | | | | | 24 | ~~95~~ | 94 | | X | | | | | | X | | 7 | | | D | | 41.59 ~~36~~ | | | | | ~~20~~ 1.79 | | | | | | | NEW 24" CPEP(SL) WITH RCDI. |
| 35 | 122+95 | 122+45 | LT | | MH | DI | | | | | | 24 | ~~46~~ | 48 | | X | | | | | X | | | 8 | | | MH COVER | | 25.74 ~~19~~ | 4.5 | | | | ~~10~~ 3.0 | | | | | | | REMOVE EXIST DMH & 12" RCP. NEW 24" CPEP(SL) WITH CONCRETE DMH (8'). CONNECT EXIST 10" VCT. |
| 36 | 123+28 | 122+95 | LT | | DI | MH | | | | | | 18 | 30 | | | X | | | | | | | X | 7 | | | D | | 19.07 ~~12~~ | ~~5.4~~ 0 | | | | ~~7~~ 1.79 | | | | | | | REMOVAL OF EXISTING DMH WAS DOCUMENTED BY DUFRESNS GROUP ON 4/30/12 REMOVE EXIST DMH. NEW 18" CPEP(SL) WITH RCDI. |
| 37 | 123+76 | 122+71 | RT | | DI | DI | | | | | | 24 | 102 | | | X | | | | | | | X | 7 | | | D | | 43.57 ~~36~~ | 2.37 | | | | ~~20~~ 1.79 | | | | | | | NEW 24" CPEP(SL) WITH RCDI CB. |
| 38 | 124+65 | 123+76 | RT | | DI | DI | | | | | | 24 | 86 | | | X | | | | | | | X | 7 | | | D | | 38.03 ~~32~~ | 0 | | | | ~~10~~ 1.79 | | | | | | | NEW 24" CPEP(SL) WITH RCDI. |
| 39 | 125+35 | SL 50+35 | RT-LT | | MH | DI | | | | | | 18 | ~~12~~ | 14 | | X | | | | | X | | | 7 | | | MH COVER | | 7.86 ~~14~~ | ~~3.7~~ 0 | | | | ~~9~~ 1.79 | | | | | | | REMOVE EXIST DMH & 10" VCT. NEW 18" CPEP(SL) WITH DMH (4'). CONNECT EXIST 6" CIP. |
| 40 | 125+70 | 125+70 | LT-RT | | DI | DI | | | | | | 18 | ~~30~~ | 40 | | X | | | | | | X | | 6 | | | D | | 16.05 ~~9~~ | | | | | ~~5~~ 1.79 | | | | | | | NEW 18" CPEP(SL) WITH RCDI. |
| 41 | 125+70 | 125+35 | RT | | DI | MH | | | | | | 18 | 32 | | | X | | | | | | X | | 6 | | | D | | 13.52 ~~10~~ | | | | | ~~13~~ 1.79 | | | | | | | NEW 18" CPEP(SL) WITH RCDI. |
| 42 | 127+00 | 125+70 | RT | | DI | DI | | | | | | 18 | ~~127~~ | 128 | | X | | | | | | X | | 7 | | | D | | 33.26 ~~28~~ | | | | | ~~16~~ 1.79 | | | | | | | NEW 18" CPEP(SL) WITH RCDI. |
| 43 | 128+55 | 128+89 | LT | | DI | MH | | | | | | 18 | ~~30~~ | 31 | | X | | | | | | X | | 7.0 | | | D | | 15.86 ~~14~~ | | | | | ~~8~~ 1.79 | | | | | | | NEW 18" CPEP(SL) WITH RCDI. |
| 44 | 128+78 | 129+90 | RT | | DI | DI | | | | | | 18 | ~~108~~ | 106 | | X | | | | | | X | | 7.0 | | | D | | 35.10 ~~26~~ | | | | | ~~16~~ 1.79 | | | | | | | NEW 18" CPEP(SL) WITH RCDI. |
| | | | | | | | | | | | | | | | | | | | | | 5 | 11 | 25 | | | | 47 | | | | | | | | | | | | | TYPE D GRATES |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | 6 | | | | | | | | | | | | | DRAIN MANHOLE COVERS |
| **DRAINAGE DETAIL SHEET #1 SUBTOTAL:** | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1538.22 ~~1248~~ | | ~~47.1~~ 101.97 | | | | ~~709~~ 84.95 | | | | | | | |
| | | | | | | | | | | | | 18 | ~~551~~ 595 | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | 24 | ~~1082~~ 1096 | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | 30 | ~~1119~~ 1128 | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | 36 | ~~61~~ 62 | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |

VHB Vanasse Hangen Brustlin, Inc.

| | |
|---|---|
| PROJECT NAME: | **BARRE CITY** |
| PROJECT NUMBER | **FEGC F 026-1(34) C/2** |
| FILE NAME: z85b010dds.xls | PLOT DATE: **3/21/2011** |
| PROJECT LEADER: G. BAKOS | DRAWN BY: D. PECK |
| DESIGNED BY: D. PECK | CHECKED BY: |
| DRAINAGE DETAIL SHEET #1 | SHEET **19** OF **339** |

STATE OF VERMONT
AGENCY OF TRANSPORTATION

# DRAINAGE DETAIL SHEET #2

| LAYOUT CODE (#) | STATION | STATION | POS. | ASKEW NO. DEG. | INLET/OUTLET TYPE INLET | INLET/OUTLET TYPE OUTLET | DITCH IN | DITCH OUT | PIPE ARCH SPAN IN | PIPE ARCH RISE IN | PIPE ARCH L FT | PIPE D IN | PIPE L FT | ALLOWABLE OPTIONS PCCSP TH | ALLOWABLE OPTIONS SPECIAL PROVISION (TRENCHLESSS PIPE) | ALLOWABLE OPTIONS CPEP SL | ALLOWABLE OPTIONS PVC | PIPE ELBOW NO. DEG. | ES EA | DMH EA | CB EA | DI EA | FRCD | DEPTH DI / DMH FT | SPECIAL PROVISION (FLOWABLE FILL) CY | REINF STEEL LBS | GRATE TYPE | CHAN ELEV EA | CRM CY | TRENCH EXCAVATION EARTH CY | TRENCH EXCAVATION ROCK CY | COMM EXC CY | UNC CHAN EXC CY | STRUCT EXCAV CY | GRAN BKFLL STRUCT CY | GRAN BORR CY | EROS MATT SY | STONE FILL CY | STONE FILL TYPE | MARKER POSTS LT EA | MARKER POSTS RT EA | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 45 | 128+89 | 129+90 | LT | | MH | DI | | | | | | 18 | 98 | | | X | | | | X | | | | 6.0 | | | MH COVER | | 32.77 | 27 | 4.3 | 2.37 | | | 17 | 1.79 | | | | | | REMOVE EXIST DI, DMH, & 12" RCP. NEW 18" CPEP(SL) WITH DMH (4'). |
| 46 | 129+90 | 130+56 | LT | | DI | BOX | | | | | | 18 | 60 | | | X | | | | | | X | | 7.0 | | | D | | 24.09 | 10 | 3.0 | 2.37 | | | 12 | 1.79 | | | | | | REMOVE EXIST DI & 12" RCP. NEW 18" CPEP(SL) WITH RCDI. CORE PIPE INTO EXIST. 6X8 BOX CULVERT. |
| 47 | 129+90 | SL 80+36 | RT | | DI | DI | | | | | | 18 | 29 26 | | | X | | | | | | X | | 7.0 | | | D | | 27.29 | 10 | 9.30+1.99= STRUCTURE 27.29 | | | | 11 | 1.79 | | | | | | NEW 18" CPEP(SL) WITH RCDI. |
| 48 | NOT USED | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | 0 | | | | 0 | | | | | | |
| 49 | 131+06 | 130+56 | LT | | DI | BOX | | | | | | 18 | 44 74 | | | X | | | | | | X | | 7.0 | | | D | | 26.18 | 14 | 0.0 | 2.37 | | | 0 | 1.79 | | | | | | REMOVE EXIST DI. NEW 18" CPEP(SL) WITH RCDI. CORE PIPE INTO EXIST. 6X6 BOX CULVERT. |
| 50 | 131+06 | SL 80+33 | RT-LT | | DI | DI | | | | | | 18 | 36 46 | | | X | | | | | | X | | 7.0 | | | D | | 21.42 | 20 | | | | | 23 | 1.79 | | | | | | NEW 18" CPEP(SL) WITH RCDI. |
| 51 | 132+32 | 131+06 | LT | | DI | DI | | | | | | 18 | 122 116 | | | X | | | | | | X | | 7.0 | | | D | | 36.10 | 33 | 2.4 | 2.37 | | | 22 | 1.79 | | | | | | REMOVE EXIST DI. NEW 18" CPEP(SL) WITH RCDI. |
| 52 | 133+04 | 131+06 | RT | | DI | DI | | | | | | 18 | 194 204 | | | X | | | | | | X | | 7.0 | | | D | | 43.33 | 42 | 3.6 | 5.19 | | | 27 | 1.79 | | | | | | REMOVE 2-EXIST DI'S. NEW 18" CPEP(SL) WITH RCDI. |
| 53 | 133+05 | 132+32 | LT | | DI | DI | | | | | | 18 | 68 70 | | | X | | | | | | X | | 7.0 | | | D | | 24.31 | 10 | 1.1 | 2.37 | | | 12 | 1.79 | | | | | | REMOVE EXIST DI. NEW 18" CPEP(SL) WITH RCDI. |
| 54 | 134+00 | 134+82 | LT | | DI | DI | | | | | | 18 | 78 80 | | | X | | | | | | X | | 7.0 | | | D | | 30.04 | 28 | | | SEE FLAT FILES | | 18 | 1.79 | | | | | | NEW 18" CPEP(SL) WITH RCDI. |
| 55 | 134+00 | 135+54 | RT | | DI | DI | | | | | | 18 | 150 154 | | | X | | | | | | X | | 7.0 | | | D | | 60.76 | 53 | 1.3 | 2.37 | | | 40 | 1.79 | | | | | | REMOVE EXIST DI. NEW 18" CPEP(SL) WITH RCDI. |
| 56 | 134+82 | 135+54 | LT | | DI | DI | | | | | | 24 | 66 70 | | | X | | | | | | X | | 8.0 | | | D | | 38.61 | 38 | 4.7 | 2.37 | | | 26 | 1.79 | | | | | | REMOVE EXIST DI. NEW 24" CPEP(SL) RCDI. |
| 57 | 135+54 | 135+54 | LT-RT | | DI | DI | | | | | | 24 | 36 40 | | | X | | | | | | X | | 9.0 | | | D | | 29.14 | 20 | | | | | 10 | 1.79 | | | | | | NEW 24" CPEP(SL) WITH RCDI. |
| 58 | 135+54 | 136+14 | RT | | DI | DI | | | | | | 24 | 55 62 | | | X | | | | | | X | | 9.0 | | | D | | 52.45 | 40 | | | | | 37 | 1.79 | | | | | | NEW 24" CPEP(SL) WITH RCDI. |
| 59 R | 136+14 | ~~136+10~~ 136+71 | RT | | DI | MH | | | | | | 24 | 90 56 | | | X | | | | | | X | | 12.0 | | | D | | 68.46 | | | | | | | 1.79 | | | | | | NEW 24" CPEP(SL) WITH RCDI. SEE SPECIAL PROVISION (FURNISH AND INSTALL STORM DRAIN PIPE) NOTDONE, REDESIGN |
| ~~60~~ | ~~138+19~~ | | ~~RT~~ | | ~~MH~~ | | | | | | | | | | | ~~X~~ | | | | ~~X~~ | | | | ~~12.0~~ | | | MH COVER | | | ~~25~~ | | | | | ~~21~~ | | | | | | ~~NEW 8'x8' CONCRETE DMH. CONNECT TO EXIST 24" RCP. REDESIGN, NOT CONSTRUCTED.~~ |
| ~~61~~ | ~~138+71~~ | ~~136+14~~ | ~~RT~~ | | ~~MH~~ | ~~DI~~ | | | | | | ~~24~~ | ~~51~~ | | | ~~X~~ | | | | | | | | ~~10.0~~ | | | MH COVER | | | ~~53~~ | | | | | ~~42~~ | | | | | | ~~NEW 24" CPEP(SL) WITH DMH (4').~~ REVISED, NEVER WAS INSTALLED PER PLAN. |
| 61R | 136+71 | 137+20 | RT | | MH | DI | | | | | | 24 | 48 | | | X | | | | | | X | | | | | | | | 61.82 | | | | | 1.79 | | | | | | REMOVED 18"CPEP FROM DRAINAGE RUN #65 AND REPLACED WITH 24" CPEP PITCHEC TOWARD DS #65R |
| 62 | 136+71 | 136+71 | LT-RT | | MH | MH | | | | | | 18 | 36 40 | | | X | | | | | | X | | 9.0 | | | MH COVER | | 51.40 | 33 | 2.37 | | | | 25 | 1.79 | | | | | | NEW 18" CPEP(SL) WITH DMH (4'). CONNECT EXIST DRAIN PIPE. |
| 63 | 137+67 | 137+20 | RT | | DI | DI | | | | | | 18 | 44 | ← RE-LAID AS 63R BELOW | | X | | | | | | X | | 9.0 | | | D | | 32.40 | 20 | | | | | 20 | 1.79 | | | | | | NEW 18" CPEP(SL) WITH RCDI. |
| 63R | 137+67 | 137+20 | RT | | DI | DI | | | | | | 18 | 44 | RELAY PIPE → | | | | | | | | | | | | | | | 25.10 | | | | | | | | | | | | RELAYED 44 LF OF 18"CPEP PREVIOUSLY INSTALLED IN DRAINAGE RUN #63 |
| 64 | 137+21 | 136+71 | LT | | DI | MH | | | | | | 18 | 45 46 | | | X | | | | | | X | | 9.0 | | | D | | 31.34 | 24 | 0.5 | 2.37 | | | 17 | 1.79 | | | | | | REMOVE EXIST DI & 10" RCP. NEW 18" CPEP(SL) WITH RCDI. |
| 65 | 137+20 | 136+71 | RT | | DI | MH | | | | | | 18 | 45 48 | | | X | | | | | | X | | 9.0 | | | D | | 36.19 | 24 | 6.0 | 2.37 | | | 16 | 1.79 | | | | | | REMOVE EXIST DI. NEW 18" CPEP(SL) WITH RCDI. ~~PLUG & ABANDON EXIST 24" RCP.~~ |
| 65R | 137+20 | | RT | | DI | EXISTING DI | | | | | | 24 | | | | X | | | | | | | | | | | | | 18.38 | | 2.37 | | | | 1.79 | | | | | | REDESIGNED DS #65R, REMOVE OLD DS #65, CONNECT TO EXISTING 24" RCP |
| 66 | 138+33 | 137+67 | RT | | DI | DI | | | | | | 18 | 70 64 | | | X | | | | | | X | | 8.0 | | | D | | 36.32 | 27 | | | | | 18 | 1.79 | | | | | | NEW 18" CPEP(SL) WITH RCDI. |
| 67 | ~~138+65~~ 138+55 | 137+21 | LT | | DI | DI | | | | | | 18 | 138 128 | | | X | | | | | | X | | 8.0 | | | D | | 90.59 | 62 | 5.48 * 4.63 | | SEE FLAT FILES | | 39 | 1.79 | | | | | | REMOVE EXIST 10" RCP. NEW 18" CPEP(SL) WITH RCDI. |
| 68 | 139+75 | 139+47 | RT | | DI | DI | | | | | | 18 | 38 28 | | | X | | | | | | X | | 6 | | | D | | 41.89 | 45 | | | SEE FLAT FILES | | 37 | 1.79 | | | | | | NEW 18" CPEP(SL) WITH RCDI. |
| 68R | | | | | | | | | | | | 12 | 6 | TIED EXISTING STATUTE DRAIN INTO DI 68 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 69 | SL 11+02 | SL 11+02 | RT | | DI | CB | | | | | | 18 | 8 12 | | | X | | | | | | X | | 8 | | | D | | 28.74 | 20 | 4.1 | 8.0 | SEE FLAT FILES | | 10 | 1.79 | | | | | | NEW 18" CPEP(SL) WITH RCDI. CONNECT TO EXIST. 15" RCP REMOVE 2 EXIST. DI'S |
| 70 | SL 11+02 | SL 12+42 | RT | | CB | MH | | | | | | 36 | 136 | | | X | | | | | X | | | 8 | | | D | | 317.52 | 81 | 4.3 | 2.37 | SEE SHEET II | | 29 | 3.01 | | | | | | REMOVE EXIST DI. NEW 36" CPEP(SL) WITH CONCRETE CB |
| 71 | SL 12+42 | SL 13+11 | RT | | MH | MH | | | | | | 36 | 48 * | TRENCHLESS PIPE | | | | | X | | | | | 8 | | | MH COVER | | 36.90 | 25 | | | SEE FLAT FILES | | 14 | 0 | | | | | | SPECIAL PROVISION (TRENCHLESS PIPE) (48"). 36" HDPE PIPE WITH 48" STEEL CASING. NEW DMH (6') 48' 40' |
| 72 | SL 12+88 | SL 13+11 | RT | | DI | MH | | | | | | 18 | 36 30 | | | X | | | NOT USED | | X | [REHABBED 13 DI #72] | | | | | | D | | 56.68 | 48 | 8.3 | 0 | SEE FLAT FILES | | 36 | 0 | | | | | | REHAB CLASS I ~~REMOVE~~ EXIST. DI. NEW 18" CPEP(SL) ~~WITH RCDI. CONNECT EXIST. 15" RCP.~~ |
| 73 | SL 13+11 | SL 14+28 | RT | | MH | SP MH | | | | | | 36 | 90 60 | | | X | | | | X | | | | 13 | | | MH COVER | | 147.84 | 155 | | | SEE SHEET II | | 118 | 3.01 | | | | | | NEW 36" CPEP(SL) WITH CONCRETE DMH (6') / REMOVE EXIST DI & 80 LF EXIST 30" RCP |
| 74 | SL 14+28 | SL 14+41 | RT | | SP MH | OPS | | | | | | 12 | 13 10 | | | X | | | | | | | | 7 | | | MH COVER | | 40.52 | 24 | | | SEE FLAT FILES | | 13 | 3.01 | | | 1 | | | NEW 12" CPEP(SL) WITH MODIFIED DMH / REMOVE 9 LF EXIST 30" RCP / SEE DRAINAGE DETAILS SHEET |
| 75 | SL 14+41 | SL 14+60 | RT | | OPS | OUT | | | | | | 12 | 20 24 | | | X | | | | | | | | | | | | | 13.53 | 10 | | | SEE FLAT FILES | | 15 | 10.48 | | 2.0 | III | 2 | | NEW 12" CPEP(SL) / CONSTRUCT OFF-LINE PARTICLE SEPARATOR / SEE DRAINAGE DETAILS SHEET |
| 76 | SL 14+85 | | RT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 83.85 | 80.5 | I | | | | CONSTRUCT WET POND / SEE PLANS FOR POND LAYOUT AND GRADING SPHM EXCAVATION INCLUDED IN DRAINAGE RUN #74 |
| 77 | SL 14+25 | SL 15+28 | RT | | SP MH | OUT | | | | | | 36 | 100 | | | X | | | | | | | | | | | | | 167.78 | 127 | | | SEE SHEET II | | 100 | 0 | | 4.5 | III | | | NEW 36" CPEP(SL) SECONDARY OUTLET / SEE DRAINAGE DETAILS SHEET |
| 78 | SL 15+25 | SL 15+59 | RT | | OCS | OUT | | | | | | 18 | 33 34 | | | X | | | | | | | | | | | | | 61.42 | 10 | | | SEE FLAT FILES | | 16 | 10.68 | | 1.0 | III | | | NEW 18" CPEP(SL) / CONSTRUCT OVERFLOW CONTROL STRUCTURE / SEE DRAINAGE DETAILS SHEET |
| 79 | SL 30+46 | 116+42 | LT | | DI | MH | | | | | | 18 | 22 | | | X | | | | | | X | | 6 | | | D | | 36.04 | 22 | 2.3 | 0 | SEE FLAT FILES | | 15 | 0 | | | | | | REMOVE EXIST DI & 6" VCT. NEW 18" CPEP(SL) WITH RCDI. CONNECT EXIST 6" PVC. |
| 80 | SL 30+49 | SL 30+46 | RT-LT | | DI | DI | | | | | | 18 | 24 22 | | | X | | | | | | X | | 6 | | | D | | 24.72 | 23 | 2.6 | 2.4 | SEE FLAT FILES | | 17 | 0 | | | | | | REMOVE EXIST DI & 12" ACCGMP. NEW 18" CPEP(SL) AND RCDI. CONNECT EXIST. 6" CMP. |
| 81 | SL 40+33 | 122+95 | LT | | DI | MH | | | | | | 18 | 22 26 | | | X | | | | | | X | | 5 | | | D | | 41.21 | 13 | 2.7 | 2.37 | | | 8 | 1.78 | | | | | | REMOVE EXIST DI & 8" VCT. NEW 18" CPEP(SL) WITH RCDI |
| 82 | SL 40+64 | 122+95 | RT-LT | | DI | MH | | | | | | 18 | 44 46 | | | X | | | | | | X | | 5 | | | D | | 53.26 | 31 | 2.9 | 2.37 | | | 23 | 1.78 | | | | | | REMOVE EXIST DI. NEW 18" CPEP(SL) WITH RCDI. CONNECT EXIST CIP. |
| 83 | SL 50+35 | 124+65 | RT | | DI | DI | | | | | | 18 | 25 28 | | | X | | | | | | X | | 6 | | | D | | 36.22 | 17 | | | | | 11 | 1.79 | | | | | | NEW 18" CPEP(SL) WITH RCDI. |
| 84 | SL 50+35 | SL 50+35 | LT-RT | | DI | DI | | | | | | 18 | 28 | | | X | | | | | | X | | 6 | | | D | | 12.46 | 22 | 2.7 | 0 | | | 15 | 1.79 | | | | | | REMOVE EXIST 6" CIP & 2-DI'S. NEW 18" CPEP(SL) WITH RCDI. CONNECT EXIST 10" VCT & 8" CIP. |
| | | | | | | | | | | | | | 12 | 12 | TIED EXISTING 10" VCT INTO DI #84 USING 12"CPEP | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 85 | SL 60+38 | 127+00 | LT-RT | | DI | DI | | | | | | 18 | 54 | | | X | | | | | | X | | 6.0 | | | D | | 17.48 | 21 | 2.37 | | | | 12 | 1.79 | | | | | | REMOVE EXIST DI. NEW 18" CPEP(SL) WITH RCDI. |
| 86 | SL 60+38 | SL 60+38 | RT-LT | | DI | DI | | | | | | 18 | 17 18 | | | X | | | | | | X | | 6.0 | | | D | | 30.15 | 15 | | | | | 0 | 1.79 | | | | | | NEW 18" CPEP(SL) WITH RCDI (ECCENTRIC). |
| 87 | SL 70+35 | 128+55 | LT | | DI | DI | | | | | | 18 | 16 18 | | | X | | | | | | X | | 5.0 | | | D | | 26.91 | 16 | 4.1 | 2.37 | | | 11 | 1.79 | | | | | | REMOVE EXIST DI. NEW 18" CPEP(SL) WITH RCDI. |
| 88 | SL 70+46 | 128+89 | RT-LT | | DI | MH | | | | | | 18 | 22 | | | X | | | | | | X | | 5.0 | | | D | | 36.89 | 10 | 3.9 | | | | 12 | 1.79 | | | | | | REMOVE EXIST DI & 12" VCT. NEW 18" CPEP(SL) WITH RCDI (ECCENTRIC). CONNECT EXIST 10" VCT. |
| | | | | | | | | | | | | | 12 | 44 | REPAIRED EXISTING DRAINAGE PIPE INTO DI #88 | | | | | | | X | SEE CALC. FOLDER, 604.18, LINE 0175, DR 12.12/12 | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | ~~6~~ 5 | 1 | ~~31~~ 32 | | | 32 7 | | | | | | | | | | | | | | | | | TYPE D GRATES DRAIN MANHOLE COVERS |
| | | | | | | | | | | | | 12 | ~~33~~ | 96 | | X | | | | | | | | | | | | | ~~1123~~ | ~~73.7~~ | | | | ~~994~~ | | 4.5 | III | 3 | | |
| | | | | | | | | | | | | 18 | ~~1630~~ | 1698 | | X | | | | | | | | | | | | | 2255.97 | 64.62 | | | | 87.45 | | ~~30.5~~ | I | | | |
| DRAINAGE DETAIL SHEET #2 SUBTOTAL: | | | | | | | | | | | | 24 | 302 | 276 | | X | | | | | | | | | | | | | | | | | | | | 83.85 | | | | |
| | | | | | | | | | | | | 36 | 326 | 276 | | X | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | 48 | 48 | | X | | | | | | | | | | | | | | | | | | | | | | | | | |

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: **BARRE CITY**
PROJECT NUMBER **FEGC F 026-1(34) C/2**

FILE NAME: z85b010dds.xls | PLOT DATE: **3/21/2011**
PROJECT LEADER: G. BAKOS | DRAWN BY: D. PECK
DESIGNED BY: D. PECK | CHECKED BY:
DRAINAGE DETAIL SHEET #2 | SHEET **20** OF **339**

STATE OF VERMONT
AGENCY OF TRANSPORTATION

# DRAINAGE DETAIL SHEET #3

| LAYOUT CODE (#) | STATION | STATION | POS. | ASKEW | INLET/OUTLET TYPE | | DITCH | | PIPE ARCH | | | PIPE | | ALLOWABLE OPTIONS | | | PIPE ELBOW | ES | DMH | CB | DI | PRCCDI | DEPTH DI / DMH | SPECIAL PROVISION (FLOWABLE FILL) | REINF STEEL | GRATE | CHAN ELEV | CRM | TRENCH EXCAVATION | | COMM EXC | UNC CHAN EXC | STRUCT EXCAV | GRAN BKFILL STRUCT | GRAN BORR | EROS MATT | STONE FILL | | MARKER POSTS | | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | INLET | OUTLET | IN | OUT | SPAN | RISE | L | D | L | PCCSP | SPECIAL PROVISION (TRENCHLESSS PIPE) | CPEP | PVC | | | | | | | | | | | | | EARTH | ROCK | | | | | | | | | | |
| | | | | NO. DEG. | | | | | IN | IN | FT | IN | FT | TH | | SL | | NO. DEG. | EA | EA | EA | EA | | FT | CY | LBS | TYPE | EA | CY | CY | CY | CY | CY | CY | CY | SY | CY | TYPE | EA | EA | |
| 89 | SL 80+35 | SL 80+36 | LT | | DI | BOX | | | | | | 18 | ~~18~~ 28 | | | X | | | | | | X | 7.0 | | | D | | 15.35 | ~~10~~ | | | | ~~12~~ 179 | | | | | | | NEW 18" CPEP(SL) WITH RCDI. CORE PIPE INTO EXIST. 6X6 BOX CULVERT. |
| 90 | SL 11+02 | SL 12+88 | RT | | DI | DI | | | | | | 0 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | PLUG AND ABANDON EXIST. 30" DRAIN PIPE |
| 91 | SL 80+36 | SL 80+36 | RT-LT | | DI | BOX | | | | | | 18 | ~~20~~ 18 | | | X | | | | | | X | 7.0 | | | D | | 11.36 | 24 | | | | ~~17~~ 179 | | | | | | | NEW 18" CPEP(SL) WITH RCDI. CORE PIPE INTO EXIST. 6X6 BOX CULVERT. |
| 92 | SL 90+35 | 132+32 | LT | | DI | DI | | | | | | 18 | ~~16~~ 28 | | | X | | | | | | X | 6.0 | | | D | | 23.83 | ~~17~~ | | ~~3.0~~ 0 | | ~~11~~ 0 | | | | | | | REMOVE EXIST DI. NEW 18" CPEP(SL) ~~WITH RCDI.~~ CONNECT EXIST 8" VCT. |
| 93 | SL 200+38 | 134+82 | LT | | DI | DI | | | | | | 18 | ~~16~~ 18 | | | X | | | | | | X | 8.0 | | | D | | 38.86 | ~~21~~ | | ~~4.0~~ 0 | SEE FLAT FILES | ~~14~~ 179 | | | | | | | REMOVE EXIST DI. NEW 18" CPEP(SL) WITH RCDI. CONNECT EXIST 8" VCT. |
| ~~94~~ | SL 200+38 | SL 200+38 | RT-LT | | DI | DI | | | | | | 18 | ~~13~~ 18 | | | X | | | | | | X | 7.0 | | | D | | 30.14 | ~~15~~ | | ~~3.0~~ 0 | SEE FLAT FILES | ~~9~~ 179 | | | | | | | REMOVE EXIST DI & 8" VCT. NEW 18" CPEP(SL) WITH RCDI (ECCENTRIC). |
| 95 | SL 600+73 | 138+33 | RT | | DI | DI | | | | | | 18 | ~~02~~ 67 | | | X | | | | | | X | 8.0 | | | D | | 74.53 | ~~31~~ | | | | ~~21~~ 179 | | | | | | | NEW 18" CPEP(SL) WITH RCDI. |
| 96 | SL 800+65 | SL ~~603+73~~ 138+50 | LT-RT | | DI | DI | | | | | | 18 | ~~77~~ 122 | | | X | | | | | | X | 8.0 | | | D | | 130.11 | ~~76~~ | | SEE FLAT FILES | | ~~80~~ 179 | | | | | | | NEW 18" CPEP(SL) WITH RCDI. |
| 97 | 120+80 | 120+73 | RT | | DI | DI | | | | | | 18 | ~~10~~ 14 | | | X | | | | | | X | 7.0 | | | D | | 34.14 | ~~15~~ | | | | ~~7~~ 179 | | | | | | | NEW 18" CPEP(SL) WITH RCDI. |
| 98 | 121+72 | 121+75 | RT | | DI | DI | | | | | | 18 | ~~10~~ 12 | | | X | | | | | | X | 7.0 | | | D | | 28.35 | ~~15~~ | | | | ~~7~~ 179 | | | | | | | NEW 18" CPEP(SL) WITH RCDI. |
| ~~99~~ | ~~SL 700+49~~ | ~~SL 700+49~~ | ~~LT-RT~~ | | ~~DI~~ | ~~DI~~ | | | | | | ~~18~~ | ~~42~~ | | | ~~X~~ | | | | | | ~~X~~ | ~~8.0~~ | | | ~~D~~ | | | ~~37~~ | | | | ~~24~~ | | | | | | | ~~NEW 18" CPEP(SL) WITH RCDI.~~ DELETED |
| 100 | SL 700+49 | 139+58 | RT-LT | | DI | MH | | | | | | ~~12~~ 18 | ~~53~~ 60 | | | X | | | | | | | | | | | | 33.24 | ~~54~~ | | SEE FLAT FILES | | ~~33~~ 0 | | | | | | | REHAB EXIST. DI. WITH NEW 18" CPEP(SL) CONNECTIONS (99 & 100) |
| 101 | 139+75 | 139+58 | LT | | DI | MH | | | | | | 18 | ~~22~~ 26 | | | X | | | | | | X | 7.0 | | | D | | 25.25 | ~~26~~ | | SEE FLAT FILES | | ~~16~~ 179 | | | | | | | NEW 18" CPEP(SL) WITH RCDI. |
| 102 | 139+58 | 139+75 | LT-RT | | MH | DI | | | | | | 18 | 32 | | | X | | | X | | | | 8.0 | | | MH COVER | | 42.58 | ~~40~~ | | SEE FLAT FILES | | ~~20~~ 179 | | | | | | | NEW 18" CPEP(SL) WITH DMH. |
| ~~103~~ | ~~136+17~~ | ~~136+19~~ | ~~RT~~ | | ~~DMH~~ | ~~MH~~ | | | | | | ~~12~~ 24 | 6 40 | | | ~~X~~ | | | ~~X~~ | | | | ~~12.0~~ | | | ~~MH COVER~~ | | | ~~58~~ | | | | ~~30~~ | | | | | | | ~~NEW 24" CPEP(SL) WITH DMH.~~ REDESIGN, NOT CONSTRUCTED |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | MOVED TO #68A | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | 4.44 | SEE DAILY REPORT MARK HOUGHWOUT, 9/27-28/2012 | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | IO CY | | | | | | ONE LOAD OF GRANULAR BACKFILL FOR STRUCTURES USED ON ROAD TO STAGGING AREA. IO CY APPROXIMATED IN THE DUMP TRUCK. |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | ~~2~~ 1 | | ~~11~~ 9 | | | | | | 11 2 | | | ~~448~~ 489.02 | ~~11.8~~ 0 | | | ~~304~~ 27.9 | | | | | | TYPE D GRATES<br>DRAIN MANHOLE COVERS |
| **DRAINAGE DETAIL SHEET #3 SUBTOTAL:** | | | | | | | | | | | | 18<br>24 | 399<br>40 | | | X<br>X | | | | | | | | | | | | | | | | | | | | | | | |

| | |
|---|---|
| PROJECT NAME: | **BARRE CITY** |
| PROJECT NUMBER: | **FEGC F 026-1(34) C/2** |
| FILE NAME: z85b010dds.xls | PLOT DATE: **3/21/2011** |
| PROJECT LEADER: G. BAKOS | DRAWN BY: D. PECK |
| DESIGNED BY: D. PECK | CHECKED BY: |
| DRAINAGE DETAIL SHEET #3 | SHEET **21** OF **339** |

VHB Vanasse Hangen Brustlin, Inc.

STATE OF VERMONT
AGENCY OF TRANSPORTATION

# DRAINAGE DETAIL SHEET # 4

| LAYOUT CODE (#) | STATION | STATION | POS. | ASKEW NO. DEG. | INLET/OUTLET TYPE INLET | INLET/OUTLET TYPE OUTLET | DITCH IN | DITCH OUT | PIPE ARCH SPAN IN | PIPE ARCH RISE IN | PIPE ARCH L FT | PIPE D IN | PIPE L FT | ALLOWABLE OPTIONS PCCSP TH | ALLOWABLE OPTIONS SPECIAL PROVISION (TRENCHLESSS PIPE) | ALLOWABLE OPTIONS CPEP SL | ALLOWABLE OPTIONS PVC | PIPE ELBOW NO. DEG. | ES EA | DMH EA | CB EA | DI EA | PRCCDI | DEPTH DI / DMH FT | SPECIAL PROVISION (FLOWABLE FILL) CY | REINF STEEL LBS | GRATE TYPE | CHAN ELEV EA | CRM CY | TRENCH EXCAVATION EARTH CY | TRENCH EXCAVATION ROCK CY | COMM EXC CY | UNC CHAN EXC CY | STRUCT EXCAV CY | GRAN BKFILL STRUCT CY | GRAN BORR CY | EROS MATT SY | STONE FILL CY | STONE FILL TYPE | MARKER POSTS LT EA | MARKER POSTS RT EA | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| R1 | 112+22 | 113+00 | LT | | | | | | | | | | | | | | | | | | | | | | ~~5.0~~ 0 | | | | | ~~2.9~~ ~~10~~ | ~~3.3~~ 3.0 | | | | | | | | | | | ~~PLUG & ABANDON EXIST 18" ACCGMP. FILL WITH SPECIAL PROVISION (FLOWABLE FILL). REMOVE EXIST DI.~~ REMOVED PIPE, NO FLOWABLE FILL USED. |
| R2 | 113+00 | 113+67 | LT | | | | | | | | | | | | | | | | | | | | | | | | | | ~~7.4~~ ~~9~~ | | | | | | | | | | | | REMOVE 65 LF EXIST 18" ACCGMP. |
| R3 | 111+64 | 113+00 | RT | | | | | | | | | | | | | | | | | | | | | | ~~15.1~~ 0 | | | | | 6.7 | | | | | | | | | | | | PLUG & ABANDON EXIST 24" RCP. FILL WITH SPECIAL PROVISION (FLOWABLE FILL). |
| R4 | 113+00 | 116+80 | RT | | | | | | | | | | | | | | | | | | | | | | | | | | 55.9 | ~~81~~ | | | | | | | | | | | | REMOVE 378 LF EXIST 24" RCP. |
| R5 | 115+84 | 116+90 | LT | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | ~~9~~ | ~~3.6~~ | 0 | | | | | | | | | | ~~REMOVE 103 LF EXIST 24" RCP.~~ REMOVE EXIST DI. |
| R6 | 120+75 | 120+93 | LT | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | ~~15~~ | ~~3.1~~ | 0 | | | | | | | | | | R5 WAS NOT PAID DIRECTLY, IT WAS REMOVED DURING EXCAVATION FOR DRAIN RUNS #13&15 ~~REMOVE 15 LF EXIST 6" PIPE / REMOVE EXIST DI.~~ |
| R7 | 116+90 | 116+97 | LT | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | ~~3~~ | ~~3.7~~ | 0 | | | | | | | | | | PIPE REMOVED DURING TRENCHING FOR DRAINAGE RUN #29, EXISTING DI DID NOT EXIST. REMOVE 4 LF EXIST 12" RCP. REMOVE EXIST DMH. |
| R8 | 116+97 | 117+91 | LT | | | | | | | | | | | | | | | | | | | | | | | | | | 6 | ~~15~~ | ~~3.1~~ | 0 | | | | | | | | | | REMOVE 90 LF EXIST 12" RCP. REMOVE EXIST DI. |
| R9 | 116+80 | 117+23 | RT | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | ~~3~~ | | | | | | | | | | | | REMOVE 40 LF EXIST 24" RCP. |
| R10 | 117+23 | 117+87 | RT | | | | | | | | | | | | | | | | | | | | | | | | | | 40.7 | ~~9~~ | 2.37 | | | | | | | | | | | REMOVE 61 LF EXIST 24" RCP. |
| R11 | 117+63 | 117+87 | RT | | | | | | | | | | | | | | | | | | | | | | | | | | 0.1 | ~~7~~ | | | | | | | | | | | | REMOVE 24 LF EXIST DRAIN PIPE. |
| R12 | 117+87 | 118+59 | RT | | | | | | | | | | | | | | | | | | | | | | ~~8.0~~ 0 | | | | | 36 | | | | | | | | | | | | ~~PLUG & ABANDON EXIST 24" RCP. FILL WITH SPECIAL PROVISION (FLOWABLE FILL).~~ REMOVED PIPE |
| R13 | 117+91 | 118+84 | LT | | | | | | | | | | | | | | | | | | | | | | | | | | 4.94 | ~~14~~ | ~~4.2~~ | 0 | | | | | | | | | | REMOVE 89 LF EXIST 12" RCP. REMOVE EXIST DI. |
| R14 | 118+59 | 119+40 | RT | | | | | | | | | | | | | | | | | | | | | | ~~9.0~~ 0 | | | | | 34.5 | | | | | | | | | | | | ~~PLUG & ABANDON EXIST 24" RCP. FILL WITH SPECIAL PROVISION (FLOWABLE FILL).~~ REMOVED PIPE |
| R15 | 118+84 | 120+74 | LT | | | | | | | | | | | | | | | | | | | | | | | | | | 10.39 | ~~29~~ | ~~3.6~~ | 0 | | | | | | | | | | REMOVE 187 LF EXIST 12" RCP. REMOVE EXIST DMH. |
| R16 | 119+40 | 120+72 | RT | | | | | | | | | | | | | | | | | | | | | | ~~14.9~~ 0 | | | | | 90.52 | | | | | | | | | | | | ~~PLUG & ABANDON EXIST 24" RCP. FILL WITH SPECIAL PROVISION (FLOWABLE FILL).~~ |
| R17 | 120+74 | 121+03 | LT | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | ~~4~~ | ~~1.7~~ 2.37 | | | | | | | | | | REMOVE 30 LF EXIST 12" RCP. REMOVE EXIST DI & DMH. |
| R18 | 120+72 | 121+67 | RT | | | | | | | | | | | | | | | | | | | | | | ~~10.6~~ 0 | | | | | 4.74 | | SEE CARL GLEASON DAILY REPORT 6/5/12 | | | | | | | | | | ~~PLUG & ABANDON EXIST 24" RCP. FILL WITH SPECIAL PROVISION (FLOWABLE FILL).~~ REMOVED PIPE |
| R19 | 121+03 | 121+70 | LT | | | | | | | | | | | | | | | | | | | | | | | | | | | | 26 | | | | | | | | | | | | REMOVE 63 LF EXIST 12" RCP. |
| R20 | 121+67 | 123+08 | RT | | | | | | | | | | | | | | | | | | | | | | ~~15.9~~ 0 | | | | | 0 | ~~3~~ | | | | | | | | | | | | PLUG & ABANDON EXIST 24" RCP. FILL WITH SPECIAL PROVISION (FLOWABLE FILL). REMOVE EXIST DI. |
| R21 | SL 40+31 | 122+95 | RT-LT | | | | | | | | | | | | | | | | | | | | | | | | | | 57.08 | ~~2~~ | ~~2.5~~ | 0 | | | | | | | | | | REMOVE 17 LF EXIST 8" VCT. REMOVE EXIST DMH. |
| R22 | SL 40+64 | SL 40+31 | RT | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | ~~4~~ | 1.18 | | | | | SEE DAILY REPORT 6/14/12 | | | | | REMOVE 29 LF EXIST 8" VCT. |
| R23 | 122+95 | 125+24 | LT | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | ~~6~~ | | | | | | | | | | | | REMOVE 224 LF EXIST 8" RCP. REMOVE EXIST DMH. |
| R24 | 125+24 | 125+24 | LT | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | ~~10~~ | ~~3.1~~ 8.3 | | | | | SEE DUFRESNE GROUP REPORT 5/9/12 | | | | | REMOVE 2 LF EXIST 6" VCT. REMOVE EXIST DMH. |
| R25 | 125+24 | SL 60+38 | LT | | | | | | | | | | | | | | | | | | | | | | ~~1.3~~ 0 | | | | | 4.7 | | | | | | SEE DUFRESNE GROUP REPORT 5/30/12 | | | | | ~~PLUG & ABANDON EXIST 6" VCT. FILL WITH SPECIAL PROVISION (FLOWABLE FILL).~~ WAS REMOVED |
| R26 | 125+24 | 125+33 | LT-RT | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | ~~4~~ | ~~3.8~~ 0 | | | | | SEE DUFRESNE GROUP REPORT 5/17/12 | | | | | REMOVE 43 LF EXIST 6" VCT. |
| R27 | 127+89 | 128+86 | RT | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | ~~6~~ | 2.0 | | | | | SEE DUFRESNE GROUP REPORT 6/11/12 | | | | | REMOVE 20 LF EXIST 8" VCT. REMOVE EXIST DI. |
| R28 | SL 70+26 | 128+89 | LT | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | ~~36~~ | ~~2.5~~ 0 | | | | | SEE DUFRESNE GROUP REPORT 5/30/12 | | | | | REMOVE 20 LF EXIST 8" VCT. REMOVE EXIST DMH. |
| R29 | SL 70+35 | SL 70+26 | LT | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | ~~7~~ | ~~4.5~~ 4.7 | | | | | SEE DUFRESNE GROUP REPORT 5/22/12 | | | | | REMOVE 6 LF EXIST 8" VCT. |
| R30 | 128+86 | 130+09 | RT | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | ~~1~~ | | | | | | | | | | | | REMOVE 120 LF EXIST 8" VCT. REMOVE EXIST DI. |
| R31 | 130+09 | 130+27 | RT | | | | | | | | | | | | | | | | | | | | | | | | | | 48.5 | ~~60~~ | ~~2.0~~ 2.37 | | | | | | | | | | | REMOVE 16 LF EXIST 6" PVC. REMOVE EXIST DMH. |
| R32 | 130+27 | | RT | | | | | | | | | | | | | | | | | | | | | | | | | | | | 5.0 | | SEE DUFRESNE GROUP REPORT 6/13/12 | | | | | | | | | | REMOVE EXIST DMH. |
| R33 | 130+11 | 130+48 | LT-RT | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | ~~8~~ | 2.37 | | | | | | | | | | | REMOVE 36 LF EXIST 12" VCT. REMOVE EXIST DMH. REMOVE EXIST. BYPASS GATE |
| R34 | 130+31 | 130+54 | LT | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | ~~4~~ | ~~4.5~~ 7.4 | | | | | | | | | | | REMOVE 23 LF EXIST 12" VCT. REMOVE EXIST DI. |
| R35 | 130+56 | 131+04 | LT | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | ~~10~~ | | | | | | | | | | | | REMOVE 46 LF EXIST 10" VCT. REMOVE EXIST DMH. |
| R36 | 131+04 | 132+30 | LT | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | ~~6~~ | ~~3.8~~ 0 | | | | | | | | | | | REMOVE 122 LF EXIST 10" VCT. REMOVE EXIST DI. |
| R37 | 130+77 | SL 80+88 | RT-LT | | | | | | | | | | | | | | | | | | | | | | ~~2.7~~ 0 | | | | | 0 | ~~4~~ | ~~3.0~~ 0 | | | | | | | | | | | REMOVE 13 LF EXIST 12" VCT. REMOVE EXIST DMH & DI. |
| R38 | 130+77 | 130+93 | RT | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | ~~8~~ | ~~2.5~~ 0 | | | | | | | | | | | REMOVE 56 LF EXIST 12" VCT. |
| R39 | 130+93 | 131+52 | RT | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | ~~10~~ | ~~1.8~~ 0 | | | | | | | | | | | REMOVE 95 LF EXIST 18" RCP. REMOVE EXIST DMH. |
| R40 | 131+52 | 132+50 | RT | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | ~~2~~ | ~~3.8~~ 0 | | | | | | | | | | | REMOVE 12 LF EXIST 10" VCT. REMOVE EXIST DMH. |
| R41 | 132+30 | 132+45 | LT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | ~~62.5~~ 0 | | | | | ~~415~~ 441.28 | ~~67.3~~ 76.5 | | | | | | | | | | |

**DRAINAGE DETAIL SHEET #4 SUBTOTAL:**

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: **BARRE CITY**
PROJECT NUMBER: **FEGC F 026-1(34) C/2**

FILE NAME: z85b010dds.xls
PROJECT LEADER: G. BAKOS
DESIGNED BY: D. PECK
DRAINAGE DETAIL SHEET #4

PLOT DATE: **3/21/2011**
DRAWN BY: D. PECK
CHECKED BY:
SHEET **22** OF **339**

STATE OF VERMONT
AGENCY OF TRANSPORTATION

# DRAINAGE DETAIL SHEET #5

| LAYOUT CODE (#) | STATION | STATION | POS. | ASKEW NO. DEG. | INLET/OUTLET TYPE INLET | INLET/OUTLET TYPE OUTLET | DITCH IN | DITCH OUT | PIPE ARCH SPAN IN | PIPE ARCH RISE IN | PIPE ARCH L FT | PIPE D IN | PIPE L FT | ALLOWABLE OPTIONS PCCSP TH | ALLOWABLE OPTIONS SPECIAL PROVISION (TRENCHLESSS PIPE) | ALLOWABLE OPTIONS CPEP SL | ALLOWABLE OPTIONS PVC | PIPE ELBOW NO. DEG. | ES EA | DMH EA | CB EA | DI EA | PRCCDI | DEPTH DI / DMH FT | SPECIAL PROVISION (FLOWABLE FILL) CY | REINF STEEL LBS | GRATE TYPE | CHAN ELEV EA | CRM CY | TRENCH EXCAVATION EARTH CY | TRENCH EXCAVATION ROCK CY | COMM EXC CY | UNC CHAN EXC CY | STRUCT EXCAV CY | GRAN BKFILL STRUCT CY | GRAN BORR CY | EROS MATT SY | STONE FILL CY | STONE FILL TYPE | MARKER POSTS LT EA | MARKER POSTS RT EA | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| R42 | 132+45 | 132+62 | LT | | | | | | | | | | | | | | | | | | | | | | | | | | 0 ~~4~~ | 2.3 | | SEE DUFRESNE GROUP REPORT 7/19/12 | | | | | | | | | REMOVE 16 LF EXIST 10" VCT. REMOVE EXIST DMH & DI. |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.0 | | SEE DUFRESNE GROUP REPORT 7/31/12 | | | | | | | | | |
| R43 | SL 90+35 | 132+45 | LT | | | | | | | | | | | | | | | | | | | | | | | | | | 0 ~~5~~ | ~~3.7~~ 0 | | | | | | | | | | | REMOVE 17 LF EXIST 8" VCT. |
| R44 | 132+62 | 133+15 | LT | | | | | | | | | | | | | | | | | | | | | | | | | | | 4.4 | | SEE DUFRESNE GROUP REPORT 7/30/12 | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 0 ~~12~~ | ~~3.0~~ 0 | | | | | | | | | | | REMOVE 49 LF EXIST 10" VCT. REMOVE EXIST DMH & DI. |
| R45 | 135+02 | 135+00 | RT-LT | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.0 | | SEE DUFRESNE GROUP REPORT 8/1/12 | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 0 ~~8~~ | ~~1.1~~ 0 | | | | | | | | | | | REMOVE 34 LF EXIST 8" VCT. REMOVE EXIST DMH & DI. |
| R46 | 134+94 | 135+00 | LT | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.5 | | SEE DUFRESNE GROUP REPORT 8/7/12 | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 0 ~~3~~ | | | | | | | | | | | | REMOVE 5 LF EXIST 8" VCT. REMOVE EXIST DI. |
| R47 | SL 200+38 | 135+00 | LT | | | | | | | | | | | | | | | | | | | | | | | | | | | 7.4 | | SEE DUFRESNE GROUP REPORT 8/15/12 | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 0 ~~7~~ | ~~5.1~~ 0 | | | | | | | | | | | REMOVE 18 LF EXIST 8" VCT. |
| R48 | 135+00 | 135+19 | LT | | | | | | | | | | | | | | | | | | | | | | | | | | 0 ~~3~~ | | | | | | | | | | | | REMOVE 16 LF EXIST 10" RCP. REMOVE EXIST DMH. |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.5I | | SEE DUFRESNE GROUP REPORT 7/26/12 | | | | | | | | | |
| R49 | 135+19 | 137+12 | LT | | | | | | | | | | | | | | | | | | | | | | | | | | 0 ~~77~~ | | | | | | | | | | | | REMOVE 189 LF EXIST 10" RCP. |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 3.64 | | SEE DUFRESNE GROUP REPORT 7/23/12 | | | | | | | | | |
| R50 | 137+12 | 137+20 | LT-RT | | | | | | | | | | | | | | | | | | | | | | | | | | 0 ~~40~~ | ~~6.0~~ 0 | | | | | | | | | | | REMOVE 42 LF EXIST 24" RCP. NOT REMOVED, PARTIAL REMOVAL DURING SEWER & WATER INSTALLATION, REMAINDER OF PIPE WAS FILLED WITH FLOWABLE FILL. |
| R51 | 137+20 | 138+29 | RT | | | | | | | | | | | | | | | | | | | | | | | | | | 0 ~~45~~ | ~~4.1~~ 3.56 | SEE DUFRESNE GROUP REPORT 9/19/12 FOR COMPUTATION | | | | | | | | | REMOVE 111 LF EXIST 12" RCP. REMOVE EXIST DMH. |
| R52 | 138+29 | SL 600+60 | RT | | | | | | | | | | | | | | | | | | | | | | | | | | 0 ~~10~~ | ~~3.3~~ 3.56 | SEE DUFRESNE GROUP REPORT 9/19/12 FOR COMPUTATION | | | | | | | | | REMOVE 51 LF EXIST 12" RCP. REMOVE EXIST DI. PLUG & ABANDON EXIST 8" VCT. |
| R53 | SL 600+56 | SL 600+60 | LT-RT | | | | | | | | | | | | | | | | | | | | | | 1.1 | | | | 0 ~~8~~ | ~~3.0~~ 0 | | | | | | | | | | | PLUG & ABANDON EXIST 8" VCT. FILL WITH CONCRETE CLASS D. REMOVE EXIST DMH. |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | SEE NEW DRAINAGE SHEETS FOR REMOVAL OF EXISTING DI. |
| R54 | SL 600+70 | SL 600+56 | LT | | | | | | | | | | | | | | | | | | | | | | 0.1 | | | | 0 ~~4~~ | ~~2.5~~ 0 | | | | | | | | | | | PLUG & ABANDON EXIST 8" VCT. FILL WITH CONCRETE CLASS D. REMOVE EXIST DI. |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | SEE NEW DRAINAGE SHEETS FOR REMOVAL OF EXISTING DI. |
| R55 | 139+58 | SL 600+56 | RT-LT | | | | | | | | | | | | | | | | | | | | | | 0.2 | | | | 0 ~~6~~ | | | | | | | | | | | | PLUG & ABANDON EXIST 8" VCT. FILL WITH CONCRETE CLASS D. REMOVE EXIST DI. |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | SEE NEW DRAINAGE SHEETS FOR REMOVAL OF EXISTING DI. |
| R56 | SL 700+40 | 139+58 | RT | | | | | | | | | | | | | | | | | | | | | | 1.0 | | | | | | | | | | | | | | | | | PLUG & ABANDON EXIST 8" VCT. FILL WITH CONCRETE CLASS D. PLUG & ABANDON EXIST. DMH |
| | | | | | | | | | | | | | | | | | | | | | | | | | | SEE FLOWABLE FILL SLIPS | | | | | | | | | | | | | | | | SEE FLOWABLE FILL SLIPS. |
| R57 | SL 700+38 | SL 700+49 | RT | | | | | | | | | | | | | | | | | | | | | | 0.5 | | | | | | | | | | | | | | | | | PLUG & ABANDON EXIST 18" PIPE. FILL WITH CONCRETE CLASS D. PLUG & ABANDON EXIST. DMH |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | SEE FLOWABLE FILL SLIPS. |
| DRAINAGE DETAIL SHEET #5 SUBTOTAL: | | | | | | | | | | | | | | | | | | | | | | | | | 2.9 | | | | ~~241~~ 0 | ~~33.6~~ 33.87 | | | | | | | | | | | |
| TOTALS: | | | | | | | | | | | | | | | | | | | | 13 | 12 | 67 | | | 85.4 | | | | 3773 | 233.5 | | | | 1998 | | | 4.5<br>80.5 | III<br>I | | 3 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | 90<br>15 | | | | | | | | | | | | | | TYPE D GRATES<br>DRAIN MANHOLE COVERS |
| | | | | | | | | | 12 | 33 | | | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | 18 | 2580 | | | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | 24 | 1424 | | | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | 30 | 1119 | | | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | 36 | 387 | | | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | 48 | 48 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| | |
|---|---|
| PROJECT NAME: | **BARRE CITY** |
| PROJECT NUMBER | **FEGC F 026-1(34) C/2** |
| FILE NAME: z85b010dds.xls | PLOT DATE: **3/21/2011** |
| PROJECT LEADER: G. BAKOS | DRAWN BY: D. PECK |
| DESIGNED BY: D. PECK | CHECKED BY: |
| DRAINAGE DETAIL SHEET #5 | SHEET **23** OF **339** |

VHB Vanasse Hangen Brustlin, Inc.

STATE OF VERMONT
AGENCY OF TRANSPORTATION

# EARTHWORKS

| STATION | DIST | TOTAL EXCAVATION EARTH AND ROCK AREA S.F. | TOTAL EXCAVATION EARTH AND ROCK VOLUME C.Y. | ROCK EXCAVATION AREA S.F. | ROCK EXCAVATION VOLUME C.Y. | EMBANKMENT AREA S.F. | EMBANKMENT VOLUME C.Y. | | |
|---|---|---|---|---|---|---|---|---|---|
| 110+50 | | 0 | 26 | | | | | | |
| 110+77 | | 53 | | | | | | | |
| NORTH MAIN STREET | | | 86 | | | | | | |
| 111+~~40~~00 | | ~~0~~148 | | | | 0 | | | |
| | 10 | | ~~4~~ 349 | | | | | | |
| 111+50 | | ~~21~~225 | | | | 0 | | | |
| | 50 | | ~~44~~ 445 | | | | 0 | | |
| 112+00 | | ~~26~~252 | | | | 0 | | | |
| | 50 | | ~~52~~ 479 | | | | 0 | | |
| 112+50 | | ~~30~~265 | | | | 0 | | | |
| | 50 | | ~~293~~ 510 | | | | 0 | | |
| 113+00 | | 286 | | | | 0 | | | |
| | 50 | | 625 | | | | 0 | | |
| 113+50 | | 388 | | | | 0 | | | |
| | 50 | | 639 | | | | 0 | | |
| 114+00 | | 303 | | | | 0 | | | |
| | 50 | | 605 | | | | | | |
| 114+50 | | 351 | | | | 0 | | | |
| | 50 | | 634 | | | | | | |
| 115+00 | | 334 | | | | 0 | | | |
| | 50 | | 614 | | | | | | |
| 115+50 | | 329 | | | | 0 | | | |
| | 50 | | 595 | | | | | | |
| 116+00 | | 314 | | | | 0 | | | |
| | 50 | | 537 | | | | | | |
| 116+50 | | 286 | | | | 0 | | | |
| | 50 | | 482 | | | | | | |
| 117+00 | | 255 | | | | 0 | | | |
| | 50 | | 448 | | | | | | |
| 117+50 | | 229 | | | | 0 | | | |
| | 50 | | 417 | | | | 1 | | |
| 118+00 | | 221 | | | | 1 | | | |
| | 50 | | 417 | | | | 1 | | |
| 118+50 | | 229 | | | | 0 | | | |
| | 50 | | 420 | | | | | | |
| 119+00 | | 225 | | | | 0 | | | |
| | 50 | | 430 | | | | | | |
| 119+50 | | 239 | | | | 0 | | | |
| | 50 | | 443 | | | | | | |
| 120+00 | | 239 | | | | 0 | | | |
| | 50 | | 427 | | | | | | |
| 120+50 | | 222 | | | | 0 | | | |
| | 50 | | 420 | | | | | | |
| 121+00 | | 232 | | | | 0 | | | |
| | 50 | | 412 | | | | | | |
| 121+50 | | 213 | | | | 0 | | | |
| | 50 | | 395 | | | | 0 | | |
| 122+00 | | 214 | | | | 0 | | | |
| | 50 | | 447 | | | | 0 | | |
| 122+50 | | ~~269~~ | | | | 0 | | | |
| | 50 | | 475 | | | | 0 | | |
| 123+00 | | 244 | | | | 0 | | | |
| | 50 | | 468 | | | | | | |
| 123+50 | | 261 | | | | 0 | | | |
| | 50 | | 469 | | | | 1 | | |
| 124+00 | | 246 | | | | 1 | | | |
| | 50 | | 459 | | | | 1 | | |
| 124+50 | | 250 | | | | 0 | | | |
| | 50 | | 459 | | | | | | |
| 125+00 | | 246 | | | | 0 | | | |
| | 50 | | 469 | | | | | CUT | 26211 |
| 125+50 | | 261 | | | | 0 | | ROCK | 0 |
| | 50 | | 481 | | | | 0 | R.FAC | .495 |
| 126+00 | | 259 | | | | 0 | | FILL | 10 |
| | 50 | | 482 | | | | 0 | F.FAC | 1.15 |
| 126+50 | | 262 | | | | 0 | | EX. C | 26211 |
| | 50 | | 474 | | | | | | |
| 127+00 | | 250 | | | | 0 | | | |
| | 50 | | 485 | | | | | | |
| 127+50 | | 274 | | | | 0 | | | |
| | 50 | | 499 | | | | | | |
| 128+00 | | 265 | | | | 0 | | | |
| | 50 | | 481 | | | | | | |
| 128+50 | | 254 | | | | 0 | | | |
| | 50 | | 475 | | | | | | |
| 129+00 | | 259 | | | | 0 | | | |
| | 50 | | 473 | | | | | | |
| 129+50 | | 252 | | | | 0 | | | |
| | 50 | | 469 | | | | 2 | | |
| 130+00 | | 254 | | | | 2 | | | |
| | 50 | | 503 | | | | 2 | | |
| 130+50 | | 289 | | | | 0 | | | |
| | 50 | | 502 | | | | 1 | | |
| 131+00 | | 253 | | | | 1 | | | |
| | 50 | | 470 | | | | 1 | | |
| 131+50 | | 255 | | | | 0 | | | |
| | 50 | | 478 | | | | | | |
| 132+00 | | 261 | | | | 0 | | | |
| | 50 | | | | | | | | |

SUBTRACT 449.6 CY OF CONTAMINATED SOIL IN THIS AREA

| STATION | DIST | TOTAL EXCAVATION EARTH AND ROCK AREA S.F. | TOTAL EXCAVATION EARTH AND ROCK VOLUME C.Y. | ROCK EXCAVATION AREA S.F. | ROCK EXCAVATION VOLUME C.Y. | EMBANKMENT AREA S.F. | EMBANKMENT VOLUME C.Y. | | |
|---|---|---|---|---|---|---|---|---|---|
| NORTH MAIN STREET CONTINUED | | | | | | | | | |
| 132+50 | | | 255 | | | | 0 | | |
| | 50 | | 481 | | | | | | |
| 133+00 | | | 264 | | | | 0 | | |
| | 50 | | 494 | | | | | | |
| 133+50 | | | 269 | | | | 0 | | |
| | 50 | | 498 | | | | | | |
| 134+00 | | | 269 | | | | 0 | | |
| | 50 | | 513 | | | | | | |
| 134+50 | | | 285 | | | | 0 | | |
| | 50 | | 500 | | | | | | |
| 135+00 | | | 255 | | | | 0 | | |
| | 50 | | 489 | | | | | | |
| 135+50 | | | 273 | | | | 0 | | |
| | 50 | | 506 | | | | | | |
| 136+00 | | | 274 | | | | 0 | | |
| | 50 | | 517 | | | | | | |
| 136+50 | | | 284 | | | | 0 | | |
| | 50 | | 499 | | | | | | |
| 137+00 | | | 255 | | | | 0 | | |
| | 50 | | 495 | | | | | | |
| 137+50 | | | 280 | | | | 0 | | |
| | 50 | | 603 | | | | | | |
| 138+00 | | | 371 | | | | 0 | | |
| | ~~50~~ 60 | | ~~787~~ 944 | | | | | | |
| 138+~~50~~60 | | | 479 | | | | 0 | | |
| | 50 | | 550 | | | | | | |
| 139+00 | | | 115 | | | | 0 | | |
| | 50 | | 252 | | | | | | |
| 139+50 | | | 157 | | | | 0 | | |
| | 50 | | 154 | | | | | | |
| 140+00 | | | 10 | | | | 0 | | |

TOTAL 110+50 ~ 140+00 = 28,110.8 CY

VT ROUTE 62

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 10+35 | | | 459 | | | | | | |
| | 15 | | ~~262~~ 295 | | | | | | |
| 10+50 | | | 459 | | | | | | |
| | 50 | | 437 | | | | | | |
| 11+00 | | | 13 | | | | | | |
| | 50 | | 23 | | | | | CUT | 797 |
| 11+50 | | | 12 | | | | | ROCK | 0 |
| | 50 | | 29 | | | | | R.FAC | .495 |
| 12+00 | | | 19 | | | | | FILL | 0 |
| | 50 | | 38 | | | | | F.FAC | 1.15 |
| 12+50 | | | 22 | | | | | EX. C | 797 |
| | 50 | | 8 | | | | | | |

TOTAL 10+35 ~ 12+60 = 790 CY

MAPLE AVENUE

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 20+35 | | | 55 | | | | | | |
| | 15 | | ~~26~~ 27 | | | | | | |
| 20+50 | | | 43 | | | | | | |
| | 50 | | 40 | | | | | | |
| 21+00 | | | 0 | | | | | | |

TOTAL 20+35 ~ 21+00 = 67 CY

COTTAGE STREET

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 30+22 | | | 132 | | | | | | |
| | 3 | | ~~18~~ 15 | | | | | | |
| 30+25 | | | 132 | | | | | | |
| | 25 | | 76 | | | | | | |
| 30+50 | | | 31 | | | | | | |
| | 25 | | 27 | | | | | | |
| 30+75 | | | 28 | | | | | | |
| | 25 | | 26 | | | | | | |
| 31+00 | | | 29 | | | | | | |
| | 25 | | 26 | | | | | | |
| 31+25 | | | 28 | | | | | | |
| | 17 | | 18 | | | | | | |
| 31+42 | | | 28 | | | | | | |

TOTAL 30+22 ~ 31+42 = 188 CY

| STATION | DIST | TOTAL EXCAVATION EARTH AND ROCK AREA S.F. | TOTAL EXCAVATION EARTH AND ROCK VOLUME C.Y. | ROCK EXCAVATION AREA S.F. | ROCK EXCAVATION VOLUME C.Y. | EMBANKMENT AREA S.F. | EMBANKMENT VOLUME C.Y. | | |
|---|---|---|---|---|---|---|---|---|---|
| S. SEMINARY STREET | | | | | | | | | |
| 40+23 | | | 153 | | | | | | |
| | 2 | | ~~14~~ 11 | | | | | | |
| 40+25 | | | 153 | | | | | | |
| | 25 | | ~~91~~ 91 | | | | | | |
| 40+50 | | | 44 | | | | | CUT | ~~194~~ 191 |
| 40+50 | | | 56 | | | | | ROCK | 0 |
| 41+00 | | | 16 | | | | | R.FAC | 495 |
| | 50 | | 28 | | | | | FILL | 0 |
| 41+50 | | | 14 | | | | | F.FAC | 1.15 |
| | 20 | | 5 | | | | | EX. C | ~~194~~ 191 |
| 41+70 | | | 0 | | | | | | |

TOTAL 40+23 ~ 41+70 = 191 CY

GRANITE STREET

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 50+23 | | | 139 | | | | 0 | | |
| | 2 | | 10 | | | | | | |
| 50+25 | | | 139 | | | | 0 | | |
| | 25 | | 69 | | | | | | |
| 50+50 | | | 10 | | | | 0 | CUT | 103 |
| | 25 | | 9 | | | | | ROCK | 0 |
| 50+75 | | | 9 | | | | 0 | R.FAC | 495 |
| | 25 | | 9 | | | | | FILL | 0 |
| 51+00 | | | 10 | | | | 0 | F.FAC | 1.15 |
| | 15 | | 6 | | | | | EX. C | 103 |
| 51+15 | | | 11 | | | | 0 | | |

WEST STREET

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 60+22 | | | 57 | | | | | | |
| | 3 | | 6 | | | | | | |
| 60+25 | | | 57 | | | | | | |
| | 25 | | 31 | | | | | | |
| 60+50 | | | 9 | | | | | | |
| | 25 | | ~~8~~ 7 | | | | | CUT | 68 |
| 60+75 | | | 7 | | | | | ROCK | 0 |
| | 25 | | 6 | | | | | R.FAC | .495 |
| 61+00 | | | 7 | | | | | FILL | 0 |
| | 50 | | 13 | | | | | F.FAC | 1.15 |
| 61+50 | | | 7 | | | | | EX. C | ~~68~~ 66 |
| | 25 | | 3 | | | | | | |
| 61+75 | | | 0 | | | | | | |

TOTAL 60+22 ~ 61+75 = 66 CY

MERCHANT STREET

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 70+22 | | | 54 | | | | 0 | | |
| | 3 | | 6 | | | | | CUT | 70 |
| 70+25 | | | 54 | | | | 0 | ROCK | 0 |
| | 25 | | ~~45~~ 44 | | | | | R.FAC | 495 |
| 70+50 | | | 42 | | | | 0 | FILL | 0 |
| | 25 | | 19 | | | | | F.FAC | 1.15 |
| 70+75 | | | 0 | | | | 0 | EX. C | 70 |

TOTAL 70+22 ~ 70+75 = 69 CY

DEPOT SQUARE

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 80+23 | | | 197 | | | | 0 | | |
| | 2 | | 15 | | | | | | |
| 80+25 | | | 197 | | | | 0 | | |
| | 25 | | 101 | | | | | | |
| 80+50 | | | 22 | | | | 0 | CUT | 181 |
| | 25 | | 22 | | | | | ROCK | 0 |
| 80+75 | | | 25 | | | | 0 | R.FAC | 495 |
| | 25 | | 27 | | | | | FILL | 0 |
| 81+00 | | | 33 | | | | 0 | F.FAC | 1.15 |
| | 25 | | 15 | | | | | EX. C | 181 |
| 81+25 | | | 0 | | | | 0 | | |

SEE CALCULATION BOOK FOR COMMON EXCAVATION CALCULATIONS FOR DEPOT SQUARE

## SUMMARY AND BALANCES

| STATION TO STATION | | TOT EXC. EARTH & ROCK C.Y. | ROCK & COBBLE EXCAV C.Y. | EMBANK C.Y. | EXCESSES CUT | EXCESSES FILL | ACUMULATIVE EXCESSES CUT | ACUMULATIVE EXCESSES FILL |
|---|---|---|---|---|---|---|---|---|
| NORTH MAIN ST. | | | | | | | | |
| 111+40 | 140+00 | 28011.8 ~~262.1~~ | 1900 | 10 | 24301 | | 24301 | |
| VT ROUTE 62 | | | | | | | | |
| SL 10+35 | SL 13+00 | 790 ~~797~~ | 0 | 0 | 797 | | 25098 | |
| MAPLE AV. | | | | | | | | |
| SL 20+35 | SL 22+50 | 67 ~~66~~ | 0 | 0 | 66 | | 25164 | |
| COTTAGE ST. | | | | | | | | |
| SL 30+22 | SL 30+75 | 188 ~~189~~ | 0 | 0 | 189 | | 25353 | |
| S. SEMINARY ST. | | | | | | | | |
| SL 40+23 | SL 40+75 | 191 ~~194~~ | 0 | 0 | 194 | | 25547 | |
| GRANITE ST. | | | | | | | | |
| SL 50+23 | SL 51+15 | 103 | 0 | 0 | 103 | | 25650 | |
| WEST ST. | | | | | | | | |
| SL 60+22 | SL 60+75 | 66 ~~68~~ | 0 | 0 | 68 | | 25718 | |
| MERCHANT ST. | | | | | | | | |
| SL 70+22 | SL 70+75 | 69 ~~70~~ | 0 | 0 | 70 | | 25788 | |
| DEPOT SQ. | | | | | | | | |
| SL 80+23 | SL 81+25 | 213.9 ~~181~~ | 0 | 0 | 181 | | 25969 | |
| PEARL ST. | | | | | | | | |
| SL 90+23 | SL 90+50 | 18 ~~39~~ | (SEE SHEET 4 OF 339) 0 | 0 | 33 | | 26002 | |
| KEITH AV. | | | | | | | | |
| SL 200+23 | SL 200+50 | 22 ~~30~~ | (SEE SHEET 4 OF 339) 0 | 0 | 39 | | 26041 | |
| PROSPECT ST. | | | | | | | | |
| SL 500+25 | SL 501+00 | 37 | 0 | 0 | 37 | | 26078 | |
| MAIN ST. - SOUTH | | | SEE FLAT FILES FOR CALCULATION (718.8 CY) | | | | | |
| SL 600+26 | SL 603+00 | 266 | 0 | 0 | 266 | | 26344 | |
| ELM ST. | | | | | | | | |
| SL 700+25 | SL 707+00 | 27 | 0 | 0 | 27 | | 26371 | |
| CREAMERY COURT | | | | | | | | |
| SL 300+22 | ~ 300+50 | 24 | (SEE SHEET 4 OF 339) | | | | | |
| WET POND AREA | | | | | | | | |
| SL 14+50, RT | | 2326.52 | (SEE FLAT FILES) | | | | | |

## REMARKS

| | | |
|---|---|---|
| EARTH AND ROCK EXCAVATION | 28281 | |
| SOLID ROCK EXCAVATION (PLAN AREA) | 500 | |
| COBBLESTONE SURFACE REMOVAL (BY CITY) | 1400 | |
| WET POND EXCAVATION | 1550 | |
| EARTH EXCAVATION | 27931 | |
| PLANIMETERED FILL | 10 | |
| LESS FACTORED SOLID ROCK | | |
| LESS DISPLACEMENT OF ANY LARGE STRUCTURES | | |
| NET PLANIMETERED FILL | 10 | |
| FACTOR | 1.15 | |
| PLANIMETERED FILL INCLUDING FACTOR | 11.5 | |
| MATERIALS AVAILABLE FOR FILLS | | |
| EARTH EXCAVATION | 27931 | |
| CHANNEL EXCAVATION | | |
| UNDERDRAIN EXCAVATION | | |
| STRUCTURE EXCAVATION | | |
| TOTAL MATERIAL AVAILABLE FOR FILL | 27931 | |
| TOTAL FILL INCLUDING FACTOR | 11.5 | |
| TOTAL MATERIAL FOR FILL | 27931 | |
| BORROW | | |
| EXCESS EXCAVATION | 27920 | |

PROJECT NAME: **BARRE CITY**
PROJECT NUMBER: **FEGC F 026-1(34) C/2**

FILE NAME: 85B010 EarthworkSummary C2.xls
PROJECT LEADER: G. BAKOS
DESIGNED BY: J. WHITMORE / D. PECK
**EARTHWORK SUMMARY SHEET #1**

PLOT DATE: 3/9/2011
DRAWN BY: KAN / JAW
CHECKED BY: D. PECK
SHEET **24** OF **339**

**STATE OF VERMONT**
**AGENCY OF TRANSPORTATION**

# EARTHWORKS

| STATION | DIST FT. | TOTAL EXCAVATION EARTH AND ROCK AREA S.F. | TOTAL EXCAVATION EARTH AND ROCK VOLUME C.Y. | ROCK EXCAVATION AREA S.F. | ROCK EXCAVATION VOLUME C.Y. | EMBANKMENT AREA S.F. | EMBANKMENT VOLUME C.Y. | AREA S.F. | VOLUME C.Y. |
|---|---|---|---|---|---|---|---|---|---|
| PEARL STREET | | | | | | | | | |
| 90+23 | | 62 | | | | 0 | | | |
| | 2 | | 5 | | | | | CUT | 33 |
| 90+25 | | 62 | | | | 0 | | ROCK | 0 |
| | 25 | | 29 | | | | | R.FAC | .495 |
| 90+50 | | 0 | | | | 0 | | FILL | 0 |
| | | | | | | | | F.FAC | 1.15 |
| | | | | | | | | EX. C | 33 |
| KEITH AVENUE | | | | | | | | | |
| 200+23 | | 73 | | | | 0 | | | |
| | 2 | | 5 | | | | | CUT | 39 |
| 200+25 | | 73 | | | | 0 | | ROCK | 0 |
| | 25 | | 34 | | | | | R.FAC | .495 |
| 200+50 | | 0 | | | | 0 | | FILL | 0 |
| | | | | | | | | F.FAC | 1.15 |
| | | | | | | | | EX. C | 39 |
| PROSPECT STREET | | | | | | | | | |
| 500+25 | | 36 | | | | | | | |
| | 25 | | 28 | | | | | CUT | 37 |
| 500+50 | | 25 | | | | | | ROCK | 0 |
| | 10 | | 9 | | | | | R.FAC | .495 |
| 500+60 | | 25 | | | | | | FILL | 0 |
| | | | | | | | | F.FAC | 1.15 |
| | | | | | | | | EX. C | 37 |
| NORTH MAIN STREET - SOUTH | | | | | | | | | |
| 600+26 | | 13 | | | | | | | |
| | 24 | | 12 | | | | | | |
| 600+50 | | 13 | | | | | | | |
| | 50 | | 61 | | | | | | |
| 601+00 | | 52 | | | | | | | |
| | 50 | | 70 | | | | | CUT | 266 |
| 601+50 | | 24 | | | | | | ROCK | 0 |
| | 50 | | 50 | | | | | R.FAC | .495 |
| 602+00 | | 30 | | | | | | FILL | 0 |
| | 50 | | 51 | | | | | F.FAC | 1.15 |
| 602+50 | | 25 | | | | | | EX. C | 266 |
| | 50 | | 23 | | | | | | |
| 603+00 | | 0 | | | | | | | |
| ELM STREET | | | | | | | | | |
| 700+25 | | 25 | | | | | | CUT | 27 |
| | 25 | | 21 | | | | | ROCK | 0 |
| 700+50 | | 20 | | | | | | R.FAC | .495 |
| | 15 | | 6 | | | | | FILL | 0 |
| 700+65 | | 0 | | | | | | F.FAC | 1.15 |
| | | | | | | | | EX. C | 27 |

| STATION | DIST FT. | TOTAL EXCAVATION EARTH AND ROCK AREA S.F. | TOTAL EXCAVATION EARTH AND ROCK VOLUME C.Y. | ROCK EXCAVATION AREA S.F. | ROCK EXCAVATION VOLUME C.Y. | EMBANKMENT AREA S.F. | EMBANKMENT VOLUME C.Y. | AREA S.F. | VOLUME C.Y. |
|---|---|---|---|---|---|---|---|---|---|

| STATION | DIST FT. | TOTAL EXCAVATION EARTH AND ROCK AREA S.F. | TOTAL EXCAVATION EARTH AND ROCK VOLUME C.Y. | ROCK EXCAVATION AREA S.F. | ROCK EXCAVATION VOLUME C.Y. | EMBANKMENT AREA S.F. | EMBANKMENT VOLUME C.Y. | AREA S.F. | VOLUME C.Y. |
|---|---|---|---|---|---|---|---|---|---|

## SUMMARY AND BALANCES

| STATION TO STATION | TOT EXC. EARTH & ROCK C.Y. | ROCK EXCAV C.Y. | EMBANK C.Y. | EXCESSES CUT | EXCESSES FILL | ACUMULATIVE EXCESSES CUT | ACUMULATIVE EXCESSES FILL |
|---|---|---|---|---|---|---|---|

## REMARKS

**PROJECT NAME:** BARRE CITY
**PROJECT NUMBER:** FEGC F 026-1(34) C/2

FILE NAME: 85B010 EarthworkSummary C2.xls
PROJECT LEADER: G. BAKOS
DESIGNED BY: J. WHITMORE / D. PECK
**EARTHWORK SUMMARY SHEET #2**

PLOT DATE: 3/9/2011
DRAWN BY: KAN / JAW
CHECKED BY: D. PECK
SHEET **25** OF **339**

Barre City FEGC F026-1(34)
Bounds & Pins on Side Streets
Coordinates are State Plane with a 1927 datum
Alignment data from Consultant VHB
(z85b010prop.alg) file dated 10/31/07

Last Revised: rbullock 6/2/2009 7:48:26 AM
Baseline Alignment: Main St US 302

| Offset Point | Baseline Station | Offset | | Offset Point Northing | Offset Point Easting | Desc. | Notes: |
|---|---|---|---|---|---|---|---|
| 10 | 120+47.23 | RT | 25.51 | 619991.57 | 498239.77 | APL | Computed Bound Location |
| 11 | 121+60.38 | RT | 29.30 | 619903.51 | 498311.86 | APL | Computed Bound Location |
| 12 | 123+03.72 | RT | 31.33 | 619794.20 | 498404.41 | APL | Computed Bound Location |
| 13 | 124+93.61 | RT | 32.18 | 619651.00 | 498529.72 | APL | Computed Bound Location |
| 14 | 135+79.55 | RT | 32.17 | 618856.61 | 499271.30 | APL | Computed Bound Location |
| 20 | 137+58.19 | RT | 34.82 | 618721.97 | 499386.58 | APL | Computed Bound Location |
| 21 | 136+78.94 | RT | 27.97 | 618786.39 | 499339.93 | APL | Computed Bound Location |
| 23 | 120+46.52 | LT | 24.00 | 620023.95 | 498277.23 | APL | Computed Bound Location |
| 24 | 122+69.43 | LT | 27.41 | 619858.63 | 498426.20 | APL | Computed Bound Location |
| 25 | 125+74.24 | LT | 33.81 | 619635.13 | 498632.69 | APL | Computed Bound Location |
| 26 | 128+61.26 | LT | 30.16 | 619421.86 | 498823.92 | APL | Computed Bound Location |
| 28 | 136+22.78 | LT | 32.02 | 618868.33 | 499347.79 | APL | Computed Bound Location |
| 42 | 118+61.40 | RT | 24.29 | 620134.69 | 498121.22 | APL | Computed Bound Location |
| 43 | 119+35.07 | RT | 24.77 | 620077.95 | 498168.22 | APL | Computed Bound Location |
| 44 | 120+32.37 | RT | 25.41 | 620003.02 | 498230.29 | APL | Computed Bound Location |
| 45 | 121+85.08 | RT | 29.77 | 619884.66 | 498327.82 | APL | Computed Bound Location |
| 46 | 124+22.19 | RT | 31.59 | 619704.86 | 498482.58 | APL | Computed Bound Location |
| 47 | 125+28.75 | RT | 31.93 | 619625.32 | 498553.06 | APL | Computed Bound Location |
| 48 | 126+16.71 | RT | 31.64 | 619559.73 | 498612.69 | APL | Computed Bound Location |
| 49 | 127+20.46 | RT | 31.67 | 619482.97 | 498682.81 | APL | Computed Bound Location |
| 50 | 127+99.30 | RT | 31.38 | 619425.17 | 498736.65 | APL | Computed Bound Location |
| 51 | 132+13.86 | RT | 32.55 | 619122.35 | 499020.11 | APL | Computed Bound Location |
| 52 | 132+61.45 | RT | 32.69 | 619061.82 | 499077.32 | APL | Computed Bound Location |
| 53 | 134+04.54 | RT | 32.35 | 618983.77 | 499151.09 | APL | Computed Bound Location |
| 54 | 134+56.04 | RT | 32.29 | 618946.35 | 499186.47 | APL | Computed Bound Location |
| 55 | 134+95.34 | RT | 32.25 | 618917.79 | 499213.47 | APL | Computed Bound Location |
| 56 | 135+59.53 | RT | 32.19 | 618871.14 | 499257.56 | APL | Computed Bound Location |
| 57 | 136+15.10 | RT | 31.21 | 618831.58 | 499295.76 | APL | Computed Bound Location |
| 63 | 123+96.97 | LT | 28.80 | 619823.94 | 498458.35 | APL | Computed Bound Location |
| 64 | 124+54.09 | LT | 31.99 | 619723.21 | 498551.32 | APL | Computed Bound Location |
| 65 | 108+67.49 | RT | 90.82 | 620871.69 | 497450.25 | APL | Computed Bound Location |
| 66 | 127+34.54 | LT | 32.42 | 619516.04 | 498739.48 | APL | Computed Bound Location |
| 67 | 128+06.67 | LT | 31.26 | 619462.43 | 498787.54 | APL | Computed Bound Location |
| 68 | 108+71.08 | RT | 36.53 | 620890.23 | 497479.32 | APL | Computed Bound Location |
| 69 | 129+44.98 | LT | 31.17 | 619361.66 | 498881.96 | APL | Computed Bound Location |
| 70 | 131+20.33 | LT | 32.35 | 619234.91 | 499003.14 | APL | Computed Bound Location |
| 71 | 131+97.08 | LT | 32.22 | 619179.00 | 499055.71 | APL | Computed Bound Location |
| 73 | 132+54.33 | LT | 32.13 | 619137.29 | 499094.93 | APL | Computed Bound Location |
| 74 | 133+12.53 | LT | 32.03 | 619094.66 | 499135.00 | APL | Computed Bound Location |
| 75 | 134+29.93 | LT | 31.84 | 619009.79 | 499214.80 | APL | Computed Bound Location |
| 76 | 109+50.43 | RT | 125.75 | 620785.04 | 497474.55 | APL | Computed Bound Location |
| 77 | 135+10.83 | LT | 31.71 | 618950.41 | 499270.62 | APL | Computed Bound Location |
| 80 | 110+28.80 | LT | 25.26 | 620817.72 | 497641.52 | APL | Computed Bound Location |
| 81 | 109+65.28 | RT | 155.46 | 620762.75 | 497454.52 | APL | Computed Bound Location |
| 82 | 110+72.30 | LT | 24.16 | 620782.60 | 497668.04 | APL | Computed Bound Location |
| 83 | 110+77.83 | LT | 36.14 | 620786.13 | 497680.56 | APL | Computed Bound Location |
| 84 | 110+71.86 | LT | 48.16 | 620798.28 | 497686.24 | APL | Computed Bound Location |
| 85 | 111+19.86 | LT | 50.04 | 620761.88 | 497717.60 | APL | Computed Bound Location |
| 86 | 111+53.81 | LT | 28.96 | 620722.19 | 497722.24 | APL | Computed Bound Location |
| 87 | 111+92.81 | LT | 30.87 | 620692.85 | 497748.01 | APL | Computed Bound Location |
| 88 | 112+02.82 | LT | 31.84 | 620685.63 | 497755.00 | APL | Computed Bound Location |
| 89 | 112+58.63 | RT | 47.29 | 620592.69 | 497727.82 | APL | Computed Bound Location |
| 90 | 112+84.83 | LT | 37.64 | 620625.06 | 497810.60 | APL | Computed Bound Location |
| 92 | 114+45.63 | LT | 56.64 | 620510.62 | 497925.42 | APL | Computed Bound Location |
| 93 | 115+36.67 | LT | 56.82 | 620426.85 | 497966.02 | APL | Computed Bound Location |
| 94 | 116+27.17 | LT | 30.08 | 620351.15 | 498017.21 | APL | Computed Bound Location |
| 95 | 116+37.01 | LT | 38.27 | 620348.28 | 498029.69 | APL | Computed Bound Location |
| 96 | 116+76.04 | LT | 37.02 | 620316.46 | 498052.33 | APL | Computed Bound Location |
| 97 | 109+66.34 | RT | 160.11 | 620751.19 | 497457.56 | APL | Computed Bound Location |
| 98 | 115+68.84 | RT | 47.11 | 620349.62 | 497920.22 | APL | Computed Bound Location |
| 99 | 116+56.90 | RT | 39.37 | 620285.47 | 497979.70 | APL | Computed Bound Location |
| 100 | 116+76.46 | RT | 36.99 | 620271.31 | 497993.68 | APL | Computed Bound Location |
| 101 | 117+09.36 | RT | 31.36 | 620248.54 | 498018.09 | APL | Computed Bound Location |
| 102 | 117+94.46 | LT | 23.46 | 620216.65 | 498114.75 | APL | Computed Bound Location |
| 103 | 109+65.18 | RT | 131.96 | 620769.63 | 497478.87 | APL | Computed Bound Location |
| 104 | 117+41.67 | LT | 45.56 | 620177.16 | 498166.94 | APL | Computed Bound Location |
| 194 | 130+77.63 | RT | 106.69 | 619170.57 | 498872.70 | APL | Computed Bound Location |
| 30000 | 109+53.29 | RT | 20.34 | 620848.42 | 497558.82 | BND | Bound Found |
| 30001 | 109+55.05 | RT | 23.76 | 620844.92 | 497557.25 | BND | Bound Found |
| 30002 | 109+62.09 | RT | 19.64 | 620841.97 | 497564.85 | BND | Bound Found |
| 30003 | 110+84.77 | RT | 20.37 | 620737.87 | 497630.87 | BND | Bound Found |
| 30004 | 110+84.66 | RT | 27.15 | 620741.37 | 497635.28 | BND | Bound Found |
| 30005 | 111+73.79 | RT | 40.18 | 620663.51 | 497680.57 | BND | Bound Found |
| 30006 | 112+48.68 | RT | 47.73 | 620600.21 | 497721.28 | BND | Bound Found |
| 30007 | 112+60.37 | RT | 47.51 | 620591.19 | 497728.73 | BND | Bound Found |
| 30008 | 114+61.14 | RT | 48.58 | 620433.29 | 497852.40 | BND | Bound Found |
| 30009 | 115+39.02 | RT | 49.23 | 620351.89 | 497923.38 | BND | Bound Found |
| 30010 | 117+93.08 | RT | 27.53 | 620184.93 | 498074.81 | BND | Bound Found |
| 30011 | 118+58.83 | RT | 28.23 | 620134.12 | 498116.55 | BND | Bound Found |
| 30012 | 119+22.13 | RT | 28.33 | 620085.57 | 498157.17 | BND | Bound Found |
| 30013 | 116+74.50 | LT | 21.81 | 620308.47 | 498039.29 | BND | Bound Found |
| 30014 | 116+45.48 | LT | 22.69 | 620343.70 | 498021.13 | BND | Bound Found |
| 30021 | 109+57.12 | LT | 29.22 | 620876.28 | 497599.99 | BND | Bound Found |
| 30025 | 113+10.95 | LT | 37.37 | 620604.45 | 497826.64 | BND | Bound Found |
| 30038 | 124+87.02 | RT | 32.11 | 619655.98 | 498525.37 | BND | Bound Found |
| 30039 | 126+98.77 | RT | 30.94 | 619499.47 | 498668.63 | BND | Bound Found |
| 30040 | 127+32.10 | RT | 31.21 | 619539.73 | 498717.07 | BND | Bound Found |
| 30041 | 128+94.59 | LT | 30.58 | 619397.89 | 498846.99 | BND | Bound Found |
| 30042 | 130+61.90 | LT | 32.44 | 619277.48 | 498963.12 | BND | Bound Found |
| 30043 | 132+39.85 | LT | 32.05 | 619147.76 | 499084.93 | BND | Bound Found |
| 30044 | 134+88.63 | LT | 31.42 | 618966.36 | 499255.18 | BND | Bound Found |
| 30045 | 130+77.35 | RT | 31.69 | 619221.41 | 498926.47 | BND | Bound Found |
| 30047 | 130+03.56 | RT | 32.09 | 619275.78 | 498876.00 | BND | Bound Found |
| 30048 | 129+20.05 | RT | 31.97 | 619336.48 | 498818.93 | BND | Bound Found |
| 30049 | 137+96.75 | LT | 27.89 | 618733.82 | 499459.23 | BND | Bound Found |
| 30057 | 138+26.04 | RT | 63.82 | 618649.88 | 499411.07 | BND | Bound Found |
| 30058 | 138+43.65 | LT | 25.60 | 618699.59 | 499487.66 | BND | Bound Found |
| 30059 | 141+87.95 | LT | 39.78 | 618521.40 | 499773.23 | IPIPE | Pipe Found |
| 30060 | 141+21.70 | LT | 42.80 | 618556.91 | 499720.35 | BND | Bound Found |
| 30077 | 143+26.19 | RT | 71.56 | 618356.46 | 499838.82 | APL | Computed Bound Location |
| 30078 | 143+28.31 | RT | 71.22 | 618355.71 | 499840.83 | APL | Computed Bound Location |
| 30079 | 144+82.89 | RT | 30.13 | 618300.91 | 499970.40 | APL | Computed Bound Location |
| 30080 | 144+01.67 | LT | 45.51 | 618417.16 | 499966.94 | APL | Computed Bound Location |
| 30081 | 143+74.62 | LT | 44.02 | 618433.26 | 499937.83 | IP | Rod Found |
| 30083 | 138+78.88 | LT | 30.65 | 618682.17 | 499515.42 | APL | Computed Bound Location |
| 30084 | 139+32.77 | LT | 32.65 | 618654.10 | 499558.99 | APL | Computed Bound Location |

Barre City FEGC F026-1(34)
Bounds & Pins on Side Streets
Coordinates are State Plane with a 1927 datum
Alignment data from Consultant VHB
[z85b010prop.alg] file dated 10/31/07

File Name: M:\ProjUb010\Su.\x85b010bnd.alg
Last Revised: rbullock 6/2/2009 7:48:26 AM
Baseline Alignment: VT62 VHB

| Offset Point | Baseline Station | Offset | | Offset Point Northing | Offset Point Easting | Type | Notes: |
|---|---|---|---|---|---|---|---|
| 104 | 12+76.92 | LT | 92.84 | 620275.03 | 497659.51 | APL | Computed Bound Location |
| 105 | 13+61.12 | LT | 112.12 | 620234.92 | 497526.00 | APL | Computed Bound Location |
| 107 | 15+61.06 | RT | 90.00 | 620512.20 | 497405.63 | APL | Computed Bound Location |
| 108 | 15+74.06 | RT | 157.00 | 620576.72 | 497427.87 | APL | Computed Bound Location |
| 114 | 16+32.06 | RT | 154.00 | 620603.12 | 497376.13 | APL | Computed Bound Location |
| 115 | 12+42.81 | RT | 92.04 | 620452.21 | 497597.28 | APL | Computed Bound Location |
| 116 | 13+01.21 | RT | 97.51 | 620444.96 | 497571.73 | APL | Computed Bound Location |
| 144 | 10+52.62 | RT | 0.91 | 620535.82 | 497770.92 | APL | Computed Bound Location |
| 156 | 12+60.45 | LT | 87.44 | 620291.89 | 497680.06 | APL | Computed Bound Location |
| 529 | 12+96.84 | LT | 235.83 | 620127.11 | 497672.23 | IP | Rod Found |
| 30008 | 10+44.71 | LT | 69.81 | 620433.29 | 497852.40 | BND | Bound Found |
| 30022 | 12+25.02 | RT | 47.54 | 620425.97 | 497637.39 | BND | Bound Found |
| 30023 | 13+23.34 | RT | 100.14 | 620445.93 | 497563.36 | BND | Bound Found |
| 30050 | 12+80.85 | LT | 92.47 | 620272.83 | 497653.62 | BND | Bound Found |
| 30051 | 14+44.06 | RT | 88.62 | 620452.52 | 497506.27 | BND | Bound Found |
| 30052 | 12+43.79 | RT | 94.49 | 620453.66 | 497595.07 | BND | Bound Found |
| 30054 | 12+57.24 | RT | 54.49 | 620414.99 | 497609.34 | BND | Bound Found |
| 30055 | 12+56.23 | RT | 46.70 | 620408.76 | 497614.05 | BND | Bound Found |

Barre City FEGC F026-1(34)
Bounds & Pins on Side Streets
Coordinates are State Plane with a 1927 datum
Alignment data from Consultant VHB
[z85b010prop.alg] file dated 10/31/07

File Name: M:\ProjUb010\Su.\x85b010bnd.alg
Last Revised: rbullock 6/2/2009 7:48:26 AM
Baseline Alignment: Maple Ave

| Offset Point | Baseline Station | Offset | | Offset Point Northing | Offset Point Easting | Type | Notes: |
|---|---|---|---|---|---|---|---|
| 91 | 21+08.97 | RT | 42.35 | 620543.22 | 497963.39 | APL | Computed Bound Location |
| 92 | 20+60.43 | RT | 47.62 | 620510.62 | 497925.42 | APL | Computed Bound Location |
| 141 | 22+70.55 | LT | 54.77 | 620719.39 | 498028.60 | APL | Computed Bound Location |
| 142 | 22+65.53 | LT | 53.80 | 620715.45 | 498025.62 | APL | Computed Bound Location |
| 143 | 25+41.69 | RT | 24.14 | 620853.60 | 498274.31 | APL | Computed Bound Location |
| 145 | 24+61.19 | RT | 26.32 | 620793.55 | 498219.96 | APL | Computed Bound Location |
| 146 | 23+18.99 | RT | 30.56 | 620689.13 | 498121.72 | APL | Computed Bound Location |
| 147 | 22+76.06 | RT | 33.26 | 620657.40 | 498091.34 | APL | Computed Bound Location |
| 148 | 21+83.23 | RT | 36.96 | 620593.35 | 498021.10 | APL | Computed Bound Location |
| 170 | 21+59.16 | LT | 107.03 | 620692.54 | 497914.11 | APL | Computed Bound Location |
| 174 | 22+82.11 | LT | 27.70 | 620711.68 | 498041.93 | APL | Computed Bound Location |
| 176 | 24+36.45 | LT | 25.89 | 620812.34 | 498165.35 | APL | Computed Bound Location |
| 177 | 25+40.73 | LT | 25.85 | 620887.15 | 498237.23 | APL | Computed Bound Location |
| 178 | 23+18.96 | RT | 34.56 | 620686.21 | 498124.45 | APL | Computed Bound Location |
| 179 | 21+41.32 | RT | 41.99 | 620563.15 | 497990.07 | APL | Computed Bound Location |
| 30015 | 23+71.07 | RT | 53.45 | 620724.10 | 498161.52 | BND | Bound Found |
| 30016 | 23+88.26 | RT | 54.13 | 620721.99 | 498188.51 | BND | Bound Found |
| 30017 | 24+42.44 | RT | 54.15 | 620760.64 | 498226.75 | BND | Bound Found |
| 30018 | 24+37.83 | RT | 54.08 | 620757.36 | 498223.43 | BND | Bound Found |
| 30025 | 20+30.76 | LT | 85.36 | 620604.45 | 497826.64 | BND | Bound Found |
| 30026 | 20+95.81 | LT | 102.97 | 620654.44 | 497868.99 | BND | Bound Found |
| 30027 | 20+91.30 | LT | 90.02 | 620657.84 | 497877.61 | BND | Bound Found |
| 30028 | 21+61.08 | LT | 74.16 | 620667.55 | 497935.54 | BND | Bound Found |
| 30029 | 22+41.56 | LT | 70.83 | 620713.20 | 497997.12 | BND | Bound Found |
| 30030 | 22+43.24 | LT | 52.94 | 620700.67 | 498009.98 | BND | Bound Found |
| 30031 | 23+83.55 | RT | 54.01 | 620718.51 | 498184.89 | BND | Bound Found |
| 30032 | 23+58.10 | LT | 52.01 | 620759.77 | 498107.35 | BND | Bound Found |
| 30033 | 24+37.79 | LT | 23.88 | 620811.89 | 498167.72 | BND | Bound Found |
| 30034 | 25+16.10 | LT | 25.30 | 620868.95 | 498220.80 | BND | Bound Found |
| 30035 | 25+16.36 | LT | 27.29 | 620870.52 | 498219.54 | BND | Bound Found |
| 30036 | 25+26.16 | RT | 24.66 | 620841.90 | 498263.98 | BND | Bound Found |
| 30037 | 24+61.02 | RT | 29.54 | 620958.23 | 498322.20 | BND | Bound Found |
| 30102 | 26+49.43 | RT | 25.63 | 620958.44 | 499374.24 | IPIPE | Pipe Found |
| 30103 | 28+01.00 | LT | 34.06 | 621082.92 | 498408.78 | BND | Bound Found |

Barre City FEGC F026-1(34)
Bounds & Pins on Side Streets
Coordinates are State Plane with a 1927 datum
Alignment data from Consultant VHB
[z85b010prop.alg] file dated 10/31/07

File Name: M:\ProjUb010\Su.\x85b010bnd.alg
Last Revised: rbullock 6/2/2009 7:48:26 AM
Baseline Alignment: South Main

| Offset Point | Baseline Station | Offset | | Offset Point Northing | Offset Point Easting | Type | Notes: |
|---|---|---|---|---|---|---|---|
| 209 | 605+22.10 | RT | 34.69 | 618128.03 | 499520.04 | APL | Computed Bound Location |
| 211 | 604+39.75 | LT | 19.39 | 618216.87 | 499562.65 | APL | Computed Bound Location |
| 30057 | 600+29.52 | RT | 99.50 | 618649.88 | 499411.07 | BND | Bound Found |
| 30075 | 603+07.69 | LT | 29.06 | 618349.24 | 499542.32 | APL | Computed Bound Location |
| 30076 | 602+57.76 | LT | 27.29 | 618398.24 | 499536.00 | APL | Computed Bound Location |
| 30115 | 602+64.01 | RT | 38.34 | 618378.27 | 499476.30 | APL | Computed Bound Location |
| 30116 | 603+14.27 | RT | 33.16 | 618330.63 | 499493.09 | APL | Computed Bound Location |

Barre City FEGC F026-1(34)
Bounds & Pins on Side Streets
Coordinates are State Plane with a 1927 datum
Alignment data from Consultant VHB
[z85b010prop.alg] file dated 10/31/07

File Name: M:\ProjUb010\Su.\x85b010bnd.alg
Last Revised: rbullock 6/2/2009 7:48:26 AM
Baseline Alignment: Elm St

| Offset Point | Baseline Station | Offset | | Offset Point Northing | Offset Point Easting | Type | Notes: |
|---|---|---|---|---|---|---|---|
| 30083 | 700+42.27 | LT | 26.23 | 618682.17 | 499515.42 | APL | Computed Bound Location |
| 30084 | 700+26.54 | RT | 23.16 | 618654.10 | 499558.99 | APL | Computed Bound Location |
| 30087 | 702+85.46 | RT | 20.78 | 618903.44 | 499624.40 | APL | Computed Bound Location |
| 30088 | 702+29.60 | RT | 21.83 | 618849.88 | 499610.57 | APL | Computed Bound Location |
| 30089 | 702+19.80 | RT | 132.06 | 618812.23 | 499714.52 | APL | Computed Bound Location |
| 30090 | 702+18.67 | RT | 203.66 | 618792.44 | 499783.40 | APL | Computed Bound Location |
| 30129 | 707+51.64 | LT | 26.59 | 619329.16 | 499798.77 | APL | Computed Bound Location |

Barre City FEGC F026-1(34)
Bounds & Pins on Side Streets
Coordinates are State Plane with a 1927 datum
Baseline Alignment:Montpelier & Barre Railroad Co. Inc. V.53/S.L.1 dated 5/

| Offset Point | Baseline Station | Offset | | Offset Coordinate Northing | Offset Coordinate Easting | Desc. | Notes: |
|---|---|---|---|---|---|---|---|
| 68 | 218+84.00 | Lt | 16.50 | 620890.23 | 497479.32 | APL | Computed Bound Location |
| 65 | 218+94.00 | Rt | 16.50 | 620871.69 | 497450.25 | APL | Computed Bound Location |
| 76 | 219+84.00 | Rt | 16.50 | 620785.04 | 497474.55 | APL | Computed Bound Location |
| 81 | 220+00.00 | Rt | 42.00 | 620762.75 | 497454.32 | APL | Computed Bound Location |
| 103 | 220+00.00 | Rt | 16.50 | 620769.63 | 497478.87 | APL | Computed Bound Location |
| 97 | 220+12.00 | Rt | 42.00 | 620751.19 | 497457.56 | APL | Computed Bound Location |
| 1465 | 221+14.16 | Lt | 10.14 | 620666.91 | 497535.35 | IPIPE | |
| 30023 | 223+32.97 | Rt | 24.07 | 620445.93 | 497563.36 | BND | |
| 30052 | 223+36.23 | Lt | 8.41 | 620453.66 | 497595.08 | BND | |
| 116 | 223+36.58 | Rt | 16.50 | 620444.96 | 497571.73 | APL | Computed Bound Location |
| 115 | 223+38.37 | Lt | 10.00 | 620452.21 | 497597.28 | APL | Computed Bound Location |
| 30054 | 223+77.93 | Lt | 7.64 | 620414.99 | 497609.35 | BND | |
| 30022 | 223+78.84 | Lt | 37.75 | 620425.97 | 497637.39 | BND | |
| 30055 | 223+85.61 | Lt | 9.49 | 620408.76 | 497614.05 | BND | |
| 156 | 225+21.94 | Lt | 10.00 | 620291.89 | 497680.06 | APL | Computed Bound Location |
| 30050 | 225+22.48 | Rt | 22.59 | 620272.82 | 497653.62 | BND | |
| 104 | 225+24.00 | Rt | 16.50 | 620275.03 | 497659.51 | APL | Computed Bound Location |
| 529 | 226+40.32 | Rt | 100.76 | 620127.11 | 497672.23 | IP | |
| 530 | 229+02.93 | Rt | 238.4 | 679840.09 | 497746.58 | IP | |
| 527 | 229+53.81 | Rt | 110.38 | 619888.34 | 497875.61 | IP | |
| 528 | 230+27.23 | Rt | 331.61 | 619685.39 | 497760.97 | IPIPE | |
| 526 | 230+28.04 | Rt | 323.76 | 619685.35 | 497742.14 | IP | |
| 524 | 231+43.48 | Rt | 323.32 | 619604.80 | 497845.18 | IP | |
| 525 | 231+53.32 | Rt | 116.50 | 619736.40 | 498005.04 | IP | |
| 523 | 233+96.00 | Rt | 387.14 | 619374.83 | 497967.45 | IP | |
| 522 | 235+36.93 | Rt | 409.95 | 619255.08 | 498045.18 | IP | |
| 521 | 235+37.01 | Rt | 390.21 | 619268.28 | 498059.86 | IP | |
| 511 | 235+38.00 | Rt | 327.39 | 619309.84 | 498107.34 | BND | |
| 512 | 235+39.45 | Rt | 267.76 | 619348.69 | 498152.23 | BND | |
| 500 | 235+77.25 | Rt | 506.87 | 619160.12 | 498000.43 | BND | |
| 501 | 235+77.39 | Rt | 500.87 | 619164.06 | 498004.97 | BND | |
| 502 | 235+77.47 | Rt | 496.86 | 619166.68 | 498008.00 | BND | |
| 503 | 235+78.58 | Rt | 454.54 | 619194.29 | 498040.11 | BND | |
| 3 | 235+80.02 | Rt | 398.57 | 619230.79 | 498082.54 | BND | |
| 509 | 235+81.65 | Rt | 333.50 | 619273.28 | 498131.85 | BND | |
| 510 | 235+83.34 | Rt | 258.50 | 619322.39 | 498188.57 | BND | |
| 511 | 235+94.35 | Rt | 83.98 | 619431.42 | 498325.28 | BND | |
| 506 | 237+44.50 | Rt | 489.85 | 619047.62 | 498125.36 | BND | |
| 507 | 237+57.42 | Rt | 500.24 | 619031.07 | 498126.32 | BND | |
| 505 | 237+68.75 | Rt | 496.46 | 619027.22 | 498138.96 | BND | |
| 504 | 237+69.58 | Rt | 499.43 | 619022.60 | 498135.09 | BND | |
| 508 | 238+09.61 | Rt | 483.30 | 619003.77 | 498173.92 | BND | |

Barre City FEGC F026-1(34)
Bounds & Pins on Side Streets
Coordinates are State Plane with a 1927 datum
Alignment data from Consultant VHB
[z85b010prop.alg] file dated 10/31/07

File Name: M:\ProjUb010\Su.\x85b010bnd.alg
Last Revised: rbullock 6/2/2009 7:48:26 AM
Baseline Alignment:Summer St

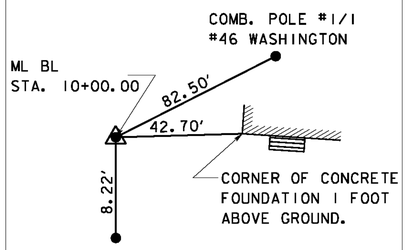
| Offset Point | Baseline Station | Offset | | Offset Point Northing | Offset Point Easting | Type | Notes: |
|---|---|---|---|---|---|---|---|
| 132 | 407+80.39 | RT | 30.02 | 620149.79 | 498636.98 | APL | Computed Bound Location |
| 135 | 403+21.10 | RT | 27.67 | 620514.42 | 498349.33 | APL | Computed Bound Location |
| 136 | 402+81.00 | RT | 27.95 | 620546.06 | 498324.68 | APL | Computed Bound Location |
| 139 | 418+19.23 | RT | 36.12 | 619450.24 | 499409.15 | APL | Computed Bound Location |
| 145 | 400+20.92 | LT | 39.69 | 620793.55 | 498219.96 | APL | Computed Bound Location |
| 151 | 401+72.69 | LT | 27.92 | 620631.99 | 498079.75 | APL | Computed Bound Location |
| 152 | 414+90.52 | LT | 21.50 | 619735.41 | 499218.85 | APL | Computed Bound Location |
| 153 | 414+57.93 | LT | 21.88 | 619760.22 | 499197.36 | APL | Computed Bound Location |
| 154 | 414+58.87 | RT | 27.34 | 619726.69 | 499161.32 | APL | Computed Bound Location |
| 155 | 414+91.26 | RT | 27.51 | 619702.55 | 499182.48 | APL | Computed Bound Location |
| 157 | 411+71.39 | RT | 26.27 | 619916.34 | 498953.87 | APL | Computed Bound Location |
| 158 | 412+07.18 | RT | 26.10 | 619895.11 | 498982.69 | APL | Computed Bound Location |
| 160 | 416+81.88 | RT | 28.79 | 619557.41 | 499305.64 | APL | Computed Bound Location |
| 161 | 417+75.99 | RT | 45.48 | 619471.83 | 499360.99 | APL | Computed Bound Location |
| 191 | 423+15.52 | LT | 14.93 | 619316.34 | 499876.21 | APL | Computed Bound Location |
| 218 | 406+66.97 | RT | 105.79 | 620162.51 | 498497.99 | APL | Computed Bound Location |
| 239 | 407+77.44 | RT | 31.97 | 620105.14 | 498617.76 | APL | Computed Bound Location |
| 242 | 406+99.61 | RT | 111.73 | 620162.25 | 498513.75 | APL | Computed Bound Location |
| 30015 | 400+40.36 | RT | 48.91 | 620724.18 | 498161.52 | BND | Bound Found |
| 30016 | 400+58.53 | RT | 28.83 | 620721.99 | 498188.51 | BND | Bound Found |
| 30017 | 400+51.16 | LT | 25.03 | 620760.64 | 498226.75 | BND | Bound Found |
| 30018 | 401+51.74 | LT | 20.40 | 620757.36 | 498223.43 | BND | Bound Found |
| 30031 | 400+59.09 | RT | 33.82 | 620718.51 | 498184.89 | BND | Bound Found |
| 30037 | 400+24.12 | LT | 40.05 | 620791.23 | 498222.20 | BND | Bound Found |
| 30104 | 402+15.76 | LT | 21.93 | 620628.19 | 498324.52 | BND | Bound Found |
| 30105 | 402+48.72 | LT | 21.98 | 620602.07 | 498344.63 | BND | Bound Found |
| 30106 | 405+47.52 | RT | 28.00 | 620334.63 | 498486.95 | IP | Rod Found |
| 30107 | 406+05.39 | RT | 28.19 | 620288.61 | 498522.04 | IPIPE | Pipe Found |
| 30108 | 406+61.44 | RT | 28.05 | 620244.24 | 498556.28 | BND | Bound Found |
| 30109 | 406+94.64 | RT | 28.00 | 620217.93 | 498576.53 | BND | Bound Found |
| 30110 | 407+31.11 | RT | 29.46 | 620187.21 | 498600.14 | BND | Bound Found |
| 30112 | 413+09.34 | RT | 26.53 | 619833.98 | 499061.37 | BND | Bound Found |
| 30129 | 422+21.57 | LT | 18.87 | 619198.77 | 499198.77 | APL | Computed Bound Location |
| 30131 | 416+78.38 | RT | 102.37 | 619512.12 | 499247.54 | BND | Bound Found |
| 30132 | 413+09.26 | LT | 23.24 | 619870.99 | 499094.64 | BND | Bound Found |
| 30133 | 412+95.14 | LT | 23.74 | 619881.18 | 499083.69 | BND | Bound Found |
| 30136 | 408+76.14 | RT | 27.77 | 620091.39 | 498716.11 | APL | Computed Bound Location |
| 30137 | 408+11.52 | LT | 21.48 | 620169.29 | 498694.04 | BND | Bound Found |
| 30138 | 406+81.50 | LT | 36.88 | 620267.86 | 498620.00 | APL | Computed Bound Location |
| 30139 | 406+66.83 | RT | 111.65 | 620189.05 | 498493.25 | BND | Bound Found |
| 30140 | 406+67.38 | RT | 111.57 | 620188.66 | 498493.65 | IP | Rod Found |

VHB Vanasse Hangen Brustlin, Inc.

| | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-1(34) C/2 |
| FILE NAME: x85B010bounds.dgn | PLOT DATE: 3/9/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: M. TROTTIER |
| DESIGNED BY: D. PECK | CHECKED BY: F. MALNATI |
| BOUND COORDINATES | SHEET 26 OF 339 |

SURVEY TIES

NORTH = 618400.9852
EAST = 4999958.7377
ELEV. = 617.284

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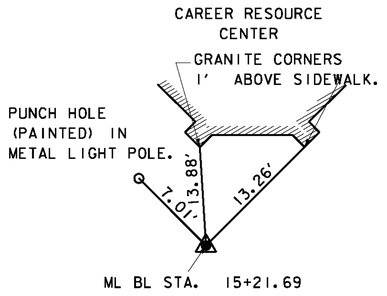


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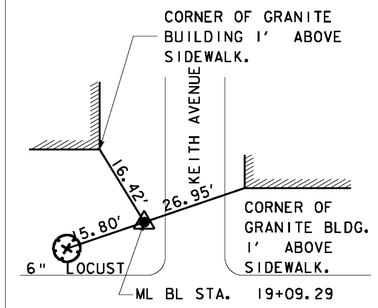


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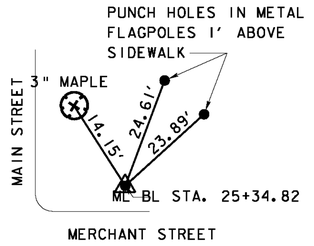


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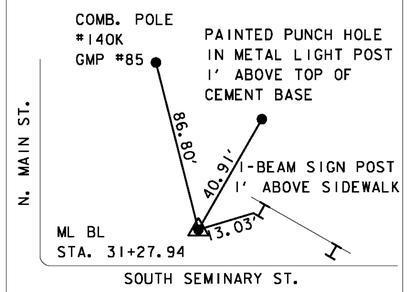


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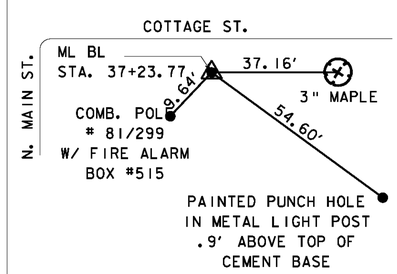


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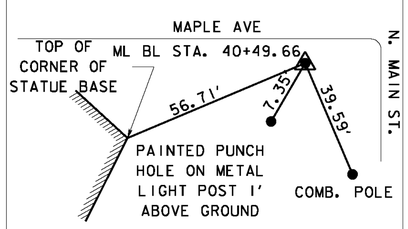


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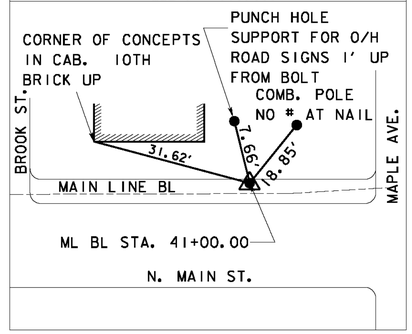



DATUM
VERTICAL NAVD 1929
HORIZONTAL NAD 27

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_TIES_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
SURVEY TIES

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 27 OF 339

| ROAD | POINT | STATION | NORTHING | EASTING |
|---|---|---|---|---|
| NORTH MAIN STREET & WASHINGTON STREET | POB | 110+50.00 | 620785.40 | 497634.95 |
| | PI | 113+59.75 | 620543.00 | 497827.78 |
| | PI | 116+22.97 | 620336.28 | 497990.73 |
| | PI | 117+35.33 | 620246.86 | 498058.77 |
| | PI | 120+57.47 | 620000.13 | 498265.89 |
| | PI | 121+94.91 | 619896.94 | 498356.66 |
| | PC | 122+63.61 | 619845.05 | 498401.69 |
| | PI | 125+89.05 | 619599.26 | 498615.00 |
| | PT | 129+14.39 | 619362.52 | 498838.30 |
| | PC | 135+78.40 | 618879.50 | 499293.92 |
| | PI | 136+21.61 | 618848.07 | 499323.57 |
| | PT | 136+64.81 | 618815.38 | 499351.84 |
| | PC | 138+11.21 | 618704.64 | 499447.60 |
| | PI | 138+57.11 | 618669.92 | 499477.62 |
| | PT | 139+02.49 | 618644.12 | 499515.59 |
| | PC | 141+01.97 | 618531.98 | 499680.56 |
| | PI | 141+43.34 | 618508.72 | 499714.78 |
| | PT | 141+84.67 | 618488.37 | 499750.80 |
| | PC | 143+90.66 | 618387.05 | 499930.14 |
| | PI | 144+04.81 | 618380.08 | 499942.47 |
| | PT | 144+18.68 | 618369.31 | 499951.66 |
| | POE | 144+50.00 | 618345.48 | 499971.98 |
| ROUTE 62 | POB | 10+00.00 | 620516.12 | 497848.97 |
| | PC | 12+48.84 | 620373.36 | 497645.14 |
| | PI | 13+47.59 | 620316.71 | 497564.26 |
| | PT | 14+24.69 | 620366.08 | 497478.74 |
| | POE | 15+80.27 | 620443.86 | 497343.99 |
| MAPLE AVENUE | POB | 20+00.00 | 620516.45 | 497848.71 |
| | PC | 20+66.34 | 620553.44 | 497903.78 |
| | PI | 22+13.82 | 620635.68 | 498026.19 |
| | PT | 23+60.35 | 620740.19 | 498130.25 |
| | PC | 23+97.77 | 620766.70 | 498156.65 |
| | PI | 24+78.54 | 620823.94 | 498213.65 |
| | PT | 25.59.30 | 620882.99 | 498268.76 |
| | POE | 27+00.00 | 620985.85 | 498364.76 |
| COTTAGE STREET | POB | 30+00.00 | 620311.10 | 498009.89 |
| | POE | 31+50.00 | 620394.63 | 498134.48 |

| ROAD | POINT | STATION | NORTHING | EASTING |
|---|---|---|---|---|
| S. SEMINARY STREET | POB | 40+00.00 | 619822.83 | 498421.01 |
| | POE | 42+00.00 | 619962.60 | 498564.06 |
| GRANITE STREET | POB | 50+00.00 | 619660.70 | 498564.22 |
| | POE | 51+25.00 | 619579.90 | 498468.85 |
| CREAMERY COURT | POB | 300+00.00 | 619513.03 | 498698.18 |
| | POE | 301+15.00 | 619435.05 | 498613.66 |
| WEST STREET | POB | 60+00.00 | 619502.53 | 498707.85 |
| | POE | 61+75.00 | 619637.30 | 498819.47 |
| MERCHANT STREET | POB | 70+00.00 | 619388.85 | 498813.53 |
| | POE | 71+00.00 | 619456.25 | 498887.40 |
| DEPOT SQUARE | POB | 80+00.00 | 619270.51 | 498925.10 |
| | POE | 81+85.00 | 619145.33 | 498788.88 |
| PEARL STREET | POB | 90+00.00 | 619118.85 | 499068.15 |
| | POE | 91+00.00 | 619182.87 | 499144.97 |
| KEITH AVENUE | POB | 200+00.00 | 618934.65 | 499241.90 |
| | POE | 201+00.00 | 619002.37 | 499315.48 |
| SOUTH MAIN STREET | POB | 600+00.00 | 618644.70 | 499514.73 |
| | PC | 600+46.71 | 618600.64 | 499499.23 |
| | PI | 600+84.94 | 618564.58 | 499486.54 |
| | PCC | 601+22.26 | 618526.37 | 499488.04 |
| | PI | 601+61.72 | 618486.95 | 499489.60 |
| | PT | 602+00.92 | 618448.58 | 499498.82 |
| | PI | 603+28.00 | 618325.03 | 499528.54 |
| | POE | 604+75.00 | 618179.34 | 499548.14 |
| PROSPECT STREET | POB | 500+00.00 | 618357.86 | 499520.64 |
| | PC | 501+67.16 | 618318.83 | 499358.10 |
| | PI | 502+33.85 | 618303.26 | 499293.26 |
| | PT | 502+99.76 | 618305.23 | 499226.59 |
| | POE | 503+25.00 | 618305.98 | 499201.36 |
| ELM STREET & WELLINGTON STREET | POB | 700+00.00 | 618634.53 | 499529.70 |
| | PC | 702+69.00 | 618894.19 | 499599.94 |
| | PI | 702+93.34 | 618917.69 | 499606.29 |
| | PT | 703+17.57 | 618939.85 | 499616.35 |
| | PC | 703+91.88 | 619007.51 | 499647.06 |
| | PI | 704+14.34 | 619027.97 | 499656.34 |
| | PT | 704+36.75 | 619047.25 | 499667.86 |
| | PC | 706+91.20 | 619265.72 | 499798.30 |

| ROAD | POINT | STATION | NORTHING | EASTING |
|---|---|---|---|---|
| ELM STREET CONT. | PI | 707+26.83 | 619296.32 | 499816.57 |
| | PT | 707+62.14 | 619330.34 | 499827.16 |
| | POE | 708+50.00 | 619414.23 | 499853.27 |
| CHURCH STREET | POB | 800+00.00 | 618376.74 | 499516.10 |
| | PC | 801+82.08 | 618389.67 | 499697.72 |
| | PI | 803+05.50 | 618398.43 | 499820.83 |
| | PT | 804+24.08 | 618348.90 | 499933.88 |
| | POE | 804+25.00 | 618348.53 | 499934.72 |
| SUMMER STREET & ELM STREET | POB | 400+00.00 | 620785.97 | 498175.74 |
| | PC | 406+95.72 | 620234.13 | 498599.40 |
| | PI | 407+58.30 | 620184.49 | 498637.51 |
| | PT | 408+20.07 | 620147.14 | 498687.71 |
| | PC | 412+71.73 | 619877.52 | 499050.06 |
| | PI | 413+08.10 | 619855.80 | 499079.24 |
| | PT | 413+44.28 | 619829.17 | 499104.03 |
| | PC | 414+00.62 | 619787.94 | 499142.42 |
| | PI | 414+60.71 | 619743.96 | 499183.36 |
| | PT | 415+20.78 | 619698.38 | 499222.51 |
| | PC | 417+45.11 | 619528.20 | 499368.68 |
| | PI | 417+88.32 | 619495.43 | 499396.83 |
| | PT | 418+30.22 | 619477.19 | 499436.00 |
| | PI | 422+68.96 | 619292.05 | 499833.77 |
| | POE | 424+00.00 | 619319.28 | 499961.95 |

LEGEND

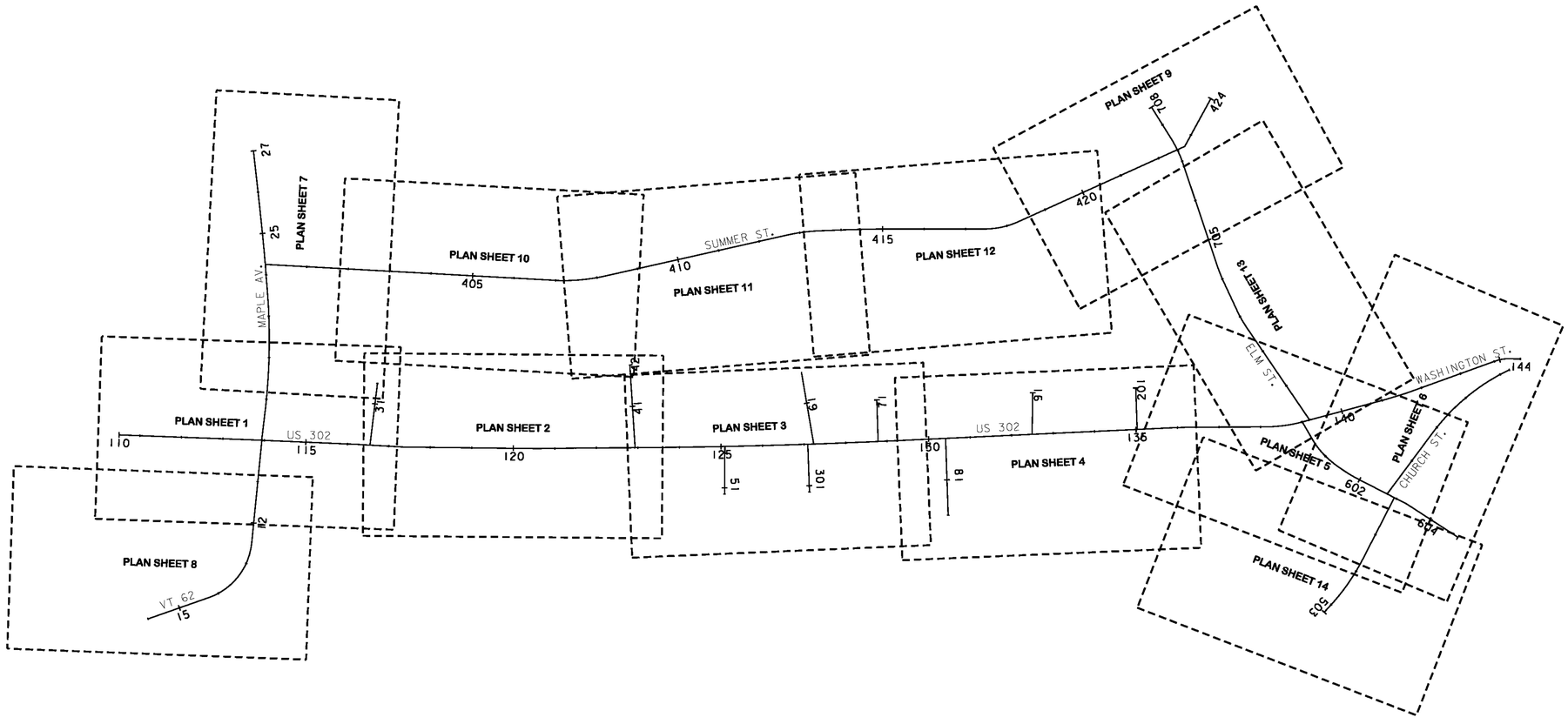
| | |
|---|---|
| POB | POINT OF BEGINNING ALIGNMENT |
| PC | POINT OF CURVATURE |
| PI | POINT OF INTERSECTION |
| PT | POINT OF TANGENCY |
| PCC | POINT OF COMPOIUND CURVATURE |
| PRC | POINT OF REVERSE CURVATURE |
| POE | POINT OF END ALIGNMENT |

DATUM
VERTICAL NAVD 1929
HORIZONTAL NAD 27

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_ALIPT_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: D. PECK
ALIGNMENT POINTS
PLOT DATE: 3/9/2011
DRAWN BY: D. PECK
CHECKED BY:
SHEET 28 OF 339

VHB Vanasse Hangen Brustlin, Inc.




| | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-1(34) C/2 |
| FILE NAME: z85b010_PLANKEY_C2 | PLOT DATE: 3/9/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: DMP / JAR |
| DESIGNED BY: DMP / MDS | CHECKED BY: |
| PLAN SHEET KEY | SHEET 29 OF 339 |

VHB Vanasse Hangen Brustlin, Inc.

SPECIAL PROVISION (PORTLAND CEMENT REINF. CONCRETE SIDEWALK, 5 INCH)

SL STA 10+65 LT - STA 114+75 RT
STA 111+26 - 111+87 LT
STA 111+40 - 111+66 RT
STA 111+95 - 112+43 RT
STA 112+17 - 112+31 LT
STA 112+65 - SL STA 20+67 LT
STA 112+68 - SL STA 10+59 RT
STA 114+90 LT - SL STA 20+83 RT
STA 115+34 - 115+39 LT
STA 115+13 - 115+99 RT
STA 115+78 - 115+89 LT
STA 116+32 LT - SL STA 31+42 LT
STA 116+53 - 116+90 RT
SL STA 30+83 RT - 116+90 LT
SL STA 31+33 - 31+42 RT

SPECIAL PROVISION (PORTLAND CEMENT REINF. CONCRETE SIDEWALK, 8 INCH)

STA 111+66 - 111+95 RT
STA 111+87 - 112+17 LT
STA 112+31 - 112+65 LT
STA 112+43 - 112+68 RT
STA 114+75 - 115+13 RT
STA 114+90 - 115+34 LT
STA 115+39 - 115+78 LT
STA 115+89 - 116+32 LT
STA 115+99 - 116+53 RT
SL STA 30+83 - 31+33 RT

VERTICAL GRANITE CURB

SL STA 10+43 - 10+64 LT
SL STA 10+53 - 11+10 RT
SL STA 10+56 - 11+75 LT-RT (CURBED ISLAND)
SL STA 20+33 - 20+66 LT
SL STA 20+45 - 20+83 RT
SL STA 20+47 - 20+95 LT-RT (CURBED ISLAND)
SL STA 30+29 - ~~30+90 RT~~ 31+42, RT
SL STA 30+30 - 31+17 LT
SL STA 30+33 - 30+51 RT (PLANTING BED)
SL STA 30+40 - 30+51 RT (PLAZA PARKING LOT)
~~SL STA 31+26 - 31+42 RT~~
SL STA 31+27 - 31+42 LT
STA 111+31 - 111+51 LT
STA 111+40 - 111+51 RT
STA 111+56 - 111+91 LT
STA 111+56 - 111+69 RT
STA 111+91 - 112+47 RT
STA 112+13 - 112+35 LT
STA 112+61 - 113+48 LT
STA 112+63 - 113+45 RT
STA 114+42 - 114+80 RT
STA 114+40 - 114+97 LT
STA 115+07 - 116+04 RT
STA 115+27 - 115+45 LT
STA 115+74 - 115+93 LT
STA 116+26 - 116+39 LT
STA 116+47 - 116+90 RT
STA 116+74 - 116+90 LT
STA 116+47 - 116+90 RT (BACK CURB)

SPECIAL PROVISION (COBBLESTONE PAVERS)

SL STA 10+56 - 10+70 LT-RT (MEDIAN ISLAND)
SL STA 11+00 - 11+52 LT-RT (MEDIAN ISLAND)
SL STA 11+68 - 11+75 LT-RT (MEDIAN ISLAND)
STA 116+76 - 116+90 LT (PLAZA)

SPECIAL PROVISION (COBBLESTONE PAVERS)

SL STA 10+64 - 10+66, LT (TRANSITION)
SL STA 11+11 - 11+12, RT (TRANSITION)

MULLIGANS *255

*257

VT. STATE PLANE GRID

MATCH TO STA. 21+75 (SHEET 36)

MAPLE AV (VT 14)

STA 31+42.00
END APPROACH
LIMITS OF PAVEMENT
POE
Sta 31+50.00

ML POT 113+93.56 =
MAPLE AVE. POB 20+00.00
Δ = 85° 38' 42.36" LT.

COTTAGE STREET
N56°09'40.43"E

BROOK ST.

COLD PLANE 40'

~~111+50.00~~
~~STA 113+00.00~~
END APPROACH
BEGIN PROJECT

PC Sta 20+66.34

Exist. R.O.W.

*99 GONE

NORTH MAIN ST. (US 302)

S38°30'07.48"E

S38°14'53.24"E

S37°15'58.16"E

PI Sta 113+59.75

PI Sta 116+22.97

MATCH TO STA. 116+90 (SHEET 31)

~~110+50.00~~
~~STA 110+65.00~~
BEGIN APPROACH
~~LIMITS OF PAVEMENT~~

HORACE LANE

CONCRETE TO GRANITE CURB TRANSITION (SEE DETAILS)

VT 289

ML POT 113+93.98 =
RTE 62 POB 10+00.00
Δ = 93° 14' 29.40" RT.

ML POT 116+54.60 =
COTTAGE ST. POB 30+00.00
Δ = 86° 34' 21.41" LT.

1. PROVIDE AN EXPANSION JOINT IN ALL NEW SIDEWALK ON THE EXISTING RIGHT-OF-WAY.
2. SEE CURBED ISLAND DETAILS FOR ADDITIONAL INFORMATION ON MEDIAN ISLAND LAYOUT

SPECIAL PROVISION (IMPRINTED CONCRETE SIDEWALK, 5 INCH)

STA 114+24 - 114+33 RT
STA 114+49 - 114+75 RT
STA 115+13 - 115+99 RT
STA 116+53 - 116+90 RT
STA 116+79 - 116+90 LT

DETECTABLE WARNING SURFACE

STA 111+30 LT
STA 111+54 LT
STA 111+54 RT
STA 113+47 RT
STA 113+50 LT
STA 114+41 RT
STA 114+42 LT
STA 116+40 LT
STA 116+73 LT

CONSTRUCT DRIVE TYPE I

| | WIDTH |
|---|---|
| STA 111+79 RT | 18' |
| STA 112+02 LT | 20' |
| STA 112+48 LT | 24' |
| STA 112+55 RT | 13' |
| STA 114+93 RT | 26' |
| STA 115+12 LT | 30' |
| STA 115+60 LT | 27' |
| STA 116+09 LT | 31' |
| STA 116+26 RT | 41' |
| SL STA 31+08 RT | 36' |
| SL STA 31+22 LT | 10' |

CONSTRUCT SIDEWALK RAMP TYPE 6

STA 111+26 - 111+39 LT
STA 111+44 - 111+63 LT
STA 111+44 - 111+63 RT
STA 113+40 - 113+52 RT
STA 113+42 - 113+56 LT
STA 114+33 - 114+49 RT
STA 114+37 - 114+49 LT
STA 116+32 - 116+41 LT
STA 116+71 - 116+80 LT

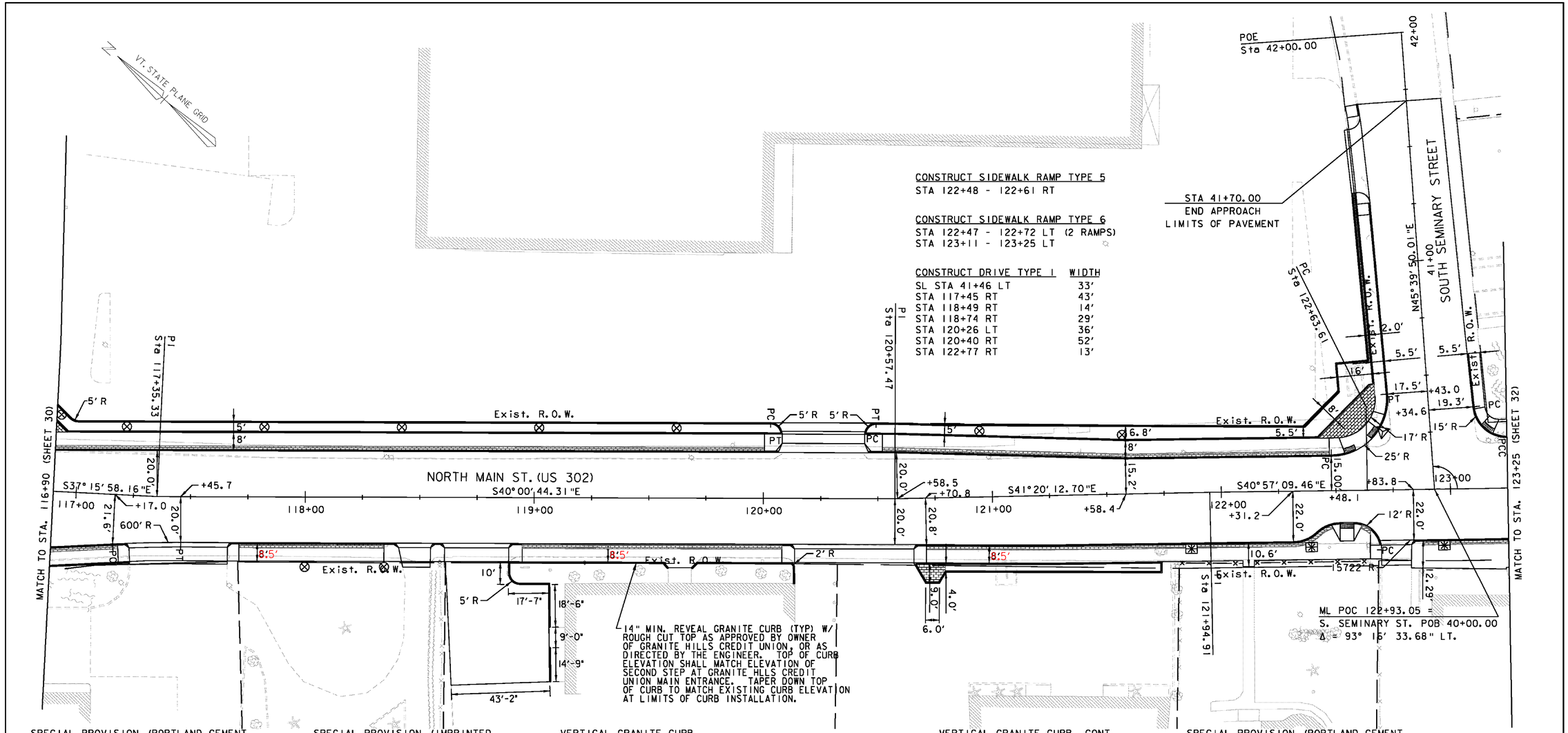
20 0 20 40
FEET

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-I(34) C/2

FILE NAME: z85b010bdr_nu_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: D. PECK
ALIGNMENT AND CURB LAYOUT PLAN #1

PLOT DATE: 3/9/2011
DRAWN BY: D. PECK
CHECKED BY:
SHEET 30 OF 339




SPECIAL PROVISION (PORTLAND CEMENT REINF. CONCRETE SIDEWALK, 5 INCH)
STA 116+90 - 117+19 RT
STA 116+90 - 120+00 LT
STA 117+71 - 118+34 RT
STA 118+95 - 120+08 RT
STA 120+52 - SL STA 41+22 LT
STA 120+71 - 122+65 RT
STA 122+88 - 123+25 RT
SL STA 40+58 RT - 123+25 LT

DETECTABLE WARNING SURFACE
STA 122+55 RT
STA 122+57 LT
SL STA 40+24 RT
SL STA 40+26 LT

SPECIAL PROVISION (IMPRINTED CONCRETE SIDEWALK, 5 INCH)
SL STA 40+58 - 41+32 LT
STA 116+90 - 120+00 LT
STA 116+90 - 117+19 RT
STA 117+71 - 118+34 RT
STA 118+95 - 120+08 RT
STA 120+52 - 122+47 LT
STA 120+71 - 121+84 RT
STA 121+89 - 122+48 RT
STA 122+61 - 122+65 RT
STA 122+88 - 122+94 RT
STA 122+99 - 123+25 RT

SPECIAL PROVISION (COBBLESTONE PAVERS)
STA 116+90 - 116+95 LT (PLAZA)
STA 120+66 - 120+79 RT (LOT ISLAND)
STA 122+43 - SL STA 40+47 LT (PLAZA)

VERTICAL GRANITE CURB
STA 116+90 - 117+23 RT
STA 116+90 - 117+25 RT (BACK CURB)
STA 116+90 - 120+06 LT
STA 116+90 LT 38' - 120+08 LT 28' (PARKING LOT CURB)
STA 116+95 LT 26' - 120+08 LT 28' (PLANTING BED)
STA 117+67 - 118+39 RT
STA 118+56 - 118+60 RT
STA 118+90 - 120+13 RT
STA 119+07 - 119+07 RT (LOT CURB)
STA 120+44 LT 28' - SL STA 41+32 LT 25' (PLANTING BED)
STA 120+44 LT 28' - SL STA 41+32 LT 27' (PARKING LOT CURB)
STA 120+46 - 122+54 LT
STA 120+65 - 121+74 RT (BACK CURB)
STA 120+65 - 121+74 RT (PARKING LOT CURB)
STA 120+66 - 122+52 RT
STA 122+58 - 122+69 RT
STA 122+84 - 123+25 RT
STA 123+19 - 123+25 LT

VERTICAL GRANITE CURB, CONT.
SL STA 40+26 - 40+58 RT
SL STA 40+28 - 41+27 LT
SL STA 41+66 - 41+71 LT

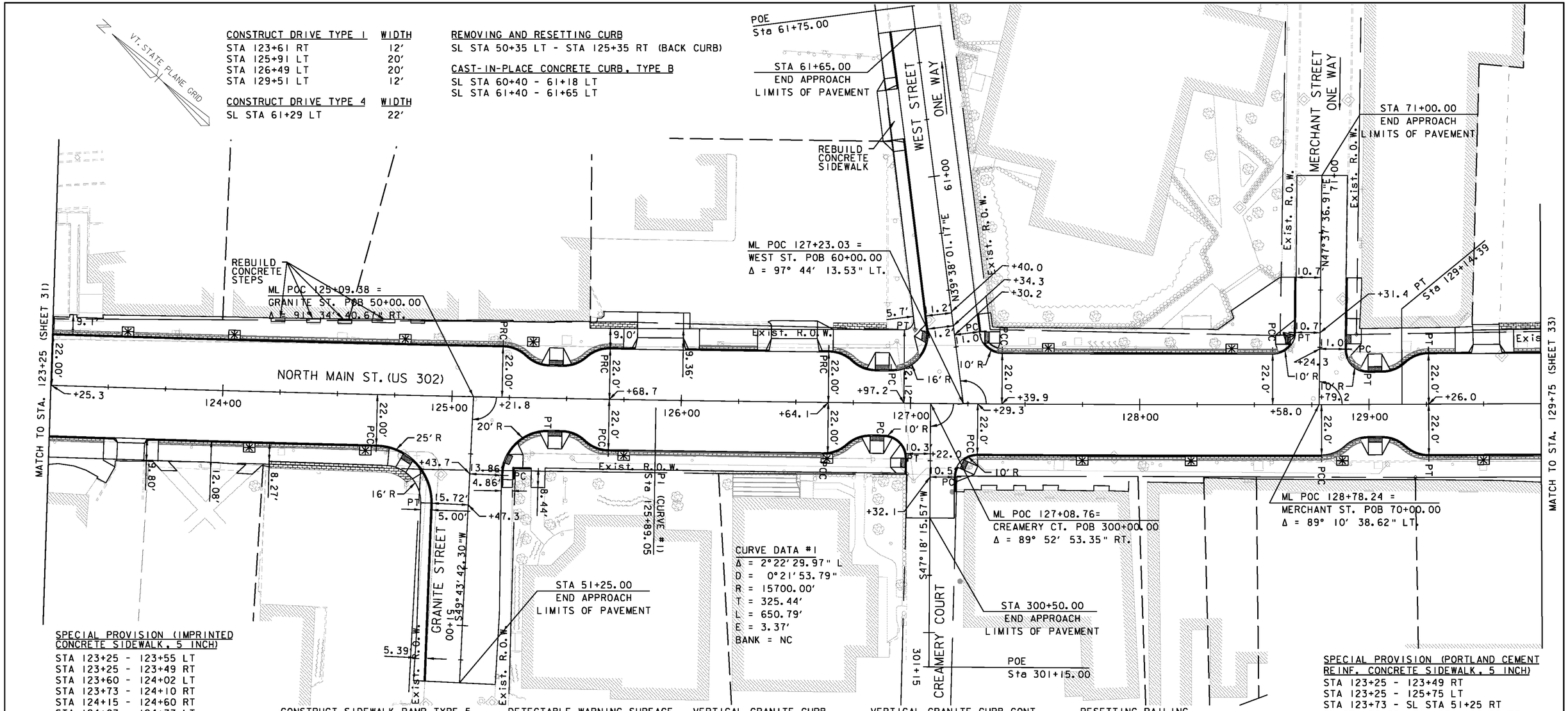
SPECIAL PROVISION (VERTICAL GRANITE CURB, UNFINISHED)
STA 118+89 - 119+59 RT (BACK CURB, 14" REVEAL)
STA 118+89 - 119+07 RT (LOT CURB, 14" REVEAL)
STA 119+69 - 120+14 RT (BACK CURB, 14" REVEAL)

SPECIAL PROVISION (PORTLAND CEMENT REINF. CONCRETE SIDEWALK, 8 INCH)
STA 117+19 - 117+71 RT
STA 118+34 - 118+95 RT
STA 120+00 - 120+52 LT
STA 120+08 - 120+71 RT
STA 122+65 - 122+88 RT
SL STA 41+22 - 41+70 LT

* PROVIDE AN EXPANSION JOINT IN ALL NEW SIDEWALK ON THE EXISTING RIGHT-OF-WAY

VHB Vanasse Hangen Brustlin, Inc.

| | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-I(34) C/2 |
| FILE NAME: z85D0I0bdr_nu_C2 | PLOT DATE: 3/9/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: D. PECK |
| DESIGNED BY: D. PECK | CHECKED BY: |
| ALIGNMENT AND CURB LAYOUT PLAN #2 | SHEET 31 OF 339 |




CONSTRUCT DRIVE TYPE 1

| | WIDTH |
|---|---|
| STA 123+61 RT | 12' |
| STA 125+91 LT | 20' |
| STA 126+49 LT | 20' |
| STA 129+51 LT | 12' |

CONSTRUCT DRIVE TYPE 4

| | WIDTH |
|---|---|
| SL STA 61+29 LT | 22' |

REMOVING AND RESETTING CURB
SL STA 50+35 LT - STA 125+35 RT (BACK CURB)

CAST-IN-PLACE CONCRETE CURB, TYPE B
SL STA 60+40 - 61+18 LT
SL STA 61+40 - 61+65 LT

SPECIAL PROVISION (IMPRINTED CONCRETE SIDEWALK, 5 INCH)
STA 123+25 - 123+55 LT
STA 123+25 - 123+49 RT
STA 123+60 - 124+02 LT
STA 123+73 - 124+10 RT
STA 124+15 - 124+60 RT
STA 124+07 - 124+77 LT
STA 124+65 - 124+73 RT
STA 124+82 - 125+39 LT
STA 125+29 - 125+39 RT
STA 125+50 - 125+74 LT
STA 125+50 - 125+73 RT
STA 125+78 - 126+61 RT
STA 126+08 - 126+33 LT
STA 126+64 - 126+79 RT
STA 126+66 - 126+81 LT
STA 126+94 - 127+04 LT
STA 127+29 - 127+72 RT
STA 127+38 - 127+57 LT
STA 127+77 - 128+20 RT
STA 127+62 - 128+38 LT
STA 128+25 - 128+96 RT
STA 128+43 - 128+61 LT
STA 128+91 - 128+98 LT
STA 129+07 - 129+38 LT
STA 129+07 - 129+47 RT
STA 129+52 - 129+75 RT
STA 129+63 - 129+75 LT

CONSTRUCT SIDEWALK RAMP TYPE 5
SL STA 60+23 - 60+36 LT
STA 125+39 - 125+52 RT
STA 125+39 - 125+52 LT
STA 126+79 - 126+92 RT
STA 126+81 - 126+94 LT
STA 128+60 - SL STA 70+37 LT
STA 128+96 - 129+09 RT
STA 128+96 - 129+09 LT
SL STA 300+18 - 300+30 RT
SL STA 300+34 LT - STA 127+29 RT

CONSTRUCT SIDEWALK RAMP TYPE 6
SL STA 50+35 LT - STA 125+29 RT
SL STA 60+38 RT - STA 127+37 LT
SL STA 70+38 RT - STA 128+91 LT
STA 124+73 - 124+88 RT

SPECIAL PROVISION (REMOVE AND RESET USPS MAIL BOX)
STA 123+50 LT (2)
STA 127+85 LT (3)

DETECTABLE WARNING SURFACE
SL STA 50+26 LT
SL STA 60+27 RT
SL STA 60+30 LT
SL STA 70+28 LT
SL STA 70+29 RT
STA 124+81 RT
STA 125+45 LT
STA 125+45 RT
STA 126+86 RT
STA 126+87 LT
STA 129+03 LT
STA 129+03 RT
SL STA 300+26 LT
SL STA 300+26 RT

VERTICAL GRANITE CURB
STA 125+48 - 126+83 RT
STA 126+02 - 126+38 LT
STA 126+60 - 126+84 LT
STA 126+89 - 126+98 RT
STA 126+90 - 127+07 LT
STA 127+23 - 129+00 RT
STA 127+32 - 128+66 LT
STA 129+06 - 129+45 LT
STA 129+06 - 129+75 RT
STA 129+58 - 129+75 LT
SL STA 300+28 - 300+31 RT
SL STA 300+28 - 300+38 LT

SPECIAL PROVISION (COBBLESTONE PAVERS)
STA 124+21 - 124+84 RT
STA 125+60 - 125+80 LT
STA 126+66 - 126+89 LT
STA 129+57 - 129+75 LT

VERTICAL GRANITE CURB CONT.
SL STA 50+28 - 50+39 LT
SL STA 50+29 - 51+25 RT
SL STA 60+30 - 60+38 RT
SL STA 60+32 - 60+40 LT
SL STA 70+30 - 70+55 LT
SL STA 70+31 - 70+55 RT
STA 123+25 - 123+54 RT
STA 123+25 - 125+42 LT
STA 123+68 - 124+80 RT
STA 125+25 - 125+42 RT
STA 125+48 - 125+79 LT
STA 129+00 LT - SL STA 70+27 RT

RESETTING RAILING
STA 123+41 LT
STA 125+35 RT - SL STA 50+35 LT
STA. 127+30 - 127+87 RT (8 RAILINGS)

SPECIAL PROVISION (PORTLAND CEMENT REINF. CONCRETE SIDEWALK, 8 INCH)
STA 123+49 - 123+73 RT
STA 125+75 - 126+08 LT
STA 126+33 - 126+66 LT
STA 129+38 - 129+63 LT
SL STA 61+13 - 61+45 LT

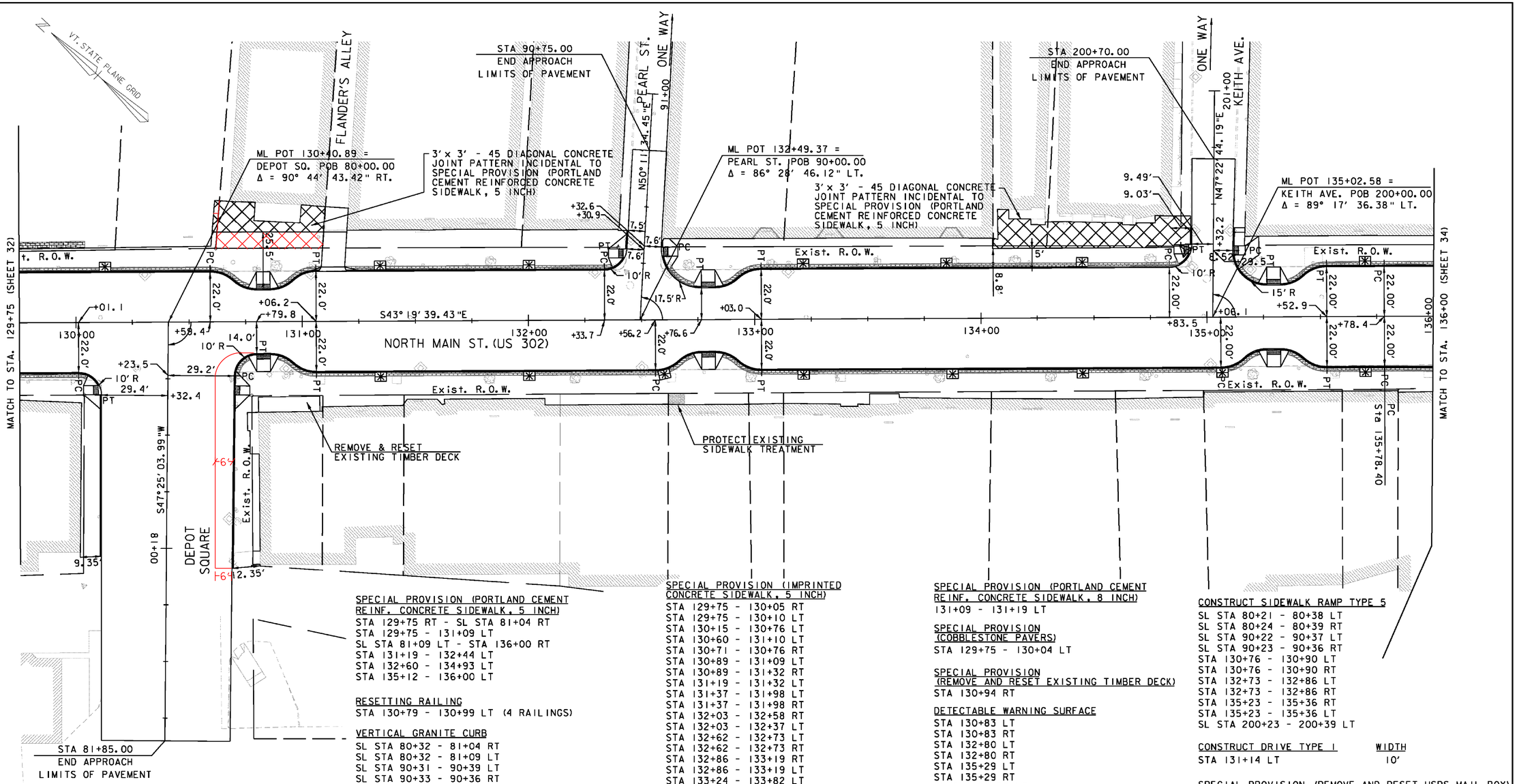
SPECIAL PROVISION (PORTLAND CEMENT REINF. CONCRETE SIDEWALK, 5 INCH)
STA 123+25 - 123+49 RT
STA 123+25 - 125+75 LT
STA 123+73 - SL STA 51+25 RT
SL STA 50+39 LT - STA 126+98 RT
STA 126+08 - 126+33 LT
STA 126+66 - SL STA 61+13 LT
SL STA 61+45 - 61+65 LT
STA 127+20 - 129+75 RT
SL STA 60+38 RT - SL STA 70+55 LT
SL STA 70+55 RT - STA 129+38 LT
STA 129+63 - 129+75 LT

* PROVIDE AN EXPANSION JOINT IN ALL NEW SIDEWALK ON THE EXISTING RIGHT-OF-WAY

20 0 20 40
FEET

VHB Vanasse Hangen Brustlin, Inc.

| | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-I(34) C/2 |
| FILE NAME: z85b010bdr_nu_C2 | PLOT DATE: 3/9/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: D. PECK |
| DESIGNED BY: D. PECK | CHECKED BY: |
| ALIGNMENT AND CURB LAYOUT PLAN #3 | SHEET 32 OF 339 |




SPECIAL PROVISION (PORTLAND CEMENT REINF. CONCRETE SIDEWALK, 5 INCH)
STA 129+75 RT - SL STA 81+04 RT
STA 129+75 - 131+09 LT
SL STA 81+09 LT - STA 136+00 RT
STA 131+19 - 132+44 LT
STA 132+60 - 134+93 LT
STA 135+12 - 136+00 LT

RESETTING RAILING
STA 130+79 - 130+99 LT (4 RAILINGS)

VERTICAL GRANITE CURB
SL STA 80+32 - 81+04 RT
SL STA 80+32 - 81+09 LT
SL STA 90+31 - 90+39 LT
SL STA 90+33 - 90+36 RT
STA 129+75 - 130+10 RT
STA 129+75 - 130+80 LT
STA 130+70 - 130+80 RT
STA 130+86 - 131+07 LT
STA 130+86 - 132+77 RT
STA 131+20 - 132+43 LT
STA 132+59 - 132+77 LT
STA 132+83 - 135+26 RT
STA 132+83 - 134+93 LT
STA 135+12 - 135+26 LT
STA 135+32 - 136+00 LT
STA 135+32 - 136+00 RT
SL STA 200+31 - 200+40 RT
SL STA 200+32 - 200+39 LT

SPECIAL PROVISION (IMPRINTED CONCRETE SIDEWALK, 5 INCH)
STA 129+75 - 130+05 RT
STA 129+75 - 130+10 LT
STA 130+15 - 130+76 LT
STA 130+60 - 131+10 LT
STA 130+71 - 130+76 RT
STA 130+89 - 131+09 LT
STA 130+89 - 131+32 RT
STA 131+19 - 131+32 LT
STA 131+37 - 131+98 LT
STA 131+37 - 131+98 RT
STA 132+03 - 132+58 RT
STA 132+03 - 132+37 LT
STA 132+62 - 132+73 LT
STA 132+62 - 132+73 RT
STA 132+86 - 133+19 RT
STA 132+86 - 133+19 LT
STA 133+24 - 133+82 LT
STA 133+24 - 133+85 RT
STA 133+87 - 134+42 LT
STA 133+90 - 134+42 RT
STA 134+05 - 134+94 LT
STA 134+47 - 134+88 LT
STA 134+47 - 135+04 RT
STA 135+06 - 135+23 RT
STA 135+14 - 135+23 LT
STA 135+36 - 135+67 LT
STA 135+36 - 135+67 RT
STA 135+72 - 136+00 LT
STA 135+72 - 136+00 RT

SPECIAL PROVISION (PORTLAND CEMENT REINF. CONCRETE SIDEWALK, 8 INCH)
131+09 - 131+19 LT

SPECIAL PROVISION (COBBLESTONE PAVERS)
STA 129+75 - 130+04 LT

SPECIAL PROVISION (REMOVE AND RESET EXISTING TIMBER DECK)
STA 130+94 RT

DETECTABLE WARNING SURFACE
STA 130+83 LT
STA 130+83 RT
STA 132+80 LT
STA 132+80 RT
STA 135+29 LT
STA 135+29 RT
SL STA 80+30 LT
SL STA 80+30 RT
SL STA 90+29 LT
SL STA 90+31 RT
SL STA 200+29 RT
SL STA 200+30 LT

* PROVIDE AN EXPANSION JOINT IN ALL NEW SIDEWALK ON THE EXISTING RIGHT-OF-WAY LINE

20 0 20 40
FEET

CONSTRUCT SIDEWALK RAMP TYPE 5
SL STA 80+21 - 80+38 LT
SL STA 80+24 - 80+39 RT
SL STA 90+22 - 90+37 LT
SL STA 90+23 - 90+36 RT
STA 130+76 - 130+90 LT
STA 130+76 - 130+90 RT
STA 132+73 - 132+86 LT
STA 132+73 - 132+86 RT
STA 135+23 - 135+36 RT
STA 135+23 - 135+36 LT
SL STA 200+23 - 200+39 LT

| CONSTRUCT DRIVE TYPE 1 | WIDTH |
|---|---|
| STA 131+14 LT | 10' |

SPECIAL PROVISION (REMOVE AND RESET USPS MAIL BOX)
STA 131+00 RT
STA 133+75 RT
STA 135+25 LT

CONSTRUCT SIDEWALK RAMP TYPE 6
SL STA 200+21 - 200+37 RT

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-I(34) C/2

FILE NAME: z85b010bdr_nu_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: D. PECK
PLOT DATE: 3/9/2011
DRAWN BY: D. PECK
CHECKED BY:
ALIGNMENT AND CURB LAYOUT PLAN #4
SHEET 33 OF 339

CONSTRUCT SIDEWALK RAMP TYPE 5
STA 136+89 - 137+03 RT
STA 136+89 - 137+03 LT
STA 500+43 - 500+60 RT
STA 602+44 - 602+61 RT
STA 700+37 - 700+52 LT

CONSTRUCT SIDEWALK RAMP TYPE 6
STA 139+60 - 139+78 RT

CONSTRUCT DRIVE TYPE 1 — WIDTH
STA 136+71 LT — 14'

VT. STATE PLANE GRID

MATCH TO STA. 701+50 (SHEET 42)

ELM STREET

MATCH TO STA. 140+25 (SHEET 35)

ML POT 139+19.56 =
ELM ST. POB 700+00.00
Δ = 109° 04' 08.40" LT.

ML POC 139+01.46 =
N. MAIN POB 600+00.00
Δ = 75° 00' 53.16" RT.

CURVE DATA #3
Δ = 14°56'36.55" L
D = 16°22'12.80"
R = 350.00'
T = 45.90'
L = 91.28'
E = 3.00'
BANK = NC

STA 138+60.00
END PROJECT
BEGIN APPROACH

CURVE DATA #2
Δ = 2°28'31.53" R
D = 2°51'53.24"
R = 2000.00'
T = 43.21'
L = 86.41'
E = 0.47'
BANK = NC

WASHINGTON ST.

MATCH TO STA. 801+39 (SHEET 35)

CHURCH ST.
ONE WAY

STA 800+65.00
END APPROACH
LIMITS OF PAVEMENT

NORTH MAIN ST. (US 302)

NORTH MAIN ST.

SOUTH MAIN ST.

PROSPECT ST.

MATCH TO STA. 136+00 (SHEET 33)

MATCH TO STA. 603+75 (SHEET 35)

MATCH TO STA. 501+35 (SHEET 43)

CURVE DATA #NM1
Δ = 21°38'40.06" L
D = 28°38'52" (1)
R = 200.00' (1)
T = 38.23' (1)
L = 75.55' (1)
E = 3.62'
BANK = NC

CURVE DATA #NM2
Δ = 11°16'02.68" L
D = 14°19'26" (2)
R = 400.00' (2)
T = 39.46' (2)
L = 78.66' (2)
E = 1.94
BANK = NC

STA 138+35.00
END PROJECT
BEGIN APPROACH

N. MAIN POT 602+74.81 =
CHURCH POB 800+00.00
Δ = 80° 32' 46.75" LT.

N. MAIN POT 602+94.23 =
PROSPECT POB 500+00.00
Δ = 90° 01' 19.76" RT.

1. PROVIDE AN EXPANSION JOINT IN ALL NEW SIDEWALK ON THE EXISTING RIGHT-OF-WAY.
2. SEE CURBED ISLAND DETAILS FOR ADDITIONAL INFORMATION ON MEDIAN ISLAND LAYOUT.

SPECIAL PROVISION (PORTLAND CEMENT REINF. CONCRETE SIDEWALK, 5 INCH)
STA 136+00 - 136+60 LT
STA 136+00 - SL STA 500+60 RT
STA 136+83 - SL STA 700+65 LT
STA 139+80 RT - SL STA 600+98 LT

SPECIAL PROVISION (PORTLAND CEMENT REINF. CONCRETE SIDEWALK, 8 INCH)
STA 136+60 - 136+83 LT

SPECIAL PROVISION (REMOVE AND RESET USPS MAIL BOX)
STA 138+60 LT

VERTICAL GRANITE CURB
STA 136+00 - 136+63 LT
STA 136+00 - 136+93 RT
STA 136+80 - 136+93 LT
STA 136+99 - SL STA 700+42 LT
STA 136+99 RT - SL STA 602+51 RT
STA 138+33 - 138+82 RT (CURBED ISLAND)
STA 139+66 RT - SL STA 600+98 LT
STA 139+71 - 139+80 RT
SL STA 500+26 - 500+49 RT
SL STA 500+53 - 500+60 RT
SL STA 600+45 - 601+24 RT (CURBED ISLAND)
SL STA 700+46 - 700+65 LT

DETECTABLE WARNING SURFACE
STA 136+96 LT
STA 136+96 RT
STA 139+69 RT
SL STA 500+51 RT
SL STA 602+53 RT
SL STA 700+44 LT

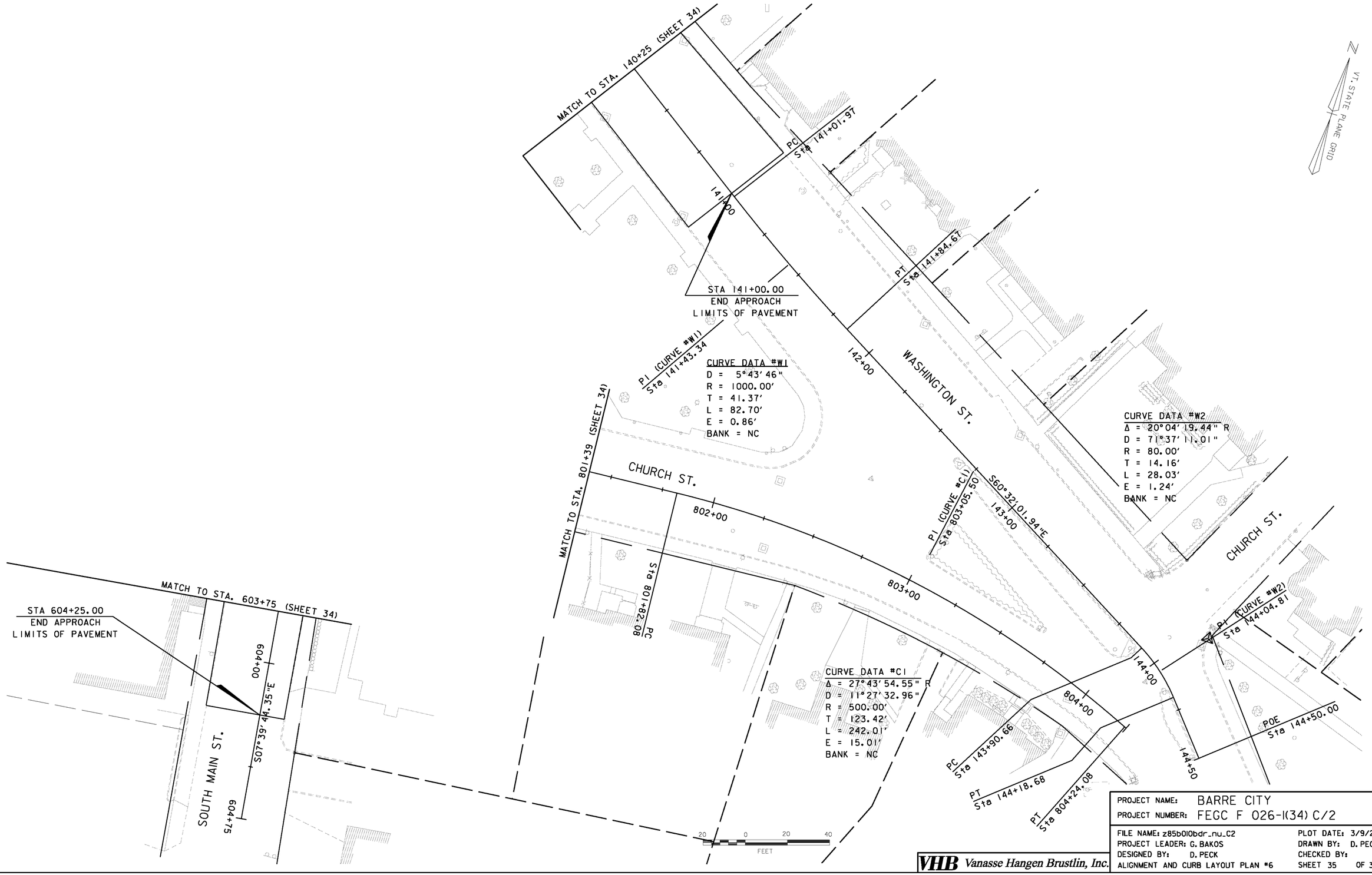
SPECIAL PROVISION (COBBLESTONE PAVERS)
SL STA 600+45 - 601+23 RT (ISLAND)

SPECIAL PROVISION (IMPRINTED CONCRETE SIDEWALK, 5 INCH)
STA 136+00 - 136+14 LT
STA 136+00 - 136+20 RT
STA 136+19 - 136+60 LT
STA 136+25 - 136+91 RT
STA 136+83 - 136+91 LT
STA 137+00 - 137+31 RT
STA 137+03 - 137+32 LT
STA 137+36 - 137+90 RT
STA 137+37 - 138+08 LT
STA 137+93 - 138+37 RT
STA 138+13 - 138+83 LT
SL STA 500+29 - 500+42 RT
SL STA 600+36 - 600+86 RT
SL STA 600+88 - 601+39 RT
SL STA 601+44 - 602+48 RT

20 0 20 40
FEET

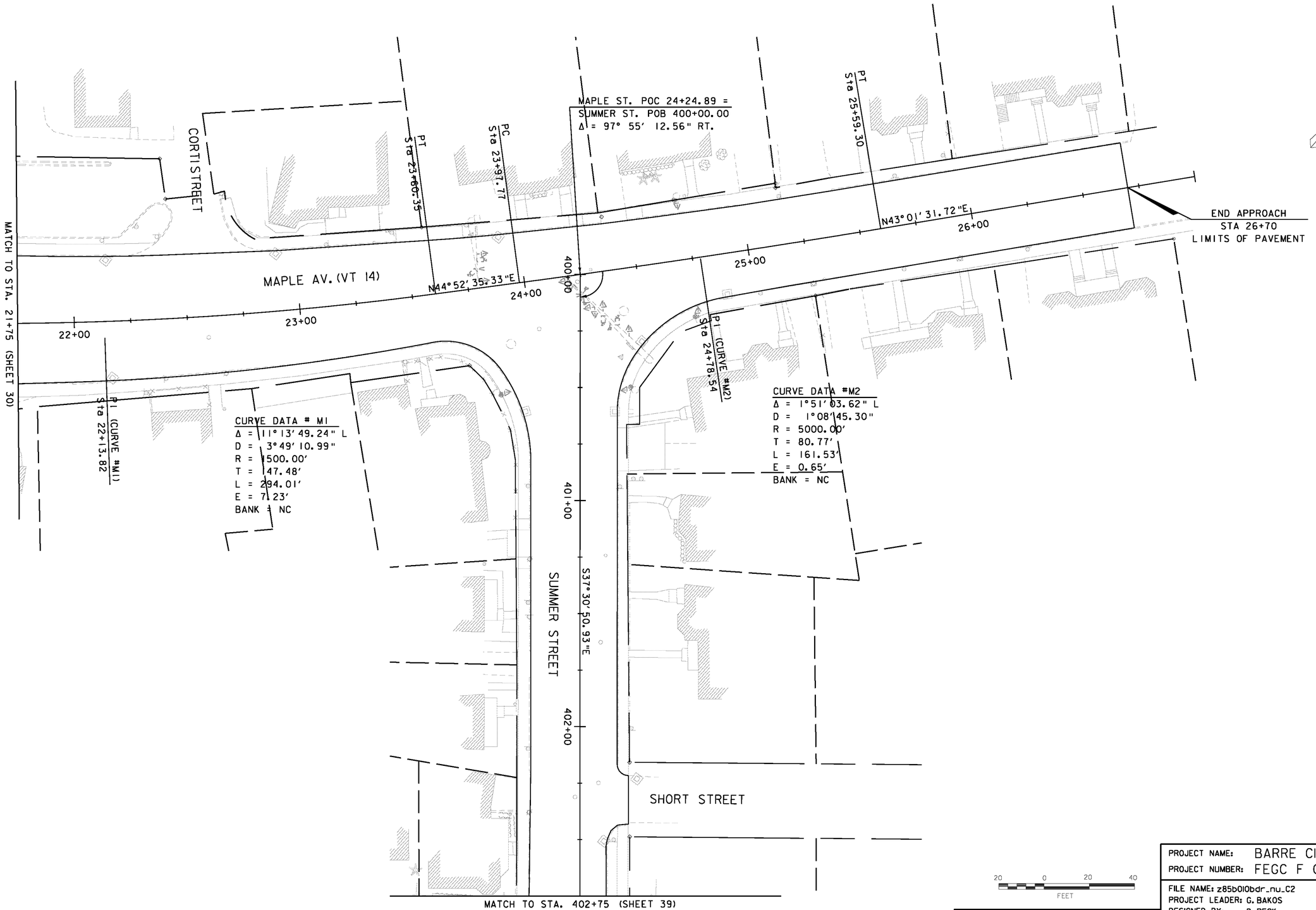
VHB Vanasse Hangen Brustlin, Inc.

| | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-1(34) C/2 |
| FILE NAME: z85b010bdr_nu_C2 | PLOT DATE: 3/9/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: D. PECK |
| DESIGNED BY: D. PECK | CHECKED BY: |
| ALIGNMENT AND CURB LAYOUT PLAN #5 | SHEET 34 OF 339 |



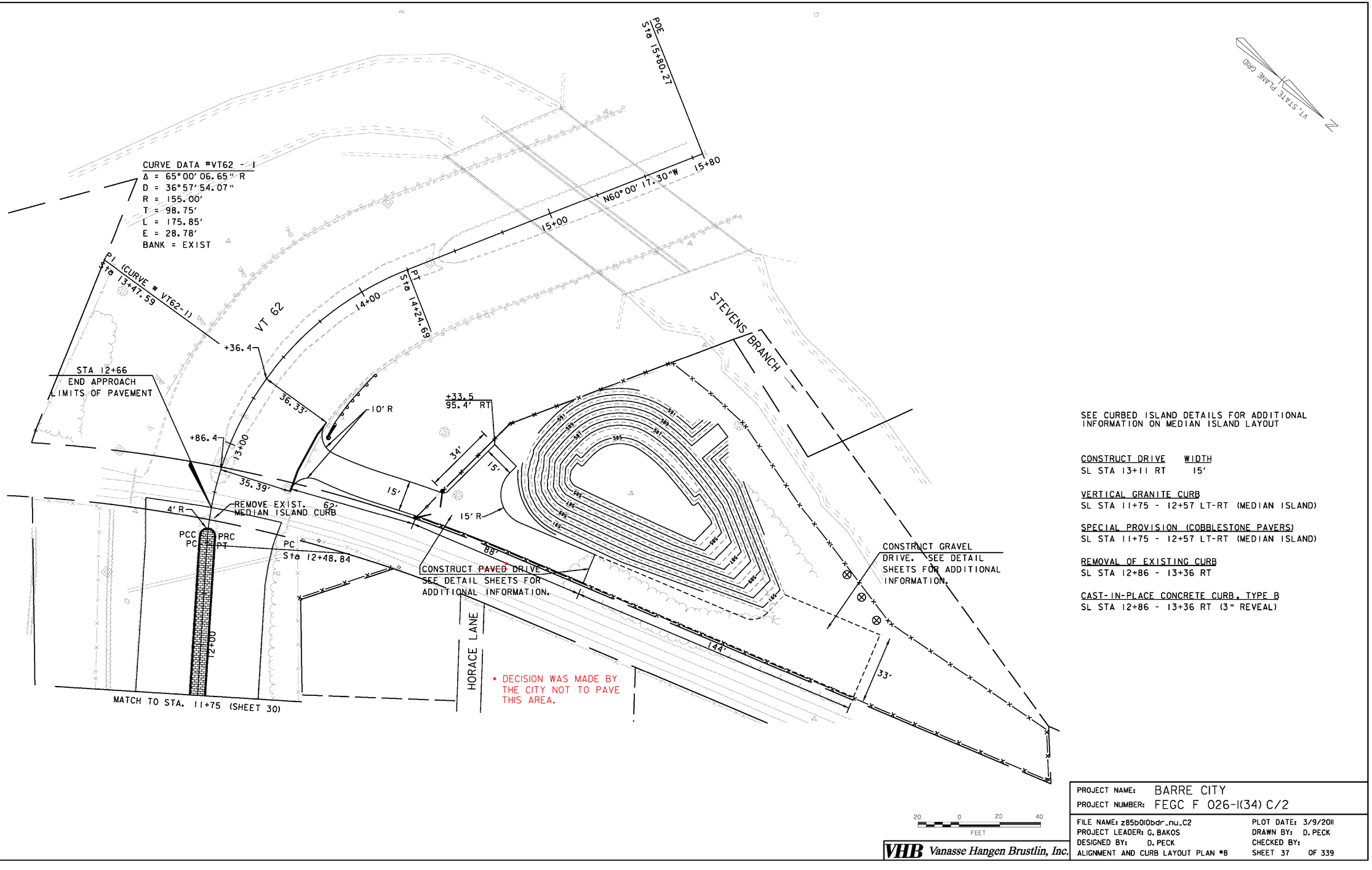

| | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-I(34) C/2 |
| FILE NAME: z85b010bdr_nu_C2 | PLOT DATE: 3/9/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: D. PECK |
| DESIGNED BY: D. PECK | CHECKED BY: |
| ALIGNMENT AND CURB LAYOUT PLAN #6 | SHEET 35 OF 339 |

VHB Vanasse Hangen Brustlin, Inc.




VHB Vanasse Hangen Brustlin, Inc.

| | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-1(34) C/2 |
| FILE NAME: z85b010bdr_nu_C2 | PLOT DATE: 3/9/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: D. PECK |
| DESIGNED BY: D. PECK | CHECKED BY: |
| ALIGNMENT AND CURB LAYOUT PLAN #7 | SHEET 36 OF 339 |




SEE CURBED ISLAND DETAILS FOR ADDITIONAL INFORMATION ON MEDIAN ISLAND LAYOUT

| CONSTRUCT DRIVE | WIDTH |
|---|---|
| SL STA 13+11 RT | 15' |

VERTICAL GRANITE CURB
SL STA 11+75 - 12+57 LT-RT (MEDIAN ISLAND)

SPECIAL PROVISION (COBBLESTONE PAVERS)
SL STA 11+75 - 12+57 LT-RT (MEDIAN ISLAND)

REMOVAL OF EXISTING CURB
SL STA 12+86 - 13+36 RT

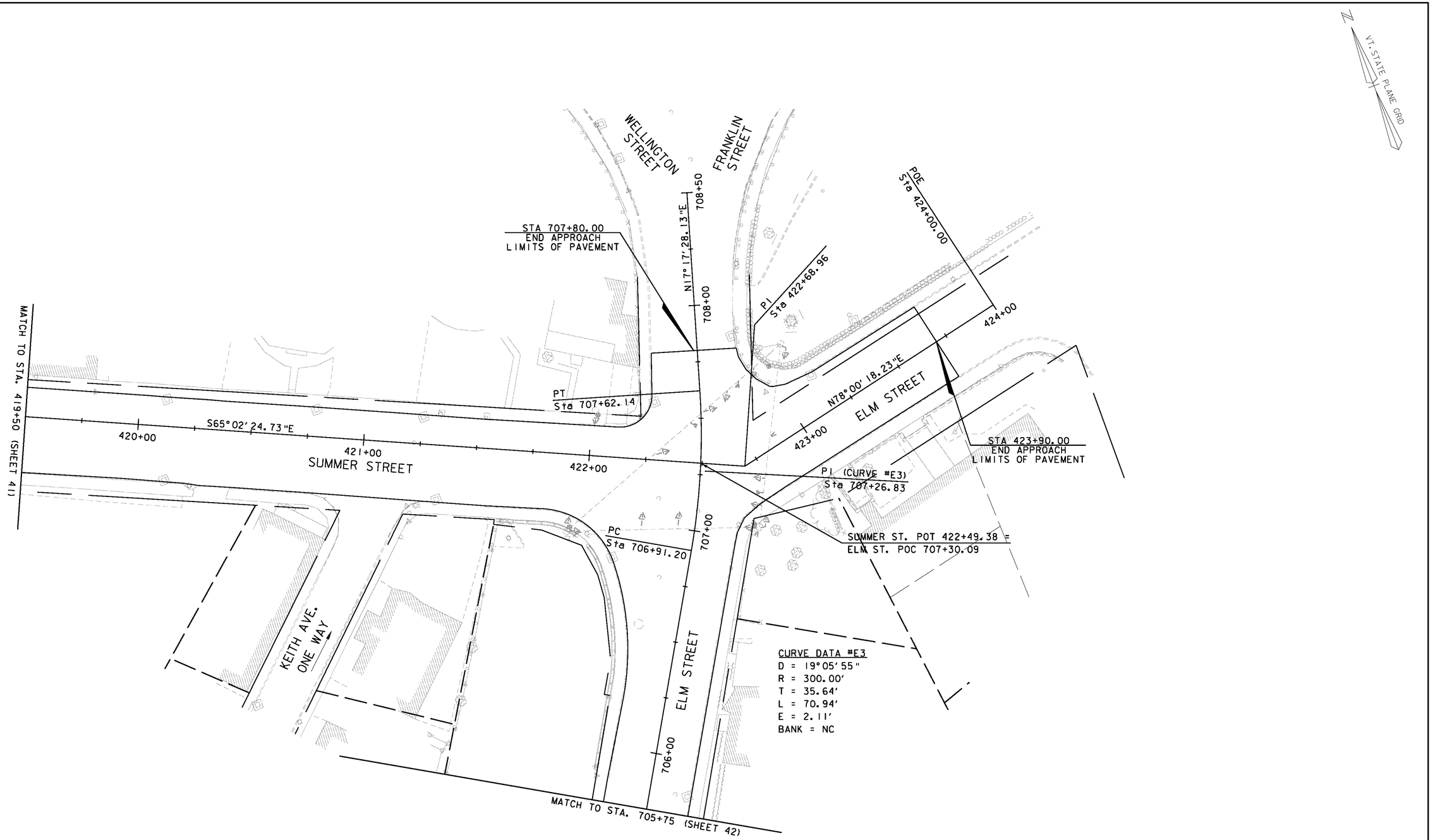
CAST-IN-PLACE CONCRETE CURB, TYPE B
SL STA 12+86 - 13+36 RT (3" REVEAL)

20 0 20 40
FEET

VHB Vanasse Hangen Brustlin, Inc.

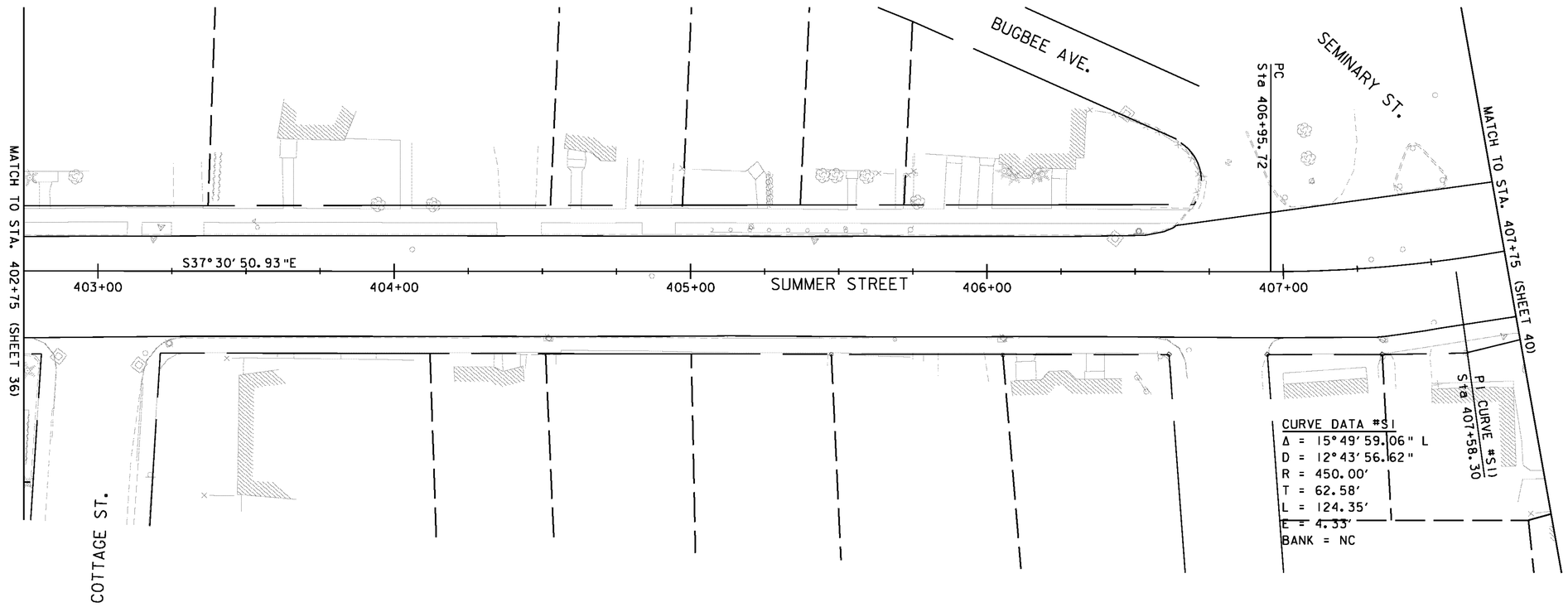
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: z85b010bdr_nu_C2 — PLOT DATE: 3/9/2011
PROJECT LEADER: G. BAKOS — DRAWN BY: D. PECK
DESIGNED BY: D. PECK — CHECKED BY:
ALIGNMENT AND CURB LAYOUT PLAN #8 — SHEET 37 OF 339




VHB Vanasse Hangen Brustlin, Inc.

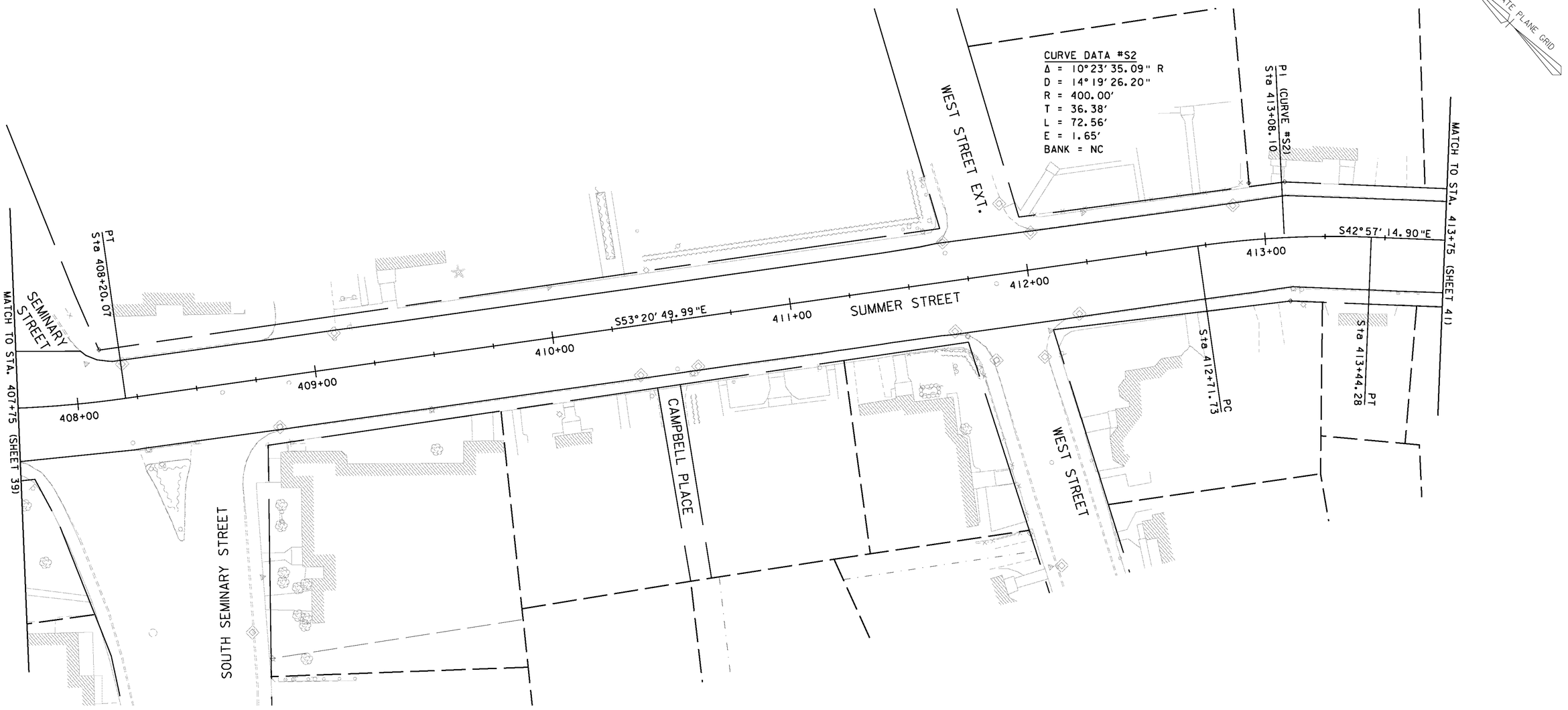
| | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-1(34) C/2 |
| FILE NAME: z85b010bdr_nu_C2 | PLOT DATE: 3/9/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: D. PECK |
| DESIGNED BY: D. PECK | CHECKED BY: |
| ALIGNMENT AND CURB LAYOUT PLAN #9 | SHEET 38 OF 339 |




20 0 20 40
FEET

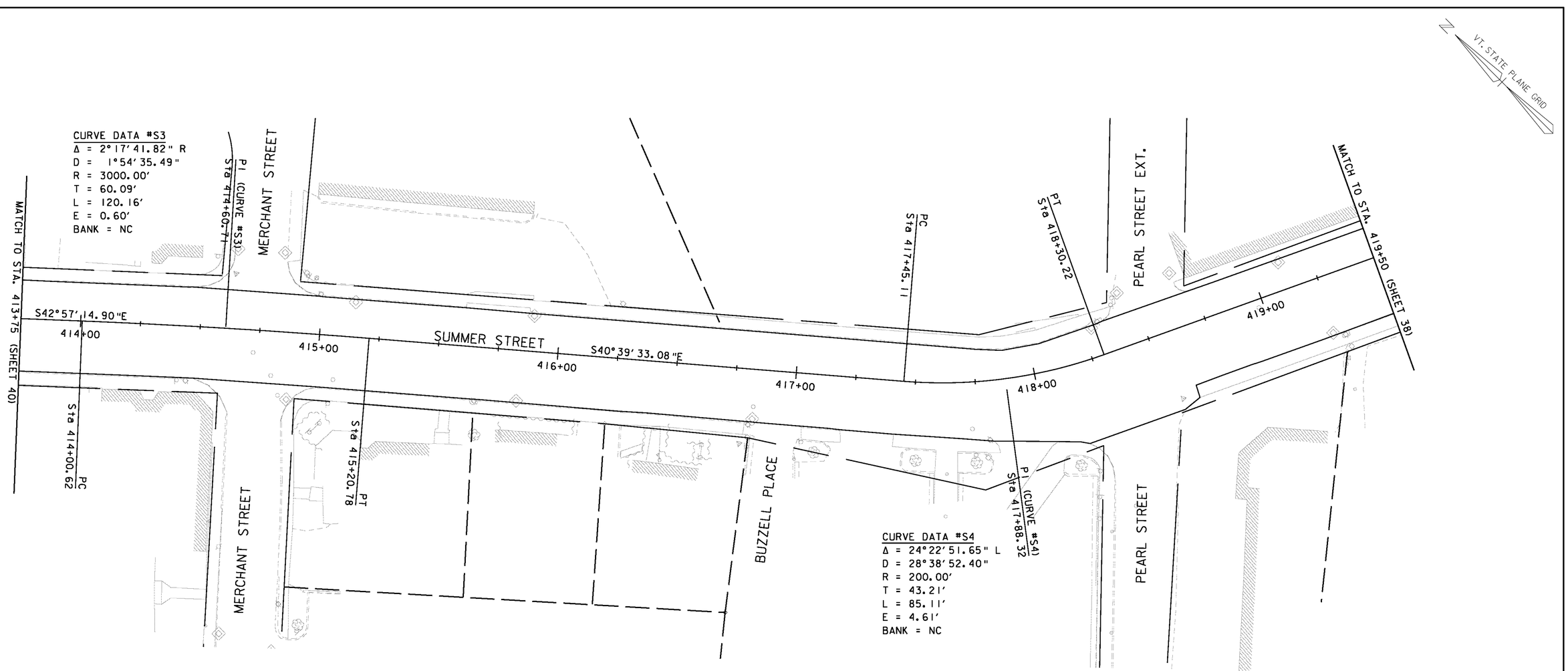
VHB Vanasse Hangen Brustlin, Inc.

| | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-1(34) C/2 |
| FILE NAME: z85b010bdr_nu_C2 | PLOT DATE: 3/9/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: D. PECK |
| DESIGNED BY: D. PECK | CHECKED BY: |
| ALIGNMENT AND CURB LAYOUT PLAN #10 | SHEET 39 OF 339 |



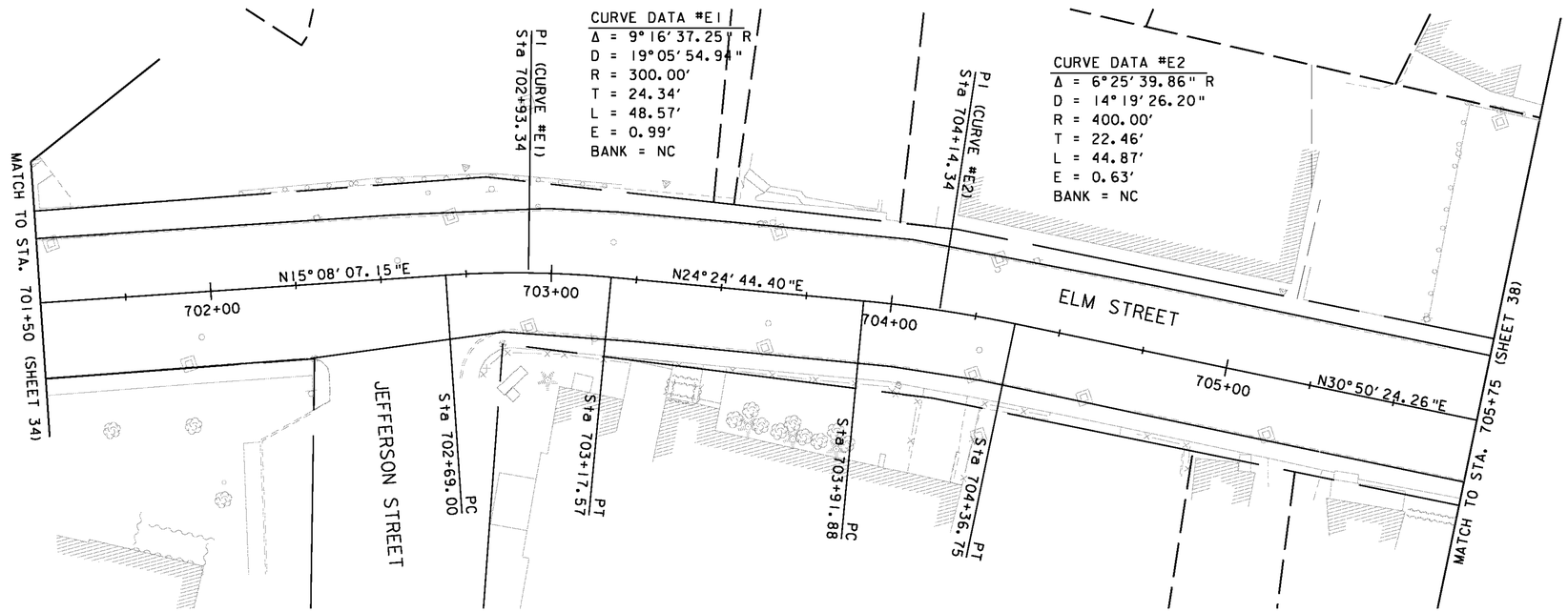

VHB Vanasse Hangen Brustlin, Inc.

| | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-1(34) C/2 |
| FILE NAME: z85b010bdr_nu_C2 | PLOT DATE: 3/9/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: D. PECK |
| DESIGNED BY: D. PECK | CHECKED BY: |
| ALIGNMENT AND CURB LAYOUT PLAN #11 | SHEET 40 OF 339 |




VHB Vanasse Hangen Brustlin, Inc.

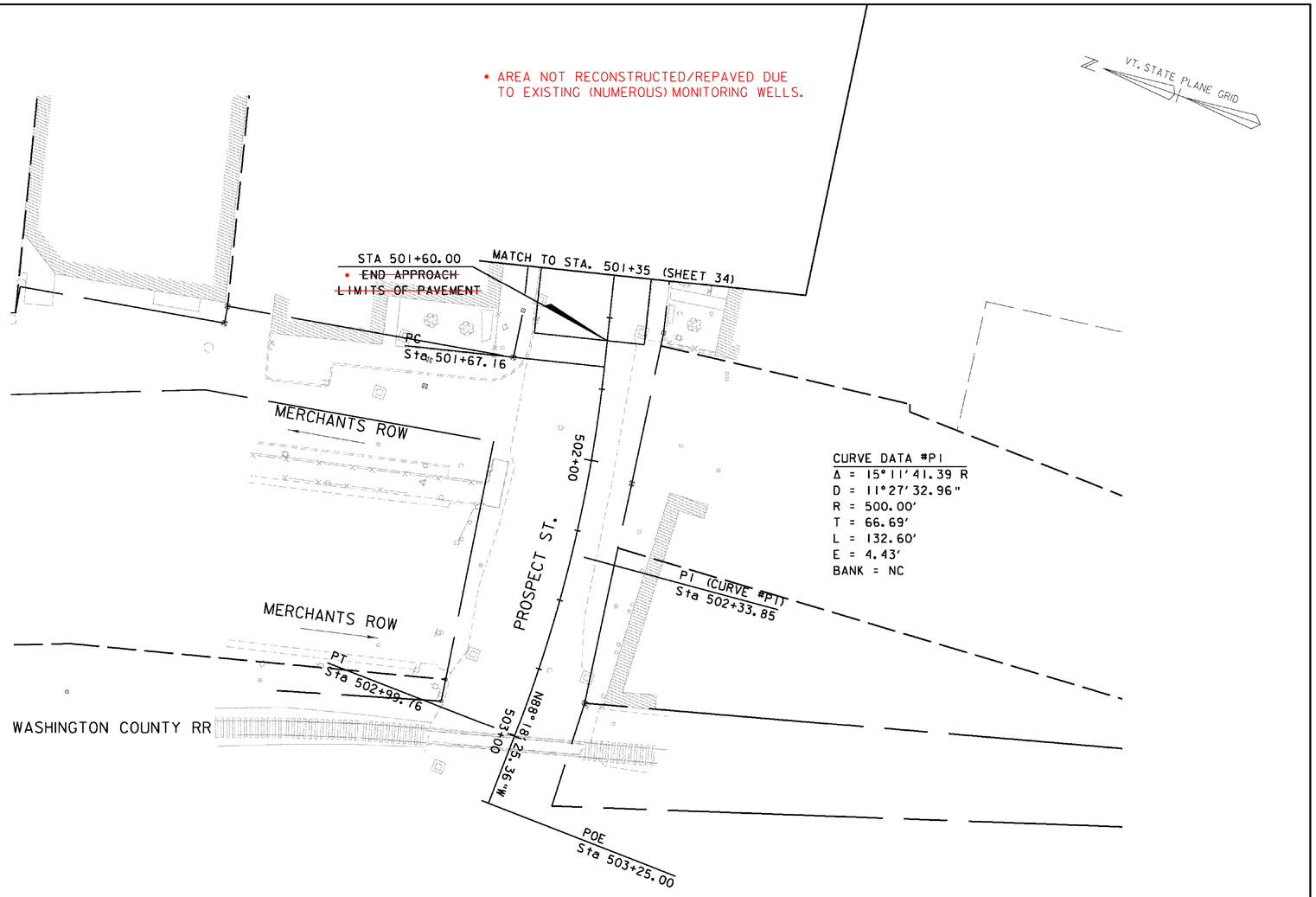
| | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-1(34) C/2 |
| FILE NAME: z85b0110bdr_nu_C2 | PLOT DATE: 3/9/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: D. PECK |
| DESIGNED BY: D. PECK | CHECKED BY: |
| ALIGNMENT AND CURB LAYOUT PLAN #12 | SHEET 41 OF 339 |




20 0 20 40
FEET

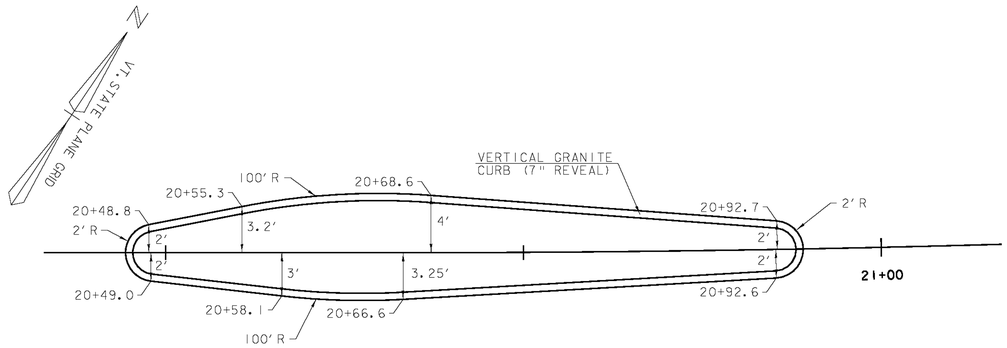
VHB Vanasse Hangen Brustlin, Inc.

| | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-1(34) C/2 |
| FILE NAME: z85b010bdr_nu_C2 | PLOT DATE: 3/9/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: D. PECK |
| DESIGNED BY: D. PECK | CHECKED BY: |
| ALIGNMENT AND CURB LAYOUT PLAN #13 | SHEET 42 OF 339 |

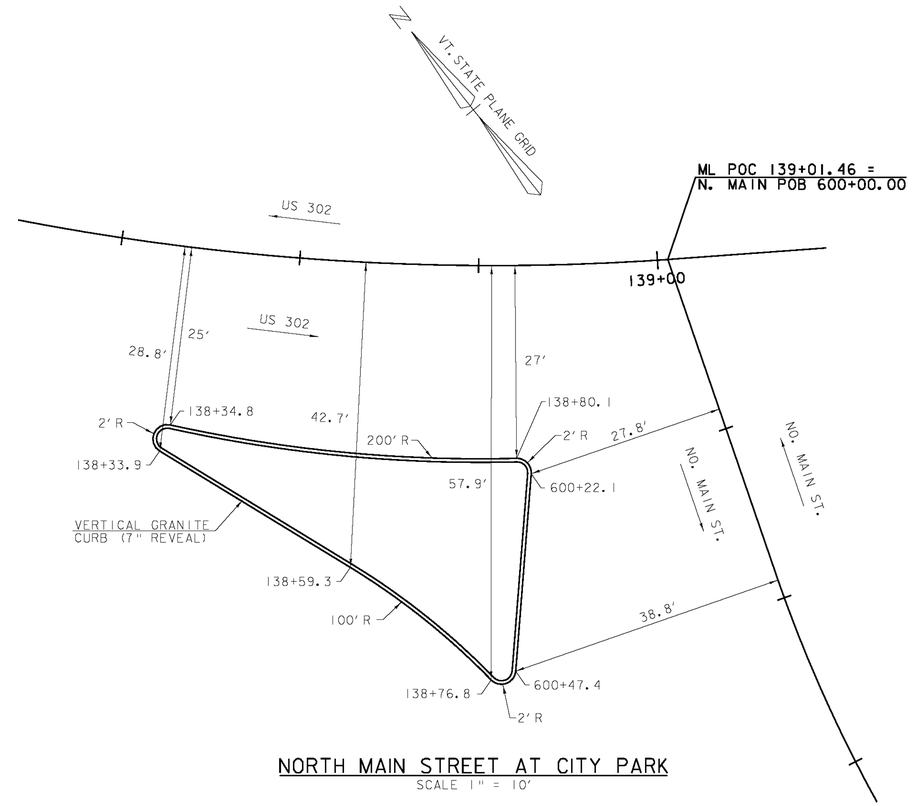



VHB Vanasse Hangen Brustlin, Inc.

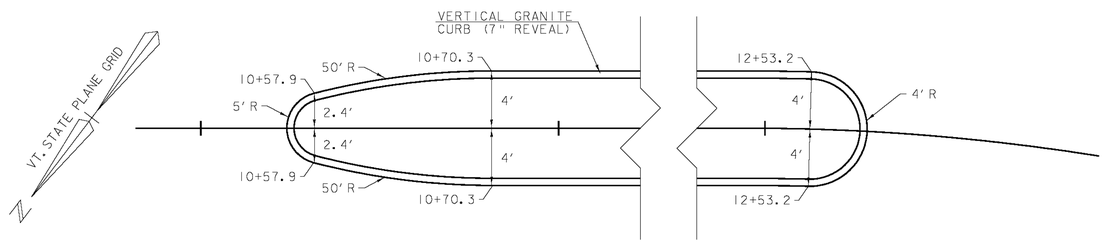
| | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-1(34) C/2 |
| FILE NAME: z85b0l0bdr_nu_C2 | PLOT DATE: 3/9/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: D. PECK |
| DESIGNED BY: D. PECK | CHECKED BY: |
| ALIGNMENT AND CURB LAYOUT PLAN #14 | SHEET 43 OF 339 |



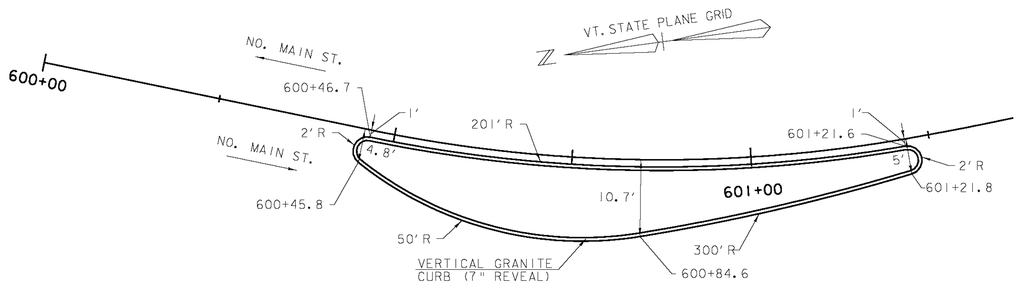

MAPLE AVENUE
SCALE 1" = 10'




NORTH MAIN STREET AT CITY PARK
SCALE 1" = 10'




VT ROUTE 62
SCALE 1" = 5'




VT 14 AT CITY PARK
SCALE 1" = 10'

CURBED ISLAND DETAILS

| | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-1(34) C/2 |

| | |
|---|---|
| FILE NAME: 85b010_DET_C2 | PLOT DATE: 3/9/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: DMP / JAR |
| DESIGNED BY: DMP / MDS | CHECKED BY: |
| CURBED ISLAND DETAILS | SHEET 44 OF 339 |

VHB Vanasse Hangen Brustlin, Inc.

NOTE:

SEE GENERAL PLAN SHEETS FOR LAYOUT LOCATIONS.

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING NUMBER: B-301
SHEET 1 of 1
DATE STARTED: 6/01/09
DATE COMPLETED: 6/01/09

PROJECT NAME: BARRE CITY
SITE NAME: US-302
STATION: 113+35.90
OFFSET: -45.00
VTSPG NAD83:

PROJECT NUMBER: FEGC F 026-1(34)
SITE NUMBER:
GROUND ELEVATION: 593.61 ft
GROUNDWATER DEPTH: 10.5 ft 6/01/09
PROJECT PIN NUMBER: 85B010

BORING CREW
CREW CHIEF: GARROW
DRILLER: GARROW
LOGGER: MAHMUTOVIC

BORING RIG: LARGE SKID RIG w/AUTO HAMMER
BORING TYPE: HOLLOW STEM AUGER
SAMPLE TYPE: SPLIT BARREL
CHECKED BY: CAA

| DEPTH (ft) | SYMBOL | CLASSIFICATION OF MATERIALS (Description) | BLOWS PER FOOT | M.C. (%) | GRAVEL (%) | SAND (%) | FINES (%) |
|---|---|---|---|---|---|---|---|
| | | A-4, SiSa, brn, Moist, Rec. = 1.4 ft | 6 | 24.2 | 1.3 | 52.2 | 46.5 |
| | | A-4, SaSi, gry, MTW, Rec. = 1.5 ft | 2 | 46.3 | 0.0 | 38.6 | 61.4 |
| | | A-4, Si with Little Organics (11.5%), gry, MTW, Rec. = 1.8 ft | 1 | 68.2 | 0.2 | 16.0 | 83.8 |
| | | A-4, SaSi, gry, MTW, Rec. = 1.7 ft | 3 | 34.9 | 2.5 | 38.8 | 58.7 |
| | | A-1-b, SaGr, gry, Wet, Rec. = 0.8 ft | 12 | 24.0 | 41.4 | 39.8 | 18.8 |
| | | A-1-b, GrSa, gry, Wet, Rec. = 0.9 ft | 10 | 26.1 | 21.3 | 64.2 | 14.5 |
| | | A-2-4, Sa, brn, Wet, Rec. = 1.4 ft | 1 | 31.6 | 3.0 | 78.8 | 18.2 |
| | | A-2-4, SiSa, brn, Wet, Rec. = 1.2 ft | 1 | 33.9 | 3.7 | 70.7 | 25.6 |
| | | A-2-4, SiSa, brn, Wet, Rec. = 1.2 ft | 3 | 27.1 | 1.2 | 73.6 | 25.2 |
| | | Hole stopped @ 25.0 ft | | | | | |

LOG OF BORING BARRE CITY FEGC F 026-1(34) GPJ VTAOT.GDT 7/8/09

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING NUMBER: B-302
SHEET 1 of 1
DATE STARTED: 6/01/09
DATE COMPLETED: 6/01/09

PROJECT NAME: BARRE CITY
SITE NAME: US-302
STATION: 113+42.40
OFFSET: 57.00
VTSPG NAD83:

PROJECT NUMBER: FEGC F 026-1(34)
SITE NUMBER:
GROUND ELEVATION: 592.84 ft
GROUNDWATER DEPTH: 5.0 ft 6/01/09
PROJECT PIN NUMBER: 85B010

BORING CREW
CREW CHIEF: GARROW
DRILLER: GARROW
LOGGER: MAHMUTOVIC

BORING RIG: LARGE SKID RIG w/AUTO HAMMER
BORING TYPE: HOLLOW STEM AUGER
SAMPLE TYPE: SPLIT BARREL
CHECKED BY: CAA

| DEPTH (ft) | SYMBOL | CLASSIFICATION OF MATERIALS (Description) | BLOWS PER FOOT | M.C. (%) | GRAVEL (%) | SAND (%) | FINES (%) |
|---|---|---|---|---|---|---|---|
| | | A-4, SiSa, brn, Moist, Rec. = 1.2 ft | 3 | 17.1 | 3.8 | 60.3 | 35.9 |
| | | A-2-4, Sa, brn, Wet, Rec. = 1.8 ft | 3 | 26.9 | 0.2 | 88.8 | 11.0 |
| | | A-2-4, Sa, brn, Wet, Rec. = 1.2 ft | 5 | 24.8 | 9.3 | 79.6 | 11.1 |
| | | A-1-b, SaGr, blk, Wet, Rec. = 0.9 ft | 11 | 19.8 | 44.1 | 40.7 | 15.2 |
| | | A-1-b, GrSa, blk, Wet, Rec. = 0.8 ft | 7 | 24.8 | 33.5 | 47.7 | 18.8 |
| | | A-2-4, Sa with pieces of Wood, blk, Wet, Rec. = 1.4 ft | 1 | 35.0 | 13.0 | 67.3 | 19.7 |
| | | A-2-4, SiSa, blk, Wet, Rec. = 1.7 ft | 7 | 30.0 | 1.3 | 75.5 | 23.2 |
| | | A-2-4, Sa, blk, Wet, Rec. = 1.1 ft | 16 | 25.0 | 13.7 | 69.2 | 17.1 |
| | | A-2-4, Sa, blk, Wet, Rec. = 1.5 ft | 14 | 19.5 | 18.9 | 64.3 | 16.8 |
| | | Hole stopped @ 25.0 ft | | | | | |

LOG OF BORING BARRE CITY FEGC F 026-1(34) GPJ VTAOT.GDT 7/8/09

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING NUMBER: B-304
SHEET 1 of 1
DATE STARTED: 6/03/09
DATE COMPLETED: 6/03/09

PROJECT NAME: BARRE CITY
SITE NAME: US-302
STATION: 114+55.50
OFFSET: 47.50
VTSPG NAD83:

PROJECT NUMBER: FEGC F 026-1(34)
SITE NUMBER:
GROUND ELEVATION: 594.14 ft
GROUNDWATER DEPTH: 13.2 ft 6/03/09
PROJECT PIN NUMBER: 85B010

BORING CREW
CREW CHIEF: GARROW
DRILLER: GARROW
LOGGER: MAHMUTOVIC

BORING RIG: LARGE SKID RIG w/AUTO HAMMER
BORING TYPE: HOLLOW STEM AUGER
SAMPLE TYPE: SPLIT BARREL
CHECKED BY: CAA

| DEPTH (ft) | SYMBOL | CLASSIFICATION OF MATERIALS (Description) | BLOWS PER FOOT | M.C. (%) | GRAVEL (%) | SAND (%) | FINES (%) |
|---|---|---|---|---|---|---|---|
| | | A-4, SaSi, brn, Moist, Rec. = 1.5 ft | 3 | 21.3 | 0.4 | 42.6 | 57.0 |
| | | A-2-4, SiSa, brn, Moist, Rec. = 1.3 ft | 4 | 17.2 | 0.1 | 75.1 | 24.8 |
| | | A-2-4, Sa, brn, Wet, Rec. = 1.6 ft | 2 | 29.3 | 0.0 | 83.5 | 16.5 |
| | | A-2-4, Sa, blk-brn, Wet, Rec. = 1.3 ft | 3 | 30.1 | 1.4 | 84.4 | 14.2 |
| | | A-1-b, GrSa, blk, Wet, Rec. = 1.1 ft | 37 | 19.2 | 41.8 | 48.5 | 9.7 |
| | | A-1-b, GrSa, brn, Wet, Rec. = 2.0 ft | 25 | 12.8 | 40.3 | 48.9 | 10.8 |
| | | Visual Classification, SaGr, brn, Wet, Rec. = 0.9 ft, Sample had oxidized staining with a slight odor of possible septic. | 19 | | | | |
| | | A-4, SaSi, gry, Wet, Rec. = 1.0 ft | 3 | 26.8 | 0.1 | 28.2 | 71.7 |
| | | A-4, Si, gry, Wet, Rec. = 1.0 ft | 7 | 29.4 | 0.3 | 16.6 | 83.1 |
| | | Hole stopped @ 25.0 ft | | | | | |

LOG OF BORING BARRE CITY FEGC F 026-1(34) GPJ VTAOT.GDT 7/8/09

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-I(34) C/2

FILE NAME: 85b010_TYP_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
BORING LOGS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 45 OF 339

NOTE:

SEE GENERAL PLAN SHEETS FOR LAYOUT LOCATIONS.

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING NUMBER: B-305
SHEET 1 of 1
DATE STARTED: 6/06/09
DATE COMPLETED: 6/08/09

PROJECT NAME: BARRE CITY
SITE NAME: US-302
STATION: 23+80.30
OFFSET: -26.90
VTSPG NAD83:

PROJECT NUMBER: FEGC F 026-1(34)
SITE NUMBER:
GROUND ELEVATION: 595.74 ft
GROUNDWATER DEPTH: 10.2 ft 6/08/09
PROJECT PIN NUMBER: 85B010

BORING CREW
CREW CHIEF: GARROW
DRILLER: GARROW
LOGGER: MAHMUTOVIC

BORING RIG: LARGE SKID RIG w/AUTO HAMMER
BORING TYPE: HOLLOW STEM AUGER
SAMPLE TYPE: SPLIT BARREL
CHECKED BY: CAA

| DEPTH (ft) | SYMBOL | CLASSIFICATION OF MATERIALS (Description) | BLOWS PER FOOT | M.C. (%) | GRAVEL (%) | SAND (%) | FINES (%) |
|---|---|---|---|---|---|---|---|
| | | A-2-4, SlSa, brn, Moist, Rec. = 0.7 ft | 22 | 12.0 | 19.6 | 59.0 | 21.4 |
| 5 | | A-4, SaSi, blk, MTW, Rec. = 1.7 ft | 3 | 41.9 | 0.1 | 44.7 | 55.2 |
| | | A-2-4, SlSa, blk, MTW, Rec. = 2.0 ft | 1 | 36.4 | 0.0 | 67.8 | 32.2 |
| 10 | | A-2-4, SlSa with Trace of Organics (5.3%), blk, Wet, Rec. = 2.0 ft | 1 | 60.5 | 0.2 | 66.3 | 33.5 |
| | | A-2-4, SlGrSa, blk, Wet, Rec. = 0.5 ft | 4 | 38.1 | 23.0 | 56.9 | 20.1 |
| | | A-2-4, GrSlSa, blk, Wet, Rec. = 1.1 ft | WH | 34.0 | 22.8 | 41.9 | 35.3 |
| 15 | | A-2-4, SlSa, brn, Wet. Rec. = 0.3 ft | 4 | 40.0 | 0.1 | 79.8 | 20.1 |
| | | | | | | | |
| 20 | | A-2-4, Sa. brn, Wet, Rec. = 2.0 ft | 7 | 28.3 | 7.2 | 78.3 | 14.5 |
| | | A-2-4, Sa. brn, Wet, Rec. = 2.0 ft | 17 | 29.3 | 3.7 | 80.6 | 15.7 |
| 25 | | Hole stopped @ 25.0 ft | | | | | |
| 30 | | | | | | | |
| 35 | | | | | | | |
| 40 | | | | | | | |
| 45 | | | | | | | |

LOG OF BORING BARRE CITY FEGC F 026-1(34) GPJ VT AOT.GDT 7/3/09

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING NUMBER: B-306
SHEET 1 of 1
DATE STARTED: 6/02/09
DATE COMPLETED: 6/02/09

PROJECT NAME: BARRE CITY
SITE NAME: US-302
STATION: 24+45.10
OFFSET: 34.50
VTSPG NAD83:

PROJECT NUMBER: FEGC F 026-1(34)
SITE NUMBER:
GROUND ELEVATION: 596.19 ft
GROUNDWATER DEPTH: 8.1 ft 6/02/09
PROJECT PIN NUMBER: 85B010

BORING CREW
CREW CHIEF: GARROW
DRILLER: GARROW
LOGGER: MAHMUTOVIC

BORING RIG: LARGE SKID RIG w/AUTO HAMMER
BORING TYPE: HOLLOW STEM AUGER
SAMPLE TYPE: SPLIT BARREL
CHECKED BY: CAA

| DEPTH (ft) | SYMBOL | CLASSIFICATION OF MATERIALS (Description) | BLOWS PER FOOT | M.C. (%) | GRAVEL (%) | SAND (%) | FINES (%) |
|---|---|---|---|---|---|---|---|
| | | A-1-b, GrSa, brn, Moist, Rec. = 0.8 ft | 9 | 6.9 | 38.5 | 44.6 | 16.9 |
| 5 | | A-4, SlSa, blk, Moist. Rec. = 1.6 ft | 3 | 44.4 | 8.7 | 47.4 | 43.9 |
| | | A-4, SlSa, blk, MTW. Rec. = 1.3 ft | 4 | 25.9 | 2.4 | 52.7 | 44.9 |
| 10 | | A-2-4, SlSa, blk, Wet, Rec. = 1.0 ft | 3 | 33.8 | 0.8 | 65.7 | 33.5 |
| | | A-2-4, GrSa, blk, Wet, Rec. = 1.1 ft | 8 | 26.3 | 25.8 | 59.6 | 14.6 |
| | | A-2-4, SlSa, blk, Wet, Rec. = 1.4 ft | 3 | 34.7 | 11.4 | 56.0 | 32.6 |
| 15 | | A-2-4, SlSa, blk, Wet, Rec. = 0.4 ft | 1 | 69.7 | 4.8 | 70.6 | 24.8 |
| | | | | | | | |
| 20 | | A-1-b, Sa, brn, Wet, Rec. = 2.0 ft | 38 | 16.4 | 19.6 | 71.3 | 9.1 |
| | | A-2-4, Sa, brn, Wet, Rec. = 1.8 ft | 25 | 20.3 | 19.8 | 61.8 | 18.4 |
| 25 | | Hole stopped @ 25.0 ft | | | | | |
| 30 | | | | | | | |
| 35 | | | | | | | |
| 40 | | | | | | | |
| 45 | | | | | | | |

LOG OF BORING BARRE CITY FEGC F 026-1(34) GPJ VT AOT.GDT 7/3/09

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING NUMBER: B-307
SHEET 1 of 1
DATE STARTED: 6/04/09
DATE COMPLETED: 6/04/09

PROJECT NAME: BARRE CITY
SITE NAME: US-302
STATION: 138+72.80
OFFSET: 36.50
VTSPG NAD83:

PROJECT NUMBER: FEGC F 026-1(34)
SITE NUMBER:
GROUND ELEVATION: 606.47 ft
GROUNDWATER DEPTH: 13.2 ft 6/04/09
PROJECT PIN NUMBER: 85B010

BORING CREW
CREW CHIEF: GARROW
DRILLER: GARROW
LOGGER: MAHMUTOVIC

BORING RIG: LARGE SKID RIG w/AUTO HAMMER
BORING TYPE: HOLLOW STEM AUGER
SAMPLE TYPE: SPLIT BARREL
CHECKED BY: CAA

| DEPTH (ft) | SYMBOL | CLASSIFICATION OF MATERIALS (Description) | BLOWS PER FOOT | M.C. (%) | GRAVEL (%) | SAND (%) | FINES (%) |
|---|---|---|---|---|---|---|---|
| | | A-4, SaSi, blk, Moist, Rec. = 1.5 ft | 18 | 13.2 | 15.7 | 39.3 | 45.0 |
| 5 | | A-1-b, GrSa, brn, Moist, Rec. = 1.2 ft | 20 | 6.3 | 41.5 | 43.6 | 14.9 |
| | | A-1-b, GrSa, brn, Moist, Rec. = 1.2 ft, Broken Granite pieces were within sample. | 21 | 5.4 | 42.5 | 44.7 | 12.8 |
| 10 | | A-4, Si, gry, MTW, Rec. = 1.1 ft | 10 | 24.6 | 1.2 | 9.9 | 88.9 |
| | | A-4, Si, brn, MTW, Rec. = 1.0 ft | 11 | 27.4 | 2.6 | 10.0 | 87.4 |
| | | A-4, Si, brn, Wet, Rec. = 1.1 ft | 13 | 25.7 | 3.7 | 15.2 | 81.1 |
| 15 | | A-4, SlSa, brn. Wet, Rec. = 1.7 ft | 15 | 22.4 | 6.0 | 51.6 | 42.4 |
| | | | | | | | |
| 20 | | A-1-b, GrSa, brn, Wet, Rec. = 2.0 ft | 29 | 12.8 | 37.2 | 52.5 | 10.3 |
| | | A-2-4, Sa, brn. Wet, Rec. = 2.0 ft | 36 | 16.5 | 15.4 | 65.5 | 19.1 |
| 25 | | Hole stopped @ 25.0 ft | | | | | |
| 30 | | | | | | | |
| 35 | | | | | | | |
| 40 | | | | | | | |
| 45 | | | | | | | |

LOG OF BORING BARRE CITY FEGC F 026-1(34) GPJ VT AOT.GDT 7/3/09

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85B010_TYP_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
BORING LOGS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 46 OF 339

NOTE:

SEE GENERAL PLAN SHEETS FOR LAYOUT LOCATIONS.

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING NUMBER: B-308
SHEET 1 of 1
DATE STARTED: 6/09/09
DATE COMPLETED: 6/09/09

PROJECT NAME: BARRE CITY
SITE NAME: US-302
STATION: 139+47.70
OFFSET: -35.00
VTSPG NAD83:

PROJECT NUMBER: FEGC F 026-1(34)
SITE NUMBER:
GROUND ELEVATION: 608.4 ft
GROUNDWATER DEPTH: 15.5 ft 6/09/09
PROJECT PIN NUMBER: 85B010

BORING CREW
CREW CHIEF: GARROW
DRILLER: GARROW
LOGGER: MAHMUTOVIC

BORING RIG: LARGE SKID RIG w/AUTO HAMMER
BORING TYPE: HOLLOW STEM AUGER
SAMPLE TYPE: SPLIT BARREL
CHECKED BY: CAA

| DEPTH (ft) | SYMBOL | CLASSIFICATION OF MATERIALS (Description) | BLOWS PER FOOT | M.C. (%) | GRAVEL (%) | SAND (%) | FINES (%) |
|---|---|---|---|---|---|---|---|
| 5 | | A-1-b, SlGrSa, blk, Moist, Rec. = 1.1 ft | 10 | 9.7 | 30.8 | 49.0 | 20.2 |
| | | A-1-b, GrSa, blk, Moist, Rec. = 1.0 ft | 9 | 10.7 | 32.1 | 51.5 | 16.4 |
| | | A-4, Si, brn, MTW, Rec. = 1.2 ft | 8 | 31.1 | 0.5 | 5.5 | 94.0 |
| 10 | | A-4, Si, brn, MTW, Rec. = 1.4 ft | 7 | 29.8 | 1.6 | 6.8 | 91.6 |
| | | A-4, Si, gry, MTW, Rec. = 1.4 ft | 5 | 31.7 | 3.3 | 7.5 | 89.2 |
| | | A-4, Si, gry, MTW, Rec. = 1.6 ft | 6 | 29.3 | 6.6 | 6.4 | 87.0 |
| 15 | | A-4, Si, gry, MTW, Rec. = 1.2 ft | 6 | 30.7 | 3.7 | 5.2 | 91.1 |
| 20 | | A-4, Si, gry, MTW, Rec. = 1.4 ft | 8 | 28.4 | 0.0 | 10.0 | 90.0 |
| | | A-2-4, Sa, gry, Wet, Rec. = 2.0 ft | 4 | 19.3 | 3.5 | 79.7 | 16.8 |
| 25 | | Hole stopped @ 25.0 ft | | | | | |
| 30 | | | | | | | |
| 35 | | | | | | | |
| 40 | | | | | | | |
| 45 | | | | | | | |

LOG OF BORING BARRE CITY FEGC F 026-1(34).GPJ VT ACT.GDT 7/31/09

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING NUMBER: B-309
SHEET 1 of 1
DATE STARTED: 6/16/09
DATE COMPLETED: 6/16/09

PROJECT NAME: BARRE CITY
SITE NAME: US 302
STATION: 600+79.10
OFFSET: 55.60
VTSPG NAD83:

PROJECT NUMBER: FEGC F 026-1(34)
SITE NUMBER:
GROUND ELEVATION: 605.82 ft
GROUNDWATER DEPTH: 12.9 ft 6/16/09
PROJECT PIN NUMBER: 85B010

BORING CREW
CREW CHIEF: GARROW
DRILLER: GARROW
LOGGER: MAHMUTOVIC

BORING RIG: LARGE SKID RIG w/AUTO HAMMER
BORING TYPE: HOLLOW STEM AUGER
SAMPLE TYPE: SPLIT BARREL
CHECKED BY: CAA

| DEPTH (ft) | SYMBOL | CLASSIFICATION OF MATERIALS (Description) | BLOWS PER FOOT | M.C. (%) | GRAVEL (%) | SAND (%) | FINES (%) |
|---|---|---|---|---|---|---|---|
| 5 | | A-2-4, SlSa, blk, Moist, Rec. = 1.4 ft | 6 | 14.9 | 4.5 | 66.3 | 29.2 |
| | | A-4, GrSlSa, blk, Moist, Rec. = 1.1 ft | 23 | 13.5 | 21.4 | 41.3 | 37.3 |
| | | Visual Classification, GrSa, blk, Moist, Rec. = 0.4 ft, Insufficient sample for testing. | 26 | | | | |
| 10 | | A-1-b, GrSa, blk, Moist, Rec. = 0.9 ft | 12 | 7.5 | 39.3 | 45.4 | 15.3 |
| | | A-1-b, GrSa, blk, MTW, Rec. = 1.1 ft | 5 | 16.2 | 23.0 | 60.3 | 16.7 |
| | | A-1-b, GrSa, blk, Wet, Rec. = 1.6 ft | 11 | 20.3 | 20.8 | 64.6 | 14.6 |
| 15 | | A-1-b, GrSa, blk, Wet, Rec. = 1.3 ft | 20 | 17.2 | 39.0 | 53.0 | 8.0 |
| 20 | | A-1-b, GrSa, blk, Wet, Rec. = 1.4 ft | 44 | 18.1 | 32.3 | 55.0 | 12.7 |
| | | A-1-b, GrSa, blk, Wet, Rec. = 1.8 ft | 26 | 14.6 | 38.3 | 49.3 | 12.4 |
| 25 | | Hole stopped @ 25.0 ft | | | | | |
| 30 | | | | | | | |
| 35 | | | | | | | |
| 40 | | | | | | | |
| 45 | | | | | | | |

DRILLER'S NOTES:
1. Duplex drilling 11.0 ft to 17.0 ft.

LOG OF BORING BARRE CITY FEGC F 026-1(34).GPJ VT ACT.GDT 7/31/09

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING NUMBER: B-310
SHEET 1 of 1
DATE STARTED: 6/10/09
DATE COMPLETED: 6/10/09

PROJECT NAME: BARRE CITY
SITE NAME: US-302
STATION: 602+52.00
OFFSET: -40.00
VTSPG NAD83:

PROJECT NUMBER: FEGC F 026-1(34)
SITE NUMBER:
GROUND ELEVATION: 608.78 ft
GROUNDWATER DEPTH: 16.2 ft 6/10/09
PROJECT PIN NUMBER: 85B010

BORING CREW
CREW CHIEF: GARROW
DRILLER: GARROW
LOGGER: MAHMUTOVIC

BORING RIG: LARGE SKID RIG w/AUTO HAMMER
BORING TYPE: HOLLOW STEM AUGER
SAMPLE TYPE: SPLIT BARREL
CHECKED BY: CAA

| DEPTH (ft) | SYMBOL | CLASSIFICATION OF MATERIALS (Description) | BLOWS PER FOOT | M.C. (%) | GRAVEL (%) | SAND (%) | FINES (%) |
|---|---|---|---|---|---|---|---|
| 5 | | A-1-b, SlGrSa, blk, Moist, Rec. = 1.1 ft | 17 | 13.4 | 25.3 | 49.9 | 24.8 |
| | | A-1-b, GrSa, blk, Moist, Rec. = 1.2 ft | 18 | 9.8 | 32.5 | 48.5 | 19.0 |
| | | A-1-b, SlGrSa, blk, Moist, Rec. = 1.1 ft | 15 | 6.9 | 39.3 | 39.7 | 21.0 |
| 10 | | A-1-b, SlSaGr, blk, Moist, Rec. = 1.0 ft | 19 | 7.1 | 48.6 | 31.3 | 20.1 |
| | | A-1-a, SaGr, blk, Moist, Rec. = 1.3 ft | 71 | 5.4 | 55.4 | 31.1 | 13.5 |
| | | A-1-b, SaGr, blk, MTW, Rec. = 1.2 ft | 14 | 7.7 | 49.0 | 36.1 | 14.9 |
| 15 | | A-1-a, SaGr, blk, Wet, Rec. = 0.6 ft | 11 | 15.0 | 59.9 | 28.0 | 12.1 |
| 20 | | A-1-b, Sa, brn, Wet, Rec. = 1.0 ft | 46 | 21.2 | 17.7 | 66.8 | 15.5 |
| | | Hole stopped @ 22.0 ft | | | | | |
| 25 | | | | | | | |
| 30 | | | | | | | |
| 35 | | | | | | | |
| 40 | | | | | | | |
| 45 | | | | | | | |

DRILLER'S NOTES:
1. Could not penetrate further.

LOG OF BORING BARRE CITY FEGC F 026-1(34).GPJ VT ACT.GDT 7/31/09

Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_TYP_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
BORING LOGS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 47 OF 339

NOTE:

SEE GENERAL PLAN SHEETS FOR LAYOUT LOCATIONS.

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING NUMBER: B-311
SHEET 1 of 1
DATE STARTED: 6/10/09
DATE COMPLETED: 6/10/09

PROJECT NAME: BARRE CITY
SITE NAME: US-302
STATION: 603+37.20
OFFSET: 29.50
VTSPG NAD83:

PROJECT NUMBER: FEGC F 026-1(34)
SITE NUMBER:
GROUND ELEVATION: 609.99 ft
GROUNDWATER DEPTH: 16.5 ft 6/10/09
PROJECT PIN NUMBER: 85B010

BORING CREW
CREW CHIEF: GARROW
DRILLER: GARROW
LOGGER: MAHMUTOVIC

BORING RIG: LARGE SKID RIG w/AUTO HAMMER
BORING TYPE: HOLLOW STEM AUGER
SAMPLE TYPE: SPLIT BARREL
CHECKED BY: CAA

| DEPTH (ft) | SYMBOL | CLASSIFICATION OF MATERIALS (Description) | BLOWS PER FOOT | M.C. (%) | GRAVEL (%) | SAND (%) | FINES (%) |
|---|---|---|---|---|---|---|---|
| | | Field Note:, No Recovery. Appears to be sand | 15 | | | | |
| 5 | | A-2-4, SlSa, Dk/brn, Moist, Rec. = 1.4 ft | 4 | 17.7 | 6.5 | 66.9 | 26.6 |
| | | A-2-4, SlSa, Dk/brn, Moist, Rec. = 1.5 ft | 4 | 12.9 | 0.7 | 65.8 | 33.5 |
| 10 | | A-4, SaSl, brn, Moist, Rec. = 1.6 ft | 6 | 21.6 | 0.0 | 49.3 | 50.7 |
| | | A-3, Sa, brn, Moist, Rec. = 1.5 ft | 6 | 10.2 | 0.7 | 89.9 | 9.4 |
| | | A-2-4, SlGrSa, blk, MTW, Rec. = 1.2 ft | 4 | 18.9 | 25.1 | 53.7 | 21.2 |
| 15 | | A-1-b, SlGrSa, blk, MTW, Rec. = 1.2 ft | 16 | 11.9 | 34.5 | 44.7 | 20.8 |
| 20 | | A-1-b, SlGrSa, brn, Wet, Rec. = 1.6 ft | 20 | 18.9 | 39.7 | 39.8 | 20.5 |
| | | A-1-b, GrSa, brn, Wet, Rec. = 1.7 ft | 22 | 16.9 | 37.8 | 46.4 | 15.8 |
| 25 | | Hole stopped @ 25.0 ft | | | | | |
| 30 | | | | | | | |
| 35 | | | | | | | |
| 40 | | | | | | | |
| 45 | | | | | | | |

LOG OF BORING BARRE CITY FEGC F 026-1(34) CPU VT AOT GDT 7/31/09

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING NUMBER: B-312
SHEET 1 of 1
DATE STARTED: 6/02/09
DATE COMPLETED: 6/02/09

PROJECT NAME: BARRE CITY
SITE NAME: US-302
STATION: 112+12.60
OFFSET: 37.50
VTSPG NAD83:

PROJECT NUMBER: FEGC F 026-1(34)
SITE NUMBER:
GROUND ELEVATION: 593.97 ft
GROUNDWATER DEPTH: 13.8 ft 6/02/09
PROJECT PIN NUMBER: 85B010

BORING CREW
CREW CHIEF: GARROW
DRILLER: GARROW
LOGGER: MAHMUTOVIC

BORING RIG: LARGE SKID RIG w/AUTO HAMMER
BORING TYPE: HOLLOW STEM AUGER
SAMPLE TYPE: SPLIT BARREL
CHECKED BY: CAA

| DEPTH (ft) | SYMBOL | CLASSIFICATION OF MATERIALS (Description) | BLOWS PER FOOT | M.C. (%) | GRAVEL (%) | SAND (%) | FINES (%) |
|---|---|---|---|---|---|---|---|
| 5 | | A-2-4, GrSa, brn, Moist, Rec. = 1.3 ft | 8 | 7.2 | 26.8 | 58.5 | 14.7 |
| | | A-4, SaSl, brn, Moist, Rec. = 1.5 ft | 4 | 31.2 | 0.4 | 25.7 | 73.9 |
| | | A-4, SaSl, blk, Moist, Rec. = 1.7 ft | 4 | 34.6 | 1.9 | 41.6 | 56.5 |
| 10 | | A-4, SaSl, gry, MTW, Rec. = 1.7 ft | 3 | 32.7 | 0.2 | 29.0 | 70.8 |
| | | A-4, SlSa, gry, MTW, Rec. = 1.5 ft, Wood pieces were within sample. | 7 | 31.6 | 1.0 | 62.1 | 36.9 |
| | | A-2-4, GrSa, blk, Wet, Rec. = 1.5 ft | 12 | 25.1 | 20.6 | 64.4 | 15.0 |
| 15 | | No Recovery, 15.0 ft - 17.0 ft | 14 | | | | |
| 20 | | A-2-4, Sa, brn, Wet, Rec. = 1.7 ft | 2 | 30.6 | 4.7 | 82.5 | 12.8 |
| | | A-2-4, SlSa, brn, Wet, Rec. = 1.6 ft | WH | 20.7 | 2.1 | 65.2 | 32.7 |
| 25 | | Hole stopped @ 25.0 ft | | | | | |
| 30 | | | | | | | |
| 35 | | | | | | | |
| 40 | | | | | | | |
| 45 | | | | | | | |

LOG OF BORING BARRE CITY FEGC F 026-1(34) GPU VT AOT GDT 7/31/09

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING NUMBER: B-313
SHEET 1 of 1
DATE STARTED: 6/03/09
DATE COMPLETED: 6/03/09

PROJECT NAME: BARRE CITY
SITE NAME: US-302
STATION: 11+49.70
OFFSET: -37.30
VTSPG NAD83:

PROJECT NUMBER: FEGC F 026-1(34)
SITE NUMBER:
GROUND ELEVATION: 593.2 ft
GROUNDWATER DEPTH: 13.0 ft 6/03/09
PROJECT PIN NUMBER: 85B010

BORING CREW
CREW CHIEF: GARROW
DRILLER: GARROW
LOGGER: MAHMUTOVIC

BORING RIG: LARGE SKID RIG w/AUTO HAMMER
BORING TYPE: HOLLOW STEM AUGER
SAMPLE TYPE: SPLIT BARREL
CHECKED BY: CAA

| DEPTH (ft) | SYMBOL | CLASSIFICATION OF MATERIALS (Description) | BLOWS PER FOOT | M.C. (%) | GRAVEL (%) | SAND (%) | FINES (%) |
|---|---|---|---|---|---|---|---|
| 5 | | A-4, SaSi, brn, Moist, Rec. = 1.5 ft | 4 | 23.9 | 0.3 | 35.2 | 64.5 |
| | | A-2-4, SlSa, brn, Moist, Rec. = 1.3 ft | 4 | 18.5 | 0.0 | 78.9 | 21.1 |
| | | A-2-4, GrSa, brn, Wet, Rec. = 1.2 ft | 6 | 18.7 | 26.6 | 58.1 | 15.3 |
| 10 | | A-1-b, SaGr, brn, Wet, Rec. = 1.1 ft | 31 | 16.3 | 41.7 | 39.8 | 18.5 |
| | | A-1-b, GrSa, blk, Wet, Rec. = 1.7 ft | 13 | 17.9 | 32.0 | 56.5 | 11.5 |
| | | A-2-4, SlSa, brn, Wet, Rec. = 2.0 ft | 6 | 28.9 | 2.9 | 63.7 | 33.4 |
| 15 | | A-4, Si, gry, Wet, Rec. = 1.3 ft | 5 | 31.0 | 1.3 | 12.5 | 86.2 |
| 20 | | A-4, SaSi, gry, Wet, Rec. = 1.4 ft | 2 | 30.2 | 0.0 | 36.2 | 63.8 |
| | | A-4, SlSa, gry, Wet, Rec. = 0.9 ft | 2 | 28.5 | 0.6 | 55.8 | 43.6 |
| 25 | | Hole stopped @ 25.0 ft | | | | | |
| 30 | | | | | | | |
| 35 | | | | | | | |
| 40 | | | | | | | |
| 45 | | | | | | | |

LOG OF BORING BARRE CITY FEGC F 026-1(34) GPU VT AOT GDT 7/31/09

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-I(34) C/2

FILE NAME: 85b010_TYP_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
BORING LOGS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 48 OF 339

NOTE:

SEE GENERAL PLAN SHEETS FOR LAYOUT LOCATIONS.

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING NUMBER: B-314
SHEET 1 of 1
DATE STARTED: 5/27/09
DATE COMPLETED: 5/29/09

PROJECT NAME: BARRE CITY
SITE NAME: US-302
STATION: 21+66.00
OFFSET: -37.90
VTSPG NAD83:

PROJECT NUMBER: FEGC F 026-1(34)
SITE NUMBER:
GROUND ELEVATION: 593.44 ft
GROUNDWATER DEPTH: 4.9 ft 5/27/09
PROJECT PIN NUMBER: 85B010

BORING CREW
CREW CHIEF: GARROW
DRILLER: GARROW
LOGGER: MAHMUTOVIC

BORING RIG: LARGE SKID RIG w/AUTO HAMMER
BORING TYPE: HOLLOW STEM AUGER
SAMPLE TYPE: SPLIT BARREL
CHECKED BY: CAA

| DEPTH (ft) | SYMBOL | CLASSIFICATION OF MATERIALS (Description) | BLOWS PER FOOT | M.C. (%) | GRAVEL (%) | SAND (%) | FINES (%) |
|---|---|---|---|---|---|---|---|
| 0 | | A-4, SaSl, Dk/brn, Moist, Rec. = 1.8 ft | 4 | 35.4 | 2.2 | 26.8 | 71.0 |
| 5 | | A-2-4, SlSa, gry. MTW, Rec. = 1.5 ft | WH | 26.7 | 0.0 | 74.7 | 25.3 |
| | | A-1-b, GrSa, gry-brn, Wet, Rec. = 0.9 ft | 2 | 24.0 | 23.7 | 66.7 | 9.6 |
| 10 | | A-1-b, GrSa, brn, Wet, Rec. = 0.8 ft | 4 | 23.3 | 22.3 | 66.1 | 11.6 |
| | | A-1-a, SaGr, brn, Wet, Rec. = 0.9 ft | 16 | 15.3 | 54.5 | 36.1 | 9.4 |
| | | A-2-4, Sa, brn, Wet. Rec. = 1.3 ft | 8 | 25.5 | 17.8 | 66.7 | 15.5 |
| 15 | | A-2-4, SlSa, brn, Wet, Rec. = 0.8 ft | 10 | 31.5 | 0.4 | 73.1 | 26.5 |
| | | | | | | | |
| 20 | | A-4, SlSa, brn, Wet. Rec. = 1.0 ft | 5 | 29.0 | 3.1 | 50.8 | 46.1 |
| | | A-2-4, Sa, brn, Wet, Rec. = 2.0 ft | 1 | 28.7 | 0.2 | 82.1 | 17.7 |
| 25 | | Hole stopped @ 25.0 ft | | | | | |
| 30 | | | | | | | |
| 35 | | | | | | | |
| 40 | | | | | | | |
| 45 | | | | | | | |

LOG OF BORING BARRE CITY FEGC F 026-1(34) GPJ VT AOT GDT 7/31/09

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING NUMBER: B-315
SHEET 1 of 1
DATE STARTED: 6/09/09
DATE COMPLETED: 6/09/09

PROJECT NAME: BARRE CITY
SITE NAME: US-302
STATION: 137+63.20
OFFSET: -26.60
VTSPG NAD83:

PROJECT NUMBER: FEGC F 026-1(34)
SITE NUMBER:
GROUND ELEVATION: 604.28 ft
GROUNDWATER DEPTH: 12.0 ft 6/09/09
PROJECT PIN NUMBER: 85B010

BORING CREW
CREW CHIEF: GARROW
DRILLER: GARROW
LOGGER: MAHMUTOVIC

BORING RIG: LARGE SKID RIG w/AUTO HAMMER
BORING TYPE: HOLLOW STEM AUGER
SAMPLE TYPE: SPLIT BARREL
CHECKED BY: CAA

| DEPTH (ft) | SYMBOL | CLASSIFICATION OF MATERIALS (Description) | BLOWS PER FOOT | M.C. (%) | GRAVEL (%) | SAND (%) | FINES (%) |
|---|---|---|---|---|---|---|---|
| 0 | | A-2-4, SlSa, brn, Moist, Rec. = 0.4 ft | 9 | 10.9 | 6.4 | 61.5 | 32.1 |
| 5 | | A-4, SlSa, brn, Moist, Rec. = 1.2 ft | 5 | 13.6 | 2.9 | 57.2 | 39.9 |
| | | A-2-4, GrSa, brn, Moist, Rec. = 1.1 ft | 6 | 7.2 | 24.0 | 62.8 | 13.2 |
| 10 | | A-1-b, SaGr, brn, Moist, Rec. = 1.0 ft | 8 | 11.0 | 54.7 | 28.5 | 16.8 |
| | | A-2-4, GrSa. brn, MTW, Rec. = 1.2 ft | 13 | 18.6 | 27.2 | 57.5 | 15.3 |
| | | A-1-b, SiGrSa, brn, Wet, Rec. = 1.3 ft | 7 | 27.3 | 28.0 | 50.7 | 21.3 |
| 15 | | A-2-4, Sa, brn, Wet, Rec. = 1.2 ft | 5 | 25.3 | 14.7 | 72.0 | 13.3 |
| | | | | | | | |
| 20 | | A-1-b, Sa, brn, Wet, Rec. = 2.0 ft | 9 | 19.2 | 19.9 | 70.4 | 9.7 |
| | | A-1-b, Sa, brn, Wet, Rec. = 2.0 ft | 7 | 19.5 | 2.3 | 89.3 | 8.4 |
| 25 | | Hole stopped @ 25.0 ft | | | | | |
| 30 | | | | | | | |
| 35 | | | | | | | |
| 40 | | | | | | | |
| 45 | | | | | | | |

LOG OF BORING BARRE CITY FEGC F 026-1(34) GPJ VT AOT GDT 7/31/09

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING NUMBER: B-316
SHEET 1 of 1
DATE STARTED: 6/11/09
DATE COMPLETED: 6/11/09

PROJECT NAME: BARRE CITY
SITE NAME: US-302
STATION: 137+56.00
OFFSET: 33.00
VTSPG NAD83:

PROJECT NUMBER: FEGC F 026-1(34)
SITE NUMBER:
GROUND ELEVATION: 603.39 ft
GROUNDWATER DEPTH: 11.2 ft 6/11/09
PROJECT PIN NUMBER: 85B010

BORING CREW
CREW CHIEF: GARROW
DRILLER: GARROW
LOGGER: MAHMUTOVIC

BORING RIG: LARGE SKID RIG w/AUTO HAMMER
BORING TYPE: HOLLOW STEM AUGER
SAMPLE TYPE: SPLIT BARREL
CHECKED BY: CAA

| DEPTH (ft) | SYMBOL | CLASSIFICATION OF MATERIALS (Description) | BLOWS PER FOOT | M.C. (%) | GRAVEL (%) | SAND (%) | FINES (%) |
|---|---|---|---|---|---|---|---|
| 0 | | A-2-4, SlSa, blk, Moist, Rec. = 1.1 ft | 6 | 12.9 | 19.3 | 51.6 | 29.1 |
| 5 | | A-1-b, SiGrSa, blk, Moist, Rec. = 0.7 ft | 6 | 8.0 | 28.9 | 49.2 | 21.9 |
| | | A-4, SlSa, blk, MTW, Rec. = 1.8 ft, Decayed Wood was within sample. | 4 | 36.6 | 6.0 | 47.6 | 46.4 |
| 10 | | A-2-4, SlSa, blk, Wet, Rec. = 2.0 ft, Decayed Wood was within sample. | 2 | 37.6 | 1.4 | 68.3 | 30.3 |
| | | A-4, SlSa, blk, Wet, Rec. = 1.0 ft | 13 | 30.3 | 3.1 | 58.4 | 40.5 |
| | | A-2-4, GrSiSa, blk, Wet, Rec. = 1.6 ft | 34 | 27.8 | 23.2 | 47.2 | 29.6 |
| 15 | | A-2-4, SlSa, blk, Wet. Rec. = 1.4 ft | 6 | 24.3 | 4.8 | 70.3 | 24.9 |
| | | | | | | | |
| 20 | | A-2-4, Sa, blk, Wet, Rec. = 2.0 ft | 4 | 18.2 | 13.3 | 67.9 | 18.8 |
| | | A-2-4, Sa, blk, Wet, Rec. = 2.0 ft | 26 | 18.0 | 4.8 | 76.6 | 18.6 |
| 25 | | Hole stopped @ 25.0 ft | | | | | |
| 30 | | | | | | | |
| 35 | | | | | | | |
| 40 | | | | | | | |
| 45 | | | | | | | |

LOG OF BORING BARRE CITY FEGC F 026-1(34) GPJ VT AOT GDT 7/31/09

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-I(34) C/2

FILE NAME: 85b010_TYP_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
BORING LOGS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 49 OF 339

NOTE:

SEE GENERAL PLAN SHEETS FOR LAYOUT LOCATIONS.

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING NUMBER: B-318
SHEET 1 of 1
DATE STARTED: 6/05/09
DATE COMPLETED: 6/05/09

PROJECT NAME: BARRE CITY
SITE NAME: US-302
STATION: 601+54.50
OFFSET: -40.80
VTSPG NAD83:

PROJECT NUMBER: FEGC F 026-1(34)
SITE NUMBER:
GROUND ELEVATION: 607.69 ft
GROUNDWATER DEPTH: 11.7 ft 6/05/09
PROJECT PIN NUMBER: 85B010

BORING CREW
CREW CHIEF: GARROW
DRILLER: GARROW
LOGGER: MAHMUTOVIC

BORING RIG: LARGE SKID RIG w/AUTO HAMMER
BORING TYPE: HOLLOW STEM AUGER
SAMPLE TYPE: SPLIT BARREL
CHECKED BY: CAA

| DEPTH (ft) | SYMBOL | CLASSIFICATION OF MATERIALS (Description) | BLOWS PER FOOT | M.C. (%) | GRAVEL (%) | SAND (%) | FINES (%) |
|---|---|---|---|---|---|---|---|
| | | A-1-b, SaGr, brn, Moist, Rec. = 1.1 ft | 19 | 7.1 | 45.7 | 37.4 | 16.9 |
| 5 | | A-4, SaGrSi, Dkbrn, MTW, Rec. = 1.0 ft | 18 | 15.5 | 27.1 | 26.6 | 46.3 |
| | | A-4, Si, brn, MTW, Rec. = 1.2 ft | 11 | 26.0 | 4.8 | 6.9 | 88.3 |
| 10 | | A-4, Si, brn, Wet, Rec. = 1.3 ft | 8 | 28.5 | 2.1 | 6.2 | 91.7 |
| | | A-4, Si, brn, Wet, Rec. = 1.2 ft | 8 | 29.7 | 3.2 | 7.7 | 89.1 |
| | | A-4, Si, brn, Wet, Rec. = 1.2 ft | 10 | 27.4 | 2.8 | 11.8 | 85.4 |
| 15 | | A-4, Si, brn, Wet, Rec. = 1.4 ft | 10 | 26.4 | 2.8 | 18.9 | 78.3 |
| 20 | | A-2-4, Sa, brn, Wet, Rec. = 1.3 ft | 6 | 22.5 | 0.9 | 87.8 | 11.3 |
| | | A-3, Sa, brn, Wet, Rec. = 1.2 ft | 12 | 22.8 | 0.5 | 90.7 | 8.8 |
| 25 | | Hole stopped @ 25.0 ft | | | | | |

LOG OF BORING BARRE CITY FEGC F 026-1(34) VT ACT GDT 7/31/09

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING NUMBER: B-319
SHEET 1 of 1
DATE STARTED: 6/18/09
DATE COMPLETED: 6/18/09

PROJECT NAME: BARRE CITY
SITE NAME: US-302
STATION: 601+67.40
OFFSET: 32.00
VTSPG NAD83:

PROJECT NUMBER: FEGC F 026-1(34)
SITE NUMBER:
GROUND ELEVATION: 607.58 ft
GROUNDWATER DEPTH: 14.2 ft 6/18/09
PROJECT PIN NUMBER: 85B010

BORING CREW
CREW CHIEF: GARROW
DRILLER: GARROW
LOGGER: MAHMUTOVIC

BORING RIG: LARGE SKID RIG w/AUTO HAMMER
BORING TYPE: HOLLOW STEM AUGER
SAMPLE TYPE: SPLIT BARREL
CHECKED BY: CAA

| DEPTH (ft) | SYMBOL | CLASSIFICATION OF MATERIALS (Description) | BLOWS PER FOOT | M.C. (%) | GRAVEL (%) | SAND (%) | FINES (%) |
|---|---|---|---|---|---|---|---|
| | | A-2-4, SlSa, brn, Moist, Rec. = 1.6 ft | 4 | 15.1 | 3.8 | 64.6 | 31.6 |
| 5 | | A-2-4, SlSa, brn, Moist, Rec. = 1.5 ft | 5 | 11.9 | 0.0 | 73.1 | 26.9 |
| | | A-4, SlSa, brn-gry, Moist, Rec. = 1.6 ft | 5 | 19.7 | 0.4 | 58.7 | 40.9 |
| 10 | | A-1-b, GrSa, blk, Moist, Rec. = 1.3 ft | 18 | 13.4 | 32.2 | 50.3 | 17.5 |
| | | A-1-b, GrSa, blk, Moist, Rec. = 0.9 ft | 33 | 12.9 | 38.9 | 44.5 | 16.6 |
| | | Visual Classification, Gr Sa, gry, MTW, Rec. = 0.6 ft | 35 | | | | |
| 15 | | A-1-b, SaGr, gry, Wet, Rec. = 0.5 ft | 26 | 13.3 | 56.9 | 24.7 | 18.4 |
| 20 | | A-1-b, GrSa, blk, Wet, Rec. = 1.1 ft | 22 | 20.6 | 36.4 | 44.9 | 18.7 |
| | | A-1-b, SlGrSa, blk, Wet, Rec. = 1.2 ft | 21 | 19.8 | 36.6 | 43.3 | 20.1 |
| 25 | | Hole stopped @ 25.0 ft | | | | | |

LOG OF BORING BARRE CITY FEGC F 026-1(34) VT ACT GDT 7/31/09

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING NUMBER: B-320
SHEET 1 of 1
DATE STARTED: 6/08/09
DATE COMPLETED: 6/08/09

PROJECT NAME: BARRE CITY
SITE NAME: US-302
STATION: 22+31.00
OFFSET: -43.00
VTSPG NAD83:

PROJECT NUMBER: FEGC F 026-1(34)
SITE NUMBER:
GROUND ELEVATION: 594.69 ft
GROUNDWATER DEPTH: 10.2 ft 6/08/09
PROJECT PIN NUMBER: 85B010

BORING CREW
CREW CHIEF: GARROW
DRILLER: GARROW
LOGGER: MAHMUTOVIC

BORING RIG: LARGE SKID RIG w/AUTO HAMMER
BORING TYPE: HOLLOW STEM AUGER
SAMPLE TYPE: SPLIT BARREL
CHECKED BY: CAA

| DEPTH (ft) | SYMBOL | CLASSIFICATION OF MATERIALS (Description) | BLOWS PER FOOT | M.C. (%) | GRAVEL (%) | SAND (%) | FINES (%) |
|---|---|---|---|---|---|---|---|
| | | A-2-4, Sa, brn, Moist, Rec. = 1.3 ft | 4 | 21.2 | 18.0 | 65.3 | 16.7 |
| 5 | | A-4, SaSi with Trace of Organics (4.2%), blk, Moist, Rec. = 1.5 ft | 2 | 42.1 | 0.1 | 34.8 | 65.1 |
| | | A-4, SaSi, blk, Moist, Rec. = 1.5 ft | 4 | 26.0 | 0.6 | 45.1 | 54.3 |
| 10 | | A-2-4, GrSa, brn, Wet, Rec. = 0.6 ft | 13 | 20.7 | 30.4 | 56.3 | 13.3 |
| | | A-1-b, GrSa, brn, Wet, Rec. = 1.4 ft | 15 | 20.7 | 29.9 | 57.1 | 13.0 |
| | | A-1-b, GrSa, brn, Wet, Rec. = 2.0 ft | 22 | 17.1 | 27.2 | 64.1 | 8.7 |
| 15 | | A-2-4, GrSa, brn, Wet, Rec. = 1.1 ft | 17 | 30.0 | 22.5 | 59.3 | 18.2 |
| 20 | | A-2-4, SlSa, brn, Wet, Rec. = 0.7 ft | 2 | 28.5 | 11.6 | 65.3 | 23.1 |
| | | A-2-4, SlSa, brn, Wet, Rec. = 1.7 ft | 2 | 29.0 | 4.3 | 75.3 | 20.4 |
| 25 | | Hole stopped @ 25.0 ft | | | | | |

LOG OF BORING BARRE CITY FEGC F 026-1(34) VT ACT GDT 7/31/09

VHB Vanasse Hangen Brustlin, Inc.

| | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-I(34) C/2 |
| FILE NAME: 85b010_TYP_C2 | PLOT DATE: 3/9/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: DMP / JAR |
| DESIGNED BY: DMP / MDS | CHECKED BY: |
| BORING LOGS | SHEET 50 OF 339 |

NOTE:
SEE GENERAL PLAN SHEETS FOR LAYOUT LOCATIONS.

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING NUMBER: B-321
SHEET 1 of 1
DATE STARTED: 6/17/09
DATE COMPLETED: 6/17/09

PROJECT NAME: BARRE CITY
SITE NAME: US-302
STATION: 14+65.00
OFFSET: 77.00
VTSPG NAD83:

PROJECT NUMBER: FEGC F 026-1(34)
SITE NUMBER:
GROUND ELEVATION: 592.26 ft
GROUNDWATER DEPTH: See Notes
PROJECT PIN NUMBER: 85B010

BORING CREW
CREW CHIEF: GARROW
DRILLER: GARROW
LOGGER: MAHMUTOVIC

BORING RIG: AUGER TRUCK
BORING TYPE: AUGER
SAMPLE TYPE: AUGER
CHECKED BY: CAA

| DEPTH (ft) | SYMBOL | CLASSIFICATION OF MATERIALS (Description) | BLOWS PER FOOT | M.C. (%) | GRAVEL (%) | SAND (%) | FINES (%) |
|---|---|---|---|---|---|---|---|
| 0 | | A-2-4, SiSa, blk, Moist | | 11.2 | 11.0 | 60.2 | 28.8 |
| 5 | | A-2-4, Sa, blk, Moist | | 14.2 | 1.5 | 82.4 | 16.1 |
| | | A-2-4, Sa, gry, MTW, Small Wood pieces were within sample. | | 25.4 | 0.3 | 79.8 | 19.9 |
| 10 | | Hole stopped @ 10.0 ft | | | | | |

DRILLER'S NOTES:
1. No Ledge to depth.
2. No Water to 8.0 ft.
3. Hole collapsed at 8.0 ft.

LOG OF BORING BARRE CITY FEGC F 026-1(34)(P) VT AOT GDT 7/2/09

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING NUMBER: B-322
SHEET 1 of 1
DATE STARTED: 7/02/09
DATE COMPLETED: 7/02/09

PROJECT NAME: BARRE CITY
SITE NAME: US-302
STATION: 423+05.00
OFFSET: -37.00
VTSPG NAD83:

PROJECT NUMBER: FEGC F 026-1(34)
SITE NUMBER:
GROUND ELEVATION: 613.57 ft
GROUNDWATER DEPTH: 11.9 ft 7/02/09
PROJECT PIN NUMBER: 85B010

BORING CREW
CREW CHIEF: GARROW
DRILLER: GARROW
LOGGER: MAHMUTOVIC

BORING RIG: LARGE SKID RIG w/AUTO HAMMER
BORING TYPE: HOLLOW STEM AUGER
SAMPLE TYPE: SPLIT BARREL
CHECKED BY: CAA

| DEPTH (ft) | SYMBOL | CLASSIFICATION OF MATERIALS (Description) | BLOWS PER FOOT | M.C. (%) | GRAVEL (%) | SAND (%) | FINES (%) |
|---|---|---|---|---|---|---|---|
| 0 | | A-2-4, GrSiSa, brn, Moist, Rec. = 0.9 ft | 4 | 21.4 | 30.5 | 37.0 | 32.5 |
| 5 | | A-4, SaSi, brn, Moist, Rec. = 1.0 ft | 2 | 24.2 | 14.0 | 35.8 | 50.2 |
| | | A-4, SaSi, brn, Moist, Rec. = 0.4 ft | 2 | 22.1 | 12.6 | 31.6 | 55.8 |
| 10 | | Visual Classification, GrSiSa, brn, MTW, Rec. = 0.1 ft, Insufficient sample for testing | 6 | 19.4 | | | |
| | | A-1-b, GrSa, brn, Wet, Rec. = 0.8 ft | 39 | 14.4 | 38.9 | 44.1 | 17.0 |
| 15 | | A-2-4, SiGrSa, brn, Wet, Rec. = 0.7 ft | 39 | 19.7 | 31.1 | 43.4 | 25.5 |
| | | A-1-b, GrSa, brn, Wet, Rec. = 1.5 ft | 16 | 18.3 | 26.6 | 56.2 | 17.2 |
| 20 | | A-4, SaGrSi, brn, MTW, Rec. = 1.3 ft | 86 | 15.4 | 32.0 | 30.7 | 37.3 |
| | | Hole stopped @ 21.5 ft | | | | | |

DRILLER'S NOTES:
1. Drilled to ledge or boulder.

LOG OF BORING BARRE CITY FEGC F 026-1(34)(P) VT AOT GDT 7/2/09

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING NUMBER: B-323
SHEET 1 of 1
DATE STARTED: 7/01/09
DATE COMPLETED: 7/01/09

PROJECT NAME: BARRE CITY
SITE NAME: US-302
STATION: 707+00.00
OFFSET: 26.00
VTSPG NAD83:

PROJECT NUMBER: FEGC F 026-1(34)
SITE NUMBER:
GROUND ELEVATION: 609.72 ft
GROUNDWATER DEPTH: 8.8 ft 7/01/09
PROJECT PIN NUMBER: 85B010

BORING CREW
CREW CHIEF: GARROW
DRILLER: GARROW
LOGGER: MAHMUTOVIC

BORING RIG: LARGE SKID RIG w/AUTO HAMMER
BORING TYPE: HOLLOW STEM AUGER
SAMPLE TYPE: SPLIT BARREL
CHECKED BY: CAA

| DEPTH (ft) | SYMBOL | CLASSIFICATION OF MATERIALS (Description) | BLOWS PER FOOT | M.C. (%) | GRAVEL (%) | SAND (%) | FINES (%) |
|---|---|---|---|---|---|---|---|
| 0 | | A-4, SiSa, brn, Moist, Rec. = 1.6 ft | 5 | 18.3 | 6.6 | 43.1 | 50.3 |
| 5 | | A-2-4, SiSa, brn, Moist, Rec. = 1.6 ft | 5 | 13.8 | 9.1 | 59.7 | 31.2 |
| | | A-2-4, SiSa, brn, Moist, Rec. = 1.0 ft | 19 | 13.5 | 17.7 | 51.7 | 30.6 |
| 10 | | A-2-4, SiSa, brn, MTW, Rec. = 1.3 ft | 6 | 26.9 | 10.4 | 67.3 | 22.3 |
| | | A-2-4, SiSa, brn, Wet, Rec. = 0.7 ft | 14 | 26.9 | 5.6 | 74.1 | 20.3 |
| 15 | | A-3, Sa, brn, Wet, Rec. = 1.5 ft | 9 | 27.4 | 0.1 | 91.5 | 8.4 |
| | | A-3, Sa, brn, Wet, Rec. = 2.0 ft | 4 | 27.5 | 0.0 | 93.4 | 6.6 |
| 20 | | A-4, SiSa, brn, Wet, Rec. = 0.9 ft | 35 | 36.9 | 0.5 | 60.4 | 39.1 |
| | | A-2-4, SiGrSa, brn, Wet, Rec. = 0.7 ft | R | 24.4 | 26.4 | 49.9 | 23.7 |
| | | Hole stopped @ 23.7 ft | | | | | |

DRILLER'S NOTES:
1. Drilled to ledge or boulder.

LOG OF BORING BARRE CITY FEGC F 026-1(34)(P) VT AOT GDT 7/2/09

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_TYP_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
BORING LOGS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 51 OF 339

NOTE:

SEE GENERAL PLAN SHEETS FOR LAYOUT LOCATIONS.

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING NUMBER: B-324
SHEET 1 of 1
DATE STARTED: 6/30/09
DATE COMPLETED: 6/30/09

PROJECT NAME: BARRE CITY
SITE NAME: US-302
STATION: 421+97.00
OFFSET: 40.00
VTSPG NAD83:

PROJECT NUMBER: FEGC F 026-1(34)
SITE NUMBER:
GROUND ELEVATION: 607.78 ft
GROUNDWATER DEPTH: 4.0 ft 6/30/09
PROJECT PIN NUMBER: 85B010

BORING CREW
CREW CHIEF: GARROW
DRILLER: GARROW
LOGGER: MAHMUTOVIC

BORING RIG: LARGE SKID RIG w/AUTO HAMMER
BORING TYPE: HOLLOW STEM AUGER
SAMPLE TYPE: SPLIT BARREL
CHECKED BY: CAA

| DEPTH (ft) | SYMBOL | CLASSIFICATION OF MATERIALS (Description) | BLOWS PER FOOT RUN | M.C. (%) REC (%) | GRAVEL (%) RQD (%) | SAND (%) Dip (deg) | FINES (%) Drill Rate (min/ft) |
|---|---|---|---|---|---|---|---|
| 2.5 | | A-2-4, GrSiSa, brn, Moist, Rec. = 1.4 ft | 2 | 13.6 | 22.9 | 45.6 | 31.5 |
| 5.0 | | A-1-b, SiGrSa, brn, Moist, Rec. = 1.2 ft | 9 | 9.8 | 37.5 | 41.2 | 21.3 |
| 7.5 | | A-1-b, SiGrSa, brn, Moist, Rec. = 1.1 ft | 9 | 11.7 | 36.1 | 42.1 | 21.8 |
| 10.0 | | A-1-b, GrSa, brn, Wet, Rec. = 1.0 ft | 13 | 22.9 | 39.0 | 41.9 | 19.1 |
| | | A-2-4, SiSa, brn, Wet. Rec. = 0.4 ft | R | 33.5 | 14.0 | 62.3 | 23.7 |
| | | Top of Bedrock @ 11.8 ft | | | | | |
| 12.5 | | Mete-Limestone, (Geologist's determination), BXDC, 11.8 ft - 14.8 ft | | | | | 10 |
| | | | | | | | 10 |
| | | | | | | | 10 |
| 15.0 | | Hole stopped @ 14.8 ft | | | | | |
| 17.5 | | | | | | | |

LOG OF BORING BARRE CITY FEGC F026 1(34).GPJ VT_AOT.GDT 7/6/09

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING LOG
BARRE CITY
FEGC F026-1(34)

Boring No.: B-401
Page No.: 1 of 1
Pin No.: 85B010
Checked By: TDE

Boring Crew: PORTER, GARROW, HOLT
Date Started: 3/02/11 Date Finished: 3/03/11
VTSPG NAD83:
Station: 14+82 Offset: 126.00
Ground Elevation:

| | Casing | Sampler |
|---|---|---|
| Type: | H.S.A. | SS |
| I.D.: | 4.25 in | 1.5 in |
| Hammer Wt: | N.A. | 140 lb. |
| Hammer Fall: | N.A. | 30 in. |
| Hammer/Rod Type: | Auto/AWJ | |
| Rig: | CME 45C TRACK | $C_E$ = 1.34 |

Groundwater Observations

| Date | Depth (ft) | Notes |
|---|---|---|
| 03/03/11 | 9.32 | 9:00AM |

| Depth (ft) | Strata (1) | CLASSIFICATION OF MATERIALS (Description) | Blows/6" (N Value) | Moisture Content % | Gravel % | Sand % | Fines % |
|---|---|---|---|---|---|---|---|
| 2.5 | | No sampling performed, 0.0 ft - 5.0 ft | | | | | |
| 5.0 | | A-4, SiSa, brn, Moist, Rec. = 1.5 ft | 2-2-3-2 (5) | 24.0 | 1.9 | 50.8 | 47.3 |
| 7.5 | | A-2-4, Sa, brn, Moist, Rec. = 1.3 ft | 3-3-3-3 (6) | 16.1 | 2.7 | 84.3 | 13.0 |
| 10.0 | | A-2-4, Sa, gry-brn, Wet, Rec. = 0.6 ft | 2-3-1 (4) | 28.4 | 0.6 | 83.9 | 15.5 |
| | | Hole stopped @ 10.5 ft | | | | | |
| 12.5 | | | | | | | |
| 15.0 | | | | | | | |
| 17.5 | | | | | | | |

Remarks:
Water levels were taken through hollow stem auger one day after drilling.

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. $C_E$ is the hammer energy correction factor.
3. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

BORING LOG 2 BARRE CITY FEGC F026 1(34).GPJ VERMONT AOT.GDT 3/9/11

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING LOG
BARRE CITY
FEGC F026-1(34)

Boring No.: B-402
Page No.: 1 of 1
Pin No.: 85B010
Checked By: TDE

Boring Crew: PORTER, GARROW, HOLT
Date Started: 3/02/11 Date Finished: 3/03/11
VTSPG NAD83:
Station: 15+6.5 Offset: 162.64
Ground Elevation:

| | Casing | Sampler |
|---|---|---|
| Type: | H.S.A. | SS |
| I.D.: | 4.25 in | 1.5 in |
| Hammer Wt: | N.A. | 140 lb. |
| Hammer Fall: | N.A. | 30 in. |
| Hammer/Rod Type: | Auto/AWJ | |
| Rig: | CME 45C TRACK | $C_E$ = 1.34 |

Groundwater Observations

| Date | Depth (ft) | Notes |
|---|---|---|
| 03/02/11 | 9.38 | 1:30PM |
| 03/03/11 | 9.32 | 9:00AM |

| Depth (ft) | Strata (1) | CLASSIFICATION OF MATERIALS (Description) | Blows/6" (N Value) | Moisture Content % | Gravel % | Sand % | Fines % |
|---|---|---|---|---|---|---|---|
| 2.5 | | No sampling performed, 0.0 ft - 5.0 ft | | | | | |
| 5.0 | | A-4, SiSa, brn, Moist, Rec. = 1.4 ft | 3-3-3-3 (6) | 22.4 | | 55.2 | 44.8 |
| 7.5 | | A-4, SiSa, brn, Moist. Rec. = 1.3 ft | 1-2-2-2 (4) | 28.1 | 1.5 | 56.0 | 42.5 |
| 10.0 | | A-2-4, SiSa, gry-brn, Wet, Rec. = 0.9 ft | 1-2-2 (4) | 38.9 | 1.3 | 70.0 | 28.7 |
| | | Hole stopped @ 10.5 ft | | | | | |
| 12.5 | | | | | | | |
| 15.0 | | | | | | | |
| 17.5 | | | | | | | |

Remarks:
Water levels were taken through hollow stem auger immediately after drilling and again one day after drilling.

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. $C_E$ is the hammer energy correction factor.
3. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

BORING LOG 2 BARRE CITY FEGC F026 1(34).GPJ VERMONT AOT.GDT 3/9/11

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85B010_TYP_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
BORING LOGS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 52 OF 339

NOTE:
SEE GENERAL PLAN SHEETS FOR LAYOUT LOCATIONS.

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH DIVISION
SOILS SUBDIVISION

1 of 9

AUGER DRILLING NOTES

PROJECT/PROJECT NO.: Barre City FEGC F026-1(34)
DRILLER Willis DATE: 06-07-95 to 06-08
NOTES FROM STATION 136+00 TO STATION 137+00
CHECKED BY Linda J. Viks
DATE CHECKED 06-19-95

| BORING NUMBER | STATION | OFFSET | DEPTH | SOIL DESCRIPTION | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Field | | | GAS DET. PID READING (PPM) | LAB CLASS. |
| | | | | Soil Type | Color | Moisture | | |
| R22 | 137+00 | 6.7' RT. | 0.0-0.4 | Pavement | | | <1 | |
| | | | 0.4-1.0 | Granite | | | <1 | |
| | | | 1.0-3.0 | SaGr | Brn | M | <1 | A-2-4 GrSiSa |
| | | | 3.0-7.0 | GrSi | Brn | M | <1 | A-4 SaSi |
| | | | 7.0-11.0 | SiSa | Brn | MTW | <1 | A-4 SiSa |
| | | | 11.0-14.0 | SaGr | Brn | W | <1 | A-2-4 GrSiSa |
| | | | 14.0-16.0 | GrSa | Brn | W | <1 | A-2-4 GrSiSa |
| | | | 16.0-20.0 | Si | GrBrn | W | <1 | A-4 SaSi |
| | | | NLTD | | | | | |
| R21 | 136+00 | 8.2' RT. | 0.0-0.4 | Pavement | | | <1 | |
| | | | 0.4-1.0 | Granite | | | <1 | |
| | | | 1.0-2.0 | SaGr | Brn | M | <1 | |
| | | | 2.0-5.0 | SiSa | Brn | M | <1 | A-2-4 GrSiSa |
| | | | 5.0-10.0 | GrSa | Brn | M | <1 | A-4 SiSa |
| | | | 10.0-12.0 | SaGr | Brn | M | <1 | A-1-B SiSaGr |
| | | | 12.0-16.0 | SaGr | Brn | W | <1 | A-1-B GrSa |
| | | | 16.0-20.0 | SaSi | Brn | W | <1 | A-4 GrSaSi |
| | | | NLTD | | | | | |

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH DIVISION
SOILS SUBDIVISION

2 of 9

AUGER DRILLING NOTES

PROJECT/PROJECT NO.: Barre City FEGC F026-1(34)
DRILLER Willis DATE: 06-07-95 to 06-08-95
NOTES FROM STATION 132+00 TO STATION 134+85
CHECKED BY Linda J. Viks
DATE CHECKED 06-19-95

| BORING NUMBER | STATION | OFFSET | DEPTH | SOIL DESCRIPTION | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Field | | | GAS DET. PID READING (PPM) | LAB CLASS. |
| | | | | Soil Type | Color | Moisture | | |
| R20 | 134+85 | 6.5' RT. | 0.0-0.4 | Pavement | | | <1 | |
| | | | 0.4-1.0 | Granite | | | <1 | |
| | | | 1.0-4.0 | SiGrSts | GrBrn | M | <1 | A-2-4 GrSiSa |
| | | | 4.0-8.0 | SaSi | Brn | M | <1 | A-4 SaSi |
| | | | 8.0-13.0 | SiSa | Brn | MTW | <1 | A-2-4 SiSa |
| | | | 13.0-16.0 | SaGr | Brn | W | <1 | A-2-4 SaSiGr |
| | | | 16.0-20.0 | Si | Gray | W | <1 | A-4 SaSi |
| | | | NLTD | | | | | |
| R19 | 133+00 | 6.5' RT. | 0.0-0.4 | Pavement | | | <1 | |
| | | | 0.4-1.0 | Granite | | | <1 | |
| | | | 1.0-3.0 | SaGr | GrBrn | M | <1 | A-1-b GrSa |
| | | | 3.0-10.0 | SiSa | Brn | M | <1 | A-4 SiSa |
| | | | 10.0-16.0 | GrSa | Brn | W | <1 | A-2-4 Sa |
| | | | 16.0-20.0 | Sa | Brn | W | <1 | A-2-4 SiSa |
| | | | NLTD | | | | | |
| R18 | 132+00 | 6.6' RT. | 0.0-0.4 | Pavement | | | <1 | |
| | | | 0.4-1.0 | Granite | | | <1 | |
| | | | 1.0-4.0 | SaGr | GrBrn | M | <1 | A-1-b SiGrSa |
| | | | 4.0-10.0 | SaSi | Brn | MTW | <1 | — |
| | | | 10.0-17.0 | SrSaGr | Brn | MTW | <1 | A-2-4 SiSa |
| | | | 17.0-20.0 | SaGr | Brn | W | <1 | A-1-b SiGrSa |
| | | | NLTD | | | | | |

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH DIVISION
SOILS SUBDIVISION

3 of 9

AUGER DRILLING NOTES

PROJECT/PROJECT NO.: Barre City FEGC F026-1(34)
DRILLER Willis DATE: 06-07-95 to 06-08-95
NOTES FROM STATION 128+00 TO STATION 131+00
CHECKED BY Linda J. Viks
DATE CHECKED 06-19-95

| BORING NUMBER | STATION | OFFSET | DEPTH | SOIL DESCRIPTION | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Field | | | GAS DET. PID READING (PPM) | LAB CLASS. |
| | | | | Soil Type | Color | Moisture | | |
| RI7 | 131+00 | 6.6' RT. | 0.0-0.4 | Pavement | | | <1 | |
| | | | 0.4-1.0 | Granite | | | <1 | |
| | | | 1.0-3.0 | GrSiSa | Brn | M | <1 | A-2-4 SiSa |
| | | | 3.0-9.0 | SiSa | Brn | MTW | <1 | A-4 SiSa |
| | | | 9.0-13.0 | SaGr | Brn | MTW | <1 | A-2-4 SiGrSa |
| | | | 13.0-20.0 | SaGr | Brn | W | <1 | A-2-4 SiGrSa |
| | | | NLTD | | | | | |
| RI6 | 130+00 | 6.6' RT. | 0.0-0.5 | Pavement | | | <1 | |
| | | | 0.5-0.9 | Granite | | | <1 | |
| | | | 0.9-3.0 | GrSa | Brn | MTW | <1 | A-4 SaSi |
| | | | 3.0-7.0 | SiSa | Brn | M | <1 | A-4 SiSa |
| | | | 7.0-13.0 | SiGrSa Trace Org. | DkBrn | W | <1 | A-2-4 GrSiSa |
| | | | 13.0-20.0 | SaSiGr Trace Org. | DkBrn | W | <1 | A-1-b SiSaGr |
| | | | NLTD | | | | | |
| RI5 | 128+00 | 8.1' RT. | 0.0-0.6 | Pavement | | | <1 | |
| | | | 0.6-1.0 | Granite | | | <1 | |
| | | | 1.0-11.0 | SiSa | Brn | M | <1 | A-2-4 SiSa |
| | | | 11.0-17.0 | Sa | Brn | W | <1 | A-2-4 SiSa |
| | | | 17.0-20.0 | GrSiSa | Brn | MTW | <1 | A-4 SiSa |
| | | | NLTD | | | | | |
| | | | NOTE: A steel drill bit broke off and is still imbedded in roadway from 0.5' to 1.0' below surface. | | | | | |

VHB Vanasse Hangen Brustlin, Inc.

| | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-1(34) C/2 |
| FILE NAME: 85D010_TYP_C2 | PLOT DATE: 3/9/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: DMP / JAR |
| DESIGNED BY: DMP / MDS | CHECKED BY: |
| BORING LOGS | SHEET 53 OF 339 |

NOTE:
SEE GENERAL PLAN SHEETS FOR LAYOUT LOCATIONS.

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH DIVISION
SOILS SUBDIVISION



AUGER DRILLING NOTES

PROJECT/PROJECT NO.: Barre City FEGC F026-1(34)
DRILLER Willis DATE: 06-07-95 to 06-08-95
NOTES FROM STATION 124+85 TO STATION 126+90
CHECKED BY Linda J. Viks
DATE CHECKED 06-19-95

| BORING NUMBER | STATION | OFFSET | DEPTH | SOIL DESCRIPTION: Field: Soil Type | Color | Moisture | GAS DET. PID READING (ppm) | LAB CLASS. |
|---|---|---|---|---|---|---|---|---|
| RI4 | 126+90 | 7.5' RT. | 0.0-0.5 | Pavement | | | <1 | |
| | | | 0.5-0.9 | Granite | | | <1 | |
| | | | 0.9-2.0 | Sa Gr (w/ Granite dust) | Brn | M | <1 | |
| | | | 2.0-8.0 | Sa | Brn | M | <1 | A-4 SiSa |
| | | | 8.0-10.0 | Gr | Brn | M | <1 | |
| | | | 10.0-15.0 | GrSa | Brn | MTW | <1 | A-2-4 GrSiSa |
| | | | 15.0-20.0 | Sa | Brn | MTW | <1 | A-2-4 GrSiSa |
| | | | NLTO | | | | | |
| RI3 | 124+85 | 13.4' LT. | 0.0-0.5 | Pavement | | | <1 | |
| | | | 0.5-0.9 | Granite | | | <1 | |
| | | | 0.9-2.5 | GrSa | Brn | M | <1 | A-2-4 GrSiSa |
| | | | 2.5-7.0 | SiSa | Brn | M | <1 | A-2-4 SiSa |
| | | | 7.0-11.0 | SaGr | Brn | MTW | <1 | A-1-b GrSa |
| | | | 11.0-16.0 | Si | Gray | W | <1 | A-4 Si |
| | | | 16.0-20.0 | Si Gr | GrBrn | SAT | <1 | A-4 SaGrSi |
| | | | NLTO | | | | | |

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH DIVISION
SOILS SUBDIVISION



AUGER DRILLING NOTES

PROJECT/PROJECT NO.: Barre City FEGC F026-1(34)
DRILLER Willis DATE: 06-07-95 to 06-08-95
NOTES FROM STATION 121+99 TO STATION 123+78
CHECKED BY Linda J. Viks
DATE CHECKED 06-19-95

| BORING NUMBER | STATION | OFFSET | DEPTH | SOIL DESCRIPTION: Field: Soil Type | Color | Moisture | GAS DET. PID READING (ppm) | LAB CLASS. |
|---|---|---|---|---|---|---|---|---|
| RI2 | 123+78 | 19.2' RT. | 0.0-0.4 | Pavement | | | <1 | |
| | | | 0.4-1.4 | Granite | | | <1 | |
| | | | 1.4-3.0 | SiGr | | | <1 | A-2-4 SiSa |
| | | | 3.0-5.0 | Si | DkBrn | M | <1 | A-4 GrSaSi |
| | | | 5.0-7.0 | SiSa | Brn | M | <1 | A-4 SiSa |
| | | | 7.0-11.0 | SiSaGr | BL | MTW | <1 | A-1-b SiSaGr |
| | | | 11.0-20.0 | Si | Gr | W | <1 | A-4 Si |
| | | | NLTO | | | | | |
| RI1 | 123+44 | 19.9' RT. | 0.0-0.4 | Pavement | | | <1 | |
| | | | 0.4-1.4 | Granite | | | <1 | |
| | | | 1.4-5.0 | SaSi | Brn | M | <1 | A-4 SiSa |
| | | | 5.0-10.0 | GrSiSa Trace Wood | Brn | M | <1 | A-2-4 SiSa |
| | | | 10.0-11.0 | Gr | Brn | W | <1 | |
| | | | 11.0-20.0 | Si | Gr | W | <1 | A-4 Si |
| | | | NLTO | | | | | |
| RI0 | 121+99 | 14.8' RT. | 0.0-0.4 | Pavement | | | <1 | |
| | | | 0.4-0.9 | Concrete | | | <1 | |
| | | | 0.9-2.5 | SaGr | Brn | M | <1 | |
| | | | 2.5-9.0 | SaSi | Brn | M | <1 | |
| | | | 9.0-14.0 | Gr | Brn | MTW | <1 | |
| | | | 14.0-20.0 | Si | Gr | W | <1 | |
| | | | NLTO | | | | | |

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH DIVISION
SOILS SUBDIVISION



AUGER DRILLING NOTES

PROJECT/PROJECT NO.: Barre City FEGC F026-1(34)
DRILLER Willis DATE: 06-07-95 to 06-08-95
NOTES FROM STATION 117+99 TO STATION 119+99
CHECKED BY Linda J. Viks
DATE CHECKED 06-19-95

| BORING NUMBER | STATION | OFFSET | DEPTH | SOIL DESCRIPTION: Field: Soil Type | Color | Moisture | GAS DET. PID READING (ppm) | LAB CLASS. |
|---|---|---|---|---|---|---|---|---|
| R9 | 119+99 | 12.8' RT. | 0.0-0.4 | Pavement | | | <1 | |
| | | | 0.4-0.4 | Concrete | | | <1 | |
| | | | 0.9-2.5 | GrSa | Brn | M | <1 | |
| | | | 2.5-11.0 | SiSa | Brn | M | <1 | |
| | | | 11.0-20.0 | SaSi | Gr | W | <1 | |
| | | | NLTO | | | | | |
| R8 | 118+99 | 13.4' RT. | 0.0-0.4 | Pavement | | | <1 | |
| | | | 0.4-1.0 | Concrete | | | <1 | |
| | | | 1.0-5.0 | SaGr | Brn | M | <1 | |
| | | | 5.0-13.0 | SiSa | Brn | M | <1 | |
| | | | 13.0-20.0 | SaSi | Gr | W | <1 | |
| | | | NLTO | | | | | |
| R7 | 117+99 | 7.0' RT. | 0.0-0.4 | Pavement | | | <1 | |
| | | | 0.4-0.8 | Granite | | | <1 | |
| | | | 0.8-3.0 | SaGr | GrBrn | M | <1 | A-2-4 SiSa |
| | | | 3.0-12.0 | SiSa | Brn | W | <1 | A-2-4 GrSiSa |
| | | | 12.0-20.0 | SiSa | Gr | SAT | <1 | |
| | | | NLTO | | | | | |

| | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-1(34) C/2 |
| FILE NAME: 85b010_TYP_C2 | PLOT DATE: 3/9/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: DMP / JAR |
| DESIGNED BY: DMP / MDS | CHECKED BY: |
| BORING LOGS | SHEET 54 OF 339 |

VHB Vanasse Hangen Brustlin, Inc.

NOTE:
SEE GENERAL PLAN SHEETS FOR LAYOUT LOCATIONS.

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH DIVISION
SOILS SUBDIVISION

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AUGER DRILLING NOTES

PROJECT/PROJECT NO.: Barre City FEGC F026-1(34)
DRILLER Willis DATE: 06-07-95 to 06-08-95
NOTES FROM STATION 115+77 TO STATION 116+37
CHECKED BY Linda J. Diks
DATE CHECKED 06-19-95

| BORING NUMBER | STATION | OFFSET | DEPTH | SOIL DESCRIPTION Field: Soil Type | Color | Moisture | GAS DET. PID READING (ppm) | LAB CLASS. |
|---|---|---|---|---|---|---|---|---|
| R6 | 116+37 | 0.0' RT. | 0.0-1.2 | Pavement | | | <1 | |
| | | | 1.2-1.8 | Stone or Concrete | | | <1 | |
| | | | 1.8-5.0 | SiGr | GrBrn | M | 5 | |
| | | | 5.0-7.0 | Si Sa and wood | DkBrn | M | 80 | |
| | | | 7.0-10.0 | SaSi | Gr | W | 50 | |
| | | | 10.0-15.0 | Saturated aver — No Rec. | | | | |
| | | | 15.0-20.0 | SaSi | Gr | W | 3 | |
| | | | NLTD | | | | | |
| R5 | 116+17 | 0.4' LT. | 0.0-0.6 | Pavement | | | <1 | |
| | | | 0.6-3.0 | SaGr | Brn | M | <1 | |
| | | | 3.0-6.0 | SiSa | Brn | M | 5 | |
| | | | 6.0-8.0 | SiSa & wood | Brn | M | 35 | |
| | | | 8.0-10.0 | SiSa & wood | Brn | M | 15 | |
| | | | 10.0-20.0 | SaGr | DkBrn | W | <1 | |
| | | | NLTD | | | | | |
| R4 | 115+77 | 2.8' LT. | 0.0-1.0 | Pavement | | | <1 | |
| | | | 1.0-6.0 | GrSa | Brn | M | <1 | |
| | | | 6.0-10.0 | GrSa | Brn | M | 140 | |
| | | | 10.0-15.0 | GrSa | GrBrn | SAT | 90 | |
| | | | 15.0-20.0 | GrSa | GrBrn | SAT | 50 | |
| | | | NLTD | | | | | |

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH DIVISION
SOILS SUBDIVISION

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AUGER DRILLING NOTES

PROJECT/PROJECT NO.: Barre City FEGC F026-1(34)
DRILLER Willis DATE: 06-07-95 to 06-08-95
NOTES FROM STATION 115+37 TO STATION 115+57
CHECKED BY Linda J. Diks
DATE CHECKED 06-19-95

| BORING NUMBER | STATION | OFFSET | DEPTH | SOIL DESCRIPTION Field: Soil Type | Color | Moisture | GAS DET. PID READING (ppm) | LAB CLASS. |
|---|---|---|---|---|---|---|---|---|
| R3 | 115+57 | 3.6' LT. | 0.0-1.0 | Pavement | | | <1 | |
| | | | 1.0-1.5 | Stone or concrete | | | <1 | |
| | | | 1.5-2.0 | SaGr | Brn | M | <1 | |
| | | | 2.0-3.0 | SaGr | Brn | M | 180 | |
| | | | 3.0-5.0 | GrSa | Brn | M | 180 | |
| | | | 5.0-10.0 | GrSa | Brn | MTW | 130 | |
| | | | 10.0-15.0 | GrSa | GrBrn | SAT | 120 | |
| | | | 15.0-20.0 | GrSa | GrBrn | SAT | 80 | |
| | | | NLTD | | | | | |
| R2 | 115+37 | 5.3' LT. | 0.0-1.0 | | | | <1 | |
| | | | 1.0-1.5 | | | | <1 | |
| | | | 1.5-4.0 | SaGr | Brn | D | 10 | |
| | | | 4.0-5.0 | SaGr | Brn | M | 40 | |
| | | | 5.0-6.0 | GrSa | GrBrn | MTW | 40 | |
| | | | 6.0-10.0 | GrSa | GrBrn | MTW | 20 | |
| | | | 10.0-13.0 | GrSa | GrBrn | SAT | 40 | |
| | | | 13.0-15.0 | GrSa | GrBrn | SAT | 64 | |
| | | | 15.0-17.0 | SaGr | Brn | SAT | 22 | |
| | | | 17.0-20.0 | SaGr | Brn | SAT | 28 | |
| | | | NLTD | | | | | |

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH DIVISION
SOILS SUBDIVISION

9 of 9

AUGER DRILLING NOTES

PROJECT/PROJECT NO.: Barre City FEGC F026-1(34)
DRILLER Willis DATE: 06-07-95 to 06-08-95
NOTES FROM STATION 113+97 TO STATION 113+97
CHECKED BY Linda J. Diks
DATE CHECKED 06-19-95

| BORING NUMBER | STATION | OFFSET | DEPTH | SOIL DESCRIPTION Field: Soil Type | Color | Moisture | GAS DET. PID READING (ppm) | LAB CLASS. |
|---|---|---|---|---|---|---|---|---|
| R1 | 113+97 | 1.2' LT. | 0.0-0.8 | Pavement | | | <1 | |
| | | | 0.8-1.5 | Stone or concrete | | | <1 | |
| | | | 1.5-5.0 | SaGr | Brn | M | <1 | A-2-4 SiSa |
| | | | 5.0-7.0 | SiSa | Brn | M | <1 | A-2-4 SiSa |
| | | | 7.0-11.0 | SiSa | Gray | W | <1 | A-1-b SiGrSa |
| | | | 11.0-17.0 | SaGr | Brn | W | <1 | A-2-4 GrSiSa |
| | | | 17.0-20.0 | SiSa | Gray | SAT | <1 | |
| | | | NLTD | | | | | |

4070 5C 8/93

VHB Vanasse Hangen Brustlin, Inc.

| | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-1(34) C/2 |
| FILE NAME: 85b010_TYP_C2 | PLOT DATE: 3/9/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: DMP / JAR |
| DESIGNED BY: DMP / MDS | CHECKED BY: |
| BORING LOGS | SHEET 55 OF 339 |

PROPOSED GRANITE POST AND CHAIN FENCE
PROPOSED ORNAMENTAL STREET LIGHT
PROPOSED SIGNAL POLE WITH LUMINAIRE
BORING/AUGER LOCATIONS
PROPOSED TRASH RECEPTACLE
PROPOSED PARKING METER POST
PROPOSED TREE LOCATION
4' x 5' PROPOSED TREE PIT
PROPOSED FIRE HYDRANT

MATCH TO STA. 21+75 (SHEET 62)

VT. STATE PLANE GRID

STA 31+42.00
END APPROACH
LIMITS OF PAVEMENT

N/F JAIMES L FEWER AGENCY INC. No. 5

N/F ELLEN R. BEAR No. 397 (UNIT A) N/F JONATHAN S. & KIMBERLEY A. RENFREW No. 397 (UNIT B)

N/F NORWAY BARRE REAL ESTATE LLC No. 395

N/F ELLIOT G. JR. & SUSAN S. HANSEN No. 399

N/F MICHAEL E. BARCOMB No. 405

N/F Z'S NORTHERN PROPERTIES No. 379

N/F WESCO INC. No. 377

BROOK ST.

MAPLE AVENUE (VT 14)

COTTAGE STREET

STA 113+00.00
END APPROACH
BEGIN PROJECT

APPROXIMATE LOCATION OF CONTAMINATED SOILS

SPECIAL PROVISION (DUCT BANK) (4 CONDUIT). SEE DETAILS FOR MORE INFORMATION

Exist. R.O.W.

U.S. ROUTE 302

NORTH MAIN STREET

SMH 1
SMH 2
SMH 3
SMH 4
SMH 17
SMH 18

COLD PLANE 25'

110+50
111+00
112+00
113+00
114+00
115+00
116+00
21+00
31+00
31+50

N/F ANTONIO & DAVID A. CAMPOS No. 396

N/F RICHARD H & LUCILLE A. FENTE No. 398

N/F CAMPOS REALTY LLC No. 386

N/F EDWARD C SIMONDS No. 372 - 378

HORACE LANE

VT 62

N/F PAUL D. & BETTY LOU MACDUFF No. 360

N/F PARESH PARESH T, GAYATRIBEN P No. 362

STA 110+65.00
BEGIN APPROACH
LIMITS OF PAVEMENT

SEE NOTE 5

MATCH TO STA. 116+90 (SHEET 57)

MATCH TO STA. 11+75 (SHEET 63)

SPECIAL PROVISION (DUCT BANK) (4 CONDUIT)
STA 115+70 - 116+02, RT-LT

CLEARING AND GRUBBING, INCLUDING INDIVIDUAL TRESS AND STUMPS
SL STA 10+56 - 11+75 RT

COLD PLANING, BITUMINOUS PAVEMENT
STA 110+65 - 112+00
SL STA 10+65 - 11+75
SL STA 20+51 - 21+75
SL STA 30+49 - 31+42

ADJUST ELEVATION OF VALVE BOX
STA 110+83, RT
STA 111+58, LT
STA 111+99, RT
STA 112+09, LT

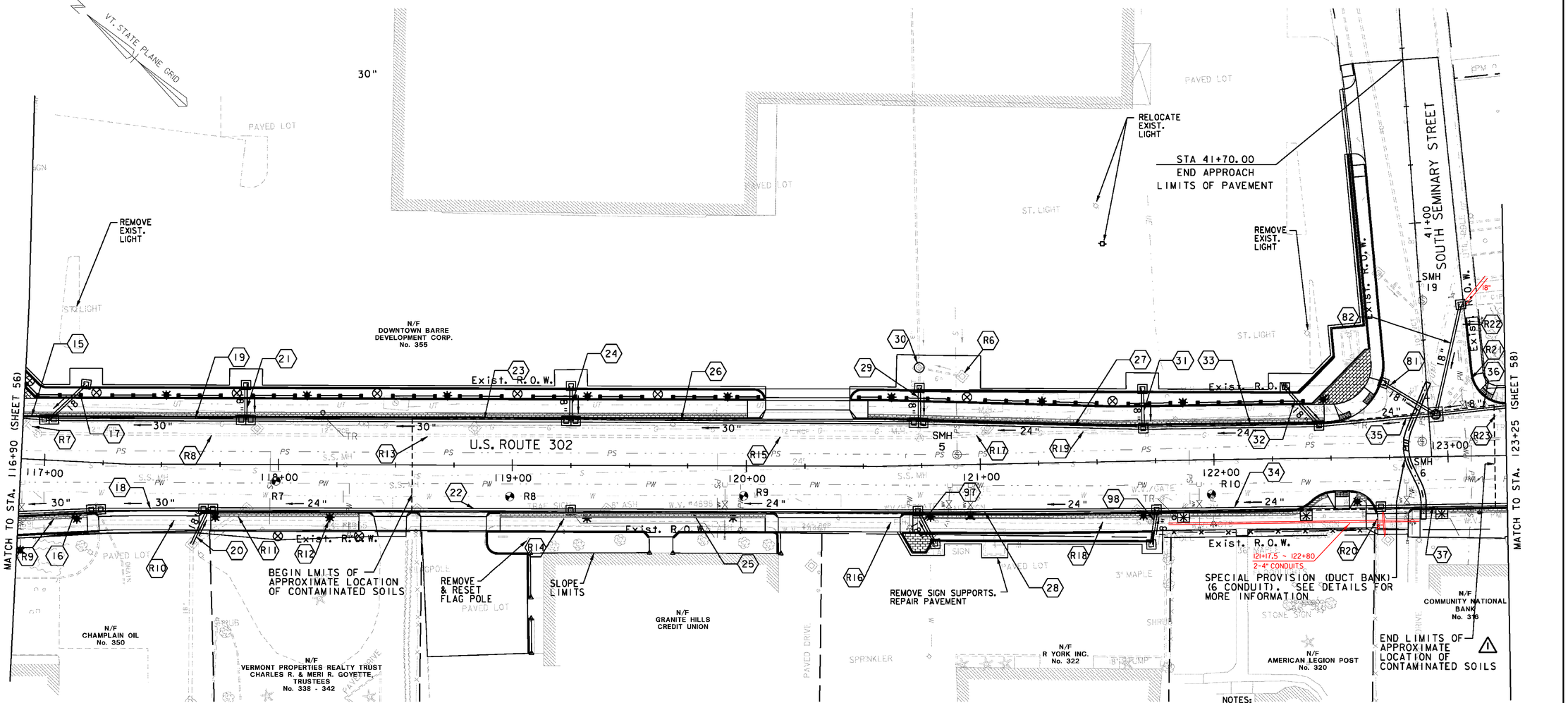
NOTES:
1. SAWCUT OF EXISTING PAVEMENT & SIDEWALK SHALL BE INCIDENTAL TO ALL EXCAVATION PAY ITEMS.
2. REMOVE ABANDONED GAS LINES TO LIMITS OF FULL DEPTH CONSTRUCTION (INCIDENTAL TO ALL EXCAVATION PAY ITEMS). PLUG EXISTING LINES AT LIMITS OF CONSTRUCTION.
3. THE PROPOSED SEWER AND WATER UTILITIES SHOWN ON THESE GENERAL PLANS ARE FOR INFORMATIONAL PURPOSES. REFER TO THE SEWER AND WATER PLANS BY DUFRESNE GROUP FOR ACTUAL CONSTRUCTION INFORMATION.
4. SEE THE ITEM DETAIL & DRAINAGE SHEETS, DRAINAGE PROFILES, AND CROSS SECTIONS FOR PROPOSED DRAINAGE INFORMATION CORRESPONDING TO NOTE NUMBERS SHOWN BY: (#)
5. SEE TRAFFIC SIGNAL PLANS FOR CONDUIT AND PULL BOX INFORMATION (SHEET 165).
6. ALL EXISTING TELEPHONE & ELECTRIC MANHOLES SHALL BE ADJUSTED BY OTHERS.

20 0 20 40
FEET

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-I(34) C/2

FILE NAME: z85b010bdr_cp_C2 | PLOT DATE: 3/9/2011
PROJECT LEADER: G. BAKOS | DRAWN BY: D. PECK
DESIGNED BY: D. PECK | CHECKED BY:
GENERAL PLAN #1 | SHEET 56 OF 339




COLD PLANING, BITUMINOUS PAVEMENT
SL STA 40+48 - 41+70

SPECIAL PROVISION (DUCT BANK) (6 CONDUIT)
STA 122+89 - 122+92, RT-LT

ADJUST ELEVATION OF VALVE BOX
STA 119+99 RT

REMOVAL OF EXISTING FENCE
STA 121+81 - 122+64 RT

SPECIAL PROVISION (ORNAMENTAL FENCE, 4 FEET)
STA 121+81 - 122+64 RT

SPECIAL PROVISION (GATE FOR ORNAMENTAL FENCE, 4 FEET)
STA 122+10 - 122+14 RT

SPECIAL PROVISION (REMOVE AND RESET FLAG POLE)
STA 119+07, RT

NOTES:

1. SAWCUT OF EXISTING PAVEMENT & SIDEWALK SHALL BE INCIDENTAL TO ALL EXCAVATION PAY ITEMS.
2. REMOVE ABANDONED GAS LINES TO LIMITS OF FULL DEPTH CONSTRUCTION (INCIDENTAL ALL EXCAVATION PAY ITEMS). PLUG EXISTING LINES AT LIMITS OF CONSTRUCTION.
3. THE PROPOSED SEWER AND WATER UTILITIES SHOWN ON THESE GENERAL PLANS ARE FOR INFORMATIONAL PURPOSES. REFER TO THE SEWER AND WATER PLANS BY DUFRESNE GROUP FOR ACTUAL CONSTRUCTION INFORMATION.
4. SEE THE ITEM DETAIL & DRAINAGE SHEETS, DRAINAGE PROFILES, AND CROSS SECTIONS FOR PROPOSED DRAINAGE INFORMATION CORRESPONDING TO NOTE NUMBERS SHOWN BY: (#)
5. ALL EXISTING TELEPHONE & ELECTRIC MANHOLES SHALL BE ADJUSTED BY OTHERS.

- PROPOSED GRANITE POST AND CHAIN FENCE
- PROPOSED ORNAMENTAL STREET LIGHT
- PROPOSED SIGNAL POLE WITH LUMINAIRE
- BORING/AUGER LOCATIONS
- PROPOSED TRASH RECEPTACLE
- PROPOSED PARKING METER POST
- PROPOSED TREE LOCATION
- 4' x 5' PROPOSED TREE PIT
- PROPOSED FIRE HYDRANT

| REVISION | BY | DATE |
|---|---|---|
| 1 | DMP | 5/6/2011 |

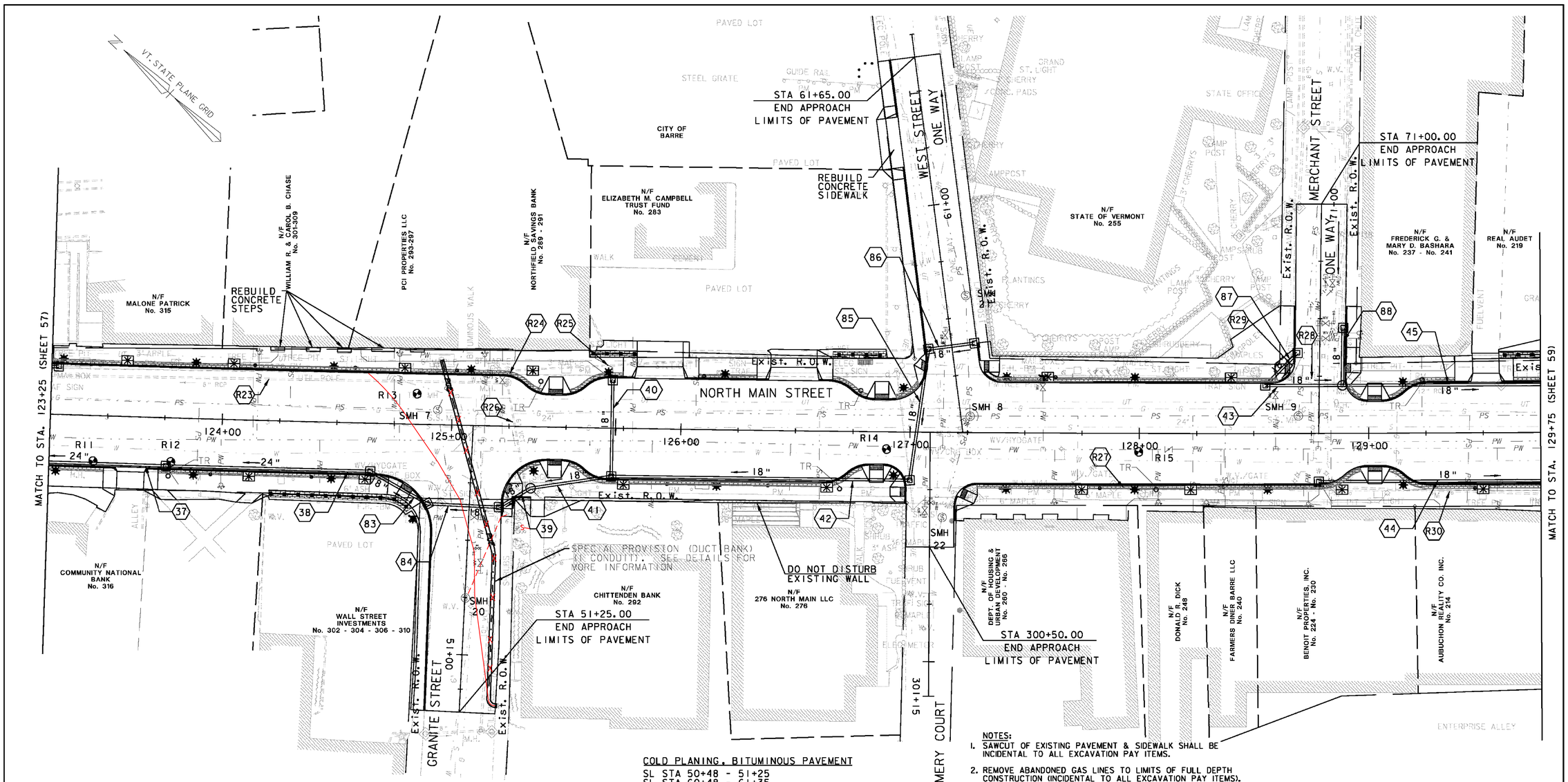
REVISION NO. 1: CLARIFIED LIMITS OF APPROXIMATELOCATION OF CONTAMINATED SOILS

20 0 20 40
FEET

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-I(34) C/2

FILE NAME: z85b010bdr_cp_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: D. PECK
GENERAL PLAN #2
PLOT DATE: 5/6/2011
DRAWN BY: D. PECK
CHECKED BY:
SHEET 57 OF 339




COLD PLANING, BITUMINOUS PAVEMENT
SL STA 50+48 - 51+25
SL STA 60+48 - 61+35
SL STA 70+48 - 71+00
SL STA 300+48 - 300+50

SPECIAL PROVISION (DUCT BANK) (1 CONDUIT)
STA. 124+95 LT - SL STA 51+21 LT

NOTES:
1. SAWCUT OF EXISTING PAVEMENT & SIDEWALK SHALL BE INCIDENTAL TO ALL EXCAVATION PAY ITEMS.
2. REMOVE ABANDONED GAS LINES TO LIMITS OF FULL DEPTH CONSTRUCTION (INCIDENTAL TO ALL EXCAVATION PAY ITEMS). PLUG EXISTING LINES AT LIMITS OF CONSTRUCTION.
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4. SEE THE ITEM DETAIL & DRAINAGE SHEETS, DRAINAGE PROFILES, AND CROSS SECTIONS FOR PROPOSED DRAINAGE INFORMATION CORRESPONDING TO NOTE NUMBERS SHOWN BY: (#)
5. ALL EXISTING TELEPHONE & ELECTRIC MANHOLES SHALL BE ADJUSTED BY OTHERS.

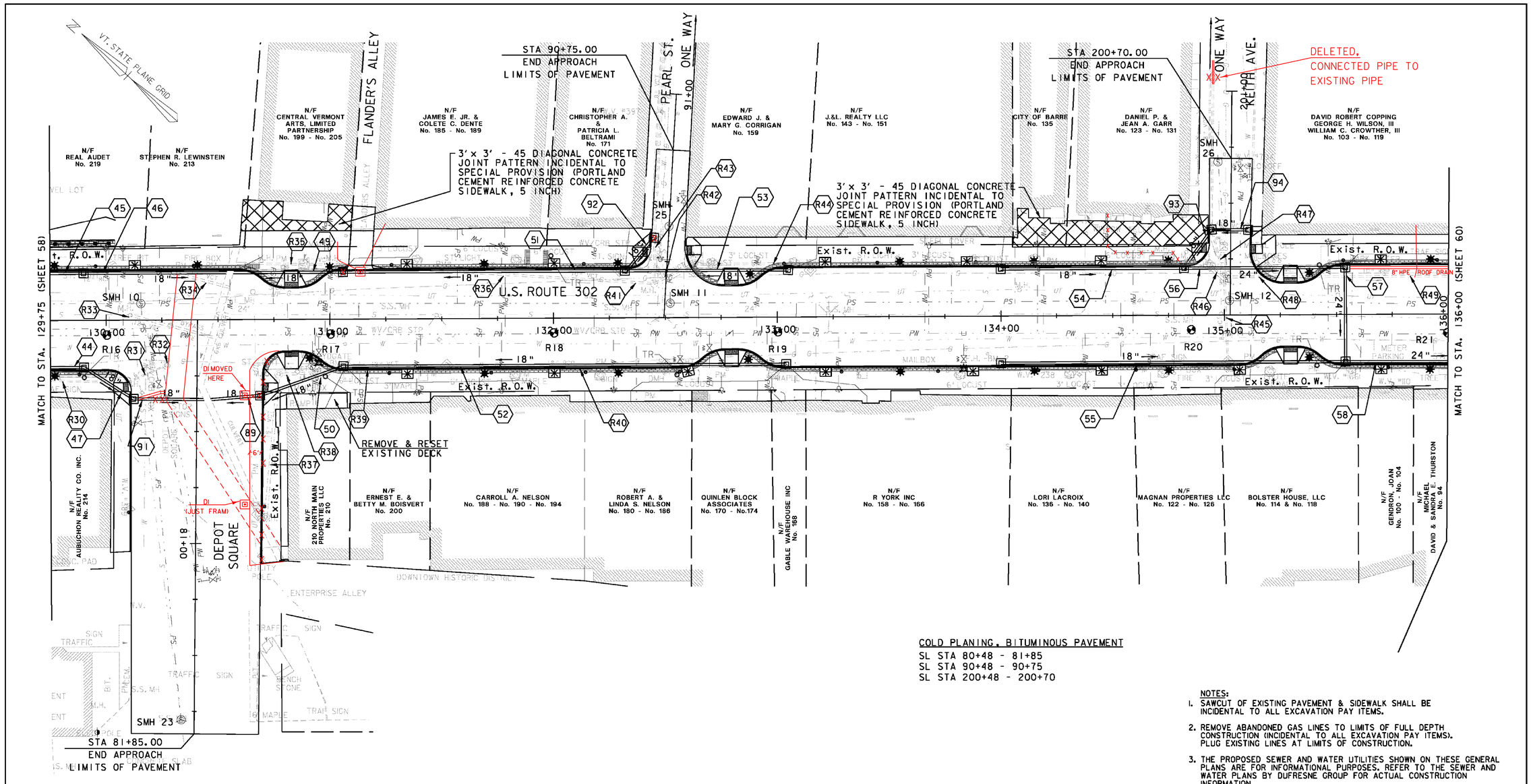
- PROPOSED GRANITE POST AND CHAIN FENCE
- PROPOSED ORNAMENTAL STREET LIGHT
- PROPOSED SIGNAL POLE WITH LUMINAIRE
- BORING/AUGER LOCATIONS
- PROPOSED TRASH RECEPTACLE
- PROPOSED PARKING METER POST
- PROPOSED TREE LOCATION
- 4' x 5' PROPOSED TREE PIT
- PROPOSED FIRE HYDRANT

20 0 20 40
FEET

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: z85b010bdr_cp_C2 | PLOT DATE: 3/9/2011
PROJECT LEADER: G. BAKOS | DRAWN BY: D. PECK
DESIGNED BY: D. PECK | CHECKED BY:
GENERAL PLAN #3 | SHEET 58 OF 339




COLD PLANING, BITUMINOUS PAVEMENT

SL STA 80+48 - 81+85
SL STA 90+48 - 90+75
SL STA 200+48 - 200+70

NOTES:

1. SAWCUT OF EXISTING PAVEMENT & SIDEWALK SHALL BE INCIDENTAL TO ALL EXCAVATION PAY ITEMS.
2. REMOVE ABANDONED GAS LINES TO LIMITS OF FULL DEPTH CONSTRUCTION (INCIDENTAL TO ALL EXCAVATION PAY ITEMS). PLUG EXISTING LINES AT LIMITS OF CONSTRUCTION.
3. THE PROPOSED SEWER AND WATER UTILITIES SHOWN ON THESE GENERAL PLANS ARE FOR INFORMATIONAL PURPOSES. REFER TO THE SEWER AND WATER PLANS BY DUFRESNE GROUP FOR ACTUAL CONSTRUCTION INFORMATION.
4. SEE THE ITEM DETAIL & DRAINAGE SHEETS, DRAINAGE PROFILES, AND CROSS SECTIONS FOR PROPOSED DRAINAGE INFORMATION CORRESPONDING TO NOTE NUMBERS SHOWN BY: (#)
5. ALL EXISTING TELEPHONE & ELECTRIC MANHOLES SHALL BE ADJUSTED BY OTHERS.

VHB Vanasse Hangen Brustlin, Inc.

| | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-I(34) C/2 |
| FILE NAME: z85b010bdr_cp_C2 | PLOT DATE: 3/9/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: D. PECK |
| DESIGNED BY: D. PECK | CHECKED BY: |
| GENERAL PLAN #4 | SHEET 59 OF 339 |

*PIPE RUN #59 COULD NOT BE CONSTRUCTED DUE TO UNEXPECTED FOUNDATION WALLS BURIED UNDER THE WALKWAY. REUTILIZED EXISTING 24" RCP AND PITCHED DRAINAGE RUNS #61& #65 TOWARD DS#65. SEE DRAINAGE SHEET 78 FOR NEW PROFILE.

VT. STATE PLANE GRID

MATCH TO STA. 701+50 (SHEET 68)

ELM STREET

00+10L

Exist. R.O.W.

SMH 16

STA 138+60.00
END PROJECT
BEGIN APPROACH

N/F
RICHARD G. MORIN
No. 47 - No. 59

N/F
AGNES ORMSBY
No. 71 - No. 77

6" ROOF DRAIN
CORE & LEAVE STUB

N/F
81 - 85 NORTH
MAIN STREET, LLC
No. 81 - 83

SMH 13

SMH 15

SMH 14

NORTH MAIN STREET

138+00

139+00

00+70L

WASHINGTON ST.

140+00

MATCH TO STA. 140+25 (SHEET 61)

MATCH TO STA. 801+39 (SHEET 61)

N/F
CITY OF BARRE

CHURCH ST.
ONE WAY

801+00

STA 800+65.00
END APPROACH
LIMITS OF PAVEMENT

N/F
UNIVERSALIST CHURCH
No. 19

NORTH MAIN ST.

602+00

800+00

603+00

MATCH TO STA. 603+75 (SHEET 61)

Exist. R.O.W.

PROSPECT ST.

00+10S

STA 501+60.00
END APPROACH
LIMITS OF PAVEMENT

N/F
U.S. POST OFFICE
No. 3

MATCH TO STA. 136+00 (SHEET 59)

8" HPE DRAINAGE PIPE/ROOF DRAIN

DS#65R

IN-SITU LINED EXISTING 24" RCP

STA 138+35.00
END PROJECT
BEGIN APPROACH

N/F
EDWARD H & YVONNE LACROSS
NO. 58 - NO. 70

N/F
MARK N MCCARTHY
No. 48 - No. 54

N/F
GRANITE CITY HOLDING CO., INC.
No. 84 - No. 86 - No. 88

N/F
THE HOWARD BANK N.A.
No. 26 - No. 40

RECONST. EXISTING SIDEWALK WITH APPROPRIATE SUBSTRUCTURE SEE SIDEWALK VAULT DETAIL

N/F
ABG CORPORATION
No. 14 - No. 22

N/F
CITY OF BARRE
No. 6

WALK-THRU N. MAIN STREET TO PARKING LOT
HAND STEEL SOUNDINGS

| BORING NUMBER | DEPTH TO REFUSAL |
|---|---|
| S1 | 12.4' |
| S2 | 4.3' |
| S3 | 13.2' |
| S4 | 14.0' |
| S5 | 13.9' |
| S6 | 14.3' |
| S7 | 12.2' |
| S8 | 14.3' |
| S9 | 13.8' |
| S10 | 13.2' |

COLD PLANING, BITUMINOUS PAVEMENT
STA 139+60 - 140+25
ST STA 600+48 - 603+75
SL STA 500+25 - 501+60
SL STA 700+53 - 701+50
SL STA 800+19 - 800+65

ADJUST ELEVATION OF VALVE BOX
STA 138+40 RT
SL STA 500+21, LT
SL STA 500+47, LT
SL STA 600+93, RT
SL STA 601+29, RT
SL STA 601+97, RT
SL STA 700+14, RT
SL STA 700+45, RT
SL STA 700+54, RT
SL STA 700+56, RT
SL STA 700+93, RT
SL STA 701+11, LT

NOTES:
1. SAWCUT OF EXISTING PAVEMENT & SIDEWALK SHALL BE INCIDENTAL TO ALL EXCAVATION PAY ITEMS.
2. REMOVE ABANDONED GAS LINES TO LIMITS OF FULL DEPTH CONSTRUCTION (INCIDENTAL TO ALL EXCAVATION PAY ITEMS. PLUG EXISTING LINES AT LIMITS OF CONSTRUCTION.
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4. SEE THE ITEM DETAIL & DRAINAGE SHEETS, DRAINAGE PROFILES, AND CROSS SECTIONS FOR PROPOSED DRAINAGE INFORMATION CORRESPONDING TO NOTE NUMBERS SHOWN BY: (#)
5. ALL EXISTING TELEPHONE & ELECTRIC MANHOLES SHALL BE ADJUSTED BY OTHERS.

PROPOSED GRANITE POST AND CHAIN FENCE
PROPOSED ORNAMENTAL STREET LIGHT
PROPOSED SIGNAL POLE WITH LUMINAIRE
BORING/AUGER LOCATIONS
PROPOSED TRASH RECEPTACLE
PROPOSED PARKING METER POST
PROPOSED TREE LOCATION
4' x 5' PROPOSED TREE PIT
PROPOSED FIRE HYDRANT

20 0 20 40
FEET

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: z85b0l0bdr_cp_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: D. PECK
GENERAL PLAN #5
PLOT DATE: 3/9/2011
DRAWN BY: D. PECK
CHECKED BY:
SHEET 60 OF 339

PROPOSED GRANITE POST AND CHAIN FENCE
PROPOSED ORNAMENTAL STREET LIGHT
PROPOSED SIGNAL POLE WITH LUMINAIRE
BORING/AUGER LOCATIONS
PROPOSED TRASH RECEPTACLE
PROPOSED PARKING METER POST
PROPOSED TREE LOCATION
4' x 5' PROPOSED TREE PIT
PROPOSED FIRE HYDRANT

NOTES:
1. SAWCUT OF EXISTING PAVEMENT & SIDEWALK SHALL BE INCIDENTAL TO ALL EXCAVATION PAY ITEMS.
2. REMOVE ABANDONED GAS LINES TO LIMITS OF FULL DEPTH CONSTRUCTION (INCIDENTAL TO ALL EXCAVATION PAY ITESM). PLUG EXISTING LINES AT LIMITS OF CONSTRUCTION.
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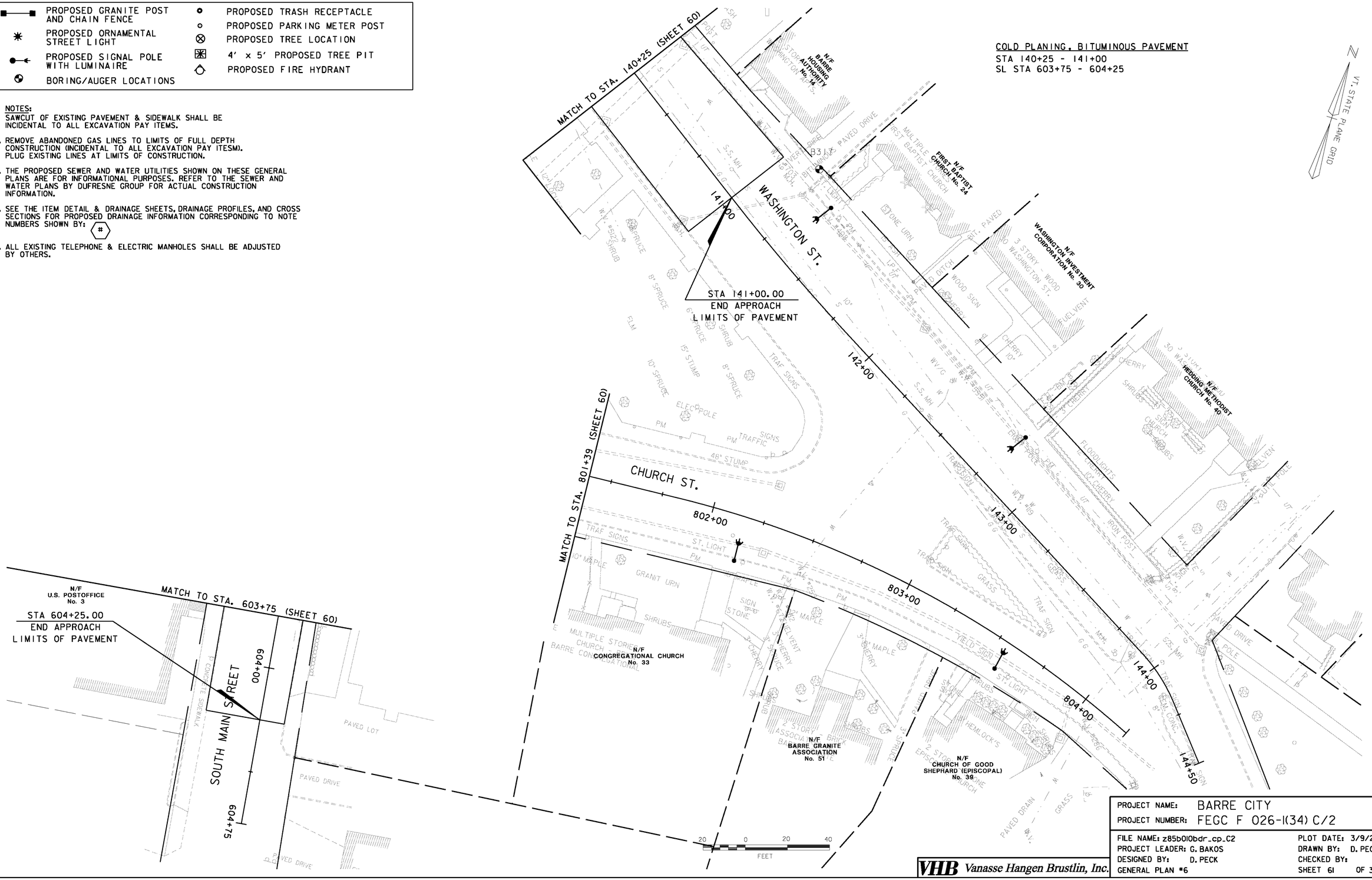
4. SEE THE ITEM DETAIL & DRAINAGE SHEETS, DRAINAGE PROFILES, AND CROSS SECTIONS FOR PROPOSED DRAINAGE INFORMATION CORRESPONDING TO NOTE NUMBERS SHOWN BY: (#)
5. ALL EXISTING TELEPHONE & ELECTRIC MANHOLES SHALL BE ADJUSTED BY OTHERS.

COLD PLANING, BITUMINOUS PAVEMENT
STA 140+25 - 141+00
SL STA 603+75 - 604+25




VHB Vanasse Hangen Brustlin, Inc.

| | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-I(34) C/2 |
| FILE NAME: z85b010bdr_cp_C2 | PLOT DATE: 3/9/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: D. PECK |
| DESIGNED BY: D. PECK | CHECKED BY: |
| GENERAL PLAN #6 | SHEET 61 OF 339 |

PROPOSED GRANITE POST AND CHAIN FENCE
PROPOSED ORNAMENTAL STREET LIGHT
PROPOSED SIGNAL POLE WITH LUMINAIRE
BORING/AUGER LOCATIONS
PROPOSED TRASH RECEPTACLE
PROPOSED PARKING METER POST
PROPOSED TREE LOCATION
4' x 5' PROPOSED TREE PIT
PROPOSED FIRE HYDRANT

N
VT. STATE PLANE GRID

MATCH TO STA. 21+75 (SHEET 56)

MAPLE AVENUE (VT 14)

CORTI STREET

SUMMER STREET

SHORT STREET

22+00
23+00
24+00
25+00
26+00
400+00
401+00
402+00

B320
B305
B306

DETECTION ZONE 6
DETECTION ZONE 1
DETECTION ZONE 2
DETECTION ZONE 2A
DETECTION ZONE 3
DETECTION ZONE 3A

END APPROACH
STA 26+70
LIMITS OF PAVEMENT

N/F
R & G
PROPERTIES III INC.
No. 14

N/F
THOMAS V
WATKINS III
No. 18

N/F
MARIANNE S
VENMAR
No. 20

N/F
STEPHEN &
ARACELIA GALLAS
No. 24 - 26

N/F
BRUCE C ELLISON
No 23 - No 25

N/F
KENNETH M &
BARBARA J PEARSON
No. 21

N/F
DAVID M &
STACEY L NELSON
No. 9

N/F
PETER L BRAUN
No. 116

N/F
WILLIAM H &
MARIE Z KEATON
No. 111 - No. 113 - No. 115

N/F
ANTONIO R &
MARY GARCIA
No. 114

N/F
PETER L BRAUN
No. 112

MATCH TO STA. 402+75 (SHEET 65)

COLD PLANING, BITUMINOUS PAVEMENT
SL STA 21+75 - 26+70
SL STA 400+19 - 402+75

ADJUST ELEVATION OF VALVE BOX
SL STA 23+42, LT
SL STA 24+30, LT
SL STA 25+31, RT
SL STA 401+24, LT

NOTES:
1. SAWCUT OF EXISTING PAVEMENT & SIDEWALK SHALL BE INCIDENTAL TO ALL EXCAVATION PAY ITEMS.
2. REMOVE ABANDONED GAS LINES TO LIMITS OF FULL DEPTH CONSTRUCTION (INCIDENTAL TO ALL EXCAVATION PAY ITEMS). PLUG EXISTING LINES AT LIMITS OF CONSTRUCTION.
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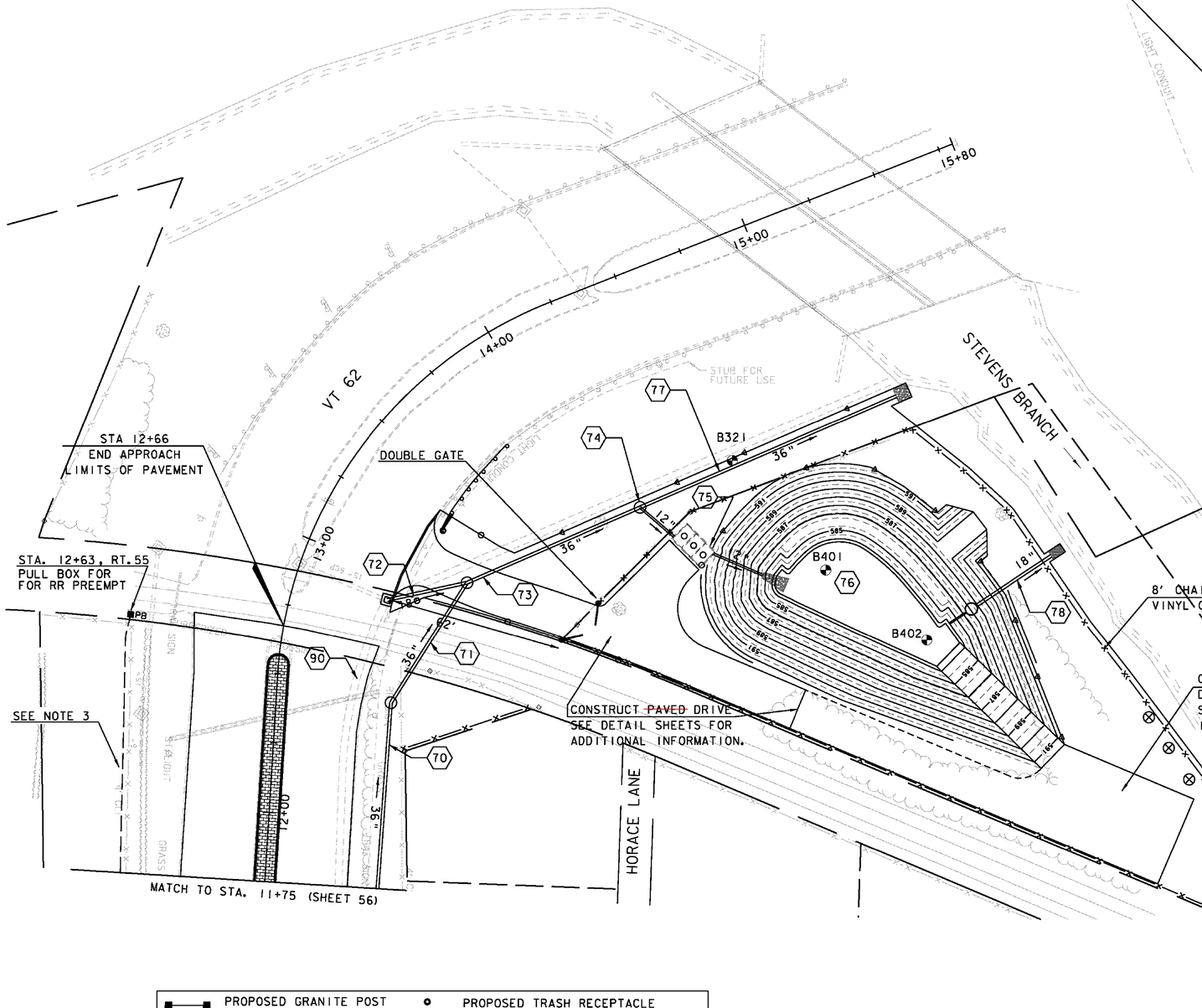
4. SEE THE ITEM DETAIL & DRAINAGE SHEETS, DRAINAGE PROFILES, AND CROSS SECTIONS FOR PROPOSED DRAINAGE INFORMATION CORRESPONDING TO NOTE NUMBERS SHOWN BY: (#)
5. ALL EXISTING TELEPHONE & ELECTRIC MANHOLES SHALL BE ADJUSTED BY OTHERS.

20 0 20 40
FEET

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: z85b010bdr_cp_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: D. PECK
GENERAL PLAN #7
PLOT DATE: 3/9/2011
DRAWN BY: D. PECK
CHECKED BY:
SHEET 62 OF 339




CLEARING AND GRUBBING, INCLUDING INDIVIDUAL TREES AND STUMPS
SL STA 10+50 - 12+61 RT
SL STA 12+83 - 12+91 LT
SL STA 12+97 - 15+66 RT

REMOVAL AND DISPOSAL OF GUARDRAIL
SL STA 13+04 - 13+80 RT

MANUFACTURED TERMINAL SECTION, FLARED
SL STA 13+31 - 13+80 RT

REMOVAL OF EXISTING FENCE
SL STA 12+25 - 12+58 RT
SL STA 13+24 - 15+21 RT

CHAIN-LINK FENCE, 8 FEET
SL STA 12+95 - 15+80 RT (VINYL COATED, PAINTED BLACK)

GATE FOR CHAIN-LINK FENCE, 8 FEET
SL STA 13+28 RT (18') (VINYL COATED, PAINTED BLACK)

CHAIN-LINK FENCE, 4 FEET
SL STA 12+25 - 12+44, RT

COLD PLANING, BITUMINOUS PAVEMENT
SL STA 11+75 - 12+66

STONE FILL, TYPE III
SL STA 14+57 RT
SL STA 15+28 RT
SL STA 15+59 RT

CONSTRUCT DRIVE
SL STA 13+11 RT (W/ 3" CURB REVEAL) (SEE SHEET #6)

NOTES:
1. ALL 8-FOOT HIGH CHAIN-LINK FENCE AND GATES FOR CHAIN-LINK FENCE, INCLUDING ASSOCIATED HARDWARE AND FURNISHINGS SHALL BE VINYL COATED, COLOR BLACK.
2. SEE THE ITEM DETAIL & DRAINAGE SHEETS, DRAINAGE PROFILES, AND CROSS SECTIONS FOR PROPOSED DRAINAGE INFORMATION CORRESPONDING TO NOTE NUMBERS SHOWN BY: (#)
3. SEE TRAFFIC SIGNAL PLANS FOR CONDUIT AND PULL BOX INFORMATION (SHEET 165).
4. ALL EXISTING TELEPHONE & ELECTRIC MANHOLES SHALL BE ADJUSTED BY OTHERS.

- PROPOSED GRANITE POST AND CHAIN FENCE
- PROPOSED ORNAMENTAL STREET LIGHT
- PROPOSED SIGNAL POLE WITH LUMINAIRE
- BORING/AUGER LOCATIONS
- PROPOSED TRASH RECEPTACLE
- PROPOSED PARKING METER POST
- PROPOSED TREE LOCATION
- 4' x 5' PROPOSED TREE PIT
- PROPOSED FIRE HYDRANT

20 0 20 40
FEET

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-I(34) C/2

FILE NAME: z85b0l0bdr_cp_C2 | PLOT DATE: 3/9/2011
PROJECT LEADER: G. BAKOS | DRAWN BY: D. PECK
DESIGNED BY: D. PECK | CHECKED BY:
GENERAL PLAN #8 | SHEET 63 OF 339

PROPOSED GRANITE POST AND CHAIN FENCE
PROPOSED ORNAMENTAL STREET LIGHT
PROPOSED SIGNAL POLE WITH LUMINAIRE
BORING/AUGER LOCATIONS
PROPOSED PARKING METER POST
PROPOSED TREE LOCATION
4' x 5' PROPOSED TREE PIT
PROPOSED FIRE HYDRANT

N
VT. STATE PLANE GRID

WELLINGTON STREET
FRANKLIN STREET
708+50
708+00
STA 707+80.00
END APPROACH
LIMITS OF PAVEMENT
B322
424+00
ELM STREET
423+00
STA 423+90.00
END APPROACH
LIMITS OF PAVEMENT
(FORMER) MATHEWSON SCHOOL
GRAVEL DRIVE
CONCRETE SIDEWALK
707+00
B323
ELM STREET
706+00
MATCH TO STA. 705+75 (SHEET 68)

MATCH TO STA. 419+50 (SHEET 67)
SUMMER STREET
420+00
421+00
422+00
N/F
SET ONE
PROPERTIES LLC
No. 9
PAVED LOT
N/F
LENA & GEORGE
A MOLLA
No. 7
CONCRETE SIDEWALK
GRAVEL DRIVE
N/F
JIMMY CULVER &
PAUL DANIELSON
No. 8
KEITH AVE.
ONE WAY
GRAVEL LOT
B324
18" PEP
PAVED LOT
CONCRETE SIDEWALK

COLD PLANING, BITUMINOUS PAVEMENT
SL STA 419+50 - 423+90
SL STA 422+07 - 422+16 LT
SL STA 705+75 - 707+80

NOTES:
1. SAWCUT OF EXISTING PAVEMENT & SIDEWALK SHALL BE INCIDENTAL TO ALL EXCAVATION PAY ITEMS.
2. REMOVE ABANDONED GAS LINES TO LIMITS OF FULL DEPTH CONSTRUCTION (INCIDENTAL TO ALL EXCAVATION PAY ITEMS). PLUG EXISTING LINES AT LIMITS OF CONSTRUCTION.
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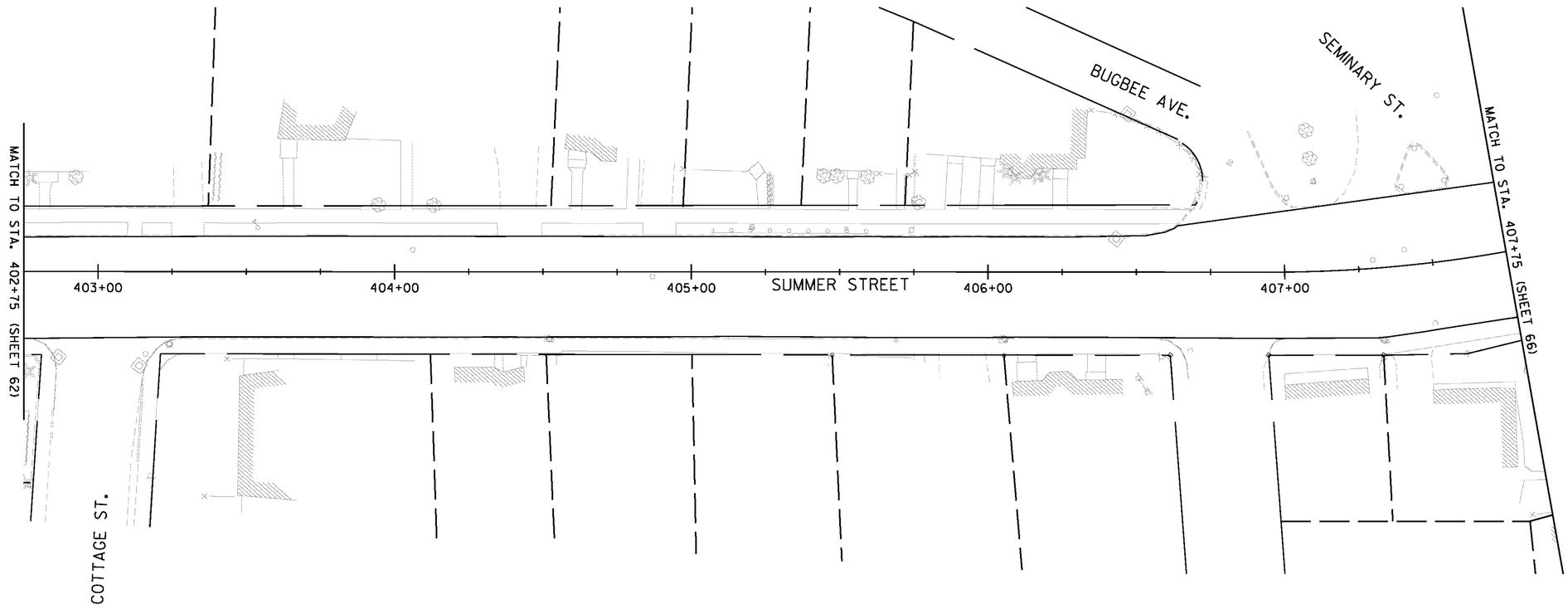
5. ALL EXISTING TELEPHONE & ELECTRIC MANHOLES SHALL BE ADJUSTED BY OTHERS.

20 0 20 40
FEET

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-I(34) C/2

FILE NAME: z85b010bdr_cp_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: D. PECK
GENERAL PLAN #9
PLOT DATE: 3/9/2011
DRAWN BY: D. PECK
CHECKED BY:
SHEET 64 OF 339

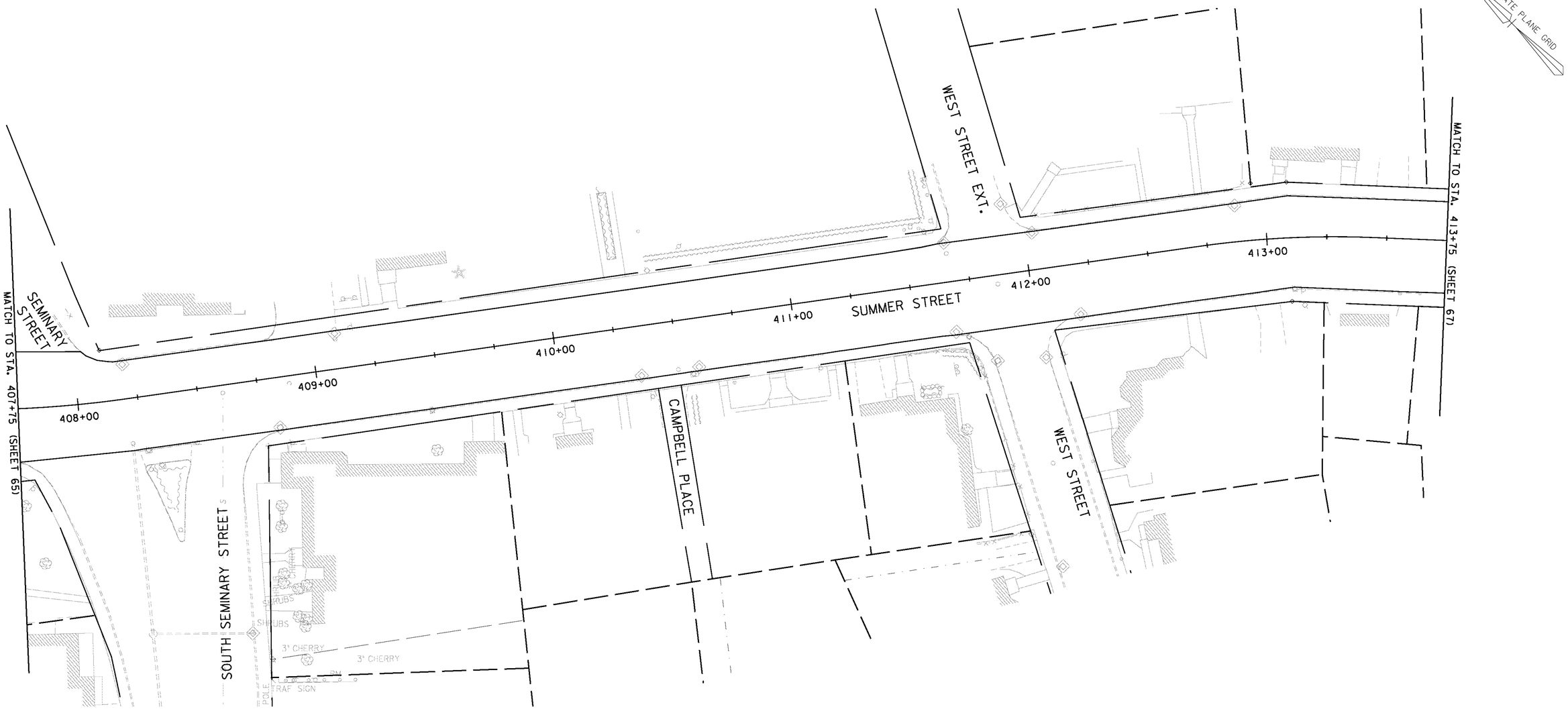



COLD PLANING, BITUMINOUS PAVEMENT
SL STA 402+75 - 407+75

20 0 20 40
FEET

VHB Vanasse Hangen Brustlin, Inc.

| | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-1(34) C/2 |
| FILE NAME: z85b010bdr_cp_C2 | PLOT DATE: 3/9/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: D. PECK |
| DESIGNED BY: D. PECK | CHECKED BY: |
| GENERAL PLAN #10 | SHEET 65 OF 339 |



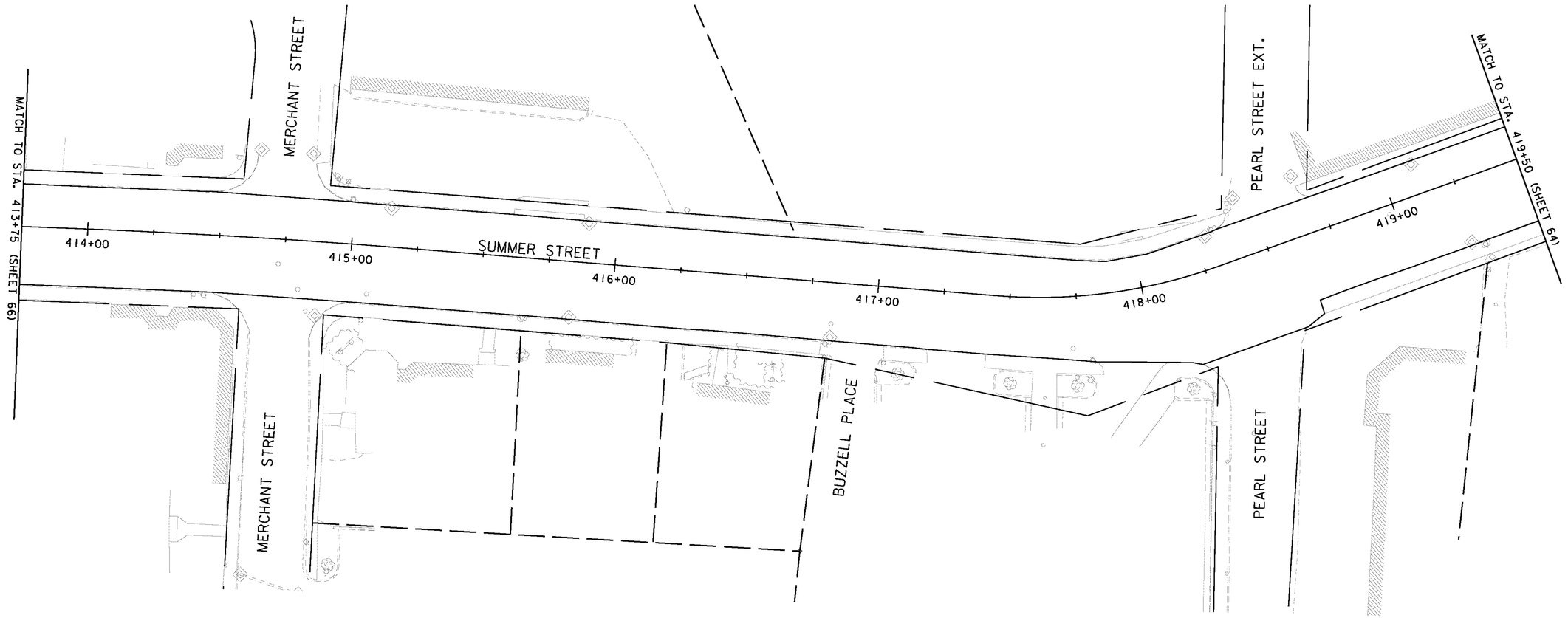

ADJUST ELEVATION OF VALVE BOX
SL STA 409+52, LT

COLD PLANING, BITUMINOUS PAVEMENT
SL STA 407+75 - 413+75

20 0 20 40
FEET

VHB Vanasse Hangen Brustlin, Inc.

| | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-1(34) C/2 |
| FILE NAME: z85b010bdr_cp_C2 | PLOT DATE: 3/9/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: D. PECK |
| DESIGNED BY: D. PECK | CHECKED BY: |
| GENERAL PLAN #11 | SHEET 66 OF 339 |




COLD PLANING, BITUMINOUS PAVEMENT
SL STA 413+75 - 419+50

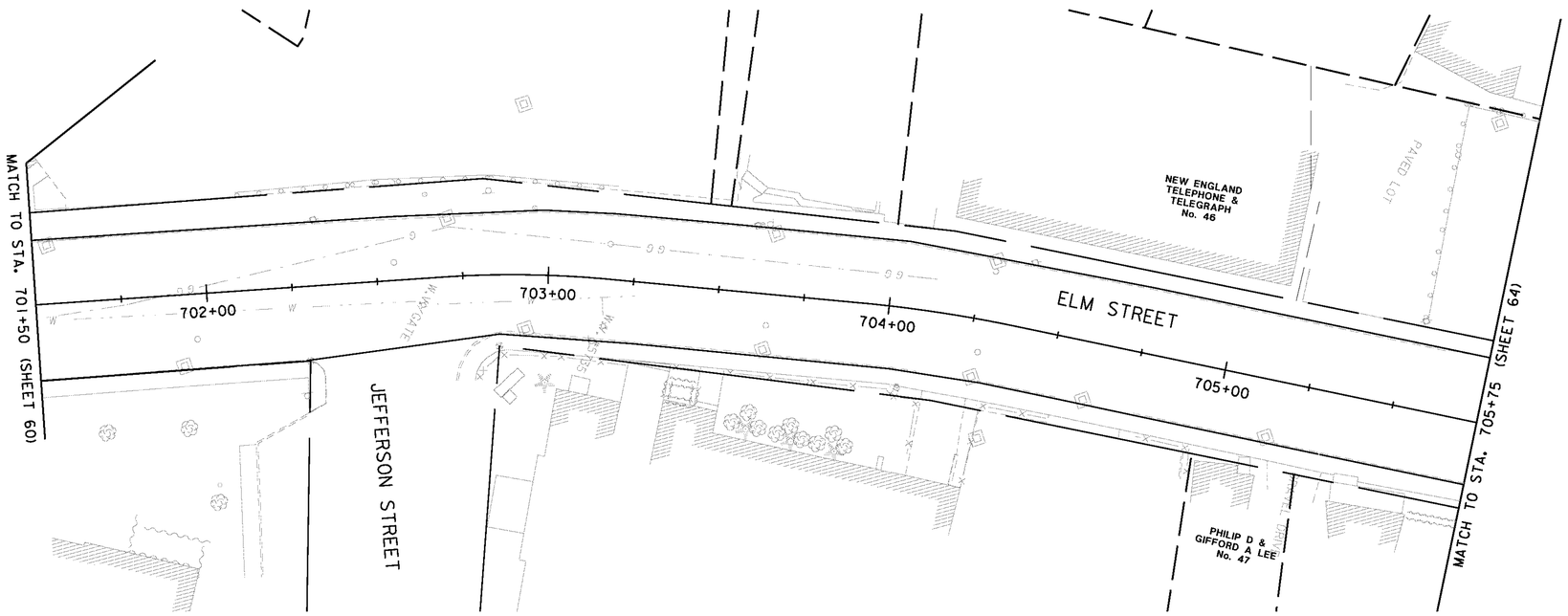
20 0 20 40
FEET

VHB Vanasse Hangen Brustlin, Inc.

| | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-1(34) C/2 |
| FILE NAME: z85b010bdr_cp_C2 | PLOT DATE: 3/9/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: D. PECK |
| DESIGNED BY: D. PECK | CHECKED BY: |
| GENERAL PLAN #12 | SHEET 67 OF 339 |

PROPOSED GRANITE POST AND CHAIN FENCE
PROPOSED ORNAMENTAL STREET LIGHT
PROPOSED SIGNAL POLE WITH LUMINAIRE
BORING/AUGER LOCATIONS
PROPOSED TRASH RECEPTACLE
PROPOSED PARKING METER POST
PROPOSED TREE LOCATION
4' x 5' PROPOSED TREE PIT
PROPOSED FIRE HYDRANT

N
VT. STATE PLANE GRID




ADJUST ELEVATION OF VALVE BOX
SL STA 702+63, RT
SL STA 703+17, RT

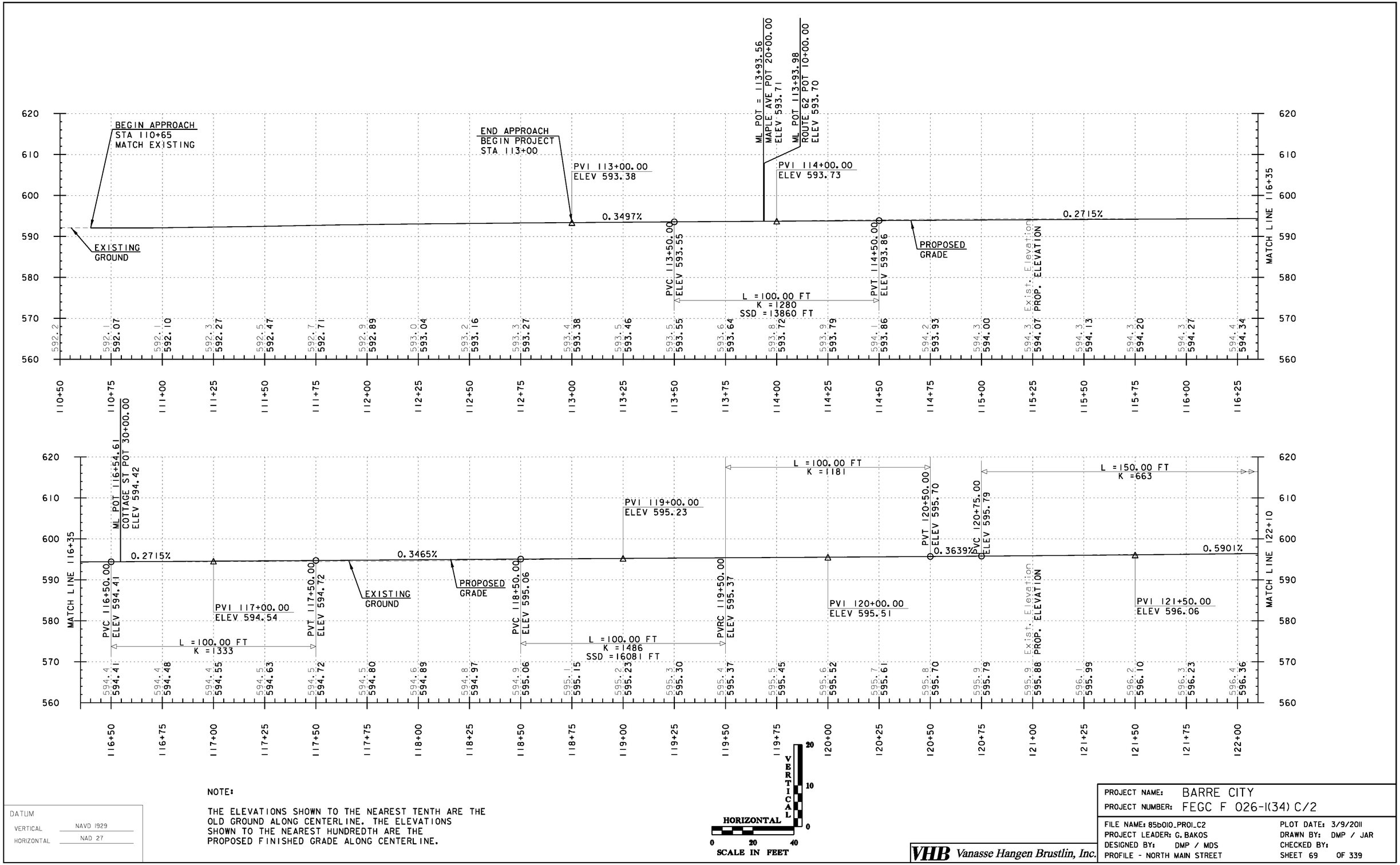
COLD PLANING & BITUMINOUS PAVEMENT
SL STA 701+50 - 705+75

20 0 20 40
FEET

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: z85b010bdr_cp_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: D. PECK
GENERAL PLAN #13
PLOT DATE: 3/9/2011
DRAWN BY: D. PECK
CHECKED BY:
SHEET 68 OF 339




NOTE:

THE ELEVATIONS SHOWN TO THE NEAREST TENTH ARE THE OLD GROUND ALONG CENTERLINE. THE ELEVATIONS SHOWN TO THE NEAREST HUNDREDTH ARE THE PROPOSED FINISHED GRADE ALONG CENTERLINE.

DATUM

VERTICAL NAVD 1929

HORIZONTAL NAD 27

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY

PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85D010_PROI_C2

PROJECT LEADER: G. BAKOS

DESIGNED BY: DMP / MDS

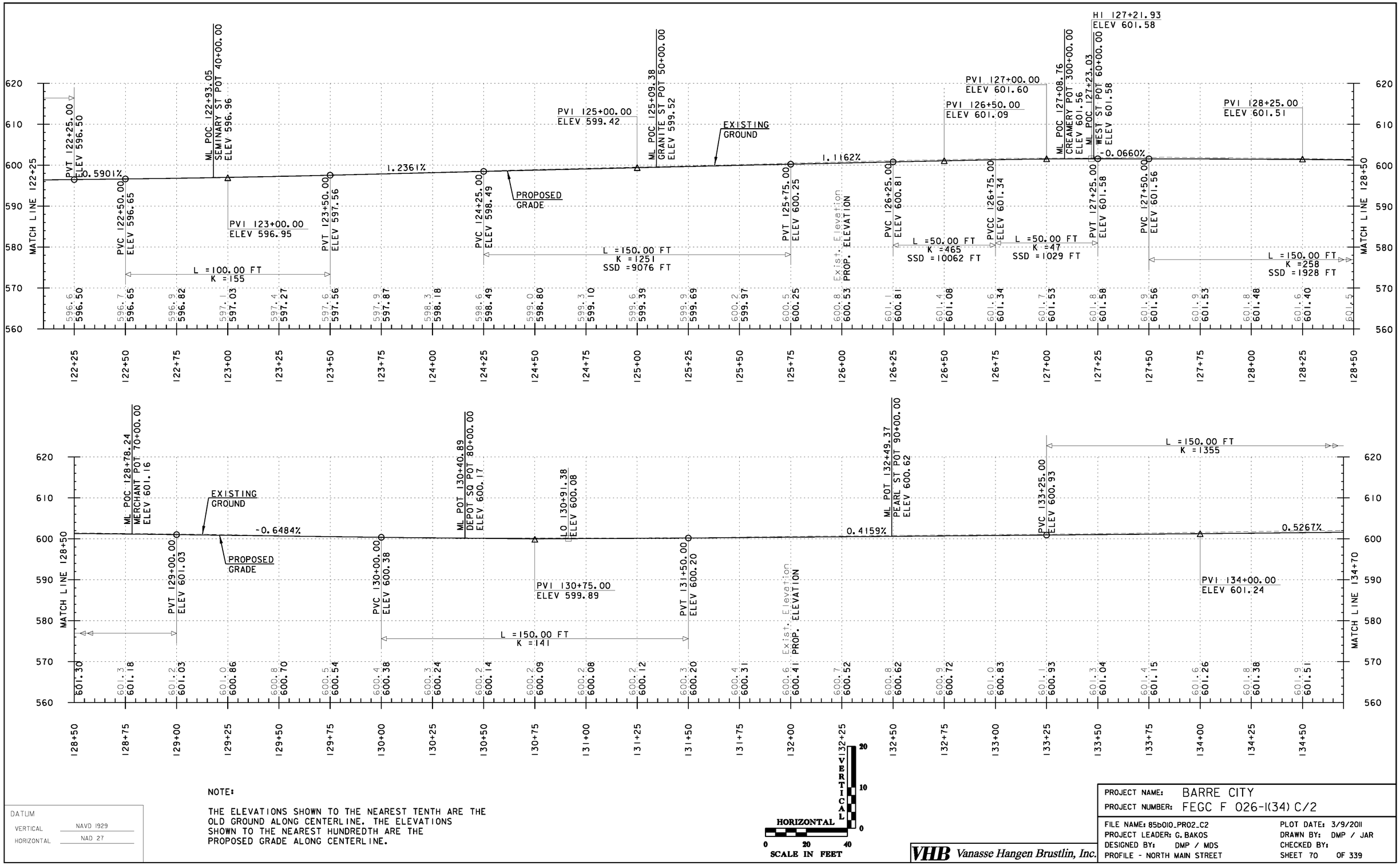
PROFILE - NORTH MAIN STREET

PLOT DATE: 3/9/2011

DRAWN BY: DMP / JAR

CHECKED BY:

SHEET 69 OF 339




NOTE:

THE ELEVATIONS SHOWN TO THE NEAREST TENTH ARE THE OLD GROUND ALONG CENTERLINE. THE ELEVATIONS SHOWN TO THE NEAREST HUNDREDTH ARE THE PROPOSED GRADE ALONG CENTERLINE.

DATUM

VERTICAL NAVD 1929

HORIZONTAL NAD 27

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY

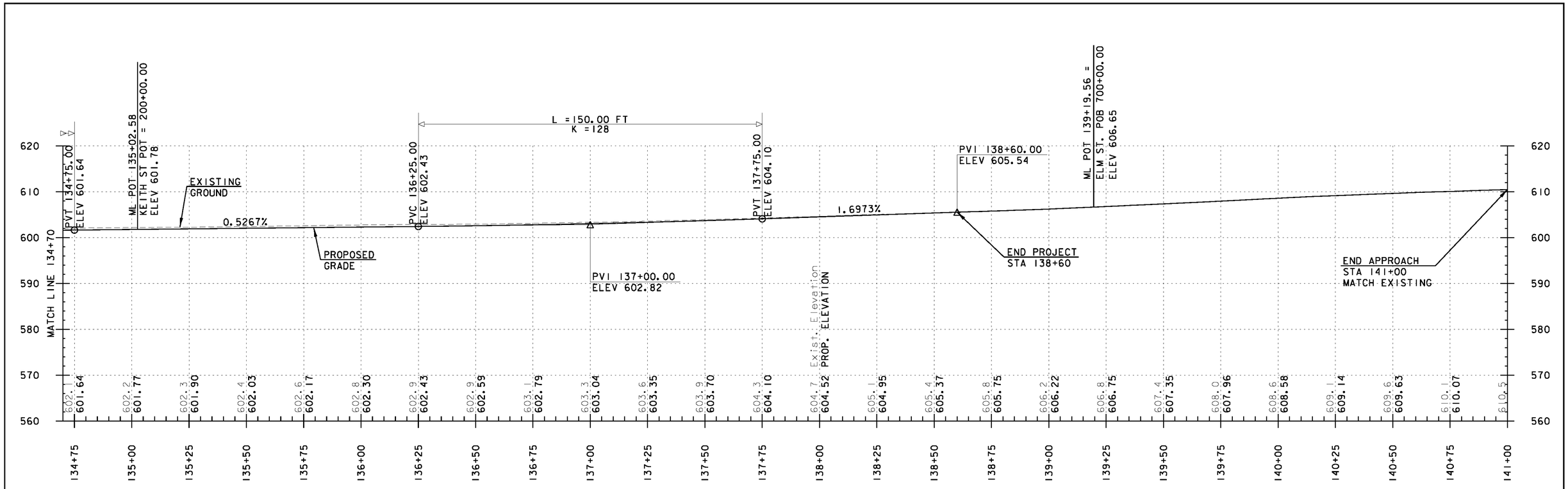
PROJECT NUMBER: FEGC F 026-I(34) C/2

FILE NAME: 85D010_PR02_C2 PLOT DATE: 3/9/2011

PROJECT LEADER: G. BAKOS DRAWN BY: DMP / JAR

DESIGNED BY: DMP / MDS CHECKED BY:

PROFILE - NORTH MAIN STREET SHEET 70 OF 339




NOTE:

THE ELEVATIONS SHOWN TO THE NEAREST TENTH ARE THE OLD GROUND ALONG CENTERLINE. THE ELEVATIONS SHOWN TO THE NEAREST HUNDREDTH ARE THE PROPOSED FINISHED GRADE ALONG CENTERLINE.

DATUM

VERTICAL NAVD 1929

HORIZONTAL NAD 27

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY

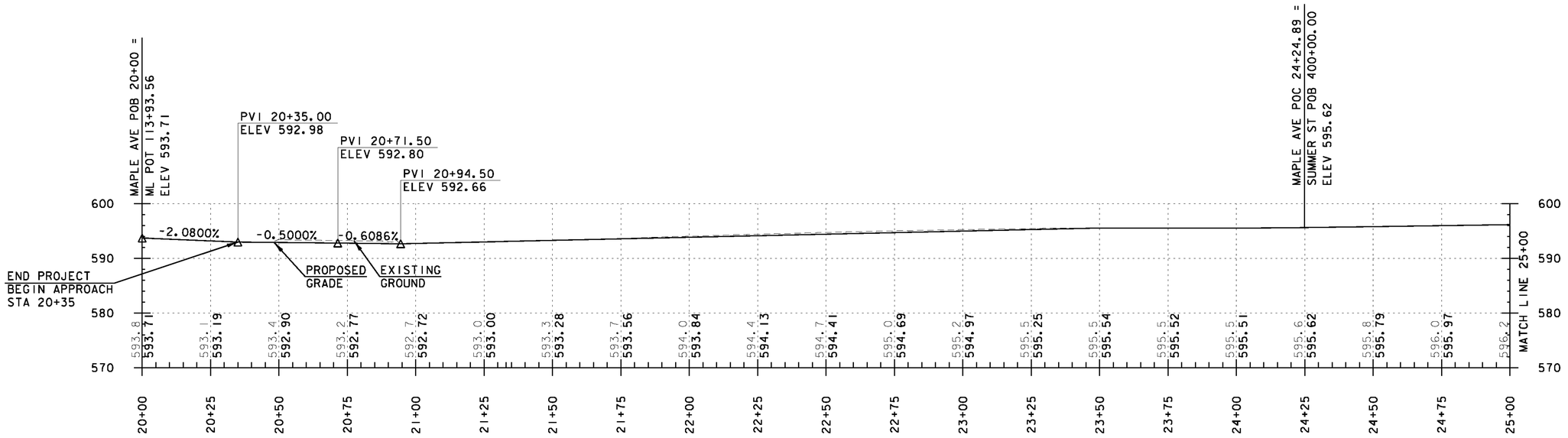
PROJECT NUMBER: FEGC F 026-1(34) C/2

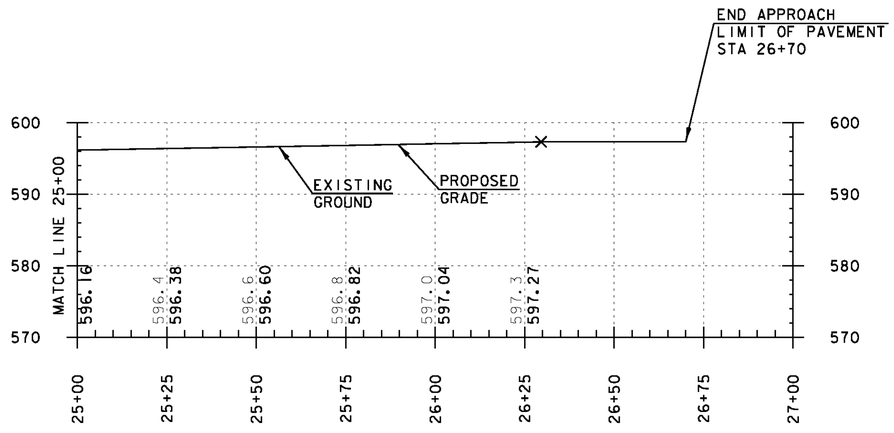
FILE NAME: 85D010_PR03_C2 PLOT DATE: 3/9/2011

PROJECT LEADER: G. BAKOS DRAWN BY: DMP / JAR

DESIGNED BY: DMP / MDS CHECKED BY:

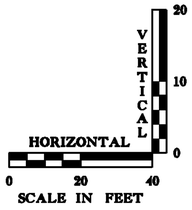
PROFILE - NORTH MAIN STREET SHEET 71 OF 339




NOTE:

THE ELEVATIONS SHOWN TO THE NEAREST TENTH ARE THE OLD GROUND ALONG CENTERLINE. THE ELEVATIONS SHOWN TO THE NEAREST HUNDREDTH ARE THE PROPOSED GROUND ALONG CENTERLINE.




DATUM

VERTICAL NAVD 1929

HORIZONTAL NAD 27

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY

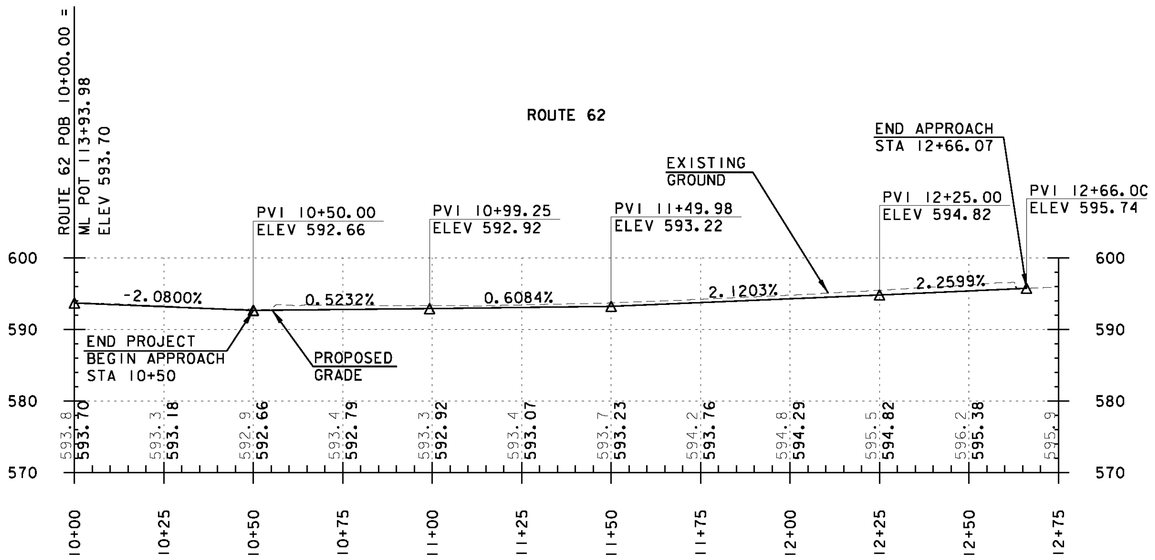
PROJECT NUMBER: FEGC F 026-1(34) C/2

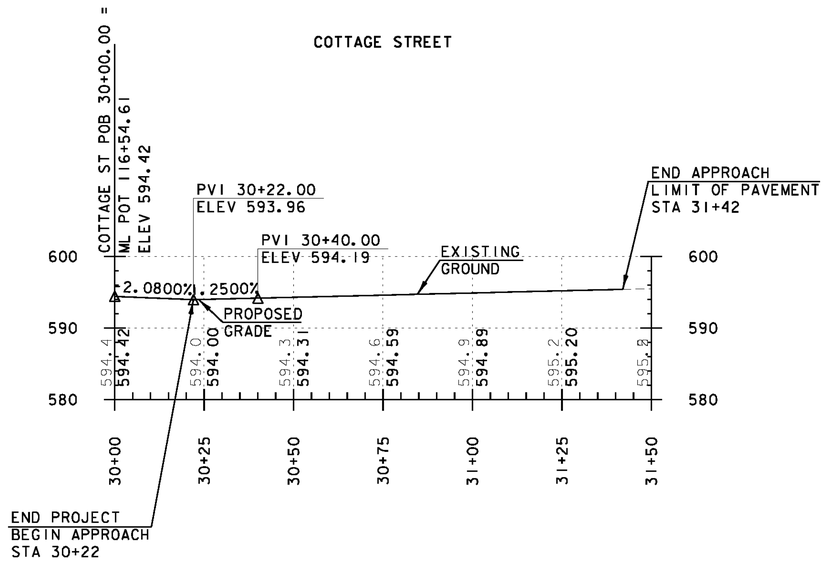
FILE NAME: 85D010_PR04_C2 | PLOT DATE: 3/9/2011

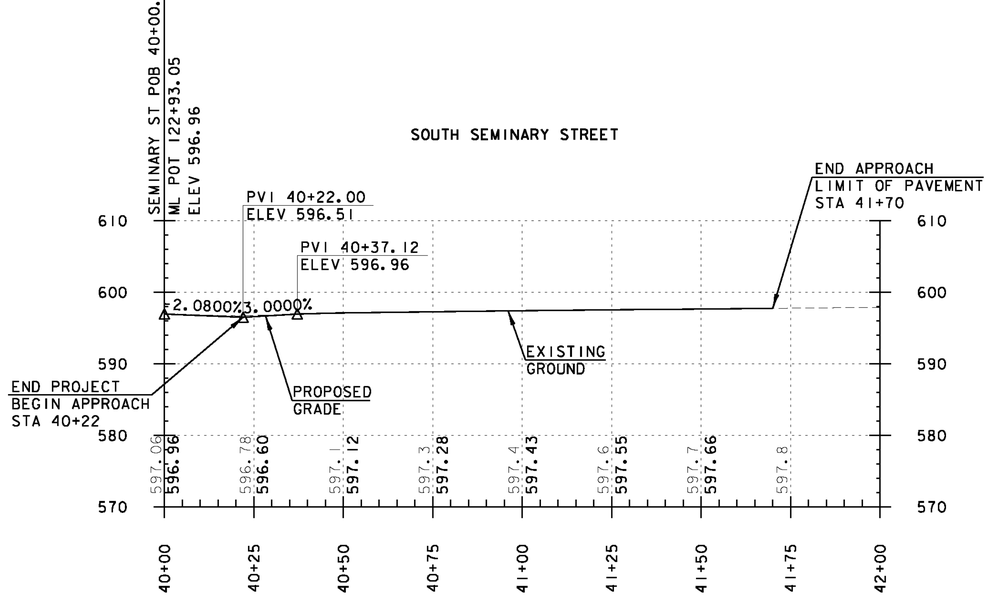
PROJECT LEADER: G. BAKOS | DRAWN BY: DMP / JAR

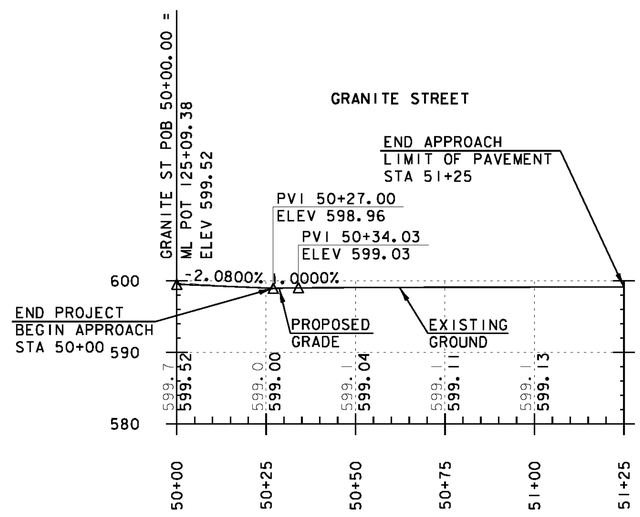
DESIGNED BY: DMP / MDS | CHECKED BY:

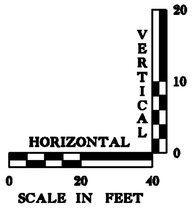
PROFILE - MAPLE AVENUE | SHEET 72 OF 339




NOTE:

THE ELEVATIONS SHOWN TO THE NEAREST TENTH ARE THE OLD GROUND ALONG CENTERLINE. THE ELEVATIONS SHOWN TO THE NEAREST HUNDREDTH ARE THE PROPOSED GROUND ALONG CENTERLINE.

DATUM

VERTICAL NAVD 1929

HORIZONTAL NAD 27

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY

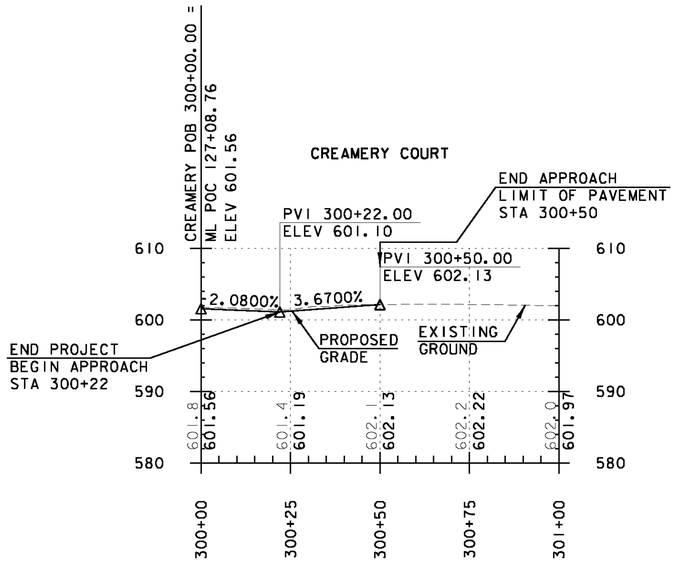
PROJECT NUMBER: FEGC F 026-1(34) C/2

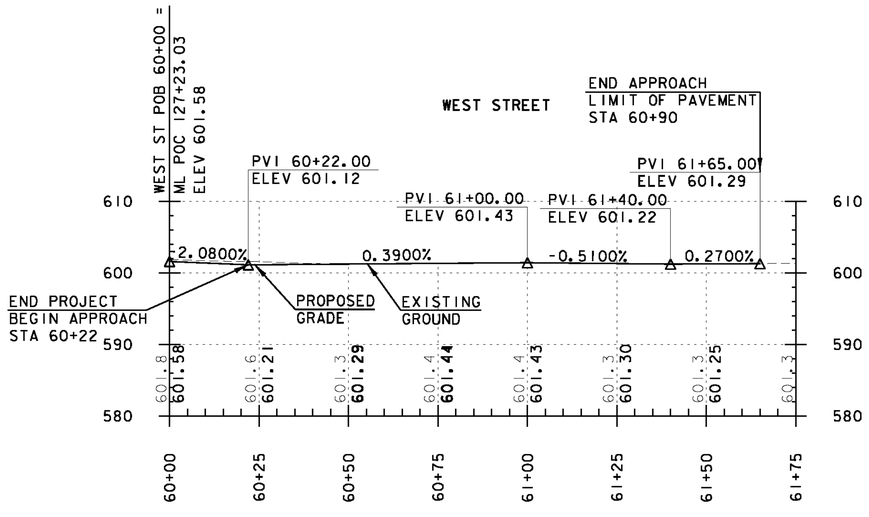
FILE NAME: 85b010_PR05_C2 PLOT DATE: 3/9/2011

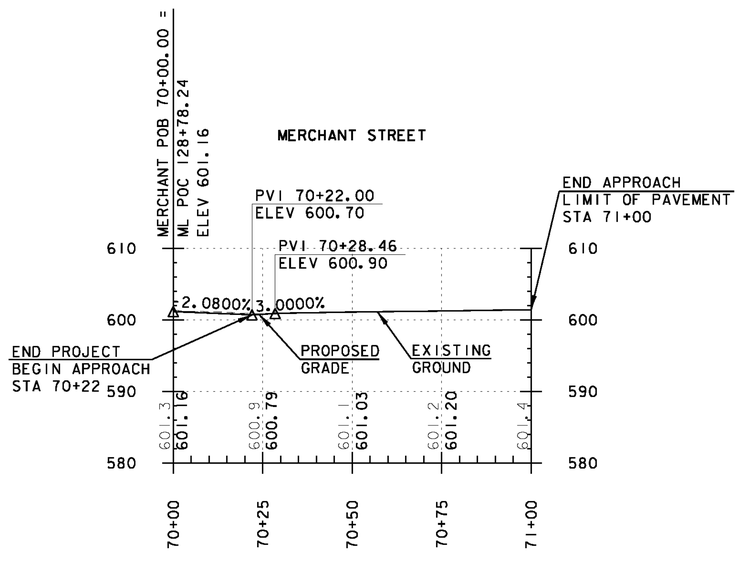
PROJECT LEADER: G. BAKOS DRAWN BY: DMP / JAR

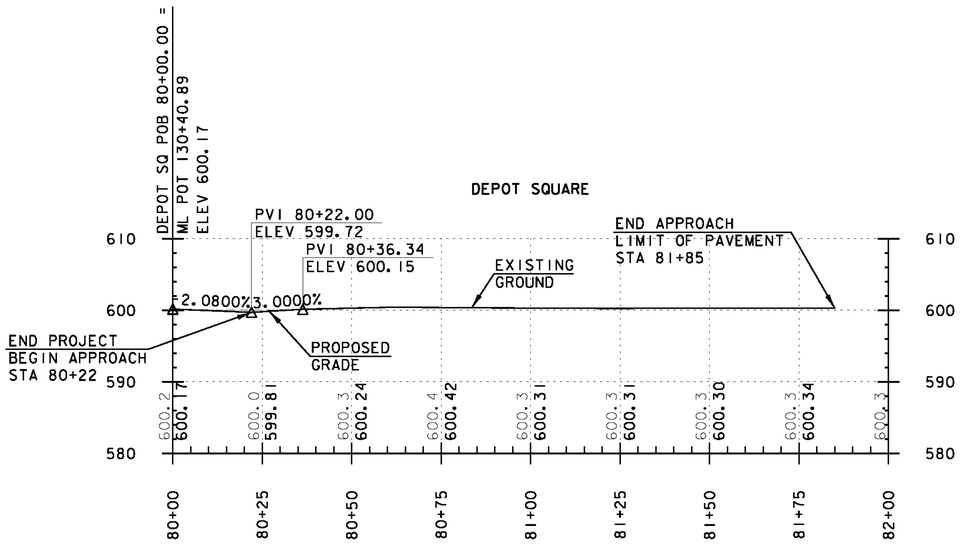
DESIGNED BY: DMP / MDS CHECKED BY:

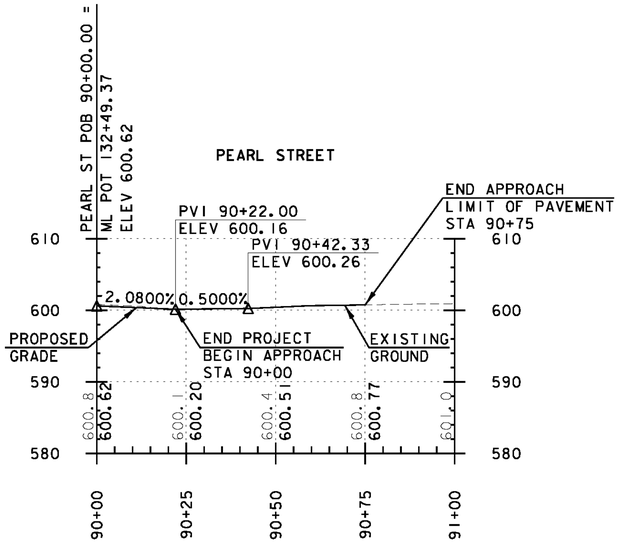
PROFILES - SIDE ROADS #1 SHEET 73 OF 339

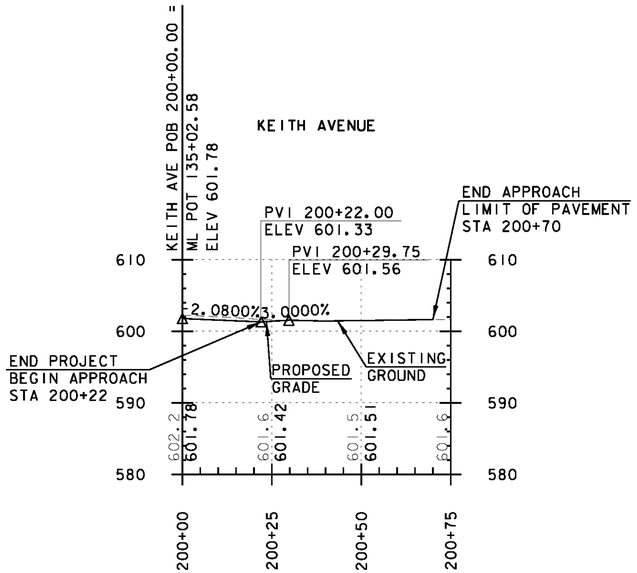


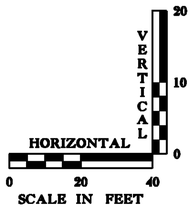




DATUM

VERTICAL NAVD 1929

HORIZONTAL NAD 27

NOTE:

THE ELEVATIONS SHOWN TO THE NEAREST TENTH ARE THE OLD GROUND ALONG CENTERLINE. THE ELEVATIONS SHOWN TO THE NEAREST HUNDREDTH ARE THE PROPOSED FINISHED GRADE ALONG CENTERLINE.

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY

PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_PR06_C2

PROJECT LEADER: G. BAKOS

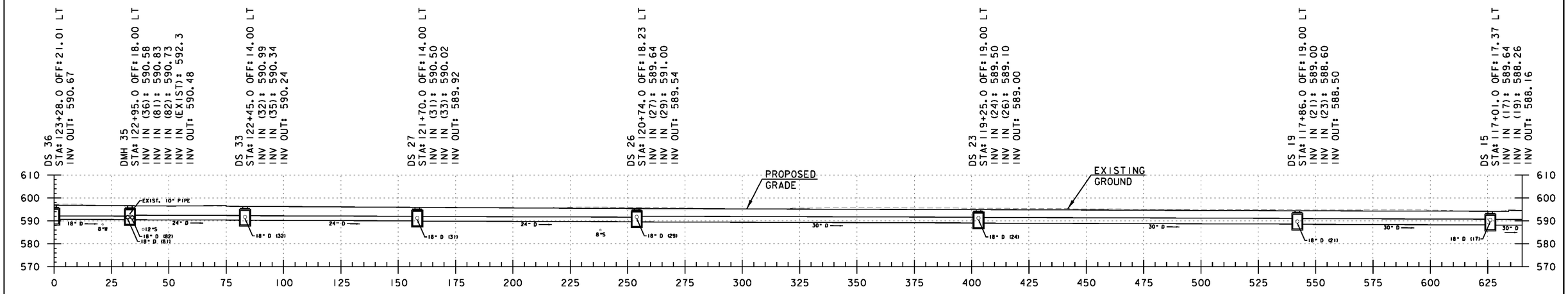
DESIGNED BY: DMP / MDS

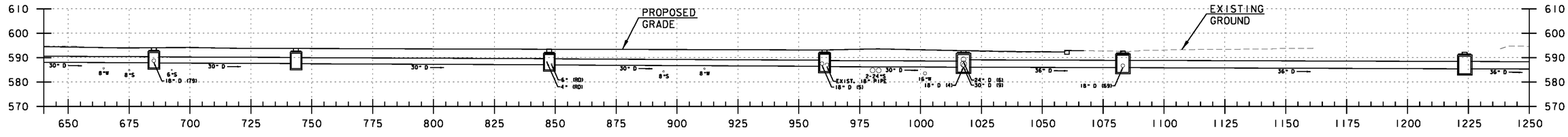
PROFILES - SIDE ROADS #2

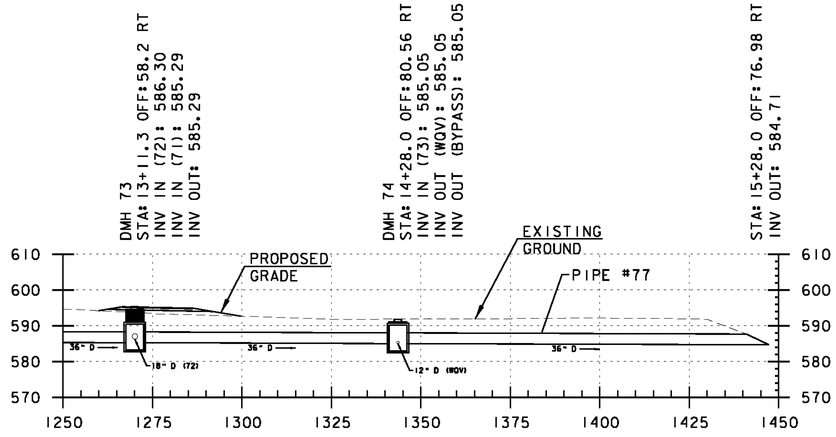
PLOT DATE: 3/9/2011

DRAWN BY: DMP / JAR

CHECKED BY:




# DRAINAGE RUN 36 TO 74

DATUM
VERTICAL NAVD 1929
HORIZONTAL NAD 27

0 20 40
SCALE IN FEET

NOTE:

INFORMATION REGARDING ROOF DRAINS IS NOT DISPLAYED ON THESE SHEETS. SEE ROOF DRAIN PROFILES.

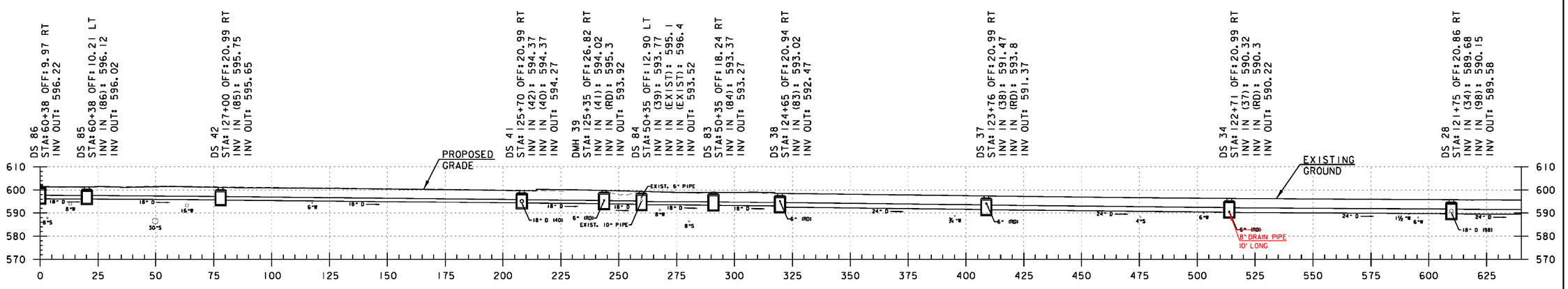
SOUTH SEMINARY ST. TO VT ROUTE 62

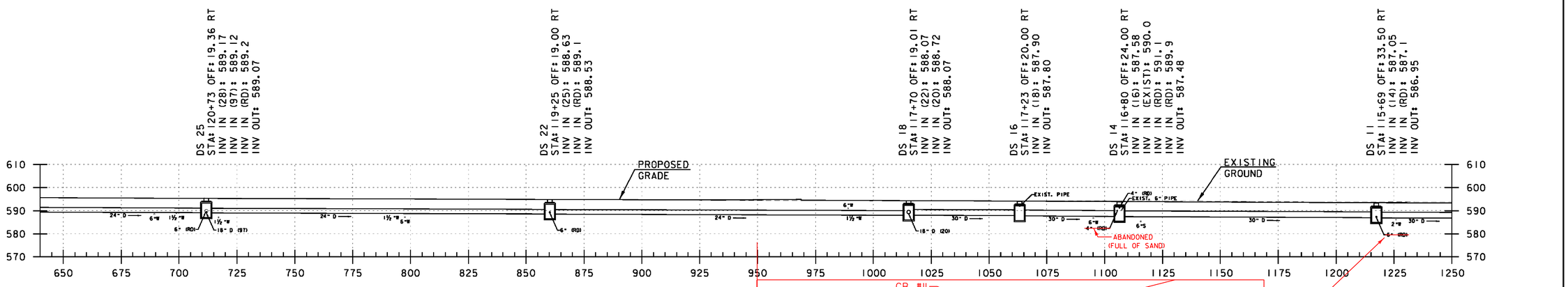
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-I(34) C/2

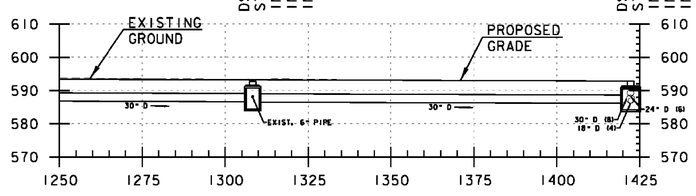
FILE NAME: 85D010_PROI_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
DRAINAGE PROFILES

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 75 OF 339

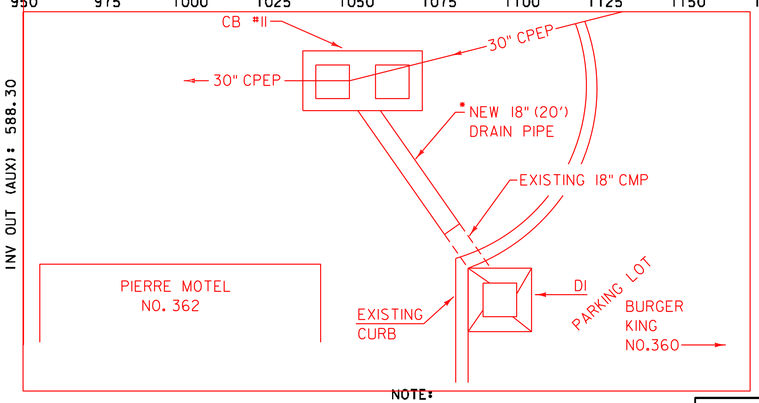
VHB Vanasse Hangen Brustlin, Inc.




DRAINAGE RUN (86) TO (7)




18" CPEP (20')
NEW PIPE FROM BURGER KING PARKING LOT DI TO CB #11. SEE DAILEY REPORT DATED 10/10/11 (SEE SKETCK)

WEST STREET TO VT ROUTE 62

DATUM
VERTICAL: NAVD 1929
HORIZONTAL: NAD 27

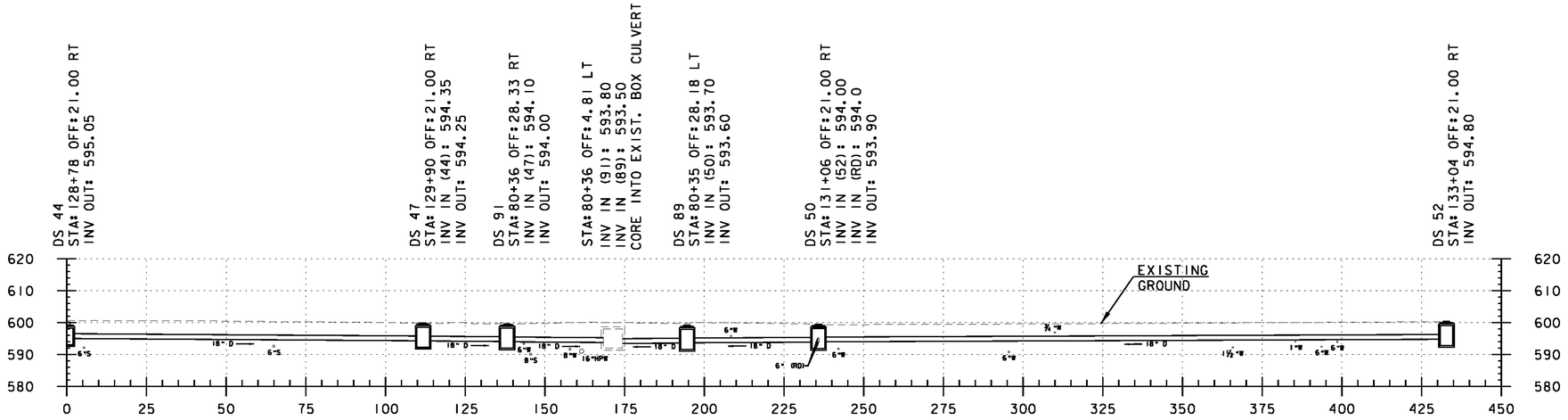
SCALE IN FEET
0 20 40

NOTE:
INFORMATION REGARDING ROOF DRAINS IS NOT DISPLAYED ON THESE SHEETS. SEE ROOF DRAIN PROFILES.

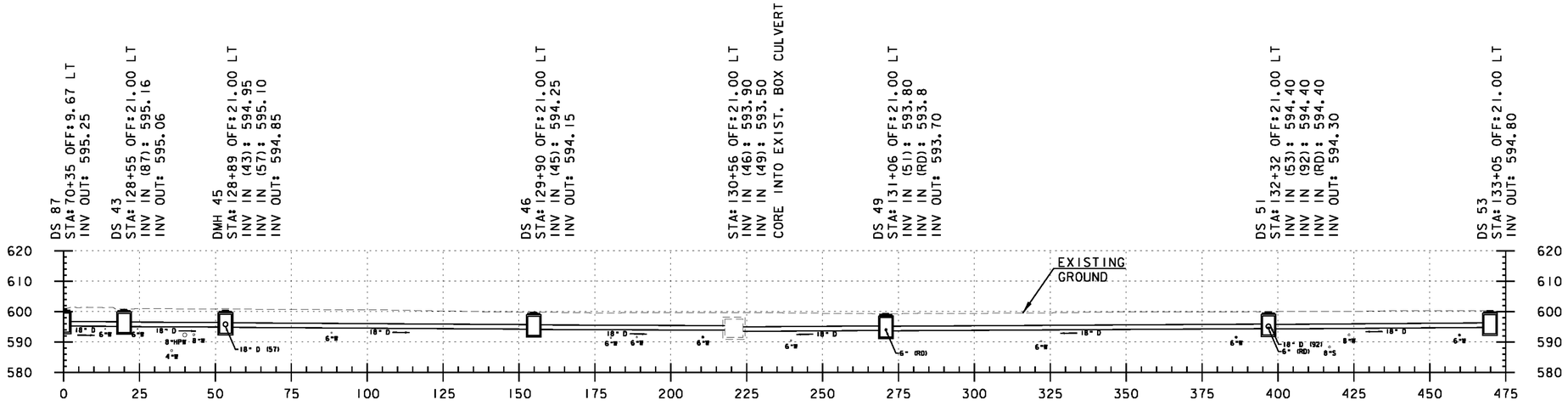
VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85D010_PROI_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
DRAINAGE PROFILES
PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 76 OF 339




DRAINAGE RUN (44) TO (52)




DRAINAGE RUN (87) TO (53)

DATUM

VERTICAL NAVD 1929

HORIZONTAL NAD 27

0 20 40

SCALE IN FEET

NOTE:

INFORMATION REGARDING ROOF DRAINS IS NOT DISPLAYED ON THESE SHEETS. SEE ROOF DRAIN PROFILES.

VHB Vanasse Hangen Brustlin, Inc.

POTASH BROOK BOX CULVERT

PROJECT NAME: BARRE CITY

PROJECT NUMBER: FEGC F 026-I(34) C/2

FILE NAME: 85D010_PROI_C2

PROJECT LEADER: G. BAKOS

DESIGNED BY: DMP / MDS

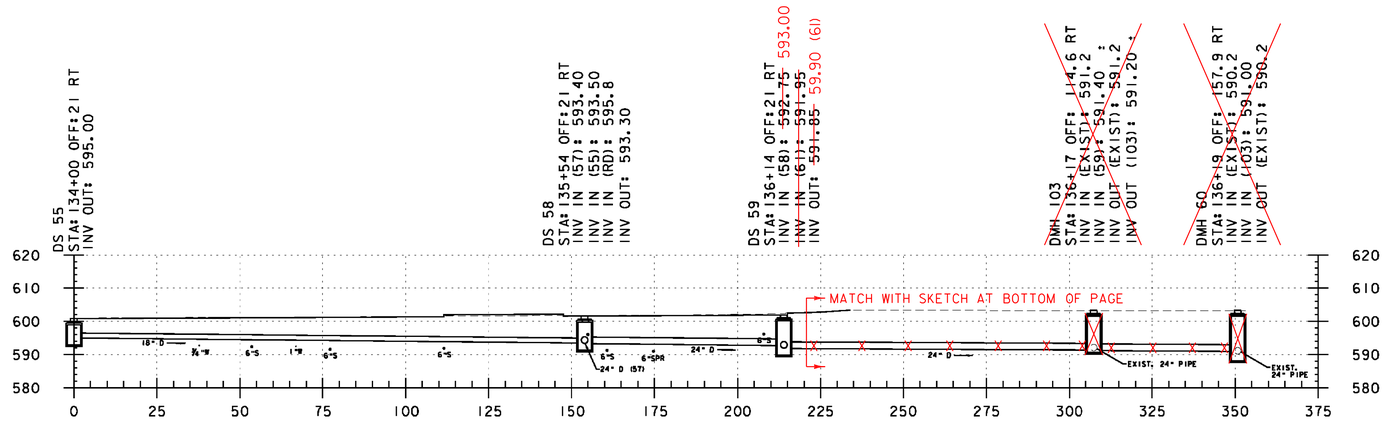
DRAINAGE PROFILES

PLOT DATE: 3/9/2011

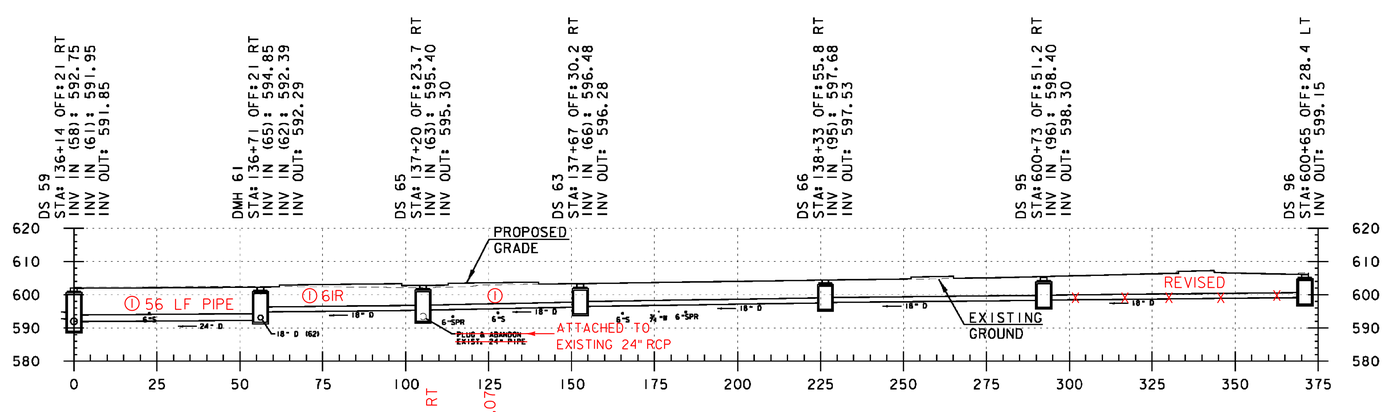
DRAWN BY: DMP / JAR

CHECKED BY:

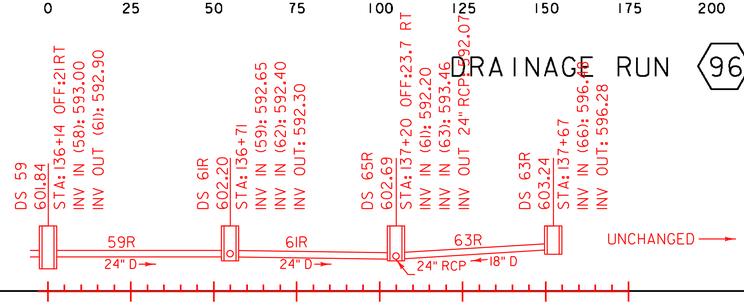
SHEET 77 OF 339




DRAINAGE RUN (55) TO (60)




DRAINAGE RUN (96) TO (59)




NOTE:

INFORMATION REGARDING ROOF DRAINS IS NOT DISPLAYED ON THESE SHEETS. SEE ROOF DRAIN PROFILES.

SCALE IN FEET
0 20 40

VHB Vanasse Hangen Brustlin, Inc.

ALLEY WAY OUTLET

| | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-I(34) C/2 |
| FILE NAME: 85b010_PROI_C2 | PLOT DATE: 3/9/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: DMP / JAR |
| DESIGNED BY: DMP / MDS | CHECKED BY: |
| DRAINAGE PROFILES | SHEET 78 OF 339 |

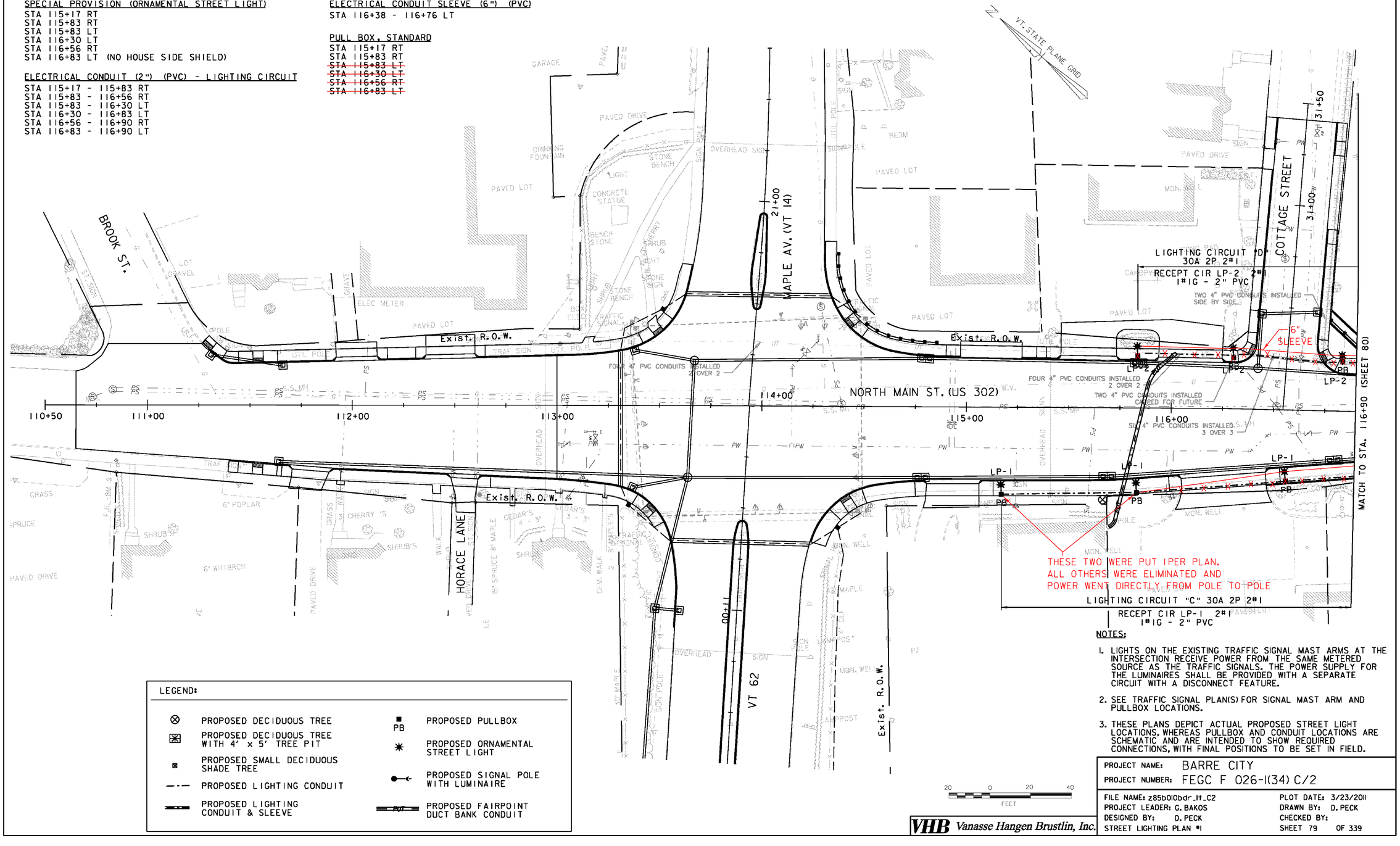
① DRAINAGE RUN REVISED TO UTILIZE EXISTING 24" RCP RATHER THAN INSTALL DRAINAGE RUN #59. DRAINAGE RUN #59 COULD NOT BE CONSTRUCTED DUE TO UNKNOWN OBSTUCLES BENEATH THE PEDESTRIAN WALKWAY.

SPECIAL PROVISION (ORNAMENTAL STREET LIGHT)
STA 115+17 RT
STA 115+83 RT
STA 115+83 LT
STA 116+30 LT
STA 116+56 RT
STA 116+83 LT (NO HOUSE SIDE SHIELD)

ELECTRICAL CONDUIT (2") (PVC) - LIGHTING CIRCUIT
STA 115+17 - 115+83 RT
STA 115+83 - 116+56 RT
STA 115+83 - 116+30 LT
STA 116+30 - 116+83 LT
STA 116+56 - 116+90 RT
STA 116+83 - 116+90 LT

ELECTRICAL CONDUIT SLEEVE (6") (PVC)
STA 116+38 - 116+76 LT

PULL BOX, STANDARD
STA 115+17 RT
STA 115+83 RT
~~STA 115+83 LT~~
~~STA 116+30 LT~~
~~STA 116+56 RT~~
~~STA 116+83 LT~~




LEGEND:

- PROPOSED DECIDUOUS TREE
- PROPOSED DECIDUOUS TREE WITH 4' x 5' TREE PIT
- PROPOSED SMALL DECIDUOUS SHADE TREE
- PROPOSED LIGHTING CONDUIT
- PROPOSED LIGHTING CONDUIT & SLEEVE
- PROPOSED PULLBOX
- PROPOSED ORNAMENTAL STREET LIGHT
- PROPOSED SIGNAL POLE WITH LUMINAIRE
- PROPOSED FAIRPOINT DUCT BANK CONDUIT

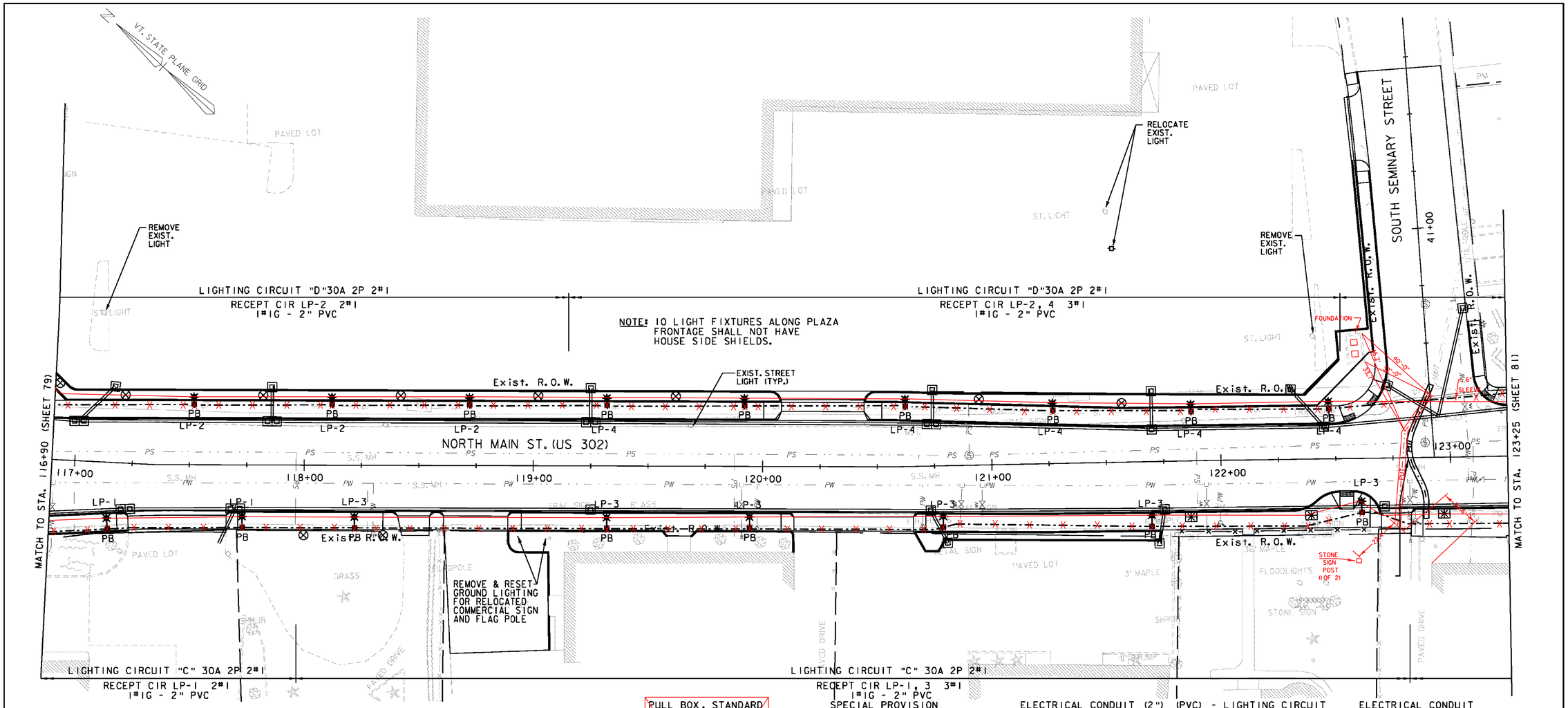
NOTES:

1. LIGHTS ON THE EXISTING TRAFFIC SIGNAL MAST ARMS AT THE INTERSECTION RECEIVE POWER FROM THE SAME METERED SOURCE AS THE TRAFFIC SIGNALS. THE POWER SUPPLY FOR THE LUMINAIRES SHALL BE PROVIDED WITH A SEPARATE CIRCUIT WITH A DISCONNECT FEATURE.
2. SEE TRAFFIC SIGNAL PLAN(S) FOR SIGNAL MAST ARM AND PULLBOX LOCATIONS.
3. THESE PLANS DEPICT ACTUAL PROPOSED STREET LIGHT LOCATIONS, WHEREAS PULLBOX AND CONDUIT LOCATIONS ARE SCHEMATIC AND ARE INTENDED TO SHOW REQUIRED CONNECTIONS, WITH FINAL POSITIONS TO BE SET IN FIELD.

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: z85b010bdr_lt_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: D. PECK
STREET LIGHTING PLAN #1
PLOT DATE: 3/23/2011
DRAWN BY: D. PECK
CHECKED BY:
SHEET 79 OF 339




REMOVING AND RESETTING LIGHT POLE
STA 121+52, LT 109' - 121+54, LT 93'

SPECIAL PROVISION (REMOVE EXISTING LIGHT POLE)
STA 117+10, LT
STA 122+40, LT

LEGEND:

- ⊗ PROPOSED DECIDUOUS TREE
- ⊠ PROPOSED DECIDUOUS TREE WITH 4' x 5' TREE PIT
- ⊡ PROPOSED SMALL DECIDUOUS SHADE TREE
- —·— PROPOSED LIGHTING CONDUIT
- ═══ PROPOSED LIGHTING CONDUIT & SLEEVE
- ■ PB PROPOSED PULLBOX
- ✱ PROPOSED ORNAMENTAL STREET LIGHT
- ●— PROPOSED SIGNAL POLE WITH LUMINAIRE
- FPT PROPOSED FAIRPOINT DUCT BANK CONDUIT

PULL BOX, STANDARD
STA 117+15 RT
STA 117+52 LT
STA 117+73 RT
STA 118+12 LT
STA 118+22 RT
STA 118+72 LT
STA 119+32 LT
STA 119+32 RT
STA 119+92 LT
STA 119+94 RT
STA 120+63 LT
STA 120+78 RT
STA 121+27 LT
STA 121+69 RT
STA 121+87 LT
STA 122+47 LT
STA 122+61 RT

SPECIAL PROVISION (REMOVING AND RESETTING GROUND/ORNAMENTAL LIGHT)
STA 118+96 RT (GHCU)
STA 119+07 RT (GHCU)

SPECIAL PROVISION (ORNAMENTAL STREET LIGHT)

| | |
|---|---|
| STA 117+15 RT | |
| STA 117+52 LT | (NO SHIELD) |
| STA 117+73 RT | |
| STA 118+12 LT | (NO SHIELD) |
| STA 118+22 RT | |
| STA 118+72 LT | (NO SHIELD) |
| STA 119+32 LT | (NO SHIELD) |
| STA 119+32 RT | |
| STA 119+92 LT | (NO SHIELD) |
| STA 119+94 RT | |
| STA 120+63 LT | (NO SHIELD) |
| STA 120+78 RT | |
| STA 121+27 LT | (NO SHIELD) |
| STA 121+69 RT | |
| STA 121+87 LT | (NO SHIELD) |
| STA 122+47 LT | (NO SHIELD) |
| STA 122+61 RT | |

ELECTRICAL CONDUIT (2") (PVC) - LIGHTING CIRCUIT

| | |
|---|---|
| STA 116+90 - | 117+15 RT |
| STA 116+90 - | 117+52 LT |
| STA 117+15 - | 117+73 RT |
| STA 117+52 - | 118+12 LT |
| STA 117+73 - | 118+22 RT |
| STA 118+12 - | 118+72 LT |
| STA 118+22 - | 119+32 RT |
| STA 118+72 - | 119+32 LT |
| STA 119+32 - | 119+92 LT |
| STA 119+32 - | 119+94 RT |
| STA 119+92 - | 120+63 LT |
| STA 119+94 - | 120+78 RT |
| STA 120+78 - | 122+61 RT |
| STA 120+63 - | 121+27 LT |
| STA 121+27 - | 121+87 LT |
| STA 121+87 - | 122+47 LT |
| STA 122+47 - | 123+25 LT |
| STA 122+61 - | 123+25 RT |

ELECTRICAL CONDUIT SLEEVE (6") (PVC)
STA 122+66 - 123+13 LT

NOTES:

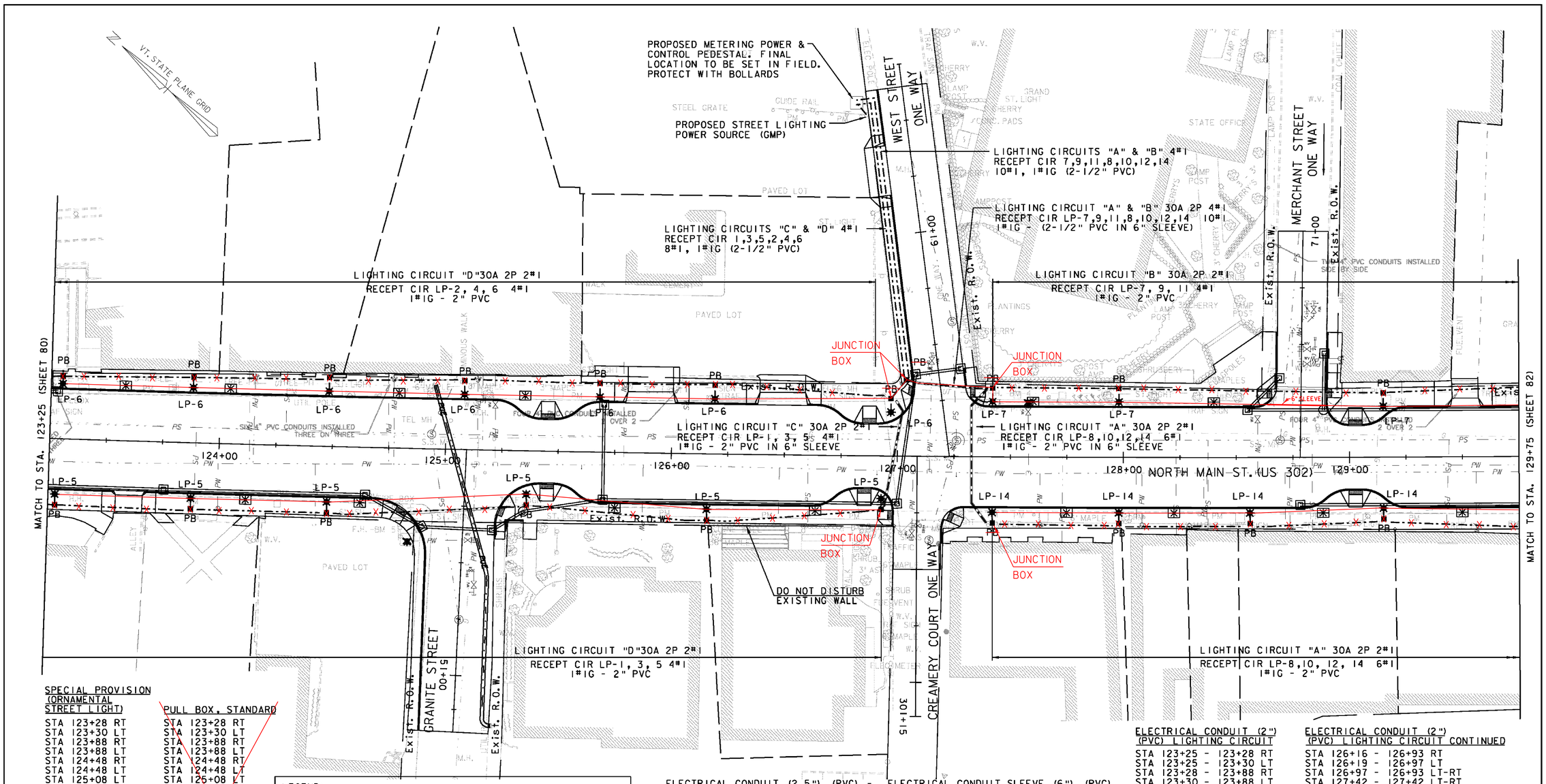
1. THESE PLANS DEPICT ACTUAL PROPOSED STREET LIGHT LOCATIONS, WHEREAS PULLBOX AND CONDUIT LOCATIONS ARE SCHEMATIC AND ARE INTENDED TO SHOW REQUIRED CONNECTIONS, WITH FINAL POSITIONS TO BE SET IN FIELD.

20 0 20 40
FEET

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-I(34) C/2

FILE NAME: z85b0l0bdr_lt_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: D. PECK
STREET LIGHTING PLAN #2
PLOT DATE: 3/23/2011
DRAWN BY: D. PECK
CHECKED BY:
SHEET 80 OF 339




SPECIAL PROVISION (ORNAMENTAL STREET LIGHT)

STA 123+28 RT
STA 123+30 LT
STA 123+88 RT
STA 123+88 LT
STA 124+48 RT
STA 124+48 LT
STA 125+08 LT
STA 125+36 LT
STA 125+68 LT
STA 126+16 RT
STA 126+19 LT
STA 126+93 RT
STA 126+97 LT
STA 127+42 RT
STA 127+42 LT
STA 127+98 RT
STA 127+98 LT
STA 128+56 RT
STA 129+15 RT
STA 129+15 LT

PULL BOX, STANDARD

STA 123+28 RT
STA 123+30 LT
STA 123+88 RT
STA 123+88 LT
STA 124+48 RT
STA 124+48 LT
STA 125+08 LT
STA 125+36 LT
STA 125+68 LT
STA 126+16 RT
STA 126+93 RT
STA 126+97 LT
STA 127+42 RT
STA 127+42 LT
STA 127+98 RT
STA 127+98 LT
STA 128+56 RT
STA 129+15 RT
STA 129+15 LT
SL STA 60+35 LT

LEGEND:

- PROPOSED DECIDUOUS TREE
- PROPOSED DECIDUOUS TREE WITH 4' x 5' TREE PIT
- PROPOSED SMALL DECIDUOUS SHADE TREE
- PROPOSED LIGHTING CONDUIT
- PROPOSED LIGHTING CONDUIT & SLEEVE
- PROPOSED PULLBOX (PB)
- PROPOSED ORNAMENTAL STREET LIGHT
- PROPOSED SIGNAL POLE WITH LUMINAIRE
- PROPOSED FAIRPOINT DUCT BANK CONDUIT

ELECTRICAL CONDUIT (2.5") (PVC) - LIGHTING CIRCUIT

STA 126+97 LT - SL STA 60+36 LT
STA 127+42 LT - SL STA 60+36 LT
SL STA 60+36 - 61+60 LT
SL STA 60+36 - 61+60 LT

BOLLARDS

SL STA 61+60 LT (4)

ELECTRICAL CONDUIT SLEEVE (6") (PVC)

STA 124+82 - 125+26 RT
STA 126+96 - 126+99 RT-LT
STA 127+04 - 127+40 LT
STA 127+39 - 127+40 LT-RT
STA 128+66 - 128+91 LT

JUNCTION PULL BOX, STANDARD

1 SL STA 60+36 LT
2 LOCATED @
3 WEST ST. INTERSECTION
4

ELECTRICAL CONDUIT (2") (PVC) LIGHTING CIRCUIT

STA 123+25 - 123+28 RT
STA 123+25 - 123+30 LT
STA 123+28 - 123+88 LT
STA 123+30 - 123+88 LT
STA 123+88 - 124+48 LT
STA 123+88 - 124+48 LT
STA 124+48 - 125+08 LT
STA 124+48 - 125+36 LT
STA 125+08 - 125+68 LT
STA 125+36 - 126+16 RT
STA 125+68 - 126+19 LT

ELECTRICAL CONDUIT (2") (PVC) LIGHTING CIRCUIT CONTINUED

STA 126+16 - 126+93 RT
STA 126+19 - 126+97 LT
STA 126+97 - 126+93 LT-RT
STA 127+42 - 127+42 LT-RT
STA 127+42 - 127+98 RT
STA 127+42 - 127+98 LT
STA 127+98 - 128+56 RT
STA 127+98 - 129+15 LT
STA 128+56 - 129+15 RT
STA 129+15 - 129+75 LT
STA 129+15 - 129+75 RT

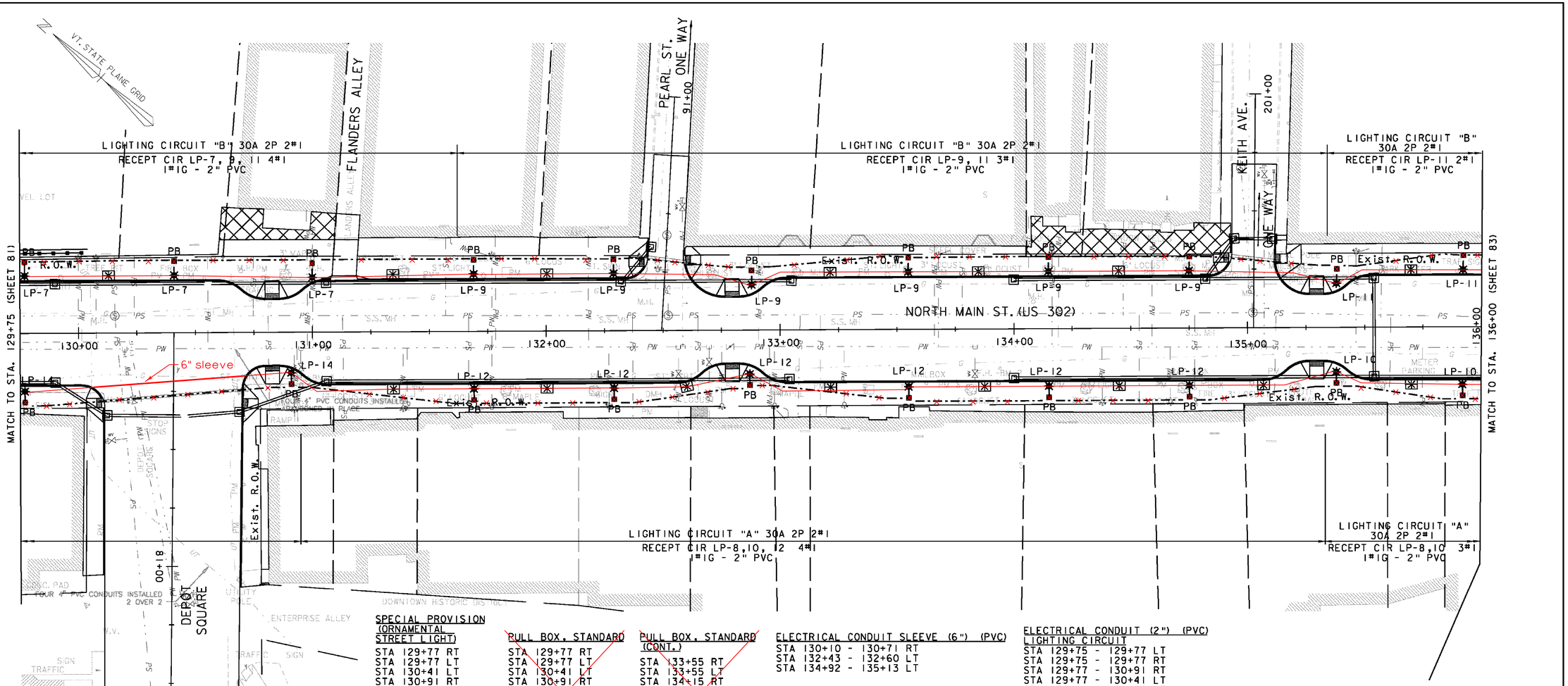
NOTES:

1. THESE PLANS DEPICT ACTUAL PROPOSED STREET LIGHT LOCATIONS, WHEREAS PULLBOX AND CONDUIT LOCATIONS ARE SCHEMATIC AND ARE INTENDED TO SHOW REQUIRED CONNECTIONS, WITH FINAL POSITIONS TO BE SET IN FIELD.

20 0 20 40
FEET

VHB Vanasse Hangen Brustlin, Inc.

| | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-1(34) C/2 |
| FILE NAME: z85b010bdr_lt_C2 | PLOT DATE: 3/9/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: D. PECK |
| DESIGNED BY: D. PECK | CHECKED BY: |
| STREET LIGHTING PLAN #3 | SHEET 81 OF 339 |




SPECIAL PROVISION (ORNAMENTAL STREET LIGHT)

STA 129+77 RT
STA 129+77 LT
STA 130+41 LT
STA 130+91 RT
STA 131+00 LT
STA 131+69 RT
STA 131+69 LT
STA 132+29 RT
STA 132+29 LT
STA 132+87 RT
STA 132+88 LT
STA 133+55 RT
STA 133+55 LT
STA 134+15 RT
STA 134+15 LT
STA 134+75 RT
STA 134+75 LT
STA 135+38 RT
STA 135+38 LT
STA 135+92 RT
STA 135+92 LT

PULL BOX, STANDARD

STA 129+77 RT
STA 129+77 LT
STA 130+41 LT
STA 130+91 RT
STA 131+00 LT
STA 131+69 RT
STA 131+69 LT
STA 132+29 RT
STA 132+29 LT
STA 132+87 RT
STA 132+88 LT

PULL BOX, STANDARD (CONT.)

STA 133+55 RT
STA 133+55 LT
STA 134+15 RT
STA 134+75 RT
STA 134+75 LT
STA 135+38 RT
STA 135+92 RT
STA 135+92 LT

ELECTRICAL CONDUIT SLEEVE (6") (PVC)

STA 130+10 - 130+71 RT
STA 132+43 - 132+60 LT
STA 134+92 - 135+13 LT

ELECTRICAL CONDUIT (2") (PVC) LIGHTING CIRCUIT

STA 129+75 - 129+77 LT
STA 129+75 - 129+77 RT
STA 129+77 - 130+91 RT
STA 129+77 - 130+41 LT
STA 130+41 - 131+00 LT
STA 130+91 - 131+69 RT
STA 131+00 - 131+69 LT
STA 131+69 - 132+29 RT
STA 131+69 - 132+29 LT
STA 132+29 - 132+88 LT
STA 132+29 - 132+87 RT
STA 132+87 - 133+55 RT
STA 132+88 - 133+55 LT
STA 133+55 - 134+15 LT
STA 133+55 - 134+15 RT
STA 134+15 - 134+75 RT
STA 134+15 - 134+75 LT
STA 134+75 - 135+38 LT
STA 134+75 - 135+38 RT
STA 135+38 - 135+92 RT
STA 135+38 - 135+92 LT
STA 135+92 - 136+00 LT
STA 135+92 - 136+00 RT

LEGEND:

- PROPOSED DECIDUOUS TREE
- PROPOSED DECIDUOUS TREE WITH 4' x 5' TREE PIT
- PROPOSED SMALL DECIDUOUS SHADE TREE
- PROPOSED LIGHTING CONDUIT
- PROPOSED LIGHTING CONDUIT & SLEEVE
- PROPOSED PULLBOX (PB)
- PROPOSED ORNAMENTAL STREET LIGHT
- PROPOSED SIGNAL POLE WITH LUMINAIRE
- PROPOSED FAIRPOINT DUCT BANK CONDUIT

NOTES:

1. THESE PLANS DEPICT ACTUAL PROPOSED STREET LIGHT LOCATIONS, WHEREAS PULLBOX AND CONDUIT LOCATIONS ARE SCHEMATIC AND ARE INTENDED TO SHOW REQUIRED CONNECTIONS, WITH FINAL POSITIONS TO BE SET IN FIELD.

20 0 20 40
FEET

VHB Vanasse Hangen Brustlin, Inc.

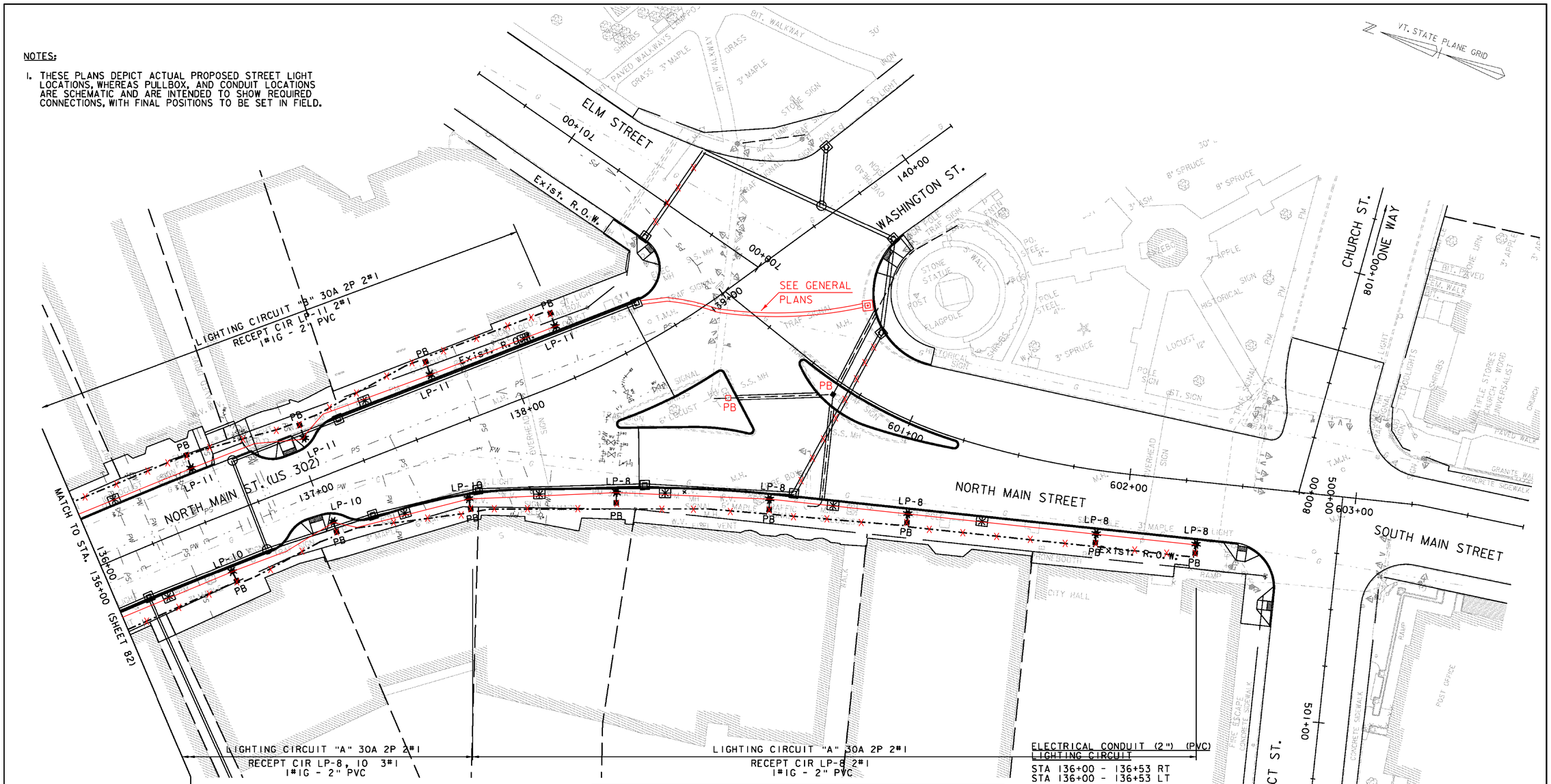
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: z85b0l0bdr_lt_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: D. PECK
STREET LIGHTING PLAN #4

PLOT DATE: 3/9/2011
DRAWN BY: D. PECK
CHECKED BY:
SHEET 82 OF 339

NOTES:

1. THESE PLANS DEPICT ACTUAL PROPOSED STREET LIGHT LOCATIONS, WHEREAS PULLBOX, AND CONDUIT LOCATIONS ARE SCHEMATIC AND ARE INTENDED TO SHOW REQUIRED CONNECTIONS, WITH FINAL POSITIONS TO BE SET IN FIELD.




SPECIAL PROVISION
(ORNAMENTAL STREET LIGHT)

STA 136+53 RT
STA 136+53 LT
STA 137+03 RT
STA 137+04 LT
STA 137+62 RT
STA 138+22 RT
STA 137+66 LT
STA 138+26 LT
SL STA 600+67 RT
SL STA 601+13 RT
SL STA 601+89 RT
SL STA 602+32 RT

PULL BOX, STANDARD

~~STA 136+53 RT~~
~~STA 136+53 LT~~
~~STA 137+03 RT~~
~~STA 137+04 LT~~
~~STA 137+62 RT~~
~~STA 138+22 RT~~
~~STA 137+66 LT~~
~~STA 138+26 LT~~
~~SL STA 600+67 RT~~
~~SL STA 601+13 RT~~
~~SL STA 601+89 RT~~
~~SL STA 602+32 RT~~
SL STA 600+30 RT

THIS ONE WAS INSTALLED

LEGEND:

- PROPOSED DECIDUOUS TREE
- PROPOSED DECIDUOUS TREE WITH 4' x 5' TREE PIT
- PROPOSED SMALL DECIDUOUS SHADE TREE
- PROPOSED LIGHTING CONDUIT
- PROPOSED LIGHTING CONDUIT & SLEEVE
- PB PROPOSED PULLBOX
- PROPOSED ORNAMENTAL STREET LIGHT
- PROPOSED SIGNAL POLE WITH LUMINAIRE
- PROPOSED FAIRPOINT DUCT BANK CONDUIT

ELECTRICAL CONDUIT (2") (PVC)
LIGHTING CIRCUIT

STA 136+00 - 136+53 RT
STA 136+00 - 136+53 LT
STA 136+53 - 137+03 RT
STA 136+53 - 137+04 LT
STA 137+03 - 137+62 RT
STA 137+04 - 137+66 LT
STA 137+62 - 138+22 RT
STA 137+66 - 138+26 LT
STA 138+22 - SL 600+67 RT
SL STA 600+67 - 601+13 RT
SL STA 601+13 - 601+89 RT
SL STA 601+89 - 602+32 RT

20 0 20 40
FEET

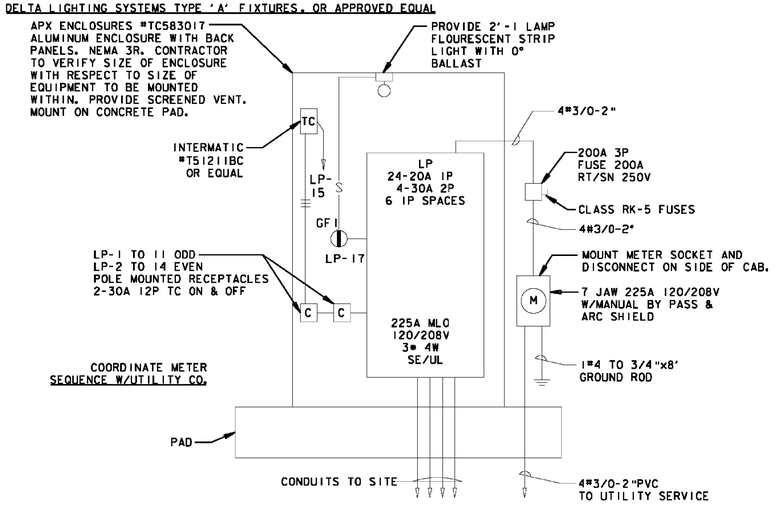
VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: z85b010bdr_lt_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: D. PECK
STREET LIGHTING PLAN #5

PLOT DATE: 3/9/2011
DRAWN BY: D. PECK
CHECKED BY:
SHEET 83 OF 339

DELTA LIGHTING SYSTEMS TYPE 'A' FIXTURES, OR APPROVED EQUAL



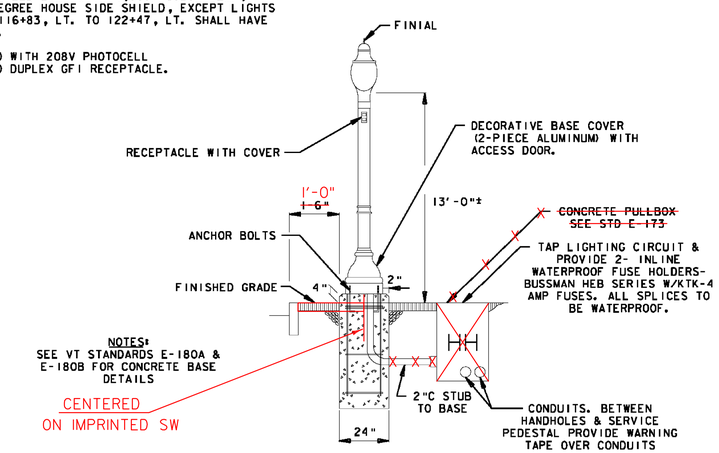

SPECIAL PROVISION (LIGHTING CONTROL PANEL) "LP"

SCALE: N.T.S.

POLE: 13'-0" 12 FLUTED MANDREL FORMED, ALUMINUM SHAFT 6" & 7" ROUND POLE WELDED TO A 6-5/8" ROUND EXTRUDED ALUMINUM POLE BASE WHICH IS WELDED TOP AND BOTTOM TO A CAST-ALUMINUM ANCHOR PLATE.

LIGHT FIXTURE: GLASS GLOBE LUMINAIRE WITH CUT-OFF OPTICAL SYSTEM 90W LED LAMP WITH 4,000K COLOR TEMP, AND 120 DEGREE HOUSE SIDE SHIELD, EXCEPT LIGHTS FROM STA 116+83, LT. TO 122+47, LT. SHALL HAVE NO SHIELD.

UNIT TO BE SUPPLIED WITH 208V PHOTOCELL AND FACTORY MOUNTED DUPLEX GFI RECEPTACLE.




SPECIAL PROVISION (ORNAMENTAL STREET LIGHT)

SCALE: N.T.S.

## GENERAL STREET LIGHT NOTES

**CONCRETE BASES**

CONCRETE BASE SIZES SHALL BE TWO FEET IN DIAMETER AND FOUR FEET IN DEPTH FOR ORNAMENTAL POLES. THE TOP OF THE BASE SHALL BE RAISED 4" ABOVE THE SIDEWALK AND SHALL HAVE A 45° 1"x1" CHAMFERED EDGE. SEE STANDARD DRAWINGS E-180A AND E-180B FOR ADDITIONAL NOTES AND CONCRETE BASE DETAILS. CARE SHOULD BE TAKEN WHERE CONCRETE BASES, DRAINAGE STRUCTURES OR UTILITIES ARE CLOSE TOGETHER.

**CONDUIT**

A 2" (I.D.) MIN. AND SIZED AS INDICATED CONDUIT SHALL BE USED AT ALL LOCATIONS. ALL CONDUIT SHALL BE AT LEAST SCHEDULE 80 P.V.C. OR RIGID GALVANIZED STEEL ELECTRICAL CONDUIT AND CONFORM TO THE REQUIREMENTS OF UL-8.

THE FINAL CONDUIT DEPTH SHALL BE A MIN. OF 2' AND BE 2' TO 3' BELOW GRADE FOR CONDUIT RUNS PARALLEL WITH CURB OR EDGE OF SHOULDER, AND 3' TO 5' DEPTH UNDER ROADWAYS OR AS DIRECTED BY THE ENGINEER.

A 6" WIDE YELLOW MARKING TAPE (PLASTIC) SHALL BE INSTALLED 6" TO 12" BELOW FINISH GRADE OVER THE CONDUIT RUNS. MARKING TAPE IS INCIDENTAL TO THE CONDUIT ITEMS.

A MAXIMUM OF 270° IN TOTAL BENDS WILL BE PERMITTED IN A SINGLE RUN OF CONDUIT, AND 180° IN RUNS LONGER THAN 250' AND NONE IN RUNS LONGER THAN 500'.

**CONDUIT SLEEVE**

MINIMUM WALL THICKNESS FOR RIGID PLASTIC PIPE SLEEVES SHALL BE 1/36th THE DIAMETER. ALL CONDUIT RUNS UNDER ROADWAY SHALL BE INSTALLED IN RIGID PLASTIC PIPE SLEEVES. THE SLEEVE SHALL EXTEND TO WITHIN 2' OF THE SIDE OF A CONCRETE BASE OR PULLBOX. WHERE NO CONCRETE BASE OR PULLBOX IS PRESENT, THE SLEEVE SHALL EXTEND 2' BEYOND THE OUTSIDE EDGE OF SHOULDER OR FACE OF CURB. BACKFILLING AROUND A SLEEVE SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

**GROUNDING**

IN ADDITION TO A GROUND ROD AT EACH CONCRETE POLE BASE, A CONTINUOUS GROUNDING CIRCUIT SIZED AS INDICATED A.W.G. COPPER CONDUCTOR SHALL RUN BACK TO A CIRCUIT PROTECTIVE DEVICE AT THE POWER SOURCE OR TRANSFORMER. ALUMINUM WIRE SHALL NOT BE USED FOR GROUND WIRE.

ALL CONDUIT MUST INCLUDE A GROUNDING CONDUCTOR, AND RIGID STEEL CONDUIT SHALL BE PROPERLY CONNECTED AT THE JOINTS SO AS TO BE WATERTIGHT AND MAINTAIN ELECTRICAL CONTINUITY AND HAVE GROUNDING BUSHINGS SO AS TO ACT AS A GROUND CONDUCTOR.

**POLES, ANCHOR BASES AND ARMS**

ALL ORNAMENTAL STREET LIGHT POLES SHALL BE FLUTED ALUMINUM, FINISHED BLACK AND SHALL NOT INCLUDE A BREAKAWAY DESIGN FEATURE.

**WIRE**

ALL WIRING BETWEEN THE METER AND/OR POWER SOURCE AND THE FIRST POLE AND/OR PULLBOX AND BETWEEN POLES AND/OR PULLBOXES SHALL BE AS SPECIFIED ON THE PLANS (ALUMINUM OR COPPER) AND SIZED AS SPECIFIED ON THE PLANS. ALL WIRE TO HAVE TYPE XHHW-2 INSULATION OR EQUIVALENT.

USE #10 A.W.G. STRANDED COPPER WIRES IN EACH POLE BETWEEN THE POLE BASE AND THE LUMINAIRE AND #6 BETWEEN RECEPTACLES. USE COPPER SIZED AS INDICATED (MIN.) FOR THE CONTINUOUS GROUND CIRCUIT.

ALL WIRE CONNECTIONS IN THE LIGHT POLE BASES SHALL BE MADE WITH THE PROPER, IN LINE OR WYE TYPE WATERPROOF DISCONNECT KIT. THE LOAD SIDE TO THE LUMINAIRE SHALL BE FUSED AT 3 TIMES THE LOAD.

VOLTAGE LOSES GREATER THAN 3% IN THE SECONDARY CIRCUIT REQUIRE LARGER WIRE.

ALL WIRE SHALL BE TYPE RHH-RHW EPR.

**PULLBOXES**

FOR DETAILS SEE STANDARD SHEET E-173.

**GENERAL**

ALL ELECTRICAL MATERIAL AND INSTALLATION SHALL MEET THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE, STATE AND LOCAL CODES AND REQUIREMENTS OF GREEN MOUNTAIN POWER AT THE SOURCE. THE LOAD ON EACH BRANCH OF A THREE WIRE CIRCUIT SHALL BE AS BALANCED AS POSSIBLE, LOAD TO NEUTRAL.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING AND FOR SCHEDULING WORK WITH GREEN MOUNTAIN POWER FACILITIES IN THE PROJECT AREA.

ALL LUMINAIRES TO BE INSTALLED ON CANTILEVER POLES SHALL HAVE THE SAME COLOR FINISH (BLACK) AS THE POLE IT IS BEING INSTALLED ON. PAYMENT FOR THE LUMINAIRE ARM, CONDUIT SWEEPS AND WIRING FOR THE LUMINAIRE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONTRACT ITEM 678.15.

**THE CONTRACTOR SHALL PERFORM THE FOLLOWING WORK ON THIS PROJECT**

1. PERFORM AN INSULATION TEST ON ALL CONDUCTORS EXCEPT THE GROUND CONDUCTOR (INCLUDING NEUTRAL, DISCONNECT FROM GROUND BEFORE TESTING). PERFORM A RESISTANCE TO GROUND TEST AT SPECIFIED GROUNDS. SEE VERMONT STANDARD SPECIFICATIONS SUBSECTION 679.08. FURNISH THE TRAFFIC AND SAFETY SECTION VIA THE RESIDENT ENGINEER THE READINGS OBTAINED FROM THE ABOVE TESTS.
2. COORDINATE WITH GMP TO CONNECT THE NEW ORNAMENTAL STREET LIGHT SYSTEM TO THE EXISTING SERVICE. INSTALL A NEW METERING POWER AND CONTROL PEDESTAL WITH METER SOCKET AND SERVICE PANELBOARD AND CONTROL EQUIPMENT [(SPECIAL PROVISION (LIGHTING CONTROL PANEL)] FOR THE SINGLE RECEPTACLE OUTLETS ON STREET LIGHT POLES. THE STREET LIGHTS WHICH WILL RECEIVE THEIR POWER FROM THE SAME CIRCUIT AS THE TRAFFIC SIGNALS SHALL UTILIZE A SEPARATE CIRCUIT BREAKER AT THE CONTROLLER CABINET. THE NEW LIGHTING CONTROL PANEL SHALL BE INSTALLED OFF OF WEST STREET AS SHOWN IN THE DETAILS (SHEET 84). INSTALL ALL NECESSARY WIRING AND CONDUIT FROM THE TRANSFORMER POLE.
3. AT EACH STREET LIGHT POLE LOCATION, INSTALL A CONCRETE POLE BASE, STAINLESS STEEL ANCHOR BOLTS, NUTS AND WASHERS (FLAT AND LOCK) CAST IRON POLE, LUMINAIRE GLOBE, LED LAMPS, WIRING, WATERPROOF DISCONNECT KITS AND CONDUIT SWEEPS.
4. INSTALL CONDUIT, SIZE, TYPE AND LOCATION AS NOTED ON THE PLANS.
5. INSTALL PULLBOXES WITH CONDUIT SWEEPS AS PER PLAN.
6. INSTALL ALL WIRING, SIZE AND TYPE AS PER PLAN AND/OR SPECIFICATION.
7. INSTALL RIGID PLASTIC SLEEVES AS PER PLAN, LOCATION & SIZE.
8. INSTALL LUMINAIRE AND NECESSARY WIRING ON ALL CANTILEVER POLES AS SHOWN ON THE PLANS.
9. STREET LIGHTING IN THIS DOWNTOWN AREA MUST BE MAINTAINED DURING CONSTRUCTION.

VHB Vanasse Hangen Brustlin, Inc.

| | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-1(34) C/2 |
| FILE NAME: 85b010_LTDETL_C2 | PLOT DATE: 3/21/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: DMP / JAR |
| DESIGNED BY: DMP / MDS | CHECKED BY: |
| STREET LIGHTING DETAILS AND NOTES | SHEET 84 OF 339 |

SPECIAL PROVISION (CU STRUCTURAL SOIL)
STA 115+47 - 115+87 RT
STA 116+85 - 116+90 LT

LANDSCAPE BACKFILL, TRUCK MEASUREMENT
SL STA 10+70 - 11+00 LT-RT
SL STA 11+52 - 11+68 LT-RT
SL STA 20+48 - 20+94 LT-RT
STA 116+77 - 116+90 LT

DECIDUOUS TREES
STA 115+67 RT
SL STA 11+02 LT
SL STA 11+20 LT
SL STA 11+45 LT
SL STA 11+64 LT

REMOVING MEDIUM TREES
STA 116+29 LT
SL STA 11+25 RT
SL STA 30+62 RT

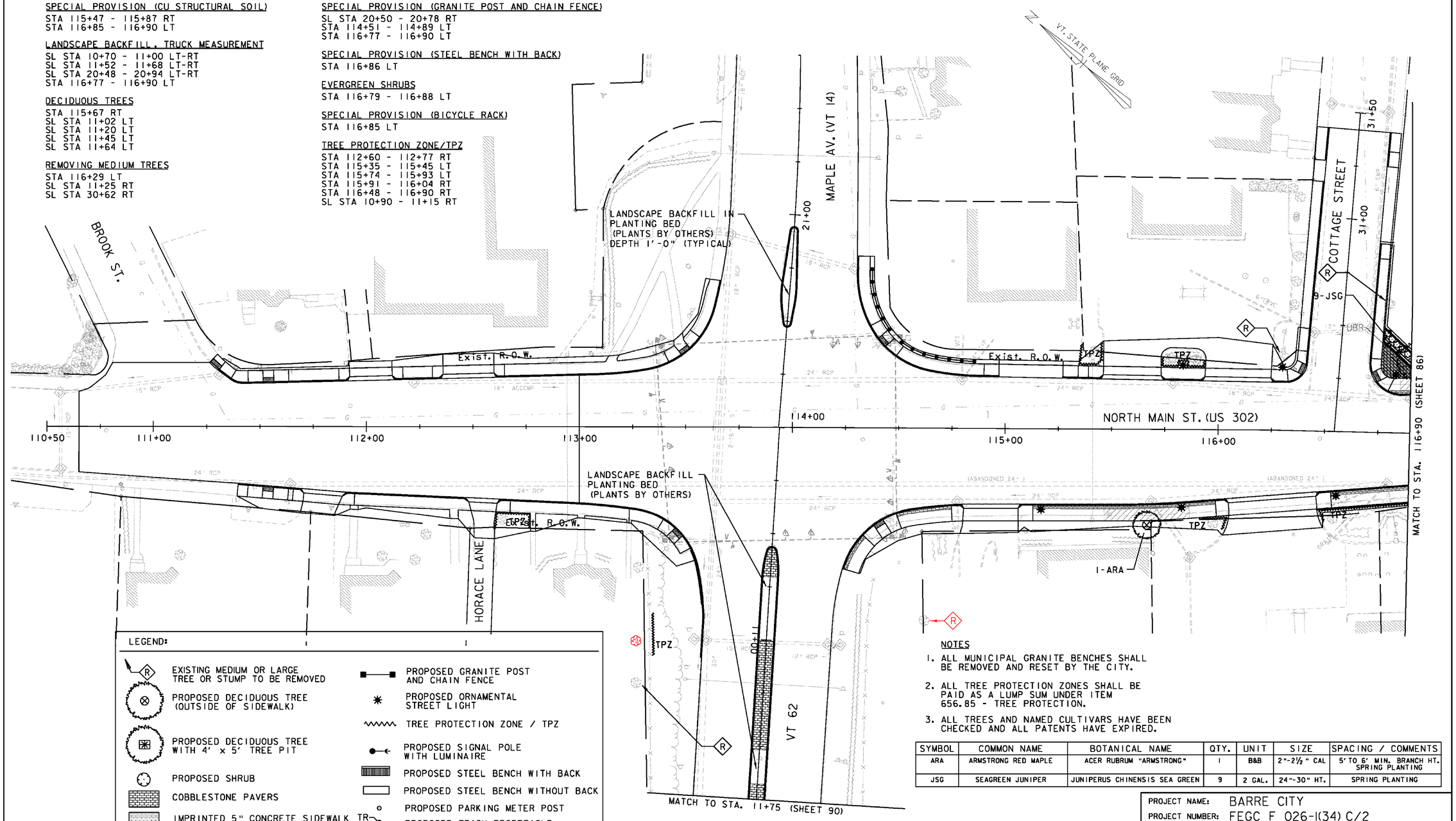
SPECIAL PROVISION (GRANITE POST AND CHAIN FENCE)
SL STA 20+50 - 20+78 RT
STA 114+51 - 114+89 LT
STA 116+77 - 116+90 LT

SPECIAL PROVISION (STEEL BENCH WITH BACK)
STA 116+86 LT

EVERGREEN SHRUBS
STA 116+79 - 116+88 LT

SPECIAL PROVISION (BICYCLE RACK)
STA 116+85 LT

TREE PROTECTION ZONE/TPZ
STA 112+60 - 112+77 RT
STA 115+35 - 115+45 LT
STA 115+74 - 115+93 LT
STA 115+91 - 116+04 RT
STA 116+48 - 116+90 RT
SL STA 10+90 - 11+15 RT




LEGEND:

- EXISTING MEDIUM OR LARGE TREE OR STUMP TO BE REMOVED
- PROPOSED DECIDUOUS TREE (OUTSIDE OF SIDEWALK)
- PROPOSED DECIDUOUS TREE WITH 4' x 5' TREE PIT
- PROPOSED SHRUB
- COBBLESTONE PAVERS
- IMPRINTED 5" CONCRETE SIDEWALK
- CU STRUCTURAL SOIL
- PROPOSED GRANITE POST AND CHAIN FENCE
- PROPOSED ORNAMENTAL STREET LIGHT
- TREE PROTECTION ZONE / TPZ
- PROPOSED SIGNAL POLE WITH LUMINAIRE
- PROPOSED STEEL BENCH WITH BACK
- PROPOSED STEEL BENCH WITHOUT BACK
- PROPOSED PARKING METER POST
- TR — PROPOSED TRASH RECEPTACLE
- UBR — PROPOSED BICYCLE RACK

NOTES
1. ALL MUNICIPAL GRANITE BENCHES SHALL BE REMOVED AND RESET BY THE CITY.
2. ALL TREE PROTECTION ZONES SHALL BE PAID AS A LUMP SUM UNDER ITEM 656.85 - TREE PROTECTION.
3. ALL TREES AND NAMED CULTIVARS HAVE BEEN CHECKED AND ALL PATENTS HAVE EXPIRED.

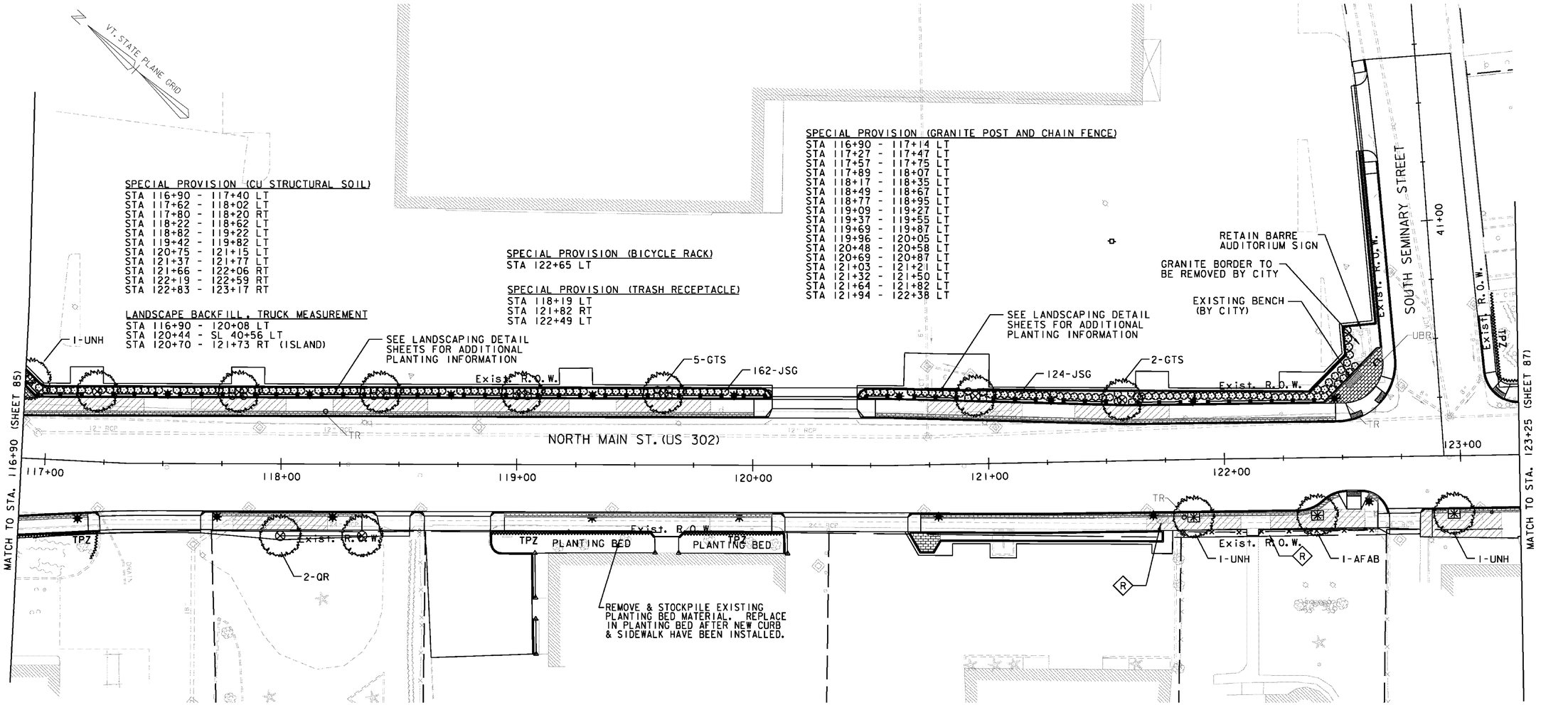
| SYMBOL | COMMON NAME | BOTANICAL NAME | QTY. | UNIT | SIZE | SPACING / COMMENTS |
|---|---|---|---|---|---|---|
| ARA | ARMSTRONG RED MAPLE | ACER RUBRUM "ARMSTRONG" | 1 | B&B | 2"-2½" CAL | 5' TO 6' MIN. BRANCH HT. SPRING PLANTING |
| JSG | SEAGREEN JUNIPER | JUNIPERUS CHINENSIS SEA GREEN | 9 | 2 GAL. | 24"-30" HT. | SPRING PLANTING |

20 0 20 40
FEET

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: z85b01Obdr_ld_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: D. PECK
LANDSCAPING PLAN #1
PLOT DATE: 3/9/2011
DRAWN BY: D. PECK
CHECKED BY:
SHEET 85 OF 339




LEGEND:

- EXISTING MEDIUM OR LARGE TREE OR STUMP TO BE REMOVED
- PROPOSED DECIDUOUS TREE (OUTSIDE OF SIDEWALK)
- PROPOSED DECIDUOUS TREE WITH 4' x 5' TREE PIT
- PROPOSED SHRUB
- COBBLESTONE PAVERS
- IMPRINTED 5" CONCRETE SIDEWALK
- CU STRUCTURAL SOIL
- PROPOSED GRANITE POST AND CHAIN FENCE
- PROPOSED ORNAMENTAL STREET LIGHT
- TREE PROTECTION ZONE / TPZ
- PROPOSED SIGNAL POLE WITH LUMINAIRE
- PROPOSED STEEL BENCH WITH BACK
- PROPOSED STEEL BENCH WITHOUT BACK
- PROPOSED PARKING METER POST
- TR PROPOSED TRASH RECEPTACLE
- UBR PROPOSED BICYCLE RACK

DECIDUOUS TREES
STA 116+93 LT
STA 117+21 LT
STA 117+82 LT
STA 118+00 RT
STA 118+34 RT
STA 118+42 LT
STA 119+02 LT
STA 119+62 LT
STA 120+95 LT
STA 121+57 LT
STA 121+86 RT
STA 122+39 RT
STA 122+97 RT

EVERGREEN SHRUBS
STA 116+91 - 120+07 LT
STA 120+47 - 122+56 LT
STA 119+00 - 120+00 RT

TREE PROTECTION ZONE/TPZ
STA 116+90 - 117+24 RT
STA 118+89 - 119+57 RT
STA 119+71 - 120+12 RT
SL STA 40+68 RT - STA 123+25 LT

REMOVING MEDIUM STUMPS
STA 122+19 RT

REMOVING MEDIUM TREES
STA 121+73 RT

SPECIAL PROVISION (CEDAR BARK MULCH)
STA 119+89 - 120+12 RT

NOTES:

1. ALL MUNICIPAL GRANITE BENCHES SHALL BE REMOVED AND RESET BY THE CITY.
2. ALL TREE PROTECTION ZONES SHALL BE PAID AS A LUMP SUM UNDER ITEM 656.85 - TREE PROTECTION.
3. ALL TREES AND NAMED CULTIVARS HAVE BEEN CHECKED AND ALL PATENTS HAVE EXPIRED.

| SYMBOL | COMMON NAME | BOTANICAL NAME | QTY. | UNIT | SIZE | SPACING / COMMENTS |
|---|---|---|---|---|---|---|
| GTS | SHADEMASTER HONEYLOCUST | GLEDITSIA TRIACANTHOS INERMIS | 7 | B&B | 2"-2½" CAL | 5' TO 6' MIN. BRANCH HT. |
| UNH | NEW HARMONY AMERICAN ELM | ULMUS AMERICANA NEW HARMONY | 3 | B&B | 2"-2½" CAL | 5' TO 6' MIN. BRANCH HT. |
| JSG | SEAGREEN JUNIPER | JUNIPERUS CHINENSIS SEA GREEN | 286 | 2 GAL. | 24"-30" HT. | SPRING PLANTING |
| QR | NORTHERN RED OAK | QUERCUS RUBRA | 2 | B&B | 2"-2½" CAL | 5' TO 6' MIN. BRANCH HT. |
| AFAB | AUTUMN BLAZE MAPLE | ACER FREMANII X AUTUMN BLAZE | 1 | B&B | 2"-2½" CAL | 5' TO 6' MIN. BRANCH HT. |

• ALL TREES SHALL BE PLANTED IN THE SPRING

20 0 20 40
FEET

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: z85b010bdr_ld_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: D. PECK
LANDSCAPING PLAN #2
PLOT DATE: 3/9/2011
DRAWN BY: D. PECK
CHECKED BY:
SHEET 86 OF 339

DECIDUOUS TREES
STA 123+58 LT
STA 124+12 RT
STA 124+05 LT
STA 124+63 RT
STA 124+79 LT
STA 125+35 LT
STA 125+75 RT
STA 126+64 RT
STA 127+75 LT
STA 127+60 LT
STA 128+22 LT
STA 128+40 LT
STA 128+88 RT
STA 129+50 RT

SPECIAL PROVISION (STEEL BENCH WITHOUT BACK)
STA 126+10 RT

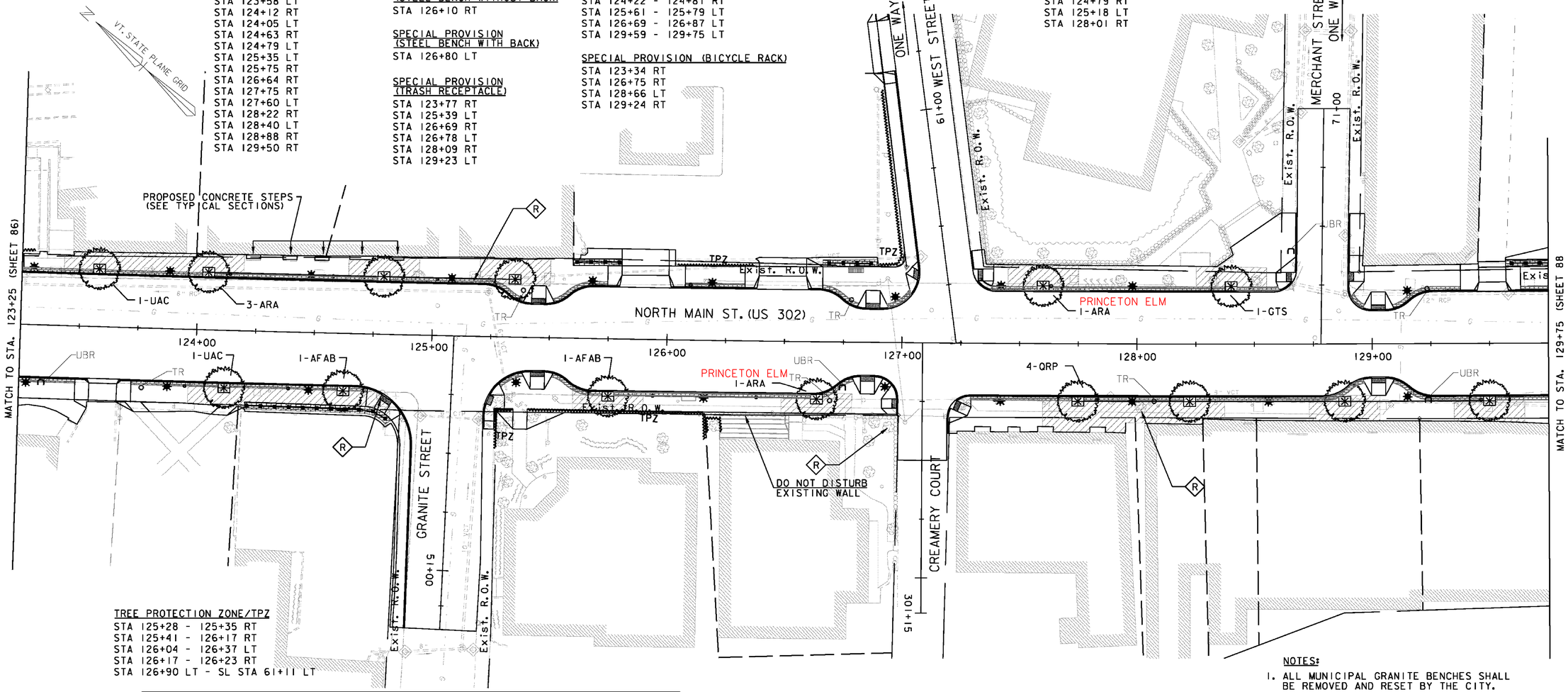
SPECIAL PROVISION (STEEL BENCH WITH BACK)
STA 126+80 LT

SPECIAL PROVISION (TRASH RECEPTACLE)
STA 123+77 RT
STA 125+39 LT
STA 126+69 RT
STA 126+78 LT
STA 128+09 RT
STA 129+23 LT

SPECIAL PROVISION (GRANITE POST AND CHAIN FENCE)
STA 124+22 - 124+81 RT
STA 125+61 - 125+79 LT
STA 126+69 - 126+87 LT
STA 129+59 - 129+75 LT

SPECIAL PROVISION (BICYCLE RACK)
STA 123+34 RT
STA 126+75 RT
STA 128+66 LT
STA 129+24 RT

REMOVING MEDIUM TREES
STA 124+79 RT
STA 125+18 LT
STA 128+01 RT




TREE PROTECTION ZONE/TPZ
STA 125+28 - 125+35 RT
STA 125+41 - 126+17 RT
STA 126+04 - 126+37 LT
STA 126+17 - 126+23 RT
STA 126+90 LT - SL STA 61+11 LT

LEGEND:

- EXISTING MEDIUM OR LARGE TREE OR STUMP TO BE REMOVED
- PROPOSED DECIDUOUS TREE (OUTSIDE OF SIDEWALK)
- PROPOSED DECIDUOUS TREE WITH 4' x 5' TREE PIT
- PROPOSED SHRUB
- COBBLESTONE PAVERS
- IMPRINTED 5" CONCRETE SIDEWALK
- CU STRUCTURAL SOIL
- PROPOSED GRANITE POST AND CHAIN FENCE
- PROPOSED ORNAMENTAL STREET LIGHT
- TREE PROTECTION ZONE / TPZ
- PROPOSED SIGNAL POLE WITH LUMINAIRE
- PROPOSED STEEL BENCH WITH BACK
- PROPOSED STEEL BENCH WITHOUT BACK
- PROPOSED PARKING METER POST
- TR — PROPOSED TRASH RECEPTACLE
- UBR — PROPOSED BICYCLE RACK

SPECIAL PROVISION (CU STRUCTURAL SOIL)
STA 123+43 - 124+20 LT
STA 123+97 - 124+83 RT
STA 124+64 - 124+94 LT
STA 125+20 - 125+50 LT
STA 125+60 - 125+90 RT
STA 126+49 - 126+79 RT
STA 127+60 - 128+37 RT
STA 127+45 - 127+75 LT
STA 128+25 - 128+55 LT
STA 128+73 - 129+03 RT
STA 129+35 - 129+65 RT

REMOVING LARGE TREE
STA 126+95 RT

NOTES:
1. ALL MUNICIPAL GRANITE BENCHES SHALL BE REMOVED AND RESET BY THE CITY.
2. ALL TREE PROTECTION ZONES SHALL BE PAID AS A LUMP SUM UNDER ITEM 656.85 - TREE PROTECTION.
3. ALL TREES AND NAMED CULTIVARS HAVE BEEN CHECKED AND ALL PATENTS HAVE EXPIRED EXCEPT AS NOTED BELOW **.

| SYMBOL | COMMON NAME | BOTANICAL NAME | QTY. | UNIT | SIZE | SPACING / COMMENTS |
|---|---|---|---|---|---|---|
| UAC | ACCOLADE ELM | ULMUS CARPINIFOLIA ACCOLADE | 2 | B&B | 2"-2½" CAL | 5' TO 6' MIN. BRANCH HT. |
| ARA | ARMSTRONG RED MAPLE | ACER RUBRUM "ARMSTRONG" | 5 | B&B | 2"-2½" CAL | 5' TO 6' MIN. BRANCH HT. |
| AFAB | AUTUMN BLAZE MAPLE | ACER FREMANII X AUTUMN BLAZE | 2 | B&B | 2"-2½" CAL | 5' TO 6' MIN. BRANCH HT. |
| QRP | REGAL PRINCE COLUMNAR OAK | QUERCUS RxB. LONG** | 4 | B&B | 2"-2½" CAL | 5' TO 6' MIN. BRANCH HT. |
| GTS | SHADEMASTER HONEYLOCUST | GLEDITSIA TRIACANTHOS INERMIS | 1 | B&B | 2"-2½" CAL | 5' TO 6' MIN. BRANCH HT. |

* ALL TREES SHALL BE PLANTED IN THE SPRING

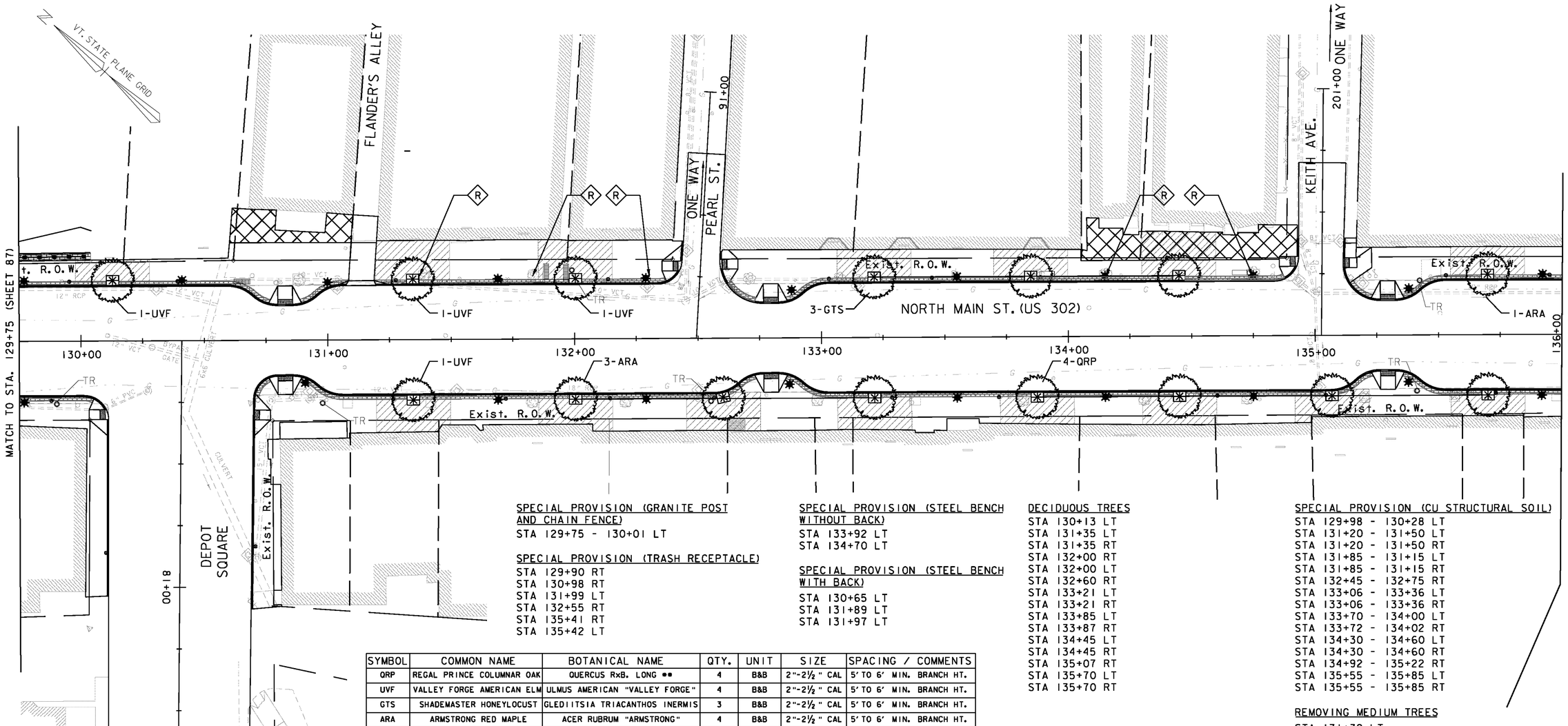
** ALTERNATIVES FOR REGAL PRINCE COLUMNAR OAK ARE AS FOLLOWS:
1. CRIMSON SPIRE OAK (QUERCUS ROBUR X Q. ALBA "CRIMSCHMIDT")
2. BOWHALL MAPLE (ACER RUBRUM "BOWHALL")
3. KARPICK MAPLE (ACER RUBRUM "KARPICK")

20 0 20 40
FEET

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-I(34) C/2

FILE NAME: z85b010bdr_ld_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: D. PECK
LANDSCAPING PLAN #3
PLOT DATE: 3/23/2011
DRAWN BY: D. PECK
CHECKED BY:
SHEET 87 OF 339




SPECIAL PROVISION (GRANITE POST AND CHAIN FENCE)
STA 129+75 - 130+01 LT

SPECIAL PROVISION (TRASH RECEPTACLE)
STA 129+90 RT
STA 130+98 RT
STA 131+99 LT
STA 132+55 RT
STA 135+41 RT
STA 135+42 LT

SPECIAL PROVISION (STEEL BENCH WITHOUT BACK)
STA 133+92 LT
STA 134+70 LT

SPECIAL PROVISION (STEEL BENCH WITH BACK)
STA 130+65 LT
STA 131+89 LT
STA 131+97 LT

DECIDUOUS TREES
STA 130+13 LT
STA 131+35 LT
STA 131+35 RT
STA 132+00 RT
STA 132+00 LT
STA 132+60 RT
STA 133+21 LT
STA 133+21 RT
STA 133+85 LT
STA 133+87 RT
STA 134+45 LT
STA 134+45 RT
STA 135+07 RT
STA 135+70 LT
STA 135+70 RT

SPECIAL PROVISION (CU STRUCTURAL SOIL)
STA 129+98 - 130+28 LT
STA 131+20 - 131+50 LT
STA 131+20 - 131+50 RT
STA 131+85 - 131+15 LT
STA 131+85 - 131+15 RT
STA 132+45 - 132+75 RT
STA 133+06 - 133+36 LT
STA 133+06 - 133+36 RT
STA 133+70 - 134+00 LT
STA 133+72 - 134+02 RT
STA 134+30 - 134+60 LT
STA 134+30 - 134+60 RT
STA 134+92 - 135+22 RT
STA 135+55 - 135+85 LT
STA 135+55 - 135+85 RT

REMOVING MEDIUM TREES
STA 131+39 LT
STA 131+83 LT
STA 132+31 LT
STA 134+15 LT
STA 134+75 LT

| SYMBOL | COMMON NAME | BOTANICAL NAME | QTY. | UNIT | SIZE | SPACING / COMMENTS |
|---|---|---|---|---|---|---|
| QRP | REGAL PRINCE COLUMNAR OAK | QUERCUS RxB. LONG ** | 4 | B&B | 2"-2½" CAL | 5' TO 6' MIN. BRANCH HT. |
| UVF | VALLEY FORGE AMERICAN ELM | ULMUS AMERICAN "VALLEY FORGE" | 4 | B&B | 2"-2½" CAL | 5' TO 6' MIN. BRANCH HT. |
| GTS | SHADEMASTER HONEYLOCUST | GLEDIITSIA TRIACANTHOS INERMIS | 3 | B&B | 2"-2½" CAL | 5' TO 6' MIN. BRANCH HT. |
| ARA | ARMSTRONG RED MAPLE | ACER RUBRUM "ARMSTRONG" | 4 | B&B | 2"-2½" CAL | 5' TO 6' MIN. BRANCH HT. |

* ALL TRESS SHALL BE PLANTED IN THE SPRING

LEGEND:

- EXISTING MEDIUM OR LARGE TREE OR STUMP TO BE REMOVED
- PROPOSED DECIDUOUS TREE (OUTSIDE OF SIDEWALK)
- PROPOSED DECIDUOUS TREE WITH 4' x 5' TREE PIT
- PROPOSED SHRUB
- COBBLESTONE PAVERS
- IMPRINTED 5" CONCRETE SIDEWALK
- CU STRUCTURAL SOIL
- PROPOSED GRANITE POST AND CHAIN FENCE
- PROPOSED ORNAMENTAL STREET LIGHT
- TREE PROTECTION ZONE / TPZ
- PROPOSED SIGNAL POLE WITH LUMINAIRE
- PROPOSED STEEL BENCH WITH BACK
- PROPOSED STEEL BENCH WITHOUT BACK
- PROPOSED PARKING METER POST
- TR PROPOSED TRASH RECEPTACLE
- UBR PROPOSED BICYCLE RACK

NOTES:

1. ALL MUNICIPAL GRANITE BENCHES SHALL BE REMOVED AND RESET BY THE CITY.
2. ALL TREE PROTECTION ZONES SHALL BE PAID AS A LUMP SUM UNDER ITEM 656.85 - TREE PROTECTION.
3. ALL TREES AND NAMED CULTIVARS HAVE BEEN CHECKED AND ALL PATENTS HAVE EXPIRED EXCEPT AS NOTED BELOW **.

** ALTERNATIVES FOR REGAL PRINCE COLUMNAR OAK ARE AS FOLLOWS:
1. CRIMSON SPIRE OAK (QUERCUS ROBUR X Q. ALBA "CRIMSCHMIDT")
2. BOWHALL MAPLE (ACER RUBRUM "BOWHALL")
3. KARPICK MAPLE (ACER RUBRUM "KARPICK")

20 0 20 40
FEET

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-I(34) C/2

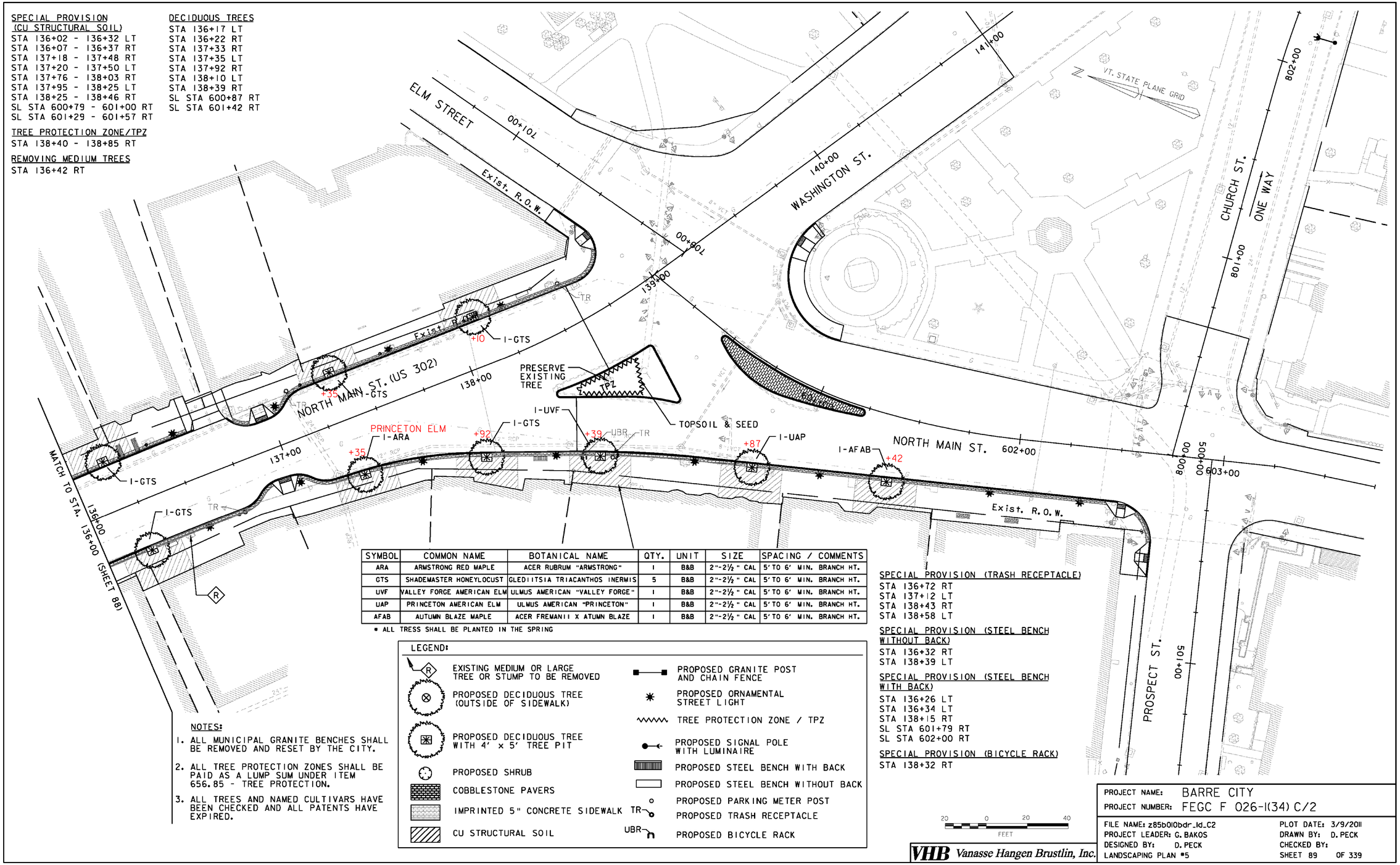
FILE NAME: z85b010bdr_ld_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: D. PECK
LANDSCAPING PLAN #4
PLOT DATE: 3/9/2011
DRAWN BY: D. PECK
CHECKED BY:
SHEET 88 OF 339

SPECIAL PROVISION
(CU STRUCTURAL SOIL)
STA 136+02 - 136+32 LT
STA 136+07 - 136+37 RT
STA 137+18 - 137+48 RT
STA 137+20 - 137+50 LT
STA 137+76 - 138+03 RT
STA 137+95 - 138+25 LT
STA 138+25 - 138+46 RT
SL STA 600+79 - 601+00 RT
SL STA 601+29 - 601+57 RT

TREE PROTECTION ZONE/TPZ
STA 138+40 - 138+85 RT

REMOVING MEDIUM TREES
STA 136+42 RT

DECIDUOUS TREES
STA 136+17 LT
STA 136+22 RT
STA 137+33 RT
STA 137+35 LT
STA 137+92 RT
STA 138+10 LT
STA 138+39 RT
SL STA 600+87 RT
SL STA 601+42 RT




| SYMBOL | COMMON NAME | BOTANICAL NAME | QTY. | UNIT | SIZE | SPACING / COMMENTS |
|---|---|---|---|---|---|---|
| ARA | ARMSTRONG RED MAPLE | ACER RUBRUM "ARMSTRONG" | 1 | B&B | 2"-2½" CAL | 5' TO 6' MIN. BRANCH HT. |
| GTS | SHADEMASTER HONEYLOCUST | GLEDIITSIA TRIACANTHOS INERMIS | 5 | B&B | 2"-2½" CAL | 5' TO 6' MIN. BRANCH HT. |
| UVF | VALLEY FORGE AMERICAN ELM | ULMUS AMERICAN "VALLEY FORGE" | 1 | B&B | 2"-2½" CAL | 5' TO 6' MIN. BRANCH HT. |
| UAP | PRINCETON AMERICAN ELM | ULMUS AMERICAN "PRINCETON" | 1 | B&B | 2"-2½" CAL | 5' TO 6' MIN. BRANCH HT. |
| AFAB | AUTUMN BLAZE MAPLE | ACER FREMANII X ATUMN BLAZE | 1 | B&B | 2"-2½" CAL | 5' TO 6' MIN. BRANCH HT. |

* ALL TRESS SHALL BE PLANTED IN THE SPRING

LEGEND:

- EXISTING MEDIUM OR LARGE TREE OR STUMP TO BE REMOVED
- PROPOSED DECIDUOUS TREE (OUTSIDE OF SIDEWALK)
- PROPOSED DECIDUOUS TREE WITH 4' x 5' TREE PIT
- PROPOSED SHRUB
- COBBLESTONE PAVERS
- IMPRINTED 5" CONCRETE SIDEWALK
- CU STRUCTURAL SOIL
- PROPOSED GRANITE POST AND CHAIN FENCE
- PROPOSED ORNAMENTAL STREET LIGHT
- TREE PROTECTION ZONE / TPZ
- PROPOSED SIGNAL POLE WITH LUMINAIRE
- PROPOSED STEEL BENCH WITH BACK
- PROPOSED STEEL BENCH WITHOUT BACK
- PROPOSED PARKING METER POST
- PROPOSED TRASH RECEPTACLE
- PROPOSED BICYCLE RACK

NOTES:

1. ALL MUNICIPAL GRANITE BENCHES SHALL BE REMOVED AND RESET BY THE CITY.
2. ALL TREE PROTECTION ZONES SHALL BE PAID AS A LUMP SUM UNDER ITEM 656.85 - TREE PROTECTION.
3. ALL TREES AND NAMED CULTIVARS HAVE BEEN CHECKED AND ALL PATENTS HAVE EXPIRED.

SPECIAL PROVISION (TRASH RECEPTACLE)
STA 136+72 RT
STA 137+12 LT
STA 138+43 RT
STA 138+58 LT

SPECIAL PROVISION (STEEL BENCH WITHOUT BACK)
STA 136+32 RT
STA 138+39 LT

SPECIAL PROVISION (STEEL BENCH WITH BACK)
STA 136+26 LT
STA 136+34 LT
STA 138+15 RT
SL STA 601+79 RT
SL STA 602+00 RT

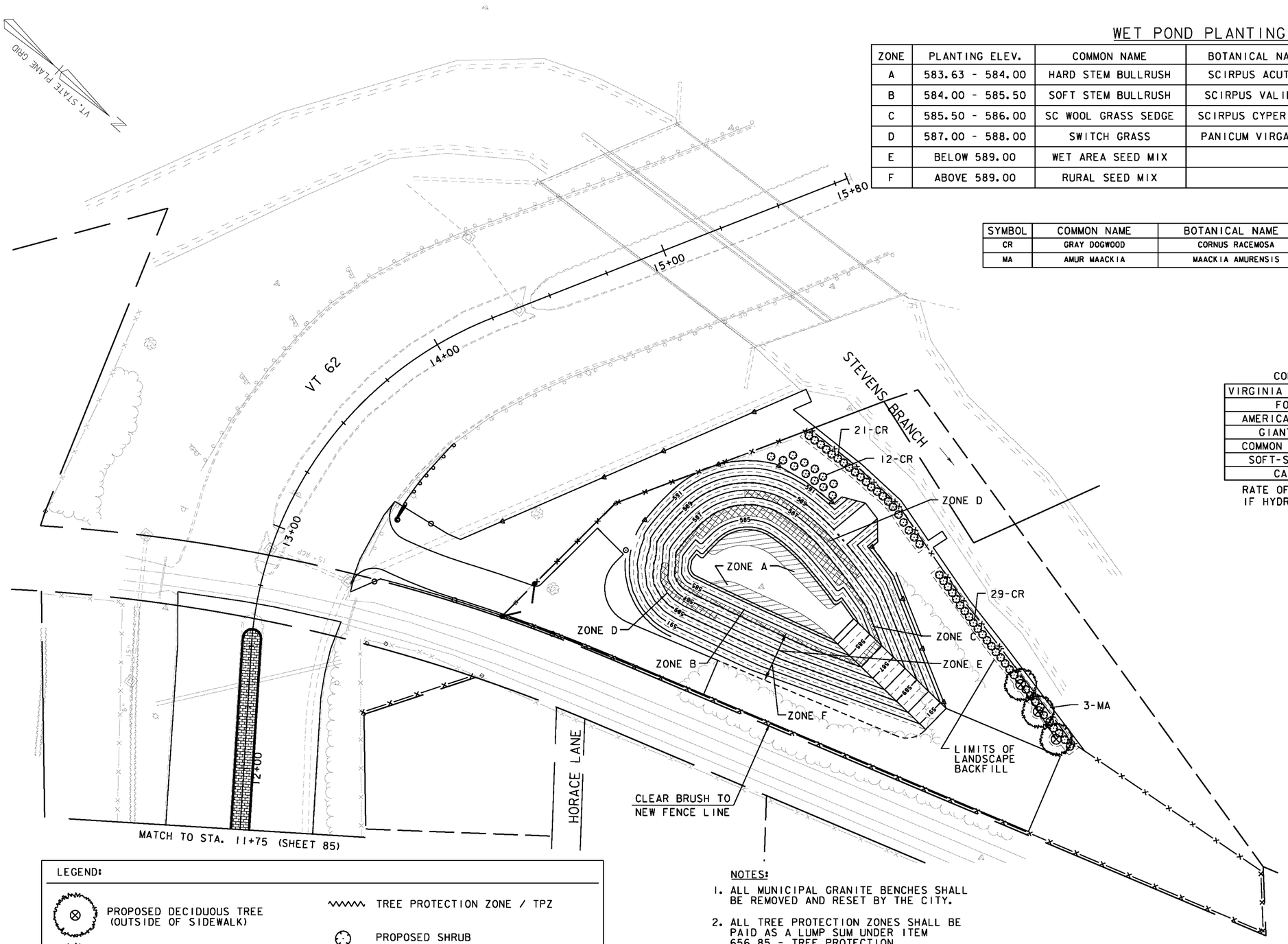
SPECIAL PROVISION (BICYCLE RACK)
STA 138+32 RT

20 0 20 40
FEET

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-I(34) C/2

FILE NAME: z85b010bdr_ld_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: D. PECK
LANDSCAPING PLAN #5
PLOT DATE: 3/9/2011
DRAWN BY: D. PECK
CHECKED BY:
SHEET 89 OF 339




## WET POND PLANTING / SEEDING LEGEND

| ZONE | PLANTING ELEV. | COMMON NAME | BOTANICAL NAME | UNIT | SIZE | QTY | SPACING COMMENTS |
|---|---|---|---|---|---|---|---|
| A | 583.63 - 584.00 | HARD STEM BULLRUSH | SCIRPUS ACUTUS | PEAT POT | 2" PLUGS | 600 | 1' O.C. |
| B | 584.00 - 585.50 | SOFT STEM BULLRUSH | SCIRPUS VALIDUS | PEAT POT | 2" PLUGS | 800 | 1' O.C. |
| C | 585.50 - 586.00 | SC WOOL GRASS SEDGE | SCIRPUS CYPERINUS | PEAT POT | 2" PLUGS | 450 | 1' O.C. |
| D | 587.00 - 588.00 | SWITCH GRASS | PANICUM VIRGATUM | PEAT POT | 2" PLUGS | 200 | 1' O.C. |
| E | BELOW 589.00 | WET AREA SEED MIX | | | | | |
| F | ABOVE 589.00 | RURAL SEED MIX | | | | | |

| SYMBOL | COMMON NAME | BOTANICAL NAME | QTY. | UNIT | SIZE | SPACING / COMMENTS |
|---|---|---|---|---|---|---|
| CR | GRAY DOGWOOD | CORNUS RACEMOSA | 62 | 2 GAL. | 30-36" HT. | 4' O.C. |
| MA | AMUR MAACKIA | MAACKIA AMURENSIS | 3 | B&B | ¾"-1½" CAL | SPRING PLANTING |

## WET AREA SEED MIX

| COMMON NAME | LATIN NAME | % MIX |
|---|---|---|
| VIRGINIA WILD RYE GRASS | ELYMUS VIRGINICUS | 20 |
| FOX SEDGE | CAREX VULPINOIDEA | 10 |
| AMERICAN MANNAGRASS | GLYCERIA GRANDIS | 20 |
| GIANT BUR-REED | SPARGANIUM EURYCARPUM | 10 |
| COMMON THREE-SQUARE | SCIRPUS AMERICANUS | 20 |
| SOFT-STEM BULRUSH | SCIRPUS VALIDUS | 10 |
| CANADA RUSH | JUNCUS CANADENSIS | 10 |

RATE OF APPLICATION: 10 LB / ACRE (20 LB/ACRE IF HYDROSEEDING)

LEGEND:

- PROPOSED DECIDUOUS TREE (OUTSIDE OF SIDEWALK)
- PROPOSED DECIDUOUS TREE WITH 4' x 5' TREE PIT
- TREE PROTECTION ZONE / TPZ
- PROPOSED SHRUB
- EXISTING MEDIUM OR LARGE TREE OR STUMP TO BE REMOVED

NOTES:

1. ALL MUNICIPAL GRANITE BENCHES SHALL BE REMOVED AND RESET BY THE CITY.
2. ALL TREE PROTECTION ZONES SHALL BE PAID AS A LUMP SUM UNDER ITEM 656.85 - TREE PROTECTION.
3. ALL TREES AND NAMED CULTIVARS HAVE BEEN CHECKED AND ALL PATENTS HAVE EXPIRED.

DECIDUOUS TREES
SL STA 15+71 RT
SL STA 15+73 RT
SL STA 15+80 RT

DECIDUOUS SHRUBS
SL STA 15+09 - 15+30 RT
SL STA 15+27 - 15+53 RT
SL STA 15+56 - 15+80 RT

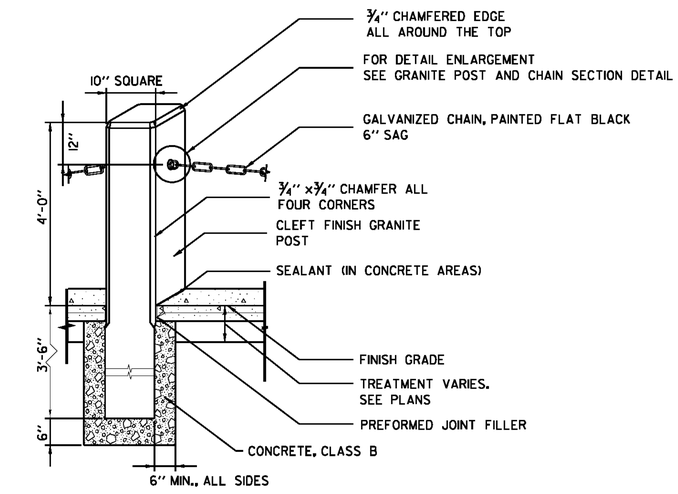
LANDSCAPE BACKFILL, TRUCK MEASUREMENT
SL STA 15+23 - 15+80 RT

20 0 20 40
FEET

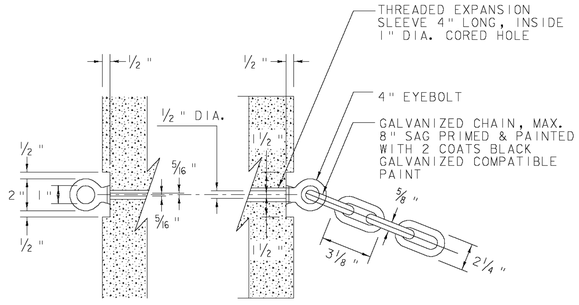
VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-I(34) C/2

FILE NAME: z85b010bdr_ld_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: D. PECK
LANDSCAPING PLAN #6
PLOT DATE: 3/9/2011
DRAWN BY: D. PECK
CHECKED BY:
SHEET 90 OF 339

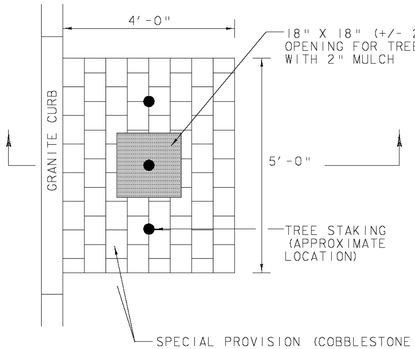



SPECIAL PROVISION (GRANITE POST AND CHAIN FENCE)
N.T.S.



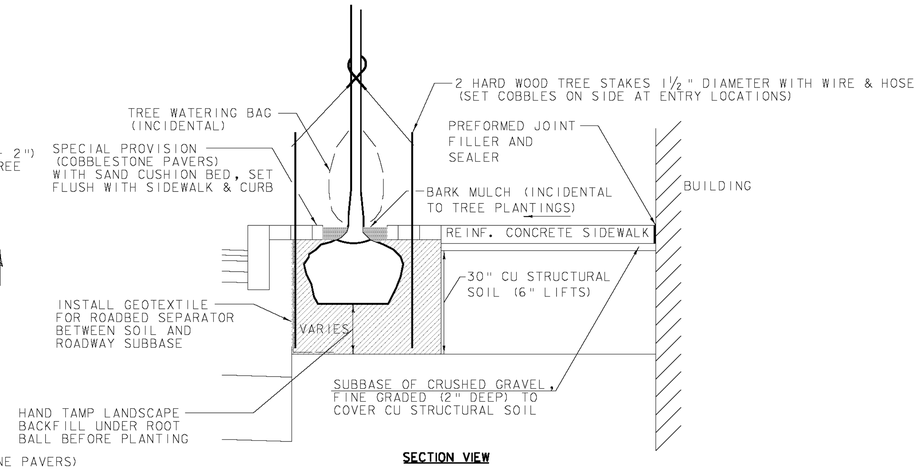

NOTE: END POST WILL HAVE ONLY ONE EYEBOLT TO CONNECT CHAIN

SPECIAL PROVISION (GRANITE POST AND CHAIN FENCE) SECTION DETAIL
N.T.S.




SPECIAL PROVISION (COBBLESTONE PAVERS)
LAID FLAT ON 3" SAND CUSION BED W/ HAND
TIGHT JOINTS & FINE, CLEAN SAND INTO JOINTS.
SAND IS INCIDENTAL TO SPECIAL PROVISION
(COBBLESTONE) PAVERS)

PLAN VIEW

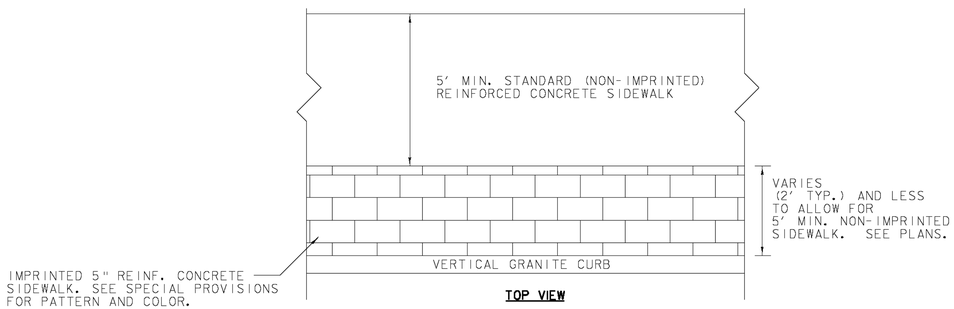



SECTION VIEW

NOTES:

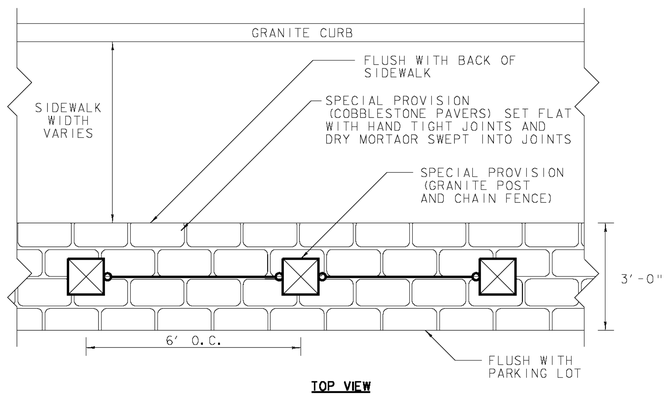
1. LAYOUT TREE STAKES PARALLEL W/ ROADWAY AS SHOWN IN PLAN VIEW.
2. ADJUST COBBLESTONES FOR HARD WOOD STAKES

TREE PIT IN SIDEWALK DETAIL
N.T.S.



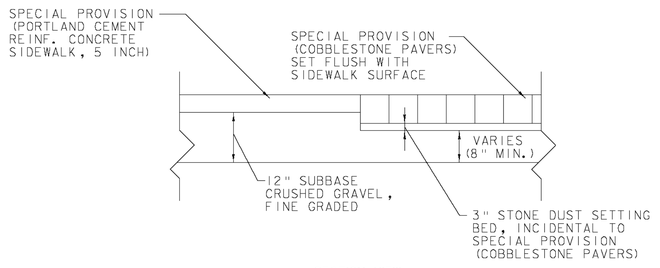

TOP VIEW

TYPICAL CONCRETE SIDEWALK TREATMENT
SEE PLANS FOR LOCATIONS
N.T.S.




TOP VIEW

GRANITE POST LAYOUT AT PARKING LOTS ON MAIN ST. AS SHOWN ON PLANS
N.T.S.




SECTION VIEW

TYPICAL CONCRETE SIDEWALK / COBBLESTONE MATCH
N.T.S.

| | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-1(34) C/2 |
| FILE NAME: 85D010_LDSDET_C2 | PLOT DATE: 3/21/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: DMP / JAR |
| DESIGNED BY: DMP / MDS | CHECKED BY: |
| LANDSCAPING DETAILS #1 | SHEET 91 OF 339 |

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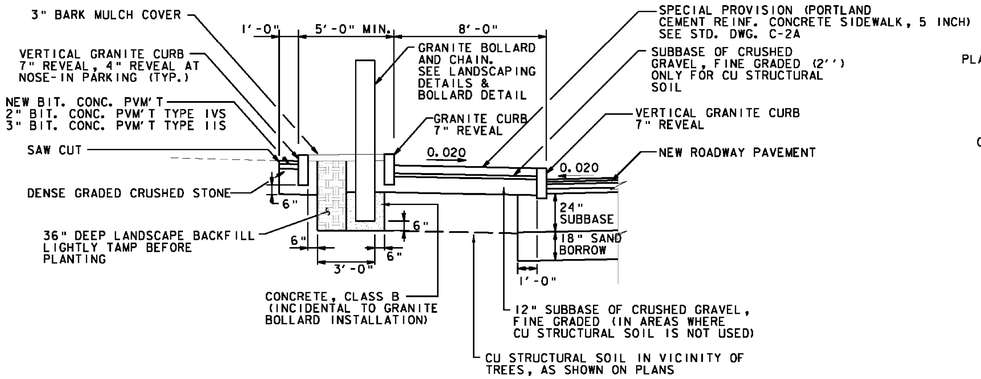
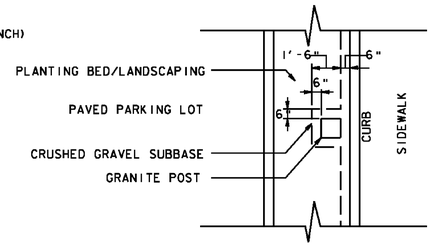



SECTION VIEW

## GRAINTE POST DETAIL FOR PLANTING BED AT PLAZA

N.T.S.

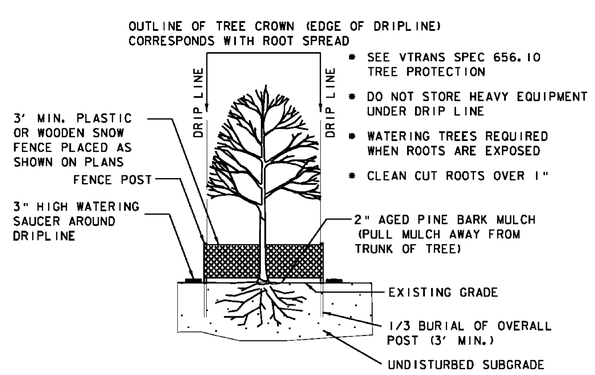



PLAN VIEW

## GRANITE POST DETAIL AT PLAZA

N.T.S.

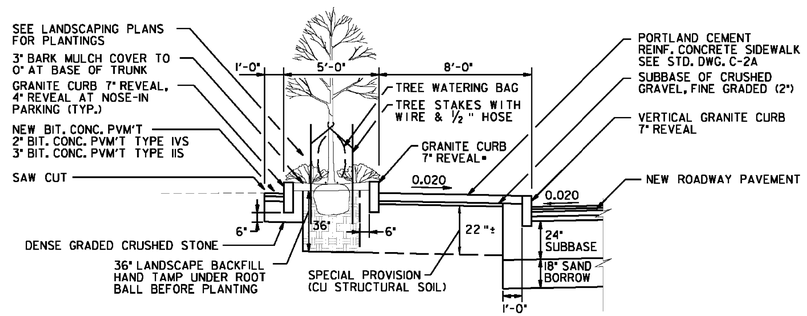
STA. 116+76 LT - 122+67 LT




## TREE PROTECTION ZONE (TPZ) FOR EXISTING TREES

SEE LANDSCAPING PLANS FOR LOCATIONS

N.T.S.

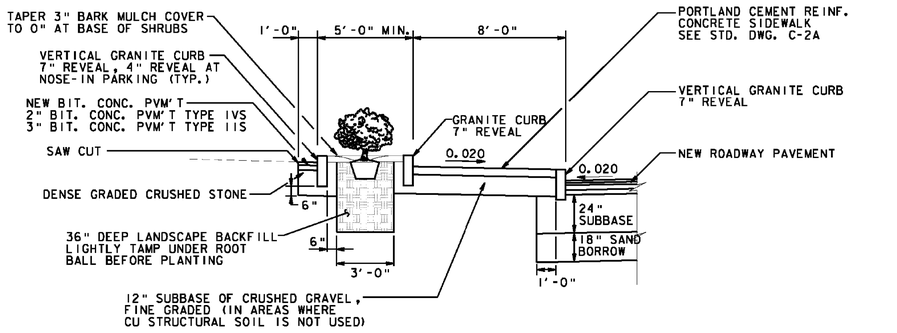



* CUT CURB TO MAX. HEIGHT OF 14" FOR 12' SEGMENTS ADJACENT TO EACH TREE TO ENCOURAGE ROOT GROWTH IN CU STRUCTURAL SOIL. (INCIDENTAL TO CURB ITEM)

SECTION VIEW

## TREE PLANTING BED AT PLAZA WITH CU STRUCTURAL SOIL UNDER SIDEWALK

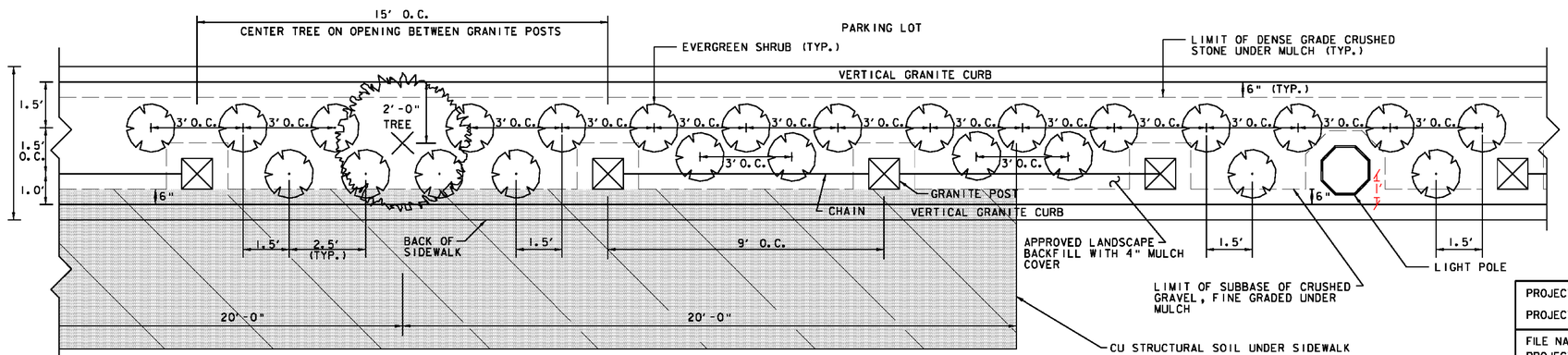
N.T.S.




SECTION VIEW

## PLANTING BED AT PLAZA WITHOUT CU STRUCTURAL SOIL UNDER SIDEWALK

N.T.S.

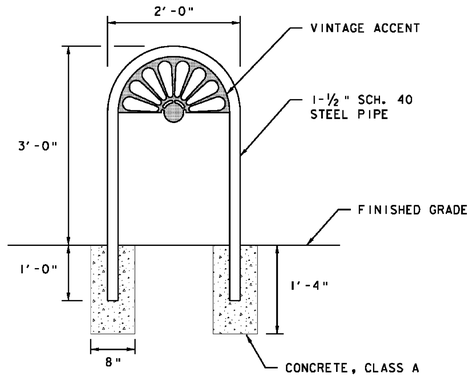



## TREES, SHRUBS, AND BOLLARD LAYOUT AT PLAZA

N.T.S.

VHB Vanasse Hangen Brustlin, Inc.

| | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-1(34) C/2 |
| FILE NAME: 85b010_LDSDET_C2 | PLOT DATE: 3/21/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: DMP / JAR |
| DESIGNED BY: DMP / MDS | CHECKED BY: |
| LANDSCAPING DETAILS #2 | SHEET 92 OF 339 |



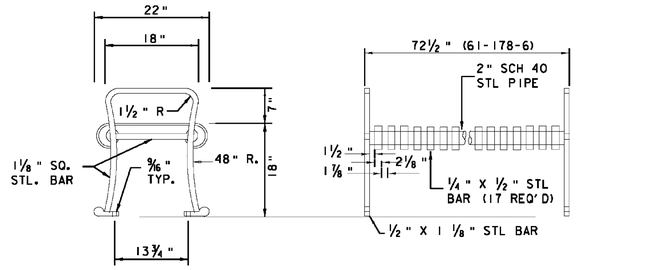

SECTION VIEW

PLAN VIEW

NOTES:

1. BIKE RACK AND HARDWARE FINISHED WITH POLYESTER POWDER COATING - BLACK.
2. SHALL NOT BE MOUNTED WITHIN 24" PARALLEL TO BUILDING, OBJECT, OR ROADWAY.
3. SHALL NOT BE MOUNTED WITHIN 30" PERPENDICULAR TO BUILDING, OBJECT, OR ROADWAY.

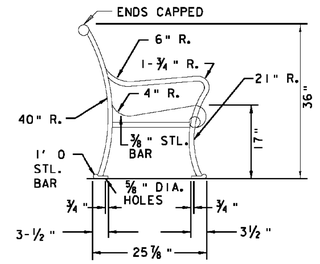
SPECIAL PROVISION (BICYCLE RACK)
N.T.S.

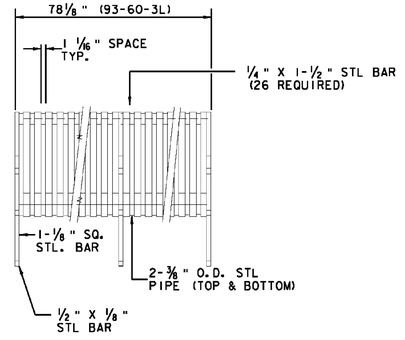



NOTES:

1. BENCH IS WELDED COMPLETELY INTO ONE UNIT AT FACTORY
2. ALL WELDS CONT. THEN GROUND SMOOTH
3. BENCH FINISHED W/ POLYESTER POWDER COATING - BLACK
4. 8" GALV. STEEL ANCHOR BOLTS IN EPOXY GROUT BY INSTALLER, TYP.

SPECIAL PROVISION (STEEL BENCH WITHOUT BACK)
N.T.S.

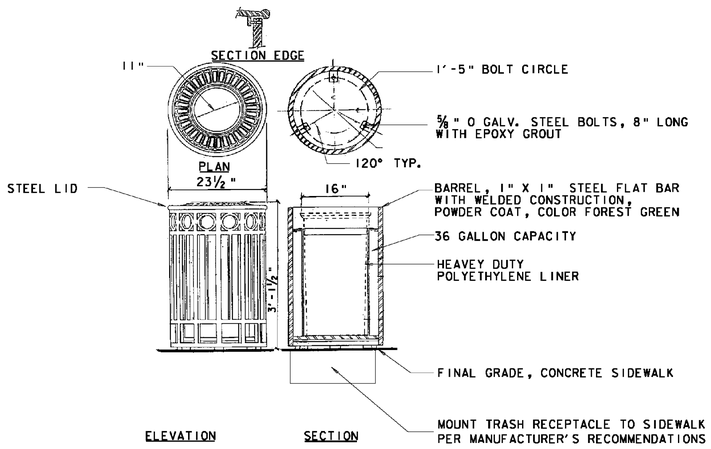



NOTES:

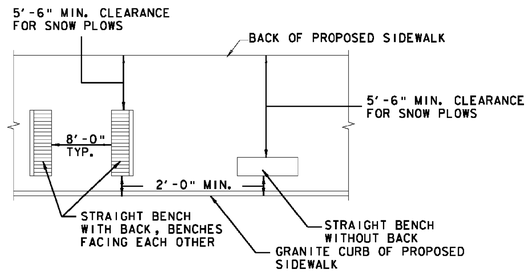
1. BENCH IS WELDED COMPLETELY INTO ONE UNIT AT FACTORY
2. ALL WELDS CONT. THEN GROUND SMOOTH
3. BENCH FINISHED W/ POLYESTER POWDER COATING - BLACK
4. 8" GALV. STEEL ANCHOR BOLTS IN EPOXY GROUT BY INSTALLER, TYP.

SPECIAL PROVISION (STEEL BENCH WITH BACK)
N.T.S.




* SPECIAL PROVISION (TRASH RECEPTACLE)
N.T.S.

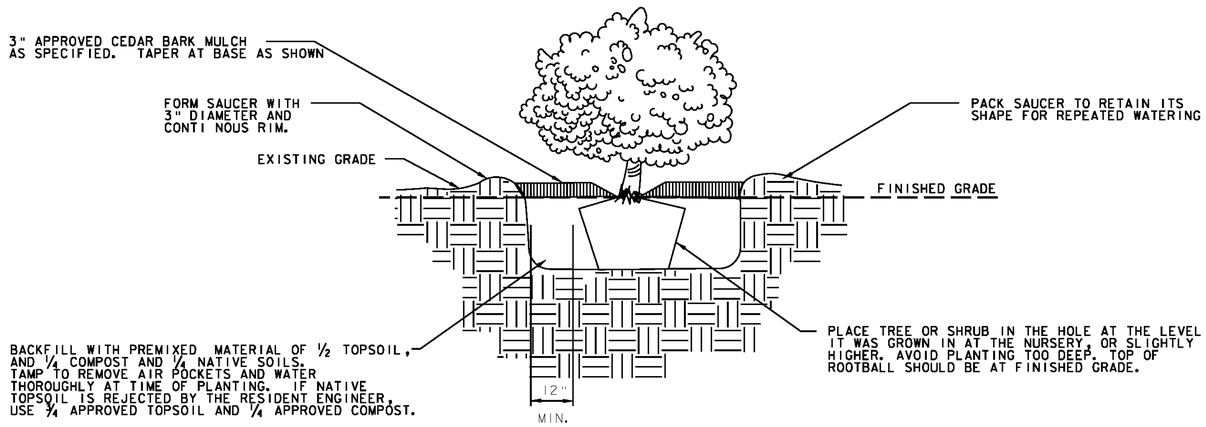
* RAIN COVERS ADDED VIA CHANGE ORDER




ENLARGED PLAN OF BENCH LOCATIONS
N.T.S.

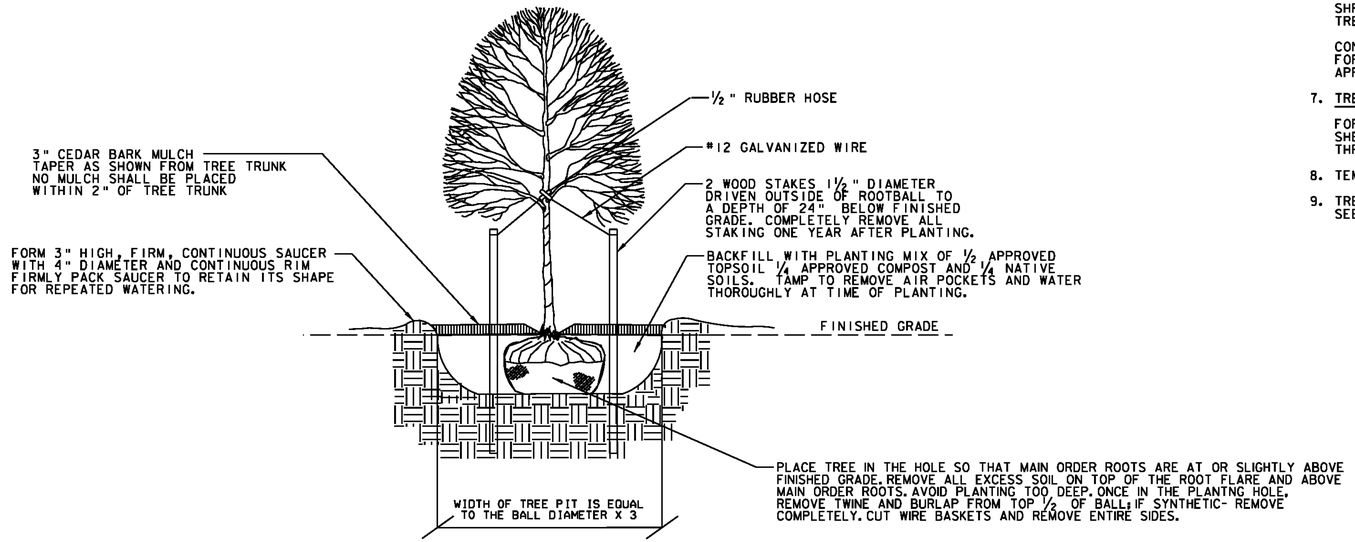
| | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-I(34) C/2 |
| FILE NAME: 85b010_LDSDET_C2 | PLOT DATE: 3/21/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: DMP / JAR |
| DESIGNED BY: DMP / MDS | CHECKED BY: |
| LANDSCAPING DETAILS #3 | SHEET 93 OF 339 |

VHB Vanasse Hangen Brustlin, Inc.




## SHRUB PLANTING DETAIL

(IN AREAS OTHER THAN PLAZA)
N.T.S.




## DECIDUOUS TREE PLANTING DETAIL OUTSIDE OF SIDEWALKS

(IN AREAS OTHER THAN PLAZA AND SIDEWALK)
N.T.S.

## GENERAL LANDSCAPE NOTES:

1. BARK MULCH IS INCLUDED IN THE UNIT PRICE BID FOR THE SECTION 656 PLANTING ITEMS.
2. SEE ROADWAY TYPICAL SECTION SHEETS FOR SEEDING FORMULAS, FERTILIZER APPLICATION RATES, MULCH REQUIREMENTS, ETC.
3. SEE SUBSECTION 755.07 MYCORRHIZAL FUNGI PRODUCT FOR THE APPLICATION OF MYCORRHIZAL FUNGI PER MANUFACTURER'S RECOMMENDATIONS AND SUBSECTION 755.01 LANDSCAPE BACKFILL FOR THE APPLICATION OF COMPOST.
4. ORGANIC MATERIAL

   TOPSOIL, COMPOST AND NATIVE EXISTING SOIL SHALL BE TESTED AT AN APPROVED LAB PRIOR TO DELIVERY ON SITE AND INSTALLATION. ORGANIC MATTER SHALL BE A MINIMUM OF 5%.
5. LANDSCAPE BACKFILL

   BACKFILL WITH PLANTING MIX OF ½ SCREENED TOPSOIL, ¼ COMPOST, ¼ NATIVE SOILS AS APPROVED BY THE ENGINEER. UNSUITABLE NATIVE MATERIAL SHALL BE REPLACED WITH IMPORTED APPROVED TOPSOIL AS DIRECTED BY ENGINEER. REFER TO SUBSECTION 755.01.
6. WATERING

   SHRUBS TO RECEIVE A MINIMUM OF 5 GALLONS AT EACH WATERING, TWICE WEEKLY DURING ESTABLISHMENT PERIOD.
   TREES TO RECEIVE A MINIMUM OF 10 GALLONS AT EACH WATERING, TWICE WEEKLY DURING ESTABLISHMENT PERIOD.

   CONTRACTOR SHALL MAINTAIN AND PROVIDE A LOG TO THE ENGINEER SHOWING AMOUNTS AND DATES OF WATERING FOR ALL PLANTINGS AND NOTING NATURAL RAINFALL EVENTS. WATERING SCHEDULE MAY BE ADJUSTED AS APPROVED BY THE ENGINEER. REFER TO SUBSECTION 656.08(f).
7. TREE PIT WIDTH

   FOR TREES WITHIN PROJECT CONSTRUCTION LIMIT, THE DIMENSIONS OF BACK FILL PLANTING MIX ARE NOTED ON EACH SHEET. FOR ALL TREES TO BE PLANTED OUTSIDE PROJECT CONSTRUCTION LIMITS, THE PLANTING PIT SHALL BE THREE TIMES THE WIDTH OF THE ROOT BALL.
8. TEMPORARY STORAGE OF ALL PLANTS SHALL BE LIMITED TO 45 DAYS FROM THE TIME OF DELIVERY UNTIL PLANTING.
9. TREES DESIGNATED TO BE PROTECTED SHALL BE WATERED AT THE SAME RATE AND SCHEDULE AS NEW PLANTINGS. SEE SUBSECTION 656.10 TREE PROTECTION.

VHB Vanasse Hangen Brustlin, Inc.

| | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-1(34) C/2 |
| FILE NAME: 85b010_LDSDET_C2 | PLOT DATE: 3/23/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: DMP / JAR |
| DESIGNED BY: DMP / MDS | CHECKED BY: |
| LANDSCAPING DETAILS #4 | SHEET 94 OF 339 |

# OVERHEAD SIGN SUPPORT NOTES

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE STATE OF VERMONT AGENCY OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR CONSTRUCTION", DATED 2006, WITH CURRENT MODIFICATIONS.

2. OVERHEAD SIGN SUPPORTS SHALL CONFORM TO AASHTO'S PUBLICATION ENTITLED "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS", DATED 2009 AND ITS LATEST INTERIMS.

3. THE DESIGN CALCULATIONS SHALL TAKE INTO ACCOUNT THE FOLLOWING CRITERIA:

   STRUCTURE CRITERIA
   - DESIGN LIFE: 50 YEARS
   - WIND LOAD: 90 MPH, UNLESS SPECIAL SITE CONDITIONS DICTATE
   - ICE LOAD PER AASHTO'S PUBLICATION ENTITLED 'STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS', DATED 2009

   FATIGUE CRITERIA
   - FATIGUE CATEGORY: I FOR MAST ARM SIGN STRUCTURES, 2 FOR SIGNAL MAST ARMS
   - VORTEX SHEDDING: INCLUDE
   - NATURAL WIND GUST: INCLUDE
   - TRUCK INDUCED WIND GUSTS: INCLUDE FOR ROADWAYS WHERE SPEED LIMIT IS 40 MPH OR GREATER
   - GALLOPING: DO NOT INCLUDE IN DESIGN CALCULATIONS

   FOUNDATION CRITERIA
   - CONCRETE: CONCRETE, HIGH PERFORMANCE CLASS B, STATE OF VERMONT, AGENCY OF TRANSPORTATION'S 'STANDARD SPECIFICATIONS FOR CONSTRUCTION', DATED 2006, SECTION 501
   - REINFORCING STEEL: STATE OF VERMONT, AGENCY OF TRANSPORTATION'S 'STANDARD SPECIFICATIONS FOR CONSTRUCTION', DATED 2006, SUB-SECTION 713.01

   ALLOWABLE BEARING CAPACITY: IN ACCORDANCE WITH GEOTECHNICAL REPORT
   INTERNAL SOIL FRICTION ANGLE, $\phi$: IN ACCORDANCE WITH GEOTECHNICAL REPORT
   WHICH IS MADE PART OF THIS CONTRACT.

4. ANCHOR BOLTS

   A MINIMUM OF FOUR STAINLESS STEEL ANCHOR BOLTS WITH TWO HEXAGON NUTS, ONE WASHER AND ONE LOCK WASHER PER BOLT SHALL BE FURNISHED WITH EACH POLE. ANCHOR BOLT PLATES, WHEN USED, SHALL ALSO BE STAINLESS STEEL. STATE OF VERMONT, AGENCY OF TRANSPORTATION'S 'STANDARD SPECIFICATIONS FOR CONSTRUCTION', DATED 2006, SUB-SECTION 714.09.

5. FLANGE BOLTS

   ALL FLANGE BOLTS AND HEX NUTS SHALL BE HIGH STRENGTH STEEL AND SHALL CONFORM TO STATE OF VERMONT, AGENCY OF TRANSPORTATION'S 'STANDARD SPECIFICATIONS FOR CONSTRUCTION', DATED 2006, SUB-SECTION 714.05.

6. HORIZONTAL AND VERTICAL MEMBERS

   STEEL TUBES SHALL BE FORMED AND WELDED WITH ONE CONTINUOUS LONGITUDINAL WELD ONLY. AFTER FORMING AND WELDING THEY SHALL BE COLD ROLLED TO ENSURE UNIFORMITY OF SIZE AND SMOOTHNESS OF WELD. THERE SHALL BE NO TRANSVERSE WELDING EXCEPT AT THE FLANGE CONNECTIONS AND POLE BASE PLATES, WHERE THE TUBES SHALL TELESCOPE THE FLANGES AND PLATES AND BE CONTINUOUSLY WELDED BOTH SIDES INSIDE AND OUT TO WITHSTAND THE FULL TRANSFER OF THE BENDING STRENGTH TO THE BOLTS. OPTIONALLY, THE MEMBERS MAY BE A SERIES OF TWO OR THREE DIFFERENT DIAMETER PIPES WELDED TOGETHER. STEEL TUBES SHALL BE CONSTRUCTED FROM MATERIALS CONFORMING TO STATE OF VERMONT, AGENCY OF TRANSPORTATION'S 'STANDARD SPECIFICATIONS FOR CONSTRUCTION', DATED 2006, SUB-SECTION 752.02.

7. GALVANIZING

   ANY STEEL COMPONENTS, EXCEPT CONCRETE REINFORCING AND STAINLESS STEEL HARDWARE THAT ARE NOT CALLED OUT TO BE PAINTED BLACK, ARE TO BE HOT DIPPED GALVANIZED AFTER FABRICATION. THE ASSEMBLIES SHALL BE DESIGNED AND FABRICATED TO PERMIT GALVANIZING ON ALL INTERIOR AND EXTERIOR SURFACES AND SHALL BE FREE OF POCKETS AND OTHER STRUCTURAL OBSTRUCTIONS THAT WILL NOT PERMIT PROPER DEPOSITION OF ZINC COATING. GALVANIZING SHALL BE IN ACCORDANCE WITH STATE OF VERMONT, AGENCY OF TRANSPORTATION'S 'STANDARD SPECIFICATIONS FOR CONSTRUCTION', DATED 2006, SUB-SECTION 752.02.

8. WELDING

   ALL DESIGN DETAILS, WORKMANSHIP, PROCEDURES AND INSPECTION SHALL CONFORM TO VTRANS SPECIFICATIONS SUB-SECTION 506.10.

9. FOUNDATIONS

   A. FOUNDATIONS SHALL BE DESIGNED IN ACCORDANCE WITH THE MREI 10-01 GUIDELINES ISSUED BY THE AGENCY.

   B. FOUNDATIONS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE FOLLOWING NOTES:

      1. ALL FOUNDATIONS FOR SIGN STRUCTURES SHALL BE CYLINDRICAL. SPREAD FOOTINGS SHALL NOT BE PERMITTED. ALL SIGN STRUCTURE FOUNDATIONS SHALL BE DESIGNED TO BE CONTAINED ENTIRELY WITHIN STATE OR TOWN RIGHTS-OF-WAY.

      2. EXCEPT FOR THE UPPERMOST 2 FEET OF SOIL, DRILLED SHAFT FOUNDATIONS SHALL BE POURED AGAINST UNDISTURBED MATERIAL; THE TOP 2 FEET OF SOIL SHALL BE NEGLECTED FOR DESIGN PURPOSES. A DISPOSABLE CIRCULAR CONCRETE FORM, IF USED, SHALL NOT BE PLACED DEEPER THAN 2 FEET, IN ORDER NOT TO REDUCE THE FRICTION BETWEEN THE SOIL AND THE CONCRETE.

      3. AS AN ALTERNATIVE TO THE DRILLED HOLES, FOUNDATIONS MAY BE POURED IN EXCAVATED HOLES USING THE PROPER FORMS, WHICH SHALL BE REMOVED. THE EXCAVATED HOLES SHALL BE AT LEAST 2 FEET CLEAR OF THE FOUNDATION SIDES AND 1 FOOT DEEPER THAN THE FOUNDATION. CARE SHALL BE TAKEN TO AVOID EXCAVATING AROUND THE TOP OF THE FOUNDATION. DESIGN LIMITS AS FOR AN AUGURED FOUNDATION APPLY.

      4. BACKFILL MATERIAL PLACED ADJACENT TO THE FOUNDATION SHALL MEET THE REQUIREMENTS FOR GRANULAR BACKFILL FOR STRUCTURES, VTRANS SPECIFICATION SUB-SECTION 704.08. BACKFILL MATERIAL SHALL BE COMPACTED AS DESCRIBED IN VTRANS CONSTRUCTION SPECIFICATIONS SUB-SECTION 204.08.

      5. CONCRETE FOR FOUNDATION SHALL CONFORM TO THE REQUIREMENTS OF SECTION 501. IF DRILLED SHAFT FOUNDATIONS ARE REQUIRED, THE CONCRETE SPECIFICATIONS MAY NEED TO BE ADJUSTED FOR CONSTRUCTIBILITY ISSUES. HOWEVER, IF REQUIRED, THE CONTRACTOR SHALL SUBMIT ANY CHANGES TO THE CONCRETE SPECIFICATION FOR REVIEW BY THE VTRANS PROJECT MANAGER.

      6. STEEL PILES SHALL MEET THE REQUIREMENTS OF SECTION 505.

      7. WHEN THE DESIGN DEPTH OF A FOUNDATION CANNOT BE OBTAINED DUE TO UNFORESEEN FIELD CONDITIONS AS DETERMINED BY THE ENGINEER, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND CONTACT THE MANUFACTURER TO OBTAIN A REVISED FOUNDATION DESIGN. SUCH A REVISION SHALL BE SUBMITTED TO THE VERMONT, AGENCY OF TRANSPORTATION, PROJECT MANAGER AND MAY REQUIRE UP TO A 4 WEEK REVIEW PERIOD BY VTRANS.

   C. SIGNS SHALL BE INSTALLED AND LEVELED AND POLES SHALL BE PLUMB PRIOR TO PLACING GROUT UNDER POLE BASE. GROUT MATERIAL SHALL BE NON-SHRINKING MORTAR CONFORMING TO SUB-SECTION 707.03 (MORTAR TYPE IV).

10. EACH OVERHEAD TRAFFIC SIGN SUPPORT SHALL BE GROUNDED. THE GROUND SHALL CONSIST OF:

    A) AN INTERNAL GROUND LUG OPPOSITE THE HAND HOLE.

    B) A #6 AWG. (MIN.) SOFT DRAWN COPPER GROUNDING ELECTRODE CONDUCTOR.

    C) A 5/8" X 8' (MIN.) COPPER CLAD GROUNDING ELECTRODE. THE RESISTANCE TO GROUND SHALL BE 25 OHMS OR LESS. ADDITIONAL GROUNDING ELECTRODES MAY BE REQUIRED (MINIMUM SPACING SHALL BE 6 FEET).

    WHEN A POWER SERVICE, METER AND DISCONNECT ARE ATTACHED TO A POLE, THERE SHALL BE A CONTINUOUS GROUNDING ELECTRODE CONDUCTOR FROM THE METER AND DISCONNECT WHICH MAY RUN INTERNAL TO THE UPRIGHT, THROUGH THE 1/2 INCH FLEXIBLE TUBING IN THE CONCRETE BASE TO THE REQUIRED GROUNDING ELECTRODE(S). THE GROUNDING ELECTRODE CONDUCTOR FROM THE POLE GROUNDING LUG, CONTROLLER CABINET AND/OR LUMINAIRE MAY ATTACH TO THIS CONTINUOUS GROUNDING ELECTRODE CONDUCTOR FROM THE SERVICE METER AND DISCONNECT. THE CONTRACTOR SHALL PERFORM A RESISTANCE TO GROUND TEST ON THE CONTINUOUS GROUNDING ELECTRODE CONDUCTOR FROM THE SERVICE METER AND DISCONNECT AND PROVIDE A WRITTEN STATEMENT TO THE AREA ELECTRICAL INSPECTOR THAT THE GROUNDING ELECTRODE CONDUCTOR IS CONTINUOUS FROM THE SERVICE METER AND DISCONNECT AND THE RESISTANCE TO GROUND IS 25 OHMS OR LESS.

11. HORIZONTAL MEMBERS SHALL BE CAMBERED AND THE VERTICAL POLES BACK RAKED (WHERE APPLICABLE) TO THE ANTICIPATED DEAD LOAD DEFLECTION PLUS THE CAMBER, IF ANY, SPECIFIED ON THE PLANS.

12. AN EQUIVALENT ALTERNATE DESIGN MAY BE SUBSTITUTED FOR THE DETAILS AND MATERIALS SHOWN. THE VERMONT AGENCY OF TRANSPORTATION SHALL HAVE THE SOLE AUTHORITY AND RETAIN THE DISCRETION TO DETERMINE IF THE CONTRACTOR'S ALTERNATE DESIGN IS EQUIVALENT AND ACCEPTABLE.

13. THE DETAILS OF DESIGN FOR THE STRUCTURE AND FOUNDATION(S) ARE TO BE SUPPLIED BY THE CONTRACTOR AND/OR BY THE MANUFACTURER. THE STRUCTURE SHALL BE DESIGNED TO RESIST THE MAXIMUM LOADING AS OUTLINED IN THE AASHTO STANDARD SPECIFICATIONS (SEE NOTE 2 AND 14G). ALL DESIGN CALCULATIONS FOR THE STRUCTURE AND THE FOUNDATION(S) SHALL BE CHECKED AND STAMPED BY AN ENGINEER REGISTERED IN THE STATE OF VERMONT PRIOR TO SUBMITTAL OF THE FABRICATION DRAWINGS TO THE VERMONT AGENCY OF TRANSPORTATION.

14. THE CONTRACTOR SHALL SUBMIT THREE (3) COPIES OF THE DESIGN CALCULATIONS TO THE VERMONT AGENCY OF TRANSPORTATION, PROJECT MANAGER, SHOWING THE FOLLOWING INFORMATION FOR EACH OF THE VERTICAL AND HORIZONTAL COMPONENTS OF THE STRUCTURE AND FOUNDATION:

    A. THE DESIGN AXIAL AND SHEAR FORCES AND BENDING AND TORSIONAL MOMENTS ACTING AT THE TOP OF THE FOUNDATION.

    B. THE DESIGN AXIAL, BENDING AND SHEAR STRESSES AND THE COMBINED STRESS RATIO.

    C. THE ALLOWABLE AXIAL, BENDING, AND SHEAR STRESSES.

    D. ITEMS A, B, C - SHALL BE SHOWN FOR EACH OF THE GROUP LOADINGS (I,II,III) AND FOR THE BASIC WIND LOAD APPLIED TO THE TWO CASES OUTLINED IN THE AASHTO STANDARD SPECIFICATIONS (SEE NOTE 2) SECTION 1.2.5 (D) (4).

    E. FAILURE TO SUPPLY THE PROPER DESIGN INFORMATION SHALL BE CAUSE FOR REJECTION OF THE STRUCTURE.

    F. A MINIMUM OF FOUR (4) WEEKS SHALL BE REQUIRED FOR REVIEW BY THE VERMONT AGENCY OF TRANSPORTATION AND THE ENGINEER OF RECORD (VANASSE HANGEN BRUSTLIN, INC).

    G. EVERY MEMBER AND CONNECTION IN AN OVERHEAD TRAFFIC SIGN SUPPORT SHALL HAVE A MAXIMUM DESIGN RATIO OF 85% TO PROVIDE RESIDUAL CAPACITY FOR FUTURE MODIFICATIONS TO SIGN SIZE OR CONFIGURATIONS.

15. FABRICATION DRAWINGS (6 COPIES OF EACH) SHALL BE SUBMITTED TO THE STATE OF VERMONT, AGENCY OF TRANSPORTATION, PROJECT MANAGER FOR APPROVAL PRIOR TO FABRICATION. THE FABRICATION DRAWINGS SHALL INCLUDE THE FOLLOWING INFORMATION:

    A. DETAILED DRAWING OF EACH COMPONENT OF THE STRUCTURE.

    B. MATERIAL SPECIFICATION FOR EACH COMPONENT OF THE STRUCTURE, EITHER BY COMPLETE SPECIFICATION OR REFERENCE TO APPLICABLE ASTM STANDARDS.

    C. NOTATION OF PROJECT NAME, PROJECT NUMBER, ROUTE NUMBER, AND STRUCTURE STATIONING (TO BE INCLUDED ON EACH SHEET).

    D. DETAILS FOR LOCATION OF SIGNS AND ATTACHMENT HARDWARE FOR THE SUPPORT STRUCTURE.

    E. ALL ELEVATIONS AND DIMENSIONS NECESSARY TO PROVIDE A COMPLETE SET OF RECORD PLANS.

    F. DEAD LOAD DEFLECTION AND CAMBER INFORMATION.

    G. WELDING DETAILS AND PROCEDURES ARE REQUIRED FOR ALL WELDS. PROCEDURES SHALL BE SUBMITTED FOR APPROVAL WITH REFERENCE TO EACH WELD IDENTIFIED ON THE FABRICATION DRAWINGS. (SEE SUB-SECTION 506.10).

    H. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLETION OF THE STRUCTURE AND FOUNDATION DATA ON THE DETAIL SHEETS.

16. BASE PLATES SHALL BE STAMPED WITH THE VERTICAL POLE DIAMETER, HEIGHT, YIELD STRENGTH, GAUGE AND THE HORIZONTAL MEMBER DIAMETER, LENGTH, YIELD STRENGTH, GAUGE, ALTERNATELY. THE INFORMATION MAY BE STAMPED ON A METAL TAG RIVETED TO THE POLE NEAR THE HAND HOLE.

17. SEE STANDARD E-171A FOR ADDITIONAL NOTES.

18. SEE SHEETS 110-129 FOR SIGN DESIGNS

19. SEE SPECIAL PROVISIONS FOR ADDITIONAL DETAILS FOR PAINTED SIGN STRUCTURES.

| | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-I(34) C/2 |
| FILE NAME: z09B240_TSPS-Notes.dgn | PLOT DATE: 3/9/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: DMP / JAR |
| DESIGNED BY: DMP / MDS | CHECKED BY: |
| OVERHEAD SIGN SUPPORT NOTES | SHEET 95 OF 339 |

VHB Vanasse Hangen Brustlin, Inc.

## LETTER OR SYMBOL

| | |
|---|---|
| STA 111+73 RT | (LEFT ARROW) |
| STA 112+53 RT | ("ONLY") |
| STA 112+82 RT | ("ONLY") |
| STA 113+33 RT | (RIGHT ARROW) |
| STA 113+33 RT | (LEFT ARROW) |
| STA 114+57 RT | (LEFT ARROW) |
| STA 114+57 LT | (RIGHT ARROW) |
| STA 115+12 LT | ("ONLY") |
| STA 115+37 RT | ("ONLY") |
| STA 115+68 LT | (RIGHT ARROW) |
| STA 116+17 RT | (LEFT ARROW) |
| SL STA 20+50 LT | (LEFT/THRU) |
| SL STA 20+50 LT | (RIGHT ARROW) |
| SL STA 21+36 LT | (LEFT/THRU) |
| SL STA 21+36 LT | ("ONLY") |
| SL STA 10+59 LT | (RIGHT ARROW) |
| SL STA 10+59 LT | (LEFT/THRU) |
| SL STA 11+47 LT | (LEFT/THRU) |
| SL STA 11+47 LT | ("ONLY") |
| SL STA 31+01 RT | (THRU ARROW) |
| SL STA 31+18 RT | (THRU ARROW) |

## 4 INCH YELLOW LINE

| | |
|---|---|
| STA 111+36 - 111+50 CL (DOUBLE) | 30' |
| STA 111+58 - 113+39 CL (DOUBLE) | 364' |
| STA 114+50 - 116+32 RT (DOUBLE) | 370' |
| SL STA 20+49 - 21+00 LT | |
| SL STA 20+49 - 21+00 RT | |
| SL STA 21+00 - 21+75 LT (DOUBLE) | |
| SL STA 21+00 - 21+75 RT (DOUBLE) | |
| SL STA 10+58 - 11+75 LT | 194' |
| SL STA 10+58 - 11+75 RT | 194' |
| SL STA ~~30+35~~ 30+75 - 31+42 CL (DOUBLE) | 278' |
| STA 111+00 LT (BROOK ST.) | 142' |
| STA 110+25 - 111+12 CL | 178' |

## 8 INCH YELLOW LINE

SL STA 21+00 - 21+75 (HATCHING)

## RAILROAD CROSSING SYMBOL

SL STA 10+89 - 12+46 RT (TWO)

## 24 INCH STOP BAR

| | |
|---|---|
| STA 113+39 RT | |
| STA 114+50 LT-RT | |
| SL STA 20+41 - 20+49 LT | 36.5' |
| SL STA 10+50 - 10+56 LT | 36.33' |
| SL STA 30+35 LT | 14.66' |

## CROSSWALK MARKING

| | |
|---|---|
| STA 110+70 - 111+29 LT | 53' |
| STA 111+54 LT-RT | 48' |
| STA 113+48 - 113+46 LT-RT | 84.33' |
| STA 114+43 - 114+42 LT-RT | 86' |
| SL STA 20+33 - 20+44 LT-RT | 92.66' |
| SL STA 10+42 - 10+52 LT-RT | 94' |
| SL STA 30+27 LT-RT | 32.66' |

MATCH TO STA. 21+75 (SHEET 102)

VT. STATE PLANE GRID

## 4 INCH WHITE LINE

| | |
|---|---|
| STA 110+65 - 111+50 RT (BROKEN) | 15' |
| STA 110+65 - 111+50 RT (BROKEN) | |
| STA 111+25 - 111+50 LT | |
| STA 111+58 - 113+44 LT | 187' |
| STA 111+58 - 113+37 RT | 182' |
| STA 111+58 - 113+37 RT | 182' |
| STA 111+58 - 112+64 RT (BROKEN) | 182' |
| STA 112+50 - 113+39 LT (DASHED) | 30' |
| STA 112+64 - 113+37 RT | |
| STA 114+46 - 116+90 RT | 283' |
| STA 114+50 - 116+00 RT (BROKEN) | 40' |
| STA 114+52 - 116+32 CL | 183' |
| STA 114+52 - 115+80 LT | 151' |
| STA 114+52 - 116+38 LT | 164' |
| SL STA 20+44 - 21+75 LT | 97' |
| SL STA 20+47 - 21+75 LT | 66' |
| SL STA 20+48 - 21+75 RT | 63' |
| SL STA 20+49 - 21+25 RT (DASHED) | 20' |
| SL STA 21+25 - 21+75 RT (BROKEN) | |
| SL STA 10+52 - 11+75 LT | 215' |
| SL STA 10+70 - 11+75 RT (DASHED) | 50' |
| SL STA 10+53 - 11+75 LT | 215' |
| SL STA 10+55 - 11+75 RT | 189' |

## REMOVING SIGNS (TYPE B)

STA 112+95 LT-RT (OVERHEAD/4 SIGNS)
STA 115+41 LT-RT (OVERHEAD/4 SIGNS)
SL STA 21+28 LT-RT (OVERHEAD/3 SIGNS)
SL STA 11+21 LT-RT (OVERHEAD/3 SIGNS)

## REMOVING SIGNS (TYPE A)

STA 111+50 LT
STA 115+39 LT (2 SIGNS)
STA 115+49 RT
SL STA 20+52 CL (7 SIGNS)
SL STA 20+91 CL (5 SIGNS)
SL STA 10+62 CL (3 SIGNS)
SL STA 10+94 LT (2 SIGNS)
SL STA 11+14 CL (2 SIGNS)
SL STA 11+14 RT
SL STA 11+21 LT (3 SIGNS)
SL STA 11+50 LT
SL STA 11+55 CL
SL STA 30+54 LT (3 SIGNS)
SL STA 30+54 RT
STA 21+65, RT

## SPECIAL PROVISION

(REMOVE EXISTING OVERHEAD TRAFFIC SIGN ASSEMBLY, MULTI-SUPPORT)

STA 112+95 LT-RT (OVERHEAD/4 SIGNS)
STA 115+41 LT-RT (OVERHEAD/4 SIGNS)
SL STA 21+28 LT-RT (OVERHEAD/3 SIGNS)
SL STA 11+21 LT-RT (OVERHEAD/3 SIGNS)

## ERECTING SALVAGED SIGNS

SL STA 20+52 CL (3 SIGNS)
SL STA 20+91 CL (2 SIGNS)
STA 21+65, RT

MATCH TO STA. 11+75 (SHEET 103)

MATCH TO STA. 116+90 (SHEET 97)

## STRIPING LEGEND

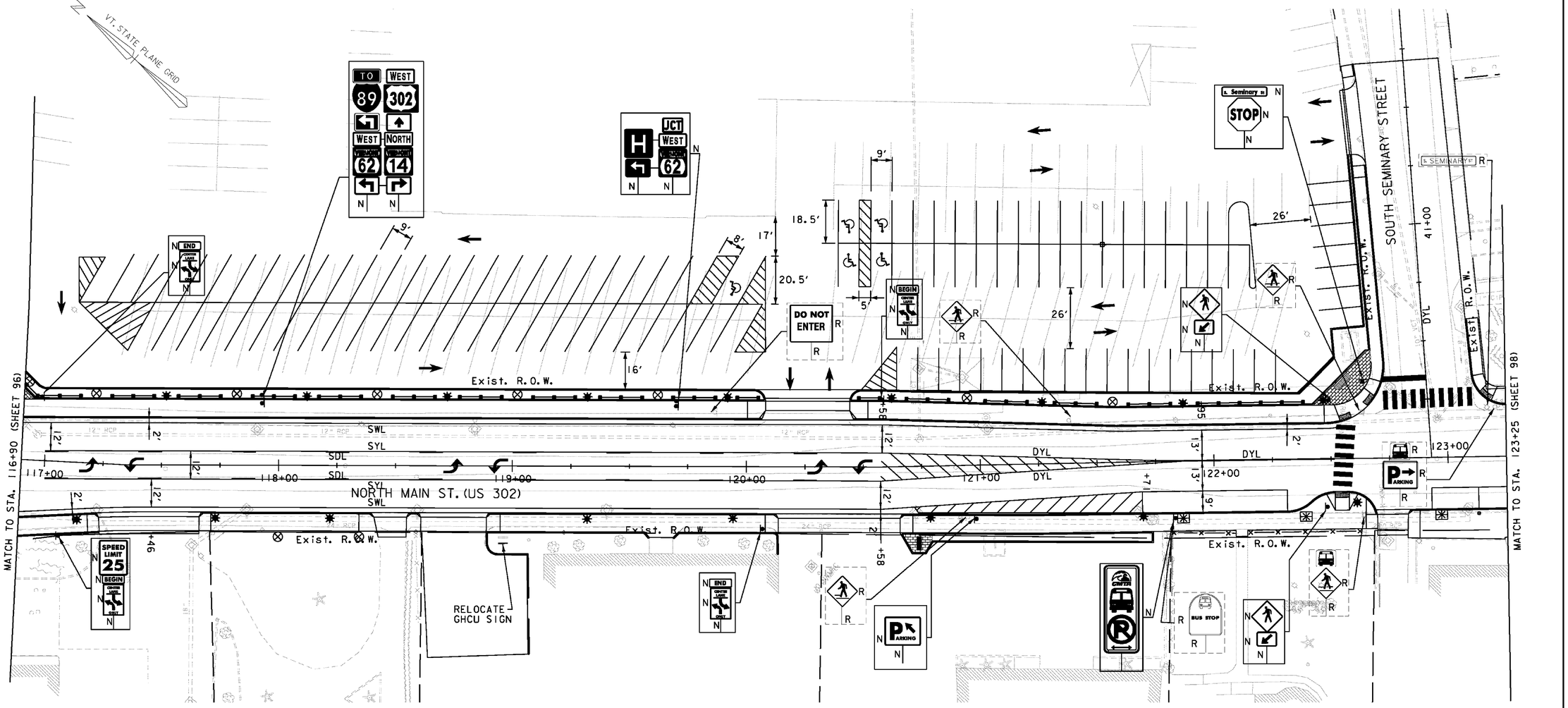
SWL = SINGLE WHITE LINE
SYL = SINGLE YELLOW LINE
DYL = DOUBLE YELLOW LINE
SDL = SINGLE DASHED LINE
SBL = SINGLE BROKEN LINE

## SIGNING LEGEND

N = NEW
R = REMOVE
R&S = REMOVE AND SALVAGE
RET = RETAIN
S = SALVAGED SIGN
B-B = BACK TO BACK
OH = OVERHEAD SIGN

| | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC-F 026-I(34) C/2 |
| FILE NAME: z85b010bdr_spm_C2 | PLOT DATE: 3/9/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: D. PECK |
| DESIGNED BY: D. PECK | CHECKED BY: |
| SIGNS AND PAVEMENT MARKING PLANS #1 | SHEET 96 OF 339 |

VHB Vanasse Hangen Brustlin, Inc.




4 INCH WHITE LINE

STA 116+86 - 122+53 LT } 1102'
STA 116+90 - 121+71 RT }
STA 117+10 - 122+64 LT (PLAZA STRIPING)
STA 121+71 - 122+31 RT (BUS PARKING) 49'
STA 122+93 - 123+25 RT PARKING LANES) 67'

4 INCH YELLOW LINE

STA 117+00 - 120+58 LT 386'
STA 117+00 - 120+58 LT (DASHED) 125'
STA 117+00 - 120+58 RT 386'
STA 117+00 - 120+58 RT (DASHED) 123'
STA 120+58 LT - 121+95 CL (DOUBLE) 216'
STA 120+58 RT - 121+95 CL (DOUBLE) 216'
STA 121+95 - 122+53 CL (DOUBLE) 164'
SL STA 40+33 - 40+70 CL (DOUBLE) 326

8 INCH YELLOW LINE

STA 120+58 - 121+91 (HATCHING) 121'

24 INCH STOP BAR

SL STA 40+34 LT 20'

LETTER OR SYMBOL

STA 117+04 LT (THRU ARROW)
STA 117+21 CL (LEFT ARROW)
STA 117+37 CL (LEFT ARROW)
STA 118+65 LT (THRU ARROW)
STA 118+76 CL (LEFT ARROW)
STA 118+81 LT (THRU ARROW)
STA 118+92 CL (LEFT ARROW)
STA 119+95 LT (HANDICAP)
STA 120+17 LT (THRU ARROW)
STA 120+32 CL (LEFT ARROW)
STA 120+35 LT (THRU ARROW)
STA 120+43 LT (HANDICAP)
STA 120+43 LT (HANDICAP)
STA 120+48 CL (LEFT ARROW)
STA 120+58 LT (HANDICAP)
STA 120+58 LT (HANDICAP)
STA 121+28 LT (THRU ARROW)
STA 121+28 LT (THRU ARROW)
STA 121+54 LT (THRU ARROW)
STA 121+54 LT (THRU ARROW)
SL STA 41+38 LT (THRU ARROW)
SL STA 41+55 LT (THRU ARROW)
STA 118+75 ~ 120+25, RT GHCU (THRU ARROW)

CROSSWALK MARKING

STA 122+55 LT-RT 30.5'
SL STA 40+25 - 40+26 RT-LT 49'

ERECTING SALVAGED SIGNS

120+73 RT (PRIVATE)

REMOVING SIGNS (TYPE A)

STA 119+86 LT
STA 120+96 RT
STA 121+39 LT
STA 122+64 LT
STA 122+64 RT (2 SIGNS)
STA 123+20 LT (2 SIGNS)

SPECIAL PROVISION
(REMOVE AND RESET COMMERCIAL SIGN)

STA 118+96 RT (GHCU)

SPECIAL PROVISION
(REMOVE AND RESET FLAG POLE)

STA 119+07 RT

REMOVAL OF EXISTING PAVEMENT MARKINGS

STA 117+31 - 122+55 LT (EXISTING PARKING LOT)

SPECIAL PROVISION
(PARKING METER POSTS)

STA 123+13 RT

SIGNING LEGEND

N = NEW
R = REMOVE
R&S = REMOVE AND SALVAGE
RET = RETAIN
S = SALVAGED SIGN
B-B = BACK TO BACK
OH = OVERHEAD SIGN

STRIPING LEGEND

SWL = SINGLE WHITE LINE
SYL = SINGLE YELLOW LINE
DYL = DOUBLE YELLOW LINE
SDL = SINGLE DASHED LINE
SBL = SINGLE BROKEN LINE

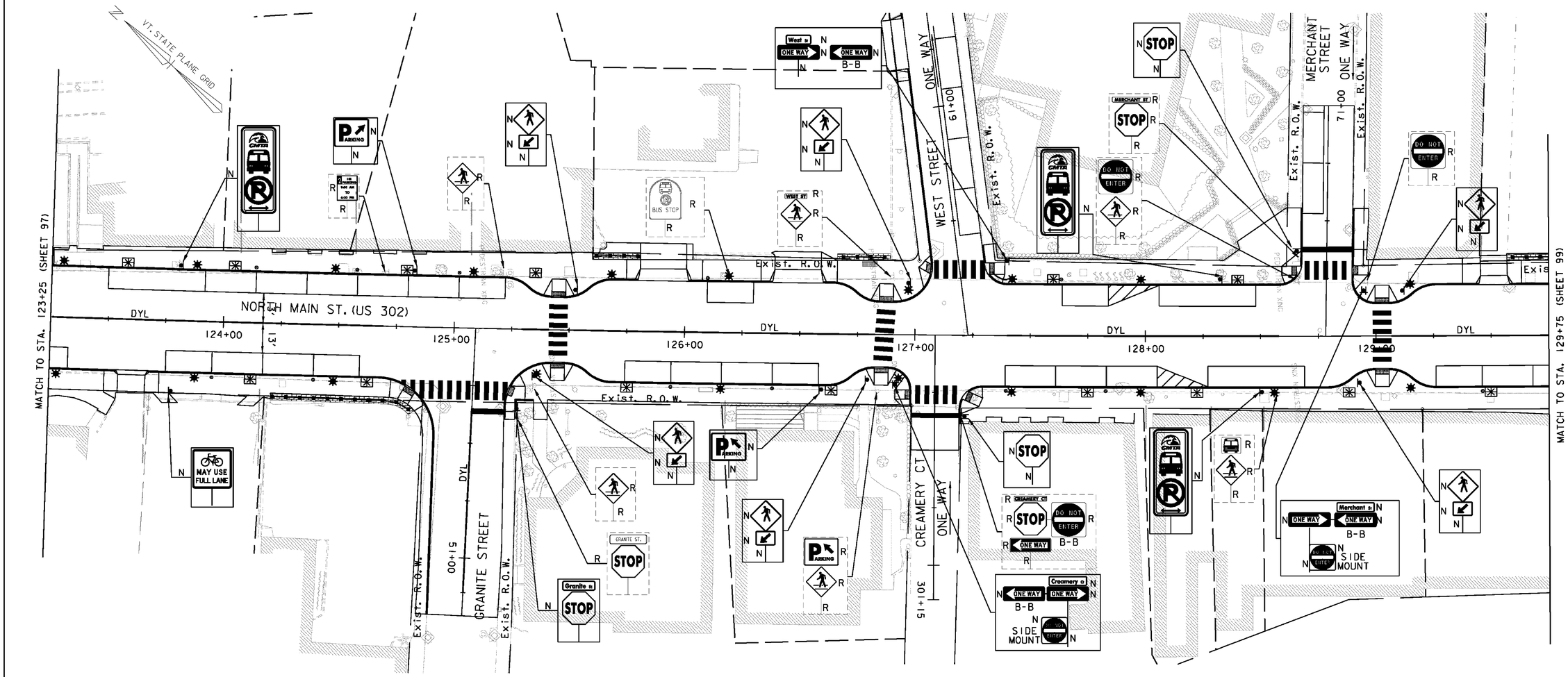
20 0 20 40
FEET

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC-F 026-I(34) C/2

FILE NAME: z85b010bdr_spm_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: D. PECK
SIGNS AND PAVEMENT MARKING PLANS #2

PLOT DATE: 3/9/2011
DRAWN BY: D. PECK
CHECKED BY:
SHEET 97 OF 339




4 INCH WHITE LINE

| | | |
|---|---|---|
| STA 123+25 - 123+33 RT | (PARKING LANES) | |
| STA 123+50 - 123+92 LT | (BUS PARKING) | 48′ |
| STA 123+92 - 125+22 LT | (PARKING LANES) | 143′ |
| STA 123+75 - 124+59 RT | (PARKING LANES) | 124′ |
| STA 125+74 - 126+59 RT | (PARKING LANES) | 124′ |
| STA 126+10 - 126+30 LT | (PARKING LANE) | 38′ |
| STA 127+39 - 128+05 RT | (PARKING LANES) | 100′ |
| STA 127+64 - 127+84 LT | (PARKING LANE) | 38′ |
| STA 127+84 - 128+06 LT | (NO PARKING ZONE) | 48′ |
| STA 128+05 - 128+27 RT | (NO PARKING ZONE) | 42.5′ |
| STA 128+06 - 128+48 LT | (BUS PARKING) | 59′ |
| STA 128+27 - 128+69 RT | (BUS PARKING) | 59′ |
| STA 129+26 - 129+75 RT | (PARKING LANES) | 98′ |
| SL STA 60+43 - 61+35 RT | (PARKING LANES) | |
| SL STA 70+53 - 71+00 LT | (PARKING LANES) | 90′ |

4 INCH YELLOW LINE

| | | |
|---|---|---|
| STA 123+26 - 124+69 CL | (DOUBLE) | 286′ |
| STA 125+29 - 125+41 CL | (DOUBLE) | 24′ |
| STA 125+49 - 126+83 CL | (DOUBLE) | 268′ |
| STA 127+40 - 128+58 CL | (DOUBLE) | 236′ |
| STA 129+07 - 129+75 CL | (DOUBLE) | 136′ |
| SL STA 50+35 - 51+15 CL | (DOUBLE) | 160′ |

24 INCH STOP BAR

| | |
|---|---|
| SL STA 50+35 LT | 12′ |
| SL STA 70+37 LT-RT | 22′ |
| SL STA 300+34 LT-RT | 20.5′ |

CROSSWALK MARKING

| | |
|---|---|
| STA 125+45 LT-RT | 28′ |
| STA 126+87 LT-RT | 28′ |
| STA 129+03 LT-RT | 28′ |
| SL STA 50+26 - 50+28 LT-RT | 42′ |
| SL STA 60+27 - 60+30 RT-LT | 24′ |
| SL STA 70+28 - 70+29 LT-RT | 22′ |
| SL STA 300+26 LT-RT | 23′ |

REMOVING SIGNS (TYPE A)

STA 124+70 LT
STA 125+21 LT
STA 125+35 RT
STA 126+19 LT
STA 126+85 RT (2 SIGNS)
STA 126+90 LT (2 SIGNS)
STA 127+19 RT (4 SIGNS)
STA 128+56 RT (2 SIGNS)
STA 128+65 LT (2 SIGNS)
STA 128+67 LT (2 SIGNS)
STA 128+95 LT
SL STA 50+38 LT (2 SIGNS)

SPECIAL PROVISION
(PARKING METER POSTS)

STA 123+95 RT
STA 124+14 LT
STA 124+39 RT
STA 124+58 LT
STA 125+02 LT
STA 125+94 RT
STA 126+10 LT
STA 126+38 RT
STA 127+39 RT
STA 127+64 LT
STA 127+83 RT
STA 129+46 RT

SIGNING LEGEND

N = NEW
R = REMOVE
R&S = REMOVE AND SALVAGE
RET = RETAIN
S = SALVAGED SIGN
B-B = BACK TO BACK
OH = OVERHEAD SIGN

STRIPING LEGEND

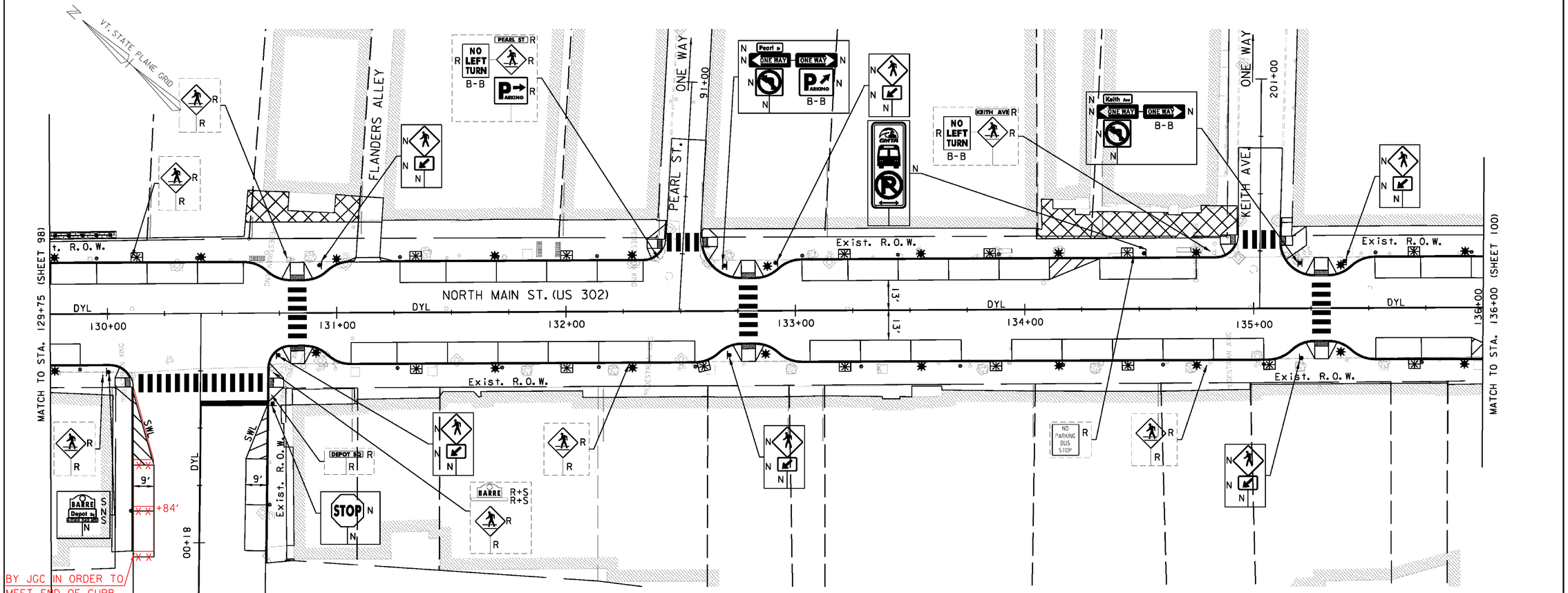
SWL = SINGLE WHITE LINE
SYL = SINGLE YELLOW LINE
DYL = DOUBLE YELLOW LINE
SDL = SINGLE DASHED LINE
SBL = SINGLE BROKEN LINE

20 0 20 40
FEET

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC-F 026-I(34) C/2

FILE NAME: z85b010bdr_spm_C2 | PLOT DATE: 3/9/2011
PROJECT LEADER: G. BAKOS | DRAWN BY: D. PECK
DESIGNED BY: D. PECK | CHECKED BY:
SIGNS AND PAVEMENT MARKING PLANS #3 | SHEET 98 OF 339




QUANTITY COMBINED WITH PREVIOUS SHEET

4 INCH WHITE LINE

STA 129+75 - 129+88 RT (PARKING LANES)
STA 129+75 - 130+59 LT (PARKING LANES) 130'
STA 131+06 - 132+56 RT (PARKING LANES)
STA 131+28 - 132+34 LT (PARKING LANES)
STA 133+03 - 134+11 LT (PARKING LANES)
STA 133+06 - 133+72 RT (PARKING LANES)
STA 133+94 - 135+04 RT (PARKING LANES)
STA 134+11 - 134+33 LT (NO PARKING ZONE)
STA 134+33 - 134+75 LT (BUS PARKING)
STA 135+53 - 135+95 RT (PARKING LANES)
STA 135+53 - 136+00 LT (PARKING LANES)
STA 135+95 - 136+00 RT (NO PARKING ZONE)
SL STA 80+35 - 80+66 RT (NO PARKING ZONE)
SL STA 80+40 - 80+63 LT (NO PARKING ZONE)
SL STA 80+63 - 81+03 LT (PARKING LANES)
SL STA ~~80+66~~ 80+64 - ~~81+06~~ 81+04 RT (PARKING LANES)

4 INCH YELLOW LINE

STA 129+75 - 130+01 CL (DOUBLE)
STA 130+87 - 132+76 CL (DOUBLE)
STA 132+84 - 135+25 CL (DOUBLE)
STA 135+33 - 136+00 CL (DOUBLE)
SL STA 80+38 - 81+85 CL (DOUBLE)

24 INCH STOP BAR

SL STA 80+38 LT

CROSSWALK MARKING

STA 130+83 LT-RT
STA 132+80 LT-RT
STA 135+29 LT-RT
SL STA 80+30 LT-RT
SL STA 90+30 LT-RT
SL STA 200+30 LT-RT

REMOVING SIGNS (TYPE A)

STA 129+99 RT
STA 130+11 LT
STA 130+72 RT (3 SIGNS)
STA 130+79 LT
STA 132+28 RT
STA 132+40 LT (4 SIGNS)
STA 134+47 LT
STA 134+82 RT
STA 134+83 LT (3 SIGNS)
SL STA 80+36 LT

SPECIAL PROVISION
(PARKING METER POSTS) (LT)

STA 129+95
STA 130+39
STA 131+28
STA 131+70
STA 132+14
STA 133+03
STA 133+45
STA 133+89
STA 135+53
STA 135+95
SL STA 80+83

ERECTING SALVAGED SIGNS

STA 130+00 RT (2 SIGNS)

SPECIAL PROVISION
(PARKING METER POSTS) (RT)

STA 129+88
STA 131+26
STA 131+72
STA 132+14
STA 132+56
STA 133+29
STA 133+72
STA 134+17
STA 134+60
STA 135+04
STA 135+73
SL STA ~~80+86~~ 80+84

SIGNING LEGEND

N = NEW
R = REMOVE
R&S = REMOVE AND SALVAGE
RET = RETAIN
S = SALVAGED SIGN
B-B = BACK TO BACK
OH = OVERHEAD SIGN

STRIPING LEGEND

SWL = SINGLE WHITE LINE
SYL = SINGLE YELLOW LINE
DYL = DOUBLE YELLOW LINE
SDL = SINGLE DASHED LINE
SBL = SINGLE BROKEN LINE

20 0 20 40
FEET

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC-F 026-1(34) C/2

FILE NAME: z85b010bdr_spm_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: D. PECK
SIGNS AND PAVEMENT MARKING PLANS #4

PLOT DATE: 3/9/2011
DRAWN BY: D. PECK
CHECKED BY:
SHEET 99 OF 339

LETTER OR SYMBOL

STA 138+19 RT ("ONLY")
STA 138+38 RT (RIGHT ARROW)
STA 138+39 RT (LEFT ARROW)
STA 139+83 LT (RIGHT ARROW)
STA 139+84 RT (LEFT ARROW)
STA 500+65 LT (RIGHT ARROW)
SL STA 500+78 RT (LEFT/THRU)
SL STA 501+05 LT ("ONLY")
SL STA 501+45 LT (RIGHT ARROW)
SL STA 501+45 RT (LEFT/THRU)
SL STA 600+52 LT (LEFT ARROW)
SL STA 600+92 LT ("ONLY")
SL STA 601+36 RT (RIGHT ARROW)
SL STA 601+38 LT (LEFT ARROW)
SL STA 601+87 RT ("ONLY")
SL STA 602+39 RT (RIGHT ARROW)
SL STA 603+52 RT (LEFT ARROW)
SL STA 700+74 CL (LEFT ARROW)
SL STA 701+42 CL ("ONLY")

ERECTING SALVAGED SIGNS

STA 138+35 RT (5 SIGNS)
SL STA 601+22 CL (2 SIGNS)

REMOVE SIGNS (TYPE A)

STA 136+12 LT
STA 136+50 LT
STA 136+64 RT
STA 137+06 RT
STA 137+96 RT
STA 138+35 RT (7 SIGNS)
STA 139+85 LT (2 SIGNS)
SL STA 600+44 CL (4 SIGNS)
SL STA 601+00 CL (5 SIGNS)
SL STA 602+56 RT (3 SIGNS)

24 INCH STOP BAR

STA 138+43 RT
STA 138+52 - 138+62 RT
STA 138+75 RT
STA 139+77 LT-RT
SL STA 500+59 RT
SL STA 500+72 LT
SL STA 600+47 LT
SL STA 602+45 - 602+46 RT
SL STA 603+36 LT
SL STA 603+46 RT
SL STA 700+52 LT
SL STA 700+68 LT-RT

VT. STATE PLANE GRID

4 INCH YELLOW LINE

STA 136+00 - 136+92 CL (DOUBLE)
STA 137+00 - 138+45 CL (DOUBLE)
STA 138+16 RT - 600+54 RT
STA 139+77 - 140+25 RT (DOUBLE)
SL STA 500+72 - 501+58 RT (DOUBLE)
SL STA 600+45 - 601+25 RT
SL STA 600+47 - 601+25 CL
SL STA 601+25 - 602+46 CL (DOUBLE)
SL STA 601+25 RT - 601+89 CL (DOUBLE)
SL STA 603+46 - 603+75 RT (DOUBLE)
SL STA 700+68 - 701+50 RT (DOUBLE)

8 INCH YELLOW LINE

SL STA 601+25 - 601+89 RT (DIAGONALS)

SPECIAL PROVISION
(REMOVE EXISTING OVERHEAD TRAFFIC SIGN ASSEMBLY, MULTI-SUPPORT)

STA 137+96 - 138+07 RT-LT (OVERHEAD/4 SIGNS)
STA 139+85 LT-RT (OVERHEAD/4 SIGNS)
SL STA 602+08 LT-RT (OVERHEAD/3 SIGNS)

4 INCH WHITE LINE

STA 136+00 - 136+15 RT (NO PARKING ZONE)
STA 136+00 - 136+59 LT (NO PARKING ZONE)
STA 136+15 - 136+72 RT (BUS PARKING)
STA 137+19 - 138+26 LT (PARKING LANES)
STA 137+19 RT - 602+46 RT
STA 138+11 - 138+78 RT
STA 138+13 - 138+57 RT
STA 138+16 - 138+86 RT
STA 138+26 - 138+48 LT (NO PARKING ZONE)
STA 138+86 RT - 600+54 RT
STA 139+73 - 140+25 RT
STA 139+79 - 140+25 CL
STA 139+79 - 140+25 LT
SL STA 500+55 - 501+58 RT
SL STA 500+59 - 501+58 CL
SL STA 500+59 - 501+58 LT

REMOVING SIGNS (TYPE B)

STA 137+96 - 138+07 RT-LT (OVERHEAD/4 SIGNS)
STA 139+85 LT-RT (OVERHEAD/4 SIGNS)
SL STA 602+08 LT-RT (OVERHEAD/3 SIGNS)

4 INCH WHITE LINE (CONT.)

SL STA 600+47 - 601+46 LT
SL STA 600+53 - 602+32 LT
SL STA 600+89 - 602+32 LT
SL STA 601+27 - 602+45 RT
SL STA 601+46 - 602+34 LT (DASHED)
SL STA 602+57 RT - 500+47 RT
SL STA 603+21 RT - 500+47 LT
SL STA 603+32 - 603+75 RT
SL STA 603+36 - 603+75 CL
SL STA 603+36 - 603+75 LT
SL STA 700+28 RT - 139+65 LT
SL STA 700+43 - 701+50 RT
SL STA 700+52 - 701+50 LT
SL STA 700+52 - 701+52 LT

8 INCH WHITE LINE

SL STA 600+89 - 602+32 LT (DIAGONALS)

CROSSWALK MARKING

STA 136+96 LT-RT
STA 139+69 LT-RT
SL STA 500+51 LT-RT
SL STA 602+53 - 602+54 RT-LT
SL STA 603+26 - 603+29 RT-LT
SL STA 700+35 - 700+47 RT-LT
SL STA 800+36 - 800+37 LT-RT

SPECIAL PROVISION
(PARKING METER POSTS)

STA 136+39 LT
STA 137+19 LT
STA 137+61 LT
STA 138+05 LT

SIGNING LEGEND

N = NEW
R = REMOVE
R&S = REMOVE AND SALVAGE
RET = RETAIN
S = SALVAGED SIGN
B-B = BACK TO BACK
OH = OVERHEAD SIGN

STRIPING LEGEND

SWL = SINGLE WHITE LINE
SYL = SINGLE YELLOW LINE
DYL = DOUBLE YELLOW LINE
SDL = SINGLE DASHED LINE
SBL = SINGLE BROKEN LINE

20 0 20 40
FEET

VHB Vanasse Hangen Brustlin, Inc.

| | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC-F 026-1(34) C/2 |
| FILE NAME: z85b0l0bdr_spm_C2 | PLOT DATE: 3/9/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: D. PECK |
| DESIGNED BY: D. PECK | CHECKED BY: |
| SIGNS AND PAVEMENT MARKING PLANS #5 | SHEET 100 OF 339 |

4 INCH WHITE LINE

STA 140+25 - 141+00 LT
STA 140+25 - 141+00 LT
STA 140+25 - 141+00 CL
STA 140+25 - 141+00 RT
SL STA 603+75 - 604+25 RT
SL STA 603+75 - 604+00 CL
SL STA 603+75 - 604+25 LT

4 INCH YELLOW LINE

STA 140+25 - 141+00 RT (DOUBLE)
SL STA 603+75 - 604+25 RT (DOUBLE)

LETTER OR SYMBOL

STA 140+41 LT ("ONLY")
STA 140+64 RT ("ONLY")
STA 140+92 LT (RIGHT ARROW)
SL STA 603+92 RT ("ONLY")

REMOVING SIGNS (TYPE A)

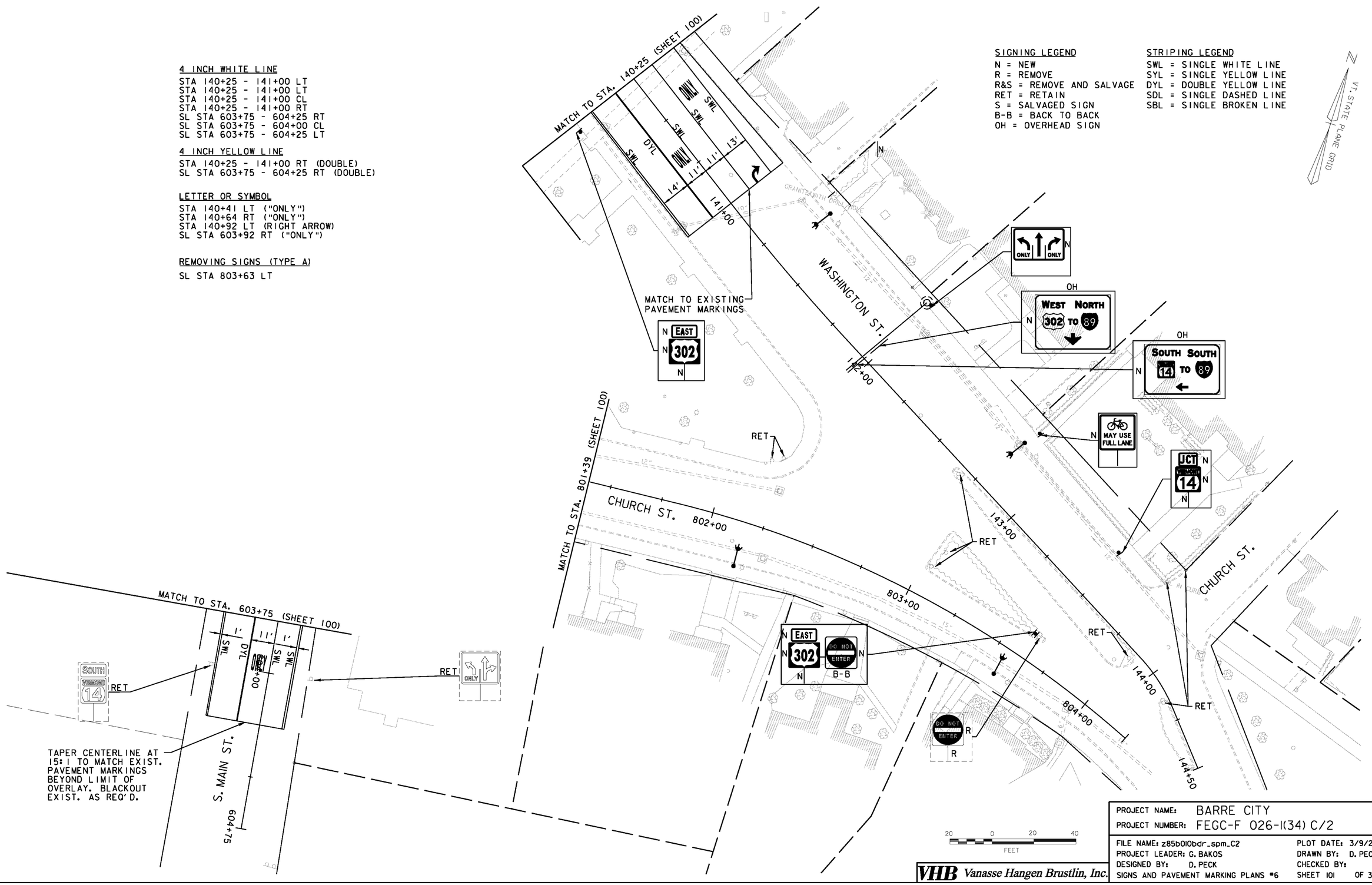
SL STA 803+63 LT

SIGNING LEGEND

N = NEW
R = REMOVE
R&S = REMOVE AND SALVAGE
RET = RETAIN
S = SALVAGED SIGN
B-B = BACK TO BACK
OH = OVERHEAD SIGN

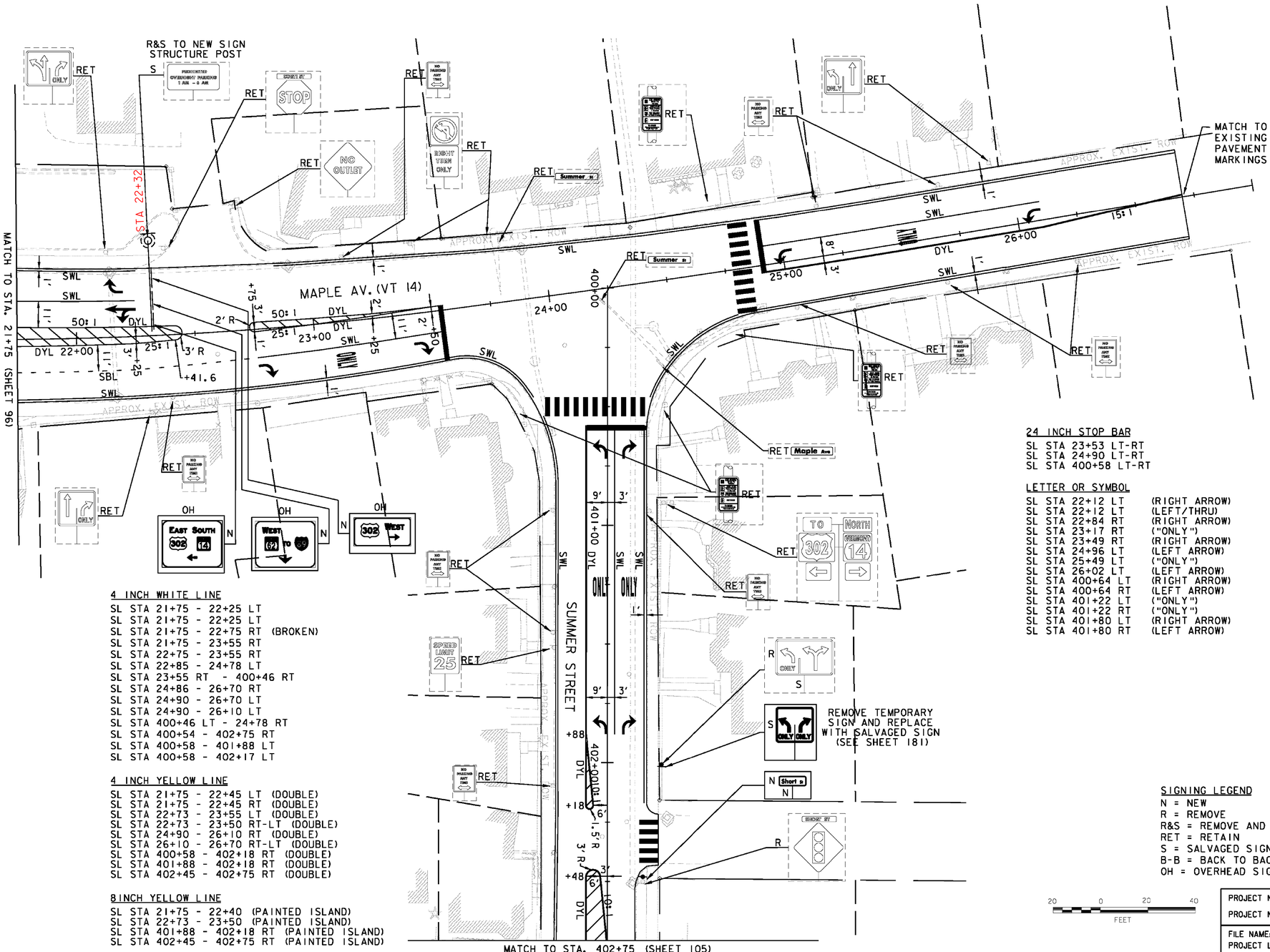
STRIPING LEGEND

SWL = SINGLE WHITE LINE
SYL = SINGLE YELLOW LINE
DYL = DOUBLE YELLOW LINE
SDL = SINGLE DASHED LINE
SBL = SINGLE BROKEN LINE




VHB Vanasse Hangen Brustlin, Inc.

| | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC-F 026-1(34) C/2 |
| FILE NAME: z85b010bdr_spm_C2 | PLOT DATE: 3/9/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: D. PECK |
| DESIGNED BY: D. PECK | CHECKED BY: |
| SIGNS AND PAVEMENT MARKING PLANS *6 | SHEET 101 OF 339 |




4 INCH WHITE LINE
SL STA 21+75 - 22+25 LT
SL STA 21+75 - 22+25 LT
SL STA 21+75 - 22+75 RT (BROKEN)
SL STA 21+75 - 23+55 RT
SL STA 22+75 - 23+55 RT
SL STA 22+85 - 24+78 LT
SL STA 23+55 RT - 400+46 RT
SL STA 24+86 - 26+70 RT
SL STA 24+90 - 26+70 LT
SL STA 24+90 - 26+10 LT
SL STA 400+46 LT - 24+78 RT
SL STA 400+54 - 402+75 RT
SL STA 400+58 - 401+88 LT
SL STA 400+58 - 402+17 LT

4 INCH YELLOW LINE
SL STA 21+75 - 22+45 LT (DOUBLE)
SL STA 21+75 - 22+45 RT (DOUBLE)
SL STA 22+73 - 23+55 LT (DOUBLE)
SL STA 22+73 - 23+50 RT-LT (DOUBLE)
SL STA 24+90 - 26+10 RT (DOUBLE)
SL STA 26+10 - 26+70 RT-LT (DOUBLE)
SL STA 400+58 - 402+18 RT (DOUBLE)
SL STA 401+88 - 402+18 RT (DOUBLE)
SL STA 402+45 - 402+75 RT (DOUBLE)

8 INCH YELLOW LINE
SL STA 21+75 - 22+40 (PAINTED ISLAND)
SL STA 22+73 - 23+50 (PAINTED ISLAND)
SL STA 401+88 - 402+18 RT (PAINTED ISLAND)
SL STA 402+45 - 402+75 RT (PAINTED ISLAND)

24 INCH STOP BAR
SL STA 23+53 LT-RT
SL STA 24+90 LT-RT
SL STA 400+58 LT-RT

LETTER OR SYMBOL

| | |
|---|---|
| SL STA 22+12 LT | (RIGHT ARROW) |
| SL STA 22+12 LT | (LEFT/THRU) |
| SL STA 22+84 RT | (RIGHT ARROW) |
| SL STA 23+17 RT | ("ONLY") |
| SL STA 23+49 RT | (RIGHT ARROW) |
| SL STA 24+96 LT | (LEFT ARROW) |
| SL STA 25+49 LT | ("ONLY") |
| SL STA 26+02 LT | (LEFT ARROW) |
| SL STA 400+64 LT | (RIGHT ARROW) |
| SL STA 400+64 RT | (LEFT ARROW) |
| SL STA 401+22 LT | ("ONLY") |
| SL STA 401+22 RT | ("ONLY") |
| SL STA 401+80 LT | (RIGHT ARROW) |
| SL STA 401+80 RT | (LEFT ARROW) |

CROSSWALK MARKING
SL STA 24+82 LT-RT
SL STA 400+50 LT-RT
SL STA 402+21-402+44 LT

REMOVING SIGNS (TYPE A)
SL STA 401+91 LT
SL STA 402+47 LT (2 SIGNS)

ERECTING SALVAGED SIGNS
SL STA 401+91 LT
SL STA 22+32 LT

SIGNING LEGEND
N = NEW
R = REMOVE
R&S = REMOVE AND SALVAGE
RET = RETAIN
S = SALVAGED SIGN
B-B = BACK TO BACK
OH = OVERHEAD SIGN

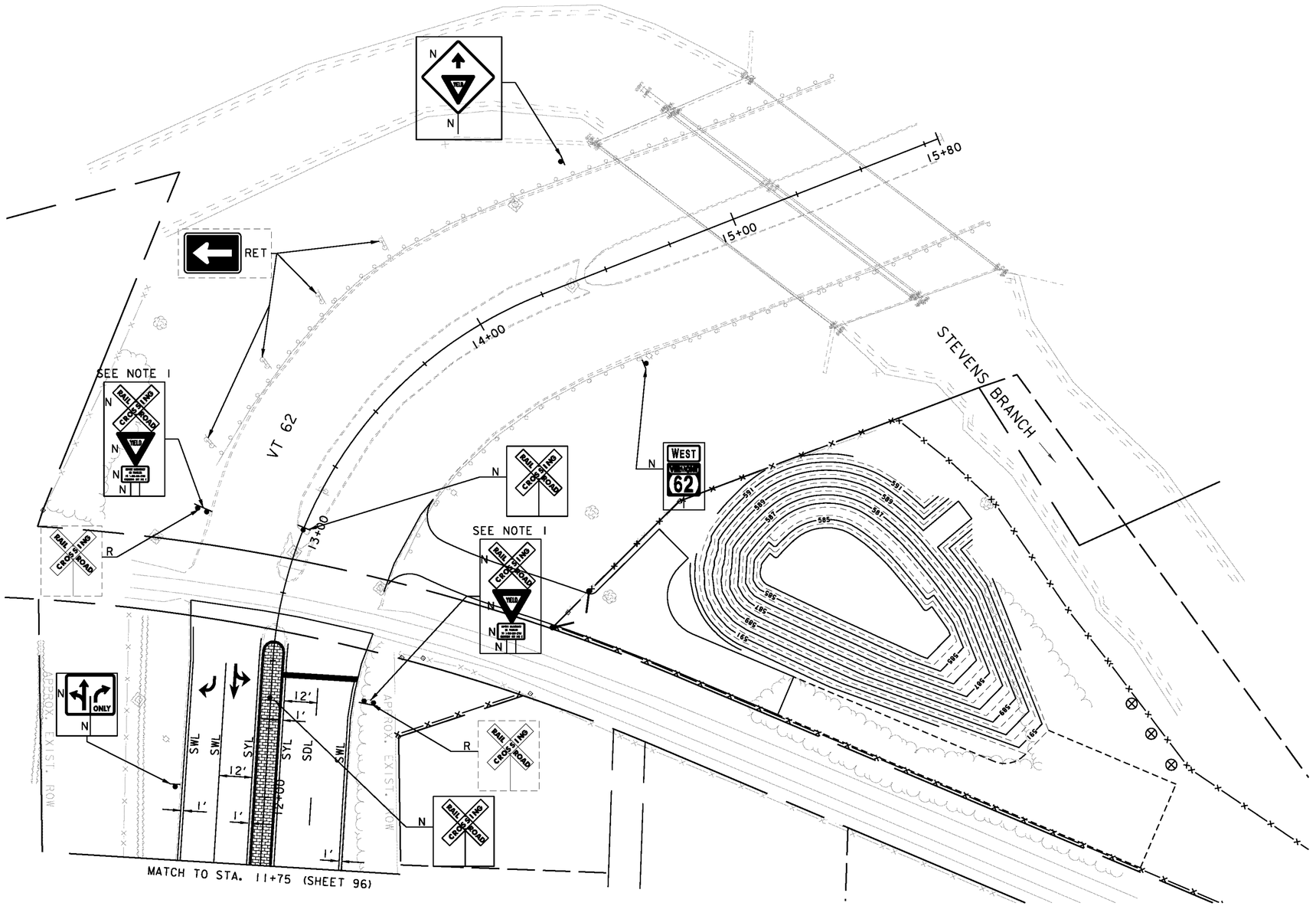
STRIPING LEGEND
SWL = SINGLE WHITE LINE
SYL = SINGLE YELLOW LINE
DYL = DOUBLE YELLOW LINE
SDL = SINGLE DASHED LINE
SBL = SINGLE BROKEN LINE

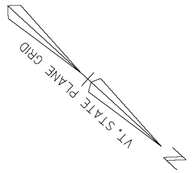
20 0 20 40
FEET

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-I(34) C/2

FILE NAME: z85b010bdr_spm_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: D. PECK
PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY: G. BAKOS
SIGNS AND PAVEMENT MARKING PLANS #7
SHEET 102 OF 339




NOTE: YIELD SIGNS, CROSSBUCKS, AND SUPPORT TO BE INSTALLED IN ACCORDANCE WITH MUTCD FIGURE 8B-2 FOR POSITION, REFLECTIVE STRIP ON SUPPORT POST, AND MOUNTING HEIGHT.

REMOVING SIGNS (TYPE A)
SL STA 12+36 RT
SL STA 12+95 LT

4 INCH WHITE LINE
SL STA 11+75 - 12+65 LT
SL STA 11+75 - 12+48 LT
SL STA 11+75 - 12+44 RT (DASHED)
SL STA 11+75 - 12+64 RT

4 INCH YELLOW LINE
SL STA 11+75 - 12+65 LT
SL STA 11+75 - 12+65 RT

LETTER OR SYMBOL
SL STA 12+35 LT (RIGHT ARROW)
SL STA 12+35 LT (LEFT/THRU)

SIGNING LEGEND
N = NEW
R = REMOVE
R&S = REMOVE AND SALVAGE
RET = RETAIN
S = SALVAGED SIGN
B-B = BACK TO BACK
OH = OVERHEAD SIGN

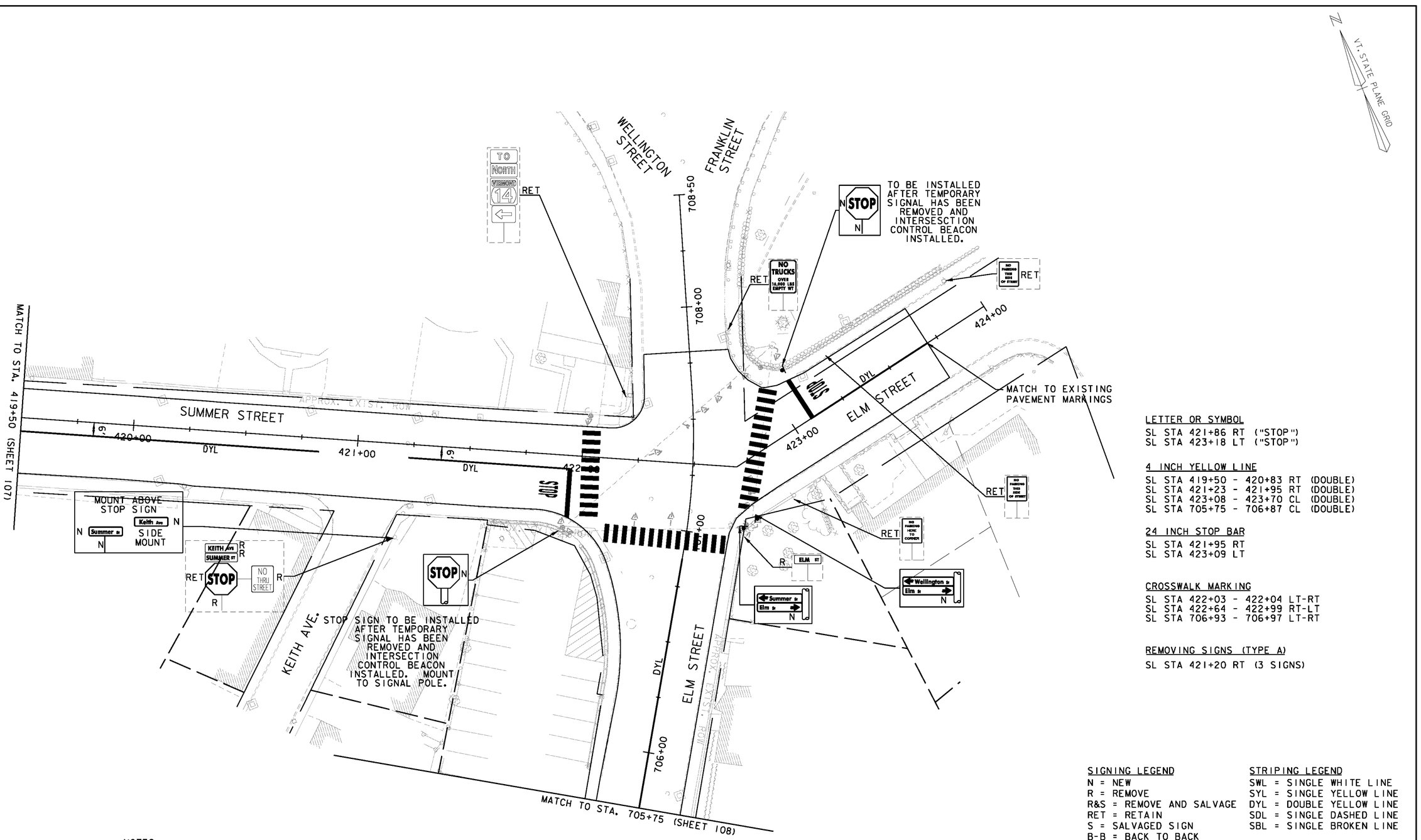
STRIPING LEGEND
SWL = SINGLE WHITE LINE
SYL = SINGLE YELLOW LINE
DYL = DOUBLE YELLOW LINE
SDL = SINGLE DASHED LINE
SBL = SINGLE BROKEN LINE

20 0 20 40
FEET

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC-F 026-1(34) C/2

FILE NAME: z85b010bdr_spm_C2 PLOT DATE: 3/9/2011
PROJECT LEADER: G. BAKOS DRAWN BY: D. PECK
DESIGNED BY: D. PECK CHECKED BY:
SIGNS AND PAVEMENT MARKING PLANS #8 SHEET 103 OF 339




LETTER OR SYMBOL
SL STA 421+86 RT ("STOP")
SL STA 423+18 LT ("STOP")

4 INCH YELLOW LINE
SL STA 419+50 - 420+83 RT (DOUBLE)
SL STA 421+23 - 421+95 RT (DOUBLE)
SL STA 423+08 - 423+70 CL (DOUBLE)
SL STA 705+75 - 706+87 CL (DOUBLE)

24 INCH STOP BAR
SL STA 421+95 RT
SL STA 423+09 LT

CROSSWALK MARKING
SL STA 422+03 - 422+04 LT-RT
SL STA 422+64 - 422+99 RT-LT
SL STA 706+93 - 706+97 LT-RT

REMOVING SIGNS (TYPE A)
SL STA 421+20 RT (3 SIGNS)

NOTES:
1. ALL EXISTING SIGNS TO BE REMOVED SHALL BE DONE AS PART OF THE "CONSTRUCTION & DETOUR SIGNING PLANS" (SHEETS 172-188).

2. FOR SIGNAL EQUIPMENT DETAILS, SEE SHEET (171 & 194)

SIGNING LEGEND
N = NEW
R = REMOVE
R&S = REMOVE AND SALVAGE
RET = RETAIN
S = SALVAGED SIGN
B-B = BACK TO BACK
OH = OVERHEAD SIGN

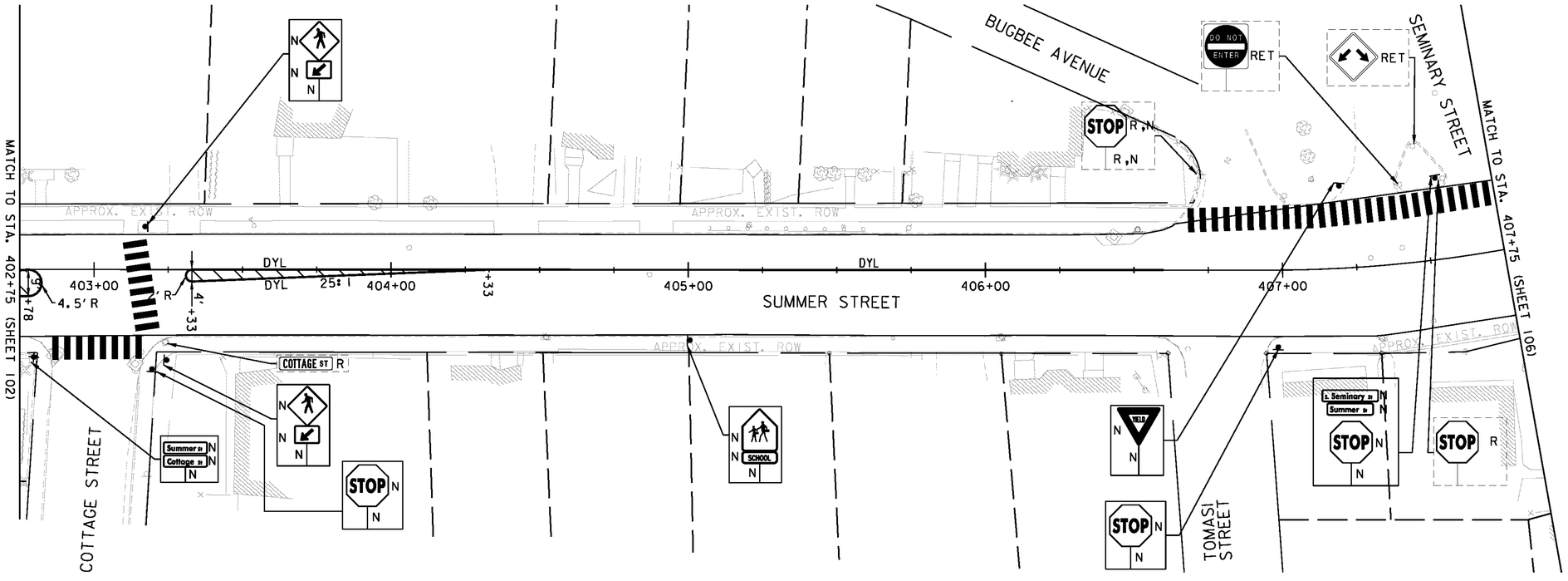
STRIPING LEGEND
SWL = SINGLE WHITE LINE
SYL = SINGLE YELLOW LINE
DYL = DOUBLE YELLOW LINE
SDL = SINGLE DASHED LINE
SBL = SINGLE BROKEN LINE

20 0 20 40
FEET

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC-F 026-I(34) C/2

FILE NAME: z85b010bdr_spm_C2 PLOT DATE: 3/9/2011
PROJECT LEADER: G. BAKOS DRAWN BY: D. PECK
DESIGNED BY: D. PECK CHECKED BY:
SIGNS AND PAVEMENT MARKING PLANS #9 SHEET 104 OF 339




CROSSWALK MARKING

SL STA 402+86 - 403+16 RT
SL STA 403+15 RT-LT
SL STA 406+68 - 407+75 LT

REMOVING SIGNS (TYPE A)

SL STA 403+25 RT
SL STA 406+71 LT
SL STA 407+55 LT

4 INCH YELLOW LINE

SL STA 402+75 - 402+83 RT (DOUBLE)
SL STA 403+31 - 404+33 RT (DOUBLE)
SL STA 403+33 - 406+60 CL (DOUBLE)

8 INCH YELLOW LINE

SL STA 403+33 - 404+25 RT (PAINTED ISLAND)

SIGNING LEGEND

N = NEW
R = REMOVE
R&S = REMOVE AND SALVAGE
RET = RETAIN
S = SALVAGED SIGN
B-B = BACK TO BACK
OH = OVERHEAD SIGN

STRIPING LEGEND

SWL = SINGLE WHITE LINE
SYL = SINGLE YELLOW LINE
DYL = DOUBLE YELLOW LINE
SDL = SINGLE DASHED LINE
SBL = SINGLE BROKEN LINE

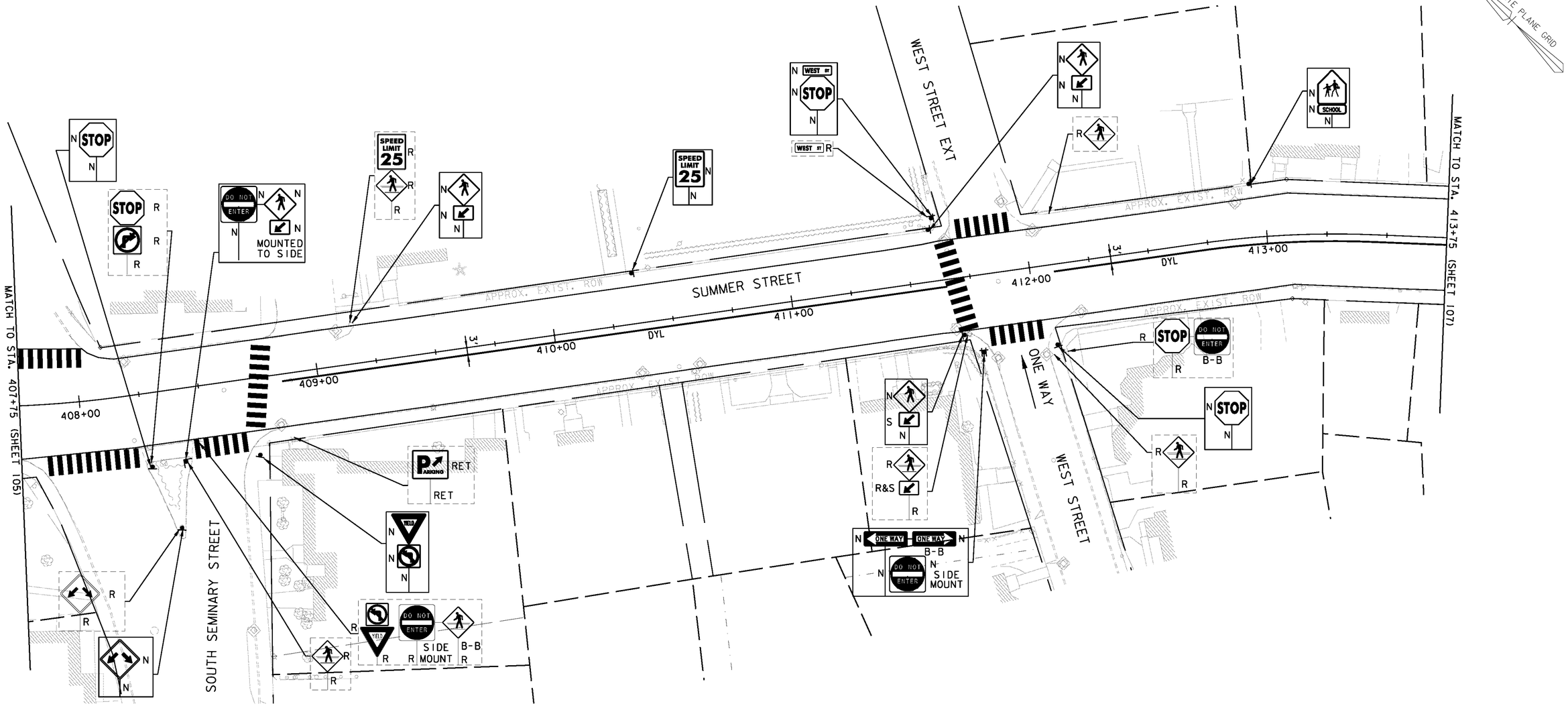
20 0 20 40
FEET

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC-F 026-I(34) C/2

FILE NAME: z85b010bdr spm
PROJECT LEADER: G. BAKOS
DESIGNED BY: D. PECK
SIGNS AND PAVEMENT MARKING PLANS #10

PLOT DATE: 3/9/2011
DRAWN BY: D. PECK
CHECKED BY:
SHEET 105 OF 339




ERECTING SALVAGED SIGNS
SL STA 411+65

REMOVING SIGNS (TYPE A)
SL STA 408+26 RT (2 SIGNS)
SL STA 408+35 RT
SL STA 408+42 RT
SL STA 408+47 RT (4 SIGNS)
SL STA 409+12 LT (2 SIGNS)
SL STA 411+61 LT
SL STA 411+66 RT (2 SIGNS)
SL STA 412+06 RT
SL STA 412+07 RT (2 SIGNS)
SL STA 412+11 LT

4 INCH YELLOW LINE
SL STA 408+85 - 411+65 RT (DOUBLE)
SL STA 412+10 - 413+75 RT (DOUBLE)

CROSSWALK MARKING
SL STA 407+75 - 408+02 LT
SL STA 407+85 - 408+21 RT
SL STA 408+45 - 408+67 RT
SL STA 408+76 RT-LT
SL STA 411+69 RT-LT
SL STA 411+72 - STA 411+94 LT
SL STA 411+80 - STA 412+02 RT

20 0 20 40
FEET

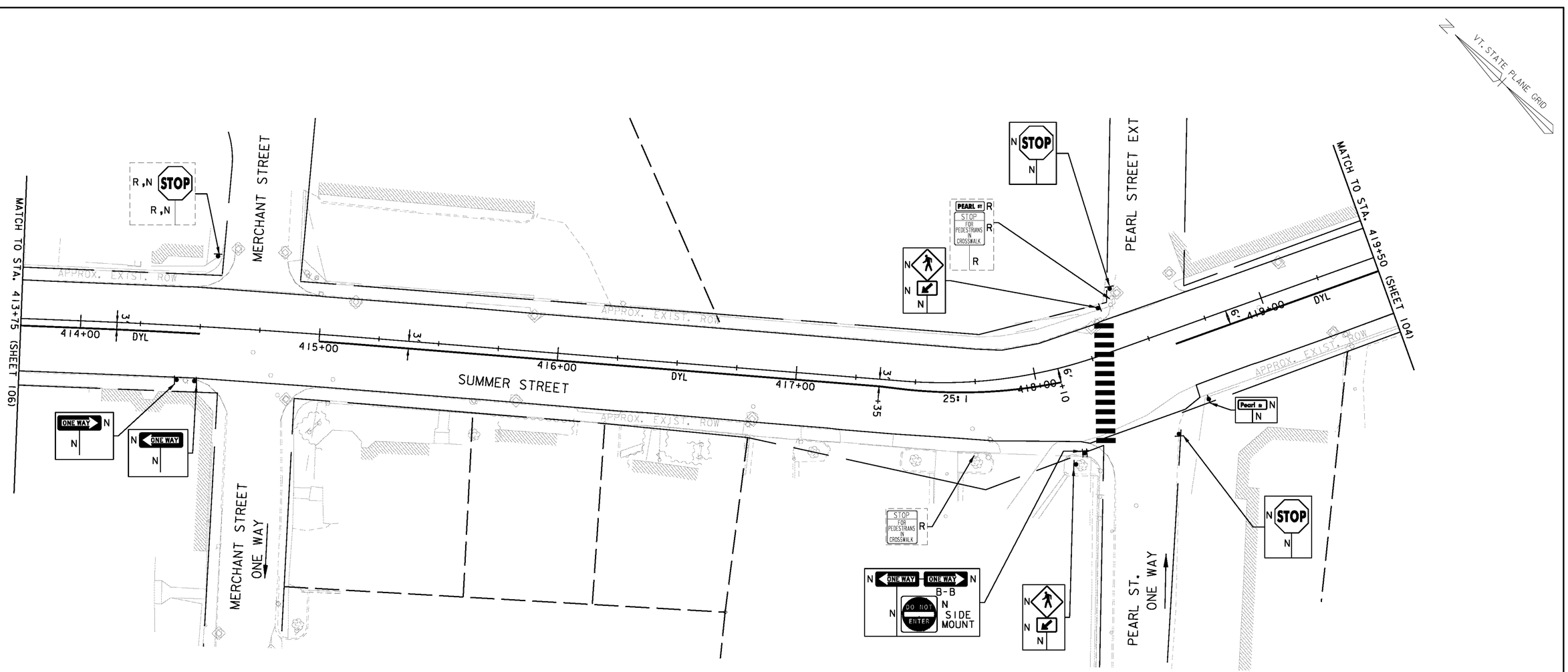
SIGNING LEGEND
N = NEW
R = REMOVE
R&S = REMOVE AND SALVAGE
RET = RETAIN
S = SALVAGED SIGN
B-B = BACK TO BACK
OH = OVERHEAD SIGN

STRIPING LEGEND
SWL = SINGLE WHITE LINE
SYL = SINGLE YELLOW LINE
DYL = DOUBLE YELLOW LINE
SDL = SINGLE DASHED LINE
SBL = SINGLE BROKEN LINE

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC-F 026-1(34) C/2

FILE NAME: z85b0110bdr_spm_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: D. PECK
PLOT DATE: 3/9/2011
DRAWN BY: D. PECK
CHECKED BY:
SIGNS AND PAVEMENT MARKING PLANS #11
SHEET 106 OF 339




REMOVING SIGNS (TYPE A)

SL STA 414+55 LT
SL STA 417+72 RT
SL STA 418+38 LT (2 SIGNS)

4 INCH YELLOW LINE

SL STA 413+75 - 414+50 RT (DOUBLE)
SL STA 415+00 - 418+10 RT (DOUBLE)
SL STA 418+60 - 419+50 RT (DOUBLE)

CROSSWALK MARKING

SL STA 418+30 RT-LT

SIGNING LEGEND

N = NEW
R = REMOVE
R&S = REMOVE AND SALVAGE
RET = RETAIN
S = SALVAGED SIGN
B-B = BACK TO BACK
OH = OVERHEAD SIGN

STRIPING LEGEND

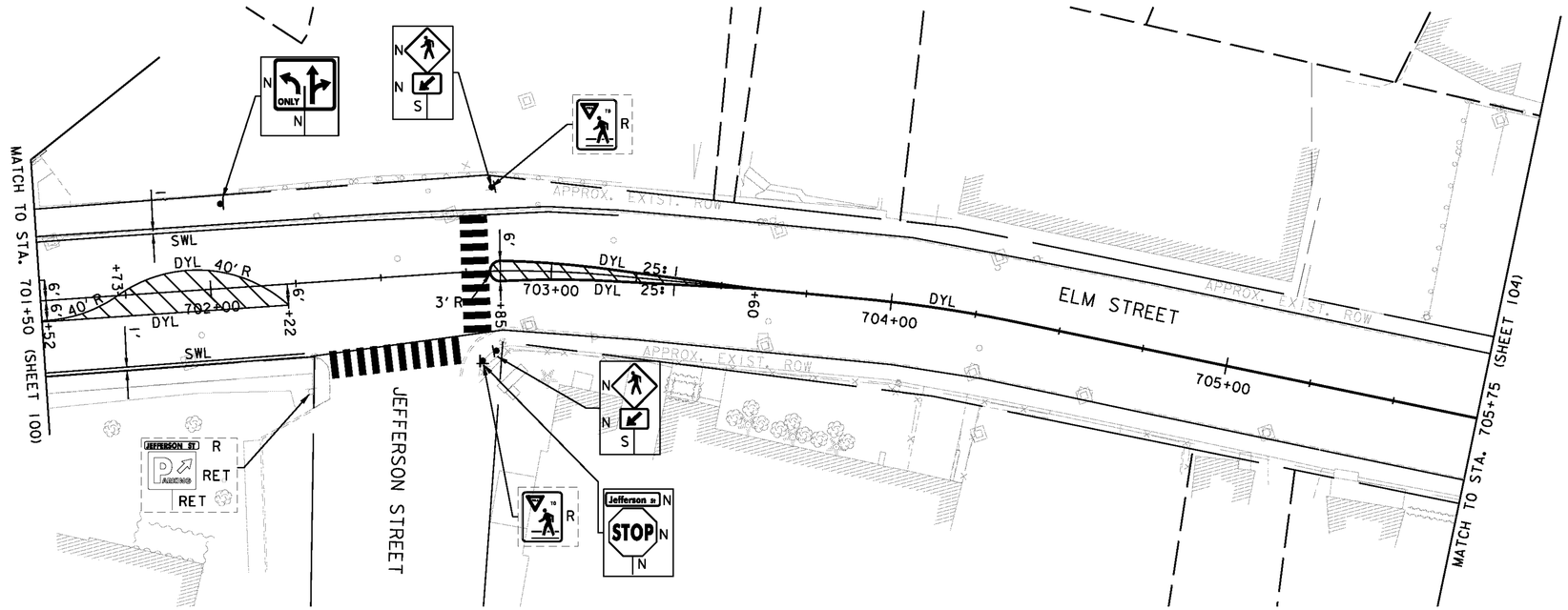
SWL = SINGLE WHITE LINE
SYL = SINGLE YELLOW LINE
DYL = DOUBLE YELLOW LINE
SDL = SINGLE DASHED LINE
SBL = SINGLE BROKEN LINE

20 0 20 40
FEET

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC-F 026-1(34) C/2

FILE NAME: z85b010bdr_spm_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: D. PECK
PLOT DATE: 3/9/2011
DRAWN BY: D. PECK
CHECKED BY:
SIGNS AND PAVEMENT MARKING PLANS #12
SHEET 107 OF 339




CROSSWALK MARKING

SL STA 702+35 - 702+72 RT
SL STA 702+78 RT-LT

REMOVING SIGNS (TYPE A)

SL STA 702+28 RT
SL STA 702+80 RT
SL STA 702+84 LT

4 INCH WHITE LINE

SL STA 701+50 - 703+18 LT
SL STA 701+50 - 702+28 RT
SL STA 705+65 - 705+75 LT (LOT STRIPING)

4 INCH YELLOW LINE

SL STA 701+50 - 702+22 RT (DOUBLE)
SL STA 701+52 - 702+22 RT (DOUBLE)
SL STA 702+82 - 703+60 LT (DOUBLE)
SL STA 702+82 - 703+60 RT (DOUBLE)
SL STA 703+60 - 705+75 CL (DOUBLE)

8 INCH YELLOW LINE

SL STA 701+52 - 702+22 (HATCHING)
SL STA 702+82 - 703+60 (HATCHING)

SIGNING LEGEND

N = NEW
R = REMOVE
R&S = REMOVE AND SALVAGE
RET = RETAIN
S = SALVAGED SIGN
B-B = BACK TO BACK
OH = OVERHEAD SIGN

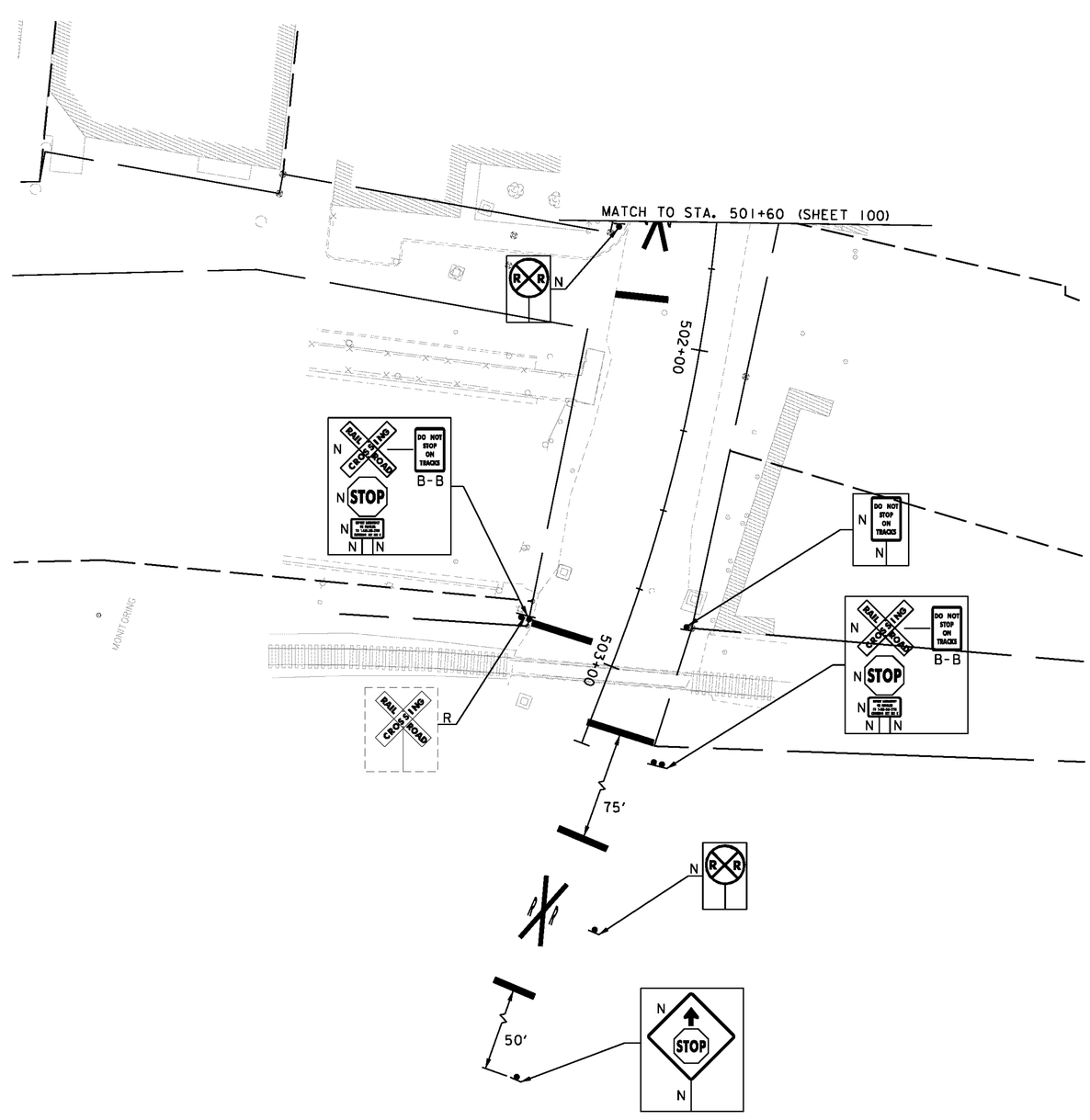
STRIPING LEGEND

SWL = SINGLE WHITE LINE
SYL = SINGLE YELLOW LINE
DYL = DOUBLE YELLOW LINE
SDL = SINGLE DASHED LINE
SBL = SINGLE BROKEN LINE

20 0 20 40
FEET

VHB Vanasse Hangen Brustlin, Inc.

| | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC-F 026-1(34) C/2 |
| FILE NAME: z85b010bdr_spm_C2 | PLOT DATE: 3/9/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: D. PECK |
| DESIGNED BY: D. PECK | CHECKED BY: |
| SIGNS AND PAVEMENT MARKING PLANS #13 | SHEET 108 OF 339 |




REMOVING SIGNS (TYPE A)
SL STA 502+95 RT

24 INCH STOP BAR
SL STA 502+95 RT
SL STA 503+18 LT

RAILROAD CROSSING SYMBOL
PROSPECT STREET RIGHT
PROSPECT STREET LEFT

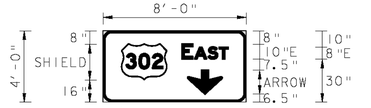
SIGNING LEGEND
N = NEW
R = REMOVE
R&S = REMOVE AND SALVAGE

STRIPING LEGEND
SWL = SINGLE WHITE LINE
SYL = SINGLE YELLOW LINE
DYL = DOUBLE YELLOW LINE

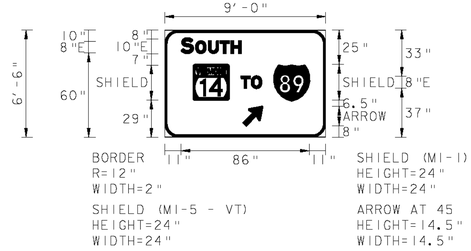
20 0 20 40
FEET

VHB Vanasse Hangen Brustlin, Inc.

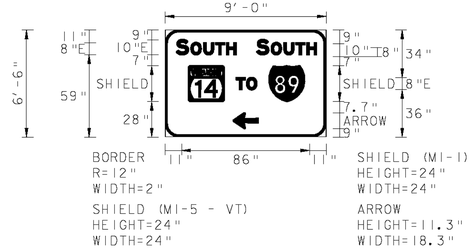
| | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC-F 026-I(34) C/2 |
| FILE NAME: z85b010bdr_spm_C2 | PLOT DATE: 3/9/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: D. PECK |
| DESIGNED BY: D. PECK | CHECKED BY: |
| SIGNS AND PAVEMENT MARKING PLANS #14 | SHEET 109 OF 339 |



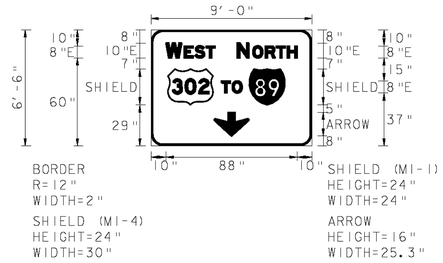

STA 137+71



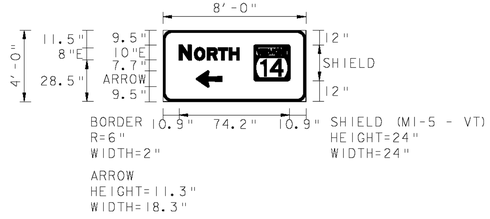

STA 137+71



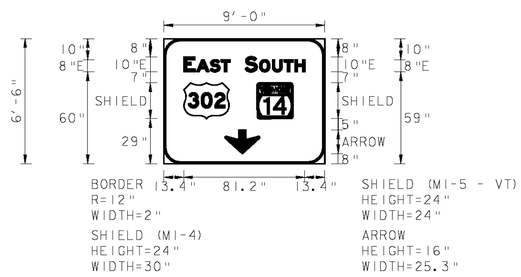

STA 141+97



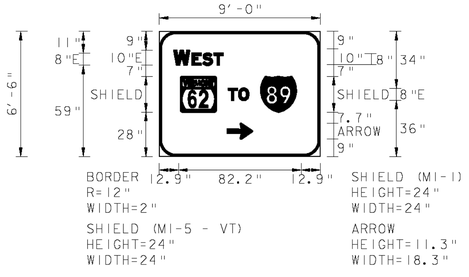

STA 141+97



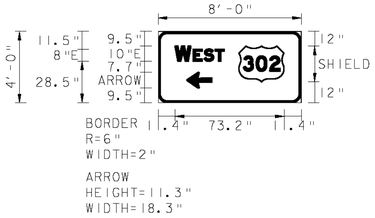

STA 112+13



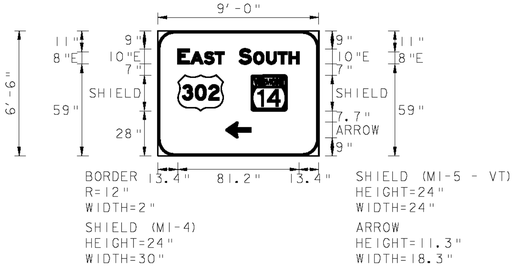

STA 112+13



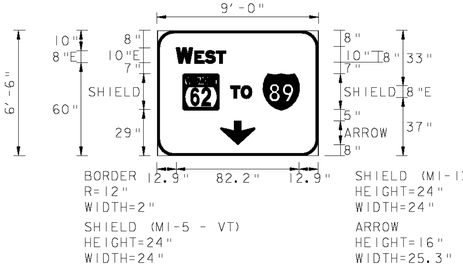

STA 112+13



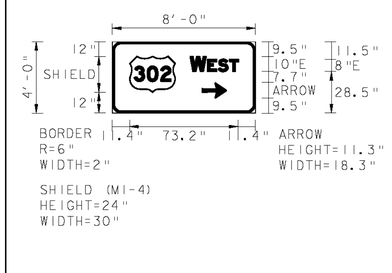

SL STA 11+49



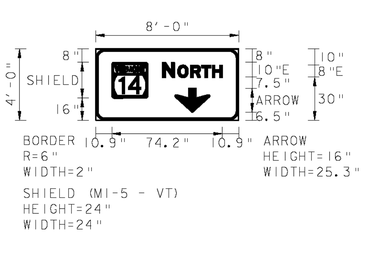

SL STA 22+32



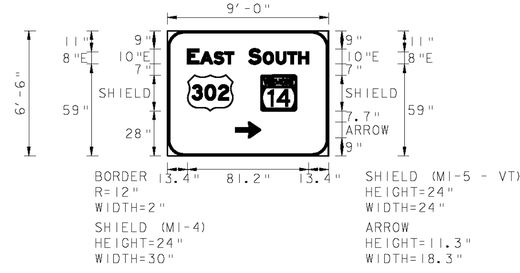

SL STA 22+32



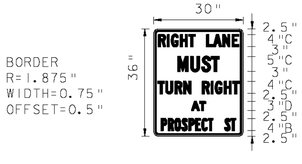

SL STA 22+32



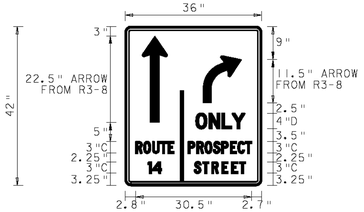

SL STA 11+49




SL STA 11+49




STA 138+30 RT

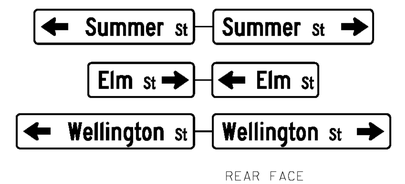



SL STA 601+30 RT

GMTA LOGO

DIMENSIONS AND LAYOUT FOR R7-107a ARE PER THE FHWA STANDARD HIGHWAY SIGNS BOOK.
GMTA LOGO SHALL BE OBTAINED FROM GREEN MOUNTAIN TRANSIT AUTHORITY.

VARIOUS LOCATIONS




D3-1 (MOD1) 42"X12"

D3-1 (MOD2) 30"X12"

D3-1 (MOD3) 48"X12"

REAR FACE

STREET NAME SIGNS WITH ARROWS (MODX) SHALL FOLLOW VTRANS STANDARD E-123 LAYOUT, WITH 6" DESTINATION ARROW, 7" LONG. SIGNS SHALL BE DUAL FACED SUCH THAT ARROWS POINT IN SAME DIRECTION.

20 0 20 40
FEET

VHB Vanasse Hangen Brustlin, Inc.

| | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-1(34) C/2 |
| FILE NAME: 85D010_GSLS_C2 | PLOT DATE: 3/31/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: DMP / JAR |
| DESIGNED BY: DMP / MDS | CHECKED BY: |
| GUIDE SIGN LAYOUT SHEET | SHEET 110 OF 339 |

**STATE OF VERMONT**
**AGENCY OF TRANSPORTATION**

# TRAFFIC SIGN SUMMARY SHEET

| MILE MARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS EA | WIDTH (IN) | HEIGHT (IN) | NEW & SALVAGED SIGNS "A" | "B" | SALV SIGN | SALV TIS | EXIST POST RETAIN | SALVAGE | NEW SIGN POSTS NO. OF POSTS | FLANGED CHANNEL LB/FT 1.12 | 2.0 | 3.0 | SQUARE STEEL (IN) 1.75 | 2.0 | 2.5 | LB/FT 1.88 | 2.42 | 3.35 | ANCHOR | SLEEVE | TUBULAR ALUMINUM Ø (IN) 3.0 | 4.0 | 4.0 MOD | LB/FT 1.3 | 1.7 | 1.7 | TUBULAR STEEL Ø (IN) FOUNDATION | 3.0 | 3.5 | 4.0 | 5.0 | LB/FT 7.6 | 9.0 | 10.8 | 14.6 | W-SHAPE STEEL FTG. SIZE 24" | 30" | WEIGHT | POST SIZE | SIGN FRAME | REQUIRED | REMARKS | SIGN DETAIL DETAIL ON SHEET NUMBER | STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OPTION ITEMS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NO. MAIN STREET | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 111+50, LT | | 1 | 12 | 30 | 2.50 | | | | | | 1 | | | | ~~X~~ 13.5' | | | | | | X | | | | | | | | | | | | | | | | | | | | | | | SHS R7-107a | 110 | |
| 112+13, RT | | 1 | 96 | 48 | | 32.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | MOUNT SIGNS TO PROPOSED OVERHEAD STRUCTURE TYPE IX SHEETING | 110 | |
| 112+13, RT | | 1 | 108 | 78 | | 58.50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | MOUNT SIGNS TO PROPOSED OVERHEAD STRUCTURE TYPE IX SHEETING | 110 | |
| 112+13, RT | | 1 | 108 | 78 | | 58.50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | MOUNT SIGNS TO PROPOSED OVERHEAD STRUCTURE TYPE IX SHEETING | 110 | |
| 112+13, RT | | 1<br>1 | 24<br>21 | 24<br>15 | 4.00<br>2.19 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | MOUNT TO NEW CANTILEVER POST | SHS D9-2<br>SHS M6-3 WOB | | |
| 112+96, RT | | 1<br>1 | 24<br>30 | 12<br>24 | 2.00<br>5.00 | | | | | | 1 | | | | X 14.0' | | | | | | | | | | | | | | | | | | | | | | | | | | | | | SHS M3-4 BOW<br>SHS M1-4 | | |
| ~~114+85~~, LT 115+40 | | 1<br>1<br>1 | 24<br>24<br>21 | 12<br>24<br>15 | 2.00<br>4.00<br>2.19 | | | | | | 1 | | | | | | X + 19.5' | | | | X | | | | | | | | | | | | | | | | | | | | | #2 | MOUNT SIGNS ON ONE #2 SIGN FRAME. SEE VAOT STD. E-123 | SHS M3-4 GOW<br>M1-5 (VT)<br>SHS M6-1 GOW | | E-136B |
| ~~114+85~~, LT 115+40 |  | 1<br>1<br>1 | 24<br>24<br>21 | 12<br>24<br>15 | 2.00<br>4.00<br>2.19 | | | | | | 1 | | | | | | X + 19.5' | | | | X | | | | | | | | | | | | | | | | | | | | | - | MOUNT SIGNS ON ONE #2 SIGN FRAME. SEE VAOT STD. E-123 | SHS M3-1 GOW<br>M1-5 (VT)<br>SHS M6-1 GOW | | E-136B |
| | | | | | | | | | | | | FT | FT | FT | FT | FT ~~30~~ | FT ~~40~~ | EA 3 | | | LB | LB | LB | | | | LB | LB | LB | LB | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | 27.5 | 39.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SUB TOTALS | | SF | SF | EA. | SF | | | | | | | FT | | | FT ~~70~~ 66.5 | | | | | | LB | | | | EA. | LB | | | | | | | | | | | | EA. | EA. | LB | | | | | |
| | | 32.07 | 149.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE VTRANS "SIGN POST DESIGN GUIDELINE."

BOW = BLACK LEGEND ON WHITE BACKGROUND - PLAQUE
GOW = GREEN LEGEND ON WHITE BACKGROUND - PLAQUE
WOB = WHITE LEGEND ON BLUE BACKGROUND - PLAQUE
FYG = BLACK LEGEND ON FLUORESCENT YELLOW-GREEN BACKGROUND
SHS = FHWA STANDARD HIGHWAY SIGNS BOOK

AVERAGE POST LENGTH = 15 FT
\+ = ADD 5 FEET TO AVERAGE POST LENGTH

VHB Vanasse Hangen Brustlin, Inc.

| | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-1(34) C/2 |
| FILE NAME: 85b010_TSSS_C2 | PLOT DATE: 3/31/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: CMD |
| DESIGNED BY: MDS | CHECKED BY: |
| TRAFFIC SIGN SUMMARY SHEET | SHEET 111 OF 339 |

**STATE OF VERMONT**
**AGENCY OF TRANSPORTATION**

# TRAFFIC SIGN SUMMARY SHEET

| MILE MARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS EA | WIDTH (IN) | HEIGHT (IN) | NEW & SALVAGED SIGNS "A" | "B" | SALV SIGN | SALV TIS | EXIST POST RETAIN | SALVAGE | NO. OF POSTS | NEW SIGN POSTS: FLANGED CHANNEL LB/FT 1.12 | 2.0 | 3.0 | SQUARE STEEL (IN) LB/FT 1.75 1.88 | 2.0 2.42 | 2.5 3.35 | ANCHOR | SLEEVE | TUBULAR ALUMINUM Ø (IN) LB/FT 3.0 1.3 | 4.0 1.7 | 4.0 MOD 1.7 | TUBULAR STEEL Ø (IN) FOUNDATION | 3.0 7.6 | 3.5 9.0 | 4.0 10.8 | 5.0 14.6 | W-SHAPE STEEL FTG. SIZE 24" | 30" | WEIGHT | POST SIZE | SIGN FRAME REQUIRED | REMARKS | SIGN DETAIL: DETAIL ON SHEET NUMBER | STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NO. MAIN STREET | | | | | | | | | | | | OPTION ITEMS | | | | | | | | | | | | | | | | | | | | | | | |
| 115+40 ~~114+85,~~ LT | TO I-89 ← | 1 | 24 | 12 | 2.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | #2A | MOUNT SIGNS ON ONE #2A SIGN FRAME ABOVE #2 FRAME SEE VAOT STD E-123 — SHS M4-5 WOB; SHS M1-1; SHS M6-1 WOB | | |
| | | 1 | 24 | 24 | 4.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 1 | 21 | 15 | 2.19 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 115+40 ~~114+85,~~ LT | WEST 302 ↑ | 1 | 24 | 12 | 2.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | - | MOUNT SIGNS ON ONE #2A SIGN FRAME ABOVE #2 FRAME SEE VAOT STD E-123 — SHS M3-4 BOW; SHS M1-5 (VT); SHS M6-3 BOW | | E-136B |
| | | 1 | 30 | 24 | 4.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 1 | 21 | 15 | 2.19 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 115+18, RT | EAST 302 | 1 | 24 | 12 | 2.00 | | | | | | 1 | | | | | | X 14.5' | | X | | | | | | | | | | | | | #1A | MOUNT SIGNS ON ONE #1A SIGN FRAME. SEE VAOT STD. E-123 — SHS M3-2 BOW; SHS M1-4 | | |
| | | 1 | 30 | 24 | 5.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 115+18, RT | SOUTH VT 14 | 1 | 24 | 12 | 2.00 | | | | | | | | | | | | 14.0' | | X | | | | | | | | | | | | | - | MOUNT SIGNS ON ONE #1A SIGN FRAME. SEE VAOT STD. E-123 — SHS M3-3 GOW; M1-5 (VT) | | E-136B |
| | | 1 | 24 | 24 | 4.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 116+29, LT | ONLY ONLY | 1 | 48 | 30 | 10.00 | | | | | | 2 | | | | | | X 23.0' | | X | | | | | | | | | | | | | | VR-932 | | E-145B |
| 115+96, RT | | 1 | 36 | 36 | 9.00 | | | | | | 2 | | | | | | X 14.25' 14.25' | | X X | | | | | | | | | | | | | | SHS W4-2 | | |
| VT ROUTE 62 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10+63, CL | B-B | 1 | 24 | 30 | 5.00 | | | | | | 1 | | | | | | X 12.5' | | X | | | | | | | | | | | | | | MOUNT OM1-1 SIGNS BACK-TO-BACK — SHS R4-7; SHS OM1-1 | | |
| | | 2 | 18 | 18 | 4.50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10+75, LT | DO NOT ENTER | 1 | 36 | 36 | 9.00 | | | | | | 1 | | | | | | X 14.0' | | X | | | | | | | | | | | | | | SHS R5-1 | | |
| 10+89, CL | R R | 1 | 36 | 36 | 7.07 | | | | | | 1 | | | | | | X 10.0' | | ~~X~~ | | | | | | | | | | | | | | NO NEW SLEEVE (USED EXISITING) — SHS W10-1 | | |
| | | | | | | | | | | | | FT | FT | FT | FT | FT | FT | EA | LB | LB | LB | | LB | LB | LB | LB | | | | | | | | |
| | | | | | | | | | | | | | | | | ~~90~~ 75.5 | ~~30~~ 41.0 | 4 | | | | | | | | | | | | | | | | |
| FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE VTRANS "SIGN POST DESIGN GUIDELINE." | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | SUB TOTALS | | | | SF 73.95 | SF | EA. | SF | | | | FT | | | FT | | ~~120~~ 115.5 | | | LB | | | EA. | LB | | | | EA. | EA. | LB | | | | | |

BOW = BLACK LEGEND ON WHITE BACKGROUND - PLAQUE
GOW = GREEN LEGEND ON WHITE BACKGROUND - PLAQUE
WOB = WHITE LEGEND ON BLUE BACKGROUND - PLAQUE
FYG = BLACK LEGEND ON FLUORESCENT YELLOW-GREEN BACKGROUND
SHS = FHWA STANDARD HIGHWAY SIGNS BOOK

AVERAGE POST LENGTH = 15 FT

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_TSSS_C2 — PLOT DATE: 3/31/2011
PROJECT LEADER: G. BAKOS — DRAWN BY: CMD
DESIGNED BY: MDS — CHECKED BY:
TRAFFIC SIGN SUMMARY SHEET — SHEET 112 OF 339

**STATE OF VERMONT**
**AGENCY OF TRANSPORTATION**

# TRAFFIC SIGN SUMMARY SHEET

| MILE MARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS EA | WIDTH (IN) | HEIGHT (IN) | NEW & SALVAGED SIGNS "A" | "B" | SALV SIGN | SALV TIS | EXIST POST RETAIN | EXIST POST SALVAGE | NEW SIGN POSTS NO. OF POSTS | FLANGED CHANNEL LB/FT 1.12 | 2.0 | 3.0 | SQUARE STEEL (IN) LB/FT 1.75 1.88 | 2.0 2.42 | 2.5 3.35 | ANCHOR | SLEEVE | TUBULAR ALUMINUM Ø (IN) LB/FT 3.0 1.3 | 4.0 1.7 | 4.0 MOD 1.7 | TUBULAR STEEL Ø (IN) FOUNDATION | LB/FT 3.0 7.6 | 3.5 9.0 | 4.0 10.8 | 5.0 14.6 | W-SHAPE STEEL FTG. SIZE 24" | 30" | WEIGHT | POST SIZE | SIGN FRAME | REQUIRED | REMARKS | SIGN DETAIL: DETAIL ON SHEET NUMBER | STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **VT ROUTE 62** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10+89, RT | R R | 1 | 36 | 36 | 7.07 | | | | | | 1 | | | | | X 14' | | | X | | | | | | | | | | | | | | | SHS W10-1 | | |
| 11+49, CL | RIGHT OF WAY | 1 | 42 | 30 | 8.75 | | | | | | 1 | | | | | X 13.5' | | | X | | | | | | | | | | | | | | | SHS R5-1a | | |
| 11+49, LT | RIGHT OF WAY | 1 | 42 | 30 | 8.75 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | MOUNT TO NEW CANTILEVER POST SHS R5-1a | | |
| 11+49, LT | WEST 302 | 1 | 96 | 48 | | 32.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | MOUNT SIGNS TO PROPOSED OVERHEAD STRUCTURE TYPE IX SHEETING | 110 | |
| 11+49, LT | VERMONT 14 NORTH | 1 | 96 | 48 | | 32.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | MOUNT SIGNS TO PROPOSED OVERHEAD STRUCTURE TYPE IX SHEETING | 110 | |
| 11+49, LT | EAST SOUTH 302 VERMONT 14 | 1 | 108 | 78 | | 58.50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | MOUNT SIGNS TO PROPOSED OVERHEAD STRUCTURE TYPE IX SHEETING | 110 | |
| **MAPLE AVENUE** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20+40, RT ~~20+47, LT~~ | BARRE HOPE CEMETERY → ITALIAN-AMERICAN MONU. ← | | | | | | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | SALVAGE SIGNS TO EXISTING SIGNAL POLE | | |
| 20+52, CL | | 1 | 24 | 30 | 5.00 | | | | | | 1 | | | | | X 12.5' | | | X | | | | | | | | | | | | | | | EXISTING SIGNS: REMOVE & RESET WITH NEW R4-7 & OMI-1 SHS R4-7 SHS OMI-1 | | |
| | | 1 | 18 | 18 | 2.25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ~~20+40, RT~~ | ~~BARRE~~ | | | | | | ~~2~~ | | | | NOT INSTALLED | | | | | | | | | | | | | | | | | | | | | | | SALVAGE SIGNS TO EXISTING SIGNAL POLE | | |
| 20+91, CL | | 1 | 24 | 30 | 5.00 | | | | | | 1 | | | | | X 12.5' | | | X | | | | | | | | | | | | | | | EXISTING SIGNS: REMOVE & RESET WITH NEW R4-7 & OMI-1 SHS R4-7 SHS OMI-1 | | |
| | | 1 | 18 | 18 | 2.25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | FT | FT | FT | FT | FT 30 27.5 | FT 30 25.0 | EA 3 | LB | LB | LB | | LB | LB | LB | LB | | | | | | | | | |
| **SUB TOTALS** | | | | | SF 39.07 | SF 122.50 | EA. 5 | SF | | | | FT | | | FT | | ~~60~~ 52.5 | | | LB | | | EA. | LB | | | | EA. | EA. | LB | | | | | | |

FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE VTRANS "SIGN POST DESIGN GUIDELINE."

AVERAGE POST LENGTH = 15 FT

BOW = BLACK LEGEND ON WHITE BACKGROUND - PLAQUE
GOW = GREEN LEGEND ON WHITE BACKGROUND - PLAQUE
WOB = WHITE LEGEND ON BLUE BACKGROUND - PLAQUE
FYG = BLACK LEGEND ON FLUORESCENT YELLOW-GREEN BACKGROUND
SHS = FHWA STANDARD HIGHWAY SIGNS BOOK

OPTION ITEMS

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_TSSS_C2 | PLOT DATE: 3/31/2011
PROJECT LEADER: G. BAKOS | DRAWN BY: CMD
DESIGNED BY: MDS | CHECKED BY:
TRAFFIC SIGN SUMMARY SHEET | SHEET 113 OF 339

**STATE OF VERMONT**
**AGENCY OF TRANSPORTATION**

# TRAFFIC SIGN SUMMARY SHEET

| MILE MARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS EA | WIDTH (IN) | HEIGHT (IN) | NEW & SALVAGED SIGNS "A" | "B" | SALV SIGN | SALV TIS | EXIST POST RETAIN | SALVAGE | NEW SIGN POSTS NO. OF POSTS | FLANGED CHANNEL LB/FT 1.12 | 2.0 | 3.0 | SQUARE STEEL (IN) LB/FT 1.75 1.88 | 2.0 2.42 | 2.5 3.35 | ANCHOR | SLEEVE | TUBULAR ALUMINUM Ø (IN) LB/FT 3.0 1.3 | 4.0 1.7 | 4.0 MOD 1.7 | TUBULAR STEEL Ø (IN) FOUNDATION | 3.0 7.6 | 3.5 9.0 | 4.0 10.8 | 5.0 14.6 | W-SHAPE STEEL FTG. SIZE 24" | 30" | WEIGHT | POST SIZE | SIGN | FRAMED | REQUIRED | REMARKS | SIGN DETAIL DETAIL ON SHEET NUMBER | STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | OPTION ITEMS | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MAPLE AVENUE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20+78, RT | NORTH / VERMONT / 14 | 1 | 24 | 12 | 2.00 | | | | | | 1 | | | | | X 14.0' | | | X | | | | | | | | | | | | | | | | SHS M3-1 GOW<br>M1-5 (VT) | | E-1368 |
| | | 1 | 24 | 24 | 4.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 21+65<br>~~21+30~~, RT | SPEED LIMIT 25 / NO PARKING ANY TIME | 1 | 24 | 30 | 5.00 | | 1 | | | | 1 | | | | | X 11.0' | | | — | | | | | | | | | | | | | | | | SHS R2-1 | | |
| 21+60, LT | H / ↑ | 1 | 24 | 24 | 4.00 | | | | | | 1 | | | | | X 14.0' | | | X | | | | | | | | | | | | | | | | "NO PARKING ANY TIME SIGN" REMOVED AND SALVAGED ONTO LONGER POST("SPPED LIMIT 25 SIGN"). KEPT EXISTING ANCHOR. SHS D9-2<br>SHS M6-3 WOB | | |
| | | 1 | 21 | 15 | 2.19 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| COTTAGE STREET | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 30+35<br>~~21+57~~, LT | Cottage st / STOP / ↰ | 1 | 36 | 12 | 3.00 | | | | | | 1 | | | | | | X 14.0' | | X | | | | | | | | | | | | | | | | SHS D3-1<br>SHS R1-1<br>SHS R3-2 | | |
| | | 1 | 36 | 36 | 9.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 1 | 24 | 24 | 4.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | FT | FT | FT | FT | ~~45~~ 39.0 FT | ~~15~~ 14.0 FT | | EA 3 | LB | LB | LB | | LB | LB | LB | LB | | | | | | | | | | |
| | **SUB TOTALS** | | | | SF 33.19 | SF | EA. 1 | SF | | | | FT | | | FT | ~~50~~ 53.0 FT | | | | LB | | | EA. | LB | | | | EA. | EA. | LB | | | | | | | |

FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE VTRANS "SIGN POST DESIGN GUIDELINE."

AVERAGE POST LENGTH = 15 FT

BOW = BLACK LEGEND ON WHITE BACKGROUND - PLAQUE
GOW = GREEN LEGEND ON WHITE BACKGROUND - PLAQUE
WOB = WHITE LEGEND ON BLUE BACKGROUND - PLAQUE
FYG = BLACK LEGEND ON FLUORESCENT YELLOW-GREEN BACKGROUND
SHS = FHWA STANDARD HIGHWAY SIGNS BOOK

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_TSSS_C2 — PLOT DATE: 3/31/2011
PROJECT LEADER: G. BAKOS — DRAWN BY: CMD
DESIGNED BY: MDS — CHECKED BY:
TRAFFIC SIGN SUMMARY SHEET — SHEET 114 OF 339

**STATE OF VERMONT**
**AGENCY OF TRANSPORTATION**

# TRAFFIC SIGN SUMMARY SHEET

| MILE MARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS EA | WIDTH (IN) | HEIGHT (IN) | NEW & SALVAGED SIGNS "A" | "B" | SALV SIGN | SALV TIS | EXIST POST RETAIN | SALVAGE | NEW SIGN POSTS NO. OF POSTS | FLANGED CHANNEL LB/FT 1.12 | 2.0 | 3.0 | SQUARE STEEL (IN) LB/FT 1.75 1.88 | 2.0 2.42 | 2.5 3.35 | ANCHOR | SLEEVE | TUBULAR ALUMINUM Ø (IN) LB/FT 3.0 1.3 | 4.0 1.7 | 4.0 MOD 1.7 | TUBULAR STEEL Ø (IN) FOUNDATION | LB/FT 3.0 7.6 | 3.5 9.0 | 4.0 10.8 | 5.0 14.6 | W-SHAPE STEEL FTG. SIZE 24" | 30" | WEIGHT | POST SIZE | SIGN FRAME | REQUIRED | REMARKS | SIGN DETAIL DETAIL ON SHEET NUMBER | STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OPTION ITEMS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NO. MAIN STREET | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 116+98, LT | END | 1 | 30 | 12 | 2.50 | | | | | | 1 | | | | | | X | | X | | | | | | | | | | | | | | | SHS INTERIM R3-9dP BOW | | |
| | CENTER LANE ONLY | 1 | 24 | 36 | 6.00 | | | | | | | | | | | | 15.33' | | | | | | | | | | | | | | | | | SHS R3-9b | | |
| 117+06, RT | SPEED LIMIT 25 | 1 | 24 | 30 | 5.00 | | | | | | 1 | | | | | | X | | | | | | | | | | | | | | | | | SHS R2-1 | | |
| | BEGIN | 1 | 30 | 12 | 2.50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | SHS INTERIM R3-9cP BOW | | |
| | CENTER LANE ONLY | 1 | 24 | 36 | 6.00 | | | | | | | | | | | | 16.5' | | | | | | | | | | | | | | | | | SHS R3-9b | | |
| 117+94, LT | WEST VERMONT 62 | 1 | 24 | 12 | 2.00 | | | | | | 1 | | | | | | 19.0' | | X | | | | | | | | | | | | | | *2 | SHS W3-4 GOW | | E-136B |
| | | 1 | 24 | 24 | 4.00 | | | | | | | | | | | | X + 19.0' | | | | | | | | | | | | | | | | | MOUNT SIGNS ON ONE #2 SIGN FRAME. SEE VAOT STD. E-123 MI-5 (VT) | | |
| | | 1 | 21 | 15 | 2.19 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | SHS W5-1 GOW | | |
| 117+94, LT | NORTH VERMONT 14 | 1 | 24 | 12 | 2.00 | | | | | | 1 | | | | | | SEE ABOVE | | X | | | | | | | | | | | | | | - | SHS W3-1 GOW | | E-136B |
| | | 1 | 24 | 24 | 4.00 | | | | | | | | | | | | X + | | | | | | | | | | | | | | | | | MOUNT SIGNS ON ONE #2 SIGN FRAME. SEE VAOT STD. E-123 MI-5 (VT) | | |
| | | 1 | 21 | 15 | 2.19 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | SHS W5-1 GOW | | |
| 117+94, LT | TO VERMONT 89 | 1 | 24 | 12 | 2.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | SHS M4-5 WOB | | |
| | | 1 | 24 | 24 | 4.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | *2A | MOUNT SIGNS ON ONE #2A SIGN FRAME ABOVE #2 SIGN FRAME, SEE VAOT STA E-123 SHS M1-1 | | |
| | | 1 | 21 | 15 | 2.19 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | SHS M5-1 WOB | | |
| 117+94, LT | WEST VERMONT 302 | 1 | 24 | 23 | 2.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | SHS M3-4 BOW | | |
| | | 1 | 30 | 24 | 5.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | - | MOUNT SIGNS ON ONE #2A SIGN FRAME ABOVE #2 SIGN FRAME, SEE VAOT STA E-123 SHS M1-4 | | |
| | | 1 | 21 | 15 | 2.19 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | SHS M6-3 BOW | | |
| 119+71, LT | H | 1 | 24 | 24 | 4.00 | | | | | | 1 | | | | | | 14.0' - F.M. BY M.W.H. 10/31/12 (NOT ON ANY F.R.L. REPORTS) | | | | | | | | | | | | | | | | | *2 | MOUNT SIGNS ON ONE #2 SIGN FRAME. SEE VAOT STD. E-123 SHS D9-2 | | |
| | | 1 | 21 | 15 | 2.19 | | | | | | | | | | | | X 15.17' | | X | | | | | | | | | | | | | | | SHS M5-1 WOB | | |
| 119+71, LT | JCT WEST VERMONT 62 | 1 | 21 | 15 | 2.19 | | | | | | 1 | | | | | | SEE ABOVE | | | | | | | | | | | | | | | | - | SHS M2-1 GOW | | |
| | | 1 | 24 | 12 | 2.00 | | | | | | | | | | | | X | | X | | | | | | | | | | | | | | | MOUNT SIGNS ON ONE #2 SIGN FRAME. SEE VAOT STD. E-123 SHS M3-4 GOW MI-5 (VT) | | E-136B |
| | | 1 | 24 | 24 | 4.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | FT | FT | FT | FT | FT | FT | EA | LB | LB | LB | | LB | LB | LB | LB | | | | | | | | | | |
| | | | | | | | | | | | | | | | ~~30~~ | ~~70~~ | 29.17 69.83 | 5 | | | | | | | | | | | | | | | | | | |
| | SUB TOTALS | SF 70.14 | SF | EA. | SF | | FT | | | FT ~~100~~ 99.0 | | | | | LB | | EA. | | LB | | | EA. | EA. | LB | | | | | | | | | | | | |

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AVERAGE POST LENGTH = 15 FT
+ = ADD 5 FEET TO AVERAGE POST LENGTH

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WOB = WHITE LEGEND ON BLUE BACKGROUND - PLAQUE
FYG = BLACK LEGEND ON FLUORESCENT YELLOW-GREEN BACKGROUND
SHS = FHWA STANDARD HIGHWAY SIGNS BOOK

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_TSSS_C2 PLOT DATE: 3/31/2011
PROJECT LEADER: G. BAKOS DRAWN BY: CMD
DESIGNED BY: MDS CHECKED BY:
TRAFFIC SIGN SUMMARY SHEET SHEET 115 OF 339

VHB Vanasse Hangen Brustlin, Inc.

**STATE OF VERMONT**
**AGENCY OF TRANSPORTATION**

# TRAFFIC SIGN SUMMARY SHEET

| MILE MARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS EA | WIDTH (IN) | HEIGHT (IN) | NEW & SALVAGED SIGNS "A" | "B" | SALV SIGN | SALV TIS | EXIST POST RETAIN | EXIST POST SALVAGE | NEW SIGN POSTS NO. OF POSTS | FLANGED CHANNEL LB/FT 1.12 | 2.0 | 3.0 | SQUARE STEEL (IN) 1.75 LB/FT 1.88 | 2.0 LB/FT 2.42 | 2.5 LB/FT 3.35 | ANCHOR | SLEEVE | TUBULAR ALUMINUM Ø (IN) 3.0 LB/FT 1.3 | 4.0 LB/FT 1.7 | 4.0 MOD LB/FT 1.7 | TUBULAR STEEL Ø (IN) FOUNDATION | 3.0 LB/FT 7.6 | 3.5 LB/FT 9.0 | 4.0 LB/FT 10.8 | 5.0 LB/FT 14.6 | W-SHAPE STEEL FTG. SIZE 24" | 30" | WEIGHT | POST SIZE | SIGN FRAME | REQUIRED | REMARKS | SIGN DETAIL: DETAIL ON SHEET NUMBER | STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | OPTION ITEMS | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 120+05, RT | END | 1 | 30 | 12 | 2.50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | SHS INTERIM R3-9dP BOW | | |
| | CENTER LANE ONLY | 1 | 24 | 36 | 6.00 | | | | | | 1 | | | | | | X 15.0' | | | | | | | | | | | | | | | | | | | SHS R3-9b | | |
| 120+65 ~~120+58~~, LT | BEGIN | 1 | 30 | 12 | 2.50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | SHS INTERIM R3-9cP BOW DUE TO ORIGINAL LOCATION OF SIGN BEING OBSCURED BY STREET LIGHT, SIGN WAS REMOVED AND RESET AT NEW LOCATION PER VAOT. | | |
| | CENTER LANE ONLY | 1 | 24 | 36 | 6.00 | | 2 | | | | 1 | | | | | | X 15.0' | | X | | | | | | | | | | | | | | | | SHS R3-9b | | |
| 121+00, RT | P PARKING | 1 | 30 | 24 | 5.00 | | | | | | 1 | | | | | X 12.83' | | | X | | | | | | | | | | | | | | | | SHS D4-1L | | |
| 121+83, RT | NO TRUCKS | 1 | 12 | 30 | 2.50 | | | | | | 1 | | | | | X 13.42' | | | X | | | | | | | | | | | | | | | | SHS R7-107a | 110 | |
| 122+48, RT | | 1 | 24 | 24 | 4.00 | | | | | | 1 | | | | | X 14.42' | | | X | | | | | | | | | | | | | | | | FYG SHS W11-2 | | |
| | | 1 | 24 | 12 | 2.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | FYG SHS W16-7pL | | |
| 122+50, LT | | 1 | 24 | 24 | 4.00 | | | | | | 1 | | | | | X 14.5' | | | X | | | | | | | | | | | | | | | | FYG SHS W11-2 | | |
| | | 1 | 24 | 12 | 2.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | FYG SHS W16-7pL | | |
| S. SEMINARY ST. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 40+35, LT | « Seminary » STOP | 1 | 42 | 12 | 3.50 | | | | | | 1 | | | | | | X 14.17' | | X | | | | | | | | | | | | | | | | | SHS D3-1 SHS R1-1 | | |
| | | | | | | | | | | | | FT | FT | FT | FT | FT ~~60~~ 55.17 | FT ~~45~~ 44.17 | EA 6 | LB | LB | LB | | LB | LB | LB | LB | | | | | | | | | |
| | SUB TOTALS | | | | SF 49.00 | SF | EA. 2 | SF | | | | FT | | | | ~~105~~ 99.34 | | | LB | | | EA. | LB | | | | EA. | EA. | LB | | | | | | | | |

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SHS = FHWA STANDARD HIGHWAY SIGNS BOOK

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-I(34) C/2

FILE NAME: 85b010_TSSS_C2 | PLOT DATE: 3/31/2011
PROJECT LEADER: G. BAKOS | DRAWN BY: CMD
DESIGNED BY: MDS | CHECKED BY:
TRAFFIC SIGN SUMMARY SHEET | SHEET 116 OF 339

**STATE OF VERMONT**
**AGENCY OF TRANSPORTATION**

# TRAFFIC SIGN SUMMARY SHEET

| MILE MARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS EA | WIDTH (IN) | HEIGHT (IN) | NEW & SALVAGED SIGNS "A" | "B" | SALV SIGN | SALV TIS | EXIST POST RETAIN | SALVAGE | NO. OF POSTS | NEW SIGN POSTS: FLANGED CHANNEL LB/FT 1.12 | 2.0 | 3.0 | SQUARE STEEL (IN) LB/FT 1.75 1.88 | 2.0 2.42 | 2.5 3.35 | ANCHOR | SLEEVE | TUBULAR ALUMINUM Ø (IN) LB/FT 3.0 1.3 | 4.0 1.7 | 4.0 MOD 1.7 | TUBULAR STEEL Ø (IN) FOUNDATION | 3.0 7.6 | 3.5 9.0 | 4.0 10.8 | 5.0 14.6 LB/FT | W-SHAPE STEEL FTG. SIZE 24" | 30" | WEIGHT | POST SIZE | SIGN FRAME | REQUIRED | REMARKS | SIGN DETAIL: DETAIL ON SHEET NUMBER | STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NO. MAIN STREET | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | OPTION ITEMS | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 123+78, RT | MAY USE FULL LANE | 1 | 30 | 30 | 6.25 | | | | | | 1 | | | | | X 13.5' | | | X | | | | | | | | | | | | | | | SHS INTERIM R4-11 | | |
| 123+81, LT | DMTR | 1 | 12 | 30 | 2.50 | | 1 | | | | 1 | | | | | X 13.25' | | | X | | | | | | | | | | | | | | | SHS R7-107a | 110 | |
| 124+83, LT | PARKING | 1 | 30 | 24 | 5.00 | | | | | | 1 | | | | | X 12.75' | | | X | | | | | | | | | | | | | | | SHS D4-1 | | |
| 125+34, RT | | 1<br>1 | 24<br>24 | 24<br>12 | 4.00<br>2.00 | | | | | | 1 | | | | | X 14.5' | | | X | | | | | | | | | | | | | | | FYG SHS W11-2<br>FYG SHS W16-7pL | | |
| 125+52, LT | | 1<br>1 | 24<br>24 | 24<br>12 | 4.00<br>2.00 | | | | | | 1 | | | | | X 14.5' | | | X | | | | | | | | | | | | | | | FYG SHS W11-2<br>FYG SHS W16-7pL | | |
| 126+59, RT | PARKING | 1 | 30 | 24 | 5.00 | | | | | | 1 | | | | | X 12.75' | | | X | | | | | | | | | | | | | | | SHS D4-1 | | |
| 126+78, RT | | 1<br>1 | 24<br>24 | 24<br>12 | 4.00<br>2.00 | | | | | | 1 | | | | | X 14.5' | | | X | | | | | | | | | | | | | | | FYG SHS W11-2<br>FYG SHS W16-7pL | | |
| 126+92, RT | B-B Creamery St ONE WAY ONE WAY DO NOT ENTER SIDE MOUNT | 1<br>1<br>1<br>1 | 42<br>36<br>36<br>36 | 12<br>12<br>12<br>36 | 3.50<br>3.00<br>3.00<br>9.00 | | | | | | 1 | | | | | X 15.25' | | | X | | | | | | | | | | | | | | | SET R6-1R & R6-1L BACK TO BACK<br>SET R5-1 FACING N. MAIN ST | SHS D3-1<br>SHS R6-1L<br>SHS R6-1R<br>SHS R5-1 | | |
| 126+98, LT | | 1<br>1 | 24<br>24 | 24<br>12 | 4.00<br>2.00 | | | | | | 1 | | | | | X 14.5' | | | X | | | | | | | | | | | | | | | FYG SHS W11-2<br>FYG SHS W16-7pL | | |
| 127+41, LT | West St ONE WAY ONE WAY B-B | 1<br>1<br>1 | 24<br>36<br>36 | 12<br>12<br>12 | 2.00<br>3.00<br>3.00 | | | | | | 1 | | | | | X 12.25' | | | X | | | | | | | | | | | | | | | SET R6-1R & R6-1L BACK TO BACK | SHS D3-1<br>SHS R6-1L<br>SHS R6-1R | | |
| 128+33, LT | DMTR | 1 | 12 | 30 | 2.50 | | | | | | 1 | | | | | X 13.5' | | | X | | | | | | | | | | | | | | | SHS R7-107a | 110 | |
| | | | | | | | | | | | | FT | FT | FT | FT | FT | FT | EA | LB | LB | LB | | LB | LB | LB | LB | | | | | | | | | |
| | | | | | | | | | | | | | | | | ~~150~~ 136.0 | ~~15~~ 15.25 | 11 | | | | | | | | | | | | | | | | | |
| SUB TOTALS | | SF 71.75 | SF | EA. | SF | | | | | | | FT | | | FT | ~~165~~ 151.25 | | | LB | | | EA. | LB | | | | EA. | EA. | LB | | | | | | |

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GOW = GREEN LEGEND ON WHITE BACKGROUND - PLAQUE
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FYG = BLACK LEGEND ON FLUORESCENT YELLOW-GREEN BACKGROUND
SHS = FHWA STANDARD HIGHWAY SIGNS BOOK

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_TSSS_C2 | PLOT DATE: 3/31/2011
PROJECT LEADER: G. BAKOS | DRAWN BY: CMD
DESIGNED BY: MDS | CHECKED BY:
TRAFFIC SIGN SUMMARY SHEET | SHEET 117 OF 339

VHB Vanasse Hangen Brustlin, Inc.

**STATE OF VERMONT**
**AGENCY OF TRANSPORTATION**

# TRAFFIC SIGN SUMMARY SHEET

| MILE MARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS EA | WIDTH (IN) | HEIGHT (IN) | NEW & SALVAGED SIGNS "A" | "B" | SALV SIGN | SALV TIS | EXIST POST RETAIN | SALVAGE | NEW SIGN POSTS NO. OF POSTS | FLANGED CHANNEL LB/FT 1.12 | 2.0 | 3.0 | SQUARE STEEL (IN) LB/FT 1.75 1.88 | 2.0 2.42 | 2.5 3.35 | ANCHOR | SLEEVE | TUBULAR ALUMINUM Ø (IN) LB/FT 3.0 1.3 | 4.0 1.7 | 4.0 MOD 1.7 | TUBULAR STEEL Ø (IN) FOUNDATION | 3.0 7.6 | 3.5 9.0 | 4.0 10.8 | 5.0 14.6 | W-SHAPE STEEL FTG. SIZE 24" | 30" | WEIGHT | POST SIZE | SIGN | REFLAMED | REQUIRED | REMARKS | SIGN DETAIL DETAIL ON SHEET NUMBER | STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | OPTION ITEMS | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MERCHANT STREET | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 128+48, RT | | 1 | 12 | 30 | 2.50 | | | | | | 1 | | | | | X 13.5' | | | X | | | | | | | | | | | | | | | SHS R7-107a | 110 | |
| 128+92, RT | | 1 | 24 | 24 | 4.00 | | | | | | 1 | | | | | X 14.5' | | | X | | | | | | | | | | | | | | | FYG SHS W11-2 | | |
| | | 1 | 24 | 12 | 2.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | FYG SHS W16-7pL | | |
| 128+95 LT | B-B Merchant » ONE WAY ONE WAY DO NOT ENTER SIDE MOUNT | 1 | 42 | 12 | 3.50 | | | | | | 1 | | | | | | X 15.25' | | X | | | | | | | | | | | | | | | SHS D3-1 | | |
| | | 1 | 36 | 12 | 3.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | SHS R6-1L | | |
| | | 1 | 36 | 12 | 3.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | SHS R6-1R | | |
| | | 1 | 36 | 36 | 9.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | SHS R5-1 | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | SET R6-1R & R6-1L BACK TO BACK<br>SET R5-1 FACING N. MAIN ST | | |
| 129+12, LT | | 1 | 24 | 24 | 4.00 | | | | | | 1 | | | | | X 14.5' | | | X | | | | | | | | | | | | | | | FYG SHS W11-2 | | |
| | | 1 | 24 | 12 | 2.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | FYG SHS W16-7pL | | |
| MERCHANT STREET | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 70+37, LT | STOP | 1 | 36 | 36 | 9.00 | | | | | | 1 | | | | | | X 13.75' | | X | | | | | | | | | | | | | | | SHS R1-1 | | |
| CREAMERY COURT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 300+35, LT | STOP | 1 | 36 | 36 | 9.00 | | | | | | 1 | | | | | | X 13.75' | | X | | | | | | | | | | | | | | | SHS R1-1 | | |
| GRANITE STREET | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 50+35, LT | Granite » STOP | 1 | 36 | 12 | 3.00 | | | | | | 1 | | | | | | X 13.75' | | X | | | | | | | | | | | | | | | SHS D3-1 | | |
| | | 1 | 36 | 36 | 9.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | SHS R1-1 | | |
| | | | | | | | | | | | | FT | FT | FT | FT | FT 45 42.5 | FT 60 56.5 | EA 7 | LB | LB | LB | | LB | LB | LB | LB | | | | | | | | | |
| | | | | | SUB TOTALS | SF 63.00 | SF | EA. | SF | | | FT | | | FT | | FT 105 99.0 | | LB | | | EA. | LB | | | | EA. | EA. | LB | | | | | | | | |

FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE VTRANS "SIGN POST DESIGN GUIDELINE."

AVERAGE POST LENGTH = 15 FT

BOW = BLACK LEGEND ON WHITE BACKGROUND - PLAQUE
GOW = GREEN LEGEND ON WHITE BACKGROUND - PLAQUE
WOB = WHITE LEGEND ON BLUE BACKGROUND - PLAQUE
FYG = BLACK LEGEND ON FLUORESCENT YELLOW-GREEN BACKGROUND
SHS = FHWA STANDARD HIGHWAY SIGNS BOOK

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_TSSS_C2 — PLOT DATE: 3/31/2011
PROJECT LEADER: G. BAKOS — DRAWN BY: CMD
DESIGNED BY: MDS — CHECKED BY:
TRAFFIC SIGN SUMMARY SHEET — SHEET 118 OF 339

**STATE OF VERMONT**
**AGENCY OF TRANSPORTATION**

# TRAFFIC SIGN SUMMARY SHEET

| MILE MARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS EA | WIDTH (IN) | HEIGHT (IN) | NEW & SALVAGED SIGNS "A" | "B" | SALV SIGN | SALV TIS | EXIST POST RETAIN | SALVAGE | NO. OF POSTS | NEW SIGN POSTS: FLANGED CHANNEL LB/FT 1.12 | 2.0 | 3.0 | SQUARE STEEL (IN) 1.75 | 2.0 | 2.5 | LB/FT 1.88 | 2.42 | 3.35 | ANCHOR | SLEEVE | TUBULAR ALUMINUM Ø (IN) 3.0 | 4.0 | 4.0 MOD | LB/FT 1.3 | 1.7 | 1.7 | TUBULAR STEEL Ø (IN) FOUNDATION | 3.0 | 3.5 | 4.0 | 5.0 | LB/FT 7.6 | 9.0 | 10.8 | 14.6 | W-SHAPE STEEL FTG. SIZE 24" | 30" | WEIGHT | POST SIZE | SIGN FRAME REQUIRED | REMARKS | SIGN DETAIL: DETAIL ON SHEET NUMBER | STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OPTION ITEMS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NO. MAIN STREET | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 130+00, RT | Depot Sq | 1 | 24 | 12 | 2.00 | | | | | | 1 | | | | | X 11.0' | | | | X | | | | | | | | | | | | | | | | | | | | | | | SHS D3-1 | | |
| 130+72, RT | BARRE CITY HALL AUDITORIUM | | | | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | EXISTING SIGNS RELOCATED TO STA 130+00 | | |
| 130+74, RT | | 1 | 24 | 24 | 4.00 | | | | | | 1 | | | | | X 15.0' | | | | X | | | | | | | | | | | | | | | | | | | | | | | FYG SHS W11-2 | | |
| | | 1 | 24 | 12 | 2.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | FYG SHS W16-7pL | | |
| 130+93, LT | | 1 | 24 | 24 | 4.00 | | | | | | 1 | | | | | X 15.0' | | | | X | | | | | | | | | | | | | | | | | | | | | | | FYG SHS W11-2 | | |
| | | 1 | 24 | 12 | 2.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | FYG SHS W16-7pL | | |
| 132+68, LT | Pearl St ONE WAY ONE WAY P ARRIVING B-B | 1 | 30 | 12 | 2.50 | | | | | | 2 | | | | | 14.75' | | | | X | | | | | | | | | | | | | | | | | | | | | | | SHS D3-1 | | |
| | | 1 | 36 | 12 | 3.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | SET R6-1R & R6-1L BACK TO BACK: SHS R6-1L, SHS R6-1R | | |
| | | 1 | 36 | 12 | 3.00 | | | | | | | | | | | X 14.5' | | | | | | | | | | | | | | | | | | | | | | | | | SET R3-2 & D4-1 BACK TO BACK: SHS R3-2, SHS D4-1 | | |
| | | 1 | 30 | 30 | 6.25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 1 | 30 | 24 | 5.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 132+70, RT | | 1 | 24 | 24 | 4.00 | | | | | | 1 | | | | | X 15.0' | | | | X | | | | | | | | | | | | | | | | | | | | | | | FYG SHS W11-2 | | |
| | | 1 | 24 | 12 | 2.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | FYG SHS W16-7pL | | |
| 132+90, LT | | 1 | 24 | 24 | 4.00 | | | | | | 1 | | | | | X 15.0' | | | | X | | | | | | | | | | | | | | | | | | | | | | | FYG SHS W11-2 | | |
| | | 1 | 24 | 12 | 2.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | FYG SHS W16-7pL | | |
| 134+52, LT | CONTROL | 1 | 12 | 30 | 2.50 | | | | | | 1 | | | | | X 13.25' | | | | X | | | | | | | | | | | | | | | | | | | | | | | SHS R7-107a | 110 | |
| 135+20, RT | | 1 | 24 | 24 | 4.00 | | | | | | 1 | | | | | X 15.0' | | | | X | | | | | | | | | | | | | | | | | | | | | | | FYG SHS W11-2 | | |
| | | 1 | 24 | 12 | 2.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | FYG SHS W16-7pL | | |
| 135+20, LT | Keith Ave ONE WAY ONE WAY B-B | 1 | 30 | 12 | 2.50 | | | | | | 1 | | | | | | X 14.75' | | | X | | | | | | | | | | | | | | | | | | | | | | | SHS D3-1 | | |
| | | 1 | 36 | 12 | 3.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | SET R6-1R & R6-1L BACK TO BACK: SHS R6-1L, SHS R6-1R | | |
| | | 1 | 36 | 12 | 3.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 1 | 30 | 30 | 6.25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | SHS R3-2 | | |
| 135+40, LT | | 1 | 24 | 24 | 4.00 | | | | | | 1 | | | | | X 15.0' | | | | X | | | | | | | | | | | | | | | | | | | | | | | FYG SHS W11-2 | | |
| | | 1 | 24 | 12 | 2.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | FYG SHS W16-7pL | | |
| DEPOT SQUARE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 80+41, LT | STOP | 1 | 36 | 36 | 9.00 | | | | | | 1 | | | | | | X | | | X | | | | | | | | | | | | | | | | | | | | | | | SHS R1-1 | | |
| | | | | | | | | | | | | FT | FT | FT | FT | FT ~~150~~ 143.50 | FT ~~30~~ 28.5 | | EA 12 | LB | LB | LB | | LB | LB | LB | LB | | | | | | | | | | | | | | | | | |
| SUB TOTALS | | | | | SF 84.00 | SF | EA. 2 | SF | | | | FT | | | FT ~~180~~ 172.0 | | | | | | LB | | | EA. | LB | | | | EA. | EA. | LB | | | | | | | | | | | | | |

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FYG = BLACK LEGEND ON FLUORESCENT YELLOW-GREEN BACKGROUND
SHS = FHWA STANDARD HIGHWAY SIGNS BOOK

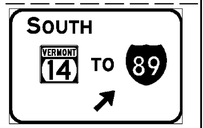
VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_TSSS_C2 | PLOT DATE: 3/31/2011
PROJECT LEADER: G. BAKOS | DRAWN BY: CMD
DESIGNED BY: MDS | CHECKED BY:
TRAFFIC SIGN SUMMARY SHEET | SHEET 119 OF 339

**STATE OF VERMONT**
**AGENCY OF TRANSPORTATION**

# TRAFFIC SIGN SUMMARY SHEET

| MILE MARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS EA | WIDTH (IN) | HEIGHT (IN) | NEW & SALVAGED SIGNS "A" | "B" | SALV SIGN | SALV TIS | EXIST POST RETAIN | SALVAGE | NEW SIGN POSTS NO. OF POSTS | FLANGED CHANNEL LB/FT 1.12 | 2.0 | 3.0 | SQUARE STEEL (IN) LB/FT 1.75 1.88 | 2.0 2.42 | 2.5 3.35 | ANCHOR | SLEEVE | TUBULAR ALUMINUM Ø (IN) LB/FT 3.0 1.3 | 4.0 1.7 | 4.0 MOD 1.7 | TUBULAR STEEL Ø (IN) FOUNDATION | 3.0 7.6 | 3.5 9.0 | 4.0 10.8 | 5.0 14.6 | W-SHAPE STEEL FTG. SIZE 24" | 30" | WEIGHT | POST SIZE | SIGN FRAME | REQUIRED | REMARKS | SIGN DETAIL DETAIL ON SHEET NUMBER | STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | OPTION ITEMS | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NO. MAIN STREET | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 136+18, RT | | 1 | 12 | 30 | 2.50 | | | | | | 1 | | | | | X 13.5' | | | X | | | | | | | | | | | | | | | SHS R7-107a | 110 | |
| 136+87, RT | | 1<br>1 | 30<br>24 | 30<br>12 | 6.25<br>2.00 | | | | | | 1 | | | | | X 15.0' | | | X | | | | | | | | | | | | | | | FYG SHS W11-2<br>FYG SHS W16-7pL | | |
| 137+06, LT | | 1<br>1 | 30<br>24 | 30<br>12 | 6.25<br>2.00 | | | | | | 1 | | | | | X 15.0' | | | X | | | | | | | | | | | | | | | FYG SHS W11-2<br>FYG SHS W16-7pL | | |
| 137+71 | | 1 | 96 | 48 | | 32.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | MOUNT SIGNS TO PROPOSED OVERHEAD STRUCTURE TYPE IX SHEETING | 110 | |
| 137+71 |  | 1 | 108 | 78 | | 58.50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | MOUNT SIGNS TO PROPOSED OVERHEAD STRUCTURE TYPE IX SHEETING | 110 | |
| 138+27, LT | | 1<br>1 | 24<br>30 | 12<br>24 | 2.00<br>5.00 | | | | | | ~~1~~ 2 | | | | | 14.0'<br>X 14.0' | | | X | | | | | | | | | | | | | #1A | MOUNT SIGNS ON ONE #1A SIGN FRAME SEE VAOT STD E-123 | SHS W3-4 BOW<br>SHS M1-4 | | |
| 138+27, LT | | 1<br>1 | 24<br>24 | 12<br>24 | 2.00<br>4.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | - | MOUNT SIGNS ON ONE #1 SIGN FRAME SEE VAOT STD E-123 | SHS W3-1 GOW<br>M1-5 (VT) | | E-136B |
| 138+30, RT | | 1 | 30 | 36 | 7.50 | | | | | | 1 | | | | | X 13.75' | | | X | | | | | | | | | | | | | | | SHS R3-7R (MOD) | 110 | |
| 138+62, RT | | 1<br>1<br>1 | 24<br>24<br>18 | 12<br>24<br>18 | 2.00<br>4.00<br>3.00 | | | | | | 1 | | | | | | X 15.0' | | | | | | | | | | | | | | | | | SHS M3-2 GOW<br>M1-5 (VT)<br>SHS INTERIM M5-4 | | E-136B |
| 138+73, RT | | | | | | | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | SALVAGE EXISTING SIGNS ONTO EXISTING (NEW) SIGNAL POLE | | |
| 138+38, RT | | 1<br>1 | 24<br>18 | 24<br>18 | 4.00<br>2.25 | | | | | | 1 | | | | | X 12.75' | | | | | | | | | | | | | | | | | SHS W12-1<br>SHS OM1-1 | | |
| | | | | | | | | | | | | FT | FT | FT | FT | FT ~~90~~ 98 | FT 15 | EA 5 | LB | LB | LB | | LB | LB | LB | LB | | | | | | | | |
| SUB TOTALS | | | | | SF 54.75 | SF 90.50 | EA. 5 | SF | | | | FT | | | | FT ~~105~~ 113 | | | LB | | | EA. | LB | | | | EA. | EA. | LB | | | | | |

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SHS = FHWA STANDARD HIGHWAY SIGNS BOOK

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_TSSS_C2 — PLOT DATE: 3/31/2011
PROJECT LEADER: G. BAKOS — DRAWN BY: CMD
DESIGNED BY: MDS — CHECKED BY:
TRAFFIC SIGN SUMMARY SHEET — SHEET 120 OF 339

**STATE OF VERMONT**
**AGENCY OF TRANSPORTATION**

# TRAFFIC SIGN SUMMARY SHEET

| MILE MARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS EA | WIDTH (IN) | HEIGHT (IN) | NEW & SALVAGED SIGNS "A" | "B" | SALV SIGN | SALV TIS | EXIST POST RETAIN | SALVAGE | NEW SIGN POSTS NO. OF POSTS | FLANGED CHANNEL LB/FT 1.12 | 2.0 | 3.0 | SQUARE STEEL (IN) 1.75 LB/FT 1.88 | 2.0 LB/FT 2.42 | 2.5 LB/FT 3.35 | ANCHOR | SLEEVE | TUBULAR ALUMINUM Ø (IN) 3.0 LB/FT 1.3 | 4.0 LB/FT 1.7 | 4.0 MOD LB/FT 1.7 | TUBULAR STEEL Ø (IN) FOUNDATION | 3.0 LB/FT 7.6 | 3.5 LB/FT 9.0 | 4.0 LB/FT 10.8 | 5.0 LB/FT 14.6 | W-SHAPE STEEL FTG. SIZE 24" | 30" | WEIGHT | POST SIZE | SIGN FRAME REQUIRED | REMARKS | SIGN DETAIL: DETAIL ON SHEET NUMBER | STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | OPTION ITEMS | | | | | | | | | | | | | | | | | | | | | | | | | |
| NO. MAIN STREET | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 138+80, RT | SOUTH VERMONT 14 | 1 | 24 | 12 | 2.00 | | | | | | 1 | | | | 14.75' | | | | | | | | | | | | | | | | | #2 | MOUNT SIGNS ON ONE #2 SIGN FRAME. SEE VAOT STD. E-123 | SHS M3-3 GOW<br>MI-5 (VT)<br>SHS M6-1 GOW | | E-136B |
| | | 1 | 24 | 24 | 4.00 | | | | | | | | | | X | | | | | | | | | | | | | | | | | | | | |
| | | 1 | 21 | 15 | 2.19 | | | | | | | | | | 14.75' | | | | | | | | | | | | | | | | | | | | |
| 138+80, RT | TO 89 | 1 | 24 | 12 | 2.00 | | | | | | 1 | | | | SEE ABOVE | | | | | | | | | | | | | | | | | - | MOUNT SIGNS ON ONE #2 SIGN FRAME. SEE VAOT STD. E-123 | SHS M4-5 WOB<br>SHS MI-1<br>SHS M6-1 WOB | | |
| | | 1 | 24 | 24 | 4.00 | | | | | | | | | | X | | | | | | | | | | | | | | | | | | | | |
| | | 1 | 21 | 15 | 2.19 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NO. MAIN STREET | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 600+47, RT | BARRE B-B | 1 | 24 | 30 | 5.00 | | | 2 | | | 1 | | | | X | | | | X | | | | | | | | | | | | | | EXISTING SIGNS REMOVED & RESET WITH R4-7 AT STA 600+47, RT (FROM STA 601+20) | SHS R4-7<br>SHS OMI-1 | | |
| | | 1 | 18 | 18 | 2.25 | | | | | | | | | | 12.75' | | | | | | | | | | | | | | | | | | | | |
| 600+74, RT | WEST 302 | 1 | 24 | 12 | 2.00 | | | | | | 1 | | | | 15.25' | | | | | | | | | | | | | | | | | #2A | MOUNT SIGNS ON ONE #2A SIGN FRAME. SEE VAOT STD. E-123 | SHS M3-4 BOW<br>SHS MI-4<br>SHS M6-1 BOW | | |
| | | 1 | 30 | 24 | 5.00 | | | | | | | | | | X | | | | X | | | | | | | | | | | | | | | | |
| | | 1 | 21 | 15 | 2.19 | | | | | | 2 | | | | 15.75' | | | | | | | | | | | | | | | | | | | | |
| 600+74, RT | NORTH VERMONT 14 | 1 | 24 | 12 | 2.00 | | | | | | 1 | | | | SEE ABOVE | | | | | | | | | | | | | | | | | - | MOUNT SIGNS ON ONE #2A SIGN FRAME. SEE VAOT STD. E-123 | SHS M3-1 GOW<br>MI-5 (VT)<br>SHS M6-1 GOW | | E-136B |
| | | 1 | 24 | 24 | 4.00 | | | | | | | | | | X | | | | X | | | | | | | | | | | | | | | | |
| | | 1 | 21 | 15 | 2.19 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SO. MAIN STREET | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 601+20, RT | | 1 | 24 | 30 | 5.00 | | | | | | 1 | | | | X | | | | X | | | | | | | | | | | | | | SHS R4-7<br>SHS OMI-1 | | |
| | | 1 | 18 | 18 | 2.25 | | | | | | | | | | 12.75' | | | | | | | | | | | | | | | | | | | | |
| 601+30, RT | ROUTE 14 ONLY PROSPECT STREET | 1 | ~~36~~ 30 | ~~42~~ 30 | ~~10.50~~ 6.25 | | | | | | ~~2~~ 1 | | | | X 13.25' | | | | X | | | | | | | | | | | | | | SIGN SIZE WAS REDUCED TO 30" X 30" WITH 1 POST, OKAYED BY D. HALE, R.E. 10/18/2012 VR-921 MOD) | 110 | E-145A | |
| | | | | | | | | | | | | FT | FT | FT | FT ~~120~~ 99.25' | FT | FT | EA 6 | LB | LB | LB | | LB | LB | LB | LB | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | SUB TOTALS | | | | SF ~~58.76~~ 34.5 | SF | EA. 2 | SF | | | | FT | | | FT ~~120~~ 99.25 | | | | | LB | | | EA. | LB | | | | EA. | EA. | LB | | | | | | |

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FILE NAME: 85b010_TSSS_C2 | PLOT DATE: 3/31/2011
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TRAFFIC SIGN SUMMARY SHEET | SHEET 121 OF 339

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**AGENCY OF TRANSPORTATION**

# TRAFFIC SIGN SUMMARY SHEET

| MILE MARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS EA | WIDTH (IN) | HEIGHT (IN) | NEW & SALVAGED SIGNS "A" | "B" | SALV SIGN | SALV TIS | EXIST POST SALVAGE RETAIN | NEW SIGN POSTS NO. OF POSTS | FLANGED CHANNEL LB/FT 1.12 | 2.0 | 3.0 | SQUARE STEEL (IN) LB/FT 1.75 1.88 | 2.0 2.42 | 2.5 3.35 | ANCHOR | SLEEVE | TUBULAR ALUMINUM Ø (IN) LB/FT 3.0 1.3 | 4.0 1.7 | 4.0 MOD 1.7 | TUBULAR STEEL Ø (IN) FOUNDATION | 3.0 7.6 | 3.5 9.0 | 4.0 10.8 | 5.0 14.6 | W-SHAPE STEEL FTG. SIZE 24" | 30" | WEIGHT | POST SIZE | SIGN FRAME | REQUIRED | REMARKS | SIGN DETAIL DETAIL ON SHEET NUMBER | STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | OPTION ITEMS | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SO. MAIN STREET | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 601+67, LT | ONLY | 1 | 36 | 30 | 7.50 | | | | | 1 | | | | | X 13.25' | | | X | | | | | | | | | | | | | | | VR-922 | | E-145A |
| 602+38, RT | BARRE OPERA HOUSE | | | | | | 2 | | | 1 | | | | | X 11.0' | | | X | | | | | | | | | | | | | | EXISTING SIGNS REMOVED & RESET ON NEW POST | | |
| CHURCH STREET | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 800+22, LT | ONE WAY / ONE WAY | 1<br>1 | 36<br>36 | 12<br>12 | 3.00<br>3.00 | | | | | 1 | | | | | X 12.0' | | | X | | | | | | | | | | | | | | SET R6-1R & R6-1L BACK TO BACK | SHS R6-1L<br>SHS R6-1R | | |
| 800+22 ~~800+38~~, LT | TO EAST 302 → | 1<br>1<br>1<br>1 | 24<br>24<br>30<br>21 | 12<br>12<br>24<br>15 | 2.00<br>2.00<br>5.00<br>2.19 | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | DUE TO THE SUBSTANTIAL NUMBER OF SIGNS FOR THIS STATION, THE SIGNS WOULD NOT FIT ON THE SIGNAL POLE. THE SIGNS WERE MOVED TO THE POST AT THE ABOVE STATION, STA 800+22, LT. ~~MOUNT SIGNS TO EXISTING SIGNAL POLE~~ | SHS M4-5 BOW<br>SHS M3-3 BOW<br>SHS M1-4<br>SHS M6-1 BOW | | |
| FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE VTRANS "SIGN POST DESIGN GUIDELINE." | | | | | | | | | | | FT | FT | FT | FT | FT ~~45~~ 53.5 | FT | | EA 3 | LB | LB | LB | | LB | LB | LB | LB | | | | | | | | | | |
| | **SUB TOTALS** | | | | SF 24.69 | SF | EA. ~~2~~ 4 | SF | | | FT | | | | FT ~~45~~ 53.5 | | | | LB | | | EA. | LB | | | | EA. | EA. | LB | | | | | | | |

AVERAGE POST LENGTH = 15 FT

BOW = BLACK LEGEND ON WHITE BACKGROUND - PLAQUE
GOW = GREEN LEGEND ON WHITE BACKGROUND - PLAQUE
WOB = WHITE LEGEND ON BLUE BACKGROUND - PLAQUE
FYG = BLACK LEGEND ON FLUORESCENT YELLOW-GREEN BACKGROUND
SHS = FHWA STANDARD HIGHWAY SIGNS BOOK

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_TSSS_C2 | PLOT DATE: 3/31/2011
PROJECT LEADER: G. BAKOS | DRAWN BY: CMD
DESIGNED BY: MDS | CHECKED BY:
TRAFFIC SIGN SUMMARY SHEET | SHEET 122 OF 339

**STATE OF VERMONT**
**AGENCY OF TRANSPORTATION**

# TRAFFIC SIGN SUMMARY SHEET

| MILE MARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS EA | WIDTH (IN) | HEIGHT (IN) | NEW & SALVAGED SIGNS "A" | "B" | SALV SIGN | SALV TIS | EXIST POST RETAIN | SALVAGE | NO. OF POSTS | NEW SIGN POSTS: FLANGED CHANNEL LB/FT 1.12 | 2.0 | 3.0 | SQUARE STEEL (IN) 1.75 | 2.0 | 2.5 LB/FT 1.88 | 2.42 | 3.35 | ANCHOR | SLEEVE | TUBULAR ALUMINUM Ø (IN) 3.0 | 4.0 | 4.0 MOD LB/FT 1.3 | 1.7 | 1.7 | TUBULAR STEEL Ø (IN) FOUNDATION | 3.0 | 3.5 | 4.0 | 5.0 LB/FT 7.6 | 9.0 | 10.8 | 14.6 | W-SHAPE STEEL FTG. SIZE 24" | 30" | WEIGHT | POST SIZE | SIGN FRAME REQUIRED | REMARKS | SIGN DETAIL: DETAIL ON SHEET NUMBER | STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | OPTION ITEMS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WASHINGTON ST. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 140+28, RT | EAST 302 | 1 | 24 | 12 | 2.00 | | | | | | 1 | | | | | X 14.0' | | | | | | | | | | | | | | | | | | | | | | | | SHS M3-2 BOW | | |
| | | 1 | 30 | 24 | 5.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | SHS M1-4 | | |
| 141+97, LT | ONLY ONLY | 1 | 48 | 30 | 10.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | MOUNT SIGN TO PROPOSED OVERHEAD SIGN SUPPORT VR-932 | | E-145B |
| 141+97, LT | SOUTH SOUTH VERMONT 14 TO 89 | 1 | 108 | 78 | | 58.50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | MOUNT SIGNS TO PROPOSED OVERHEAD STRUCTURE TYPE IX SHEETING | 110 | |
| 141+97, LT | WEST NORTH 302 TO 89 | 1 | 108 | 78 | | 58.50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | MOUNT SIGNS TO PROPOSED OVERHEAD STRUCTURE TYPE IX SHEETING | 110 | |
| 142+80, LT | MAY USE FULL LANE | 1 | 30 | 30 | 6.25 | | | | | | 1 | | | | | X 13.33' | | | | X | | | | | | | | | | | | | | | | | | | | | |
| 143+47, LT | JCT VERMONT 14 | 1 | 21 | 15 | 2.19 | | | | | | 1 | | | | | X 14.25' | | | | X | | | | | | | | | | | | | | | | | | | | SHS M2-1 GOW M1-5 (VT) | | E-136B |
| | | 1 | 24 | 24 | 4.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 143+48, RT | EAST 302 DO NOT ENTER B-B | 1 | 24 | 12 | 2.00 | | | | | | 1 | | | | | X 14.0' | | | | X | | | | | | | | | | | | | | | | | | | | SHS M3-2 BOW SHS M1-4 SHS R5-1 | | |
| | | 1 | 30 | 24 | 5.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 1 | 30 | 30 | 6.25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VT ROUTE 62 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12+02, LT | ONLY | 1 | 36 | 30 | 7.50 | | | | | | 1 | | | | | X 13.5' | | | | | | | | | | | | | | | | | | | | | | | | VR-922 | | E-145A |
| | | 1 | 36 | 30 | 7.50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12+36, CL | RAIL ROAD CROSS ROAD | 1 | 48 | 9 | 6.00 | | | | | | 1 | | | | | X 13.25' | | | | X | | | | | | | | | | | | | | | | | | | | CROSSBUCKS SHALL INCLUDE REFLECTIVE STRIPS ON BACK AND ON POST SHS R15-1 | | MUTCD FIGURE 8B-2 |
| | | | 48 | 9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12+36, RT | RAIL ROAD CROSS ROAD | 1 | 48 | 9 | 6.00 | | | | | | 2 | | | | | 16.75' | | | | | | | | | | | | | | | | | | | | | | | | CROSSBUCKS SHALL INCLUDE REFLECTIVE STRIPS ON BACK AND ON POST SHS R15-1 | | MUTCD FIGURE 8B-2 |
| | | | 48 | 9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | YIELD | 1 | • | • | 3.18 | | | | | | | | | | | X 17.25' | | | | | | | | | | | | | | | | | | | | | | | | • SIZE = 36"x36"x36" SHS R1-2 | | |
| | REPORT EMERGENCY OR PROBLEM TO 1-800-352-2720 CHOOSING 527 365 E | 1 | 15 | 9 | 0.94 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | SHS INTERIM I-13 | | |
| | | | | | | | | | | | | FT | FT | FT | FT | FT | FT EA | | LB | LB | LB | | LB | LB | LB | LB | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | ~~105~~ 103.33 | ~~15~~ 14.0 | | | 3 | | | | | | | | | | | | | | | | | | | | | | |
| SUB TOTALS | | SF | SF | EA. | SF | | | | | | | FT | | | FT | | | | LB | | EA. | LB | | | | EA. | EA. | LB | | | | | | | | | | | | | |
| | | ~~66.31~~ 73.81 | 117.00 | | | | | | | | | | | | ~~120~~ 116.33 | | | | | | | | | | | | | | | | | | | | | | | | | | |

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VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_TSSS_C2 — PLOT DATE: 3/31/2011
PROJECT LEADER: G. BAKOS — DRAWN BY: CMD
DESIGNED BY: MDS — CHECKED BY:
TRAFFIC SIGN SUMMARY SHEET — SHEET 123 OF 339

**STATE OF VERMONT**
**AGENCY OF TRANSPORTATION**

# TRAFFIC SIGN SUMMARY SHEET

| MILE MARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS EA | WIDTH (IN) | HEIGHT (IN) | NEW & SALVAGED SIGNS "A" | "B" | SALV SIGN | SALV TIS | EXIST POST RETAIN | SALVAGE | NEW SIGN POSTS NO. OF POSTS | FLANGED CHANNEL LB/FT 1.12 | 2.0 | 3.0 | SQUARE STEEL (IN) LB/FT 1.75 1.88 | 2.0 2.42 | 2.5 3.35 | ANCHOR | SLEEVE | TUBULAR ALUMINUM Ø (IN) LB/FT 3.0 1.3 | 4.0 1.7 | 4.0 MOD 1.7 | TUBULAR STEEL Ø (IN) FOUNDATION | 3.0 7.6 | 3.5 9.0 | 4.0 10.8 | 5.0 14.6 | W-SHAPE STEEL FTG. SIZE 24" | 30" | WEIGHT | POST SIZE | SIGN FRAME | REQUIRED | REMARKS | SIGN DETAIL: DETAIL ON SHEET NUMBER | STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OPTION ITEMS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VT ROUTE 62 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12+95, LT | RAIL ROAD CROSSING; YIELD; REPORT EMERGENCY OR PROBLEM TO 1-800-345-7233 CROSSING 837 310 E | 1 | 48 | 9 | 6.00 | | | | | | 2 | | | | 14.75' | | | | | | | | | | | | | | | | | | | | E CROSSBUCKS SHALL INCLUDE REFLECTIVE STRIPS ON BACK AND ON POST SHS R15-1 | | MUTCD FIGURE 8B-2 |
| | | 1 | 48 | 9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 1 | * | * | 3.18 | | | | | | | | | | X | | | | | | | | | | | | | | | | | | | | * SIZE = 36"x36"x36" SHS R1-2 | | |
| | | 1 | 15 | 9 | 0.94 | | | | | | | | | | 14.5' | | | | | | | | | | | | | | | | | | | | SHS INTERIM I-13 | | |
| 13+00, CL | RAIL ROAD CROSSING | 1 | 48 | 9 | 6.00 | | | | | | 1 | | | | X | | | | X | | | | | | | | | | | | | | | | E CROSSBUCKS SHALL INCLUDE REFLECTIVE STRIPS ON BACK AND ON POST SHS R15-1 | | MUTCD FIGURE 8B-2 |
| | | 1 | 48 | 9 | | | | | | | | | | | 13.25' | | | | | | | | | | | | | | | | | | | | | | | |
| 14+50, LT | | 1 | 30 | 30 | 6.25 | | | | | | 1 | | | | X | | | | | | | | | | | | | | | | | | | | SHS W3-2 | | |
| | | | | | | | | | | | | | | | 14.5' | | | | | | | | | | | | | | | | | | | | | | | |
| 14+50, RT | WEST VERMONT 62 | 1 | 24 | 12 | 2.00 | | | | | | 1 | | | | X | | | | | | | | | | | | | | | | | | | | SHS M3-4 GOW | | E-136B |
| | | 1 | 24 | 24 | 4.00 | | | | | | | | | | 13.5' | | | | | | | | | | | | | | | | | | | | M1-5 (VT) | | |
| MAPLE AVENUE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 22+32, LT | EAST SOUTH 302 14 | 1 | 108 | 78 | | 58.50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | MOUNT SIGNS TO PROPOSED OVERHEAD STRUCTURE | 110 | |
| 22+32, LT | WEST 62 TO 89 | 1 | 108 | 78 | | 58.50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | MOUNT SIGNS TO PROPOSED OVERHEAD STRUCTURE | 110 | |
| 22+32, LT | 302 WEST | 1 | 96 | 48 | | 32.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | MOUNT SIGNS TO PROPOSED OVERHEAD STRUCTURE | 110 | |
| 22+32, LT | PROHIBITED OVERNIGHT PARKING 1 AM - 6 AM | | | | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 402+48, LT | Short St | 1 | 24 | 12 | 2.00 | | | | | | ~~1~~ | | | | ~~X~~ | | | | ~~X~~ | | | | | | | | | | | | | | | | THIS SIGN WAS INSTALLED ABOVE THE TRAFFIC SIGNAL SIGN AT THE SAME LOCATION. NO NEW POST NEEDED. SHS D3-1 | | |
| | | | | | | | | | | | | FT | FT | FT | FT | ~~90~~ 70.5 | FT | | EA 2 | LB | LB | LB | | LB | LB | LB | LB | | | | | | | | | |
| SUB TOTALS | | | | | SF 30.37 | SF 149.00 | EA. 1 | SF | | | | FT | | | FT | ~~90~~ 70.5 | | | | LB | | | EA. | LB | | | | EA. | EA. | LB | | | | | | | |

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VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_TSSS_C2 — PLOT DATE: 3/31/2011
PROJECT LEADER: G. BAKOS — DRAWN BY: CMD
DESIGNED BY: MDS — CHECKED BY:
TRAFFIC SIGN SUMMARY SHEET — SHEET 124 OF 339

**STATE OF VERMONT**
**AGENCY OF TRANSPORTATION**

# TRAFFIC SIGN SUMMARY SHEET

| MILE MARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS EA | WIDTH (IN) | HEIGHT (IN) | NEW & SALVAGED SIGNS "A" | "B" | SALV SIGN | SALV TIS | EXIST POST RETAIN | EXIST POST SALVAGE | NO. OF POSTS | NEW SIGN POSTS: FLANGED CHANNEL LB/FT 1.12 | 2.0 | 3.0 | SQUARE STEEL (IN) LB/FT 1.75 1.88 | 2.0 2.42 | 2.5 3.35 | ANCHOR | SLEEVE | TUBULAR ALUMINUM Ø (IN) LB/FT 3.0 1.3 | 4.0 1.7 | 4.0 MOD 1.7 | TUBULAR STEEL Ø (IN) FOUNDATION | 3.0 7.6 | 3.5 9.0 | 4.0 10.8 | 5.0 14.6 | W-SHAPE STEEL FTG. SIZE 24" | 30" | WEIGHT | POST SIZE | SIGN FRAME | REQUIRED | REMARKS | SIGN DETAIL: DETAIL ON SHEET NUMBER | STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | OPTION ITEMS | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SUMMER STREET | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SEE NOTES ~~418+14, RT~~ | B-B ONE WAY ONE WAY DO NOT ENTER | 1<br>1<br>1 | 36<br>36<br>36 | 12<br>12<br>36 | ~~3.00~~<br>~~3.00~~<br>~~9.00~~ | | | | | | 1 | | | | | | X | | X | | | | | | | | | | | | | | | SET R6-1R & R6-1L BAK TO BACK WITH R5-1 FACING SUMMER ST<br>SEE NEXT PAGE - REPEATED ON THIS SHEET | SHS R6-1L<br>SHS R6-1R<br>SHS R5-1 | | |
| ~~418+40, LT~~ | STOP | 1 | 36 | 36 | ~~9.00~~ | | | | | | 1 | | | | | | X | | X | | | | | | | | | | | | | | | SEE NOTE ABOVE | SHS R1-1 | | |
| ~~418+47, RT~~ | STOP | 1 | 36 | 36 | ~~9.00~~ | | | | | | 1 | | | | | | X | | X | | | | | | | | | | | | | | | SEE NOTE ABOVE STA. 418+14, RT | SHS R1-1 | | |
| 420+75, RT | STOP Keith St AVE. Summer St SIDE MOUNT | 1<br>1<br>1 | 30<br>36<br>36 | 12<br>12<br>36 | 2.50<br>3.00<br>9.00 | | | | | | 1 | | | | | | X<br>14.25' | | X | | | | | | | | | | | | | | | OLD STOP SIGN WAS DAMAGED | SHS D3-1<br>SHS D3-1 | | |
| 421+92, RT | STOP | 1 | 36 | 36 | 9.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | MOUNT TO SIGNAL POLE | SHS R1-1 | | |
| ELM STREET | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 423+12, LT | STOP | 1 | 36 | 36 | 9.00 | | | | | | 1 | | | | | | X 15.0' | | X | | | | | | | | | | | | | | | | SHS R1-1 | | |
| 707+05, RT | Summer St Elm St | 1<br>1 | 42<br>30 | 12<br>12 | 3.50<br>2.50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | MOUNT TO EXISTING SIGNAL POLE | SHS D3-1 (MOD 1)<br>SHS D3-1 (MOD 2) | 110 | |
| 707+05, RT | Wellington St Elm St | 1<br>1 | 48<br>30 | 12<br>12 | 4.00<br>2.50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | MOUNT TO EXISTING SIGNAL POLE | SHS D3-1 (MOD 3)<br>SHS D3-1 (MOD 2) | 110 | |
| 702+11, LT | ONLY | 1 | 36 | 30 | 7.50 | | | | | | 1 | | | | | | X 13.5' | | X | | | | | | | | | | | | | | | | VR-922 | | E-145A |
| 702+77, RT | | 1<br>1 | 30<br>24 | 30<br>12 | 6.25<br>2.00 | | | | + | | 1 | | | | | | X 15.0' | | | | | | | | | | | | | | | | | OLD POST WAS DAMAGED | FYG SHS W11-2<br>FYG SHS W16-7pL | | |
| | | | | | | | | | | | | FT | FT | FT | FT | FT | FT | EA | LB | LB | LB | | LB | LB | LB | LB | | | | | | | | | |
| | | | | | | | | | | | | | | | | | ~~15~~ 28.5 | ~~75~~ 29.25 | 6 | | | | | | | | | | | | | | | | | |
| | SUB TOTALS | | | | SF ~~84.75~~ 60.75 | SF | EA. | SF | | | | FT | | | FT ~~90~~ 57.75 | | | | | LB | | | EA. | LB | | | | EA. | EA. | LB | | | | | | | |

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FILE NAME: 85b010_TSSS_C2 — PLOT DATE: 3/31/2011
PROJECT LEADER: G. BAKOS — DRAWN BY: CMD
DESIGNED BY: MDS — CHECKED BY:
TRAFFIC SIGN SUMMARY SHEET — SHEET 125 OF 339

**STATE OF VERMONT**
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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OPTION ITEMS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ELM STREET | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 702+83, LT | | 1 | 30 | 30 | 6.25 | | | | + | | 1 | | | | | X 14.0' | | | | | | | | | | | | | | | | | | FYG SHS W11-2 OLD POST WAS DAMAGED. FYG SHS W16-7pL | | |
| | | 1 | 24 | 12 | 2.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 703+83, RT | Jefferson St STOP | 1 | 42 | 12 | 3.50 | | | | | | 1 | | | | | | X 14.0' | | X | | | | | | | | | | | | | | | | SHS D3-1 SHS R1-1 | | |
| | | 1 | 36 | 36 | 9.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SUMMER STREET | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 414+41, RT | ONE WAY | 1 | 36 | 12 | 3.00 | | | | | | 1 | | | | | X 12.0' | | | X | | | | | | | | | | | | | | | | THIS SIGN WAS COMBINED WITH SIGN AT STA. 414+41, RT (ABOVE). SHS R6-1R | | |
| ~~414+41~~ 414+49, RT | ONE WAY | 1 | 36 | 12 | 3.00 | | | | | | ~~1~~ | | | | | ~~X~~ | | | ~~X~~ | | | | | | | | | | | | | | | | SHS R6-1L | | |
| 414+55, LT | STOP | 1 | 36 | 36 | 9.00 | | | | | | 1 | | | | | | X 9.83' | | X | | | | | | | | | | | | | | | | SHS R1-1 | | |
| 418+10, RT | | 1 | 30 | 30 | 6.25 | | | | | | 1 | | | | | X 15.0' | | | | | | | | | | | | | | | | | | | FYG SHS W11-2 FYG SHS W16-7pL | | |
| | | 1 | 24 | 12 | 2.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 418+14, RT | B-B ONE WAY ONE WAY DO NOT ENTER | 1 | 36 | 12 | 3.00 | | | | | | 1 | | | | | | X 14.75' | | X | | | | | | | | | | | | | | | | SET R6-1R & R64L BAK TO BACK WITH R5-1 FACING SUMMER ST SHS R6-1L SHS R6-1R SHS R5-1 | | |
| | | 1 | 36 | 12 | 3.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 1 | 36 | 36 | 9.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 418+35, LT | | 1 | 30 | 30 | 6.25 | | | | | | 1 | | | | | X 15.0' | | | X | | | | | | | | | | | | | | | | FYG SHS W11-2 FYG SHS W16-7pL | | |
| | | 1 | 24 | 12 | 2.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 418+40, LT | STOP | 1 | 36 | 36 | 9.00 | | | | | | 1 | | | | | | X 13.75' | | X | | | | | | | | | | | | | | | | SHS R1-1 | | |
| 418+47, RT | STOP B-B NO THRU STREET | 1 | 36 | 36 | 9.00 | | | 1 | | | 1 | | | | | | X 15.0' | | X | | | | | | | | | | | | | | | | SHS R1-1 | | |
| ~~418+47, RT~~ ~~418+64, LT~~ | Pearl St | 1 | 24 | 12 | 2.00 | | | | | | ~~1~~ | | | | | ~~X~~ | | | ~~X~~ | | | | | | | | | | | | | | | | SIGN PLACED ABOVE STOP SIGN ABOVE SHS D3-1 | | |
| | | | | | | | | | | | | FT | FT | FT | FT | FT ~~50~~ 56 | FT ~~90~~ 67.33 | EA 9 | LB | LB | LB | | LB | LB | LB | LB | | | | | | | | | |
| **SUB TOTALS** | | | | | SF 87.25 | SF | EA. 1 | SF | | | | FT | | | | FT ~~150~~ 123.33 | | | LB | | | EA. | LB | | | | EA. | EA. | LB | | | | | | | | |

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WOB = WHITE LEGEND ON BLUE BACKGROUND - PLAQUE
FYG = BLACK LEGEND ON FLUORESCENT YELLOW-GREEN BACKGROUND
SHS = FHWA STANDARD HIGHWAY SIGNS BOOK

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_TSSS_C2 — PLOT DATE: 3/31/2011
PROJECT LEADER: G. BAKOS — DRAWN BY: CMD
DESIGNED BY: MDS — CHECKED BY:
TRAFFIC SIGN SUMMARY SHEET — SHEET 126 OF 339

**STATE OF VERMONT**
**AGENCY OF TRANSPORTATION**

# TRAFFIC SIGN SUMMARY SHEET

| MILE MARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS EA | WIDTH (IN) | HEIGHT (IN) | NEW & SALVAGED SIGNS "A" | "B" | SALV SIGN | SALV TIS | EXIST POST RETAIN | EXIST POST SALVAGE | NEW SIGN POSTS NO. OF POSTS | FLANGED CHANNEL LB/FT 1.12 | 2.0 | 3.0 | SQUARE STEEL (IN) LB/FT 1.75 1.88 | 2.0 2.42 | 2.5 3.35 | ANCHOR | SLEEVE | TUBULAR ALUMINUM Ø (IN) LB/FT 3.0 1.3 | 4.0 1.7 | 4.0 MOD 1.7 | TUBULAR STEEL Ø (IN) FOUNDATION | LB/FT 3.0 7.6 | 3.5 9.0 | 4.0 10.8 | 5.0 14.6 | W-SHAPE STEEL FTG. SIZE 24" | 30" | WEIGHT | POST SIZE | SIGN FRAME | REQUIRED | REMARKS | SIGN DETAIL: DETAIL ON SHEET NUMBER | STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | OPTION ITEMS | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SUMMER STREET | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 402+78, RT | Cottage St / Summer St | 1 | 36 | 12 | 3.00 | | | | | | 1 | | | | | X 11.67' | | | X | | | | | | | | | | | | | | SHS D3-1 | | |
| | | 1 | 36 | 12 | 3.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | SHS D3-1 | | |
| 403+18, LT | | 1 | 24 | 24 | 4.00 | | | | | | 1 | | | | | X 14.5' | | | | | | | | | | | | | | | | FYG SHS W11-2 | | |
| | | 1 | 24 | 12 | 2.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | FYG SHS W16-7pL | | |
| 403+20, RT | STOP | 1 | 36 | 36 | 9.00 | | | | | | 1 | | | | | | X 13.83' | | X | | | | | | | | | | | | | SHS R1-1 | | |
| 403+23, RT | | 1 | 24 | 24 | 4.00 | | | | | | 1 | | | | | X 14.5' | | | X | | | | | | | | | | | | | FYG SHS W11-2 | | |
| | | 1 | 24 | 12 | 2.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | FYG SHS W16-7pL | | |
| 405+00, RT | SCHOOL | 1 | 36 | 36 | 6.75 | | | | | | 1 | | | | | X 16.0' | | | X | | | | | | | | | | | | | FYG SHS S1-1 | | |
| | | 1 | 24 | 8 | 1.33 | | | | | | | | | | | | | | | | | | | | | | | | | | | FYG SHS S4-3 | | |
| 406+71, ~~RT~~ LT | Bugbee Ave. STOP / NO PARKING ANY TIME | 1 | 36 | 36 | 9.00 | | 2 | | | | 1 | | | | | | X 14.25' | | | | | | | | | | | | | | | SALVAGE 2 SIGNS, NO PARKING SIGN IS 90° TO STOP-FACES CURB. SHS R1-1 | | |
| 406+97, RT | STOP | 1 | 36 | 36 | 9.00 | | | | | | 1 | | | | | | X 13.67' | | X | | | | | | | | | | | | | FOR TOMASI STREET SHS R1-1 | | |
| 407+20, LT | YIELD | 1 | * 36 | * 36 | 3.18 | | | | | | 1 | | | | | X 13.17' | | | | | | | | | | | | | | | | * SIZE = 36" x 36" x 36" SHS R1-2 | | |
| 407+60, LT | Summer St / S. Seminary St / STOP | 1 | 36 | 12 | 3.00 | | | | | | 1 | | | | | | X 14.33' | | X | | | | | | | | | | | | | SHS D3-1 | | |
| | | 1 | 42 | 12 | 3.50 | | | | | | | | | | | | | | | | | | | | | | | | | | | SHS D3-1 | | |
| | | 1 | 36 | 36 | 9.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | SHS R1-1 | | |
| 408+26, RT | STOP | 1 | 36 | 36 | 9.00 | | | | | | 1 | | | | | | X 13.83' | | X | | | | | | | | | | | | | SHS R1-1 | | |
| 408+35, RT | | 1 | 30 | 30 | 6.25 | | | | | | 1 | | | | | | X 14.0' | | X | | | | | | | | | | | | | SHS W12-1 | | |
| 408+43, RT | DO NOT ENTER | 1 | 30 | 30 | 6.25 | | | | | | | | | | | | | | | | | | | | | | | | | | | FACES SUMMER STREET SIDE BY SIDE WITH W11-2 BELOW SHS R5-1 | | |
| 408+43, RT | | 1 | 30 | 30 | 6.25 | | | | | | 1 | | | | | | X 16.67' | | X | | | | | | | | | | | | | SIDE BY SIDE WITH R5-1 FYG SHS W11-2 | | |
| | | 1 | 24 | 12 | 2.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | FYG SHS W16-7pL | | |
| | | | | | | | | | | | | FT | FT | FT | FT | FT 75 69.84 | FT 105 100.58 | EA 9 | LB | LB | LB | | LB | LB | LB | LB | | | | | | | | |
| SUB TOTALS | | | | | SF 101.51 | SF | EA. 2 | SF | | | | FT | | | | FT 180 170.42 | | | LB | | | EA. | LB | | | | EA. | EA. | LB | | | | | | |

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SHS = FHWA STANDARD HIGHWAY SIGNS BOOK

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_TSSS_C2 — PLOT DATE: 3/31/2011
PROJECT LEADER: G. BAKOS — DRAWN BY: CMD
DESIGNED BY: MDS — CHECKED BY:
TRAFFIC SIGN SUMMARY SHEET — SHEET 127 OF 339

**STATE OF VERMONT**
**AGENCY OF TRANSPORTATION**

# TRAFFIC SIGN SUMMARY SHEET

| MILE MARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS EA | WIDTH (IN) | HEIGHT (IN) | NEW & SALVAGED SIGNS "A" | "B" | SALV SIGN | SALV TIS | EXIST POST RETAIN | EXIST POST SALVAGE | NEW SIGN POSTS NO. OF POSTS | FLANGED CHANNEL LB/FT 1.12 | 2.0 | 3.0 | SQUARE STEEL (IN) 1.75 LB/FT 1.88 | 2.0 LB/FT 2.42 | 2.5 LB/FT 3.35 | ANCHOR | SLEEVE | TUBULAR ALUMINUM Ø (IN) 3.0 LB/FT 1.3 | 4.0 LB/FT 1.7 | 4.0 MOD LB/FT 1.7 | TUBULAR STEEL Ø (IN) FOUNDATION | 3.0 LB/FT 7.6 | 3.5 LB/FT 9.0 | 4.0 LB/FT 10.8 | 5.0 LB/FT 14.6 | W-SHAPE STEEL FTG. SIZE 24" | 30" | WEIGHT | POST SIZE | SIGN FRAME | REQUIRED | REMARKS | SIGN DETAIL: DETAIL ON SHEET NUMBER | STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | OPTION ITEMS | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SUMMER STREET | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 408+72, RT | GMTA B-B CHURCH PARKING USE WEST ST | 1 | * 36 | * 36 | 3.18 | 2 | | | | | 1 | | | | | | X 14.75' | | X | | | | | | | | | | | | | | | * SIZE = 36" x 36" | SHS R1-2 | | |
| | | 1 | 30 | 30 | 6.25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | SHS R3-2 | | |
| 409+16, LT | | 1 | 30 | 30 | 6.25 | | | | | | 1 | | | | | X 15.0' | | | X | | | | | | | | | | | | | | FYG | SHS W11-2 | | |
| | | 1 | 24 | 12 | 2.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | FYG | SHS W16-7pL | | |
| 410+36, LT | SPEED LIMIT 25 | 1 | 24 | 30 | 5.00 | | | | | | 1 | | | | | X 13.33' | | | X | | | | | | | | | | | | | | | SHS R2-1 | | |
| 411+62, LT | SAL. NO PARKING ANYTIME | 1 | 30 | 30 | 6.25 | 1 | | | | | 1 | | | | | X 15.0' | | | X | | | | | | | | | | | | | | NO PARKING SIGN FACES CURB-90 TO PED. SIGN. SALVAGED DOWN ARROW. FYG | SHS W11-2 | | |
| | | ~~1~~ | ~~24~~ | ~~12~~ | ~~2.00~~ | | | | | | | | | | | | | | | | | | | | | | | | | | | | FYG | SHS W16-7pL | | |
| 411+66, LT | West STOP CHURCH PARKING | 1 | 24 | 12 | 2.00 | 1 | | | | | 1 | | | | | | X 15.33' | | X | | | | | | | | | | | | | | | | SHS D3-1 | | |
| | | 1 | 36 | 36 | 9.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | SHS R1-1 | | |
| 411+67, RT | | 1 | 30 | 30 | 6.25 | | | | | | 1 | | | | | X 15.75' | | | X | | | | | | | | | | | | | | REPLACE PRIMARY SIGN; ~~RETAIN~~ SUPPLEMENTAL SIGN AND POST ADD NEW | SHS W11-2 FYG | | |
| | | 1 | 24 | 12 | 2.00 | | 1 | | + | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 411+70, RT | B-B ONE WAY ONE WAY DO NOT ENTER | 1 | 36 | 12 | 3.00 | | | | | | 1 | | | | | X 14.83' | | | X | | | | | | | | | | | | | | SET R6-1R & R6-1L BAK TO BACK WITH R5-1 FACING SUMMER ST | SHS R6-1L SHS R6-1R SHS R5-1 | | |
| | | 1 | 36 | 12 | 3.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 1 | 36 | 36 | 9.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 412+08, RT | STOP | 1 | 36 | 36 | 9.00 | | | | | | 1 | | | | | X 13.75' | | | X | | | | | | | | | | | | | | | SHS R1-1 | | |
| 412+95, LT | SCHOOL | 1 | 36 | 36 | 6.75 | | | | | | 1 | | | | | X 14.0' | | | X | | | | | | | | | | | | | | FYG | SHS S1-1 | | |
| | | 1 | 24 | 8 | 1.33 | | | | | | | | | | | | | | | | | | | | | | | | | | | | FYG | SHS S4-3 | | |
| | | | | | | | | | | | | FT | FT | FT | FT | FT ~~50~~ 73.08 | FT ~~60~~ 58.66 | EA 8 | LB | LB | LB | | LB | LB | LB | LB | | | | | | | | |
| | **SUB TOTALS** | | | | SF 80.26 | SF | EA. ~~1~~ 4 | SF | | | | FT | | | FT | | FT ~~120~~ 151.74 | | | LB | | | EA. | LB | | | | EA. | EA. | LB | | | | | |

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PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-I(34) C/2

FILE NAME: 85b010_TSSS_C2 | PLOT DATE: 3/31/2011
PROJECT LEADER: G. BAKOS | DRAWN BY: CMD
DESIGNED BY: MDS | CHECKED BY:
TRAFFIC SIGN SUMMARY SHEET | SHEET 128 OF 339

VHB Vanasse Hangen Brustlin, Inc.

**STATE OF VERMONT**
**AGENCY OF TRANSPORTATION**

# TRAFFIC SIGN SUMMARY SHEET

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | OPTION ITEMS | | | | | | | | | | | | | | | | | | | | | | | | | |
| PROSPECT STREET | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 501+65, RT | R&R | 1 | 36 | 36 | 7.07 | | | | | | 1 | | | | | X 13.83' | | | | | | | | | | | | | | | | | SHS W10-1 | | |
| 502+24, LT | DO NOT STOP ON TRACKS | 1 | 24 | 30 | 5.00 | | | | | | 1 | | | | | X 13.33' | | | | | | | | | | | | | | | | | SHS R8-8 | | |
| 502+93, RT | RAIL ROAD CROSSING / DO NOT STOP ON TRACKS B-B; STOP SIGN REPLACED WITH YEILD SIGN.; REPORT EMERGENCY OR PROBLEM TO 1-800-563-2732 CROSSING 887 335 X | 1<br>1<br>1<br>1<br>1 | 48<br>48<br>24<br>30<br>30<br>15 | 9<br>9<br>30<br>30<br>9 | 6.00<br>5.00<br>6.25<br>3.18<br>0.94 | | | | | | 2 | | | | | X 16.25'<br>X<br>X 16.5' | | | | | | | | | | | | | | | | | CROSSBUCK SHALL INCLUDE REFLECTIVE STRIPS ON BACK AND ON POST<br>SHS R15-1<br>SHS R8-8<br>SHS R1-1<br>SHS INTERIM I-13 | | MUTCD FIGURE 8B-2 |
| 503+24, LT | RAIL ROAD CROSSING / DO NOT STOP ON TRACKS B-B; STOP SIGN REPLACED WITH YEILD SIGN.; REPORT EMERGENCY OR PROBLEM TO 1-800-563-2732 CROSSING 887 335 X | 1<br>1<br>1<br>1<br>1 | 48<br>48<br>24<br>30<br>30<br>15 | 9<br>9<br>30<br>30<br>9 | 6.00<br>5.00<br>6.25<br>3.18<br>0.94 | | | | | | 2 | | | | | X 16.25'<br>X<br>X 16.25' | | | | | | | | | | | | | | | | | CROSSBUCK SHALL INCLUDE REFLECTIVE STRIPS ON BACK AND ON POST<br>SHS R15-1<br>SHS R8-8<br>SHS R1-1<br>SHS INTERIM I-13 | | MUTCD FIGURE 8B-2 |
| 504+20, LT | R&R | 1 | 36 | 36 | 7.07 | | | | | | 1 | | | | | X 13.83' | | | | | | | | | | | | | | | | | SHS W10-1 | | |
| 504+95, LT | | 1<br>1 | 30<br>30 | 30<br>30 | 6.25<br>6.25 | | | | | | 1 | | | | | X 14.0' | | | | | | | | | | | | | | | | | SHS W3-1 | | |
| VARIOUS LOCATIONS SEE SIGN FOLDER | TURNING VEHICLES R10-15 | 14 | 30 | 30 | 87.5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VARIOUS LOCATIONS SEE SIGN FOLDER | TURNING VEHICLES R10-15 | 6 | 30 | 30 | 37.5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | REMOVED AND REPLACED WITH YEILD SIGN | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | FT | FT | FT | FT | FT | FT | EA | LB | LB | LB | | LB | LB | LB | LB | | | | | | | | | |
| | | | | | | | | | | | | | | | | ~~120~~ 120.24 | | | | | | | | | | | | | | | | | | | |
| **SUB TOTALS** | | SF | SF | EA. | SF | | | | | | | FT | | | FT | | | | LB | | | EA. | LB | | | | EA. | EA. | LB | | | | | |
| | | ~~51.77~~ 186.77 | | | | | | | | | | | | | ~~120~~ 120.24 | | | | | | | | | | | | | | | | | | | | |

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FILE NAME: 85b010_TSSS_C2 — PLOT DATE: 3/31/2011
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TRAFFIC SIGN SUMMARY SHEET — SHEET 129 OF 339

**STATE OF VERMONT**
**AGENCY OF TRANSPORTATION**

# TRAFFIC SIGN SUMMARY SHEET

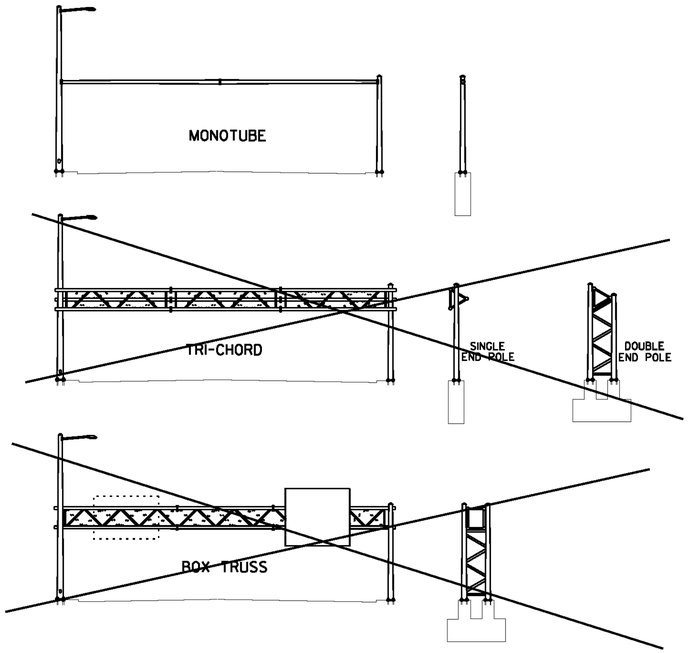
| MILE MARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS EA | WIDTH (IN) | HEIGHT (IN) | NEW & SALVAGED SIGNS "A" | "B" | SALV SIGN | SALV TIS | EXIST POST RETAIN | SALVAGE | NEW SIGN POSTS NO. OF POSTS | FLANGED CHANNEL LB/FT 1.12 | 2.0 | 3.0 | SQUARE STEEL (IN) 1.75 | 2.0 | 2.5 LB/FT 1.88 | 2.42 | 3.35 | ANCHOR | SLEEVE | TUBULAR ALUMINUM Ø (IN) 3.0 | 4.0 | 4.0 MOD LB/FT 1.3 | 1.7 | 1.7 | TUBULAR STEEL Ø (IN) FOUNDATION | 3.0 | 3.5 | 4.0 | 5.0 LB/FT 7.6 | 9.0 | 10.8 | 14.6 | W-SHAPE STEEL FTG. SIZE 24" | 30" | WEIGHT | POST SIZE | SIGN FRAME REQUIRED | REMARKS | SIGN DETAIL DETAIL ON SHEET NUMBER | STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OPTION ITEMS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **SUB TOTALS** | | SF | | | SF | SF | EA. | SF | | | | FT | | | FT | | | | | | EA. | LB | | | | EA. | LB | | | | | | | | EA. | EA. | LB | | | | | | |
| **FROM SHEET 111** | | 32.07 | | | 149.00 | | | | | | | | | | 70 | | | | | | 3 | | | | | | | | | | | | | | | | | | | | | | |
| **FROM SHEET 112** | | 73.95 | | | | | | | | | | | | | 120 | | | | | | 4 | | | | | | | | | | | | | | | | | | | | | | |
| **FROM SHEET 113** | | 39.07 | | | 122.50 | | 5 | | | | | | | | 60 | | | | | | 3 | | | | | | | | | | | | | | | | | | | | | | |
| **FROM SHEET 114** | | 33.19 | | | | | | | | | | | | | 60 | | | | | | 3 | | | | | | | | | | | | | | | | | | | | | | |
| **FROM SHEET 115** | | 70.14 | | | | | | | | | | | | | 100 | | | | | | 5 | | | | | | | | | | | | | | | | | | | | | | |
| **FROM SHEET 116** | | 49.00 | | | | | | | | | | | | | 105 | | | | | | 6 | | | | | | | | | | | | | | | | | | | | | | |
| **FROM SHEET 117** | | 71.75 | | | | | | | | | | | | | 165 | | | | | | 11 | | | | | | | | | | | | | | | | | | | | | | |
| **FROM SHEET 118** | | 63.00 | | | | | | | | | | | | | 105 | | | | | | 8 | | | | | | | | | | | | | | | | | | | | | | |
| **FROM SHEET 119** | | 84.00 | | | | | 2 | | | | | | | | 180 | | | | | | 12 | | | | | | | | | | | | | | | | | | | | | | |
| **FROM SHEET 120** | | 54.75 | | | 90.50 | | 5 | | | | | | | | 105 | | | | | | 5 | | | | | | | | | | | | | | | | | | | | | | |
| **FROM SHEET 121** | | 58.76 | | | | | 2 | | | | | | | | 120 | | | | | | 6 | | | | | | | | | | | | | | | | | | | | | | |
| **FROM SHEET 122** | | 24.69 | | | | | 2 | | | | | | | | 45 | | | | | | 3 | | | | | | | | | | | | | | | | | | | | | | |
| **FROM SHEET 123** | | 66.31 | | | 117.00 | | | | | | | | | | 120 | | | | | | 3 | | | | | | | | | | | | | | | | | | | | | | |
| **FROM SHEET 124** | | 30.37 | | | 149.00 | | 1 | | | | | | | | 90 | | | | | | 2 | | | | | | | | | | | | | | | | | | | | | | |
| **FROM SHEET 125** | | 84.75 | | | | | | | | | | | | | 90 | | | | | | 6 | | | | | | | | | | | | | | | | | | | | | | |
| **FROM SHEET 126** | | 87.25 | | | | | | | | | | | | | 150 | | | | | | 9 | | | | | | | | | | | | | | | | | | | | | | |
| **FROM SHEET 127** | | 101.51 | | | | | | | | | | | | | 180 | | | | | | 9 | | | | | | | | | | | | | | | | | | | | | | |
| **FROM SHEET 128** | | 80.26 | | | | | 1 | | | | | | | | 120 | | | | | | 8 | | | | | | | | | | | | | | | | | | | | | | |
| **FROM SHEET 129** | | 51.77 | | | | | | | | | | | | | 120 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | FT | FT | FT | FT | FT | FT | | | | EA | LB | LB | LB | | LB | LB | LB | LB | | | | | | | | | | | | | |
| **ROUNDING** | | 0.41 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **TOTALS** | | SF 1157 | | | SF 628 | | EA. 18 | SF | | | | FT | | | FT 2105 | | | | | | EA 106 | LB | | | | EA. | LB | | | | | | | | EA. | EA. | LB | | | | | | |

FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE VTRANS "SIGN POST DESIGN GUIDELINE."

VHB Vanasse Hangen Brustlin, Inc.

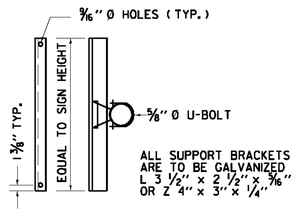
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_TSSS_C2 | PLOT DATE: 3/31/2011
PROJECT LEADER: G. BAKOS | DRAWN BY: CLC
DESIGNED BY: MDS | CHECKED BY:
TRAFFIC SIGN SUMMARY SHEET | SHEET 130 OF 339



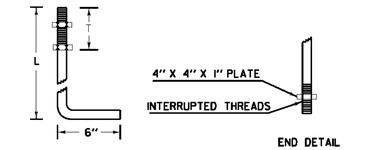

TRUSS-TYPE SPANS SHALL BE PROHIBITED

**DETAIL A**

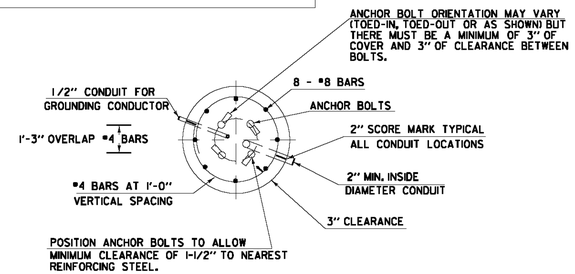



**SIGN BRACKET DETAILS**

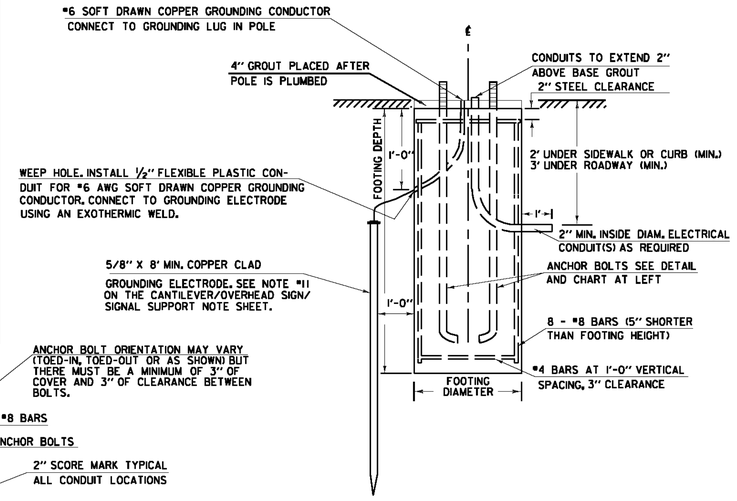
| ANCHOR BOLT DETAIL | | |
|---|---|---|
| SIZE | L (IN) | T (IN) |
| 1- 1/4" X 48" | 42 | 8 |
| 1- 1/2" X 60" | 54 | 9 |
| 1- 3/4" X 90" | 84 | 9 |
| 2" X 96" | 96 | 9 |



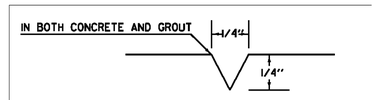

ANCHOR BOLT DETAIL




SECTION




ELEVATION

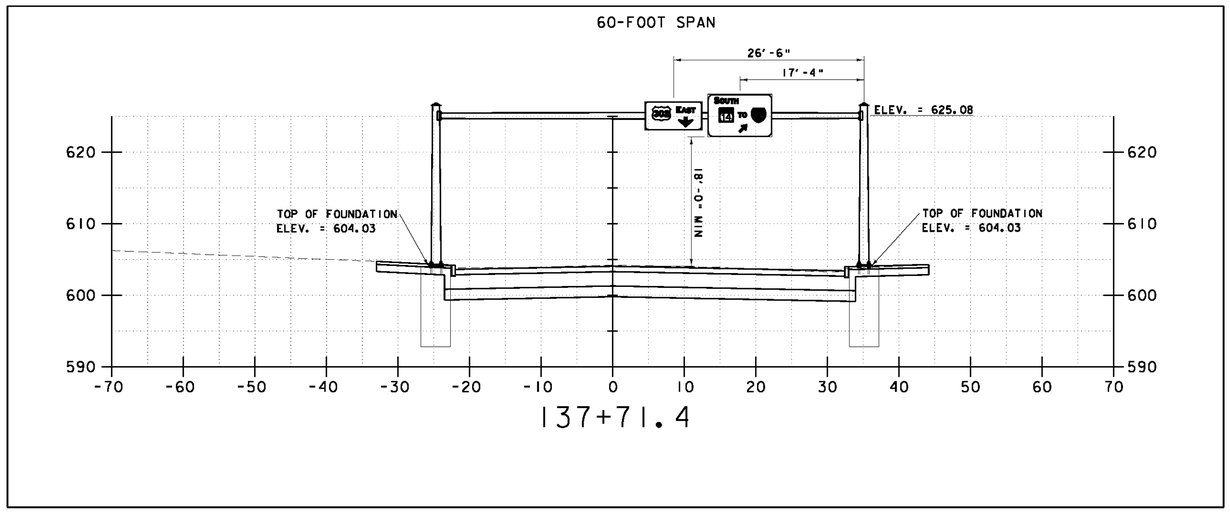



USED FOR CONDUIT LOCATION, SEE SECTION DETAIL AT LEFT

2" SCORE MARK DETAIL

**OVERHEAD TRAFFIC SIGN BRIDGE FOOTING DETAIL**

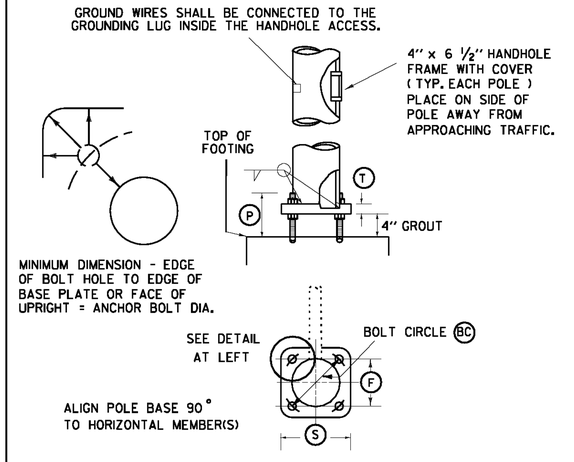
( SPREAD FOOTINGS SHALL NOT BE PERMITTED )




**OVERHEAD SIGN BRIDGE CROSS SECTION**

**NOTES:**

1. SEE OVERHEAD SIGN SUPPORT NOTES SHEET ( SHEET 95) FOR ADDITIONAL INFORMATION.
2. MANUFACTURER TO DESIGN FOUNDATION IN ACCORDANCE WITH VTRANS MREI 10-01. ALL FOUNDATIONS SHALL BE CYLINDRICAL; SPREAD FOOTINGS SHALL NOT BE PERMITTED.
3. SPANS SHALL BE MONOTUBE DESIGN.
4. MINIMUM CLEARANCE FROM SIGNS TO ROADWAY IS 18'.
5. SEE BORING LOGS FOR GEOTECHNICAL INFORMATION FOR POLE FOUNDATIONS ( SHEETS 45-55)
6. ALL SIGN STRUCTURES SHALL BE PAINTED BLACK PER THE SPECIAL PROVISIONS AND THE OVERHEAD SIGN SUPPORT NOTES SHEET ( SHEET 95).




**POLE BASE AND BASE PLATE DETAIL**

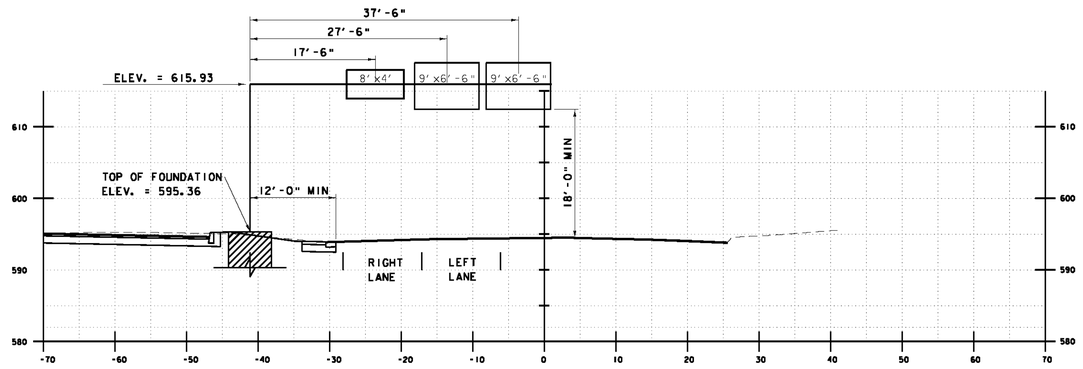
NOTE:
DETAILS
NTS

# OVERHEAD TRAFFIC SIGN BRIDGE / FOOTING DETAIL SHEET

z85b010_SIGN_C2

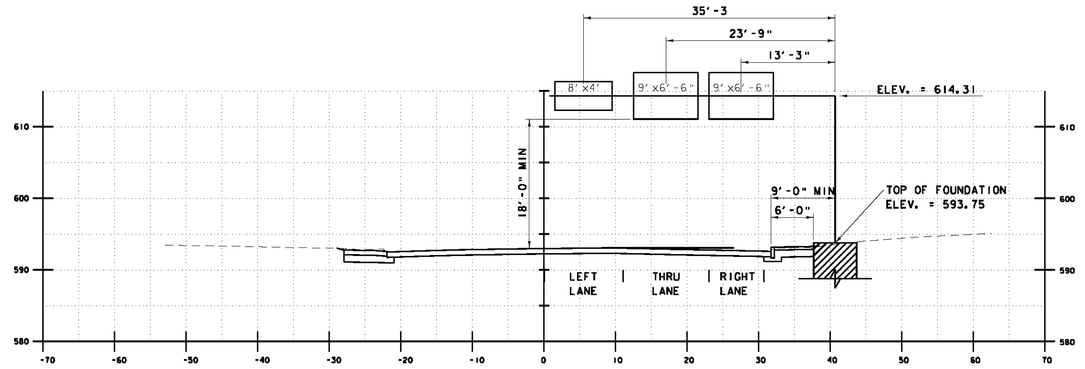
LAST REVISED 8/15/95

PREPARED BY JAR DATE 3/21/2011
CHECKED BY MDS DATE 3/21/2011
DESIGN SUPERVISOR ____ DATE ____
PROJ. BARRE CITY
FEGC F 026-1(34) C/2
TRAFFIC SHEET NO. ____ OF ____
SHEET 131 OF 339 SHEETS



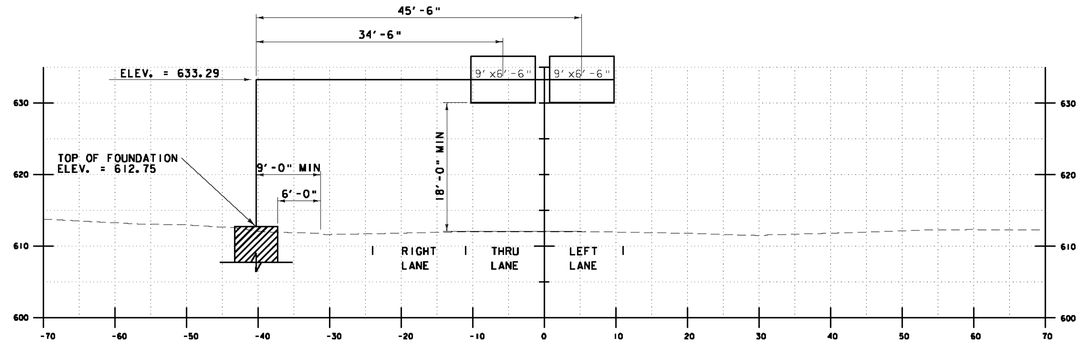

22+32.0, LT

42-FOOT CANTILEVER ARM



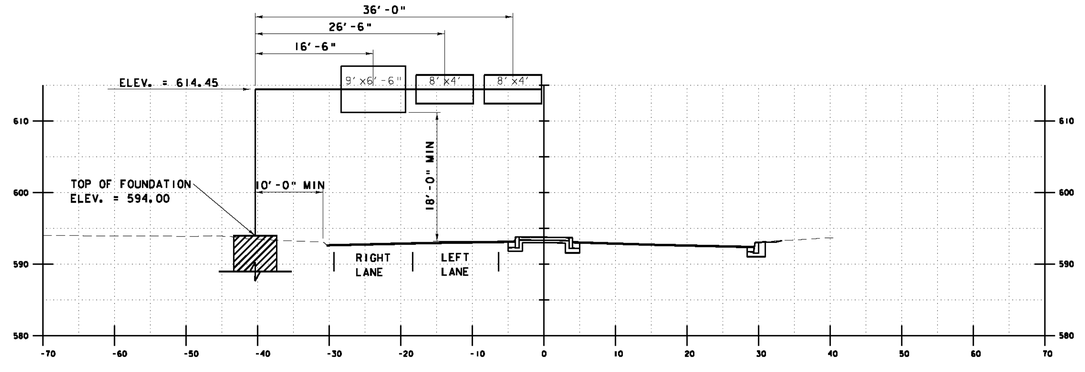

112+12.6, RT

40-FOOT CANTILEVER ARM




141+97, LT

50-FOOT CANTILEVER ARM




11+49.5, LT

40-FOOT CANTILEVER ARM

NOTE: ALL CANTILEVER SIGN STRUCTURE ELEMENTS SHALL BE PAINTED BLACK PER THE SPECIAL PROVISIONS. ALL CANTILEVER SIGN STRUCTURE FOUNDATIONS SHALL BE CYLINDRICAL. SPREAD FOOTING FOUNDATIONS SHALL NOT BE PERMITTED. SEE OVERHEAD SIGN SUPPORT NOTES SHEET (SHEET 95) FOR ADDITIONAL DETAILS.

VHB Vanasse Hangen Brustlin, Inc.

| | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-1(34) C/2 |
| FILE NAME: 85b010_CANT_C2 | PLOT DATE: 3/21/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: DMP / JAR |
| DESIGNED BY: DMP / MDS | CHECKED BY: |
| CANTILEVER SIGN STRUCTURE CROSS SECTIONS | SHEET 132 OF 339 |

## CIVIL GENERAL NOTES

1. THERE ARE NUMEROUS EXISTING BURIED UTILITIES IN THIS PROJECT AREA. THE LOCATION OF PIPES, DUCTS CONDUITS, AND OTHER UNDERGROUND STRUCTURES SHOWN HERE ARE NOT WARRANTED TO BE EXACT, NOR IS IT WARRANTED THAT ALL UNDERGROUND STRUCTURES ARE SHOWN. THESE UTILITIES ARE SHOWN BASED ON BEST AVAILABLE FIELD EVIDENCE AND RECORDED DATA PROVIDED BY THE OWNER. ALL UNDERGROUND UTILITIES MUST BE LOCATED AND MARKED, BY THE CONTRACTOR, DURING THE PROJECT.
2. THE CONTRACTOR MUST CONSTRUCT THE WATER MAIN WHILE MAINTAINING WATER SERVICE THROUGH THE EXISTING WATER MAINS. WATER SERVICE SHALL NOT BE INTERRUPTED FOR MORE THAN FOUR (4) HOURS. ALL CUSTOMERS THAT MAY BE TEMPORARILY OUT OF WATER SHALL BE NOTIFIED TWENTY–FOUR (24) HOURS PRIOR TO ACTIVITY BY THE CONTRACTOR.
3. THE CONTRACTOR MUST CONSTRUCT THE SANITARY SEWER MAIN WHILE MAINTAINING SEWER SERVICE THROUGH THE EXISTING COLLECTION SYSTEM OR A BY–PASS PUMPING SYSTEM. SEWER SERVICE SHALL NOT BE INTERRUPTED FOR MORE THAN FOUR (4) HOURS. ALL CUSTOMERS THAT MAY BE TEMPORARILY OUT OF SEWER SERVICE SHALL BE NOTIFIED TWENTY–FOUR (24) HOURS PRIOR TO ACTIVITY BY THE CONTRACTOR.
4. THE CONTRACTOR SHALL PERFORM EXPLORATORY EXCAVATION TO VERIFY LOCATIONS AND SIZES OF EXISTING WATER, SEWER, STORM DRAIN SYSTEMS, AND SERVICES, PRIOR TO INSTALLATION OF ANY SEGMENT OF NEW UTILITIES. CONTRACTOR SHALL USE EXTREME CAUTION TO PREVENT DAMAGE TO EXISTING UTILITIES. CONTRACTOR IS RESPONSIBLE FOR PROTECTION OF ALL UTILITIES WHETHER OR NOT THEY ARE SHOWN ON THE PLANS. ALL REPAIRS TO DAMAGED UTILITIES SHALL BE MADE BY THE CONTRACTOR, USING MATERIALS APPROVED BY THE ENGINEER, AT NO ADDITIONAL EXPENSE OF THE OWNER.
5. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS SET FORTH IN THE CONSTRUCTION GENERAL PERMIT(3–9001) AND THE VERMONT STANDARDS AND SPECIFICATIONS FOR EROSION PREVENTION AND SEDIMENTATION CONTROL.
6. WHEN REPLACING STRUCTURES AND/OR CONNECTING TO EXISTING PIPING SYSTEMS, CONFIRM EXISTING LOCATIONS, SIZES AND ELEVATIONS OF INVERTS PRIOR TO ORDERING PRE–CAST STRUCTURES.
7. CONTRACTOR TO USE EXTREME CAUTION WHEN EXCAVATING NEAR BUILDINGS AND OTHER STRUCTURES.
8. GENERALLY DARK OR HEAVY LINE WEIGHT REFERS TO PROPOSED IMPROVEMENTS. NORMAL FONT OR LIGHT LINE WORK REFERS TO EXISTING FACILITIES.
9. CONTRACTORS SHALL COORDINATE WITH DIG SAFE A MINIMUM OF 72 HOURS PRIOR TO ANY EXCAVATION.
10. REFER TO WATER DETAILS AND SEWER DETAILS FOR CONSTRUCTION DETAILS.
11. ALL WORK SHALL BE DONE ON LANDS OWNED BY CITY OF BARRE OR IN THE PUBLIC RIGHT–OF–WAY OR EASEMENT AREAS.
12. LISTING OF ADAPTERS, FITTINGS, NIPPLES, ETC. IS FOR THE CONVENIENCE OF THE CONTRACTOR ONLY. ADDITIONAL MATERIAL MAY BE REQUIRED. SOLID SLEEVE COUPLINGS WILL BE REQUIRED FOR CONNECTION TO EXISTING MAINS.
13. MINIMUM VERTICAL CLEARANCE BETWEEN NEW WATER MAINS AND ALL EXISTING UTILITIES, EXCEPT SEWERS AND STORM DRAINS TO BE SIX (6) INCHES AT CROSSING LOCATIONS. SEE WATER AND SEWER SEPARATION NOTES ON THIS SHEET FOR MINIMUM CLEARANCE FROM SEWERS AND STORM DRAINS.
14. ANY EXISTING WATER AND SEWER SERVICES WILL BE REPAIRED OR RELOCATED AS NECESSARY IN ORDER TO MAINTAIN SERVICE. THE UTILITY OWNER WILL ASSIST IN THE LOCATION AND MARKING OF THESE SERVICES BUT THE CONTRACTOR MAY BE REQUIRED TO CONDUCT EXPLORATORY EXCAVATION AS REQUIRED.
15. WHERE NEW MECHANICALLY RESTRAINED PIPE IS CONNECTED TO EXISTING PUSH ON JOINT PEIP THE CONTRACTOR MUST ADEQUATELY RESTRAIN EXISTING PUSH ON PIPE AS NECESSARY..
16. ALL WATER MAIN PIPE, VALVES, FITTINGS, AND HYDRANTS ARE TO BE MECHANICALLY RESTRAINED USING MECHANICAL JOINTS WITH WEDGE TYPE RETAINER GLANDS. CONTRACTOR MAY USE THRUST BLOCKS AT HIS DISCRETION.
17. WATER MAINS TO HAVE 6.0 FEET MINIMUM COVER UNLESS OTHERWISE STATED OR SHOWN ON THE PROFILES. WHEN 6.0 FEET OF COVER CANNOT BE MAINTAINED 4" RIGID BOARD INSULATION SHALL BE USED. DEPTH COVER SHALL NOT BE LESS THAN 4 FEET EVEN WITH INSULATION. SEWER MAIN SHALL HAVE A MINIMUM OF 6.0' OF COVER UNLESS OTHERWISE STATED OR SHOWN ON THE PROFILES.
18. ALL WATER MAIN ON THE PROJECT SHALL BE MECHANICAL JOINT AND SHALL INCORPORATE A WEDGE TYPE RETAINER GLAND INSTEAD OF THE COMMON FOLLOWER GLAND.
19. CONTRACTOR IS RESPONSIBLE FOR FLUSHING, PRESSURE TESTING AND DISINFECTING ALL NEW WATER MAIN. CHLORINE INJECTION POINTS SHALL BE INSTALLED WHERE REQUIRED AND APPROVED BY THE ENGINEER PRIOR TO INSTALLATION AND REMOVED UPON COMPLETION OF TESTING. CONTRACTOR TO DISCUSS PROCEDURES WITH ENGINEER PRIOR TO COMMENCEMENT OF TESTING.
20. CONTRACTOR SHALL VERIFY LOCATION OF ALL OVERHEAD AND UNDERGROUND ELECTRIC, CABLE AND TELEPHONE LINES AND TAKE NECESSARY PRECAUTIONS IN STRICT ACCORDANCE WITH OSHA STANDARDS DURING CONSTRUCTION. CONTRACTOR SHALL CONTACT THE LOCAL POWER UTILITY AND TELEPHONE UTILITY REGARDING ANY NECESSARY SUPPORT OF ANY UTILITY POLES DURING CONSTRUCTION. SEE THE UTILITY SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
21. CONTRACTOR TO PROVIDE CAPS FOR ALL ABANDONED PIPING AS REQUIRED. ALL TYPES OF PIPE CAPPING TO BE PAID FOR UNDER THE PIPE UNIT PRICE. ALL MAIN LINE UTILITIES TO BE ABANDONED SHALL BE FILLED WITH FLOWABLE FILL. ALL SERVICE LINES TO BE REMOVED.
22. CONTRACTOR SHALL MAKE EVERY EFFORT TO ALLOW ACCESS TO AND FROM DRIVEWAYS, RESIDENCES, AND BUSINESSES LOCATED ALONG THE ROUTE OF CONSTRUCTION.
23. TECHNICAL SPECIFICATIONS PROVIDE NECESSARY INFORMATION AND ARE PART OF THE CONTRACT DOCUMENTS FOR THIS PROJECT.
24. ROOF DRAIN INFORMATION SHOWN HEREON RELY ON INFORMATION PROVIDED BY PLANS PRODUCED BY VANASSE HANGEN BRUSTLIN, INC. CONTRACTOR IS TO VERIFY STORMWATER STRUCTURE INVERT INFORMATION PRIOR TO COMMENCMENT OF CONSTRUCTION OF EACH ROOF DRAIN.
25. CONTRACTOR SHALL COORDINATE WITH PROPERTY OWNERS TO GAIN ACCESS TO BASEMENTS WHERE NECESSARY.
26. FLOWABLE FILL IS TO BE USED DIRECTLY UNDER EXISTING DUCT BANK WHEN MECHANICAL COMPACTION CANNOT ACHIEVE THE REQUIRED COMPACTION AT ALL UTILITY MAIN AND SERVICE CROSSINGS.
27. ALL WATER MAIN (INCLUDING INTERCONNECTION POINTS, SPRINKLER LINES, AND FUTURE STUBS) MUST BE FLUSHED PRIOR TO DISENFECTION. TEMPORARY FLUSHING CONNECTIONS AE REQUIRED IN MOST CASES. SEE DETAIL ON SHEET 154.

## WATER AND SEWER SEPARATION

1. PARALLEL INSTALLATION: WATER MAINS AND WATER SERVICES SHALL BE LAID AT LEAST TEN (10) FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED SANITARY SEWER OR FIVE (5) FEET FROM ANY STORM SEWER. THE DISTANCE SHALL BE MEASURED EDGE TO EDGE.
2. CROSSINGS: WATER MAINS OR WATER SERVICES CROSSING SEWER PIPES (SANITARY OR STORM) SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF EIGHTEEN (18) INCHES BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF THE SEWER PIPE. THIS SHALL BE THE CASE WHERE THE WATER MAIN IS ABOVE OR BELOW THE SEWER PIPE. AT CROSSINGS, ONE FULL LENGTH OF WATER PIPE SHALL BE LOCATED SO BOTH JOINTS WILL BE AS FAR FROM THE SEWER AS POSSIBLE. IF THE SEWER MAIN IS OVER THE WATER MAIN, THE FIRST SEWER PIPE JOINTS ON EACH SIDE OF THE WATER MAIN MUST BE CONCRETE ENCASED. SPECIAL STRUCTURAL SUPPORT FOR THE WATER AND SEWER PIPES MAY BE REQUIRED.

## LOCAL VALVE OPERATION

1. EXISTING AND PROPOSED MAIN LINE GATE VALVES SHALL OPEN RIGHT OR CLOCKWISE. OPERATION OF GATE VALVES WILL BE PERFORMED BY THE UTILITY OWNER'S STAFF ONLY.
2. ALL INTERCONNECTIONS TO THE EXISTING SYSTEM CAN ONLY BE MADE WITH THE WRITTEN PERMISSION OF THE ENGINEER.

### LEGEND

| EXISTING | | PROPOSED | |
|---|---|---|---|
| | BUILDING | S | SANITARY SEWER |
| | CURB | S | SEWER SERVICE |
| | EDGE OF PAVEMENT | W | WATER MAIN |
| | EDGE OF SIDEWALK | HPW | HIGH PRESSURE WATER MAIN |
| | EDGE OF GRAVEL DRIVE | W | WATER SERVICE |
| W | WATER MAIN | | ROOF DRAIN |
| S | SANITARY SEWER | | SEWER MANHOLE |
| | STORM DRAIN | | GATE VALVE |
| | SEWER MANHOLE | | BUTTERFLY VALVE |
| | CATCH BASIN | | FIRE HYDRANT |
| | DRAIN MANHOLE | | CURB STOP |
| | TELEPHONE MANHOLE | | MANUAL AIR RELEASE |
| | ELECTRIC MANHOLE | | END CAP |
| | FIRE HYDRANT | | PIPE FITTINGS |
| | GATE VALVE | | SOLID SLEEVE |
| | CURB STOP | | CATCH BASIN (BY OTHERS) |
| T | TELEPHONE | | STORM MANHOLE (BY OTHERS) |
| GAS | GAS LINE | | STORM DRAIN (BY OTHERS) |
| UE | UNDERGROUND ELECTRIC | T | TELEPHONE (BY OTHERS) |
| | UTILITY POLE | UE | UNDERGROUND ELECTRIC (BY OTHERS) |
| | GUY WIRE | | LIGHT AND BASE (BY OTHERS) |
| | TREELINE | | GFI RECEPTICAL (BY OTHERS) |
| | SIGN | | TREE (BY OTHERS) |
| | LIGHT | | UTILITIES TO BE ABANDONED |
| | CHAINLINK FENCE | | FUTURE STUB |
| | MAIL BOX | | SEWER VAULT |
| | RIGHT OF WAY | | |

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### ABBREVIATIONS

| | |
|---|---|
| CPEP | CORRUGATED POLYETHYLENE PIPE |
| DI | DUCTILE IRON |
| FF | FINISHED FLOOR |
| ID | INSIDE DIAMETER |
| MJ | MECHANICAL JOINT |
| N/F | NOW OR FORMALLY |
| PP | PRESSURE PIPE |
| RD | ROOF DRAIN |
| ROW | RIGHT–OF–WAY |
| SMH | SEWER MANHOLE |
| SS | SEWER SERVICE |
| TYP | TYPICAL |
| WS | WATER SERVICE |
| MIN | MINIMUM |
| TBR | TO BE REMOVED |
| TBV | TO BE VERIFIED |

STATE OF VERMONT ROBERT E. DUFRESNE NO. 3837 CIVIL REGISTERED PROFESSIONAL ENGINEER
12-22-10

DUFRESNE GROUP CONSULTING ENGINEERS
Dufresne Group is owned by Dufresne & Associates, PC

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026–1(34) C/2

FILE NAME: 717014–SITE PLANS
PROJECT LEADER: R.E. DUFRESNE
DESIGNED BY: B.L. BAKER
LEGEND AND GENERAL NOTES

PLOT DATE: Mar. 22, 11
DRAWN BY: B.L. BAKER
CHECKED BY: C.L. WHITEHEAD
SHEET 133 OF 339

ABANDON EXISTING SEWER MANHOLES WHERE SHOWN ABANDONED SEWER MANHOLE TO BE REMOVED AND DISPOSED OF (4 THIS SHEET). CONTRACTOR SHALL FILL ABANDONED SEWER MAIN WITH FLOWABLE FILL.

CONTRACTOR SHALL FURNISH AND INSTALL WATER METERS FOR ALL CUSTOMERS IN PROJECT AREA. SEE SHEET 154 FOR DETAIL AND TABLE FOR METER AND SERVICE SIZE. INSTALLATION SHALL BE DONE BY VERMONT LICENSED PLUMBER. CITY OF BARRE TO DIRECT LOCATIONS FOR METER AND REMOTE TOUCH-READ PADS.

N/F ELLEN R. BEAR NO. 397 (UNIT A) N/F JONATHAN S. & KIMBERLEY A. RENFREW NO. 397 (UNIT B)

N/F ELLIOT G. JR. & SUSAN S. HANSEN NO. 399

N/F NORWAY BARRE REAL ESTATE LLC NO. 395

PARIS NAILS

NORWAY & SONS, INC.

N/F MICHAEL E. BARCOMB NO. 405

MAPLE AVENUE

N/F JAIMES L FEWERAGENCY INC.NO. 5

N/F Z'S NORTHERN PROPERTIES NO. 379

MISTER Z'S

EXXON STATION

COTTAGE STREET

EXIST. R.O.W.

NORTH MAIN STREET - U.S. ROUTE 302

SMH 1
SET OVER EXISTING 24" SEWER MAIN
6' ID PRECAST CONCRETE MANHOLE
SEE DETAIL SHEET 150

SMH 2
8'x8' PRECAST CONCRETE VAULT
SEE DETAIL SHEET 150

SMH 3
8'x8' PRECAST CONCRETE VAULT
SEE DETAIL SHEET 150

SMH 4
6' ID PRECAST CONCRETE MANHOLE
SEE DETAIL SHEET 150

SMH 17
SET OVER EXISTING 6" SEWER MAIN
4' ID PRECAST CONCRETE MANHOLE
SEE DETAIL SHEET 150

SMH 18
SET OVER EXISTING 6" SEWER MAIN
4' ID PRECAST CONCRETE MANHOLE
SEE DETAIL SHEET 150

NEW 30" SEWER MAIN

(2) NEW 24" SEWER MAINS

16" FUTURE CONNECTION
SEE DETAIL SHEET 154

NEW 8" SEWER MAIN

24" NEW 30" SEWER MAIN

8" FUTURE CONNECTION
SEE DETAIL ON SHEET 154

1½" WATER SERVICE

6" NEW SPRINKLER SERVICE

NEW 8" WATER MAIN MJ

CONCRETE ENCASE WATER MAIN WHEN WITHIN 5' OF CB OR STORM DRAIN PIPE

NEW 8" SEWER MAIN

8" GATE VALVE, MJ

MANUAL AIR RELEASE/ CHLORINE INJECTION POINT SEE DETAIL ON SHEET 154

6" RD CONNECT TO EXISTING DRAIN AT R.O.W.

4" RD CONNECT TO EXISTING DRAIN AT R.O.W.

BENDS
(2) 16"ø 45° BENDS, MJ

MATCHLINE TO SHEET 135

N/F ANTONIO & DAVID A. CAMPOS NO 396

N/F RICHARD H. & LUCILLE R. BLENTE NO. 398

1½" WATER SERVICE

CAP SEWER SERVICE AT R.O.W.

OVERHEAD STREET SIGN

N/F CAMPOS REALTY LLC NO. 386

N/F EDWARD S. SIMONDS NO. 372 & 378

INTERCONNECTION
16"x8" TEE, MJ
8"ø NIPPLE, VARIABLE LENGTH
8"ø GATE VALVE, MJ
8"ø NIPPLE, VARIABLE LENGTH
8"ø 90° BEND, MJ
8"ø NIPPLE, VARIABLE LENGTH
8"ø SOLID SLEEVE, MJ
8"ø END CAP, MJ

6" NEW SPRINKLER SERVICE

INTERCONNECTION
16"x8" DI TEE, MJ
8"ø NIPPLE, VARIABLE LENGTH
8"ø 45° BEND, MJ
8"ø NIPPLE, VARIABLE LENGTH
8"ø GATE VALVE, MJ
8"ø NIPPLE, VARIABLE LENGTH
8"ø 45° BEND, MJ
8"ø NIPPLE, VARIABLE LENGTH
8"ø SOLID SLEEVE, MJ
8"ø END CAP, MJ

NEW 16" WATER MAIN MJ

6" NEW SPRINKLER SERVICE

1½" WATER SERVICE

6" NEW SPRINKLER SERVICE

6" RD CAP INSIDE BUILDING

PIERRE MOTEL

N/F PARESH RAMESH T, GAYATRIBEN P NO. 362

1½" WATER SERVICE

CONNECTION 16"x8" TEE, MJ

16" BUTTERFLY VALVE, MJ AND BOX

N/F RAJU D. & NO. 360

6" RD CONNECT TO EXISTING DRAIN AT R.O.W.

4" RD CONNECT TO EXISTING DRAIN AT R.O.W.

JIMMY MART SHELL STATION

VERMONT ROUTE 62

GRAPHIC SCALE
20 0 10 20 40 80
( IN FEET )

**NOTES:**

1. SEE SHEET 133 FOR GENERAL NOTES, LEGEND AND LIST OF ABBREVIATIONS.
2. SEE SHEETS 139-143 FOR SEWER MAIN PROFILES
3. SEE SHEETS 151-153 FOR WATER MAIN PROFILES
4. SEE SHEETS 144-149 FOR SEWER SERVICE PROFILES
5. SEE SHEETS 155-157 FOR ROOF DRAIN PROFILES
6. SEE SHEETS 150 AND 154 FOR DETAILS
7. SEE PLANS PROVIDED BY VANASSE HANGEN BRUSTLIN, INC FOR ADDITIONAL INFORMATION, INCLUDING STORM DRAIN AND ROAD IMPROVEMENTS

DUFRESNE GROUP
CONSULTING ENGINEERS
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PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 717014-SITE PLANS
PROJECT LEADER: R.E. DUFRESNE
DESIGNED BY: B.L. BAKER
WATER AND SEWER SITE PLAN

PLOT DATE: Feb. 18, 11
DRAWN BY: B.L. BAKER
CHECKED BY: C.L. WHITEHEAD
SHEET 134 OF 339

ABANDON EXISTING SEWER MANHOLES WHERE SHOWN ABANDONED SEWER MANHOLE TO BE REMOVED AND DISPOSED OF (5 THIS SHEET). CONTRACTOR SHALL FILL ABANDONED SEWER MAIN WITH FLOWABLE FILL.

CONTRACTOR SHALL FURNISH AND INSTALL WATER METERS FOR ALL CUSTOMERS IN PROJECT AREA. SEE SHEET 154 FOR DETAIL AND TABLE FOR METER AND SERVICE SIZE. INSTALLATION SHALL BE DONE BY VERMONT LICENSED PLUMBER. CITY OF BARRE TO DIRECT LOCATIONS FOR METER AND REMOTE TOUCH-READ PADS.

LENNY'S SHOES & APPAREL

BROOKS PHARMACY

VERMONT TOURIST INFORMATION BOOTH

EXIST. R.O.W.

N/F DOWNTOWN BARRE DEVELOPMENT CORP. NO. 355

6" SPRINKLER SERVICE SEE DETAIL ON SHEET 154

DRAIN ON COVER

EXIST. STREET LIGHT (TYP.)

SMH 5 6' ID PRECAST CONCRETE MANHOLE SEE DETAIL SHEET 150

CONNECT TO EXISTING SANITARY SEWER AT ELEV. 586.0 TBV

1½" WATER SERVICE

6" FUTURE CONNECTION SEE DETAIL ON SHEET 154

SOUTH SEMINARY STREET

CONCRETE ENCASE WATER MAIN WHEN WITHIN 5' OF CB OR STORM DRAIN PIPE

SMH 19 SET OVER EXISTING 8" SEWER MAIN 4' ID PRECAST CONCRETE MANHOLE SEE DETAIL SHEET 150

6" NEW SPRINKLER SERVICE

NEW 8" WATER MAIN MJ

NEW 12" SEWER MAIN

8"ø GATE VALVE, MJ

NEW 30" SEWER MAIN

NEW 16" WATER MAIN MJ

6" SPRINKLER SERVICE SEE DETAIL ON SHEET 154

NEW 8" SEWER MAIN

NEW 30" SEWER MAIN

SMH 6 6' ID PRECAST CONCRETE MANHOLE SEE DETAIL SHEET 150

MATCHLINE TO SHEET 134

NORTH MAIN STREET – U.S. ROUTE 302

EXIST. R.O.W.

MATCHLINE TO SHEET 136

HYDRANT TBR

6" NEW SPRINKLER SERVICE

1½" WATER SERVICE

6" RD CAP INSIDE BUILDING

CONNECT TO EXISTING SPRINKLER SERVICE WITH 6"X4" REDUCER, MJ 4"ø DI NIPPLE, VARIABLE LENGTH 4"ø SOLID SLEEVE, MJ

LIVE SEWER FOUND.

1½" WATER SERVICE

REMOVE SIGN & SUPPORTS REPAIR PAVEMENT

HYDRANT SEE DETAIL ON SHEET 154

HYDRANT TBR

6" SPRINKLER SERVICE SEE DETAIL ON SHEET 154

1½" WATER SERVICE

CONNECT TO EXISTING SPRINKLER SERVICE WITH 6"ø SOLID SLEEVE, MJ

CONNECTION 16"x8" TEE, MJ

N/F COMMUNITY NATIONAL BANK NO. 316

N/F CHAMPLAIN OILNO. 350

HYDRANT SEE DETAIL ON SHEET 154

BARRE LODGE NO. 139 LOYAL ORDER OF MOOSE NO. 328 – 330 – 332

1½" WATER SERVICE

6" RD CONNECT TO EXISTING DRAIN AT R.O.W.

6"ø x45° BEND, MJ
6"ø DI NIPPLE, VARIABLE LENGTH
6"ø x45° BEND, MJ
6"ø DI NIPPLE, VARIABLE LENGTH
6"X4" DI REDUCER, MJ
4"ø DI NIPPLE, VARIABLE LENGTH
CONNECT TO EXISTING SPRINKLER SERVICE WITH 4"ø SOLID SLEEVE, MJ

DOMINO'S PIZZA

COPY WORLD

N/F R YORK INC.NO. 322

6" SPRINKLER SERVICE SEE DETAIL SHEET 22

MAINLINE VALVE 16"ø BUTTERFLY VALVE, MJ

6" RD CONNECT TO EXISTING DRAIN AT R.O.W.

N/F AMERICAN LEGION POST NO. 320

BURGER KING

N/F VERMONT PROPERTIES REALTY TRUSTCHARLES R. & MERI R. GOYETTE,TRUSTEESNO. 338 – 342

GRAPHIC SCALE

20 0 10 20 40 80

( IN FEET )

## NOTES:

1. SEE SHEET 133 FOR GENERAL NOTES, LEGEND AND LIST OF ABBREVIATIONS.
2. SEE SHEETS 139-143 FOR SEWER MAIN PROFILES
3. SEE SHEETS 151-153 FOR WATER MAIN PROFILES
4. SEE SHEETS 144-149 FOR SEWER SERVICE PROFILES
5. SEE SHEETS 155-157 FOR ROOF DRAIN PROFILES
6. SEE SHEETS 150 AND 154 FOR DETAILS
7. SEE PLANS PROVIDED BY VANASSE HANGEN BRUSTLIN, INC FOR ADDITIONAL INFORMATION, INCLUDING STORM DRAIN AND ROAD IMPROVEMENTS

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PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 717014-SITE PLANS
PROJECT LEADER: R.E. DUFRESNE
DESIGNED BY: B.L. BAKER
WATER AND SEWER SITE PLAN

PLOT DATE: Feb. 18, 11
DRAWN BY: B.L. BAKER
CHECKED BY: C.L. WHITFHEAD
SHEET 135 OF 339

ABANDON EXISTING SEWER MANHOLES WHERE SHOWN ABANDONED SEWER MANHOLE TO BE REMOVED AND DISPOSED OF (3 THIS SHEET). CONTRACTOR SHALL FILL ABANDONED SEWER MAIN WITH FLOWABLE FILL.

CONTRACTOR SHALL FURNISH AND INSTALL WATER METERS FOR ALL CUSTOMERS IN PROJECT AREA. SEE SHEET 154 FOR DETAIL AND TABLE FOR METER AND SERVICE SIZE. INSTALLATION SHALL BE DONE BY VERMONT LICENSED PLUMBER. CITY OF BARRE TO DIRECT LOCATIONS FOR METER AND REMOTE TOUCH-READ PADS.

CORE Ex. SMH AND CONNECT NEW 8" SEWER MAIN AT ELEV. 588.1

SMH 21
4' ID PRECAST CONCRETE MANHOLE
SEE DETAIL SHEET 150

SMH 23
SET OVER EXISTING 6" SEWER MAIN
4' ID PRECAST CONCRETE MANHOLE
SEE DETAIL SHEET 150

NEW 8" SEWER MAIN

8"ø 45° BEND, MJ
(TYP. OF 2)

8" FUTURE CONNECTION
SEE DETAIL ON SHEET 154

NEW 8" C900 PVC SEWER MAIN

INTERCONNECTION
8"x4" TEE, MJ
4"ø DI NIPPLE, VARIABLE LENGTH
4"ø GATE VALVE, MJ
4"ø DI NIPPLE, VARIABLE LENGTH
4"ø 90° BEND, MJ
4"ø DI NIPPLE, VARIABLE LENGTH
4"ø SOLID SLEEVE, MJ
4"ø END CAP, MJ

16"ø 45° BEND, MJ
(TYP. OF 2)

NEW 8" WATER MAIN MJ

SMH 9
6' ID PRECAST CONCRETE MANHOLE
SEE DETAIL SHEET 150

1½" WATER SERVICE

6" SPRINKLER SERVICE
SEE DETAIL ON SHEET 154

CONNECT EXISTING SPRINKLER SERVICE WITH 6"ø SOLID SLEEVE, MJ

6" RD CAP INSIDE BUILDING (TYP OF 2)

SMH 8
6' ID PRECAST CONCRETE MANHOLE
SEE DETAIL SHEET 150

HYDRANT
SEE DETAIL ON SHEET 154

HYDRANT TBR

CONNECT EXISTING SPRINKLER SERVICE WITH 6"X4" REDUCER, MJ
4"ø DI NIPPLE, VARIABLE LENGTH
4"ø SOLID SLEEVE, MJ

6" SPRINKLER SERVICE
SEE DETAIL ON SHEET 154

NEW 30" SEWER MAIN

NEW 16" WATER MAIN MJ

AIR RELEASE

SMH 7
6' ID PRECAST CONCRETE MANHOLE
SEE DETAIL SHEET 150

1½" WATER SERVICE

6" RD CAP
INSIDE BUILDING

1½" WATER SERVICE

6" NEW SPRINKLER SERVICE

6" NEW SPRINKLER SERVICE

6" SPRINKLER SERVICE
SEE DETAIL ON SHEET 154

6" RD CAP
INSIDE BUILDING

6" RD CAP AT R.O.W.

6" NEW SPRINKLER SERVICE

8" FUTURE CONNECTION
SEE DETAIL ON SHEET 154

INTERCONNECTION
8"x4" TEE, MJ
4"ø DI NIPPLE, VARIABLE LENGTH
4"ø GATE VALVE, MJ
4"ø DI NIPPLE, VARIABLE LENGTH
4"ø 90° BEND, MJ
4"ø DI NIPPLE, VARIABLE LENGTH
4"ø SOLID SLEEVE, MJ
4"ø END CAP, MJ

NEW 8" WATER MAIN MJ

NEW 30" SEWER MAIN

NEW 16" WATER MAIN MJ

HYDRANT TBR

6" RD CAP AT R.O.W.

1½" WATER SERVICE

6" NEW SPRINKLER SERVICE

6" RD CAP AT R.O.W.

HYDRANT
SEE DETAIL ON SHEET 154

NEW 8" SEWER MAIN

6" RD CONNECT TO EXISTING DRAIN AT R.O.W.

16"x8" TEE, MJ

NEW 8" WATER MAIN MJ

INTERCONNECTION
8"x6" TEE, MJ
6"ø DI NIPPLE, VARIABLE LENGTH
6"ø GATE VALVE, MJ
6"ø DI NIPPLE, VARIABLE LENGTH
6"ø 90° BEND, MJ
6"ø DI NIPPLE, VARIABLE LENGTH
6"ø SOLID SLEEVE, MJ
6"ø END CAP, MJ

8" FUTURE CONNECTION
SEE DETAIL ON SHEET 154

16"x8" TEE, MJ

NEW 8" WATER MAIN

INTERCONNECTION
8"x4" TEE, MJ
4"ø DI NIPPLE, VARIABLE LENGTH
4"ø GATE VALVE, MJ
4"ø DI NIPPLE, VARIABLE LENGTH
4"ø 90° BEND, MJ
4"ø DI NIPPLE, VARIABLE LENGTH
4"ø SOLID SLEEVE, MJ
4"ø END CAP, MJ

8" FUTURE CONNECTION
SEE DETAIL ON SHEET 154

SMH 20
SET OVER EXISTING 8" SEWER MAIN
4' ID PRECAST CONCRETE MANHOLE
SEE DETAIL SHEET 150

SMH 22
SET OVER EXISTING 6" SEWER MAIN
4' ID PRECAST CONCRETE MANHOLE
SEE DETAIL SHEET 150

NEW 8" SEWER MAIN

1½" WATER SERVICE

6" RD CAP
INSIDE BUILDING

6" NEW SPRINKLER SERVICE

1½" WATER SERVICE

MAINLINE VALVE
16"ø BUTTERFLY VALVE, MJ

1½" WATER SERVICE

6" RD CAP
INSIDE BUILDING

1½" WATER SERVICE

6" NEW SPRINKLER SERVICE

6" RD CAP
INSIDE BUILDING

6" NEW SPRINKLER SERVICE

16"ø HIGH PRESSURE LINE
INSTALL APPROX 360 LF OF 16" DI CLASS 52 WATER MAIN FOR FUTURE USE. EACH END TO HAVE:
MANUAL AIR RELEASE/CHLORINE INJECTION POINT
16" BUTTERFLY VALVE, MJ
MANUAL AIR RELEASE/CHLORINE INJECTION POINT
16"ø END CAP, MJ

NEW 30" SEWER MAIN

NEW 16" WATER MAIN MJ

16"ø 90° BEND, MJ

NEW 30" SEWER MAIN

NEW 16" WATER MAIN MJ

MATCHLINE TO SHEET 135

MATCHLINE TO SHEET 137

N/F ELIZABETH M. CAMPBELL TRUST FUND NO. 283

N/F PCI PROPERTIES LLC NO. 293 – 297

N/F WILLIAM R. & CAROLYN E. CHASE NO. 309

N/F NORTHFIELD SAVINGS BANK NO. 289 – 291

N/F STATE OF VERMONT NO. 755

N/F FREDERICK G. & MARY D. BASHARA NO. 237 – NO. 241

N/F REAL AUDET NO. 219

COURT HOUSE

DUNKIN DONUTS

BARRE PAINT

EMSLIE'S FLORIST

MALONE PATRICK NO. 313

KEY BANK

BK'S COMPUTIN

ATTORNEY AT LAW

PARAMOUNT THEATER

NORTH MAIN STREET – U.S. ROUTE 302

EXIST. R.O.W.

EAST R.O.W.

EXIST. R.O.W.

GRANITE STREET

CREAMERY CONNECTOR

N/F COMMUNITY NATIONAL BANK NO. 316

PARK

N/F WALL STREET INVESTMENTS NO. 302 – 304 – 306 – 310

CHINATOWN RESTURANT

ARMY

N/F CHITTENDEN BANK NO. 292

SEAN & NORA'S RESTAURANT

N/F 276 NORTH MAIN LLC NO. 276

N/F DEPT. OF HOUSING & URBAN DEVELOPMENT NO. 280 – NO. 286

GRANITE HILLS CREDIT UNION 266

NEW DIRECTION FOR BARRE

JEROME THE FLORIST

N/F DONALD R. DICK NO. 248

DEB'S PIT STOP DINER

CUZZIN'S NIGHTCLUB

N/F BENOIT PROPERTIES, INC. NO. 224 – NO. 230

AUBUCHON HARDWARE

N/F AUBUCHON HARDWARE CO. INC. NO. 214

N/F FARMERS DIST. BARRE LLC NO. 240

GRAPHIC SCALE
20 0 10 20 40 80
( IN FEET )

## NOTES:

1. SEE SHEET 133 FOR GENERAL NOTES, LEGEND AND LIST OF ABBREVIATIONS.
2. SEE SHEETS 139–143 FOR SEWER MAIN PROFILES
3. SEE SHEETS 151–153 FOR WATER MAIN PROFILES
4. SEE SHEETS 144–149 FOR SEWER SERVICE PROFILES
5. SEE SHEETS 155–157 FOR ROOF DRAIN PROFILES
6. SEE SHEETS 150 AND 154 FOR DETAILS
7. SEE PLANS PROVIDED BY VANASSE HANGEN BRUSTLIN, INC FOR ADDITIONAL INFORMATION, INCLUDING STORM DRAIN AND ROAD IMPROVEMENTS

DUFRESNE GROUP
CONSULTING ENGINEERS
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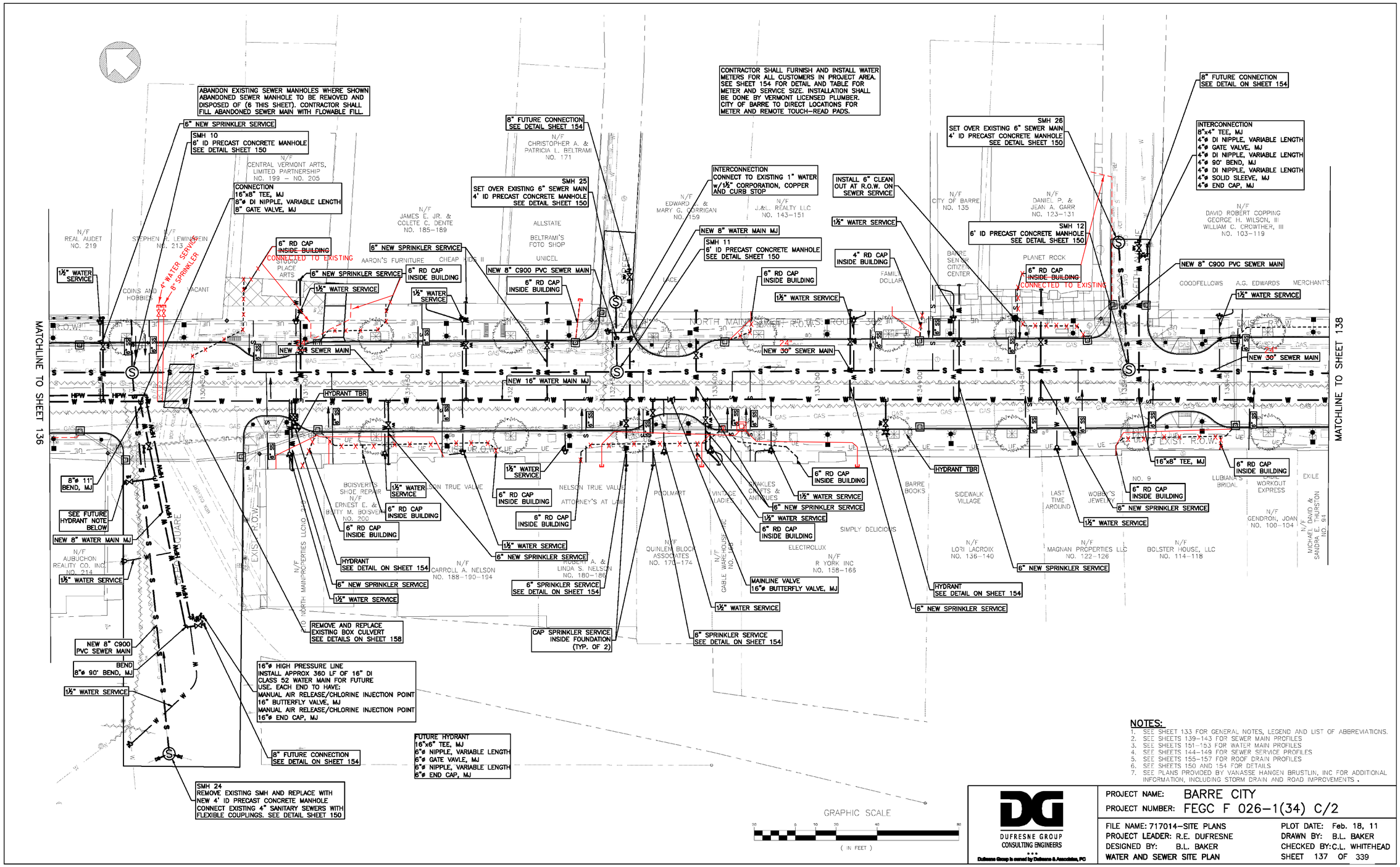
PROJECT NUMBER: FEGC F 026–1(34) C/2

FILE NAME: 717014–SITE PLANS
PROJECT LEADER: R.E. DUFRESNE
DESIGNED BY: B.L. BAKER
WATER AND SEWER SITE PLAN

PLOT DATE: Feb. 18, 11
DRAWN BY: B.L. BAKER
CHECKED BY: C.L. WHITEHEAD
SHEET 136 OF 339




NOTES:

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DRAWN BY: B.L. BAKER
CHECKED BY: C.L. WHITEHEAD
SHEET 137 OF 339

ABANDON EXISTING SEWER MANHOLES WHERE SHOWN
ABANDONED SEWER MANHOLE TO BE REMOVED AND DISPOSED OF (3 THIS SHEET). CONTRACTOR SHALL FILL ABANDONED SEWER MAIN WITH FLOWABLE FILL.

NEW 12" SEWER MAIN

SMH 16 NOT INSTALLED
4' ID PRECAST CONCRETE MANHOLE
LEAVE 5' OF 12" SEWER MAIN AND CAP
SEE DETAIL SHEET 150

CONTRACTOR SHALL FURNISH AND INSTALL WATER METERS FOR ALL CUSTOMERS IN PROJECT AREA. SEE SHEET 154 FOR DETAIL AND TABLE FOR METER AND SERVICE SIZE. INSTALLATION SHALL BE DONE BY VERMONT LICENSED PLUMBER. CITY OF BARRE TO DIRECT LOCATIONS FOR METER AND REMOTE TOUCH-READ PADS.

NEW 12" SEWER MAIN

SMH 15
SET OVER EXISTING 10" SEWER MAIN
4' ID PRECAST CONCRETE MANHOLE
SEE DETAIL SHEET 150

CORE AND CONNECT TO EXISTING SMH AT ELEV. 595.6 TBV. INVERT TO BE REBRICKED AS NECESSARYPLUG EXISTING INVERT OUT WITH BRICK AND MORTAR

CAP SPRINKLER SERVICE INSIDE BUILDING

6" SPRINKLER SERVICE SEE DETAIL ON SHEET 154

1½" WATER SERVICE

6" NEW SPRINKLER SERVICE

HYDRANT SEE DETAIL ON SHEET 154

HYDRANT TBR

6" RD CAP INSIDE BUILDING

6" RD CAP INSIDE BUILDING

1½" WATER SERVICE

EXPLORATORY EXCAVATION REQUIRED TO VERIFY EXACT ELEVATION OF EXISTING STORM DRAIN

SMH 13
6' ID PRECAST CONCRETE MANHOLE
SEE DETAIL SHEET 150

12"ø 22° BEND, MJ

12"ø 45° BEND, MJ

24" NEW 30" SEWER MAIN

NEW 12" SEWER MAIN

SMH 14
6' ID PRECAST CONCRETE MANHOLE
LEAVE 5' OF 30" SEWER MAIN AND CAP
SEE DETAIL SHEET 150

24" NEW 30" SEWER MAIN

12" FUTURE CONNECTION SEE DETAIL ON SHEET 154

INTERCONNECTION
12"x12" TEE, MJ
12"ø DI NIPPLE, VARIABLE LENGTH
12"ø GATE VALVE, MJ
12"ø DI NIPPLE, VARIABLE LENGTH
12"ø 45° BEND, MJ
12"ø DI NIPPLE, VARIABLE LENGTH
12"ø 22° BEND, MJ
12"ø DI NIPPLE, VARIABLE LENGTH
12"ø SOLID SLEEVE, MJ
12"ø END CAP, MJ

NEW 15" SEWER MAIN

16"ø 22° BEND, MJ

16"ø 11° BEND, MJ

NEW 16" WATER MAIN MJ

6" NEW SPRINKLER SERVICE

1½" WATER SERVICE

6" NEW SPRINKLER SERVICE

16"x12" DI TEE, MJ

16" FUTURE CONNECTION SEE DETAIL SHEET 154

CONNECT TO EXISTING SANITARY SEWER AT ELEV. 594.6 TBV

INTERCONNECTION
12"x12" TEE, MJ
12"ø DI NIPPLE, VARIABLE LENGTH
12"ø GATE VALVE, MJ
12"ø DI NIPPLE, VARIABLE LENGTH
12"ø 90° BEND, MJ
12"ø DI NIPPLE, VARIABLE LENGTH
12"ø 90° BEND, MJ
12"ø DI NIPPLE, VARIABLE LENGTH
12"ø SOLID SLEEVE, MJ
12"ø END CAP, MJ

INTERCONNECTION
12"x8" TEE, MJ
8"ø DI NIPPLE, VARIABLE LENGTH
8"ø GATE VALVE, MJ
8"ø DI NIPPLE, VARIABLE LENGTH
8"ø 90° BEND, MJ
8"ø DI NIPPLE, VARIABLE LENGTH
8"ø 90° BEND, MJ
8"ø DI NIPPLE, VARIABLE LENGTH
8"ø SOLID SLEEVE, MJ
8"ø END CAP, MJ

6" SPRINKLER SERVICE
6"ø 45° BEND, MJ
6"ø DI NIPPLE, VARIABLE LENGTH
6"ø 45° BEND, MJ
6"ø DI NIPPLE, VARIABLE LENGTH
6"ø 45° BEND, MJ
6"ø DI NIPPLE, VARIABLE LENGTH
6"ø SOLID SLEEVE, MJ
6"ø END CAP, MJ
SEE DETAIL SHEET 22

1½" WATER SERVICE

1½" WATER SERVICE
SEE DETAIL A, THIS SHEET

INSTALL NEW 4"ø DI END CAP, MJ w/ 1½" THREAD

EXISTING 4" GATE VALVE

1½" CURB STOP

1½" COPPER WATER SERVICE

EXISTING 4" WATER SERVICE TO BE USED AS SLEEVE INTO BUILDING. SEAL AROUND NEW WATER SERVICE.

DETAIL A
SCALE: NOT TO SCALE

N/F RICHARD G. MORIN NO. 47-59

N/F AGNES ORMSBY NO. 71-77

N/F 81 - 85 NORTH MAIN STREET, LLC NO. 81 - 83

N/F CITY OF BARRE

N/F GRANITE CITY HOLDING CO., INC. NO. 84-86-88

N/F EDWARD H & YVONNE LACROSS NO. 58-70

N/F MARK N. MCCARTHY NO. 48-54

N/F THE HOWARD BANK N.A. NO. 26-40

N/F ABC CORPORATION NO. 14-22

N/F CITY OF BARRE NO. 6

BERG, CARNIOLO, AND KENT

BOUCHARD-PIERCE

SUBWAY

SIMPLY SUBS

LENNY'S OUTLET

MATTRESS LAND

BOB'S CAMERA

BCK REAL ESTATE

TD BANKNORTH

GRANITE CITY BREWING

VACANT

MATCHLINE TO SHEET 137

GRAPHIC SCALE
20 0 10 20 40 60
( IN FEET )

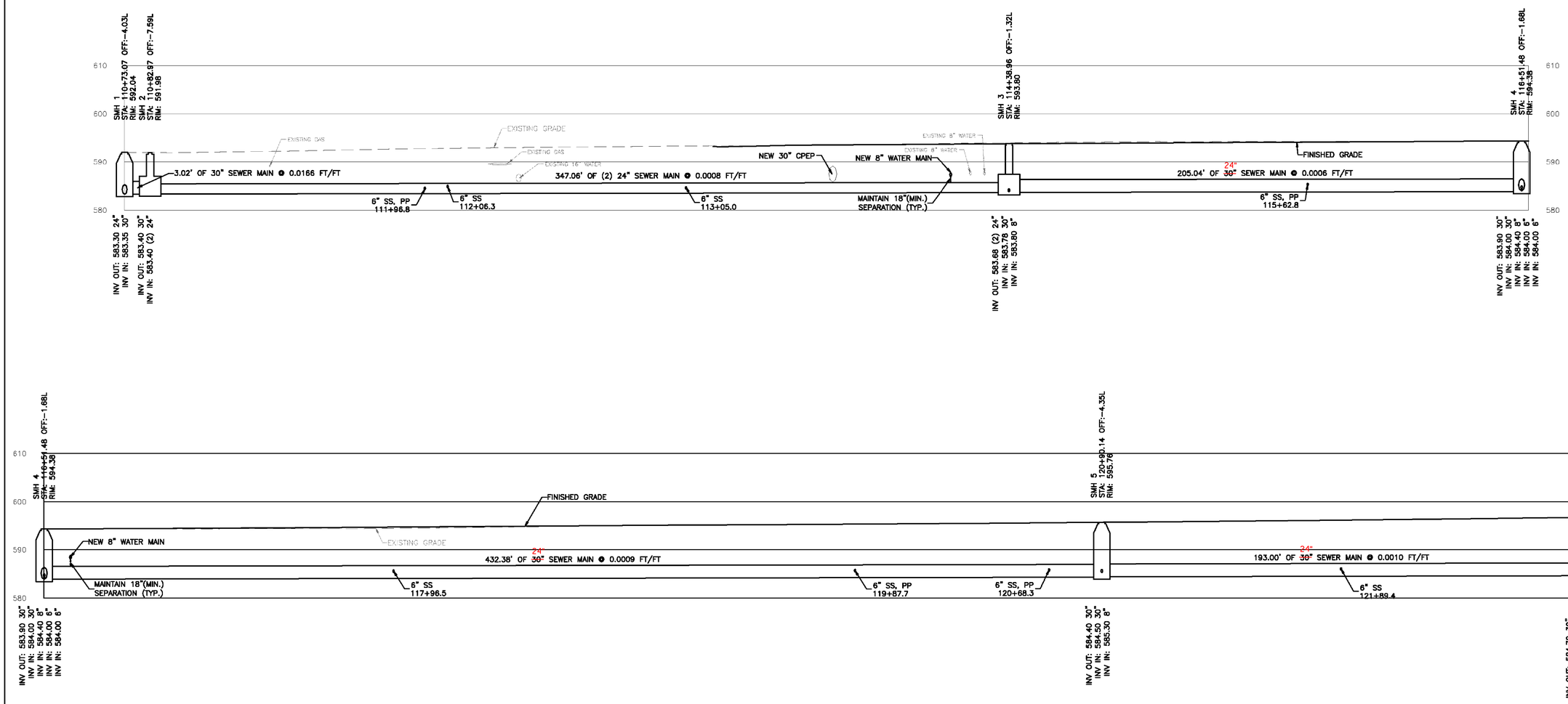
NOTES:
1. SEE SHEET 133 FOR GENERAL NOTES, LEGEND AND LIST OF ABBREVIATIONS.
2. SEE SHEETS 139-143 FOR SEWER MAIN PROFILES
3. SEE SHEETS 151-153 FOR WATER MAIN PROFILES
4. SEE SHEETS 144-149 FOR SEWER SERVICE PROFILES
5. SEE SHEETS 155-157 FOR ROOF DRAIN PROFILES
6. SEE SHEETS 150 AND 154 FOR DETAILS
7. SEE PLANS PROVIDED BY VANASSE HANGEN BRUSTLIN, INC FOR ADDITIONAL INFORMATION, INCLUDING STORM DRAIN AND ROAD IMPROVEMENTS.

DUFRESNE GROUP
CONSULTING ENGINEERS
Dufresne Group is owned by Dufresne & Associates, PC

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 717014-SITE PLANS
PROJECT LEADER: R.E. DUFRESNE
DESIGNED BY: B.L. BAKER
WATER AND SEWER SITE PLAN

PLOT DATE: Feb. 18, 11
DRAWN BY: B.L. BAKER
CHECKED BY: C.L. WHITEHEAD
SHEET 138 OF 339




**NOTES:**

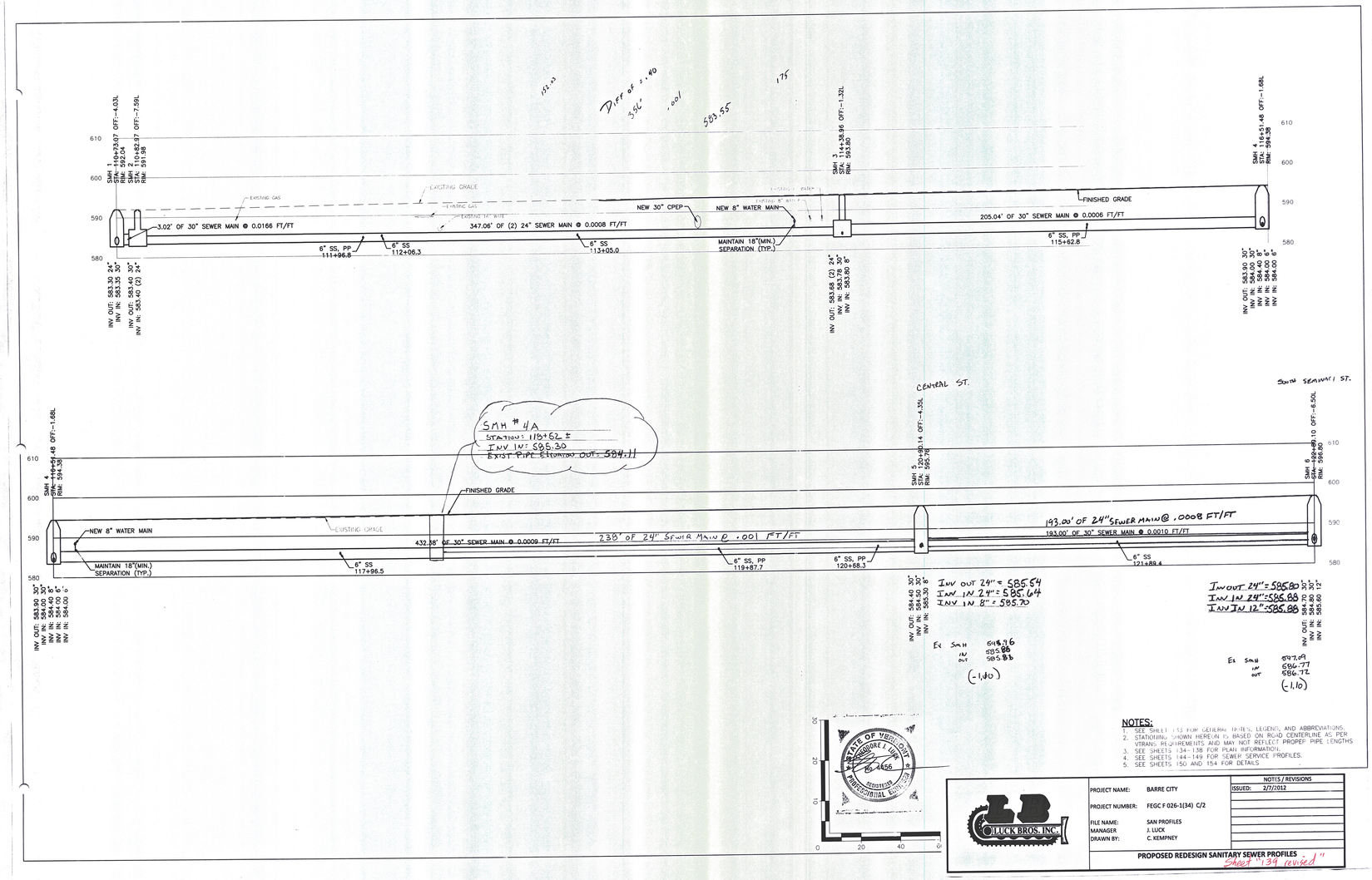
1. SEE SHEET 133 FOR GENERAL NOTES, LEGEND, AND ABBREVIATIONS.
2. STATIONING SHOWN HEREON IS BASED ON ROAD CENTERLINE AS PER VTRANS REQUIREMENTS AND MAY NOT REFLECT PROPER PIPE LENGTHS
3. SEE SHEETS 134–138 FOR PLAN INFORMATION.
4. SEE SHEETS 144–149 FOR SEWER SERVICE PROFILES.
5. SEE SHEETS 150 AND 154 FOR DETAILS

DUFRESNE GROUP
CONSULTING ENGINEERS
Dufresne Group is owned by Dufresne & Associates, PC

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026–1(34) C/2

FILE NAME: 717014–PROFILES
PROJECT LEADER: R.E. DUFRESNE
DESIGNED BY: B.L. BAKER
SANITARY SEWER PROFILES

PLOT DATE: Feb. 18, 11
DRAWN BY: B.L. BAKER
CHECKED BY: C.L. WHITFHEAD
SHEET 139 OF 339




Diff of 2.40
3.52'
.001
583.55
175
152.43

STATE OF VERMONT
JEREMY L. LUCK
No. 2456
REGISTERED
PROFESSIONAL ENGINEER

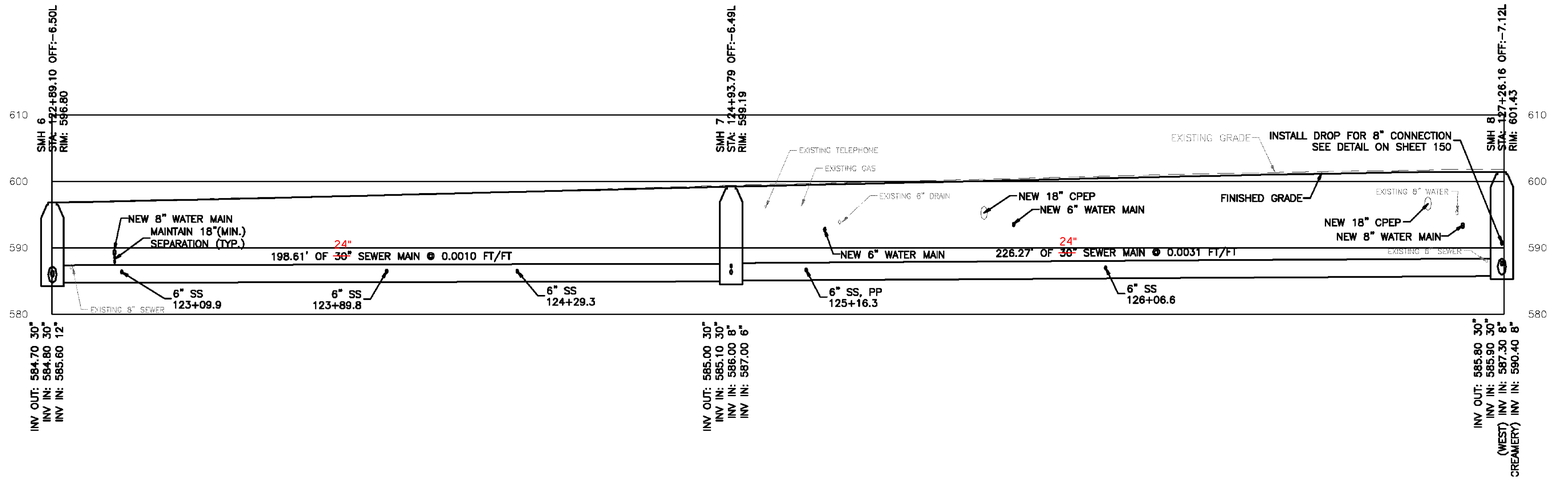
NOTES:
1. SEE SHEET 133 FOR GENERAL NOTES, LEGEND, AND ABBREVIATIONS.
2. STATIONING SHOWN HEREON IS BASED ON ROAD CENTERLINE AS PER VTRANS REQUIREMENTS AND MAY NOT REFLECT PROPEP PIPE LENGTHS
3. SEE SHEETS 134-138 FOR PLAN INFORMATION.
4. SEE SHEETS 144-149 FOR SEWER SERVICE PROFILES.
5. SEE SHEETS 150 AND 154 FOR DETAILS

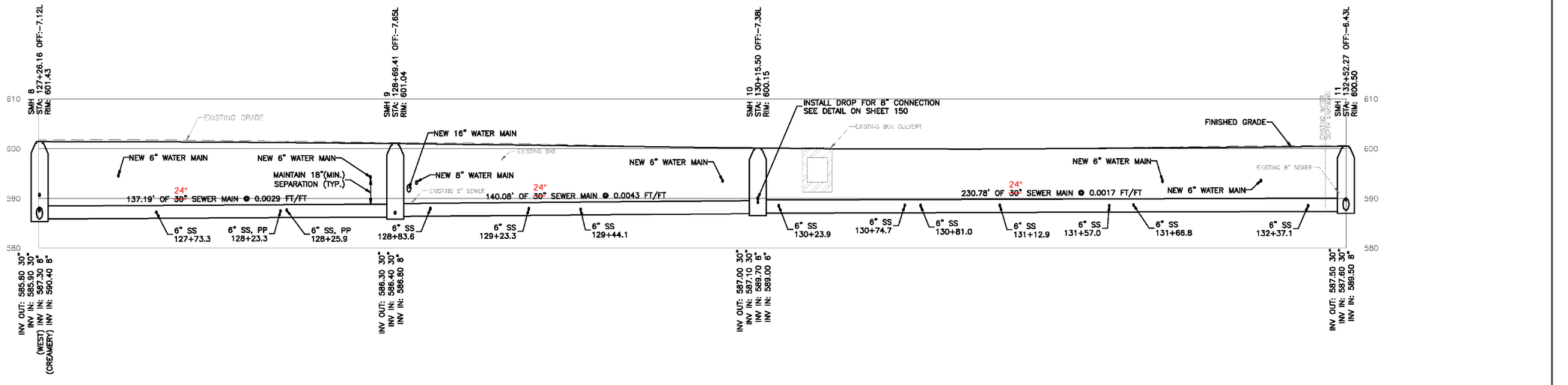
LUCK BROS. INC.

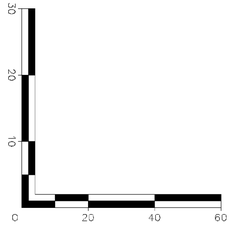
| | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-1(34) C/2 |
| FILE NAME: | SAN PROFILES |
| MANAGER | J. LUCK |
| DRAWN BY: | C. KEMPNEY |

NOTES / REVISIONS
ISSUED: 2/7/2012

PROPOSED REDESIGN SANITARY SEWER PROFILES
Sheet 139 revised




**NOTES:**

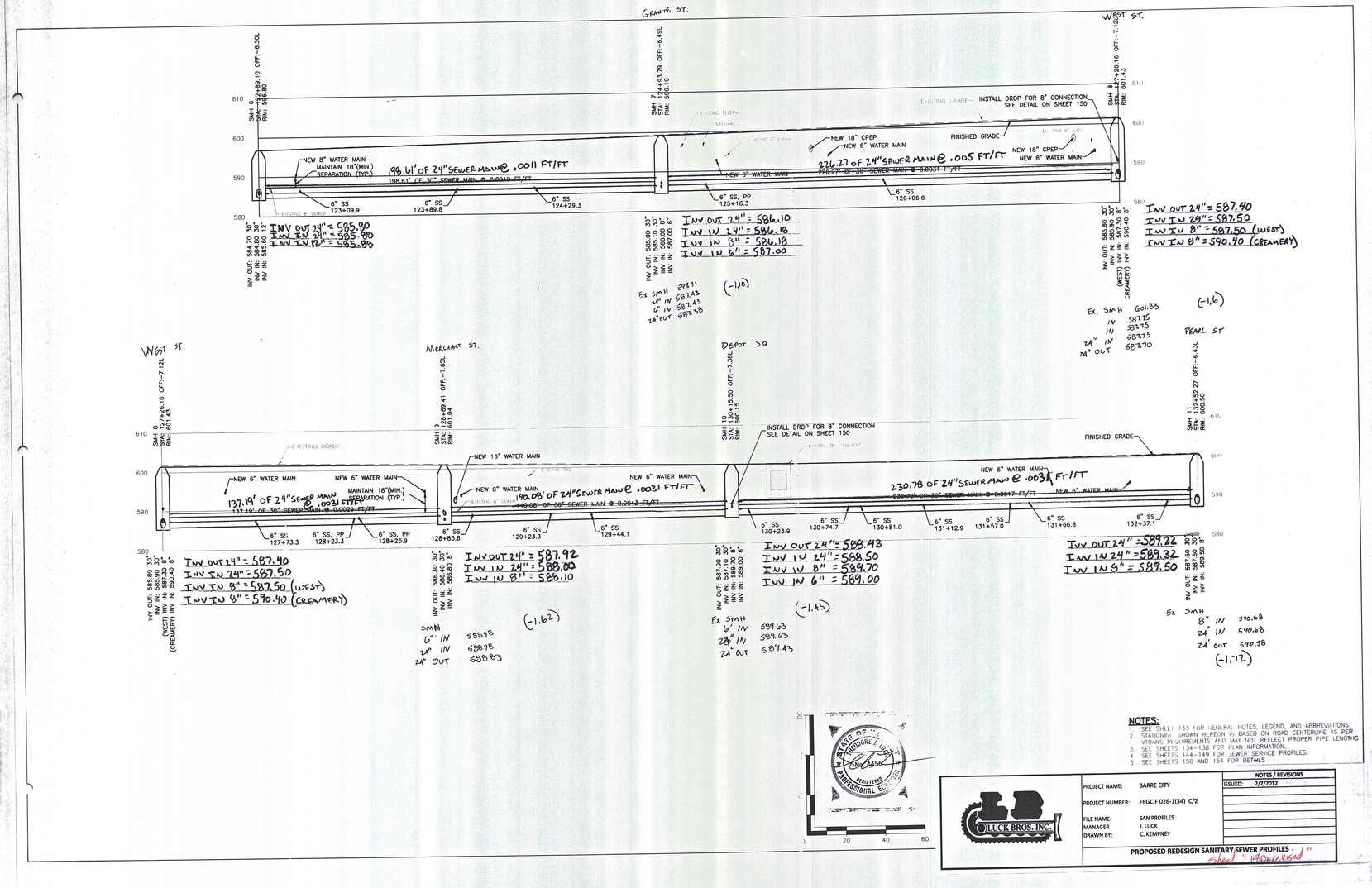
1. SEE SHEET 133 FOR GENERAL NOTES, LEGEND, AND ABBREVIATIONS.
2. STATIONING SHOWN HEREON IS BASED ON ROAD CENTERLINE AS PER VTRANS REQUIREMENTS AND MAY NOT REFLECT PROPER PIPE LENGTHS
3. SEE SHEETS 134–138 FOR PLAN INFORMATION.
4. SEE SHEETS 144–149 FOR SEWER SERVICE PROFILES.
5. SEE SHEETS 150 AND 154 FOR DETAILS

DUFRESNE GROUP
CONSULTING ENGINEERS
Dufresne Group is owned by Dufresne & Associates, PC

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026–1(34) C/2

FILE NAME: 717014–PROFILES
PROJECT LEADER: R.E. DUFRESNE
DESIGNED BY: B.L. BAKER
SANITARY SEWER PROFILES

PLOT DATE: Feb. 18, 11
DRAWN BY: B.L. BAKER
CHECKED BY: C.L. WHITFHEAD
SHEET 140 OF 339







**NOTES:**

1. SEE SHEET 133 FOR GENERAL NOTES, LEGEND, AND ABBREVIATIONS.
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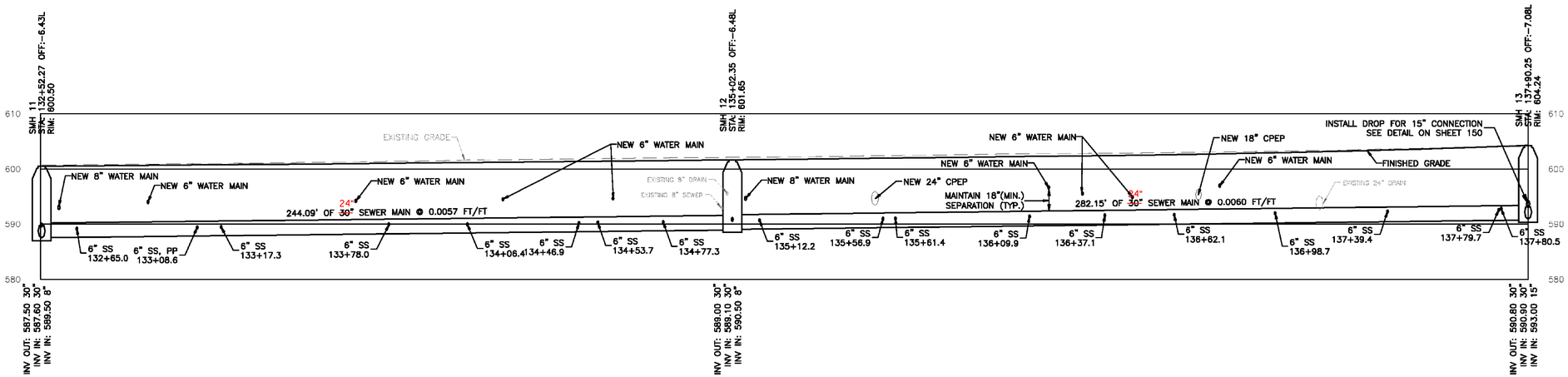
4. SEE SHEETS 144–149 FOR SEWER SERVICE PROFILES.
5. SEE SHEETS 150 AND 154 FOR DETAILS

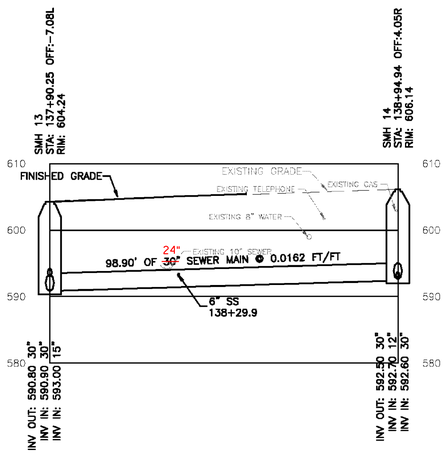
LUCK BROS. INC.

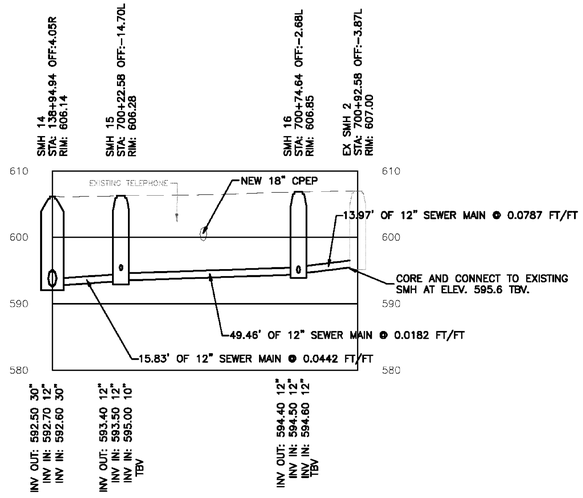
| | | |
|---|---|---|
| PROJECT NAME: | BARRE CITY | NOTES / REVISIONS |
| PROJECT NUMBER: | FEGC F 026-1(34) C/2 | ISSUED: 2/7/2012 |
| FILE NAME: | SAN PROFILES | |
| MANAGER | J. LUCK | |
| DRAWN BY: | C. KEMPNEY | |

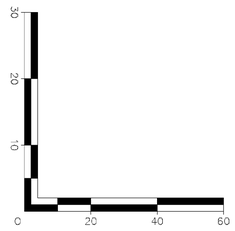
PROPOSED REDESIGN SANITARY SEWER PROFILES

Sheet 140 (revised)




**NOTES:**

1. SEE SHEET 133 FOR GENERAL NOTES, LEGEND, AND ABBREVIATIONS.
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4. SEE SHEETS 144–149 FOR SEWER SERVICE PROFILES.
5. SEE SHEETS 150 AND 154 FOR DETAILS .

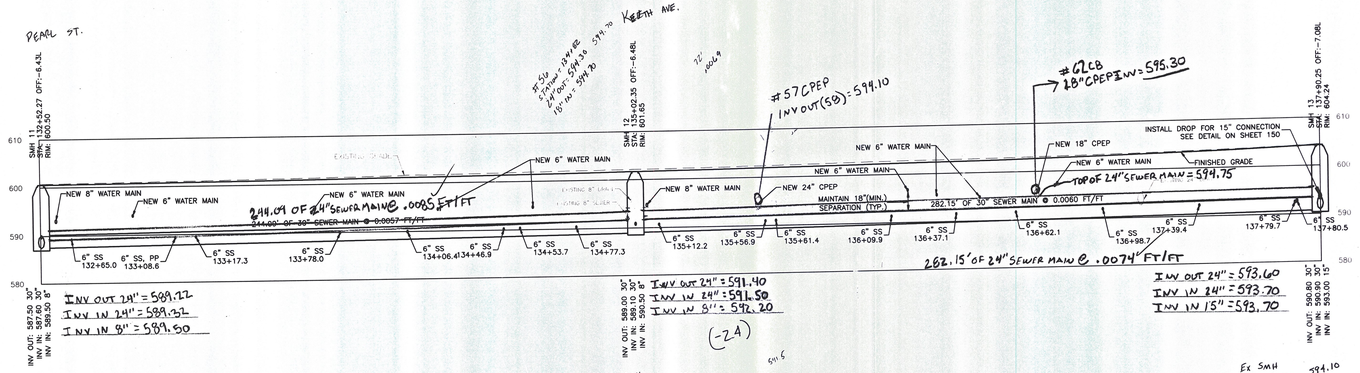
DUFRESNE GROUP
CONSULTING ENGINEERS
Dufresne Group is owned by Dufresne & Associates, PC

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026–1(34) C/2

| | |
|---|---|
| FILE NAME: 717014–PROFILES | PLOT DATE: Feb. 18, 11 |
| PROJECT LEADER: R.E. DUFRESNE | DRAWN BY: B.L. BAKER |
| DESIGNED BY: B.L. BAKER | CHECKED BY: C.L. WHITFHEAD |
| SANITARY SEWER PROFILES | SHEET 141 OF 339 |

PEARL ST.

KEITH AVE.




INV OUT 24" = 589.22
INV IN 24" = 589.32
INV IN 8" = 589.50

INV OUT 24" = 591.40
INV IN 24" = 591.50
INV IN 8" = 592.20

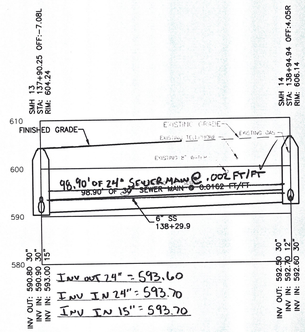
(-2.9)

INV OUT 24" = 593.60
INV IN 24" = 593.70
INV IN 15" = 593.70

Ex SMH
8" IN 592.47
24" IN 592.47
24" OUT 592.42

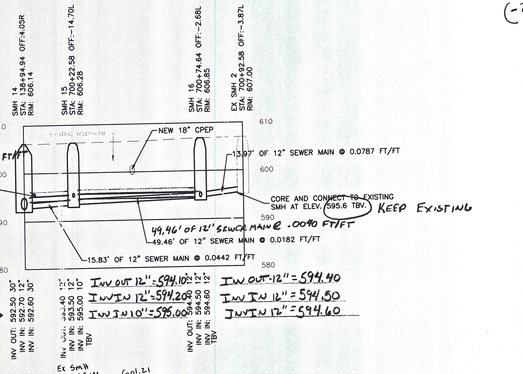
Ex SMH
10" IN 594.10
24" IN 594.06, 607.9
24" OUT 594.06

(-2.8)



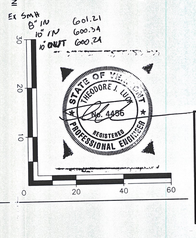

INV OUT 24" = 593.60
INV IN 24" = 593.70
INV IN 15" = 593.70

INV OUT 24" = 593.90
INV IN 12" = 594.00
INV IN 24" = 594.00 (FUTURE)




INV OUT 12" = 594.40
INV IN 12" = 594.50
INV IN 12" = 594.60

Ex SMH
8" IN 600.21
10" IN 600.39
10" OUT 600.24




160.65




**NOTES:**

1. SEE SHEET 133 FOR GENERAL NOTES, LEGEND, AND ABBREVIATIONS.
2. STATIONING SHOWN HEREON IS BASED ON ROAD CENTERLINE AS PER VTRANS REQUIREMENTS AND MAY NOT REFLECT PROPER PIPE LENGTHS
3. SEE SHEET: 134--138 FOR PLAN INFORMATION.
4. SEE SHEET: 144--149 FOR SEWER SERVICE PROFILES.
5. SEE SHEET: 150 AND 154 FOR DETAILS.

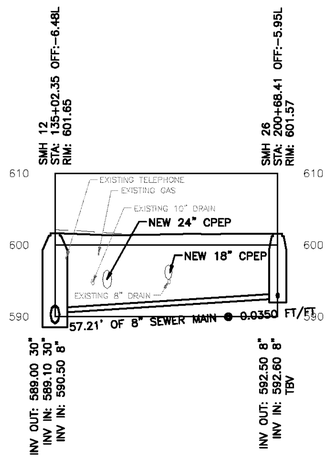
LUCK BROS. INC.

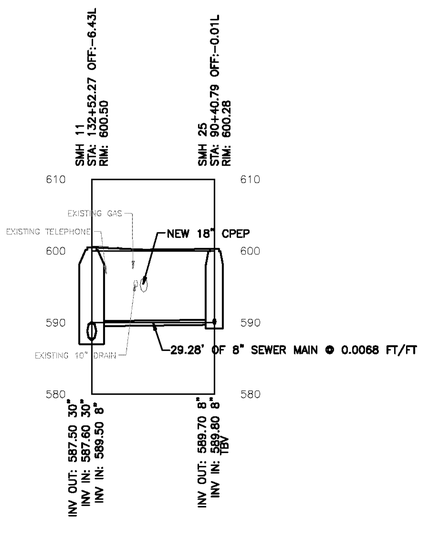
| | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-1(34) C/2 |
| FILE NAME: | SAN PROFILES |
| MANAGER | J. LUCK |
| DRAWN BY: | C. KEMPNEY |

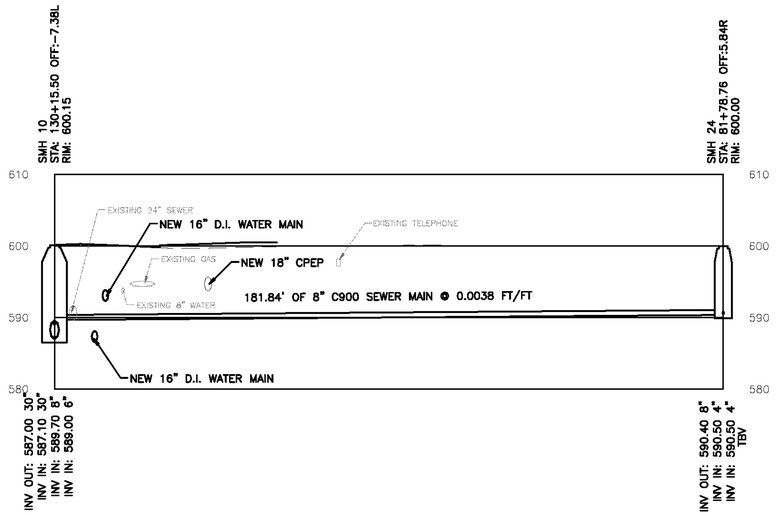
| NOTES / REVISIONS | |
|---|---|
| ISSUED: | 2/7/2012 |
| | |
| | |
| | |
| | |
| | |

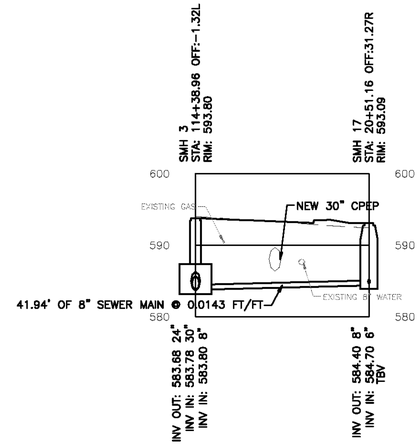
**PROPOSED REDESIGN SANITARY SEWER PROFILES**

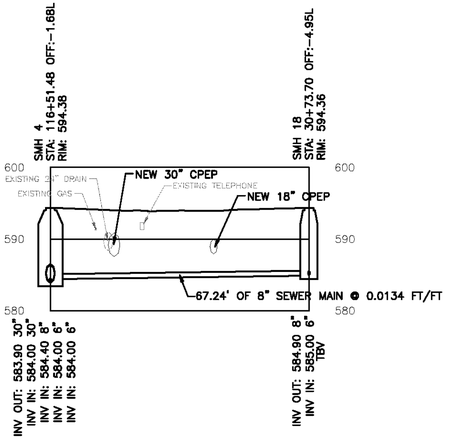
Sheet #41 revised

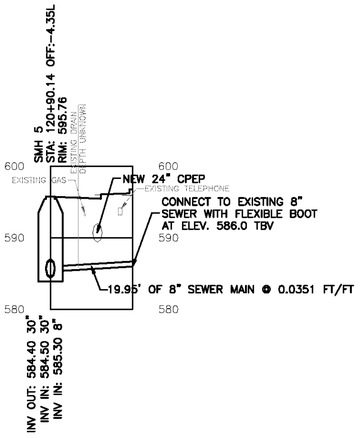


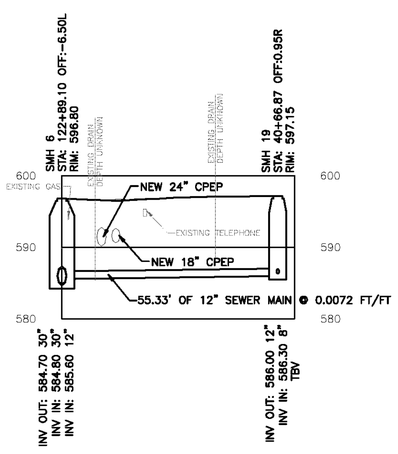



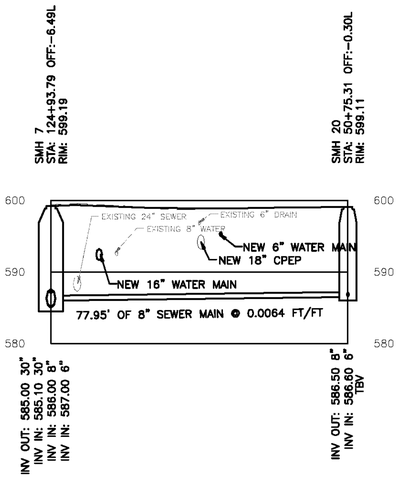



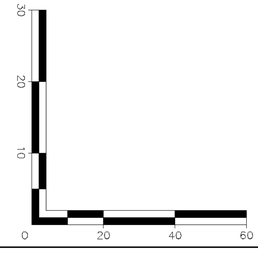




**NOTES:**

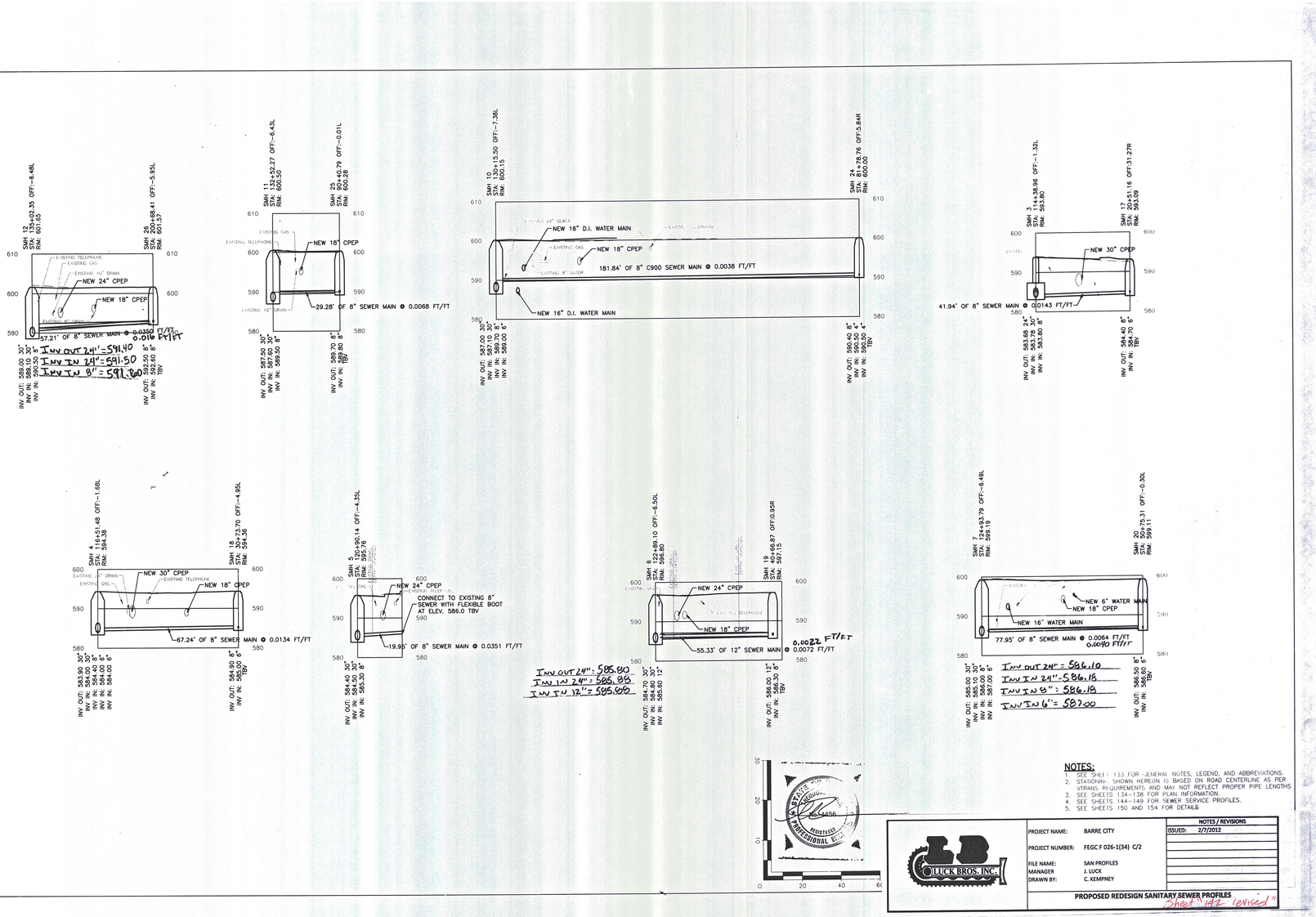
1. SEE SHEET 133 FOR GENERAL NOTES, LEGEND, AND ABBREVIATIONS.
2. STATIONING SHOWN HEREON IS BASED ON ROAD CENTERLINE AS PER VTRANS REQUIREMENTS AND MAY NOT REFLECT PROPER PIPE LENGTHS
3. SEE SHEETS 134–138 FOR PLAN INFORMATION.
4. SEE SHEETS 144–149 FOR SEWER SERVICE PROFILES.
5. SEE SHEETS 150 AND 154 FOR DETAILS

DUFRESNE GROUP
CONSULTING ENGINEERS
Dufresne Group is owned by Dufresne & Associates, PC

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026–1(34) C/2

FILE NAME: 717014–PROFILES
PROJECT LEADER: R.E. DUFRESNE
DESIGNED BY: B.L. BAKER
SANITARY SEWER PROFILES

PLOT DATE: Feb. 18, 11
DRAWN BY: B.L. BAKER
CHECKED BY: C.L. WHITFIHEAD
SHEET 142 OF 339




**NOTES:**

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5. SEE SHEETS 150 AND 154 FOR DETAILS

STATE OF VERMONT — No. 4456 — REGISTERED PROFESSIONAL ENGINEER

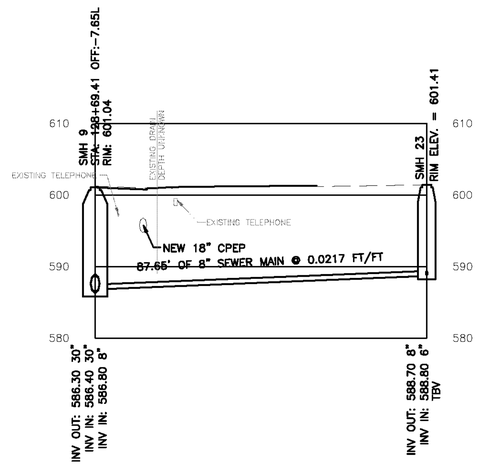
LUCK BROS. INC.

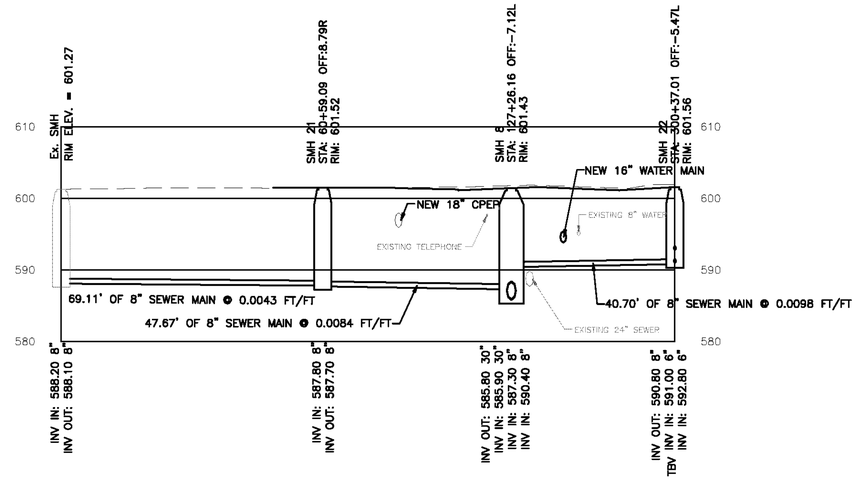
| | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-1(34) C/2 |
| FILE NAME: | SAN PROFILES |
| MANAGER | J. LUCK |
| DRAWN BY: | C. KEMPNEY |

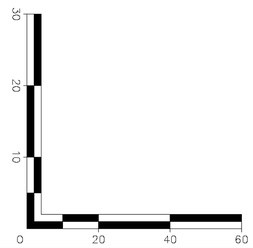
| NOTES / REVISIONS | |
|---|---|
| ISSUED: | 2/7/2012 |

**PROPOSED REDESIGN SANITARY SEWER PROFILES**

Sheet Title "revised"




**NOTES:**

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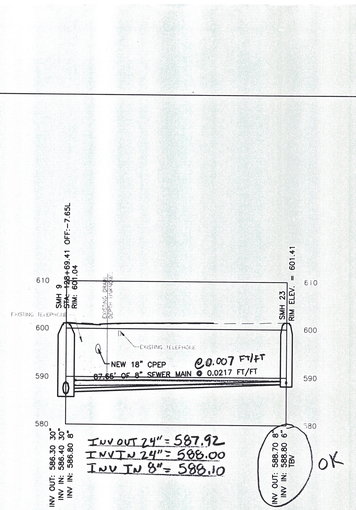
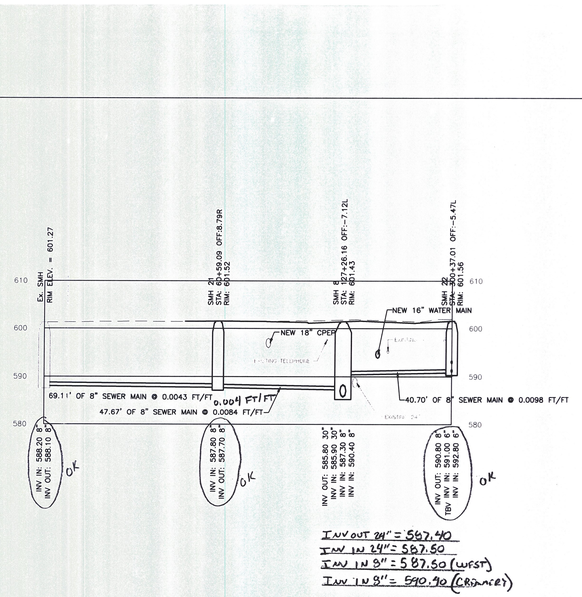
DUFRESNE GROUP
CONSULTING ENGINEERS
Dufresne Group is owned by Dufresne & Associates, PC

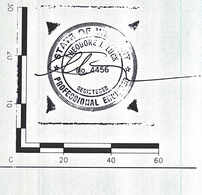
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026–1(34) C/2

FILE NAME: 717014–PROFILES
PROJECT LEADER: R.E. DUFRESNE
DESIGNED BY: B.L. BAKER
SANITARY SEWER PROFILES

PLOT DATE: Feb. 18, 11
DRAWN BY: B.L. BAKER
CHECKED BY: C.L. WHITEHEAD
SHEET 143 OF 339




**NOTES:**

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LUCK BROS. INC.

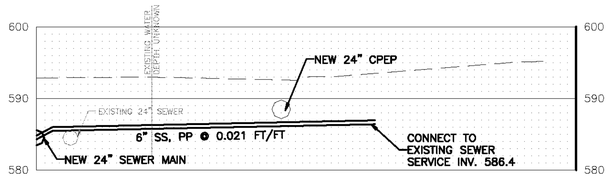
| | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-1(34) C/2 |
| FILE NAME: | SAN PROFILES |
| MANAGER | J. LUCK |
| DRAWN BY: | C. KEMPNEY |

NOTES / REVISIONS

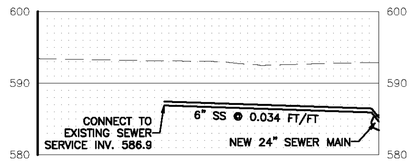
ISSUED: 2/7/2012

**PROPOSED REDESIGN SANITARY SEWER PROFILES**

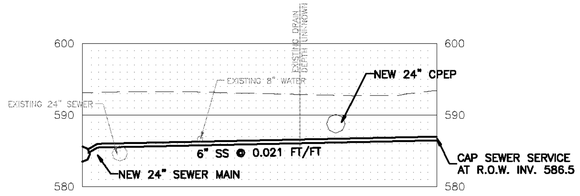
Sheet 193 revised



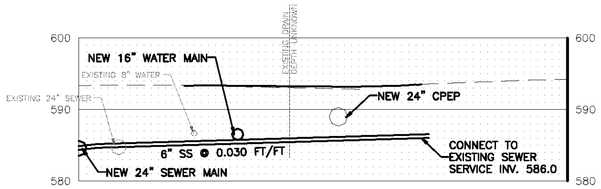

111+97
386 NORTH MAIN STREET



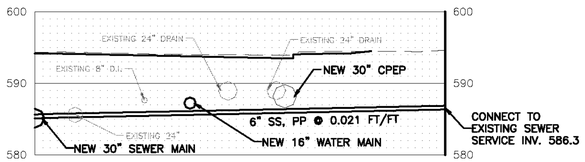

112+06
395 NORTH MAIN STREET



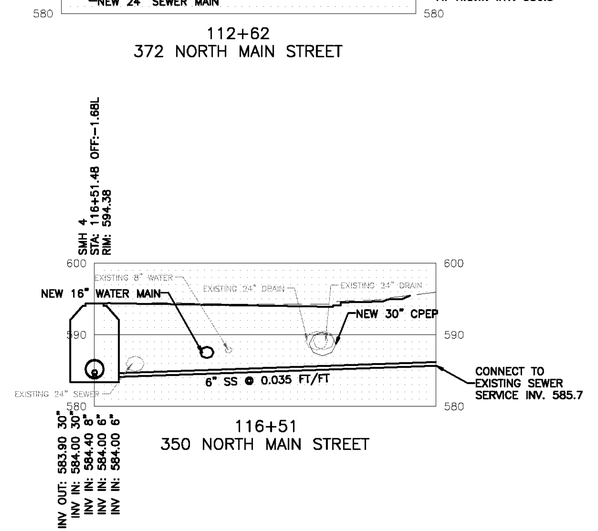

112+62
372 NORTH MAIN STREET



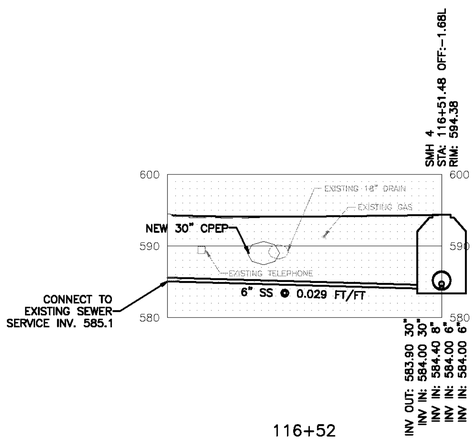

113+05
378 NORTH MAIN STREET



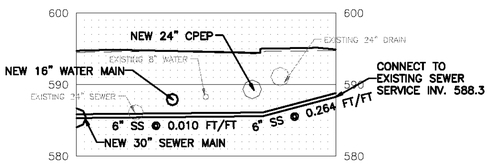

115+63
362 NORTH MAIN STREET



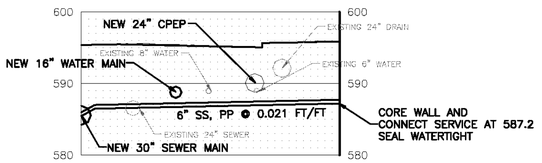

116+51
350 NORTH MAIN STREET




116+52
377 NORTH MAIN STREET




117+97
338–342 NORTH MAIN STREET




119+88
328–330–332 NORTH MAIN STREET

GRAPHIC SCALE

1 0 5 10 20 40

( IN FEET )

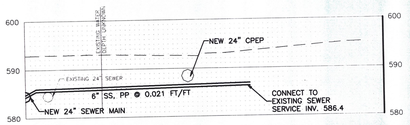
DUFRESNE GROUP
CONSULTING ENGINEERS

Dufresne Group is owned by Dufresne & Associates, PC

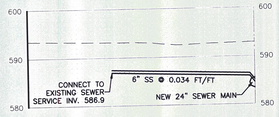
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026–1(34) C/2

FILE NAME: 717014–SERVICES
PROJECT LEADER: R.E. DUFRESNE
DESIGNED BY: B.L. BAKER
SEWER SERVICE PROFILES

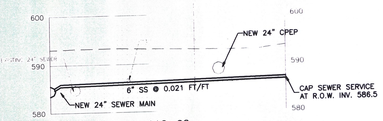
PLOT DATE: Feb. 18, 11
DRAWN BY: B.L. BAKER
CHECKED BY: C.L. WHITFIELD
SHEET 144 OF 339



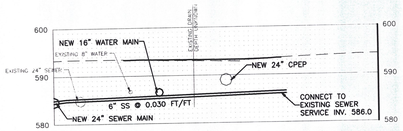

111+97
386 NORTH MAIN STREET



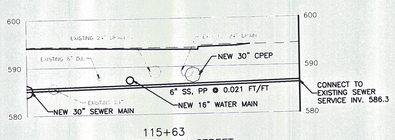

112+06
395 NORTH MAIN STREET



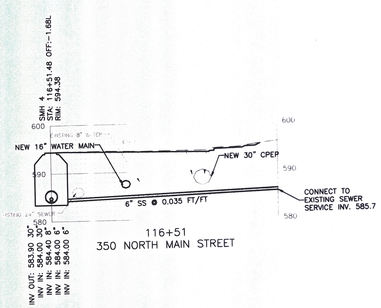

112+62
372 NORTH MAIN STREET



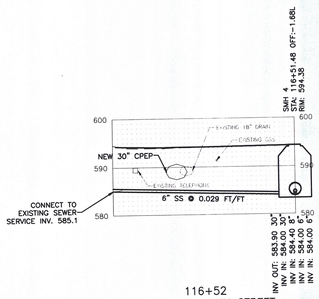

113+05
378 NORTH MAIN STREET



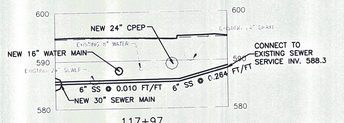

115+63
362 NORTH MAIN STREET



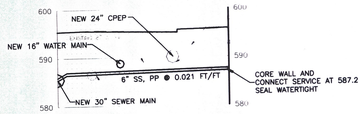

116+51
350 NORTH MAIN STREET




116+52
377 NORTH MAIN STREET




117+97
338–342 NORTH MAIN STREET




119+88
328–330–332 NORTH MAIN STREET

GRAPHIC SCALE

1 0 5 10 20 40

( IN FEET )

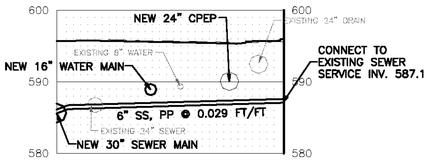
LUCK BROS. INC.

| | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-1(34) C/2 |
| FILE NAME: | SAN PROFILES |
| MANAGER | J. LUCK |
| DRAWN BY: | C. KEMPNEY |

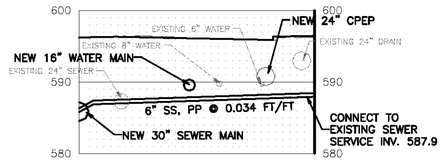
| NOTES / REVISIONS | |
|---|---|
| ISSUED: | 2/7/2012 |
| | |
| | |
| | |
| | |
| | |

PROPOSED REDESIGN SANITARY SEWER PROFILES

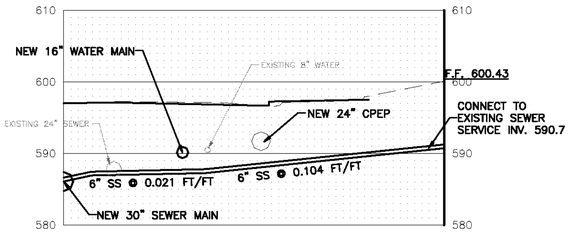
Sheet 14A (revised)



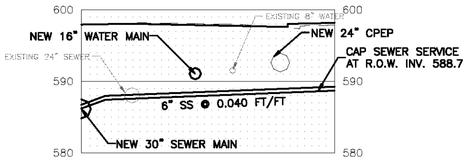

120+68
322 NORTH MAIN STREET



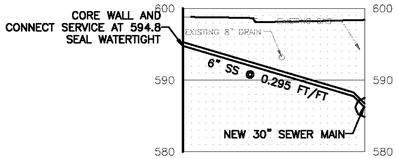

121+90
320 NORTH MAIN STREET



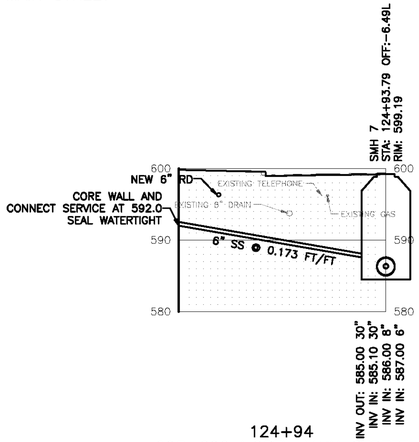

123+10
316 NORTH MAIN STREET



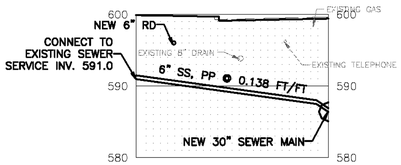

123+90
310 NORTH MAIN STREET



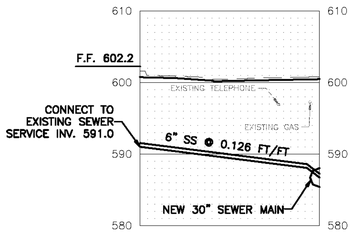

124+29
305 NORTH MAIN STREET



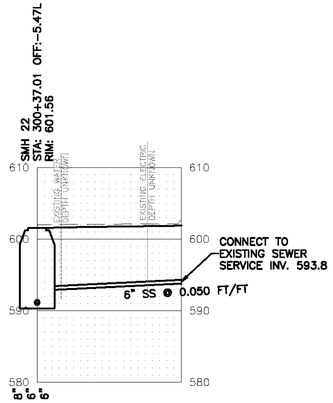

124+94
293–299 NORTH MAIN STREET



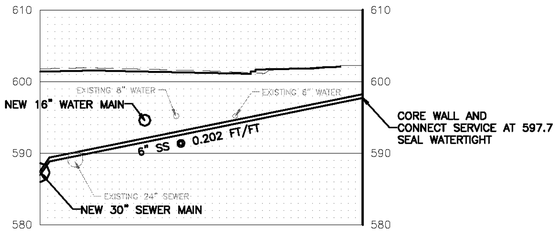

125+16
289–291 NORTH MAIN STREET




126+07
283 NORTH MAIN STREET




126+61
276 NORTH MAIN STREET




127+73
260–266 NORTH MAIN STREET

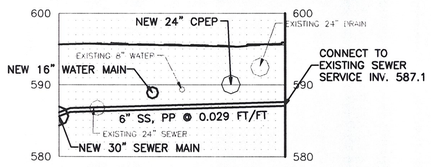
GRAPHIC SCALE
10 0 5 10 20 40
( IN FEET )

DUFRESNE GROUP
CONSULTING ENGINEERS
Dufresne Group is owned by Dufresne & Associates, PC

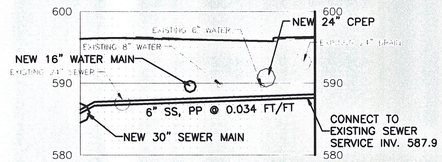
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026–1(34) C/2

FILE NAME: 717014–SERVICES
PROJECT LEADER: R.E. DUFRESNE
DESIGNED BY: B.L. BAKER
SEWER SERVICE PROFILES

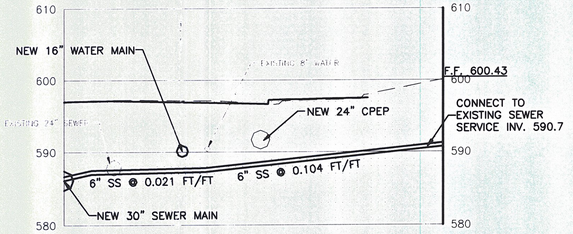
PLOT DATE: Feb. 18, 11
DRAWN BY: B.L. BAKER
CHECKED BY: C.L. WHITEHEAD
SHEET 145 OF 339



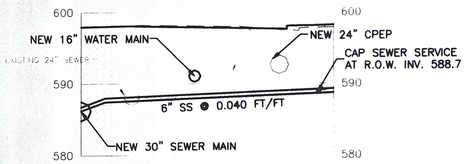

120+68
322 NORTH MAIN STREET



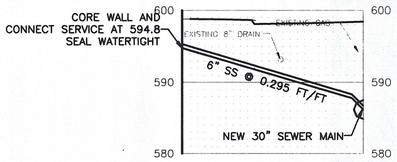

121+90
320 NORTH MAIN STREET



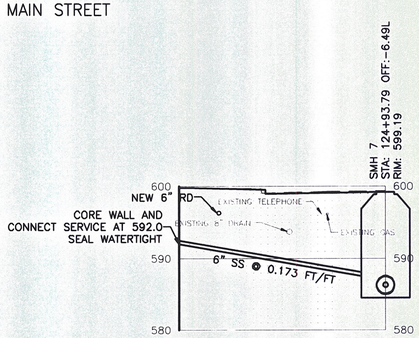

123+10
316 NORTH MAIN STREET



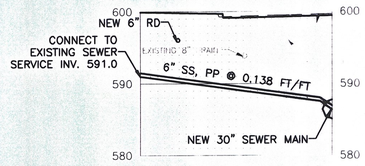

123+90
310 NORTH MAIN STREET



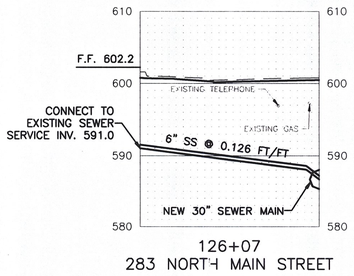

124+29
305 NORTH MAIN STREET



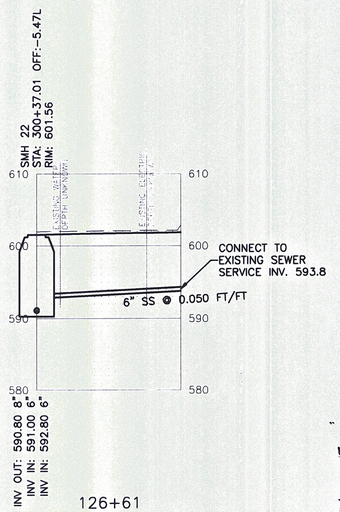

124+94
293–299 NORTH MAIN STREET



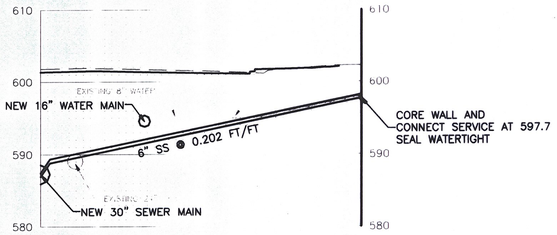

125+16
289–291 NORTH MAIN STREET



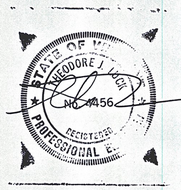

126+07
283 NORTH MAIN STREET




126+61
276 NORTH MAIN STREET




127+73
260–266 NORTH MAIN STREET




GRAPHIC SCALE

10 0 5 10 20 40

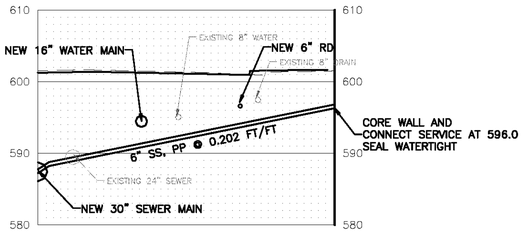
( IN FEET )

LUCK BROS. INC.

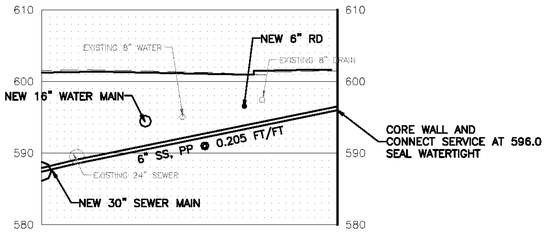
| | | |
|---|---|---|
| PROJECT NAME: | BARRE CITY | NOTES / REVISIONS |
| PROJECT NUMBER: | FEGC F 026-1(34) C/2 | ISSUED: 2/7/2012 |
| FILE NAME: | SAN PROFILES | |
| MANAGER | J. LUCK | |
| DRAWN BY: | C. KEMPNEY | |

PROPOSED REDESIGN SANITARY SEWER PROFILES

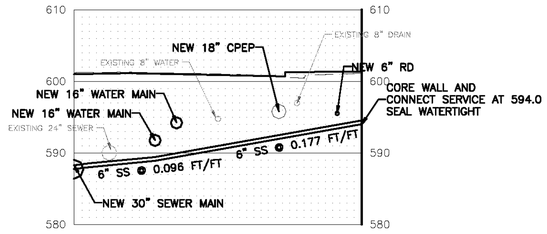
Sheet 145 "REVISED"



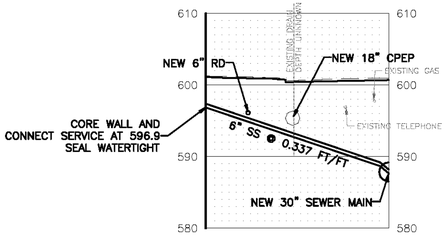

128+23
248 NORTH MAIN STREET



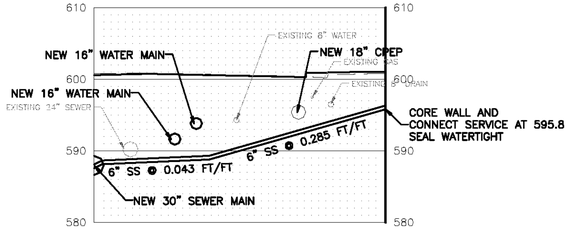

128+26
240 NORTH MAIN STREET



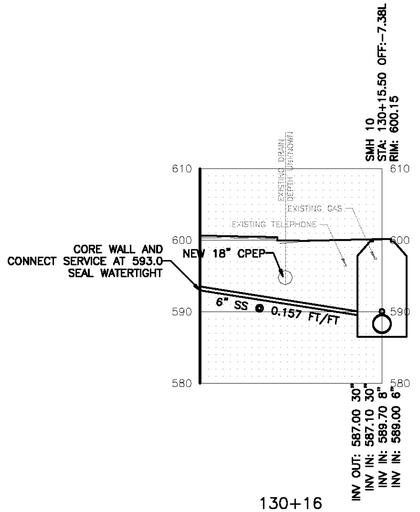

128+84
224–230 NORTH MAIN STREET



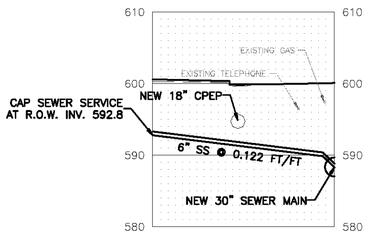

129+23
237–241 NORTH MAIN STREET



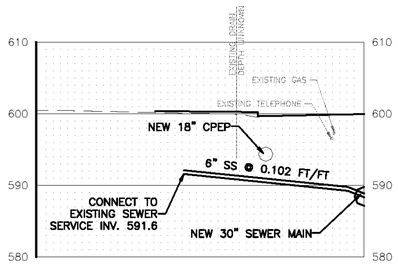

129+44
214 NORTH MAIN STREET



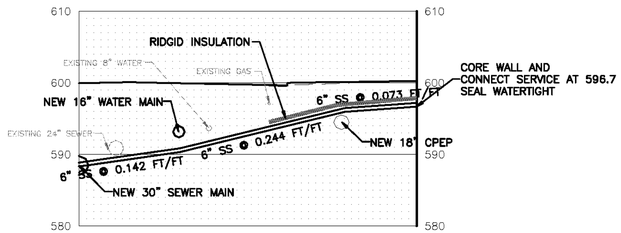

130+16
219 NORTH MAIN STREET




130+24
213 NORTH MAIN STREET




130+75
199–205 NORTH MAIN STREET




130+81
210 NORTH MAIN STREET

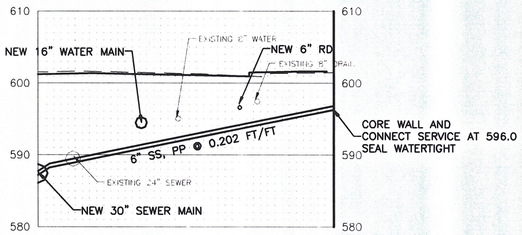
GRAPHIC SCALE
10 0 5 10 20 40
( IN FEET )

DUFRESNE GROUP
CONSULTING ENGINEERS
Dufresne Group is owned by Dufresne & Associates, PC

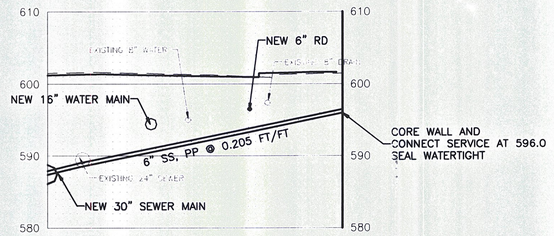
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026–1(34) C/2

FILE NAME: 717014–SERVICES
PROJECT LEADER: R.E. DUFRESNE
DESIGNED BY: B.L. BAKER
SEWER SERVICE PROFILES

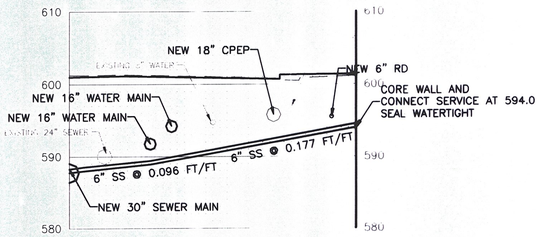
PLOT DATE: Feb. 18, 11
DRAWN BY: B.L. BAKER
CHECKED BY: C.L. WHITEHEAD
SHEET 146 OF 339



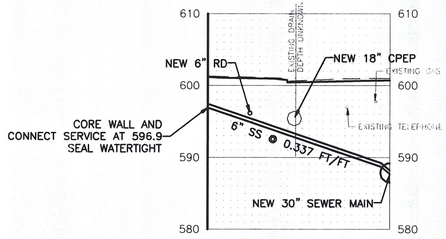

128+23
248 NORTH MAIN STREET



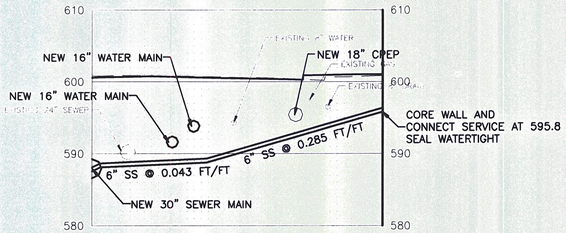

128+26
240 NORTH MAIN STREET



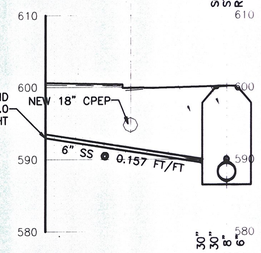

128+84
224–230 NORTH MAIN STREET



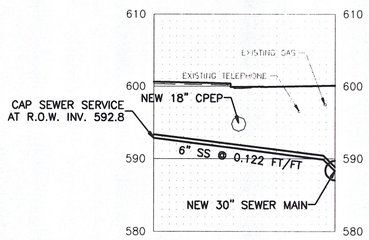

129+23
237–241 NORTH MAIN STREET



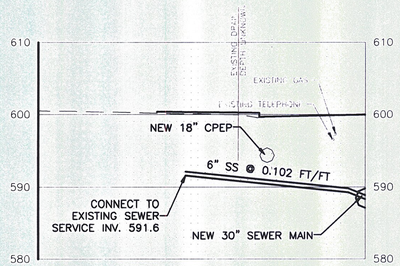

129+44
214 NORTH MAIN STREET



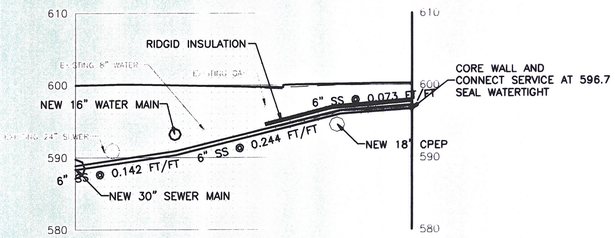

130+16
219 NORTH MAIN STREET



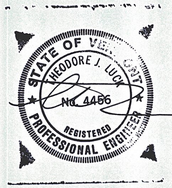

130+24
213 NORTH MAIN STREET




130+75
199–205 NORTH MAIN STREET




130+81
210 NORTH MAIN STREET




GRAPHIC SCALE

10 0 5 10 20

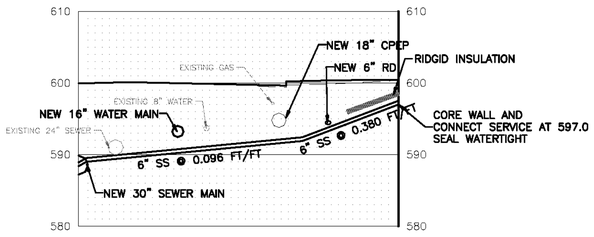
( IN FEET )

LUCK BROS. INC.

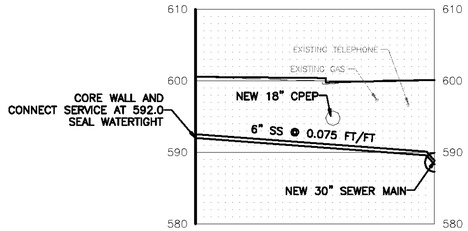
| | | |
|---|---|---|
| PROJECT NAME: | BARRE CITY | NOTES / REVISIONS |
| PROJECT NUMBER: | FEGC F 026-1(34) C/2 | ISSUED: 2/7/2012 |
| FILE NAME: | SAN PROFILES | |
| MANAGER | J. LUCK | |
| DRAWN BY: | C. KEMPNEY | |

PROPOSED REDESIGN SANITARY SEWER PROFILES

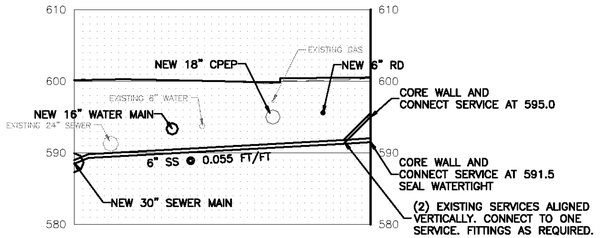
Sheet "16 revised"



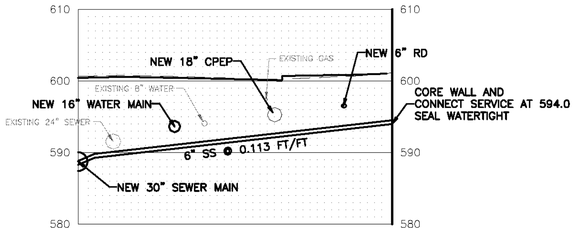

131+13
200 NORTH MAIN STREET



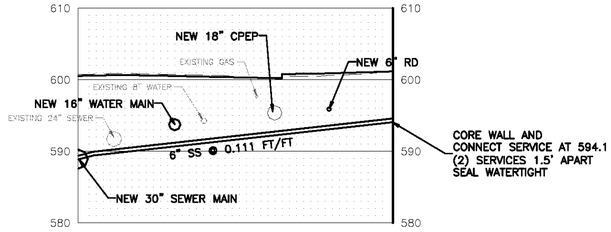

131+57
185–189 NORTH MAIN STREET



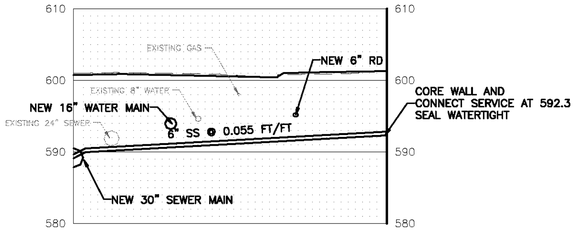

131+67
188–194 NORTH MAIN STREET



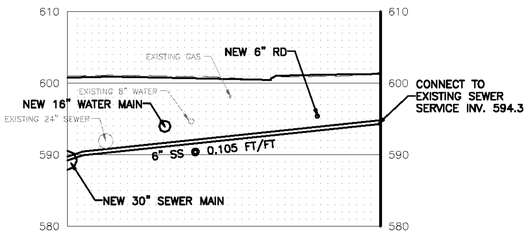

132+37
180–186 NORTH MAIN STREET



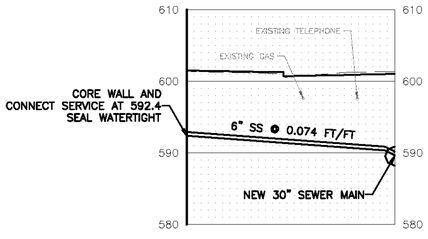

132+65
170–174 NORTH MAIN STREET



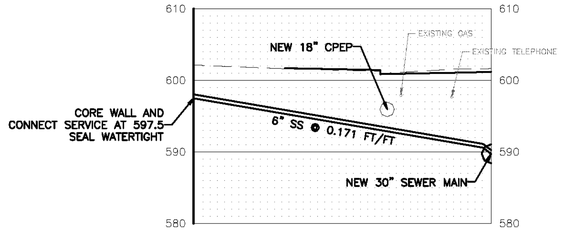

133+09
168 NORTH MAIN STREET




133+17
158–166 NORTH MAIN STREET




133+78
143–151 NORTH MAIN STREET




134+06
135 NORTH MAIN STREET

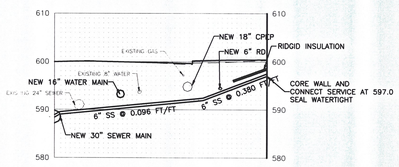
GRAPHIC SCALE

DUFRESNE GROUP
CONSULTING ENGINEERS
Dufresne Group is owned by Dufresne & Associates, PC

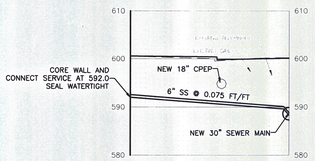
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026–1(34) C/2

FILE NAME: 717014–SERVICES
PROJECT LEADER: R.E. DUFRESNE
DESIGNED BY: B.L. BAKER
SEWER SERVICE PROFILES

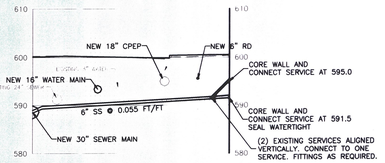
PLOT DATE: Feb. 18, 11
DRAWN BY: B.L. BAKER
CHECKED BY: C.L. WHITEHEAD
SHEET 147 OF 339



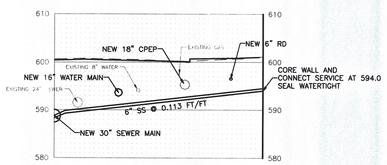

131+13
200 NORTH MAIN STREET



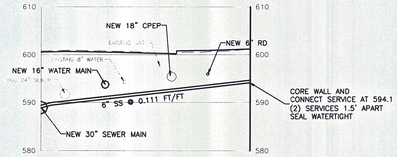

131+57
185–189 NORTH MAIN STREET



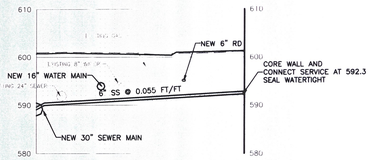

131+67
188–194 NORTH MAIN STREET



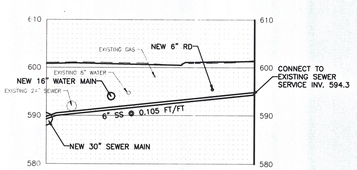

132+37
180–186 NORTH MAIN STREET




132+65
170–174 NORTH MAIN STREET




133+09
168 NORTH MAIN STREET

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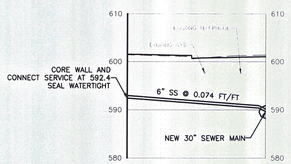
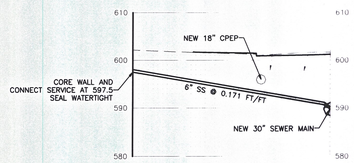
158–166 NORTH MAIN STREET




133+78
143–151 NORTH MAIN STREET




134+06
135 NORTH MAIN STREET

STATE OF VERMONT
THEODORE J. LUCK
No. 5156
REGISTERED
PROFESSIONAL ENGINEER

GRAPHIC SCALE
0 5 10 20
( IN FEET )

LUCK BROS. INC.

| | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-1(34) C/2 |
| FILE NAME: | SAN PROFILES |
| MANAGER | J. LUCK |
| DRAWN BY: | C. KEMPNEY |

| NOTES / REVISIONS | |
|---|---|
| ISSUED: | 2/7/2012 |
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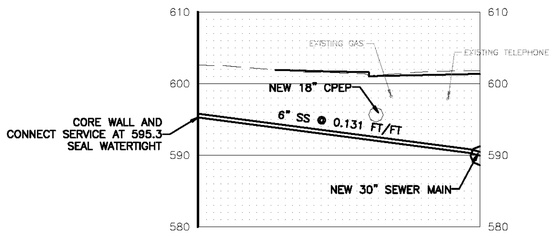
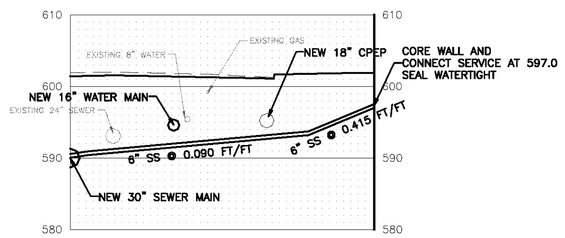
PROPOSED REDESIGN SANITARY SEWER PROFILES

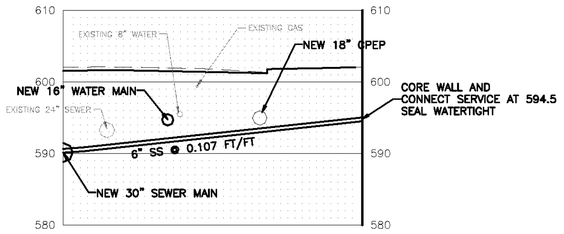
Sheet "#7 (Revised)"




134+47
123–131 NORTH MAIN STREET




134+54
136–140 NORTH MAIN STREET

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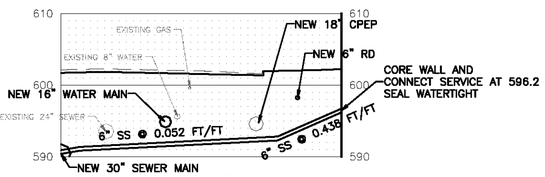
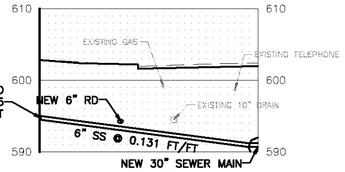
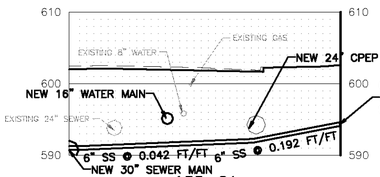
122–126 NORTH MAIN STREET



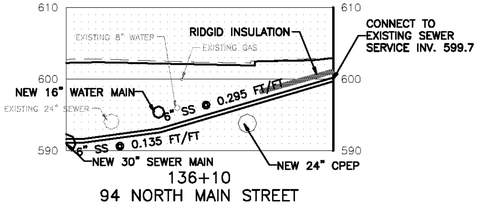

135+12
114–118 NORTH MAIN STREET



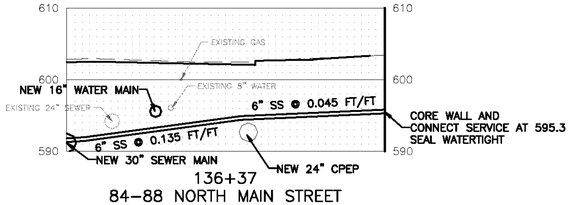

135+57
103–119 NORTH MAIN STREET



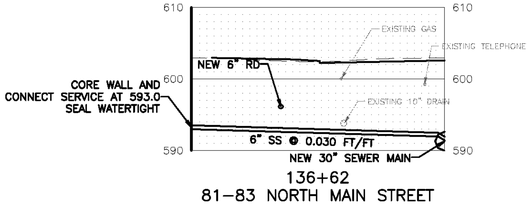

135+61
100 NORTH MAIN STREET




136+10
94 NORTH MAIN STREET




136+37
84–88 NORTH MAIN STREET




136+62
81–83 NORTH MAIN STREET

GRAPHIC SCALE

10 0 5 10 20 40

( IN FEET )

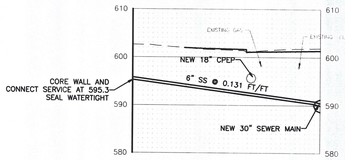
DUFRESNE GROUP
CONSULTING ENGINEERS

Dufresne Group is owned by Dufresne & Associates, PC

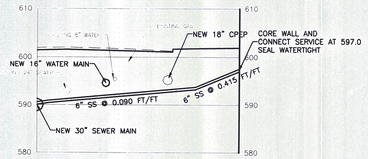
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026–1(34) C/2

FILE NAME: 717014–SERVICES
PROJECT LEADER: R.E. DUFRESNE
DESIGNED BY: B.L. BAKER
SEWER SERVICE PROFILES

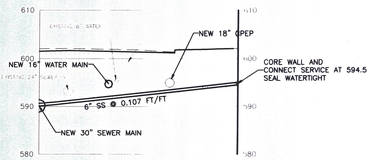
PLOT DATE: Feb. 18, 11
DRAWN BY: B.L. BAKER
CHECKED BY: C.L. WHITEHEAD
SHEET 148 OF 339



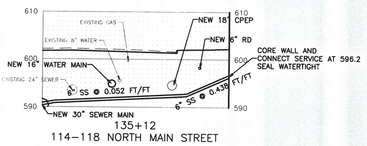

134+47
123–131 NORTH MAIN STREET



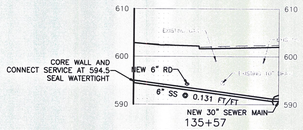

134+54
136–140 NORTH MAIN STREET



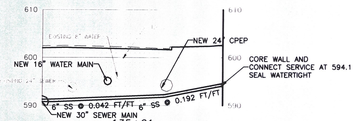

134+77
122–126 NORTH MAIN STREET



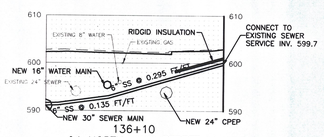

135+12
114–118 NORTH MAIN STREET



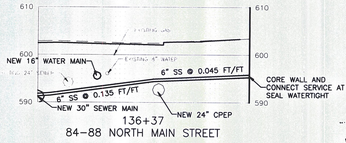

135+57
103–119 NORTH MAIN STREET



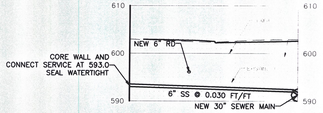

135+61
100 NORTH MAIN STREET




136+10
94 NORTH MAIN STREET




136+37
84–88 NORTH MAIN STREET




136+62
81–83 NORTH MAIN STREET

GRAPHIC SCALE

0 1 5 10 20 40

( IN FEET )

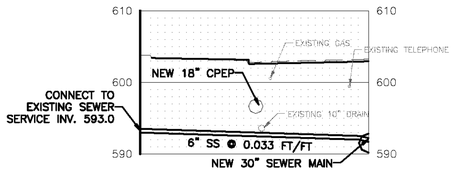
LUCK BROS. INC.

| | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-1(34) C/2 |
| FILE NAME: | SAN PROFILES |
| MANAGER | J. LUCK |
| DRAWN BY: | C. KEMPNEY |

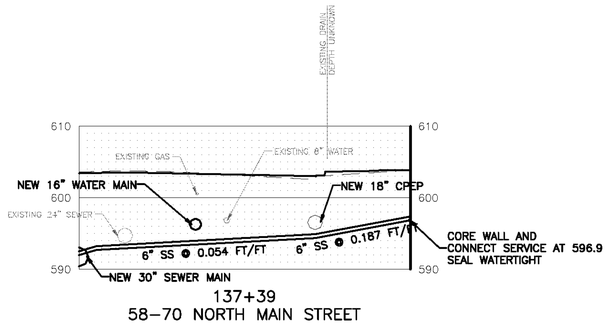
| NOTES / REVISIONS | |
|---|---|
| ISSUED: | 2/7/2012 |

**PROPOSED REDESIGN SANITARY SEWER PROFILES**

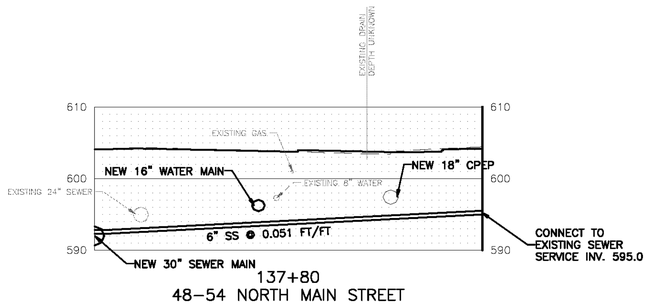
Sheet 14A revised 1"



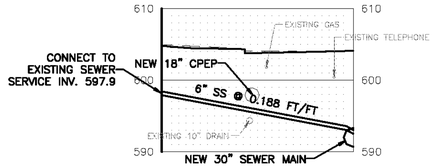

136+99
71–77 NORTH MAIN STREET



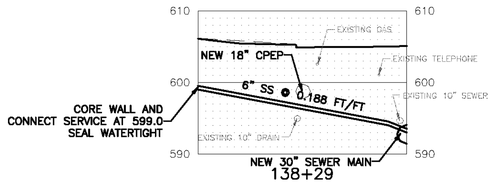

137+39
58–70 NORTH MAIN STREET



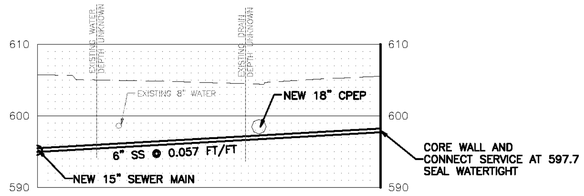

137+80
48–54 NORTH MAIN STREET




137+81
47–59b NORTH MAIN STREET




138+29
47–59a NORTH MAIN STREET




600+13
26–40 NORTH MAIN STREET

GRAPHIC SCALE

10 0 5 10 20 40

( IN FEET )

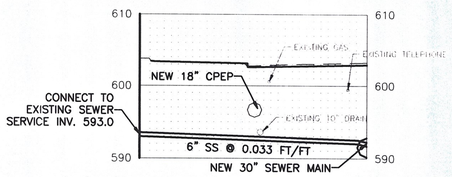
DUFRESNE GROUP
CONSULTING ENGINEERS

Dufresne Group is owned by Dufresne & Associates, PC

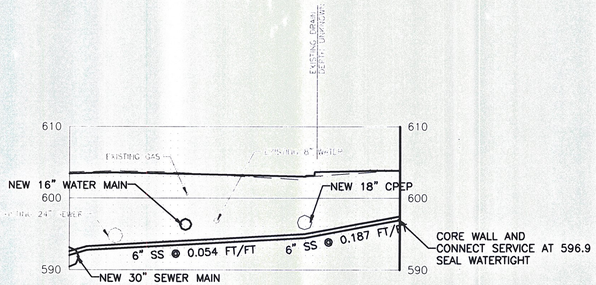
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026–1(34) C/2

FILE NAME: 717014–SERVICES
PROJECT LEADER: R.E. DUFRESNE
DESIGNED BY: B.L. BAKER
SEWER SERVICE PROFILES

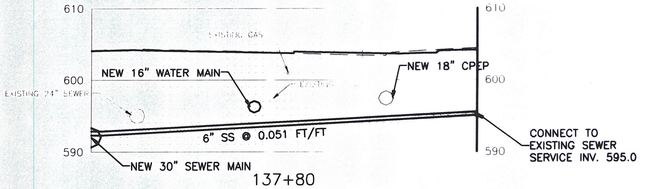
PLOT DATE: Feb. 18, 11
DRAWN BY: B.L. BAKER
CHECKED BY: C.L. WHITFHEAD
SHEET 149 OF 339



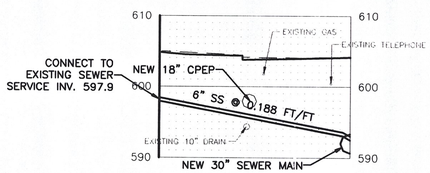

136+99
71–77 NORTH MAIN STREET



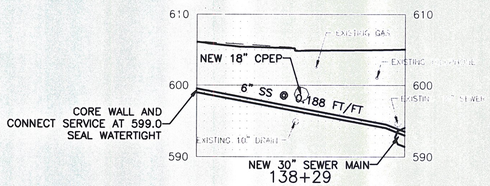

137+39
58–70 NORTH MAIN STREET



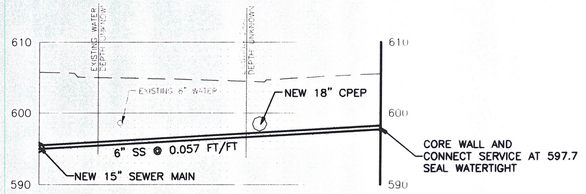

137+80
48–54 NORTH MAIN STREET




137+81
47–59b NORTH MAIN STREET




138+29
47–59a NORTH MAIN STREET




600+13
26–40 NORTH MAIN STREET

STATE OF VERMONT
THEODORE J. LUCK
No. 4456
REGISTERED
PROFESSIONAL ENGINEER

GRAPHIC SCALE

10 0 5 10 20

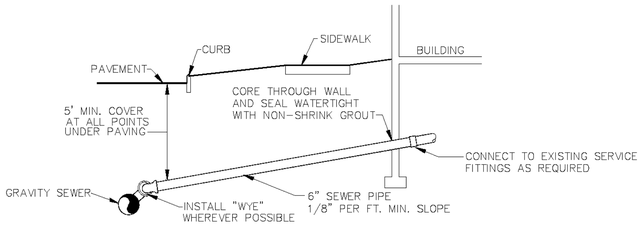
( IN FEET )

LUCK BROS. INC.

| | | |
|---|---|---|
| PROJECT NAME: | BARRE CITY | NOTES / REVISIONS |
| PROJECT NUMBER: | FEGC F 026-1(34) C/2 | ISSUED: 2/7/2012 |
| FILE NAME: | SAN PROFILES | |
| MANAGER | J. LUCK | |
| DRAWN BY: | C. KEMPNEY | |

PROPOSED REDESIGN SANITARY SEWER PROFILES

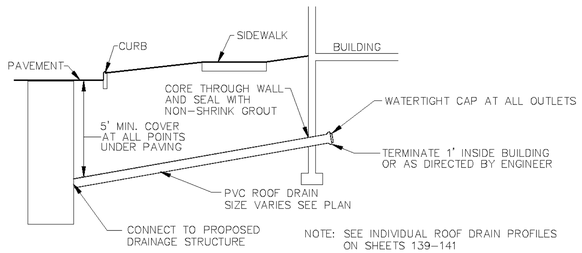
Sheet "A" revised"




NOTE: SEE INDIVIDUAL SEWER SERVICE PROFILES ON SHEETS 128-133

## TYPICAL SEWER SERVICE LATERALS

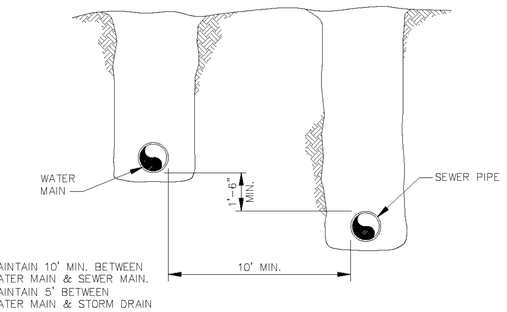
NOT TO SCALE




NOTE: SEE INDIVIDUAL ROOF DRAIN PROFILES ON SHEETS 139-141

## TYPICAL ROOF DRAIN SERVICE LATERALS

NOT TO SCALE



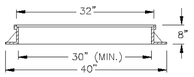

## SEWER-WATER PARALLEL INSTALLATION

NOT TO SCALE

COVER PLATE

MIN. WEIGHT = 150 LBS.

COVER SECTION

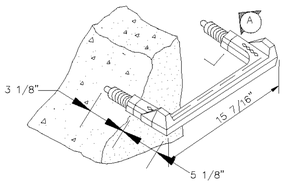


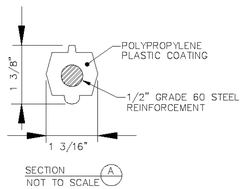

FRAME SECTION

MIN. WEIGHT = 250 LBS.

## MANHOLE FRAME AND COVER DETAIL

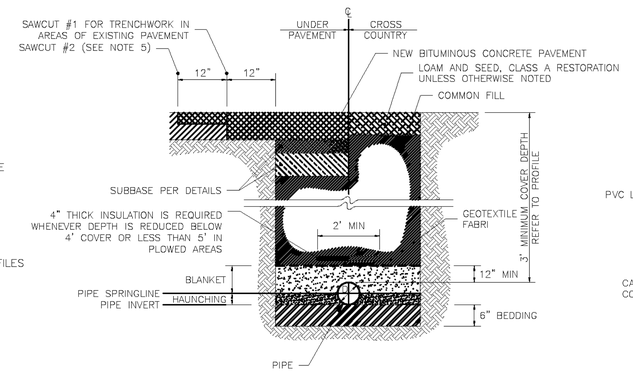
NOT TO SCALE




## MANHOLE STEP DETAIL

NOT TO SCALE




BEDDING - EXCAVATE BELOW PIPE AND REFILL. MATERIALS AND COMPACTION AS SPECIFIED.

HAUNCHING - FROM INVERT OF PIPE TO SPRINGLINE OF PIPE. HAND PLACE AND HAND TAMP TO REMOVE ALL VOIDS FROM UNDER PIPE. MATERIAL AND COMPACTION AS SPECIFIED.

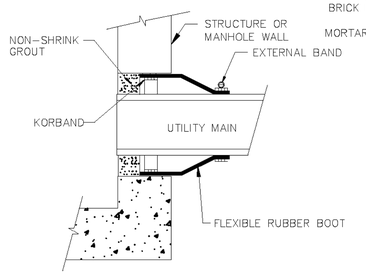
BLANKET - FROM SPRINGLINE TO 12" MIN. ABOVE PIPE. MATERIAL AND COMPACTION AS SPECIFIED.

## SANITARY SEWER MAIN TYPICAL TRENCH DETAIL

NOT TO SCALE

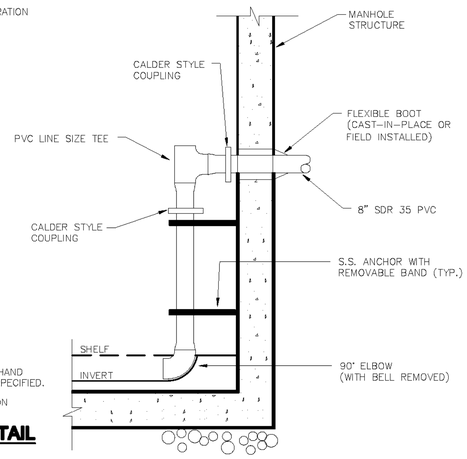
**NOTES:**

1. TYPICAL TRENCH DETAILS SHOWN HEREIN ARE BASED ON THE USE OF PVC OR HDPE PIPE.
2. REFER TO THE SPECIFICATIONS FOR COMPACTION AND PAY LIMITS. BLANKET, HAUNCHING, AND BEDDING, ARE TO BE CRUSHED STONE.
3. NORMALLY, EXCAVATED MATERIAL FROM THE TRENCH CAN BE USED AS COMMON FILL BACKFILL AND COMPACTED AS NECESSARY TO ACHIEVE COMPLIANCE WITH THE SPECIFICATIONS. IF IN THE OPINION OF THE ENGINEER, THE EXCAVATED MATERIAL WHEN REMOVED IS TOO WET TO BE USED AS BACKFILL TO ACHIEVE THE MINIMUM SPECIFIED COMPACTION, MATERIAL MEETING THE COMMON FILL SPECIFICATION WILL BE FURNISHED AND INSTALLED AT THE UNIT PRICE PROVIDED.
4. IF THE EXCAVATED MATERIAL BECOMES TOO WET DUE TO WEATHER CONDITIONS OR DUE TO IMPROPER HANDLING PROCEDURES AND CANNOT BE REUSED FOR BACKFILL, THE MATERIAL SHALL BE SUFFICIENTLY DRIED OR MIXED WITH DRY MATERIAL TO OBTAIN PROPER MOISTURE CONTENT AT NO ADDITIONAL CHARGE TO THE OWNER.
5. SAWCUT #2 FOR PERMANENT TRENCH PAVEMENT: CUT EXISTING PAVEMENT IN A STRAIGHT LINE TO A DEPTH EQUAL TO NEW WEARING COURSE PAVEMENT THICKNESS AND REMOVE EXISTING PAVEMENT. CLEAN SURFACES AND TACK COAT ALL EDGES OF EXISTING PAVEMENT.
6. TRENCH WIDTH SHALL BE SUFFICIENT TO ALLOW PIPE TO BE LAID AND JOINED PROPERLY AND FOR PLACEMENT AND COMPACTION OF BEDDING. TRENCH SUPPORT SHALL BE ADEQUATE TO PERMIT SAFE ACCESS BY INSPECTOR FOR COMPACTION SAMPLES.
7. WHERE PIPE IS INSTALLED IN GRAVEL SHOULDER OR IN GRAVELED ROAD, GRAVEL SUBBASE MATERIAL AND COMPACTION SHALL BE AS SPECIFIED.



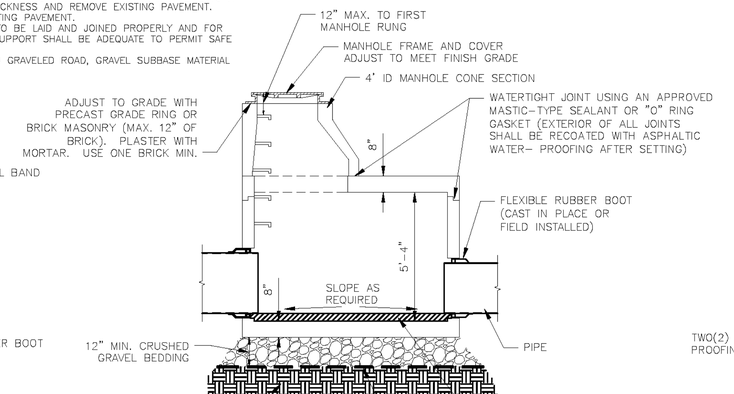

## PIPE TO STRUCTURE OR MANHOLE JOINT DETAIL

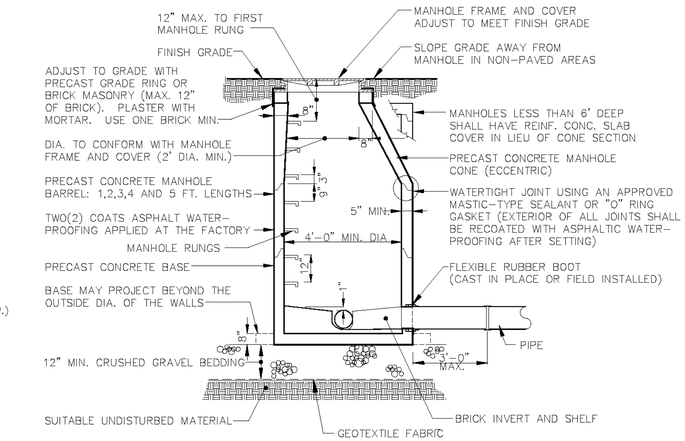
NOT TO SCALE




## MANHOLE DROP INLET DETAIL

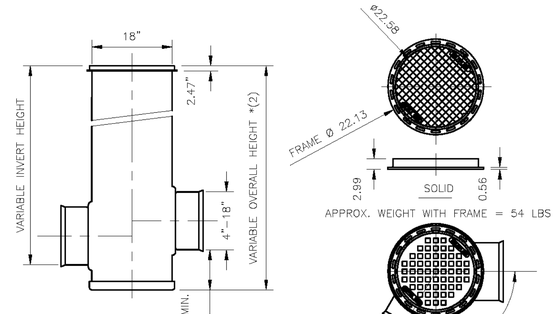
**NOT TO SCALE**



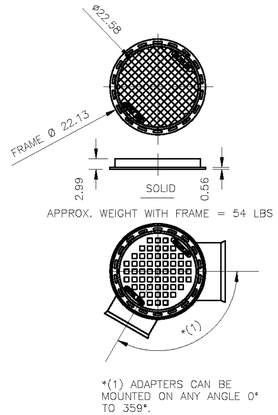




## PRECAST CONCRETE MANHOLE

NOT TO SCALE



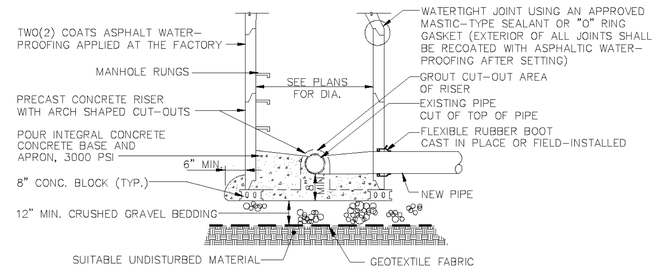

*(2)MAXIMUM RECOMMENDED OVERALL HEIGHT 10'




*(1) ADAPTERS CAN BE MOUNTED ON ANY ANGLE 0° TO 359°.

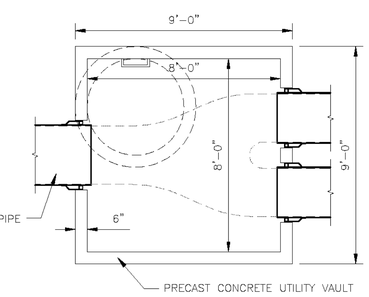
## CLEAN OUT DETAIL

NOT TO SCALE




## NEW MANHOLE ON EXISTING PIPE

NOT TO SCALE




## PRECAST CONCRETE VAULT

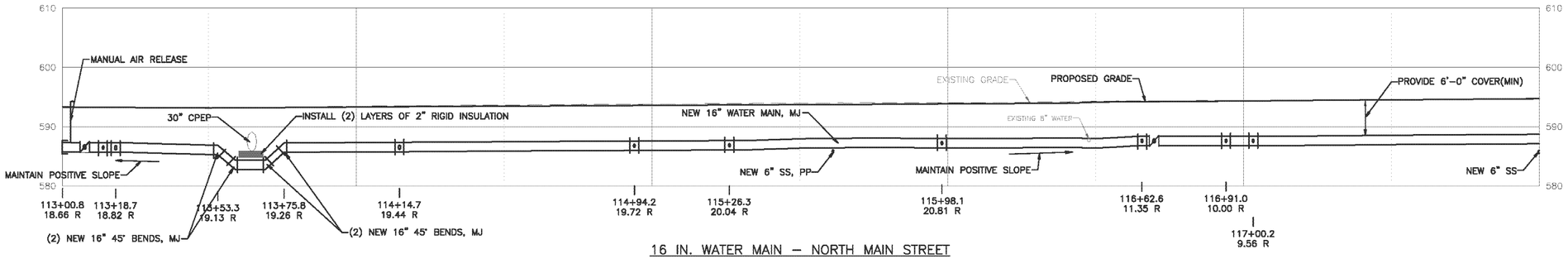
NOT TO SCALE

DUFRESNE GROUP
CONSULTING ENGINEERS
Dufresne Group is owned by Dufresne & Associates, PC

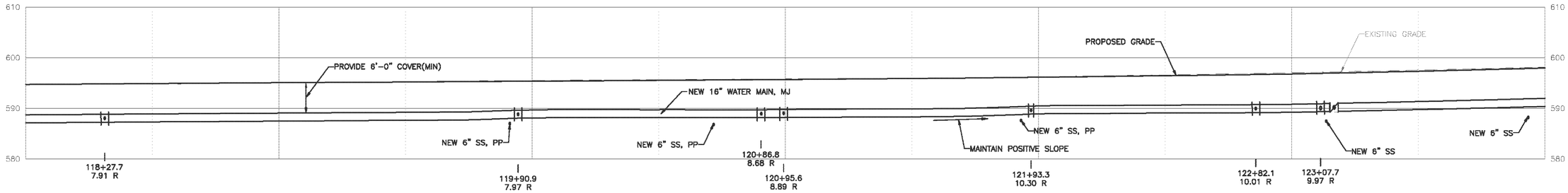
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 717014-DETAILS
PROJECT LEADER: R.E. DUFRESNE
DESIGNED BY: B.L. BAKER
SEWER DETAILS

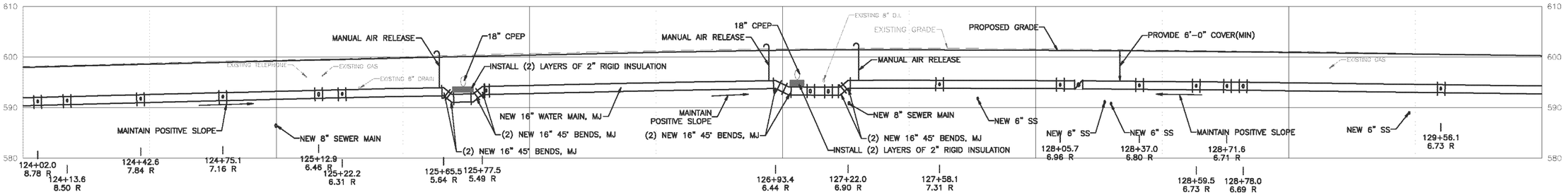
PLOT DATE: Feb. 18, 11
DRAWN BY: B.L. BAKER
CHECKED BY: C.L. WHITFHEAD
SHEET 150 OF 339



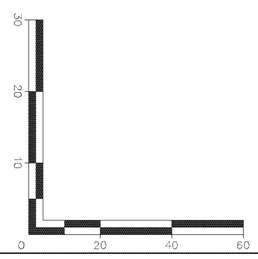

16 IN. WATER MAIN – NORTH MAIN STREET




16 IN. WATER MAIN – NORTH MAIN STREET




16 IN. WATER MAIN – NORTH MAIN STREET




**NOTES:**

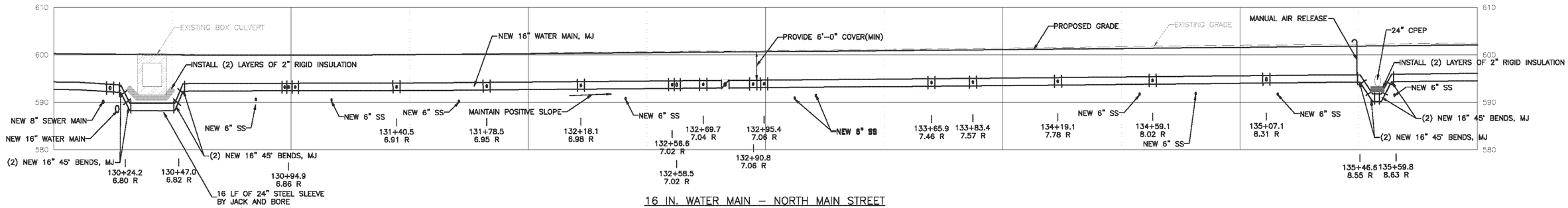
1. SEE SHEET 133 FOR GENERAL NOTES, LEGEND, AND ABBREVIATIONS.
2. STATIONING SHOWN HEREON IS BASED ON ROAD CENTERLINE AS PER VTRANS REQUIREMENTS AND MAY NOT REFLECT PROPER PIPE LENGTHS
3. SEE SHEETS 134–138 FOR PLAN INFORMATION.
4. SEE SHEETS 150 AND 154 FOR DETAILS

DUFRESNE GROUP
CONSULTING ENGINEERS
Dufresne Group is owned by Dufresne & Associates, PC

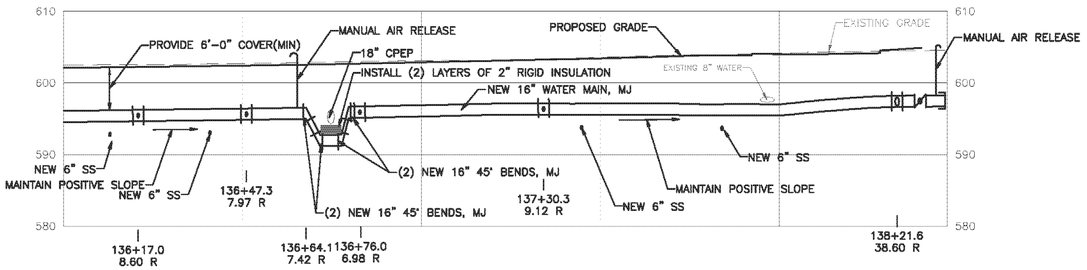
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 717014-PROFILES
PROJECT LEADER: R.E. DUFRESNE
DESIGNED BY: B.L. BAKER
WATER PROFILES

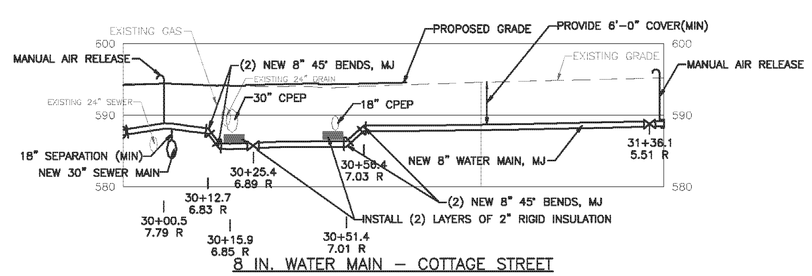
PLOT DATE: Feb. 18, 11
DRAWN BY: B.L. BAKER
CHECKED BY: C.L. WHITEHEAD
SHEET 151 OF 339



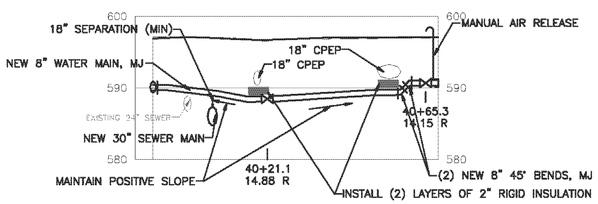

16 IN. WATER MAIN – NORTH MAIN STREET



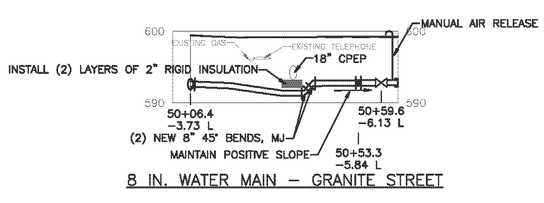

16 IN. WATER MAIN – NORTH MAIN STREET



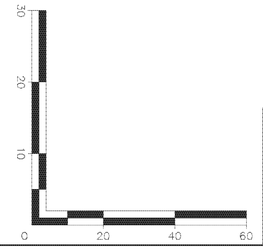

8 IN. WATER MAIN – COTTAGE STREET




8 IN. WATER MAIN – SOUTH SEMINARY STREET




8 IN. WATER MAIN – GRANITE STREET




**NOTES:**

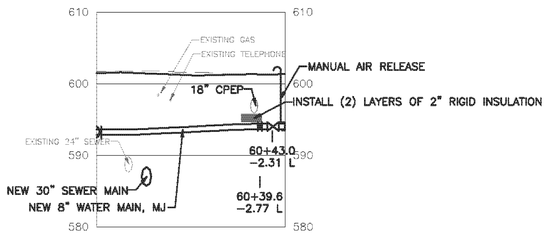
1. SEE SHEET 133 FOR GENERAL NOTES, LEGEND, AND ABBREVIATIONS.
2. STATIONING SHOWN HEREON IS BASED ON ROAD CENTERLINE AS PER VTRANS REQUIREMENTS AND MAY NOT REFLECT PROPER PIPE LENGTHS
3. SEE SHEETS 134–138 FOR PLAN INFORMATION.
4. SEE SHEETS 150 AND 154 FOR DETAILS

DUFRESNE GROUP
CONSULTING ENGINEERS
Dufresne Group is owned by Dufresne & Associates, PC

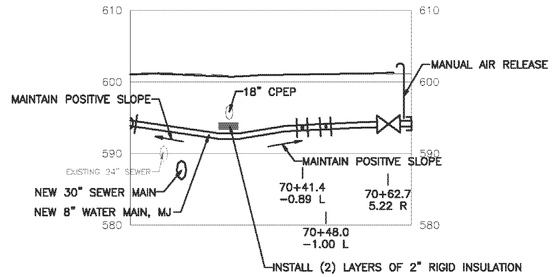
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 717014-PROFILES
PROJECT LEADER: R.E. DUFRESNE
DESIGNED BY: B.L. BAKER
WATER PROFILES

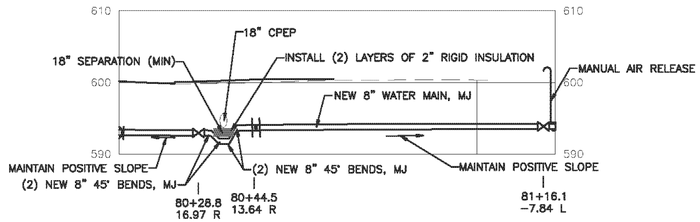
PLOT DATE: Feb. 18, 11
DRAWN BY: B.L. BAKER
CHECKED BY: C.L. WHITEHEAD
SHEET 152 OF 339



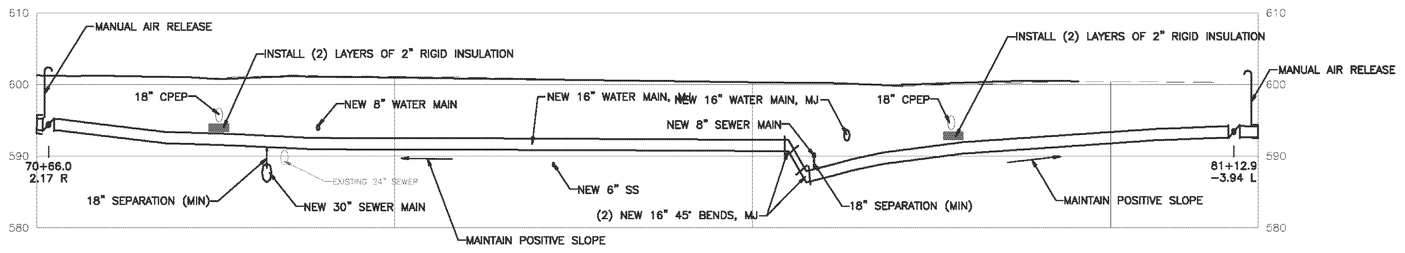

8 IN. WATER MAIN – WEST STREET



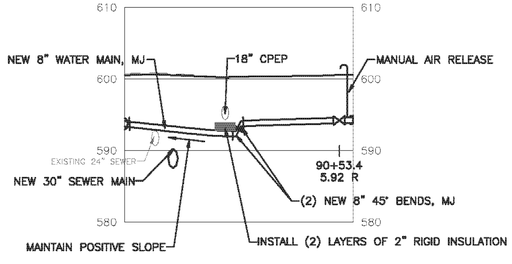

16 IN. WATER MAIN – MERCHANT STREET



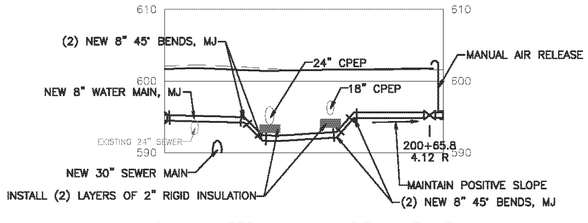

8 IN. WATER MAIN – DEPOT SQUARE



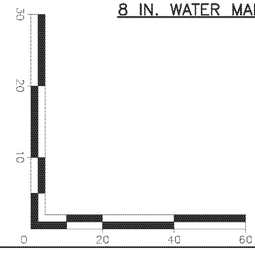

16 IN. HIGH PRESSURE WATER MAIN




8 IN. WATER MAIN –PEARL STREET




8 IN. WATER MAIN – KEITH AVENUE




NOTES:

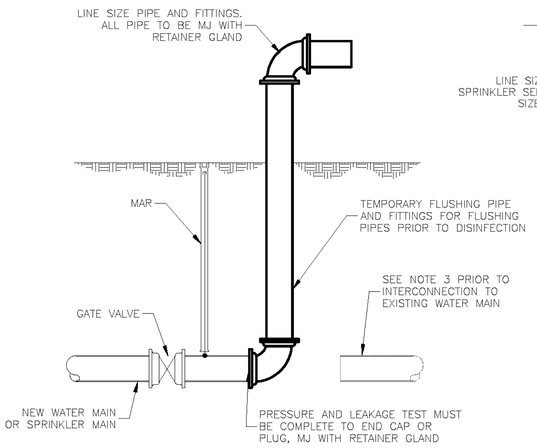
1. SEE SHEET 133 FOR GENERAL NOTES, LEGEND, AND ABBREVIATIONS.
2. STATIONING SHOWN HEREON IS BASED ON ROAD CENTERLINE AS PER VTRANS REQUIREMENTS AND MAY NOT REFLECT PROPER PIPE LENGTHS
3. SEE SHEETS 134–138 FOR PLAN INFORMATION.
4. SEE SHEETS 150 AND 154 FOR DETAILS.

DUFRESNE GROUP
CONSULTING ENGINEERS
Dufresne Group is owned by Dufresne & Associates, PC

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026–1(34) C/2

FILE NAME: 717014–PROFILES
PROJECT LEADER: R.E. DUFRESNE
DESIGNED BY: B.L. BAKER
WATER PROFILES

PLOT DATE: Feb. 18, 11
DRAWN BY: B.L. BAKER
CHECKED BY: C.L. WHITEHEAD
SHEET 153 OF 339

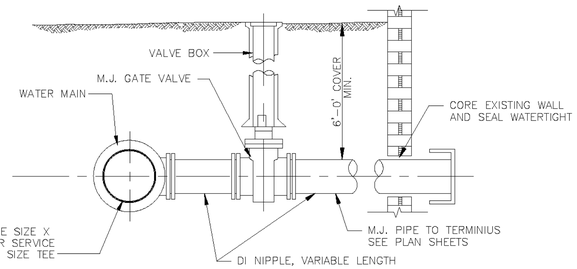



## TEMPORARY FLUSHING CONNECTION

SCALE: NOT TO SCALE

**NOTES:**

1. MINIMUM FLUSHING VELOCITY IS 3 FEET PER SECOND.
2. CONTRACTOR TO INSURE ALL FLUSHING WATER IS CONTROLLED IN ACCORDANCE WITH CONSTRUCTION GENERAL PERMIT AND DECHLORINATED PRIOR TO DISCHARGE.
3. CONTRACTOR TO SWAB CHLORNATE FITTINGS AND CONNECTORS NOT INCLUDED IN INITIAL DISINFECTION PROCEDURE IF CONNECTING TO AN EXISTING WATER MAIN.

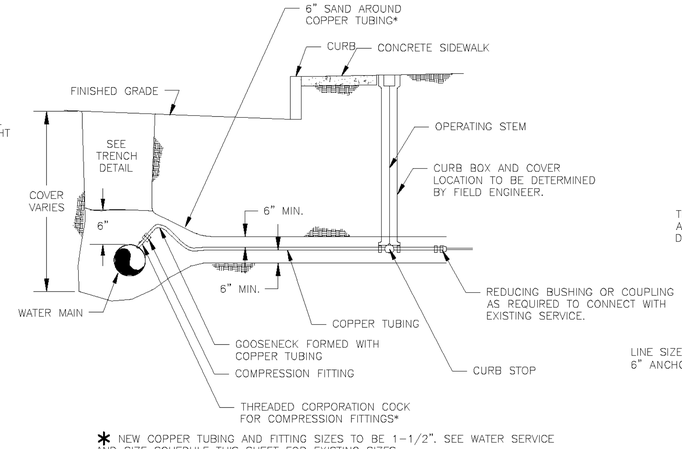



NOTES:

1. ALL SPRINKLERS TO BE 6" AND VALVES LOCATED AT THE CURB LINE.
2. ADDITIONAL BENDS OR FITTINGS MAY BE REQUIRED, SEE PLAN SHEETS.
3. ALL SPRINKLER CONNECTION MUST HAVE SINGLE CHECK VALVE INSTALLED AT THE CONNECTION TO THE INTERIOR PLUMBING.

## SPRINKLER SERVICE DETAIL

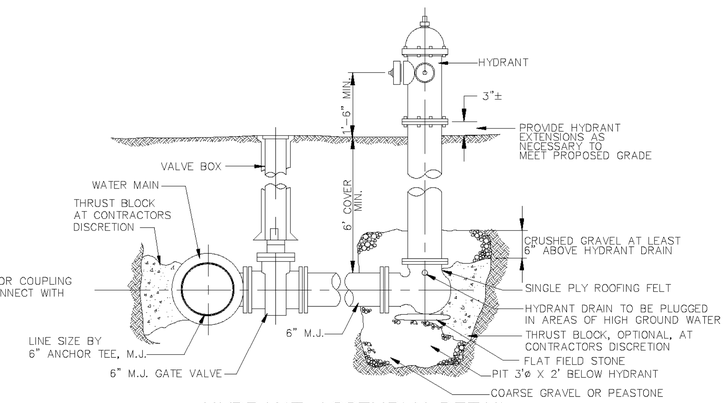
NOT TO SCALE




* NEW COPPER TUBING AND FITTING SIZES TO BE 1-1/2". SEE WATER SERVICE AND SIZE SCHEDULE THIS SHEET FOR EXISTING SIZES.

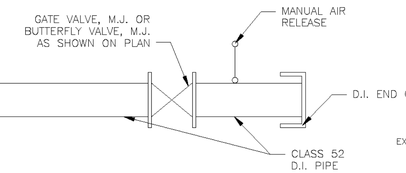
## TYPICAL WATER SERVICE CONNECTION DETAIL

NOT TO SCALE




## HYDRANT ASSEMBLY DETAIL

NOT TO SCALE

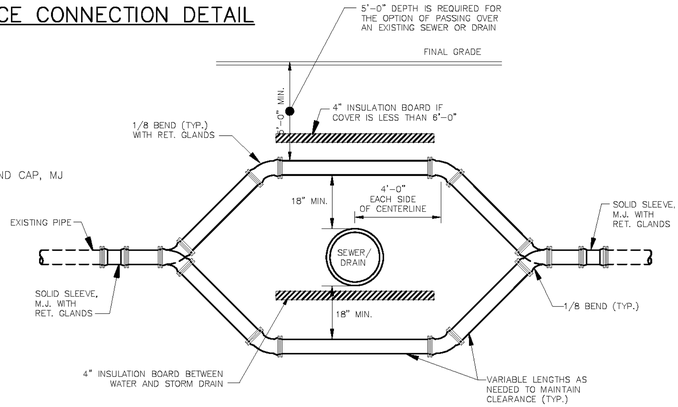



NOTES:

1. SEE PLANS FOR LINE SIZES AND VALVE LOCATIONS.
2. ADDITIONAL BENDS OR FITTINGS MAY BE REQUIRED, SEE PLAN SHEETS.
3. SEE MANUAL/CHLORINE DETAIL. THIS SHEET

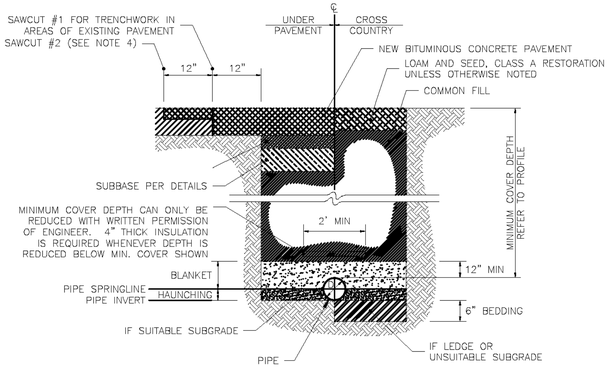
## FUTURE CONNECTION DETAIL

NOT TO SCALE




## SECTION-WATER MAIN RELOCATION DETAIL

NOT TO SCALE




BEDDING – EXCAVATE BELOW PIPE AND REFILL ONLY WHEN SPECIFICALLY ORDERED. MATERIALS AND COMPACTION AS SPECIFIED.

HAUNCHING – FROM INVERT OF PIPE TO SPRINGLINE OF PIPE. HAND PLACE AND HAND TAMP TO REMOVE ALL VOIDS FROM UNDER PIPE. MATERIAL AND COMPACTION AS SPECIFIED.

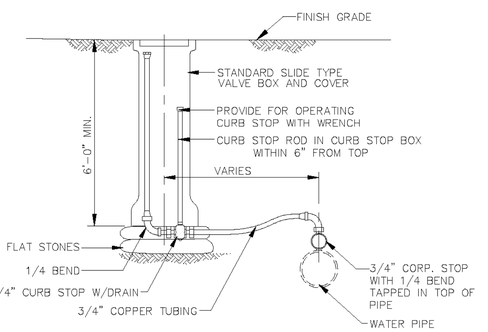
BLANKET – FROM SPRINGLINE TO 12" MIN. ABOVE PIPE. MATERIAL AND COMPACTION AS SPECIFIED.

## WATER MAIN TYPICAL TRENCH DETAIL

NOT TO SCALE

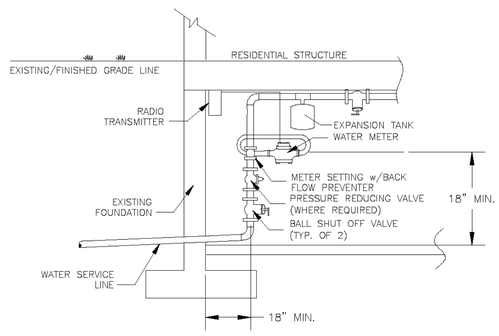
**NOTES:**

1. REFER TO THE SPECIFICATIONS FOR COMPACTION, PAY LIMITS, AND SPECIALTY MATERIALS FOR BLANKET, BEDDING, AND GRAVELS.
2. NORMALLY, EXCAVATED MATERIAL FROM THE TRENCH CAN BE USED AS COMMON FILL BACKFILL AND COMPACTED AS NECESSARY TO ACHIEVE COMPLIANCE WITH THE SPECIFICATIONS. IF IN THE OPINION OF THE ENGINEER, THE EXCAVATED MATERIAL WHEN REMOVED IS TOO WET TO BE USED AS BACKFILL TO ACHIEVE THE MINIMUM SPECIFIED COMPACTION, MATERIAL MEETING THE COMMON FILL SPECIFICATION WILL BE FURNISHED AND INSTALLED AT THE UNIT PRICE PROVIDED.
3. IF THE EXCAVATED MATERIAL BECOMES TOO WET DUE TO WEATHER CONDITIONS OR DUE TO IMPROPER HANDLING PROCEDURES AND CANNOT BE REUSED FOR BACKFILL, THE MATERIAL SHALL BE SUFFICIENTLY DRIED OR MIXED WITH DRY MATERIAL TO OBTAIN PROPER MOISTURE CONTENT AT NO CHARGE TO THE OWNER.
4. SAWCUT #2 FOR PERMANENT TRENCH PAVEMENT: CUT EXISTING PAVEMENT IN A STRAIGHT LINE TO A DEPTH EQUAL TO NEW WEARING COURSE PAVEMENT THICKNESS AND REMOVE EXISTING PAVEMENT. CLEAN SURFACES AND TACK COAT ALL EDGES OF EXISTING PAVEMENT.
5. TRENCH WIDTH SHALL BE SUFFICIENT TO ALLOW PIPE TO BE LAID AND JOINED PROPERLY AND FOR PLACEMENT AND COMPACTION OF BEDDING. TRENCH SUPPORT SHALL BE ADEQUATE TO PERMIT SAFE ACCESS BY INSPECTOR FOR COMPACTION SAMPLES.
6. WHERE PIPE IS INSTALLED IN GRAVEL SHOULDER OR IN GRAVELED ROAD, GRAVEL SUBBASE MATERIAL AND COMPACTION SHALL BE AS SPECIFIED.




## TYPICAL INSTALLATION-TRAVEL WAY FOR MANUAL AIR RELEASE OR CHLORINATION INJECTION

NOT TO SCALE




## WATER METER DETAIL

NOT TO SCALE

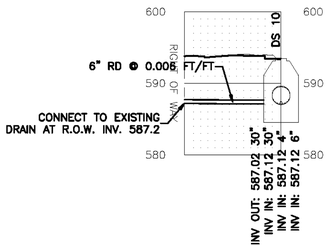
| WATER SERVICE AND METER SIZES | | |
|---|---|---|
| BUILDING NO. | SERVICE SIZE | METER SIZE |
| 14–22 | 1" | 3/4" |
| 48–54 | 3/4" | 5/8" |
| 71–77 | 3/4" | 5/8" |
| 81–83 | 3/4" | 5/8" |
| 103–119 | 1 1/2" | 1" |
| 122–126 | 1" | 3/4" |
| 135 | 3/4 | 5/8" |
| 143–151 | 2" | 1" |
| 158–166 | 3/4" | 5/8" |
| 168 | 3/4" | 5/8" |
| 170–174 | 1" | 3/4" |
| 180–186 | 1" | 3/4" |
| 185–189 | 1 1/2" | 1" |
| 188–194 | 1 1/2" | 1" |
| 199–205 | 3/4" | 5/8" |
| 200 | 3/4" | 5/8" |
| 210 | 1" | 3/4" |
| 213–219 | 3/4" | 5/8" |
| 214 | 3/4" | 5/8" |
| 224–230 | 1" | 3/4" |
| 237–241 | 3/4" | 5/8" |
| 240 | 1" | 3/4" |
| 248 | 1" | 3/4" |
| 260–266 | 1" | 3/4" |
| 289–291 | 3/4" | 5/8" |
| 293–297 | 1" | 3/4" |
| 301–309 | 1" | 3/4" |
| 302–310 | 3/4" | 5/8" |
| 315 | 3/4" | 5/8" |
| 316 | 3/4" | 5/8" |
| 320 | 1" | 3/4" |
| 322 | 1 1/2" | 1" |
| 328–332 | 1 1/2" | 1" |
| 338–342 | 1 1/2" | 1" |
| 350 | 1" | 3/4" |
| 362 | 2" | 1" |
| 372–378 | 3/4" | 5/8" |

DUFRESNE GROUP
CONSULTING ENGINEERS
Dufresne Group is owned by Dufresne & Associates, PC

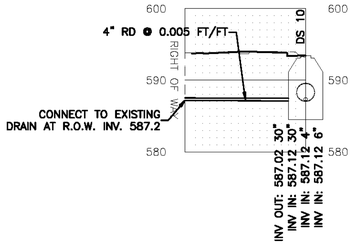
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 717014-DETAILS
PROJECT LEADER: R.E. DUFRESNE
DESIGNED BY: B.L. BAKER
WATER DETAILS

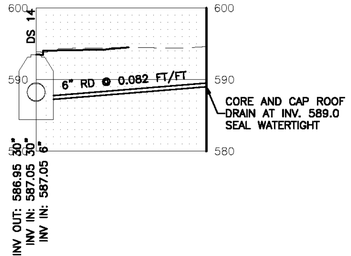
PLOT DATE: Mar. 22, 11
DRAWN BY: B.L. BAKER
CHECKED BY: C.L. WHITEHEAD
SHEET 154 OF 339



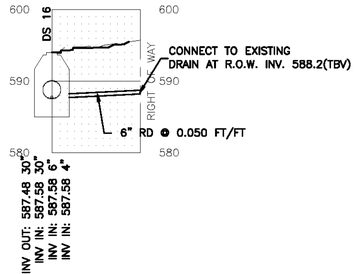

114+80
379a NORTH MAIN STREET



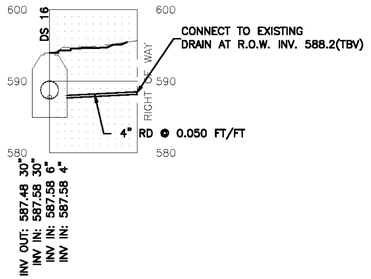

114+80
379b NORTH MAIN STREET



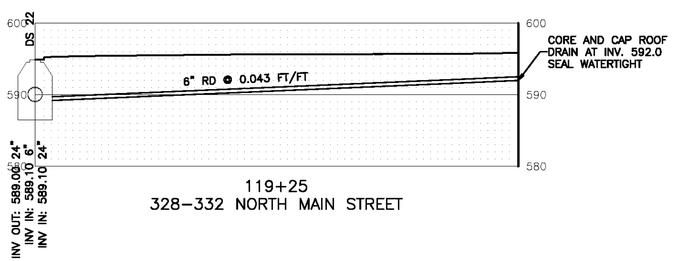

115+67
362 NORTH MAIN STREET



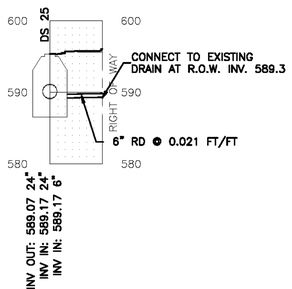

116+80
360 NORTH MAIN STREET




116+80
350 NORTH MAIN STREET



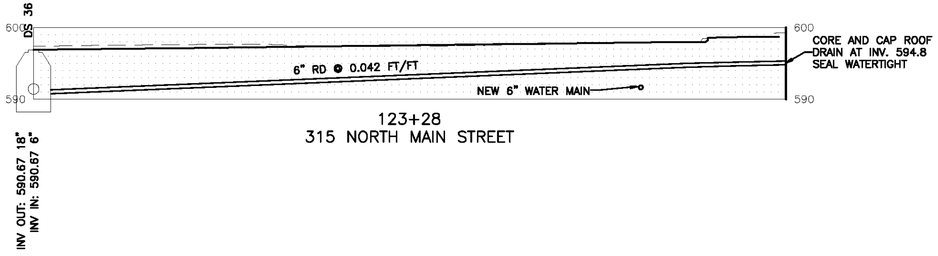

119+25
328–332 NORTH MAIN STREET



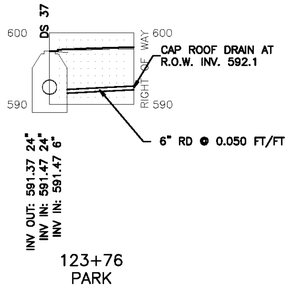

120+73
322 NORTH MAIN STREET



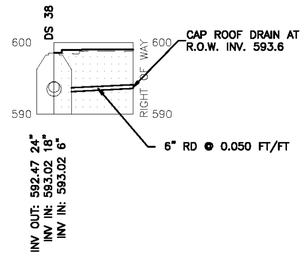

122+71
316 NORTH MAIN STREET



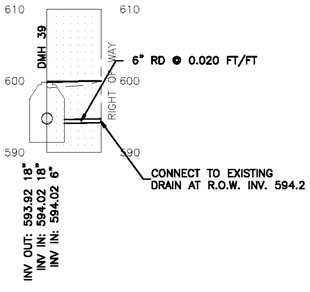

123+28
315 NORTH MAIN STREET




123+76
PARK




124+65
302–310 NORTH MAIN STREET




125+35
292 NORTH MAIN STREET

GRAPHIC SCALE

10 0 5 10 20 40

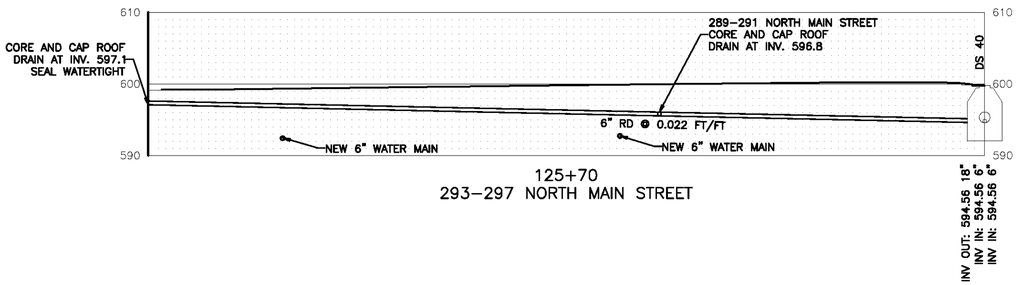
( IN FEET )

DUFRESNE GROUP
CONSULTING ENGINEERS
Dufresne Group is owned by Dufresne & Associates, PC

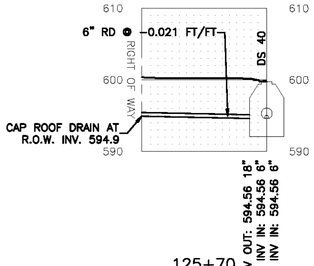
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026–1(34) C/2

FILE NAME: 717014–SERVICES
PROJECT LEADER: R.E. DUFRESNE
DESIGNED BY: B.L. BAKER
ROOF DRAIN PROFILES

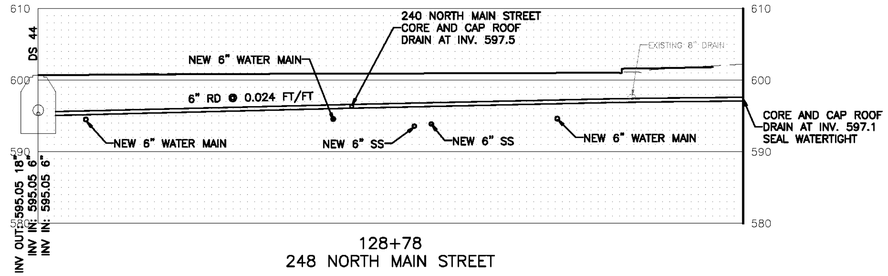
PLOT DATE: Feb. 18, 11
DRAWN BY: B.L. BAKER
CHECKED BY: C.L. WHITFIHEAD
SHEET 155 OF 339



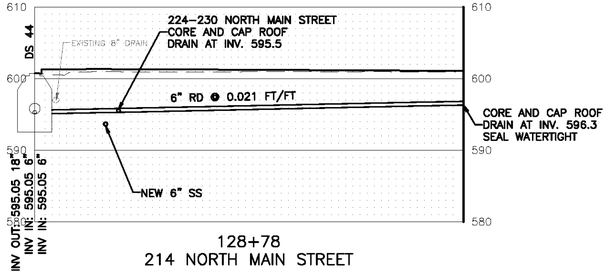

125+70
293-297 NORTH MAIN STREET



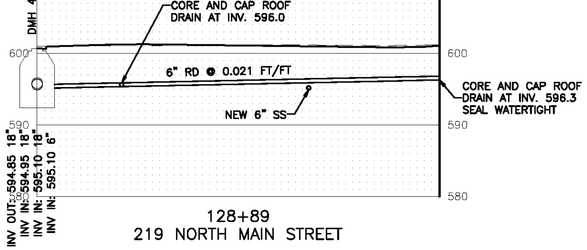

125+70
283 NORTH MAIN STREET



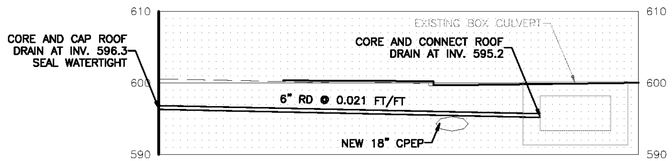

128+78
248 NORTH MAIN STREET



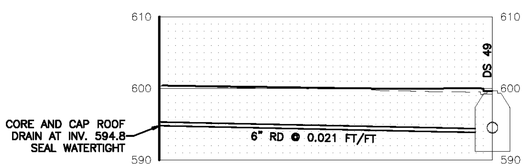

128+78
214 NORTH MAIN STREET



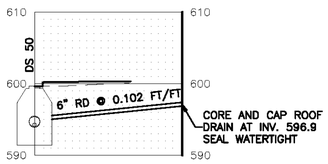

128+89
219 NORTH MAIN STREET

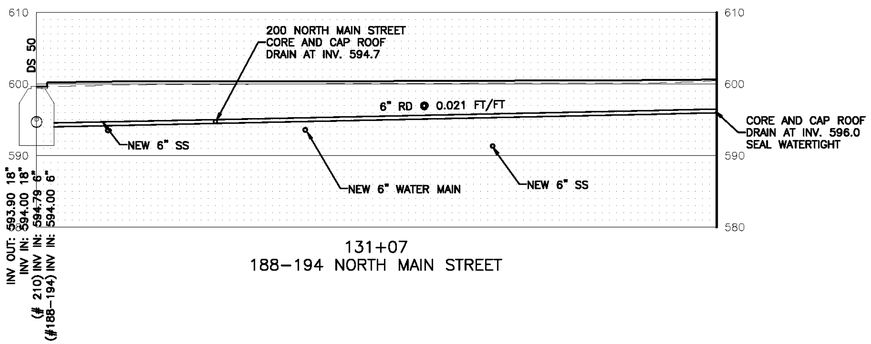



130+56
199-205 NORTH MAIN STREET

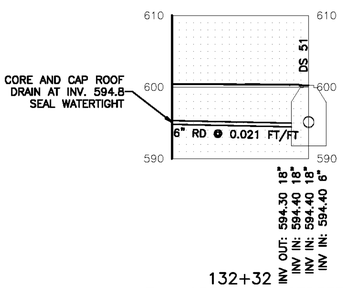



131+06
185-189 NORTH MAIN STREET




131+07
188-194 NORTH MAIN STREET




132+32
171 NORTH MAIN STREET

GRAPHIC SCALE

0 0 5 10 20 40

( IN FEET )

DUFRESNE GROUP
CONSULTING ENGINEERS
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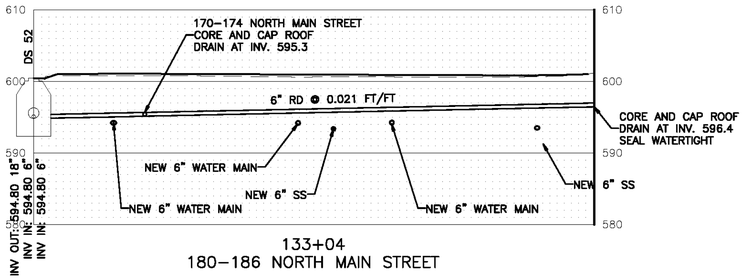
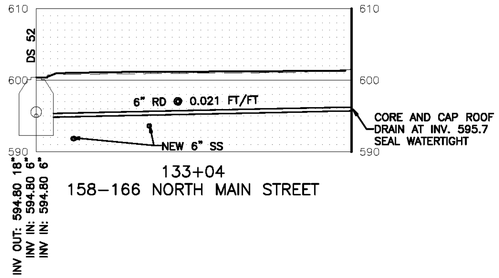
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 717014-SERVICES
PROJECT LEADER: R.E. DUFRESNE
DESIGNED BY: B.L. BAKER
ROOF DRAIN PROFILES

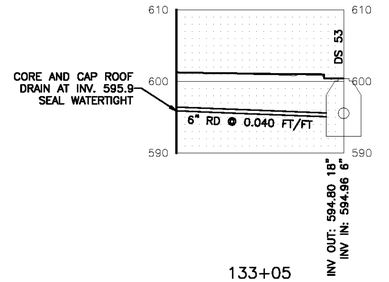
PLOT DATE: Feb. 18, 11
DRAWN BY: B.L. BAKER
CHECKED BY: C.L. WHITEHEAD
SHEET 156 OF 339



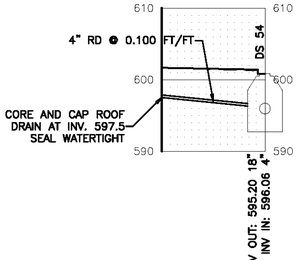

133+04
180–186 NORTH MAIN STREET



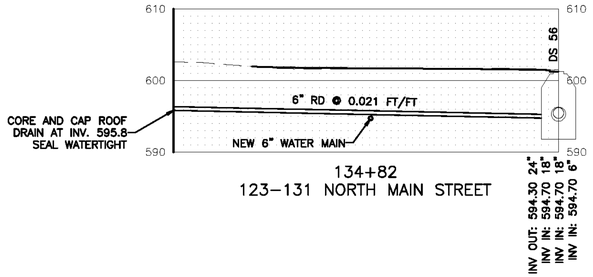

133+04
158–166 NORTH MAIN STREET



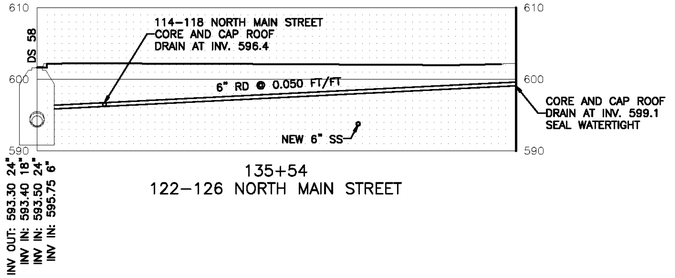

133+05
143–151 NORTH MAIN STREET



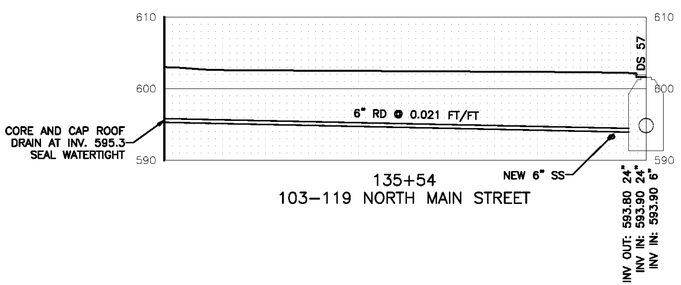

134+00
135 NORTH MAIN STREET



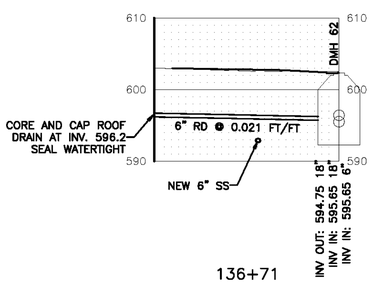

134+82
123–131 NORTH MAIN STREET




135+54
122–126 NORTH MAIN STREET




135+54
103–119 NORTH MAIN STREET




136+71
81–83 NORTH MAIN STREET

GRAPHIC SCALE

10 0 5 10 20 40

( IN FEET )

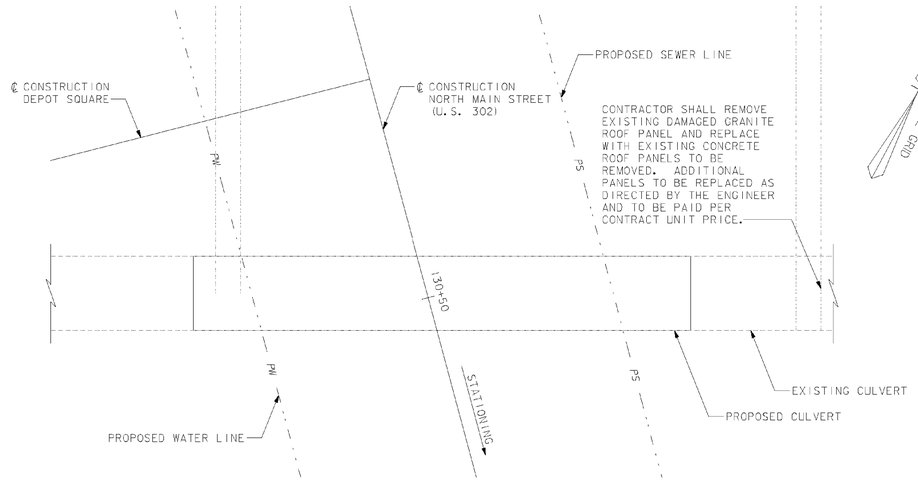
DUFRESNE GROUP
CONSULTING ENGINEERS

Dufresne Group is owned by Dufresne & Associates, PC

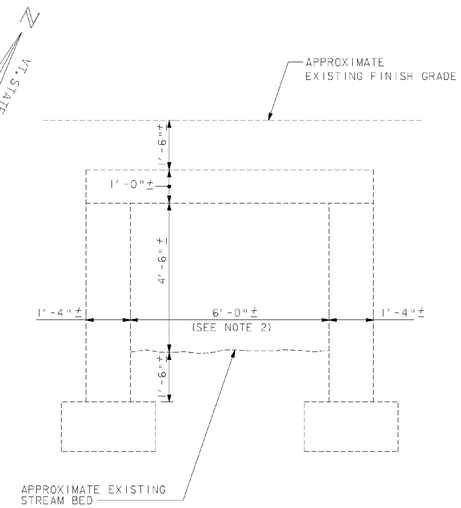
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026–1(34) C/2

FILE NAME: 717014–SERVICES
PROJECT LEADER: R.E. DUFRESNE
DESIGNED BY: B.L. BAKER
ROOF DRAIN PROFILES

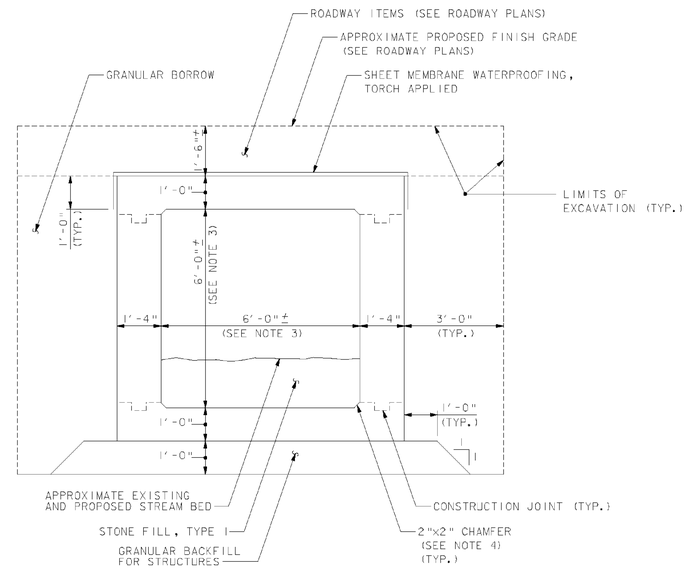
PLOT DATE: Feb. 18, 11
DRAWN BY: B.L. BAKER
CHECKED BY: C.L. WHITFHEAD
SHEET 157 OF 339



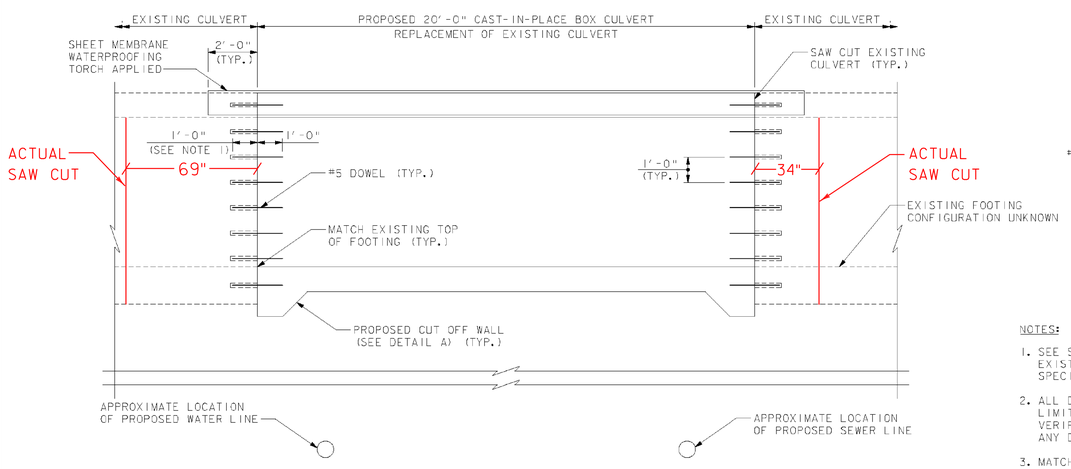

PLAN
SCALE: ⅜" = 1'-0"



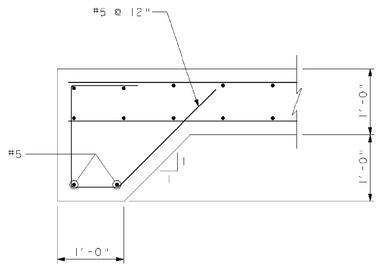

EXISTING TYPICAL SECTION
NOT TO SCALE




PROPOSED TYPICAL SECTION
SCALE: ½" = 1'-0"



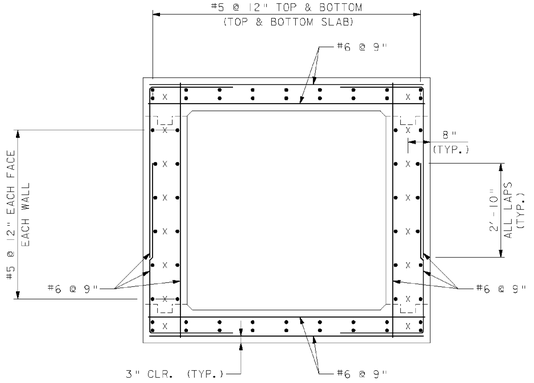

LONGITUDINAL SECTION
SCALE: ⅜" = 1'-0"




DETAIL A
SCALE: 1" = 1'-0"

NOTES:

1. SEE SPECIFICATION SECTION 03301 "PARTIAL REPLACEMENT OF EXISTING CONCRETE CULVERT" IN MUNICIPAL WATER AND SEWER SPECIFICATIONS FOR ADDITIONAL INFORMATION.
2. ALL DIMENSIONS OF EXISTING CULVERT SHOWN ARE BASED ON LIMITED FIELD MEASUREMENTS. THE CONTRACTOR SHALL FIELD VERIFY THE EXISTING CONDITIONS AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO COMMENCEMENT OF WORK.
3. MATCH EXISTING CULVERT INTERIOR DIMENSIONS. FORMS SHALL PROVIDE A SMOOTH INTERIOR TRANSITION FROM THE EXISTING CULVERT TO THE PROPOSED BOX CULVERT WALLS AND TOP SLAB.
4. A PROPOSED 2"x2" CHAMFER IS SHOWN AT EACH INTERIOR CORNER. ADJUST CHAMFER SIZE AS NECESSARY OR ELIMINATE IT COMPLETELY TO MATCH EXISTING CULVERT.
5. DRILL AND GROUT #5 DOWELS 1'-0" INTO CENTER OF EXISTING CULVERT WALLS, TOP SLAB AND FOOTINGS AS SHOWN. FOR LOCATION OF DOWELS, SEE TYPICAL REINFORCING SECTION.
6. PAYMENT FOR ALL MATERIALS AND WORK SHOWN SHALL BE MADE UNDER CONTRACT ITEM 900.645 - SPECIAL PROVISION (REMOVE AND REPAIR BOX CULVERT).




TYPICAL REINFORCING SECTION
SCALE: ½" = 1'-0"
X = LOCATION OF #5 DOWEL, SEE LONGITUDINAL SECTION.

STATE OF VERMONT
TIMOTHY S. BRYANT
(NO. 016.0064445)
CIVIL
LICENSED
PROFESSIONAL ENGINEER

DUFRESNE GROUP
CONSULTING ENGINEERS

VHB Vanasse Hangen Brustlin, Inc.

| | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-I(34) C/2 |
| FILE NAME: z85b010_culvert.dgn | PLOT DATE: 3/31/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: K. WENTWORTH |
| DESIGNED BY: GME/MAC III | CHECKED BY: G. EDINGTON |
| BOX CULVERT DETAILS | SHEET 158 OF 339 |

# EPSC PLAN NARRATIVE

## 1.1 PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE REHABILITATION OF NORTH MAIN ST IN BARRE CITY, VT FROM THE VT 62/MAPLE AV INTERSECTION TO THE ELM ST INTERSECTION. MINOR INTERSECTION IMPROVEMENTS AT THE ELM ST/SUMMER ST INTERSECTION AND THE MAPLE AV/SUMMER ST INTERSECTION ARE ALSO PROPOSED FOR TEMPORARY TRAFFIC CONTROL PURPOSES. THE FIRST CONSTRUCTION SEASON IS PROPOSED TO INVOLVE THE UPGRADING OF THE EXISTING SEWER AND WATER LINES, AS WELL AS MODIFICATIONS TO THE NORTH MAIN/MAPLE AV/VT 62 INTERSECTION, MAPLE AV/SUMMER ST INTERSECTION, AND SUMMER ST/ELM ST INTERSECTION. THE PROPOSED WET POND TO BE LOCATED IN THE PARCEL ALONG VT 62 NEAR THE STEVENS BRANCH WILL ALSO BE CONSTRUCTED AND VEGETATED IN THE FIRST CONSTRUCTION SEASON. THE SECOND CONSTRUCTION SEASON WILL INVOLVE THE FULL DEPTH RECONSTRUCTION OF THE NORTH MAIN STREET ROADWAY AND SIDEWALK. IT WILL ALSO INCLUDE UPGRADING THE EXISTING STORM DRAIN SYSTEM LOCATED WITHIN THE PROJECT AREA. CONSTRUCTION WILL BE DONE IN PHASES TO LIMIT IMPACTS TO BUSINESS OWNERS LOCATED ALONG THE PROJECT CORRIDOR. DURING CONSTRUCTION, TRAFFIC WILL BE DIVERTED ONTO SUMMER ST TO BYPASS THE CONSTRUCTION ON NORTH MAIN ST.

THE TOTAL LENGTH OF THE ROADWAY PROJECT IS APPROXIMATELY 0.485 MILES. THE SITE IS LOCATED AT 619582.928 N, 498641.202 E BASED UPON NAD 27. TOTAL DISTURBED AREA (EXCLUDING WASTE, BORROW AND STAGING AREAS): 6.2 ACRES.

TOTAL AREA OF DISTURBANCE AS SHOWN ON THE ATTACHED EPSC PLAN IN THE AREA OF THE PROPOSED WET POND IS APPROXIMATELY 0.70 ACRES. TOTAL AREA OF DISTURBANCE FOR THE ENTIRE PROJECT, NOT INCLUDING COLD PLANING, RESURFACING, AND STAGING, IS APPROXIMATELY 6.2 ACRES. PROPOSED STAGING AND WASTE AREAS SHALL BE LIMITED TO AN AREA OF LESS THAN THREE (3) ACRES. PROPOSED AREAS WILL BE DEFINED BY THE CITY OF BARRE. IT IS ANTICIPATED THAT THIS PROJECT WILL LAST THREE CONSTRUCTION SEASONS.

## 1.2 SITE INVENTORY

### 1.2.1 TOPOGRAPHY

THE TOPOGRAPHY OF THE PROJECT AREA IS GENERALLY FLAT AND IS COVERED WITH SIGNIFICANT DEVELOPMENT, BOTH RESIDENTIAL AND COMMERCIAL. BUSINESSES LINE BOTH SIDES OF NORTH MAIN STREET THROUGHOUT THE PROJECT SITE. OVERHEAD UTILITIES HAVE BEEN MOVED OFF SITE TO IMPROVE THE AESTHETICS OF THE DOWNTOWN. UPGRADES IN THE SEWER, WATER, AND DRAINAGE LINES ARE A KEY PART OF THE PROJECT SCOPE.

### 1.2.2 DRAINAGE, WATERWAYS, BODIES OF WATER, AND PROXIMITY TO NATURAL OR MAN-MADE WATER FEATURES

THE STEVENS BRANCH IS THE PRIMARY WATER SOURCE NEAR THE PROJECT SITE. POTASH BROOK IS A TRIBUTARY OF THE STEVENS BRANCH THAT TRAVELS THROUGH THE PROJECT SITE UNDERGROUND. PART OF THE EXISTING STORMWATER SYSTEM WITHIN THE SITE CONNECTS TO POTASH BROOK VIA CULVERTS AND DROP INLETS. THE TRIBUTARY AREA FOR THE STEVENS BRANCH AT THE MOST DOWNSTREAM END OF THE PROJECT SITE IS APPROXIMATELY 86.2 SQUARE MILES.

### 1.2.3 VEGETATION

MINIMAL VEGETATION EXISTS WITHIN THE PROJECT SITE. MINOR IMPACTS TO RESIDENTIAL LAWNS WILL BE REESTABLISHED WITH STANDARD SEED MULCH PRACTICES. THE UNDEVELOPED PARCEL ALONG THE STEVENS BRANCH WILL BE USED TO CONSTRUCT A WET POND FOR WATER QUALITY TREATMENT PURPOSES. EROSION MATTING WILL BE USED TO STABILIZE THE SLOPES. ALL DISTURBED EARTH WILL BE REESTABLISHED FOLLOWING CONSTRUCTION. AS PART OF THE LANDSCAPING PLAN, NUMEROUS TREES AND SHRUBS WILL BE PLACED THROUGHOUT THE PROJECT AREA, INCLUDING AT THE PROPOSED WET POND.

### 1.2.4 SOILS

SOIL DATA CAME FROM THE U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE FOR THE COUNTY OF WASHINGTON, VERMONT. THE SOIL ON THE PROJECT SITE HAS BEEN CLASSIFIED AS "URBAN LAND-UDIPSAMMENTS, OCCASIONALLY FLOODED" WITH AN APPROXIMATE "K" FACTOR OF 0.1. THIS SOIL TYPE IS GENERALLY LOCATED IN BARRE AND MONTPELIER, AND CAN GENERALLY BE FOUND WITHIN FLOOD PLAINS AND TERRACES. IT IS MADE UP OF 50% URBAN LAND, 25% UDIPSAMMENTS, 15% DUMPS, AND 10% OTHER SOILS. ONSITE INVESTIGATION IS REQUIRED TO DETERMINE THE EXACT NATURE OF THE SOIL MAKEUP.
NOTE: K-VALUES GENERALLY INDICATE THE FOLLOWING:
0.0-0.23 = LOW EROSION POTENTIAL
0.24-0.36 = MODERATE EROSION POTENTIAL
0.37 AND HIGHER = HIGH EROSION POTENTIAL

### 1.2.5 SENSITIVE RESOURCE AREAS

CRITICAL HABITATS: NO
HISTORICAL OR ARCHEOLOGICAL AREAS: NO
PRIME AGRICULTURAL LAND: NO
THREATENED AND ENDANGERED SPECIES: NO
WATER RESOURCE: STEVENS BRANCH & POTASH BROOK
WETLANDS: NO

## 1.3 RISK EVALUATION

THIS PROJECT FALLS UNDER THE JURISDICTION OF GENERAL PERMIT 3-9020 FOR STORMWATER RUNOFF FROM CONSTRUCTION SITES FOR LOW RISK PROJECTS. ANY MODIFICATIONS TO THE PROJECT THAT INCREASE THE RISK TO ENVIRONMENTAL RESOURCES SHALL BE EVALUATED IN ACCORDANCE WITH THE PERMIT REQUIREMENTS. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY ADDITIONAL PERMITTING.

## 1.4 EROSION PREVENTION AND SEDIMENT CONTROL

THE EROSION CONTROL PLANS ARE MEANT AS A GUIDELINE FOR PREVENTING EROSION AND CONTROLLING SEDIMENT TRANSPORT. THE PRINCIPLES OUTLINED IN THIS NARRATIVE CONSIST OF APPLYING MEASURES THROUGHOUT CONSTRUCTION OF THE PROJECT IN ORDER TO MINIMIZE SEDIMENT TRANSPORT TO THE RECEIVING WATERS. THE MEASURES INCLUDE STABILIZATION AND STRUCTURAL PRACTICES, STORM WATER CONTROLS AND OTHER POLLUTION PREVENTION PRACTICES. THEY HAVE BEEN PROPOSED BY THE DESIGNER AS A BASIS FOR PROTECTING RESOURCES AND WILL NEED TO BE BUILT UPON BASED ON THE SPECIFIC MEANS AND METHODS OF THE CONTRACTOR. REFER TO THE LOW RISK SITE HANDBOOK AND APPROPRIATE DETAIL SHEETS FOR SPECIFIC GUIDANCE AND CONSTRUCTION DETAILING.

ALL MEASURES SHALL BE REGULARLY MAINTAINED AND SHALL BE CHECKED FOR SEDIMENT BUILD-UP. SEDIMENT SHALL BE DISPOSED OF AT AN APPROVED SITE WHERE IT WILL NOT BE SUBJECT TO EROSION.

### 1.4.1 MARK SITE BOUNDARIES

SITE BOUNDARIES AND AREAS CONSTRUCTION EQUIPMENT CAN ACCESS SHALL BE DELINEATED. PROJECT DEMARCATION FENCING (PDF) SHALL BE USED TO PHYSICALLY MARK SITE BOUNDARIES. BECAUSE THIS PROJECT FALLS UNDER THE CGP 3-9020, BARRIER FENCE SHALL BE USED INSTEAD OF PROJECT DEMARCATION FENCE WITHIN 100 FEET OF A WATER RESOURCE (STREAM, BROOK, LAKE, POND, WETLAND, ETC).

### 1.4.2 LIMIT DISTURBANCE AREA

PREVENTING INITIAL SOIL EROSION BY MINIMIZING THE EXPOSED AREA IS MUCH MORE EFFECTIVE THAN TREATING ERODED SEDIMENT. EARTH DISTURBANCE CAN BE MINIMIZED THROUGH CONSTRUCTION PHASING BY ONLY OPENING UP EARTH AS NECESSARY. THIS CAN LIMIT THE AREA THAT WILL BE DISTURBED AND EXPOSED TO EROSION. EMPLOY TEMPORARY CONSTRUCTION STABILIZATION PRACTICES IN INCREMENTAL STAGES AS PHASES CHANGE. FOR PROJECTS WHICH FALL UNDER THE CONSTRUCTION GENERAL PERMIT, ONLY THE ACREAGE LISTED ON THE PERMIT AUTHORIZATION MAY BE EXPOSED AT ANY GIVEN TIME.

MAINTAINING VEGETATED BUFFERS ALONG STREAM BANKS, WETLANDS OR OTHER SENSITIVE AREAS IS A CRUCIAL EROSION AND SEDIMENT CONTROL MEASURE THAT SHOULD BE ESTABLISHED WHEREVER POSSIBLE.

### 1.4.3 SITE ENTRANCE/EXIT STABILIZATION

TRACKING OF SEDIMENT ONTO PUBLIC HIGHWAYS SHALL BE MINIMIZED TO REDUCE THE POTENTIAL FOR RUNOFF ENTERING RECEIVING WATERS. INSTALLATION SHALL COINCIDE WITH THE CONTRACTOR'S PROGRESS SCHEDULE.

STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AS PROPOSED ON THE EPSC PLAN AND ANYWHERE EQUIPMENT WILL BE GOING FROM AREAS OF EXPOSED SOILS TO PAVED SURFACES.

### 1.4.4 INSTALL SEDIMENT BARRIERS

SEDIMENT BARRIERS SHALL BE UTILIZED TO INTERCEPT RUNOFF AND ALLOW SUSPENDED SEDIMENT TO SETTLE OUT. THEY SHALL BE INSTALLED PRIOR TO ANY UP SLOPE WORK.

SILT FENCE WILL BE INSTALLED AS PROPOSED ON THE EPSC PLAN. BECAUSE THIS PROJECT FALLS UNDER THE CGP 3-9020, WOVEN WIRE REINFORCED SILT FENCE SHALL BE USED INSTEAD OF SILT FENCE WITHIN 100 FEET UPSLOPE OF RECEIVING WATERS.

INLET PROTECTION DEVICES WILL BE INSTALLED THROUGHOUT THE PROJECT SITE TO MINIMIZE CONSTRUCTION RUNOFF FROM DIRECTLY ENTERING THE SURROUNDING RECEIVING WATER BODIES VIA THE EXISTING STORMWATER COLLECTION SYSTEM.

### 1.4.5 DIVERT UPLAND RUNOFF

DIVERSIONARY MEASURES SHALL BE USED TO INTERCEPT RUNOFF FROM ABOVE THE CONSTRUCTION AND DIRECT IT AROUND THE DISTURBED AREA SO THAT CLEAN WATER DOES NOT BECOME MUDDIED WHILE TRAVELING OVER EXPOSED SOILS ON THE CONSTRUCTION SITE.

THE PROJECT AREA IS RELATIVELY FLAT. THEREFORE IT IS NOT ANTICIPATED THAT DIVERSION MEASURES WILL BE NECESSARY.

### 1.4.6 SLOW DOWN CHANNELIZED RUNOFF

CHECK STRUCTURES SHALL BE UTILIZED TO REDUCE THE VELOCITY, AND THUS THE EROSIVE POTENTIAL, OF CONCENTRATED FLOW IN CHANNELS.

DUE TO THE MAKEUP OF THE PROJECT SITE AND THE SURROUNDING FACILITIES, CONCENTRATED FLOW IN CHANNELS IS NOT ANTICIPATED. THUS CHECK STRUCTURES ARE NOT ANTICIPATED TO BE NEEDED.

### 1.4.7 CONSTRUCT PERMANENT CONTROLS

PERMANENT STORMWATER TREATMENT DEVICES SHALL BE INSTALLED AS SHOWN ON THE PLANS AND IN ACCORDANCE WITH PERMIT CONDITIONS.

A NEW WET POND AND PARTICLE SEPARATOR ARE PROPOSED FOR THE PURPOSE OF TREATING THE REQUIRED WATER QUALITY VOLUME OF STORMWATER GENERATED THROUGHOUT THE PROJECT SITE. THE PROPOSED POND AND PARTICLE SEPARATOR WILL BE LOCATED ALONG VT ROUTE 62 SOUTH OF THE NORTH MAIN STREET INTERSECTION. THE WET POND WILL HAVE A DIRECT DISCHARGE INTO STEVENS BRANCH VIA A PIPE AND OVERFLOW WEIR.

### 1.4.8 STABILIZE EXPOSED SOILS DURING CONSTRUCTION

ALL AREAS OF DISTURBANCE MUST HAVE TEMPORARY STABILIZATION IN PLACE WITHIN 48 HOURS OF DISTURBANCE OR IN ACCORDANCE WITH THE CONSTRUCTION GENERAL PERMIT 3-9020 AUTHORIZATION.

TEMPORARY MULCHING AND SEEDING OF ALL EXPOSED SLOPES SHALL BE UTILIZED ON A REGULAR BASIS. BIODEGRADABLE EROSION CONTROL MATTING OR AN EQUIVALENT SHALL BE USED TO STABILIZE ALL SLOPES STEEPER THAN 1:3.
THE FORECAST OF RAINFALL EVENTS SHALL TRIGGER IMMEDIATE PROTECTION OF EXPOSED SOILS.

### 1.4.9 WINTER STABILIZATION

VARIOUS MEASURES SPECIFIC TO WINTER MAY BE NECESSARY SHOULD THE PROJECT EXTEND INTO WINTER (OCTOBER 15 THROUGH APRIL 15). REFER TO THE LOW RISK SITE HANDBOOK FOR GUIDANCE.

### 1.4.10 STABILIZE SOIL AT FINAL GRADE

EXPOSED SOIL MUST BE STABILIZED WITHIN 48 HOURS OF REACHING FINAL GRADE.

SEED, MULCH, FERTILIZER AND LIME SHALL BE USED TO ESTABLISH PERMANENT VEGETATION. FOR SLOPES STEEPER THAN 1:3, BIODEGRADABLE EROSION CONTROL MATTING OR AN EQUIVALENT SHALL BE USED INSTEAD OF MULCH.

### 1.4.11 DE-WATERING ACTIVITIES

DISCHARGE FROM DEWATERING ACTIVITIES THAT FLOWS OFF OF THE CONSTRUCTION SITE MUST NOT CAUSE OR CONTRIBUTE TO A VIOLATION OF THE VERMONT WATER QUALITY STANDARDS.

DE-WATERING ACTIVITIES INCLUDE BUT ARE NOT LIMITED TO OPEN PUMPING FROM SHALLOW SUMPS, TEMPORARY DITCHES, AND TRENCHES WITHIN AND AROUND THE EXCAVATION LIMITS. SUMPS SHALL BE PROVIDED WITH FILTERS SUITABLE TO PREVENT PUMPING OF FINE-GRAINED SOIL PARTICLES. TRAPPED WATER DURING DEWATERING CONTROLS SHOULD BE DISCHARGED TO SETTLING BASINS AND/OR APPROVED FILTER SOCKS. ALL EFFLUENT OR DISCHARGE SHOULD COMPLY WITH ALL APPLICABLE PERMITS AND REGULATIONS.

### 1.4.12 INSPECT YOUR SITE

INSPECT THE PROJECT SITE BASED ON SPECIAL PROVISION REQUIREMENTS OR CONSTRUCTION GENERAL PERMIT AUTHORIZATION STIPULATIONS.

## 1.5 SEQUENCE AND STAGING

THIS SECTION WILL BE DEVELOPED BY THE CONTRACTOR USING THE GUIDANCE OUTLINED IN THE VTRANS EPSC PLAN CONTRACTOR CHECKLIST.

### 1.5.1 CONSTRUCTION SEQUENCE

### 1.5.2 OFF-SITE ACTIVITIES

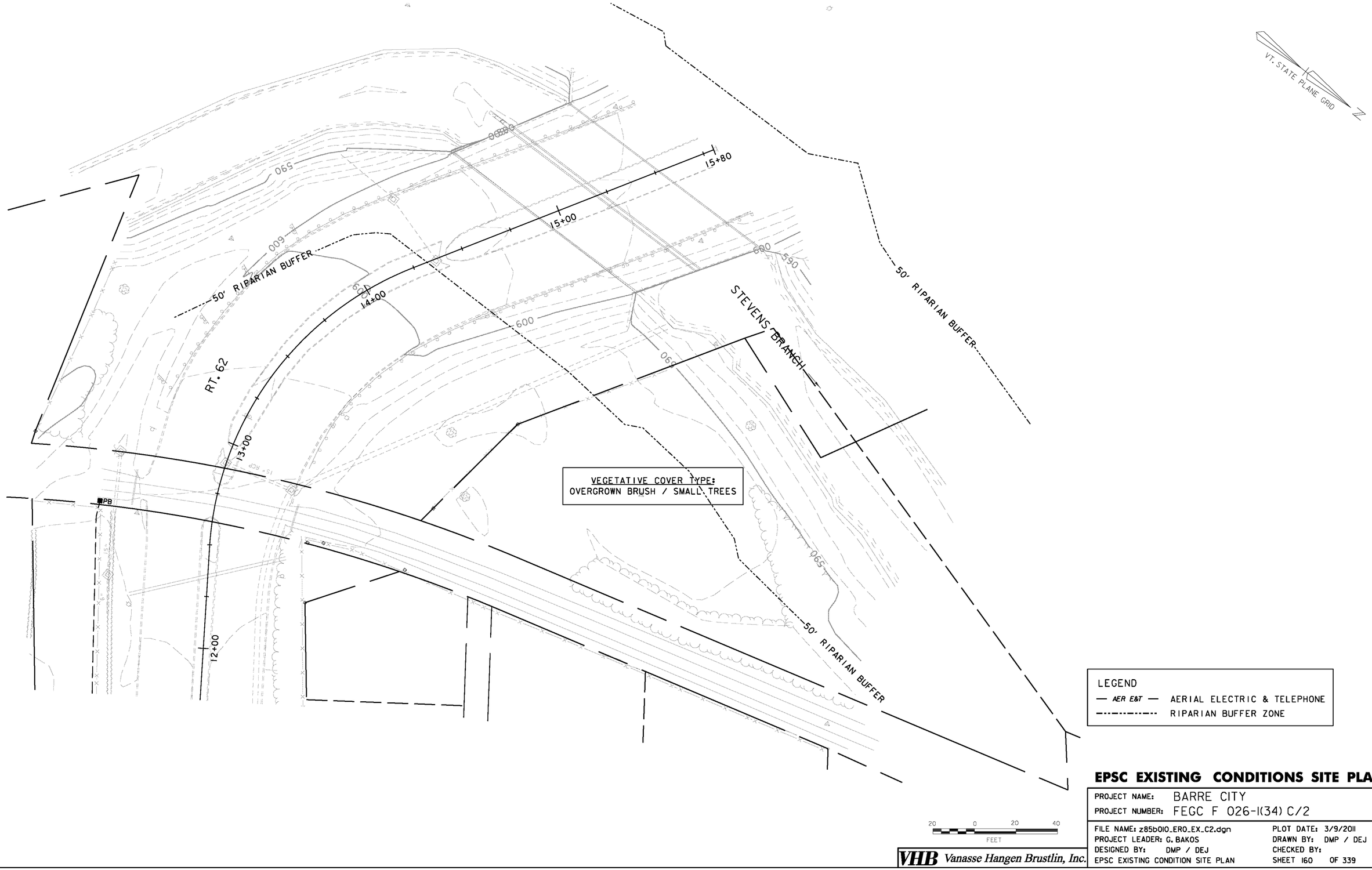
IN ADDITION TO THE CONTRACTOR CHECKLIST ANY ACTIVITIES OUTSIDE THE CONSTRUCTION LIMITS SHALL FOLLOW SUBSECTIONS 105.25- 105.29 OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION.

**EPSC NARRATIVE**

| | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-I(34) C/2 |

| | | | |
|---|---|---|---|
| FILE NAME: 85b010_ERO_NAR_C2 | | PLOT DATE: | 3/9/2011 |
| PROJECT LEADER: | G. BAKOS | DRAWN BY: | DMP / JAR |
| DESIGNED BY: | DMP / MDS | CHECKED BY: | |
| EPSC NARRATIVE | | SHEET | 159 OF 339 |

VHB Vanasse Hangen Brustlin, Inc.

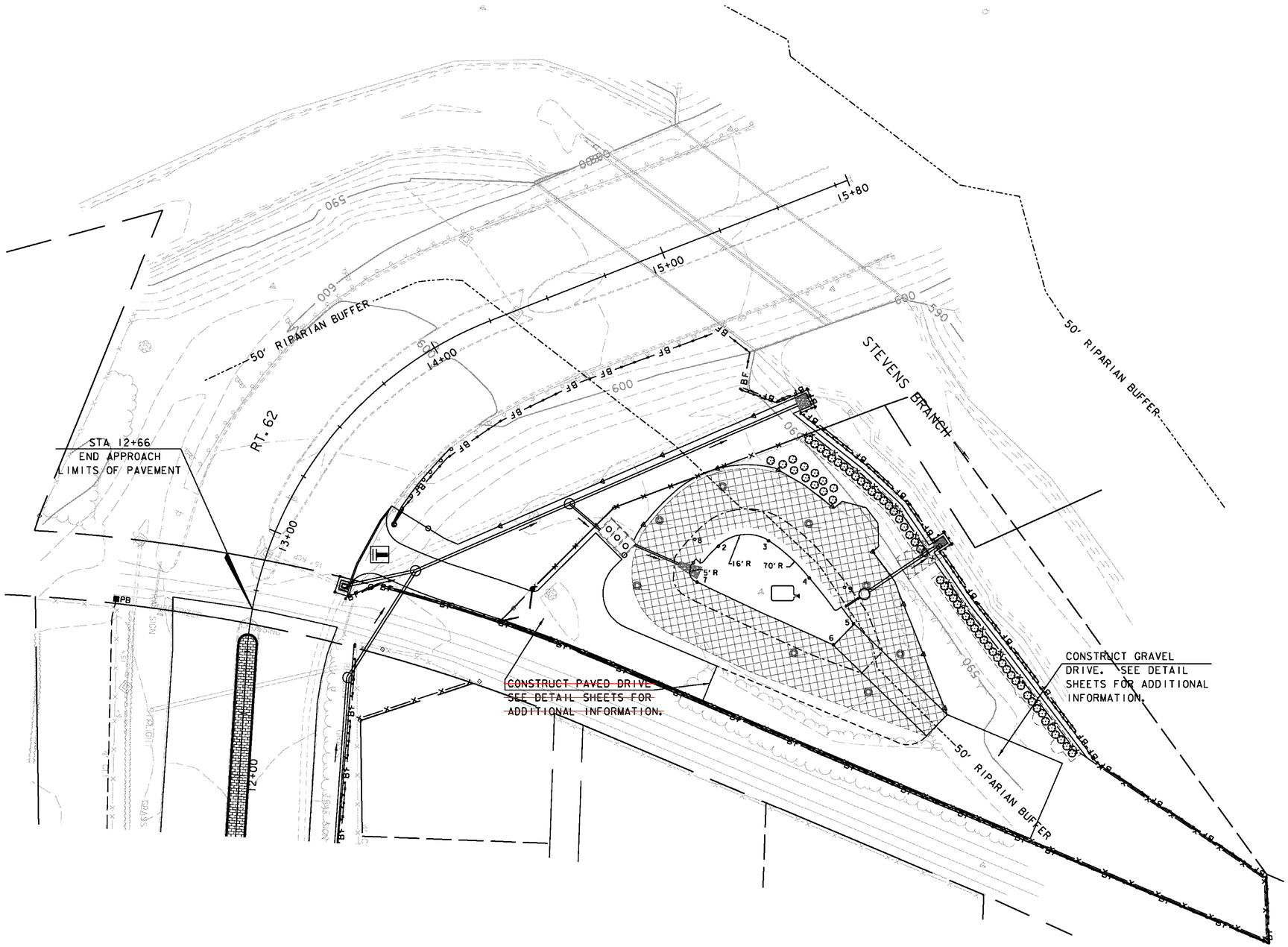



# EPSC EXISTING CONDITIONS SITE PLAN

| | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-I(34) C/2 |

| | |
|---|---|
| FILE NAME: z85b010_ERO_EX_C2.dgn | PLOT DATE: 3/9/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: DMP / DEJ |
| DESIGNED BY: DMP / DEJ | CHECKED BY: |
| EPSC EXISTING CONDITION SITE PLAN | SHEET 160 OF 339 |

VHB Vanasse Hangen Brustlin, Inc.




VT. STATE PLANE GRID

**SOIL CLASSIFICATION**

URBAN LAND-UDIPSAMMENTS COMPLEX, OCCASSIONALLY FLOODED
NEARLY LEVEL SLOPES
"K FACTOR" 0.10

NOTES:

1. THESE PLANS SHOW A CONCEPTUAL EROSION CONTROL PLAN, THE CONTRACTOR MUST SUBMIT A TEMPORARY EROSION CONTROL PLAN FOR APPROVAL.
2. TEMPORARY EROSION CONTROL MEASURES ARE CONCEPTUALLY SHOWN. THE CONTRACTOR MAY RELOCATE TEMPORARY MEASURES TO IMPROVE EROSION CONTROL WITH APPROVAL OF THE RESIDENT ENGINEER AND ON SITE COORDINATOR.
3. THE CONTRACTOR SHALL USE OTHER TEMPORARY EROSION CONTROL MEASURES AS NECESSITATED BY THE SEQUENCE OF CONSTRUCTION OR AS DIRECTED BY THE RESIDENT ENGINEER AND ON SITE COORDINATOR.
4. CONTRACTOR SHALL PROVIDE PROVIDE DEWATERING OPERATIONS (INCIDENTAL TO POND CONSTRUCTION ITEMS).
5. REFER TO TEMPORARY EROSION CONTROL DETAIL SHEETS FOR ADDITIONAL DETAILS.
6. PROVIDE AN AGENCY APPROVED LINER IF THE POND CANNOT SUSTAIN A PERMANENT POOL. LINER SHALL BE PAID FOR AS SPECIAL PROVISION (POND LINER, GEOMEMBRANE)

LEGEND

- SILT FENCE
- SILT FENCE, WOVEN-WIRE REINFORCED
- LIMITS OF SOIL DISTURBANCE
- EROSION MATTING
- BF BARRIER FENCE
- RIPARIAN BUFFER ZONE
- NEW FENCE
- PROPOSED GRAVEL DRIVE
- STABILIZED CONSTRUCTION ENTRANCE
- DROP INLET PROTECTION
- FILTER BAG FOR DEWATERING

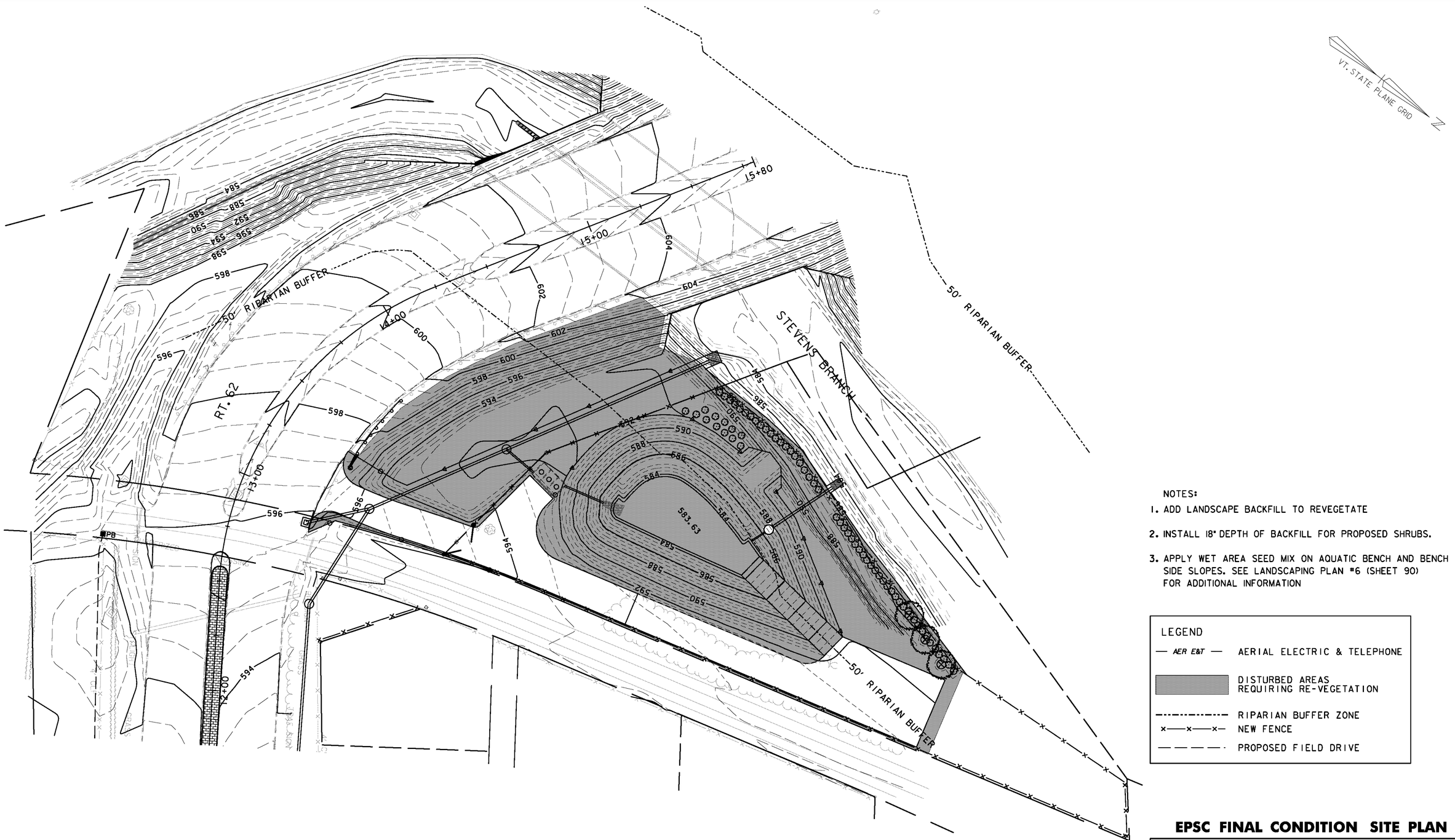
# EPSC CONSTRUCTION SITE PLAN

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: z85b010_ERO_CP_C2.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / DEJ
EPSC CONSTRUCTION SITE PLAN

PLOT DATE: 3/9/2011
DRAWN BY: DMP / DEJ
CHECKED BY:
SHEET 161 OF 339

VHB Vanasse Hangen Brustlin, Inc.




NOTES:

1. ADD LANDSCAPE BACKFILL TO REVEGETATE
2. INSTALL 18" DEPTH OF BACKFILL FOR PROPOSED SHRUBS.
3. APPLY WET AREA SEED MIX ON AQUATIC BENCH AND BENCH SIDE SLOPES. SEE LANDSCAPING PLAN #6 (SHEET 90) FOR ADDITIONAL INFORMATION

LEGEND

- AER E&T — AERIAL ELECTRIC & TELEPHONE
- DISTURBED AREAS REQUIRING RE-VEGETATION
- RIPARIAN BUFFER ZONE
- NEW FENCE
- PROPOSED FIELD DRIVE

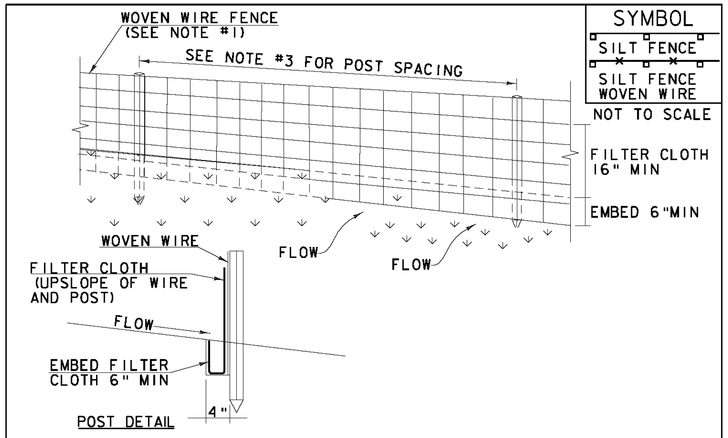
# EPSC FINAL CONDITION SITE PLAN

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-I(34) C/2

FILE NAME: z85b010_ERO_FC_C2.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / DEJ
EPSC FINAL CONDITION SITE PLAN

PLOT DATE: 3/9/2011
DRAWN BY: DMP / DEJ
CHECKED BY:
SHEET 162 OF 339

VHB Vanasse Hangen Brustlin, Inc.




SYMBOL

SILT FENCE

SILT FENCE WOVEN WIRE

NOT TO SCALE

FILTER CLOTH 16" MIN

EMBED 6"MIN

## CONSTRUCTION SPECIFICATIONS

1. WOVEN WIRE REINFORCED FENCE IS REQUIRED WITHIN 100' UPSLOPE OF RECEIVING WATERS WHEN THE PROJECT FALLS UNDER A CONSTRUCTION STORMWATER PERMIT. WOVEN WIRE SHALL BE A MIN. 14 GAUGE WITH A 6" MAX. MESH OPENING.
2. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI100X, STABILINKA T140N OR APPROVED EQUIVALENT.
3. POST SPACING FOR WIRE-BACKED FENCE SHALL BE 10' MAXIMUM. FOR FILTER-CLOTH FENCE, WHEN ELONGATION IS >50%, POST SPACING SHALL NOT EXCEED 4' AND WHEN ELONGATION IS <50%, POST SPACING SHALL NOT EXCEED 6'.
4. WOVEN WIRE FENCE IS TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES. FILTER CLOTH IS TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
5. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY 6" AND FOLDED.
6. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN SEDIMENT REACHES HALF OF FABRIC HEIGHT.

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC
ORIGINALLY DEVELOPED BY USDA-NRCS
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SILT FENCE

NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- " FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 649 AND AS SHOWN IN THE PLANS FOR GEOTEXTILE FOR SILT FENCE (PAY ITEM 649.51) OR GEOTEXTILE FOR SILT FENCE, WOVEN WIRE REINFORCED (PAY ITEM 649.515).

| REVISIONS | |
|---|---|
| MARCH 21, 2008 | WHF |
| DECEMBER 11, 2008 | WHF |
| JANUARY 13, 2009 | WHF |
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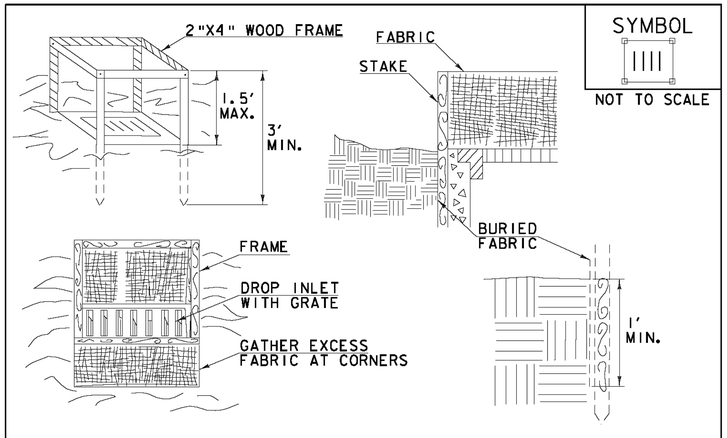


SYMBOL

NOT TO SCALE

## CONSTRUCTION SPECIFICATIONS

1. FILTER FABRIC SHALL HAVE AN APPARENT OPENING SIZE OF 40-85. BURLAP MAY BE USED FOR SHORT TERM APPLICATIONS.
2. CUT FABRIC FROM A CONTINUOUS ROLL TO ELIMINATE JOINTS. IF JOINTS ARE NEEDED THEY WILL BE OVERLAPPED TO THE NEXT STAKE.
3. STAKE MATERIALS WILL BE STANDARD 2"x 4" WOOD OR EQUIVALENT METAL WITH A MINIMUM LENGTH OF 3'.
4. SPACE STAKES EVENLY AROUND INLET 3' APART AND DRIVE A MINIMUM 18" DEEP. SPANS GREATER THAN 3' MAY BE BRIDGED WITH THE USE OF WIRE MESH BEHIND THE FILTER FABRIC FOR SUPPORT.
5. FABRIC SHALL BE EMBEDDED 1' MINIMUM BELOW GROUND AND BACKFILLED. IT SHALL BE SECURELY FASTENED TO THE STAKES AND FRAME.
6. A 2" x 4" WOOD FRAME SHALL BE COMPLETED AROUND THE CREST OF THE FABRIC FOR OVER FLOW STABILITY.
7. MAXIMUM DRAINAGE AREA 1 ACRE

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC
ORIGINALLY DEVELOPED BY USDA-NRCS
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FILTER FABRIC DROP INLET PROTECTION

NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- " FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 FOR INLET PROTECTION DEVICE, TYPE I (PAY ITEM 653.40).

| REVISIONS | |
|---|---|
| MARCH 7, 2008 | WHF |
| JANUARY 13, 2009 | WHF |
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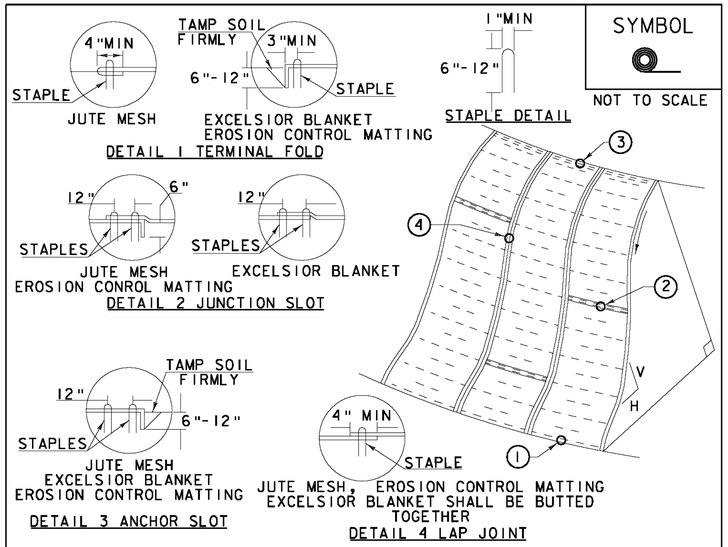


SYMBOL

NOT TO SCALE

## CONSTRUCTION SPECIFICATIONS

1. APPLY TO SLOPES GREATER THAN 3H:1V OR WHERE NECESSARY TO AID IN ESTABLISHING VEGETATION.
2. APPLY FERTILIZER, LIME SEED PRIOR TO PLACING MATTING.
3. STAPLES ARE TO BE PLACED ALTERNATELY, IN COLUMNS APPROXIMATELY 2' APART AND IN ROWS APPROXIMATELY 3' APART. APPROXIMATELY 175 STAPLES ARE REQUIRED PER 4'X225' ROLL OF MATERIAL AND 125 STAPLES ARE REQUIRED PER 4'X150' ROLL OF MATERIAL.
4. DISTURBED AREAS SHALL BE SMOOTHLY GRADED. EROSION CONTROL MATERIAL SHALL BE PLACED LOOSELY OVER GROUND SURFACE. DO NOT STRETCH.
5. ALL TERMINAL ENDS AND TRANSVERSE LAPS SHALL BE STAPLED AT APPROXIMATELY 12" INTERVALS.

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC
ORIGINALLY DEVELOPED BY USDA-NRCS
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

ROLLED EROSION CONTROL PRODUCT (RECP) SIDE SLOPE

NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- " FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.
THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 AND AS SHOWN IN THE PLANS FOR TEMPORARY EROSION MATTING (PAY ITEM 653.20)

| REVISIONS | |
|---|---|
| APRIL 16, 2007 | JMF |
| JANUARY 13, 2009 | WHF |
| | |
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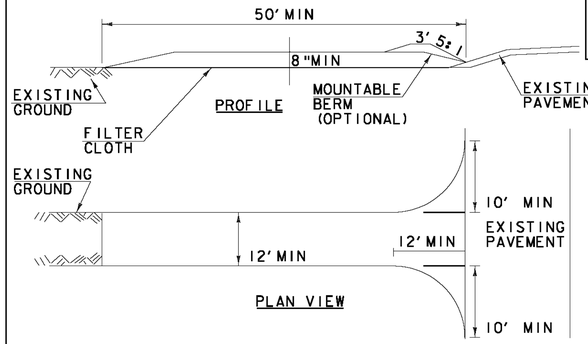
**EPSC DETAIL SHEET**

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85D010_ERO_DET_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
EPSC DETAIL SHEET

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 163 OF 339

VHB Vanasse Hangen Brustlin, Inc.




SYMBOL

NOT TO SCALE

## CONSTRUCTION SPECIFICATIONS

1. STONE SIZE- USE 1-4" STONE, RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH- NOT LESS THAN 50' (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30' MINIMUM LENGTH APPLIES).
3. THICKNESS- NOT LESS THAN 8".
4. WIDTH- 12' MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. 24' IF SINGLE ENTRANCE TO SITE.
5. GEOTEXTILE MUST BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING STONE.
6. SURFACE WATER- ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY, ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED ACCORDING TO PERMIT REQUIREMENTS.

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC
ORIGINALLY DEVELOPED BY USDA-NRCS
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

# STABILIZED CONSTRUCTION ENTRANCE

NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- " FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 FOR VEHICLE TRACKING PAD (PAY ITEM 653.35) OR AS SPECIFIED IN THE CONTRACT.

| REVISIONS | |
|---|---|
| MARCH 24, 2008 | WHF |
| JANUARY 13, 2009 | WHF |
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**VAOT RURAL AREA MIX**

| LBS/AC | | | | | |
|---|---|---|---|---|---|
| % WEIGHT | BROADCAST | HYDROSEED | NAME | GERM % | PURITY % |
| 37.5% | 22.5 | 45 | CREEPING RED FESCUE | 85% | 98% |
| 37.5% | 22.5 | 45 | TALL FESCUE | 90% | 95% |
| 5.0% | 3 | 6 | RED TOP | 90% | 95% |
| 15.0% | 9 | 18 | BIRDSFOOT TREFOIL | 85% | 98% |
| 5.0% | 3 | 6 | ANNUAL RYE GRASS | 85% | 95% |
| 100% | 60 | 120 | | | |

**VAOT URBAN AREA MIX**

| LBS/AC | | | | | |
|---|---|---|---|---|---|
| % WEIGHT | BROADCAST | HYDROSEED | NAME | GERM % | PURITY % |
| 42.5% | 34 | 68 | CREEPING RED FESCUE | 85% | 98% |
| 10.0% | 8 | 16 | PERENNIAL RYE GRASS | 90% | 95% |
| 42.5% | 34 | 68 | KENTUCKY BLUE GRASS | 85% | 85% |
| 5.0% | 4 | 8 | ANNUAL RYE GRASS | 85% | 95% |
| 100% | 80 | 160 | | | |

**GENERAL GUIDANCE**

| FERTILIZER | | LIME | |
|---|---|---|---|
| BROADCAST | HYDROSEED | BROADCAST | HYDROSEED |
| 10-20-10 | 19-19-19 | PELLETIZED | LIQUID |
| 500 LBS/AC | | 2 TONS/AC | 4.4 GAL/AC |

## CONSTRUCTION GUIDANCE

1. RURAL SEED MIX: USE AS INDICATED IN THE PLANS AND/OR FOR ALL ESTABLISHED UPLAND (NON WETLAND) AREAS DISTURBED BY THE CONTRACTOR.
2. URBAN SEED MIX: USE AS INDICATED IN THE PLANS AND/OR FOR ALL ESTABLISHED LAWN AREAS DISTURBED BY THE CONTRACTOR.
3. ALL SEED MIXTURES: SHALL NOT HAVE A WEED CONTENT EXCEEDING 0.40% BY WEIGHT AND SHALL BE FREE OF ALL NOXIOUS SEED.
4. FERTILIZER AND LIMESTONE: SHALL FOLLOW RATES SHOWN ON PLAN OR AS DIRECTED BY THE ENGINEER
5. HAY MULCH: TO BE PLACED ON EARTH SLOPES AT THE RATE OF 2 TONS/ACRE, ACHIEVE 90% GROUND COVER OR AS DIRECTED BY THE ENGINEER.
6. TOPSOIL: TO BE USED WITH SEED AS INDICATED ON THE PLANS, OR AS DIRECTED BY THE ENGINEER.
7. HYDROSEEDING: ALTHOUGH GUIDANCE IS GIVEN ABOVE THE SITE CONDITIONS AND THE TYPE OF HYDROSEED WILL ULTIMATELY DICTATE THE AMOUNTS AND TYPES OF SOIL AMENDMENTS TO BE APPLIED
8. TURF ESTABLISHMENT: PLACING SEED, FERTILIZER, LIME AND MULCH PRIOR TO SEPTEMBER 15 AND AFTER APRIL 15 CAN BETTER ENSURE A VIGOROUS GROWTH OF GRASS.

ADAPTED FROM VTRANS TECHNICAL LANSCAPE MAUAL FOR ROADWAYS AND TRANSPORTATION FACILITIES

# TURF ESTABLISHMENT

| REVISIONS | |
|---|---|
| JUNE 23, 2009 | WHF |
| JANUARY 15, 2010 | WHF |
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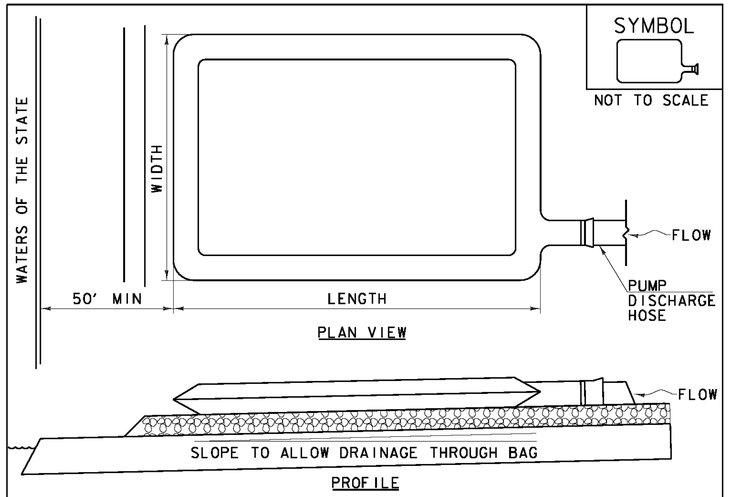


SYMBOL

NOT TO SCALE

## CONSTRUCTION SPECIFICATIONS

1. THE PRIMARY PURPOSE OF FILTER BAG IS TO RETAIN SILT, SAND, AND FINES DURING DEWATERING OPERATIONS.
2. FILTER BAGS SHALL BE INSTALLED ON A VEGETATED SLOPE GRADED TO ALLOW INCOMING WATER TO FLOW THROUGH THE BAG.
3. FILTER BAGS MAY ALSO BE PLACED ON COARSE AGGREGATE, STONE, OR HAYBALES TO INCREASE FILTRATION EFFICIENCY.
4. FILTER BAGS SHALL BE LOCATED A MINIMUM OF 50' FROM WATERS OF THE STATE UNLESS OTHERWISE APPROVED BY THE ENGINEER.
5. THE NECK OF THE FILTER BAG SHALL BE STRAPPED TIGHTLY TO THE DISCHARGE HOSE.
6. A FILTER BAG IS FULL WHEN IT NO LONGER CAN EFFICIENTLY FILTER SEDIMENT OR ALLOW WATER TO PASS AT A REASONABLE RATE.
7. FILTER BAG SHALL BE DISPOSED OF AS APPROVED IN THE EPSC PLAN OR AS DIRECTED BY THE ENGINEER.

# FILTER BAG

NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- " FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 FOR FILTER BAG (PAY ITEM 653.45) AND AS SPECIFIED IN THE CONTRACT.

| REVISIONS | |
|---|---|
| MARCH 24, 2008 | WHF |
| JANUARY 13, 2009 | WHF |
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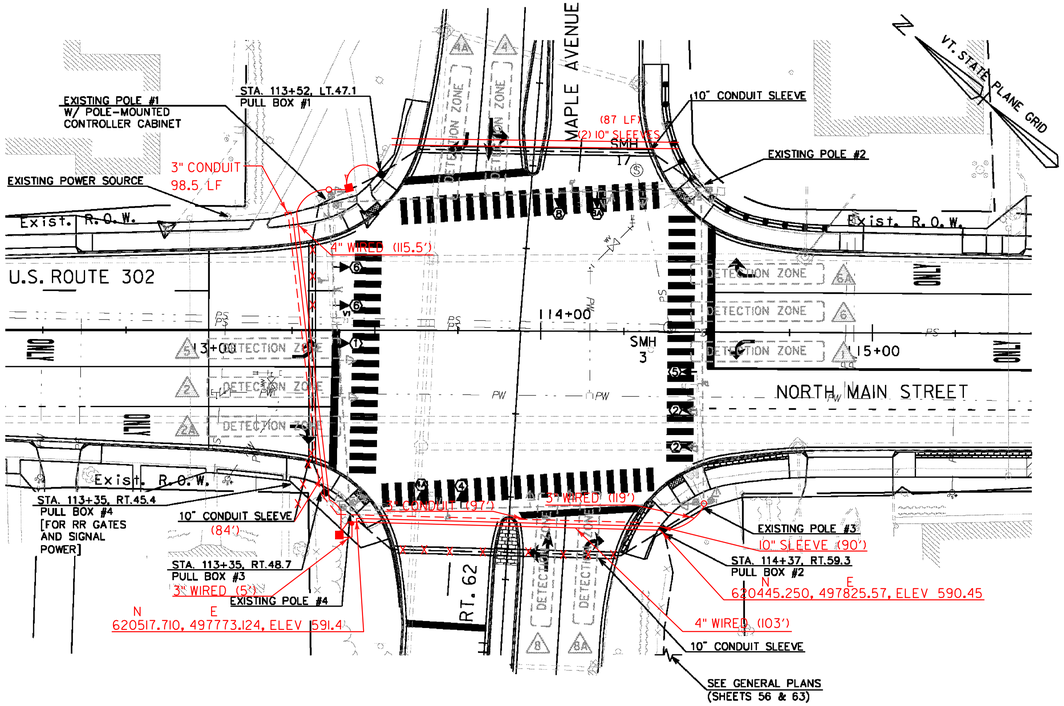
**EPSC DETAIL SHEET**

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-I(34) C/2

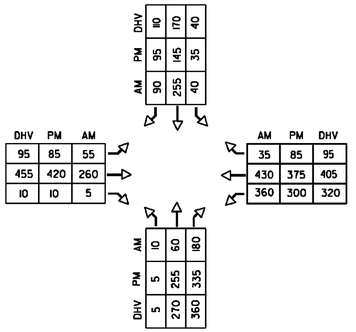
FILE NAME: 85b010_ERO_DET_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
EPSC DETAIL SHEET

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 164 OF 339

VHB Vanasse Hangen Brustlin, Inc.




## 2012 AVERAGE WEEKDAY TRAFFIC DATA




## LIST OF MAJOR EQUIPMENT

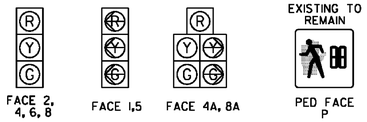
| EQUIPMENT ITEM 678.15 | QUANTITY |
|---|---|
| ONE WAY, 3-SECTION, 12-INCH POLYCARBONATE MAST ARM MOUNTED LED TRAFFIC SIGNAL HEAD WITH TUNNEL VISORS AND LOUVERED BACKPLATES WITH ALL PIECES PAINTED FLAT BLACK | 8 |
| ONE WAY, 5-SECTION, 12-INCH POLYCARBONATE MAST ARM MOUNTED LED TRAFFIC SIGNAL HEAD WITH TUNNEL VISORS AND LOUVERED BACKPLATES WITH ALL PIECES PAINTED FLAT BLACK | 2 |
| ASTRO-BRACKETS | 10 |
| REINSTALL OPTICAL DETECTION EQUIPMENT WITH DETECTOR CABLES | - |

## WIRED CONDUIT (PVC) AND ELECTRICAL CONDUIT SLEEVE SCHEDULE

| ITEM NUMBER | 678.21 | 678.23 | | 678.30 | |
|---|---|---|---|---|---|
| | ELECTRICAL CONDUIT | WIRED CONDUIT | | CONDUIT SLEEVE | |
| FROM/TO | 3" | 3" | 4" | 10" | DESCRIPTION |
| CABINET TO PB #3 | ~~66~~ 98.5 | | ~~86~~ 118.5 | ~~66~~ 84 | EX POLE SW, EX POLE SE, RR PREEMPT |
| PB #3 TO EX POLE SW | | ~~10~~ 5 | | | EX POLE SW |
| PB #3 TO PB #2 | ~~68~~ 97.0 | | ~~112~~ 103 | ~~68~~ 90 | EX POLE SE, RR PREEMPT |
| PB #2 TO EX POLE SE | | ~~15~~ 19 | | | EX POLE SE |
| CABINET TO PB #1 | | ~~15~~ 18 | | | EX POLE NE |
| PB #1 TO EX POLE NE | 71 | ~~103~~ 132 | | ~~71~~ 87 | EX POLE NE |
| PB PREEMPT TO PB #2 | | ~~203~~ 205 | | | RR GATES AND SIGNAL POWER |
| SUB-TOTALS | ~~205~~ 195 | 346 | 198 | ~~205~~ 261 | |
| ROUNDING | 0 | 4 | 2 | 0 | |
| TOTALS | ~~205~~ 195 | 350 | 200 | ~~205~~ 261 | |

## SIGNAL FACE ARRANGEMENT

(12" LED LENSES W/ 5" BACKPLATES)




AT THE COMPLETION OF PHASE IE, REINSTALL SALVAGED MAST ARMS AND INSTALL NEW SIGNAL HEADS ON NEW BRACKETS.

## EQUIPMENT NOTES

(A) SEE STANDARDS E-170, E-171A, E-171B, 171C, 173, & 175 FOR ADDITIONAL INFORMATION.

(B) FOR SIGN DETAILS, SEE SHEETS 85-113.

(C) SEE SHEETS 172, 174, 176, 178, & 180-191 FOR ADDITIONAL DETAILS FOR TRAFFIC CONTROL, CONSTRUCTION, AND PHASING.

## LEGEND

| NEW | EXISTING | LEGEND |
|---|---|---|
| | | CONTROLLER CABINET |
| | | SIGNAL HEAD |
| | | CONDUIT |
| | | OPTICAL DETECTION ZONE |
| | | PEDESTAL POST |
| | | STANCHION |
| | | EMERGENCY VEHICLE PREEMPTION STROBE |
| | | EMERGENCY VEHICLE PREEMPTION RECEIVER |
| | | PEDESTRIAN PUSH BUTTON |
| | | PULL BOX |
| | | OVERHEAD SIGN |
| | | RADIO ANTENNA |
| | | OPTICAL DETECTION |
| | | MAST ARM |

## EXISTING DETECTION SCHEDULE

| OPTICAL VIDEO DETECTORS | | | | | | | |
|---|---|---|---|---|---|---|---|
| LOOP NO. | LANE | CALL Ø | SIZE | TYPE & NO. TURNS | DELAY OR PRESENCE | SLOT | CHANNEL |
| 1 | WBLT | 1 | 6X40 | OPTICAL | PRESENCE | 2 | 1 |
| 2 | EBTH | 2 | 6X40 | OPTICAL | PRESENCE | 4 | 2 |
| 2A | EBRT | 2 | 6X40 | OPTICAL | 5 SEC DELAY | 4 | 3 |
| 4 | SBTH | 4 | 6X40 | OPTICAL | PRESENCE | 6 | 1 |
| 4A | SBRT | 4 | 6X40 | OPTICAL | 5 SEC DELAY | 6 | 2 |
| 5 | EBLT | 5 | 6X40 | OPTICAL | PRESENCE | 4 | 1 |
| 6 | WBTH | 6 | 6X40 | OPTICAL | PRESENCE | 2 | 2 |
| 6A | WBRT | 6 | 6X40 | OPTICAL | 5 SEC DELAY | 2 | 3 |
| 8 | NBLT | 8 | 6X40 | OPTICAL | PRESENCE | 8 | 1 |
| 8A | NBRT | 8 | 6X40 | OPTICAL | 5 SEC DELAY | 8 | 2 |

DATUM
VERTICAL NAVD 1929
HORIZONTAL NAD 27

20 0 20 40
FEET

VHB Vanasse Hangen Brustlin, Inc.

NORTH MAIN ST AND MAPLE AVE / RT 62

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: z085b010_TSPS1.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
TRAFFIC SIGNAL PLAN

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 165 OF 339

## TRAFFIC SIGNAL NOTES

A. NEW EQUIPMENT

1. ALL SIGNAL HEADS MOUNTED ON CANTILEVER ARMS SHALL BE POLYCARBONATE. BACKPLATES SHALL BE REQUIRED ON ALL SIGNAL HEADS. SIGNAL HEADS SHALL BE EQUIPPED FOR RIGID MOUNTING ON MAST ARMS.

2. ALL SIGNAL HEADS SHALL BE LIGHT EMITTING DIODES (LED).

3. ALL SIGNAL EQUIPMENT SHALL BE PAINTED FLAT BLACK IN ACCORDANCE WITH THE SPECIAL PROVISIONS.

B. SIGNAL OPERATION

1. SIGNAL TIMING SHOWN ON THE PLANS SHALL BE IMPLEMENTED AT THE COMPLETION OF THE TEMPORARY TRAFFIC SIGNAL PHASING. SIGNAL TIMING MAY REQUIRE FINE-TUNING IN THE FIELD BASED ON TRAFFIC PATTERNS AND CONDITIONS.

2. THE SIGNAL SHALL BEGIN WITH PHASES 2 & 6 FOLLOWING FLASHING OPERATIONS.

3. PEDESTRIAN MOVEMENTS ARE CONCURRENT WITH AUDIBLE INDICATIONS.

C. TRAFFIC SIGNAL CONDUIT

1. ALL TRAFFIC SIGNAL WIRED CONDUIT SHALL BE 3-INCH OR 4-INCH PVC, SCHEDULE 80.

2. WHEN CONDUIT IS PLACED BELOW THE TRAVELED ROADWAY, IT SHALL BE PLACED IN AN 8-INCH PVC ELECTRICAL CONDUIT SLEEVE, SCHEDULE 80.

D. OPTICAL VEHICLE DETECTION

1. ALL OPTICAL DETECTION CABLES SHALL BE LABELED WITH THE PHASE NUMBERS AND APPROACH DIRECTION CONTROLLED BY THE OPTICAL DETECTION UNIT (PHASE 1&6, WB)

2. ALL PROGRAMMED DETECTION ZONES SHALL FAIL IN THE "ON" MODE.

3. NO SPLICES SHALL BE PERMITTED IN THE OPTICAL DETECTION CABLES.

4. VIDEO DETECTION ZONES SHALL BEGIN AT 5 FEET IN FRONT OF THE STOP LINE AND EXTEND AT LEAST 40 FEET.

5. FINAL VIDEO DETECTION CAMERA AIM AND DETECTION ZONE PLACEMENT SHALL BE DETERMINED IN THE FIELD BY THE CONTRACTOR AND THE RESIDENT ENGINEER.

E. GENERAL

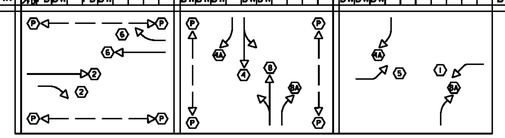
1. INTERSECTION SHALL BE INTERCONNECTED WITH THE INTERSECTION AT MAPLE AVENUE AND SUMMER STREET VIA WIRELESS RADIO SYSTEM. ANTENNA SHALL BE SECURELY MOUNTED TO MAST ARM POLE EXTENSION OR AS DIRECTED BY THE ENGINEER.

2. INTERSECTION SHALL INCLUDE AN EMERGENCY VEHICLE PREEMPTION SYSTEM AS APPROVED BY THE CITY OF BARRE FIRE DEPARTMENT.
   PREEMPT #3 - RECEIVER 1 CALLS PHASES 1 & 6
   PREEMPT #4 - RECEIVER 2 CALLS PHASES 2 & 5
   PREEMPT #5 - RECEIVER 3 CALLS PHASE 8
   PREEMPT #6 - RECEIVER 4 CALLS PHASE 4

## TIMING AND PHASING

| | | PHASE 2+6 (DWELL) | | | | | PHASE 4+8 | | | | | PHASE 1+5 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | R/Y/G | CLEAR TO Ø4+8 | | CLEAR TO Ø1+5 | | R/Y/G | CLEAR TO Ø1+5 | | CLEAR TO Ø2+6 | | R/Y/G | CLEAR TO Ø 2+6 | | | | |
| OFF PEAK REST OF DAY | VEHICLE | - | 1 | | | | 2 | | | | | 2 | | | | | |
| | MINIMUM | 5/22 | 4 | 3 | 4 | 3 | 5/25 | 4 | 2 | 4 | 2 | 5/28 | 4 | 2 | | | |
| | MAXIMUM | 30 | 4 | 3 | 4 | 3 | 25 | 4 | 2 | 4 | 2 | 5/8 | 4 | 2 | | | |
| | MAXIMUM2 | 45 | 4 | 3 | 4 | 3 | 30 | 4 | 2 | 4 | 2 | 5/8 | 4 | 2 | | | |
| | PED ACT | | | | | | | | | | | | | | | | |
| AM PEAK 7-9 AM | VEHICLE | - | | | | | 2 | | | | | 2 | | | | | |
| | MINIMUM | 5/22 | 4 | 3 | 4 | 3 | 5/25 | 4 | 2 | 4 | 2 | 5/28 | 4 | 2 | | | |
| | MAXIMUM | 45 | 4 | 3 | 4 | 3 | 25 | 4 | 2 | 4 | 2 | 5/8 | 4 | 2 | | | |
| | MAXIMUM2 | 60 | 4 | 3 | 4 | 3 | 40 | 4 | 2 | 4 | 2 | 5/8 | 4 | 2 | | | |
| | PED ACT | | | | | | | | | | | | | | | | |
| PM PEAK 3-6 PM | VEHICLE | - | | | | | 2 | | | | | 2 | | | | | |
| | MINIMUM | 5/22 | 4 | 3 | 4 | 3 | 5/25 | 4 | 2 | 4 | 2 | 5/28 | 4 | 2 | | | |
| | MAXIMUM | 45 | 4 | 3 | 4 | 3 | 35 | 4 | 2 | 4 | 2 | 5/8 | 4 | 2 | | | |
| | MAXIMUM3 | 60 | 4 | 3 | 4 | 3 | 50 | 4 | 2 | 4 | 2 | 5/8 | 4 | 2 | | | |
| | PED ACT | | | | | | | | | | | | | | | | |

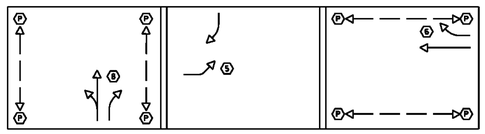
| | | | | | | | | | | | | | | | | | FLASHING OPERATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FACE 1 | G | Y | R | | Y | R | | | | R | R | R | | R | R | R/Y | FY |
| FACE 2 | G | Y | R | | Y | R | | | | R | R | R | | R | R | R/Y | FY |
| FACE 4 | R | R | R | | R | R | | | | G | Y | R | | Y | R | R | FR |
| FACE 4A | R | R | R | | R | R | | | | G | Y | R | | Y | R | R/G | FR |
| FACE 5 | G | Y | R | | Y | R | | | | R | R | R | | R | R | R/Y | FY |
| FACE 6 | G | Y | R | | Y | R | | | | R | R | R | | R | R | R | FY |
| FACE 8 | R | R | R | | R | R | | | | G | Y | R | | Y | R | R | FR |
| FACE 8A | R | R | R | | R | R | | | | G | Y | R | | Y | R | R/G | FR |
| PED (N-S) | DW | DW | DW | | DW | DW | | | | W/FD | DW | | | FD | DW | DW | B |
| PED (E-W) | W/FD | DW | | | FD | DW | | | | DW | DW | DW | | DW | DW | DW | B |



W = WALK, FD = FLASHING DON'T WALK, DW = DON'T WALK, B = BLANK, FR = FLASHING RED, FY = FLASHING YELLOW

1. FACE NUMBERS ARE BASED ON NEMA PHASES
2. EASTBOUND AND WESTBOUND LEFT-TURNS SHALL OPERATE UNDER LEADING PROTECTED ONLY LEFT-TURN PHASING.

## RAILROAD PRE-EMPTION



DWELL IN PHASE 6 UNTIL THE END OF PREEMPTION

AT THE COMPLETION OF THE PREEMPTION CYCLE, RETURN TO PHASES 2+6

## PROGRAM PERIODS OF OPERATION

| | 1 2 3 4 5 6 7 8 9 10 11 12 AM | 1 2 3 4 5 6 7 8 9 10 11 12 PM | AM |
|---|---|---|---|
| SUNDAY | 1 | | |
| MONDAY | 1 | 2 1 | 3 1 |
| TUESDAY | 1 | 2 1 | 3 1 |
| WEDNESDAY | 1 | 2 1 | 3 1 |
| THURSDAY | 1 | 2 1 | 3 1 |
| FRIDAY | 1 | 2 1 | 3 1 |
| SATURDAY | 1 | | |

NOTES:

PLAN 1 - OFFPEAK (MAXIMUM 1): MIDNIGHT TO 7:00 AM, M-F; 9:00 AM TO 3:00 PM, M-F; 6:00 PM TO MIDNIGHT, M-F; ALL DAY SATURDAY AND SUNDAY

PLAN 2 - AM PEAK (MAXIMUM 2): 7:00 AM TO 9:00 AM, M-F

PLAN 3 - PM PEAK (MAXIMUM 3): 3:00 PM TO 6:00 PM, M-F

## COORDINATION CYCLE/SPLIT OFFSET SCHEDULE

| | PLAN 1 | PLAN 2 | PLAN 3 | PLAN 4 |
|---|---|---|---|---|
| CYCLE LENGTH | 80 | 80 | 80 | FREE |
| COS | 111 | 121 | 131 | - |
| OFFSET | 49 | 49 | 50 | - |
| SPLIT TIME 01 | 11 | 11 | 13 | - |
| SPLIT TIME 02 | 38 | 37 | 36 | - |
| SPLIT TIME 03 | 0 | 0 | 0 | - |
| SPLIT TIME 04 | 31 | 32 | 31 | - |
| SPLIT TIME 05 | 27 | 20 | 21 | - |
| SPLIT TIME 06 | 22 | 28 | 28 | - |
| SPLIT TIME 07 | 0 | 0 | 0 | - |
| SPLIT TIME 08 | 31 | 32 | 31 | - |

COORDINATION NOTES:
1. OFFSET IS REFERENCED TO BEGINNING OF THE COORDINATED GREEN PHASE (04 & 08)

DATUM
VERTICAL NAVD 1929
HORIZONTAL NAD 27

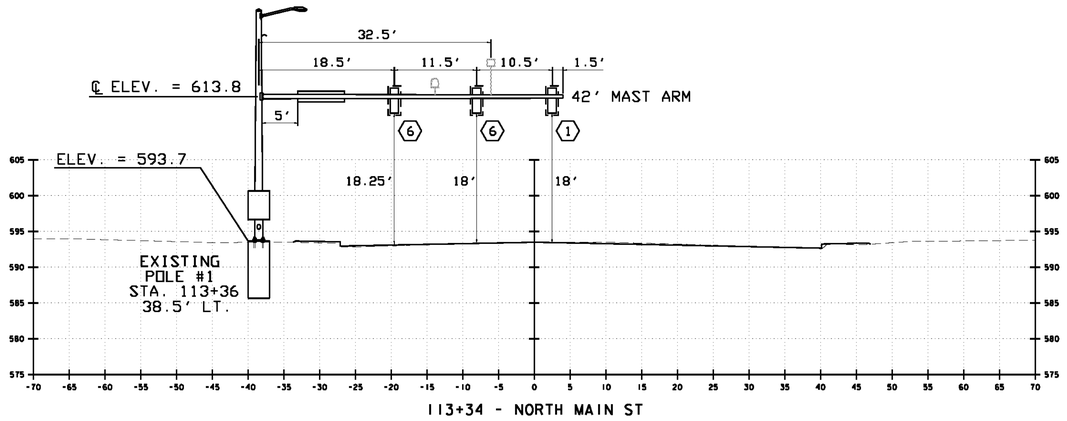
NORTH MAIN ST AND MAPLE AVE / RT 62

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

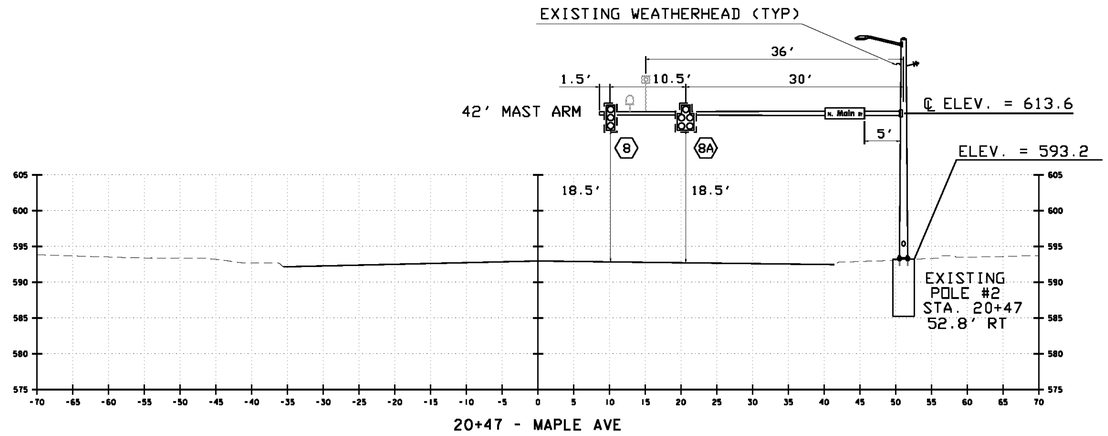
FILE NAME: z85b010_TSPS1A.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
TRAFFIC SIGNAL PLAN

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 166 OF 339

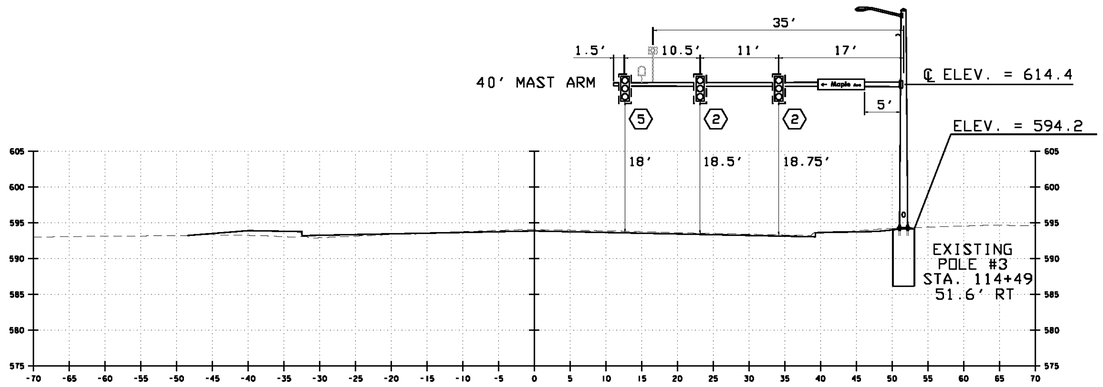
VHB Vanasse Hangen Brustlin, Inc.



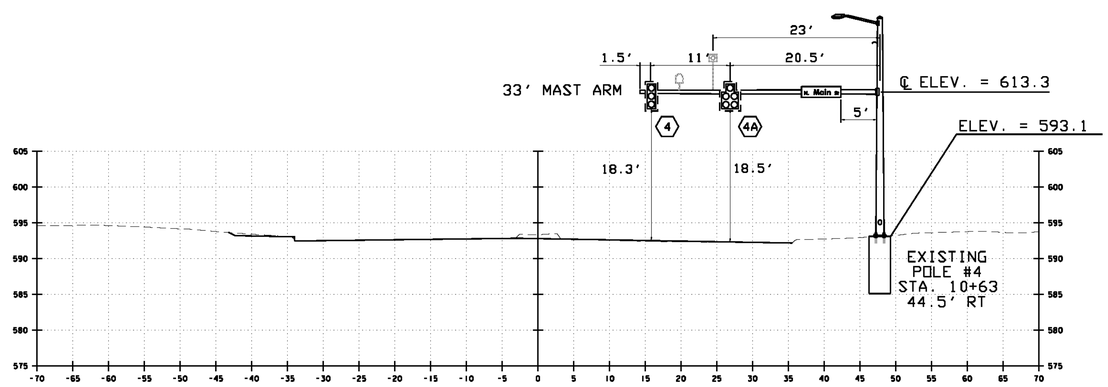

113+34 - NORTH MAIN ST




20+47 - MAPLE AVE




114+51 - NORTH MAIN ST




10+63 - VT 62

NOTES:

1. LOCATIONS OF OPTICAL DETECTION EQUIPMENT AND WIRELESS EQUIPMENT ARE APPROXIMATE. FINAL LOCATIONS FOR OPTICAL DETECTION EQUIPMENT AND WIRELESS EQUIPMENT SHALL BE DETERMINED BY THE CONTRACTOR AND THE ENGINEER IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

2. CROSS-SECTIONS SHOW LOCATION OF SIGNS AND SIGNALS AT THE COMPLETION OF THE TEMPORARY SIGNAL PHASING.

DATUM

VERTICAL NAVD 1929

HORIZONTAL NAD 27

NORTH MAIN ST AND MAPLE AVE / RT 62

PROJECT NAME: BARRE CITY

PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: z85b010_TSPSIC.dgn

PROJECT LEADER: G. BAKOS

DESIGNED BY: DMP / MDS

TRAFFIC SIGNAL PLAN

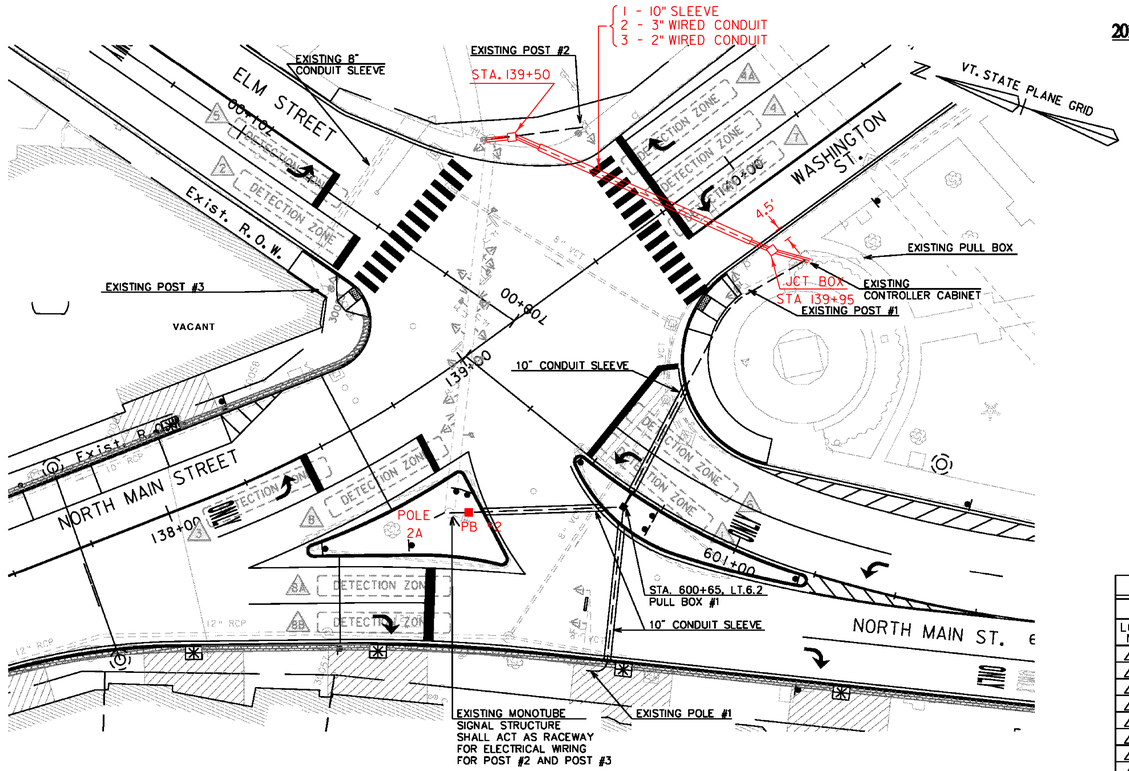
PLOT DATE: 3/31/2011

DRAWN BY: DMP / JAR

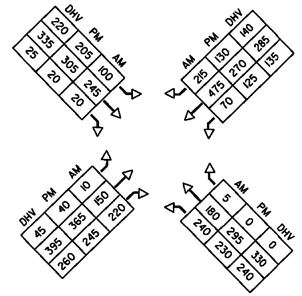
CHECKED BY:



VHB Vanasse Hangen Brustlin, Inc.




## 2012 AVERAGE WEEKDAY TRAFFIC DATA




## EXISTING DETECTION SCHEDULE

| OPTICAL VIDEO DETECTORS | | | | | | | |
|---|---|---|---|---|---|---|---|
| LOOP NO. | LANE | CALL Ø | SIZE | TYPE & NO. TURNS | DELAY OR PRESENCE | SLOT | CHANNEL |
| 1 | NBLT | 1 | 6X40 | OPTICAL | PRESENCE | 2 | 1 |
| 2 | SBTH | 2 | 6X40 | OPTICAL | PRESENCE | 4 | 2 |
| 3 | EBLT | 3 | 6X40 | OPTICAL | PRESENCE | 6 | 1 |
| 4 | WBTH | 4 | 6X40 | OPTICAL | PRESENCE | 8 | 2 |
| 4A | WBRT | 4 | 6X40 | OPTICAL | 5 SEC DELAY | 8 | 3 |
| 5 | SBLT | 5 | 6X40 | OPTICAL | PRESENCE | 4 | 1 |
| 6 | NBTH | 6 | 6X40 | OPTICAL | PRESENCE | 2 | 2 |
| 7 | WBLT | 7 | 6X40 | OPTICAL | PRESENCE | 8 | 1 |
| 8 | EBTH | 8 | 6X40 | OPTICAL | PRESENCE | 6 | 2 |
| 8A | EBRT1 | 8 | 6X40 | OPTICAL | PRESENCE | 8 | 4 |
| 8B | EBRT2 | 8 | 6X40 | OPTICAL | PRESENCE | 8 | 4 |

## LEGEND

| EXISTING | LEGEND |
|---|---|
| | CONTROLLER CABINET |
| | SIGNAL HEAD |
| | CONDUIT |
| | OPTICAL DETECTION ZONE |
| | PEDESTAL POST |
| | STANCHION |
| | EMERGENCY VEHICLE PREEMPTION STROBE |
| | EMERGENCY VEHICLE PREEMPTION RECEIVER |
| | PEDESTRIAN PUSH BUTTON |
| | PULL BOX |
| | OVERHEAD SIGN |
| | RADIO ANTENNA |
| | OPTICAL DETECTION |
| | MAST ARM |
| | SIGNAL MONOTUBE STRUCTURE |

## WIRED CONDUIT (PVC) AND ELECTRICAL CONDUIT SLEEVE SCHEDULE

| ITEM NUMBER | 678.24 | 678.23 | | 678.30 | |
|---|---|---|---|---|---|
| | ELECTRICAL WIRING | WIRED CONDUIT | | CONDUIT SLEEVE | |
| FROM/TO | | 3" | 4" | 10" | DESCRIPTION |
| CABINET TO PB #1 | | | 212 | 37 | MONOTUBE, POLE #1, POST #2, POST #3 |
| PB #1 TO MONOTUBE STRUCTURE | | | 54 | 37 | MONOTUBE, POST #2, POST #3 |
| PB #1 TO EX POLE #1 | | 54 | | 39 | POST #1 |
| USE SIGNAL MONOTUBE AS RACEWAY | 152 | | | | MONOTUBE, POST #2, POST #3 |
| MONOTUBE TO POST #2 | | 29 | | | POST #2 |
| MONOTUBE TO POST #3 | | 214 | | | POST #3 |
| SUB-TOTALS | 152 | 297 | 266 | 113 | |
| ROUNDING | 3 | 3 | 4 | 2 | |
| TOTALS | 155 | 300 | 270 | 115 | |

## EQUIPMENT NOTES

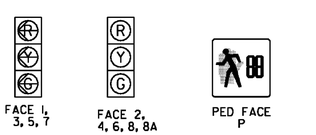
(A) SEE STANDARDS E-170, E-171A, E-171B, 171C, 173, & 175 FOR ADDITIONAL INFORMATION.

(B) FOR SIGN DETAILS, SEE SHEET 100.

(C) SEE SHEETS 172, 184-188, AND 192 FOR ADDITIONAL DETAILS FOR TRAFFIC CONTROL, CONSTRUCTION, AND PHASING.

## EXISTING SIGNAL FACE ARRANGEMENT

(12" LED LENSES W/ 5" BACKPLATES)




DATUM
VERTICAL NAVD 1929
HORIZONTAL NAD 27

VHB Vanasse Hangen Brustlin, Inc.

NORTH MAIN ST AND ELM ST/WASHINGTON ST

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: z85b010_TSPS2.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
TRAFFIC SIGNAL PLAN
PLOT DATE: 3/31/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 168 OF 339

## TRAFFIC SIGNAL NOTES

A. SIGNAL OPERATION

1. SIGNAL TIMING SHOWN ON THE PLANS SHALL BE IMPLEMENTED AT THE COMPLETION OF THE TRAFFIC SIGNAL CONSTRUCTION. SIGNAL TIMING SHOWN ON THE PLANS MAY REQUIRE FINE-TUNING IN THE FIELD BASED ON TRAFFIC PATTERNS AND CONDITIONS.

2. THE SIGNAL SHALL BEGIN WITH PHASES 2 & 6 FOLLOWING FLASHING OPERATIONS.

3. PEDESTRIAN MOVEMENTS ARE CONCURRENT WITH AUDIBLE INDICATIONS.

B. TRAFFIC SIGNAL CONDUIT

1. ALL TRAFFIC SIGNAL WIRED CONDUIT SHALL BE 3-INCH OR 4-INCH PVC, SCHEDULE 80.

2. WHEN CONDUIT IS PLACED BELOW THE TRAVELED ROADWAY, IT SHALL BE PLACED IN AN 8-INCH PVC ELECTRICAL CONDUIT SLEEVE, SCHEDULE 80.

C. OPTICAL VEHICLE DETECTION

1. ALL OPTICAL DETECTION CABLES SHALL BE LABELED WITH THE PHASE NUMBERS AND APPROACH DIRECTION CONTROLLED BY THE OPTICAL DETECTION UNIT (PHASE 1&6, WB)

2. ALL PROGRAMMED DETECTION ZONES SHALL FAIL IN THE "ON" MODE.

3. NO SPLICES SHALL BE PERMITTED IN THE OPTICAL DETECTION CABLES.

4. VIDEO DETECTION ZONES SHALL BEGIN AT 5 FEET IN FRONT OF THE STOP LINE AND EXTEND AT LEAST 40 FEET.

5. FINAL VIDEO DETECTION CAMERA AIM AND DETECTION ZONE PLACEMENT SHALL BE DETERMINED IN THE FIELD BY THE CONTRACTOR AND THE RESIDENT ENGINEER.

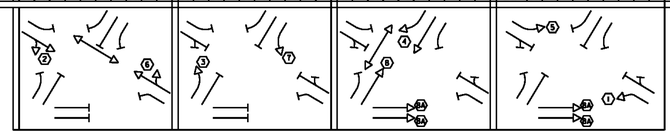
D. GENERAL

1. INTERSECTION SHALL BE INTERCONNECTED WITH THE INTERSECTION AT N./S. MAIN ST. AND PROSPECT ST./CHURCH ST. ANTENNA SHALL BE SECURELY MOUNTED TO LIGHTING ARM EXTENSION OR AS DIRECTED BY THE ENGINEER.

2. INTERSECTION SHALL INCLUDE AN EMERGENCY VEHICLE PREEMPTION SYSTEM AS APPROVED BY THE CITY OF BARRE FIRE DEPARTMENT.
   PREEMPT #3 - RECEIVER 1 CALLS PHASES 1 & 6
   PREEMPT #4 - RECEIVER 2 CALLS PHASES 2 & 5
   PREEMPT #5 - RECEIVER 3 CALLS PHASE 3 & 8
   PREEMPT #6 - RECEIVER 4 CALLS PHASE 4 & 7

## TIMING AND PHASING

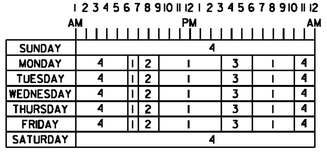
| | | | PHASE 2+6 (DWELL) | | | | | | | | PHASE 3+7 | | | | | | | | PHASE 4+8 | | | | | | | | PHASE 1+5 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | CLEAR TO | | | | | | | | CLEAR TO | | | | | | | | CLEAR TO | | | | | | | | CLEAR TO | | | | | | |
| | | | | Ø 3+7 | | | Ø 4+8 | | Ø 1+5 | | | Ø 4+8 | | Ø 1+5 | | Ø 2+6 | | | | Ø 1+5 | | Ø 2+6 | | | | | | Ø 2+6 | | | | | | |
| OFF PEAK REST OF DAY | VEHICLE | 2 | | | | | | | | | | | | | | | | | 2 | | | | | | | | | | | | | | |
| | MINIMUM | 8/13 | 4 | 3 | | 4 | 3 | | 4 | 3 | 8 | 4 | 3 | | 4 | 3 | | 4 | 3 | 8/10 | 4 | 3 | | 4 | 3 | | | 8 | 4 | 3 | | | | |
| | MAXIMUM | 40 | 4 | 3 | | 4 | 3 | | 4 | 3 | 10 | 4 | 3 | | 4 | 3 | | 4 | 3 | 25 | 4 | 3 | | 4 | 3 | | | 15 | 4 | 3 | | | | |
| | MAXIMUM2 | 45 | 4 | 3 | | 4 | 3 | | 4 | 3 | 15 | 4 | 3 | | 4 | 3 | | 4 | 3 | 30 | 4 | 3 | | 4 | 3 | | | 20 | 4 | 3 | | | | |
| | MAXIMUM3 | | | 4 | 3 | | 4 | 3 | | 4 | 3 | | 4 | 3 | | 4 | 3 | | 4 | 3 | | 4 | 3 | | 4 | 3 | | | | 4 | 3 | | | | |
| | PED ACT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| AM PEAK 7-9 AM | VEHICLE | 2 | | | | | | | | | | | | | | | | | 2 | | | | | | | | | | | | | | |
| | MINIMUM | 8/13 | 4 | 3 | | 4 | 3 | | 4 | 3 | 8 | 4 | 3 | | 4 | 3 | | 4 | 3 | 8/10 | 4 | 3 | | 4 | 3 | | | 8 | 4 | 3 | | | | |
| | MAXIMUM | 40 | 4 | 3 | | 4 | 3 | | 4 | 3 | 10 | 4 | 3 | | 4 | 3 | | 4 | 3 | 25 | 4 | 3 | | 4 | 3 | | | 15 | 4 | 3 | | | | |
| | MAXIMUM2 | 45 | 4 | 3 | | 4 | 3 | | 4 | 3 | 15 | 4 | 3 | | 4 | 3 | | 4 | 3 | 30 | 4 | 3 | | 4 | 3 | | | 20 | 4 | 3 | | | | |
| | MAXIMUM3 | | | 4 | 3 | | 4 | 3 | | 4 | 3 | | 4 | 3 | | 4 | 3 | | 4 | 3 | | 4 | 3 | | 4 | 3 | | | | 4 | 3 | | | | |
| | PED ACT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PM PEAK 3-6 PM | VEHICLE | 2 | | | | | | | | | | | | | | | | | 2 | | | | | | | | | | | | | | |
| | MINIMUM | 8/13 | 4 | 3 | | 4 | 3 | | 4 | 3 | 8 | 4 | 3 | | 4 | 3 | | 4 | 3 | 8/10 | 4 | 3 | | 4 | 3 | | | 8 | 4 | 3 | | | | |
| | MAXIMUM | 40 | 4 | 3 | | 4 | 3 | | 4 | 3 | 10 | 4 | 3 | | 4 | 3 | | 4 | 3 | 25 | 4 | 3 | | 4 | 3 | | | 15 | 4 | 3 | | | | |
| | MAXIMUM2 | 45 | 4 | 3 | | 4 | 3 | | 4 | 3 | 15 | 4 | 3 | | 4 | 3 | | 4 | 3 | 30 | 4 | 3 | | 4 | 3 | | | 20 | 4 | 3 | | | | |
| | MAXIMUM3 | | | 4 | 3 | | 4 | 3 | | 4 | 3 | | 4 | 3 | | 4 | 3 | | 4 | 3 | | 4 | 3 | | 4 | 3 | | | | 4 | 3 | | | | |
| | PED ACT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | FACE 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | FR (ARROW) |
| | FACE 2 | G | Y | R | | Y | R | | Y | R | R | R | R | | R | R | | R | R | R | R | R | | R | R | | | R | R | R | | | | FY |
| | FACE 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | FR (ARROW) |
| | FACE 4 | R | R | R | | R | R | | R | R | R | R | R | | R | R | | R | R | G | Y | R | | Y | R | | | R | R | R | | | | FR |
| | FACE 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | FR (ARROW) |
| | FACE 6 | G | Y | R | | Y | R | | Y | R | R | R | R | | R | R | | R | R | R | R | R | | R | R | | | R | R | R | | | | FY |
| | FACE 7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | FR (ARROW) |
| | FACE 8 | R | R | R | | R | R | | R | R | R | R | R | | R | R | | R | R | G | Y | R | | Y | R | | | R | R | R | | | | FR |
| | FACE 8A | R | R | R | | R | R | | R | R | R | R | R | | R | R | | R | R | G | G | G | | Y | R | | | G | Y | R | | | | FR |
| | PED (N-S) | W | FD | DW | | FD | DW | | FD | DW | DW | DW | DW | | DW | DW | | DW | DW | DW | DW | DW | | DW | DW | | | DW | DW | DW | | | | DARK |
| | PED (E-W) | DW | DW | DW | | DW | DW | | DW | DW | DW | DW | DW | | DW | DW | | DW | DW | W | FD | DW | | FD | DW | | | DW | DW | DW | | | | DARK |



W = WALK, FD = FLASHING DON'T WALK, DW = DON'T WALK, B = BLANK, FR = FLASHING RED, FY = FLASHING YELLOW

1. FACE NUMBERS ARE BASED ON NEMA PHASES
2. ALL LEFT-TURN PHASES SHALL OPERATE UNDER PROTECTED LEFT-TURN PHASING.
3. EASTBOUND RIGHT TURNS (8A) SHALL OVERLAP PHASE 1

## PROGRAM PERIODS OF OPERATION




| | | | | | | | |
|---|---|---|---|---|---|---|---|
| SUNDAY | 4 | | | | | | |
| MONDAY | 4 | 1 | 2 | 1 | 3 | 1 | 4 |
| TUESDAY | 4 | 1 | 2 | 1 | 3 | 1 | 4 |
| WEDNESDAY | 4 | 1 | 2 | 1 | 3 | 1 | 4 |
| THURSDAY | 4 | 1 | 2 | 1 | 3 | 1 | 4 |
| FRIDAY | 4 | 1 | 2 | 1 | 3 | 1 | 4 |
| SATURDAY | 4 | | | | | | |

NOTES:

PLAN 1 - MIDDAY (MAXIMUM 1): 6:00 AM TO 7:00 AM, M-F; 9:00 AM TO 3:00 PM, M-F; 6:00 PM TO 10:00 PM, M-F

PLAN 2 - AM PEAK (MAXIMUM 2): 7:00 AM TO 9:00 AM, M-F

PLAN 3 - PM PEAK (MAXIMUM 3): 3:00 PM TO 6:00 PM, M-F

PLAN 4 - OFFPEAK (MAXIMUM 1): MIDNIGHT TO 6:00 AM, M-F; 10:00 PM TO MIDNIGHT, M-F; ALL DAY SATURDAYS AND SUNDAYS

## COORDINATION CYCLE/SPLIT OFFSET SCHEDULE

| | PLAN 1 | PLAN 2 | PLAN 3 | PLAN 4 |
|---|---|---|---|---|
| CYCLE LENGTH | 80 | 90 | 80 | FREE |
| COS | 111 | 221 | 131 | - |
| OFFSET | 0 | 0 | 0 | - |
| SPLIT TIME 01 | 20 | 23 | 18 | - |
| SPLIT TIME 02 | 20 | 21 | 21 | - |
| SPLIT TIME 03 | 11 | 11 | 11 | - |
| SPLIT TIME 04 | 29 | 35 | 30 | - |
| SPLIT TIME 05 | 15 | 16 | 16 | - |
| SPLIT TIME 06 | 25 | 28 | 23 | - |
| SPLIT TIME 07 | 11 | 14 | 12 | - |
| SPLIT TIME 08 | 29 | 32 | 29 | - |

COORDINATION NOTES:
1. OFFSET IS REFERENCED TO BEGINNING OF THE COORDINATED PHASE (01, NBL)

DATUM
VERTICAL NAVD 1929
HORIZONTAL NAD 27

VHB Vanasse Hangen Brustlin, Inc.

NORTH MAIN ST AND ELM ST/WASHINGTON ST

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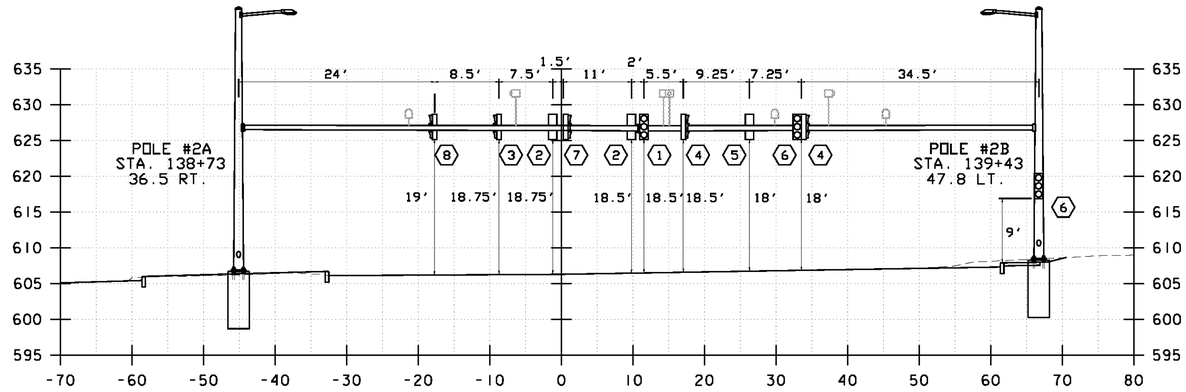
CHECKED BY:
SHEET 169 OF 339




600+04 (N. MAIN ST BASELINE - SKEWED)

## SUMMARY OF QUANTITIES

### WIRED CONDUIT (PVC) AND ELECTRICAL CONDUIT SLEEVE SCHEDULE

| ITEM NUMBER | 678.21 | 678.24 | 678.23 | | | 678.30 | |
|---|---|---|---|---|---|---|---|
| | ELECTRICAL CONDUIT | ELECTRICAL WIRING | WIRED CONDUIT | | | CONDUIT SLEEVE | |
| | 3" | | 2" | 3" | 4" | 10" | DESCRIPTION |
| SHEET 165 | 205 | | | 346 | 198 | 205 | |
| SHEET 168 | | 152 | | 297 | 266 | 113 | |
| | | | | | | | |
| SUB-TOTALS | 205 | 152 | 0 | 643 | 464 | 318 | |
| ROUNDING | 0 | 3 | 0 | 7 | 6 | 2 | |
| TOTALS | 205 | 155 | 0 | 650 | 470 | 320 | |

NOTES:

1. LOCATIONS OF OPTICAL DETECTION EQUIPMENT AND WIRELESS EQUIPMENT ARE APPROXIMATE. FINAL LOCATIONS FOR OPTICAL DETECTION EQUIPMENT AND WIRELESS EQUIPMENT SHALL BE DETERMINED BY THE CONTRACTOR AND THE ENGINEER IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
2. CROSS-SECTION SHOWS LOCATION OF SIGNALS AT THE COMPLETION OF THE DETOUR OPERATIONS.

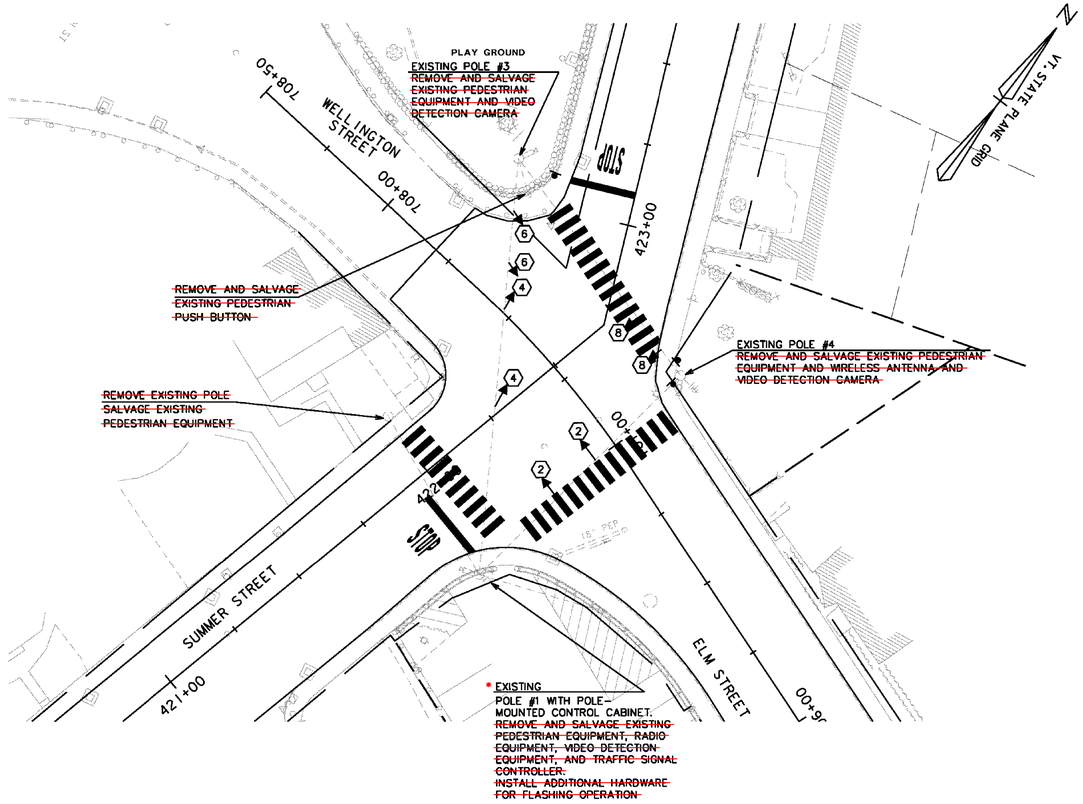
DATUM
VERTICAL NAVD 1929
HORIZONTAL NAD 27

VHB Vanasse Hangen Brustlin, Inc.

NORTH MAIN ST AND ELM ST/WASHINGTON ST

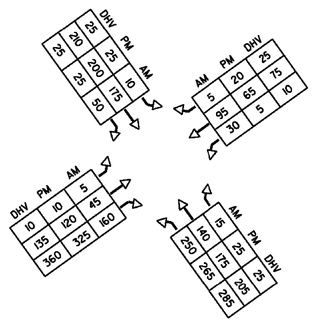
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: z85b010_TSPS2D.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
TRAFFIC SIGNAL PLAN
PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 170 OF 339




*THIS INTERSECTION WAS LEFT AS A FULLY SIGNALIZED INTERSECTION PER REQUEST FROM CITY OF BARRE. FLASHING BEACON EQUIPMENT, WHICH HAD BEEN PURCHASED BY SUB-CONTRACTOR, WAS DELIVERED TO THE PROJECT AND TURNED OVER TO VAOT TRAFFIC SHOP.

## 2012 AVERAGE WEEKDAY TRAFFIC DATA




DATUM
VERTICAL NAVD 1929
HORIZONTAL NAD 27

## SIGNAL FACE ARRANGEMENT

( 12" LED LENSES W/ 5" BACKPLATES )

• Ⓨ FACE 2 & 6 Ⓡ FACE 4 & 8

• CONTRACTOR MAY REINSTALL ORIGINAL SIGNAL HEADS 4 REMOVED FOR TEMPORARY TRAFFIC SIGNAL OPERATIONS

## LIST OF MAJOR EQUIPMENT

| EQUIPMENT ITEM 678.17 | QUANTITY |
|---|---|
| ~~REMOVE AND SALVAGE SIGNAL HEADS (PED AND VEHICLE)~~ | ~~12~~ |
| ~~REMOVE AND SALVAGE PEDESTRIAN PUSH BUTTONS AND SIGNS~~ | ~~6~~ |
| • REMOVE AND SALVAGE RADIO INTERCONNECT EQUIPMENT | 1 |
| ~~REMOVE AND SALVAGE VIDEO DETECTION CAMERAS~~ | ~~3~~ |
| ~~REMOVE AND SALVAGE VIDEO DETECTION EQUIPMENT~~ | ~~1~~ |
| ~~REMOVE AND SALVAGE TRAFFIC SIGNAL CONTROLLER~~ | ~~1~~ |
| ~~FLASHING CONTROL EQUIPMENT~~ | ~~1~~ |
| ~~ONE WAY, SINGLE-SECTION, 12-INCH POLYCARBONATE SPAN-WIRE MOUNTED LED TRAFFIC SIGNAL HEADS WITH TUNNEL VISORS PAINTED FLAT BLACK~~ | ~~8~~ |
| ~~REMOVE AND SALVAGE EMERGENCY VEHICLE PREEMPTION EQUIPMENT~~ | ~~1~~ |

• THIS EQUIPMENT REMOVED AND SALVAGED (TO VAOT TRAFFIC SHOP) AND REPLACED WITH GPS UNIT.

## LEGEND

| EXISTING | LEGEND |
|---|---|
| | CONTROLLER CABINET |
| | SIGNAL HEAD |
| | CONDUIT |
| | OPTICAL DETECTION ZONE |
| | PEDESTAL POST |
| | STANCHION |
| | EMERGENCY VEHICLE PREEMPTION STROBE |
| | EMERGENCY VEHICLE PREEMPTION RECEIVER |
| | PEDESTRIAN PUSH BUTTON |
| | PULL BOX |
| | OVERHEAD SIGN |
| | RADIO ANTENNA |
| | OPTICAL DETECTION |
| | MAST ARM |
| | STEEL STRAIN POLE |

20 0 20 40
FEET

VHB Vanasse Hangen Brustlin, Inc.

FLASHING BEACON, AERIAL MOUNTED
SUMMER ST AND ELM ST/WELLINGTON ST

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-I(34) C/2

FILE NAME: z85b010_TSPS5-PERM.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
TRAFFIC SIGNAL PLAN

PLOT DATE: 3/31/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 171 OF 339

GENERAL

THE FOLLOWING TRAFFIC CONTROL INFORMATION AND PHASING PLAN IS INTENDED TO BE A CONCEPTUAL PLAN FOR HOW THE WORK MAY PROCEED. THE CONTRACTOR SHALL SUBMIT A DETAILED TRAFFIC CONTROL PLAN TO THE VERMONT AGENCY OF TRANSPORTATION (VAOT) ROADWAY DESIGN ENGINEER, VIA THE ENGINEER. THE CONTRACTOR SHALL ALLOW AT LEAST TWO (2) WEEKS FOR VAOT REVIEW AND APPROVAL. ALL CHANGES TO THE TRAFFIC CONTROL PLAN MUST BE APPROVED BY VAOT. MODIFICATIONS TO THE APPROVED TRAFFIC CONTROL PLAN FOR VEHICLES OR PEDESTRIANS SHALL BE SUBMITTED TO THE ENGINEER AT LEAST TWO WEEKS PRIOR TO THE IMPLEMENTATION OF THE CHANGE.

THE CONTRACTOR'S TRAFFIC CONTROL PLAN SHALL BE DEVELOPED IN ACCORDANCE WITH THE 2006 EDITION OF VTRANS STANDARD SPECIFICATIONS SECTION 641 - TRAFFIC CONTROL AND IN SUBSTANTIAL CONFORMANCE WITH THE 2009 EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) WITH LATEST INTERIMS. THE PLAN SHALL ACCOMMODATE VEHICLE TRAFFIC, PEDESTRIAN TRAFFIC, AND EMERGENCY SERVICES. THE TRAFFIC CONTROL PLAN SHALL INCLUDE ALL TEMPORARY SIGNS, PAVEMENT MARKINGS, CHANNELIZING DEVICES, PORTABLE MESSAGE BOARDS, ARROW PANELS, AND OTHER DEVICES REQUIRED TO PROVIDE COMPLETE MANAGEMENT OF TRAFFIC. ANY SIGNS NOT INCLUDED IN THE FHWA STANDARD HIGHWAY SIGNS BOOK SHALL INCLUDE SIGN FACE DIMENSIONS AND LAYOUT.

THE RECONSTRUCTION OF NORTH MAIN STREET SHALL INCLUDE THE USE OF DETOUR ROUTES. TRAFFIC SHALL BE MAINTAINED AT ALL TIMES BY USING A COMBINATION OF THROUGH ROUTE DETOURS AND LOCAL ACCESS DETOURS AS DETERMINED BY THE APPROVED TRAFFIC CONTROL PLAN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING, ERECTING, MAINTAINING, AND REMOVING ALL TEMPORARY AND DETOUR SIGNING ALONG THE DETOUR ROUTES AS SHOWN IN THE PLANS, AS REQUIRED BY SITE SPECIFIC WORK, AND AS DIRECTED BY THE ENGINEER.

MODIFICATIONS TO THE EXISTING SIGNAL SYSTEMS, INCLUDING THE INSTALLATION AND ADJUSTMENT OF TEMPORARY TRAFFIC SIGNAL SYSTEMS AT THE INTERSECTIONS OF N. MAIN STREET AT MAPLE AVENUE/ROUTE 62, N. MAIN STREET AT ELM STREET/WASHINGTON STREET, MAPLE AVENUE AT SUMMER STREET, AND SUMMER STREET AT ELM STREET/WELLINGTON STREET SHALL BE REQUIRED AS PART OF THE DETOUR ROUTES. ALL TRAFFIC CONTROL DETAILS SHALL BE DESIGNED AND IMPLEMENTED IN ACCORDANCE WITH THE MUTCD, VAOT STANDARDS, AND THE CONTRACTOR'S APPROVED TRAFFIC CONTROL PLANS.

THE RECONSTRUCTION OF NORTH MAIN STREET SHALL BEGIN NEAR THE INTERSECTION OF MAPLE AVENUE/ROUTE 62, PROGRESSING EASTWARD TOWARDS CITY PARK. THE WORK SHALL BE STAGED ACCORDING TO THE CONSTRUCTION AND DETOUR SIGNING PLANS (SHEETS 173-188) AND AS APPROVED BY THE ENGINEER.

DURING THE STAGED CONSTRUCTION OF NORTH MAIN STREET, DETOUR PLANS SHALL BE ESTABLISHED TO MAINTAIN THE CONTINUITY OF VEHICLE AND PEDESTRIAN TRAFFIC THROUGH THE CORRIDOR. DETOUR SIGNS SHALL BE ADJUSTED AT THE COMPLETION OF EACH CONSTRUCTION PHASE AS SHOWN ON THE DETOUR PLANS AND AS DIRECTED BY THE ENGINEER. TRAFFIC SIGNAL TIMING AND PHASING SHALL BE ADJUSTED DURING DETOUR OPERATIONS AS NEEDED AND WITH THE APPROVAL OF THE ENGINEER. THE CONTRACTOR SHALL MAINTAIN ALL DETOURS, TEMPORARY SIGNING, TEMPORARY TRAFFIC SIGNALS, AND OTHER SUPPORTING TRAFFIC CONTROLS THROUGHOUT CONSTRUCTION. INSTALLING, MAINTAINING, ADJUSTING, MODIFYING, AND REMOVING THE DETOUR AND TRAFFIC CONTROLS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONTRACT ITEM 641.10 TRAFFIC CONTROL. INSTALLING, MAINTAINING, ADJUSTING, MODIFYING, AND REMOVING THE TEMPORARY TRAFFIC SIGNALS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONTRACT ITEM 678.40 TEMPORARY TRAFFIC SIGNAL SYSTEM.

TRAFFIC SHALL NOT BE CHANGED FROM ONE PHASE TO THE NEXT UNTIL ALL TEMPORARY MARKINGS, SIGNING, AND TRAFFIC SIGNAL WORK REQUIRED FOR THE SUBSEQUENT PHASE IS COMPLETED. ANY CONFLICTING PAVEMENT MARKINGS SHALL BE MASKED WITH PAVEMENT MARKING MASK OR REMOVED BY GRINDING. EXISTING PAVEMENT MARKINGS THAT ARE TO REMAIN FOR LATER USE SHALL BE MASKED WITH PAVEMENT MARKING MASK. SIGNALIZED INTERSECTIONS SHALL BE CONTROLLED BY UNIFORMED TRAFFIC OFFICERS AT ANY TIME THEY ARE NOT IN NORMAL OPERATION (FULL GREEN-YELLOW-RED COLOR OPERATIONS IN ACCORDANCE WITH THE TEMPORARY OR PERMANENT SIGNAL PLANS). ALL NON-OPERATING TRAFFIC SIGNAL HEADS SHALL BE REMOVED OR COMPLETELY COVERED.

EACH SEGMENT OF ROADWAY CONSTRUCTED SHALL ALLOW FOR FULL-DEPTH EXCAVATION, ALL UTILITY INSTALLATION AND REPLACEMENT, DRAINAGE INSTALLATION, AND THE CONSTRUCTION OF THE ROADWAY TO INCLUDE THE PAVEMENT BASE COURSES. EACH SEGMENT SHALL PROVIDE INTERIM PLACEMENT OF DRAINAGE GRATES AS NEEDED. TEMPORARY PAVEMENT MARKINGS SHALL BE PLACED ON ALL RECONSTRUCTED ROADWAY SEGMENTS PRIOR TO OPENING THAT SEGMENT TO TRAFFIC. UPON COMPLETION OF EACH CONSTRUCTION SEGMENT, THAT SEGMENT SHOULD BE OPENED AND MADE AVAILABLE TO LOCAL TRAFFIC. AT THE COMPLETION OF ALL CONSTRUCTION PHASES, THE CONTRACTOR SHALL APPLY THE BINDER AND TOP COURSE PAVEMENT AND APPLY THE FINAL PAVEMENT MARKINGS.

SEVERAL OF THE CONSTRUCTION PHASES SHOW VEHICULAR TRAFFIC ADJACENT TO CONSTRUCTION WORK AREAS. REFLECTORIZED DRUMS SHALL BE USED TO DELINEATE THE WORK ZONE FROM THE TRAVELED WAY FOR VERTICAL DROP OFFS OF NOT MORE THAN THREE INCHES. FOR VERTICAL GRADE CHANGES GREATER THAN THREE INCHES, THE SLOPE ADJACENT TO THE TRAVELED WAY SHALL BE AT LEAST 4H:1V OR FLATTER WHEN UNATTENDED AND SHALL BE SEPARATED FROM THE TRAVELED WAY BY THREE HORIZONTAL FEET AND REFLECTORIZED DRUMS. FOR SHORT DURATIONS OF NOT MORE THAN THREE DAYS, THE SLOPE ADJACENT TO THE TRAVELED WAY MAY BE 3H:1V BEHIND DRUMS. DURING ACTIVE AND ATTENDED CONSTRUCTION ACTIVITIES, AND IN THE PRESENCE OF UNIFORMED TRAFFIC OFFICERS, THE ADJACENT STREET TRAFFIC SHALL BE A MINIMUM OF THREE FEET FROM THE EDGE OF THE EXCAVATION AND DELINEATED BY REFLECTORIZED DRUMS. IF THE GRADE CHANGE ADJACENT TO THE TRAVELED WAY IS MORE SEVERE THAN THESE CONDITIONS IN A WORK AREA , TEMPORARY CONCRETE BARRIER WALL SHALL BE USED TO SEPARATE THE WORK ZONE FROM ADJACENT TRAFFIC. ALL TEMPORARY CONCRETE BARRIER WALL SHALL HAVE THE BLUNT ENDS THAT FACE ON-COMING TRAFFIC PROTECTED IN ACCORDANCE WITH THE AASHTO ROADSIDE DESIGN GUIDE AND VAOT STANDARDS.

EXISTING SIGNS SHALL REMAIN UNTIL THEY ARE NO LONGER REQUIRED. EXISTING SIGNS WHICH CONFLICT WITH TEMPORARY TRAFFIC CONTROLS SHALL BE COMPLETELY COVERED WITH SOLID COVERS PAINTED BLACK OR REMOVED/RELOCATED AS NEEDED. TEMPORARY SIGNS SHALL BE INSTALLED AS SHOWN IN THE PLANS AND THE CONTRACTOR'S APPROVED TRAFFIC CONTROL PLANS. NEW SIGNING SHALL BE INSTALLED AS IT BECOMES APPLICABLE. ALL PROPOSED SIGNING SHALL BE INSTALLED AND ALL SIGNS TO BE REMOVED SHALL BE REMOVED PRIOR TO THE APPLICATION OF THE FINAL PAVEMENT MARKINGS.

GENERAL (CONT.)

CONTRACTOR SHALL MAINTAIN PEDESTRIAN ACCESS TO ALL COMMERCIAL AND MUNICIPAL PROPERTIES DURING BUSINESS HOURS. PEDESTRIAN ACCESS SHALL MEET ALL APPLICABLE AMERICANS WITH DISABILITIES ACT (ADA) REQUIREMENTS. POSITIVE GUIDANCE SHALL BE PROVIDED TO SEPARATE PEDESTRIAN ACCESS FROM THE WORK AREA AND VERTICAL GRADE CHANGES. ACCESS TO PROPERTIES MAY BE RESTRICTED FOR SHORT DURATIONS OF NOT MORE THAN TWO HOURS WITH THE PERMISSION AND PRIOR NOTIFICATION OF THE OWNER DURING BUSINESS HOURS. CONTRACTOR SHALL COORDINATE MAJOR WORK ADJACENT TO COMMERCIAL AND MUNICIPAL ACCESS AREAS WITH THE OWNER AND CITY AT LEAST ONE WEEK PRIOR TO STARTING THE WORK IN THE AREA.

SPECIAL CARE MUST BE TAKEN TO PROVIDE ACCESS THROUGH THE WORK ZONES FOR EMERGENCY VEHICLES. THE CONTRACTOR SHALL COORDINATE WITH BOTH POLICE AND FIRE DEPARTMENTS TO DETERMINE THEIR MINIMUM ACCESS REQUIREMENTS BEFORE PROCEEDING TO THE NEXT PHASE OF CONSTRUCTION. CONTRACTOR SHALL ENSURE THAT ACCESS IS AVAILABLE TO ALL PROPERTIES AT ALL TIMES FOR EMERGENCY VEHICLES.

TRAFFIC MANAGEMENT AND ROADWAY CONSTRUCTION SEQUENCING

THE CONSTRUCTION FOR NORTH MAIN STREET IS EXPECTED TO SPAN MORE THAN TWO CONSTRUCTION SEASONS. THIS WILL LIKELY REQUIRE AT LEAST TWO WINTER SHUTDOWN PERIODS WHEN THE WEATHER IS NOT CONDUCIVE TO CONTINUED CONSTRUCTION ACTIVITIES. THE CONTRACTOR AND ENGINEER SHALL COORDINATE THE BEGINNING AND ENDING OF THE WINTER SHUTDOWN PERIODS IN ACCORDANCE WITH VAOT PROCEDURES. AT LEAST THREE WEEKS PRIOR TO THE ANTICIPATED WINTER SHUTDOWN, THE CONTRACTOR SHALL PREPARE ALL WORK AREAS TO BE REOPENED TO TRAFFIC. THIS INCLUDES PROVIDING A PAVED SURFACE FOR ALL STREETS AND SIDEWALKS, FRESH PAINTED PAVEMENT MARKINGS, AND ALL NECESSARY TRAFFIC SIGNS. IN ADDITION, THE CONTRACTOR SHALL COVER OR REMOVE THE DETOUR SIGNING, REVERT THE TEMPORARY TRAFFIC SIGNAL AT SUMMER STREET/ELM STREET/WELLINGTON STREET TO PRE-EXISTING FLASHING OPERATIONS AND REOPEN THE CLOSED SECTION OF WELLINGTON STREET TO TRAFFIC.

THE FOLLOWING PARAGRAPHS DESCRIBE THE CONCEPTUAL MAJOR PHASES OF CONSTRUCTION. PHASES HAVE BEEN DEVELOPED ON THE BASIS OF MAINTAINING TRAFFIC THROUGHOUT THE PROJECT WHILE MINIMIZING THE IMPACTS TO ADJACENT COMMERCIAL, RESIDENTIAL, AND MUNICIPAL PROPERTIES. EACH PHASE HAS A SPECIFIC CONSTRUCTION AND DETOUR SIGNING PLAN. (ALL STATION REFERENCES ARE APPROXIMATE; ACTUAL BEGIN AND END STATIONS WILL BE DETERMINED BY THE CONTRACTOR AND THE ENGINEER IN THE FIELD. SOME OVERLAP OF PHASES IS EXPECTED.)

PHASE 1 - STA 110+65 TO STA 115+70
THIS PHASE INCLUDES FIVE (5) STAGES FOR THE RECONSTRUCTION OF NORTH MAIN STREET AT THE INTERSECTION OF MAPLE AVENUE/ROUTE 62 UNDER TRAFFIC. THE STAGES ARE:

A - STA 110+65 TO STA 113+85 LEFT

B - STA 113+85 TO STA 115+70 LEFT

C - STA 113+85 TO STA 115+70 RIGHT

D - STA 111+30 TO STA 113+85 RIGHT

E - MEDIANS ALONG MAPLE AVENUE AND ROUTE 62 AND TEMPORARY TRAFFIC SIGNAL ADJUSTMENTS FOR THE DETOUR ROUTE

AT THE BEGINNING OF STAGE A, THE EXISTING TRAFFIC SIGNAL HEADS AT THE INTERSECTION SHALL BE RELOCATED TO THE EXISTING SPAN WIRE BETWEEN THE SIGNAL POLES. THE RELOCATED SIGNAL HEADS SHALL BE TETHERED. THE EXISTING MAST ARMS SHALL BE REMOVED AND CAREFULLY STORED BY THE CONTRACTOR UNTIL THE COMPLETION OF PHASE 1. AT LEAST ONE LANE OF TRAFFIC SHALL BE MAINTAINED ON EACH LEG OF THE INTERSECTION AT ALL TIMES. UNIFORMED TRAFFIC OFFICERS SHALL BE USED FOR TRAFFIC CONTROL WHILE THE SIGNAL OPERATIONS ARE ADJUSTED FROM ONE STAGE TO THE NEXT. REFLECTORIZED DRUMS SHALL BE USED TO DELINEATE TRAVEL LANES. SEE CONSTRUCTION INTERSECTION DETAILS FOR MORE INFORMATION.

DURING STAGE C, THE EXISTING DRIVEWAY AT STA 114+95, LEFT SHALL REMAIN ACCESSIBLE UNLESS THE CONTRACTOR RECEIVES WRITTEN AGREEMENT FROM THE PROPERTY OWNER FOR A TEMPORARY CLOSURE.

AT THE END OF STAGE E, THE EXISTING FLASHING SIGNAL OPERATION AT THE INTERSECTION OF SUMMER STREET AND ELM STREET/WELLINGTON STREET SHALL BE MODIFIED AS DESCRIBED IN THE TEMPORARY TRAFFIC SIGNAL PLANS TO PROVIDE FULL GREEN-YELLOW-RED OPERATIONS. THE SOUTHBOUND/WEST SIDE OF WELLINGTON STREET SHALL BE CLOSED TO THROUGH TRAFFIC, CONVERTING WELLINGTON STREET TO A ONE WAY ROADWAY BETWEEN ELM STREET AND FRANKLIN STREET. THE TEMPORARY DETOUR SIGNING SHALL BE INSTALLED.

AT THE END OF STAGE E, THE EXISTING TRAFFIC SIGNAL AT MAPLE AVENUE AND SUMMER STREET SHALL BE MODIFIED AS DESCRIBED IN THE TEMPORARY TRAFFIC SIGNAL PLANS TO PROVIDE THE NECESSARY DOUBLE LEFT TURNS FROM SUMMER STREET TO MAPLE AVENUE.

PHASE 2 - STA 115+70 TO STA 122+70

THIS PHASE SHALL BEGIN WITH THE INITIATION OF THE SUMMER STREET DETOUR. WESTBOUND THROUGH TRAFFIC SHALL BE DETOURED ALONG ELM STREET, SUMMER STREET, AND MAPLE AVENUE AS SHOWN IN THE CONSTRUCTION AND DETOUR SIGNING PLANS. EASTBOUND THROUGH TRAFFIC SHALL BE DETOURED ALONG MAPLE AVENUE, SUMMER STREET, AND ELM STREET. LOCAL TRAFFIC ACCESS SHALL BE MAINTAINED TO THE BUSINESSES ALONG N. MAIN STREET BETWEEN ELM STREET AND SOUTH SEMINARY STREET.

NORTH MAIN STREET SHALL BE CLOSED BETWEEN STA 115+70 AND STA 122+70 FOR THE INSTALLATION OF UTILITIES, FULL DEPTH RECONSTRUCTION OF N. MAIN STREET, AND FOR SIDEWALK WORK. A MINIMUM OF ONE 12-FOOT LANE SHALL BE MAINTAINED THROUGH THE CONSTRUCTION ZONE FOR USE BY EMERGENCY VEHICLES.

PHASE 3 - STA 122+70 TO STA 130+20

THE EXISTING SUMMER STREET DETOUR SHALL BE MAINTAINED. LOCAL TRAFFIC ACCESS SHALL BE MAINTAINED ALONG N. MAIN STREET BETWEEN MAPLE AVENUE AND THE PLAZA. LOCAL TRAFFIC ACCESS SHALL BE MAINTAINED ALONG N. MAIN STREET BETWEEN ELM STREET AND DEPOT SQUARE. NORTH MAIN STREET SHALL BE CLOSED BETWEEN STA 122+70 AND STA 130+20 FOR THE INSTALLATION OF UTILITIES, FULL DEPTH RECONSTRUCTION OF N. MAIN STREET, AND FOR SIDEWALK WORK. A MINIMUM OF ONE 12-FOOT LANE SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION ZONE FOR USE BY EMERGENCY VEHICLES.

PHASE 4 - STA 130+20 TO STA 134+80

THE EXISTING SUMMER STREET DETOUR SHALL BE MAINTAINED. LOCAL TRAFFIC ACCESS SHALL BE MAINTAINED ALONG N. MAIN STREET BETWEEN MAPLE AVENUE AND GRANITE STREET. LOCAL TRAFFIC ACCESS SHALL BE MAINTAINED ALONG N. MAIN STREET BETWEEN ELM STREET AND KEITH AVENUE. LOCAL TRAFFIC ACCESS SHALL BE MAINTAINED ALONG MERCHANTS ROW BETWEEN GRANITE STREET AND PROSPECT STREET. NORTH MAIN STREET SHALL BE CLOSED BETWEEN STA 130+20 AND STA 134+80 FOR THE INSTALLATION OF UTILITIES, FULL DEPTH RECONSTRUCTION OF N. MAIN STREET, AND FOR SIDEWALK WORK. A MINIMUM OF ONE 12-FOOT LANE SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION ZONE FOR USE BY EMERGENCY VEHICLES.

PHASE 5 - STA 134+80 TO STA 138+60

THE EXISTING SUMMER STREET DETOUR SHALL BE MAINTAINED. LOCAL TRAFFIC ACCESS SHALL BE MAINTAINED ALONG N. MAIN STREET BETWEEN MAPLE AVENUE AND PEARL STREET. NORTH MAIN STREET SHALL BE CLOSED BETWEEN STA 134+90 AND STA 138+60 FOR THE INSTALLATION OF UTILITIES, FULL DEPTH RECONSTRUCTION OF N. MAIN STREET, AND FOR SIDEWALK WORK. A MINIMUM OF ONE 12-FOOT LANE SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION ZONE FOR USE BY EMERGENCY VEHICLES.

PHASE 6 - STA 138+60 TO STA 143+00, STA 700+00 TO STA 701+50, STA 600+00 TO STA 604+25

THIS PHASE REQUIRES THE RECONSTRUCTION OF THE NORTH MAIN STREET/ELM STREET/WASHINGTON STREET INTERSECTION UNDER TRAFFIC. THE EXISTING SUMMER STREET DETOUR SHALL BE MAINTAINED FOR WESTBOUND TRAFFIC. THE EASTBOUND DETOUR MAY BE REMOVED, ALLOWING EASTBOUND TRAFFIC ALONG NORTH MAIN STREET, TO BE ONE WAY EASTBOUND BETWEEN KEITH AVENUE AND ELM STREET.

THE CONSTRUCTION AREA FOR THE SEWER LINE CONNECTION FROM STA 138+60 TO STA 700+75 SHALL BE CLOSED TO TRAFFIC DURING THIS PHASE. ELM STREET SHALL BE ONE WAY NORTHBOUND BETWEEN WASHINGTON STREET AND JEFFERSON STREET.

PHASE 7 - FULL PROJECT LENGTH (NO PLAN)

THIS PHASE SHALL INCLUDE THE REMOVAL OF ALL DETOUR SIGNING, TEMPORARY TRAFFIC SIGNALS, AND OTHER TRAFFIC CONTROL DEVICES. FINAL TRAFFIC PATTERNS WILL BE ESTABLISHED. ALL LANDSCAPING WILL BE COMPLETED. DRAINAGE AND UTILITY STRUCTURES WITHIN THE ROADWAYS SHALL BE ADJUSTED TO FINAL GRADE. ALL ROADWAY SURFACES SHALL BE PAVED TO FINISHED GRADE TO THE LIMITS SHOWN IN THE PLANS. FINAL PAVEMENT MARKINGS SHALL BE APPLIED AND FINAL SIGNING AND TRAFFIC SIGNALS SHALL BE INSTALLED. THE STORED MAST ARMS FROM THE INTERSECTION OF N. MAIN STREET AND MAPLE AVENUE/ROUTE 62 SHALL BE REINSTALLED WITH NEW TRAFFIC SIGNAL HEADS. THE NEW SIGNAL HEADS SHALL BE WIRED USING THE NEW UNDERGROUND CONDUIT.

FINAL PAVING SHALL BE PERFORMED AT NIGHT WITH THE HOURS OF OPERATION COORDINATED WITH AND APPROVED BY THE ENGINEER AND THE CITY.

FINAL PAVING IN 2011 SHALL EXTEND TO COTTAGE STREET. FINAL PAVING IN 2012 SHALL EXTEND TO DEPOT SQUARE. THE REMAINING FINAL PAVING SHALL BE COMPLETED IN 2013, TO INCLUDE PAVING ALONG SUMMER STREET

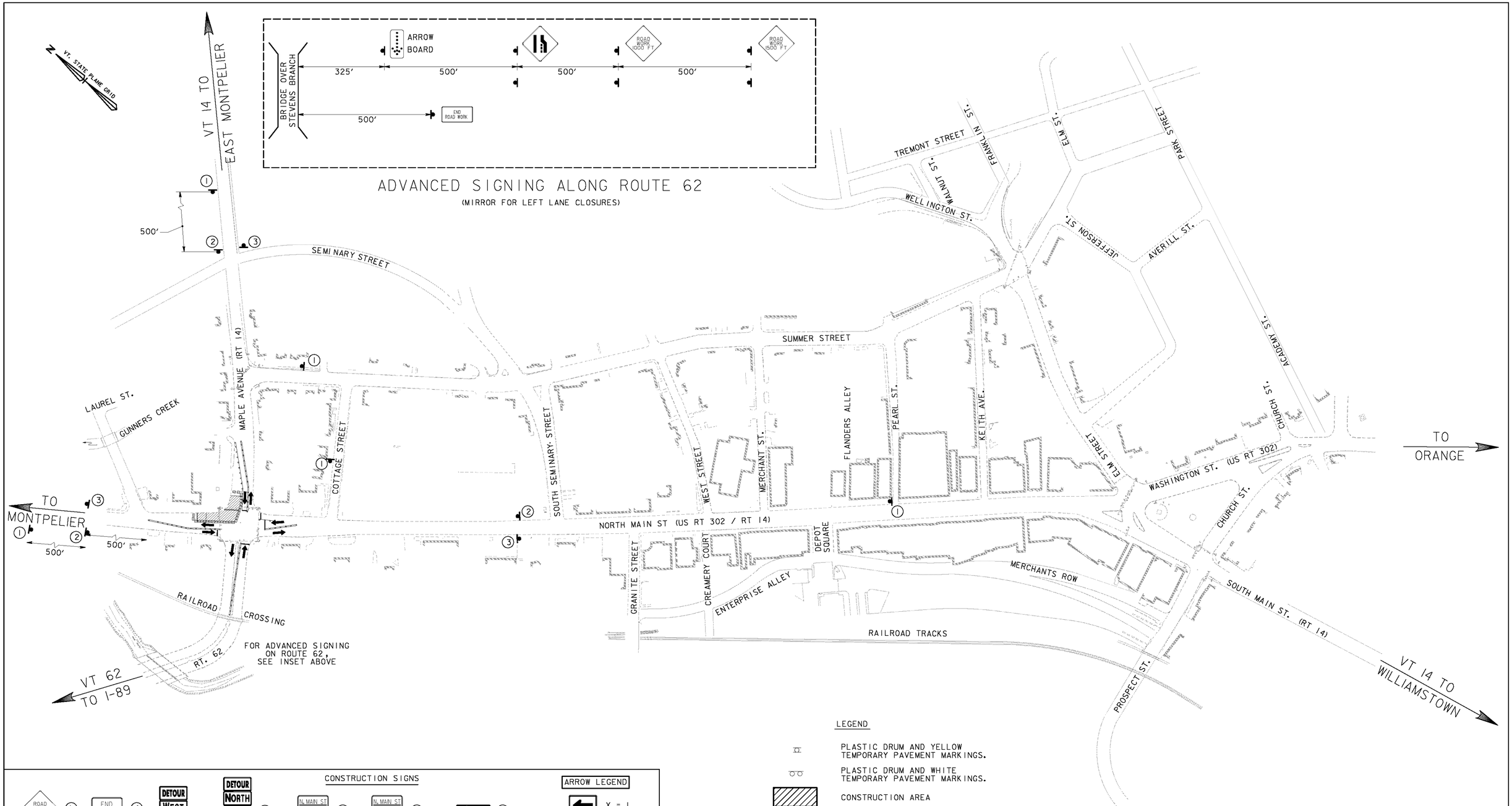
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: z85b010_TCTRL_C2 | PLOT DATE: 3/9/2011
PROJECT LEADER: G. BAKOS | DRAWN BY: DMP / JAR
DESIGNED BY: DMP / MDS | CHECKED BY:
TRAFFIC CONTROL NOTES | SHEET 172 OF 339

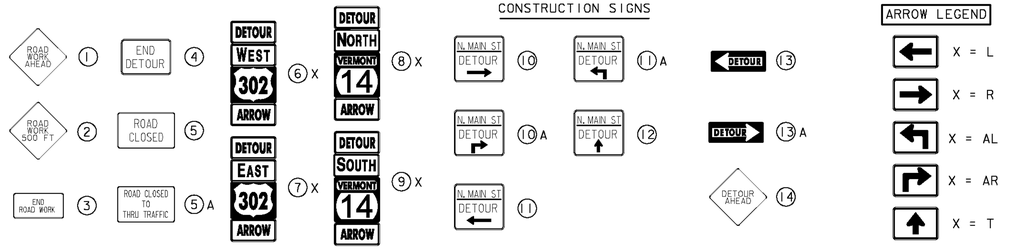
VHB Vanasse Hangen Brustlin, Inc.

ADVANCED SIGNING ALONG ROUTE 62

(MIRROR FOR LEFT LANE CLOSURES)




CONSTRUCTION SIGNS




ARROW LEGEND




LEGEND

- PLASTIC DRUM AND YELLOW TEMPORARY PAVEMENT MARKINGS.
- PLASTIC DRUM AND WHITE TEMPORARY PAVEMENT MARKINGS.
- CONSTRUCTION AREA
- DESIGNATED DETOUR ROUTE
- CONSTRUCTION SIGN
- TYPE I/2/3 BARRICADE
- BARRICADE WITH SIGNS
- LOCAL TRAFFIC ACCESS

125 0 125 250

FEET

VHB Vanasse Hangen Brustlin, Inc.

PHASE IA

PROJECT NAME: BARRE CITY

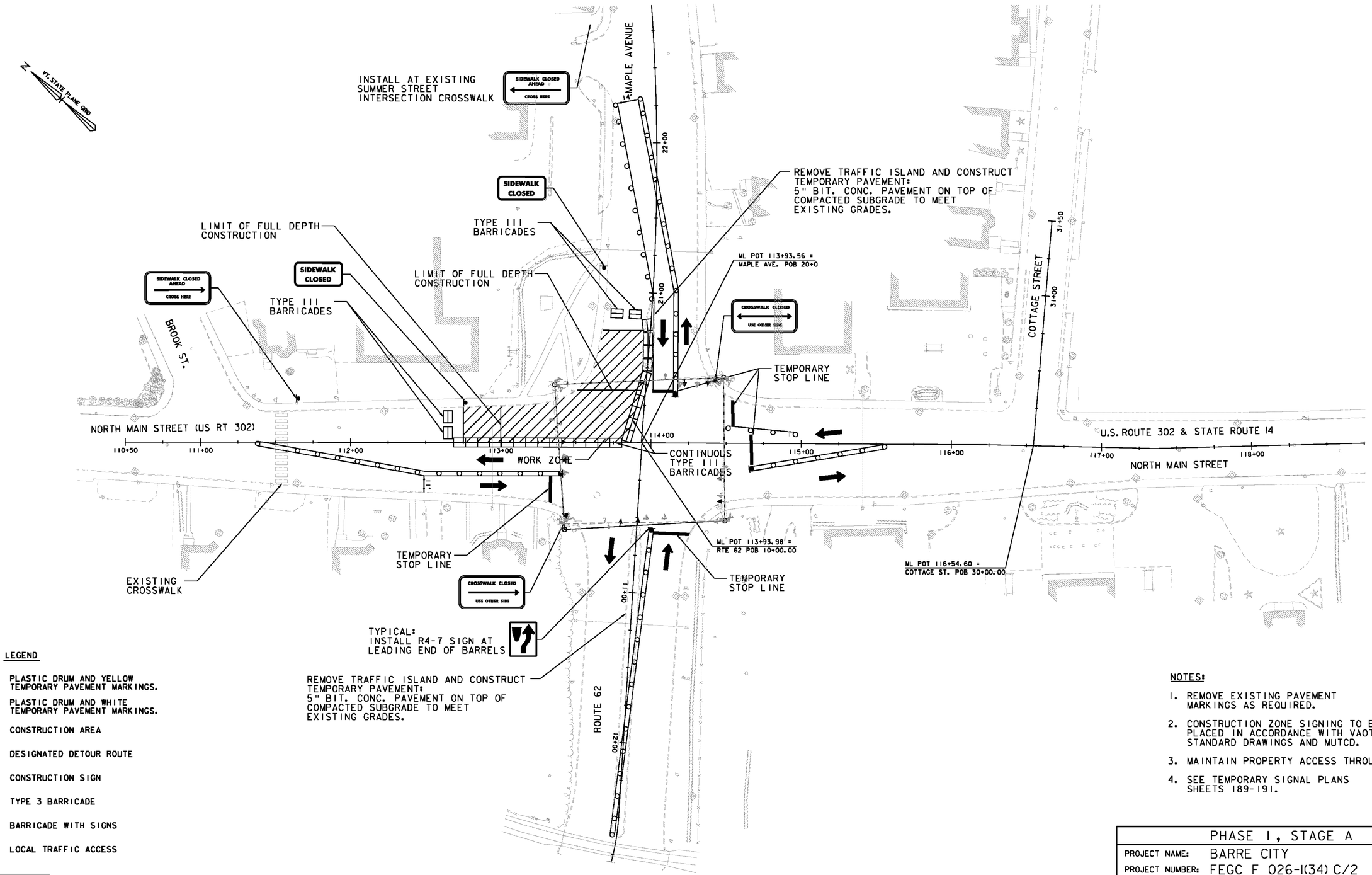
PROJECT NUMBER: FEGC F 026-I(34) C/2

FILE NAME: 85D010_DTRI_C2 PLOT DATE: 3/31/2011

PROJECT LEADER: G. BAKOS DRAWN BY: DMP / JAR

DESIGNED BY: DMP / MDS CHECKED BY:

CONST. & DETOUR SIGNING PLAN PHASE IA SHEET 173 OF 339




LEGEND

- PLASTIC DRUM AND YELLOW TEMPORARY PAVEMENT MARKINGS.
- PLASTIC DRUM AND WHITE TEMPORARY PAVEMENT MARKINGS.
- CONSTRUCTION AREA
- DESIGNATED DETOUR ROUTE
- CONSTRUCTION SIGN
- TYPE 3 BARRICADE
- BARRICADE WITH SIGNS
- LOCAL TRAFFIC ACCESS

DATUM

VERTICAL NAVD 1929

HORIZONTAL NAD 27

30 0 30

FEET

NOTES:

1. REMOVE EXISTING PAVEMENT MARKINGS AS REQUIRED.
2. CONSTRUCTION ZONE SIGNING TO BE PLACED IN ACCORDANCE WITH VAOT STANDARD DRAWINGS AND MUTCD.
3. MAINTAIN PROPERTY ACCESS THROUGHOUT.
4. SEE TEMPORARY SIGNAL PLANS SHEETS 189-191.

PHASE I, STAGE A

PROJECT NAME: BARRE CITY

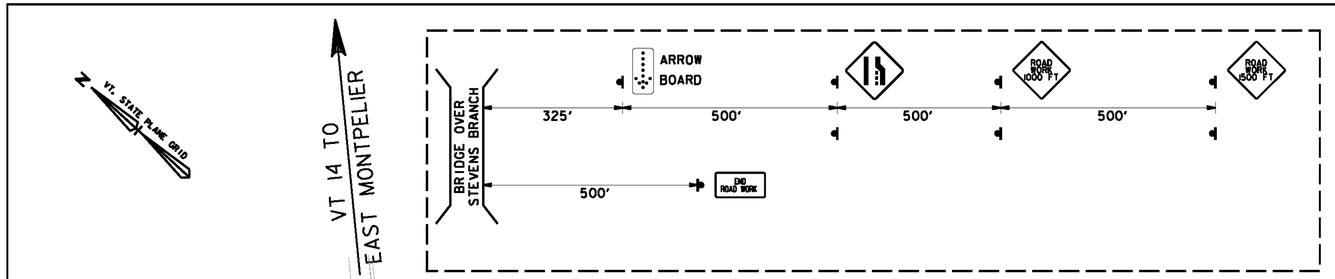
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_CSPI_C2 PLOT DATE: 4/4/2011

PROJECT LEADER: G. BAKOS DRAWN BY: JAR

DESIGNED BY: DMP / MDS CHECKED BY:

CONSTRUCTION INTERSECTION DETAIL SHEET 174 OF 339




ADVANCED SIGNING ALONG ROUTE 62

(MIRROR FOR LEFT LANE CLOSURES)

VT. STATE PLANE GRID

VT 14 TO EAST MONTPELIER

500'

SEMINARY STREET

MAPLE AVENUE (RT 14)

LAUREL ST.

GUNNERS CREEK

COTTAGE STREET

SOUTH SEMINARY STREET

WEST STREET

MERCHANT ST.

FLANDERS ALLEY

PEARL ST.

KEITH AVE.

SUMMER STREET

TREMONT STREET

FRANKLIN ST.

MAULL ST.

ELM ST.

PARK STREET

WELLINGTON ST.

JEFFERSON ST.

AVERILL ST.

ACADEMY ST.

CHURCH ST.

ELM STREET

WASHINGTON ST. (US RT 302)

TO ORANGE

TO MONTPELIER

500'

500'

NORTH MAIN ST (US RT 302 / RT 14)

GRANITE STREET

CREAMERY COURT

ENTERPRISE ALLEY

DEPOT SQUARE

MERCHANTS ROW

CHURCH ST.

SOUTH MAIN ST. (RT 14)

RAILROAD TRACKS

PROSPECT ST.

VT 14 TO WILLIAMSTOWN

RAILROAD CROSSING

RT. 62

FOR ADVANCED SIGNING ON ROUTE 62, SEE INSET ABOVE

VT 62 TO I-89

CONSTRUCTION SIGNS

ROAD WORK AHEAD (1) — END DETOUR (4) — DETOUR WEST 302 ARROW (6)X — DETOUR NORTH VERMONT 14 ARROW (8)X — N. MAIN ST DETOUR (10) — N. MAIN ST DETOUR (11)A — DETOUR (13)

ROAD WORK 500 FT (2) — ROAD CLOSED (5) — DETOUR EAST 302 ARROW (7)X — DETOUR SOUTH VERMONT 14 ARROW (9)X — N. MAIN ST DETOUR (10)A — N. MAIN ST DETOUR (12) — DETOUR (13)A

END ROAD WORK (3) — ROAD CLOSED TO THRU TRAFFIC (5)A — N. MAIN ST DETOUR (11) — DETOUR AHEAD (14)

ARROW LEGEND

- X = L
- X = R
- X = AL
- X = AR
- X = T

LEGEND

- PLASTIC DRUM AND YELLOW TEMPORARY PAVEMENT MARKINGS.
- PLASTIC DRUM AND WHITE TEMPORARY PAVEMENT MARKINGS.
- CONSTRUCTION AREA
- DESIGNATED DETOUR ROUTE
- CONSTRUCTION SIGN
- TYPE I/2/3 BARRICADE
- BARRICADE WITH SIGNS
- LOCAL TRAFFIC ACCESS

125 0 125 250

FEET

VHB Vanasse Hangen Brustlin, Inc.

PHASE IB

PROJECT NAME: BARRE CITY

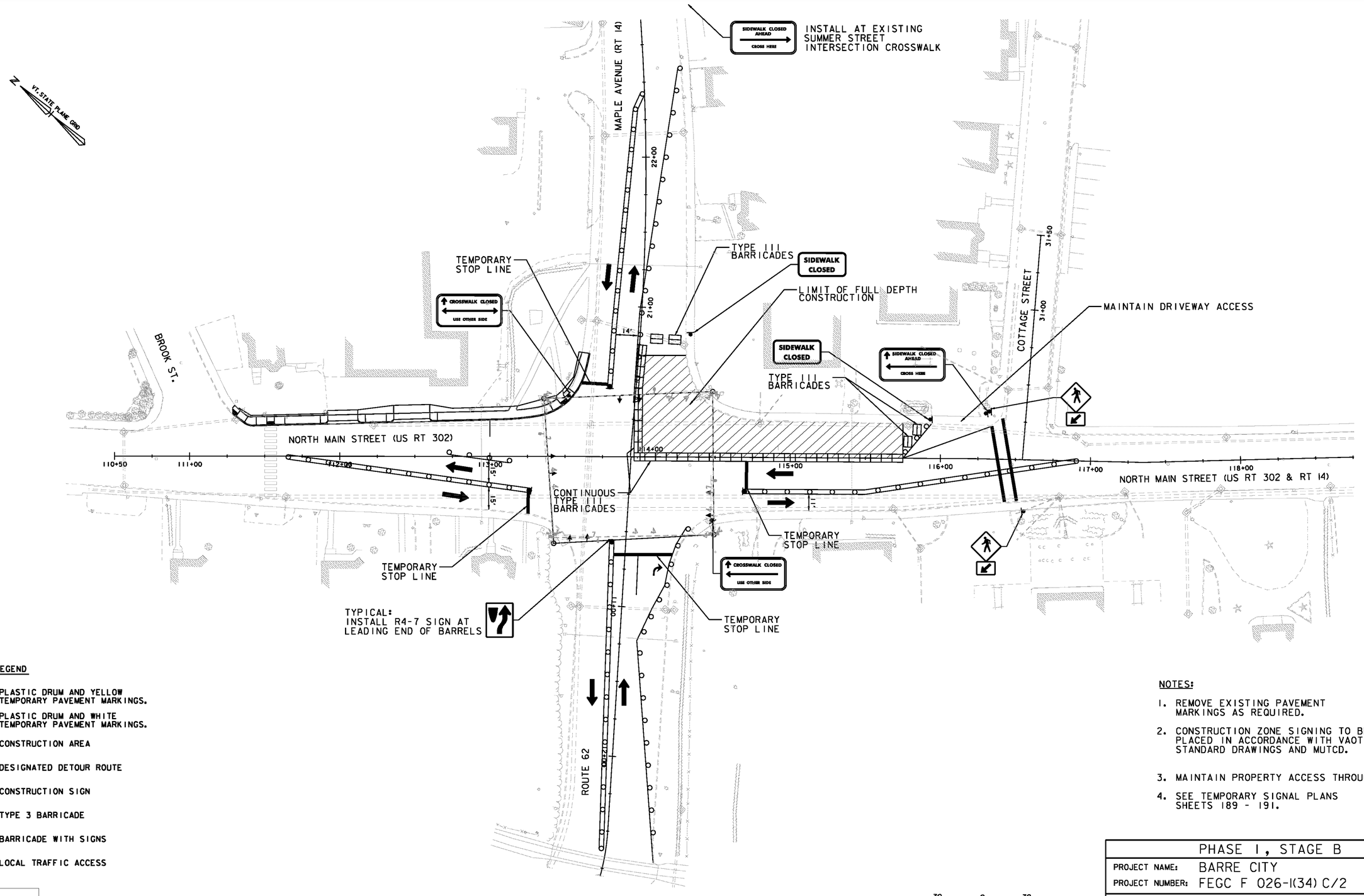
PROJECT NUMBER: FEGC F 026-I(34) C/2

FILE NAME: 85b010_DTR2_C2 — PLOT DATE: 3/9/2011

PROJECT LEADER: G. BAKOS — DRAWN BY: DMP / JAR

DESIGNED BY: DMP / MDS — CHECKED BY:

CONST. & DETOUR SIGNING PLAN PHASE IB — SHEET 175 OF 339




LEGEND

- PLASTIC DRUM AND YELLOW TEMPORARY PAVEMENT MARKINGS.
- PLASTIC DRUM AND WHITE TEMPORARY PAVEMENT MARKINGS.
- CONSTRUCTION AREA
- DESIGNATED DETOUR ROUTE
- CONSTRUCTION SIGN
- TYPE 3 BARRICADE
- BARRICADE WITH SIGNS
- LOCAL TRAFFIC ACCESS

DATUM
VERTICAL NAVD 1929
HORIZONTAL NAD 27

30 0 30
FEET

NOTES:

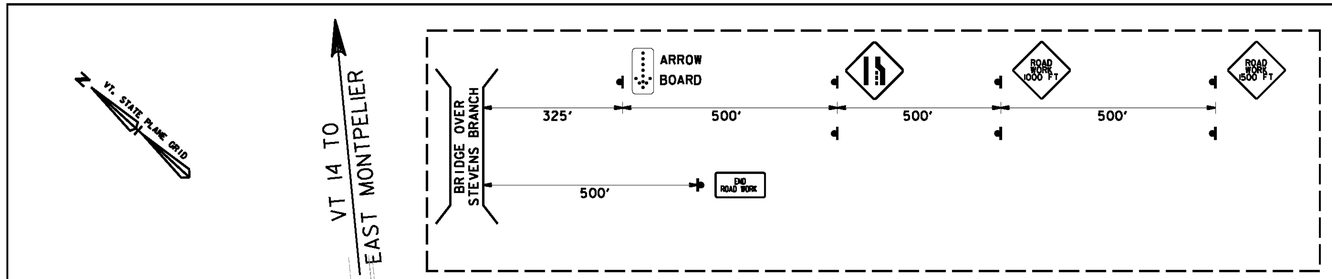
1. REMOVE EXISTING PAVEMENT MARKINGS AS REQUIRED.
2. CONSTRUCTION ZONE SIGNING TO BE PLACED IN ACCORDANCE WITH VAOT STANDARD DRAWINGS AND MUTCD.
3. MAINTAIN PROPERTY ACCESS THROUGHOUT.
4. SEE TEMPORARY SIGNAL PLANS SHEETS 189 - 191.

PHASE I, STAGE B

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_CSP2_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CONSTRUCTION INTERSECTION DETAIL

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 176 OF 339




ADVANCED SIGNING ALONG ROUTE 62

(MIRROR FOR LEFT LANE CLOSURES)

VT. STATE PLANE GRID

VT 14 TO EAST MONTPELIER

500'

SEMINARY STREET

MAPLE AVENUE (RT 14)

LAUREL ST.

GUNNERS CREEK

COTTAGE STREET

SOUTH SEMINARY STREET

WEST STREET

MERCHANT ST.

FLANDERS ALLEY

PEARL ST.

KEITH AVE.

ELM STREET

CHURCH ST.

ACADEMY ST.

TREMONT STREET

FRANKLIN ST.

MAULL ST.

ELM ST.

PARK STREET

WELLINGTON ST.

JEFFERSON ST.

AVERILL ST.

SUMMER STREET

WASHINGTON ST. (US RT 302)

TO ORANGE

TO MONTPELIER

500'

500'

NORTH MAIN ST (US RT 302 / RT 14)

GRANITE STREET

CREAMERY COURT

ENTERPRISE ALLEY

DEPOT SQUARE

CHURCH ST.

MERCHANTS ROW

SOUTH MAIN ST. (RT 14)

RAILROAD CROSSING

RAILROAD TRACKS

RT. 62

FOR ADVANCED SIGNING ON ROUTE 62, SEE INSET ABOVE

VT 62 TO I-89

PROSPECT ST.

VT 14 TO WILLIAMSTOWN

CONSTRUCTION SIGNS

ROAD WORK AHEAD (1) — END DETOUR (4) — DETOUR WEST 302 ARROW (6)X — DETOUR NORTH VERMONT 14 ARROW (8)X — N. MAIN ST DETOUR (10) — N. MAIN ST DETOUR (11)A — DETOUR (13)

ROAD WORK 500 FT (2) — ROAD CLOSED (5) — DETOUR EAST 302 ARROW (7)X — DETOUR SOUTH VERMONT 14 ARROW (9)X — N. MAIN ST DETOUR (10)A — N. MAIN ST DETOUR (12) — DETOUR (13)A

END ROAD WORK (3) — ROAD CLOSED TO THRU TRAFFIC (5)A — N. MAIN ST DETOUR (11) — DETOUR AHEAD (14)

ARROW LEGEND

- X = L
- X = R
- X = AL
- X = AR
- X = T

LEGEND

- PLASTIC DRUM AND YELLOW TEMPORARY PAVEMENT MARKINGS.
- PLASTIC DRUM AND WHITE TEMPORARY PAVEMENT MARKINGS.
- CONSTRUCTION AREA
- DESIGNATED DETOUR ROUTE
- CONSTRUCTION SIGN
- TYPE 1/2/3 BARRICADE
- BARRICADE WITH SIGNS
- LOCAL TRAFFIC ACCESS

125 0 125 250

FEET

VHB Vanasse Hangen Brustlin, Inc.

PHASE IC

PROJECT NAME: BARRE CITY

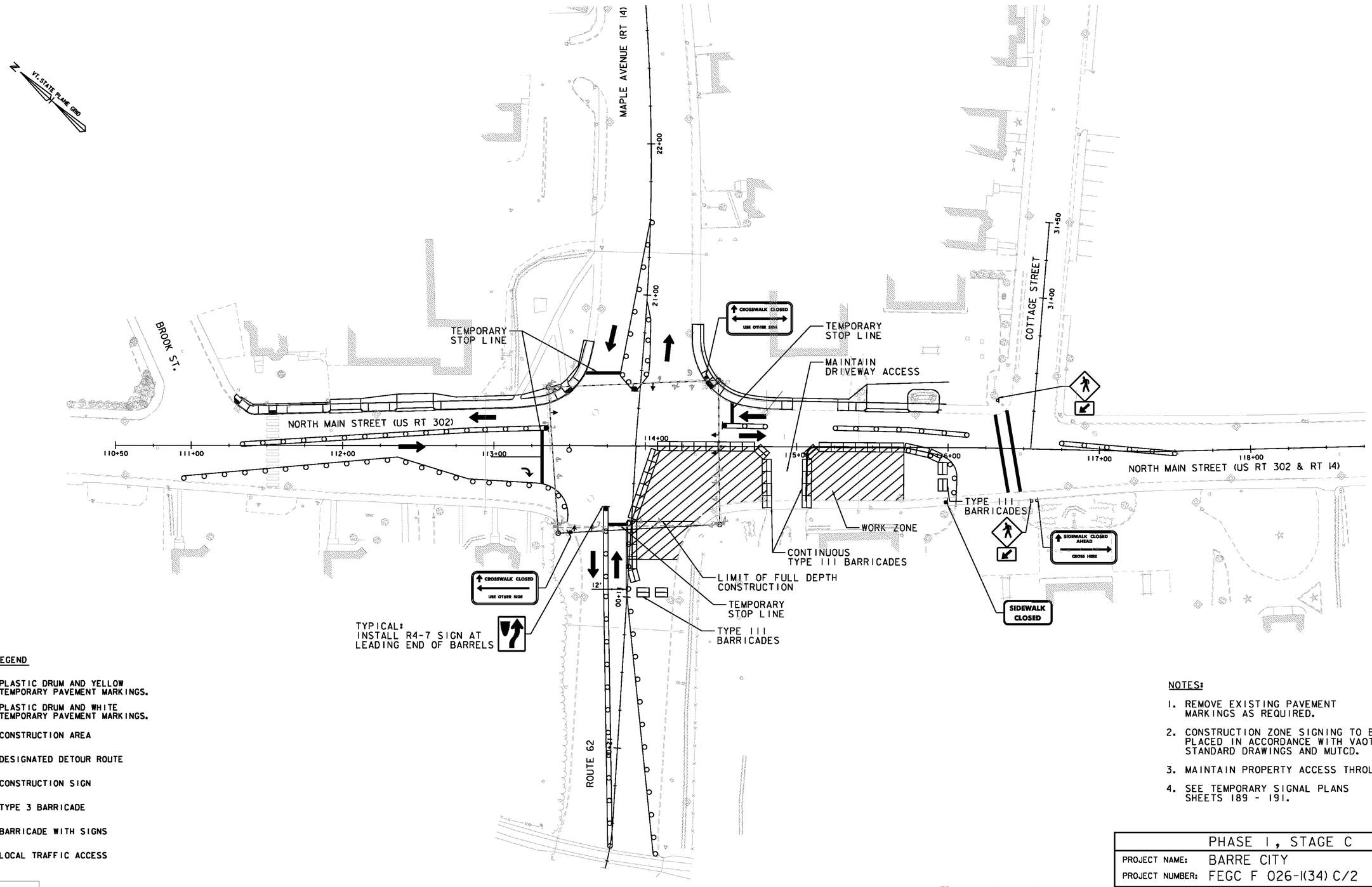
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_DTR3_C2 — PLOT DATE: 3/31/2011

PROJECT LEADER: G. BAKOS — DRAWN BY: DMP / JAR

DESIGNED BY: DMP / MDS — CHECKED BY:

CONST. & DETOUR SIGNING PLAN PHASE IC — SHEET 177 OF 339




LEGEND

- PLASTIC DRUM AND YELLOW TEMPORARY PAVEMENT MARKINGS.
- PLASTIC DRUM AND WHITE TEMPORARY PAVEMENT MARKINGS.
- CONSTRUCTION AREA
- DESIGNATED DETOUR ROUTE
- CONSTRUCTION SIGN
- TYPE 3 BARRICADE
- BARRICADE WITH SIGNS
- LOCAL TRAFFIC ACCESS

DATUM

| | |
|---|---|
| VERTICAL | NAVD 1929 |
| HORIZONTAL | NAD 27 |

30 0 30
FEET

NOTES:

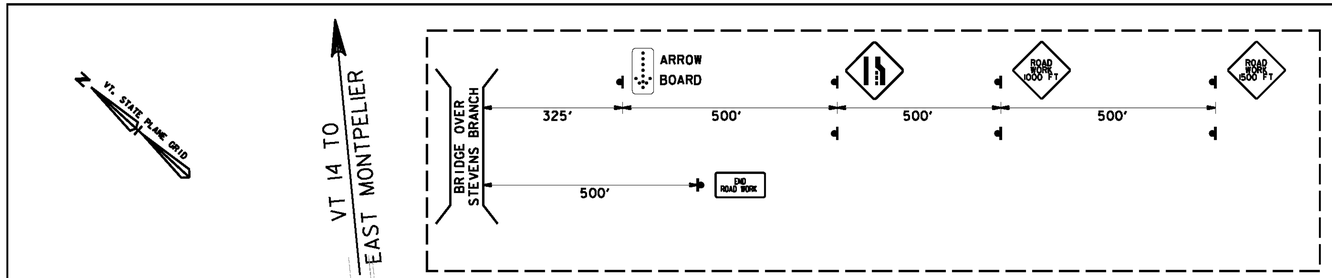
1. REMOVE EXISTING PAVEMENT MARKINGS AS REQUIRED.
2. CONSTRUCTION ZONE SIGNING TO BE PLACED IN ACCORDANCE WITH VAOT STANDARD DRAWINGS AND MUTCD.
3. MAINTAIN PROPERTY ACCESS THROUGHOUT.
4. SEE TEMPORARY SIGNAL PLANS SHEETS 189 - 191.

PHASE I, STAGE C

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_CSP3_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CONSTRUCTION INTERSECTION DETAIL

PLOT DATE: 3/31/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 178 OF 339




ADVANCED SIGNING ALONG ROUTE 62

(MIRROR FOR LEFT LANE CLOSURES)

VT. STATE PLANE GRID

VT 14 TO EAST MONTPELIER

500'

SEMINARY STREET

MAPLE AVENUE (RT 14)

LAUREL ST.

GUNNERS CREEK

COTTAGE STREET

SOUTH SEMINARY STREET

WEST STREET

MERCHANT ST.

FLANDERS ALLEY

PEARL ST.

KEITH AVE.

ELM STREET

SUMMER STREET

TREMONT STREET

FRANKLIN ST.

ELM ST.

PARK STREET

WELLINGTON ST.

MALNUT ST.

JEFFERSON ST.

AVERILL ST.

ACADEMY ST.

CHURCH ST.

WASHINGTON ST. (US RT 302)

TO ORANGE

TO MONTPELIER

500'

500'

NORTH MAIN ST (US RT 302 / RT 14)

GRANITE STREET

CREAMERY COURT

ENTERPRISE ALLEY

DEPOT SQUARE

MERCHANTS ROW

CHURCH ST.

SOUTH MAIN ST. (RT 14)

VT 14 TO WILLIAMSTOWN

RAILROAD CROSSING

RAILROAD TRACKS

PROSPECT ST.

RT. 62

VT 62 TO I-89

FOR ADVANCED SIGNING ON ROUTE 62, SEE INSET ABOVE

CONSTRUCTION SIGNS

ROAD WORK AHEAD ①

END DETOUR ④

ROAD WORK 500 FT ②

ROAD CLOSED ⑤

END ROAD WORK ③

ROAD CLOSED TO THRU TRAFFIC ⑤A

DETOUR WEST 302 ARROW ⑥X

DETOUR EAST 302 ARROW ⑦X

DETOUR NORTH VERMONT 14 ARROW ⑧X

DETOUR SOUTH VERMONT 14 ARROW ⑨X

N. MAIN ST DETOUR ⑩

N. MAIN ST DETOUR ⑩A

N. MAIN ST DETOUR ⑪

N. MAIN ST DETOUR ⑪A

N. MAIN ST DETOUR ⑫

DETOUR ⑬

DETOUR ⑬A

DETOUR AHEAD ⑭

ARROW LEGEND

X = L

X = R

X = AL

X = AR

X = T

LEGEND

PLASTIC DRUM AND YELLOW TEMPORARY PAVEMENT MARKINGS.

PLASTIC DRUM AND WHITE TEMPORARY PAVEMENT MARKINGS.

CONSTRUCTION AREA

DESIGNATED DETOUR ROUTE

CONSTRUCTION SIGN

TYPE 1/2/3 BARRICADE

BARRICADE WITH SIGNS

LOCAL TRAFFIC ACCESS

125 0 125 250

FEET

VHB Vanasse Hangen Brustlin, Inc.

PHASE ID

PROJECT NAME: BARRE CITY

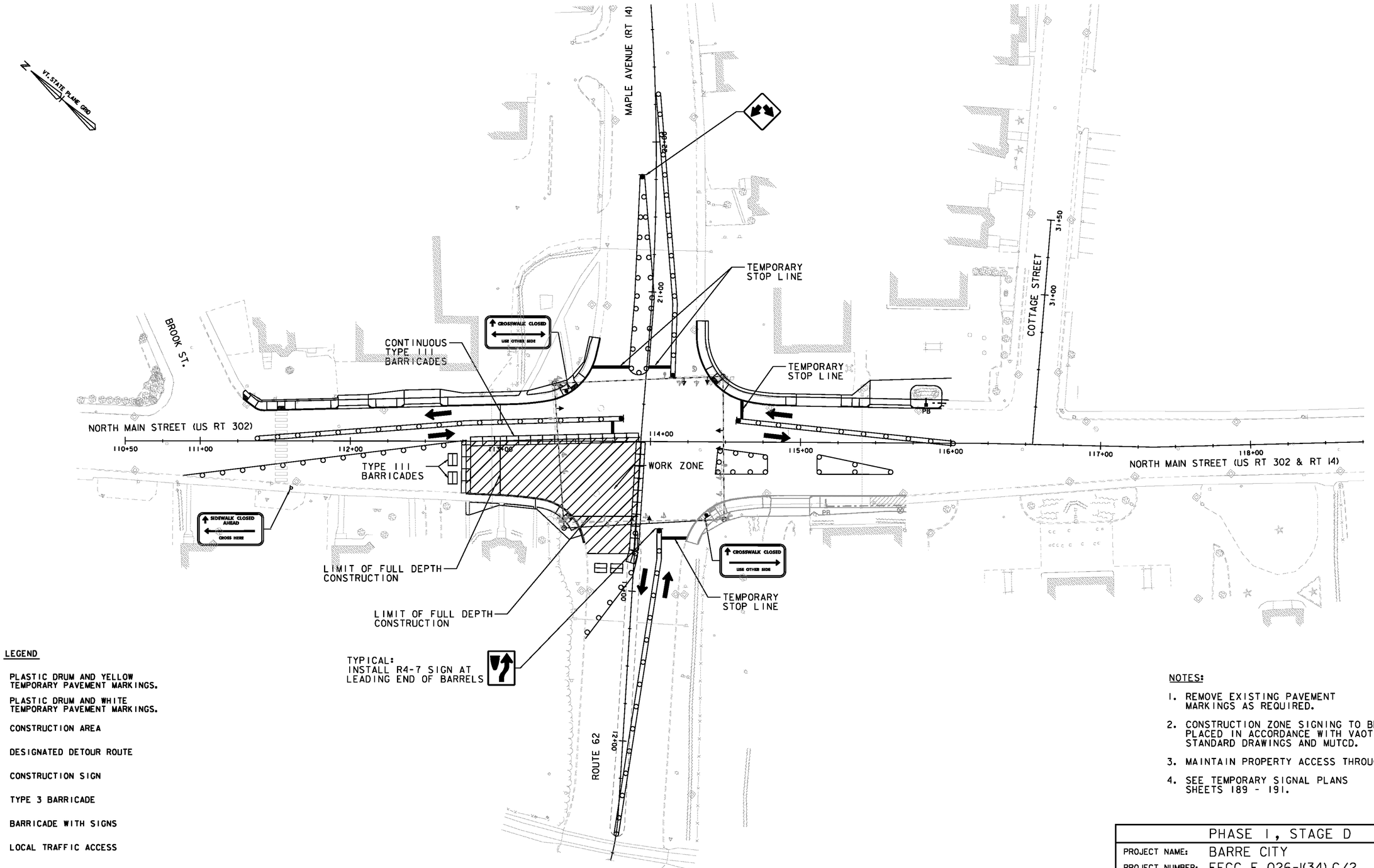
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_DTR4_C2 | PLOT DATE: 3/31/2011

PROJECT LEADER: G. BAKOS | DRAWN BY: DMP / JAR

DESIGNED BY: DMP / MDS | CHECKED BY:

CONST. & DETOUR SIGNING PLAN PHASE ID | SHEET 179 OF 339




LEGEND

- PLASTIC DRUM AND YELLOW TEMPORARY PAVEMENT MARKINGS.
- PLASTIC DRUM AND WHITE TEMPORARY PAVEMENT MARKINGS.
- CONSTRUCTION AREA
- DESIGNATED DETOUR ROUTE
- CONSTRUCTION SIGN
- TYPE 3 BARRICADE
- BARRICADE WITH SIGNS
- LOCAL TRAFFIC ACCESS

DATUM

| | |
|---|---|
| VERTICAL | NAVD 1929 |
| HORIZONTAL | NAD 27 |

30 0 30
FEET

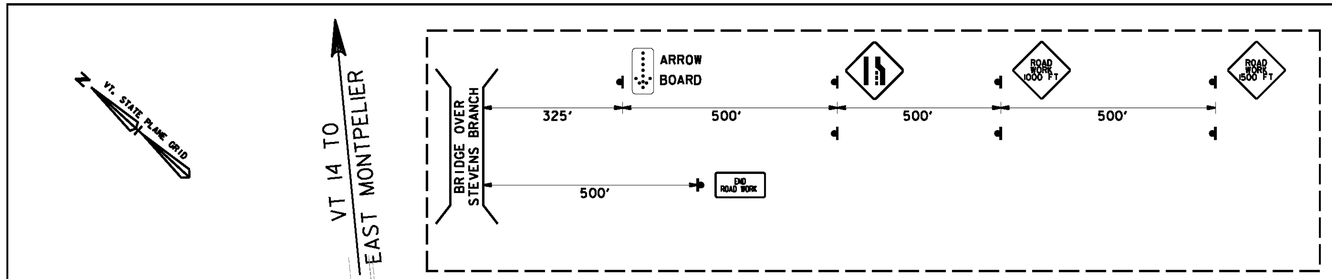
NOTES:

1. REMOVE EXISTING PAVEMENT MARKINGS AS REQUIRED.
2. CONSTRUCTION ZONE SIGNING TO BE PLACED IN ACCORDANCE WITH VAOT STANDARD DRAWINGS AND MUTCD.
3. MAINTAIN PROPERTY ACCESS THROUGHOUT.
4. SEE TEMPORARY SIGNAL PLANS SHEETS 189 - 191.

PHASE I, STAGE D

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

| | |
|---|---|
| FILE NAME: 85b010_CSP4_C2 | PLOT DATE: 3/31/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: DMP / JAR |
| DESIGNED BY: DMP / MDS | CHECKED BY: |
| CONSTRUCTION INTERSECTION DETAIL | SHEET 180 OF 339 |




ADVANCED SIGNING ALONG ROUTE 62

(MIRROR FOR LEFT LANE CLOSURES)

VT. STATE PLANE GRID

VT 14 TO EAST MONTPELIER

500'

SEMINARY STREET

SEE TEMPORARY TRAFFIC SIGNAL PLANS

MAPLE AVENUE (RT 14)

LAUREL ST.

GUNNERS CREEK

COTTAGE STREET

SOUTH SEMINARY STREET

WEST STREET

MERCHANT ST.

FLANDERS ALLEY

PEARL ST.

KEITH AVE.

SUMMER STREET

TREMONT STREET

FRANKLIN ST.

MALNUT ST.

ELM ST.

PARK STREET

WELLINGTON ST.

JEFFERSON ST.

AVERILL ST.

ACADEMY ST.

CHURCH ST.

ELM STREET

SEE TEMPORARY TRAFFIC SIGNAL PLANS

WASHINGTON ST. (US RT 302)

TO ORANGE

TO MONTPELIER

500'

500'

NORTH MAIN ST (US RT 302 / RT 14)

GRANITE STREET

CREAMERY COURT

ENTERPRISE ALLEY

DEPOT SQUARE

MERCHANTS ROW

SOUTH MAIN ST. (RT 14)

RAILROAD CROSSING

RAILROAD TRACKS

RT. 62

FOR ADVANCED SIGNING ON ROUTE 62, SEE INSET ABOVE

VT 62 TO I-89

PROSPECT ST.

VT 14 TO WILLIAMSTOWN

CONSTRUCTION SIGNS

ROAD WORK AHEAD (1) — END DETOUR (4) — DETOUR WEST 302 ARROW (6)X — DETOUR NORTH VERMONT 14 ARROW (8)X — N. MAIN ST DETOUR (10) — N. MAIN ST DETOUR (11)A — DETOUR (13)

ROAD WORK 500 FT (2) — ROAD CLOSED (5) — DETOUR EAST 302 ARROW (7)X — DETOUR SOUTH VERMONT 14 ARROW (9)X — N. MAIN ST DETOUR (10)A — N. MAIN ST DETOUR (12) — DETOUR (13)A

END ROAD WORK (3) — ROAD CLOSED TO THRU TRAFFIC (5)A — N. MAIN ST DETOUR (11) — DETOUR AHEAD (14)

ARROW LEGEND

X = L

X = R

X = AL

X = AR

X = T

LEGEND

- PLASTIC DRUM AND YELLOW TEMPORARY PAVEMENT MARKINGS.
- PLASTIC DRUM AND WHITE TEMPORARY PAVEMENT MARKINGS.
- CONSTRUCTION AREA
- DESIGNATED DETOUR ROUTE
- CONSTRUCTION SIGN
- TYPE I/2/3 BARRICADE
- BARRICADE WITH SIGNS
- LOCAL TRAFFIC ACCESS

125 0 125 250

FEET

VHB Vanasse Hangen Brustlin, Inc.

PHASE IE

PROJECT NAME: BARRE CITY

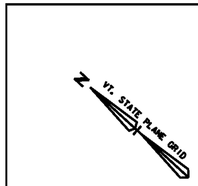
PROJECT NUMBER: FEGC F 026-I(34) C/2

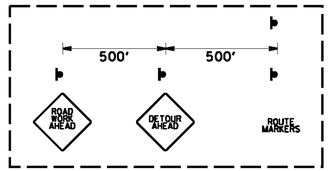
FILE NAME: 85b010_DTR5_C2 — PLOT DATE: 3/31/2011

PROJECT LEADER: G. BAKOS — DRAWN BY: DMP / JAR

DESIGNED BY: DMP / MDS — CHECKED BY:

CONST. & DETOUR SIGNING PLAN PHASE IE — SHEET 181 OF 339




DETAIL B

VT 14 TO EAST MONTPELIER

SEE DETAIL B FOR PHASES 2-5

SEMINARY STREET

SUMMER STREET

TREMONT STREET

FRANKLIN ST.

ELM ST.

PARK STREET

WELLINGTON ST.

MALNUT ST.

JEFFERSON ST.

AVERILL ST.

ACADEMY ST.

CHURCH ST.

ELM STREET

WASHINGTON ST. (US RT 302)

TO ORANGE

SEE DETAIL A FOR PHASES 2-6

LAUREL ST.

GUNNERS CREEK

MAPLE AVENUE (RT 14)

COTTAGE STREET

SOUTH SEMINARY STREET

WEST STREET

MERCHANT ST.

FLANDERS ALLEY

PEARL ST.

KEITH AVE.

TO MONTPELIER

NORTH MAIN ST (US RT 302 / RT 14)

GRANITE STREET

CREAMERY COURT

DEPOT SQUARE

ENTERPRISE ALLEY

MERCHANTS ROW

SOUTH MAIN ST. (RT 14)

SEE DETAIL A FOR PHASES 2-6

VT 14 TO WILLIAMSTOWN

SEE DETAIL A FOR PHASES 2-5; PHASE 6 ALLOWS EASTBOUND THROUGH MOVEMENT WITHOUT DETOUR

RAILROAD CROSSING

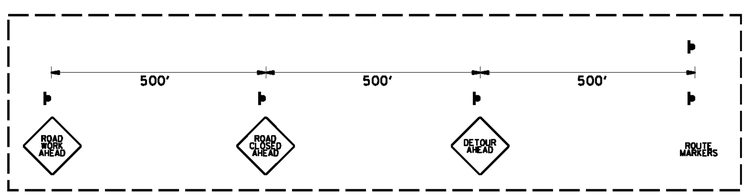
RAILROAD TRACKS

PROSPECT ST.

RT. 62

VT 62 TO I-89

SEE DETAIL B FOR PHASES 2-5




DETAIL A

125 0 125 250
FEET

VHB Vanasse Hangen Brustlin, Inc.

# DETOUR ADVANCED SIGNING PLAN

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85D010_DTR6_C2 PLOT DATE: 3/9/2011
PROJECT LEADER: G. BAKOS DRAWN BY: DMP / JAR
DESIGNED BY: DMP / MDS CHECKED BY:
CONST. & DETOUR SIGNING PLAN PHASES 2-6 SHEET 182 OF 339

N

VT. STATE PLANE GRID

TREMONT ST

WALNUT ST

FRANKLIN ST

ELM ST

EASTERN AVE

PARK ST

WELLINGTON ST

JEFFERSON ST

AVERILL ST

ACADEMY ST

SUMMER STREET

KEITH AVE

PEARL ST

Elm St DETOUR

Elm St DETOUR

Elm St DETOUR

Elm St END DETOUR

TEMPORARY 4 INCH SINGLE WHITE LINE

SWL

ROAD CLOSED

ONE WAY

ONE WAY

LEGEND

- CONSTRUCTION AREA
- DESIGNATED DETOUR ROUTE
- CONSTRUCTION SIGN
- TYPE 1/2/3 BARRICADE
- BARRICADE WITH SIGNS
- LOCAL TRAFFIC ACCESS

50 0 50 100

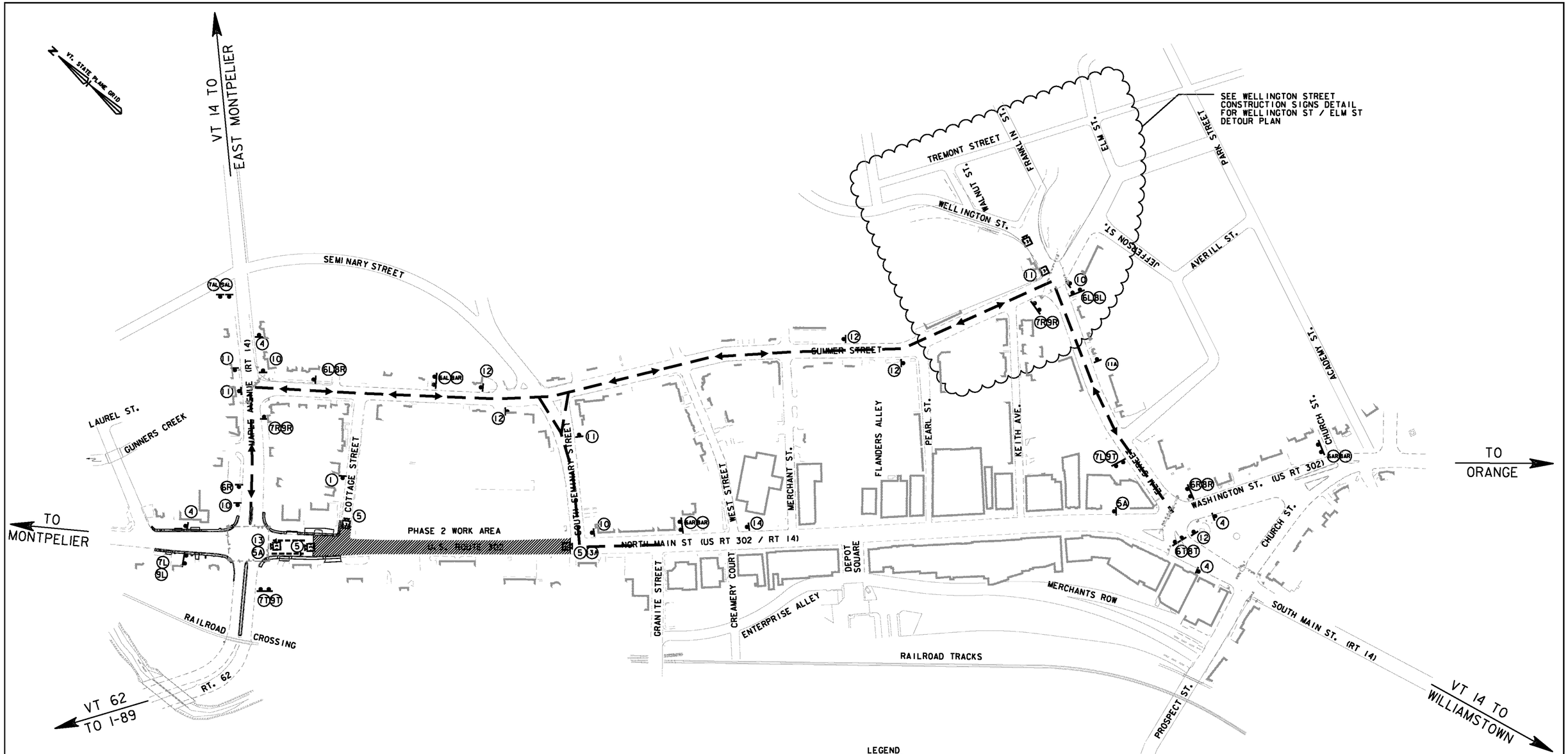
FEET

VHB Vanasse Hangen Brustlin, Inc.

# WELLINGTON STREET CONSTRUCTION SIGNS DETAIL

| | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-1(34) C/2 |

| | |
|---|---|
| FILE NAME: 85b010_CSP5_C2 | PLOT DATE: 3/31/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: DMP / JAR |
| DESIGNED BY: DMP / MDS | CHECKED BY: |
| CONST. & DETOUR SIGNING PLAN PHASES 2-6 | SHEET 183 OF 339 |




NOTE: ALL SIGNS THAT CONFLICT WITH THE TRAFFIC CONTROL PLANS SHALL BE REMOVED OR FULLY COVERED WITH OPAQUE COVERS (INCLUDES OVERHEAD SIGNS).

CONSTRUCTION SIGNS

ROAD WORK AHEAD ① — END DETOUR ④ — DETOUR WEST 302 ARROW ⑥X — DETOUR NORTH VERMONT 14 ARROW ⑧X — N. MAIN ST DETOUR ⑩ — N. MAIN ST DETOUR ⑪A — DETOUR ⑬

ROAD WORK 500 FT ② — ROAD CLOSED ⑤ — DETOUR EAST 302 ARROW ⑦X — DETOUR SOUTH VERMONT 14 ARROW ⑨X — N. MAIN ST DETOUR ⑩A — N. MAIN ST DETOUR ⑫ — DETOUR ⑬A

END ROAD WORK ③ — ROAD CLOSED TO THRU TRAFFIC ⑤A — N. MAIN ST DETOUR ⑪ — DETOUR AHEAD ⑭

ARROW LEGEND

X = L
X = R
X = AL
X = AR
X = T

LEGEND

- PLASTIC DRUM AND YELLOW TEMPORARY PAVEMENT MARKINGS.
- PLASTIC DRUM AND WHITE TEMPORARY PAVEMENT MARKINGS.
- CONSTRUCTION AREA
- DESIGNATED DETOUR ROUTE
- CONSTRUCTION SIGN
- TYPE 1/2/3 BARRICADE
- BARRICADE WITH SIGNS
- LOCAL TRAFFIC ACCESS

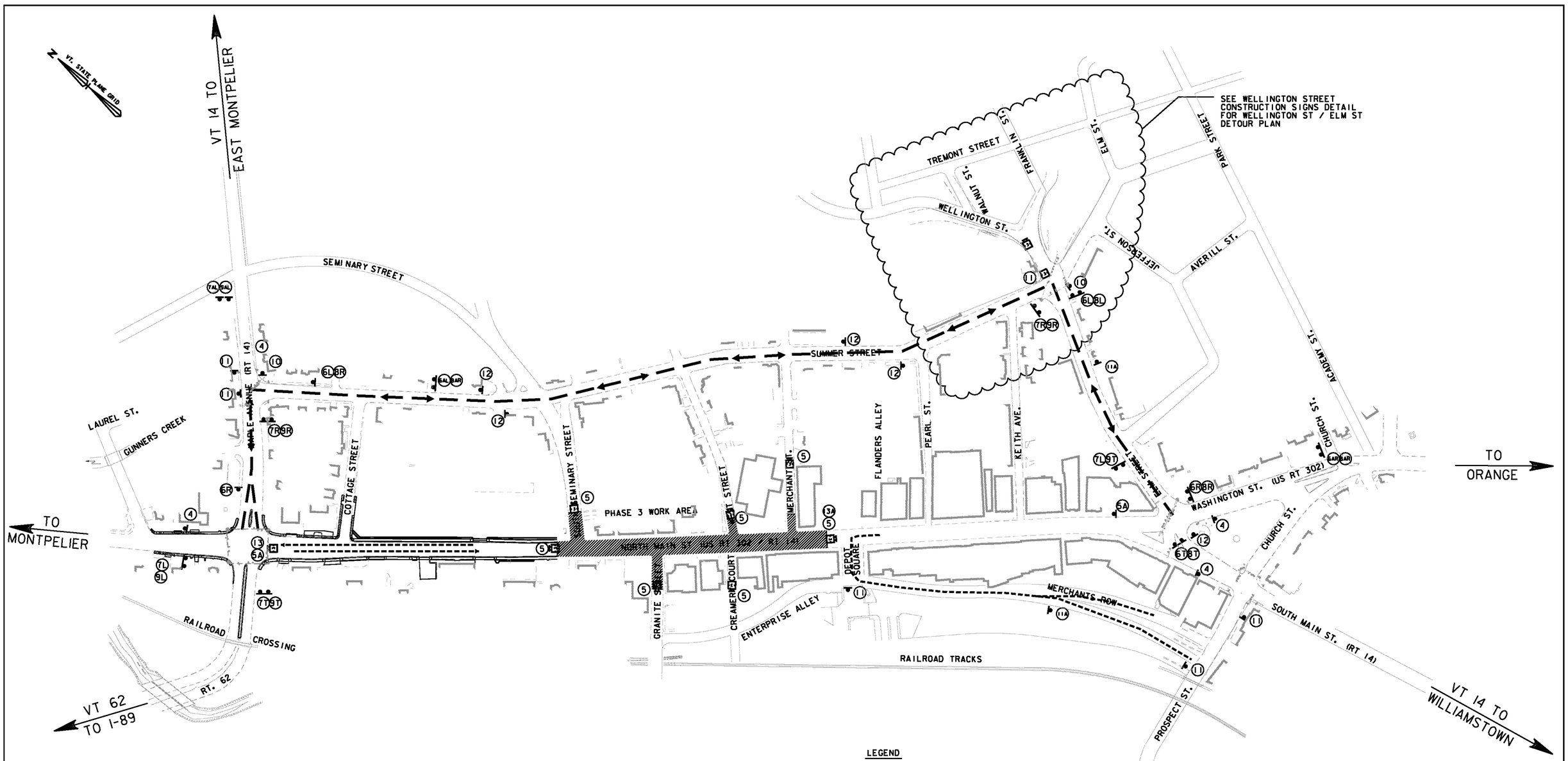
125 0 125 250
FEET

VHB Vanasse Hangen Brustlin, Inc.

PHASE 2

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-I(34) C/2

FILE NAME: 85b010_DTR7_C2 — PLOT DATE: 3/31/2011
PROJECT LEADER: G. BAKOS — DRAWN BY: DMP / JAR
DESIGNED BY: DMP / MDS — CHECKED BY:
CONST. & DETOUR SIGNING PLAN PHASE 2 — SHEET 184 OF 339




NOTE: ALL SIGNS THAT CONFLICT WITH THE TRAFFIC CONTROL PLANS SHALL BE REMOVED OR FULLY COVERED WITH OPAQUE COVERS (INCLUDES OVERHEAD SIGNS).

CONSTRUCTION SIGNS

ROAD WORK AHEAD ① — END DETOUR ④ — DETOUR WEST 302 ARROW ⑥X — DETOUR NORTH VERMONT 14 ARROW ⑧X — N. MAIN ST DETOUR ⑩ — N. MAIN ST DETOUR ⑪A — DETOUR ⑬

ROAD WORK 500 FT ② — ROAD CLOSED ⑤ — N. MAIN ST DETOUR ⑩A — N. MAIN ST DETOUR ⑫ — DETOUR ⑬A

END ROAD WORK ③ — ROAD CLOSED TO THRU TRAFFIC ⑤A — DETOUR EAST 302 ARROW ⑦X — DETOUR SOUTH VERMONT 14 ARROW ⑨X — N. MAIN ST DETOUR ⑪ — DETOUR AHEAD ⑭

ARROW LEGEND

X = L
X = R
X = AL
X = AR
X = T

LEGEND

- PLASTIC DRUM AND YELLOW TEMPORARY PAVEMENT MARKINGS.
- PLASTIC DRUM AND WHITE TEMPORARY PAVEMENT MARKINGS.
- CONSTRUCTION AREA
- DESIGNATED DETOUR ROUTE
- CONSTRUCTION SIGN
- TYPE 1/2/3 BARRICADE
- BARRICADE WITH SIGNS
- LOCAL TRAFFIC ACCESS

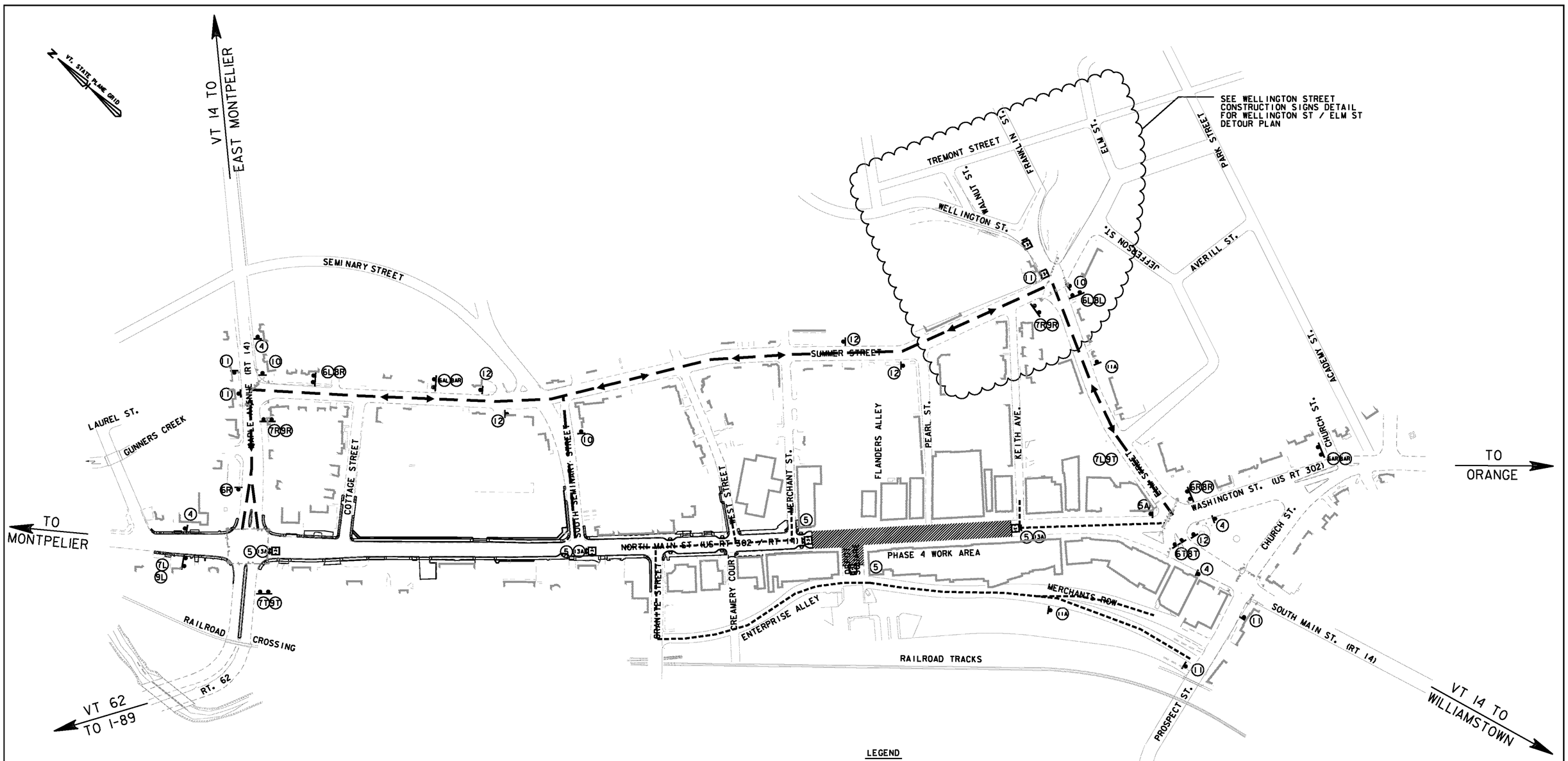
125 0 125 250
FEET

VHB Vanasse Hangen Brustlin, Inc.

PHASE 3

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-I(34) C/2

FILE NAME: 85b010_DTR8_C2 — PLOT DATE: 3/9/2011
PROJECT LEADER: G. BAKOS — DRAWN BY: DMP / JAR
DESIGNED BY: DMP / MDS — CHECKED BY:
CONST. & DETOUR SIGNING PLAN PHASE 3 — SHEET 185 OF 339




NOTE: ALL SIGNS THAT CONFLICT WITH THE TRAFFIC CONTROL PLANS SHALL BE REMOVED OR FULLY COVERED WITH OPAQUE COVERS (INCLUDES OVERHEAD SIGNS).

CONSTRUCTION SIGNS

ROAD WORK AHEAD ① — END DETOUR ④ — DETOUR WEST 302 ARROW ⑥X — DETOUR NORTH VERMONT 14 ARROW ⑧X — N. MAIN ST DETOUR ⑩ — N. MAIN ST DETOUR ⑪A — DETOUR ⑬

ROAD WORK 500 FT ② — ROAD CLOSED ⑤ — N. MAIN ST DETOUR ⑩A — N. MAIN ST DETOUR ⑫ — DETOUR ⑬A

END ROAD WORK ③ — ROAD CLOSED TO THRU TRAFFIC ⑤A — DETOUR EAST 302 ARROW ⑦X — DETOUR SOUTH VERMONT 14 ARROW ⑨X — N. MAIN ST DETOUR ⑪ — DETOUR AHEAD ⑭

ARROW LEGEND

X = L
X = R
X = AL
X = AR
X = T

LEGEND

- PLASTIC DRUM AND YELLOW TEMPORARY PAVEMENT MARKINGS.
- PLASTIC DRUM AND WHITE TEMPORARY PAVEMENT MARKINGS.
- CONSTRUCTION AREA
- DESIGNATED DETOUR ROUTE
- CONSTRUCTION SIGN
- TYPE 1/2/3 BARRICADE
- BARRICADE WITH SIGNS
- LOCAL TRAFFIC ACCESS

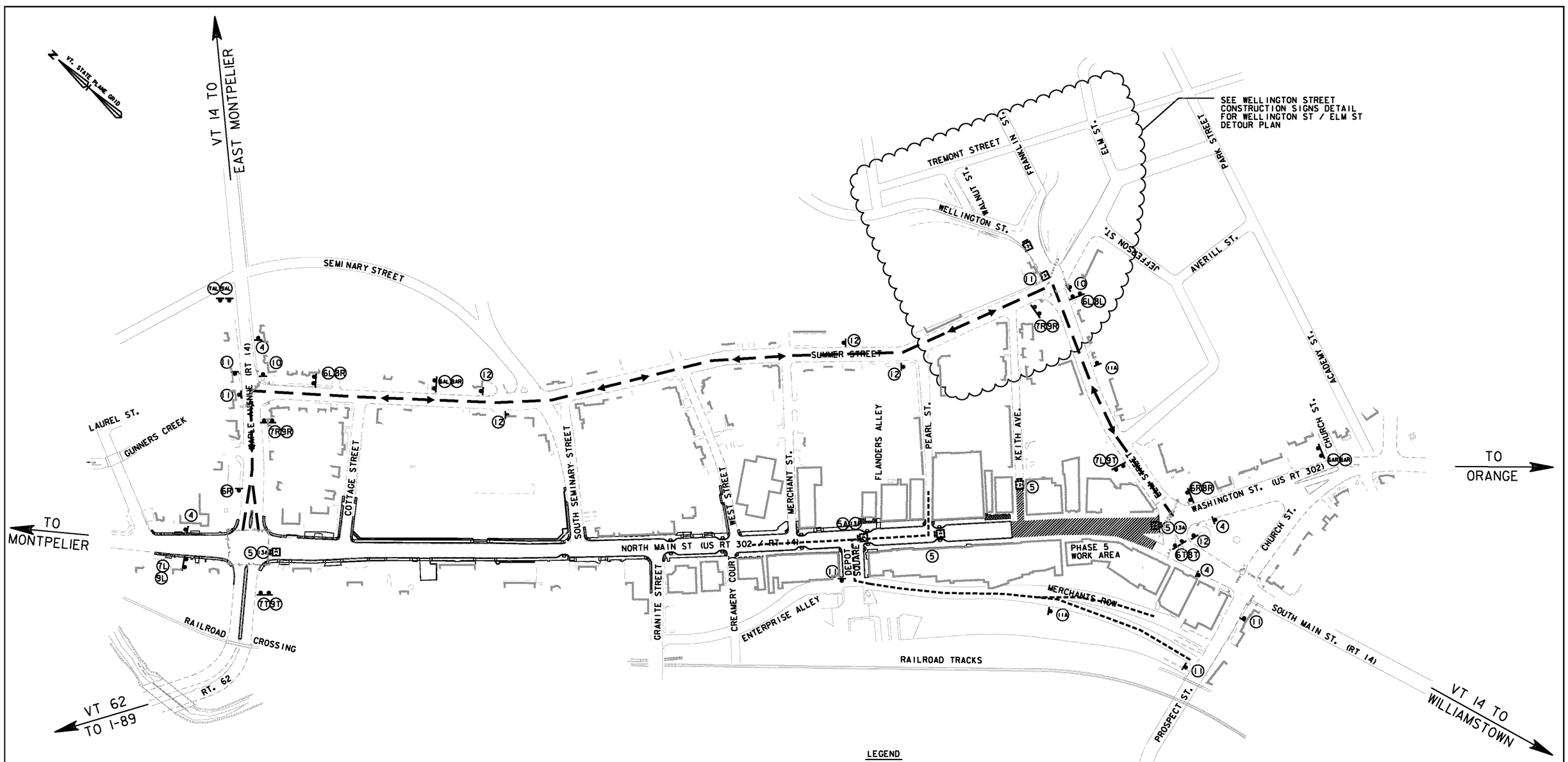
125 0 125 250
FEET

VHB Vanasse Hangen Brustlin, Inc.

PHASE 4

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-I(34) C/2

FILE NAME: 85b010_DTR9_C2 — PLOT DATE: 3/9/2011
PROJECT LEADER: G. BAKOS — DRAWN BY: DMP / JAR
DESIGNED BY: DMP / MDS — CHECKED BY:
CONST. & DETOUR SIGNING PLAN PHASE 4 — SHEET 186 OF 339




NOTE: ALL SIGNS THAT CONFLICT WITH THE TRAFFIC CONTROL PLANS SHALL BE REMOVED OR FULLY COVERED WITH OPAQUE COVERS (INCLUDES OVERHEAD SIGNS).

CONSTRUCTION SIGNS

ARROW LEGEND

X = L
X = R
X = AL
X = AR
X = T

LEGEND

- PLASTIC DRUM AND YELLOW TEMPORARY PAVEMENT MARKINGS.
- PLASTIC DRUM AND WHITE TEMPORARY PAVEMENT MARKINGS.
- CONSTRUCTION AREA
- DESIGNATED DETOUR ROUTE
- CONSTRUCTION SIGN
- TYPE 1/2/3 BARRICADE
- BARRICADE WITH SIGNS
- LOCAL TRAFFIC ACCESS

125 0 125 250
FEET

VHB Vanasse Hangen Brustlin, Inc.

PHASE 5

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-I(34) C/2

FILE NAME: 85b010_DTR10_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CONST. & DETOUR SIGNING PLAN PHASE 5

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 187 OF 339

VT. STATE PLANE GRID

VT 14 TO EAST MONTPELIER

SEMINARY STREET

SUMMER STREET

TREMONT STREET

WELLINGTON ST.

WALNUT ST.

FRANKLIN ST.

ELM ST.

PARK STREET

JEFFERSON ST.

AVERILL ST.

ACADEMY ST.

SEE WELLINGTON STREET CONSTRUCTION SIGNS DETAIL FOR WELLINGTON ST / ELM ST DETOUR PLAN

DOUBLE HATCHED AREA SHALL BE CLOSED TO ALLOW SEWER LINE COMPLETION

LAUREL ST.

GUNNERS CREEK

MAPLE AVENUE

COTTAGE STREET

SOUTH SEMINARY STREET

WEST STREET

MERCHANT ST.

FLANDERS ALLEY

PEARL ST.

KEITH AVE.

CHURCH ST.

TO ORANGE

WASHINGTON ST. (US RT 302)

TO MONTPELIER

NORTH MAIN ST (US RT 302 / RT 14)

GRANITE STREET

CREAMERY COURT

DEPOT SQUARE

CHURCH ST.

MERCHANTS ROW

ENTERPRISE ALLEY

RAILROAD CROSSING

RAILROAD TRACKS

SOUTH MAIN ST. (RT 14)

PHASE 6 WORK AREA (WORK TO BE PERFORMED UNDER TRAFFIC)

RT. 62

VT 62 TO I-89

PROSPECT ST.

VT 14 TO WILLIAMSTOWN

NOTE: ALL SIGNS THAT CONFLICT WITH THE TRAFFIC CONTROL PLANS SHALL BE REMOVED OR FULLY COVERED WITH OPAQUE COVERS (INCLUDES OVERHEAD SIGNS).

CONSTRUCTION SIGNS

ROAD WORK AHEAD ① — END DETOUR ④ — DETOUR WEST 302 ARROW ⑥X — DETOUR NORTH VERMONT 14 ARROW ⑧X — N. MAIN ST DETOUR ⑩ — N. MAIN ST DETOUR ⑪A — DETOUR ⑬

ROAD WORK 500 FT ② — ROAD CLOSED ⑤ — N. MAIN ST DETOUR ⑩A — N. MAIN ST DETOUR ⑫ — DETOUR ⑬A

END ROAD WORK ③ — ROAD CLOSED TO THRU TRAFFIC ⑤A — DETOUR EAST 302 ARROW ⑦X — DETOUR SOUTH VERMONT 14 ARROW ⑨X — N. MAIN ST DETOUR ⑪ — DETOUR AHEAD ⑭

ARROW LEGEND

X = L

X = R

X = AL

X = AR

X = T

LEGEND

PLASTIC DRUM AND YELLOW TEMPORARY PAVEMENT MARKINGS.

PLASTIC DRUM AND WHITE TEMPORARY PAVEMENT MARKINGS.

CONSTRUCTION AREA

DESIGNATED DETOUR ROUTE

CONSTRUCTION SIGN

TYPE 1/2/3 BARRICADE

BARRICADE WITH SIGNS

LOCAL TRAFFIC ACCESS

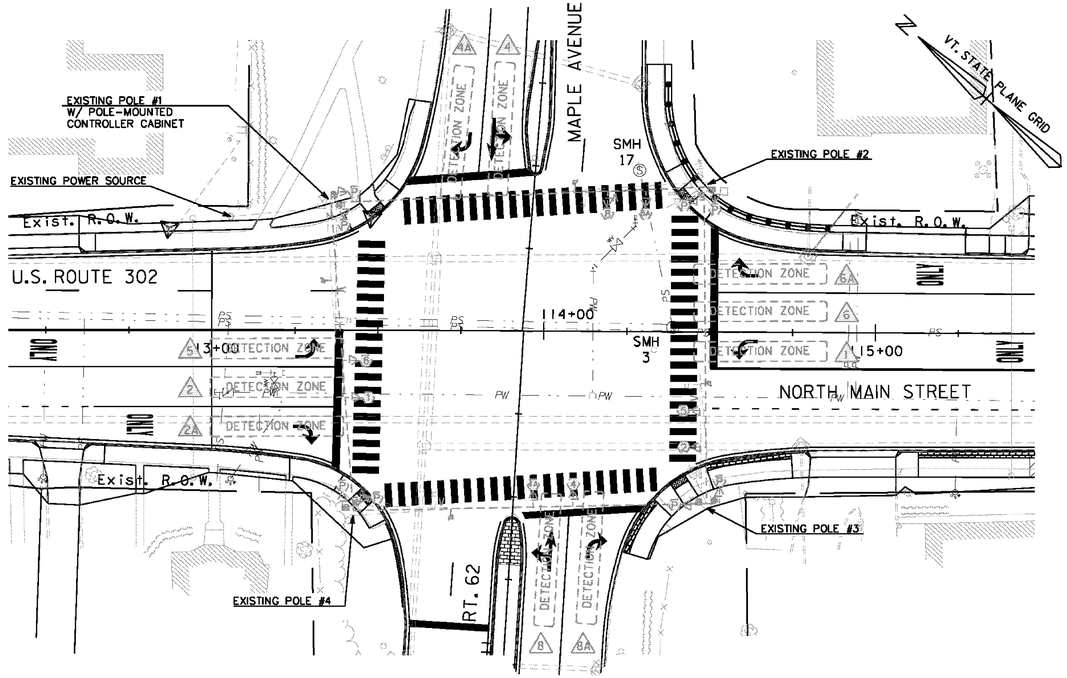
125 0 125 250
FEET

VHB Vanasse Hangen Brustlin, Inc.

PHASE 6

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-I(34) C/2

FILE NAME: 85b010_DTRII_C2 — PLOT DATE: 3/9/2011
PROJECT LEADER: G. BAKOS — DRAWN BY: DMP / JAR
DESIGNED BY: DMP / MDS — CHECKED BY:
CONST. & DETOUR SIGNING PLAN PHASE 6 — SHEET 188 OF 339




## TIMING AND PHASING (PHASE 1)

| | | PHASE 2+6 (DWELL) | | | | PHASE 4 + 8 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | % | Ø4+Ø8 | | | % | CLEAR TO Ø2+6 | | |
| OFF PEAK REST OF DAY | VEHICLE | - | | | | 2 | | | |
| | MINIMUM | 5/25 | 4 | 3 | | 5/25 | 4 | 2 | |
| | MAXIMUM | 60 | 4 | 3 | | 40 | 4 | 2 | |
| | MAXIMUM2 | 75 | 4 | 3 | | 55 | 4 | 2 | |
| | PED ACT | | | | | | | | |
| AM PEAK 7-9 AM | VEHICLE | - | | | | 2 | | | |
| | MINIMUM | 5/25 | 4 | 3 | | 5/25 | 4 | 2 | |
| | MAXIMUM | 45 | 4 | 3 | | 25 | 4 | 2 | |
| | MAXIMUM2 | 60 | 4 | 3 | | 40 | 4 | 2 | |
| | PED ACT | | | | | | | | |
| PM PEAK 3-6 PM | VEHICLE | - | | | | 2 | | | |
| | MINIMUM | 5/25 | 4 | 3 | | 5/25 | 4 | 2 | |
| | MAXIMUM | 50 | 4 | 3 | | 35 | 4 | 2 | |
| | MAXIMUM2 | 75 | 4 | 3 | | 45 | 4 | 2 | |
| | PED ACT | | | | | | | | |
| FLASHING OPERATION | | | | | | | | | |
| | FACE 2 | G | Y | R | | R | R | R | FY |
| | FACE 4 | R | R | R | | G | Y | R | FR |
| | FACE 6 | G | Y | R | | R | R | R | FY |
| | FACE 8 | R | R | R | | G | Y | R | FR |
| | PED (N-S) | DW | DW | DW | | 5/25 | FD | DW | B |
| | PED (E-W) | 5/25 | FD | DW | | DW | DW | DW | B |

W = WALK, FD = FLASHING DON'T WALK, DW = DON'T WALK,
B = BLANK, FR = FLASHING RED, FY = FLASHING YELLOW

1. FACE NUMBERS ARE BASED ON NEMA PHASES
2. DURING PHASE 1, ALL LEFT TURNS SHALL OPERATE UNDER PERMISSIVE PHASING
3. DURING PHASE 1, CLOSED PEDESTRIAN CROSSINGS SHALL HAVE THE PEDESTRIAN SIGNAL HEADS COVERED AND THE PUSH BUTTONS DEACTIVATED.

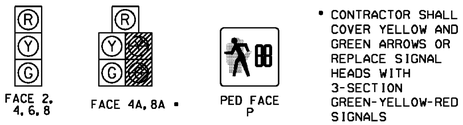
DATUM
VERTICAL NAVD 1929
HORIZONTAL NAD 27

## 2011 AVERAGE WEEKDAY TRAFFIC DATA (PHASES 2-6)

( SEE SHEET 190)

## EXISTING SIGNAL FACE ARRANGEMENT

( 12" LED LENSES W/ 5" BACKPLATES )




* CONTRACTOR SHALL COVER YELLOW AND GREEN ARROWS OR REPLACE SIGNAL HEADS WITH 3-SECTION GREEN-YELLOW-RED SIGNALS

AT THE COMPLETION OF PHASE IE, REINSTALL SALVAGED MAST ARMS AND INSTALL NEW SIGNAL HEADS ON NEW BRACKETS.

## PROGRAM PERIODS OF OPERATION

| | 1 2 3 4 5 6 7 8 9 10 11 12 AM | 1 2 3 4 5 6 7 8 9 10 11 12 PM |
|---|---|---|
| SUNDAY | 4 | |
| MONDAY | 4 1 2 | 1 3 1 4 |
| TUESDAY | 4 1 2 | 1 3 1 4 |
| WEDNESDAY | 4 1 2 | 1 3 1 4 |
| THURSDAY | 4 1 2 | 1 3 1 4 |
| FRIDAY | 4 1 2 | 1 3 1 4 |
| SATURDAY | 4 | |

NOTES:

PLAN 1 - MIDDAY (MAXIMUM 1): 6:00 AM TO 7:00 AM, M-F; 9:00 AM TO 3:00 PM, M-F; 6:00 PM TO 10:00 PM, M-F

PLAN 2 - AM PEAK (MAXIMUM 2): 7:00 AM TO 9:00 AM, M-F

PLAN 3 - PM PEAK (MAXIMUM 2): 3:00 PM TO 6:00 PM, M-F

PLAN 4 - OFFPEAK (MAXIMUM 1): MIDNIGHT TO 6:00 AM, M-F; 10:00 PM TO MIDNIGHT, M-F; ALL DAY SATURDAYS AND SUNDAYS

## COORDINATION CYCLE / SPLIT / OFFSET SCHEDULE

| | PLAN 1 | PLAN 2 | PLAN 3 | PLAN 4 |
|---|---|---|---|---|
| CYCLE LENGTH | 80 | 80 | 80 | FREE |
| COS | 111 | 121 | 131 | - |
| OFFSET | 8 | 77 | 39 | - |
| SPLIT TIME Ø1 | 0 | 0 | 0 | - |
| SPLIT TIME Ø2 | 46 | 34 | 44 | - |
| SPLIT TIME Ø3 | 0 | 0 | 0 | - |
| SPLIT TIME Ø4 | 34 | 46 | 36 | - |
| SPLIT TIME Ø5 | 0 | 0 | 0 | - |
| SPLIT TIME Ø6 | 46 | 34 | 44 | - |
| SPLIT TIME Ø7 | 0 | 0 | 0 | - |
| SPLIT TIME Ø8 | 34 | 46 | 36 | - |

COORDINATION NOTES:
1. OFFSET IS REFERENCED TO BEGINNING OF THE COORDINATED PHASE (Ø4 & Ø8)

NOT REQUIRED AS CONTRACTOR WORKED AT NIGHT THROUGH THIS INTERSECTION

## LIST OF MAJOR EQUIPMENT

| EQUIPMENT ITEM 678.40 | QUANTITY |
|---|---|
| RELOCATE TRAFFIC SIGNAL HEADS FROM MAST ARM MOUNTING TO SPAN WIRE MOUNTING, WITH NEW WIRING AS NEEDED | 8 |
| SALVAGE TRAFFIC SIGNAL HEADS | 2 |
| SPAN WIRE MOUNTING DISCONNECT BRACKET | 8 |
| RELOCATE TRAFFIC SIGNAL HEADS FOR STAGES IB, IC, ID, & IE | 20 |
| RELOCATE EMERGENCY PREEMPTION EQUIPMENT TO SPAN WIRE | - |
| RELOCATE VIDEO DETECTION EQUIPMENT TO TRAFFIC SIGNAL POLES | 4 |
| MODIFY VIDEO DETECTION ZONES FOR STAGED CONSTRUCTION ( 1x PER CAMERA PER SITE ) | 20 |

## EXISTING DETECTION SCHEDULE

| OPTICAL VIDEO DETECTORS | | | | | | | |
|---|---|---|---|---|---|---|---|
| LOOP NO. | LANE | CALL Ø | SIZE | TYPE & NO. TURNS | DELAY OR PRESENCE | SLOT | CHANNEL |
| 1 | WBLT | 1 | 6X40 | OPTICAL | PRESENCE | 2 | 1 |
| 2 | EBTH | 2 | 6X40 | OPTICAL | PRESENCE | 4 | 2 |
| 2A | EBRT | 2 | 6X40 | OPTICAL | 5 SEC DELAY | 4 | 3 |
| 3 | SBTH | 4 | 6X40 | OPTICAL | PRESENCE | 6 | 1 |
| 4A | SBRT | 4 | 6X40 | OPTICAL | 5 SEC DELAY | 6 | 2 |
| 5 | EBLT | 5 | 6X40 | OPTICAL | PRESENCE | 4 | 1 |
| 6 | WBTH | 6 | 6X40 | OPTICAL | PRESENCE | 2 | 2 |
| 6A | WBRT | 6 | 6X40 | OPTICAL | 5 SEC DELAY | 2 | 3 |
| 7 | NBLT | 8 | 6X40 | OPTICAL | PRESENCE | 8 | 1 |
| 8A | NBRT | 8 | 6X40 | OPTICAL | 5 SEC DELAY | 8 | 2 |

## EQUIPMENT NOTES

(A) SEE STANDARDS E-170, E-171A, E-171B, 171C, 173, & 175 FOR ADDITIONAL INFORMATION.

(B) FOR SIGN DETAILS, SEE SHEET 85.

(C) SEE SHEETS 172, 174, 176, 178, 180, AND 181 FOR ADDITIONAL DETAILS FOR TRAFFIC CONTROL, CONSTRUCTION, AND PHASING. TRAFFIC SIGNAL SHALL OPERATE AS 2-PHASE SIGNAL DURING STAGED CONSTRUCTION IN PHASE 1. TRAFFIC SIGNAL SHALL OPERATE AS PROPOSED FOR PHASES 2-7. CONTRACTOR SHALL MODIFY TIMING PLAN IN ACCORDANCE TO DETOUR TRAFFIC CONDITIONS.

## LEGEND

| EXISTING | LEGEND |
|---|---|
| | CONTROLLER CABINET |
| | SIGNAL HEAD |
| | CONDUIT |
| | OPTICAL DETECTION ZONE |
| | PEDESTAL POST |
| | STANCHION |
| | EMERGENCY VEHICLE PREEMPTION STROBE |
| | EMERGENCY VEHICLE PREEMPTION RECEIVER |
| | PEDESTRIAN PUSH BUTTON |
| | PULL BOX |
| | OVERHEAD SIGN |
| | RADIO ANTENNA |
| | OPTICAL DETECTION |
| | MAST ARM |

20 0 20 40
FEET

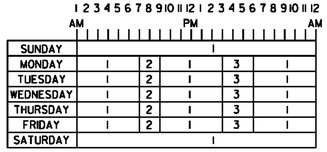
TEMPORARY TRAFFIC SIGNAL SYSTEM
NORTH MAIN ST AND MAPLE AVE / RT 62

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-I(34) C/2

FILE NAME: z85b010_TEMPSI.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
TEMPORARY TRAFFIC SIGNAL PLAN
PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 189 OF 339

VHB Vanasse Hangen Brustlin, Inc.

## PROGRAM PERIODS OF OPERATION




| | | | | | |
|---|---|---|---|---|---|
| SUNDAY | 1 | | | | |
| MONDAY | 1 | 2 | 1 | 3 | 1 |
| TUESDAY | 1 | 2 | 1 | 3 | 1 |
| WEDNESDAY | 1 | 2 | 1 | 3 | 1 |
| THURSDAY | 1 | 2 | 1 | 3 | 1 |
| FRIDAY | 1 | 2 | 1 | 3 | 1 |
| SATURDAY | 1 | | | | |

NOTES:

PLAN 1 - OFFPEAK (MAXIMUM 1): MIDNIGHT TO 7:00 AM, M-F
9:00 AM TO 3:00 PM, M-F
6:00 PM TO MIDNIGHT, M-F
ALL DAY SATURDAY AND SUNDAY

PLAN 2 - AM PEAK (MAXIMUM 2): 7:00 AM TO 9:00 AM, M-F

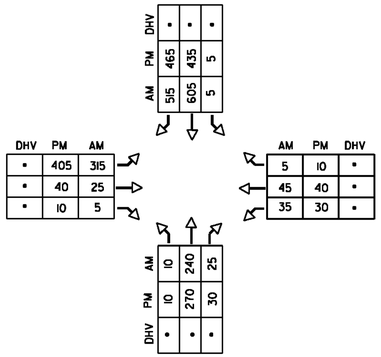
PLAN 3 - PM PEAK (MAXIMUM 3): 3:00 PM TO 6:00 PM, M-F

## COORDINATION CYCLE/SPLIT OFFSET SCHEDULE

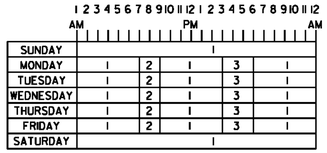
| | PLAN 1 | PLAN 2 | PLAN 3 | PLAN 4 |
|---|---|---|---|---|
| CYCLE LENGTH | 80 | 80 | 80 | FREE |
| COS | 111 | 121 | 131 | - |
| OFFSET | 14 | 25 | 35 | - |
| SPLIT TIME 01 | 11 | 11 | 11 | - |
| SPLIT TIME 02 | 45 | 39 | 45 | - |
| SPLIT TIME 03 | 0 | 0 | 0 | - |
| SPLIT TIME 04 | 24 | 30 | 24 | - |
| SPLIT TIME 05 | 24 | 18 | 24 | - |
| SPLIT TIME 06 | 32 | 32 | 32 | - |
| SPLIT TIME 07 | 0 | 0 | 0 | - |
| SPLIT TIME 08 | 24 | 30 | 24 | - |

COORDINATION NOTES:
1. OFFSET IS REFERENCED TO BEGINNING OF THE COORDINATED GREEN PHASE (04 & 08)

## 2011 AVERAGE WEEKDAY TRAFFIC DATA (PHASES 2-3)




## PROGRAM PERIODS OF OPERATION




| | | | | | |
|---|---|---|---|---|---|
| SUNDAY | 1 | | | | |
| MONDAY | 1 | 2 | 1 | 3 | 1 |
| TUESDAY | 1 | 2 | 1 | 3 | 1 |
| WEDNESDAY | 1 | 2 | 1 | 3 | 1 |
| THURSDAY | 1 | 2 | 1 | 3 | 1 |
| FRIDAY | 1 | 2 | 1 | 3 | 1 |
| SATURDAY | 1 | | | | |

NOTES:

PLAN 1 - OFFPEAK (MAXIMUM 1): MIDNIGHT TO 7:00 AM, M-F
9:00 AM TO 3:00 PM, M-F
6:00 PM TO MIDNIGHT, M-F
ALL DAY SATURDAY AND SUNDAY

PLAN 2 - AM PEAK (MAXIMUM 2): 7:00 AM TO 9:00 AM, M-F

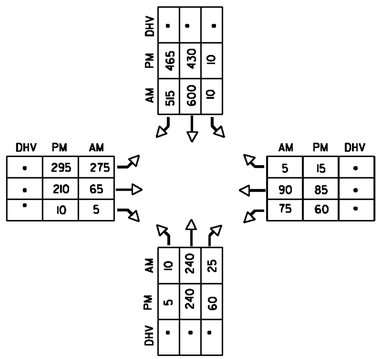
PLAN 3 - PM PEAK (MAXIMUM 3): 3:00 PM TO 6:00 PM, M-F

## COORDINATION CYCLE/SPLIT OFFSET SCHEDULE

| | PLAN 1 | PLAN 2 | PLAN 3 | PLAN 4 |
|---|---|---|---|---|
| CYCLE LENGTH | 80 | 80 | 80 | FREE |
| COS | 111 | 121 | 131 | - |
| OFFSET | 13 | 32 | 40 | - |
| SPLIT TIME 01 | 11 | 13 | 11 | - |
| SPLIT TIME 02 | 42 | 37 | 42 | - |
| SPLIT TIME 03 | 0 | 0 | 0 | - |
| SPLIT TIME 04 | 27 | 30 | 27 | - |
| SPLIT TIME 05 | 21 | 18 | 21 | - |
| SPLIT TIME 06 | 32 | 32 | 32 | - |
| SPLIT TIME 07 | 0 | 0 | 0 | - |
| SPLIT TIME 08 | 27 | 30 | 27 | - |

COORDINATION NOTES:
1. OFFSET IS REFERENCED TO BEGINNING OF THE COORDINATED GREEN PHASE (04 & 08)

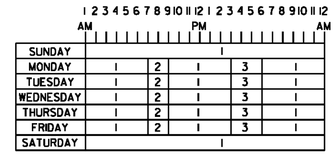
## 2011 AVERAGE WEEKDAY TRAFFIC DATA (PHASES 4-5)




DATUM
VERTICAL NAVD 1929
HORIZONTAL NAD 27

* DHV CANNOT BE ESTIMATED FOR INTERIM CONDITIONS DURING DETOUR OPERATIONS

## PROGRAM PERIODS OF OPERATION




| | | | | | |
|---|---|---|---|---|---|
| SUNDAY | 1 | | | | |
| MONDAY | 1 | 2 | 1 | 3 | 1 |
| TUESDAY | 1 | 2 | 1 | 3 | 1 |
| WEDNESDAY | 1 | 2 | 1 | 3 | 1 |
| THURSDAY | 1 | 2 | 1 | 3 | 1 |
| FRIDAY | 1 | 2 | 1 | 3 | 1 |
| SATURDAY | 1 | | | | |

NOTES:

PLAN 1 - OFFPEAK (MAXIMUM 1): MIDNIGHT TO 7:00 AM, M-F
9:00 AM TO 3:00 PM, M-F
6:00 PM TO MIDNIGHT, M-F
ALL DAY SATURDAY AND SUNDAY

PLAN 2 - AM PEAK (MAXIMUM 2): 7:00 AM TO 9:00 AM, M-F

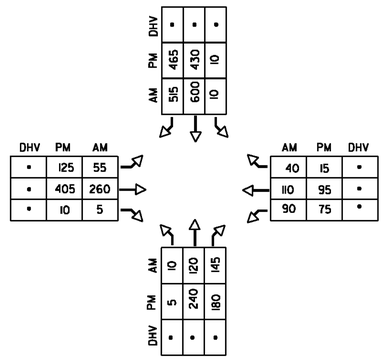
PLAN 3 - PM PEAK (MAXIMUM 3): 3:00 PM TO 6:00 PM, M-F

## COORDINATION CYCLE/SPLIT OFFSET SCHEDULE

| | PLAN 1 | PLAN 2 | PLAN 3 | PLAN 4 |
|---|---|---|---|---|
| CYCLE LENGTH | 80 | 80 | 80 | FREE |
| COS | 111 | 121 | 131 | - |
| OFFSET | 15 | 30 | 35 | - |
| SPLIT TIME 01 | 14 | 11 | 11 | - |
| SPLIT TIME 02 | 35 | 32 | 36 | - |
| SPLIT TIME 03 | 0 | 0 | 0 | - |
| SPLIT TIME 04 | 31 | 37 | 33 | - |
| SPLIT TIME 05 | 16 | 11 | 15 | - |
| SPLIT TIME 06 | 33 | 32 | 32 | - |
| SPLIT TIME 07 | 0 | 0 | 0 | - |
| SPLIT TIME 08 | 31 | 37 | 33 | - |

COORDINATION NOTES:
1. OFFSET IS REFERENCED TO BEGINNING OF THE COORDINATED GREEN PHASE (04 & 08)

## 2011 AVERAGE WEEKDAY TRAFFIC DATA (PHASES 6)




20 0 20 40
FEET

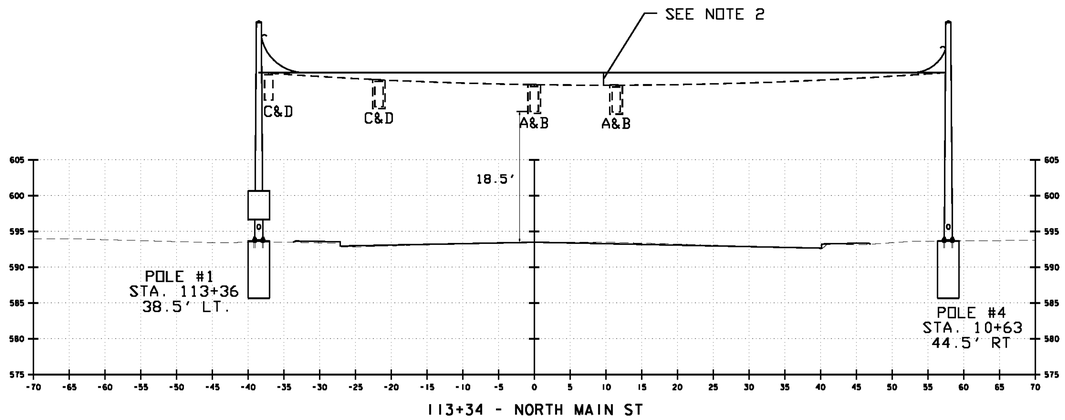
VHB Vanasse Hangen Brustlin, Inc.

TEMPORARY TRAFFIC SIGNAL SYSTEM
NORTH MAIN ST AND MAPLE AVE / RT 62

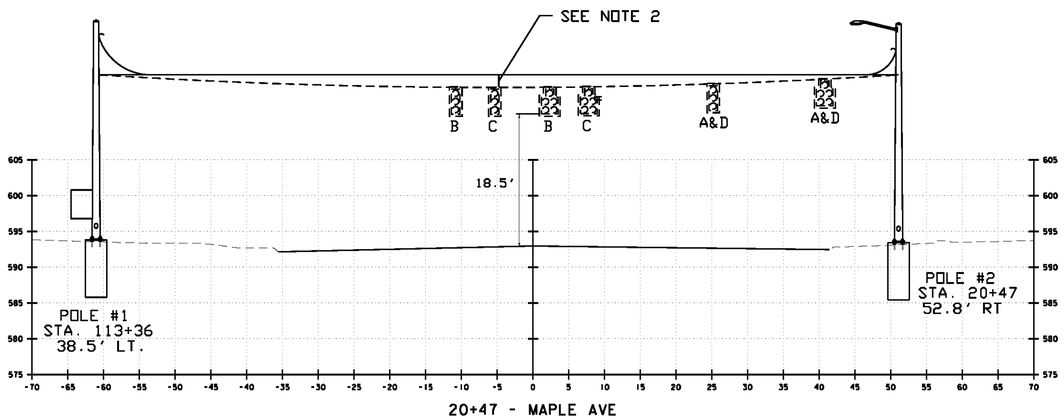
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: z85b010_TEMPS2.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
TEMPORARY TRAFFIC SIGNAL PLAN

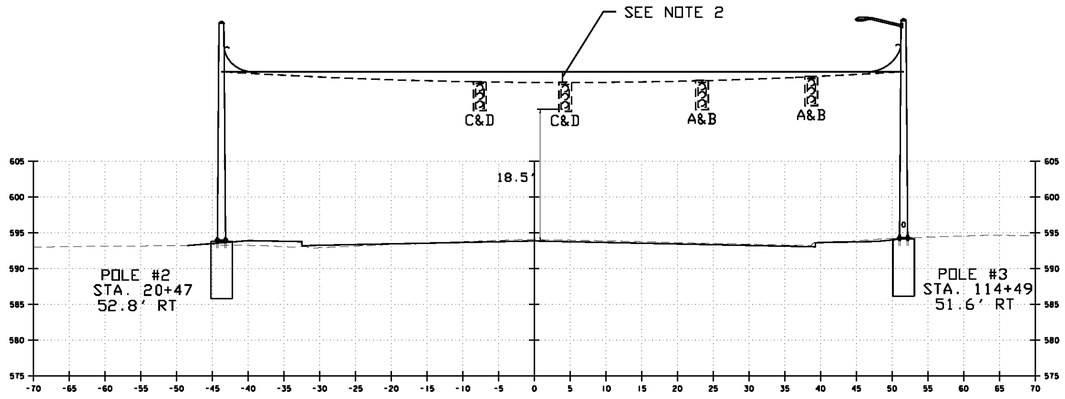
PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 190 OF 339



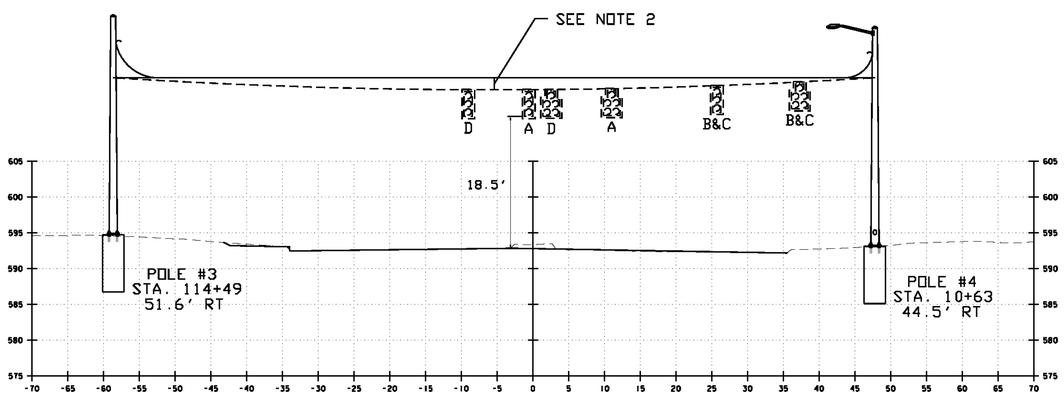

113+34 - NORTH MAIN ST




20+47 - MAPLE AVE




114+51 - NORTH MAIN ST




10+63 - VT 62

NOTES:

1. SPAN WIRE MOUNTED SIGNAL HEADS ARE SHOWN FOR CONSTRUCTION DETOUR PHASE 1, STAGES A-D. SIGNAL HEADS ARE SHOWN AT APPROXIMATE LOCATIONS. ACTUAL SIGNAL HEAD PLACEMENT SHALL BE DETERMINED IN THE FIELD BASED ON PHASED DETOUR LANE ALIGNMENT.

2. ALL SIGNAL HEAD WIRING SHALL BE FROM SPAN WIRE SPANNING FROM POLE TO POLE. SPAN WIRE SAG SHALL NOT BLOCK SIGNAL HEAD VIEWING.

3. SIGNAL HEAD LETTERS REPRESENT LOCATION OF SIGNAL HEADS DURING PHASED CONSTRUCTION. SEE CONSTRUCTION INTERSECTION DETAILS FOR LANE ALIGNMENTS (SHEETS 174, 176, 178, 180).

DATUM

VERTICAL NAVD 1929

HORIZONTAL NAD 27

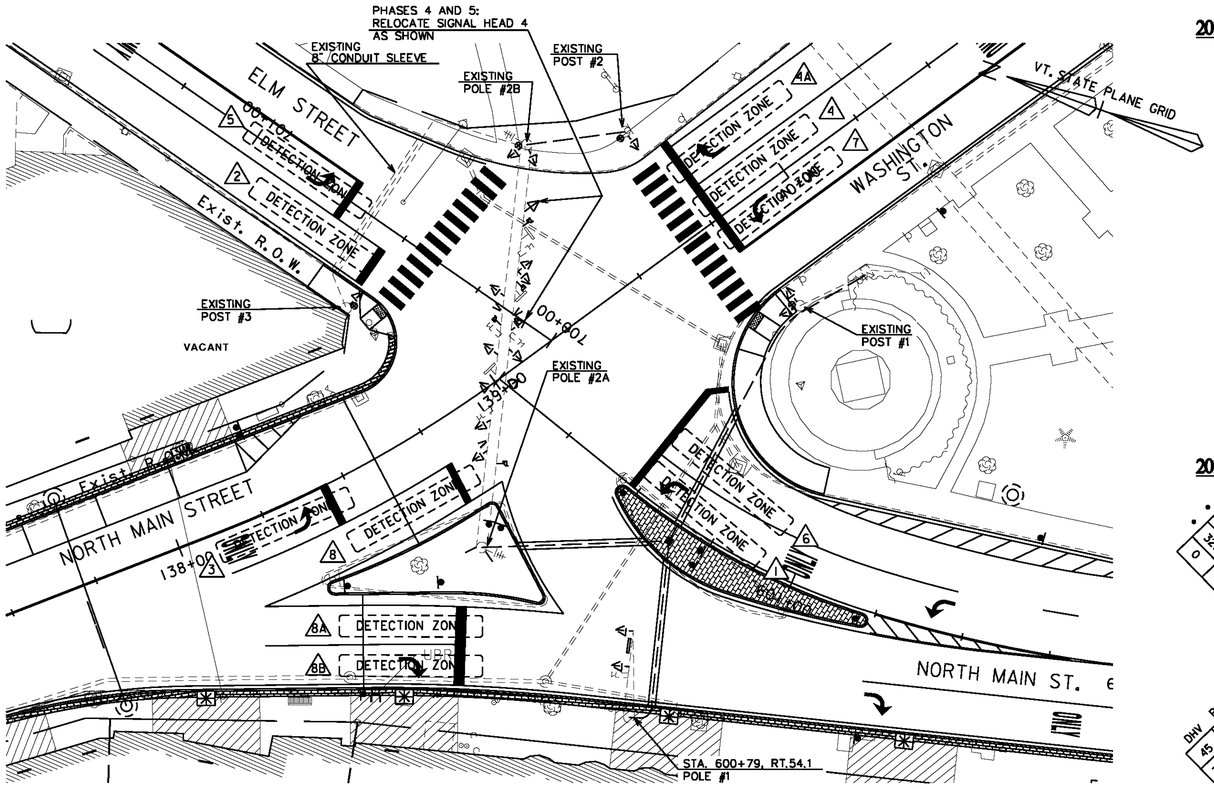
TEMPORARY TRAFFIC SIGNAL SYSTEM
NORTH MAIN ST AND MAPLE AVE / RT 62

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: z85b010_TSPSID.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
TEMPORARY TRAFFIC SIGNAL PLAN

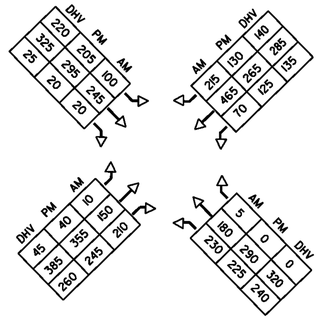
PLOT DATE: 3/31/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 191 OF 339

VHB Vanasse Hangen Brustlin, Inc.



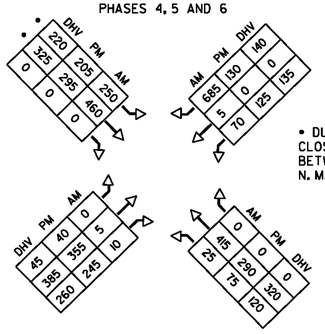

## 2011 AVERAGE WEEKDAY TRAFFIC DATA

PHASES 2 AND 3




## 2011 AVERAGE WEEKDAY TRAFFIC DATA

PHASES 4, 5 AND 6



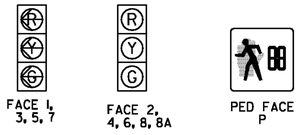

• DURING PHASE 6, ELM STREET IS CLOSED TO SOUTHBOUND TRAFFIC BETWEEN JEFFERSON STREET AND N. MAIN STREET; NO VOLUME.

## LIST OF MAJOR EQUIPMENT

| EQUIPMENT ITEM 678.40 | QUANTITY |
|---|---|
| RELOCATE TRAFFIC SIGNAL HEAD | 1 |
| MODIFY VIDEO DETECTION ZONE | 1 |

## EXISTING SIGNAL FACE ARRANGEMENT

( 12" LED LENSES W/ 5" BACKPLATES )




AT THE COMPLETION OF THE SEWER LINE CONSTRUCTION, REINSTALL SIGNAL HEAD 4 IN ORIGINAL POSITION IN ACCORDANCE WITH CROSS-SECTION ON SHEET 169.

## EXISTING DETECTION SCHEDULE

-- SEE SHEET 167

## LEGEND

| RELOCATE | EXISTING | LEGEND |
|---|---|---|
| | | CONTROLLER CABINET |
| | | SIGNAL HEAD |
| | | CONDUIT |
| | | OPTICAL DETECTION ZONE |
| | | PEDESTAL POST |
| | | STANCHION |
| | | EMERGENCY VEHICLE PREEMPTION STROBE |
| | | EMERGENCY VEHICLE PREEMPTION RECEIVER |
| | | PEDESTRIAN PUSH BUTTON |
| | | PULL BOX |
| | | OVERHEAD SIGN |
| | | RADIO ANTENNA |
| | | OPTICAL DETECTION |
| | | MAST ARM |
| | | SIGNAL MONOTUBE STRUCTURE |

## PROGRAM PERIODS OF OPERATION

| | 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 |
|---|---|
| | AM PM AM |
| SUNDAY | 4 |
| MONDAY | 4 1 2 1 3 1 4 |
| TUESDAY | 4 1 2 1 3 1 4 |
| WEDNESDAY | 4 1 2 1 3 1 4 |
| THURSDAY | 4 1 2 1 3 1 4 |
| FRIDAY | 4 1 2 1 3 1 4 |
| SATURDAY | 4 |

NOTES:

PLAN 1 - MIDDAY (MAXIMUM 1): 6:00 AM TO 7:00 AM, M-F; 9:00 AM TO 3:00 PM, M-F; 6:00 PM TO 10:00 PM, M-F

PLAN 2 - AM PEAK (MAXIMUM 2): 7:00 AM TO 9:00 AM, M-F

PLAN 3 - PM PEAK (MAXIMUM 3): 3:00 PM TO 6:00 PM, M-F

PLAN 4 - OFFPEAK (MAXIMUM 1): MIDNIGHT TO 6:00 AM, M-F; 10:00 PM TO MIDNIGHT, M-F; ALL DAY SATURDAYS AND SUNDAYS

## COORDINATION CYCLE/SPLIT OFFSET SCHEDULE CONSTRUCTION PHASES 2 AND 3

| | PLAN 1 | PLAN 2 | PLAN 3 | PLAN 4 |
|---|---|---|---|---|
| CYCLE LENGTH | 80 | 90 | 80 | FREE |
| COS | III | 121 | 131 | - |
| OFFSET | 0 | 0 | 0 | - |
| SPLIT TIME Ø1 | 17 | 19 | 17 | - |
| SPLIT TIME Ø2 | 27 | 27 | 27 | - |
| SPLIT TIME Ø3 | II | II | II | - |
| SPLIT TIME Ø4 | 25 | 33 | 25 | - |
| SPLIT TIME Ø5 | 15 | 16 | 17 | - |
| SPLIT TIME Ø6 | 29 | 30 | 27 | - |
| SPLIT TIME Ø7 | II | 14 | II | - |
| SPLIT TIME Ø8 | 25 | 30 | 25 | - |

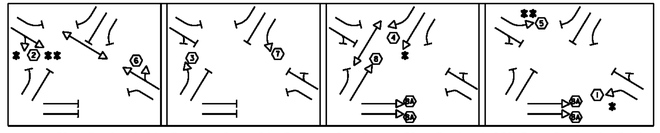
COORDINATION NOTES:
1. OFFSET IS REFERENCED TO BEGINNING OF THE COORDINATED PHASE (Ø1, NBL)

## COORDINATION CYCLE/SPLIT OFFSET SCHEDULE CONSTRUCTION PHASES 4 THROUGH 6

| | PLAN 1 | PLAN 2 | PLAN 3 | PLAN 4 |
|---|---|---|---|---|
| CYCLE LENGTH | 80 | 90 | 80 | FREE |
| COS | III | 121 | 131 | - |
| OFFSET | 0 | 0 | 0 | - |
| SPLIT TIME Ø1 | II | 12 | 17 | - |
| SPLIT TIME Ø2 | 38 | 33 | 27 | - |
| SPLIT TIME Ø3 | II | 13 | II | - |
| SPLIT TIME Ø4 | 20 | 32 | 25 | - |
| SPLIT TIME Ø5 | 20 | 24 | 17 | - |
| SPLIT TIME Ø6 | 29 | 21 | 27 | - |
| SPLIT TIME Ø7 | II | 16 | II | - |
| SPLIT TIME Ø8 | 20 | 29 | 25 | - |

COORDINATION NOTES:
1. OFFSET IS REFERENCED TO BEGINNING OF THE COORDINATED PHASE (Ø1, NBL)

## SIGNAL PHASING



W = WALK, FD = FLASHING DON'T WALK, DW = DON'T WALK, B = BLANK, FR = FLASHING RED, FY = FLASHING YELLOW

1. FACE NUMBERS ARE BASED ON NEMA PHASES
2. ALL LEFT-TURN PHASES SHALL OPERATE UNDER PROTECTED LEFT-TURN PHASING.
3. EASTBOUND RIGHT TURNS (8A) SHALL OVERLAP PHASE 1
4. • OMIT SIGNAL MOVEMENTS FOR CONSTRUCTION PHASES 4 THROUGH 6.
5. •• OMIT ALL ELM STREET MOVEMENTS FOR CONSTRUCTION PHASE 6.

## EQUIPMENT NOTES

(A) SEE SHEETS 172 AND 182-188 FOR ADDITIONAL DETAILS FOR TRAFFIC CONTROL, CONSTRUCTION AND PHASING.

(B) FOR SIGN DETAILS, SEE SHEETS 96 THROUGH 109.

(C) FOR PERMANENT SIGNAL DETAILS, SEE SHEETS 168 THROUGH 170.

DATUM
VERTICAL NAVD 1929
HORIZONTAL NAD 27

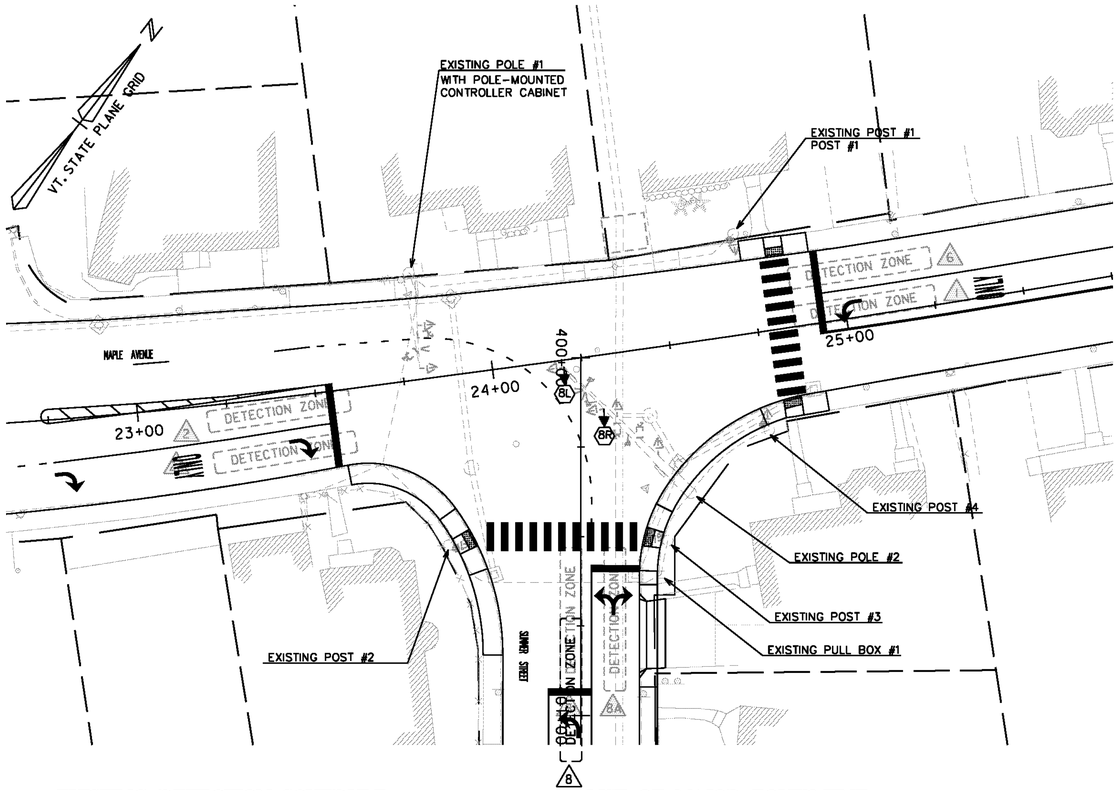
20 0 20 40
FEET

VHB Vanasse Hangen Brustlin, Inc.

TEMPORARY TRAFFIC SIGNAL SYSTEM
NORTH MAIN ST AND ELM ST/WASHINGTON ST

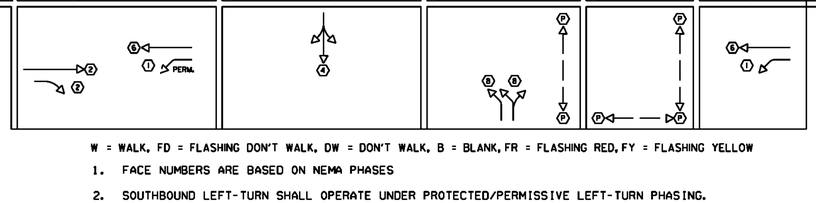
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-I(34) C/2

FILE NAME: z85b010_TEMPS3.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
TEMPORARY TRAFFIC SIGNAL PLAN
PLOT DATE: 3/31/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 192 OF 339




## TIMING AND PHASING

| | | PHASE 2+6 (DWELL) | | | | | | | | PHASE 4 | | | | | | | | PHASE 8 | | | | | | | | PHASE 9 | | | | | | | | PHASE 1+6 | | | | | | | | FLASHING OPERATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | R/Y | CLEAR TO | | | | | | | R/Y | CLEAR TO | | | | | | | R/Y | CLEAR TO | | | | | | | R/Y | CLEAR TO | | | | | | | R/Y | CLEAR TO | | | | | | | |
| | | | Ø4 | | | Ø8 | | Ø9 | | | Ø8 | | Ø9 | | Ø1+6 | | Ø2+6 | | Ø9 | | Ø1+6 | | Ø2+6 | | Ø1+6 | | Ø2+6 | | | | | | Ø | 2+6 | | | | | | | |
| OFF PEAK REST OF DAY | VEHICLE | 2 | | | | | | | | 2 | | | | | | | | 2 | | | | | | | | 2 | | | | | | | | - | | | | | | | | |
| | MINIMUM | 10 | 4 | 3 | | 4 | 3 | 4 | 3 | 4 | 2 | | 4 | 2 | | 4 | 2 | 5/5 | 4 | 2 | | 4 | 2 | | 4 | 2 | 5/5 | 4 | 2 | | 4 | 2 | | 4 | 4 | 2 | | | | | | |
| | MAXIMUM | 40 | 4 | 3 | | 4 | 3 | 4 | 3 | 4 | 2 | | 4 | 2 | | 4 | 2 | 10 | 4 | 2 | | 4 | 2 | | 4 | 2 | 30 | 4 | 2 | | 4 | 2 | | 12 | 4 | 2 | | 4 | 2 | | | |
| | MAXIMUM2 | 40 | 4 | 3 | | 4 | 3 | 4 | 3 | 4 | 2 | | 4 | 2 | | 4 | 2 | 10 | 4 | 2 | | 4 | 2 | | 4 | 2 | 40 | 4 | 2 | | 4 | 2 | | 12 | 4 | 2 | | 4 | 2 | | 15 | 4 | 2 |
| | PED ACT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| AM PEAK 7-9 AM | VEHICLE | 2 | | | | | | | | 2 | | | | | | | | 2 | | | | | | | | 2 | | | | | | | | - | | | | | | | | |
| | MINIMUM | 10 | 4 | 3 | | 4 | 3 | 4 | 3 | 4 | 2 | | 4 | 2 | | 4 | 2 | 5/5 | 4 | 2 | | 4 | 2 | | 4 | 2 | 5/5 | 4 | 2 | | 4 | 2 | | 4 | 4 | 2 | | | | | | |
| | MAXIMUM | 45 | 4 | 3 | | 4 | 3 | 4 | 3 | 4 | 2 | | 4 | 2 | | 4 | 2 | 10 | 4 | 2 | | 4 | 2 | | 4 | 2 | 45 | 4 | 2 | | 4 | 2 | | 12 | 4 | 2 | | 4 | 2 | | 10 | 4 | 2 |
| | MAXIMUM2 | 55 | 4 | 3 | | 4 | 3 | 4 | 3 | 4 | 2 | | 4 | 2 | | 4 | 2 | 10 | 4 | 2 | | 4 | 2 | | 4 | 2 | 50 | 4 | 2 | | 4 | 2 | | 12 | 4 | 2 | | 4 | 2 | | 20 | 4 | 2 |
| | PED ACT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PM PEAK 3-6 PM | VEHICLE | 2 | | | | | | | | 2 | | | | | | | | 2 | | | | | | | | 2 | | | | | | | | - | | | | | | | | |
| | MINIMUM | 10 | 4 | 3 | | 4 | 3 | 4 | 3 | 4 | 2 | | 4 | 2 | | 4 | 2 | 5/5 | 4 | 2 | | 4 | 2 | | 4 | 2 | 5/5 | 4 | 2 | | 4 | 2 | | 4 | 4 | 2 | | | | | | |
| | MAXIMUM | 45 | 4 | 3 | | 4 | 3 | 4 | 3 | 4 | 2 | | 4 | 2 | | 4 | 2 | 10 | 4 | 2 | | 4 | 2 | | 4 | 2 | 45 | 4 | 2 | | 4 | 2 | | 12 | 4 | 2 | | 4 | 2 | | 10 | 4 | 2 |
| | MAXIMUM2 | 55 | 4 | 3 | | 4 | 3 | 4 | 3 | 4 | 2 | | 4 | 2 | | 4 | 2 | 10 | 4 | 2 | | 4 | 2 | | 4 | 2 | 50 | 4 | 2 | | 4 | 2 | | 12 | 4 | 2 | | 4 | 2 | | 20 | 4 | 2 |
| | PED ACT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FACE 1 | | G | Y | R | | Y | R | Y | R | G | G | | R | R | R | | R | R | R | R | | R | R | R | R | | R | R | R | R | | R | R | R | | | | | | | FY |
| FACE 2 | | G | Y | R | | Y | R | Y | R | Y | R | | R | R | R | | R | R | R | R | | R | R | R | R | | R | R | R | R | | R | R | R | | | | | | | FY |
| FACE 4 | | R | R | R | | R | R | R | R | R | R | | G | Y | R | | Y | R | Y | R | | R | R | R | R | | R | R | R | R | | R | R | R | | | | | | | FR |
| FACE 6 | | G | Y | R | | Y | R | Y | R | G | G | | R | R | R | | R | R | R | R | | R | R | R | R | | R | R | R | R | | G | G | G | | | | | | | FY |
| FACE 8 | | R | R | R | | R | R | R | R | R | R | | R | R | R | | R | R | R | R | | C | Y | R | Y | R | | R | R | R | R | | R | R | R | | | | | | | FR |
| PED (N-S) | | DW | DW | DW | | DW | DW | DW | DW | DW | DW | | DW | DW | DW | | DW | DW | DW | DW | | DW | DW | DW | DW | | FD | DW | FD | DW | | DW | DW | DW | | | | | | | 8 |
| PED (E-W) | | DW | DW | DW | | DW | DW | DW | DW | DW | DW | | FD | DW | W | | W | FD | DW | FD | | DW | W | W | FD | | FD | DW | FD | DW | | DW | DW | DW | | | | | | | 8 |




W = WALK, FD = FLASHING DON'T WALK, DW = DON'T WALK, B = BLANK, FR = FLASHING RED, FY = FLASHING YELLOW

1. FACE NUMBERS ARE BASED ON NEMA PHASES
2. SOUTHBOUND LEFT-TURN SHALL OPERATE UNDER PROTECTED/PERMISSIVE LEFT-TURN PHASING.

## PROGRAM PERIODS OF OPERATION

| | 1 2 3 4 5 6 7 8 9 10 11 12 AM | 1 2 3 4 5 6 7 8 9 10 11 12 PM |
|---|---|---|
| SUNDAY | 4 | |
| MONDAY | 4 | 1 2 1 3 1 4 |
| TUESDAY | 4 | 1 2 1 3 1 4 |
| WEDNESDAY | 4 | 1 2 1 3 1 4 |
| THURSDAY | 4 | 1 2 1 3 1 4 |
| FRIDAY | 4 | 1 2 1 3 1 4 |
| SATURDAY | 4 | |

NOTES:

PLAN 1 - MIDDAY (MAXIMUM 1): 6:00 AM TO 7:00 AM, M-F
9:00 AM TO 3:00 PM, M-F
6:00 PM TO 10:00 PM, M-F

PLAN 2 - AM PEAK (MAXIMUM 2): 7:00 AM TO 9:00 AM, M-F

PLAN 3 - PM PEAK (MAXIMUM 2): 3:00 PM TO 6:00 PM, M-F

PLAN 4 - OFFPEAK (MAXIMUM 1): MIDNIGHT TO 6:00 AM, M-F
10:00 PM TO MIDNIGHT, M-F
ALL DAY SATURDAYS AND SUNDAYS

## LEGEND

| NEW | EXISTING | LEGEND |
|---|---|---|
| | | CONTROLLER CABINET |
| | | SIGNAL HEAD |
| | | CONDUIT |
| | | OPTICAL DETECTION ZONE |
| | | PEDESTAL POST |
| | | STANCHION |
| | | EMERGENCY VEHICLE PREEMPTION STROBE |
| | | EMERGENCY VEHICLE PREEMPTION RECEIVER |
| | | PEDESTRIAN PUSH BUTTON |
| | | PULL BOX |
| | | OVERHEAD SIGN |
| | | RADIO ANTENNA |
| | | OPTICAL DETECTION |
| | | MAST ARM |

## EXISTING DETECTION SCHEDULE

| OPTICAL VIDEO DETECTORS | | | | | | | |
|---|---|---|---|---|---|---|---|
| LOOP NO. | LANE | CALL Ø | SIZE | TYPE & NO. TURNS | DELAY OR PRESENCE | SLOT | CHANNEL |
| 1 | SBLT | 1 | 6X40 | OPTICAL | PRESENCE | 2 | 1 |
| 2 | NBTH | 2 | 6X40 | OPTICAL | PRESENCE | 4 | 1 |
| 2A | NBRT | 2 | 6X40 | OPTICAL | 5 SEC DELAY | 4 | 2 |
| 4 | DW | 4 | 6X40 | OPTICAL | PRESENCE | 6 | 1 |
| 6 | SBTH | 6 | 6X40 | OPTICAL | PRESENCE | 2 | 2 |
| 8 | WBLT | 8 | 6X40 | OPTICAL | PRESENCE | 8 | 1 |
| 8A | WBRT | 8 | 6X40 | OPTICAL | 5 SEC DELAY | 8 | 2 |

## LIST OF MAJOR EQUIPMENT

| EQUIPMENT ITEM 678.40 | QUANTITY |
|---|---|
| ONE WAY, 3-SECTION, 12-INCH POLYCARBONATE MAST ARM MOUNTED LED TRAFFIC SIGNAL HEAD WITH TUNNEL VISORS AND LOUVERED BACKPLATES WITH ALL PIECES PAINTED FLAT BLACK | 1 |
| ONE WAY, 4-SECTION, 12-INCH POLYCARBONATE MAST ARM MOUNTED LED TRAFFIC SIGNAL HEAD WITH TUNNEL VISORS AND LOUVERED BACKPLATES WITH ALL PIECES PAINTED FLAT BLACK | 1 |
| ASTRO-BRACKETS | 2 |

## SIGNAL FACE ARRANGEMENT

( 12" LED LENSES W/ 5" BACKPLATES )

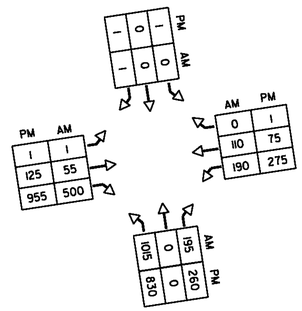
## COORDINATION CYCLE / SPLIT / OFFSET SCHEDULE

| | PLAN 1 | PLAN 2 | PLAN 3 | PLAN 4 |
|---|---|---|---|---|
| CYCLE LENGTH | 80 | 80 | 80 | FREE |
| COS | 111 | 121 | 131 | - |
| OFFSET | 0 | 0 | 0 | - |
| SPLIT TIME Ø1 | 15 | 11 | 17 | - |
| SPLIT TIME Ø2 | 21 | 23 | 21 | - |
| SPLIT TIME Ø3 | 0 | 0 | 0 | - |
| SPLIT TIME Ø4 | 24 | 26 | 22 | - |
| SPLIT TIME Ø5 | 0 | 0 | 0 | - |
| SPLIT TIME Ø6 | 36 | 34 | 38 | - |
| SPLIT TIME Ø7 | 0 | 0 | 0 | - |
| SPLIT TIME Ø8 | 24 | 26 | 22 | - |
| SPLIT TIME Ø9 | 20 | 20 | 20 | - |

COORDINATION NOTES:

1. OFFSET IS REFERENCED TO BEGINNING OF THE COORDINATED PHASE (Ø2 & Ø6)

## 2011 AVERAGE WEEKDAY TRAFFIC DATA




## EQUIPMENT NOTES

(A) SEE STANDARDS E-170, E-171A, E-171B, E-171C, E-173, & E-175 FOR ADDITIONAL INFORMATION.

(B) FOR TEMPORARY SIGN DETAILS, SEE SHEET 195.

(C) SEE SHEETS 172 AND 182-188 FOR ADDITIONAL DETAILS FOR TRAFFIC CONTROL, CONSTRUCTION, AND PHASING.

(D) CONTRACTOR SHALL MODIFY TIMING PLAN IN ACCORDANCE WITH DETOUR TRAFFIC CONDITIONS

DATUM

VERTICAL NAVD 1929

HORIZONTAL NAD 27

TEMPORARY TRAFFIC SIGNAL SYSTEM
MAPLE AVE AND SUMMER ST

PROJECT NAME: BARRE CITY

PROJECT NUMBER: FEGC F 026-1(34) C/2

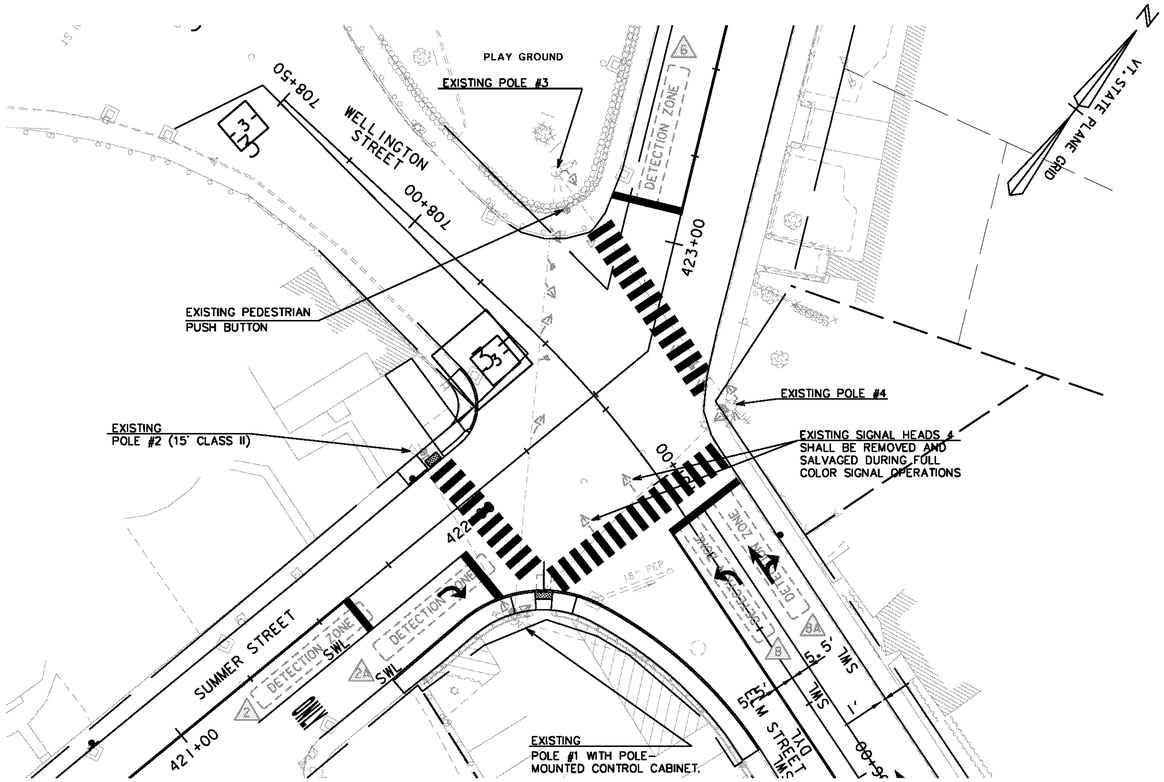
FILE NAME: z85B010_TSPS4 PLOT DATE: 3/31/2011

PROJECT LEADER: G. BAKOS DRAWN BY: DMP / JAR

DESIGNED BY: DMP / MDS CHECKED BY:

TEMPORARY TRAFFIC SIGNAL PLAN SHEET 193 OF 339

VHB Vanasse Hangen Brustlin, Inc.

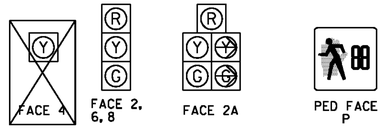



## EXISTING DETECTION SCHEDULE

| OPTICAL VIDEO DETECTORS | | | | | | | |
|---|---|---|---|---|---|---|---|
| LOOP NO. | LANE | CALL Ø | SIZE | TYPE & NO. TURNS | DELAY OR PRESENCE | SLOT | CHANNEL |
| 2 | EBTH | 2 | 6X40 | OPTICAL | PRESENCE | 4 | 1 |
| 4A | EBRT | 2 | 6X40 | OPTICAL | 5 SEC DELAY | 4 | 2 |
| 6 | WBTH | 6 | 6X40 | OPTICAL | PRESENCE | 2 | 1 |
| 8 | NBLT | 8 | 6X40 | OPTICAL | PRESENCE | 8 | 1 |
| 8A | NBRT | 8 | 6X40 | OPTICAL | PRESENCE | 8 | 2 |

## EXISTING SIGNAL FACE ARRANGEMENT

( 12" LED LENSES W/ 5" BACKPLATES )




## LIST OF MAJOR EQUIPMENT

| EQUIPMENT ITEM 678.40 | QUANTITY |
|---|---|
| REMOVE AND SALVAGE SIGNAL HEADS | 2 |
| UNCOVER AND ACTIVATE PEDESTRIAN SIGNAL EQUIPMENT | - |

## EQUIPMENT NOTES

(A) SEE STANDARDS E-170, E-171A, E-171B, E-171C, E-173, & E-175 FOR ADDITIONAL INFORMATION.

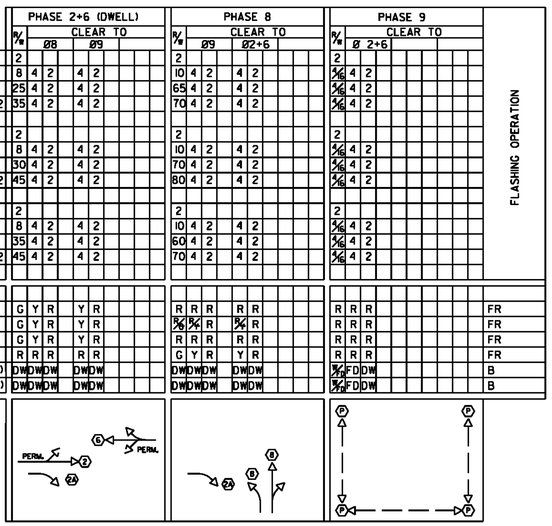
(B) FOR TEMPORARY SIGN DETAILS, SEE SHEET 199.

(C) CONTRACTOR SHALL MODIFY TIMING PLAN IN ACCORDANCE TO DETOUR TRAFFIC CONDITIONS

(D) SEE SHEETS 172 AND 183-188 FOR ADDITIONAL DETAILS FOR TRAFFIC CONTROL, CONSTRUCTION AND PHASING.

## TIMING AND PHASING

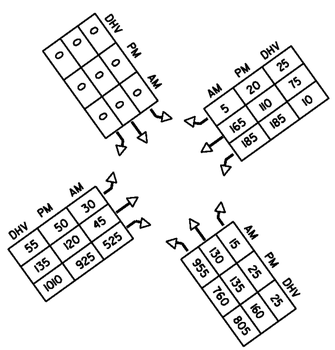
| | | PHASE 2+6 (DWELL) | | | | | | | | PHASE 8 | | | | | | | | PHASE 9 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MIN | CLEAR TO Ø8 | | | CLEAR TO Ø9 | | | | MIN | CLEAR TO Ø9 | | | CLEAR TO Ø2+6 | | | | MIN | CLEAR TO Ø 2+6 | | | | | | | FLASHING OPERATION |
| OFF PEAK REST OF DAY | VEHICLE | 2 | | | | | | | | 2 | | | | | | | | 2 | | | | | | | | |
| | MINIMUM | 8 | 4 | 2 | | 4 | 2 | | | 10 | 4 | 2 | | 4 | 2 | | | 5/16 | 4 | 2 | | | | | | |
| | MAXIMUM | 25 | 4 | 2 | | 4 | 2 | | | 65 | 4 | 2 | | 4 | 2 | | | 5/16 | 4 | 2 | | | | | | |
| | MAXIMUM2 | 35 | 4 | 2 | | 4 | 2 | | | 70 | 4 | 2 | | 4 | 2 | | | 5/16 | 4 | 2 | | | | | | |
| | PED ACT | | | | | | | | | | | | | | | | | | | | | | | | | |
| AM PEAK 7-9 AM | VEHICLE | 2 | | | | | | | | 2 | | | | | | | | 2 | | | | | | | | |
| | MINIMUM | 8 | 4 | 2 | | 4 | 2 | | | 10 | 4 | 2 | | 4 | 2 | | | 5/16 | 4 | 2 | | | | | | |
| | MAXIMUM | 30 | 4 | 2 | | 4 | 2 | | | 70 | 4 | 2 | | 4 | 2 | | | 5/16 | 4 | 2 | | | | | | |
| | MAXIMUM2 | 45 | 4 | 2 | | 4 | 2 | | | 80 | 4 | 2 | | 4 | 2 | | | 5/16 | 4 | 2 | | | | | | |
| | PED ACT | | | | | | | | | | | | | | | | | | | | | | | | | |
| PM PEAK 3-6 PM | VEHICLE | 2 | | | | | | | | 2 | | | | | | | | 2 | | | | | | | | |
| | MINIMUM | 8 | 4 | 2 | | 4 | 2 | | | 10 | 4 | 2 | | 4 | 2 | | | 5/16 | 4 | 2 | | | | | | |
| | MAXIMUM | 35 | 4 | 2 | | 4 | 2 | | | 60 | 4 | 2 | | 4 | 2 | | | 5/16 | 4 | 2 | | | | | | |
| | MAXIMUM2 | 45 | 4 | 2 | | 4 | 2 | | | 70 | 4 | 2 | | 4 | 2 | | | 5/16 | 4 | 2 | | | | | | |
| | PED ACT | | | | | | | | | | | | | | | | | | | | | | | | | |
| | FACE 2 | G | Y | R | | Y | R | | | R | R | R | | R | R | | | R | R | R | | | | | | FR |
| | FACE 2A | G | Y | R | | Y | R | | | 5/16 | 5/16 | R | | 5/16 | R | | | R | R | R | | | | | | FR |
| | FACE 6 | G | Y | R | | Y | R | | | R | R | R | | R | R | | | R | R | R | | | | | | FR |
| | FACE 8 | R | R | R | | R | R | | | G | Y | R | | Y | R | | | R | R | R | | | | | | FR |
| | PED (N-S) | DW | DW | DW | | DW | DW | | | DW | DW | DW | | DW | DW | | | 5/16 | FD | DW | | | | | | B |
| | PED (E-W) | DW | DW | DW | | DW | DW | | | DW | DW | DW | | DW | DW | | | 5/16 | FD | DW | | | | | | B |




W = WALK, FD = FLASHING DON'T WALK, DW = DON'T WALK, B = BLANK, FR = FLASHING RED, FY = FLASHING YELLOW

1. FACE NUMBERS ARE BASED ON NEMA PHASES
2. EASTBOUND RIGHT-TURN SHALL OPERATE UNDER PROTECTED/PERMISSIVE RIGHT-TURN PHASING.

## 2011 AVERAGE WEEKDAY TRAFFIC DATA




DATUM

VERTICAL NAVD 1929

HORIZONTAL NAD 27

## LEGEND

| EXISTING | LEGEND |
|---|---|
| | CONTROLLER CABINET |
| | SIGNAL HEAD |
| | CONDUIT |
| | OPTICAL DETECTION ZONE |
| | PEDESTAL POST |
| | STANCHION |
| | EMERGENCY VEHICLE PREEMPTION STROBE |
| | EMERGENCY VEHICLE PREEMPTION RECEIVER |
| | PEDESTRIAN PUSH BUTTON |
| | PULL BOX |
| | OVERHEAD SIGN |
| | RADIO ANTENNA |
| | OPTICAL DETECTION |
| | MAST ARM |
| | STEEL STRAIN POLE |

20 0 20 40

FEET

VHB Vanasse Hangen Brustlin, Inc.

TEMPORARY TRAFFIC SIGNAL SYSTEM
SUMMER ST AND ELM ST/WELLINGTON ST

PROJECT NAME: BARRE CITY

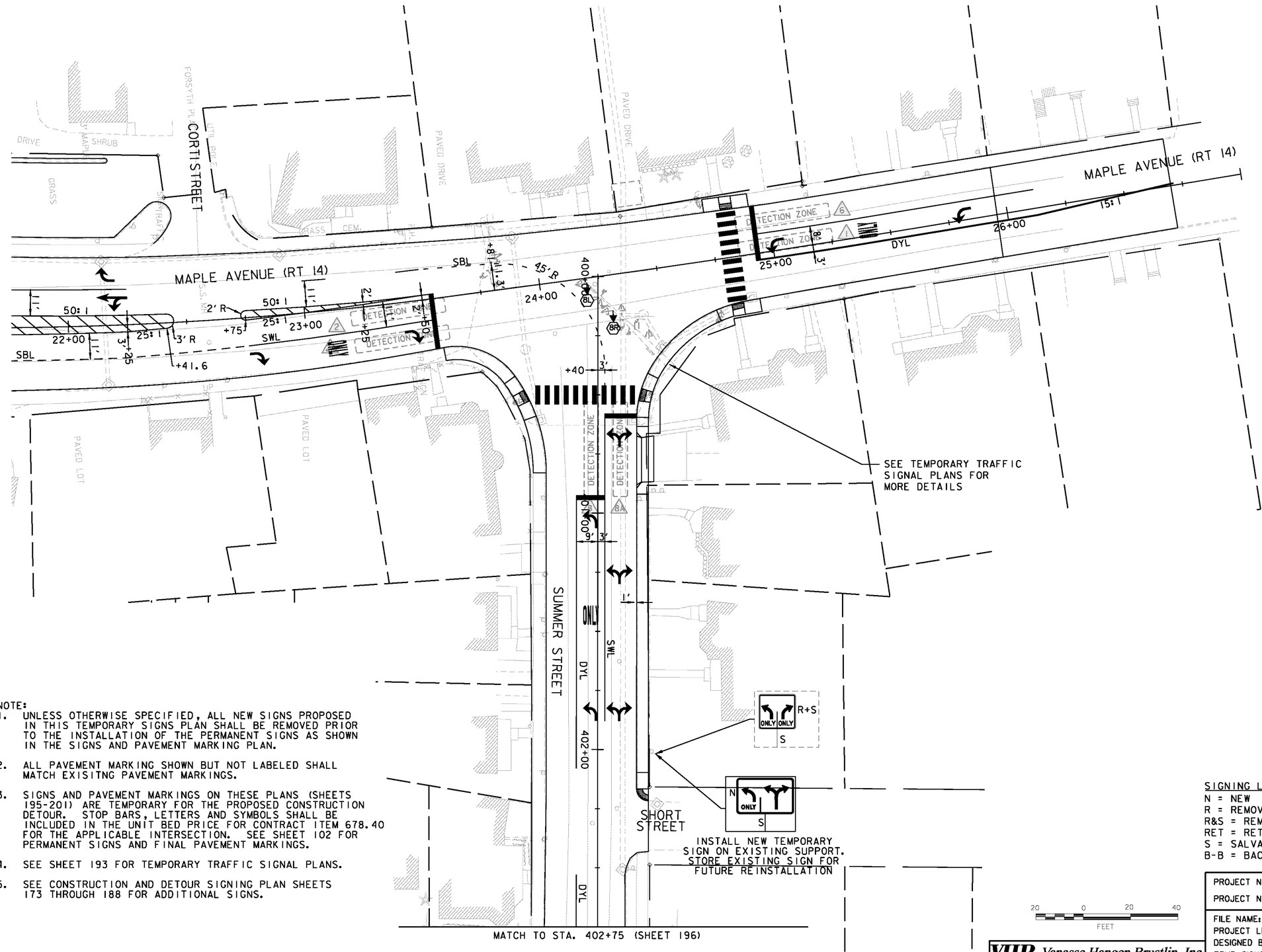
PROJECT NUMBER: FEGC F 026-I(34) C/2

FILE NAME: z85b010_TSPS5.dgn PLOT DATE: 3/31/2011

PROJECT LEADER: G. BAKOS DRAWN BY: DMP / JAR

DESIGNED BY: DMP / MDS CHECKED BY:

TEMPORARY TRAFFIC SIGNAL PLAN SHEET 194 OF 339




NOTE:

1. UNLESS OTHERWISE SPECIFIED, ALL NEW SIGNS PROPOSED IN THIS TEMPORARY SIGNS PLAN SHALL BE REMOVED PRIOR TO THE INSTALLATION OF THE PERMANENT SIGNS AS SHOWN IN THE SIGNS AND PAVEMENT MARKING PLAN.
2. ALL PAVEMENT MARKING SHOWN BUT NOT LABELED SHALL MATCH EXISITNG PAVEMENT MARKINGS.
3. SIGNS AND PAVEMENT MARKINGS ON THESE PLANS (SHEETS 195-201) ARE TEMPORARY FOR THE PROPOSED CONSTRUCTION DETOUR. STOP BARS, LETTERS AND SYMBOLS SHALL BE INCLUDED IN THE UNIT BED PRICE FOR CONTRACT ITEM 678.40 FOR THE APPLICABLE INTERSECTION. SEE SHEET 102 FOR PERMANENT SIGNS AND FINAL PAVEMENT MARKINGS.
4. SEE SHEET 193 FOR TEMPORARY TRAFFIC SIGNAL PLANS.
5. SEE CONSTRUCTION AND DETOUR SIGNING PLAN SHEETS 173 THROUGH 188 FOR ADDITIONAL SIGNS.

TEMPORARY 4 INCH YELLOW LINE
SL STA 400+92 - 402+08 RT (DOUBLE)
SL STA 402+54 - 402+75 RT (DOUBLE)

24 INCH STOP BAR
SL STA 400+93 LT-RT
SL STA 400+59 RT-RT

TEMPORARY 4 INCH WHITE LINE
SL STA 400+58 - 401+88 LT
SL STA 400+58 - 23+50 LT (BROKEN)
SL STA 21+75 - 22+75 RT (BROKEN)

LETTER OR SYMBOL
SL STA 400+68 LT (LEFT-RIGHT ARROW)
SL STA 401+25 LT (LEFT-RIGHT ARROW)
SL STA 401+84 LT (LEFT-RIGHT ARROW)
SL STA 401+03 CL (LEFT ARROW)
SL STA 401+43 CL ("ONLY")
SL STA 401+84 CL (LEFT ARROW)

CROSSWALK MARKING
SL STA 401+50 LT - SL STA 401+50 RT
SL STA 24+83 LT - SL STA 24+83 RT

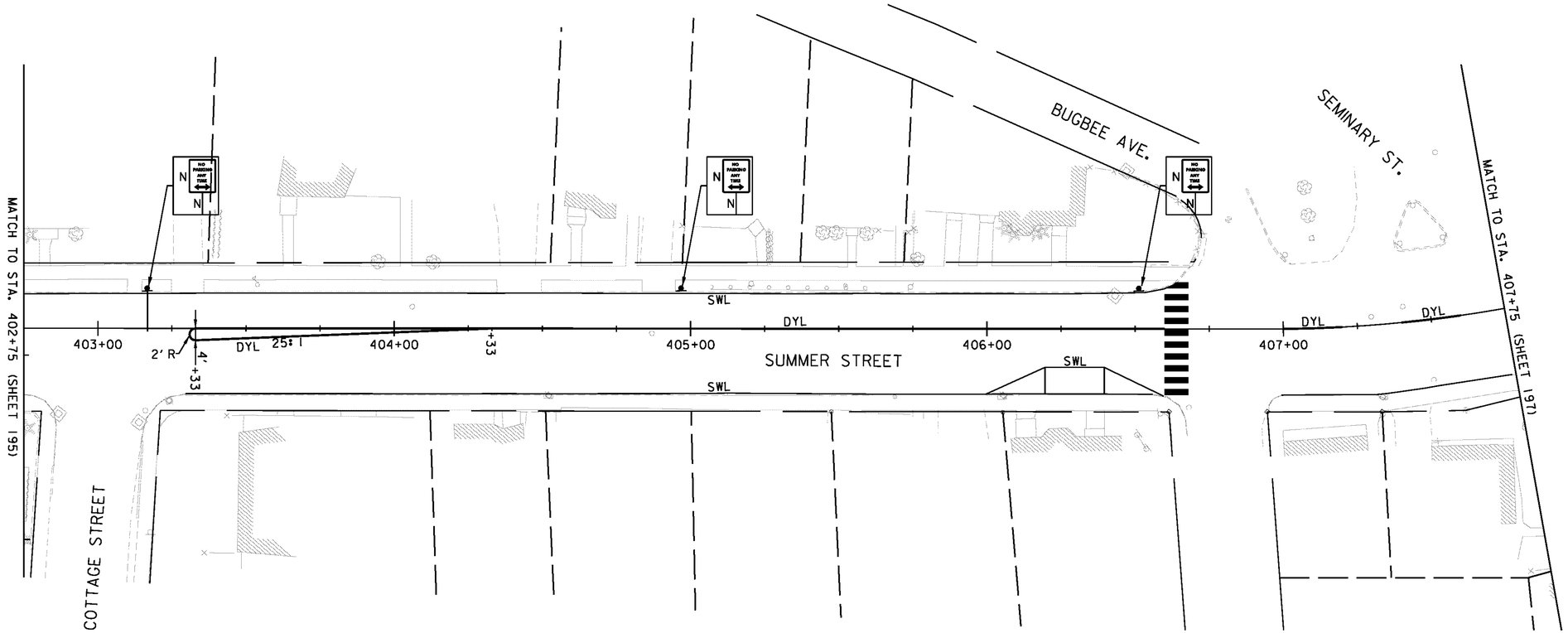
SIGNING LEGEND
N = NEW
R = REMOVE
R&S = REMOVE AND SALVAGE
RET = RETAIN
S = SALVAGED SIGN
B-B = BACK TO BACK

STRIPING LEGEND
SWL = SINGLE WHITE LINE
SYL = SINGLE YELLOW LINE
DYL = DOUBLE YELLOW LINE
SDL = SINGLE DASHED LINE
SBL = SINGLE BROKEN LINE

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: z85b010bdr tcp
PROJECT LEADER: G. BAKOS
DESIGNED BY: D. PECK
PLOT DATE: 3/9/2011
DRAWN BY: D. PECK
CHECKED BY:
TEMP. SIGNS & PAVEMENT MARKING PLAN #1
SHEET 195 OF 339




TEMPORARY 4 INCH YELLOW LINE
SL STA 403+31 - 406+60 CL (DOUBLE)
SL STA 403+31 - 404+33 RT (DOUBLE)
SL STA 407+00 - 407+20 CL (DOUBLE)
SL STA 407+40 - 407+60 CL (DOUBLE)

TEMPORARY 4 INCH WHITE LINE
SL STA 402+75 - 406+64 LT
SL STA 403+30 - 406+56 RT
SL STA 406+00 - 406+60 RT (PARKING)

SIGNING LEGEND
N = NEW
R = REMOVE
R&S = REMOVE AND SALVAGE
RET = RETAIN
S = SALVAGED SIGN
B-B = BACK TO BACK

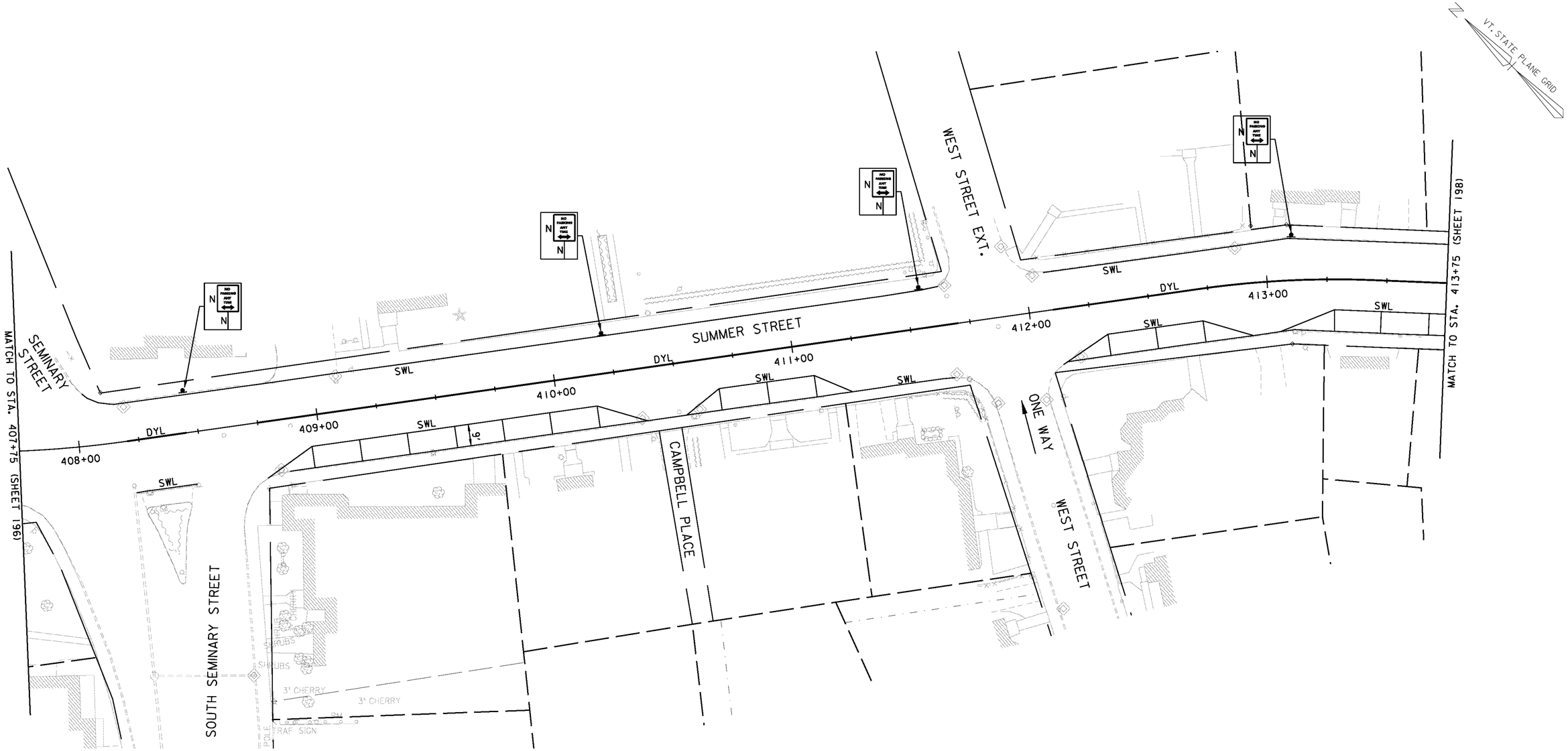
STRIPING LEGEND
SWL = SINGLE WHITE LINE
SYL = SINGLE YELLOW LINE
DYL = DOUBLE YELLOW LINE
SDL = SINGLE DASHED LINE
SBL = SINGLE BROKEN LINE

20 0 20 40
FEET

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: z85b010bdr tcp
PROJECT LEADER: G. BAKOS
DESIGNED BY: D. PECK
PLOT DATE: 3/9/2011
DRAWN BY: D. PECK
CHECKED BY:
TEMP. SIGNS & PAVEMENT MARKING PLAN #2 SHEET 196 OF 339




TEMPORARY 4 INCH YELLOW LINE

SL STA 408+20 - 408+45 CL (DOUBLE)
SL STA 408+75 - 411+70 CL (DOUBLE)
SL STA 412+10 - 413+75 CL (DOUBLE)

TEMPORARY 4 INCH WHITE LINE

SL STA 408+03 - 411+64 LT
SL STA 408+21 - 408+47 RT
SL STA 408+76 - 411+23 RT (PARKING)
SL STA 411+23 - 411+66 RT
SL STA 412+08 - 413+75 LT
SL STA 412+11 - 413+75 RT (PARKING)

SIGNING LEGEND

N = NEW
R = REMOVE
R&S = REMOVE AND SALVAGE
RET = RETAIN
S = SALVAGED SIGN
B-B = BACK TO BACK

STRIPING LEGEND

SWL = SINGLE WHITE LINE
SYL = SINGLE YELLOW LINE
DYL = DOUBLE YELLOW LINE
SDL = SINGLE DASHED LINE
SBL = SINGLE BROKEN LINE

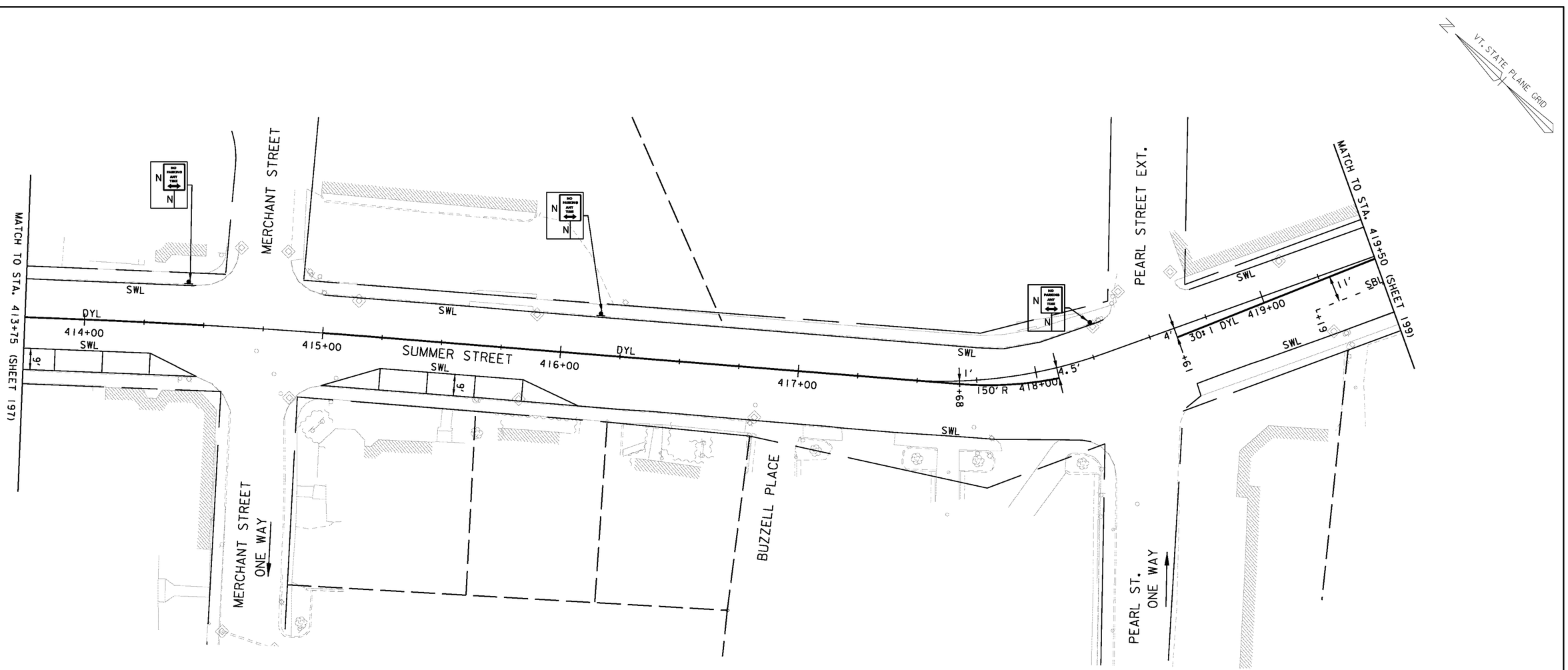
20 0 20 40
FEET

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: z85b0110bdr tcp
PROJECT LEADER: G. BAKOS
DESIGNED BY: D. PECK
PLOT DATE: 3/9/2011
DRAWN BY: D. PECK
CHECKED BY:

TEMP. SIGNS & PAVEMENT MARKING PLAN #3 SHEET 197 OF 339




TEMPORARY 4 INCH YELLOW LINE

SL STA 413+75 - 414+50 CL (DOUBLE)
SL STA 415+00 - 418+13 CL (DOUBLE)
SL STA 417+55 - 418+13 RT (DOUBLE)
SL STA 418+65 - 419+50 CL (DOUBLE)
SL STA 418+65 - 419+50 RT (DOUBLE)

TEMPORARY 4 INCH WHITE LINE

SL STA 413+75 - 414+46 LT
SL STA 415+00 - 418+34 LT
SL STA 418+72 - 419+50 LT
SL STA 413+75 - 414+48 RT (PARKING)
SL STA 415+01 - 416+09 RT (PARKING)
SL STA 416+09 - 418+15 RT
SL STA 418+55 - 419+50 RT
SBL STA 418+71 - 419+50 RT

SIGNING LEGEND

N = NEW
R = REMOVE
R&S = REMOVE AND SALVAGE
RET = RETAIN
S = SALVAGED SIGN
B-B = BACK TO BACK

STRIPING LEGEND

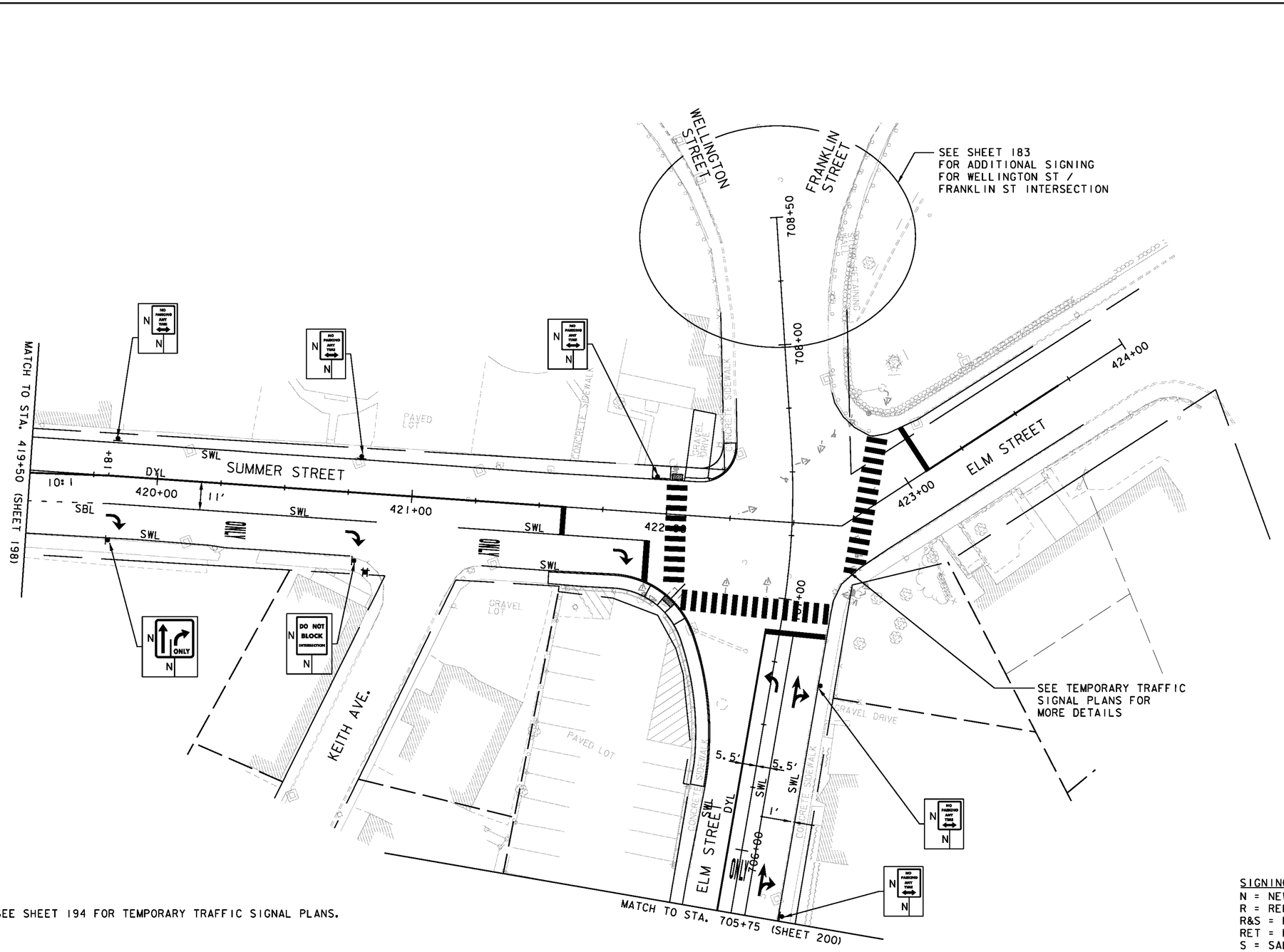
SWL = SINGLE WHITE LINE
SYL = SINGLE YELLOW LINE
DYL = DOUBLE YELLOW LINE
SDL = SINGLE DASHED LINE
SBL = SINGLE BROKEN LINE

20 0 20 40
FEET

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: z85b0110bdr tcp
PROJECT LEADER: G. BAKOS
DESIGNED BY: D. PECK
PLOT DATE: 3/9/2011
DRAWN BY: D. PECK
CHECKED BY:
TEMP. SIGNS & PAVEMENT MARKING PLAN #4
SHEET 198 OF 339




NOTE:
1. SEE SHEET 194 FOR TEMPORARY TRAFFIC SIGNAL PLANS.

TEMPORARY 4 INCH YELLOW LINE
SL STA 419+50 - 419+81 RT (DOUBLE)
SL STA 419+50 - 421+61 CL (DOUBLE)
SL STA 605+75 - 706+87 LT (DOUBLE)

24 INCH STOP BAR
SL STA 421+60 CL-RT
SL STA 421+93 RT-RT
SL STA 706+87 LT-RT

TEMPORARY 4 INCH WHITE LINE
SL STA 419+50 - 422+17 LT
SL STA 419+50 - 420+77 RT
SL STA 421+29 RT - 605+75 LT
SL STA 419+81 - 420+87 RT
SL STA 421+19 - 420+94 RT
SBL STA 419+50 - 419+81 RT
SL STA 605+75 - 706+88 RT
SL STA 605+75 - 707+08 RT

LETTER OR SYMBOL
SL STA 419+85 RT (RIGHT ARROW)
SL STA 420+32 RT ("ONLY")
SL STA 420+79 RT (RIGHT ARROW)
SL STA 421+32 RT ("ONLY")
SL STA 421+85 RT (RIGHT ARROW)
SL STA 706+68 CL (LEFT ARROW)
SL STA 705+88 RT (THRU-RIGHT ARROW)
SL STA 705+92 CL ("ONLY")
SL STA 706+65 RT (THRU-RIGHT ARROW)

SIGNING LEGEND
N = NEW
R = REMOVE
R&S = REMOVE AND SALVAGE
RET = RETAIN
S = SALVAGED SIGN
B-B = BACK TO BACK

STRIPING LEGEND
SWL = SINGLE WHITE LINE
SYL = SINGLE YELLOW LINE
DYL = DOUBLE YELLOW LINE
SDL = SINGLE DASHED LINE
SBL = SINGLE BROKEN LINE

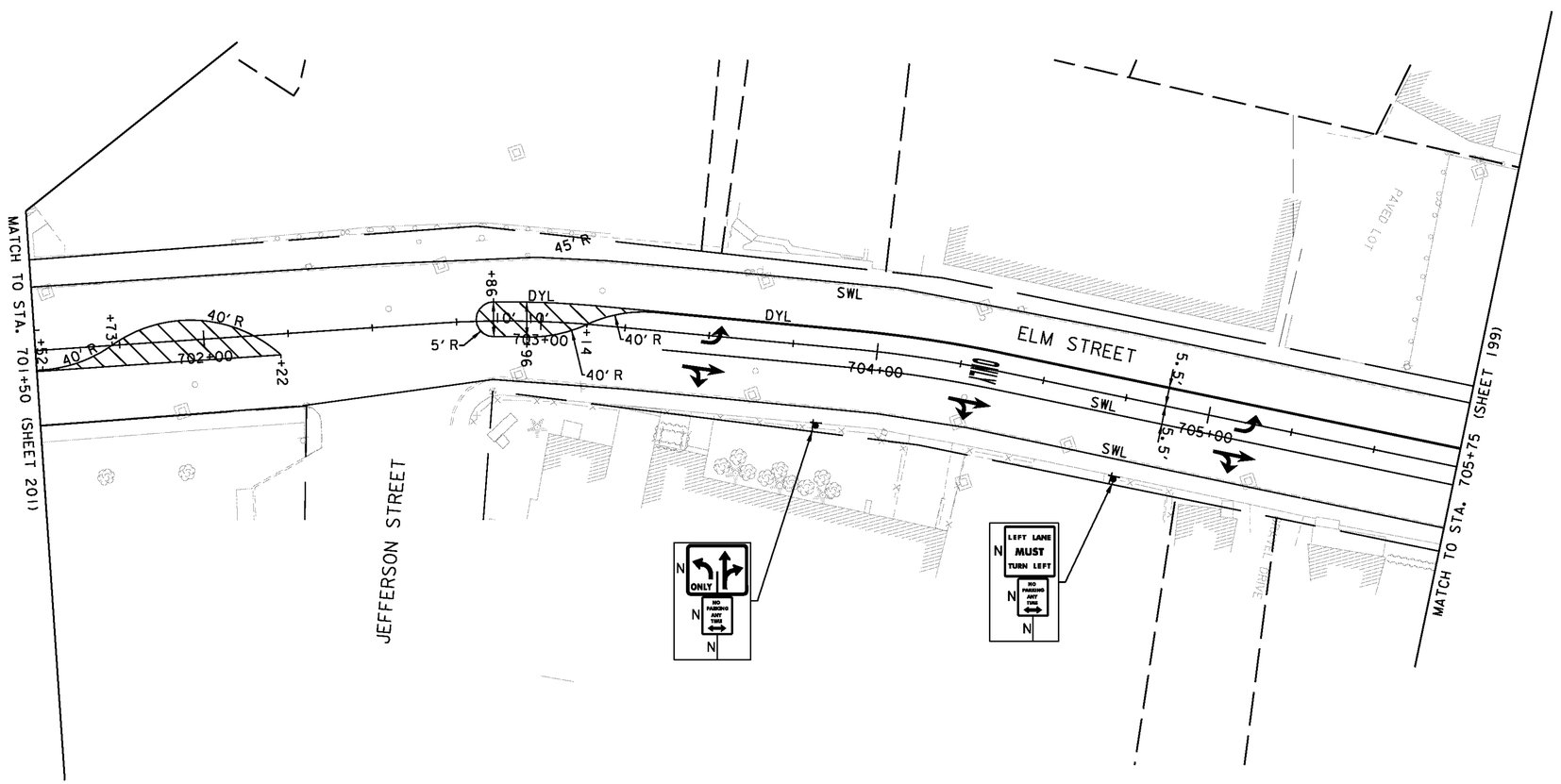
20 0 20 40
FEET

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-I(34) C/2

FILE NAME: z85b010bdr tcp
PROJECT LEADER: G. BAKOS
DESIGNED BY: D. PECK
TEMP. SIGNS & PAVEMENT MARKING PLAN #5

PLOT DATE: 3/9/2011
DRAWN BY: D. PECK
CHECKED BY:
SHEET 199 OF 339




LETTER OR SYMBOL

SL STA 703+50 CL (LEFT ARROW)
SL STA 703+48 RT (THRU-RIGHT ARROW)
SL STA 704+32 CL ("ONLY")
SL STA 704+28 RT (THRU-RIGHT ARROW)
SL STA 705+11 CL (LEFT ARROW)
SL STA 705+09 RT (THRU-RIGHT ARROW)

TEMPORARY 4 INCH YELLOW LINE

SL STA 702+80 - 705+75 LT (DOUBLE)
SL STA 702+80 RT - 703+34 LT (DOUBLE)
SL STA 702+80 RT - 703+34 LT (ISLAND)

TEMPORARY 4 INCH WHITE LINE

SL STA 701+50 - 705+75 LT
SL STA 702+86 - 705+75 RT
SL STA 703+37 - 705+75 RT

SIGNING LEGEND

N = NEW
R = REMOVE
R&S = REMOVE AND SALVAGE
RET = RETAIN
S = SALVAGED SIGN
B-B = BACK TO BACK

STRIPING LEGEND

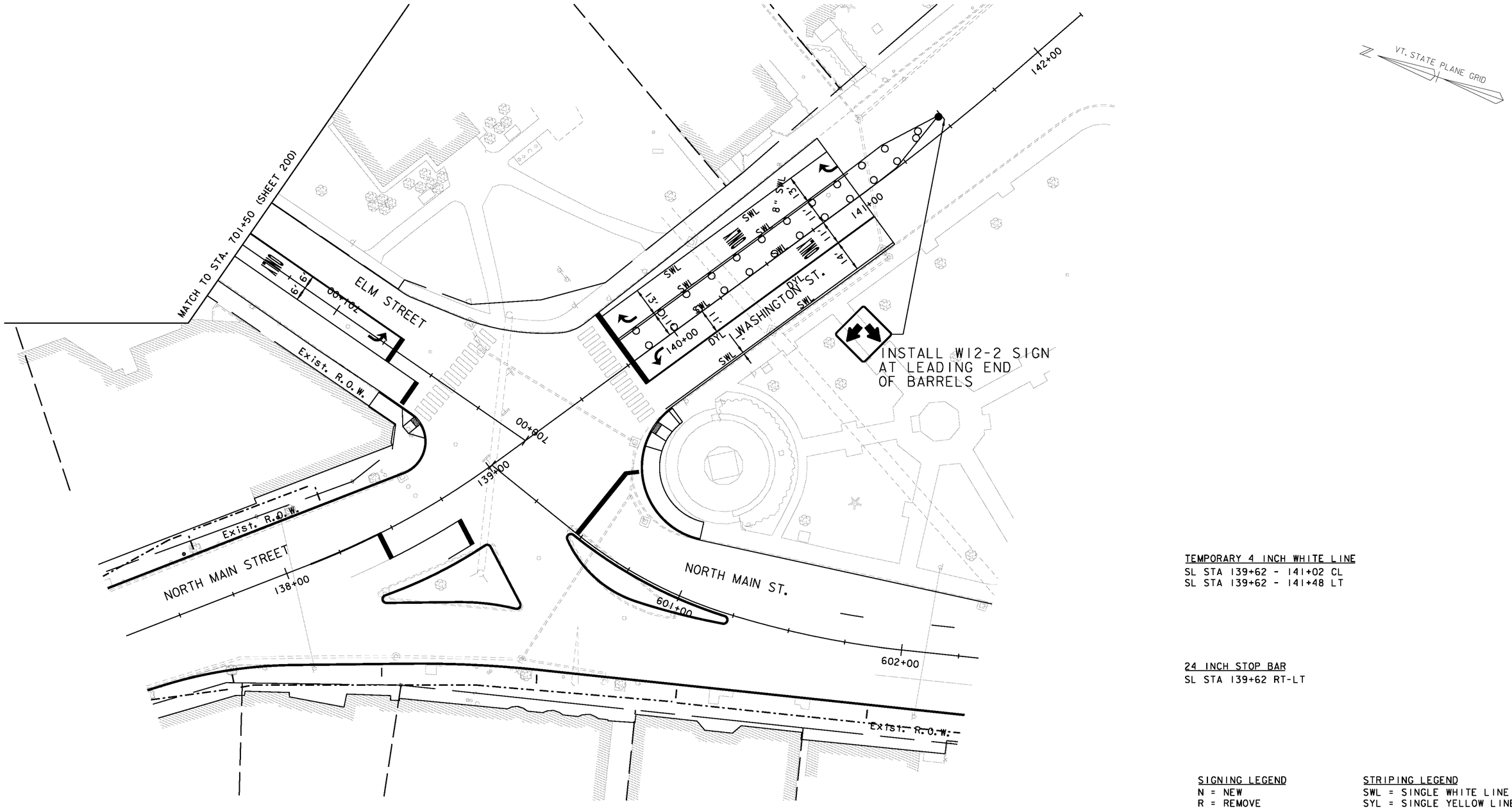
SWL = SINGLE WHITE LINE
SYL = SINGLE YELLOW LINE
DYL = DOUBLE YELLOW LINE
SDL = SINGLE DASHED LINE
SBL = SINGLE BROKEN LINE

20 0 20 40
FEET

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: z85b010bdr tcp C2 PLOT DATE: 3/9/2011
PROJECT LEADER: G. BAKOS DRAWN BY: D. PECK
DESIGNED BY: D. PECK CHECKED BY:
TEMP. SIGNS & PAVEMENT MARKING PLAN #6 SHEET 200 OF 339




TEMPORARY 4 INCH WHITE LINE
SL STA 139+62 - 141+02 CL
SL STA 139+62 - 141+48 LT

24 INCH STOP BAR
SL STA 139+62 RT-LT

NOTE:
1. TEMPORARY SIGNING AND STRIPING ALONG WASHINGTON STREET SHALL BE USED ONLY DURING PHASES 4 & 5.
2. SEE SHEET 100 FOR PERMANENT SIGNS AND FINAL PAVEMENT MARKINGS.
3. SEE SHEET 192 FOR TEMPORARY TRAFFIC SIGNAL PLAN.

SIGNING LEGEND
N = NEW
R = REMOVE
R&S = REMOVE AND SALVAGE
RET = RETAIN
S = SALVAGED SIGN
B-B = BACK TO BACK

STRIPING LEGEND
SWL = SINGLE WHITE LINE
SYL = SINGLE YELLOW LINE
DYL = DOUBLE YELLOW LINE
SDL = SINGLE DASHED LINE
SBL = SINGLE BROKEN LINE

20 0 20 40
FEET

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-I(34) C/2

FILE NAME: z85b010bdr tcp
PROJECT LEADER: G. BAKOS
DESIGNED BY: D. PECK
PLOT DATE: 3/9/2011
DRAWN BY: D. PECK
CHECKED BY:
TEMP. SIGNS & PAVEMENT MARKING PLAN #7 SHEET 201 OF 339

**STATE OF VERMONT**
**AGENCY OF TRANSPORTATION**

# TEMPORARY TRAFFIC SIGN SUMMARY SHEET

| MILE MARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS EA | WIDTH (IN) | HEIGHT (IN) | NEW & SALVAGED SIGNS "A" | "B" | SALV SIGN | SALV TIS | EXIST POST RETAIN | SALVAGE | NEW SIGN POSTS NO. OF POSTS | FLANGED CHANNEL LB/FT 1.12 | 2.0 | 3.0 | SQUARE STEEL (IN) 1.75 | 2.0 | 2.5 | LB/FT 1.88 | 2.16 | 3.35 | ANCHOR | SLEEVE | TUBULAR ALUMINUM Ø (IN) 3.0 | 4.0 | 4.0 MOD | LB/FT 1.3 | 1.7 | 1.7 | TUBULAR STEEL Ø (IN) FOUNDATION | 3.0 | 3.5 | 4.0 | 5.0 | LB/FT 7.6 | 9.0 | 10.8 | 14.6 | W-SHAPE STEEL FTG. SIZE 24" | 30" | WEIGHT | POST SIZE | SIGN REQUIRED | REMARKS | SIGN DETAIL DETAIL ON SHEET NUMBER | STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OPTION ITEMS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SUMMER STREET | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 402+00, LT | ONLY | 1 | 48 | 30 | 10.00 | | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | TEMPORARY SIGN | VR-926 | | E-145A |
| 403+17, LT | NO PARKING ANY TIME | 1 | 12 | 18 | 1.50 | | | | | | 1 | | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | | TEMPORARY SIGN | SHS R7-1 | | |
| 404+97, LT | NO PARKING ANY TIME | 1 | 12 | 18 | 1.50 | | | | | | 1 | | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | | TEMPORARY SIGN | SHS R7-1 | | |
| 406+51, LT | NO PARKING ANY TIME | 1 | 12 | 18 | 1.50 | | | | | | 1 | | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | | TEMPORARY SIGN | R7-1 | | |
| 408+46, LT | NO PARKING ANY TIME | 1 | 12 | 18 | 1.50 | | | | | | 1 | | | | | X | | | | | X | | | | | | | | | | | | | | | | | | | | TEMPORARY SIGN | R7-1 | | |
| 410+22, LT | NO PARKING ANY TIME | 1 | 12 | 18 | 1.50 | | | | | | 1 | | | | | X | | | | | X | | | | | | | | | | | | | | | | | | | | TEMPORARY SIGN | R7-1 | | |
| 411+66, LT | NO PARKING ANY TIME | 1 | 12 | 18 | 1.50 | | | | | | 1 | | | | | X | | | | | X | | | | | | | | | | | | | | | | | | | | TEMPORARY SIGN | R7-1 | | |
| 413+11, LT | NO PARKING ANY TIME | 1 | 12 | 18 | 1.50 | | | | | | 1 | | | | | X | | | | | X | | | | | | | | | | | | | | | | | | | | TEMPORARY SIGN | R7-1 | | |
| 414+43, LT | NO PARKING ANY TIME | 1 | 12 | 18 | 1.50 | | | | | | 1 | | | | | X | | | | | X | | | | | | | | | | | | | | | | | | | | TEMPORARY SIGN | R7-1 | | |
| 416+15, LT | NO PARKING ANY TIME | 1 | 12 | 18 | 1.50 | | | | | | 1 | | | | | X | | | | | X | | | | | | | | | | | | | | | | | | | | TEMPORARY SIGN | R7-1 | | |
| 418+28, LT | NO PARKING ANY TIME | 1 | 12 | 18 | 1.50 | | | | | | 1 | | | | | X | | | | | X | | | | | | | | | | | | | | | | | | | | TEMPORARY SIGN | R7-1 | | |
| 419+81, RT | ONLY | 1 | 30 | 30 | 6.25 | | | | | | 1 | | | | | X | | | | | X | | | | | | | | | | | | | | | | | | | | TEMPORARY SIGN | VR-921 | | E-145A |
| 419+83, LT | NO PARKING ANY TIME | 1 | 12 | 18 | 1.50 | | | | | | 1 | | | | | X | | | | | X | | | | | | | | | | | | | | | | | | | | TEMPORARY SIGN | R7-1 | | |
| 420+79, LT | NO PARKING ANY TIME | 1 | 12 | 18 | 1.50 | | | | | | 1 | | | | | X | | | | | X | | | | | | | | | | | | | | | | | | | | TEMPORARY SIGN | R7-1 | | |
| | | | | | | | | | | | | FT | FT | FT | FT | FT 156 | FT | | EA | LB | LB | LB | | LB | LB | LB | LB | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | 10 | | | | | | | | | | | | | | | | | | | | | | | | |
| TOTALS | | SF 34.25 | SF | EA. | SF | | FT | | | FT 156 | | | | LB | EA. | | | LB | | | | | EA. | EA. | LB | | | | | | | | | | | | | | | | | | | |

FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE VTRANS "SIGN POST DESIGN GUIDELINE."

AVERAGE POST LENGTH = 12 FT

NOTE:

PAYMENT FOR TEMPORARY TRAFFIC SIGNS WILL BE INCLUDED IN THE UNIT PRICE BID FOR CONTRACT ITEM 641.10.

| | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-1(34) C/2 |
| FILE NAME: z85b010_TTSSS.dgn | PLOT DATE: 3/9/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: DMP / JAR |
| DESIGNED BY: DMP / MDS | CHECKED BY: |
| TEMPORARY TRAFFIC SIGN SUMMARY SHEET | SHEET 202 OF 339 |

VHB Vanasse Hangen Brustlin, Inc.

**STATE OF VERMONT**
**AGENCY OF TRANSPORTATION**

# TEMPORARY TRAFFIC SIGN SUMMARY SHEET

| MILE MARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS EA | WIDTH (IN) | HEIGHT (IN) | NEW & SALVAGED SIGNS "A" | "B" | SALV SIGN | SALV TIS | EXIST POST RETAIN | SALVAGE | NEW SIGN POSTS NO. OF POSTS | FLANGED CHANNEL LB/FT 1.12 | 2.0 | 3.0 | SQUARE STEEL (IN) LB/FT 1.75 | 2.0 | 2.5 | ANCHOR | SLEEVE | TUBULAR ALUMINUM Ø (IN) LB/FT 3.0 | 4.0 | 4.0 MOD | TUBULAR STEEL Ø (IN) FOUND-ATION | LB/FT 3.0 | 3.5 | 4.0 | 5.0 | W-SHAPE STEEL FTG. SIZE 24" | 30" | WEIGHT | POST SIZE | SIGN FRAME REQUIRED | REMARKS | SIGN DETAIL DETAIL ON SHEET NUMBER | STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | OPTION ITEMS | | | | | | | | | | | | | | | | | | | | | | | | | |
| SUMMER STREET | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 420+79, RT | DO NOT BLOCK INTERSECTION | 1 | 24 | 30 | 5.00 | | | | | | 1 | | | | | X | | | X | | | | | | | | | | | | | | TEMPORARY SIGN R10-7 | | |
| 421+95, LT | NO PARKING ANY TIME | 1 | 12 | 18 | 1.50 | | | | | | 1 | | | | | X | | | X | | | | | | | | | | | | | | TEMPORARY SIGN R7-1 | | |
| ELM STREET | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 703+84, RT | ONLY<br>NO PARKING ANY TIME | 1<br>1 | 36<br>12 | 30<br>18 | 7.50<br>1.50 | | | | | | 1 | | | | | | X | | | | | | | | | | | | | | | | VR-922<br>TEMPORARY SIGNS<br>R7-1 | | E-145A |
| 704+76, RT | LEFT LANE MUST TURN LEFT<br>NO PARKING ANY TIME | 1<br>1 | 30<br>12 | 30<br>18 | 6.25<br>1.50 | | | | | | 1 | | | | | | X | | | | | | | | | | | | | | | | R3-7L<br>TEMPORARY SIGNS<br>R7-1 | | |
| 705+77, RT | NO PARKING ANY TIME | 1 | 12 | 18 | 1.50 | | | | | | 1 | | | | | X | | | X | | | | | | | | | | | | | | TEMPORARY SIGN R7-1 | | |
| 706+69, RT | NO PARKING ANY TIME | 1 | 12 | 18 | 1.50 | | | | | | 1 | | | | | X | | | X | | | | | | | | | | | | | | TEMPORARY SIGN R7-1 | | |
| | | | | | | | | | | | | FT | FT | FT | FT | FT 60 | FT 30 | | EA | LB | LB | LB | | LB | LB | LB | LB | | | | | | | | |
| **SUB TOTALS** | | | | | SF 26.25 | SF | EA. | SF | | | | FT | | | FT 90 | | | | EA 4 | LB | | | EA. | LB | | | EA. | EA. | LB | | | | | | |
| **FROM SHEET 202** | | | | | 34.25 | | | | | | | | | | 156 | | | | 10 | | | | | | | | | | | | | | | | |
| **TOTALS** | | | | | 60.50 | | | | | | | | | | 246 | | | | 14 | | | | | | | | | | | | | | | | |

FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE VTRANS "SIGN POST DESIGN GUIDELINE."

AVERAGE POST LENGTH = 15 FT

NOTE:

PAYMENT FOR TEMPORARY TRAFFIC SIGNS WILL BE INCLUDED IN THE UNIT PRICE BID FOR CONTRACT ITEM 641.10.

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: z85b010_TTSSS.dgn PLOT DATE:
PROJECT LEADER: G. BAKOS DRAWN BY: DMP / JAR
DESIGNED BY: DMP / MDS CHECKED BY:
TEMPORARY TRAFFIC SIGN SUMMARY SHEET SHEET 203 OF 339

STATE OF VERMONT
AGENCY OF TRANSPORTATION

# ALPHABETICAL INDEX SHEET

## RIGHT OF WAY PLANS

| GRANTOR | DETAIL SHEET NO. | LAYOUT SHEET NO. | PARCEL NO. |
|---|---|---|---|
| # | | | |
| 81-85 NORTH MAIN STREET, LLC | 84 | 96 | 60 |
| 100 NORTH MAIN STREET, LLC | 83 | 95 | 57 |
| 210 NORTH MAIN PROPERTIES, LLC - LESSOR; EL SOL MEXICAN GRILL, LLC - LESSEE | 82 | 95 | 44 |
| 386 NORTH MAIN STREET, LLC | 78 | 86, 87 | 10 |
| A | | | |
| ABG CORPORATION | 84 | 96 | 66 |
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| B | | | |
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| BARRE, CITY OF | 82 | 95 | 40 |
| BARRE HOUSING AUTHORITY **(CONTRACT #1)** | **(22)** | **(33)** | 84 |
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| BENOIT PROPERTIES, INC. | 82 | 94 | 36 |
| BOISVERT, ERNEST E. - LESSOR; BOISVERT, KARL W. d/b/a/ BOISVERT SHOE REPAIR - LESSEE | 83 | 95 | 45 |
| BOISVERT, KARL W. d/b/a BOISVERT SHOE REPAIR - LESSEE; BOISVERT, ERNEST E. - LESSOR | 83 | 95 | 45 |
| BOLSTER HOUSE, LLC | 83 | 95 | 56 |
| C | | | |
| CHAMPLAIN OIL CO., INC. | 79 | 86 | 17 |
| CHAMPLAIN OIL CO., INC. - LESSEE; MacDUFF, PAUL D. & BETTY LOU - LESSOR | 79 | 86 | 16 |
| CHAMPLAIN OIL CO., INC. - LESSEE; VERMONT PROPERTIES REALTY TRUST - LESSOR | 79 | 86,93 | 18B |
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| CHITTENDEN TRUST COMPANY,FSB - LESSEE; MURPHY REALTY CO., INC. - LESSOR | 81 | 94 | 30 |
| CITY OF BARRE | 82 | 94,95 | 39 |
| CITY OF BARRE | 82 | 95 | 40 |
| COMMUNITY NATIONAL BANK | 80 | 93,94 | 22 |
| COPPING, DAVID ROBERT & WILSON, GEORGE H. IV & CROWTHER, WILLIAM C III | 83 | 95,96 | 55 |
| CORRIGAN, EDWARD J. & MARY G. | 83 | 95 | 52 |
| CROWTHER, WILLIAM C III & WILSON, GEORGE H. IV & COPPING, DAVID ROBERT | 83 | 95,96 | 55 |
| D | | | |
| DENTE, JAMES E. JR. & COLETTE G. | 82 | 95 | 42 |
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| DRURY, MARIE L. **(CONTRACT #1)** | **(22)** | **(32)** | 73 |
| **DUNKIN' BRANDS INC. - LESSEE THE STRATEVEST GROUP N.A.,** TRUSTEE OF THE ELIZABETH CAMBELL - LESSOR | 81 | 94 | 28 |
| E | | | |
| EDGEWOOD DEVELOPMENT, LLC | 83 | 95 | 48 |
| ELSOL MEXICAN GRILL, LLC - LESSEE; 210 NORTH MAIN PROPERTIES LLC- LESSOR | 82 | 95 | 44 |
| ED'S BARRR-B-Q,LLC | 81 | 94 | 34 |
| F | | | |
| | **(22)** | **(33)** | 76 |
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| GRANTOR | DETAIL SHEET NO. | LAYOUT SHEET NO. | PARCEL NO. |
|---|---|---|---|
| G | | | |
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| GARR, DANIEL P. & JEAN A. | 83 | 95 | 54 |
| GENDRON, JOAN M. | 78 | 86,87 | 12 |
| GRANITE CITY HOLDING COMPANY., INC. | 84 | 96 | 59 |
| GRANITE HILLS CREDIT UNION | 79 | 93 | 19 |
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| GYPSYCAT REAL ESTATE, LLC | 81 | 94 | 35 |
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| HERSCHEL, LUCILLE J. & MOORE, W. GLENN **(CONTRACT #1)** | **(21)** | **(24)** | 7 |
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| IB PROPERTIES HOLDINGS, LLC **(CONTRACT #1)** | **(21)** | **(29)** | 62 |
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| JACOBS, JEFFREY & LEWINSTEIN, STEPHEN R. | 83 | 95 | 53 |
| JOLU, LLC | 81 | 94 | 31 |
| K | | | |
| KEATON, WILLIAM H. & MARIE Z. **(CONTRACT #1)** | **(21)** | **(24)** | 8 |
| KEYBANK NATIONAL ASSOCIATION - LESSEE; MALONE 315 NORTH MAIN STREET PROPERTIES, LLC - LESSOR | 80 | 93,94 | 24 |
| L | | | |
| LACROIX, LORI A. | 83 | 95 | 50 |
| LACROSS, EDWARD H. & YVONNE M. | 84 | 96 | 63 |
| LEWINSTEIN, STEPHEN R. & JACOBS, JEFFREY | 83 | 95 | 53 |
| M | | | |
| MACDUFF, PAUL D. & BETTY LOU - LESSOR; CHAMPLAIN OIL CO., INC. - LESSEE | 79 | 86 | 16 |
| MAGNAN PROPERTIES, LLC | 83 | 95 | 51 |
| MILES BLOCK PROPERTIES, LLC | 83 | 95 | 49 |
| MALONE 315 NORTH MAIN STREET PROPERTIES, LLC - LESSOR; KEY BANK NATIONAL ASSOCIATION - LESSEE | 80 | 93,94 | 24 |
| MCCARTHY, MARK N. & MCCARTHY, TODD G. | 84 | 96 | 64 |
| MCCARTHY, TODD G. & MCCARTHY, MARK N. | 84 | 96 | 64 |
| METRO DEVELOPMENT LLC | 80 | 93 | 20 |
| MONTE, DANIEL T. **(CONTRACT #1)** | **(22)** | **(27)** | 78 |
| MOORE, W. GLENN & HERSCHEL, LUCILLE J. **(CONTRACT #1)** | **(21)** | **(24)** | 7 |
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| MURPHY REALTY CO., INC. - LESSOR; CHITTENDEN TRUST COMPANY, FSB - LESSEE | 81 | 94 | 30 |
| N | | | |
| N AND M INVESTMENTS, LLC **(CONTRACT #1)** | **(22)** | **(30)** | 68 |
| NELSON, ROBERT A. & LINDA S. | 83 | 95 | 46 |
| NORTHFIELD SAVINGS BANK | 80 | 94 | 27 |
| NORWAY BARRE REAL ESTATE, LLC **(CONTRACT #1)** | **(21)** | **(23,24)** | 9 |
| O | | | |
| ORMSBY, JOHN I. & AGNES W., AS CO-TRUSTEES OF THE ORMSBY FAMILY TRUST u/a | 84 | 96 | 61 |

| GRANTOR | DETAIL SHEET NO. | LAYOUT SHEET NO. | PARCEL NO. |
|---|---|---|---|
| P | | | |
| PATEL, PARESH T. & GAYATRIBEN P.; PATEL, KISHOR R. & PRATIBHA; PATEL, MANHARLAL & PATEL, DAXABEN | 78 | 86 | 13 |
| PCI PROPERTIES, LLC | 80 | 94 | 26 |
| PEARSON, KENNETH M. & BARBARA J. - TRUSTEES OF PEARSON LIVING TRUST **(CONTRACT #1)** | **(21)** | **(24,25)** | 2 |
| Q | | | |
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| R | | | |
| RONSON, TODD S. & MARY E. **(CONTRACT #1)** | **(22)** | **(26)** | 77 |
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| SIMONDS, EDWARD C | 78 | 86,87 | 11 |
| STATE OF VERMONT | 81 | 94 | 32 |
| STATE OF VERMONT - LESSOR; WASHINGTON COUNTY RAILROAD COMPANY - LESSEE | 85 | 87 | 75 |
| STUDIO PLACE ARTS INCORPORATED | 82 | 95 | 41 |
| T | | | |
| TD BANK, N.A. | 84 | 96 | 65 |
| TELEPHONE OPERATING CO. OF VT., LLC | | | 80 |
| TELEPHONE OPERATING CO. OF VT., LLC - LESSOR; BARRE, CITY OF - LESSEE **(CONTRACT #1)** | **(22)** | **(31,32)** | 72 |
| THE STRATEVEST GROUP, N.A. - TRUSTEE OF THE ELIZABETH M. CAMPBELL TRUST FUND - LESSOR; DUNKIN BRANDS INC. - LESSEE | 81 | 94 | 28 |
| THOMPSON, ROBERT F. & BRENDA J. **(CONTRACT #1)** | **(21)** | **(24,25)** | 3 |
| THURSTON, MICHAEL D. & SANDRA F. | 83 | 95,96 | 58 |
| TIMBERLAKE ASSOCIATES | 79 | 86 | 15 |
| U | | | |
| UNITED STATES OF AMERICA POSTAL SERVICE **(CONTRACT #1)** | **(22)** | **(29)** | 67 |
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| VENMAR, MARIANNE S. - TRUSTEE OF THE MARIANNE S. VENMAR REVOCABLE FAMILY LIVING TRUST u/t/a JUNE 9, 2008 **(CONTRACT #1)** | **(21)** | **(24)** | 5 |
| VENMAR, RICHARD S. - TRUSTEE OF THE RICHARD S. VENMAR REVOCABLE FAMILY LIVING TRUST **(CONTRACT #1)** | **(22)** | **(24)** | 83 |
| VERMONT PROPERTIES REALTY TRUST - LESSOR; CHAMPLAIN OIL CO., INC. - LESSEE | 79 | 86,93 | 18B |
| VERMONT PROPERTIES REALTY TRUST; MURPHY, CAROLE ANN - TRUSTEE | 79 | 86,93 | 18A |
| W | | | |
| WALL STREET INVESTMENTS | 80 | 94 | 23 |
| WATKINS, THOMAS V. III & CROWLEY-WATKINS, JOANNE **(CONTRACT #1)** | **(21)** | **(24)** | **(6)** |
| WASHINGTON COUNTY RAILROAD - LESSEE; STATE OF VERMONT - LESSOR | 85 | 87 | 75 |
| WILSON, GEORGE H. IV & COPPING, DAVID ROBERT & CROWTHER, WILLIAM C. III | 83 | 95,96 | 55 |
| Z | | | |
| Z'S NORTHERN PROPERTIES | 79 | 86 | 14 |

PLOT DATE 03/04/11

APPROVED: HARRY PETROVS DATE: 10-29-09
CHIEF, PLANS & TITLES

PROJECT NAME: **BARRE CITY**
PROJECT NUMBER: **FEGC F 026-1(34) C/2**

FILE NAME: **r85b010ALPHA sheet.xls** PLOT DATE:
PROJECT LEADER: **G. BAKOS** DRAWN BY: **MT**
DESIGNED BY: **D. PECK** CHECKED BY: **FM**
**ALPH ABETICAL - ROW SHEET 76 OF 100** SHEET **204** OF **339**

**STATE OF VERMONT**
**AGENCY OF TRANSPORTATION**

# RIGHT-OF-WAY DETAIL SHEET

## TABLE OF PROPERTY ACQUISITION

| PARCEL NO. | PROPERTY OWNER | SHEET NO. | BEGINNING STATION | ENDING STATION | TAKE | REMAINDER | RIGHT | | | RECORDING DATA | | | | | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | AREA± | AREA± | TYPE | (T)/(P) | AREA ± | TITLE | DATE | TOWN / CITY | BOOK | PAGE | |
| 1 | GABLE GROUP BARRE, INC. | 87 | VT RTE 62 12+92.09 RT. | VT RTE 62 15+75.56 RT. | 0.67 | 0 | | | | WD | | BARRE CITY | | | TOTAL TAKE |
| 2 | PEARSON, KENNETH M. & BARBARA J. TRUSTEES OF PEARSON LIVING TRUST | (24,25) | | | | | | | | | | | | | PART OF CONTRACT I |
| 3 | THOMPSON, ROBERT F. & BRENDA J. | (24,25) | | | | | | | | | | | | | PART OF CONTRACT I |
| 4A | DOWNTOWN BARRE DEVELOPMENT | 86,93 | 116+74.50 LT. | 122+54.42 LT. | 0.11 A | | | | | WD | 8/26/2010 | BARRE CITY | 260 | 892-895 | |
| | | | 116+74.50 LT. | 122+54.42 LT. | | | INSTALL | (T) | | | | | | | CURB |
| | | | 117+10 LT.± | | | | REMOVE | (T) | | | | | | | STREET LIGHT |
| | | | 117+16.20 LT. | | | | CULVERT | (P) | | | | | | | |
| | | | 117+86.10 LT. | | | | CULVERT | (P) | | | | | | | |
| | | | 119+25.00 LT. | | | | CULVERT | (P) | | | | | | | |
| | | | 120+26.00 LT. | | | | DRIVE | (T) | | | | | | | 36' PAVED |
| | | | 120+74.56 LT. | | | | DI | (P) | | | | | | | |
| | | | 120+74.56 LT. | | | | DI & CULVERT | (P) | | | | | | | |
| | | | 120+74.56 LT. | 120+93.04 LT. | | | REMOVE | (T) | | | | | | | CULVERT & DI |
| | | | 121+70.00 LT. | | | | CULVERT | (P) | | | | | | | |
| | | | 122+30.72 LT. | | | | CULVERT | (P) | | | | | | | |
| | | | 116+74.50 LT. | 122+64.43 LT. | | | INSTALL | (T) | | | | | | | RESTRIPE PARKING LOT |
| | | | 121+50.54 LT. | | | | REMOVE & RESET | (T) | | | | | | | LIGHT POLE & BASE |
| | | | 122+40.43 LT. | | | | REMOVE | (T) | | | | | | | LIGHT POLE & BASE |
| | | | 116+74.50 LT. | 122+54.42 LT. | | | D&C | (T) | | | | | | | SEWER, WATER & DRAINAGE IF APPLICABLE |
| 4B | DOWNTOWN BARRE DEVELOPMENT | 93 | 122+66.12 LT. | S. SEMINARY 41+32.00 LT. | 115 SF | | | | | | | | | | |
| | | | S. SEM. ST. 41+46.00 LT | | | | DRIVE | (T) | | | | | | | 28' PAVED |
| | | | 122+54.42 LT. | S. SEMINARY 41+32.00 LT. | | | INSTALL | (T) | | | | | | | CURB |
| 5 | VENMAR, MARIANNE S. | (24) | | | | | | | | | | | | | PART OF CONTRACT I |

## TABLE OF REVISIONS

| REVISION NO. | SHEET NO. | DESCRIPTION | DATE |
|---|---|---|---|
| 1 | 76,83,95 | PARCEL NO. 53 JACOBS & LEWINSTEIN. CHANGE SPELLING OF JEFFERY TO JEFFREY. PER C.O. 9573<br>MADE BY: MR APPROVED BY: HP | 11/5/09 |
| 2 | 77 | PARCEL NO. 4 DOWNTOWN BARRE DEVELOPMENT. CHANGE REMOVE (T) FOR LIGHT POLE & BASE AT STA. 122+40.43 LT. TO REMOVE & RESET (T) PER C.O. 9572<br>MADE BY: MR APPROVED BY: HP | 11/5/09 |
| 3 | 76 | PARCEL NO. 76 FIREHOUSE AT BARRE, LLC. REMOVE PROPERTY OWNER FROM ALPHABETICAL INDEX SHEET. PER C.O. 9584<br>MADE BY: MR APPROVED BY: HP | 12/15/09 |
| 4 | 76 | PARCEL NO. 84 BARRE HOUSING AUTHORITY. ADD PROPERTY OWNER TO ALPHABETICAL INDEX SHEET. PER C.O. 9585<br>MADE BY: MR APPROVED BY: HP | 12/15/09 |
| 5 | 82 | PARCEL NO. 39 AUDET. ADD WALK (T) STA. 129+44.98 LT – 130+17.26 LT TO DETAIL SHEET. PER C.O. 9587<br>MADE BY: MT APPROVED BY: HP | 12/16/09 |
| 6 | 77 | PARCEL NO. 4 DOWNTOWN BARRE DEVELOPMENT. ADD D&C AT STA. 116+74.50 LT. – 122+54.42 LT. FOR SEWER, WATER & DRAINAGE IF APPLICABLE TO DETAIL SHEET. PER C.O. 9586<br>MADE BY: MT APPROVED BY: HP | 12/16/09 |
| 7 | 82,95 | PARCEL NO. 41 CENTRAL VERMONT ARTS CENTER LIMITED PARTNERSHIP. CHANGE OWNER NAME TO STUDIO ARTS INCORPORATED. PER C.O. 9590<br>MADE BY: MT APPROVED BY: HP | 12/28/09 |
| 8 | 80 | PARCEL NO. 20 R. YORK, INC. TOTAL ACQUISITION AREA HAS BEEN CORRECTED FROM 370SF TO 4665F. PER C.O. 9592<br>MADE BY: MT APPROVED BY: HP | 1/4/10 |
| 9 | 11, 34, 79, 93 | PARCEL NO. 19 GRANITE HILLS CREDIT UNION. ADDED AREA TO DRIVE AT 116+75.00 RT. (2,200 SF±); INCREASED TWO SLOPE AREAS 73 SF TO 620 SF AND 73 SF TO 380 SF; ADDED TWO INSTALL (T) CURBS 129'± AND 54'±; ADDED REMOVE & RESET (T) FOR SIGN, FLAGPOLE, LIGHTS AND OTHER APPURTENANCES IN SLOPE AREAS; ADDED LANDSCAPE (T) FOR SLOPE AREAS WITH AN AGREEMENT BETWEEN VTRANS AND OWNER. PER C.O. 9593<br>MADE BY: MT APPROVED BY: HP | 1/4/10 |
| 10 | 78,86,87 | PARCEL NO. 10 CAMPOS REALTY, LLC. NEW OWNER IS 386 NORTH MAIN STREET, LLC. PER C.O. 9607<br>MADE BY: MT APPROVED BY: HP | 3/15/10 |
| 11 | 83, 95 | PARCEL NO. 45 BOISVERT, ERNEST E. & BETTY M. REMOVE NAME OF BETTY M. BOISVERT AS SHE IS DECEASES AS OF JUNE 1, 2006. ALSO CORRECTED LAST NAME OF KARL FROM ERNEST TO BOISVERT ON LAYOUT 9. PER C.O. 9608<br>MADE BY: MT APPROVED BY: HP | 3/15/10 |
| 12 | 76,80,93 | PARCEL NO. 20 R. YORK, INC. - CHANGED OWNER TO METRO DEVELOPMENT LLC. PER C.O. 9616<br>MADE BY: MT APPROVED BY: HP | 5/27/10 |
| 13 | 76,82 94,95 | PARCEL NO. 39 AUDET. CHANGE OWNER TO THE CITY OF BARRE. PER C.O. 9619.<br>MADE BY: MR APPROVED BY: HP | 6/21/10 |
| 14 | 76,82,95 | PARCEL NO. 40 LEWINSTEIN. CHANGE OWNER TO THE CITY OF BARRE. PER C.O. 9620.<br>MADE BY: MR APPROVED BY: HP | 6/21/10 |
| 15 | 77,93 | PARCEL NO. 4 DOWNTOWN BARRE DEVELOPMENT. CHANGE REMOVE & RESET FOR LIGHT POLE AT STA. 122+40.43 LT. TO REMOVE (T). ADD REMOVE (T) FOR STREET LIGHT LOCATED AT STATION 117+10 LT.± PER C.O. 9628.<br>MADE BY: MR APPROVED BY: HP | 8/4/10 |
| | | ELECTRONIC FILES TO VHB 3-7-11 | |
| | | PLOT DATE | 3/4/11 |

### PLAN LEGEND

| | | | |
|---|---|---|---|
| EXISTING RIGHT-OF-WAY | | TOE OF SLOPE | |
| TAKING WITH ACCESS | | TOP OF CUT | |
| TAKING WITHOUT ACCESS | SR (P) | SLOPE RIGHT | |
| CLEAR ZONE | CONST. (T) | CONSTRUCTION RIGHT | |
| PROPERTY LINE | -PDF PDF- | PROJECT DEMARCATION FENCE | |

| | |
|---|---|
| D&C | - DISCONNECT & CONNECT |
| EC | - EROSION CONTROL |
| (P) | - PERMANENT |
| (T) | - TEMPORARY |
| DR. | - DRAINAGE RIGHT |
| DT. | - DITCHING RIGHT |
| CH. | - CHANNEL RIGHT |
| DRIVE | - DRIVE RIGHT |
| CUL. | - CULVERT RIGHT |
| C&T | - CLEARING & TRIMMING RIGHT |
| SR | - SLOPE RIGHT |
| UE | - UTILITY EASEMENT |

APPROVED BY: HARRY PETROVS
CHIEF, PLANS & TITLES

DATE: 10-29-09

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-I(34) CONTRACT 2

FILE NAME: detailsheets .dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: D. PECK
ROW SHEET 77 OF 100

PLOT DATE: 04-MAR-2011
DRAWN BY: MT
CHECKED BY: FM
SHEET 205 OF 339

**STATE OF VERMONT**
**AGENCY OF TRANSPORTATION**

# RIGHT-OF-WAY DETAIL SHEET

## TABLE OF PROPERTY ACQUISITION

| PARCEL NO. | PROPERTY OWNER | SHEET NO. | BEGINNING STATION | ENDING STATION | TAKE | REMAINDER | RIGHT | | | RECORDING DATA | | | | | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | AREA± | AREA± | TYPE | (T)/(P) | AREA ± | TITLE | DATE | TOWN / CITY | BOOK | PAGE | |
| 6 | WATKINS, THOMAS V. III & | (24) | | | | | | | | | | | | | PART OF CONTRACT I |
| | CROWLEY-WATKINS, JOANNE | | | | | | | | | | | | | | |
| 7 | MOORE, W. GLENN & HERSCHEL, LUCILLE J. | (24) | | | | | | | | | | | | | PART OF CONTRACT I |
| 8 | KEATON, WILLIAM H. & MARIE Z. | (24) | | | | | | | | | | | | | PART OF CONTRACT I |
| 9 | NORWAY BARRE REAL ESTATE, LLC | (23,24) | | | | | | | | | | | | | PART OF CONTRACT I |
| 10 | 386 NORTH MAIN STREET, LLC | 86,87 | 111+79.00 RT. | | | | DRIVE | | | GTR | 10/27/2010 | BARRE CITY | 261 | 927-928 | 18' PAVED |
| | | | 111+93.56 RT. | | | | WALK | (T) | | | | | | | 4' CONCRETE |
| | | | 112+41.13 RT. | | | | WALK | (T) | | | | | | | 4' CONCRETE |
| | | | 112+55.00 RT. | | | | DRIVE | (T) | | | | | | | 13' PAVED IN COMMON / PARCEL 12 & 11 |
| | | | 110+84.77 RT. | 112+48.66 RT. | | | D & C | (T) | | | | | | | SEWER, WATER & DRAINAGE IF APPLICABLE |
| 11 | SIMONDS, EDWARD C. | 86,87 | 112+48.66 RT. | 113+27.97 RT. | | | D & C | (T) | | GTR | 9/22/2010 | BARRE CITY | 261 | 342-344 | SEWER, WATER & DRAINAGE IF APPLICABLE |
| | | | 113+28.24 RT. | 113+29.97 RT. | | | SLOPE | (T) | 2 SF | | | | | | |
| | | | 113+00.00 RT. | | | | WALK | (T) | | | | | | | 3' CONCRETE |
| | | | 112+60.15 RT. | 112+83.43 RT. | | | SLOPE | (T) | 58 SF | | | | | | |
| | | | 112+55.00 RT. | | | | DRIVE | (T) | | | | | | | 13' PAVED IN COMMON / PARCEL 12 & 10 |
| 12 | GENDRON, JOAN M. | 86,87 | 112+55.00 RT. | | | | DRIVE | (T) | | GTR | 8/31/2010 | BARRE CITY | 260 | 1003-1004 | 13' PAVED IN COMMON / PARCEL 11 & 10 |
| 13 | PATEL, PARESH T. & GAYATRIBEN P.; | 86 | 114+61.15 RT. | 115+69.02 RT. | | | D & C | (T) | | | | | | | SEWER, WATER & DRAINAGE IF APPLICABLE |
| | PATEL, KISHOR R. & PRATIBHA; | | 114+93.00 RT. | | | | DRIVE | (T) | | | | | | | 26' PAVED |
| | PATEL, MANHARLAL & PATEL, DAXABEN | | 114+61.15 RT. | 114+79.01 RT. | | | SR | (T) | 19 SF | | | | | | |
| | | | 115+11.80 RT. | 115+24.33 RT. | | | SR | (T) | 3 SF | | | | | | |

## TABLE OF REVISIONS

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| | | | |
| | | PLOT DATE | 3/4/11 |

### PLAN LEGEND

- EXISTING RIGHT-OF-WAY
- TAKING WITH ACCESS
- TAKING WITHOUT ACCESS
- CLEAR ZONE (CZ)
- PROPERTY LINE (P / L)
- TOE OF SLOPE
- TOP OF CUT
- SLOPE RIGHT (SR (P))
- CONSTRUCTION RIGHT (CONST. (T))
- PROJECT DEMARCATION FENCE (-PDF-)

| | |
|---|---|
| D&C | - DISCONNECT & CONNECT |
| EC | - EROSION CONTROL |
| (P) | - PERMANENT |
| (T) | - TEMPORARY |
| DR. | - DRAINAGE RIGHT |
| DT. | - DITCHING RIGHT |
| CH. | - CHANNEL RIGHT |
| DRIVE | - DRIVE RIGHT |
| CUL. | - CULVERT RIGHT |
| C&T | - CLEARING & TRIMMING RIGHT |
| SR | - SLOPE RIGHT |
| UE | - UTILITY EASEMENT |

APPROVED BY: NAME
CHIEF, PLANS & TITLES

DATE: DATE

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-I(34) CONTRACT 2

FILE NAME: detailsheets .dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: D. PECK
ROW SHEET 78 OF 100

PLOT DATE: 04-MAR-2011
DRAWN BY: MT
CHECKED BY: FM
SHEET 206 OF 339

**STATE OF VERMONT**
**AGENCY OF TRANSPORTATION**

# RIGHT-OF-WAY DETAIL SHEET

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| | | | | | AREA± | AREA± | TYPE | (T)/(P) | AREA ± | TITLE | DATE | TOWN / CITY | BOOK | PAGE | |
| 14 | Z'S NORTHERN PROPERTIES | 86 | MAPLE AVE. 21+07.56 RT. | N. MAIN ST. 115+36.67 LT. | | | D & C | (T) | | GTR | 10/28/2010 | BARRE CITY | 261 | 944-946 | SEWER, WATER & DRAINAGE IF APPLICABLE |
| | | | 114+50.62 LT. | 114+57.09 LT. | | | SLOPE | (T) | 7 SF | | | | | | |
| | | | 114+50.62 LT. | 114+57.09 LT. | | | INSTALL & MAINT. | (P) | | | | | | | BOLLARDS & CHAIN |
| 15 | TIMBERLAKE ASSOCIATES | 86 | 115+60.00 LT. | | | | DRIVE | (T) | | QC | 12/23/2010 | BARRE CITY | 262 | 663-664 | 27' PAVED |
| | | | 116+09.00 LT. | | | | DRIVE | (T) | | | | | | | 31' PAVED |
| | | | 115+36.88 LT. | COTTAGE ST. 31+16.90 LT. | | | D & C | | | | | | | | SEWER, WATER & DRAINAGE IF APPLICABLE |
| | | | 116+27.89 LT. | | | | INSTALL & MAINT. | (P) | | | | | | | STREET LIGHT |
| | | | 116+35.74 LT. | COTTAGE ST. 20+47.50 LT. | | | INSTALL | (T) | | | | | | | CURB |
| 16 | MacDUFF, PAUL D. & BETTY LOU - LESSOR | 86 | 115+69.02 RT. | 116+76.46 RT. | | | D & C | (T) | | GTR | 7/7/2010 | BARRE CITY | 260 | 167-170 | SEWER, WATER & DRAINAGE IF APPLICABLE |
| | CHAMPLAIN OIL CO., INC. - LESSEE | | 115+69.02 RT. | 116+05.03 RT. | | | SLOPE | (T) | 147 SF | | | | | | |
| | | | 116+26.00 RT. | | | | DRIVE | (T) | | | | | | | 41' PAVED IN COMMON / PARCEL 17 |
| 17 | CHAMPLAIN OIL CO., INC. | 86 | 116+26.00 RT. | | | | DRIVE | (T) | | GTR | 7/6/2010 | BARRE CITY | 260 | 137-138 | 41' PAVED IN COMMON / PARCEL 16 |
| 18A | VERMONT PROPERTIES REALTY TRUST | 93 | 117+70.65 RT. | 118+61.40 RT. | 189 SF± | | | | | WD | | | | | |
| | MURPHY, CAROLE ANN - TRUSTEE | | 117+70.65 RT. | 118+42.66 RT. | | | SLOPE | (T) | 194 SF | | | | | | |
| | | | 117+70.65 RT. | 118+61.40 RT. | | | D & C | (T) | | | | | | | SEWER, WATER & DRAINAGE IF APPLICABLE |
| | | | 118+48.00 RT. | | | | DRIVE | (T) | | | | | | | 14' PAVED |
| | | | 117+70.65 RT. | 118+61.40 RT. | | | LANDSCAPING | (T) | | | | | | | |
| 18B | VERMONT PROPERTIES REALTY TRUST - | 86,93 | 117+46.00 RT. | | | | DRIVE | (T) | | | | | | | 43' PAVED |
| | LESSOR, CHAMPLAIN OIL CO., INC. - LESSEE | | 116+76.73 RT. | 117+70.65 RT. | | | D & C | (T) | | | | | | | SEWER, WATER & DRAINAGE IF APPLICABLE |
| | | | 116+76.73 RT. | 117+00.00 RT. | | | SLOPE | (T) | 20 SF | | | | | | |
| | | | 117+62.56 RT. | 117+65.46 RT. | | | REMOVE | (T) | | | | | | | CULVERT |
| | | | 117+62.56 RT. | 117+65.46 RT. | | | CULVERT | (P) | | | | | | | |
| 19 | GRANITE HILLS CREDIT UNION | 93 | 118+61.40 RT. | 120+32.37 RT. | 645 SF± | | | | | WD | 9/22/2010 | BARRE CITY | 261 | 301-303 | |
| | | | 118+90.00 RT. | 119+58.75 RT. | | | SLOPE | (T) | 620 SF | | | | | | |
| | | | 119+63.75 RT. | | | | WALK | (T) | | | | | | | CONCRETE, 10' |
| | | | 119+68.75 RT. | 120+13.64 RT. | | | SLOPE | (T) | 380 SF | | | | | | |
| | | | 118+61.40 RT. | 120+32.37 RT. | | | D & C | (T) | | | | | | | SEWER, WATER & DRAINAGE IF APPLICABLE |
| | | | 118+75.00 RT. | | | | DRIVE | (T) | | | | | | | 28' PAVED (2,200 SF±) |
| | | | 120+22.00 RT. | | | | DRIVE | (T) | | | | | | | 19' PAVED |
| | | | 118+90.00 RT. | 119+58.75 RT. | | | INSTALL | (T) | | | | | | | CURB (129'±) |
| | | | 119+68.75 RT. | 120+13.64 RT. | | | INSTALL | (T) | | | | | | | CURB (54'±) |
| | | | 118+90.00 RT. | 120+13.64 RT. | | | REMOVE & RESET | (T) | | | | | | | SIGN, FLAGPOLE, LIGHTS AND OTHER APPURTENANCES IN SLOPE AREAS. |
| | | | 118+90.00 RT. | 120+13.64 RT. | | | LANDSCAPE | (T) | | | | | | | PER OWNER & VTRANS AGREEMENT |

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- TAKING WITH ACCESS
- TAKING WITHOUT ACCESS
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- PROPERTY LINE (P / L)
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- PROJECT DEMARCATION FENCE (-PDF-)

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| D&C | - DISCONNECT & CONNECT |
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PROJECT NAME: BARRE CITY

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FILE NAME: detailsheets .dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: D. PECK
ROW SHEET 79 OF 100

PLOT DATE: 04-MAR-2011
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SHEET 207 OF 339

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**AGENCY OF TRANSPORTATION**

# RIGHT-OF-WAY DETAIL SHEET

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| | | | | | AREA± | AREA± | TYPE | (T)/(P) | AREA ± | TITLE | DATE | TOWN / CITY | BOOK | PAGE | |
| 20 | METRO DEVELOPMENT LLC | 93 | 120+32.37 RT. | 121+81.03 RT. | 466 SF | | | | | WD | 11/2/2010 | BARRE CITY | 261 | 987 | |
| | | | 120+64.14 RT. | 121+29.91 RT. | | | INSTALL | (T) | | | | | | | ISLAND & CURB |
| | | | 121+05.36 RT. | | | | REMOVE & RESET | (T) | | | | | | | SIGN - PRIVATE |
| | | | 120+32.37 RT. | 121+81.03 RT. | | | D & C | (T) | | | | | | | SEWER, WATER & DRAINAGE IF APPLICABLE |
| | | | 121+78.34 RT. | | | | REMOVE | (T) | | | | | | | WALL (1.5' WIDTH ) |
| | | | 120+50.00 RT. | | | | DRIVE | (T) | | | | | | | 33' PAVED |
| | | | 121+46.00 RT. | | | | DRIVE | (T) | | | | | | | 34' PAVED |
| 21 | AMERICAN LEGION-BARRE POST, NO. 10, INC. | 93 | 121+81.03 RT. | 122+68.21 RT. | 250 SF | | | | | WD | | BARRE CITY | 260 | 206-208 | |
| | | | 121+81.03 RT. | 122+68.23 RT. | | | REMOVE & RESET | (T) | | | | | | | IRON FENCE/GATE & CHAIN LINK FENCE |
| | | | 122+11.75 RT. | | | | WALK | (T) | | | | | | | 5' CONCRETE |
| | | | 122+19.00 RT. | | | | REMOVE | (T) | | | | | | | TREE STUMP |
| | | | 121+81.03 RT. | 122+68.21 RT. | | | D & C | (T) | | | | | | | SEWER, WATER & DRAINAGE IF APPLICABLE |
| | | | 121+80.99 RT. | | | | REMOVE & RESET | (T) | | | | | | | GRANITE POST |
| | | | 122+76.90 RT. | | | | DRIVE | (T) | | | | | | | 13' PAVED OVER PARCEL 22 |
| 22 | COMMUNITY NATIONAL BANK | 93,94 | 122+68.21 RT. | 124+18.16 RT. | | | D & C | (T) | | GTR | 40207 | BARRE CITY | 257 | 484-486 | SEWER, WATER & DRAINAGE IF APPLICABLE |
| | | | 122+76.90 RT. | | | | DRIVE | (T) | | | | | | | 13' PAVED IN COMMON PARCEL #21 |
| | | | 123+61.90 RT. | | | | DRIVE | (T) | | | | | | | 12' PAVED |
| | | | 122+86.56 RT. | 124+18.61 RT. | | | WALK | (T) | | | | | | | SIDEWALK |
| | | | 123+63.58 RT. | 124+18.61 RT. | | | SLOPE | (T) | 94 SF± | | | | | | |
| | | | 123+73.80 RT. | | | | WALK | (T) | | | | | | | 5' CONCRETE |
| | | | 124+14.36 RT. | | | | WALK | (T) | | | | | | | 5' CONCRETE |
| 23 | WALL STREET INVESTMENTS | 94 | 124+77.51 RT. | 124+87.02 RT. | 19 SF+ | | | | | WD | 7/12/2010 | BARRE CITY | 260 | 200-201 | |
| | | | 124+18.61 RT. | 124+83.34 RT. | | | SLOPE | (T) | 77 SF+ | | | | | | |
| | | | 124+18.61 RT. | 124+87.03 RT. | | | D & C | (T) | | | | | | | SEWER, WATER & DRAINAGE IF APPLICABLE |
| | | | 124+25.90 RT. | | | | REMOVE | (T) | | | | | | | OLD CONCRETE FOUNDATION |
| | | | 124+18.61 RT. | 124+83.34 RT. | | | INSTALL & MAINT. | (P) | | | | | | | BOLLARDS & CHAIN,AND BRICKWORK |
| 24 | MALONE 315 NORTH MAIN STREET | 93,94 | 123+16.86 LT. | 123+99.11 LT. | | | D & C | (T) | | | | | | | SEWER, WATER & DRAINAGE IF APPLICABLE |
| | PROPERTIES, LLC - LESSOR | | 123+16.86 LT. | 123+99.11 LT. | | | WALK | (T) | | | | | | | |
| | KEYBANK NATIONAL ASSOCIATIONS- LESSEE | | | | | | | | | | | | | | |
| 25 | CHASE, WILLIAM R. & CAROL B. | 94 | 123+99.11 LT. | 124+54.09 LT. | | | D & C | (T) | | GTR | 7/2/2010 | BARRE CITY | 260 | 96-97 | SEWER, WATER & DRAINAGE IF APPLICABLE |
| | | | 123+99.11 LT. | 124+54.09 LT. | | | WALK | (T) | | | | | | | SIDEWALK INCLUDES 3 ENTRANCE STEPS |
| 26 | PCI PROPERTIES, LLC | 94 | 124+54.09 LT. | 125+06.52 LT. | | | D & C | (T) | | GTR | 40186 | BARRE CITY | 257 | 164-165 | SEWER, WATER & DRAINAGE IF APPLICABLE |
| | | | 124+54.09 LT. | 125+06.52 LT. | | | WALK | (T) | | | | | | | SIDEWALK INCLUDES 1 ENTRANCE STEP |
| 27 | NORTHFIELD SAVINGS BANK | 94 | 125+06.52 LT. | 125+59.74 LT. | | | D & C | (T) | | GTR | 40164 | BARRE CITY | 257 | 767-768 | SEWER, WATER & DRAINAGE IF APPLICABLE |
| | | | 125+06.52 LT. | 125+59.74 LT. | | | WALK | (T) | | | | | | | SIDEWALK |

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| | |
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| EXISTING RIGHT-OF-WAY | TOE OF SLOPE |
| TAKING WITH ACCESS | TOP OF CUT |
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| CLEAR ZONE (CZ) | CONSTRUCTION RIGHT (CONST. (T)) |
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CHIEF, PLANS & TITLES

DATE: DATE

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-I(34) CONTRACT 2

FILE NAME: detailsheets .dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: D. PECK
ROW SHEET 80 OF 100

PLOT DATE: 04-MAR-2011
DRAWN BY: MT
CHECKED BY: FM
SHEET 208 OF 339

**STATE OF VERMONT**
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# RIGHT-OF-WAY DETAIL SHEET

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| 28 | THE STRATEVEST GROUP, N.A. - TRUSTEE | 94 | 125+59.75 LT. | 127+01.72 LT. | | | D & C | (T) | | | | | | | SEWER, WATER & DRAINAGE IF APPLICABLE |
| | OF THE ELIZABETH M. CAMPBELL TRUST | | 125+91.00 LT. | | | | DRIVE | (T) | | | | | | | 20' PAVED |
| | FUND - LESSOR | | 126+49.00 LT. | | | | DRIVE | (T) | | | | | | | 20' PAVED |
| | DUNKIN BRANDS INC. - LESSEE | | 126+66.00 LT. | 127+01.72 LT. | | | INSTALL & MAINT. | (P) | | | | | | | BOLLARDS & CHAIN |
| | | | 125+59.75 LT. | 127+01.72 LT. | | | WALK | (T) | | | | | | | SIDEWALK |
| 29 | NOT USED | | | | | | | | | | | | | | |
| 30 | MURPHY REALTY CO., INC. - LESSOR | 94 | 125+28.25 RT | 126+16.71 RT | | | D&C | (T) | | | | | | | SEWER, WATER & DRAINAGE IF APPLICABLE |
| | CHITTENDEN TRUST COMPANY, FSB - LESSEE | | 125+38.10 RT | | | | WALK | (T) | | | | | | | 6' CONCRETE |
| 31 | JOLU, LLC | 94 | 126+16.71 RT | 126+98.49 RT | | | D&C | (T) | | GTR | 8/19/2010 | BARRE CITY | 260 | 515-516 | SEWER, WATER & DRAINAGE IF APPLICABLE |
| | | | 126+55.31 RT | | | | WALK | (T) | | | | | | | 6' PAVED |
| | | | 126+78.44 RT | | | | WALK | (T) | | | | | | | 4' PAVED |
| | | | 126+94.76 RT | | | | REMOVE | (T) | | | | | | | TREE |
| | | | 126+16.71 RT | 126+98.49 RT | | | WALK | (T) | | | | | | | SIDEWALK |
| 32 | STATE OF VERMONT | 94 | 127+35.19 LT | 128+61.74 LT | | | D&C | (T) | | | | | | | SEWER, WATER & DRAINAGE IF APPLICABLE |
| | | | 128+04.91 LT | | | | WALK | (T) | | | | | | | 6' CONCRETE |
| | | | 128+35.94 LT | 128+61.74 LT | | | WALK | (T) | | | | | | | SIDEWALK |
| 33 | MORSE BLOCK HOUSING ASSOCIATES | 94 | 127+20.46 RT | 127+99.30 RT | | | D&C | (T) | | WDOE | 7/2/2010 | BARRE CITY | 260 | 98-100 | SEWER, WATER & DRAINAGE IF APPLICABLE |
| | | | 127+21.65 RT | | | | INSTALL & MAINT. | (P) | | | | | | | SIGN |
| | | | 127+34.65 RT | | | | REMOVE & RESET | (T) | | | | | | | HANDRAILS |
| | | | 127+47.76 RT | | | | REMOVE & RESET | (T) | | | | | | | HANDRAIL & STEPS |
| | | | 127+61.57 RT | | | | REMOVE & RESET | (T) | | | | | | | HANDRAIL |
| | | | 127+83.26 RT | | | | REMOVE & RESET | (T) | | | | | | | HANDRAIL |
| | | | 127+20.46 RT | 127+99.30 RT | | | WALK | (T) | | | | | | | SIDEWALK |
| 34 | ED'S BARRR-B-Q,LLC | 94 | 127+99.30 RT | 128+27.94 RT | | | D&C | (T) | | GTR | 40177 | BARRE CITY | 257 | 40-41 | SEWER, WATER & DRAINAGE IF APPLICABLE |
| | | | 127+99.30 RT | 128+27.94 RT | | | WALK | (T) | | | | | | | SIDEWALK |
| 35 | GYPSYCAT REAL ESTATE, LLC | 94 | 128+27.94 RT | 128+50.84 RT | | | D&C | (T) | | GTR | 40207 | BARRE CITY | 257 | 482-483 | SEWER, WATER & DRAINAGE IF APPLICABLE |
| | | | 128+27.94 RT | 128+50.84 RT | | | WALK | (T) | | | | | | | SIDEWALK |

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- TAKING WITH ACCESS
- TAKING WITHOUT ACCESS
- CLEAR ZONE (CZ)
- PROPERTY LINE (P/L)
- TOE OF SLOPE
- TOP OF CUT
- SLOPE RIGHT (SR (P))
- CONSTRUCTION RIGHT (CONST. (T))
- PROJECT DEMARCATION FENCE (-PDF-PDF-)

| | |
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FILE NAME: detailsheets .dgn
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DESIGNED BY: D. PECK
ROW SHEET 81 OF 100

PLOT DATE: 04-MAR-2011
DRAWN BY: MT
CHECKED BY: FM
SHEET 209 OF 339

**STATE OF VERMONT**
**AGENCY OF TRANSPORTATION**

# RIGHT-OF-WAY DETAIL SHEET

## TABLE OF PROPERTY ACQUISITION

| PARCEL NO. | PROPERTY OWNER | SHEET NO. | BEGINNING STATION | ENDING STATION | TAKE | REMAINDER | RIGHT | | | RECORDING DATA | | | | | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | AREA± | AREA± | TYPE | (T)/(P) | AREA ± | TITLE | DATE | TOWN / CITY | BOOK | PAGE | |
| 36 | BENOIT PROPERTIES, INC. | 94 | 128+50.84 RT. | 129+20.05 RT. | | | D & C | (T) | | GTR | 40283 | BARRE CITY | 258 | 644-645 | SEWER, WATER & DRAINAGE IF APPLICABLE |
| | | | 128+50.84 RT. | 129+20.05 RT. | | | WALK | (T) | | | | | | | SIDEWALK |
| 37 | AUBUCHON REALTY COMPANY, INC. | 94,95 | 129+20.05 RT | 130+03.66 RT | | | D & C | (T) | | GTR | 40164 | BARRE CITY | 258 | 765-766 | SEWER, WATER & DRAINAGE IF APPLICABLE |
| | | | 129+20.05 RT | 130+03.66 RT | | | WALK | (T) | | | | | | | SIDEWALK |
| 38 | BASHARA PARAMOUNT THEATER, LLC | 94 | 128+91.59 LT | 129+44.98 LT | | | D & C | (T) | | GTR | 40228 | BARRE CITY | 257 | 793-794 | SEWER, WATER & DRAINAGE IF APPLICABLE |
| | | | 128+91.59 LT | 129+44.98 LT | | | WALK | (T) | | | | | | | SIDEWALK |
| 39 | CITY OF BARRE | 94,95 | 129+44.98 LT | 130+17.26 LT | | | D & C | (T) | | | | | | | SEWER, WATER & DRAINAGE IF APPLICABLE |
| | (FORMERLY AUDET) | | 129+44.98 LT | 130+17.26 LT | | | WALK | (T) | | | | | | | SIDEWALK |
| | | | 129+51.00 LT | | | | DRIVE | (T) | | | | | | | 12' GRAVEL |
| | | | 129+56.55 LT | 130+04.16 LT | | | INSTALL & MAINTAIN | (P) | | | | | | | BOLLARDS,CHAIN & CURB |
| | | | 129+56.55 LT | 130+04.16 LT | | | SLOPE | (T) | 477 SF± | | | | | | |
| 40 | CITY OF BARRE | 95 | 130+17.26 LT. | 130+61.90 LT. | | | D & C | (T) | | | | | | | SEWER, WATER & DRAINAGE IF APPLICABLE |
| | (FORMERLY LEWINSTEIN ) | | 130+17.26 LT. | 130+61.90 LT. | | | WALK | (T) | | | | | | | SIDEWALK |
| 41 | STUDIO PLACE ARTS INCORPORATED | 95 | 130+61.90 LT. | 131+09.15 LT. | | | D & C | (T) | | | | | | | SEWER, WATER & DRAINAGE IF APPLICABLE |
| | | | 130+61.90 LT. | 131+09.15 LT. | | | WALK | (T) | | | | | | | SIDEWALK |
| 42 | DENTE, JAMES E. JR & COLETTE G. | 95 | 131+09.15 LT. | 131+97.07 LT. | | | D & C | (T) | | GTR | 40276 | BARRE CITY | 258 | 520-521 | SEWER, WATER & DRAINAGE IF APPLICABLE |
| | | | 131+09.15 LT. | 131+97.07 LT. | | | WALK | (T) | | | | | | | SIDEWALK |
| | | | 131+14.00 LT. | | | | DRIVE | (T) | | | | | | | 10' PAVED |
| 43 | BELTRAMI, CHRISTOPHER A. & PATRICIA L. | 95 | 131+97.07 LT. | 132+39.85 LT. | | | D & C | (T) | | GTR | 40295 | BARRE CITY | 258 | 892-893 | SEWER, WATER & DRAINAGE IF APPLICABLE |
| | | | 131+97.07 LT. | 132+39.85 LT. | | | WALK | (T) | | | | | | | SIDEWALK |
| 44 | 210 NORTH MAIN PROPERTIES, LLC - LESSOR | 95 | 130+77.55 RT. | 131+09.05 RT. | | | D & C | (T) | | GTR | 9/9/2010 | BARRE CITY | 261 | 196-197 | SEWER, WATER & DRAINAGE IF APPLICABLE |
| | ELSOL MEXICAN GRILL, LLC - LESSEE | | 130+77.55 RT. | 131+09.05 RT. | | | WALK | (T) | | | | | | | SIDEWALK |
| | | | 130+80.53 RT. | 131+06.55 RT. | | | REMOVE & RESET | (T) | | | | | | | DECK |

## TABLE OF REVISIONS

| REVISION NO. | SHEET NO. | DESCRIPTION | DATE |
|---|---|---|---|
| | | | |
| | | PLOT DATE | 3/4/11 |

### PLAN LEGEND

- EXISTING RIGHT-OF-WAY
- TAKING WITH ACCESS
- TAKING WITHOUT ACCESS
- CLEAR ZONE (CZ)
- PROPERTY LINE (P/L)
- TOE OF SLOPE
- TOP OF CUT
- SLOPE RIGHT (SR (P))
- CONSTRUCTION RIGHT (CONST. (T))
- PROJECT DEMARCATION FENCE (-PDF-PDF-)

| | |
|---|---|
| D&C | - DISCONNECT & CONNECT |
| EC | - EROSION CONTROL |
| (P) | - PERMANENT |
| (T) | - TEMPORARY |
| DR. | - DRAINAGE RIGHT |
| DT. | - DITCHING RIGHT |
| CH. | - CHANNEL RIGHT |
| DRIVE | - DRIVE RIGHT |
| CUL. | - CULVERT RIGHT |
| C&T | - CLEARING & TRIMMING RIGHT |
| SR | - SLOPE RIGHT |
| UE | - UTILITY EASEMENT |

APPROVED BY: HARRY PETROVS
CHIEF, PLANS & TITLES

DATE: 10-29-09

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-I(34) CONTRACT 2

FILE NAME: detailsheets .dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: D. PECK
ROW SHEET 82 OF 100

PLOT DATE: 04-MAR-2011
DRAWN BY: MT
CHECKED BY: FM
SHEET 210 OF 339

**STATE OF VERMONT**
**AGENCY OF TRANSPORTATION**

# RIGHT-OF-WAY DETAIL SHEET

## TABLE OF PROPERTY ACQUISITION

| PARCEL NO. | PROPERTY OWNER | SHEET NO. | BEGINNING STATION | ENDING STATION | TAKE | REMAINDER | RIGHT | | | RECORDING DATA | | | | | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | AREA± | AREA± | TYPE | (T)/(P) | AREA ± | TITLE | DATE | TOWN / CITY | BOOK | PAGE | |
| 45 | BOISVERT, ERNEST E. - LESSOR | 95 | 131+09.05 RT. | 131+44.87 RT. | | | D & C | (T) | | GTR | 40225 | BARRE CITY | 257 | 682-684 | SEWER, WATER & DRAINAGE IF APPLICABLE |
| | BOISVERT, KARL W. d/b/a BOISVERT SHOE REPAIR - LESSEE | | 131+09.05 RT. | 131+44.87 RT. | | | WALK | (T) | | | | | | | SIDEWALK |
| 46 | NELSON, ROBERT A. & LINDA S. | 95 | 131+44.87 RT. | 132+61.83 RT. | | | D & C | (T) | | GTR | 7/26/2010 | BARRE CITY | 260 | 388-390 | SEWER, WATER & DRAINAGE IF APPLICABLE |
| | | | 131+44.87 RT. | 132+61.83 RT. | | | WALK | (T) | | | | | | | SIDEWALK |
| 47 | QUINLIN BLOCK ASSOCIATES | 95 | 132+61.83 RT. | 132+97.15 RT. | | | D & C | (T) | | | | | | | SEWER, WATER & DRAINAGE IF APPLICABLE |
| | | | 132+61.83 RT. | 132+97.15 RT. | | | WALK | (T) | | | | | | | SIDEWALK |
| | | | 132+69.00 RT. | | | | REMOVE & RESET | (T) | | | | | | | BRICK PAVERS |
| 48 | EDGEWOOD DEVELOPMENT, LLC | 95 | 132+97.15 RT. | 133+12.65 RT. | | | D & C | (T) | | GTR | 40252 | BARRE CITY | 257 | 1076-1077 | SEWER, WATER & DRAINAGE IF APPLICABLE |
| | | | 132+97.15 RT. | 133+12.65 RT. | | | WALK | (T) | | | | | | | SIDEWALK |
| 49 | MILES BLOCK PROPERTIES, LLC | 95 | 133+12.65 RT. | 134+04.54 RT. | | | D & C | (T) | | GTR | 40343 | BARRE CITY | 259 | 719-720 | SEWER, WATER & DRAINAGE IF APPLICABLE |
| | | | 133+12.65 RT. | 134+04.54 RT. | | | WALK | (T) | | | | | | | SIDEWALK |
| 50 | LACROIX, LORI A. | 95 | 134+04.54 RT. | 134+59.34 RT. | | | D & C | (T) | | | | | | | SEWER, WATER & DRAINAGE IF APPLICABLE |
| | | | 134+04.54 RT. | 134+59.34 RT. | | | WALK | (T) | | | | | | | SIDEWALK |
| 51 | MAGNAN PROPERTIES, LLC | 95 | 134+59.34 RT. | 134+98.34 RT. | | | D & C | (T) | | GTR | 40296 | BARRE CITY | 258 | 924-925 | SEWER, WATER & DRAINAGE IF APPLICABLE |
| | | | 134+59.34 RT. | 134+98.34 RT. | | | WALK | (T) | | | | | | | SIDEWALK |
| 52 | CORRIGAN, EDWARD J. & MARY G. | 95 | 132+59.05 LT. | 133+12.83 LT. | | | D & C | (T) | | GTR | 40289 | BARRE CITY | 258 | 824-825 | SEWER, WATER & DRAINAGE IF APPLICABLE |
| | | | 132+59.05 LT. | 133+12.83 LT. | | | WALK | (T) | | | | | | | SIDEWALK |
| 53 | JACOBS, JEFFREY & . | 95 | 133+12.83 LT. | 134+05.56 LT. | | | D & C | (T) | | | | | | | SEWER, WATER & DRAINAGE IF APPLICABLE |
| | LEWINSTEIN, STEPHEN R. | | 133+12.83 LT. | 134+05.56 LT. | | | WALK | (T) | | | | | | | SIDEWALK |
| 54 | GARR, DANIEL P. & JEAN A. | 95 | 134+29.33 LT. | 134+88.63 LT. | | | D & C | (T) | | | | | | | SEWER, WATER & DRAINAGE IF APPLICABLE |
| | | | 134+29.33 LT. | 134+88.63 LT. | | | WALK | (T) | | | | | | | SIDEWALK |
| 55 | WILSON, GEORGE H. IV & COPPING, DAVID ROBERT & CROWTHER, WILLIAM C. III | 95,96 | 135+16.71 LT. | 136+22.78 LT. | | | D & C | (T) | | GTR | 40217 | BARRE CITY | 257 | 562-564 | SEWER, WATER & DRAINAGE IF APPLICABLE |
| | | | 135+16.71 LT. | 136+22.78 LT. | | | WALK | (T) | | | | | | | SIDEWALK |
| 56 | BOLSTER HOUSE, LLC | 95 | 134+98.34 RT. | 135+59.52 RT. | | | D & C | (T) | | GTR | 8/6/2010 | BARRE CITY | 260 | 618-619 | SEWER, WATER & DRAINAGE IF APPLICABLE |
| | | | 134+98.34 RT. | 135+59.52 RT. | | | WALK | (T) | | | | | | | SIDEWALK |
| 57 | 100 NORTH MAIN STREET, LLC | 95 | 135+59.52 RT. | 135+84.44 RT. | | | D & C | (T) | | GTR | 40246 | BARRE CITY | 257 | 998-999 | SEWER, WATER & DRAINAGE IF APPLICABLE |
| | | | 135+59.52 RT. | 135+84.44 RT. | | | WALK | (T) | | | | | | | SIDEWALK |
| 58 | THURSTON, MICHAEL D. & SANDRA F. | 95,96 | 135+84.44 RT. | 136+10.28 RT. | | | D & C | (T) | | | | | | | SEWER, WATER & DRAINAGE IF APPLICABLE |
| | | | 135+84.44 RT. | 136+10.28 RT. | | | WALK | (T) | | | | | | | SIDEWALK |

## TABLE OF REVISIONS

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| | | | |
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**PLAN LEGEND**

| | |
|---|---|
| EXISTING RIGHT-OF-WAY | TOE OF SLOPE |
| TAKING WITH ACCESS | TOP OF CUT |
| TAKING WITHOUT ACCESS | SLOPE RIGHT |
| CLEAR ZONE (CZ) | CONSTRUCTION RIGHT |
| PROPERTY LINE (P / L) | PROJECT DEMARCATION FENCE (-PDF-) |

SR (P)

CONST. (T)

| | |
|---|---|
| D&C | - DISCONNECT & CONNECT |
| EC | - EROSION CONTROL |
| (P) | - PERMANENT |
| (T) | - TEMPORARY |
| DR. | - DRAINAGE RIGHT |
| DT. | - DITCHING RIGHT |
| CH. | - CHANNEL RIGHT |
| DRIVE | - DRIVE RIGHT |
| CUL. | - CULVERT RIGHT |
| C&T | - CLEARING & TRIMMING RIGHT |
| SR | - SLOPE RIGHT |
| UE | - UTILITY EASEMENT |

APPROVED BY: NAME

CHIEF, PLANS & TITLES

DATE: DATE

PROJECT NAME: BARRE CITY

PROJECT NUMBER: FEGC F 026-I(34) CONTRACT 2

FILE NAME: detailsheets .dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: D. PECK
ROW SHEET 83 OF 100

PLOT DATE: 04-MAR-2011
DRAWN BY: MT
CHECKED BY: FM
SHEET 211 OF 339

**STATE OF VERMONT**
**AGENCY OF TRANSPORTATION**

# RIGHT-OF-WAY DETAIL SHEET

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | AREA± | AREA± | TYPE | (T)/(P) | AREA ± | TITLE | DATE | TOWN / CITY | BOOK | PAGE | |
| 59 | GRANITE CITY HOLDING COMPANY, INC. | 96 | 136+18.58 RT. | 136+93.67 RT. | | | D & C | (T) | | PTR | 40295 | BARRE CITY | 258 | 686-687 | SEWER, WATER & DRAINAGE IF APPLICABLE |
| | | | 136+18.58 RT. | 136+93.67 RT. | | | WALK | (T) | | | | | | | SIDEWALK |
| | | | 136+50.00 RT. | 136+80.30 RT. | | | INSTALL & MAINT. | (P) | | | | | | | UNDERGROUND POWER & PULL BOX |
| 60 | 61 - 85 NORTH MAIN STREET, LLC | 96 | 136+22.76 LT. | 136+67.41 LT. | | | D & C | (T) | | WD | 40211 | BARRE CITY | 257 | 512-513 | SEWER, WATER & DRAINAGE IF APPLICABLE |
| | | | 136+22.76 LT. | 136+67.41 LT. | | | WALK | (T) | | | | | | | SIDEWALK |
| | | | 136+53.20 LT. | 136+67.00 LT. | | | INSTALL & MAINT. | (P) | | | | | | | UNDERGROUND POWER & PULL BOX |
| | | | 136+71.00 LT. | | | | DRIVE | (T) | | | | | | | 15' PAVED, SHARED WITH PARCEL 61 |
| 61 | ORMSBY, JOHN L. & AGNES W., as | 96 | 136+67.41 LT. | 137+23.02 LT. | | | D & C | (T) | | GTR | 40289 | BARRE CITY | 258 | 622-623 | SEWER, WATER & DRAINAGE IF APPLICABLE |
| | CO-TRUSTEES OF THE ORMSBY FAMILY | | 136+67.41 LT. | 137+23.02 LT. | | | WALK | (T) | | | | | | | SIDEWALK |
| | TRUST u/a | | 136+71.00 LT. | | | | DRIVE | (T) | | | | | | | 15' PAVED, SHARED WITH PARCEL 60 |
| 62 | IB PROPERTY HOLDINGS, LLC | (21, 29) | | | | | | | | | | | | | PART OF CONTRACT I |
| 63 | LACROSS, EDWARD H. & YVONNE M. | 96 | 136+93.67 RT. | 137+63.91 RT. | | | D & C | (T) | | | | | | | SEWER, WATER & DRAINAGE IF APPLICABLE |
| | | | 136+93.67 RT. | 137+63.91 RT. | | | WALK | (T) | | | | | | | SIDEWALK |
| | | | 137+37.04 RT. | 137+63.91 RT. | | | INSTALL & MAINT. | (P) | | | | | | | UNDERGROUND UTILITIES |
| 64 | McCARTHY, MARK N. & | 96 | 137+63.91 RT. | 138+28.74 RT. | | | D & C | (T) | | | | | | | SEWER, WATER & DRAINAGE IF APPLICABLE |
| | McCARTHY, TODD G. | | 137+63.91 RT. | 138+28.74 RT. | | | WALK | (T) | | WDOE | 7/28/2010 | BARRE CITY | 260 | 406- | SIDEWALK |
| | | | 137+63.91 RT. | 138+28.74 RT. | | | INSTALL & MAINT. | (P) | | | | | | 407 | UNDERGROUND UTILITIES |
| 65 | TD BANK, NA | 96 | S. MAIN ST. 600+29.53 RT. | S. MAIN ST. 601+01.96 RT. | | | WALK | (T) | | GTR | 8/3/2010 | BARRE CITY | 260 | 568- | SIDEWALK |
| | | | S. MAIN ST. 600+54.70 RT.± | | | | INSTALL | (T) | | | | | | 569 | WALL, REPAIR SIDEWALK & |
| | | | | | | | | | | | | | | | APPURTENANCES, SEWER, WATER, |
| | | | | | | | | | | | | | | | POWER & OIL FILLER |
| 66 | ABG CORPORATION | 96 | S. MAIN ST. 601+01.96 RT. | S. MAIN ST. 601+64.53 RT. | | | WALK | (T) | | | | | | | SIDEWALK |
| 67 | UNITED STATES OF AMERICA POSTAL SERVICE | (22, 29) | | | | | | | | | | | | | PART OF CONTRACT I |
| 68 | N AND M INVESTMENTS, LLC | (22, 30) | | | | | | | | | | | | | PART OF CONTRACT I |
| 69 | UNIVERSALIST CHURCH, THE FIRST CHURCH | (22,29,33) | | | | | | | | | | | | | PART OF CONTRACT I |
| | IN BARRE | | | | | | | | | | | | | | |
| 70 | DELETED | | | | | | | | | | | | | | |
| 71 | ALDRICH PUBLIC LIBRARY | (22, 29) | | | | | | | | | | | | | PART OF CONTRACT I |

## TABLE OF REVISIONS

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|---|---|---|---|
| | | PLOT DATE | 3/4/11 |

**PLAN LEGEND**

| | | | |
|---|---|---|---|
| EXISTING RIGHT-OF-WAY | | TOE OF SLOPE | |
| TAKING WITH ACCESS | | TOP OF CUT | |
| TAKING WITHOUT ACCESS | SR (P) | SLOPE RIGHT | |
| CLEAR ZONE | CONST. (T) | CONSTRUCTION RIGHT | |
| PROPERTY LINE | -PDF PDF- | PROJECT DEMARCATION FENCE | |

| | |
|---|---|
| D&C | - DISCONNECT & CONNECT |
| EC | - EROSION CONTROL |
| (P) | - PERMANENT |
| (T) | - TEMPORARY |
| DR. | - DRAINAGE RIGHT |
| DT. | - DITCHING RIGHT |
| CH. | - CHANNEL RIGHT |
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APPROVED BY: HARRY PETROVS
CHIEF, PLANS & TITLES

DATE: 10-29-09

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-I(34) CONTRACT 2

FILE NAME: detailsheets .dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: D. PECK
ROW SHEET 84 OF 100

PLOT DATE: 04-MAR-2011
DRAWN BY: MT
CHECKED BY: FM
SHEET 212 OF 339

**STATE OF VERMONT**
**AGENCY OF TRANSPORTATION**

# RIGHT-OF-WAY DETAIL SHEET

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | AREA± | AREA± | TYPE | (T)/(P) | AREA ± | TITLE | DATE | TOWN / CITY | BOOK | PAGE | |
| 72 | TELEPHONE OPERATING CO. OF VT, LLC - LESSOR<br>CITY OF BARRE - LESSEE | (22, 31,32) | | | | | | | | | | | | | PART OF CONTRACT I |
| 73 | DRURY, MARIE L. | (22, 32) | | | | | | | | | | | | | PART OF CONTRACT I |
| 74 | DELETED | | | | | | | | | | | | | | FORMERLY BARRE CITY/HIGUERA |
| 75 | STATE OF VERMONT - LESSOR<br>WASHINGTON CONTY RAILROAD - LESSEE | 87 | VT RTE 62 12+57.36 RT.<br>VT RTE 62 12+56.06 RT.<br>VT RTE 62 12+54.66 RT.<br>VT RTE 62 12+81.64 RT. | VT RTE 62 12+92.53 RT.<br>VT RTE 62 12+59.12 RT.<br>VT RTE 62 12+76.99 LT.<br>VT RTE 62 12+93.86 RT. | | | CUL. & DI<br>INSTALL<br>CROSSING EASEMENT<br>INSTALL | (P)<br>(T)<br>(P)<br>(T) | | | | | | | <br>PDF & EROSION CONTROL<br>RR STA. VT. RTE. 62 12+71.27 ℄ = RR STA. 224+32.81 ℄<br>PDF & EROSION CONTROL |
| 76 | FIREHOUSE AT BARRE, LLC | (22, 33) | | | | | | | | | | | | | PART OF CONTRACT I |
| 77 | RONSON, TODD S.& MARY E. | (22, 26) | | | | | | | | | | | | | PART OF CONTRACT I |
| 78 | MONTE, DANIEL T. | (22, 27) | | | | | | | | | | | | | PART OF CONTRACT I |
| 79 | GREEN MOUNTAIN POWER CORPORATION | | 110+84.77 RT. | SO. MAIN 604+61.64 LT. | | | | | | | | | | | UTILITY |
| 80 | TELEPHONE OPERATING CO. OF VT. LLC | | 110+84.79 RT. | SO. MAIN 604+61.64 LT. | | | | | | | | | | | UTILITY |
| 81 | BARRE, CITY OF (SEWER, WATER) | | 110+84.77 RT. | SO. MAIN 604+61.64 LT. | | | | | | | | | | | UTILITY |
| 82 | CHARTER ONE COMMUNICATIONS | | 110+84.77 RT. | SO. MAIN 604+61.64 LT. | | | | | | | | | | | UTILITY |

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- TOP OF CUT
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| D&C | - DISCONNECT & CONNECT |
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APPROVED BY: NAME
CHIEF, PLANS & TITLES

DATE: DATE

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-I(34) CONTRACT 2

FILE NAME: detailsheets .dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: D. PECK
ROW SHEET 85 OF 100

PLOT DATE: 04-MAR-2011
DRAWN BY: MT
CHECKED BY: FM
SHEET 213 OF 339

PROPOSED GRANITE BOLLARD AND CHAIN FENCE
PROPOSED ORNAMENTAL STREET LIGHT
PROPOSED STREET LIGHT WITH LUMINAIRE BY GMP
PROPOSED SIGNAL POLE WITH LUMINAIRE
PROPOSED TRASH RECEPTACLE
PROPOSED PARKING METER
PROPOSED TREE LOCATION
4' x 5' PROPOSED TREE PIT
PROPOSED FIRE HYDRANT

TO R.O.W. LAYOUT 3

VT. STATE PLANE GRID

**BEGIN ROW PROJECT**
**F EGC-F 026-1(34)**
**STA. 110+84.77 RT.(32.68')**
**CONTRACT 2**

**MALONE, PATRICK M.**
BUILDING

**NORWAY BARRE REAL ESTATE LLC.**
393-395 No. Main St.

**CITY OF BARRE DENTE PARK**
STATUE

**386 NORTH MAIN STREET, LLC**
386 No.Main St.

**SIMONDS, EDWARD C.**
372-8 No.Main St.

**Z'S NORTHERN PROPERTIES**
379 No. Main St.

**DOWNTOWN BARRE DEVELOPMENT**

**TIMBERLAKE ASSOCIATES**
377 No. Main St.

**PATEL,PARESH ET AL**
362 No. Main St.

**MACDUFF, PAUL D. & BETTY LOU – LESSOR**
**CHAMPLAIN OIL COMPANY INC.– LESSEE**
360 No. Main St.

**CHAMPLAIN OIL COMPANY INC.**
350 No. Main St.

**VT PROPERTIES – LESSOR**
**CHAMPLAIN OIL – LESSEE**

BROOK ST.
COTTAGE STREET
NORTH MAIN STREET
U.S. ROUTE 302

DISCONNECT & CONNECT (T)
INSTALL & MAINT.(P)
DRIVE(T)
SR(T)
WALK(T)

116+78.00 68.78' LT.
116+77.32 49.56' LT.
116+74.50 21.81' LT.
116+78.35

TO R.O.W. LAYOUT 2

TO R.O.W. LAYOUT 7

NOTES:
1. SAWCUT OF EXISTING SIDEWALK SHALL BE INCIDENTAL TO ITEMS CONSTRUCTION.
2. REMOVE ABANDONED GAS LINES WITHIN LIMITS OF FULL-DEPTH CONSTRUCTION. PLUG EXISTING LINES AT LIMITS OF CONSTRUCTION.
3. THE PROPOSED SEWER AND WATER UTILITIES SHOWN ON THESE GENERAL PLANS ARE FOR INFORMATIONAL PURPOSES REFER TO THE SEWER AND WATER PLANS BY DUFRESNE ASSOCIATES FOR ACTUAL CONSTRUCTION INFORMATION.
4. SEE THE ITEM DETAIL & DRAINAGE SHEETS AND CROSS SECTIONS FOR PROPOSED DRAINAGE INFORMATION CORRESPONDING TO NOTE NUMBERS SHOWN BY: (#)

COLD PLANING, BITUMINOUS PAVEMENT
STA 110+65 - 112+00
STA 111+69 - 111+87 RT
STA 111+92 - 112+12 RT
STA 112+36 - 112+60 LT
STA 112+49 - 112+61 RT
STA 114+79 - 115+07 RT
STA 115+04 - 115+34 LT
STA 115+46 - 116+25 LT
STA 116+02 - 116+50 RT
SL STA 10+21 - 11+75
SL STA 20+51 - 21+75
SL STA 30+49 - 31+42

FOR LANDSCAPING DETAILS SEE SHEET 33 OF 100

FOR WATER & SEWER DETAILS SEE SHEET 54 OF 100

FOR LIGHTING AND POWER DETAILS SEE SHEET 25 OF 100

**FOR R.O.W. USE ONLY**

20 0 20 40
FEET

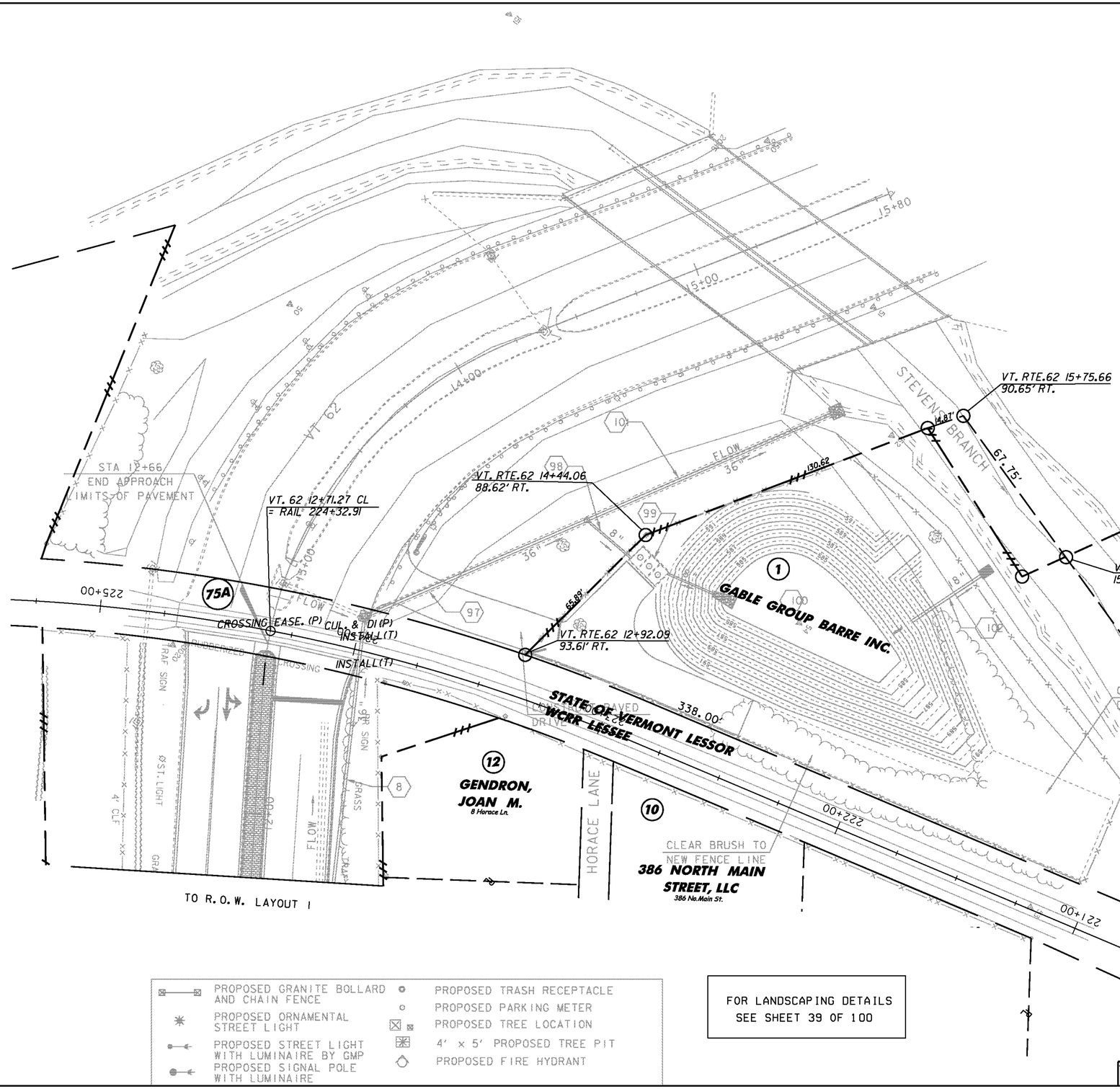
ROW LAYOUT 1

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY - NORTH MAIN ST.
PROJECT NUMBER: F EGC-F 026-1(34) - CONTRACT 2

FILE NAME: z85b0110bdr cp
PROJECT LEADER: G. BAKOS
DESIGNED BY: D. PECK
ROW SHEET 86 OF 100

PLOT DATE: 04-MAR-2011
DRAWN BY: D. PECK
CHECKED BY:
SHEET 214 OF 339




PROPOSED GRANITE BOLLARD AND CHAIN FENCE
PROPOSED ORNAMENTAL STREET LIGHT
PROPOSED STREET LIGHT WITH LUMINAIRE BY GMP
PROPOSED SIGNAL POLE WITH LUMINAIRE
PROPOSED TRASH RECEPTACLE
PROPOSED PARKING METER
PROPOSED TREE LOCATION
4' x 5' PROPOSED TREE PIT
PROPOSED FIRE HYDRANT

FOR LANDSCAPING DETAILS
SEE SHEET 39 OF 100

VT. STATE PLANE GRID N

CLEARING AND GRUBBING, INCLUDING INDIVIDUAL TREES AND STUMPS
SL STA 11+00 - 12+61 RT
SL STA 12+83 - 12+91 LT
SL STA 12+97 - 15+66 RT

REMOVAL AND DISPOSAL OF GUARDRAIL
SL STA 13+04 - 13+80 RT

MANUFACTURED TERMINAL SECTION, FLARED
SL STA 13+31 - 13+80 RT

REMOVAL OF EXISTING FENCE
SL STA 13+24 - 15+21 RT

CHAIN-LINK FENCE, 8 FT (POLY-COATED BLACK)
SL STA 12+95 - 15+80 RT

GATE FOR CHAIN-LINK FENCE, 8 FEET (POLY-COATED BLACK)
SL STA 13+28 RT

COLD PLANING, BITUMINOUS PAVEMENT
SL STA 11+75 - 12+66

STONE FILL, TYPE III
SL STA 14+57 RT
SL STA 15+28 RT
SL STA 15+59 RT

GEOTEXTILE FOR FILTER CURTAIN
SL STA 15+07 - 15+50 RT

PERMANENT EROSION MATTING
SL STA 14+32 - 15+45 RT (POND/ON SLOPES)

NOTE:
1. SEE THE ITEM DETAIL & DRAINAGE SHEETS AND CROSS SECTIONS FOR PROPOSED DRAINAGE INFORMATION CORRESPONDING TO NOTE NUMBERS SHOWN BY: (#)

**FOR R.O.W. USE ONLY**

ROW LAYOUT 2

PROJECT NAME: BARRE CITY - NORTH MAIN ST.
PROJECT NUMBER: F EGC-F 026-1(34) - CONTRACT 2

FILE NAME: z85b010bdr cp
PROJECT LEADER: G. BAKOS
DESIGNED BY: D. PECK
ROW SHEET 87 OF 100

PLOT DATE: 04-MAR-2011
DRAWN BY: D. PECK
CHECKED BY:
SHEET 215 OF 339

VHB Vanasse Hangen Brustlin, Inc.

PROPOSED GRANITE BOLLARD AND CHAIN FENCE
PROPOSED ORNAMENTAL STREET LIGHT
PROPOSED STREET LIGHT WITH LUMINAIRE BY GMP
PROPOSED SIGNAL POLE WITH LUMINAIRE
PROPOSED TRASH RECEPTACLE
PROPOSED PARKING METER
PROPOSED TREE LOCATION
4' x 5' PROPOSED TREE PIT
PROPOSED FIRE HYDRANT

VT. STATE PLANE GRID N

TO R.O.W. LAYOUT 1

9 NORWAY BARRE REAL ESTATE LLC 6-8 Corti St.

NF R & G. PROPERTIES

WATKINS, THOMAS V. III & CROWLEY - WATKINS, JOANNE 18 Maple Ave.

VENMAR, MARIANNE S. 20 Maple Ave.

NF VENMAR, MARIANNE S.

6

5

CORTI STREET

MAPLE AVENUE

SUMMER STREET

SHORT STREET

PAVED DRIVE

PAVED LOT

GRASS CEM.

SHRUB

SR(T)

INSTALL & MAINT.(P)

WALK(T)

DRIVE(T)

RELOCATE UTILITY POLE (BY GMP)

END APPROACH STA 26+70 LIMITS OF PAVEMENT

LIMITS OF PAVEMENT

EXCEPT & RESERVE

INSTALL(T)

2

3

THOMPSON, ROBERT F. & BRENDA J. 118 Summer St.

PEARSON LIVING TRUST 21 Maple Ave.

HERSCHEL, LUCILLE J. & MOORE, W. GLENN 117 Summer St.

7

8

KEATON, WILLIAM H. & MARIE Z. 114-115 Summer St.

TO R.O.W. LAYOUT 4

SEE INSET "A" FOR PARCEL #2 & #3 DETAIL ROW SHEET 89 OF 100

CHAIN-LINK FENCE, 4 FEET
SL STA 23+57 RT - SL STA 400+83 RT

REMOVAL OF EXISTING FENCE
SL STA 23+57 RT - SL STA 400+83 RT

COLD PLANING, BITUMINOUS PAVEMENT
SL STA 21+75 - 26+70
SL STA 400+19 - 402+75
SL STA 400+64 - 400+86 LT

FOR LANDSCAPING DETAILS SEE SHEET 38 OF 100

NOTES:

1. SAWCUT OF EXISTING SIDEWALK SHALL BE INCIDENTAL TO ITEMS 618.10 & 618.11.
2. REMOVE ABANDONED GAS LINES TO LIMITS OF FULL-DEPTH CONSTRUCTION. PLUG EXISTING LINES AT LIMITS OF CONSTRUCTION.
3. THE PROPOSED SEWER AND WATER UTILITIES SHOWN ON THESE GENERAL PLANS ARE FOR INFORMATIONAL PURPOSES REFER TO THE SEWER AND WATER PLANS BY DUFRESNE ASSOCIATES FOR ACTUAL CONSTRUCTION INFORMATION.
4. SEE THE ITEM DETAIL & DRAINAGE SHEETS AND CROSS SECTIONS FOR PROPOSED DRAINAGE INFORMATION CORRESPONDING TO NOTE NUMBERS SHOWN BY: (#)

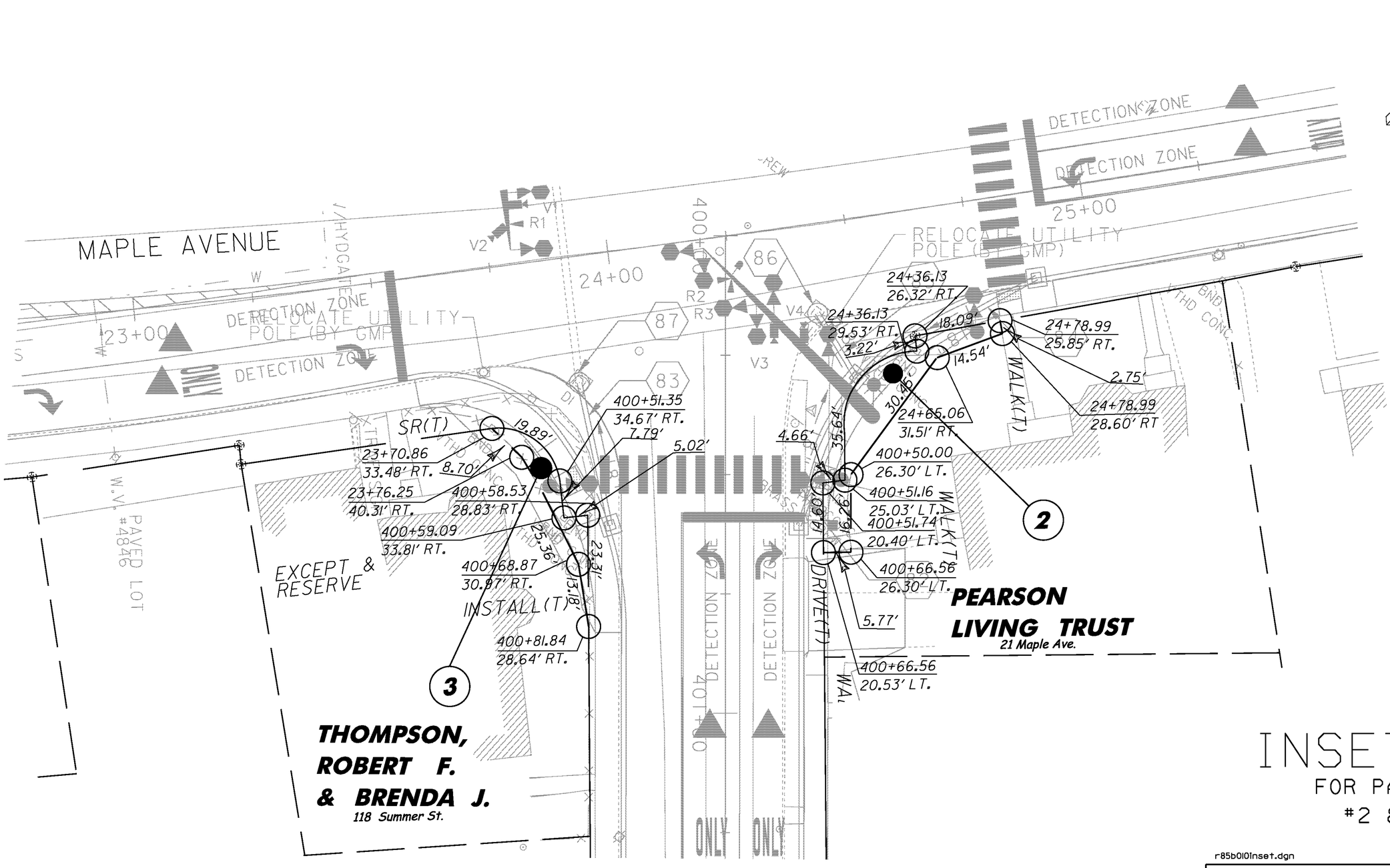
**FOR R.O.W. USE ONLY**

20 0 20 40
FEET

ROW LAYOUT 3

| | |
|---|---|
| PROJECT NAME: | BARRE CITY - NORTH MAIN ST. |
| PROJECT NUMBER: | F EGC-F 026-1(34) - CONTRACT 2 |
| FILE NAME: z85b010bdr cp | PLOT DATE: 04-MAR-2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: D. PECK |
| DESIGNED BY: D. PECK | CHECKED BY: |
| ROW SHEET 88 OF 100 | SHEET 216 OF 339 |

VHB Vanasse Hangen Brustlin, Inc.



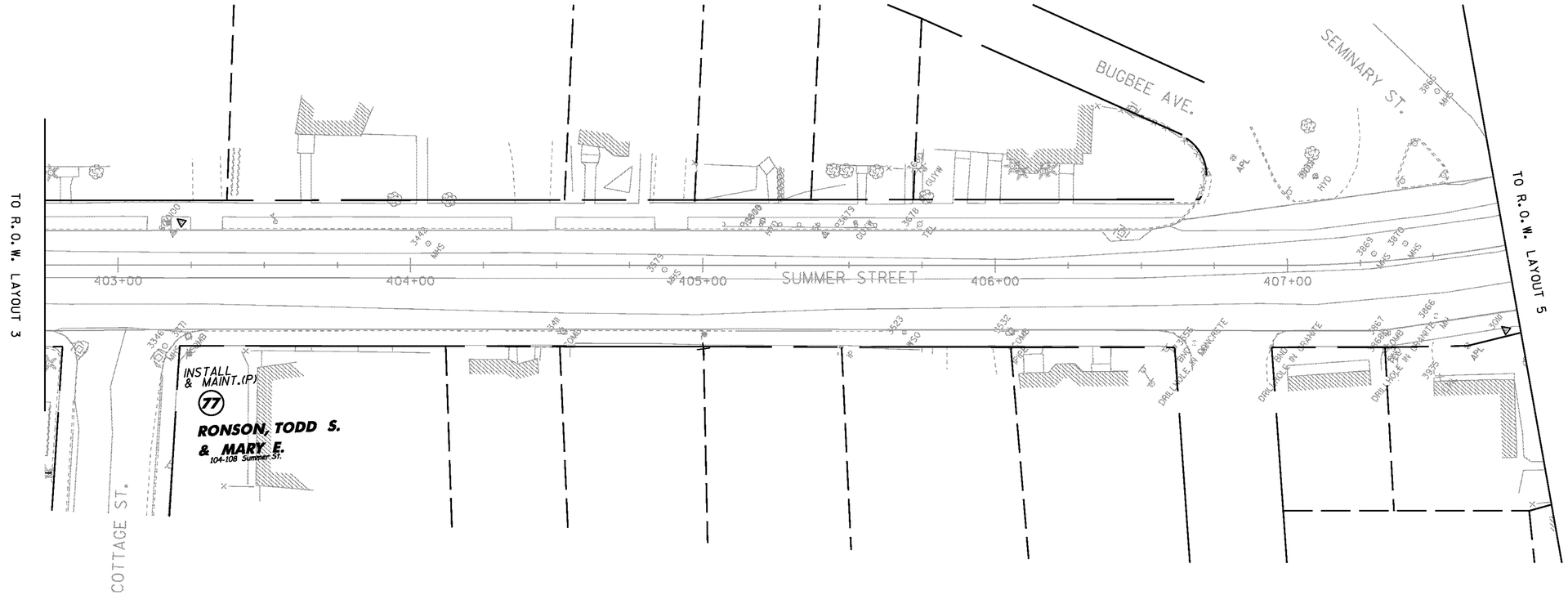

# INSET "A"

FOR PARCELS #2 & #3

**FOR R.O.W. USE ONLY**

r85b0101nset.dgn

| | |
|---|---|
| PROJECT NAME: | BARRE CITY - NORTH MAIN ST. |
| PROJECT NUMBER: | F EGC-F 026-1(34) - CONTRACT 2 |
| FILE NAME: z85b0101bdr cp | PLOT DATE: 04-MAR-2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: D. PECK |
| DESIGNED BY: D. PECK | CHECKED BY: |
| ROW SHEET 89 OF 100 | SHEET 217 OF 339 |




COLD PLANING, BITUMINOUS PAVEMENT & RESURFACING
SL STA 402+75 - 407+75

**FOR R.O.W. USE ONLY**

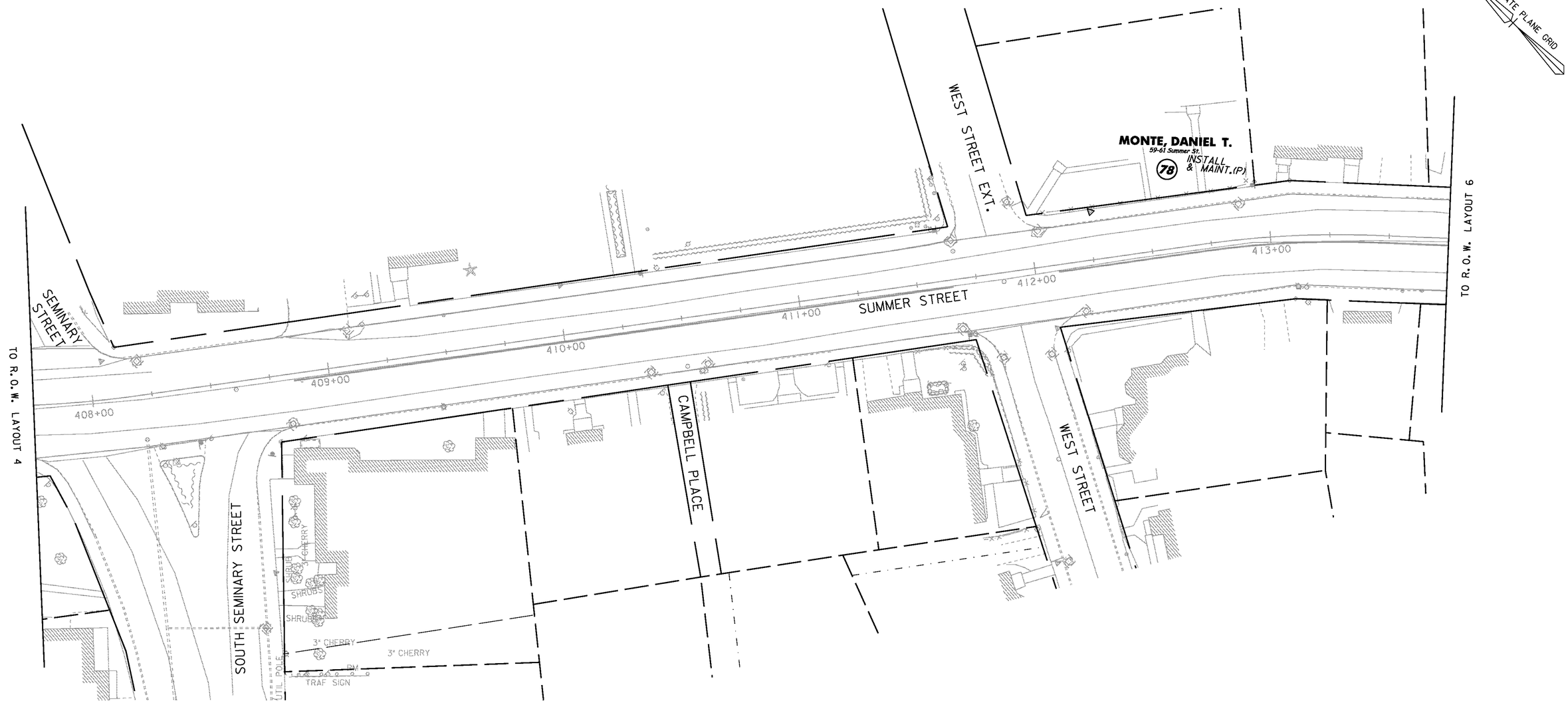
ROW LAYOUT 4

| | |
|---|---|
| PROJECT NAME: | BARRE CITY - NORTH MAIN ST. |
| PROJECT NUMBER: | F EGC-F 026-1(34) - CONTRACT 2 |

| | |
|---|---|
| FILE NAME: z85b010bdr spm | PLOT DATE: 04-MAR-2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: D. PECK |
| DESIGNED BY: D. PECK | CHECKED BY: |
| ROW SHEET 90 OF 100 | SHEET 218 OF 339 |

20 0 20 40
FEET

VHB Vanasse Hangen Brustlin, Inc.




COLD PLANING, BITUMINOUS PAVEMENT & RESURFACING
SL STA 407+75 - 413+75

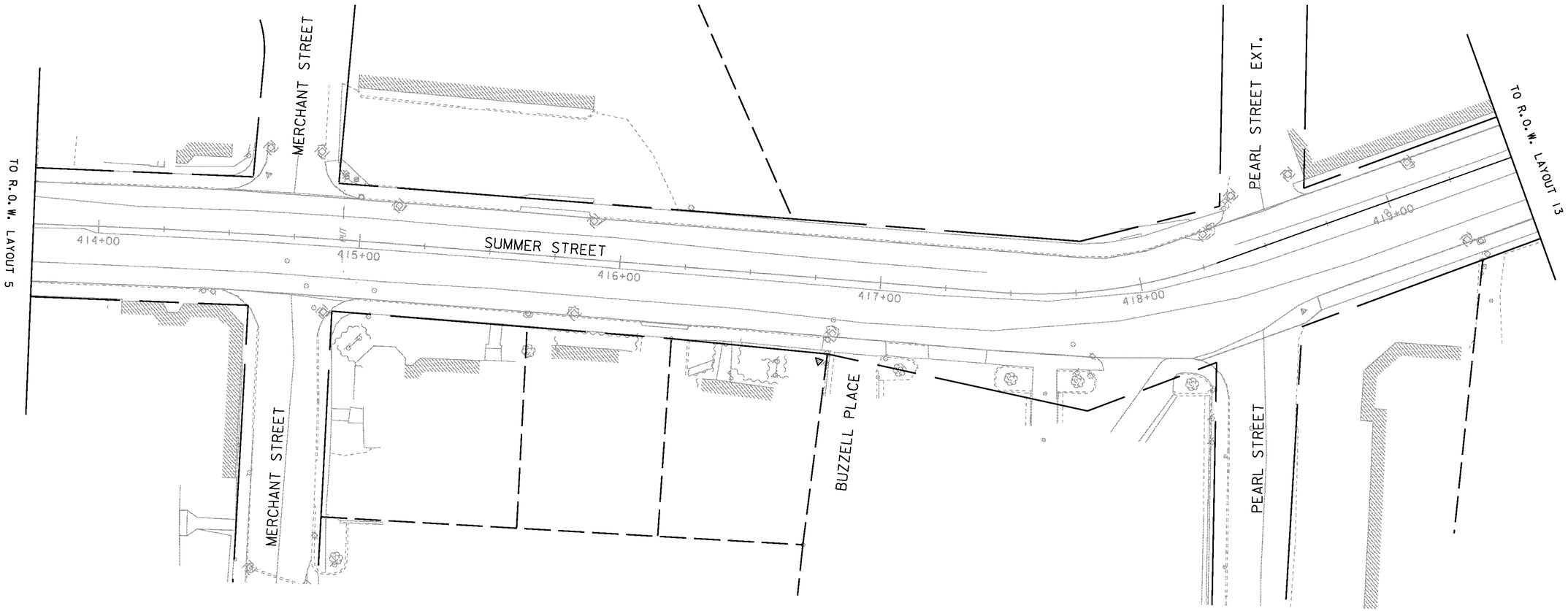
**FOR R.O.W. USE ONLY**

ROW LAYOUT 5

20 0 20 40
FEET

VHB Vanasse Hangen Brustlin, Inc.

| | |
|---|---|
| PROJECT NAME: BARRE CITY - NORTH MAIN ST. | |
| PROJECT NUMBER: F EGC-F 026-1(34) - CONTRACT 2 | |
| FILE NAME: z85b010bdr spm | PLOT DATE: 04-MAR-2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: D. PECK |
| DESIGNED BY: D. PECK | CHECKED BY: |
| ROW SHEET 91 OF 100 | SHEET 219 OF 339 |




COLD PLANING, BITUMINOUS PAVEMENT & RESURFACING
SL STA 413+75 - 419+50

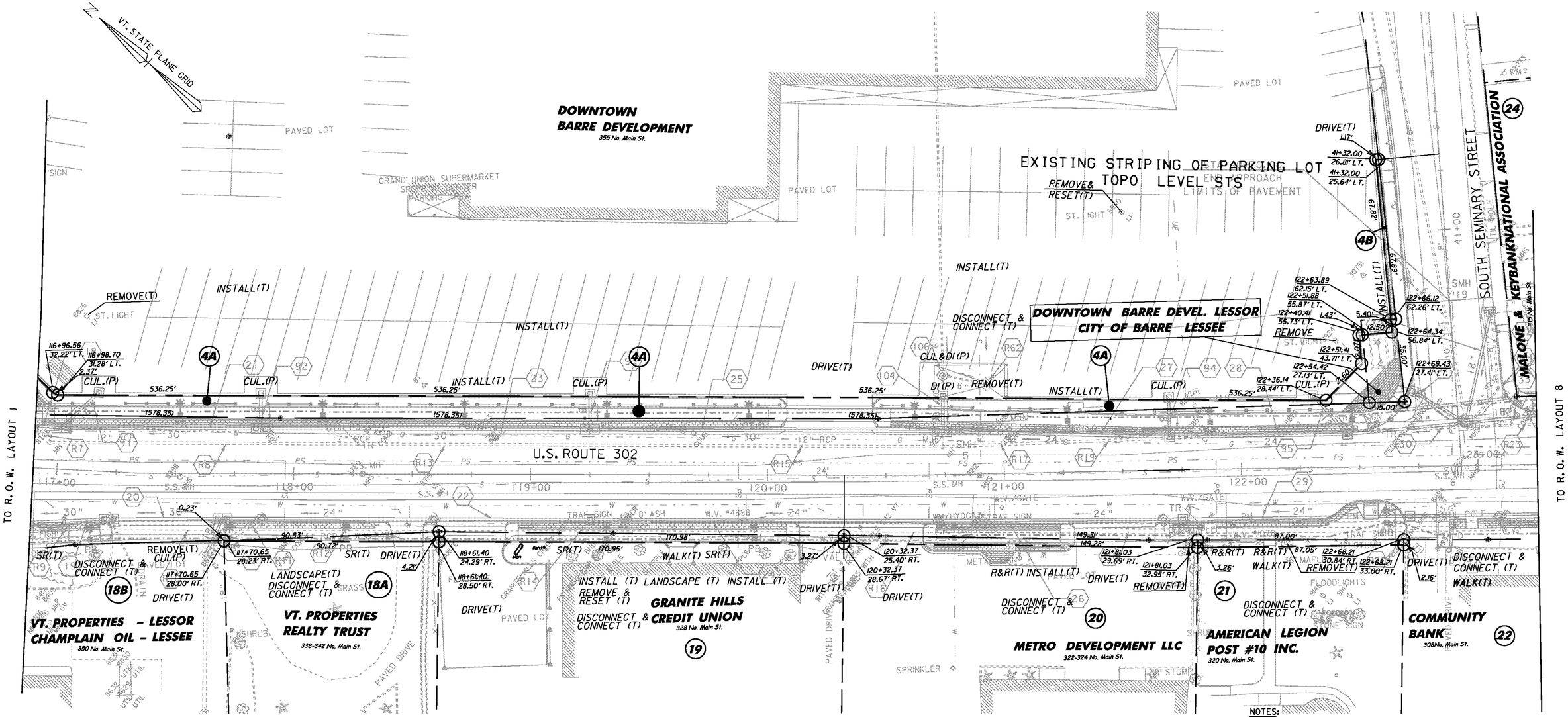
**FOR R.O.W. USE ONLY**

ROW LAYOUT 6

20 0 20 40
FEET

VHB Vanasse Hangen Brustlin, Inc.

| | |
|---|---|
| PROJECT NAME: BARRE CITY - NORTH MAIN ST. | |
| PROJECT NUMBER: F EGC-F 026-1(34) - CONTRACT 2 | |
| FILE NAME: z85b010bdr spm | PLOT DATE: 04-MAR-2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: D. PECK |
| DESIGNED BY: D. PECK | CHECKED BY: |
| ROW SHEET 92 OF 100 | SHEET 220 OF 339 |




COLD PLANING, BITUMINOUS PAVEMENT
STA 117+25 - 117+66 RT
STA 118+42 - 118+55 RT
STA 120+08 - 120+44 LT
STA 122+69 - 122+83 RT
SL STA 40+48 - 40+70

REMOVING AND RESETTING FENCE
STA 121+81 - 122+64 RT

NOTES:
1. SAWCUT OF EXISTING SIDEWALK SHALL BE INCIDENTAL TO ITEMS 618.10 & 618.11.
2. REMOVE ABANDONED GAS LINES TO LIMITS OF FULL-DEPTH CONSTRUCTION. PLUG EXISTING LINES AT LIMITS OF CONSTRUCTION.
3. THE PROPOSED SEWER AND WATER UTILITIES SHOWN ON THESE GENERAL PLANS ARE FOR INFORMATIONAL PURPOSES REFER TO THE SEWER AND WATER PLANS BY DUFRESNE ASSOCIATES FOR ACTUAL CONSTRUCTION INFORMATION.
4. SEE THE ITEM DETAIL & DRAINAGE SHEETS AND CROSS SECTIONS FOR PROPOSED DRAINAGE INFORMATION CORRESPONDING TO NOTE NUMBERS SHOWN BY: (#)

- PROPOSED GRANITE BOLLARD AND CHAIN FENCE
- PROPOSED ORNAMENTAL STREET LIGHT
- PROPOSED STREET LIGHT WITH LUMINAIRE BY BMP
- PROPOSED SIGNAL POLE WITH LUMINAIRE
- PROPOSED TRASH RECEPTACLE
- PROPOSED PARKING METER
- PROPOSED TREE LOCATION
- 4' x 5' PROPOSED TREE PIT
- PROPOSED FIRE HYDRANT

FOR LANDSCAPING DETAILS SEE SHEET 34 OF 100

FOR WATER & SEWER DETAILS SEE SHEET 55 OF 100

FOR LIGHTING AND POWER DETAILS SEE SHEET 26 OF 100

**FOR R.O.W. USE ONLY**

20 0 20 40
FEET

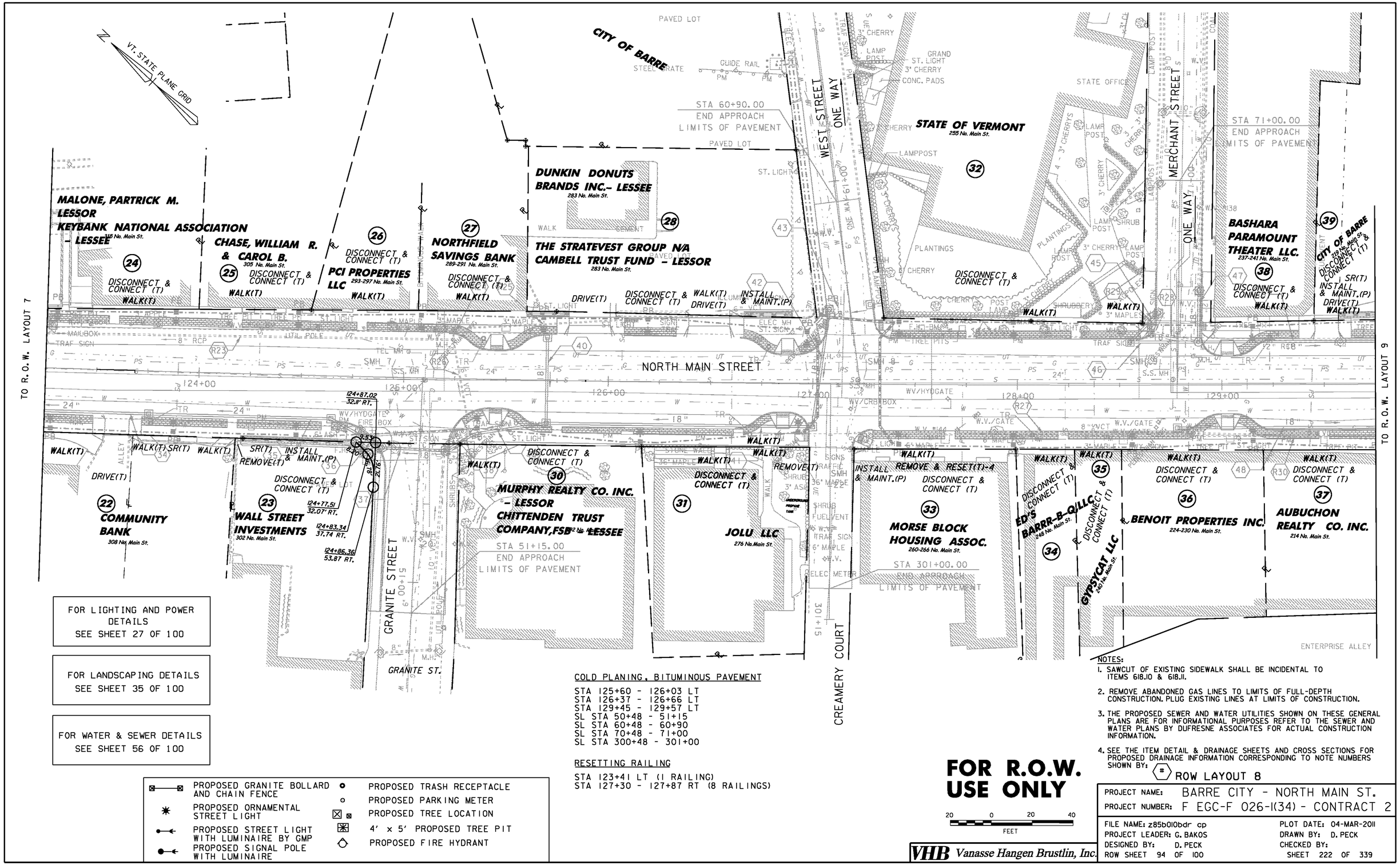
VHB Vanasse Hangen Brustlin, Inc.

ROW LAYOUT 7

PROJECT NAME: BARRE CITY - NORTH MAIN ST.
PROJECT NUMBER: F EGC-F 026-1(34) - CONTRACT 2

FILE NAME: z85b010bdr cp
PROJECT LEADER: G. BAKOS
DESIGNED BY: D. PECK
ROW SHEET 93 OF 100

PLOT DATE: 04-MAR-2011
DRAWN BY: D. PECK
CHECKED BY:
SHEET 221 OF 339




FOR LIGHTING AND POWER DETAILS
SEE SHEET 27 OF 100

FOR LANDSCAPING DETAILS
SEE SHEET 35 OF 100

FOR WATER & SEWER DETAILS
SEE SHEET 56 OF 100

- PROPOSED GRANITE BOLLARD AND CHAIN FENCE
- PROPOSED ORNAMENTAL STREET LIGHT
- PROPOSED STREET LIGHT WITH LUMINAIRE BY GMP
- PROPOSED SIGNAL POLE WITH LUMINAIRE
- PROPOSED TRASH RECEPTACLE
- PROPOSED PARKING METER
- PROPOSED TREE LOCATION
- 4' x 5' PROPOSED TREE PIT
- PROPOSED FIRE HYDRANT

COLD PLANING, BITUMINOUS PAVEMENT

STA 125+60 - 126+03 LT
STA 126+37 - 126+66 LT
STA 129+45 - 129+57 LT
SL STA 50+48 - 51+15
SL STA 60+48 - 60+90
SL STA 70+48 - 71+00
SL STA 300+48 - 301+00

RESETTING RAILING

STA 123+41 LT (1 RAILING)
STA 127+30 - 127+87 RT (8 RAILINGS)

NOTES:

1. SAWCUT OF EXISTING SIDEWALK SHALL BE INCIDENTAL TO ITEMS 618.10 & 618.11.
2. REMOVE ABANDONED GAS LINES TO LIMITS OF FULL-DEPTH CONSTRUCTION. PLUG EXISTING LINES AT LIMITS OF CONSTRUCTION.
3. THE PROPOSED SEWER AND WATER UTILITIES SHOWN ON THESE GENERAL PLANS ARE FOR INFORMATIONAL PURPOSES REFER TO THE SEWER AND WATER PLANS BY DUFRESNE ASSOCIATES FOR ACTUAL CONSTRUCTION INFORMATION.
4. SEE THE ITEM DETAIL & DRAINAGE SHEETS AND CROSS SECTIONS FOR PROPOSED DRAINAGE INFORMATION CORRESPONDING TO NOTE NUMBERS SHOWN BY: (#) ROW LAYOUT 8

**FOR R.O.W. USE ONLY**

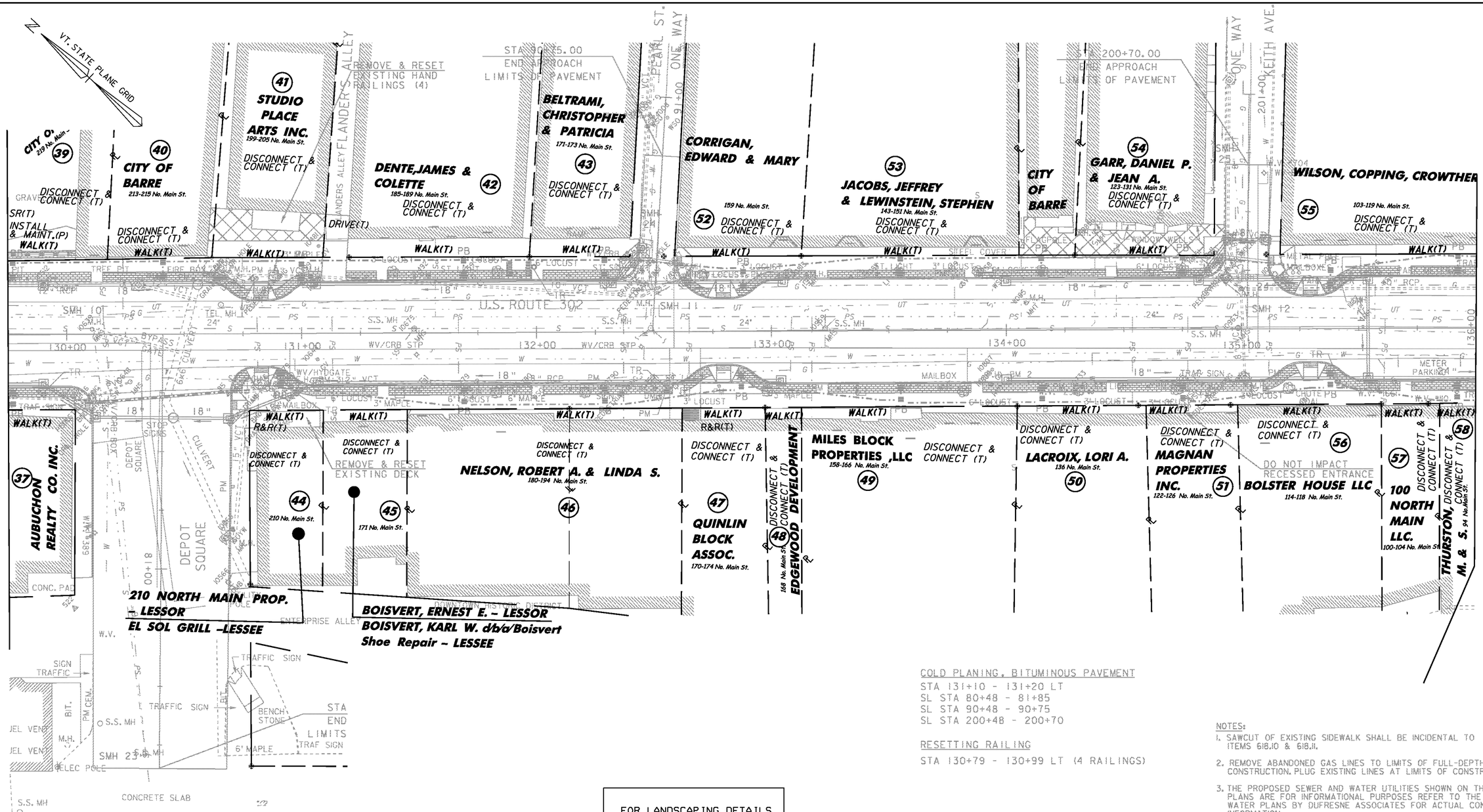
20 0 20 40
FEET

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: BARRE CITY - NORTH MAIN ST.
PROJECT NUMBER: F EGC-F 026-1(34) - CONTRACT 2

FILE NAME: z85b010bdr cp
PROJECT LEADER: G. BAKOS
DESIGNED BY: D. PECK
ROW SHEET 94 OF 100

PLOT DATE: 04-MAR-2011
DRAWN BY: D. PECK
CHECKED BY:
SHEET 222 OF 339




FOR LANDSCAPING DETAILS
SEE SHEET 36 OF 100

FOR LIGHTING AND POWER DETAILS
SEE SHEET 28 OF 100

FOR WATER & SEWER DETAILS
SEE SHEET 57 OF 100

- PROPOSED GRANITE BOLLARD AND CHAIN FENCE
- PROPOSED ORNAMENTAL STREET LIGHT
- PROPOSED STREET LIGHT WITH LUMINAIRE BY GMP
- PROPOSED SIGNAL POLE WITH LUMINAIRE
- PROPOSED TRASH RECEPTACLE
- PROPOSED PARKING METER
- PROPOSED TREE LOCATION
- 4' x 5' PROPOSED TREE PIT
- PROPOSED FIRE HYDRANT

COLD PLANING, BITUMINOUS PAVEMENT
STA 131+10 - 131+20 LT
SL STA 80+48 - 81+85
SL STA 90+48 - 90+75
SL STA 200+48 - 200+70

RESETTING RAILING
STA 130+79 - 130+99 LT (4 RAILINGS)

NOTES:
1. SAWCUT OF EXISTING SIDEWALK SHALL BE INCIDENTAL TO ITEMS 618.10 & 618.11.
2. REMOVE ABANDONED GAS LINES TO LIMITS OF FULL-DEPTH CONSTRUCTION. PLUG EXISTING LINES AT LIMITS OF CONSTRUCTION.
3. THE PROPOSED SEWER AND WATER UTILITIES SHOWN ON THESE GENERAL PLANS ARE FOR INFORMATIONAL PURPOSES REFER TO THE SEWER AND WATER PLANS BY DUFRESNE ASSOCIATES FOR ACTUAL CONSTRUCTION INFORMATION.
4. SEE THE ITEM DETAIL & DRAINAGE SHEETS AND CROSS SECTIONS FOR PROPOSED DRAINAGE INFORMATION CORRESPONDING TO NOTE NUMBERS SHOWN BY: ※

**FOR R.O.W. USE ONLY**

20 0 20 40
FEET

ROW LAYOUT 9

PROJECT NAME: BARRE CITY - NORTH MAIN ST.
PROJECT NUMBER: F EGC-F 026-1(34) - CONTRACT 2

FILE NAME: z85b010bdr cp
PROJECT LEADER: G. BAKOS
DESIGNED BY: D. PECK
ROW SHEET 95 OF 100

PLOT DATE: 04-MAR-2011
DRAWN BY: D. PECK
CHECKED BY:
SHEET 223 OF 339

VHB Vanasse Hangen Brustlin, Inc.

VT. STATE PLANE GRID

TO R.O.W. LAYOUT 12

TO R.O.W. LAYOUT 14

TO R.O.W. LAYOUT 9

TO R.O.W. LAYOUT 11

TO R.O.W. LAYOUT 14

COLD PLANING, BITUMINOUS PAVEMENT
STA 136+64 - 136+78 LT
STA 139+60 - 140+25
ST STA 600+48 - 603+75
SL STA 500+25 - 501+60
SL STA 700+53 - 701+50
SL STA 800+19 - 800+65

(71) ALDRICH PUBLIC LIBRARY
6 Washington St.

701+32.15 27.64' RT.
SLOPE(T) 4.97'
139+35.54 61.84' LT.
WALK(T) 30.97' 30.63'
139+61.38 45.46' LT.
139+88.42 35.00' LT.
701+32.15 22.78' LT.
56.71'
55.70'
139+32.77 32.65' LT.

STA 138+00.00
END PROJECT
BEGIN APPROACH

138+75.17 38.22' LT.
138+78.88 30.68' LT.
138+67.29 29.37' LT.

IB PROPERTY HOLDINGS ,LLC
47-59 No. Main St. (62)

DISCONNECT & CONNECT (T)
INSTALL &MAINT.(P)
WALK(T)

WILSON, COPPING & CROWTHER

81-85 NORTH MAIN ST. LLC (60)
81-85 No. Main St.

ORMSBY FAMILY TRUST U/A (61)
71-77 No. Main St.

(55)

INSTALL &MAINT.(P)
WALK(T)
DRIVE(T)

NORTH MAIN STREET

DISCONNECT & CONNECT (T)
INSTALL & MAINT.(P)
WALK(T)

(63) LACROSS, EDWARD H. & YVONNE M.

(64) McCARTHY, MARK N. & McCARTHY, TODD G.
46-54 No. Main St.

STA 139+00.00
BEGIN PROJECT
BEGIN APPROACH

(65) TD BANK, NA.
26-40 No. Main St.

(66) ABG CORP.
14-22 No. Main St.

CITY OF BARRE

GRANITE CITY HOLDING COMPANY INC. (59)
84-88 No. Main St.

THURSTON, M. & S. (58)

CITY OF BARRE

STA 140+00

STONE STATUE
5' WALL
FLAGPOLE
POST
POLE STEEL 4"
3" SPRUCE
3" ASH
8" SPRUCE
3" APPLE
SIGN HISTORICAL
LOCUST 12"
HISTORICAL SIGN
POLE SIGN
ST. SIGN
SHRUBS
TRAF SIGNAL
CHURCH ST.
ONE WAY
24'-0"
12'-0"
801+00

STA 800+65.00
END APPROACH
LIMITS OF PAVEMENT

UNIVERSALIST CHURCH THE FIRST CHURCH IN BARRE (69)
19 Church St.

603+11.42 41.68' LT.
603+12.09 41.60' LT.
603+12.59 31.48' LT.
603+18.29 42.57' LT.
603+37.55 19.50' LT
2.02'
603+37.55 17.49' LT.
603+07.76 19.06' LT.
0.63'
INSTALL & MAINT. (P)-2
INSTALL & MAINT. (P)
INSTALL & MAINT. (P)-(4)
REMOVE & RESET (T)
SR1(T)

(67) USA POST OFFICE
3 So. Main St.

PROSPECT ST.
CONCRETE SIDEWALK
FIRE ESCAPE
CONCRETE SIDEWALK
501+00

STA 501+60.00
END APPROACH
LIMITS OF PAVEMENT

FOR R.O.W. USE ONLY

NOTES:
1. SAWCUT OF EXISTING SIDEWALK SHALL BE INCIDENTAL TO ITEM ITEM 618.10 & 618.11.
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3. THE PROPOSED SEWER AND WATER UTILITIES SHOWN ON THESE GENERAL PLANS ARE FOR INFORMATIONAL PURPOSES REFER TO THE SEWER AND WATER PLANS BY DUFRESNE ASSOCIATES FOR ACTUAL CONSTRUCTION INFORMATION.
4. SEE THE ITEM DETAIL & DRAINAGE SHEETS AND CROSS SECTIONS FOR PROPOSED DRAINAGE INFORMATION CORRESPONDING TO NOTE NUMBERS SHOWN BY: (#)


FOR LANDSCAPING DETAILS SEE SHEET 37 OF 100

FOR LIGHTING AND POWER DETAILS SEE SHEET 29 OF 100

FOR WATER & SEWER DETAILS SEE SHEET 58 OF 100


PROPOSED GRANITE BOLLARD AND CHAIN FENCE
PROPOSED ORNAMENTAL STREET LIGHT
PROPOSED STREET LIGHT WITH LUMINAIRE BY CMP
PROPOSED SIGNAL POLE WITH LUMINAIRE
PROPOSED TRASH RECEPTACLE
PROPOSED PARKING METER
PROPOSED TREE LOCATION
4' x 5' PROPOSED TREE PIT
PROPOSED FIRE HYDRANT

20 0 20 40
FEET

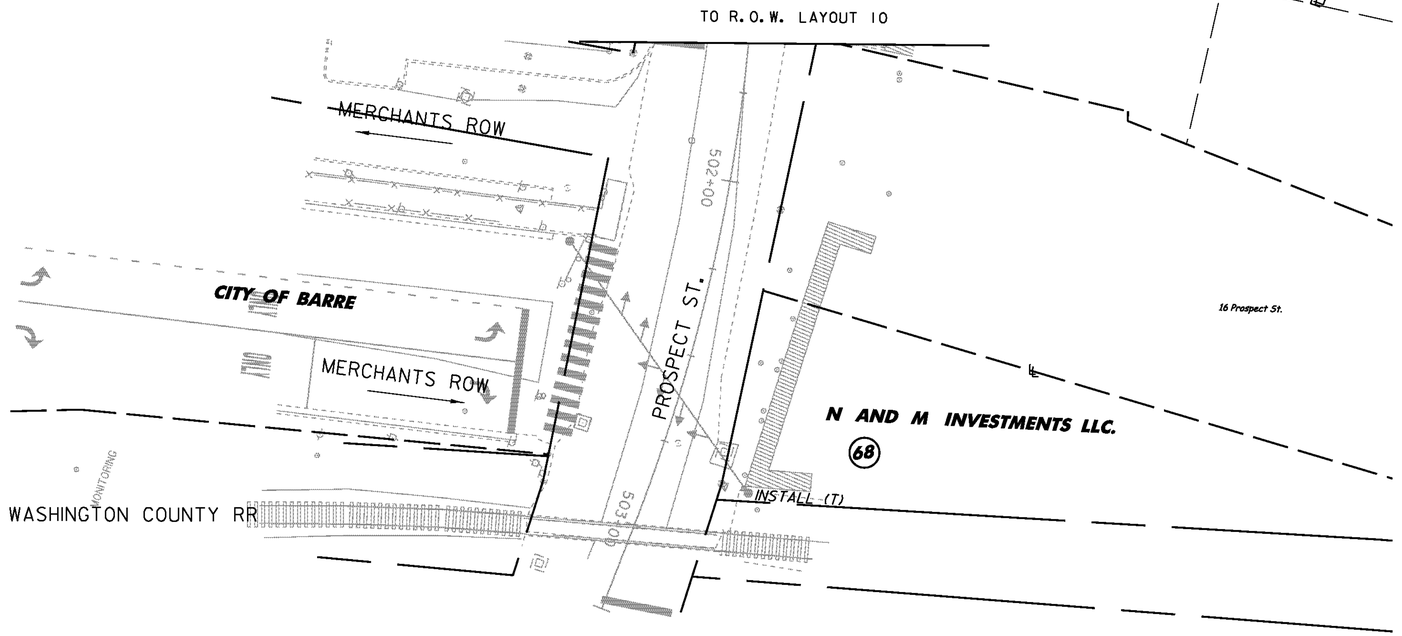
VHB Vanasse Hangen Brustlin, Inc.

ROW LAYOUT 10

PROJECT NAME: BARRE CITY - NORTH MAIN ST.
PROJECT NUMBER: F EGC-F 026-1(34) - CONTRACT 2

FILE NAME: z85b010bdr cp
PROJECT LEADER: G. BAKOS
DESIGNED BY: D. PECK
ROW SHEET 96 OF 100

PLOT DATE: 04-MAR-2011
DRAWN BY: D. PECK
CHECKED BY:
SHEET 224 OF 339




# FOR R.O.W. USE ONLY

ROW LAYOUT 11

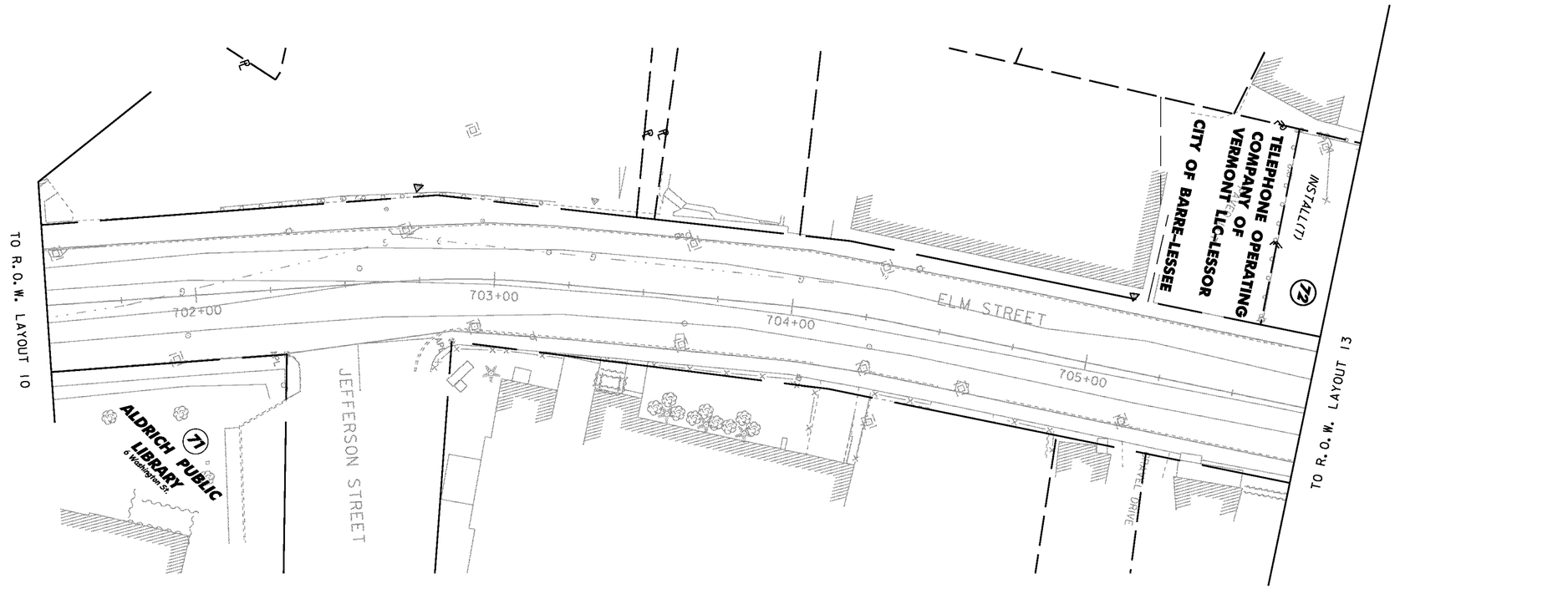
| | |
|---|---|
| PROJECT NAME: | BARRE CITY - NORTH MAIN ST. |
| PROJECT NUMBER: | F EGC-F 026-1(34) - CONTRACT 2 |

| | |
|---|---|
| FILE NAME: z85b010bdr nu | PLOT DATE: 04-MAR-2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: D. PECK |
| DESIGNED BY: D. PECK | CHECKED BY: |
| ROW SHEET 97 OF 100 | SHEET 225 OF 339 |

VHB Vanasse Hangen Brustlin, Inc.

PROPOSED GRANITE BOLLARD AND CHAIN FENCE
PROPOSED ORNAMENTAL STREET LIGHT
PROPOSED STREET LIGHT WITH LUMINAIRE BY GMP
PROPOSED SIGNAL POLE WITH LUMINAIRE
PROPOSED TRASH RECEPTACLE
PROPOSED PARKING METER
PROPOSED TREE LOCATION
4' x 5' PROPOSED TREE PIT
PROPOSED FIRE HYDRANT

VT. STATE PLANE GRID




COLD PLANING, BITUMINOUS PAVEMENT & RESURFACING
SL STA 701+50 - 705+75

**FOR R.O.W. USE ONLY**

20 0 20 40
FEET

VHB Vanasse Hangen Brustlin, Inc.

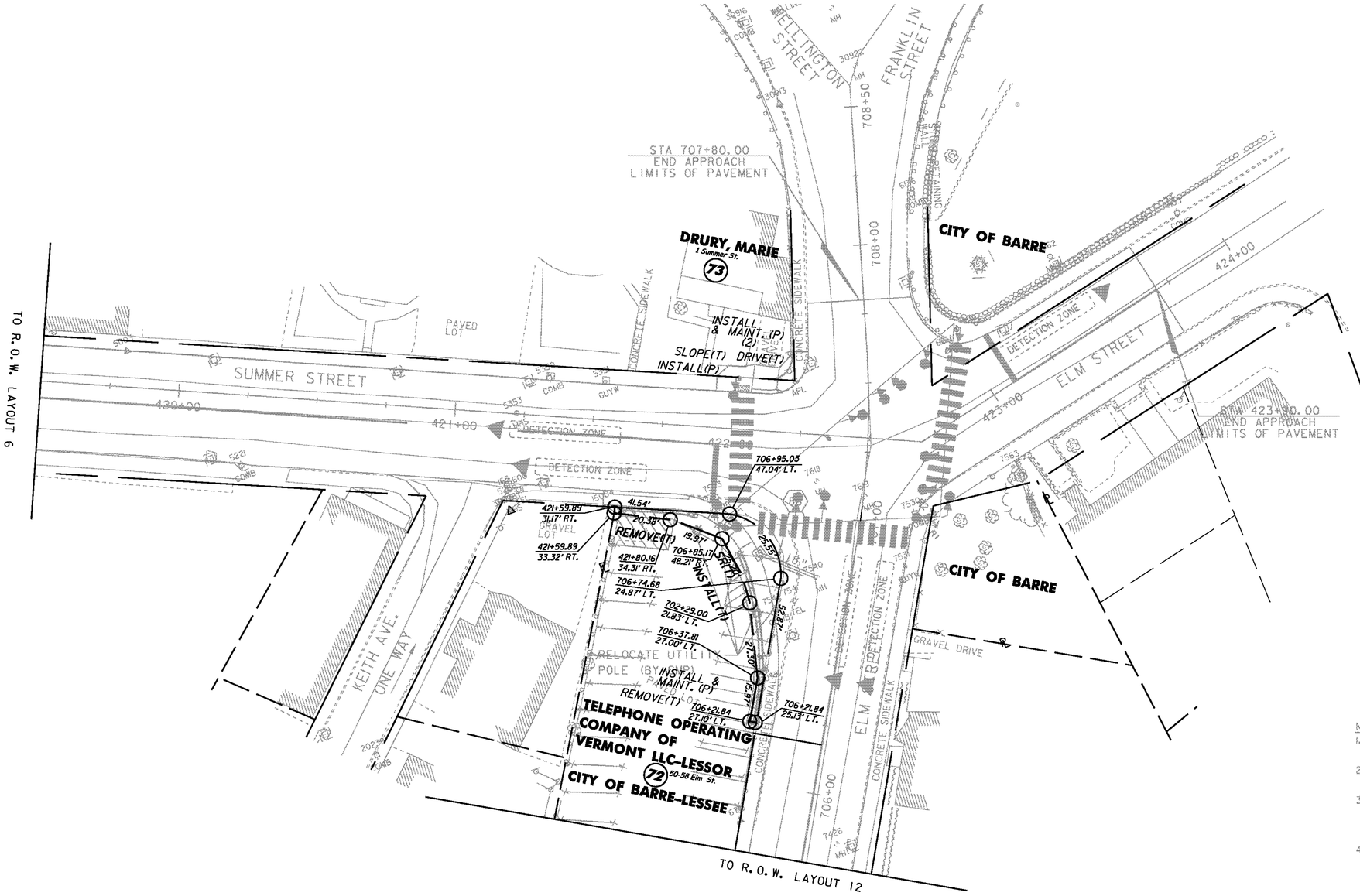
ROW LAYOUT 12

| | |
|---|---|
| PROJECT NAME: | BARRE CITY - NORTH MAIN ST. |
| PROJECT NUMBER: | F EGC-F 026-1(34) - CONTRACT 2 |

| | |
|---|---|
| FILE NAME: z85b010bdr cp | PLOT DATE: 04-MAR-2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: D. PECK |
| DESIGNED BY: D. PECK | CHECKED BY: |
| ROW SHEET 98 OF 100 | SHEET 226 OF 339 |

PROPOSED GRANITE BOLLARD AND CHAIN FENCE
PROPOSED ORNAMENTAL STREET LIGHT
PROPOSED STREET LIGHT WITH LUMINAIRE BY GMP
PROPOSED SIGNAL POLE WITH LUMINAIRE
PROPOSED TRASH RECEPTACLE
PROPOSED PARKING METER
PROPOSED TREE LOCATION
4' x 5' PROPOSED TREE PIT
PROPOSED FIRE HYDRANT

N
VT. STATE PLANE GRID




STEEL BEAM GUARDRAIL, GALVANIZED (DOUBLE-FACED)
SL STA 421+62 - 421+75 RT
SL STA 421+82 - 421+88 RT
SL STA 706+21 - 706+80 LT

TERMINAL CONNECTOR FOR STEEL BEAM GUARDRAIL
SL STA 421+62 RT
SL STA 421+75 RT
SL STA 421+82 RT
SL STA 421+88 RT
SL STA 706+80 LT

REMOVAL AND DISPOSAL OF GUARDRAIL
SL STA 706+21 - 706+77 LT

COLD PLANING, BITUMINOUS PAVEMENT
SL STA 419+50 - 423+90
SL STA 422+07 - 422+16 LT
SL STA 705+75 - 707+80

NOTES:
1. SAWCUT OF EXISTING SIDEWALK SHALL BE INCIDENTAL TO ITEMS 618.10 & 618.11.
2. REMOVE ABANDONED GAS LINES TO LIMITS OF FULL-DEPTH CONSTRUCTION. PLUG EXISTING LINES AT LIMITS OF CONSTRUCTION.
3. THE PROPOSED SEWER AND WATER UTILITIES SHOWN ON THESE GENERAL PLANS ARE FOR INFORMATIONAL PURPOSES REFER TO THE SEWER AND WATER PLANS BY DUFRESNE ASSOCIATES FOR ACTUAL CONSTRUCTION INFORMATION.
4. SEE THE ITEM DETAIL & DRAINAGE SHEETS AND CROSS SECTIONS FOR PROPOSED DRAINAGE INFORMATION CORRESPONDING TO NOTE NUMBERS SHOWN BY: (#)

**FOR R.O.W. USE ONLY**

20 0 20 40
FEET

VHB Vanasse Hangen Brustlin, Inc.

ROW LAYOUT 13

PROJECT NAME: BARRE CITY - NORTH MAIN ST.
PROJECT NUMBER: F EGC-F 026-1(34) - CONTRACT 2

FILE NAME: z85b0110bdr cp
PROJECT LEADER: G. BAKOS
DESIGNED BY: D. PECK
ROW SHEET 99 OF 100

PLOT DATE: 04-MAR-2011
DRAWN BY: D. PECK
CHECKED BY:
SHEET 227 OF 339

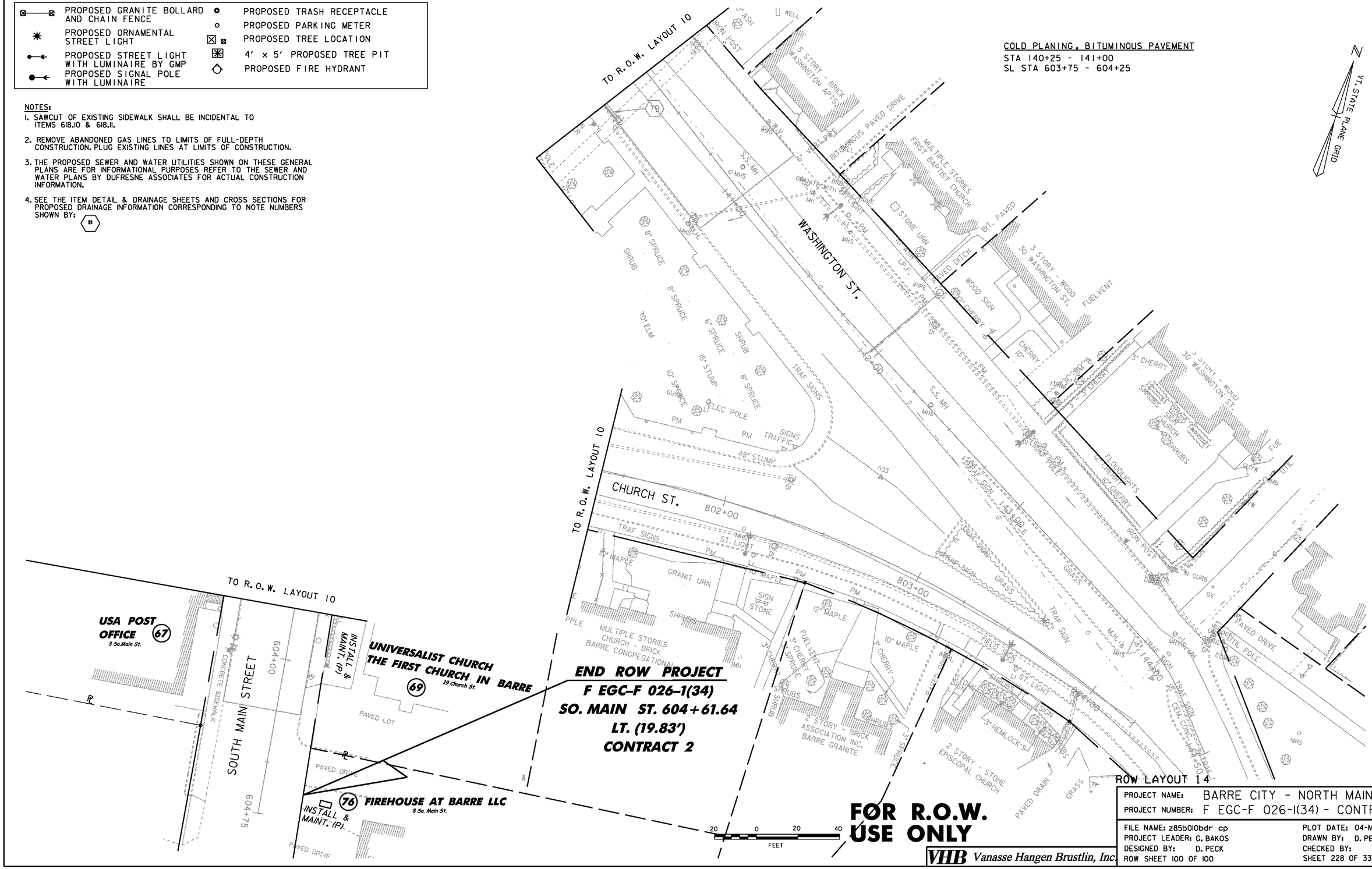
| | |
|---|---|
| PROPOSED GRANITE BOLLARD AND CHAIN FENCE | PROPOSED TRASH RECEPTACLE |
| PROPOSED ORNAMENTAL STREET LIGHT | PROPOSED PARKING METER |
| PROPOSED STREET LIGHT WITH LUMINAIRE BY GMP | PROPOSED TREE LOCATION |
| PROPOSED SIGNAL POLE WITH LUMINAIRE | 4' x 5' PROPOSED TREE PIT |
| | PROPOSED FIRE HYDRANT |

NOTES:

1. SAWCUT OF EXISTING SIDEWALK SHALL BE INCIDENTAL TO ITEMS 618.10 & 618.11.
2. REMOVE ABANDONED GAS LINES TO LIMITS OF FULL-DEPTH CONSTRUCTION. PLUG EXISTING LINES AT LIMITS OF CONSTRUCTION.
3. THE PROPOSED SEWER AND WATER UTILITIES SHOWN ON THESE GENERAL PLANS ARE FOR INFORMATIONAL PURPOSES REFER TO THE SEWER AND WATER PLANS BY DUFRESNE ASSOCIATES FOR ACTUAL CONSTRUCTION INFORMATION.
4. SEE THE ITEM DETAIL & DRAINAGE SHEETS AND CROSS SECTIONS FOR PROPOSED DRAINAGE INFORMATION CORRESPONDING TO NOTE NUMBERS SHOWN BY: (#)

COLD PLANING, BITUMINOUS PAVEMENT
STA 140+25 - 141+00
SL STA 603+75 - 604+25

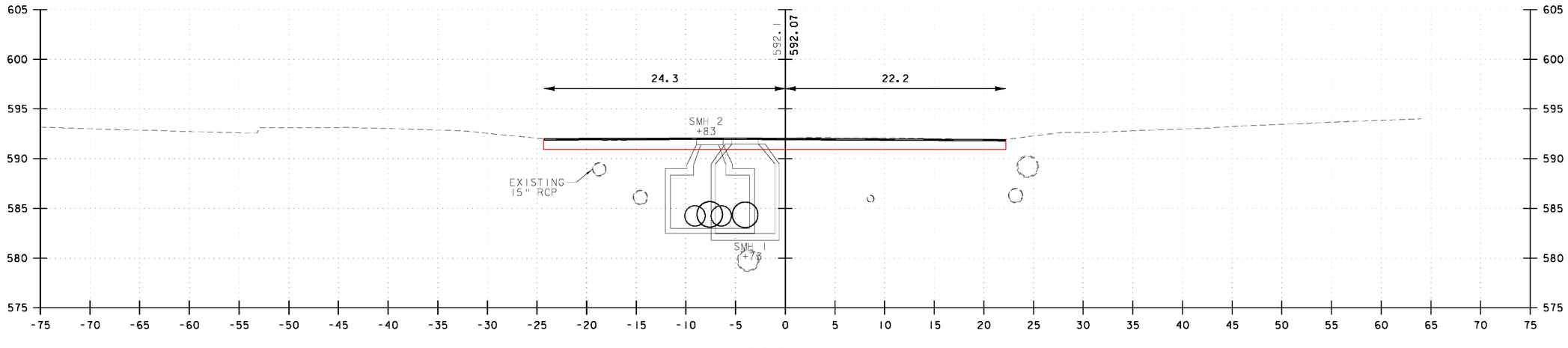
VT STATE PLANE GRID




**FOR R.O.W. USE ONLY**

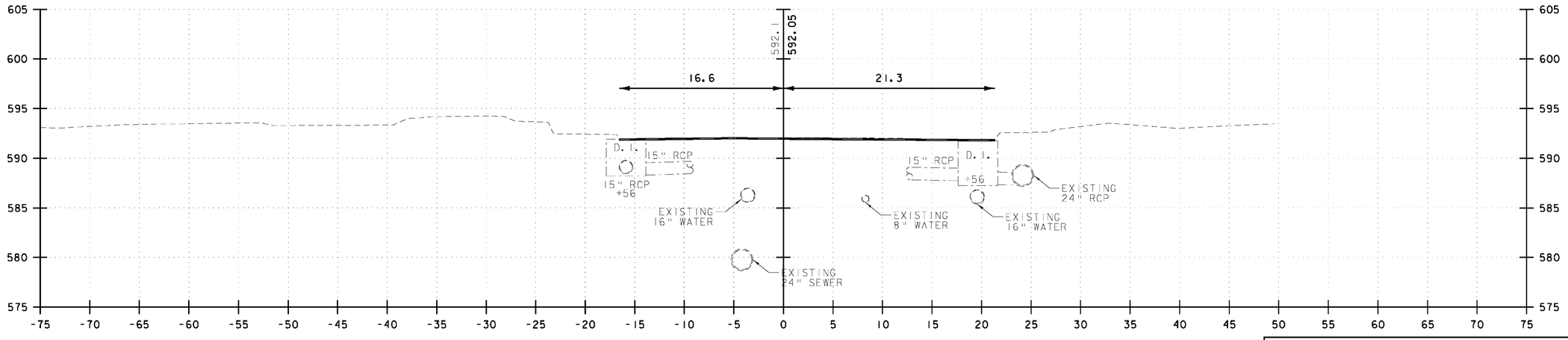
VHB Vanasse Hangen Brustlin, Inc.

| | |
|---|---|
| PROJECT NAME: | BARRE CITY - NORTH MAIN ST. |
| PROJECT NUMBER: | F EGC-F 026-1(34) - CONTRACT 2 |
| FILE NAME: z85b0110bdr cp | PLOT DATE: 04-MAR-2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: D. PECK |
| DESIGNED BY: D. PECK | CHECKED BY: |
| ROW SHEET 100 OF 100 | SHEET 228 OF 339 |




110+77 EXCAVATION ~ 46.5' • 1.15'= 53 SF

$\frac{4.25}{100} = \frac{X}{27'} = 1.15'$




110+~~65~~50 ECAVATION = 0

BEGIN APPROACH STA. 110+~~65~~25

5 0 5 10
FEET

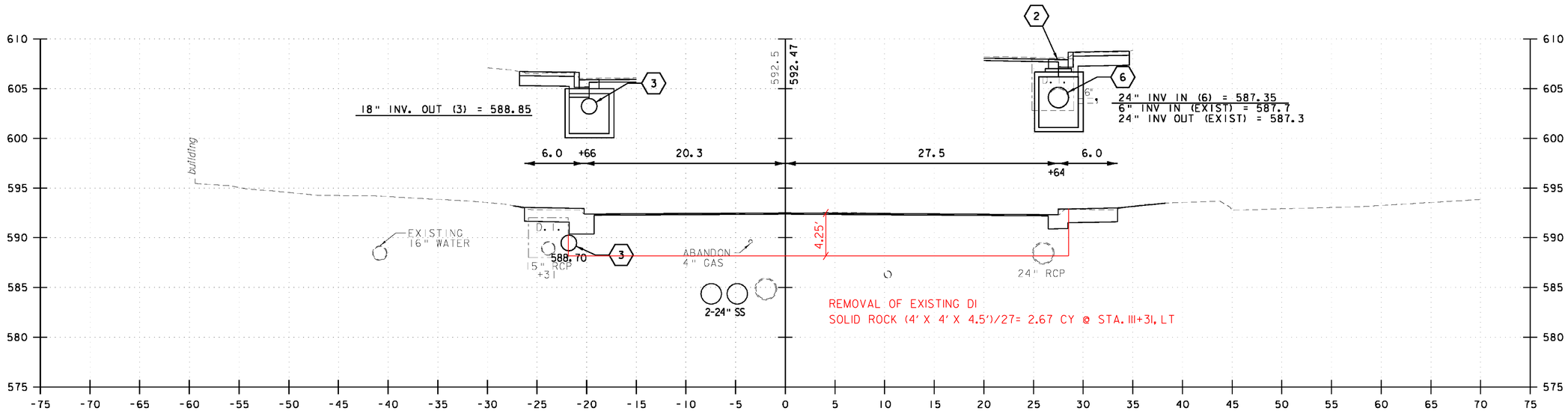
VHB Vanasse Hangen Brustlin, Inc.

NORTH MAIN STREET (US 302)

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

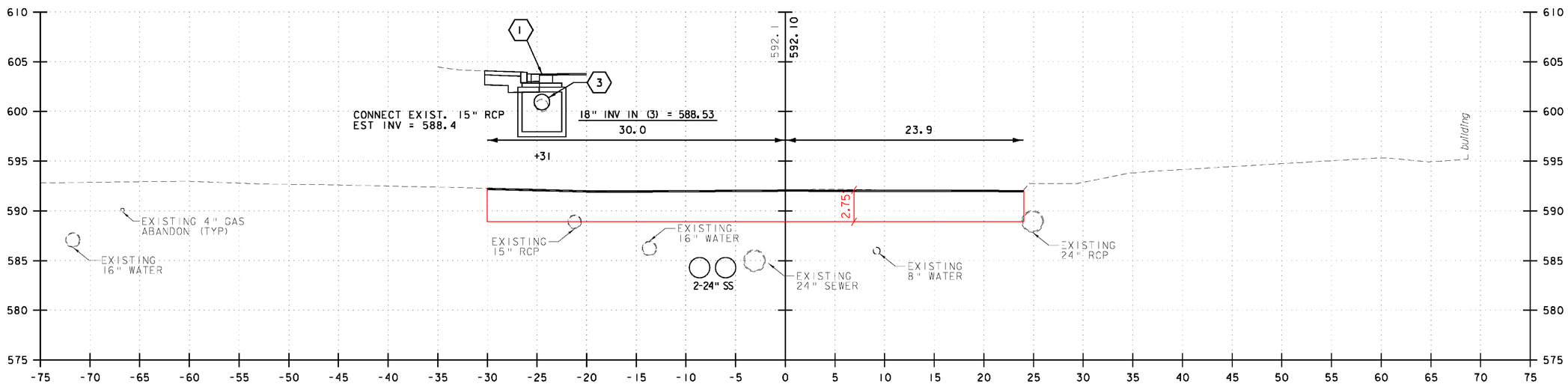
FILE NAME: 85b010_xsl_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 229 OF 339




111+50

EXCAVATION ~ (4.25' X 50.5') + (2 X 5' X 1.42')= 229 SF
DENSE GRADED ~ 2.00' X 50.5'= 101 SF
SAND BORROW ~ 1.50' X 50.5'= 76 SF




111+~~00~~07

EXCAVATION ~ 2.75' X 54'= 148 SF
DENSE GRADED ~ 2.00' X 54'= 108 SF
SAND BORROW = 0

5 0 5 10
FEET

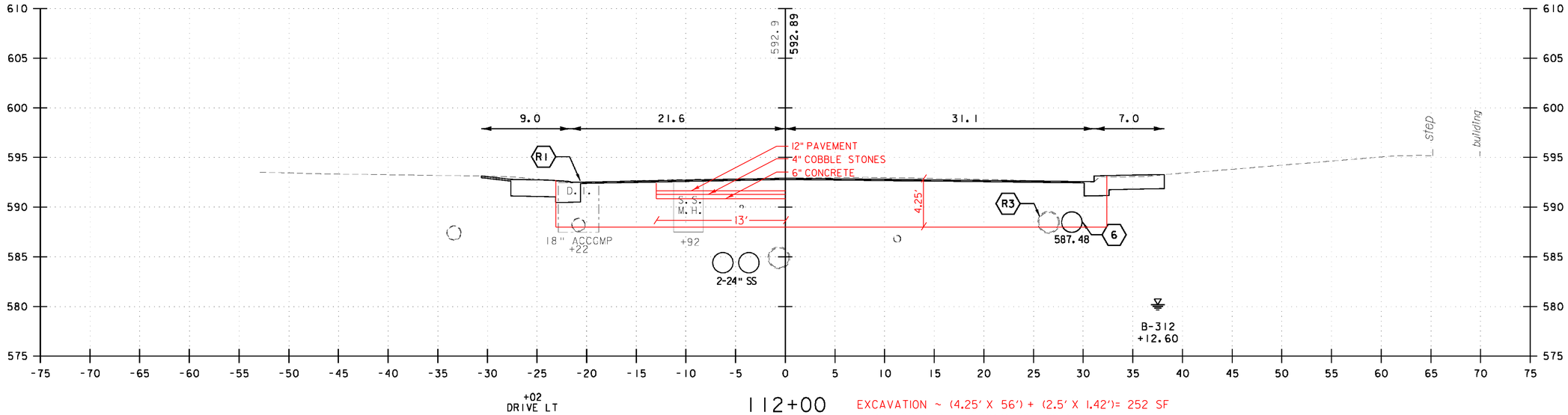
VHB Vanasse Hangen Brustlin, Inc.

NORTH MAIN STREET (US 302)

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_xsl_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

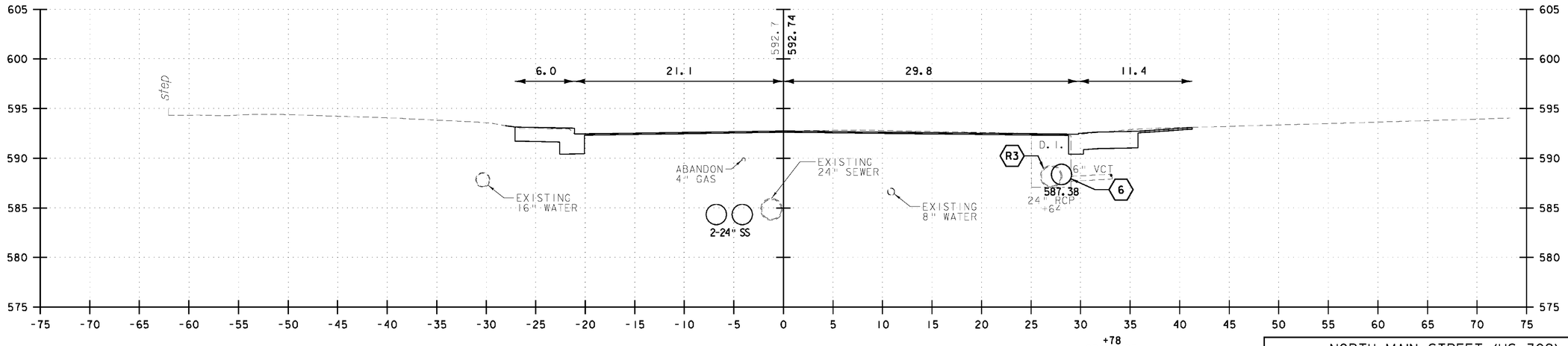
PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 230 OF 339




+02
DRIVE LT

112+00

EXCAVATION ~ (4.25' X 56') + (2.5' X 1.42')= 252 SF
DENSE GRADED ~ 2.00' X 56'= 112 SF
SAND BORROW ~ 1.50' X 56'= 84 SF




111+79

+78
DRIVE RT

5 0 5 10
FEET

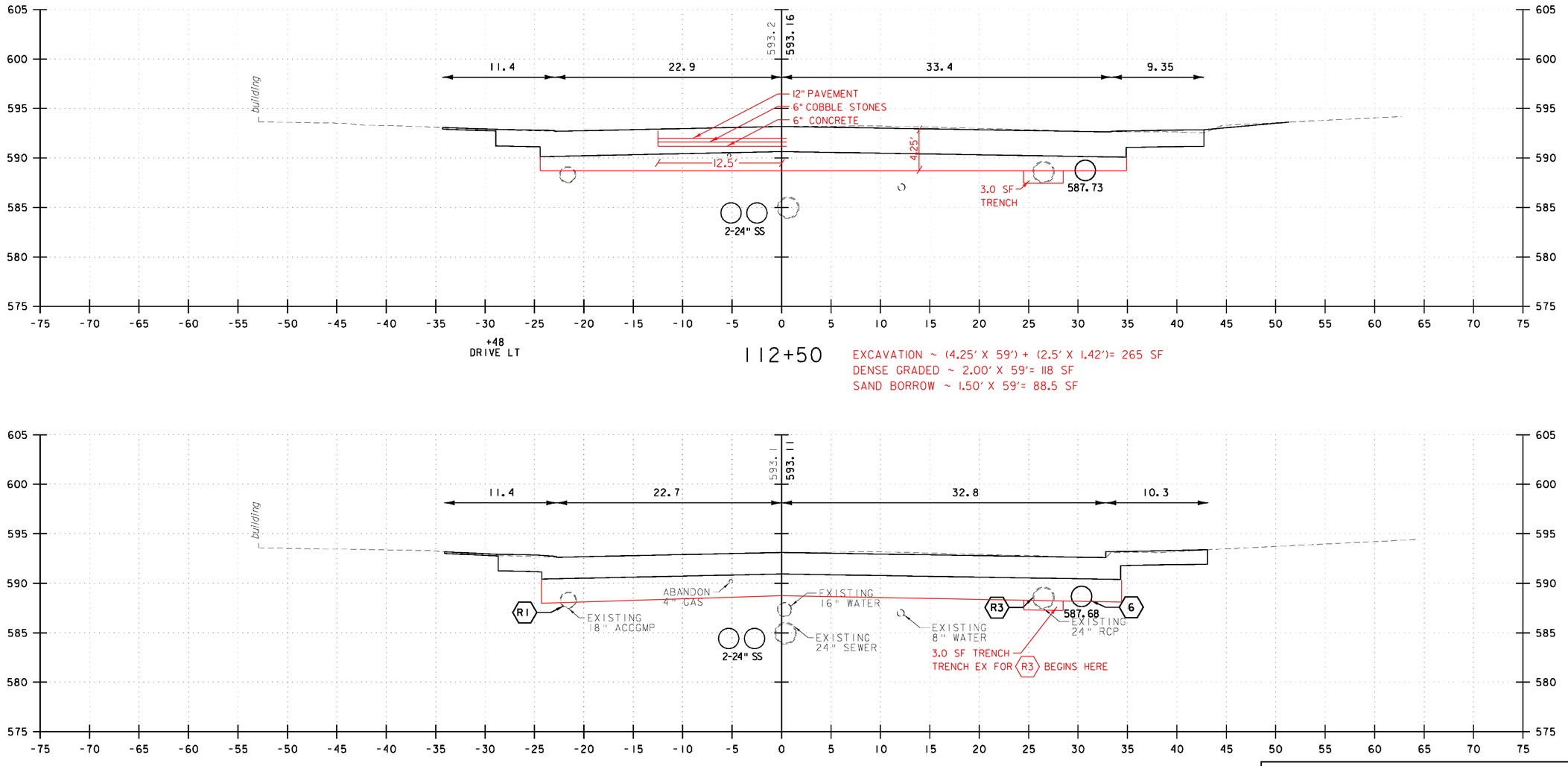
VHB Vanasse Hangen Brustlin, Inc.

NORTH MAIN STREET (US 302)

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_xsi_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 231 OF 339




112+50

EXCAVATION ~ (4.25' X 59') + (2.5' X 1.42')= 265 SF
DENSE GRADED ~ 2.00' X 59'= 118 SF
SAND BORROW ~ 1.50' X 59'= 88.5 SF




112+40

5 0 5 10
FEET

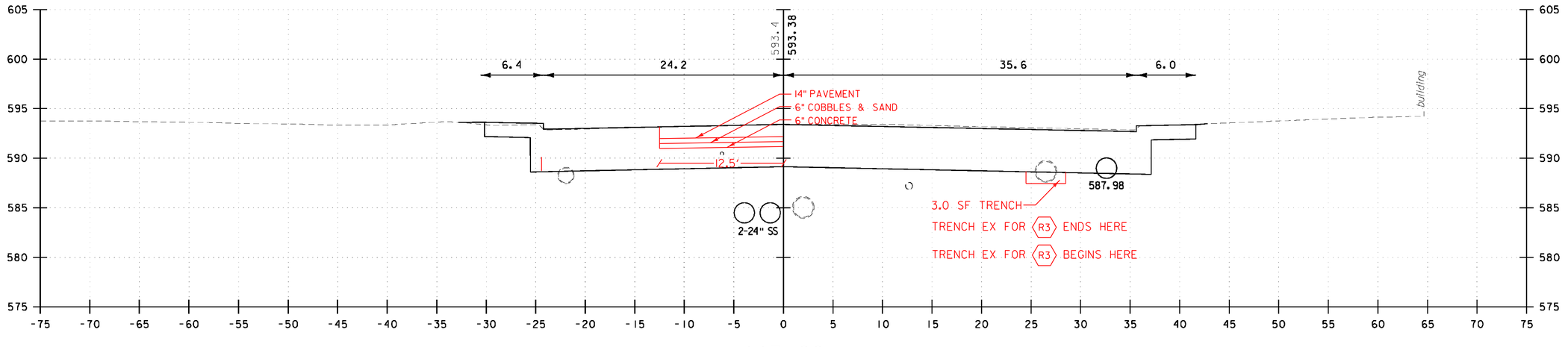
VHB Vanasse Hangen Brustlin, Inc.

NORTH MAIN STREET (US 302)

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_xsl_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

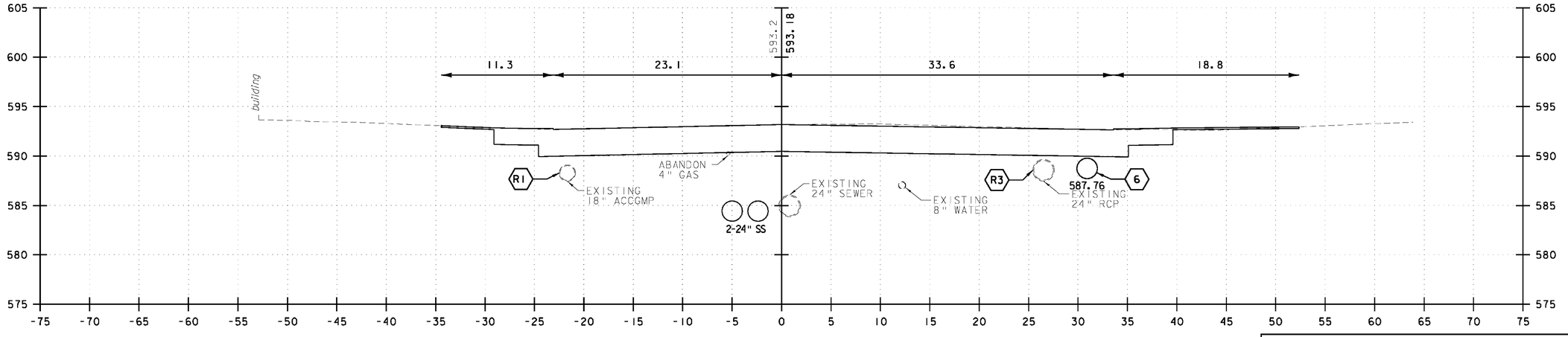
PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 232 OF 339




113+00

EXCAVATION ~ (4.25' X 63') + (2.5' X 1.42')= 282 SF
DENSE GRADED ~ 2.00' X 63'= 126 SF
SAND BORROW ~ 1.50' X 63'= 94.5 SF

END APPROACH/BEGIN PROJECT STA. 113+00




112+55

+55
DRIVE R

5 0 5 10
FEET

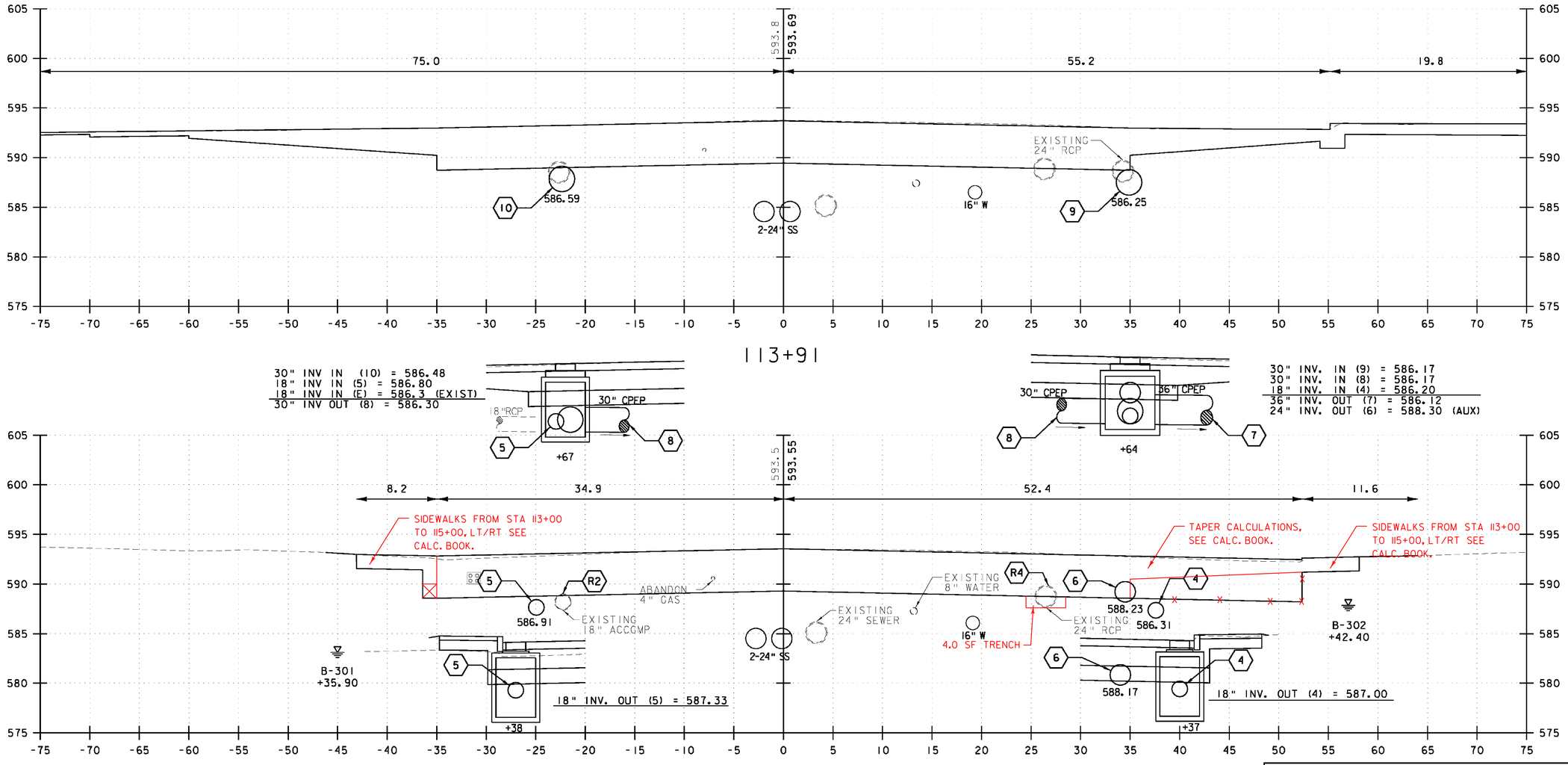
VHB Vanasse Hangen Brustlin, Inc.

NORTH MAIN STREET (US 302)

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_xsl_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 233 OF 339




113+50 DENSE GRADED ~ 2.00' X 70'= 140 SF
SAND BORROW ~ 1.50' X 70'= 105 SF

5 0 5 10
FEET

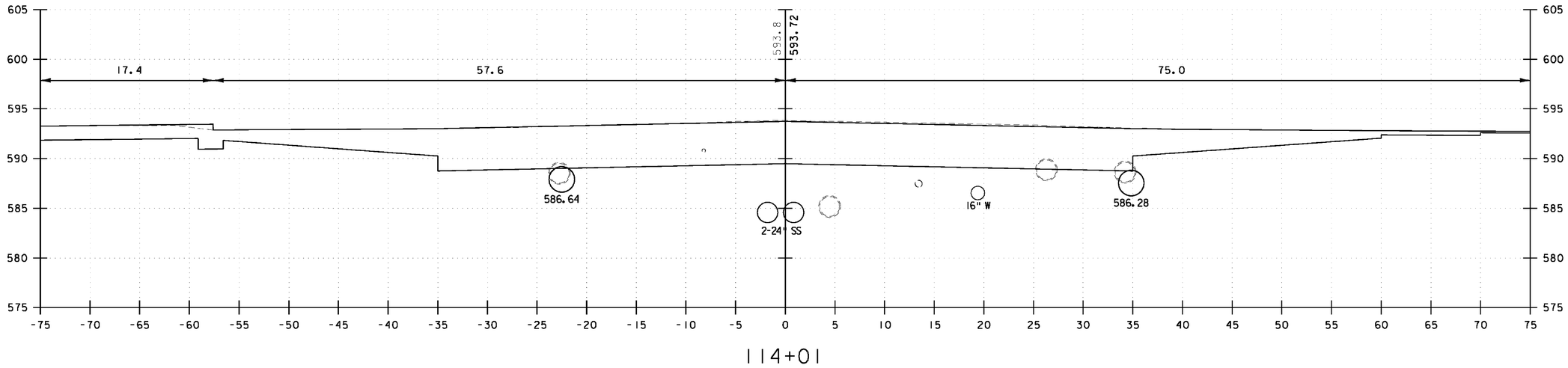
VHB Vanasse Hangen Brustlin, Inc.

NORTH MAIN STREET (US 302)

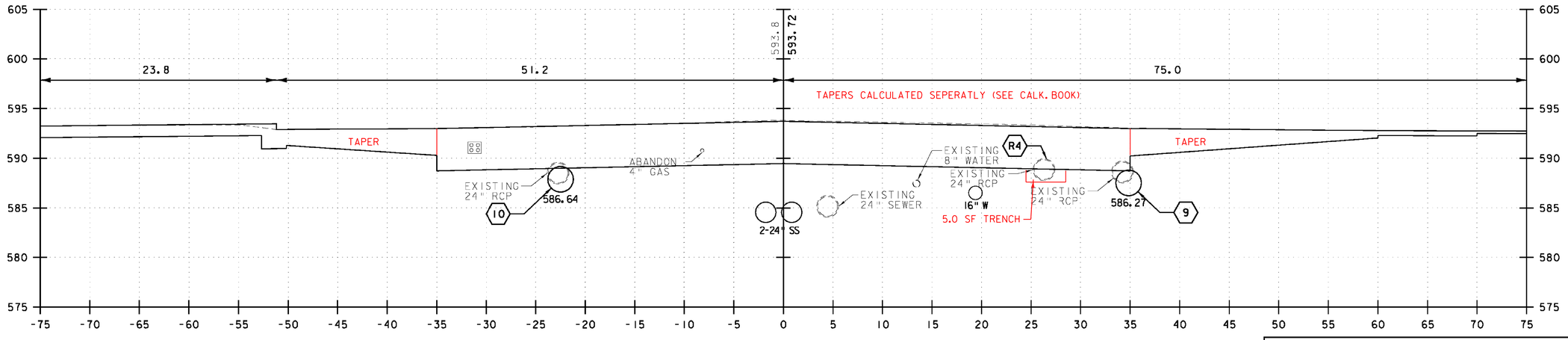
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_xsl_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 234 OF 339




114+01




114+00

DENSE GRADED ~ 2.00' X 70'= 140 SF
SAND BORROW ~ 1.50' X 70'= 105 SF

5 0 5 10
FEET

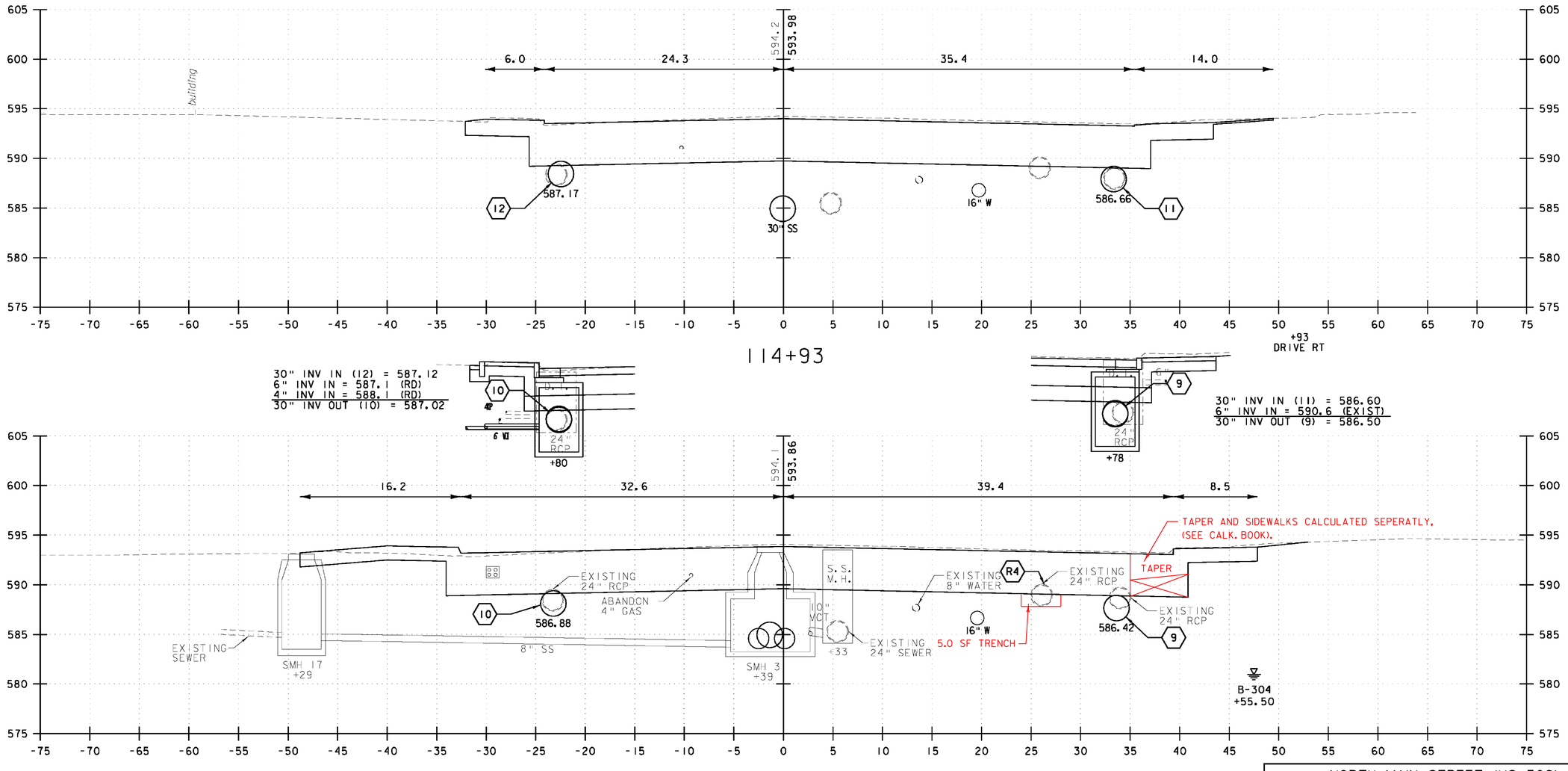
VHB Vanasse Hangen Brustlin, Inc.

NORTH MAIN STREET (US 302)

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_xsl_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 235 OF 339



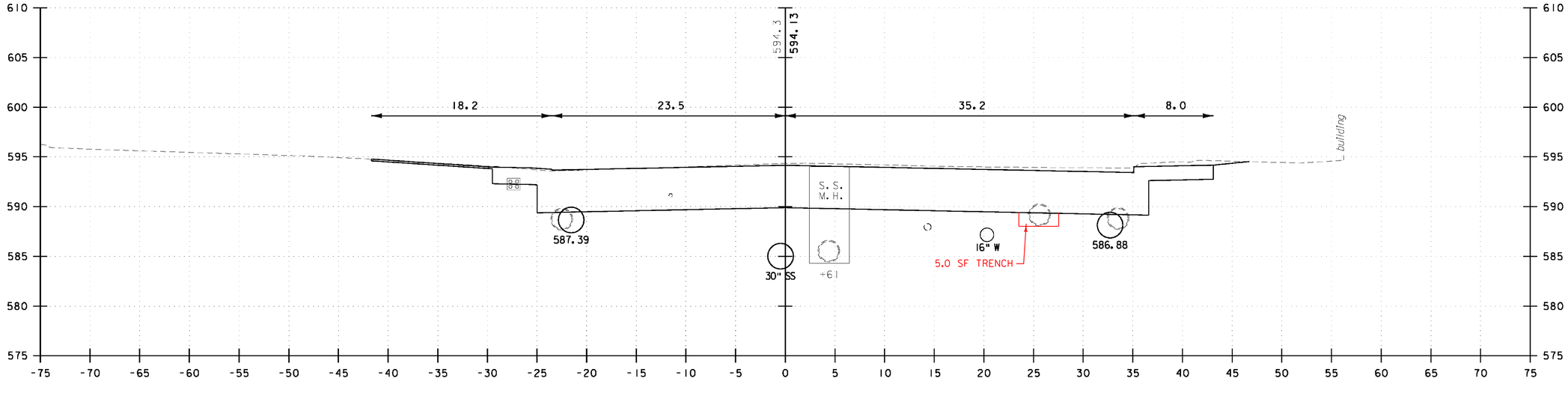

VHB Vanasse Hangen Brustlin, Inc.

NORTH MAIN STREET (US 302)

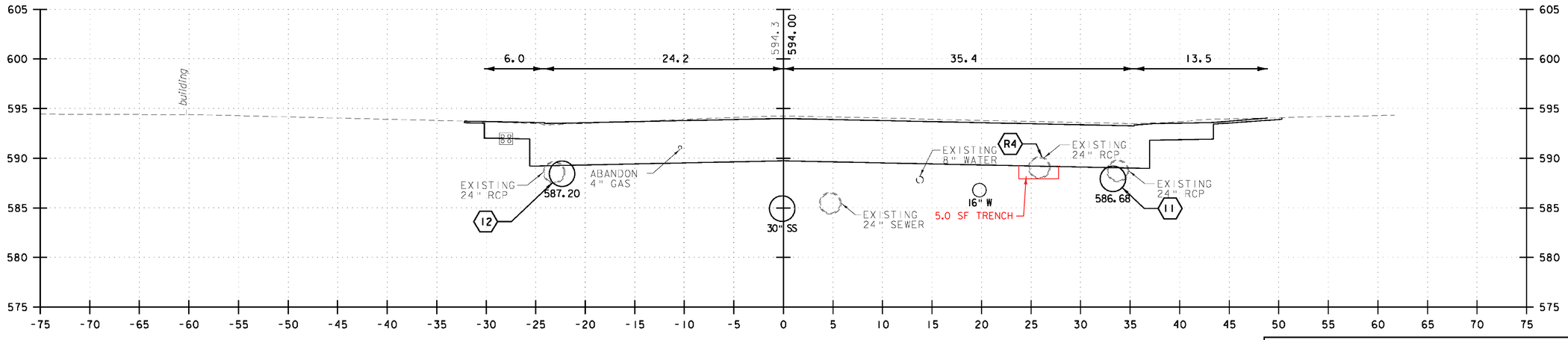
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-I(34) C/2

FILE NAME: 85b010_xsl_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 236 OF 339




115+50 DENSE GRADED ~ 2.00' X 62'= 124 SF
SAND BORROW ~ 1.50' X 62'= 93 SF




+19
DRIVE LT

115+00 DENSE GRADED ~ 2.00' X 63'= 126 SF
SAND BORROW ~ 1.50' X 63'= 94.5 SF

5 0 5 10
FEET

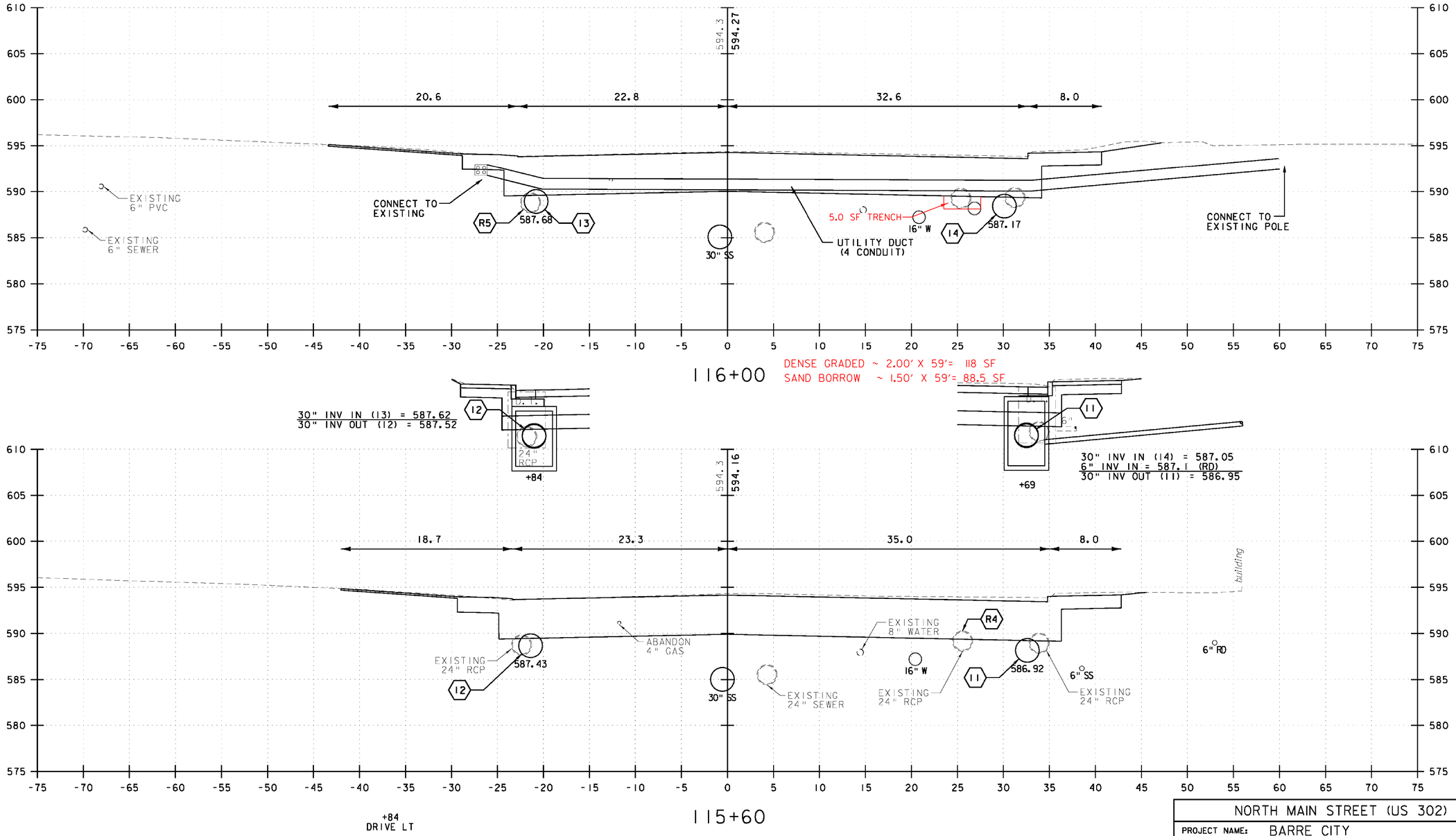
VHB Vanasse Hangen Brustlin, Inc.

NORTH MAIN STREET (US 302)

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_xsl_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 237 OF 339




5 0 5 10
FEET

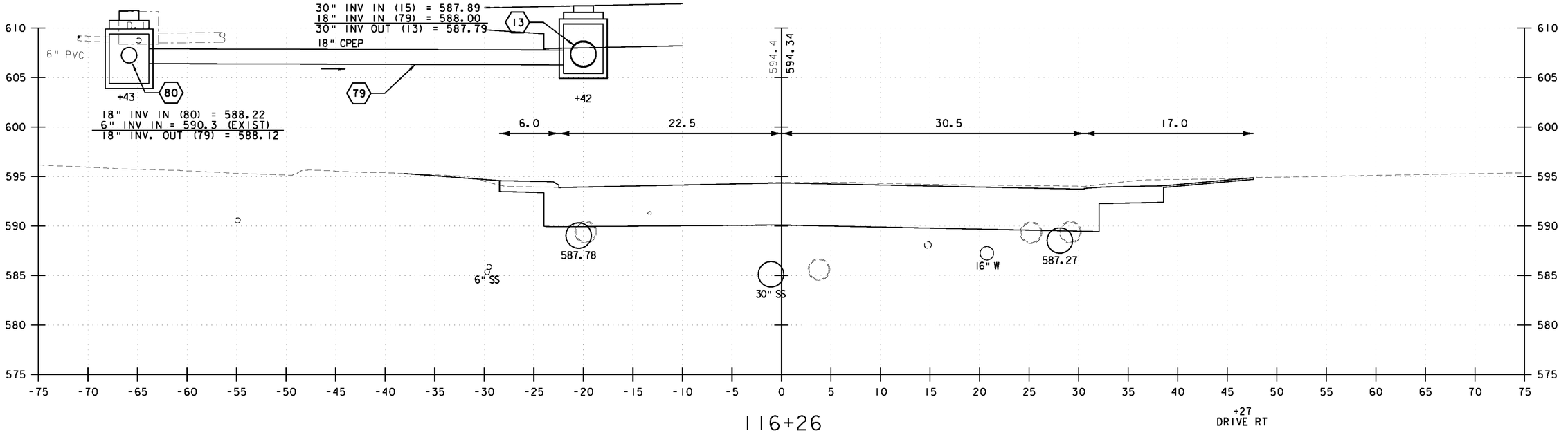
VHB Vanasse Hangen Brustlin, Inc.

NORTH MAIN STREET (US 302)

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-I(34) C/2

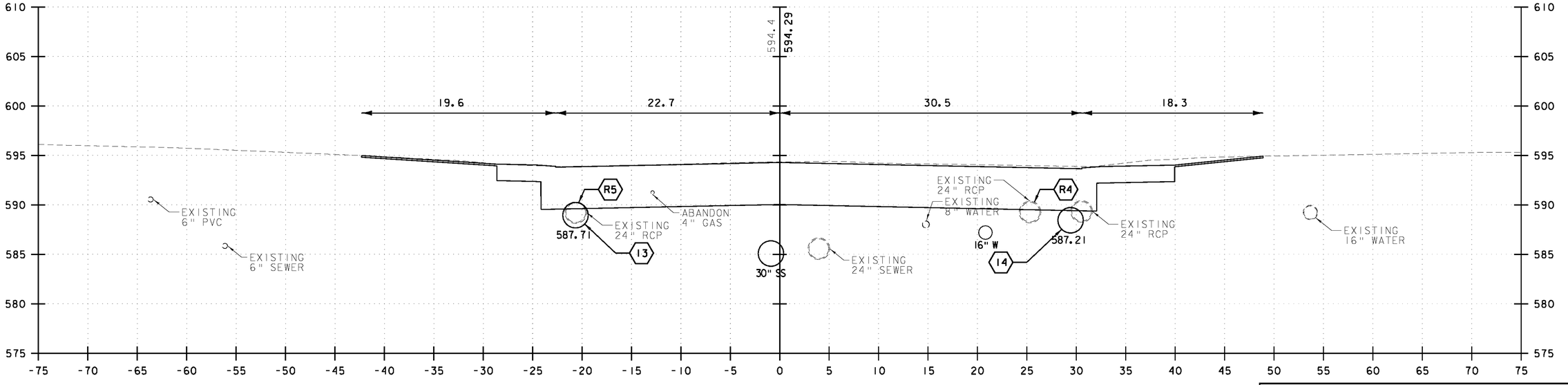
FILE NAME: 85b010_xsl_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 238 OF 339




116+26

+27
DRIVE RT




116+09

5 0 5 10
FEET

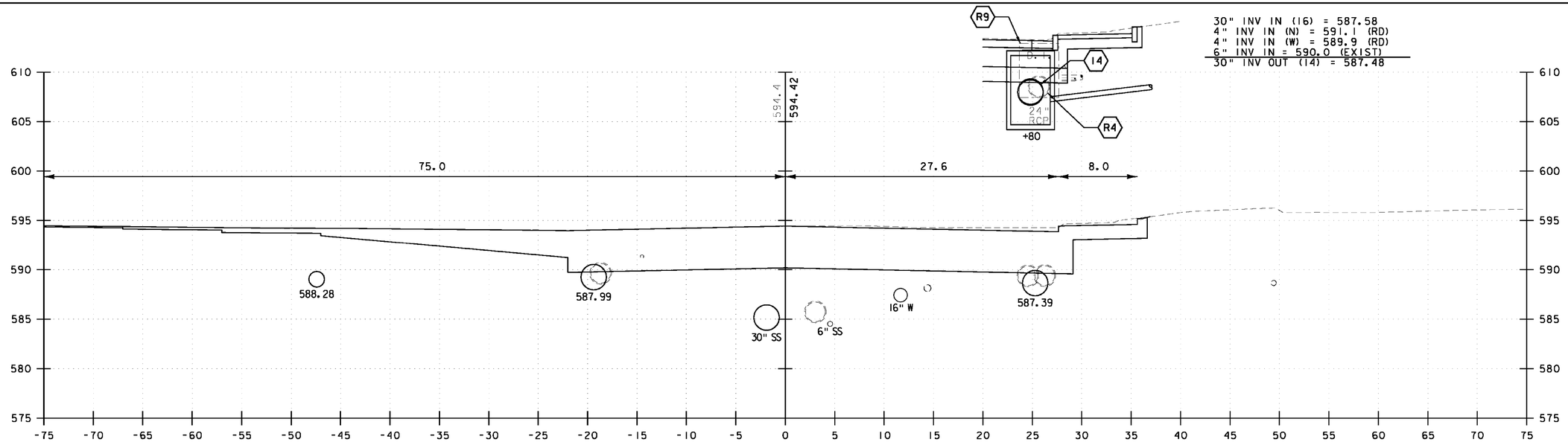
VHB Vanasse Hangen Brustlin, Inc.

NORTH MAIN STREET (US 302)

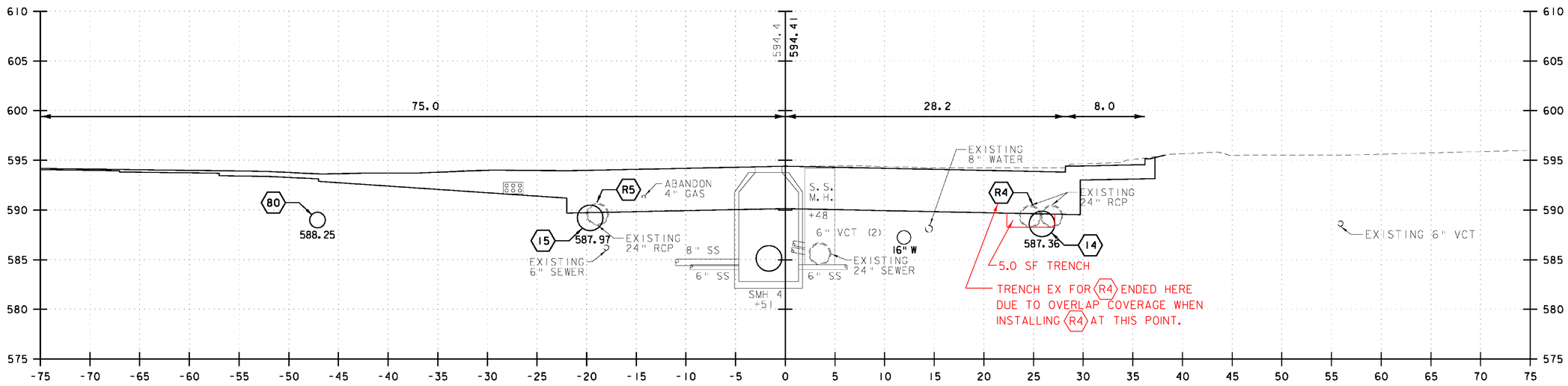
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b0110_xsl_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 239 OF 339




116+56




116+50

DENSE GRADED ~ 2.00' X 51.7'= 77.6 SF
SAND BORROW ~ 1.50' X 51.7'= 103.4 SF

5 0 5 10
FEET

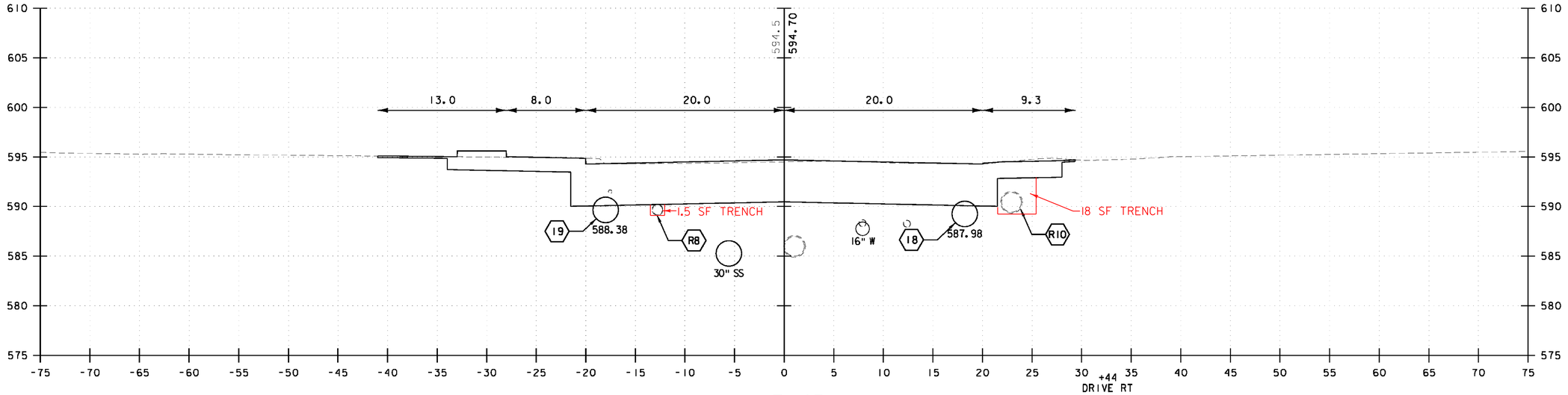
VHB Vanasse Hangen Brustlin, Inc.

NORTH MAIN STREET (US 302)

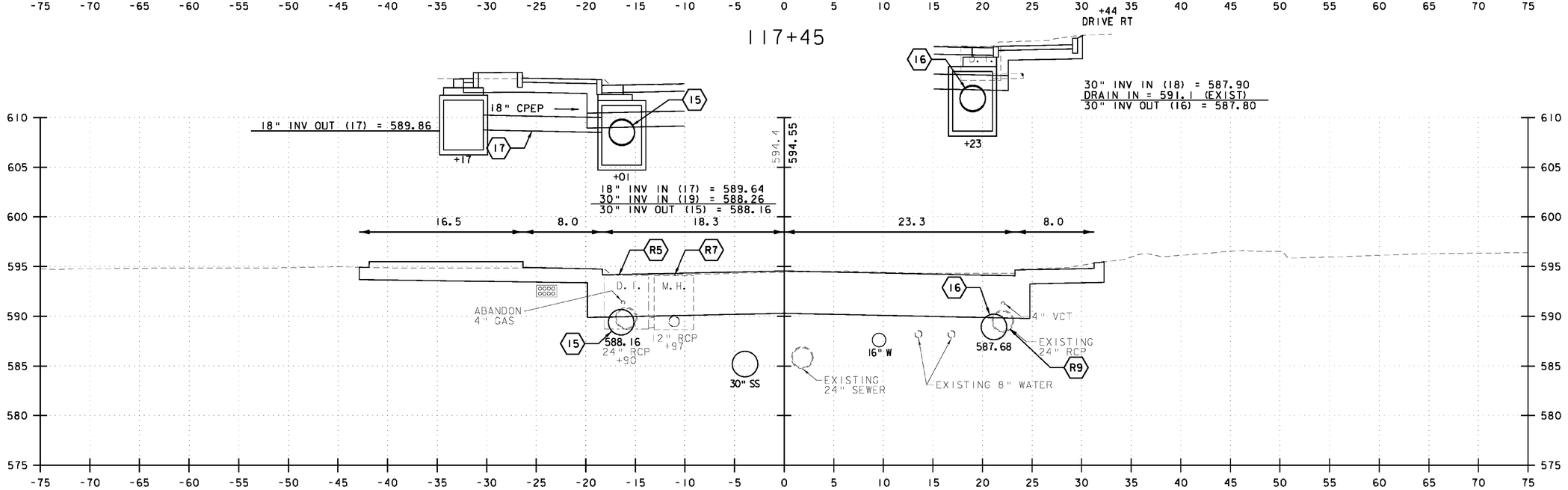
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_xsl_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 240 OF 339




117+45




117+00

SUBBASE ~ 2.00' X 44.6'= 89.2 SF
SAND BORROW ~ 1.50' X 44.6'= 66.9 SF

5 0 5 10
FEET

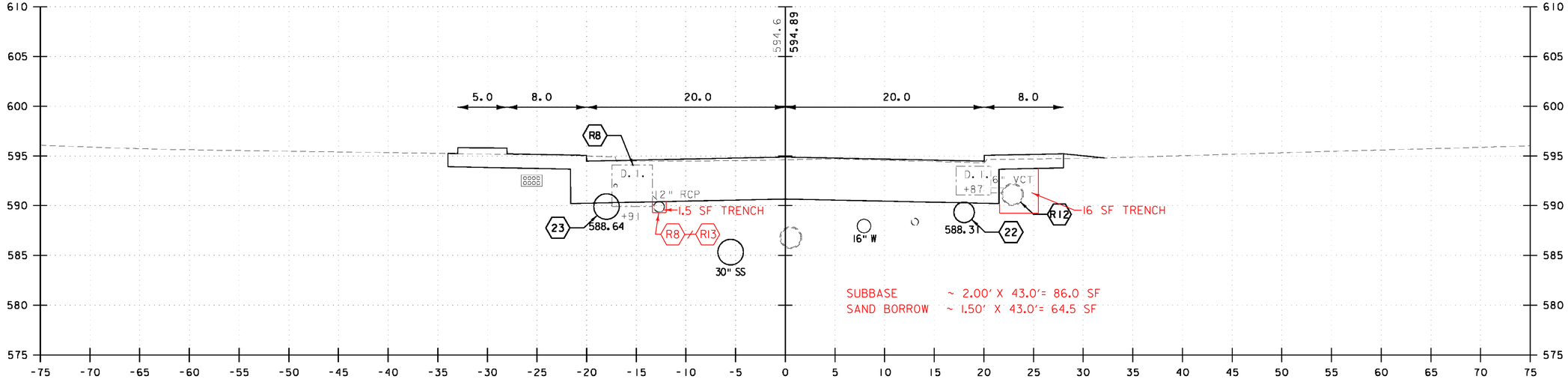
VHB Vanasse Hangen Brustlin, Inc.

NORTH MAIN STREET (US 302)

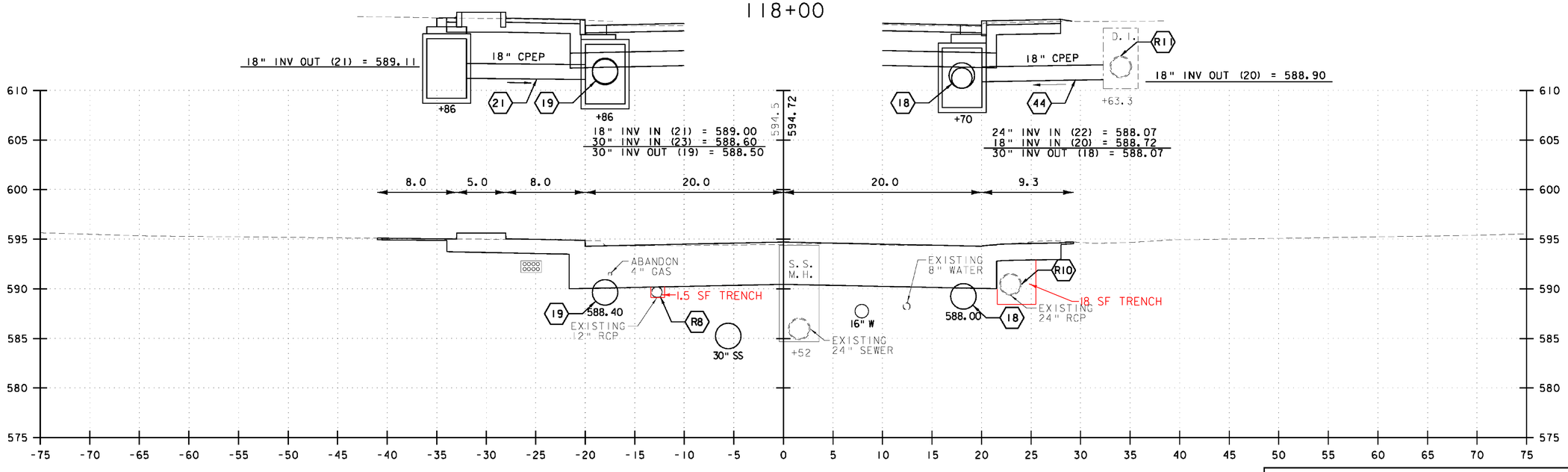
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-I(34) C/2

FILE NAME: 85b010_xsl_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 241 OF 339




118+00




117+50

SUBBASE ~ 2.00' X 43.0'= 86.0 SF
SAND BORROW ~ 1.50' X 43.0'= 64.5 SF

5 0 5 10
FEET

VHB Vanasse Hangen Brustlin, Inc.

NORTH MAIN STREET (US 302)

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_xsl_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
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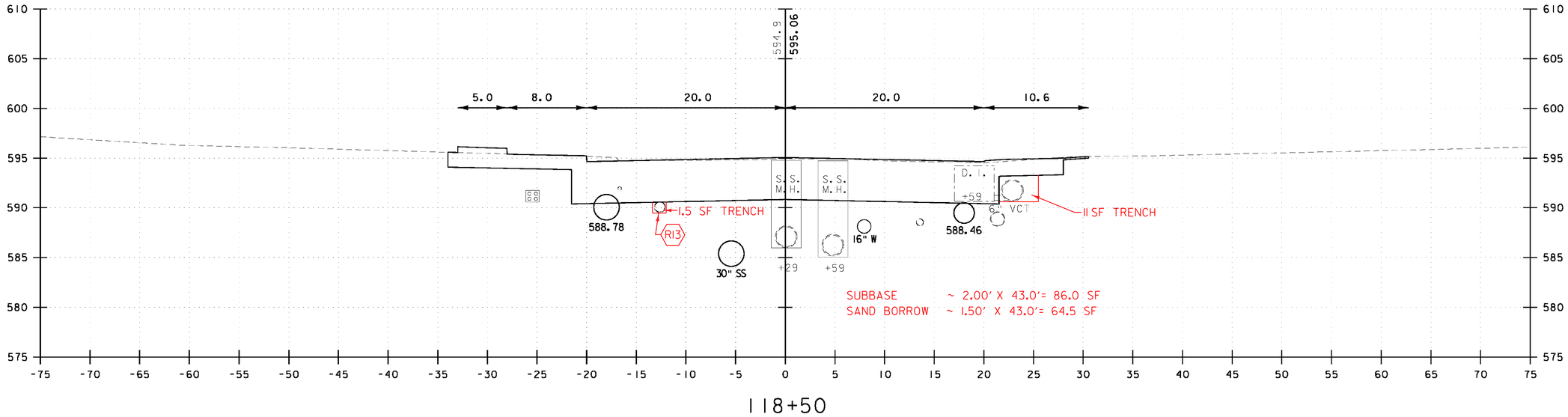
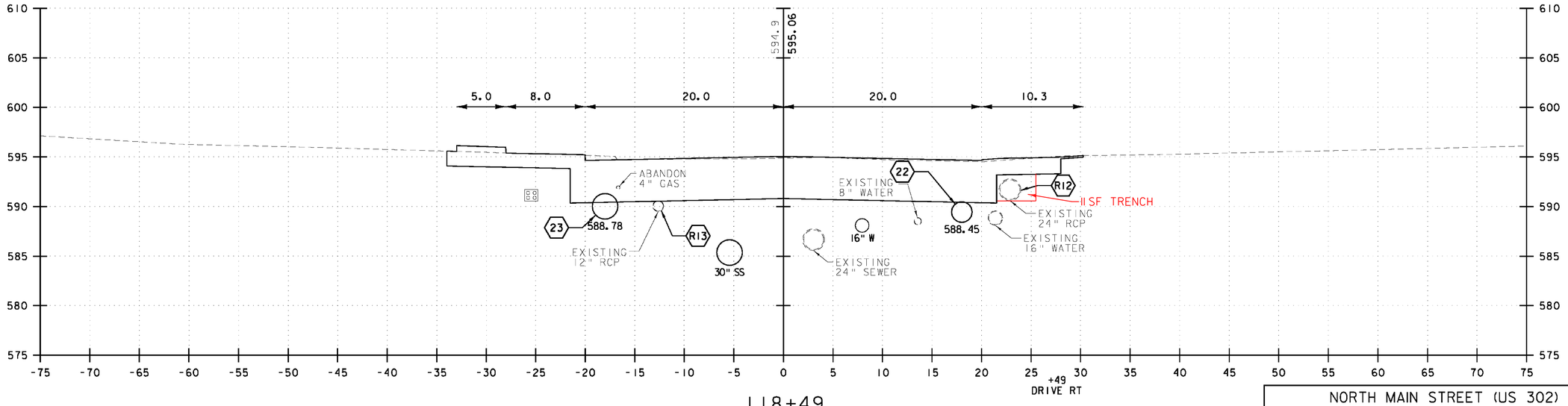
PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 242 OF 339




118+50




118+49

5 0 5 10
FEET

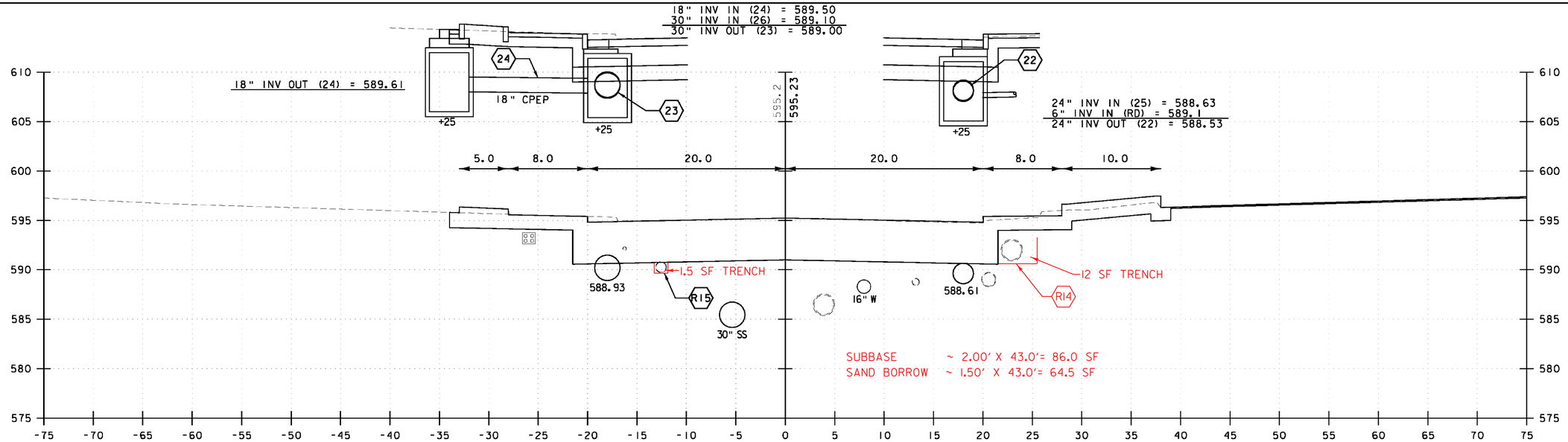
VHB Vanasse Hangen Brustlin, Inc.

NORTH MAIN STREET (US 302)

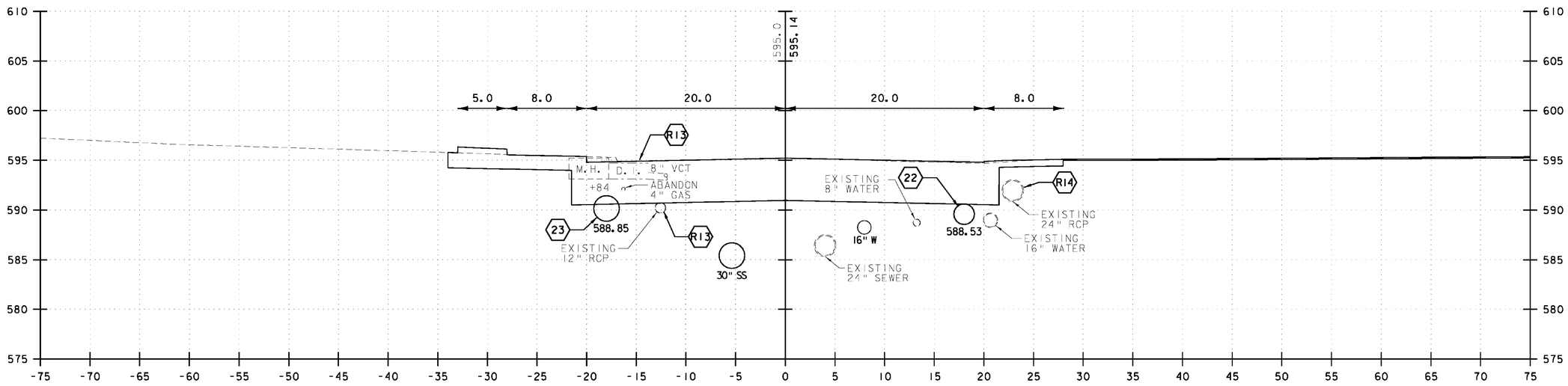
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_xsl_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 243 OF 339




119+00




118+74

5 0 5 10
FEET

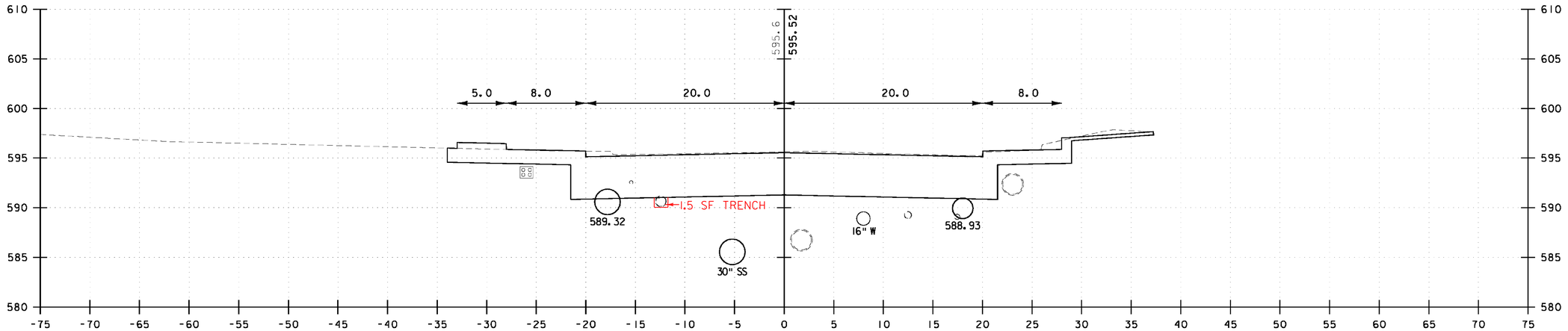
VHB Vanasse Hangen Brustlin, Inc.

NORTH MAIN STREET (US 302)

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-I(34) C/2

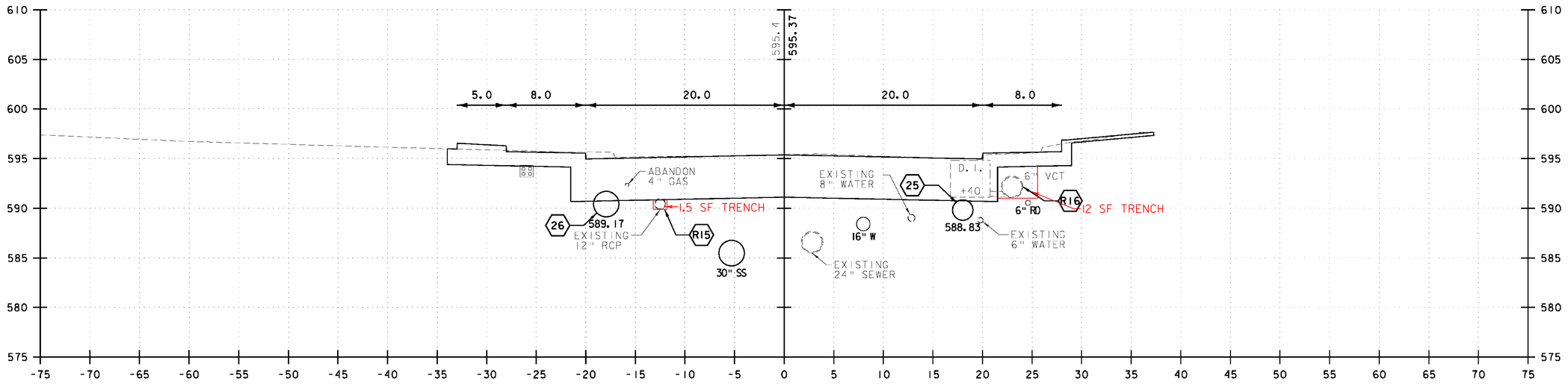
FILE NAME: 85b010_xsl_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 244 OF 339




120+00

SUBBASE ~ 2.00' X 43.0'= 86.0 SF
SAND BORROW ~ 1.50' X 43.0'= 64.5 SF




119+50

SUBBASE ~ 2.00' X 43.0'= 86.0 SF
SAND BORROW ~ 1.50' X 43.0'= 64.5 SF

5 0 5 10
FEET

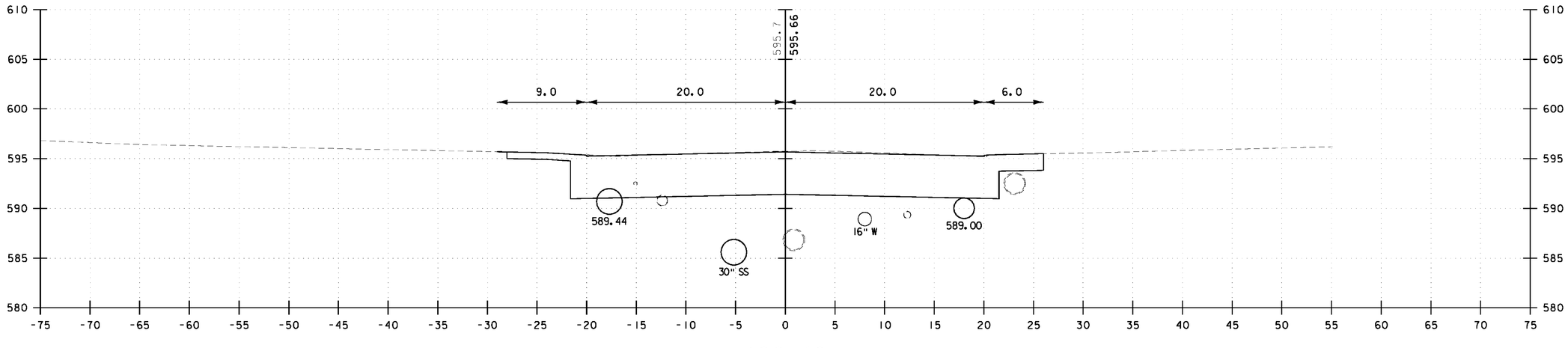
VHB Vanasse Hangen Brustlin, Inc.

NORTH MAIN STREET (US 302)

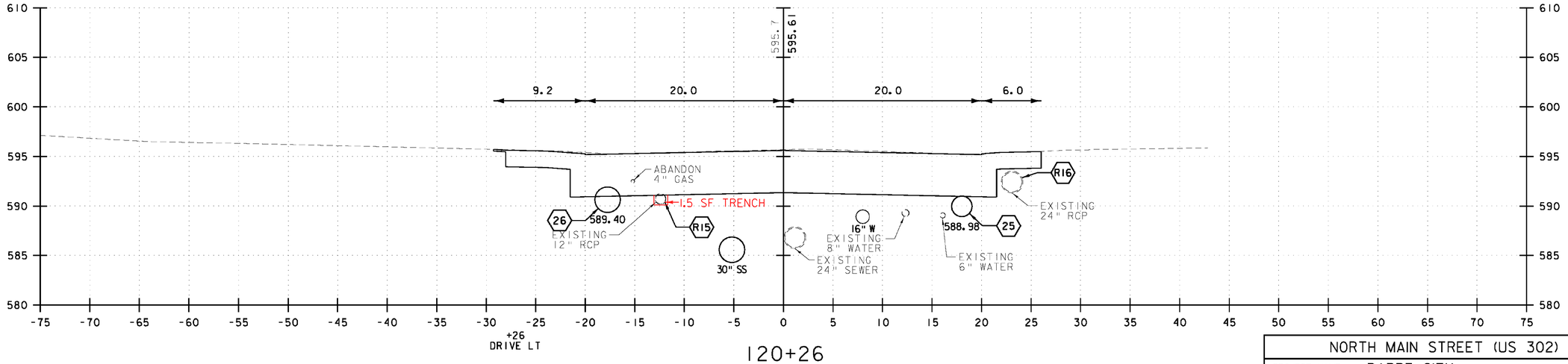
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_xsl_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 245 OF 339




120+40




120+26

5 0 5 10
FEET

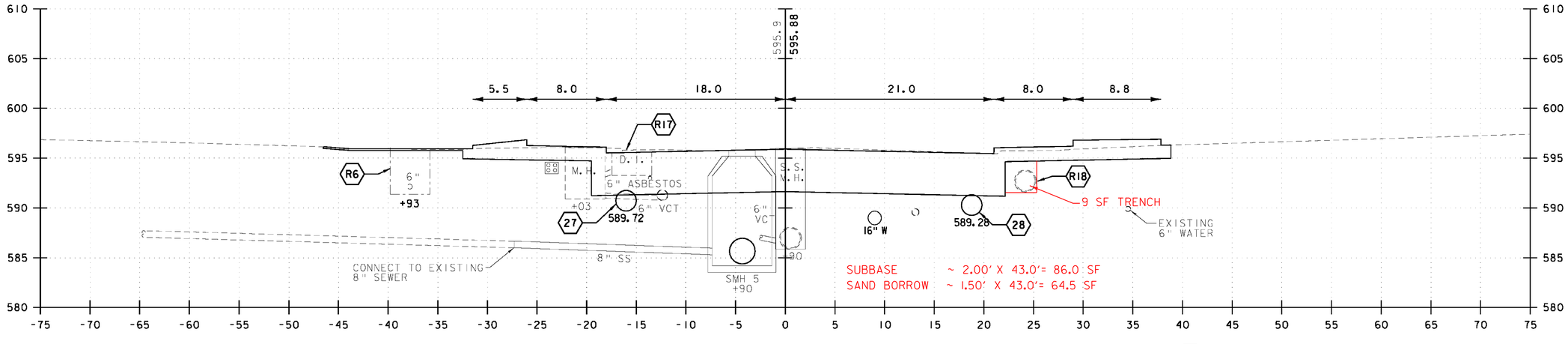
VHB Vanasse Hangen Brustlin, Inc.

NORTH MAIN STREET (US 302)

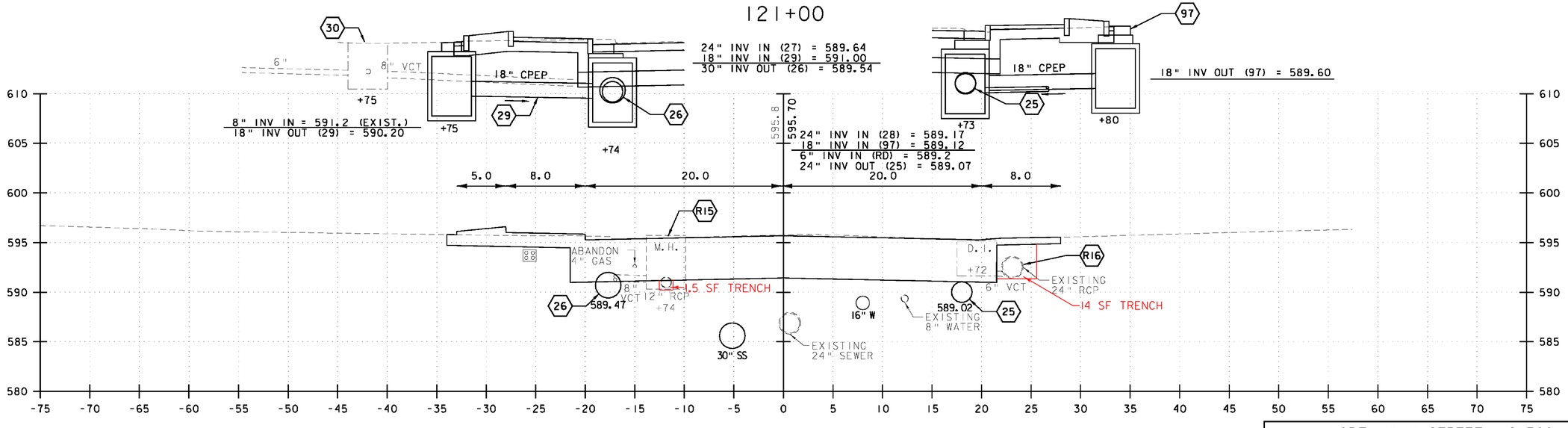
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_xsl_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 246 OF 339




## 121+00




## 120+50

SUBBASE ~ 2.00' X 43.0'= 86.0 SF
SAND BORROW ~ 1.50' X 43.0'= 64.5 SF

5 0 5 10
FEET

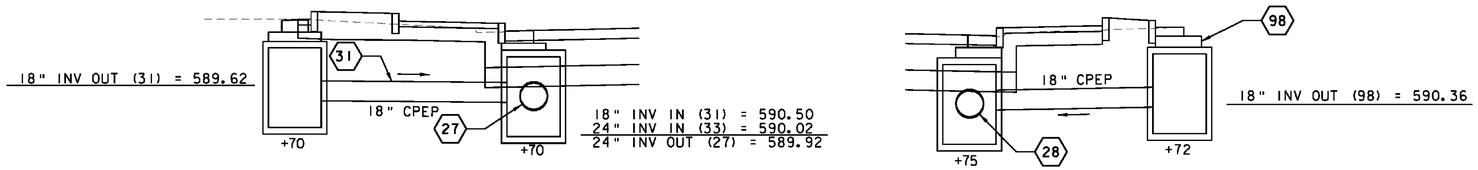
VHB Vanasse Hangen Brustlin, Inc.

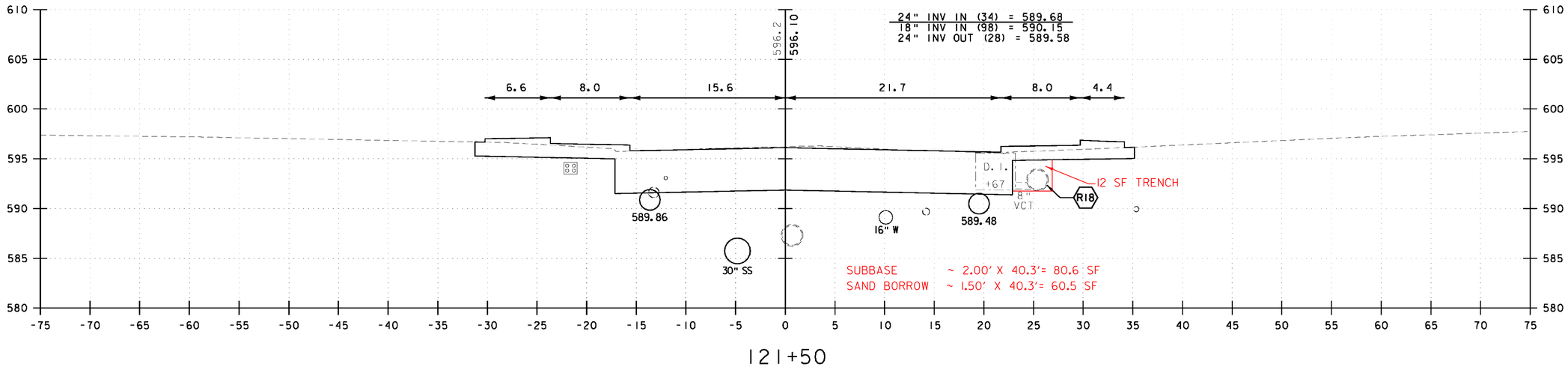
# NORTH MAIN STREET (US 302)

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-I(34) C/2

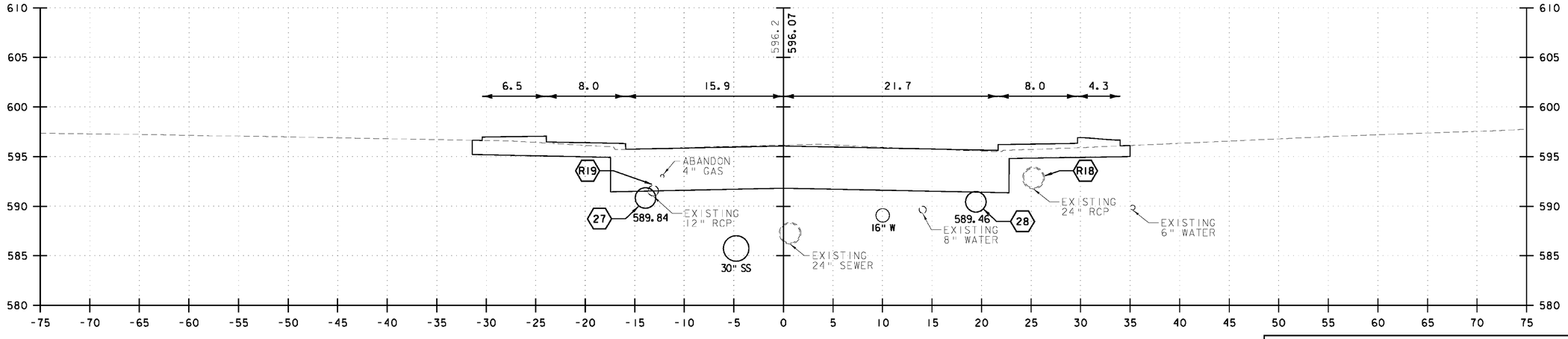
FILE NAME: 85b010_xsi_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 247 OF 339




121+50




121+44

5 0 5 10
FEET

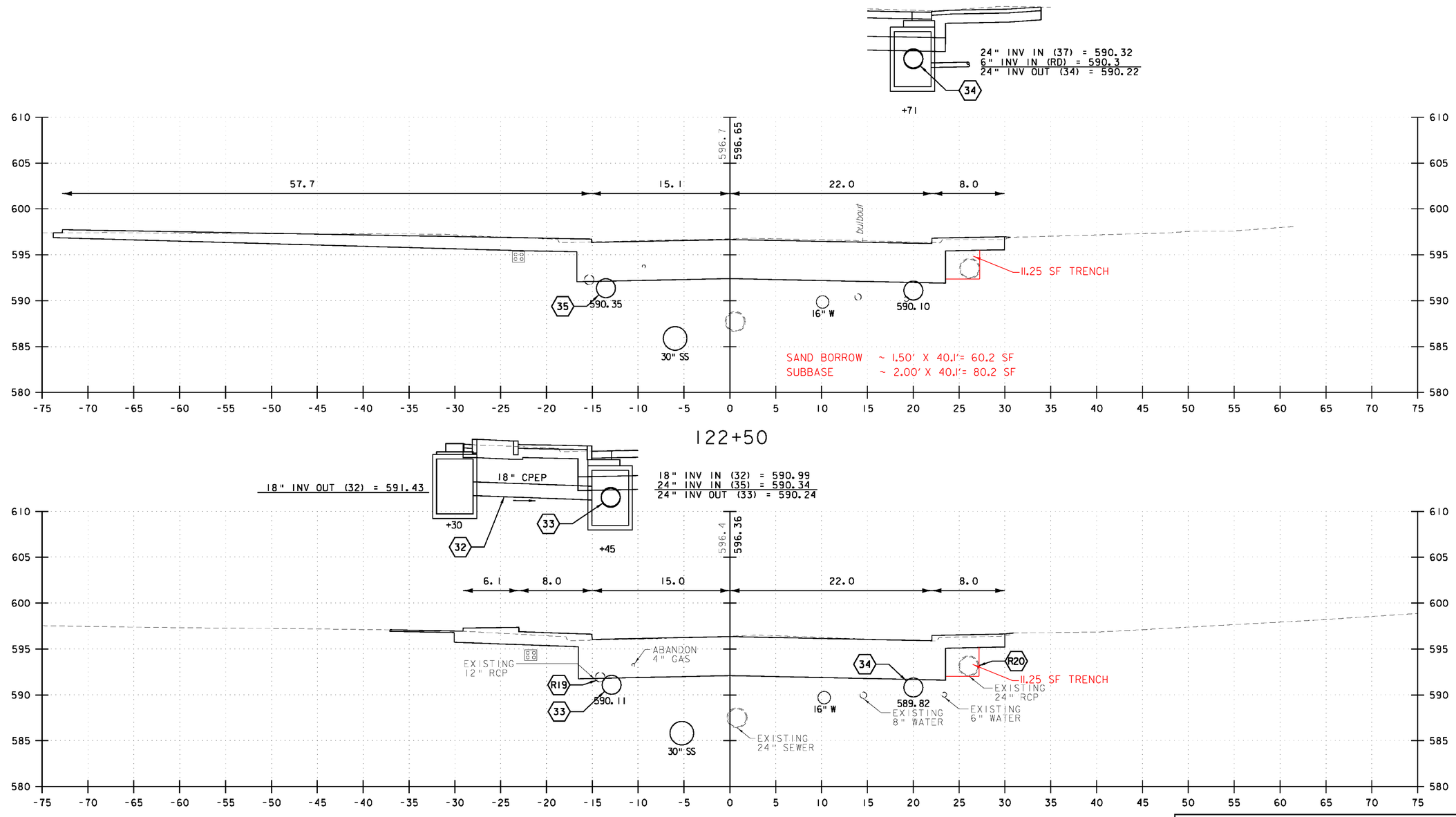
VHB Vanasse Hangen Brustlin, Inc.

NORTH MAIN STREET (US 302)

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_xsl_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 248 OF 339




VHB Vanasse Hangen Brustlin, Inc.

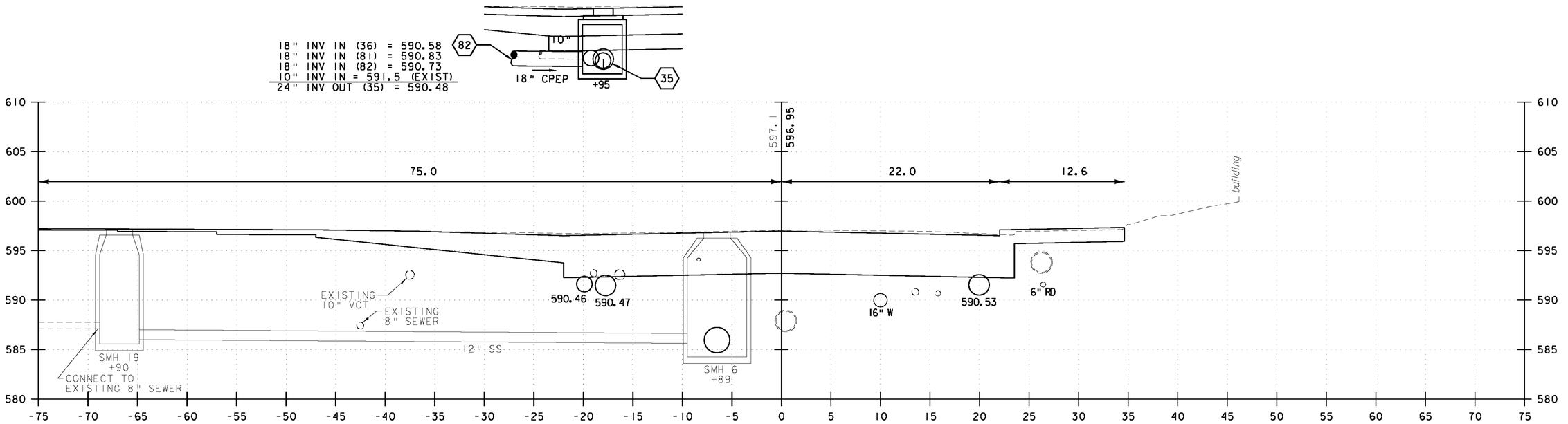
NORTH MAIN STREET (US 302)

PROJECT NAME: BARRE CITY

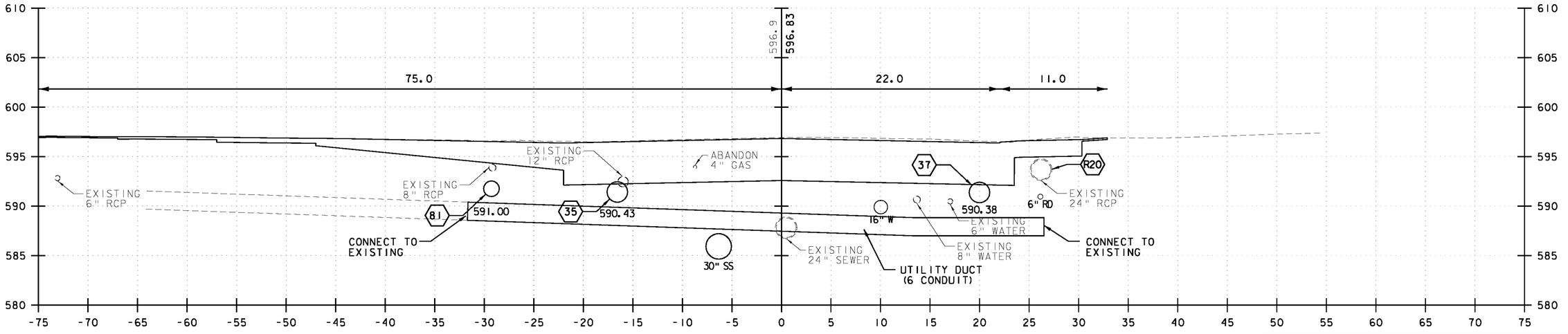
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_xsl_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 249 OF 339




122+92




122+77

+76
DRIVE RT

5 0 5 10
FEET

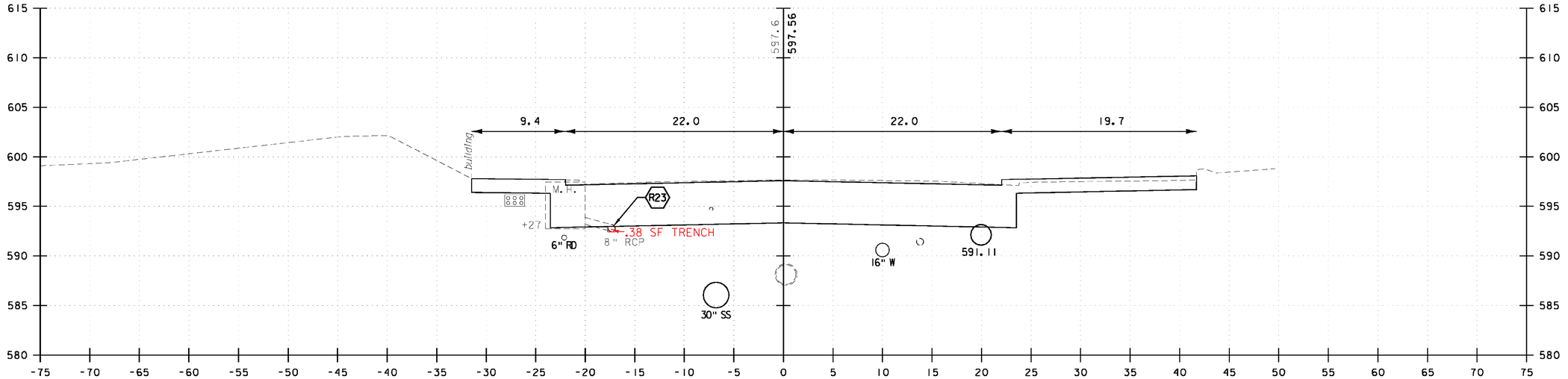
VHB Vanasse Hangen Brustlin, Inc.

NORTH MAIN STREET (US 302)

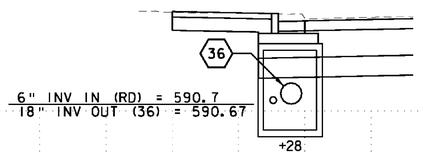
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

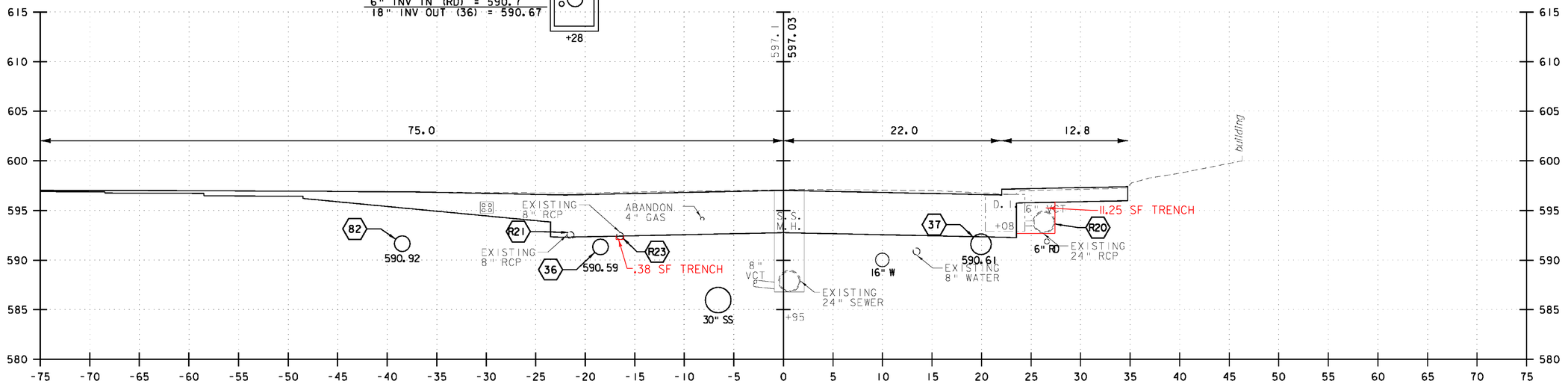
FILE NAME: 85b010_xsl_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 250 OF 339




123+50 SAND BORROW ~ 1.50' X 47.0'= 70.5 SF
SUBBASE ~ 2.00' X 47.0'= 94.0 SF




123+00 SAND BORROW ~ 1.50' X 47.0'= 70.5 SF
SUBBASE ~ 2.00' X 47.0'= 94.0 SF

5 0 5 10
FEET

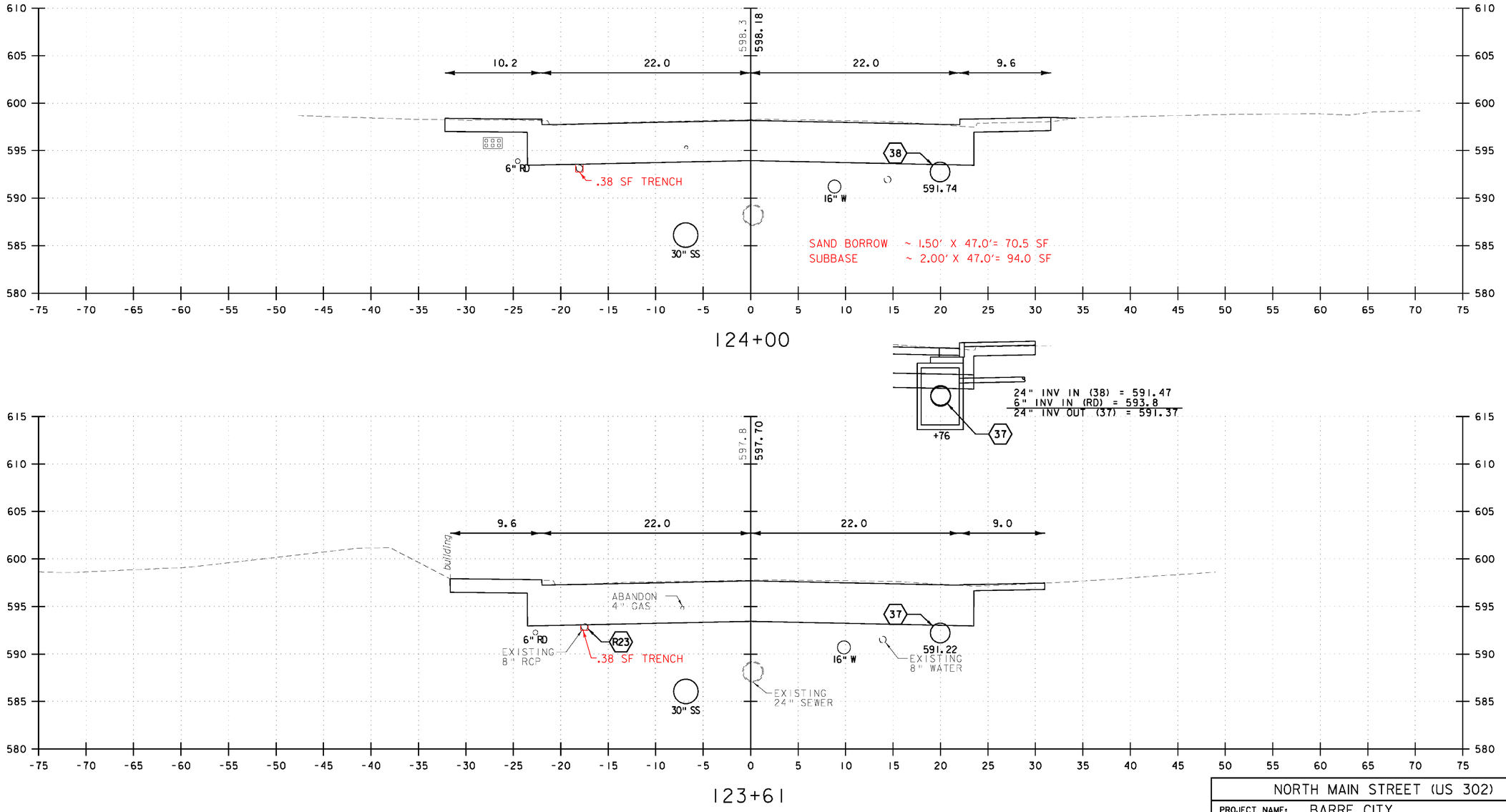
VHB Vanasse Hangen Brustlin, Inc.

NORTH MAIN STREET (US 302)

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_xsl_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 251 OF 339




124+00







123+61

5 0 5 10
FEET

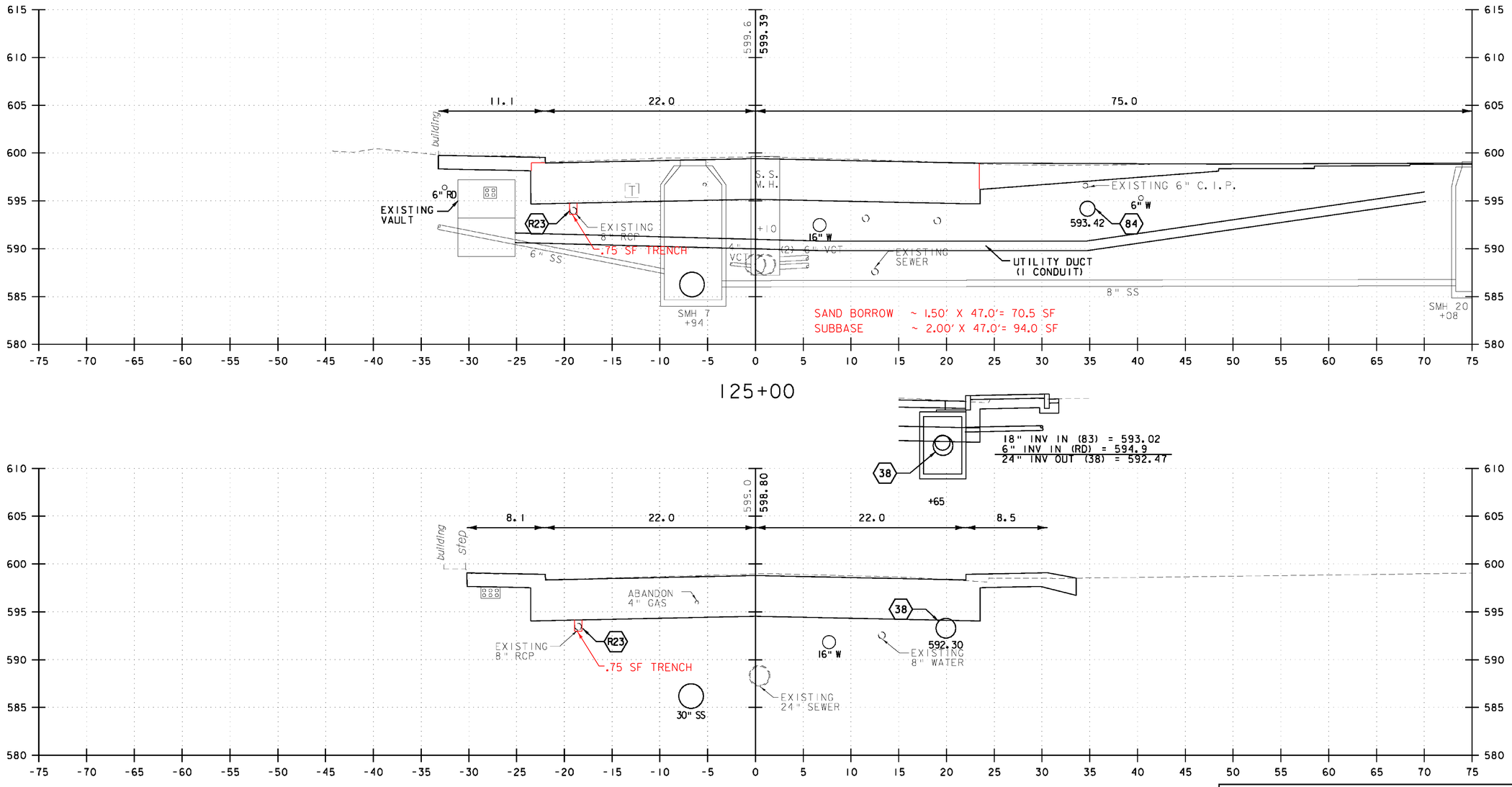
VHB Vanasse Hangen Brustlin, Inc.

NORTH MAIN STREET (US 302)

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_xsl_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 252 OF 339




NORTH MAIN STREET (US 302)

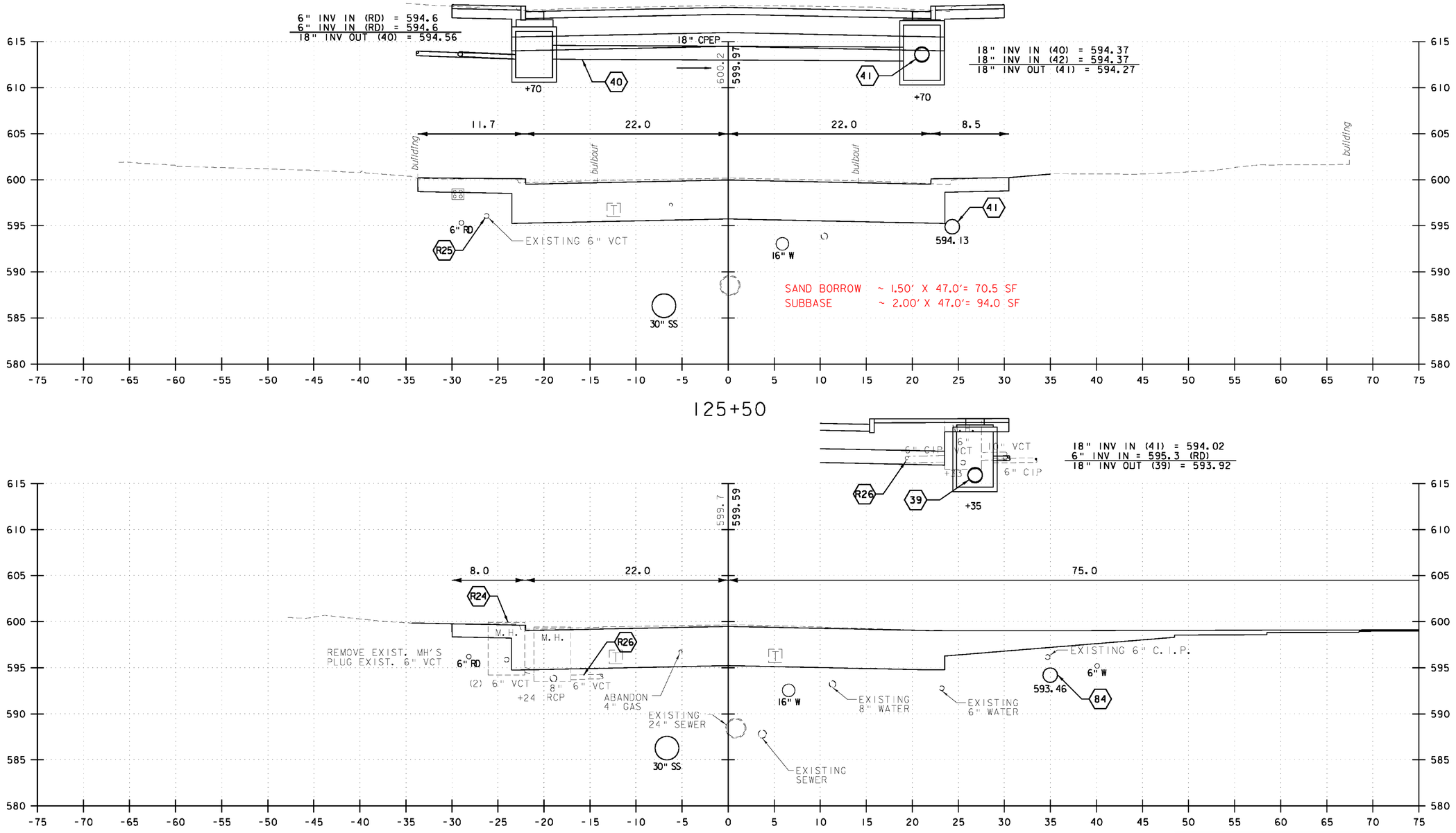
PROJECT NAME: BARRE CITY

PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_xsl_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 253 OF 339

VHB Vanasse Hangen Brustlin, Inc.



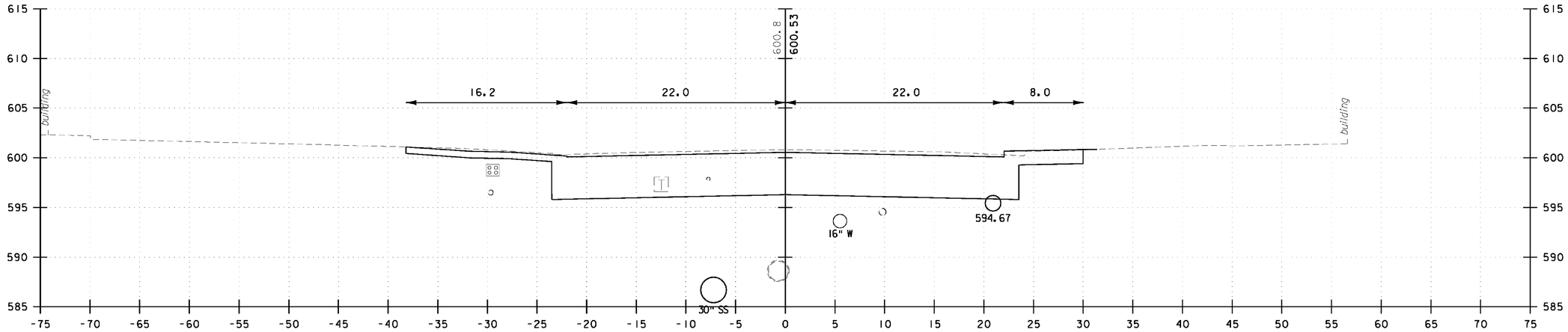

VHB Vanasse Hangen Brustlin, Inc.

NORTH MAIN STREET (US 302)

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

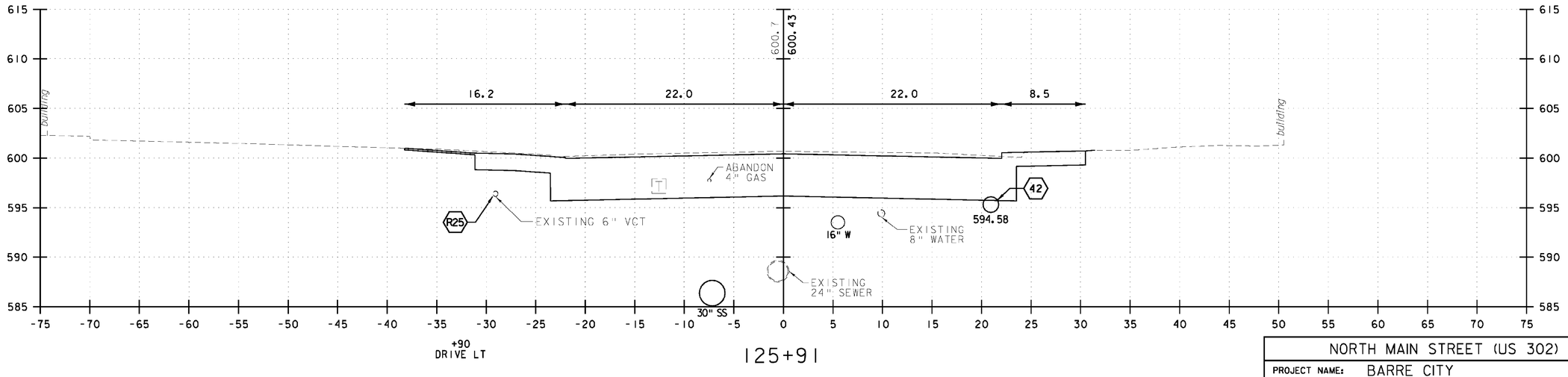
FILE NAME: 85b010_xsl_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 254 OF 339




126+00

SAND BORROW ~ 1.50' X 47.0'= 70.5 SF
SUBBASE ~ 2.00' X 47.0'= 94.0 SF




125+91

5 0 5 10
FEET

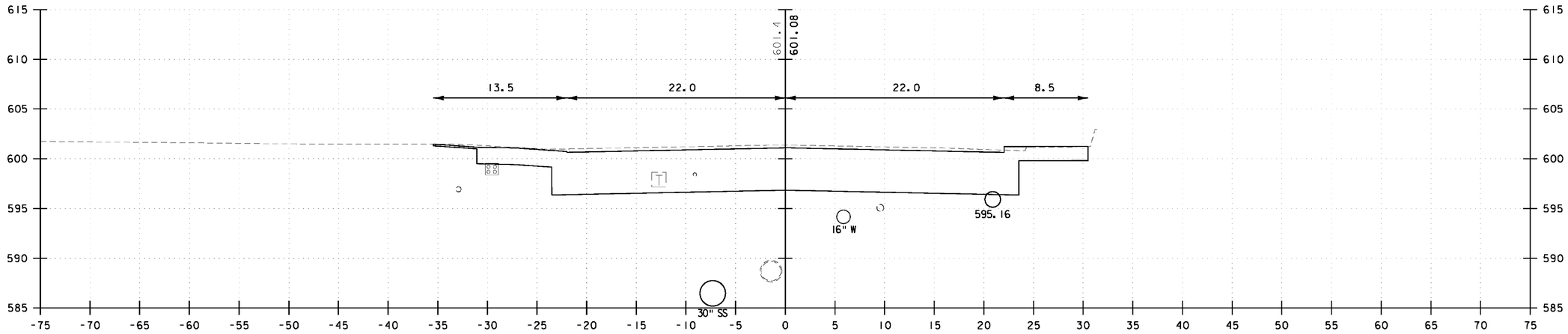
VHB Vanasse Hangen Brustlin, Inc.

NORTH MAIN STREET (US 302)

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-I(34) C/2

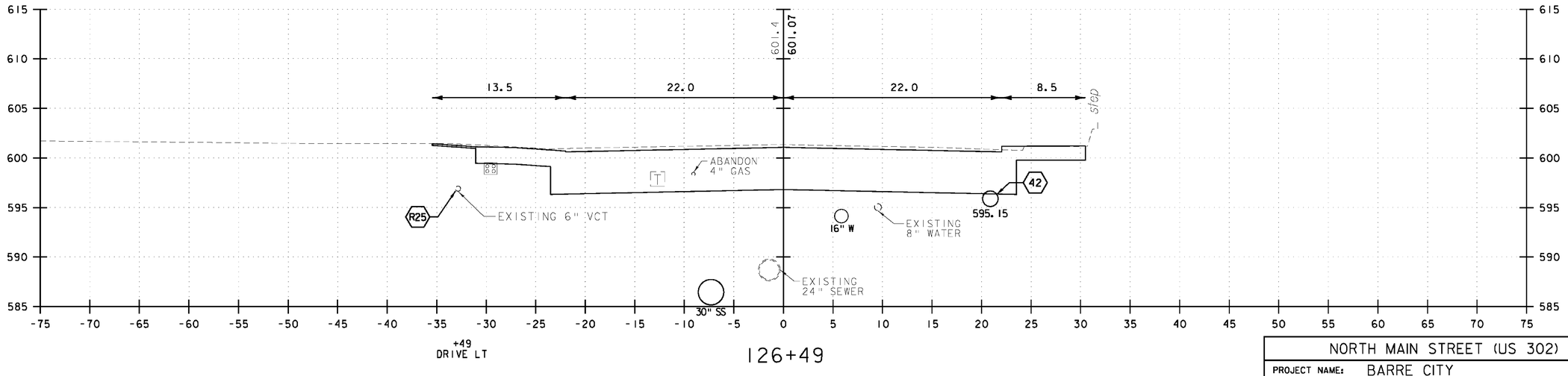
FILE NAME: 85b010_xsl_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 255 OF 339




126+50

SAND BORROW ~ 1.50' X 47.0'= 70.5 SF
SUBBASE ~ 2.00' X 47.0'= 94.0 SF




126+49

NORTH MAIN STREET (US 302)

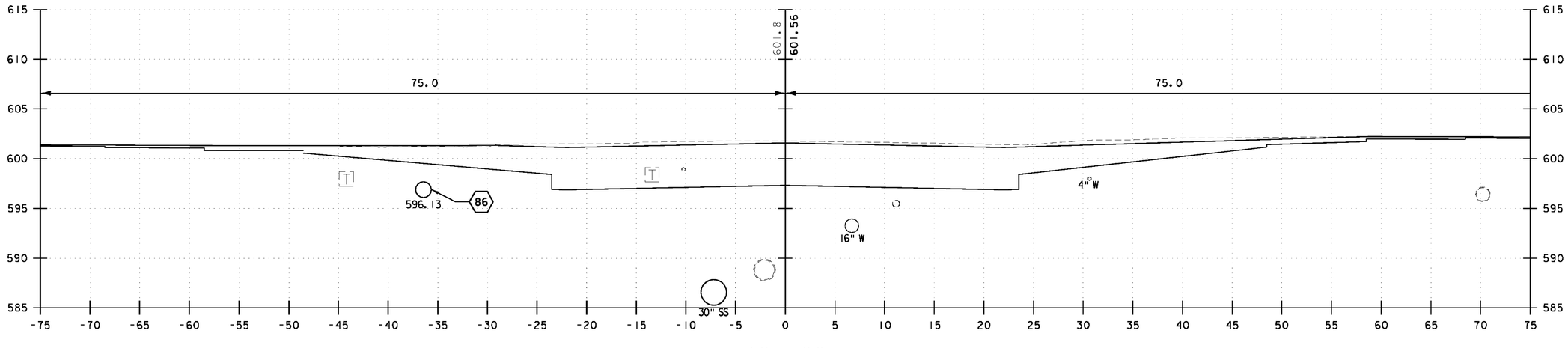
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

5 0 5 10
FEET

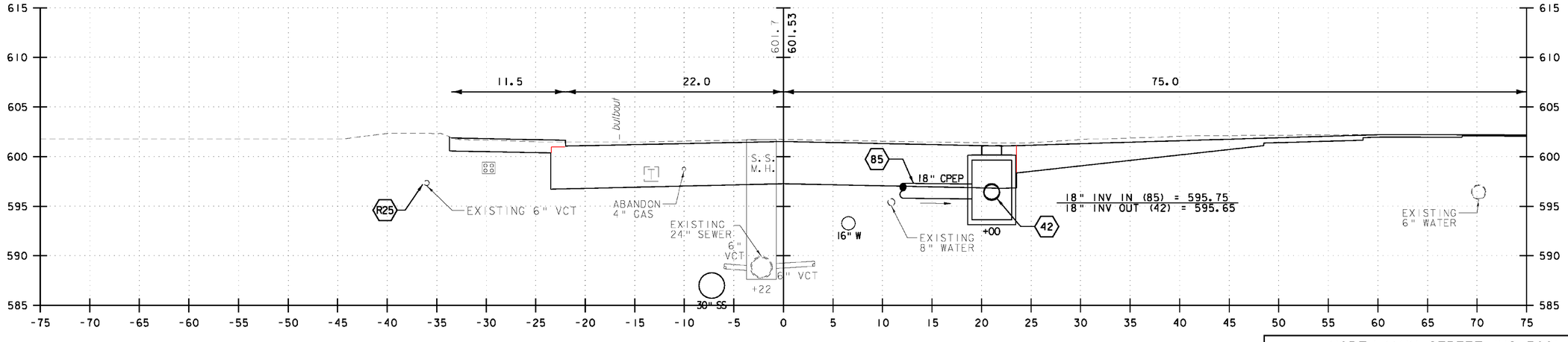
VHB Vanasse Hangen Brustlin, Inc.

FILE NAME: 85b010_xsl_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 256 OF 339




127+09




127+00

SAND BORROW ~ 1.50' X 47.0'= 70.5 SF
SUBBASE ~ 2.00' X 47.0'= 94.0 SF

5 0 5 10
FEET

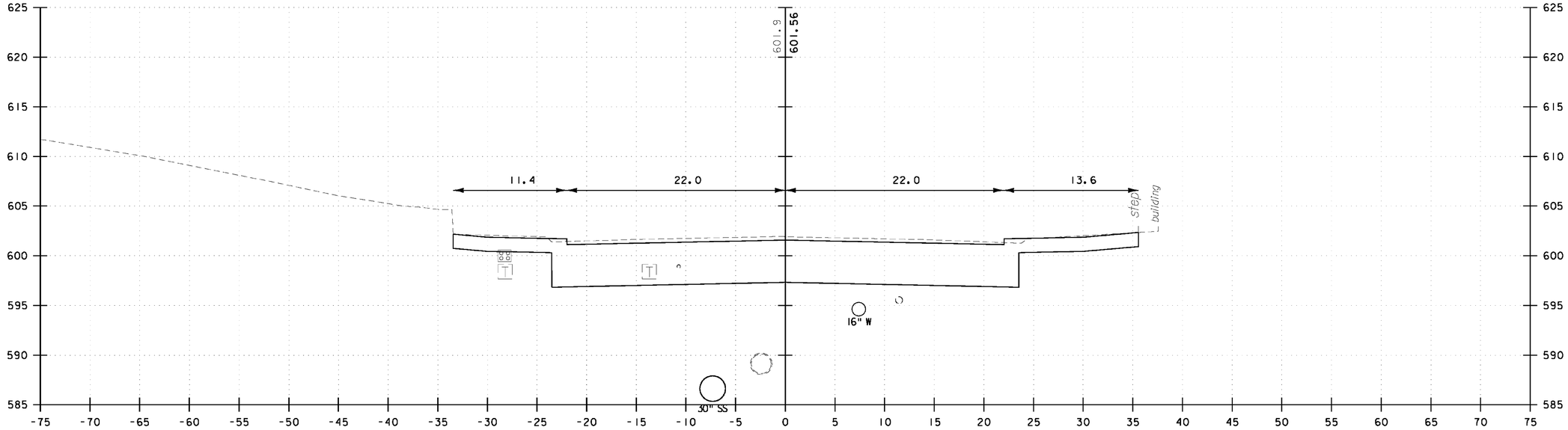
VHB Vanasse Hangen Brustlin, Inc.

NORTH MAIN STREET (US 302)

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

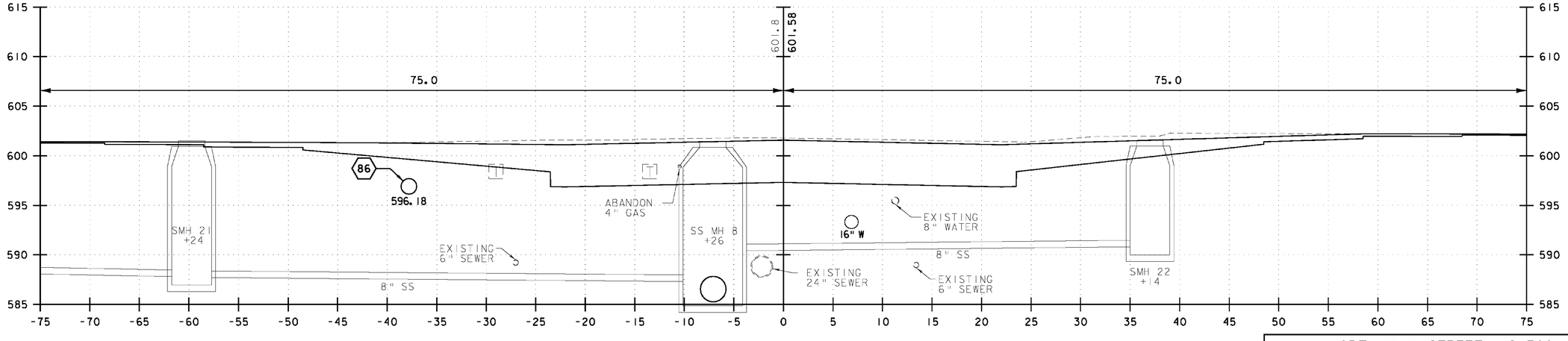
FILE NAME: 85b010_xsl_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 257 OF 339




127+50

SAND BORROW ~ 1.50' X 47.0'= 70.5 SF
SUBBASE ~ 2.00' X 47.0'= 94.0 SF




127+19

5 0 5 10
FEET

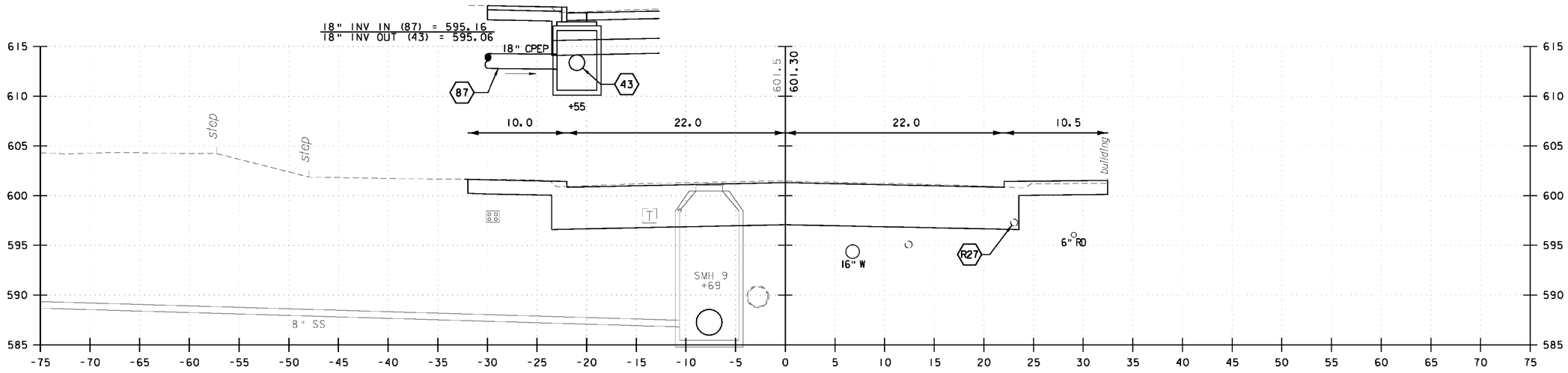
VHB Vanasse Hangen Brustlin, Inc.

NORTH MAIN STREET (US 302)

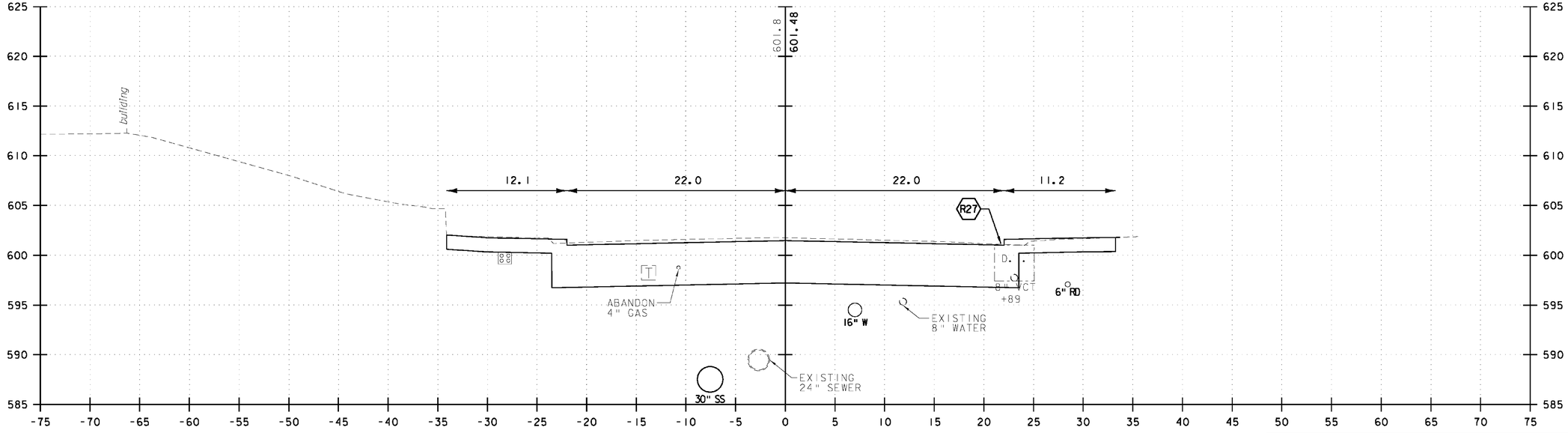
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_xsl_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 258 OF 339




128+50 SAND BORROW ~ 1.50' X 47.0'= 70.5 SF
SUBBASE ~ 2.00' X 47.0'= 94.0 SF




128+00 SAND BORROW ~ 1.50' X 47.0'= 70.5 SF
SUBBASE ~ 2.00' X 47.0'= 94.0 SF

5 0 5 10
FEET

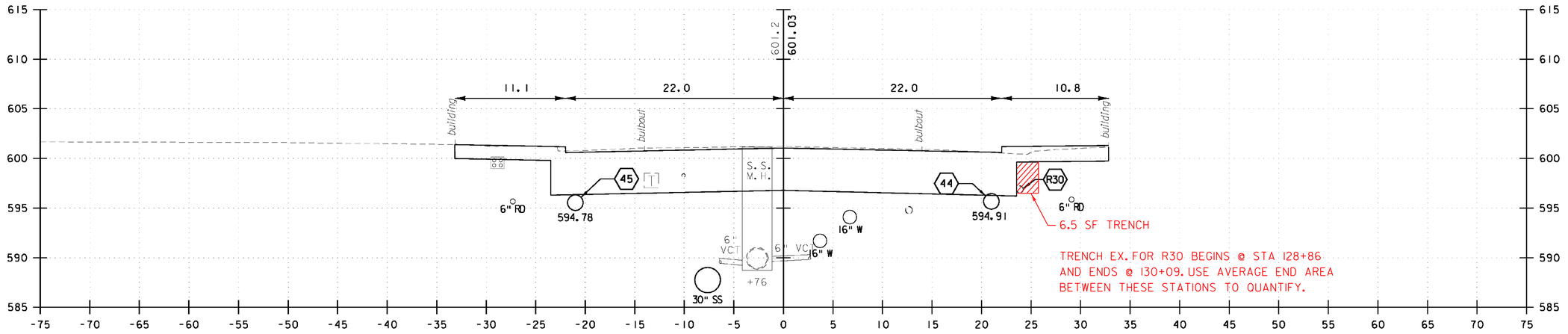
VHB Vanasse Hangen Brustlin, Inc.

NORTH MAIN STREET (US 302)

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-I(34) C/2

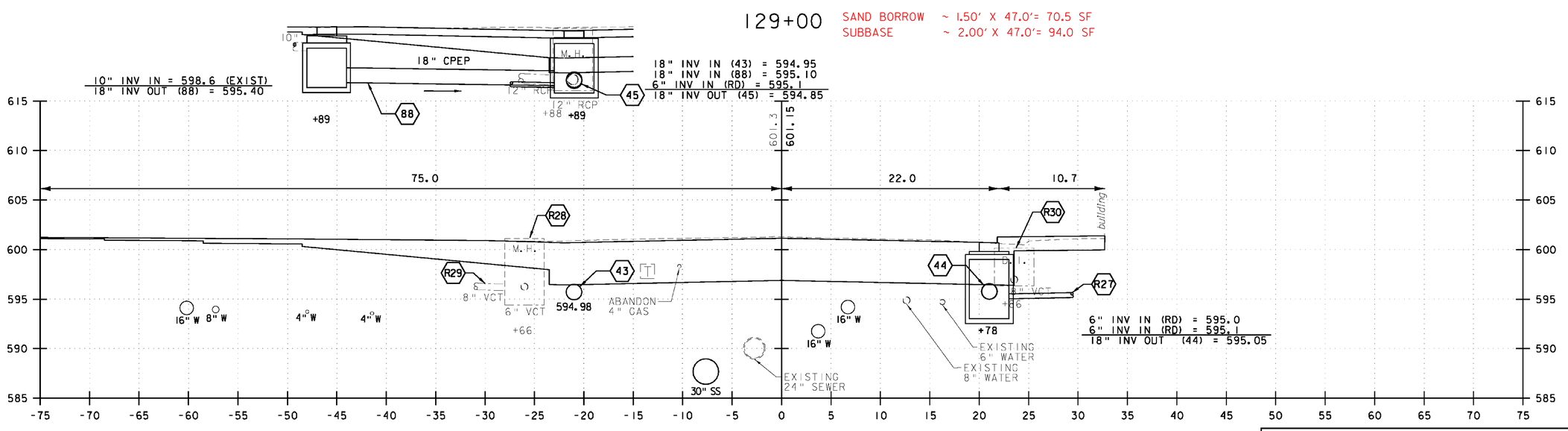
FILE NAME: 85b010_xsl_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 259 OF 339




129+00

SAND BORROW ~ 1.50' X 47.0'= 70.5 SF
SUBBASE ~ 2.00' X 47.0'= 94.0 SF




128+79

5 0 5 10
FEET

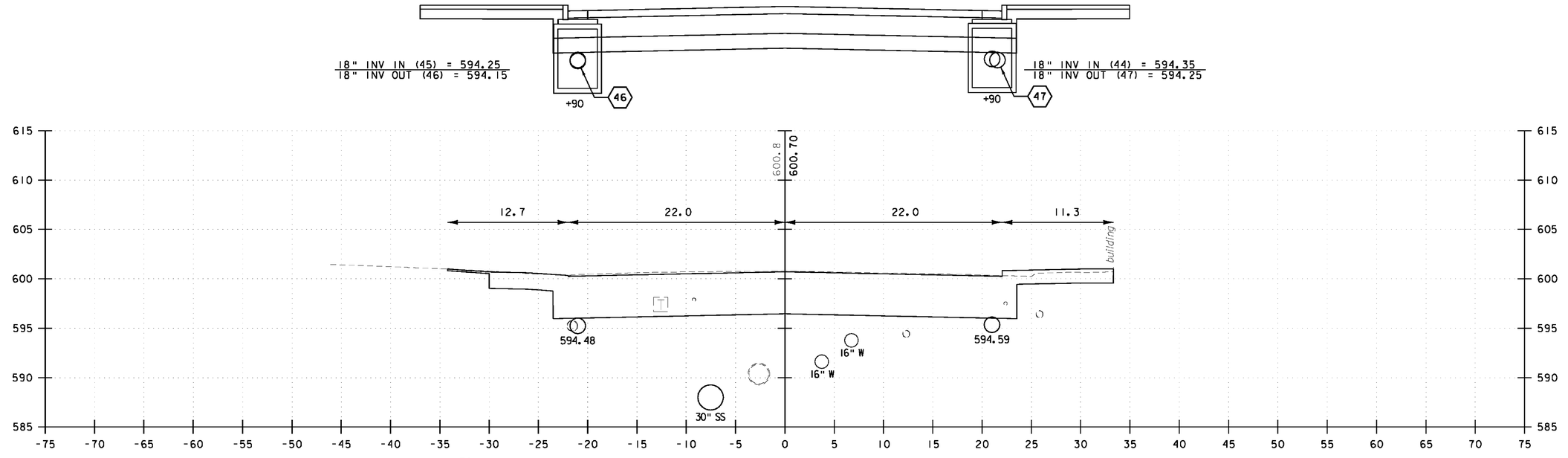
VHB Vanasse Hangen Brustlin, Inc.

NORTH MAIN STREET (US 302)

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

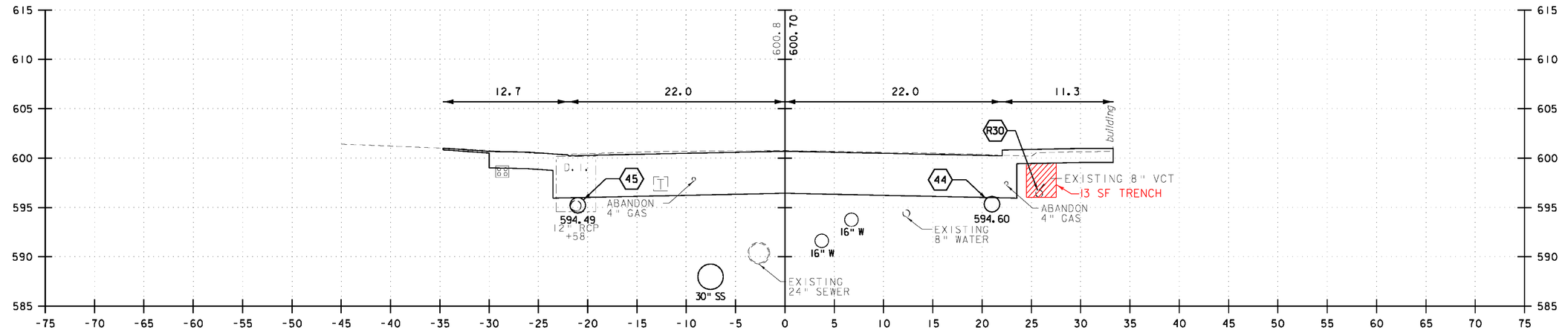
FILE NAME: 85b010_xsl_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 260 OF 339




+51
DRIVE LT

129+51 SAND BORROW ~ 1.50' X 47.0'= 70.5 SF
SUBBASE ~ 2.00' X 47.0'= 94.0 SF




129+50 SAND BORROW ~ 1.50' X 47.0'= 70.5 SF
SUBBASE ~ 2.00' X 47.0'= 94.0 SF

5 0 5 10
FEET

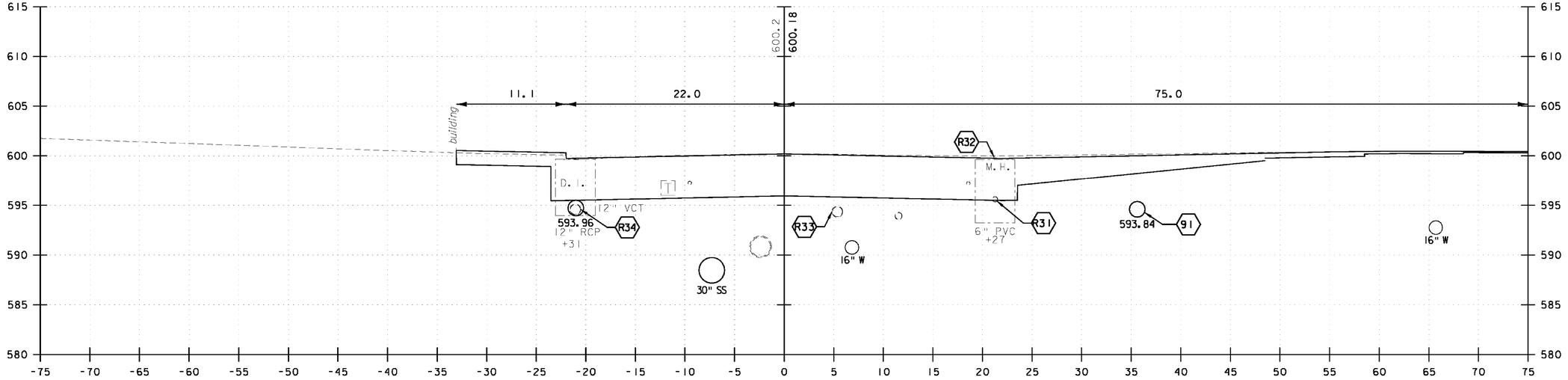
VHB Vanasse Hangen Brustlin, Inc.

NORTH MAIN STREET (US 302)

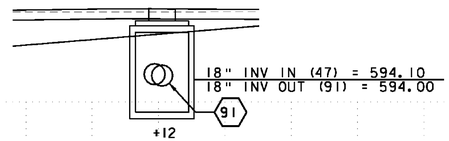
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

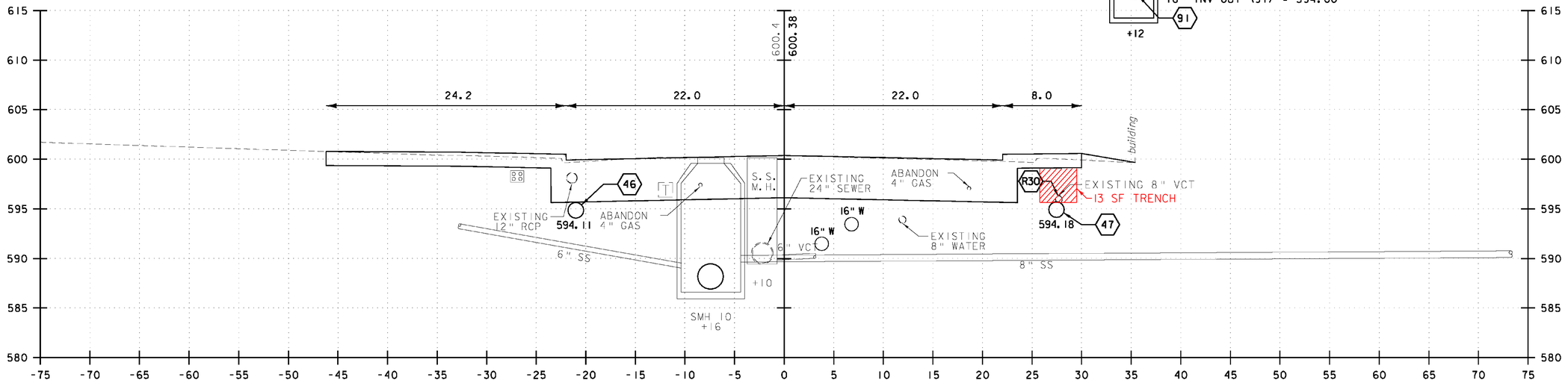
FILE NAME: 85b010_xsl_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 261 OF 339




130+39




130+00

SAND BORROW ~ 1.50' X 47.0'= 70.5 SF
SUBBASE ~ 2.00' X 47.0'= 94.0 SF

5 0 5 10
FEET

VHB Vanasse Hangen Brustlin, Inc.

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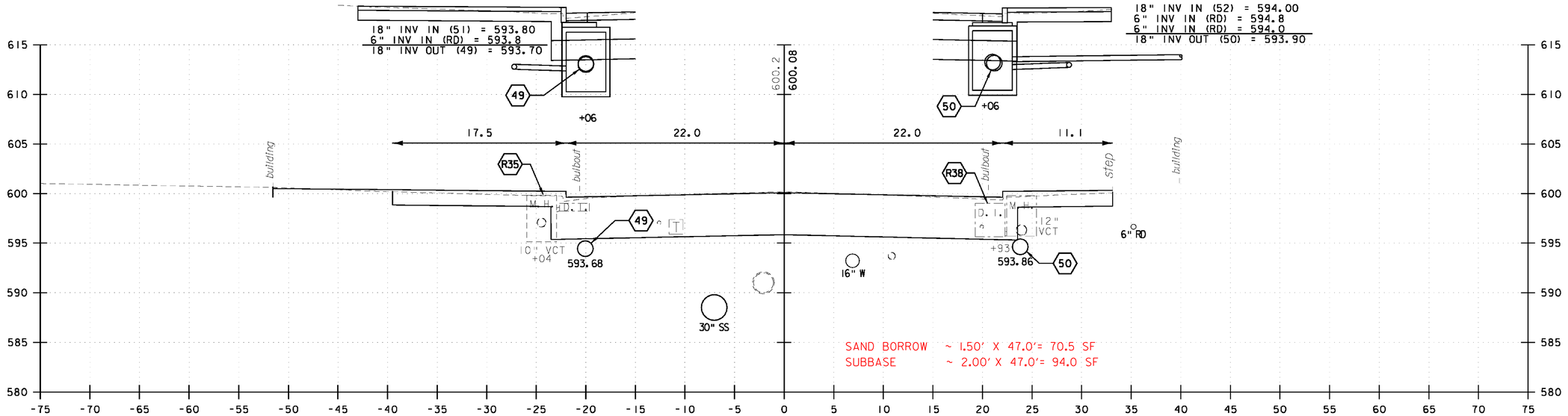
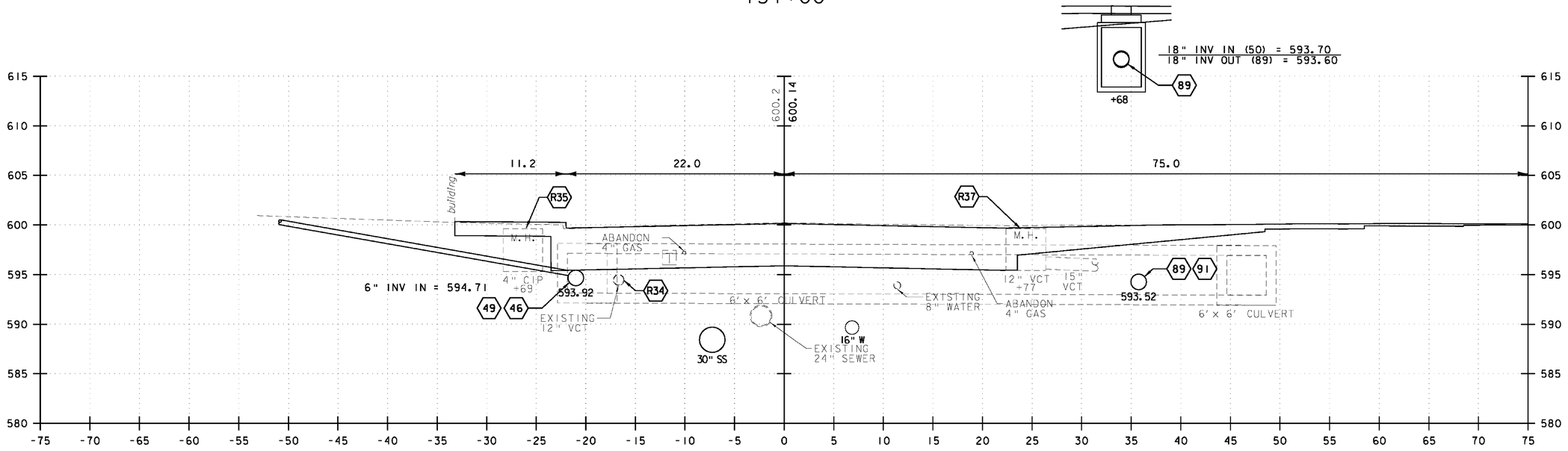
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 262 OF 339




131+00




130+50

SAND BORROW ~ 1.50' X 47.0'= 70.5 SF
SUBBASE ~ 2.00' X 47.0'= 94.0 SF

5 0 5 10
FEET

VHB Vanasse Hangen Brustlin, Inc.

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CROSS SECTIONS

PLOT DATE: 3/9/2011
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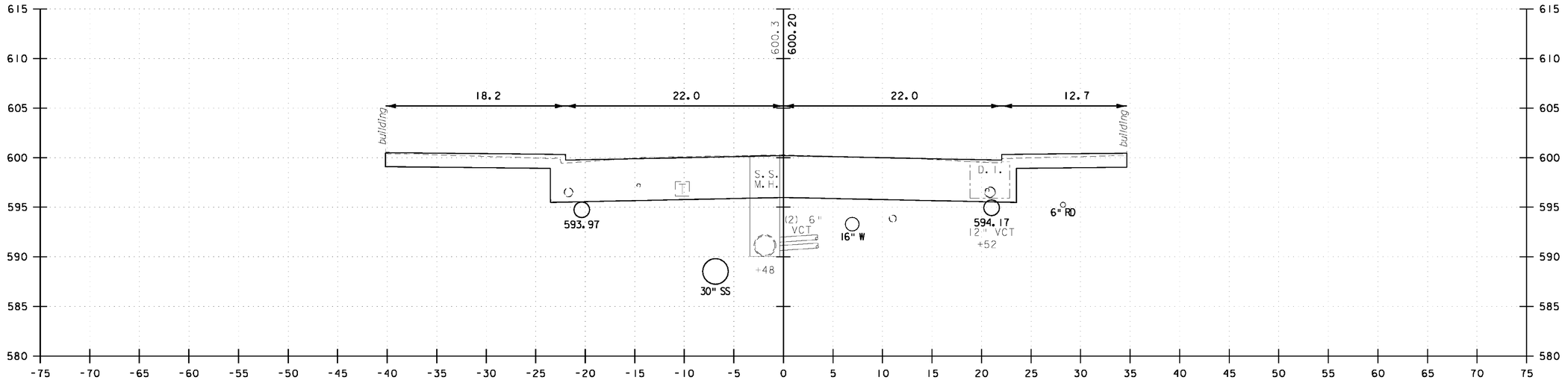
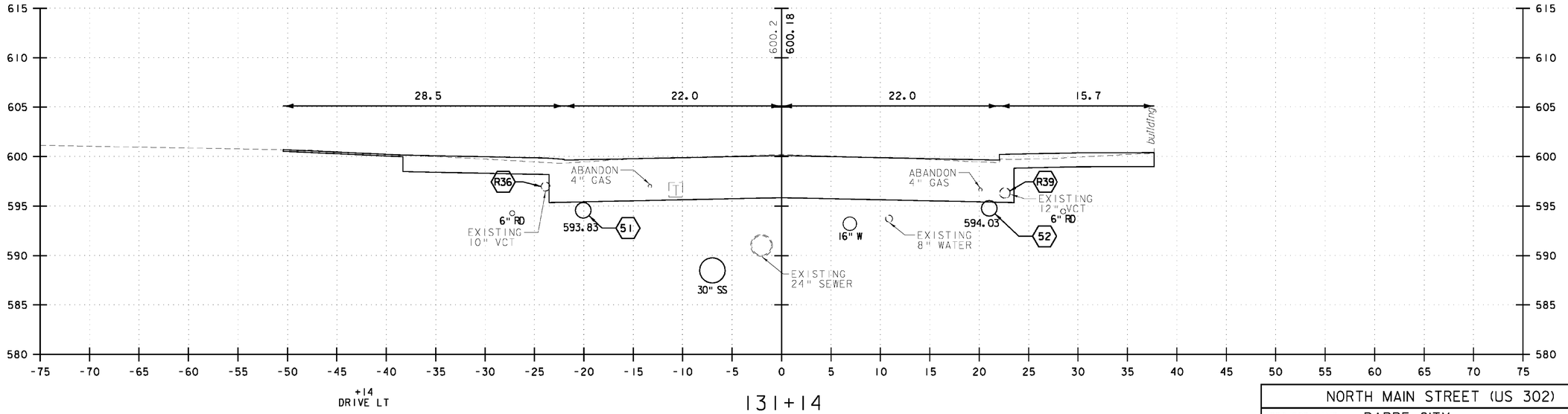
CHECKED BY:
SHEET 263 OF 339




131+50

SAND BORROW ~ 1.50' X 47.0'= 70.5 SF
SUBBASE ~ 2.00' X 47.0'= 94.0 SF




+14 DRIVE LT

131+14

5 0 5 10
FEET

VHB Vanasse Hangen Brustlin, Inc.

NORTH MAIN STREET (US 302)

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

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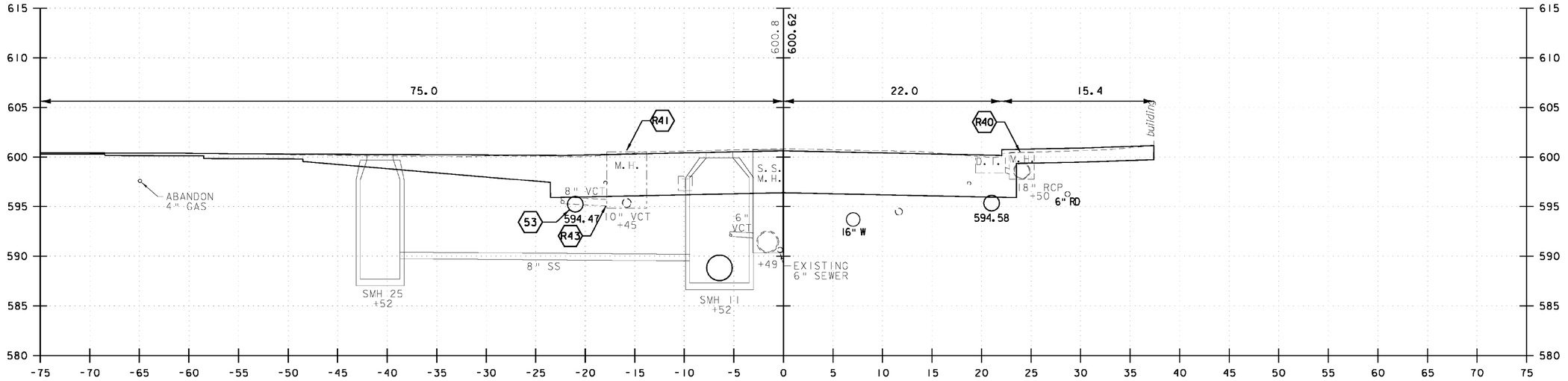
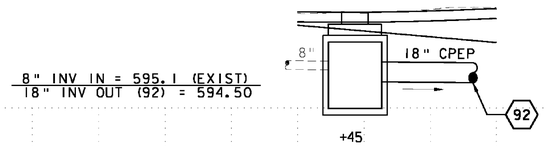
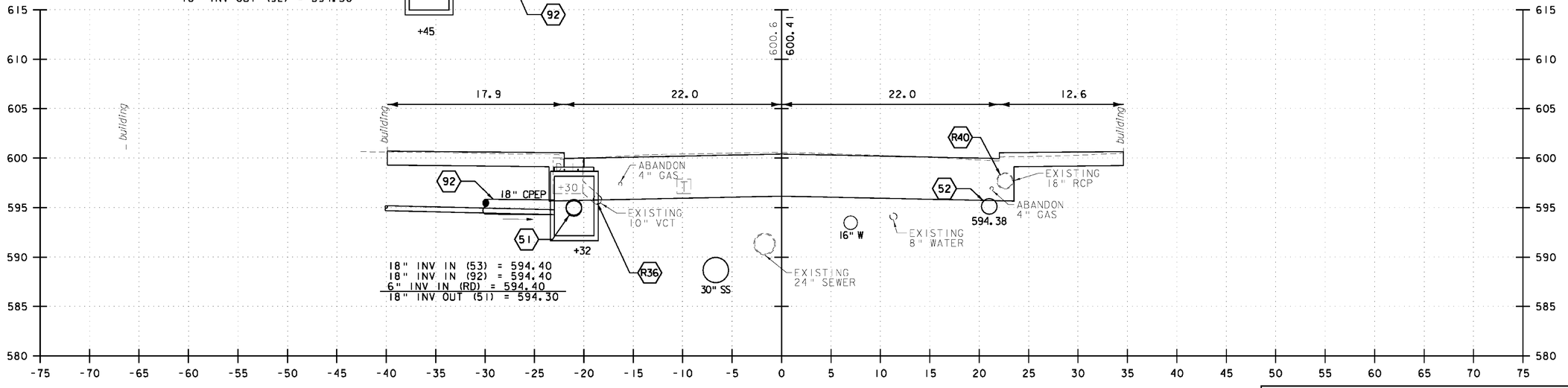
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 264 OF 339




132+50 SAND BORROW ~ 1.50' X 47.0'= 70.5 SF
SUBBASE ~ 2.00' X 47.0'= 94.0 SF




132+00 SAND BORROW ~ 1.50' X 47.0'= 70.5 SF
SUBBASE ~ 2.00' X 47.0'= 94.0 SF

5 0 5 10
FEET

VHB Vanasse Hangen Brustlin, Inc.

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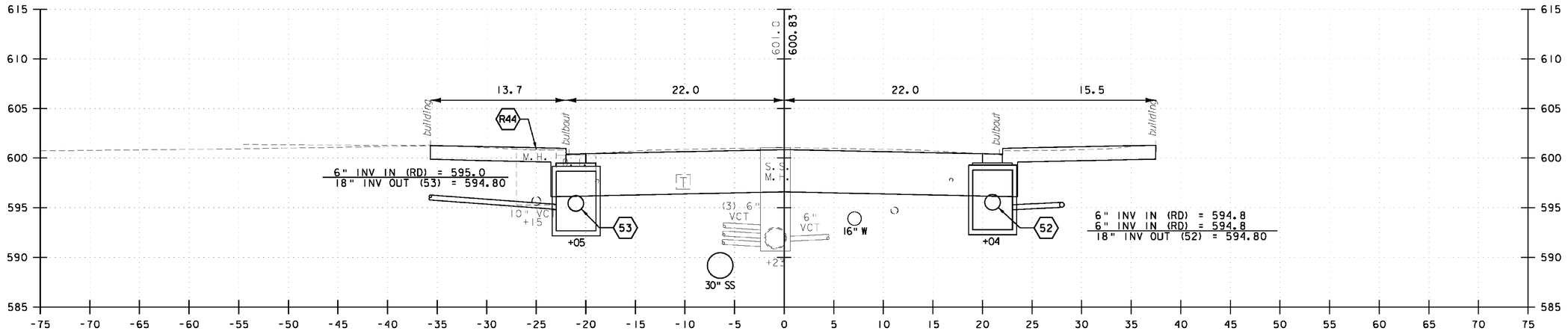
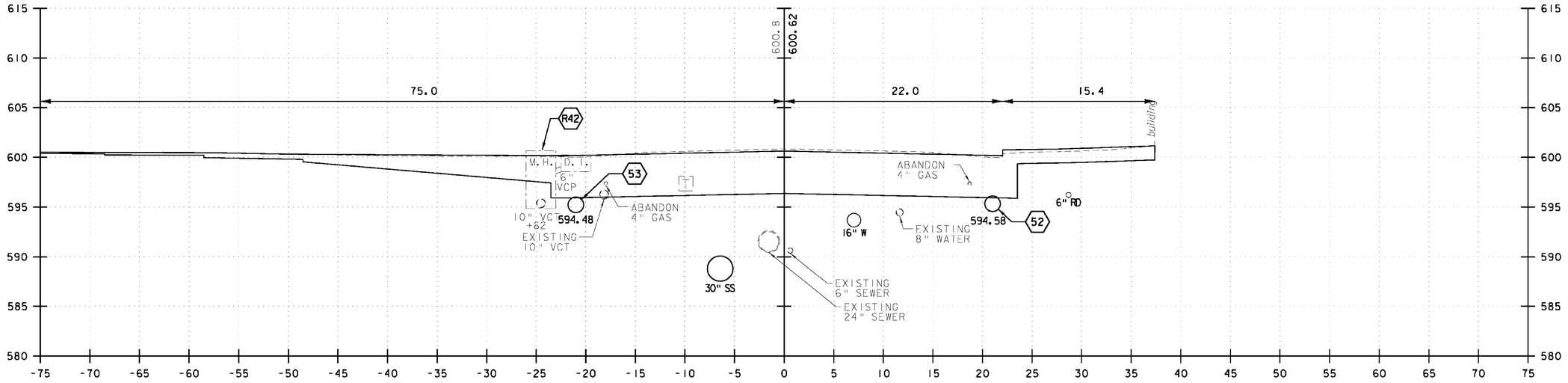
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 265 OF 339




133+00

SAND BORROW ~ 1.50' X 47.0'= 70.5 SF
SUBBASE ~ 2.00' X 47.0'= 94.0 SF




132+51

5 0 5 10
FEET

VHB Vanasse Hangen Brustlin, Inc.

NORTH MAIN STREET (US 302)

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

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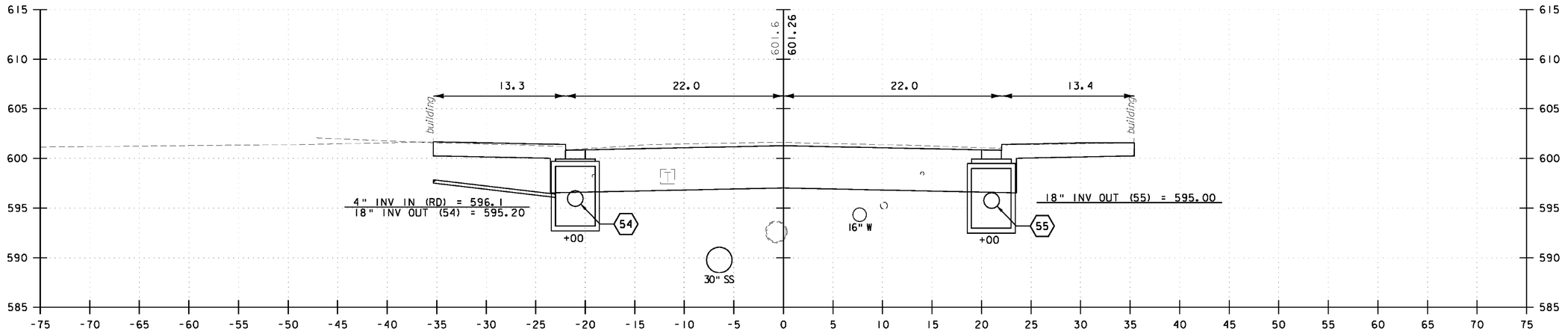
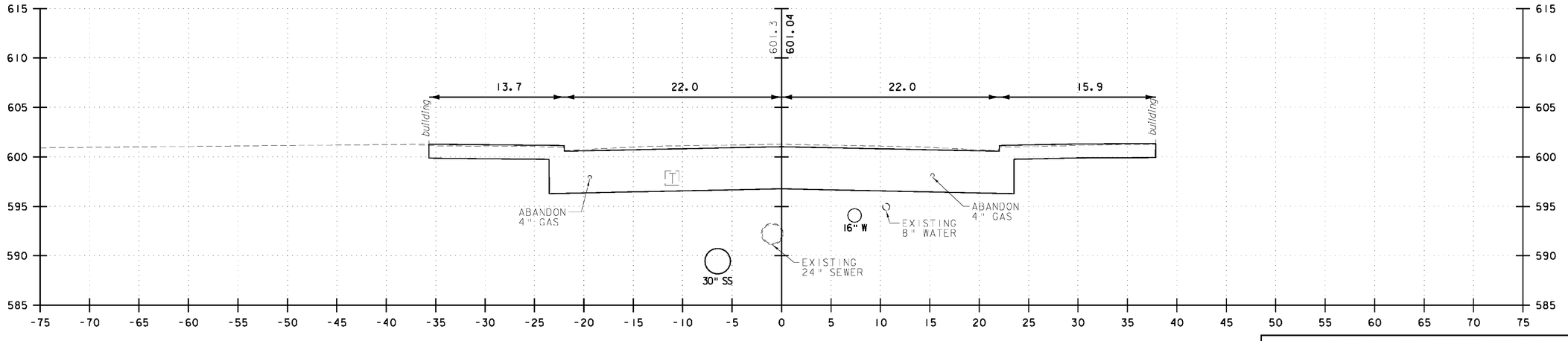
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 266 OF 339




134+00 SAND BORROW ~ 1.50' X 47.0'= 70.5 SF
SUBBASE ~ 2.00' X 47.0'= 94.0 SF




133+50 SAND BORROW ~ 1.50' X 47.0'= 70.5 SF
SUBBASE ~ 2.00' X 47.0'= 94.0 SF

5 0 5 10
FEET

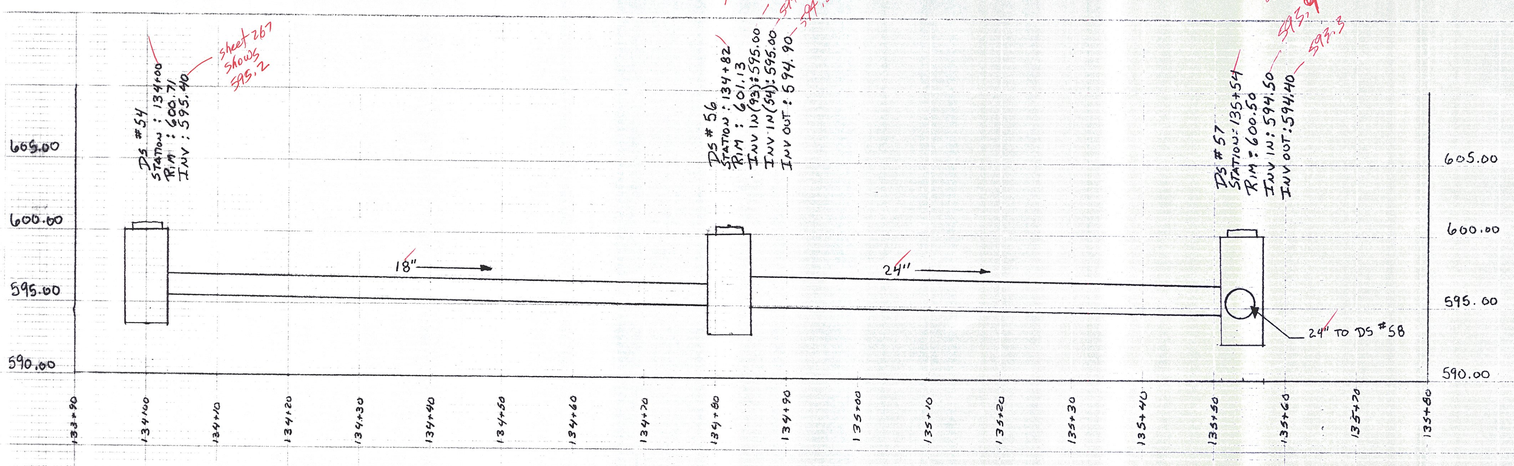
VHB Vanasse Hangen Brustlin, Inc.

NORTH MAIN STREET (US 302)

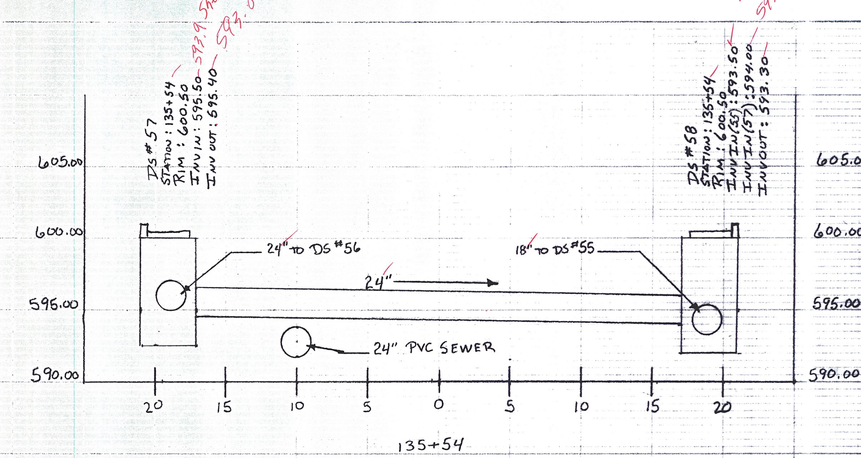
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_xsl_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

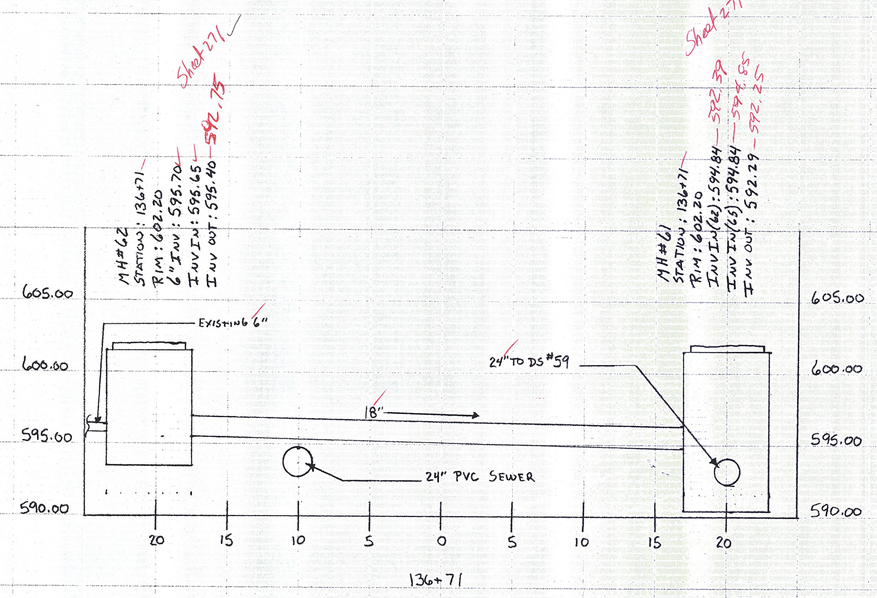
PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 267 OF 339




DRAINAGE RUN (54) TO (57)

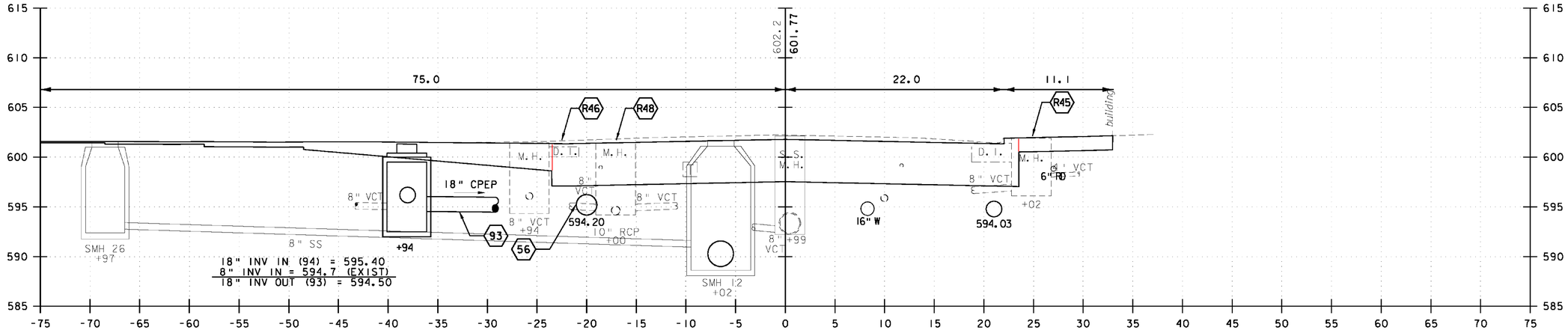



DRAINAGE X-ING (57) TO (58)



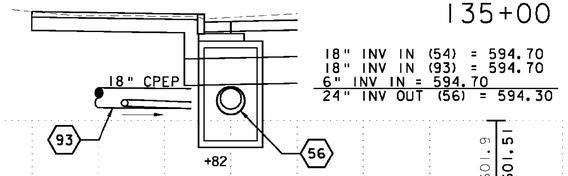

| | | | |
|---|---|---|---|
| LUCK BROS. INC. | PROJECT NAME: | BARRE CITY | NOTES / REVISIONS |
| | PROJECT NUMBER: | FEGC F 026-1(34) C/2 | ISSUED: 2/7/2012 |
| | FILE NAME: | SAN PROFILES | |
| | MANAGER | J. LUCK | |
| | DRAWN BY: | C. KEMPNEY | |

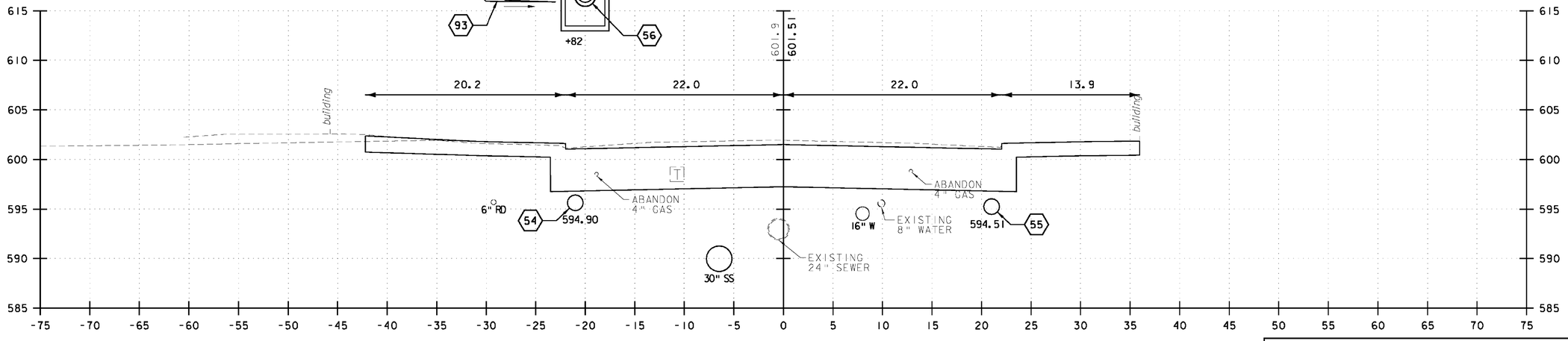
**PROPOSED REDESIGN STORM SEWER PROFILES**




135+00

SAND BORROW ~ 1.50' X 47.0'= 70.5 SF
SUBBASE ~ 2.00' X 47.0'= 94.0 SF




134+50

SAND BORROW ~ 1.50' X 47.0'= 70.5 SF
SUBBASE ~ 2.00' X 47.0'= 94.0 SF

5 0 5 10
FEET

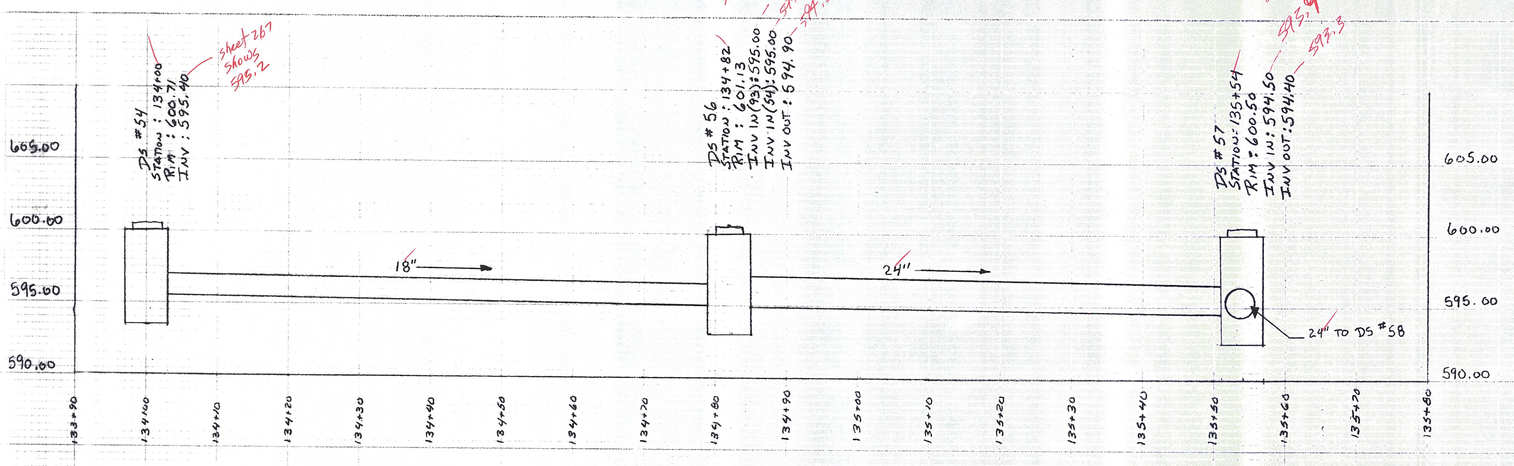
VHB Vanasse Hangen Brustlin, Inc.

NORTH MAIN STREET (US 302)

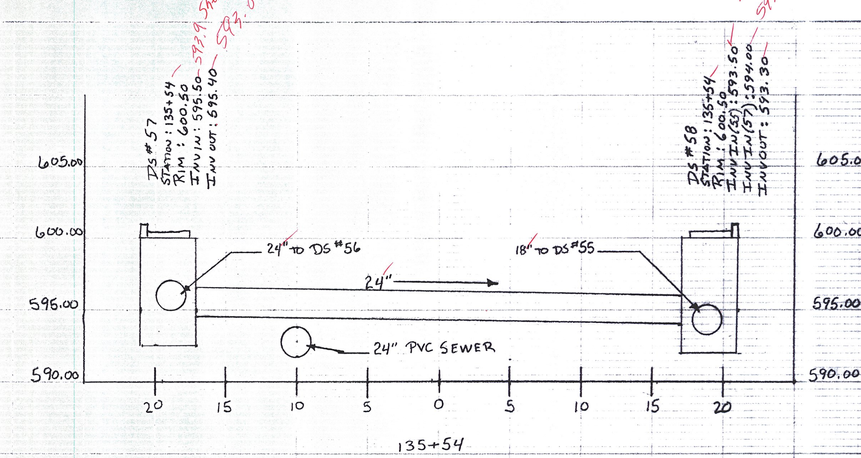
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_xsl_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

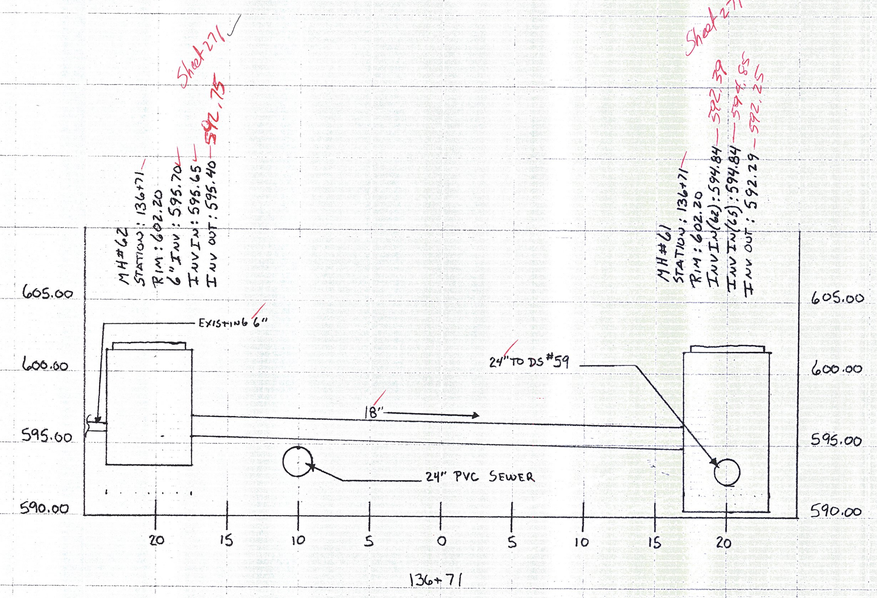
PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 268 OF 339




DRAINAGE RUN (54) TO (57)




DRAINAGE X-ING (57) TO (58)

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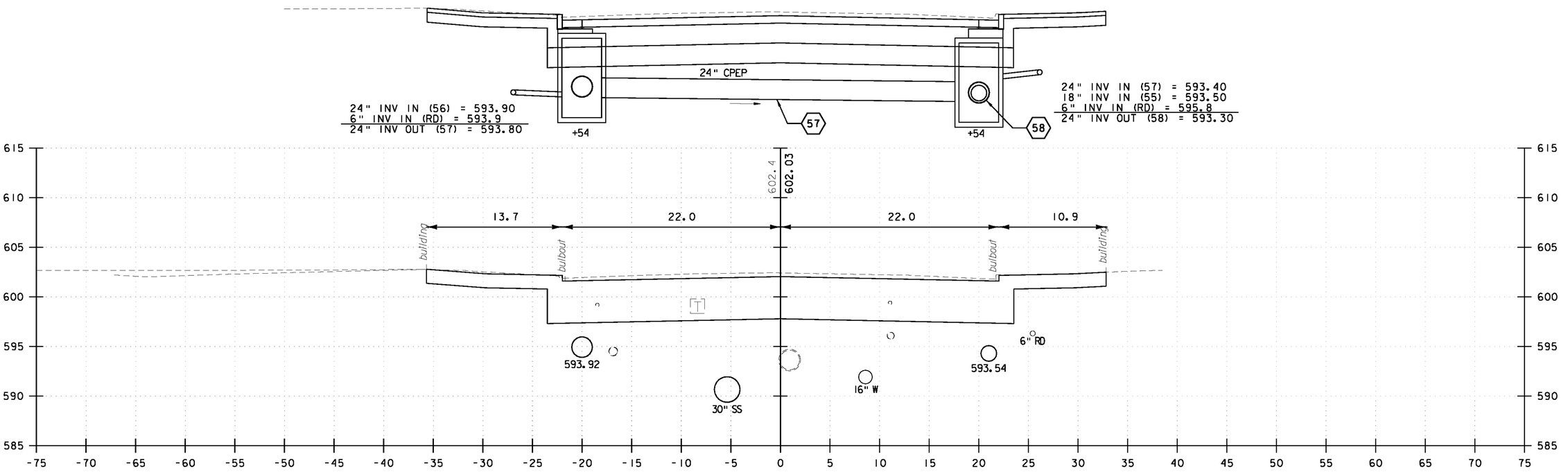
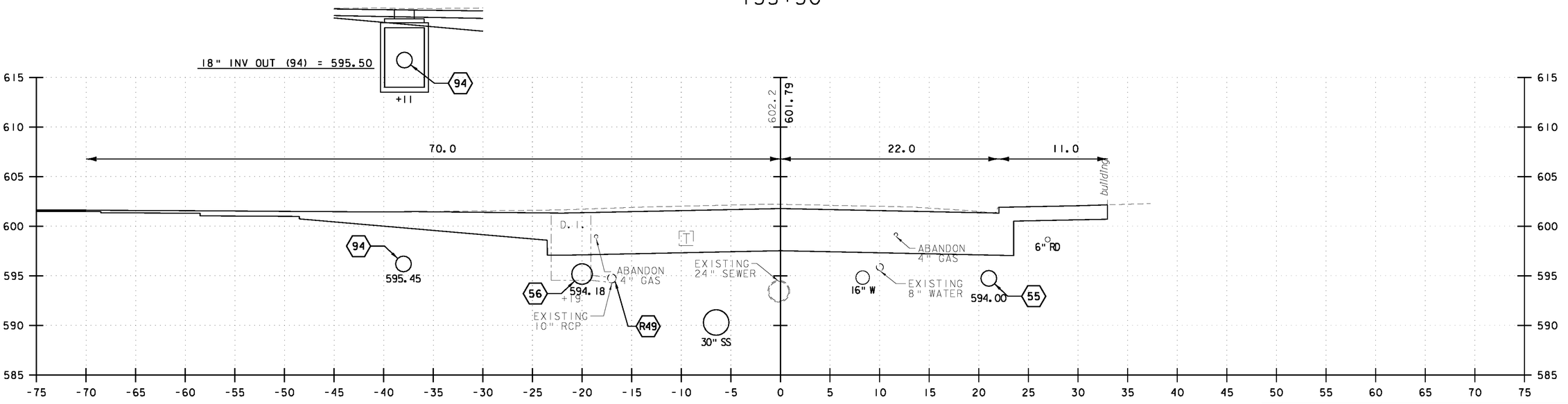
| | MANAGER | J. LUCK | |
| | DRAWN BY: | C. KEMPNEY | |

**PROPOSED REDESIGN STORM SEWER PROFILES**




135+50




135+03

5 0 5 10
FEET

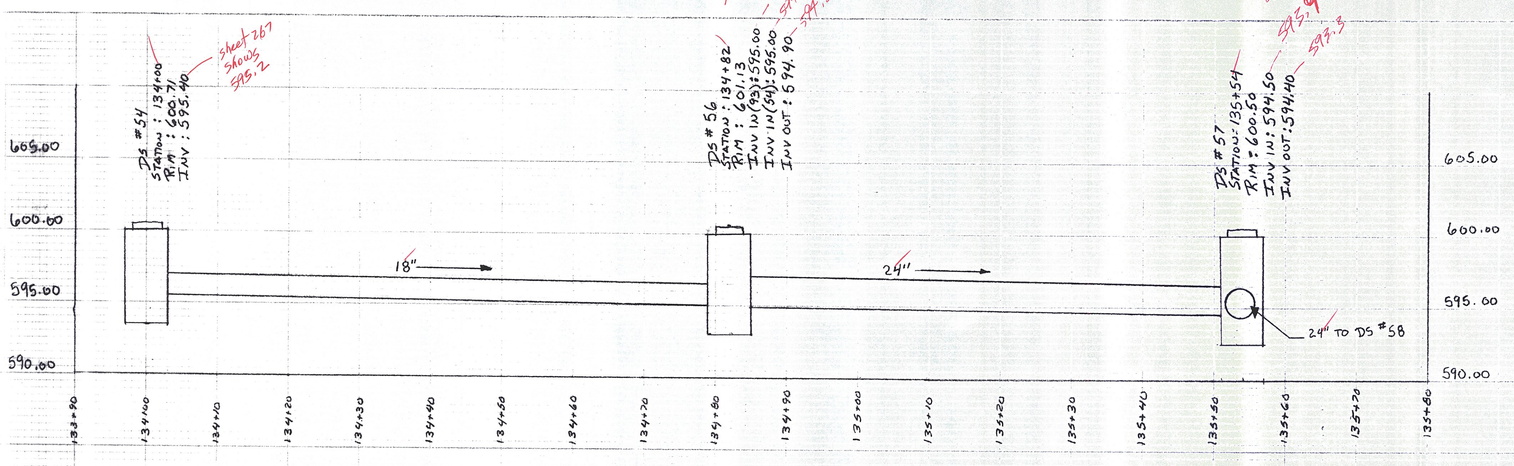
VHB Vanasse Hangen Brustlin, Inc.

NORTH MAIN STREET (US 302)

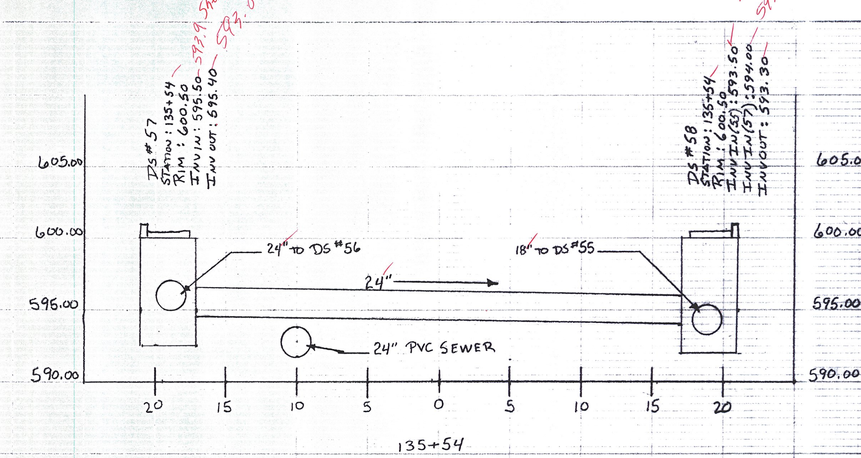
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_xsl_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

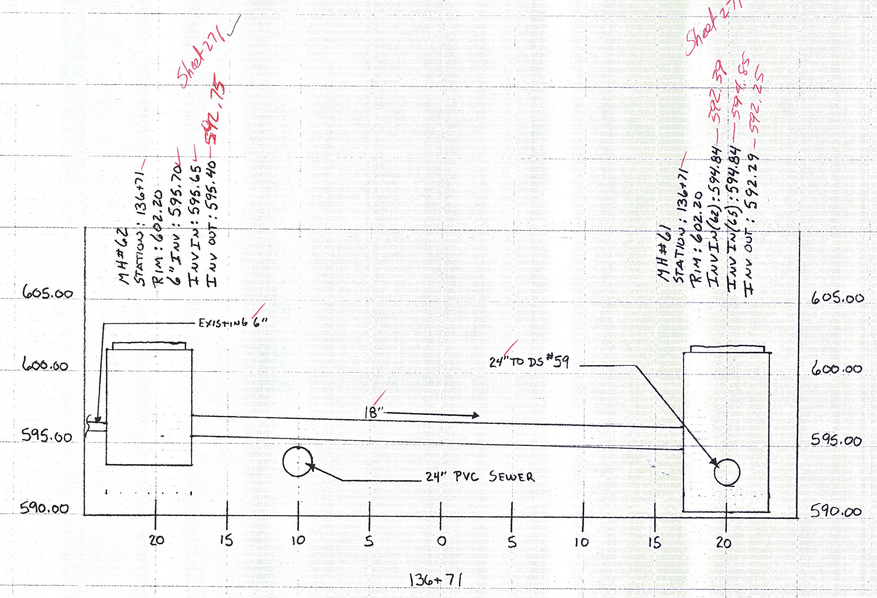
PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 269 OF 339




DRAINAGE RUN (54) TO (57)




DRAINAGE X-ING (57) TO (58)




| | | | |
|---|---|---|---|
| LUCK BROS. INC. | PROJECT NAME: | BARRE CITY | NOTES / REVISIONS |
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| | MANAGER | J. LUCK | |
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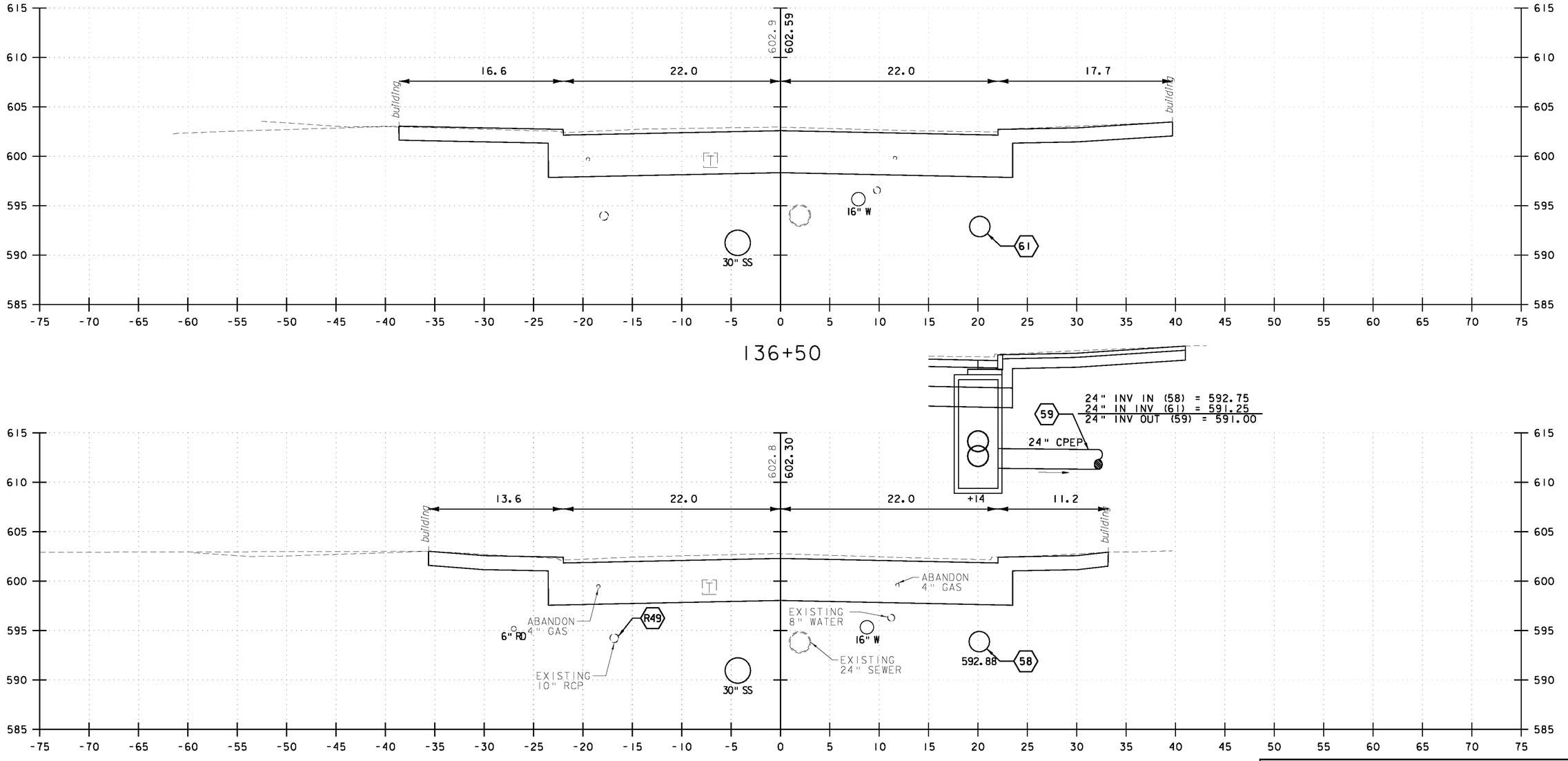
**PROPOSED REDESIGN STORM SEWER PROFILES**




VHB Vanasse Hangen Brustlin, Inc.

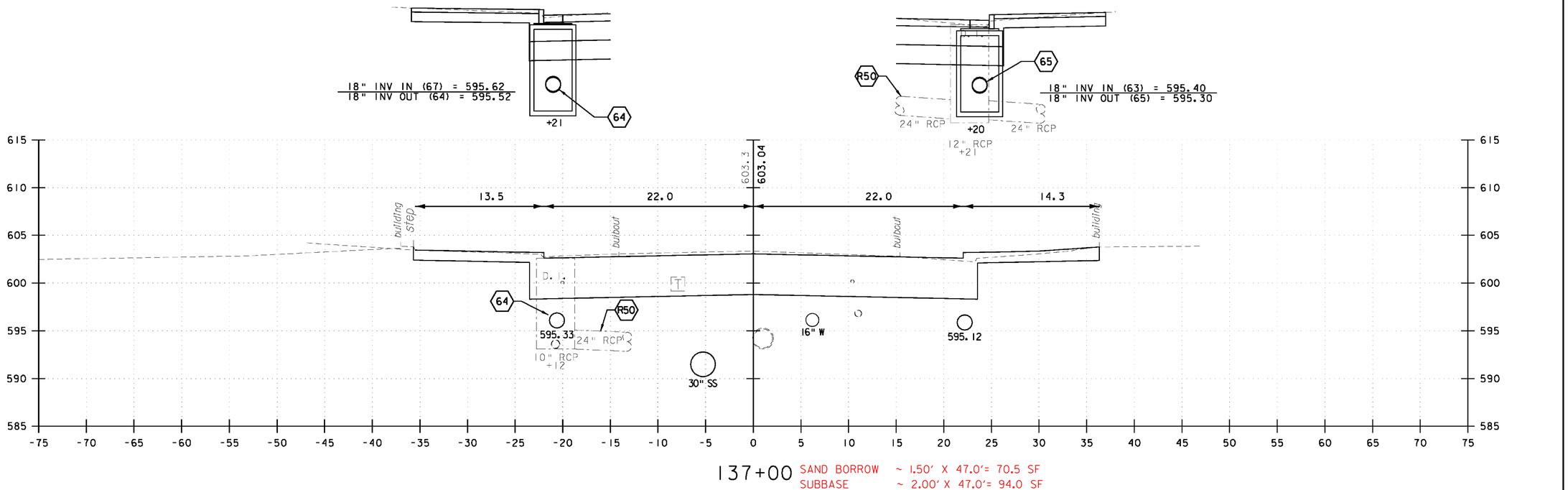
NORTH MAIN STREET (US 302)

PROJECT NAME: BARRE CITY

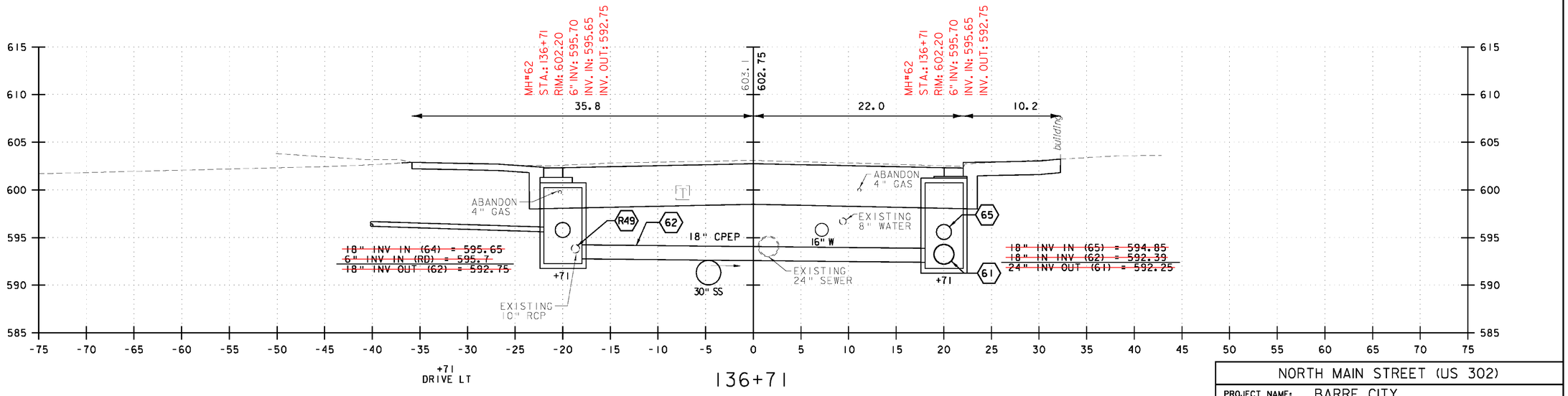
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_xsl_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 270 OF 339




137+00 SAND BORROW ~ 1.50' X 47.0'= 70.5 SF
SUBBASE ~ 2.00' X 47.0'= 94.0 SF




136+71

5 0 5 10
FEET

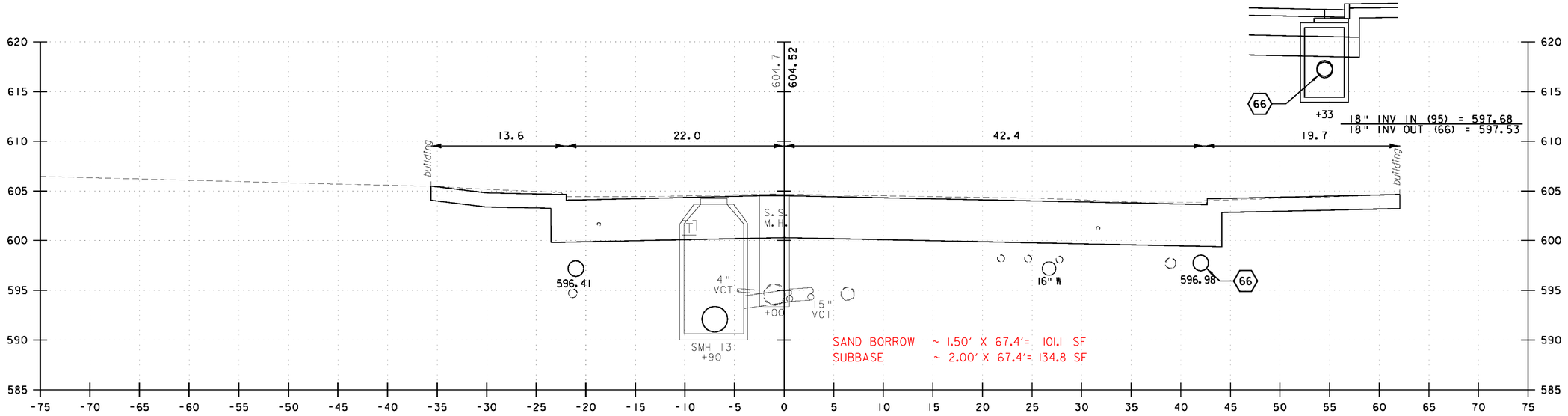
VHB Vanasse Hangen Brustlin, Inc.

NORTH MAIN STREET (US 302)

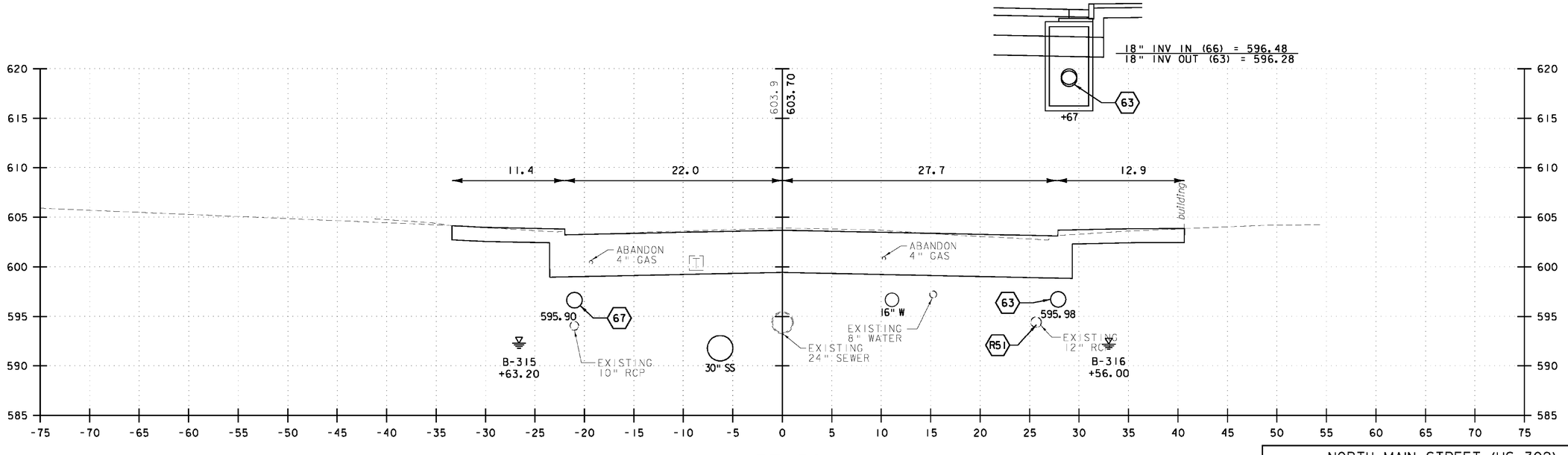
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_xsl_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 271 OF 339




138+00




137+50 SAND BORROW ~ 1.50' X 52.7'= 79.1 SF
SUBBASE ~ 2.00' X 52.7'= 105.4 SF

5 0 5 10
FEET

VHB Vanasse Hangen Brustlin, Inc.

NORTH MAIN STREET (US 302)

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PLOT DATE: 3/9/2011
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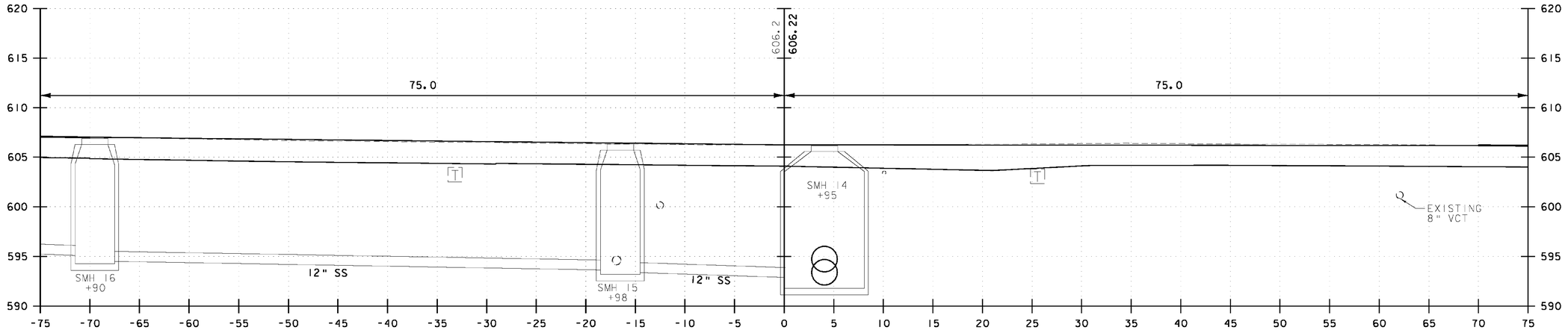
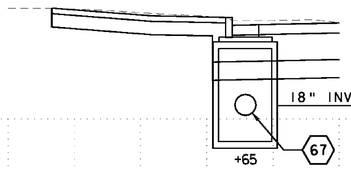
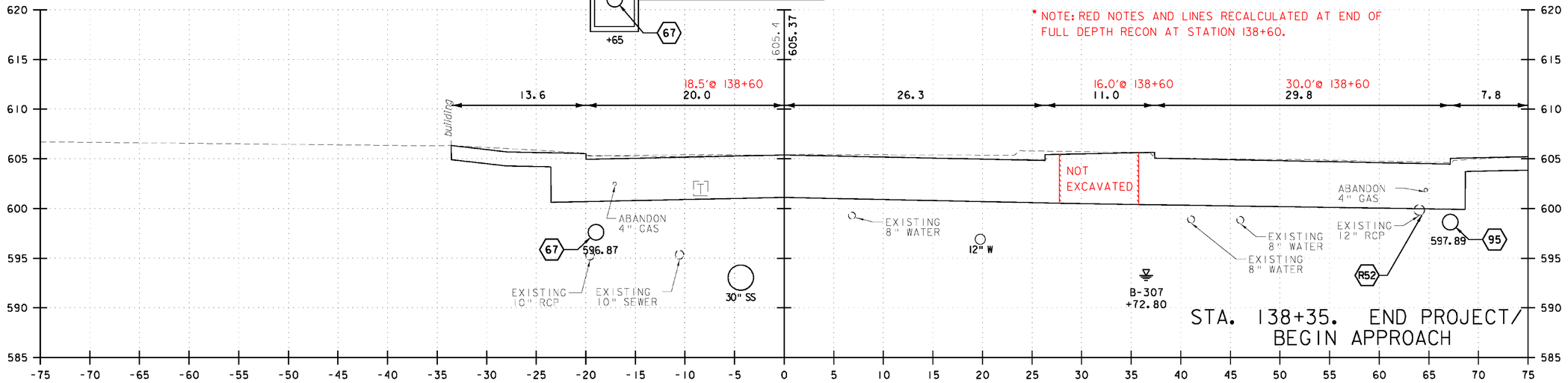
SHEET 272 OF 339




139+00

STA. 138+60. END PROJECT/
BEGIN APPROACH




* NOTE: RED NOTES AND LINES RECALCULATED AT END OF FULL DEPTH RECON AT STATION 138+60.

STA. 138+35. END PROJECT/
BEGIN APPROACH

138+~~50~~60

SAND BORROW@ 138+60 ~ 1.50' X 80.8'= 121.2 SF
SUBBASE@ 138+60 ~ 2.00' X 80.8'= 161.6 SF

5 0 5 10
FEET

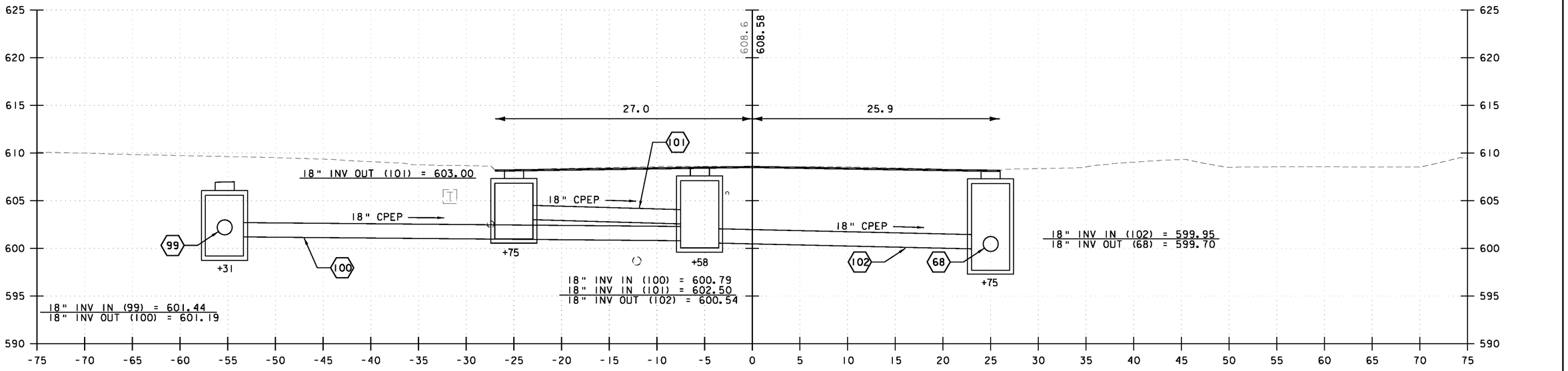
VHB Vanasse Hangen Brustlin, Inc.

NORTH MAIN STREET (US 302)

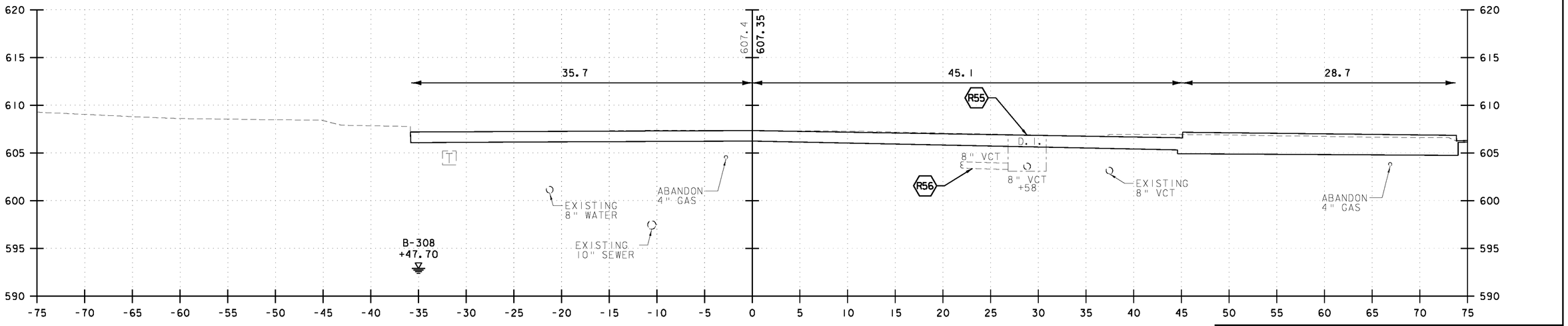
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_xsi_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 273 OF 339




140+00




139+50

5 0 5 10
FEET

VHB Vanasse Hangen Brustlin, Inc.

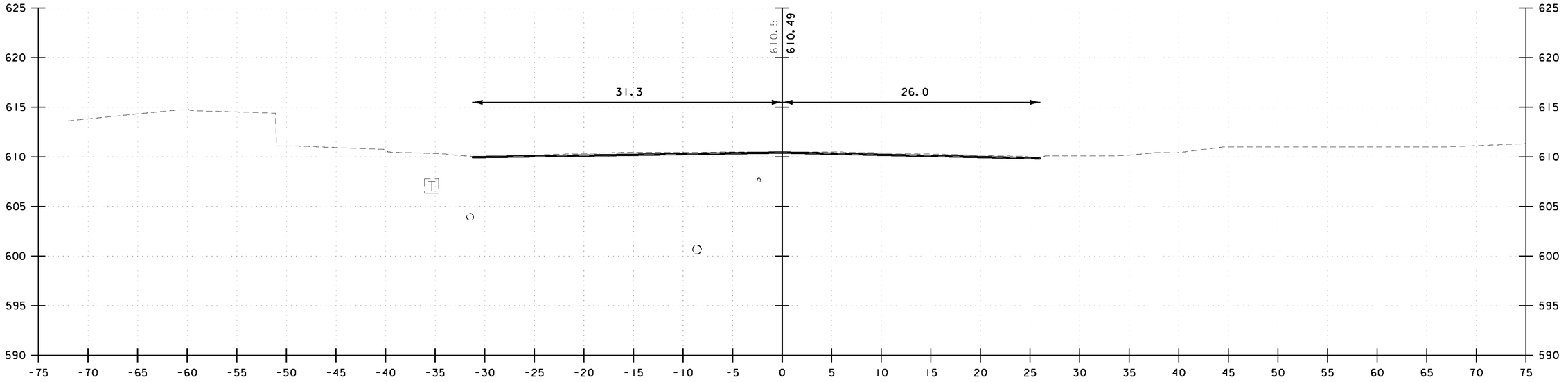
NORTH MAIN STREET (US 302)

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

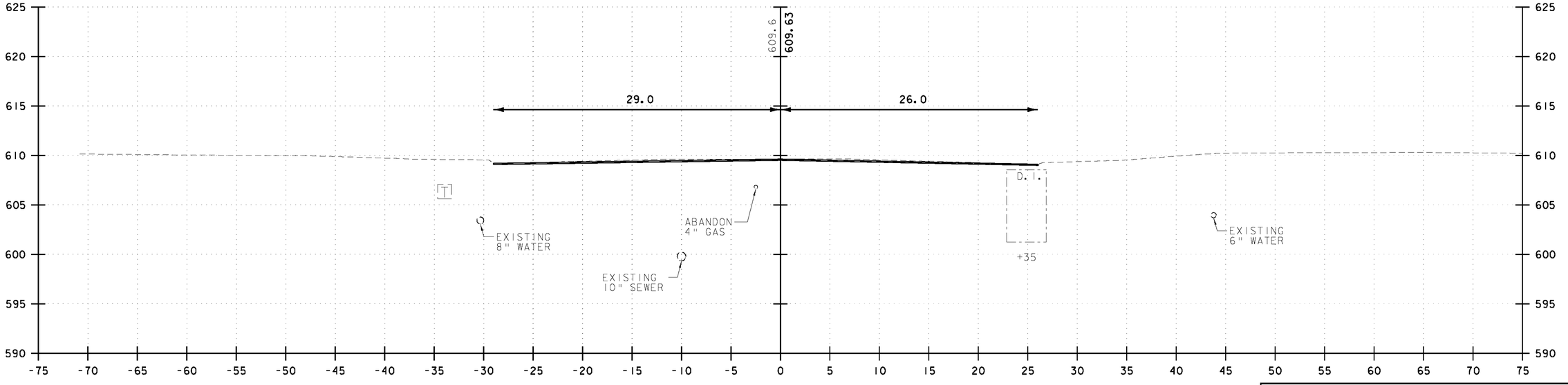
FILE NAME: 85b010_xsl_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 274 OF 339

## END APPROACH 141+00




141+00




140+50

5 0 5 10
FEET

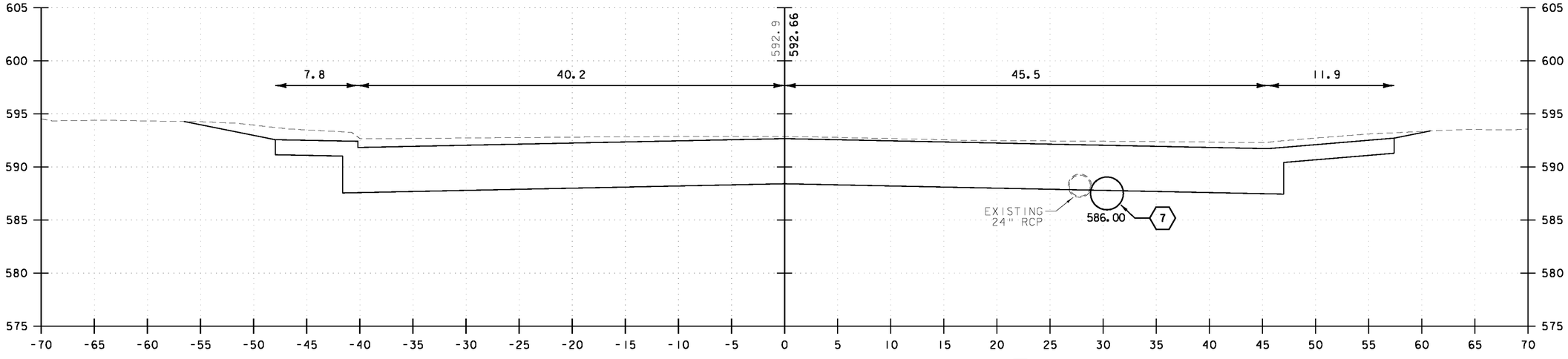
VHB Vanasse Hangen Brustlin, Inc.

NORTH MAIN STREET (US 302)

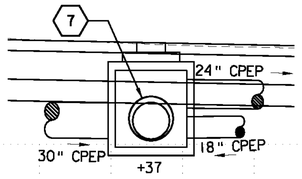
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_xsl_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

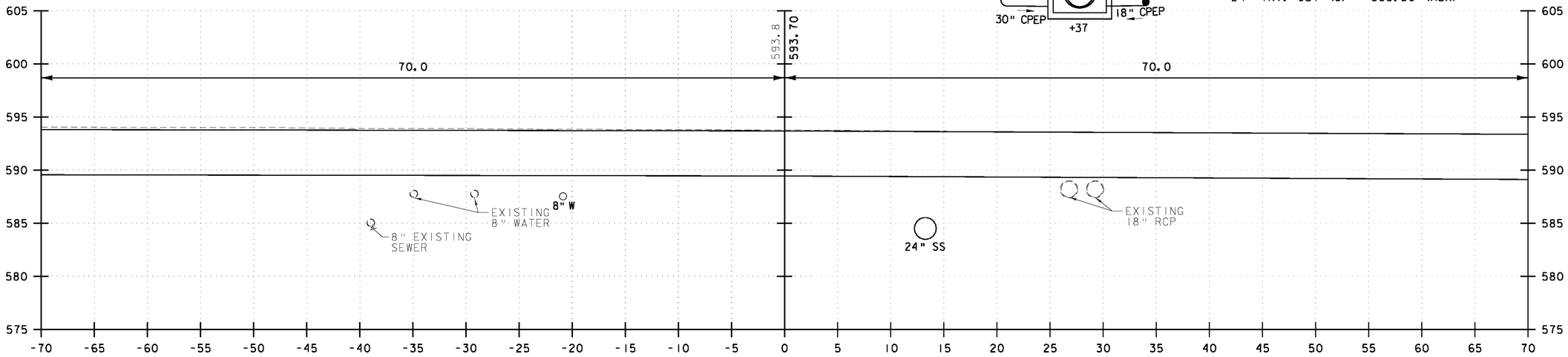
PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 275 OF 339




10+50




30" INV. IN (9) = 586.17
30" INV. IN (8) = 586.17
18" INV. IN (4) = 586.20
36" INV. OUT (7) = 586.12
24" INV. OUT (6) = 588.30 (AUX)




10+00

5 0 5 10
FEET

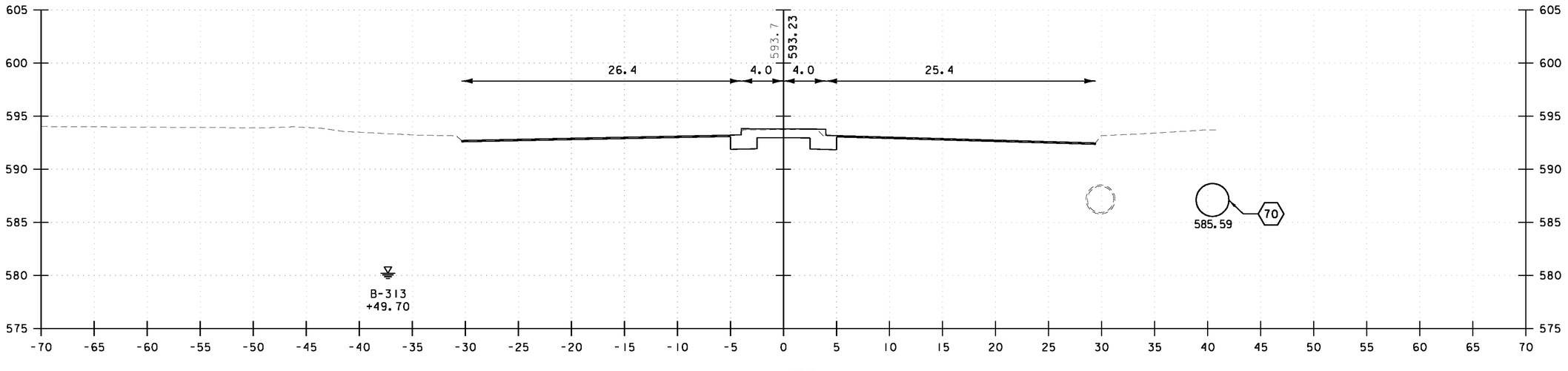
VHB Vanasse Hangen Brustlin, Inc.

ROUTE 62

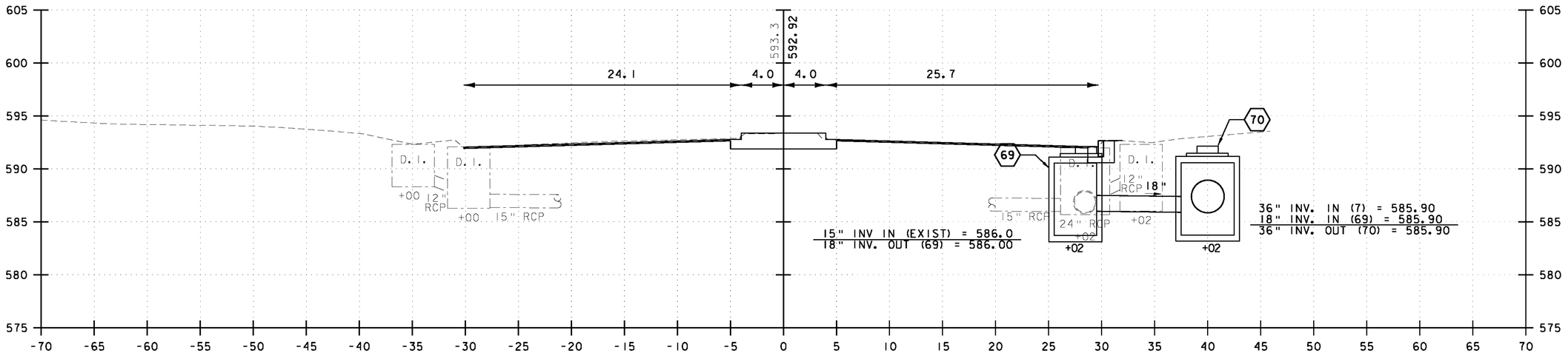
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_xs2_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 276 OF 339




11+50




11+00

5 0 5 10
FEET

VHB Vanasse Hangen Brustlin, Inc.

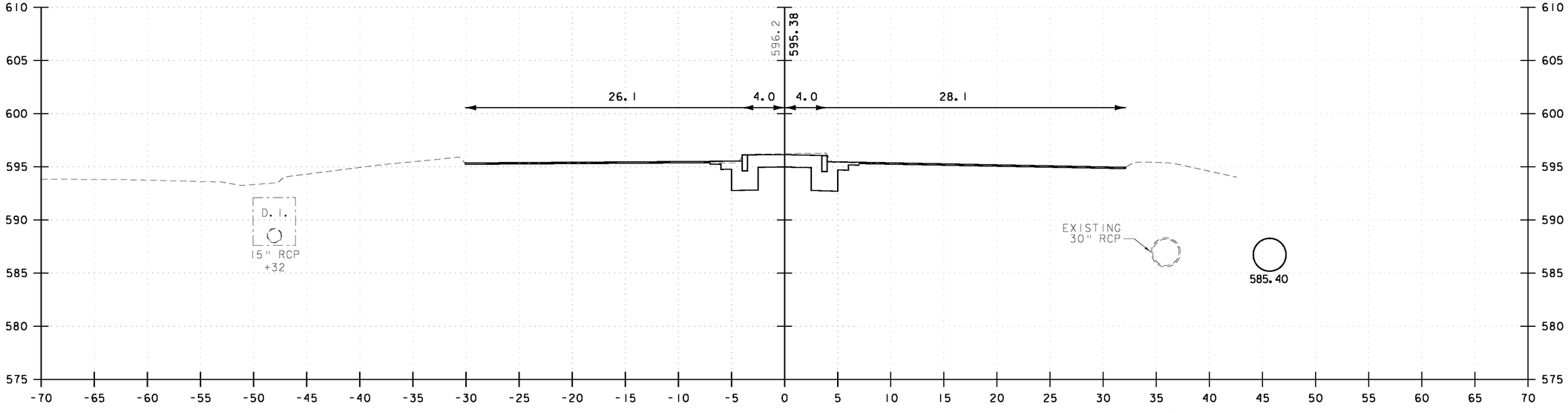
ROUTE 62

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

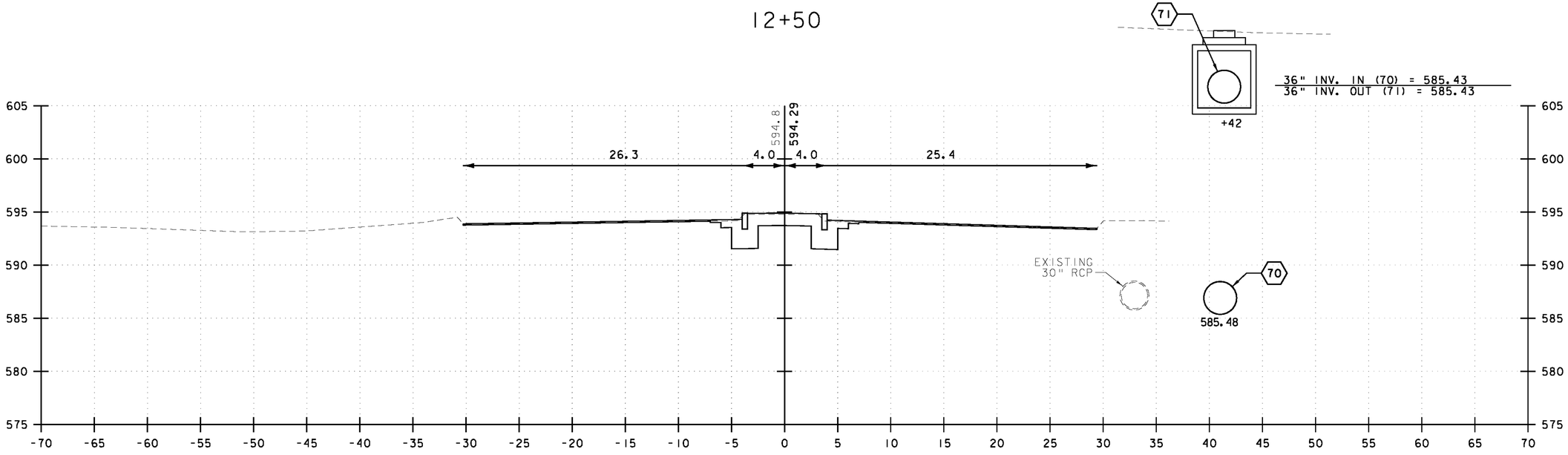
FILE NAME: 85b010_xs2_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 277 OF 339

## END APPROACH STA. 12+66




## 12+50

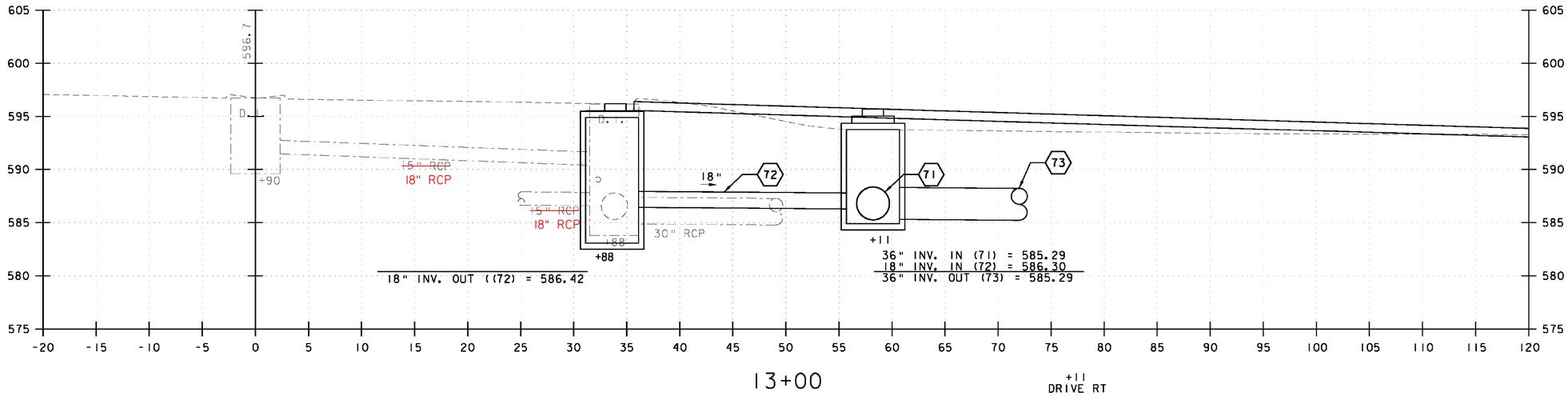



## 12+00

5 0 5 10
FEET

VHB Vanasse Hangen Brustlin, Inc.

| ROUTE 62 | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-1(34) C/2 |
| FILE NAME: 85b010_xs2_Cut_C2 | PLOT DATE: 3/9/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: DMP / JAR |
| DESIGNED BY: DMP / MDS | CHECKED BY: |
| CROSS SECTIONS | SHEET 278 OF 339 |




13+00

+11
DRIVE RT

5 0 5 10
FEET

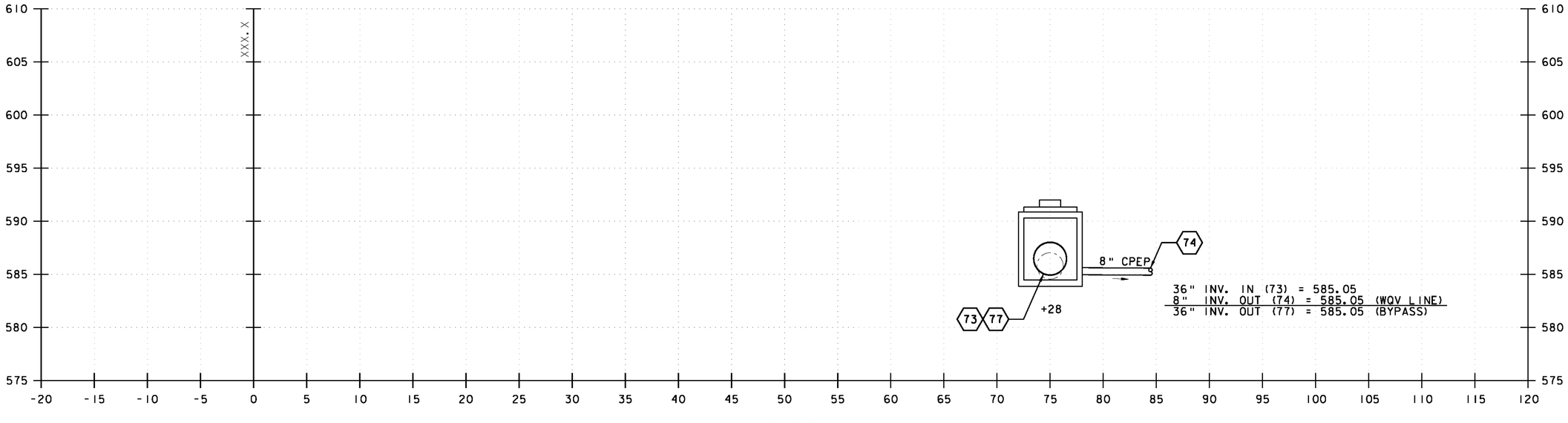
VHB Vanasse Hangen Brustlin, Inc.

ROUTE 62

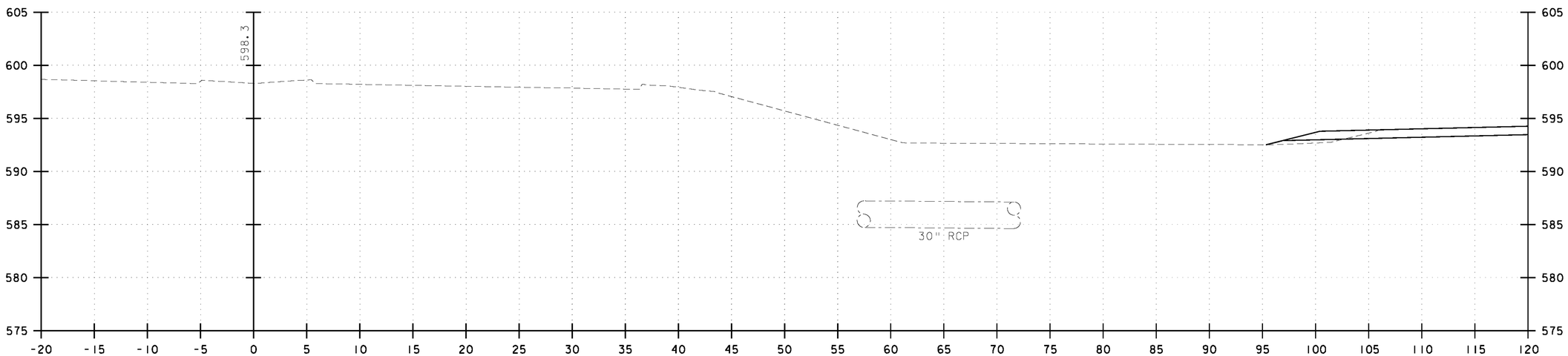
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_xs2_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 279 OF 339




14+00




13+50

5 0 5 10
FEET

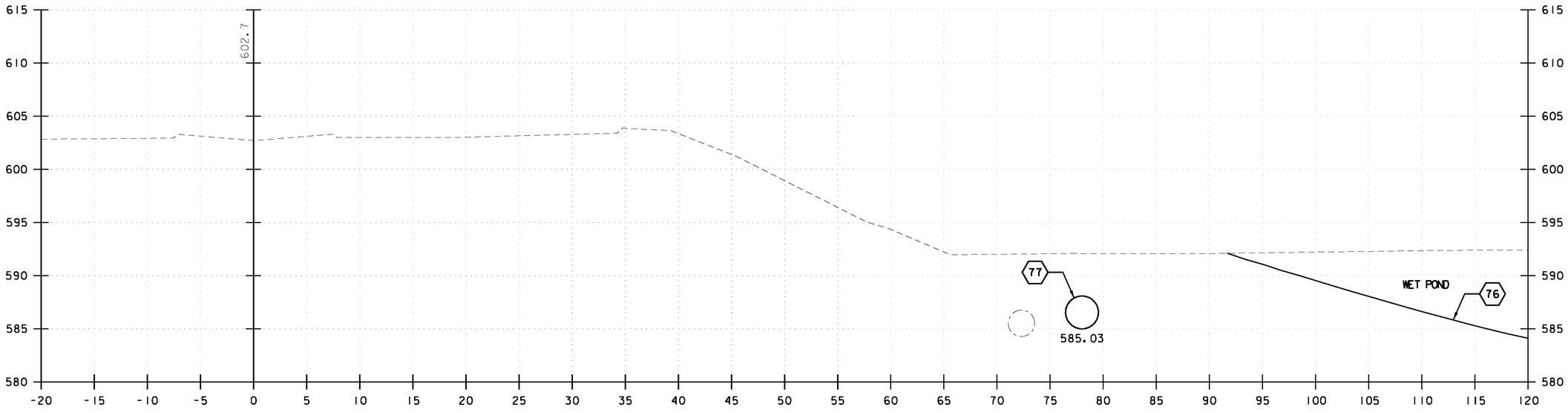
VHB Vanasse Hangen Brustlin, Inc.

ROUTE 62

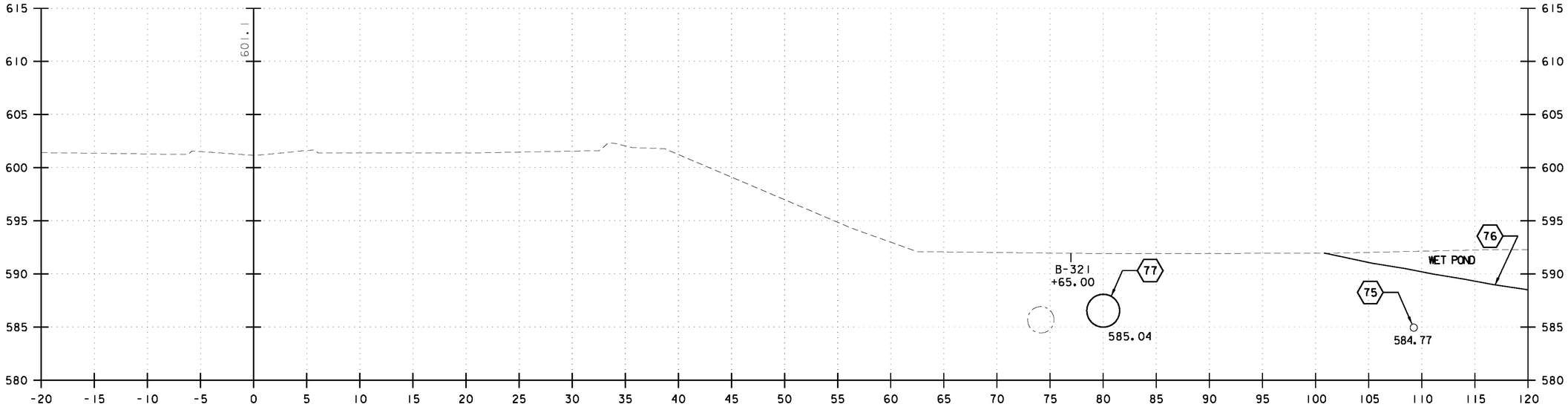
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_xs2_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 280 OF 339




15+00

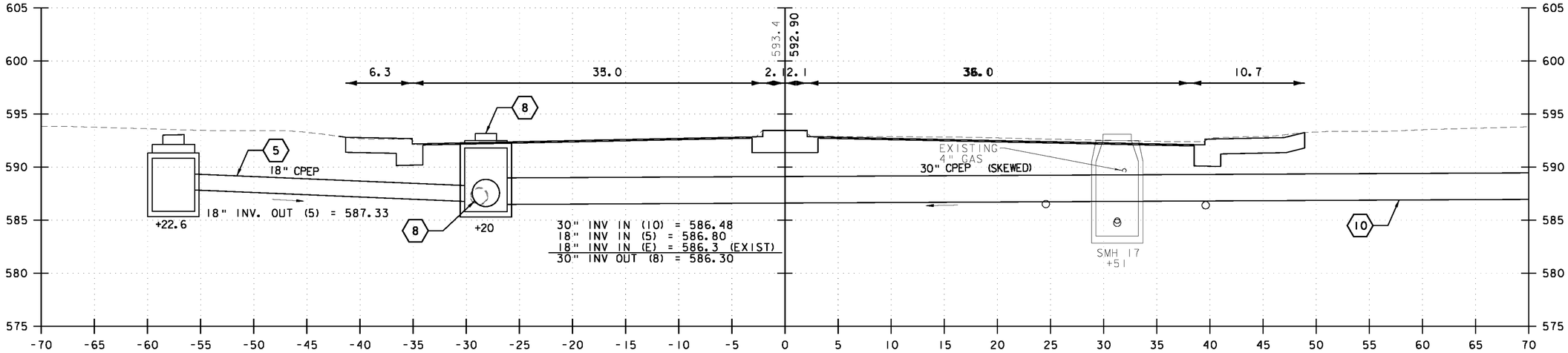



14+50

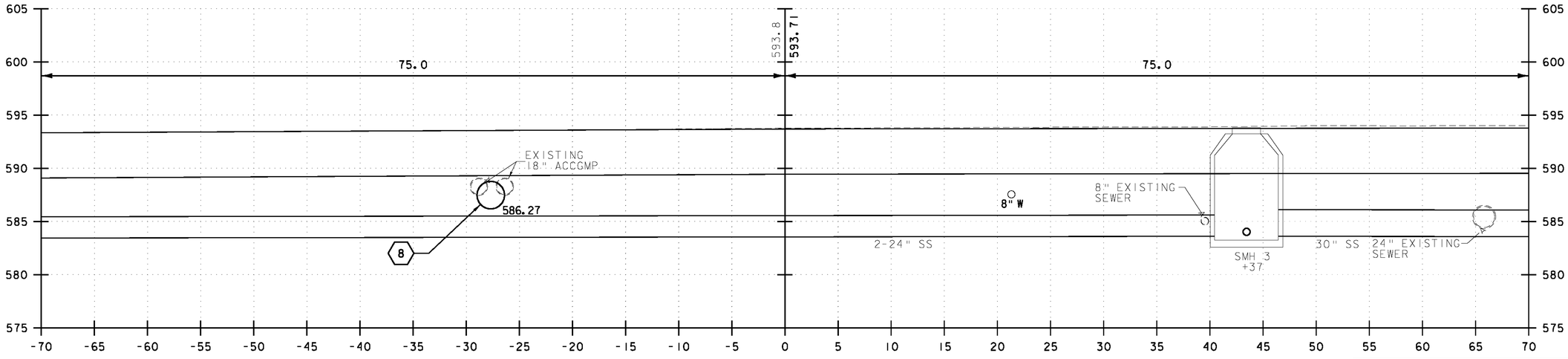
5 0 5 10
FEET

VHB Vanasse Hangen Brustlin, Inc.

| ROUTE 62 | |
|---|---|
| PROJECT NAME: BARRE CITY | |
| PROJECT NUMBER: FEGC F 026-1(34) C/2 | |
| FILE NAME: 85b010_xs2_Cut_C2 | PLOT DATE: 3/9/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: DMP / JAR |
| DESIGNED BY: DMP / MDS | CHECKED BY: |
| CROSS SECTIONS | SHEET 281 OF 339 |




20+50




20+00

5 0 5 10
FEET

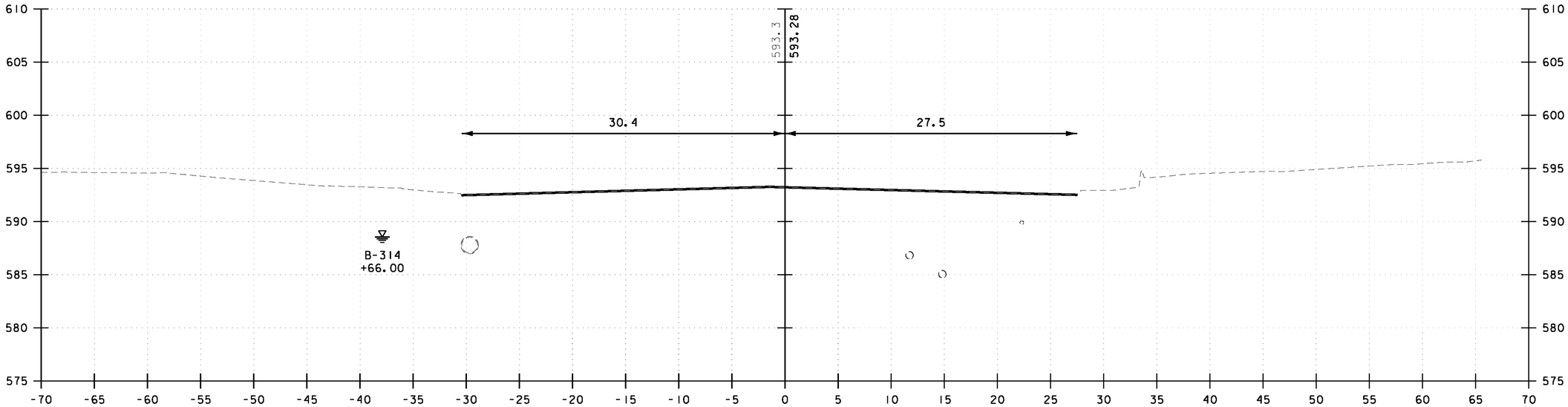
VHB Vanasse Hangen Brustlin, Inc.

MAPLE AVENUE

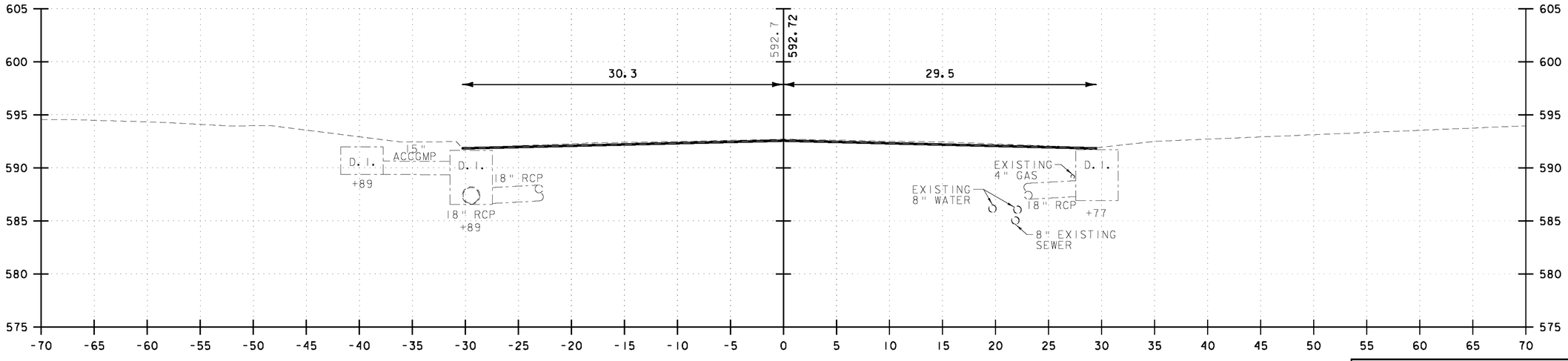
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_xs2_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 282 OF 339




21+50




21+00

5 0 5 10
FEET

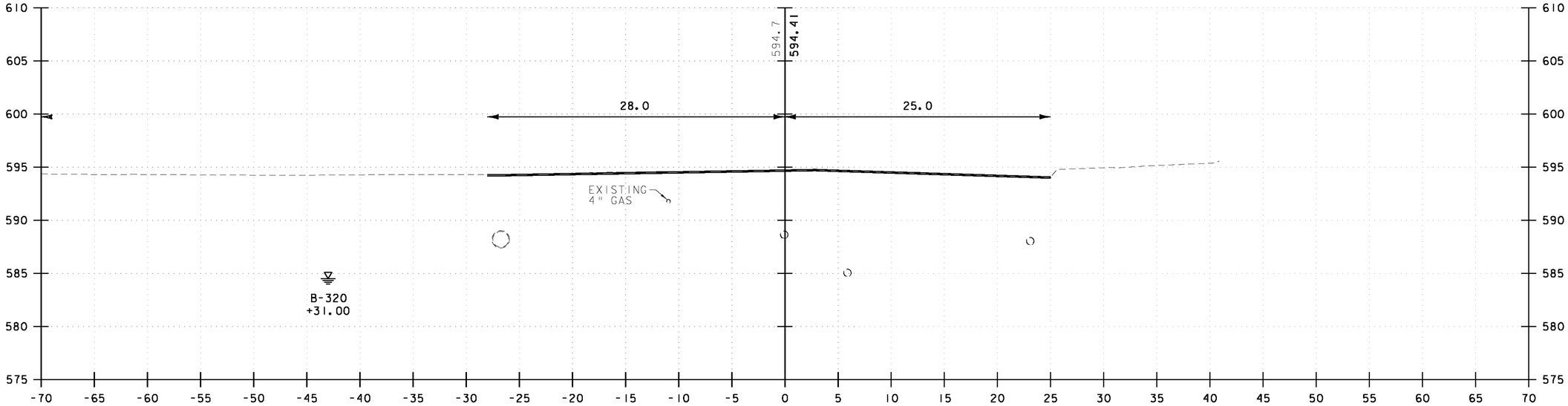
VHB Vanasse Hangen Brustlin, Inc.

MAPLE AVENUE

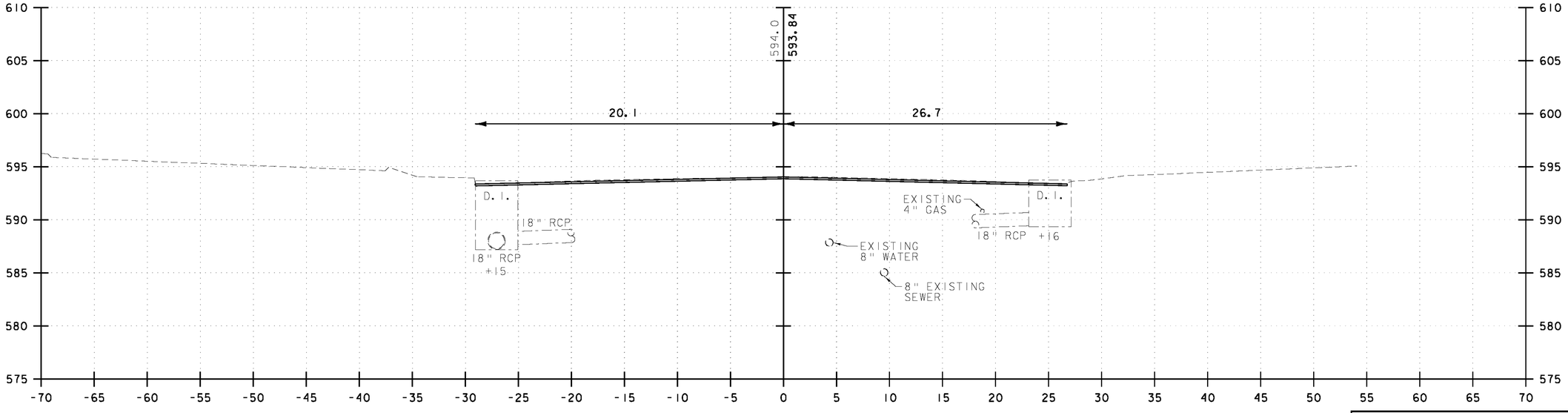
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_xs2_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 283 OF 339




22+50




22+00

5 0 5 10
FEET

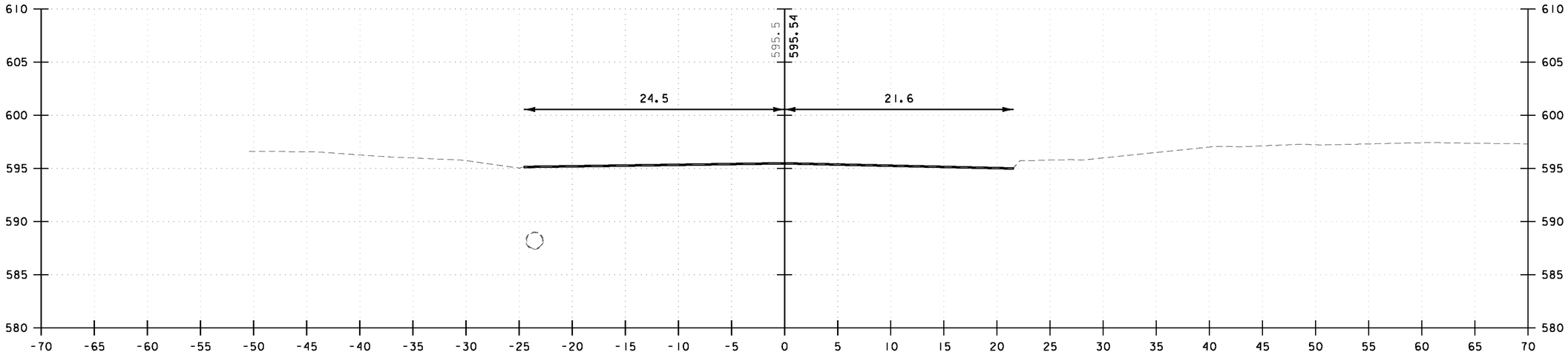
VHB Vanasse Hangen Brustlin, Inc.

MAPLE AVENUE

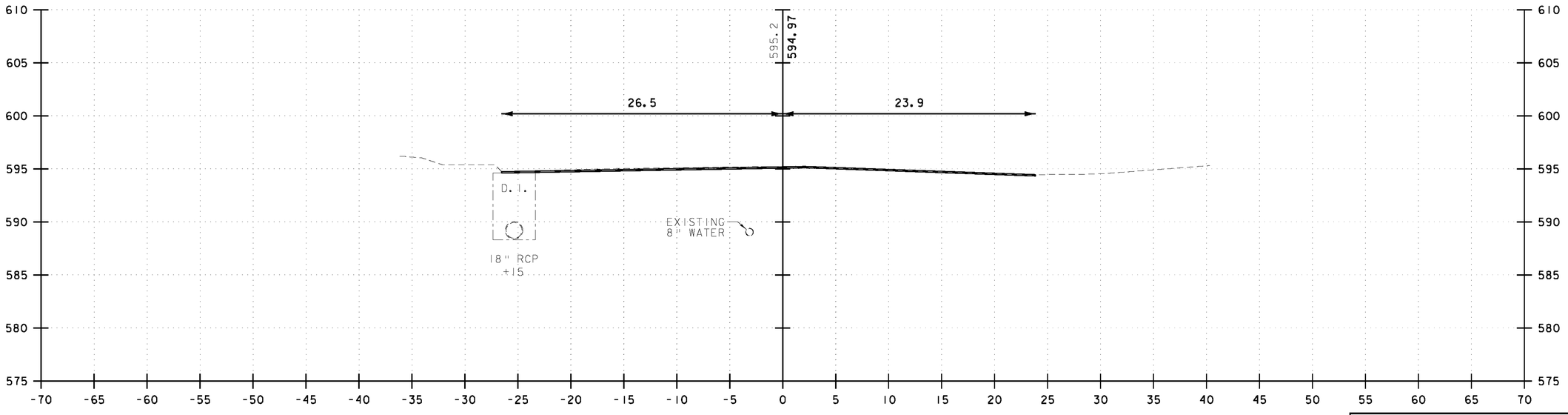
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b0110_xs2_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 284 OF 339




23+50




23+00

5 0 5 10
FEET

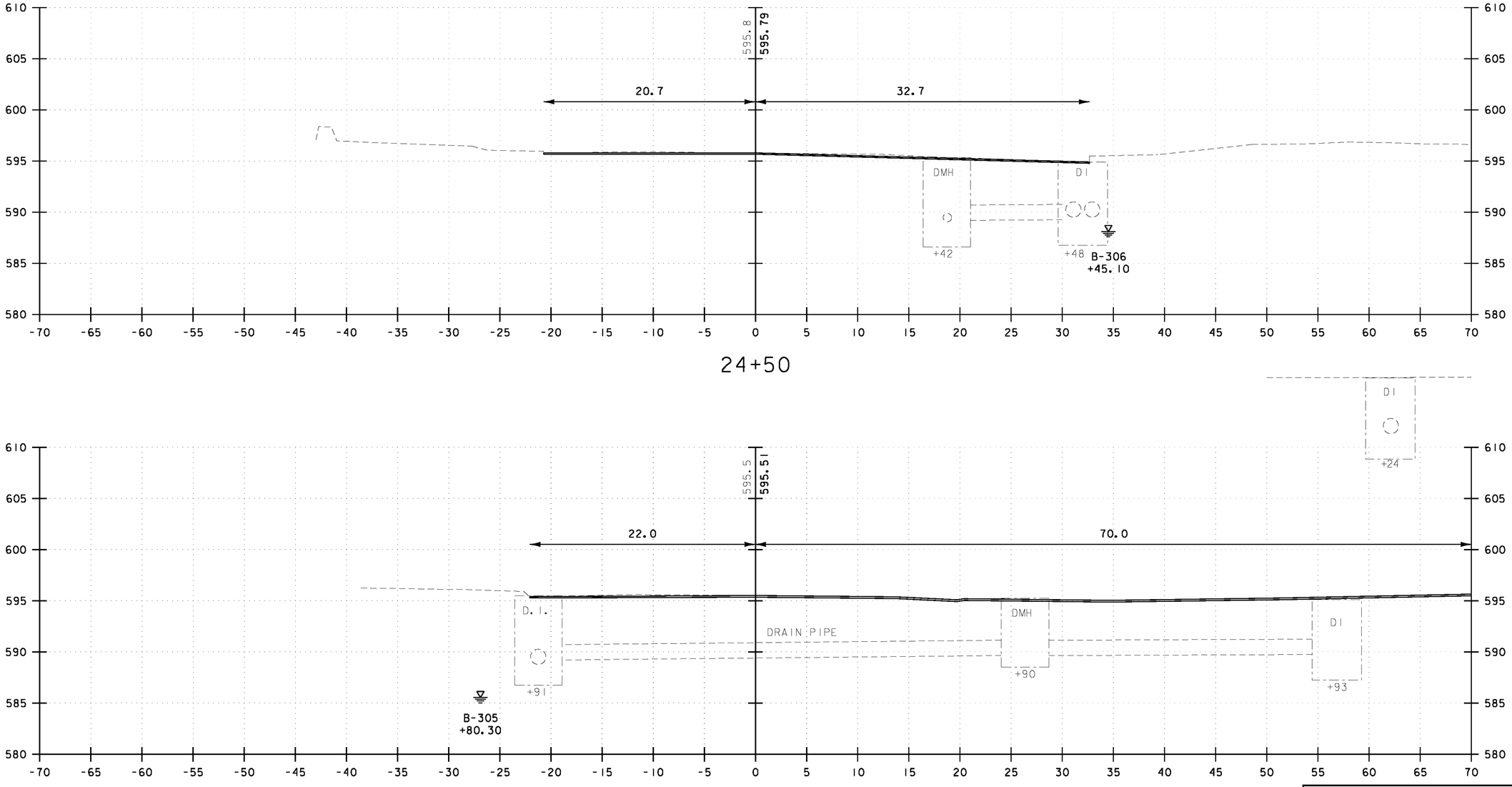
VHB Vanasse Hangen Brustlin, Inc.

MAPLE AVENUE

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b0110_xs2_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 285 OF 339




24+50

24+00

5 0 5 10
FEET

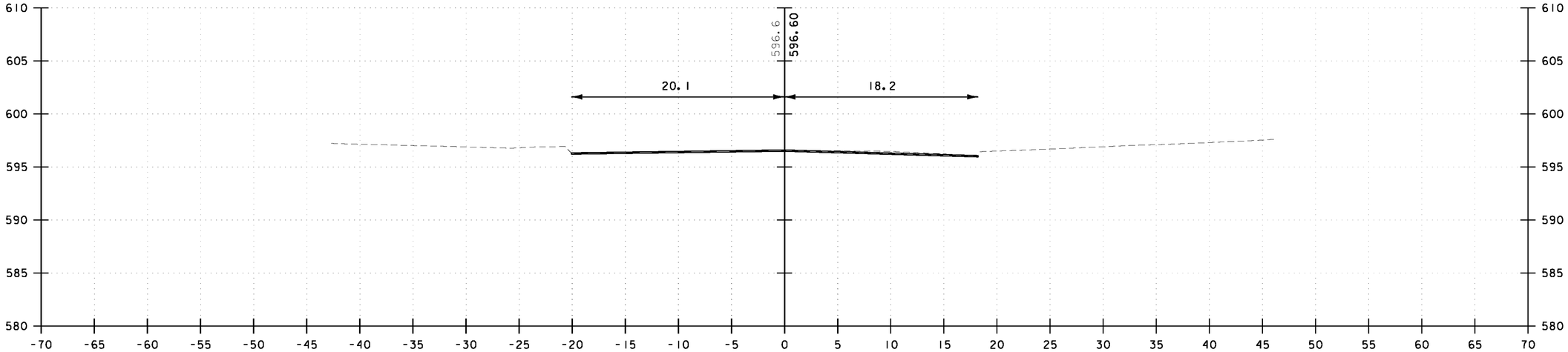
VHB Vanasse Hangen Brustlin, Inc.

MAPLE AVENUE

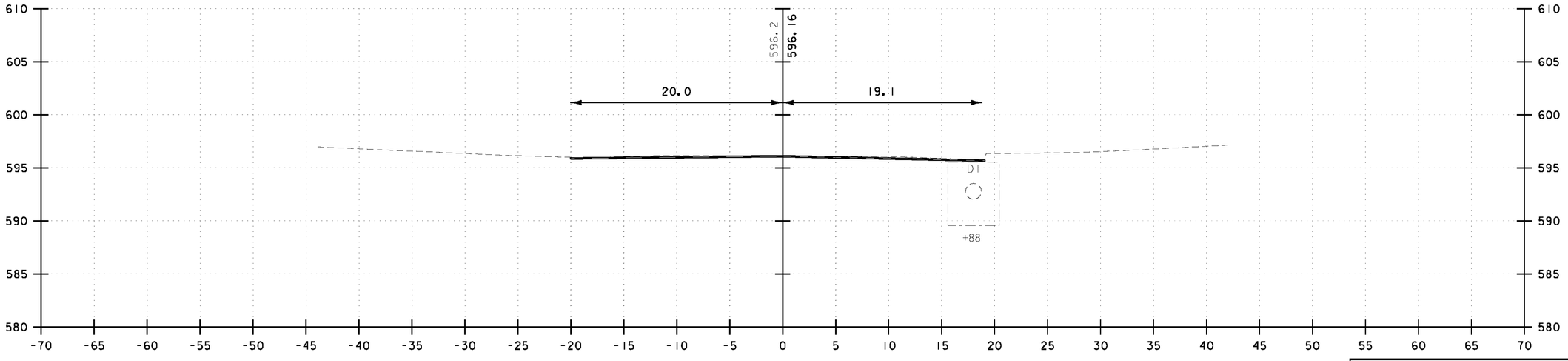
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_xs2_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 286 OF 339




25+50




25+00

5 0 5 10
FEET

VHB Vanasse Hangen Brustlin, Inc.

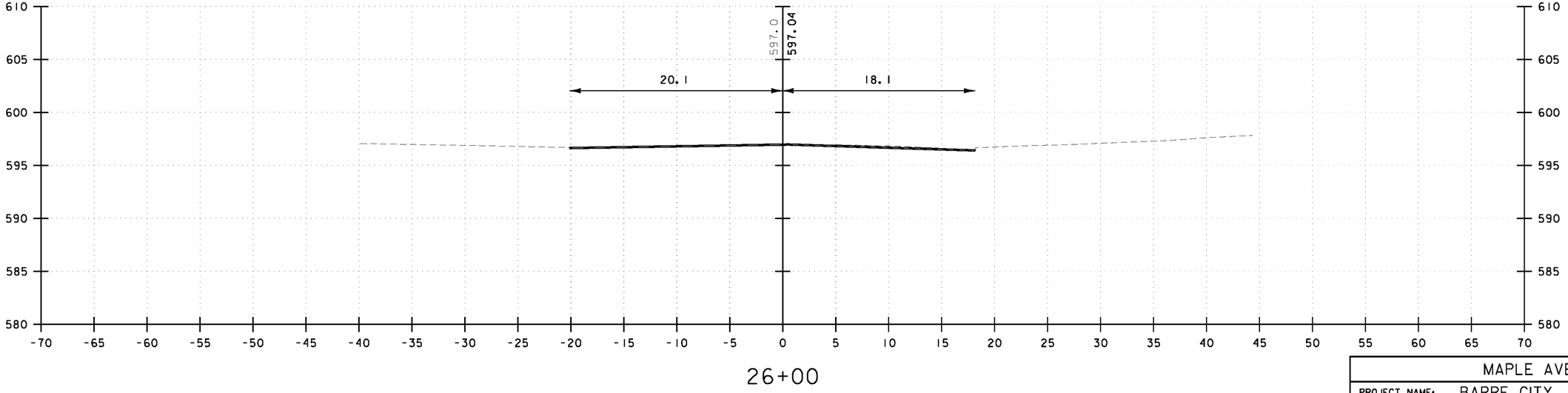
MAPLE AVENUE

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b0110_xs2_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 287 OF 339

## END APPROACH STA. 26+70




5 0 5 10
FEET

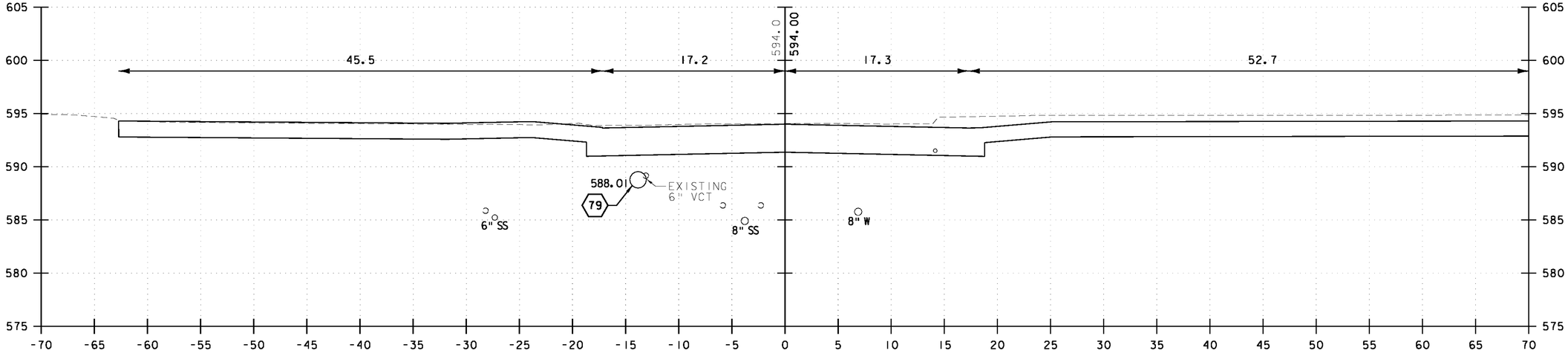
VHB Vanasse Hangen Brustlin, Inc.

MAPLE AVENUE

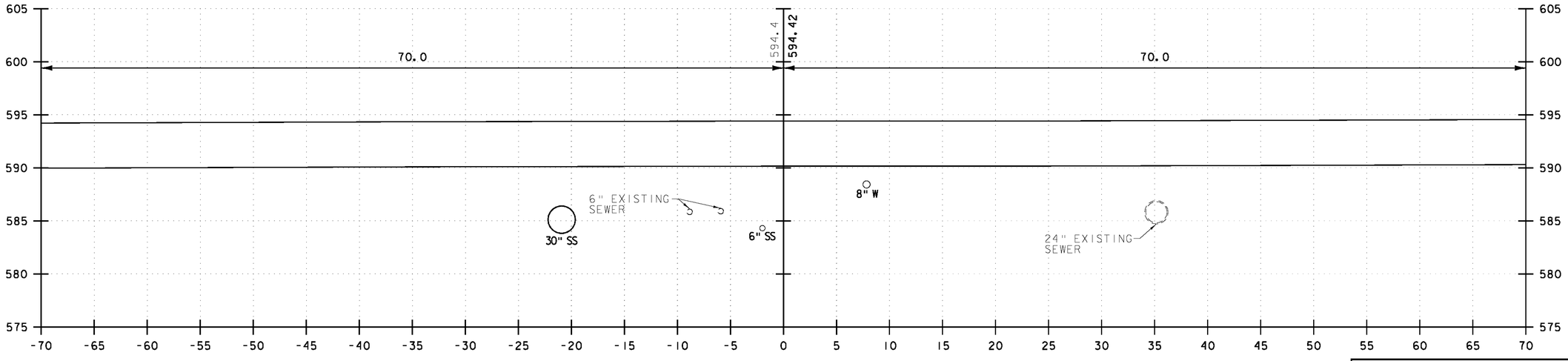
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_xs2_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 288 OF 339




30+25




30+00

5 0 5 10
FEET

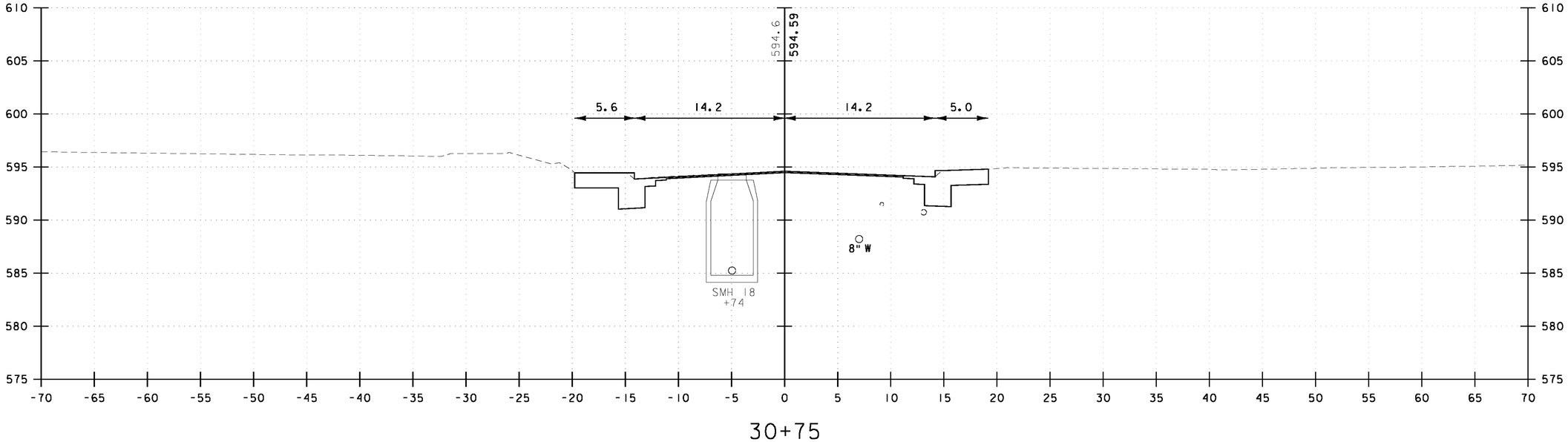
VHB Vanasse Hangen Brustlin, Inc.

COTTAGE STREET

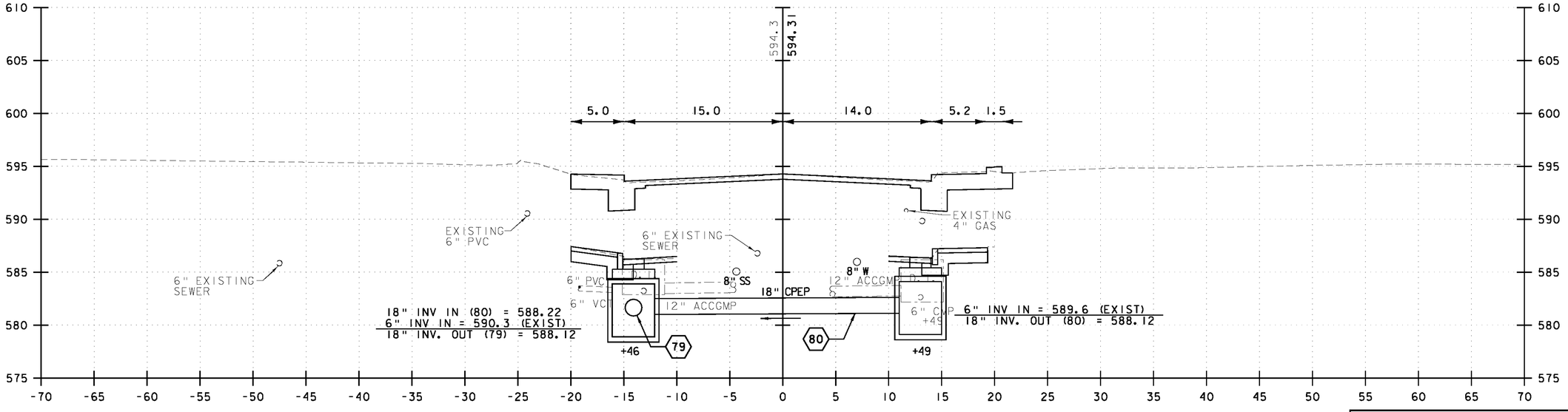
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_xs2_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 289 OF 339




30+75




30+50

5 0 5 10
FEET

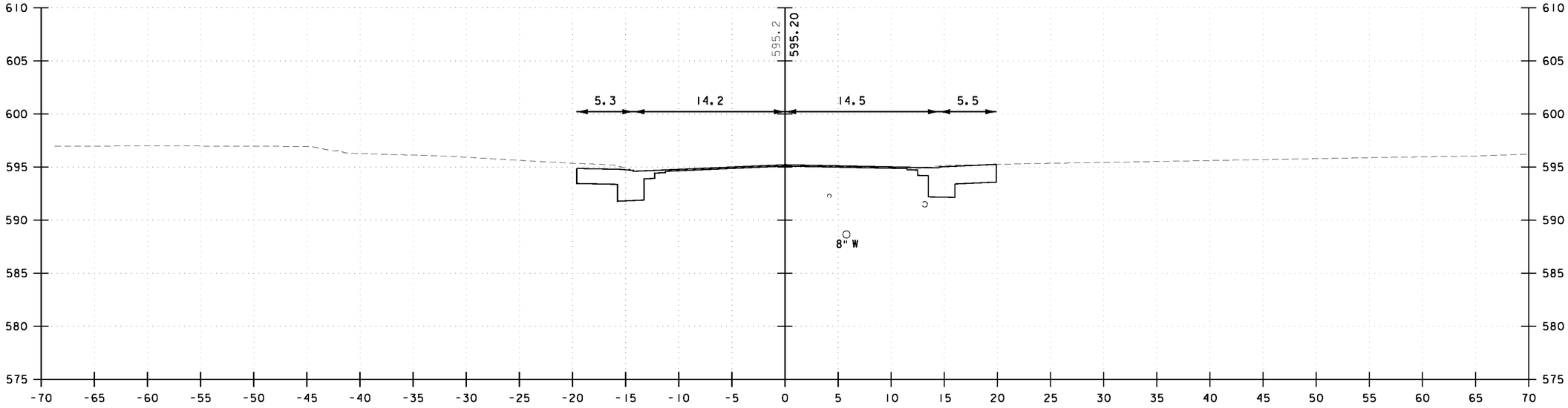
VHB Vanasse Hangen Brustlin, Inc.

COTTAGE STREET

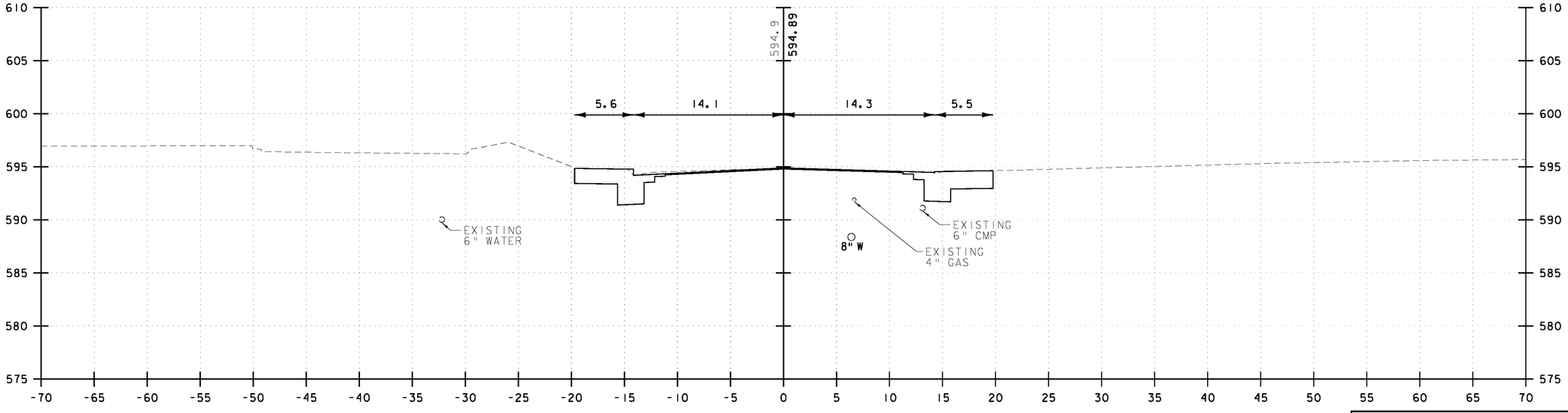
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b0110_xs2_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 290 OF 339




31+25



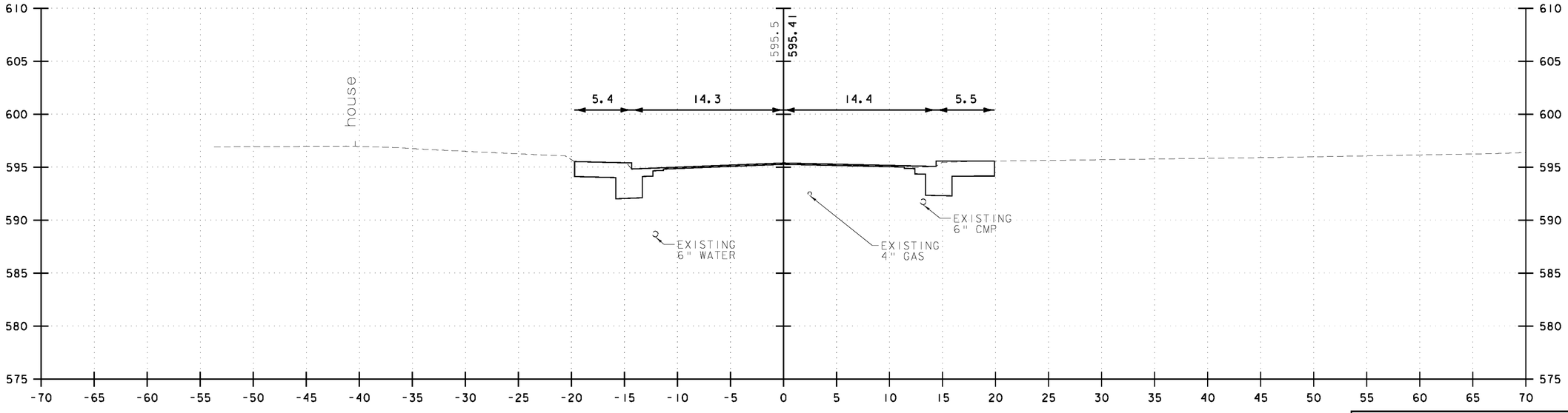

31+00

5 0 5 10
FEET

VHB Vanasse Hangen Brustlin, Inc.

| COTTAGE STREET | |
|---|---|
| PROJECT NAME: BARRE CITY | |
| PROJECT NUMBER: FEGC F 026-1(34) C/2 | |
| FILE NAME: 85b0110_xs2_Cut_C2 | PLOT DATE: 3/9/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: DMP / JAR |
| DESIGNED BY: DMP / MDS | CHECKED BY: |
| CROSS SECTIONS | SHEET 291 OF 339 |

## END APPROACH STA. 31+42

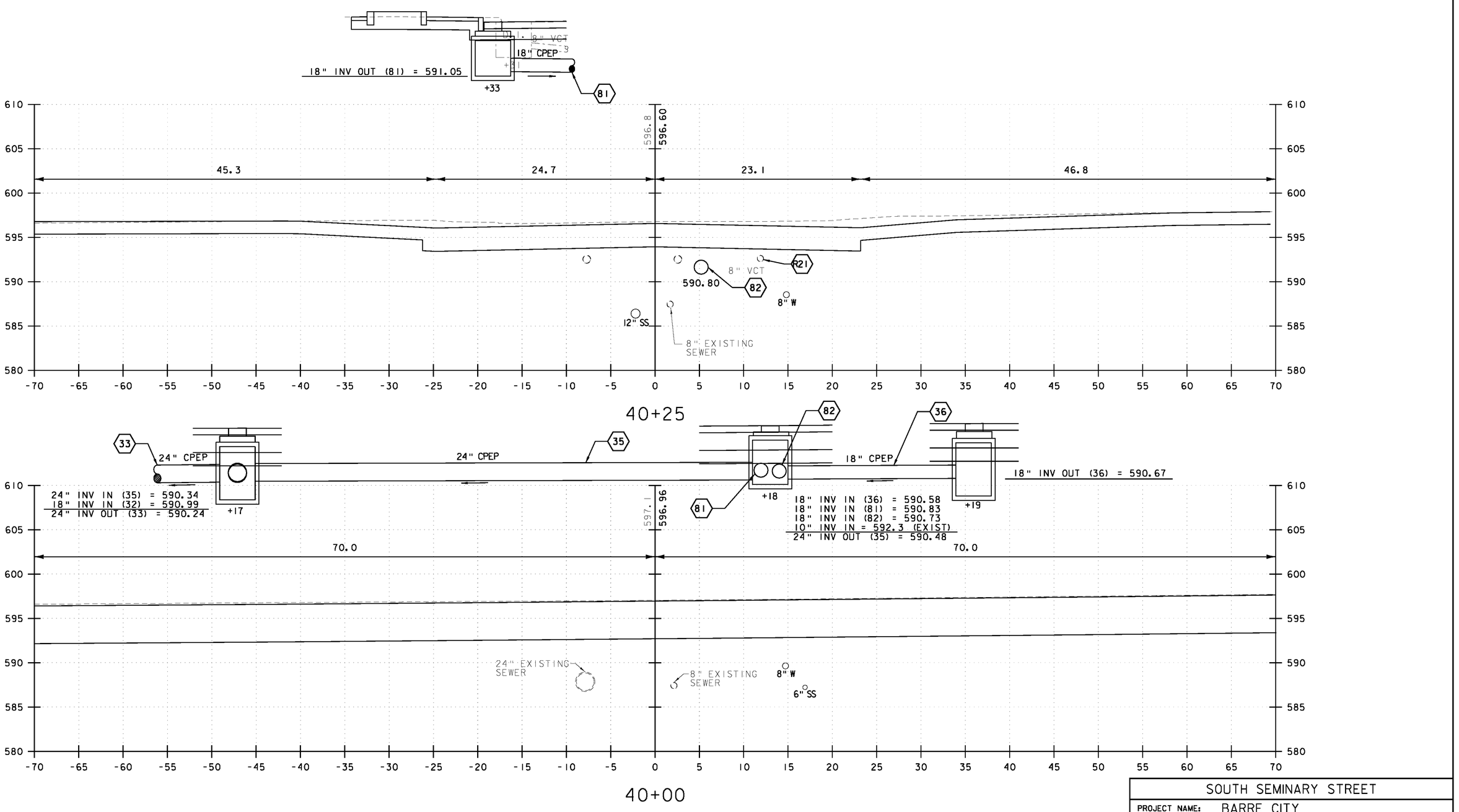



31+42

5 0 5 10
FEET

VHB Vanasse Hangen Brustlin, Inc.

| COTTAGE STREET | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-1(34) C/2 |
| FILE NAME: 85b010_xs2_Cut_C2 | PLOT DATE: 3/9/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: DMP / JAR |
| DESIGNED BY: DMP / MDS | CHECKED BY: |
| CROSS SECTIONS | SHEET 292 OF 339 |




VHB Vanasse Hangen Brustlin, Inc.

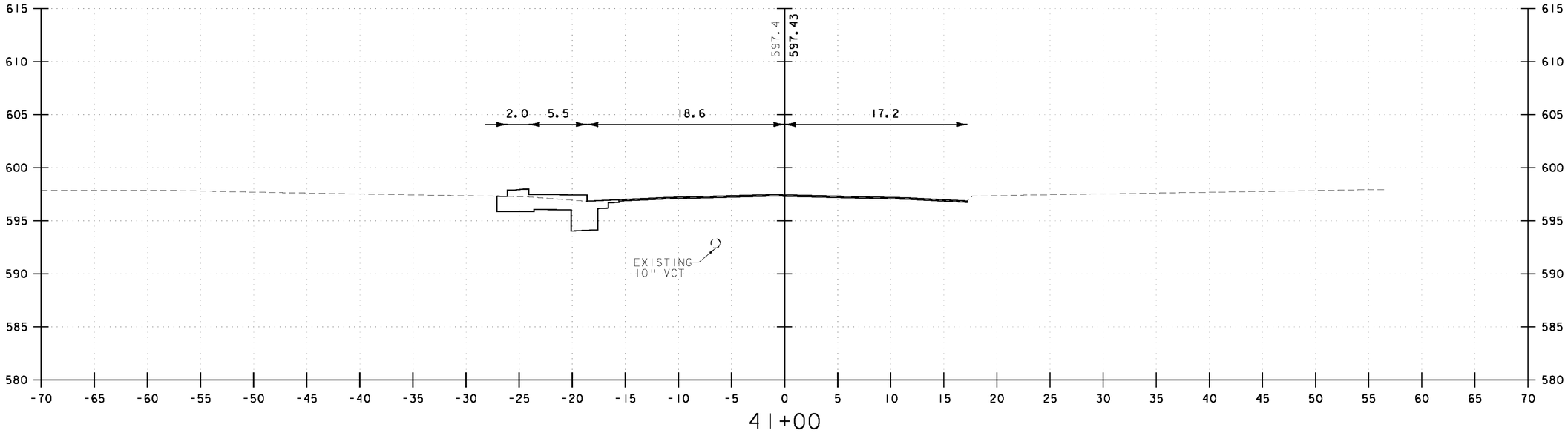
SOUTH SEMINARY STREET

PROJECT NAME: BARRE CITY

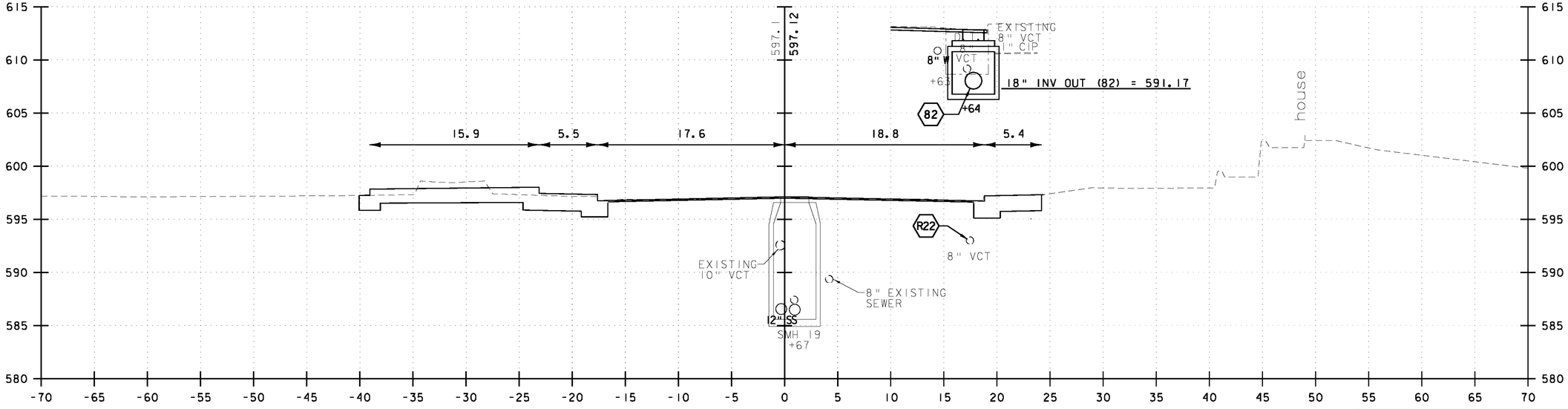
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_xs2_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 293 OF 339




41+00




40+50

5 0 5 10
FEET

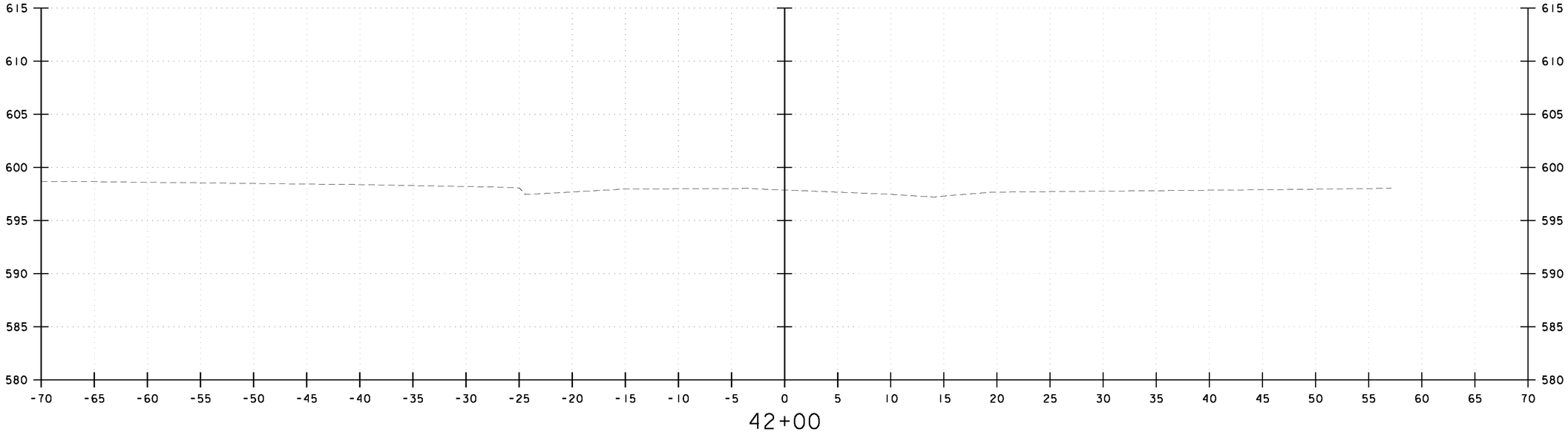
VHB Vanasse Hangen Brustlin, Inc.

SOUTH SEMINARY STREET

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

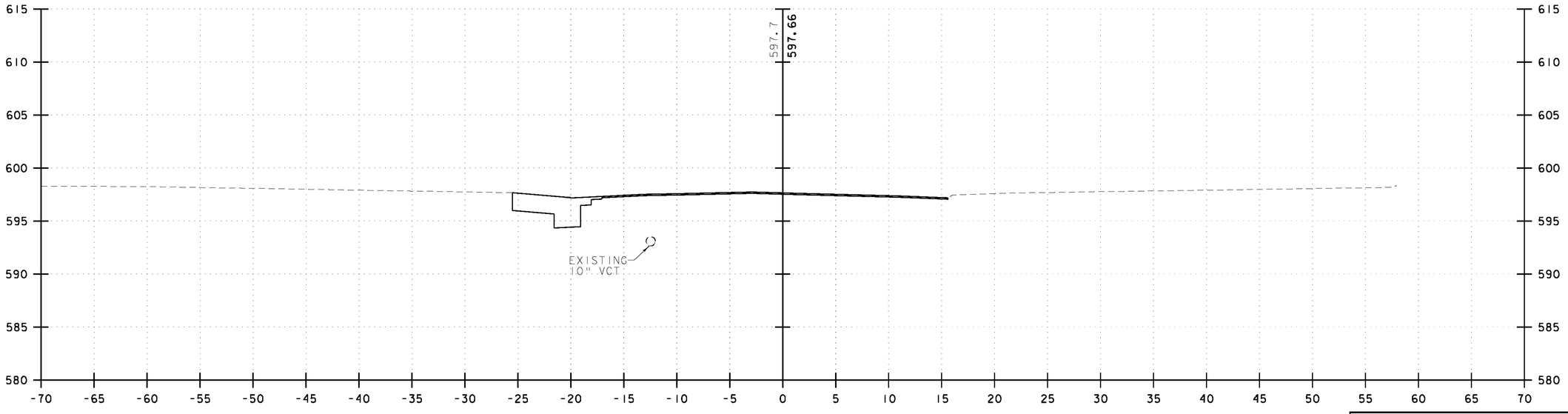
FILE NAME: 85b010_xs2_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 294 OF 339




42+00

END APPROACH STA. 41+70




+45
DRIVE LT

41+50

5 0 5 10
FEET

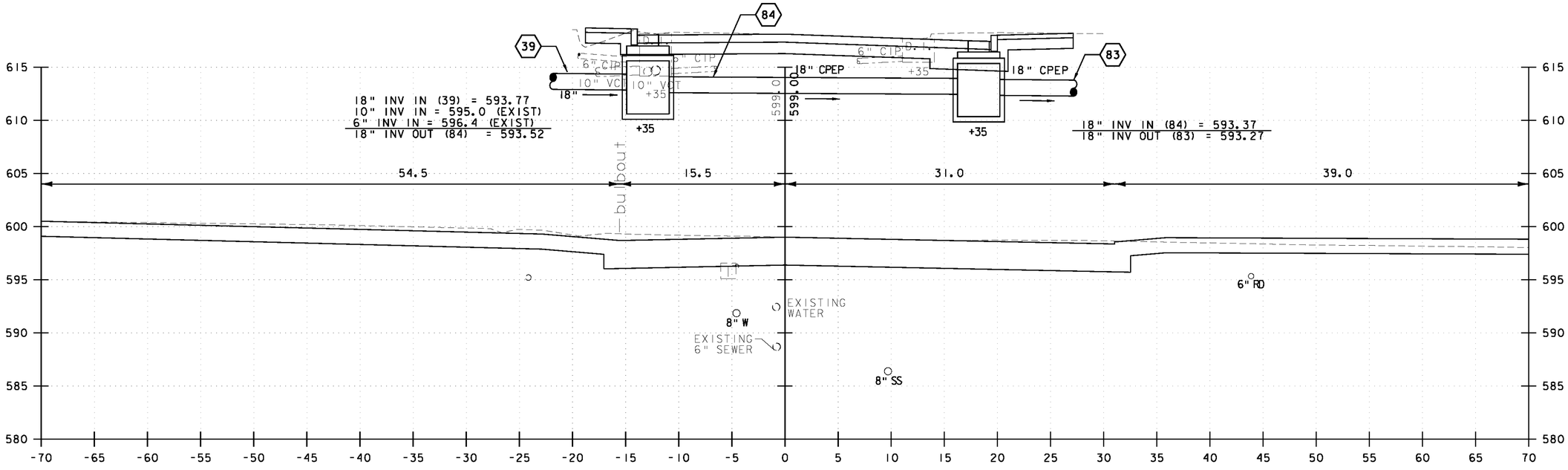
VHB Vanasse Hangen Brustlin, Inc.

SOUTH SEMINARY STREET

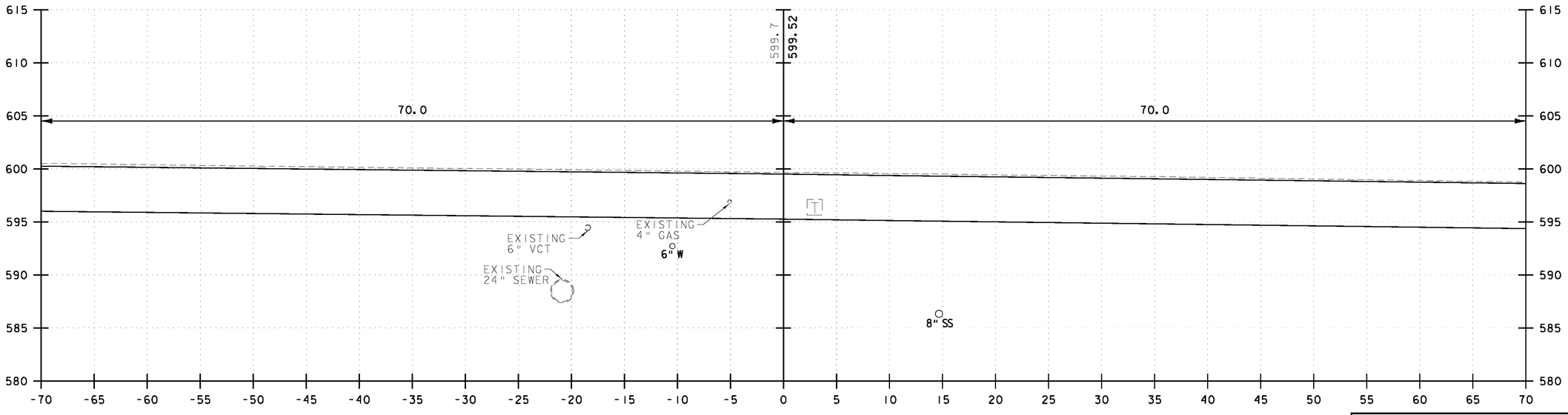
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b0110_xs2_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 295 OF 339




50+25




50+00

5 0 5 10
FEET

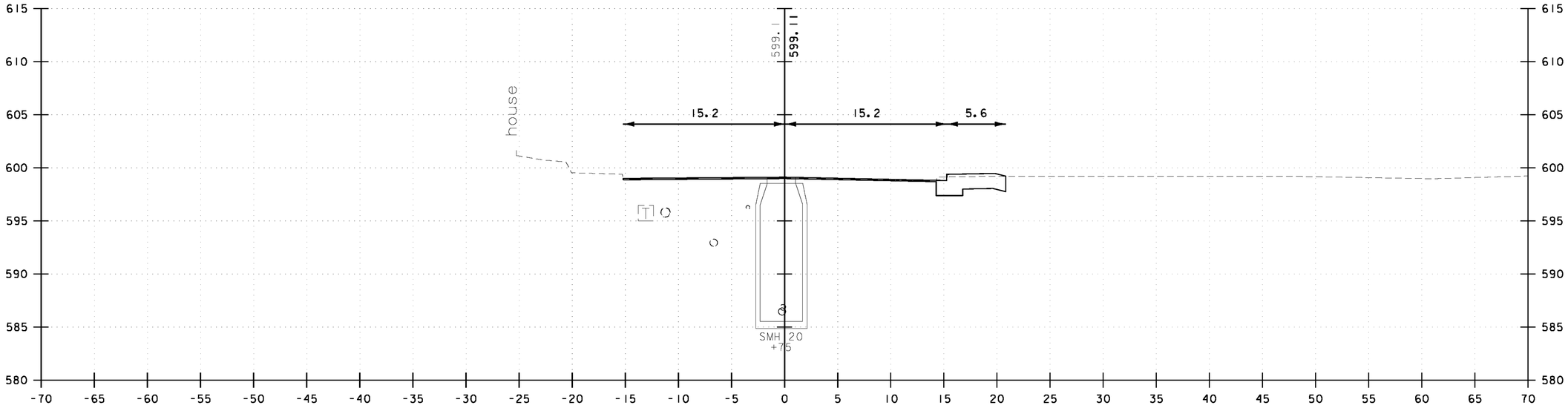
VHB Vanasse Hangen Brustlin, Inc.

GRANITE STREET

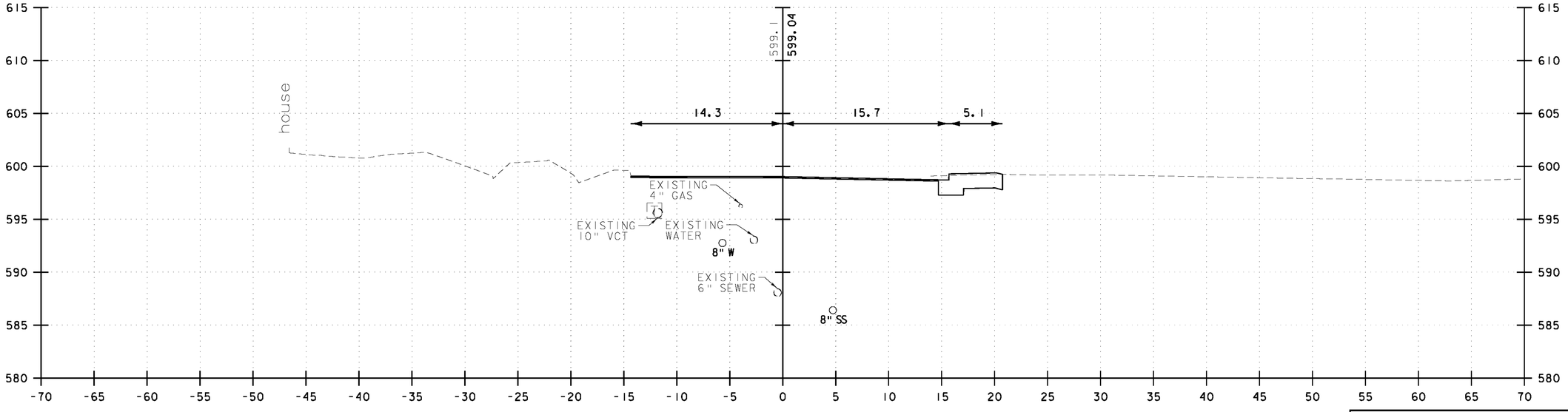
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b0110_xs2_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 296 OF 339




50+75




50+50

5 0 5 10
FEET

VHB Vanasse Hangen Brustlin, Inc.

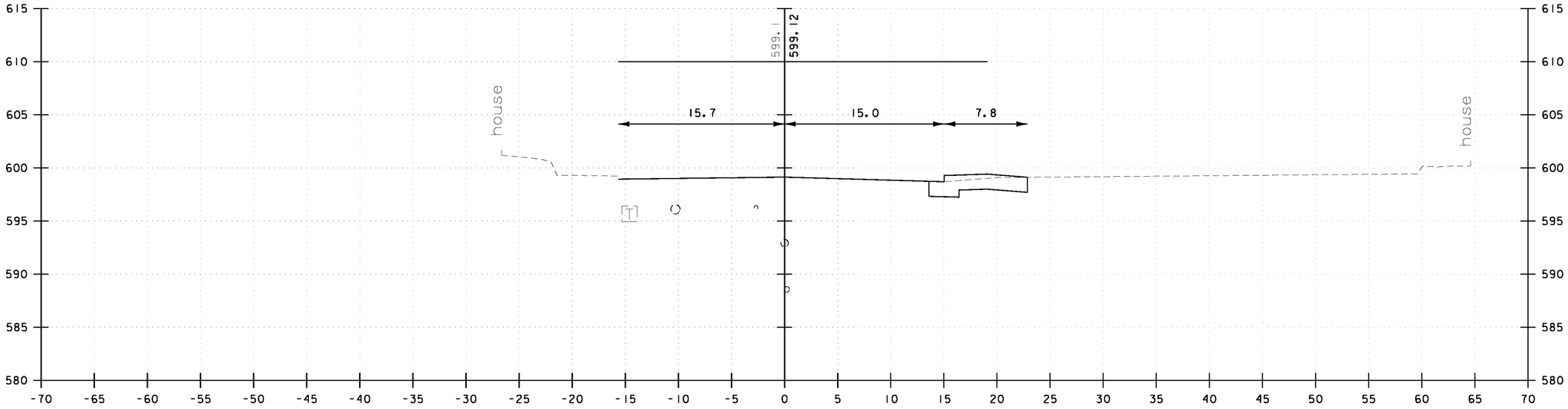
GRANITE STREET

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b0110_xs2_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

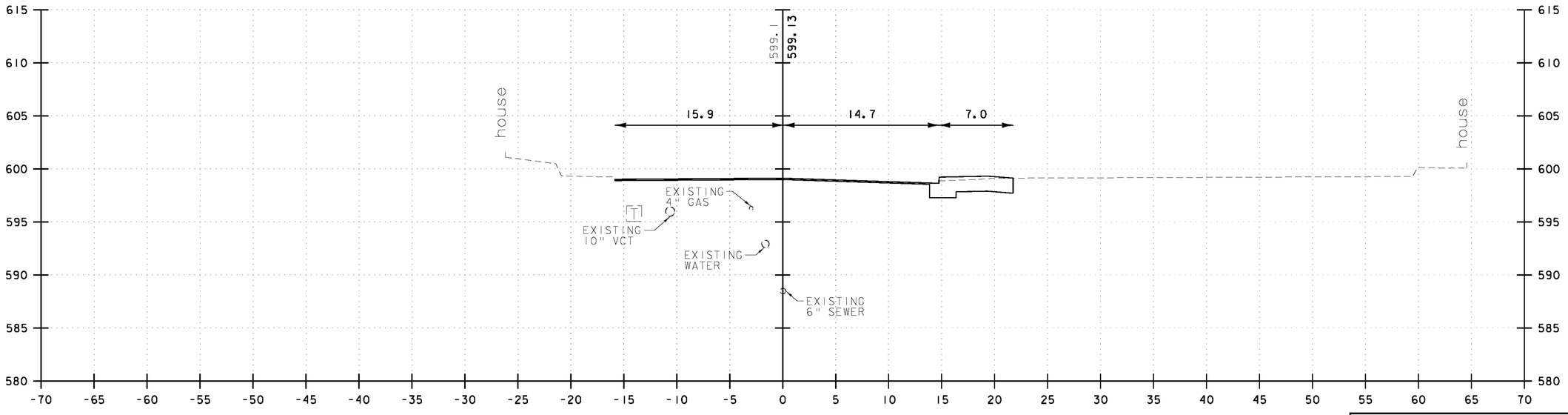
PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 297 OF 339

## END APPROACH STA. 51+25




51+25

## 51+00




5 0 5 10
FEET

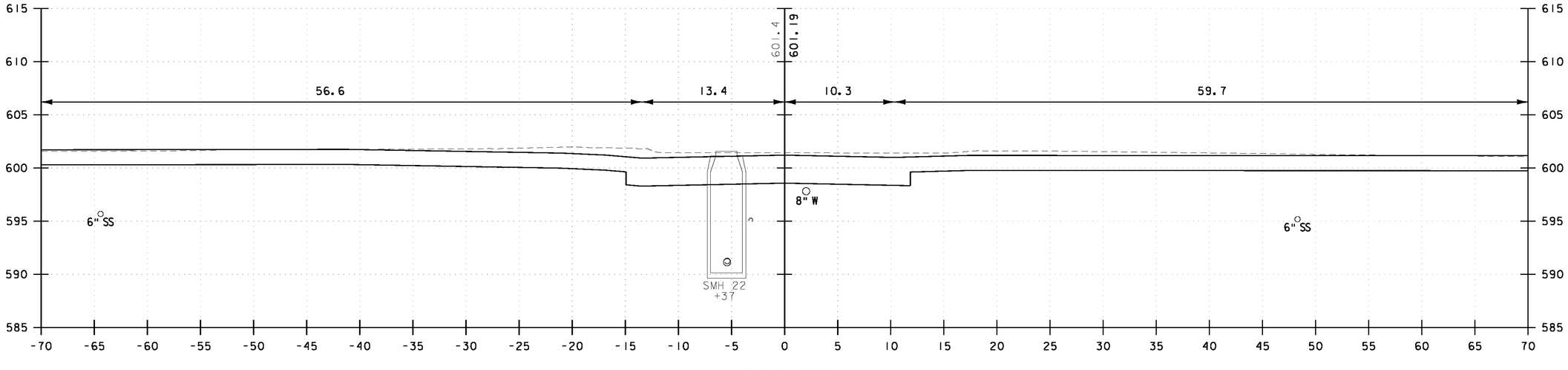
VHB Vanasse Hangen Brustlin, Inc.

GRANITE STREET

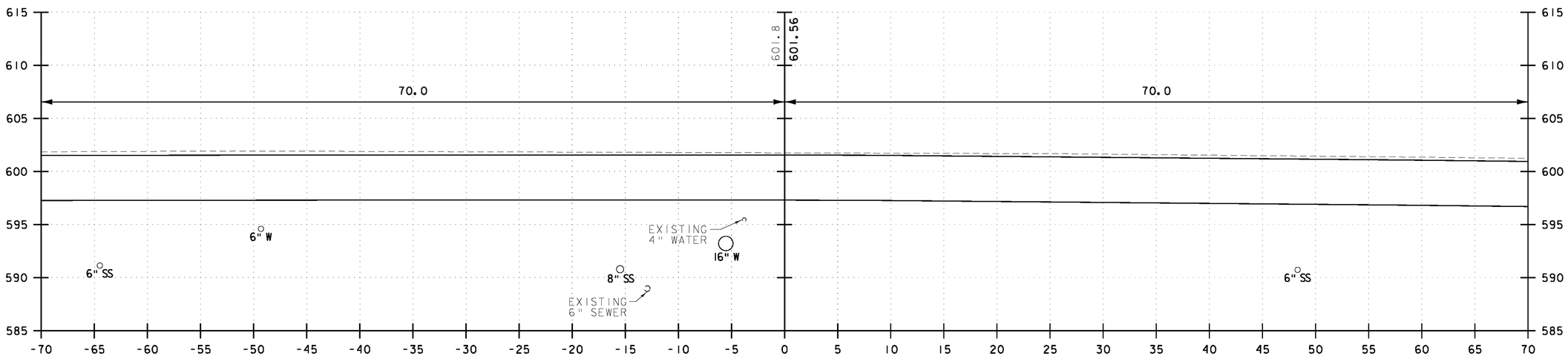
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b0110_xs2_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 298 OF 339




300+25




300+00

5 0 5 10
FEET

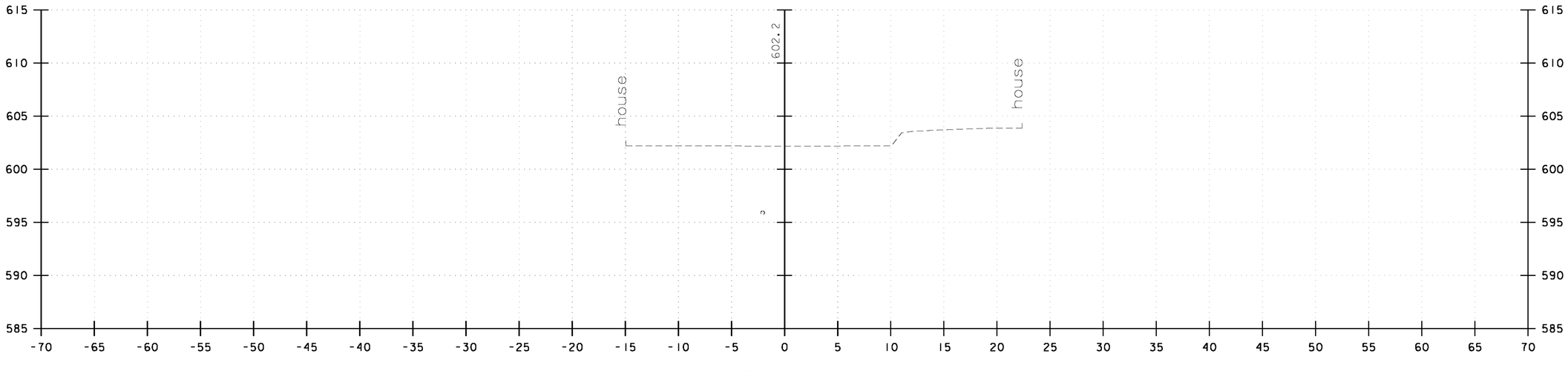
VHB Vanasse Hangen Brustlin, Inc.

CREAMERY COURT

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

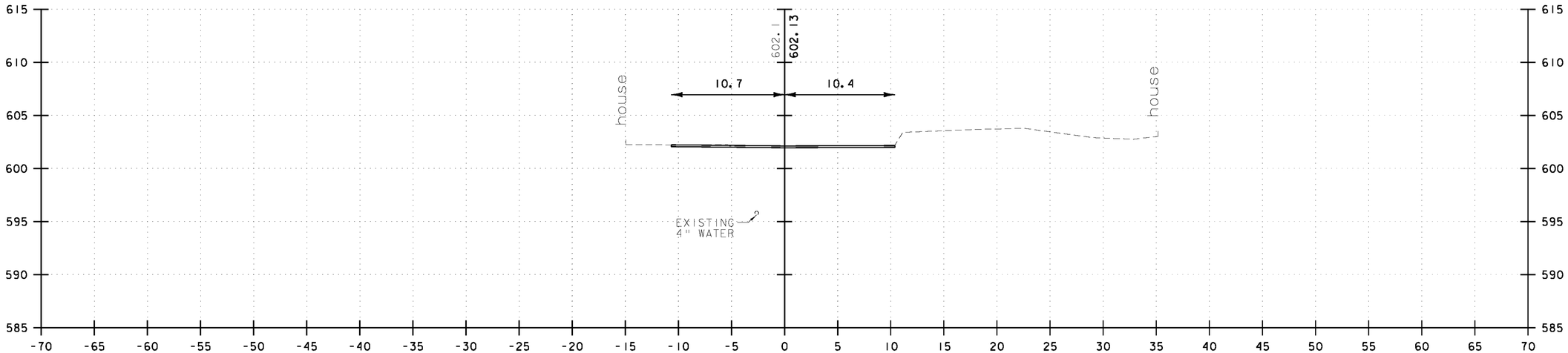
FILE NAME: 85b010_xs2_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 299 OF 339




300+75

## END APPROACH STA. 300+50

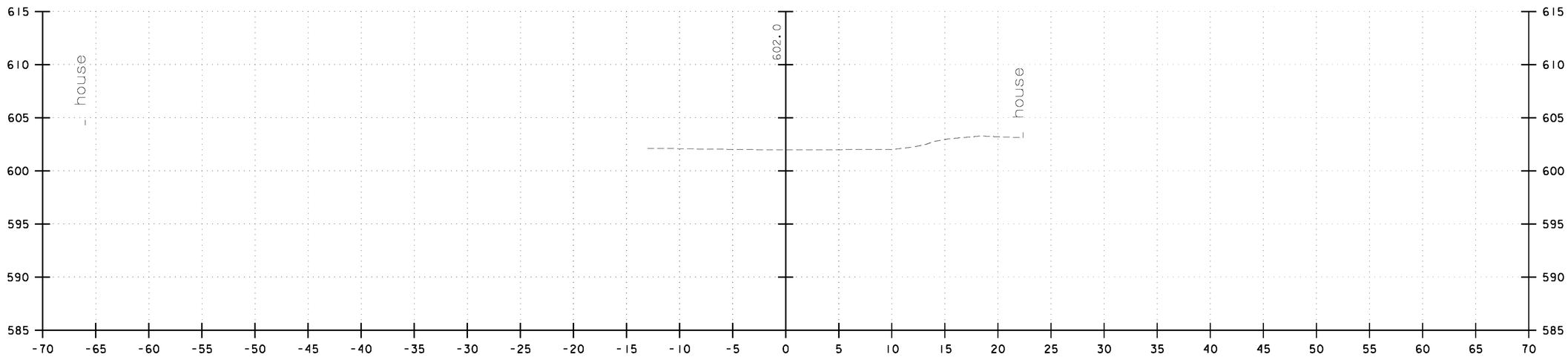



300+50

5 0 5 10
FEET

VHB Vanasse Hangen Brustlin, Inc.

| CREAMERY COURT | |
|---|---|
| PROJECT NAME: BARRE CITY | |
| PROJECT NUMBER: FEGC F 026-1(34) C/2 | |
| FILE NAME: 85b010_xs2_Cut_C2 | PLOT DATE: 3/9/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: DMP / JAR |
| DESIGNED BY: DMP / MDS | CHECKED BY: |
| CROSS SECTIONS | SHEET 300 OF 339 |




301+00

5 0 5 10
FEET

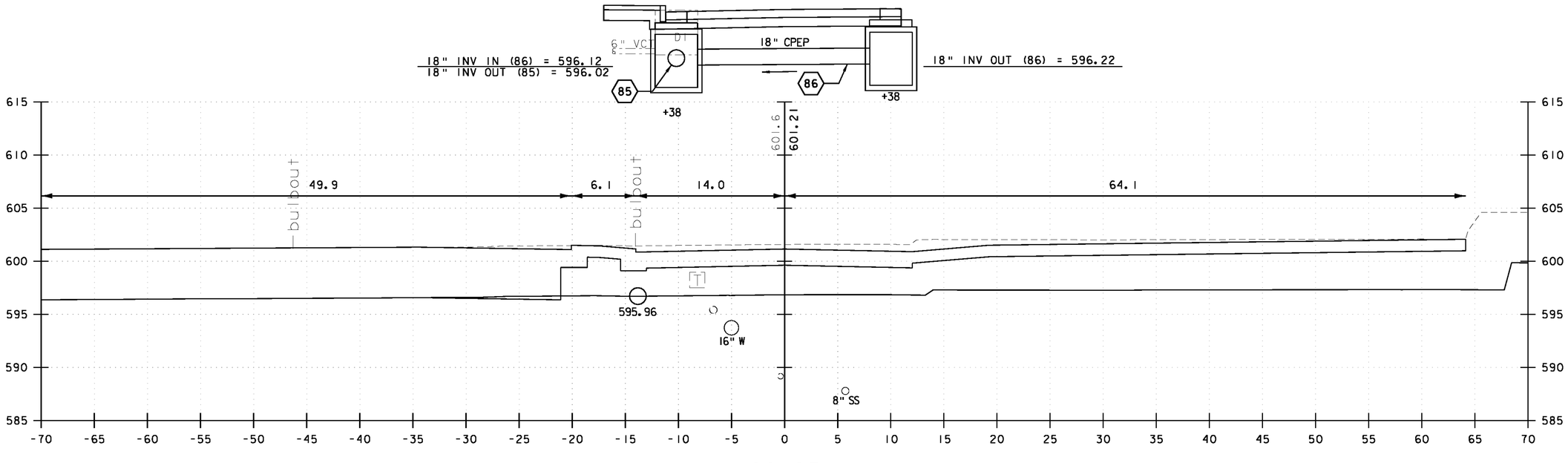
VHB Vanasse Hangen Brustlin, Inc.

CREAMERY COURT

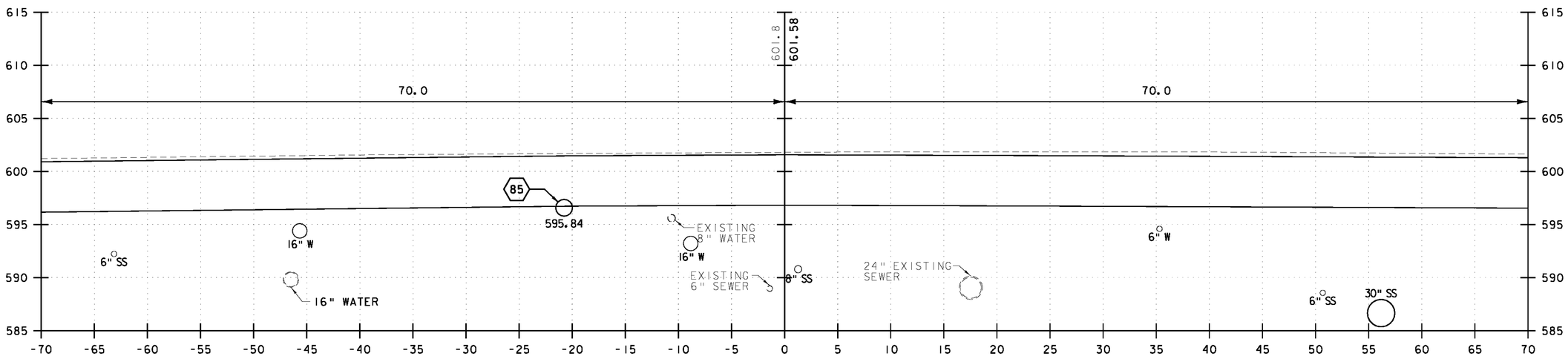
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_xs2_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 301 OF 339




60+25




60+00

5 0 5 10
FEET

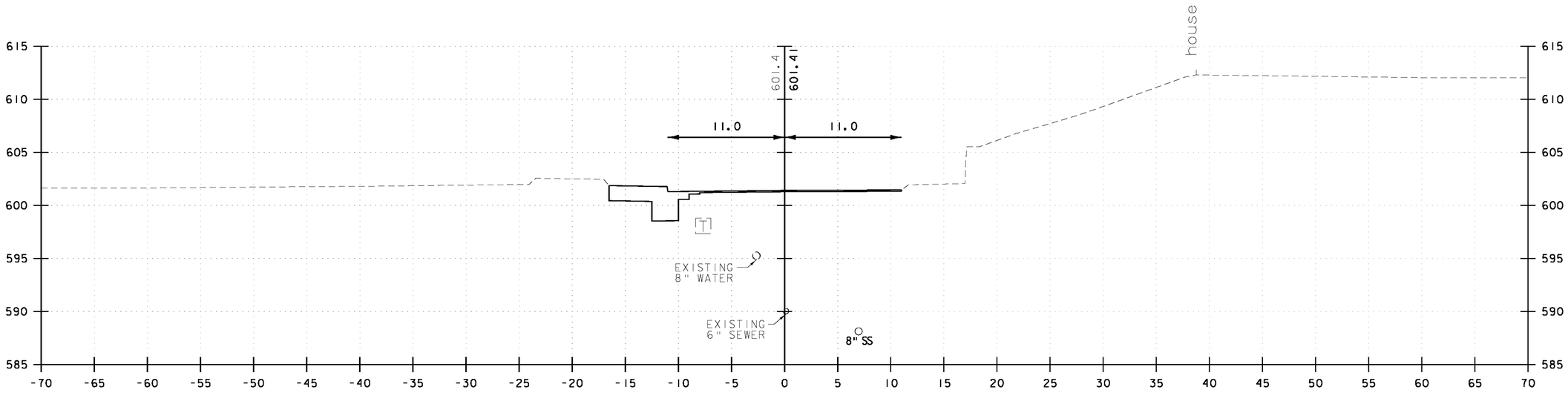
VHB Vanasse Hangen Brustlin, Inc.

WEST STREET

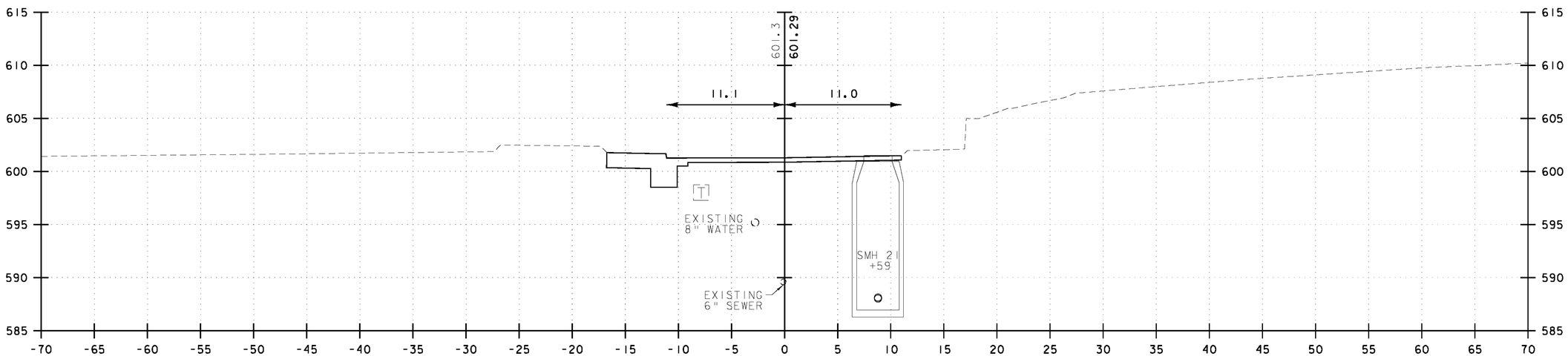
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_xs2_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 302 OF 339




60+75

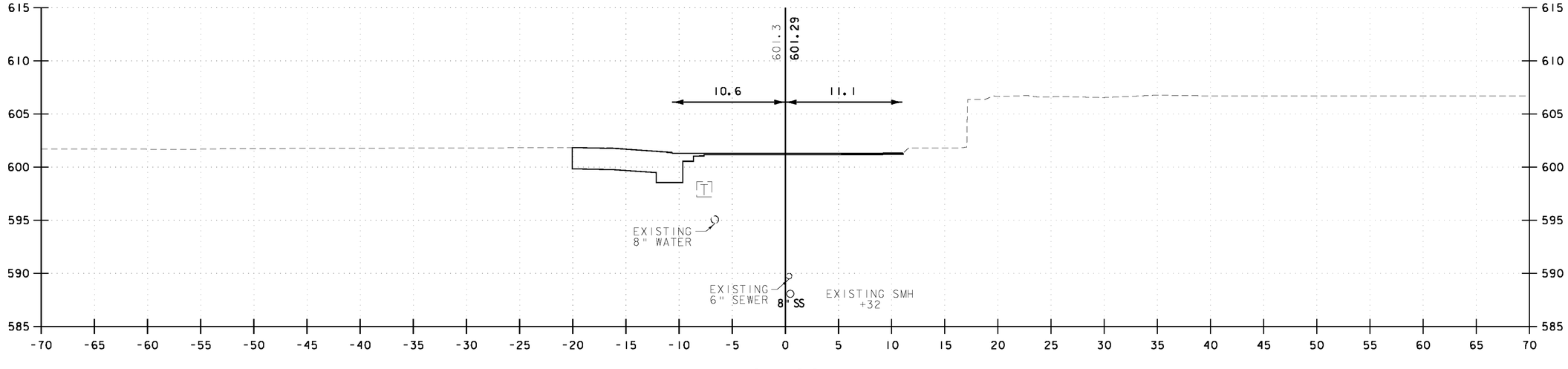



60+50

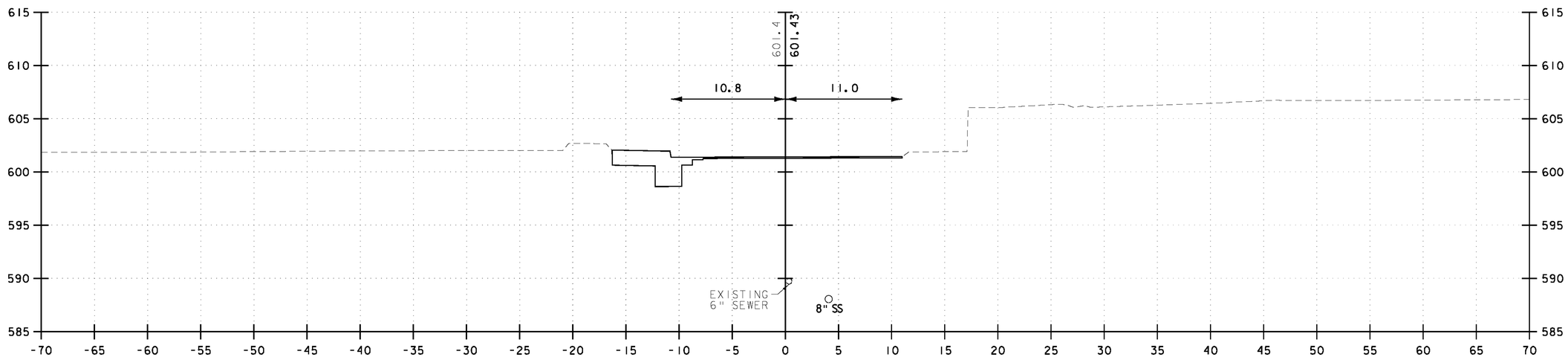
5 0 5 10
FEET

VHB Vanasse Hangen Brustlin, Inc.

| WEST STREET | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-1(34) C/2 |
| FILE NAME: 85b010_xs2_Cut_C2 | PLOT DATE: 3/9/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: DMP / JAR |
| DESIGNED BY: DMP / MDS | CHECKED BY: |
| CROSS SECTIONS | SHEET 303 OF 339 |




61+29

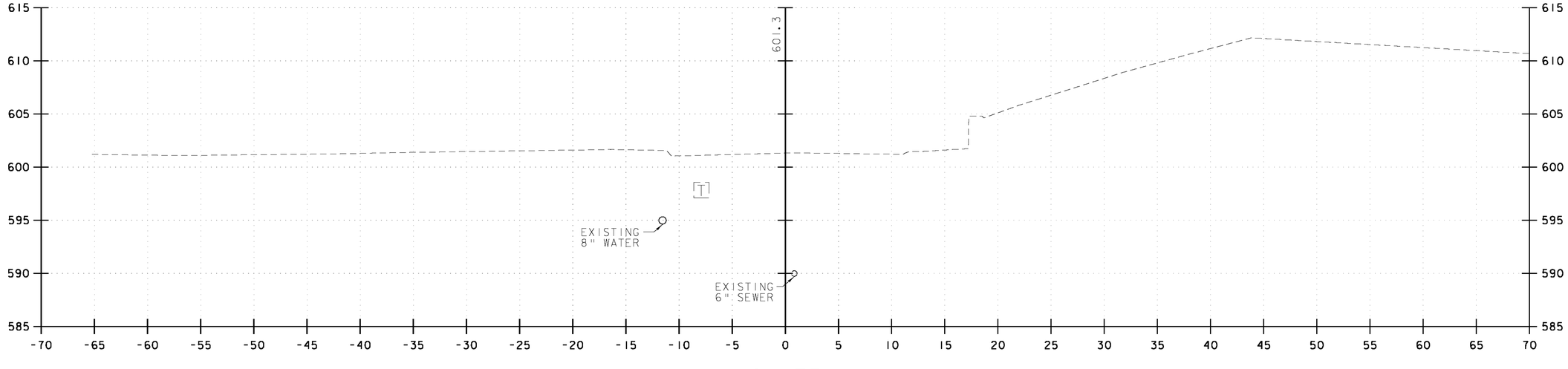



61+00

5 0 5 10
FEET

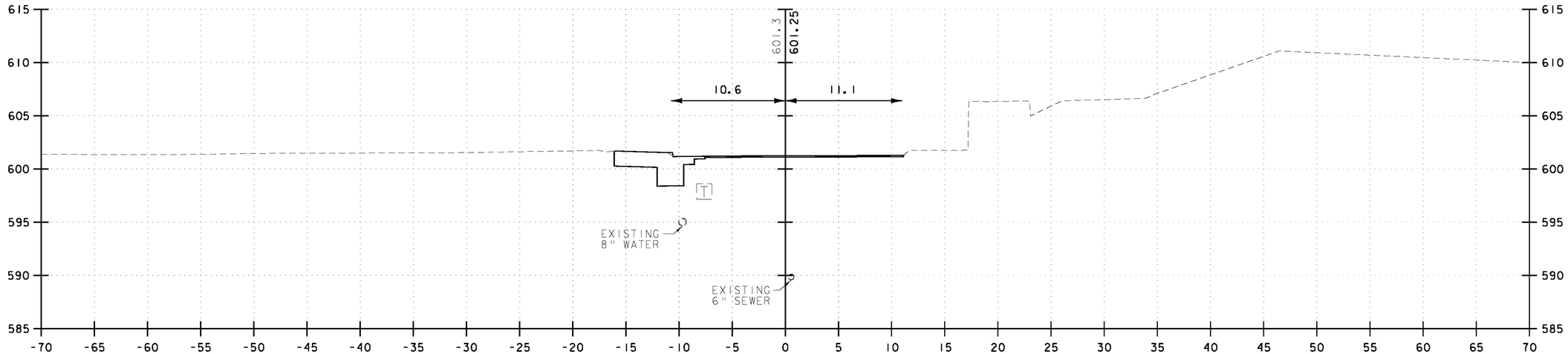
VHB Vanasse Hangen Brustlin, Inc.

| WEST STREET | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-1(34) C/2 |
| FILE NAME: 85b010_xs2_Cut_C2 | PLOT DATE: 3/9/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: DMP / JAR |
| DESIGNED BY: DMP / MDS | CHECKED BY: |
| CROSS SECTIONS | SHEET 304 OF 339 |




61+75

END APPROACH STA. 61+65

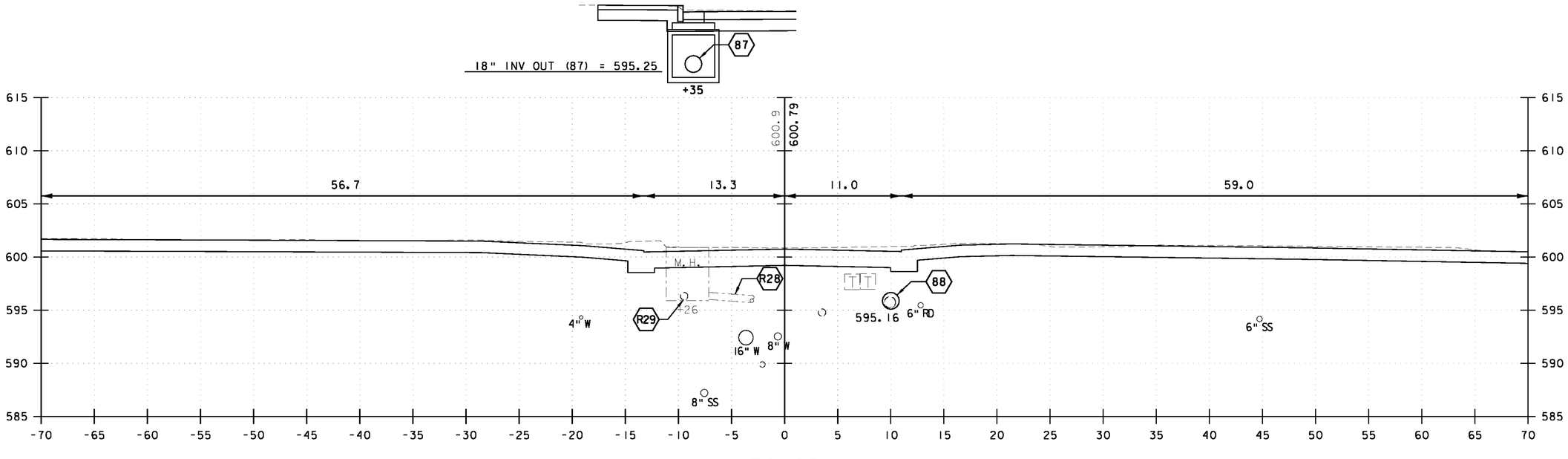



61+50

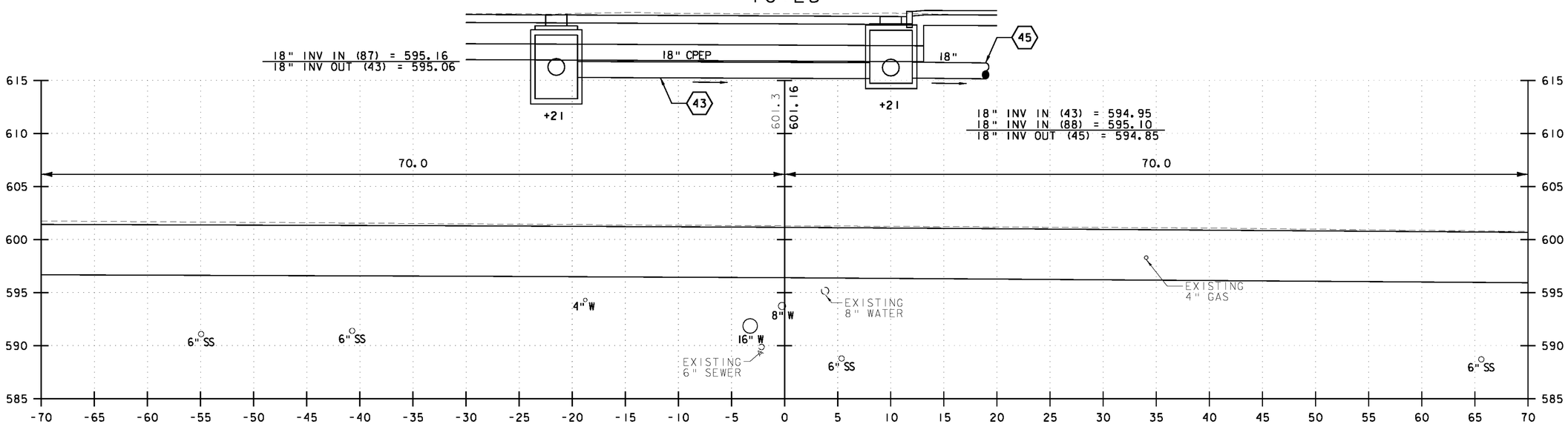
5 0 5 10
FEET

VHB Vanasse Hangen Brustlin, Inc.

| WEST STREET | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-1(34) C/2 |
| FILE NAME: 85b010_xs2_Cut_C2 | PLOT DATE: 3/9/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: DMP / JAR |
| DESIGNED BY: DMP / MDS | CHECKED BY: |
| CROSS SECTIONS | SHEET 305 OF 339 |




70+25




70+00

5 0 5 10
FEET

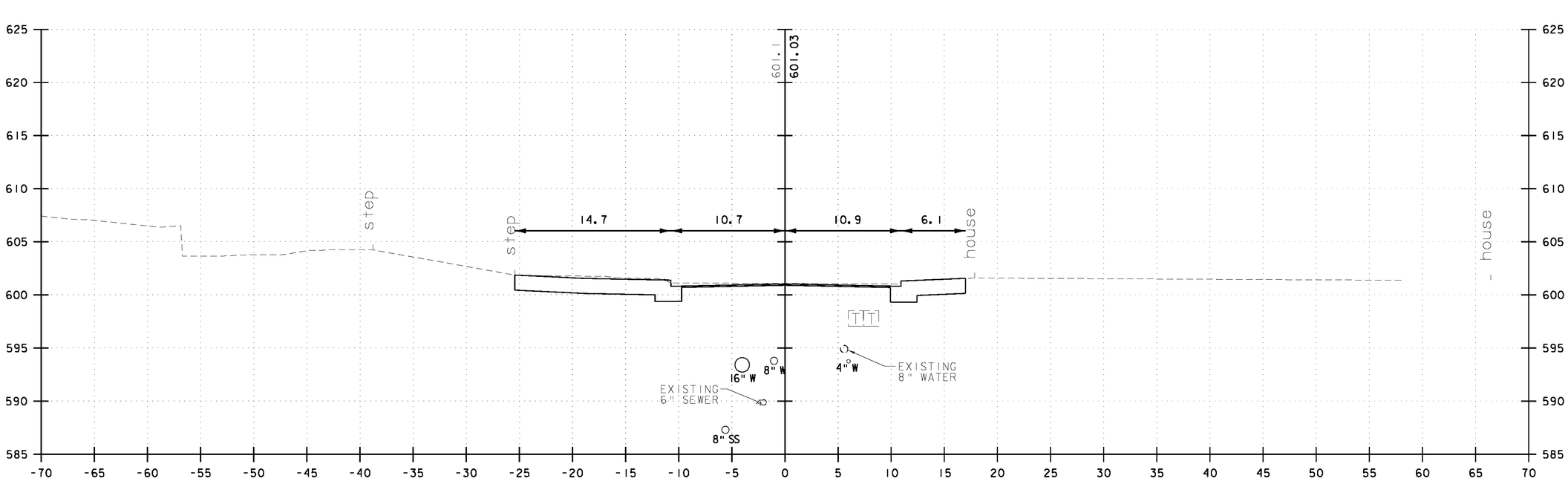
VHB Vanasse Hangen Brustlin, Inc.

MERCHANT STREET

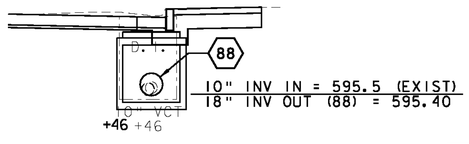
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_xs2_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 306 OF 339




70+50




5 0 5 10
FEET

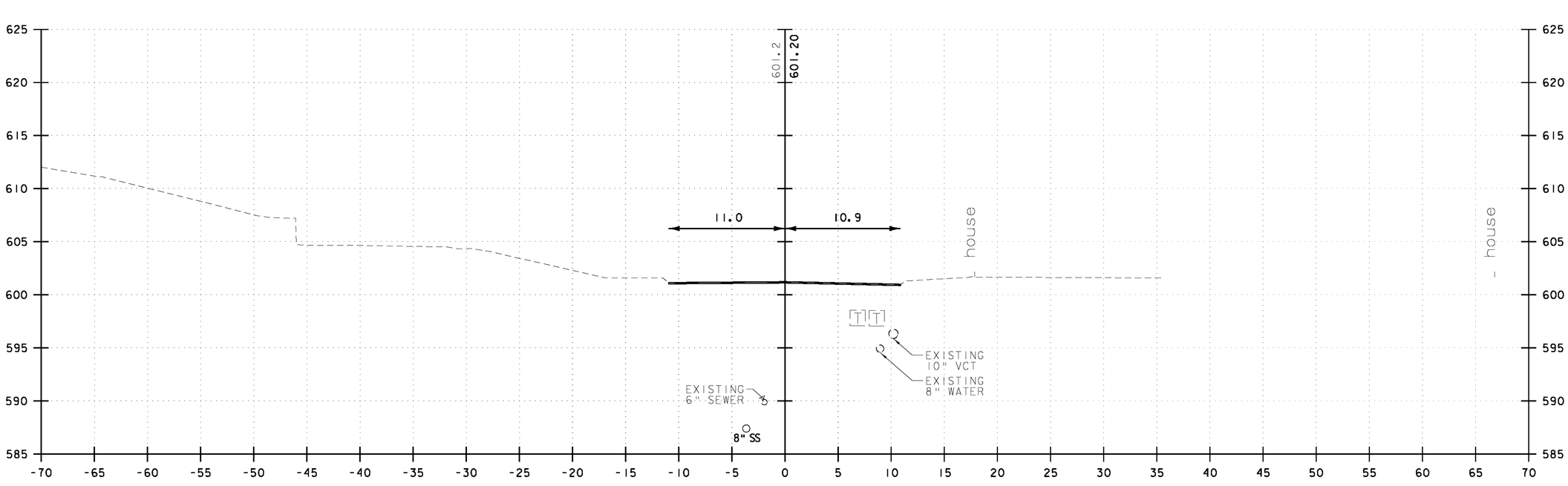
VHB Vanasse Hangen Brustlin, Inc.

MERCHANT STREET

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_xs2_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 307 OF 339




70+75

5 0 5 10
FEET

VHB Vanasse Hangen Brustlin, Inc.

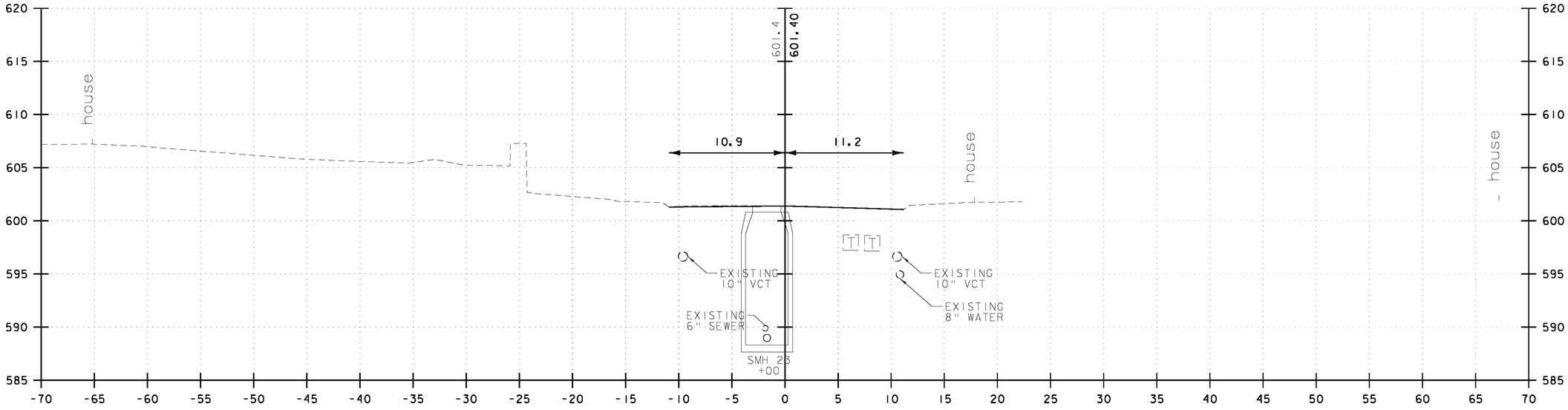
MERCHANT STREET

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_xs2_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 308 OF 339

END APPROACH STA. 71+00




71+00

5 0 5 10
FEET

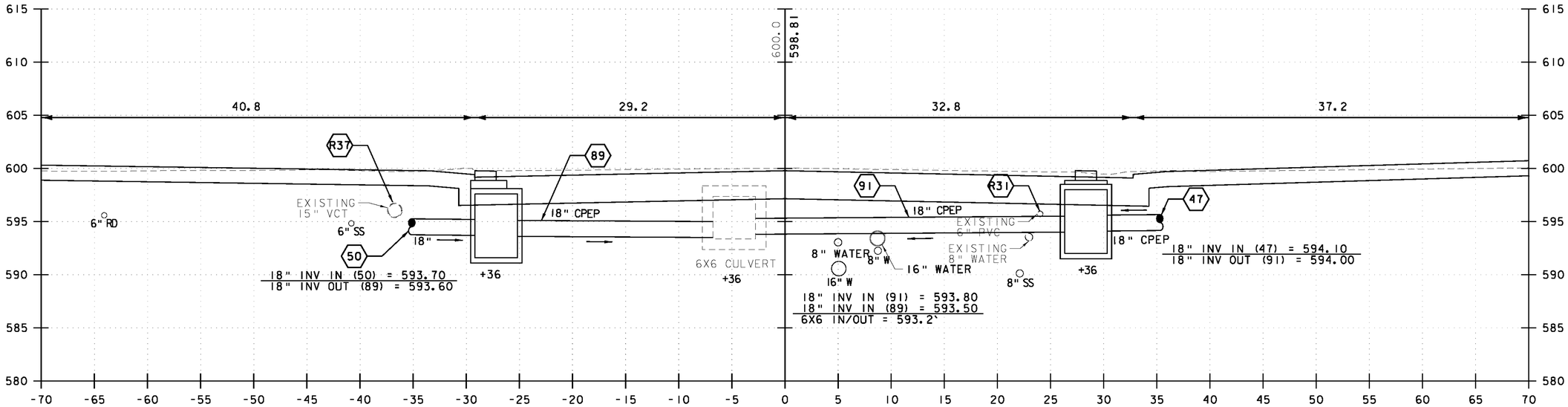
VHB Vanasse Hangen Brustlin, Inc.

MERCHANT STREET

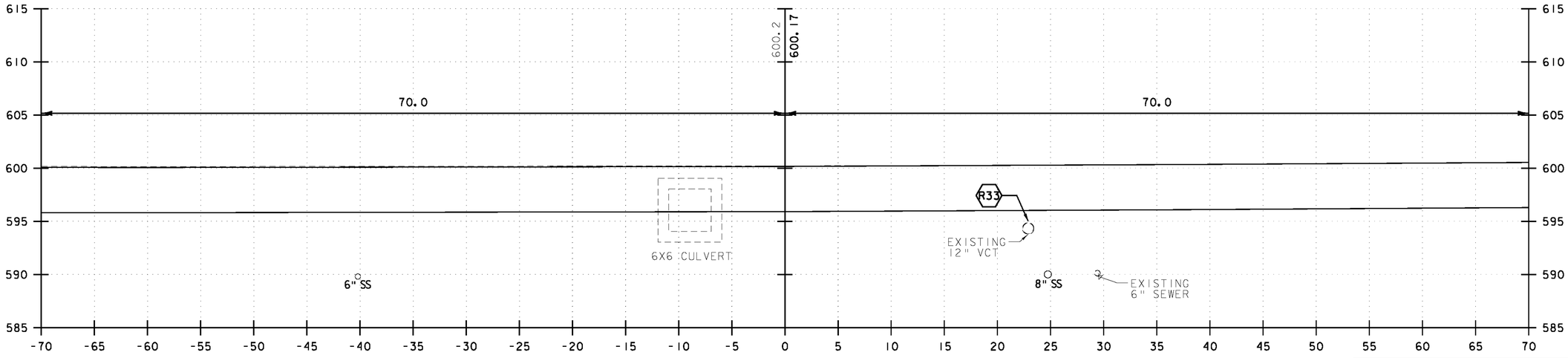
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_xs2_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 309 OF 339




80+25

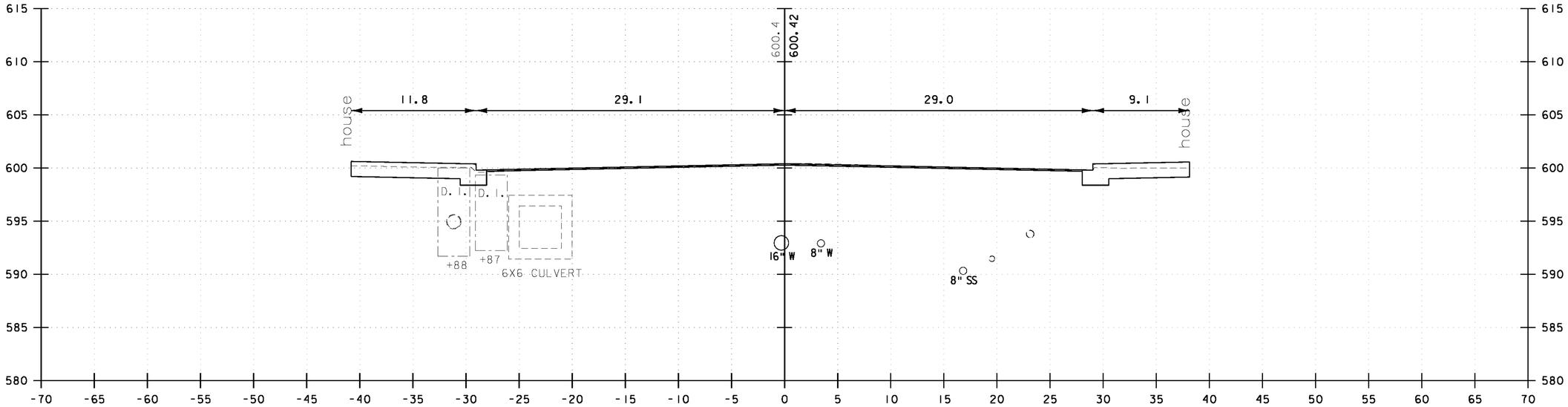



80+00

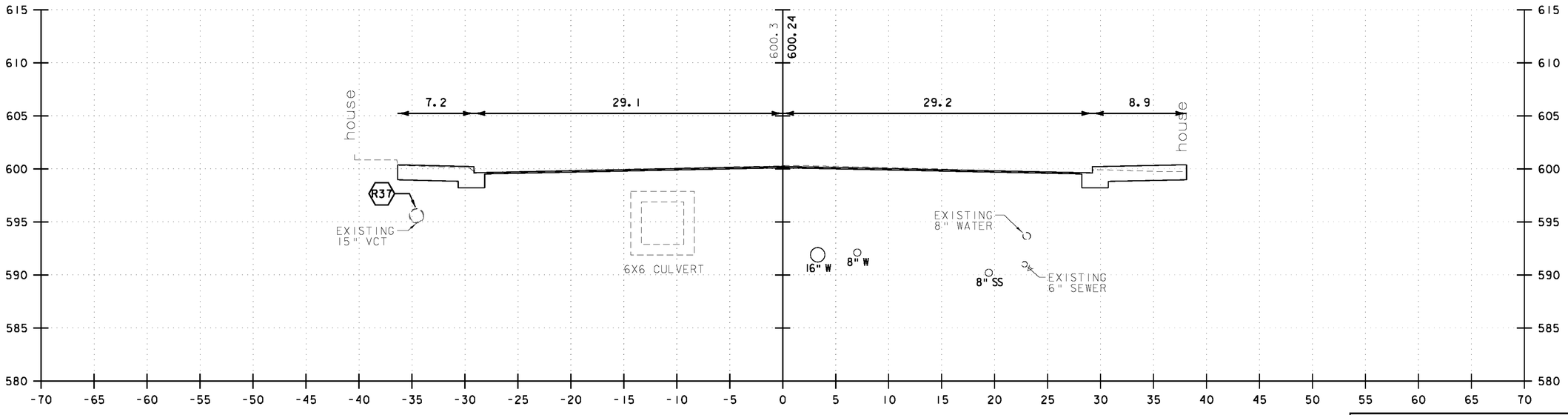
5 0 5 10
FEET

VHB Vanasse Hangen Brustlin, Inc.

| DEPOT SQUARE | |
|---|---|
| PROJECT NAME: BARRE CITY | |
| PROJECT NUMBER: FEGC F 026-1(34) C/2 | |
| FILE NAME: 85b010_xs2_Cut_C2 | PLOT DATE: 3/9/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: DMP / JAR |
| DESIGNED BY: DMP / MDS | CHECKED BY: |
| CROSS SECTIONS | SHEET 310 OF 339 |




80+75




80+50

5 0 5 10
FEET

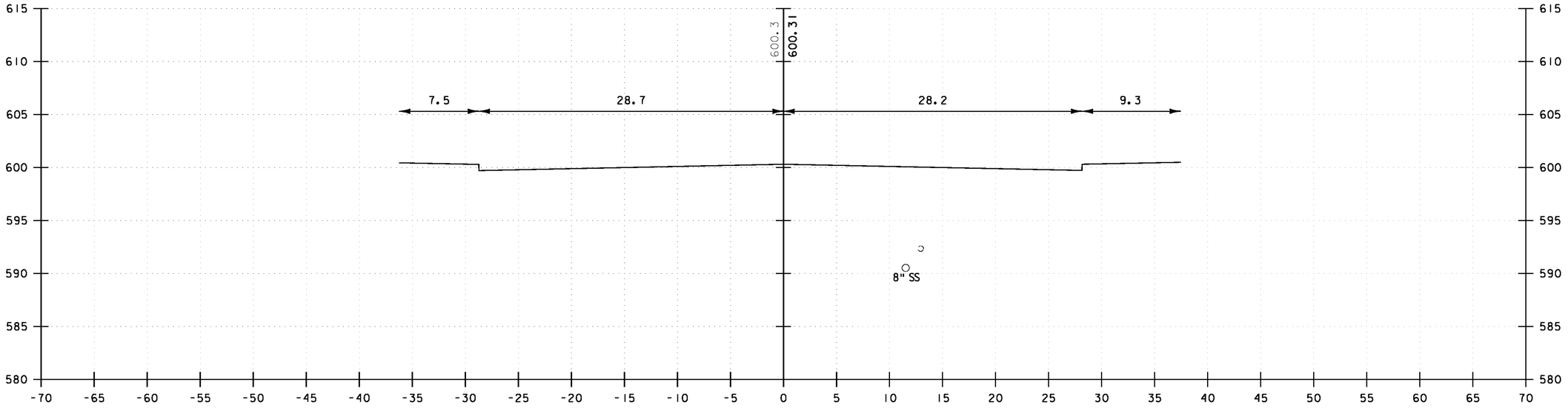
VHB Vanasse Hangen Brustlin, Inc.

DEPOT SQUARE

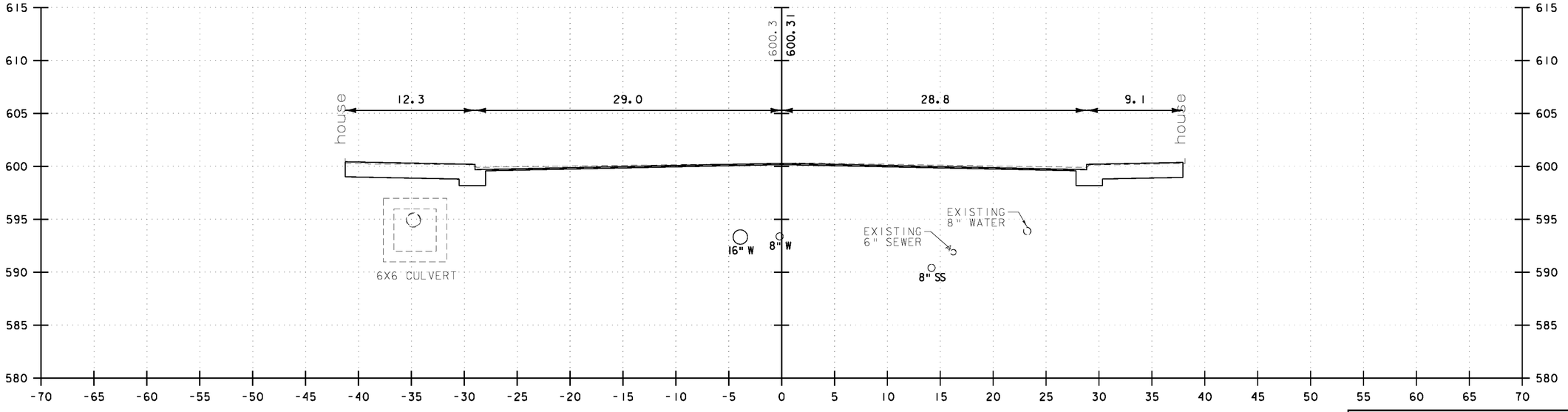
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_xs2_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 311 OF 339




81+25




81+00

5 0 5 10
FEET

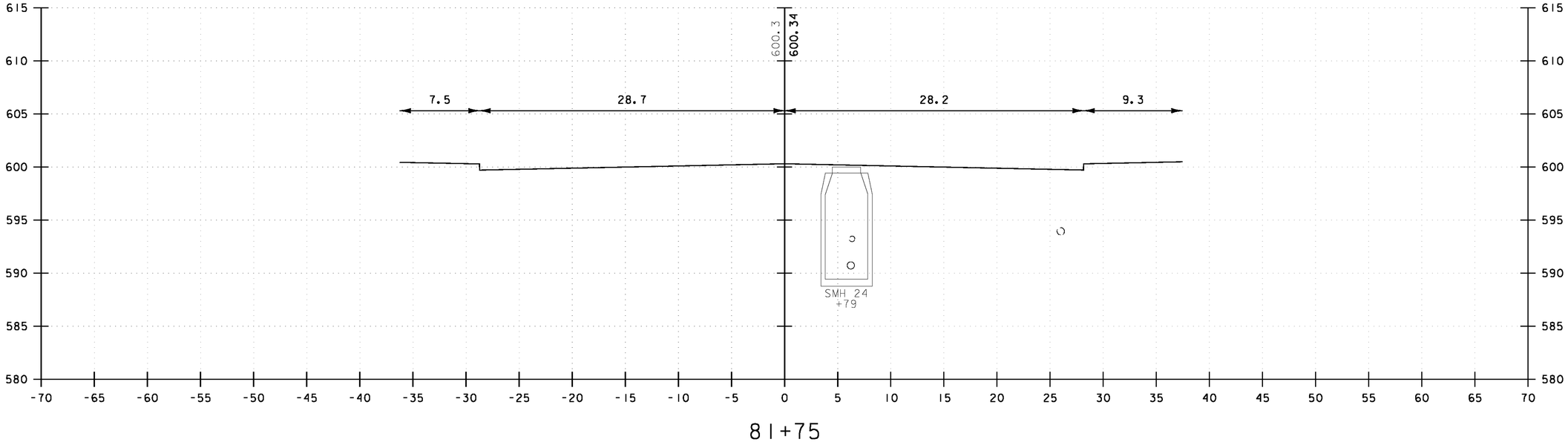
VHB Vanasse Hangen Brustlin, Inc.

DEPOT SQUARE

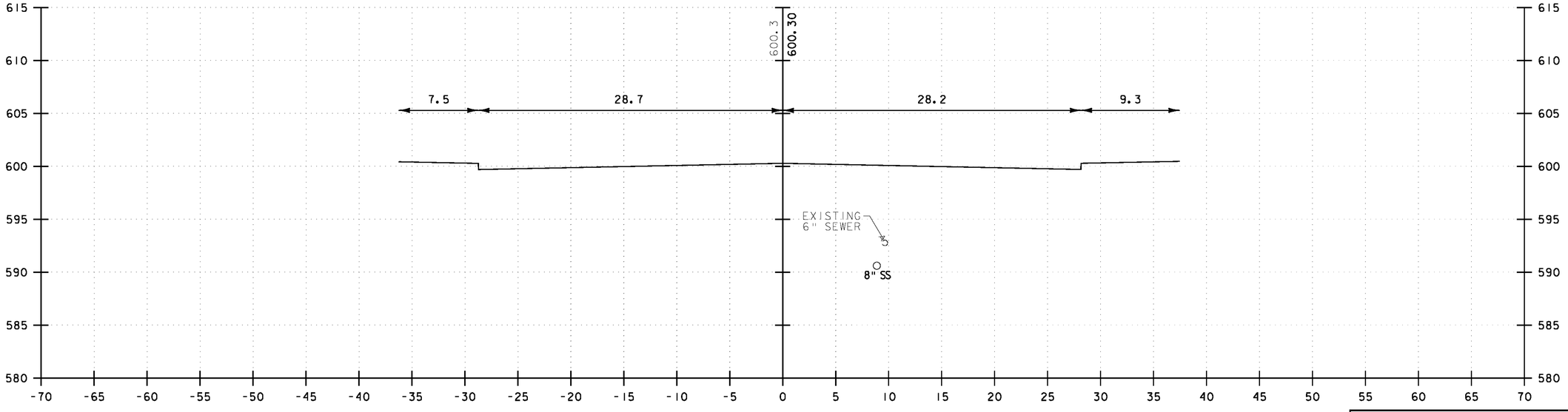
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b0110_xs2_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 312 OF 339




81+75




81+50

5 0 5 10
FEET

VHB Vanasse Hangen Brustlin, Inc.

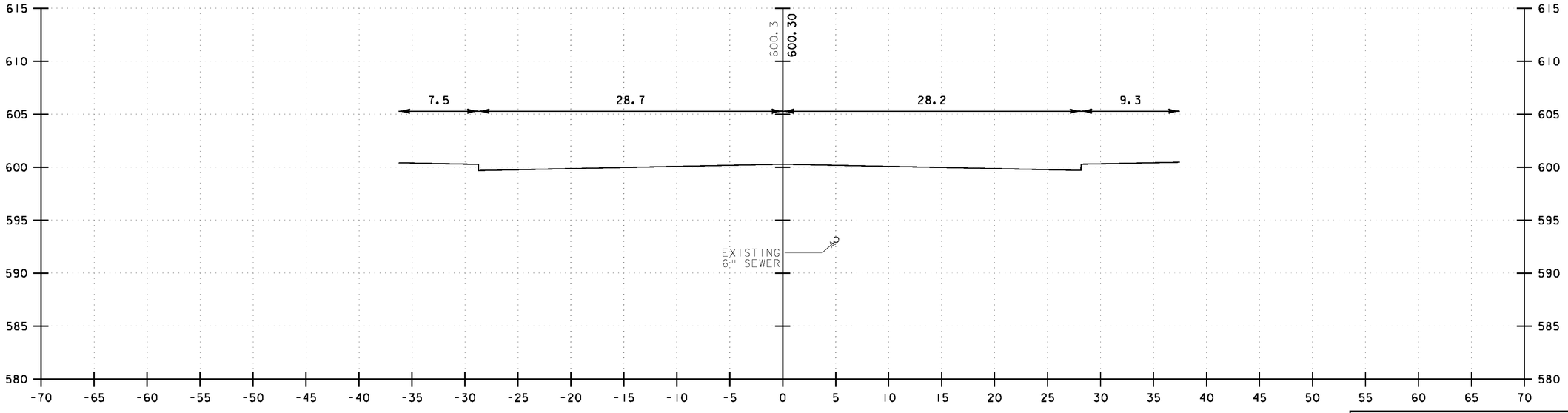
DEPOT SQUARE

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b0110_xs2_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 313 OF 339

## END APPROACH STA. 81+85




81+85

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FEET

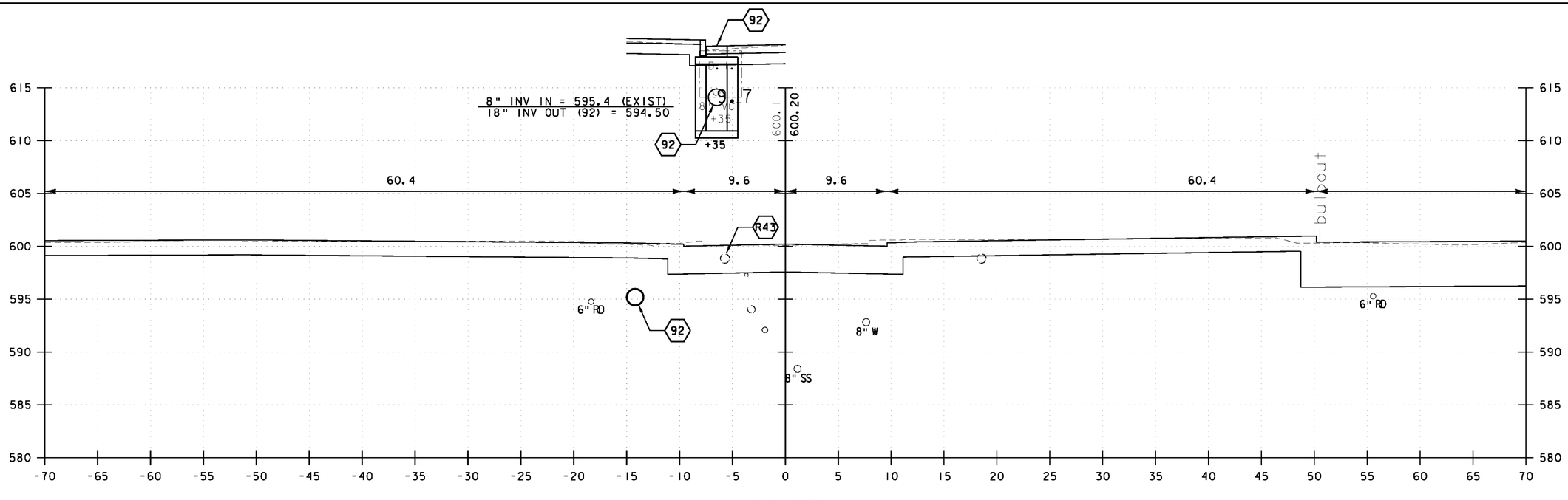
VHB Vanasse Hangen Brustlin, Inc.

DEPOT SQUARE

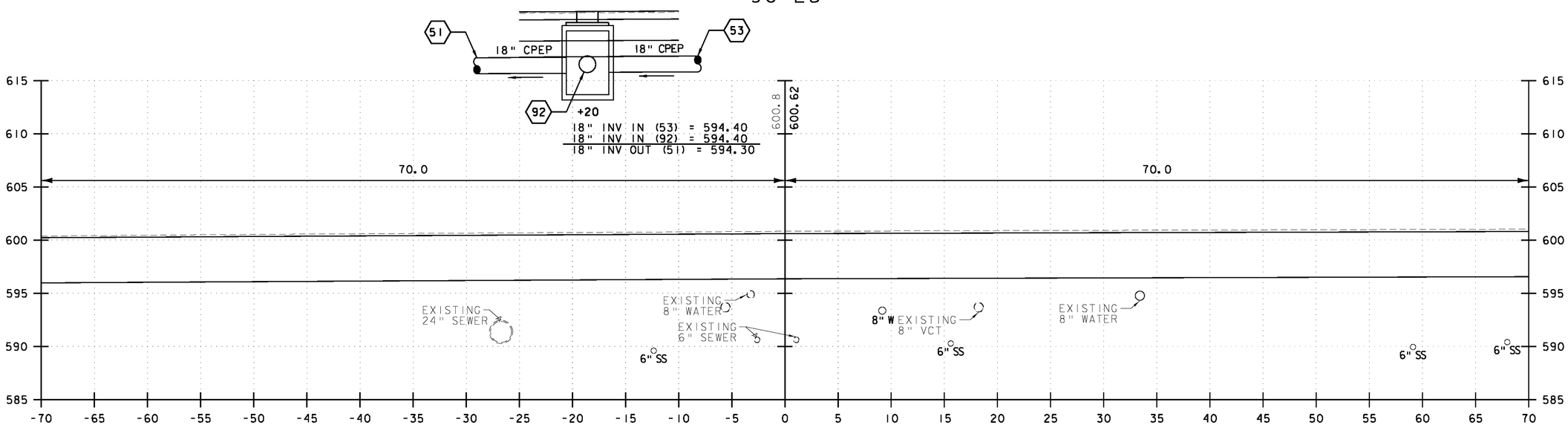
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_xs2_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 314 OF 339




90+25




90+00

5 0 5 10
FEET

VHB Vanasse Hangen Brustlin, Inc.

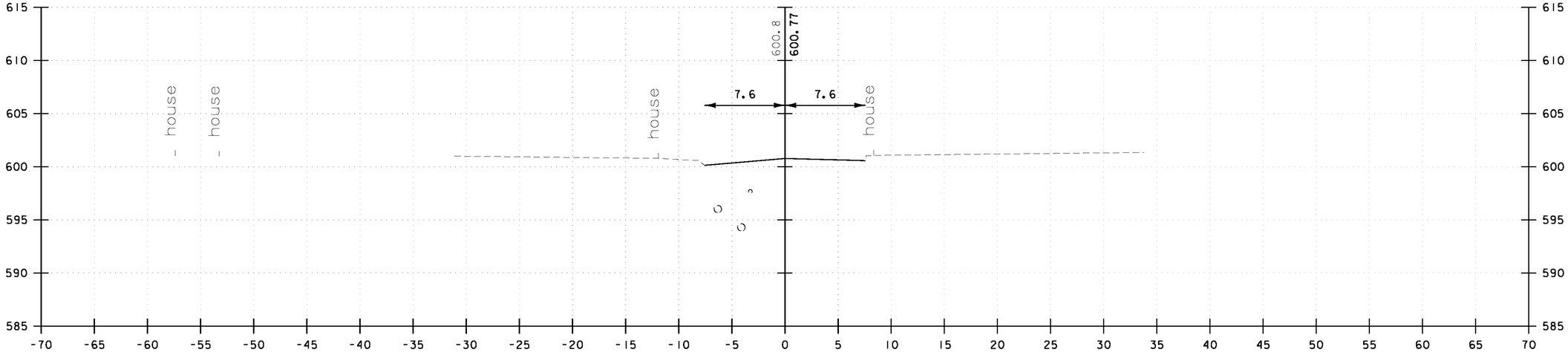
PEARL STREET

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_xs2_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

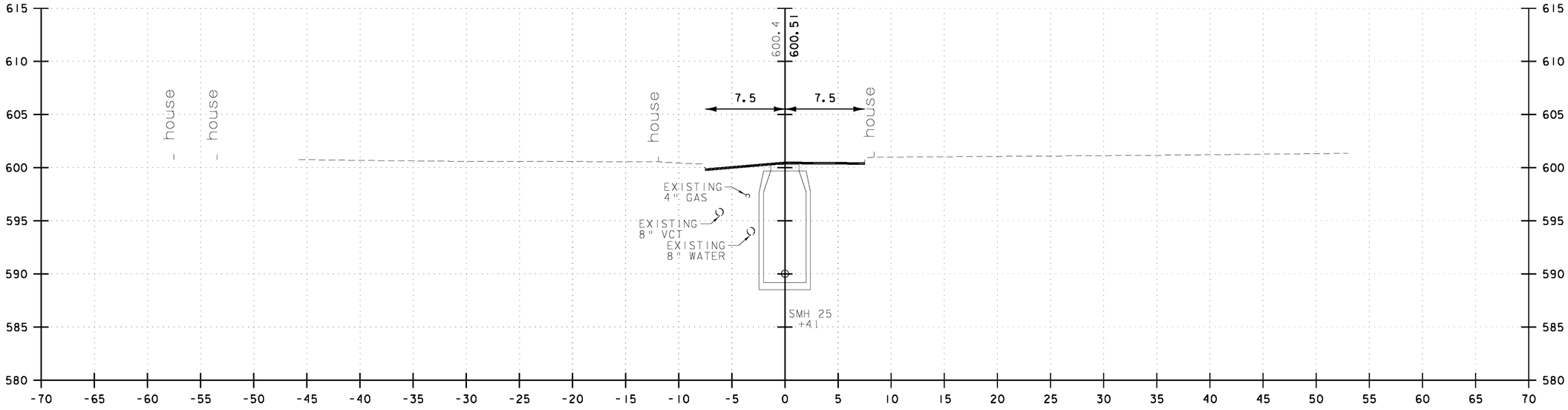
PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 315 OF 339

## END APPROACH STA. 90+75




90+75

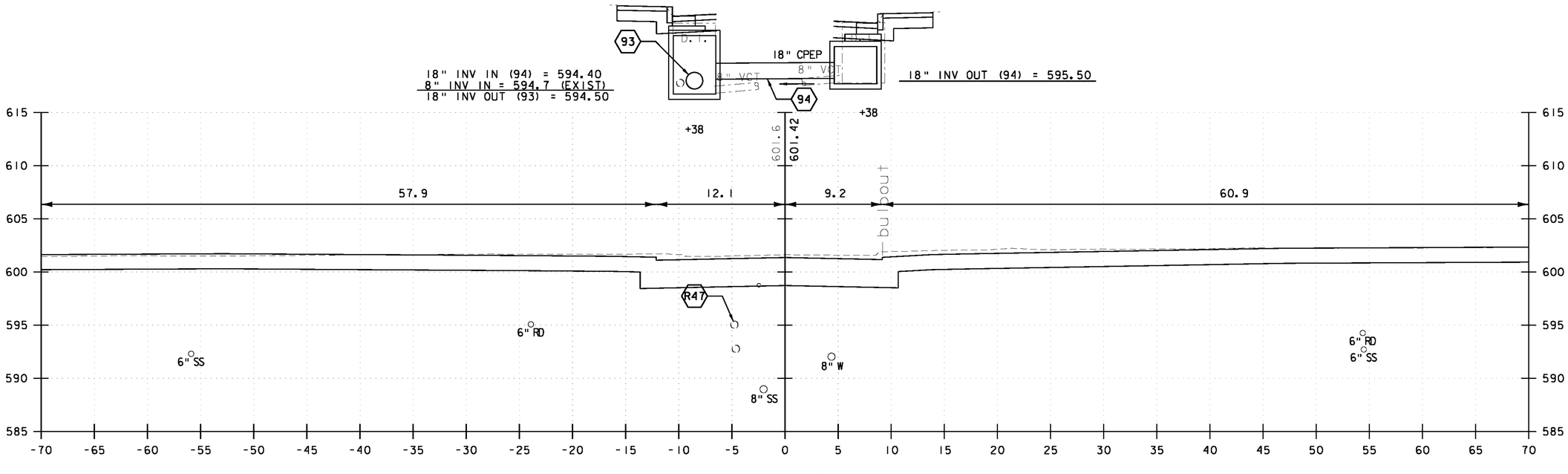
## 90+50

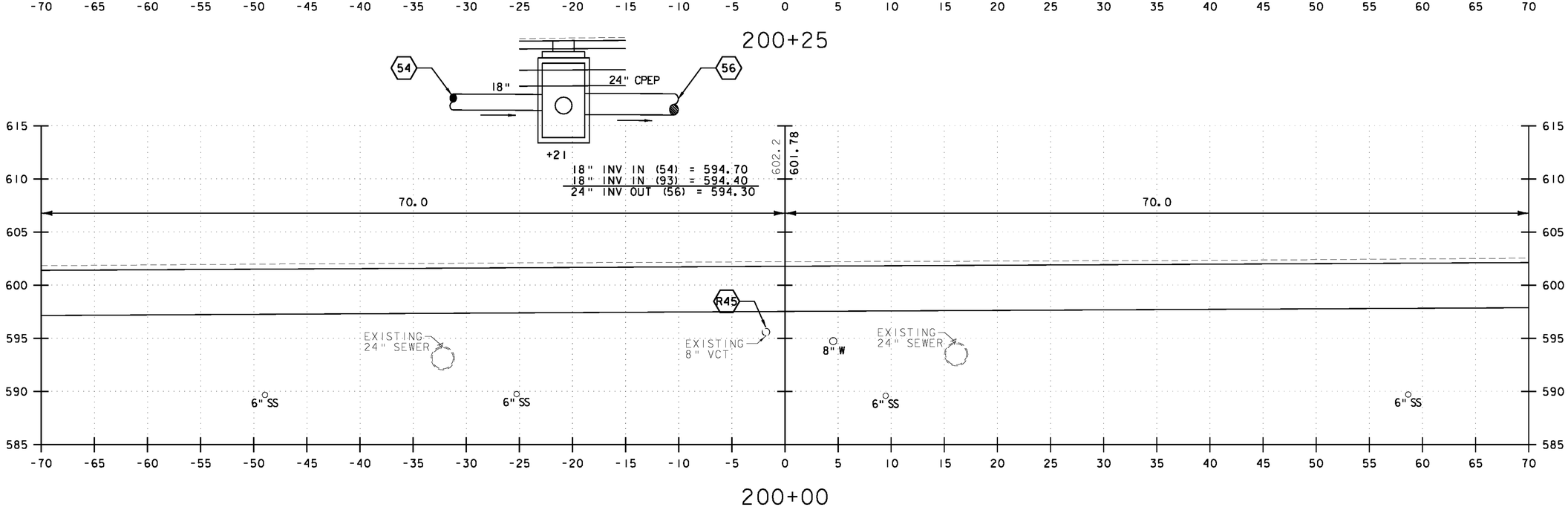



5 0 5 10
FEET

VHB Vanasse Hangen Brustlin, Inc.

| PEARL STREET | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-1(34) C/2 |
| FILE NAME: 85b010_xs2_Cut_C2 | PLOT DATE: 3/9/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: DMP / JAR |
| DESIGNED BY: DMP / MDS | CHECKED BY: |
| CROSS SECTIONS | SHEET 316 OF 339 |



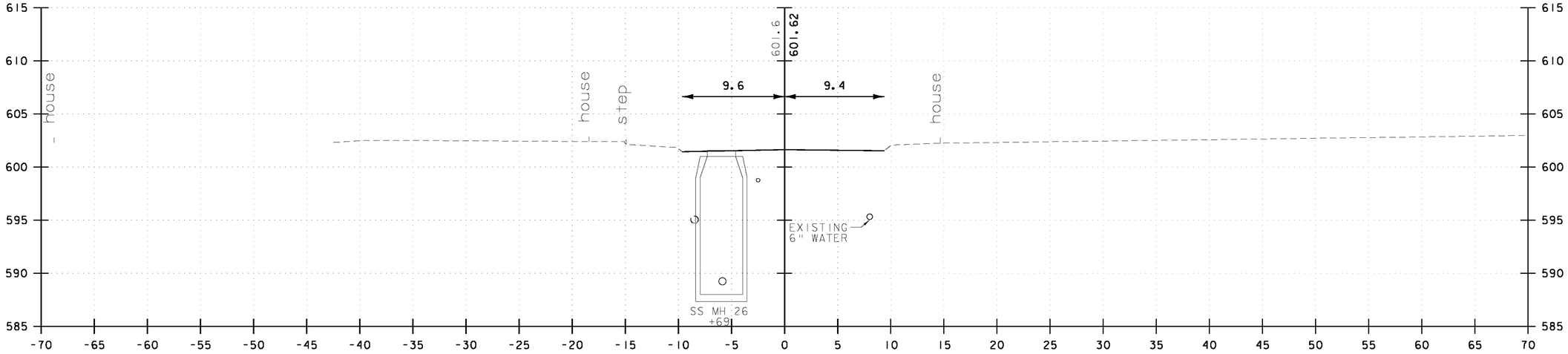




5 0 5 10
FEET

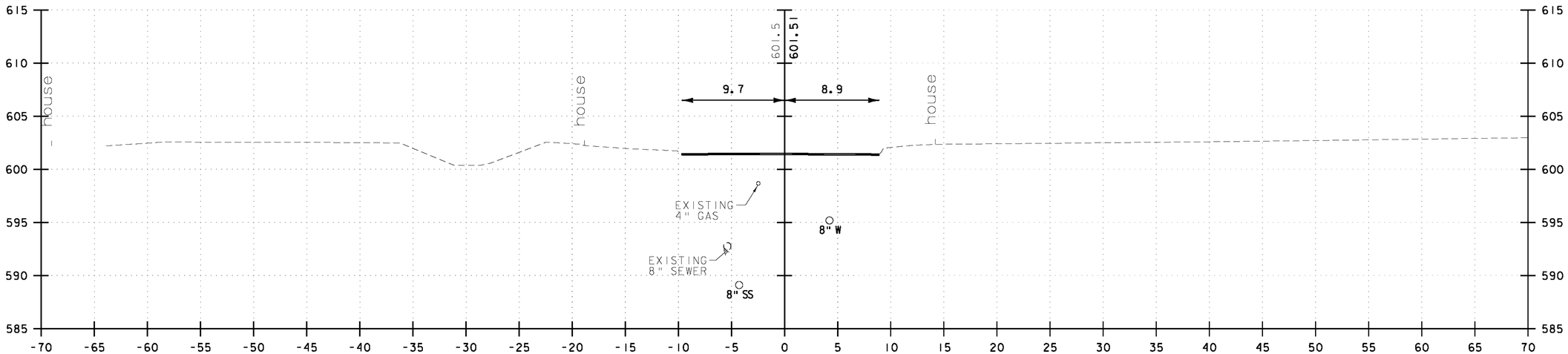
VHB Vanasse Hangen Brustlin, Inc.

| KEITH AVENUE | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-1(34) C/2 |
| FILE NAME: 85b010_xs2_Cut_C2 | PLOT DATE: 3/9/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: DMP / JAR |
| DESIGNED BY: DMP / MDS | CHECKED BY: |
| CROSS SECTIONS | SHEET 317 OF 339 |

## END APPROACH STA. 200+70




200+70

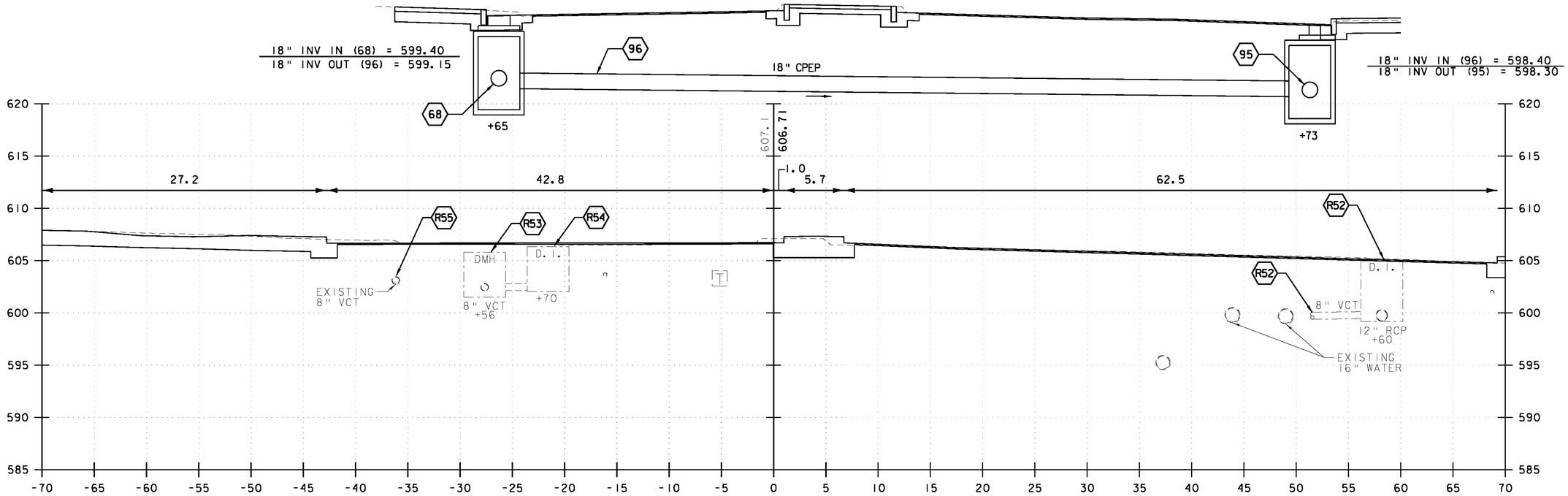



200+50

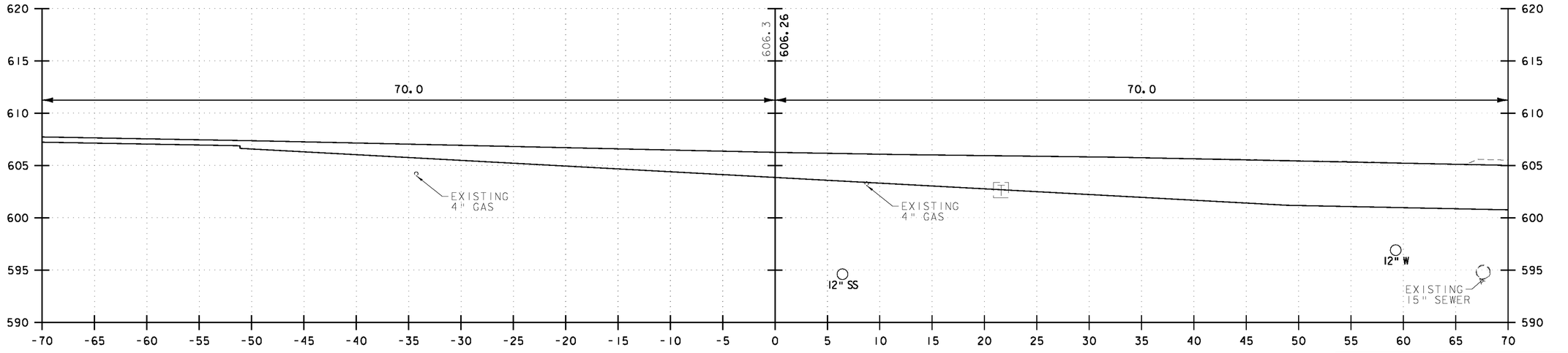
5 0 5 10
FEET

VHB Vanasse Hangen Brustlin, Inc.

| KEITH AVENUE | |
|---|---|
| PROJECT NAME: | BARRE CITY |
| PROJECT NUMBER: | FEGC F 026-1(34) C/2 |
| FILE NAME: 85b010_xs2_Cut_C2 | PLOT DATE: 3/9/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: DMP / JAR |
| DESIGNED BY: DMP / MDS | CHECKED BY: |
| CROSS SECTIONS | SHEET 318 OF 339 |




600+50




600+00

5 0 5 10
FEET

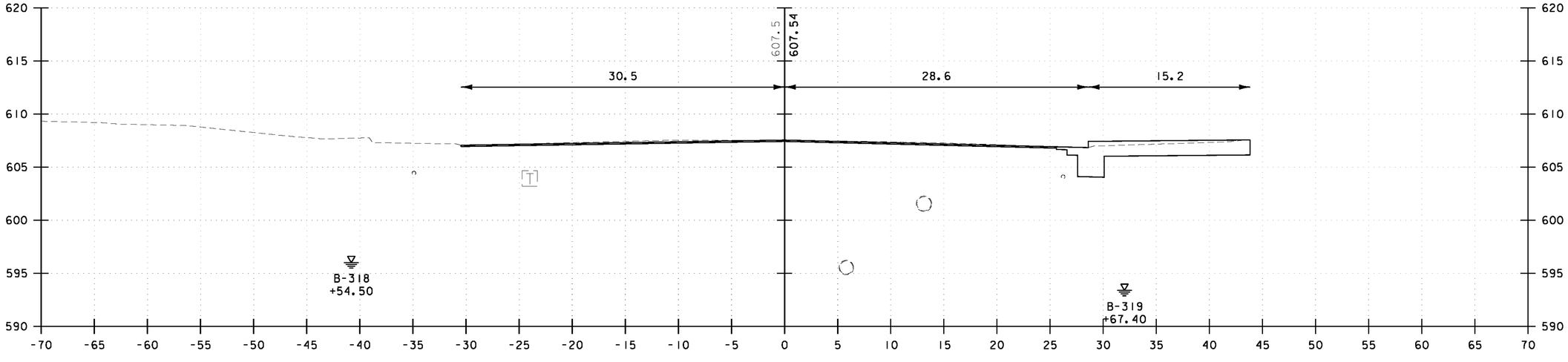
VHB Vanasse Hangen Brustlin, Inc.

NORTH MAIN STREET

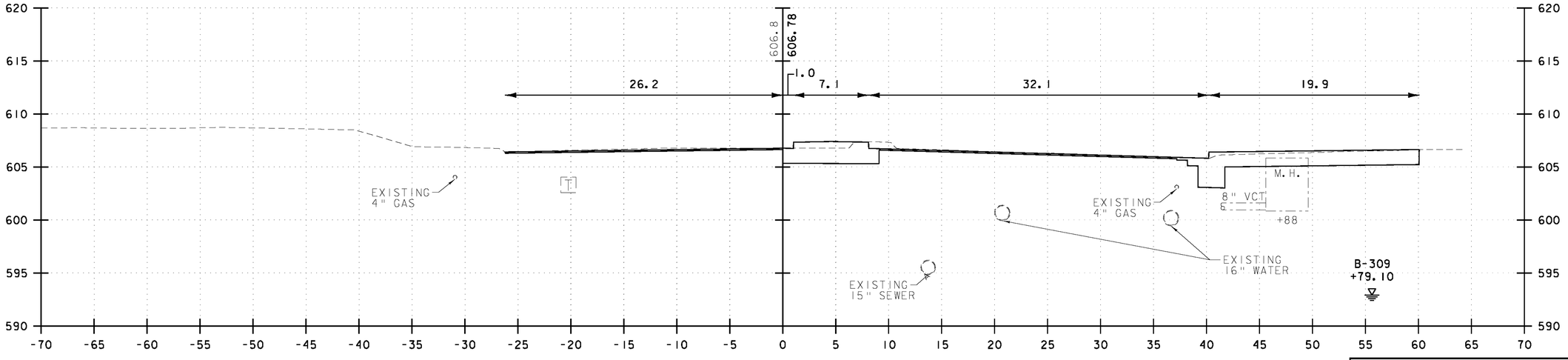
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_xs2_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 319 OF 339




601+50




601+00

5 0 5 10
FEET

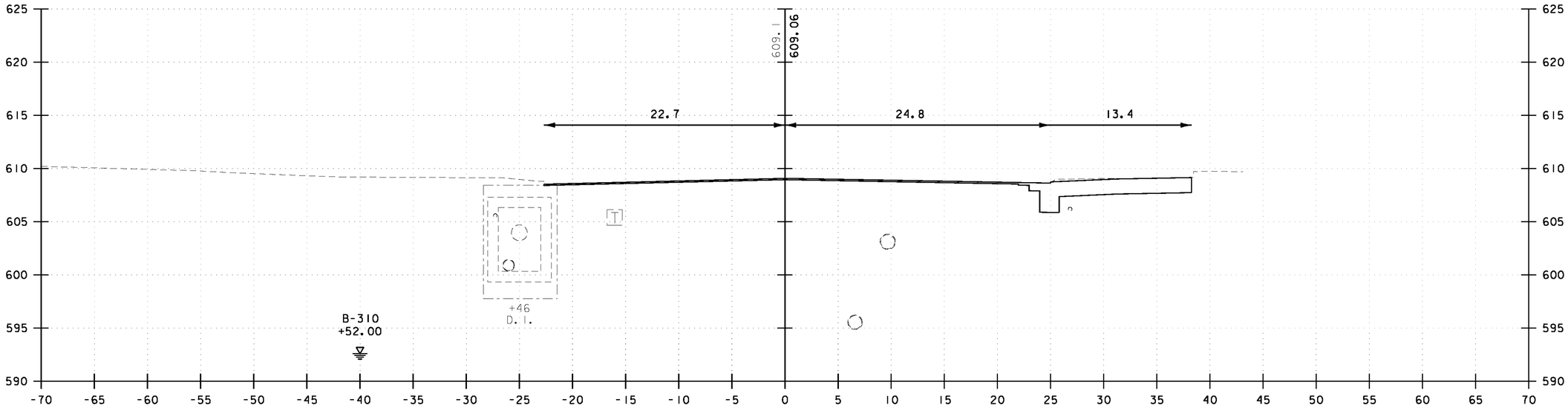
VHB Vanasse Hangen Brustlin, Inc.

NORTH MAIN STREET

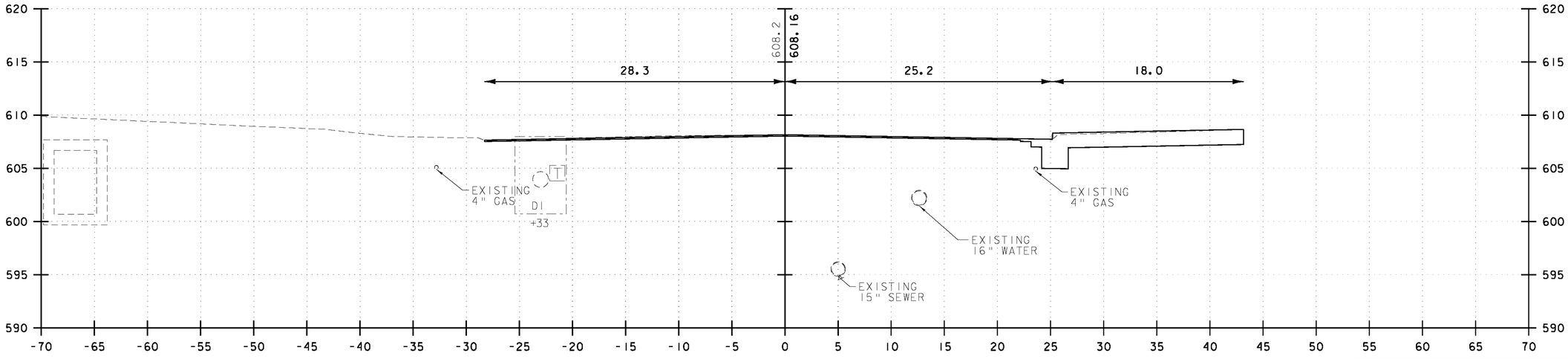
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b0110_xs2_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 320 OF 339




602+50




602+00

5 0 5 10
FEET

VHB Vanasse Hangen Brustlin, Inc.

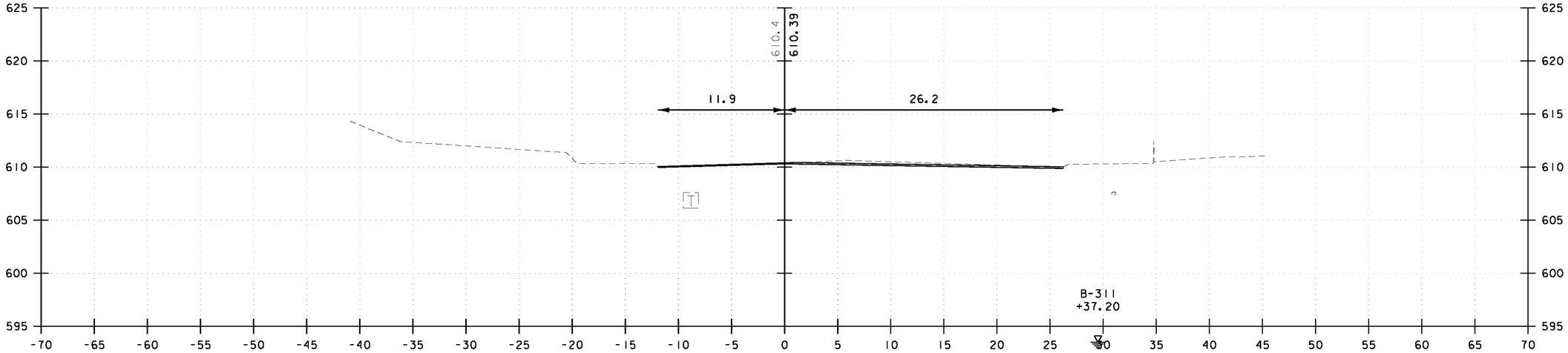
NORTH MAIN STREET

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

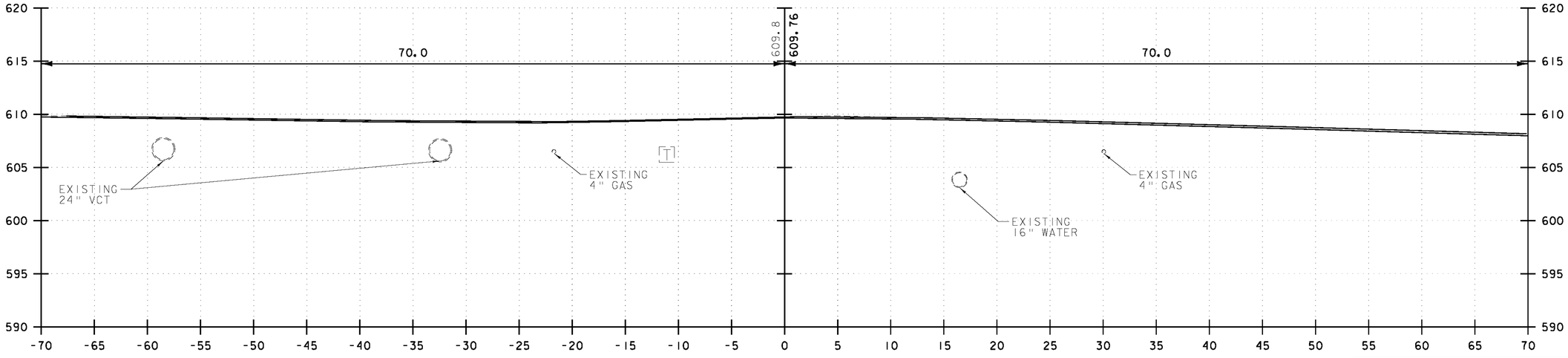
FILE NAME: 85b010_xs2_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 321 OF 339

## END APPROACH STA. 604+25




## 603+50




## 603+00

5 0 5 10
FEET

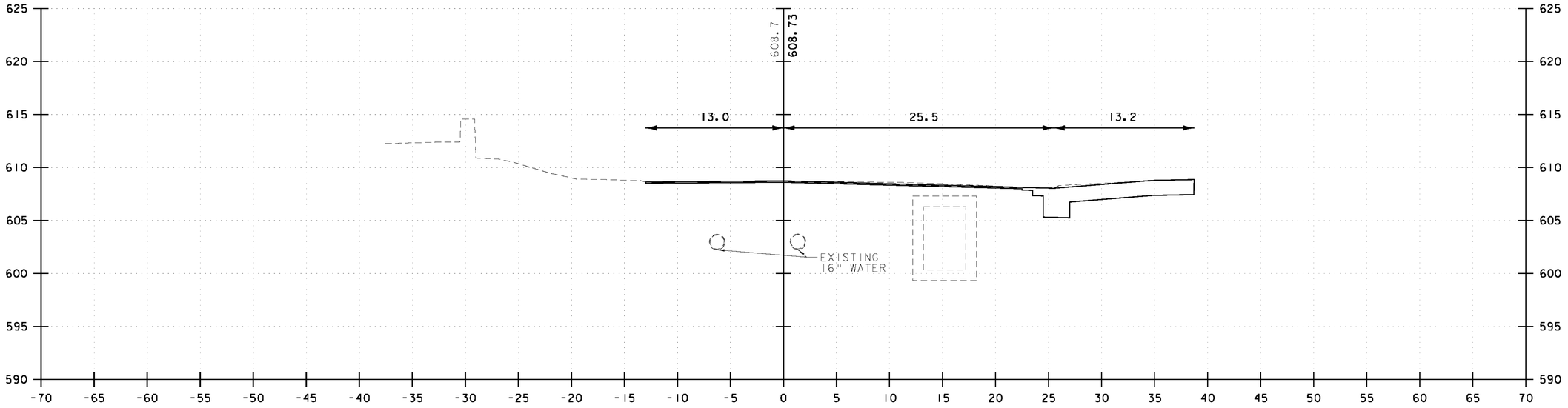
VHB Vanasse Hangen Brustlin, Inc.

NORTH MAIN STREET

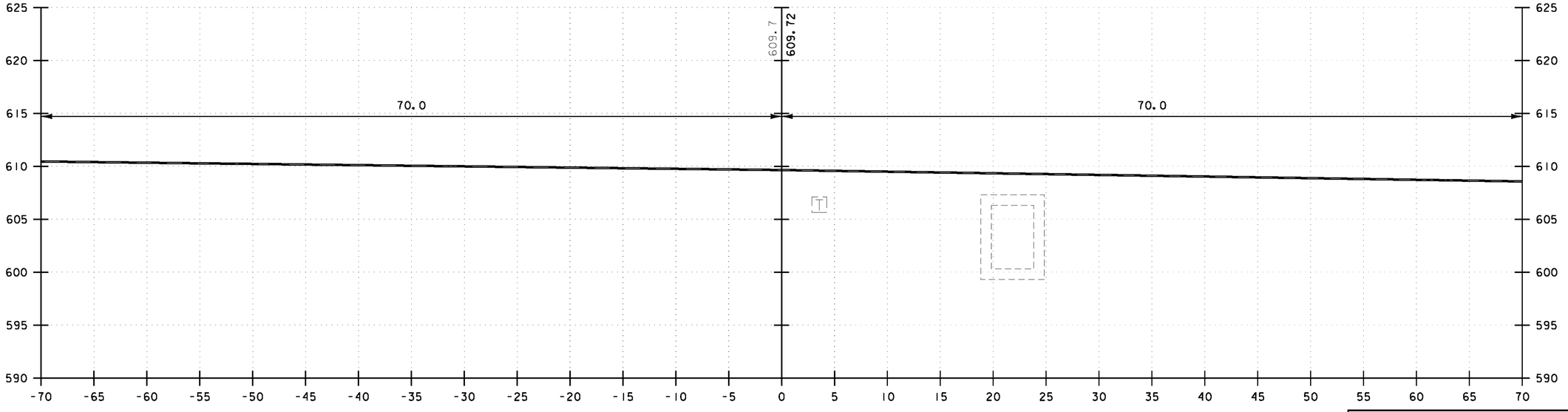
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_xs2_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 322 OF 339




500+50




500+00

5 0 5 10
FEET

VHB Vanasse Hangen Brustlin, Inc.

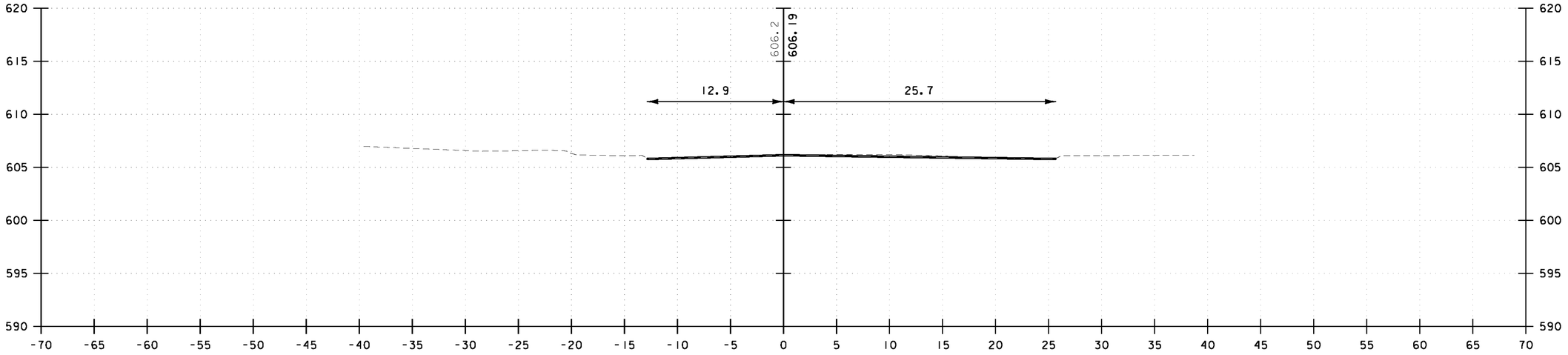
PROSPECT STREET

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

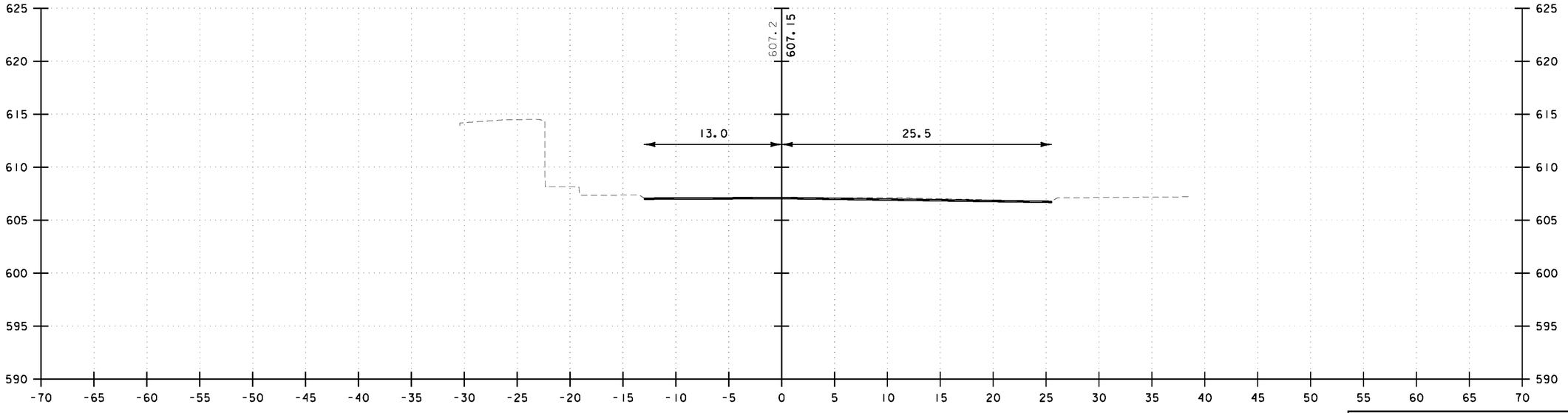
FILE NAME: 85b0110_xs2_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 323 OF 339

## END APPROACH STA. 501+60




501+42




501+00

5 0 5 10
FEET

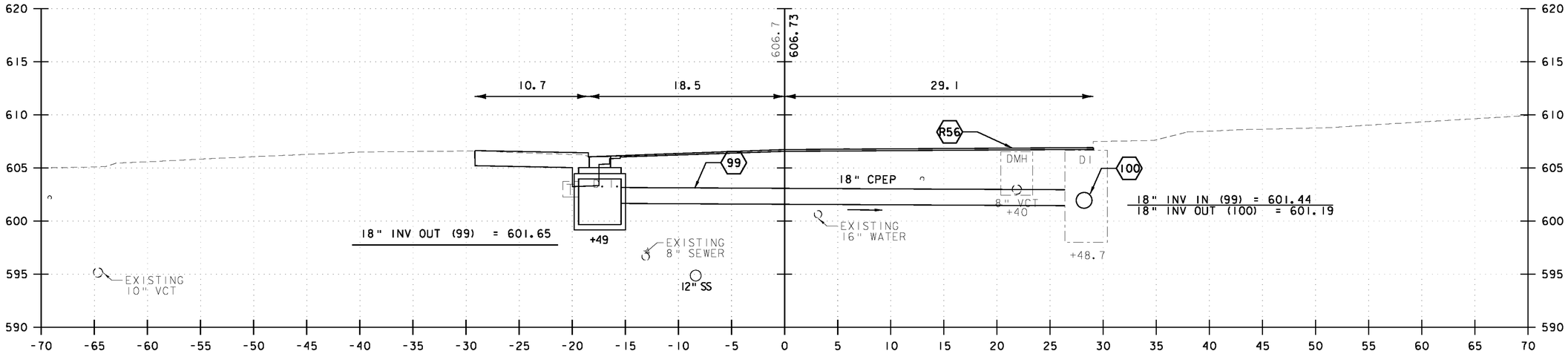
VHB Vanasse Hangen Brustlin, Inc.

PROSPECT STREET

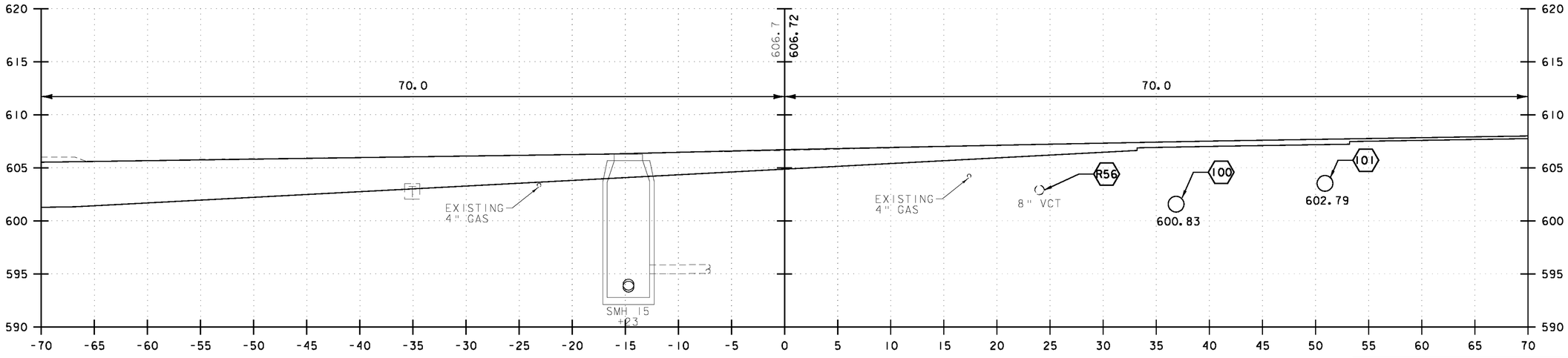
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b0110_xs2_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 324 OF 339




700+50




700+00

5 0 5 10
FEET

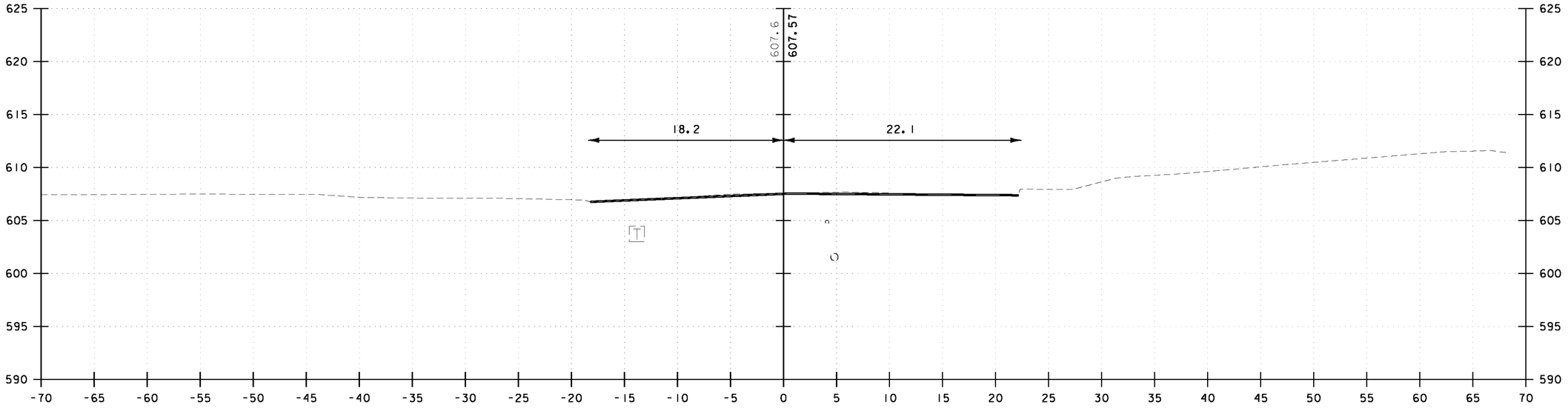
VHB Vanasse Hangen Brustlin, Inc.

ELM STREET

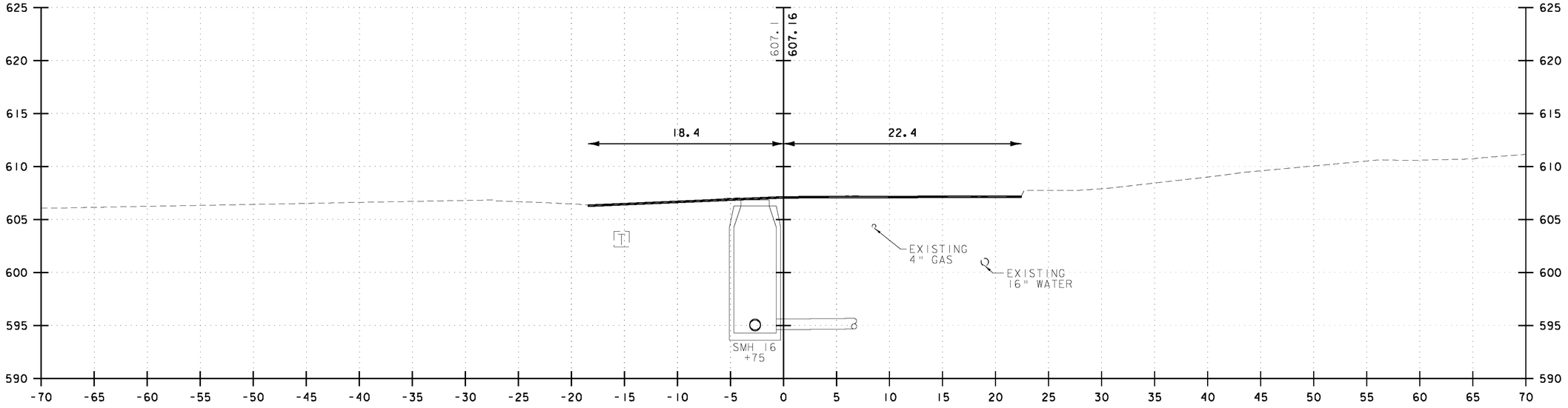
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_xs2_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 325 OF 339




701+50




701+00

5 0 5 10
FEET

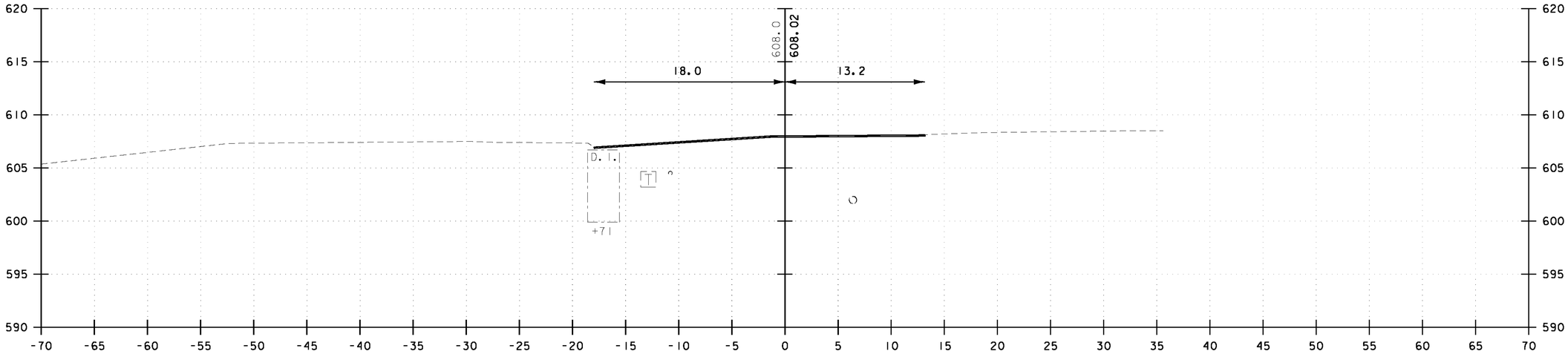
VHB Vanasse Hangen Brustlin, Inc.

ELM STREET

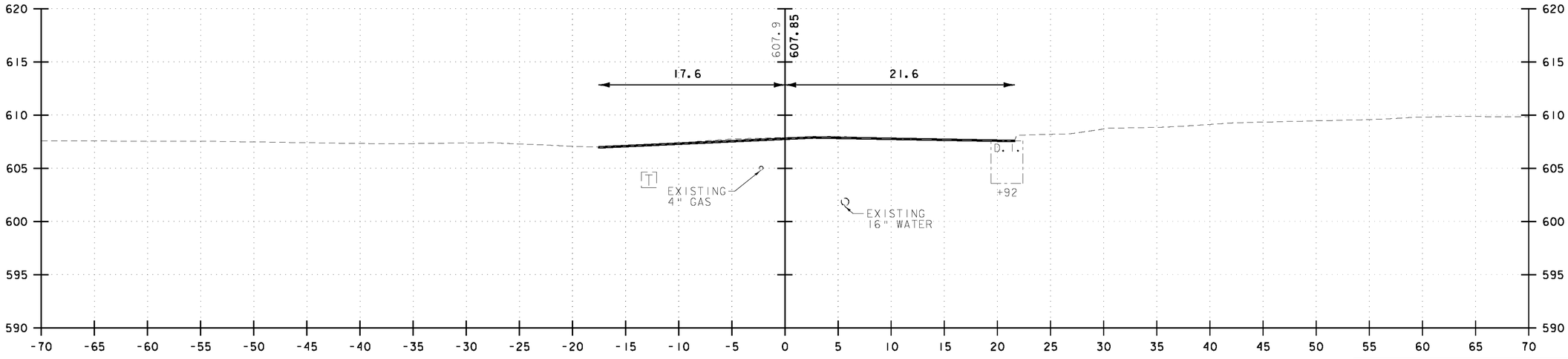
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b0110_xs2_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 326 OF 339




702+50




702+00

5 0 5 10
FEET

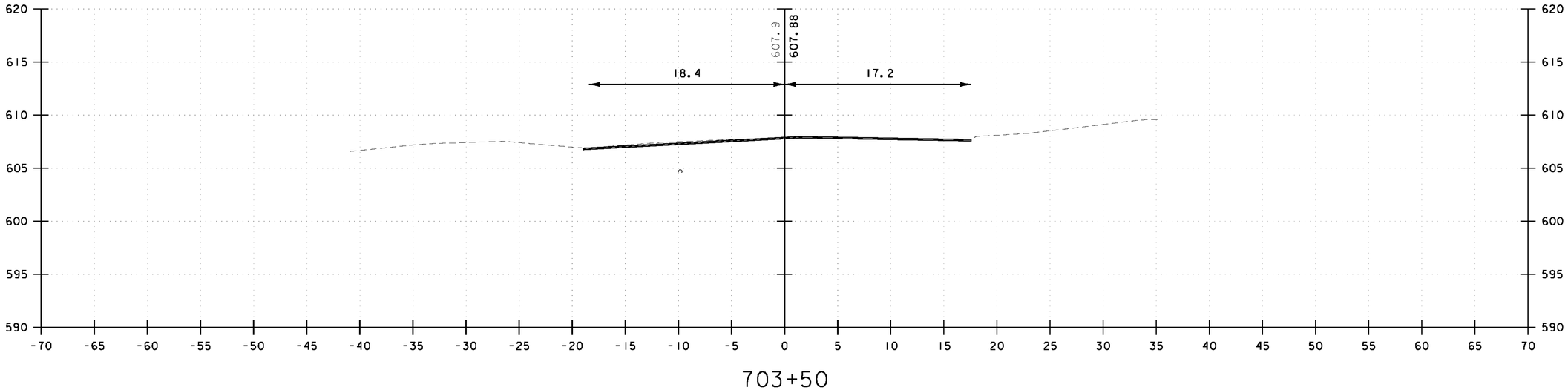
VHB Vanasse Hangen Brustlin, Inc.

ELM STREET

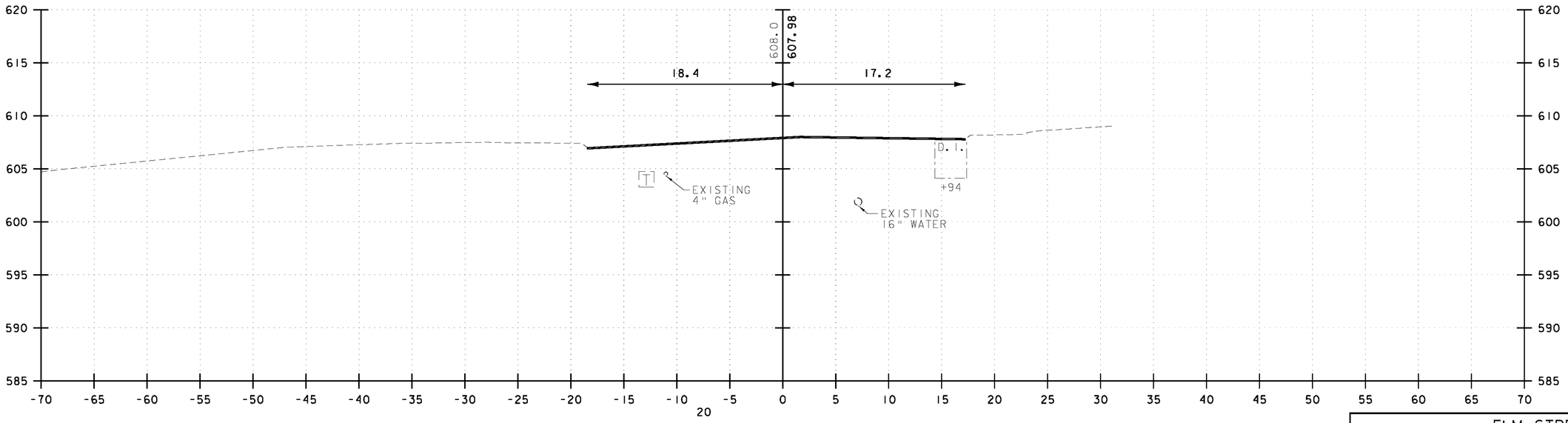
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_xs2_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 327 OF 339




703+50




703+00

5 0 5 10
FEET

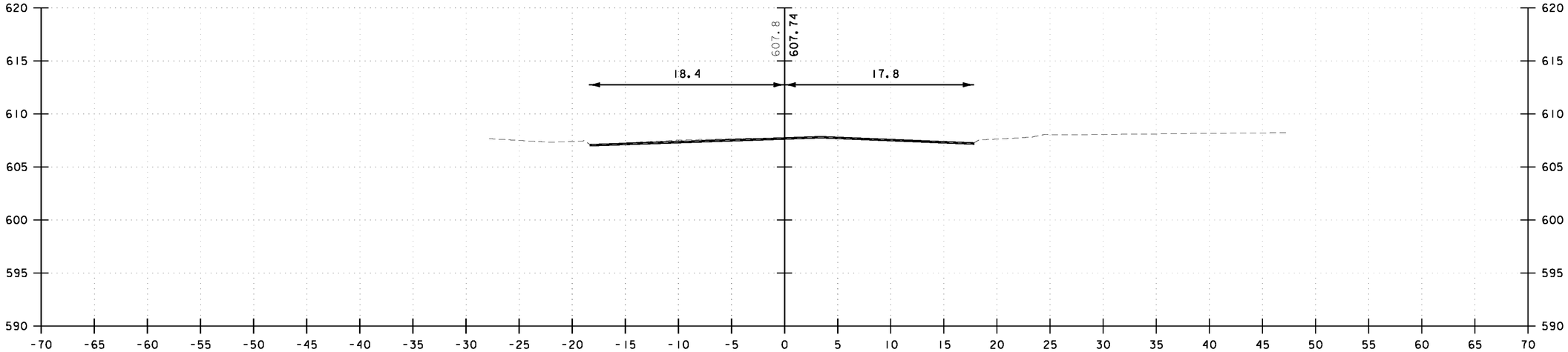
VHB Vanasse Hangen Brustlin, Inc.

ELM STREET

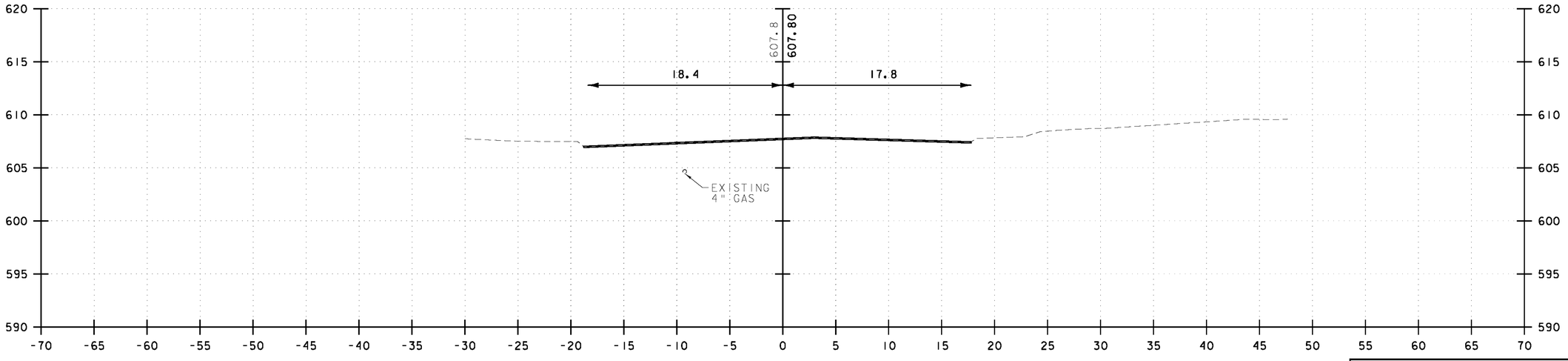
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b0110_xs2_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 328 OF 339




704+50




704+00

5 0 5 10
FEET

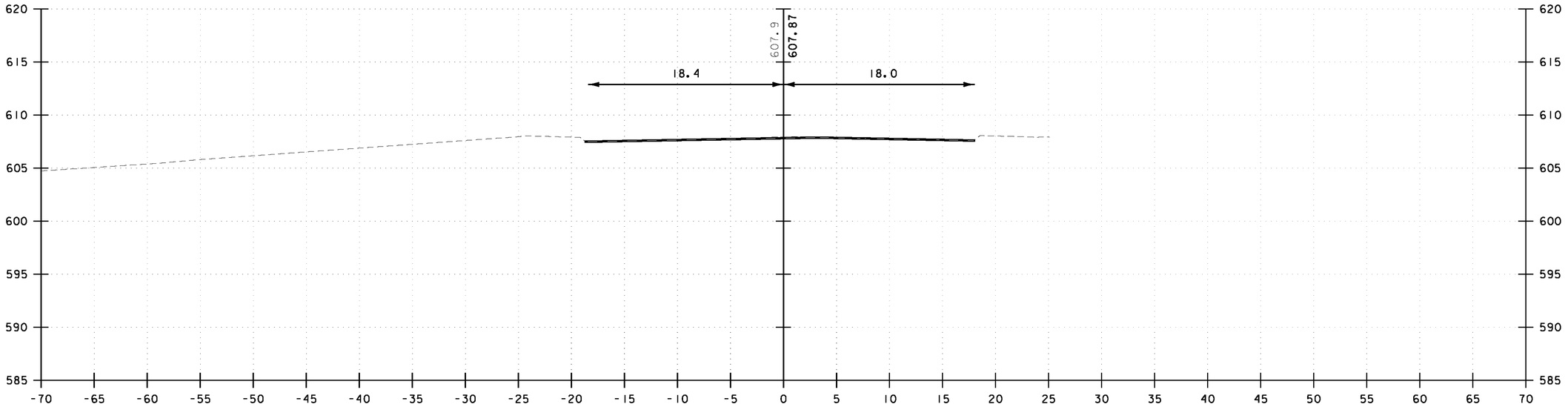
VHB Vanasse Hangen Brustlin, Inc.

ELM STREET

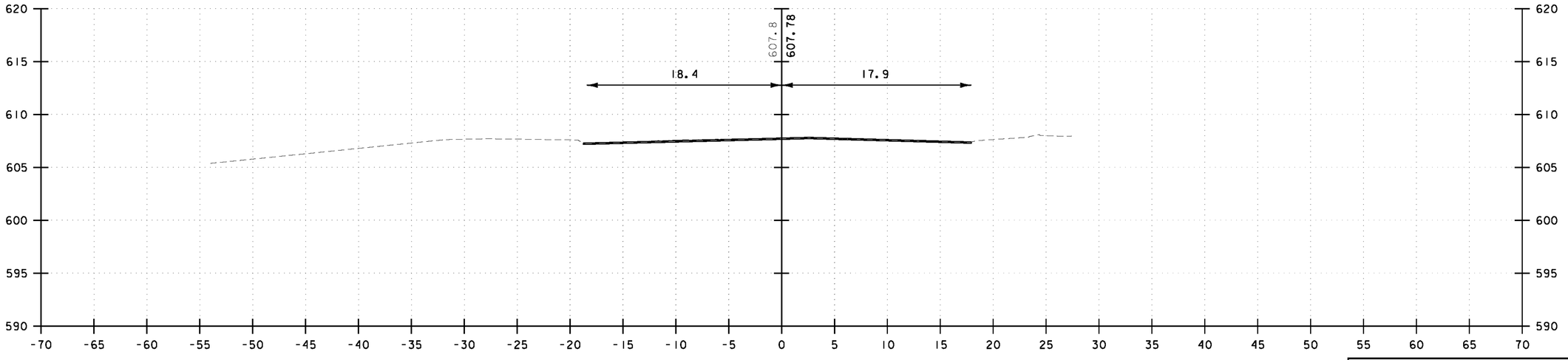
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_xs2_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 329 OF 339




705+50




705+00

5 0 5 10
FEET

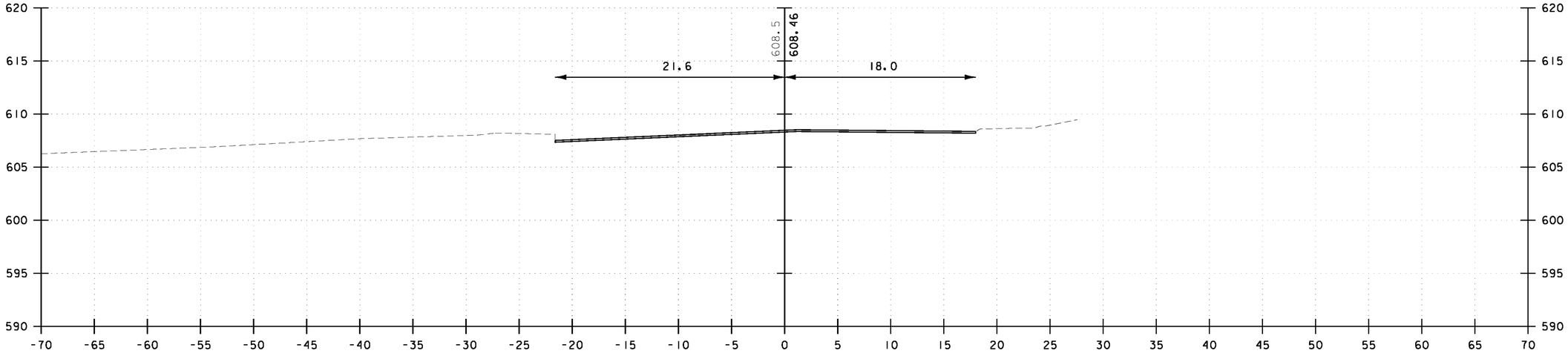
VHB Vanasse Hangen Brustlin, Inc.

ELM STREET

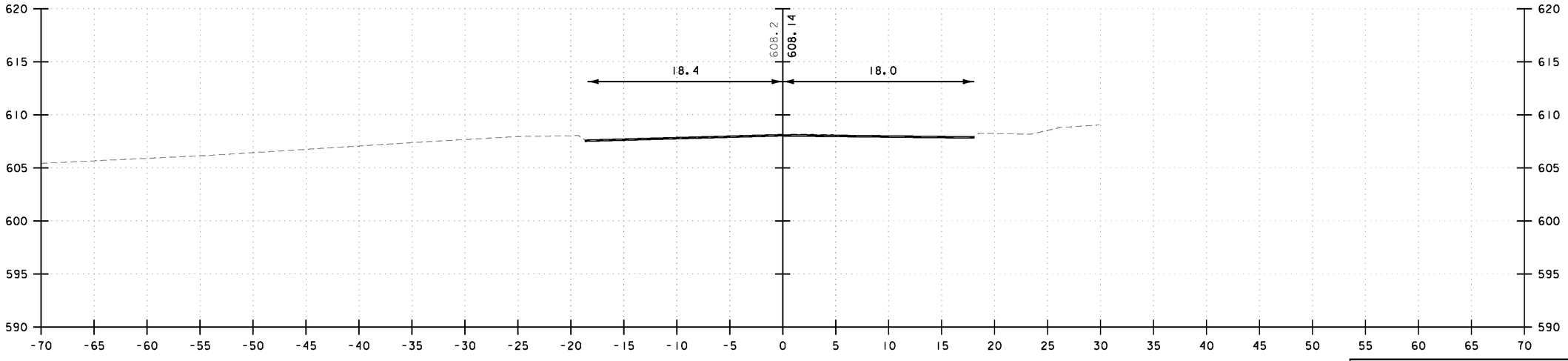
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_xs2_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 330 OF 339




706+50




706+00

5 0 5 10
FEET

VHB Vanasse Hangen Brustlin, Inc.

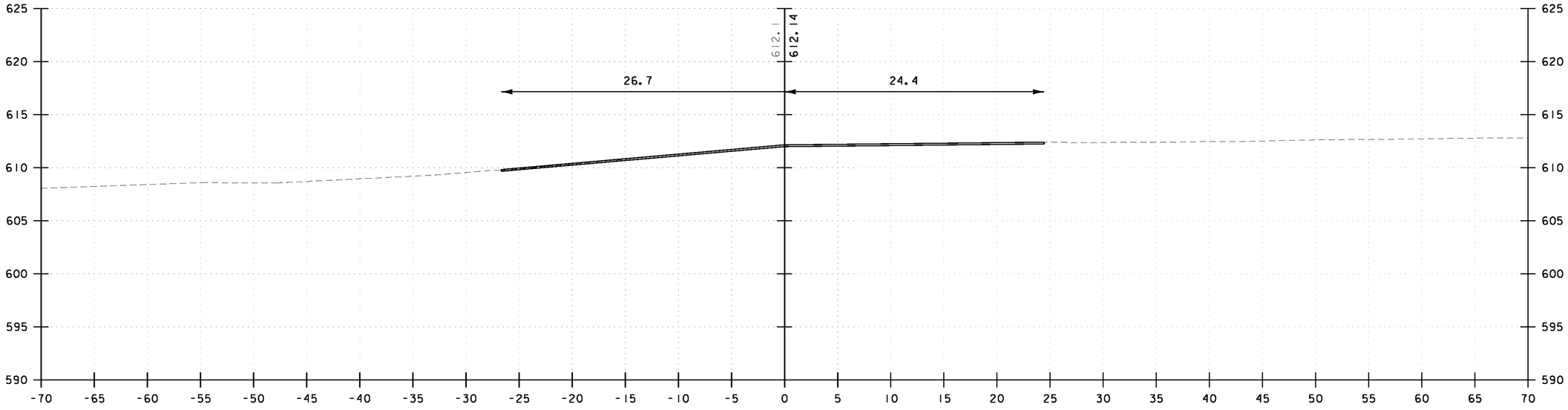
ELM STREET

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b0110_xs2_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 331 OF 339

## END APPROACH STA. 707+80

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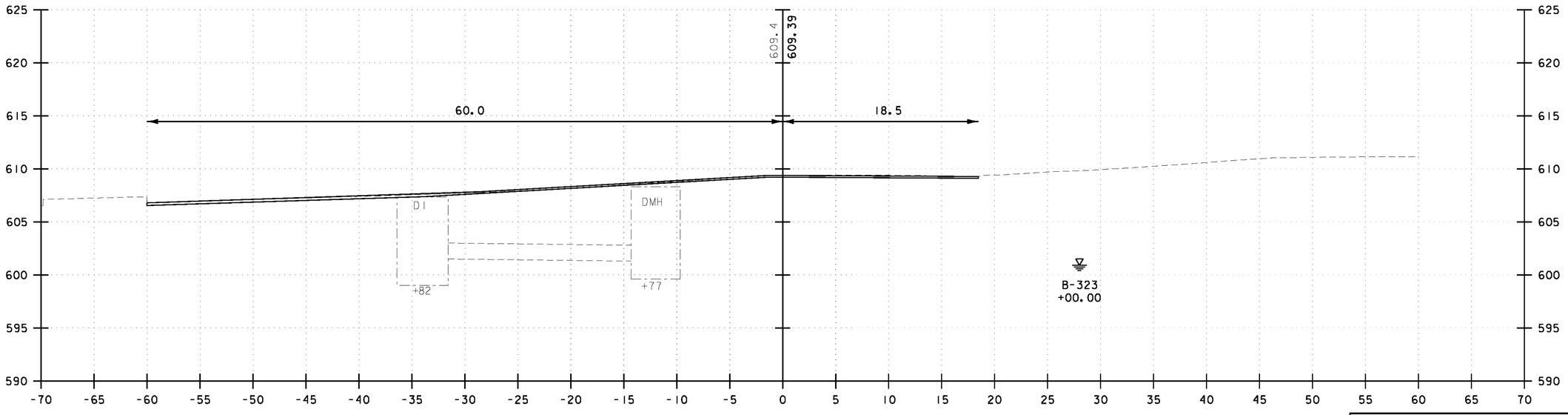



707+00

5 0 5 10
FEET

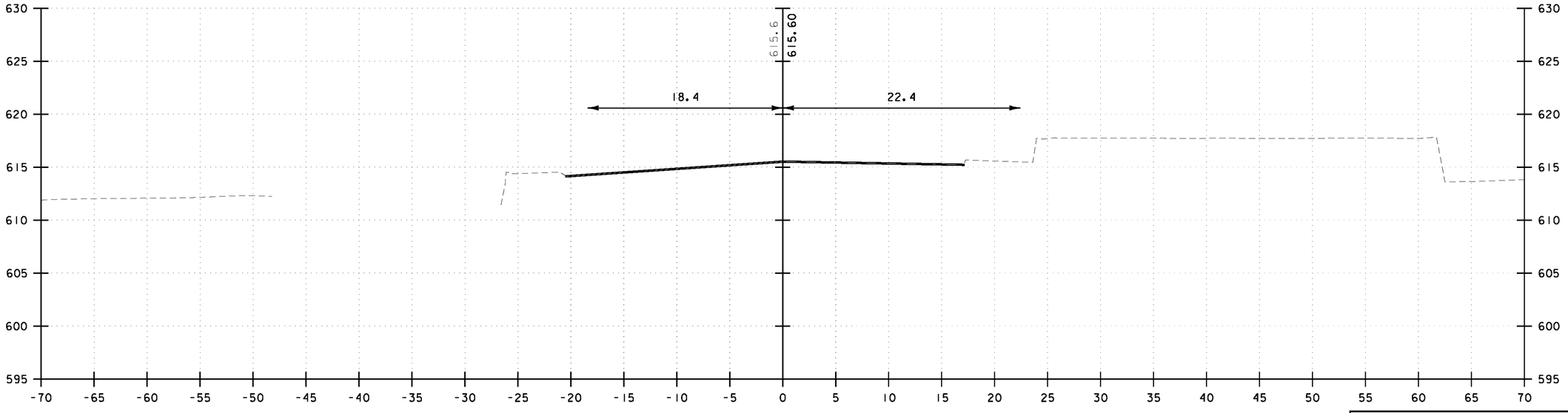
VHB Vanasse Hangen Brustlin, Inc.

ELM STREET

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-I(34) C/2

FILE NAME: 85b0110_xs2_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 332 OF 339




707+80

5 0 5 10
FEET

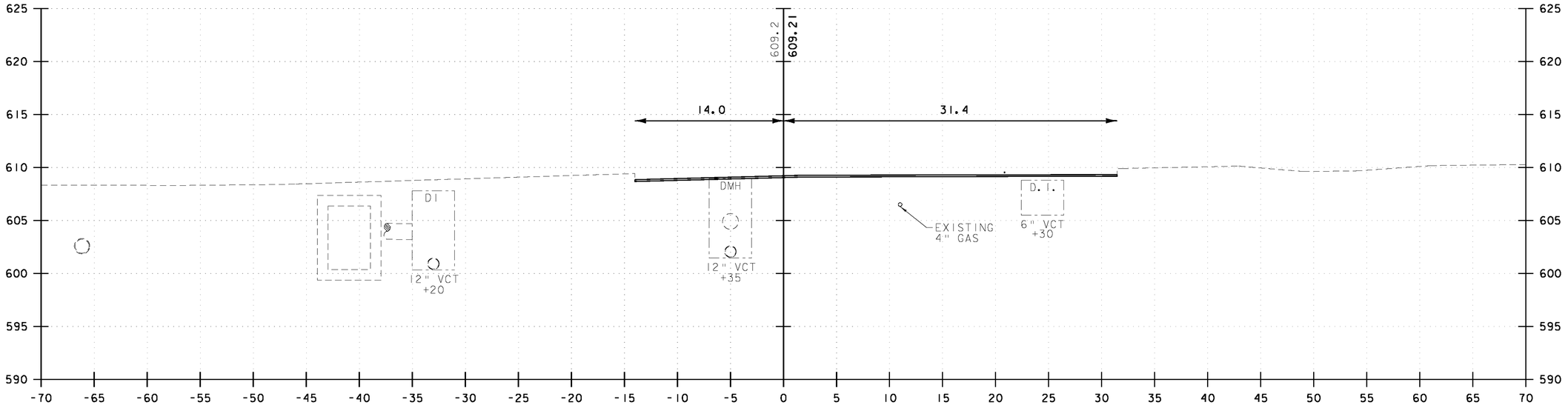
VHB Vanasse Hangen Brustlin, Inc.

ELM STREET

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010_xs2_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 333 OF 339

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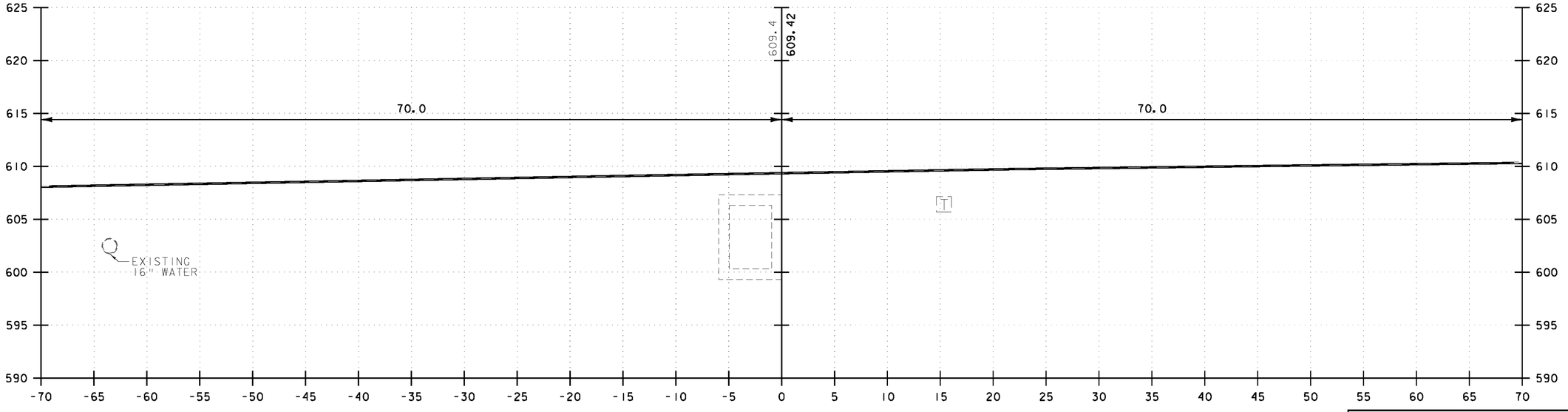



800+00

5 0 5 10
FEET

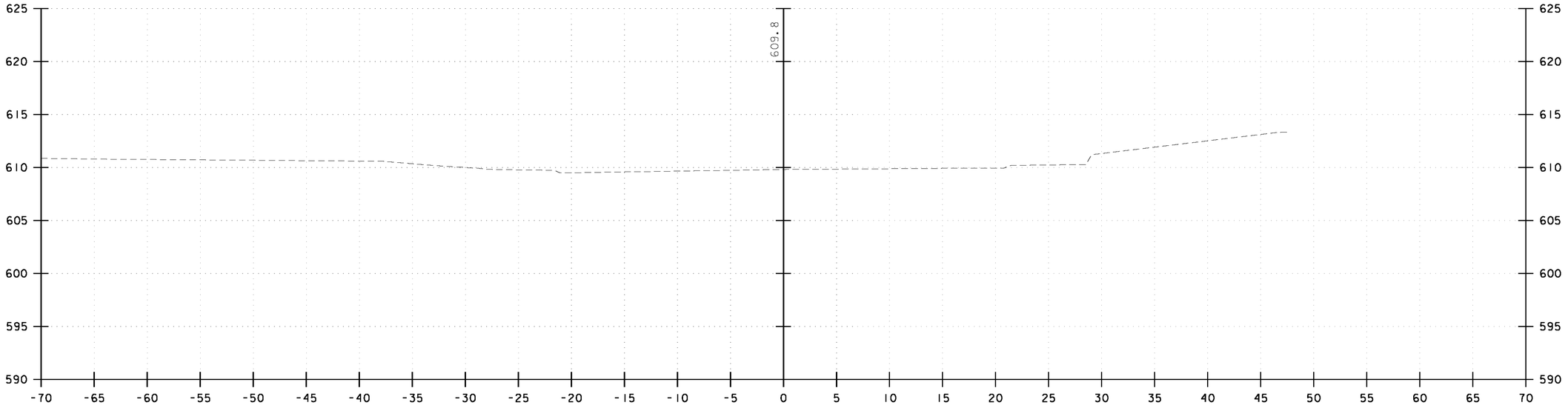
VHB Vanasse Hangen Brustlin, Inc.

CHURCH STREET

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

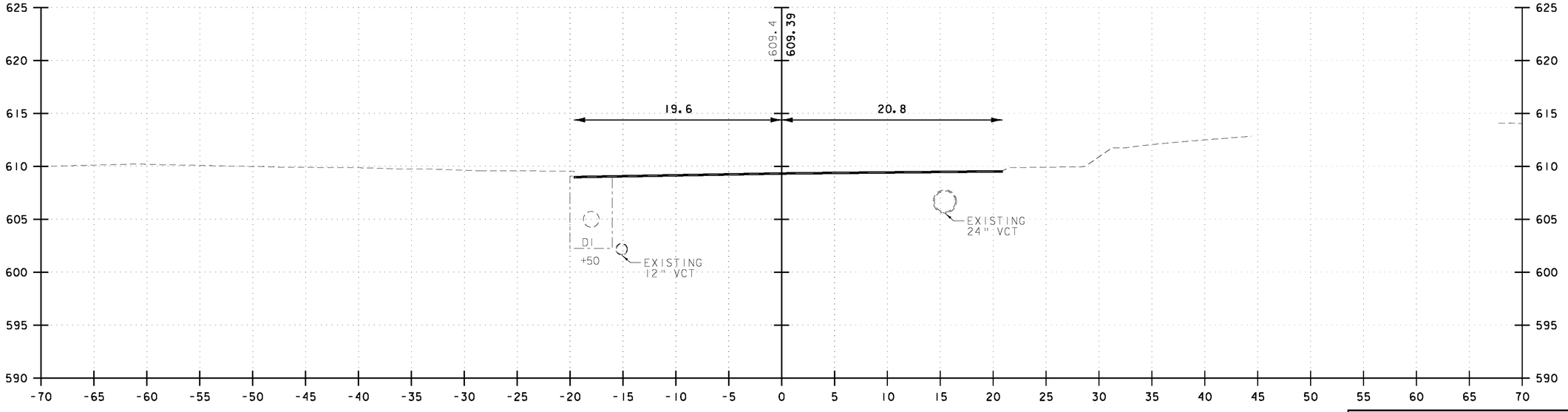
FILE NAME: 85b0110_xs2_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 334 OF 339




800+75

END APPROACH STA. 800+65




800+50

5 0 5 10
FEET

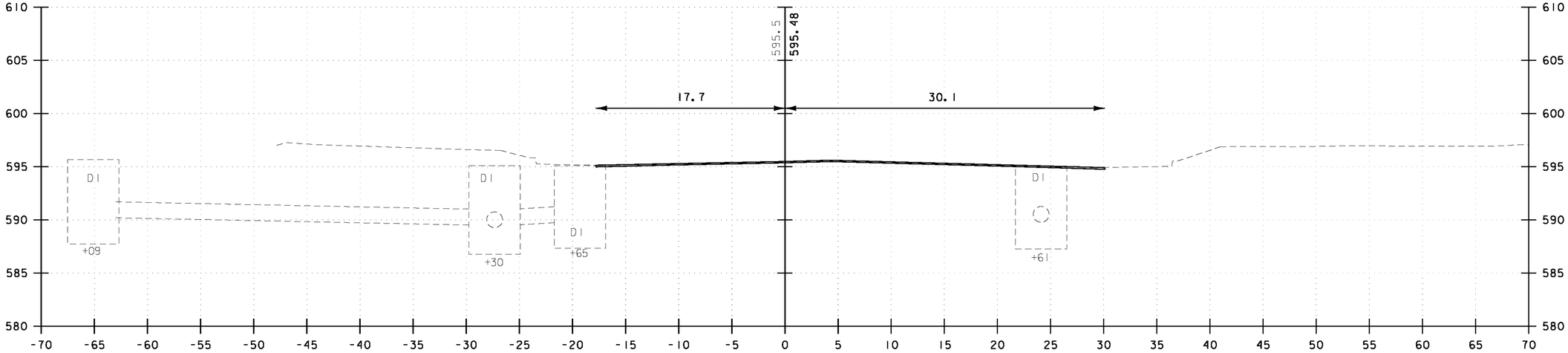
VHB Vanasse Hangen Brustlin, Inc.

CHURCH STREET

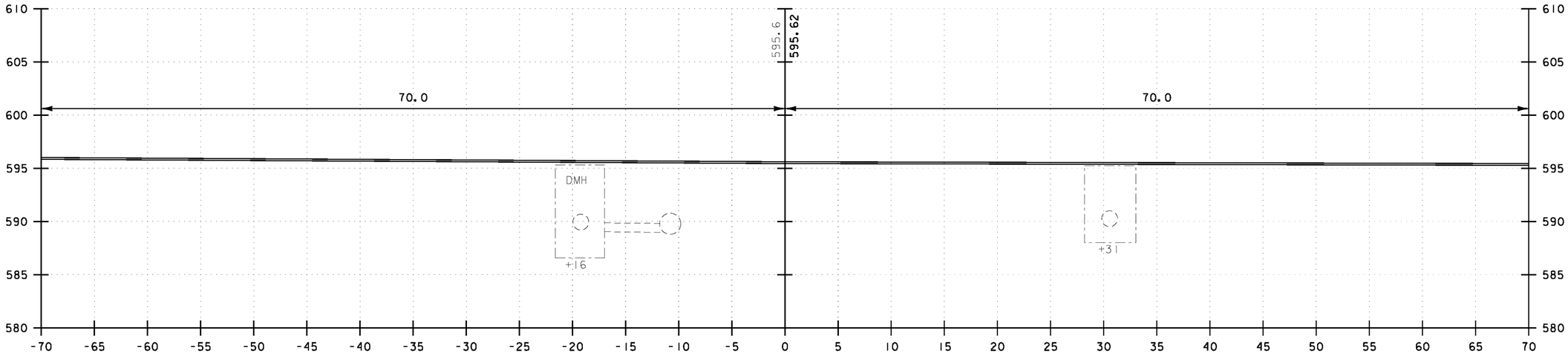
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b0110_xs2_Cut_C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 335 OF 339




400+50

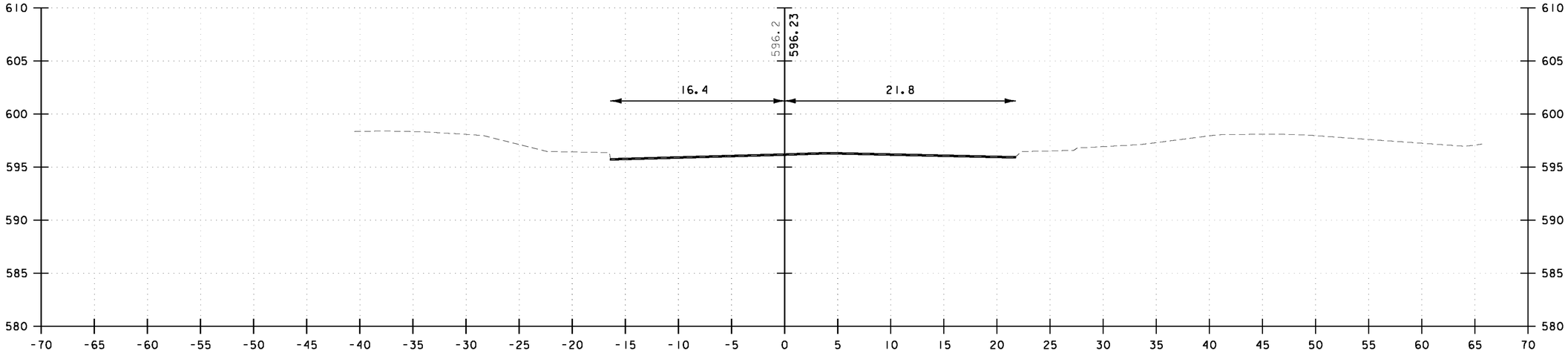



400+00

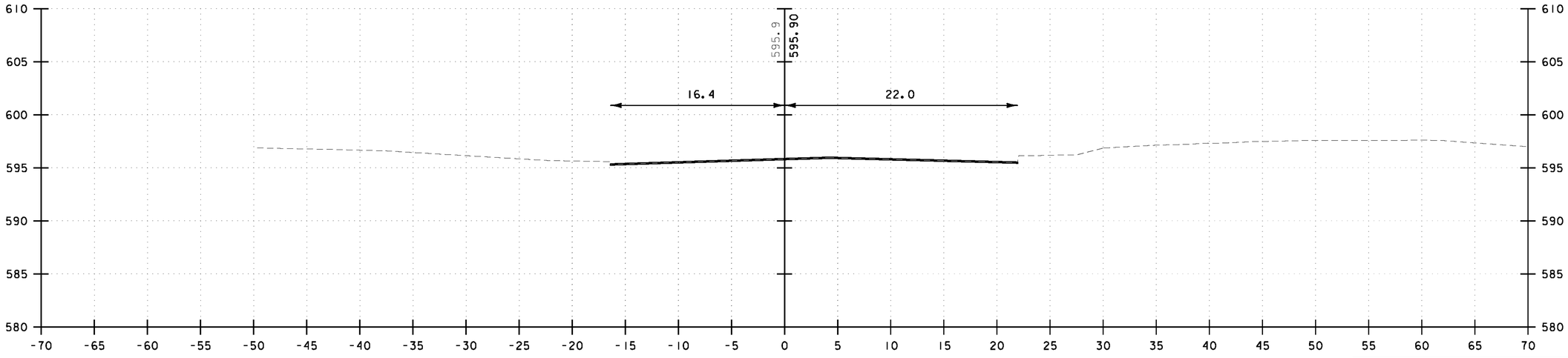
5 0 5 10
FEET

VHB Vanasse Hangen Brustlin, Inc.

| SUMMER STREET | |
|---|---|
| PROJECT NAME: BARRE CITY | |
| PROJECT NUMBER: FEGC F 026-1(34) C/2 | |
| FILE NAME: 85b010 xs2 Cut C2 | PLOT DATE: 3/9/2011 |
| PROJECT LEADER: G. BAKOS | DRAWN BY: DMP / JAR |
| DESIGNED BY: DMP / MDS | CHECKED BY: |
| CROSS SECTIONS | SHEET 336 OF 339 |




401+00




400+78

5 0 5 10
FEET

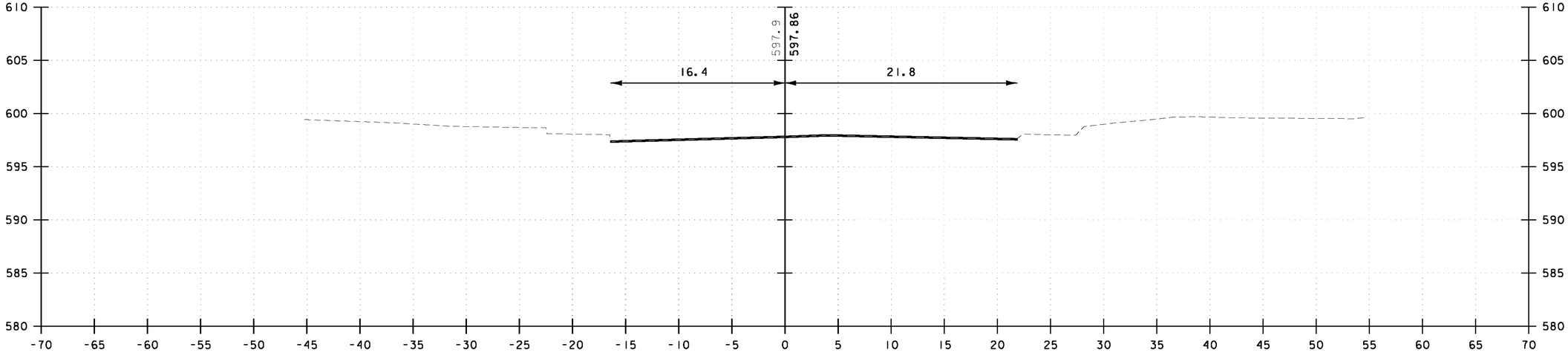
VHB Vanasse Hangen Brustlin, Inc.

SUMMER STREET

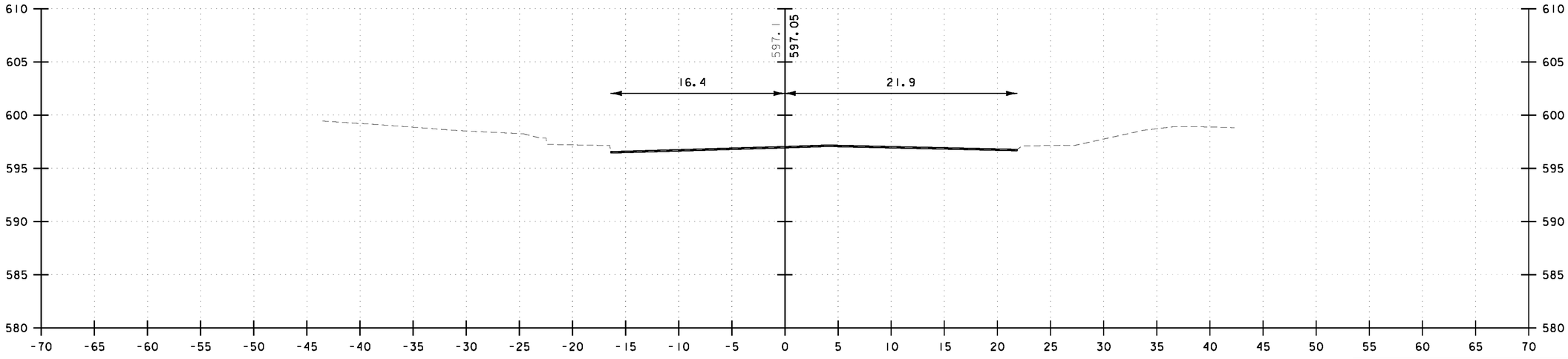
PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010 xs2 Cut C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 337 OF 339




402+00




401+50

5 0 5 10
FEET

VHB Vanasse Hangen Brustlin, Inc.

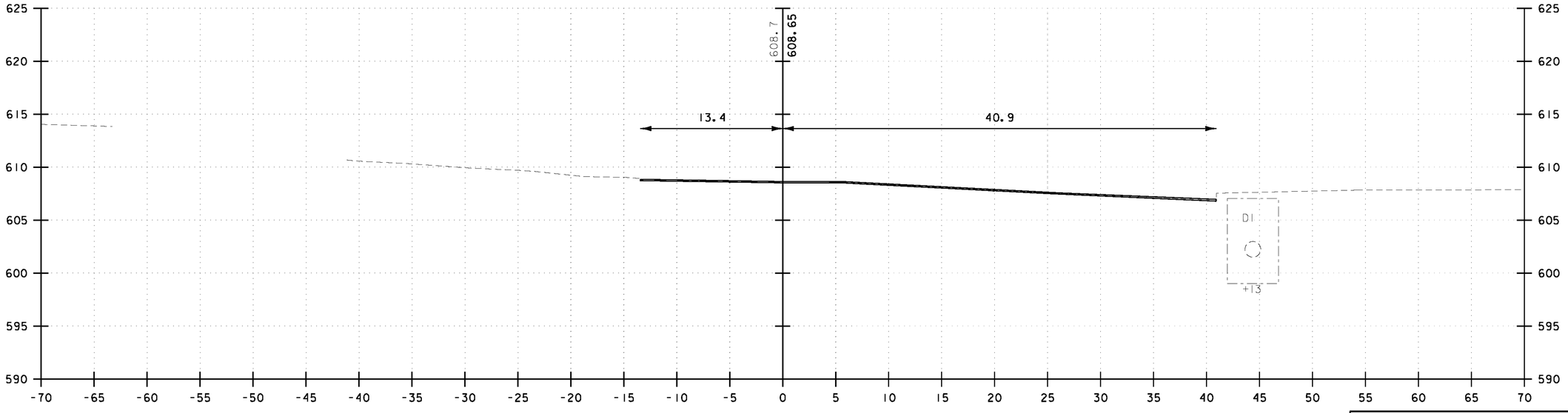
SUMMER STREET

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010 xs2 Cut C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 338 OF 339

END APPROACH STA. 423+90




422+11

5 0 5 10
FEET

VHB Vanasse Hangen Brustlin, Inc.

SUMMER STREET

PROJECT NAME: BARRE CITY
PROJECT NUMBER: FEGC F 026-1(34) C/2

FILE NAME: 85b010 xs2 Cut C2
PROJECT LEADER: G. BAKOS
DESIGNED BY: DMP / MDS
CROSS SECTIONS

PLOT DATE: 3/9/2011
DRAWN BY: DMP / JAR
CHECKED BY:
SHEET 339 OF 339

#100
Trench Earth
DI = 0, came out of existing
PIPE = 60'x4'x3.74'x1/27 = 33.28 CY

DI#100, RIM 607.64
INV OUT 602.69

DI# 101, RIM 607.64, INV. OUT 603.00

(23 LF)

DMH #102, RIM 607.57, INV IN 602.47
OUT 600.54

IN 601.60

(29 LF)

Connect Clay Pipe drain (M# 9/18-19/12

12" Pipe - 6 LF TE - 5x4x6/27 = 4.44 JGC 3-21-13

DI#68, RIM 607.57, INV IN 600.33
OUT 600.23

(25 LF)

DI#99, RIM 605.91, INV IN 600.05
OUT 600.01

DI#67, RIM 605.62
INV IN 597.10
OUT 597.00

(119 LF)

18"

#101
Trench Earth
DI = 48.20ft² x (8.38' - 1.75') + (48.20ft² x 1.63' x .5') x 1/27 = 13.79 CY
PIPE = 23' x 4.5' x 3.12' x 1/27 = 11.96 CY
Total = 25.25 CY
GBFS = 48.20ft² x 1' x 1/27 = 1.79 CY

#102
Trench Earth
DMH = 48.20ft² x (9.19' - 1.75') + (48.20ft² x 2.49' x .5)
x 1/27 = 15.46 CY
PIPE = 29' x 4.5' x 5.38' + 29' x 4.5' x .38' x .5 x 1/27
= 26.92 CY
Total = 42.38 CY
GBFS = 48.20ft² x 1' x 1/27 = 1.79 CY

#68
Trench Excavation
DI = 48.20ft² x (11.5' - 1.75') + (48.20ft² x 4.75' x .5')
x 1/27 = 21.64 CY
PIPE = 25' x 4.5' x 4.86' x 1/27 = 20.25 CY
Total = 41.89 CY
GBFS = 48.20ft² x 1' x 1/27 = 1.79 CY

#96
Trench Excavation
DI = 48.20ft² x (10.42' - 1.75') + (48.20ft² x 3.67' x .5) x 1/27 = 18.75 CY
PIPE = (119' x 4.5' x 5.41') 1/27 + (119' x 4.5' x .41' x .5) 1/27 = 111.36 CY
Total = 130.11 CY
GBFS = 48.20ft² x 1 x 1/27 = 1.79 CY

100+10
700+00
139+00
138+00
140+00

ORIGINAL SURVEY
NO _____ NOTE BOOK _____
AREAS CHECKED _____
TEMPLATE _____
PLOTTED _____
SURVEYED _____
BY
DATE

D = (Rim Elevation − Bottom of Exc. Elev.) − (9" Pavement + 2' Dense Graded (4.25' TYP) + 1.5' Sand Borrow)
A = Cross Sectional Area of 4'DI (48.20 SF) or 6'DB (81.17 SF) to excavation limits
L = Length of pipe trench Excavation = (sta. $DI_1$ − sta $DI_2$) − ($\frac{1}{2}$ Dia $DI_1$ Excavation + $\frac{1}{2}$ Dia $DI_2$ Excavation)
W = Dia. Pipe + 1.5' + 1.5'

DS#61R
STA 136+71 RT
INV. IN: 592.20
RIM 602.91

Trench Excavation
$V_{DI} = \frac{1}{27}((48.20ft^2 \times (11.69-4.25')) + (48.20ft^2 \times (11.69-4.25-5')\times 5') = 15.46$ CY
$V_{pipe} = \frac{1}{27}(\frac{(35.16' \times 4.5' \times \frac{6.24-5.24}{2} \times 5.24') + (35.16' \times 4.5' \times 6.24-5.24' \times 5')}{2}) = 35.94$ CY
Total = 51.40 CY ✓ JGC 9/7/12

Granular Backfill for Structures
$V = (48.20ft^2 \times 1') \times \frac{1}{27} = 1.79$ CY ✓ 9/7/12

18" (40 LF)

DS#62
136+71 LT
INV IN: 592.62 (Lowered 1' from design)
INV OUT: 592.28
RIM 602.20

Drainage Run #62
Trench Excavation
$V_{DI} = \frac{1}{27}(48.20ft^2 \times 6.83' \times \frac{4.25+2.82}{2}) = 13.34$ CY
$V_{pipe} = \frac{1}{27}(46.16' \times 4.5' \times \frac{4.25+2.82}{2}) = 19.81$ CY
Total = 33.15 CY ✓ 8/29/12

Trench Rock Excavation
$V = \frac{1}{27}(4' \times 4' \times 4') = 2.37$ CY @ 136+71 LT ✓ 8/29/12

Granular Backfill for Structures
$V = (48.20ft^2 \times 1') = 1.79$ CY ✓ 8/24/12

DS#64
137+61 LT
INV IN: 592.78
INV OUT: 592.68 (Raised 2" from design)
RIM 602.76

18" (40 LF)

Drainage Run #67
Trench Excavation
$V_{DI} = \frac{1}{27}((48.20ft^2 \times 8.12') + (48.20ft^2 \times (8.12'-5') \times 5') = 17.28$ CY
$V_{pipe} = \frac{1}{27}(126.16' \times 4.5' \times \frac{(6.98-4.25) + (8.58-4.25)}{2}) = 69.80$ CY
Total = 87.09 CY ✓ 8/30/12

Trench Excavation of Rock (½ places) see asterisks below
$*_1 = (5' \times 5' \times 5')/27 = 4.63$ CY ✓ 8/30/12
$*_2 = (5' \times 5' \times 7')/27 = 6.48$ CY ✓ 8/30/12

Granular Backfill for Structures
$V = \frac{1}{27}(48.2ft^2 \times 1') = 1.79$ CY ✓ 8/30/12 $*_1$

18" (127 LF)

Moved to 138+55 to miss fiber optic duct bank

DS#67
138+55 LT
INV OUT: 597.00
RIM 605.55

Drainage Run #94
Trench Exc.
$DI = \frac{1}{27}(48.20 \times 9.46') + (48.20ft^2 \times 4.46' \times 5')) = 20.32$ CY
$PIPE = \frac{1}{27}(\frac{(9' \times 4.5' \times \frac{5.04+5.84}{2}) + (9' \times 4.5' \times 5.84')}{2}) = 9.22$ CY ✓ 8/24/12
Total = 30.14 CY ✓ 8/24/12

Gran. Bkfl
$V = \frac{1}{27}(48.20ft^2 \times 1') = 1.79$ CY ✓ 8/24/12

DS#93
220+38 LT
INV. OUT: 595.40
INV. IN: 595.50
RIM 601.20

DS#94
220+38
INV. OUT: 595.50
RIM 601.37

Drainage Run #56
Trench Exc.
$DI = \frac{1}{27}(48.20 \times 6.24') + (48.20ft^2 \times 5') = 12.28$ CY
$Pipe = \frac{1}{27}(\frac{(60.16' \times 4.5' \times \frac{6.24-5.24}{2}) + (60.16' \times 4.5' \times 5.24')}{2}) = 26.35$ CY
Total = 38.61 CY ✓ 8/24/12

Gran Bkfl
$V = \frac{1}{27}(48.20ft^2 \times 1') = 1.79$ CY ✓ 8/24/12

Trench Exc. Rock Removal at Exist. Struct.
$V = \frac{1}{27}(4' \times 4' \times 4') = 2.37$ CY ✓ 8/24/12

DS#56
136+71 LT
INV IN (54): 594.70
INV IN (90): 594.70
RIM 601.13
INV OUT: 594.20

DS#57
135+54 LT
INV. IN (56): 598.90
INV. OUT (593.80)
RIM 600.56

DS#58
135+54 RT
INV. OUT (57): 593.40
RIM 600.56

Drainage Run #54
TRENCH EXC.
$DI = \frac{1}{27}(48.20ft^2 \times 9.17') = 16.17$ CY
$PIPE = \frac{1}{27}(\frac{(11.46' \times 4.5' \times \frac{6.51-4.98+6.42-4.26}{2}) + (11.46' \times 4.5' \times 4.26')}{2}) = 21.75$ CY
Total = 37.92 CY

GRAN. BKFL. FOR STRUCTURES
$V = \frac{1}{27}(48.20 \times 1') = 1.79$ CY ✓ 8/24/12

DS#54
134+00 LT
INV OUT: 595.20
RIM 601.91

Drainage Run #93
TRENCH EXC
$DI = \frac{1}{27}(48.20ft^2 \times 10.36') + (5 \times 48.20ft^2 \times 5.36ft) = 23.28$ CY
$PIPE = \frac{1}{27}(\frac{(11.4' \times 4.5' \times \frac{6.43+5.80}{2}) + (11.4' \times 4.5' \times 4.80' \times 5)}{2}) = 16.43$ CY
Total = 39.72 CY ✓ 8/24/12

Granular Backfill for Structures
$V = \frac{1}{27}(48.2ft^2 \times 1') = 1.79$ CY ✓ 8/24/12

18" (80 LF)

24" (70 LF)

40 LF 24"

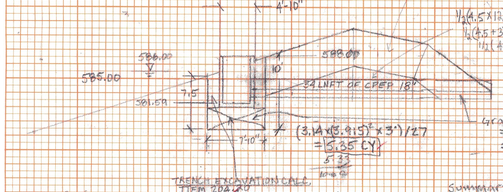
600.60

590.00

FINAL SURVEY — SURVEYED, PLOTTED, TEMPLATE, AREAS CHECKED, NOTE BOOK, NO., BY, DATE

ORIGINAL SURVEY — SURVEYED, PLOTTED, TEMPLATE, AREAS CHECKED, NOTE BOOK, NO., BY, DATE

DRAINAGE RUN #78




TRENCH EXCAVATION CALC.
ITEM 204.20
(3.14 X (5.915)² X 3') / 27 = 5.35 CY
5.33 10% @

TRENCH EXCAVATION CALC.
Volume for 1st 5' depth of structure = 3.14 X (3.915)² X 5' = 48.16 X 5.0' = 240.75 FT³

Volume for depth below 5' deep. = 3.14 X (2.915)² X (10+7.5)/2 = 5' = 48.16 X 3.75 = 180.60 FT³ = 180.56 X 150 %⁰ = 270.84

TOTAL = 240.75 FT³ + 270.84 = 511.59 FT³ = 511.59 FT³ / 27 FT³/CY = 18.95 CY

8/8/11 cwcy

TRENCH EXCAVATION CALC. FOR 18" PIPE
13' X 5' = 65 FT²
(10.5' + 8.5') / 2 X 5' = 47.5 (FT²) > First 5'
(13'+5') / 2 X 5' = 45 FT²
157.50 FT² X 4.5FT = 708.75 FT³ = 26.25 CY

1/2 (4.5 X 13) = 27 FT²
1/2 (3.5 + 3) X 9.5 = 31.9 FT²
1/2 (4' X 3') = 6 FT²
10.81 CY X 150 %⁰ = 16.22 CY — For 11% below 5'
Total = 26.25 CY + 16.22 CY = 42.47 CY

8/8/11 cwcy

Granular Backfill for structures - 204.30
= (34' - 2') X 4.5' X 1.0' = 144 FT³
= 144 FT³ / 27 FT³/CY = 5.33 CY

8/9/11 cwcy

Summary of Items

Item 204.20 - Trench Excavation of Earth
= 18.95 CY For Structure
+ 42.47 CY For Pipe
TOTAL = 61.42 CY

8/9/11 cwcy

Item 204.30 - Granular Backfill for Structures
5.33 CY For Pipe Bedding
+ 5.25 CY For Under OPS
TOTAL 10.58 CY

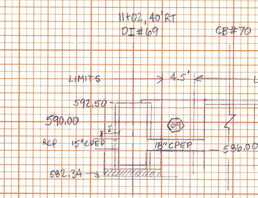
8/12/11 cwcy

Item 613.12 - STONE FILL, Type III
= 1 (CY) Used at outlet per plans.

Item 601.2615 - 18" CPEP(SL)
34 LF Field Measured

ITEM 900.670 EP (Curtain Wall Control Structure)
1 EACH

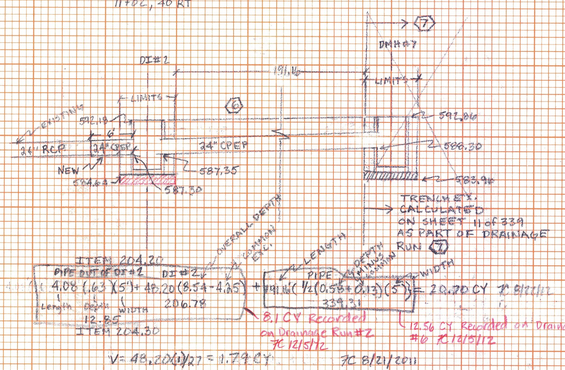
11+02, 40 RT
DI #69




ITEM 204.20 — STRUCTURE #69 — 5.44 — 4' PIPE RUN
V = 1/27 ( 48.20(5') + 1.5(49.16')(5.16') + 5'(4.5')(4.5') + 1.5(2')(4.5')(4.5') ) = 28.74 CY
241.0 + 379.07 + 101.25 + 60.75
8/2/11 JC

ITEM 204.30
DI #69 - V = 48.20(1') / 27 = 1.79 CY JC 8/2/11

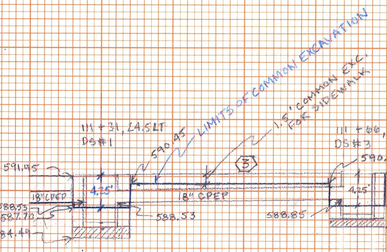
ITEM 204.21
(4'x6'x6') / 27 = 8 CY JC 8/2/11
11+02, 40 RT




ITEM 204.20
DI #2 — PIPE OUT OF DI #2
4.08 (1.63 X (5') + 48.20 (8.54 - 4.25') + 191.16 ( 1/2 (0.56 + 0.13) (5')) = 20.20 CY JC 8/22/11
Length 206.78 — Depth 12.85 — Width 339.31
8.1 CY Recorded on Drainage Run #2 JC 12/5/11
12.56 CY Recorded on Drainage Run #0 JC 12/5/11

ITEM 204.30
V = 48.20(1)/27 = 1.79 CY JC 8/21/2011

ITEM 204.21
(4' X 4' X 5') / 27 = 2.96 CY JC 8/21/2011



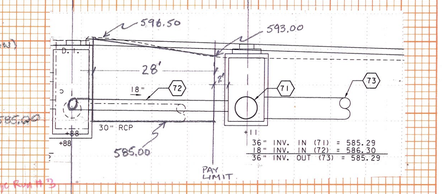

ITEM 204.20
V = 1/27 ( 48.20(3.21) + 1/2(1.42+1.95)(4.5')(28.16) + 48.20(3.11) ) = 20.36 CY JC 8/18/2011
154.72 — 245.20 — 149.90
(5.75 CY) JC 11/11/11 Subject to check 191 of 339
Note 6.13 CY used to DI #1 and 14.63 CY used to Drainage Run #3 JC 12/14/12

ITEM 204.30
DI #1 VOLUME = 48.20(1)/27 = 1.79 CY
DI #3 VOLUME = 48.20(1)/27 = 1.79 CY 8/18/2011 JC

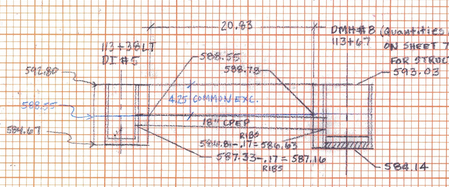
ITEM 204.21
EXISTING DI @ 111+31 = (4'x4'x4.5') / 27 = 2.67 CY 8/18/2011 JC

EXISTING DI #72 REHABED

DMH #73 CALCULATED ON SHEET 75 of 339




ITEM 204.20
PIPE RUN #72
V = 1/27 ( 5'(28)(4.5) + (6.5+3.0)/2 (28)(4.5)(1.5) ) = 36.58 CY
630 — 897.75



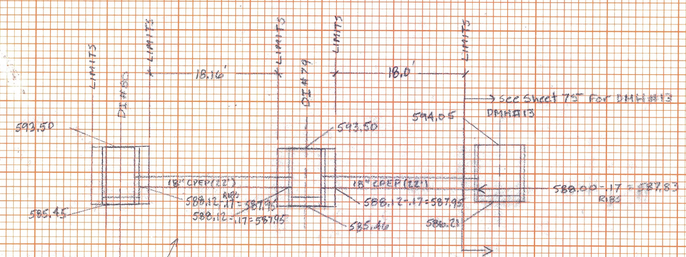

ITEM 204.20
DI #5
V = 1/27 ( 48.20(8.13 + 4.25) + 20.83 ( (1.39 + 2.15)/2 (4.5) ) = 13.1 CY
187.02 — 165.91
10/5/11 JC

ITEM 204.30
V = 1/27 (48.20(1)) = 1.79 CY
10/5/11 JC




ITEM 204.20
DI #4
V = 1/27 ( 48.20(8.27 - 4.25) + 19.16 ( 1/2 (1.41 + 2.41) (4.5) ) = 13.53 CY 8/23/11 JC
OVERALL DEPTH — COMMON EXC. — LENGTH — DEPTH MINUS COMMON — WIDTH
199.58 — 166.84

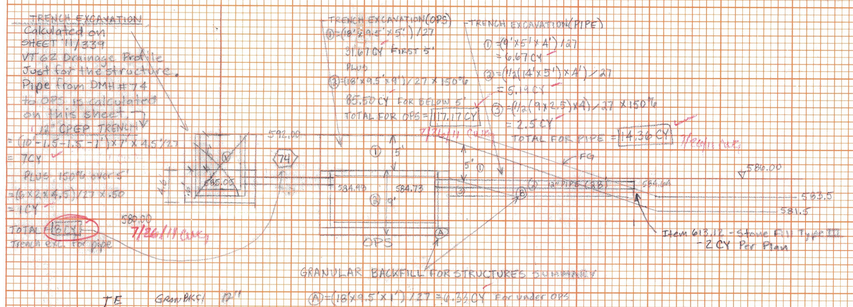
ITEM 204.30
V = 48.20(1)/27 = 1.79 CY 8/23/11 JC




ITEM 204.20
DI #80 — PIPE TO LIM. OF DI #79
V = 1/27 ( 48.20(8.05) + (18.16)(4.5)((5.55+5.56)/2) )
388.01 — 453.55
= 31.17 CY
31.7 CY * 48.20(1.5) + 18.16 X 4.5 X 1.5 / 27 = 35.4 CY
JC 11/15/11
ITEM 204.21
1/27 (4 x 4 x 4) = 2.4 CY

ITEM 204.20
V = 1/27 ( 48.20(8.04) + (18.00)(4.5)((5.55+6.22)/2) )
387.53 — 476.69
= 32.0 CY + 48.2 * 3.0 * 1/27 + 18' X 4.5' X 1.5' / 27 = 5.10 CY
2.7 CY
34.7 CY JC 11/15/11 ✓ JC 9/22/13

Trench Excavation Of Earth 204.20
Report failed 6" from DI #80 upstream
Measured in field
84' x 3.5' x 3.9' x 1/27 = 38.1 CY 5/1/12




TRENCH EXCAVATION (OPS)
(A) (18' X 2.5' X 5') / 27 = 83.3 CY FIRST 5'
PLUS
(B) (18' X 9.5' X 11') / 27 X 150 %⁰ = 85.50 CY FOR BELOW 5'
TOTAL FOR OPS = 117.17 CY
8/22/11 cwcy

TRENCH EXCAVATION (PIPE)
(1) (4' X 5' X 4') / 27 = 6.67 CY
(2) (1/2 (18' X 5') X 4') / 27 = 6.7 CY
(3) (1/2 (9' X 2.5') X 4') / 27 X 150 %⁰ = 2.5 CY
TOTAL FOR PIPE = 14.36 CY
8/22/11 cwcy

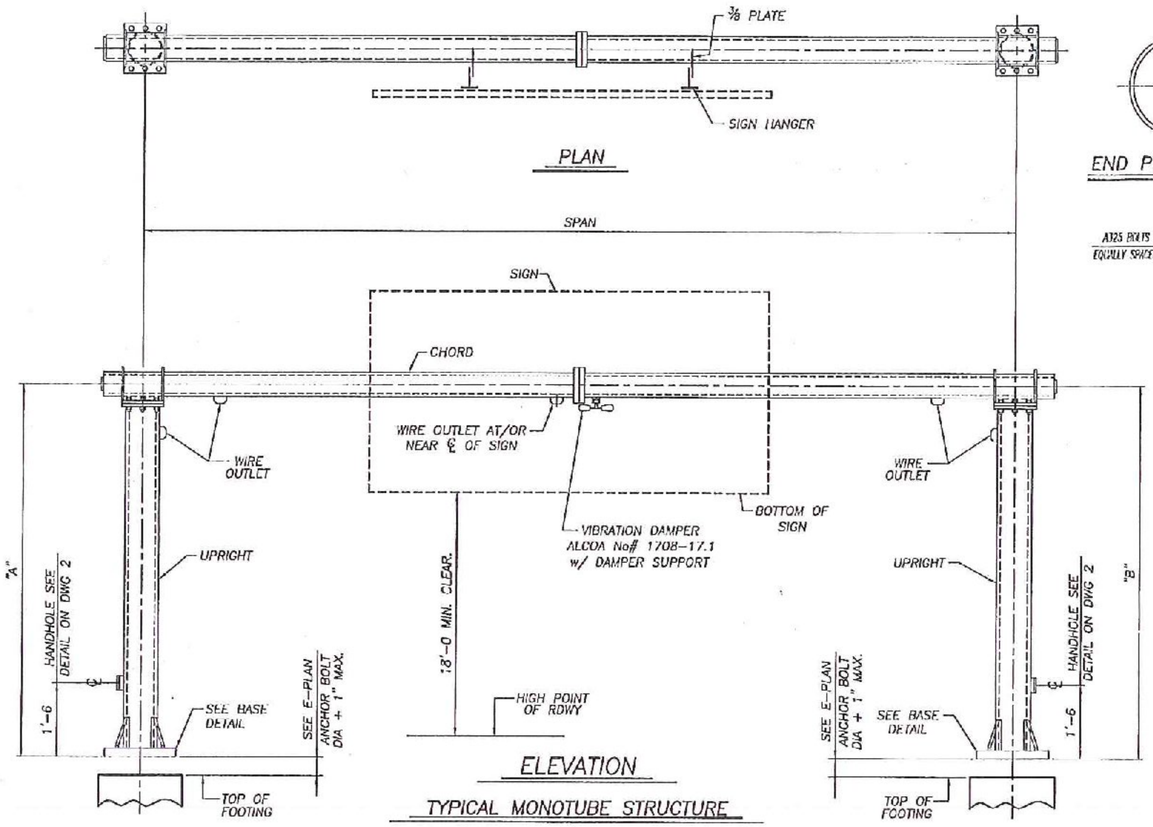
GRANULAR BACKFILL FOR STRUCTURES SUMMARY
(A) = (18' X 2.5' X 1') / 27 = 4.33 CY For under OPS
(B) = (2.5' X 2' X 1') / 27 = 4.15 CY For under OPS outlet pipe
TOTAL = 10.48 CY

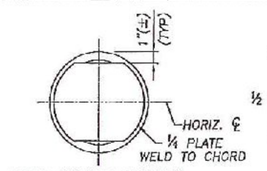
| | TE | Granular BKFL | 18" |
|---|---|---|---|
| M/H | 32.62 | 3.01 | |
| Conn Pipe | 8.0 | 0 | 10 |
| OPS | 113.17 | 6.33 | |
| O.S Flow Pipe | 14.36 | 4.15 | 28 2 CY |
| | 168.15 | 13.49 | 38 |

TRENCH EXCAVATION SUMMARY
FOR OPS 117.17 CY
FOR OPS PIPE 14.36 CY
FOR PIPE FROM WETA 0.96 CY
TOTAL 132.53 CY

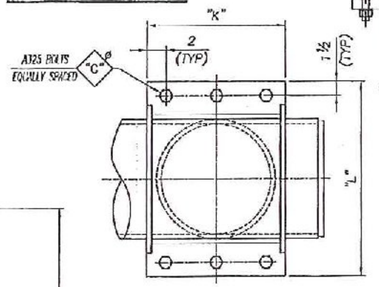
PLATE 3-FULL CROSS SECTION-FULL LINE
HIGHWAY FEDERAL AID SHEET
NATIONAL PRINTWORK
PRINTED IN U.S.A.

C1181–D1



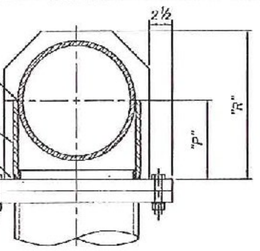




END PLATE DETAIL

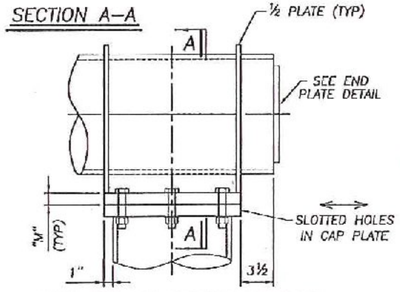



CAP PLATE DETAIL

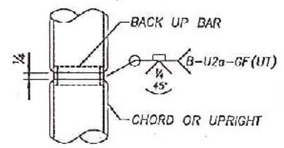
TOTAL NUMBER BOLTS IN CONNECTION ( "N" )




SECTION A–A

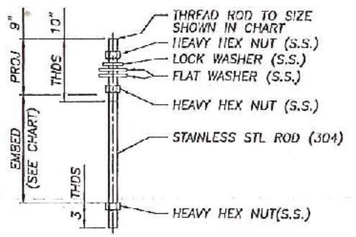



TYPICAL CHORD TO UPRIGHT CONNECTION

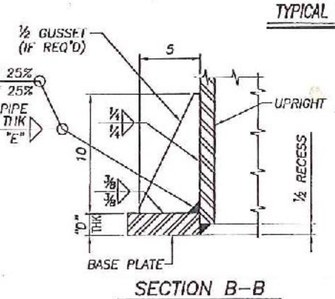



OPTIONAL SPLICE

(FOR WALL THK ⅜ OR GREATER ONLY)



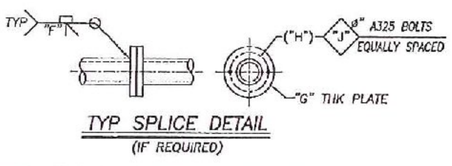

ANCHOR DETAIL




SECTION B–B

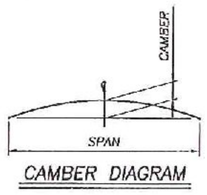
## MATERIAL SPECIFICATIONS

- PIPE – SHALL MEET THE FOLLOWING SPECIFICATIONS WITH THE PROPERTIES (52 KSI MIN. YIELD, 60 KSI MIN. ULTIMATE TENSILE AND MIN. ELONGATION EQUAL TO 20% IN 2 IN.). API–5L–X52, API–5L–X42, API–5L–X60, ASTM A252 GR. 3, ASTM A500 GR. B/C, OR ASTM A53 GR. B (YIELD STRENGTH SHALL NOT EXCEED 82 KSI).
- PLATES – ASTM A572, GR. 50
- ANGLES – STEEL ASTM A36
- HARDWARE – PRIMARY–ASTM A325
  – SECONDARY–ASTM A307
- GALVANIZING – STRUCTURAL–ASTM A123
  – HARDWARE–ASTM A153
- PAINTING – PER WALPAR COATING SYSTEM #3 – COLOR BLACK
- ANCHOR BOLTS – STAINLESS STEEL, ASTM A276 TYPE 304 (55 KSI YIELD)
  – S.S. FLAT AND LOCK WASHERS
  – S.S. NUTS – AASHTO M 292/M 292 GR. 8 & ANSI B18.2.4.6M
- WELDING – AWS SPEC. D1.1 – LATEST REV.

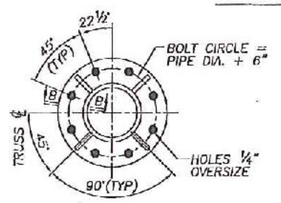



TYP SPLICE DETAIL

(IF REQUIRED)




CAMBER DIAGRAM




TYP BASE DETAIL

(FOR 8 ANCHOR BOLTS)

NOTE: ALL PIPE SIZES SHOWN ARE OUTSIDE DIAMETER

| STRUCTURE | STATION | SPAN | CHORD | LEFT UPRIGHT | RIGHT UPRIGHT | "A" | "B" | "C" | "D" LEFT | "D" RIGHT | "E" | "F" | "G" | "H" | "J" | CAMBER | ANCHOR BOLTS QTY | ANCHOR BOLTS LT. SIZE | ANCHOR BOLTS EMBED | DESIGN SIGN AREA (SQ FT) | GUSSETS REQ'D | "K" | "L" | "M" | "N" | "P" | "R" |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 137+71.4 | 60'–0 | 12.750 x .250 | 12.750 x .250 | 12.750 x .250 | 21'–0¾ | 21'–0¾ | ¾ | 1¼ | 1¼ | 5⁄16 | CP | ¾ | 12 | ⅞ | 3 15⁄16 | 8 | 1 | 3'–6 | 99.6 | 4 | 1'–2¾ | 1'–8¾ | 1¼ | 6 | 8⅜ | 1'–3¾ |

MSHTO 5th Edition Spec's

VHB

VTrans Received

CK'D WP CA OK'd BY KCU

MAY 0 2 2012

STATE OF VERMONT
BARBARA B. CLEMENTS
8/22/11
NO. 64492
STRUCTURAL
LICENSED PROFESSIONAL ENGINEER

Resubmit APPROVED

BY DATE 5/2/12

| NO: | REVISIONS | DATE | MADE | CHECKED |
|---|---|---|---|---|
| A | FOR APPROVAL | 8/16/11 | JEFF | RRW |

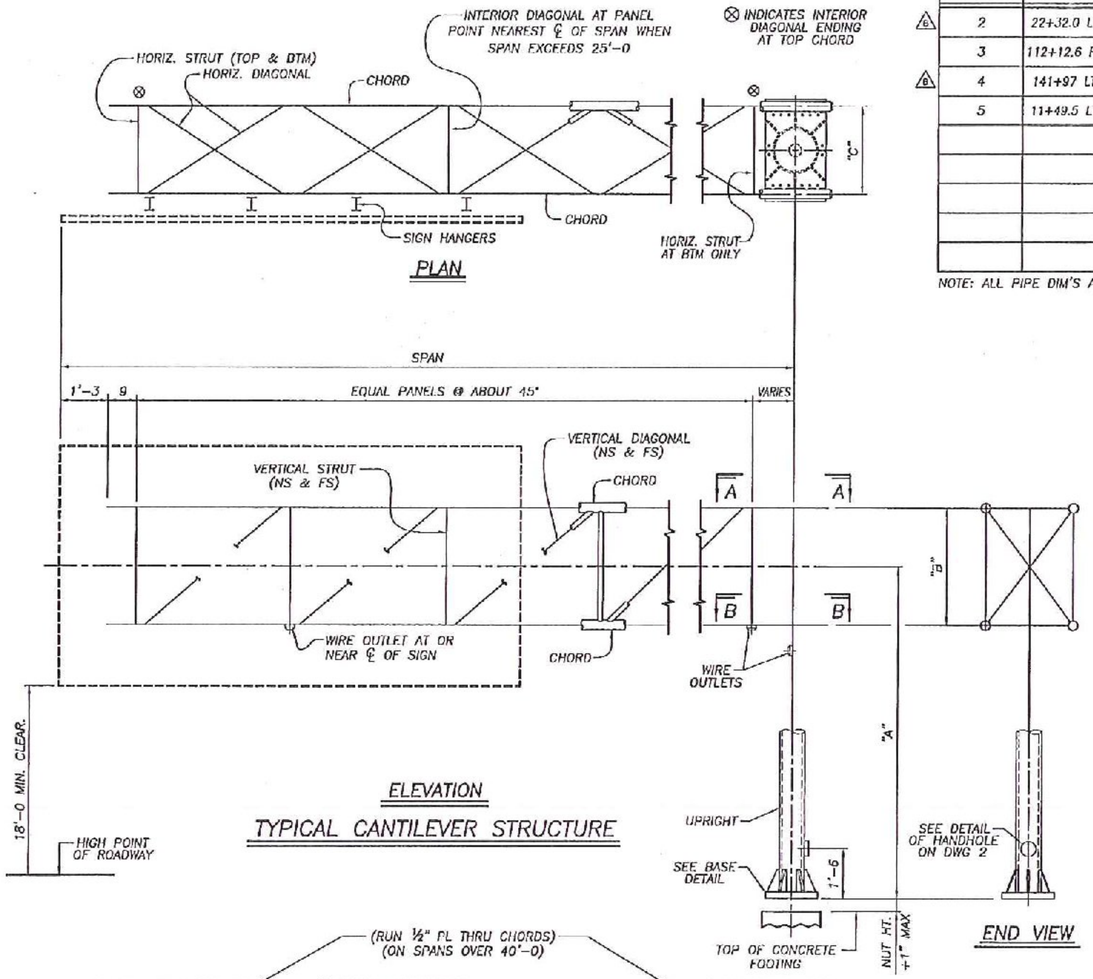
MT–DH–D

Walpar, LLC

POST OFFICE BOX 28650
BIRMINGHAM ALABAMA 35228
4200 JEFFERSON AVENUE
BIRMINGHAM ALABAMA 35221
PHONE (205) 925–4990
FAX (205) 925–7273

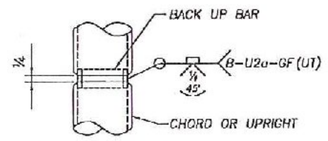
| | |
|---|---|
| STATE: | Vermont |
| PROJECT: | Barre City |
| PROJ No: | FEGC F 026–1(34) C/2 |
| COUNTY: | Washington |
| ROUTE: | US–302 |
| SUBJECT: | OVERHEAD SIGN SUPPORT (MONOTUBE) |
| | WALPAR STD DESIGN |
| FOR: | F.R. Lafayette , Inc. |
| DRAWN BY: | JEFF DATE: 7/27/11 |
| CHECKED BY: | RRW DATE: 8/16/11 |
| RELEASE FOR CONSTRUCTION: ☐ | DWG NO: C1181–D1 |

0

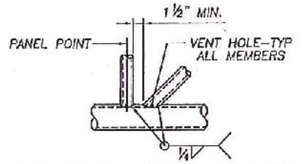



| | STRUCTURE | STATION | SPAN | UPRIGHT | CHORD | STRUT | VERTICAL DIAGONAL | HORIZ. DIAGONAL | CAMBER | POST TILT | BOLTS @ CHORD | ANCHOR BOLTS QTY | ANCHOR BOLTS SIZE | ANCHOR BOLTS EMBED | GUSSET REQ'D | "A" | "B" | "C" | "D" | "F" | | | | "L" | DESIGN SIGN AREA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B | 2 | 22+32.0 LT | 42'-0 | 20.000 x .250 | 2.875 x .203 | 1.315 x .133 | 1.315 x .133 | 1.315 x .133 | 5¼ | 1 3/16 | 6 | 8 | 1½ | 3'-6 | 4 | 20'-7 | 3'-6 | 3'-3 | 1½ | 5/16 | | | | ¼ | 163.9 |
| | 3 | 112+12.6 RT | 39'-3 | 20.000 x .250 | 2.875 x .203 | 1.315 x .133 | 1.315 x .133 | 1.315 x .133 | 4 15/16 | 1 1/16 | 6 | 6 | 1½ | 3'-6 | 6 | 20'-6¾ | 3'-6 | 3'-3 | 1½ | 5/16 | | | | ¼ | 163.9 |
| B | 4 | 141+97 LT | 50'-0 | 20.000 x .250 | 2.875 x .203 | 1.315 x .133 | 1.315 x .133 | 1.315 x .133 | 6¼ | 1⅝ | 6 | 8 | 1½ | 3'-6 | 4 | 20'-6½ | 3'-6 | 3'-3 | 1½ | 5/16 | | | | ¼ | 128.7 |
| | 5 | 11+49.5 LT | 40'-0 | 20.000 x .250 | 2.875 x .203 | 1.315 x .133 | 1.315 x .133 | 1.315 x .133 | 5 | 1 | 6 | 6 | 1½ | 3'-6 | 6 | 20'-5½ | 3'-6 | 3'-3 | 1½ | 5/16 | | | | ¼ | 134.8 |

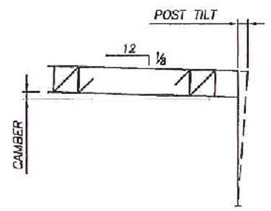
NOTE: ALL PIPE DIM'S ARE OUTSIDE DIAMETERS



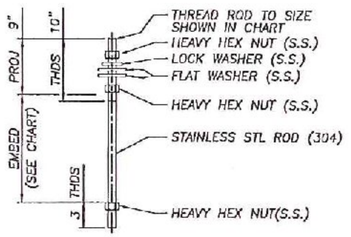

OPTIONAL PIPE SPLICES
(FOR WALL THK 5/16 OR GREATER ONLY)



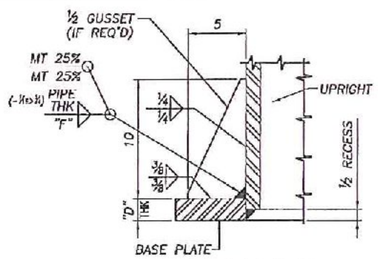

TYP DETAIL AT PANEL POINT




CAMBER DIAGRAM




ANCHOR DETAIL



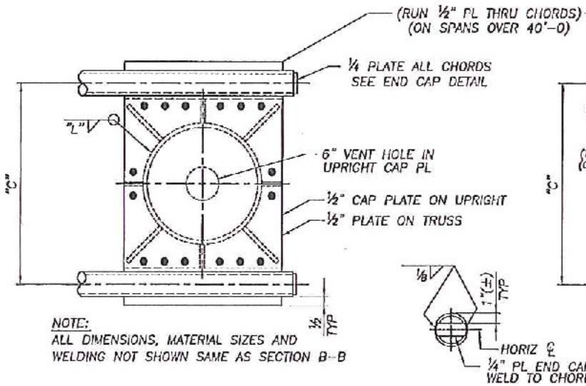

SECTION C–C

## MATERIAL SPECIFICATIONS

- PIPE – SHALL MEET THE FOLLOWING SPECIFICATIONS WITH THE PROPERTIES (52 KSI MIN. YIELD, 60 KSI MIN. ULTIMATE TENSILE AND MIN. ELONGATION EQUAL TO 20% IN 2 IN.). API-5L-X52, API-5L-X60, ASTM A500 GR. B/C, API-5L-X42, ASTM A252 GR.3 OR ASTM A53 GR. B (YIELD STRENGTH SHALL NOT EXCEED 82 KSI).
- PLATES – ASTM A572, GR. 50
- ANGLES – STEEL ASTM A36
- HARDWARE – PRIMARY–ASTM A325
  – SECONDARY–ASTM A307
- GALVANIZING – STRUCTURAL–ASTM A123
  – HARDWARE–ASTM A153
- PAINTING – PER WALPAR COATING SYSTEM #3 – COLOR BLACK
- ANCHOR BOLTS – STAINLESS STEEL, ASTM A276 TYPE 304 (45 KSI YIELD)
  – S.S. FLAT AND LOCK WASHERS
  – S.S. NUTS – AASHTO M 292/M 292 GR. B & ANSI B18.2.4.6M
- WELDING – AWS SPEC. D1.1 – LATEST REV.

NOTE: FOR SIGN HANGER, WALKWAY & LIGHT SUPPORT INFORMATION SEE ERECTION DWG'S

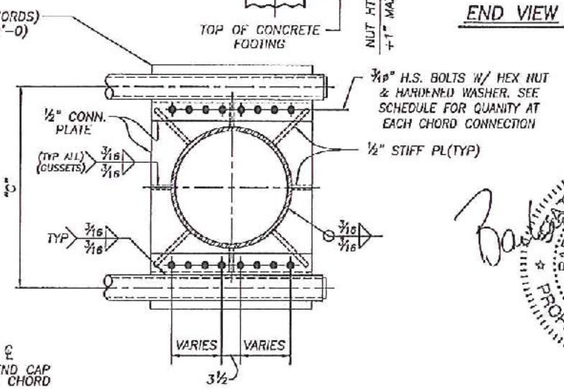
AASHTO 5th Edition Spec's



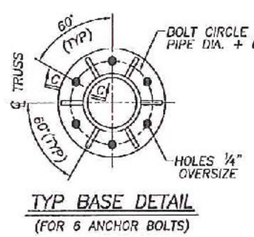

SECTION A–A
TOP CHORD CONNECTION




END CAP DETAIL




SECTION B–B
BOTTOM CHORD CONNECTION




TYP BASE DETAIL
(FOR 6 ANCHOR BOLTS)

STATE OF VERMONT
BARBARA B. CLEMENTS
4/12/12
NO. 64492
STRUCTURAL I
LICENSED
PROFESSIONAL ENGINEER

| NO: | REVISIONS | DATE | MADE | CHECKED |
|---|---|---|---|---|
| A | FOR APPROVAL, REVISE AB QTY, AB SIZE, GUSSET QTY, AND BASE PL TH | 4/5/12 | JEFF | NRW |


Walpar, LLC
POST OFFICE BOX 22850
BIRMINGHAM ALABAMA 35228
4200 JEFFERSON AVENUE
BIRMINGHAM ALABAMA 35221
PHONE (205)-925-4990
FAX (205) 925-7273


B

BTCT-D

| | |
|---|---|
| STATE: | Vermont |
| PROJECT: | Barre City |
| PROJ No: | FEGC F 026-1(34) C/2 |
| COUNTY: | Washington |
| ROUTE: | US-302 |
| SUBJECT: | BOX TRUSS CANTILEVER SIGN SUPPORTS |
| | WALPAR STANDARD DESIGN |
| FOR: | F.R. Lafayette, Inc. |
| DRAWN BY: | JEFF DATE: 7/27/11 |
| CHECKED BY: | RKW DATE: 8/16/11 |
| RELEASE FOR CONSTRUCTION: ☐ | DWG NO: C1181-D2 |

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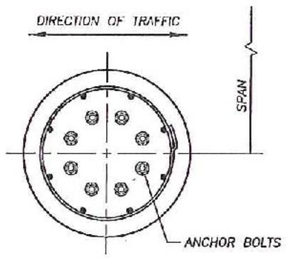
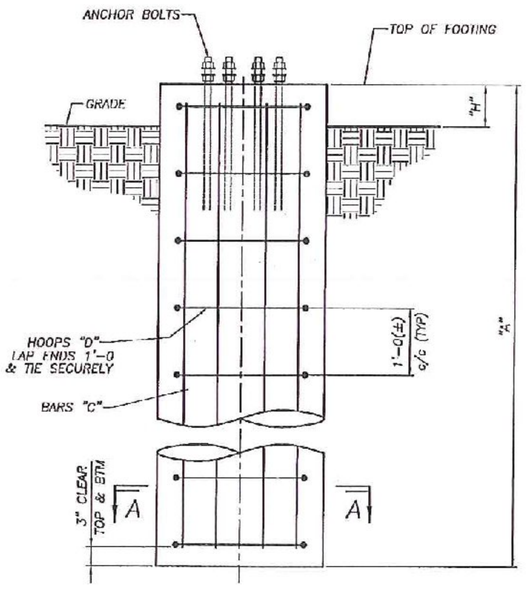
C1181-D3

| | STRUCTURE | STATION | SPAN | "A" | "B" | BARS "C" (±)c/c | HOOPS "D" (±)c/c | CONC/FTG (cu yds) | REINF/FTG (lbs) | "H" |
|---|---|---|---|---|---|---|---|---|---|---|
| B | 1(L) | 137+71.4 | 60'-0 | 10'-0 | 2'-6 | 12 - #7 @ 5 13/16 | 11 - #4 @ 1'-0 | 1.82 | 283 | 9 |
| B | 1(R) | 137+71.4 | 60'-0 | 11'-0 | 2'-6 | 12 - #7 @ 5 13/16 | 12 - #4 @ 1'-0 | 2.00 | 312 | 6 |

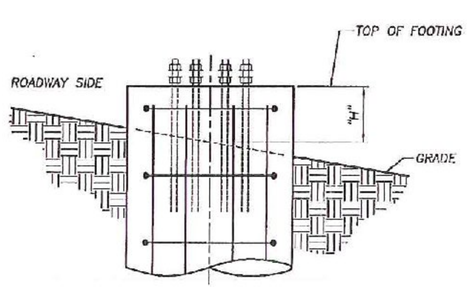



PLAN

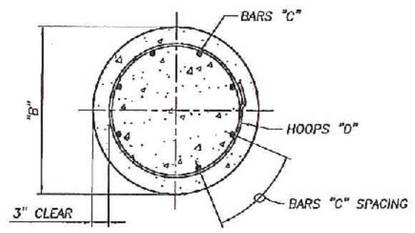



ELEVATION

SINGLE POLE OVERHEAD FOOTING




SIDE VIEW ELEVATION




SECTION A-A

## GENERAL NOTES

B 1. CONCRETE TO BE HIGH PERFORMANCE CLASS "B" AND f'c=3500 PSI
2. REINFORCING TO BE ASTM -- A615, GRADE 60, DEFORMED. Fy = 60 KSI., fs = 24 KSI.
3. REINFORCING TO BE TIED SUFFICIENTLY TO RETAIN ITS PROPER SHAPE DURING PLACEMENT.
4. REINFORCING TO BE HOOKED OR BENT PER ACI CODE.
5. CONTRACTOR TO PROVIDE CONDUIT IN FOOTING AS NECESSARY FOR ELECTRICAL SERVICE.
6. SEE STRUCTURE ERECTION DRAWINGS FOR FOOTING ELEVATIONS & ANCHOR BOLT MARKS, QUANTITIES, & SPACING.
7. CONTRACTOR SHALL BACK FILL AS NECESSARY TO COVER FOUNDATION.

STATE OF VERMONT
BARRY S. CLEMENTS
4/12/12
NO. 64492
STRUCTURAL
LICENSED
PROFESSIONAL ENGINEER

AASHTO 5th Edition Spec's


Walpar, LLC
POST OFFICE BOX 26650
BIRMINGHAM ALABAMA 35226
4200 JEFFERSON AVENUE
BIRMINGHAM ALABAMA 35221
PHONE (205)-925-4960
FAX (205) 925-7273


| | |
|---|---|
| STATE: | Vermont |
| PROJECT: | Barre City |
| PROJ No: | FEGC F 028-1(34) C/2 |
| COUNTY: | Washington |
| ROUTE: | US-302 |
| SUBJECT: | OVERHEAD SIGN SUPPORT CYLINDRICAL FOOTING DESIGN |
| FOR: | F.R. Lafayette , Inc. |
| DRAWN BY: | JEFF DATE: 8/5/11 |
| CHECKED BY: | RRW DATE: 8/17/11 |
| RELEASE FOR CONSTRUCTION: ☐ | DWG NO: C1181-D3 |

| NO | REVISIONS | DATE | MADE | CHECKED |
|---|---|---|---|---|
| B | FOR APPROVAL, CH'D CONC SPEC, REVISED CYL DESIGN | 4/3/12 | BBC | JEFF |

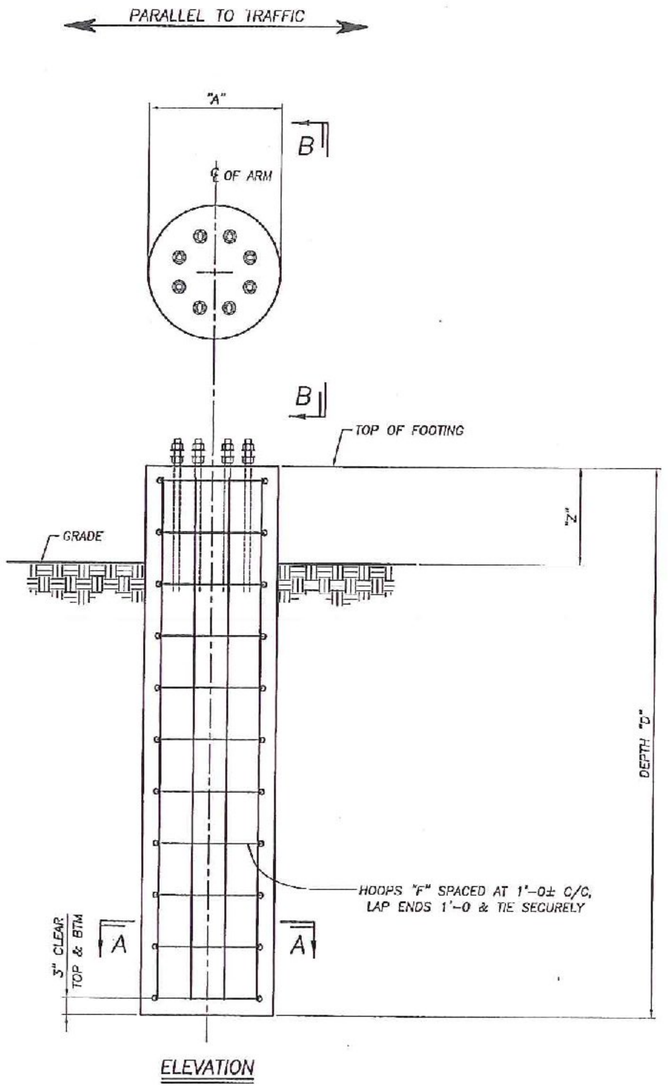
B

SPCI-D

0

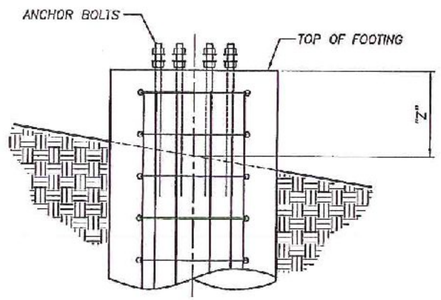
C1181-D4

| | STRUCTURE | STATION | "A" | | | "D" | BARS "E" | HOOPS "F" * SEE NOTE | | | CONC/FTG (cu yds) | REINF/FTG (lbs) | "Z" |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B | 2 | 22+32.0 LT | 3'-6 | | | 14'-0 | 18 - #8 @ 5 15/16in. | 15 - #4 @ 1'-0 | | | 4.99 | 748 | 6 |
| B | 3 | 112+12.6 RT | 3'-6 | | | 14'-0 | 18 - #8 @ 5 15/16in. | 15 - #4 @ 1'-0 | | | 4.99 | 748 | 6 |
| B | 4 | 141+97 LT | 3'-6 | | | 12'-0 | 18 - #8 @ 5 15/16in. | 13 - #4 @ 1'-0 | | | 4.28 | 639 | 6 |
| B | 5 | 111+49.5 LT | 3'-6 | | | 13'-0 | 18 - #8 @ 5 15/16in. | 14 - #4 @ 1'-0 | | | 4.63 | 693 | 6 |

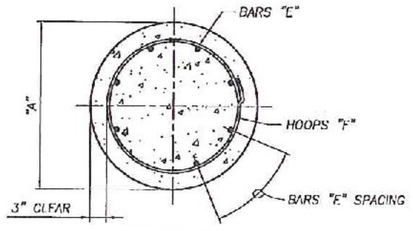



ELEVATION

SINGLE POLE CANTILEVER FOOTING




SECTION B-B




SECTION A-A

STATE OF VERMONT
BARBARA B. CLEMENTS
4/12/12
NO. 64492
STRUCTURAL I
LICENSED
PROFESSIONAL ENGINEER

## GENERAL NOTES

B 1. CONCRETE TO BE HIGH PERFORMANCE CLASS "B" AND f'c=3500 PSI
2. REINFORCING TO BE ASTM - A615, GRADE 60, DEFORMED, fy = 60 KSI., fs = 24 KSI.
3. REINFORCING TO BE TIED SUFFICIENTLY TO RETAIN ITS PROPER SHAPE DURING PLACEMENT.
4. REINFORCING TO BE HOOKED OR BENT PER ACI CODE.
5. CONTRACTOR TO PROVIDE CONDUIT IN FOOTING AS NECESSARY FOR ELECTRICAL SERVICE.
6. SEE STRUCTURE ERECTION DRAWINGS FOR FOOTING ELEVATIONS & ANCHOR BOLT MARKS, QUANTITIES, & SPACING.
7. CONTRACTOR SHALL BACK FILL AS NECESSARY TO COVER FOUNDATION.

AASHTO 5th Edition Spec's

| NO: | REVISIONS | DATE | MADE | CHECKED |
|---|---|---|---|---|
| B | FOR APPROVAL, CH'D CONC SPEC, REVISED CYL DESIGN | 4/3/12 | BBC | JEFF |


Walpar, LLC
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BIRMINGHAM ALABAMA 35228
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BIRMINGHAM ALABAMA 35221
PHONE (205)-925-4990
FAX (205) 925-7273


B

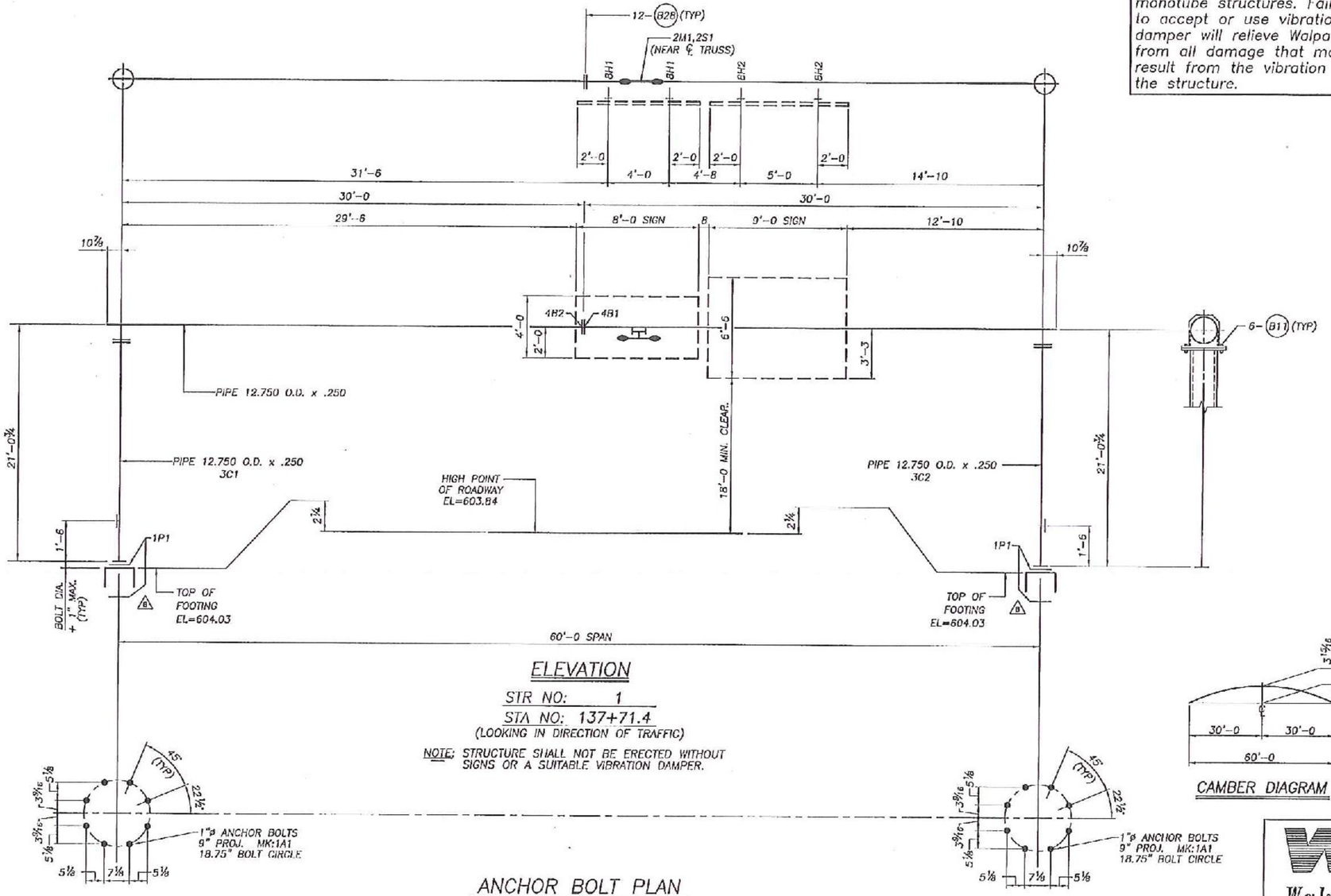
CCF-0

| | |
|---|---|
| STATE: | Vermont |
| PROJECT: | Barre City |
| PROJ No: | FEGC F 026-1(34) C/2 |
| COUNTY: | Washington |
| ROUTE: | US-302 |
| SUBJECT: | OVERHEAD SIGN SUPPORT CANTILEVER/BUTTERFLY CYLINDRICAL FOOTING DESIGN |
| FOR: | F.R. Lafayette , Inc. |
| DRAWN BY: | JEFF DATE: 7/27/11 |
| CHECKED BY: | RRW DATE: 8/17/11 |
| RELEASE FOR CONSTRUCTION: ☐ | DWG NO: C1181-D4 |

0

Walpar, LLC requires the use of a vibration damper on all monotube structures. Failure to accept or use vibration damper will relieve Walpar from all damage that may result from the vibration of the structure.

| SHIPPING LIST | | C1181-E1 |
|---|---|---|
| QTY | MARK | DESCRIPTION |
| 16 | 1A1 | ANCHOR BOLTS |
| 1 | 4B1 | BEAM 1.3' x 1.8' x 31' |
| 1 | 4B2 | BEAM 1.3' x 1.8' x 31' |
| 1 | 3C1 | POST 2' x 2' x 20.3' |
| 1 | 3C2 | POST 2' x 2' x 20.3' |
| | | |
| 2 | 8H1 | SIGN HANGERS |
| 2 | 8H2 | SIGN HANGERS |
| 1 | 2M1 | VD. DAMPER 1708-17.1 (ALCOA NMD) |
| 1 | 2S1 | SAFETY CHAIN /2 REPAIR LINKS |
| 2 | 2W1 | HANDHOLE COVER ASSEMBLY |
| 4 | (B2) | 1/4" x 3/4" Hex Hd c/s (STAINLESS STL) |
| 12 | (B11) | 3/4" x 3 3/4" HHB w/HN/FW (A325 GALV) |
| 8 | (B27) | 5/8" x 1 3/4" HHB w/HN/FW (A325 GALV) |
| 12 | (B28) | 7/8" x 2 3/4" HHB w/HN/FW (A325 GALV) |
| A 4 | 1P1 | ANCHOR TEMPLATES |




## ELEVATION

STR NO: 1

STA NO: 137+71.4

(LOOKING IN DIRECTION OF TRAFFIC)

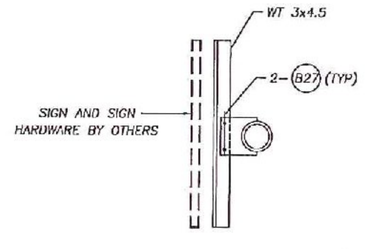
NOTE: STRUCTURE SHALL NOT BE ERECTED WITHOUT SIGNS OR A SUITABLE VIBRATION DAMPER.







## ANCHOR BOLT PLAN




## TYP SECTION @ SIGN HANGER




## CAMBER DIAGRAM

STATE OF VERMONT
BARBARA B. CLEMENT
4/12/12
NO. 64492
STRUCTURAL
LICENSED
PROFESSIONAL ENGINEER

AASHTO 5th Edition Spec's

| NO: | REVISIONS | DATE | MADE | CHECKED |
|---|---|---|---|---|
| A | FOR APPROVAL, INCREASE QTY OF TEMPLATES | 4/11/12 | RRW | JETT |

OHMOND-E

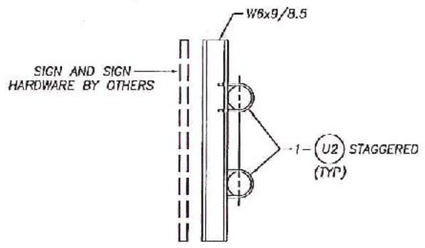
Walpar, LLC

POST OFFICE BOX 28659
BIRMINGHAM ALABAMA 35228
4200 JEFFERSON AVENUE
BIRMINGHAM ALABAMA 35221
PHONE (205)-925-4990
FAX (205) 925-7273

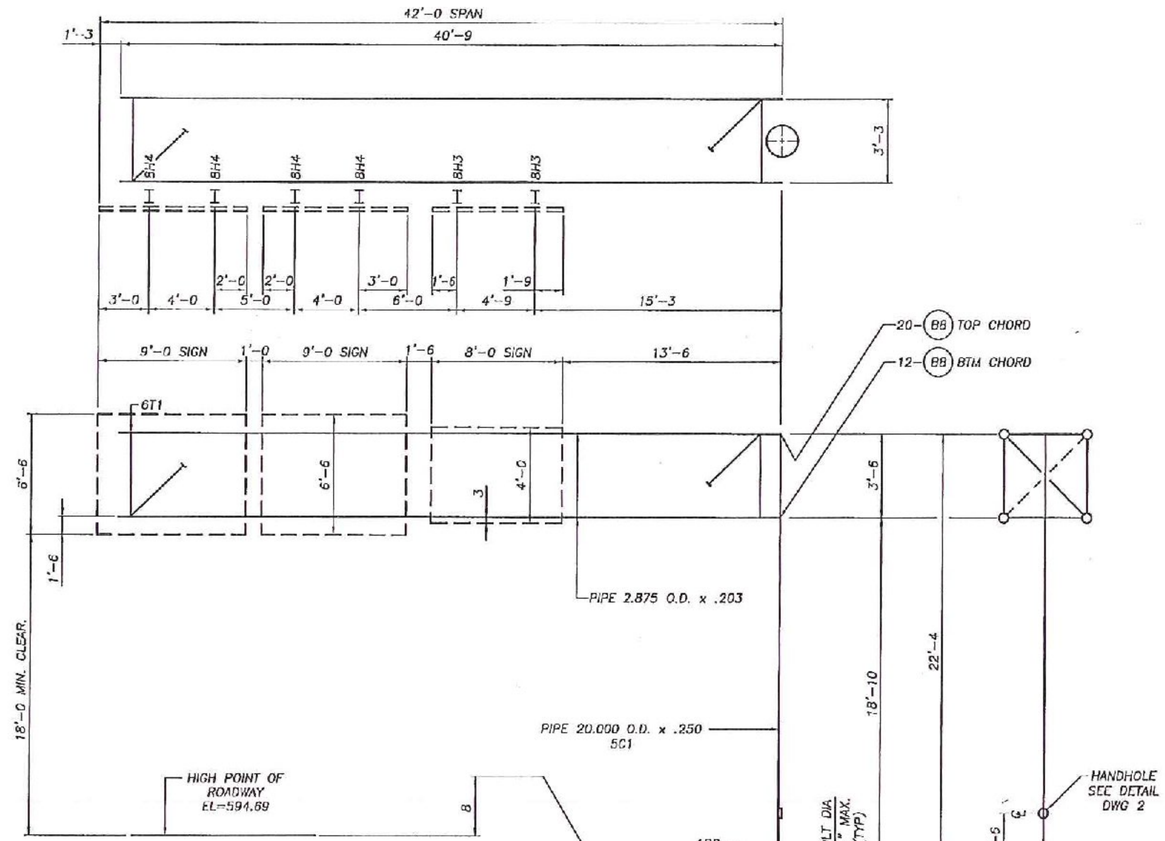
H

| | |
|---|---|
| STATE: | Vermont |
| PROJECT: | Barre City |
| PROJ No: | FEGC F 026-1(34) C/2 |
| COUNTY: | Washington |
| ROUTE: | US-302 |
| SUBJECT: | OVERHEAD MONOTUBE STRUCTURE ERECTION DRAWING |
| FOR: | F.R. Lafayette, Inc. |
| DRAWN BY: | JLS DATE: 8/19/11 |
| CHECKED BY: | RRW DATE: 8/22/11 |
| RELEASE FOR CONSTRUCTION: ☐ | DWG NO: C1181-E1 |

| SHIPPING LIST | | C1181--E2 |
|---|---|---|
| QTY | MARK | DESCRIPTION |
| 8 | 1A2 | ANCHOR BOLTS |
| 1 | 6T1 | TRUSS 3.6' x 3.8' x 42' |
| 1 | 5C1 | POST 2.6' x 2.9' x 22.3' |
| 1 | 2W1 | HANDHOLE COVER ASSEMBLY |
| 2 | BH3 | SIGN HANGERS |
| 4 | BH4 | SIGN HANGERS |
| 2 | (B2) | 1/4" x 3/4" Hex Hd s/s (STAINLESS STL) |
| 32 | (B8) | 3/4" x 2 1/4" HHB w/HW/FW (A325 GALV) |
| 12 | (U2) | 1/2" U-BOLTS w/(2 EA) HN/LW/FW (A307 GALV) |
| 2 | 1P2 | ANCHOR BOLT TEMPLATE |




TYP SECTION THRU SIGN HANGER



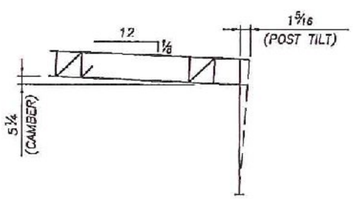

ELEVATION

STR NO: 2

STA NO: 22+32.0 LT

(LOOKING IN DIRECTION OF TRAFFIC)

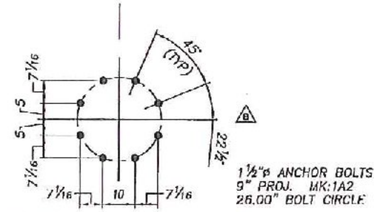
NOTE:
STRUCTURE SHALL NOT BE ERECTED WITHOUT SIGNS OR A SUITABLE VIBRATION DAMPER




CAMBER DIAGRAM

ERECTION NOTE

1) TILT POST AWAY FROM ROADWAY AT ERECTION BY ADJUSTING LEVELING NUTS.
2) 1" MINIMUM PERMANENT CAMBER AFTER DEFLECTION.




1½"ø ANCHOR BOLTS
9" PROJ. MK:1A2
26.00" BOLT CIRCLE

ANCHOR BOLT PLAN

| NO: | REVISIONS | DATE | MADE | DESIGN |
|---|---|---|---|---|
| A | FOR APPROVAL, REVISE AB QTY, AB TEMPLATE | 4/11/12 | JEFF | RRW |

AASHTO 5th Edition Spec's

Walpar, LLC

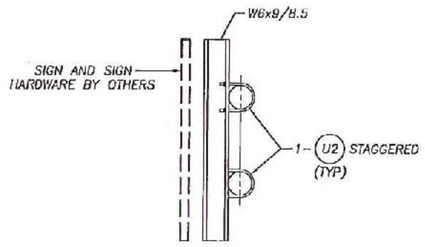
POST OFFICE BOX 28659
BIRMINGHAM ALABAMA 35228
4200 JEFFERSON AVENUE
BIRMINGHAM ALABAMA 35221
PHONE (205)-925-4990
FAX (205) 925-7273

CANT-F

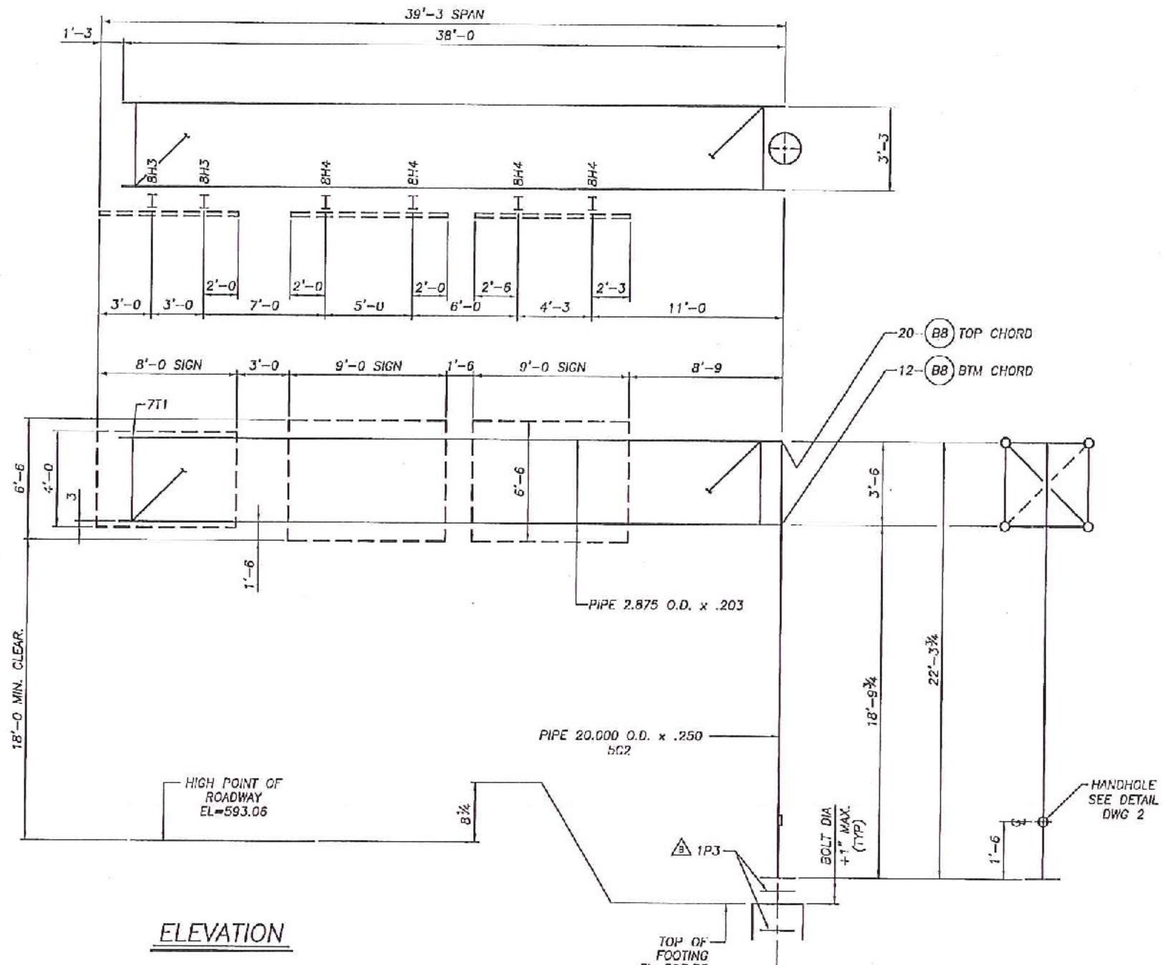
| | |
|---|---|
| STATE: | Vermont |
| PROJECT: | Barre City |
| PROJ No: | FEGC F 026-1(34) C/2 |
| COUNTY: | Washington |
| ROUTE: | US-302 |
| SUBJECT: | CANTILEVER SIGN SUPPORT ERECTION DRAWING |
| FOR: | F.R. Lafayette, Inc. |
| DRAWN BY: | JLS DATE: 8/19/11 |
| CHECKED BY: | RRW DATE: 8/22/11 |
| RELEASE FOR CONSTRUCTION ☐ | DWG NO: C1181-E2 |

BARRE R. CLEMENTS 4/12/12 NO. 64492 STRUCTURAL LICENSED PROFESSIONAL ENGINEER STATE OF VERMONT

| SHIPPING LIST | | C1181-E3 |
|---|---|---|
| QTY | MARK | DESCRIPTION |
| 6 | 1A2 | ANCHOR BOLTS |
| 1 | 7T1 | TRUSS 3.5' x 3.7' x 39.2' |
| 1 | 5C2 | POST 2.6' x 2.9' x 22.3' |
| 1 | 2W1 | HANDHOLE COVER ASSEMBLY |
| 2 | 8H3 | SIGN HANGERS |
| 4 | 8H4 | SIGN HANGERS |
| 2 | (B2) | 1/4" x 3/4" Hex Hd c/s (STAINLESS STL) |
| 32 | (B8) | 3/4" x 2 1/4" HHB w/(1H/1W/FW (A325 GALV) |
| 12 | (U2) | 1/2" U-BOLTS w/(2 EA) HN/LW/FW (A307 GALV) |
| 2 | 1P3 | ANCHOR BOLT TEMPLATE |




TYP SECTION THRU SIGN HANGER



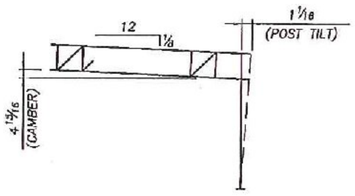

ELEVATION

STR NO: 3

STA NO: 112+12.6 RT

(LOOKING IN DIRECTION OF TRAFFIC)

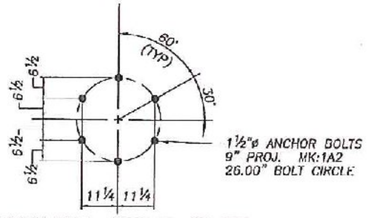
NOTE:
STRUCTURE SHALL NOT BE ERECTED WITHOUT SIGNS OR A SUITABLE VIBRATION DAMPER




CAMBER DIAGRAM

ERECTION NOTE

1) TILT POST AWAY FROM ROADWAY AT ERECTION BY ADJUSTING LEVELING NUTS.
2) 1" MINIMUM PERMANENT CAMBER AFTER DEFLECTION.




ANCHOR BOLT PLAN

| NO: | REVISIONS | DATE | MADE | CHECKED |
|---|---|---|---|---|
| 6 | FOR APPROVAL, REVISE AB TEMPLATE | 4/11/13 | JEFF | RRW |

AASHTO 5th Edition Spec's

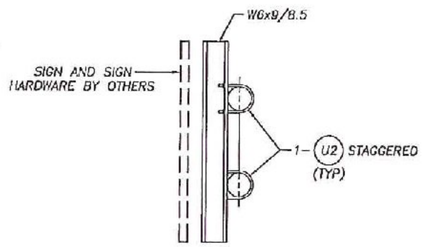
Walpar, LLC

POST OFFICE BOX 28650
BIRMINGHAM ALABAMA 35228
4200 JEFFERSON AVENUE
BIRMINGHAM ALABAMA 35221
PHONE (205)-925-4990
FAX (205) 925-1273

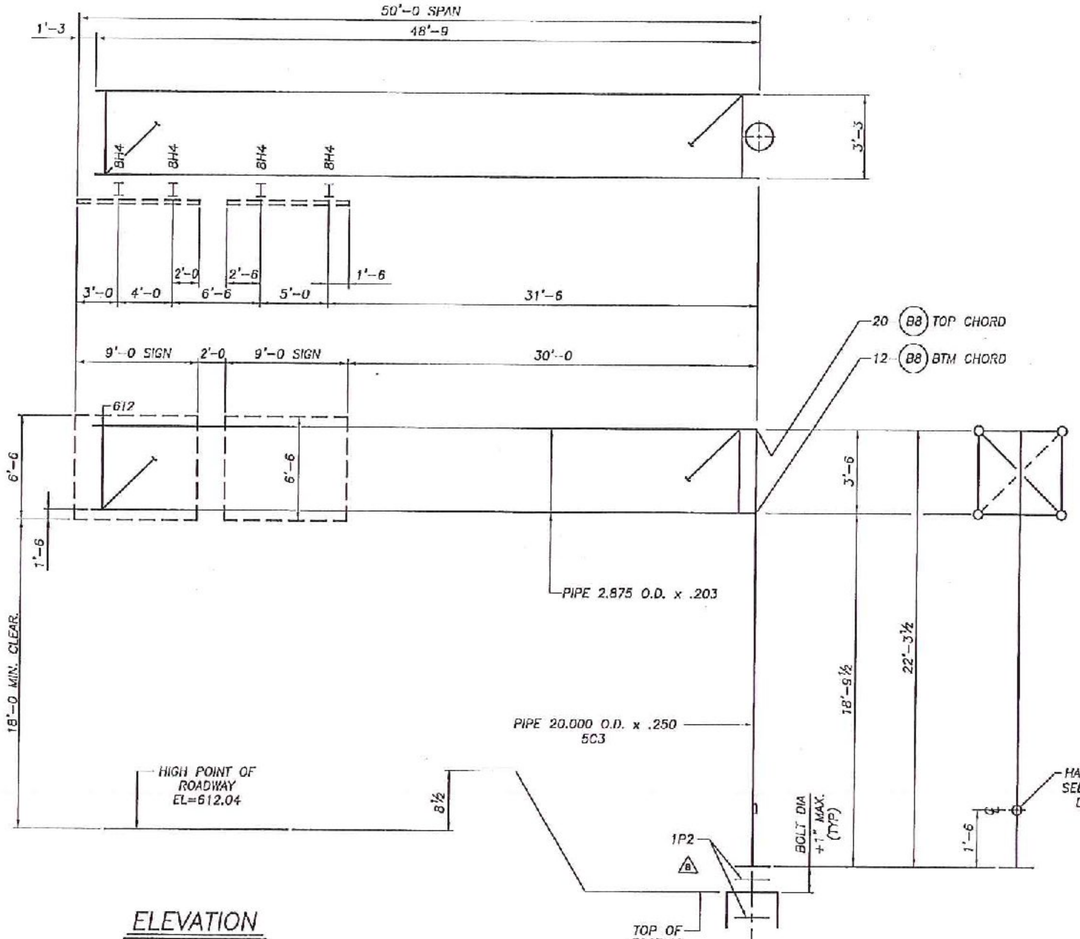
| | |
|---|---|
| STATE: | Vermont |
| PROJECT: | Barre City |
| PROJ No: | HEGC F 026-1(34) C/2 |
| COUNTY: | Washington |
| ROUTE: | US-302 |
| SUBJECT: | CANTILEVER SIGN SUPPORT ERECTION DRAWING |
| FOR: | F.R. Lafayette, Inc. |
| DRAWN BY: | JLS DATE: 8/19/11 |
| CHECKED BY: | RRW DATE: 8/22/11 |
| RELEASE FOR CONSTRUCTION: ☐ | DWG NO: C1181-E3 |

CANT-E

| SHIPPING LIST | | C1181-E4 |
|---|---|---|
| QTY | MARK | DESCRIPTION |
| 8 | 1A2 | ANCHOR BOLTS |
| 1 | 6T2 | TRUSS 3.6' x 3.8' x 50' |
| 1 | 5C3 | POST 2.6' x 2.9' x 22.3' |
| 1 | 2W1 | HANDHOLE COVER ASSEMBLY |
| 4 | 8H4 | SIGN HANGERS |
| 2 | (B2) | 1/4" x 3/4" Hex Hd c/s (STAINLESS STL) |
| 32 | (B8) | 3/4" x 2 1/4" HHD w/HN/FW (A325 GALV) |
| 8 | (U2) | 1/2" U-BOLTS w/(2 EA) HN/LW/FW (A307 GALV) |
| 1 | 1P2 | ANCHOR BOLT TEMPLATE |




TYP SECTION THRU SIGN HANGER



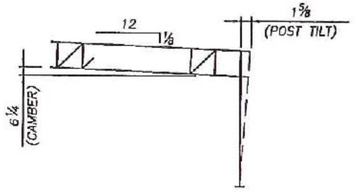

ELEVATION

STR NO: 4

STA NO: 141+97 LT

(LOOKING IN DIRECTION OF TRAFFIC)

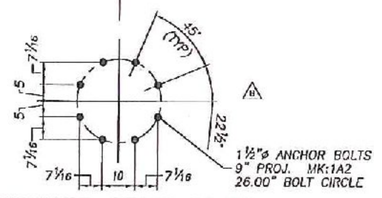
NOTE:
STRUCTURE SHALL NOT BE ERECTED WITHOUT SIGNS OR A SUITABLE VIBRATION DAMPER




CAMBER DIAGRAM

ERECTION NOTE

1) TILT POST AWAY FROM ROADWAY AT ERECTION BY ADJUSTING LEVELING NUTS.
2) 1" MINIMUM PERMANENT CAMBER AFTER DEFLECTION.




ANCHOR BOLT PLAN

| NO. | REVISIONS | DATE | MADE | CHECK |
|---|---|---|---|---|
| B | FOR APPROVAL, REVISE AB QTY, AB SIZE, AB TEMPLATE | 4/11/12 | JEFF | RRW |

Walpar, LLC

POST OFFICE BOX 28650
BIRMINGHAM ALABAMA 35228
4200 JEFFERSON AVENUE
BIRMINGHAM ALABAMA 35221
PHONE (205)-925-4990
FAX (205) 925-7273

B

CANT-E

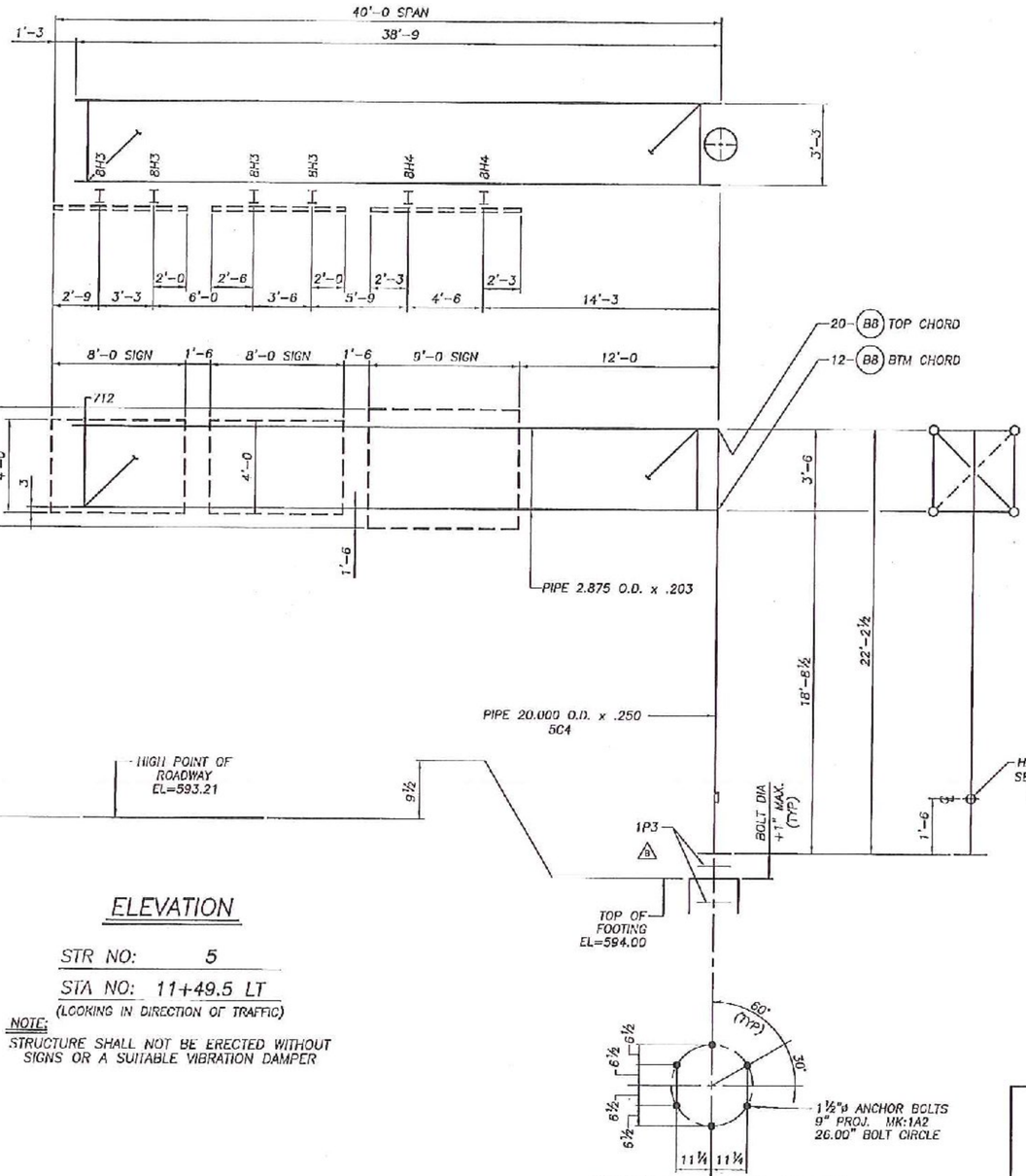
STATE OF VERMONT
BARBARA B. CLEMENTS
NO. 64492
STRUCTURAL
LICENSED
PROFESSIONAL ENGINEER
4/12/12

AASHTO 5th Edition Spec's

| | |
|---|---|
| STATE: | Vermont |
| PROJECT: | Barre City |
| PROJ No: | FEGC F 026-1(34) C/2 |
| COUNTY: | Washington |
| ROUTE: | US-302 |
| SUBJECT: | CANTILEVER SIGN SUPPORT ERECTION DRAWING |
| FOR: | F.R. Lafayette, Inc. |
| DRAWN BY: | JLS DATE: 8/19/11 |
| CHECKED BY: | RRW DATE: 8/22/11 |
| RELEASE FOR CONSTRUCTION: ☐ | DWG NO: C1181-E4 |

D

| SHIPPING LIST | | C1181-E5 |
|---|---|---|
| QTY | MARK | DESCRIPTION |
| 6 | 1A2 | ANCHOR BOLTS |
| 1 | 7T2 | TRUSS 3.5' x 3.7' x 40' |
| 1 | 5C4 | POST 2.6' x 2.9' x 22.2' |
| 1 | 2W1 | HANDHOLE COVER ASSEMBLY |
| 4 | 8H3 | SIGN HANGERS |
| 2 | 8H4 | SIGN HANGERS |
| 2 | (B2) | 1/4" x 3/4" Hex Hd s/s (STAINLESS STL) |
| 32 | (B8) | 3/4" x 2 1/4" HHB w/HH/FW (A325 GALV) |
| 12 | (U2) | 1/2" U-BOLTS w/(2 FA) HH/LW/FW (A307 GALV) |
| 6 | 1P3 | ANCHOR BOLT TEMPLATE |




## ELEVATION

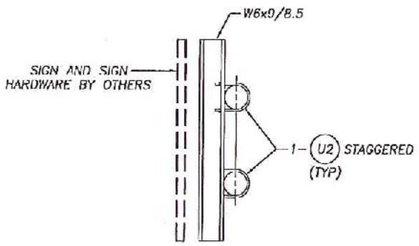
STR NO: 5

STA NO: 11+49.5 LT

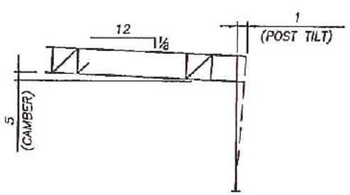
(LOOKING IN DIRECTION OF TRAFFIC)

NOTE:

STRUCTURE SHALL NOT BE ERECTED WITHOUT SIGNS OR A SUITABLE VIBRATION DAMPER




## TYP SECTION THRU SIGN HANGER




## CAMBER DIAGRAM

ERECTION NOTE

1) TILT POST AWAY FROM ROADWAY AT ERECTION BY ADJUSTING LEVELING NUTS.
2) 1" MINIMUM PERMANENT CAMBER AFTER DEFLECTION.




## ANCHOR BOLT PLAN

AASHTO 5th Edition Spec's


Walpar, LLC

POST OFFICE BOX 28550
BIRMINGHAM ALABAMA 35228
4200 JEFFERSON AVENUE
BIRMINGHAM ALABAMA 35221
PHONE (205) 925-4990
FAX (205) 925-7273


| NO: | REVISIONS | DATE | MADE | CHECKED |
|---|---|---|---|---|
| B | FOR APPROVAL, REVISE AB TEMPLATE | 4/11/12 | JEFF | RRW |

CANT-E

STATE: Vermont
PROJECT: Barre City
PROJ No: FEGC F 028-1(34) C/2
COUNTY: Washington
ROUTE: US-302

SUBJECT: CANTILEVER SIGN SUPPORT ERECTION DRAWING
FOR: F.R. Lafayette, Inc.

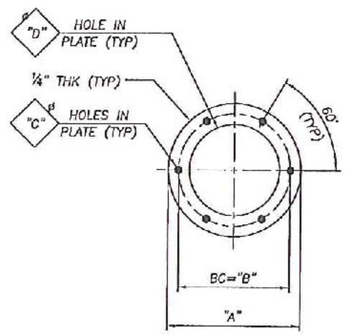
DRAWN BY: JLS DATE: 8/19/11
CHECKED BY: RRW DATE: 8/22/11
RELEASE FOR CONSTRUCTION: ☐ DWG NO: C1181-E5

STATE OF VERMONT
BARBARA B. CLEARY
4/12/12
NO. 64492
STRUCTURAL
LICENSED
PROFESSIONAL ENGINEER

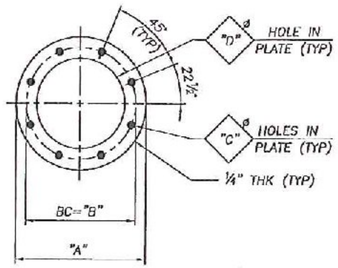
C1181-1

| PARTS PER CONT | PART MARK NO | NO OF PIECES REQ'D | SECTION SYM | DESCRIPTION OF MATERIAL | LENGTH FEET | LENGTH INCHES | PLATES PER UNIT | |
|---|---|---|---|---|---|---|---|---|
| | – | – | | ANCHOR BOLT TEMPLATES | | | | |
| | 1P1 | 4 | PL | 1/4 x 23 3/4 DIA | – | – | | |
| | 1P2 | 3 | PL | 1/4 x 31 DIA | – | – | | |
| | 1P3 | 3 | PL | 1/4 x 31 DIA | – | – | | |

| SHIPPING LIST | | |
|---|---|---|
| QTY | MARK | DESCRIPTION |
| 16 | 1A1 | ANCHOR BOLTS |
| 28 | 1A2 | ANCHOR BOLTS |
| 4 | 1P1 | ANCHOR BOLT TEMPLATES |
| 3 | 1P2 | ANCHOR BOLT TEMPLATE |
| 3 | 1P3 | ANCHOR BOLT TEMPLATE |



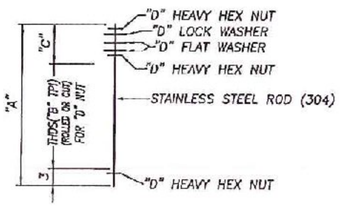

TYPE II ANCHOR TEMPLATE
(SEE CHART FOR INFORMATION)




TYPE III ANCHOR TEMPLATE
(SEE CHART FOR INFORMATION)

ANCHOR TEMPLATE CHART

| MARK | QTY | TYPE | "A" | "B" | "C" | "D" | STATION # |
|---|---|---|---|---|---|---|---|
| 1P1 | 4 | III | 1'–11¾ | 1'–6¾ | 1⅛ | 1'–1¾ | 137+71.4 |
| 1P2 | 3 | III | 2'–7 | 2'–2 | 1⅝ | 1'–9 | 22+32.0 LT, 141+97 LT |
| 1P3 | 3 | II | 2'–7 | 2'–2 | 1⅝ | 1'–9 | 112+12.6 RT, 11+49.5 LT |
| | | | | | | | |
| | | | | | | | |




TYPE "G"

HDWE
STAINLESS STEEL

~ ANCHOR BOLTS ~
(SEE CHART FOR MARKS)

| MARK | QTY | "A" | "B" | "C" | "D" | TYPE | YIELD | STATION # |
|---|---|---|---|---|---|---|---|---|
| 1A1 | 16 | 4'–6 | 8 | 10 | 1 | "G" | 55 KSI | 137+71.4 |
| 1A2 | 28 | 4'–6 | 6 | 10 | 1½ | "G" | 45 KSI | 22+32.0 LT, 141+97 LT<br>112+12.6 RT, 11+49.5 LT |
| | | | | | | | | |

MAT'L SPECS

| MAT'L | "G" |
|---|---|
| RODS | ASTM A276,TYPE 304(SEE YIELD IN CHART) |
| NUTS | AASHTO M292/M292 GR.8, ANSI B18.2.4.6M |
| WASHERS | STAINLESS STEEL |

NOTE: SHOP SHIP FROM THIS DRAWING

ANCHOR BOLT TEMPLATE MATERIAL SPECS.
ALL MAT'L. – ASTM A572, GR. 50
DO NOT GALVANIZE TEMPLATES

STATE OF VERMONT
BRIAN R. CLEMENTS
4/12/12
NO. 64492
STRUCTURAL
LICENSED
PROFESSIONAL ENGINEER

REF DWG: E1–E5

AASHTO 5th Edition Spec's

Walpar, LLC
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BIRMINGHAM ALABAMA 35228
4200 JEFFERSON AVENUE
BIRMINGHAM ALABAMA 35221
PHONE: (205)–925–1990
FAX (205) 925–7773

| | |
|---|---|
| STATE: | Vermont |
| PROJECT: | Barre City |
| PROJ No: | FEGC F 026–1(34) C/2 |
| COUNTY: | Washington |
| ROUTE: | US–302 |
| SUBJECT: | SIGN STRUCTURE |
| | ANCHOR BOLT & TEMPLATE DETAILS |
| FOR: | F.R. Lafayette, Inc. |
| DRAWN BY: | JLS DATE: 8/19/11 |
| CHECKED BY: | RRW DATE: 8/22/11 |
| RELEASE FOR CONSTRUCTION: ☐ | DWG NO: C1181–1 |

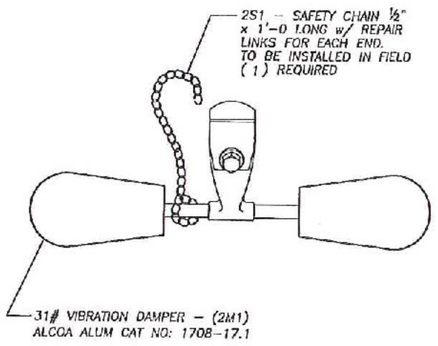
| NO: | REVISIONS | DATE | MADE | CHECKED |
|---|---|---|---|---|
| B | FOR APPROVAL, REVISE AB'S, AB TEMPLATES | 4/11/12 | JEFF | RRW |

ANC_TEMPLATE

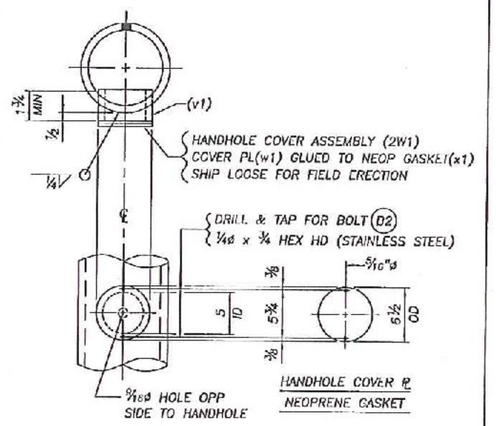
D

M:\ND E:\cad\Abutting\1181\B181-1.dwg DATE: APR 11, 2012 TIME: 2:03 PM Robert

C1181–2

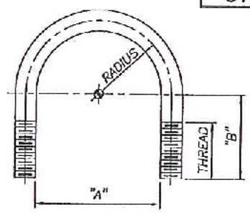



1 ~ DAMPER ASS'Y ~ 2M1



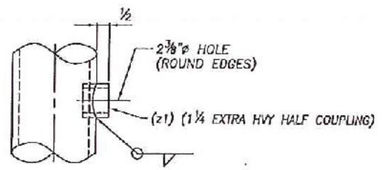

~ HANDHOLE DETAIL ~

| PART MARK NO | NO. OF PIECES 2W2 | SECTION SYM | DESCRIPTION OF MATERIAL | LENGTH FEET | LENGTH INCHES | RATIO FOR DWT UNIT |
|---|---|---|---|---|---|---|
| 2W1 | 6 | – | HANDHOLE COVER ASSEMBLY | | | |
| w1 | 6 | PL | ¼ x 6½ DIA. | – | – | 1 |
| x1 | 6 | OP | ⅛ x 6½ DIA. (NEOP GASKET) | – | – | 1 |

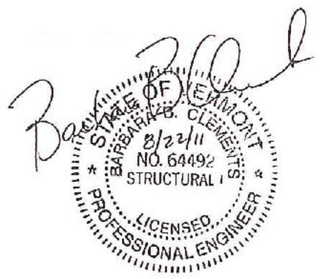



~ U–BOLTS ~

| MARK | QTY | DIA | "A" | "B" | RADIUS | THDS | MATERIAL |
|---|---|---|---|---|---|---|---|
| U2 | 44 | ½ | 3 | 3½ | 1¾ | 2 | A307 GALV |




~ WIRE OUTLET DETAIL ~




AASHTO 5th Edition Spec's

REF DWGS: E1 THRU E5
MAT'L SPECS: AS NOTED
WELD SPECS: AWS D1.1 ~ LATEST REV.

| NO: | REVISIONS | DATE | MADE | CHECKED |
|---|---|---|---|---|
| A | FOR APPROVAL | 8/22/11 | JLS | RRW |


Walpar, LLC
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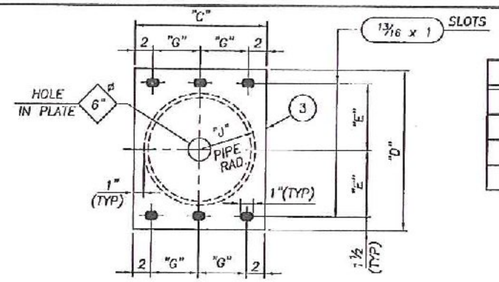
1200 JEFFERSON AVENUE
BIRMINGHAM ALABAMA 35221
PHONE (205)–925–1990
FAX (205) 925–7273


DWG–2

| | |
|---|---|
| STATE: | Vermont |
| PROJECT: | Barre City |
| PROJ No: | FEGC F 026–1(34) C/2 |
| COUNTY: | Washington |
| ROUTE: | US–302 |
| SUBJECT: | SIGN STRUCTURES MISC DETAILS |
| FOR: | F.R. Lafayette, Inc. |
| DRAWN BY: | JLS DATE 8/18/11 |
| CHECKED BY: | RRW DATE: 8/22/11 |
| RELEASE FOR CONSTRUCTION: ☐ | DWG NO: C1181–2 |

NAME: E:\cad\LabelPlot\1121\C1181-2.dwg DATE: Aug 22, 2011 TIME: 11:23 AM Roberta

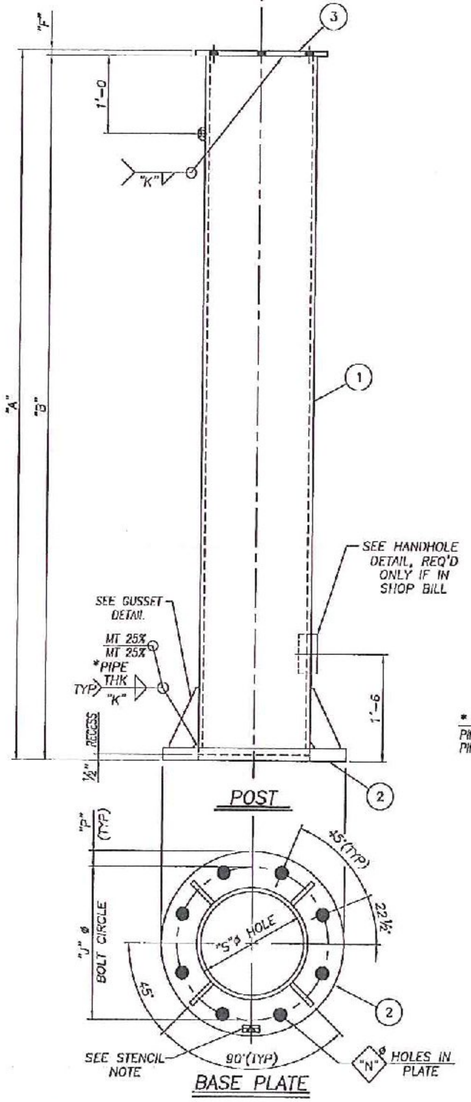



| STATION # | MARK | QTY | "A" | "B" | "C" | "D" | "E" | "F" | "G" | "H" | "J" | "K" | "N" QTY | "N" DIA | "P" | "R" |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 137+71.4 | 3C1 | 1 | 20'-3⅛ | 20'-1⅞ | 1'-2¾ | 1'-8¾ | 8⅞ | 1¼ | 5⅛ | 6⅜ | 1'-6¾ | 5/16 | 8 | 1¼ | 2½ | 1¼ |
| 137+71.4 | 3C2 | 1 | 20'-3⅛ | 20'-1⅞ | 1'-2¾ | 1'-8¾ | 8⅞ | 1¼ | 5⅛ | 6⅜ | 1'-6¾ | 5/16 | 8 | 1¼ | 2½ | 1¼ |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |

| MARK | "S" | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|
| 3C1 | 1'-0 13/16 | a | b | d | f |
| 3C2 | 1'-0 13/16 | a | b | d | f |
| | | | | | |
| | | | | | |

| PARTS PER CONT | PART MARK NO | NO OF PARTS REQ'D | SECTION SIZE | DESCRIPTION OF MATERIAL | LENGTH FEET | LENGTH INCHES | WEIGHT PER UNIT | WEIGHT |
|---|---|---|---|---|---|---|---|---|
| | 3C1 | 1 | | POST | | | | |
| | a | 1 | PIPE | 12.750 x .250 | 20 | 1⅜ | | |
| | b | 1 | PL | 1¼ x 23¾ DIA | -- | -- | | |
| | d | 1 | PL | 1¼ x 14¾ | 1 | 8¾ | | |
| | f | 4 | PL | ½ x 5 | 0 | 10 | | |
| | 3C2 | 1 | | POST | | | | |
| | a | 1 | PIPE | 12.750 x .250 | 20 | 1⅜ | | |
| | b | 1 | PL | 1¼ x 23¾ DIA | -- | -- | | |
| | d | 1 | PL | 1¼ x 14¾ | 1 | 8¾ | | |
| | f | 4 | PL | ½ x 5 | 0 | 10 | | |

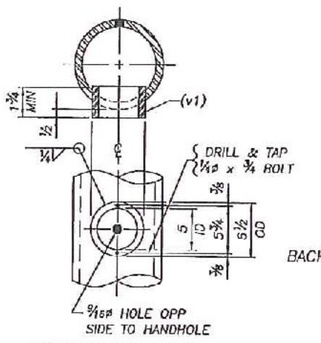
C1181-3



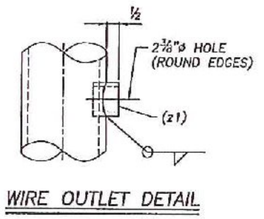

POST

BASE PLATE

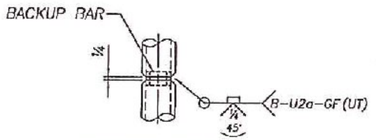
* NOTE:
PIPE THK -5/16" FOR PIPE WALLS >¼"




HANDHOLE DETAIL

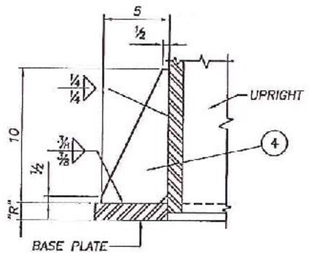



WIRE OUTLET DETAIL



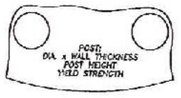

OPTIONAL SPLICE

(FOR WALL THK 5/16" OR GREATER ONLY)




TYP GUSSET DETAIL

STENCIL NOTE:
BASE PLATES SHALL BE STENCILED WITH THE POST DIAMETER AND WALL THICKNESS, POST HEIGHT, AND YIELD STRENGTH. ALL LETTERING SHALL BE 1/4" SIZE WITH SINGLE SPACES BETWEEN THE LINES AND WILL NEED THE ABOVE DATA STENCILED ON THE BASE PLATE AS SHOWN BELOW.




## MATERIAL SPEC'S.

- UPRIGHTS – STEEL PIPE SHALL MEET THE FOLLOWING SPECIFICATIONS WITH THE PROPERTIES (52 KSI MIN. YIELD, 60 KSI MIN. ULTIMATE TENSILE AND MIN. ELONGATION EQUAL TO 20% IN 2 IN.). API-5L-X52, API-5L-X42, API-5L-X60, ASTM A252 GR. 3, ASTM A500 GR. B/C, OR ASTM A53 GR. B (YIELD STRENGTH SHALL NOT EXCEED 82 KSI).
- PLATES – ASTM A572, GR. 50
- GALV. – ASTM A123
- PAINT – PER WALPAR COATING SYSTEM #3 – COLOR BLACK
- WELD – AWS SPEC. D1.1 – LATEST REV.
- ALL PIPE SIZES ARE OUTSIDE DIAMETER.

| NO | REVISIONS | DATE | MADE | CHECKED |
|---|---|---|---|---|
| A | FOR APPROVAL | 8/22/11 | JLS | RRW |

REF DWG: E1

AASHTO 5th Edition Spec's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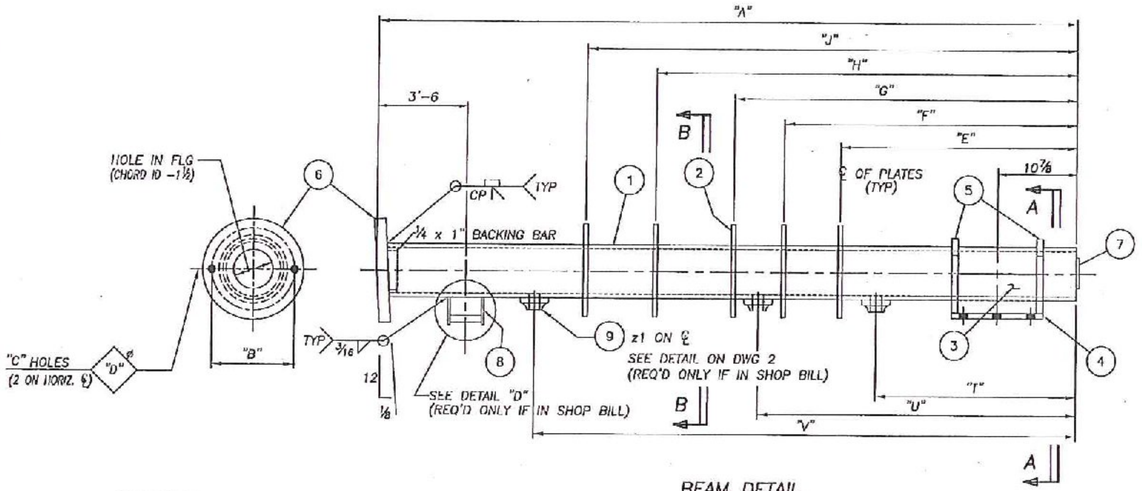
BIRMINGHAM ALABAMA 35221
PHONE (205) 925-4950
FAX (205) 925-7273

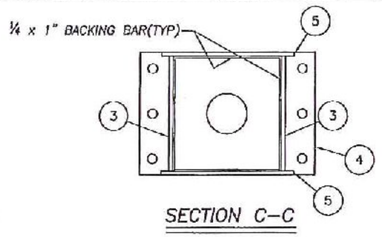

| | |
|---|---|
| STATE: | Vermont |
| PROJECT: | Barre City |
| PROJ No: | FEGC F 028-1(34) C/2 |
| COUNTY: | Washington |
| ROUTE: | US-302 |
| SUBJECT: | OVERHEAD SIGN SUPPORT DETAIL OF UPRIGHT |
| FOR: | F.R. Lafayette, Inc. |
| DRAWN BY: | JLS DATE: 8/18/11 |
| CHECKED BY: | RRW DATE: 8/22/11 |
| RELEASE FOR CONSTRUCTION: ☐ | DWG NO: C1181-3 |

STATE OF VERMONT
BARBARA B. CLEMENTS
NO. 64492
STRUCTURAL
LICENSED
PROFESSIONAL ENGINEER
8/22/11

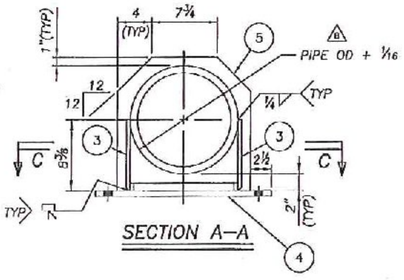
0




BEAM DETAIL




SECTION C–C



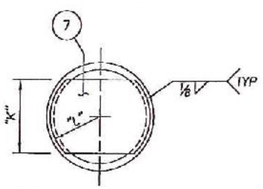

SECTION A–A

| | | | | | | C1181–4 | | |
|---|---|---|---|---|---|---|---|---|
| PARTS PER DWG | PART MARK NO | NO OF PIECES REQ'D | SECTION SIZE | DESCRIPTION OF MATERIAL | LENGTH FEET | LENGTH INCHES | PARTS FOR ONE UNIT | |
| | 4B1 | 1 | | BEAM | | | | |
| | a | 1 | PIPE | 12.750 x .250 | 30 | 10 5/16 | | |
| | b | 4 | PL | ⅜ x 10 | 1 | 3 | | |
| | d | 2 | PL | ½ x 8⅜ | 1 | 1¾ | | |
| | f | 1 | PL | 1¼ x 14¾ | 1 | 8¾ | | |
| | g | 2 | PL | ½ x 15¾ | 1 | 3¾ | | |
| | h | 1 | PL | ¾ x 18¾ DIA | – | – | | |
| | k | 1 | PL | ¼ x 10¾ | 1 | 0½ | | |
| | m | 2 | PL | ⅜ x 4 | 0 | 4 | | |
| | n | 1 | PIPE | 1.900 x .145 | 0 | 4 | | |
| | z1 | 3 | OP | 1¼ø EX HVY HALF COUPLING | – | – | | |
| | | | | | | | | |
| | 4B2 | 1 | | BEAM | | | | |
| | aa | 1 | PIPE | 12.750 x .250 | 30 | 10 5/16 | | |
| | d | 2 | PL | ½ x 8⅜ | 1 | 1¾ | | |
| | f | 1 | PL | 1¼ x 14¾ | 1 | 8¾ | | |
| | g | 2 | PL | ½ x 15¾ | 1 | 3¾ | | |
| | h | 1 | PL | ¾ x 18¾ DIA | – | – | | |
| | k | 1 | PL | ¼ x 10¾ | 1 | 0½ | | |
| | z1 | 1 | OP | 1¼ø EX HVY HALF COUPLING | – | – | | |

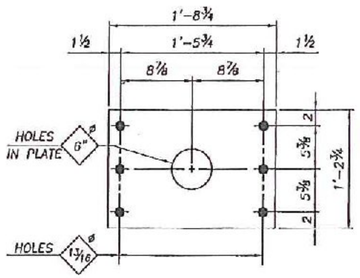
BEAM CHART

| STATION # | MARK | QTY | VIEW | "A" | "B" | "C" | "D" | "E" | "F" | "G" | "H" | "J" | "K" | "L" | "M" |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 137+71.4 | 4B1 | 1 | RIGHT | 30'–10⅞ | 1'–3¾ | 12 | 1 | 15'–8⅞ | 20'–8⅞ | 25'–4⅞ | 29'–4⅞ | ------ | 10¾ | 6¼ | 6⅜ |
| 137+71.4 | 4B2 | 1 | OPPHAND | 30'–10⅞ | 1'–3¾ | 12 | 1 | ------ | ------ | ------ | ------ | ------ | 10¾ | 6¼ | -- |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |

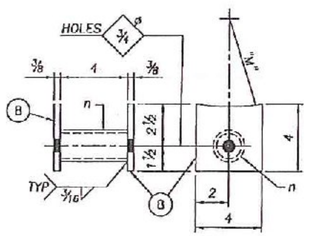
| MARK | "T" | "U" | "V" | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | a | b | d | f | g | h | k | m | z1 |
| 4B1 | 2'–0 | 10'–2⅞ | 27'–4⅞ | | | | | | | | | |
| 4B2 | 2'–0 | ------ | ------ | aa | -- | d | f | g | h | k | --- | z1 |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |



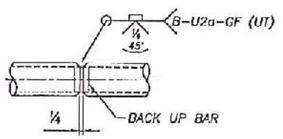

END PLATE DETAIL



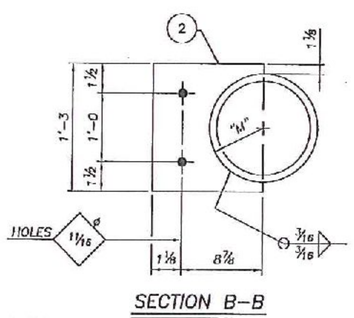

DETAIL (4)




DETAIL "D"
(DAMPER SUPPORT)




OPTIONAL CHORD SPLICE
(FOR WALL THK 5/16" OR GREATER ONLY)




SECTION B–B

## MATERIAL SPEC'S.

- ARMS – STEEL PIPE SHALL MEET THE FOLLOWING SPECIFICATIONS WITH THE PROPERTIES (52 KSI MIN. YIELD, 60 KSI MIN. ULTIMATE TENSILE AND MIN. ELONGATION EQUAL TO 20% IN 2 IN.). API–5L–X52, API–5L–X42, API–5L–X60, ASTM A252 GR. 3, ASTM A500 GR. B/C, OR ASTM A53 GR. B, (YIELD STRENGTH SHALL NOT EXCEED 62 KSI).
- PLATES – ASTM A572, GR. 50
- GALV. – ASTM A123
- PAINT – PER WALPAR COATING SYSTEM #3 -- COLOR BLACK
- WELD – AWS SPEC. D1.1 – LATEST REV.
- ALL PIPE SIZES ARE OUTSIDE DIAMETER

| NO: | REVISIONS | DATE | MADE | CHECKED |
|---|---|---|---|---|
| B | FOR APPROVAL | 2/27/12 | JLS | BBC |

REF DWG: E1

AASHTO 5th Edition Spec's

Walpar, LLC

POST OFFICE BOX 28650
BIRMINGHAM ALABAMA 35228
4200 JEFFERSON AVENUE
BIRMINGHAM ALABAMA 35221
PHONE (205)-925-4990
FAX (205) 925-7273

C

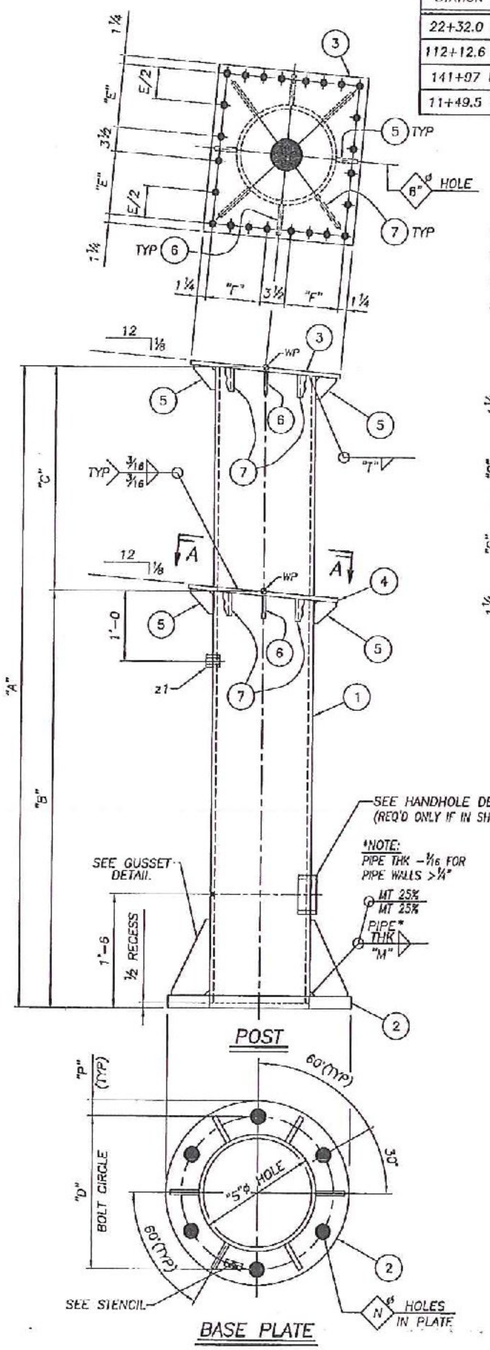
STATE OF VERMONT
BARBARA B. CLEMENTS
2/29/12
NO. 64492
STRUCTURAL
LICENSED
PROFESSIONAL ENGINEER

| | |
|---|---|
| STATE: | Vermont |
| PROJECT: | Barre City |
| PROJ No: | FEGC F 026–1(34) C/2 |
| COUNTY: | Washington |
| ROUTE: | US -302 |
| SUBJECT: | SINGLE PLANE SUPPORTS DETAIL OF ARMS |
| FOR: | F.R. Lafayette, Inc. |
| DRAWN BY: | JLS DATE: 8/18/11 |
| CHECKED BY: | RRW DATE: 8/22/11 |
| RELEASE FOR CONSTRUCTION: ☐ | DWG NO: C1181–4 |

0

| STATION # | MARK | QTY | "A" | "B" | "C" | "D" | "E" | "F" | "G" | "H" |
|---|---|---|---|---|---|---|---|---|---|---|
| 22+32.0 LT | SC1 | 1 | 22'-3¾ | 18'-9¾ | 3'-6 | 2'-2 | 1'-2⁵⁄₁₆ | 2 @ 5 = 10 | 1'-4⁵⁄₁₆ | 2 @ 5 = 10 |
| 112+12.6 RT | SC2 | 1 | 22'-3½ | 18'-9½ | 3'-6 | 2'-2 | 1'-2⁵⁄₁₆ | 2 @ 5 = 10 | 1'-4⁵⁄₁₆ | 2 @ 5 = 10 |
| 141+97 LT | SC3 | 1 | 22'-3¼ | 18'-9¼ | 3'-6 | 2'-2 | 1'-2⁵⁄₁₆ | 2 @ 5 = 10 | 1'-4⁵⁄₁₆ | 2 @ 5 = 10 |
| 11+49.5 LT | SC4 | 1 | 22'-2¼ | 18'-8¼ | 3'-6 | 2'-2 | 1'-2⁵⁄₁₆ | 2 @ 5 = 10 | 1'-4⁵⁄₁₆ | 2 @ 5 = 10 |

| MARK | "J" | "K" | "L" | "M" | "N" QTY | "N" DIA | "P" | "S" | "T" | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC1 | 2½ | 6¾ | 8⅜ | ⅝ | 8 | 1¾ | 3 | 1'-8⅛ | ¼ | a | b | d | f | k | m | n | h |
| SC2 | 2½ | 6¾ | 8⅜ | ⅝ | 6 | 1¾ | 3 | 1'-8⅛ | ¼ | aa | bb | d | f | k | m | n | h |
| SC3 | 2½ | 6¾ | 8⅜ | ⅝ | 8 | 1¾ | 3 | 1'-8⅛ | ½ | ba | b | d | f | k | m | n | h |
| SC4 | 2½ | 6¾ | 8⅜ | ⅝ | 6 | 1¾ | 3 | 1'-8⅛ | ¼ | da | bb | d | f | k | m | n | h |




**STENCIL NOTE:**
BASE PLATES SHALL BE STENCILED WITH THE POST DIAMETER AND WALL THICKNESS, POST HEIGHT, AND YIELD STRENGTH. ALL LETTERING SHALL BE 1/4" SIZE WITH SINGLE SPACES BETWEEN THE LINES AND WILL NEED THE ABOVE DATA STENCILED ON THE BASE PLATE AS SHOWN BELOW.

## MATERIAL SPEC'S.

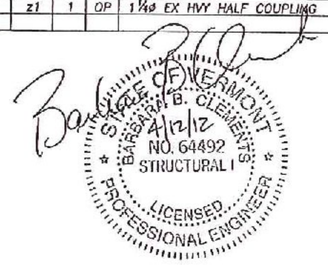
- POSTS – STEEL PIPE SHALL MEET THE FOLLOWING SPECIFICATIONS WITH THE PROPERTIES (52 KSI MIN. YIELD, 60 KSI MIN. ULTIMATE TENSILE AND MIN. ELONGATION EQUAL TO 20% IN 2 IN.). API-5L-X52, API-5L-X42, API-5L-X60, ASTM A252 GR. 3, ASTM A500 GR. B/C, OR ASTM A53 GR. B, (YIELD STRENGTH SHALL NOT EXCEED 82 KSI).
- PLATES – ASTM A572, GR. 50
- GALV. – ASTM A123
- PAINT – PER WALPAR COATING SYSTEM #3 – COLOR BLACK
- WELD – AWS SPEC. D1.1 – LATEST REV.
- ALL PIPE SIZES ARE OUTSIDE DIAMETER

ALL HOLES TO BE ⅝ø UNLESS NOTED

| NO: | REVISIONS | DATE | MADE | CHECKED |
|---|---|---|---|---|
| C | FOR APPROVAL, REVISE BASE PL'S, GUSSETS | 4/11/12 | JEFF | RRW |

C1181-5

| PARTS PER UNIT | PART MARK NO | NO OF PIECES PER | SECTION SIZE | DESCRIPTION OF MATERIAL | LENGTH FEET | LENGTH INCHES | PARTS FOR ONE UNIT |
|---|---|---|---|---|---|---|---|
| | SC1 | 1 | | POST | | | |
| | a | 1 | PIPE | 20.000 x .250 | 22 | 2⅜ | |
| | b | 1 | PL | 1½ x 32 DIA. | – | – | |
| | d | 1 | PL | ½ x 26 | 2 | 10⅜ | |
| | f | 1 | PL | ½ x 26 | 2 | 10⅜ | |
| | k | 4 | PL | ½ x 2½ | 0 | 2½ | |
| | m | 4 | PL | ½ x 6¾ | 0 | 6¾ | |
| | n | 8 | PL | ½ x 8⅜ | 0 | 8⅜ | |
| | h | 4 | PL | ½ x 5 | 0 | 10 | |
| | v1 | 1 | PL | 1¾ x 6½ DIA. | – | – | |
| | z1 | 1 | OP | 1¼ø EX HVY HALF COUPLING | – | – | |
| | SC2 | 1 | | POST | | | |
| | aa | 1 | PIPE | 20.000 x .250 | 22 | 2⅜ | |
| | bb | 1 | PL | 1½ x 32 DIA. | – | – | |
| | d | 1 | PL | ½ x 26 | 2 | 10⅜ | |
| | f | 1 | PL | ½ x 26 | 2 | 10⅜ | |
| | k | 4 | PL | ½ x 2½ | 0 | 2½ | |
| | m | 4 | PL | ½ x 6¾ | 0 | 6¾ | |
| | n | 8 | PL | ½ x 8⅜ | 0 | 8⅜ | |
| | h | 6 | PL | ½ x 5 | 0 | 10 | |
| | v1 | 1 | PL | 1¾ x 6½ DIA. | – | – | |
| | z1 | 1 | OP | 1¼ø EX HVY HALF COUPLING | – | – | |
| | SC3 | 1 | | POST | | | |
| | ba | 1 | PIPE | 20.000 x .250 | 22 | 2⅜ | |
| | b | 1 | PL | 1½ x 32 DIA. | – | – | |
| | d | 1 | PL | ½ x 26 | 2 | 10⅜ | |
| | f | 1 | PL | ½ x 26 | 2 | 10⅜ | |
| | k | 4 | PL | ½ x 2½ | 0 | 2½ | |
| | m | 4 | PL | ½ x 6¾ | 0 | 6¾ | |
| | n | 8 | PL | ½ x 8⅜ | 0 | 8⅜ | |
| | h | 4 | PL | ½ x 5 | 0 | 10 | |
| | v1 | 1 | PL | 1¾ x 6½ DIA. | – | – | |
| | z1 | 1 | OP | 1¼ø EX HVY HALF COUPLING | – | – | |
| | SC4 | 1 | | POST | | | |
| | da | 1 | PIPE | 20.000 x .250 | 22 | 1⅜ | |
| | bb | 1 | PL | 1½ x 32 DIA. | – | – | |
| | d | 1 | PL | ½ x 26 | 2 | 10⅜ | |
| | f | 1 | PL | ½ x 26 | 2 | 10⅜ | |
| | k | 4 | PL | ½ x 2½ | 0 | 2½ | |
| | m | 4 | PL | ½ x 6¾ | 0 | 6¾ | |
| | n | 8 | PL | ½ x 8⅜ | 0 | 8⅜ | |
| | h | 6 | PL | ½ x 5 | 0 | 10 | |
| | v1 | 1 | PL | 1¾ x 6½ DIA. | – | – | |
| | z1 | 1 | OP | 1¼ø EX HVY HALF COUPLING | – | – | |




REF DWG: E2-E5

AASHTO 5th Edition Spec's

Walpar, LLC

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BIRMINGHAM ALABAMA 35228
4200 JEFFERSON AVENUE
BIRMINGHAM ALABAMA 35221
PHONE (205)-925-4990
FAX (205) 925-7273

C3TUPDET

STATE: Vermont
PROJECT: Barre City
PROJ No: FEGC F 026-1(34) C/2
COUNTY: Washington
ROUTE: US-302

SUBJECT: CANTILEVER SIGN SUPPORT
DETAILS OF UPRIGHT
FOR: F.R. Lafayette, Inc.

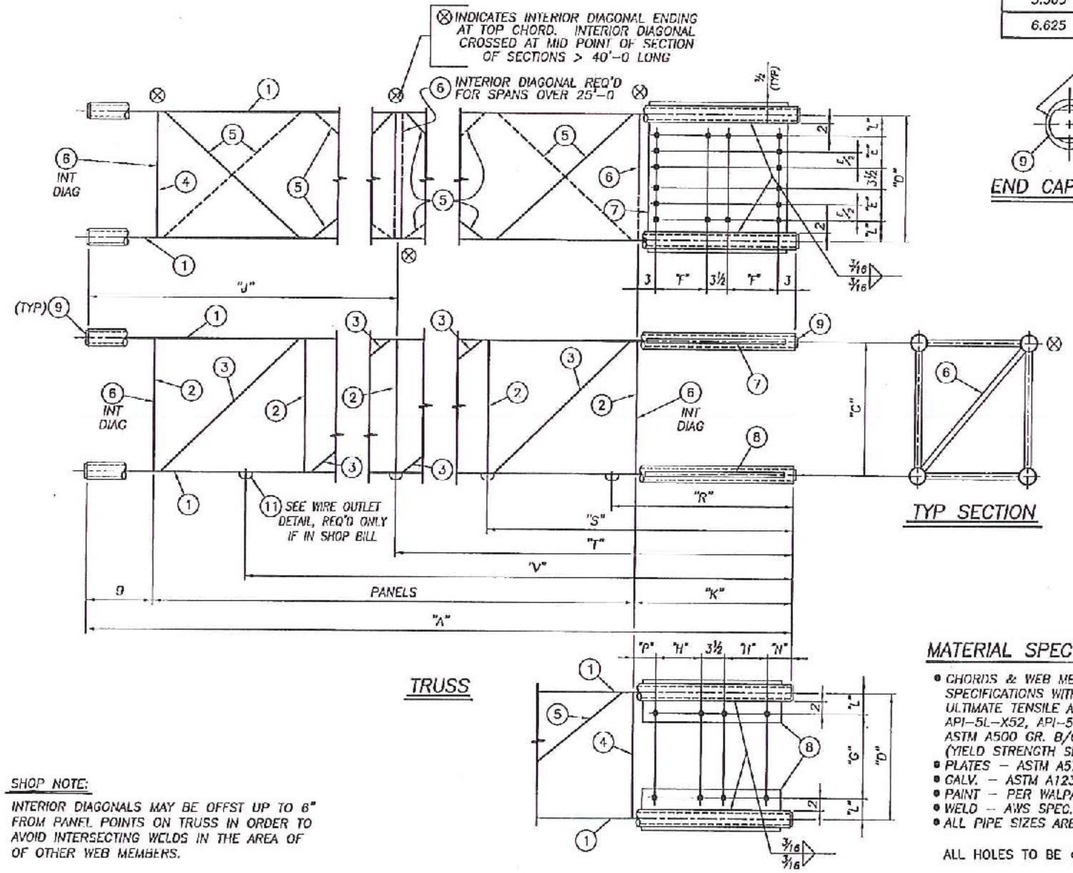
DESIGN BY: JLS DATE: 8/19/11
CHECKED BY: RRW DATE: 8/22/11
RELEASE FOR CONSTRUCTION: ☐ DWG NO: C1181-5

0

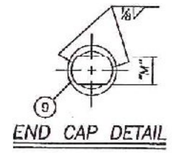
| STATION # | MARK | QTY | "A" | "C" | PANELS | "D" | "E" | "F" | "G" | "H" | "J" | "K" | "L" | "M" | "N" | "P" |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 22+32.0 LT | 6T1 | 1 | 41'-11¾ | 3'-6 | 13 @ 2'-11 11/16(±) = 38'-9¼ | 3'-3 | 1'-2 5/16 | 2 @ 5 = 0'-10 | 2'-8⅛ | 2 @ 5 = 0'-10 | 18'-7¾ | 2'-5½ | 3 7/16 | ⅞ | 2 9/16 | 3 7/16 |
| 141+97 LT | 6T2 | 1 | 49'-11¾ | 3'-6 | 15 @ 3'-1 7/16(±) = 46'-9¼ | 3'-3 | 1'-2 5/16 | 2 @ 5 = 0'-10 | 2'-8⅛ | 2 @ 5 = 0'-10 | 22'-6 15/16 | 2'-5½ | 3 7/16 | ⅞ | 2 9/16 | 3 7/16 |

| MARK | "R" | "S" | "T" | "V" | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | ⑧ | ⑨ | | ⑪ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6T1 | 2'-11½ | 17'-4 7/16 | 29'-3⅝ | 38'-2 15/16 | a | b | d | f | h | k | m | n | p | | z1 |
| 6T2 | 2'-11½ | 36'-9 1/16 | 46'-1 5/16 | ------- | aa | b | ad | f | ah | k | m | n | p | | z1 |

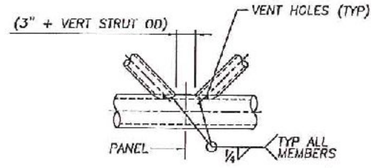
| VENT HOLE SIZES | |
|---|---|
| WEB MEMBER (OD) | HOLE DIA ± ⅛" |
| < 3.500 | ⅞ |
| 3.500 | 1¾ |
| 4.000 | 2 |
| 4.500 | 2¼ |
| 5.563 | 2¾ |
| 6.625 | 3¼ |



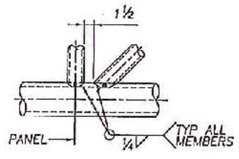

TYP SECTION



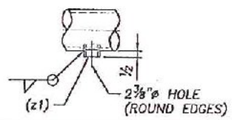

END CAP DETAIL



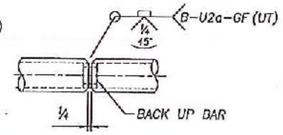

JOINT DETAIL




JOINT DETAIL




WIRE OUTLET DETAIL




OPTIONAL CHORD SPLICE

(FOR WALL THK 5/16" OR GREATER ONLY)




TRUSS

SHOP NOTE:

INTERIOR DIAGONALS MAY BE OFFST UP TO 6" FROM PANEL POINTS ON TRUSS IN ORDER TO AVOID INTERSECTING WELDS IN THE AREA OF OF OTHER WEB MEMBERS.

## MATERIAL SPEC'S

- CHORDS & WEB MEMBERS – STEEL PIPE SHALL MEET THE FOLLOWING SPECIFICATIONS WITH THE PROPERTIES (52 KSI MIN. YIELD, 60 KSI MIN. ULTIMATE TENSILE AND MIN. ELONGATION EQUAL TO 20% IN 2 IN.). API–5L–X52, API–5L–X42, API–5L–X60, ASTM A252 GR. 3, ASTM A500 GR. B/C, OR ASTM A53 GR. B, (YIELD STRENGTH SHALL NOT EXCEED 82 KSI).
- PLATES – ASTM A572, GR. 50
- GALV. – ASTM A123
- PAINT – PER WALPAR COATING SYSTEM #3 – COLOR BLACK
- WELD – AWS SPEC. D1.1 – LATEST REV.
- ALL PIPE SIZES ARE OUTSIDE DIAMETER

ALL HOLES TO BE ⟨13/16⟩ UNLESS NOTED

| NO | REVISIONS | DATE | MADE | CHECKED |
|---|---|---|---|---|
| A | FOR APPROVAL | 8/22/11 | JLS | RRW |

DTCTDET

C1181-6

| PARTS PER UNIT | PART MARK NO | NO OF PIECES REQ'D | SECTION SYM | DESCRIPTION OF MATERIAL | LENGTH FEET | LENGTH INCHES | FINISH FOR ONE UNIT |
|---|---|---|---|---|---|---|---|
| | 6T1 | 1 | | TRUSS | | | |
| | a | 4 | PIPE | 2.875 x .203 | 41 | 11¾ | |
| | b | 28 | PIPE | 1.315 x .133 | 3 | 3 5/16 | |
| | d | 28 | PIPE | 1.315 x .133 | 4 | 2 3/16 | |
| | f | 3 | PIPE | 1.315 x .133 | 3 | 0 5/16 | |
| | h | 26 | PIPE | 1.315 x .133 | 3 | 11 15/16 | |
| | k | 4 | PIPE | 1.315 x .133 | 4 | 6⅜ | |
| | m | 1 | PL | ½ x 26 | 3 | 6⅞ | |
| | n | 2 | PL | ½ x 6⅜ | 2 | 2 | |
| | p | 8 | PL | ¼ x ⅞ | 0 | 2⅜ | |
| | z1 | 4 | OP | 1¼ø EX HVY HALF COUPLING | – | – | |
| | 6T2 | 1 | | TRUSS | | | |
| | aa | 4 | PIPE | 2.075 x .203 | 49 | 11¾ | |
| | b | 32 | PIPE | 1.315 x .133 | 3 | 3 5/16 | |
| | ad | 30 | PIPE | 1.315 x .133 | 4 | 3¼ | |
| | f | 3 | PIPE | 1.315 x .133 | 3 | 0 5/16 | |
| | ah | 30 | PIPE | 1.315 x .133 | 4 | 1 | |
| | k | 4 | PIPE | 1.315 x .133 | 4 | 6⅜ | |
| | m | 1 | PL | ½ x 26 | 3 | 6⅞ | |
| | n | 2 | PL | ½ x 6⅜ | 2 | 2 | |
| | p | 8 | PL | ¼ x ⅞ | 0 | 2⅜ | |
| | z1 | 3 | OP | 1¼ø EX HVY HALF COUPLING | – | – | |

STATE OF VERMONT
BARBARA B. CLEMENTS
8/22/11
NO. 64492
STRUCTURAL
LICENSED
PROFESSIONAL ENGINEER

REF DWG: E2, & E4

AASHTO 5th Edition Spec's

Walpar, LLC

POST OFFICE BOX 28650
BIRMINGHAM ALABAMA 35228
4200 JEFFERSON AVENUE
BIRMINGHAM ALABAMA 35221
PHONE (205)-925-4990
FAX (205) 925-7273

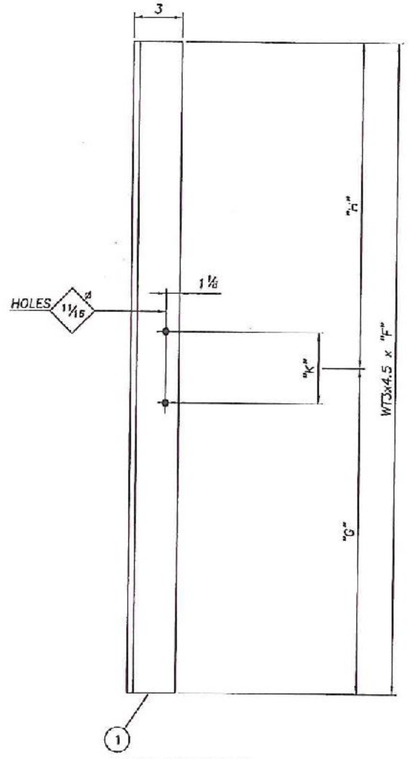
| | |
|---|---|
| STATE: | Vermont |
| PROJECT: | Barre City |
| PROJ No: | FEGC F 026-1(31) C/2 |
| COUNTY: | Washington |
| ROUTE: | US-302 |
| SUBJECT: | CANTILEVER SIGN SUPPORT DETAIL OF TRUSS |
| FOR: | F.R. Lafayette, Inc. |
| DRAWN BY: | JLS DATE: 8/19/11 |
| CHECKED BY: | RRW DATE: 8/22/11 |
| RELEASE FOR CONSTRUCTION: ☐ | DWG NO: C1181-6 |

| STATION # | MARK | QTY | "A" | "C" | PANELS | "D" | "E" | "F" | "G" | "H" | "J" | "K" | "L" | "M" | "N" | "P" |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 112+12.6 RT | 7T1 | 1 | 39'-2¾ | 3'-6 | 12 @ 3'-0 (±) = 36'-0¼ | 3'-3 | 1'-2⁵⁄₁₆ | 2 @ 5 = 0'-10 | 2'-8⅛ | 2 @ 5 = 0'-10 | 18'-9⅛ | 2'-5½ | 3⁷⁄₁₆ | ⅛ | 2⁵⁄₁₆ | 3⁷⁄₁₆ |
| 11+49.5 LT | 7T2 | 1 | 39'-11¾ | 3'-6 | 12 @ 3'-0¾(±) = 36'-9¼ | 3'-3 | 1'-2⁵⁄₁₆ | 2 @ 5 = 0'-10 | 2'-8⅛ | 2 @ 5 = 0'-10 | 19'-1⅝ | 2'-5½ | 3⁷⁄₁₆ | ⅛ | 2⁵⁄₁₆ | 3⁷⁄₁₆ |

| MARK | "R" | "S" | "T" | "V" | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | ⑧ | ⑨ | | ⑪ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7T1 | 2'-11½ | 14'-5⁹⁄₁₆ | 26'-5¹¹⁄₁₆ | 35'-5¾ | a | b | d | f | h | k | m | n | P | | z1 |
| 7T2 | 2'-11½ | 17'-9⅜ | 26'-11¹¹⁄₁₆ | 36'-2 | aa | b | ad | f | ah | k | m | n | P | | z1 |

| VENT HOLE SIZES | |
|---|---|
| WEB MEMBER (OD) | HOLE DIA ± ¼" |
| < 3.500 | ¾ |
| 3.500 | 1¾ |
| 4.000 | 2 |
| 4.500 | 2¼ |
| 5.563 | 2¾ |
| 6.625 | 3¼ |

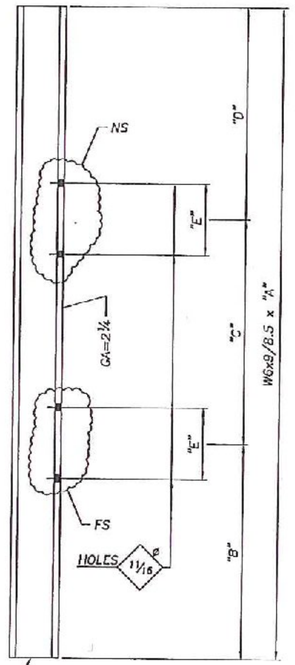
| | | |




1

SIGN HANGERS

| MARK | QTY | "F" | "G" | "H" | "K" | 1 |
|---|---|---|---|---|---|---|
| BH1 | 2 | 4'-0 | 2'-0 | 2'-0 | 1'-0 | a |
| BH2 | 2 | 6'-6 | 3'-3 | 3'-3 | 1'-0 | aa |




2

SIGN HANGERS

| MARK | QTY | "A" | "B" | "C" | "D" | "E" | 2 |
|---|---|---|---|---|---|---|---|
| BH3 | 8 | 4'-0 | 3 | 3'-6 | 3 | 3½ | ba |
| BH4 | 14 | 6'-6 | 1'-6 | 3'-6 | 1'-6 | 3½ | da |

MATERIAL SPECS.

ALL MAT'L. – ASTM A572, GR.50
GALV. AFTER FAB. PER ASTM A123
PAINT – PER WALPAR COATING SYSTEM #3 – COLOR BLACK

| PARTS PER ASSY | MARK NO | NO OF PIECES REQ'D | SECTION SHAPE | DESCRIPTION OF MATERIAL | C1181-8 LENGTH FEET | LENGTH INCHES | PARTS FOR ONE UNIT | |
|---|---|---|---|---|---|---|---|---|
| | BH1 | 2 | | SIGN HANGERS | | | | |
| | a | 2 | WT | 3 x 4.5 | 4 | 0 | 1 | |
| | BH2 | 2 | | SIGN HANGERS | | | | |
| | aa | 2 | WT | 3 x 4.5 | 6 | 6 | 1 | |
| | BH3 | 8 | | SIGN HANGERS | | | | |
| | ba | 8 | W | 6 x 9/8.5 | 4 | 0 | 1 | |
| | BH4 | 14 | | SIGN HANGERS | | | | |
| | da | 14 | W | 6 x 9/8.5 | 6 | 6 | 1 | |

STATE OF VERMONT
BARBARA B. CLEMENTS
8/22/11
NO. 64492
STRUCTURAL
LICENSED
PROFESSIONAL ENGINEER

REF DWG: E1-E5

AASHTO 5th Edition Spec's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FAX (205) 925-7273


| | | | | |
|---|---|---|---|---|
| NO: | REVISIONS | DATE | MADE | CHECKED |
| A | FOR APPROVAL | 8/22/11 | JLS | RKW |

STATE: Vermont
PROJECT: Barre City
PROJ No: FEGC F 026-1(34) C/2
COUNTY: Washington
ROUTE: US-302

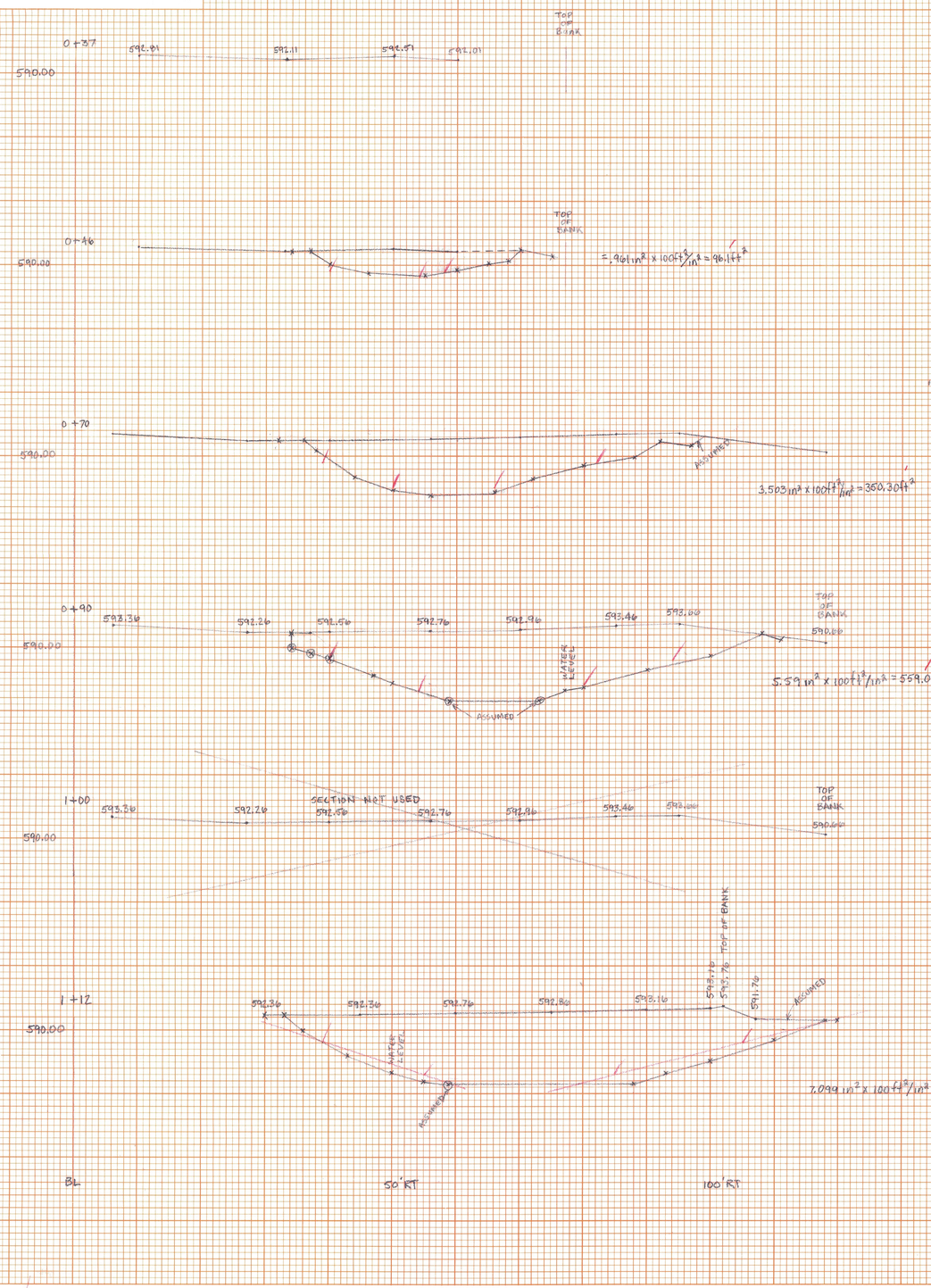
SUBJECT: OVERHEAD SIGN SUPPORTS
SIGN HANGER DETAILS
FOR: F.R. Lafayette, Inc.

DRAWN BY: JLS DATE: 8/19/11
CHECKED BY: RKW DATE: 8/22/11
RELEASE FOR CONSTRUCTION: ☐ DWG NO: C1181-8

SH-DET7

D

# WET POND CROSS SECTIONS




## Earthwork Quantity Calculations

Project No. *Wet Pond*

| Station | CUTS End Area ft² | Average End Area ft² | Length Between Stations ft | Volume yd³ |
|---|---|---|---|---|
| 000+37 | 0.00 | | | |
| | | 48.05 | 9.00 | 16.02 |
| 000+46 | 96.10 | | | |
| | | 223.20 | 24.00 | 198.40 |
| 000+70 | 350.30 | | | |
| | | 454.65 | 20.00 | 336.78 |
| 000+90 | 559.00 | | | |
| | | 634.45 | 22.00 | 516.96 |
| 001+12 | 709.90 | | | |
| | | 746.45 | 22.00 | 608.22 |
| 001+34 | 783.00 | | | |
| | | 714.15 | 18.00 | 476.10 |
| 001+52 | 645.30 | | | |
| | | 594.30 | 9.00 | 198.10 |
| 001+61 | 543.30 | | | |
| | | 271.65 | 22.00 | 221.34 |
| 001+83 | 0.00 | | | |

Total cuts, yd³ 2,571.92

ACCESS DRIVE 226.00 CY

WET POND EMERGENCY OVERFLOW 31.11 CY

TOTAL COMMON EXC. 2829.02 CY

UNAUTHORIZED EXCAVATION BELOW WET POND — DESIGN GRADE - 502.50 CY

(2326.52 CY)

Calculated by Date

8/1/11 CWG

PROJECT NAME: BARRE CITY

PROJECT NUMBER: FEGC F 026-1(34) C/2

COMMON EARTH CALCULATIONS FOR WET POND LOCATED BETWEEN 14+00 - 15+50 RT REF. SHEET 11 of 30.

EXISTING GROUND PLOTTED: 7/12/2011

SUBGRADE PLOTTED:

FINISH GRADE PLOTTED:

QUANTITY CALCULATIONS SHEET 1 OF

CHECKED BY: DOYLE

PLATE 3-FULL CROSS SECTION-FULL LINE
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Field Office Copy

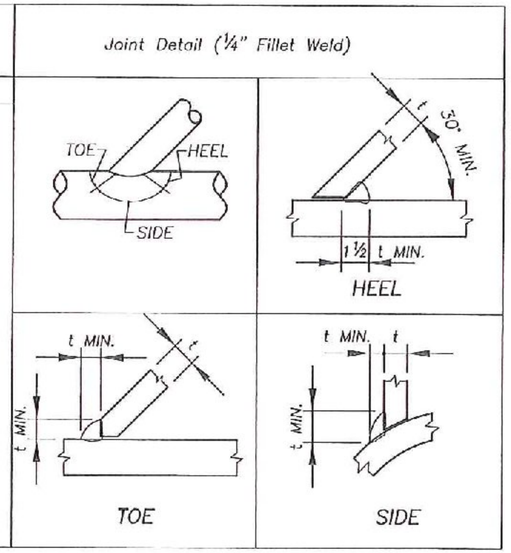
AASHTO/AWS D1.1

# WELDING PROCEDURE SPECIFICATION (WPS)

Project No. FEGC F 026-1(34) C/2 County Barre Date 8/22/11
Material specification API-5L-X52, ASTM-A252, Gr. 3 or ASTM-A500, Gr. B (Mod. to 52 k.s.i.)
Welding process GMAW
Manual or machine Machine Semi-automatic
Position of welding Flat, Horizontal
Filler metal specification AWS A5.18
Filler metal classification ER 70S-6
Flux N/A Manufacturer Lincoln Trade name SuperArc L56 Term. qual. date 11/12/10
Shielding gas 98% argon, 2% oxygen Flow rate 40 CFH Dew point -65° F
Single or multiple pass Multiple
Single or multiple arc Single
Welding current D.C.
Polarity Reverse
Welding progression N.A.
Root treatment Machine cleaned
Preheat and interpass temperature 50° F
Post heat temperature N/A
Angle of electrode Varies
Electrode stickout 1" (±¼")

## WELDING PROCEDURE

| Pass No. | Electrode Size | Welding Current | | Travel Speed | Proc. No. | Joint Detail (¼" Fillet Weld) |
|---|---|---|---|---|---|---|
| | | Amperes | Volts | | | |
| 1 | .045 | 260 | 25 | N.A. | 6 | |
| | | (±10%) | (±7%) | | | |

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BY _____ DATE 10/04/11

This WPS may vary due to fabrication sequence, fit-up, pass size, etc., within the limitation of variables given in Section 3.

STATE OF VERMONT
BARBARA B. CLEMENTS
8/22/11
NO. 64492
STRUCTURAL
LICENSED
PROFESSIONAL ENGINEER

Fabricator WALPAR, LLC S.O. No. C1181
Authorized By Michael Dempsey
Date 8/22/11

Form created 3/5/04 C.C.
File name - D1.1 T-K-Y Pipe Joint.dwg

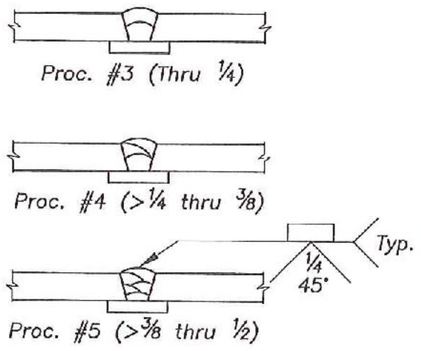
AASHTO/AWS D1.1

# WELDING PROCEDURE SPECIFICATION (WPS)

Project No. FEGC F 026-1(34) C/2 County Barre Date 8/22/11
Material specification API-5L-X52, ASTM-A252, Gr. 3 or ASTM-A500, Gr. B (Mod. to 52 k.s.i.)
Welding process GMAW
Manual or machine Machine Semi-automatic
Position of welding Flat
Filler metal specification AWS A5.18
Filler metal classification ER 70S-6
Flux N/A Manufacturer Lincoln Trade name SuperArc L56 Term. qual. date 11/12/10
Shielding gas 98% argon, 2% oxygen Flow rate 40 CFH Dew point -65° F
Single or multiple pass Multiple
Single or multiple arc Single
Welding current D.C.
Polarity Reverse
Welding progression N.A.
Root treatment Machine cleaned
Preheat and interpass temperature 50° F
Post heat temperature N/A
Angle of electrode Varies
Electrode stickout 1" (±¼")

## WELDING PROCEDURE

| Pass No. | Electrode Size | Welding Current | | Travel Speed | Proc. No. | Joint Detail |
|---|---|---|---|---|---|---|
| | | Amperes | Volts | | | |
| 2 | .045 | 260 | 25 | N.A. | 3 | |
| 3 | .045 | 260 | 25 | N.A. | 4 | |
| 5 | .045 | 260 | 25 | N.A. | 5 | |
| | | (±10%) | (±7%) | | | |




BU2a-GF

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STATE OF VERMONT
BARBARA B. CLEMENTS
8/22/11
NO. 64492
STRUCTURAL I
LICENSED
PROFESSIONAL ENGINEER

Fabricator Walpar, LLC S.O. No. C1181
Authorized By Michael Dempsey
Date 8/22/11

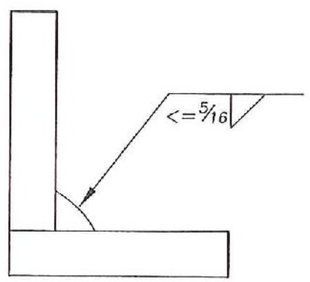
Form created 3/5/04 C.C.
File name – D1.1 Pipe Splice.dwg

AASHTO/AWS D1.1

## WELDING PROCEDURE SPECIFICATION (WPS)

Project No. FEGC F 026-1(34) C/2 County Barre Date 8/22/11
Material specification API-5L-X52, ASTM-A252, Gr. 3 or ASTM-A500, Gr. B (Mod. to 52 k.s.i.)
Welding process GMAW
Manual or machine Machine Semi-automatic
Position of welding Flat, Horizontal
Filler metal specification AWS A5.18
Filler metal classification ER 70S-6
Flux N/A Manufacturer Lincoln Trade name SuperArc L56 Term. qual. date 11/12/10
Shielding gas 98% argon, 2% oxygen Flow rate 40 CFH Dew point -65° F
Single or multiple pass Single
Single or multiple arc Single
Welding current D.C.
Polarity Reverse
Welding progression N.A.
Root treatment Machine cleaned
Preheat and interpass temperature 50° F
Post heat temperature N/A
Angle of electrode Varies
Electrode stickout 1" (±¼")

## WELDING PROCEDURE

| Pass No. | Electrode Size | Welding Current | | Travel Speed | Proc. No. | Joint Detail (Fillet Weld) |
|---|---|---|---|---|---|---|
| | | Amperes | Volts | | | |
| 1 | .045 | 260 | 25 | N.A. | 1 |  |
| | | (±10%) | (±7%) | | | |



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STATE OF VERMONT
BARBARA B. CLEMENTS
8/22/11
NO. 64492
STRUCTURAL
LICENSED
PROFESSIONAL ENGINEER

Fabricator Walpar, LLC S.O. No. C1181
Authorized By Michael Dempsey
Date 8/22/11

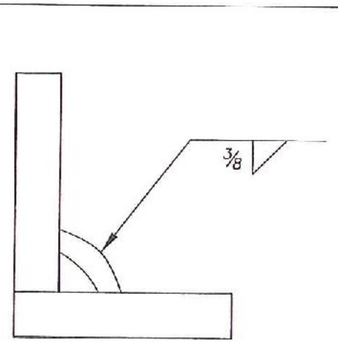
Form created 3/5/04 C.C.
File name - D1.1 Fillet weld.dwg

AASHTO/AWS D1.1–2006

## WELDING PROCEDURE SPECIFICATION (WPS)

Project No. FEGC F 026-1(34) C/2 City Barre Date 8/22/11
Material specification ASTM-A572 Gr. 50, API-5L-X52, ASTM-A252, Gr. 3 or ASTM-A500, Gr. B (Mod. to 52 k.s.i.)
Welding process GMAW
Manual or machine Machine Semi-automatic
Position of welding Flat, Horizontal
Filler metal specification AWS A5.18
Filler metal classification ER 70S-6
Flux N/A
Shielding gas 98% argon, 2% oxygen Flow rate 40 CFH Dew point -65° F
Single or multiple pass Multiple
Single or multiple arc Single
Welding current D.C.
Polarity Reverse
Welding progression N.A.
Root treatment Machine cleaned
Preheat and interpass temperature 150° F
Post heat temperature N/A
Angle of electrode Varies
Electrode stickout 1" (±¼")

## WELDING PROCEDURE

| Pass No. | Electrode Size | Welding Current | | Travel Speed | Proc. No. | Joint Detail (Fillet Weld) |
|---|---|---|---|---|---|---|
| | | Amperes | Volts | | | |
| 2 | .045 | 260 | 25 | N.A. | 1 |  |
| | | (±10%) | (±7%) | | | |



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Fabricator Walpar, LLC S.O. No. C1181
Authorized By Michael Dempsey
Date 8/22/11

Form created 3/5/04 C.C.
File name – D1.1 Fillet weld.dwg