

STATE OF VERMONT
AGENCY OF TRANSPORTATION



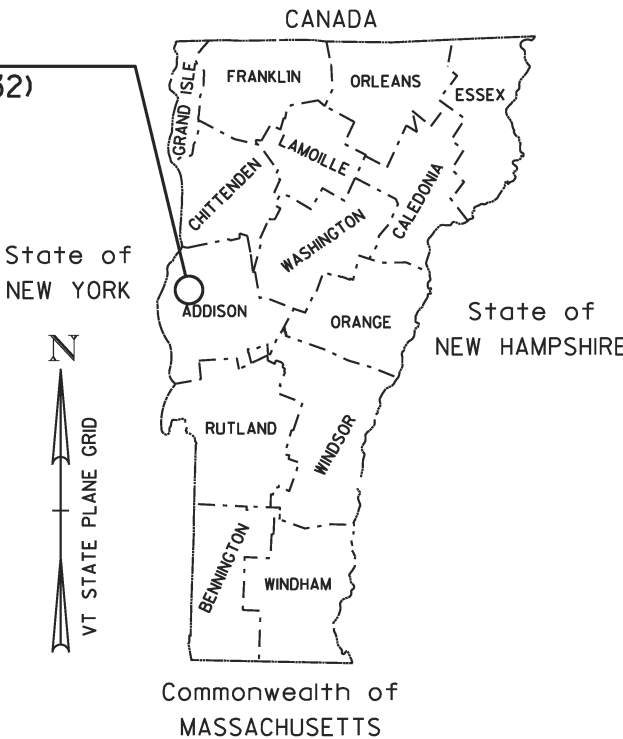
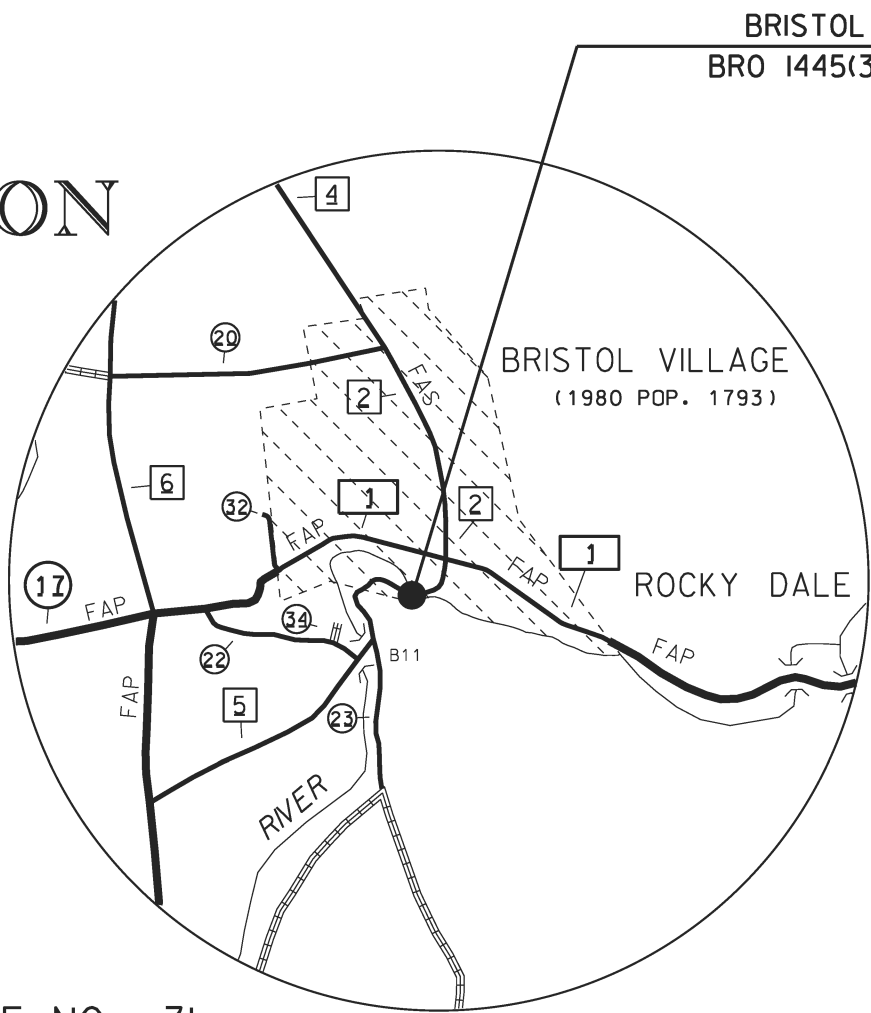
R.O.W. PLANS

PROPOSED IMPROVEMENT
BRIDGE PROJECT

TOWN OF BRISTOL, ADDISON COUNTY

ROUTE NO : TH 5 CLASS II, LOCAL ROAD (SOUTH STREET) BRIDGE NO : 31

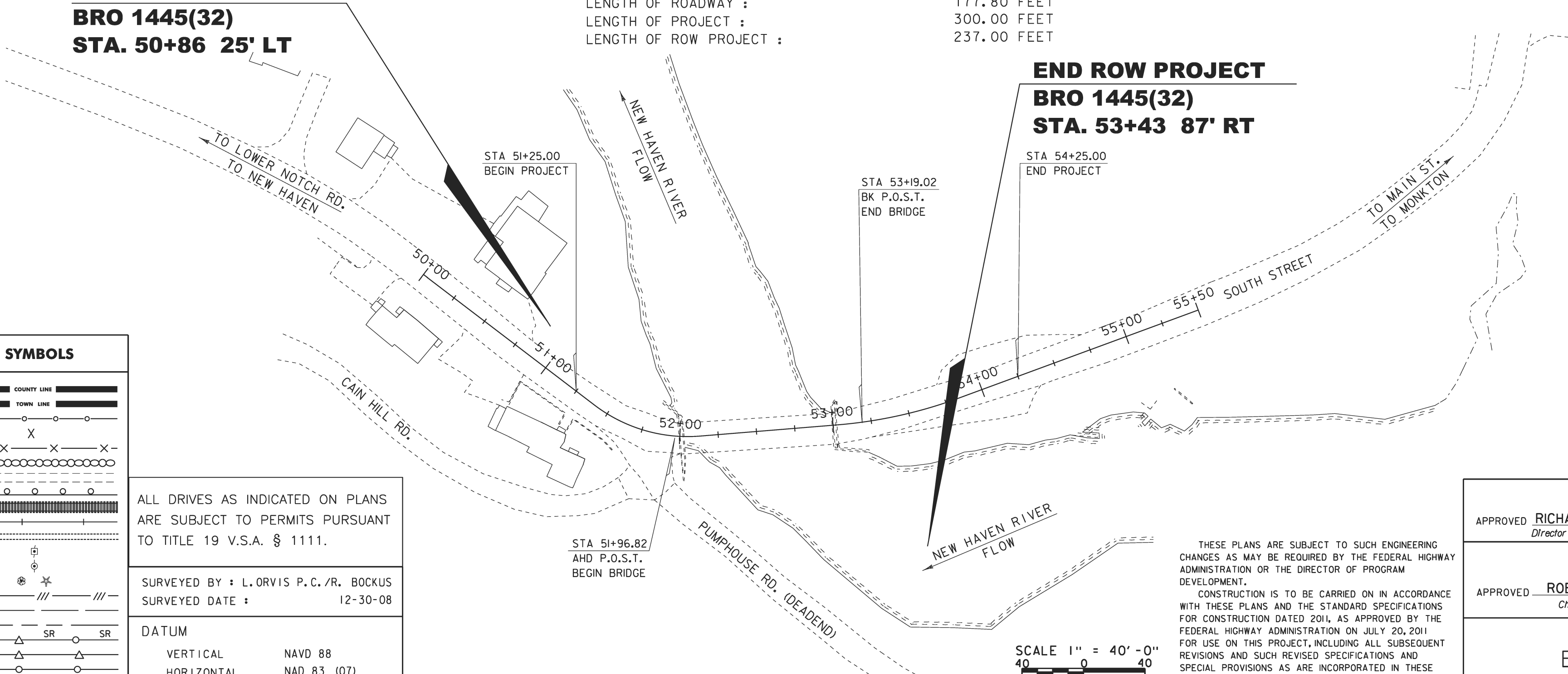
PROJECT LOCATION : THE BRIDGE IS LOCATED ON TOWN HIGHWAY 5 (SOUTH STREET) APPROXIMATELY 0.2 MILES SOUTHWEST OF THE INTERSECTION OF TOWN HIGHWAY 5 AND VT RTE 17.
PROJECT DESCRIPTION : REPLACEMENT OF EXISTING TRUSS BRIDGE WITH A NEW SINGLE SPAN BRIDGE, NEW ABUTMENTS AND NECESSARY APPROACH WORK.



BEGIN ROW PROJECT
BRO 1445(32)
STA. 50+86 25' LT

LENGTH OF STRUCTURE : 122.20 FEET
LENGTH OF ROADWAY : 177.80 FEET
LENGTH OF PROJECT : 300.00 FEET
LENGTH OF ROW PROJECT : 237.00 FEET

END ROW PROJECT
BRO 1445(32)
STA. 53+43 87' RT



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	
TOP OF CUT	
TOE OF SLOPE	

ALL DRIVES AS INDICATED ON PLANS
ARE SUBJECT TO PERMITS PURSUANT
TO TITLE 19 V.S.A. § 1111.

SURVEYED BY : L. ORVIS P.C./R. BOCKUS
SURVEYED DATE : 12-30-08

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (07)

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 2011, AS APPROVED BY THE
FEDERAL HIGHWAY ADMINISTRATION ON JULY 20, 2011
FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT
REVISIONS AND SUCH REVISED SPECIFICATIONS AND
SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE
PLANS.

APPROVED RICHARD TETREAU DATE 07-23-12
Director of Program Development

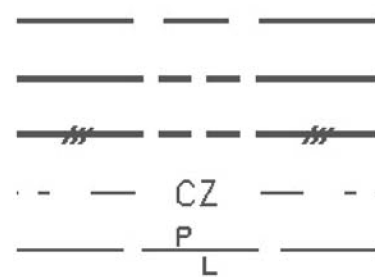
APPROVED ROBERT M. WHITE DATE 07-23-12
Chief of Right of Way

BRISTOL
BRO 1445(32)
ROW SHEET 1 OF 19 SHEETS

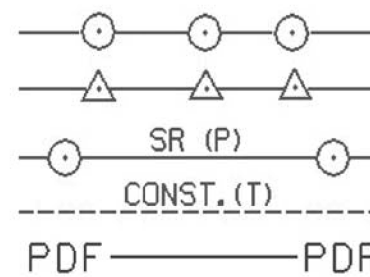
RIGHT - OF - WAY DETAIL SHEET

[illegible][illegible]

PLAN LEGEND



EXISTING RIGHT-OF-WAY
TAKING WITH ACCESS
TAKING WITHOUT ACCESS
CLEAR ZONE
PROPERTY LINE



TOE OF SLOPE
TOP OF CUT
SLOPE RIGHT
CONSTRUCTION RIGHT
PROJECT DEMARCATION FENCE

(P)	-PERMANENT
(T)	-TEMPORARY
DR.	-DRAINAGE RIGHT
DIT.	-DITCHING RIGHT
CH.	-CHANNEL RIGHT
DRIVE	-DRIVE RIGHT
CUL.	-CULVERT RIGHT
BND	-BOUND (PROPERTY MARKER)
SR	-SLOPE RIGHT
UE	-UTILITY EASEMENT

APPROVED: HARRY PETROVS DATE: 07-23-12
CHIEF, PLANS & TITLES

PROJECT NAME: BRISTOL	
PROJECT NUMBER: BRO 1445(32)	
FILE NAME: r05352DetailSheet.xls	PLOT DATE: 20-MAY-2013
PROJECT LEADER: K. HIGGINS	DRAWN BY: M. TROTTIER
DESIGNED BY: A. EGIZI	CHECKED BY: A. EGIZI
R.O.W. DETAIL SHEET #1	SHEET 2 OF 19

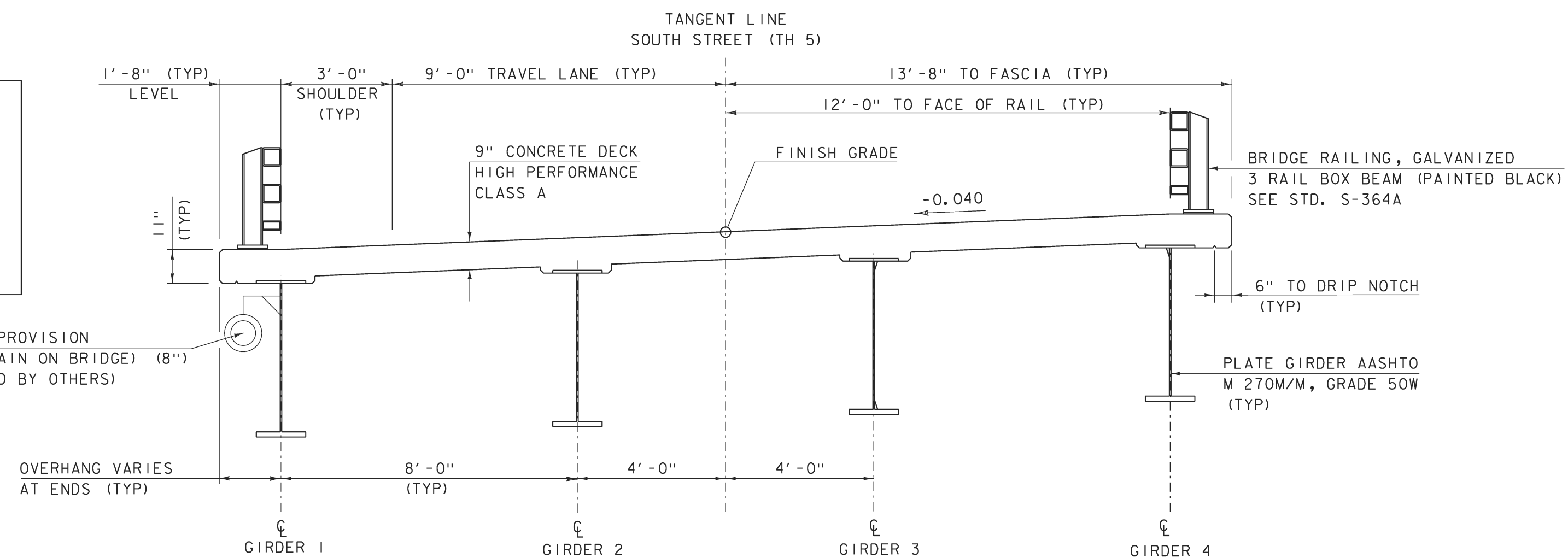
1	TITLE SHEET
2	DETAIL SHEET
3	ROW LAYOUT SHEET
4	PRELIMINARY INFORMATION SHEET
5-6	TYPICAL SECTIONS
7	TIE SHEET
8	ALIGNMENT SHEET
9-10	PROFILE SHEETS
11-12	UTILITY SHEETS
13	DRAINAGE LAYOUT SHEET
14	SIGN LAYOUT SHEET
15	PLAN & ELEVATION SHEET
16-18	EPSC DETAIL SHEETS
19	EPSC - DURING CONSTRUCTION SHEET

PROJECT NAME: BRISTOL	
PROJECT NUMBER: BRO 1445(32)	
FILE NAME: r05j352.plt.dgn	PLOT DATE: 06-MAR-2013
PROJECT LEADER: K. HIGGINS	DRAWN BY: R. PELLETT
DESIGNED BY: G. LAROCHE	CHECKED BY: T. FILLBACH
PRELIMINARY INFORMATION SHEET	SHEET 4 OF 19

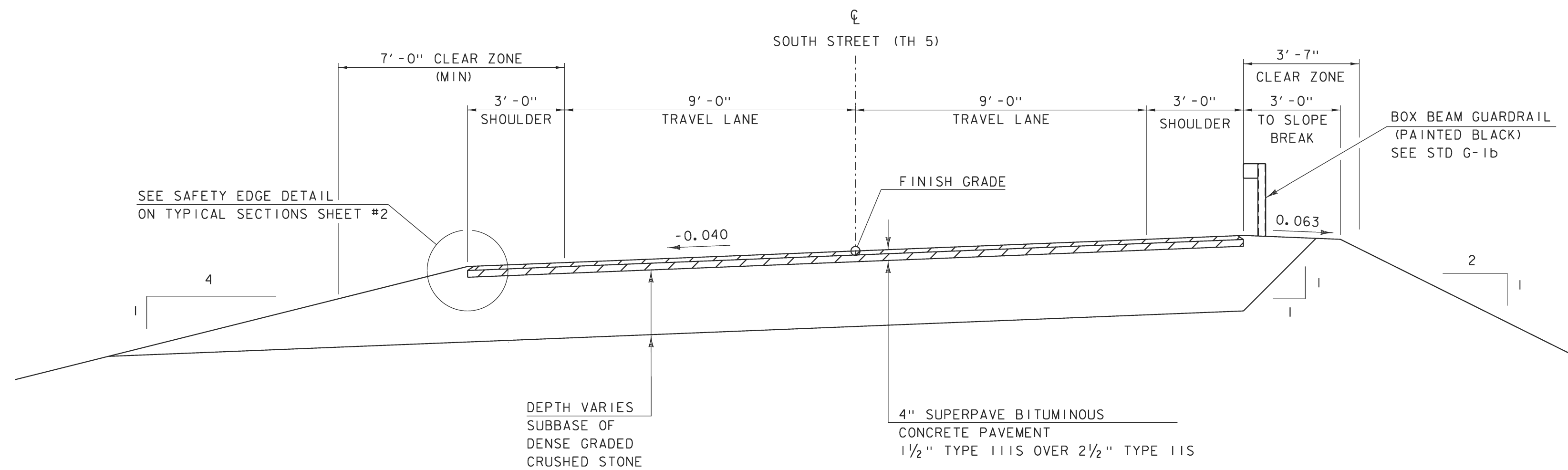
(IF USED ON PROJECT)

SURFACE	
- PAVEMENT (TOTAL THICKNESS)	+/- 1/4 "
- AGGREGATE SURFACE COURSE	+/- 1/2 "
SUBBASE	+/- 1 "
SAND BORROW	+/- 1 "

SPECIAL PROVISION
(WATER MAIN ON BRIDGE) (8")
(DESIGNED BY OTHERS)



SCALE 1/2" = 1'-0"

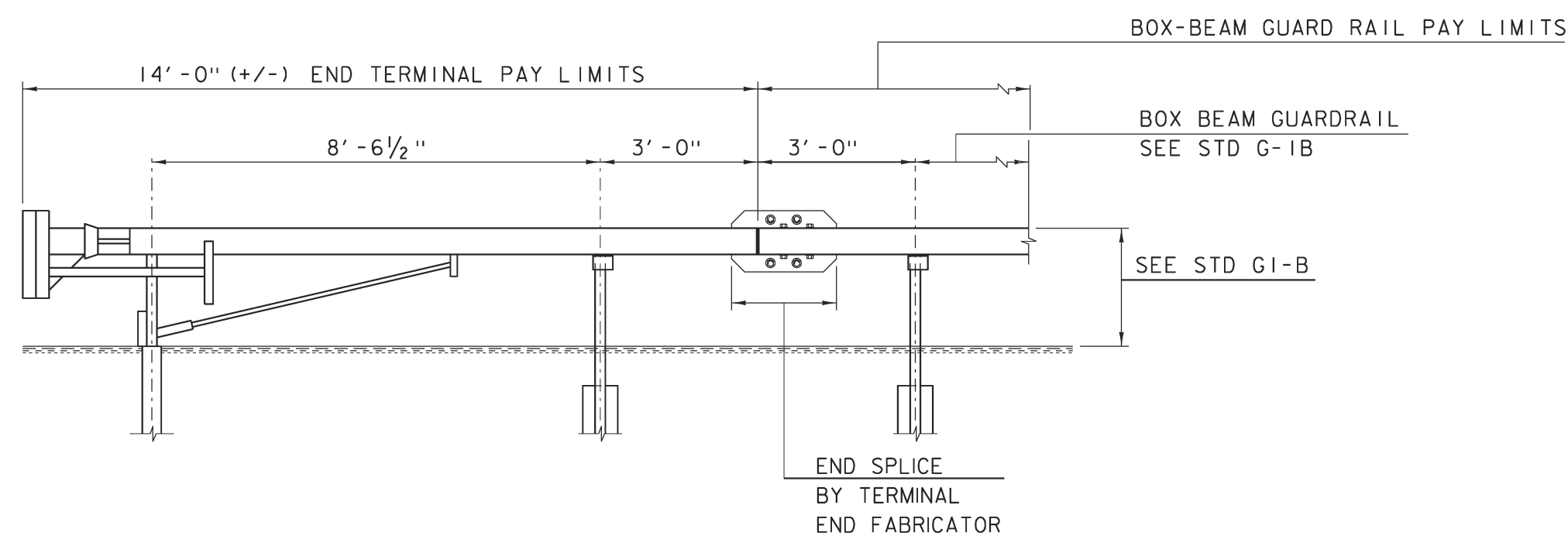


SCALE 1/2" = 1'-0"

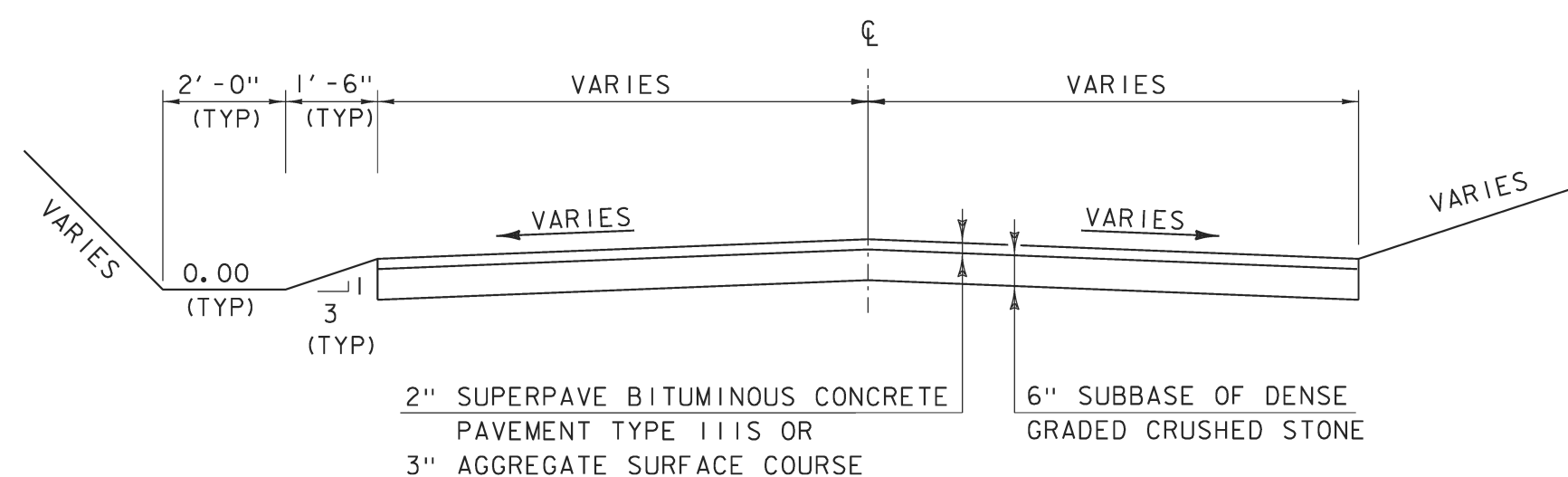
PROJECT NAME:	BRISTOL
PROJECT NUMBER:	BRO 1445(32)

FILE NAME: s05j352+yp.dgn
PROJECT LEADER: J. LACROIX
DESIGNED BY: G. LAROCHE
TYPICAL SECTIONS SHEET #1

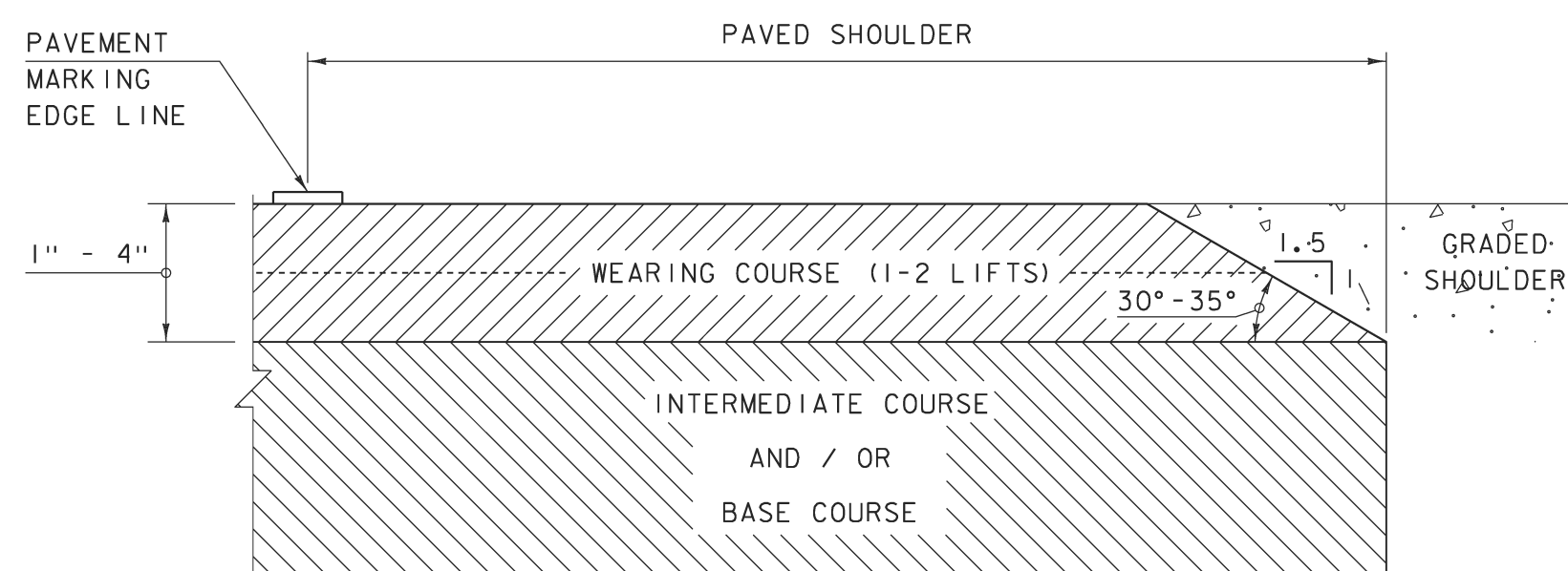
PLOT DATE: 06-MAR-2013
DRAWN BY: R. PELLETT
CHECKED BY: T. FILLBACH
SHEET 5 OF 19



MANUFACTURED TERMINAL SECTION, TANGENT DETAIL
SCALE 1/2" = 1'-0"

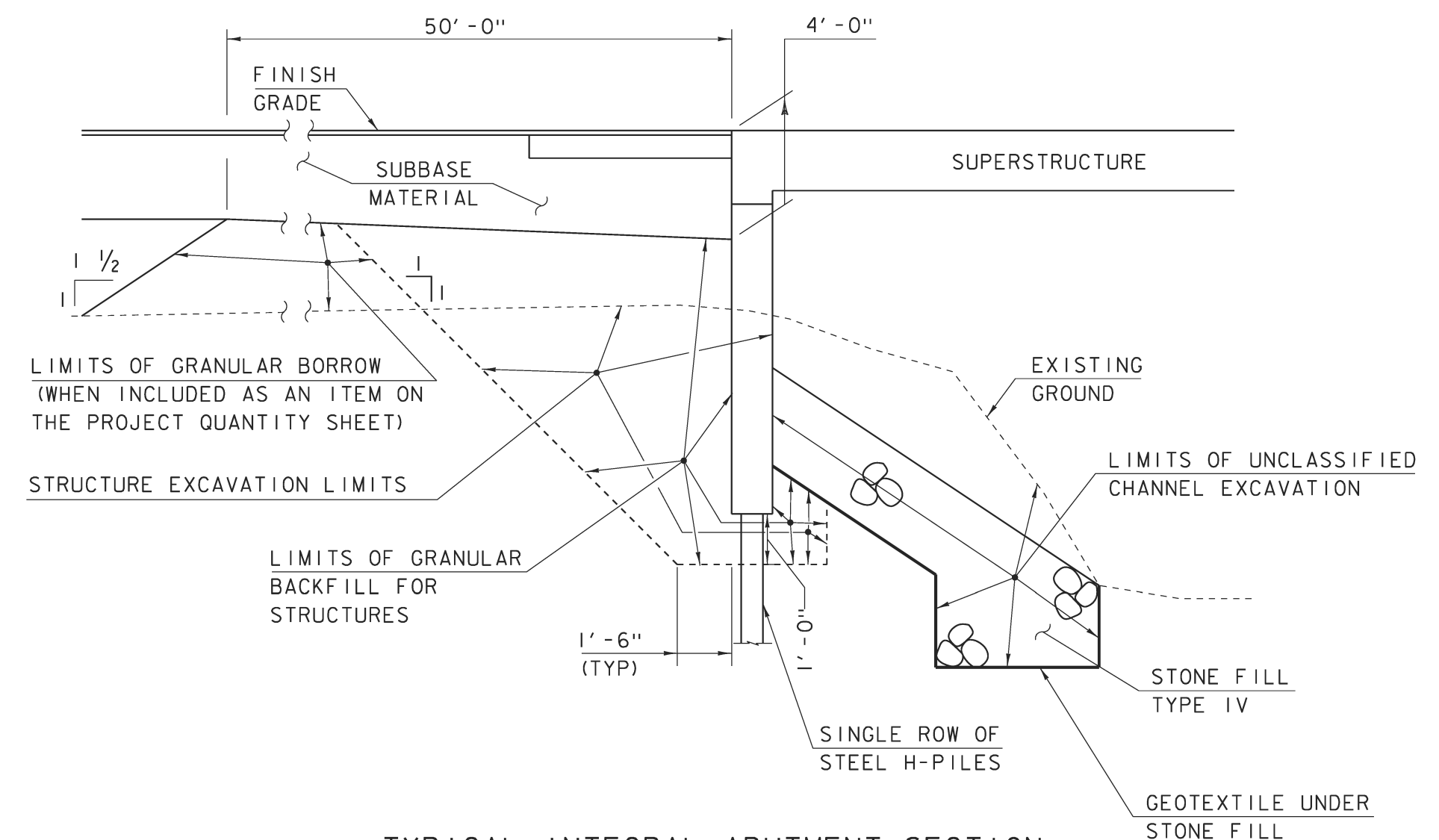


SIDE ROAD TYPICAL SECTION
SCALE 1/2" = 1'-0"



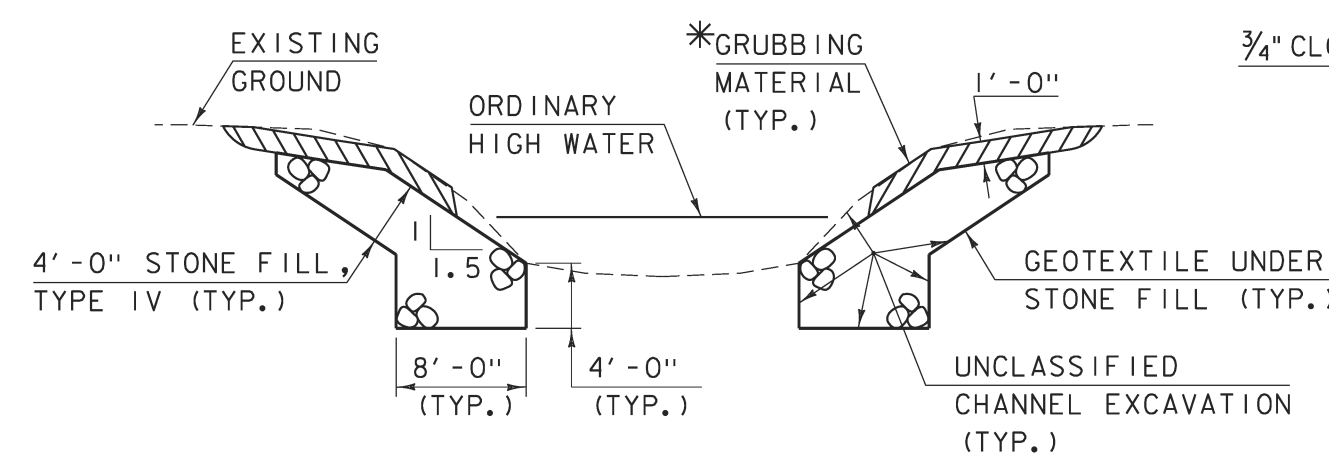
SAFETY EDGE DETAIL
NOT TO SCALE

NOTE: LEVELING COURSE MAY INCLUDE THE "SAFETY EDGE" AT THE CONTRACTOR'S CHOICE.



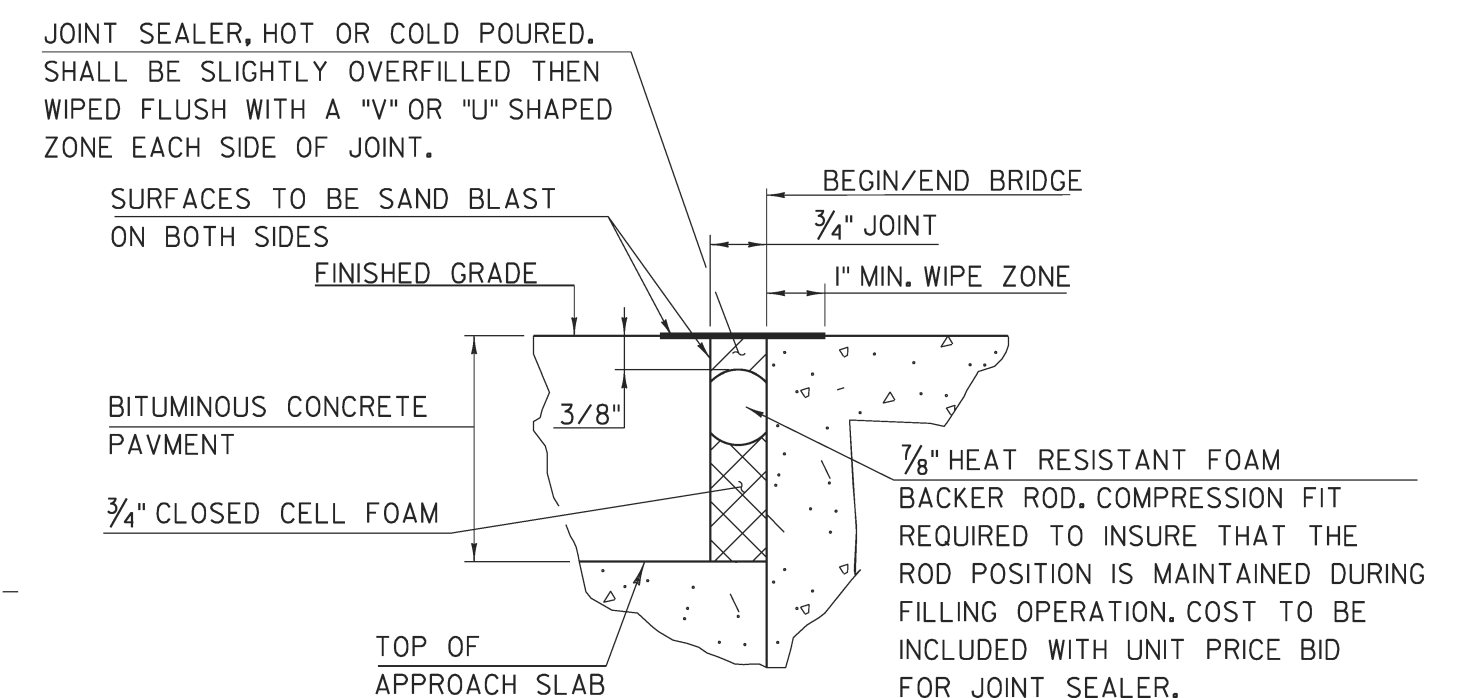
TYPICAL INTEGRAL ABUTMENT SECTION
NOT TO SCALE

ACTUAL LIMITS OF STRUCTURE EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR. HOWEVER, ONLY THE EXCAVATION BETWEEN THE LIMITS SHOWN WILL BE PAID FOR UNDER THE ITEM 204.25 "STRUCTURE EXCAVATION". EXCAVATION BY THE CONTRACTOR OUTSIDE OF THESE LIMITS WILL BE AT THE EXPENSE OF THE CONTRACTOR.



TYPICAL CHANNEL SECTION
(NOT TO SCALE)

*GRUBBING MATERIAL SHALL NOT BE PLACED ON THE STONE FILL IN THE AREA UNDER THE BRIDGE. WHENEVER CHANNEL SLOPE INTERSECTS ROADWAY SUBBASE, GRUBBING MATERIAL SHALL BEGIN AT THE BOTTOM OF SUBBASE.



PROJECT NAME: BRISTOL
PROJECT NUMBER: BRO 1445(32)

FILE NAME: s05j352typ.dgn
PROJECT LEADER: J. LACROIX
DESIGNED BY: G. LAROCHE
TYPICAL SECTIONS SHEET #2

PLOT DATE: 06-MAR-2013
DRAWN BY: R. PELLETT
CHECKED BY: T. FILLBACH
SHEET 6 OF 19

GPS CONTROL POINTS

HVCTRL #1

LATHROP AZ MK
NORTH = 596195.437
EAST = 1486663.832
ELEV. = 565.693

GENERAL LOCATION BRISTOL, VT.
TO REACH FROM THE INTERSECTION OF BURPEE ROAD, VT ROUTE 17 AND VT ROUTE 116 SOUTH, JUST WEST OF BRISTOL VILLAGE, GO EAST ALONG VT ROUTES 17/116 FOR 0.8 MI (1.3 KM) TO THE INTERSECTION OF MUNSILL AVENUE LEFT AND THE SITE OF THE MARK ON THE RIGHT. THE MARK IS SET IN THE TOP OF A 30 CM (12 INCHES) DIAMETER CONCRETE MONUMENT POURED 1.4 M (4.6 FT) DEEP. IT IS 6.5 M (21.3 FT) SOUTH OF AND ABOUT 0.3 M (1.0 FT) LOWER THAN THE CENTERLINE OF VT ROUTE 17/116, 1.8 M (5.9 FT) SOUTH OF A STEEL BEAM GUARD RAIL, 21.4 M (70.2 FT) EAST OF POLE NO 21/8/13, 10.7 M (35.1 FT) WEST OF POLE NO 20/12, 2.5 M (8.2 FT) NORTH OF THE TOP OF A STEEP BANK, AND 0.3 M (1.0 FT) NORTH OF A FIBERGLASS WITNESS POST.

HVCTRL #2

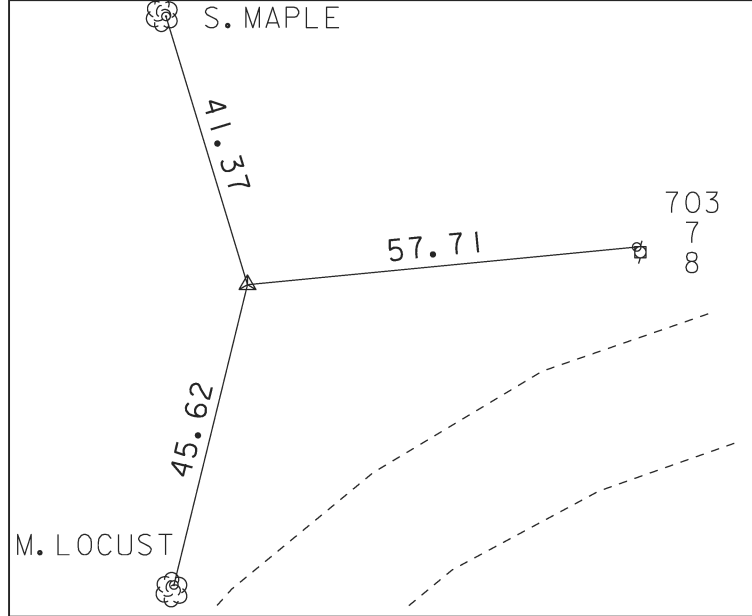
LATHROP
NORTH = 595029.754
EAST = 1487003.577
ELEV. = 461.658

GENERAL LOCATION BRISTOL, VT. OWNERSHIP-- LATHROP LTD, 62 WEST STREET, BRISTOL, VT 05443.
TO REACH FROM THE INTERSECTION OF BURPEE ROAD, VT ROUTE 17 AND VT ROUTE 116 SOUTH, JUST WEST OF BRISTOL VILLAGE, GO EAST ALONG VT ROUTES 17/116 FOR 1.1 MI (1.8 KM) TO THE INTERSECTION OF NORTH STREET LEFT AND SOUTH STREET RIGHT AT THE TRAFFIC LIGHT IN BRISTOL VILLAGE. TURN RIGHT AND GO SOUTH ALONG SOUTH STREET FOR 0.4 MI (0.6 KM) TO THE CLARE LATHROP LUMBER YARD ON THE RIGHT AND THE SITE OF THE MARK ON THE LEFT, ABOUT OPPOSITE THE MOST SOUTHERLY GATE TO THE LUMBER YARD. THE MARK IS SET IN THE TOP OF A 1.5 M (4.9 FT) X 1.2 M (3.9 FT) BOULDER WHICH PROJECTS ABOUT 0.8 M ABOVE GROUND SURFACE. IT IS 12.9 M (42.3 FT) EAST OF AND ABOUT 2.2 M (7.2 FT) HIGHER THAN THE CENTERLINE OF SOUTH STREET, 20.6 M (67.6 FT) EAST-NORTHEAST OF POLE NO 11, 22.8 M (74.8 FT) EAST-SOUTHEAST OF THE MOST SOUTHERLY GATE POST OF THE SOUTHERN GATE TO THE LATHROP LUMBER YARD, 41.2 M (135.2 FT) SOUTH-SOUTHWEST OF POLE NO 9, AND 1.7 M (5.6 FT) NORTHWEST OF A FIBERGLASS WITNESS POST.

TRAVERSE TIES

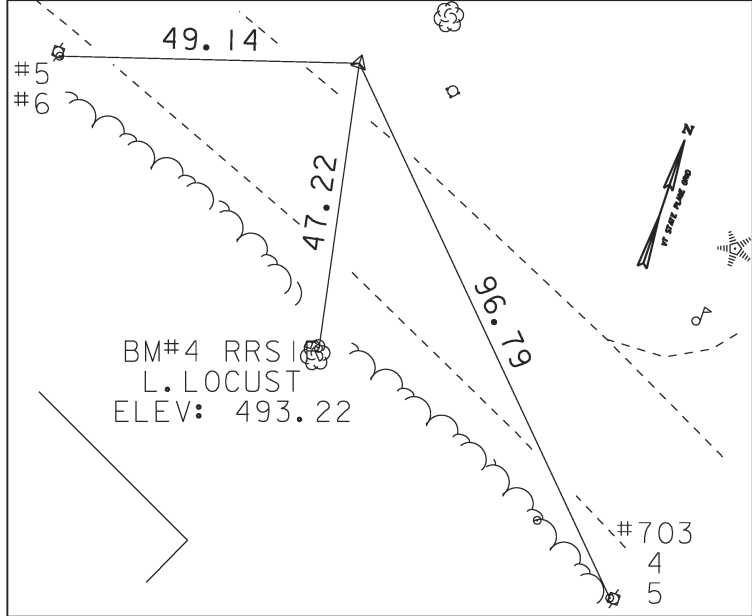
HVCTRL #3

NORTH = 595431.576
EAST = 1487230.649
ELEV. = 481.028



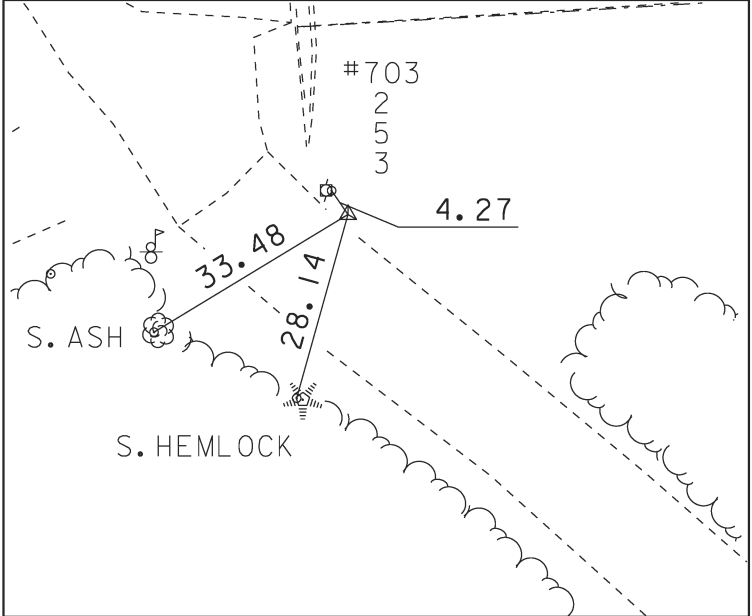
HVCTRL #4

NORTH = 595361.273
EAST = 1487589.444
ELEV. = 488.396



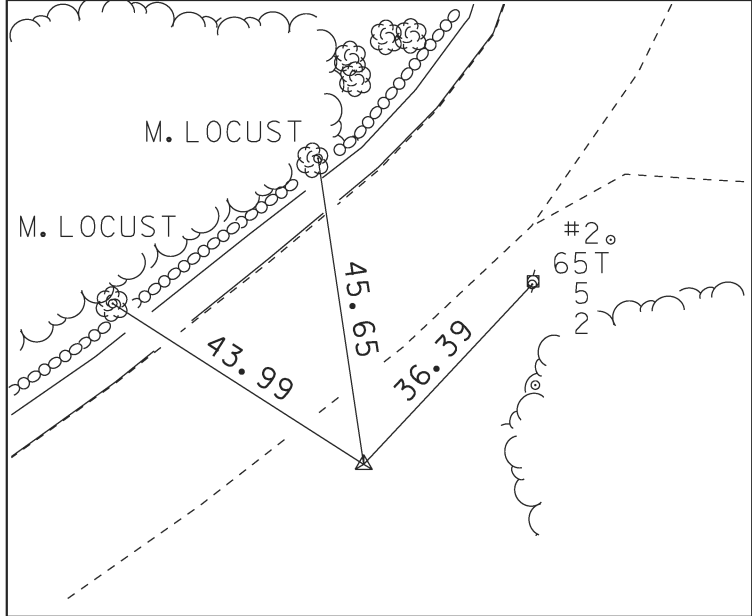
HVCTRL #5

NORTH = 595103.408
EAST = 1487927.976
ELEV. = 495.856



HVCTRL #6

NORTH = 595290.930
EAST = 1488415.521
ELEV. = 529.217



NORTH =
EAST =
ELEV. =

* Main Traverse Completed 12/30/2008 by L.Orvis & R.Bockus

ALIGNMENT TIES

NORTH =
EAST =
ELEV. =

NORTH =
EAST =
ELEV. =

NORTH =
EAST =
ELEV. =

NORTH =
EAST =
ELEV. =

NORTH =
EAST =
ELEV. =

DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (07)
ADJUSTMENT	Compass

PROJECT NAME:	Bristol
PROJECT NUMBER:	BRO 1445 (32)
FILE NAME: 05j352\survey\x05j352+1.dg	PLOT DATE: 06-MAR-2013
PROJECT LEADER: Kristin Higgins	DRAWN BY: R. Bullock
DESIGNED BY: G. LAROCHE	CHECKED BY: T. FILLBACH
TIE SHEET	SHEET 7 OF 19

MAINLINE
CURVE DATA #1

$\Delta = 42^{\circ}-01'-18.93''$
 $D = 57^{\circ}-17'-44.81''$
 $R = 100'-0''$
 $T = 38.41'$
 $L = 73.34'$
 $E = 7.12'$

MAINLINE
CURVE DATA #2

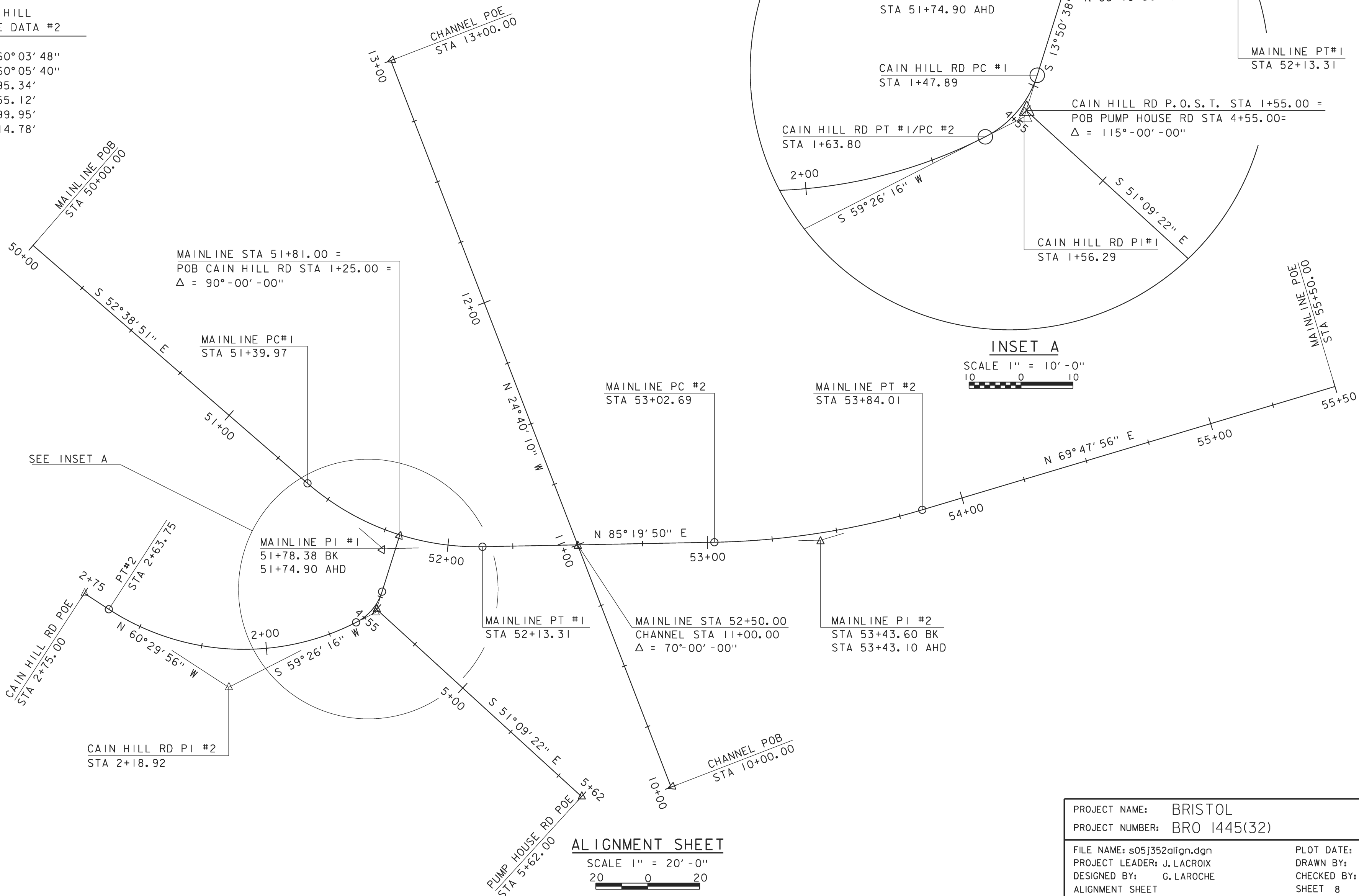
$\Delta = 15^{\circ}-31'-53.99''$
 $D = 19^{\circ}-05'-54.94''$
 $R = 300'-0''$
 $T = 40.91'$
 $L = 81.32'$
 $E = 2.78'$

CAIN HILL
CURVE DATA #1

$\Delta = 45^{\circ}35'39''$
 $D = 286^{\circ}28'44''$
 $R = 20.00'$
 $T = 8.41'$
 $L = 15.92'$
 $E = 1.69'$

CAIN HILL
CURVE DATA #2

$\Delta = 60^{\circ}03'48''$
 $D = 60^{\circ}05'40''$
 $R = 95.34'$
 $T = 55.12'$
 $L = 99.95'$
 $E = 14.78'$

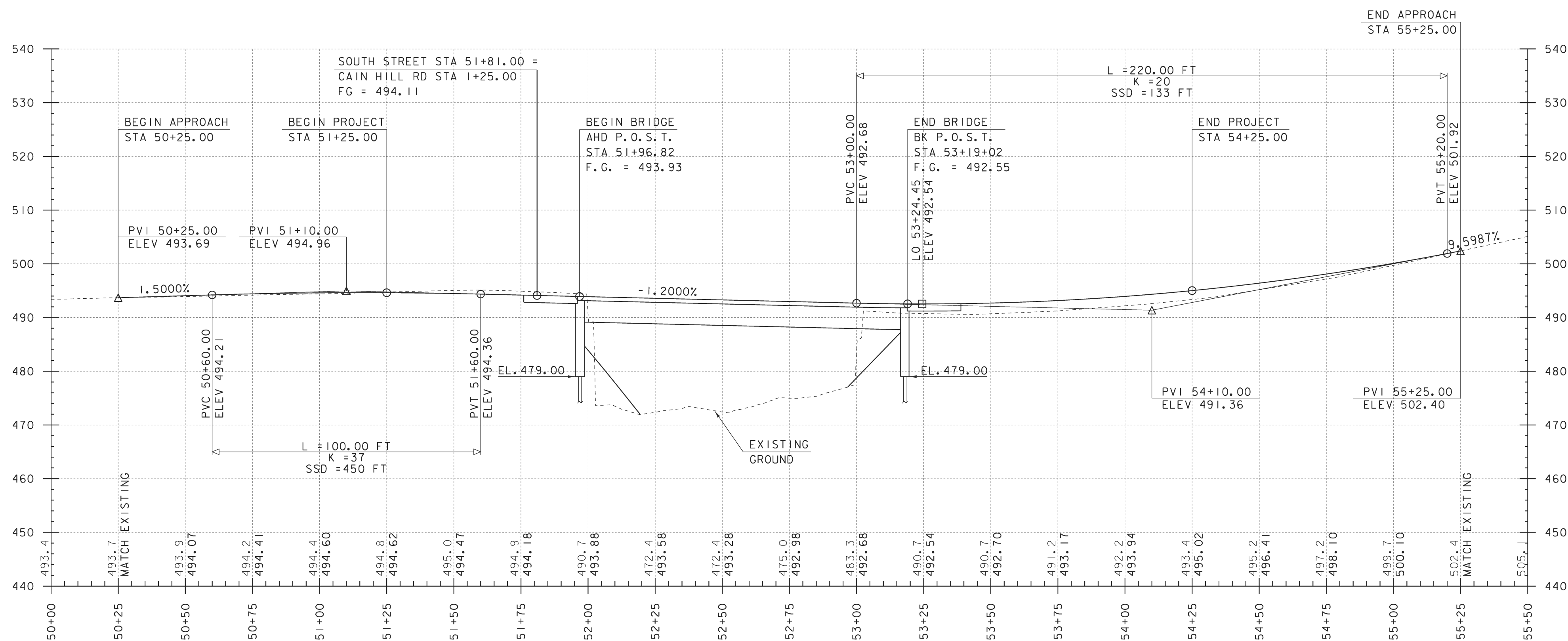


ALIGNMENT SHEET

PROJECT NAME: BRISTOL
PROJECT NUMBER: BRO 1445(32)

FILE NAME: s05j352align.dgn
PROJECT LEADER: J. LACROIX
DESIGNED BY: G. LAROCHE
ALIGNMENT SHEET

PLOT DATE: 06-MAR-2013
DRAWN BY: J. SALVATORI
CHECKED BY: T. FILLBACH
SHEET 8 OF 19

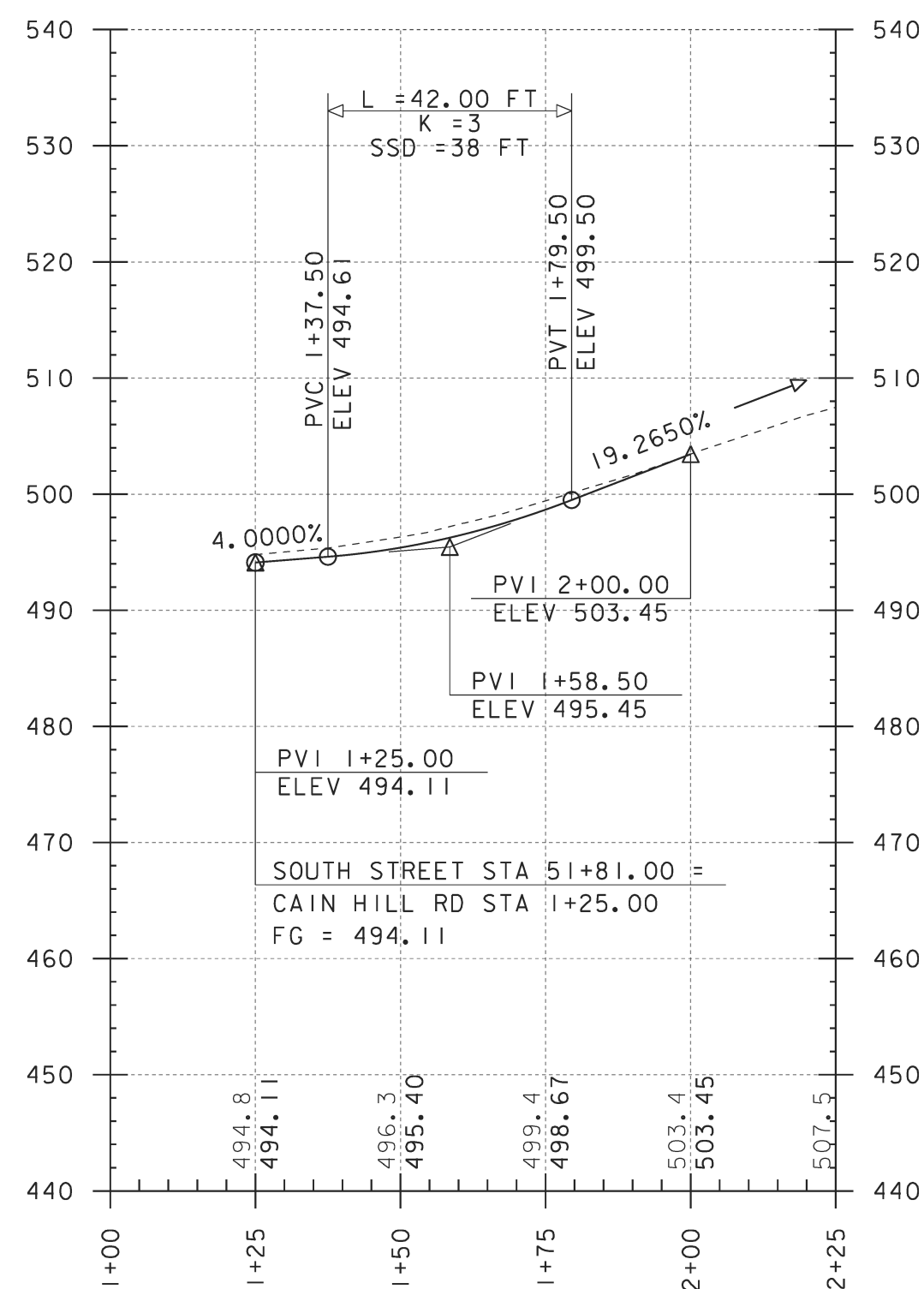


MAINLINE PROFILE

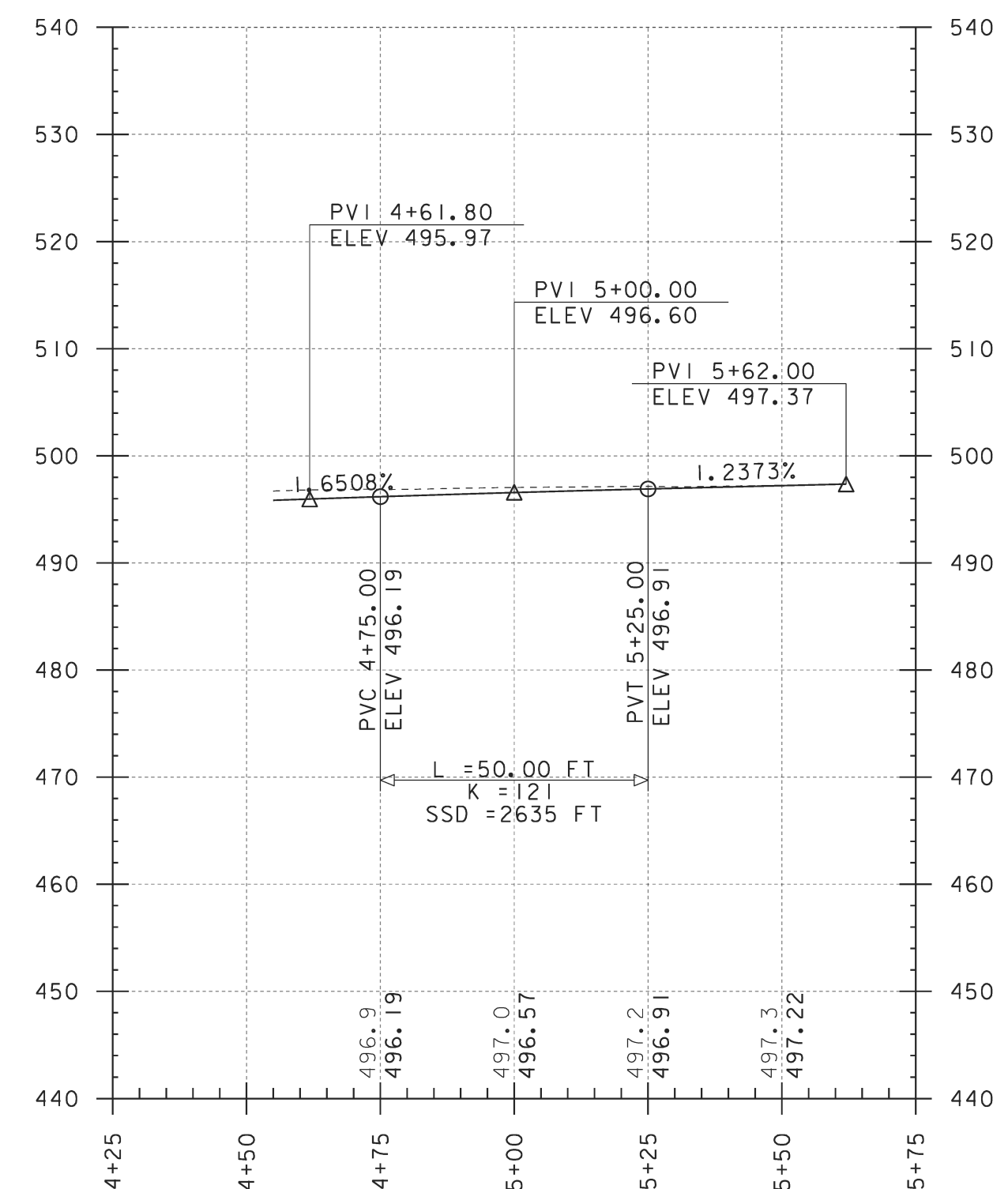
THE GRADES SHOWN TO THE NEAREST TENTH ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT.

THE GRADES SHOWN TO THE NEAREST HUNDREDTH ARE THE FINISH GRADES ALONG THE PROPOSED ALIGNMENT.

PROJECT NAME:	BRISTOL
PROJECT NUMBER:	BRO 1445(32)
FILE NAME:	s05j352pro.dgn
PROJECT LEADER:	J. LACROIX
DESIGNED BY:	G. LAROCHE
MAINLINE PROFILE SHEET	
PLOT DATE:	06-MAR-2013
DRAWN BY:	R. PELLETT
CHECKED BY:	T. FILLBACH
SHEET	9 OF 19



CAIN HILL ROAD PROFILE

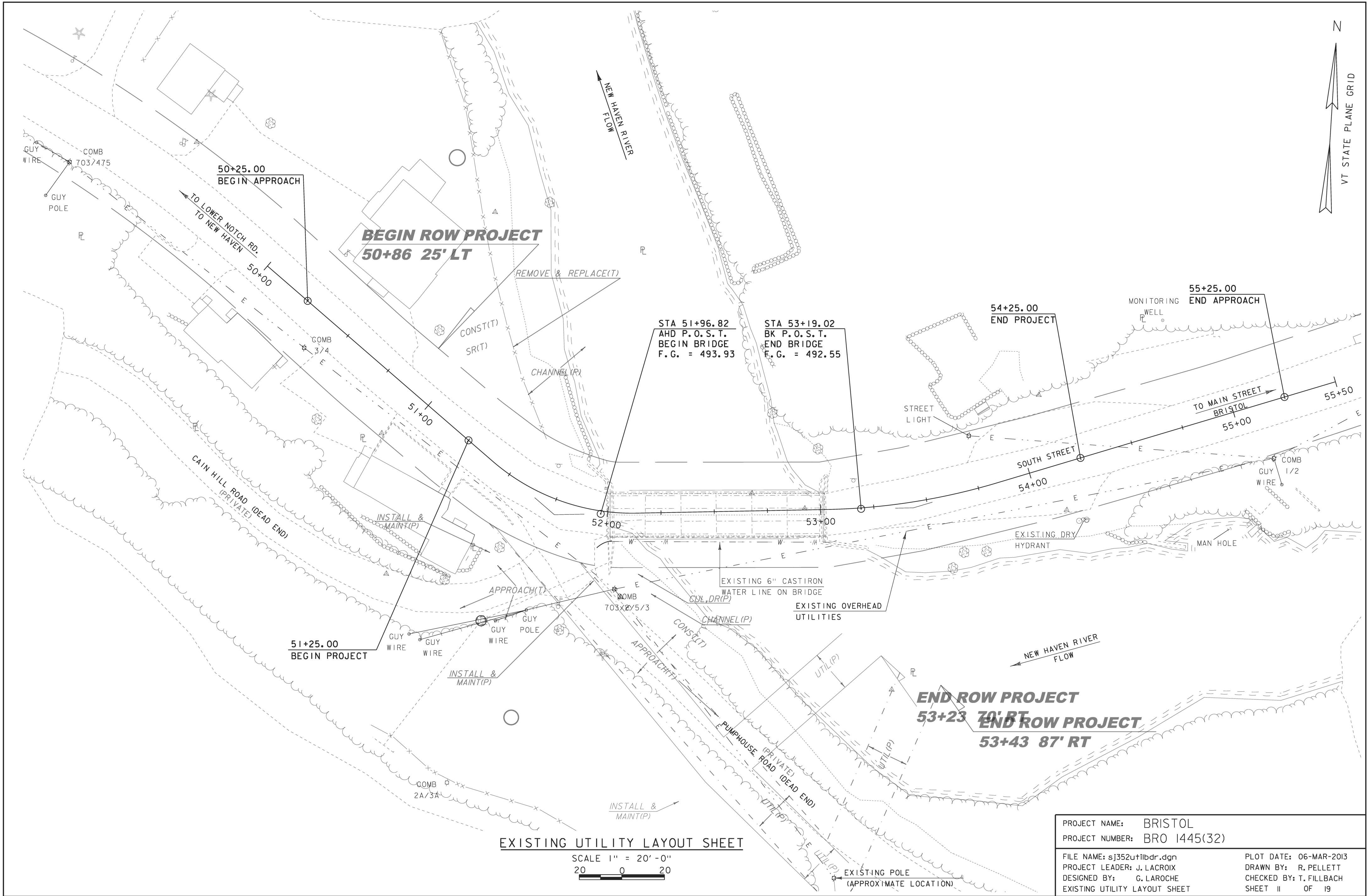


PUMPHOUSE ROAD PROFILE

THE GRADES SHOWN TO THE NEAREST TENTH ARE THE ORIGINAL
GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT.

THE GRADES SHOWN TO THE NEAREST HUNDREDTH ARE THE FINISH
GRADES ALONG THE PROPOSED ALIGNMENT.

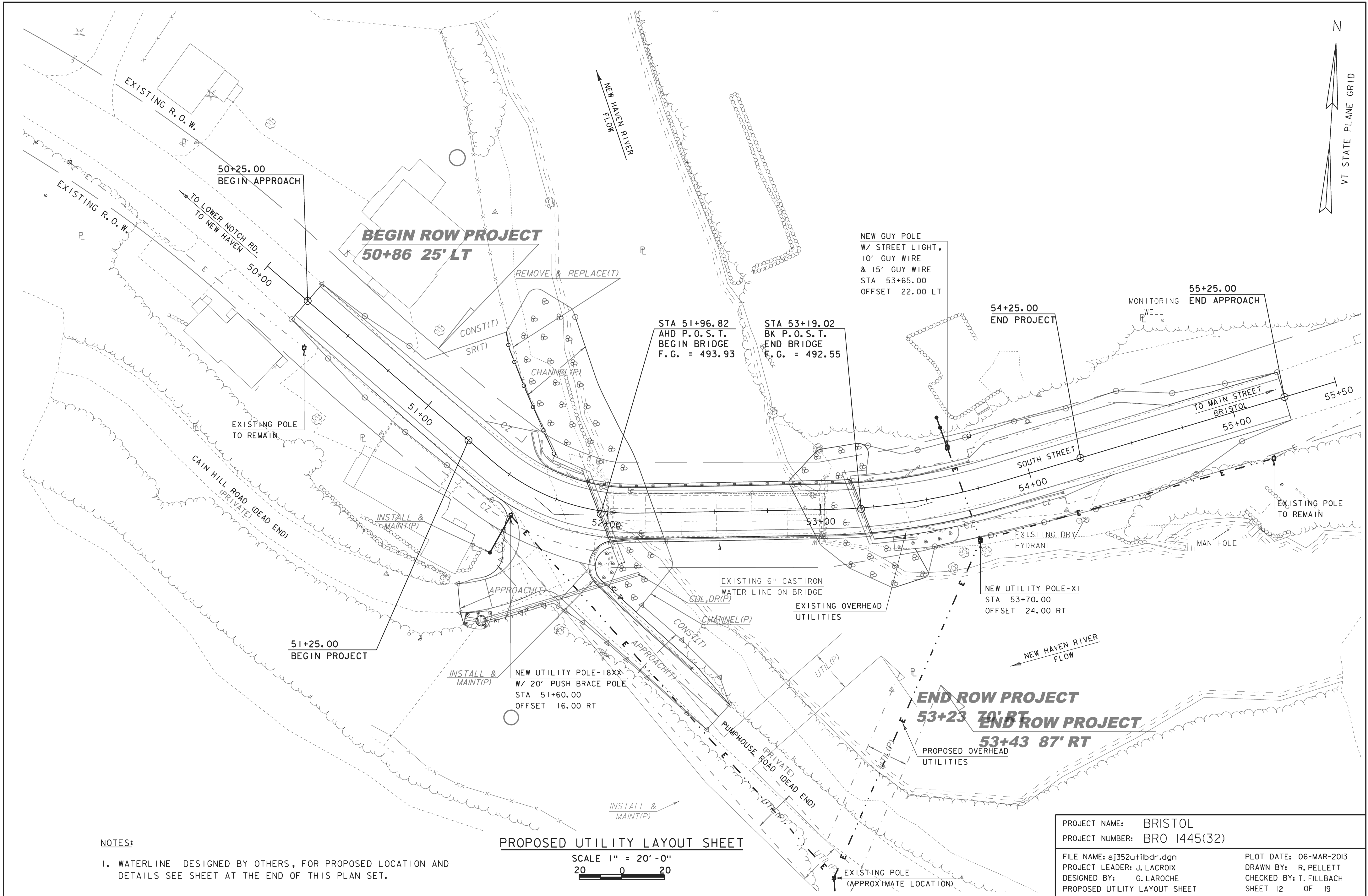
PROJECT NAME:	BRISTOL
PROJECT NUMBER:	BRO 1445(32)
FILE NAME: s05j352pro.dgn	PLOT DATE: 06-MAR-2013
PROJECT LEADER: J. LACROIX	DRAWN BY: G. LAROCHE
DESIGNED BY: G. LAROCHE	CHECKED BY: T. FILLBACH
SIDELINE PROFILES SHEET	SHEET 10 OF 19

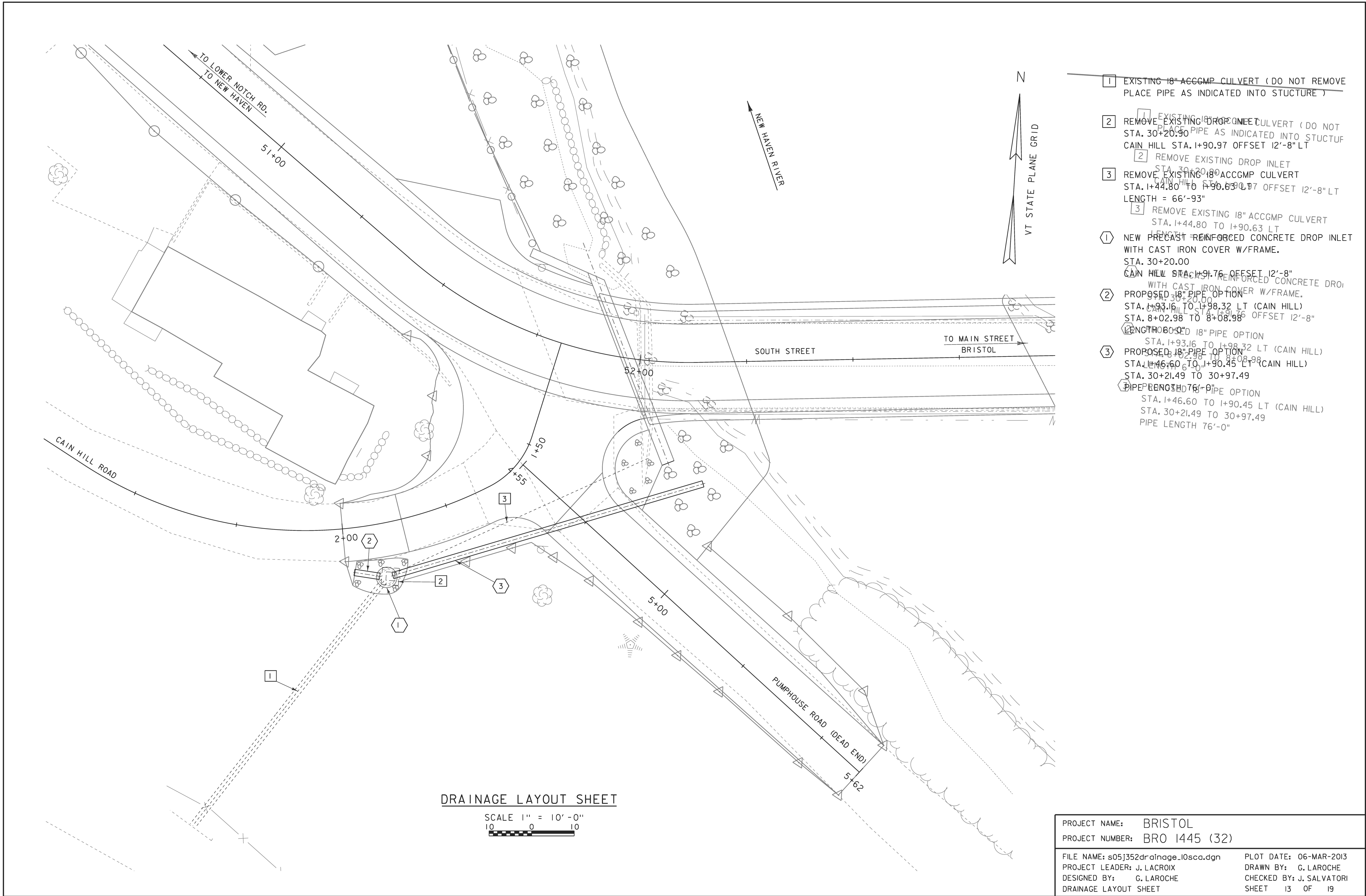


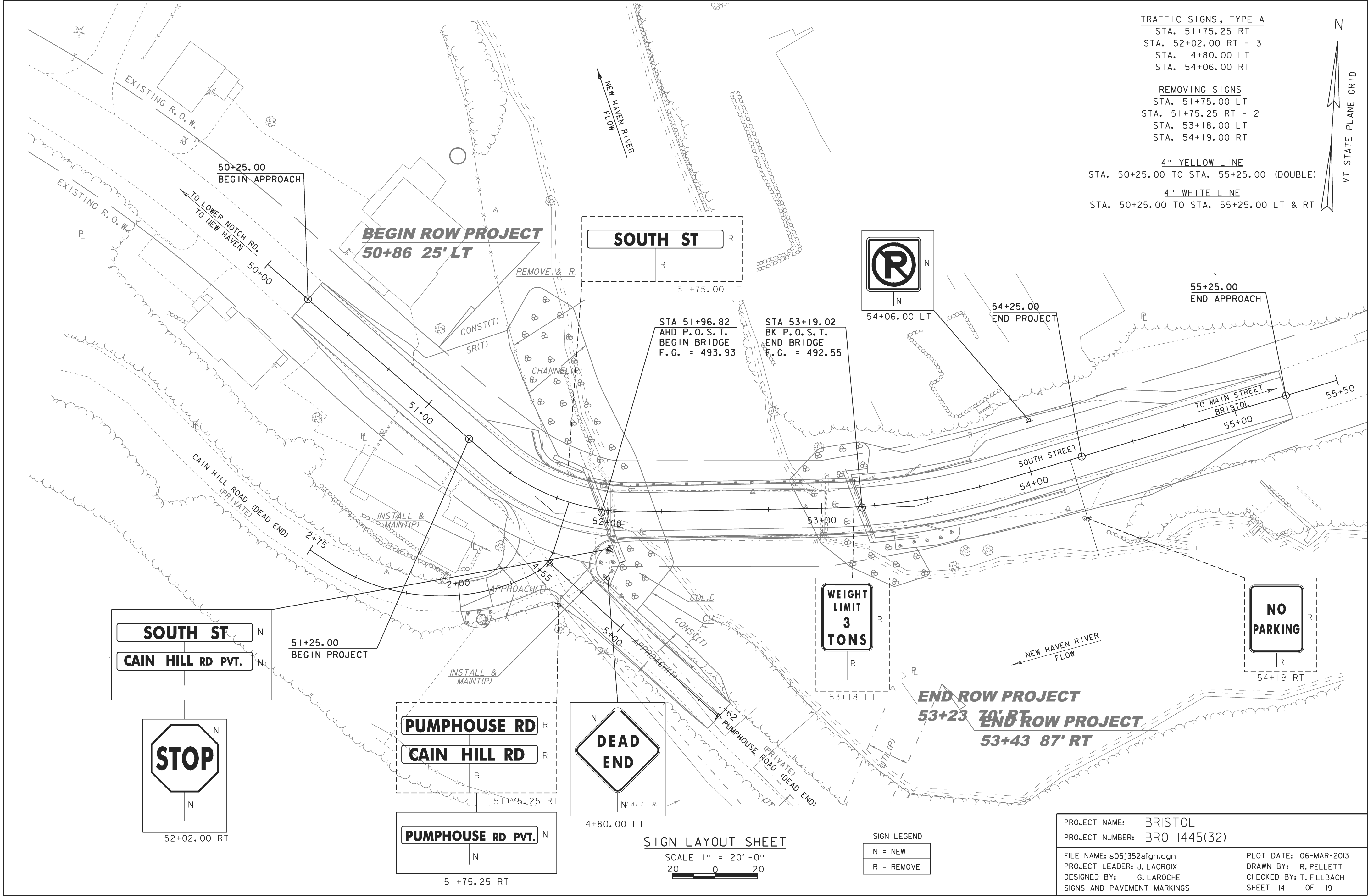
PROJECT NAME: BRISTOL
PROJECT NUMBER: BRO 1445(32)

FILE NAME: sj352utilbdr.dgn
PROJECT LEADER: J. LACROIX
DESIGNED BY: G. LAROCHE
EXISTING UTILITY LAYOUT SHEET

PLOT DATE: 06-MAR-2013
DRAWN BY: R. PELLETT
CHECKED BY: T. FILLBACH
SHEET II OF 19







TRAFFIC SIGNS, TYPE A
STA. 51+75.25 RT
STA. 52+02.00 RT - 3
STA. 4+80.00 LT
STA. 54+06.00 RT

REMOVING SIGNS
STA. 51+75.00 LT
STA. 51+75.25 RT - 2
STA. 53+18.00 LT
STA. 54+19.00 RT

4" YELLOW LINE
STA. 50+25.00 TO STA. 55+25.00 (DOUBLE)
4" WHITE LINE
STA. 50+25.00 TO STA. 55+25.00 LT & RT

N
VT STATE PLANE GRID

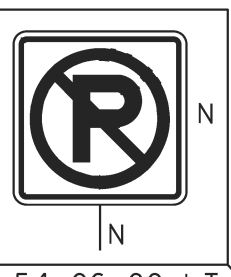
SOUTH ST

R

51+75.00 LT

STA 51+96.82
AHD P.O.S.T.
BEGIN BRIDGE
F.G. = 493.93

STA 53+19.02
BK P.O.S.T.
END BRIDGE
F.G. = 492.55



54+06.00 LT

54+25.00
END PROJECT

55+25.00
END APPROACH

TO MAIN STREET
BRISTOL
55+50
55+00

SOUTH STREET
54+00

SOUTH ST

CAIN HILL RD PVT.



52+02.00 RT

51+25.00
BEGIN PROJECT

PUMPHOUSE RD

CAIN HILL RD

PUMPHOUSE RD PVT.

51+75.25 RT

DEAD
END

4+80.00 LT

SIGN LAYOUT SHEET

SCALE 1" = 20'-0"
20 0 20

SIGN LEGEND

N = NEW

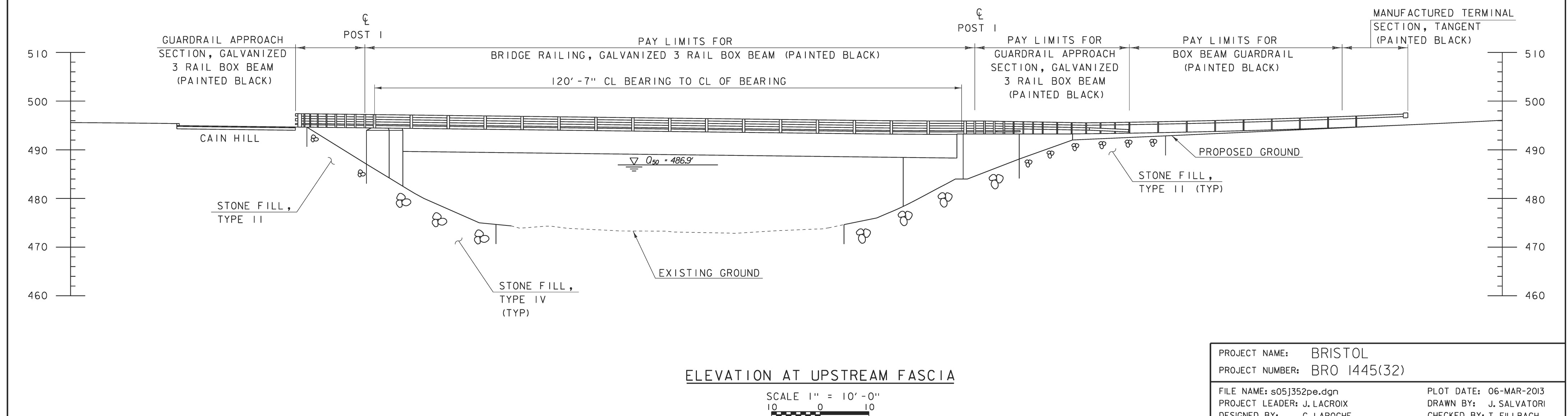
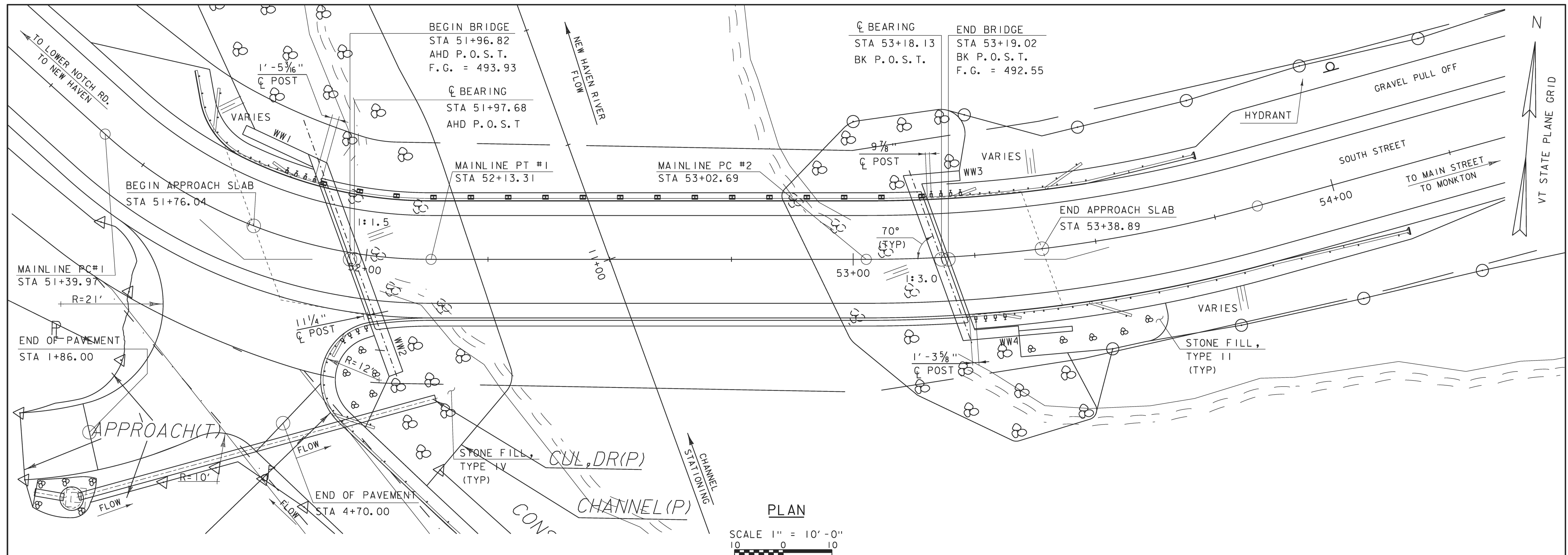
R = REMOVE

END ROW PROJECT
53+23 20' BT
53+43 87' RT

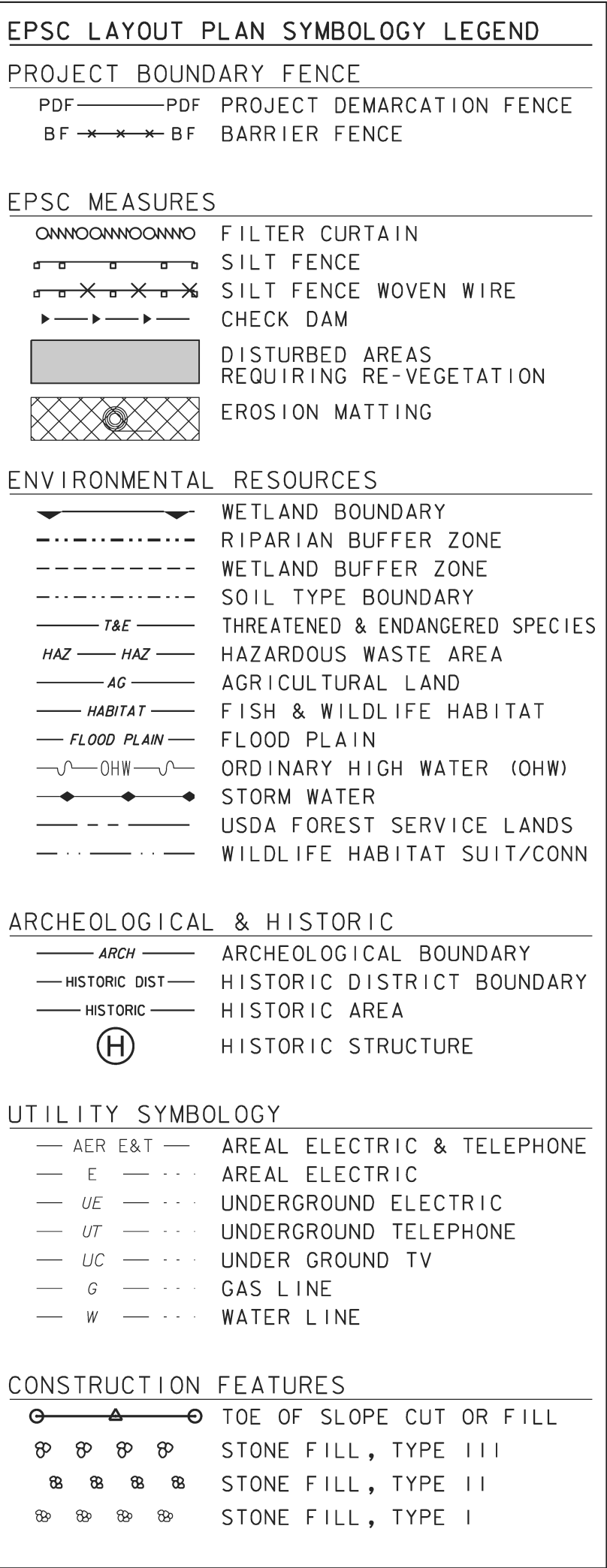
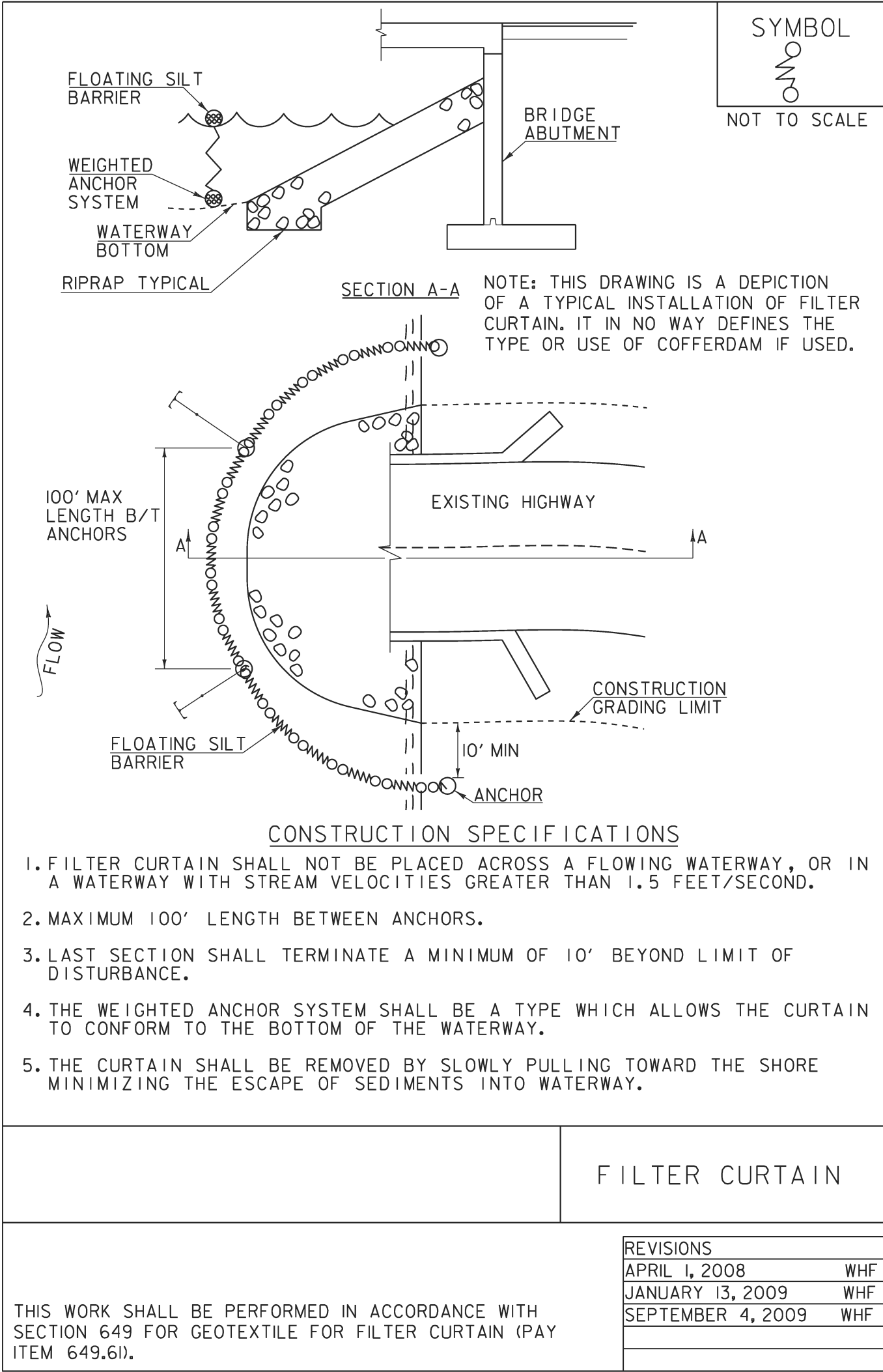
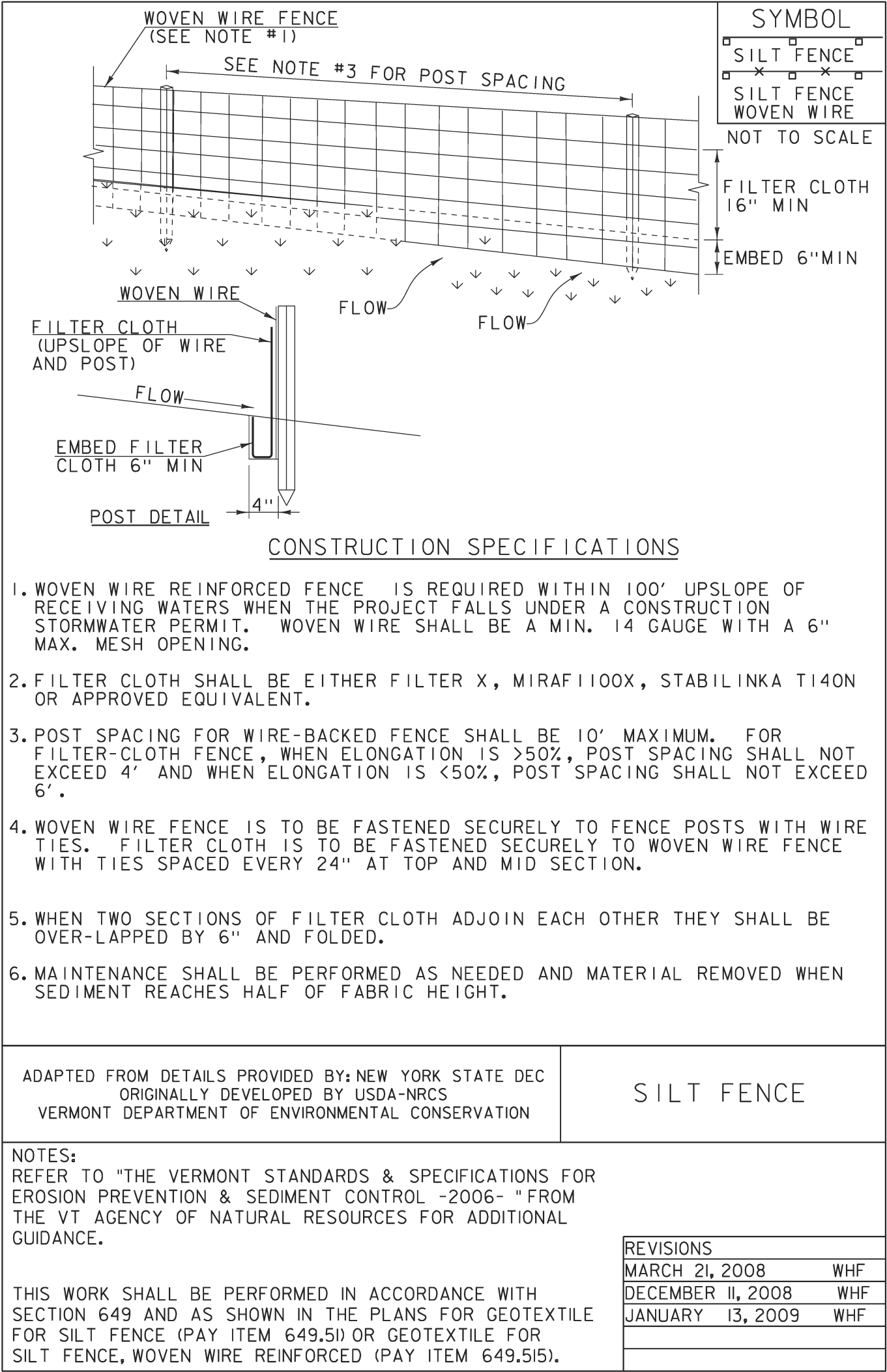
PROJECT NAME: BRISTOL
PROJECT NUMBER: BRO 1445(32)

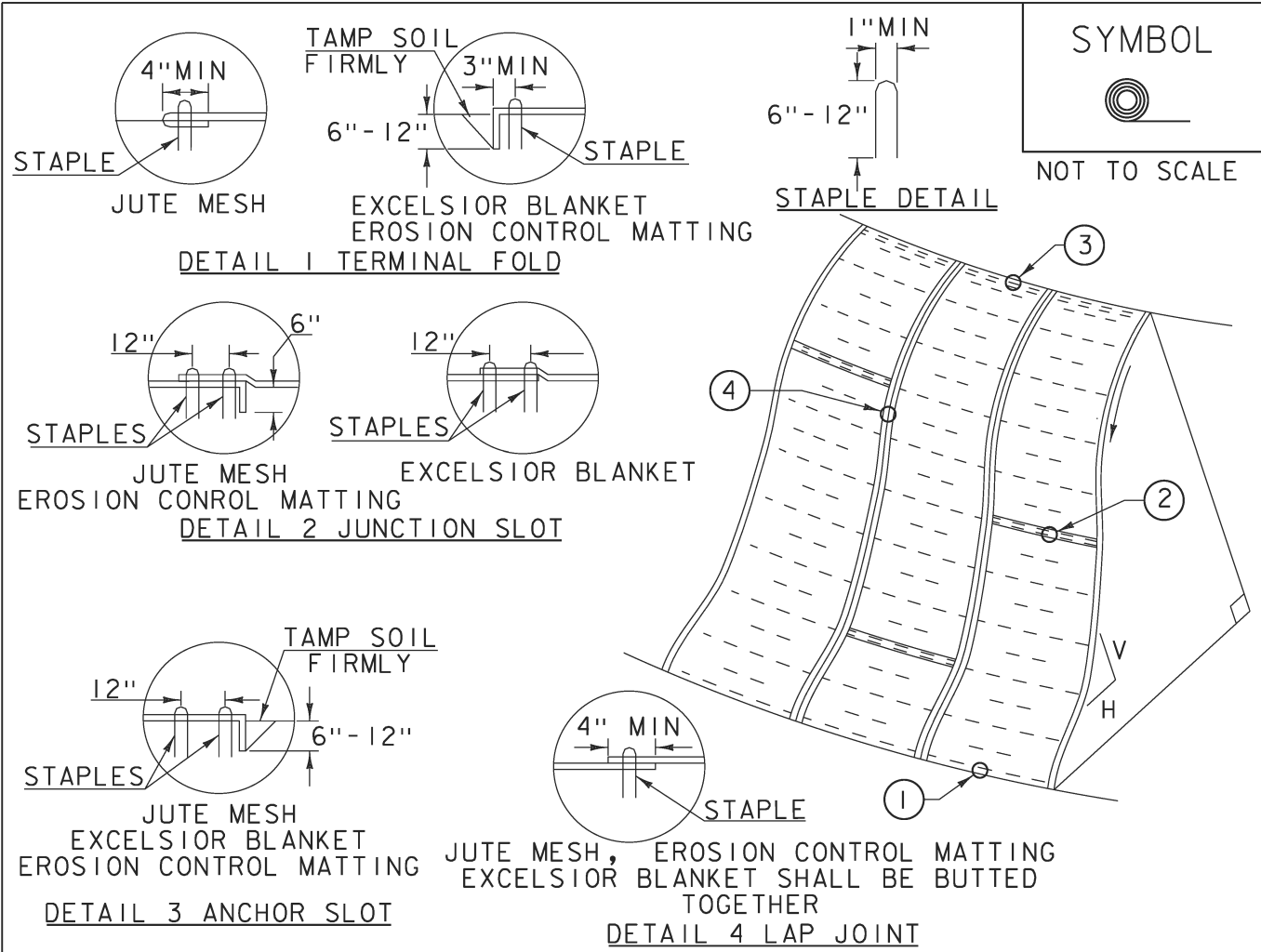
FILE NAME: s05j352sign.dgn
PROJECT LEADER: J. LACROIX
DESIGNED BY: G. LAROCHE
SIGNS AND PAVEMENT MARKINGS

PLOT DATE: 06-MAR-2013
DRAWN BY: R. PELLETT
CHECKED BY: T. FILLBACH
SHEET 14 OF 19



PROJECT NAME:	BRISTOL	PLOT DATE:	06-MAR-2013
PROJECT NUMBER:	BRO 1445(32)	DRAWN BY:	J. SALVATORI
FILE NAME:	s05j352pe.dgn	CHECKED BY:	T. FILLBACH
PROJECT LEADER:	J. LACROIX	PLAN AND ELEVATION SHEET	SHEET 15 OF 19
DESIGNED BY:	G. LAROCHE		





CONSTRUCTION SPECIFICATIONS

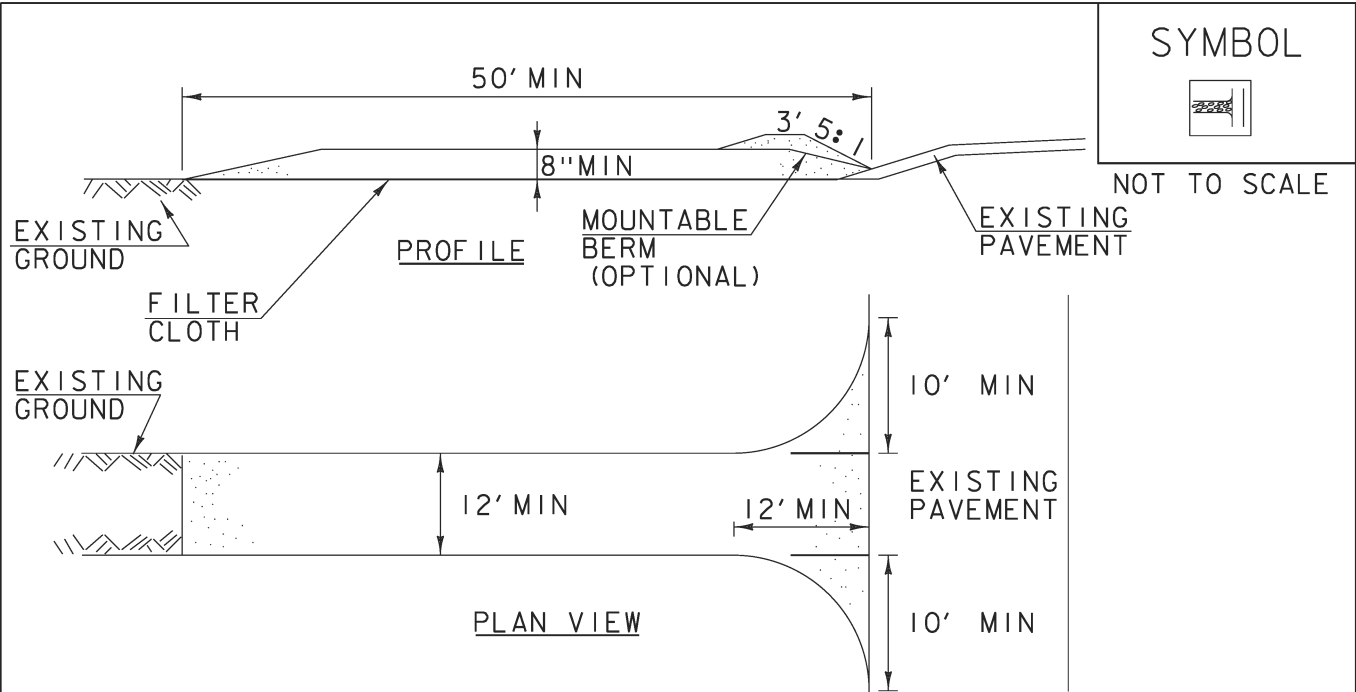
1. APPLY TO SLOPES GREATER THAN 3H:1V OR WHERE NECESSARY TO AID IN ESTABLISHING VEGETATION.
2. APPLY FERTILIZER, LIME SEED PRIOR TO PLACING MATTING.
3. STAPLES ARE TO BE PLACED ALTERNATELY, IN COLUMNS APPROXIMATELY 2' APART AND IN ROWS APPROXIMATELY 3' APART. APPROXIMATELY 175 STAPLES ARE REQUIRED PER 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) OR PERMANENT EROSION MATTING (PAY ITEM 653.21).

REVISIONS		
APRIL 16, 2007	JMF	
JANUARY 13, 2009	WHF	



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	

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			

SOIL AMENDMENT GUIDANCE

FERTILIZER		LIME	
BROADCAST	HYDROSEED	BROADCAST	HYDROSEED
10-20-10	FOLLOW	PELLETIZED	FOLLOW
500 LBS/AC	MANUFACTURER	2 TONS/AC	MANUFACTURER

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 LANDSCAPE MANUAL FOR
ROADWAYS AND TRANSPORTATION FACILITIES

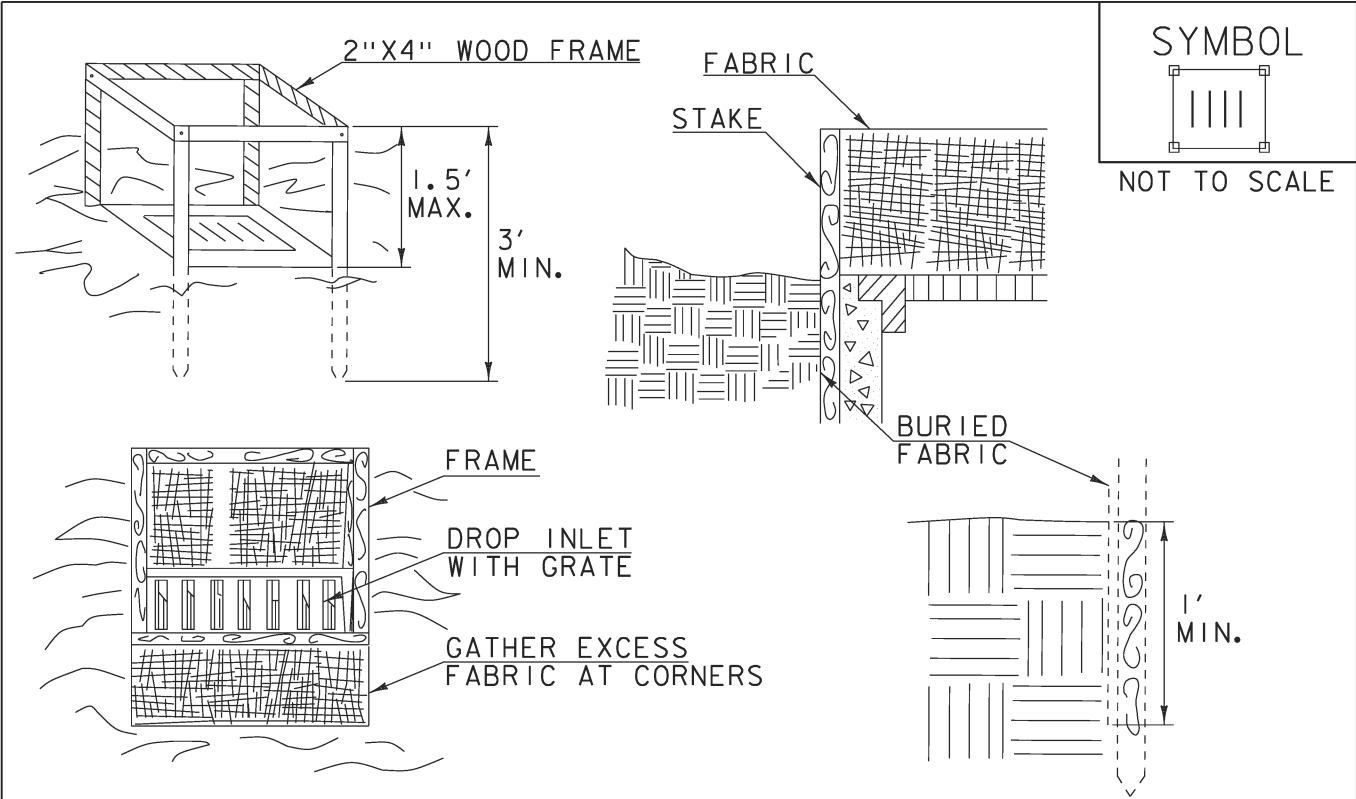
TURF ESTABLISHMENT

REVISIONS		
JUNE 23, 2009	WHF	
JANUARY 15, 2010	WHF	
FEBRUARY 16, 2011	WHF	

PROJECT NAME: BRISTOL
PROJECT NUMBER: BRO 1445(32)

FILE NAME: s05j352EPSC_details.dgn
PROJECT LEADER: J. LACROIX
DESIGNED BY: G. LAROCHE
EPSC DETAILS - #2

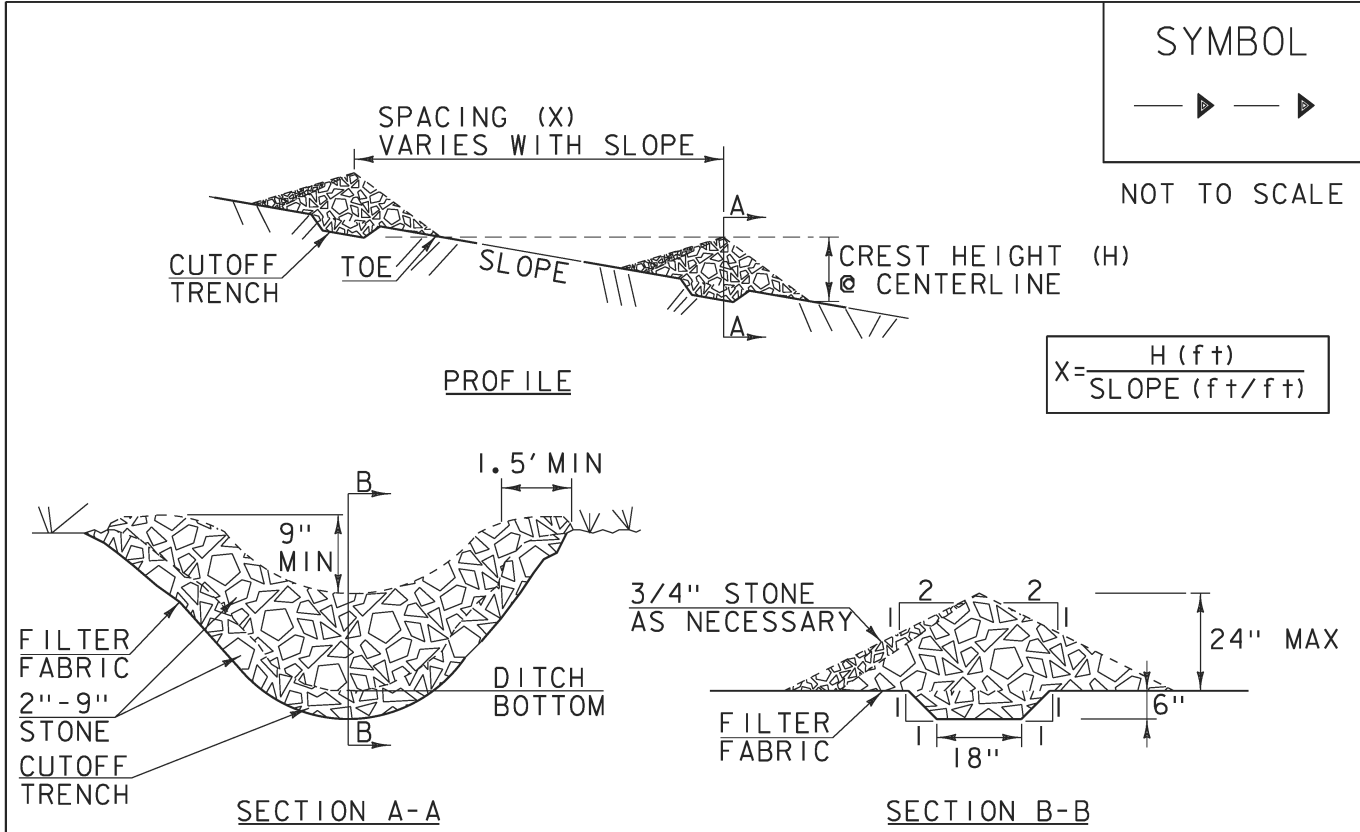
PLOT DATE: 06-MAR-2013
DRAWN BY: R. PELLETT
CHECKED BY: J. SALVATORI
SHEET 17 OF 19



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	

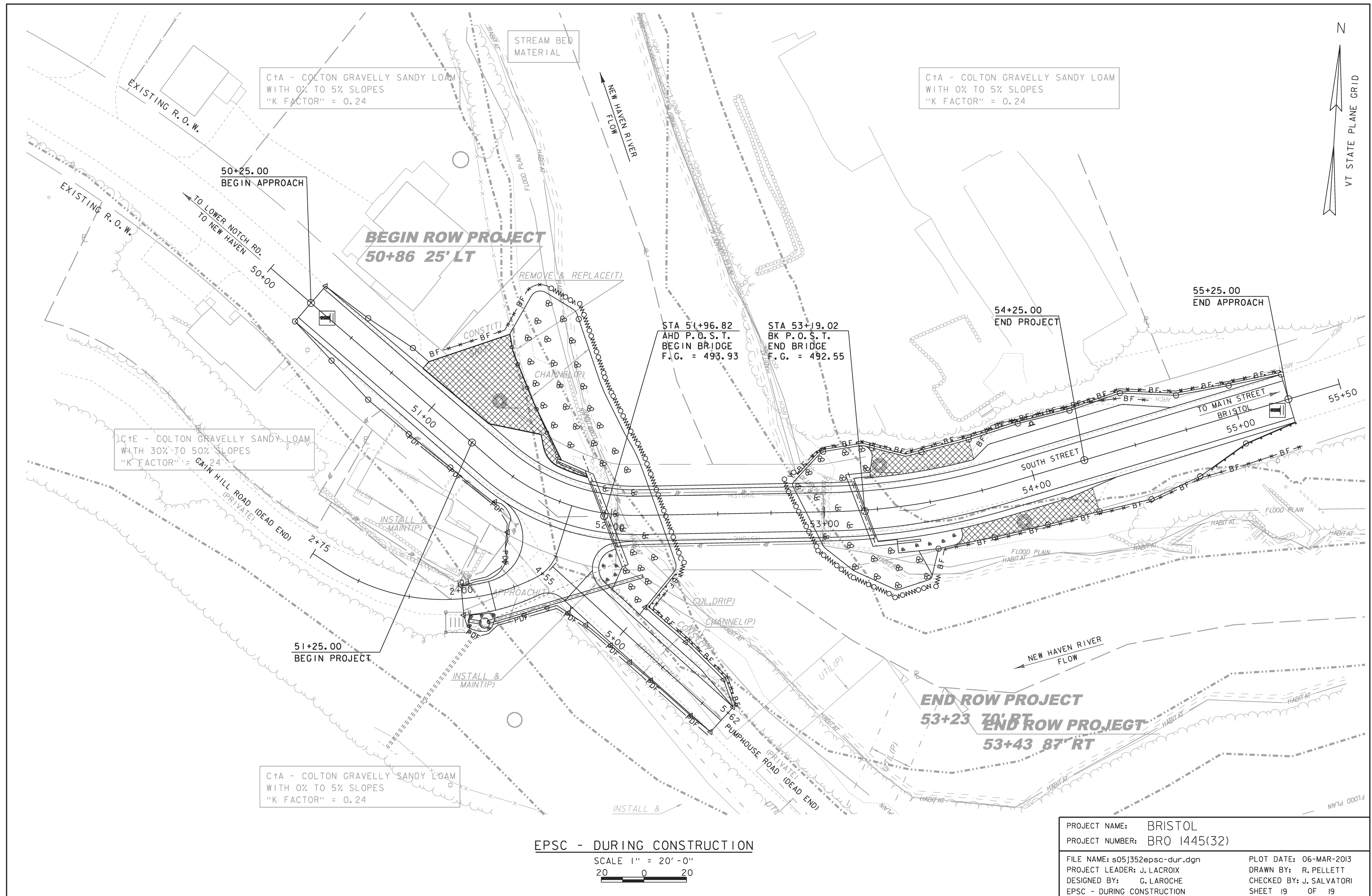


CONSTRUCTION SPECIFICATIONS

1. STONE WILL BE PLACED ON A FILTER FABRIC FOUNDATION.
2. CHECK DAMS SHALL BE SPACED SO THAT THE ELEVATION OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION AS THE TOE OF THE UPSTREAM DAM.
3. 3/4" FILTERING STONE MAY BE ADDED TO THE FACE OF THE CHECK DAM AS NECESSARY.
4. EXTEND THE STONE A MINIMUM OF 1.5' BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
5. PROTECT CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
6. ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONE.
7. MAXIMUM DRAINAGE AREA 2 ACRES.

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC ORIGINALLY DEVELOPED BY USDA-NRCS VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION		CHECK DAM	
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 TEMPORARY STONE CHECK DAM, TYPE I(PAY ITEM 653.25)		REVISIONS	
		MARCH 21, 2008 WHF	
		JANUARY 8, 2009 WHF	

PROJECT NAME: BRISTOL	
PROJECT NUMBER: BRO 1445(32)	
FILE NAME: s05j352EPSC_details.dgn	PLOT DATE: 06-MAR-2013
PROJECT LEADER: J. LACROIX	DRAWN BY: R. PELLETT
DESIGNED BY: G. LAROCHE	CHECKED BY: J. SALVATORI
EPSC DETAILS - #3	SHEET 18 OF 19



PROJECT NAME:	BRISTOL
PROJECT NUMBER:	BRO 1445(32)

FILE NAME: s05j352epsc-dur.dgn
PROJECT LEADER: J. LACROIX
DESIGNED BY: G. LAROCHE
EPSC - DURING CONSTRUCTION

PLOT DATE: 06-MAR-2013
DRAWN BY: R. PELLETT
CHECKED BY: J. SALVATORI
SHEET 19 OF 19