

Record Plans

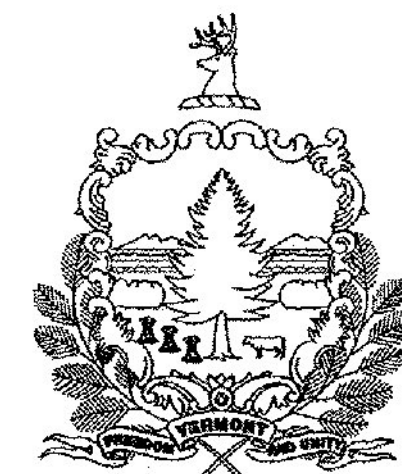
Robert Suckert

Prime Contractor: Blow and Cote Inc.

Construction Began Date: 7/18/16

Substantial Completion Date: 12/9/16

STATE OF VERMONT AGENCY OF TRANSPORTATION



PROPOSED IMPROVEMENT BRIDGE PROJECT

TOWN OF CHARLOTTE

COUNTY OF CHITTENDEN

ROUTE NO : TH 39; CLASS 3

BRIDGE NO : 28

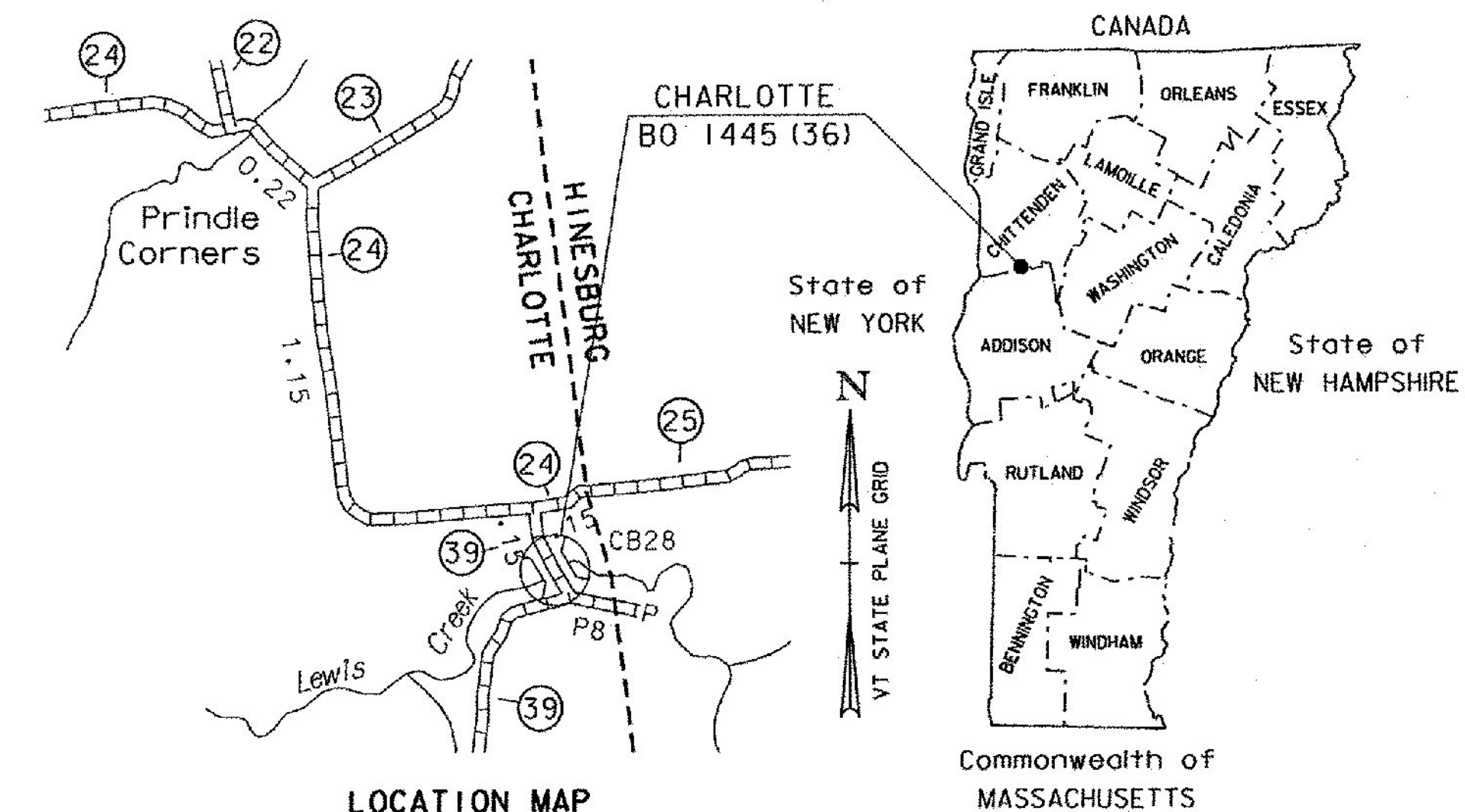
PROJECT LOCATION : ON TH 39 BEGINNING APPROXIMATELY 0.2 MILE SOUTH FROM ITS INTERSECTION WITH TH 24 AND EXTENDING SOUTHERLY APPROXIMATELY 0.01 MILE.

PROJECT DESCRIPTION : REHABILITATION OF THE SEGUIN COVERED BRIDGE, INCLUDING TIMBER SUPERSTRUCTURE, BRIDGE SEATS AND MINOR APPROACH WORK.

LENGTH OF STRUCTURE : 71.1 ± FEET

LENGTH OF ROADWAY : 0.0 FEET

LENGTH OF PROJECT : 71.1 ± FEET



RECORD PLANS

CONTRACTOR: BLOW & COTE INC. - MORRISVILLE, VT

RESIDENT ENGINEER: ROBERT SUCKERT

CONSTRUCTION BEGAN: JULY 18, 2016

CONSTRUCTION COMPLETE: DECEMBER 9, 2016

RECORD PLANS BY: ROBERT SUCKERT & JESSE IVES

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

BY Robert Suckert RESIDENT ENGINEER

DATE 4-27-17

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.

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.

QUALITY ASSURANCE PROGRAM : LEVEL 2

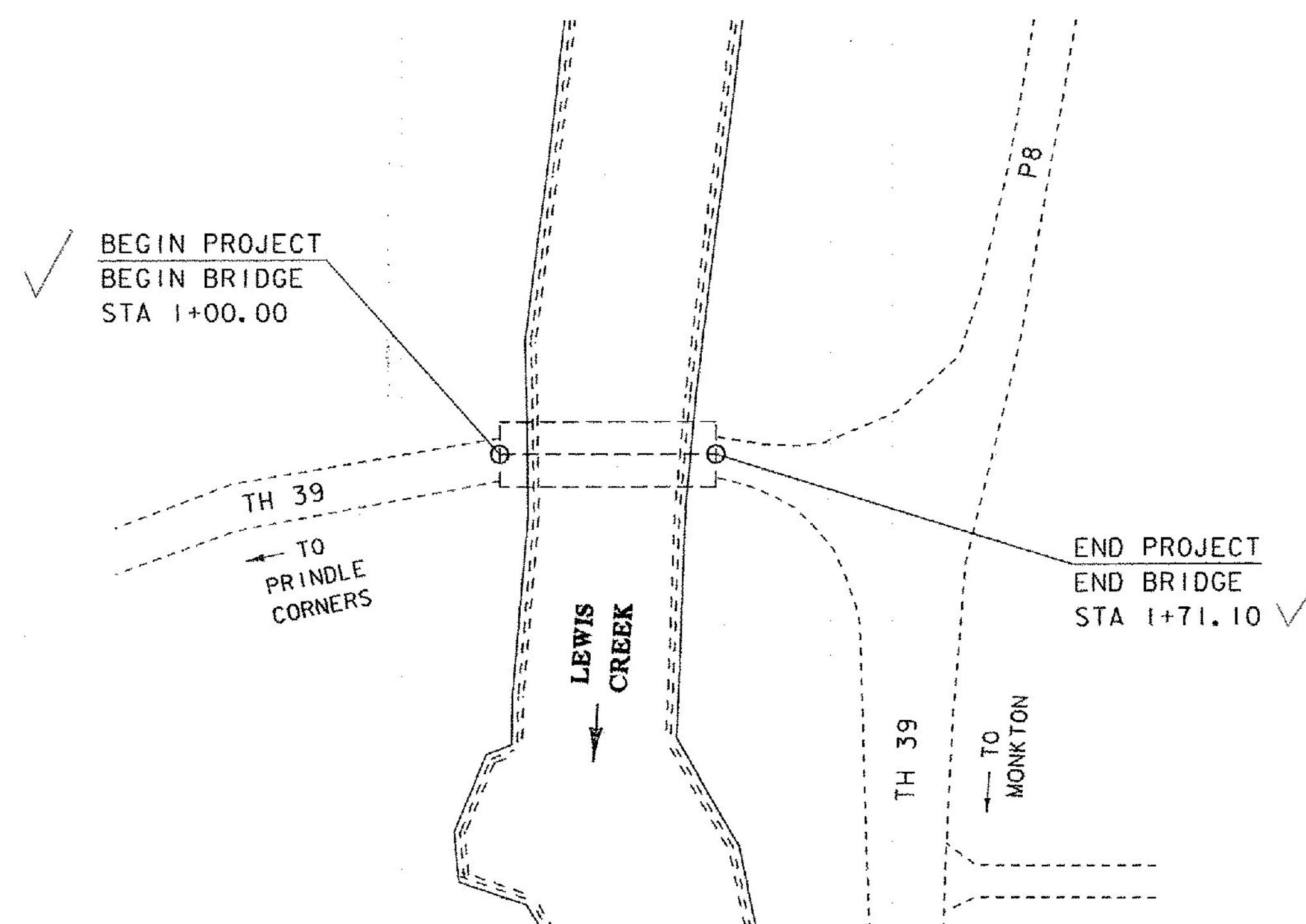
SURVEYED BY : NA

SURVEYED DATE : NA

DATUM

VERTICAL : NA

HORIZONTAL : NA



NOT TO SCALE

DIRECTOR OF PROJECT DELIVERY

APPROVED [Signature] DATE 2/2/2017

PROJECT MANAGER : M. SARGENT

PROJECT NAME : CHARLOTTE

PROJECT NUMBER : BO 1445 (36)

SHEET 1 OF 13 SHEETS

INDEX OF SHEETS

1	TITLE SHEET
2	INDEX OF SHEETS AND PROJECT DATA
3	PROJECT NOTES AND MATERIALS TABLE
4	QUANTITY SHEET
5	TYPICAL SECTIONS
6	TOP AND BOTTOM CHORD PLAN
7	TRUSS ELEVATIONS
8	DECK PLAN AND CONNECTION DETAILS
9	NEW POST AND BEARING BLOCK DETAILS
10	ABUTMENT AND END POST DETAILS
11	REINFORCING STEEL SCHEDULE
12	DETOUR LAYOUT
13	TRAFFIC SIGN SUMMARY

DESIGN CRITERIA

1. DESIGN LIVE LOAD AASHTO	H-7 (INVENTORY)
2. DESIGN SPAN	64 FEET (TRUSS)
3. ALLOWABLE LOAD FOR SPREAD FOOTINGS ON SOIL	N/A
ON LEDGE	N/A
4. ALLOWABLE LOAD FOR PILING	N/A
TYPE	N/A
ESTIMATED LENGTH	N/A
5. STRUCTURAL STEEL AASHTO M270/M270M GRADE	N/A
6. REINFORCING STEEL GRADE	N/A
7. CONCRETE, HIGH PERFORMANCE CLASS A f'c:	N/A
CONCRETE, HIGH PERFORMANCE CLASS B f'c:	N/A
8. DESIGN SOIL UNIT WEIGHT	N/A
9. DESIGN LOAD FOR SPREAD FOOTINGS ON SOIL	N/A

HIGHWAY SAFETY & DESIGN DETAILS

HSD-621.06 GUARDRAIL TERMINAL LABEL DETAIL 11-03-2015

LIST OF STANDARDS

E-121	STANDARD SIGN PLACEMENT-CONVENTIONAL ROAD	08-08-1995
E-141	REGULATORY SIGN DETAILS	09-20-1995
G-1	STEEL BEAM GUARDRAIL DETAILS (POST, DELINEATOR, TYPICALS)	11-10-2015
G-1d	STEEL BEAM GUARDRAIL DETAILS (END TERMINAL, ANCHOR, MEDIUM)	02-10-2014
T-1	TRAFFIC CONTROL GENERAL NOTES	08-06-2012
T-10	CONVENTIONAL ROADS CONSTRUCTION APPROACH SIGNING	08-06-2012
T-28	CONSTRUCTION SIGN DETAILS	08-06-2012
T-30	CONSTRUCTION SIGN DETAILS	08-06-2012
T-35	CONSTRUCTION ZONE LONGITUDINAL DROP-OFFS	08-06-2012
T-36	CONSTRUCTION ZONE LONGITUDINAL DROP-OFFS FOR PAVING	08-06-2012

ASD LOAD RATING (TONS)							
LOADING LEVELS (LOAD FACTOR)	TRUCK						
	H	HS	3S2	6 AXLE	3A, STR.	4A, STR.	5A, SEMI
INVENTORY							
† POSTED	7						
OPERATING							

COMMENTS:
† COUNTERBRACE CONTROLS LOAD RATING.

NOTE: 3RD END POST CONTROLS RATING FOR DEAD LOAD PLUS 70% SNOW LOAD CASE.

PROJECT NAME:	CHARLOTTE
PROJECT NUMBER:	BO 1445(36)
FILE NAME: sl4j235+yp.dgn	PLOT DATE: 21-MAR-2016
PROJECT LEADER: M. SARGENT	DRAWN BY: G. ROY
DESIGNED BY: J. WEAVER	CHECKED BY: J. WEAVER
INDEX OF SHEETS AND PROJECT DATA	SHEET 2 OF 13

GENERAL

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE STATE OF VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2011 AND ITS LATEST REVISIONS, THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FIFTH EDITION, DATED 2010 AND ITS LATEST REVISIONS AND THE AASHTO LRFD BRIDGE CONSTRUCTION SPECIFICATIONS THIRD EDITION, DATED 2010 AND ITS LATEST REVISIONS.
2. ALL INFORMATION, DIMENSIONS, AND DETAILS PROVIDED IN THE PLANS SHALL BE CHECKED AND VERIFIED BY THE CONTRACTOR PRIOR TO COMMENCING THE WORK.
3. ALL WORK IS TO BE COMPLETED WITHIN THE AVAILABLE TOWN-OWNED RIGHT-OF-WAY. THE THREE ROD R.O.W. PORTION IS ASSUMED TO BE APPROXIMATELY CENTERED ABOUT THE EXISTING CENTER LINE OF THE BRIDGE OR ROADWAY. NO PROVISIONS HAVE BEEN MADE TO GO OUTSIDE THE EXISTING RIGHT-OF-WAY AND NO WORK SHALL BE PERFORMED OR PAID FOR OUTSIDE THE EXISTING TOWN-OWNED RIGHT-OF-WAY LIMITS. SHOULD THE CONTRACTOR REQUIRE ADDITIONAL R.O.W, IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL EASEMENTS AT NO ADDITIONAL COST TO THE STATE.
4. GREAT CARE SHALL BE TAKEN BY THE CONTRACTOR TO PREVENT ANY MATERIAL FROM ENTERING THE STREAM BED PER SECTION 105 OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION. ANY MATERIAL THAT DOES ESCAPE THE CONTRACTOR'S CONTAINMENT SYSTEM WILL BE RECOVERED IMMEDIATELY.
5. ALL WORK SHALL PROCEED IN A CAREFUL, ORDERLY MANNER SO THAT AFFECTED HISTORIC STRUCTURES ARE NOT DAMAGED IN ANY WAY. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ALL DAMAGE TO THE STRUCTURE AS A RESULT OF ITS OPERATIONS AT NO COST TO THE STATE. ALL DAMAGE WILL BE REPORTED TO THE PROJECT MANAGER IMMEDIATELY AND NO REPAIRS WILL BE MADE UNTIL APPROVED BY THE AGENCY.
6. THE BRIDGE WILL REMAIN CLOSED DURING CONSTRUCTION. PRIOR TO ANY CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL SUBMIT A SEQUENCE OF CONSTRUCTION FOR THE ENGINEER'S APPROVAL. THE SEQUENCE OF CONSTRUCTION SUBMITTAL WILL BE CONSIDERED INCIDENTAL TO THE WORK REQUIRED FOR ITEM 635.11, MOBILIZATION/DEMOBILIZATION. GENERAL PLACEMENT OF APPROACH SIGNING AND "ROAD CLOSED" SIGNS SHALL BE PLACED ACCORDING TO THE MUTCD.
7. EXCEPT AS NOTED OTHERWISE, ITEM 529.20, PARTIAL REMOVAL OF STRUCTURE, WILL INCLUDE ANY WORK NECESSARY TO FACILITATE AND ACCOMPLISH THE PROJECT SCOPE OF WORK AS DEFINED BY THE CONTRACT DOCUMENTS AND AS DIRECTED BY THE ENGINEER: REMOVING AND DISPOSING OF SUPERSTRUCTURE MEMBERS AND PORTIONS OF MEMBERS; AS WELL AS REMOVING AND STOCKPILING MEMBERS AND PORTIONS OF MEMBERS FOR RE-USE, INCLUDING REMOVING AND STOCKPILING MEMBERS AND PORTIONS OF MEMBERS FOR THE CONTRACTOR'S METHOD OF REHABILITATION. NO BURNING OF REMOVED MATERIALS AT THE PROJECT SITE WILL BE ALLOWED. EXISTING COVERED BRIDGE LUMBER AND TIMBERS MAY CONTAIN HAZARDOUS WOOD PRESERVATIVES. THE CONTRACTOR SHALL INDEMNIFY AND HOLD THE STATE, ITS OFFICERS, AND EMPLOYEES HARMLESS REGARDING THE CONTRACTOR'S HANDLING OF THESE MATERIALS AND SUBSEQUENT USE, RE-USE, AND DISPOSAL OF THIS LUMBER OR TIMBERS.
8. EXCEPT AS NOTED, ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1" X 1".
9. WHERE NOT NOTED, ALL LUMBER AND TIMBER DIMENSIONS ARE IN INCHES.
10. UNLESS NOTED OTHERWISE, ALL NEW STRUCTURAL LUMBER AND TIMBER SHALL BE UNTREATED, FULL SAWN (TO THE INDICATED CROSS SECTION DIMENSIONS) ROUGH SURFACE MEMBERS OR BOARDS. WHEN SPECIFIED, PRESSURE TREATMENT SHALL BE TYPE II, PER SECTION 726 OF THE STANDARD SPECIFICATIONS.
11. THE WORK PAID FOR UNDER ITEM 506.60, STRUCTURAL STEEL, WILL INCLUDE: NEW GALVANIZED ½" X 10" X 10" STEEL PLATES; 1" DIA. TIE RODS, TURNBUCKLES, NUTS AND WASHERS AS WELL AS RAIL POST ANCHOR BOLTS, NUTS AND WASHERS. FABRICATION PLAN AND ERECTION PLAN SUBMITTALS WILL NOT BE REQUIRED FOR STEEL COMPONENTS FURNISHED UNDER PAY ITEM 506.60. ALL ROD ASSEMBLIES SHALL BE SNUG TIGHT OR TIGHTENED AS DIRECTED BY THE ENGINEER.
12. THE EXISTING CAMBER OF THE SUPERSTRUCTURE IS ASSUMED TO BE ADEQUATE AND SHALL BE MAINTAINED DURING REHABILITATION CONSTRUCTION ACTIVITIES, UNTIL COMPLETION OF THE PROJECT. SEE SPECIAL PROVISION 900.645, REHABILITATING COVERED BRIDGE SUPERSTRUCTURE. AT THE BEGINNING AND END OF THE PROJECT, THE CONTRACTOR SHALL MEASURE EXISTING CAMBER, TAKING ROD SHOTS AT EACH PANEL POINT OR CROSS TIE LOCATION FOR EACH TRUSS, AND SUBMITTING THESE RESULTS TO THE ENGINEER. PAYMENT WILL BE CONSIDERED INCIDENTAL TO ITEM 900.645 SPECIAL PROVISION (REHABILITATING COVERED BRIDGE SUPERSTRUCTURE).

TIMBER CONNECTORS

13. EXCEPT AS SPECIFIED IN THE STRUCTURAL STEEL NOTES, PAYMENT FOR STRUCTURAL LUMBER AND TIMBER AND NON-STRUCTURAL LUMBER QUANTITIES SHALL BE FULL COMPENSATION FOR DETAILING, FURNISHING, TRANSPORTING, HANDLING, PLACING AND INSTALLING NEW AND REUSED TIMBER CONNECTORS WHICH ARE USED TO CONNECT NEW LUMBER AND TIMBER MEMBERS WITH EXISTING LUMBER AND TIMBER MEMBERS.
14. EXCEPT AS SPECIFIED IN THE STRUCTURAL STEEL NOTES, DETAILING, FURNISHING, TRANSPORTING, HANDLING, AND INSTALLING NEW AND REUSED TIMBER CONNECTORS WHICH ARE USED TO CONNECT EXISTING LUMBER AND TIMBER MEMBERS SHALL BE CONSIDERED INCIDENTAL TO THE WORK REQUIRED FOR ITEM 900.645 SPECIAL PROVISION (REHABILITATING COVERED BRIDGE SUPERSTRUCTURE).

MATERIALS FOR LUMBER AND TIMBER					
MEMBER TYPE	PROPOSED SIZE (SAWN TO ACTUAL SIZE UNLESS NOTED OTHERWISE)	PROPOSED SPECIES & STRESS GRADE	PRESERVATIVE PRESSURE TREATMENT	FINISH	PAY ITEM FOR COMPONENT
TRUSS - TOP CHORDS	10" X 10"	SOUTHERN YELLOW PINE NO.1		ROUGH	522.20 STRUCTURAL LUMBER AND TIMBER, UNTREATED
TRUSS - BOTTOM CHORDS	8" X 8"	SOUTHERN YELLOW PINE NO.1		ROUGH	522.20 STRUCTURAL LUMBER AND TIMBER, UNTREATED
TRUSS - ARCHES (REPAIR AS REQUIRED)	4 ¾" X 11 ¾"	EASTERN HEMLOCK NO.1		ROUGH	522.20 STRUCTURAL LUMBER AND TIMBER, UNTREATED
TRUSS - DIAGONALS	10" X 8"	SOUTHERN YELLOW PINE NO.1		ROUGH	522.20 STRUCTURAL LUMBER AND TIMBER, UNTREATED
TRUSS - POSTS	10" X 17 ½" (MAX.)	SOUTHERN YELLOW PINE NO.1		ROUGH	522.20 STRUCTURAL LUMBER AND TIMBER, UNTREATED
TRUSS - UPPER CHECK BRACES	9 ¾" X 3 ½"	EASTERN HEMLOCK NO.1		ROUGH	522.20 STRUCTURAL LUMBER AND TIMBER, UNTREATED
KNEE BRACES	4 ¾" X 4"	EASTERN HEMLOCK NO.1		ROUGH	522.20 STRUCTURAL LUMBER AND TIMBER, UNTREATED
STRUCTURAL SIDING NAILERS	1 ½" X 5 ½", 1 ¼" X 4"	EASTERN SPRUCE NO.1		ROUGH	522.20 STRUCTURAL LUMBER AND TIMBER, UNTREATED
SIDING	1" X 8"	EASTERN HEMLOCK NO.1 COMMON		ROUGH	522.30 NONSTRUCTURAL LUMBER, UNTREATED
SIDING TRIM	MATCH EXISTING	EASTERN SPRUCE NO.1 COMMON		ROUGH	522.30 NONSTRUCTURAL LUMBER, UNTREATED
BLOCKING	AS NOTED	* DOUGLAS FIR NO.1, UNLESS NOTED OTHERWISE	TYPE II	ROUGH	522.25 STRUCTURAL LUMBER AND TIMBER, TREATED
WEARING SURFACE	1 ¾" X 10"	WHITE OAK NO.2		ROUGH	522.20 STRUCTURAL LUMBER AND TIMBER, UNTREATED
GLULAM FLOOR BEAMS	12 ¾" X 10 ½"	16F - V2 SP/SP	TYPE II	INDUSTRIAL APPEARANCE	522.40 STRUCTURAL GLUED LAMINATED TIMBER
GLULAM FLOOR DECKING	5 ½" X 33" DECK PANELS W/ 5 ½" X 5 ½" TRANSVERSE STIFFENERS	16F - V2 SP/SP	TYPE II	INDUSTRIAL APPEARANCE	522.40 STRUCTURAL GLUED LAMINATED TIMBER
WOOD TRUNNELS	1 ¼" DIA.	WHITE OAK			900.645 SPECIAL PROVISION (REHABILITATING COVERED BRIDGE SUPERSTRUCTURE)

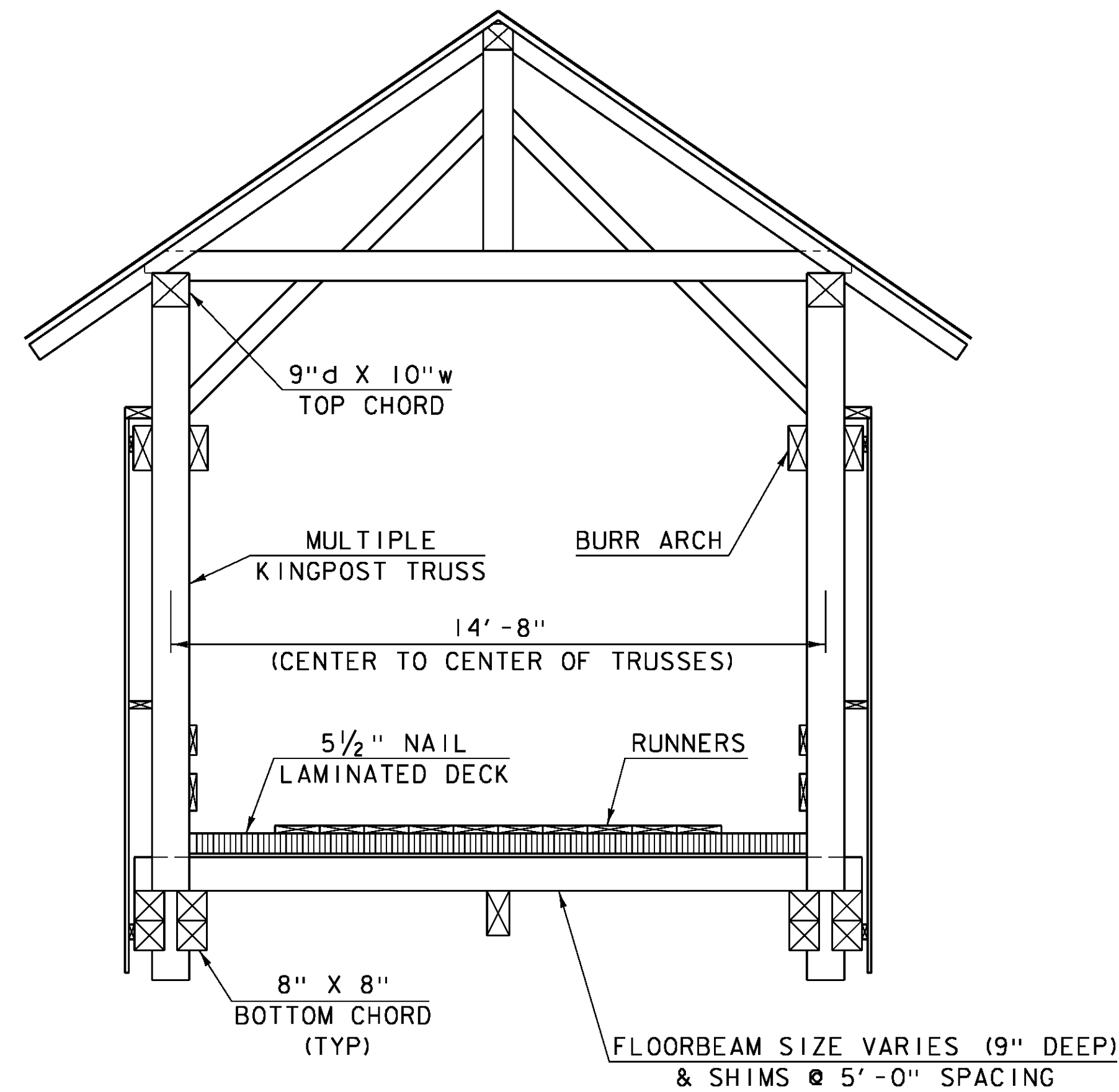
* UNTREATED BLACK LOCUST BLOCKING MAY BE SUBSTITUTED. IN THIS CASE, MOISTURE CONTENT AND CERTIFICATION REQUIREMENTS OF THE STANDARD SPECIFICATIONS SHALL BE WAIVED.

PROJECT NAME: CHARLOTTE	
PROJECT NUMBER: BO 1445(36)	
FILE NAME: sl4j235notes.dgn	PLOT DATE: 26-FEB-2016
PROJECT LEADER: M. SARGENT	DRAWN BY: G. ROY
DESIGNED BY: J. WEAVER	CHECKED BY: J. WEAVER
PROJECT NOTES AND MATERIALS TABLE	SHEET 3 OF 13

STATE OF VERMONT
AGENCY OF TRANSPORTATION

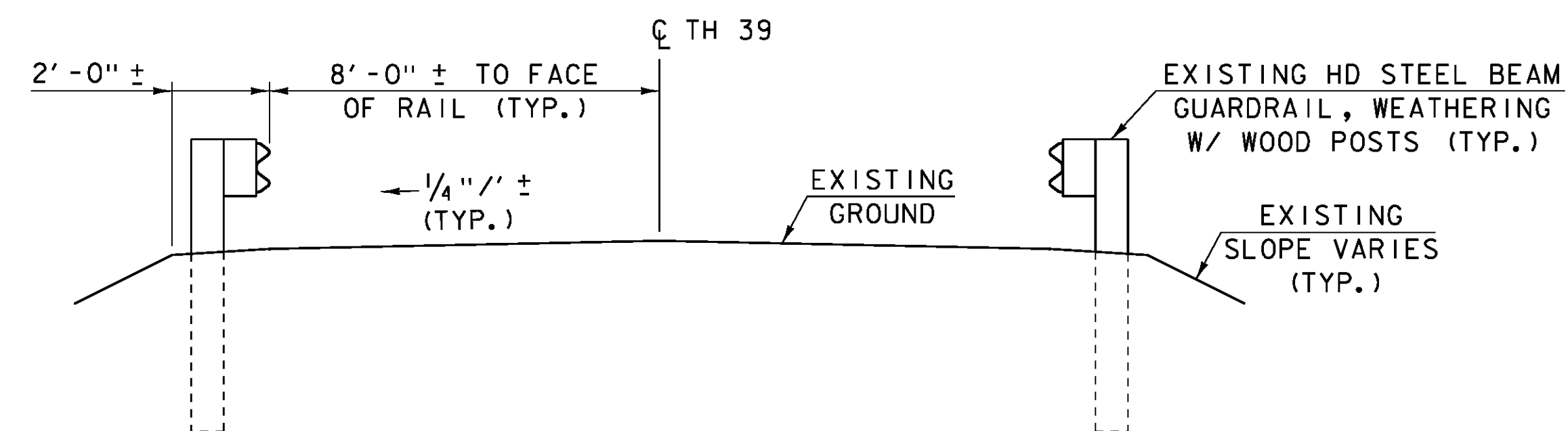
QUANTITY SHEET

[illegible]



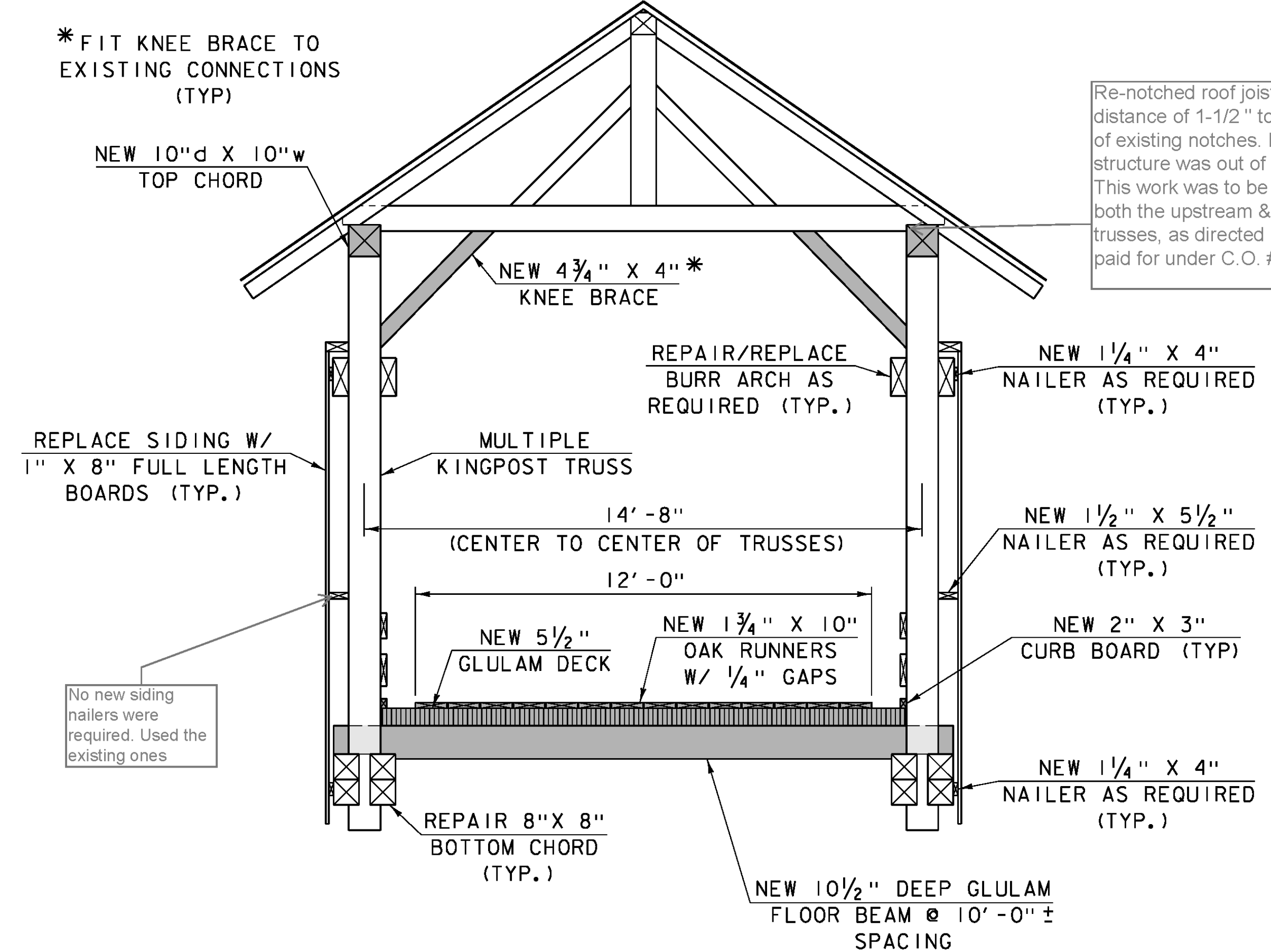
EXISTING TRUSS TYPICAL SECTION

SCALE: $\frac{3}{8}$ " = 1'-0"



EXISTING ROADWAY APPROACH
TYPICAL SECTION

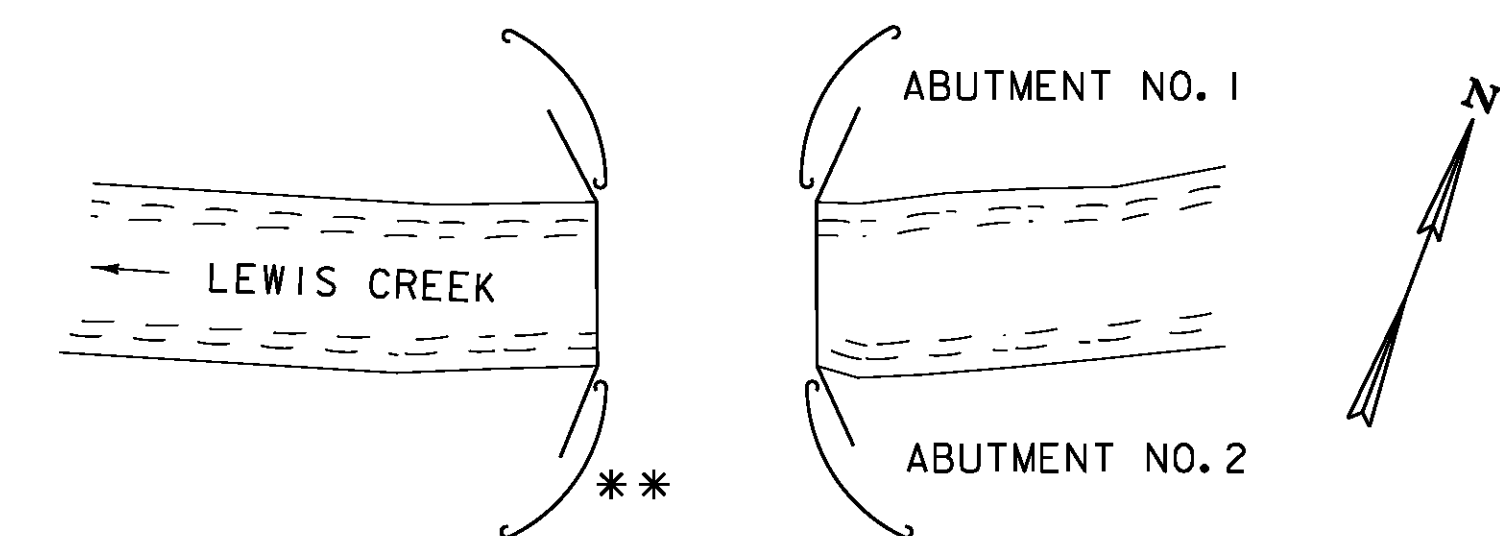
SCALE: $\frac{3}{8}$ " = 1'-0"



PROPOSED TRUSS TYPICAL SECTION

SCALE: $\frac{3}{8}$ " = 1'-0"

NEW MEMBERS



GUARDRAIL SCHEMATIC PLAN

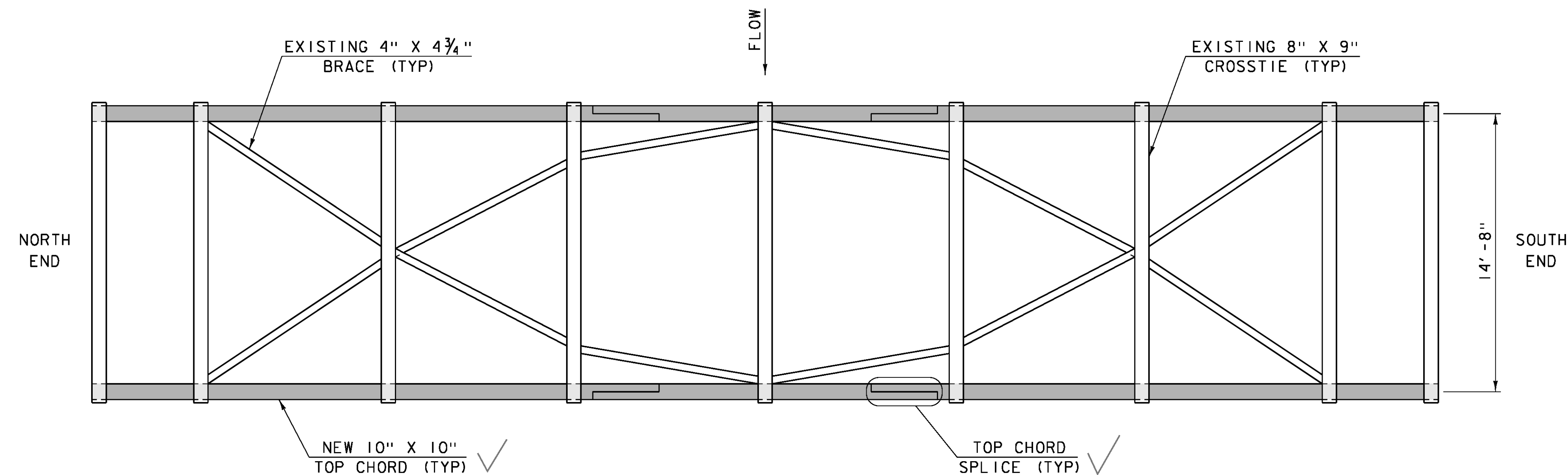
NOT TO SCALE

** LIMITS OF REMOVE AND RESET GUARDRAIL = 45'-0" AT THIS LOCATION. WILL BE PAID FOR UNDER ITEM 621.75, REMOVE AND RESET GUARDRAIL. OTHERWISE, REWORK GUARDRAIL AND ADD END POSTS AT EACH PORTAL CORNER. WILL BE PAID FOR UNDER ITEM 525.60, BRIDGE RAILING REPAIR, TYPE III. SEE "ABUTMENT AND END POST DETAILS", SHEET 10, FOR DETAILS.

PROJECT NAME: CHARLOTTE
PROJECT NUMBER: BO 1445(36)

FILE NAME: sl4j235+yp.dgn
PROJECT LEADER: M. SARGENT
DESIGNED BY: J. WEAVER
TYPICAL SECTIONS

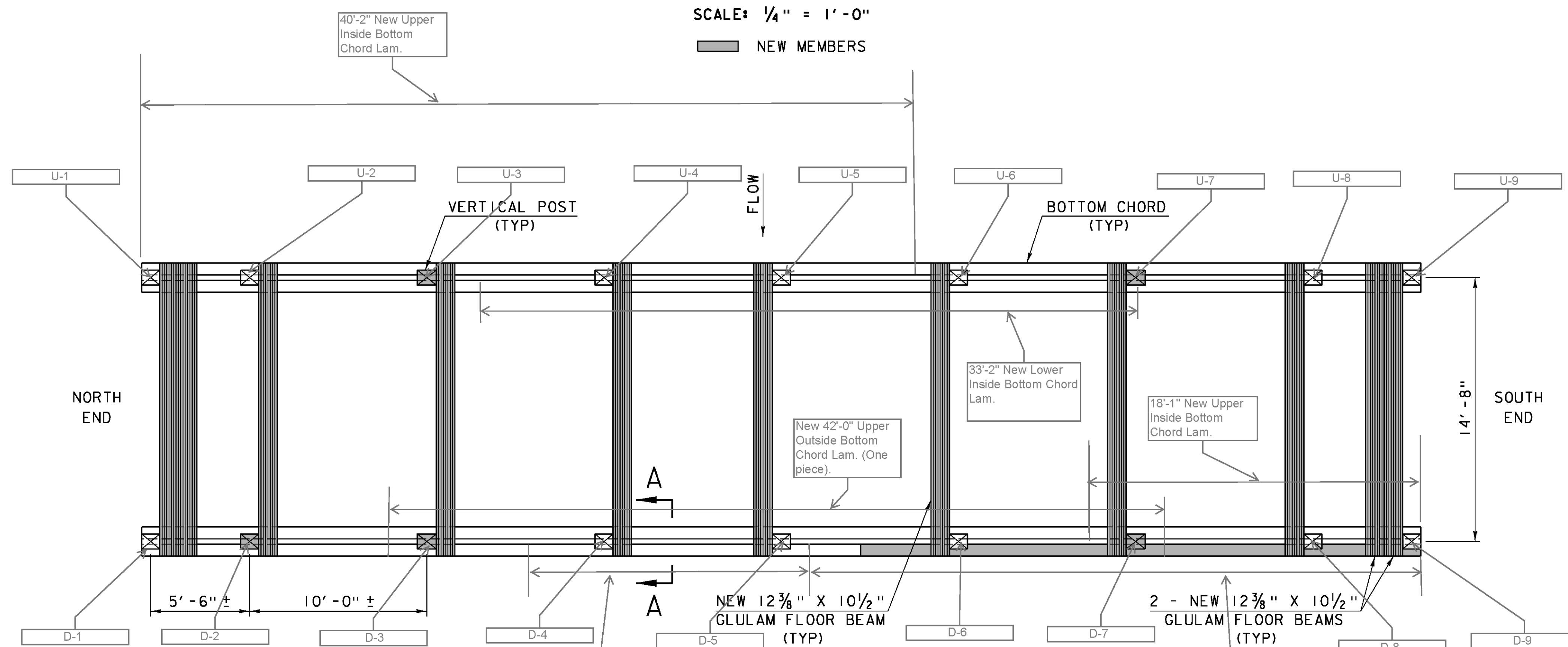
PLOT DATE: 26-FEB-2016
DRAWN BY: G. ROY
CHECKED BY: J. WEAVER
SHEET 5 OF 13



TOP CHORD AND BRACING PLAN

SCALE: 1/4" = 1'-0"

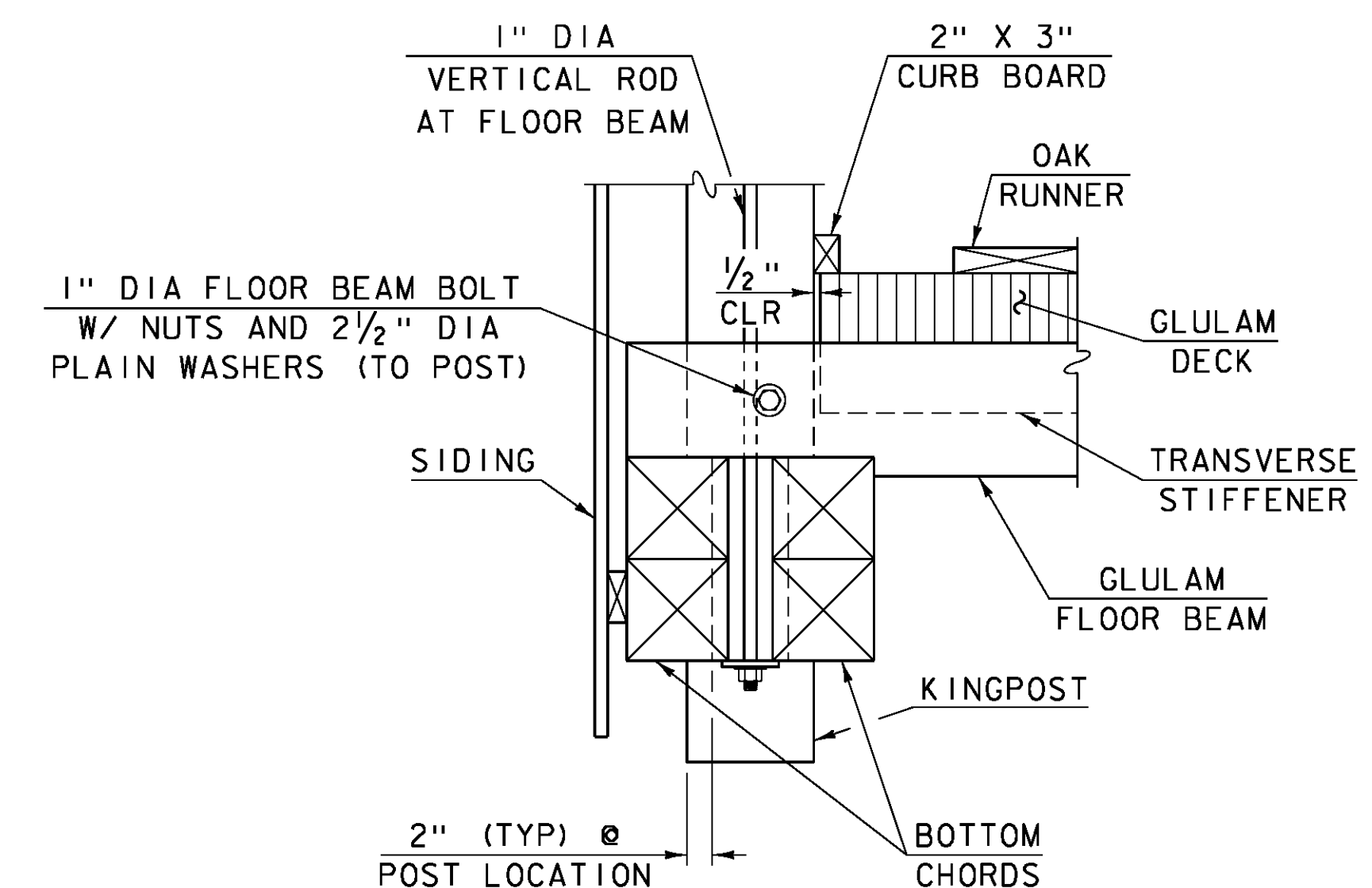
NEW MEMBERS



BOTTOM CHORD AND FLOOR BEAM PLAN

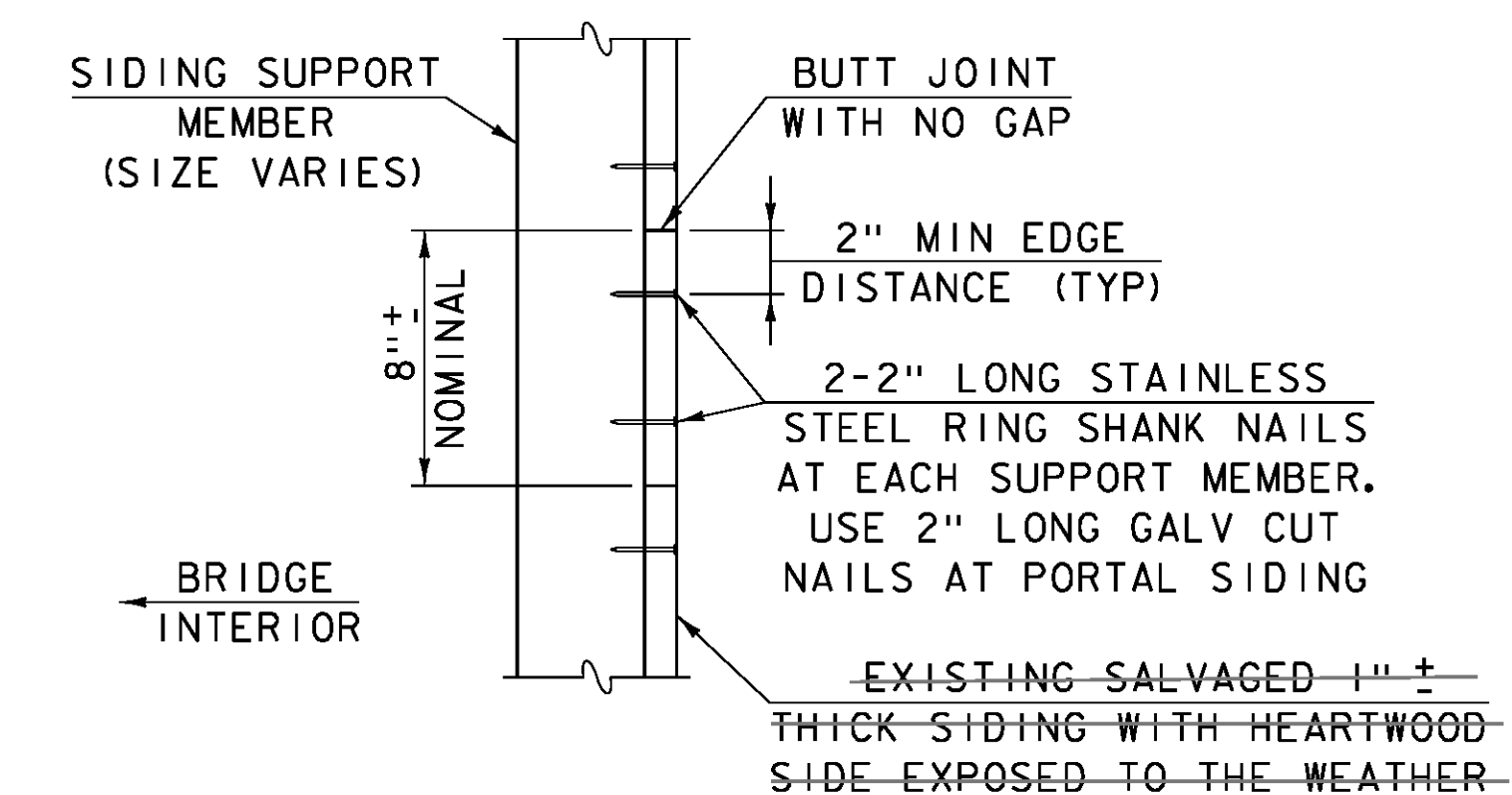
SCALE: 1/4" = 1'-0"

NEW MEMBERS



SECTION A-A

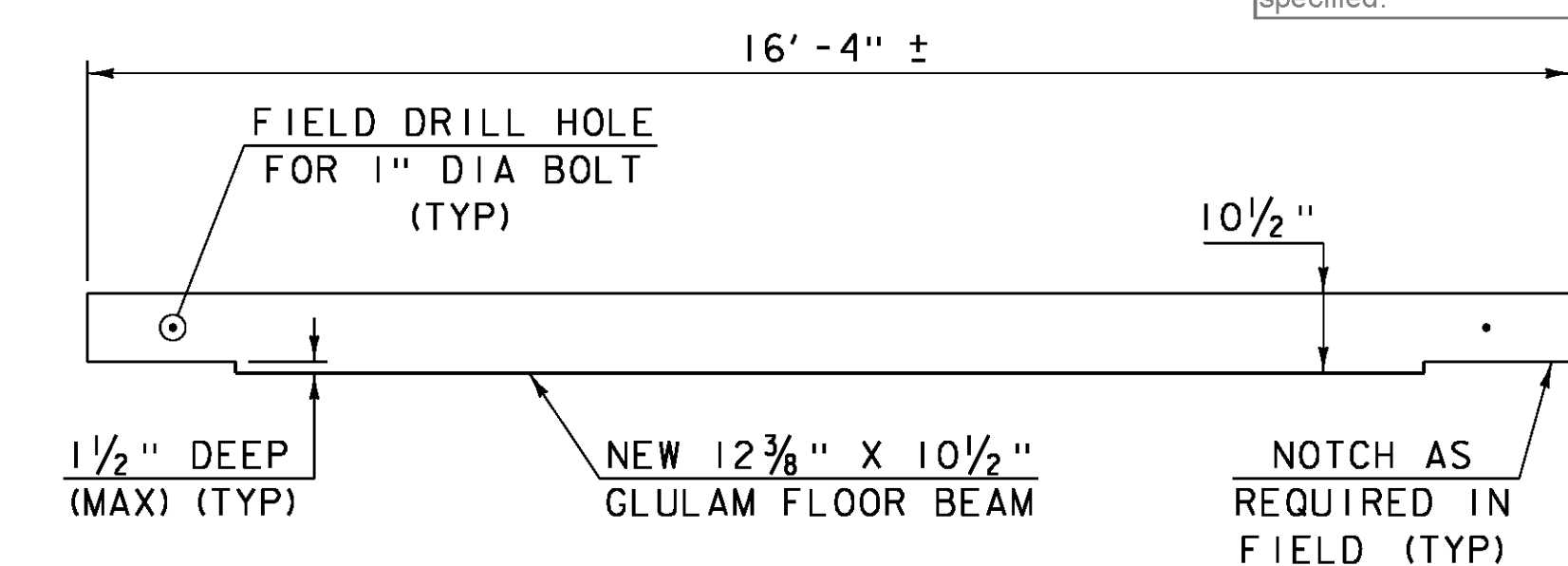
SCALE: 1" = 1'-0"



SIDING DETAIL

(PLAN VIEW)
NOT TO SCALE

This is a generic detail. All Siding was replaced with 1"x 8" Eastern Hemlock, No. 1 Common. See Plan Sheet #5 where replacement of the siding is specified.



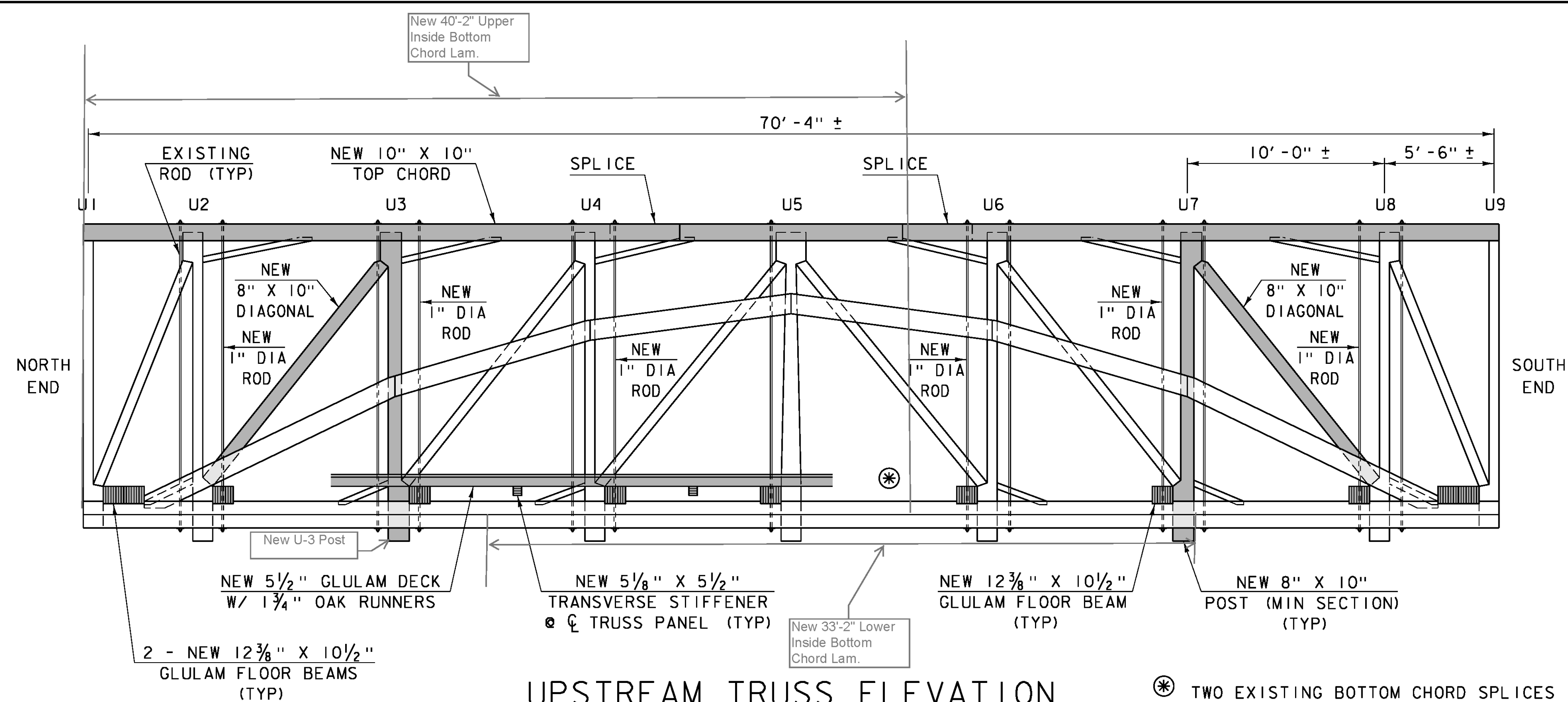
FLOOR BEAM DETAIL

SCALE: 1/2" = 1'-0"

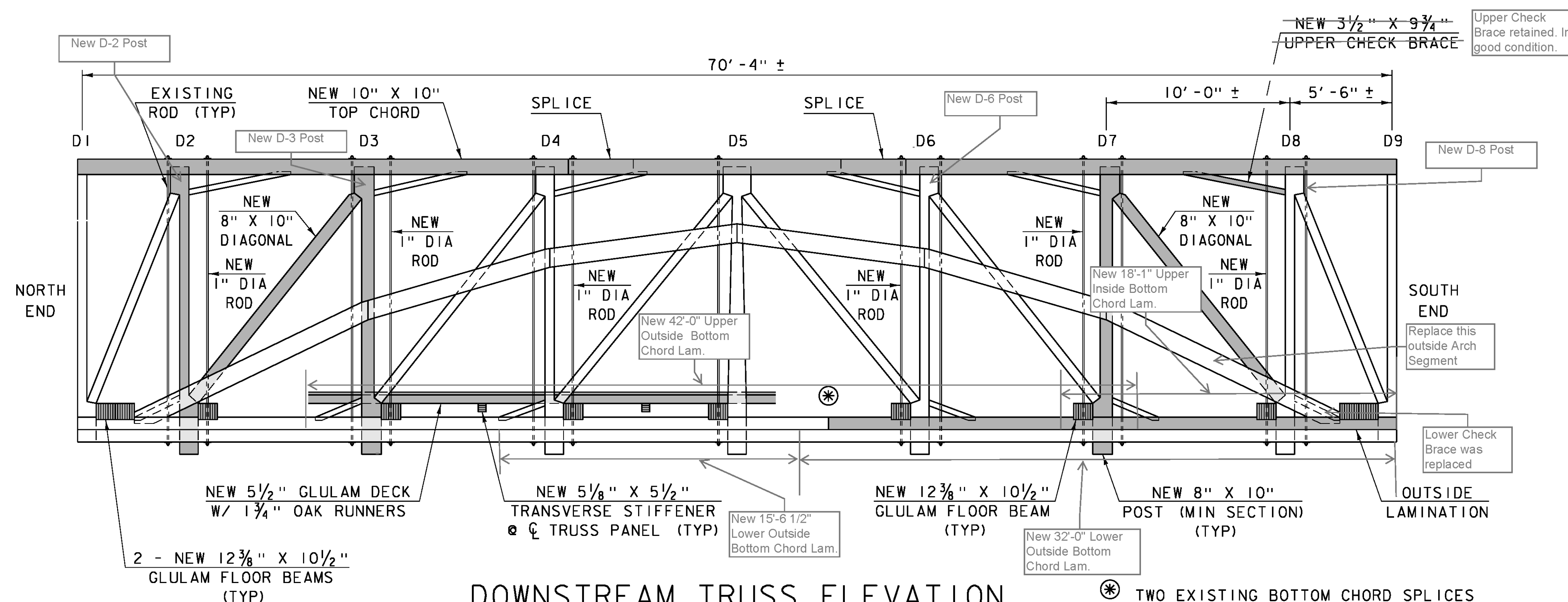
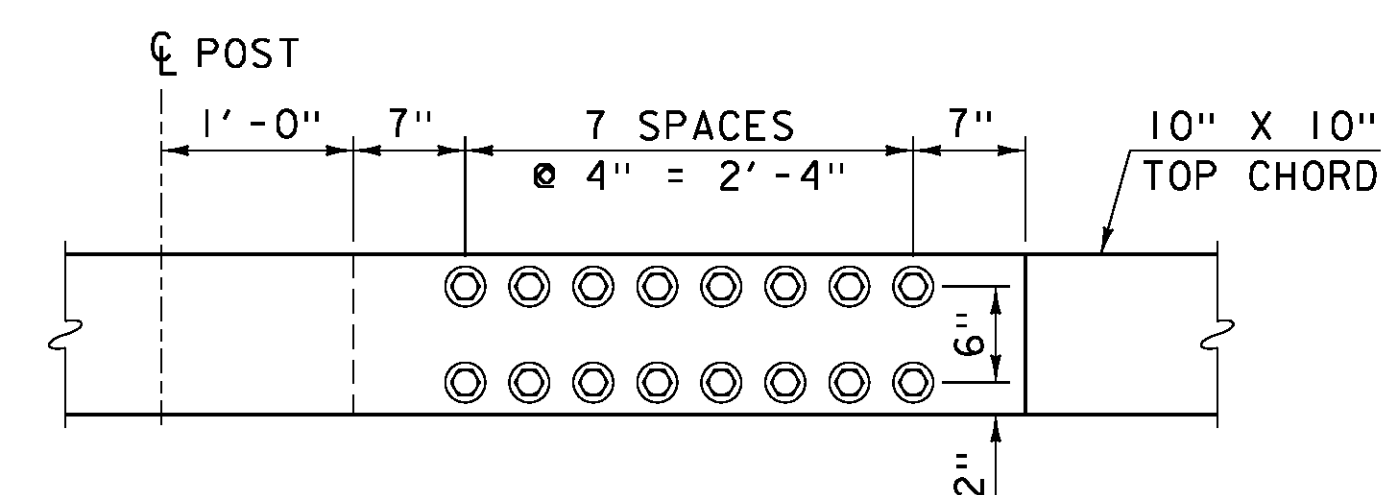
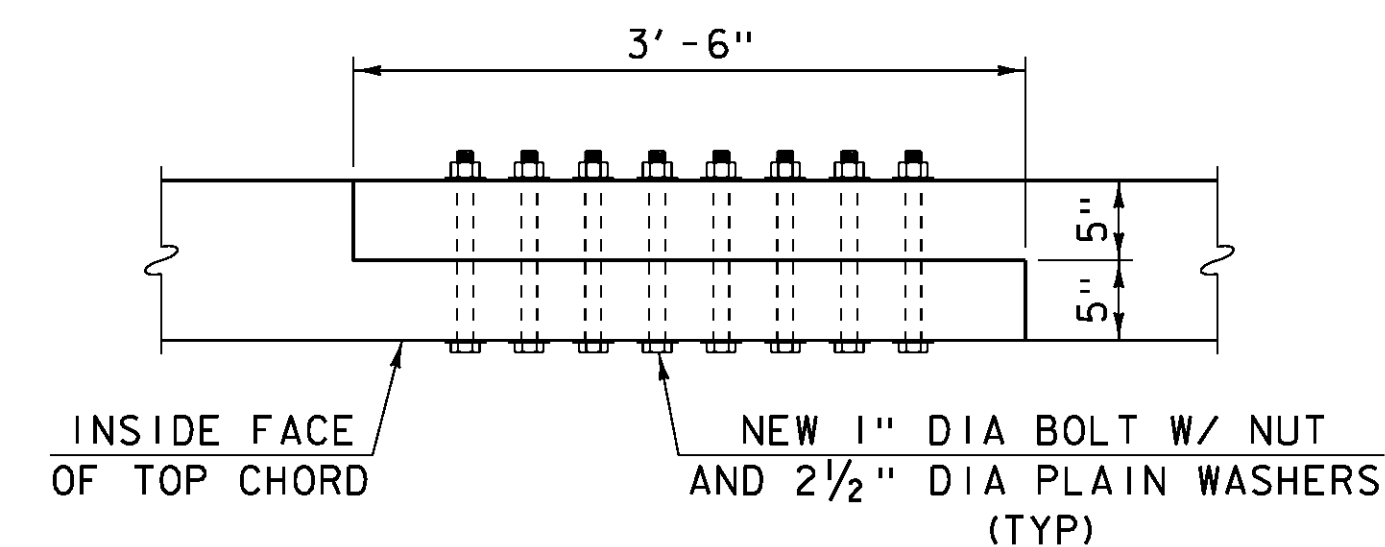
PROJECT NAME: CHARLOTTE
PROJECT NUMBER: BO 1445(36)

FILE NAME: sl4j235truss.dgn
PROJECT LEADER: M. SARGENT
DESIGNED BY: J. WEAVER
TOP AND BOTTOM CHORD PLAN

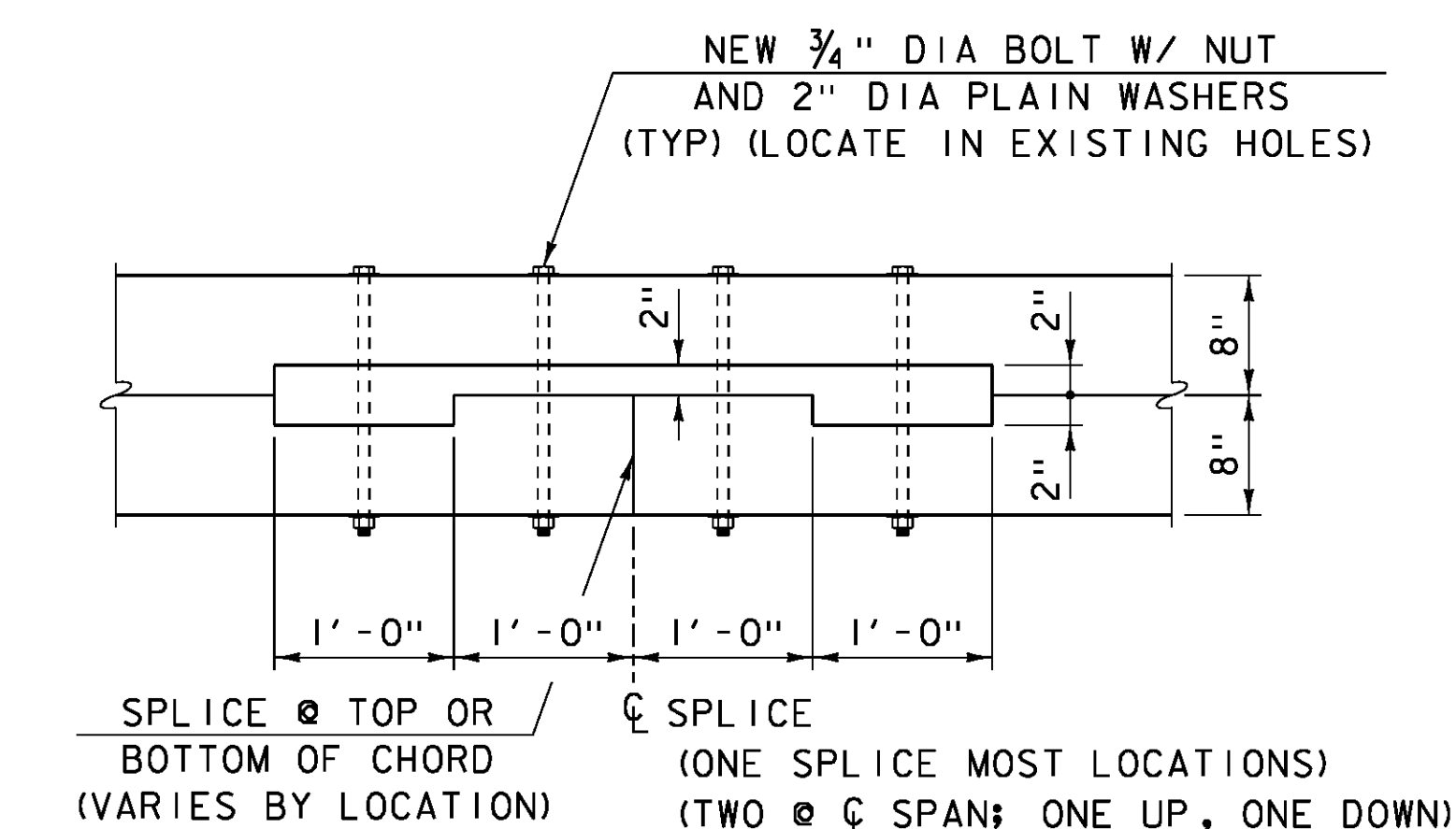
PLOT DATE: 15-JAN-2016
DRAWN BY: G. ROY
CHECKED BY: J. WEAVER
SHEET 6 OF 13



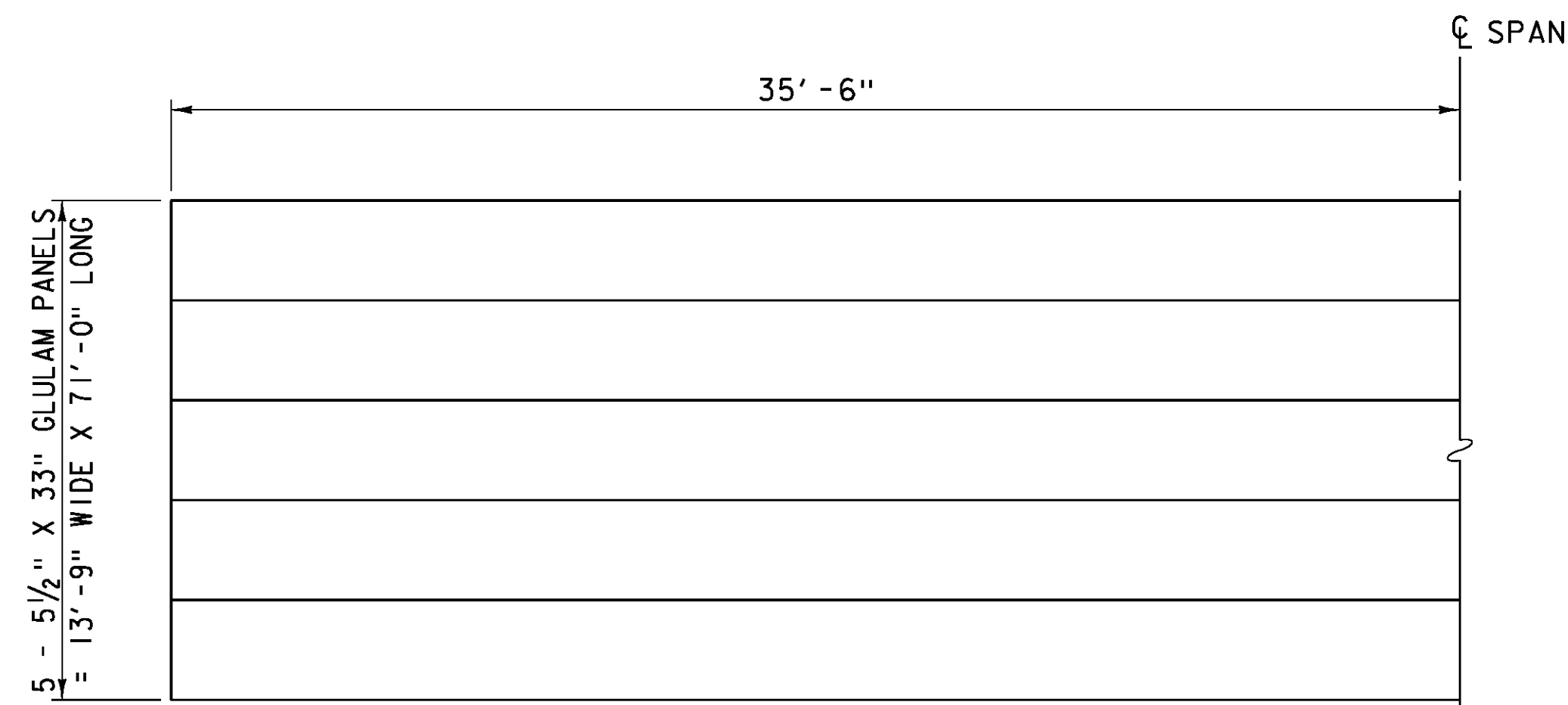
* TWO EXISTING BOTTOM CHORD SPLICES AT THIS PANEL. SEE ELEVATION VIEW BOTTOM CHORD SPLICE FOR DETAIL.



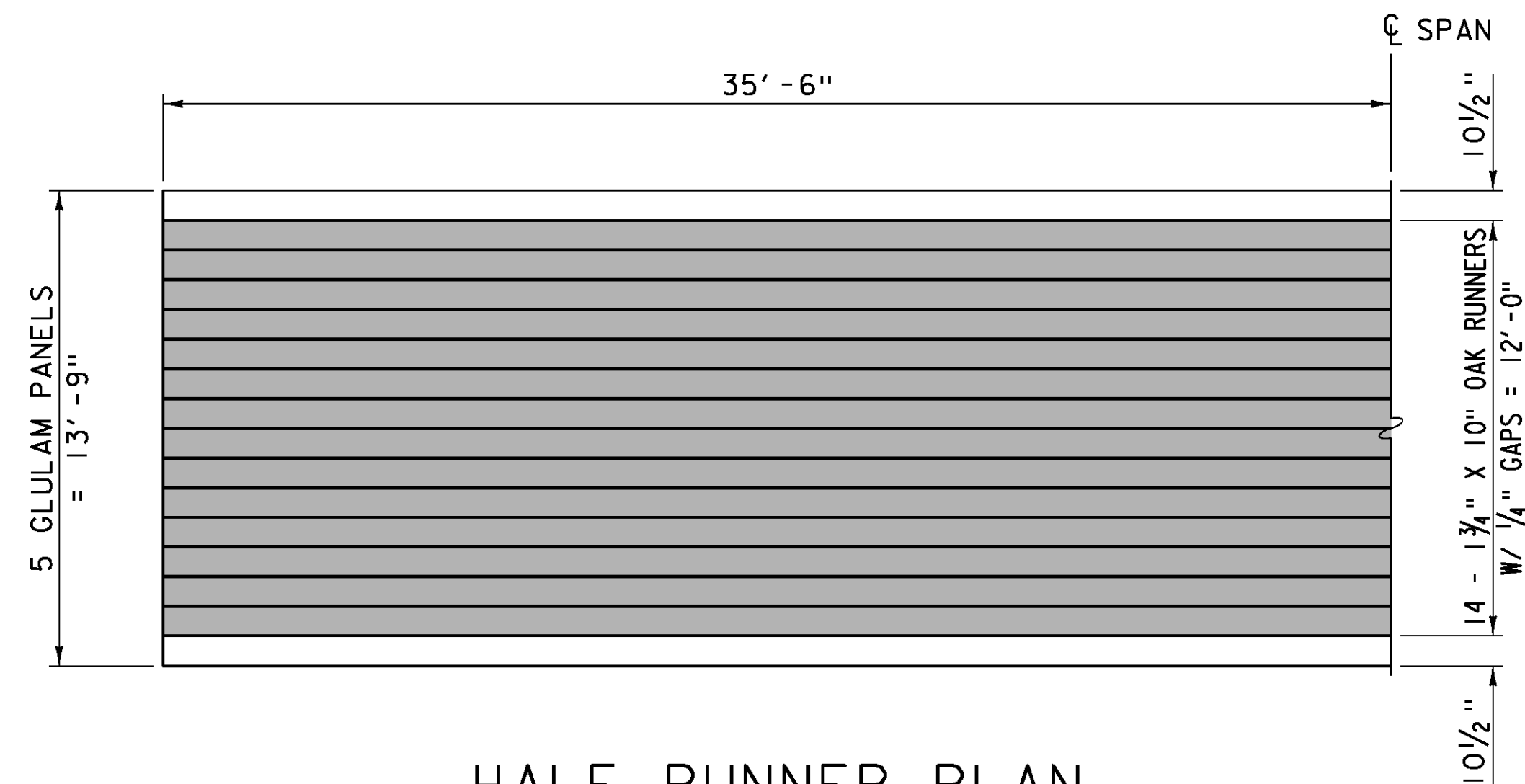
* TWO EXISTING BOTTOM CHORD SPLICES AT THIS PANEL. SEE ELEVATION VIEW BOTTOM CHORD SPLICE FOR DETAIL.



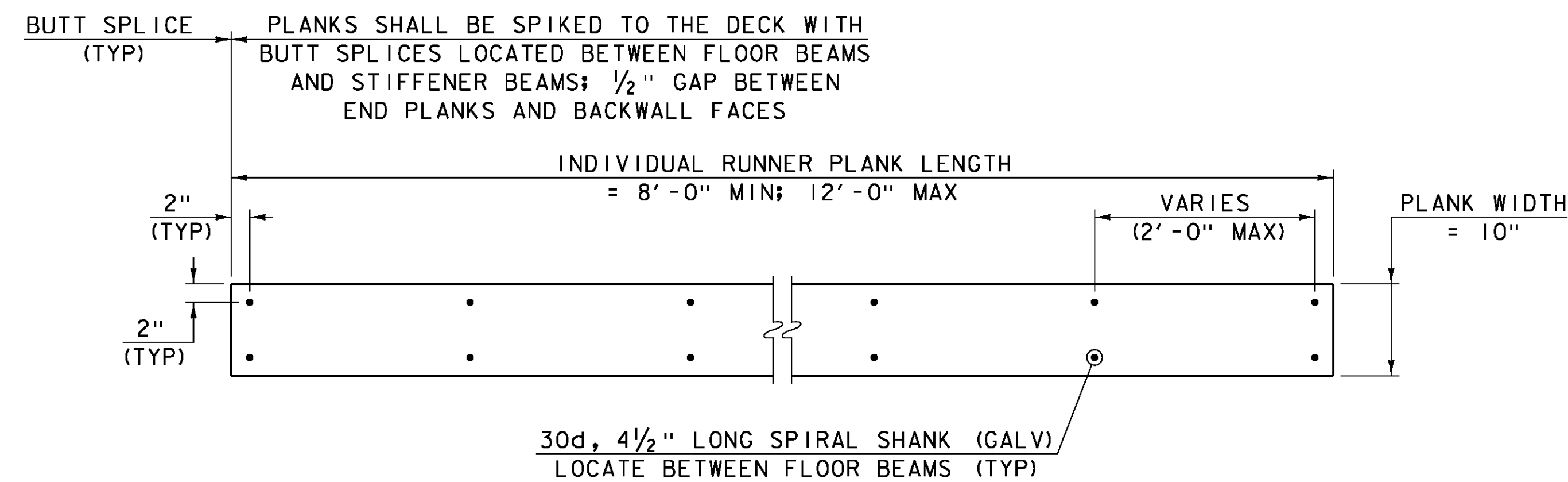
PROJECT NAME:	CHARLOTTE	PLOT DATE:	22-FEB-2016
PROJECT NUMBER:	BO 1445(36)	PROJECT LEADER:	M. SARGENT
FILE NAME:	sl4j235truss.dgn	DRAWN BY:	G. ROY
DESIGNED BY:	J. WEAVER	CHECKED BY:	J. WEAVER
TRUSS ELEVATIONS		SHEET	7 OF 13



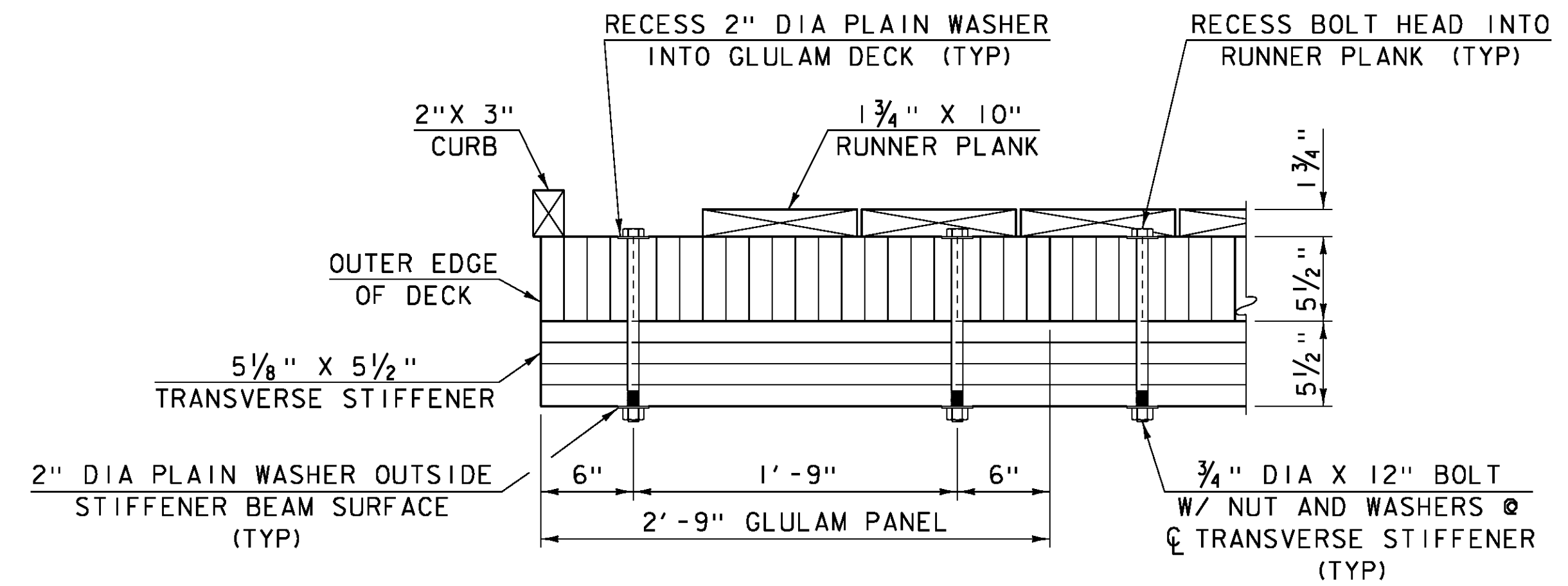
HALF DECK PANEL PLAN
SCALE: $\frac{1}{4}" = 1'-0"$



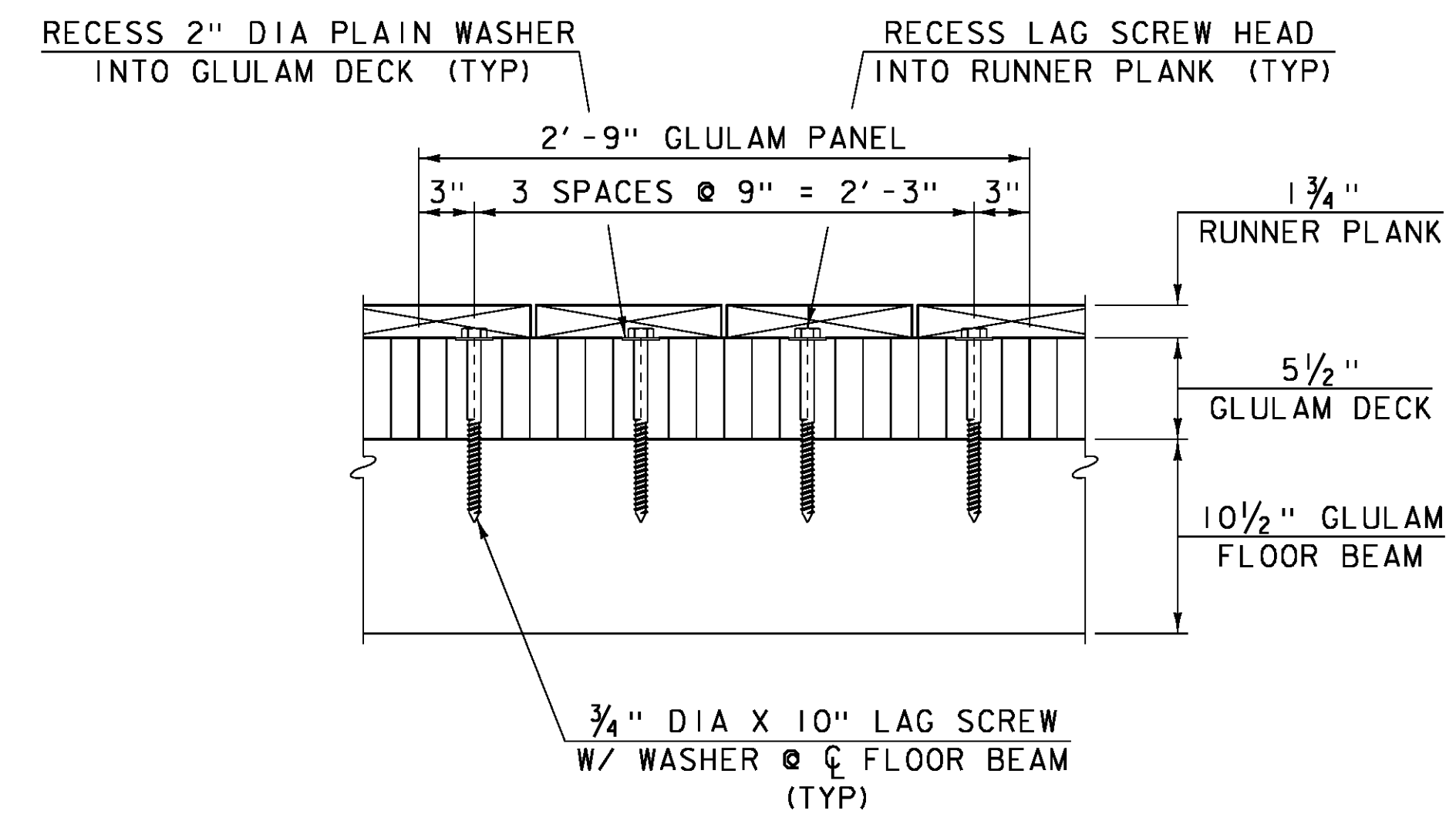
HALF RUNNER PLAN
SCALE: $\frac{1}{4}" = 1'-0"$



RUNNER PLANK ATTACHMENT DETAIL
SCALE: $1" = 1'-0"$

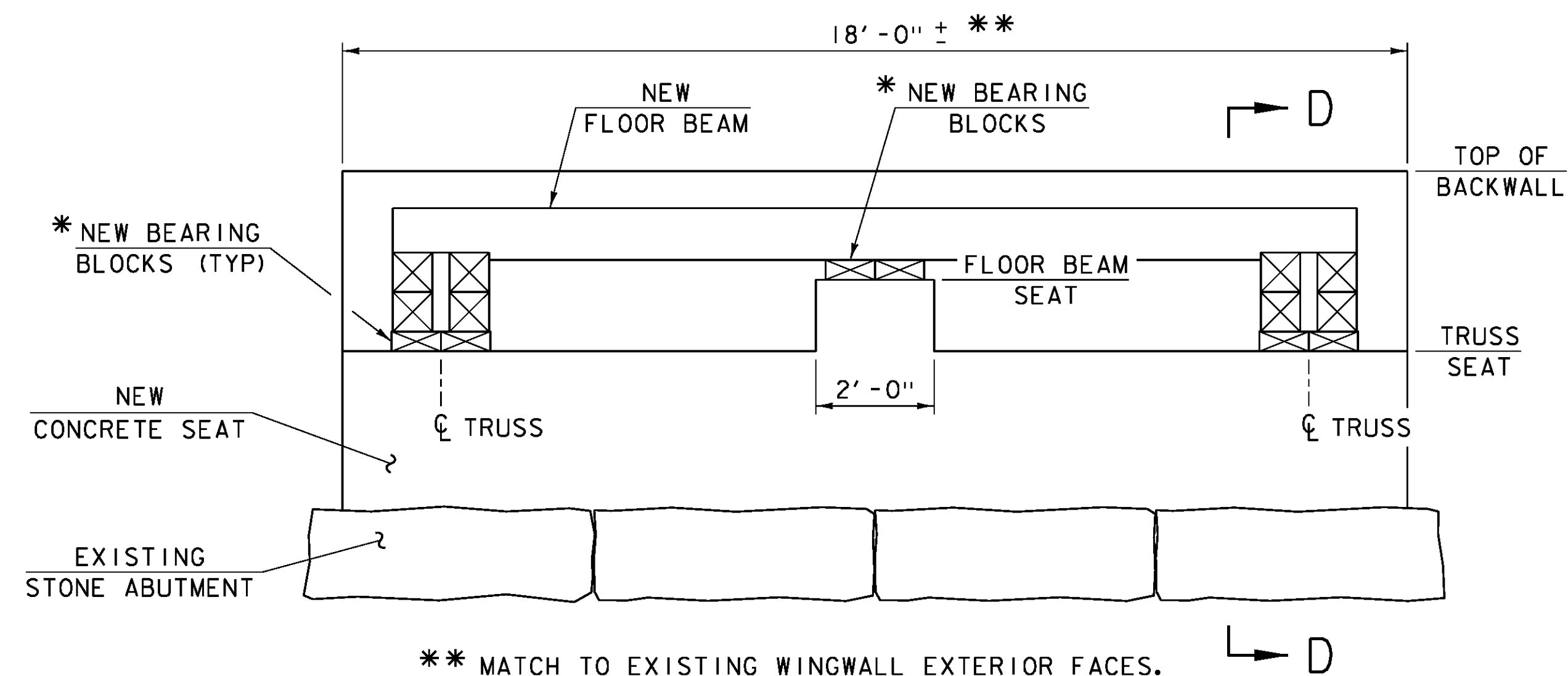


DECK DETAIL
SCALE: $1\frac{1}{2}" = 1'-0"$



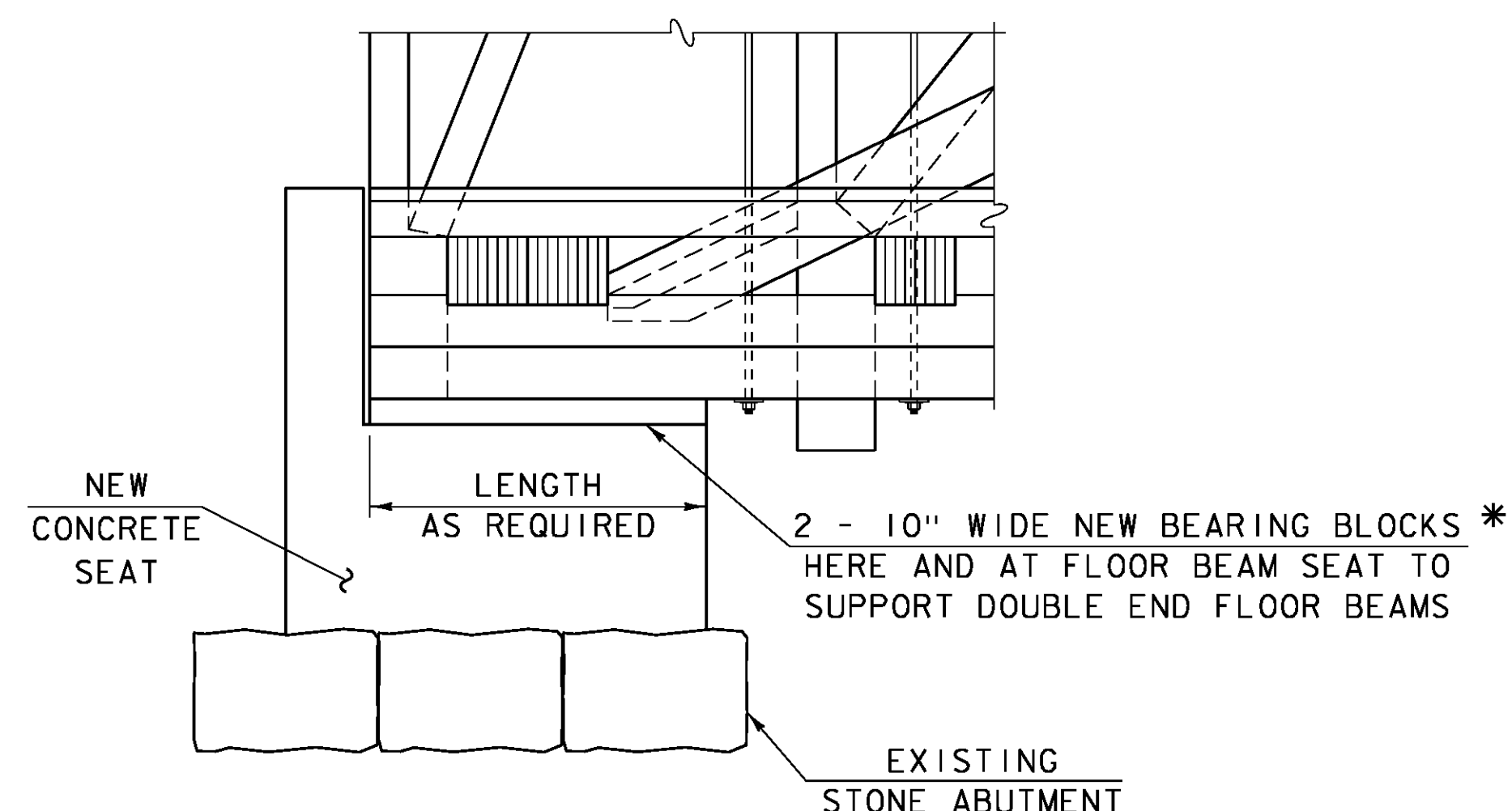
FLOOR CONNECTION DETAIL
SCALE: $1\frac{1}{2}" = 1'-0"$

PROJECT NAME:	CHARLOTTE
PROJECT NUMBER:	BO 1445(36)
FILE NAME:	sl4j235truss.dgn
PROJECT LEADER:	M. SARGENT
DESIGNED BY:	J. WEAVER
DECK PLAN AND CONNECTION DETAILS	
PLOT DATE:	22-FEB-2016
DRAWN BY:	G. ROY
CHECKED BY:	J. WEAVER
SHEET	8 OF 13



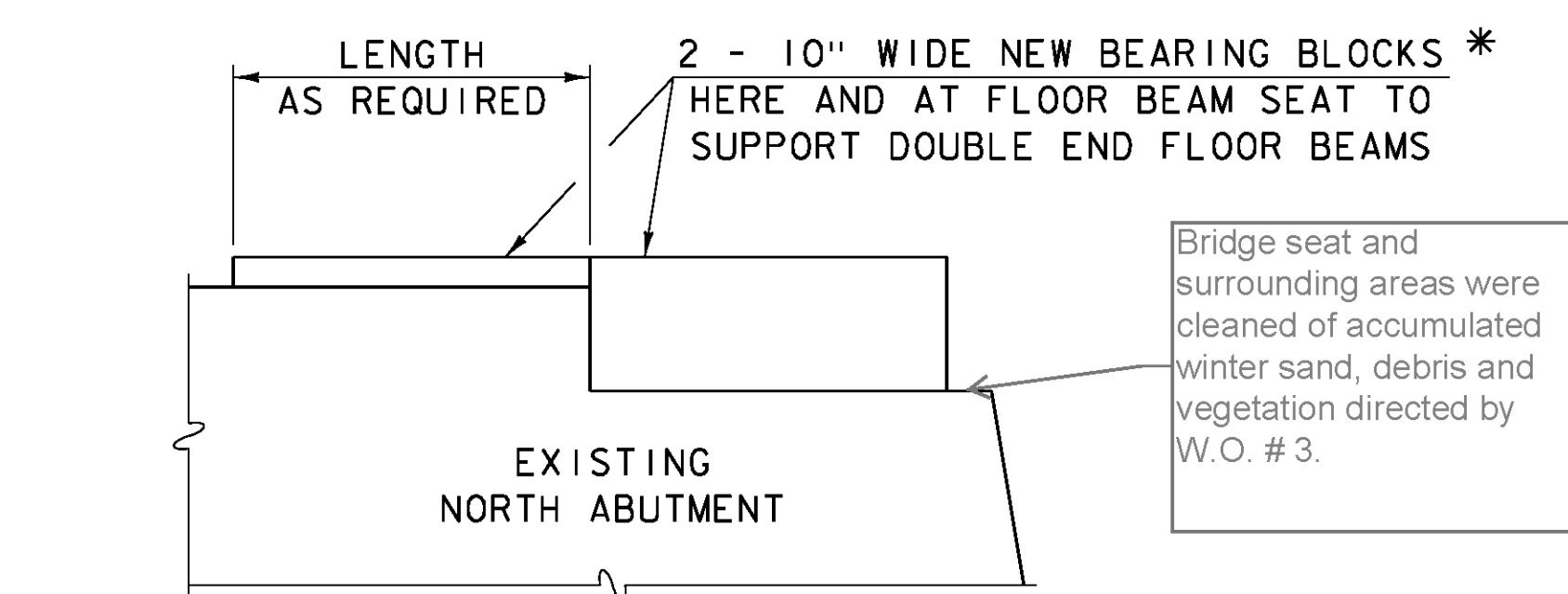
ELEVATION SOUTH ABUTMENT

SCALE: 1/2" = 1'-0"



SECTION D-D

NOT TO SCALE

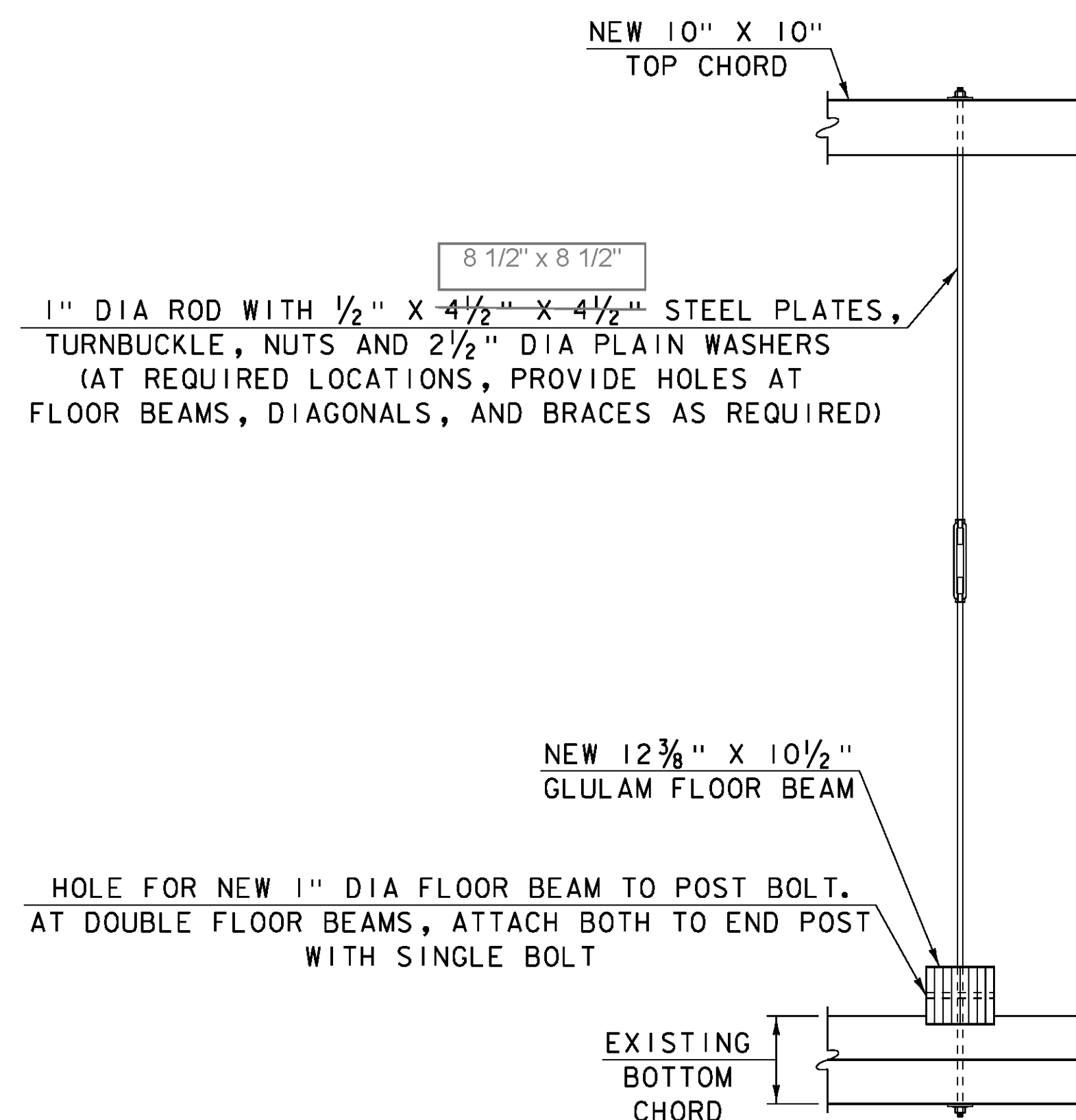


SECTION AT NORTH ABUTMENT

TRUSS SEAT

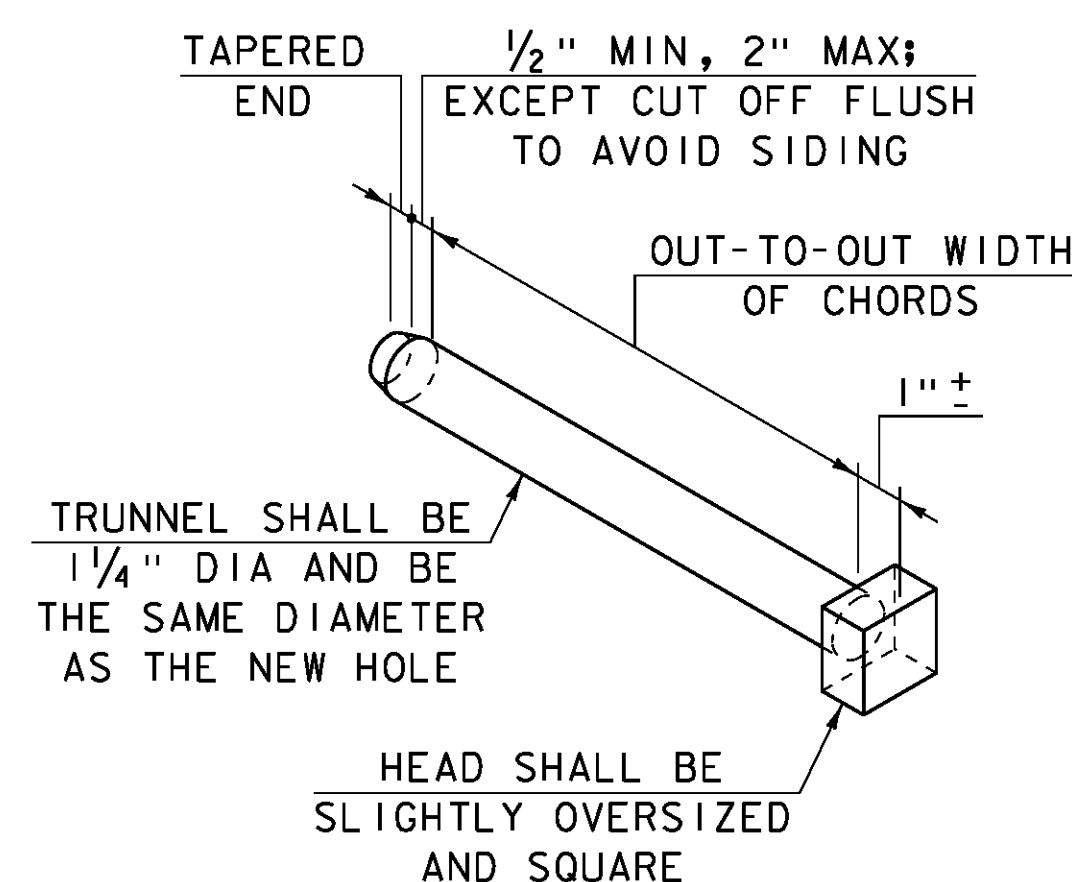
NOT TO SCALE

* DEPTH AS REQUIRED TO MEET EXISTING FINISH GRADES.



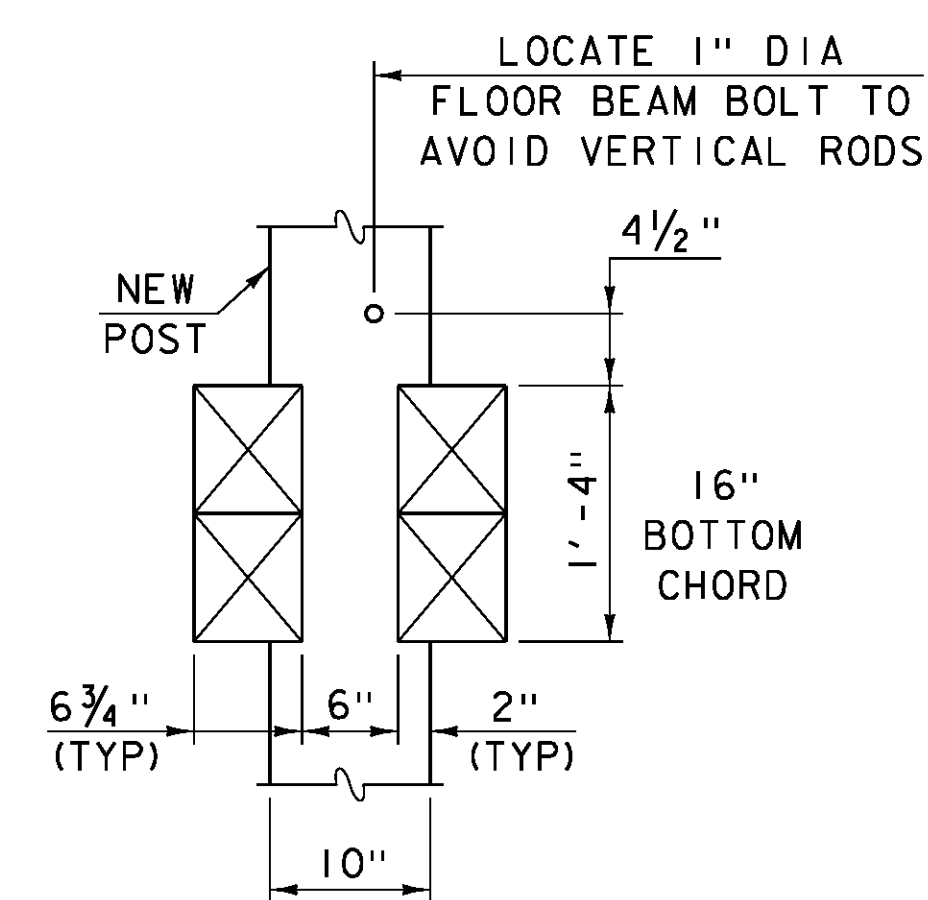
TRUSS ROD DETAIL

SCALE: 1/2" = 1'-0"



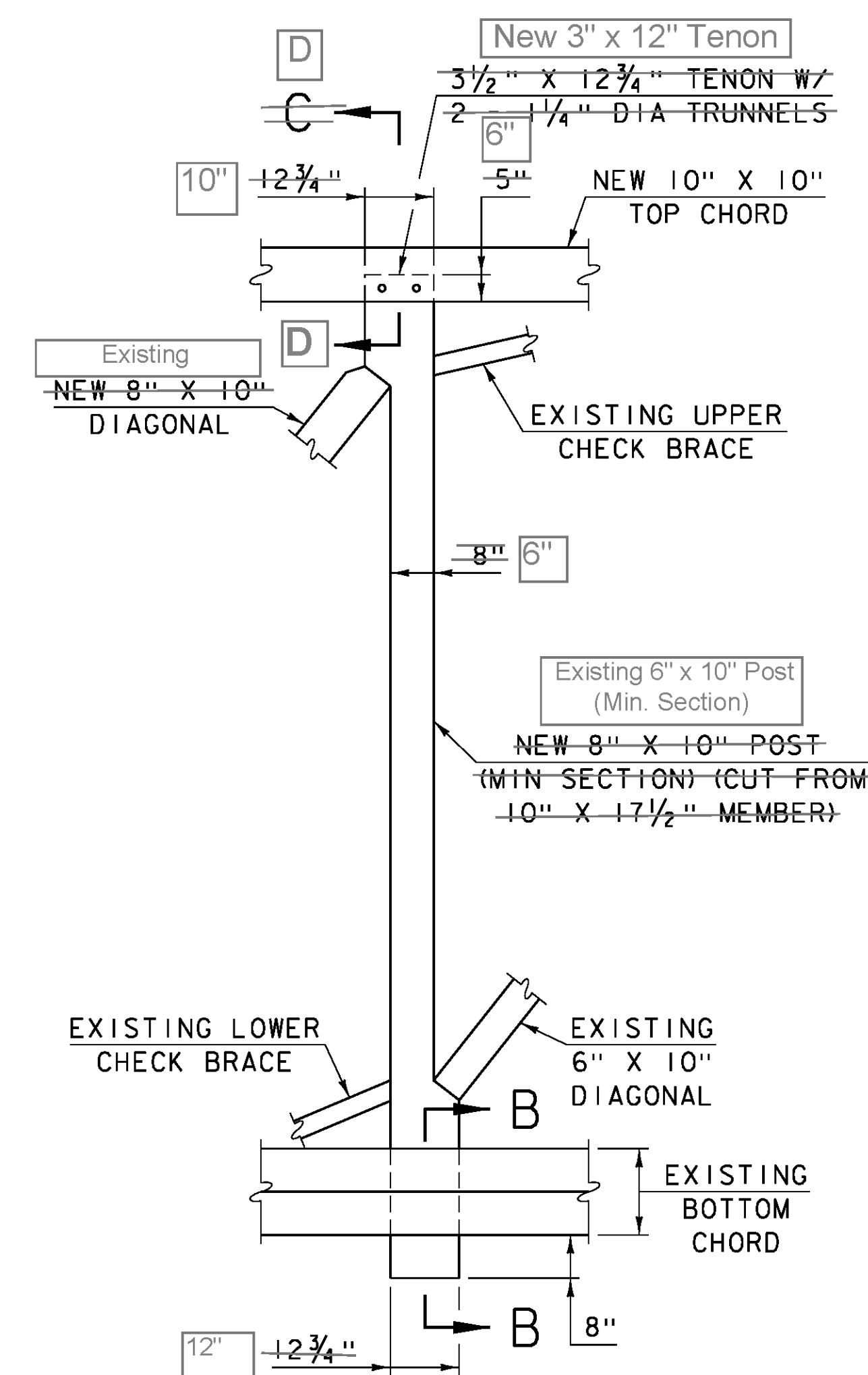
TRUNNEL DETAIL

NOT TO SCALE



SECTION B-B

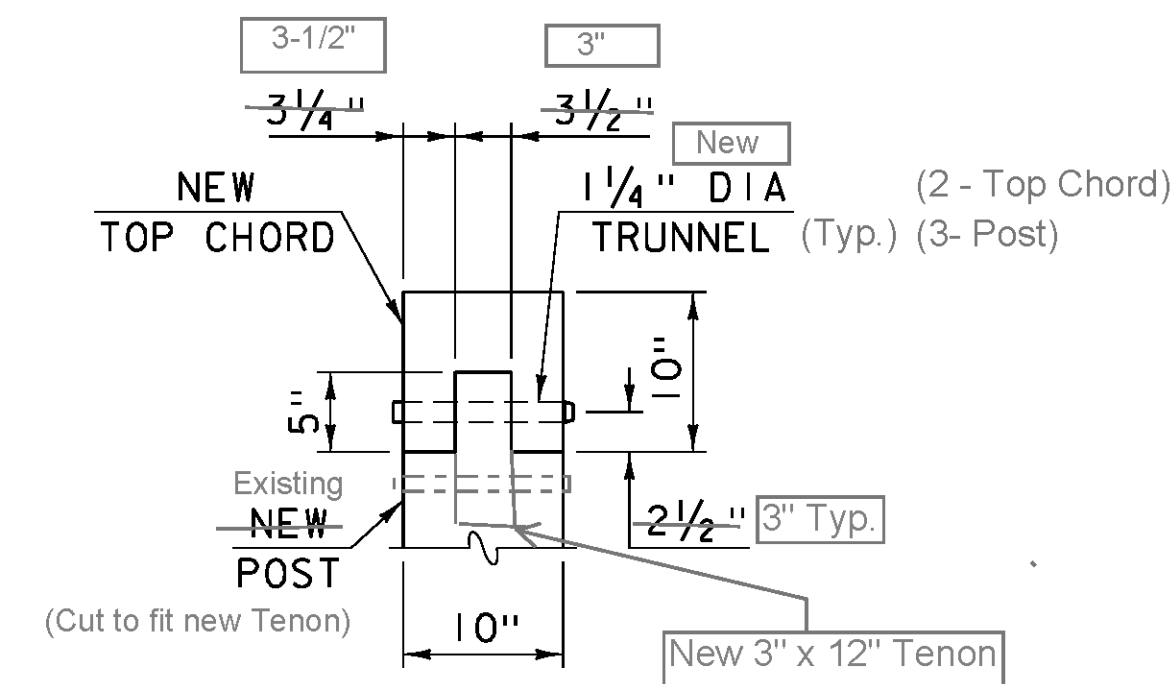
SCALE: 1" = 1'-0"



NEW POST DETAIL

SCALE: 1/2" = 1'-0"

(VERTICAL RODS AND FLOOR BEAMS NOT SHOWN)



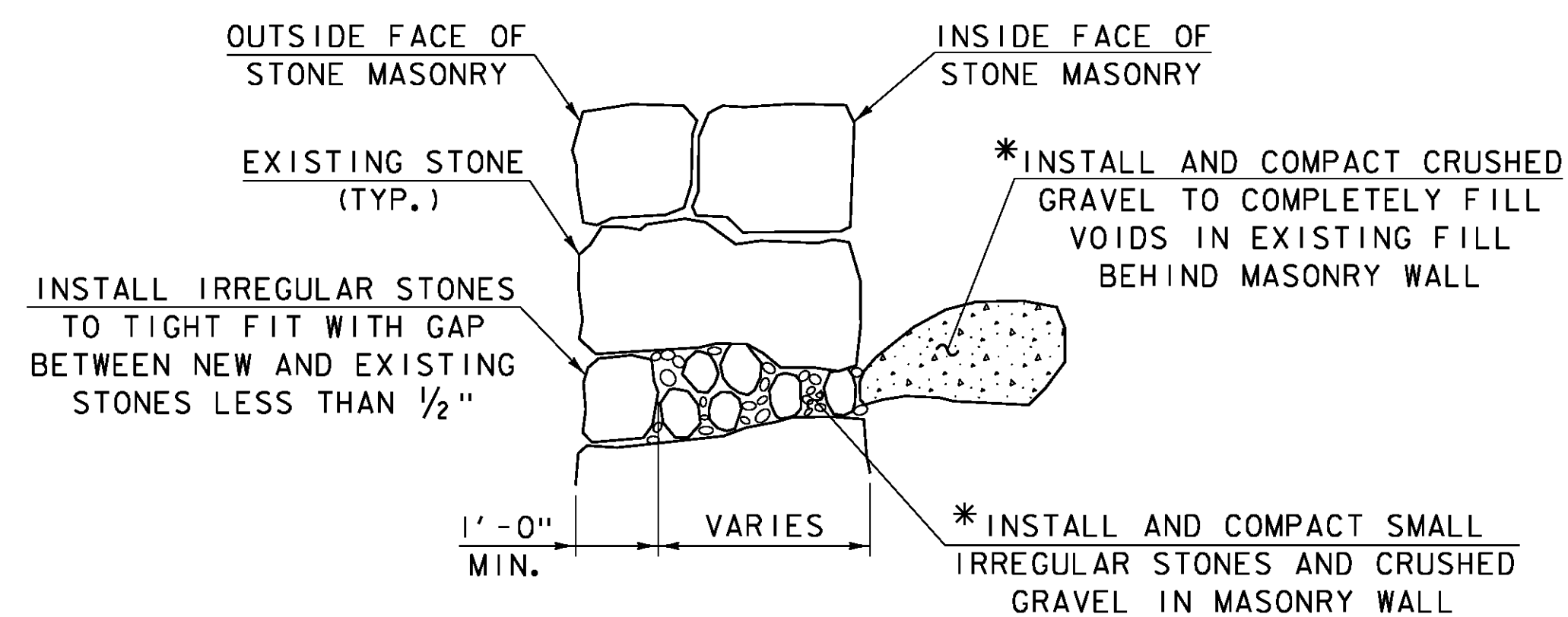
SECTION C-C

SCALE: 1" = 1'-0"

PROJECT NAME: CHARLOTTE
PROJECT NUMBER: BO 1445(36)

FILE NAME: sl4j235+truss.dgn
PROJECT LEADER: M. SARGENT
DESIGNED BY: J. WEAVER
NEW POST AND BEARING BLOCK DETAILS

PLOT DATE: 21-SEP-2015
DRAWN BY: G. ROY
CHECKED BY: J. WEAVER
SHEET 9 OF 13

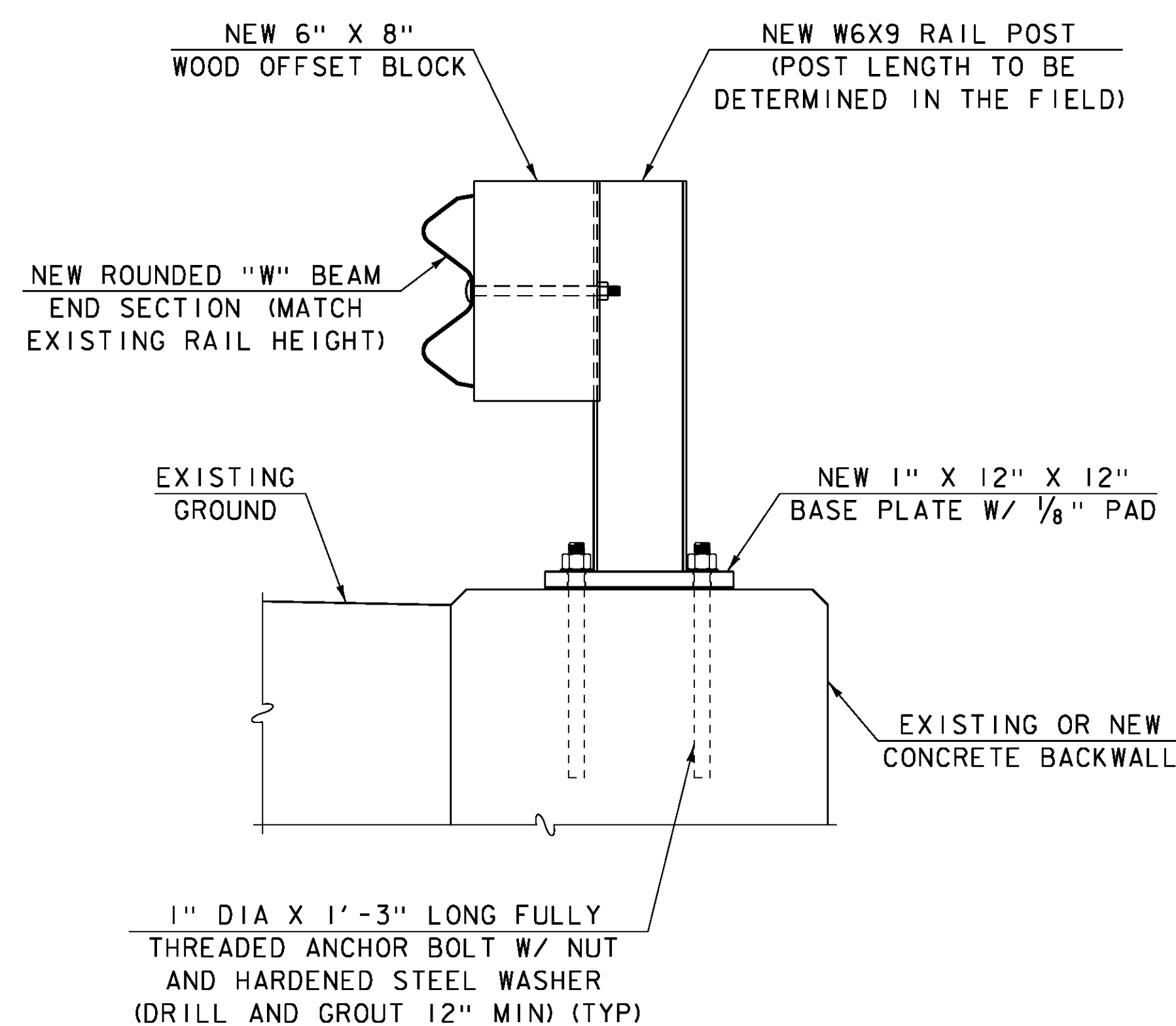


MASONRY REPAIR DETAIL

NOT TO SCALE

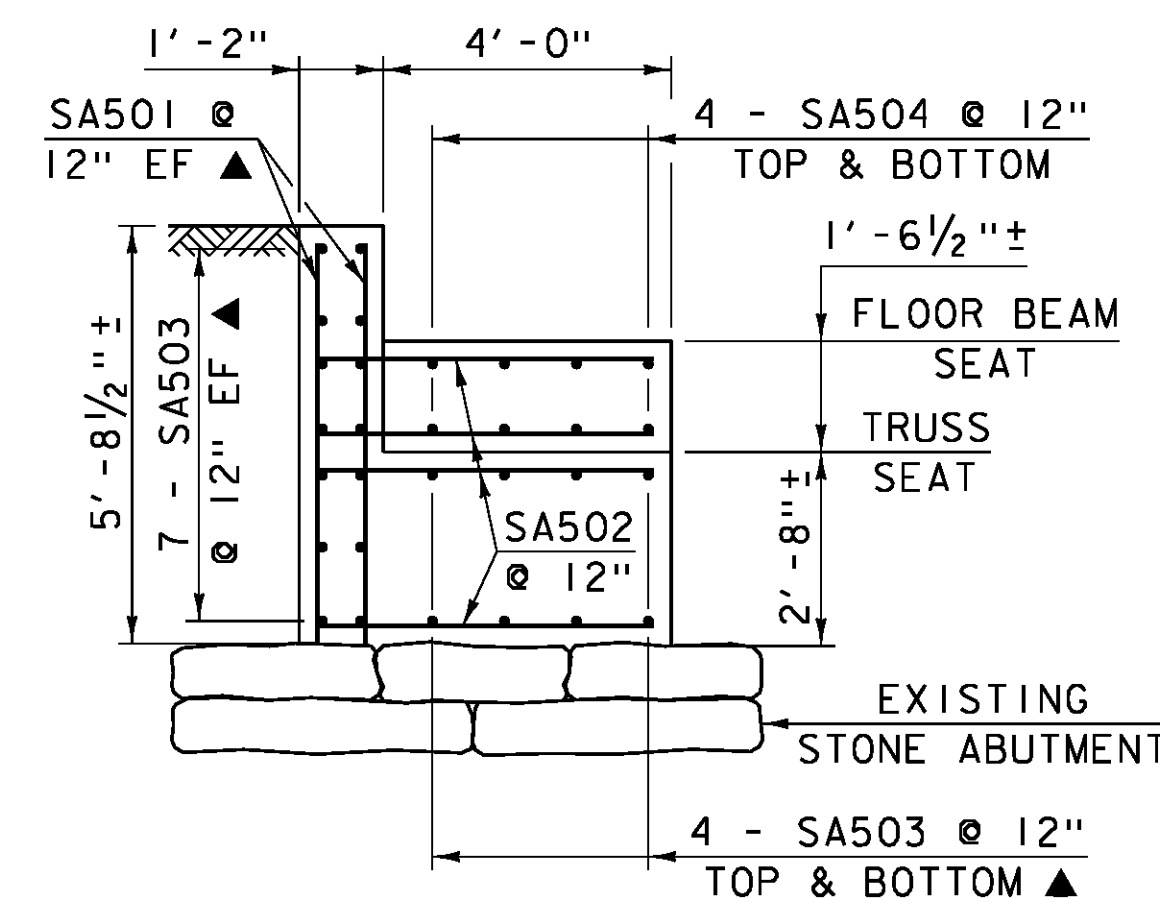
* USE TAMPING RODS OR OTHER METHODS ACCEPTABLE TO THE ENGINEER.

MASONRY REPAIR WILL BE PAID FOR UNDER ITEM 602.40, REPAIRING STONE MASONRY.



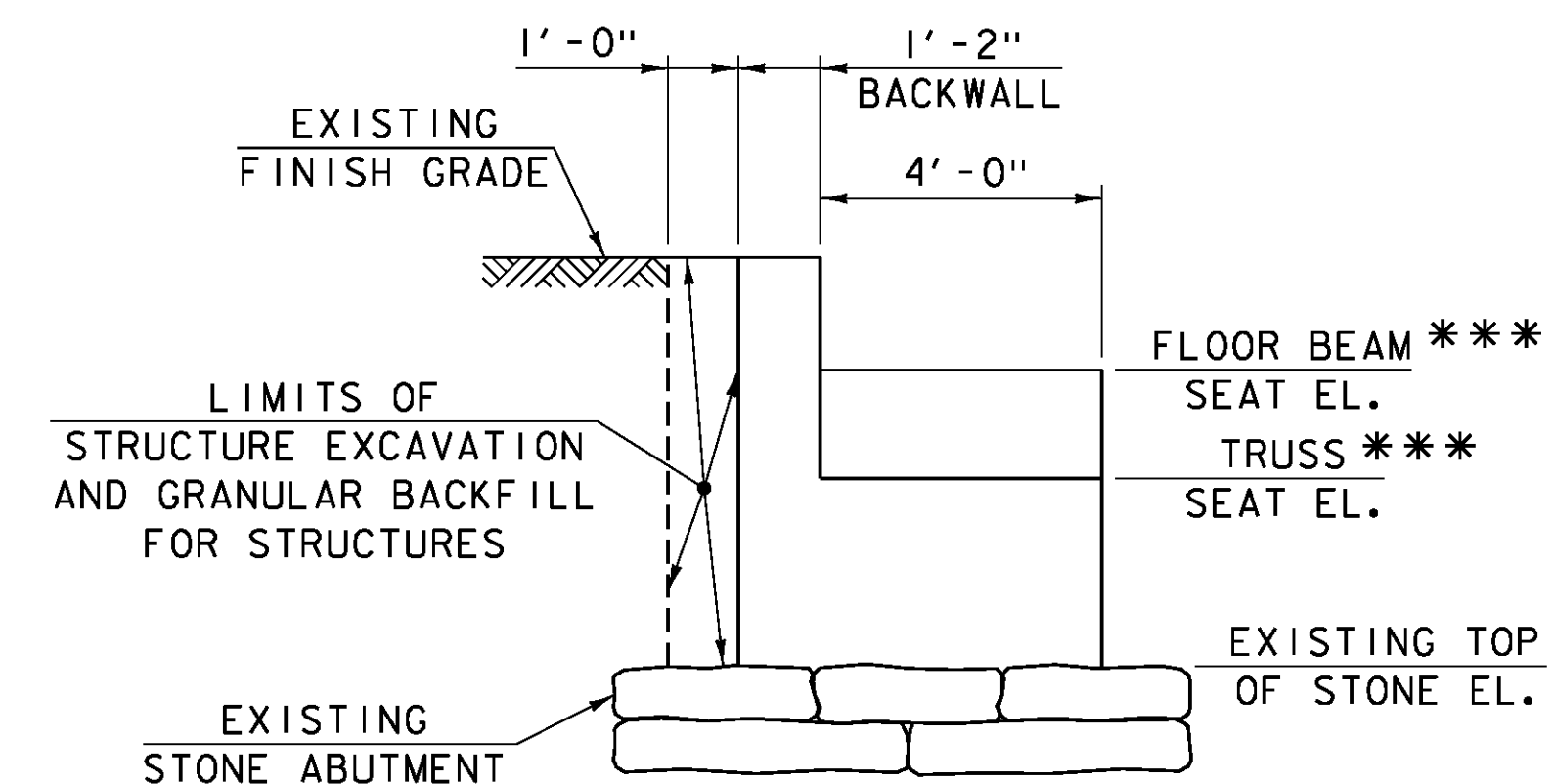
END POST DETAIL

SCALE: 1 1/2" = 1'-0"



REINFORCING DETAIL @ SOUTH ABUTMENT

SCALE: 3/8" = 1'-0"

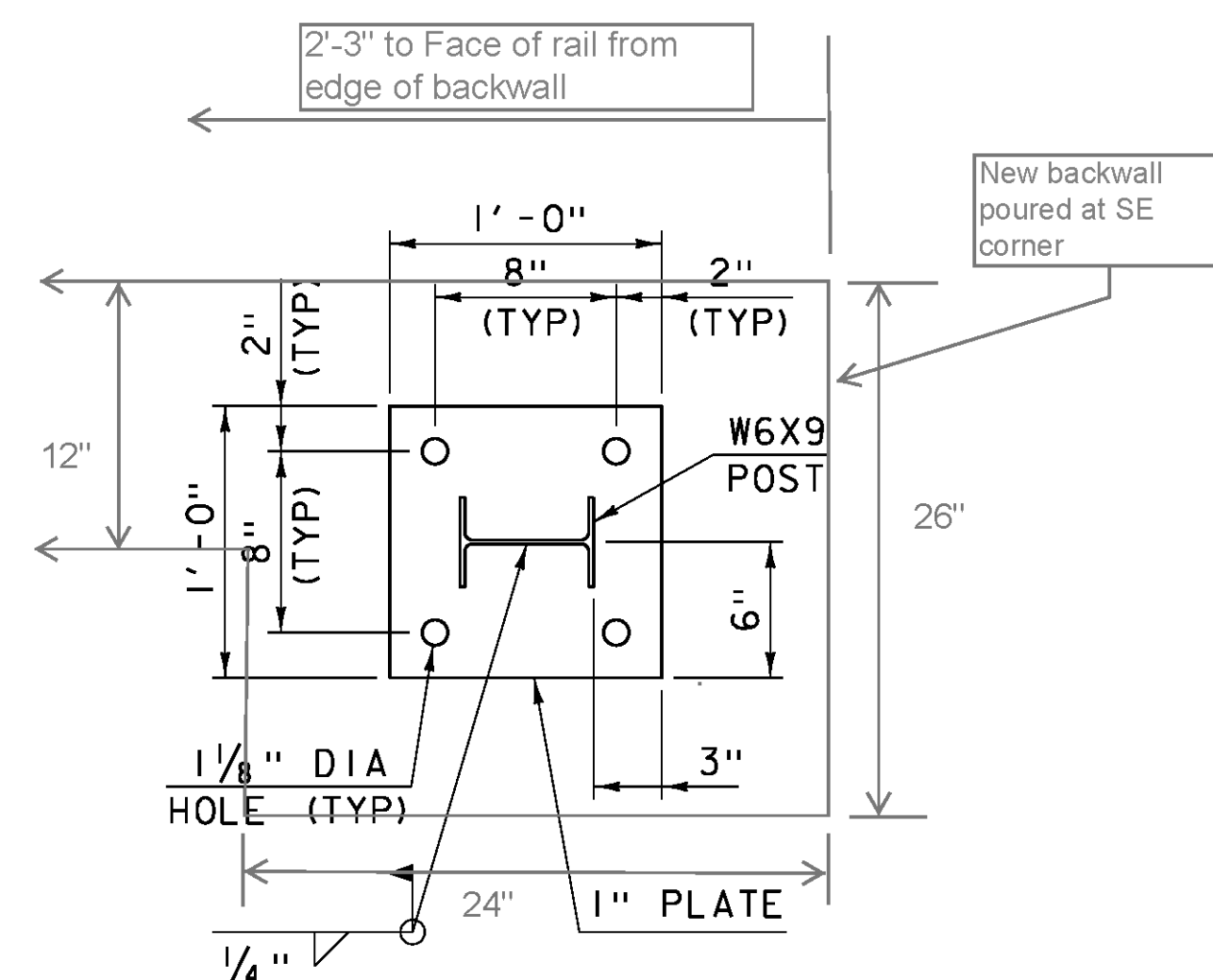


NEW CONCRETE SEAT @ SOUTH ABUTMENT

SCALE: 3/8" = 1'-0"

*** TO BE DETERMINED IN THE FIELD.

NOTE: REMOVE EXISTING CONCRETE BRIDGE SEAT AND BACKWALL ABOVE EXISTING TOP OF STONE ELEVATION. WORK TO BE PAID FOR UNDER PAY ITEM 529.25, "REMOVAL OF CONCRETE OR MASONRY".

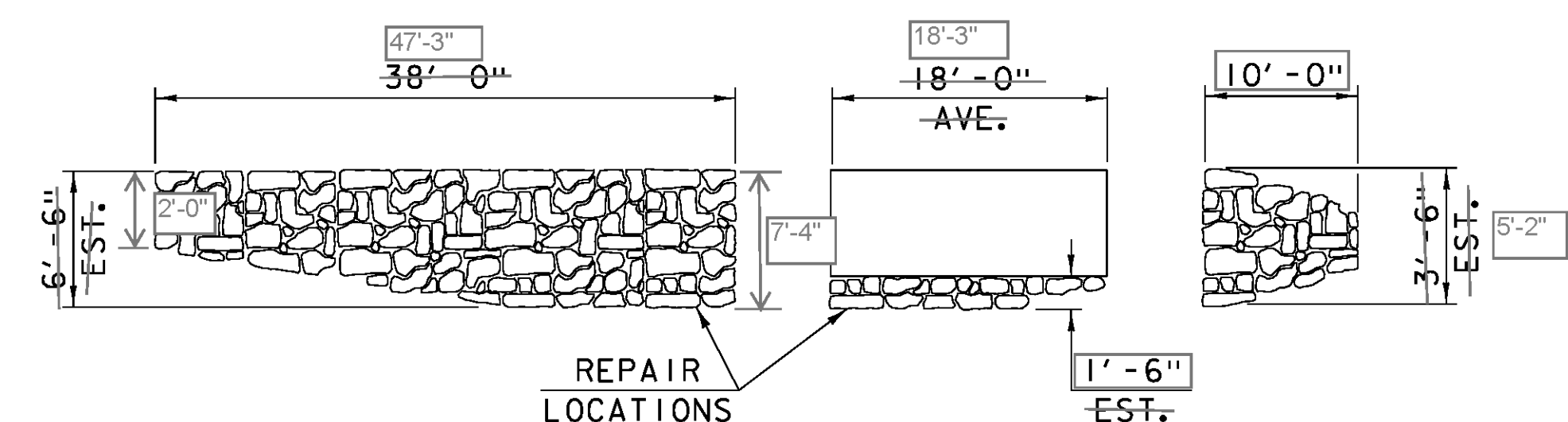


BASE PLATE DETAIL

SCALE: 1 1/2" = 1'-0"

END POST NOTES:

1. ANCHOR BOLTS SHALL BE ASTM A 449, 15" LONG, FULLY THREADED. WORK FOR DRILLING AND GROUTING WILL BE PAID FOR UNDER ITEM 507.16, DRILLING AND GROUTING DOWELS.
2. MAINTAIN 1" CLEARANCE BETWEEN END OF NEW ROUNDED "W" BEAM END SECTION AND PORTAL BOARDING.
3. ALL RAIL COMPONENTS, FASTENERS, AND ANCHORS BOLTS SHALL BE GALVANIZED PER SECTION 525 OF THE STANDARD SPECIFICATIONS.



ABUTMENT NO. 2 REPAIRS (SOUTH ABUTMENT)

NOT TO SCALE

PROJECT NAME: CHARLOTTE
PROJECT NUMBER: BO 1445(36)

FILE NAME: sl4j235sub.dgn
PROJECT LEADER: M. SARGENT
DESIGNED BY: J. WEAVER
ABUTMENT AND END POST DETAILS

PLOT DATE: 15-JAN-2016
DRAWN BY: G. ROY
CHECKED BY: J. WEAVER
SHEET 10 OF 13

REINFORCING STEEL SCHEDULE

~ NOTES ~

1. UNLESS OTHERWISE DESIGNATED, ALL BAR REINFORCEMENT FOR CONCRETE IN SIZES UP TO AND INCLUDING NO. 18 SHALL CONFORM TO THE REQUIREMENTS OF THE "SPECIFICATIONS FOR DEFORMED BILLET-STEEL BARS FOR CONCRETE REINFORCEMENT", AASHTO M 31 (ASTM A 615-S1). ALL BARS SHALL BE GRADE 60, UNLESS OTHERWISE DESIGNATED.
2. FOR TYPICAL BENDING DETAILS, RECOMMENDED PIN DIAMETER "D" OF BENDS AND HOOKS, AND OTHER STANDARD PRACTICE, SEE CURRENT CONCRETE REINFORCING STEEL INSTITUTE "MANUAL OF STANDARD PRACTICE".
3. BARS WHICH REQUIRE MORE ACCURATE BENDING THAN STANDARD PRACTICES SHOULD HAVE LIMITS INDICATED.
4. ALL DIMENSIONS ARE OUT TO OUT OF BAR EXCEPT "A" AND "G" ON STANDARD 180 DEGREE AND 135 DEGREE HOOKS.
5. "J" DIMENSION ON 180 DEGREE HOOKS TO BE SHOWN ONLY WHERE NECESSARY TO RESTRICT HOOK SIZE. OTHERWISE, STANDARD HOOKS ARE TO BE USED.
6. "H" DIMENSION ON STIRRUPS TO BE SHOWN ONLY WHEN NECESSARY TO MAINTAIN CLEARANCES.
7. WHERE SLOPE DIFFERS FROM 45 DEGREES, DIMENSIONS "H" AND "K" MUST BE SHOWN.
8. ▲ DENOTES BARS TO BE CUT IN FIELD.
9. * DENOTES ONE EXTRA BAR ADDED FOR TESTING PURPOSES.
10. △ DENOTES TWO EXTRA BARS ADDED FOR TESTING PURPOSES.
11. E IN BAR MARK PREFIX DENOTES EPOXY COATED REINFORCING STEEL.

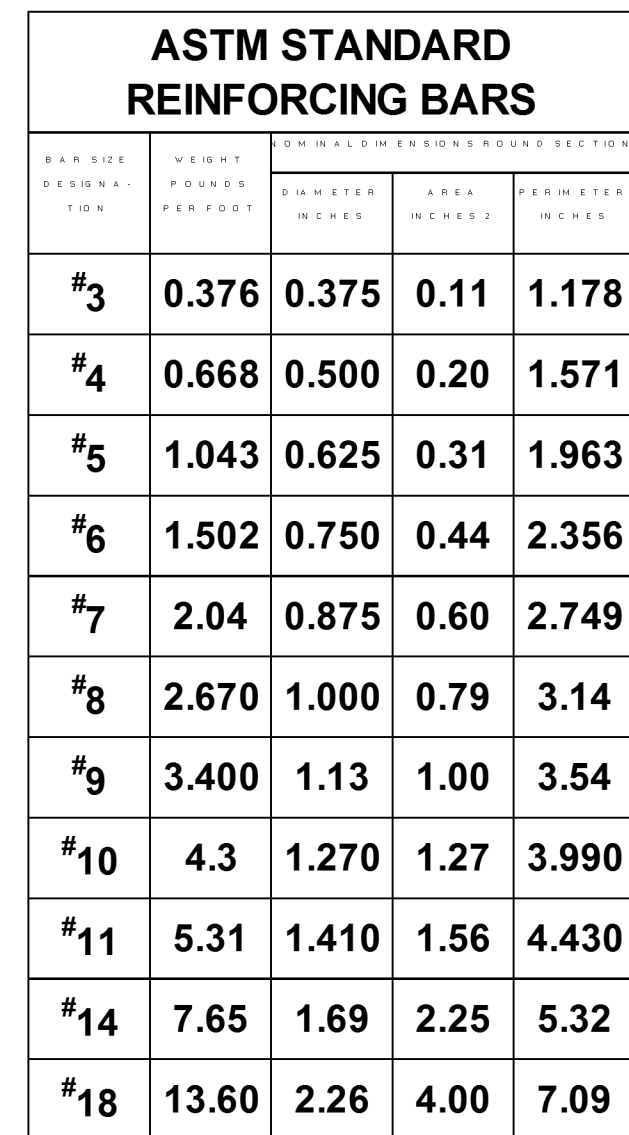
ASTM STANDARD REINFORCING BARS				
BAR SIZE (NOMINAL) INCH	WEIGHT POUNDS PER FOOT	YIELD STRENGTH (MINIMUM) KILOPSI	TENSILE STRENGTH (MINIMUM) KILOPSI	ELONGATION (MINIMUM) PERCENT
#3	0.376	0.375	0.11	1.178
#4	0.668	0.500	0.20	1.571
#5	1.043	0.625	0.31	1.963
#6	1.502	0.750	0.44	2.356
#7	2.04	0.875	0.60	2.749
#8	2.670	1.000	0.79	3.14
#9	3.400	1.13	1.00	3.54
#10	4.3	1.270	1.27	3.990
#11	5.31	1.410	1.56	4.430
#14	7.65	1.69	2.25	5.32
#18	13.60	2.26	4.00	7.09

~ REINFORCING STEEL CORROSION RESISTANCE LEVEL ~

THE REINFORCING STEEL MARKS IN THIS SCHEDULE INDICATE THE REQUIRED BAR CORROSION RESISTANCE LEVEL. CORROSION RESISTANCE LEVEL IS DENOTED WITH A .2 FOR LEVEL TWO SUFFIX OR .3 FOR LEVEL THREE SUFFIX. .1 FOR LEVEL ONE IS TO BE OMITTED. THE BAR MATERIAL TYPE AND BAR STEEL GRADE PROVIDED FOR EACH CORROSION LEVEL WILL BE RECORDED ON THE PLAN SET PER SHEET FOR AS-BUILT RECORD PLAN ARCHIVES.

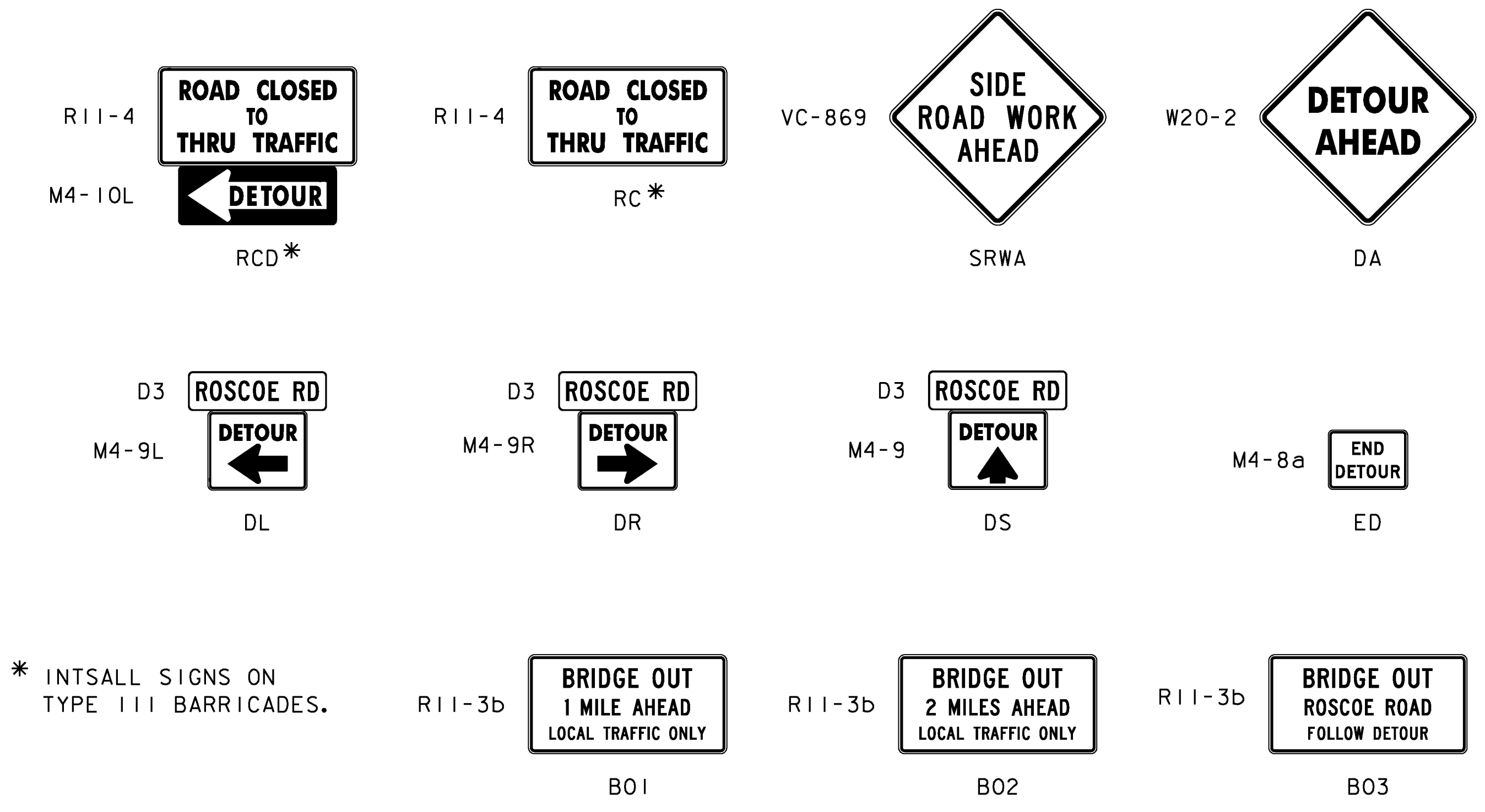
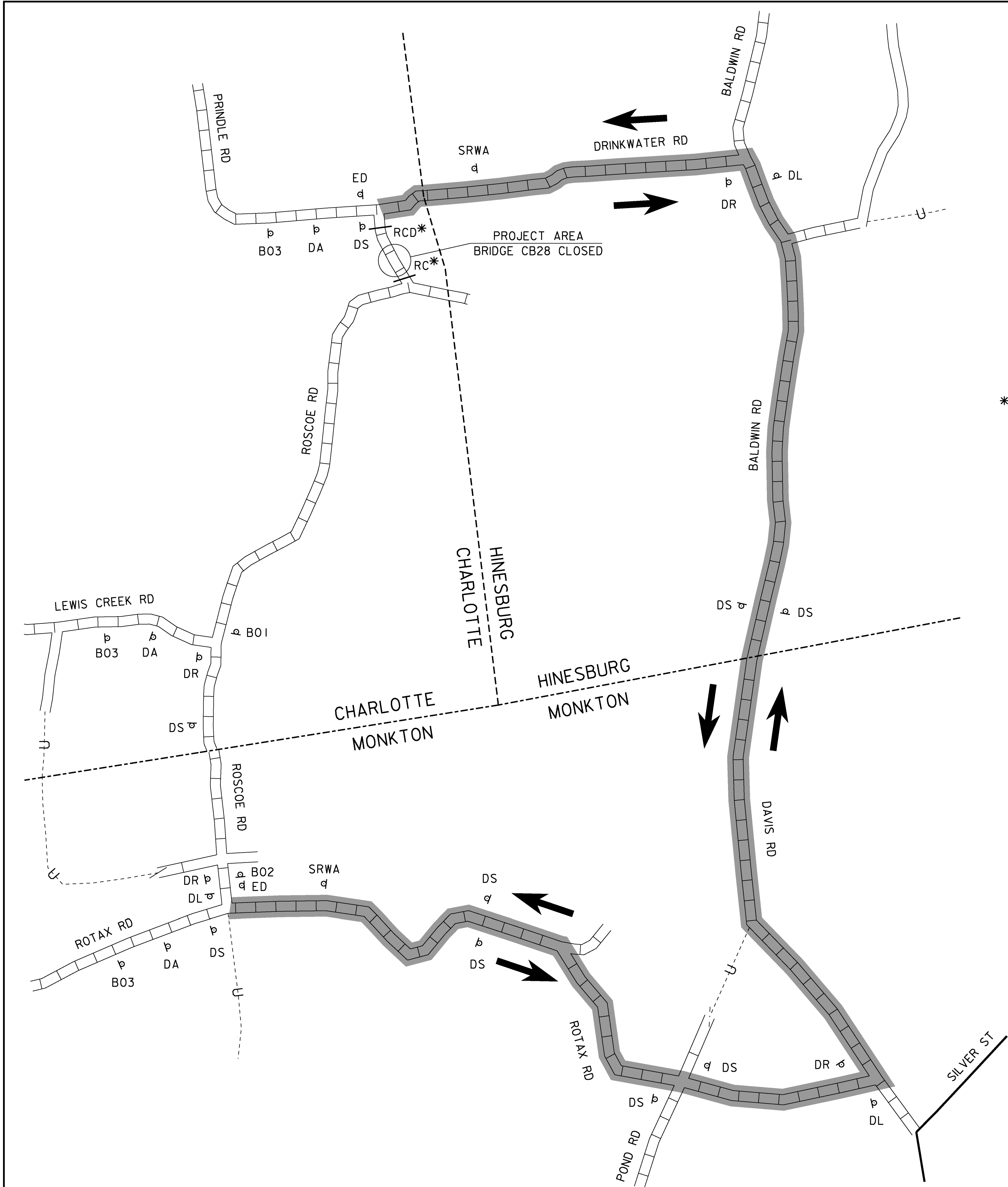
PROJECT NAME:	CHARLOTTE
PROJECT NUMBER:	BO 1445(36)
FILE NAME:	s14j235rss.dgn
PROJECT MANAGER:	M. SARGENT
DESIGNED BY:	J. WEAVER
REINFORCING STEEL SCHEDULE	
PLOT DATE:	14-SEP-2015
DRAWN BY:	G. ROY
CHECKED BY:	J. WEAVER
SHEET	11 OF 13

1. UNLESS OTHERWISE DESIGNATED, ALL BAR REQUIREMENTS FOR CONCRETE IN SIZES UP TO AND INCLUDING NO. 18 SHALL CONFORM TO THE REQUIREMENTS OF THE "SPECIFICATIONS FOR DEFORMED BILLET-STEEL BARS FOR CONCRETE REINFORCEMENT", AASHTO M 31 (ASTM A 615-SI). ALL BARS SHALL BE GRADE 60, UNLESS OTHERWISE DESIGNATED.
2. FOR TYPICAL BENDING DETAILS, RECOMMENDED PIN DIAMETER "D" OF BENDS AND HOOKS, AND OTHER STANDARD PRACTICE, SEE CURRENT CONCRETE REINFORCING STEEL INSTITUTE "MANUAL OF STANDARD PRACTICE".
3. BARS WHICH REQUIRE MORE ACCURATE BENDING THAN STANDARD PRACTICES SHOULD HAVE LIMITS INDICATED.
4. ALL DIMENSIONS ARE OUT TO OUT OF BAR EXCEPT "A" AND "G" ON STANDARD 180 DEGREE AND 135 DEGREE HOOKS.
5. "J" DIMENSION ON 180 DEGREE HOOKS TO BE SHOWN ONLY WHERE NECESSARY TO RESTRICT HOOK SIZE. OTHERWISE, STANDARD HOOKS ARE TO BE USED.
6. "H" DIMENSION ON STIRRUPS TO BE SHOWN ONLY WHEN NECESSARY TO MAINTAIN CLEARANCES.
7. WHERE SLOPE DIFFERS FROM 45 DEGREES, DIMENSIONS "H" AND "K" MUST BE SHOWN.
8. ▲ DENOTES BARS TO BE CUT IN FIELD.
9. * DENOTES ONE EXTRA BAR ADDED FOR TESTING PURPOSES.
10. △ DENOTES TWO EXTRA BARS ADDED FOR TESTING PURPOSES.
11. E IN BAR MARK PREFIX DENOTES EPOXY COATED REINFORCING STEEL.



THE REINFORCING STEEL MARKS IN THIS SCHEDULE INDICATE THE REQUIRED BAR CORROSION RESISTANCE LEVEL. CORROSION RESISTANCE LEVEL IS DENOTED WITH A .2 FOR LEVEL TWO SUFFIX OR .3 FOR LEVEL THREE SUFFIX. 1 FOR LEVEL ONE IS TO BE OMITTED. THE BAR MATERIAL TYPE AND BAR STEEL GRADE PROVIDED FOR EACH CORROSION LEVEL WILL BE RECORDED ON THE PLAN SET P1 SHEET FOR AS-BUILT RECORD PLAN ARCHIVES.

PROJECT NAME:	CHARLOTTE		
PROJECT NUMBER:	BO 1445(36)		
FILE NAME: s14j235rss.dgn	PLOT DATE:	14-SEP-2015	
PROJECT MANAGER: M. SARGENT	DRAWN BY:	G. ROY	
DESIGNED BY: J. WEAVER	CHECKED BY:	J. WEAVER	
REINFORCING STEEL SCHEDULE	SHEET	11	OF 13



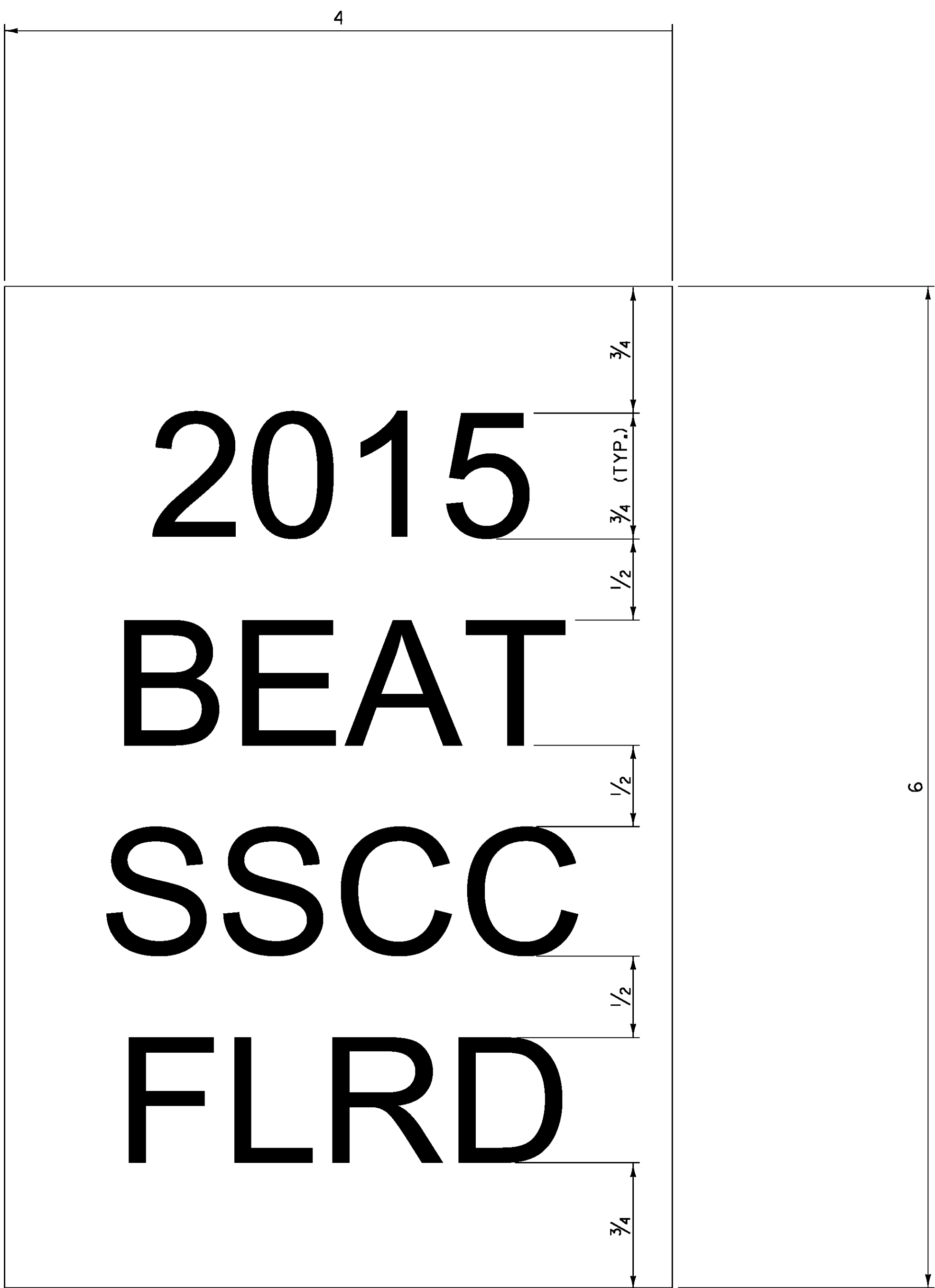
* INTSALL SIGNS ON TYPE III BARRICADES.

SIGN DIMENSIONS				MUTCD SIGN NUMBER / STD NUMBER
EACH	WIDTH (in)	HEIGHT (in)	2 IN SQ X 10 FT STEEL POST	
2	60	30	-	R11-4 (ROAD CLOSED TO THRU TRAFFIC)
1	48	18	-	M4-10L (DETOUR ARROW LEFT)
2	48	48	2	VC-869 (SIDE ROAD WORK AHEAD) (SEE STD T-28)
3	48	48	2	W20-2 (DETOUR AHEAD)
16	42	12	-	D3 (ROSCOE RD)
3	30	24	1	M4-9L (DETOUR LEFT ARROW)
4	30	24	1	M4-9R (DETOUR RIGHT ARROW)
9	30	24	1	M4-9 (DETOUR VERTICAL ARROW)
2	24	18	1	M4-8a (END DETOUR)
1	60	30	2	R11-3b (BRIDGE OUT/1 MILE AHEAD/LOCAL TRAFFIC ONLY)
1	60	30	2	R11-3b (BRIDGE OUT/2 MILES AHEAD/LOCAL TRAFFIC ONLY)
1	60	30	2	R11-3b (BRIDGE OUT/ROSCOE ROAD/FOLLOW DETOUR)
			EA	
SQ FT			FT	
291			140	

DETOUR SIGNING WILL BE THE RESPONSIBILITY OF THE TOWN. PROPOSED DETOUR ROUTE AND SIGNAGE SHOWN IS NOT INCLUDED IN THE CONTRACT. USE FOR TOWN REFERENCE ONLY.

PROJECT NAME: CHARLOTTE	
PROJECT NUMBER: BO 1445(36)	
FILE NAME: sl4j235detour.dgn	PLOT DATE: 26-FEB-2016
PROJECT LEADER: M. SARGENT	DRAWN BY: G. ROY
DESIGNED BY: G. ROY	CHECKED BY: J. WEAVER
DETOUR LAYOUT	SHEET 12 OF 13

TRAFFIC SIGN SUMMARY SHEET



GENERAL NOTES:

- 1. LINE ONE SHALL INDICATE THE INSTALLATION YEAR (YYYY).
- 2. LINE TWO SHALL INDICATE THE MODEL AS IDENTIFIED ON THE APPROVED PRODUCTS LIST. FOR GENERIC INSTALLATIONS THE STANDARD DRAWING DESIGNATION OR NAME AS IDENTIFIED IN THE FHWA ELIGIBILITY LETTER SHALL BE USED.
- 3. LINE THREE SHALL SHALL INDICATE ADDITIONAL MODEL INFORMATION IF NECESSARY.
- 4. LINE FOUR SHALL INDICATE FLARED (FLRD) OR TANGENT (TANG).
- 5. LEGEND SHALL BE ONE ARIEL FONT.
- 6. LEGEND SHALL BE BLACK ON A WHITE BACKGROUND, LENGEND AND BACKGROUND SHALL NOT BE REFLECTIVE.
- 7. SUITABLE MATERIAL SHALL BE USED SO AS TO NOT DETERIORATE DURING EXPOSURE TO WEATHER.
- 8. LABELS SHALL BE APPLIED IN SUCH A WAY THAT THEY REMAIN INTACT DURING THE LIFE OF THE TERMINAL.
- 9. FOR W-BEAM GUARDRAIL, LABEL SHALL BE PLACED ON THE TOP OF POST ONE FACING AWAY FROM TRAFFIC.
- 10. FOR BOX BEAM GUARDRAIL, LABEL SHALL BE PLACED ON THE BOX BEAM ADJACENT TO POST ONE FACING AWAY FROM TRAFFIC.
- 11. PAYMENT SHALL BE INCIDENTAL TO OTHER TRAFFIC BARRIER ITEMS.
- 12. ALL DIMENSIONS IN INCHES.

REV.	DATE	DESCRIPTION
0	NOV. 3, 2015	ORIGINAL APPROVAL
OTHER DETAILS REQUIRED: NONE		
DETAILS APPROVED FOR USE BY HIGHWAY SAFETY & DESIGN		

GUARDRAIL TERMINAL LABEL DETAIL



HIGHWAY SAFETY
& DESIGN DETAIL
HSD-621.06