STATE OF VERMONT
AGENCY OF TRANSPORTATION

SEE SHEET 2 FOR INDEX OF SHEETS
AND INDEX OF STANDARDS

RECORD PLANS

CONTRACTOR: ALPINE CONSTRUCTION, LLC - SCHUYLERVILLE, NY

RESIDENT ENGINEER: BUTCH COLBY

CONSTRUCTION BEGAN: OCTOBER 1, 2012

CONSTRUCTION COMPLETE: AUGUST 30, 2013

RECORD PLANS BY: BUTCH COLBY & JENNA HYDE

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

BY _____ RESIDENT ENGINEER
FOR BUTCH COLBY

DATE 2/1/16

NOTE: Any further information concerning final quantities, amounts or other details relative to this project may be found by contacting Vtrans Records Management.

PROPOSED IMPROVEMENT
BRIDGE PROJECT

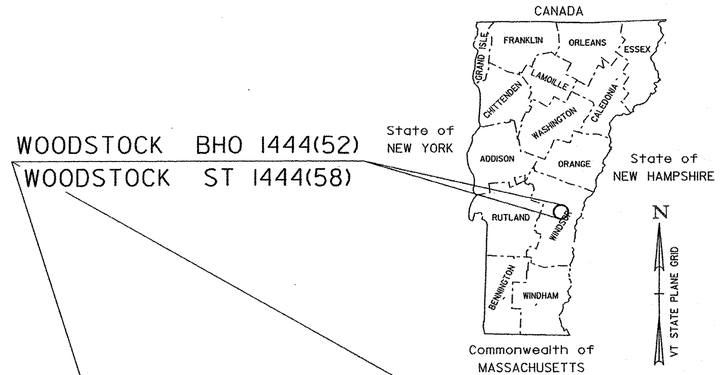
TOWN OF WOODSTOCK COUNTY OF WINDSOR

TAFTSVILLE COVERED BRIDGE ROAD (TH 02, CLASS 2) - BRIDGE NO. CB45

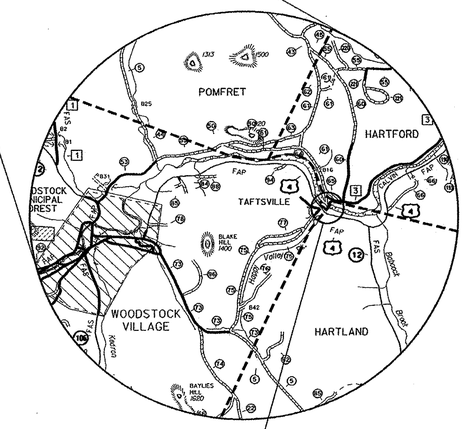
PROJECT LOCATION: BEGINNING AT A POINT ON TH 02 (TAFTSVILLE COVERED BRIDGE ROAD) IN THE TOWN OF WOODSTOCK LOCATED APPROXIMATELY 0.02 MILES EASTERLY FROM ITS INTERSECTION WITH US 4 AND EXTENDING EASTERLY 0.04 MILES ON TH 02.

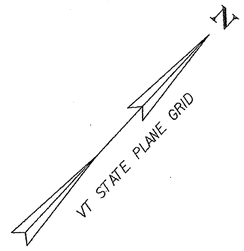
PROJECT DESCRIPTION: TAFTSVILLE COVERED BRIDGE REHABILITATION INCLUDES RETROFIT OF TIMBER SUPERSTRUCTURE, REPLACEMENT OF COLLAPSED ABUTMENT AND REPAIR OF REMAINING ABUTMENT AND PIER MASONRY FOUNDATIONS WITH RELATED APPROACH WORK.

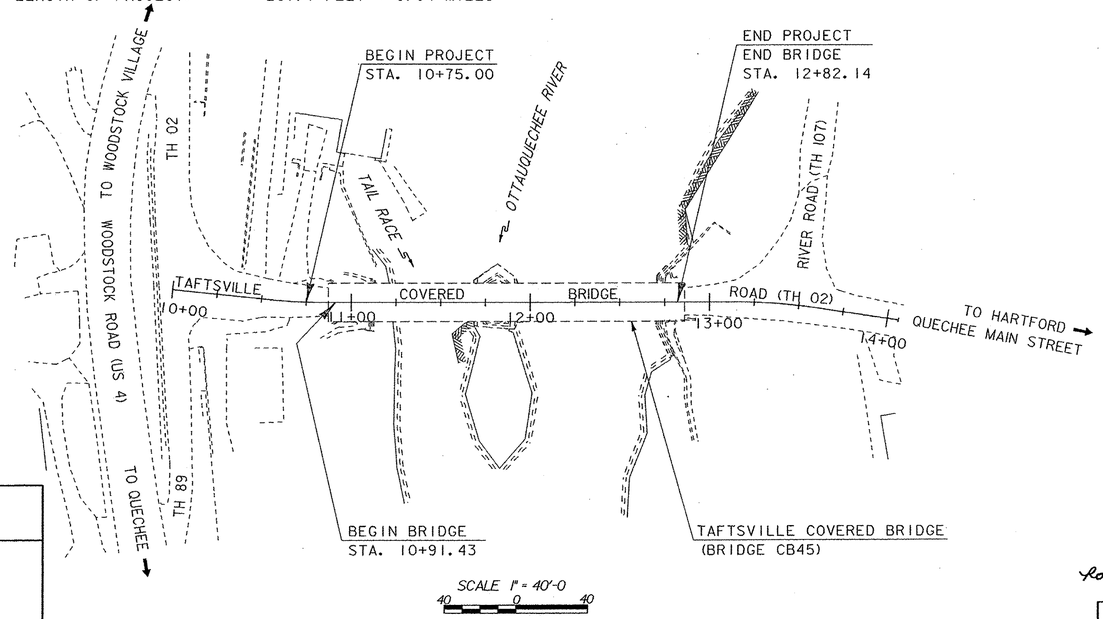
LENGTH OF STRUCTURE:	190.7 FEET = 0.04 MILES
LENGTH OF ROADWAY:	16.4 FEET = 0.00 MILES
LENGTH OF PROJECT:	207.1 FEET = 0.04 MILES



WOODSTOCK BHO 1444(52)
WOODSTOCK ST 1444(58)







QUALITY ASSURANCE 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 :	VTRANS
SURVEYED DATE :	04-07-2004

DATUM

VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (96)
ADJUSTMENT	COMPASS

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.

STATE OF VERMONT
RONALD L. JOY
NO. 46225
CIVIL
LICENSED
PROFESSIONAL ENGINEER

Ronald L Joy 06/21/12

McFarland Johnson

DIRECTOR OF PROGRAM DEVELOPMENT
APPROVED _____ DATE 6-26-12

PROJECT MANAGER : M. Sargent

PROJECT NAME : WOODSTOCK WOODSTOCK
PROJECT NUMBER : BHO 1444(52) ST 1444(58)

SHEET 1 OF 68 SHEETS

STATE OF VERMONT
AGENCY OF TRANSPORTATION

PRELIMINARY INFORMATION SHEET

INDEX OF SHEETS

INDEX OF STANDARDS

D-3	TREATED GUTTERS	6/1/94
E-100	CONSTRUCTION APPROACH SIGNS	1/2/04
E-100A	SIDE ROAD CONSTRUCTION - APPROACH SIGNS	1/2/04
E-101	CONSTRUCTION SIGN DETAILS	5/30/03
E-102	CONSTRUCTION SIGN DETAILS	6/30/03
E-102A	CONSTRUCTION SIGN DETAILS	5/1/04
E-107	DELINEATION, BARRICADES AND DETOURS FOR CONSTRUCTION AREAS	6/30/03
E-107A	BREAKAWAY BARRICADE DETAILS	6/8/09
E-120	STANDARD SIGN PLACEMENT - EXPRESSWAY & FREEWAY	8/8/95
E-121	STANDARD SIGN PLACEMENT - CONVENTIONAL ROAD	8/8/95
E-141	REGULATORY SIGN DETAILS	9/20/95
E-155	WARNING SIGN DETAILS	5/1/04
E-164	SQUARE STEEL SIGN POST	6/8/09

McFarland Johnson

FINAL HYDRAULIC REPORT

HYDROLOGIC DATA

Date: October 2010

DRAINAGE AREA : 191.6 sq mi
CHARACTER OF TERRAIN : HILLY TO MOUNTAINOUS
STREAM CHARACTERISTICS : STRAIGHT WITH LARGE RADIUS BENDS
NATURE OF STREAMBED : VERY COARSE GRAVEL WITH BOULDERS

PEAK FLOW DATA

Q 2.33 =	8,400 cfs	Q 50 =	24,290 cfs
Q 10 =	13,235 cfs	Q 100 =	30,790 cfs
Q 25 =	18,700 cfs	Q 500 =	50,375 cfs

DATE OF FLOOD OF RECORD: 1927
ESTIMATED DISCHARGE: 30,400 cfs AT NORTH HARTLAND DAM
WATER SURFACE ELEV.: UNKNOWN
NATURAL STREAM VELOCITY : @ Q25 = 9.2 fps
ICE CONDITIONS : MODERATE
DEBRIS: MODERATE
DOES THE STREAM REACH MAXIMUM HIGHWATER ELEV. RAPIDLY? YES
IS ORDINARY RISE RAPID? YES
IS STAGE AFFECTED BY UPSTREAM OR DOWNSTREAM CONDITIONS? YES
IF YES, DESCRIBE: DAM JUST UPSTREAM OF THE STRUCTURE AND NUMEROUS OTHER DAMS ON SMALLER TRIBUTARIES IN WATERSHED

WATERSHED STORAGE: >1%
HEADWATERS:
UNIFORM: X
IMMEDIATELY ABOVE SITE:

EXISTING STRUCTURE INFORMATION

STRUCTURE TYPE: TWO SPAN TIMBER COVERED BRIDGE
YEAR BUILT: 1836
CLEAR SPAN(NORMAL TO STREAM): 165'
VERTICAL CLEARANCE ABOVE STREAMBED: 26'
WATERWAY OF FULL OPENING: 3540 sq ft
DISPOSITION OF STRUCTURE: SUPERSTRUCTURE REHABILITATION
TYPE OF MATERIAL UNDER SUBSTRUCTURE: UNKNOWN

WATER SURFACE ELEVATIONS AT:

Q2.33 =	622.4'	VELOCITY =	10.8 fps
Q10 =	625.7'	"	14.3 fps
Q25 =	630.4'	"	10.5 fps
Q50 =	632.7	"	11.5 fps
Q100 =	635.3	"	12.4 fps

LONG TERM STREAMBED CHANGES:

IS THE ROADWAY OVERTOPPED BELOW Q100: NO
FREQUENCY: N/A
RELIEF ELEVATION: 644.5'
DISCHARGE OVER ROAD @Q100: 0

UPSTREAM STRUCTURE

TOWN: WOODSTOCK — DISTANCE: 20,000'
HIGHWAY# : VT12 — STRUCTURE #: BR15
CLEAR SPAN: 105' — CLEAR HEIGHT: 25'
YEAR BUILT: 1980 — FULL WATERWAY: 1790 sq. ft.
STRUCTURE TYPE: STEEL TRUSS

DOWNSTREAM STRUCTURE

TOWN: HARTFORD — DISTANCE: 24,000'
HIGHWAY# : TH8 — STRUCTURE #: CB6
CLEAR SPAN: 67' — CLEAR HEIGHT:
YEAR BUILT: 1956 — FULL WATERWAY:
STRUCTURE TYPE: ROLLED BEAM COVERED BRIDGE

ASD LOAD RATING (TONS)

LOADING LEVELS	TRUCK						
	H	HS	3S2	6 AXLE	3A. STR.	4A. STR.	5A. SEMI
INVENTORY	8	--					
POSTED	10	--	--		--	--	--
OPERATING		--	--	--	--	--	

COMMENTS:

TRAFFIC DATA

YEAR	ADT	DHV	% D	% T	ADTT
2008	1000			3	35

20 year ESAL for flexible pavement from to : NO PAVEMENT DESIGN
40 year ESAL for flexible pavement from to : NO PAVEMENT DESIGN
Design Speed : 25 mph

PROPOSED STRUCTURE

STRUCTURE TYPE: TWO SPAN TIMBER COVERED BRIDGE

CLEAR SPAN(NORMAL TO STREAM): 165'
VERTICAL CLEARANCE ABOVE STREAMBED: 26'
WATERWAY OF FULL OPENING: 3540'

WATER SURFACE ELEVATIONS AT:

Q2.33 =	622.4'	VELOCITY=	10.8 fps
Q10 =	625.7'	"	14.3 fps
Q25 =	630.4'	"	10.5 fps
Q50 =	632.7	"	11.5 fps
Q100 =	635.3	"	12.4 fps

IS THE ROADWAY OVERTOPPED BELOW Q100: NO
FREQUENCY: N/A
RELIEF ELEVATION: 644.5'
DISCHARGE OVER ROAD @Q100: 0

AVERAGE LOW ELEVATION OF SUPERSTRUCTURE: 642.2'
VERTICAL CLEARANCE: @ Q25 = 11.8'

SCOUR: NOT CALCULATED

REQUIRED CHANNEL PROTECTION: N/A

PERMIT INFORMATION

AVERAGE DAILY FLOW:	398 cfs	DEPTH OR ELEVATION:
ORDINARY LOW WATER:	175 cfs	ELEVATION = 617.0'
ORDINARY HIGH WATER:	2750 cfs	ELEVATION = 620.5'

TEMPORARY BRIDGE REQUIREMENTS

STRUCTURE TYPE: NOT REQUIRED
CLEAR SPAN (NORMAL TO STREAM):
VERTICAL CLEARANCE ABOVE STREAMBED:
WATERWAY AREA OF FULL OPENING:

ADDITIONAL INFORMATION

DESIGN CRITERIA

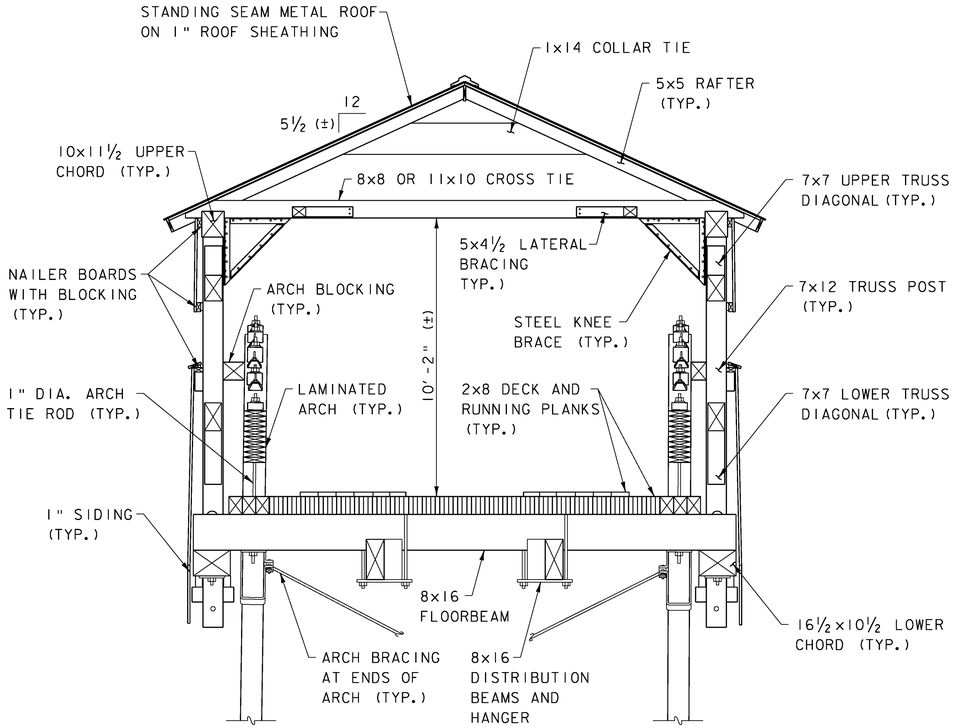
1. DESIGN LIVE LOAD AASHTO H-10 (POSTED LEVEL)
2. DESIGN SPAN 100' & 88'
3. ALLOWABLE LOAD FOR SPREAD FOOTINGS ON SOIL N/A
   ON LEDGE 10 ksf
4. ALLOWABLE LOAD FOR PILING N/A
   TYPE N/A
   ESTIMATED LENGTH N/A
5. STRUCTURAL STEEL VARIES
6. REINFORCING STEEL GRADE 60
7. CONCRETE, HIGH PERFORMANCE CLASS A f'c: NOT USED
   CONCRETE, HIGH PERFORMANCE CLASS B f'c: 3500 psi
   CONCRETE, CLASS AA f'c: 4000 psi
   CONCRETE, CLASS C f'c: 3000 psi
8. DESIGN SOIL UNIT WEIGHT 140 pcf
9. DESIGN LOAD FOR SPREAD FOOTINGS ON SOIL N/A

TRAFFIC MAINTENANCE

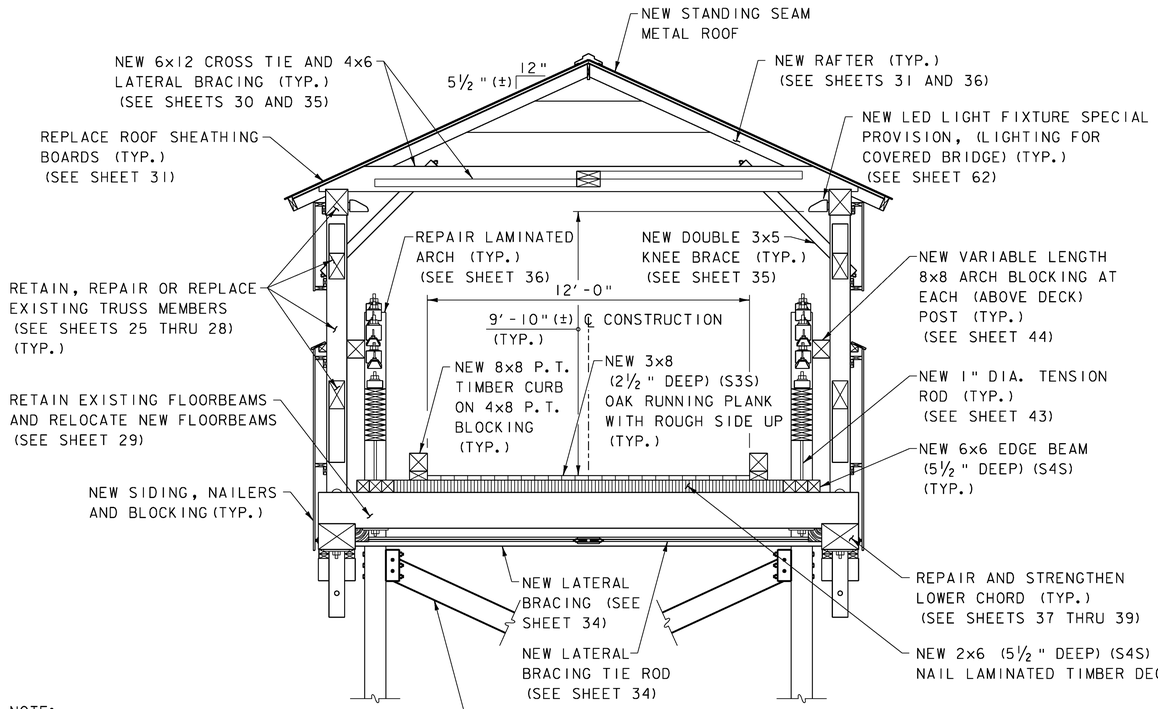
1. IS TRAFFIC TO BE MAINTAINED? SEE NOTE 4
   IF YES, ON EXISTING STRUCTURE?
   OR ON TEMPORARY BRIDGE?
   ONE OR TWO-WAY TRAVEL?
2. TRAFFIC CONTROL SIGNALS REQUIRED NO
3. ARE SIDEWALKS REQUIRED? NO
   IF SO, ON WHAT SIDE?
4. BRIDGE TO BE CLOSED DURING CONSTRUCTION WITH TRAFFIC DETOURED AROUND BRIDGE SITE.

PROJECT NAME: WOODSTOCK WOODSTOCK
PROJECT NUMBER: BH0 1444(52) ST 1444(58)

FILE NAME: z96j262engpi.xls — PLOT DATE: 2/17/2012
PROJECT LEADER: M. Sargent — DRAWN BY: P. Dustin
DESIGNED BY: VTrans/P. Dustin — CHECKED BY: R. Joy
PRELIMINARY INFORMATION SHEET — SHEET 2 OF 68



NOTE:
TRUSS TIE RODS NOT SHOWN FOR CLARITY. TO BE REPLACED. EXISTING TIMBER DIMENSIONS PROVIDED FOR GENERAL REFERENCE. ACTUAL DIMENSIONS MAY VARY.

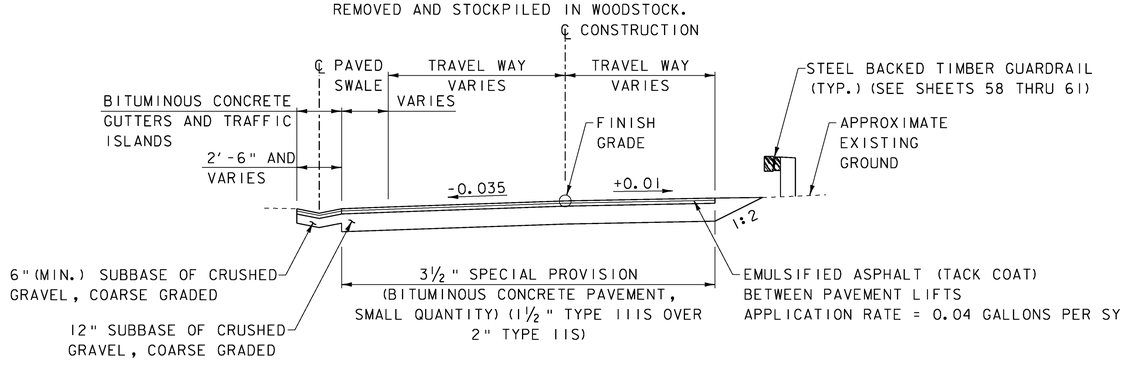


NOTE:
NEW TRUSS DOUBLE TENSION RODS NOT SHOWN FOR CLARITY.

EXISTING TYPICAL BRIDGE SECTION

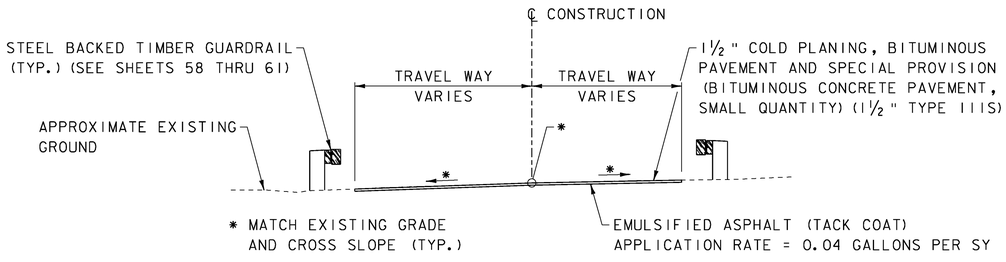
SCALE: ⅜" = 1'-0"

NOTE:
THE SPAN 1 SUPERSTRUCTURE (EXCEPT EXISTING LAMINATED ARCHES AND ARCH BRACING) HAS BEEN REMOVED AND STOCKPILED IN WOODSTOCK.



PROPOSED TYPICAL BRIDGE SECTION

SCALE: ⅜" = 1'-0"



TYPICAL EAST APPROACH SECTION

SCALE: ¼" = 1'-0"

TYPICAL WEST APPROACH SECTION

SCALE: ¼" = 1'-0"

LEGEND

P.T. PRESSURE TREATED
S4S SURFACED 4 SIDES
F.S. FULL SAWN

MATERIAL TOLERANCES

(IF USED ON THIS PROJECT)

SURFACE	
- PAVEMENT (TOTAL THICKNESS)	± ¼"
- AGGREGATE SURFACE COURSE	± ½"
SUBBASE	± 1"

SCALE 1/4" = 1'-0
1 0 2 4 6

SCALE ⅜" = 1'-0
1 0 1 2 3 4

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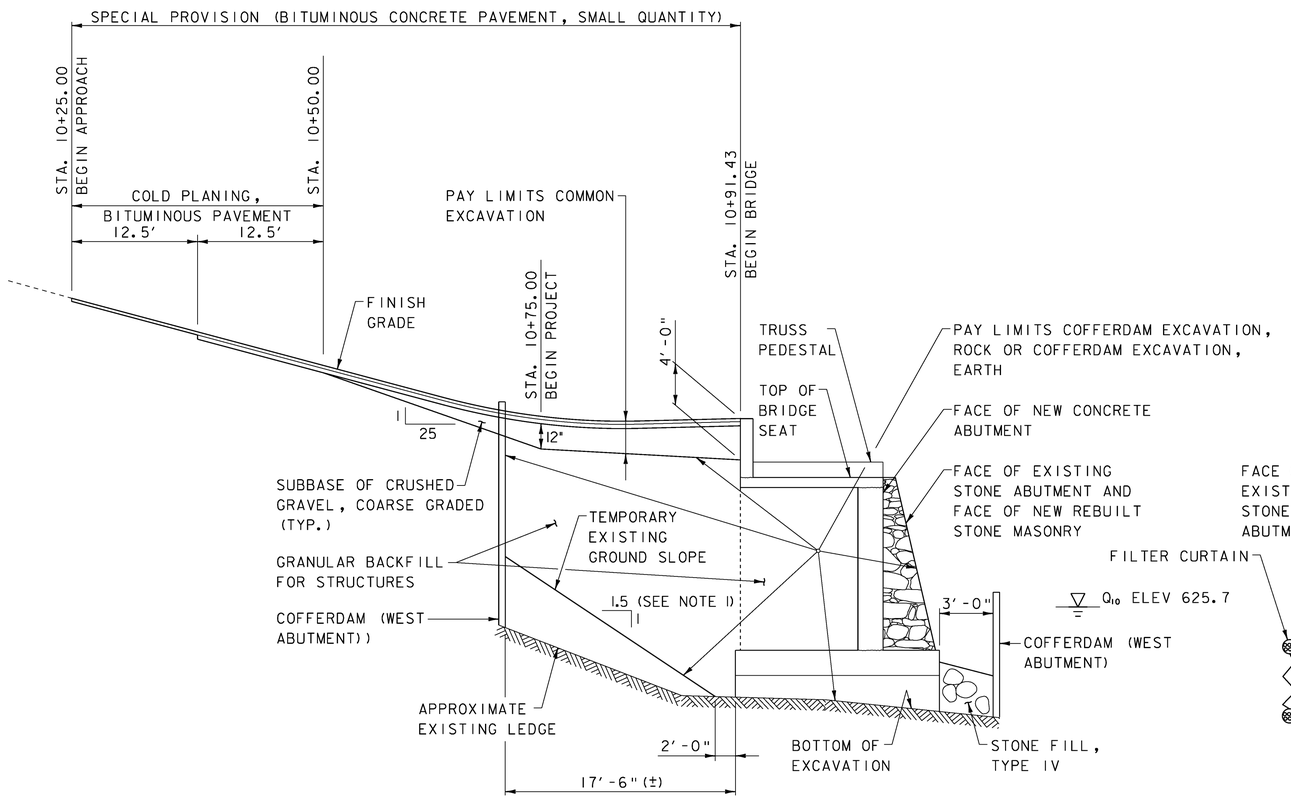
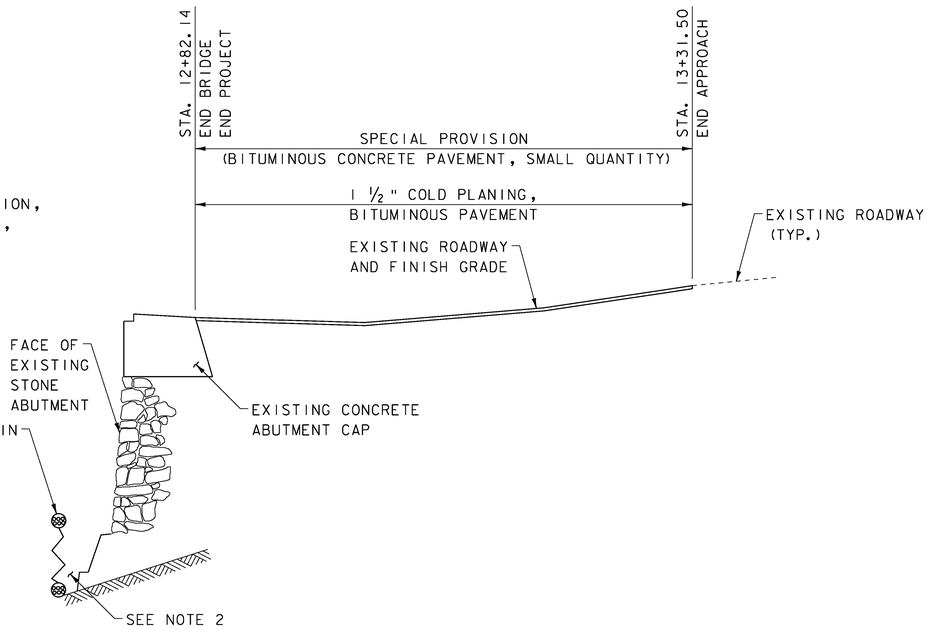
PROJECT NAME:	WOODSTOCK	WOODSTOCK
PROJECT NUMBER:	BHO 1444(52)	ST 1444(58)
FILE NAME: z96j262tsl.dgn		PLOT DATE: 10-JUL-2012
PROJECT LEADER: M. Sargent		DRAWN BY: P. Dustin
DESIGNED BY: P. Dustin		CHECKED BY: R. Joy
TYPICAL SECTIONS (1 OF 2)		SHEET 3 OF 68



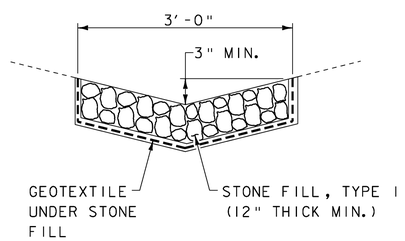
ABUTMENT NO. 1 (WEST)



ABUTMENT NO. 2 (EAST)

EARTHWORK DETAILS

NOT TO SCALE



STONE FILL DITCH DETAIL

NOT TO SCALE

NOTES

1. THE TEMPORARY EXCAVATION SLOPE RATIO (1.5H : 1.0V) HAS BEEN PROVIDED FOR INFORMATIONAL PURPOSES ONLY AND WAS BASED ON A TYPE C SOIL AS DESCRIBED IN THE VTRANS CONSTRUCTION MANUAL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY AND SUCCESS OF ALL EXCAVATION AND COFFERDAM WORK TO THE SATISFACTION OF THE RESIDENT ENGINEER.
2. COFFERDAMS ARE REQUIRED AT ABUTMENT NO. 2 (EAST) AND THE PIER TO ENSURE THAT THE SEALING OF THE EXISTING CONCRETE ENCASEMENT AT THE BASE OF THE FOUNDATIONS (AS PART OF REPAIRING STONE MASONRY ITEMS) WILL BE PERFORMED IN THE DRY. THE LIMITS OF THE COFFERDAM (EAST ABUTMENT) AND COFFERDAM (PIER) SHALL BE ESTABLISHED BY THE CONTRACTOR AND CONTAINED WITHIN THE LIMITS OF THE FILTER CURTAIN AND LIMITS OF TEMPORARY CONSTRUCTION ACCESS (DEFINED ON SHEET 13), TO THE SATISFACTION OF THE RESIDENT ENGINEER.

PROJECT NAME:	WOODSTOCK	WOODSTOCK
PROJECT NUMBER:	BHO 1444(52)	ST 1444(58)
FILE NAME: z96J262ts2.dgn		PLOT DATE: 29-JUN-2012
PROJECT LEADER: M. Sargent		DRAWN BY: P. Dustin
DESIGNED BY: P. Dustin		CHECKED BY: R. Joy
TYPICAL SECTIONS (2 Of 2)		SHEET 4 OF 68

McFarland Johnson

STATE OF VERMONT
AGENCY OF TRANSPORTATION

QUANTITY SHEET 1

WOODSTOCK BHO 1444 (52)				WOODSTOCK ST 1444 (58)					SUMMARY OF ESTIMATED QUANTITIES					DETAILED SUMMARY OF QUANTITIES		
ROADWAY	TRAINING	EROSION CONTROL	FULL CE ITEMS	BRIDGE	BRIDGE	ROADWAY	TRAINING	EROSION CONTROL	FULL C.E. ITEMS	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND	QUANTITIES	UNIT	ITEMS
5										5		EACH	REMOVING MEDIUM TREES	201.15	-			
						45				45		CY	COMMON EXCAVATION	203.15	-			
		6								6		CY	TRENCH EXCAVATION OF EARTH	204.20	-			
1										1		CY	TRENCH EXCAVATION OF EARTH, EXPLORATORY (N.A.B.I.)	204.22	-			
					80					80		CY	STRUCTURE EXCAVATION	204.25	-			
					475					475		CY	GRANULAR BACKFILL FOR STRUCTURES	204.30	-			
					400					400		CY	COFFERDAM EXCAVATION, EARTH	208.30	-			
					1275					1275		CY	COFFERDAM EXCAVATION, ROCK	208.35	-			
				1						1		LS	COFFERDAM (EAST ABUTMENT)	208.40	-			
				1						1		LS	COFFERDAM (PIER)	208.40	-			
					1					1		LS	COFFERDAM (WEST ABUTMENT)	208.40	-			
190										190		SY	COLD PLANING, BITUMINOUS PAVEMENT	210.10	-			
						35				35		CY	SUBBASE OF CRUSHED GRAVEL, COARSE GRADED	301.25	-			
1										1		CWT	EMULSIFIED ASPHALT	404.65	-			
1										1		LU	PRICE ADJUSTMENT, ASPHALT CEMENT (N.A.B.I.)	406.50				
				24	243					267		CY	CONCRETE, HIGH PERFORMANCE CLASS B	501.34	-			
				0.5	0.5					1		LS	SHORING SUPERSTRUCTURE	502.10	-			
				1						1		LS	STRUCTURAL STEEL	506.75	-			
				3120	20757					23877		LB	REINFORCING STEEL, LEVEL I	507.11				
				40	60					100		LF	DRILLING AND GROUTING DOWELS	507.16	-			
				5	5					10		GAL	WATER REPELLENT, SILANE	514.10	-			
				23.5						23.5		MFBM	STRUCTURAL LUMBER AND TIMBER, UNTREATED	522.20	-			
				37.38						37.38		MFBM	STRUCTURAL LUMBER AND TIMBER, TREATED	522.25	-			
				8.92						8.92		MFBM	NONSTRUCTURAL LUMBER, UNTREATED	522.30	-			
				1						1		EACH	PARTIAL REMOVAL OF STRUCTURE	529.20	-			
					60					60		CY	CONCRETE, CLASS C	541.30	-			
					90					90		CY	REBUILT STONE MASONRY	602.35	-			
		1								1		HR	ALL PURPOSE EXCAVATOR RENTAL, TYPE I	608.25	-			
		2								2		CY	STONE FILL, TYPE I	613.10	-			
						12				12		CY	STONE FILL, TYPE II	613.11	-			
						140				140		CY	STONE FILL, TYPE IV	613.13	-			
					45					45		CY	GABION WALL	613.25	-			
						4				4		TON	BITUMINOUS CONCRETE GUTTERS AND TRAFFIC ISLANDS	616.47	-			
200										200		LF	STEEL BACKED TIMBER GUARDRAIL	621.18	-			
90										90		LF	REMOVAL AND DISPOSAL OF GUARDRAIL	621.80	-			
7										7		EACH	REMOVAL AND DISPOSAL OF GUIDE POSTS	621.81	-			
80										80		LF	TEMPORARY TRAFFIC BARRIER	621.90	-			
80										80		HR	FLAGGERS	630.15	-			
			0.5						0.5	1		LS	FIELD OFFICE, ENGINEERS	631.10	-			
			0.5						0.5	1		LS	TESTING EQUIPMENT, CONCRETE	631.16	-			

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PROJECT NAME: WOODSTOCK WOODSTOCK
PROJECT NUMBER: BHO 1444(52) ST 1444(58)

FILE NAME: z96j262quant.dgn
PROJECT LEADER: M. Sargent
DESIGNED BY: S. Delia
QUANTITY SHEET #1

PLOT DATE: 23-JUL-2012
DRAWN BY: P. Dustin
CHECKED BY: R. Joy
SHEET 5 OF 68

STATE OF VERMONT
AGENCY OF TRANSPORTATION

QUANTITY SHEET 2

WOODSTOCK BHO 1444 (52)				WOODSTOCK ST 1444 (58)						SUMMARY OF ESTIMATED QUANTITIES					
ROADWAY	TRAINING	EROSION CONTROL	FULL CE ITEMS	BRIDGE	BRIDGE	ROADWAY	TRAINING	EROSION CONTROL	FULL C.E. ITEMS	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND
									1	1		LS	TESTING EQUIPMENT, BITUMINOUS	631.17	
			3000							3000		DL	FIELD OFFICE TELEPHONE (N.A.B.I.)	631.26	-
	260						260			520		HR	EMPLOYEE TRAINEESHIP	634.10	-
0.5						0.5				1		LS	MOBILIZATION/DEMOBILIZATION	635.11	-
1										1		LS	TRAFFIC CONTROL	641.10	-
		50								50		SY	GEOTEXTILE UNDER STONE FILL	649.31	-
		10								10		SY	GEOTEXTILE FOR SILT FENCE, WOVEN WIRE REINFORCED	649.515	-
		90								90		SY	GEOTEXTILE FOR FILTER CURTAIN	649.61	-
		11								11		LB	SEED	651.15	-
		2								2		LB	SEED, WINTER RYE	651.17	-
		87								87		LB	FERTILIZER	651.18	-
		0.1								0.1		TON	AGRICULTURAL LIMESTONE	651.20	-
		0.4								0.4		TON	HAY MULCH	651.25	-
		94								94		CY	TOPSOIL	651.35	-
								80		80		SY	GRUBBING MATERIAL	651.40	-
		1								1		LS	EPSC PLAN	652.10	-
		40						40		80		HR	MONITORING EPSC PLAN	652.20	-
		0.5						0.5		1		LU	MAINTENANCE OF EPSC PLAN (N.A.B.I.)	652.30	-
								100		100		SY	TEMPORARY EROSION MATTING	653.20	
		300						300		600		LF	PROJECT DEMARCATION FENCE	653.55	-
				1						1		LS	TIMBER PAINTING, ENVIRONMENTAL PROTECTION	660.10	-
				1						1		LS	TIMBER PAINTING, FIRE RETARDANT	660.20	-
				1						1		LS	TIMBER PAINTING, INSECTICIDE/FUNGICIDE	660.30	-
				535						535		SY	METAL ROOFING	661.10	-
104										104		SF	TRAFFIC SIGNS, TYPE A	675.20	-
224										224		LF	SQUARE TUBE SIGN POST AND ANCHOR	675.341	-
2										2		EACH	REMOVING SIGNS	675.50	-
				12						12		EACH	SPECIAL PROVISION (BEARING DEVICE ASSEMBLY, COVERED BRIDGE)	900.620	
				8						8		EACH	SPECIAL PROVISION (TIMBER ARCH BEARING CONNECTION)	900.620	
				20						20		EACH	SPECIAL PROVISION (WOOD EPOXY REPAIRS)	900.620	-
					1					1		LS	SPECIAL PROVISION (INCORPORATING SALVAGED BRIDGE COMPONENTS)	900.645	
				1						1		LS	SPECIAL PROVISION (LIGHTING FOR COVERED BRIDGE)	900.645	
				0.5	0.5					1		LS	SPECIAL PROVISION (REHABILITATING COVERED BRIDGE SUPERSTRUCTURE)	900.645	-
				1						1		LS	SPECIAL PROVISION (REPAIRING STONE MASONRY, JAHN PERMEABLE MORTAR SYSTEM) (EAST ABUTMENT)	900.645	
				1						1		LS	SPECIAL PROVISION (REPAIRING STONE MASONRY, JAHN PERMEABLE MORTAR SYSTEM) (PIER)	900.645	
				1						1		LS	SPECIAL PROVISION (STONE MASONRY REPAIR MATERIAL, JAHN PERMEABLE MORTAR SYSTEM)	900.645	
1										1		LU	SPECIAL PROVISION (MAT DENSITY PAY ADJUSTMENT, SMALL QUANTITY) (N.A.B.I.)	900.650	
1										1		LS	SPECIAL PROVISION (MIXTURE PAY ADJUSTMENT)(N.A.B.I.)	900.650	

DETAILED SUMMARY OF QUANTITIES		
QUANTITIES	UNIT	ITEMS

McFarland Johnson

PROJECT NAME: WOODSTOCK WOODSTOCK
PROJECT NUMBER: BHO 1444(52) ST 1444(58)

FILE NAME: z96j262quant.dgn
PROJECT LEADER: M. Sargent
DESIGNED BY: S. Delia
QUANTITY SHEET #2

PLOT DATE: 23-JUL-2012
DRAWN BY: P. Dustin
CHECKED BY: R. Joy
SHEET 6 OF 68

STATE OF VERMONT
AGENCY OF TRANSPORTATION

QUANTITY SHEET 3

WOODSTOCK BHO 1444 (52)					WOODSTOCK ST 1444 (58)					SUMMARY OF ESTIMATED QUANTITIES						DETAILED SUMMARY OF QUANTITIES		
ROADWAY	TRAINING	EROSION CONTROL	FULL CE ITEMS	BRIDGE	BRIDGE	ROADWAY	TRAINING	EROSION CONTROL	FULL C.E. ITEMS	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND	QUANTITIES	UNIT	ITEMS
				1						1		LU	SPECIAL PROVISION (ON-SITE MASONRY MOCK-UP AND TRAINING, JAHN PERMEABLE MORTAR SYSTEM N.A.B.I.)	900.650				
16						26				42		TON	SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT, SMALL QUANTITY)	900.680	-			

McFarland Johnson

PROJECT NAME: WOODSTOCK WOODSTOCK
PROJECT NUMBER: BHO 1444(52) ST 1444(58)

FILE NAME: z96j262quant.dgn
PROJECT LEADER: M. Sargent
DESIGNED BY: S. Delia
QUANTITY SHEET #3

PLOT DATE: 23-JUL-2012
DRAWN BY: P. Dustin
CHECKED BY: R. Joy
SHEET 6A OF 68

STATE OF VERMONT
AGENCY OF TRANSPORTATION

BRIDGE QUANTITY SHEET 1

SUMMARY OF BRIDGE QUANTITIES

SUPERSTRUCTURE	ABUTMENT NO. 1	PIER	ABUTMENT NO. 2	BRIDGE TOTAL	UNIT	ITEMS	ITEM NUMBER
	80			80	CY	STRUCTURE EXCAVATION	204.25
	475			475	CY	GRANULAR BACKFILL FOR STRUCTURES	204.30
	400			400	CY	COFFERDAM EXCAVATION, EARTH	208.30
	1275			1275	CY	COFFERDAM EXCAVATION, ROCK	208.35
	1			1	LS	COFFERDAM (WEST ABUTMENT)	208.40
	243			243	CY	CONCRETE, HIGH PERFORMANCE CLASS B	501.34
0.5				0.5	LS	SHORING SUPERSTRUCTURE	502.10
	20757			20757	LB	REINFORCING STEEL, LEVEL I	507.11
	60			60	LF	DRILLING AND GROUTING DOWELS	507.16
	5			5	GAL	WATER REPELLENT, SILANE	514.10
	60			60	CY	CONCRETE, CLASS C	541.30
	90			90	CY	REBUILT STONE MASONRY	602.35
	45			45	CY	GABION WALL	613.25
1				1	LS	SPECIAL PROVISION (INCORPORATING SALVAGED BRIDGE COMPONENTS)	900.645
0.5				0.5	LS	SPECIAL PROVISION (REHABILITATING COVERED BRIDGE SUPERSTRUCTURE)	900.645

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS

McFarland Johnson

PROJECT NAME: WOODSTOCK
PROJECT NUMBER: ST 1444(58)

PROJECT NAME: WOODSTOCK
PROJECT NUMBER: ST 1444(58)

FILE NAME: z96j262quant.dgn
PROJECT LEADER: M. Sargent
DESIGNED BY: S. Delia
BRIDGE QUANTITY SHEET #1

PLOT DATE: 23-JUL-2012
DRAWN BY: P. Dustin
CHECKED BY: R. Joy
SHEET 68 OF 68

STATE OF VERMONT
AGENCY OF TRANSPORTATION

BRIDGE QUANTITY SHEET 2

SUMMARY OF BRIDGE QUANTITIES				TOTALS	DESCRIPTIONS		
SUPERSTRUCTURE	ABUTMENT NO. 1	PIER	ABUTMENT NO. 2	BRIDGE TOTAL	UNIT	ITEMS	ITEM NUMBER
			1	1	LS	COFFERDAM (EAST ABUTMENT)	208.40
		1		1	LS	COFFERDAM (PIER)	208.40
		24		24	CY	CONCRETE, HIGH PERFORMANCE CLASS B	501.34
0.5				0.5	LS	SHORING SUPERSTRUCTURE	502.10
1				1	LS	STRUCTURAL STEEL	506.75
		3120		3120	LB	REINFORCING STEEL, LEVEL I	507.11
		40		40	LF	DRILLING AND GROUTING DOWELS	507.16
		5		5	GAL	WATER REPELLENT, SILANE	514.10
23.5				23.5	MFBM	STRUCTURAL LUMBER AND TIMBER, UNTREATED	522.20
37.38				37.38	MFBM	STRUCTURAL LUMBER AND TIMBER, TREATED	522.25
8.92				8.92	MFBM	NONSTRUCTURAL LUMBER, UNTREATED	522.30
1				1	EACH	PARTIAL REMOVAL OF STRUCTURE	529.20
1				1	LS	TIMBER PAINTING, ENVIRONMENTAL PROTECTION	660.10
1				1	LS	TIMBER PAINTING, FIRE RETARDANT	660.20
1				1	LS	TIMBER PAINTING, INSECTICIDE/FUNGICIDE	660.30
535				535	SY	METAL ROOFING	661.10
	4	4	4	12	EACH	SPECIAL PROVISION (BEARING DEVICE ASSEMBLY, COVERED BRIDGE)	900.620
		4	4	8	EACH	SPECIAL PROVISION (TIMBER ARCH BEARING CONNECTION)	900.620
20				20	EACH	SPECIAL PROVISION (WOOD EPOXY REPAIRS)	900.620
1				1	LS	SPECIAL PROVISION (LIGHTING FOR COVERED BRIDGE)	900.645
0.5				0.5	LS	SPECIAL PROVISION (REHABILITATING COVERED BRIDGE SUPERSTRUCTURE)	900.645
			1	1	LS	SPECIAL PROVISION (REPAIRING STONE MASONRY, JAHN PERMEABLE MORTAR SYSTEM) (EAST ABUTMENT)	900.645
		1		1	LS	SPECIAL PROVISION (REPAIRING STONE MASONRY, JAHN PERMEABLE MORTAR SYSTEM) (PIER)	900.645
		0.5	0.5	1	LS	SPECIAL PROVISION (STONE MASONRY REPAIR MATERIAL, JAHN PERMEABLE MORTAR SYSTEM)	900.645
		0.5	0.5	1	LU	SPECIAL PROVISION (ON-SITE MASONRY MOCK-UP AND TRAINING, JAHN PERMEABLE MORTAR SYSTEM N.A.B.I.)	900.650

DETAILED SUMMARY OF QUANTITIES		
QUANTITIES	UNIT	ITEMS

McFarland Johnson

PROJECT NAME: WOODSTOCK WOODSTOCK
PROJECT NUMBER: BHO 1444(52) ST 1444(58)

FILE NAME: z96j262quant.dgn
PROJECT LEADER: M. Sargent
DESIGNED BY: S. Delia
BRIDGE QUANTITY SHEET #2

PLOT DATE: 23-JUL-2012
DRAWN BY: P. Dustin
CHECKED BY: R. Joy
SHEET 6C OF 68

GPS CONTROL POINTS

HVCTRL #1

B94061

NORTH = 414918.82
EAST = 1647137.75
ELEV. = 716.81

GENERAL LOCATION, WOODSTOCK, ABOUT 2 MI (3.2 KM) EAST OF WOODSTOCK VILLAGE, ABOUT 8.5 MI (13.7 KM) WEST OF WHITE RIVER JUNCTION. TO REACH FROM THE INTERSECTION OF U.S. ROUTE 4 AND VT ROUTE 12 NORTH IN THE CENTER OF WOODSTOCK VILLAGE GO EAST ALONG U.S. ROUTE 4 FOR 2.7 MI (4.3 KM) TO A GRAVEL PULLOUT AND THE MARK ON THE LEFT. THE MARK IS 9.1 (29.9 FT) NORTH OF AND ABOUT 0.5 M (1.6 FT) LOWER THAN THE NORTH EDGE OF PAVEMENT OF U.S. ROUTE 4, 4.3 M (14.1 FT) NORTH OF THE NORTH EDGE OF THE GRAVEL PULLOUT, 4.9 M (16.1 FT) NORTHWEST OF POLE NO. 25T/74/16/11, 16.9 M (55.4 FT) EAST-NORTHEAST OF THE EAST END OF A STEEL BEAM GUARD RAIL, AND 0.7 M (2.3 FT) SOUTH OF A FIBERGLASS WITNESS POST. IT IS SET FLUSH WITH THE GROUND SURFACE IN THE TOP OF A 30-CM DIAMETER CONCRETE MONUMENT POURED TO A DEPTH OF 1.8 M.

HVCTRL #8

TAFTSVILLE

NORTH = 412277.58
EAST = 1648740.65
ELEV. = 412288.53

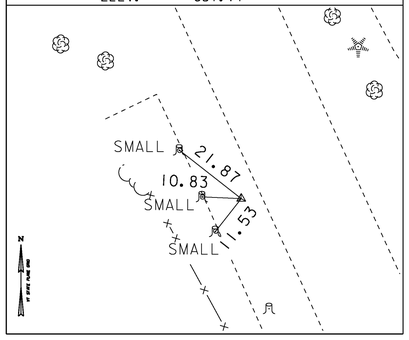
GENERAL LOCATION, TAFTSVILLE, ABOUT 2.5 MI (4.0 KM) EAST OF WOODSTOCK VILLAGE, ABOUT 8 MI (12.9 KM) WEST OF WHITE RIVER JUNCTION. OWNERSHIP, CENTRAL VERMONT PUBLIC SERVICE CORPORATION, 77 GROVE STREET, RUTLAND, VT. 05701. CONTACT STEVE EDGERTON, PHONE 802-773-2711. TO REACH FROM THE INTERSECTION OF U.S. ROUTE 4 AND VT ROUTE 12 NORTH IN THE CENTER OF WOODSTOCK VILLAGE GO EAST ALONG U.S. ROUTE 4 FOR 3.3 MI (5.3 KM) TO THE TAFTSVILLE POWER DAM LEFT AND THE MARK ON THE LEFT, SET IN THE TOP OF THE NORTHEAST CORNER OF THE CONCRETE INTAKE STRUCTURE AT THE HEADWORKS OF THE DAM. THE MARK IS ABOUT 8.5 M (27.9 FT) NORTH OF THE DAM, 0.5 M (1.6 FT) SOUTH OF THE NORTH EDGE OF THE CONCRETE INTAKE STRUCTURE, 0.7 M (2.3 FT) WEST OF THE EAST EDGE OF THE STRUCTURE, AND 16.0 M (52.5 FT) EAST OF AN ELECTRIC POLE. NOTE--IT IS A BLANK DISK.

• DESCRIPTION PROVIDED BY VERMONT AGENCY OF TRANSPORTATION GEODETIC SURVEY UNIT

TRAVERSE TIES

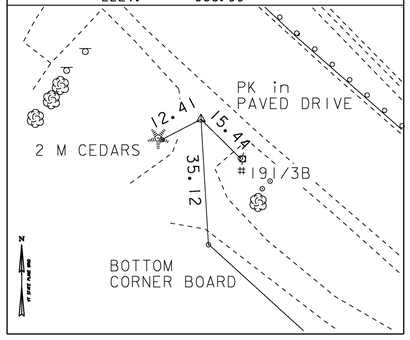
HVCTRL #6

NORTH = 412288.53
EAST = 1648568.02
ELEV. = 657.71



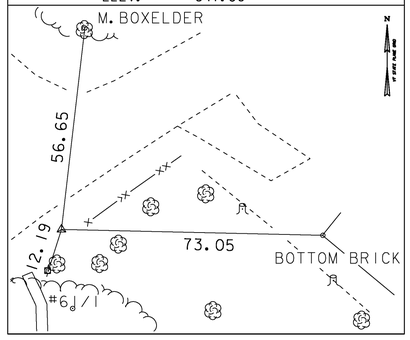
HVCTRL #7

NORTH = 411975.39
EAST = 1648757.27
ELEV. = 666.99



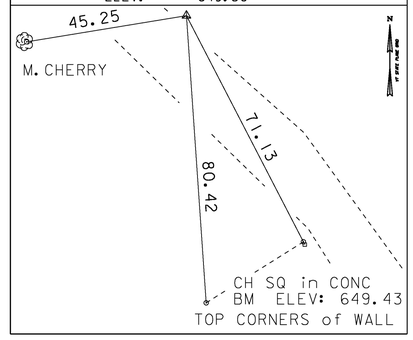
HVCTRL #10

NORTH = 412249.04
EAST = 1649041.89
ELEV. = 647.80



HVCTRL #11

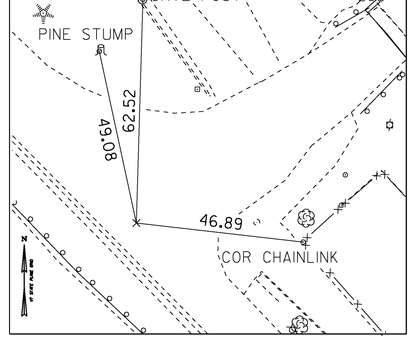
NORTH = 412440.76
EAST = 1648914.03
ELEV. = 649.30



ALIGNMENT TIES

POT 10+00.00

NORTH = 412041.79
EAST = 1648768.93

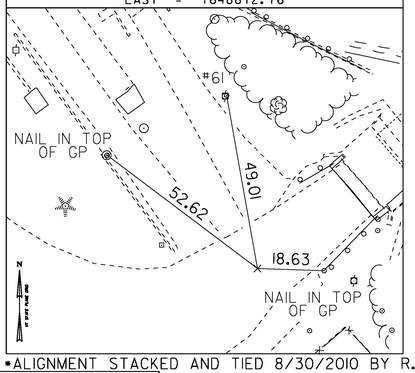


* MAIN TRAVERSE COMPLETED: R.GILMAN PC/P.WINTERS 04/07/2004 on previous job [PMS 04X500]

ALIGNMENT TIES

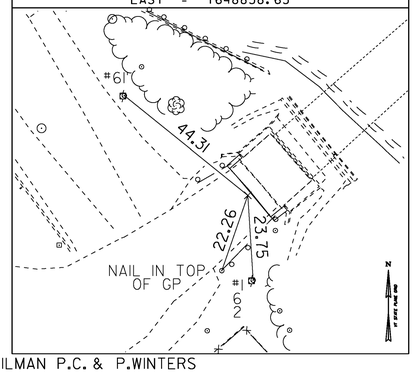
PC 10+53.60

NORTH = 412072.63
EAST = 1648812.76



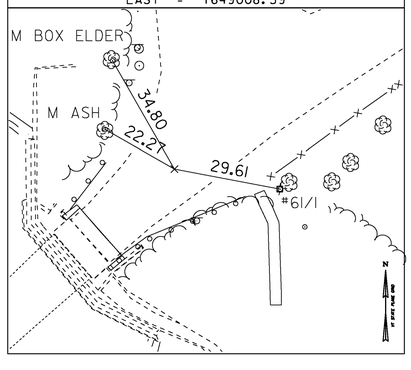
PT 10+86.60

NORTH = 412093.07
EAST = 1648838.65



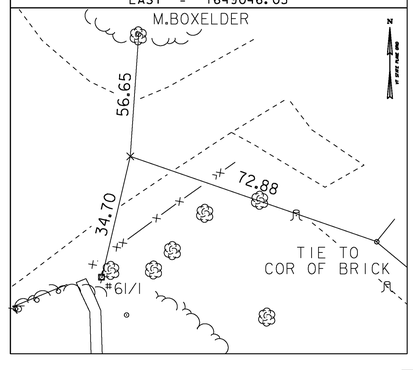
PC 13+13.28

NORTH = 412243.09
EAST = 1649008.59



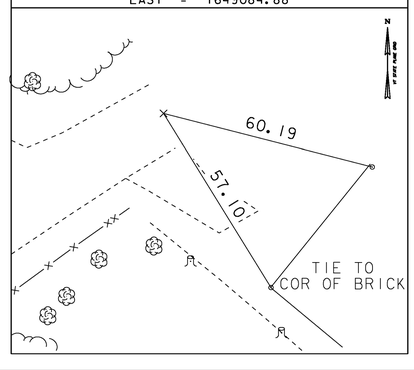
PT 13+60.21

NORTH = 412271.27
EAST = 1649046.05



POT 14+06.24

NORTH = 412295.99
EAST = 1649084.88



*ALIGNMENT STACKED AND TIED 8/30/2010 BY R.GILMAN P.C. & P.WINTERS

DATUM

VERTICAL NAVD 88
HORIZONTAL NAD 83 (96)
ADJUSTMENT Compass

NOTE

1. THE SURVEY TIES DEPICTED ON THIS SHEET WERE OBTAINED PRIOR TO FLOODING AND PRIOR TO OVERHEAD UTILITY RELOCATION. SOME TIES MAY REQUIRE ADJUSTING BY THE ENGINEER PRIOR TO CONSTRUCTION.

McFarland Johnson

PROJECT NAME: WOODSTOCK WOODSTOCK
PROJECT NUMBER: BHO 1444(52) ST 1444(58)

FILE NAME: z96J262ti.dgn
PROJECT LEADER: M. Sargent
DESIGNED BY: VTRANS
TIE SHEET

PLOT DATE: 29-JUN-2012
DRAWN BY: P. Dustin
CHECKED BY: R. Joy
SHEET 7 OF 68

CURVE #1 DATA

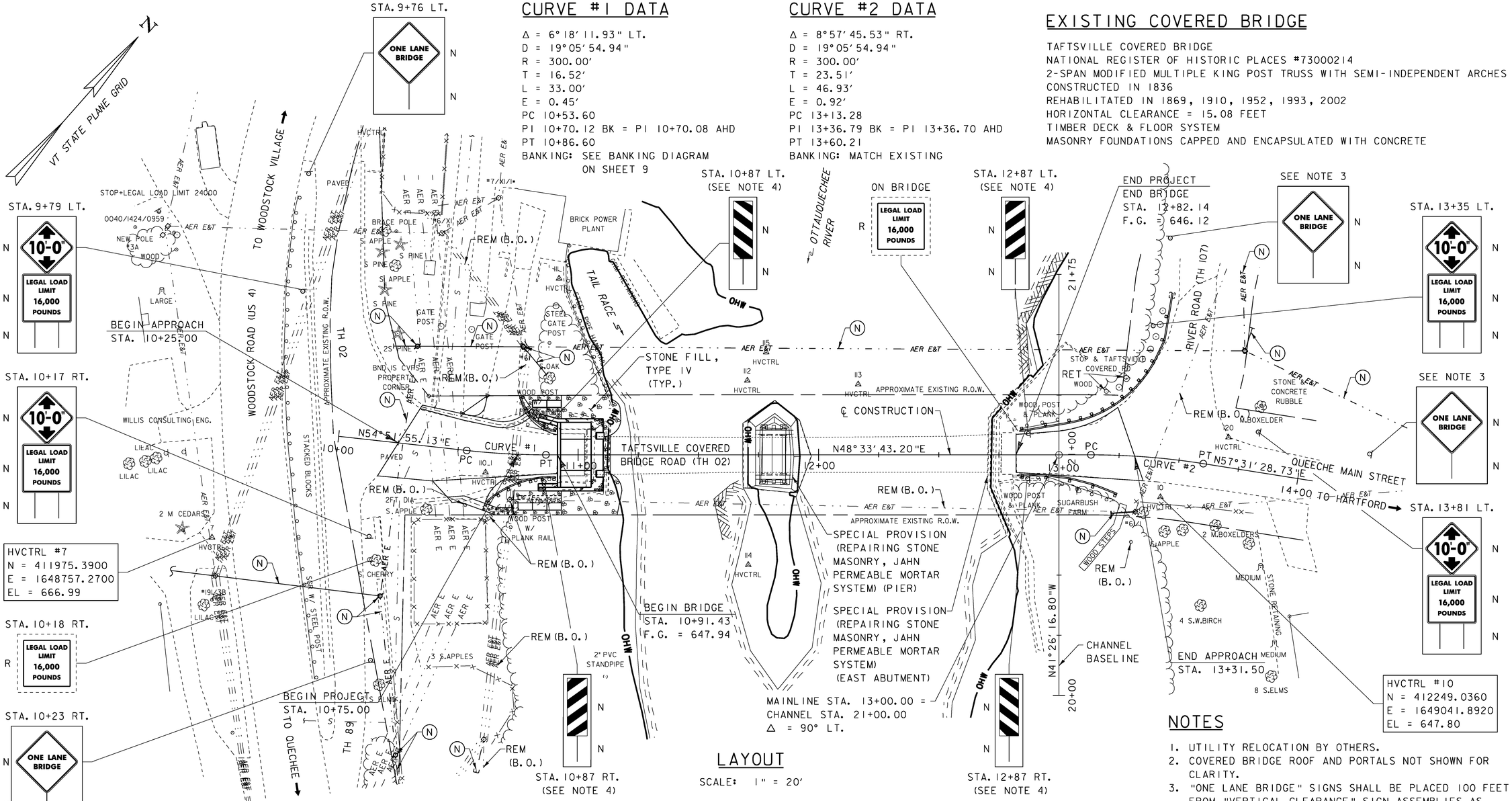
Δ = 6°18′11.93" LT.
D = 19°05′54.94"
R = 300.00′
T = 16.52′
L = 33.00′
E = 0.45′
PC 10+53.60
PI 10+70.12 BK = PI 10+70.08 AHD
PT 10+86.60
BANKING: SEE BANKING DIAGRAM ON SHEET 9

CURVE #2 DATA

Δ = 8°57′45.53" RT.
D = 19°05′54.94"
R = 300.00′
T = 23.51′
L = 46.93′
E = 0.92′
PC 13+13.28
PI 13+36.79 BK = PI 13+36.70 AHD
PT 13+60.21
BANKING: MATCH EXISTING

EXISTING COVERED BRIDGE

TAFTSVILLE COVERED BRIDGE
NATIONAL REGISTER OF HISTORIC PLACES #73000214
2-SPAN MODIFIED MULTIPLE KING POST TRUSS WITH SEMI-INDEPENDENT ARCHES
CONSTRUCTED IN 1836
REHABILITATED IN 1869, 1910, 1952, 1993, 2002
HORIZONTAL CLEARANCE = 15.08 FEET
TIMBER DECK & FLOOR SYSTEM
MASONRY FOUNDATIONS CAPPED AND ENCAPSULATED WITH CONCRETE



LAYOUT

SCALE: 1" = 20′

CONSTRUCTION NOTES

STEEL BACKED TIMBER GUARDRAIL SEE GUARDRAIL LAYOUT PLAN ON SHEET 57

REMOVAL AND DISPOSAL OF GUARDRAIL

STA. 10+77.9 TO STA. 10+89.0 LT.
STA. 10+68.2 TO STA. 10+88.6 RT.
STA. 12+84.0 TO STA. 13+00.2 LT.
STA. 12+84.3 TO STA. 13+23.8 RT.

REMOVAL AND DISPOSAL OF GUIDE POSTS

STA. 13+24 TO STA. 13+38 RT. (TOTAL = 7)

GABION WALL

STA. 10+81 TO STA. 10+93 LT.
STA. 10+75 TO STA. 10+93 RT.

STONE FILL, TYPE I

STA. 10+78 TO STA. 10+82 LT.
STA. 10+63 TO STA. 10+74 RT.

STONE FILL, TYPE II

STA. 10+76 TO STA. 10+93 LT.
STA. 10+73 TO STA. 10+93 RT.

STONE FILL, TYPE IV

STA. 10+93 TO STA. 11+18 LT.
STA. 10+93 TO STA. 11+18 RT.

LEGEND

R	REMOVE EXISTING SIGN AND POST (SALVAGE TO TOWN)
N	NEW SIGN, NEW POST
— AER E&T —	AERIAL ELECTRIC AND TELEPHONE
— AER E —	AERIAL ELECTRIC
REM (B.O.)	REMOVE EXISTING AERIAL LINE (BY OTHERS)
(N)	NEW AERIAL UTILITY
RET	RETAIN EXISTING SIGN AND POST
— S —	EXISTING SEWER

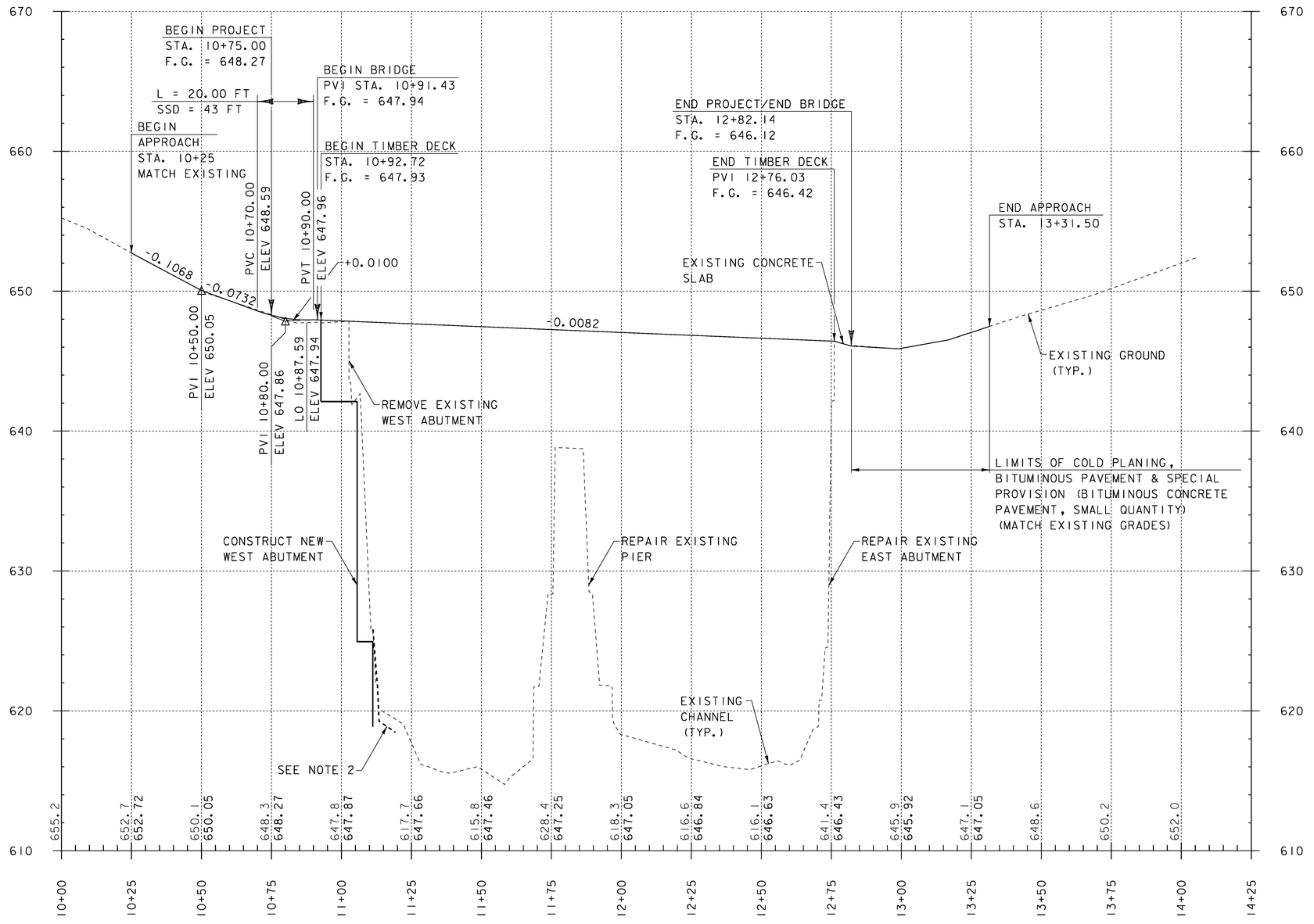
SCALE 1" = 20′-0
20 0 20

NOTES

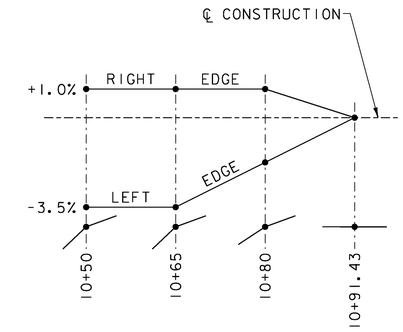
1. UTILITY RELOCATION BY OTHERS.
2. COVERED BRIDGE ROOF AND PORTALS NOT SHOWN FOR CLARITY.
3. "ONE LANE BRIDGE" SIGNS SHALL BE PLACED 100 FEET FROM "VERTICAL CLEARANCE" SIGN ASSEMBLIES AS DIRECTED BY THE RESIDENT ENGINEER.
4. THE OBJECT MARKERS AT EACH CORNER SHALL BE PLACED AS CLOSE AS POSSIBLE TO STEEL BACKED TIMBER GUARDRAIL TO THE SATISFACTION OF THE RESIDENT ENGINEER.
5. SEE GENERAL NOTE 7 ON SHEET 23 FOR UTILITY NOTE.

McFarland Johnson

PROJECT NAME:	WOODSTOCK	WOODSTOCK
PROJECT NUMBER:	BHO 1444(52)	ST 1444(58)
FILE NAME: z96j262pln.dgn		PLOT DATE: 29-JUN-2012
PROJECT LEADER: M. Sargent		DRAWN BY: P. Dustin
DESIGNED BY: P. Dustin		CHECKED BY: R. Joy
PLAN SHEET		SHEET 8 OF 68

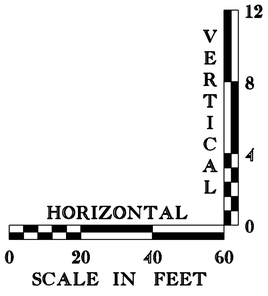


PROFILE - TAFTSVILLE COVERED BRIDGE ROAD



PROPOSED BANKING DIAGRAM

NOT TO SCALE

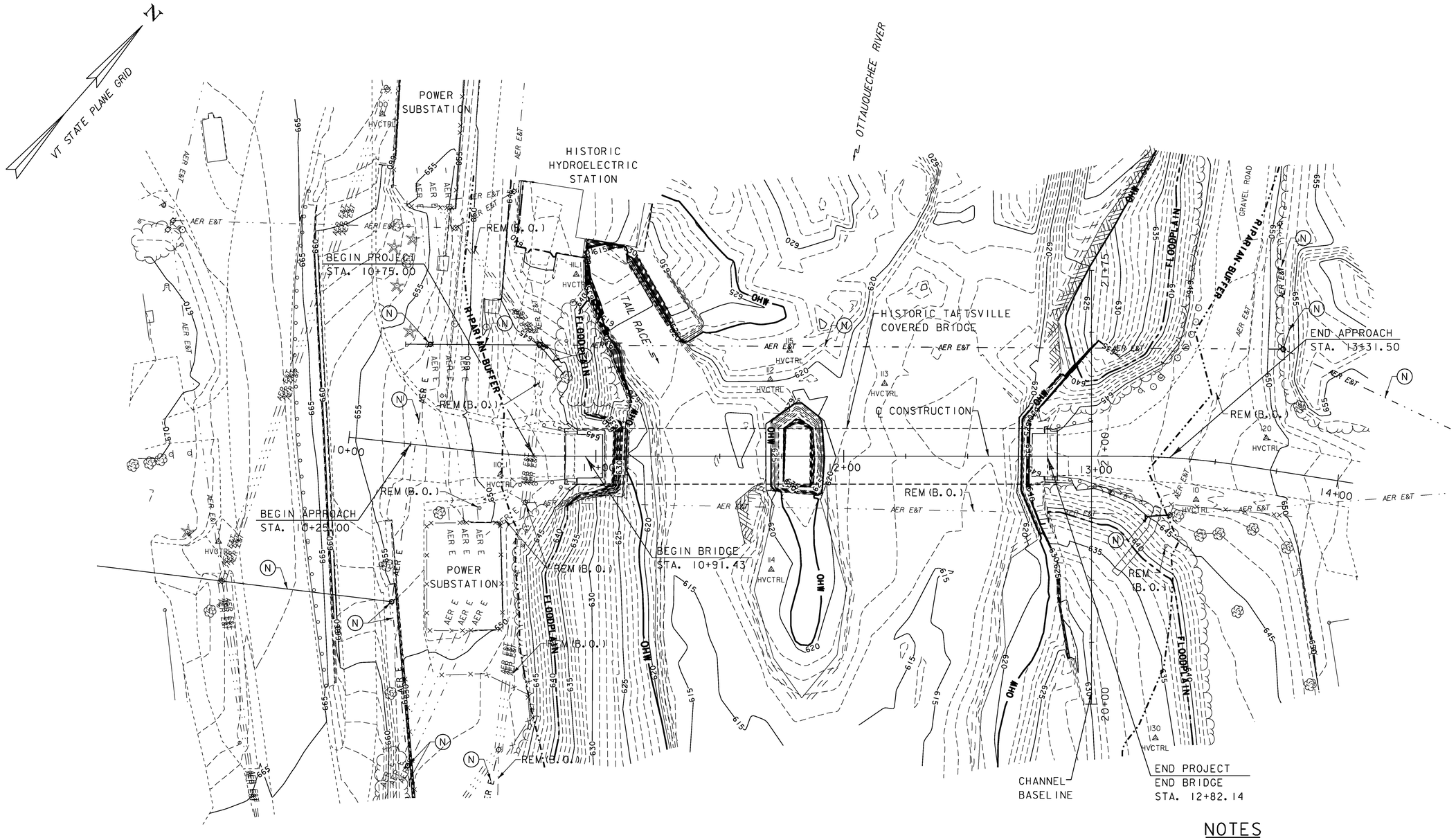


NOTES

1. ELEVATIONS SHOWN TO THE NEAREST TENTH ARE EXISTING GROUND ALONG THE PROPOSED ALIGNMENT PRIOR TO FLOODING. ELEVATIONS SHOWN TO THE NEAREST HUNDREDTH ARE FINISH GRADE ELEVATIONS ALONG THE PROPOSED ALIGNMENT.
2. THE BOLD DASHED LINES REPRESENT THE FINDINGS OF A PARTIAL POST-FLOOD SURVEY OF EXISTING CONDITIONS CONDUCTED IN JANUARY 2012.

McFarland Johnson

PROJECT NAME:	WOODSTOCK	WOODSTOCK
PROJECT NUMBER:	BHO 1444(52)	ST 1444(58)
FILE NAME: z96j262pro.dgn		PLOT DATE: 29-JUN-2012
PROJECT LEADER: M. Sargent		DRAWN BY: P. Dustin
DESIGNED BY: P. Dustin		CHECKED BY: R. Joy
PROFILE SHEET		SHEET 9 OF 68



LEGEND

— AER E&T —	AERIAL ELECTRIC & TELEPHONE
— AER E —	AERIAL ELECTRIC
—— OHW ——	ORDINARY HIGH WATER LIMIT
—— - - ——	FLOODPLAIN
-·-·-·-·-·-	RIPARIAN BUFFER ZONE
REM (B.O.)	REMOVE EXISTING AERIAL LINE (BY OTHERS)
(N)	NEW AERIAL LINE

RESOURCE LAYOUT SHEET

SCALE: 1" = 20'

NOTES

1. THE TOPOGRAPHY, CHANNEL FEATURES AND OVERHEAD UTILITIES DEPICTED ON THIS SHEET WERE OBTAINED PRIOR TO 2011 FLOODING AND DO NOT REFLECT CURRENT CONDITIONS.

SCALE 1" = 20'-0
20 0 20

McFarland Johnson

PROJECT NAME:	WOODSTOCK	WOODSTOCK
PROJECT NUMBER:	BHO 1444(52)	ST 1444(58)
FILE NAME: z96j262res.dgn		PLOT DATE: 29-JUN-2012
PROJECT LEADER: M. Sargent		DRAWN BY: P. Dustin
DESIGNED BY: P. Dustin		CHECKED BY: R. Joy
RESOURCE LAYOUT SHEET		SHEET 10 OF 68

EROSION CONTROL NARRATIVE

1.1 PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE REHABILITATION OF THE HISTORIC TAFTSVILLE COVERED BRIDGE ALONG ITS CURRENT ALIGNMENT, INCLUDING REPAIR OF THE EXISTING FOUNDATIONS. THE PROJECT SITE IS LOCATED IN THE HAMLET OF TAFTSVILLE, APPROXIMATELY THREE MILES EAST OF WOODSTOCK VILLAGE IN THE NORTHEAST CORNER OF THE TOWNSHIP OF WOODSTOCK. THE STRUCTURE CARRIES TAFTSVILLE COVERED BRIDGE ROAD (T.H. 02), OVER THE OTTAUQUECHEE RIVER.

THE EXISTING COVERED BRIDGE WILL BE REHABILITATED TO A LEVEL THAT ACCOMMODATES A REGULATORY POSTED WEIGHT REQUIREMENT OF 10 TONS. HOWEVER, THE TOWN WISHES TO POST THE BRIDGE FOR 8 TONS (16000 POUNDS). THE EXISTING DAMAGED WEST MASONRY ABUTMENT WILL BE REPLACED. REHABILITATION OF THE REMAINING SUBSTRUCTURES WILL INCLUDE REPOINTING OF THE MASONRY FACES, PLACEMENT OF INTERNAL CONSOLIDATION GROUT AND NEW ARCH CONNECTIONS. EXISTING PIER WORK WILL ALSO INCLUDE NEW CONCRETE CAP AND STRENGTHENING. ROADWAY WORK WILL INCLUDE NEW GUARDRAIL AT THE CORNERS OF THE BRIDGE AND PAVED APPROACHES, INCLUDING PAVED DRAINAGE SWALES AT THE WEST APPROACH.

THE BRIDGE WILL BE CLOSED DURING CONSTRUCTION AND TRAFFIC WILL BE REROUTED AROUND THE SITE VIA THE EXISTING ROADWAY NETWORK.

IT IS ANTICIPATED THIS PROJECT WILL BE COMPLETED WITHIN TWO CONSTRUCTION SEASONS.

TOTAL AREA OF DISTURBANCE, EXCLUDING WASTE, BORROW AND STAGING AREAS, AS SHOWN ON THE ATTACHED EPSC PLAN IS APPROXIMATELY 0.17 ACRES.

THE TOTAL DISTURBED AREA IS AN ESTIMATE. ALL ON-SITE AND OFF-SITE WASTE AND BORROW AREAS, STAGING AREAS, AND HAUL ROADS NEED PRIOR WRITTEN CLEARANCE BY VTRANS ENVIRONMENTAL SECTION PRIOR TO THE BEGINNING OF CONSTRUCTION.

CONSTRUCTION SHALL CONFORM TO ALL OTHER ENVIRONMENTAL PERMITS ASSOCIATED WITH THIS PROJECT.

1.2 SITE INVENTORY

1.2.1 TOPOGRAPHY

THE TOPOGRAPHY OF THE PROJECT SITE TO THE EAST IS GENERALLY SLOPING AND SCATTERED WITH VARIOUS SIZE TREES. THE NORTHEAST SIDE IS WOODED WITH MODERATELY STEEP SLOPES. TO THE WEST, THE LAND CONSISTS OF A GENERALLY OPEN AREA MOST OF WHICH IS PAVED TO ACCOMMODATE ACCESS TO THE HYDROELECTRIC POWER GENERATION STATION. THERE IS ONE RESIDENCE AND A HYDROELECTRIC POWER GENERATION STATION LOCATED NEAR THE PROJECT AREA. TAFTSVILLE COVERED BRIDGE ROAD (T.H. 2) IS A PAVED, CLASS 2 RURAL LOCAL ROAD. ON THE WEST END OF THE BRIDGE, THE ROAD SPLITS INTO TWO TRAVELWAYS, BOTH OF WHICH CONNECT TO WOODSTOCK ROAD (US ROUTE 4 & VT ROUTE 12). ON THE EAST END OF THE BRIDGE, RIVER ROAD (T.H. 107), AN UNPAVED, CLASS 3 RURAL LOCAL ROAD DEPARTS IN A NORTHWESTERLY DIRECTION. TAFTSVILLE COVERED BRIDGE ROAD TRANSITIONS INTO QUECHEE MAIN STREET AT THE INTERSECTION WITH RIVER ROAD AND CONTINUES AWAY FROM THE SITE AS A PAVED, CLASS 2 RURAL LOCAL ROAD IN A SOUTHEASTERLY DIRECTION. OVERHEAD UTILITY LINES THAT RUN ALONG THE SOUTH SIDE OF TAFTVILLE COVERED BRIDGE ROAD AND CROSS OVER AT THE EAST AND WEST ENDS OF THE BRIDGE WILL REMAIN. THERE ARE NO KNOWN UNDERGROUND UTILITIES OR DRAINAGE PIPES IN THE PROJECT AREA.

1.2.2 DRAINAGE, WATERWAYS, BODIES OF WATER, AND PROXIMITY TO NATURAL OR MAN-MADE WATER FEATURES

THE OTTAUQUECHEE RIVER IS THE ONLY WATER SOURCE ON THE PROJECT SITE. IT IS A RURAL MEANDERING WATERWAY THAT FLOWS EASTERLY FROM ITS HEADWATERS IN THE GREEN MOUNTAINS IN SHERBURNE, WHERE IT PASSES THROUGH OR ALONG THE BOUNDARIES OF THE TOWNS OF BRIDGEWATER, WOODSTOCK, POMFRET, HARTFORD AND HARTLAND THROUGH THE QUECHEE GORGE TO ITS OUTLET AT THE CONNECTICUT RIVER IN NORTH HARTIAND. THE OTTAUQUECHEE RIVER IS REGULATED BY THE ARMY CORPS OF ENGINEERS NORTH HARTLAND DAM, THE QUECHEE DAM, AND THE TAFTSVILLE DAM LOCATED IMMEDIATELY UPSTREAM OF THE BRIDGE. THE BED MATERIAL IN THE IMMEDIATE AREA OF THE BRIDGE CONSISTS OF LEDGE, BOULDERS, AND COBBLES. THERE IS A HISTORY OF ICE JAMS THAT FORM IN THE TAFTSVILLE POND UPSTREAM OF THE TAFTSVILLE DAM.

1.2.3 VEGETATION

THE VEGETATION IN THE PROJECT AREA CONSISTS OF WOODS, GRASSY LAWNS, BRUSH AND UNDERGROWTH. THE MAJORITY OF THE WOODED AREA CAN BE FOUND IN THE NORTHEAST SIDE OF THE PROJECT. THE IMPACT TO VEGETATION WILL BE LIMITED TO THAT WHICH IS DIRECTLY AFFECTED BY APPROACH WORK.

1.2.4 SOILS

ALL SOIL DATA CAME FROM THE U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE FOR THE COUNTY OF WINDSOR, VERMONT. SOILS ON THE PROJECT SITE ARE HINCKLEY SANDY LOAM, 25 TO 50 PERCENT SLOPES. "K-FACTOR" = 0.49. 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: TAFTSVILLE COVERED BRIDGE IS ON NATIONAL REGISTER OF HISTORIC PLACES (NRHP). THE BRIDGE IS LOCATED WITHIN A HISTORIC DISTRICT.
PRIME AGRICULTURAL LAND: NO
THREATENED AND ENDANGERED SPECIES: NO
WATER RESOURCE: OTTAUQUECHEE RIVER

1.3 RISK EVALUATION

THIS PROJECT IS CONSIDERED LOW RISK AND DOES NOT FALL UNDER THE JURISDICTION OF CONSTRUCTION GENERAL PERMIT 3-9020 FOR STORMWATER BASED ON PROJECT IMPACT AREA. SHOULD CHANGES PRIOR TO OR DURING CONSTRUCTION RESULT IN ONE OF MORE ACRES OF EARTH DISTURBANCE OR SHOULD THE PROJECT BECOME PART OF A LARGER PLAN OF DEVELOPMENT THEN THE SELECTED CONTRACTOR WILL BE RESPONSIBLE FOR ADDITIONAL PERMITTING WITH "VANR" VIA FILIING THE APPROPRIATE "NOTICE OF INTENT" UNDER THE CONSTRUCTION GENERAL PERMIT PROCESS.

1.4 EROSION PREVENTION AND SEDIMENT CONTROL

THE EROSION CONTROL PLANS ARE MEANT TO BE A GUIDELINE FOR PREVENTING EROSION AND CONTROLLING SEDIMENT TRANSPORT. THE WORK OUTLINED IN THIS NARRATIVE CONSISTS 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, STORMWATER 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 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 THE SITE BOUNDARIES.

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, 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

NOT ANTICIPATED FOR THIS PROJECT.

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.

TURBIDITY CURTAIN WILL BE INSTALLED AS PROPOSED ON THE EPSC PLAN.

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 CONSTRUCITON SITE.

THE PROJECT AREA IS REALTIVELY FLAT. THERFORE IT IS NOT ANTICPIATED THAT DIVERSION MEASURES WILL BE NECESSARY.

1.4.6 SLOW DOWN CHANNELIZED RUNOFF

CHECK STRUCTURES WILL NOT LIKELY BE UTILIZED TO REDUCE THE VELOCITY, AND THUS THE EROSIVE POTENTIAL, OF CONCENTRATED FLOW IN CHANNELS.

1.4.7 CONSTRUCT PERMANENT CONTROLS

PERMANENT STORMWATER TREATMENT DEVICES SHALL BE INSTALLED AS SHOWN ON THE PLANS AND IN ACCORDANCE WITH PERMIT CONDITIONS. STORMWATER TREATMENT INCLUDES REPAVING OF WEST APPROACH DRAINAGE SWALES WHICH OUTLET INTO STONE FILL DITCHES.

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.

SURFACE ROUGHENING OF ALL EXPOSED SLOPES, COMBINED WITH TEMPORARY MULCHING, 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.

1.4.11 DE-WATERING ACTIVITIES

DISCHARGE FROM DE-WATERING ACTIVITIES THAT FLOWS OFF THE CONSTRUCTION SITE MUST NOT CAUSE OR CONTRIBUTE TO A VIOLATION OF THE VERMONT WATER QUALITY STANDARDS. TREATMENT OF DE-WATERING COFFERDAM IS ANTICIPATED. THE SPECIFIC MEANS AND LOCATION OF SEDIMENT BASINS FOR TREATMENT OF DISCHARGE SHALL BE PROVIDED BY THE CONTRACTOR.

1.4.12 INSPECT YOUR SITE

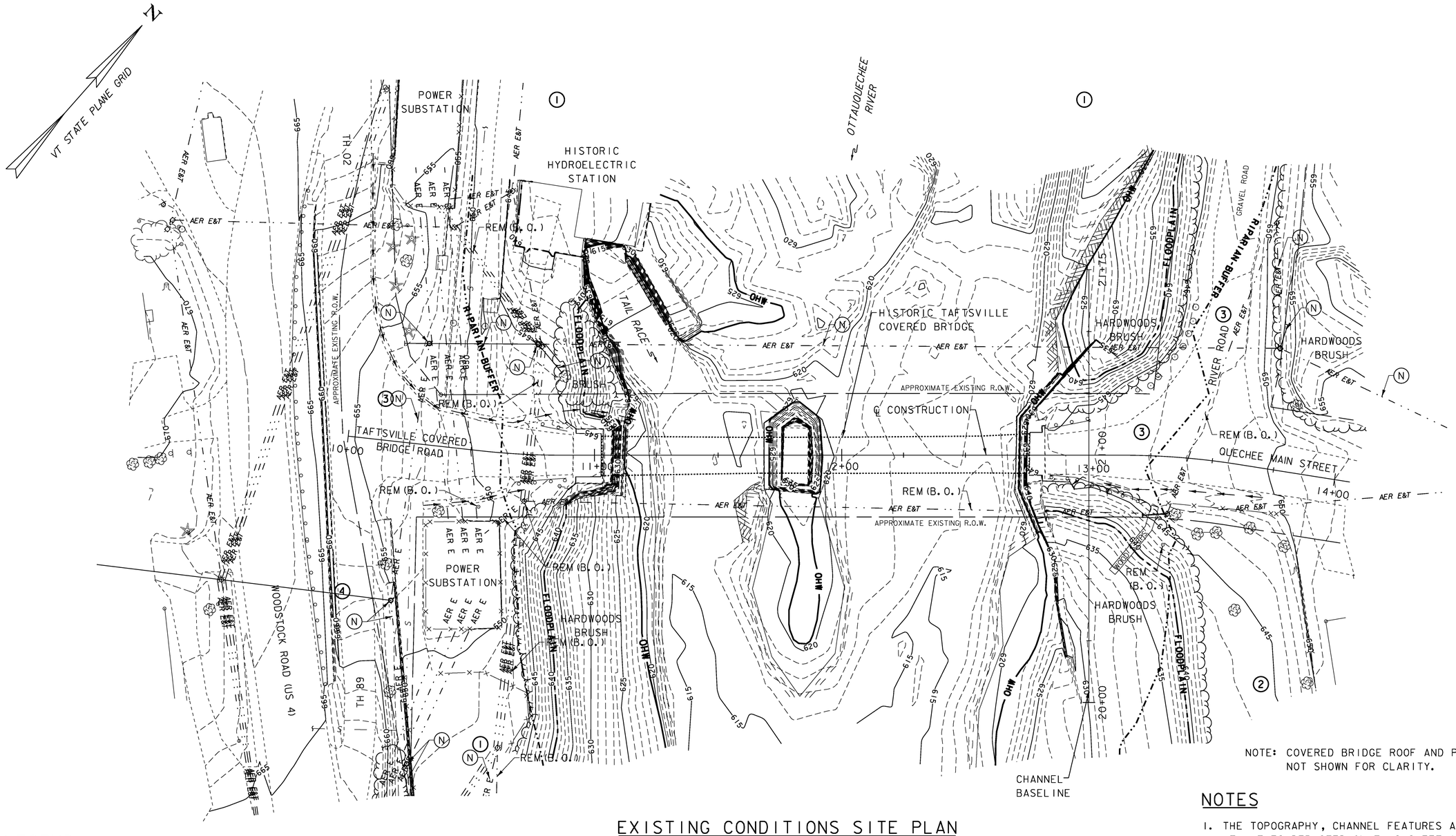
INSPECT THE PROJECT SITE BASED ON SPECIAL PROVISION REQUIREMENTS OR CONSTRUCTION GENERAL PERMIT AUTHORIZATION STIPULATIONS.

1.5 SEQUENCE AND STAGING

DETAILS TO BE DEVELOPED BY THE CONTRACTOR.

McFarland Johnson

PROJECT NAME:	WOODSTOCK	WOODSTOCK
PROJECT NUMBER:	BHO 1444(52)	ST 1444(58)
FILE NAME: z96j262nar.dgn		PLOT DATE: 29-JUN-2012
PROJECT LEADER: M. Sargent		DRAWN BY: P. Dustin
DESIGNED BY: W. Durack		CHECKED BY: R. Joy
EPSC NARRATIVE		SHEET 11 OF 68



NOTE: COVERED BRIDGE ROOF AND PORTALS NOT SHOWN FOR CLARITY.

EXISTING CONDITIONS SITE PLAN

SCALE: 1" = 20'

LEGEND

→→→	EXISTING DRAINAGE FLOW
— AER E&T —	AERIAL ELECTRIC & TELEPHONE
— AER E —	AERIAL ELECTRIC
—— OHW ——	ORDINARY HIGH WATER LIMIT
—— - - ——	FLOODPLAIN
-·-·-·-·-	RIPARIAN BUFFER ZONE
REM (B.O.)	REMOVE EXISTING AERIAL LINE (BY OTHERS)
(N)	NEW AERIAL LINE

PROPERTY OWNERS

1. CENTRAL VERMONT PUBLIC SERVICE CORP.
2. TEA HOUSE PROPERTIES, LLC
3. TOWN OF WOODSTOCK
4. STATE OF VERMONT

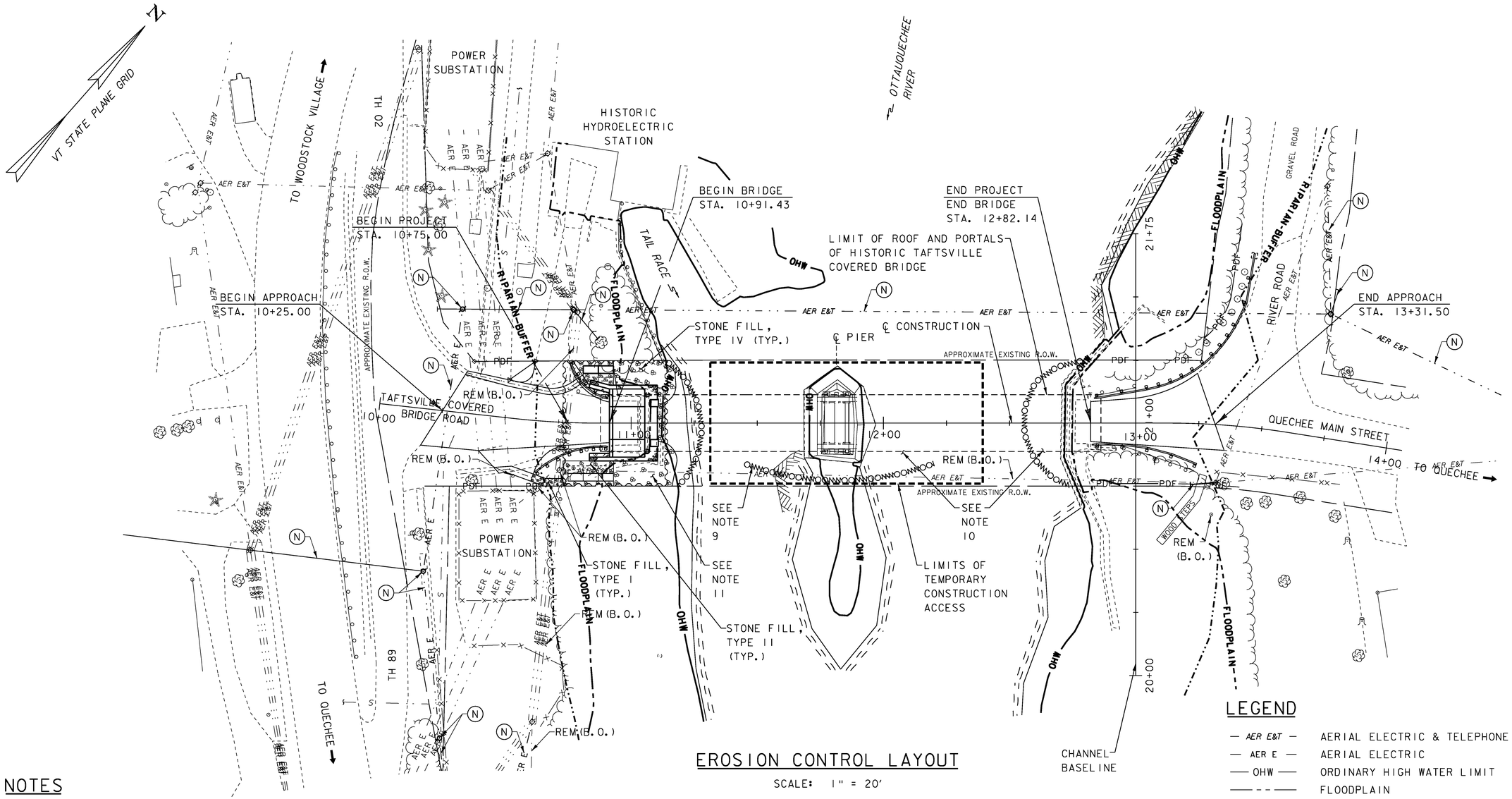
NOTES

1. THE TOPOGRAPHY, CHANNEL FEATURES AND OVERHEAD UTILITIES DEPICTED ON THIS SHEET WERE OBTAINED PRIOR TO 2011 FLOODING AND DO NOT REFLECT CURRENT CONDITIONS.
2. PROJECT SOIL TYPE IS LISTED ON SHEET 11, SECTION 1.2.4.

SCALE 1" = 20'-0
20 0 20

McFarland Johnson

PROJECT NAME:	WOODSTOCK	WOODSTOCK	
PROJECT NUMBER:	BHO 1444(52)	ST 1444(58)	
FILE NAME: z96j262exc.dgn		PLOT DATE: 29-JUN-2012	
PROJECT LEADER: M. Sargent		DRAWN BY: P. Dustin	
DESIGNED BY: P. Dustin		CHECKED BY: R. Joy	
EPSC EXISTING CONDITIONS SITE PLAN		SHEET 12 OF 68	



EROSION CONTROL LAYOUT

SCALE: 1" = 20'

NOTES

1. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY EARTH DISTURBANCE.
2. THESE PLANS SHOW A CONCEPTUAL EROSION CONTROL PLAN. THE CONTRACTOR MUST SUBMIT A TEMPORARY EROSION CONTROL PLAN FOR APPROVAL. PAYMENT FOR DEVELOPMENT OF AND MODIFICATIONS TO THE EPSC SHALL BE INCLUDED IN ITEM 652.10, EPSC PLAN.
3. 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.
4. 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.
5. REFER TO TEMPORARY EROSION CONTROL DETAIL SHEETS FOR ADDITIONAL DETAILS.
6. WHERE LEDGE IS EXPOSED, GRAVEL BAGS MAY BE USED INSTEAD OF FILTER CURTAIN. PAYMENT WILL BE MADE UNDER ITEM 649.61, GEOTEXTILE FOR FILTER CURTAIN.
7. ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED. SEE SEEDING FORMULA AND SEEDING NOTES ON SHEET 15 FOR TURF REESTABLISHMENT REQUIREMENTS.
8. MONITORING AND MAINTAINING THE EROSION AND SEDIMENT CONTROL PLAN SHALL BE PER SUBSECTIONS 652.06 AND 652.07 OF THE SPECIAL PROVISIONS AND PAYMENT WILL BE MADE UNDER CONTRACT ITEMS 652.20 AND 652.30 RESPECTIVELY.
9. LOCATION OF TURBIDITY CURTAIN AT THE PIER SHALL CONSIDER LOCATION OF TEMPORARY SHORING FOUNDATIONS WITHIN THE LIMITS OF TEMPORARY CONSTRUCTION ACCESS.
10. THE COFFERDAM (PIER) AND COFFERDAM (EAST ABUTMENT) ITEMS CONSIST OF PROVIDING A DRY ENVIRONMENT TO ALLOW THE SEALING OF THE EXISTING CONCRETE ENCASEMENTS AS PART OF THE REPAIR OF THE SUBSTRUCTURE ELEMENTS.
11. EXPOSED SOILS SHALL BE STABILIZED AT ABUTMENT NO. 1 (WEST ABUTMENT) PER THE DETAILS SHOWN ON SHEET 16.

LEGEND

— AER E&T —	AERIAL ELECTRIC & TELEPHONE
— AER E —	AERIAL ELECTRIC
— OHW —	ORDINARY HIGH WATER LIMIT
— - - —	FLOODPLAIN
-·-·-·-·-	RIPARIAN BUFFER ZONE
ooNNooNNoo	FILTER CURTAIN
—PDF—	PROJECT DEMARCATION FENCE
▫ ▫ ▫	SILT FENCE
~~	COFFERDAM (WEST ABUTMENT)
REM (B.O.)	REMOVE EXISTING AERIAL LINE (BY OTHERS)
(N)	NEW AERIAL UTILITY

SCALE 1" = 20'-0

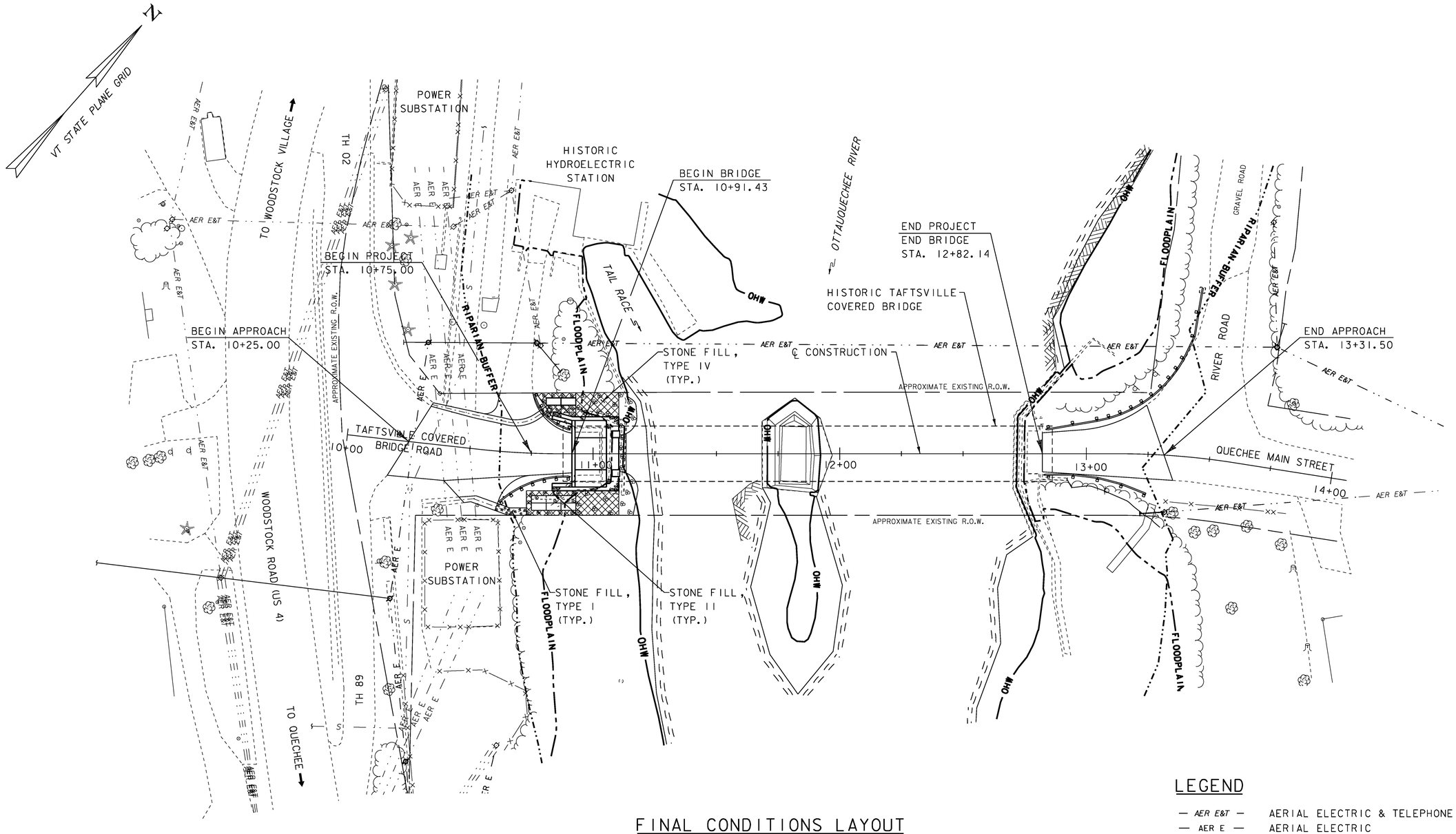
20 0 20

McFarland Johnson

PROJECT NAME:	WOODSTOCK	WOODSTOCK
PROJECT NUMBER:	BHO 1444(52)	ST 1444(58)

FILE NAME: z96j262ecp.dgn
PROJECT LEADER: M. Sargent
DESIGNED BY: W. Durack
EPSC CONSTRUCTION SITE PLAN

PLOT DATE: 29-JUN-2012
DRAWN BY: P. Dustin
CHECKED BY: R. Joy
SHEET 13 OF 68



FINAL CONDITIONS LAYOUT

SCALE: 1" = 20'

LEGEND

- AER E&T — AERIAL ELECTRIC & TELEPHONE
- AER E — AERIAL ELECTRIC
- OHW — ORDINARY HIGH WATER LIMIT
- FLOODPLAIN
- RIPARIAN BUFFER ZONE
- GRUBBING MATERIAL

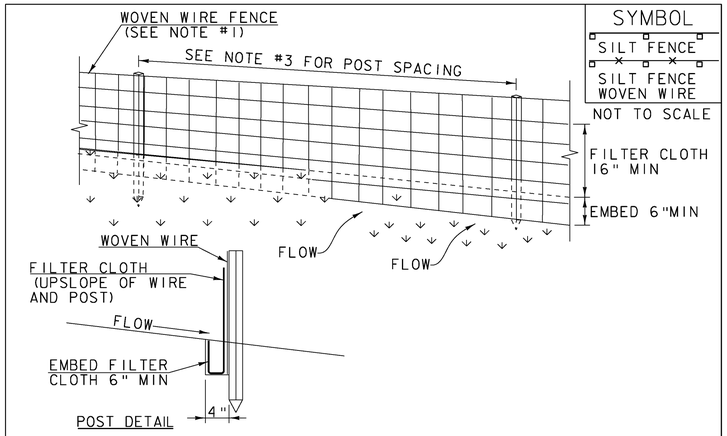
NOTE

1. FOR FINAL GRADE INFORMATION, REFER TO ROADWAY CROSS SECTIONS, SHEETS 64 AND 65.

SCALE 1" = 20'-0
20 0 20

McFarland Johnson

PROJECT NAME:	WOODSTOCK	WOODSTOCK
PROJECT NUMBER:	BHO 1444(52)	ST 1444(58)
FILE NAME: z96j262fcp.dgn		PLOT DATE: 29-JUN-2012
PROJECT LEADER: M. Sargent		DRAWN BY: P. Dustin
DESIGNED BY: W. Durack		CHECKED BY: R. Joy
EPSC FINAL CONDITIONS SITE PLAN		SHEET 14 OF 68



SYMBOL

SILT FENCE

SILT FENCE WOVEN WIRE

NOT TO SCALE

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.

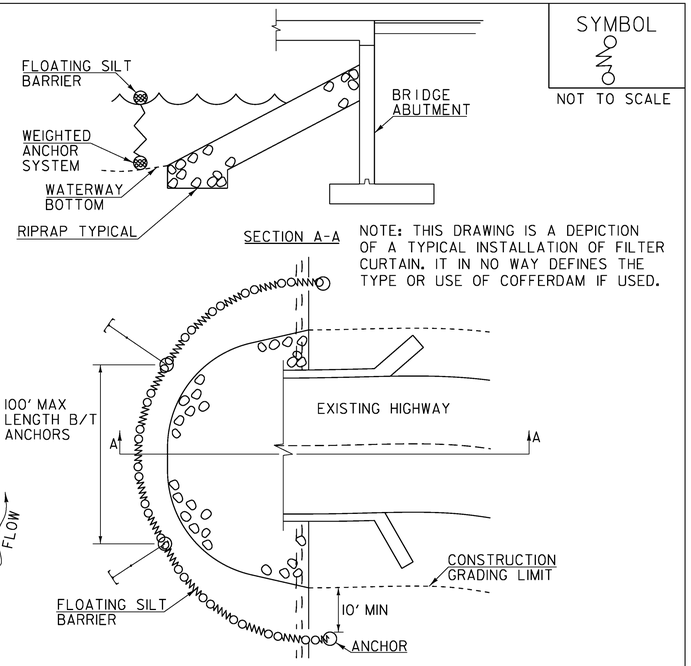
ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC ORIGINALLY DEVELOPED BY USDA-NRCS VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

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, WOVEN WIRE REINFORCED (PAY ITEM 649.515).

REVISIONS	
MARCH 21, 2008	WHF
DECEMBER 11, 2008	WHF
JANUARY 13, 2009	WHF



SYMBOL

NOT TO SCALE

NOTE: THIS DRAWING IS A DEPICTION OF A TYPICAL INSTALLATION OF FILTER CURTAIN. IT IN NO WAY DEFINES THE TYPE OR USE OF COFFERDAM IF USED.

CONSTRUCTION SPECIFICATIONS

1. FILTER CURTAIN SHALL NOT BE PLACED ACROSS A FLOWING WATERWAY, OR IN A WATERWAY WITH STREAM VELOCITIES GREATER THAN 1.5 FEET/SECOND.
2. MAXIMUM 100' LENGTH BETWEEN ANCHORS.
3. LAST SECTION SHALL TERMINATE A MINIMUM OF 10' BEYOND LIMIT OF DISTURBANCE.
4. THE WEIGHTED ANCHOR SYSTEM SHALL BE A TYPE WHICH ALLOWS THE CURTAIN TO CONFORM TO THE BOTTOM OF THE WATERWAY.
5. THE CURTAIN SHALL BE REMOVED BY SLOWLY PULLING TOWARD THE SHORE MINIMIZING THE ESCAPE OF SEDIMENTS INTO WATERWAY.

FILTER CURTAIN

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 649 FOR GEOTEXTILE FOR FILTER CURTAIN (PAY ITEM 649.61).

REVISIONS	
APRIL 1, 2008	WHF
JANUARY 13, 2009	WHF
SEPTEMBER 4, 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	USE RURAL SEED MIX FOR PROJECT		

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.

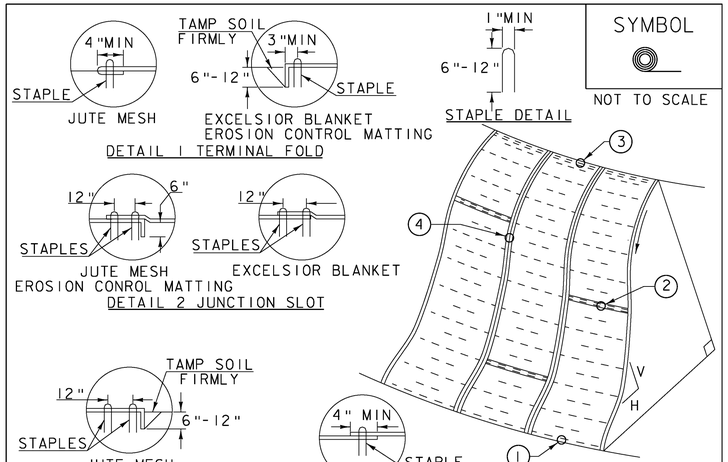
ADAPTED FROM VTRANS TECHNICAL LANSCAPE MAUAL FOR ROADWAYS AND TRANSPORTATION FACILITIES

TURF ESTABLISHMENT

REVISIONS	
JUNE 23, 2009	WHF
JANUARY 15, 2010	WHF

McFarland Johnson

PROJECT NAME:	WOODSTOCK	WOODSTOCK
PROJECT NUMBER:	BHO 1444(52)	ST 1444(58)
FILE NAME: z96j262edl.dgn		PLOT DATE: 29-JUN-2012
PROJECT LEADER: M. Sargent		DRAWN BY: P. Dustin
DESIGNED BY: W. Durack		CHECKED BY: R. Joy
EPSC DETAILS SHEET (1OF 2)		SHEET 15 OF 68



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.

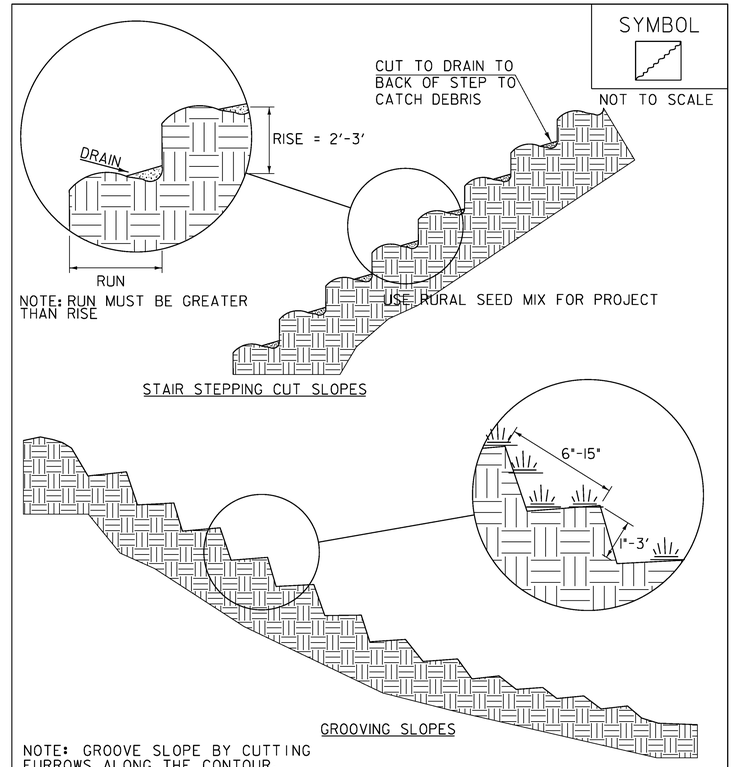
5. ALL TERMINAL ENDS AND TRANSVERSE LAPS SHALL BE STAPLED AT APPROXIMATELY 12" INTERVALS.

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) ~~OR PERMANENT EROSION MATTING (PAY ITEM 653.21).~~

REVISIONS	
APRIL 16, 2007	JMF
JANUARY 13, 2009	WHF



SYMBOL

NOT TO SCALE

NOTE: GROOVE SLOPE BY CUTTING FURROWS ALONG THE CONTOUR. IRREGULARITIES IN THE SOIL SURFACE CATCH RAINWATER AND RETAIN LIME, FERTILIZER AND SEED.

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC
ORIGINALLY DEVELOPED BY USDA-NRCS
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SURFACE ROUGHENING

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 CONSIDERED INCIDENTAL TO THE CONTRACT

REVISIONS	
APRIL 1, 2008	WHF
JANUARY 13, 2009	WHF

McFarland Johnson

PROJECT NAME:	WOODSTOCK	WOODSTOCK
PROJECT NUMBER:	BHO 1444(52)	ST 1444(58)

FILE NAME: z96j262ed2.dgn
PROJECT LEADER: M. Sargent
DESIGNED BY: W. Durack
EPSC DETAILS SHEET (2 OF 2)

PLOT DATE: 29-JUN-2012
DRAWN BY: P. Dustin
CHECKED BY: R. Joy
SHEET 16 OF 68

N

VT STATE PLANE GRID

POMFRET

PROJECT LOCATION

HARTFORD

HARTLAND

WOODSTOCK

WOODSTOCK MUNICIPAL FOREST

WEST WOODSTOCK VILLAGE

WOODSTOCK VILLAGE

TAFTSVILLE

QUEECHE

DEWEYS MILLS

DETAIL 1

DETAIL 2

HIGH PASTURE ROAD

HILLSIDE ROAD

MAIN STREET

QUEECHE RIVER ROAD

OTTAUQUEECHE RIVER

RED BARN ROAD

WEST HARTFORD ROAD

WILLARD ROAD

OLD QUEECHE ROAD

12

4

106

D3-1 COVERED BRIDGE ROAD
M4-9 DETOUR

D3-1 COVERED BRIDGE ROAD
M4-9 DETOUR

D3-1 COVERED BRIDGE ROAD
M4-8 DETOUR
M6-3

D3-1 COVERED BRIDGE ROAD
M4-9 DETOUR

D3-1 COVERED BRIDGE ROAD
M4-9 DETOUR

COVERED BRIDGE ROAD
CLOSED
FOLLOW DETOUR

COVERED BRIDGE ROAD
CLOSED
FOLLOW DETOUR

D3-1 COVERED BRIDGE ROAD
M4-8 DETOUR
M6-3

TEMPORARY DETOUR SIGNING PLAN

SCALE: 1" = 2000'

LEGEND

DETOUR SIGN AND POSTS

PROPOSED DETOUR ROUTE

NOTES

1. FOR DETAIL 1 AND DETAIL 2, SEE SHEET 18.
2. FOR TRAFFIC CONTROL NOTES, SEE SHEET 23.
3. THIS SHEET PROVIDED FOR REFERENCE ONLY.

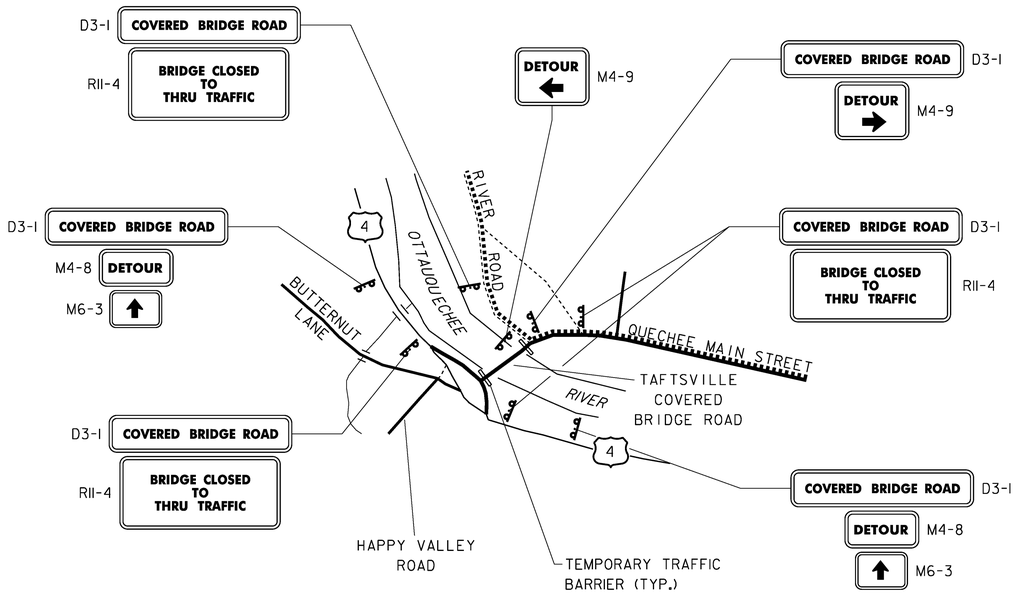
SCALE 1" = 2000'
2000 0 2000

McFarland Johnson

PROJECT NAME:	WOODSTOCK	WOODSTOCK
PROJECT NUMBER:	BHO 1444(52)	ST 1444(58)
FILE NAME: z96j262tcl.dgn		PLOT DATE: 29-JUN-2012
PROJECT LEADER: M. Sargent		DRAWN BY: P. Dustin
DESIGNED BY: W. Durack/P. Dustin		CHECKED BY: R. Joy
TRAFFIC CONTROL SHEET (1 OF 2)		SHEET 17 OF 68

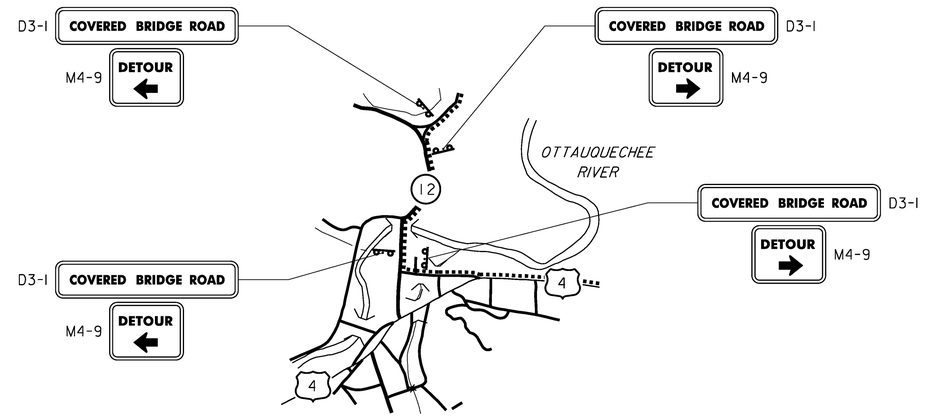
N

VT STATE PLANE GRID



DETAIL 1

SCALE: 1" = 500'



DETAIL 2

SCALE: 1" = 1000'

LEGEND

DETOUR SIGN AND POSTS

PROPOSED DETOUR ROUTE

NOTES

1. FOR OVERALL DETOUR SIGNING LAYOUT AND LOCATION OF DETAIL 1 AND DETAIL 2, SEE SHEET 17.
2. FOR TRAFFIC CONTROL NOTES, SEE SHEET 23.
3. THIS SHEET IS PROVIDED FOR REFERENCE ONLY.

SCALE 1" = 2000'

2000 0 2000

McFarland Johnson

PROJECT NAME:	WOODSTOCK	WOODSTOCK
PROJECT NUMBER:	BHO 1444(52)	ST 1444(58)
FILE NAME: z96j262tc2.dgn		PLOT DATE: 29-JUN-2012
PROJECT LEADER: M. Sargent		DRAWN BY: P. Dustin
DESIGNED BY: W. Durack/P. Dustin		CHECKED BY: R. Joy
TRAFFIC CONTROL SHEET (2 OF 2)		SHEET 18 OF 68

SOIL CLASSIFICATION

AASHTO	
A1	Gravel and Sand
A3	Fine Sand
A2	Silty or Clayey Gravel and Sand
A4	Silty Soil - Low Compressibility
A5	Silty Soil - Highly Compressible
A6	Clayey Soil - Low Compressibility
A7	Clayey Soil - Highly Compressible

ROCK QUALITY DESIGNATION

R.Q.D. (%)	ROCK DESCRIPTION
<25	Very Poor
25 to 50	Poor
51 to 75	Fair
76 to 90	Good
>90	Excellent

SHEAR STRENGTH

UNDRAINED SHEAR STRENGTH IN P.S.F.	CONSISTENCY
<250	Very Soft
250-500	Soft
500-1000	Med. Stiff
1000-2000	Stiff
2000-4000	Very Stiff
>4000	Hard

CORRELATION GUIDE OF "N" TO DENSITY/CONSISTENCY

DENSITY (GRANULAR SOILS)		CONSISTENCY (COHESIVE SOILS)	
N	DESCRIPTIVE TERM	N	DESCRIPTIVE TERM
<5	Very Loose	<2	Very Soft
5-10	Loose	2-4	Soft
11-24	Med. Dense	5-8	Med. Stiff
25-50	Dense	9-15	Stiff
>50	Very Dense	16-30	Very Stiff
		31-60	Hard
		>60	Very Hard

COMMONLY USED SYMBOLS

▼	Water Elevation
⊗	Standard Penetration Boring
⊕	Auger Boring
⊙	Rod Sounding
⊕	Probe
S	Sample
N	Standard Penetration Test Blow Count Per Foot For: 2" O.D. Sampler 1 3/8" I.D. Sampler Hammer Weight Of 140 Lbs. Hammer Fall Of 30"
VS	Field Vane Shear Test
US	Undisturbed Soil Sample
B	Blast
DC	Diamond Core
MD	Mud Drill
WA	Wash Ahead
HSA	Hollow Stem Auger
AX	Core Size 1 1/8"
BX	Core Size 1 5/8"
NX	Core Size 2 1/8"
M	Double Tube Core Barrel Used
LL	Liquid Limit
PL	Plastic Limit
PI	Plasticity Index
NP	Non Plastic
w	Moisture Content (Dry Wgt. Basis)
D	Dry
M	Moist
MTW	Moist To Wet
W	Wet
Sat	Saturated
Bo	Boulder
Gr	Gravel
Sa	Sand
Si	Silt
Cl	Clay
HP	Hardpan
Le	Ledge
NLTD	No Ledge To Depth
CNPF	Can Not Penetrate Further
TLOB	To Ledge Or Boulder
NR	No Recovery
Rec.	Recovery
%Rec.	Percent Recovery
RQD	Rock Quality Designation
CBR	California Bearing Ratio
<	Less Than
>	Greater Than
R	Refusal (N > 100)

COLOR			
blk	Black	pnk	Pink
bl	Blue	pu	Purple
brn	Brown	rd	Red
dk	Dark	tn	Tan
gry	Gray	wh	White
gn	Green	yel	Yellow
lt	Light	mltc	Multicolored
or	Orange		

DEFINITIONS (AASHTO)

BEDROCK (LEDGE) - Rock in its native location of indefinite thickness.

BOULDER - A rock fragment with an average dimension > 12 inches.

COBBLE - Rock fragments with an average dimension between 3 and 12 inches.

GRAVEL - Rounded particles of rock < 3" and > 0.0787" (#10 sieve).

SAND - Particles of rock < 0.0787" (#10 sieve) and > 0.0029" (#200 sieve).

SILT - Soil < 0.0029" (#200 sieve), non or slightly plastic and exhibits no strength when air-dried.

CLAY - Fine grained soil, exhibits plasticity when moist and considerable strength when air-dried.

VARVED - Alternate layers of silt and clay.

HARDPAN - Extremely dense soil, cemented layer, not softened when wet.

MUCK - Soft organic soil (containing > 10% organic material.

MOISTURE CONTENT - Weight of water divided by dry weight of soil.

FLOWING SAND - Granular soil so saturated (loose) that it flows into drill casing during extraction of wash rod.

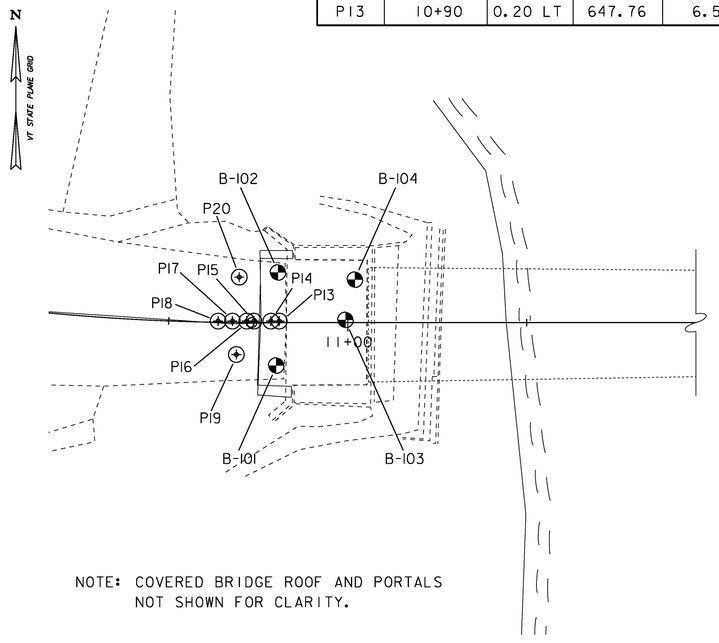
STRIKE - Angle from magnetic north to line of intersection of bed with a horizontal plane.

DIP - Inclination of bed with a horizontal plane.

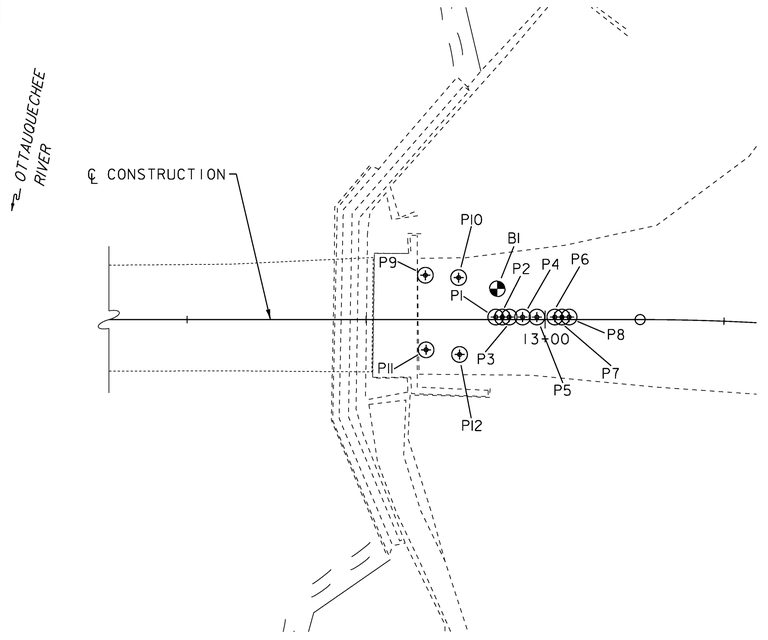
PROBE AND BORING CHARTS

HOLE NO.	SURV. STATION	OFFSET	GROUND ELEV.	TLOB
P1	12+93	0.35 LT	645.96	19.0
P2	12+94	0.35 LT	645.94	20.1
P3	12+95	0.35 LT	645.93	19.9
P4	12+97	0.35 LT	645.90	20.5
P5	12+99	0.35 LT	645.88	20.7
P6	13+01	0.35 LT	645.96	21.8
P7	13+02	0.35 LT	646.00	22.6
P8	13+03	0.35 LT	646.03	22.8
P9	12+83	6.20 LT	646.01	23.3
P10	12+88	5.87 LT	645.75	20.3
P11	12+83	4.23 RT	646.12	23.1
P12	12+88	4.87 RT	646.04	22.0
P13	10+90	0.20 LT	647.76	6.5

HOLE NO.	SURV. STATION	OFFSET	GROUND ELEV.	TLOB
P14	10+89	0.20 LT	647.75	29.4
P15	10+87	0.20 LT	647.74	24.6
P16	10+86	0.20 LT	647.74	30.1
P17	10+84	0.19 LT	647.73	26.3
P18	10+82	0.17 LT	647.85	25.6
P19	10+84	4.47 RT	647.81	26.0
P20	10+85	6.35 LT	647.53	25.0
B1	12+93	4.30 LT	645.88	20.5
B-101	10+90	6.00 RT	647.57	25.8
B-102	10+90	7.00 LT	647.47	30.8
B-103	10+99	0.37 LT	647.13	28.5
B-104	11+01	6.00 LT	647.06	27.5



NOTE: COVERED BRIDGE ROOF AND PORTALS NOT SHOWN FOR CLARITY.



PROBE AND BORING LAYOUT

SCALE: 1" = 10'

GENERAL NOTES

1. The subsurface explorations shown herein were made between July 28, 2010 and October 27, 2012 by NH Boring, Inc. and GZA GeoEnvironmental, Inc.
2. Soil and rock classifications, properties and descriptions are based on engineering interpretation from available subsurface information by the Agency and may not necessarily reflect actual variations in subsurface conditions that may be encountered between individual boring or sample locations.
3. Observed water levels and/or conditions indicated are as recorded at the time of exploration and may vary according to the prevailing rainfall, methods of exploration and other factors.
4. Engineering judgement was exercised in preparing the subsurface information presented herein. Analysis and interpretation of subsurface data was performed and interpreted for Agency design and estimating purposes. Presentation of the information in the Contract is intended to provide the Contractor access to the same data available to the Agency. The subsurface information is presented in good faith and is not intended as a substitute for personal investigation, independent interpretation, independent analysis or judgement by the Contractor.
5. Pictorial structure details shown on the boring plan layout or soils profile are for illustrative purposes only and may not accurately portray final contract details.
6. Terminology used on boring logs to describe the hardness, degree of weathering, and spacing of fractures, joints and other discontinuities in the bedrock is defined in the AASHTO Manual on Subsurface Investigations, 1988.

LEGEND

⊕ PROBE

⊗ BORING

SCALE 1" = 10'-0

10 0 10

McFarland Johnson

PROJECT NAME:	WOODSTOCK	WOODSTOCK	
PROJECT NUMBER:	BHO 1444(52)	ST 1444(58)	
FILE NAME: z96j262bor.dgn		PLOT DATE: 29-JUN-2012	
PROJECT LEADER: M. Sargent		DRAWN BY: P. Dustin	
DESIGNED BY: S. Della		CHECKED BY: R. Joy	
BORING INFORMATION SHEET		SHEET 19 OF 68	

	NEW HAMPSHIRE BORING, INC. P.O. Box 165 Derry, NH 03038	Phone: (603)437-1610 Fax: (603) 437-0034 E Mail: nhb@nhboring.com	**Boring #** B-1 Scale 1" = 5'
City/Town: Woodstock	Taftsville Covered Bridge	Project File No: 94394	Contract No:
Project: River Road		Date & Time Started: 7/28/10	Total Hours:
Groundwater Depth:	Date & Time:	Date & Time Completed: 8/29/10	
Coordinates: N	E	Driller's Name: Peter LaBossiere Helper's Name: Jack Lefebvre	
Ground Elevation:	Inspector's Name:	Inspector's Company:	

Sample Number	Depth Range (Feet)	Blow Counts per 6" Coring Times Minute Per Foot	Recovery (Inches)	Field Description	Strata Changes
S-1	0' - 2'	11 8 7 7	10"	3" Asphalt Dry, medium dense, brown, FINE SAND, some coarse sand.	3"
S-2	4' - 6'	6 7 17 20	10"	Wet, dense, brown, FINE SAND, some coarse sand, trace inorganic silt.	
S-3	9' - 11'	18 9 8 7	0"	No recovery.	
S-4	14' - 16'	12 12 13 9	8"	Wet, medium dense, brown, FINE SAND AND INORGANIC SILT, some coarse sand.	
S-5	19' - 19'1"	100/1"	1"	Wet, very dense, brown, FINE SAND. Looks like BEDROCK fragments. Rollerbit to 20'6", began coring.	
C-1	20'6" - 25'6"	4 4 5 5 4	60"	SCHIST with quartz veins, competent. Percent Recovery = 100%	
C-2	25'6" - 30'6"	4 6 5 4 4	60"	SCHIST with quartz veins, competent. Percent Recovery = 100%	30'6"
				Bottom of Exploration - 30'6"	

Notes:	Protective Device - Stand: Box: Well Depth: Solid Pipe: Stick Up Pipe: Screen Pipe:
Penetration Resistance (N) Guide:	Type of Drill Rig: CME 550x

Cohesionless Soils (Sands, Gravels)		Cohesive Soils (Silts, Clays)		Casing Type: HW Size: 4 Hammer Weight: 300kg Fall: 24 Depth: 4'	Signs: Cones: Arrow-Board:
Relative Density	Penetration Resistance	Consistency	Penetration Resistance		
Very Loose	0 - 4	Very Soft	0 - 2		
Loose	4 - 10	Soft	2 - 4		
Medium Dense	10 - 30	Medium Stiff	4 - 8		
Dense	30 - 50	Stiff	8 - 15		
Very Dense	Over 50	Very Stiff	15 - 30		
N=Sum of Second and Third .15 Blow Counts		Hard	Over 30		

Terms Used for Second Entry of Descriptions: and = 40-50%, some = 10-40%, trace = 10% or less	Sampler Type: S/S Size: 34.9mm Automatic Hammer Weight: 63.5kg Safety Hammer Weight: Donut Hammer Weight: Fall: 0.76m
	Core Barrel Type: Size:

TEST BORING LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	Taftsville Covered Bridge Woodstock, Vermont	EXPLORATION NO.: B-102 SHEET: 1 of 2 PROJECT NO: 04.0029444.00 REVIEWED BY: DGL

Logged By: Mike Devoid Drilling Co.: New Hampshire Boring Foreman: Mike Misiaszek	Type of Rig: Acker Rig Model: HMD 2350 Drilling Method: ODEX	Boring Location: See Plan Ground Surface Elev. (ft.): Final Boring Depth (ft.): 30.8 Date Start – Finish: 10/24/2011 – 10/25/2011	H. Datum: V. Datum:

Hammer Type: Donut Hammer Weight (lb.): 140 Hammer Fall (in.): 30 Auger or Casing O.D./I.D Dia (in.): 4	Sampler Type: SS Sampler O.D. (in.): 2.0 Sampler Length (in.): 24 Rock Core Size:	Groundwater Depth (ft.)			
		Date	Time	Water Depth	Stab. Time

Depth (ft)	Casing Blows/ Core Rate	Sample No.	Sample Depth (ft.)	Sample Pen. (in)	Sample Rec. (in)	Sample Blows (per 6 in.)	Sample SPT Value	Sample Description and Identification (Modified Burmister Procedure)	Remark	Field Test Data	Depth (ft.)	Stratum Description	Elev. (ft.)
		S-1	0.5-2.5	24	5	5 6 5 5	11	S-1: Medium dense, brown, fine to coarse SAND, little Gravel, trace Silt. Dry.			0.25	ASPHALT	
5		S-2	5-7	24	5	2 4 5 5	9	S-2: Loose, brown, fine to coarse SAND, some Gravel, little Silt. Dry.	1			FILL	
10		S-3	10-12	24	8	4 5 5 5	10	S-3: Medium dense, brown, fine to coarse SAND, some Gravel, little Silt. Dry.					
15		S-4	15-17	24	18	6 7 28 39	35	S-4: Top 8 inches: Very dense, brown, fine to medium SAND, little Silt. Damp. Bottom 10 inches: Very dense, gray, fine to coarse SAND, some Silt, little Gravel. Damp.			16		
20		S-5	20-22	24	20	24 32 38 38	70	S-5: Very dense, gray, fine to coarse SAND, some Silt, little Gravel. Damp.				GLACIAL TILL	
25		S-6	25-25.5	6	3	107		S-6: Brown to brown-gray, highly weathered rock.			24.8	WEATHERED ROCK	
30													

REMARKS

1 – Cobbles and boulders encountered throughout Fill and Glacial Till deposits.

See Log Key for exploration of sample description and identification procedures. Stratification lines represent approximate boundaries between soil and bedrock types. Actual transitions may be gradual. Water level readings have been made at the times and under the conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the times the measurements were made.

Exploration No.: B-102

GZA TEMPLATE TEST BORING; 1/9/2012; 12:48:54 PM

TEST BORING LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	Taftsville Covered Bridge Woodstock, Vermont	EXPLORATION NO.: B-102 SHEET: 2 of 2 PROJECT NO: 04.0029444.00 REVIEWED BY: DGL

Logged By: Mike Devoid Drilling Co.: New Hampshire Boring Foreman: Mike Misiaszek	Type of Rig: Acker Rig Model: HMD 2350 Drilling Method: ODEX	Boring Location: See Plan Ground Surface Elev. (ft.): Final Boring Depth (ft.): 30.8 Date Start – Finish: 10/24/2011 – 10/25/2011	H. Datum: V. Datum:

Hammer Type: Donut Hammer Weight (lb.): 140 Hammer Fall (in.): 30 Auger or Casing O.D./I.D Dia (in.): 4	Sampler Type: SS Sampler O.D. (in.): 2.0 Sampler Length (in.): 24 Rock Core Size:	Groundwater Depth (ft.)			
		Date	Time	Water Depth	Stab. Time

Depth (ft)	Casing Blows/ Core Rate	Sample No.	Sample Depth (ft.)	Sample Pen. (in)	Sample Rec. (in)	Sample Blows (per 6 in.)	Sample SPT Value	Sample Description and Identification (Modified Burmister Procedure)	Remark	Field Test Data	Depth (ft.)	Stratum Description	Elev. (ft.)
		S-7	30-30.2	2	2	100/2"	R	S-7: Gray, weathered rock.	2		30.3	BEDROCK	
35								End of exploration at 30.8 feet.			30.8		
40													
45													
50													
55													
60													

REMARKS

2 – Possibly fractured/weathered rock (small <1-inch seams/fractures) at 24.8 feet to 30.3 feet below ground surface. Hard drilling at 30.3 feet below ground surface.

See Log Key for exploration of sample description and identification procedures. Stratification lines represent approximate boundaries between soil and bedrock types. Actual transitions may be gradual. Water level readings have been made at the times and under the conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the times the measurements were made.

Exploration No.: B-102

GZA TEMPLATE TEST BORING; 1/9/2012; 12:48:54 PM

LOG KEY (1 OF 4)

UNIFIED SOIL CLASSIFICATION SYSTEM (USCS) (ASTM D 2487)

MAJOR DIVISIONS			Group Symbols
Coarse Grained Soils More than 50% material larger than No. 200 sieve	Gravel More than 50% larger than No. 4 sieve	Clean Gravels (Little or no fines)	GW
			GP
		Gravels with Fines (Appreciable amount of fines)	GM
			GC
	Sand More than 50% smaller than No. 4 sieve	Clean Sands (Little or no fines)	SW
			SP
		Sands with Fines (Appreciable amount of fines)	SM
			SC
Fine Grained Soils More than 50% material smaller than No. 200 sieve		Silts and Clays Liquid Limit <50	ML
			CL
			OL
		Silts and Clays Liquid Limit >50	MH
			CH
			OH
		Highly Organic Soils	Pt

LOG KEY (2 OF 4)

ABBREVIATIONS

MR = Mud Rotary	Tv = Field Vane Shear Test (Torvane)
HSA = Hollow Stem Auger	PP = Pocket Penetrometer
SSA = Solid Stem Auger	PI = Plasticity Index
SS = Split Spoon Sampler	MC = Moisture Content
U = Undisturbed Sample (Shelby Tube)	CO = Consolidation
MC = Modified California Sampler	UC = Unconfined Compression Test
V = Vibracore	SI = Sieve Analysis
M = Macrocore	DS = Direct Shear
R = Refusal	PID = Photoionization Detector
USCS = Unified Soil Classification System (ASTM D2487)	ppm = Parts Per Million
NYCBC = New York City Building Code	REC = Recovery
WOR = Weight of Rods	RQD = Rock Quality Designation
WOH= Weight of Hammer	▼ = Measured Water Level
SPT = Standard Penetration Test (ASTM D1586)	
N-Value = Cumulative number of uncorrected blows for the middle two 6-inch intervals (blows/foot).	

McFarland Johnson

PROJECT NAME:	WOODSTOCK	WOODSTOCK
PROJECT NUMBER:	BHO 1444(52)	ST 1444(58)
FILE NAME: z96j262log.dgn		PLOT DATE: 29-JUN-2012
PROJECT LEADER: M. Sargent		DRAWN BY: P. Dustin
DESIGNED BY: S. Della		CHECKED BY: R. Joy
BORING LOGS (1 OF 2)		SHEET 20 OF 68

TEST BORING LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	Taftsville Covered Bridge Woodstock, Vermont	EXPLORATION NO.: B-101 SHEET: 1 of 1 PROJECT NO: 04.0029444.00 REVIEWED BY: DGL

Logged By: Mike Devoid Drilling Co.: New Hampshire Boring Foreman: Mike Mislaszek	Type of Rig: Acker Rig Model: HMD 2350 Drilling Method: ODEX	Boring Location: See Plan Ground Surface Elev. (ft.): Final Boring Depth (ft.): 25.8 Date Start – Finish: 10/24/2011 – 10/24/2011	H. Datum: V. Datum:
Hammer Type: Donut Hammer Weight (lb.): 140 Hammer Fall (in.): 30 Auger or Casing O.D./I.D Dia (in.): 4	Sampler Type: SS Sampler O.D. (in.): 2.0 Sampler Length (in.): 24 Rock Core Size:	Groundwater Depth (ft.) Date / Time / Water Depth / Stab. Time	

Depth (ft)	Casing Blows/ Core Rate	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Blows (per 6 in.)	SPT Value	Sample Description and Identification (Modified Burmister Procedure)	Remark	Field Test Data	Stratum Depth (ft.)	Stratum Description	Elev. (ft.)
											0.25	ASPHALT	
5		S-1	1-3	24	5	3 3 5 5	8	S-1: Loose, brown, fine to coarse SAND, some Gravel, trace Silt. Dry.					
		S-2	5-7	24	0	2 2 4 5	6	S-2: No Recovery.	1			FILL	
10		S-3	10-12	24	4	9 10 8 9	18	S-3: Medium dense, brown, fine to coarse SAND, some Gravel, little Silt. Dry.					
15		S-4	15-15.7	9	6	17 100/3"	R	S-4: Top 3 inches: Very dense, brown, fine to medium SAND, little Silt. Bottom 3 inches: Very dense, brown, fine to coarse SAND, trace Gravel, trace Silt. Wet.			15.2	GLACIAL TILL	
20		S-5	20-20.8	10	10	75 150/4"	R	S-5: Very dense, gray, fine to coarse SAND, little Gravel, little Silt. Damp.	2		21	WEATHERED ROCK	
											23	BEDROCK	
25								End of exploration at 25.8 feet.			25.8		
30													

REMARKS

1 – Cobbles and boulders encountered throughout Fill and Glacial Till deposits.
2 – Possibly fractured/weathered rock (small <1-inch seams/fractures) at 21 feet to 23 feet below ground surface. Hard drilling at 23 feet below ground surface.

See Log Key for exploration of sample description and identification procedures. Stratification lines represent approximate boundaries between soil and bedrock types. Actual transitions may be gradual. Water level readings have been made at the times and under the conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the times the measurements were made.

Exploration No.: B-101

GZA TEMPLATE TEST BORING: 1/9/2012: 12:48:54 PM

TEST BORING LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	Taftsville Covered Bridge Woodstock, Vermont	EXPLORATION NO.: B-103 SHEET: 1 of 1 PROJECT NO: 04.0029444.00 REVIEWED BY: DGL

Logged By: Mike Devoid Drilling Co.: New Hampshire Boring Foreman: Mike Mislaszek	Type of Rig: Acker Rig Model: HMD 2350 Drilling Method: ODEX	Boring Location: See Plan Ground Surface Elev. (ft.): Final Boring Depth (ft.): 28.5 Date Start – Finish: 10/26/2011 – 10/26/2011	H. Datum: V. Datum:
Hammer Type: Donut Hammer Weight (lb.): 140 Hammer Fall (in.): 30 Auger or Casing O.D./I.D Dia (in.): 4	Sampler Type: SS Sampler O.D. (in.): 2.0 Sampler Length (in.): 24 Rock Core Size:	Groundwater Depth (ft.) Date / Time / Water Depth / Stab. Time	

Depth (ft)	Casing Blows/ Core Rate	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Blows (per 6 in.)	SPT Value	Sample Description and Identification (Modified Burmister Procedure)	Remark	Field Test Data	Stratum Depth (ft.)	Stratum Description	Elev. (ft.)
5									1		5.9	CONCRETE	
									2		7	VOID	
10		S-1	10-12	24	1	2 3 2 4	5	S-1: Loose, brown, fine to coarse SAND and Gravel, trace Silt. Rock stuck in tip. Dry.					
15		S-2	15-17	24	7	7 4 4 7	8	S-2: Loose, brown, fine to coarse SAND, some Gravel, some Silt. Dry.	3			FILL	
20		S-3	20-20.8	10	2	22 100/4"	R	S-3: Very dense, brown, fine to coarse SAND, little Gravel, trace Silt. Rock stuck in tip. Dry.			23	GLACIAL TILL	
25		S-4	25-27	24	14	27 44 40 41	84	S-4: Very dense, brown to brown-gray, fine to coarse SAND, little Gravel, trace Silt. Damp.	4		28 28.5	BEDROCK	
								End of exploration at 28.5 feet.					
30													

REMARKS

1 – Cored top 5.9 feet concrete using 5.5-inch OD/4.25-inch ID, 5-foot-long core barrel. Broke through concrete at 5.9 feet below ground surface.
2 – Void encountered below concrete from approximately 5.9 to 7.0 feet below ground surface.
3 – Cobbles and boulders encountered throughout Fill and Glacial Till deposits.
4 – Very hard drilling at 28 feet below ground surface.

See Log Key for exploration of sample description and identification procedures. Stratification lines represent approximate boundaries between soil and bedrock types. Actual transitions may be gradual. Water level readings have been made at the times and under the conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the times the measurements were made.

Exploration No.: B-103

GZA TEMPLATE TEST BORING: 1/9/2012: 12:48:55 PM

TEST BORING LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	Taftsville Covered Bridge Woodstock, Vermont	EXPLORATION NO.: B-104 SHEET: 1 of 1 PROJECT NO: 04.0029444.00 REVIEWED BY: DGL

Logged By: Mike Devoid Drilling Co.: New Hampshire Boring Foreman: Mike Mislaszek	Type of Rig: Acker Rig Model: HMD 2350 Drilling Method: ODEX	Boring Location: See Plan Ground Surface Elev. (ft.): Final Boring Depth (ft.): 27.5 Date Start – Finish: 10/26/2011 – 10/27/2011	H. Datum: V. Datum:
Hammer Type: Donut Hammer Weight (lb.): 140 Hammer Fall (in.): 30 Auger or Casing O.D./I.D Dia (in.): 4	Sampler Type: SS Sampler O.D. (in.): 2.0 Sampler Length (in.): 24 Rock Core Size:	Groundwater Depth (ft.) Date / Time / Water Depth / Stab. Time	

Depth (ft)	Casing Blows/ Core Rate	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Blows (per 6 in.)	SPT Value	Sample Description and Identification (Modified Burmister Procedure)	Remark	Field Test Data	Stratum Depth (ft.)	Stratum Description	Elev. (ft.)
									1		5.5	CONCRETE	
5									2		7	VOID	
10		S-1	10-12	24	6	2 3 3 3	6	S-1: Loose, brown, fine to coarse SAND, some Gravel, some Silt. Dry.	3			FILL	
15		S-2	15-17	24	3	9 11 38 26	49	S-2: Dense, brown, fine to coarse SAND and Gravel, some Silt. Dry.					
20		S-3	20-22	24	7	75 51 51 29	>100	S-3: Very dense, brown, fine to coarse SAND, some Gravel, some Silt. Damp.			23	GLACIAL TILL	
25		S-4	25-26.7	20	17	15 35 46 100/0.2'	81	S-4: Very dense, brown-gray, fine to coarse SAND, little Silt, trace Gravel.	4		27.2 27.5	BEDROCK	
								End of exploration at 27.5 feet.					
30													

REMARKS

1 – Cored top 5.5 feet concrete using 5.5-inch OD/4.25-inch ID, 5-foot-long core barrel. Broke through concrete at 5.5 feet below ground surface.
2 – Void encountered below concrete from approximately 5.5 to 7.0 feet below ground surface.
3 – Cobbles and boulders encountered throughout Fill and Glacial Till deposits.
4 – Very hard drilling at 27.2 feet below ground surface.

See Log Key for exploration of sample description and identification procedures. Stratification lines represent approximate boundaries between soil and bedrock types. Actual transitions may be gradual. Water level readings have been made at the times and under the conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the times the measurements were made.

Exploration No.: B-104

LOG KEY (3 OF 4)

BURMISTER SOIL CLASSIFICATION (INORGANIC)

COMPONENT	NAME	PROPORTIONAL TERM	PERCENT BY WEIGHT
MAJOR	GRAVEL, SAND, FINES*		>50
Minor	Gravel, Sand, Fines*	and	35 – 50
		some	20–35
		little	10–20
		trace	0–10

*See identification of fines table.

IDENTIFICATION OF FINES		
Material	PI	Atterberg Thread Dia.
SILT	0	Cannot Roll
Clayey SILT	1–5	1/4"
SILT & CLAY	5–10	1/8"
CLAY & SILT	10–20	1/16"
Silty CLAY	20–40	1/32"
CLAY	>40	1/64"

GRADATION DESIGNATION	PROPORTION OF COMPONENT
Fine to coarse	All fractions > 10%
Medium to coarse	<10% fine
Fine to medium	<10% coarse
Coarse	<10% fine and medium
Medium	<10% coarse and fine
Fine	<10% coarse and medium

PLASTIC SOILS	
Consistency	Blows/Ft. SPT N-Value
Very Soft	< 2
Soft	2 – 4
Medium Stiff	4 – 8
Stiff	8 – 15
Very Stiff	15 – 30
Hard	>30

GRAVEL & SAND	
Density	Blows/Ft. SPT N-Value
Very Loose	< 4
Loose	4 – 10
Medium Dense	10 – 30
Dense	30 – 50
Very Dense	> 50

LOG KEY (4 OF 4)

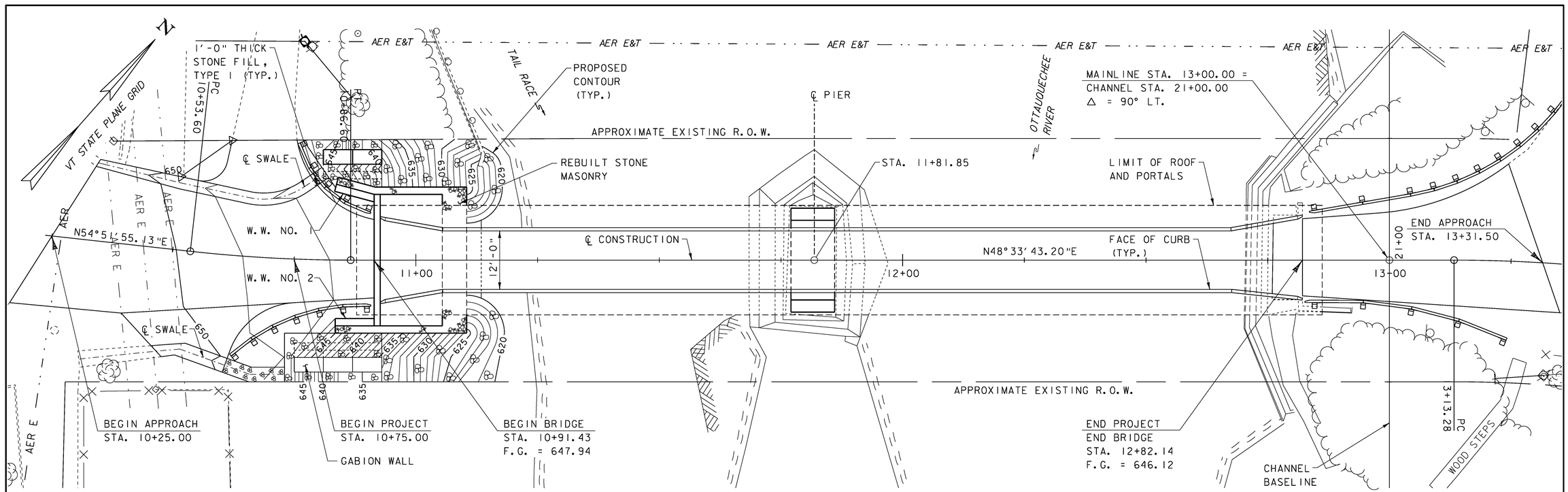
BURMISTER SOIL CLASSIFICATION (ORGANIC)

Fibrous PEAT (Pt) – Lightweight, spongy, mostly visible organic matter, water squeezes readily from sample. Typically near top of deposit.
Fine Grained PEAT (Pt) – Lightweight, spongy, little visible organic matter, water squeezes readily from sample. Typically below fibrous peat.
Organic Silt (OL) – Typically gray to dark gray, often has strong H2S odor. Typically contains shells or shell fragments. Lightweight. Usually found near coastal regions. May contain wide range of sand fractions.
Organic Clay (OH) – Typically gray to dark gray, high plasticity. Usually found near coastal regions. May contain wide range of sand fractions. Need organic content test for final identification.

✳ BOTTOM OF ABUTMENT NO. I (WEST) SUBFOOTING

McFarland Johnson

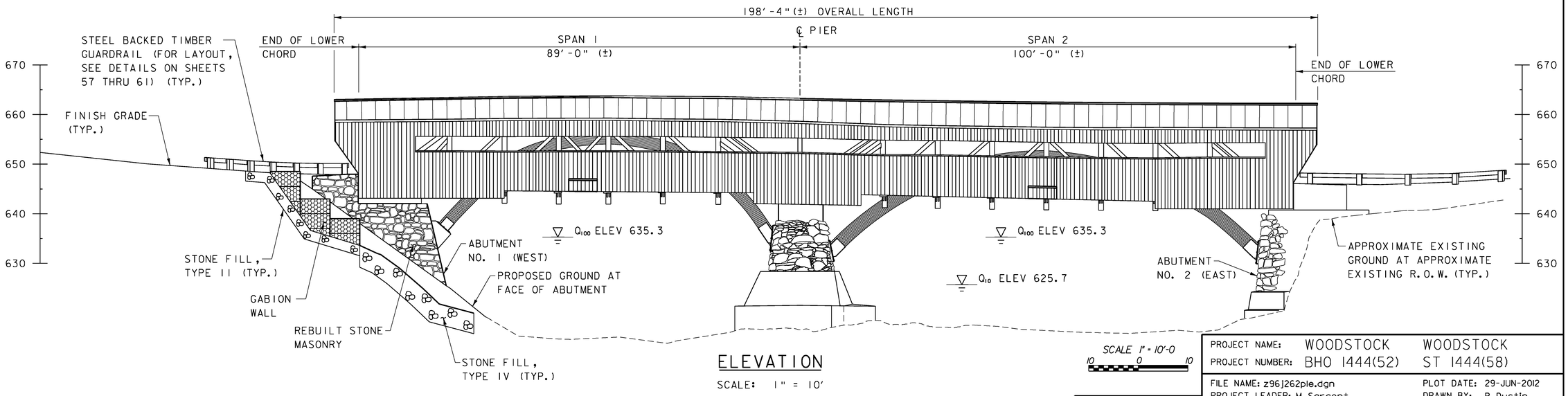
PROJECT NAME:	WOODSTOCK	WOODSTOCK
PROJECT NUMBER:	BHO 1444(52)	ST 1444(58)
FILE NAME: z96j262log.dgn		PLOT DATE: 29-JUN-2012
PROJECT LEADER: M. Sargent		DRAWN BY: P. Dustin
DESIGNED BY: S. Della		CHECKED BY: R. Joy
BORING LOGS (2 OF 2)		SHEET 21 OF 68



NOTE: TRUSS/ARCH SYSTEM NOT SHOWN IN PLAN VIEW FOR CLARITY.

PLAN

SCALE: 1" = 10'



ELEVATION

SCALE: 1" = 10'

SCALE 1" = 10'-0

10 0 10

McFarland Johnson

PROJECT NAME:	WOODSTOCK	WOODSTOCK
PROJECT NUMBER:	BHO 1444(52)	ST 1444(58)

FILE NAME: z96j262ple.dgn
PROJECT LEADER: M. Sargent
DESIGNED BY: P. Dustin
PLAN AND ELEVATION

PLOT DATE: 29-JUN-2012
DRAWN BY: P. Dustin
CHECKED BY: R. Joy
SHEET 22 OF 68

STATE OF VERMONT
AGENCY OF TRANSPORTATION

PROJECT NOTES

GENERAL NOTES

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO STATE OF VERMONT AGENCY OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR CONSTRUCTION, DATED 2011, AND ITS LATEST REVISIONS, AND THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 17TH EDITION, DATED 2002, AND ITS LATEST REVISIONS.

2. DESIGN OF THE REHABILITATED STRUCTURE IS FOR AN AASHTO H10 LIVE LOAD. SEE SHEET 2 FOR MORE INFORMATION.

3. ALL DIMENSIONS ARE HORIZONTAL OR VERTICAL AND ARE GIVEN AT 68 DEGREES FAHRENHEIT UNLESS NOTED OTHERWISE.

4. THE CONTRACTOR SHALL REVIEW AND UNDERSTAND ALL APPLICABLE ENVIRONMENTAL PERMITS AND ENSURE THAT ALL CONSTRUCTION CONDITIONS ARE MET.

5. THE CONTRACTOR SHALL TAKE SPECIAL CARE AND PRECAUTION TO ENSURE THAT NO DEBRIS FALLS INTO THE OTTAUQUECHEE RIVER DURING CONSTRUCTION. ALL MATERIAL FALLING INTO THE AREA BELOW AND ADJACENT TO THE BRIDGE SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR TO THE SATISFACTION OF THE RESIDENT ENGINEER AT NO COST TO THE STATE.

6. ALL WORK SHALL BE COMPLETED WITHIN THE EXISTING 3-ROD R.O.W. SHOWN IN THESE PLANS. THE RIGHT-OF-WAY SHOWN IS ASSUMED TO BE APPROXIMATELY CENTERED ABOUT THE EXISTING CENTER LINE OF THE BRIDGE AND ROADWAY. NO PROVISIONS HAVE BEEN MADE FOR WORK OR ACTIVITIES OUTSIDE THE EXISTING RIGHT-OF-WAY LIMITS. SHOULD THE CONTRACTOR REQUIRE ANY ADDITIONAL RIGHT-OF-WAY IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL EASEMENTS, AND BEAR THE COSTS OF SUCH EASEMENTS WITHOUT FURTHER COMPENSATION.

7. THE LOCATION OF ANY UTILITY INFORMATION SHOWN ON THE PLANS IS APPROXIMATE AND NO CLAIMS ARE MADE AS TO THE ACCURACY OR COMPLETENESS OF THE UTILITIES SHOWN. THE OVERHEAD UTILITIES DEPICTED ON SHEET 8 INCLUDE LINES DESIGNATED WITH AN "N" (NEW) AND "REM (B.O.)" (REMOVE BY OTHERS). ALL OF THE OVERHEAD UTILITY RELOCATION WORK WILL BE COMPLETED BY THE UTILITY COMPANIES PRIOR TO THE PROJECT START DATE. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR LOCATING AND PROTECTING FROM DAMAGE ALL UTILITIES ON SITE DURING ALL STAGES OF CONSTRUCTION. THE CONTRACTOR SHALL USE CAUTION WHEN WORKING AROUND OVERHEAD UTILITIES, AND COORDINATE ALL WORK WITH THE UTILITY COMPANIES. SEE THE UTILITY SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

8. THESE CONTRACT DOCUMENTS HAVE BEEN PREPARED BASED ON LIMITED FIELD INSPECTIONS AND OTHER INFORMATION AVAILABLE AT THE TIME OF BIDDING. ALL DIMENSIONS SHOWN ON THE PLANS SHALL BE CHECKED BY THE CONTRACTOR IN THE FIELD PRIOR TO COMMENCING THE WORK. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM THE DIMENSIONS AND DETAILS OF EXISTING BRIDGE FEATURES AND COMPONENTS PRIOR TO FABRICATION OF NEW BRIDGE COMPONENTS. ACTUAL WORK SHALL MATCH FIELD CONDITIONS UNLESS NOTED OTHERWISE. ANY DISCREPANCIES IN DIMENSIONS, CHARACTER OR EXTENT OF THE EXISTING FEATURES SHALL BE BROUGHT TO THE ATTENTION OF THE RESIDENT ENGINEER BEFORE PROCEEDING WITH THE WORK.

9. EXCEPT AS NOTED OTHERWISE, ITEM 529.20, PARTIAL REMOVAL OF STRUCTURE, SHALL INCLUDE ANY WORK NECESSARY TO FACILITATE AND ACCOMPLISH THE SCOPE OF THE PROJECT WORK AS INDICATED BY THE CONTRACT DOCUMENTS AND DIRECTED BY THE RESIDENT ENGINEER: REMOVING AND DISPOSING OF BRIDGE 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 METHODS OF REHABILITATION.

10. NO BURNING OF REMOVED MATERIALS AT THE PROJECT SITE WILL BE ALLOWED. THE EXISTING COVERED BRIDGE TIMBERS AND LUMBER 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, OR DISPOSAL OF THESE MATERIALS.

11. SPECIAL CARE SHALL BE TAKEN TO AVOID DAMAGE TO MEMBERS THAT ARE TO REMAIN AND TO AVOID MOVEMENT OF THE TRUSSES AND ARCHES THAT COULD RESULT IN DISTORTION OR MISALIGNMENT OF THE TRUSS AND ITS JOINTS. MEMBERS DAMAGED BY THE CONTRACTOR SHALL BE REPLACED AS DIRECTED BY THE RESIDENT ENGINEER AT THE CONTRACTOR'S EXPENSE.

12. IF THE CONTRACTOR CHOOSES TO WORK THROUGH THE WINTER, THE CONTRACTOR SHALL PREPARE AND SUBMIT A WINTER STABILIZATION/PROTECTION PLAN TO THE RESIDENT ENGINEER FOR APPROVAL PRIOR TO OCTOBER 15. COSTS WILL BE INCLUDED UNDER CONTRACT ITEM 635.11.

13. THE MAJORITY OF THE SPAN 1 (WESTERN) TIMBER SUPERSTRUCTURE HAS BEEN REMOVED AND STOCKPILED IN THE TOWN OF WOODSTOCK, AND THE EXISTING ARCHES HAVE BEEN RETAINED. THE CONTRACTOR SHALL RETAIN THESE MEMBERS AND INCORPORATE THESE INTO THE PROJECT. COST SHALL BE INCLUDED TO ITEM 900.645, SPECIAL PROVISION (INCORPORATING SALVAGED BRIDGE COMPONENTS).

14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A SUITABLE STAGING AREA, INCLUDING OBTAINING NECESSARY PERMITS AND CLEARANCES.

15. THE CONTRACTOR'S BRIDGE SHORING SYSTEM SHALL NOT SIGNIFICANTLY RESTRICT THE EXISTING WATERWAY AND SHALL INCORPORATE A SEQUENCE WHERE SHORING IN THE CHANNEL IMPACTS ONE SPAN AT A TIME.

TRAFFIC CONTROL NOTES

1. BRIDGE NO. CB45 HAS BEEN CLOSED TO ALL PEDESTRIAN AND VEHICULAR TRAFFIC. THE CONTRACTOR SHALL NOTIFY THE TOWNS OF WOODSTOCK, HARTFORD AND POMFRET AT LEAST TWO (2) WEEKS PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES.

2. TRAFFIC HAS BEEN AND SHALL BE TEMPORARILY REROUTED AROUND THE PROJECT SITE DURING CONSTRUCTION. THE TOWN OF WOODSTOCK WILL PROVIDE AND MAINTAIN THE NECESSARY OFF-PROJECT TRAFFIC CONTROL DEVICES, INCLUDING TEMPORARY DETOUR SIGNS AS CONCEPTUALLY DEPICTED ON SHEETS 17 AND 18.

3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DESIGNING, ERECTING AND MAINTAINING (AS WELL AS REMOVING AND RESETTING) ALL ON-PROJECT TEMPORARY TRAFFIC CONTROL DEVICES, INCLUDING BUT NOT LIMITED TO CONSTRUCTION SIGNS, BARRICADES, CONCRETE TRAFFIC BARRIERS AND OTHER REQUIRED DEVICES USED TO REGULATE, WARN AND GUIDE TRAFFIC DURING CONSTRUCTION. TRAFFIC CONTROL DEVICES SHALL MEET THE REQUIREMENTS OF LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND PERTINENT E-SERIES STANDARDS, AND SHALL BE SUBMITTED TO THE RESIDENT ENGINEER, WHO WILL FORWARD THE PLAN FOR REVIEW AND APPROVAL BY THE TRAFFIC AND SAFETY ENGINEER. THE COST OF ALL ON-PROJECT TEMPORARY TRAFFIC CONTROL ZONE DEVICES (EXCEPT PRECAST CONCRETE BARRIERS) SHALL BE PAID FOR UNDER ITEM 641.10, TRAFFIC CONTROL.

4. ALL TRAFFIC CONTROL DEVICES SHALL BE KEPT IN THEIR PROPER POSITION AT ALL TIMES AND SHALL BE REPAIRED, REPLACED OR CLEANED AS NECESSARY TO PRESERVE THEIR APPEARANCE AND CONTINUITY.

5. ALL SIGNS SHALL BE PLACED WITHIN EXISTING STATE OR TOWN RIGHTS-OF-WAY.

6. PRECAST CONCRETE BARRIERS SHALL BE PLACED ON THE TAFTSVILLE COVERED BRIDGE ROAD, TOWN HIGHWAY 89 AND QUECHEE MAIN STREET APPROACHES TO LIMITS APPROVED BY THE RESIDENT ENGINEER TO PREVENT TRAFFIC FROM ENTERING THE BRIDGE WORK AREA. COST TO INCORPORATE THESE DURING NON-WORKING HOURS, AS WELL AS RELOCATING THESE DURING WORKING HOURS, SHALL BE INCLUDED IN THE UNIT BID PRICE FOR ITEM 621.90, TEMPORARY TRAFFIC BARRIER.

7. NO CONSTRUCTION SIGNS SHALL BE INSTALLED AS TO INTERFERE OR OBSTRUCT THE VIEW OF THE EXISTING TRAFFIC CONTROL DEVICES, STOPPING SIGHT DISTANCE, AND CORNER SIGHT DISTANCE FROM DRIVES AND TOWN HIGHWAYS.

STRUCTURAL STEEL NOTES

1. EXCEPT AS NOTED OTHERWISE IN THE CONTRACT PLANS, ITEM 506.75, STRUCTURAL STEEL, SHALL INCLUDE THE FOLLOWING:

   - LOWER LATERAL BRACING TIE RODS
   - UPPER LATERAL BRACING TIE RODS
   - ARCH TIE RODS
   - TRUSS DOUBLE TENSION RODS
   - KNEE BRACE TIE RODS
   - BOLSTER BEAM U-BOLT ASSEMBLIES WITH TIE RODS
   - LOWER CHORD STRAPS
   - ARCH STRAPS
   - LOWER CHORD SPLICE U-BOLTS, RODS, BEARING PLATES, AND SPACER WASHERS
   - ASSOCIATED NUTS, PLATES, WASHERS, TURNBUCKLES, AND OTHER APPURTENANCES

2. FABRICATION DRAWINGS AND ERECTION PLAN SUBMITTALS ARE NOT REQUIRED FOR ITEM 506.75, STRUCTURAL STEEL.

3. ALL NEW STRUCTURAL STEEL SHOWN IN THE PLANS INCLUDING PLATES, BOLTS, LAG BOLTS, TURNBUCKLES, NUTS, WASHERS, RODS, ANGLES AND MISCELLANEOUS STEEL, SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH AASHTO M 232M/M 232 EXCEPT FOR PLATES WHICH SHALL BE GALVANIZED PER AASHTO M 111M/M 111. ALL STEEL PLATES AND RODS SHALL BE ASTM A36, UNLESS NOTED OTHERWISE.

REINFORCED CONCRETE NOTES

1. REINFORCING STEEL SHALL CONFORM TO SECTION 507 OF THE STANDARD SPECIFICATIONS AND BE DETAILED AND FABRICATED USING PROCEDURES AND TOLERANCES IN ACCORDANCE WITH APPLICABLE PUBLICATIONS OF THE "CONCRETE REINFORCING STEEL INSTITUTE" (CRSI).

2. REINFORCING STEEL PLACEMENT TOLERANCES SHALL BE:

   SPACING: +/- ONE INCH
   CLEARANCE: +/- ONE-QUARTER INCH

3. THE MINIMUM CLEAR COVER FOR REINFORCING STEEL IN THE SUBSTRUCTURES SHALL BE TWO (2) INCHES ALONG WALL FACES AGAINST EARTH, AND THREE (3) INCHES ELSEWHERE, UNLESS NOTED OTHERWISE.

4. REINFORCING STEEL SHALL BE LEVEL I (LIMITED CORROSION RESISTANCE) AND INCLUDE CARBON STEEL REINFORCING STEEL AND EPOXY COATED REINFORCING STEEL. ALL REINFORCING STEEL BARS WITH A MARK CONTAINING AN "E" ON THE REINFORCING STEEL SUMMARY SHALL BE EPOXY COATED. ALL OTHER REINFORCING STEEL BARS SHALL BE PLAIN REINFORCING.

5. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1" X 1" UNLESS NOTED OTHERWISE.

6. THE FOLLOWING CONCRETE SHALL BE INCORPORATED:

CONCRETE, HIGH PERFORMANCE CLASS B:	ABUTMENT NO. 1 STEM, BACKWALL & WINGWALLS PIER CAP
CONCRETE, CLASS C:	ABUTMENT NO. 1 SUB-FOOTING
CONCRETE, CLASS AA:	ABUTMENT NO.2 PEDESTALS & PIER PEDESTALS

7. WATER REPELLENT, SILANE, SHALL BE APPLIED TO ALL EXPOSED NEW CONCRETE SURFACES AND PAID UNDER ITEM 514.10, WATER REPELLENT, SILANE.

SUPERSTRUCTURE NOTES

1. ALL TIMBER CONSTRUCTION SHALL COMPLY WITH THE LATEST AASHTO SPECIFICATIONS, THE NATIONAL DESIGN SPECIFICATION (NDS) AND SUPPLEMENT FOR WOOD CONSTRUCTION, AND THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION (AITC)SPECIFICATION.

2. THE CONTRACTOR SHALL AVOID UNNECESSARY DISASSEMBLY OF THE TRUSSES. ONLY THE JOINTS THAT MUST BE DISASSEMBLED TO EFFECT REPAIRS TO THE TRUSSES SHALL BE DISASSEMBLED.

3. THE MAXIMUM IN PLACE MOISTURE CONTENT OF THE TIMBER USED SHALL BE AS FOLLOWS:

MEMBERS LESS THAN 5" THICK:	16%
MEMBERS GREATER THAN 5" THICK:	19%
TRUNNELS:	10%

4. NEW SIDING SHALL BE INSTALLED TO LIMITS DETAILED ON SHEET 32. ALL SIDING SHALL BE PAINTED RED MEETING REQUIREMENTS OF ANDEK "RED PEPPER".

5. FOR INVENTORY OF ESTIMATED TIMBER QUANTITIES, SEE TIMBER TABLE ON SHEET 56.

6. ALL EXISTING MEMBERS SHOWN TO BE REPLACED ARE TO BE REPLACED "IN-KIND" WITH NEW MEMBERS IDENTICAL IN DIMENSIONS AND CONFIGURATIONS AS THE MEMBERS ORIGINALLY USED IN THE COVERED BRIDGE (INCLUDING MORTISES, TENONS, NOTCHES, HOLES, ETC.) UNLESS NOTED OTHERWISE IN THESE PLANS.

7. EXTREME CARE SHALL BE TAKEN TO ENSURE THAT ANY EXISTING HOLES IN MEMBERS SHALL NOT BE ELONGATED OR ENLARGED. THIS INCLUDES, BUT IS NOT LIMITED TO, BOLT HOLES AND TRUNNEL HOLES. THE CONTRACTOR SHALL DEMONSTRATE THEIR METHOD OF INSTALLING NEW MEMBERS WHILE MAINTAINING THE EXISTING HOLE PATTERN IN ADJACENT RETAINED MEMBERS TO THE RESIDENT ENGINEER FOR APPROVAL.

8. ALL JOINTS IN REPLACED MEMBERS SHALL MATCH THE EXISTING JOINTS, INCLUDING ALL NAILS, BOLTS OR SCREWS REQUIRED UNLESS NOTED OTHERWISE.

9. ALL NEW WOOD TRUNNELS SHALL BE MADE OF WHITE OAK. NEW HOLES FOR TRUNNELS SHALL BE BORED WITH A BIT THE SAME DIAMETER AS THE TRUNNEL TO PROVIDE A FRICTION FIT. TRUNNELS SHALL BE DRIVEN IN A MANNER WHICH AVOIDS SPLITTING THE TRUNNELS OR THE CONNECTED MEMBERS. TRUNNELS SHALL BE DIPPED IN BOILED LINSEED OIL, MINERAL OIL OR AN APPROVED WAX PRIOR TO DRIVING.

10. THE CONTRACTOR SHALL REPAIR LOWER ENDS OF SPLIT TRUSS POSTS AND OTHER TRUSS MEMBERS VIA APPROVED EPOXY. THE CONTRACTOR SHALL SUBMIT A MATERIAL SPECIFICATION AND PROCEDURE TO THE RESIDENT ENGINEER PRIOR TO COMMENCING THE WORK. FOR ESTIMATING PURPOSES, TWENTY (20) MEMBERS HAVE BEEN ASSUMED TO NEED REPAIR, WITH THE DECISION ON WHICH MEMBERS TO BE REPAIRED TO BE IDENTIFIED BY THE RESIDENT ENGINEER. PAYMENT SHALL BE MADE UNDER ITEM 900.620, SPECIAL PROVISION (WOOD EPOXY REPAIRS).

11. THE CONTRACTOR SHALL PROVIDE SURVEY ELEVATIONS ALONG THE TOP OF THE LOWER CHORDS AT EACH POST TO THE VTRANS PROJECT MANAGER FOR THE PURPOSES OF ESTIMATING THE EXISTING BRIDGE CAMBER. THIS INFORMATION, ALONG WITH AN UNDERSTANDING OF THE CONTRACTOR'S METHOD OF REHABILITATING THE COVERED BRIDGE SUPERSTRUCTURE, WILL BE CONSIDERED IN DEVELOPING THE REQUIRED POSITIVE CAMBER OF THE REALIGNED BRIDGE IN ITS FINAL CONDITION. THE CONTRACTOR SHALL JACK THE BRIDGE TO THE MAXIMUM MIDSPAN CAMBER PRIOR TO STRENGTHENING THE LOWER CHORDS AND REHABILITATING THE TRUSS. THE REQUIRED CAMBER IS 0.5 INCHES (SPAN 1) AND 1.0 INCHES (SPAN 2). ALL COST SHALL BE INCLUDED UNDER ITEM 900.645, SPECIAL PROVISION (REHABILITATING COVERED BRIDGE SUPERSTRUCTURE).

12. THE CONTRACTOR AND RESIDENT ENGINEER SHALL JOINTLY INSPECT EXISTING METAL FASTENERS AND CONNECTIONS FOR CORROSION AND TIGHTNESS TO DETERMINE THE REQUIRED LEVEL OF REHABILITATION. ALL NEW METAL FASTENERS SHALL BE ASTM A307 AND GALVANIZED IN ACCORDANCE WITH AASHTO M 232M/M 232. MATERIAL AND INSTALLATION COSTS OF BOLTS, LAG SCREWS AND OTHER METAL CONNECTORS SHALL BE PAID FOR UNDER THE APPROPRIATE SECTION 522 ITEMS.

PROJECT NAME:	**WOODSTOCK**	**WOODSTOCK**
PROJECT NUMBER:	**BHO 1444(52)**	**ST 1444(58)**

FILE NAME:	**z96j262gen.xls**	PLOT DATE:	**2/17/2012**
PROJECT LEADER:	**M. Sargent**	DRAWN BY:	**P. Dustin**
DESIGNED BY:	**W. Durack**	CHECKED BY:	**R. Joy**
PROJECT NOTES SHEET #1		SHEET **23** OF **68**	

STATE OF VERMONT
AGENCY OF TRANSPORTATION

PROJECT NOTES

13. ALL NAILS AND SPIKES SHALL CONFORM TO ASTM F1667 AND BE DOUBLE HOT DIPPED GALVANIZED IN ACCORDANCE WITH AASHTO M 232M/M 232.

14. THE SUBSTRUCTURE HOLD DOWN RODS SHALL BE GROUTED INTO THE PIER AND ABUTMENTS USING SPEC BOND 200 BY CONSPEC, RESCON 304 BY SYMONS CORPORATION OR DURALCRETE BY TAMMS INDUSTRIES OR OTHER EQUIVALENT APPROVED EPOXY MORTAR IN LIEU OF MORTAR, TYPE IV. THE HOLD DOWN RODS, DRILLING AND GROUTING OF THEM, NUTS, WASHERS, PLATES, AND ADJUSTMENT OF TIMBER MEMBERS TO ALLOW INSTALLATION OF HOLD DOWN RODS SHALL BE PAID UNDER ITEM 900.620, SPECIAL PROVISION (BEARING DEVICE ASSEMBLY, COVERED BRIDGE).

15. THE CONTRACTOR SHALL INCORPORATE AN LED BRIDGE LIGHTING SYSTEM WHICH INCORPORATES LED LUMINAIRES PLACED AT EACH PORTAL (OUTSIDE AT THE ROOFLINE. SEE SHEET 32) AND WITHIN THE COVERED BRIDGE. NO APPROACH LIGHTING IS REQUIRED. THE SYSTEM SHALL BE DESIGNED TO PROVIDE AN AVERAGE MAINTAINED ILLUMINATION OF 1.0 FOOTCANDLES AND A UNIFORMITY (AVERAGE/MINIMUM) OF 3:1. IT IS ANTICIPATED THAT A TOTAL OF 10 LUMINAIRES WILL BE REQUIRED (2 AT PORTALS AND 8 WITHIN THE COVERED BRIDGE). SEE LIGHTING PLAN ON SHEET 62. ALL ASSOCIATED COSTS SHALL BE INCLUDED IN ITEM 900.645 SPECIAL PROVISION (LIGHTING FOR COVERED BRIDGE). THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH CVPS TO DETACH THE EXISTING LIGHTING SYSTEM AND CONFIGURE THE NEW LIGHTING SYSTEM PRIOR TO COMMENCING ANY WORK. SEE SPECIAL PROVISIONS.

16. TRUSS, FLOORBEAM, AND OTHER ELEMENTS DESIGNATED TO BE REMOVED, REPLACED, OR RELOCATED SHALL BE TAGGED WITH METAL TAGS THAT ARE STAMPED WITH MEMBER NOMENCLATURE PRIOR TO DISASSEMBLY. ALL TAGGED MEMBERS SHALL ALSO BE PHOTOGRAPHED AND CAREFULLY REMOVED FOR FUTURE REASSEMBLY.

17. 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.

18. 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) AND ITEM 900.645, SPECIAL PROVISION (INCOPORATING SALVAGED BRIDGE COMPONENTS).

19. DOWEL HOLES ON EXISTING ARCH AND TRUSS MEMBERS SHALL BE PLUGGED WITH AN APPROVED WOOD EPOXY OR HARDWOOD DOWEL AS APPROVED BY THE ENGINEER. APPROXIMATELY 100 LOCATIONS HAVE BEEN INCLUDED FOR BIDDING PURPOSES. COST SHALL BE INCLUDED UNDER ITEM 900.645, SPECIAL PROVISION (REHABILITATING COVERED BRIDGE SUPERSTRUCTURE).

20. THE REPAIR OF EXISTING BRIDGE MEMBERS SHALL BE MADE WITH AN APPROVED WOOD EPOXY TO ACHIEVE FULL STRENGTH OF THE REPAIRED MEMBER. TWENTY (20) MEMBER REPAIRS HAVE BEEN INCLUDED FOR BIDDING PURPOSES. COST SHALL BE INCLUDED UNDER ITEM 900.645, SPECIAL PROVISION (WOOD EPOXY REPAIRS). THE SUGGESTED REPAIR SEQUENCE SHALL BE AS FOLLOWS:

- PERFORM A SURVEY OF EXISTING MEMBERS WITH THE RESIDENT ENGINEER.
- REMOVE ROTTED MATERIAL TO A MINIMUM OF 1/4 INCH BEYOND EXTENT OF ROT, SAWCUT 1/8 INCH DEEP AROUND PERIMETER OF REPAIR AREA.
- CLEAN EXISTING MEMBER OF ALL DIRT, SAWDUST, ETC. AND PREPARE SURFACE PER MANUFACTURER'S RECOMMENDATIONS.
- INSTALL/INJECT APPROVED EPOXY REPAIR MATERIAL PER MANUFACTURER'S RECOMMENDATIONS. COLOR OF REPAIR MATERIAL SHALL MATCH EXISTING WOOD. A COMPLETED TEST SECTION SHALL BE MADE FOR APPROVAL OF THE RESIDENT ENGINEER.
- INSTALL TWO (2) GALVANIZED LAG SCREWS INTO EXISTING SPLIT THROUGH REPAIR MATERIAL (IF REQUIRED). SIZE OF LAG SCREWS TO BE DETERMINED BY THE CONTRACTOR TO THE SATISFACTION OF THE RESIDENT ENGINEER.

21. ALL NEW SIDING SHALL BE FULL LENGTH BOARDS. THE OUTSIDE FACES OF SIDING AND PORTAL BOARDS SHALL BE TREATED WITH FIRE RETARDANT PAINT (AMDEK "RED PEPPER"). THE INSIDE FACES OF PORTAL AND SIDING BOARDS SHALL BE TREATED WITH CLEAR FIRE RETARDANT.

22. TIMBER SHALL BE TREATED WITH INSECTICIDE/FUNGICIDE AND FIRE RETARDANTS IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATION SECTION 660. SEE TIMBER TABLE ON SHEET 56.

23. THERE MAY BE INSTANCES WHERE EXISTING MEMBERS (DESIGNATED TO REMAIN) MAY NEED TO BE TEMPORARILY REMOVED OR ADJUSTED IN ORDER TO INCORPORATE A NEW MEMBER OR NEW IMPROVEMENTS. ALL COSTS ASSOCIATED WITH REMOVAL OR ADJUSTMENT OF EXISTING MEMBERS SHALL BE INCLUDED IN ITEM 900.645, SPECIAL PROVISION (REHABILITATING COVERED BRIDGE SUPERSTRUCTURE).

24. FLOORBEAMS THAT BEAR ON THE ABUTMENT NO. 1 (WEST) CENTER PEDESTAL SHALL BE SET ON 1/8-INCH ELASTOMERIC BEARING PADS. COSTS SHALL BE INCLUDED IN CONTRACT ITEM 501.34, CONCRETE, HIGH PERFORMANCE CLASS B.

SUBSTRUCTURE NOTES

1. ITEM 900.645, SPECIAL PROVISION (REPAIRING STONE MASONRY, JAHN PERMEABLE MORTAR SYSTEM)(EAST ABUTMENT)SHALL INCLUDE, BUT IS NOT LIMITED TO:

   - INSTALL WORK PLATFORMS AROUND THE EAST ABUTMENT NO. 2
   - FLUSH JOINTS WITH WATER
   - POINT STONE MASONRY WITH COLORED, RECESSED, PERMEABLE MORTAR
   - SEAL CONCRETE ENCASEMENT CRACKS AND BASE OF ENCASEMENT (FOUNDED ON LEDGE) WITH APPROVED SEALANT
   - PLACE CONSOLIDATION MORTAR (GROUT) IN ABUTMENT STEM AREAS IN APPROVED LIFTS

2. ITEM 900.645, SPECIAL PROVISION (REPAIRING STONE MASONRY, JAHN PERMEABLE MORTAR SUSTEM)(PIER), SHALL INCLUDE, BUT IS NOT LIMITED TO:

   - INSTALL WORK PLATFORM AROUND PIER
   - CONDUCT WATER BATH OF PIER CORE TO REMOVE DUST AND DEBRIS
   - PERFORM BORESCOPE INSPECTION
   - SEAL CONCRETE ENCASEMENT CRACKS AT BASE OF ENCASEMENT (FOUNDED ON LEDGE) WITH APPROVED SEALANT
   - POINT STONE MASONRY WITH COLORED, RECESSED PERMEABLE MORTAR
   - PLACE CONSOLIDATION MORTAR (GROUT) IN PIER STEM IN APPROVED LIFTS
   - INCORPORATE TENSION ANCHORS
   - CONTRACTOR'S METHOD FOR ENSURING SUPERSTRUCTURE AND PIER STABILITY DURING DRILLING ACCESS AND OPERATIONS.

3. ITEM 900.645, SPECIAL PROVISION (STONE MASONRY REPAIR MATERIAL, JAHN PERMEABLE MORTAR SYSTEM) SHALL INCLUDE, BUT IS NOT LIMITED TO:

   - OBTAIN REQUIRED MORTAR AND GROUT FOR THE REPAIR OF THE MASONRY ABUTMENTS AND PIERS FROM CATHEDRAL STONE.

4. ITEM 900.620, SPECIAL PROVISION (WOOD EPOXY REPAIRS) SHALL INCLUDE, BUT IS NOT LIMITED TO:

   - JOINTLY INSPECT WITH THE RESIDENT ENGINEER THE EXISTING TRUSS MEMBERS DESIGNATED TO REMAIN TO IDENTIFY MEMBERS REQUIRING REPAIR
   - WORK WITH THE RESIDENT ENGINEER TO DETERMINE AN APPROPRIATE REPAIR SCHEME INVOLVING LAG SCREWS AND WOOD EPOXY OR GLUE
   - COMPLETE THE REPAIRS TO THE LIMITS AND SATISFACTION OF THE RESIDENT ENGINEER

5. ITEM 900.620, SPECIAL PROVISION (TIMBER ARCH BEARING CONNECTION) SHALL INCLUDE, BUT IS NOT LIMITED TO:

   - MEASURE EXISTING ARCHES TO ESTABLISH DIMENSIONS FOR THE NEW METAL CONNECTION ASSEMBLIES
   - FABRICATE AND INSTALL METAL CONNECTION ASSEMBLIES
   - OBTAIN AND INSTALL ELASTOMERIC BEARING PADS AND METAL CONNECTION ASSEMBLIES
   - DEVELOP LIMITS AND CONSTRUCT ARCH PEDESTALS WITH HPC, CLASS AA
   - DRILL AND DOWEL ANCHORS INTO EXISTING FOUNDATIONS
   - SECURE AND CONSTRUCT FLASHING

6. ITEM 602.35, REBUILT STONE MASONRY, SHALL INCLUDE, BUT IS NOT LIMITED TO:

   - PLACEMENT OF MORTARED MASONRY WALL AROUND THE PERIMETER OF THE NEW REINFORCED CONCRETE ABUTMENT NO. 1 (WEST)

   - ATTACHING THE MORTARED MASONRY WALL TO THE REINFORCED CONCRETE ABUTMENT STEM WITH APPROVED ANCHORS

   - INCORPORATING STONES FROM THE COLLAPSED ABUTMENT INTO THE MASONRY WALL, AS WELL AS INCORPORATING NEW STONE (AS REQUIRED) THAT MATCH AS CLOSELY AS PRACTICAL TO THE EXISTING STONE

   - FACING STONES SHALL CONSIST OF INCORPORATING EXISTING FACING STONES AS CLOSELY AS PRACTICAL AS DETERMINED BY AND TO THE SATISFACTION OF THE RESIDENT ENGINEER.

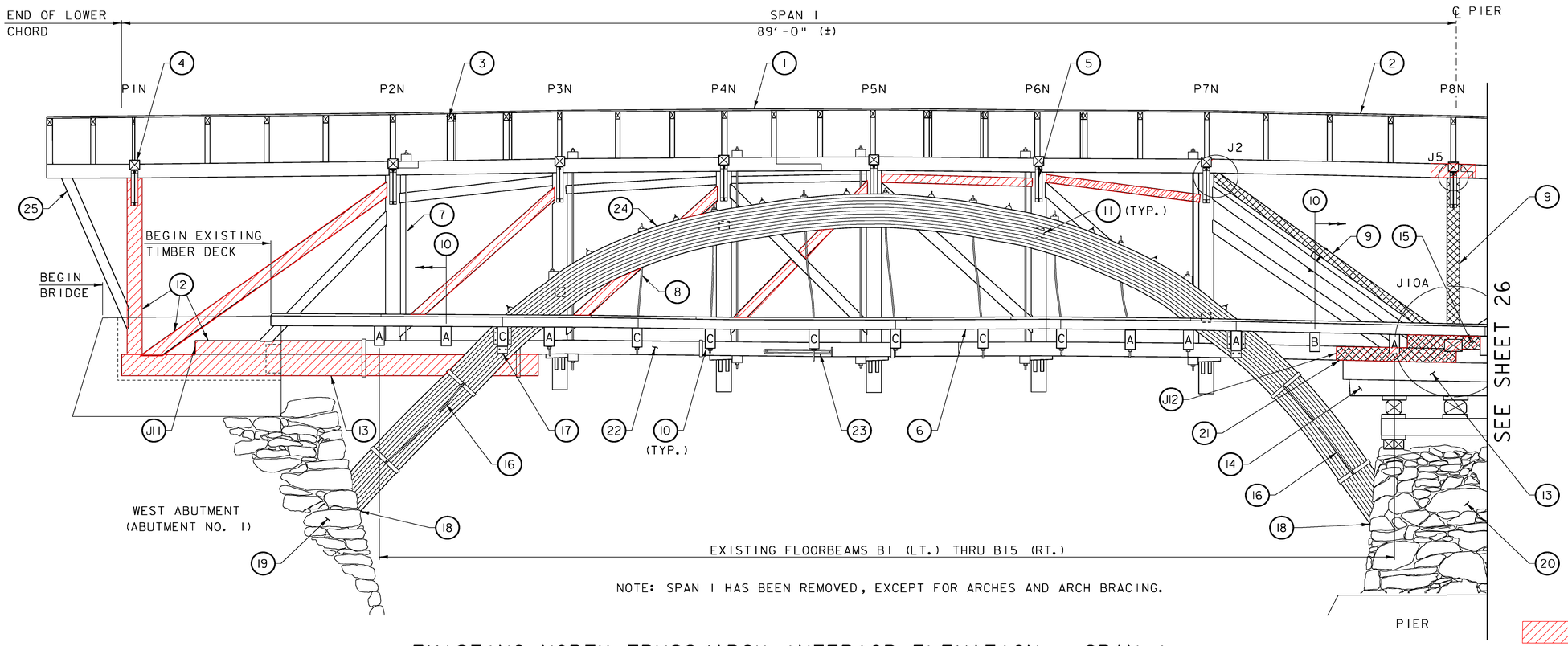
   - NEW STONES SHALL MEET THE REQUIREMENTS OF SUBSECTION 706.01.

7. THE MASONRY FACING WALLS SHALL BE FASTENED TO THE REINFORCED CONCRETE ABUTMENT WITH NON-CORROSIVE METAL SUPPORT ANCHORS.

8. ITEM 900.620, SPECIAL PROVISION (BEARING DEVICE ASSEMBLY, COVERED BRIDGE) SHALL INCLUDE, BUT IS NOT LIMITED TO:

   - PROVIDING HOLD DOWN RODS, NUTS, WASHERS, AND BEARING PLATE
   - ESTABLISHING LOCATION OF HOLD DOWN RODS
   - DRILLING AND GROUTING INTO THE THREE SUBSTRUCTURE ELEMENTS

PROJECT NAME:	WOODSTOCK	WOODSTOCK
PROJECT NUMBER:	BHO 1444(52)	ST 1444(58)
FILE NAME:	z96j262gen.xls	PLOT DATE: 2/17/2012
PROJECT LEADER:	M. Sargent	DRAWN BY: P. Dustin
DESIGNED BY:	W. Durack	CHECKED BY: R. Joy
PROJECT NOTES SHEET #2		SHEET 24 OF 68



NOTE: SPAN 1 HAS BEEN REMOVED, EXCEPT FOR ARCHES AND ARCH BRACING.

EXISTING NORTH TRUSS/ARCH INTERIOR ELEVATION - SPAN 1

(LOOKING NORTH)
SCALE: 1/4" = 1'-0"

1. REPLACE ROOF WITH NEW STANDING SEAM METAL ROOF
2. ADJUST ROOF PROFILE
3. REPLACE ROOF SHEATHING AND RAFTERS (TYP.)
4. REPLACE ALL CROSS TIES (TYP.) (SEE SHEET 30)
5. REPLACE KNEE BRACE WITH TIMBER/TIE ROD KNEE BRACE (TYP.) (SEE SHEET 35)
6. REPLACE FLOOR SYSTEM WITH NAIL LAMINATED DECK, RUNNING PLANKS AND CURBING (SEE SHEET 33)
7. REPLACE ALL TRUSS DOUBLE TENSION RODS (TYP.) (SEE SHEET 43)
8. REPLACE ALL ARCH TENSION RODS (TYP.) (SEE SHEET 43)
9. REPLACE DESIGNATED TRUSS MEMBER
10. EXISTING FLOORBEAMS ARE SHOWN. NEW FLOORBEAM LAYOUT INVOLVES RETAINING A PORTION OF THE EXISTING FLOORBEAMS AND INCORPORATING NEW FLOORBEAMS. SEE SHEET 29 FOR FLOOR FRAMING PLAN
11. REPLACE ABOVE DECK ARCH BLOCKS (SEE SHEET 44)
12. EXTEND EXISTING LOWER CHORD AND REFRAME EXISTING MEMBERS
13. REPLACE BOLSTER BEAM AND BLOCKING (SEE SHEET 46)
14. REPLACE PIER CRIBBING SYSTEM WITH CONCRETE SEAT AND PEDESTALS (SEE SHEET 54)
15. REPLACE LOWER CHORD BLOCKING (SEE SHEET 41)
16. REPLACE ARCH BRACING (TYP.) (SEE SHEET 44)
17. REPLACE ARCH/FLOORBEAM CONNECTION ANGLES (TYP.) (SEE SHEET 43)
18. ADD NEW ARCH CONNECTION (SEE SHEET 45)
19. REPLACE MASONRY ABUTMENT (SEE SHEETS 48 THRU 52)
20. REPAIR MASONRY PIER (SEE SHEETS 54 & 55)
21. REPLACE PORTION OF LOWER CHORD
22. STRENGTHEN LOWER CHORD (SEE SHEETS 37 & 38)
23. REPLACE LOWER CHORD TENSION SPLICE (SEE SHEET 39)
24. REPAIR ARCH (SEE SHEET 36)
25. REPLACE END PORTAL FRAMING (SEE SHEET 32)

TRUSS JOINTS

J1A	SEE SHEET 40	J11	SEE SHEET 42
J1B	SEE SHEET 40	J12	SEE SHEET 42
J2	SEE SHEET 40		
J3	SEE SHEET 40		
J4	SEE SHEET 40		
J5	SEE SHEET 40		
J6	SEE SHEET 41		
J7	SEE SHEET 41		
J8	SEE SHEET 41		
J9	SEE SHEET 41		
J10A	SEE SHEET 41		
J10B	SEE SHEET 41		

SCALE 1/4" = 1'-0
1 0 2 4 6

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EXISTING DISTRIBUTION BEAMS NOT SHOWN FOR CLARITY.

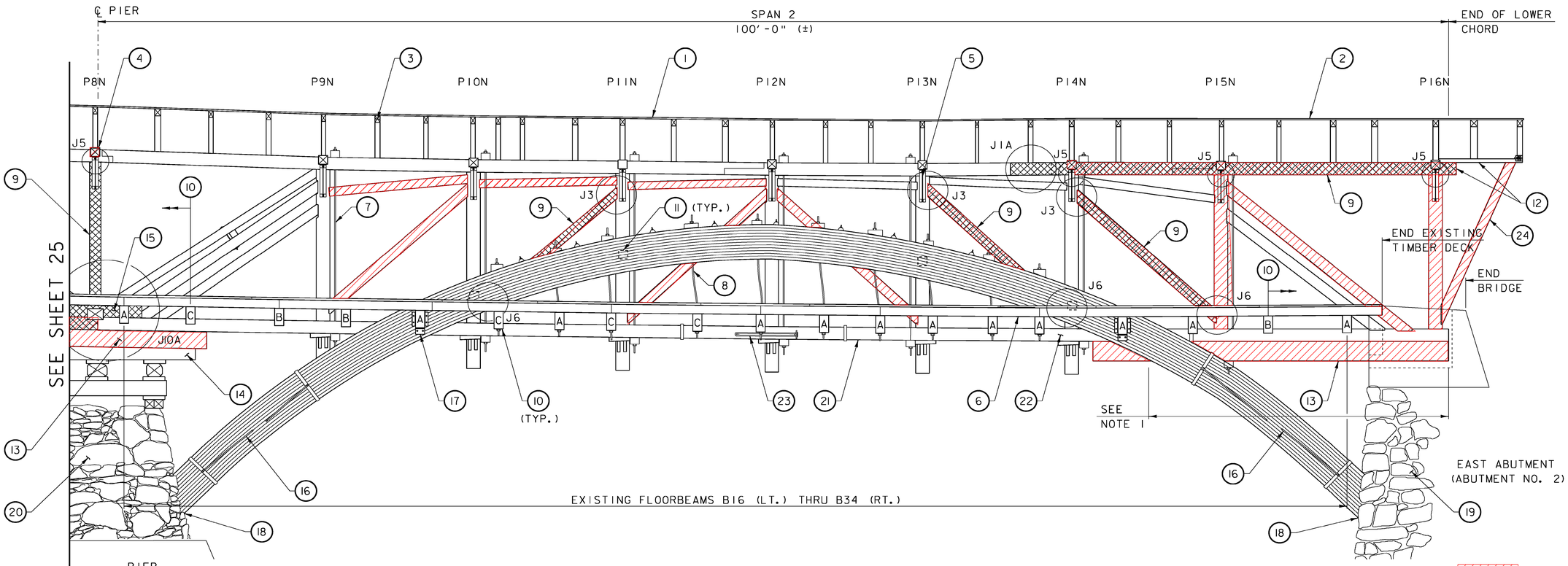
LEGEND

A	EXISTING FLOORBEAM SET AT EXISTING LOCATION
B	EXISTING FLOORBEAM TO BE SLIGHTLY SHIFTED FROM ITS EXISTING LOCATION
C	NEW FLOORBEAM SET AT EXISTING LOCATION
	TRUSS MEMBERS TO BE REPLACED
P4N	TRUSS POST DESIGNATION
J1	TRUSS JOINT DETAIL DESIGNATION

NOTES

1. FOR FLOORBEAM REFERENCE TABLE, SEE SHEET 56.

PROJECT NAME:	WOODSTOCK	WOODSTOCK
PROJECT NUMBER:	BHO 1444(52)	ST 1444(58)
FILE NAME: z96j262tr1.dgn		PLOT DATE: 29-JUN-2012
PROJECT LEADER: M. Sargent		DRAWN BY: P. Dustin
DESIGNED BY: P. Dustin		CHECKED BY: R. Joy
TRUSS/ARCH ELEVATION (1 OF 4)		SHEET 25 OF 68



EXISTING NORTH TRUSS/ARCH INTERIOR ELEVATION - SPAN 2

(LOOKING NORTH)
SCALE: 1/4" = 1'-0"

EXISTING DISTRIBUTION BEAMS NOT SHOWN FOR CLARITY.

1. REPLACE ROOF WITH NEW STANDING SEAM METAL ROOF
2. ADJUST ROOF PROFILE
3. REPLACE ROOF SHEATHING AND RAFTERS (TYP.)
4. REPLACE ALL CROSS TIES (TYP.) (SEE SHEET 30)
5. REPLACE KNEE BRACE WITH TIMBER/TIE ROD KNEE BRACE (TYP.) (SEE SHEET 35)
6. REPLACE FLOOR SYSTEM WITH NAIL LAMINATED DECK, RUNNING PLANKS AND CURBING (SEE SHEET 33)
7. REPLACE ALL TRUSS DOUBLE TENSION RODS (TYP.) (SEE SHEET 43)
8. REPLACE ALL ARCH TENSION RODS (TYP.) (SEE SHEET 43)
9. REPLACE DESIGNATED TRUSS MEMBER
10. EXISTING FLOORBEAMS ARE SHOWN. NEW FLOORBEAM LAYOUT INVOLVES RETAINING A PORTION OF THE EXISTING FLOORBEAMS AND INCORPORATING NEW FLOORBEAMS. SEE SHEET 29 FOR FLOOR FRAMING PLAN
11. REPLACE ABOVE DECK ARCH BLOCKS (SEE SHEET 44)
12. EXTEND UPPER CHORD TO LIMITS OF ROOF (SEE SHEET 30)
13. REPLACE BOLSTER BEAM AND BLOCKING (SEE SHEET 46)
14. REPLACE PIER CRIBBING SYSTEM WITH CONCRETE SEAT AND PEDESTALS (SEE SHEET 54)
15. REPLACE LOWER CHORD BLOCKING (SEE SHEET 41)
16. REPLACE ARCH BRACING (TYP.) (SEE SHEET 44)
17. REPLACE ARCH/FLOORBEAM CONNECTION ANGLES (TYP.) (SEE SHEET 43)
18. ADD NEW ARCH CONNECTION (SEE SHEET 45)
19. REPAIR MASONRY ABUTMENT (SEE SHEET 53)
20. REPAIR MASONRY PIER (SEE SHEETS 54 & 55)
21. ELIMINATE SAG IN SPAN 2 (SEE SUPERSTRUCTURE NOTE 11 ON SHEET 23)
22. STRENGTHEN LOWER CHORD (SEE SHEETS 37 & 38)
23. REPLACE LOWER CHORD TENSION SPLICE (SEE SHEET 39)
24. REPLACE END PORTAL FRAMING (SEE SHEET 32)

TRUSS JOINTS

J1A	SEE SHEET 40
J1B	SEE SHEET 40
J2	SEE SHEET 40
J3	SEE SHEET 40
J4	SEE SHEET 40
J5	SEE SHEET 40
J6	SEE SHEET 41
J7	SEE SHEET 41
J8	SEE SHEET 41
J9	SEE SHEET 41
J10A	SEE SHEET 41
J10B	SEE SHEET 41

LEGEND

A	EXISTING FLOORBEAM SET AT EXISTING LOCATION
B	EXISTING FLOORBEAM TO BE SLIGHTLY SHIFTED FROM ITS EXISTING LOCATION
C	NEW FLOORBEAM SET AT EXISTING LOCATION
	TRUSS MEMBERS TO BE REPLACED
P12N	TRUSS POST DESIGNATION
J1	TRUSS JOINT DETAIL DESIGNATION

NOTES

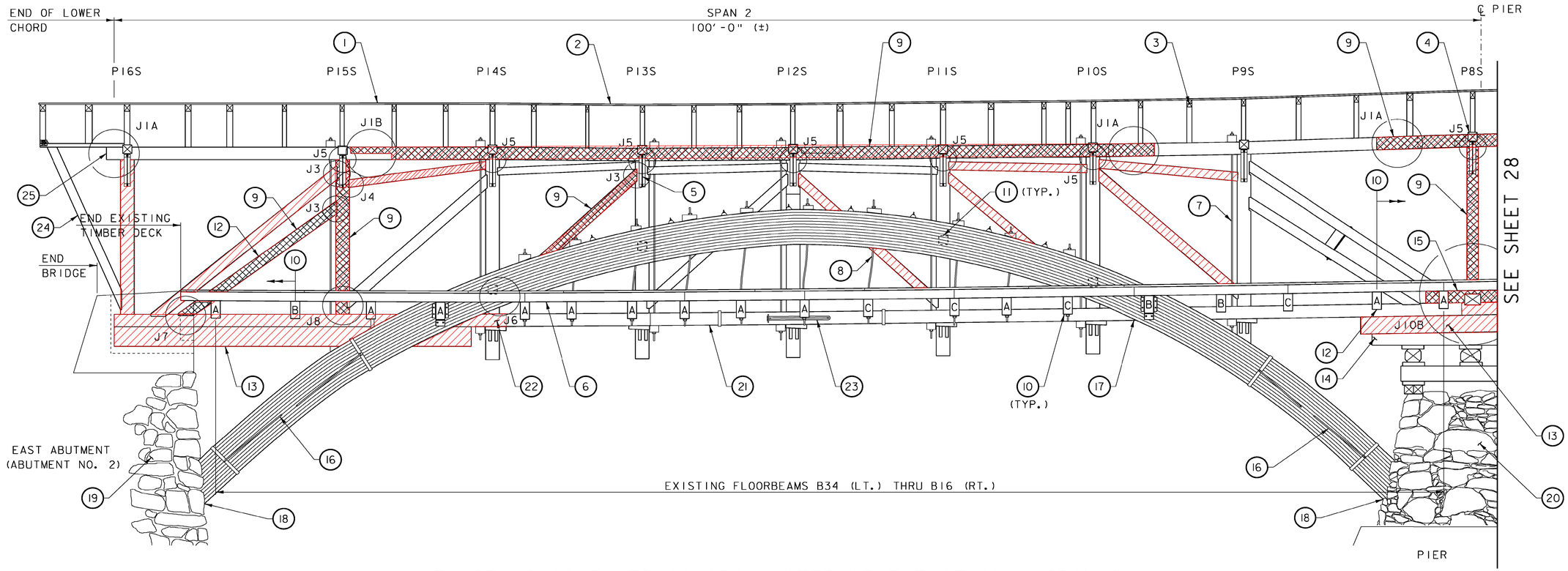
1. PORTION OF LOWER CHORD REPLACED PER 1952 REPAIR PLANS
2. FOR FLOORBEAM REFERENCE TABLE, SEE SHEET 56.

SCALE 1/4" = 1'-0
0 2 4 6

McFarland Johnson

PROJECT NAME:	WOODSTOCK	WOODSTOCK
PROJECT NUMBER:	BHO 1444(52)	ST 1444(58)

FILE NAME: z96j262trl.dgn
PROJECT LEADER: M. Sargent
DESIGNED BY: P. Dustin
TRUSS/ARCH ELEVATION (2 OF 4)
PLOT DATE: 29-JUN-2012
DRAWN BY: P. Dustin
CHECKED BY: R. Joy
SHEET 26 OF 68



EXISTING SOUTH TRUSS/ARCH INTERIOR ELEVATION - SPAN 2

(LOOKING SOUTH)
SCALE: 1/4" = 1'-0"

1. REPLACE ROOF WITH NEW STANDING SEAM METAL ROOF
2. ADJUST ROOF PROFILE
3. REPLACE ROOF SHEATHING AND RAFTERS (TYP.)
4. REPLACE ALL CROSS TIES (TYP.) (SEE SHEET 30)
5. REPLACE KNEE BRACE WITH TIMBER/TIE ROD KNEE BRACE (TYP.) (SEE SHEET 35)
6. REPLACE FLOOR SYSTEM WITH NAIL LAMINATED DECK, RUNNING PLANKS AND CURBING (SEE SHEET 33)
7. REPLACE ALL TRUSS DOUBLE TENSION RODS (TYP.) (SEE SHEET 43)
8. REPLACE ALL ARCH TENSION RODS (TYP.) (SEE SHEET 43)
9. REPLACE DESIGNATED TRUSS MEMBER
10. EXISTING FLOORBEAMS ARE SHOWN. NEW FLOORBEAM LAYOUT INVOLVES RETAINING A PORTION OF THE EXISTING FLOORBEAMS AND INCORPORATING NEW FLOORBEAMS. SEE SHEET 29 FOR FLOOR FRAMING PLAN
11. REPLACE ABOVE DECK ARCH BLOCKS (SEE SHEET 44)
12. REMOVE INSIDE PLANK ONLY
13. REPLACE BOLSTER BEAM AND BLOCKING (SEE SHEET 46)
14. REPLACE PIER CRIBBING SYSTEM WITH CONCRETE SEAT AND PEDESTALS (SEE SHEET 54)
15. REPLACE LOWER CHORD BLOCKING (SEE SHEET 41)
16. REPLACE ARCH BRACING (TYP.) (SEE SHEET 44)
17. REPLACE ARCH/FLOORBEAM CONNECTION ANGLES (TYP.) (SEE SHEET 43)
18. ADD NEW ARCH CONNECTION (SEE SHEET 45)
19. REPAIR MASONRY ABUTMENT (SEE SHEET 53)
20. REPAIR MASONRY PIER (SEE SHEETS 54 & 55)
21. ELIMINATE SAG IN SPAN 2 (SEE SUPERSTRUCTURE NOTE 11 ON SHEET 23)
22. STRENGTHEN LOWER CHORD (SEE SHEETS 37 & 38)
23. REPLACE LOWER CHORD TENSION SPLICE (SEE SHEET 39)
24. REPLACE END PORTAL FRAMING (SEE SHEET 32)
25. ADD UPPER CHORD EXTENSION (SEE SHEET 30)

TRUSS JOINTS

J1A	SEE SHEET 40
J1B	SEE SHEET 40
J2	SEE SHEET 40
J3	SEE SHEET 40
J4	SEE SHEET 40
J5	SEE SHEET 40
J6	SEE SHEET 41
J7	SEE SHEET 41
J8	SEE SHEET 41
J9	SEE SHEET 41
J10A	SEE SHEET 41
J10B	SEE SHEET 41

MEMBER REPLACED

EXISTING DISTRIBUTION BEAMS NOT SHOWN FOR CLARITY.

LEGEND

A	EXISTING FLOORBEAM SET AT EXISTING LOCATION
B	EXISTING FLOORBEAM TO BE SLIGHTLY SHIFTED FROM ITS EXISTING LOCATION
C	NEW FLOORBEAM SET AT EXISTING LOCATION
	TRUSS MEMBERS TO BE REPLACED
P12S	TRUSS POST DESIGNATION
J1	TRUSS JOINT DETAIL DESIGNATION

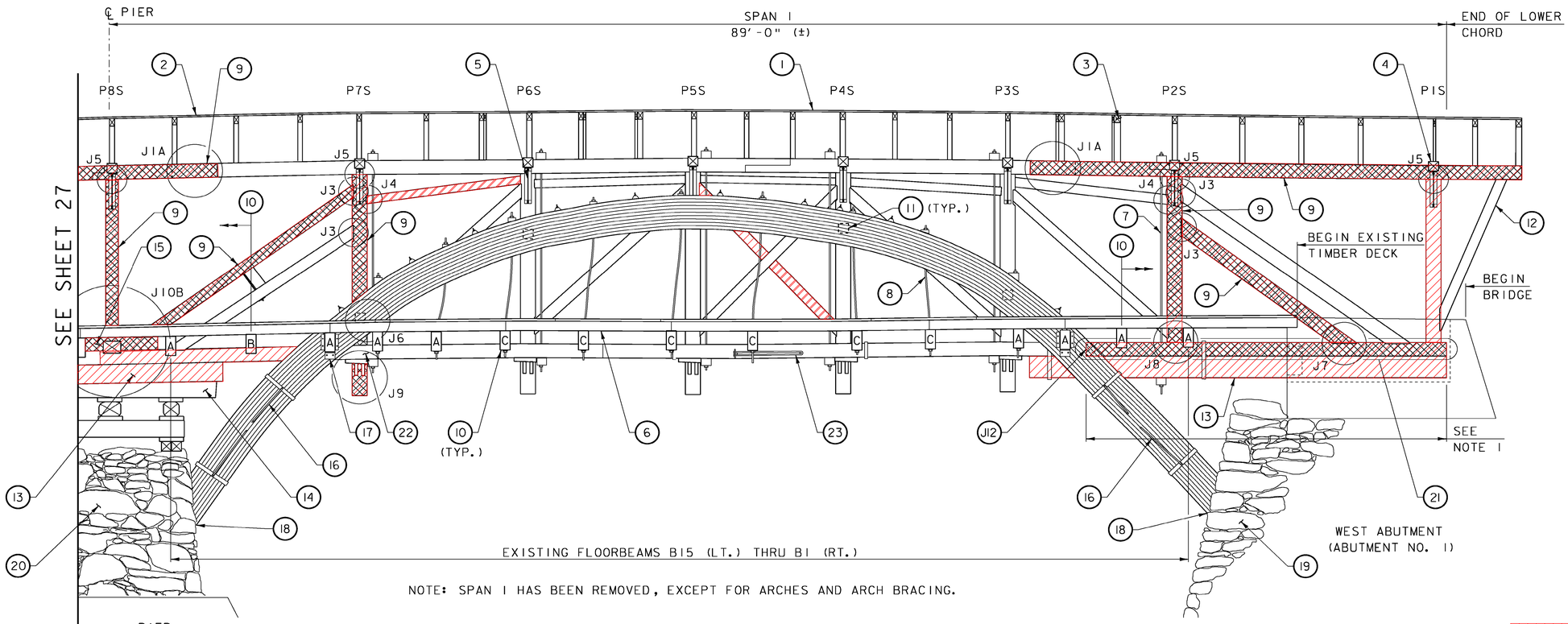
NOTES

1. FOR FLOORBEAM REFERENCE TABLE, SEE SHEET 56.

SCALE 1/4" = 1'-0
1 0 2 4 6

McFarland Johnson

PROJECT NAME:	WOODSTOCK	WOODSTOCK
PROJECT NUMBER:	BHO 1444(52)	ST 1444(58)
FILE NAME: z96j262tr2.dgn		PLOT DATE: 29-JUN-2012
PROJECT LEADER: M. Sargent		DRAWN BY: P. Dustin
DESIGNED BY: P. Dustin		CHECKED BY: R. Joy
TRUSS/ARCH ELEVATION (3 OF 4)		SHEET 27 OF 68



MEMBER REPLACED

EXISTING DISTRIBUTION BEAMS NOT SHOWN FOR CLARITY.

EXISTING SOUTH TRUSS/ARCH INTERIOR ELEVATION - SPAN 1

(LOOKING SOUTH)
SCALE: 1/4" = 1'-0"

1. REPLACE ROOF WITH NEW STANDING SEAM METAL ROOF
2. ADJUST ROOF PROFILE
3. REPLACE ROOF SHEATHING AND RAFTERS (TYP.)
4. REPLACE ALL CROSS TIES (TYP.) (SEE SHEET 30)
5. REPLACE KNEE BRACE WITH TIMBER/TIE ROD KNEE BRACE (TYP.) (SEE SHEET 35)
6. REPLACE FLOOR SYSTEM WITH NAIL LAMINATED DECK, RUNNING PLANKS AND CURBING (SEE SHEET 33)
7. REPLACE ALL TRUSS DOUBLE TENSION RODS (TYP.) (SEE SHEET 43)
8. REPLACE ALL ARCH TENSION RODS (TYP.) (SEE SHEET 43)
9. REPLACE DESIGNATED TRUSS MEMBER
10. EXISTING FLOORBEAMS ARE SHOWN. NEW FLOORBEAM LAYOUT INVOLVES RETAINING A PORTION OF THE EXISTING FLOORBEAMS AND INCORPORATING NEW FLOORBEAMS. SEE SHEET 29 FOR FLOOR FRAMING PLAN
11. REPLACE ABOVE DECK ARCH BLOCKS (SEE SHEET 44)
12. REPLACE END PORTAL FRAMING (SEE SHEET 32)
13. REPLACE BOLSTER BEAM AND BLOCKING (SEE SHEET 46)
14. REPLACE PIER CRIBBING SYSTEM WITH CONCRETE SEAT AND PEDESTALS (SEE SHEET 54)
15. REPLACE LOWER CHORD BLOCKING (SEE SHEET 41)
16. REPLACE ARCH BRACING (TYP.) (SEE SHEET 44)
17. REPLACE ARCH/FLOORBEAM CONNECTION ANGLES (TYP.) (SEE SHEET 43)
18. ADD NEW ARCH CONNECTION (SEE SHEET 45)
19. REPLACE MASONRY ABUTMENT (SEE SHEETS 48 THRU 52)
20. REPAIR MASONRY PIER (SEE SHEETS 54 & 55)
21. REPLACE PORTION OF LOWER CHORD SEE SHEET 37)
22. STRENGTHEN LOWER CHORD (SEE SHEETS 37 & 38)
23. REPLACE LOWER CHORD TENSION SPLICE (SEE SHEET 39)

TRUSS JOINTS

J1A	SEE SHEET 40	J12	SEE SHEET 42
J1B	SEE SHEET 40		
J2	SEE SHEET 40		
J3	SEE SHEET 40		
J4	SEE SHEET 40		
J5	SEE SHEET 40		
J6	SEE SHEET 41		
J7	SEE SHEET 41		
J8	SEE SHEET 41		
J9	SEE SHEET 41		
J10A	SEE SHEET 41		
J10B	SEE SHEET 41		

SCALE 1/4" = 1'-0
1 0 2 4 6

LEGEND

A	EXISTING FLOORBEAM SET AT EXISTING LOCATION
B	EXISTING FLOORBEAM TO BE SLIGHTLY SHIFTED FROM ITS EXISTING LOCATION
C	NEW FLOORBEAM SET AT EXISTING LOCATION
	TRUSS MEMBERS TO BE REPLACED
P4N	TRUSS POST DESIGNATION
J1	TRUSS JOINT DETAIL DESIGNATION

NOTES

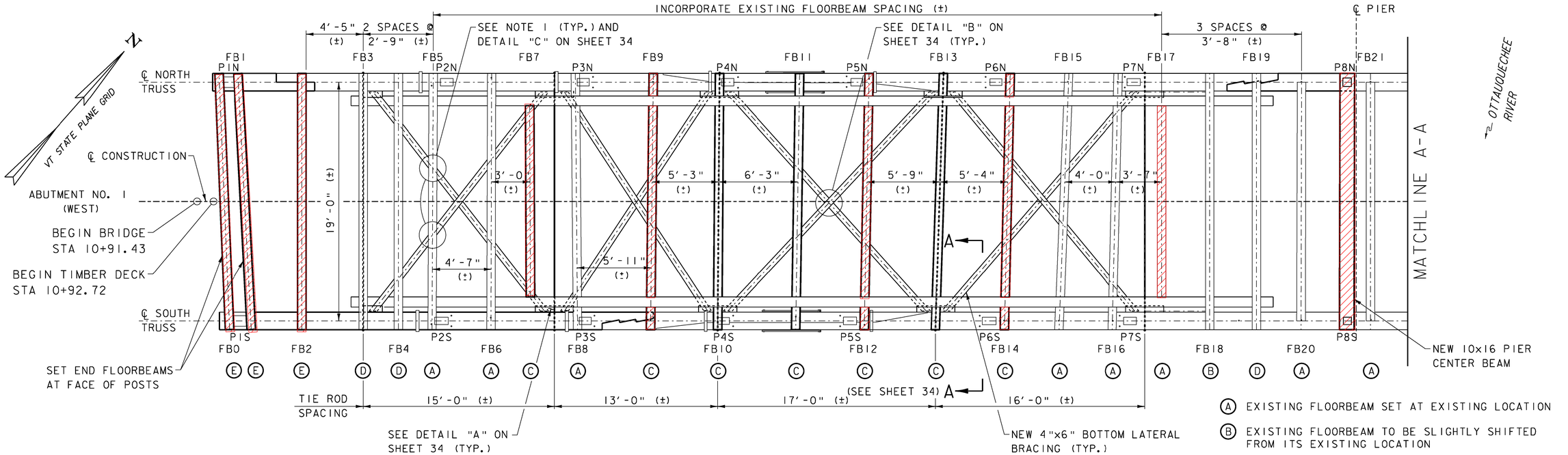
1. PORTION OF LOWER CHORD REPLACED PER 1952 REPAIR PLANS
2. FOR FLOORBEAM REFERENCE TABLE, SEE SHEET 56.

McFarland Johnson

PROJECT NAME: WOODSTOCK WOODSTOCK
PROJECT NUMBER: BHO 1444(52) ST 1444(58)

FILE NAME: z96j262tr2.dgn
PROJECT LEADER: M. Sargent
DESIGNED BY: P. Dustin
TRUSS/ARCH ELEVATION (4 OF 4)

PLOT DATE: 29-JUN-2012
DRAWN BY: P. Dustin
CHECKED BY: R. Joy
SHEET 28 OF 68



FLOOR FRAMING PLAN - SPAN 1

SCALE: 1/4" = 1′-0"

MEMBER REPLACED

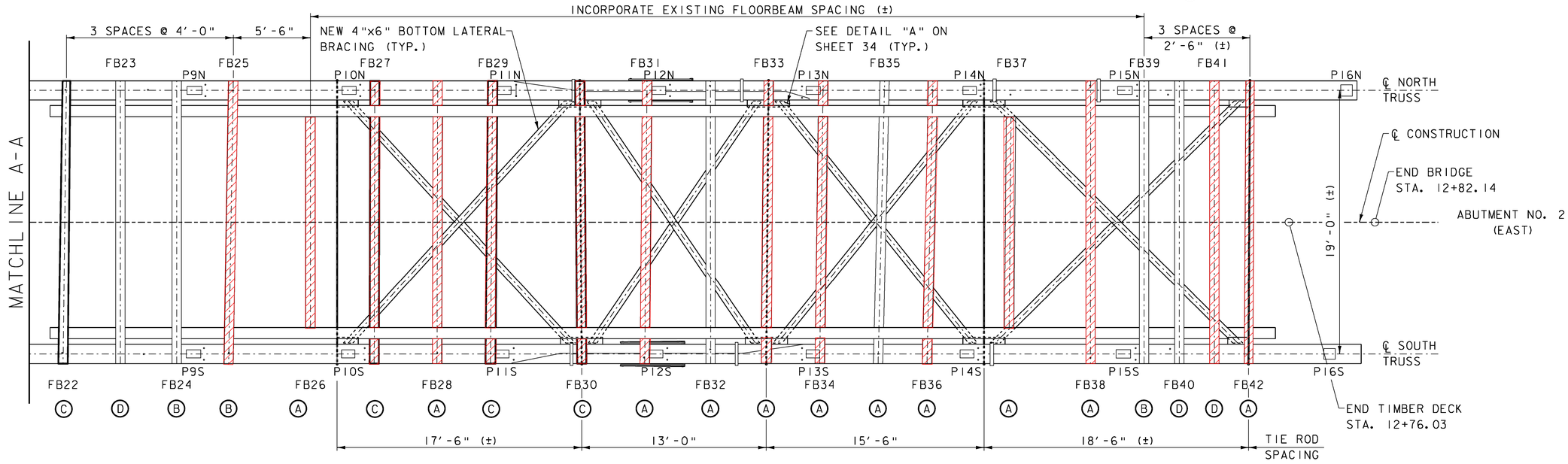
(A) EXISTING FLOORBEAM SET AT EXISTING LOCATION

(B) EXISTING FLOORBEAM TO BE SLIGHTLY SHIFTED FROM ITS EXISTING LOCATION

(C) NEW FLOORBEAM SET AT EXISTING LOCATION

(D) EXISTING FLOORBEAM TO BE SET AT NEW LOCATION (FROM SPAN 1 STOCKPILE OR SPAN 2 REMOVAL)

(E) NEW FLOORBEAM SET AT NEW LOCATION



FLOOR FRAMING PLAN - SPAN 2

SCALE: 1/4" = 1′-0"

SCALE 1/4"= 1'-0
1 0 2 4 6

LEGEND

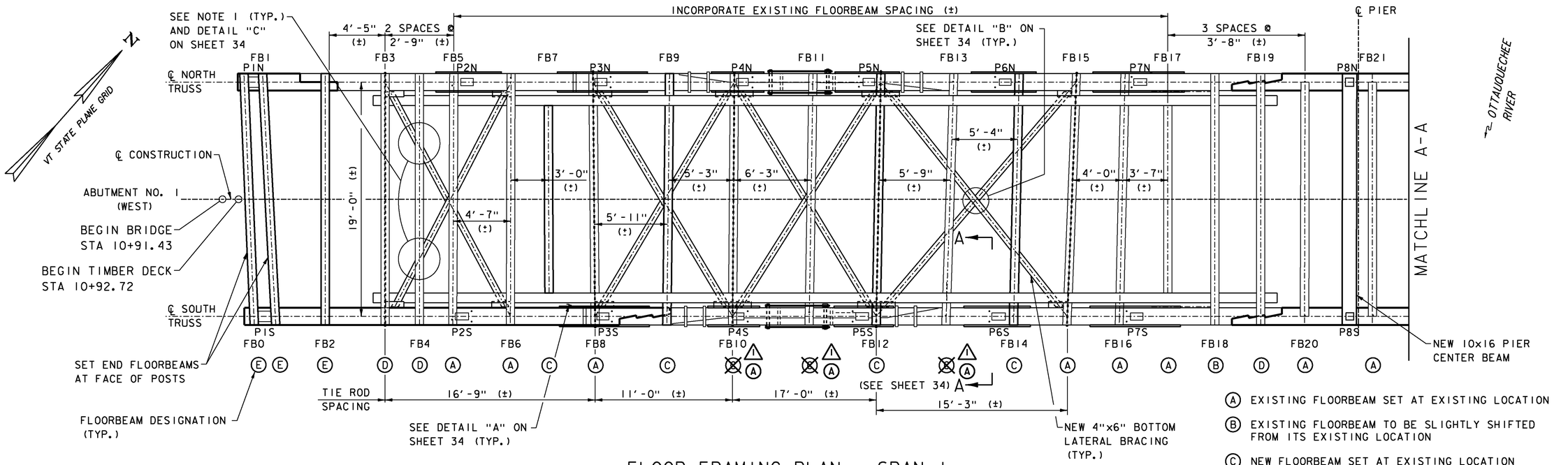
FB FLOORBEAM
P POST

NOTES

1. LAG LATERAL BRACING FROM UNDERNEATH TO FLOORBEAMS AT FB5, FB6, FB9, FB11, FB12, FB14, FB15, FB28, FB29, FB31, FB32, FB34, FB36, FB38 AND FB40 AT BRACING/FLOORBEAM CROSSINGS (2 PER FLOORBEAM) WITH 3/4" DIA. HEX HEADED LAG SCREWS. SEE DETAIL "C" ON SHEET 34.
2. FOR FLOORBEAM REFERENCE TABLE, SEE SHEET 56.

McFarland Johnson

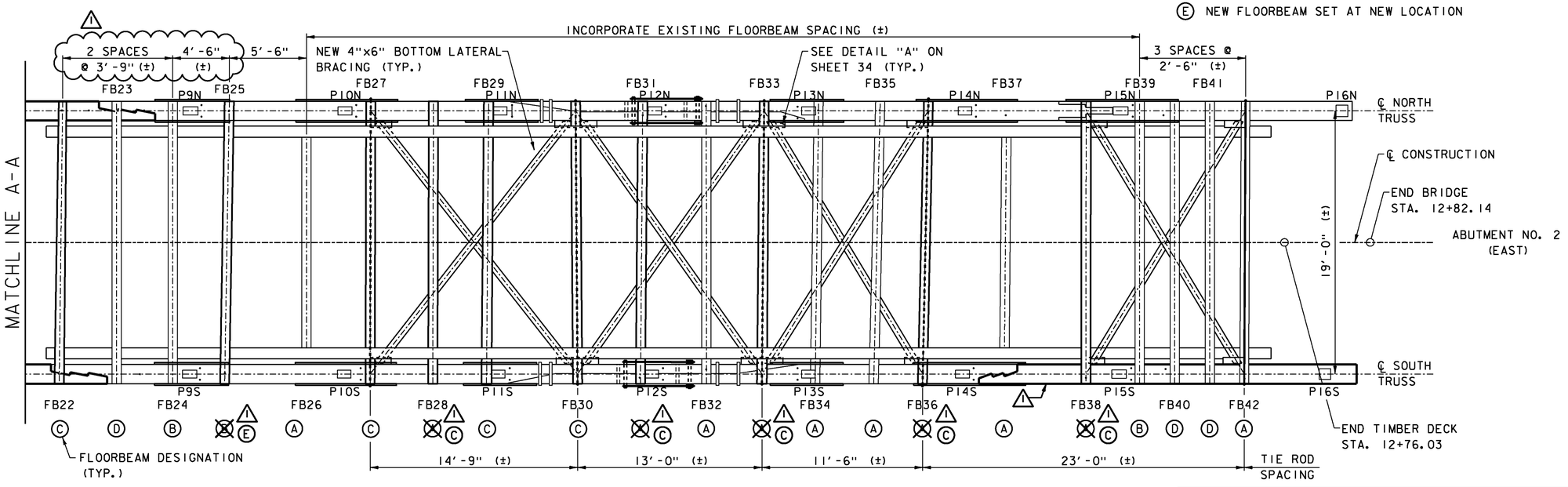
PROJECT NAME:	WOODSTOCK	WOODSTOCK
PROJECT NUMBER:	BHO 1442(52)	ST 1444(58)
FILE NAME: z96j262ffp.dgn		PLOT DATE: 10-JUL-2012
PROJECT LEADER: M. Sargent		DRAWN BY: P. Dustin
DESIGNED BY: P. Dustin		CHECKED BY: R. Joy
FLOOR FRAMING PLAN		SHEET 29 OF 68



FLOOR FRAMING PLAN - SPAN 1

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

- (A) EXISTING FLOORBEAM SET AT EXISTING LOCATION
- (B) EXISTING FLOORBEAM TO BE SLIGHTLY SHIFTED FROM ITS EXISTING LOCATION
- (C) NEW FLOORBEAM SET AT EXISTING LOCATION
- (D) EXISTING FLOORBEAM TO BE SET AT NEW LOCATION (FROM SPAN 1 STOCKPILE OR SPAN 2 REMOVAL)
- (E) NEW FLOORBEAM SET AT NEW LOCATION



FLOOR FRAMING PLAN - SPAN 2

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

SCALE 1/4" = 1'-0
1 0 2 4 6

LEGEND

FB FLOORBEAM
P POST

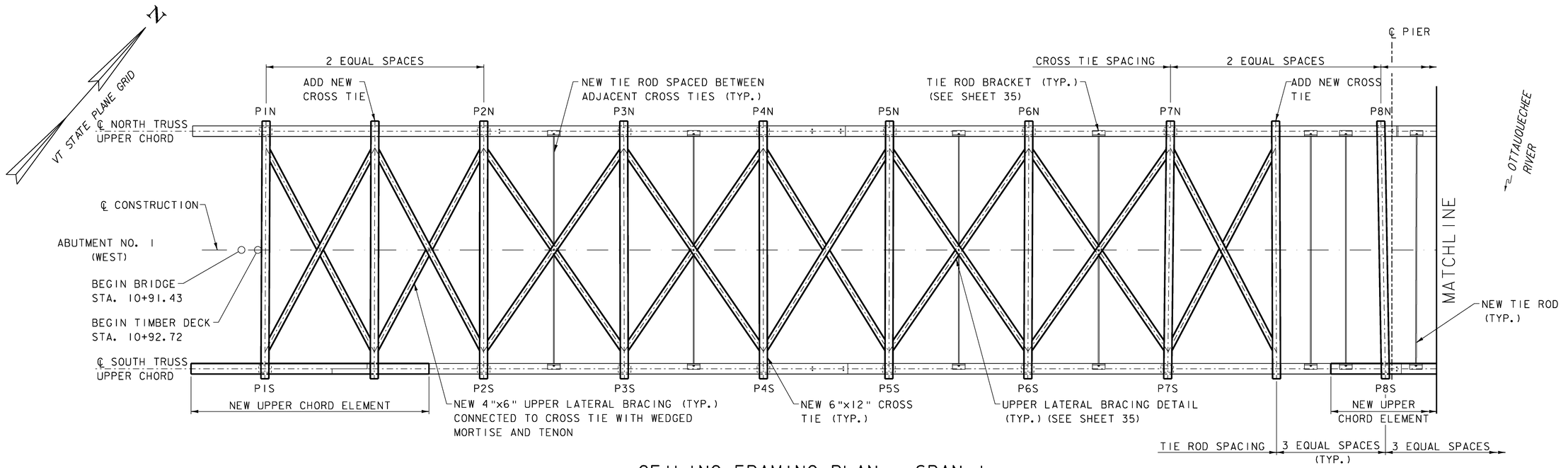
NOTES

1. LAG LATERAL BRACING FROM UNDERNEATH TO FLOORBEAMS AT FB4, FB5, FB9, FB11, FB13, FB14, FB28, FB29, FB31, FB32, FB34, FB36, FB39 AND FB41 AT BRACING/FLOORBEAM CROSSINGS (2 PER FLOORBEAM) WITH 3/4" DIA. HEX HEADED LAG SCREWS. SEE DETAIL "C" ON SHEET 34.
2. FOR FLOORBEAM REFERENCE TABLE, SEE SHEET 56.

(1) UPDATE FB DESIGNATION AND LOWER CHORD WORK LIMITS (PER FIELD INSPECTION)
(2) REVISE LOCATIONS OF BOTTOM LATERAL BRACING

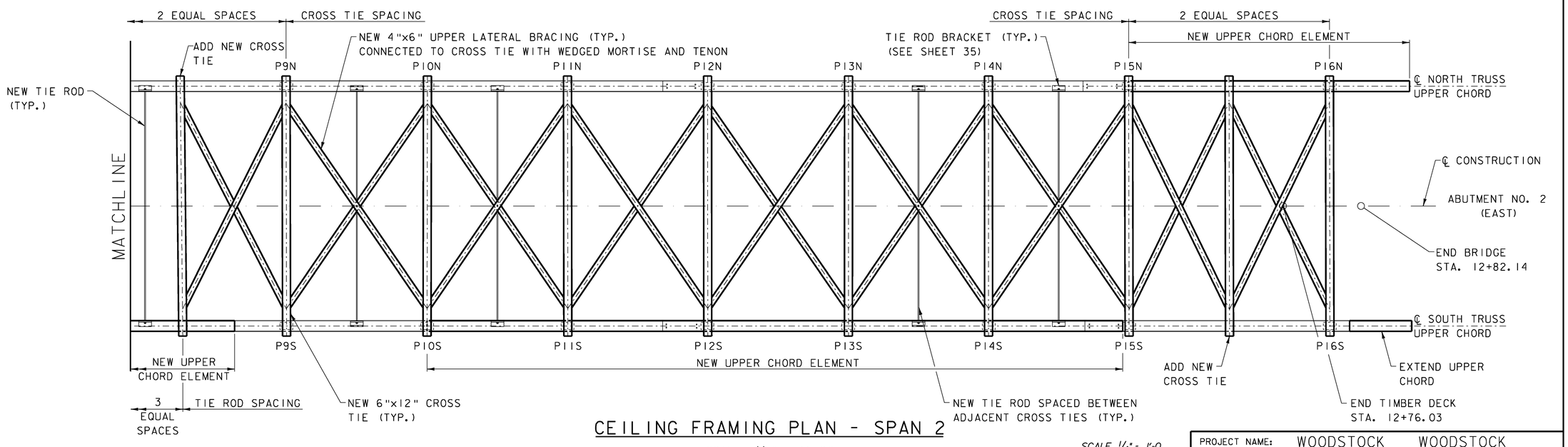
McFarland Johnson

PROJECT NAME:	WOODSTOCK	WOODSTOCK
PROJECT NUMBER:	BHO 1442(52)	ST 1444(58)
FILE NAME: z96J262ffp.dgn		PLOT DATE: $$$$DATE$$$
PROJECT LEADER: M. Sargent		DRAWN BY: P. Dustin
DESIGNED BY: P. Dustin		CHECKED BY: R. Joy
FLOOR FRAMING PLAN		SHEET 29A OF 68



CEILING FRAMING PLAN - SPAN 1

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



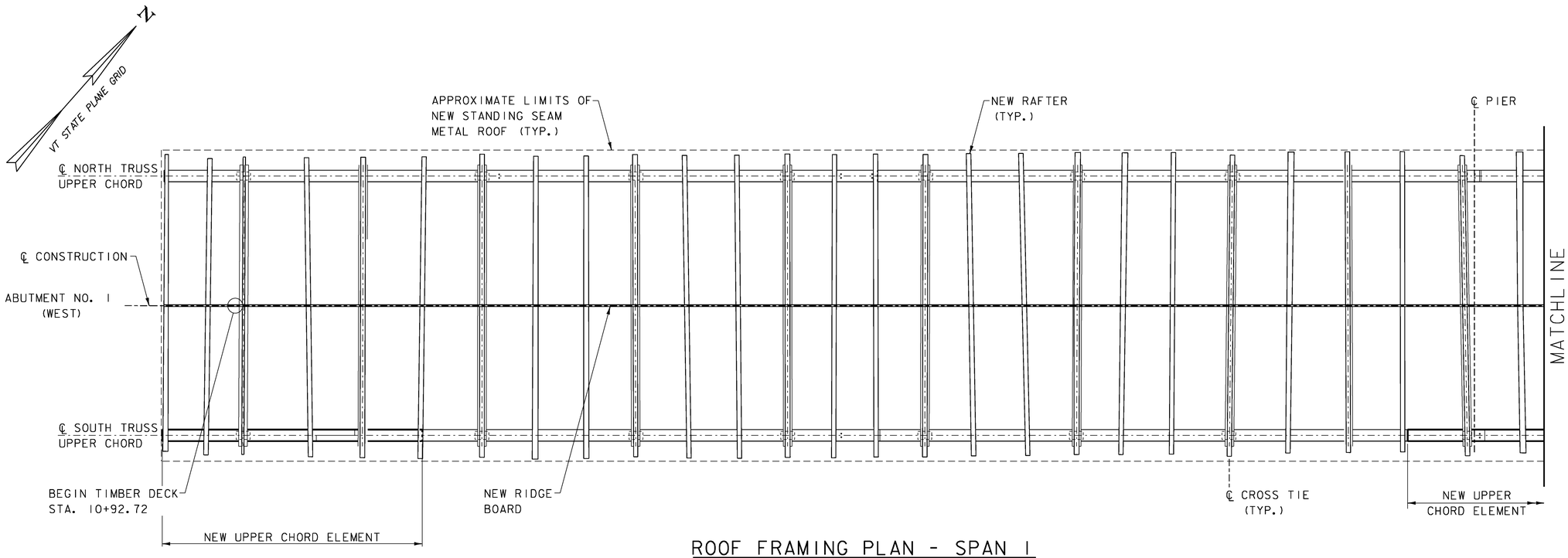
CEILING FRAMING PLAN - SPAN 2

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

SCALE 1/4" = 1'-0
1 0 2 4 6

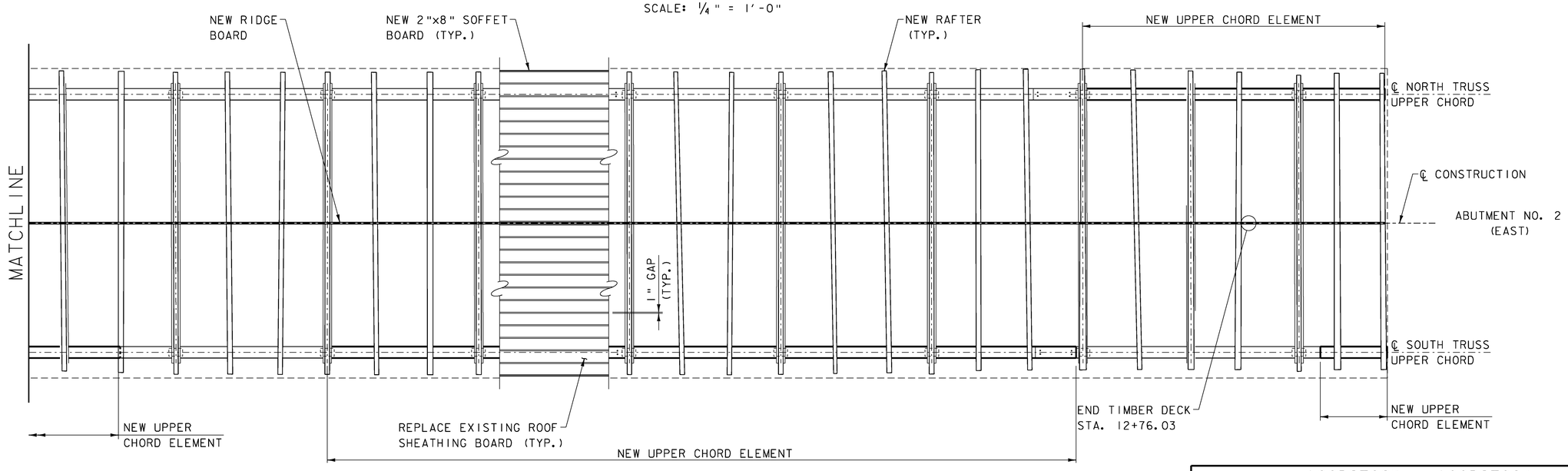
McFarland Johnson

PROJECT NAME:	WOODSTOCK	WOODSTOCK	
PROJECT NUMBER:	BHO 1442(52)	ST 1444(58)	
FILE NAME: z96j262cfp.dgn		PLOT DATE: 10-JUL-2012	
PROJECT LEADER: M. Sargent		DRAWN BY: P. Dustin	
DESIGNED BY: D. Kull		CHECKED BY: R. Joy	
CEILING FRAMING PLAN		SHEET 30 OF 68	



ROOF FRAMING PLAN - SPAN 1

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



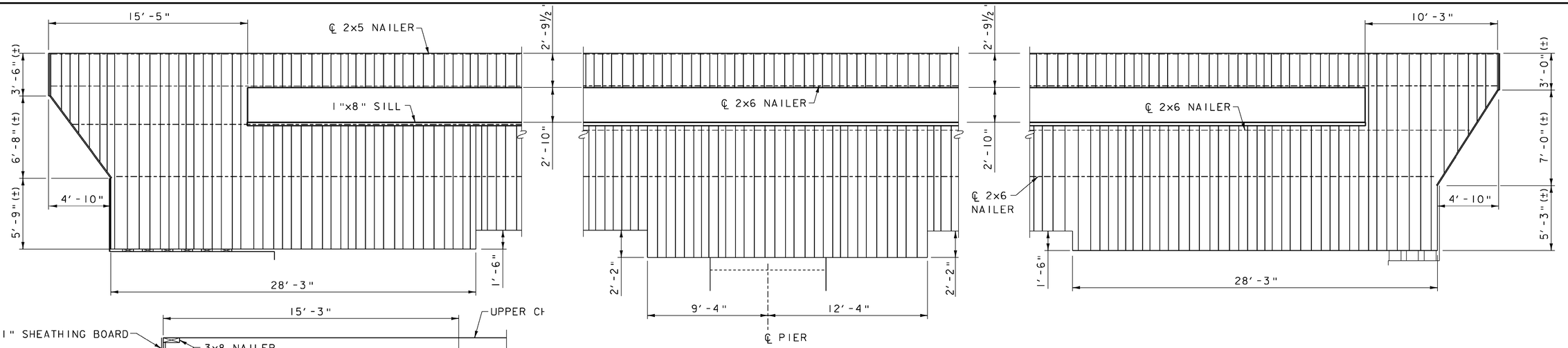
SCALE 1/4" = 1'-0
1 0 2 4 6

ROOF FRAMING PLAN - SPAN 2

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

McFarland Johnson

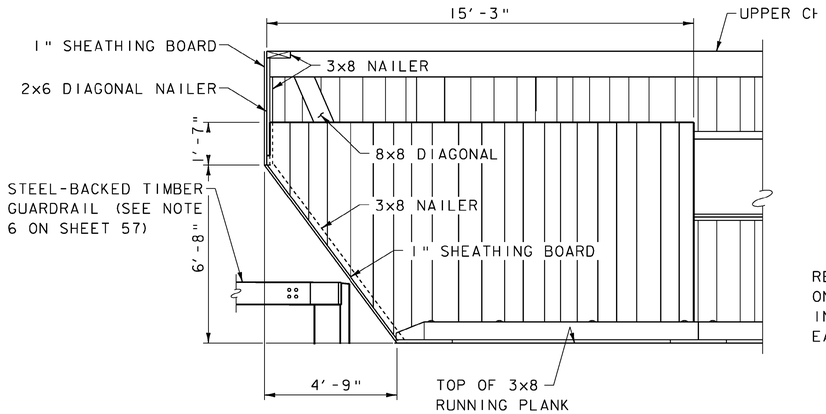
PROJECT NAME:	WOODSTOCK	WOODSTOCK	
PROJECT NUMBER:	BHO 1444(52)	ST 1444(58)	
FILE NAME: z96j262rfp.dgn		PLOT DATE: 29-JUN-2012	
PROJECT LEADER: M. Sargent		DRAWN BY: P. Dustin	
DESIGNED BY: P. Dustin		CHECKED BY: R. Joy	
ROOF FRAMING PLAN		SHEET 31 OF 68	



EXTERIOR SIDING ELEVATION

(SOUTH SIDING ELEVATION SHOWN, NORTH SIMILAR)

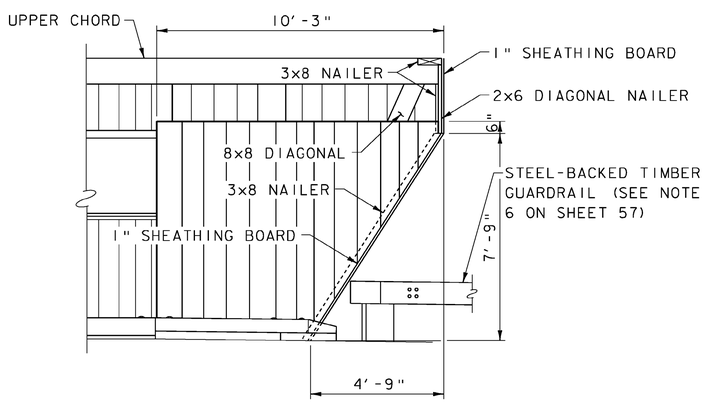
SCALE: 1/4" = 1'-0"



INTERIOR SIDING ELEVATION (WEST)

(LOOKING NORTH)

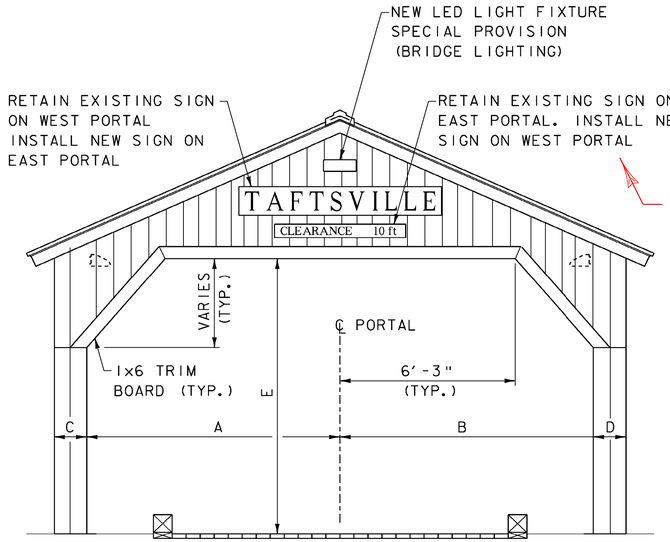
SCALE: 3/8" = 1'-0"



INTERIOR SIDING ELEVATION (EAST)

(LOOKING NORTH)

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

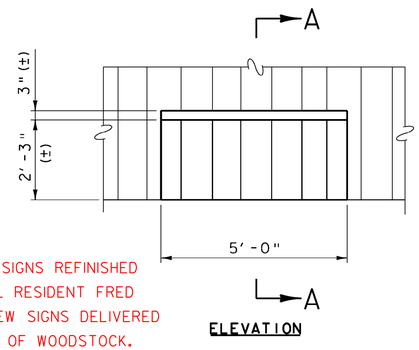


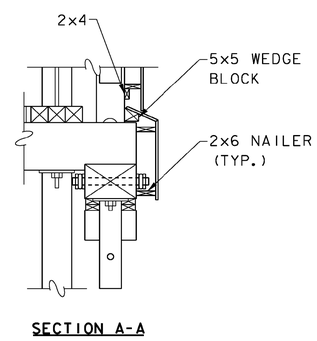
PORTAL ELEVATION

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

PORTAL DIMENSIONS		
	WEST APPROACH	EAST APPROACH
A	8'-11¾"	8'-5¾"
B	8'-8¾"	9'-4¼"
C	1'-1¼"	1'-1½"
D	1'-4½"	1'-2¼"
E	10'-5"	11'-4"

EXISTING SIGNS REFINISHED BY LOCAL RESIDENT FRED BLOOD. NEW SIGNS DELIVERED TO TOWN OF WOODSTOCK.





SIDING BUMPOUT AT LOWER CHORD TENSION SPLICE

SCALE: 3/4" = 1'-0"

NOTES

1. ALL DIMENSIONS ARE IN REFERENCE TO FINISHED GRADE LINE.
2. THE NEW "TAFTSVILLE" SIGN AT THE EAST PORTAL AND NEW "CLEARANCE 10 ft" AT THE WEST PORTAL SHALL MATCH THE EXISTING SIGNS AS CLOSE AS POSSIBLE AS DETERMINED BY THE RESIDENT ENGINEER. ALL COSTS ASSOCIATED WITH FURNISHING AND INSTALLING NEW SIGNS SHALL BE CONSIDERED INCIDENTAL TO ITEM 522.30
3. FOR APPROXIMATE LOCATION OF SIDING BUMPOUTS, SEE SHEET 22.

SCALE 3/8" = 1'-0
1 0 1 2 3 4

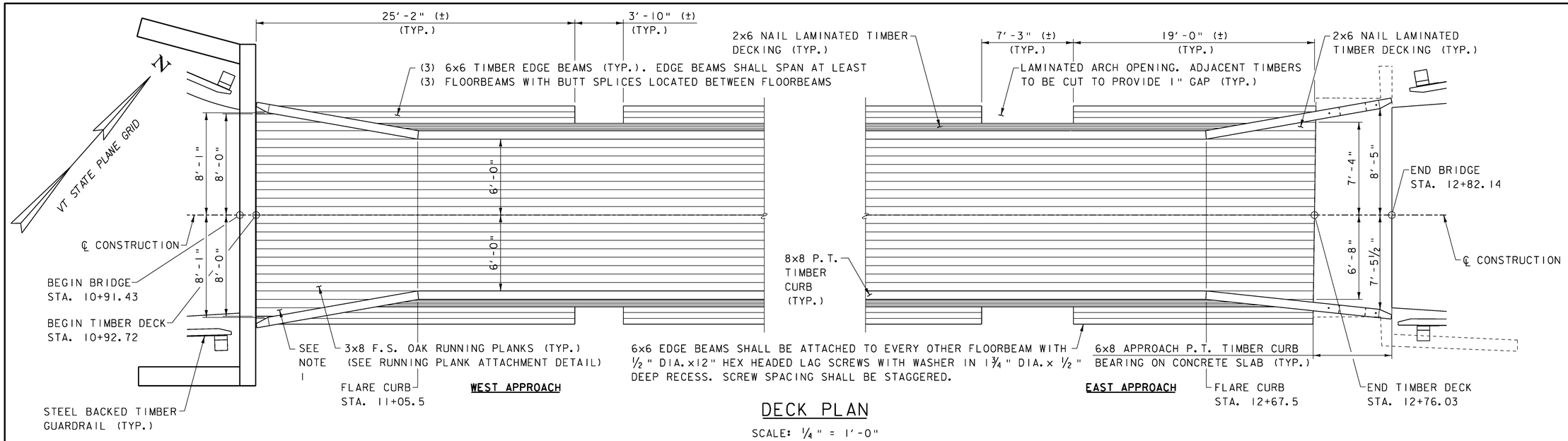
SCALE 1/4" = 1'-0
1 0 2 4 6

McFarland Johnson

PROJECT NAME: WOODSTOCK WOODSTOCK
PROJECT NUMBER: BHO 1442(52) ST 1444(58)

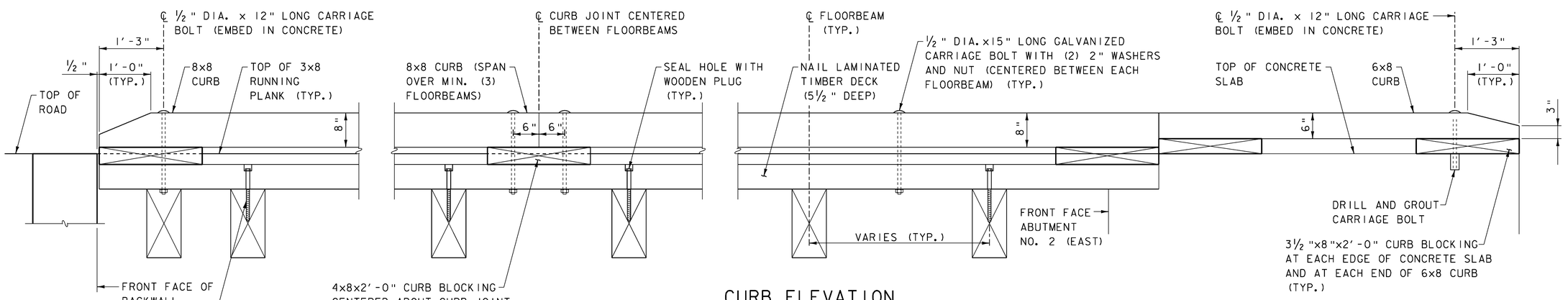
FILE NAME: z96j262sld.dgn
PROJECT LEADER: M. Sargent
DESIGNED BY: P. Dustin
SIDING AND PORTAL DETAILS

PLOT DATE: 29-JUN-2012
DRAWN BY: P. Dustin
CHECKED BY: R. Joy
SHEET 32 OF 68



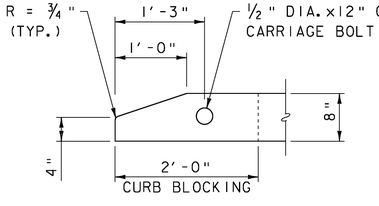
DECK PLAN

SCALE: ¼" = 1'-0"



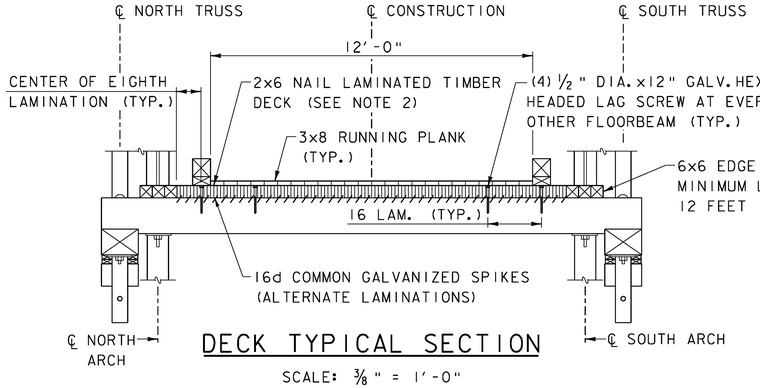
CURB ELEVATION

SCALE: 1" = 1'-0"



CURB END DETAIL - PLAN

SCALE: 1" = 1'-0"



DECK TYPICAL SECTION

SCALE: ⅜" = 1'-0"

SCALE ¼" = 1'-0
1 0 2 4 6

SCALE ⅜" = 1'-0
1 0 1 2 3 4

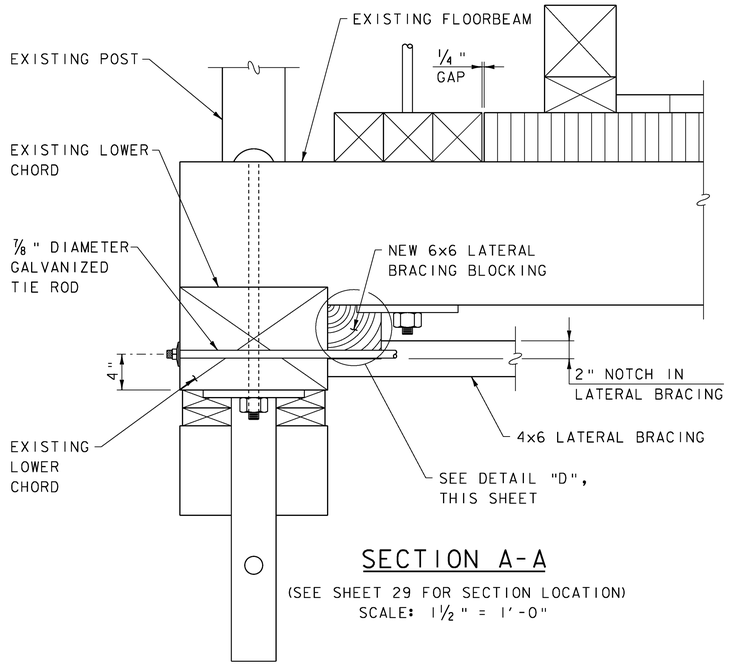
SCALE 1" = 1'-0
1 9 6 3 0 1 2

NOTES

1. THE END EDGE RUNNING PLANKS WITHIN THE FLARED CURBS SHALL BE SQUARED OFF AND PLACED UNDER THE CURB.
2. THE TRANSVERSE NAIL LAMINATED SECTION SHALL BE A SINGLE UNIT. NO PANELS SHALL BE ALLOWED.

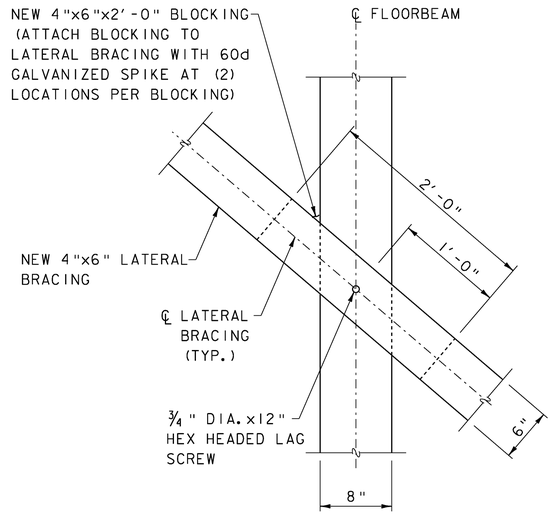
McFarland Johnson

PROJECT NAME:	WOODSTOCK	WOODSTOCK
PROJECT NUMBER:	BHO 1444(52)	ST 1444(58)
FILE NAME: z96j262d01.dgn		PLOT DATE: 29-JUN-2012
PROJECT LEADER: M. Sargent		DRAWN BY: P. Dustin
DESIGNED BY: J. Hall/P. Dustin		CHECKED BY: R. Joy
BRIDGE DETAILS (1 OF 11)		SHEET 33 OF 68



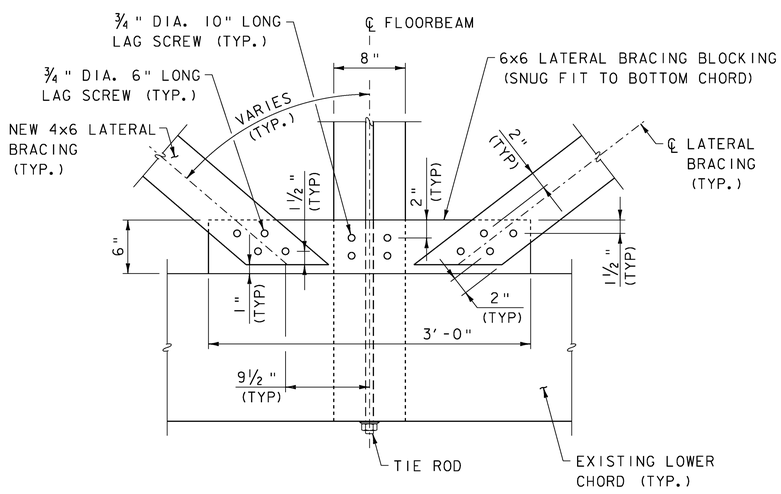
SECTION A-A

(SEE SHEET 29 FOR SECTION LOCATION)
SCALE: 1½ " = 1'-0"



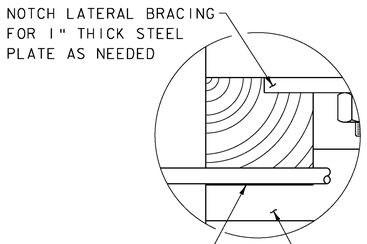
DETAIL "C"

(VIEW FROM UNDER BRIDGE)
SCALE: 1½ " = 1'-0"



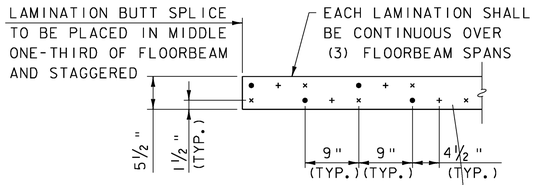
DETAIL "A"

SCALE: 1½ " = 1'-0"
(VIEW FROM UNDER BRIDGE)



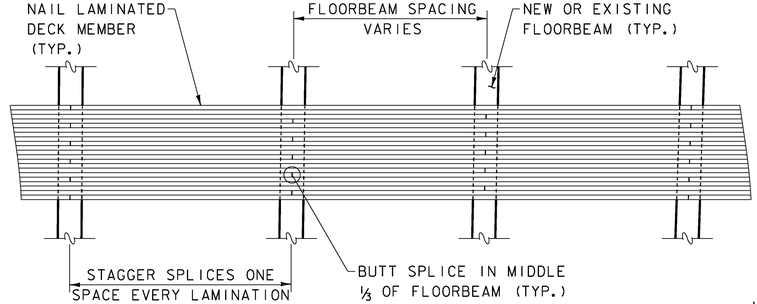
DETAIL "D"

SCALE: 1½ " = 1'-0"



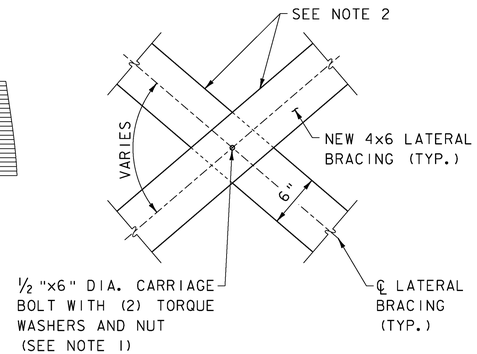
DECK NAILING PATTERN-ELEVATION

SCALE: 1" = 1'-0"



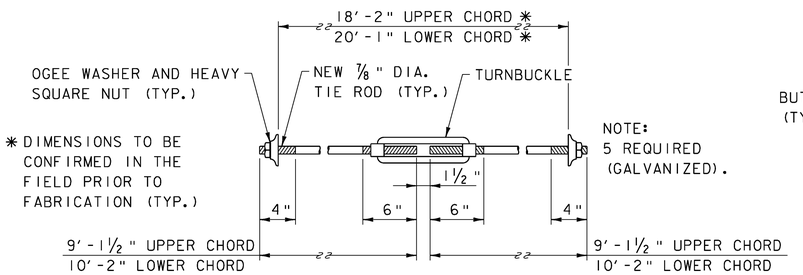
NAIL LAMINATED DECK BUTT SPLICE DETAIL

NOT TO SCALE



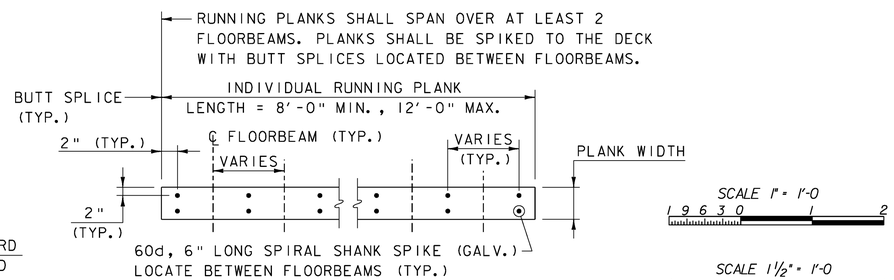
DETAIL "B" - PLAN

SCALE: 1½ " = 1'-0"



TIE ROD ASSEMBLY

SCALE: 1½ " = 1'-0"



RUNNING PLANK ATTACHMENT DETAIL

NOT TO SCALE

SCALE 1" = 1'-0
1 9 6 3 0 1 2

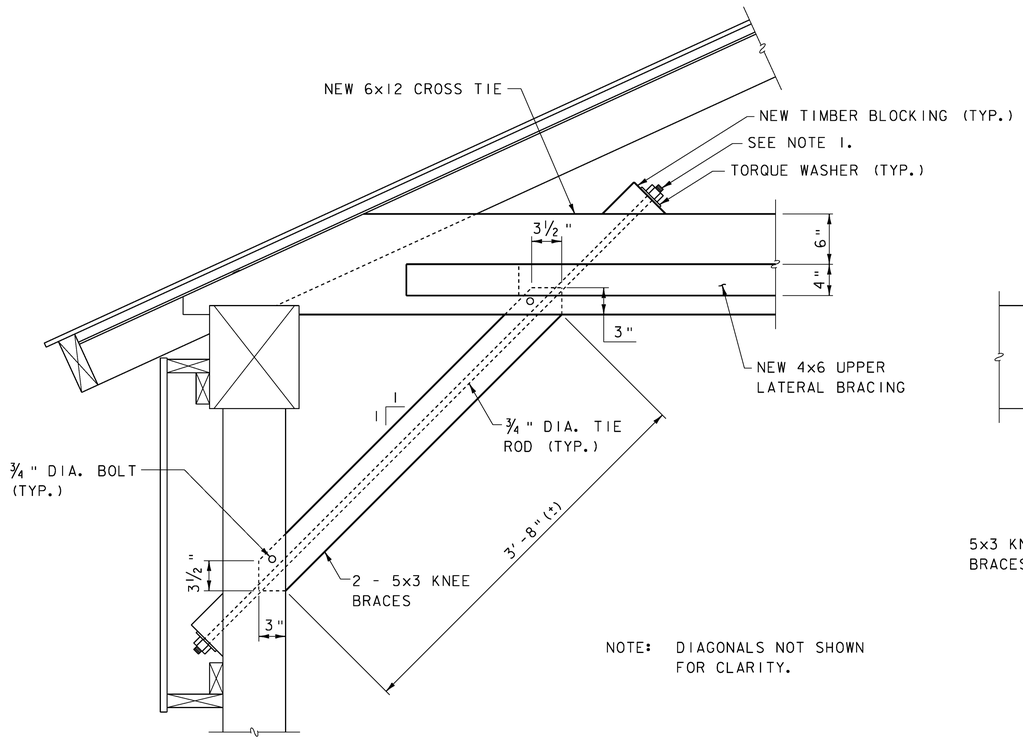
SCALE 1½" = 1'-0
1 9 6 3 0 1

NOTES

1. CARRIAGE BOLT NUTS SHALL BE TORQUED TO VALUE RECOMMENDED BY MANUFACTURER.
2. NOTCH EACH MEMBER 2" DEEP AT INTERSECTION TO PROVIDE SNUG JOINT AND SECURE WITH ½ " DIA. CARRIAGE BOLT.
3. FOR DECK LAMINATIONS ADJACENT TO THE EXISTING ARCHES, ¼-INCH DIAMETER GALVANIZED LAG SCREWS SHALL BE USED INSTEAD OF GALVANIZED SPIKES.

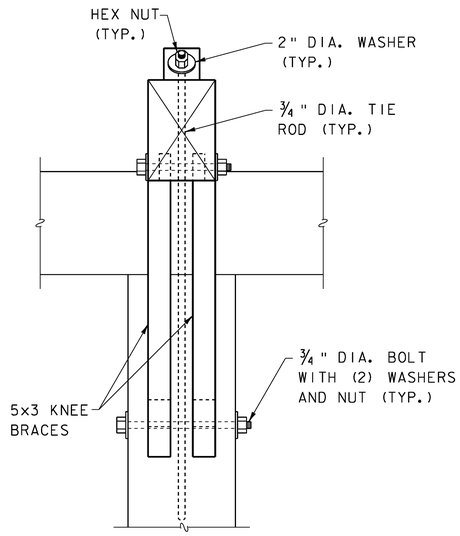
McFarland Johnson

PROJECT NAME:	WOODSTOCK	WOODSTOCK
PROJECT NUMBER:	BHO 1444(52)	ST 1444(58)
FILE NAME: z96j262d02.dgn		PLOT DATE: 10-JUL-2012
PROJECT LEADER: M. Sargent		DRAWN BY: P. Dustin
DESIGNED BY: P. Dustin		CHECKED BY: R. Joy
BRIDGE DETAILS (2 OF 11)		SHEET 34 OF 68



ELEVATION

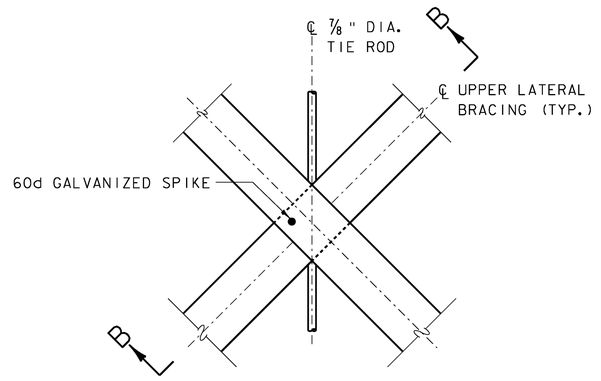
NOTE: DIAGONALS NOT SHOWN FOR CLARITY.



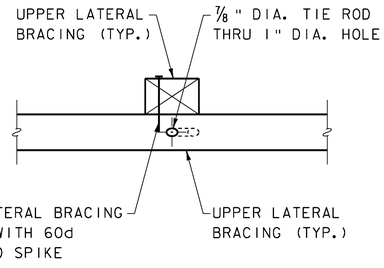
END VIEW

KNEE BRACE DETAILS

SCALE: 1½" = 1'-0"



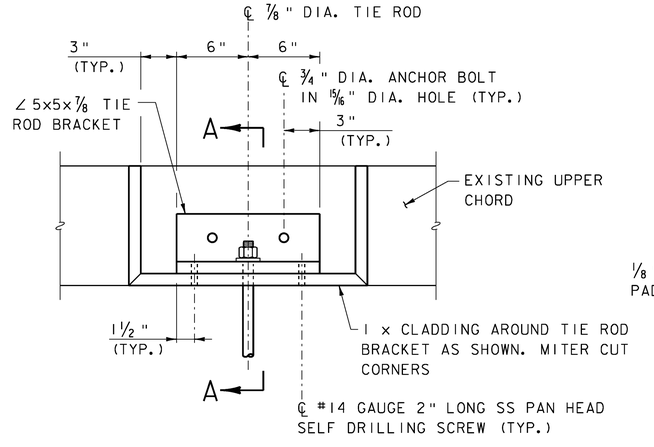
PLAN



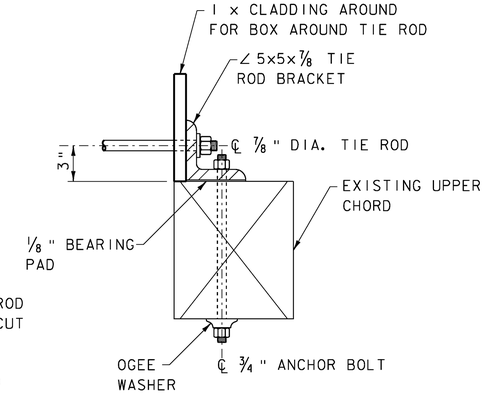
SECTION B-B

UPPER LATERAL BRACING BLOCKING DETAILS

SCALE: 1½" = 1'-0"



PLAN



SECTION A-A

TIE ROD BRACKET DETAIL

SCALE: 2" = 1'-0"

NOTES

1. TIE ROD NUTS SHALL BE TORQUED TO A VALUE RECOMMENDED BY THE MANUFACTURER TO THE SATISFACTION OF THE RESIDENT ENGINEER.

SCALE 2" = 1'-0

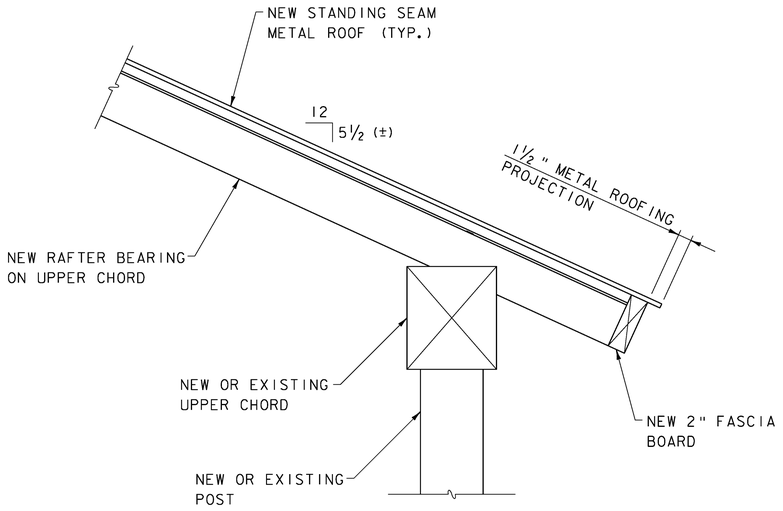
1 9 6 3 0 1

SCALE 1½" = 1'-0

1 9 6 3 0 1

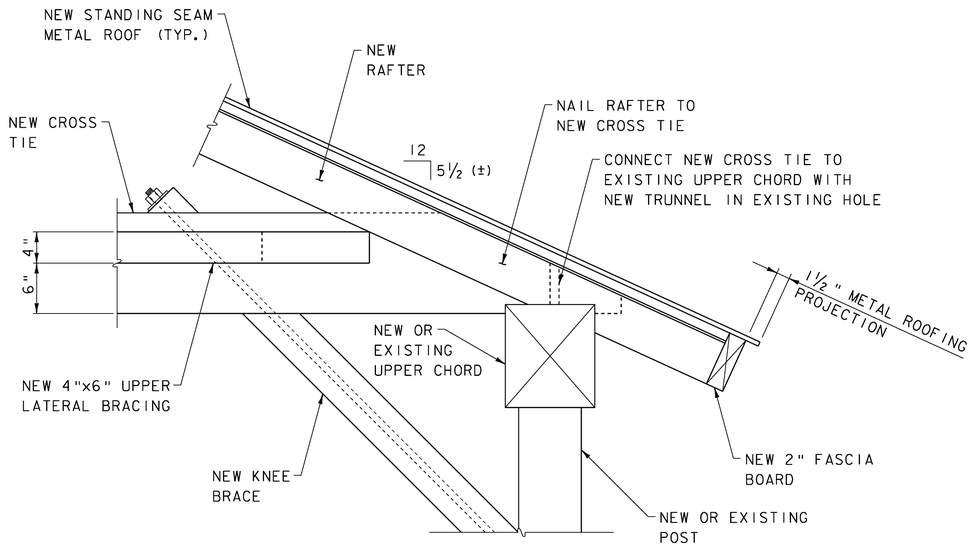
McFarland Johnson

PROJECT NAME:	WOODSTOCK	WOODSTOCK
PROJECT NUMBER:	BHO 1444 (52)	ST 1444(58)
FILE NAME: z96j262d03.dgn		PLOT DATE: 29-JUN-2012
PROJECT LEADER: M. Sargent		DRAWN BY: P. Dustin
DESIGNED BY: J. Hall/P. Dustin		CHECKED BY: R. Joy
BRIDGE DETAILS (3 OF 11)		SHEET 35 OF 68



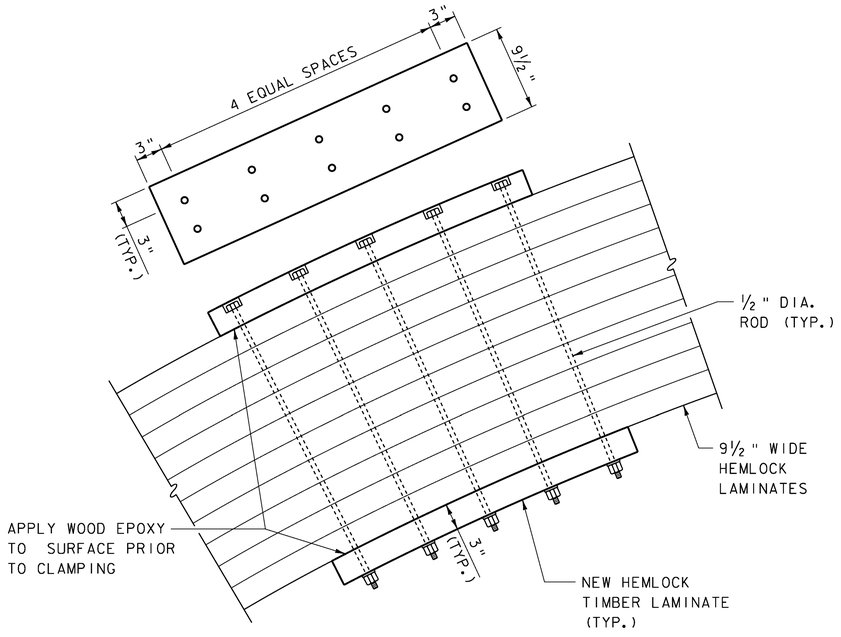
ROOF RAFTER DETAIL 1

SCALE: 1½" = 1'-0"



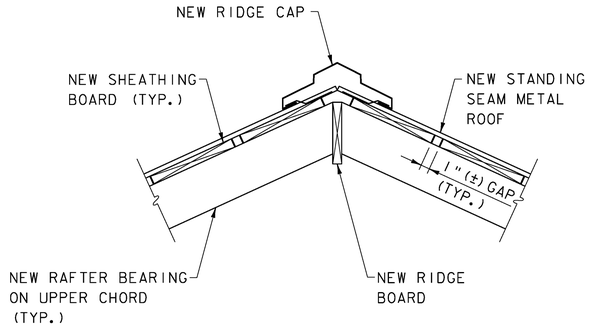
ROOF RAFTER DETAIL 2

SCALE: 1½" = 1'-0"



ARCH REPAIR DETAIL

SCALE: 1½" = 1'-0"



ROOF RIDGE DETAIL

SCALE: 1½" = 1'-0"

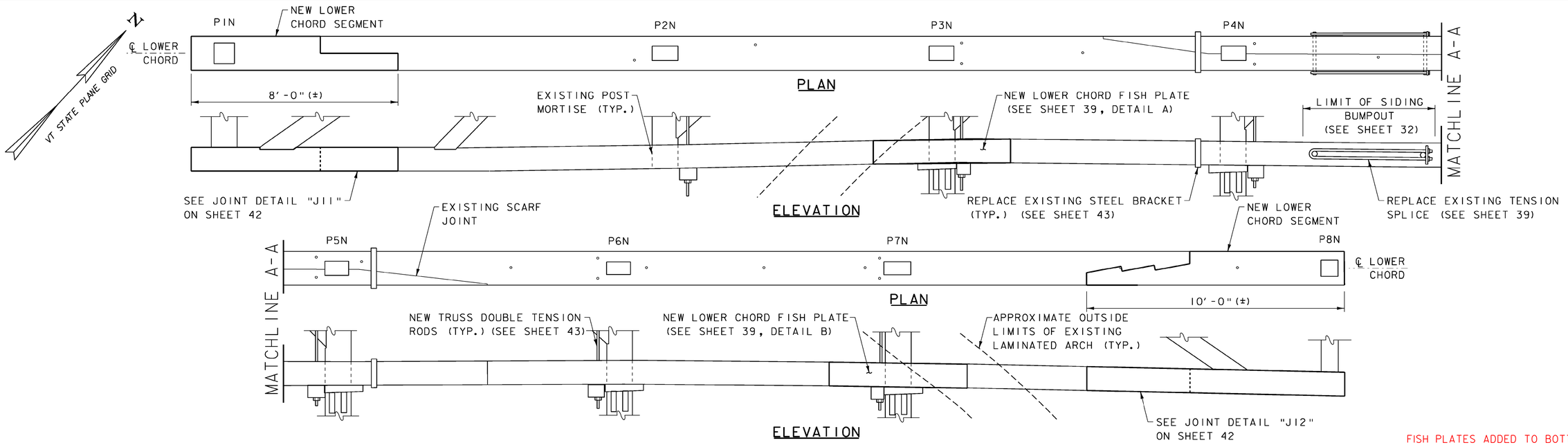
NOTES

1. ALL COSTS ASSOCIATED WITH THE ARCH REPAIR DETAIL SHALL BE INCLUDED IN ITEM 900.645, SPECIAL PROVISION (REHABILITATING COVERED BRIDGE SUPERSTRUCTURE). WOOD EPOXY SHALL BE AN APPROVED PRODUCT FROM THE SPECIAL PROVISION (WOOD EPOXY REPAIRS).

SCALE 1½" = 1'-0
1 9 6 3 0 1

McFarland Johnson

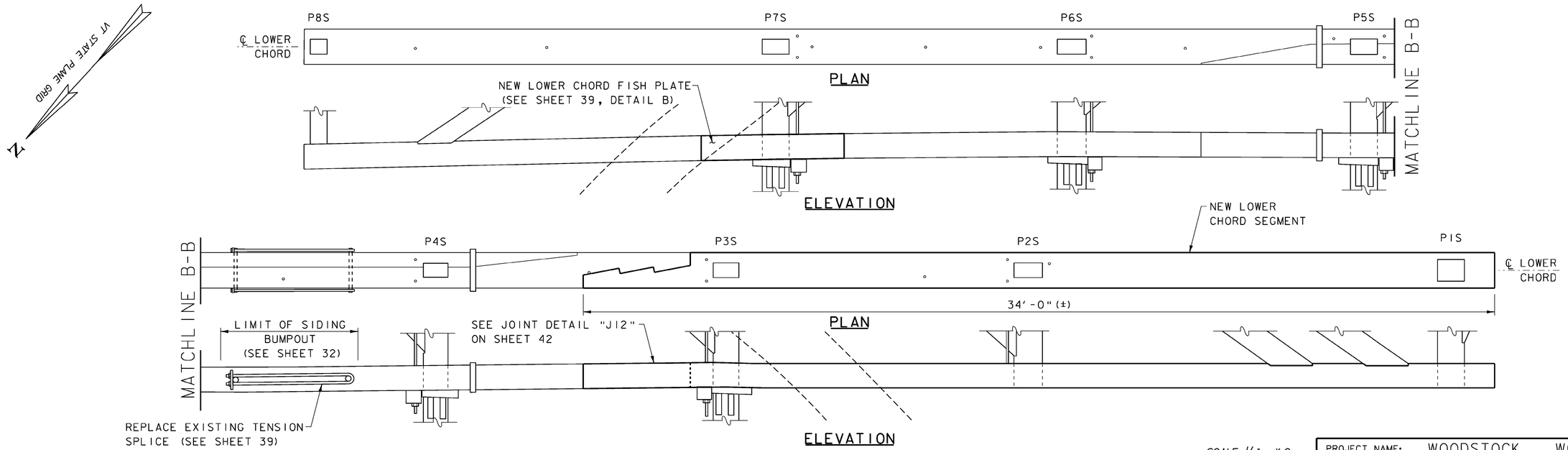
PROJECT NAME:	WOODSTOCK	WOODSTOCK
PROJECT NUMBER:	BHO 1444(52)	ST 1444(58)
FILE NAME: z96j262d04.dgn		PLOT DATE: 29-JUN-2012
PROJECT LEADER: M. Sargent		DRAWN BY: P. Dustin
DESIGNED BY: P. Dustin		CHECKED BY: R. Joy
BRIDGE DETAILS (4 OF 11)		SHEET 36 OF 68



FISH PLATES ADDED TO BOTTOM CHORDS AT ALL POST LOCATIONS

SPAN 1 - LOWER CHORD (NORTH)

(LOOKING NORTH)
SCALE: ½" = 1'-0"



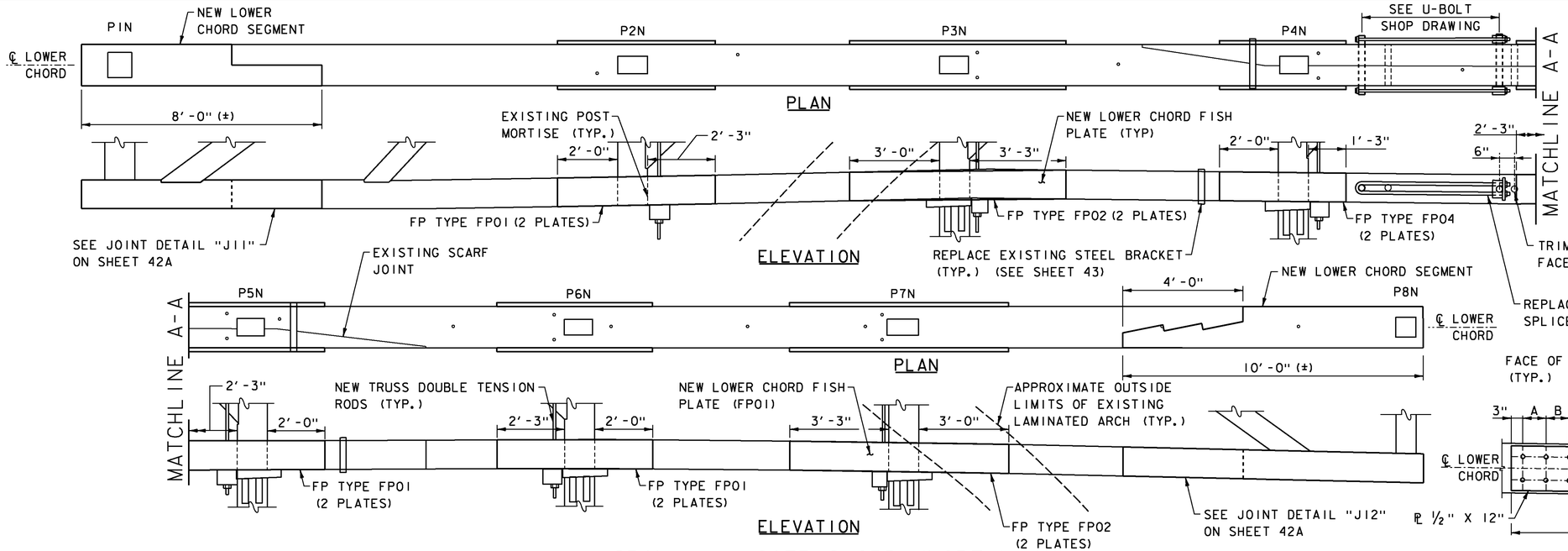
SPAN 1 - LOWER CHORD (SOUTH)

(LOOKING SOUTH)
SCALE: ½" = 1'-0"

SCALE ½" = 1'-0
1 0 1 2

McFarland Johnson

PROJECT NAME:	WOODSTOCK	WOODSTOCK	
PROJECT NUMBER:	BHO 1444(52)	ST 1444(58)	
FILE NAME: z96j262d05.dgn		PLOT DATE: 29-JUN-2012	
PROJECT LEADER: M. Sargent		DRAWN BY: P. Dustin	
DESIGNED BY: J. Hall		CHECKED BY: R. Joy	
BRIDGE DETAILS (5 OF 11)		SHEET 37 OF 68	



SPAN 1 - LOWER CHORD (NORTH)

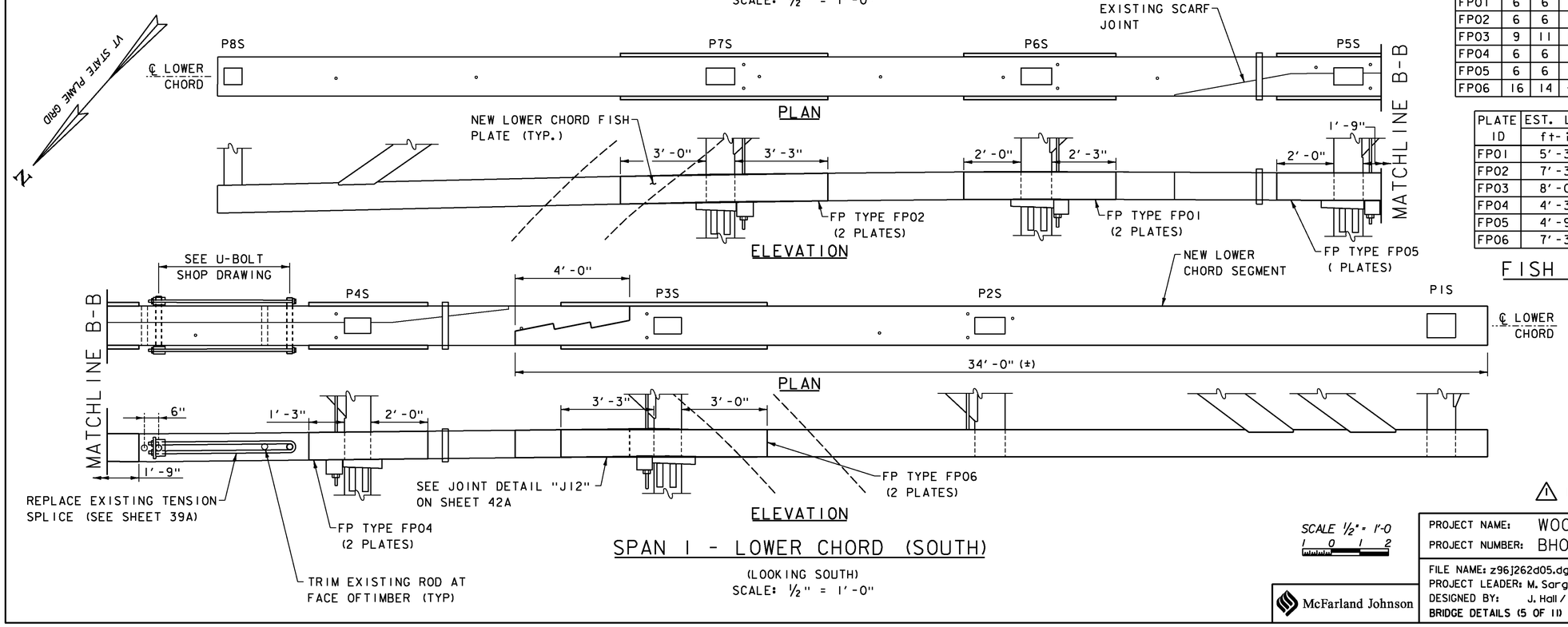
(LOOKING NORTH)
SCALE: ½" = 1'-0"

PLATE ID	"A" in	"B" in	"C" in	"D" in	"E" in	"F" in	"G" in	"H" in	"I" in	"J" in
FP01	6	6	6	--	--	6	6	6	--	--
FP02	6	6	6	6	6	6	6	6	6	6
FP03	9	11	11	8	--	6	6	6	6	6
FP04	6	6	6	--	--	6	--	--	--	--
FP05	6	6	6	--	--	6	6	--	--	--
FP06	16	14	--	--	--	6	6	6	6	6

PLATE ID	EST. L (±) ft-in	NUMBER OF PLATES SPAN 1	SPAN 2	TOTAL
FP01	5'-3"	8	14	22
FP02	7'-3"	6	6	12
FP03	8'-0"	--	2	2
FP04	4'-3"	4	--	4
FP05	4'-9"	2	--	2
FP06	7'-3"	2	--	2

FISH PLATE TABLES

N.T.S



SPAN 1 - LOWER CHORD (SOUTH)

(LOOKING SOUTH)
SCALE: ½" = 1'-0"

SCALE ½" = 1'-0
1 0 1 2

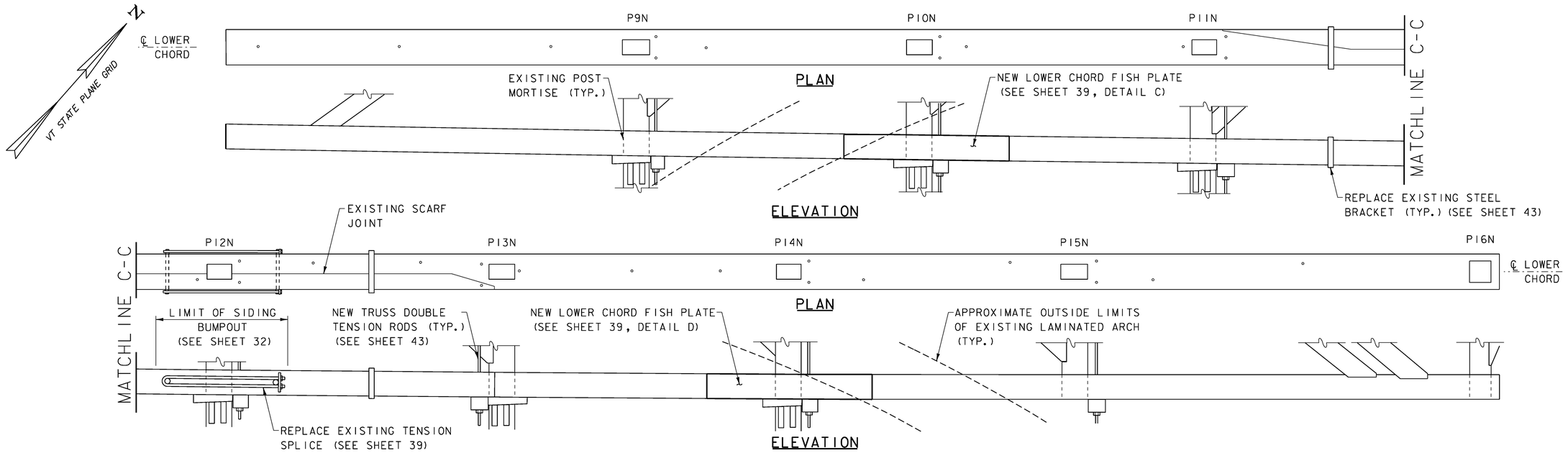
⚠ 1/7/2013 UPDATE LIMITS OF REPAIR

McFarland Johnson

PROJECT NAME:	WOODSTOCK	WOODSTOCK
PROJECT NUMBER:	BHO 1444(52)	ST 1444(58)

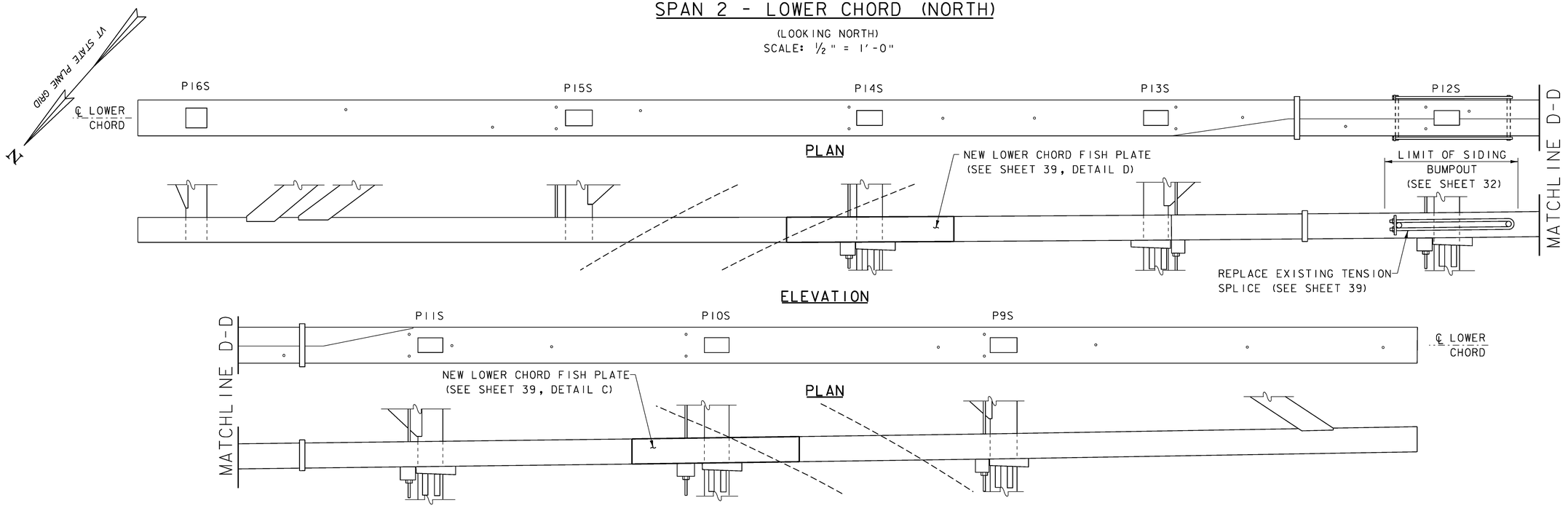
FILE NAME: z96J262d05.dgn
PROJECT LEADER: M. Sargent
DESIGNED BY: J. Hall / S. Della
BRIDGE DETAILS (5 OF 11)

PLOT DATE: $$$$DATE$$$
DRAWN BY: P. Dustin
CHECKED BY: R. Joy
SHEET 37A OF 68



SPAN 2 - LOWER CHORD (NORTH)

(LOOKING NORTH)
SCALE: 1/2" = 1'-0"



SPAN 2 - LOWER CHORD (SOUTH)

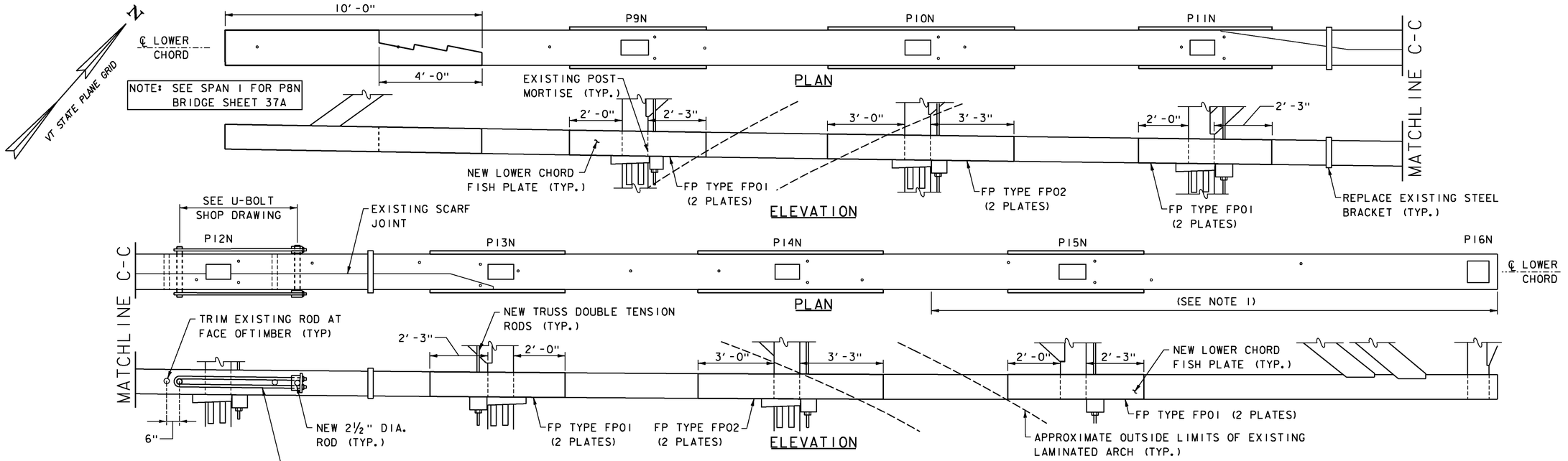
(LOOKING SOUTH)
SCALE: 1/2" = 1'-0"

McFarland Johnson

PROJECT NAME:	WOODSTOCK	WOODSTOCK
PROJECT NUMBER:	BHO 1444(52)	ST 1444(58)

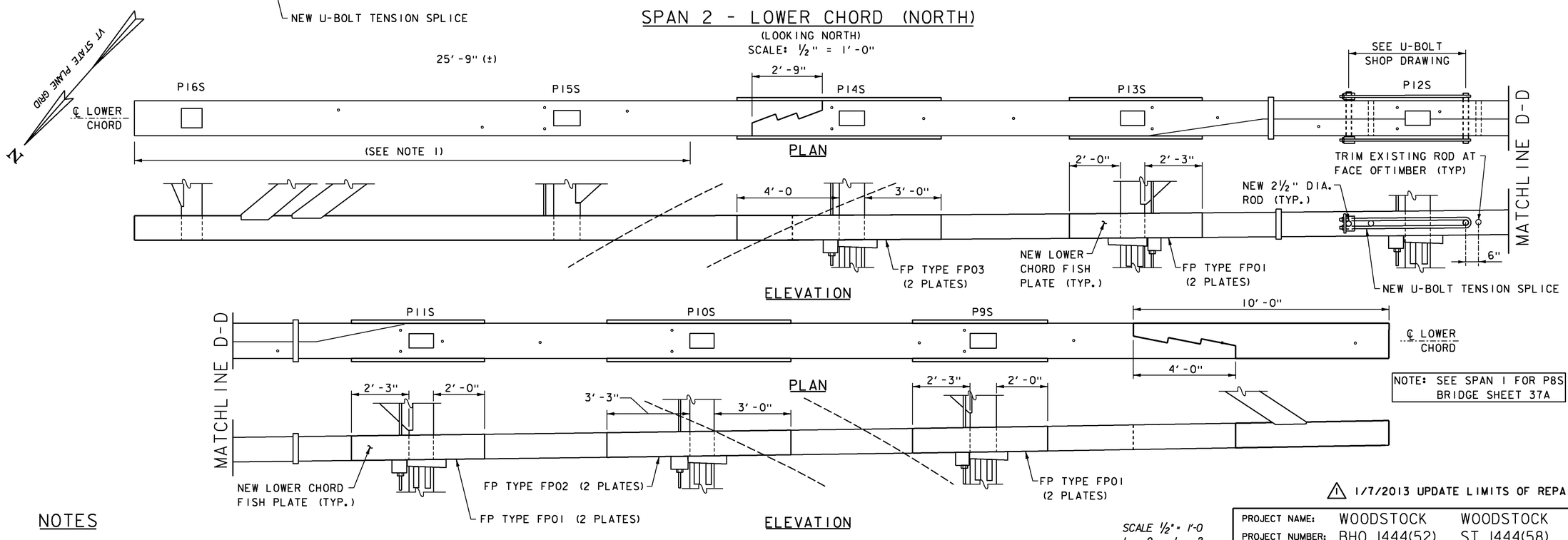
FILE NAME: z96J262d06.dgn
PROJECT LEADER: M. Sargent
DESIGNED BY: J. Hall
BRIDGE DETAILS (6 OF 11)

PLOT DATE: 29-JUN-2012
DRAWN BY: P. Dustin
CHECKED BY: R. Joy
SHEET 38 OF 68



SPAN 2 - LOWER CHORD (NORTH)

(LOOKING NORTH)
SCALE: ½" = 1'-0"



SPAN 2 - LOWER CHORD (SOUTH)

(LOOKING SOUTH)
SCALE: ½" = 1'-0"

NOTES

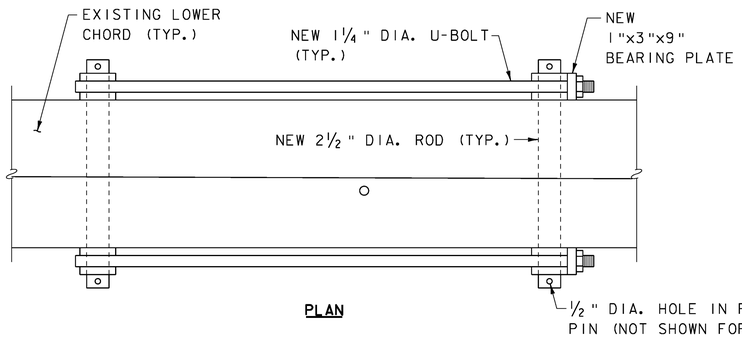
1. PORTION OF LOWER CHORD REPLACED IN 1952
2. FOR FISH PLATE TABLE, SEE BRIDGE SHEET 37A

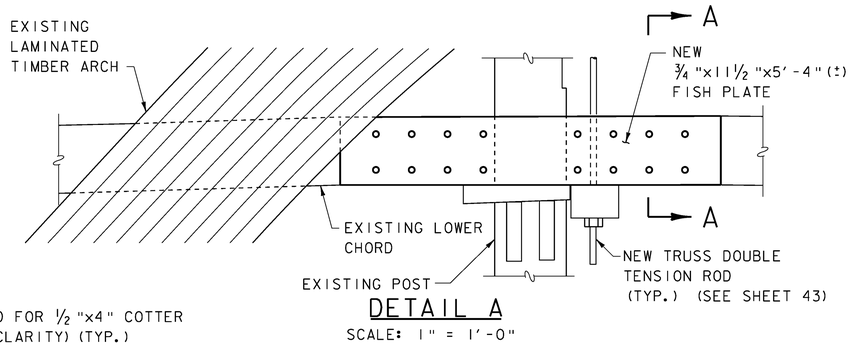
SCALE ½" = 1'-0
1 0 1 2

⚠1 1/7/2013 UPDATE LIMITS OF REPAIR

McFarland Johnson

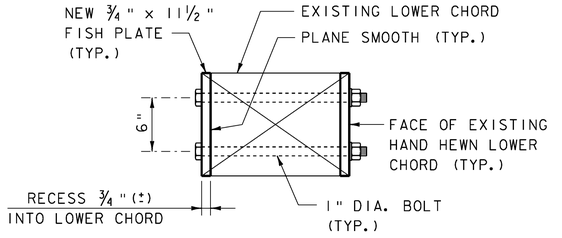
PROJECT NAME:	WOODSTOCK	WOODSTOCK
PROJECT NUMBER:	BHO 1444(52)	ST 1444(58)
FILE NAME: z96j262d06.dgn		PLOT DATE: $$$$DATE$$$
PROJECT LEADER: M. Sargent		DRAWN BY: P. Dustin
DESIGNED BY: J. Hall / S. Della		CHECKED BY: R. Joy
BRIDGE DETAILS (6 OF 11)		SHEET 38A OF 68





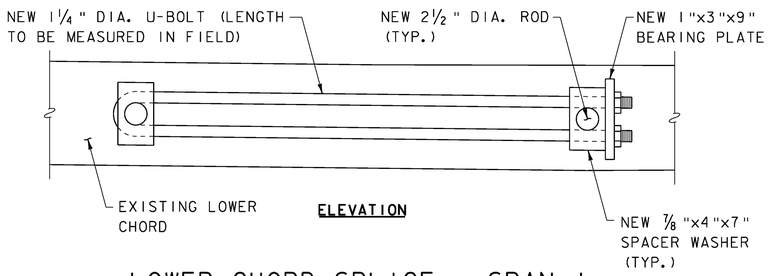
DETAIL A

SCALE: 1" = 1'-0"



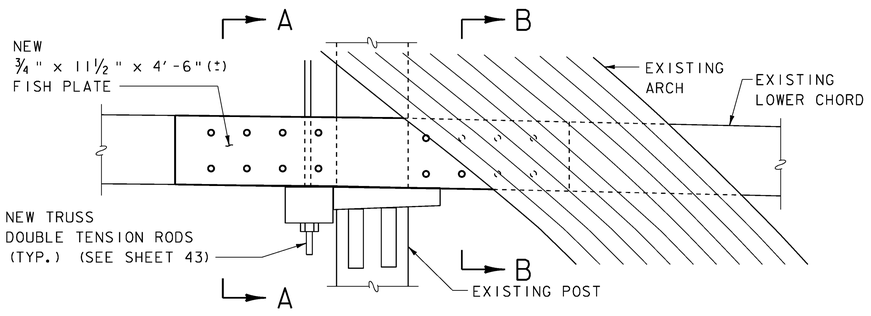
SECTION A-A

SCALE: 1½" = 1'-0"



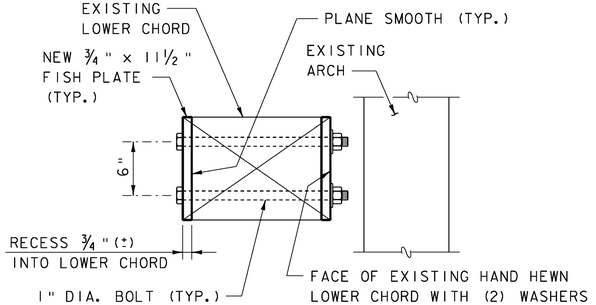
LOWER CHORD SPLICE - SPAN 1

SCALE: 1½" = 1'-0"



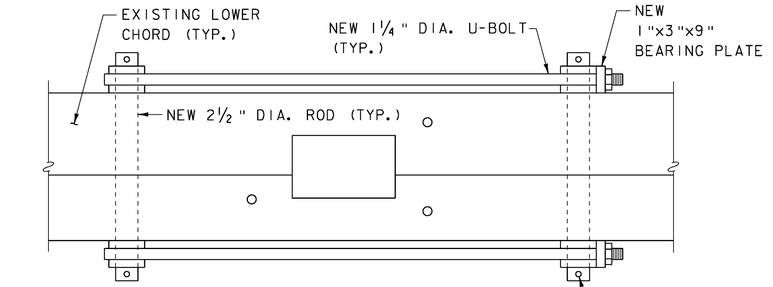
DETAIL B

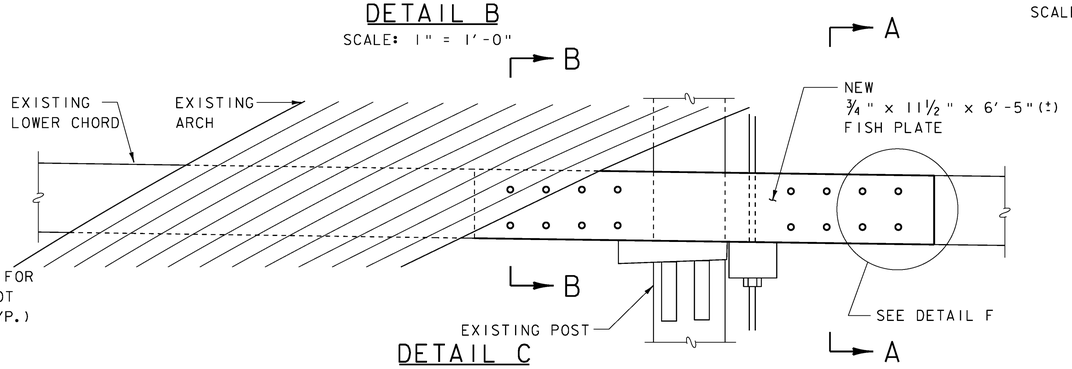
SCALE: 1" = 1'-0"



SECTION B-B

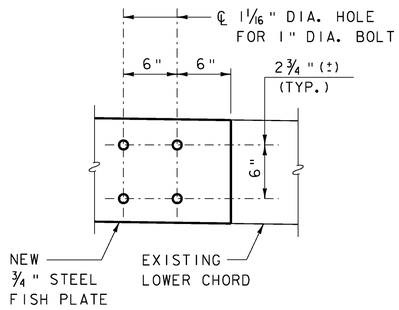
SCALE: 1½" = 1'-0"





DETAIL C

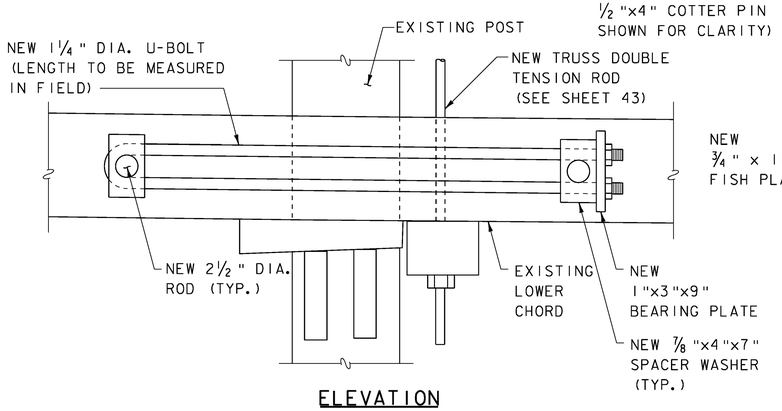
SCALE: 1" = 1'-0"



DETAIL F

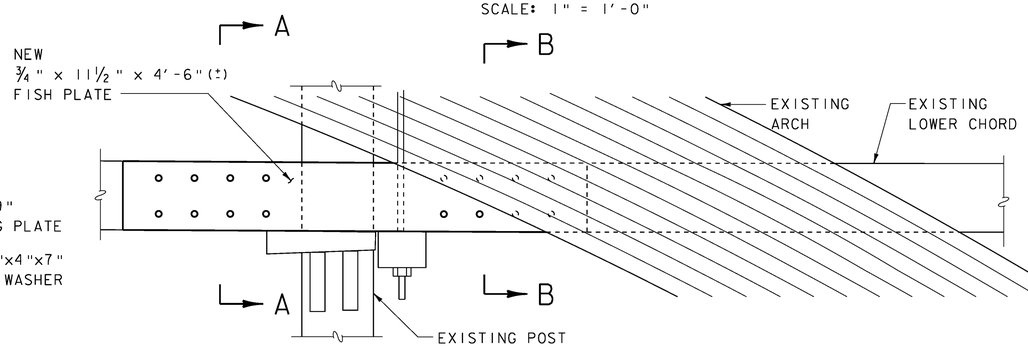
(TYP. BOTH ENDS ALL FISH PLATES)

SCALE: 1½" = 1'-0"



LOWER CHORD SPLICE - SPAN 2

SCALE: 1½" = 1'-0"



DETAIL D

SCALE: 1" = 1'-0"

SCALE 1" = 1'-0
1 9 6 3 0 1 2

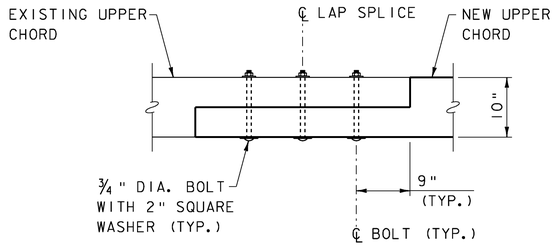
SCALE 1½" = 1'-0
1 9 6 3 0 1

PROJECT NAME:	WOODSTOCK	WOODSTOCK
PROJECT NUMBER:	BHO 1444 (52)	ST 1444(58)

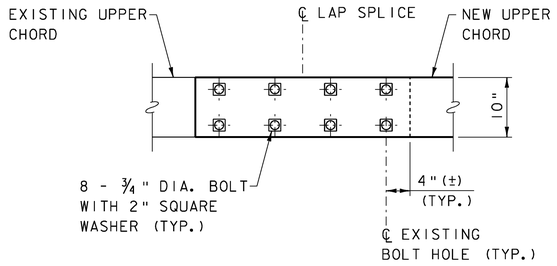
FILE NAME: z96j262d07.dgn
PROJECT LEADER: M. Sargent
DESIGNED BY: J. Hall
BRIDGE DETAILS (7 OF 11)

PLOT DATE: 29-JUN-2012
DRAWN BY: S. Merkwan
CHECKED BY: R. Joy
SHEET 39 OF 68

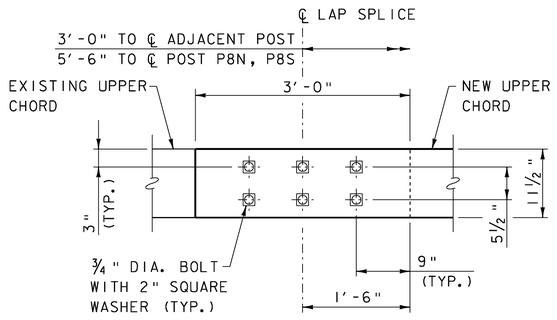
McFarland Johnson



PLAN



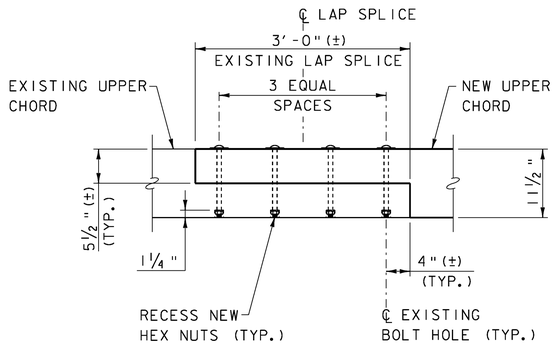
PLAN



ELEVATION

JOINT DETAIL "J1A"

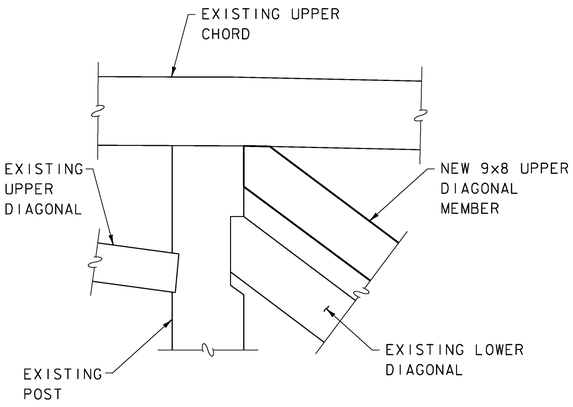
SCALE: 1" = 1'-0"



ELEVATION

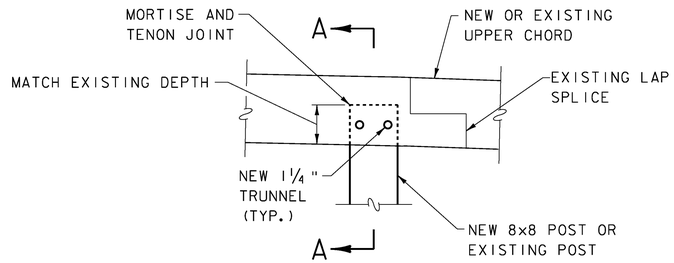
JOINT DETAIL "J1B"

SCALE: 1" = 1'-0"

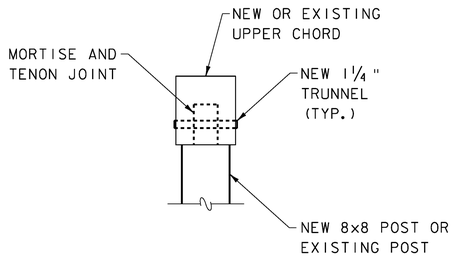


JOINT DETAIL "J2"

SCALE: 1" = 1'-0"



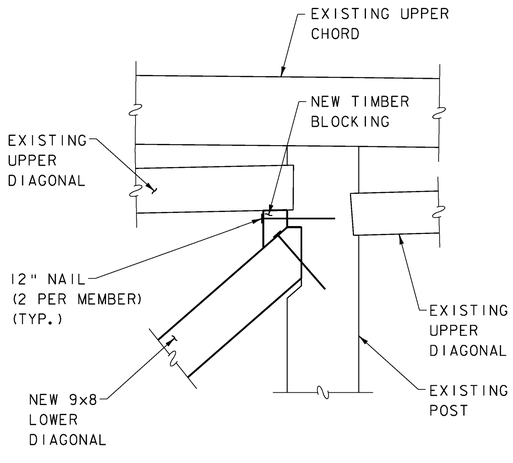
ELEVATION



SECTION A-A

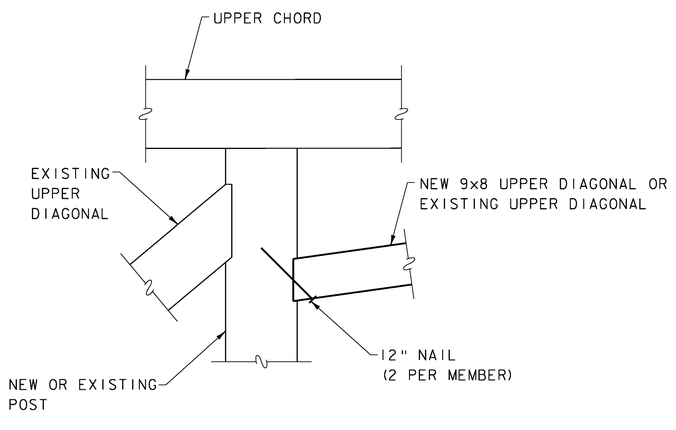
JOINT DETAIL "J5"

SCALE: 1" = 1'-0"



JOINT DETAIL "J3"

SCALE: 1" = 1'-0"



JOINT DETAIL "J4"

SCALE: 1" = 1'-0"

NOTES

1. ALL MEMBERS TO BE FIELD MEASURED AND CONNECTIONS VERIFIED PRIOR TO ORDERING NEW TIMBER.

SCALE ½" = 1'-0

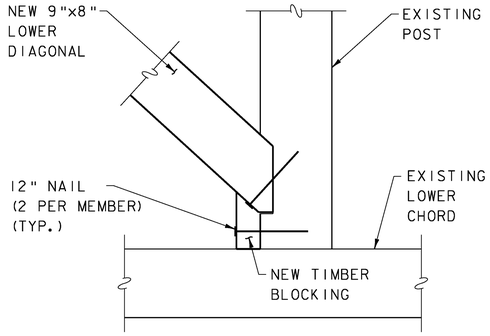
0 1 2

McFarland Johnson

PROJECT NAME:	WOODSTOCK	WOODSTOCK
PROJECT NUMBER:	BHO 1444(52)	ST 1444(58)

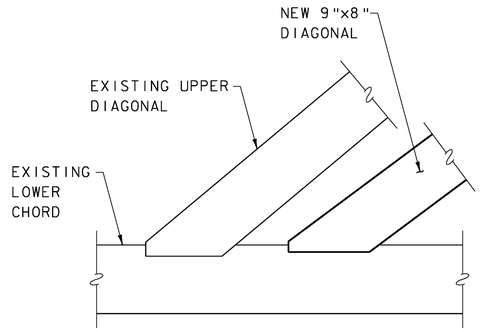
FILE NAME: z96j262d08.dgn
PROJECT LEADER: M. Sargent
DESIGNED BY: J. Hall/P. Dustin
BRIDGE DETAILS (8 OF 11)

PLOT DATE: 29-JUN-2012
DRAWN BY: P. Dustin
CHECKED BY: R. Joy
SHEET 40 OF 68



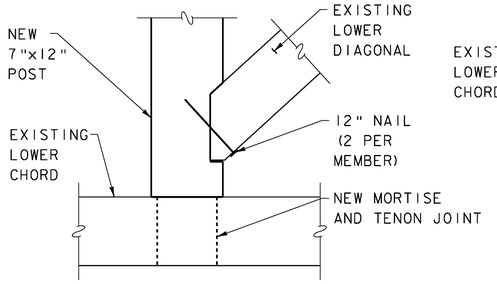
JOINT DETAIL "J6"

SCALE: 1" = 1'-0"



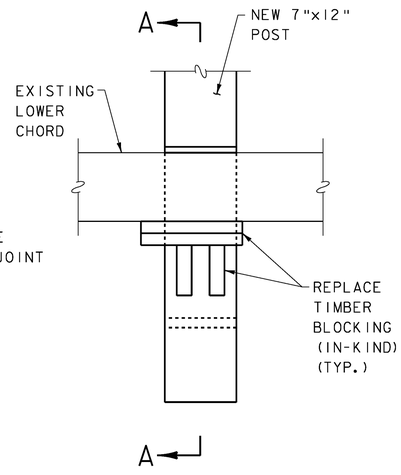
JOINT DETAIL "J7"

SCALE: 1" = 1'-0"

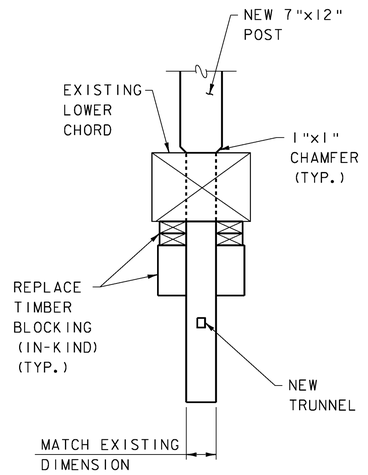


JOINT DETAIL "J8"

SCALE: 1" = 1'-0"



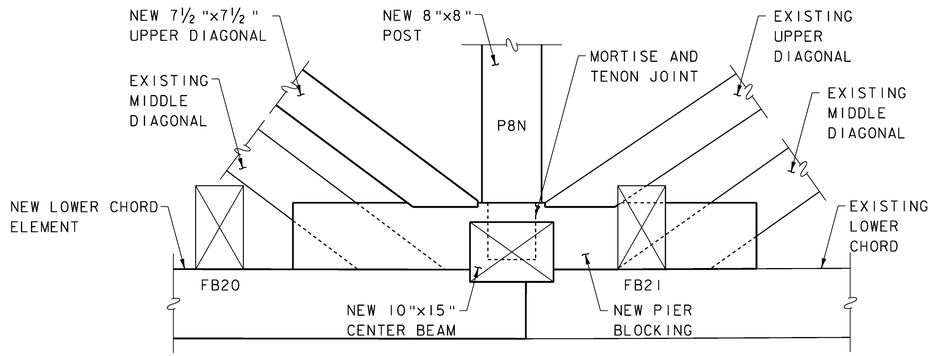
ELEVATION



SECTION A-A

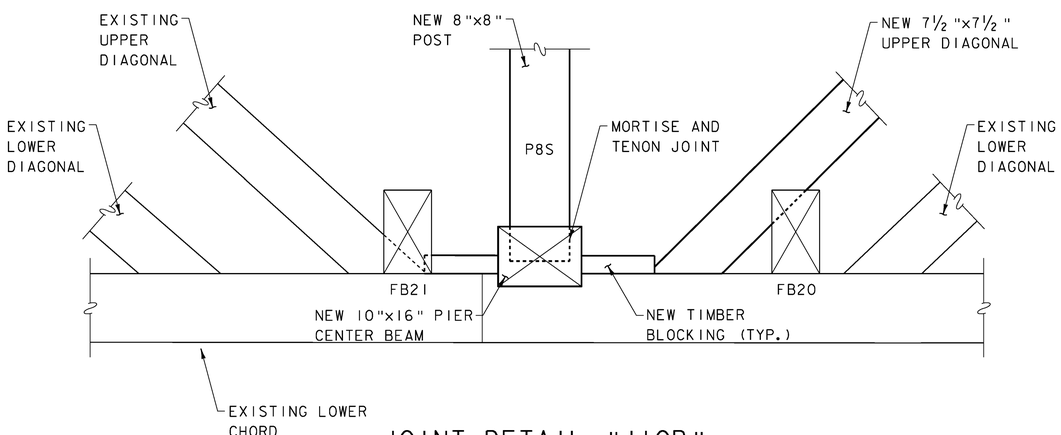
JOINT DETAIL "J9"

SCALE: 1" = 1'-0"



JOINT DETAIL "J10A"

(NORTH TRUSS)
SCALE: 1" = 1'-0"



JOINT DETAIL "J10B"

(SOUTH TRUSS)
SCALE: 1" = 1'-0"

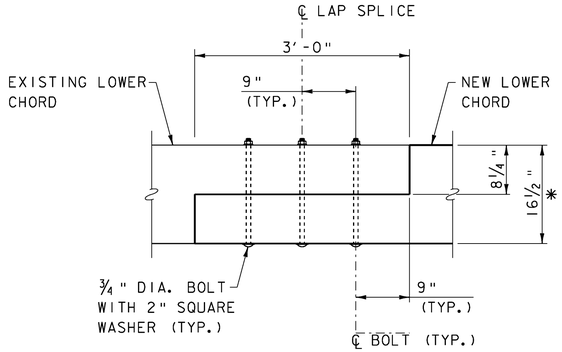
NOTES

1. ALL MEMBERS TO BE FIELD MEASURED AND CONNECTIONS VERIFIED PRIOR TO ORDERING NEW TIMBER.
2. ONCE A PORTION OF THE EXISTING BRIDGE DECK IS REMOVED FROM OVER THE PIER AREA, THE CONTRACTOR SHALL JOINTLY INSPECT THE TIMBER JOINERY AT JOINTS J10A AND J10B WITH THE RESIDENT ENGINEER TO DETERMINE THE FINAL SIZES OF NEW MEMBERS AT THESE JOINTS. ALL COSTS SHALL BE INCLUDED IN ITEM 900.645, SPECIAL PROVISION (REHABILITATING COVERED BRIDGE SUPERSTRUCTURE).

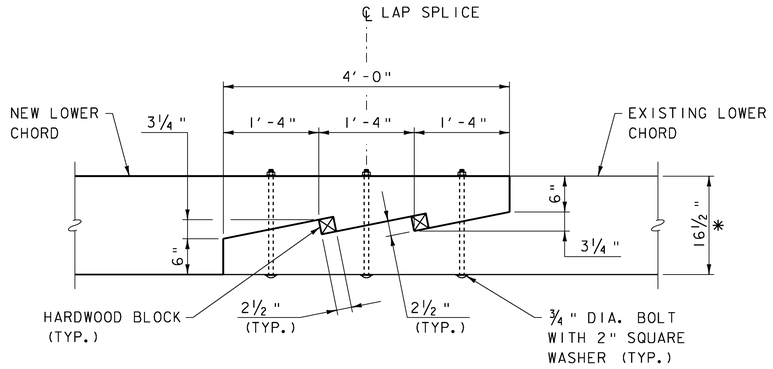
SCALE ½" = 1'-0
1 0 1 2

McFarland Johnson

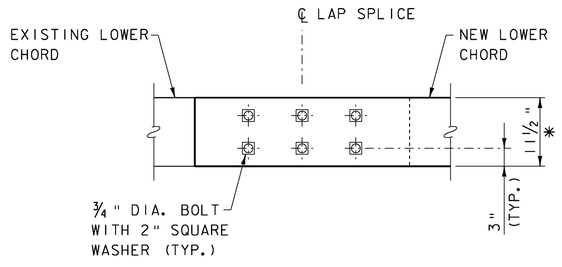
PROJECT NAME:	WOODSTOCK	WOODSTOCK
PROJECT NUMBER:	BHO 1444(52)	ST 1444(58)
FILE NAME: z96j262d09.dgn		PLOT DATE: 10-JUL-2012
PROJECT LEADER: M. Sargent		DRAWN BY: P. Dustin
DESIGNED BY: J. Hall/P. Dustin		CHECKED BY: R. Joy
BRIDGE DETAILS (9 OF 11)		SHEET 41 OF 68



PLAN



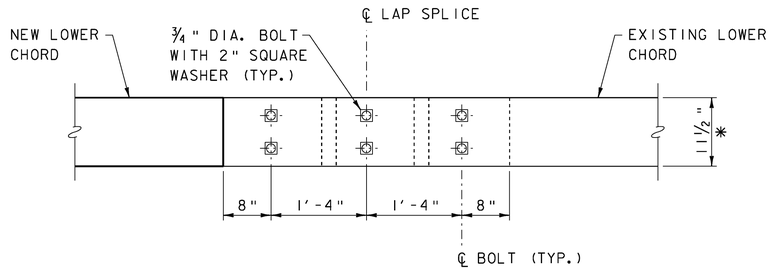
PLAN



ELEVATION

JOINT DETAIL "J11"

SCALE: 1" = 1'-0"



ELEVATION

JOINT DETAIL "J12"

SCALE: 1" = 1'-0"

* EXISTING LOWER CHORD DIMENSIONS VARY THROUGHOUT THE BRIDGE.

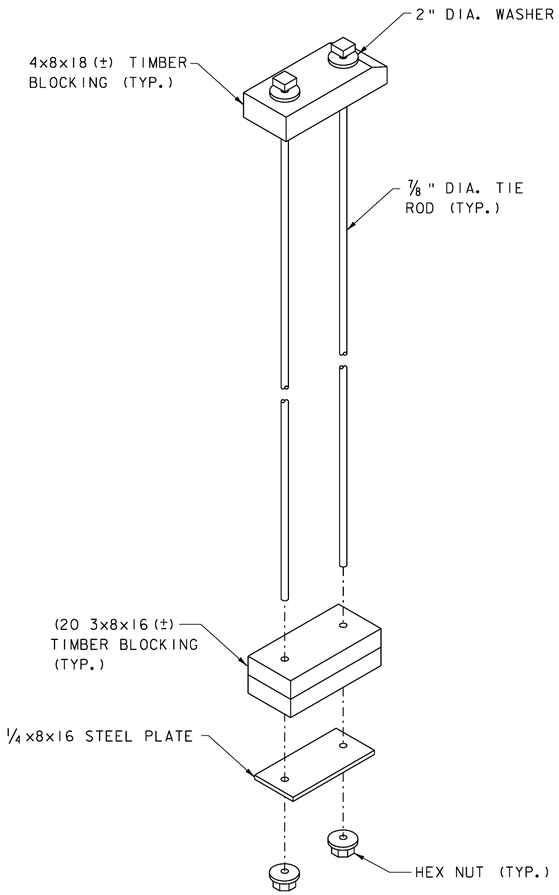
NOTES

1. ALL MEMBER DIMENSIONS AND CONNECTIONS SHALL BE MEASURED AND FIELD VERIFIED (TO THE SATISFACTION OF THE ENGINEER) PRIOR TO ORDERING NEW TIMBER.

SCALE ½" = 1'-0
1 0 1 2

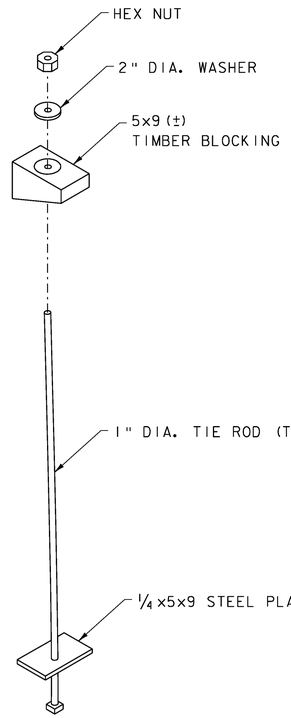
McFarland Johnson

PROJECT NAME:	WOODSTOCK	WOODSTOCK
PROJECT NUMBER:	BHO 1444(52)	ST 1444(58)
FILE NAME: z96j262d10.dgn		PLOT DATE: 29-JUN-2012
PROJECT LEADER: M. Sargent		DRAWN BY: P. Dustin
DESIGNED BY: S. Della		CHECKED BY: R. Joy
BRIDGE DETAILS (10 OF 11)		SHEET 42 OF 68



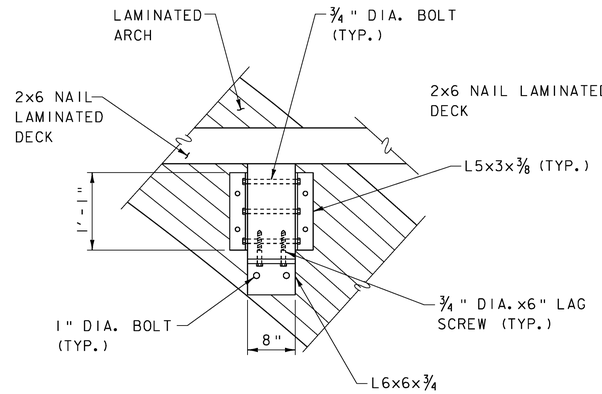
TRUSS DOUBLE TENSION RODS

SCALE: 1" = 1'-0"



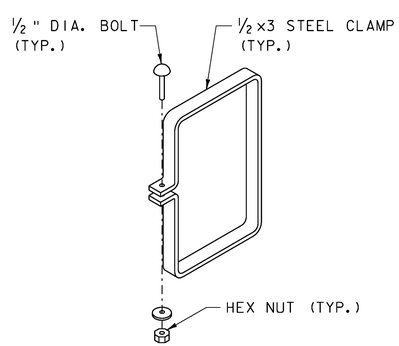
TENSION ROD AT ARCH AND FLOORBEAM

SCALE: 1" = 1'-0"



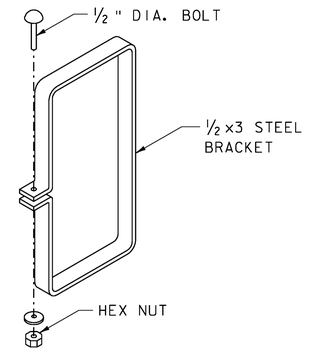
ARCH/FLOORBEAM CONNECTION

SCALE: 1" = 1'-0"



LOWER CHORD BRACKET

SCALE: 1" = 1'-0"



ARCH STEEL BRACKET

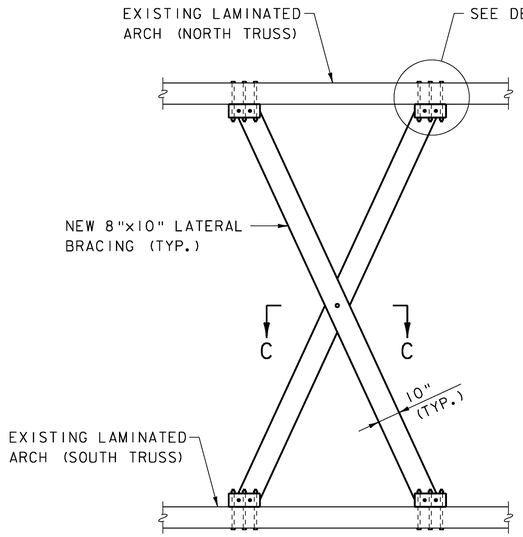
SCALE: 1" = 1'-0"

NOTE:
FINAL DIMENSIONS OF TIMBER BLOCKING SHALL BE DEVELOPED BY THE CONTRACTOR TO THE SATISFACTION OF THE RESIDENT ENGINEER.

SCALE 1" = 1'-0
1 9 6 3 0 1 2

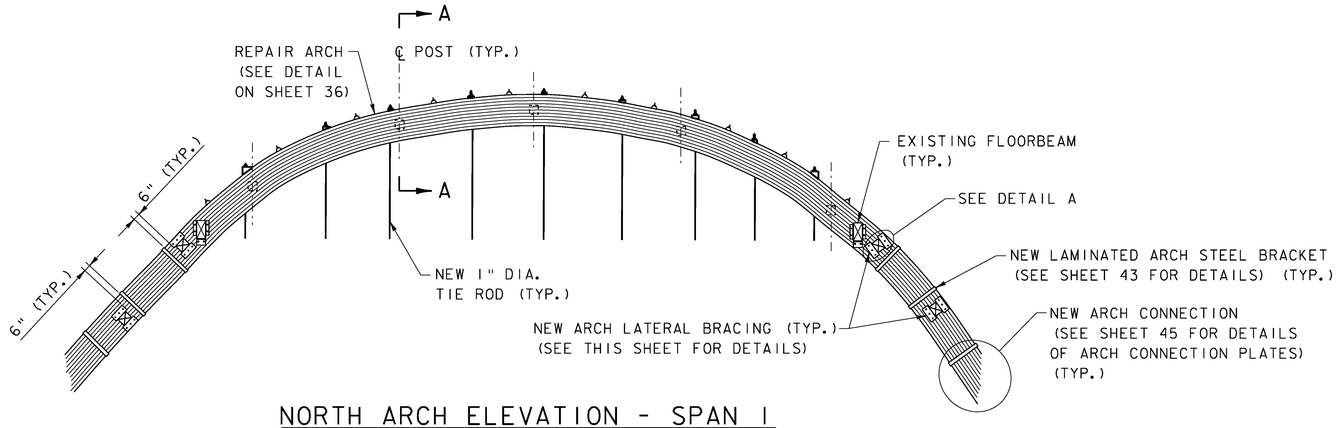
McFarland Johnson

PROJECT NAME:	WOODSTOCK	WOODSTOCK
PROJECT NUMBER:	BHO 1444(52)	ST 1444(58)
FILE NAME: z96j262dll.dgn		PLOT DATE: 29-JUN-2012
PROJECT LEADER: M. Sargent		DRAWN BY: P. Dustin
DESIGNED BY: P. Dustin		CHECKED BY: R. Joy
BRIDGE DETAILS (11 OF 11)		SHEET 43 OF 68



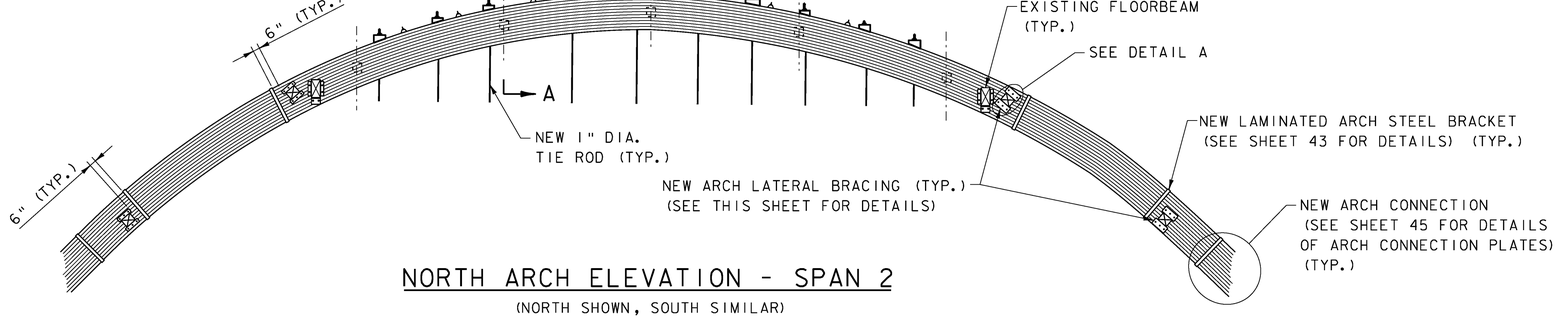
LATERAL BRACING DETAIL

(SPAN 1 SHOWN, SPAN 2 SIMILAR)
SCALE: 3/8" = 1'-0"



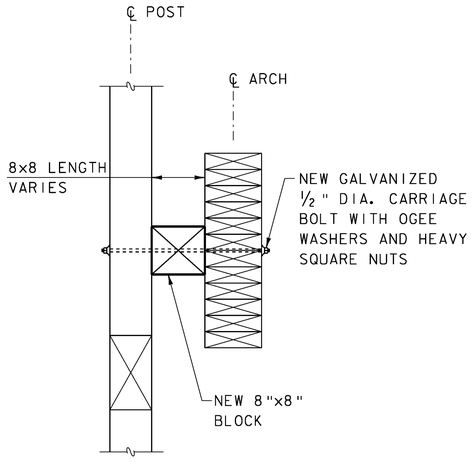
NORTH ARCH ELEVATION - SPAN 1

(NORTH SHOWN, SOUTH SIMILAR)
SCALE: 3/16" = 1'-0"



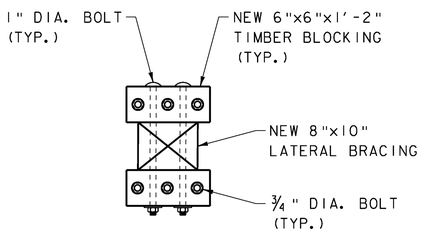
NORTH ARCH ELEVATION - SPAN 2

(NORTH SHOWN, SOUTH SIMILAR)
SCALE: 3/16" = 1'-0"



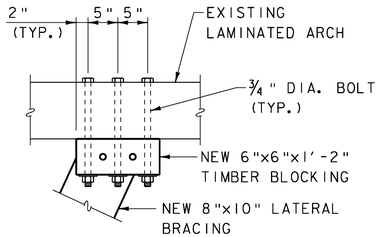
SECTION A-A

SCALE: 1" = 1'-0"



DETAIL A

SCALE: 1" = 1'-0"

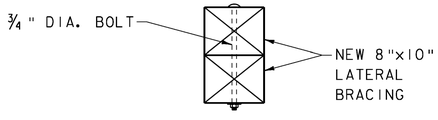


DETAIL B

SCALE: 1" = 1'-0"

SCALE 3/16" = 1'-0
1 0 2 4 6 8

SCALE 1" = 1'-0
1 9 6 3 0 1 2

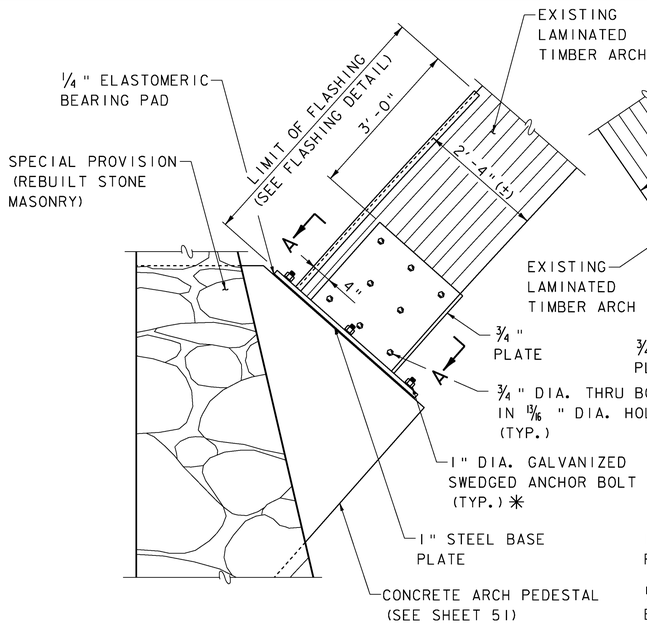


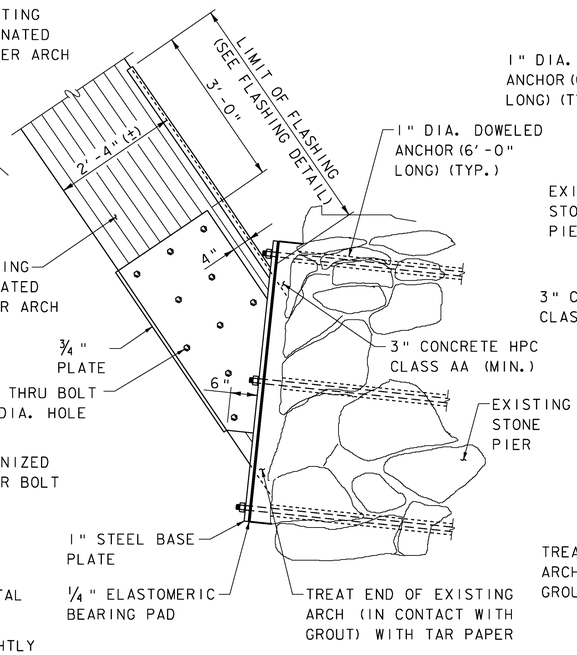
SECTION C-C

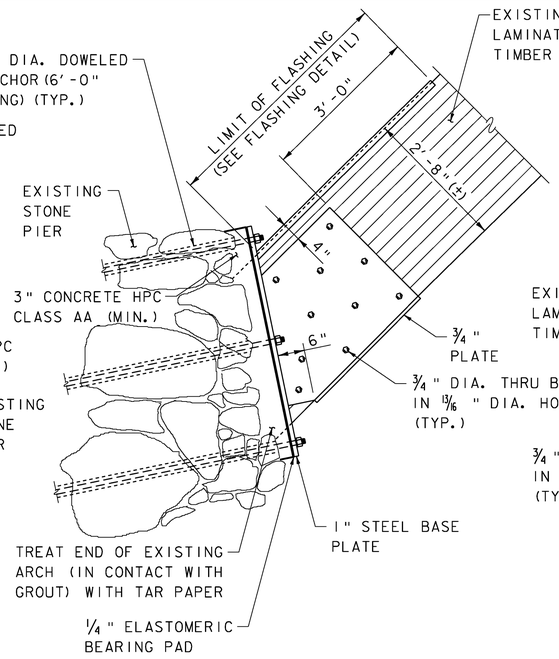
SCALE: 1" = 1'-0"

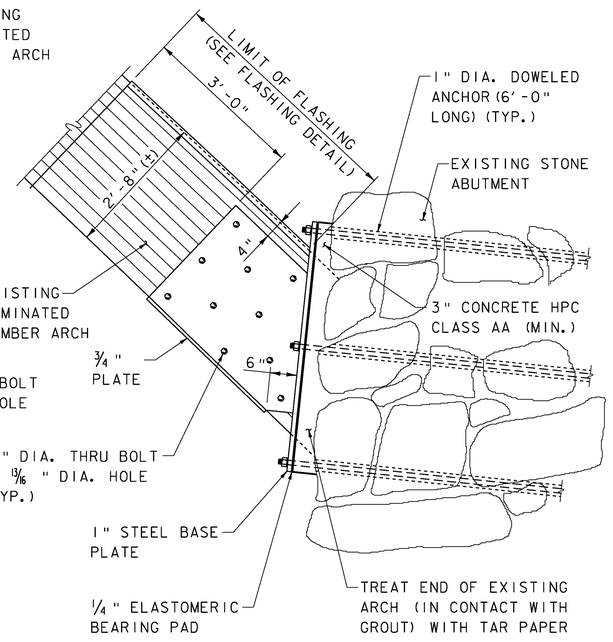
McFarland Johnson

PROJECT NAME:	WOODSTOCK	WOODSTOCK	
PROJECT NUMBER:	BHO 1442(52)	ST 1444(58)	
FILE NAME: z96j262ar1.dgn		PLOT DATE: 29-JUN-2012	
PROJECT LEADER: M. Sargent		DRAWN BY: S. Merkwan	
DESIGNED BY: J. Hall		CHECKED BY: R. Joy	
ARCH DETAILS (1 OF 2)		SHEET 44 OF 68	





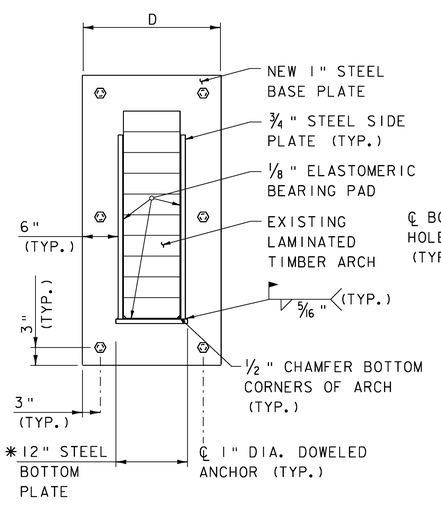




✳ CAST 15 INCHES MIN. INTO CONCRETE. BURR THREADS LIGHTLY AFTER NUT INSTALLATION TO PREVENT REMOVAL

ABUTMENT NO. 1 ARCH CONNECTION

(NORTH TRUSS - LOOKING NORTH)
SCALE: 3/4 " = 1'-0"



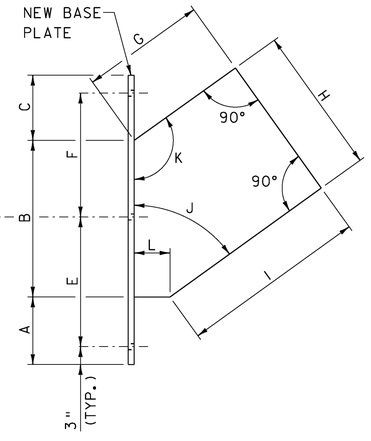
✳CONFIRM DIMENSION IN FIELD (TYP.)

SECTION A-A

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

WEST PIER ARCH CONNECTION

(NORTH TRUSS - LOOKING NORTH)
SCALE: 3/4 " = 1'-0"



SIDE PLATE ELEVATION

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

EAST PIER ARCH CONNECTION

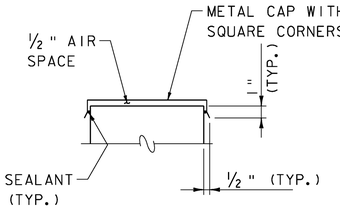
(NORTH TRUSS - LOOKING NORTH)
SCALE: 3/4 " = 1'-0"

ABUTMENT NO. 2 ARCH CONNECTION

(NORTH TRUSS - LOOKING NORTH)
SCALE: 3/4 " = 1'-0"

STEEL PLATE DIMENSION TABLE (SEE NOTE 2)

		ABUTMENT NO. 1 (NORTH)		ABUTMENT NO. 1 (SOUTH)		WEST PIER (NORTH)		WEST PIER (SOUTH)		EAST PIER (NORTH)		EAST PIER (SOUTH)		ABUTMENT NO. 2 (NORTH)		ABUTMENT NO. 2 (SOUTH)	
		EST.	ACTUAL	EST.	ACTUAL	EST.	ACTUAL	EST.	ACTUAL	EST.	ACTUAL	EST.	ACTUAL	EST.	ACTUAL	EST.	ACTUAL
BASE PLATE	A	8"		8"		8"		8"		11 1/2"		11 1/2"		1'-1"		1'-1"	
	B	2'-0"		2'-0"		2'-6"		2'-6"		2'-5 3/4"		2'-5 3/4"		2'-7 1/4"		2'-7 1/4"	
	C	10"		10"		1'-1"		1'-1"		11 1/4"		11 1/4"		1-1 3/4"		1-1 3/4"	
	D	2'-0"		2'-0"		2'-0"		2'-0"		2'-0"		2'-0"		2'-0"		2'-0"	
	E	1'-6"		1'-6"		2'-4 1/2"		2'-4 1/2"		1'-11 1/4"		1'-11 1/4"		2'-2"		2'-2"	
	F	1'-6"		1'-6"		2'-4 1/2"		2'-4 1/2"		1'-11 1/4"		1'-11 1/4"		2'-2"		2'-2"	
SIDE PLATES	G	1'-11 1/4"		1'-11 1/4"		2'-0"		2'-0"		1'-9 1/2"		1'-9 1/2"		1'-10"		1'-10"	
	H	2'-0"		2'-0"		2'-0"		2'-0"		2'-4"		2'-4"		2'-4 1/4"		2'-4 1/4"	
	I	1'-11 1/4"		1'-11 1/4"		3'-7"		3'-7"		2'-8 3/4"		2'-8 3/4"		3'-0 1/2"		3'-0 1/2"	
	J	90°		90°		40° 9'		40° 9'		56° 36'		56° 36'		51° 58'		51° 58'	
	K	90°		90°		139° 51'		139° 51'		123° 24'		123° 24'		128° 2'		128° 2'	
	L	0		0		6"		6"		6"		6"		6"		6"	



FLASHING DETAIL

SCALE: 2" = 1'-0"

NOTES

1. ALL COSTS ASSOCIATED WITH CONSTRUCTION OF ARCH CONNECTIONS SHALL BE INCLUDED IN ITEM 900.620 SPECIAL PROVISION (TIMBER ARCH BEARING CONNECTION). SEE GENERAL NOTES AND SPECIAL PROVISIONS.
2. THE ESTIMATED (EST.) DIMENSIONS DEPICTED HAVE BEEN PROVIDED FOR BIDDING PURPOSES ONLY. THE CONTRACTOR SHALL DEVELOP FINAL DIMENSIONS BASED ON ACTUAL FIELD MEASUREMENTS.

SCALE 3/4" = 1'-0
0 1 2

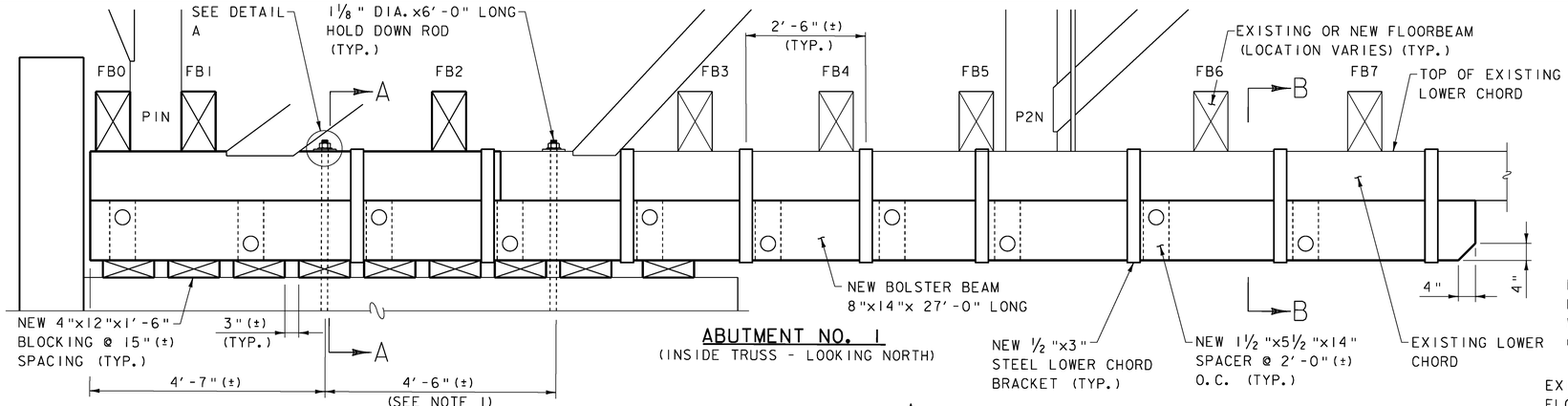
SCALE 1 1/2" = 1'-0
1 9 6 3 0 1

McFarland Johnson

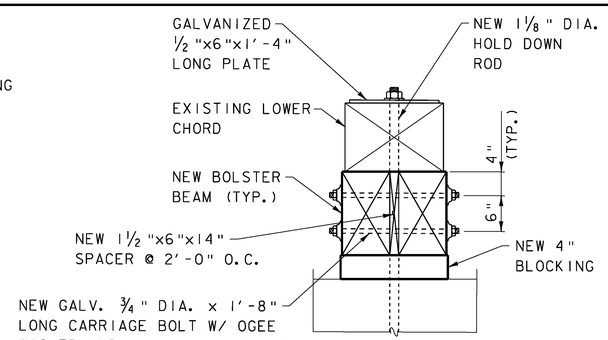
PROJECT NAME: WOODSTOCK WOODSTOCK
PROJECT NUMBER: BHO 1442(52) ST 1444(58)

FILE NAME: z96j262ar2.dgn
PROJECT LEADER: M. Sargent
DESIGNED BY: J. Hall/P. Dustin
ARCH DETAILS (2 OF 2)

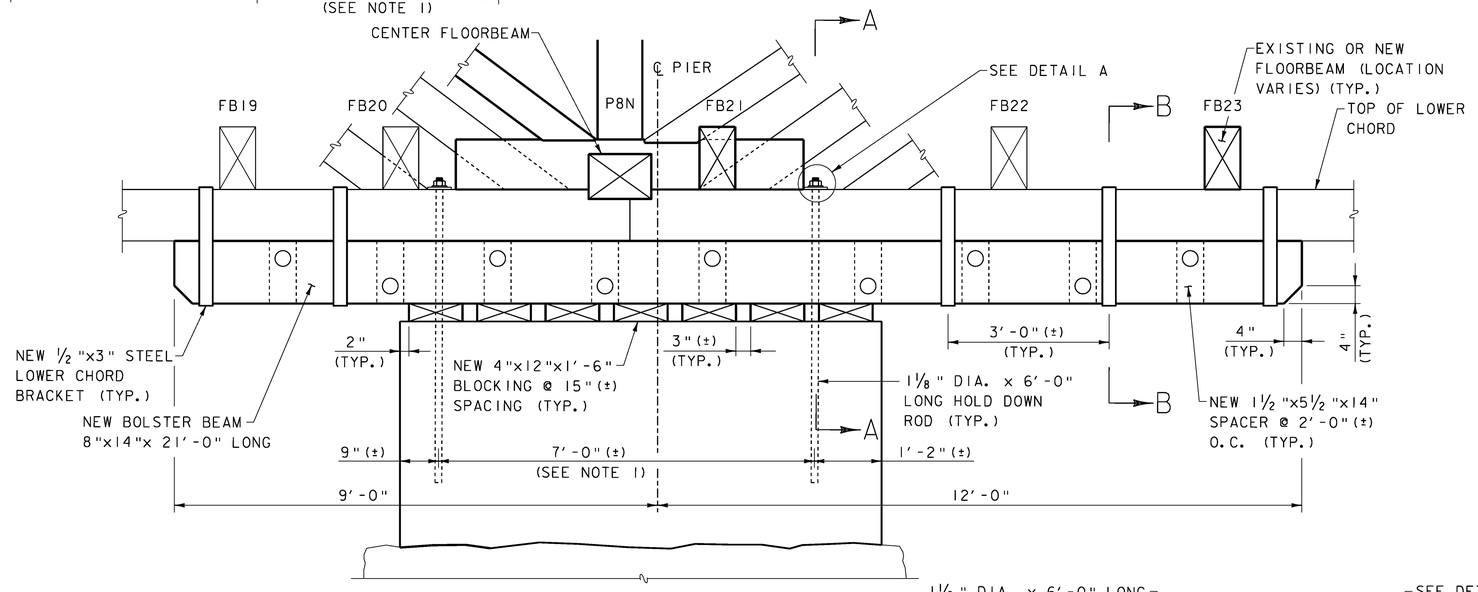
PLOT DATE: 29-JUN-2012
DRAWN BY: P. Dustin
CHECKED BY: R. Joy
SHEET 45 OF 68



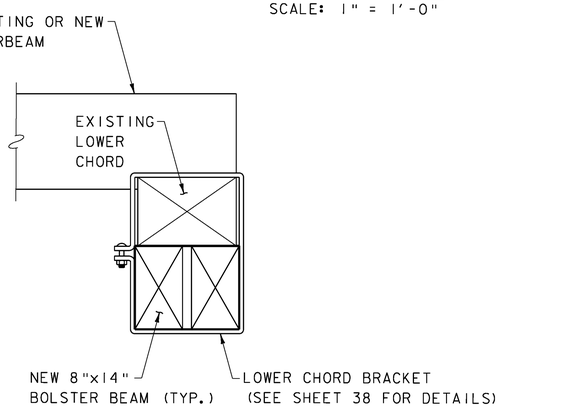
ABUTMENT NO. 1
(INSIDE TRUSS - LOOKING NORTH)



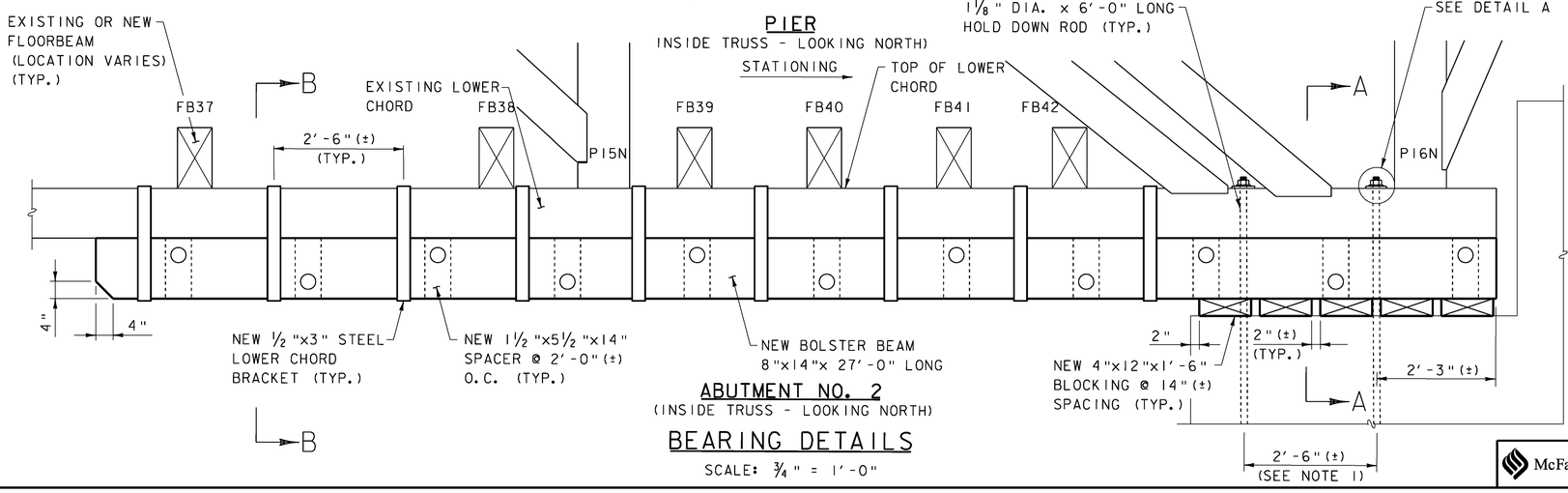
SECTION A-A
SCALE: 1" = 1'-0"



PIER
INSIDE TRUSS - LOOKING NORTH)

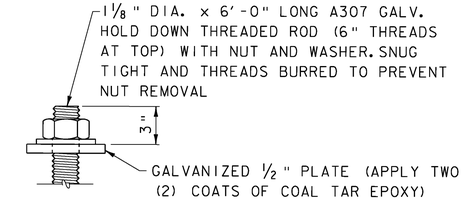


SECTION B-B
SCALE: 1" = 1'-0"



ABUTMENT NO. 2
(INSIDE TRUSS - LOOKING NORTH)

BEARING DETAILS
SCALE: ¾" = 1'-0"



DETAIL A
NOT TO SCALE

SCALE ¾" = 1'-0

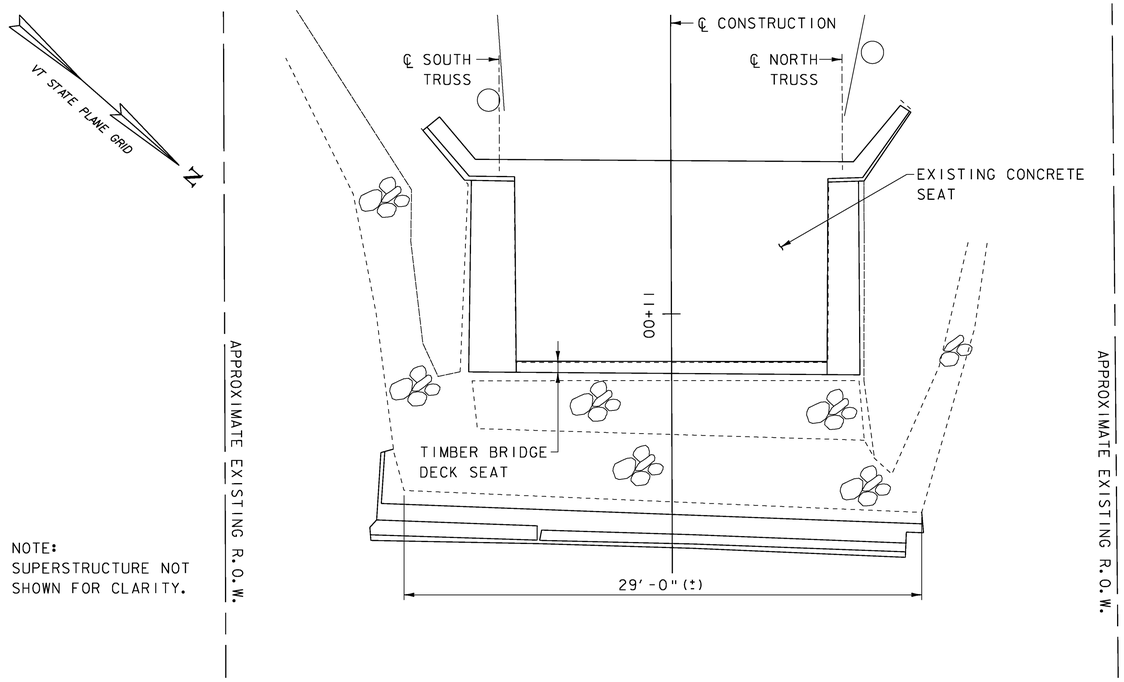
SCALE 1" = 1'-0

NOTES

1. HOLD DOWN RODS SHALL BE PLACED AROUND TRUSS MEMBERS.

McFarland Johnson

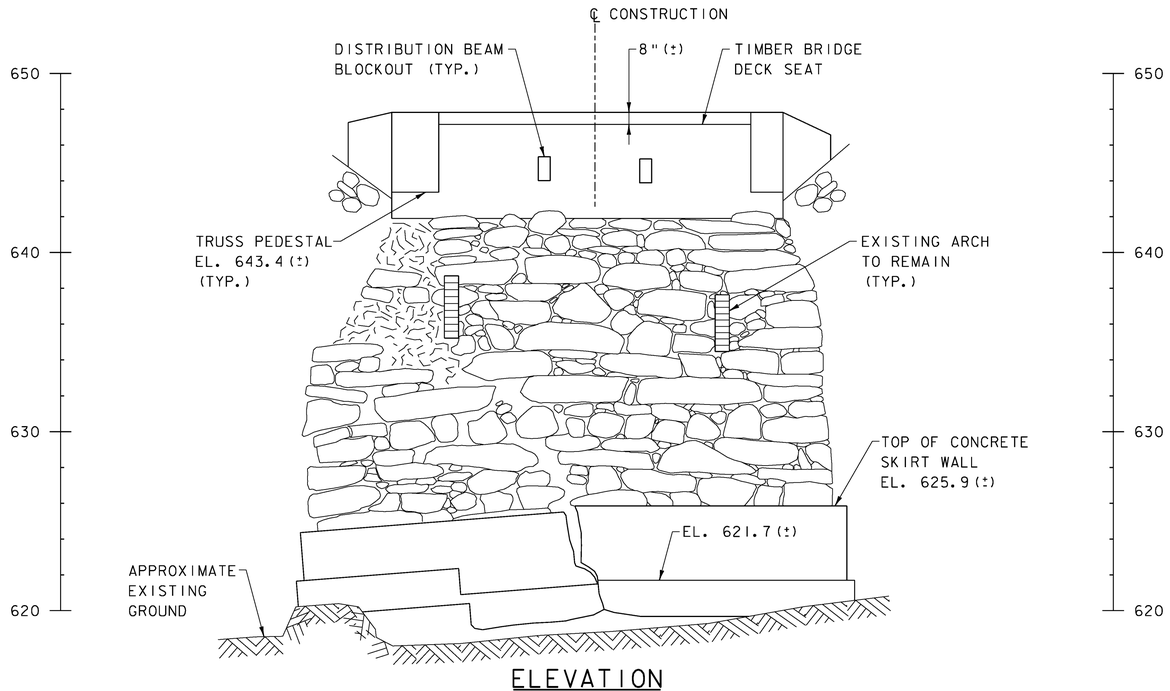
PROJECT NAME:	WOODSTOCK	WOODSTOCK
PROJECT NUMBER:	BHO 1444(52)	ST 1444(58)
FILE NAME: z96j262brg.dgn		PLOT DATE: 29-JUN-2012
PROJECT LEADER: M. Sargent		DRAWN BY: S. Merkwan
DESIGNED BY: S. Merkwan		CHECKED BY: R. Joy
COVERED BRIDGE BEARING DETAILS		SHEET 46 OF 68



NOTE:
SUPERSTRUCTURE NOT SHOWN FOR CLARITY.

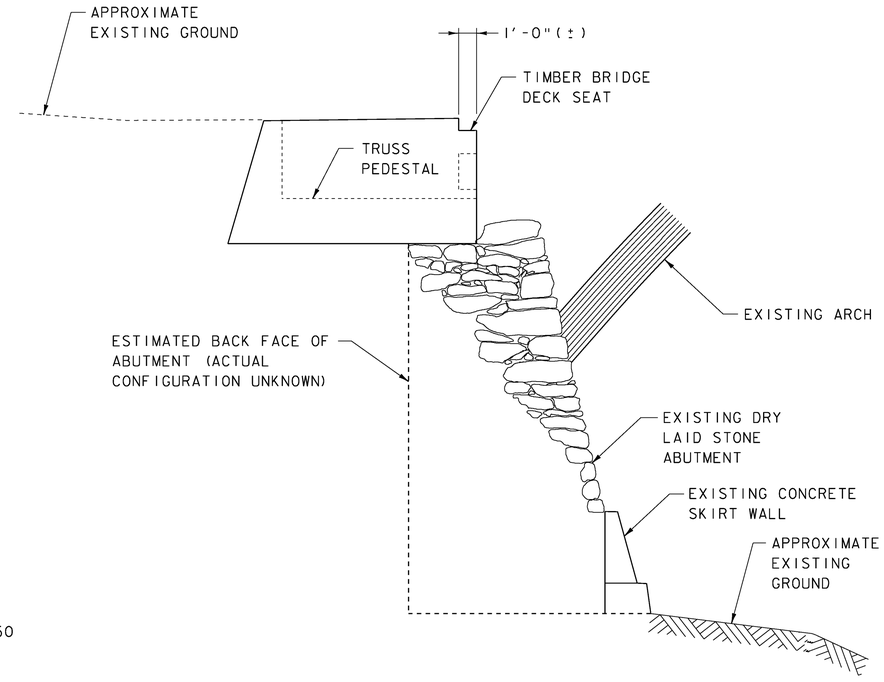
PLAN

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



ELEVATION

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



TYPICAL SECTION

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

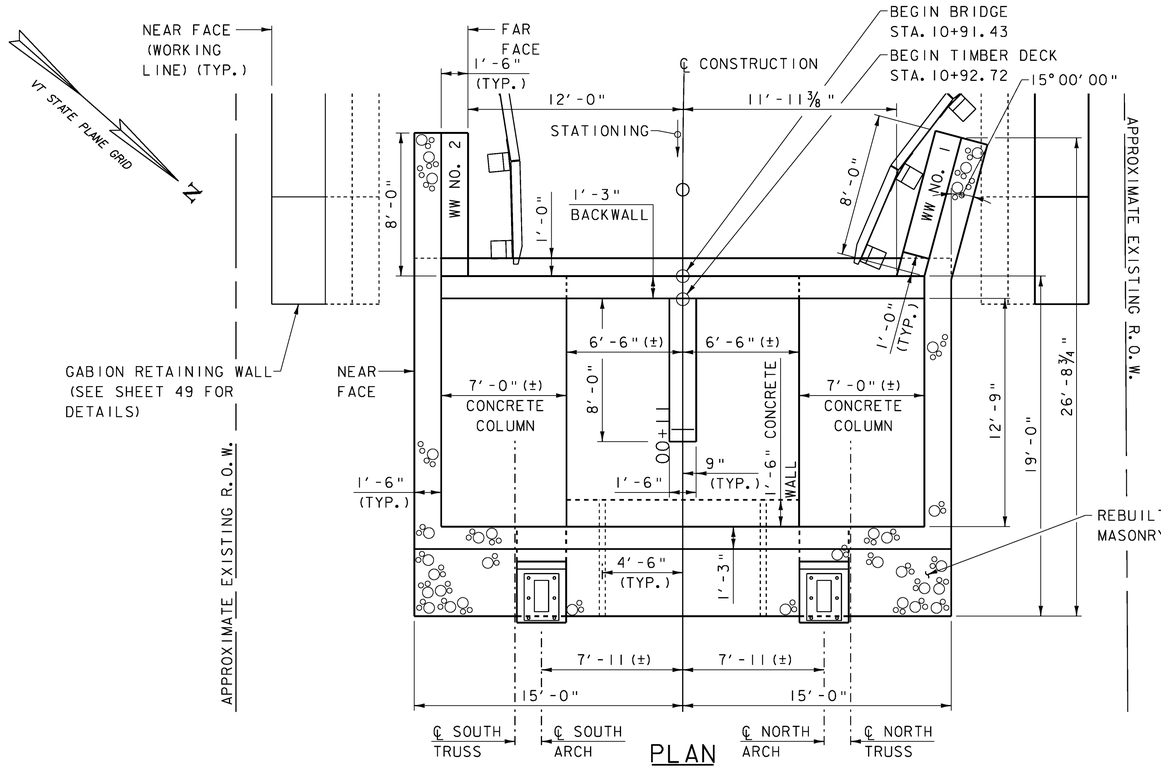
NOTE

1. THIS DRAWING HAS BEEN PROVIDED FOR REFERENCE ONLY.

SCALE 1/4" = 1'-0
1 0 2 4 6

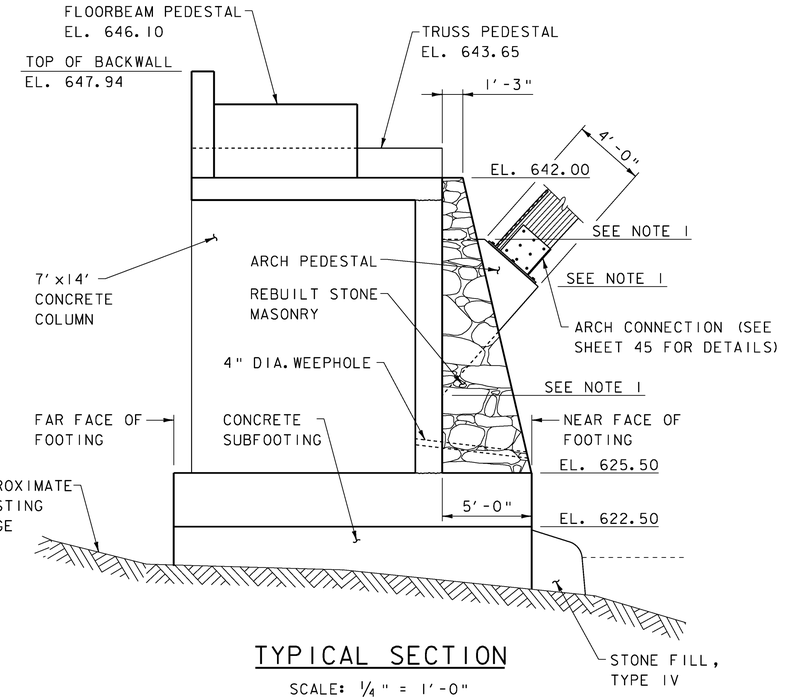
McFarland Johnson

PROJECT NAME:	WOODSTOCK	WOODSTOCK
PROJECT NUMBER:	BHO 1444(52)	ST 1444(58)
FILE NAME: z96J262abe.dgn		PLOT DATE: 29-JUN-2012
PROJECT LEADER: M. Sargent		DRAWN BY: S. Merkwan
DESIGNED BY: S. Merkwan		CHECKED BY: R. Joy
EXISTING ABUTMENT NO. 1		SHEET 47 OF 68



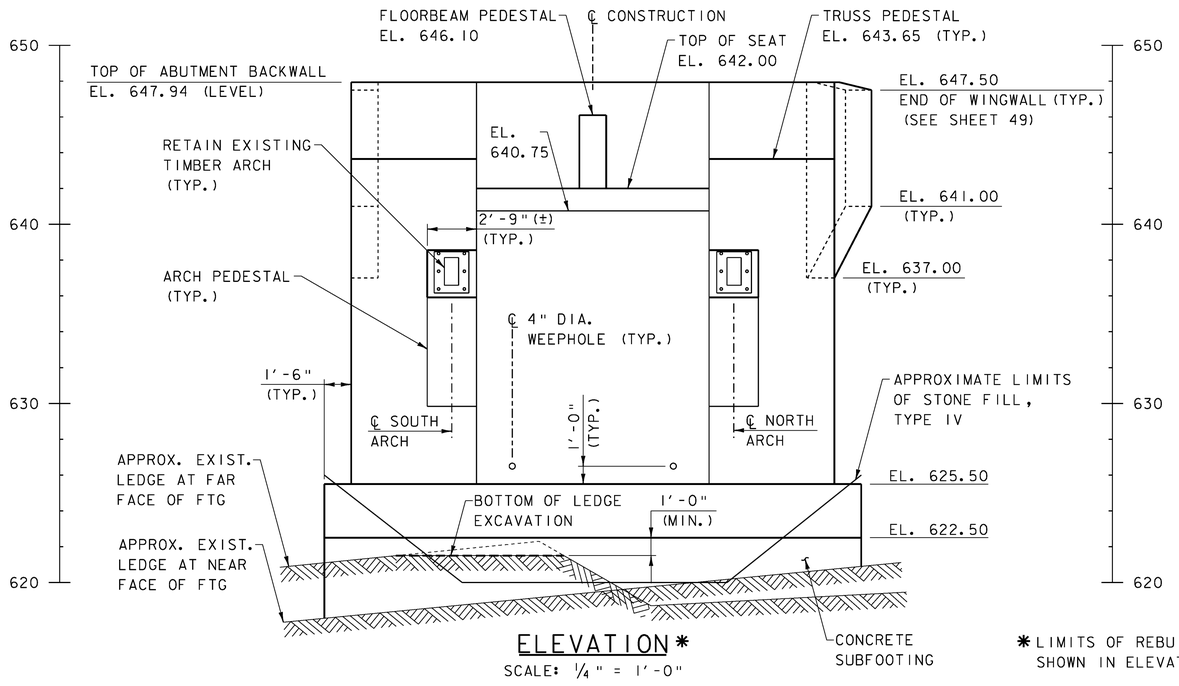
PLAN

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



TYPICAL SECTION

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



ELEVATION*

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

*LIMITS OF REBUILT STONE MASONRY NOT SHOWN IN ELEVATION FOR CLARITY

NOTES

1. ELEVATIONS TO BE DETERMINED IN THE FIELD.
2. FOR CONSTRUCTION NOTES, SEE SHEETS 23 AND 24.

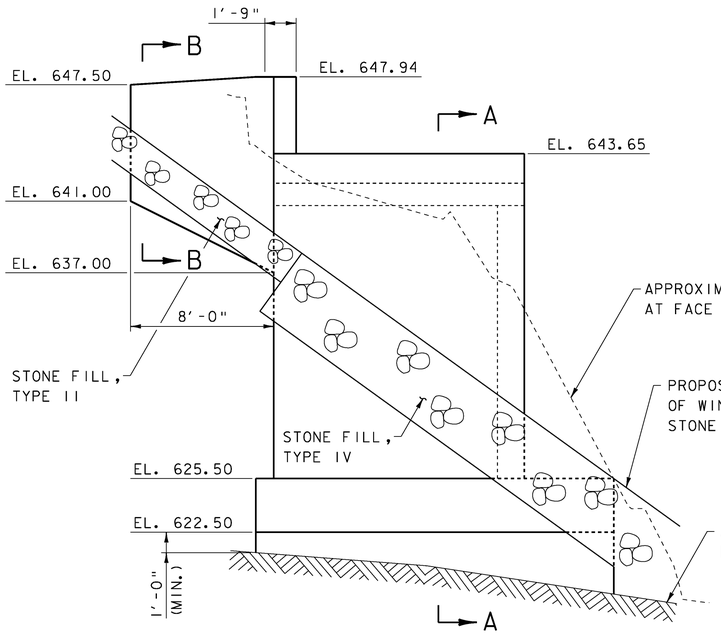
SCALE 1/4" = 1'-0"
1 0 2 4 6

McFarland Johnson

PROJECT NAME:	WOODSTOCK	WOODSTOCK
PROJECT NUMBER:	BHO 1444(52)	ST 1444(58)

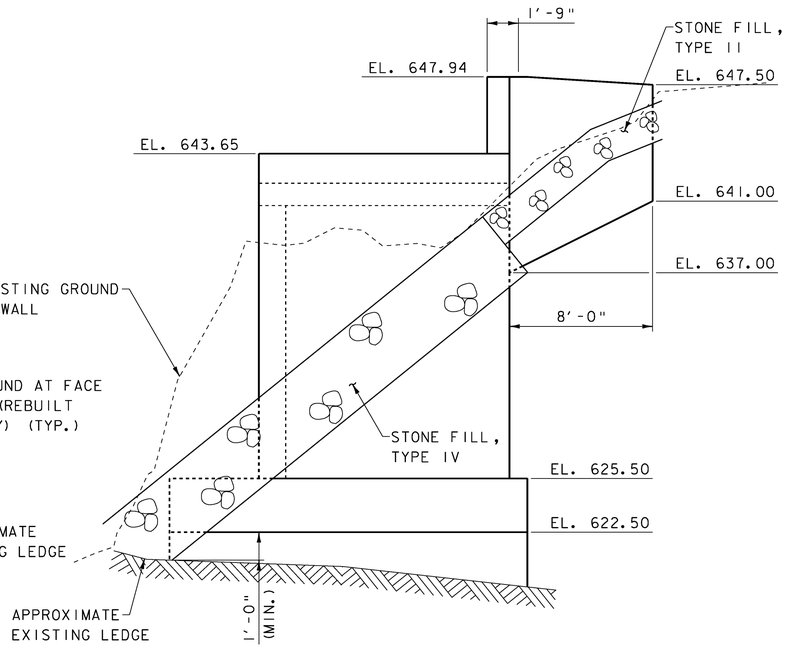
FILE NAME: z96J262abl.dgn
PROJECT LEADER: M. Sargent
DESIGNED BY: S. Della/J. Lund
PROPOSED ABUTMENT NO. 1

PLOT DATE: 29-JUN-2012
DRAWN BY: P. Dustin
CHECKED BY: R. Joy
SHEET 48 OF 68



WINGWALL NO. 2 ELEVATION

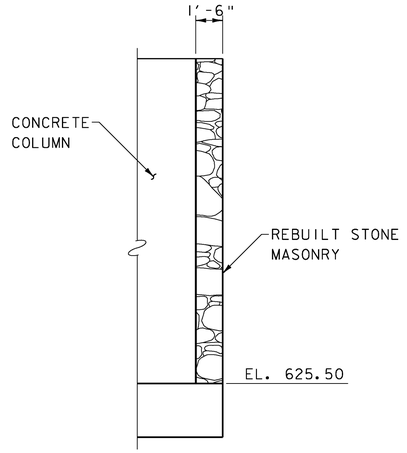
SCALE: 1/4" = 1'-0"



WINGWALL NO. 1 ELEVATION

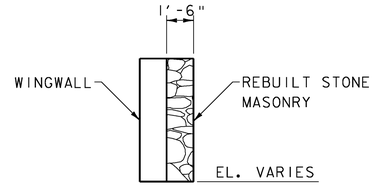
SCALE: 1/4" = 1'-0"

REBUILT STONE MASONRY NOT SHOWN IN ELEVATION VIEWS FOR CLARITY.



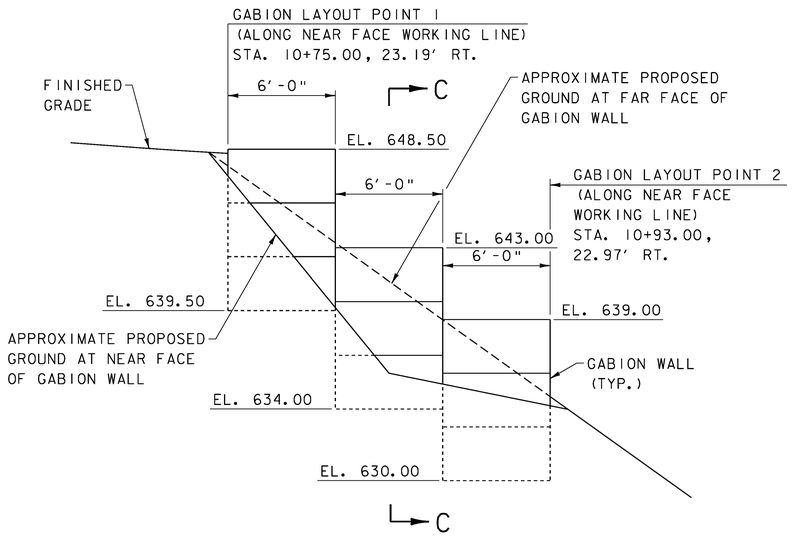
SECTION A-A

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



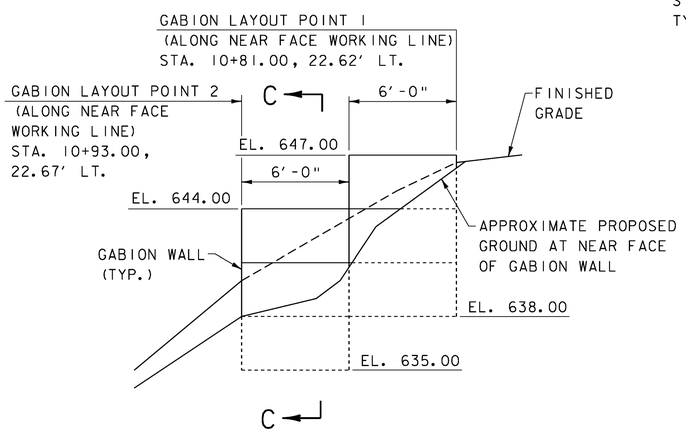
SECTION B-B

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



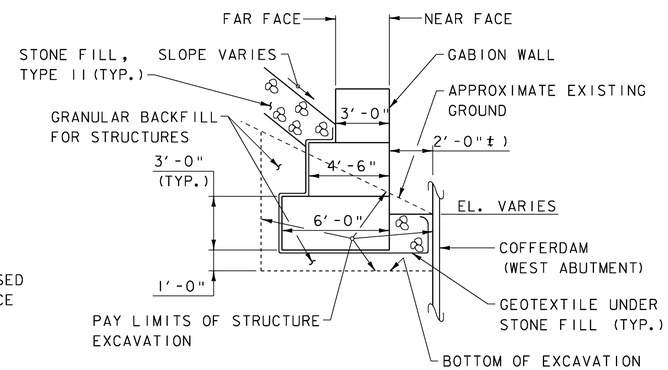
SOUTHWEST GABION WALL ELEVATION

(LOOKING NORTH)
SCALE: 1/4" = 1'-0"



NORTHWEST GABION WALL ELEVATION

(LOOKING SOUTH)
SCALE: 1/4" = 1'-0"



SECTION C-C

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

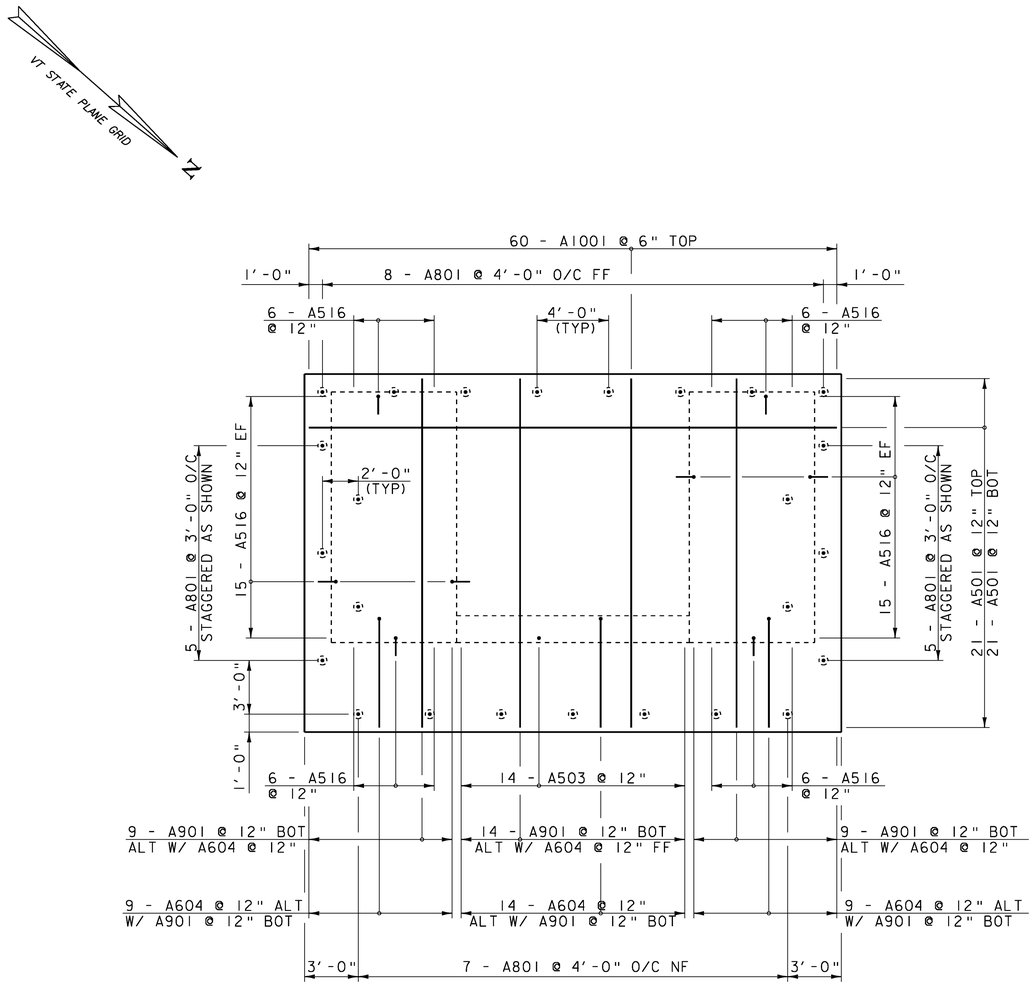
NOTES

1. FOR CONSTRUCTION NOTES, SEE SHEETS 23 AND 24.

SCALE 1/4" = 1'-0
1 0 2 4 6

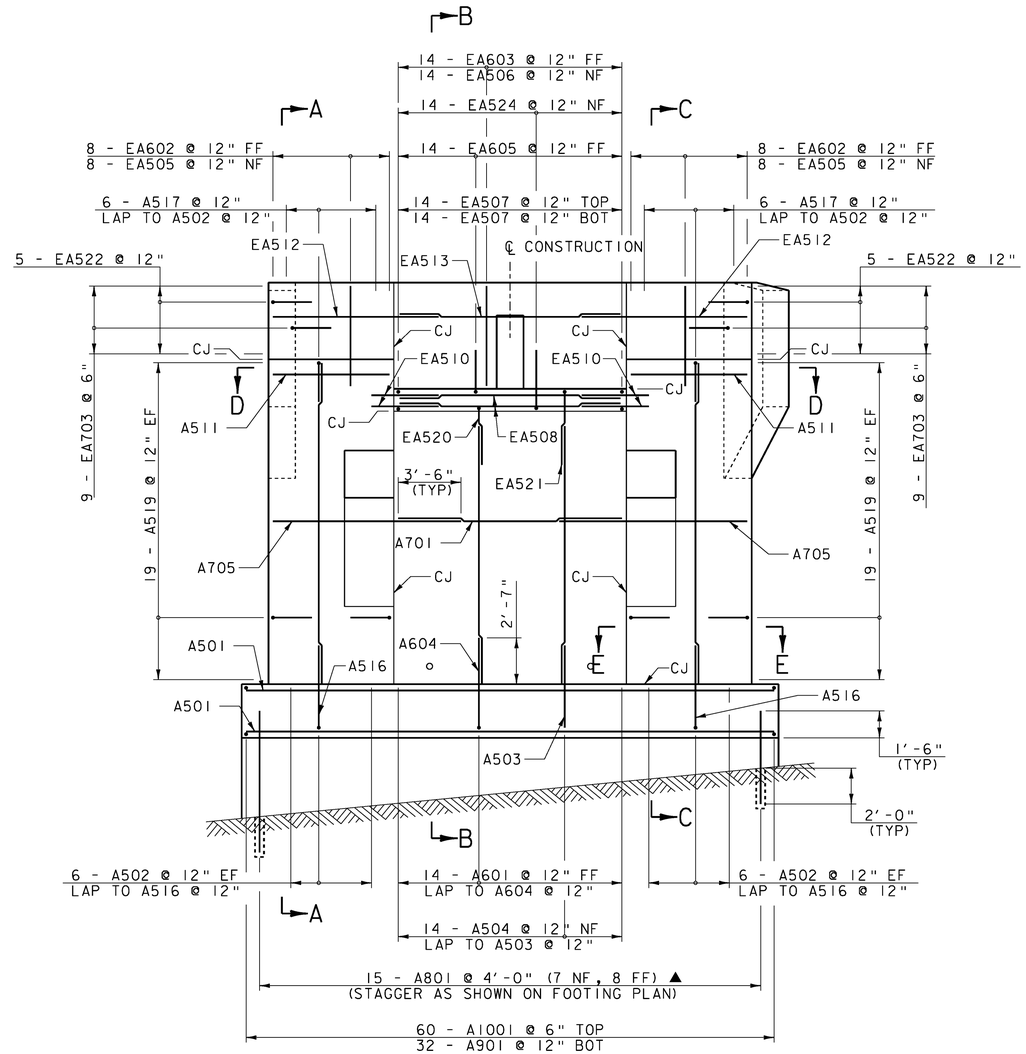
McFarland Johnson

PROJECT NAME:	WOODSTOCK	WOODSTOCK
PROJECT NUMBER:	BHO 1444(52)	ST 1444(58)
FILE NAME: z96J262adl.dgn		PLOT DATE: 29-JUN-2012
PROJECT LEADER: M. Sargent		DRAWN BY: P. Dustin
DESIGNED BY: S. Della		CHECKED BY: R. Joy
PROPOSED ABUTMENT NO. 1 DETAILS (1 OF 4)		SHEET 49 OF 68



FOOTING PLAN

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



ABUTMENT ELEVATION

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

LEGEND

NF NEAR FACE
FF FAR FACE
EF EACH FACE
▲ CUT TO FIT IN FIELD

NOTES

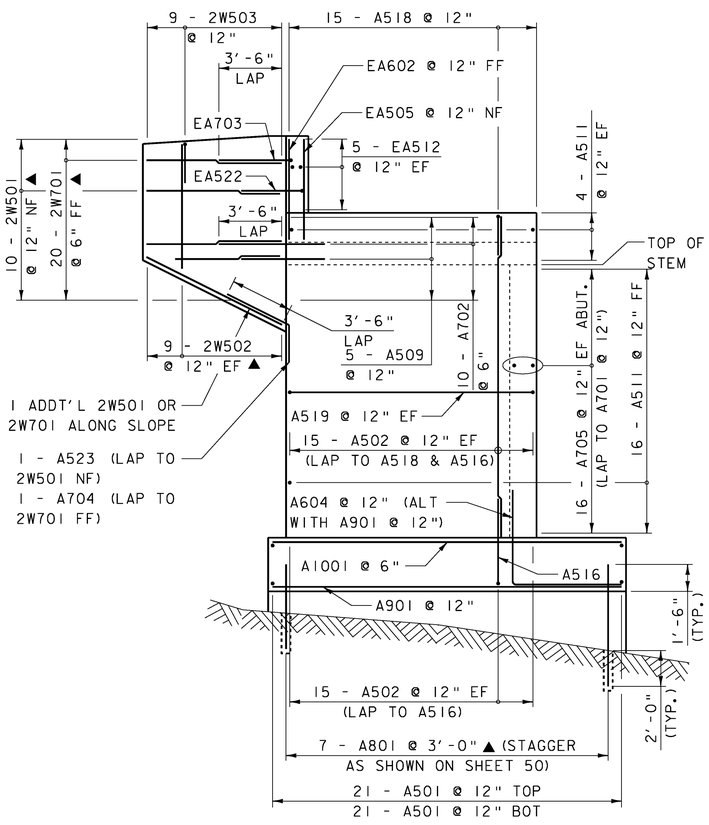
1. 3" CLEAR UNLESS OTHERWISE SPECIFIED ON PLANS.
2. ALL LAPS ARE 2'-2" UNLESS OTHERWISE SPECIFIED ON PLANS.

SCALE 1/4" = 1'-0
1 0 2 4 6

McFarland Johnson

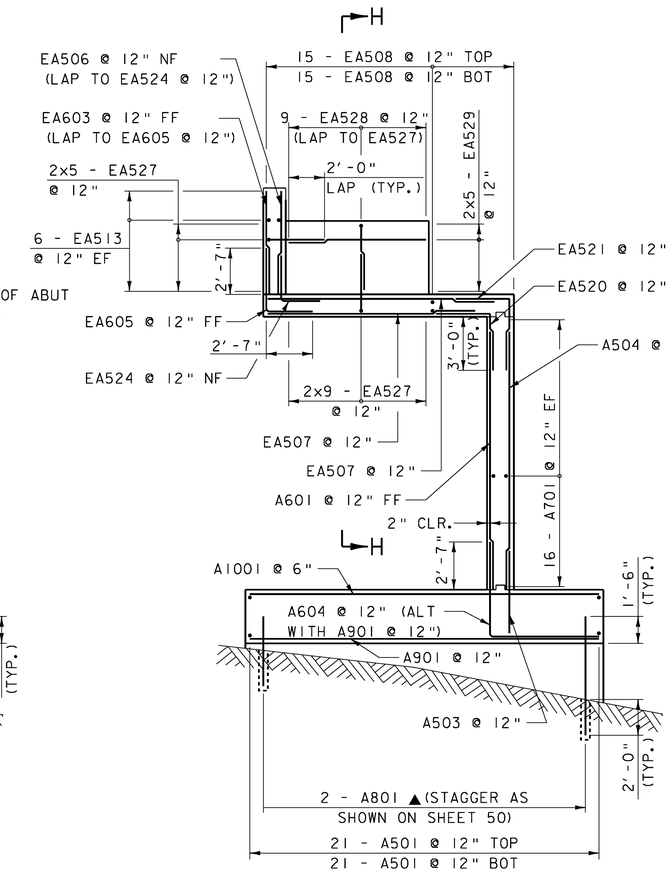
PROJECT NAME:	WOODSTOCK	WOODSTOCK
PROJECT NUMBER:	BHO 1444(52)	ST 1444(58)

FILE NAME: z96J262ad2.dgn — PLOT DATE: 29-JUN-2012
PROJECT LEADER: M. Sargent — DRAWN BY: P. Dustin
DESIGNED BY: S. Della/J. Lund — CHECKED BY: R. Joy
PROPOSED ABUTMENT NO.1DETAILS (2 OF 4) SHEET 50 OF 68



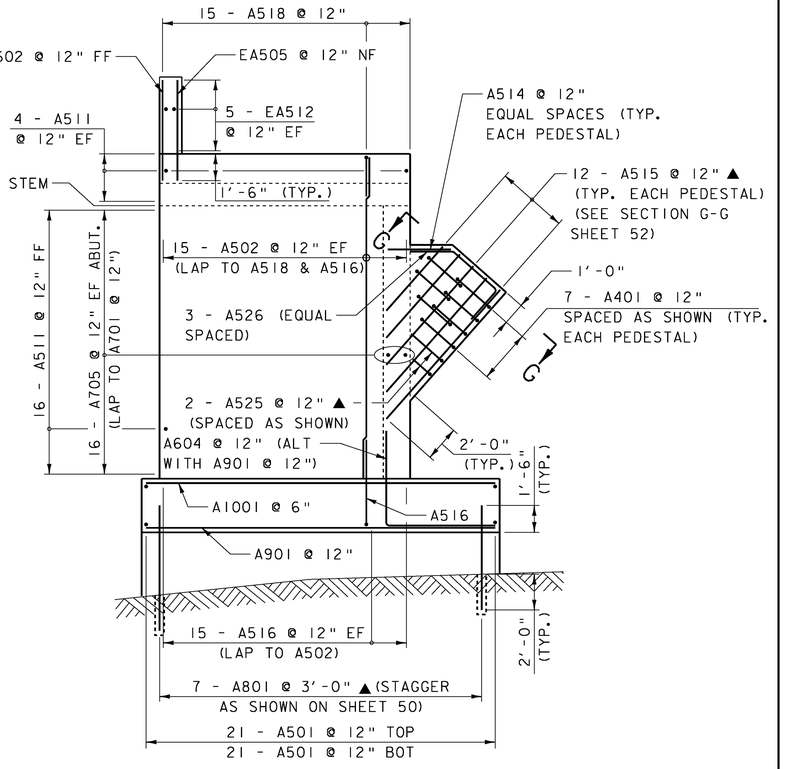
SECTION A-A

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



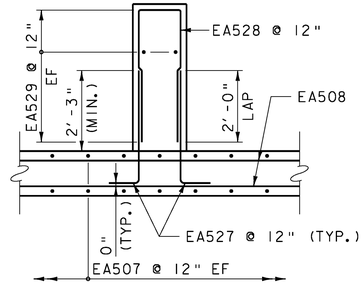
SECTION B-B

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



SECTION C-C

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



SECTION H-H

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

LEGEND

NF NEAR FACE
FF FAR FACE
EF EACH FACE
▲ CUT TO FIT IN FIELD

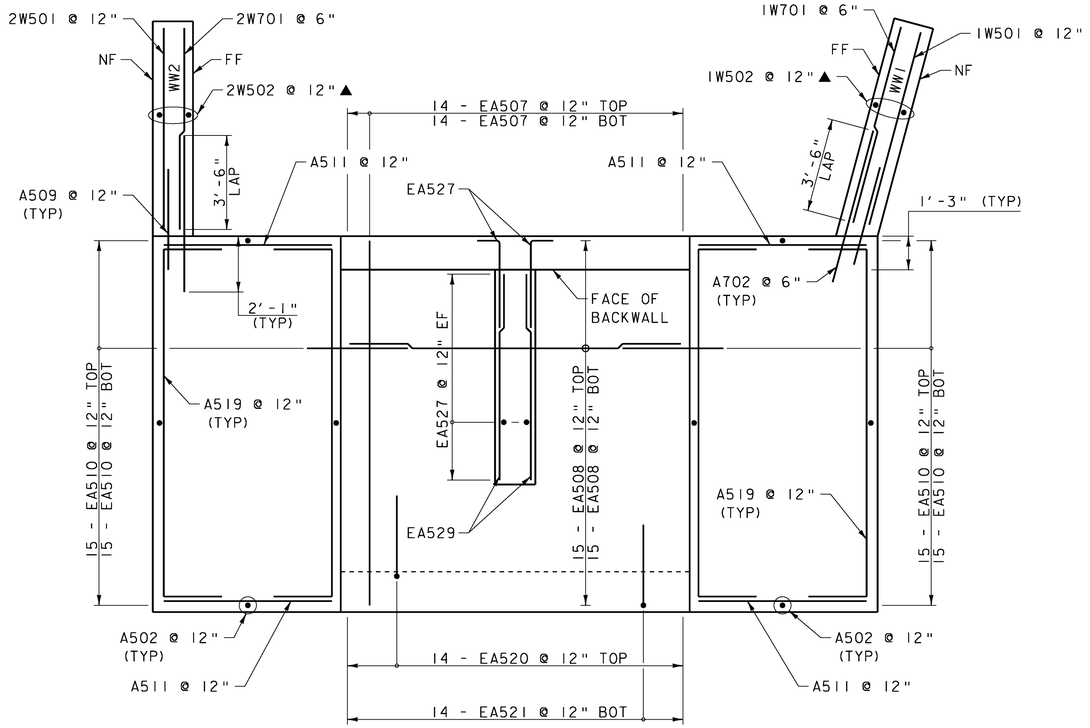
NOTES

1. 3" CLEAR UNLESS OTHERWISE SPECIFIED ON PLANS.
2. ALL LAPS ARE 2'-2" UNLESS OTHERWISE SPECIFIED ON PLANS.

SCALE 1/4" = 1'-0
1 0 2 4 6

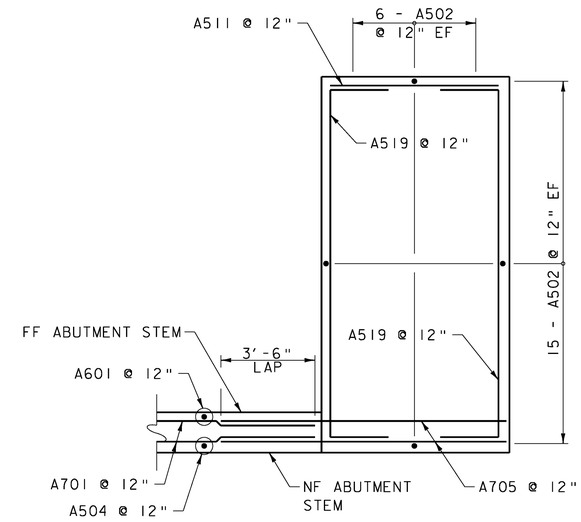
McFarland Johnson

PROJECT NAME:	WOODSTOCK	WOODSTOCK
PROJECT NUMBER:	BHO 1444(52)	ST 1444(58)
FILE NAME: z96J262ad3.dgn		PLOT DATE: 29-JUN-2012
PROJECT LEADER: M. Sargent		DRAWN BY: P. Dustin
DESIGNED BY: S. Della/J. Lund		CHECKED BY: R. Joy
PROPOSED ABUTMENT NO. 1 DETAILS (3 OF 4)		SHEET 51 OF 68



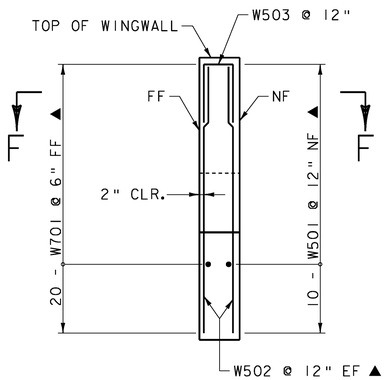
SECTION D-D

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



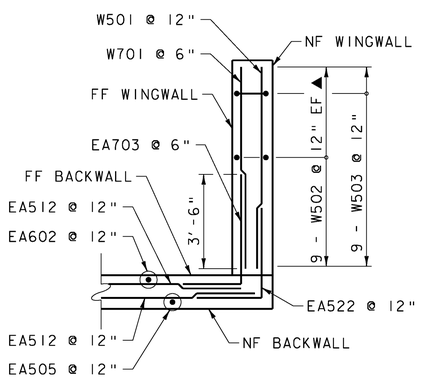
SECTION E-E

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



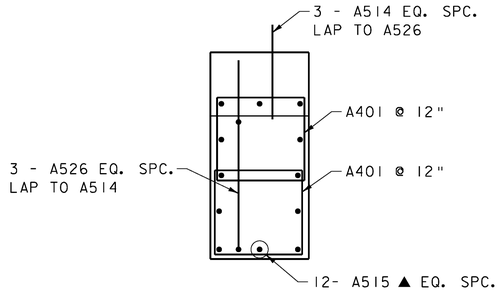
WINGWALL #1 & #2 TYPICAL SECTION

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



SECTION F-F

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



SECTION G-G

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

LEGEND

NF NEAR FACE
FF FAR FACE
EF EACH FACE
▲ CUT TO FIT IN FIELD

NOTES

1. 3" CLEAR UNLESS OTHERWISE SPECIFIED ON PLANS.
2. ALL LAPS ARE 2'-2" UNLESS OTHERWISE SPECIFIED ON PLANS.

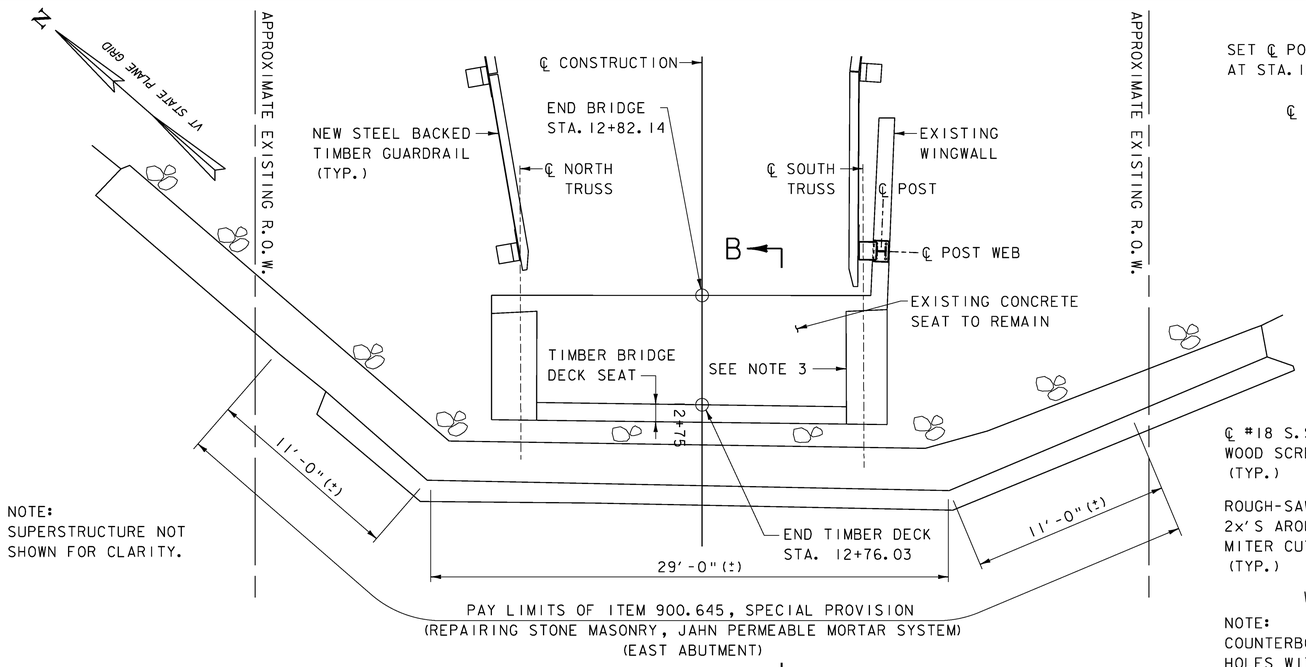
SCALE 1/2" = 1'-0
1 0 1 2

SCALE 3/8" = 1'-0
1 0 1 2 3 4

McFarland Johnson

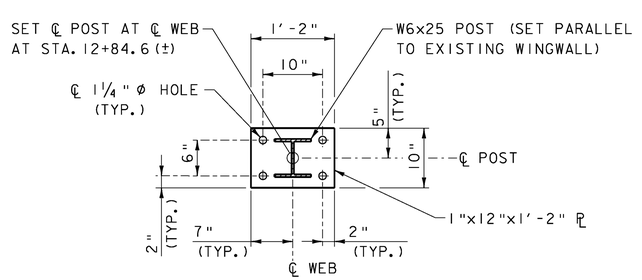
PROJECT NAME: WOODSTOCK WOODSTOCK
PROJECT NUMBER: BHO 1444(52) ST 1444(58)

FILE NAME: z96J262ad4.dgn PLOT DATE: 29-JUN-2012
PROJECT LEADER: M. Sargent DRAWN BY: P. Dustin
DESIGNED BY: S. Della/J. Lund CHECKED BY: R. Joy
PROPOSED ABUTMENT NO. 1 DETAILS (4 OF 4) SHEET 52 OF 68



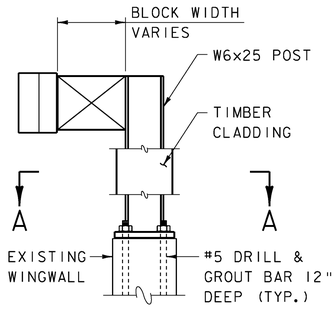
PLAN

SCALE: ¼" = 1'-0"



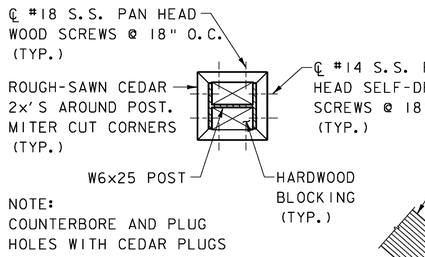
POST AND BASE PLATE

SCALE: 4" = 1'-0"



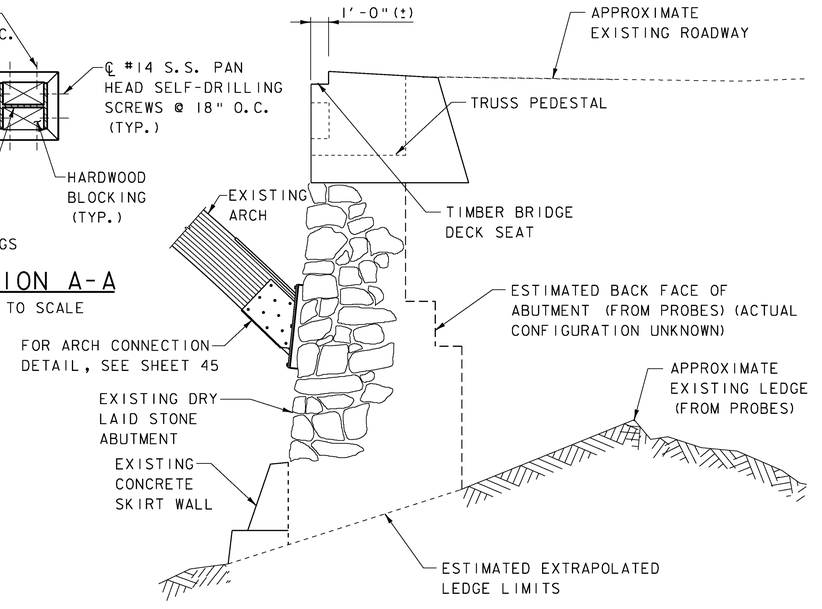
RAIL ELEVATION

SCALE: 4" = 1'-0"



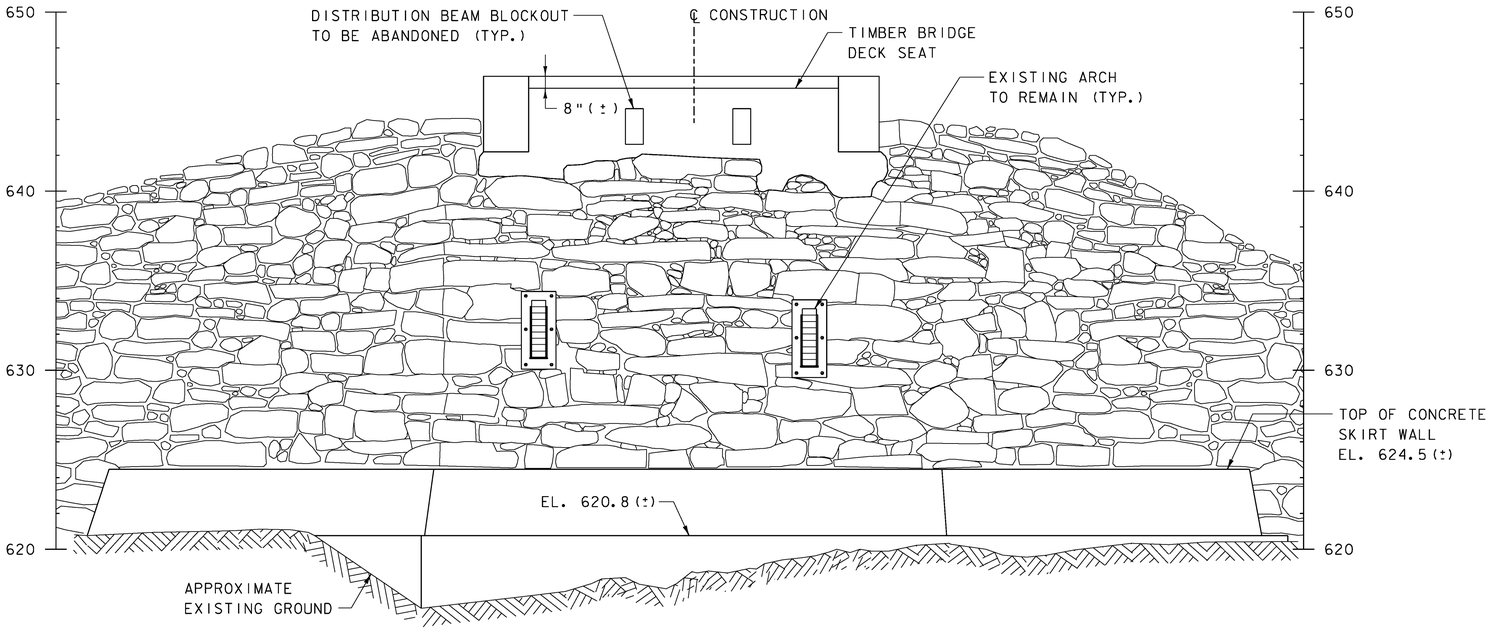
SECTION A-A

NOT TO SCALE



TYPICAL ABUTMENT SECTION B-B

SCALE: ¼" = 1'-0"



ELEVATION

SCALE: ¼" = 1'-0"

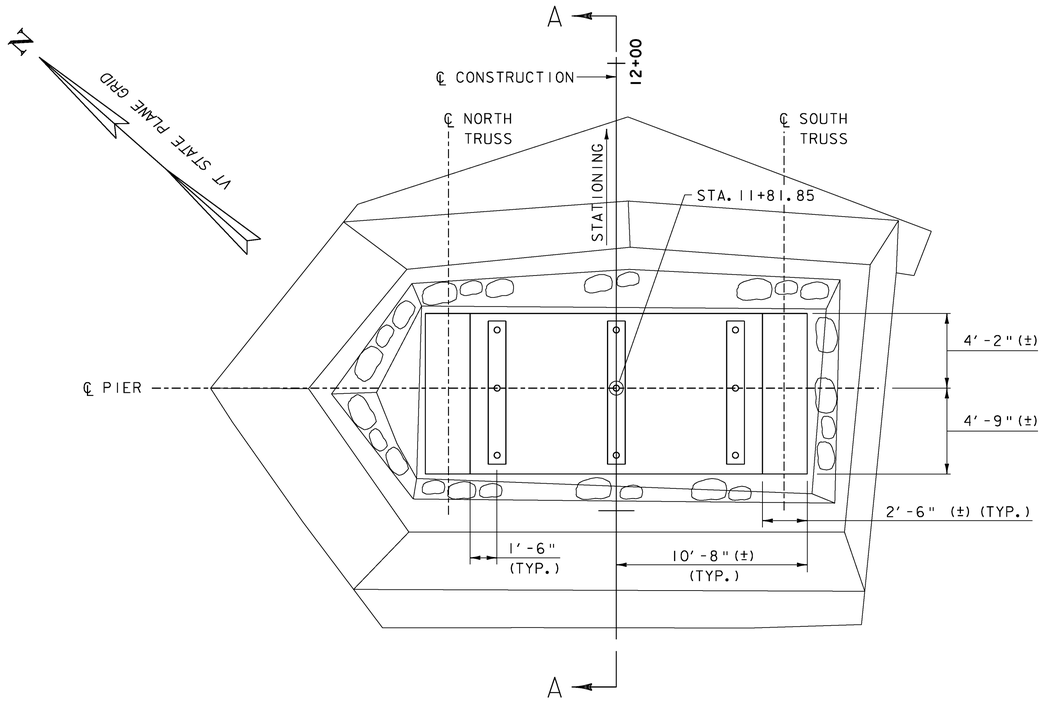
NOTES

1. FOR DESCRIPTION OF ABUTMENT WORK, SEE PROJECT NOTES SHEET 24.
2. FOR BOLSTER BEAM DETAILS, SEE SHEET 46.
3. PORTIONS OF THE FACE OF THE EXISTING CONCRETE MAY NEED TO BE CHIPPED AWAY TO PROVIDE CLEARANCE FOR BOLSTER BEAM U-BOLTS. COST SHALL BE INCIDENTAL TO ITEM 900.645, SPECIAL PROVISION (REPAIRING STONE MASONRY, JAHN PERMEABLE MORTAR SYSTEM) (EAST ABUTMENT).

SCALE ¼"= 1'-0
1 0 2 4 6

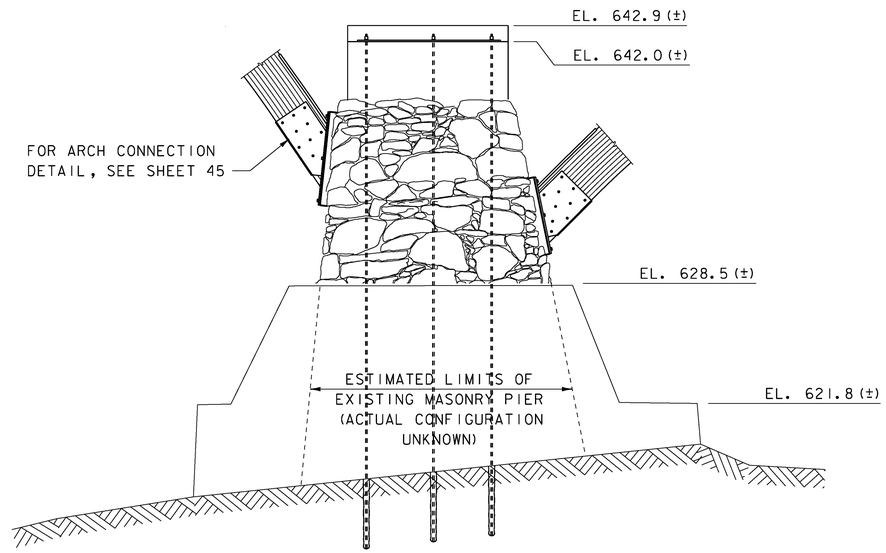
McFarland Johnson

PROJECT NAME:	WOODSTOCK	WOODSTOCK
PROJECT NUMBER:	BHO 1444(52)	ST 1444(58)
FILE NAME: z96j262ab2.dgn		PLOT DATE: 29-JUN-2012
PROJECT LEADER: M. Sargent		DRAWN BY: S. Merkwan
DESIGNED BY: S. Merkwan/P. Dustin		CHECKED BY: R. Joy
ABUTMENT NO. 2		SHEET 53 OF 68



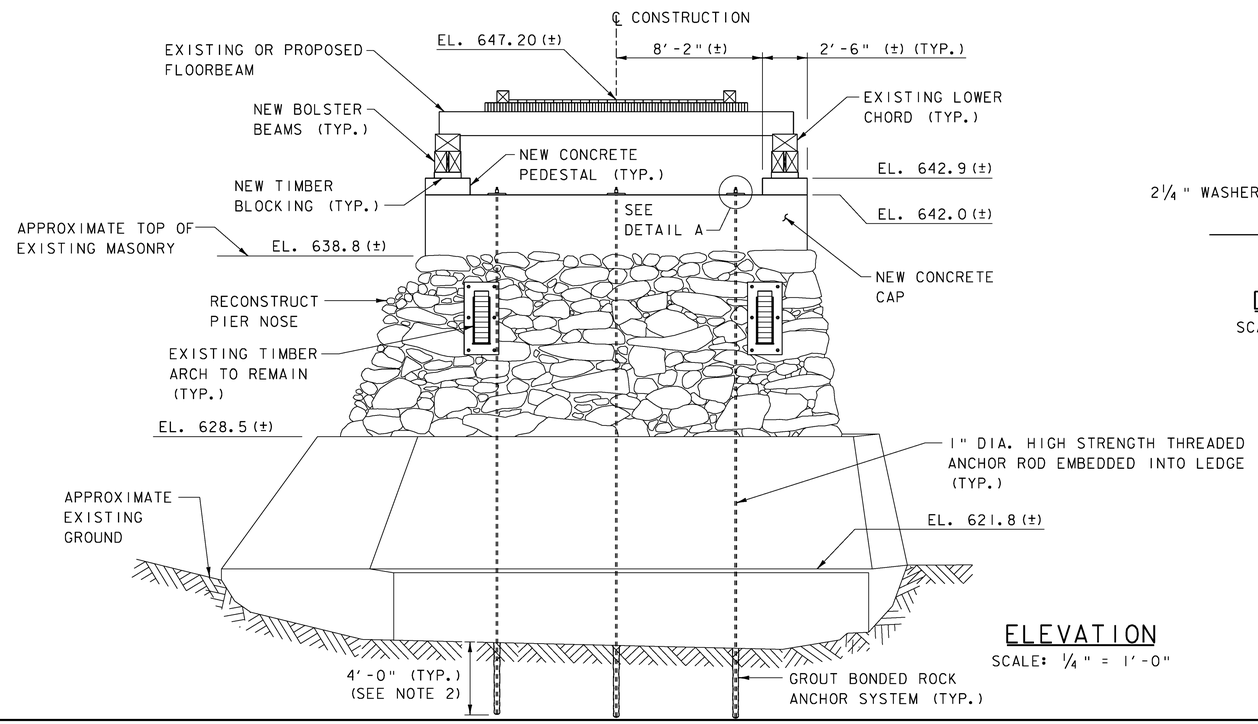
PLAN

SCALE: 1/4" = 1′-0"
(TIMBER NOT SHOWN IN PLAN FOR CLARITY)



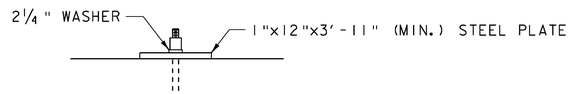
SECTION A-A

SCALE: 1/4" = 1′-0"



ELEVATION

SCALE: 1/4" = 1′-0"



DETAIL A

SCALE: 1" = 1′-0"

NOTES

1. FOR DESCRIPTION OF PIER WORK, SEE PROJECT NOTES SHEET 24 AND SPECIAL PROVISIONS.
2. ROCK ANCHOR EMBEDMENT SHALL BE VERIFIED BY MANUFACTURER PRIOR TO CONSTRUCTION.

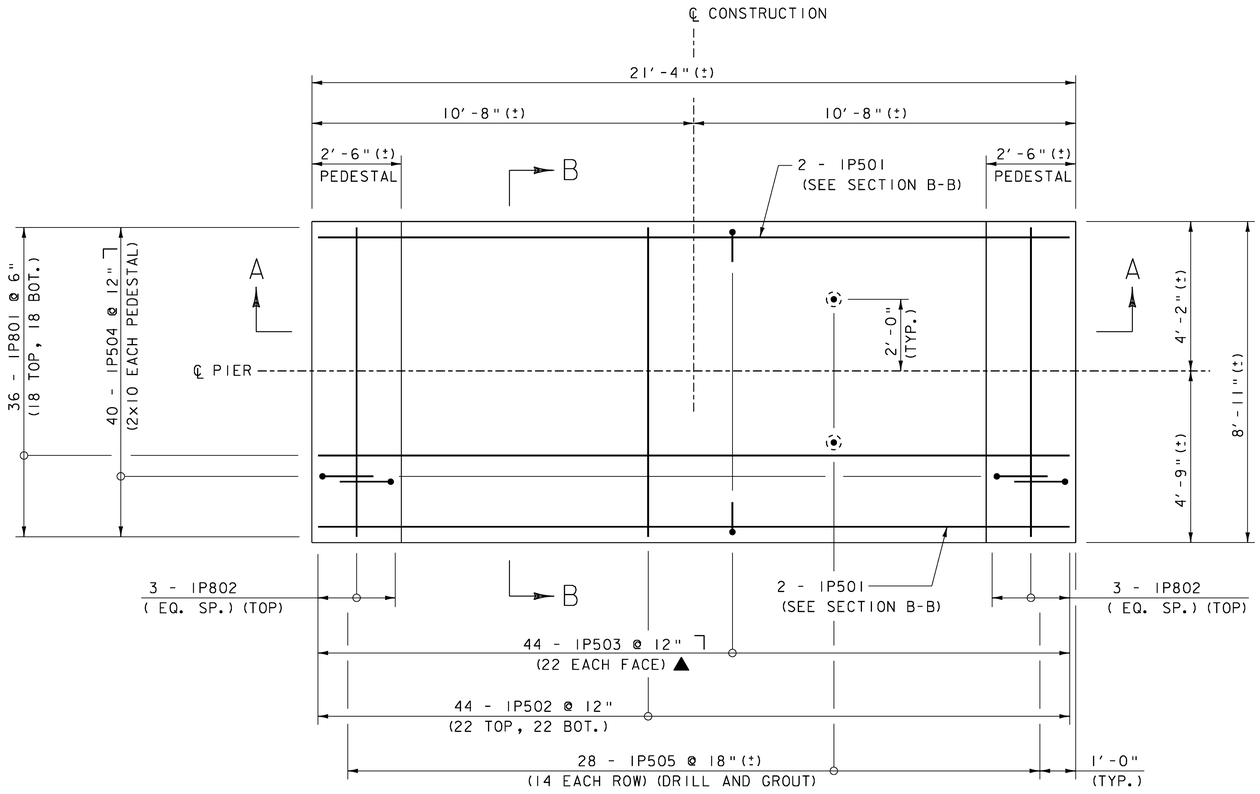
SCALE 1/4" = 1′-0
1 0 2 4 6

McFarland Johnson

PROJECT NAME:	WOODSTOCK	WOODSTOCK
PROJECT NUMBER:	BHO 1444(52)	ST 1444(58)

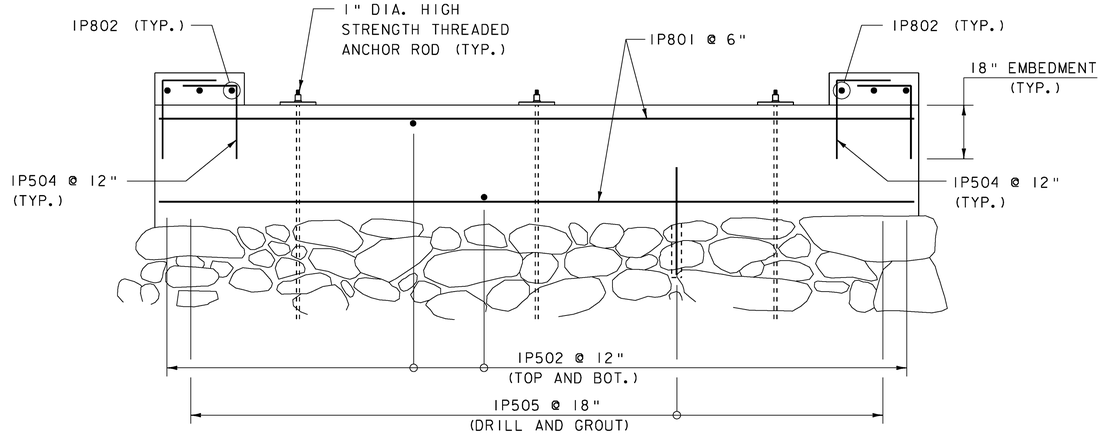
FILE NAME: z96J262pr1.dgn
PROJECT LEADER: M. Sargent
DESIGNED BY: S. Della/W. Durack
PIER

PLOT DATE: 29-JUN-2012
DRAWN BY: S. Merkwan
CHECKED BY: R. Joy
SHEET 54 OF 68



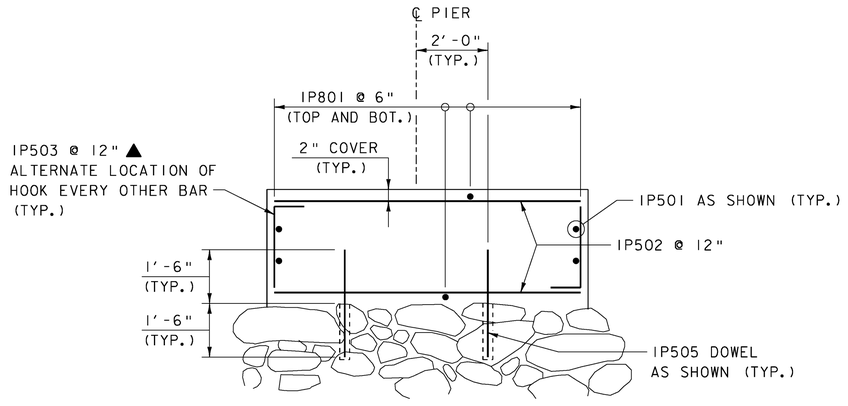
PIER REINFORCEMENT PLAN

SCALE: ½" = 1'-0"



SECTION A-A

SCALE: ½" = 1'-0"



SECTION B-B

SCALE: ½" = 1'-0"

SCALE ½" = 1'-0
1 0 1 2

McFarland Johnson

PROJECT NAME:	WOODSTOCK	WOODSTOCK	
PROJECT NUMBER:	BHO 1444(52)	ST 1444(58)	
FILE NAME: z96J262pr2.dgn		PLOT DATE: 29-JUN-2012	
PROJECT LEADER: M. Sargent		DRAWN BY: S. Merkwan	
DESIGNED BY: W. Durack		CHECKED BY: R. Joy	
PIER DETAILS		SHEET 55 OF 68	

TIMBER TABLE FOR NEW AND REPLACEMENT MEMBERS

ITEM NUMBER	MEMBER	EXISTING SIZE (INCHES)	PROPOSED NOMINAL SIZE (IN)	LENGTH (FT)	DELINEATED NUMBER OF PIECES	ADDNL. EST. NUMBER OF PIECES	TOTAL PIECES	QUANTITY MFBM	SPECIES	GRADE	TREATMENT
	COVERED BRIDGE ROOF, CEILING, PORTALS & SIDING										
522.20	RAFTER (RS)	5 X 5	5 X 5	12.50	108	6	114	2.97	SPRUCE PINE FIR	S.S.	
522.30	ROOF SHEATHING BOARD (RS)	1 X VARIES	1 X 10	198.75	24	0	24	3.98	DOUGLAS FIR	NO. 1 COM.	
522.20	RIDGE BOARD (RS)	2 X 8	3 X 8	200.00	1	0	1	0.40	DOUGLAS FIR	NO. 1	
522.20	KNEE BRACE (RS)	-	3 X 5	4.00	64	0	64	0.32	DOUGLAS FIR	NO. 1	
522.20	UPPER LATERAL BRACING (RS)	-	4 X 6	18.00	12	0	12	0.43	DOUGLAS FIR	NO. 1	
522.20	UPPER LATERAL BRACING (RS)	-	4 X 6	20.00	22	0	22	0.88	DOUGLAS FIR	NO. 1	
522.20	CROSS TIES (RS)	8 x 8	6 X 12	20.33	20	0	20	2.44	DOUGLAS FIR	NO. 1	
522.30	SIDING BOARDS EXTERIOR (RS) (SEE NOTE 4)	1 X VARIES	1 X 10	11.25	480	0	480	4.50	DOUGLAS FIR	NO. 1 COM.	
522.30	SIDING BOARDS INTERIOR (RS) (SEE NOTE 4)	1 X VARIES	1 X 10	6.00	20	0	20	0.10	DOUGLAS FIR	NO. 1 COM.	
522.30	SIDING BOARDS PORTALS (RS) (SEE NOTE 4)	1 X VARIES	1 X 10	8.00	18	0	18	0.12	DOUGLAS FIR	NO. 1 COM.	
522.30	SIDING SILLS (RS)	1 X VARIES	2 X 8	171.50	2	0	2	0.23	DOUGLAS FIR	NO. 1 COM.	
522.20	SIDING NAILERS (RS)	2 x 4	2 x 6	199.00	6	0	6	1.19	DOUGLAS FIR	NO. 1 COM.	
522.20	SIDING NAILERS (RS)	2 x 4	2 X 5	199.00	2	0	2	0.33	DOUGLAS FIR	NO. 1 COM.	
522.20	FASCIA BOARDS (RS)	-	2 x 8	199.00	2	0	2	0.53	DOUGLAS FIR	NO. 1 COM.	
522.20	PORTAL NAILERS (ASSORTED LENGTHS) (RS)	-	3 X 8	48.00	2	0	2	0.19	DOUGLAS FIR	NO. 1 COM.	
522.25	PORTAL END DIAGONAL (RS)	-	8 X 8	12.00	4	0	4	0.26	DOUGLAS FIR	NO. 1 COM.	
	COVERED BRIDGE FLOOR SYSTEM										
522.25	NAIL LAMINATED BRIDGE DECK (S4S) (DR)	2 X 8	2 X 6	184.00	120	0	120	22.08	DOUGLAS FIR	NO. 1	
522.25	BRIDGE DECK EDGE BEAM (S4S) (DR)	-	6 X 6	174.00	6	0	6	3.13	DOUGLAS FIR	NO. 1	
522.25	BRIDGE CURB (FS)	-	8 X 8	184.00	2	0	2	1.96	DOUGLAS FIR	NO. 1	P.T.
522.25	APPROACH CURB EAST (FS)	-	8 X 6	6.25	2	0	2	0.05	DOUGLAS FIR	NO. 1	P.T.
522.25	BRIDGE CURB BLOCKING (FS)	-	4 X 8	2.00	60	0	60	0.32	DOUGLAS FIR	NO. 1	P.T.
522.25	APPROACH CURB BLOCKING (DR)	-	4 x 8	2.00	4	0	4	0.02	DOUGLAS FIR	NO. 1	P.T.
522.20	RUNNING PLANK (S3S)(DR) (SEE NOTE 8)	-	3 X 8	184.00	21	0	21	7.73	OAK	NO. 1	
522.20	FLOORBEAMS (RS)	8 X 16	8 X 16	21.00	14	9	23	5.15	DOUGLAS FIR	S.S.	
522.20	BOTTOM LATERAL BRACING (FS)	-	4 X 6	22.00	4	0	4	0.18	DOUGLAS FIR	NO. 1	
522.20	BOTTOM LATERAL BRACING (FS)	-	4 X 6	23.00	6	0	6	0.28	DOUGLAS FIR	NO. 1	
522.20	BOTTOM LATERAL BRACING (FS)	-	4 X 6	24.00	2	0	2	0.10	DOUGLAS FIR	NO. 1	
522.20	BOTTOM LATERAL BRACING (FS)	-	4 X 6	25.00	4	0	4	0.20	DOUGLAS FIR	NO. 1	
522.20	LATERAL BRACING BLOCKING (FS)	-	6 X 6	3.00	20	0	20	0.18	DOUGLAS FIR	NO. 1	
	COVERED BRIDGE ARCH TRUSS SYSTEM										
	EXISTING TRUSS AND ARCH MEMBERS	VARIES	-	-	-	-	-	-	VARIES	-	
522.25	UPPER CHORDS (SES)	11.5 x 10	12 x 10	33.00	2	0	2	0.66	DOUGLAS FIR	S.S.	
522.25	UPPER CHORDS (SES)	11.5 x 10	12 x 10	24.00	1	0	1	0.24	DOUGLAS FIR	S.S.	
522.25	UPPER CHORDS (SES)	11.5 x 10	12 x 10	28.00	1	0	1	0.28	DOUGLAS FIR	S.S.	
522.25	UPPER CHORDS (SES)	11.5 x 10	12 x 10	32.00	1	0	1	0.32	DOUGLAS FIR	S.S.	
522.25	UPPER CHORDS (SES)	11.5 x 10	12 x 10	8.00	1	0	1	0.08	DOUGLAS FIR	S.S.	
522.25	POSTS (SES)	8 X 8	8 X 8	12.40	2	2	4	0.26	DOUGLAS FIR	S.S.	
522.25	POSTS (SES)	7 X 12	8 X 12	14.00	1	1	2	0.22	DOUGLAS FIR	S.S.	
522.25	POSTS (SES)	7 X 12	8 X 12	16.00	1	2	3	0.38	DOUGLAS FIR	S.S.	
522.25	POSTS (SES)	6.5 X 11.5	8 X 12	18.00	1	1	2	0.29	DOUGLAS FIR	S.S.	
522.25	LOWER CHORD (SES)	VARIES	12 X 18	8.00	1	0	1	0.14	DOUGLAS FIR	S.S.	
522.25	LOWER CHORD (SES)	VARIES	12 X 18	10.00	1	0	1	0.18	DOUGLAS FIR	S.S.	
522.25	LOWER CHORD (SES)	VARIES	12 X 18	34.00	1	0	1	0.61	DOUGLAS FIR	S.S.	
522.25	UPPER DIAGONALS (SES)	7.5 x 7.5	8 x 8	15.75	1	2	3	0.25	DOUGLAS FIR	S.S.	
522.25	UPPER DIAGONALS (SES)	7.5 x 7.5	8 x 8	17.25	1	2	3	0.28	DOUGLAS FIR	S.S.	
522.25	LOWER DIAGONALS (SES)	8 X 7	8 x 8	14.00	1	1	2	0.15	DOUGLAS FIR	S.S.	
522.25	LOWER DIAGONALS (SES)	8 X 7	8 x 8	13.40	1	0	1	0.07	DOUGLAS FIR	S.S.	
522.25	LOWER DIAGONALS (SES)	8 X 7	8 x 8	13.80	1	1	2	0.15	DOUGLAS FIR	S.S.	
522.25	LOWER DIAGONALS (SES)	3 X 10	3 X 10	13.80	1	0	1	0.03	DOUGLAS FIR	S.S.	
522.25	LOWER DIAGONALS (SES)	7 X 7	8 x 8	13.80	1	0	1	0.07	DOUGLAS FIR	S.S.	
522.25	LOWER DIAGONALS (SES)	8 X 10	8 X 10	13.60	1	0	1	0.09	DOUGLAS FIR	S.S.	
522.25	BOLSTER BEAM (FS)	12 x 18	8 X 14	27.00	8	0	8	2.02	DOUGLAS FIR	NO. 1	
522.25	BOLSTER BEAM (FS)	12 x 18	8 X 14	21.00	4	0	4	0.78	DOUGLAS FIR	NO. 1	
522.25	BOLSTER BEAM SPACER (DR)	-	2 X 6	1.17	60	0	60	0.07	DOUGLAS FIR	NO. 1	
522.25	BOLSTER BEAM BLOCKING (FS)	3 X 10	4 X 12	1.50	40	0	40	0.24	DOUGLAS FIR	NO. 1	
522.25	ARCH BLOCKING (RS)	8 x 8	8 x 8	1.50	10	0	10	0.08	DOUGLAS FIR	NO. 1	
522.25	ARCH LATERAL BRACING (FS)	-	8 X 10	16.60	4	0	4	0.44	DOUGLAS FIR	NO. 1	
522.25	ARCH LATERAL BRACING (FS)	-	8 X 10	21.25	4	0	4	0.57	DOUGLAS FIR	NO. 1	
522.25	ARCH LATERAL BRACING BLOCKING (FS)	-	6 X 6	1.17	32	0	32	0.11	DOUGLAS FIR	NO. 1	
522.25	PIER BLOCKING (RS)	10 X 12	10 X 12	7.00	2	0	2	0.14	DOUGLAS FIR	NO. 1	
522.25	PIER CENTER BEAM (RS)	10 X 15	10 X 16	21.00	1	0	1	0.28	DOUGLAS FIR	NO. 1	
522.25	ARCH REPAIR LAMINATES (S4S)(DR)	-	4 X 10	3.00	2	4	6	0.06	HEMLOCK	S.S.	

NOTES:

1. THE TIMBER DIMENSIONS PROVIDED IN THIS TABLE ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONFIRMING SIZES OF ACTUAL MEMBERS PRIOR TO ORDERING TIMBER. ALL COSTS ASSOCIATED WITH CONFIRMING MEMBER SIZES SHALL BE INCLUDED IN ITEM 900.645 SPECIAL PROVISION (REHABILITATING COVERED BRIDGE SUPERSTRUCTURE)
2. KEY: FS (FULL SAWN), RS (ROUGH SAWN), DR (DRESSED), SES (SAWN TO EXISTING SIZE WITH ROUGH FINISH)
3. LUMBER FINISH: ALL NEW LUMBER AND TIMBER SHALL BE ROUGH SURFACED, UNLESS DESIGNATED OTHERWISE
4. AVERAGE WIDTH OF SIDING BOARDS PROVIDED FOR QUANTITY PURPOSES. ACTUAL SIDING BOARD WIDTHS TO VARY AND MATCH EXISTING SIDING WIDTHS.
5. TIMBER BLOCKING MEMBER QUANTITIES ARE APPROXIMATE.
6. S.S. = SELECT STRUCTURAL, COM. = COMMON
7. LENGTH OF MEMBERS ARE PROVIDED FOR QUANTITY ESTIMATING PURPOSES ONLY.
8. QUANTITY INCLUDES SKEWED RUNNING PLANKS AT END OF BRIDGE. PROPOSED PLANKS SHALL BE 2.5 INCHEST THICK WITH WIDE FACE PLACED UP.

FLOORBEAM REFERENCE TABLE

OLD FLOOR BEAM NO.	CODE LETTER	NEW FLOOR BEAM NO.
-	E	FB0
	E	FB1
-	E	FB2
-	D	FB3
-	D	FB4
B1	A	FB5
B2	A	FB6
B3	C	FB7
B4	A	FB8
B5	C	FB9
B6	C	FB10
B7	C	FB11
B8	C	FB12
B9	C	FB13
B10	C	FB14
B11	A	FB15
B12	A	FB16
B13	A	FB17
B14	B	FB18
-	D	FB19
B15	A	FB20
B16	A	FB21
B17	C	FB22
-	D	FB23
B18	B	FB24
B19	B	FB25
B20	A	FB26
B21	C	FB27
B22	A	FB28
B23	C	FB29
B24	C	FB30
B25	A	FB31
B26	A	FB32
B27	A	FB33
B28	A	FB34
B29	A	FB35
B30	A	FB36
B31	A	FB37
B32	A	FB38
B33	B	FB39
-	D	FB40
-	D	FB41
B34	A	FB42

CODE LETTERS

(A) EXISTING FLOORBEAM SET AT EXISTING LOCATION

(B) EXISTING FLOORBEAM TO BE SLIGHTLY SHIFTED FROM ITS EXISTING LOCATION

(C) NEW FLOORBEAM SET AT EXISTING LOCATION

(D) EXISTING FLOORBEAM TO BE SET AT NEW LOCATION (FROM SPAN 1 STOCKPILE OR SPAN 2 REMOVAL)

(E) NEW FLOORBEAM SET AT NEW LOCATION

LEGEND

P.T. PRESSURE TREATED WITH TYPE II PENTACHLOROPHENOL

I.F. INSECTICIDE/FUNGICIDE

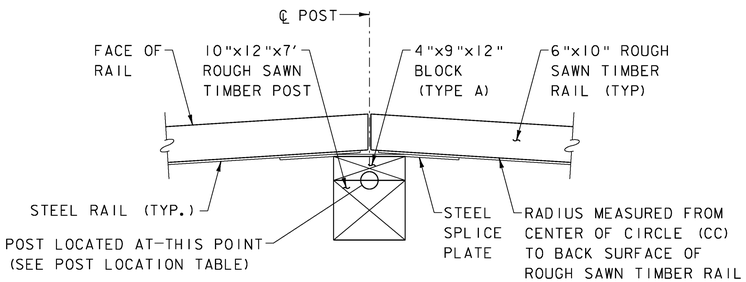
NOTE

1. EXISTING AND PROPOSED FLOORBEAMS MAY NEED TO BE NOTCHED, TRIMMED OR SHIMMED TO FIT AROUND THE EXISTING TRUSS MEMBERS AND MEET THE PROPOSED BRIDGE GRADE. ALL COSTS ASSOCIATED WITH NOTCHING, TRIMMING OR SHIMMING THE FLOORBEAMS SHALL BE INCLUDED IN ITEM 900.645, SPECIAL PROVISION (REHABILITATING COVERED BRIDGE SUPERSTRUCTURE).

PROJECT NAME: WOODSTOCK WOODSTOCK
PROJECT NUMBER: BHO 1442(52) ST 1444(58)

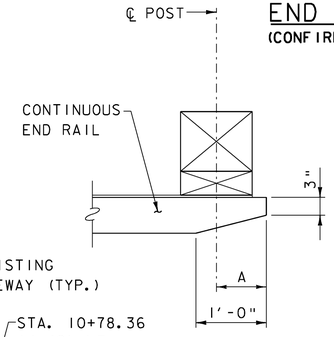
FILE NAME: z96j262mdt.dgn PLOT DATE: 12-JUL-2012
PROJECT LEADER: M. Sargent DRAWN BY: P. Dustin
DESIGNED BY: S. Della CHECKED BY: R. Joy
LUMBER DETAILS AND NOTES SHEET 56 OF 68

McFarland Johnson



POST DETAIL

SCALE: 1" = 1'-0"

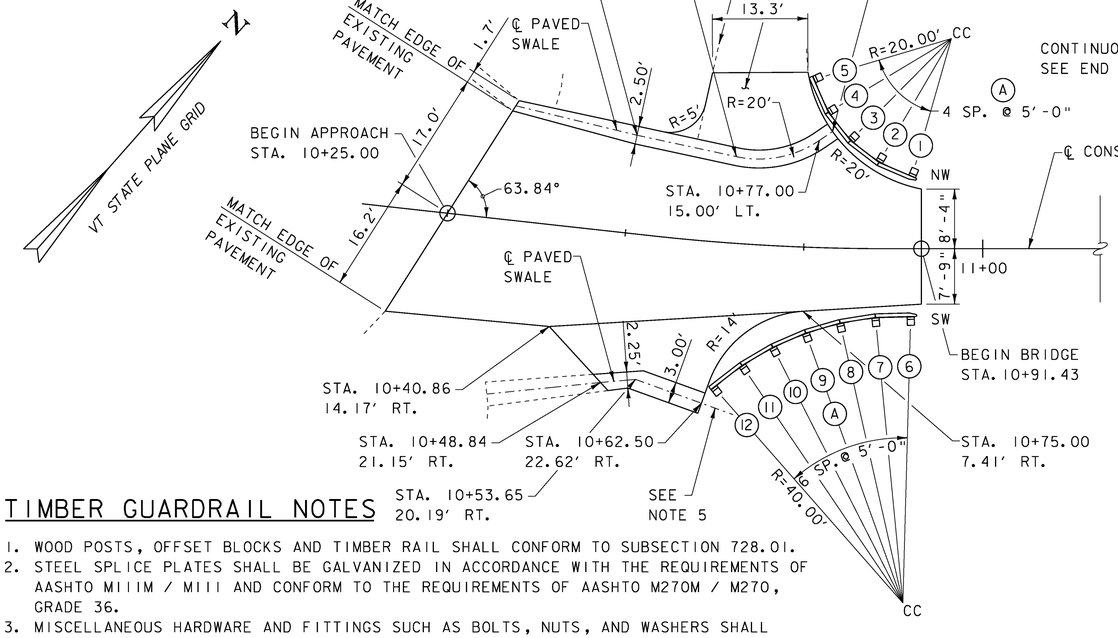


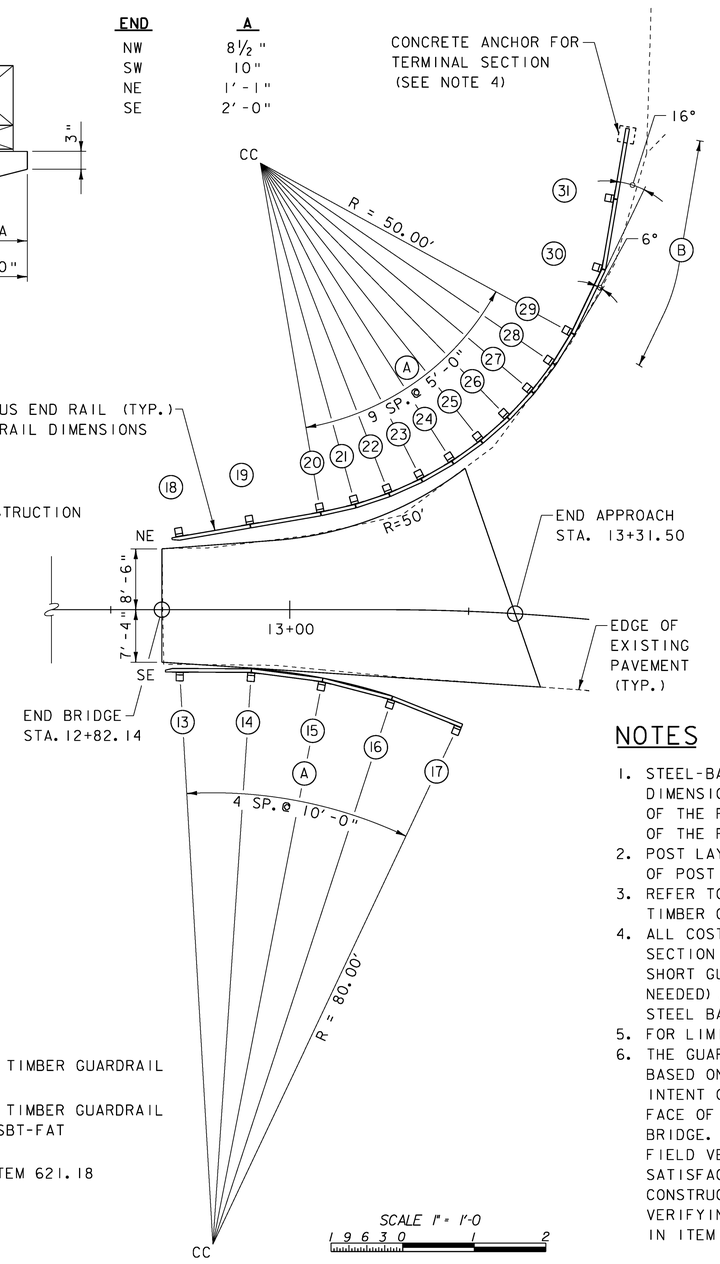
END RAIL DIMENSIONS

(CONFIRM DIMENSION "A" PER NOTE 6)

END	A
NW	8½"
SW	10"
NE	1'-1"
SE	2'-0"

POST LOCATIONS		
POST NO.	STATION	OFFSET
1	STA. 10+90.27	10.41 LT.
2	STA. 10+85.70	12.45 LT.
3	STA. 10+81.60	15.39 LT.
4	STA. 10+78.30	19.18 LT.
5	STA. 10+75.94	23.61 LT.
6	STA. 10+89.94	9.87 RT.
7	STA. 10+85.10	10.03 RT.
8	STA. 10+80.39	10.88 RT.
9	STA. 10+75.86	12.39 RT.
10	STA. 10+71.60	14.55 RT.
11	STA. 10+67.70	17.30 RT.
12	STA. 10+64.19	20.57 RT.
13	STA. 12+84.64	9.11 RT.
14	STA. 12+94.60	9.18 RT.
15	STA. 13+04.46	10.47 RT.
16	STA. 13+14.12	12.97 RT.
17	STA. 13+23.95	16.46 RT.
18	STA. 12+84.54	10.60 LT.
19	STA. 12+94.40	12.31 LT.
20	STA. 13+04.23	14.01 LT.
21	STA. 13+09.03	15.11 LT.
22	STA. 13+13.67	16.65 LT.
23	STA. 13+17.88	18.70 LT.
24	STA. 13+21.82	21.23 LT.
25	STA. 13+25.43	24.22 LT.
26	STA. 13+28.69	27.62 LT.
27	STA. 13+31.54	31.40 LT.
28	STA. 13+33.98	35.49 LT.
29	STA. 13+35.98	39.84 LT.
30	STA. 13+39.02	49.02 LT.
31	STA. 13+39.75	58.85 LT.





TIMBER GUARDRAIL NOTES

1. WOOD POSTS, OFFSET BLOCKS AND TIMBER RAIL SHALL CONFORM TO SUBSECTION 728.01.
2. STEEL SPLICE PLATES SHALL BE GALVANIZED IN ACCORDANCE WITH THE REQUIREMENTS OF AASHTO M111M / M111 AND CONFORM TO THE REQUIREMENTS OF AASHTO M270M / M270, GRADE 36.
3. MISCELLANEOUS HARDWARE AND FITTINGS SUCH AS BOLTS, NUTS, AND WASHERS SHALL CONFORM TO THE DIMENSIONS SHOWN.
4. ALL STEEL BOLTS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F568M, CLASS 4.6 (ASTM A307, GRADE A). STEEL NUTS SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M291M (AASHTO M291). STEEL WASHERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F436M (ASTM F844).
5. ALL HARDWARE SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO M232M / M232. ALL BOLTS, NUTS, AND WASHERS SHALL EITHER BE HOT-DIP GALVANIZED IN ACCORDANCE WITH THE REQUIREMENTS OF AASHTO M232M / M232 OR MECHANICALLY GALVANIZED USING A MECHANICALLY DEPOSITED PROCESS CONFORMING TO THE REQUIREMENTS OF AASHTO M298, CLASS 50.
6. LAG SCREWS SHALL BE OF LOW TO MEDIUM CARBON STEEL AND SHALL BE OF GOOD COMMERCIAL QUALITY.
7. CONCRETE ANCHORS SHALL CONFORM TO THE REQUIREMENTS OF SUBSECTION 728.05.
8. DELINEATORS SHALL BE A 3 INCH BY 1.5 INCH REFLECTIVE ALUMINUM STRIP ATTACHED WITH TWO 4D GALVANIZED NAILS. DELINEATORS SHALL BE PLACED APPROXIMATELY 10 FEET APART ALONG THE TIMBER RAIL AND CLEARLY VISIBLE TO APPROACHING TRAFFIC. REFLECTIVE MATERIAL SHALL MEET THE REQUIREMENTS OF SUBSECTION 751.03 AND SHALL BE OF ENCAPSULATED LENS SILVER OR AMBER. PAYMENT SHALL BE INCIDENTAL TO 621.18

* (A) LIMITS OF STEEL-BACKED TIMBER GUARDRAIL TYPE A

* (B) LIMITS OF STEEL-BACKED TIMBER GUARDRAIL TERMINAL SECTION TYPE SBT-FAT

* COST INCLUDED IN ITEM 621.18

GUARDRAIL AND PAVEMENT LAYOUT

SCALE: 1" = 10'

SCALE 1" = 1'-0

1 9 6 3 0 1 2

SCALE 1" = 10'-0

10 0 10

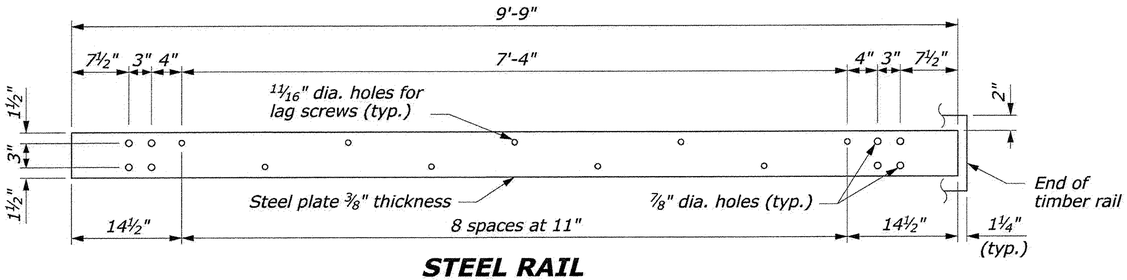
NOTES

1. STEEL-BACKED TIMBER GUARDRAIL RADIAL LAYOUT DIMENSIONS ARE PROVIDED AT THE BACK SURFACE OF THE ROUGH SAWN TIMBER RAIL AT THE CENTERLINE OF THE POST.
2. POST LAYOUT DIMENSIONS ARE PROVIDED AT THE FACE OF POST AT THE CENTERLINE OF THE POST.
3. REFER TO SHEETS 58 THRU 61 FOR STEEL-BACKED TIMBER GUARDRAIL DETAILS.
4. ALL COSTS ASSOCIATED WITH THE NEW TERMINAL SECTION ANCHOR, AS WELL AS CONCRETE ANCHORS FOR SHORT GUARDRAIL POST ON STANDARD 617-60 (IF NEEDED), SHALL BE INCIDENTAL TO ITEM 621.18, STEEL BACKED TIMBER GUARDRAIL.
5. FOR LIMITS OF STONE FILL, SEE SHEET 8.
6. THE GUARDRAIL LAYOUT AND POST LOCATIONS WERE BASED ON EXISTING BRIDGE DIMENSIONS WITH THE INTENT OF LINING UP THE FACE OF RAIL WITH THE FACE OF THE NEW PORTAL AT EACH CORNER OF THE BRIDGE. THE FINAL GUARDRAIL LOCATION SHALL BE FIELD VERIFIED BY THE CONTRACTOR TO THE SATISFACTION OF THE RESIDENT ENGINEER PRIOR TO CONSTRUCTION. ALL COSTS ASSOCIATED WITH VERIFYING THE GUARDRAIL LAYOUT SHALL BE INCLUDED IN ITEM 621.18.

PROJECT NAME:	WOODSTOCK	WOODSTOCK
PROJECT NUMBER:	BHO 1442(52)	ST 1444(58)
FILE NAME: z96J262grl.dgn		PLOT DATE: 29-JUN-2012
PROJECT LEADER: M. Sargent		DRAWN BY: P. Dustin
DESIGNED BY: S. Della/P. Dustin		CHECKED BY: R. Joy
GUARDRAIL AND PAVEMENT LAYOUT		SHEET 57 OF 68

McFarland Johnson

STATE	PROJECT	SHEET NUMBER

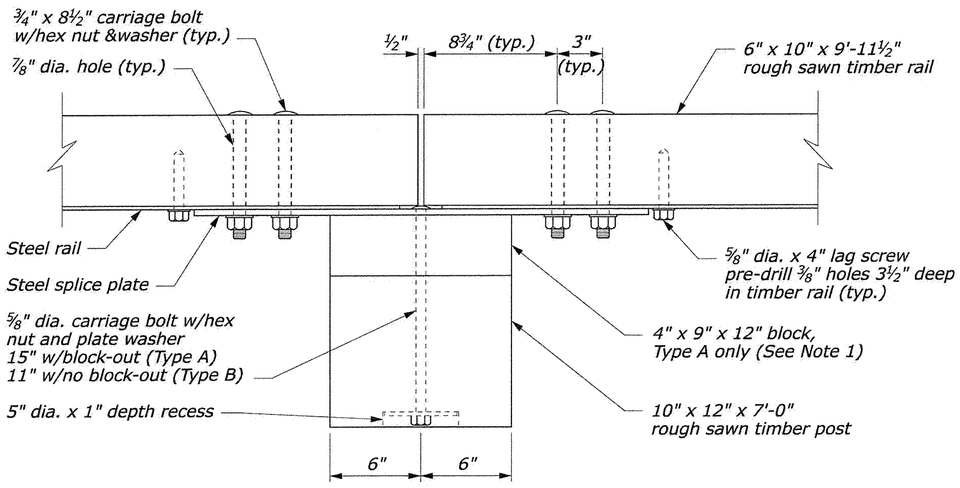


STEEL RAIL

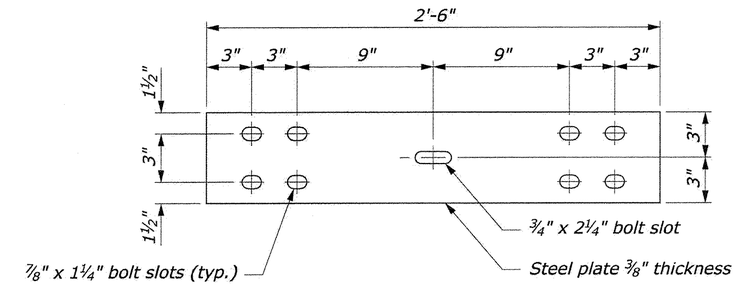
PLATE WASHER

NOTE:

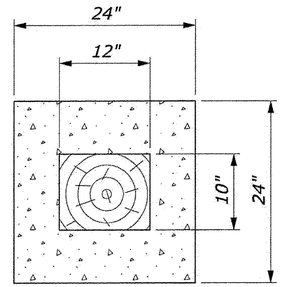
1. Use the Type A, blocked-out, system or the Type B, non-blocked-out, system as specified in the plans.
2. Place a terminal section (See Standards 617-61 at northeast approach.
3. See additional notes on sheet 57.

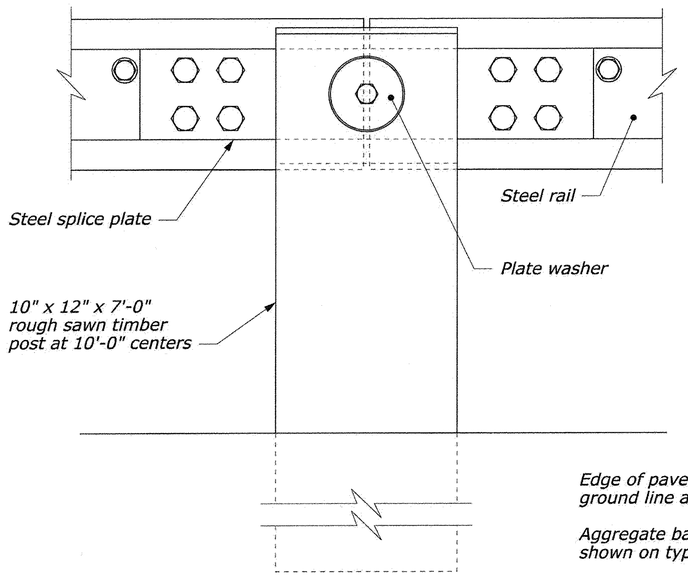


PLAN



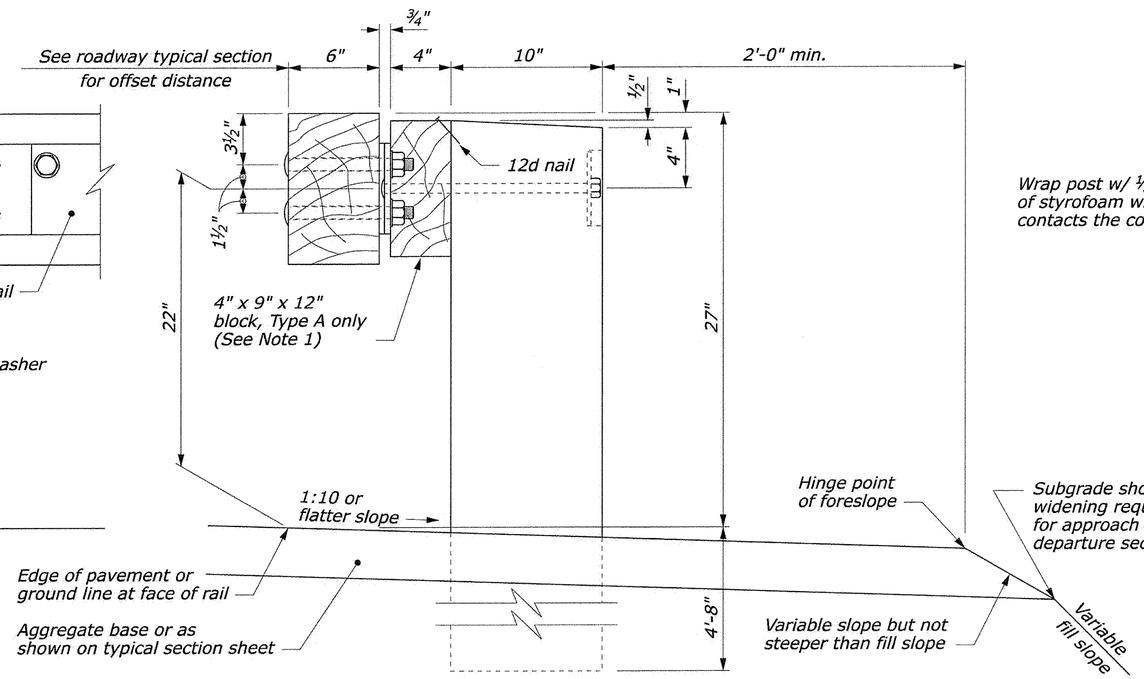
STEEL SPLICE PLATE



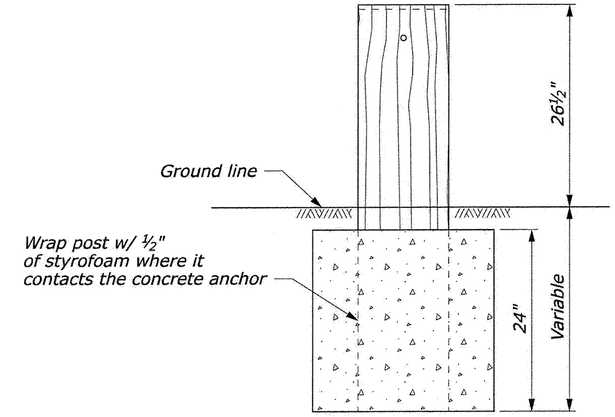


ELEVATION

POST CONNECTION



TYPICAL GUARDRAIL CROSS SECTION



24" dia. round anchor is an acceptable alternative.
Reduced size acceptable in solid rock.

CONCRETE ANCHOR FOR SHORT GUARDRAIL POST

Woodstock BHO 1444(52)
Woodstock ST 1444(58)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
FEDERAL LANDS HIGHWAY

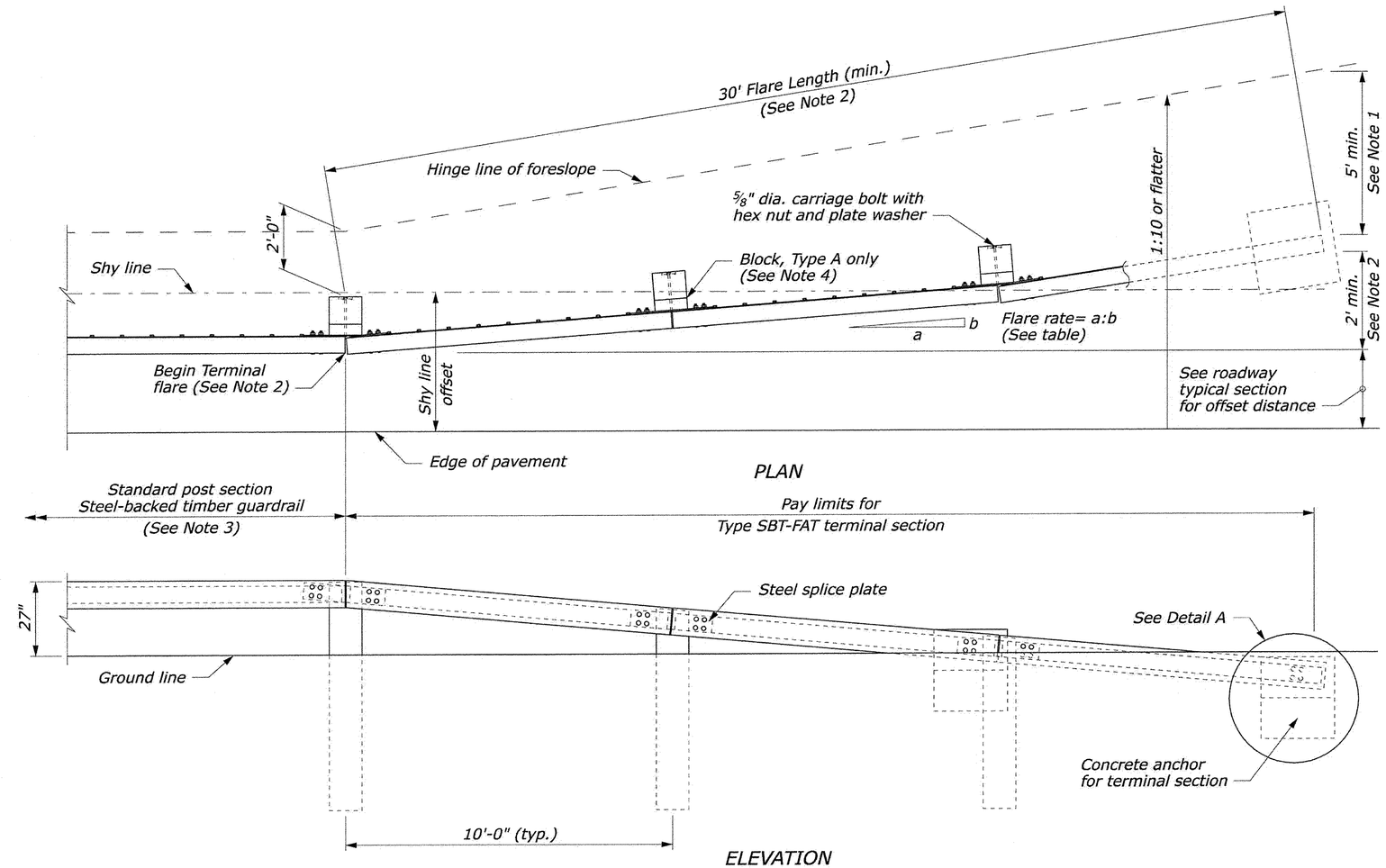
U.S. CUSTOMARY STANDARD

STEEL-BACKED TIMBER GUARDRAIL TYPE A & TYPE B

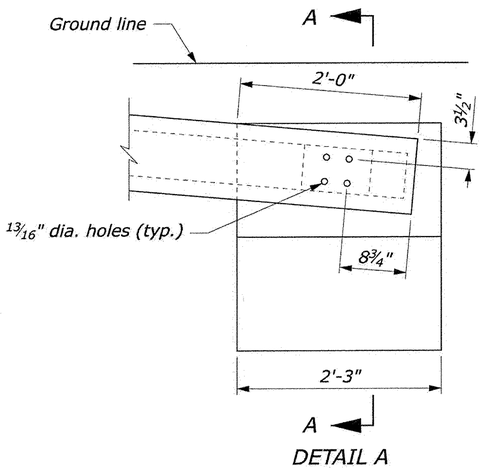
STANDARD APPROVED FOR USE 3/1990	STANDARD
REVISED: 4/1994 6/2005	617-60

NO SCALE

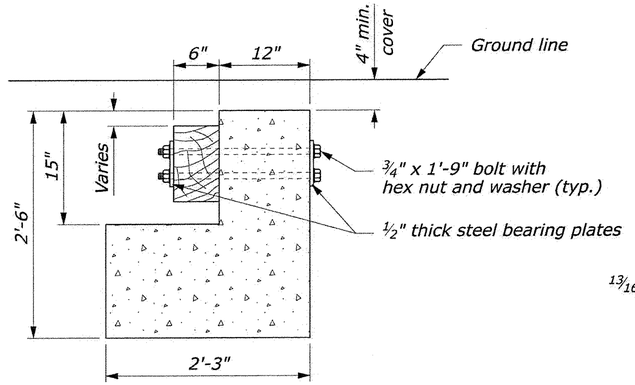
STATE	PROJECT	SHEET NUMBER



APPROACH & DEPARTURE FLARE WITH FLARED ANCHOR TERMINAL (FAT)

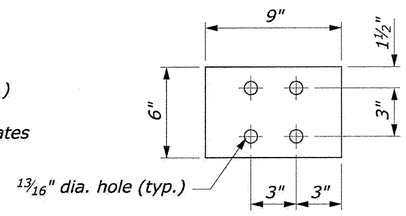


DETAIL A



SECTION A-A

CONCRETE ANCHOR



STEEL BEARING PLATE

NOTE:

1. Extend the fill widening a minimum of 5 feet behind the guardrail, unless otherwise directed by the CO.
2. The guardrail flare shown in the plan view is the minimum length and rate required. As directed by the CO, flare the guardrail so that the terminal section is outside the clear zone. If the terminal section cannot be located outside the clear zone, it should be flared as far as practical from the road at the maximum rate indicated on the Guardrail Flare Rates table.
3. See Standard 617-60, Steel-Backed Timber Guardrail, Type SBTA and SBTB, for timber, structural steel, and hardware details.
4. On the Type A, blocked-out guardrail, include the blocks in terminal section, except on the concrete anchor. For the Type B, non-blocked-out guardrail, no blocks are included.

Note: CO = Resident Engineer

GUARDRAIL FLARE RATE TABLE			
Design Speed (mph)	Shy line offset (ft)	Flare rate inside shy line (a:b)	Flare rate outside shy line (a:b)
60	8.0	26:1	14:1
50	6.5	21:1	11:1
40	5.0	16:1	8:1
30 and less	3.5	13:1	7:1

Woodstock BHO 1444(52)
Woodstock ST 1444(58)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
FEDERAL LANDS HIGHWAY

U.S. CUSTOMARY STANDARD

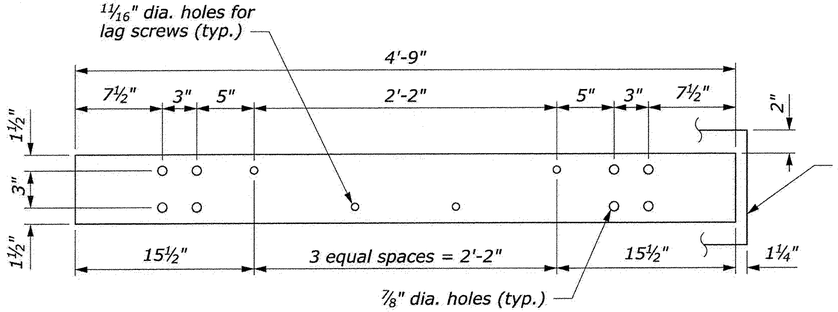
STEEL-BACKED TIMBER GUARDRAIL TERMINAL SECTION TYPE SBT-FAT

STANDARD APPROVED FOR USE 1/1990
REVISED: 4/1994 6/2005
DRAFT: 9/2007

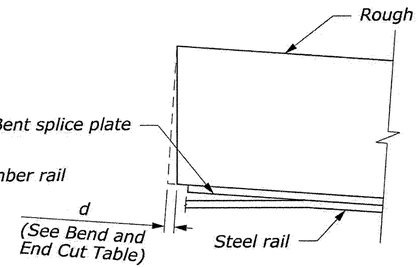
STANDARD 617-61

NO SCALE

STATE	PROJECT	SHEET NUMBER



STEEL RAIL
6" x ⅜" x 4'-9"



DETAIL A

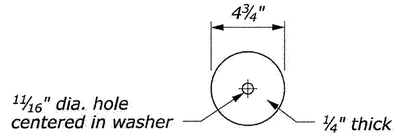
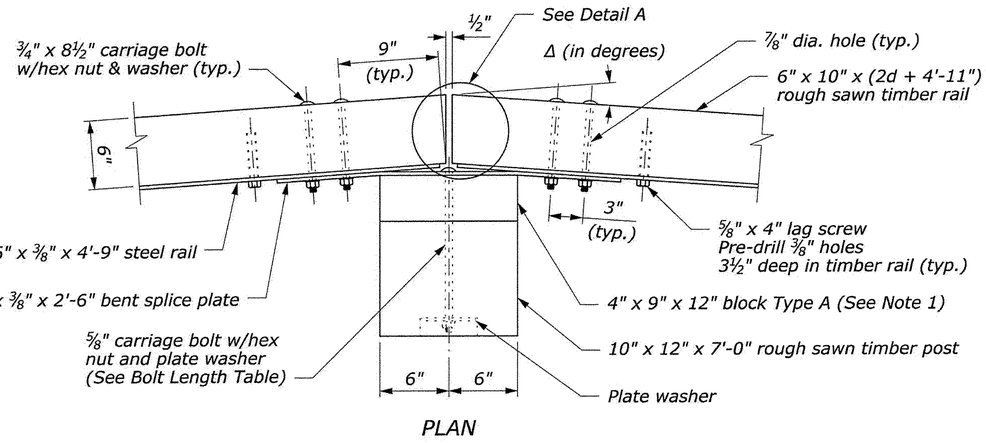


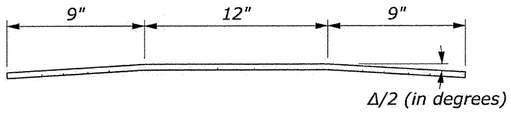
PLATE WASHER DETAIL

NOTE:

1. Use the Type A, blocked-out, system or the Type B, non-blocked-out, system as specified.
2. Furnish shop bent splice plates. Use the minimum bend angle shown in the table below.
3. See Sheet 2 of 2 for Plan View Layout.
4. See additional notes on sheet 57.



PLAN



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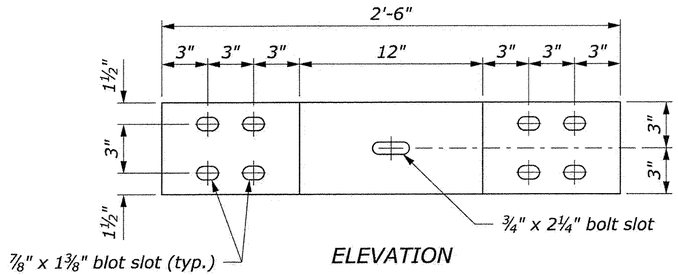
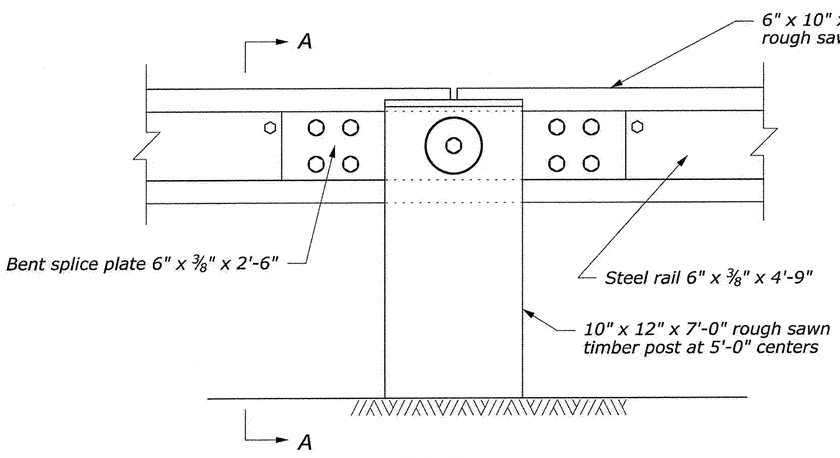


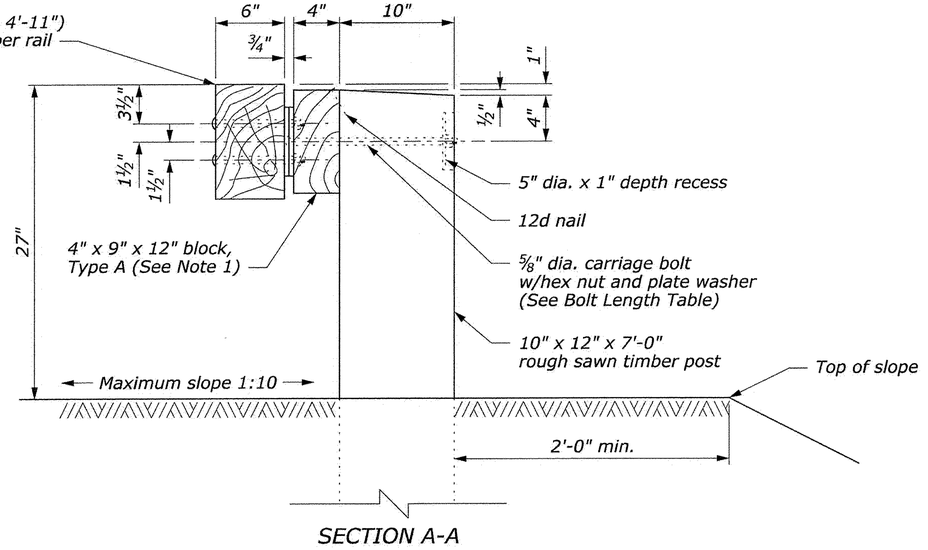
ELEVATION

BENT SPLICE PLATE
6" x ⅜" x 2'-6"

BEND AND END CUT TABLE		
Radius R ft	Δ/2 degrees	d in
20	7.18	¾
25	5.74	⅝
30	4.78	½
35	4.10	7/16
40	3.58	⅜
45	3.18	⅓
50	2.87	5/16
55	2.61	¼
60	2.39	¼
65	2.20	¼
70	2.05	¼
over 70	flat	0



ELEVATION



SECTION A-A

POST CONNECTION

BOLT LENGTH TABLE	
Type A (Block-out)	Type B (No Block-out)
15"	11"

Woodstock BHO 1444(52)
Woodstock ST 1444(58)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
FEDERAL LANDS HIGHWAY

U.S. CUSTOMARY STANDARD

STEEL-BACKED TIMBER GUARDRAIL AROUND CIRCULAR CURVES 70 FOOT RADIUS AND BELOW

Sheet 1 of 2

STANDARD APPROVED FOR USE 6/2005
REVISED:

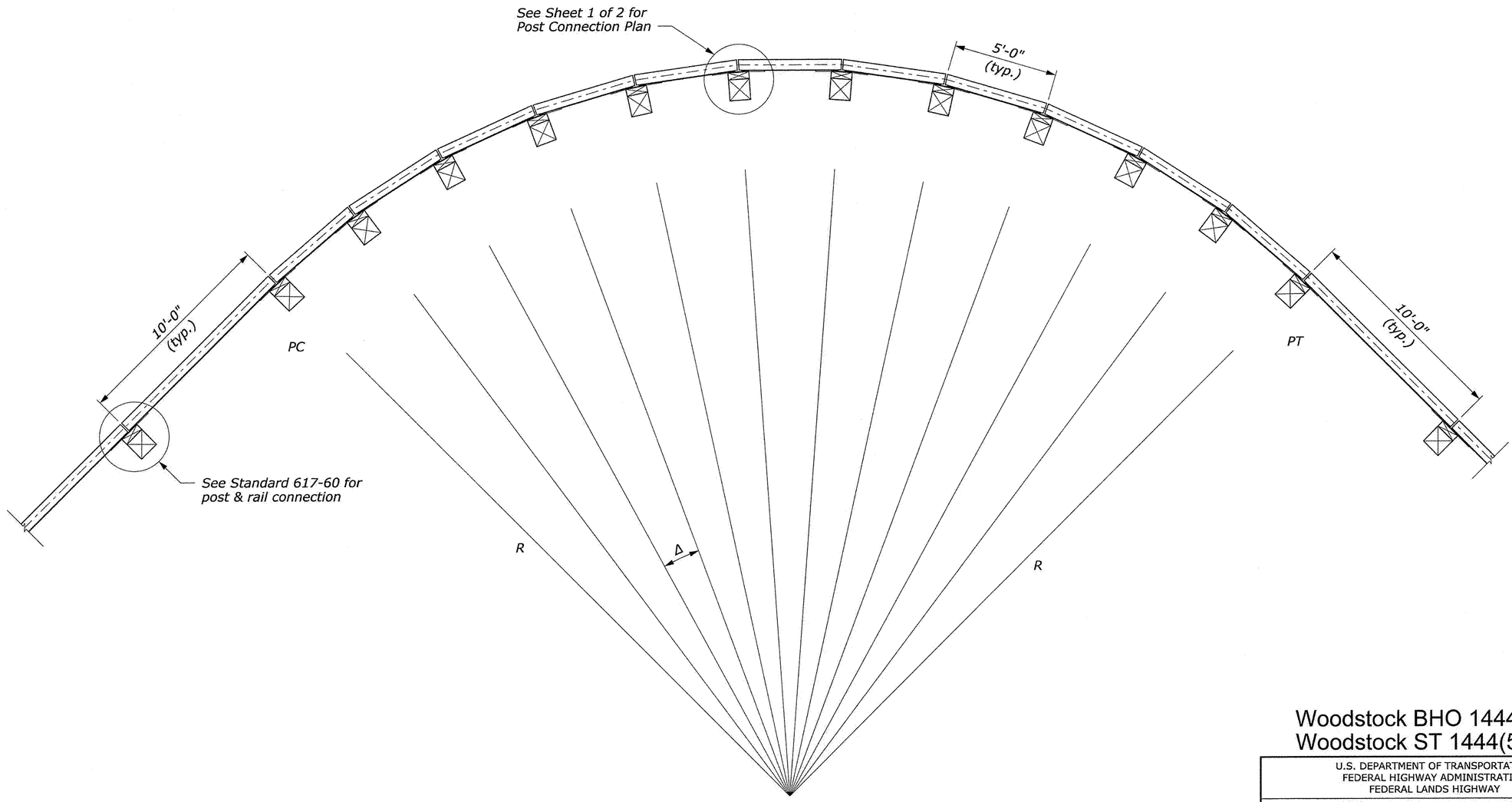
STANDARD 617-63

NO SCALE

STATE	PROJECT	SHEET NUMBER

NOTE:

1. *Δ is the central angle which subtends a 5'-0" chord.*
2. *R is measured from the center of the circle to the back surface of the rough sawn timber rail.*



PLAN VIEW LAYOUT

Woodstock BHO 1444(52)
Woodstock ST 1444(58)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
FEDERAL LANDS HIGHWAY

U.S. CUSTOMARY STANDARD

STEEL-BACKED TIMBER GUARDRAIL AROUND CIRCULAR CURVES 70 FOOT RADIUS AND BELOW

Sheet 2 of 2

STANDARD APPROVED FOR USE 6/2005	STANDARD
REVISED:	617-63

NO SCALE

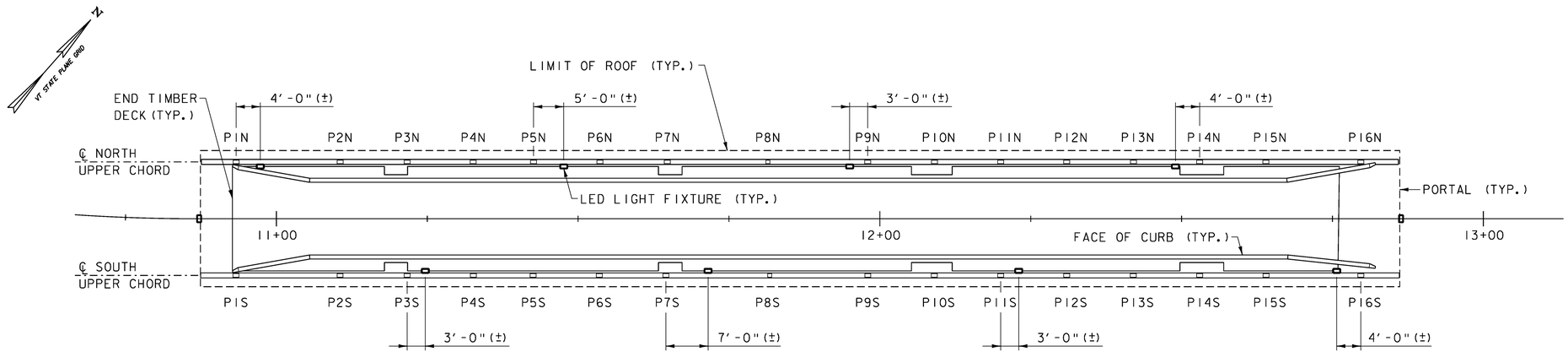
STATE OF VERMONT
AGENCY OF TRANSPORTATION

TRAFFIC SIGN SUMMARY SHEET

MILEMARKER, 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) FOUND-ATION	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																																			
9+79 LT. 10+17 RT. 13+35 LT. 13+81 LT.	10-0"	4	36	36	36.00						8					X		X															W12-2		SHS
	LEGAL LOAD LIMIT 16,000 POUNDS	4	24	30	20.00																											VR-017		E-141
9+76 LT. 10+23 RT. 13+XX LT. 14+XX LT.	ONE LANE BRIDGE	4	36	36	36.00						4					X		X															W5-3		SHS
10+87 LT. 12+87 RT.		2	12	36	6.0						2					X		X															OM3-L		SHS
10+87 RT. 12+87 LT.		2	12	36	6.0						2					X		X															OM3-R		SHS
												FT	FT	FT	FT	FT 224.0	FT		EA	LB	LB	LB		LB	LB	LB	LB								
TOTALS		SF 104.0	SF	EA.	SF		FT		FT 224.0		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."

SHS=2009 STANDARD HIGHWAY SIGNS



LIGHTING PLAN

SCALE: 1" = 10'

TOTAL FIXTURES = 10

NOTES

1. ALL COSTS ASSOCIATED WITH INCORPORATING A NEW LED BRIDGE LIGHTING SYSTEM SHALL BE INCLUDED IN ITEM 900.645 SPECIAL PROVISION (LIGHTING FOR COVERED BRIDGE).

McFarland Johnson

PROJECT NAME:	WOODSTOCK	WOODSTOCK
PROJECT NUMBER:	BHO 1444(52)	ST 1444(58)
FILE NAME: z96j262sgn.dgn		PLOT DATE: 29-JUN-2012
PROJECT LEADER: M. Sargent		DRAWN BY: P. Dustin
DESIGNED BY: P. Dustin		CHECKED BY: R. Joy
SIGN SUMMARY AND LIGHTING DETAILS		SHEET 62 OF 68

STATE OF VERMONT
AGENCY OF TRANSPORTATION

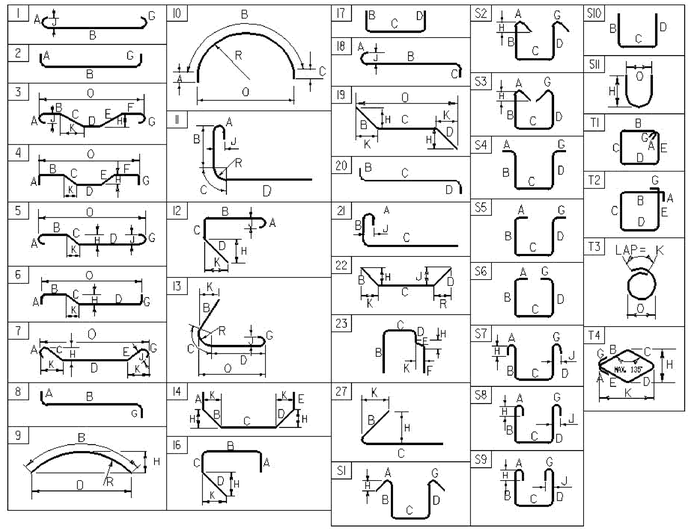
REINFORCING STEEL SCHEDULE

ITEM	EACH	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	K	R	O
	WEST ABUTMENT																
	14	4	9'- 10"	A401	T2	0'- 6"	2'- 3"	2'- 2"	2'- 3"	2'- 2"		0'- 6"					
	42	5	29'- 6"	A501	STR												
	84	5	17'- 10"	A502	STR												
	14	5	4'- 11"	A503	STR												
✳	15	5	15'- 0"	A504	STR												
	16	5	5'- 7"	EA505	STR												
	14	5	5'- 9"	EA506	STR												
	28	5	13'- 7"	EA507	STR												
	30	5	12'- 7"	EA508	STR												
	10	5	3'- 9"	A509	STR												
	60	5	3'- 9"	EA510	STR												
	48	5	6'- 7"	A511	STR												
	20	5	8'- 11"	EA512	STR												
	12	5	13'- 8"	EA513	STR												
	6	5	3'- 6"	A514	STR												
▲	24	5	10'- 0"	A515	STR												
	84	5	5'- 10"	A516	17		0'- 10"	5'- 0"	0'- 0"								
	12	5	17'- 10"	A517	17		2'- 2"	13'- 6"	2'- 2"								
	30	5	10'- 10"	A518	17		2'- 2"	6'- 6"	2'- 2"								
	76	5	17'- 9"	A519	17		2'- 2"	13'- 5"	2'- 2"								
	14	5	6'- 0"	EA520	17		3'- 0"	3'- 0"	0'- 0"								
	14	5	7'- 0"	EA521	17		3'- 0"	4'- 0"	0'- 0"								
	10	5	4'- 8"	EA522	17		3'- 6"	2'- 2"	0'- 0"								
	2	5	6'- 2"	A523	22		4'- 0"	2'- 2"	0'- 0"				3'- 7"	0'- 0"	1'- 10"	0'- 0"	
	14	5	5'- 0"	EA524	17		2'- 6"	2'- 6"	0'- 0"								
▲	4	5	7'- 3"	A525	17		2'- 6"	2'- 3"	2'- 6"								
	6	5	8'- 0"	A526	22		2'- 4"	3'- 6"	2'- 2"				1'- 7"	2'- 2"	1'- 9"	0'- 0"	
	28	5	4'- 2"	EA527	2		0'- 10"	3'- 4"				0'- 0"					
	9	5	8'- 10"	EA528	S10		3'- 10"	1'- 2"	3'- 10"								
	10	5	7'- 8"	EA529	STR												
✳	15	6	15'- 0"	A601	STR												
	16	6	5'- 7"	EA602	STR												
	14	6	5'- 9"	EA603	STR												
	32	6	11'- 4"	A604	17		6'- 0"	5'- 4"	0'- 0"								
	14	6	6'- 5"	EA605	17		2'- 7"	3'- 10"	0'- 0"								
✳	33	7	12'- 6"	A701	STR												
	20	7	5'- 10"	A702	STR												
	18	7	6'- 1"	EA703	17		2'- 2"	3'- 11"	0'- 0"								
	2	7	6'- 2"	A704	22		4'- 0"	2'- 2"	0'- 0"				3'- 7"	0'- 0"	1'- 10"	0'- 0"	
	32	7	10'- 6"	A705	STR												
✳ ▲	26	8	8'- 0"	A801	STR												
✳	33	9	19'- 6"	A901	STR												
✳	61	10	19'- 6"	A1001	STR												
	WINGWALL 1																
	11	5	7'- 6"	1W501	STR												
	18	5	10'- 0"	1W502	STR												
	9	5	5'- 5"	1W503	17		2'- 2"	1'- 1"	2'- 2"								
	20	7	7'- 6"	1W701	STR												
	WINGWALL 2																
▲	11	5	7'- 6"	2W501	STR												
▲	18	5	10'- 0"	2W502	STR												
	9	5	5'- 5"	2W503	17		2'- 2"	1'- 1"	2'- 2"								
▲	20	7	7'- 6"	2W701	STR												
	PIER																
	4	5	21'- 0"	1P501	STR												
	44	5	8'- 7"	1P502	STR												
▲	44	5	4'- 4"	1P503	2	0'- 10"	3'- 6"					0'- 0"					
	40	5	3'- 11"	1P504	17		1'- 8"	2'- 3"	0'- 0"								
✳	29	5	3'- 0"	1P505	STR												
	36	8	21'- 0"	1P801	STR												
✳	7	8	8'- 7"	1P802	STR												

ITEM	EACH	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	K	R	O

~ NOTES ~

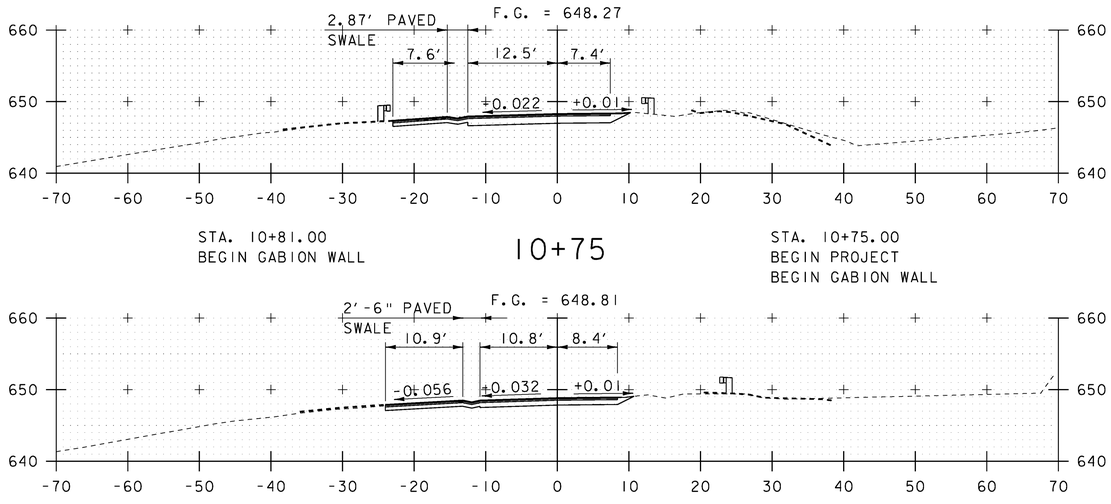
1. UNLESS OTHERWISE DESIGNATED, ALL BAR REINFORCEMENT FOR CONCRETE IN SIZES UP TO AND INCLUDING NO. 18 SHALL CONFORM TO THE REQUIREMENTS OF THE "SPECIFICATIONS FOR DEFORMED BILLET-STEEL BARS FOR CONCRETE REINFORCEMENT", AASHTO M 31 (ASTM A 615-SI). ALL BARS SHALL BE GRADE 60, UNLESS OTHERWISE DESIGNATED.
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.



ASTM STANDARD REINFORCING BARS

BAR SIZE DESIGNATION	WEIGHT POUNDS PER FOOT	NOMINAL DIMENSIONS ROUND SECTION		
		DIAMETER INCHES	AREA INCHES^2	PERIMETER INCHES
#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	2.044	0.875	0.60	2.749
#8	2.670	1.000	0.79	3.142
#9	3.400	1.128	1.00	3.544
#10	4.303	1.270	1.27	3.990
#11	5.313	1.410	1.56	4.430
#14	7.65	1.693	2.25	5.32
#18	13.60	2.257	4.00	7.09

PROJECT NAME:	WOODSTOCK	WOODSTOCK
PROJECT NUMBER:	BHO 1444 (52)	ST 1444(58)
FILE NAME: z96j262reinf.xls		PLOT DATE: 6/12/2012
PROJECT MANAGER: M. Sargent		DRAWN BY: S. Delia
DESIGNED BY: S. Delia		CHECKED BY: R. Joy
REINFORCING STEEL SUMMARY		SHEET 63 OF 68

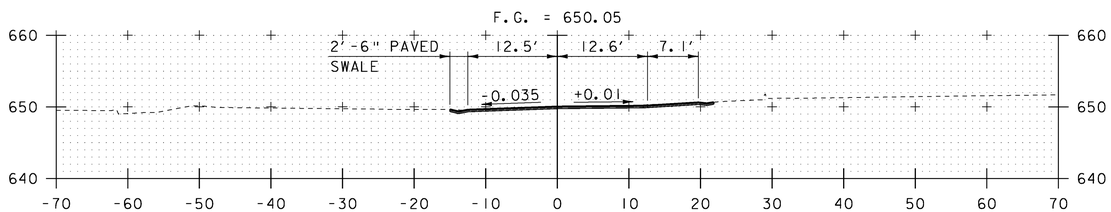


STA. 10+81.00
BEGIN GABION WALL

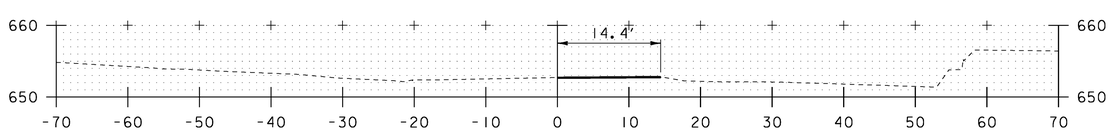
10+75

STA. 10+75.00
BEGIN PROJECT
BEGIN GABION WALL

10+67 (DRIVEWAY SECTION)

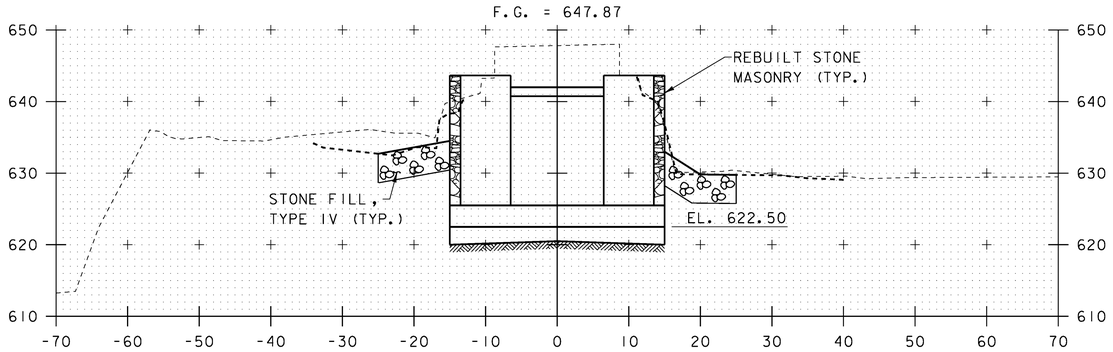


10+50



10+25

STA. 10+25.00
BEGIN APPROACH
MATCH EXISTING

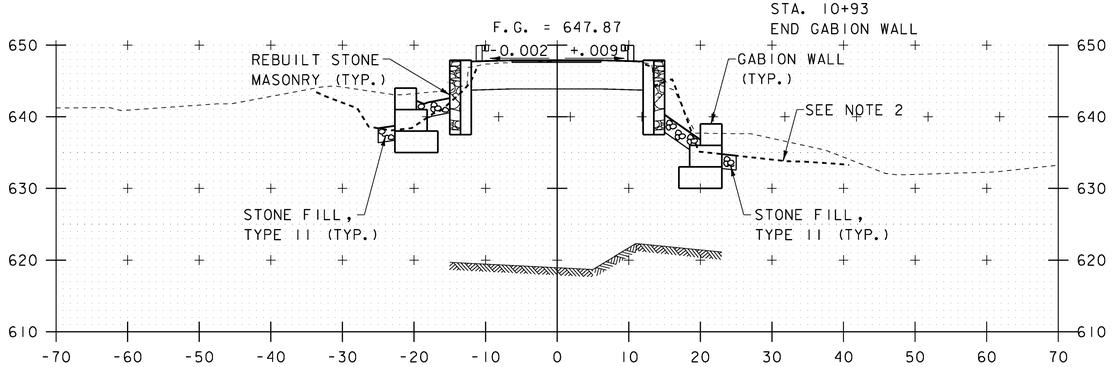


STA. 10+91.43
BEGIN BRIDGE

STA. 10+93
END GABION WALL

11+00

STA. 10+93
END GABION WALL



10+90

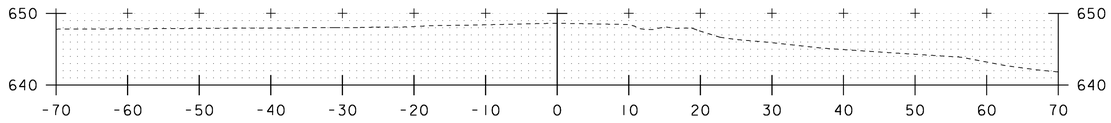
NOTES

1. THE EXISTING TOPOGRAPHY AND CHANNEL FEATURES DEPICTED ON THIS SHEET WERE OBTAINED PRIOR TO FLOODING AND DO NOT REFLECT CURRENT CONDITIONS.
2. THE BOLD DASHED LINES REPRESENT THE FINDINGS OF A PARTIAL POST-FLOOD SURVEY OF EXISTING CONDITIONS CONDUCTED IN JANUARY 2012.

SCALE 1" = 10'-0
10 0 10

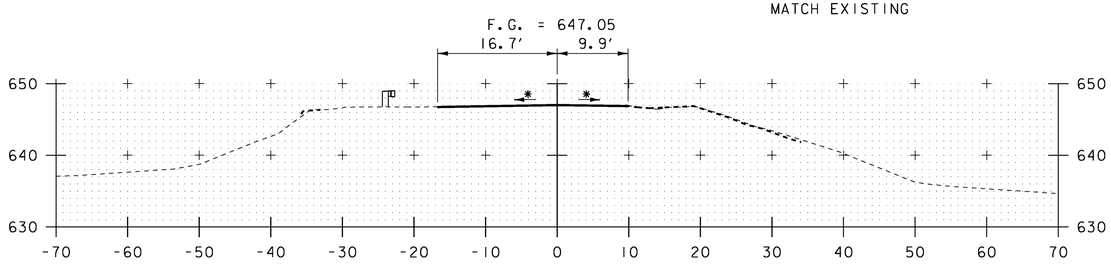
McFarland Johnson

PROJECT NAME:	WOODSTOCK	WOODSTOCK
PROJECT NUMBER:	BHO 1444(52)	ST 1444(58)
FILE NAME: z96j262xsl.dgn		PLOT DATE: 29-JUN-2012
PROJECT LEADER: M.Sargent		DRAWN BY: P.Dustin
DESIGNED BY: P.Dustin		CHECKED BY: R.Joy
ROADWAY CROSS SECTIONS (1OF 2)		SHEET 64 OF 68

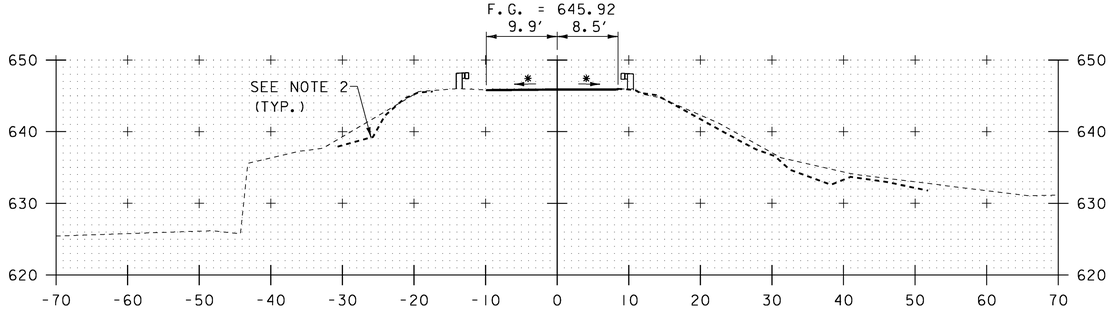


13+50

STA. 13+31.50
END APPROACH
MATCH EXISTING



13+25



* MATCH EXISTING CROSS SLOPE (TYP.)

13+00

STA. 12+82.14
END BRIDGE
END PROJECT

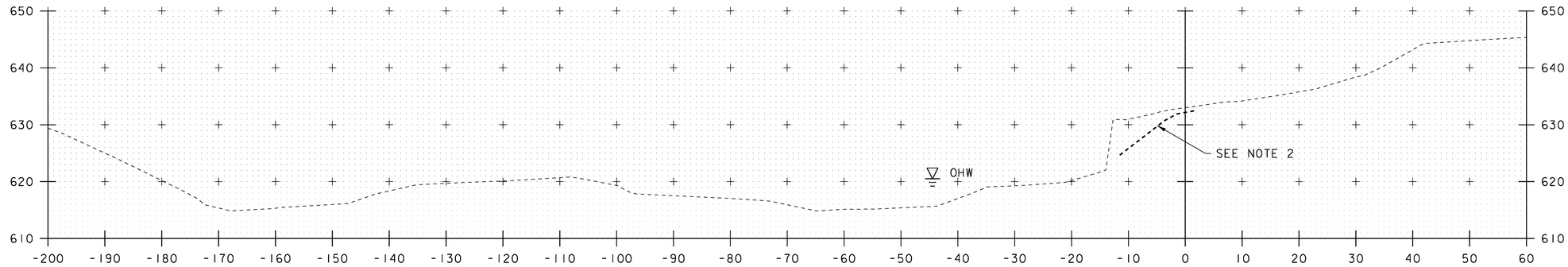
NOTES

1. THE EXISTING TOPOGRAPHY AND CHANNEL FEATURES DEPICTED ON THIS SHEET WERE OBTAINED PRIOR TO FLOODING AND DO NOT REFLECT CURRENT CONDITIONS.
2. THE BOLD DASHED LINES REPRESENT THE FINDINGS OF A PARTIAL POST-FLOOD SURVEY OF EXISTING CONDITIONS CONDUCTED IN JANUARY 2012.

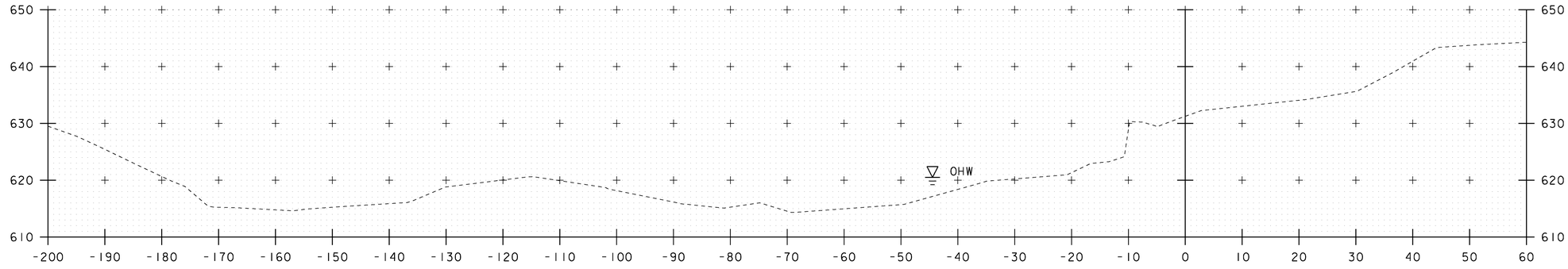
SCALE 1" = 10'-0
10 0 10

McFarland Johnson

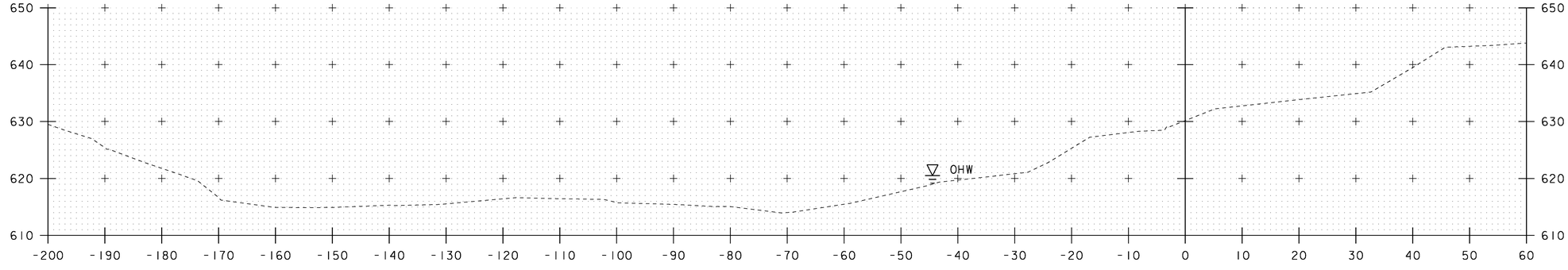
PROJECT NAME:	WOODSTOCK	WOODSTOCK
PROJECT NUMBER:	BHO 1444(52)	ST 1444(58)
FILE NAME: z96j262xsl.dgn		PLOT DATE: 29-JUN-2012
PROJECT LEADER: M.Sargent		DRAWN BY: P. Dustin
DESIGNED BY: P. Dustin		CHECKED BY: R. Joy
ROADWAY CROSS SECTIONS (2 OF 2)		SHEET 65 OF 68



20+50



20+25



20+00

NOTES

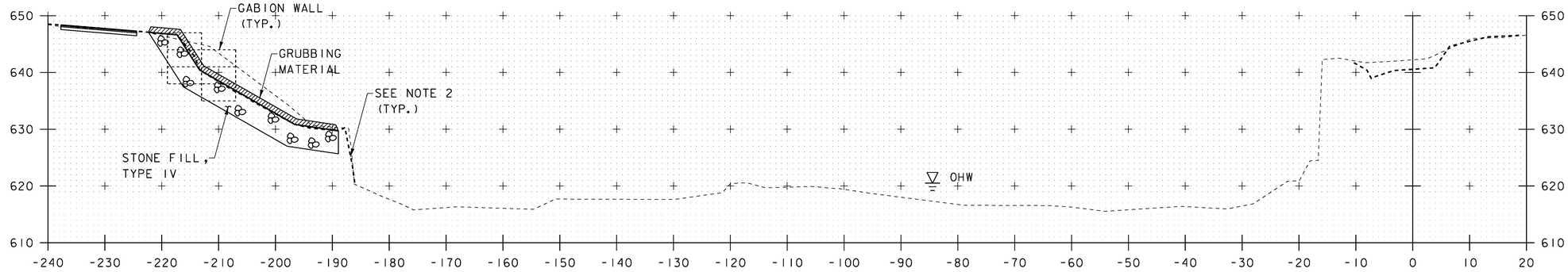
1. THE EXISTING TOPOGRAPHY AND CHANNEL FEATURES DEPICTED ON THIS SHEET WERE OBTAINED PRIOR TO FLOODING AND DO NOT REFLECT CURRENT CONDITIONS.
2. THE BOLD DASHED LINES REPRESENT THE FINDINGS OF A PARTIAL POST-FLOOD SURVEY OF EXISTING CONDITIONS CONDUCTED IN JANUARY 2012.

SCALE 1" = 10'-0

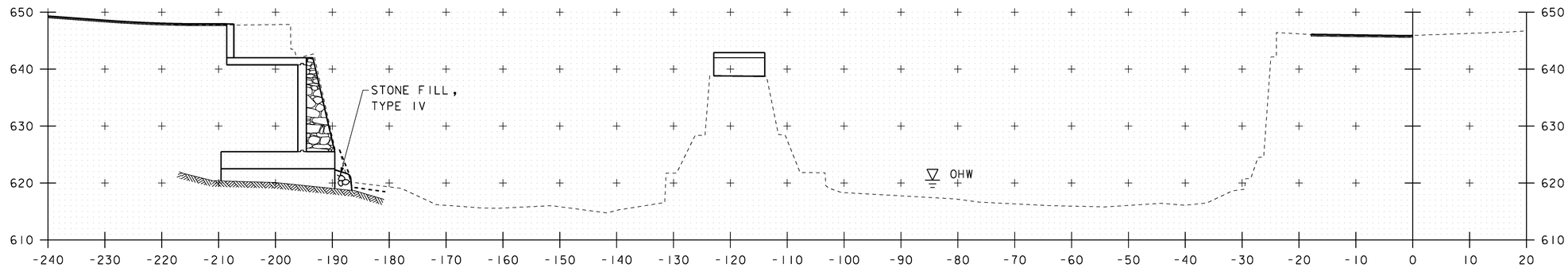
10 0 10

McFarland Johnson

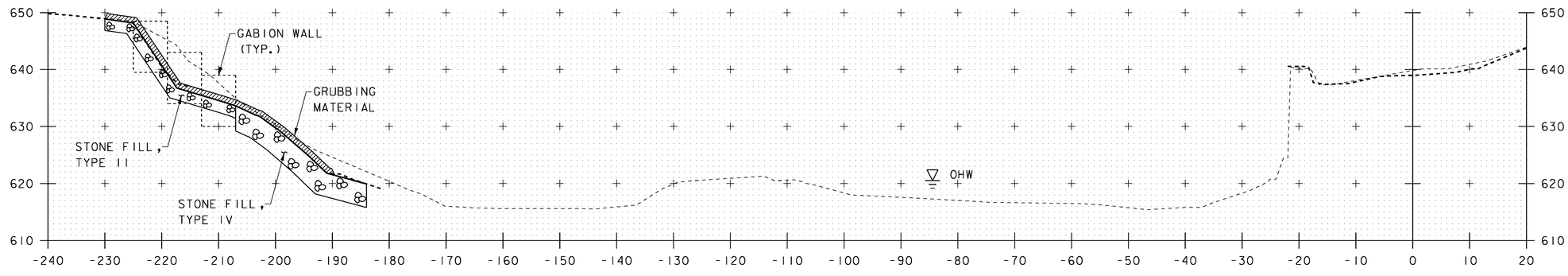
PROJECT NAME:	WOODSTOCK	WOODSTOCK
PROJECT NUMBER:	BHO 1444(52)	ST 1444(58)
FILE NAME: z96J262xs2.dgn		PLOT DATE: 29-JUN-2012
PROJECT LEADER: M.Sargent		DRAWN BY: P. Dustin
DESIGNED BY: P. Dustin		CHECKED BY: R. Joy
CHANNEL CROSS SECTIONS (1 OF 3)		SHEET 66 OF 68



21+25



21+00



20+75

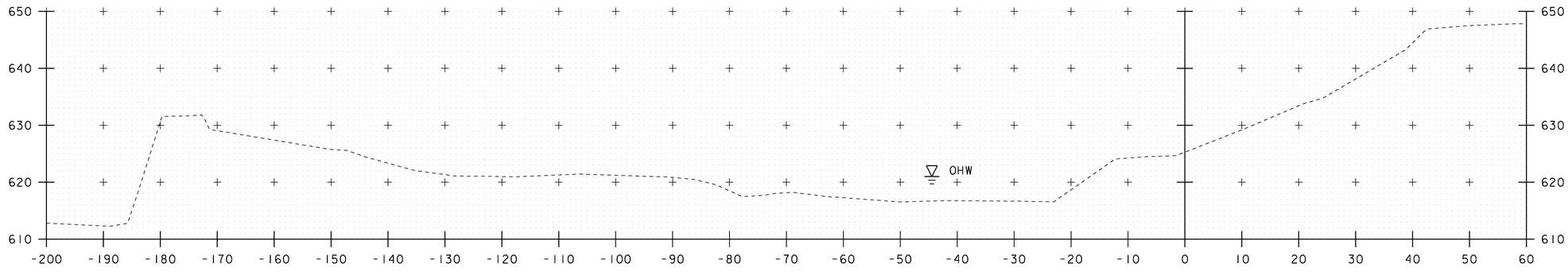
NOTES

1. THE EXISTING TOPOGRAPHY AND CHANNEL FEATURES DEPICTED ON THIS SHEET WERE OBTAINED PRIOR TO FLOODING AND DO NOT REFLECT CURRENT CONDITIONS.
2. THE BOLD DASHED LINES REPRESENT THE FINDINGS OF A PARTIAL POST-FLOOD SURVEY OF EXISTING CONDITIONS CONDUCTED IN JANUARY 2012.

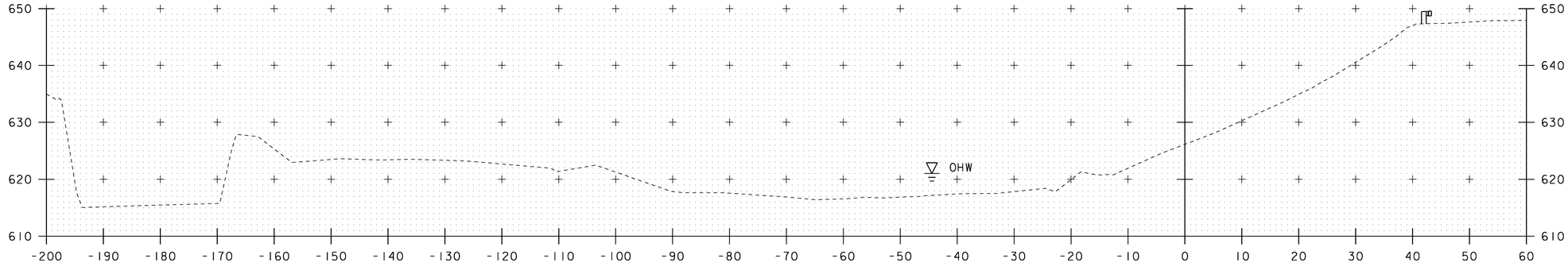
SCALE 1" = 10'-0
10 0 10

McFarland Johnson

PROJECT NAME:	WOODSTOCK	WOODSTOCK	
PROJECT NUMBER:	BHO 1444(52)	ST 1444(58)	
FILE NAME: z96j262xs3.dgn		PLOT DATE: 29-JUN-2012	
PROJECT LEADER: M.Sargent		DRAWN BY: P. Dustin	
DESIGNED BY: P. Dustin		CHECKED BY: R. Joy	
CHANNEL CROSS SECTIONS (2 OF 3)		SHEET 67 OF 68	



21+75



21+50

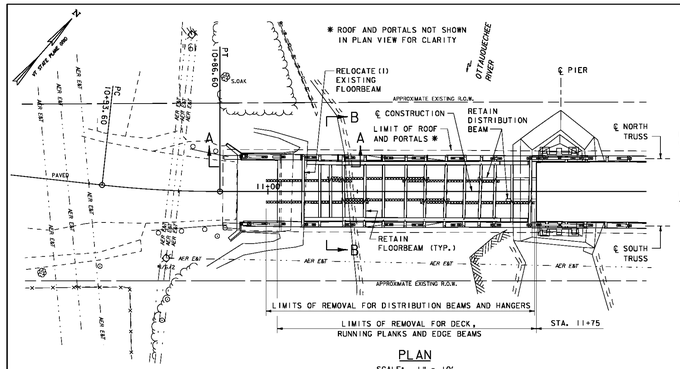
NOTES

1. THE EXISTING TOPOGRAPHY AND CHANNEL FEATURES DEPICTED ON THIS SHEET WERE OBTAINED PRIOR TO FLOODING AND DO NOT REFLECT CURRENT CONDITIONS.

SCALE 1" = 10'-0
10 0 10

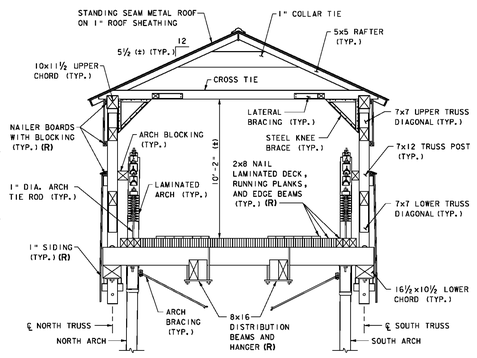
McFarland Johnson

PROJECT NAME:	WOODSTOCK	WOODSTOCK
PROJECT NUMBER:	BHO 1444(52)	ST 1444(58)
FILE NAME: z96j262xs4.dgn		PLOT DATE: 29-JUN-2012
PROJECT LEADER: M.Sargent		DRAWN BY: P. Dustin
DESIGNED BY: P. Dustin		CHECKED BY: R. Joy
CHANNEL CROSS SECTIONS (3 OF 3)		SHEET 68 OF 68



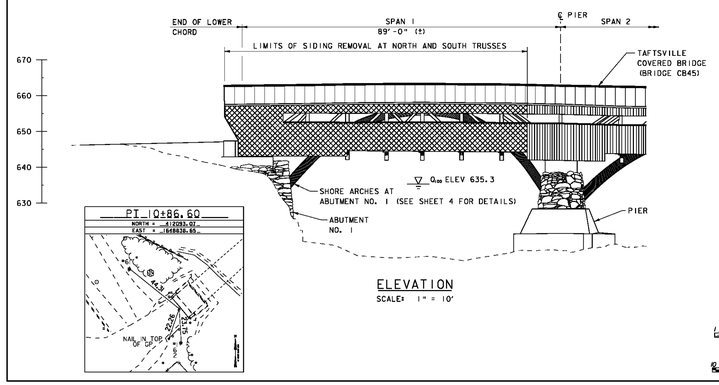
PLAN

SCALE: 1" = 10'



SECTION B-B (TYPICAL BRIDGE SECTION)

SCALE: ⅜" = 1'-0"



ELEVATION

SCALE: 1" = 10'

INDEX OF SHEETS

LEGEND

LIMITS OF REMOVAL

(R) ITEMS TO BE REMOVED

NOTES:

1. FOR SECTION A-A, SEE SHEET 4.

SCALE ⅜" = 1'-0"

0 1 2 3 4

SCALE 1" = 10'-0"

0 5 10

McFarland Johnson

PROJECT NAME: WOODSTOCK	
PROJECT NUMBER: BHO 1444(52) STAGE 1	
FILE NAME: z96j262pln.dgn	PLOT DATE: 21-OCT-2011
PROJECT LEADER: M. Sargent	DRAWN BY: S. Markwan
DESIGNED BY: J. Hall	CHECKED BY: R. Jay
PLAN AND ELEVATION	SHEET 1 OF 4

STATE OF VERMONT
AGENCY OF TRANSPORTATION

QUANTITY SHEET

SUMMARY OF ESTIMATED QUANTITIES		TOTALS			DESCRIPTIONS			DETAILED SUMMARY OF QUANTITIES		
	BRIDGE QUANTITY	ROUND	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	QUANTITIES	UNIT	ITEMS
	1		1		LS	SHORING SUPERSTRUCTURE	502.10			
	1		1		EACH	PARTIAL REMOVAL OF STRUCTURE	529.20			
	1		1		LS	MOBILIZATION(DEMOBILIZATION	635.11			

PROJECT NAME: **WOODSTOCK**
PROJECT NUMBER: **BHO 1444(52) STAGE 1**

FILE NAME: **z96jquant archsupport.xlsm** PLOT DATE: **10/13/2011**
PROJECT MANAGER: **M. Sargent** DRAWN BY: **S. Merkwan**
DESIGNED BY: **J. Hall** CHECKED BY: **R. Jay**
QUANTITY SHEET #1 SHEET **2** OF **4**

STATE OF VERMONT
AGENCY OF TRANSPORTATION

GENERAL NOTES

GENERAL NOTES

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO STATE OF VERMONT AGENCY OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR CONSTRUCTION, DATED 2006, AND ITS LATEST REVISIONS, AND THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 17TH EDITION, DATED 2002, AND ITS LATEST REVISIONS.

2. THE CONTRACTOR SHALL TAKE SPECIAL CARE AND PRECAUTION TO ENSURE THAT NO DEBRIS FALLS INTO THE OTTAUQUECHEE RIVER DURING CONSTRUCTION. ALL MATERIAL FALLING INTO THE AREA BELOW AND ADJACENT TO THE BRIDGE SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR TO THE SATISFACTION OF THE RESIDENT ENGINEER AT NO COST TO THE STATE.

3. ALL WORK SHALL BE COMPLETED WITHIN THE EXISTING 3-ROD R.O.W. SHOWN IN THESE PLANS. THE RIGHT-OF-WAY SHOWN IS ASSUMED TO BE APPROXIMATELY CENTERED ABOUT THE EXISTING CENTER LINE OF THE BRIDGE AND ROADWAY. NO PROVISIONS HAVE BEEN MADE FOR WORK OR ACTIVITIES OUTSIDE THE EXISTING RIGHT-OF-WAY LIMITS. SHOULD THE CONTACTOR REQUIRE ANY ADDITIONAL RIGHT-OF-WAY IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL EASEMENTS, AND BEAR THE COSTS OF SUCH EASEMENTS WITHOUT FURTHER COMPENSATION.

4. THE LOCATION OF ANY UTILITY INFORMATION SHOWN ON THE PLANS IS APPROXIMATE. NO CLAIMS ARE MADE AS TO THE ACCURACY OR COMPLETENESS OF THE UTILITIES SHOWN. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR LOCATING AND PROTECTING FROM DAMAGE ALL UTILITIES ON SITE DURING ALL STAGES OF CONSTRUCTION. THE CONTRACTOR SHALL USE CAUTION WHEN WORKING AROUND OVERHEAD UTILITIES, AND COORDINATE TEMPORARY AND/OR PERMANENT UTILITY RELOCATION WITH THE UTILITY COMPANIES.

5. THESE CONTRACT DOCUMENTS HAVE BEEN PREPARED BASED ON LIMITED FIELD INSPECTIONS AND OTHER INFORMATION AVAILABLE AT THE TIME OF BIDDING. ALL DIMENSIONS SHOWN ON THE PLANS SHALL BE CHECKED BY THE CONTRACTOR IN THE FIELD PRIOR TO COMMENCING THE WORK. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM THE DIMENSIONS AND DETAILS OF EXISTING BRIDGE FEATURES AND COMPONENTS PRIOR TO FABRICATION OF NEW BRIDGE COMPONENTS. ACTUAL WORK SHALL MATCH FIELD CONDITIONS UNLESS NOTED OTHERWISE. ANY DISCREPANCIES IN DIMENSIONS, CHARACTER OR EXTENT OF THE EXISTING FEATURES SHALL BE BROUGHT TO THE ATTENTION OF THE RESIDENT ENGINEER BEFORE PROCEEDING WITH THE WORK.

6. EXCEPT AS NOTED OTHERWISE, ITEM 529.20, PARTIAL REMOVAL OF STRUCTURE, SHALL INCLUDE ANY WORK NECESSARY TO FACILITATE AND ACCOMPLISH THE SCOPE OF THE PROJECT WORK AS INDICATED BY THE CONTRACT DOCUMENTS AND DIRECTED BY THE RESIDENT ENGINEER: REMOVING AND DISPOSING OF BRIDGE 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 METHODS OF REHABILITATION.

7. NO BURNING OF REMOVED MATERIALS AT THE PROJECT SITE WILL BE ALLOWED. THE EXISTING COVERED BRIDGE TIMBERS AND LUMBER 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, OR DISPOSAL OF THESE MATERIALS.

8. SPECIAL CARE SHALL BE TAKEN TO AVOID DAMAGE TO MEMBERS THAT ARE TO REMAIN AND TO AVOID MOVEMENT OF THE TRUSSES AND ARCHES THAT COULD RESULT IN DISTORTION OR MISALIGNMENT OF THE TRUSS AND ITS JOINTS. MEMBERS DAMAGED BY THE CONTRACTOR SHALL BE REPLACED AS DIRECTED BY THE RESIDENT ENGINEER AT THE CONTRACTOR'S EXPENSE.

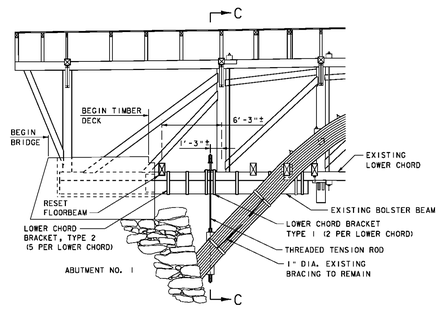
9. BRIDGE NO. 45 IS CLOSED TO ALL PEDESTRIAN AND VEHICULAR TRAFFIC.

10. ALL TIMBER CONSTRUCTION SHALL COMPLY WITH THE NATIONAL DESIGN SPECIFICATION (NDS) AND SUPPLEMENT FOR WOOD CONSTRUCTION, AND THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION (AITC) SPECIFICATION.

11. CONTRACTOR SHALL SUBMIT A DETAILED SEQUENCE OF CONSTRUCTION TO THE VERMONT AGENCY OF TRANSPORTATION STRUCTURES SECTION, FOR APPROVAL. COST SHALL BE INCIDENTAL TO CONTRACT ITEMS.

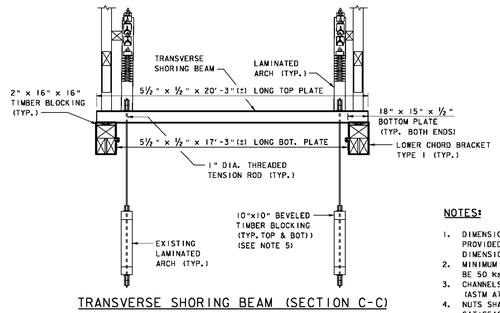
12. ITEM 502.10, SHORING SUPERSTRUCTURE SHALL INCLUDE ALL WORK ASSOCIATED WITH TEMPORARY SHORING OF ABUTMENT NO. 1 INCLUDING, BUT NOT LIMITED TO, RELOCATING FLOORBEAMS, FURNISHING, FABRICATING AND ERECTING SHORING BEAM AND TIE ROD SYSTEM, ADDITIONAL LOWER CHORD BRACKETS AND ALL ASSOCIATED CONNECTION MATERIALS. 25% PAYMENT WILL BE MADE AFTER APPROVAL OF CONTRACTOR'S CONSTRUCTION DRAWINGS AND 100% PAYMENT WILL BE MADE AFTER WORK IS APPROVED BY RESIDENT ENGINEER.

PROJECT NAME:	WOODSTOCK		
PROJECT NUMBER:	BHO 1444(52) STAGE 1		
FILE NAME:	z96j262gen.xls	PLOT DATE:	10/21/2011
PROJECT LEADER:	M. Sargent	DRAWN BY:	S. Merkwan
DESIGNED BY:	J. Hall	CHECKED BY:	R. Joy
GENERAL NOTES SHEET #1		SHEET 3	OF 4



SECTION A-A

(NORTH TRUSS SHOWN, SOUTH TRUSS SIMILAR)
SCALE: ¼" = 1'-0"



TRANSVERSE SHORING BEAM (SECTION C-C)

SCALE: ⅜" = 1'-0"

SECTION BETWEEN LOWER CHORDS

SECTION AT LOWER CHORDS

SECTION AT TENSION ROD

TRANSVERSE SHORING BEAM (FLOORBEAM)

SCALE: 2" = 1'-0"

LOWER CHORD BRACKET

SCALE: 1" = 1'-0"

ARCH CONNECTION DETAIL

SCALE: 1" = 1'-0"

NOTES:

1. DIMENSIONS OF LOWER CHORD BRACKETS HAVE BEEN PROVIDED FOR BIDDING PURPOSES ONLY. ACTUAL FABRICATED DIMENSIONS SHALL BE BASED ON FIELD MEASUREMENTS.
2. MINIMUM YIELD STRENGTH FOR TENSION RODS SHALL BE 50 Ksi.
3. CHANNELS AND PLATES SHALL BE AASHTO M270 GRADE 50 (ASTM A709 GRADE 50).
4. NUTS SHALL BE TIGHTENED TO A SNUG FIT TO THE SATISFACTION OF THE RESIDENT ENGINEER.
5. TIMBER BLOCKING SHALL BE SEASONED (HARDWOOD) OAK (SELECT STRUCTURAL).

SCALE 1"-1'-0"
SCALE ¼"-1'-0"
SCALE 2"-1'-0"
SCALE ⅜"-1'-0"

McFarland Johnson

PROJECT NAME: WOODSTOCK
PROJECT NUMBER: BHO 1444(52) STAGE 1

FILE NAME: z96j262tr2 Arch Support.dgn
PROJECT LEADER: M. Sargent
DESIGNED BY: J. Hall
DETAILS SHEET
PLOT DATE: 21-OCT-2011
DRAWN BY: S. Markwan
CHECKED BY: R. Jay
SHEET 4 OF 4

ENGINEERING DESIGN DRAWINGS - KYLE F. SWIERSKI P.E., LLC

DRAWING NO.		DATE	REVISION	DRAWING TITLE
ALP-WB-01	SHT 1 OF 1	JAN. 16, 2013	4	WOODSTOCK BRIDGE BHO 1444(52) TEMPORARY WORKS FOR REHAB DRAWING LIST & SITE LOCATION PLAN
ALP-WB-02	SHT 1 OF 4	NOV. 08, 2012	1	WOODSTOCK BRIDGE BHO 1444(52) TEMPORARY WORKS FOR REHAB GENERAL ARRANGEMENT PLAN & ELEVATION
	SHT 2 OF 4	OCT. 15, 2012	0	WOODSTOCK BRIDGE BHO 1444(52) TEMPORARY WORKS FOR REHAB GENERAL ARRANGEMENT TYPICAL SHORING SECTION
	SHT 3 OF 4	OCT. 15, 2012	0	WOODSTOCK BRIDGE BHO 1444(52) TEMPORARY WORKS FOR REHAB GENERAL ARRANGEMENT WORK SEQUENCE
	SHT 4 OF 4	OCT. 15, 2012	0	WOODSTOCK BRIDGE BHO 1444(52) TEMPORARY WORKS FOR REHAB GENERAL ARRANGEMENT WORK SEQUENCE
ALP-WB-03	SHT 1 OF 4	NOV. 08, 2012	2	WOODSTOCK BRIDGE BHO 1444(52) TEMPORARY WORKS FOR REHAB SHORING FRAME SUPPORT PLAN & SECTION
	SHT 2 OF 4	NOV. 08, 2012	2	WOODSTOCK BRIDGE BHO 1444(52) TEMPORARY WORKS FOR REHAB SHORING FRAME SUPPORT ELEVATIONS
	SHT 3 OF 4	NOV. 08, 2012	2	WOODSTOCK BRIDGE BHO 1444(52) TEMPORARY WORKS FOR REHAB SHORING FRAME SUPPORT DETAILS
	SHT 4 OF 4	NOV. 08, 2012	1	WOODSTOCK BRIDGE BHO 1444(52) TEMPORARY SHORING FOR REHAB SHORING FRAME STRUCTURAL STEEL DETAILS
ALP-WB-04	SHT 1 OF 3	JAN. 16, 2013	1	WOODSTOCK BRIDGE BHO 1444(52) TEMPORARY WORKS FOR REHAB COFFERDAMS FOR ABUTMENTS & PIER PLAN
	SHT 2 OF 3	JAN. 16, 2013	1	WOODSTOCK BRIDGE BHO 1444(52) TEMPORARY WORKS FOR REHAB COFFERDAMS FOR ABUTMENTS & PIER SECTIONS & DETAILS
	SHT 3 OF 3	JAN. 16, 2013	1	WOODSTOCK BRIDGE BHO 1444(52) TEMPORARY WORKS FOR REHAB COFFERDAMS FOR ABUTMENTS & PIER SECTIONS & DETAILS

REFERENCE DOCUMENTS

DOCUMENT	DATE
WOODSTOCK BRIDGE BHO 1444(52) PROPOSED IMPROVEMENT BRIDGE PROJECT DESIGN DRAWINGS (SHTS. 1-71), VAOT STANDARDS (13 SHTS.) PREPARED BY: McFARLAND JOHNSON FOR STATE OF VERMONT AGENCY OF TRANSPORTATION	JUNE 2012
WOODSTOCK BRIDGE BHO 1444(52) TEMPORARY WORKS FOR REHAB – DESIGN REPORT PREPARED BY: KYLE F. SWIERSKI, P.E., LLC	OCTOBER 2012 UPDATED NOVEMBER 2012

DATE	REV.	DESCRIPTION OF REVISIONS	DRAWN BY	CHECKED BY
JAN. 16, 2013	4	UPDATED	LSS	KFS
DEC. 03, 2012	3	UPDATED	LSS	KFS
NOV. 08, 2012	2	UPDATED	LSS	KFS
OCT. 15, 2012	1	UPDATED	LSS	KFS
SEPT. 21, 2012	0	ISSUED FOR CONSTRUCTION	LSS	KFS

NOTE

1. FIELD VERIFY EXISTING CONDITIONS. SHOULD EXISTING CONDITIONS DIFFER FROM THAT INDICATED ON THIS DRAWING SET, NOTIFY ENGINEER FOR RESOLUTION.

STATE OF VERMONT
KYLE F. SWIERSKI
NO. 9059
Structural I
LICENSED
PROFESSIONAL ENGINEER

Kyle F. Swierski
JAN. 16, 2013

THIS DOCUMENT HAS BEEN PREPARED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF VERMONT. ANY ALTERATION TO THIS DOCUMENT SHALL BE IDENTIFIED AND SEALED/SIGNED BY THE ALTERING LICENSED PROFESSIONAL ENGINEER IN ACCORDANCE WITH THE STATE OF VERMONT LAWS AND RULES.

ALPINE CONSTRUCTION, LLC
VERMONT AGENCY OF TRANSPORTATION

WOODSTOCK BRIDGE BHO 1444(52)
TEMPORARY WORKS FOR REHAB
DRAWING LIST &
SITE LOCATION PLAN

KYLE F. SWIERSKI, P.E., LLC
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Elma, New York 14059
(716) 655-6722
kfswierski@broadrunner.com

PROJECT ID: ALP-WB
DRAWING NUMBER: ALP-WB-01
SHEET 1 OF 1
REV. 4

PLAN

SCALE 0 10 20 FEET

LEGEND

T.O.	TOP OF
T.O.S.	TOP OF STEEL
B.O.	BOTTOM OF
⊕ B-101	BOREHOLE LOCATIONS
UON	UNLESS OTHERWISE NOTED

NOTE

1. USE THIS DRAWING IN CONJUNCTION WITH THE FOLLOWING DRAWING:

   WOODSTOCK BRIDGE BHO 1444(52)
   TEMPORARY WORKS FOR REHAB
   DRAWING LIST & SITE LOCATION PLAN
   KFS DWG. NO. ALP-WB-01, SHEET 1

TECHNICAL SPECIFICATIONS

MATERIALS:

STEEL SHEET PILES:
ASTM A328 OR A572-50. Z-SHAPED WITH MANUF. TEE & BEND CONNECTORS, BALL & SOCKET (BS) OR HOOK & GRIP (HG) INTERLOCK, SECTION MODULUS = 30.3 MIN CUBIC INCHES PER FOOT OF WALL. PZ27 AS MANUFACTURED BY NUCOR USA OR PZC18 AS MANUFACTURED BY LB FOSTER, OR EQUAL.

STRUCTURAL STEEL SHAPES AND PLATES:
ASTM A36 (GR 36 OR 50) OR A992 (GR 50)

CONNECTIONS:
HIGH STRENGTH BOLTS: ASTM A325
HEAVY HEX NUTS: ASTM A563
WIDE WASHERS: ANSI B18.22.1, TYPE B
WELD FILLER: E70XX, SMAW PROCEDURE

INSTALLATION:

INSTALL TEMPORARY SHEET PILES VERTICALLY IN THE LOCATIONS, AND TO THE DEPTHS & ELEVATIONS SHOWN.

FABRICATE & INSTALL STRUCT STEEL IN ACCORDANCE WITH AISC MANUAL OF STEEL CONSTRUCTION, CURRENT EDITION.

PERFORM WELDING IN ACCORDANCE WITH ANSI/AWS D1.1., CURRENT EDITION.

SCHEDULE (SEQUENCE) OF OPERATIONS

REFER TO SHEET 2.

STATE OF VERMONT
KYLE F. SWIERSKI
NO. 9059
Structural
LICENSED PROFESSIONAL ENGINEER

Kyle F. Swierski
JAN. 16, 2013

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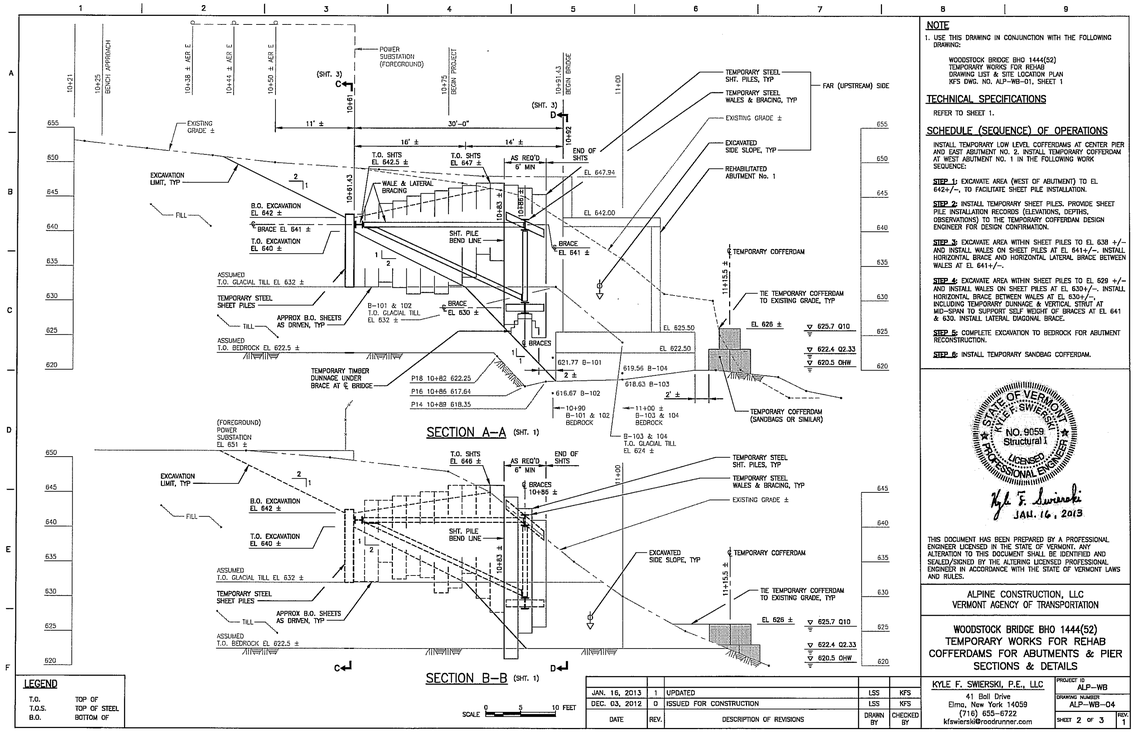
ALPINE CONSTRUCTION, LLC
VERMONT AGENCY OF TRANSPORTATION

WOODSTOCK BRIDGE BHO 1444(52)
TEMPORARY WORKS FOR REHAB
COFFERDAMS FOR ABUTMENTS & PIER
PLAN

DATE	REV.	DESCRIPTION OF REVISIONS	DRAWN BY	CHECKED BY
JAN. 16, 2013	1	UPDATED	LSS	KFS
DEC. 03, 2012	0	ISSUED FOR CONSTRUCTION	LSS	KFS

KYLE F. SWIERSKI, P.E., LLC
41 Boll Drive
Elmo, New York 14059
(716) 655-6722
kfswierski@roadrunner.com

PROJECT ID	ALP-WB
DRAWING NUMBER	ALP-WB-04
SHEET	1 OF 3
REV.	1



NOTE

1. USE THIS DRAWING IN CONJUNCTION WITH THE FOLLOWING DRAWING:

   WOODSTOCK BRIDGE BHO 1444(52)
   TEMPORARY WORKS FOR REHAB
   DRAWING LIST & SITE LOCATION PLAN
   RFS DWG. NO. ALP-WB-01, SHEET 1

TECHNICAL SPECIFICATIONS

REFER TO SHEET 1.

SCHEDULE (SEQUENCE) OF OPERATIONS

INSTALL TEMPORARY LOW LEVEL COFFERDAMS AT CENTER PIER AND EAST ABUTMENT NO. 2. INSTALL TEMPORARY COFFERDAM AT WEST ABUTMENT NO. 1 IN THE FOLLOWING WORK SEQUENCE:

STEP 1: EXCAVATE AREA (WEST OF ABUTMENT) TO EL 642+/–, TO FACILITATE SHEET PILE INSTALLATION.

STEP 2: INSTALL TEMPORARY SHEET PILES. PROVIDE SHEET PILE INSTALLATION RECORDS (ELEVATIONS, DEPTHS, OBSERVATIONS) TO THE TEMPORARY COFFERDAM DESIGN ENGINEER FOR DESIGN CONFIRMATION.

STEP 3: EXCAVATE AREA WITHIN SHEET PILES TO EL 638 +/– AND INSTALL WALES ON SHEET PILES AT EL 641+/–. INSTALL HORIZONTAL BRACE AND HORIZONTAL LATERAL BRACE BETWEEN WALES AT EL 641+/–.

STEP 4: EXCAVATE AREA WITHIN SHEET PILES TO EL 629 +/– AND INSTALL WALES ON SHEET PILES AT EL 630+/–. INSTALL HORIZONTAL BRACE BETWEEN WALES AT EL 630+/–, INCLUDING TEMPORARY DUNNAGE & VERTICAL STRUT AT MID–SPAN TO SUPPORT SELF WEIGHT OF BRACES AT EL 641 & 630. INSTALL LATERAL DIAGONAL BRACE.

STEP 5: COMPLETE EXCAVATION TO BEDROCK FOR ABUTMENT RECONSTRUCTION.

STEP 6: INSTALL TEMPORARY SANDBAG COFFERDAM.

STATE OF VERMONT
KYLE F. SWIERSKI
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Structural
LICENSED
PROFESSIONAL ENGINEER

Kyle F. Swierski
JAN. 16, 2013

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ALPINE CONSTRUCTION, LLC
VERMONT AGENCY OF TRANSPORTATION

WOODSTOCK BRIDGE BHO 1444(52)
TEMPORARY WORKS FOR REHAB COFFERDAMS FOR ABUTMENTS & PIER SECTIONS & DETAILS

LEGEND

T.O.	TOP OF
T.O.S.	TOP OF STEEL
B.O.	BOTTOM OF

DATE	REV.	DESCRIPTION OF REVISIONS	DRAWN BY	CHECKED BY
JAN. 16, 2013	1	UPDATED	LSS	KFS
DEC. 03, 2012	0	ISSUED FOR CONSTRUCTION	LSS	KFS

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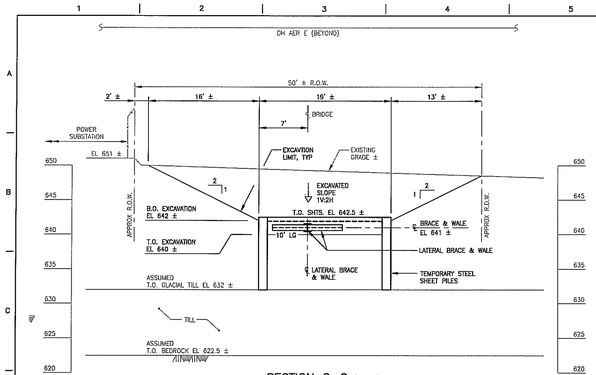
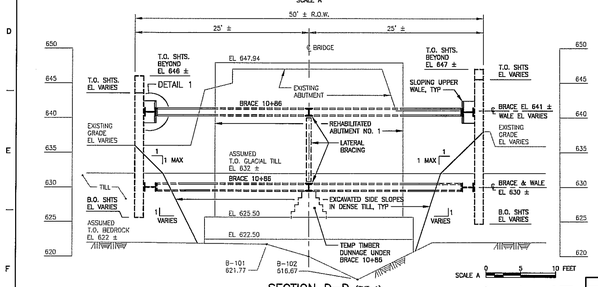
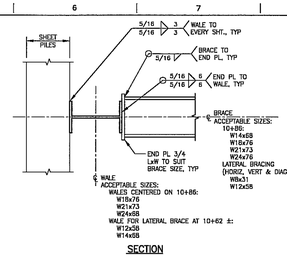
PROJECT ID	ALP–WB
DRAWING NUMBER	ALP–WB–04
SHEET	2 OF 3
REV.	1



SECTION C–C (SHT. 1)
STA 10+81 ±
SCALE A

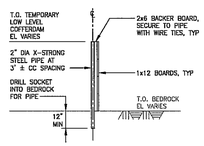


SECTION D–D (SHT. 1)
STA 10+92 ±
SCALE A

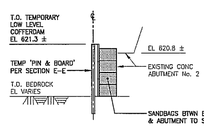


SECTION

TYPICAL WALE & BRACE
DETAIL 1
SCALE B



TYPICAL 'PIN & BOARD' AT PIER
SECTION E–E (SHT. 1)
SCALE C



TYPICAL 'PIN & BOARD' AT ABUTMENT No. 2
SECTION F–F (SHT. 1)
SCALE C

SCALE A 0 5 10 FEET
SCALE B 0 1 2 FEET
SCALE C 0 2 4 FEET

DATE	REV.	DESCRIPTION OF REVISIONS	DRAWN BY	CHECKED BY
JAN. 16, 2013	1	UPDATED	LSS	KFS
DEC. 03, 2012	0	ISSUED FOR CONSTRUCTION	LSS	KFS

NOTE

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   WOODSTOCK BRIDGE BHO 1444(52)
   TEMPORARY WORKS FOR REHAB
   DRAWING LIST & SITE LOCATION PLAN
   KFS DWG. NO. ALP-WB-01, SHEET 1

TECHNICAL SPECIFICATIONS

REFER TO SHEET 1.

SCHEDULE (SEQUENCE) OF OPERATIONS

REFER TO SHEET 2.

LEGEND

T.O.	TOP OF
T.O.S.	TOP OF STEEL
B.O.	BOTTOM OF

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ALPINE CONSTRUCTION, LLC
VERMONT AGENCY OF TRANSPORTATION

WOODSTOCK BRIDGE BHO 1444(52)
TEMPORARY WORKS FOR REHAB
COFFERDAMS FOR ABUTMENTS & PIER
SECTIONS & DETAILS

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PROJECT ID: ALP-WB
DRAWING NUMBER: ALP-WB-04
SHEET 3 OF 3
REV. 1