SEE SHEET 2 FOR INDEX OF SHEETS

STATE OF VERMONT
AGENCY OF TRANSPORTATION

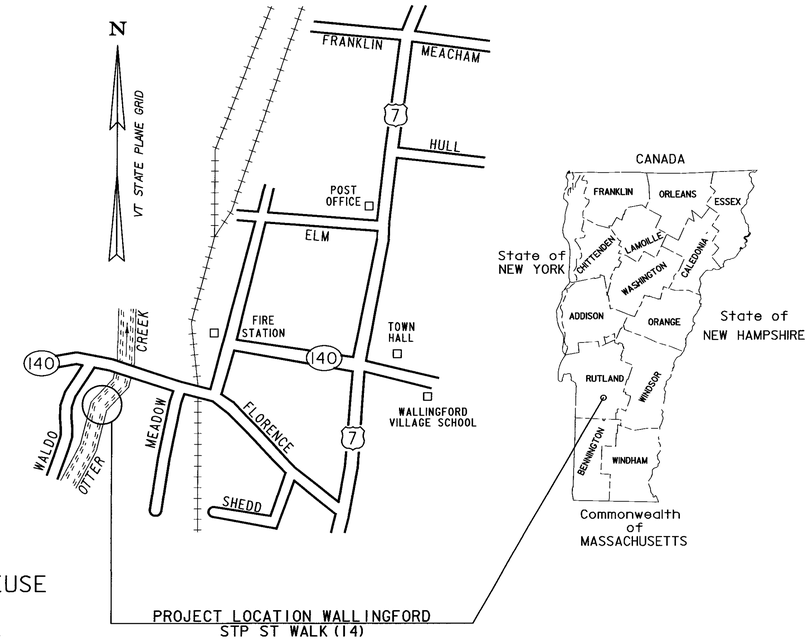
PROPOSED IMPROVEMENT
BRIDGE PROJECT
TOWN OF WALLINGFORD
COUNTY OF RUTLAND

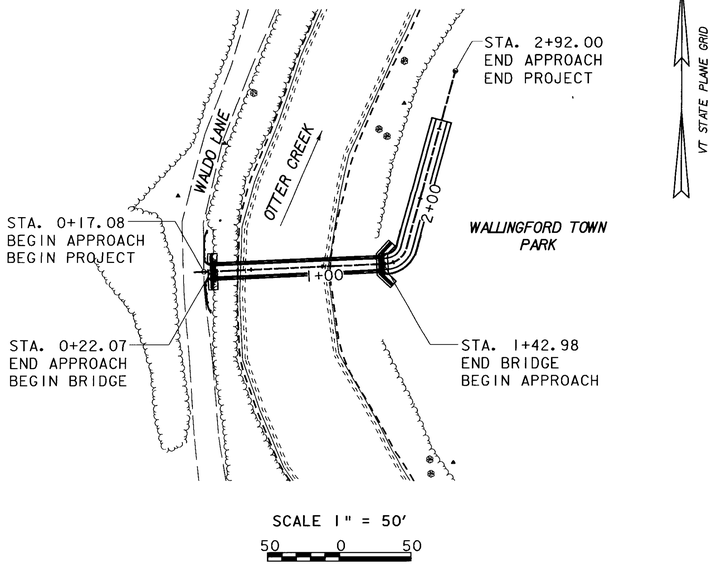
ROUTE NO : PEDESTRIAN BRIDGE BRIDGE NO : ADAPTIVE REUSE

PROJECT LOCATION: LOCATED IN THE COUNTY OF RUTLAND, TOWN OF WALLINGFORD, PEDESTRIAN BRIDGE OVER THE OTTER CREEK, APPROXIMATELY 800+/- FEET SOUTH OF VT. ROUTE 140 BETWEEN WALDO LANE AND THE WALLINGFORD TOWN PARK.

PROJECT DESCRIPTION: REHABILITATE AND ASSEMBLE HISTORIC TRUSS OVER OTTER CREEK AT THE WALLINGFORD TOWN PARK.

LENGTH OF STRUCTURE : 120.91 FEET
LENGTH OF APPROACH: 154.01 FEET
LENGTH OF PROJECT: 274.92 FEET





RECORD PLANS

CONTRACTOR RENAUD BROTHERS, INC – VERNON, VT
RESIDENT ENGINEER ERIC FOSTER
CONSTRUCTION BEGAN APRIL 10, 2009
CONSTRUCTION COMPLETE NOVEMBER 18, 2009
RECORD PLANS BY ERIC FOSTER & NICK GARBACIK

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

BY Eric Foster RESIDENT ENGINEER

DATE 10 25 2010

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

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

STATE OF VERMONT RODNEY A BASSON No. 6581 CIVIL LICENSED PROFESSIONAL ENGINEER

PLANS PREPARED BY

Rodney A Basson

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CHA

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (92)

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

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

DIRECTOR OF PROGRAM DEVELOPMENT
APPROVED Richard Tetreault DATE 1-13-09

PROJECT MANAGER : SUSAN SCRIBNER

PROJECT NAME : WALLINGFORD
PROJECT NUMBER : STP ST WALK(14)

SHEET 1 OF 26 SHEETS

STATE OF VERMONT
AGENCY OF TRANSPORTATION

PRELIMINARY INFORMATION SHEET

INDEX OF SHEETS

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G-1D	01-03-2000
G-16	06-01-1994

SCOPE OF WORK

1. REHABILITATION OF EXISTING TRUSSES, STORED IN A VAOT MAINTENANCE FACILITY IN CLARENDON, VT, OFF OF VT. ROUTE 7B. REHABILITATION INCLUDES COMPLETE REPLACEMENT OF INBOARD ANGLE ON TRUSS LOW CHORD, IN KIND REPLACEMENT OF ALL INBOARD GUSSET PLATES, LATERAL BRACING CONNECTION PLATES, PARTIAL REPLACEMENT OF EXISTING TRUSS MEMBERS, COMPLETE REPLACEMENT OF SELECT DIAGONALS AND REPLACEMENT OF CORRODED RIVETS WITH HIGH STRENGTH BOLTS THROUGHOUT THE TRUSSES.
2. BLAST CLEANING AND PAINTING OF ALL REMAINING EXISTING STEEL.
3. CONSTRUCTION OF NEW CAST-IN-PLACE CONCRETE SUBSTRUCTURES ON PILE FOUNDATIONS.
4. INSTALLATION OF NEW TRUSS FLOOR SYSTEM, INCLUDING NEW TIMBER PLANK DECK, STRINGERS, FLOORBEAMS AND CONNECTIONS.
5. RELATED APPROACH WORK INCLUDING CONSTRUCTION OF EARTHEN APPROACH RAMP AND NEW APPROACH RAILING.

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11 Winners Circle, PO Box 5269 • Albany, NY 12205-0269
Main: (518) 453-4500 • www.chacompanies.com

FINAL HYDRAULIC REPORT

HYDROLOGIC DATA

Date:

DRAINAGE AREA : 94.9 sq-mi
CHARACTER OF TERRAIN : Generally forested, ranging from mountainous to valley floor.
STREAM CHARACTERISTICS : Sinuous planform, perennial subcritical flow.
NATURE OF STREAMBED : Gravel bed with sand and cobbles present.

PEAK FLOW DATA

Q 2.33 =	2600 cfs	Q 50 =	7980 cfs
Q 10 =	5260 cfs	Q 100 =	9210 cfs
Q 25 =	N/A	Q 500 =	12400 cfs

DATE OF FLOOD OF RECORD : 1927
ESTIMATED DISCHARGE: Unknown
WATER SURFACE ELEV.: Unknown
NATURAL STREAM VELOCITY : 2-3 ft/sec
ICE CONDITIONS : Moderate
DEBRIS: Moderate
DOES THE STREAM REACH MAXIMUM HIGHWATER ELEV. RAPIDLY? No
IS ORDINARY RISE RAPID? No
IS STAGE AFFECTED BY UPSTREAM OR DOWNSTREAM CONDITIONS? Yes
IF YES, DESCRIBE: Minor backwater from Vermont Route 140 bridge approximately 800 ft downstream.

WATERSHED STORAGE: Minimal
HEADWATERS:
UNIFORM: x
IMMEDIATELY ABOVE SITE:

EXISTING STRUCTURE INFORMATION

STRUCTURE TYPE: There is presently no bridge at this site.
YEAR BUILT:
CLEAR SPAN(NORMAL TO STREAM):
VERTICAL CLEARANCE ABOVE STREAMBED:
WATERWAY OF FULL OPENING:
DISPOSITION OF STRUCTURE:
TYPE OF MATERIAL UNDER SUBSTRUCTURE:

WATER SURFACE ELEVATIONS AT:

Q2.33 =	566.7 ft	VELOCITY =	5.4 fps
Q10 =	569.3 ft	"	6.7 fps
Q25 =	N/A	"	N/A
Q50 =	572.0 ft	"	6.9 fps
Q100 =	572.7 ft	"	7.0 fps

LONG TERM STREAMBED CHANGES:

IS THE ROADWAY OVERTOPPED BELOW Q100:
FREQUENCY:
RELIEF ELEVATION:
DISCHARGE OVER ROAD @Q100:

UPSTREAM STRUCTURE

TOWN:	Wallingford	DISTANCE:	3700 ft
HIGHWAY # :	US Route 7	STRUCTURE #:	79
CLEAR SPAN:	117' (west) 135' (east)	CLEAR HEIGHT:	--
YEAR BUILT:	1996	FULL WATERWAY:	5505 sq-ft
STRUCTURE TYPE:	2 span continuous welded plate girder		

DOWNSTRUCTURE STRUCTURE

TOWN:	Wallingford	DISTANCE:	800 ft
HIGHWAY # :	Vermont Route 140	STRUCTURE #:	54
CLEAR SPAN:	127.'	CLEAR HEIGHT:	22'
YEAR BUILT:	Unknown	FULL WATERWAY:	1587 sq-ft
STRUCTURE TYPE:	Steel Truss		

LOAD FACTOR LOAD RATING (TONS)

LOADING LEVELS	TRUCK						
	H	HS	3S2	6 AXLE	3A. STR.	4A. STR.	5A. SEMI
INVENTORY	23						
POSTED							
OPERATING	41						

COMMENTS:

TRAFFIC DATA

YEAR	ADT	DHV	% D	% T	ADTT
2007	N/A	N/A	N/A	N/A	N/A
2027	N/A	N/A	N/A	N/A	N/A

20 year ESAL for flexible pavement from N/A to N/A : N/A
40 year ESAL for flexible pavement from N/A to N/A : N/A
Design Speed : N/A mph

PROPOSED STRUCTURE

STRUCTURE TYPE: Warren Pony Truss - Adaptive Reuse of Historic Bridge

CLEAR SPAN(NORMAL TO STREAM): 117.0 ft
VERTICAL CLEARANCE ABOVE STREAMBED: 16.2 ft
WATERWAY OF FULL OPENING: 1240 sq-ft

WATER SURFACE ELEVATIONS AT:

Q2.33 =	567.0 ft	VELOCITY=	5.2 fps
Q10 =	569.4 ft	"	6.6 fps
Q25 =	N/A	"	N/A
Q50 =	572.0 ft	"	6.9 fps
Q100 =	572.7 ft	"	6.9 fps

IS THE ROADWAY OVERTOPPED BELOW Q100: No
FREQUENCY:
RELIEF ELEVATION:
DISCHARGE OVER ROAD @Q100:

AVERAGE LOW ELEVATION OF SUPERSTRUCTURE: 573.78 ft
VERTICAL CLEARANCE: Q50 = 1.8 ft Q100 = 1.1 ft

SCOUR: 1.0 ft of contraction scour during Q10. Larger flood events exceed main channel banks and bypass the bridge in the in the right overbank.
REQUIRED CHANNEL PROTECTION: Stone Fill Type III

PERMIT INFORMATION

AVERAGE DAILY FLOW:	162 cfs	DEPTH OR ELEVATION:
ORDINARY LOW WATER:	--	Elev. 562.5 ft
ORDINARY HIGH WATER:	--	Elev. 564.5 ft

TEMPORARY BRIDGE REQUIREMENTS

STRUCTURE TYPE: No temporary bridge required.
CLEAR SPAN (NORMAL TO STREAM):
VERTICAL CLEARANCE ABOVE STREAMBED:
WATERWAY AREA OF FULL OPENING:

ADDITIONAL INFORMATION

All elevations are referenced to NAVD88.
Flow overtops main channel banks in the right approach between the 10 and 50-year flood events.

DESIGN CRITERIA

1. DESIGN LIVE LOAD AASHTO Pedestrian LL (trusses), H-10 (floorbeams & stringers)
2. DESIGN SPAN 117'-0"
3. ALLOWABLE LOAD FOR SPREAD FOOTINGS ON SOIL N/A
   ON LEDGE N/A
4. ALLOWABLE LOAD FOR PILING 54 kips
   TYPE Concrete filled 12.75" O.D. x 3/8" steel pipe piling, ASTM A-252 Grade 2 (Fy = 35 ksi)
   ESTIMATED LENGTH 51' (Abutment 1) 53' (Abutment 2)
5. STRUCTURAL STEEL AASHTO M270M/M270 GRADE 50 Painted
6. REINFORCING STEEL GRADE 60
7. CONCRETE, HIGH PERFORMANCE CLASS A f'c: N/A
   CONCRETE, HIGH PERFORMANCE CLASS B f'c: 3,500psi (substructures, pipe piling and metal hand rail foundations)
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? Yes, on Waldo Lane
   IF YES, ON EXISTING STRUCTURE? No
   OR ON TEMPORARY BRIDGE? No
   ONE OR TWO-WAY TRAVEL? N/A
2. TRAFFIC CONTROL SIGNALS REQUIRED? No
3. ARE SIDEWALKS REQUIRED? No
   IF SO, ON WHAT SIDE? N/A

PROJECT NAME: **WALLINGFORD**
PROJECT NUMBER: **STP ST WALK(14)**

FILE NAME: **Z02F136PRELIM.XLS**
PROJECT LEADER: **S. SCRIBNER**
DESIGNED BY: **D. D'AMATO**
PRELIMINARY INFORMATION SHEET

PLOT DATE: **08/07/2008**
DRAWN BY: **D. D'AMATO**
CHECKED BY: **P. HALSTEAD**
SHEET **2** OF **26**

QUANTITY SHEET 1

STATE OF VERMONT
AGENCY OF TRANSPORTATION

SUMMARY OF ESTIMATED QUANTITIES

		FULL C.E.	EROSION CONTROL	BRIDGE	ROADWAY	QUANTITIES GRAND TOTAL	UNIT	ITEMS	ITEM NO.	ROUNDING
		-	-	1	-	1	LS	CLEARING AND GRUBBING, INCLUDING INDIVIDUAL TREES AND STUMPS	201.10	-
		-	-	-	20	20	CY	COMMON EXCAVATION	203.15	8
		-	-	310	-	310	CY	CHANNEL EXCAVATION OF EARTH	203.25	6
		-	-	-	110	110	CY	EARTH BORROW	203.30	-
		-	-	150	-	150	CY	STRUCTURE EXCAVATION	204.25	-
		-	-	80	-	80	CY	GRANULAR BACKFILL FOR STRUCTURES	204.30	8
		-	-	-	80	80	CY	SUBBASE OF CRUSHED GRAVEL, COARSE GRADED	301.25	4
		-	-	-	15	15	TON	MEDIUM DUTY BITUMINOUS CONCRETE PAVEMENT (PG 58-28)	406.27	3
					1	1	LU	PRICE ADJUSTMENT, ASPHALT CEMENT (N.A.B.I.)	406.50	
		-	-	75	-	75	CY	CONCRETE, HIGH PERFORMANCE CLASS B	501.34	4
		-	-	1	-	1	LS	FURNISHING EQUIPMENT FOR DRIVING PILING	504.10	-
		-	-	2	-	2	EA	DYNAMIC PILE LOADING TEST	505.45	-
		-	-	29,410	-	29,410	LB	STRUCTURAL STEEL, ROLLED BEAM	506.50	5
		-	-	11,400	-	11,400	LB	STRUCTURAL STEEL	506.60	4
		-	-	4,340	-	4,340	LB	REINFORCING STEEL	507.15	-
		-	-	1	-	1	LS	STRUCTURAL PAINTING, SHOP APPLIED	513.25	-
		-	-	1	-	1	LS	STRUCTURAL PAINTING, FIELD APPLIED	513.30	-
		-	-	1	-	1	LS	CONTAINMENT & ENVIRONMENTAL PROTECTION, FIELD	513.36	-
		-	-	1	-	1	LS	SURFACE PREPARATION, SHOP	513.40	-
		-	-	1	-	1	LS	SURFACE PREPARATION, FIELD	513.41	-
		-	-	4	-	4	GAL	WATER REPELLENT, SILANE	514.10	-
		-	-	6	-	6	MFBM	STRUCTURAL LUMBER AND TIMBER, TREATED	522.25	-
		-	-	65	-	65	LF	METAL HAND RAILING	525.15	-
		-	-	110	-	110	CY	STONE FILL, TYPE II	613.11	-
		-	-	260	-	260	CY	STONE FILL, TYPE III	613.12	-
		-	-	-	2	2	EA	BOLLARDS	619.14	-
		-	-	-	195	195	LF	CHAIN-LINK FENCE, 6 FEET	620.12	3
		-	-	-	4	4	EA	BRACING ASSEMBLY FOR CHAIN-LINK FENCE, 6 FEET	620.21	-
		-	-	-	54	54	LF	STEEL BEAM GUARDRAIL, GALVANIZED W/8 FEET POSTS	621.205	-
		-	-	-	2	2	EA	TERMINAL CONNECTOR FOR STEEL BEAM GUARDRAIL	621.53	-
		-	-	-	2	2	EA	ANCHOR FOR STEEL BEAM RAIL	621.60	-
		1	-	-	-	1	LS	FIELD OFFICE, ENGINEERS	631.10	-
		1	-	-	-	1	LS	TESTING EQUIPMENT, CONCRETE	631.16	-
		1	-	-	-	1	LS	TESTING EQUIPMENT, BITUMINOUS	631.17	-
		1	-	-	-	1	LS	TESTING EQUIPMENT, PROTECTIVE COATINGS	631.18	-
		1	-	-	-	1	LU	FIELD OFFICE TELEPHONE (N.A.B.I.)	631.25	-
		-	-	-	1	1	LS	MOBILIZATION/DEMOBILIZATION	635.11	-
		-	-	-	1	1	LS	TRAFFIC CONTROL	641.10	-
		-	-	260	-	260	SY	GEOTEXTILE UNDER STONE FILL	649.31	-

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS

QUANTITY SHEET 1

PROJECT NAME: WALLINGFORD
PROJECT NUMBER: STP ST WALK(14)

CHA

FILE NAME: $FILES$
PLOT DATE: 1/22/2009
PROJECT MANAGER: SUSAN SCRIBNER
DRAWN BY: W. WEATHERBY
DESIGNED BY: L. HARDEN
CHECKED BY: P. HALSTEAD
BRIDGE DESIGN SUPERVISOR: P. HALSTEAD
SHEET 3 OF 26

FILE NAME =u:\8669\MSTN\prefinal_submission\s02f136quan.dgn
DATE/TIME = 1/22/2009
USER =2532

QUANTITY SHEET 2

STATE OF VERMONT
AGENCY OF TRANSPORTATION

SUMMARY OF ESTIMATED QUANTITIES

		FULL C.E.	EROSION CONTROL	BRIDGE	ROADWAY	QUANTITIES GRAND TOTAL	UNIT	ITEMS	ITEM NO.	ROUNDING
		-	90	-	-	90	SY	GEOTEXTILE FOR SILT FENCE, WOVEN WIRE REINFORCED	649.515	8
		-	150	-	-	150	SY	GEOTEXTILE FOR FILTER CURTAIN	649.61	4
		-	-	-	10	10	LB	SEED	651.15	-
		-	-	-	50	50	LB	FERTILIZER	651.18	-
		-	-	-	1	1	TON	AGRICULTURAL LIMESTONE	651.20	-
		-	-	-	10	10	CY	TOPSOIL	651.35	-
		-	1	-	-	1	LS	EPSC PLAN	652.10	-
		-	100	-	-	100	HR	MONITORING EPSC PLAN	652.20	-
		-	1	-	-	1	LU	MAINTENANCE OF EPSC PLAN (N.A.B.I.)	652.30	-
		-	80	-	-	80	SY	TEMPORARY EROSION MATTING	653.20	-
		-	140	-	-	140	CY	VEHICLE TRACKING PAD	653.35	8
		-	210	-	-	210	LF	BARRIER FENCE	653.50	6
		-	875	-	-	875	LF	PROJECT DEMARCATION FENCE	653.55	12
		-	-	600	-	600	EA	SPECIAL PROVISION (THROUGH TRUSS RIVET REPLACEMENT)	900.620	-
		-	-	248	-	248	LF	SPECIAL PROVISION (BRIDGE RAILING, STEEL/PEDESTRIAN)	900.640	-
		-	-	1,360	-	1,360	LF	SPECIAL PROVISION (STEEL PILING, CONCRETE-FILLED 12¾" O.D. x ⅜" PIPE)	900.640	6
		-	-	1	-	1	LS	SPECIAL PROVISION (INCORPORATING SALVAGED BRIDGE COMPONENTS)	900.645	-

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS

QUANTITY SHEET 2

PROJECT NAME: WALLINGFORD
PROJECT NUMBER: STP ST WALK(14)

CHA

FILE NAME: $FILES$ | PLOT DATE: 1/9/2009
PROJECT MANAGER: SUSAN SCRIBNER | DRAWN BY: W. WEATHERBY
DESIGNED BY: L. HARDEN | CHECKED BY: P. HALSTEAD
BRIDGE DESIGN SUPERVISOR: P. HALSTEAD | SHEET 4 OF 26

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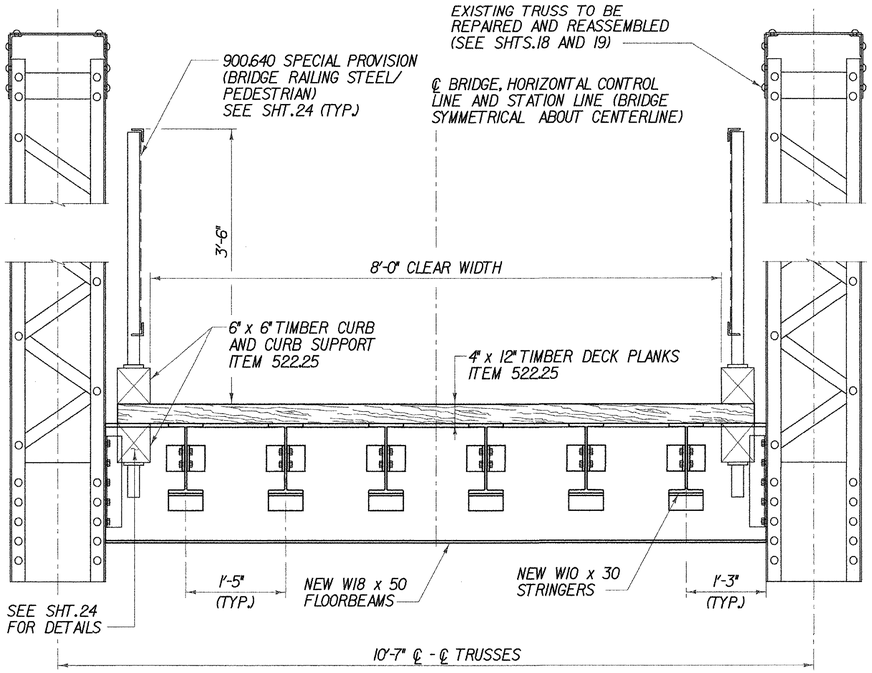
USER =2552



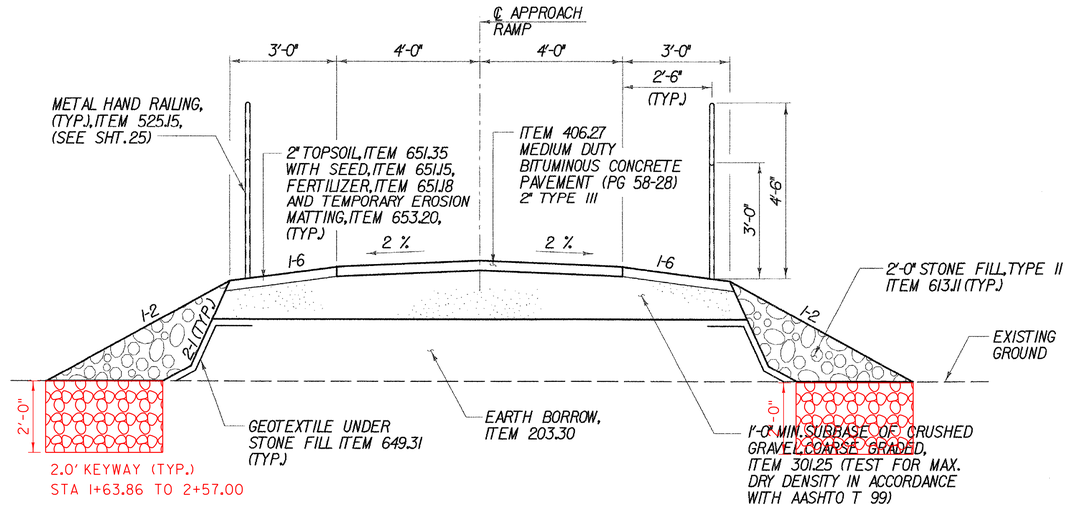
TYPICAL BRIDGE SECTION

SCALE 1" = 1'-0"

1 9 6 3 0 1 2

NOTE:

SEE STRUCTURAL STEEL AND TRUSS REHABILITATION NOTES ON SHT.13 FOR PAYMENT INFORMATION ON STRUCTURAL STEEL,SURFACE PREPARATION AND PAINTING ITEMS.



TYPICAL APPROACH RAMP SECTION

SCALE 1/2" = 1'-0

1 0 1 2

SEEDING FORMULA
RURAL AREAS

% WT.	LBS./A.	NAME	PUR %	GERM %
37.5	22.5	CREEPING RED FESCUE	98	85
37.5	22.5	TALL FESCUE	95	90
5.0	3.0	RED TOP	95	90
15.0	9.0	BIRDSFOOT TREFOIL	98	85
5.0	3.0	ANNUAL RYEGRASS	95	85
100.0	60.0			

GENERAL NOTES

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

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

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

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

TEMPORARY EROSION MATTING: TO BE PLACED ON EARTH SLOPES AS SHOWN ON THE PLANS, OR AS DIRECTED BY THE RESIDENT ENGINEER.

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

PROJECT TYPICAL SECTIONS

CHA

PROJECT NAME: WALLINGFORD
PROJECT NUMBER: STP ST WALK(14)

FILE NAME: $FILE$ | PLOT DATE: 1/9/2009
PROJECT MANAGER: SUSAN SCRIBNER | DRAWN BY: W. WEATHERBY
DESIGNED BY: L. HARDEN | CHECKED BY: P. HALSTEAD
BRIDGE DESIGN SUPERVISOR: P. HALSTEAD | SHEET 5 OF 26

STATE OF VERMONT
AGENCY OF TRANSPORTATION

ITEM DETAIL SHEET

FENCE

BEGIN STATION	END STATION	CHAIN LINK FENCE, 6 FEET LF	BRACING ASSEMBLY FOR CHAIN LINK FENCE EA	REMARKS
ITEM 620.12 CHAIN-LINK FENCE, 6 FEET				
1+10.0	2+60.0	192		
ROUNDING		3		
TOTAL		195		
ITEM 620.21 BRACING ASSEMBLY FOR CHAIN-LINK FENCE, 6 FEET				
BRACING ASSEMBLIES SHALL BE INSTALLED AT EACH END AND AT THE CORNER. SEE VAOT STANDARD SHEET F-2.				
SUBTOTAL			4	
ROUNDING			-	
TOTAL			4	

MISCELLANEOUS

STATION	BOLLARDS EA	POSITION LEFT	POSITION RIGHT	REMARKS
ITEM 619.14 BOLLARDS				
0+20	1			
1+46	1			
SUBTOTAL	2			
ROUNDING	-			
TOTAL	2			

GUARDRAIL

BEGIN STATION	END STATION	POSITION LEFT FT	POSITION RIGHT FT	END TREATMENT BEGIN EA	END TREATMENT END EA
ITEM 621.205 STEEL BEAM GUARDRAIL, GALVANIZED W/ 8 FEET POSTS					
0+20.0	0+23.0	27*			
CONNECT TO TERMINAL CONNECTOR AT STA. 0+23.0. 5'-0" RADIUS ON ONE END ONLY AT TERMINAL CONNECTOR. 16'-0" RADIUS ON ONE END ONLY AT END SECTION.					
0+21.0	0+23.0		27*		
CONNECT TO TERMINAL CONNECTOR AT STA. 0+23.0. 5'-0" RADIUS ON ONE END ONLY AT TERMINAL CONNECTOR. 16'-0" RADIUS ON ONE END ONLY AT END SECTION.					
SUBTOTAL (LT & RT)		54			
ROUNDING		-			
TOTAL		54			
ITEM 621.53 TERMINAL CONNECTOR FOR STEEL BEAM GUARDRAIL					
0+22.5	0+24.5 LT				1
CONNECT TO BRIDGE AT STA. 0+24.5.					
0+23.0	0+25.0 RT				1
CONNECT TO BRIDGE AT STA. 0+25.0.					
SUBTOTAL (BEGIN & END)					2
ROUNDING					-
TOTAL					2
ITEM 621.60 ANCHOR FOR STEEL BEAM RAIL					
0+18.5 LT				1	
0+19.0 RT				1	
SUBTOTAL (BEGIN & END)					2
ROUNDING					-
TOTAL					2

* PAY LENGTH INCLUDES ROUNDED W-BEAM END SECTION(S). SEE STD. G-1D FOR DETAILS.

UNDERDRAIN

BEGIN STATION	END STATION	TYPE	POSITION	DIA. IN	LENGTH FT	TRENCH EARTH CF	TRENCH ROCK CF	GRAN BKFILL CF	FB EA	MKR PST EA

CHA
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PROJECT NAME: **WALLINGFORD**
PROJECT NUMBER: **STP ST WALK(14)**

FILE NAME: **Z02F136ITEMDETAIL.XLS**
PROJECT LEADER: **SUSAN SCRIBNER**
DESIGNED BY: **D. EMERICH**
ITEM DETAIL SHEET

PLOT DATE: **08/07/2008**
DRAWN BY: **D. EMERICH**
CHECKED BY: **P. HALSTEAD**
SHEET **6** OF **26**

1 EPSC NARRATIVE

1.1 PROJECT DESCRIPTION

THE PROPOSED PROJECT AREA IS LOCATED APPROXIMATELY 750 FT SOUTH OF VT. ROUTE 140 BETWEEN WALDO LANE AND THE WALLINGFORD TOWN PARK IN THE TOWN OF WALLINGFORD, RUTLAND COUNTY VERMONT. THIS PROJECT WILL INVOLVE THE INSTALLATION OF A REHABILITATED HISTORIC PONY TRUSS BRIDGE FOR USE AS A NEW PEDESTRIAN CROSSING OVER THE OTTER CREEK CONNECTING WALDO LANE WITH THE TOWN PARK. THE GENERAL WORK TO BE PERFORMED UNDER THIS PROJECT WILL INCLUDE THE REHABILITATION OF THE HISTORIC TRUSS BRIDGE OFF SITE, CONSTRUCTION OF NEW CONCRETE SUBSTRUCTURES AND APPROACHES ON SITE, THE PLACEMENT OF THE HISTORIC TRUSS BRIDGE ON THE NEW SUBSTRUCTURE AND THE CONSTRUCTION OF A NEW SHARED USE PATH CONNECTING THE HISTORIC TRUSS BRIDGE TO WALDO LANE AND THE TOWN PARK. IT IS ANTICIPATED THAT THIS PROJECT WILL LAST ONE CONSTRUCTION SEASON.

TOTAL AREA OF DISTURBANCE IS APPROXIMATELY 0.3 ACRES INCLUDING THE IMPACTS ASSOCIATED WITH THE VEHICLE ACCESS ROUTE NECESSARY TO CONSTRUCT THIS BRIDGE.

1.2 SITE INVENTORY

1.2.1 OFF SITE DRAINAGE CHARACTERISTICS (UP AND DOWN-GRADIENT)

WEST OF THE PROJECT AREA IS A STEEP, WOODED HILL THAT SLOPES DOWN TOWARD THE OTTER CREEK. ON THE EAST SIDE OF THE PROJECT AREA IS A MODERATELY FLAT GRASSED AREA THAT IS USED AS RECREATION FIELDS BY THE TOWN OF WALLINGFORD. ALL STORMWATER RUNOFF IN THE VICINITY OF THE PROJECT AREA FLOWS OVERLAND INTO THE OTTER CREEK.

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

THE OTTER CREEK IS THE ONLY NATURAL WATER SOURCE LOCATED WITHIN THE VICINITY OF THE PROJECT SITE. THERE ARE NO OTHER DRAINAGE OR WATER FEATURES LOCATED WITHIN THE VICINITY OF THE PROJECT AREA.

1.2.3 TOPOGRAPHY, EXISTING ROADS, BUILDINGS, UTILITIES

THE EXISTING TOPOGRAPHY WITHIN THE PROJECT AREA PRIMARILY CONSISTS OF A MIXED VEGETATED LANDSCAPE OF A STEEPLY SLOPED DENSELY WOODED AREA ON THE WEST AND FAIRLY LEVEL SLOPED RECREATIONAL FIELDS ON THE EAST WHICH ARE SEPARATED BY THE OTTER CREEK.

1.2.4 VEGETATION

THE VEGETATION IN THE PROJECT AREA PRIMARILY CONSISTS OF A DENSELY FORESTED AREA TO THE WEST AND A RESIDENTIAL AREA WITH GRASSED RECREATIONAL FIELDS TO THE EAST. THERE IS ALSO A GRAVEL ROAD KNOWN AS WALDO LANE LOCATED ON THE WESTERN SIDE OF THE PROJECT AREA. THE IMPACTS TO EXISTING VEGETATION WILL BE LIMITED TO THAT WHICH IS DIRECTLY AFFECTED BY THE PLACEMENT OF THE HISTORIC TRUSS BRIDGE AND SHARED USE PATH CONSTRUCTION.

1.2.5 SOILS

THE U.S. DEPARTMENT OF AGRICULTURE'S NATIONAL RESOURCE CONSERVATION SERVICE (NRCS) HAS IDENTIFIED AND MAPPED TWO SOIL TYPES WITHIN THE PROJECT AREA, ONE ON EACH SIDE OF THE OTTER CREEK. THE SOIL TYPE LOCATED TO THE WEST OF THE PROJECT AREA HAS NOT BEEN RATED FOR EROSION SUSCEPTIBILITY BUT THE SOIL TYPE LOCATED ON THE EASTERN SIDE OF THE PROJECT HAS BEEN CLASSIFIED AS POTENTIALLY HIGHLY ERODIBLE. THE FOLLOWING LIST DEPICTS THE ERODIBILITY PROPERTIES FOR THE TWO TYPES OF SOILS LOCATED WITHIN THE PROJECT AREA.

MAP UNIT TYPE*	DESCRIPTION	SLOPES (%)	ERODIBILITY	ERODIBILITY FACTOR (k)
13B	HINCKLEY GRAVELY LOAMY FINE SAND	0-8	POTENTIALY HIGHLY ERODIBLE	0.17
96	UDIPSAMMENTS	NEARLY LEVEL	NOT RATED	0.10

*MAP UNIT TYPE IS FROM THE NRCS SOIL SURVEY MAP FOR RUTLAND COUNTY, VERMONT. SEE SHEET 10 FOR LOCATIONS OF MAPPED SOILS.

IN ADDITION, MAP UNIT TYPE 13B HAS BEEN CLASSIFIED BY THE NRCS AS PRIME FARMLAND OF STATEWIDE IMPORTANCE.

1.2.6 SENSITIVE RESOURCE AREAS

THERE ARE NO KNOWN OCCURRENCES OF CRITICAL HABITATS, THREATENED AND ENDANGERED SPECIES, OR HISTORICAL OR ARCHEOLOGICAL SITES LOCATED WITHIN THE LIMITS OF THE PROJECT AREA. HOWEVER, THE MAJORITY OF THE PROJECT AREA LIES WITHIN THE HINCKLEY GRAVELY LOAMY FINE SAND SOIL TYPE THAT IS CLASSIFIED AS FARMLAND OF STATEWIDE IMPORTANCE BY THE NRCS. IN ADDITION, THERE ARE NO KNOWN WETLANDS OR IMPAIRED WATERWAYS LOCATED WITHIN THE PROJECT AREA, BUT THE OTTER CREEK RECEIVING WATERS ADJACENT TO THE PROJECT AREA IS CONSIDERED A SENSITIVE RESOURCE. THE CONTRACTOR SHALL EMPLOY EROSION PREVENTION AND SEDIMENT CONTROL MEASURES THROUGHOUT THE DURATION OF THE PROJECT TO PROTECT THE WATER QUALITY OF THE OTTER CREEK AS OUTLINED IN THE EPSC PLANS FOR THIS PROJECT'S LOCATION. THE CONTRACTOR SHOULD NOTE THAT THERE IS A 50' RIPARIAN BUFFER ZONE ASSOCIATED WITH THE OTTER CREEK. THIS RIPARIAN BUFFER IS ILLUSTRATED ON THE PROJECT PLANS.

1.3 RISK EVALUATION

THIS PROJECT DOES NOT FALL UNDER THE JURISDICTION OF CONSTRUCTION GENERAL PERMIT 3-9020 BASED ON THE PROJECT IMPACT AREA. SHOULD CHANGES PRIOR TO OR DURING CONSTRUCTION RESULT IN ONE OR 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 FILING OF THE APPROPRIATE NOTICE OF INTENT UNDER THE CONSTRUCTION GENERAL PERMIT PROCESS.

1.4 EROSION PREVENTION AND SEDIMENT CONTROL

THE EROSION PREVENTION AND SEDIMENT CONTROL PLANS ARE MEANT AS A GUIDELINE FOR PREVENTING EROSION AND CONTROLLING SEDIMENT TRANSPORT. THE WORK OUTLINED IN THIS NARRATIVE CONSISTS OF APPLYING MEASURES THROUGHOUT THE LIFE OF THE PROJECT MINIMIZING SEDIMENT TRANSPORT TO THE RECEIVING WATERS. THE MEASURES INCLUDE STABILIZATION AND STRUCTURAL PRACTICES, STORM WATER CONTROLS AND OTHER POLLUTION PREVENTION CONTROLS.

PREVENTING INITIAL SOIL EROSION IS MUCH MORE EFFECTIVE THAN TREATING ERODED SEDIMENT. MAINTAINING VEGETATED BUFFERS ALONG STREAM BANKS, WETLANDS OR OTHER SENSITIVE AREAS IS A CRUCIAL EROSION PREVENTION AND SEDIMENT CONTROL MEASURE THAT SHOULD BE ESTABLISHED WHEREVER POSSIBLE. THEREFORE, STABILIZE ALL DISTURBED AREAS AS SOON AS PRACTICAL BUT NO MORE THAN TWO DAYS AFTER CONSTRUCTION ACTIVITY HAS TEMPORARILY OR PERMANENTLY CEASED.

THE CONTRACTOR SHALL COORDINATE THE INSTALLATION, USE, AND REMOVAL OF EROSION PREVENTION AND SEDIMENT CONTROL MEASURES WITH CONSTRUCTION ACTIVITIES TO ASSURE ECOLOGICAL, EFFECTIVE, AND CONTINUOUS EROSION PREVENTION AND SEDIMENT CONTROL. THE CONTRACTOR SHALL EMPLOY TEMPORARY STABILIZATION PRACTICES IN INCREMENTAL STAGES AS CONSTRUCTION PROCEEDS.

THE CONTRACTOR SHALL INSTALL ALL EROSION PREVENTION AND SEDIMENT CONTROL MEASURES AS SHOWN IN THE EPSC PLANS OR AS DIRECTED BY THE ON-SITE PLAN COORDINATOR. DO NOT MODIFY THE TYPE, SIZE, OR LOCATION OF ANY CONTROL OR PRACTICE WITHOUT APPROVAL FROM THE ON-SITE PLAN COORDINATOR.

ALL MEASURES SHALL BE REGULARLY MAINTAINED AND SHALL BE CHECKED FOR SEDIMENT BUILD-UP. SEDIMENT SHALL BE DISPOSED AT AN APPROVED SITE WHERE IT WILL NOT BE SUBJECT TO EROSION.

CONSTRUCTION OPERATIONS SHALL BE CONDUCTED IN SUCH A MANNER AS TO PREVENT ANY DAMAGE TO THE WATERS OF THE UNITED STATES FROM POLLUTION BY DEBRIS, SEDIMENT, OR OTHER FOREIGN MATERIAL, OR FROM MANIPULATION OF EQUIPMENT AND/OR MATERIALS IN OR NEAR THE WATERS OF THE UNITED STATES. THE CONTRACTOR SHALL NOT RETURN DIRECTLY TO THE WATERS OF THE UNITED STATES ANY WATER WHICH HAS BEEN USED FOR WASH PURPOSES OR OTHER SIMILAR OPERATIONS WHICH WOULD CAUSE THIS WATER TO BECOME POLLUTED WITH SAND, SILT, CEMENT, OIL OR OTHER IMPURITIES. IF THE CONTRACTOR USES WATER FROM THE WATERS OF THE UNITED STATES, THE CONTRACTOR SHALL CONSTRUCT AN INTAKE OR TEMPORARY DAM TO PROTECT AND MAINTAIN STREAM WATER QUALITY. DURING CONSTRUCTION, NO WET OR FRESH CONCRETE OR LEACHATE SHALL BE ALLOWED TO ESCAPE INTO THE WATERS OF THE UNITED STATES, NOR SHALL WASHING FROM CONCRETE TRUCKS, MIXERS OR OTHER DEVICES BE ALLOWED TO ENTER ANY WETLANDS OR WATERS OF THE UNITED STATES.

(REFER TO THE LOW RISK SITE HANDBOOK AND APPROPRIATE DETAIL SHEETS FOR EACH PRACTICE REQUIRED ON THE PROJECT TO INCLUDE BUT NOT LIMITED TO THE FOLLOWING.)

1.4.1 MARK SITE BOUNDARIES

PROJECT DEMARCATION FENCING AND BARRIER FENCING WILL BE USED TO DELINEATE THE LIMITS IN WHICH THE CONTRACTOR CAN ACCESS WITH CONSTRUCTION EQUIPMENT AND PERSONNEL. THESE MEASURES WILL LIMIT THE AREA THAT CAN BE DISTURBED AND EXPOSED TO EROSION. THE CONTRACTOR SHALL INSTALL THE PERIMETER CONTROLS PRIOR TO STARTING ANY WORK WITHIN THE PROJECT AREA. THE CONTRACTOR SHALL NOT ALLOW ANY CONSTRUCTION EQUIPMENT TO OPERATE OR ACCESS ON THE DOWN SLOPE SIDE OF ANY PERIMETER CONTROL MEASURE. THE CONTRACTOR SHALL NOT ALLOW ANY CROSSING OF A FLOWING STREAM OR DISTURBANCE OF THE EXISTING STREAM BANKS BY CONSTRUCTION EQUIPMENT EXCEPT AS AUTHORIZED BY THE ON-SITE PLAN COORDINATOR.

1.4.2 LIMIT DISTURBANCE AREA

EMPLOY TEMPORARY STABILIZATION PRACTICES IN INCREMENTAL STAGES (PHASING) AS CONSTRUCTION ACTIVITIES PROCEED. ADDITIONAL MEASURES MAY BE NEEDED DUE TO THE PHASING OF THE PROJECT AND AS DIRECTED BY THE ON-SITE PLAN COORDINATOR. IN GENERAL, PRESERVE EXISTING VEGETATION, TREES AND SHRUBS WHEN POSSIBLE, AS DIRECTED BY THE ON-SITE PLAN COORDINATOR.

1.4.3 STABILIZE CONSTRUCTION EXIT

THE CONTRACTOR SHALL CONSTRUCT A TEMPORARY STABILIZED CONSTRUCTION ENTRANCE ALONG WITH AN ACCESS PATH AS SHOWN IN THE PLANS. THE CONTRACTOR SHALL NOT ALLOW CONSTRUCTION VEHICLES TO TRACK SEDIMENT OFFSITE OF THE PROJECT LIMITS. THE CONSTRUCTION ENTRANCE SHALL BE REMOVED AND THE AREA RESTORED IMMEDIATELY FOLLOWING COMPLETION OF THE PROJECT.

1.4.4 INSTALL WOVEN WIRE REINFORCED SILT FENCE

WOVEN WIRE REINFORCED SILT FENCE SHALL BE INSTALLED PRIOR TO ANY UP SLOPE WORK AS SHOWN ON THE PLANS AS NECESSARY OR AS DIRECTED BY THE ON-SITE COORDINATOR.

1.4.5 DIVERT UPLAND RUNOFF

CONTROL ONLY SEDIMENT LADEN RUNOFF GENERATED FROM THE PROJECT SITE. IT IS NOT ANTICIPATED THAT TEMPORARY DRAINAGE SWALES WILL BE NEEDED TO DIVERT UPLAND RUNOFF AWAY FROM THE PROJECT. HOWEVER, IF SITE CONDITIONS CHANGE, THE CONTRACTOR SHALL CONSTRUCT TEMPORARY DIVERSION DIKES OR SWALES PER THE VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION'S LOW RISK SITE HANDBOOK FOR EROSION PREVENTION AND SEDIMENT CONTROL AS DIRECTED BY THE ON-SITE PLAN COORDINATOR.

1.4.6 SLOW DOWN CHANNELIZED RUNOFF

IT IS NOT ANTICIPATED THAT THE CONTRACTOR WILL ENCOUNTER CHANNELIZED RUNOFF DURING THE CONSTRUCTION OF THIS PROJECT. HOWEVER, IF SITE CONDITIONS CHANGE, THE CONTRACTOR SHALL INSTALL TEMPORARY CHECK DAMS TO HELP SLOW DOWN AND CONTROL CHANNELIZED RUNOFF PER THE VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION'S LOW RISK SITE HANDBOOK FOR EROSION PREVENTION AND SEDIMENT CONTROL AS DIRECTED BY THE ON-SITE PLAN COORDINATOR.

1.4.7 CONSTRUCT PERMANENT CONTROLS

THE CONSTRUCTION OF THIS PROJECT WILL NOT REQUIRE THE USE OF PERMANENT CONTROLS UPON COMPLETION OF THE PROJECT. ALL EXPOSED SLOPES SHALL BE STABILIZED PRIOR TO THE COMPLETION OF THIS PROJECT.

1.4.8 STABILIZE EXPOSED SOILS

THE CONTRACTOR SHALL GRADE AND TRIM ALL SLOPES AS THE EXCAVATION PROGRESSES AND STABILIZE ALL SLOPES AS SHOWN IN THE PLANS OR AS DIRECTED BY THE ON-SITE PLAN COORDINATOR. TRACKING OF ALL EXPOSED SLOPES, COMBINED WITH TEMPORARY MULCHING, WILL BE UTILIZED ON A REGULAR BASIS. SLOPES SHALL BE STABILIZED WITHIN 48 HOURS OF FORECASTED RAIN. THE CONTRACTOR SHALL HAVE A HYDRO SEEDER AND/OR MULCHING MACHINE AVAILABLE ON THE PROJECT SITE OR AVAILABLE AT ONE WEEK'S NOTICE (MAXIMUM) UNTIL PERMANENT SEEDING IS COMPLETED.

1.4.9 WINTER STABILIZATION

IF CONSTRUCTION ACTIVITIES INVOLVING EARTH DISTURBANCE CONTINUE PAST OCTOBER 15 OR BEGIN BEFORE APRIL 15, EPSC WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LOW RISK HANDBOOK FOR WINTER CONSTRUCTION.

1.4.10 STABILIZE SOIL AT FINAL GRADE

STONE FILL SHALL BE USED TO STABILIZE ALL SLOPES STEEPER THAN 1-3 AS SHOWN IN THE PLANS. ALL OTHER EXPOSED SOIL SURFACES SHALL BE STABILIZED WITH SEED AND MULCH. THESE SLOPES SHALL BE STABILIZED WITHIN 48 HOURS OF REACHING FINAL GRADE.

1.4.11 DE-WATERING ACTIVITIES

NO DE-WATERING ACTIVITIES ARE ANTICIPATED AS PART OF THIS PROJECT.

1.4.12 INSPECT YOUR SITE

INSPECTION OF EROSION PREVENTION AND SEDIMENT CONTROL MEASURES USED WITHIN THE PROJECT SITE SHALL BE INSPECTED ON A DAILY BASIS AND AFTER EVERY STORM GREAT ENOUGH TO CAUSE WATER TO LEAVE THE CONSTRUCTION SITE OR AS DIRECTED BY THE ON-SITE PLAN COORDINATOR. REPAIRS SHALL BE MADE AS NEEDED WHEN DAMAGE TO MEASURES ARE DISCOVERED AND SEDIMENT SHALL BE REMOVED WHEN THE STORAGE CAPACITY OF A SEDIMENT CONTROL MEASURE APPROACHES ONE HALF OF ITS INTENDED CAPACITY OR AS DIRECTED BY THE ON-SITE PLAN COORDINATOR.

FILE NAME =U:\8669\MSTN\prefinal_submission\x02f136er-o.dgn
DATE/TIME =1/22/2009
USER =2552

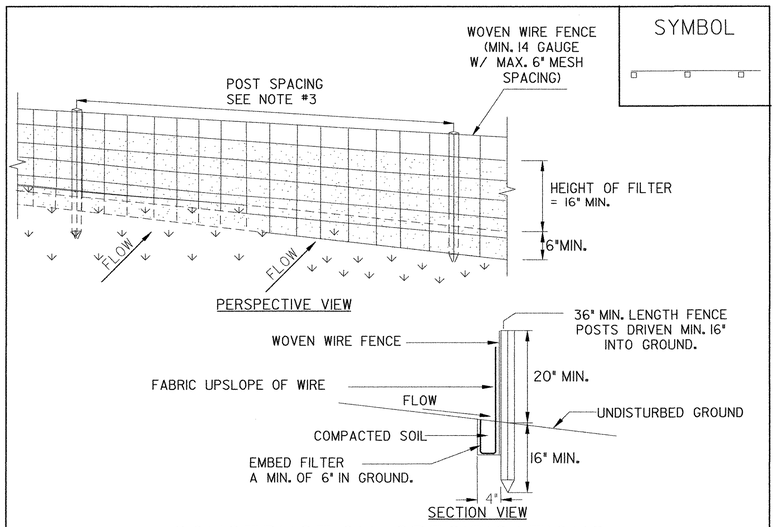
EPSC NARRATIVE

PROJECT NAME: WALLINGFORD
PROJECT NUMBER: STP ST WALK(14)

CHA

FILE NAME: $FILES$ | PLOT DATE: 1/22/2009
PROJECT MANAGER: SUSAN SCRIBNER | DRAWN BY: W. WEATHERBY
DESIGNED BY: L. HARDEN | CHECKED BY: P. HALSTEAD
BRIDGE DESIGN SUPERVISOR: P. HALSTEAD | SHEET 7 OF 26

SYMBOL



CONSTRUCTION SPECIFICATIONS

1. WOVEN WIRE FENCE REINFORCEMENT IS ONLY REQUIRED WITHIN 100 FT UPSLOPE OF RECEIVING WATERS.

2. WHERE REQUIRED FENCE SHALL BE WOVEN WIRE, MIN. 14 GAUGE WITH A 6" MAXIMUM MESH OPENING. 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'. FOR FILTER-CLOTH FENCE, 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 SIX INCHES AND FOLDED.

6. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE, OR APPROVED EQUIVALENT.

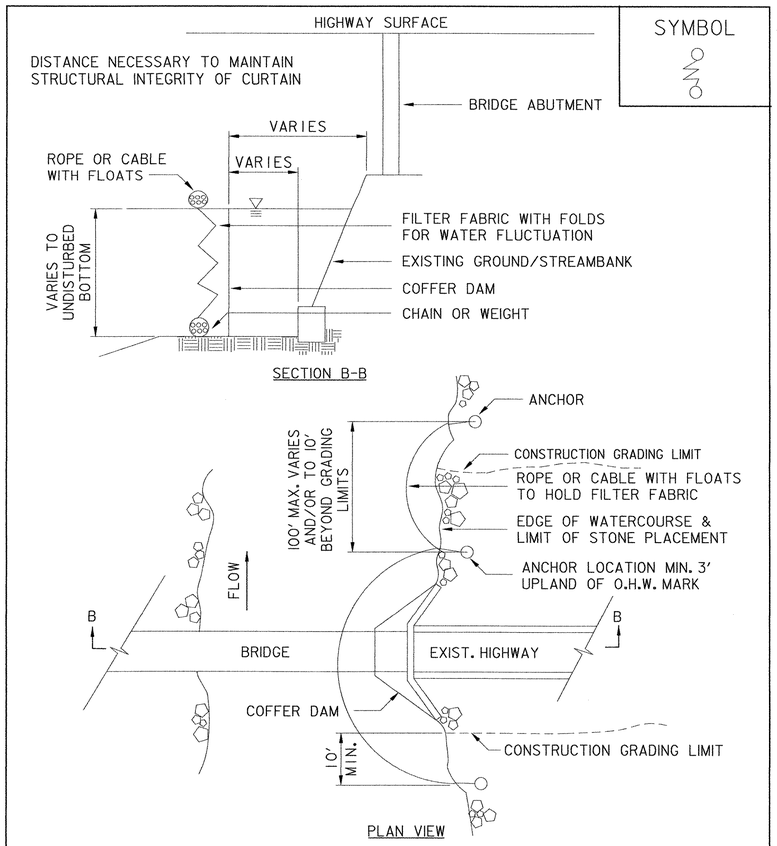
7. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN SEDIMENT REACHES HALF OF FABRIC HEIGHT.

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 ITEM SHALL BE PAID FOR UNDER ITEM
649.51 GEOTEXTILE FOR SILT FENCE OR
649.515 GEOTEXTILE FOR SILT FENCE, WOVEN WIRE REINFORCED

SYMBOL



ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC ORIGINALLY DEVELOPED BY USDA-NRCS VERMONT AGENCY OF TRANSPORTATION	TURBIDITY CURTAIN

NOTES:

THIS ITEM SHALL BE PAID FOR UNDER ITEM
649.61 GEOTEXTILE FOR FILTER CURTAIN

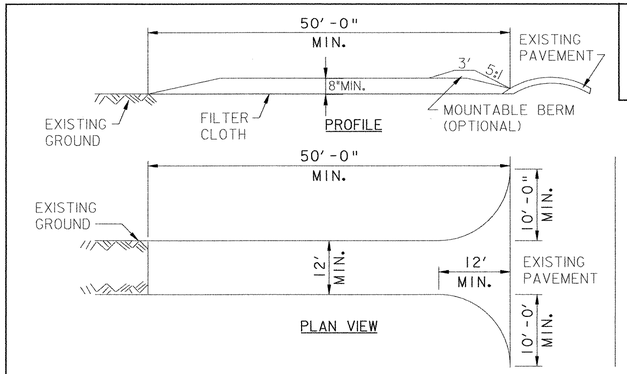
FILE NAME =U:\3669\WSTN\pre-final_submission\d02f136er0.dgn
DATE/TIME =1/9/2009
USER =2552

EPSC DETAIL SHEET 1

PROJECT NAME: WALLINGFORD
PROJECT NUMBER: STP ST WALK(14)

CHA

FILE NAME: $FILES$ — PLOT DATE: 1/9/2009
PROJECT MANAGER: SUSAN SCRIBNER — DRAWN BY: W. WEATHERBY
DESIGNED BY: L. HARDEN — CHECKED BY: P. HALSTEAD
BRIDGE DESIGN SUPERVISOR: P. HALSTEAD — SHEET 8 OF 26



SYMBOL

CONSTRUCTION SPECIFICATIONS

1. STONE SIZE - USE 1-4" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH - NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH APPLIES).
3. THICKNESS - NOT LESS THAN EIGHT (8) INCHES.
4. WIDTH - TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. TWENTY-FOUR (24) FOOT IF SINGLE ENTRANCE TO SITE.
5. GEOTEXTILE MUST BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING STONE.
6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY, ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED ACCORDING TO PERMIT REQUIREMENTS.

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

STABILIZED CONSTRUCTION ENTRANCE

NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- " FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

THIS ITEM SHALL BE PAID FOR UNDER ITEM
653.35 VEHICLE TRACKING PAD

REVISIONS	
FEBRUARY 9, 2007	WHF
MARCH 8, 2007	JMF

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DATE/TIME =1/9/2009
USER =2552

EPSC DETAIL SHEET 2

PROJECT NAME: WALLINGFORD
PROJECT NUMBER: STP ST WALK(14)

CHA

FILE NAME: $FILES$ PLOT DATE: 1/9/2009
PROJECT MANAGER: SUSAN SCRIBNER DRAWN BY: W. WEATHERBY
DESIGNED BY: L. HARDEN CHECKED BY: P. HALSTEAD
BRIDGE DESIGN SUPERVISOR: P. HALSTEAD SHEET 9 OF 26

N/F THOMAS J.PHILLIPS AND KIMBERLY A.PHILLIPS
FROM EDWARD H.MOORE,JR.
BK.83,PG.459 MARCH 29TH,2006
+/- 3.0 ACRES

N/F WALLINGFORD PARK ASSOCIATION

N

VT STATE PLANE GRID

N/F TOWN OF WALLINGFORD

DENSE FOREST

RIPARIAN BUFFER

WALDO LANE (GRAVEL ROAD)

DENSE WOODED AREA

BLAZED MAPLE

IRON PIPE

OTTER CREEK

DENSE WOODED AREA

PAVED BASKETBALL COURT

RIPARIAN BUFFER

GRASSED BASEBALL FIELDS

N/F TOWN OF WALLINGFORD

RIPARIAN BUFFER

200' TOWN WELL BUFFER

OTTER CREEK

96

13B

630 620 610 600 590 580 570

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

0 20 40
SCALE IN FEET

RESOURCE LEGEND

(XX) SOIL MAP UNIT TYPE

RIPARIAN BUFFER

EXISTING CONDITIONS PLAN

PROJECT NAME: WALLINGFORD
PROJECT NUMBER: STP ST WALK(14)

FILE NAME: $FILES$
PROJECT MANAGER: SUSAN SCRIBNER
DESIGNED BY: L. HARDEN
BRIDGE DESIGN SUPERVISOR: P. HALSTEAD

PLOT DATE: 1/9/2009
DRAWN BY: W. WEATHERBY
CHECKED BY: P. HALSTEAD
SHEET 10 OF 26

CHA

FILE NAME =U:\B663\WSTN\prefinal_submission\s02f136ero.dgn
DATE/TIME =1/9/2009
USER =2552

N/F THOMAS J.PHILLIPS AND KIMBERLY A.PHILLIPS
FROM EDWARD H.MOORE,JR.
BK.83,PG.459 MARCH 29TH,2006
+/- 3.0 ACRES

N/F WALLINGFORD PARK ASSOCIATION

N/F TOWN OF WALLINGFORD

VT STATE PLANE GRID

RIPARIAN BUFFER

DENSE FOREST

WALDO LANE (GRAVEL ROAD)

DENSE WOODED AREA

BLAZED MAPLE

IRON PIPE

OTTER CREEK

DENSE WOODED AREA

PAVED BASKETBALL COURT

TEMPORARY STABILIZED CONSTRUCTION ENTRANCE SHALL BE REMOVED AND THE AREA RESTORED IMMEDIATELY UPON COMPLETION OF THE PROJECT

CONSTRUCTION LIMITS (TYP)

BARRIER FENCE (TYP)

200' TOWN WELL BUFFER

GRASSED BASEBALL FIELDS

N/F TOWN OF WALLINGFORD

MATCH LINE SEE SHT. 12

EPSC LEGEND

—PDF—	PROJECT DEMARCATION FENCE
———	SILT FENCE
×——×—	BARRIER FENCE
ONO	TURBIDITY CURTAIN
	STABILIZED CONSTRUCTION ENTRANCE

RESOURCE LEGEND

(XX)	SOIL MAP UNIT TYPE
------	RIPARIAN BUFFER

649.515 GEOTEXTILE FOR SILT FENCE, WOVEN WIRE REINFORCED
STA 0+35.0 LT&RT (20.0 SY)
STA 1+39.0 - STA 2+57.0 LT (32.0 SY)
STA 1+22.0 - STA 1+31.0 LT&RT (24.0 SY)
STA 1+46.0 - STA 1+48.0 RT (6.0 SY)

649.61 GEOTEXTILE FOR FILTER CURTAIN
STA 0+37.0 - STA 0+53.0 LT&RT (60.0 SY)
STA 0+92.0 - STA 1+21.0 LT&RT (86.0 SY)

653.35 VEHICLE TRACKING PAD
STA 2+92.0 RT, ACCESS PATH (50.0 CY)

653.50 BARRIER FENCE
STA 0+19.0 - STA 0+43.0 LT (24.0 LF)
STA 1+12.0 - STA 2+53.0 RT (180.0 LF)

653.55 PROJECT DEMARCATION FENCE
STA 0+19.0 - STA 0+40.0 RT (21.0 LF)
STA 1+18.0 - STA 2+92.0 LT (240.0 LF)
STA 2+53.0 RT - STA 2+90.0 RT (100.0 LF)

0 20 40
SCALE IN FEET

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

CHA

EPSC PLAN 1

PROJECT NAME: WALLINGFORD
PROJECT NUMBER: STP ST WALK(14)

FILE NAME: $FILES$
PROJECT MANAGER: SUSAN SCRIBNER
DESIGNED BY: L. HARDEN
BRIDGE DESIGN SUPERVISOR: P. HALSTEAD
PLOT DATE: 1/9/2009
DRAWN BY: W. WEATHERBY
CHECKED BY: P. HALSTEAD
SHEET 11 OF 26

FILE NAME =U:\6669\MSTN\pref\nal_submission\d02f136erc.dgn
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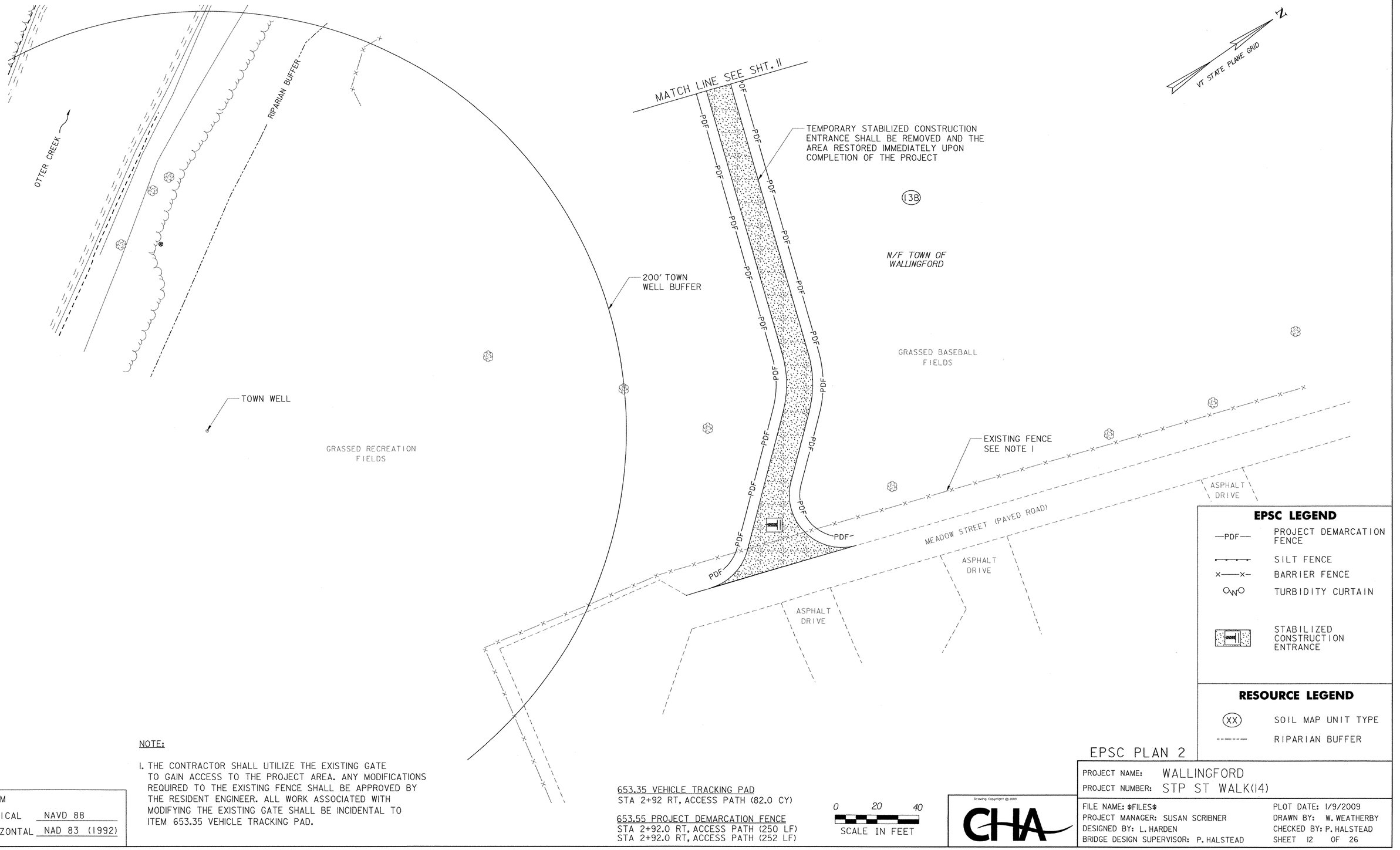

EPSC LEGEND

- PDF — PROJECT DEMARCATION FENCE
- SILT FENCE
- BARRIER FENCE
- TURBIDITY CURTAIN
- STABILIZED CONSTRUCTION ENTRANCE

RESOURCE LEGEND

- (XX) SOIL MAP UNIT TYPE
- RIPARIAN BUFFER

NOTE:

1. THE CONTRACTOR SHALL UTILIZE THE EXISTING GATE TO GAIN ACCESS TO THE PROJECT AREA. ANY MODIFICATIONS REQUIRED TO THE EXISTING FENCE SHALL BE APPROVED BY THE RESIDENT ENGINEER. ALL WORK ASSOCIATED WITH MODIFYING THE EXISTING GATE SHALL BE INCIDENTAL TO ITEM 653.35 VEHICLE TRACKING PAD.

653.35 VEHICLE TRACKING PAD
STA 2+92 RT, ACCESS PATH (82.0 CY)

653.55 PROJECT DEMARCATION FENCE
STA 2+92.0 RT, ACCESS PATH (250 LF)
STA 2+92.0 RT, ACCESS PATH (252 LF)

0 20 40
SCALE IN FEET

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

CHA

EPSC PLAN 2

PROJECT NAME: WALLINGFORD
PROJECT NUMBER: STP ST WALK(14)

FILE NAME: $FILES$
PROJECT MANAGER: SUSAN SCRIBNER
DESIGNED BY: L. HARDEN
BRIDGE DESIGN SUPERVISOR: P. HALSTEAD
PLOT DATE: 1/9/2009
DRAWN BY: W. WEATHERBY
CHECKED BY: P. HALSTEAD
SHEET 12 OF 26

FILE NAME =U:\8669\MSTN\prefinal_submission\z02f136ero.dgn
DATE/TIME = 1/9/2009
USER =2552

GENERAL NOTES:

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2006, AND IT'S LATEST REVISIONS, THE AASHTO GUIDE SPECIFICATIONS FOR DESIGN OF PEDESTRIAN BRIDGES, AUGUST 1997, AND IT'S LATEST REVISIONS AND THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, SEVENTEENTH EDITION, AND IT'S LATEST REVISIONS.

2. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT SILTATION OR POLLUTION, ESPECIALLY THE DISCHARGE OF RAW CONCRETE, FUEL AND/OR LUBRICANTS INTO THE OTTER CREEK AS DIRECTED BY THE RESIDENT ENGINEER AND STANDARD SPECIFICATION SECTION 105.

3. THE CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE AND LOCAL, AIR, GROUND AND WATER POLLUTION CONTROL REGULATIONS, HEALTH AND SAFETY REGULATIONS AND TRANSPORTATION REGULATIONS WHEN CLEANING, HANDLING, MOVING, PAINTING, CUTTING, WELDING, SANDING OR GRINDING ANY COATED OR TREATED MATERIAL. THE EXISTING STRUCTURAL STEEL IS PAINTED WITH A MATERIAL THAT MAY CONTAIN LEAD. THE CONTRACTOR SHALL FOLLOW ALL APPLICABLE REGULATIONS WHEN HANDLING AND WORKING WITH THIS STEEL. THE REMOVED STRUCTURAL STEEL WILL BECOME THE PROPERTY OF THE CONTRACTOR. THE CONTRACTOR SHALL INDEMNIFY AND HOLD THE STATE, ITS OFFICERS AND EMPLOYEES HARMLESS CONCERNING THE CONTRACTOR'S USE OR DISPOSITION OF THE REMOVED STRUCTURAL STEEL.

4. THE CONTRACTOR SHALL CLOSE WALDO LANE WITHIN THE LIMITS OF THE TOWN OF WALLINGFORD'S PROPERTY DURING CONSTRUCTION, AND SHALL GIVE TWO WEEKS NOTICE TO THE TOWN BEFORE DOING SO. IN ADDITION, THE CONTRACTOR SHALL PROVIDE THE SIGNS AND BARRICADES LISTED BELOW ON WALDO LANE AND SUBMIT A SCHEMATIC DRAWING OF THE SIGN LOCATIONS TO THE RESIDENT ENGINEER FOR APPROVAL. PAYMENT FOR CONSTRUCTION SIGNING AND NECESSARY SUBMISSIONS FOR APPROVAL WILL BE MADE UNDER ITEM 641.10 TRAFFIC CONTROL.
   - "ROAD CLOSED AHEAD" SIGN - IMMEDIATELY SOUTH OF THE TRANSFER STATION (NEAR THE VT RT 140 INTERSECTION)
   - "ROAD CLOSED" SIGN - IMMEDIATELY NORTH OF THE PROJECT WITHIN THE TOWN'S PROPERTY LIMITS (JUST SOUTH OF THE TOWN'S PROPERTY BOUNDARY ABUTTING THE PHILLIPS' PARCEL) WITH TYPE III BARRICADES ACROSS THE FULL WIDTH OF ROAD
   - "ROAD CLOSED" SIGN - IMMEDIATELY SOUTH OF THE PROJECT WITH TYPE III BARRICADES ACROSS THE FULL WIDTH OF ROAD
   - "ROAD CLOSED - LOCAL TRAFFIC ONLY" SIGN - IMMEDIATELY NORTH OF THE US RT 7 INTERSECTION

5. ALL DIMENSIONS ARE HORIZONTAL OR VERTICAL AND ARE GIVEN AT 68° F, UNLESS SHOWN OTHERWISE.

6. THE FOLLOWING TABLE OF ALLOWABLE STRESSES APPLY TO THESE PLANS FOR DESIGN PURPOSES:

   STEEL PILING, ASTM A252, GRADE 2.

   Fy=35,000 PSI Fb=19,250 PSI Fa= 8,750 PSI

   NEW STRUCTURAL STEEL (TRUSSES/FLOOR SYSTEM), AASHTO M-270 GRADE 50:

   Fy=50,000 PSI Fb=27,500 PSI Fv=16,500 PSI

   CONCRETE, HIGH PERFORMANCE, CLASS B: f'c=3,500 PSI fc=1,400 PSI

   REINFORCING STEEL: Ft=24,000 PSI GRADE 60

7. NO UTILITY ADJUSTMENTS ARE ANTICIPATED TO COMPLETE THIS BRIDGE PROJECT. SHOULD ADJUSTMENTS OF ANY EXISTING UTILITIES BE DESIRED, PROPER ARRANGEMENTS SHALL BE MADE IN CONFORMANCE WITH SUBSECTION 105.07 OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION.

8. RECORD PLANS AND FABRICATION DRAWINGS FOR THE EXISTING TRUSSES ARE NOT AVAILABLE. THE CONTRACTOR MUST FIELD VERIFY DIMENSIONS TO ENSURE THE WORK CAN BE CONSTRUCTED AS PROPOSED IN THE PLANS. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO MATCH THE FINAL PRODUCT AS DESCRIBED IN THE PLANS WITH THE EXISTING FIELD CONDITION.

GENERAL NOTES (CON'T):

9. THE CONTRACTOR SHALL TAKE SPECIAL CARE TO AVOID DISTURBING THE AREA WITHIN A 200 FOOT RADIUS OF THE TOWN WELL AS SHOWN ON SHTS. 11 & 12. THIS INCLUDES PLACING EQUIPMENT, TRANSPORTING EQUIPMENT, EXCAVATING, OR WORK OF ANY KIND WITHIN THE LIMIT SHOWN.

STRUCTURAL STEEL NOTES:

1. ALL NEW STRUCTURAL STEEL SHALL BE AASHTO M270M/M270 GRADE 50 PAINTED EXCEPT AS SHOWN OTHERWISE. NEW STRUCTURAL STEEL FOR THE TRUSS FLOOR SYSTEM, BOTTOM LATERAL BRACING AND STRINGER CONNECTION ANGLES SHALL BE PAID FOR UNDER ITEM 506.50 STRUCTURAL STEEL, ROLLED BEAM.

2. ALL PREPARATION AND PAINTING OF NEW STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATION SECTION 513. ALL NEW STRUCTURAL STEEL PAID FOR UNDER ITEM 506.50 STRUCTURAL STEEL, ROLLED BEAM SHALL BE PREPARED AND PAINTED UNDER ITEM 513.40 SURFACE PREPARATION, SHOP AND ITEM 513.25 STRUCTURAL PAINTING, SHOP APPLIED, RESPECTIVELY. THE COLOR OF THE TOP COAT OF PAINT SHALL BE BLACK (FEDERAL COLOR CHIP NO. 27038). THE CONTRACTOR SHALL ENSURE COMPATIBILITY BETWEEN THE SHOP AND FIELD PAINT SYSTEMS.

3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETAILING AND FIT-UP OF ALL NEW STRUCTURAL STEEL. FABRICATION PLANS FOR ALL NEW STRUCTURAL STEEL SHALL BE SUBMITTED TO THE STRUCTURES ENGINEER FOR APPROVAL AS PER SECTION 506 OF THE STANDARD SPECIFICATIONS.

4. ALL FIELD CONNECTIONS SHALL BE MADE USING HIGH STRENGTH BOLTS MEETING AASHTO M164, TYPE I GALVANIZED. THE BOLTS SHALL RECEIVE AN INTERMEDIATE COAT OF PAINT, AS WELL AS A FINAL COAT AFTER INSTALLATION. ALL CONNECTIONS SHALL BE 3/4" BOLTS INSTALLED IN 13/16" HOLES UNLESS OTHERWISE NOTED. ANY CONNECTIONS NOT FULLY DETAILED IN THE PLANS SHALL BE DETAILED BY THE FABRICATOR AND SUBMITTED TO THE STRUCTURES ENGINEER FOR APPROVAL.

5. CVN TESTING WILL NOT BE REQUIRED FOR ANY STEEL MEMBERS ON THIS PROJECT. THE BOTTOM CHORD IS FRACTURE CRITICAL.

6. ALL MEMBERS SHALL BE PLACED WITH THE MILL CAMBER UP.

7. AN ORNAMENTAL PEDESTRIAN RAILING SHALL BE USED ON THE BRIDGE. DETAILS FOR FABRICATION OF THIS ORNAMENTAL RAIL ARE SHOWN ON SHT. 24. THIS WORK SHALL BE PAID FOR UNDER ITEM 900.640 SPECIAL PROVISION (BRIDGE RAILING STEEL/PEDESTRIAN).

TRUSS REHABILITATION NOTES:

1. THE EXISTING TRUSSES ARE STORED IN A VAOT MAINTENANCE FACILITY IN CLARENDON, VERMONT OFF OF VT. ROUTE 7B. EROSION AND SEDIMENT CONTROL PLANS HAVE BEEN PREPARED ASSUMING THE CONTRACTOR MAY PERFORM ALL TRUSS REHABILITATION AND PAINTING ACTIVITIES AT THIS YARD. THE SUBJECT TRUSSES ARE MARKED "T1" AND "T2" WITH WHITE PAINT. THE FOLLOWING WORK ITEMS ASSOCIATED WITH THE TRUSS REHABILITATION SHALL BE INCLUDED FOR LUMP SUM PAYMENT UNDER ITEM 900.645 SPECIAL PROVISION (INCORPORATING SALVAGED BRIDGE COMPONENTS):
   - RELOCATION OF OTHER STRUCTURES STOCKPILED IN THE VAOT MAINTENANCE FACILITY AS REQUIRED TO GAIN ACCESS TO THE SUBJECT TRUSSES
   - SHORING OF EXISTING TRUSSES AND CONSTRUCTION OF STAGING AS REQUIRED TO PERFORM THE WORK AS SHOWN ON THE PLANS
   - REMOVAL AND DISPOSAL OF EXISTING STEEL ATTACHED TO TRUSSES WHICH ARE NOT REQUIRED IN THE PROPOSED STRUCTURE (END SECTIONS OF ORIGINAL FLOORBEAMS AND RAILING CONNECTION PLATES)
   - MACHINE BRONZE BEARING PLATES ON EXISTING EXPANSION BEARING PEDESTALS AND BRIDGE SHOES AT JOINT L0. INSTALL REHABILITATED BEARING PEDESTALS ON PROPOSED SUBSTRUCTURES
   - LOADING AND HAULING OF THE TRUSSES AND ALL COMPONENTS FROM THE VAOT MAINTENANCE FACILITY TO THE PROJECT SITE
   - UNLOADING OF THE TRUSSES AT THE PROJECT SITE, ASSEMBLY OF FIELD SPLICES, RIGGING AND ERECTION OF THE TRUSSES ON NEW SUBSTRUCTURES

2. THE CONTRACTOR SHALL USE GREAT CARE IN LIFTING, MOVING, AND TRANSPORTING THE SUBJECT MEMBERS, OR ANY OTHER STOCKPILED TRUSSES. LIFTING OF TRUSSES FROM ANYWHERE ON THE BOTTOM CHORD, OR WITHIN THE MIDDLE THIRD OF THE TOP CHORD SHALL BE AVOIDED. ANY DAMAGE TO ANY MEMBERS SHALL BE REPLACED OR REPAIRED AS DIRECTED BY THE RESIDENT ENGINEER AT THE CONTRACTOR'S EXPENSE.

TRUSS REHABILITATION NOTES (CON'T):

3. ANY NECESSARY SHORING OF THE TRUSSES SHALL BE PERFORMED IN ACCORDANCE WITH STANDARD SPECIFICATION SECTION 506 AND SHALL BE PAID FOR UNDER ITEM 900.645. THE CONTRACTOR SHALL TAKE CARE SUCH THAT THE TRUSSES REMAIN STABLE DURING ALL REPAIR WORK TO TRUSS MEMBERS.

4. TO ENSURE THE FAYING SURFACES OF THE REHABILITATED TRUSS JOINTS ARE WELL PREPARED AND THE JOINTS WELL PROTECTED, THE FOLLOWING TRUSS REHABILITATION SEQUENCING HAS BEEN PROVIDED:
   - THE CONTRACTOR SHALL REMOVE AND DISPOSE OF EXISTING TRUSS COMPONENTS/MEMBERS DESIGNATED ON THE PLANS FOR REPLACEMENT. REMOVAL AND DISPOSAL OF EXISTING TRUSS COMPONENTS/MEMBERS SHALL BE INCIDENTAL TO ITEM 506.60 STRUCTURAL STEEL.
   - THE CONTRACTOR SHALL PREPARE THE SURFACES OF THE RETAINED TRUSS COMPONENTS/MEMBERS UNDER ITEM 513.36 CONTAINMENT AND ENVIRONMENTAL PROTECTION, FIELD AND ITEM 513.41 SURFACE PREPARATION, FIELD. SURFACES SHALL BE PREPARED IN ACCORDANCE WITH STANDARD SPECIFICATION SECTION 513.04.
   - THE CONTRACTOR SHALL APPLY THE PRIME COAT TO THE PREPARED SURFACES OF THE RETAINED TRUSS COMPONENTS/MEMBERS UNDER ITEM 513.30 STRUCTURAL PAINTING, FIELD APPLIED.
   - THE RESIDENT ENGINEER SHALL INSPECT THE RETAINED TRUSS COMPONENTS/MEMBERS FOR SIGNIFICANT SECTION LOSS OR DAMAGE. COMPONENTS/MEMBERS THAT HAVE MORE THAN 15% SECTION LOSS AT ANY CROSS SECTION SHALL BE RE-EVALUATED FOR REPLACEMENT OR REPAIR AT THE RESIDENT ENGINEER'S DISCRETION.
   - THE RESIDENT ENGINEER SHALL CONTACT THE STRUCTURES ENGINEER FOR FURTHER REPAIR RECOMMENDATIONS OF ANY TRUSS COMPONENTS/MEMBERS NOTED DURING THE INSPECTION PROCESS.
   - THE CONTRACTOR SHALL INSTALL THE NEW STRUCTURAL STEEL REQUIRED FOR THE REPLACEMENT OF EXISTING TRUSS COMPONENTS/MEMBERS, AS DESIGNATED ON THE PLANS, OR AS ORDERED BY THE RESIDENT ENGINEER, UNDER ITEM 506.60 STRUCTURAL STEEL. PRIOR TO INSTALLATION, THE SURFACES OF THE REPLACEMENT STEEL WILL BE CLEANED TO BARE METAL UNDER ITEM 513.41 SURFACE PREPARATION, FIELD AND RECEIVE A PRIME COAT UNDER ITEM 513.30 STRUCTURAL PAINTING, FIELD APPLIED.
   - WITH THE FLOORBEAM CONNECTION AREAS MASKED, THE CONTRACTOR SHALL APPLY THE INTERMEDIATE AND TOP COATS TO THE ENTIRE TRUSS UNDER ITEM 513.30 STRUCTURAL PAINTING, FIELD APPLIED. THE COLOR OF THE TOP COAT OF PAINT SHALL BE BLACK (FEDERAL COLOR CHIP NO. 27038).

5. ALL CONNECTIONS ON THE TRUSS ARE BELIEVED TO BE 3/4" DIAMETER RIVETS IN 13/16" HOLES. THE CONTRACTOR SHALL VERIFY DIAMETER OF ACTUAL RIVET OR BOLT SIZE BEFORE ORDERING REPLACEMENTS.

6. ALL RIVETS REMOVED FROM THE TRUSS SHALL BE REPLACED WITH EQUIVALENT DIAMETER BOLTS MEETING AASHTO M-164, TYPE I GALVANIZED. HEX HEADED BOLTS SHALL BE USED THROUGHOUT. PAYMENT FOR RIVET REMOVAL AND REPLACEMENT WITH BOLTS AT CONNECTIONS WHERE EXISTING STEEL IS TO BE REPLACED UNDER 506.60 SHALL BE INCIDENTAL TO ITEM 506.60. REMOVAL OF DETERIORATED RIVETS AND REPLACEMENT WITH BOLTS AT LOCATIONS (AS DETERMINED BY THE RESIDENT ENGINEER) WHERE EXISTING STEEL IS NOT REPLACED SHALL BE PAID UNDER ITEM 900.620 SPECIAL PROVISION (THROUGH TRUSS RIVET REPLACEMENT).

7. THE CONTRACTOR IS REMINDED THAT ALL HARDWARE FOR CONNECTIONS IS NOT PAID FOR DIRECTLY BUT IS CONSIDERED INCIDENTAL TO ITEM 506.50 STRUCTURAL STEEL, ROLLED BEAM AND ITEM 506.60 STRUCTURAL STEEL. THE CONTRACTOR SHALL MAKE A DETAILED COUNT OF ALL HARDWARE NECESSARY TO COMPLETE THE WORK AS SHOWN ON THE PLANS. BOLT LENGTHS SHALL BE FIELD VERIFIED BY THE CONTRACTOR TO HAVE SUFFICIENT THREAD LENGTH TO PROPERLY TORQUE.

8. ANCHOR BOLTS FOR THE TRUSS AT THE EXPANSION ABUTMENT WILL HAVE AN 1/8" GAP BETWEEN THE BOTTOM OF THE NUT AND THE TOP OF THE WASHER. THE CONTRACTOR SHALL BURR THE THREADS ON ALL ANCHOR BOLTS TO PREVENT REMOVAL OF THE NUTS.

9. THE EXISTING BEARING PEDESTALS ARE STOCKPILED AT THE VAOT MAINTENANCE FACILITY. THE PEDESTALS SHALL BE BLAST CLEANED UNDER ITEM 513.41 SURFACE PREPARATION, FIELD AND PAINTED UNDER ITEM 513.30 STRUCTURAL PAINTING, FIELD APPLIED. THE REHABILITATED BEARINGS SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD SPECIFICATION SECTION 531 AND PAID FOR UNDER ITEM 900.645 SPECIAL PROVISION (INCORPORATING SALVAGED BRIDGE COMPONENTS). CARE SHALL BE TAKEN TO AVOID DAMAGE TO THE BRONZE BEARING PLATES DURING BLAST CLEANING OPERATIONS.

TRUSS REHABILITATION NOTES (CON'T):

10. THE CONTRACTOR SHALL INSTALL A PLAQUE AT THE LOCATION SHOWN ON SHT. 18. THE AGENCY WILL PROVIDE THE PLAQUE AND HARDWARE. A GASKET SHALL BE INSTALLED BETWEEN THE PLAQUE AND THE TRUSS. BOLT SLEEVES SHALL BE USED. ALL WORK REQUIRED TO INSTALL THE PLAQUE SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

TIMBER NOTES:

1. ITEM 522.25 STRUCTURAL LUMBER AND TIMBER, TREATED IS FOR ALL THE WORK ASSOCIATED WITH THE LUMBER AND TIMBER NECESSARY TO CONSTRUCT THE BRIDGE DECK AND CURBING AS DETAILED IN THE PLANS, INCLUDING BUT NOT LIMITED TO CUTTING, DRILLING, TIMBER CONNECTORS, HARDWARE AND JOINT SEALER.

2. TIMBER CURB AND TIMBER CURB SUPPORT MATERIAL SHALL BE DRESSED SIZE 6"X6" SOUTHERN PINE, SELECT STRUCTURAL OR BETTER.

3. TIMBER DECK PLANK MATERIAL SHALL BE DRESSED SIZE 4"X12" SOUTHERN PINE, NO.2 OR BETTER. A 1/4" GAP SHALL BE MAINTAINED BETWEEN PLANKS.

4. ALL BOLTS IN THE TIMBER CURB AND TIMBER DECK SHALL MEET ASTM A-307 GALVANIZED. BOLTS SHALL BE TIGHTENED SNUGLY, BUT NOT SO TIGHTLY AS TO CAUSE CRUSHING OF THE WOOD UNDER THE WASHER OR C-CLIP.

5. ALL BOLT HOLES IN WOOD SHALL BE THE SAME DIAMETER AS THE BOLT.

CONCRETE NOTES:

1. FOR BOTH ABUTMENTS 1 AND 2, CONCRETE PORTIONS OF THE ABUTMENTS AND WINGWALLS ABOVE ADJACENT BRIDGE SEAT ELEVATIONS SHALL NOT BE PLACED UNTIL THE STRUCTURAL STEEL HAS BEEN SET AND FINISHED GRADE DETERMINED BY THE RESIDENT ENGINEER.

2. ITEM 514.10 WATER REPELLENT, SILANE SHALL BE APPLIED TO ALL EXPOSED CONCRETE SURFACES.

3. SURFACES OF BRIDGE SEAT AREAS UNDER BEARING DEVICES SHALL BE LEVEL, OTHER BRIDGE SEAT AREAS SHALL BE SLOPED 1/4" PER FOOT TOWARDS MID-SPAN. THE ENTIRE BRIDGE SEAT SURFACE SHALL BE MAGNESIUM FLOAT FINISHED.

4. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1" x1".

5. REINFORCING PLACEMENT TOLERANCES: SPACING +/- 1"
   CLEARANCE +/- 1/4"

6. THE KEY IN THE CONCRETE CONSTRUCTION JOINTS SHALL BE MONOLITHIC AND CONTINUOUS FOR THE FULL LENGTH OF THE JOINT. UPWARD KEYS SHALL BE APPROVED BY THE RESIDENT ENGINEER AND PLACED INTEGRALLY WITH THE CONCRETE BELOW THE JOINT.

FOUNDATION NOTES:

1. ALL PIPE PILING INSTALLED UNDER ITEM 900.640 SPECIAL PROVISION (STEEL PILING, CONCRETE-FILLED 12 3/4" O.D. X 3/8" PIPE) SHALL BE FILLED WITH HIGH PERFORMANCE CONCRETE, CLASS B. PAYMENT FOR HPC, CLASS B TO FILL PIPES SHALL BE INCIDENTAL TO ITEM 900.640.

2. ALL PIPE PILING SHALL BE FITTED WITH A CONICAL DRIVING POINT ATTACHMENT. DRIVING POINTS SHALL BE ASTM A-27 GRADE 65/35.

3. PIPE PILING SHALL BE SPLICED, IF REQUIRED, AS SHOWN ON SHT. 22. PROPRIETARY SPLICING SYSTEMS MAY BE SUBSTITUTED UPON APPROVAL BY THE STRUCTURES ENGINEER. PAYMENT FOR SPLICING INCLUDED IN THE UNIT PRICE BID FOR ITEM 900.640 SPECIAL PROVISION (STEEL PILING, CONCRETE-FILLED 12 3/4" X 3/8" PIPE)

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PROJECT NOTES

PROJECT NAME: WALLINGFORD
PROJECT NUMBER: STP ST WALK(14)

FILE NAME: $FILES$ | PLOT DATE: 1/9/2009
PROJECT MANAGER: SUSAN SCRIBNER | DRAWN BY: W. WEATHERBY
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FILE NAME =u:\9669\mast\prefinal_submission\s22f136gennotes_rev.dgn
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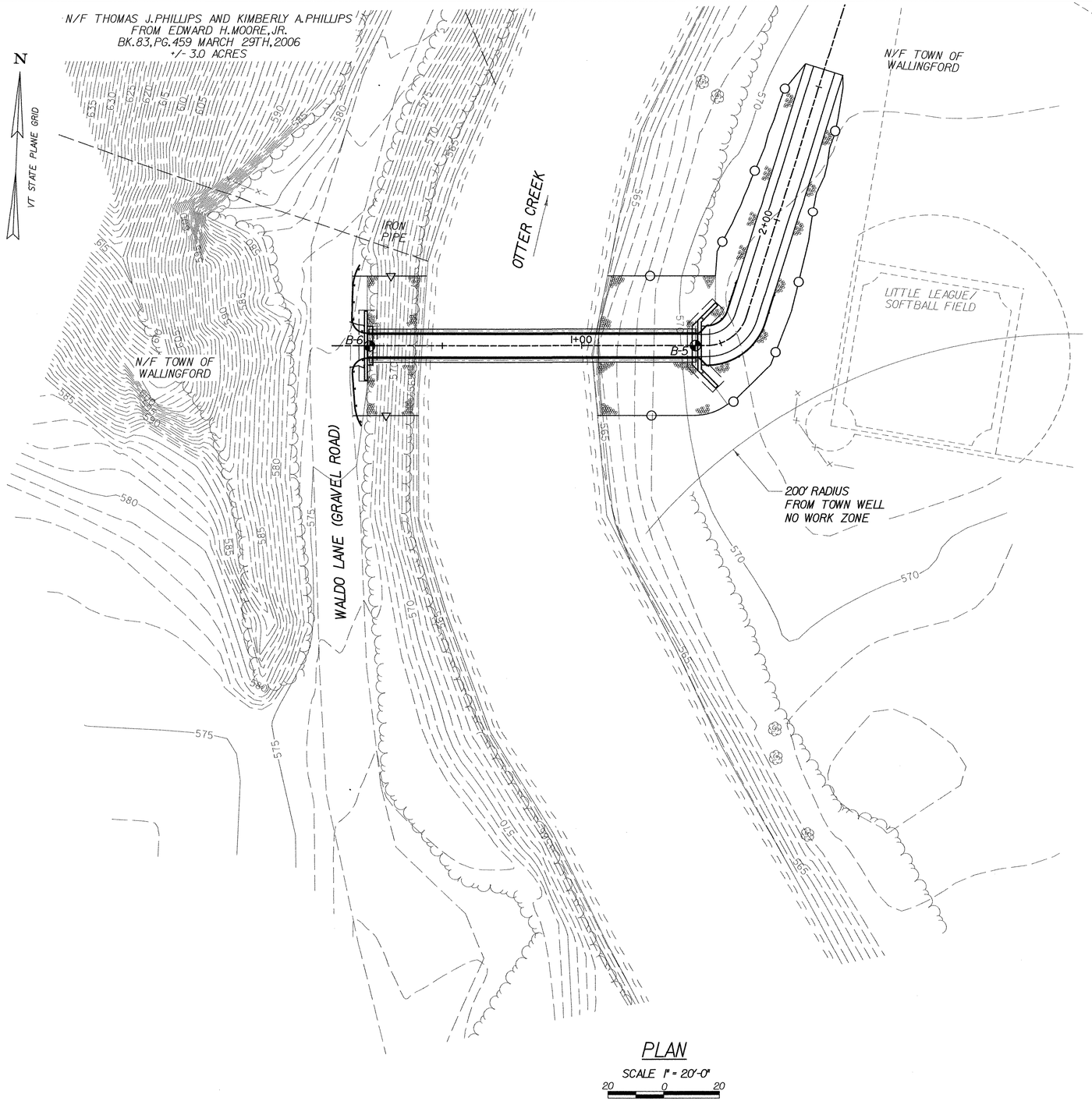

PLAN

SCALE 1" = 20'-0"

20 0 20

SAMP./CORE NUMBER	SAMP. ADV (ft) LEN. CORE (ft)	RECOVERY (ft)	Blows per 6" on Split Spoon Sampler	"N" VALUE or ROD% SAMPLE	DEPTH (Feet)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	ELEVATION (Feet)	Remarks on Character of Drilling, water return, etc	WATER LEVELS AND/OR WELL DATA
S1	2.0	1.8	2-3-4-5	7			f. SAND , Some Silt, trace f. gravel, brown, loose, moist (A-2-4)			
R1	2.0	2.0	N/A	88%			Mica SCHIST , gray, soft, slightly weathered, closely fractured, good RQD	100 / 101		
1	2	3	4	5	6	7	8	9	10	11	12	13

SUBSURFACE LOGS PRESENT MATERIAL CLASSIFICATIONS, TEST DATA, AND OBSERVATIONS FROM SUBSURFACE INVESTIGATIONS AT THE SUBJECT SITE AS REPORTED BY THE INSPECTING GEOLOGIST OR ENGINEER. IN SOME CASES, THE CLASSIFICATIONS MAY BE MADE BASED ON LABORATORY TEST DATA WHEN AVAILABLE. IT SHOULD BE NOTED THAT THE INVESTIGATION PROCEDURES ONLY RECOVER A SMALL PORTION OF THE SUBSURFACE MATERIALS AT THE SITE. THEREFORE, ACTUAL CONDITIONS BETWEEN BORINGS AND SAMPLED INTERVALS MAY DIFFER FROM THOSE PRESENTED ON THE SUBSURFACE LOGS. THE INFORMATION PRESENTED ON THE LOGS PROVIDE A BASIS FOR AN EVALUATION OF THE SUBSURFACE CONDITIONS AND MAY INDICATE THE NEED FOR ADDITIONAL EXPLORATION. ANY EVALUATION OF THE CONDITIONS REPORTED ON THE LOGS MUST BE PERFORMED BY PROFESSIONAL ENGINEERS OR GEOLOGISTS.

1. *SAMP./CORE NUMBER - SAMPLES ARE NUMBERED FOR IDENTIFICATION ON CONTAINERS, LABORATORY REPORTS OR IN TEXT REPORTS.*
2. *SAMP.ADV/LEN.CORE - LENGTH OF SAMPLER ADVANCE OR LENGTH OF CORING RUN MEASURED IN FEET.*
3. *RECOVERY - AMOUNT OF SAMPLE ACTUALLY RECOVERED AFTER WITHDRAWING SAMPLER OR CORE BARREL FROM BORE HOLE MEASURED IN FEET.*
4. *SAMPLE BLOWS/6" - UNLESS OTHERWISE NOTED, BLOW COUNTS REPRESENT VALUES OBTAINED BY DRIVING A 2.0" (O.D.), I- 3/8 " (I.D.) SPLIT SPOON SAMPLER INTO THE SUBSURFACE STRATA WITH A 140 POUND WEIGHT FALLING 30" AS PER ASTM D 1586. AFTER AN INITIAL PENETRATION OF 6" TO SEAT THE SAMPLER INTO UNDISTURBED MATERIAL, THE SAMPLER IS THEN DRIVEN AN ADDITIONAL 2 OR 3 SIX INCH INCREMENTS.*
5. *"N" VALUE OR ROD % - "N" VALUE - THE SUM OF THE SECOND AND THIRD SAMPLE BLOW INCREMENTS IS GENERALLY TERMED THE STANDARD PENETRATION TEST (SPT) "N" VALUE. CORE RQD - CORE ROCK QUALITY DESIGNATION, RQD, IS DEFINED AS THE SUMMED LENGTH OF ALL PIECES OF CORE EQUAL TO OR LONGER THAN 4 INCHES DIVIDED BY THE TOTAL LENGTH OF THE CORING RUN. FRESH, IRREGULAR BREAKS DISTINGUISHABLE AS BEING CAUSED BY DRILLING OR RECOVERY OPERATIONS ARE IGNORED AND THE PIECES ARE COUNTED AS INTACT LENGTHS. RQD VALUES ARE VALID ONLY FOR CORES OBTAINED WITH NX SIZE CORE BARRELS.*
6. *SAMPLE - GRAPHICAL PRESENTATION OF SAMPLE TYPE AND ADVANCE OR CORE RUN LENGTH. SEE TABLE 1, SHT.15.*
7. *DEPTH - DEPTH AS MEASURED FROM THE GROUND SURFACE IN FEET.*
8. *GRAPHICS - GRAPHICAL PRESENTATION OF SUBSURFACE MATERIALS. SEE TABLE 4, SHT.15. DUAL SOIL CLASSIFICATION AND ROCK GRAPHICS MAY VARY AND ARE NOT SHOWN ON TABLE 4, SHT.15.*
9. *DESCRIPTION AND CLASSIFICATION - SOIL - RECOVERED SAMPLES ARE VISUALLY CLASSIFIED IN THE FIELD BY THE SUPERVISING GEOLOGIST OR ENGINEER UNLESS OTHERWISE NOTED. PARTICLE SIZE AND PLASTICITY CLASSIFICATION IS BASED ON FIELD OBSERVATIONS, AND USING THE AASHTO SOIL CLASSIFICATION SYSTEM. SEE TABLE 4, SHT.15. AASHTO SYMBOLS ARE PRESENTED IN PARENTHESES FOLLOWING THE SOIL DESCRIPTION. WHERE NECESSARY, DUAL SYMBOLS MAY BE USED FOR COMBINATIONS OF SOIL TYPES. RELATIVE PROPORTIONS, BY WEIGHT AND/OR PLASTICITY, ARE DESCRIBED IN GENERAL ACCORDANCE WITH "SUGGESTED METHODS OF TEST FOR IDENTIFICATION OF SOILS" BY D.M. BURMISTER, ASTM SPECIAL PUBLICATION 479, 6-1970. SEE TABLE 2, SHT.15. SOIL DENSITY OR CONSISTENCY DESCRIPTION IS BASED ON THE PENETRATION RESISTANCE. SEE TABLE 3, SHT.15. SOIL MOISTURE DESCRIPTION IS BASED ON THE OBSERVED WETNESS OF THE SOIL RECOVERED BEING DRY, MOIST, WET, OR SATURATED. WATER INTRODUCED INTO THE BORING DURING DRILLING MAY AFFECT THE MOISTURE CONTENT OF THE MATERIALS. OTHER GEOLOGIC TERMS MAY ALSO BE USED TO FURTHER DESCRIBE THE SUBSURFACE MATERIALS. ROCK - ROCK CORE DESCRIPTIONS ARE BASED ON THE INSPECTOR'S OBSERVATIONS AND MAY BE EXAMINED AND DESCRIBED IN GREATER DETAIL BY THE PROJECT ENGINEER OR GEOLOGIST. TERMS USED IN THE DESCRIPTION OF ROCK CORE ARE PRESENTED IN TABLE 5, SHT.15.*
10. *DIVISION LINES - DIVISION LINES BETWEEN DEPOSITS ARE BASED ON FIELD OBSERVATIONS AND CHANGES IN RECOVERED MATERIAL. SOLID LINES DEPICT CONTACTS BETWEEN TWO DEPOSITS OF DIFFERENT GEOLOGIC DEPOSITIONAL ENVIRONMENT OF KNOWN ELEVATION. DASHED LINES REPRESENT ESTIMATED ELEVATION OF CONTACTS BETWEEN TWO DEPOSITS OF DIFFERENT GEOLOGIC DEPOSITIONAL ENVIRONMENT. DOTTED LINES DEPICT TRANSITIONS OF DEPOSITS WITHIN THE SAME DEPOSITIONAL ENVIRONMENT, SUCH AS GRAIN SIZE OR DENSITY.*
11. *ELEVATION - ELEVATION OF STRATA CHANGES IN FEET.*
12. *REMARKS - MISCELLANEOUS OBSERVATIONS.*
13. *WATER LEVELS & WELL DATA - HOLLOW WATER LEVEL SYMBOL, IF PRESENT, REPRESENTS LEVEL AT WHICH FIRST SATURATED SAMPLE OR WATER LEVEL WAS ENCOUNTERED. SOLID WATER LEVEL SYMBOL, IF PRESENT, DEPICTS THE MOST PROBABLE STATIC WATER ELEVATION AT THE TIME OF DRILLING OR AS MEASURED IN AN INSTALLED OBSERVATION WELL AT A LATER DATE. SUBSURFACE WATER CONDITIONS ARE INFLUENCED BY FACTORS SUCH AS PRECIPITATION, STRATIGRAPHIC COMPOSITION, AND DRILLING/CORING METHODS. CONDITIONS AT OTHER TIMES MAY DIFFER FROM THOSE DESCRIBED ON THE LOGS. FOR GRAPHICAL PRESENTATION OF OBSERVATION/MONITORING WELL CONSTRUCTION, SEE TABLE 6, SHT.15. ELEVATIONS OF CHANGES IN CONSTRUCTION ARE NOTED AT THE BOTTOM OF EACH SECTION.*

BORING INFORMATION

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FILE NAME =u\9669\mstr\prefinal.submission\x202f136boringinfo.dgn
DATE/TIME =1/9/2009
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ABUTMENT 2
BOTTOM OF FOOTING
EL.566.00

ABUTMENT 2
ESTIMATED PILE
TIP EL.514.00

Wallingford Bridge over Otter Creek — SUBSURFACE LOG — HOLE NUMBER B-5

Page 1 of 2

PROJECT NUMBER: 16311.1004.1502 12/20/2006
LOCATION: Wallingford, Vermont
CLIENT: Vermont Agency of Transportation
CONTRACTOR: Environmental Drilling NY
DRILLER: D. Drew INSPECTOR: K. Armstrong
START DATE and TIME: 12/15/2006 8:30:00 AM
FINISH DATE and TIME: 12/15/2006 5:00:00 PM
SURFACE ELEV: 570.00 (ft; Estimated) CHECKED BY: W. Harris
DRILL FLUID: Water @ 47' DRILLING METHOD: 4.25" HSA/3" FJC

WATER LEVEL OBSERVATIONS DURING DRILLING	DATE	TIME	READING TYPE	WATER DEPTH (ft)	CASING BOTTOM (ft)	HOLE BOTTOM (ft)
	12-15-06	4:45 PM	Completion	7.6	Pulled	9

SAMP./CORE NUMBER	SAMP. ADV. (ft) LEN. CORE (ft)	RECOVERY (ft)	Blows Per 6" on Split Spoon Sampler	"N" Value or RQD%
S-1	2	0.3	100/0.3-6-6-9	12
S-2	2	0.4	8-6-4-4	10
S-3	2	0	2-2-3-3	5
S-4	2	2	3-2-4-3	6
S-5	2	13	1-1-6-6	7
S-6	2	0.8	10-8-8-9	16
S-7	2	0.5	11-8-12-9	20
S-8	2	0.9	8-11-14-12	25
S-9	2	0.4	9-5-2-4	7
S-10	2	0.6	7-6-5-8	1
S-11	2	1.5	12-12-10-13	22
S-12	2	0.9	15-16-19-37	35
S-13	2	1.6	31-27-31-18	58

DESCRIPTION AND CLASSIFICATION:

- f.m. SAND, little silt, trace c. sand, trace roots, brown, medium compact, moist (TOPSOIL)
- f.m. SAND, little silt, trace c. sand, trace f. gravel, brown, loose, moist (FILL)
- f. SAND and SILT, trace organics, brown/gray/black, loose, moist (SM)
- Similar Soil (SM)
- f. SAND and SILT, little organics, brown/black, loose, moist (SM)
- f.m.c. SAND, little f.c. gravel, trace silt, brown, loose, moist (SP)
- f.c. GRAVEL, Some f.m.c. Sand, trace silt, brown, m. compact, wet (GP)
- f. GRAVEL, Some f.m.c. Sand, trace silt, trace c. gravel, brown, medium compact, wet (GP)
- f.m.c. SAND, trace f.c. gravel, brown, medium compact, wet (SP)
- f.m.c. SAND, trace f.c. gravel, brown, medium compact, wet (SP)
- f.m.c. SAND, trace c. gravel, brown, loose, wet (SP)
- f.m.c. SAND, trace silt, trace f. gravel, brown, medium compact, wet (SP)
- m.c. SAND, Some f. Gravel, trace f. sand, trace c. gravel, brown/orange/yellow/white/gray, medium compact, wet (SP)
- f. SAND, Some m. Sand, little c. sand, brown, compact, wet (SP)
- f.m.c. SAND, little f.c. gravel, brown, very compact, wet (SP)
- End of Boring at 51 ft

Remarks on Character of Drilling, Water Return, etc.:

- Spoon bouncing on boulder at 0.5 feet. Boulder removed and sampling continued.
- Cobbles and boulders encountered throughout boring.
- Water level observations during drilling may not represent static conditions.
- Auger grinding on boulders/cobbles at 15 feet.
- Piece of coarse gravel lodged in tip of shoe.
- Auger refusal at 47 feet. Switch drilling method to 3 inch FJC with bentonite mud. All four teeth broken off of auger bit and several augers had flights sheared off. Encountered refusal while spinning casing at 51 feet. Attempt to rollerbit to 60 feet but wash returned metal shavings and boring was terminated.

SUBSURFACE LOG WALLINGFORDVT.GPJ UPDATEDCHA.GDT 10/4/07

ABUTMENT 1
BOTTOM OF FOOTING
EL.568.08

ABUTMENT 1
ESTIMATED PILE
TIP EL.518.00

Wallingford Bridge over Otter Creek — SUBSURFACE LOG — HOLE NUMBER B-6

Page 1 of 2

PROJECT NUMBER: 16311.1004.1502 12/20/2006
LOCATION: Wallingford, Vermont
CLIENT: Vermont Agency of Transportation
CONTRACTOR: Environmental Drilling NY
DRILLER: D. Drew INSPECTOR: K. Armstrong
START DATE and TIME: 12/14/2006 8:30:00 AM
FINISH DATE and TIME: 12/14/2006 3:30:00 PM
SURFACE ELEV: 576.00 (ft; Estimated) CHECKED BY: W. Harris
DRILL FLUID: None DRILLING METHOD: 4.25" HSA

WATER LEVEL OBSERVATIONS DURING DRILLING	DATE	TIME	READING TYPE	WATER DEPTH (ft)	CASING BOTTOM (ft)	HOLE BOTTOM (ft)
	12-14-06	1:30 PM	During Drilling	20	35	45

SAMP./CORE NUMBER	SAMP. ADV. (ft) LEN. CORE (ft)	RECOVERY (ft)	Blows Per 6" on Split Spoon Sampler	"N" Value or RQD%
S-1	2	0.7	4-13-7-5	20
S-2	2	0.5	5-8-6-5	14
S-3	2	0.7	4-4-4-2	8
S-4	2	0.5	4-3-3-2	6
S-5	2	0.4	32-6-6-7	12
S-6	2	0.8	6-8-12-14	20
S-7	2	0.6	8-11-10-13	21
S-8	2	1	5-25-22-28	47
S-9	2	1	22-27-33-54	60
S-10	1.0	1	27-33-40-50/0.3'	73
S-11	1.7	0.7	29-27-55-50/0.2'	82
S-12	1.5	0.5	23-52-100/0.3'	R
S-13	0	0	100/0.0'	R

DESCRIPTION AND CLASSIFICATION:

- f.m.c. SAND, little f.c. gravel, brown, medium compact, moist (FILL)
- f.m.c. SAND, trace silt, trace f. gravel, trace organics, medium compact, moist (FILL)
- f.m. SAND, little c. sand, trace silt, trace f. gravel, brown/copper, loose, moist (SP)
- f.m. SAND, little c. sand, trace silt, brown/copper/gray, loose, moist (SP)
- f.m.c. SAND, trace silt, trace f. gravel, brown, medium compact, moist (SP)
- f.m.c. SAND, little silt, trace f.c. gravel, brown/white, compact, moist (SM)
- f.m.c. SAND and f.c. GRAVEL, little c. gravel, trace silt, brown, medium compact, wet (SP-GP)
- f.m.c. SAND and f.c. GRAVEL, trace silt, brown, compact, wet (SP-GP)
- f. GRAVEL, little f.m.c. sand, trace silt, brown, very compact, wet (GP)
- f.m.c. SAND and f.c. GRAVEL, trace silt, brown, very compact, wet (SP-GP)
- f.m.c. SAND, Some f. Gravel, trace silt, trace c. gravel, brown, very compact, wet (SP)
- Similar Soil (SP)
- No Recovery
- End of Boring at 45 ft

Remarks on Character of Drilling, Water Return, etc.:

- Cobbles and boulders encountered throughout boring.
- Water level observations during drilling may not represent static conditions.

SUBSURFACE LOG WALLINGFORDVT.GPJ UPDATEDCHA.GDT 10/4/07

TABLE 1 — TYPICAL SAMPLE TYPES

- SPLIT SPOON (1 3/8" I.D.)
- NX SIZE ROCK CORE
- SHELBY TUBE "UNDISTURBED"
- AUGER SAMPLE

TABLE 2 — SAMPLE MATERIAL PROPORTIONS

ADJECTIVE	PERCENTAGE OF SAMPLE
"and"	35% - 50%
"some"	20% - 35%
"little"	10% - 20%
"trace"	< 10%

Standard split spoon samples may not recover particles with any dimension larger than 1 3/8". Therefore, reported gravel percentages may not reflect actual conditions.

TABLE 3 — DENSITY/CONSISTENCY

GRANULAR SOILS Blows/ft.	Density	COHESIVE SOILS Blows/ft.	Consistency
< 5	Very Loose	< 2	Very Soft
5-10	Loose	2-4	Soft
11-30	Med. Compact	5-8	Med. Stiff
31-50	Compact	9-15	Stiff
> 50	Very Compact	16-30	Very Stiff
		> 30	Hard

TABLE 4 — USCS CLASSIFICATION, PARTICLE SIZE, & GRAPHICS

	MAJOR PARTICLE SIZE DIVISION	USCS SYMBOL	GRAPHIC SYMBOL	GENERAL DESCRIPTION
COARSE GRAINED SOILS	GRAVEL Coarse:3"-3/4" Fine:3/4"-#4. Classification based on > 50% being gravel	GW		Well graded gravels, gravel & sand mix.
		GP		Poorly graded gravels, gravel & sand mix.
		GM		Gravel, sand and silt mix.
		GC		Gravel, sand and clay mix.
	SAND Coarse:#4-#10 Med.:#10-#40 Fine:#40-#200. Classification based on > 50% being sand	SW		Well graded sand, sand & gravel mix.
		SP		Poorly graded sand, sand & gravel mix.
		SM		Sand and silt mix.
		SC		Sand and clay mix.
FINE GRAINED SOILS	SILT & CLAY. Classification based on > 50% passing #200 sieve.	ML		Inorganic silt, low plasticity.
		CL		Inorganic clay, low plasticity.
		OL		Organic silt/clay, low plasticity.
		MH		Inorganic silt, high plasticity.
		CH		Inorganic clay, high plasticity.
		OH		Organic silt/clay, high plasticity.
	ORGANIC SOILS	Pt		Peat and other highly organic soils.
	FILL	Fill		Miscellaneous fill materials.

TABLE 5 — ROCK CLASSIFICATION TERMS

HARDNESS:

Very Soft	Carves
Soft	Grooves with knife
Med. Hard	Scratched easily with knife
Hard	Scatched with difficulty
Very Hard	Cannot be scratched with knife

WEATHERING:

Fresh	Slight or no staining of fractures, little or no discoloration, few fractures.
Slightly	Fractures stained, discoloration may extend into rock 1", some soil in fractures.
Moderately	Significant portions of rock stained and discolored, soil in fractures, loss of strength.
Highly	Entire rock discolored and dull except quartz grains, severe loss of strength.
Complete	Weathered to a residual soil.

BEDDING:		FRACTURE SPACING:		RQD:	
Massive	> 40"	Massive/V. Wide	> 6'	Excellent	> 90%
Thick	12" - 40"	Thick/Wide	2' - 6'	Good	76% - 90%
Medium	4" - 12"	Med./Med.	8" - 24"	Fair	51% - 75%
Thin	< 4"	Thin/Close	2 1/2" - 8"	Poor	25% - 50%
		V. Thin/V. Close	< 2 1/2"	V. Poor	< 25%

TABLE 6 — WELL CONSTRUCTION

- SOLID PVC PIPE
- SCREENED PVC PIPE
- STAINLESS STEEL SCREENED PIPE
- FINE GRAINED WASHED SAND
- WASHED SAND
- BENTONITE PLUG
- AIR ENTRAINED CEMENT
- NATURAL SOIL/ ROCK FILL
- BENTONITE/ CEMENT GROUT

NOTE:
SEE SHT.14 FOR BORING LOCATIONS

BORING LOGS

PROJECT NAME: WALLINGFORD
PROJECT NUMBER: STP ST WALK(14)

CHA

FILE NAME: $FILES$
PROJECT MANAGER: SUSAN SCRIBNER
DESIGNED BY: L. HARDEN
BRIDGE DESIGN SUPERVISOR: P. HALSTEAD
PLOT DATE: 1/9/2009
DRAWN BY: W. WEATHERBY
CHECKED BY: P. HALSTEAD

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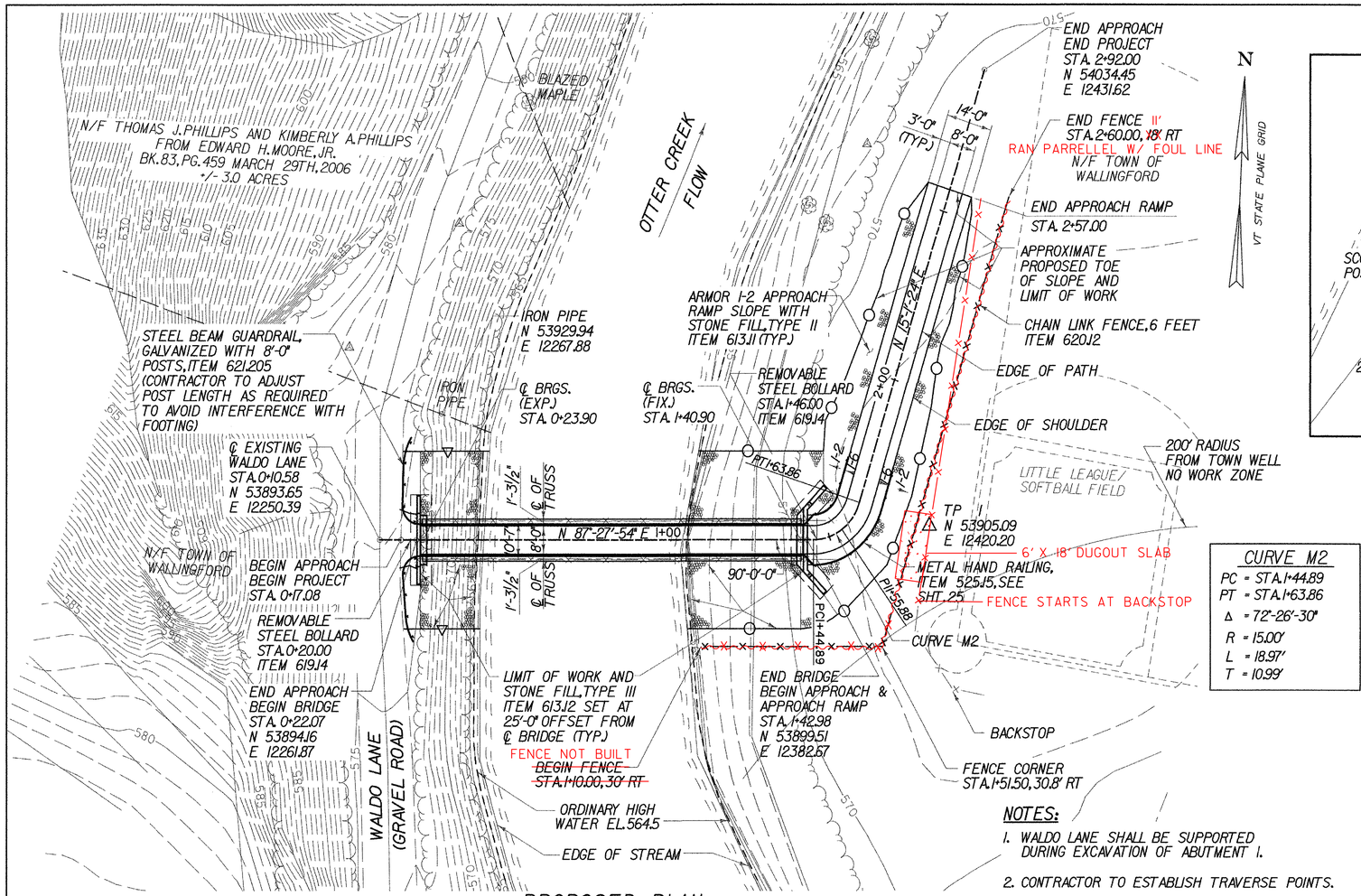
USER =2552



PROPOSED PLAN

SCALE 1" = 20'-0"

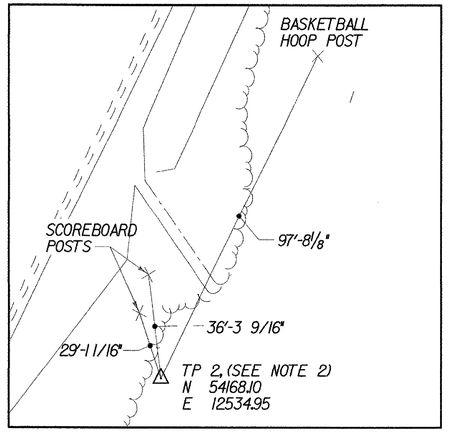
20 0 20

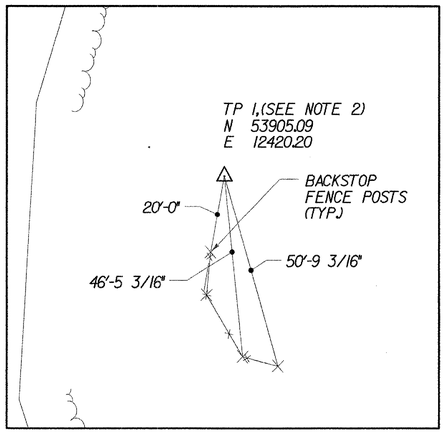
CURVE M2

PC = STA.1+44.89
PT = STA.1+63.86
Δ = 72°-26'-30"
R = 15.00'
L = 18.97'
T = 10.99'

NOTES:

1. WALDO LANE SHALL BE SUPPORTED DURING EXCAVATION OF ABUTMENT 1.
2. CONTRACTOR TO ESTABLISH TRAVERSE POINTS.



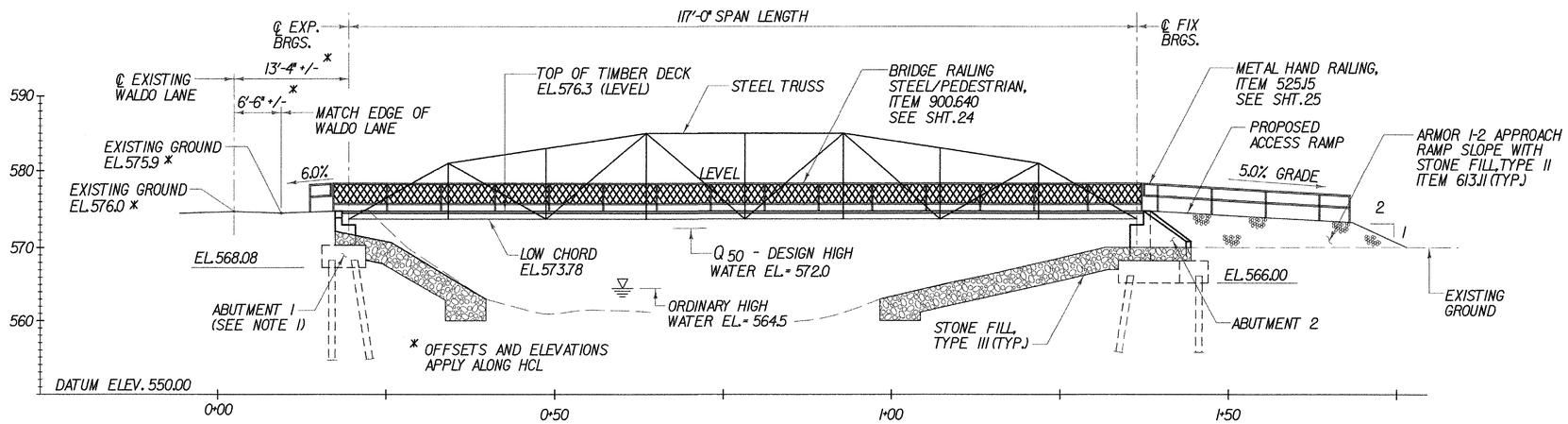


TRAVERSE TIES

(NOT TO SCALE)

TYPICAL ABUTMENT EARTHWORK SECTION - IN CUT

(NOT TO SCALE)



ELEVATION ALONG SOUTH FASCIA

SCALE 1" = 10'-0"

10 0 10

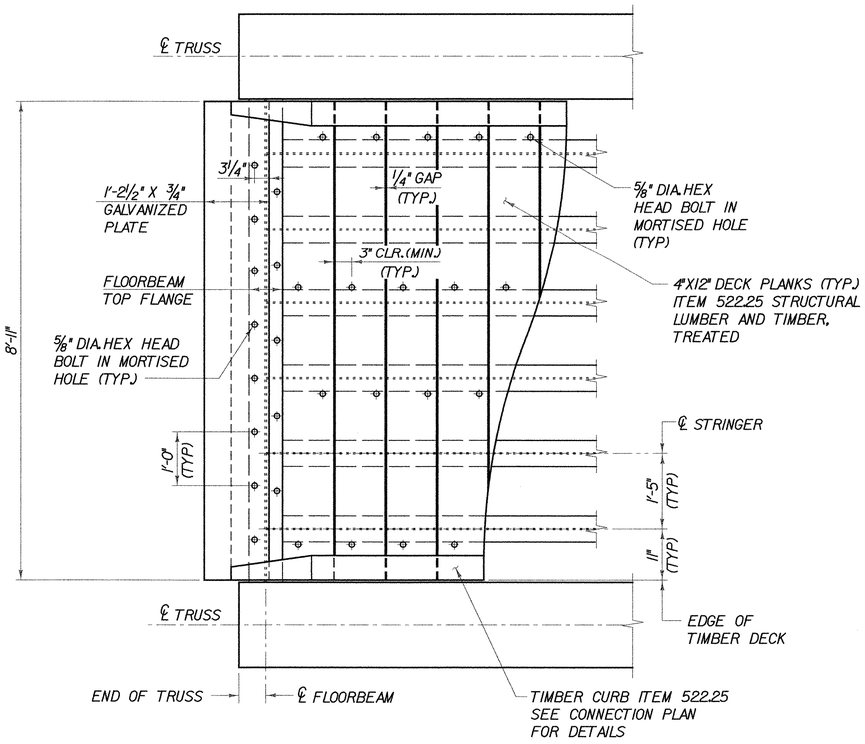
PLAN AND ELEVATION

PROJECT NAME: WALLINGFORD
PROJECT NUMBER: STP ST WALK(14)

FILE NAME: $FILES$
PROJECT MANAGER: SUSAN SCRIBNER
DESIGNED BY: L. HARDEN
BRIDGE DESIGN SUPERVISOR: P. HALSTEAD
PLOT DATE: 1/9/2009
DRAWN BY: W. WEATHERBY
CHECKED BY: P. HALSTEAD
SHEET 16 OF 26

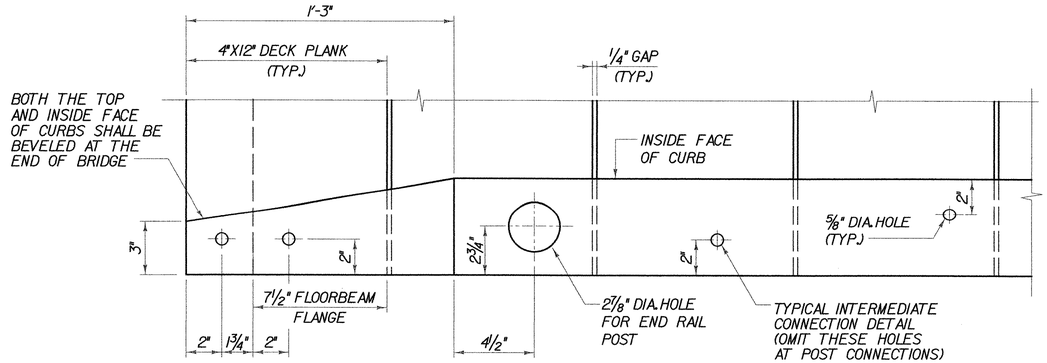
CHA

DATE/TIME = 1/9/2009
USER = 2552



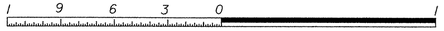
TIMBER DECK PARTIAL PLAN

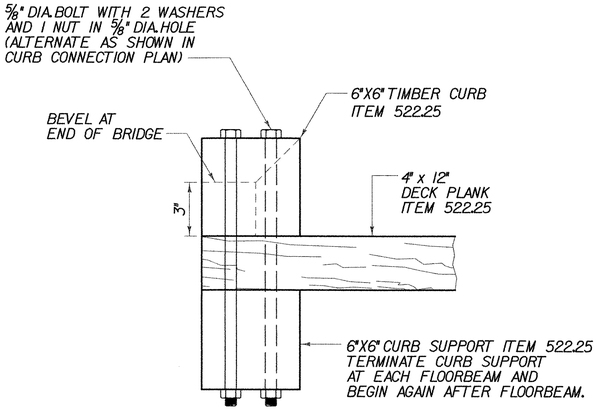
SCALE ¾" = 1'-0



CURB CONNECTION PLAN

SCALE 3" = 1'-0





TYPICAL CURB SECTION

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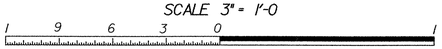
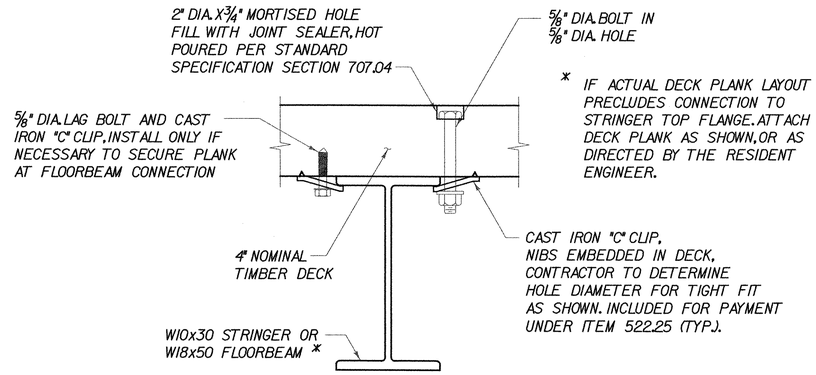
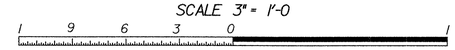


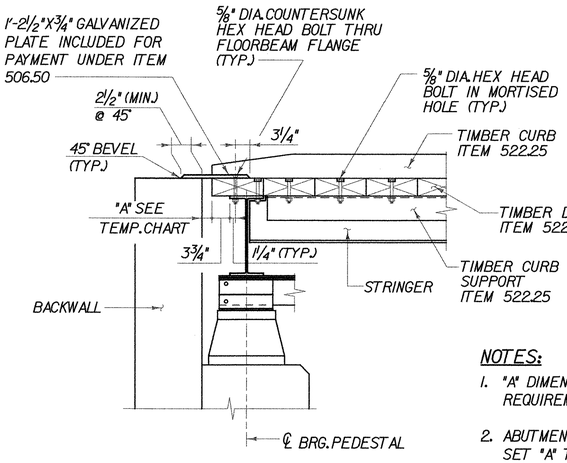


* IF ACTUAL DECK PLANK LAYOUT PRECLUDES CONNECTION TO STRINGER TOP FLANGE, ATTACH DECK PLANK AS SHOWN, OR AS DIRECTED BY THE RESIDENT ENGINEER.

DECK CONNECTION DETAIL

SCALE 3" = 1'-0





TEMP. CHART	
TEMP.	"A"
0° F	2¾"
15° F	2⅝"
30° F	2½"
45° F	2¼"
60° F	2⅛"
75° F	2"
90° F	1⅞"
105° F	1¾"

NOTES:

1. "A" DIMENSIONS SHOWN IN TEMP. CHART ARE MINIMUM REQUIREMENTS AT ABUTMENT 1.
2. ABUTMENT 1 SHOWN, ABUTMENT 2 SIMILAR. AT ABUTMENT 2 SET "A" TO 2¼" REGARDLESS OF AMBIENT TEMPERATURE.

END JOINT DETAIL

SCALE ¾" = 1'-0

CHA

DECK PLAN AND DETAILS

PROJECT NAME:	WALLINGFORD
PROJECT NUMBER:	STP ST WALK(14)
FILE NAME: $FILES$	PLOT DATE: 1/9/2009
PROJECT MANAGER: SUSAN SCRIBNER	DRAWN BY: W. WEATHERBY
DESIGNED BY: L. HARDEN	CHECKED BY: P. HALSTEAD
BRIDGE DESIGN SUPERVISOR: P. HALSTEAD	SHEET 17 OF 26

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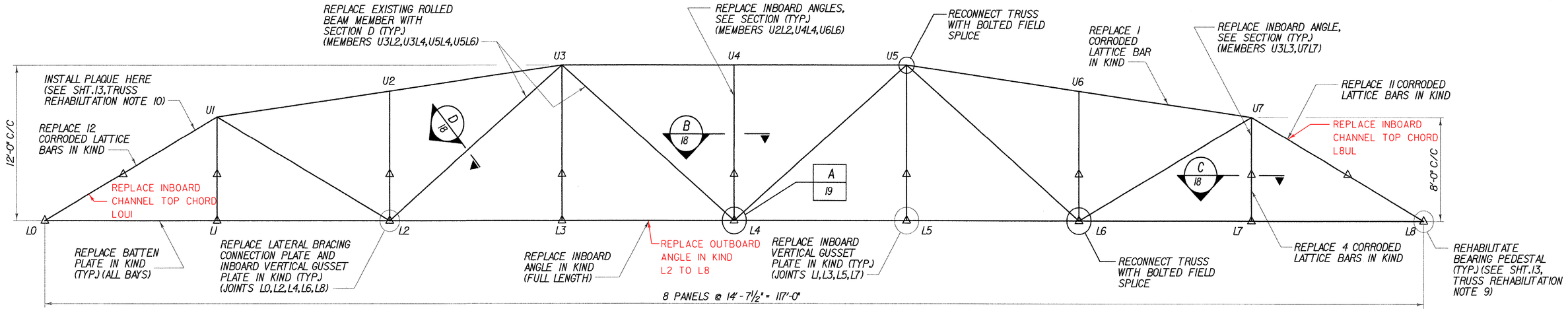
DATE/TIME = 1/9/2009
USER = 2352



T1 ~~T1~~ TRUSS ELEVATION LOOKING NORTH

SCALE 1/4" = 1'-0

1 0 2 4 6

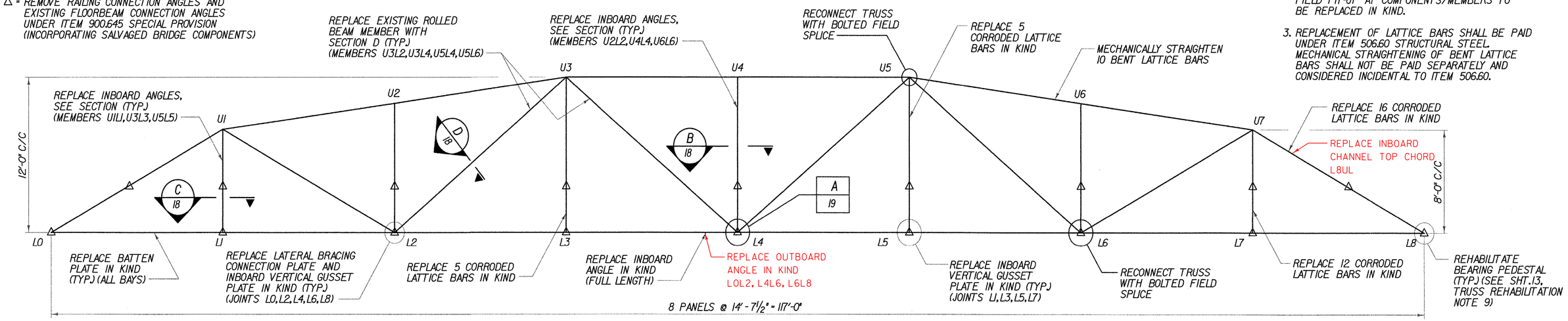
LEGEND:

INBOARD ANGLE = ANGLE THAT FACES WALKWAY

△ = REMOVE RAILING CONNECTION ANGLES AND EXISTING FLOORBEAM CONNECTION ANGLES UNDER ITEM 900.645 SPECIAL PROVISION (INCORPORATING SALVAGED BRIDGE COMPONENTS)

NOTES:

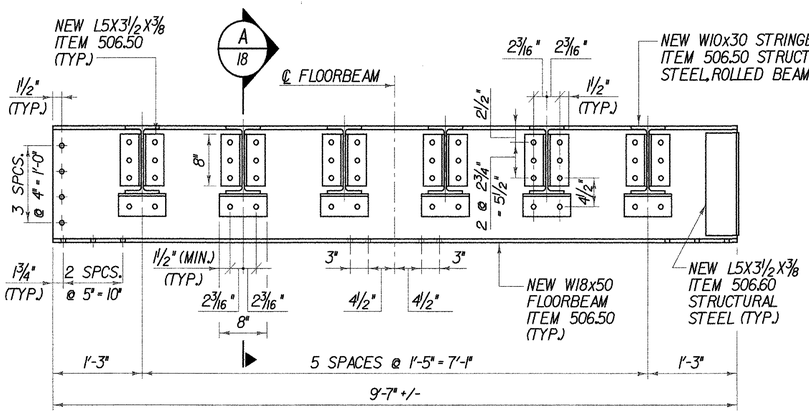
1. SEE SHT.13 FOR ADDITIONAL INFORMATION REGARDING PAYMENT AND REQUIRED SUBMITTALS.
2. WHERE NEW STRUCTURAL STEEL IS NOT FULLY DETAILED IN THE PLANS, THE CONTRACTOR SHALL DETAIL THE MEMBERS TO ACCOMMODATE FIELD FIT-UP AT COMPONENTS/MEMBERS TO BE REPLACED IN KIND.
3. REPLACEMENT OF LATTICE BARS SHALL BE PAID UNDER ITEM 506.60 STRUCTURAL STEEL. MECHANICAL STRAIGHTENING OF BENT LATTICE BARS SHALL NOT BE PAID SEPARATELY AND CONSIDERED INCIDENTAL TO ITEM 506.60.



T2 TRUSS ELEVATION LOOKING NORTH

SCALE 1/4" = 1'-0

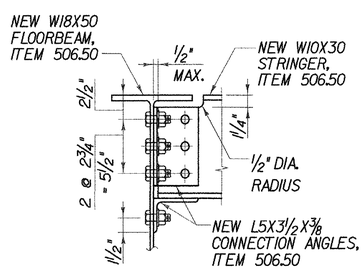
1 0 2 4 6



FLOORBEAM ELEVATION

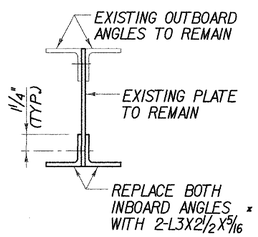
SCALE 1" = 1'-0

1 9 6 3 0 1 2

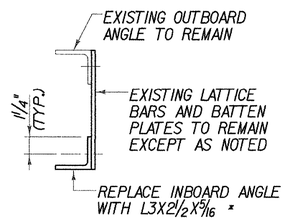


A 18 STRINGER CONNECTION (NOT TO SCALE)

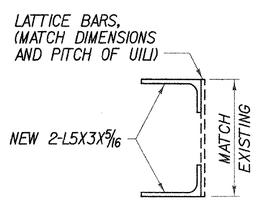
* REPLACE ONLY WHERE INDICATED IN TRUSS ELEVATIONS OR AS DIRECTED BY THE RESIDENT ENGINEER



B 18 VERTICAL MEMBER AT U2L2,U4L4 & U6L6 (NOT TO SCALE)



C 18 VERTICAL MEMBER AT U1L1,U3L3,U5L5 & U7L7 (NOT TO SCALE)



D 18 NEW DIAGONAL MEMBER @ U3L2,U3L4,U5L4 & U5L6 (NOT TO SCALE)

TRUSS REHABILITATION

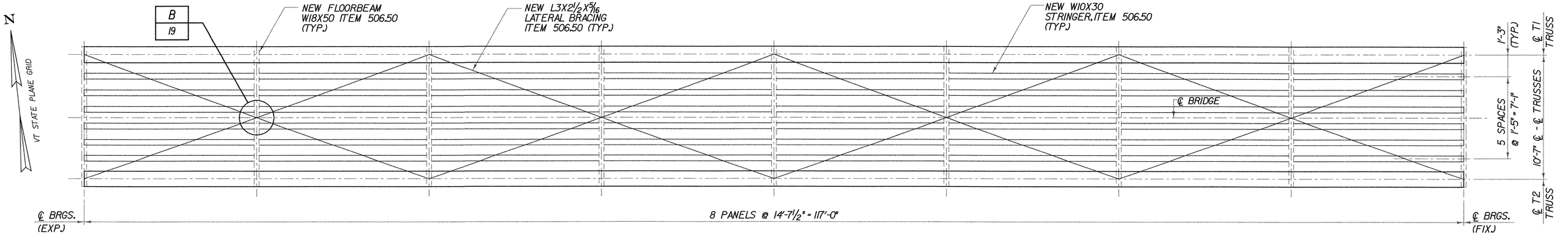
PROJECT NAME: WALLINGFORD
PROJECT NUMBER: STP ST WALK(14)

FILE NAME: $FILES$
PROJECT MANAGER: SUSAN SCRIBNER
DESIGNED BY: L. HARDEN
BRIDGE DESIGN SUPERVISOR: P. HALSTEAD

PLOT DATE: 1/9/2009
DRAWN BY: W. WEATHERBY
CHECKED BY: P. HALSTEAD
SHEET 18 OF 26

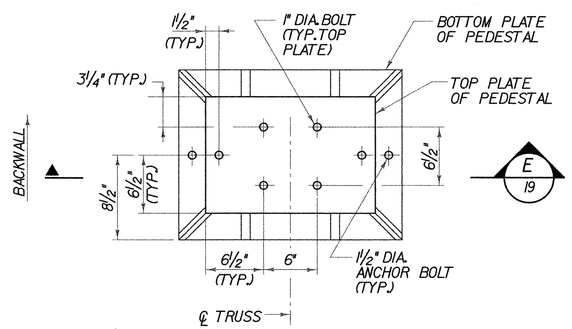
CHA

DATE/TIME = 1/9/2009
USER = 2532



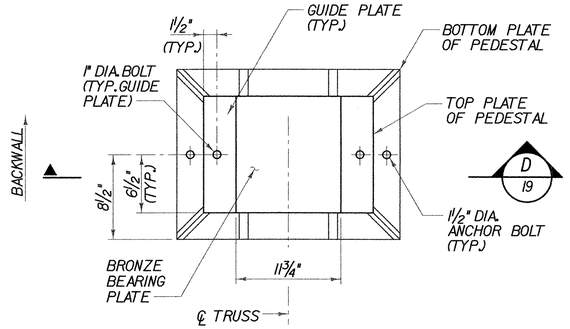
LATERAL BRACING PLAN

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



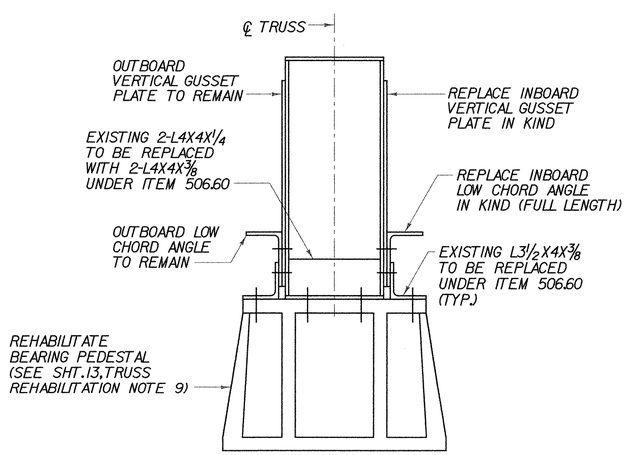
PLAN - FIXED BEARING PEDESTAL (TOP)

T1 BEARING SHOWN, T2 BEARING SIMILAR
(NOT TO SCALE)



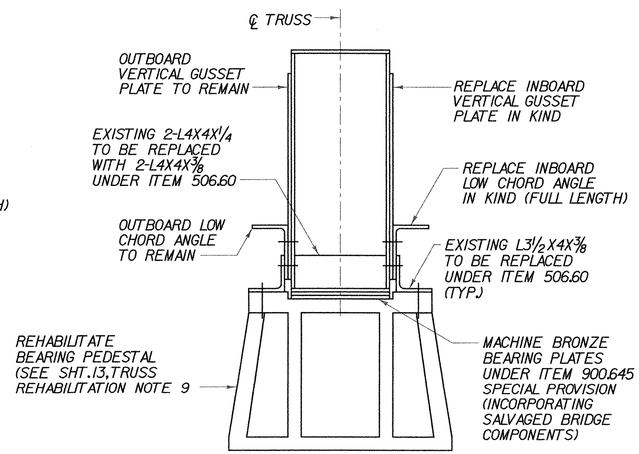
PLAN - EXPANSION BEARING PEDESTAL (TOP)

T2 BEARING SHOWN, T1 BEARING SIMILAR
(NOT TO SCALE)



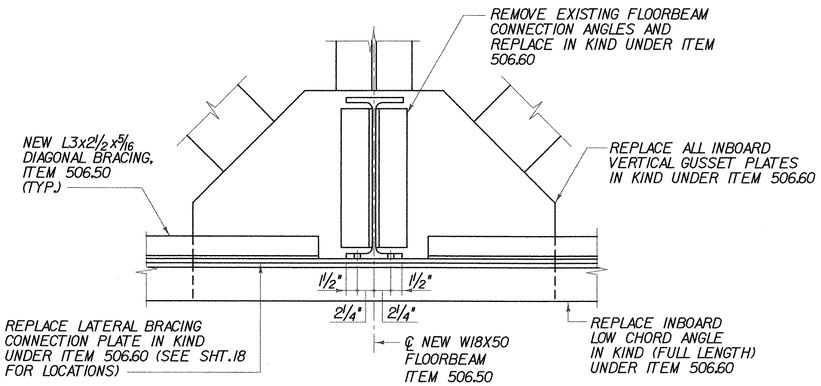
E TYPICAL FIXED END

19 (NOT TO SCALE)



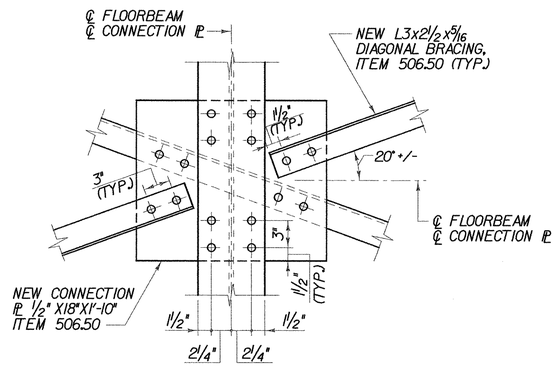
D TYPICAL EXPANSION END

19 NOT TO SCALE



A GUSSET TO FLOORBEAM CONNECTION

18 (CONNECTION AT L2, L4 & L6 SHOWN)
(CONNECTION @ L0, L1, L3, L5, L7 & L8 SIMILAR)
(NOT TO SCALE)



B DIAGONAL BRACING CONNECTION AT MIDSPAN OF FLOORBEAM

19 (NOT TO SCALE)

NOTES:

1. SEE SHT. 13 FOR ADDITIONAL INFORMATION REGARDING PAYMENT AND REQUIRED SUBMITTALS.
2. WHERE NEW STRUCTURAL STEEL IS NOT FULLY DETAILED IN THE PLANS, THE CONTRACTOR SHALL DETAIL THE MEMBERS TO ACCOMMODATE FIELD FIT-UP AT COMPONENTS/MEMBERS TO BE REPLACED IN KIND.

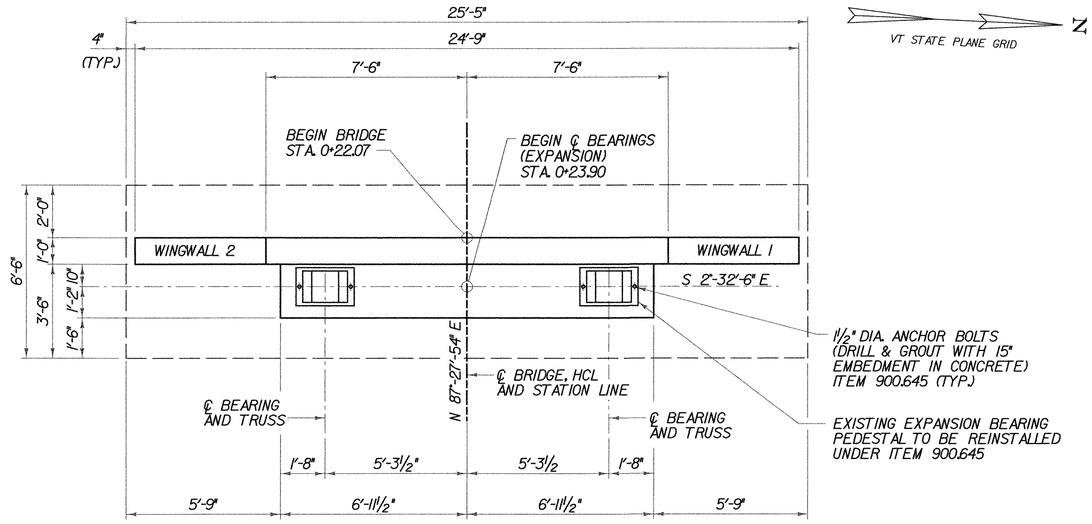
FRAMING PLAN AND DETAILS

PROJECT NAME: WALLINGFORD
PROJECT NUMBER: STP ST WALK(14)

CHA

FILE NAME: $FILES$
PROJECT MANAGER: SUSAN SCRIBNER
DESIGNED BY: L. HARDEN
BRIDGE DESIGN SUPERVISOR: P. HALSTEAD
PLOT DATE: 1/9/2009
DRAWN BY: W. WEATHERBY
CHECKED BY: P. HALSTEAD
SHEET 19 OF 26

FILE NAME =u\8683\mstr\prefinal_submission\s02f136fmgnt.dgn
DATE/TIME = 1/9/2009
USER = 2552



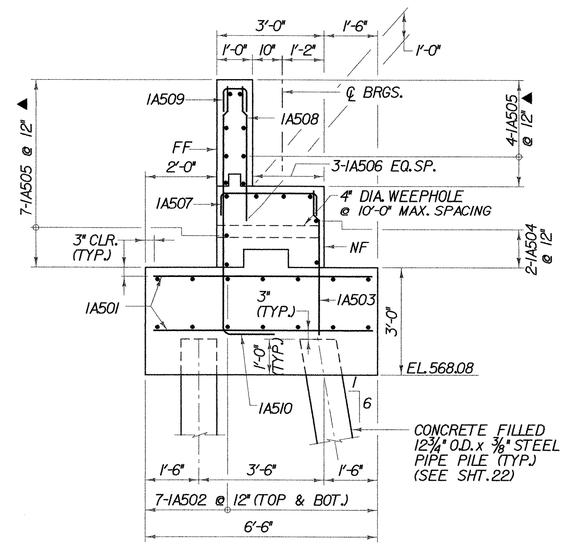
VT STATE PLANE GRID

N

PLAN

SCALE ⅜" = 1'-0

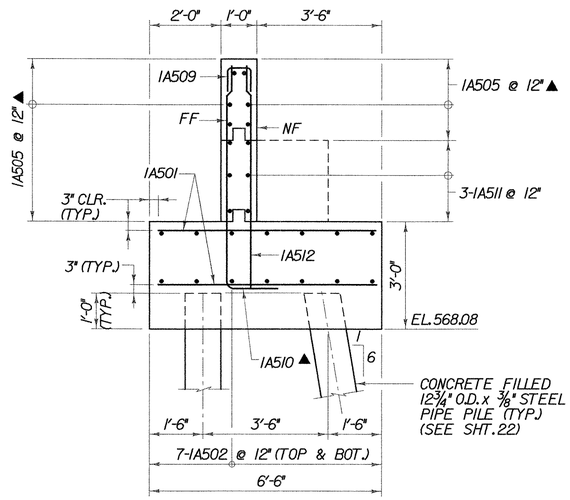
1 0 1 2 3 4



A 20 TYPICAL ABUTMENT SECTION

SCALE ½" = 1'-0

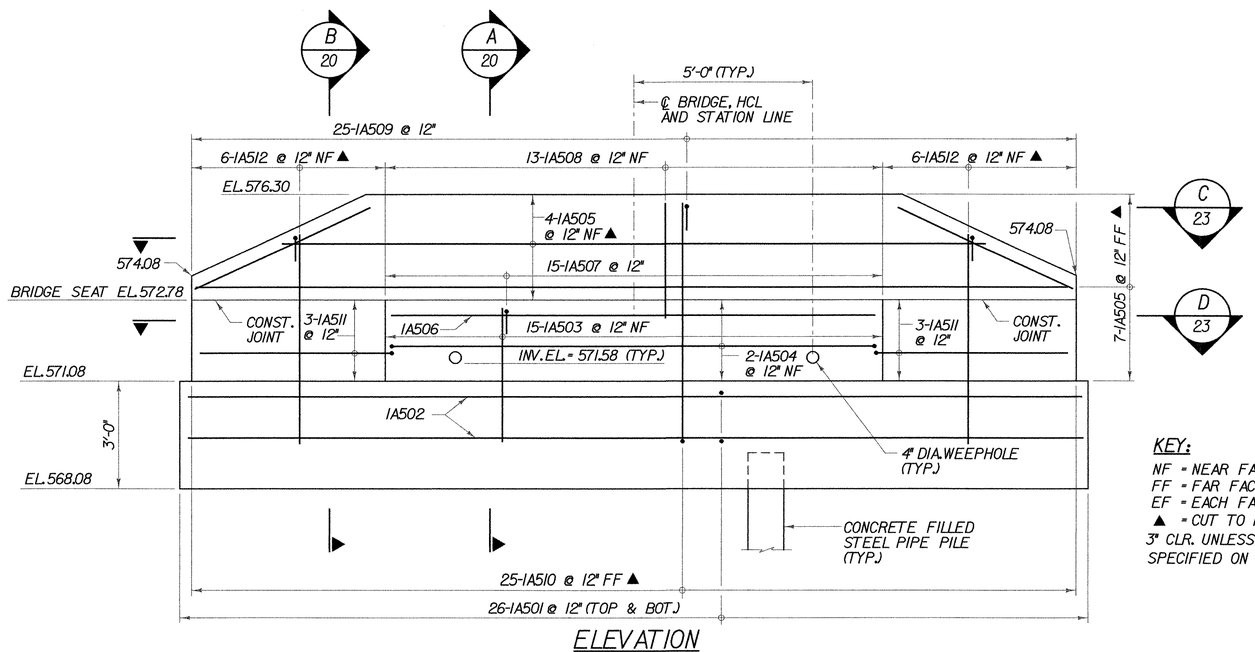
1 0 1 2



B 20 TYPICAL WINGWALL SECTION

SCALE ½" = 1'-0

1 0 1 2



ELEVATION

SCALE ½" = 1'-0

1 0 1 2

KEY:

NF = NEAR FACE
FF = FAR FACE
EF = EACH FACE
▲ = CUT TO FIT IN FIELD
3" CLR. UNLESS OTHERWISE SPECIFIED ON THE PLANS.

NOTES:

1. THE IA506 REINFORCEMENT BARS SHALL BE PLACED TO AVOID ANCHOR ROD PLACEMENT.

ABUTMENT 1 PLAN AND ELEVATION

PROJECT NAME: WALLINGFORD
PROJECT NUMBER: STP ST WALK(14)

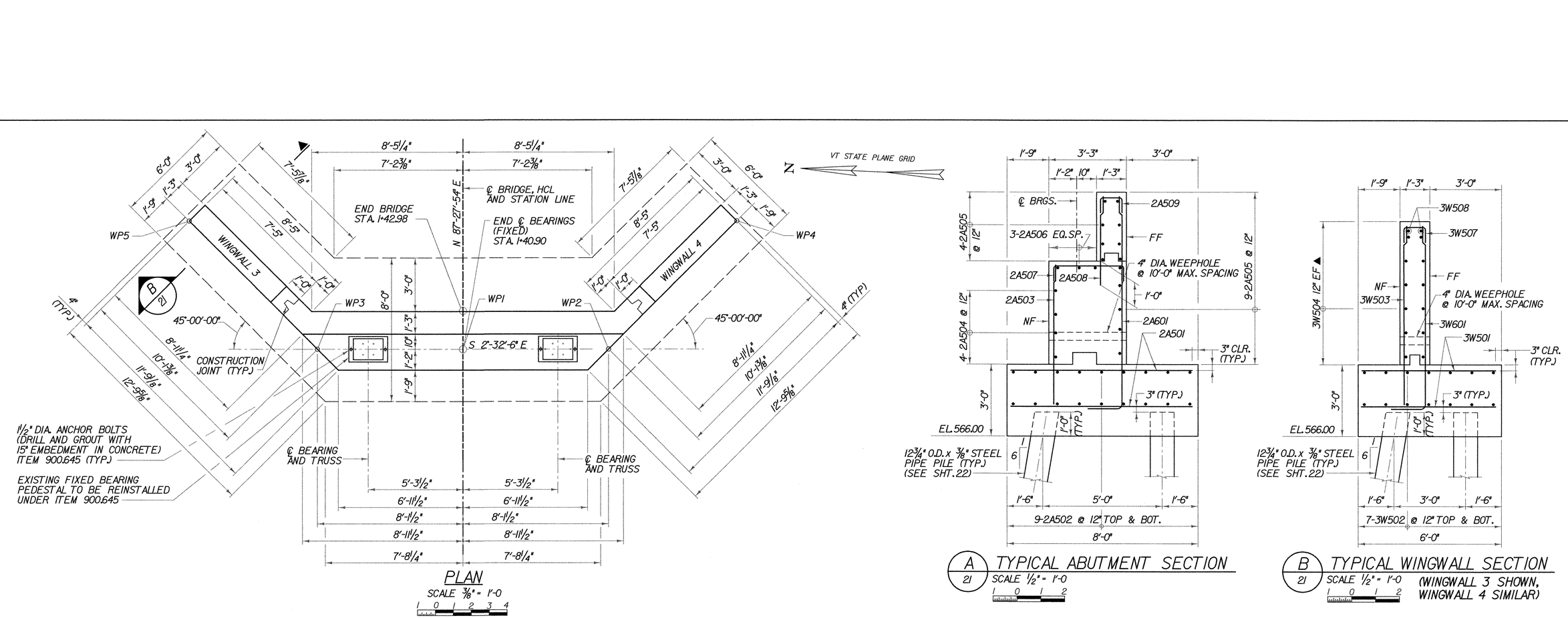
CHA

FILE NAME: $FILES$
PROJECT MANAGER: SUSAN SCRIBNER
DESIGNED BY: L. HARDEN
BRIDGE DESIGN SUPERVISOR: P. HALSTEAD
PLOT DATE: 1/9/2009
DRAWN BY: W. WEATHERBY
CHECKED BY: P. HALSTEAD
SHEET 20 OF 26

FILE NAME =u\8689\mstr\prefrun1_submission\x82f136ab1sht.dgn
DATE/TIME = 1/9/2009
USER = 2552

PLAN

SCALE ⅜" = 1'-0

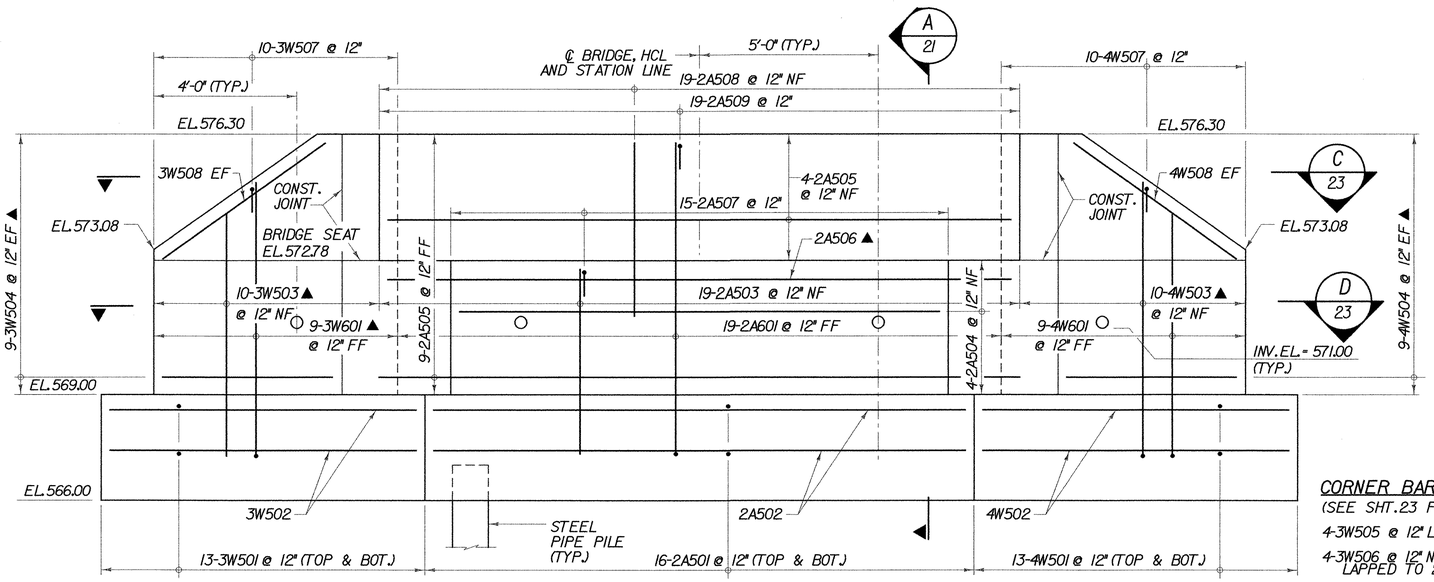


A 21 TYPICAL ABUTMENT SECTION

SCALE ½" = 1'-0

B 21 TYPICAL WINGWALL SECTION

SCALE ½" = 1'-0 (WINGWALL 3 SHOWN, WINGWALL 4 SIMILAR)



WINGWALL 3 (SPLAYED VIEW)

ELEVATION

SCALE ½" = 1'-0

WINGWALL 4 (SPLAYED VIEW)

KEY:

NF = NEAR FACE
FF = FAR FACE
EF = EACH FACE
▲ = CUT TO FIT IN FIELD
3" CLR. UNLESS OTHERWISE SPECIFIED ON THE PLANS.

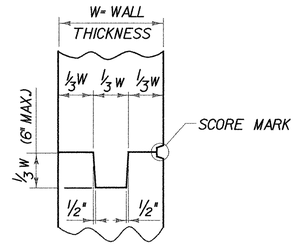
CORNER BARS NOT SHOWN FOR CLARITY:

(SEE SHT. 23 FOR DETAILS)

4-3W505 @ 12" LAPPED TO 2A504 & 3W504
4-3W506 @ 12" NF & 4-3W506 @ 12" FF LAPPED TO 2A505 & 3W504
5-3W509 @ 12" FF LAPPED TO 3W504
4-4W505 @ 12" LAPPED TO 2A504 & 4W504
4-4W506 @ 12" NF & 4-4W506 @ 12" FF LAPPED TO 2A505 & 4W504
5-4W509 @ 12" FF LAPPED TO 4W504

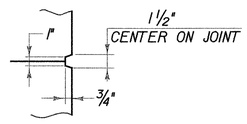
NOTES:

1. THE 2A506 REINFORCEMENT BARS SHALL BE PLACED TO AVOID ANCHOR ROD PLACEMENT.



TYPICAL CONCRETE CONSTRUCTION JOINT

(NOT TO SCALE)



1 / 21 SCORE MARK DETAIL

(NOT TO SCALE)

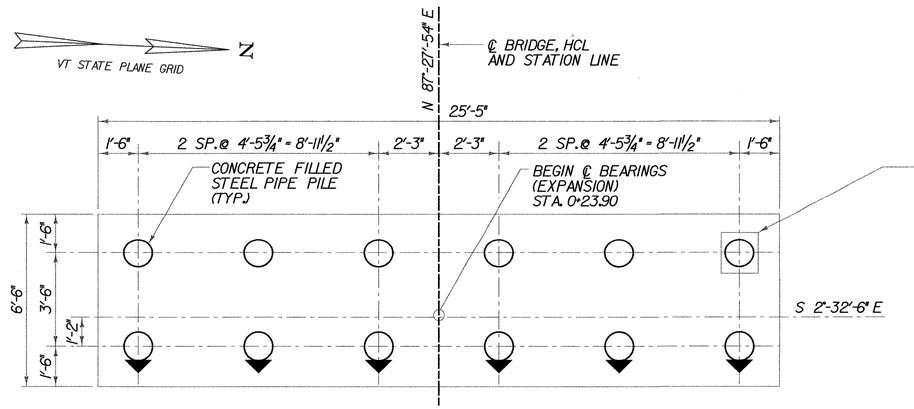
ABUTMENT 2 PLAN AND ELEVATION

PROJECT NAME: WALLINGFORD
PROJECT NUMBER: STP ST WALK(14)

FILE NAME: $FILES$
PROJECT MANAGER: SUSAN SCRIBNER
DESIGNED BY: L. HARDEN
BRIDGE DESIGN SUPERVISOR: P. HALSTEAD
PLOT DATE: 1/9/2009
DRAWN BY: W. WEATHERBY
CHECKED BY: P. HALSTEAD
SHEET 21 OF 26

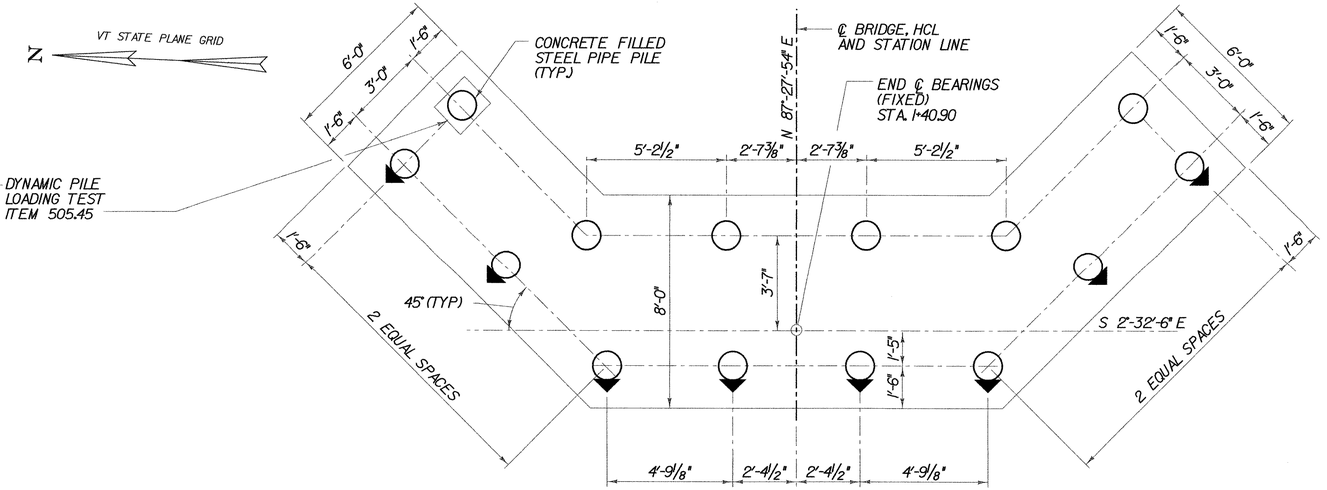
CHA

FILE NAME =u\86695\mstn\prefinal_submission\d02f136ab2sht.dgn
DATE/TIME =1/9/2009
USER =2552



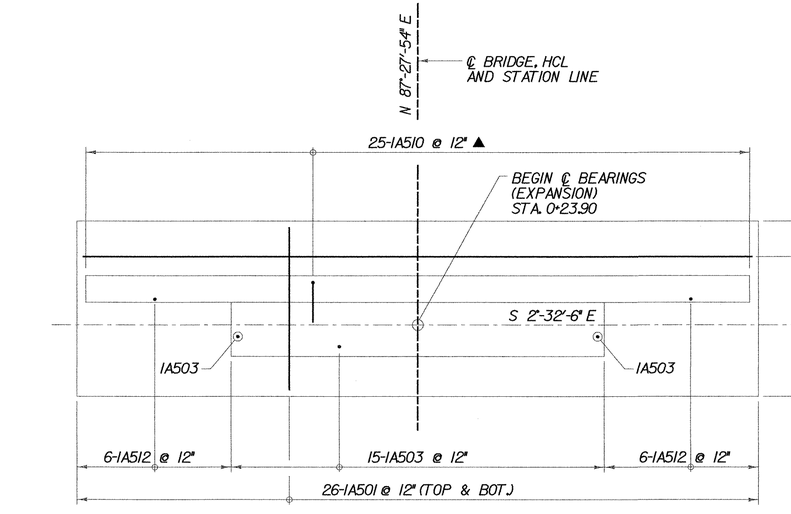
ABUTMENT 1 PILE LAYOUT

SCALE 3/8" = 1'-0



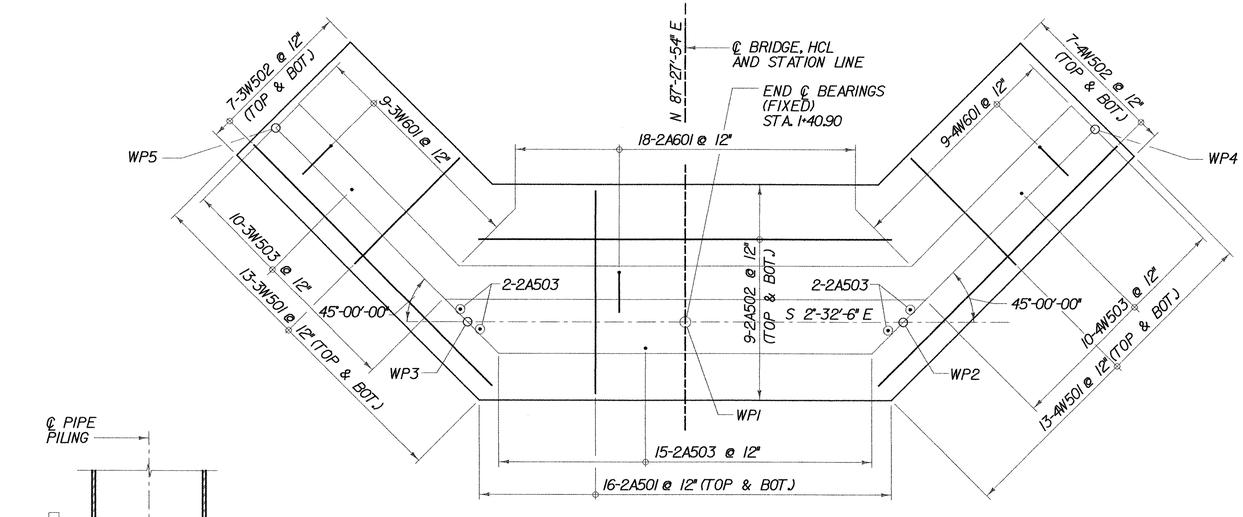
ABUTMENT 2 PILE LAYOUT

SCALE 3/8" = 1'-0



ABUTMENT 1 FOOTING REINFORCEMENT PLAN

SCALE 3/8" = 1'-0



ABUTMENT 2 FOOTING REINFORCEMENT PLAN

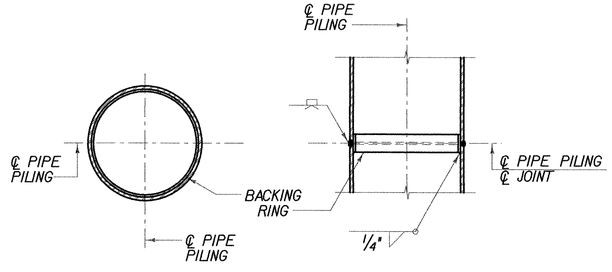
SCALE 3/8" = 1'-0

KEY:

- ITEM 900.640 SPECIAL PROVISION (STEEL PILING, CONCRETE-FILLED 12 3/4" O.D. X 3/8" PIPE)
  12 3/4" O.D. x 3/8" STEEL PIPE PILING FILLED WITH HIGH PERFORMANCE CONCRETE, CLASS B BATTERED 1 H : 6 V AND DRIVEN TO:
  230 KIPS ULTIMATE CAPACITY (ABUTMENT 1)
  189 KIPS ULTIMATE CAPACITY (ABUTMENT 2),
  ESTIMATED LENGTH EQUALS 51 FEET (ABUTMENT 1)
  ESTIMATED LENGTH EQUALS 53 FEET (ABUTMENT 2)

- ITEM 900.640 SPECIAL PROVISION (STEEL PILING, CONCRETE-FILLED 12 3/4" O.D. X 3/8" PIPE)
  12 3/4" O.D. x 3/8" STEEL PIPE PILING FILLED WITH HIGH PERFORMANCE CONCRETE, CLASS B AND DRIVEN TO:
  230 KIPS ULTIMATE CAPACITY (ABUTMENT 1)
  189 KIPS ULTIMATE CAPACITY (ABUTMENT 2),
  ESTIMATED LENGTH EQUALS 51 FEET (ABUTMENT 1)
  ESTIMATED LENGTH EQUALS 53 FEET (ABUTMENT 2)

NF = NEAR FACE
FF = FAR FACE
EF = EACH FACE
▲ = CUT TO FIT IN FIELD
3" CLR. UNLESS OTHERWISE SPECIFIED ON THE PLANS.



PLAN SECTION

PIPE PILE SPLICE DETAIL

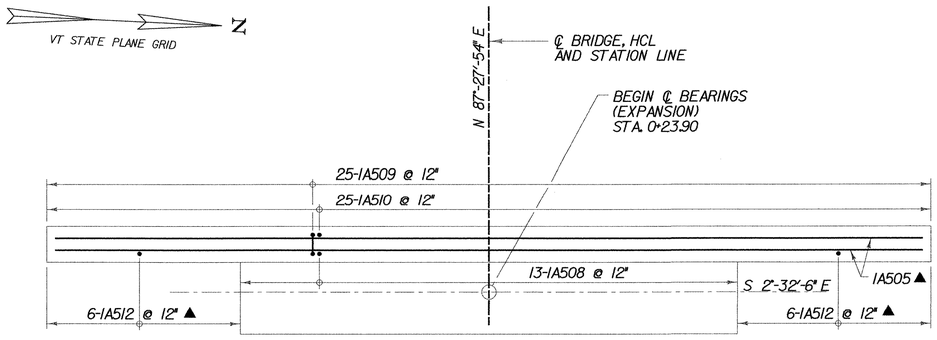
SCALE 1 1/2" = 1'-0

ABUTMENT PILE LAYOUT &
FOOTING REINFORCEMENT PLAN

PROJECT NAME:	WALLINGFORD
PROJECT NUMBER:	STP ST WALK(14)

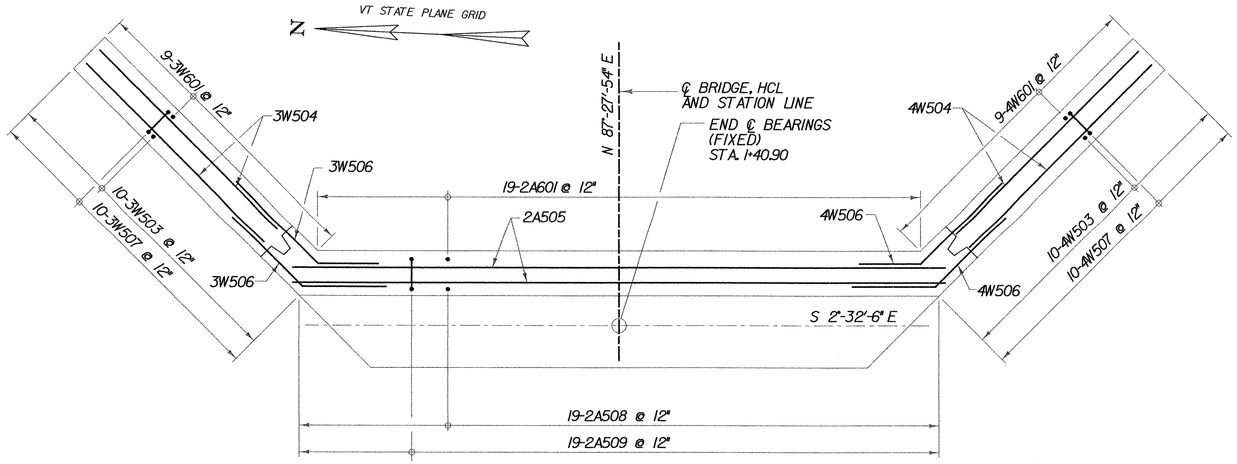
CHA

FILE NAME: $FILES$	PLOT DATE: 1/9/2009
PROJECT MANAGER: SUSAN SCRIBNER	DRAWN BY: W. WEATHERBY
DESIGNED BY: L. HARDEN	CHECKED BY: P. HALSTEAD
BRIDGE DESIGN SUPERVISOR: P. HALSTEAD	SHEET 22 OF 26



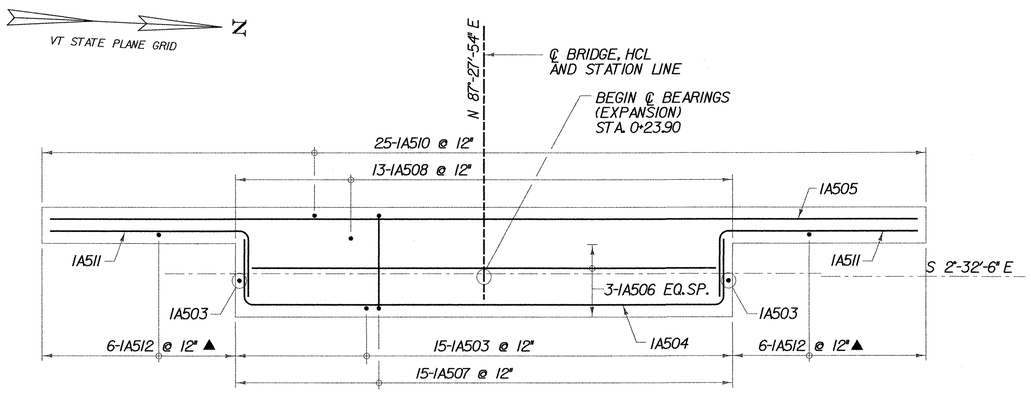
C 20 ABUTMENT 1 BACKWALL SECTION

SCALE 1/2" = 1'-0



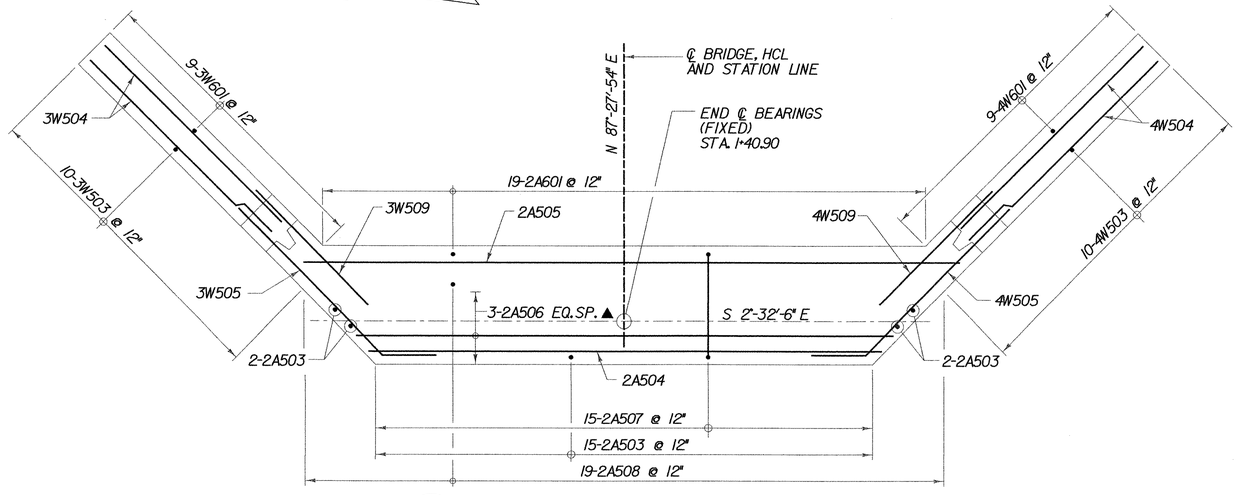
C 21 ABUTMENT 2 BACKWALL SECTION

SCALE 1/2" = 1'-0



D 20 ABUTMENT 1 STEM SECTION

SCALE 1/2" = 1'-0



D 21 ABUTMENT 2 STEM SECTION

SCALE 1/2" = 1'-0

KEY:

NF = NEAR FACE
FF = FAR FACE
EF = EACH FACE
▲ = CUT TO FIT IN FIELD
3" CLR. UNLESS OTHERWISE SPECIFIED ON THE PLANS.

ABUTMENT 1 & 2 REINFORCEMENT SECTIONS

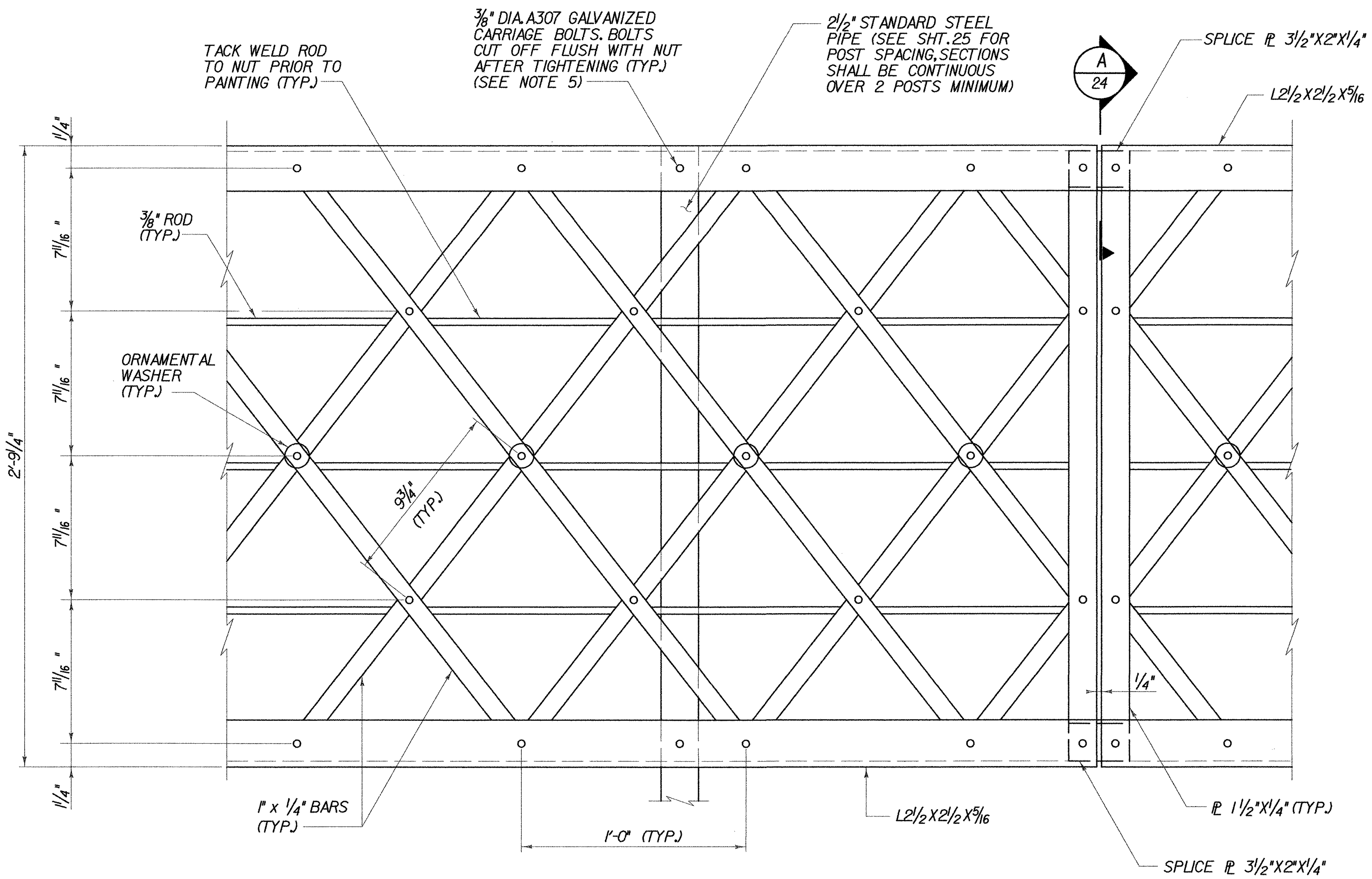
PROJECT NAME: WALLINGFORD
PROJECT NUMBER: STP ST WALK(14)

CHA

FILE NAME: $FILES$
PROJECT MANAGER: SUSAN SCRIBNER
DESIGNED BY: L. HARDEN
BRIDGE DESIGN SUPERVISOR: P. HALSTEAD

PLOT DATE: 1/9/2009
DRAWN BY: W. WEATHERBY
CHECKED BY: P. HALSTEAD
SHEET 23 OF 26

FILE NAME =u\8669\mast\prefinal_submission\vs802f136-reinfabt.dgn
DATE/TIME = 1/9/2009
USER = 2552



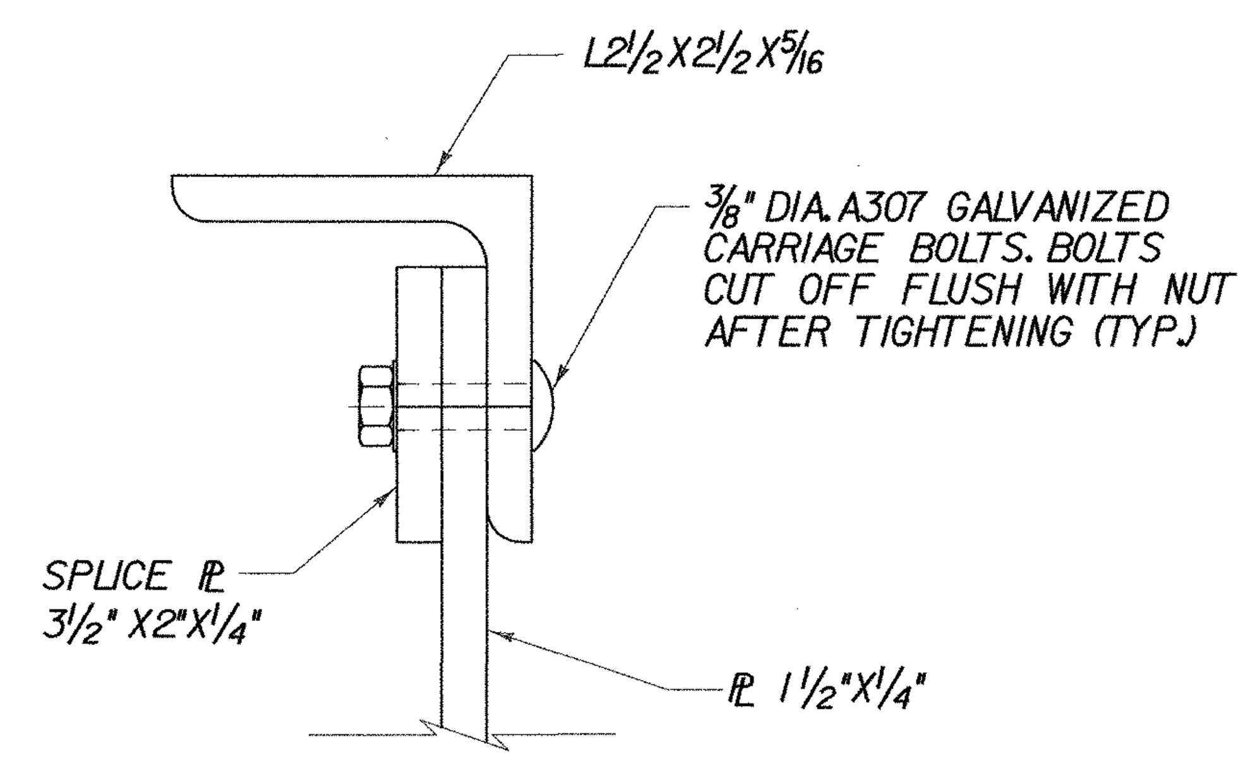
BRIDGE RAILING ELEVATION

SCALE 3" = 1'-0

1 9 6 3 0 1

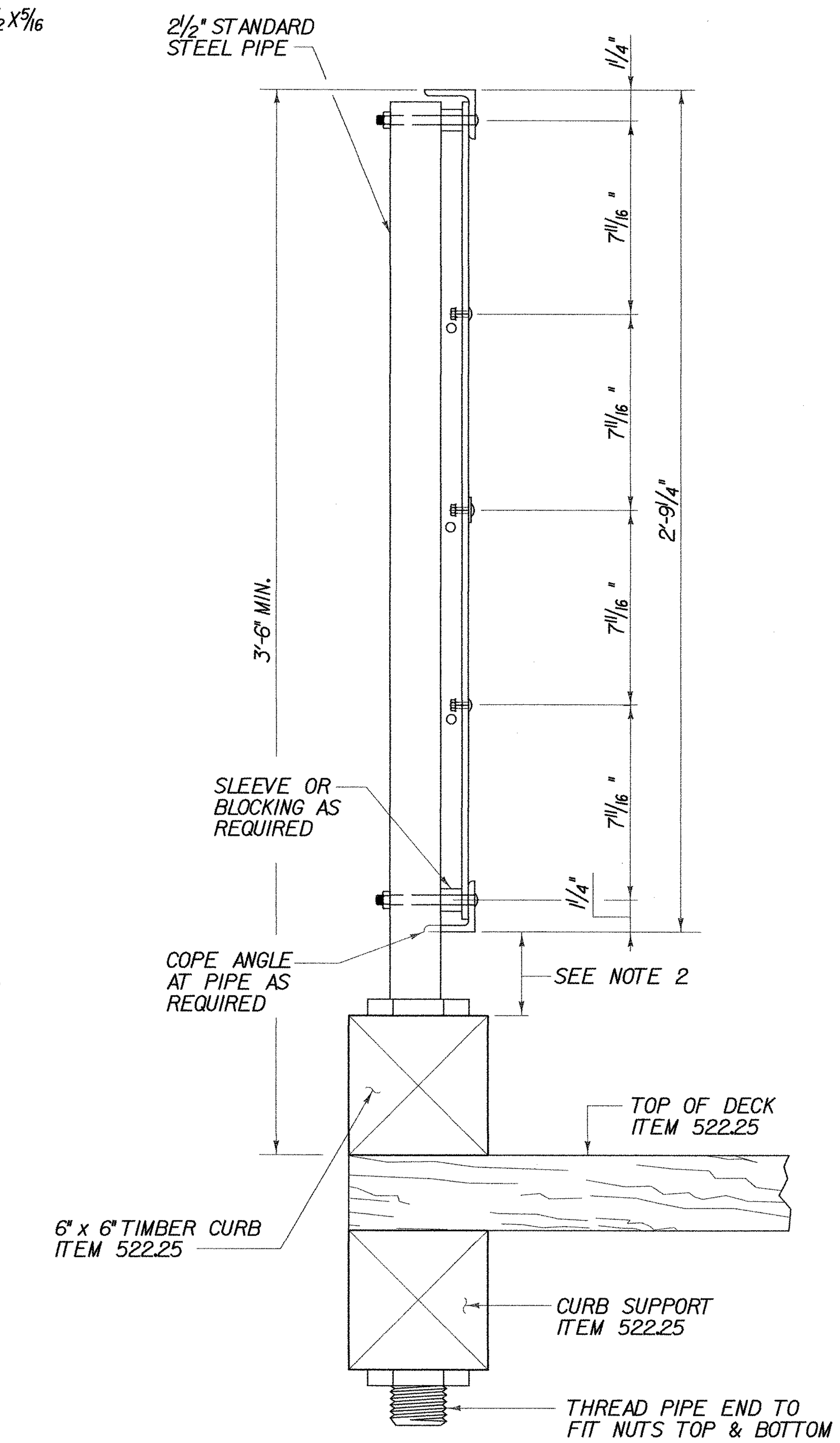
NOTES:

1. ALL MATERIAL TO BE AASHTO M270 GRADE 36. ALL LABOR AND MATERIALS REQUIRED FOR FABRICATION AND ERECTION OF BRIDGE RAILING SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 900.640 SPECIAL PROVISION (BRIDGE RAILING STEEL/PEDESTRIAN).
2. THE VERTICAL OPENING BELOW THE BOTTOM ANGLE SHALL NOT EXCEED 6".
3. ORNAMENTAL WASHERS SHALL BE CAST IRON AND COST INCLUDED UNDER ITEM 900.640 SPECIAL PROVISION (BRIDGE RAILING STEEL/PEDESTRIAN).
4. ONE WASHER STYLE WILL BE CHOSEN BY THE TOWN AND USED THROUGHOUT THE RAILING.
5. AFTER BOLTS ARE CUT OFF, THE CUT ENDS SHALL BE TREATED WITH A MANUFACTURER'S RECOMMENDED 'COLD GALVANIZING', INCLUDED FOR PAYMENT UNDER ITEM 900.640 SPECIAL PROVISION (BRIDGE RAILING STEEL/PEDESTRIAN).



A/24 RAILING CONNECTION PLATE

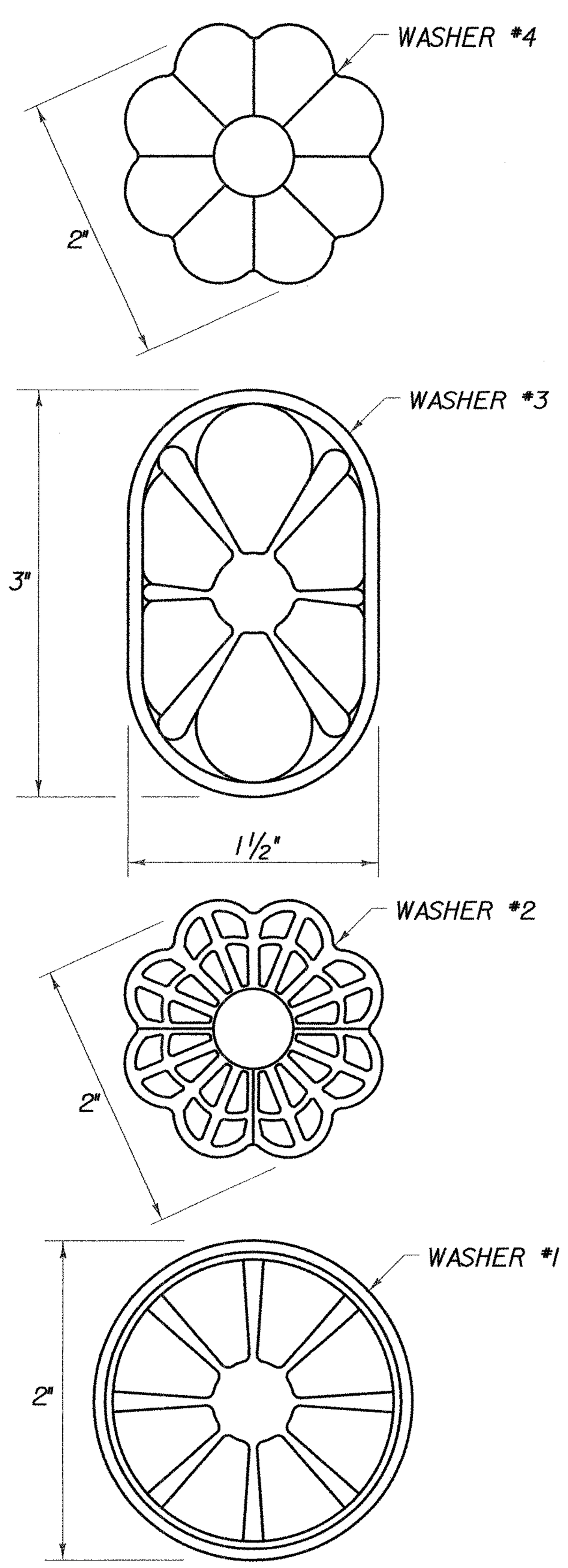
(NOT TO SCALE)



TYPICAL BRIDGE RAILING SECTION

SCALE 3" = 1'-0

1 9 6 3 0 1



ORNAMENTAL WASHERS FOR BRIDGE RAIL

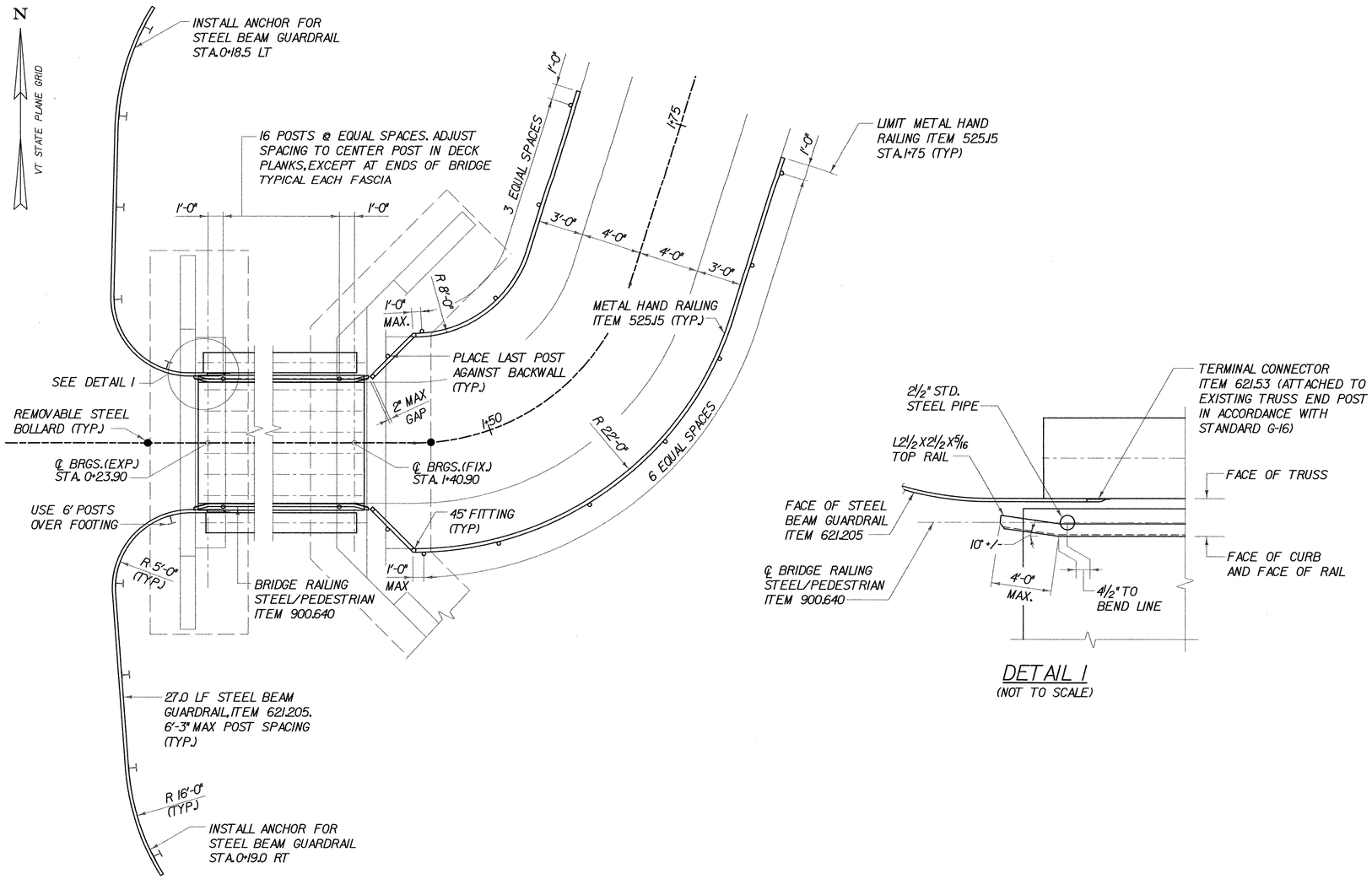
(NOT TO SCALE)

BRIDGE RAILING DETAILS

PROJECT NAME: WALLINGFORD	
PROJECT NUMBER: STP ST WALK(14)	
FILE NAME: $FILES$	PLOT DATE: 1/9/2009
PROJECT MANAGER: SUSAN SCRIBNER	DRAWN BY: W. WEATHERBY
DESIGNED BY: L. HARDEN	CHECKED BY: P. HALSTEAD
BRIDGE DESIGN SUPERVISOR: P. HALSTEAD	SHEET 24 OF 26

CHA

FILE NAME =u:\8669\mstn\prefinal.submission\z02136r1sht.dgn
DATE/TIME =1/9/2009
USER =2552



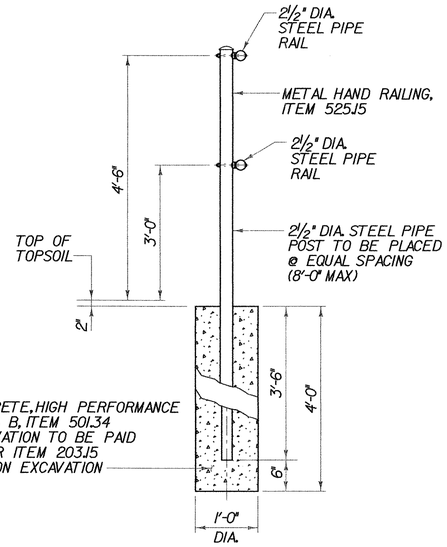
RAIL LAYOUT PLAN

SCALE 1/4" = 1'-0

1 0 2 4 6

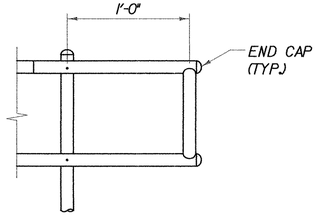
DETAIL I

(NOT TO SCALE)



METAL HAND RAILING SECTION

(NOT TO SCALE)



METAL HAND RAILING END ELEVATION

(NOT TO SCALE)

RAIL LAYOUT PLAN AND DETAILS

PROJECT NAME:	WALLINGFORD
PROJECT NUMBER:	STP ST WALK(14)

CHA

FILE NAME: $FILES$	PLOT DATE: 1/9/2009
PROJECT MANAGER: SUSAN SCRIBNER	DRAWN BY: W. WEATHERBY
DESIGNED BY: L. HARDEN	CHECKED BY: P. HALSTEAD
BRIDGE DESIGN SUPERVISOR: P. HALSTEAD	SHEET 25 OF 26

FILE NAME =u:\8669\mstr\prefinal_submission\s02fi36-rail-sht.dgn
DATE/TIME = 1/9/2009
USER = 2552

ITEM	NO. PIECES	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	K	R	O
1	ABUTMENT 1																
2																	
3 *	53	5	6'-0"	1A501	STR												
4	14	5	24'-11"	1A502	STR												
5	17	5	3'-2"	1A503	STR												
6	2	5	16'-11"	1A504	17		1'-9"	13'-5"	1'-9"								
7 ▲	11	5	24'-3"	1A505	STR												
8 *	4	5	13'-5"	1A506	STR												
9	15	5	4'-6"	1A507	17		1'-0"	2'-6"	1'-0"								
10	13	5	4'-3"	1A508	STR												
11	25	5	2'-6"	1A509	17		1'-0"	6"	1'-0"								
12 ▲	25	5	7'-6"	1A510	2	10"	6'-8"					0"					
13	6	5	7'-5"	1A511	17		2'-0"	5'-5"	0"								
14 ▲	12	5	6'-9"	1A512	STR												
15																	
16	ABUTMENT 2																
17																	
18 *	33	5	7'-6"	2A501	STR												
19	18	5	14'-10"	2A502	STR												
20	19	5	5'-3"	2A503	STR												
21	4	5	13'-6"	2A504	STR												
22	13	5	17'-5"	2A505	STR												
23 ▲	3	5	17'-5"	2A506	STR												
24	15	5	4'-9"	2A507	17		1'-0"	2'-9"	1'-0"								
25	19	5	4'-3"	2A508	STR												
26	19	5	2'-9"	2A509	17		1'-0"	9"	1'-0"								
27 *	20	6	9'-9"	2A601	2	1'-0"	8'-9"					0"					
28																	
29	WINGWALL 3																
30																	
31	26	5	5'-6"	3W501	STR												
32	14	5	12'-4"	3W502	STR												
33 ▲	10	5	8'-9"	3W503	STR												
34 ▲	18	5	6'-11"	3W504	STR												
35 *	5	5	8'-4"	3W505	19		0"	6'-4"	2'-0"				1'-5"		1'-5"		7'-9"
36	8	5	5'-0"	3W506	19		0"	3'-0"	2'-0"				1'-5"		1'-5"		4'-5"
37	10	5	2'-9"	3W507	17		1'-0"	9"	1'-0"								
38	2	5	6'-8"	3W508	STR												
39	5	5	5'-0"	3W509	STR												
40 ▲ *	10	6	9'-9"	3W601	2	1'-0"	8'-9"					0"					
41																	
42	WINGWALL 4																
43																	
44	26	5	5'-6"	4W501	STR												
45 *	15	5	12'-4"	4W502	STR												
46 ▲	10	5	8'-9"	4W503	STR												
47 ▲	18	5	6'-11"	4W504	STR												
48 *	5	5	8'-4"	4W505	19		0"	6'-4"	2'-0"				1'-5"		1'-5"		7'-9"
49	8	5	5'-0"	4W506	19		0"	3'-0"	2'-0"				1'-5"		1'-5"		4'-5"
50	10	5	2'-9"	4W507	17		1'-0"	9"	1'-0"								
51	2	5	6'-8"	4W508	STR												
52	5	5	5'-0"	4W509	STR												
53 ▲	9	6	9'-9"	4W601	2	1'-0"	8'-9"					0"					
54																	
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97																	
98																	

ITEM	NO. PIECES	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	K	R	O
99																	
100																	
101																	
102																	
103																	
104																	
105																	
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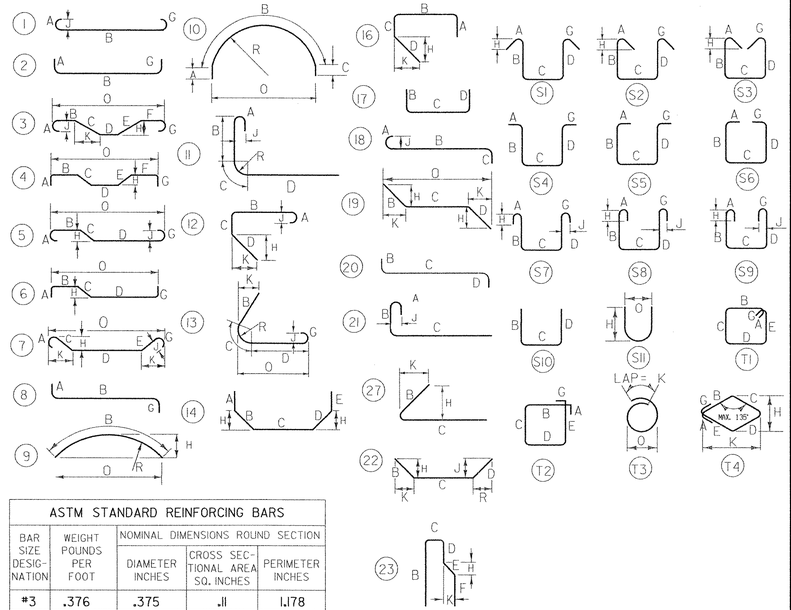
NOTES:

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 615-91). 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 PREFIX DENOTES EPOXY COATED REINFORCING STEEL.



ASTM STANDARD REINFORCING BARS

BAR SIZE DESIGNATION	WEIGHT POUNDS PER FOOT	NOMINAL DIMENSIONS ROUND SECTION		
		DIAMETER INCHES	CROSS SECTIONAL AREA SQ. INCHES	PERIMETER INCHES
#3	.376	.375	.11	1.178
#4	.668	.500	.20	1.571
#5	1.043	.625	.31	1.963
#6	1.502	.750	.44	2.356
#7	2.044	.875	.60	2.749
#8	2.670	1.000	.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

REINFORCING STEEL SCHEDULE

PROJECT NAME: WALLINGFORD
PROJECT NUMBER: STP ST WALK(14)

CHA

FILE NAME: $FILES$
PROJECT MANAGER: SUSAN SCRIBNER
DESIGNED BY: L. HARDEN
BRIDGE DESIGN SUPERVISOR: P. HALSTEAD

PLOT DATE: 1/9/2009
DRAWN BY: W. WEATHERBY
CHECKED BY: P. HALSTEAD
SHEET 26 OF 26

FILE NAME =u:\8669\nst\prefinal_submission\za022f136rebar.dgn
DATE/TIME =1/9/2009
USER =2652

VERMONT

State of Vermont *Agency of Transportation*
PDD/Structures Design Section
One National Life Drive [phone] 802-828-2621
Montpelier, VT 05633-5001 [fax] 802-828-3566
www.aot.state.vt.us [ttd] 800-253-0191

May 29, 2009

Renaud Bros , Inc
283 Fort Bridgeman Road #2
Vernon, VT 05354

Project Name: Wallingford STP WALK(14)

The following Structural Steel shop drawing details for the above project (General Contractor – Renaud Bros , Inc) have been reviewed and are being returned herewith

Truss 1 Shops: These drawings are "Approved as Noted". Note the comments in red.

Truss 2 Drawings: These drawings are "Approved as Noted". Note the comments in red.

Pedestrian Railing Drawings: These drawings are to be "Resubmitted". The drawings shall be reconsidered and resubmitted for approval. Also note that there is a required welding procedure.

You must provide notice to our fabrication inspector, Jeff Clark, as to the date fabrication represented by these drawings will begin That notice must be received and acknowledged at least seven days prior to that date, as per Specification 506 03 Jeff may be contacted by phone at (802)828-0044 or email at jeff.clark@state.vt.us Any material fabricated prior to the notification date is subject to rejection without further cause

Sincerely,

Wayne Symonds
Project Manager

Attachments

cc [x] Resident Engineer – Eric Foster
[x] Shop Inspector – Jeff Clark
[x] Contractor – Renaud
[] Sub-Contractor
[x] Design Consultant – CHA
[x] Construction Divison – letter only
[x] Materials & Research Section (C&IA Unit) – letter only
[x] Files

VERMONT

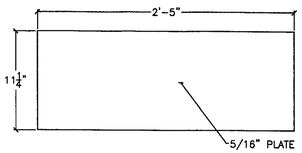
GENERAL NOTES:

* All MEASUREMENTS TO BE VERIFIED BEFORE FABRICATION OF INDIVIDUAL MEMBERS BEGINS
* ALL HOLES DRILLED IN NEW FABRICATED STEEL, TO MATCH EXISTING STEEL MEMBERS
* ALL STRUCTURAL STEEL SHALL CONFORM TO AASHTO M–270 GRADE 50
* UNLESS OTHERWISE NOTED, ALL HOLES SHALL BE DRILLED TO $13/16$" DIA
* DIMENSIONS LESS THAN 25'–0" +/– $1/16$"
* DIMENSIONS GREATER THAN 25'–0" +/– $1/8$"
* SUPPORTING DOCUMENTATION TO DRAWINGS SEE BILL OF MATERIALS TRUSS TYPE 1 & 2
* PAINT SYSTEM TO BE USED.
* ALL PARTS TO BE PRIMED PRIOR TO INSTALLATION.

NOTE: FOR FUTURE SUBMITTALS PLEASE PROVIDE BILL OF MATERIALS, INCLUDING FASTENERS, ON THE SHEETS WITH DETAILS.

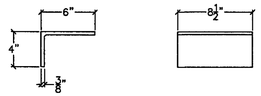
BEARING PEDESTAL:

NOTE: HORIZONTAL LATERAL BRACING / FLOOR BEAM CONNECTION PLATES, SCHEDULED FOR REPLACEMENT AT L0, L2, L4, L6 & L8 ARE NOT INCLUDED IN THIS SET.



1BP01

3" = 1'–0"



1BP03–ANGLE

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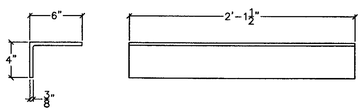

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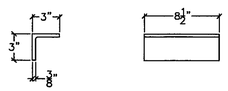


1BP04–ANGLE

3" = 1'–0"

RECEIVED
CK'D BY CWA OK'D BY
MAY 11 2009
REVISIONS APPROVED As Noted
BY WY DATE 5/14/09

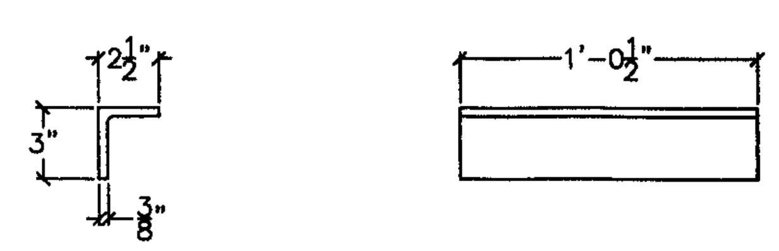
Ranaud Bros Construction
Fairfield, Vermont 05455
(802) 257 - 7383

TITLE Wallingford Bridge Rehab
LOCATION Wallingford, VT
DRAWING TITLE Drawings Truss Type 1 General Notes & Drawings
DRAWN BY JED JOB CONTACT Enck Foster State of VT
CHECKED BY JED/AD DATE 4 - 30 - 09

DRAWING NO. T–1

SHEET NO. 1 OF 17

BEARING PEDESTAL:



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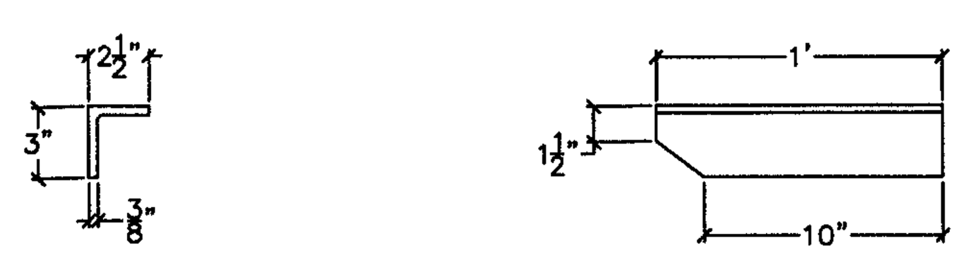

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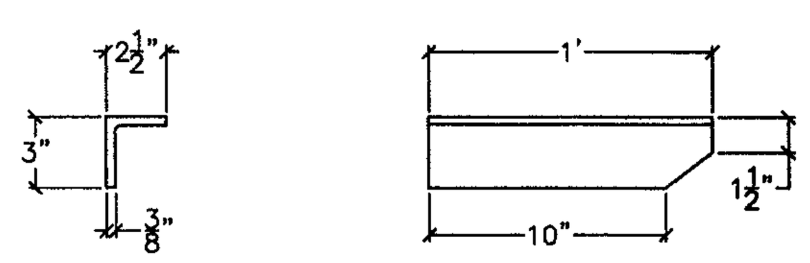

1BP06R–ANGLE

3" = 1'–0"

DIMENSIONS TBD

1BP07–PLATE

3" = 1'–0"

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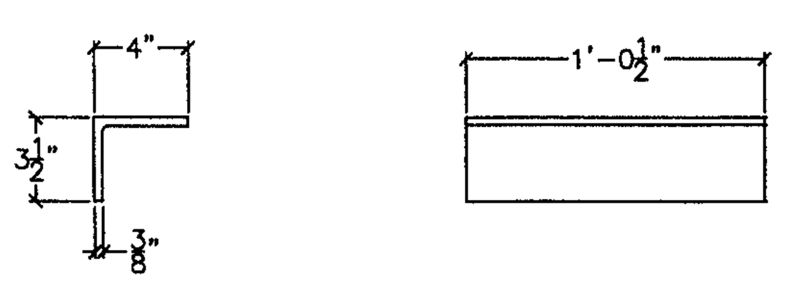
MAY 1 1 20
APPROVED ✓
BY
DATE 5/29/09

	Renaud Bros. Construction Fort Bridgman Road Vernon, VT 05354 (802) 257-7383
TITLE	Wallingford Bridge Rehab
LOCATION	Wallingford, VT
DRAWING TITLE	Drawings Truss Type 1 Drawings
DRAWN BY JED	JOB CONTACT Erick Foster State of VT
CHECKED BY JED/AD	DATE 4 30 09
DRAWING NO.	T–1
SHEET NO.	2 OF 17

BEARING PEDESTAL:



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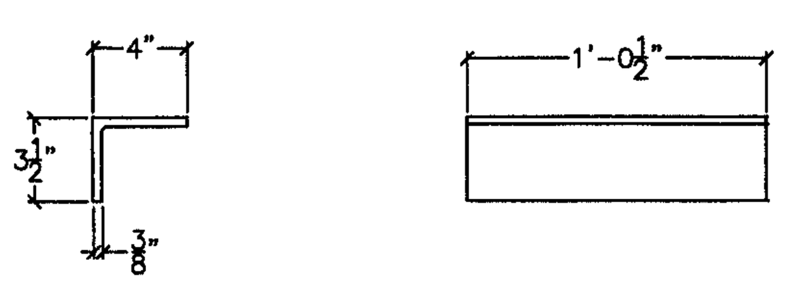


1BA02–ANGLE

3" = 1'-0"

Renaud Bros Construction
Fort Bridgman Road Vernon, VT 05354
(802) 257-7383

TITLE Wallingford Bridge Rehab

LOCATION Wallingford, VT

DRAWING TITLE Drowings Truss Type 1: Drowings

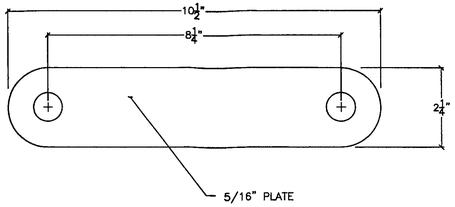
DRAWN BY JED | JOB CONTACT Erick Foster State of VT

CHECKED BY JED/AD | DATE 4 30 09

DRAWING NO. T-1

SHEET NO. 3 OF 17

LATTICE:



1LP01–PLATE

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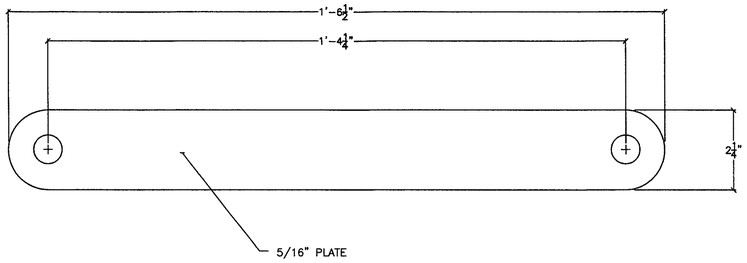

1LP02–PLATE

1'–0" = 1'–0"

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APPROVED ✓
BY WH SJS DATE 5/12/09

Reinaud Bros. Construction
Randolph Center, VT 05061
(802) 257-7383

TITLE Wallingford Bridge Rehab
LOCATION Wallingford, VT
DRAWING TITLE Drawings Truss Type 1 Drawings
DRAWN BY JED JOB CONTACT Enok Foster State of VT
CHECKED BY JED/AD DATE 4 30 09

DRAWING NO. T–1

SHEET NO. 4 OF 17

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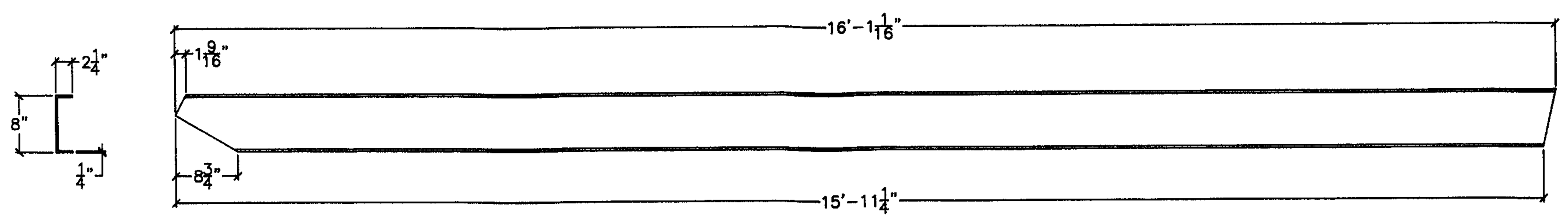
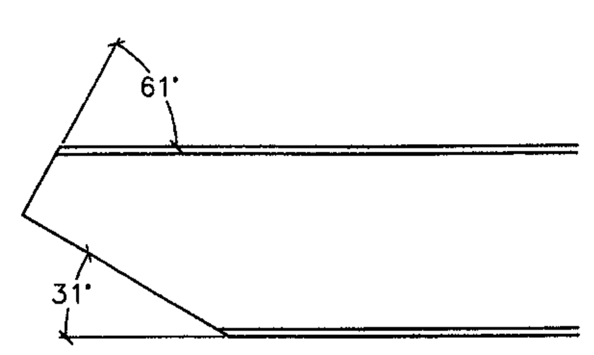


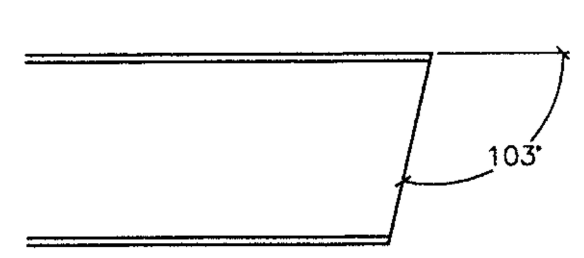
1LOU1-CHANNEL

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



1LOU1-END DETAIL

3" = 1'-0"



1LOU1-END DETAIL

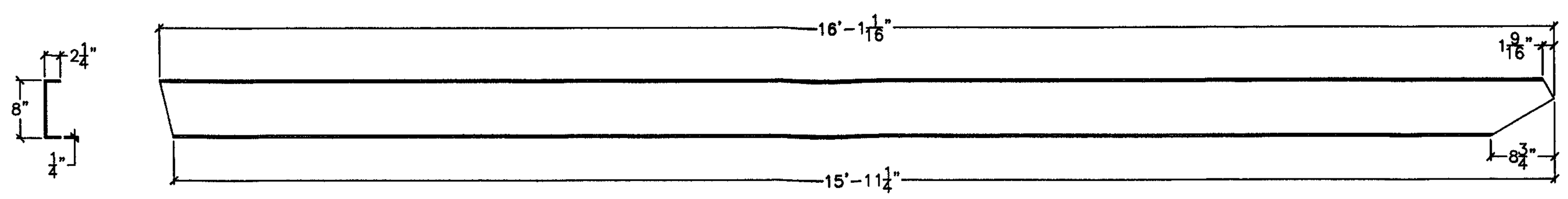
3" = 1'-0"

RECEIVED
CK'D BY CHA OK'D BY
MAY 1 1 20
APPROVED ✓
BY DATE 5/19/09

Renaud Bros Construction
Fort Bridgman Road Vernon, VT 05354
(802) 257-7383

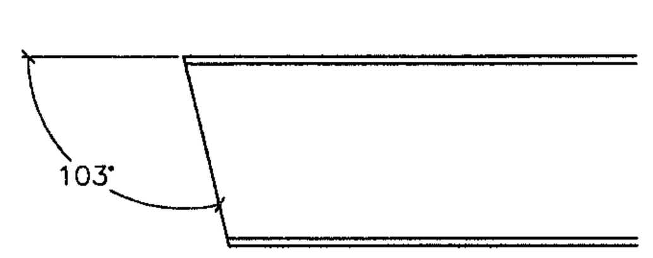
TITLE	Wallingford Bridge Rehab
LOCATION	Wallingford, VT
DRAWING TITLE	Drawings Truss Type 1. Drawings
DRAWN BY JED	JOB CONTACT Erick Foster State of VT
CHECKED BY JED/AD	DATE 4 30 09
DRAWING NO.	T-1
SHEET NO.	5 OF 17

UPPER CHORD:



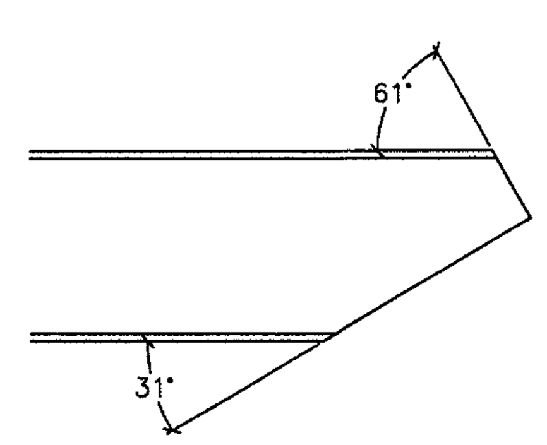
1L8U7–CHANNEL

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



1L8U7–END DETAIL

3" = 1'-0"



1L8U7–END DETAIL

3" = 1'-0"

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APPROVED ✓
BY WY SJ DATE 5/29/09

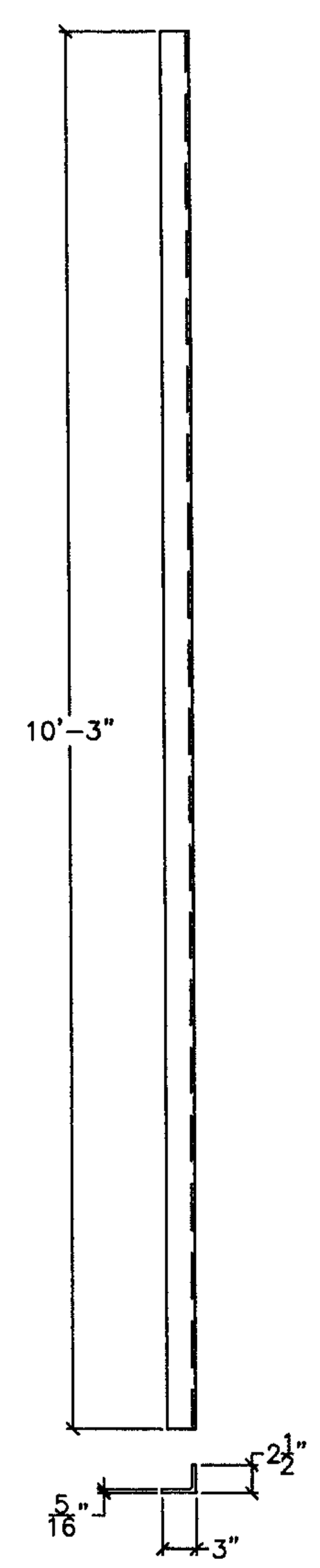
Renaud Bros Construction
Fort Bridgman Road Vernon, VT 05354
(802) 257-7383

TITLE Wallingford Bridge Rehab
LOCATION Wallingford, VT
DRAWING TITLE Drawings Truss Type 1 Drawings
DRAWN BY JED JOB CONTACT Erick Foster State of VT
CHECKED BY JED/AD DATE 4 30 09

DRAWING NO. T-1

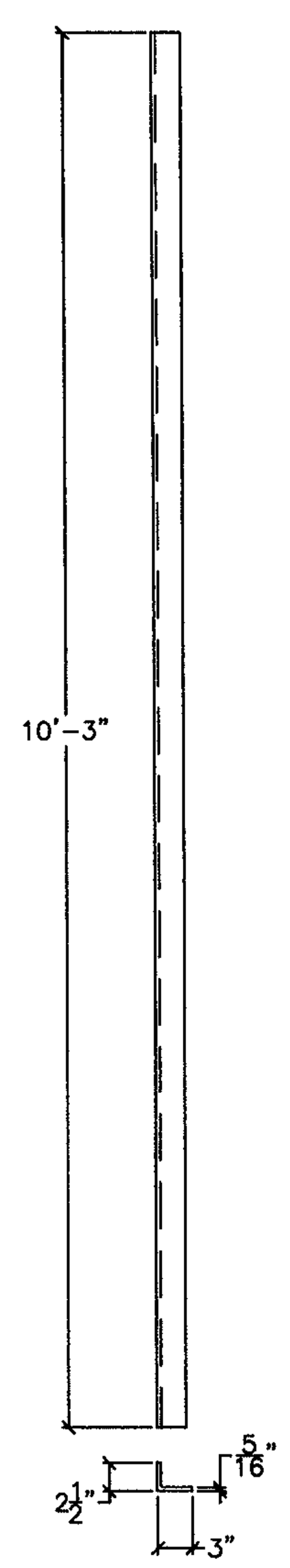
SHEET NO. 6 OF 17

UPRIGHT MEMBERS:



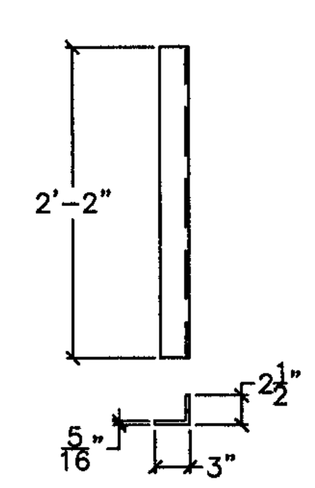
1U2L2L-ANGLE

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



1U2L2R-ANGLE

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



1U3L3L-ANGLE

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

Renaud Bros Construction
Fort Bridgman Road Vernon VT 05354
(802) 257-7383

TITLE Wallingford Bridge Rehab
LOCATION Wallingford, VT
DRAWING TITLE Drawings Truss Type 1 Drawings
DRAWN BY JED | JOB CONTACT Erick Foster State of VT
CHECKED BY JED/AD | DATE 4 30 09

DRAWING NO. T-1

SHEET NO. 7 OF 17

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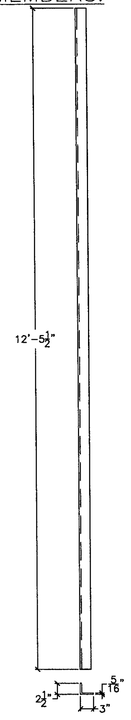

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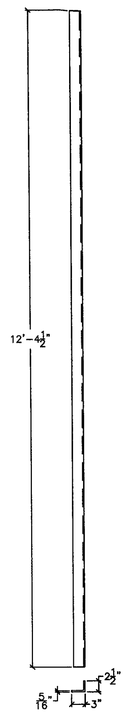
1–1/2" = 1'–0"



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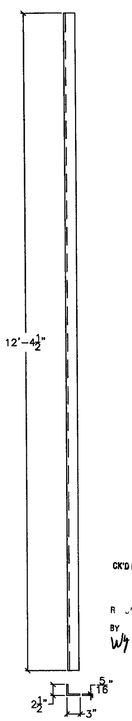
1–1/2" = 1'–0"



1U4L4R–ANGLE

1–1/2" = 1'–0"

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APPROVED
BY
DATE 5/11/09

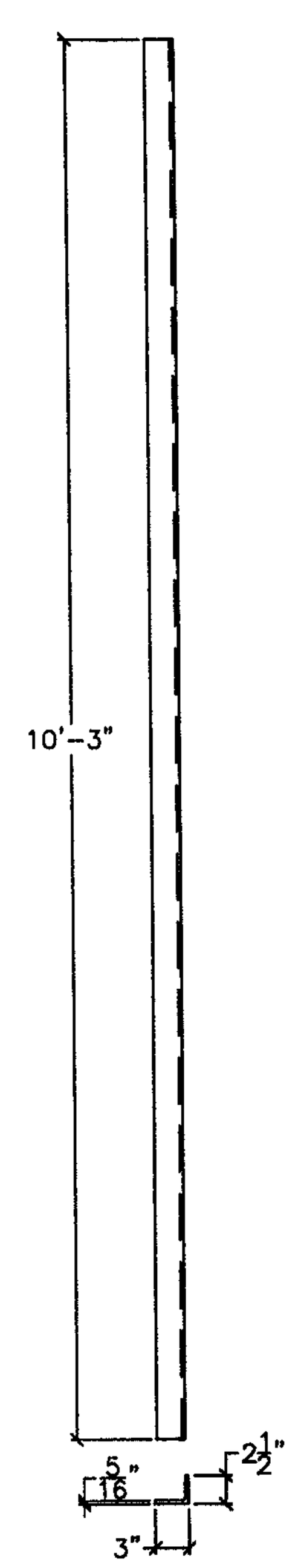
Rainaud Bros. Construction
Fair Haven, Vermont 05743
(802) 287-7383

TITLE Wallingford Bridge Rehab
LOCATION Wallingford, VT
DRAWING TITLE Drawings Truss Type 1 Drawings
DRAWN BY JED JOB CONTACT Erick Foster State of VT
CHECKED BY JED/AD DATE 4 30 09

DRAWING NO. T-1

SHEET NO. 8 OF 17

UPRIGHT MEMBERS:



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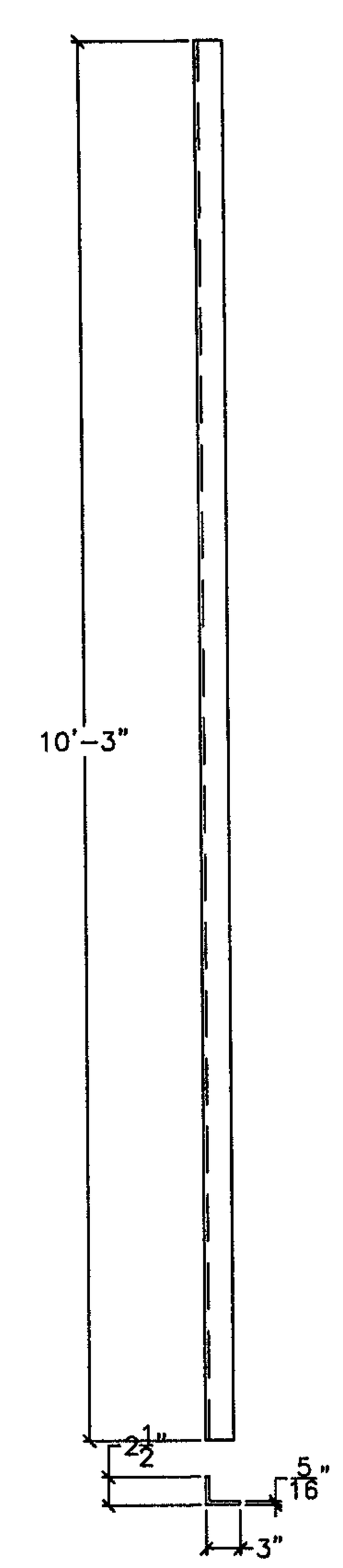


1U6L6R–ANGLE

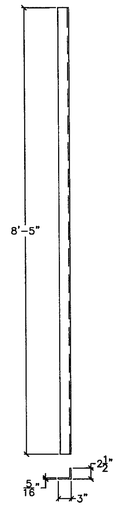
1-1/2" = 1'-0"

RECEIVED
CK'D BY CHA OK'D BY
MAY 1 1 2[illegible]
R[illegible] APPROVED ✓
BY Wy S[illegible] DATE 5/19/09

Renaud Bros Construction
Fort Bridgman Road Vernon, VT 05354
(802) 257 - 7383

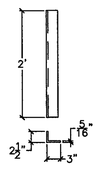
TITLE	Wallingford Bridge Rehab
LOCATION	Wallingford, VT
DRAWING TITLE	Drawings Truss Type 1 Drawings
DRAWN BY JED	JOB CONTACT Erick Foster State of VT
CHECKED BY JED/AD	DATE 4 30 09
DRAWING NO.	T–1
SHEET NO.	9 OF 17

UPRIGHT MEMBERS:



1U7L7L-ANGLE

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



1U7L7R-ANGLE

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

RECEIVED
CK'D BY CWA OK'D BY
MAY 1 1 20
APPROVED
BY
DATE 5/19/09

Renaud Bros. Construction
Fair Haven, VT 05743
(802) 287-2303

TITLE Wallingford Bridge Rehab
LOCATION Wallingford, VT
DRAWING TITLE Drawings Truss Type 1 Drawings
DRAWN BY JED JOB CONTACT Erick Foster State of VT
CHECKED BY JED/AD DATE 4 30 09

DRAWING NO. T-1

SHEET NO. 10 OF 17

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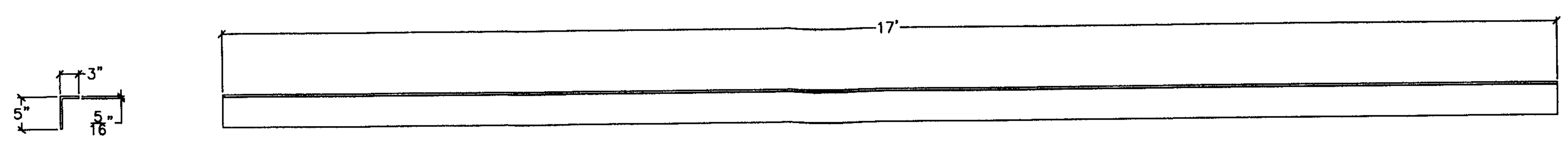

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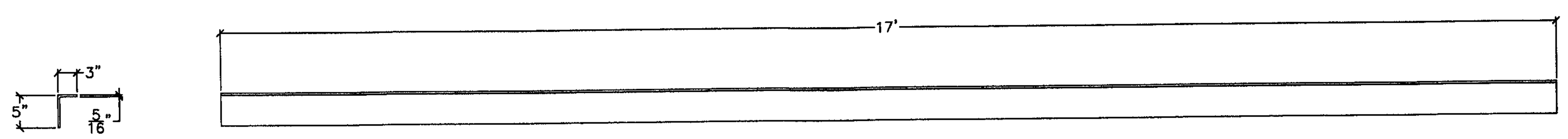

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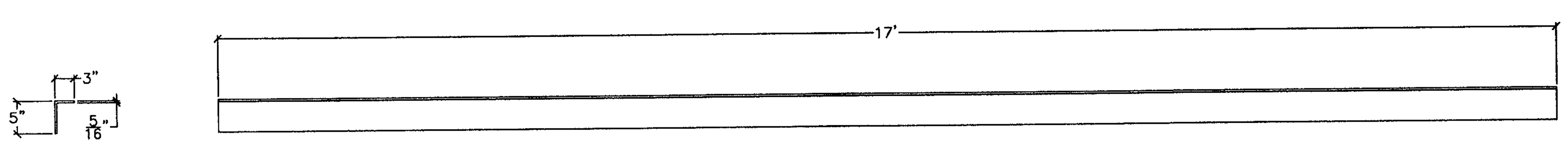
1–1/2" = 1'–0"



1DM03–ANGLE

1–1/2" = 1'–0"

RECEIVED
CK'D BY CNA OK'D BY
MAY 1 1 2
APPROVED ✓
BY Wy S DATE 5/29/09

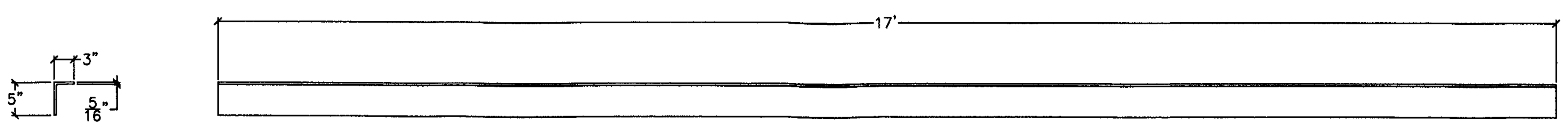
Renaud Bros Construction
Fort Bridgman Road Vernon, VT 05354
(802) 257 - 7383

TITLE Wallingford Bridge Rehab
LOCATION Wallingford, VT
DRAWING TITLE Drawings Truss Type 1 Drawings
DRAWN BY JED | JOB CONTACT Erick Foster State of VT
CHECKED BY JED/AD | DATE 4 30 09

DRAWING NO. T–1

SHEET NO. 11 OF 17

UPRIGHT MEMBERS:



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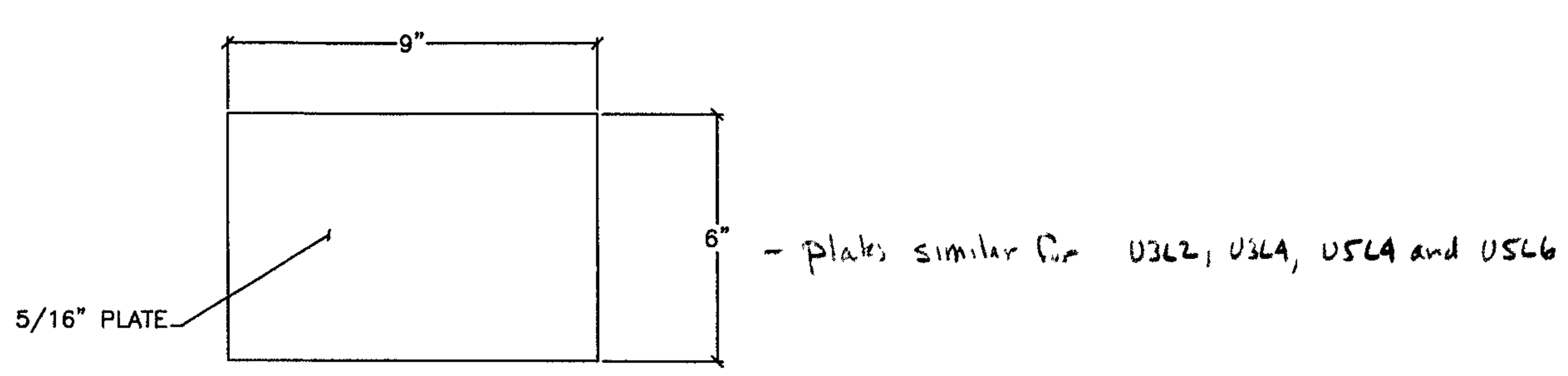


1DM05–PLATE

3" = 1'-0"

RECEIVED
CK'D BY CHA OK'D BY
MAY 1 1 2
APPROVED As Noted
BY
DATE 5/19/09

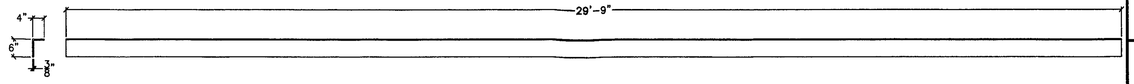
Renaud Bros. Construction
Fort Bridgman Road Vernon VT 05354
(802) 257-7383

TITLE Wallingford Bridge Rehab
LOCATION Wallingford, VT
DRAWING TITLE Drawings Truss Type 1. Drawings
DRAWN BY JED | JOB CONTACT Erick Foster State of VT
CHECKED BY JED/AD | DATE. 4.30 09

DRAWING NO. T–1

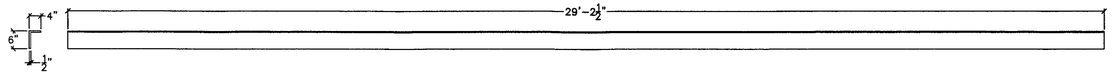
SHEET NO. 12 OF 17

BOTTOM CHORD:



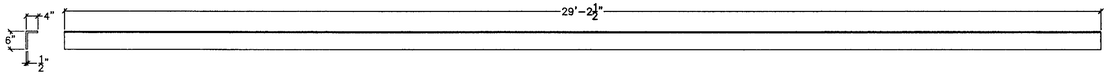
1L0L2A–ANGLE

1" = 1'–0"



1L2L4A–ANGLE

1" = 1'–0"



1L2L4B–ANGLE

1" = 1'–0"

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MAY 11 2
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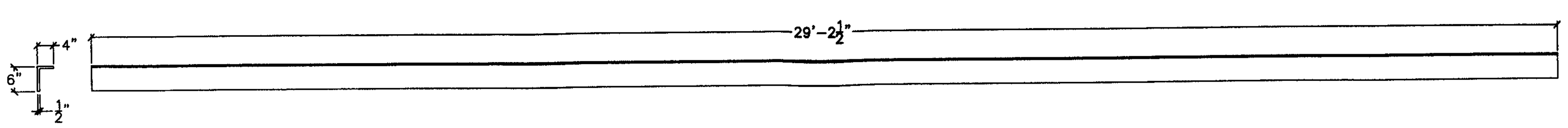
BY
DATE 5/12/09

Rainaud Bros. Construction
Fair Haven, VT 05743
(802) 287-9303

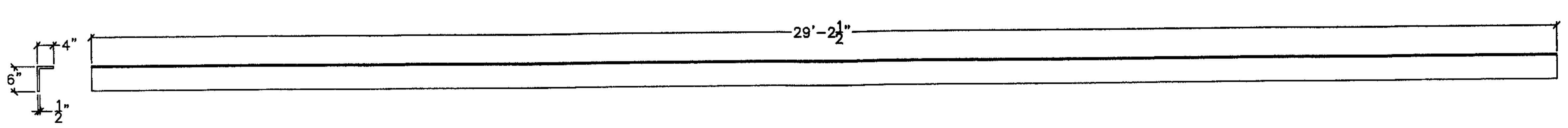
TITLE Wallingford Bridge Rehab
LOCATION Wallingford, VT
DRAWING TITLE Drawings Truss Type 1 Drawings
DRAWN BY JED JOB CONTACT Endr. Foster State of VT
CHECKED BY JED/AD DATE 4 30 09
DRAWING NO. T-1
SHEET NO. 13 OF 17

BOTTOM CHORD:



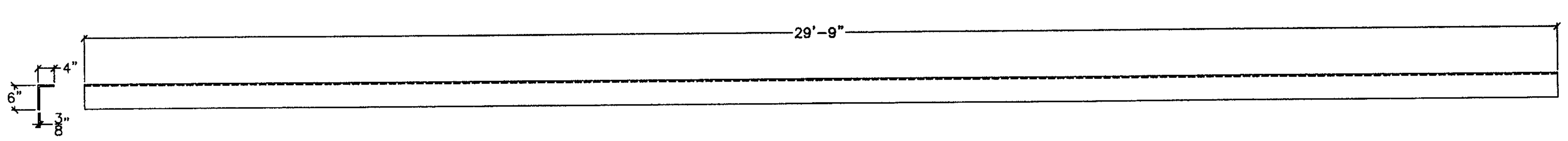
1L4L6A-ANGLE

1" = 1'-0"



1L4L6B-ANGLE

1" = 1'-0"



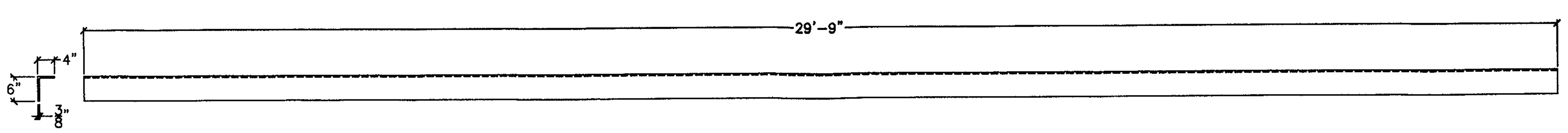
1L6L8A-ANGLE

1" = 1'-0"

Renaud Bros Construction
Fort Bridgman Road Vernon, VT 05354
(802) 257 - 7383

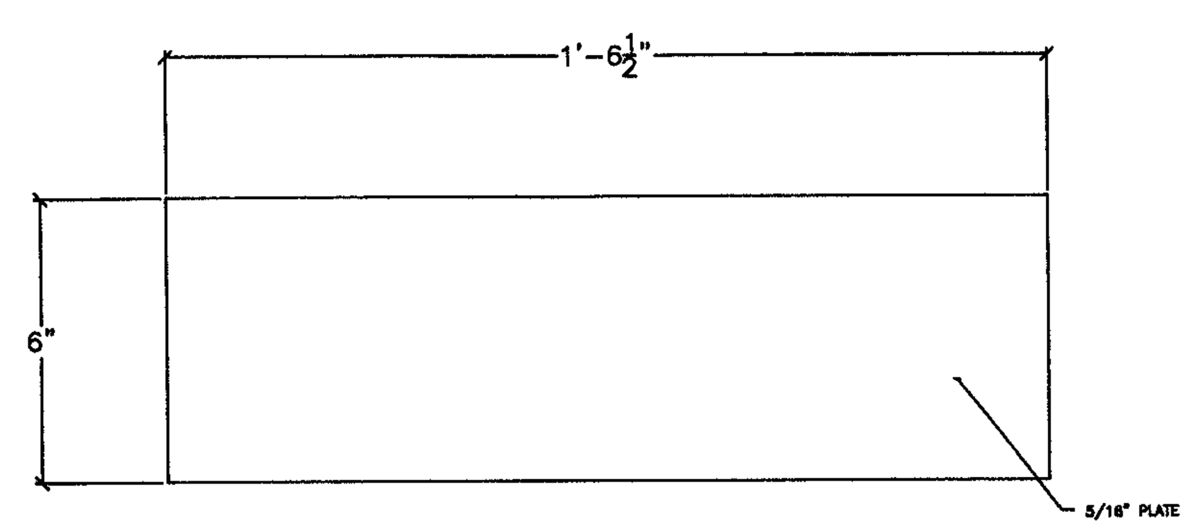
TITLE	Wallingford Bridge Rehab
LOCATION	Wallingford, VT
DRAWING TITLE	Drawings Truss Type 1· Drawings
DRAWN BY JED	JOB CONTACT Erick Foster State of VT
CHECKED BY JED/AD	DATE. 4 30 09
DRAWING NO.	T-1
SHEET NO.	14 OF 17

BOTTOM CHORD:



1L6L8B–ANGLE

1" = 1'–0"



1BC01–PLATE

3" = 1'–0"

RECEIVED
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MAY 1 1 2[illegible]
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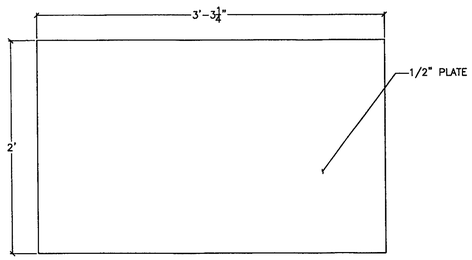
BY DATE 5/29/09

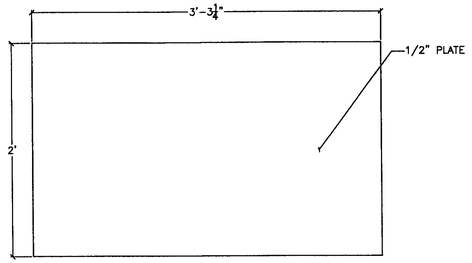
	Renaud Bros Construction Fort Bridgman Road Vernon, VT 05354 (802) 257 - 7383
TITLE	Wallingford Bridge Rehab
LOCATION	Wallingford, VT
DRAWING TITLE	Drawings Truss Type 1 Drawings
DRAWN BY JED	JOB CONTACT Erick Foster State of VT
CHECKED BY JED/AD	DATE 4 30 09
DRAWING NO.	T–1
SHEET NO.	15 OF 17

GUSSET PLATES:



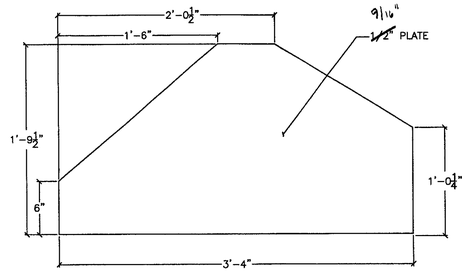
1GP01

3" = 1'-0"



1GP02

3" = 1'-0"



1GP03

3" = 1'-0"

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APPROVED As Noted
DATE 5/11/09
BY

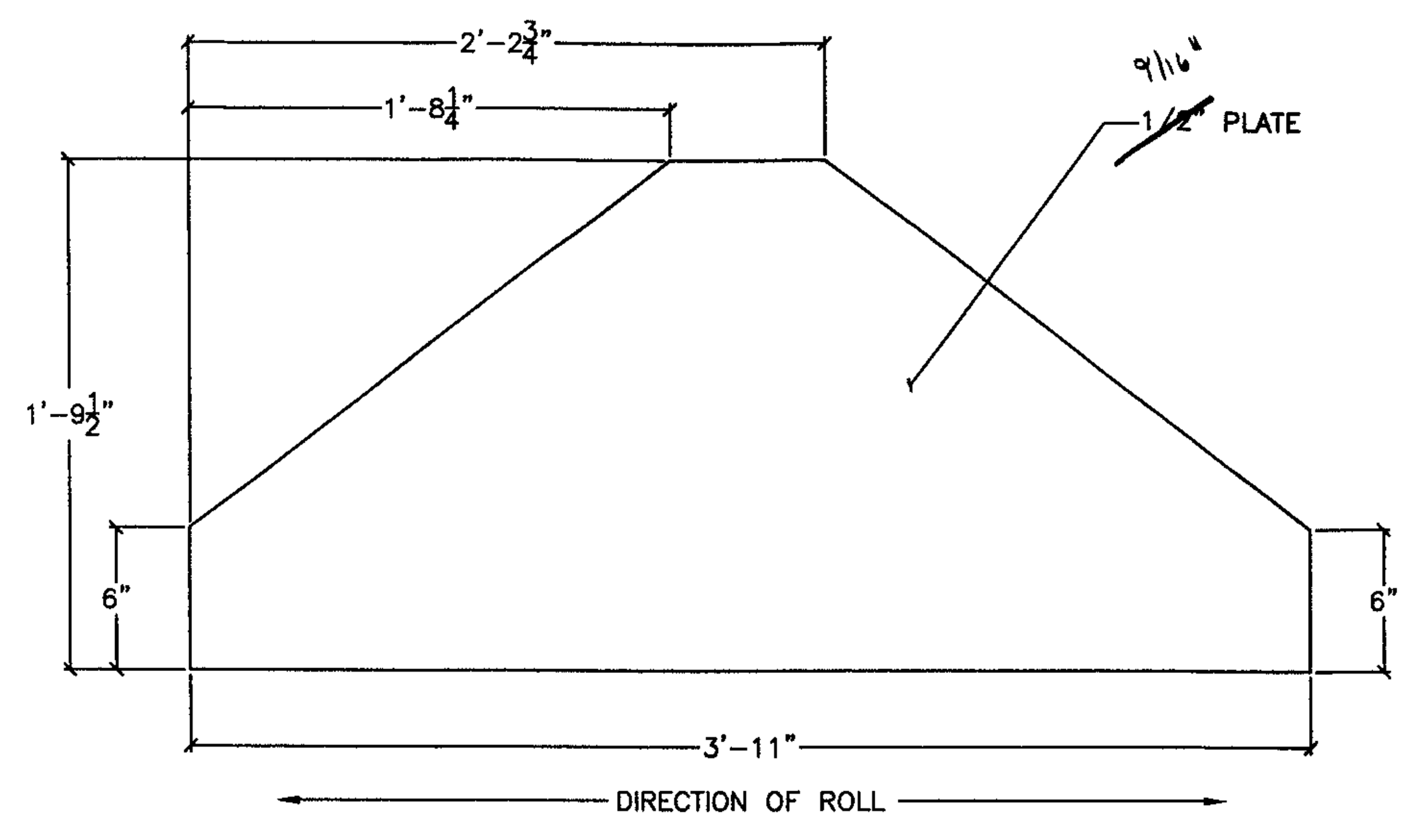
Reinaud Bros Construction
Randolph Center, VT 05061
(802) 257 - 7383

TITLE Wallingford Bridge Rehab
LOCATION Wallingford, VT
DRAWING TITLE Drawings Truss Type 1 Drawings
DRAWN BY JED JOB CONTACT Encl. Foster Slote of VT
CHECKED BY JED/AD DATE 4 30 09

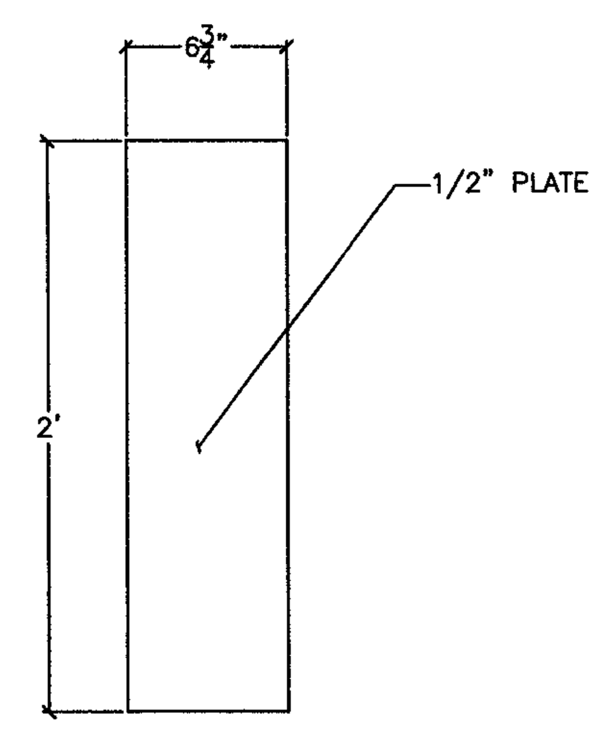
DRAWING NO. T-1

SHEET NO. 16 OF 17

GUSSET PLATES:



1GP04
3" = 1'-0"



1GP05
3" = 1'-0"

RECEIVED
CK'D BY CHA OK'D BY
MAY 1 1 '09
APPROVED As Noted
BY Wy Gail DATE 5/29/09

Renaud Bros Construction
Fort Bridgman Road Vernon, VT 05354
(802) 257 - 7383

TITLE	Wallingford Bridge Rehab
LOCATION	Wallingford, VT
DRAWING TITLE	Drawings Truss Type 1 Drawings
DRAWN BY JED	JOB CONTACT Erick Foster State of VT
CHECKED BY JED/AD	DATE 4 30 09
DRAWING NO.	T–1
SHEET NO.	17 OF 17

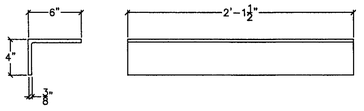
GENERAL NOTES:

* All MEASUREMENTS TO BE VERIFIED BEFORE FABRICATION OF INDIVIDUAL MEMBERS BEGINS
* ALL HOLES DRILLED IN NEW FABRICATED STEEL, TO MATCH EXISTING STEEL MEMBERS
* ALL STRUCTURAL STEEL SHALL CONFORM TO AASHTO M-270 GRADE 50
* UNLESS OTHERWISE NOTED, ALL HOLES SHALL BE DRILLED TO $13/16$" DIA
* DIMENSIONS LESS THAN 25'-0" +/- $1/16$"
* DIMENSIONS GREATER THAN 25'-0" +/- $1/8$"
* SUPPORTING DOCUMENTATION TO DRAWINGS SEE BILL OF MATERIALS TRUSS TYPE 1 & 2.

* PAINT SYSTEM TO BE USED.

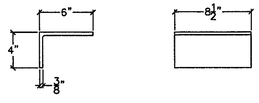
BEARING PEDESTAL:

NOTE: HORIZONTAL LATERAL BRACING / FLOOR BEAM CONNECTION PLATES, SCHEDULED FOR REPLACEMENT AT L0, L2, L4, L6 & L8 ARE NOT INCLUDED IN THIS SET.



2BP01-ANGLE

3" = 1'-0"



2BP03-ANGLE

3" = 1'-0"

NOTE: FOR FUTURE SUBMITTALS PLEASE PROVIDE BILL OF MATERIALS, INCLUDING FASTENERS, ON THE SHEETS WITH DETAILS.

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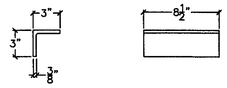
Renaud Bros Construction
Fel Bridgman Road Vienna, VT 05934
(802) 257 - 7383

TITLE Wallingford Bridge Rehab
LOCATION Wallingford, VT
DRAWING TITLE Drawings Truss Type 2: General Notes & Drawings
DRAWN BY JED JOB CONTACT Enek Foster State of VT
CHECKED BY JED/AD DATE 4 - 30 - 09

DRAWING NO. T-2

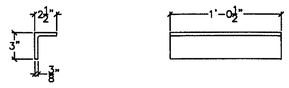
SHEET NO. 1 OF 18

BEARING PEDESTAL CONT.:



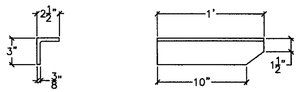
2BP04–ANGLE

3" = 1'–0"



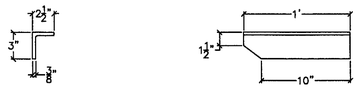
2BP05–ANGLE

3" = 1'–0"



2BP06R–ANGLE

3" = 1'–0"



2BP06L–ANGLE

3" = 1'–0"

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R-SUBMIT APPROVED AS NOTED
BY WJ CJ DATE 5/14/09

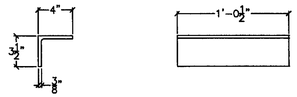
Rienaud Bros. Construction
Fair Haven, Vermont 05743
(802) 287 - 9393

TITLE Wallingford Bridge Rehab
LOCATION Wallingford, VT
DRAWING TITLE Drawings Truss Type 2: Drawings
DRAWN BY JED JOB CONTACT Erick Foster State of VT
CHECKED BY JED/AD DATE 4.30.09

DRAWING NO. T-2

BEARING PEDESTAL CONT.:

TBD WHEN REMOVED
DWG. SUBMITTED FOR
APPROVAL

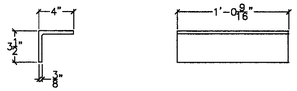


2BP07–PLATE

3" = 1'–0"

2BA01–ANGLE

3" = 1'–0"



2BA02–ANGLE

3" = 1'–0"

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CK'D BY CHA CK'D BY
MAY 1 1 2009
R- SUBMIT APPROVED As Noted
BY SV DATE 5/29/09

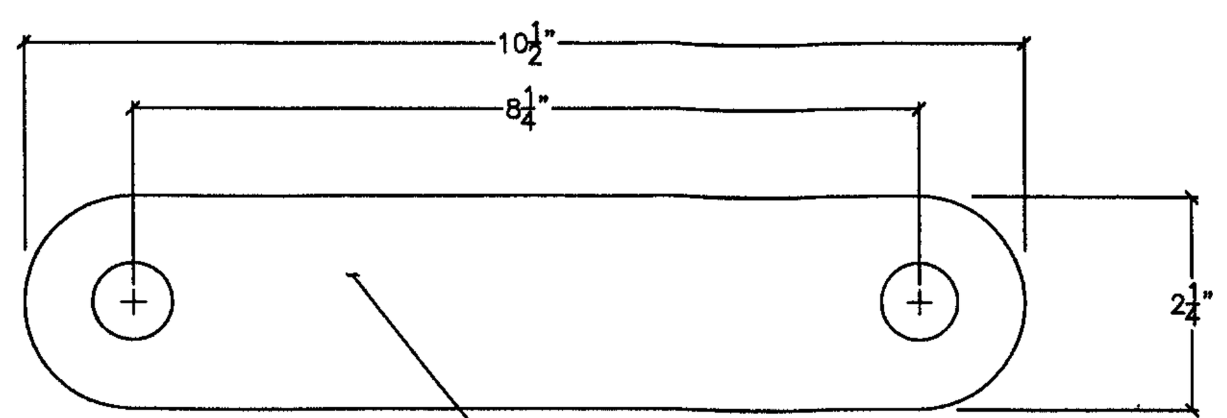
Rienaud Bros. Construction
Fort Bridgman Road Vernon, VT 05354
(802) 257 - 7383

TITLE Wallingford Bridge Rehab
LOCATION Wallingford, VT
DRAWING TITLE Drawings Type 2: Drawings
DRAWN BY JED JOB CONTACT Erick Foster State of VT
CHECKED BY JED/AD DATE 4 30 09

DRAWING NO. T-2

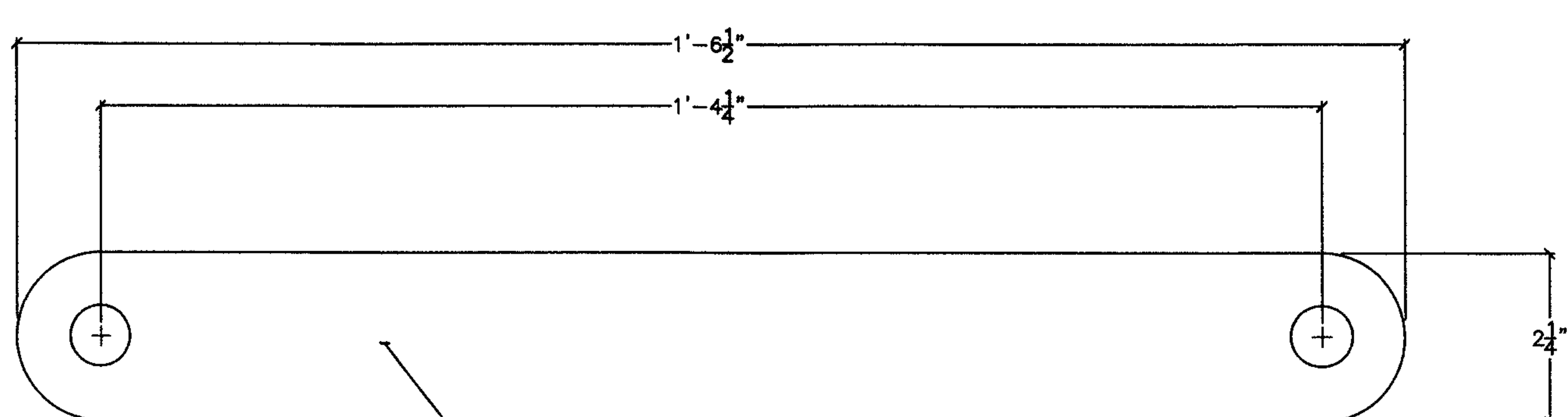
SHEET NO. 3 OF 18

LATTICE:



2LP01—PLATE

3" = 1'-0"



2LP02—ANGLE

3" = 1'-0"

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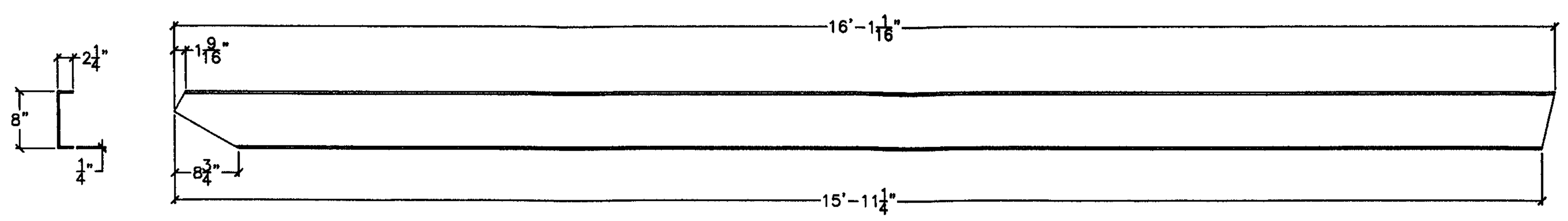
MAY 1 1 2009
R SUBMIT APPROVED As Noted
BY DATE 5/11/09

Renaud Bros Construction
Fort Bridgman Road Vernon, VT 05354
(802) 257-7383

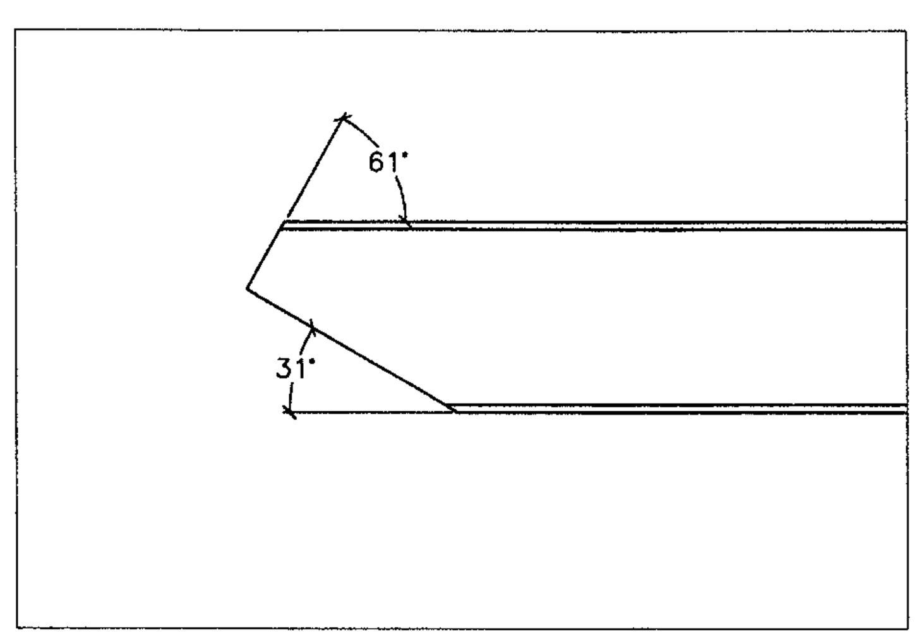
TITLE Wallingford Bridge Rehab
LOCATION Wallingford, VT
DRAWING TITLE Drawings Truss Type 2: Drawings
DRAWN BY JED JOB CONTACT Erick Foster State of VT
CHECKED BY JED/AD DATE 4 30 09
DRAWING NO. T-2
SHEET NO. 4 OF 18

UPPER CHORD:



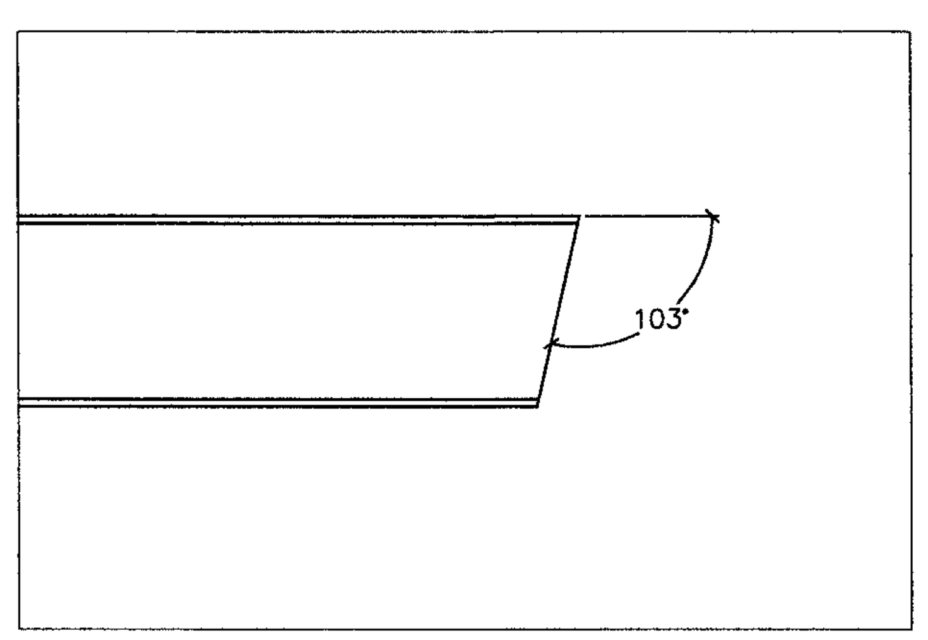
2L8U7—CHANNEL

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



2L8U7—END DETAIL

3" = 1'-0"



2L8U7—END DETAIL

3" = 1'-0"

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MAY 1 1 2009
RESUBMIT APPROVED As Noted
BY
DATE 5/29/09

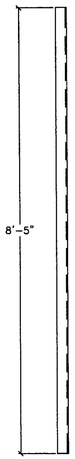
Renaud Bros Construction
Fort Bridgman Road Vernon, VT 05354
(802) 257-7383

TITLE Wallingford Bridge Rehab
LOCATION Wallingford, VT
DRAWING TITLE Drawings Truss Type 2 Drawings
DRAWN BY JED | JOB CONTACT Erick Foster State of VT
CHECKED BY JED/AD | DATE 4 30 09

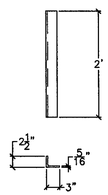
DRAWING NO. T-2

SHEET NO. 5 OF 18

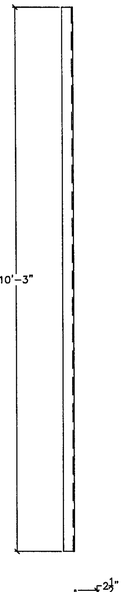
UPRIGHT MEMBERS:



2U1L1L-ANGLE
1-1/2" = 1'-0"



2U1L1R-ANGLE
1-1/2" = 1'-0"



2U2L2L-ANGLE
1-1/2" = 1'-0"

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MAY 11 2009
R LUEMIT APPROVED As Noted
BY WJ S/ DATE 5/14/09

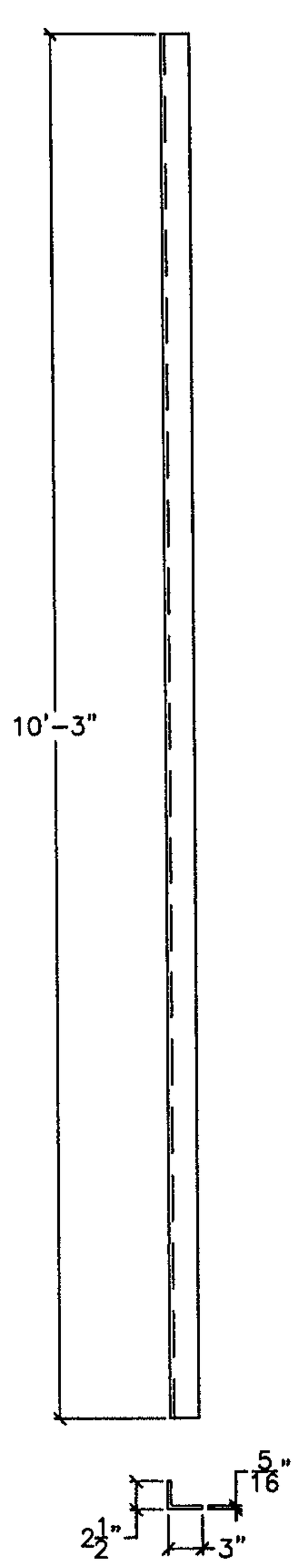
Reinaud Bros. Construction
Fort Bridgman Road Vernon, VT 05354
(802) 257 - 7553

TITLE Wallingford Bridge Rehab
LOCATION Wallingford, VT
DRAWING TITLE Drawings Truss Type 2 Drawings
DRAWN BY JED JOB CONTACT Erek Foster, State of VT
CHECKED BY JED/AD DATE 4 30 09

DRAWING NO. T-2

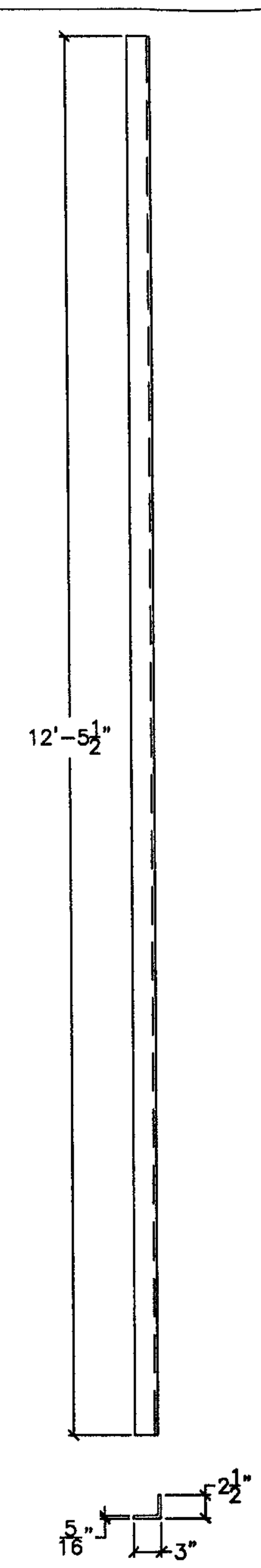
SHEET NO. 6 of 18

UPRIGHT MEMBERS:



2U2L2R-ANGLE

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



2U3L3L-ANGLE

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

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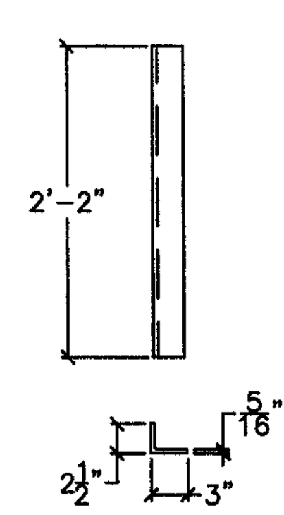
CK'D BY CWB OK'D BY
MAY 1 1 2009
APPROVED As Noted
DATE 5/11/09



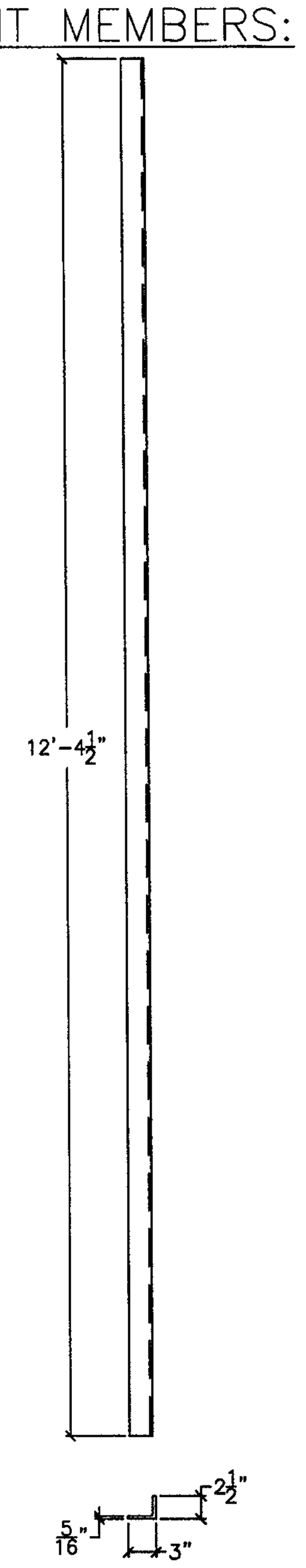
2U3L3R-ANGLE

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

Renaud Bros Construction
Fort Bridgman Road Vernon VT 05354
(802) 257 - 7383

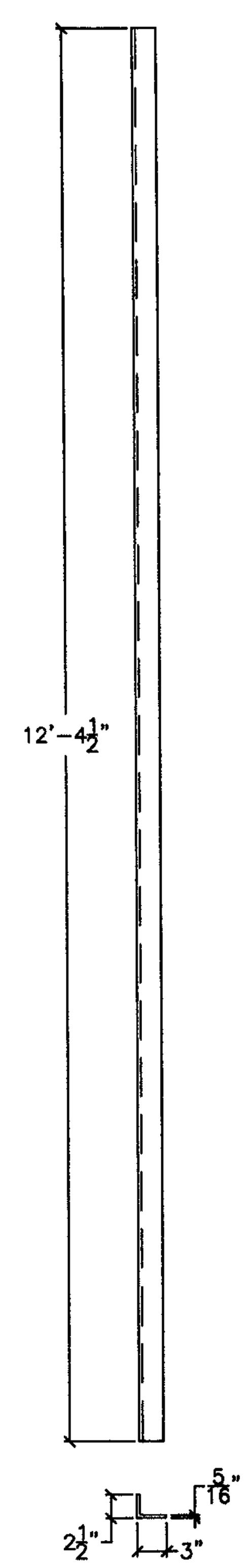
TITLE Wallingford Bridge Rehab
LOCATION Wallingford, VT
DRAWING TITLE Drawings Truss Type 2: Drawings
DRAWN BY JED JOB CONTACT Erick Foster State of VT
CHECKED BY JED/AD DATE 4 30 09
DRAWING NO. T-2
SHEET NO. 7 OF 18

UPRIGHT MEMBERS:



2U4L4L-ANGLE

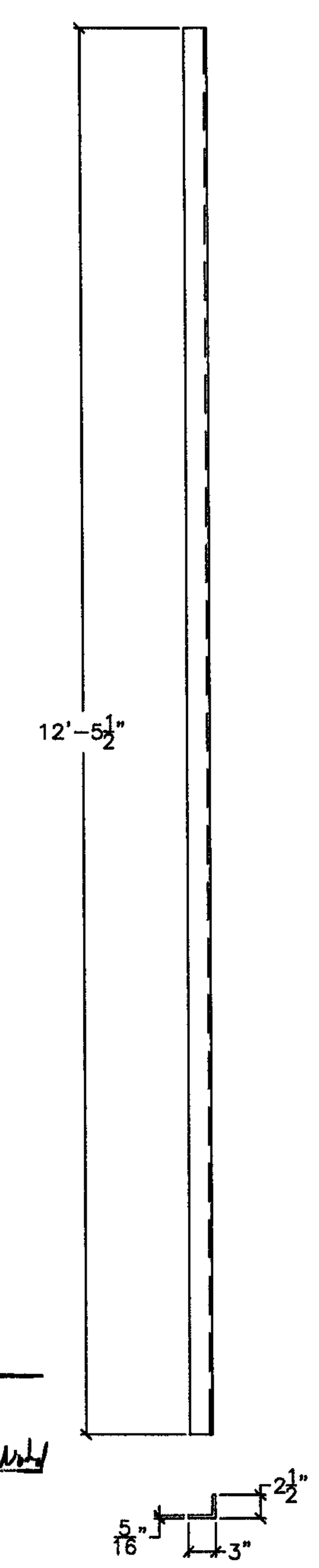
1-1/2" = 1'-0"



2U4L4R-ANGLE

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

RECEIVED
CK'D BY CHA OK'D BY
MAY 1 1 2009
R SUBMIT APPROVED As Noted
BY
DATE 5/19/09



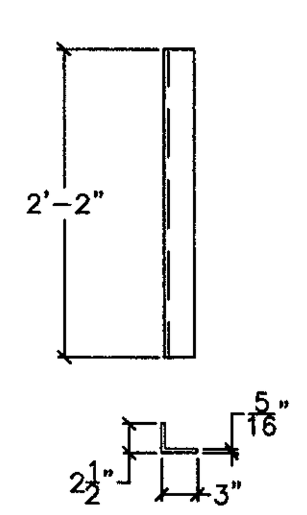
2U5L5L-ANGLE

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

Renaud Bros Construction
Fort Bridgman Road Vernon, VT 05354
(802) 257-7383

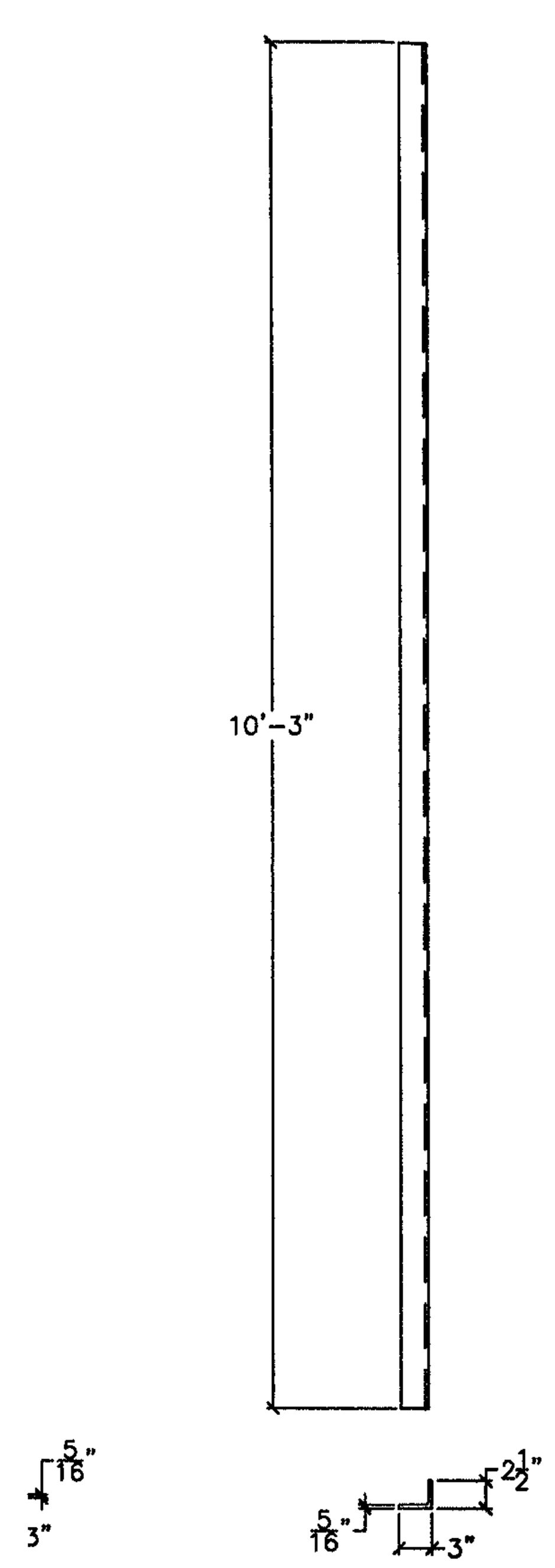
TITLE Wallingford Bridge Rehab
LOCATION Wallingford, VT
DRAWING TITLE Drawings Truss Type 2: Drawings
DRAWN BY JED JOB CONTACT Erick Foster State of VT
CHECKED BY JED/AD DATE 4 30 09
DRAWING NO. T-2
SHEET NO. 8 OF 18

UPRIGHT MEMBERS:



2U5L5R-ANGLE

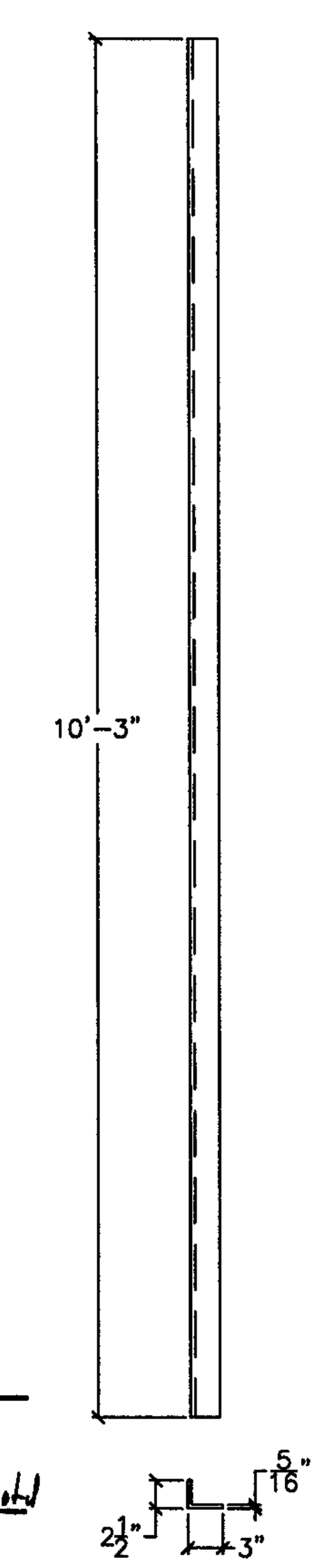
1-1/2" = 1'-0"



2U6L6L-ANGLE

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

RECEIVED
CK'D BY CHA OK'D BY
MAY 1 1 2009
R SUBMIT ___ APPROVED As Noted
BY WJ SJ DATE 5/29/09



2U6L6R-ANGLE

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

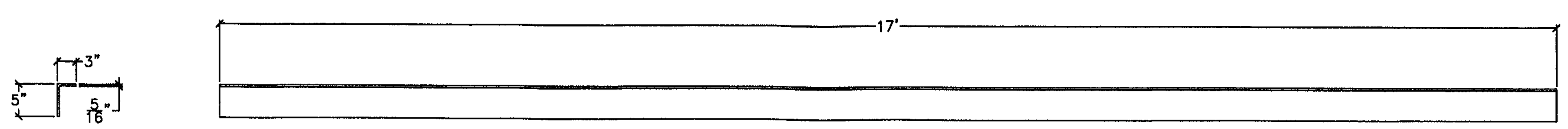
Renaud Bros Construction
Fort Bridgman Road Vernon, VT 05354
(802) 257 - 7383

TITLE Wallingford Bridge Rehab
LOCATION Wallingford, VT
DRAWING TITLE Drawings Truss Type 2: Drawings
DRAWN BY JED JOB CONTACT Erick Foster State of VT
CHECKED BY JED/AD DATE 4 30 09

DRAWING NO. T-2

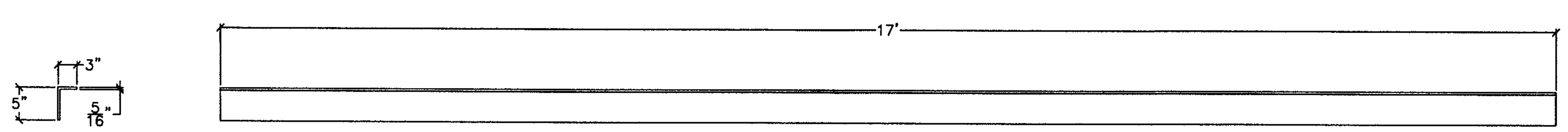
SHEET NO. 9 OF 18

UPRIGHT MEMBERS:



2DM01–ANGLE

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



2DM02–ANGLE

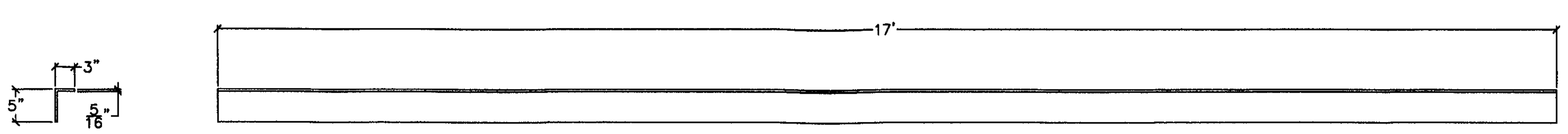
1-1/2" = 1'-0"

RECEIVED
CK'D BY CHA OK'D BY
MAY 1 1 2009
RESUBMIT APPROVED As Noted
BY SJ
DATE 5/19/09

Renaud Bros Construction
Fort Bridgman Road Vernon, VT 05354
(802) 257-7383

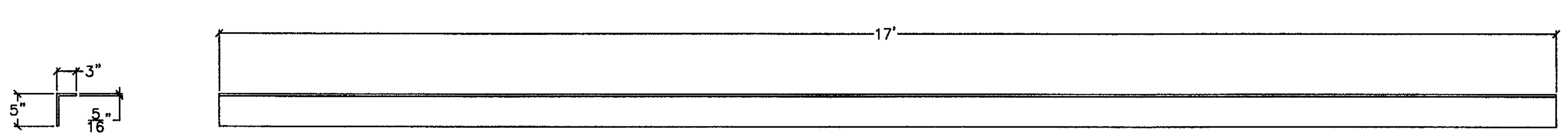
TITLE Wallingford Bridge Rehab
LOCATION Wallingford, VT
DRAWING TITLE Drawings Truss Type 2 Drawings
DRAWN BY JED | JOB CONTACT Erick Foster State of VT
CHECKED BY JED/AD | DATE 4 30 09
DRAWING NO. T-2
SHEET NO. 10 OF 18

UPRIGHT MEMBERS:



2DM03-ANGLE

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



2DM04-ANGLE

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

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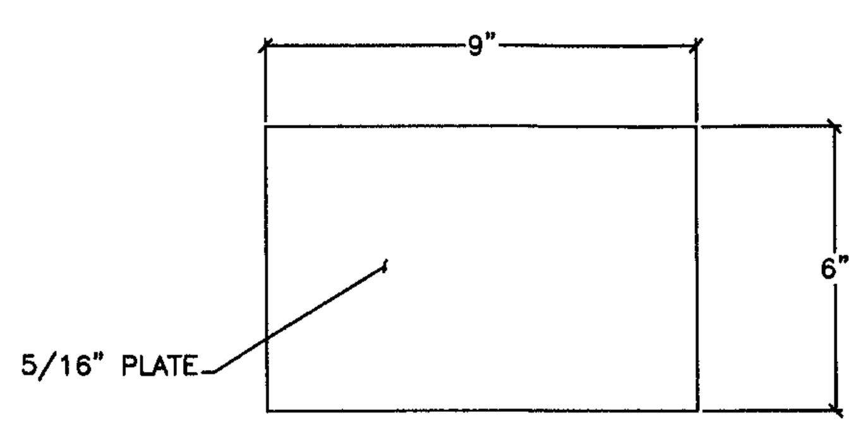
MAY 1 1 2009
APPROVED
BY
DATE 5/29/09

Renaud Bros Construction
Fort Bridgman Road Vernon, VT 05354
(802) 257-7383

TITLE Wallingford Bridge Rehab
LOCATION Wallingford, VT
DRAWING TITLE Drawings Truss Type 2: Drawings
DRAWN BY JED | JOB CONTACT Erick Foster State of VT
CHECKED BY JED/AD | DATE 4 30 09
DRAWING NO. T-2
SHEET NO. 11 OF 18

UPRIGHT MEMBERS:



– plates similar for U3L2, U3L4, U5L4, and U5L6

2DM05–PLATE
6" = 1'-0"

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MAY 1 1 2009
R UENIT APPROVED As Noted
BY SJ DATE 5/19/09
WY

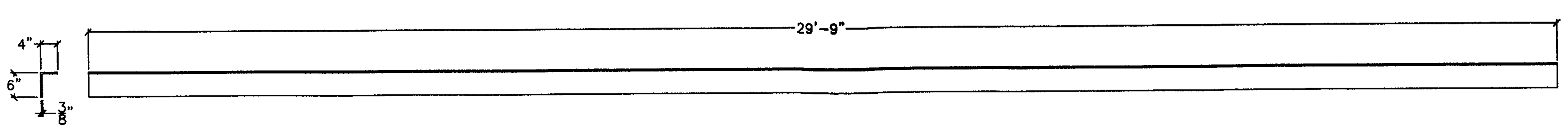
Renaud Bros Construction
Fort Bridgman Road Vernon VT 05354
(802) 257-7383

TITLE Wallingford Bridge Rehab
LOCATION Wallingford, VT
DRAWING TITLE Drawings Truss Type 2. Drawings
DRAWN BY JED JOB CONTACT Erick Foster State of VT
CHECKED BY JED/AD DATE 4 30 09

DRAWING NO. T–2

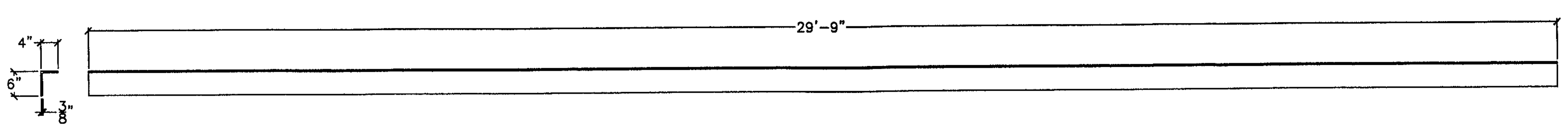
SHEET NO. 12 OF 18

BOTTOM CHORD:



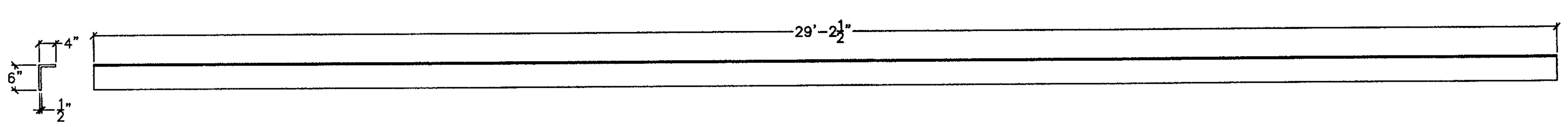
2LOL2A–ANGLE

1" = 1'–0"



2LOL2B–ANGLE

1" = 1'–0"



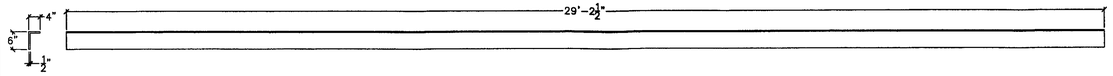
2L2L4A–ANGLE

1" = 1'–0"

Renaud Bros. Construction
Fort Bridgman Road Vernon, VT 05354
(802) 257-7383

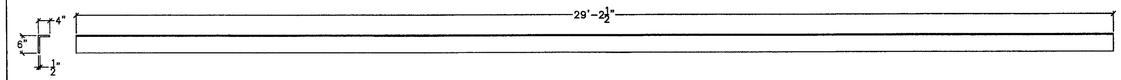
TITLE	Wallingford Bridge Rehab
LOCATION	Wallingford, VT
DRAWING TITLE	Drawings Truss Type 2 Drawings
DRAWN BY	JED
JOB CONTACT	Erick Foster State of VT
CHECKED BY	JED/AD
DATE	4 30 09
DRAWING NO.	T-2
SHEET NO.	13 OF 18

BOTTOM CHORD:



2L4L6A–ANGLE

1" = 1'–0"



2L4L6B–ANGLE

1" = 1'–0"

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MAY 11 20
APPROVED As Noted
BY WY DATE 5/29/09

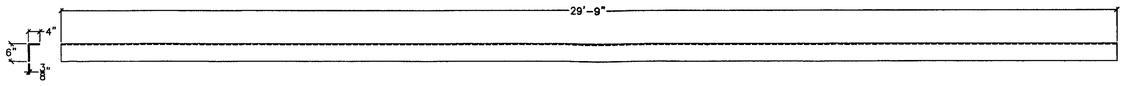
Rainaud Bros. Construction
Fair Haven, Vermont 05743
(802) 265-3303

TITLE Wallingford Bridge Rehab
LOCATION Wallingford, VT
DRAWING TITLE Drawings Truss Type 2: Drawings
DRAWN BY JED JOB CONTACT Erick Foster State of VT
CHECKED BY JED/AD DATE 4 30 09

DRAWING NO. T-2

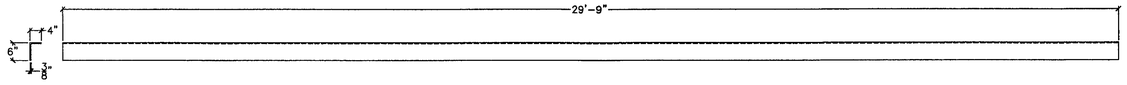
SHEET NO. 14 OF 18

BOTTOM CHORD:



2L6L8A–ANGLE

1–1/2" = 1'–0"



2L6L8B–ANGLE

1" = 1'–0"

RECEIVED
CK'D BY Chk CK'D BY
MAY 1 1 2009
RESUBMIT APPROVED As Noted
BY WF DATE 5/19/09

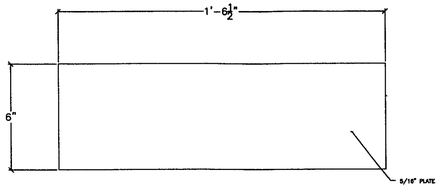
Renaud Bros. Construction
East Hardwick, VT 05836
Tel: (802) 257-7393

TITLE Wallingford Bridge Rehab
LOCATION Wallingford, VT
DRAWING TITLE Drawings Truss Type 2 Drawings
DRAWN BY JED JOB CONTACT Erick Foster State of VT
CHECKED BY JED/AD DATE 4 30 09

DRAWING NO. T-2

SHEET NO. 15 OF 18

BOTTOM CHORD:



2BC01-PLATE

3" = 1'-0"

RECEIVED
CK'D BY Clm OK'D BY
MAY 11 2009
RESUBMIT APPROVED As Noted
BY WY DATE 5/11/09

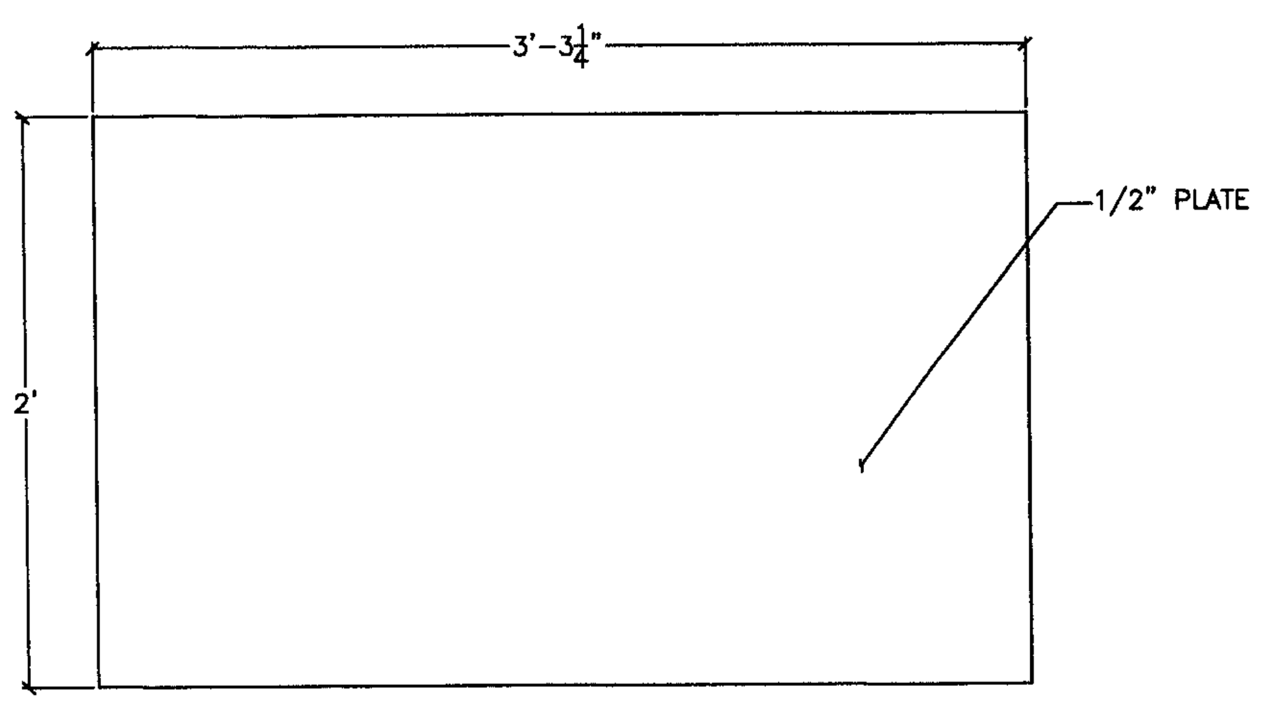
Renaud Bros. Construction
Fort Bridgman Road Vernon, VT 05354
((802)) 257-7533

TITLE Wallingford Bridge Rehab
LOCATION Wallingford, VT
DRAWING TITLE Drawings Truss Type 2 Drawings
DRAWN BY JED JOB CONTACT Erick Fowler State of VT
CHECKED BY JED/AD DATE 4 30 09

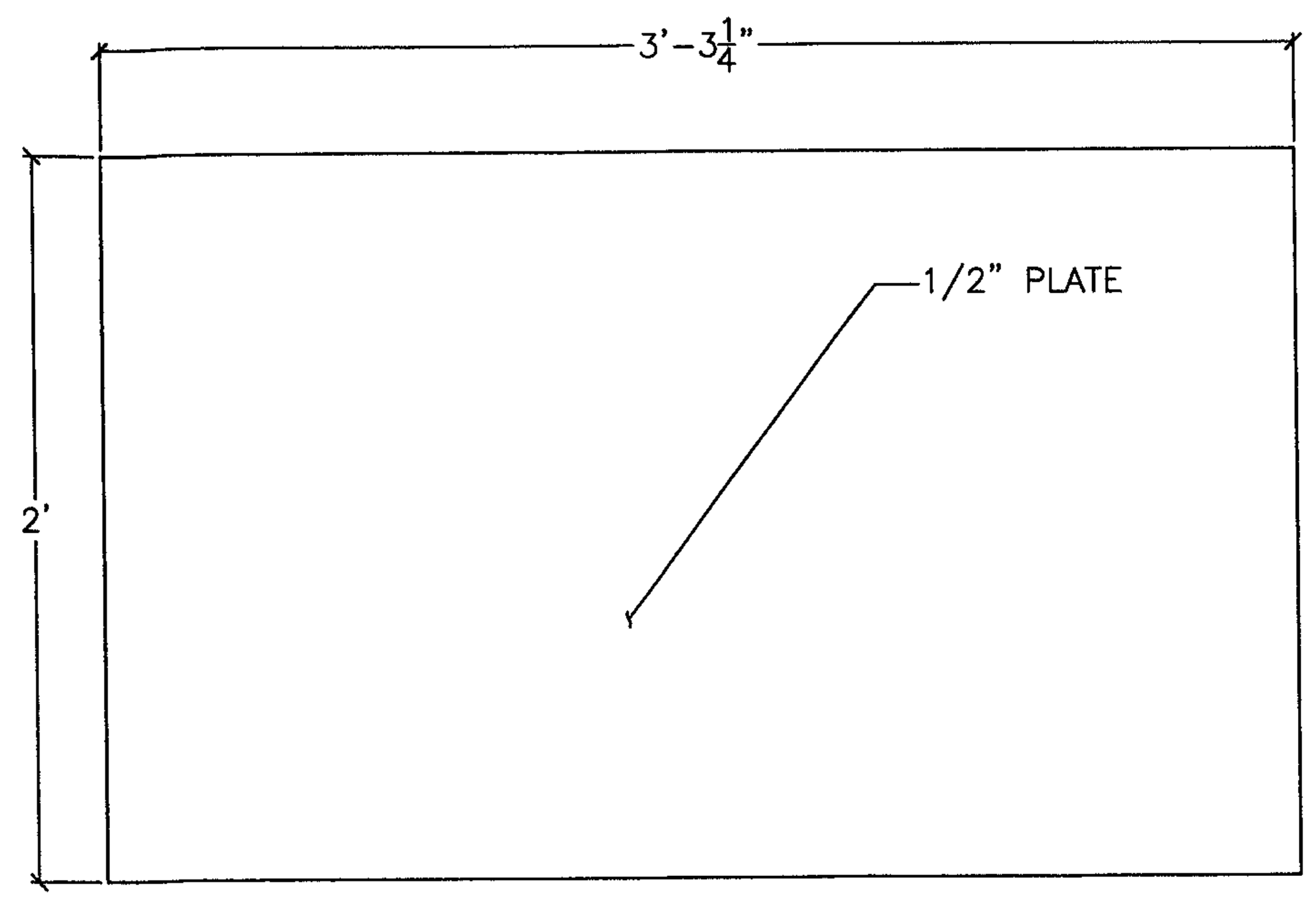
DRAWING NO. T-2

SHEET NO. 16 OF 18

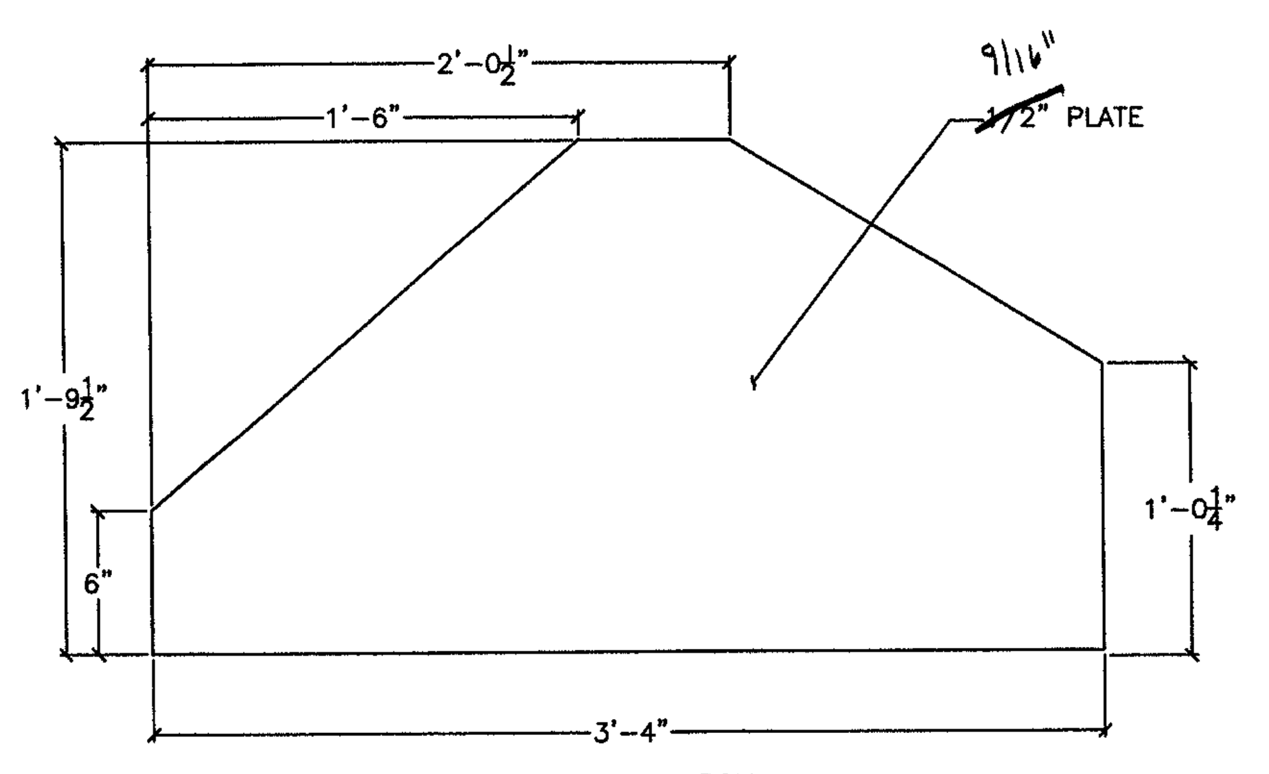
GUSSET PLATES.:



2GP01-PLATE
3" = 1'-0"



2GP02-PLATE
3" = 1'-0"

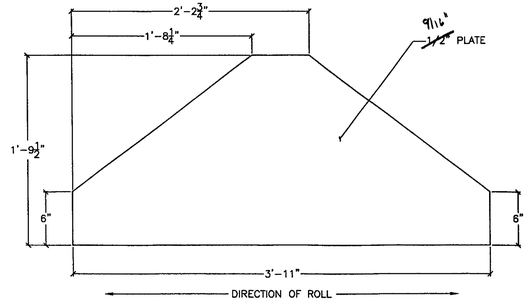


2GP03-PLATE
3" = 1'-0"

RECEIVED
CK'D BY CH CK'D BY ____
MAY 1 1 2009
RESUBMIT ____ APPROVED AS NOTED
BY WY DATE 5/11/4

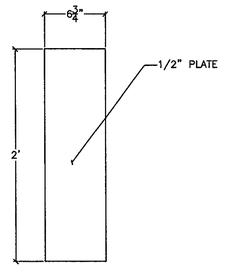
Renaud Bros Construction Fort Bridgman Road Vernon, VT 05354 (802) 257 - 7383	
TITLE	Wallingford Bridge Rehab
LOCATION	Wallingford, VT
DRAWING TITLE	Drawings Truss Type 2 Drawings
DRAWN BY JED	JOB CONTACT Erick Foster State of VT
CHECKED BY JED/AD	DATE 4 30 09
DRAWING NO.	T-2
SHEET NO.	17 OF 18

GUSSET PLATES.:



2GP04—PLATE

3" = 1'-0"



2GP05—PLATE

3" = 1'-0"

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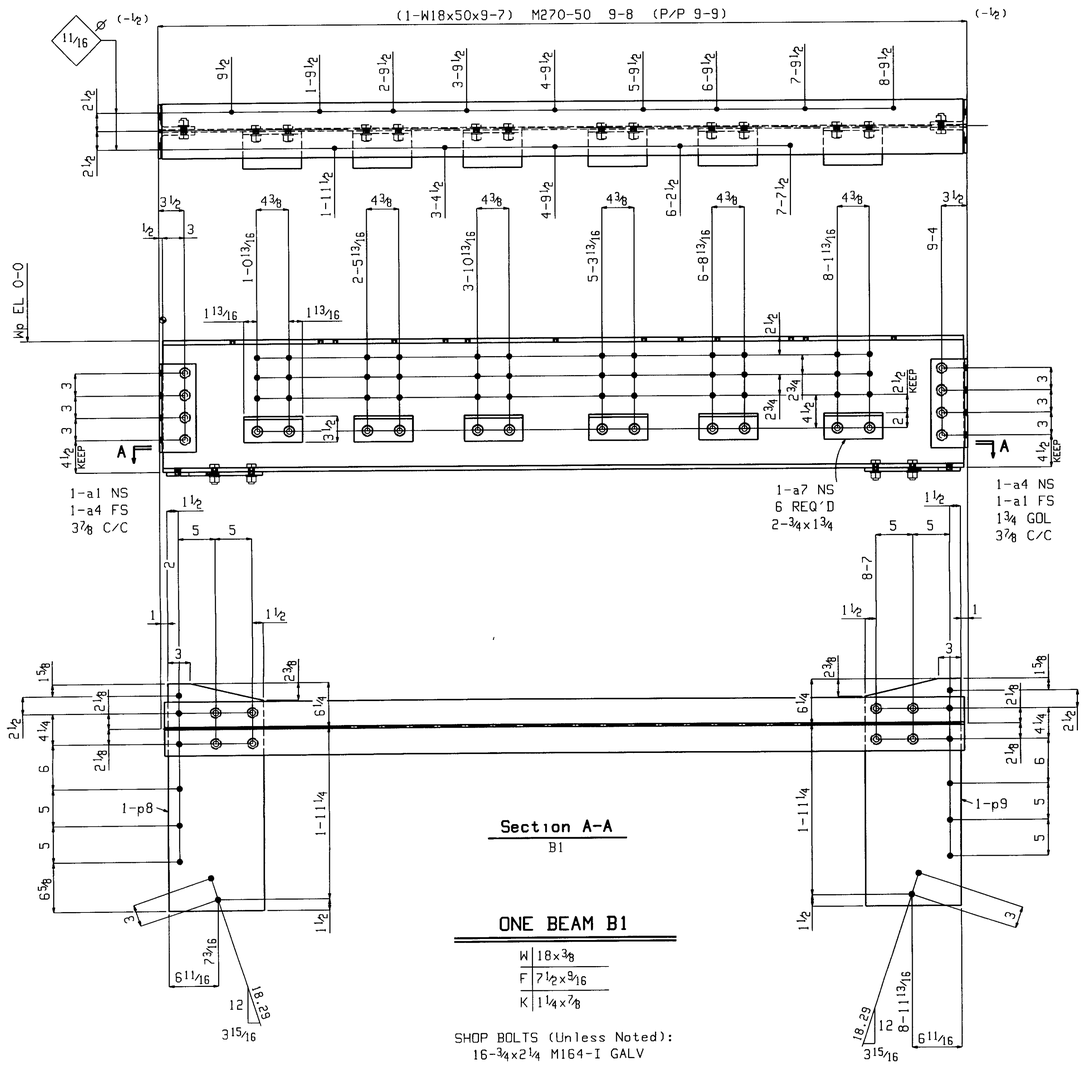
CK'D BY CHA OK'D BY
MAY 1 1 2009
RESUBMIT APPROVED As Noted
BY WF DATE 5/11/09

Renaud Bros. Construction
Rd Bridgman Road Vienna, VT 05554
(802) 257 - 7383

TITLE Wallingford Bridge Rehab
LOCATION Wallingford, VT
DRAWING TITLE Drawings Type 2 Drawings
DRAWN BY JED JOB CONTACT Erick Foster State of VT
CHECKED BY JED/AD DATE 4 30 09

DRAWING NO. T-2

SHEET NO. 18 OF 18



ONE BEAM B1

W	18x3/8
F	7 1/2x9/16
K	1 1/4x7/8

SHOP BOLTS (Unless Noted):
16-3/4x2 1/4 M164-I GALV

4 BEAMS B2

W	18x3/8
F	7 1/2x9/16
K	1 1/4x7/8

SHOP BOLTS
36-3/4x2 1/4 M164-I GALV

CORRECTION TAKEN ☐ MAKE CORRECTIONS NOTED
☐ REJECTED ☐ RESUBMIT
☐ SUBMITTED ITEM

CLOUGH HARBOUR & ASSOCIATES LLP
ENGINEERS, SCIENTISTS, PLANNERS
& LANDSCAPE ARCHITECTS
DATE BY

RECEIVED
CK'D BY OK'D BY
MAY 26 2009
RESUBMIT APPROVED
BY DATE

BILL OF MATERIAL

Qty Tot.	Piece Mark	Description	Length		Seq NO.	Seq Qty	Adv ABM #	Steel Grade	Remarks
ONE		BEAM			1	1		M270-50	
1	B1	W18x50	9	7				M270-50	
2	a1	L5x3 1/2x3/8	1	0				M270-50	
2	a4	L5x3 1/2x3/8	1	0				M270-50	
6	a7	L5x3 1/2x3/8	0	8				M270-50	
1	p8	PL 1/2x13	2	7				M270-50	
1	p9	PL 1/2x13	2	7				M270-50	
16		3/4 Dia M164-I	0	2 1/4					1HD WASH,GALV
12		3/4 Dia M164-I	0	1 3/4					1HD WASH,GALV

BILL OF MATERIAL

Qty Tot.	Piece Mark	Description	Length		Seq NO.	Seq Qty	Adv ABM #	Steel Grade	Remarks
4		BEAM			1	4			
4	B2	W18x50	9	7				M270-50	
8	a1	L5x3 1/2x3/8	1	0				M270-50	
8	a4	L5x3 1/2x3/8	1	0				M270-50	

BILL OF MATERIAL

Qty Tot.	Piece Mark	Description	Length		Seq NO.	Seq Qty	Adv ABM #	Steel Grade	Remarks
48	a7	L5x3 1/2x3/8	0	8				M270-50	
4	p13	PL 1/2x18	1	10				M270-50	
8	p17	PL 1/2x13	1	1				M270-50	
144		3/4 Dia M164-I	0	2 1/4					1HD WASH,GALV

Total weight 3595

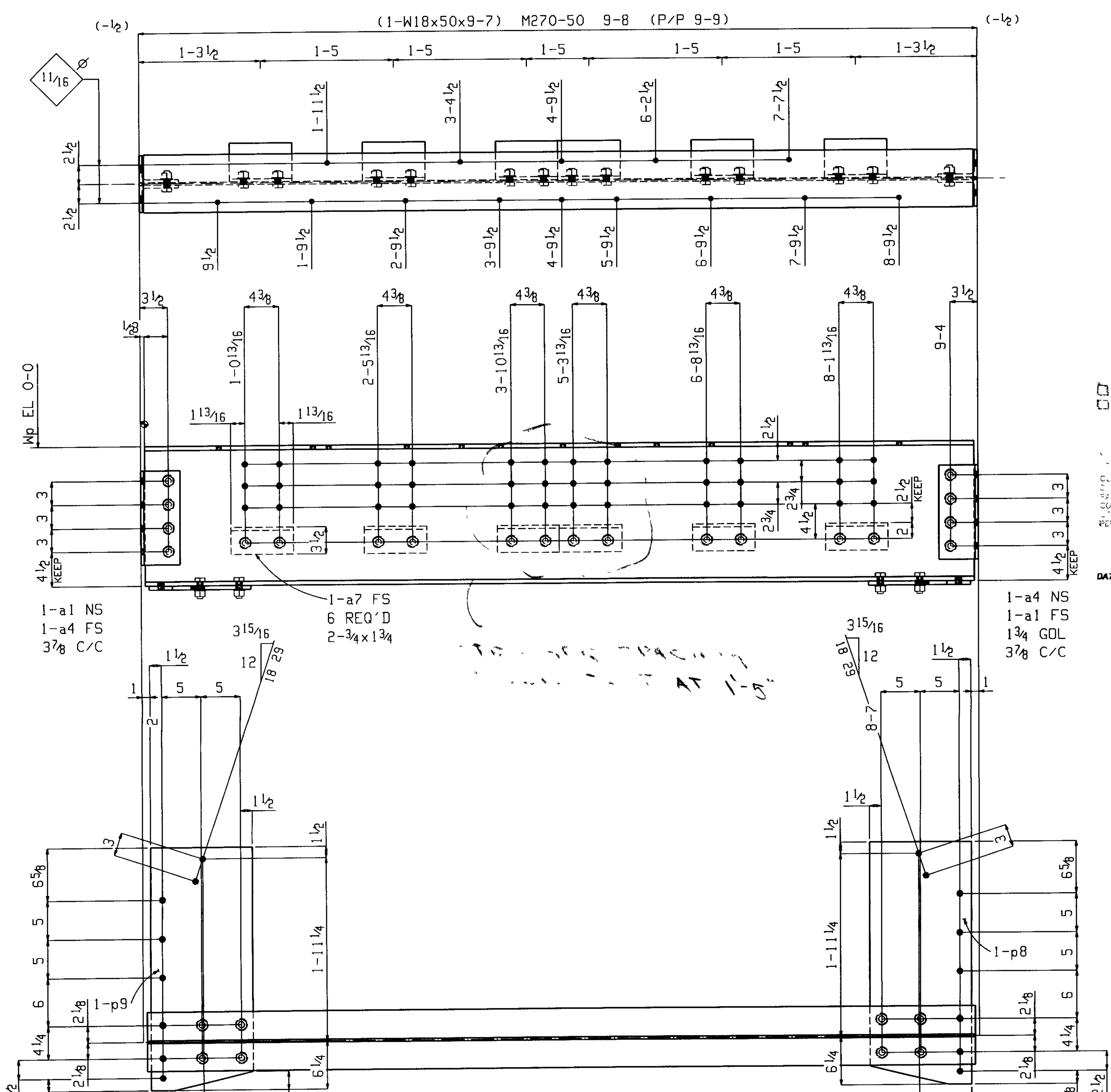
		Holes:	13/16 UNO
		BOLTS:	3/4" DIA M164-I GALV
		Steel GR:	M270-50 UNO
		Paint:	PER SPECS
Rev.No:	Date:	Surface Prep:	PER SPECS

Renaud Bros. Inc.
283 Fort Bridgeman Rd. #2
Vernon, VT. 05354
Phone 1-802 257-7383

Project:
WALLINGFORD BRIDGE
WALLINGFORD, VT

Date: 4-28-09		Job No.	
DWN. BY: EG	Checked:	Sheet No.	B1, 2

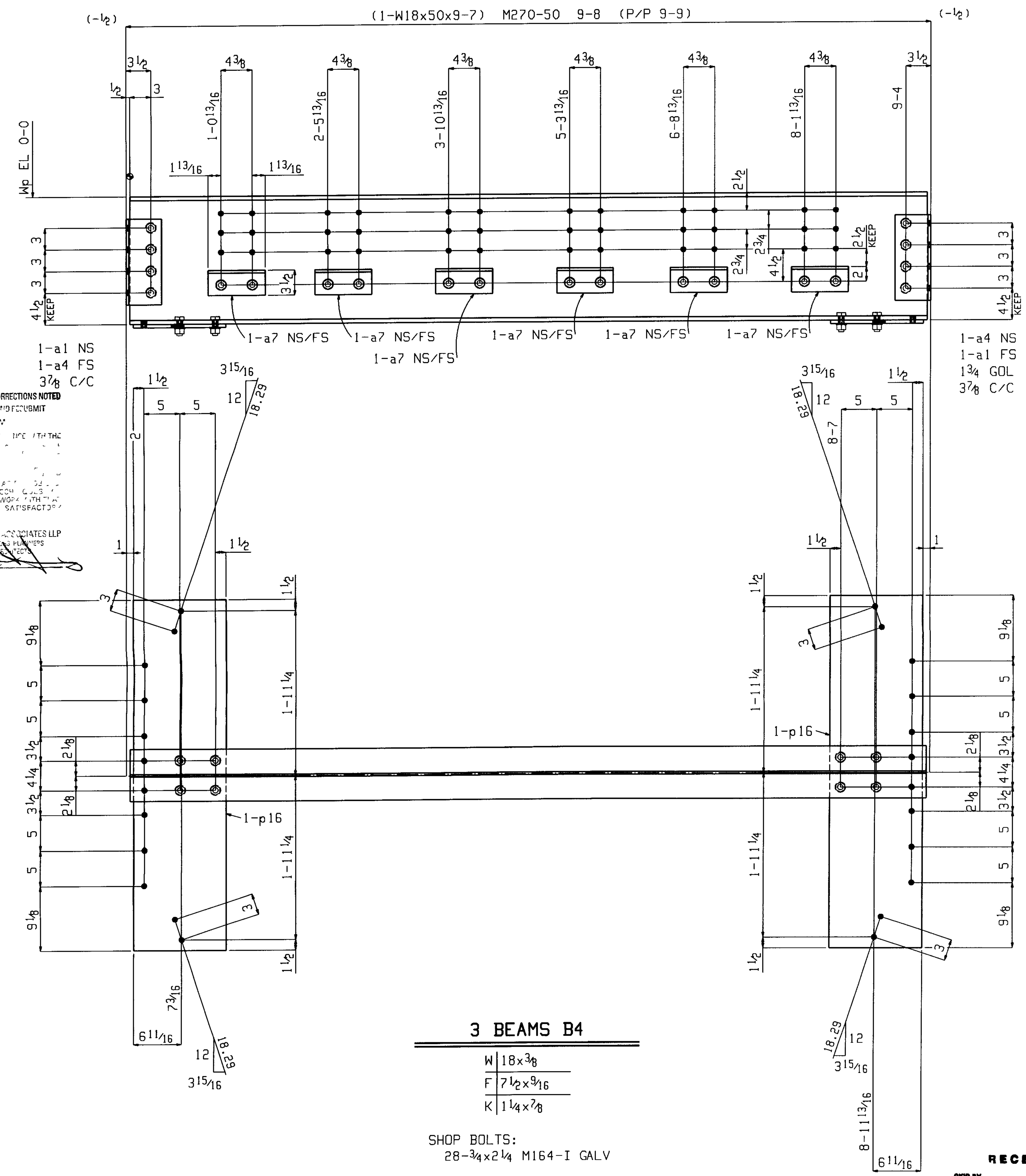
May 15 2009 03:03:43 PM



ONE BEAM B3

W	18x3/8
F	7 1/2x9/16
K	1 1/4x7/8

SHOP BOLTS (Unless Noted):
16-3/4x2 1/4 M164-I GALV



3 BEAMS B4

W	18x3/8
F	7 1/2x9/16
K	1 1/4x7/8

SHOP BOLTS:
28-3/4x2 1/4 M164-I GALV

RECEIVED
CK'D BY______ OK'D BY______
MAY 2 6 2009
RESUBMIT______ APPROVED______
BY DATE

BILL OF MATERIAL

Qty Tot.	Piece Mark	Description	Length		Seq NO.	Seq Qty	Adv ABM #	Steel Grade	Remarks
ONE		BEAM			1	1			
1	B3	W18x50	9	7				M270-50	
2	a1	L5x3 1/2x3/8	1	0				M270-50	
2	a4	L5x3 1/2x3/8	1	0				M270-50	
6	a7	L5x3 1/2x3/8	0	8				M270-50	
1	p8	PL1/2x13	2	7				M270-50	
1	p9	PL1/2x13	2	7				M270-50	
16		3/4 Dia M164-I	0	2 1/4					1HD WASH,GALV
12		3/4 Dia M164-I	0	1 3/4					1HD WASH,GALV

May 15 2009 03:03 46 PM

BILL OF MATERIAL

Qty Tot.	Piece Mark	Description	Length		Seq NO.	Seq Qty	Adv ABM #	Steel Grade	Remarks
3		BEAM			1	3			
3	B4	W18x50	9	7				M270-50	
6	a1	L5x3 1/2x3/8	1	0				M270-50	
6	a4	L5x3 1/2x3/8	1	0				M270-50	

BILL OF MATERIAL

Qty Tot.	Piece Mark	Description	Length		Seq NO.	Seq Qty	Adv ABM #	Steel Grade	Remarks
36	a7	L5x3 1/2x3/8	0	8				M270-50	
6	p16	PL1/2x13	4	1 1/2				M270-50	
84		3/4 Dia M164-I	0	2 1/4					1HD WASH,GALV

Total weight 3104

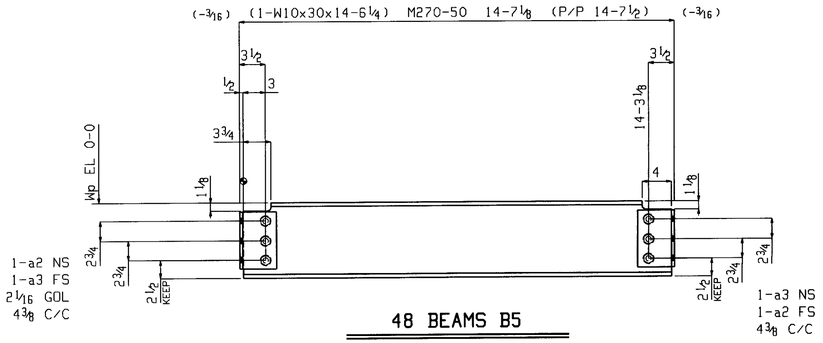
Renaud Bros. Inc.
283 Fort Bridgeman Rd. #2
Vernon, VT. 05354
Phone 1-802 257-7383

Holes:	13/16 UNO
BOLTS:	3/4" DIA M164-I GALV
Steel GR:	M270-50 UNO
Paint:	PER SPECS
Surface Prep:	PER SPECS

Rev.No: Date:

Project: WALLINGFORD BRIDGE
WALLINGFORD, VT

Date: 4-28-09
Job No.
DWN. BY EG
Checked
Sheet No. B3,4



48 BEAMS B5

W	10 1/2 x 5/16
F	5 13/16 x 1/2
K	1 1/8 x 3/4

SHOP BOLTS
6-3/4x2 1/4 M164-I GALV

☒ NO EXCEPTION TAKEN ☐ MAKE CORRECTION'S NOTED
☐ REJECTED ☐ RESUBMIT
☐ SUBMIT REVISED ITEM

DATE BY

RECEIVED
CK'D BY CK'D BY
MAY 26 2009
RESUBMIT APPROVED
BY DATE

BILL OF MATERIAL

Qty Tot.	Piece Mark	Description	Length		Seq NO.	Seq Qty	Adv ABM #	Steel Grade	Remarks
48		BEAM			1	48			
48	B5	W10x30	14	6 1/4				M270-50	
96	a2	L5x3 1/2x3/8	0	8				M270-50	
96	a3	L5x3 1/2x3/8	0	8				M270-50	
288		3/4 Dia M164-I	0	2 1/4					IHD WASH, GALV

BILL OF MATERIAL

Qty Tot.	Piece Mark	Description	Length		Seq NO.	Seq Qty	Adv ABM #	Steel Grade	Remarks

BILL OF MATERIAL

Qty Tot.	Piece Mark	Description	Length		Seq NO.	Seq Qty	Adv ABM #	Steel Grade	Remarks

Total weight 22008

Renaud Bros. Inc.
283 Fort Bridgeman Rd. #2
Vernon, VT. 05354
Phone 1-802 257-7383

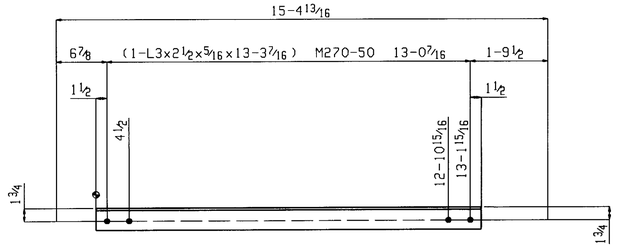
Rev.No: Date:

Holes: 13/16 UNO
BOLTS: 3/4" DIA M164-I GALV
Steel GR: M270-50 UNO
Paint: PER SPECS
Surface Prep: PER SPECS

Project:
WALLINGFORD BRIDGE
WALLINGFORD, VT

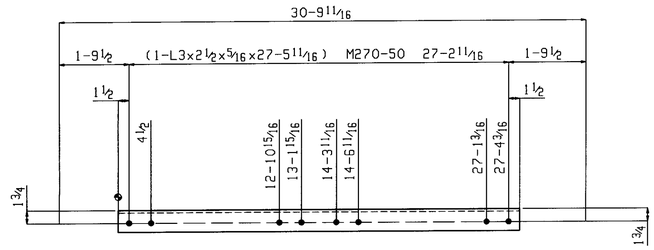
Date: 4-28-09
Job No.
DWN. BY: EG
Checked:
Sheet No. B5

May 15 2008 03:49 PM



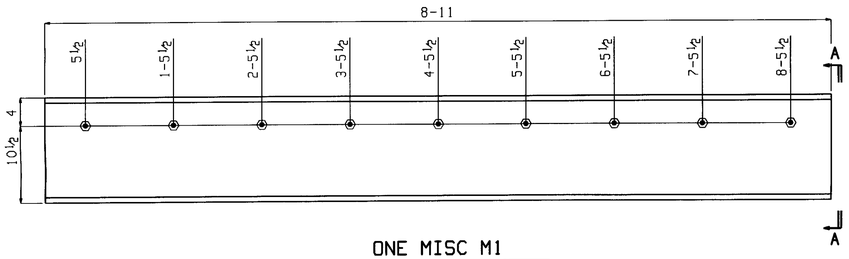
8 HORIZONTAL BRACES HB1

SHOP NOTE
TOE DIRECTION NEAR SIDE
LONG LEG SHOWN



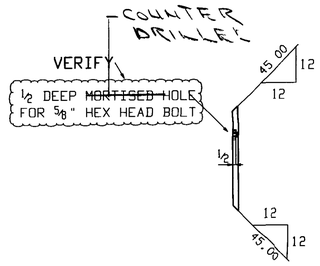
4 HORIZONTAL BRACES HB2

SHOP NOTE:
TOE DIRECTION FAR SIDE
LONG LEG SHOWN



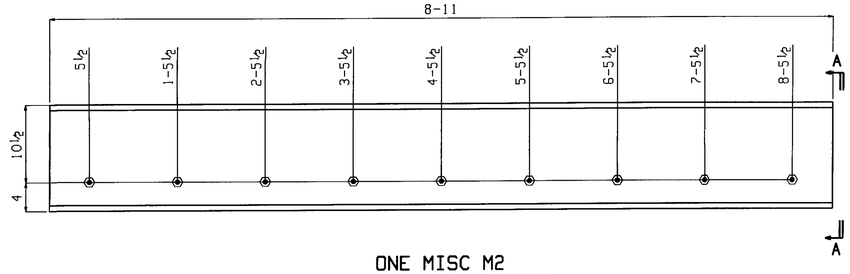
ONE MISC M1

GALV



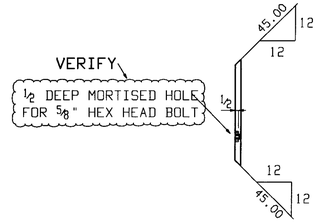
Section A-A

M1



ONE MISC M2

GALV



Section A-A

M2

BILL OF MATERIAL

Qty Tot.	Piece Mark	Description	Length		Seq NO.	Seq Qty	Adv ABM #	Steel Grade	Remarks
8		HORIZONTAL BRACE			1	8			
8	HB1	L3x2 1/2x5/16	13	3 7/16				M270-50	
4		HORIZONTAL BRACE			1	4			
4	HB2	L3x2 1/2x5/16	27	5 11/16				M270-50	

BILL OF MATERIAL

Qty Tot.	Piece Mark	Description	Length		Seq NO.	Seq Qty	Adv ABM #	Steel Grade	Remarks
ONE		MISC			1	1			GALV
1	M1	PL 3/4x14 1/2	8	11				M270-50	
ONE		MISC			1	1			GALV
1	M2	PL 3/4x14 1/2	8	11				M270-50	

BILL OF MATERIAL

Qty Tot.	Piece Mark	Description	Length		Seq NO.	Seq Qty	Adv ABM #	Steel Grade	Remarks

Total weight 1832

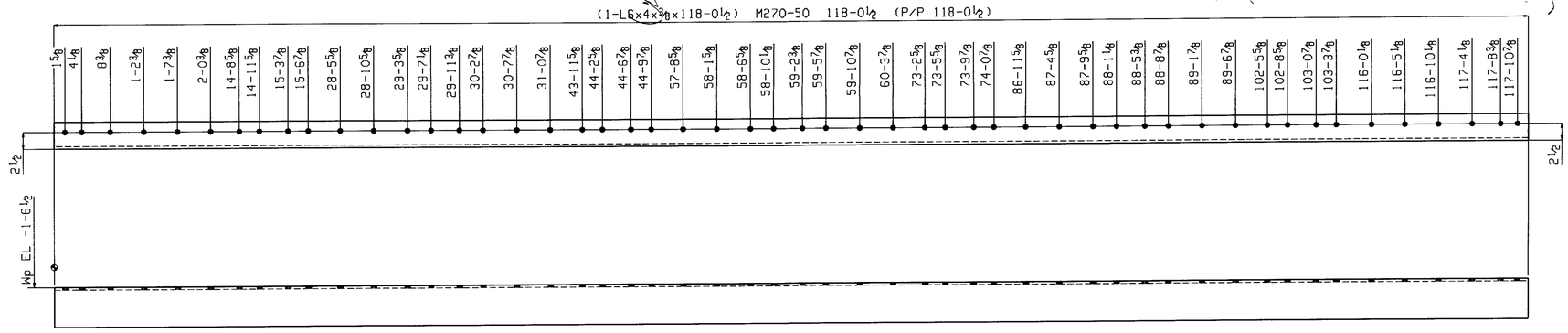
Renaud Bros. Inc.
283 Fort Bridgeman Rd. #2
Vernon, VT. 05354
Phone 1-802 257-7383

Rev.No:	Date.	
		Holes: 13/16 UNO
		BOLTS: 3/4" DIA M164-I GALV
		Steel GR: M270-50 UNO
		Paint: PER SPECS
		Surface Prep: PER SPECS

Project:
WALLINGFORD BRIDGE
WALLINGFORD, VT

Date: 4-28-09
Job No.
DWN. BY EG
Checked:
Sheet No. HB1-2, M1-2

May 15 2009 03:51 PM



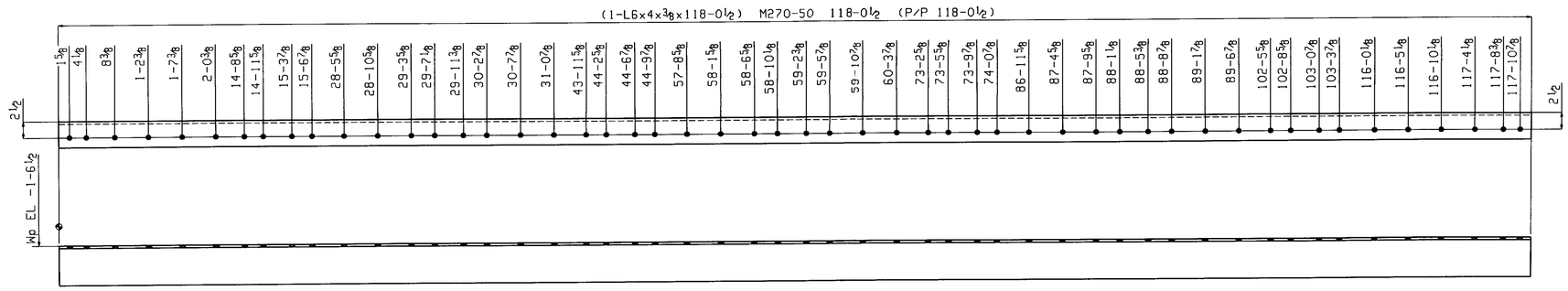
ONE MISC M3

SHOP NOTE:
TOE DIRECTION FAR SIDE

☐ NO EXCEPTION TAKEN ☒ MAKE CORRECTIONS NOTED
☐ REJECTED ☐ REVISE AND RESUBMIT
☐ SUBMIT SPECIFIED ITEM

CHECKING IS ONLY FOR GENERAL CONFORMANCE WITH THE DESIGN CONCEPT OF THE PROJECT AND GENERAL COMPLIANCE WITH THE CONTRACT DOCUMENTS. CONTRACTOR IS RESPONSIBLE FOR DIMENSIONS TO BE CONFIRMED AND CORRELATED AT THE JOBSITE; FOR INFORMATION THAT PERTAINS SOLELY TO THE FABRICATION PROCESSES OR TO TECHNIQUES OF CONSTRUCTION AND COORDINATION OF THE WORK WITH THAT OF ALL OTHER TRADES AND FOR THE SATISFACTORY PERFORMANCE OF THE WORK.

CLOUGH HARBOUR & ASSOCIATES LLP
ENGINEERS, ARCHITECTS, PLANNERS
& LANDSCAPE ARCHITECTS
DATE 6/2/09 BY



ONE MISC M4

SHOP NOTE:
TOE DIRECTION NEAR SIDE

BILL OF MATERIAL

Qty Tot.	Piece Mark	Description	Length		Seq NO.	Seq Qty	Adv ABM #	Steel Grade	Remarks
ONE		MISC			1	1			
1	M3	L6x4x3/8	118	0 1/2				M270-50	
ONE		MISC			1	1			
1	M4	L6x4x3/8	118	0 1/2				M270-50	

BILL OF MATERIAL

Qty Tot.	Piece Mark	Description	Length		Seq NO.	Seq Qty	Adv ABM #	Steel Grade	Remarks

BILL OF MATERIAL

Qty Tot.	Piece Mark	Description	Length		Seq NO.	Seq Qty	Adv ABM #	Steel Grade	Remarks

Total weight 2898

RECEIVED
CK'D BY_____ CK'D BY_____
MAY 26 2009
RESUBMIT____ APPROVED_____
BY DATE

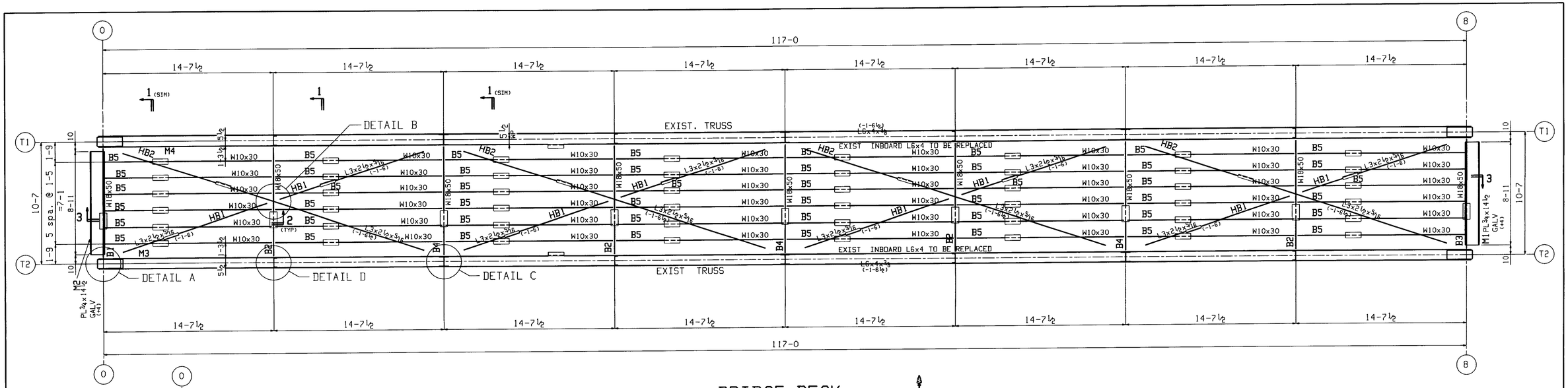
Renaud Bros. Inc.
283 Fort Bridgeman Rd. #2
Vernon, VT. 05354
Phone 1-802 257-7383

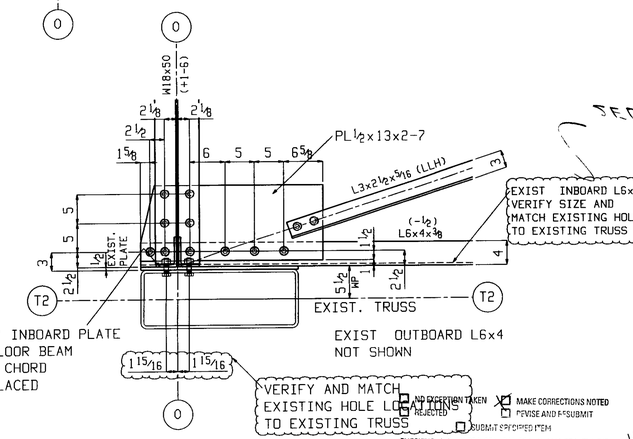
Rev.No:	Date:	
		Holes: 13/16 UNO
		BOLTS: 3/4" DIA M164-I GALV
		Steel GR: M270-50 UNO
		Paint: PER SPECS
		Surface Prep: PER SPECS

Project:
WALLINGFORD BRIDGE
WALLINGFORD, VT

Date: 4-28-09 | Job No.
DWN. BY: EG | Checked | Sheet No. M3, 4

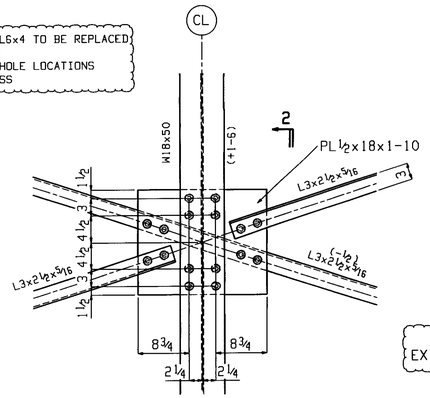
May 15 2009 03:03:54 PM





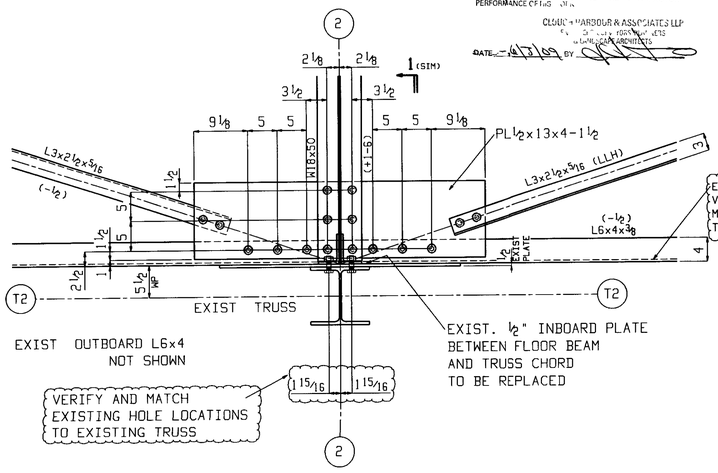
DETAIL_A

Elevation: -1-6 (U.N.)



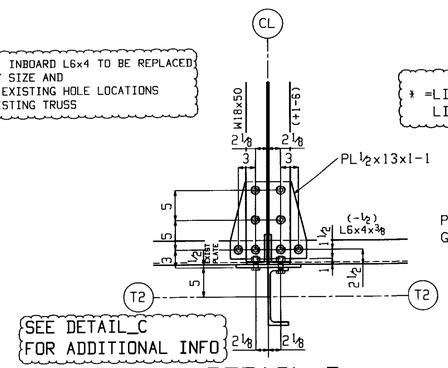
DETAIL_B

Elevation: -1-6 (U.N.)



DETAIL_C

Elevation: -1-6 (U.N.)



DETAIL_D

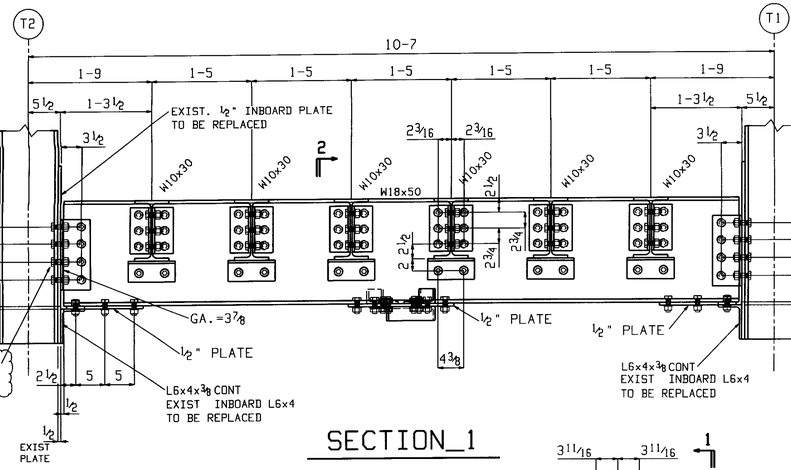
Elevation: -1-6 (U.N.)

BRIDGE_DECK

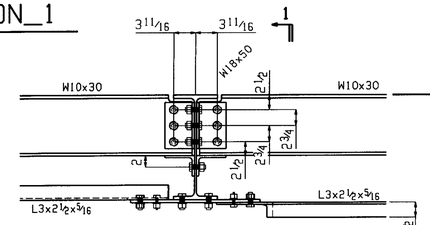
Elevation: 0-0 (U.N.)

REF. 576 3' LESS 4" TIMBER =575-11⅝ (0-0)

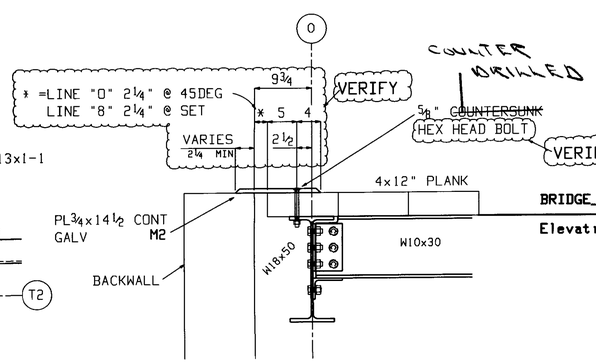
CALLED



SECTION_1



SECTION_2



SECTION_3

RECEIVED
CK'D BY_____ CK'D BY_____
MAY 26 2009
RESUBMIT___ ___ APPROVED_____
BY DATE

BRIDGE_DECK
Elevation: 0-0

Holes:	13/16 UNO
BOLTS:	¾" DIA M164-I GALV
Steel GR:	M270-50 UNO
Paint:	PER SPECS
Surface Prep:	PER SPECS

Renaud Bros. Inc.
283 Fort Bridgeman Rd. #2
Vernon, VT. 05354
Phone 1-802 257-7383

Rev.No: | Date:

Project:
WALLINGFORD BRIDGE
WALLINGFORD, VT

Date: 4-28-09 | Job No.

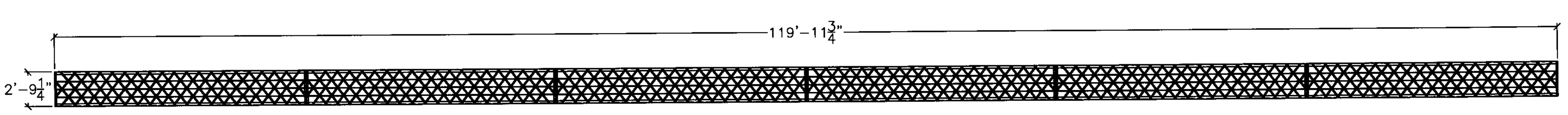
DWN. BY: EG | Checked | Sheet No. E1

May 15 2009 03:03:57 PM

GENERAL NOTES:

* All MEASUREMENTS TO BE VERIFIED BEFORE FABRICATION OF INDIVIDUAL MEMBERS BEGINS
* ALL RAIL HOLES TO BE PUNCHED FULL SIZE
* ALL RAIL STEEL SHALL BE DOMESTIC AASHTO M270 GRADE 36
* DIMENSIONS LESS THAN 25'–0" +/– $\frac{1}{16}$"
* DIMENSIONS GREATER THAN 25'–0" +/– $\frac{1}{8}$"
* SUPPORTING DOCUMENTATION TO DRAWINGS SEE BILL OF MATERIALS PEDESTRIAN RAIL
* TACK WELDING TO BE PERFORMED PRIOR TO BLASTING AND PAINTING OPERATIONS
* ALL RAIL ELEMENTS TO BE BLAST CLEANED AND PRIMED PRIOR TO ASSEMBLY
* AFTER ASSEMBLY, FINAL COAT OF PAINT SHALL BE APPLIED, ANY BLEMISHES OCCURRING During INSTALLATION SHALL BE FIXED
* $\frac{3}{8}$" ROD WILL BE TACKED TO OVERSIZED WASHER, TO ALLOW SECTIONS TO BE PRIMED, BEFORE ASSEMBLY SEE SHEET 2

RAILNG SYSTEM:



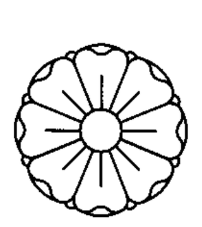
RAILING OVER–ALL

1/4" = 1'–0"

RECEIVED
CK'D BY ______ OK'D BY
JUL 3 1 20
APPROVED
BY
DATE 8/6/09

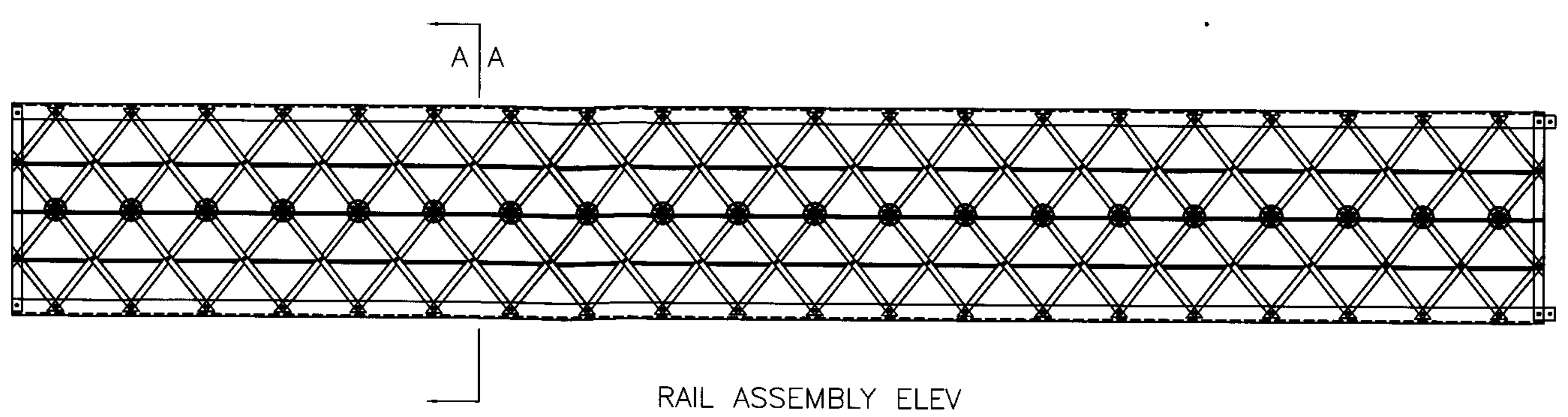
	Renaud Bros Construction Fort Bridgman Road Vernon VT 05354 (802) 257 - 7383
TITLE	Wallingford Bridge Rehab
LOCATION	Wallingford, VT
DRAWING TITLE	Drawings Railing System General Notes & Drawings
DRAWN BY JED	JOB CONTACT Erick Foster State of VT
CHECKED BY JED/AD	DATE 4 30 09
DRAWING NO	R–1
SHEET NO	1 OF 10

RAILNG SYSTEM:



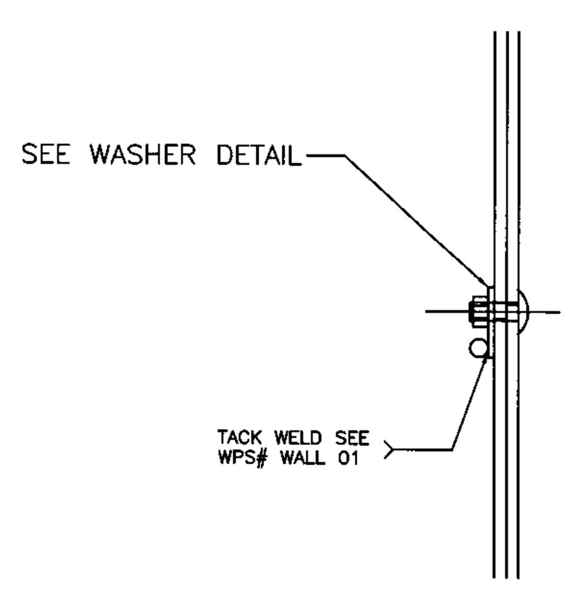
WASHER SELECTION

6"=1'-0" QTY 240



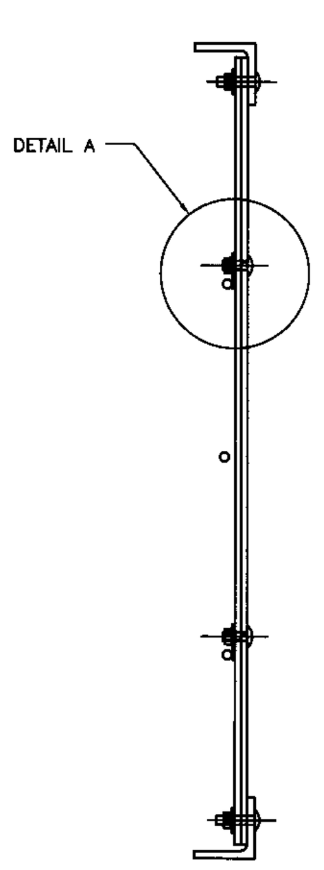
RAIL ASSEMBLY ELEV

1"=1'-0"



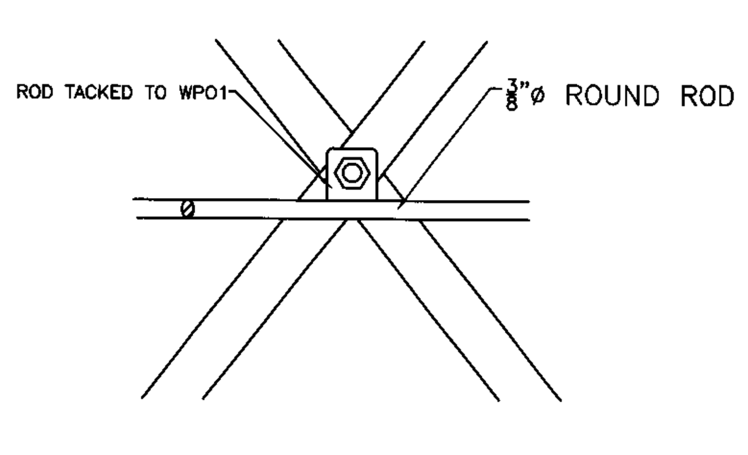
DETAIL A

6"=1'-0"



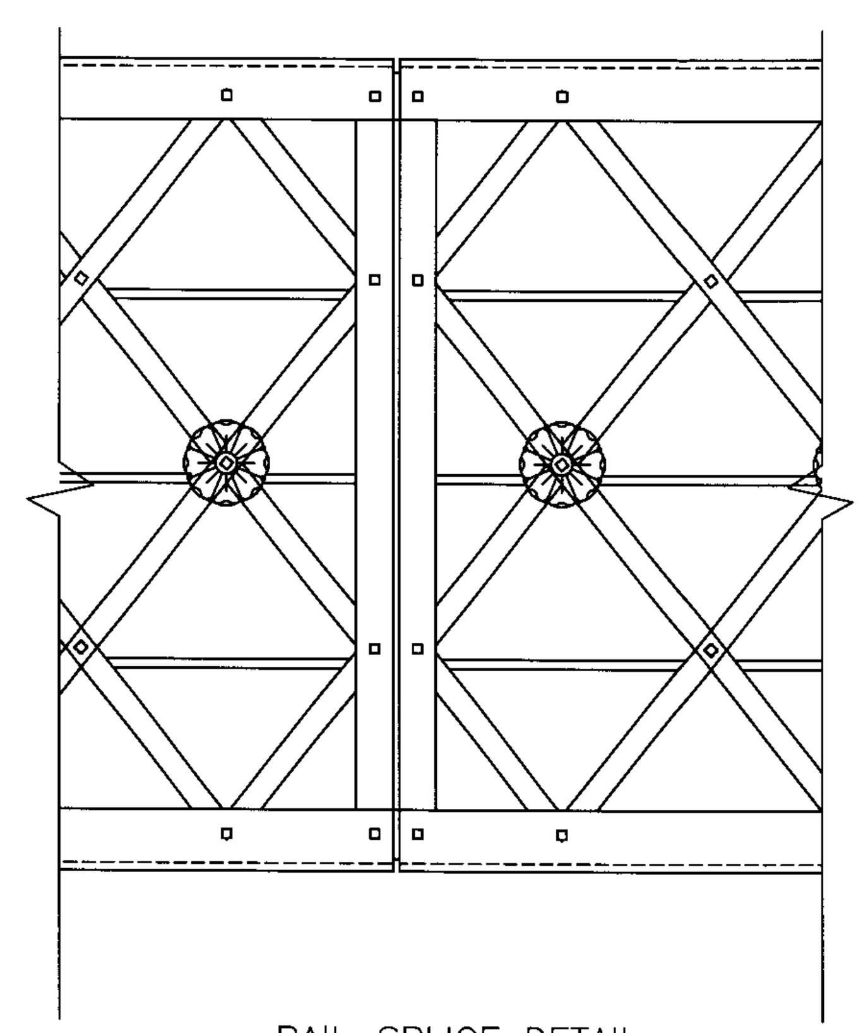
SECTION A-A

3"=1'-0"



WASHER DETAIL

6"=1'-0"



RAIL SPLICE DETAIL

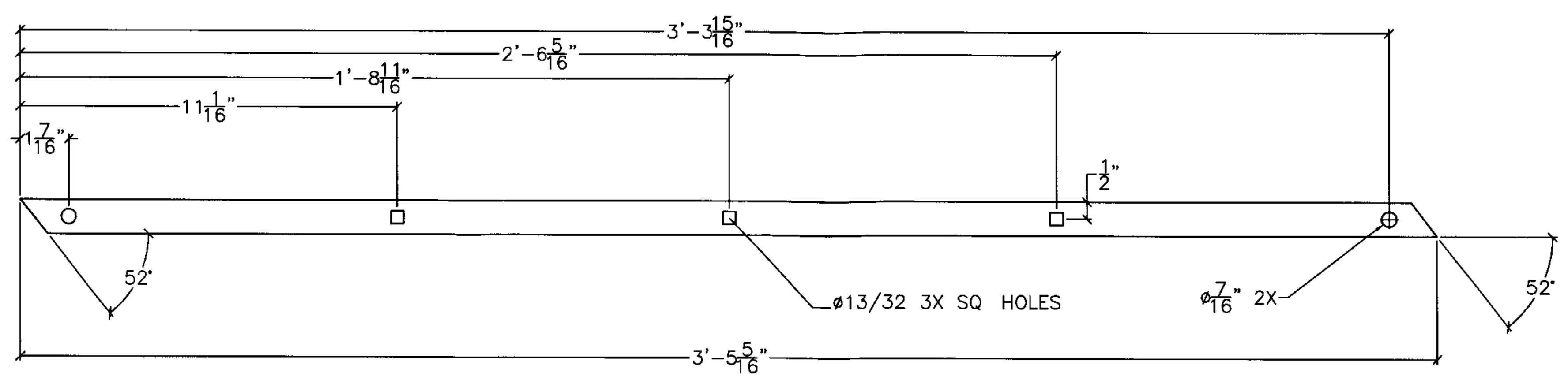
3"=1'-0"

RECEIVED
CK'D BY ________ OK'D BY ________
JUL 3 1 20__
R________ APPROVED ✓
BY [signature] DATE 8/6/09

Renaud Bros Construction
Fort Bridgman Road Vernon VT 05354
(802) 257-7383

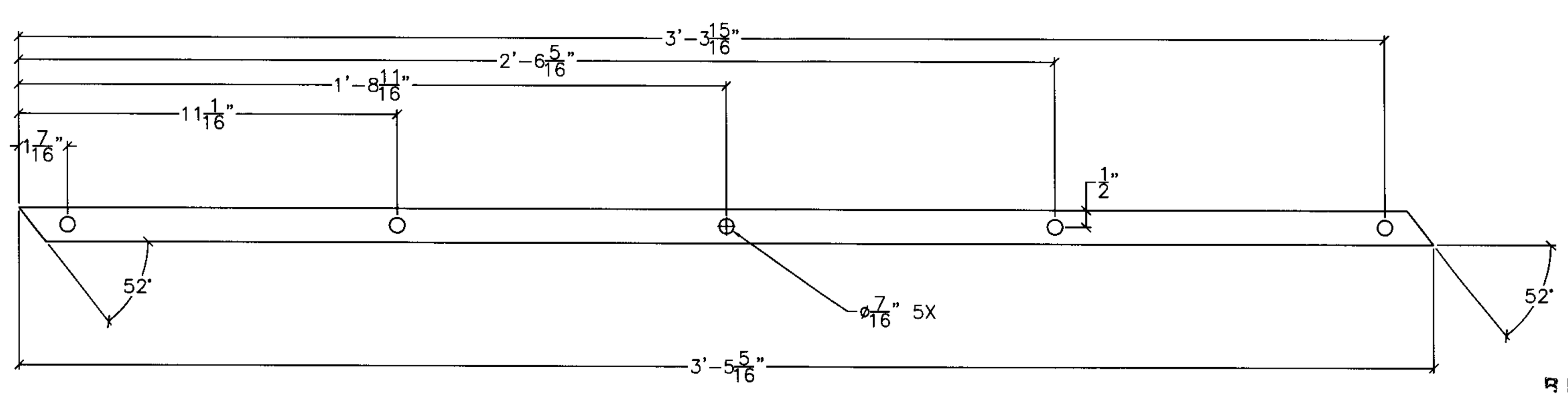
TITLE	Wallingford Bridge Rehab
LOCATION	Wallingford, VT
DRAWING TITLE	Drawings Railing System Drawings
DRAWN BY JED	JOB CONTACT Erick Foster State of VT
CHECKED BY JED/AD	DATE 4 30 09
DRAWING NO	R-1
SHEET NO.	2 OF 10

RAILNG SYSTEM:



HR01: PLATE-1/4"

6" = 1'-0" QTY. 216



HR02: PLATE-1/4"

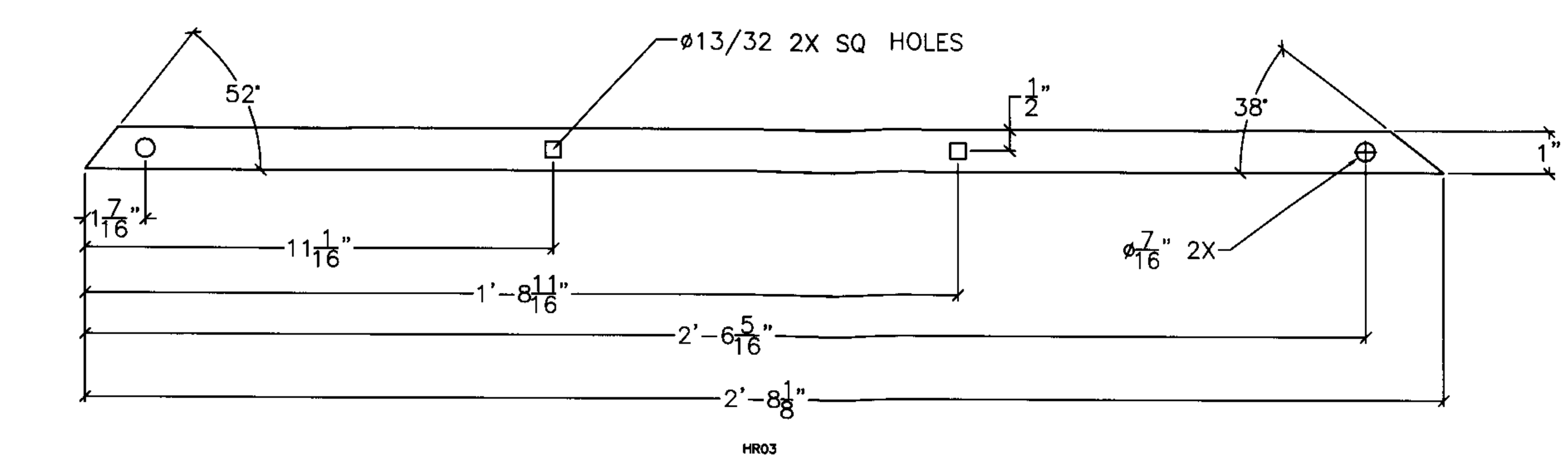
6" = 1'-0" QTY. 216

RECEIVED
CK'D BY ________ OK'D BY ________
JUL 31 20..
R... ___ APPROVED ✓
BY Wy R. 8/ DATE 8/6/09

Renaud Bros Construction
Fort Bridgman Road Vernon VT 05354
(802) 257 - 7383

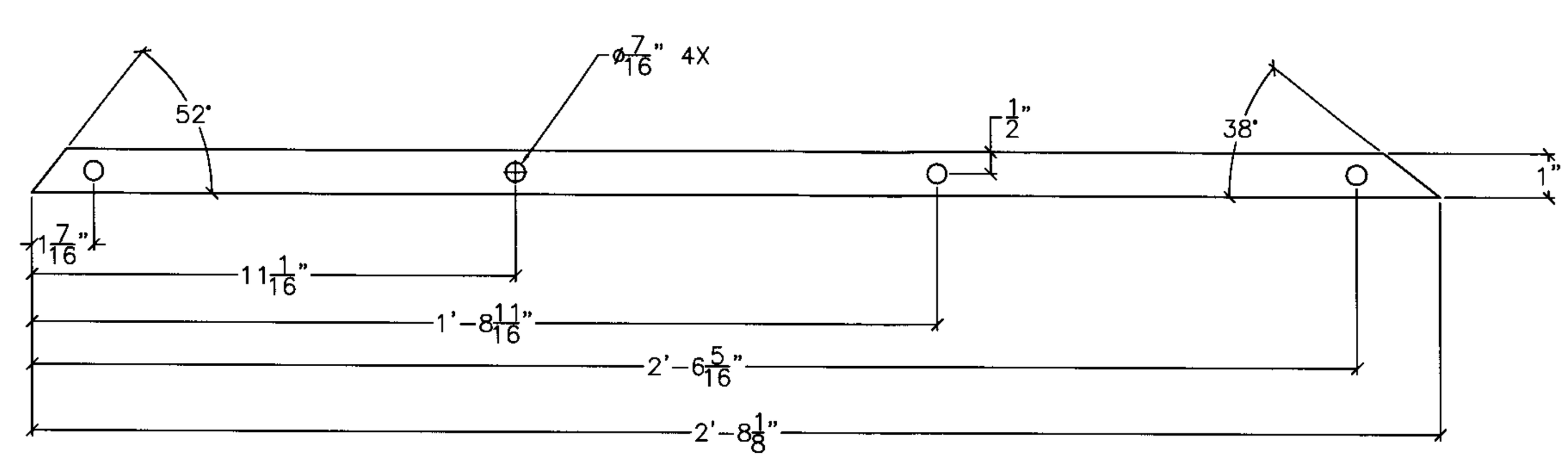
TITLE	Wallingford Bridge Rehab
LOCATION	Wallingford, VT
DRAWING TITLE	Drawings Railing System Drawings
DRAWN BY	JED
JOB CONTACT	Erick Foster State of VT
CHECKED BY	JED/AD
DATE	4 30 09
DRAWING NO.	R-1
SHEET NO.	3 OF 10

RAILNG SYSTEM:



HR03: PLATE–1/4"

6" = 1'–0" QTY. 24



HR04: PLATE–1/4"

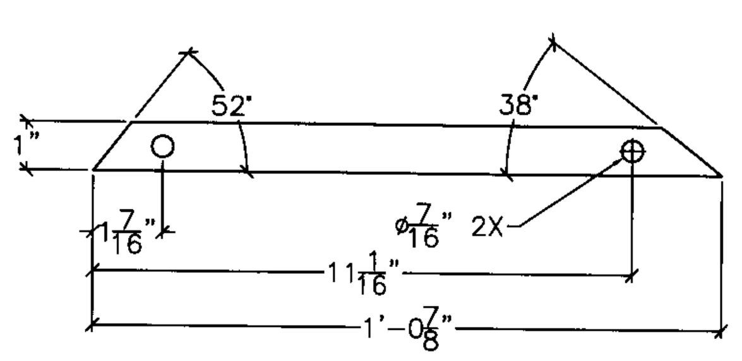
6" = 1'–0" QTY. 24

RECEIVED
CK'D BY ______ OK'D BY ______
JUL 3 1 2[illegible]
APPROVED
BY wy B. S/ DATE 8/6/09

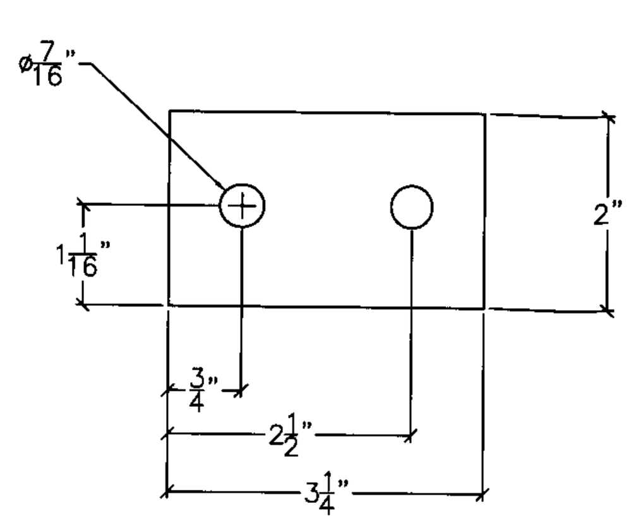
Renaud Bros. Construction
(802) 257-7383

TITLE	Wallingford Bridge Rehab
LOCATION	Wallingford, VT
DRAWING TITLE	Drawings Railing System Drawings
DRAWN BY JED	JOB CONTACT Erick Foster State of VT
CHECKED BY JED/AD	DATE 4 30 09
DRAWING NO	R–1
SHEET NO	4 OF 10

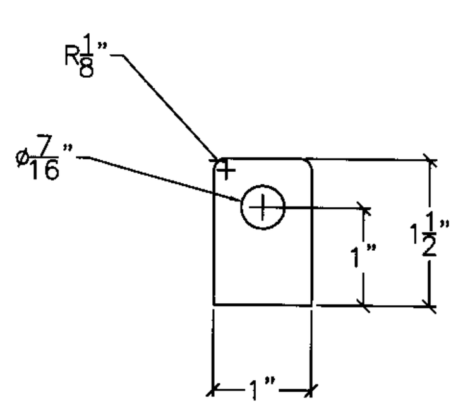
RAILNG SYSTEM:



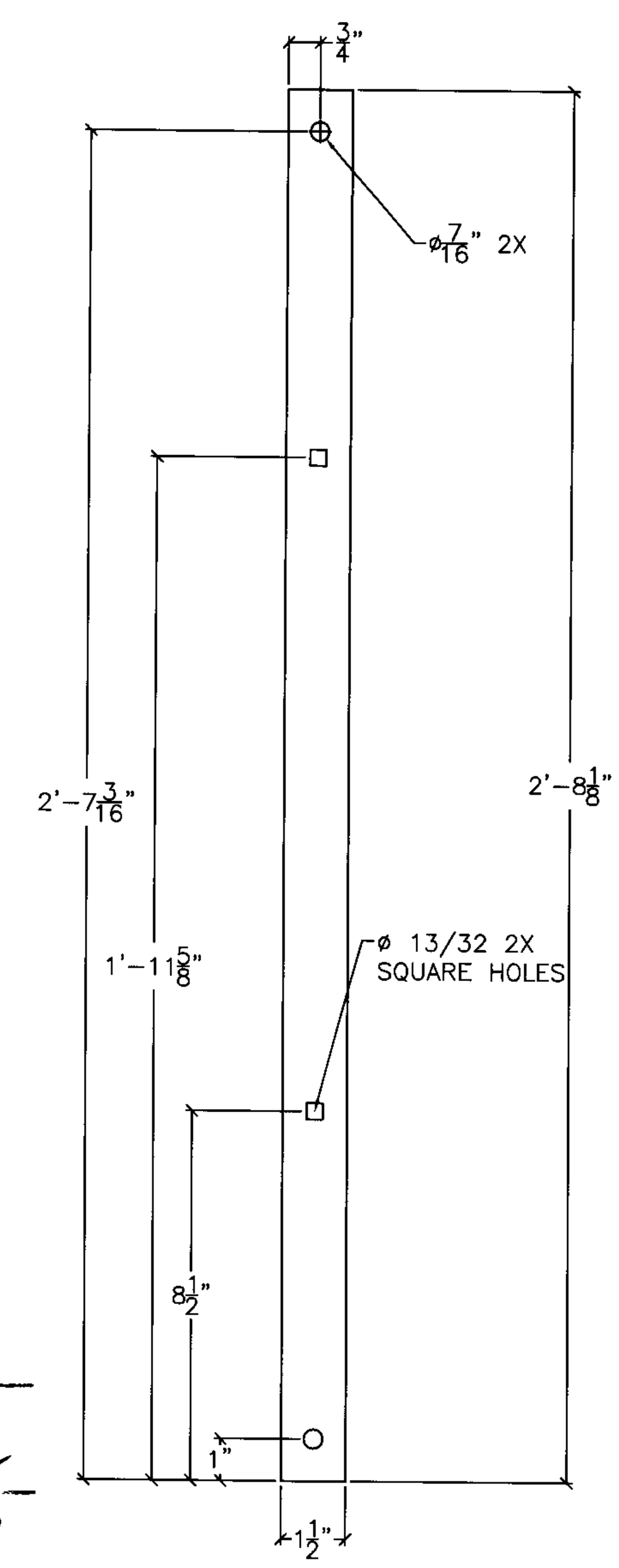
HR05: PLATE–1/4"
6" = 1'–0" QTY. 48



HR08: PLATE–1/4"
1'–0" = 1'–0" QTY. 12



W01: PLATE–1/4"
1'–0" = 1'–0" QTY. 775



RECEIVED
CK'D BY ____ OK'D BY ____
JUL 3 1 2009
APPROVED ✓
BY W.B.S. DATE 8/6/09

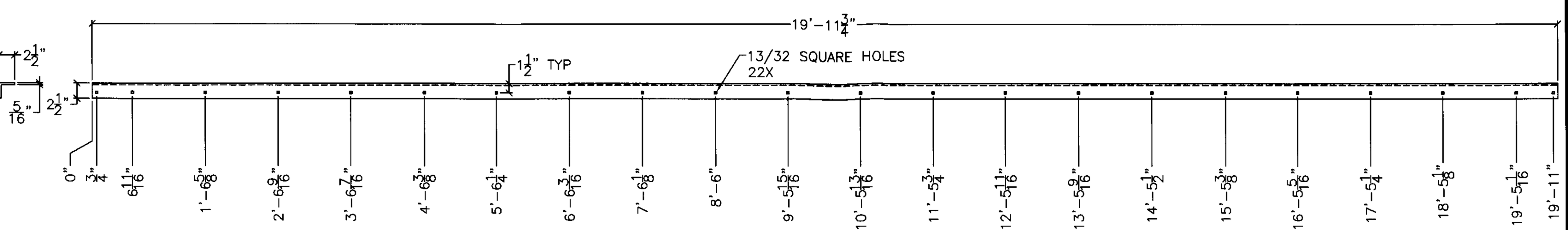
HR09: PLATE–1/4"
6" = 1'–0" QTY. 24

Renaud Bros. Construction
Fort Bridgman Road Vernon VT 05354
(802) 257-7383

TITLE Wallingford Bridge Rehab
LOCATION Wallingford, VT
DRAWING TITLE Drawings Railing System Drawings
DRAWN BY JED JOB CONTACT Erick Foster State of VT
CHECKED BY JED/AD DATE 4 30 09

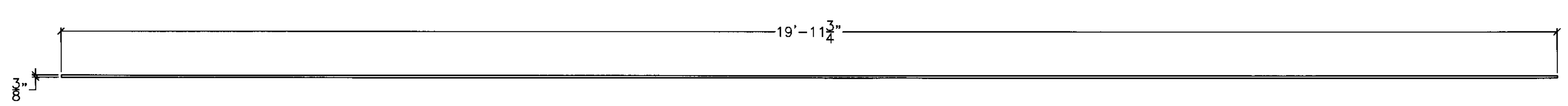
DRAWING NO R–1
SHEET NO 5 OF 10

RAILNG SYSTEM:



HR06, HR07: -ANGLE

1-1/2" = 1'-0" QTY. 24



HR10: -3/8 ROUND STOCK

1-1/2" = 1'-0" QTY. 36

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CK'D BY ____ OK'D BY ____
JUL 3 1 2...
APPROVED ✓
BY Wy B. SJ DATE 8/6/09

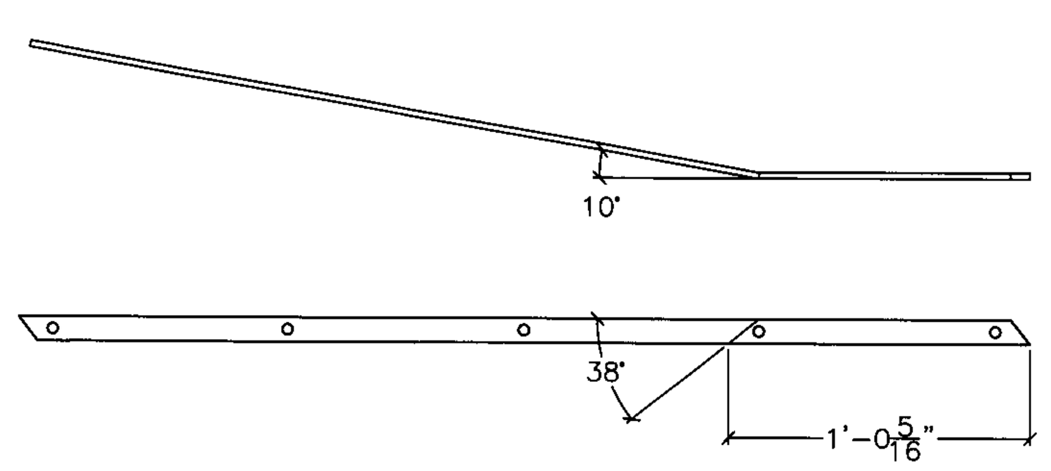
Renaud Bros Construction
Fort Bridgman Road Vernon VT 05354
(802) 257-7383

TITLE Wallingford Bridge Rehab
LOCATION Wallingford, VT
DRAWING TITLE Drawings Railing System Drawings
DRAWN BY JED | JOB CONTACT Erick Foster State of VT
CHECKED BY JED/AD | DATE 4 30 09

DRAWING NO. R-1

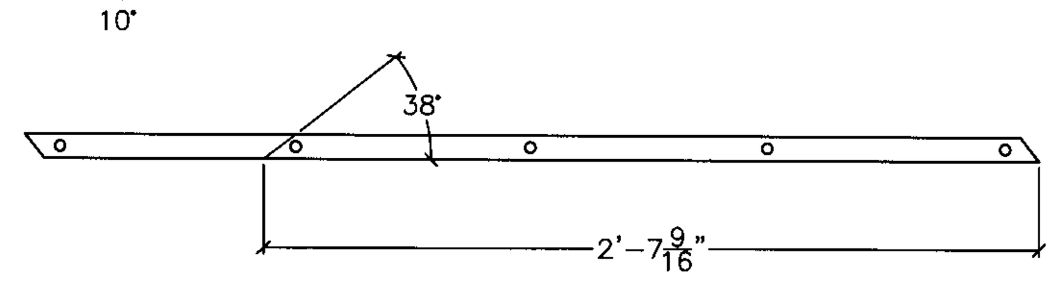
SHEET NO 6 OF 10

RAILNG SYSTEM: FLARED END LEFT



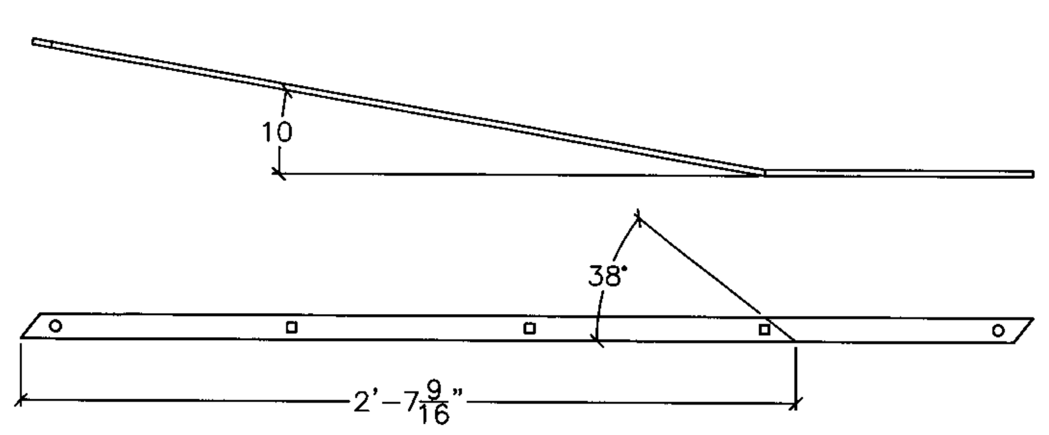
HR021: LATTICE (USE HR02)

3" = 1'-0" QTY 2



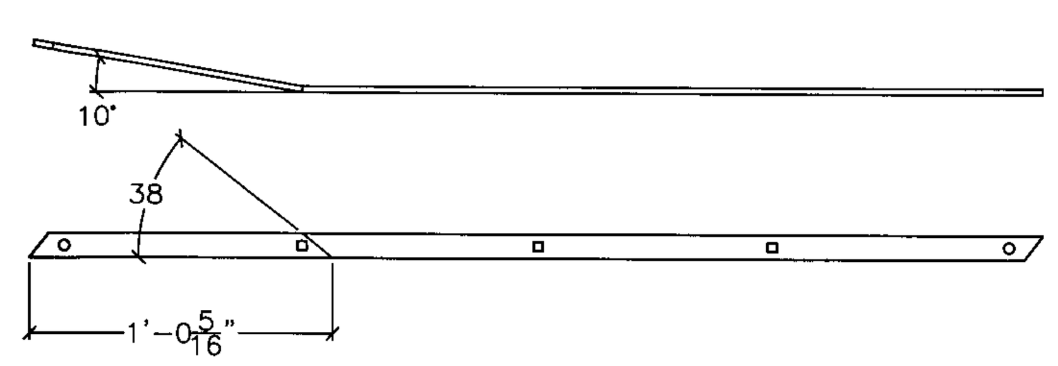
HR022; LATTICE (USE HR02)

3" = 1'-0" QTY 2



HR011: -LATTICE(USE HR01)

3" = 1'-0" QTY 2



HR012 -LATTICE (USE HR01)

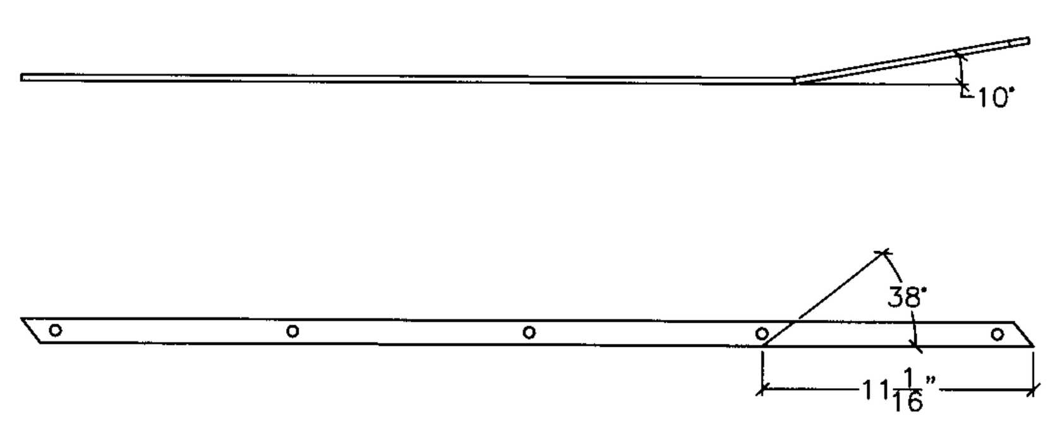
3" = 1'-0" QTY 2

RECEIVED
CK'D BY______ OK'D BY______
JUL 3 1 '09
APPROVED ✓
BY WY B SJ DATE 8/6/09

Renaud Bros Construction
Fort Bridgman Road Vernon, VT 05354
(802) 257-7383

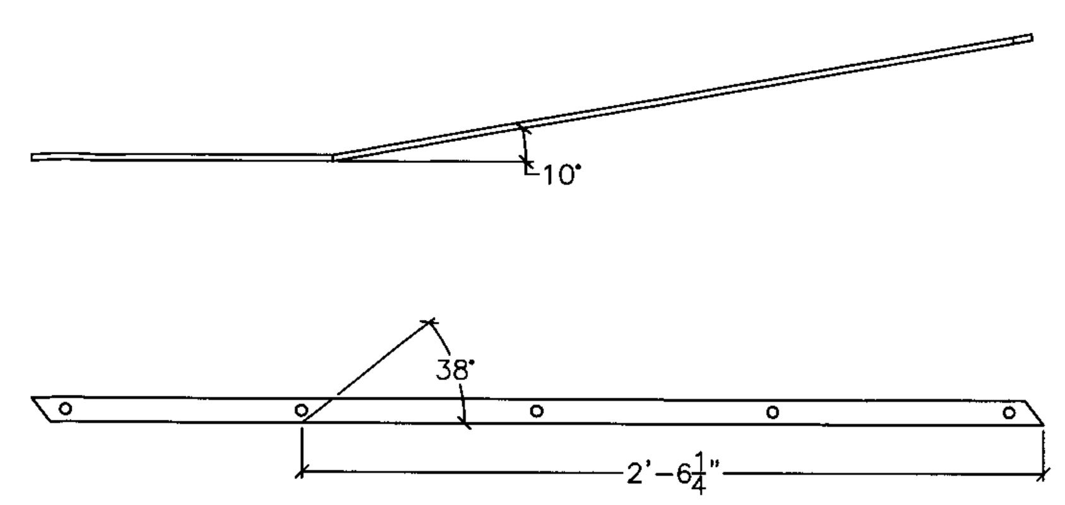
TITLE Wallingford Bridge Rehab
LOCATION Wallingford, VT
DRAWING TITLE Drawings Railing System Drawings
DRAWN BY JED JOB CONTACT Erick Foster State of VT
CHECKED BY JED/AD DATE 4 30 09
DRAWING NO R-1
SHEET NO. 7 OF 10

RAILNG SYSTEM: FLARED END RIGHT



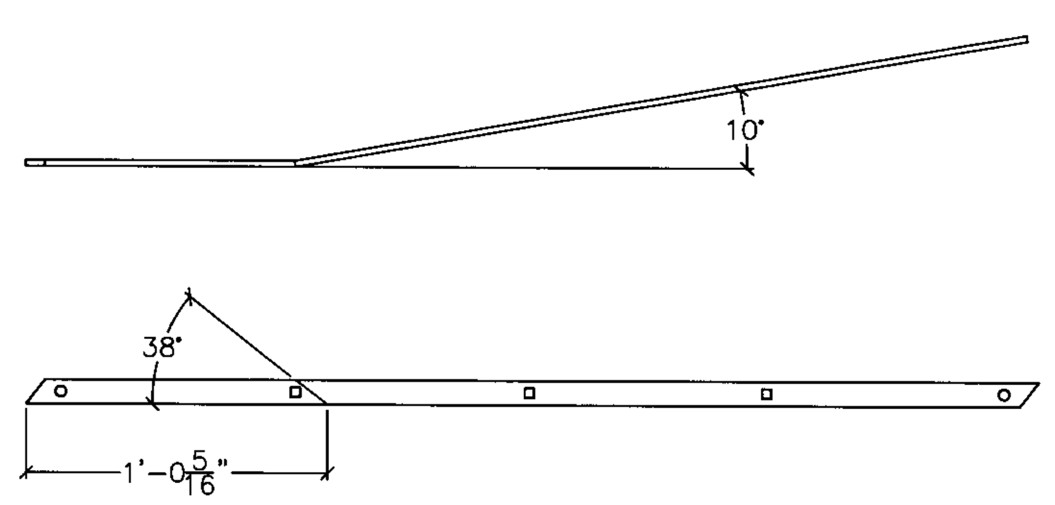
HR023; LATTICE (USE HR02)

3" = 1'-0" QTY 2



HR024; LATTICE (USE HR02)

3" = 1'-0" QTY 2



HR013; LATTICE (USE HR01)

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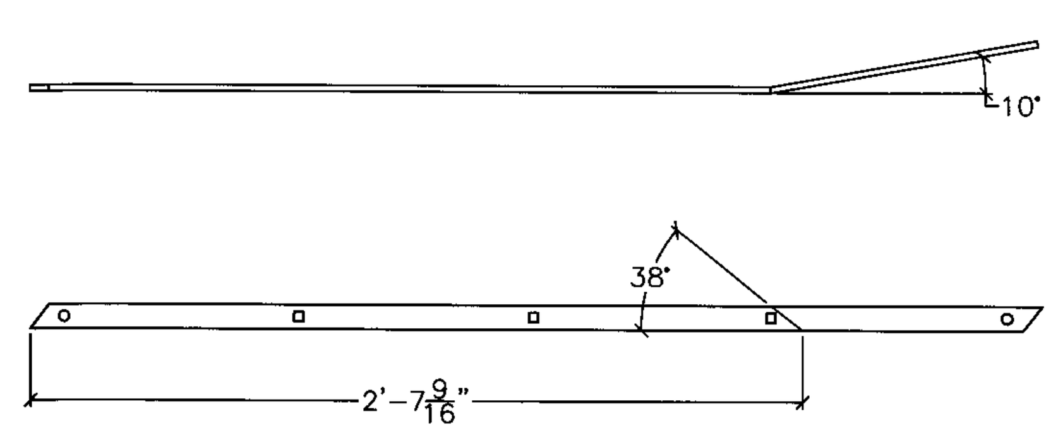


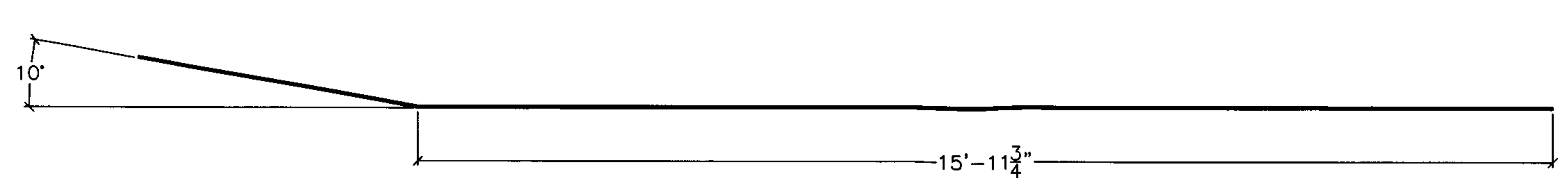
HR014; LATTICE (USE HR01)

3" = 1'-0" QTY 2

Renaud Bros Construction
Fort Bridgman Road Vernon VT 05354
(802) 257 - 7383

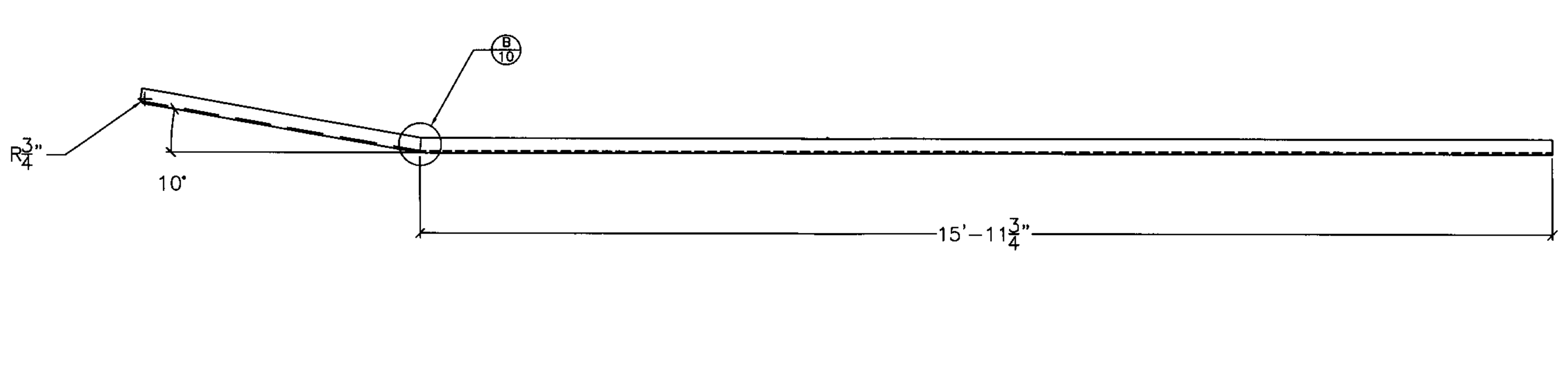
TITLE Wallingford Bridge Rehab
LOCATION Wallingford, VT
DRAWING TITLE Drawings Railing System Drawings
DRAWN BY JED | JOB CONTACT Erick Foster State of VT
CHECKED BY JED/AD | DATE 4 30 09
DRAWING NO R-1
SHEET NO 8 OF 10

RAILNG SYSTEM:



HR101; 3/8 ROUND STOCK (USE HR10)

1" = 1'-0" QTY 12



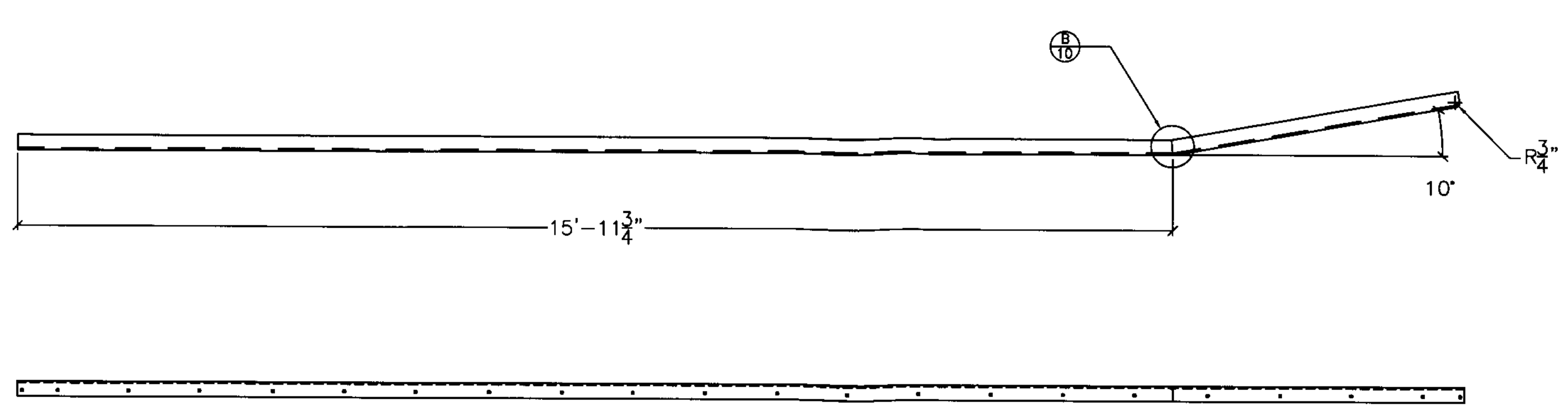
HR081,HR091; ANGLE (USE HR06)

1" = 1'-0" QTY 4

Renaud Bros Construction
Fort Bridgman Road Vernon VT 05354
(802) 257 - 7383

TITLE	Wallingford Bridge Rehab
LOCATION	Wallingford, VT
DRAWING TITLE	Drawings Railing System Drawings
DRAWN BY JED	JOB CONTACT Erick Foster State of VT
CHECKED BY JED/AD	DATE 4 30 09
DRAWING NO	R–1
SHEET NO.	9 OF 10

RAILNG SYSTEM:

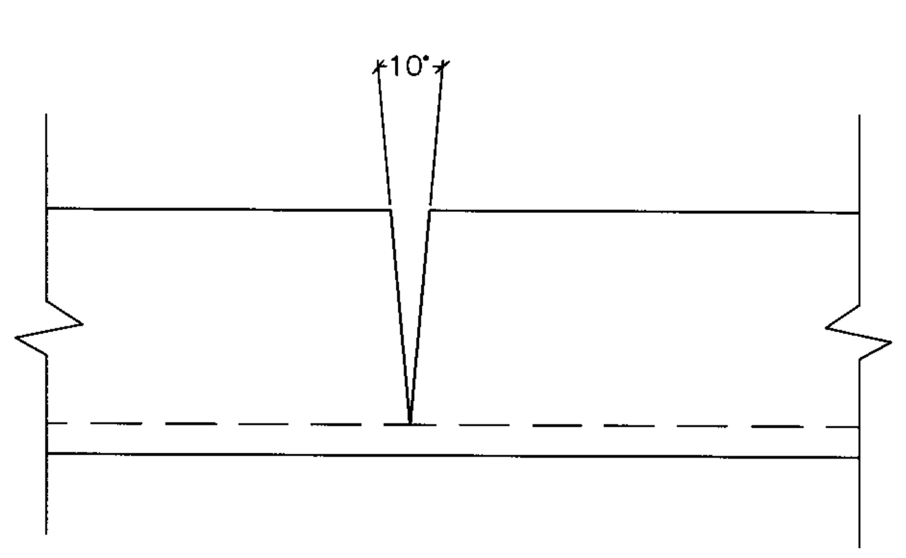


HR082, HR092: -ANGLE (USE HR07)

1" = 1'-0"   QTY 4

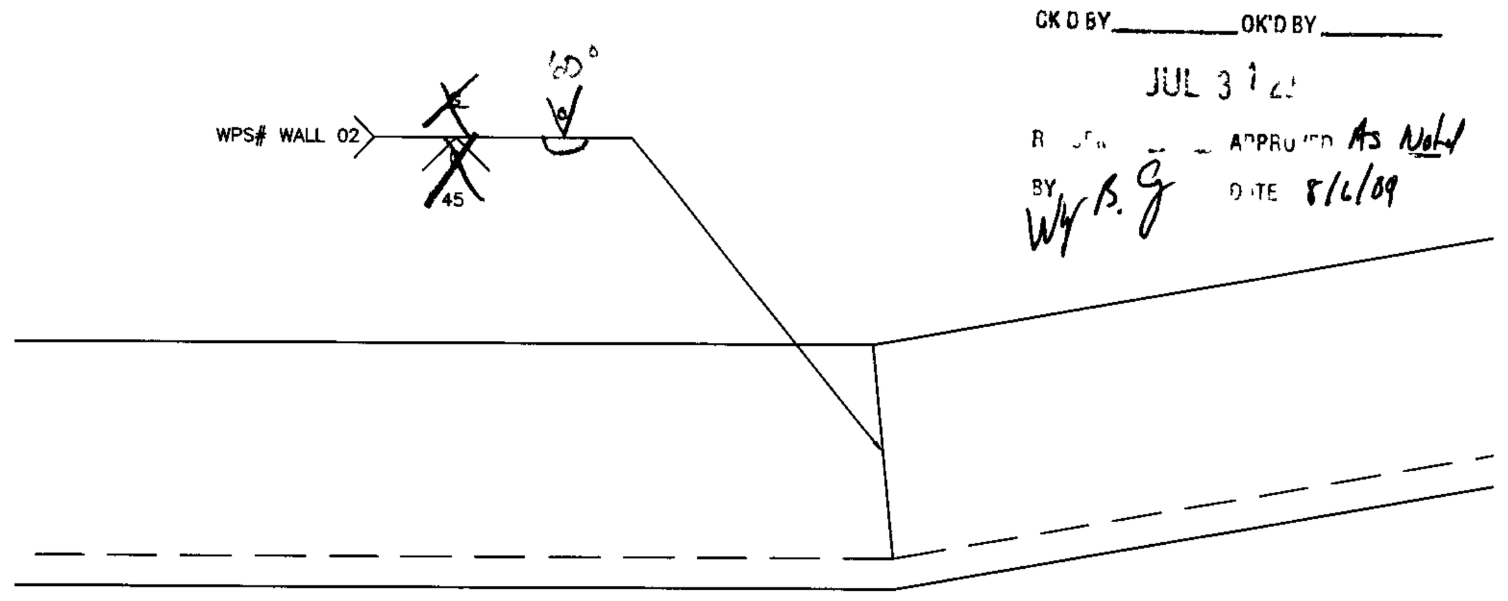
NOTES

*RELIEF CUT TO BE MADE IN ANGLE, THEN BENT AND WELDED
*BENDS TO BE PERFORMED COLD, ON A PRESS BRAKE



RELIEF CUT DETAIL

1'-0"=1'-0"



B/10 WELD DETAIL AT FLARE

1"=1'

RECEIVED

CK'D BY ________ CK'D BY ________

JUL 3 1

APPROVED As Noted

DATE 8/4/09

Renaud Bros Construction Fort Bridgman Road Vernon VT 05354 (802) 257 - 7383	
TITLE	Wallingford Bridge Rehab
LOCATION	Wallingford, VT
DRAWING TITLE	Drawings Railing System Drawings
DRAWN BY JED	JOB CONTACT Erick Foster State of VT
CHECKED BY JED/AD	DATE 4 30 09
DRAWING NO.	R-1
SHEET NO.	10 OF 10

VERMONT

State of Vermont
PDD/Structures Design Section
One National Life Drive
Montpelier, VT 05633-5001
www.aot.state.vt.us

Agency of Transportation

[phone] 802-828-2621
[fax] 802-828-3566
[ttd] 800-253-0191

June 9, 2009

Renaud Bros., Inc.
283 Fort Bridgeman Road #2
Vernon, VT 05354

Project Name: Wallingford STP WALK(14)

The following Structural Steel shop drawing details for the above project (General Contractor – Renaud Bros., Inc.) have been reviewed and are being returned herewith.

Sheets: a1-a7; p8-p17; B1,2 and B5 are "Approved".

Sheets: B3,4; HB1-2,M1-2; M3,4; and E1 are "Approved as Noted". Note the comments in red.

You must provide notice to our fabrication inspector, Jeff Clark, as to the date fabrication represented by these drawings will begin. That notice must be received and acknowledged at least seven days prior to that date, as per Specification 506.03. Jeff may be contacted by phone at (802)828-0044 or email at jeff.clark@state.vt.us. Any material fabricated prior to the notification date is subject to rejection without further cause.

Sincerely,

Wayne Symonds
Project Manager

Attachments

cc: [x] Resident Engineer – Eric Foster
[x] Shop Inspector – Jeff Clark
[x] Contractor – Renaud
[] Sub-Contractor
[x] Design Consultant – CHA
[x] Construction Divison – letter only
[x] Materials & Research Section (C&IA Unit) – letter only
[x] Files

→ See Jeff's files for shop B copy

VERMONT

RENAUD BROS., INC.

283 Fort Bridgeman Road #2, Vernon, VT 05354

phone (802) 257-7383
fax (802) 257-7308

May 20, 2009

Wayne Symonds, Structural Engineer
Vermont Agency of Transportation
1 National Life Drive, Drawer 33
Montpelier, VT 05633-5001

RE: Wallingford STP ST WALK (14)
Shop Drawings

Dear Wayne:

Enclosed for review please find seven (7) sets each of the following with regard to the above-referenced project:

A. Floor System with Bill of Materials (22x36 plans)
B. Part Details (8.5 x 11 sheets)

If you have any questions or require additional information, please do not hesitate to contact us.

Very truly yours,

RENAUD BROS., INC.

Michael J Renaud (CAR)

Michael J. Renaud, V.P.

MJR:car

Enclosures

June 3, 2009

Wayne Symonds, P.E.
Vermont Agency of Transportation
National Life Building, Drawer 33
Montpelier, VT 05633

RE: Vermont General Design Retainer Contract No. 284599; Wallingford STP ST WALK(14); CHA File: 16311

Dear Mr. Symonds:

CHA has reviewed the set of structural steel shop drawings transmitted May 27, 2009 and recommends the following:

Sheet No. B1, 2: 'Approve'

Sheet No. B3, 4: 'Approve as Noted': Stringer spacing in B3 elevation should show constant spacing of 1'-5".

Sheet No. B5: 'Approve'

Sheet No. HB1-2, M1-2: 'Approve': In regards to request for detailer verification in Section A-A, the hole will be counter drilled, not counter sunk.

Sheet No. M3, 4: 'Approve as Noted': The inboard angle will be replaced full length, as shown in the plans, however, the angle is not continuous and the size varies throughout the length as follows:

- L0-L2, L6-L8: L6x4x3/8
- L2-L4,L4-L6: L6x4x9/16 (a change to L6x4x1/2 was approved by CHA on 4/22/09)

Sheet No. E1: 'Approve as Noted': In regards to request for detailer verification:

- Detail A: See inboard angle sizes in Sheet No. M3, M4 response.
- Detail C: See inboard angle sizes in Sheet No. M3, M4 response.
- Section 3, Plate detailing: Proposed edge distance change from 3 ¼" to 4" is acceptable.
- Section 3, Hex head bolt: See response on Sheet No. HB1-2, M1-2.

Cut Sheets a1-a4, a7, p8-p9, p13, p16-p17: 'Approve'

Sincerely,

David M. D'Amato, P.E.
Project Engineer

X NO EXCEPTION TAKEN ☐ MAKE CORRECTIONS NOTED
☐ REJECTED ☐ REVISE AND RESUBMIT
☐ SUBMIT SPECIFIED ITEM

CHECKING IS ONLY FOR GENERAL CONFORMANCE WITH THE DESIGN CONCEPT OF THE PROJECT AND GENERAL COMPLIANCE WITH THE INFORMATION GIVEN IN THE CONTRACT DOCUMENTS. ANY ACTION SHOWN IS SUBJECT TO THE REQUIREMENTS OF THE PLANS AND SPECIFICATIONS. CONTRACTOR IS RESPONSIBLE FOR DIMENSIONS WHICH SHALL BE CONFIRMED AND CORRELATED AT THE JOB SITE; FABRICATION PROCESSES AND TECHNIQUES OF CONSTRUCTION; COORDINATION OF HIS WORK WITH THAT OF ALL OTHER TRADES AND THE SATISFACTORY PERFORMANCE OF HIS WORK.

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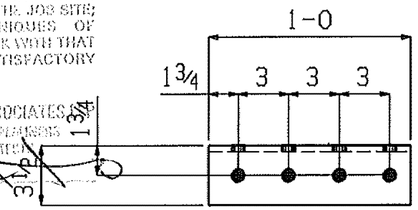
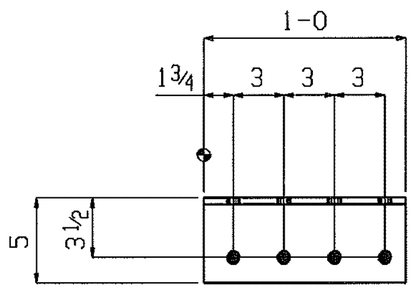
ARCHITECTS & ARCHITECTURAL ENGINEERS

6/3/09





18 L5x3½x⅜x1-0 a1

GRADE: M270-50

RECEIVED
CK'D BY_____ OK'D BY_____
MAY 26 2009
RESUBMIT_____ APPROVED_____
BY DATE

Renaud Bros. Inc.
283 Fort Bridgeman Rd. #2
Vernon, VT. 05354
Phone 1-802 257-7383

JOB: WALLINGFORD BRIDGE, WALLINGFORD, VT				PART
BOLTS: ¾" DIA. M164-I GALV	STL GR: M270-50 UNO	DRWN BY: EG	DATE: 5-11-09	SHT: a1
	HOLES: 13/16 UNO	CHK:	JOB NO:	

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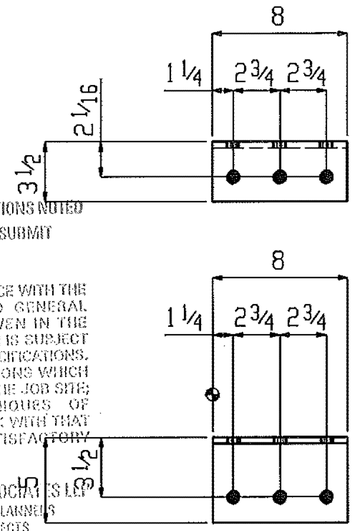

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6/5/09 BY

96 L5x3 1/2x3/8x0-8 a2

GRADE: M270-50

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JOB: WALLINGFORD BRIDGE WALLINGFORD, VT			PART	
BOLTS: 3/4" DIA. M164-I GALV	STL GR: M270-50 UNO HOLES: 13/16 UNO	DRWN BY: EG	DATE: 5-11-09	SHT: a2
		CHK:	JOB NO:	

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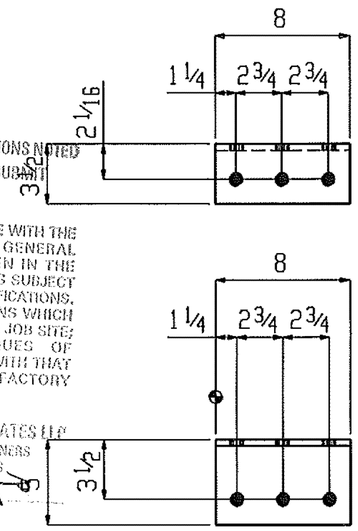
TRANSPORTATION SPECIALISTS

6/5/09



96 L5x3½x⅜x0-8 a3

GRADE: M270-50

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BOLTS: ¾" DIA. M164-I GALV	STL GR: M270-50 UNO	DRWN BY: EG	DATE: 5-11-09	SHT: a3
	HOLES: 13/16 UNO	CHK:	JOB NO:	

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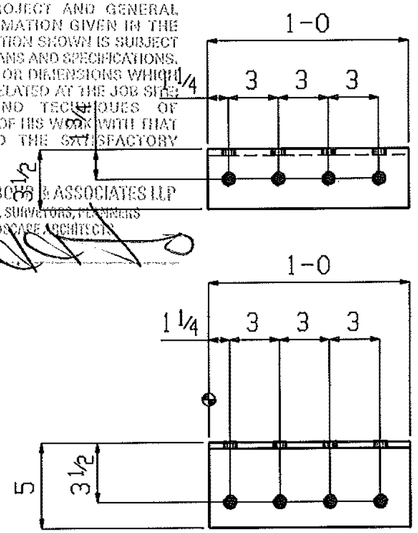
& LANDSCAPE ARCHITECTS

DATE 6/2/09 BY



18 L5x3½x⅜x1-0 a4

GRADE: M270-50

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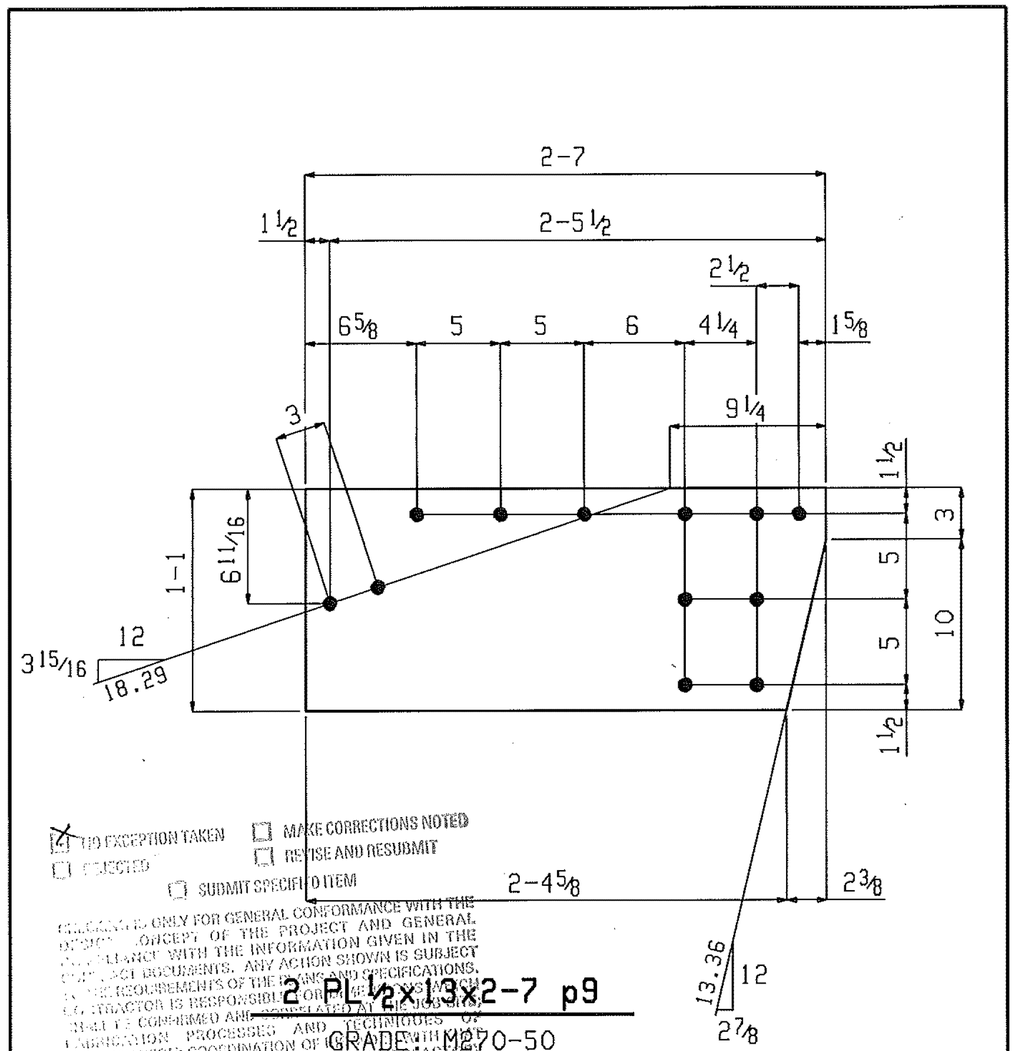

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		CHK:	JOB NO:	

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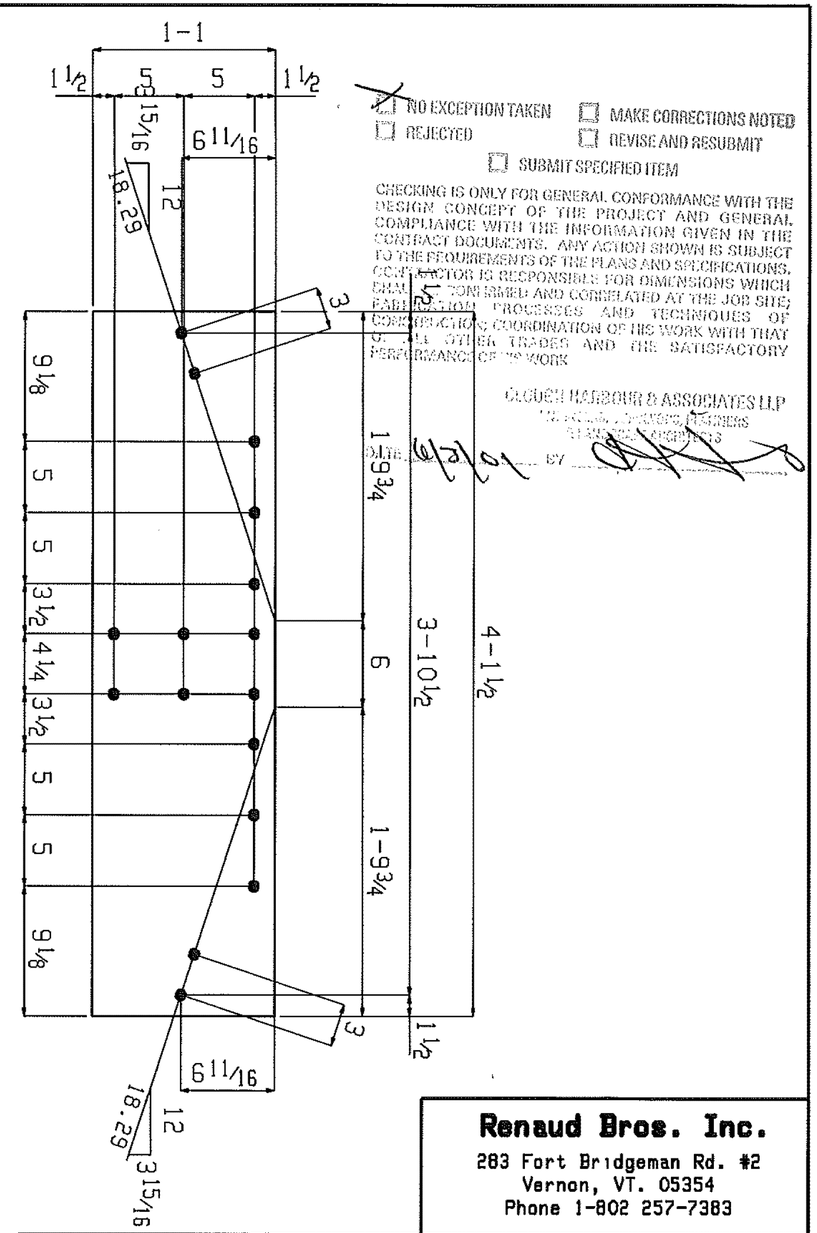

6 PL½x13x4-1½ p16

GRADE: M270-50

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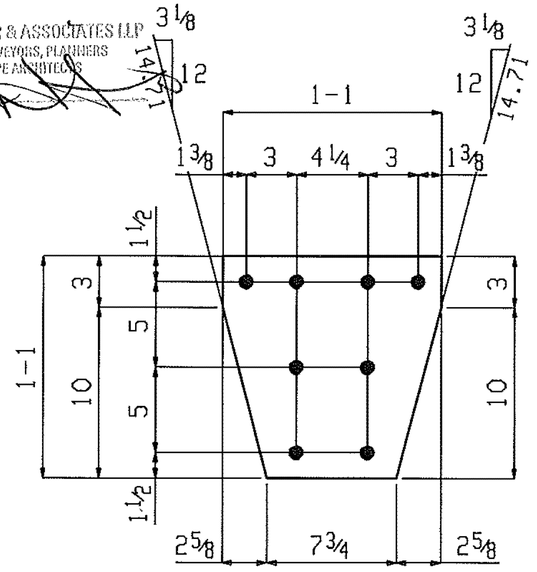

8 PL 1/2x13x1-1 p17

GRADE: M270-50

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