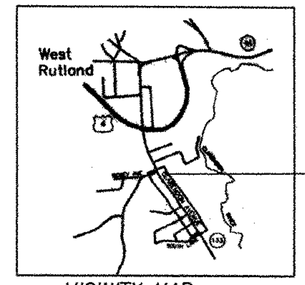
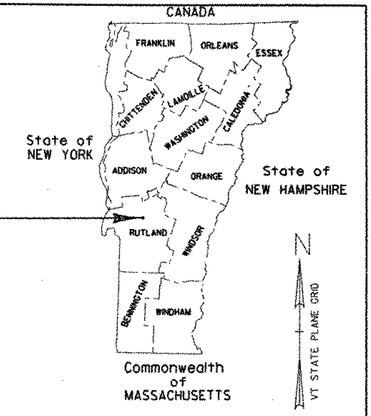
STATE OF VERMONT
AGENCY OF TRANSPORTATION

LIST OF BRIDGE SHEETS	
SHEET NUMBER	DESCRIPTION
BRI00	PLAN AND ELEVATION
BRI01	PRELIMINARY INFORMATION
BRI02	QUANTITIES AND BAR LIST
BRI03	GENERAL NOTES
BRI04	DECK PLAN AND DETAILS
BRI05	FRAMING PLAN AND DETAILS
BRI06	STEEL REPAIR DETAILS
BRI07	ABUTMENT 1 PLAN AND ELEVATION
BRI08	ABUTMENT 2 PLAN AND ELEVATION
BRI09	RAILING DETAILS
BRI10	DRAINAGE AND TEMPORARY EROSION CONTROL

VAOT STANDARDS

T-1	TEMPORARY EROSION CONTROL PLANS	06-01-94
T-2	TEMPORARY EROSION CONTROL PLANS	06-01-94
E-100	CONSTRUCTION APPROACH SIGNS	01-06-97
E-100A	SIDE ROAD CONSTRUCTION APPROACH SIGNS	01-06-97
E-101	CONSTRUCTION SIGN DETAILS	03-10-97
E-102	CONSTRUCTION SIGN DETAILS	08-08-95
E-102A	CONSTRUCTION SIGN DETAILS	08-08-95
E-103	MAINLINE TRAFFIC CONTROL DIVIDED HIGHWAY ONE LANE CLOSED	09-23-98
E-106	TRAFFIC CONTROL MISCELLANEOUS DETAILS	08-08-95
E-107	DELINEATION, BARRICADES AND DETOURS FOR CONSTRUCTION AREAS	08-08-95
E-107A	BREAKAWAY BARRICADE DETAILS	08-08-95
E-108	CONSTRUCTRION ZONE LONGITUDINAL DROP OFFS	08-08-95
E-110	MAJOR MAINTENANCE OPERATION LANE CLOSURE	08-18-95
E-120	STANDARD SIGN PLACEMENT EXPRESSWAY AND FREEWAY	08-08-95
E-121	STANDARD SIGN PLACEMENT CONVENTIONAL ROAD	08-08-95
E-140	REGULATORY SIGN DETAILS	08-30-96
E-160	FLANGED CHANNEL STEEL SIGN POST	05-20-99





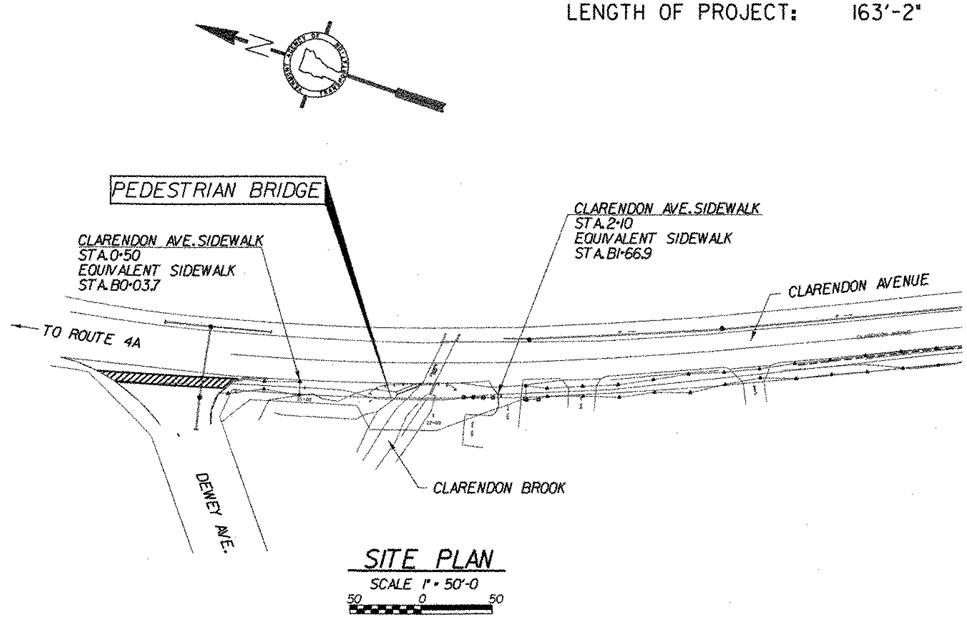
PROPOSED IMPROVEMENT
TOWN OF WEST RUTLAND
COUNTY OF RUTLAND
ADAPTIVE REUSE OF HISTORIC TRUSS BRIDGE
ALONG SIDE CLARENDON AVENUE OVER CLARENDON BROOK
PROJECT ST WALK (11)

PROJECT LOCATION: CLARENDON AVENUE
PEDESTRIAN BRIDGE OVER
CLARENDON BROOK

PROJECT DESCRIPTION: REHABILITATE AND ASSEMBLE HISTORIC TRUSS ALONG WEST SIDE OF CLARENDON AVENUE OVER CLARENDON BROOK.

LENGTH OF STRUCTURE: PEDESTRIAN BRIDGE 60'-4"

LENGTH OF PROJECT: 163'-2"



SITE PLAN
SCALE 1" = 50'-0
50 0 50

RECORD PLANS	
CONTRACTOR:	AUSTIN CONST. - CONCORD, VT
RESIDENT ENGINEER:	TONY COARSE
CONSTRUCTION BEGAN:	APRIL 20, 2003
CONSTRUCTION COMPLETE:	MAY 11, 2004
RECORD PLANS BY:	T. COARSE & N. GARBACIK

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

BY Anthony J. Coarse RESIDENT ENGINEER

DATE JAN 5, 2005

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.

THESE PLANS ARE SUBJECT TO SUCH ENGINEERING CHANGES AS MAY BE REQUIRED BY THE FEDERAL HIGHWAY ADMINISTRATION OR THE CHIEF ENGINEER.

CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2001, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON JANUARY 4, 2001 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.

STATE OF VERMONT
MARK W. OLSEN
No. 5822
REGISTERED
PROFESSIONAL ENGINEER

BY 11-1-02

CONVENTIONAL SIGNS

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
TOP OF CUT
TOE OF SLOPE

DATUM	
VERTICAL	ASSUMED
HORIZONTAL	N/A

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CHA CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
11 WINNERS CIRCLE ALBANY, NEW YORK, 12205

APPROVED _____ DIRECTOR OF PROJECT DEVELOPMENT DATE 11/20/02

PROJECT WEST RUTLAND ST WALK (11)

SHEET 1 OF 12 SHEETS

N 86° 09' W

℄ OF EXISTING ROADWAY

PROPOSED MANUFACTURED TERMINAL SECTION. ITEM 621.505

BEGIN ITEM 621.505 STA. EP0+76.5

END ITEM 621.505 STA. EP0+26.6

REMOVE AND DISPOSE GUARDRAIL UP TO STA. EP0+76.5, ITEM 621.80

CLARENDON AVE

EXISTING ROADWAY

14'-4¾"±

CLARENDON AVE. SIDEWALK STA. 2+10
EQUIVALENT SIDEWALK
STA. BI+66.9 ±
ELEV. 99.36± (MEET EXISTING)

PROPOSED SIDEWALK BY OTHERS

CLARENDON AVE. SIDEWALK STA. 0+50
EQUIVALENT SIDEWALK
STA. B0+03.70
ELEV. 105.61 (MEET EXISTING)
N=5107.1834
E=4965.5370

LIMITS OF STONE FILL TYPE III - ITEM 613.12

EDGE OF PAVEMENT (REFERENCE LINE)

CORNER OF INSIDE HEADWALL = REF. LINE STA. EP1+00

REMOVE & RELOCATE FENCE TO WEST OF SIDEWALK, ITEM 620.50

EXISTING EDGE OF PAVEMENT

EP0+20 EP0+40 EP0+60 EP0+80 EP1+00

5'-0" PW

R=235'±

5'-0" B0+20

PRC STA. B0+18.27
ELEV. 105.06

R=41'0"±

27'-3"

LIMITS OF STONE FILL TYPE III - ITEM 613.12

6'-0"

R=144'±

PRC STA. BI+42.16
ELEV. 100.28±

BI+60

5'-0"

BI+40

R=77.5'±

8'-0"

B0+60

11'-0" OUT TO OUT TRUSS

REMOVAL AND DISPOSAL OF GUIDE POSTS ITEM 621.81

AZ. 161°-29'-16.80"

B0+80

BI+00

BI+20

MEET EXISTING PAVED DRIVEWAY

BEGIN BRIDGE
STA. B0+45.00 = EP0+42.58
ELEV. 103.96
OFFSET 17'-0" FROM REFERENCE LINE
N=5066.6541
E=4965.2574

5'-0"

CLEARING & GRUBBING ITEM 201.10 (TYP.)

FLOW

CLARENDON BROOK

13'-0"

TOE OF SLOPE

END BRIDGE
STA. BI+06.33 = EP1+02.87±
ELEV. 101.64
OFFSET 16'-5"± FROM REFERENCE LINE
N=5008.4984
E=4984.7434

EXISTING BITUMINOUS PAVEMENT.

℄ BRGS. ABUT. 1
STA. B0+46.67
ELEV. 103.90

PROPOSED WATERLINE (BY OTHERS)

℄ BRGS. ABUT. 2
STA. BI+04.67
ELEV. 101.70

CONTRACTOR WILL INSTALL BRONZE PLAQUE AT END OF TRUSS. PAID FOR UNDER ITEM 506.75. SEE NOTE 6, DWG. BRI06

TOE OF SLOPE

R.O.W. LINE

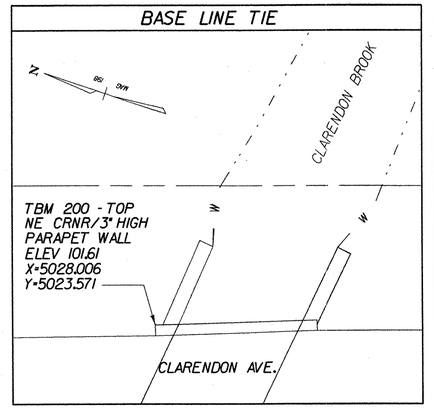
PLAN

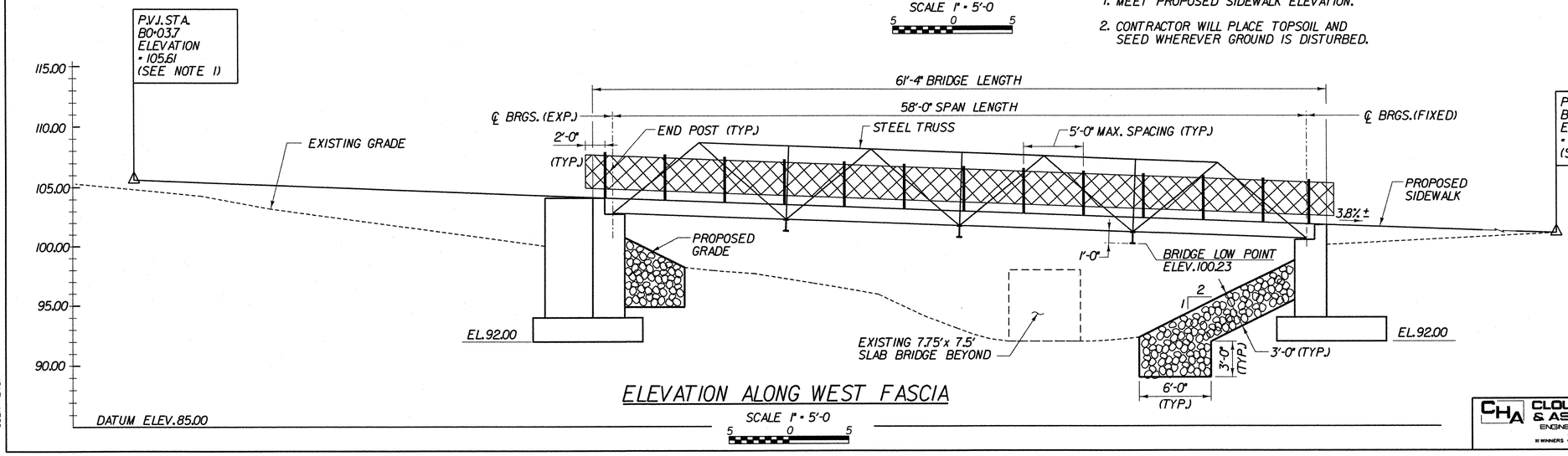
SCALE 1" = 5'-0

5 0 5

NOTES:
1. MEET PROPOSED SIDEWALK ELEVATION.
2. CONTRACTOR WILL PLACE TOPSOIL AND SEED WHEREVER GROUND IS DISTURBED.

BASE LINE TIE





ELEVATION ALONG WEST FASCIA

SCALE 1" = 5'-0

5 0 5

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of WEST RUTLAND	Bridge No. XX
Highway No. CLARENDON AVE.	Log Sta. / Surv. Sta.
PEDESTRIAN BRIDGE OVER CLARENDON BROOK	
PLAN AND ELEVATION	
Designed By L. HARDEN	Drawn by Wm WEATHERBY
Checked By M. OLSTAD Date 4/2002	Bridge Design Supervisor M. OLSTAD Date 4/2002
PROJECT WEST RUTLAND	PROJECT NO. ST WALK (11)
I.G.C. Info.	
Bridge Sheet No. BRI00	Sheet 2 OF 12

CHA CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
18 WINNERS CIRCLE ALBANY, NEW YORK, 12205

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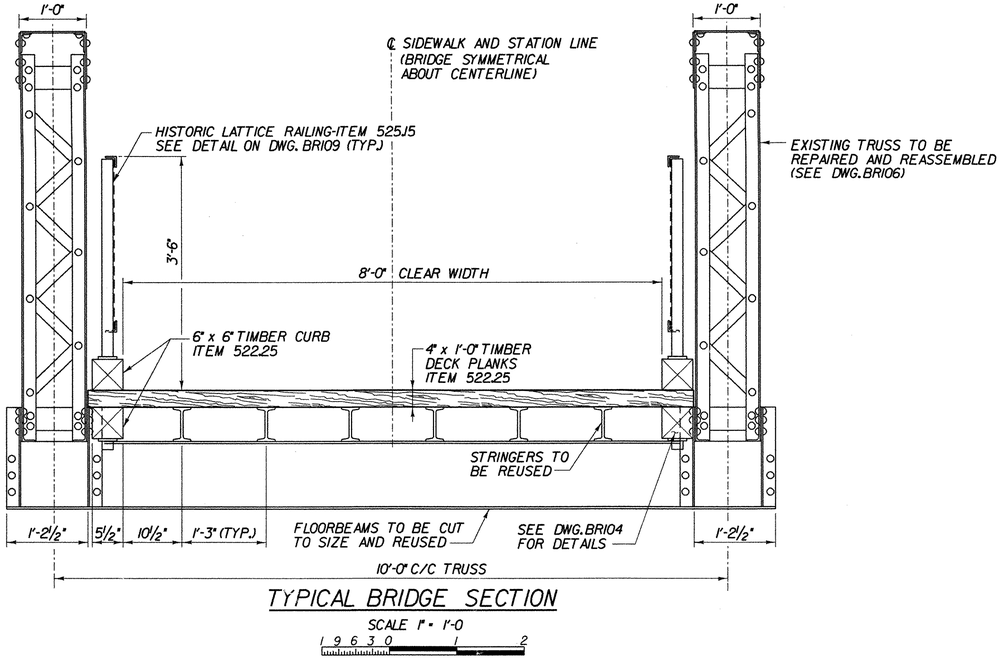
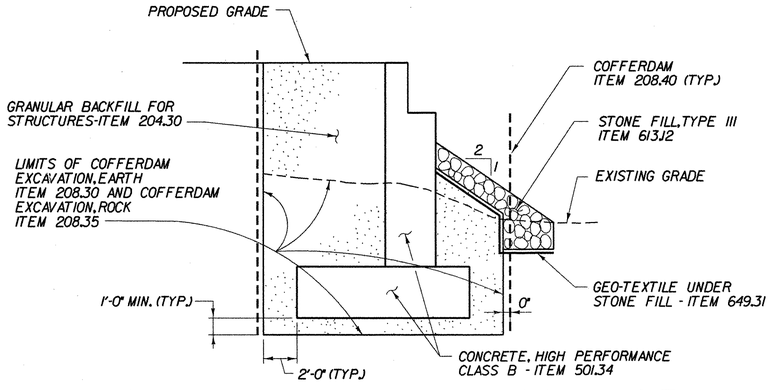


TYPICAL BRIDGE SECTION

SCALE 1" = 1'-0

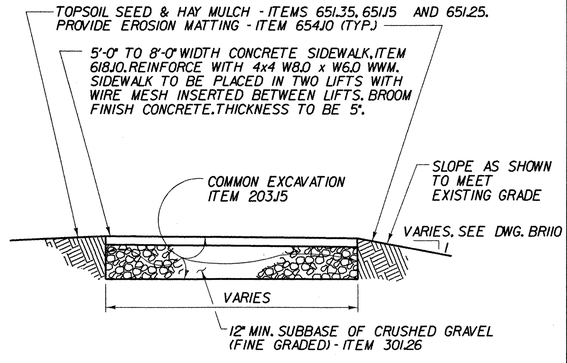
1 9 6 3 0 1 2



TYPICAL ABUTMENT EARTHWORK SECTION - IN CUT

SCALE 1/4" = 1'-0

1 0 2 4 6



TYPICAL SIDEWALK DETAIL

(NOT TO SCALE)

FINAL HYDRAULICS REPORT

HYDROLOGIC DATA

DRAINAGE AREA= SEE NOTE
CHARACTER OF TERRAIN:
CHARACTER & TYPE OF STREAM:
NATURE OF STREAMBED:

Q2.33= Q50=
Q10= Q100=
Q25= Q500=

DATE OF FLOOD OF RECORD:
WATER SURFACE ELEV.: ESTIMATED DISCHARGE:
NATURAL STREAM VELOCITY @ FLOOD OF RECORD
ICE CONDITIONS: DEBRIS:
DOES THE STREAM REACH MAXIMUM HIGHWATER ELEVATION RAPIDLY?
IS ORDINARY RISE RAPID?
IS STAGE AFFECTED BY UPSTREAM OR DOWNSTREAM CONDITIONS?
IF YES, DESCRIBE.

WATERSHED STORAGE HEADWATERS LINIFORM THROUGHOUT WATERSHED
IMMEDIATELY ABOVE SITE

EXISTING STRUCTURE

STRUCTURE TYPE: N/A 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 ELEV. @ Q2.33= VELOCITY=
Q10= " =
Q25= " =
Q50= " =
Q100= " =

LONG TERM STREAM BED CHANGES:

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

UPSTREAM STRUCTURE *1: TOWN: DISTANCE:
HIGHWAY NO.: STRUCTURE NO.:
STRUCTURE TYPE:
CLEAR SPAN: CLEAR HEIGHT:
YEAR BUILT: FULL WATERWAY:

UPSTREAM STRUCTURE *2: TOWN: DISTANCE:
HIGHWAY NO.: STRUCTURE NO.:
STRUCTURE TYPE:
CLEAR SPAN: CLEAR HEIGHT:
YEAR BUILT: FULL WATERWAY:

DOWNSTREAM STRUCTURE: TOWN: WEST RUTLAND DISTANCE: 10 FEET
HIGHWAY NO.: STRUCTURE NO.:
STRUCTURE TYPE: FLAT SLAB
CLEAR SPAN: 7.75 FEET CLEAR HEIGHT: 7.5 FEET
YEAR BUILT: UNKNOWN FULL WATERWAY:

PROPOSED STRUCTURE

STRUCTURE TYPE: WARREN PONY TRUSS - ADAPTIVE REUSE OF HISTORIC TRUSS

VERTICAL CLEARANCE ABOVE STREAMBED: 7'-5"
WATERWAY OF FULL OPENING:

WATER SURFACE ELEV. @ Q2.33 = N/A VELOCITY = N/A
" Q10 = " =
" Q25 = " =
" Q50 = " =
" Q100 = " =

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

AVERAGE LOW ELEVATION OF SUPERSTRUCTURE:
VERTICAL CLEARANCE @ Q100 =

SCOUR:

REQUIRED CHANNEL PROTECTION:

PERMIT INFORMATION

AVERAGE DAILY FLOW:
ORDINARY LOW WATER: DEPTH:
ORDINARY HIGH WATER: 96.5 DEPTH: 4 FEET

ADDITIONAL COMMENTS

PROPOSED BRIDGE HAS A SIGNIFICANTLY LARGER HYDRAULIC OPENING THAN THE EXISTING SLAB BRIDGE THAT IS IMMEDIATELY DOWNSTREAM OF THIS BRIDGE. AND THEREFORE NO HYDRAULIC DATA WAS GATHERED.

CHA CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
3 WINNERS CIRCLE ALBANY, NEW YORK, 12205

DESIGN CRITERIA:
1. DESIGN LIVE LOAD AASHTO H-10 TRUCK LOAD, 85 PSF PEDESTRIAN LOAD
2. DESIGN SPAN 58'-0"
3. ALLOWABLE LOAD FOR SPREAD FOOTINGS ON SOIL 2TSF ON LEDGE -
4. ALLOWABLE LOAD FOR PILING N/A TYPE - ESTIMATED LENGTH
5. STRUCTURAL STEEL M 270 GRADE 36
6. REINFORCING STEEL 60 KSI
7. CONCRETE HIGH PERFORMANCE CLASS B - f'c= 3500 PSI

TRAFFIC MAINTENANCE:
1. IS TRAFFIC TO BE MAINTAINED? N/A IF YES, ON EXISTING STRUCTURE - OR ON TEMPORARY BRIDGE -
2. TEMPORARY BRIDGE REQUIREMENTS: ONE OR TWO WAY - TRAFFIC CONTROL SIGNALS REQUIRED -
MINIMUM CLEAR SPAN (NORMAL TO STREAM): - VERTICAL CLEARANCE ABOVE STREAMBED: -
WATERWAY OF FULL OPENING: -
ARE SIDEWALKS REQUIRED? - IF SO, ON WHAT SIDE? -
STRUCTURE TYPE: -

LOAD FACTOR LOAD RATING (TONS)

LOADING LEVELS (LOAD FACTOR)	TRUCK H	HS	3S2	6 AXLE	3A.STR.	4A.STR.	5A.SEMI
INVENTORY A = 2.17; B = 1.00	H14						
POSTED A = 1.55; B = 1.40							
OPERATING A = 1.30; B = 1.67	H21						

$RF = \frac{\emptyset M_N - 1.3\, M_{DL}}{A \times M_{LL+I}}$

$\frac{.95\, F_Y\, S_{LL+I} - M_{DL}\frac{S_{LL+I}}{S_{DL}} - M_{SDL}\frac{S_{LL+I}}{S_{SDL}}}{1.67\, M_{LL+I}}$

PROJECTED TRAFFIC DATA

YEAR	ADT	DHV	% D	% T	% ADTT
2001	N/A	N/A	N/A	N/A	N/A
2020	N/A	N/A	N/A	N/A	N/A

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of WEST RUTLAND	Bridge No. XX
Highway No. CLARENDON AVE.	Log Sta.
	Surv. Sta. 120+00

PEDESTRIAN BRIDGE OVER CLARENDON BROOK

PRELIMINARY INFORMATION

Designed By L. HARDEN	Drawn by Wm WEATHERBY
Checked By M. OLSTAD Date 4/2002	Bridge Design Supervisor M. OLSTAD Date 4/2002
PROJECT WEST RUTLAND	PROJECT NO. ST WALK (11)
L.G.C. Info.	
Bridge Sheet No. BRI01	Sheet 3 OF 12

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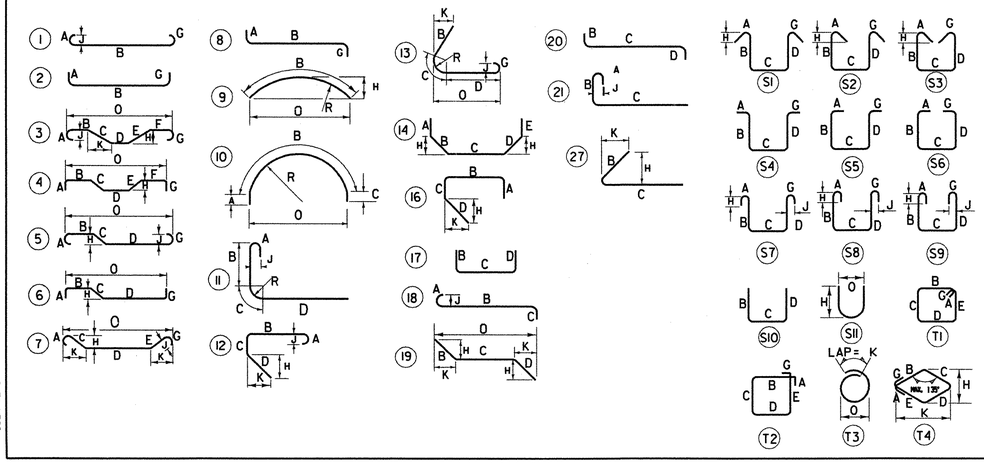
BRIDGE QUANTITY SHEET

STATE OF VERMONT
AGENCY OF TRANSPORTATION
STRUCTURES DIVISION

ITEM NO.	ITEM	UNIT	QUANTITY BREAKDOWN				TOTAL	FINAL
			SUPER STRUCTURE	ABUTMENT 1	ABUTMENT 2	MISC.		
201.10	CLEARING AND GRUBBING (INCL. INDIVIDUAL TREES & STUMPS)	LS				1	1	
203.15	COMMON EXCAVATION	CY		56	25	23	104	
204.30	GRANULAR BACKFILL FOR STRUCTURES	CY		89	66		155	
208.30	COFFERDAM EXCAVATION, EARTH	CY		80	80		160	
208.35	COFFERDAM EXCAVATION, ROCK	CY		20	20		40	
208.40	COFFERDAM (STA. B0+46.67)	LS		1			1	
208.40	COFFERDAM (STA. B1+04.67)	LS			1		1	
301.26	SUBBASE OF CRUSHED GRAVEL (FINE GRADED)	CY				16	16	
501.34	CONCRETE, HIGH PERFORMANCE CLASS B	CY		30	22		52	
502.10	SHORING SUPERSTRUCTURE	LS	1				1	
506.60	STRUCTURAL STEEL	Lb	1300				1300	
506.75	STRUCTURAL STEEL	LS	1				1	
507.15	REINFORCING STEEL	Lb		3613	2136		5749	
513.30	STRUCTURAL PAINTING, FIELD APPLIED (16.5T)	LS	1				1	
513.36	CONTAINMENT AND ENVIRONMENTAL PROTECTION, FIELD (16.5T)	LS	1				1	
513.41	SURFACE PREPARATION, FIELD (16.5T)	LS	1				1	
514.10	WATER REPELLANT	GAL		1	1		2	
522.25	STRUCTURAL LUMBER AND TIMBER (TREATED)	MFBM	2.5				2.5	
525.15	METAL HAND RAILING	LF	123				123	
531.10	BEARING DEVICE ASSEMBLY (EXP. @ ABUT. 1)	EA	2				2	
531.10	BEARING DEVICE ASSEMBLY (FIXED @ ABUT. 2)	EA	2				2	
613.12	STONE FILL, TYPE III	CY		72	36		108	
618.10	PORTLAND CEMENT SIDEWALK, 5 INCH	SY				50	50	
620.50	REMOVING AND RESETTING FENCE	LF				21	21	
621.505	MANUFACTURED TERMINAL SECTION	EA				1	1	
621.80	REMOVAL AND DISPOSAL OF GUARDRAIL	LF				27	27	
621.81	REMOVAL AND DISPOSAL OF GUIDE POSTS	EA				4	4	
631.16	TESTING EQUIPMENT - CONCRETE	LS				1	1	
631.18	TESTING EQUIPMENT - PROTECTIVE COATING	LS				1	1	
635.10	MOBILIZATION	LS				1	1	
649.31	GEOTEXTILE UNDER STONE FILL	SY		35	17		52	
649.51	GEOTEXTILE FOR SILT FENCE	SY				34	34	
651.15	SEED	LB				25	25	
651.17	SEED - WINTER RYE	Lb				25	25	
651.18	FERTILIZER	Lb				10	10	
651.20	AGRICULTURAL LIMESTONE	TON				0.10	0.10	
651.25	HAY MULCH	TON				0.25	0.25	
651.26	HAY BAILS FOR EROSION CONTROL	EA				34	34	
651.30	SODDING	SY				54	54	
651.35	TOPSOIL	CY				15	15	
654.10	EROSION MATTING	SY				255	255	



MARK	NO. PIECES	SIZE	LENGTH IN.	TYPE	WEIGHT LBS.	A	B	C	D	E	F	G	H
ABUTMENT 1													
* 1A501	73	5	104	STR	660								
1A502	16	5	45	STR	63								
1A503	26	5	137	2	310	12	125					0	
1A504	16	5	104	STR	145								
* 1A505	26	5	174	STR	394								
1A506	14	5	75	S10	91		24	27	24				
1A507	14	5	73	S10	88		33	7	33				
1A508	22	5	48	S10	92		24	24	0				
ABUTMENT 2													
2A501	72	5	104	STR	650								
* 2A502	17	5	45	STR	67								
* 2A503	31	5	110	2	296	12	98					0	
2A504	18	5	77	STR	121								
2A505	23	5	174	STR	348								
2A506	14	5	75	S10	91		24	27	24				
2A507	18	5	73	S10	114		33	7	33				
2A508	4	5	52	S10	18		24	28	0				
2A509	4	5	27	STR	10								
2A510	16	5	75	S10	105		24	27	24				
2A511	18	5	210	STR	329								
ABUTMENT 1 WINGWALLS													
* 1W601	37	6	210	STR	973								
1W501	14	5	45	STR	55								
* 1W502	15	5	116	STR	152								
* 1W602	17	6	149	2	317	12	137					0	
1W503	10	5	77	S10	67		33	11	33				
* 1W504	41	5	74	STR	264								
1W505	8	5	54	STR	36								

* DENOTES ONE EXTRA BAR ADDED FOR TESTING PURPOSES

NOTES:

1. UNLESS OTHERWISE DESIGNATED, ALL BAR REINFORCEMENT FOR CONCRETE IN SIZES UP TO AND INCLUDING NO.18 SHALL CONFORM TO BILLET-STEEL BARS FOR CONCRETE REINFORCEMENT", AASHTO M 31 (ASTM A 615-S1). ALL BARS SHALL BE GRADE 60, UNLESS OTHERWISE DESIGNATED.
2. FOR TYPICAL BENDING DETAILS, RECOMMENDED PIN DIAMETER "D" OF BENDS AND HOOKS, AND OTHER STANDARD PRACTICE, SEE CURRENT CONCRETE REINFORCING STEEL INSTITUTE "MANUAL OF STANDARD PRACTICE".
3. ALL DIMENSIONS ARE OUT TO OUT OF BAR EXCEPT "A" AND "G" ON STANDARD 180 DEGREE AND 135 DEGREE HOOKS.

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	5.320
#18	13.60	2.257	4.00	7.090

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STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of WEST RUTLAND	Bridge No. XX
Highway No. CLARENDON AVE.	Log Sta.
	Surv. Sta.

PEDESTRIAN BRIDGE OVER CLARENDON BROOK

QUANTITIES AND BAR LIST

Designed By L. HARDEN	Drawn by Wm WEATHERBY
Checked By M. OLSTAD Date 4/2002	Bridge Design Supervisor M. OLSTAD Date 4/2002
PROJECT WEST RUTLAND	PROJECT NO. ST WALK (11)
I.G.C. Info.	
Bridge Sheet No. BRI02	Sheet 4 OF 12

CHA CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
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GENERAL NOTES

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE AGENCY OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2001, AND ITS LATEST REVISIONS, AND THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, SIXTEENTH EDITION, AND ITS 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 ANY BROOK, STREAM OR RIVER. ANY MATERIALS WHICH ESCAPE THE CONTRACTOR EFFORTS OF PREVENTION SHALL BE IMMEDIATELY AND ENTIRELY CLEANED UP OR REMOVED.

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.

4. IT IS ANTICIPATED THAT THE MAJORITY OF THE WORK TO RESTORE THE TRUSSES AND INSTALL THE BRIDGE WILL TAKE PLACE AWAY FROM ANY TRAFFIC. SHOULD ANY OF THE CONSTRUCTION ACTIVITIES AFFECT THE TRAVELING PUBLIC, THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY SIGNING AND TRAFFIC CONTROL NECESSARY TO ASSURE SAFE MOVEMENT OF TRAFFIC IN ACCORDANCE WITH VAOT SPECIFICATION SECTION 641. THE COST SHALL BE INCIDENTAL TO THE ITEMS IN THE CONTRACT.

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

   NEW STRUCTURAL STEEL, AASHTO M-270 GRADE 36 Fy=36,000 PSI
   Fb=19,800 PSI
   Fv=17,000 PSI

   CONCRETE, CLASS B, (HPC-B): f'c=3,500 PSI fc=1,400 PSI
   REINFORCING STEEL: Ft=24,000 PSI GRADE 60

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

7. THERE ARE NO HISTORICAL RECORD PLANS FOR THIS STRUCTURE. ALL DIMENSIONS HAVE BEEN CALCULATED AS ACCURATELY AS POSSIBLE, HOWEVER, THE CONTRACTOR IS ADVISED TO FIELD VERIFY DIMENSIONS TO ENSURE THE WORK CAN BE CONSTRUCTED AS PROPOSED BY THESE PLANS. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO MATCH THE FINAL PRODUCT AS DESCRIBED IN THE PLANS WITH THE EXISTING FIELD CONDITION

8. THE REHABILITATED STRUCTURE HAS BEEN DESIGNED FOR AN INVENTORY LOAD OF H-10.

9. NO UTILITY ADJUSTMENTS ARE ANTICIPATED BY THE PLANS FOR THE BRIDGE PROJECT. SHOULD ADJUSTMENTS OF THE UTILITIES FACILITIES BE DESIRED, PROPER ARRANGEMENTS SHALL BE MADE IN CONFORMANCE WITH SUBSECTION 105.07 OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION.

10. THE CONTRACTOR SHALL PREPARE A LEVEL AND SECURE STAGING AREA TO PERFORM REHABILITATION WORK ON THE TRUSS BRIDGE. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND SECURING THE STAGING AREA. THE EXISTING TRUSS IS STORED IN A VAOT YARD IN CLARENDON, VERMONT OFF OF ROUTE 7B. CONTRACTOR MAY PERFORM TRUSS REHABILITATION AND PAINTING IN THIS YARD. CONTRACTOR SHALL PROVIDE TRANSPORTATION OF THE TRUSS AND ALL COMPONENTS FROM THE CLARENDON VERMONT YARD TO THE PROPOSED WEST RUTLAND SITE. THE COST OF TRANSPORTATION SHALL BE INCLUDED IN ITEM 506.75. THE CONTRACTOR SHOULD NOTE THAT THE RIGHT TRUSS IS TAGGED WITH PINK SURVEY TAPE MARKERS AND THE LEFT TRUSS IS TAGGED WITH YELLOW SURVEY TAPE MARKERS.

11. THE CONTRACTOR SHALL SANDBLAST CLEAN, PER VAOT SPECIFICATION 513.41, THE TRUSSES, FLOORBEAMS AND STRINGERS, SUPPORTING THEM IN AN UPRIGHT POSITION, UPON CLEANING STEEL, THE CONTRACTOR SHALL CONTACT THE ENGINEER TO INSPECT ALL STEEL MEMBERS FOR AREAS OF SIGNIFICANT SECTION LOSS DUE TO RUST OR DAMAGE.

12. THE CONTRACTOR SHALL USE GREAT CARE IN LIFTING, MOVING, AND TRANSPORTING THE TRUSSES TO AVOID DAMAGE TO THE BRIDGE. LIFTING THE TRUSSES FROM ANYWHERE ON THE BOTTOM CHORD, OR AT MIDDLE THIRD OF THE TOP CHORD SHALL BE AVOIDED TO PREVENT OVER STRESSING OF MEMBERS AND/OR STRESS REVERSALS IN THE TRUSS.

13. THE CONTRACTOR IS RESPONSIBLE FOR BRACING AND SECURING THE TRUSSES TO PROVIDE LATERAL STABILITY OF THE TRUSSES DURING REPAIR AND ASSEMBLY. ITEM 502.10, SHORING SUPERSTRUCTURE, SHALL BE FULL COMPENSATION FOR PROVIDING BRACING AND SHORING ACTIVITIES.

14. ALL REINFORCING STEEL SHALL BE DETAILED AND FABRICATED USING PROCEDURES AND TOLERANCES IN ACCORDANCE WITH APPLICABLE PUBLICATIONS OF THE CONCRETE REINFORCING STEEL INSTITUTE (CRSI) AND IN ACCORDANCE WITH SECTION 713 OF THE STANDARD SPECIFICATIONS.

15. ALL CONCRETE SHALL BE ITEM 501.34 CONCRETE, HIGH PERFORMANCE CLASS B UNLESS OTHERWISE NOTED.

16. REINFORCING PLACEMENT TOLERANCES SHALL BE: SPACING +/- 1" CLEARANCE +/- 1/4"

17. MINIMUM COVER FOR REINFORCING STEEL SHALL BE THREE INCHES (3") UNLESS OTHERWISE NOTED.

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

19. 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 SMOOTH STEEL TROWEL FINISHED.

20. WATER REPELLANT SHALL BE APPLIED TO ALL EXPOSED CONCRETE SURFACES.

21. ALL STRUCTURAL STEEL SHALL BE DETAILED AND FABRICATED USING PROCEDURES AND TOLERANCES IN ACCORDANCE WITH APPLICABLE PUBLICATIONS OF THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC).

22. ALL STRUCTURAL STEEL, EXCEPT RAILINGS, ANCHOR BOLTS AND DECK BOLTS SHALL BE PAINTED GREEN (FEDERAL COLOR CHIP NO.14062) AS DESCRIBED UNDER VERMONT SPECIFICATION SECTION 513 "PROTECTIVE COATINGS".

23. CHARPY V-NOTCH TESTING WILL NOT BE REQUIRED FOR ANY STEEL MEMBERS ON THIS PROJECT.

24. ALL NEW STRUCTURAL STEEL FOR THE TRUSS MEMBERS AND ASSOCIATED CONNECTION ANGLES SHALL CONFORM TO AASHTO M-270 GRADE 36.

25. ALL NEW STRUCTURAL STEEL COMPONENTS SUCH AS LATERAL BRACING ANGLES AND REPAIR PLATES SHALL BE PAID FOR AND INCLUDED UNDER ITEM 506.60 "STRUCTURAL STEEL". THE ASSEMBLY OF THE TRUSSES, STRINGERS, FLOORBEAMS AND REPAIR OF EXISTING BENT MEMBERS WILL BE PAID FOR UNDER ITEM 506.75.

26. ALL CONNECTIONS ON THE TRUSS ARE BELIEVED TO BE 3/4 INCH DIAMETER RIVETS IN 13/16 INCH HOLES. THE CONTRACTOR SHALL VERIFY DIAMETER OF ACTUAL RIVET OR BOLT SIZE BEFORE ORDERING REPLACEMENTS (SEE NOTES 28 AND 30).

27. ALL BOLTS IN THE TIMBER CURB AND TIMBER DECK SHALL MEET ASTM A-307 GALVANIZED. BOLTS SHALL BE TIGHTENED TO THE FULL EFFORT OF A WORKER WITH A WRENCH, BUT NOT SO TIGHT AS TO CRUSH THE WOOD OR BREAK THE CAST "C" CLIPS.

28. ALL BOLTS USED SHALL MEET AASHTO M164 (ASTM A 325 TYPE 1) HIGH STRENGTH BOLTS UNLESS NOTED OTHERWISE IN THE PLANS. ALL HIGH STRENGTH BOLTS SHALL BE TIGHTENED PER SUBSECTION 506.19 OF THE VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION.

29. THE CONTRACTOR IS REMINDED THAT ALL HARDWARE FOR CONNECTIONS IS NOT PAID FOR DIRECTLY BUT IS CONSIDERED SUBSIDIARY TO THE STRUCTURAL STEEL ITEM. THE CONTRACTOR IS URGED TO MAKE A DETAILED COUNT OF ALL HARDWARE NECESSARY AS REQUIRED TO COMPLETE THE WORK AS SHOWN ON THESE PLANS. BOLT LENGTHS SHALL BE FIELD VERIFIED BY THE CONTRACTOR TO ALLOW 1/2 INCH MINIMUM PROJECTION BEYOND THE NUT IN SNUG POSITION, AND HAVE SUFFICIENT THREAD LENGTH TO TIGHTEN AS MUCH AS NECESSARY.

30. ALL RIVETS REMOVED FROM THE TRUSS SHALL BE REPLACED WITH AASHTO M-164 (ASTM A 325 TYPE 1) HIGH STRENGTH BOLTS OF EQUIVALENT DIAMETER. ANY RIVET OR BOLT HOLES NOT OTHERWISE REPLACED SHALL BE FILLED WITH A HIGH STRENGTH BOLT.

31. ALL BOLT HOLES IN WOOD AND STEEL SHALL BE 1/16" LARGER THAN THE BOLT UNLESS NOTED OTHERWISE ON THE PLANS.

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

33. AN ORNAMENTAL PEDESTRIAN RAILING SHALL BE USED ON THIS PROJECT. DETAILS FOR FABRICATION OF THIS ORNAMENTAL RAIL ARE SHOWN ON SHEET BRI09. THIS WORK SHALL BE PAID FOR AS ITEM 525J5 METAL HAND RAILING.

34. ALL EXISTING STEEL TO REMAIN WILL BE CLEANED AND RECEIVE A PRIME COAT AND TWO TOP CATS IN ACCORDANCE WITH STATE OF VERMONT AGENCY OF TRANSPORTATION SUPPLEMENTAL SPECIFICATION 513 "PROTECTIVE COATINGS", THE FINAL TOP COAT SHALL BE AFTER THE BRIDGE IS IN PLACE AND ALL OTHER WORK IS COMPLETE. THE CONTRACTOR IS ALERTED THAT ALL EXISTING STEEL MAY CONTAIN LEAD BASED PAINT. APPROPRIATE PRECAUTIONS SHALL BE OBSERVED AS SPECIFIED IN ITEM 513.36.

35. THE ORNAMENTAL PEDESTRIAN RAILING ASSEMBLY WILL BE PAINTED IN ACCORDANCE WITH STATE OF VERMONT AGENCY OF TRANSPORTATION SUPPLEMENTAL SPECIFICATION SECTION 513 - PROTECTIVE COATINGS. THE RAIL IS TO RECEIVE A PRIME COAT AND A TOP COAT PRIOR TO ASSEMBLY.

36. TIMBER DECK PLANKS SHALL BE DRESSED OR ROUGH DRY SIZE 4 x 12 SOUTHERN PINE (NO.2 OR BETTER).

37. TIMBER DECK PLANKS SHALL BE PLACED WITH A TIGHT JOINT BETWEEN PLANKS TO ALLOW FOR SEASONING SHRINKAGE. IF ACTUAL DECK PLANK TO BE INSTALLED ARE NOT ANTICIPATED TO SHRINK, THEN A 1/8" GAP SHALL BE LEFT BETWEEN PLANKS.

38. THE ITEM 522.25 STRUCTURAL LUMBER AND TIMBER (TREATED) IS FOR ALL THE WORK ASSOCIATED WITH THE LUMBER AND TIMBER NECESSARY TO CONSTRUCT THE BRIDGE AS DETAILED ON THESE PLANS, INCLUDING BUT NOT LIMITED TO CUTTING AND DRILLING.

39. LATERAL BRACING RODS SHALL BE CAREFULLY TIGHTENED SNUG TIGHT IN A MANNER THAT AVOIDS RACKING THE BRIDGE OUT OF SHAPE OR OUT OF SQUARE.

40. THE CONTRACTOR IS REQUIRED TO COORDINATE WORK AS NECESSARY WITH THE WATERLINE/SIDEWALK CONTRACTOR.

41. ASSEMBLY OF THE EXISTING TRUSS MEMBERS SHALL BE IN ACCORDANCE WITH SECTION 506 OF THE VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION.

42. TIMBER CURB SHALL BE DRESSED OR ROUGH DRY SIZE 6 x 6 SOUTHERN PINE (NO.2 OR BETTER).

43. ALL HARDWARE (BOLTS, WASHERS, NUTS, "C" CLIPS, ETC.) SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO M-232 (ASTM A153) UNLESS OTHERWISE NOTED IN PLANS, WHERE REQUIRED, OVERSIZE NUTS SHALL BE PROVIDED FOR GALVANIZING. FASTENERS SHALL RECEIVE INTERMEDIATE AND FINAL COATS OF PAINT AFTER INSTALLATION.

44. THE BRIDGE RAILING SHALL BE PAINTED BLACK (FEDERAL COLOR CHIP NO. 27038) AS DESCRIBED UNDER VERMONT SPECIFICATION SECTION 513 "PROTECTIVE COATINGS". THE CONTRACTOR IS RESPONSIBLE FOR PAINTING ALL NEW STRUCTURAL STEEL, INCLUDING A PRIME COAT AND TWO TOP COATS, PAID FOR UNDER ITEMS 513.30, 513.36 AND 513.41.

COFFERDAM NOTES

45. COFFERDAM LIMITS TO BE DETERMINED BY THE CONTRACTOR.

46. THE PAY LIMITS OF "COFFERDAM EXCAVATION", "ROCK" OR "EARTH" SHALL BE 2'-0" OUTSIDE THE PERIMETER OF THE FOOTING, UP TO EXISTING GROUND OR BOTTOM OF SUBBASE, WHICHEVER IS LOWER.

47. ONE FOOT UNDERCUT AS DETERMINED NECESSARY BY THE RESIDENT ENGINEER.

48. IF A COFFERDAM IS CONSTRUCTED WHICH IS LARGER THAN THE INDICATED COFFERDAM EXCAVATION PAY LIMITS, PAYMENT FOR ALL UNCLASSIFIED CHANNEL EXCAVATION, INCLUDING THAT PORTION WHICH IS INSIDE THE COFFERDAM BUT OUTSIDE THE COFFERDAM EXCAVATION PAY LIMITS, WILL BE MADE AT THE CONTRACT UNIT PRICE FOR UNCLASSIFIED CHANNEL EXCAVATION.

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STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of WEST RUTLAND	Bridge No. XX
Highway No. CLARENDON AVE.	Log Sta.
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PEDESTRIAN BRIDGE OVER CLARENDON BROOK

GENERAL NOTES

Designed By L. HARDEN	Drawn by Wm WEATHERBY
Checked By M. OLSTAD Date 4/2002	Bridge Design Supervisor M. OLSTAD Date 4/2002
PROJECT WEST RUTLAND	PROJECT NO. ST WALK (11)
I.G.C. Info.	
Bridge Sheet No. BRI03	Sheet 5 OF 12

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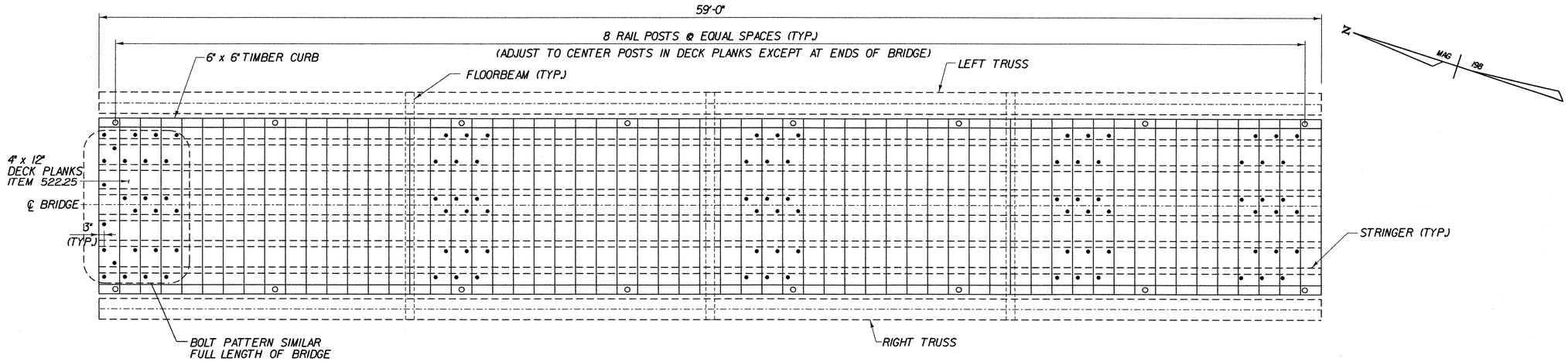

DECK LAYOUT AND BOLTING PATTERN

SCALE 3/8" = 1'-0

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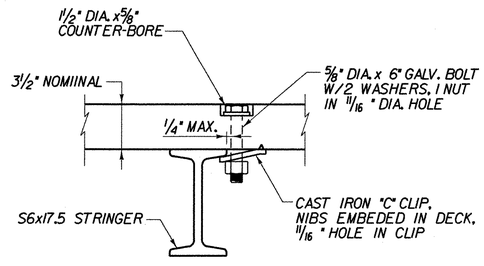
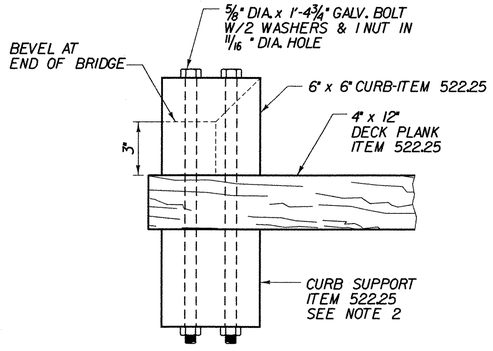


DECK TO STRINGER CONNECTION

SCALE 3" = 1'-0

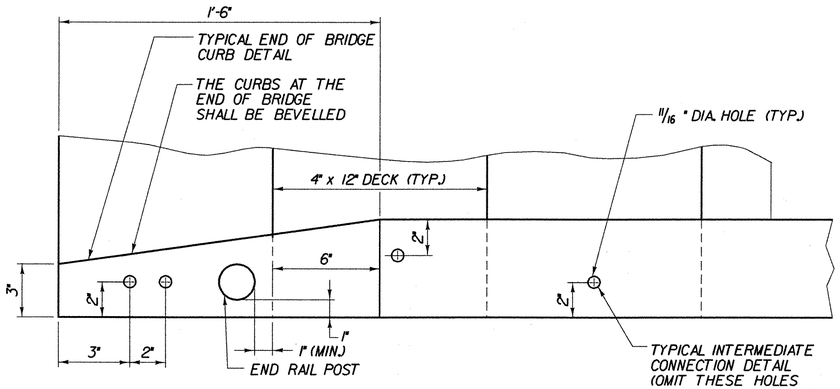
1 9 6 3 0



TYPICAL CURB SECTION

SCALE 3" = 1'-0

1 9 6 3 0



CURB CONNECTION PLAN

SCALE 3" = 1'-0

1 9 6 3 0

NOTES:

1. USE FULL PLANKS ON ENDS AND ADJUST WIDTH OF 1 OR 2 INTERIOR PLANKS TO MATCH SPAN OF BRIDGE.
2. TERMINATE CURB SUPPORT AT EACH FLOORBEAM AND BEGIN AGAIN AFTER FLOORBEAM.

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PEDESTRIAN BRIDGE OVER CLARENDON BROOK

DECK PLAN AND DETAILS

Designed By L. HARDEN	Drawn by Wm WEATHERBY
Checked By M. OLSTAD Date 4/2002	Bridge Design Supervisor M. OLSTAD Date 4/2002
PROJECT WEST RUTLAND	PROJECT NO. ST WALK (11)
L.G.C. Info.	
Bridge Sheet No. BRI04	Sheet 6 OF 12

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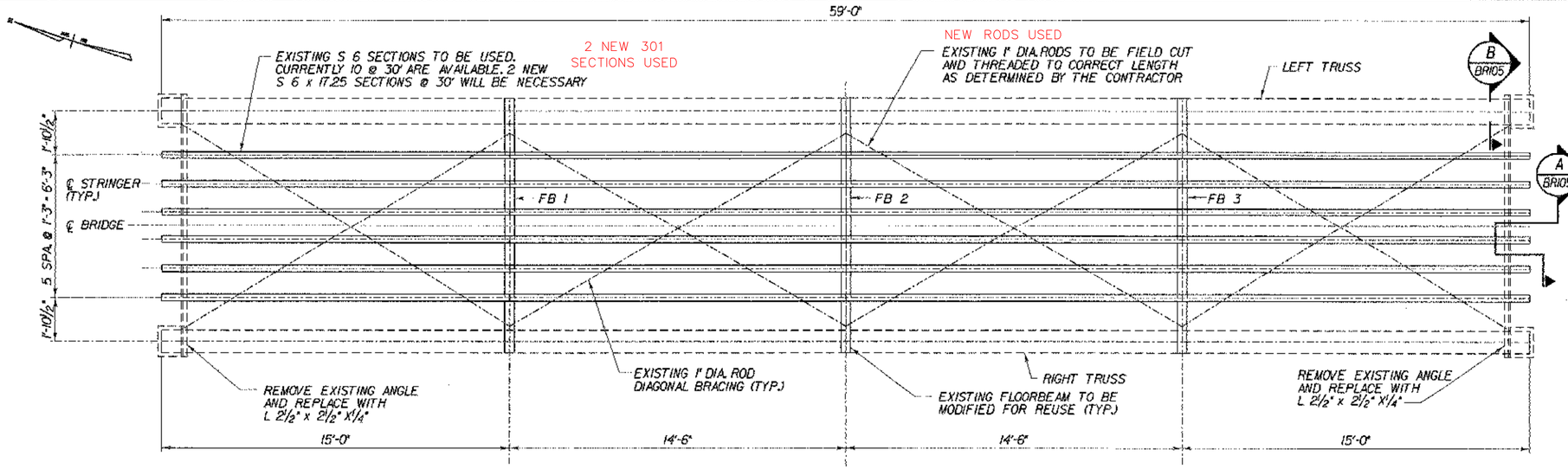
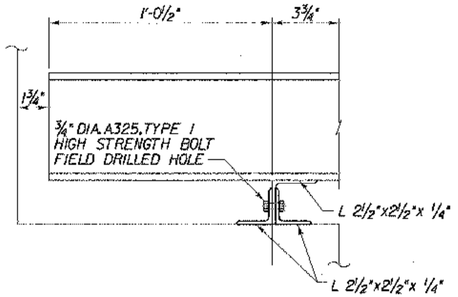


FRAMING PLAN

SCALE 3/8" = 1'-0

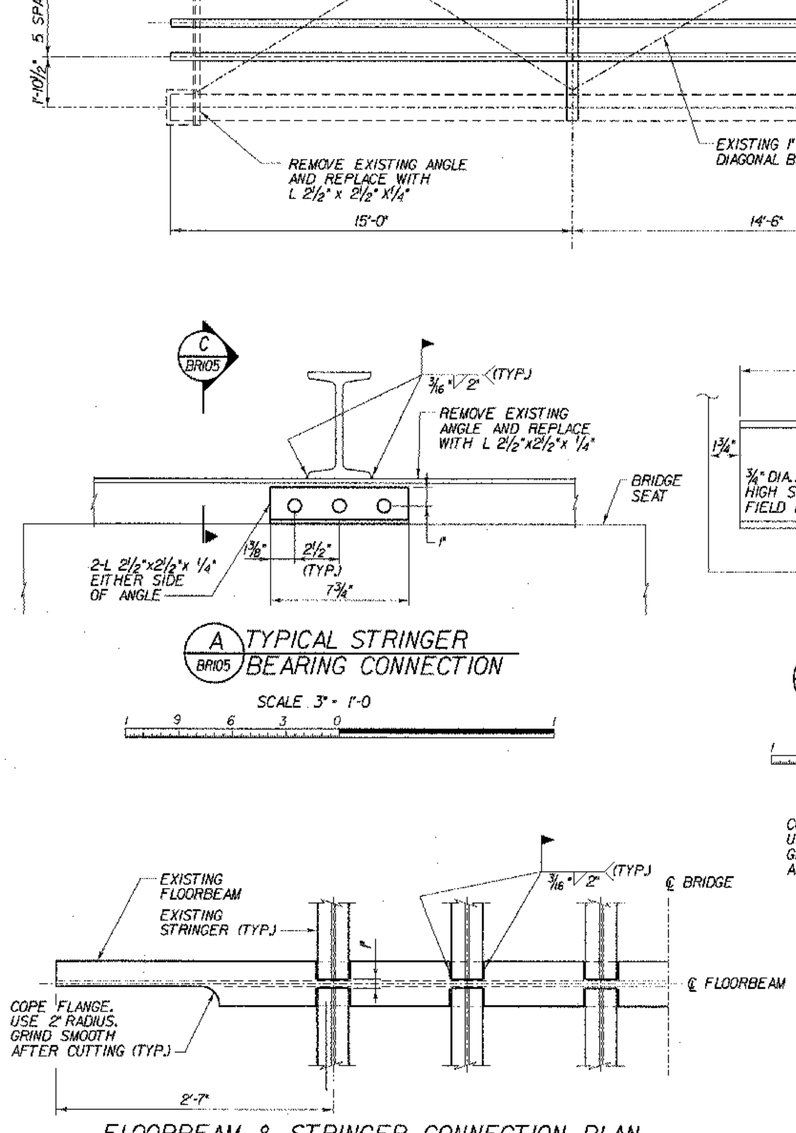
A BRI05 TYPICAL STRINGER BEARING CONNECTION

SCALE 3" = 1'-0



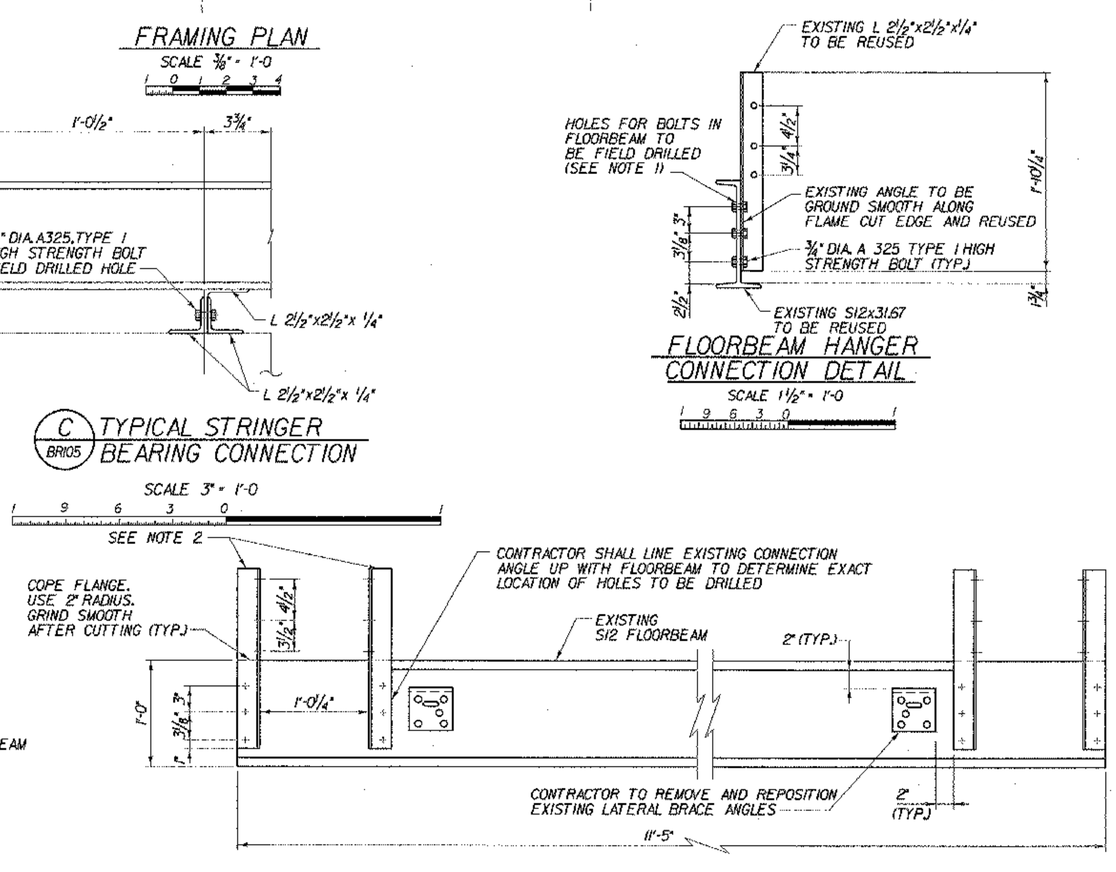
C BRI05 TYPICAL STRINGER BEARING CONNECTION

SCALE 3" = 1'-0



FLOORBEAM & STRINGER CONNECTION PLAN

SCALE 1½" = 1'-0

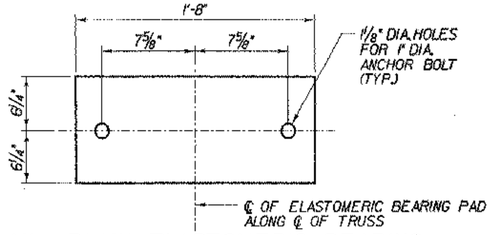


S12x31.67 FLOORBEAM ELEVATION

SCALE 1½" = 1'-0

FLOORBEAM HANGER CONNECTION DETAIL

SCALE 1½" = 1'-0



PLAN - PLAIN ELASTOMERIC BEARING (TYPE E.P.)

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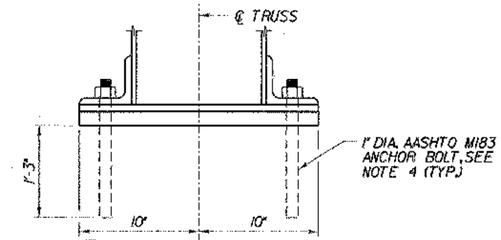

B BRI05 BEARING SECTION

(NOT TO SCALE)

NOTES:

1. IT IS ASSUMED THAT ALL EXISTING HOLES ARE 1⅜" DIAMETER. THE CONTRACTOR SHOULD VERIFY THIS DIMENSION BEFORE ORDERING BOLTS.
2. CONTRACTOR SHALL REMOVE ALL CUT-OFFS BY CAREFULLY REMOVING ALL BOLTS OR RIVETS.
3. REPAIR OF EXISTING MEMBERS TO BE PAID FOR UNDER ITEM 506.50.
4. THE CONTRACTOR SHALL HAND TIGHTEN THE FIXED END ANCHOR BOLT NUT AND BURR THE THREADS ABOVE THE NUT. THE CONTRACTOR SHALL LEAVE A ⅛" GAP AT EXPANSION BOLTS BELOW THE NUT AND BURR THE THREADS ABOVE THE NUT. ANCHOR BOLTS, NUTS AND WASHERS SHALL CONFORM TO AASHTO M183, M291 AND F844, RESPECTIVELY.
5. REPOSITION OR REPLACE PLATES A.O.B.E.
6. CONTRACTOR SHALL VERIFY BEARING DIMENSIONS BEFORE ORDERING ELASTOMERIC PADS.
7. ASSEMBLY OF TRUSSES, FLOORBEAMS AND STRINGERS TO BE PAID FOR UNDER ITEM 506.75.
8. EXTRA CARE IS REQUIRED WHEN WELDING NEW STEEL TO OLD STEEL. THE WELDER SHALL PERFORM A TEST WELD ON SCRAP EXISTING OLD STEEL TO DEVELOP A QUALIFIED WELDING PROCEDURE. THIS PROCEDURE WILL INCLUDE THE ELECTRODE SIZE, AMPERE AND TRAVEL SPEED TO ASSURE CRACK FREE WELDS. THE WELDER SHALL HAVE AN AWS CERTIFICATION DESIGNATING THEM AS QUALIFIED IN THE APPROPRIATE CATEGORY FOR STRUCTURAL WELDING.

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FRAMING PLAN AND DETAILS

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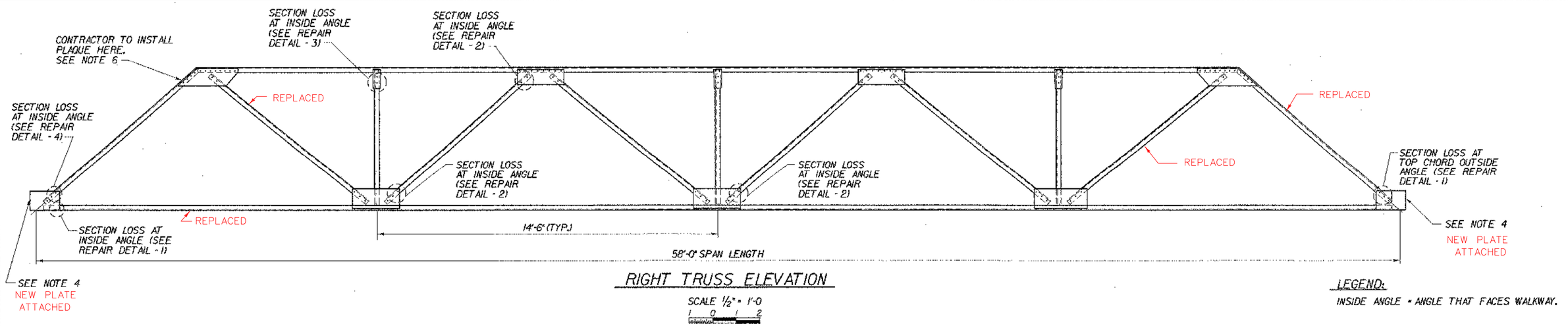
ALBANY, NEW YORK

USER = 22467

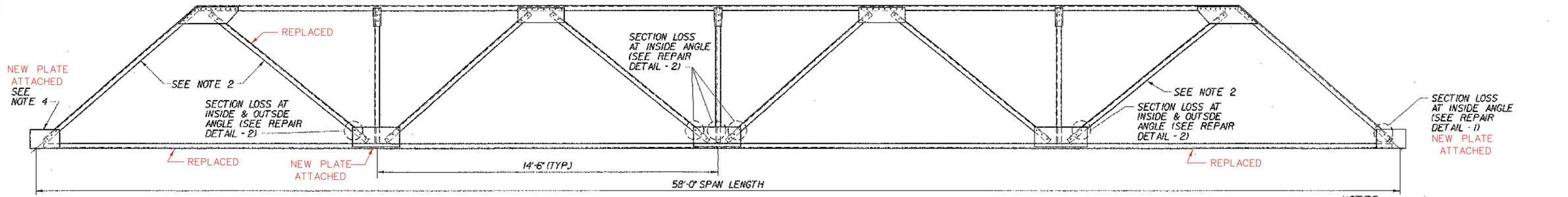


RIGHT TRUSS ELEVATION

SCALE 1/2" = 1'-0

LEGEND:

INSIDE ANGLE = ANGLE THAT FACES WALKWAY.

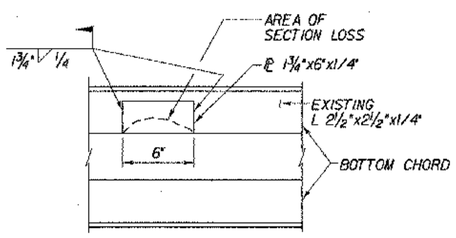


LEFT TRUSS ELEVATION

SCALE 1/2" = 1'-0

NOTES:

1. CONTRACTOR TO VERIFY EXISTING TRUSS DIMENSIONS BEFORE CUTTING PLATES.
2. STRAIGHTEN BENT MEMBER AS PER VAOT SPECIFICATION 506.12(H).
3. CONTRACTOR SHALL REMOVE AND REPLACE ANY RIVETS WITH SEVERE SECTION LOSS AS PER ENGINEER.
4. STRAIGHTEN BENT PLATE AS PER VAOT SPECIFICATION 506.12(H).
5. AFTER TRUSS IS BLAST CLEANED, ENGINEER SHALL INSPECT AND DETERMINE IF ADDITIONAL STRENGTHENING IS REQUIRED.
6. CONTRACTOR TO INSTALL PLAQUE AT LOCATION SHOWN. VAOT WILL PROVIDE PLAQUE AND HARDWARE. A GASKET SHALL BE INSTALLED BETWEEN PLAQUE AND TRUSS AND BOLT SLEEVES SHALL BE USED. PAYMENT FOR THIS ITEM SHALL BE INCLUDED IN ITEM 506.75.



REPAIR DETAIL - 1 (PLAN VIEW)

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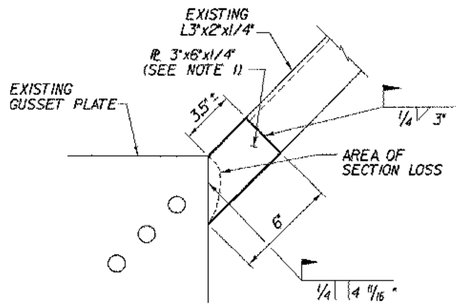

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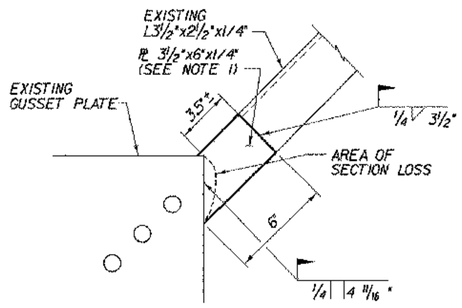

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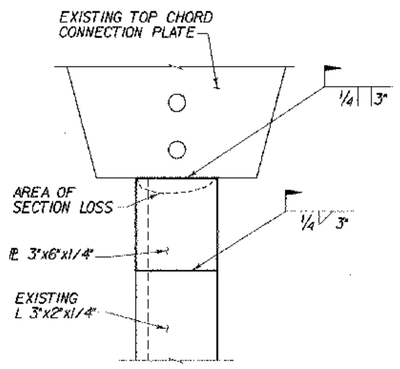

REPAIR DETAIL - 3

(NOT TO SCALE)

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AGENCY OF TRANSPORTATION

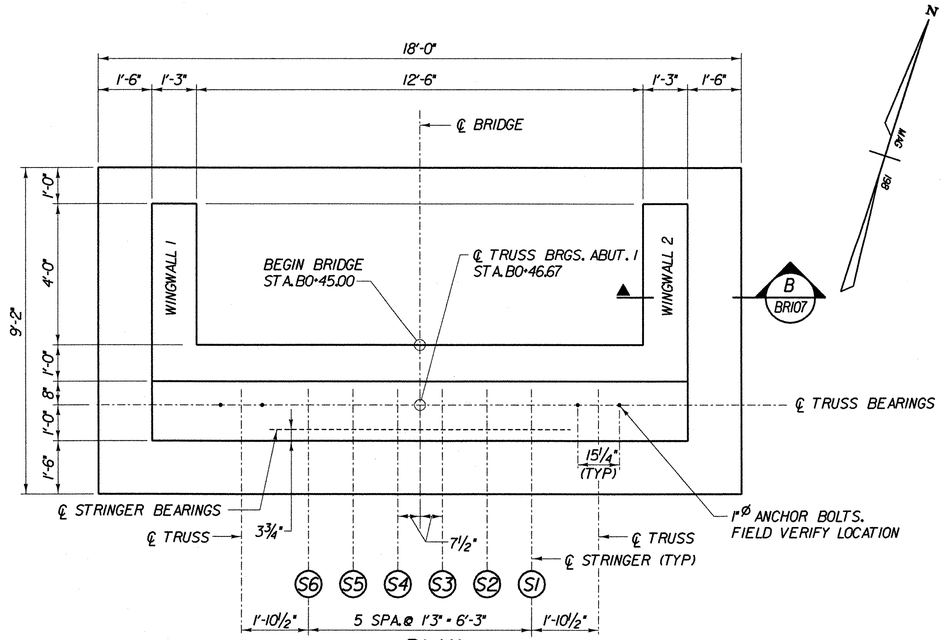
Town Of WEST RUTLAND	Bridge No. XX
Highway No. CLARENDON AVE.	Log Sta.
	Surv. Sta.

PEDESTRIAN BRIDGE OVER CLARENDON BROOK

STEEL REPAIR DETAILS

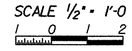
Designed By L. HARDEN	Drawn by Wm WEATHERBY
Checked By M. OLSTAD Date 4/2002	Bridge Design Supervisor M. OLSTAD Date 4/2002
PROJECT WEST RUTLAND	PROJECT NO. ST WALK (8)
L.G.C. Info.	
Bridge Sheet No. BR106	Sheet 8 OF 12

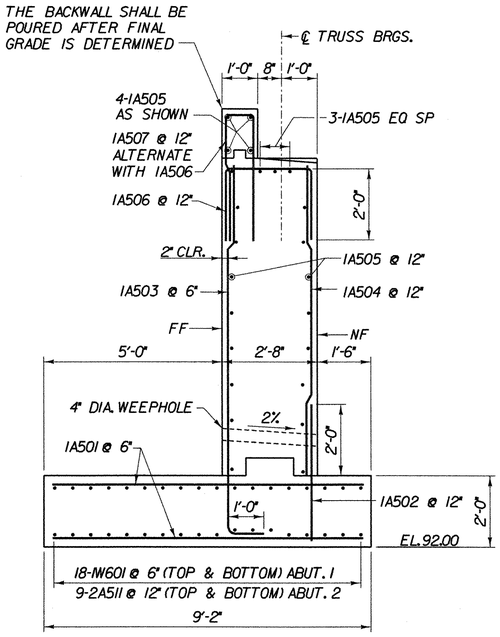
DATE/TIME = 11/01/02 USER = 24657



PLAN

SCALE ½" = 1'-0

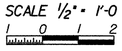


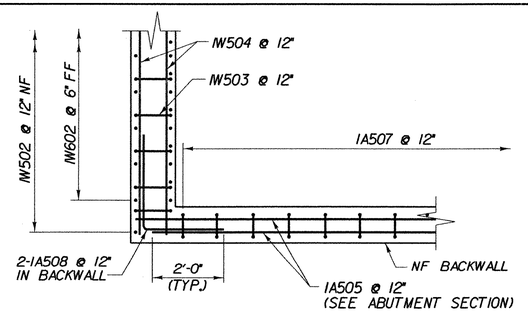


A BRI07 TYPICAL ABUTMENT SECTION

ABUTMENT 1 (SHOWN), ABUTMENT 2 (SIMILAR, EXCEPT AS NOTED)

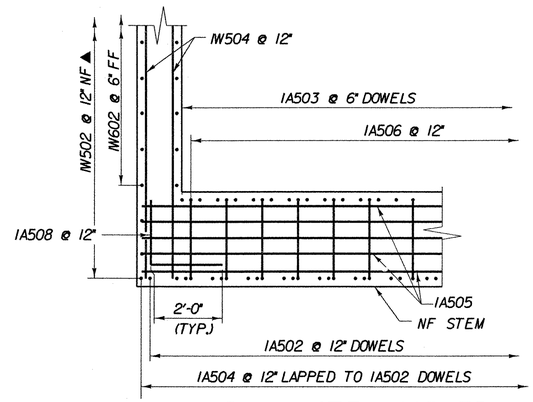
SCALE ½" = 1'-0





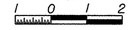
PLAN - BACKWALL CORNER - ABUTMENT 1

SCALE ½" = 1'-0

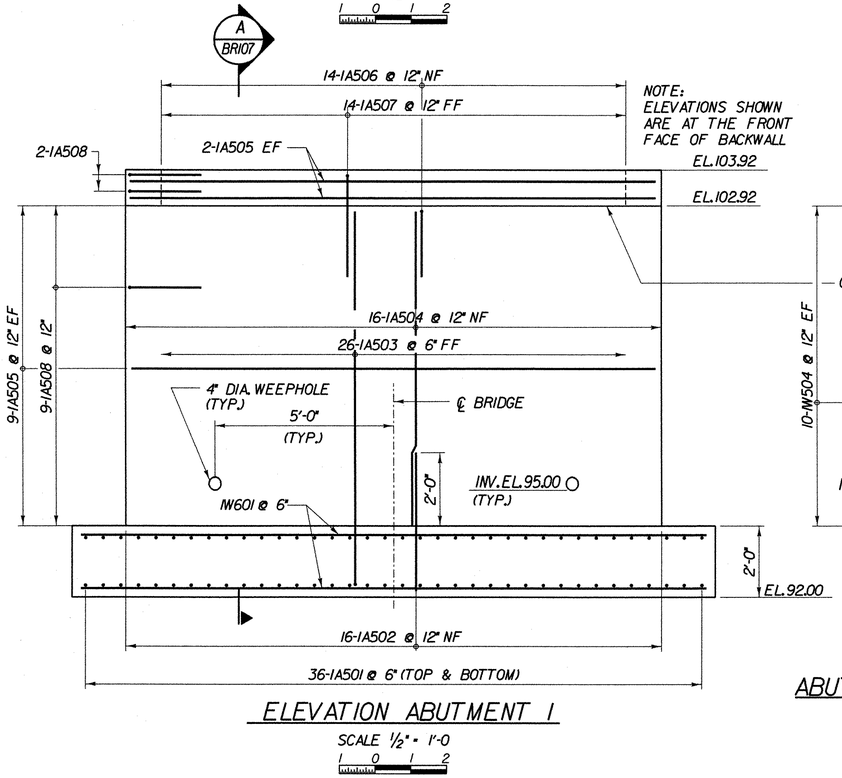


PLAN - STEM CORNER

SCALE ½" = 1'-0

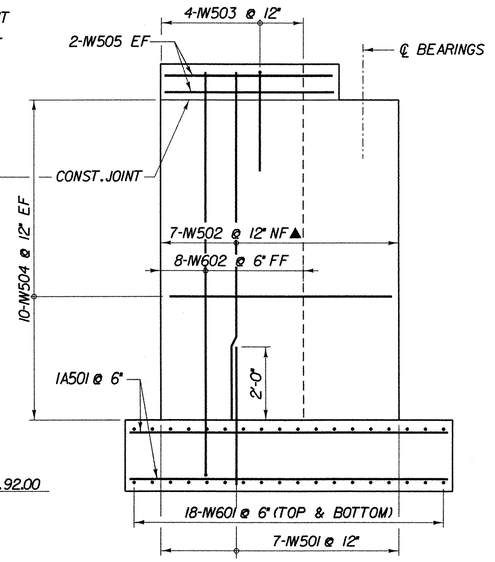


A BRI07



ELEVATION ABUTMENT 1

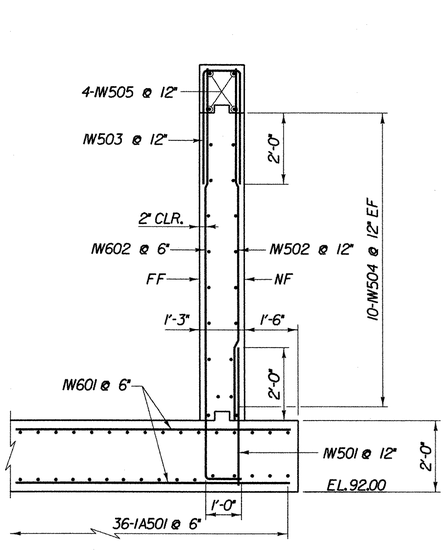
SCALE ½" = 1'-0



ABUTMENT 1 WINGWALL REINF. ELEVATION

EAST WINGWALL (SHOWN), WEST WINGWALL (SIMILAR)

SCALE ½" = 1'-0



B BRI07 TYPICAL ABUTMENT 1 WINGWALL SECTION

SCALE ½" = 1'-0

NOTE:

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

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of WEST RUTLAND	Bridge No. XX
Highway No. CLARENDON AVE.	Log Sta. / Surv. Sta.

PEDESTRIAN BRIDGE OVER CLARENDON BROOK

ABUTMENT I PLAN AND ELEVATION

Designed By L. HARDEN	Drawn by Wm WEATHERBY
Checked By M. OLSTAD Date 4/2002	Bridge Design Supervisor M. OLSTAD Date 4/2002
PROJECT WEST RUTLAND	PROJECT NO. ST WALK (11)
I.G.C. Info.	
Bridge Sheet No. BRI07	Sheet 9 OF 12

CHA CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
11 WINNERS CIRCLE ALBANY, NEW YORK, 12205

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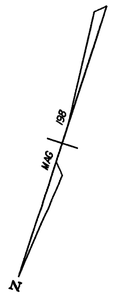
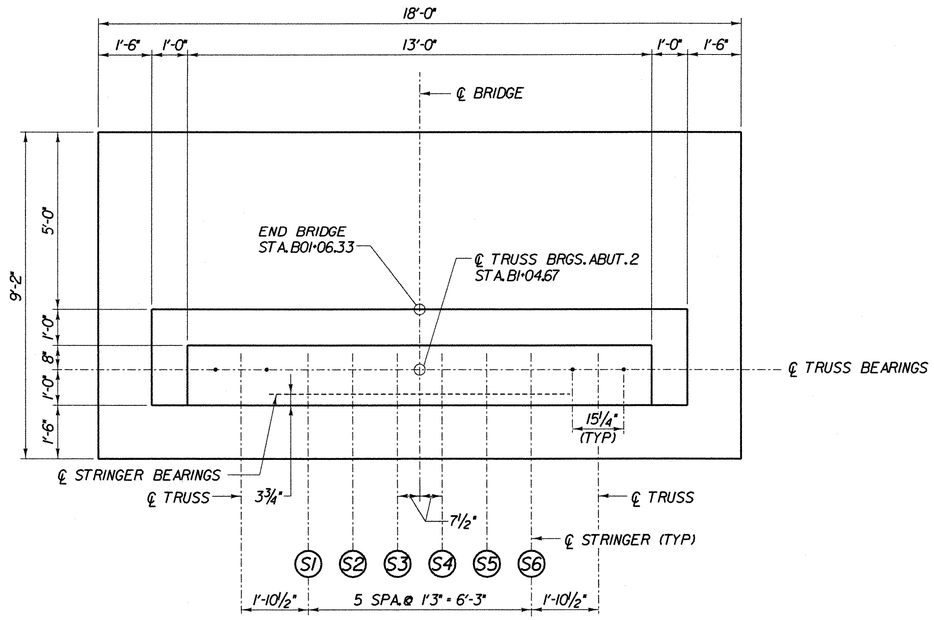
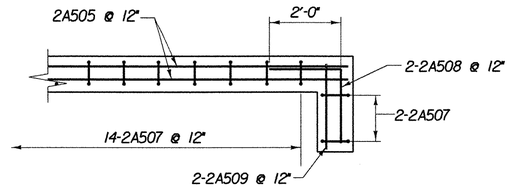
USER = 2467





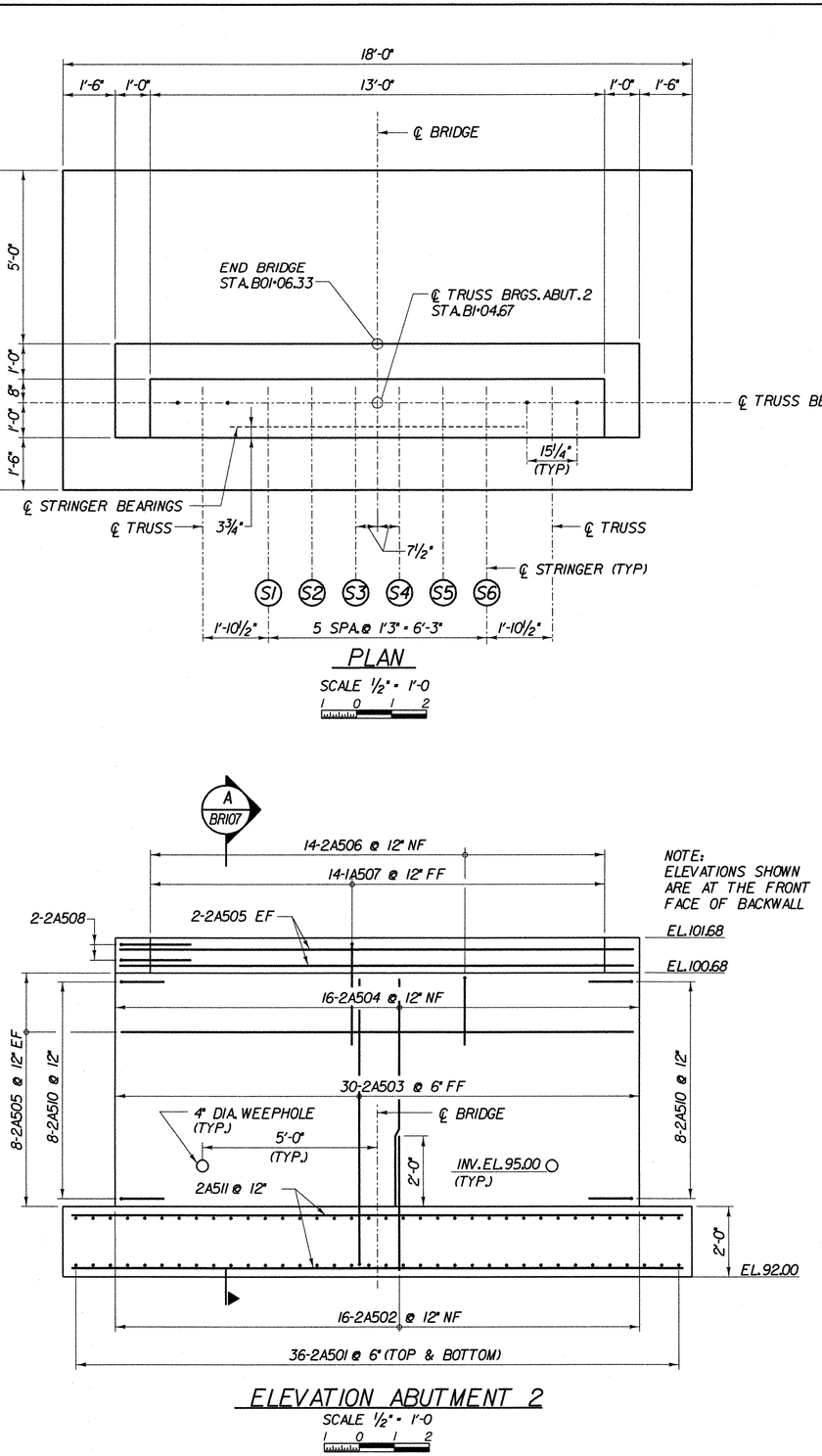
PLAN

SCALE 1/2" = 1'-0



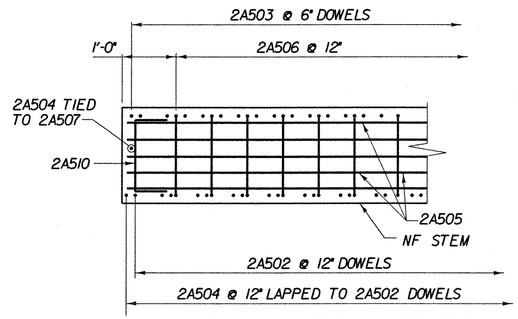
PLAN - BACKWALL CORNER - ABUTMENT 2

SCALE 1/2" = 1'-0



ELEVATION ABUTMENT 2

SCALE 1/2" = 1'-0



PLAN - STEM CORNER

SCALE 1/2" = 1'-0

NOTE:

NF = NEAR FACE
FF = FAR FACE
EF = EACH FACE
3" CLR. UNLESS OTHERWISE SPECIFIED ON THE PLANS.

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of WEST RUTLAND	Bridge No. XX
Highway No. CLARENDON AVE.	Log Sta.
	Surv. Sta.

PEDESTRIAN BRIDGE OVER CLARENDON BROOK

ABUTMENT 2 PLAN AND ELEVATION

Designed By L. HARDEN	Drawn by Wm WEATHERBY
Checked By M. OLSTAD Date 4/2002	Bridge Design Supervisor M. OLSTAD Date 4/2002
PROJECT WEST RUTLAND	PROJECT NO. ST WALK (II)
L.G.C. Info.	
Bridge Sheet No. BRI08	Sheet 10 OF 12

CHA CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
11 WINNERS CIRCLE ALBANY, NEW YORK, 12205

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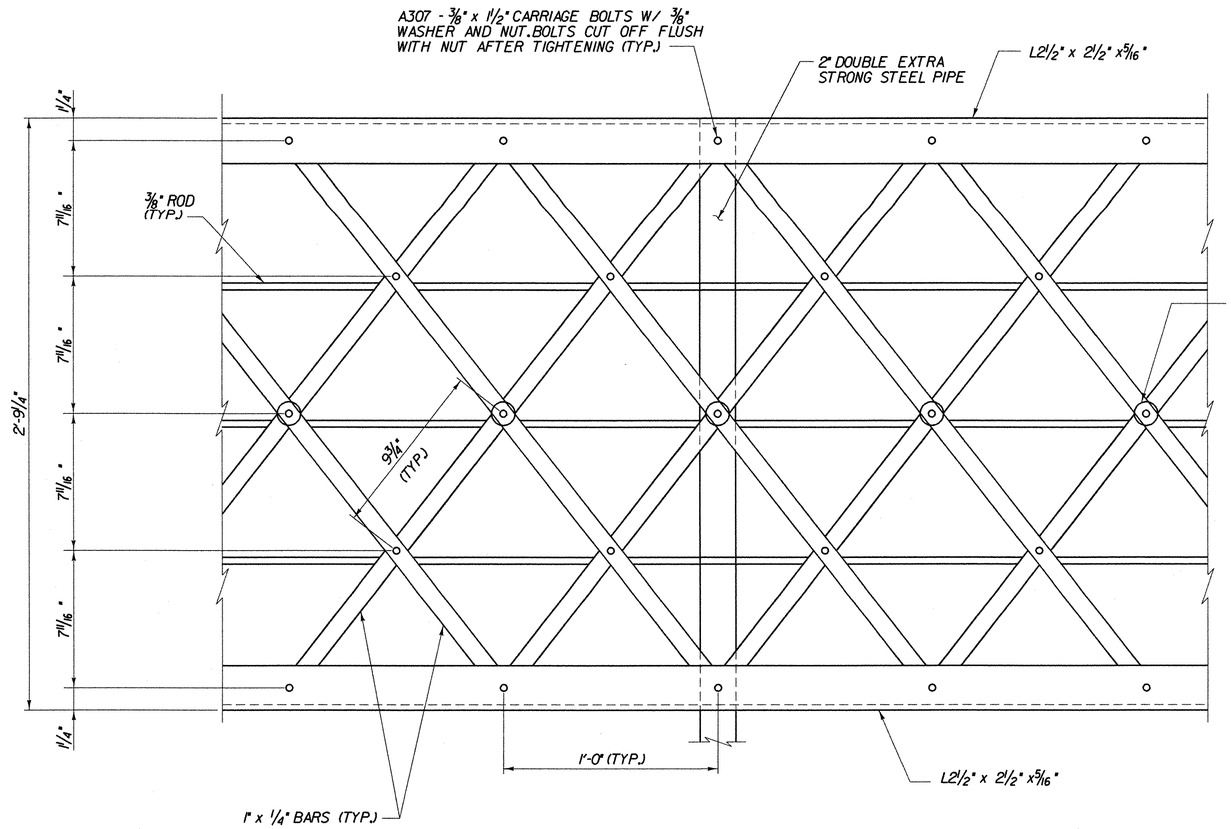
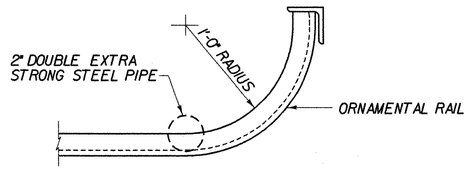


RAILING ELEVATION

SCALE 3" = 1'-0

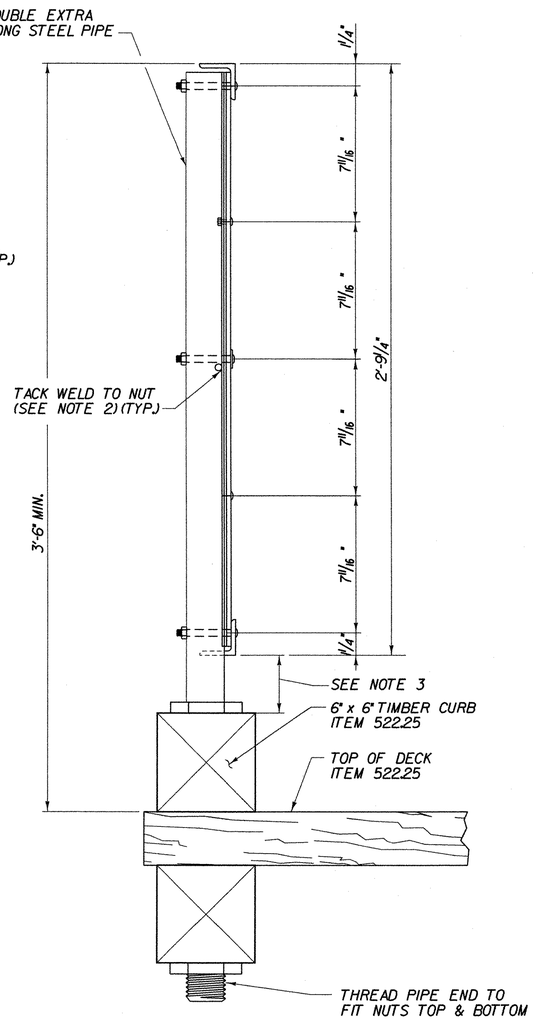
NOTES:

1. ALL MATERIAL TO BE AASHTO M270 GRADE 36. PAID FOR UNDER ITEM 525.15.
2. RODS SHALL BE LOCATED TO PREVENT NUT ROTATION
3. THE VERTICAL OPENING BELOW THE BOTTOM ANGLE SHALL NOT EXCEED 6".



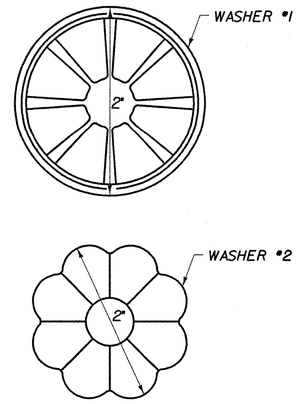
TYPICAL RAIL END DETAIL

(NOT TO SCALE)



TYPICAL BRIDGE SECTION

SCALE 3" = 1'-0



ORNAMENTAL WASHERS

(NOT TO SCALE)

NOTES:

1. USE WASHER #1 AS A FIRST CHOICE FOR AN ORNAMENTAL WASHER AND #2 WASHER AS A SECOND CHOICE.
2. ONE WASHER STYLE WILL BE USED THROUGHOUT THE PROJECT.
3. ORNAMENTAL WASHERS SHALL BE CAST IRON AND COST INCLUDED IN THE RAILING ITEM.

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of WEST RUTLAND	Bridge No. XX
Highway No. CLARENDON AVE.	Log Sta.
	Surv. Sta.

PEDESTRIAN BRIDGE OVER CLARENDON BROOK

RAILING DETAILS

Designed By L. HARDEN	Drawn by Wm WEATHERBY
Checked By M. OLSTAD Date 4/2002	Bridge Design Supervisor M. OLSTAD Date 4/2002
PROJECT WEST RUTLAND	PROJECT NO. ST WALK (11)
I.G.C. Info.	
Bridge Sheet No. BRI09	Sheet 11 OF 12

CHA CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
11 WINNERS CIRCLE ALBANY, NEW YORK, 12205

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DATE/TIME = 11/09/02
USER = 2467

N

861

N46

℄ OF EXISTING ROADWAY

EXISTING ROADWAY

CLARENDON AVE

CLARENDON AVE. SIDEWALK STA.0+50
EQUIVALENT SIDEWALK
STA.B0+03.70
ELEV. 105.61 (MEET EXISTING)

PRC STA.B0+18.27
ELEV.105.06

SEE SOD GUTTER DETAIL
THIS SHEET

SEE SOD GUTTER DETAIL
THIS SHEET

CLARENDON AVE. SIDEWALK
STA.2+10
EQUIVALENT SIDEWALK
STA.B1+66.9 ±
ELEV. 99.36 ± (MEET EXISTING)

BM101
N5163.212.
E4705.558

N 29°-00'-00"E

PRC STA.B1+42.16
ELEV.100.28 ±

B0+20

B0+60

B0+80

AZ.161°-29'-16.80"

B1+00

B1+20

B1+40

B1+60

MEET EXISTING
PAVED DRIVEWAY

105

100

95

94

93

95

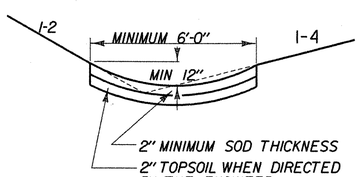
100

FLOW
CLARENDON BROOK

PLAN

SCALE 1" = 5'-0

5 0 5



SODDING DETAIL

(NOT TO SCALE)

LEGEND

HAY BALES FOR EROSION CONTROL, ITEM 651.26

GOETEXTILE FOR SILT FENCE - ITEM 649.51

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of WEST RUTLAND	Bridge No. XX
	Log Sta.
Highway No. CLARENDON AVE.	Surv. Sta.

PEDESTRIAN BRIDGE OVER CLARENDON BROOK

DRAINAGE & TEMPORARY EROSIAN CONTROL

Designed By L. HARDEN	Drawn by Wm WEATHERBY
Checked By M. OLSTAD Date 4/2002	Bridge Design Supervisor M. OLSTAD Date 4/2002
PROJECT WEST RUTLAND	PROJECT NO. ST WALK (11)
L.G.C. Info.	
Bridge Sheet No. BR110	Sheet 12 OF 12

CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
11 WINNERS CIRCLE ALBANY, NEW YORK, 12205

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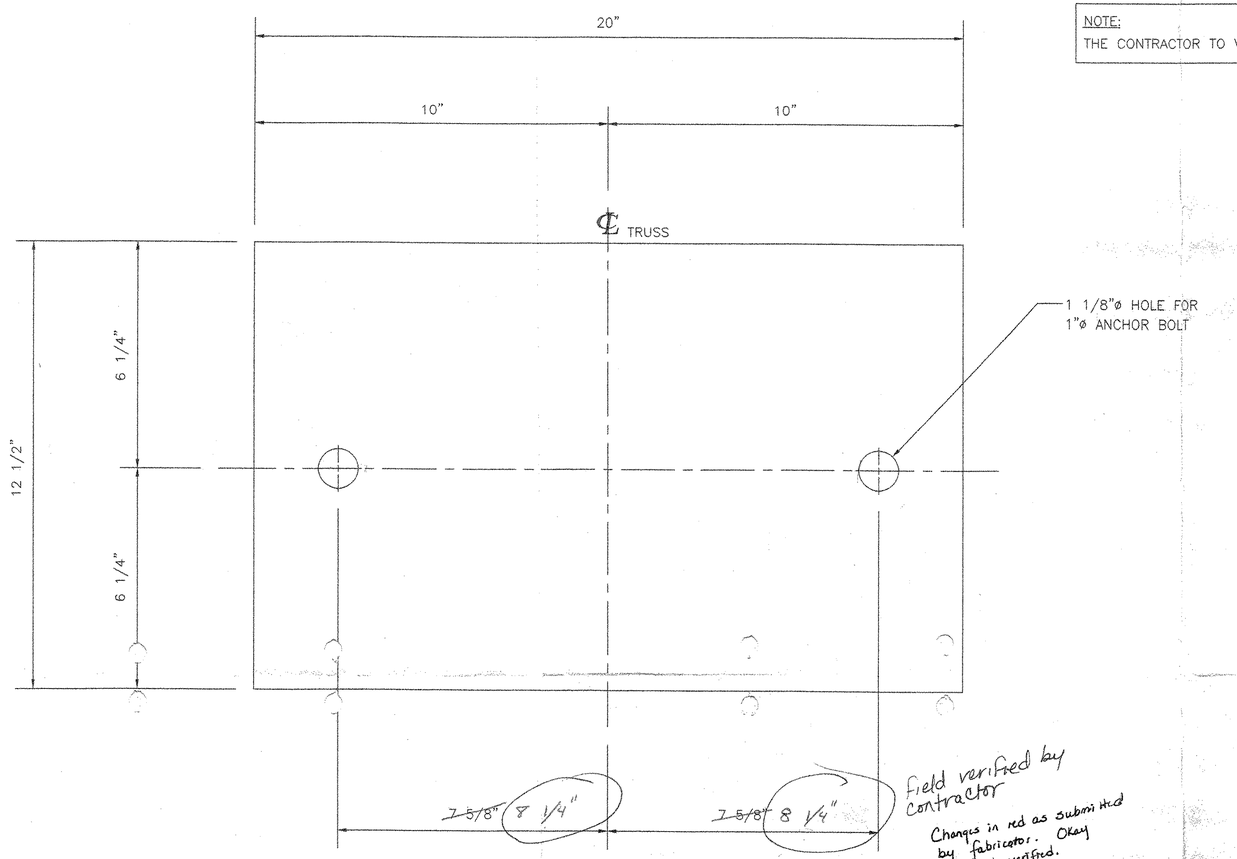
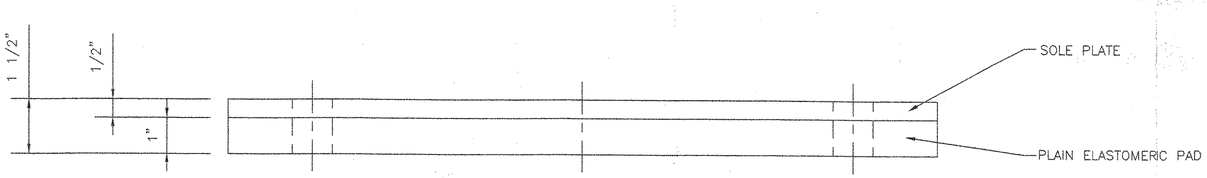


Field verified by contractor

Changes in red as submitted by fabricator. Okay if field verified.

PLAN

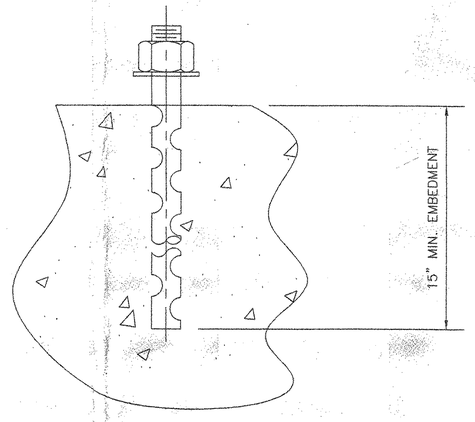


FRONT ELEVATION

TYPE – E.P.

QUANTITY – 4

NOTE:
THE CONTRACTOR TO VERIFY ALL DIMENSIONS, THICKNESS, MATERIALS & NOTES.



ANCHOR BOLT DETAIL

N.T.S.

1"ø X 20" LONG ASTM (A36) SWEDGED ANCHOR BOLT WITH 5" OF THREADS ONE END, ONE ASTM A563 HEAVY HEX NUT & ONE ASTM F436 WASHER. ALL GALVANIZED

SA709 GR 36

MATERIAL:

STEEL – ASTM A709 GR36 ZINC METALIZED
ELASTOMER – AASHTO 50 DUROMETER GRADE 3 NEOPRENE

NOTES:

1. BEARINGS SHALL BE SHIPPED IN DUST & MOISTURE PROOF COVERS FOR PROTECTION DURING TRANSIT & STORAGE.
2. ALL STEEL COMPONENTS SHALL BE METALIZED AS PER SECTION 531.04(b) & 506.15. AFTER THE BEARINGS ARE METALIZED, THEY SHALL BE SEALED WITH AN APPROVED PRIMER AS SPECIFIED IN SUBSECTION 506.15.
3. PRIOR TO METALIZING, ALL CORNERS & EDGES OF STEEL PLATES SHALL BE GROUND TO A 1/16" RADIUS.
4. LOCATION OF FABRICATION PLANT – 70 SOUTH ST., WALPOLE, MA 02081
5. COSMEC INC. REPRESENTATIVE – MR. MATT McANDREWS (508-668-6600)

☐ 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

CLOUGH HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS
& LANDSCAPE ARCHITECTS

DATE 6/23/03 A. Hayden

RECEIVED
OK'D BY NH OK'D BY AHO
JUN 09 2003
RESUBMIT ____ APPROVED AHO As noted
BY AHO DATE 6/20/03

REV.		BY:	DATE	CK'D BY:	DATE

STATE OF VERMONT

AGENCY OF TRANSPORTATION

PROJECT: WEST RUTLAND
PROJECT NO.: ST. WALK (II)
PEDESTRIAN BRIDGE OVER CLARENDON BROOK
HIGHWAY NO.: CLARENDON AVE.
TOWN OF WEST RUTLAND

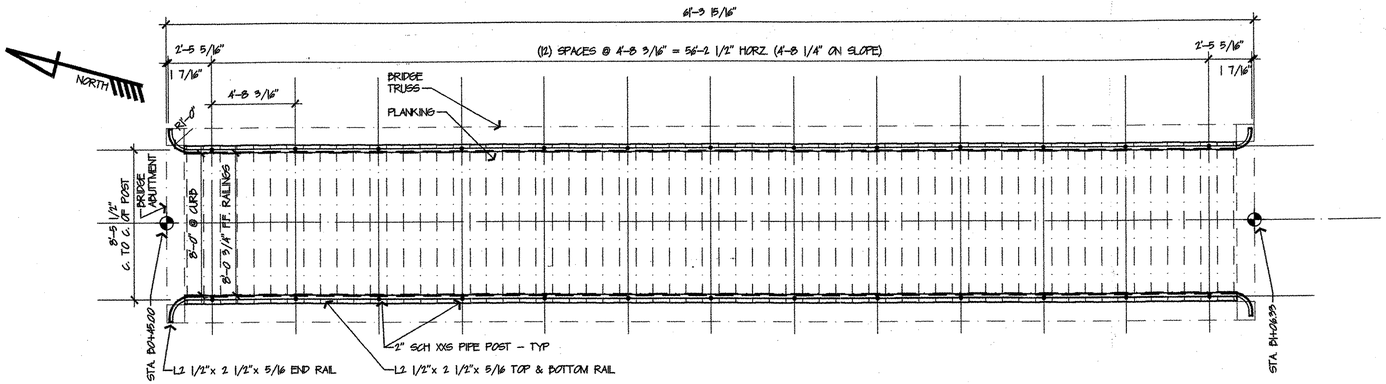
COSMEC, INC. 70 SOUTH STREET WALPOLE, MA. 02081

SCALE: 1/2"=1"	DRAWN BY: NH	CHECKED BY: MCM
	DATE: 5.23.03	DATE 5.23.03

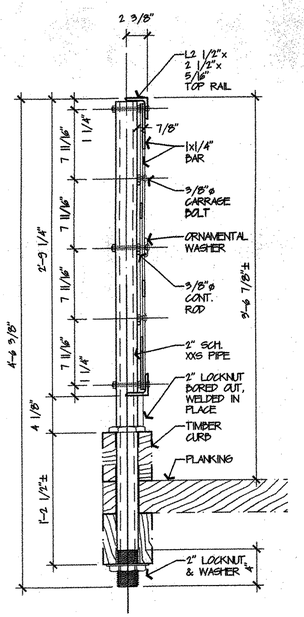
PLAIN ELASTOMERIC BEARINGS

CUSTOMER	S.O. NUMBER	DRAWING NUMBER	REV.
AUSTIN CONSTRUCTION INC.	59802	3876	

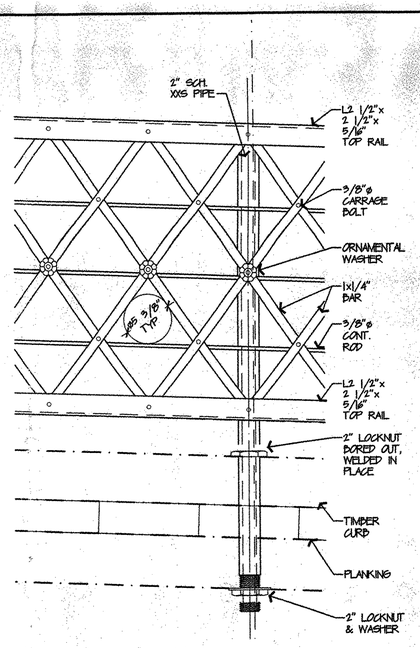
C:\DWG\CURRENT\VT59802\VT59802.dwg, 05/23/2003 03:05:10 PM



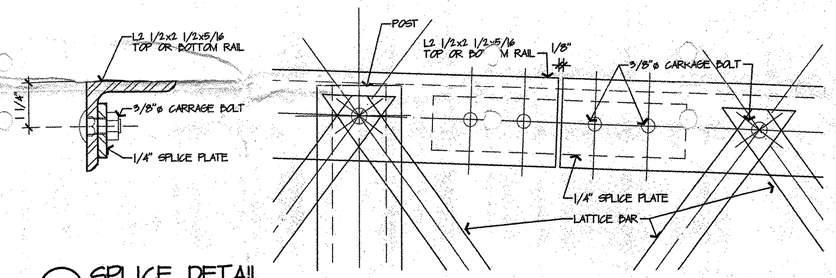
2 PLAN
SCALE: 1/4"=1'-0"



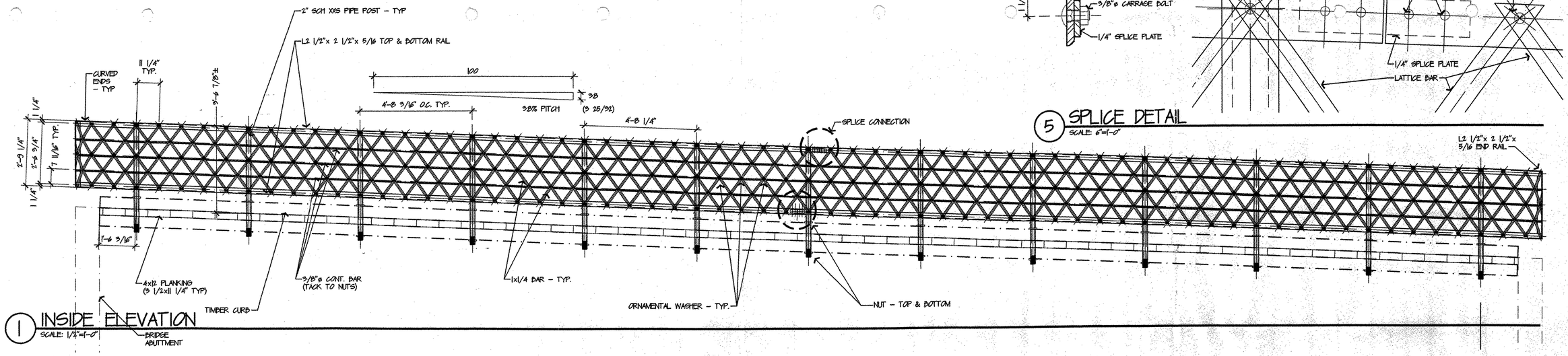
3 SECTION
SCALE: 1 1/2"=1'-0"



4 ELEV. DETAIL
SCALE: 1 1/2"=1'-0"



5 SPLICE DETAIL
SCALE: 6"=1'-0"



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

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

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: CONFIRMING AND CORRELATING ALL QUANTITIES AND DIMENSIONS; FABRICATION PROCESSES AND TECHNIQUES OF CONSTRUCTION; COORDINATION OF THE WORK WITH THAT OF ALL OTHER TRADES; AND THE SATISFACTORY PERFORMANCE OF HIS WORK.

CLOUGH HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNING
ARCHITECTURE, LANDSCAPE
DATE 8/25/03 BY

RECEIVED
OK'D BY LH OK'D BY SES
AUG 14 2003
RESUBMIT ____ APPROVED ✓ WITH CHANGES NOTED IN RED
BY ALG DATE 8/26/03

NOTE:
1. RAILING TO RECEIVE PRIME & TOP COAT AS PER V.A.T. SUP. SPEC # 513 PRIOR TO ASSEMBLY

REVISIONS	REMARKS

ONE PRUYN'S ISLAND DR.
GLENS FALLS, N.Y. 12801

RIVERSIDE FAB, INC.

PHONE # 1(518) 798-3533
FAX # 1(518) 798-1711

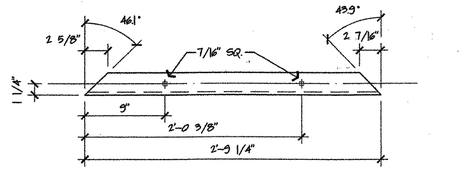
DATE	7/31/03
DRAWN BY	CCE
CHK'D BY	
HOLES	
BOLTS	A325
PAINT	
SCALE	AS NOTED

PROJECT	WEST RUTLAND ST WALK (II) PEDESTRIAN BRIDGE OVER CLARENDON BROOK
LOCATION	WEST RUTLAND, VT, OFF VT 13.5
CUSTOMER	STATE OF VERMONT, AGENCY OF TRANSPORTATION
ARCHITECT	CLOUGH HARBOUR & ASSOC. LLP
JOB NO.	RFC 598
SHEET NAME	INSIDE ELEVATION & PLAN, RAILING

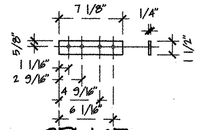
PRINT RECORD

DATE	NO.	

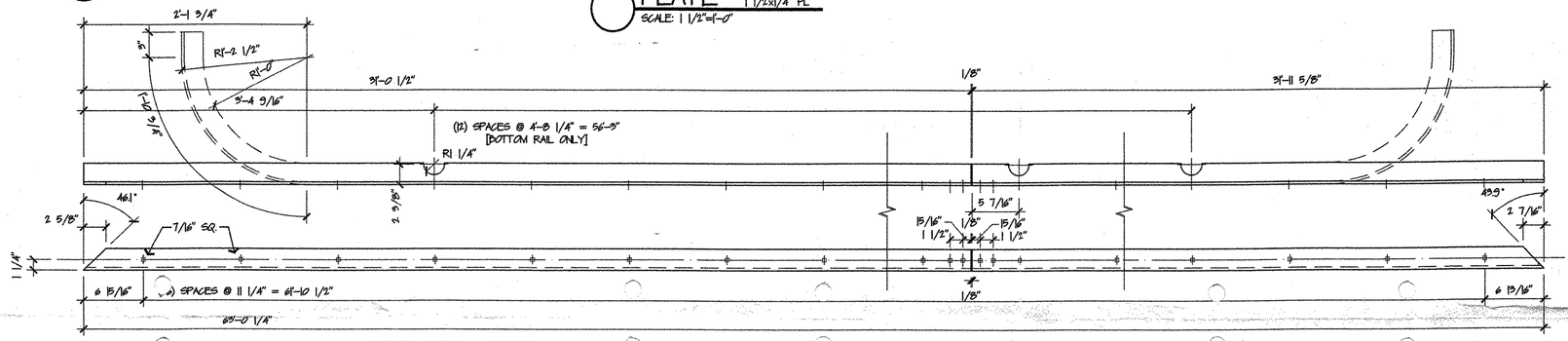
DRAWING NUMBER: E1



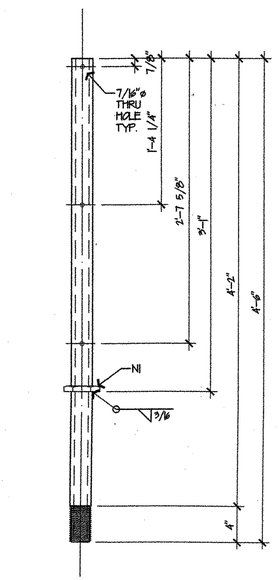
3 END RAIL
SCALE: 1 1/2"=1'-0"
(4) REQD
L 2 1/2"x2 1/2"x5/16



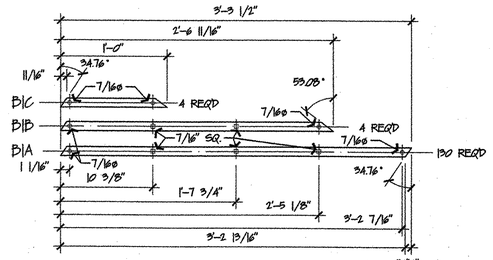
SPLICE PLATE
SCALE: 1 1/2"=1'-0"
(2) REQD
1 1/2x1/4" PL



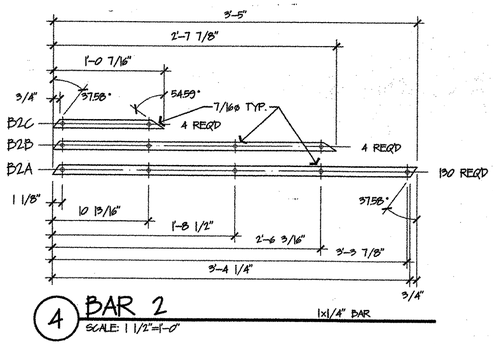
2 TOP & BOT. RAIL
SCALE: 1 1/2"=1'-0"
BOT. RAIL SHOWN, (2) EA. REQD
L 2 1/2"x2 1/2"x5/16



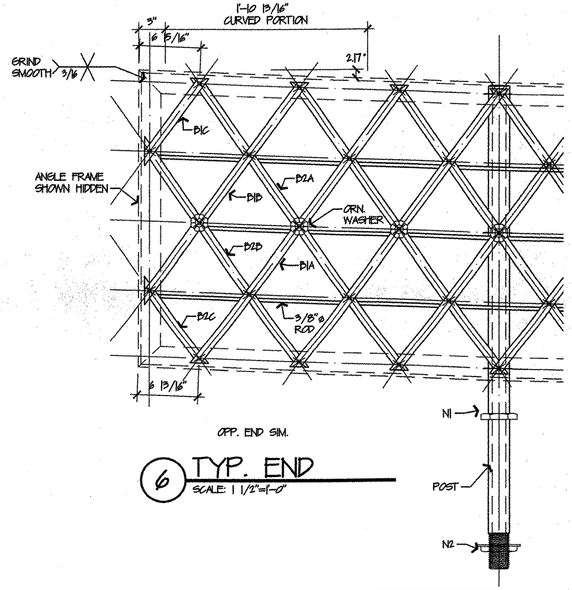
1 POST
SCALE: 1 1/2"=1'-0"
(26) REQD
2" SCH XXS



5 BAR 1
SCALE: 1 1/2"=1'-0"
1x1/4" BAR



4 BAR 2
SCALE: 1 1/2"=1'-0"
1x1/4" BAR



OPP. END SIM.

6 TYP. END
SCALE: 1 1/2"=1'-0"

RIVERSIDE FAB, INC.

PROJECT PED. BRIDGE – W. RUTLAND RFC./RT. RFC 598
BILL OF MATERIAL ☐ CUTTING LIST ☐ SHIP NOTICE ☐
RECD. BY _____ DATE _____

QTY.	MARK	DESCRIPTION	LENGTH FT.	LENGTH IN.	REMARKS
130	B1A	BAR 1 'A' 1x1/4"	3	2 1/2	ROUND & SQ HOLES
4	B1B	BAR 1 'B' 1x1/4"	2	6 11/16	ROUND & SQ HOLES
4	B1C	BAR 1 'C' 1x1/4"	1	0	
130	B2A	BAR 2 'A' 1x1/4"	3	5	
4	B2B	BAR 2 'B' 1x1/4"	2	7 7/8	
4	B2C	BAR 2 'C' 1x1/4"	1	0 7/16	
4	–	TOP & BOTTOM RAIL	63	0 1/4	L 2 1/2x2 1/2x5/16"; SQ HOLES
4	–	END RAIL	2	9 1/4	L 2 1/2x2 1/2x5/16"; SQ HOLES
26	–	2" SCH XXS POST	4	6	4" OF 2 1/4" THD ONE END & 3 HOLES
2	–	1 1/2"x1/4" SPLICE PLATE	–	7 1/8	
13	N1	2 1/4" NUT	–	–	BORE 2 7/16"ø & SPLIT IN HALF
13	N2	2 1/4" NUT	–	–	SPLIT IN HALF
26	–	2 1/4" WASHER	–	–	
272	–	3/8"ø CARRIAGE BOLT	–	1	w/ NUT & WASHER
224	–	3/8"ø CARRIAGE BOLT	–	1 1/4	w/ NUT & WASHER
54	–	3/8"ø CARRIAGE BOLT	–	1 1/2	w/ NUT & WASHER
54	–	3/8"ø CARRIAGE BOLT	–	4	w/ (2) NUTS & WASHER
26	–	3/8"ø CARRIAGE BOLT	–	4 1/4	w/ (2) NUTS & WASHER
134	–	ORNAMENTAL "WASHER"	KING ARCH. METAL #45-084-R – DRILL 5/8"ø FOR CARRIAGE BOLT		

☐ NO EXCEPTION TAKEN ☐ REJECTED
CLOUGH HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
DATE _____ BY _____

☐ 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.
CLOUGH HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
DATE 8/26/03 BY

RECEIVED
CK'D BY LH CK'D BY SES
AUG 14 2003
RESUBMIT _____ APPROVED ✓ WITH CHANGES NOTED AS RED
BY _____ DATE 8/20/03

REVISIONS	REMARKS

ONE PRUYN'S ISLAND DR.
GLENS FALLS, N.Y. 12801
RIVERSIDE FAB, INC.
PHONE # 1(518) 798-3533
FAX # 1(518) 798-1711

DATE	7/31/03
DRAWN BY	CCE
CH'D BY	
HOLES	
BOLTS	A325
PAINT	
SCALE	AS NOTED

PROJECT	WEST RUTLAND ST WALK (H) PEDESTRIAN BRIDGE OVER CLARENDON BROOK
LOCATION	WEST RUTLAND, VT. OFF VT 133
CUSTOMER	STATE OF VERMONT, AGENCY OF TRANSPORTATION
ARCHITECT	CLOUGH HARBOUR & ASSOC. LLP
JOB NO.	RFC 598
SHEET NAME	PIECE DWG, RAILING

PRINT RECORD

DATE	NO.	

DRAWING NUMBER F1