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CONVENTIONAL SIGNS

COUNTY LINE	---
TOWN LINE	---
LIMITS OF ACCESS	---
POINT OF ACCESS	X
FENCE LINE	---
STONE WALL	---
TRAVELED WAY	---
GUARD RAIL	---
RAILROAD	---
SURVEY LINE	---
CULVERT	---
POWER POLE	---
TELEPHONE POLE	---
TREES	---
CONTROL OF ACCESS	---
PROPERTY LINE	---
ROW, TAKING LINE	---
SLOPE RIGHTS	---
TOP OF CUT	---
TOE OF CUT	---

DATUM	ASSUMED
VERTICAL	N/A
HORIZONTAL	N/A

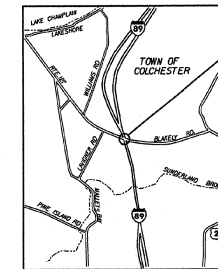
STATE OF VERMONT AGENCY OF TRANSPORTATION



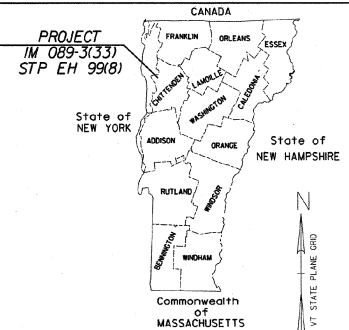
PROPOSED IMPROVEMENT TOWN OF COLCHESTER COUNTY OF CHITTENDEN BLAKELY ROAD PEDESTRIAN BRIDGE OVER INTERSTATE 89

LENGTH OF BRIDGE 267 ± FEET = 0.050 MILES
LENGTH OF PROJECT 1422 ± FEET = 0.270 MILES
BEGINNING AT A POINT APPROXIMATELY 0.146 MILES EAST OF THE
BLAKELY ROAD/I-89 INTERSECTION AND EXTENDING WEST 0.123 MILES.

WORK TO BE PERFORMED UNDER THIS PROJECT INCLUDES CONSTRUCTION OF A PARALLEL
PEDESTRIAN BRIDGE AND RELATED APPROACH WORK AND GUARDRAIL MODIFICATIONS IN THE I-89 MEDIAN

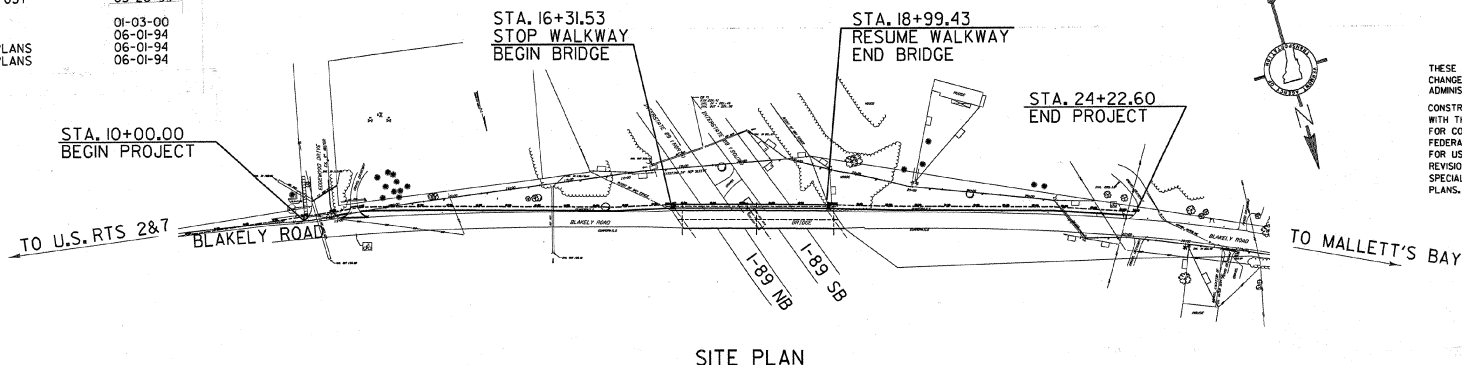


VICINITY MAP
(NOT TO SCALE)



RECORD PLANS

CONTRACTOR:	CONTRACTOR'S CRANE SERVICE - MORRISVILLE VT.
RESIDENT ENGINEER:	R. STANCLIFF
CONSTRUCTION BEGAN:	SEPTEMBER 23, 2002
CONSTRUCTION COMPLETE:	
RECORD PLANS BY:	R. RICHERT
I HEREBY CERTIFY THAT ALL THE CONSTRUCTION REQUIRED BY THIS SET OF DRAWINGS HAS BEEN ACCOMPLISHED AS INDICATED HEREIN.	
BY:	Resident Engineer
DATE:	June 20, 2003
NOTE: Any further information concerning final quantities, amounts or other details relative to this project may be found on microfilm in Central Files.	



SITE PLAN

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 1990, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON MARCH 15, 1990 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.



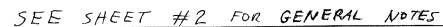
DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
APPROVED _____ DATE _____
DIVISION ADMINISTRATOR

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
APPROVED _____ DATE 4/4/01
DIRECTOR OF PROJECT DEVELOPMENT

PROJECT MANAGER:
SHERWARD G. FARNSWORTH

CHA CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, PLANNERS, ARCHITECTS
& LANDSCAPE ARCHITECTS
VERMONT LICENSE NO. 1001-0001

PROJECT: W-089-3(33)
STP EH 99(8)
SHEET 1 OF 23 SHEETS

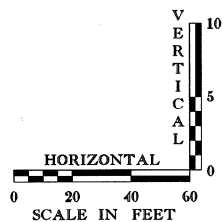
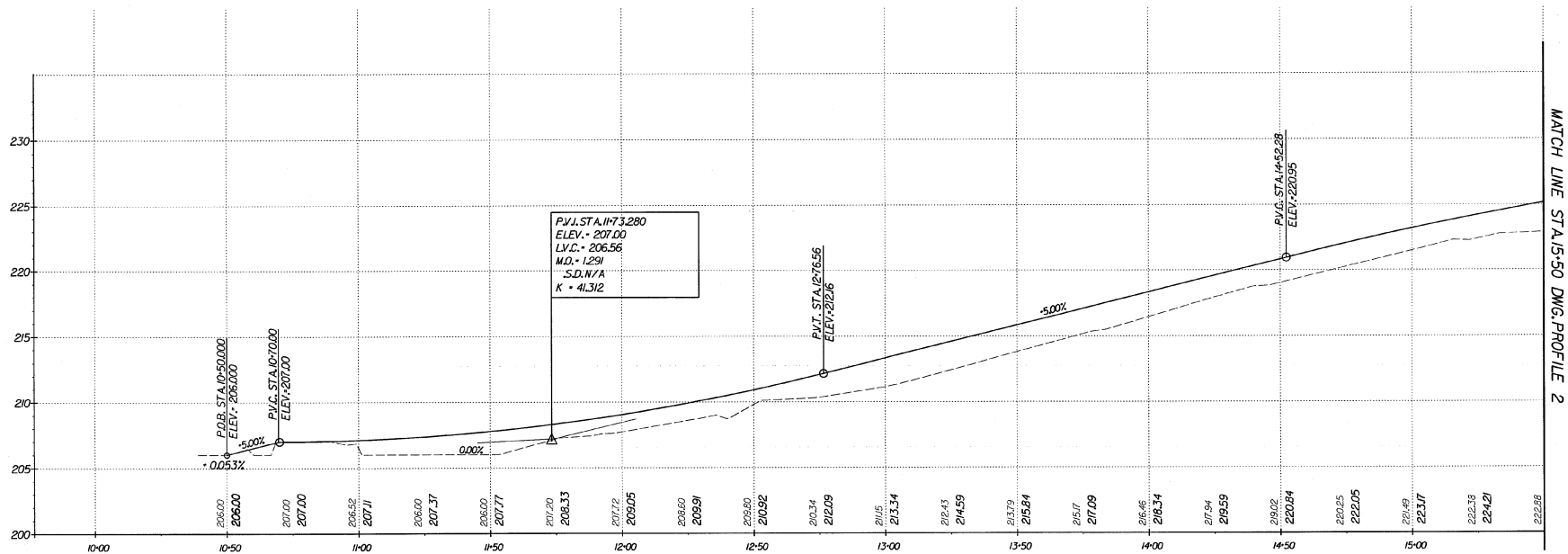


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STATE OF VERMONT
AGENCY OF TRANSPORTATION
STRUCTURES DIVISION

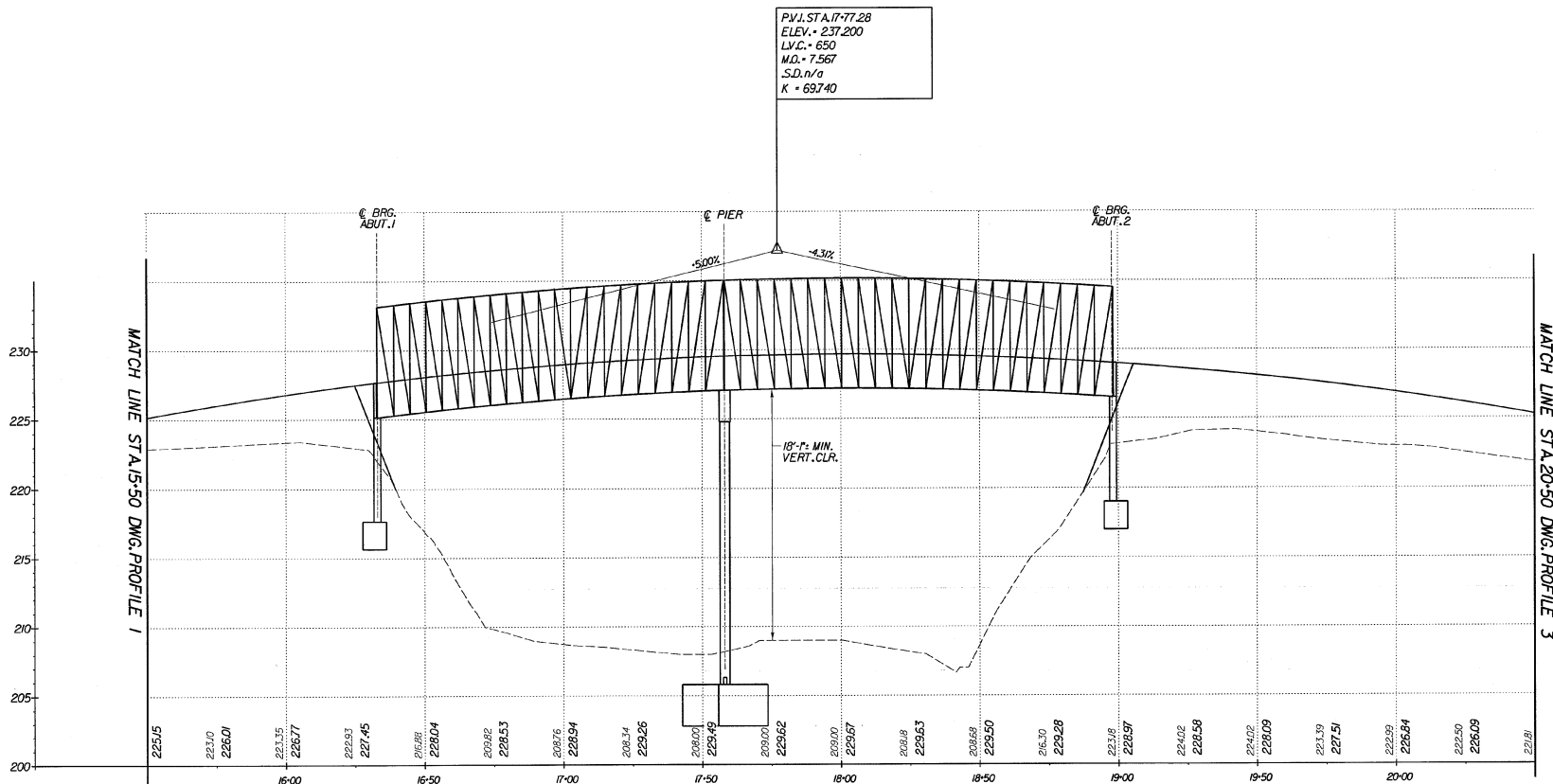
ITEM NO.	ITEM	UNIT	QUANTITY BREAKDOWN (SEE SHEET 10 FOR PROJECT UNITS)							PROJECT TOTAL	FINAL
			STP EH 99(B)			IM-089-3(3.3)					
			ROADWAY	EROSION	TOTAL	BRIDGE	EROSION	FULL E&C	TOTAL		
201J0	CLEARING AND GRUBBING	LS								1	
203J5	COMMON EXCAVATION	CY	230		230					230	
203J30	EARTH BORROW	CY	20		20					20	
203J40	FINE GRADING - SUBGRADE	SY	735		735	65			65	800	
204J25	STRUCTURE EXCAVATION	CY	366		366	654			654	1020	
204J30	GRANULAR BACKFILL FOR STRUCTURES	CY	221		221	397			397	618	
301J25	SUBBASE OF CRUSHED GRAVEL	CY	240		240					240	
501J22	CONCRETE, CLASS A	CY				21			21	21	
501J25	CONCRETE, CLASS B	CY				146			146	146	
505J36	TEMPORARY STEEL SHEET PILING	SF				1310			1310	1310	
507J7	EPOXY COATED REINFORCING STEEL	LB				14870			14870	14870	
514J0	WATER REPELLANT	GAL				10			10	10	
525J5	METAL HAND RAILING (MOD-2 x 6 PRESSURE TREATED TIMBER)	LF	810		810	110			110	920	
526J20	CONCRETE BIN TYPE RETAINING WALL (MOD A - SHIP 2 FOOT DEEP BLOCK)	SF				3000			3000	3000	
526J20	CONCRETE BIN TYPE RETAINING WALL (MOD B - SHIP 4 FOOT DEEP BLOCK)	SF				410			410	410	
526J20	CONCRETE BIN TYPE RETAINING WALL (MOD C - PLACE 2 FOOT DEEP BLOCK)	SF	3000		3000					3000	
526J20	CONCRETE BIN TYPE RETAINING WALL (MOD D - PLACE 4 FOOT DEEP BLOCK)	SF	410		410					410	
545J20	PREFABRICATED MULTI-MODAL BRIDGE (MOD)	LS				1			1	1	
618J5	BITUMINOUS CONCRETE SIDEWALK	TON	85		85	7			7	92	
620J1	CHAIN-LINK FENCE, 4 FEET	LF	1130		1130					1130	
620J20	BRACE ASSEMBLY FOR CHAIN-LINK FENCE, 4 FEET	EA	10		10					10	
620J25	WOVEN WIRE FENCE WITH STEEL POSTS	LF				50			50	50	
620J75	SNOW BARRIER (GALV)	LF				175			175	175	
621J75	REMOVING AND RESETTING GUARDRAIL (MOD-MODIFY POSTS)	LF				120			120	120	
621J90	TEMPORARY TRAFFIC BARRIER (CONCRETE MEDIAN BARRIER)	LF				240			240	240	
630J0	UNIFORMED TRAFFIC OFFICERS	HR	50		50	120			120	170	
630J5	FLAGGERS	HR	300		300	90			90	390	
631J6	TEST EQUIPMENT FOR CONCRETE	LS						1	1	1	
635J0	MOBILIZATION	LS	0.2		0.2	0.8			0.8	1	
641J0	TRAFFIC CONTROL	LS	0.5		0.5	0.5			0.5	1	
649J41	GEOTEXTILE FOR UNDERDRAIN TRENCH LINING	SY	520		520					520	
649J51	GEOTEXTILE FOR SILT FENCE	SY		397	397		43		43	440	
650J5	SEED	LB		45	45		5		5	50	
651J8	FERTILIZER	LB		415	415		45		45	460	
651J25	HAY MULCH	TON		1	1		0.1		0.1	1.1	
651J26	HAY BALES FOR EROSION CONTROL	EA		300	300		30		30	330	
651J35	TOPSOIL	CY	30		30					30	
651J40	STONE FILL, TYPE 1	CY	30		30					30	
651J41	CAST-IN-PLACE CONCRETE CURB, TYPE B	FT	20		20					20	
651J41	REMOVAL OF EXISTING CURB	FT	20		20					20	
651J40	PORTLAND CEMENT CONCRETE SIDEWALK 5 IN.	SY	10		10					10	
651J40	EROSION MATTING	SF	90		90					90	
651J40	TRAFFIC SIGNS (TYPE A)	SF	12		12						
651J40	PLUNGED CHANNEL SIGN POSTS	LB	150		150						
* ITEMS NOT IN ORDER											
BRIDGES(S) AT STATION(S) STA. 16+34.53			PREPARED BY: B.A.S.YAL	CHECKED BY:		PROJECT: COLCHESTER		PROJECT NO: IM-089-3(3.3) & STP EH 99(B)			
LOCATION(S) BLAKLEY RD. PEDESTRIAN BRIDGE OVER I-89			SUPERVISOR: M.W. OLSTAD		BR OF		SHEET NO: 3 OF 23				



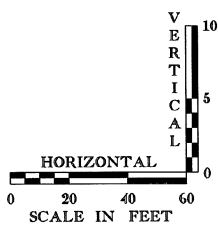
STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of	COLCHESTER	Bridge No.	
Highway No.	I-89	Loc. Sta.	
BLAKELY RD. PEDESTRIAN BRIDGE OVER I-89		Surv. Sta.	
PROFILE 1			
Designed By D. STECIAK		Drawn by K. DETRICK	
Checked By	Date	Bridge Design Supervisor	Date
M. OLSTAD	7/2001	M. OLSTAD	7/2001
PROJECT	COLCHESTER	PROJECT NO.	HM-089-3(13) STP EH 99(8)

PREPARED BY	I.G.C. Info.	
	Bridge Sheet No.	Sheet 7 OF 23



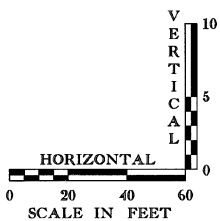
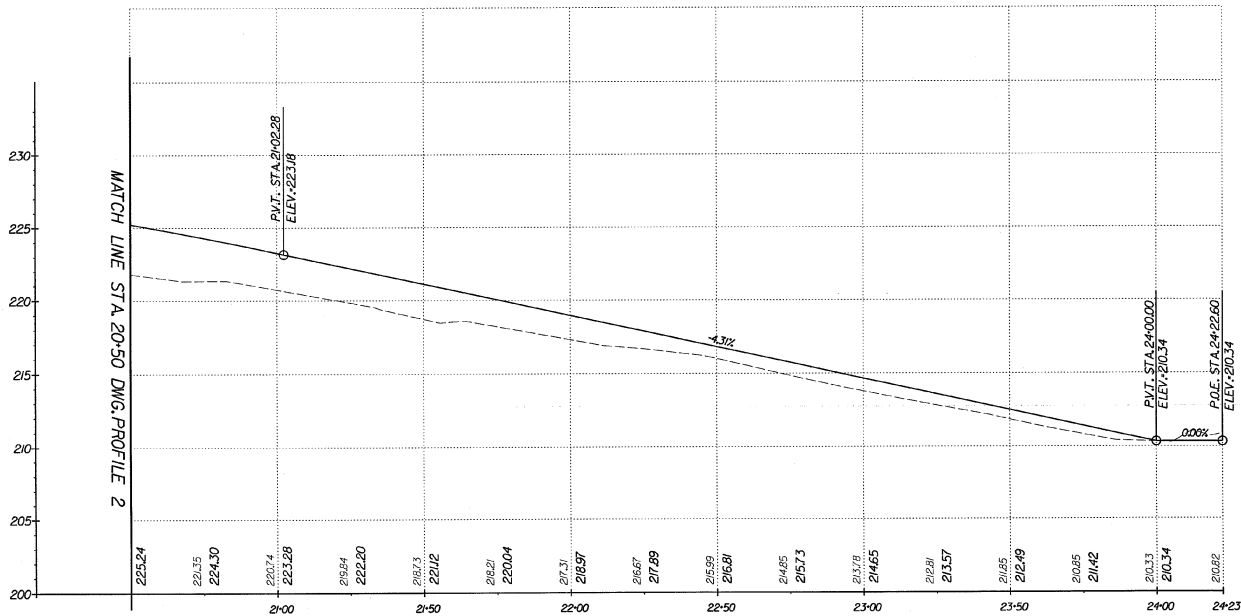
PROFILE



STATE OF VERMONT AGENCY OF TRANSPORTATION

Town Of	COLCHESTER	Bridge No.	
Highway No.	I-89	Log Sta.	
Project	BLAKELY RD. PEDESTRIAN BRIDGE OVER I-89	Surv. Sta.	
PROFILE 2			
Designed By	D. STECIAK	Drawn by	K. DETRICK/J. LAGONE
Checked By	M. OLSTAD	Bridge Design Supervisor	M. OLSTAD
Date	7/2001	Date	7/2001
PROJECT	COLCHESTER	PROJECT NO.	M-089-3(33)
			STP EH 99(8)
I.G.C. info.		Bridge Sheet No.	
		Sheet 8 OF 23	

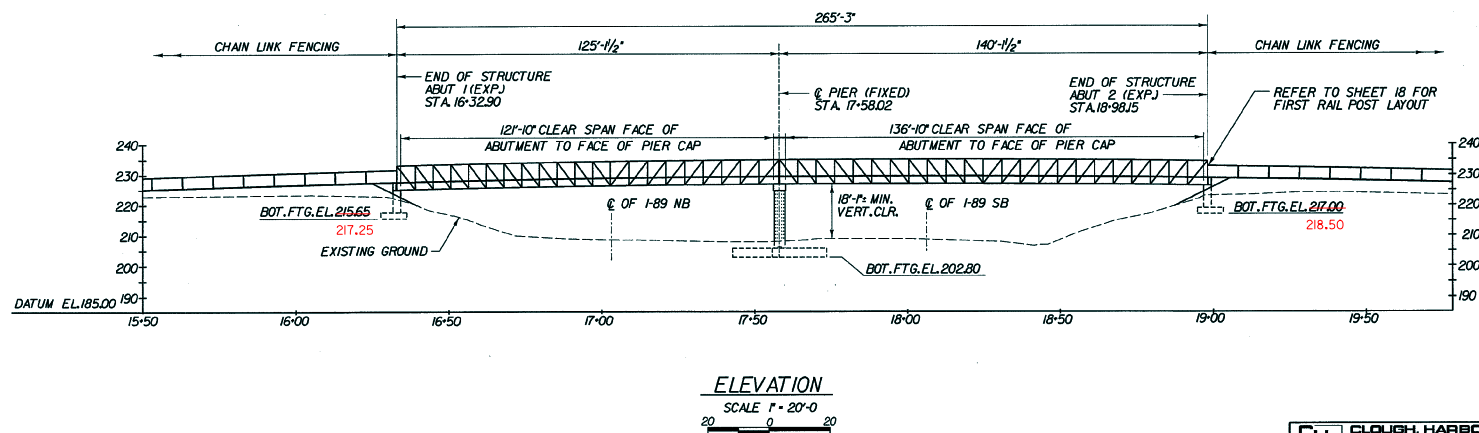
CHA CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, PLANNERS & LANDSCAPE ARCHITECTS
60 WATER STREET, SUITE 200, VERMONT, VT 05401



STATE OF VERMONT AGENCY OF TRANSPORTATION

Town Of	COLCHESTER	Bridge No.	
Highway No.	1-89	Log Sta.	
		Surv. Sta.	
BLAKELY RD. PEDESTRIAN BRIDGE OVER I-89			
PROFILE 3			
Designed By	D. STECIAK	Drawn by	K. DETRICK
Checked By	M. OLSTAD	Date	7/2001
PROJECT	COLCHESTER	Bridge Design Supervisor	M. OLSTAD
		PROJECT NO.	84-089-3(33)
			STP. EX. 996B
L&C. Info.			
Bridge Sheet No.		Sheet 9 OF 23	

CHA CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS
& LANDSCAPE ARCHITECTS
BIRMINGHAM, OHIO ALBANY, NEW YORK, 2008



Town Of	COLCHESTER	Bridge No.	
Highway No.	I-89	Log Sta.	
		Surv. Sta.	
BLAKELY RD, PEDESTRIAN BRIDGE OVER I-89			
PLAN AND ELEVATION			
Designed By	D. STECIAK	Drawn by	K. DETRICK
Checked By	M. OLSTAD	Bridge Design Supervisor	
Date	7/2001	Date	7/2001
PROJECT	COLCHESTER	PROJECT	4-009-3333 STP EH 9903
L.G.C. Info.			
Bridge Sheet No.		Sheet	Of 23

COMMONLY USED SYMBOLS

GRANULAR (SOILS)		DESCRIPTIVE TERM	
Very Loose	2-4	Very Soft	2-4
Loose	4-5	Soft	5-8
Med. Dense	5-8	Med. Stiff	8-15
Dense	15-30	Stiff	30-60
Very Dense	30-60	Hard	60-100
		Very Hard	>100

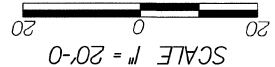
DEFINITIONS (AASHTO)

BECKON (LEB)B - Rock in its native location of indeterminate thickness.	BOLDFR - A rock fragment with an average dimension ≥ 12 inches.	COBBLE - Rock fragments between 3 and 6 inches.	MUD - Fine-grained organic soil containing organic material.	MOISTURE CONTENT - Weight of water divided by dry weight of soil.	FLOWING SAND - Granular soil so disturbed (loose) that it flows.	SILT - Silty (0.0025" (200 sieve) to 0.075" (20 sieve).	CLAY - Silty (0.0025" (200 sieve) to 0.0002" (200 sieve).	STRIKE - Angle from magnetic north to line of intersection of plane.	DP - Indication of bed with a horizontal plane.	ADDED - Indication of bed with a horizontal plane.
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GENERAL NOTES

5. Technical structure details shown on the boring plan layout of soils and may not accurately portray actual conditions. The substructure information presented herein was based in part upon the substructure information presented herein. Analysis and interpretation of substructure data was performed and reported for agency design and estimation purposes. Presentation of the information in the contract is intended to provide the Contractor access to some degree of information. The foregoing information is presented in good faith and is not intended as a substitute for person and investigation. Independent investigation, independent analysis and judgment by the Contractor or judgment by the Contractor.

STATIONING IS BASED ON BLAKELY ROAD 1960 PLANS OF RECORD. THIS IS APPROMATE TO NEW STRUCTURE 17+55, +/- RIGHT 4 FT.

STATE OF VERMONT
AGENCY OF TRANSPORTATION

BORING INFORMATION SHEET

Town of	COLCHESTER	Highway No.	1-89
Bridge No.	75	Long Sta.	51+00
Project	BLAKELY RD. PEDESTAL BRIDGE OVER I-89	Designated By	S.F. RAYMONTH
Checked By	S.F. RAYMONTH	Date	11/28/00
Project	COLCHESTER	Design By	R. FLETT
Project No.	08-9	Bridge Design Supervisor	S.F. RAYMONTH
Sheet No.	23	Sheet	104 of 23

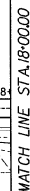
STATE OF VERMONT AGENCY OF TRANSPORTATION MATERIALS & RESEARCH DIVISION SUBSURFACE INFORMATION									
PROJECT NAME: COLCHESTER SITE NAME: BR 75 STATION: 10+83.50 GROUND EL.: 204.36					PROJECT NUMBER: IM089-3(33) SITE NO.: Blakely Rd. OFFSET: -20.00 G.W. DEPTH: 15.2				
BORING CREW CREW CHIEF: YOUNG DRILLER: YOUNG LOGGER: SOMERS					BORING RIG: SKID RIG BORING TYPE: WASH BORE SAMPLE TYPE: SPLIT BARREL				
DEPTH	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER FOOT	M.C. %	GRAVEL %	SAND %	FINES %	LL	PI
		A-2-4, Sa, brn, Moist, Rec. = 1.6'	12	14.6	2.5	78.1	19.4		
5		A-2-4, SiSa, brn, Moist, Rec. = 1.7'	10	20.2	1	76.9	22.1		
		A-2-4, SiSa, brn, MTW, Rec. = 1.15'	13	25.7	0.8	70.8	28.4		
		A-4, SaSi, gry-brn, MTW, Rec. = 1.7'	17	29.6		45.7	54.3		
10		A-4, SaSi, Lt/gry, MTW, Rec. = 1.7'	7	29.3	0.2	20.1	79.7		
		A-4, SaSi, Lt/gry, MTW, Rec. = 1.6'	4	29.7		24.9	75.1		
15		A-4, SaSi, Lt/gry, MTW, Rec. = 1.5'	4	27.2	VISUAL	CLASSIF	CATION		
		A-4, Si, gry, MTW, Rec. = 0.8'	5	26.9	VISUAL	CLASSIF	CATION		
		A-4, SaSi, gry, MTW, Rec. = 0.8'	28.2	VISUAL	CLASSIF	CATION			
		A-4, Si, gry, MTW, Rec. = 1.5'	8	28.6	VISUAL	CLASSIF	CATION		
20		A-4, Si, gry, MTW, Rec. = 1.7'	5	26.2	VISUAL	CLASSIF	CATION		
		A-4, Si, gry, MTW, Rec. = 1.5'	7	27.4	VISUAL	CLASSIF	CATION		
25		A-4, SaSi, gry, MTW, Rec. = 1.0'	2	27.7	VISUAL	CLASSIF	CATION		
		A-4, Si, gry, MTW, Rec. = 1.6'	8	27.1	VISUAL	CLASSIF	CATION		
		A-4, Si, gry, MTW, Rec. = 1.4'	3	27.3	VISUAL	CLASSIF	CATION		
30		A-4, Si, gry, MTW, Rec. = 1.9'	2	29.3	VISUAL	CLASSIF	CATION		
35		A-4, Si, gry, MTW, Rec. = 1.9'	2	29.4	VISUAL	CLASSIF	CATION		
40		A-4, Si, gry, MTW, Rec. = 1.2'	3	32.3		0.8	99.2	31	6
45		A-4, Si, gry, MTW, Rec. = 2.0'	4	28.1		0.6	99.4		

STATE OF VERMONT AGENCY OF TRANSPORTATION MATERIALS & RESEARCH DIVISION SUBSURFACE INFORMATION									
PROJECT NAME: COLCHESTER SITE NAME: BR 75 STATION: 10+83.50 GROUND EL.: 204.36					PROJECT NUMBER: IM089-3(33) SITE NO.: Blakely Rd. OFFSET: -20.00 G.W. DEPTH: 15.2				
BORING CREW CREW CHIEF: YOUNG DRILLER: YOUNG LOGGER: SOMERS					BORING RIG: SKID RIG BORING TYPE: WASH BORE SAMPLE TYPE: SPLIT BARREL				
DEPTH	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER FOOT	M.C. %	GRAVEL %	SAND %	FINES %	LL	PI
		A-4, Si, gry, MTW, Rec. = 2.0'	1	30.7		1.2	98.8		
55		A-4, Si, gry, MTW, Rec. = 2.0'	5	30.4		3.8	96.2	29	6
60		A-4, Si, gry, MTW, Rec. = 2.0'	7	30.2	0.3	4.1	95.6	28	6
65		A-4, Si, gry, MTW, Rec. = 2.0'	3	27.5	0.3	2.8	96.9	28	6
70		A-4, Si, gry, MTW, Rec. = 2.0'	5	29	0.1	0.9	99		
75		A-3, Sa, brn, MTW, Rec. = 2.0'	7	21.9	0.1	93.6	6.3		
80		A-4, Si, gry, MTW, Rec. = 2.0'	WH	29.8		0.4	99.6		
85		A-4, Si, gry, MTW, Rec. = 1.2'	8	28.1		1.1	98.9		
90		A-4, Si, gry, MTW, Rec. = 1.7'	8	26.3	0.3	2.8	96.9		
95		A-4, Si, gry, MTW, Rec. = 1.5'	9	27.3	0.6	2.3	97.1		

STATE OF VERMONT AGENCY OF TRANSPORTATION MATERIALS & RESEARCH DIVISION SUBSURFACE INFORMATION									
PROJECT NAME: COLCHESTER SITE NAME: BR 75 STATION: 10+83.50 GROUND EL.: 204.36					PROJECT NUMBER: IM089-3(33) SITE NO.: Blakely Rd. OFFSET: -20.00 G.W. DEPTH: 15.2				
BORING CREW CREW CHIEF: YOUNG DRILLER: YOUNG LOGGER: SOMERS					BORING RIG: SKID RIG BORING TYPE: WASH BORE SAMPLE TYPE: SPLIT BARREL				
DEPTH	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER FOOT	M.C. %	GRAVEL %	SAND %	FINES %	LL	PI
		A-4, Si, gry, MTW, Rec. = 0.9'	6	27.1		1.3	98.7		
105		A-4, Si, gry, MTW, Rec. = 1.1'	5	27		0.9	99.1		
110		A-2-4, SiSa, brn-gry, Moist, Rec. = 0.3'	27	18.4	1	70.7	28.3		
115		A-4, SaSi, gry, MTW, Rec. = 1.1'	36	26	0.1	22	77.9		
120		A-4, Si, gry, MTW, Rec. = 1.1'	14	25.3		2.8	97.2		
125		A-4, Si, gry, MTW, Rec. = 1.5'	12	26.3		0.6	99.4		
130		A-4, Si, gry, MTW, Rec. = 1.1'	23	22.5		5.2	94.8		
135		A-4, Si, gry, MTW, Rec. = 0.7'	24	27.7		3.4	96.6		
140		A-4, Si, gry, MTW, Rec. = 1.4'	31	28.7		3	97		
145									

STATE OF VERMONT AGENCY OF TRANSPORTATION MATERIALS & RESEARCH DIVISION SUBSURFACE INFORMATION									
PROJECT NAME: COLCHESTER SITE NAME: BR 75 STATION: 10+83.50 GROUND EL.: 204.36					PROJECT NUMBER: IM089-3(33) SITE NO.: Blakely Rd. OFFSET: -20.00 G.W. DEPTH: 15.2				
BORING CREW CREW CHIEF: YOUNG DRILLER: YOUNG LOGGER: SOMERS					BORING RIG: SKID RIG BORING TYPE: WASH BORE SAMPLE TYPE: SPLIT BARREL				
DEPTH	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER FOOT	M.C. %	GRAVEL %	SAND %	FINES %	LL	PI
		A-4, Si, gry, MTW, Rec. = 2.0'	21	27.7		1.7	98.3		
Hole stopped @ 152.0'									
Drillers Notes: Water @ 15.2' below ground surface 04/16/01.									
155									
160									
165									
170									
175									
180									
185									
190									
195									

SURVEYED BY: J. TOUCHETTE DATE: 05/01/01
 DRAWN BY: C.C. BENDA
 SQUAD LEADER: g/str6/colch-sher/ma324bor.dgn
 DESIGN FILE NO.: ma324bor. DATE: 28-NOV-2001
 PROJ. NAME: COLCHESTER
 PROJ. NO.: IM089-3(33)
 SHEET: 10B OF 23 SHEETS



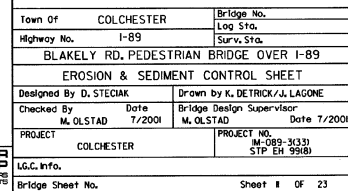
MATCH LINE STA 18+00.00

NAME = us\9916\mstr
TIME = 03/24/2001
USER = 004

 HAY BALES FOR EROSION CONTROL, ITEM 651.26
x—x— GOETEXTILE FOR SILT FENCE - ITEM 649.51

1. ALL DISTURBED AREAS SHALL BE SEEDED AS SOON AS POSSIBLE AFTER FINAL GRADING.
2. ALL HAY BALES SHALL REMAIN IN PLACE UNTIL NEW TURF IS ESTABLISHED.

SCALE 1" = 20'-0"



GENERAL NOTES:

THE FOLLOWING GENERAL NOTES SHALL APPLY UNLESS OTHERWISE NOTED ON THE PLANS.

1. ALL MATERIAL AND CONSTRUCTION SHALL CONFORM TO STATE OF VERMONT AGENCY OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" 1990 EDITION AND ITS LATEST REVISIONS, AND AASHTO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" 18th EDITION AND ITS LATEST REVISIONS.
2. DESIGN LIVE LOADING IS TO BE APPLIED IN ACCORDANCE WITH THE PROVISIONS OF THE AASHTO GUIDE SPECIFICATIONS FOR DESIGN OF PEDESTRIAN BRIDGES, AUGUST 1997, AND FOR SNOW REMOVAL TRACTOR OF THE FOLLOWING SPECIFICATIONS:
TOTAL LENGTH 106"
TOTAL WIDTH 48"
WHEEL BASE 63"
TOTAL WEIGHT 4300 LBS (INCLUDING SNOW BLOWER)
3. ANY REFERENCE TO "LEFT" AND/OR "RIGHT" ON THE PLANS OR IN THE NOTES REFER TO THE DIRECTION OF STATIONING.
4. THE FOLLOWING TABLE OF DESIGN STRENGTHS APPLIES TO THESE PLANS FOR DESIGN PURPOSES.

CONCRETE: $f'_c = 3,500$ PSI
STRUCTURAL STEEL: AASHTO M270, GR50W, $F_y = 50,000$ PSI
REINFORCING STEEL: $F_y = 60,000$ PSI (GRADE 60)
5. ALL WELDING AND DIMENSIONAL TOLERANCES OF WELDED MEMBERS SHALL CONFORM TO THE LATEST ANSI/AASHTO/AWS BRIDGE WELDING CODE AND ITS LATEST REVISIONS.
6. ALL REINFORCING STEEL SHALL BE DETAILED AND FABRICATED USING PROCEDURES IN ACCORDANCE WITH APPLICABLE PUBLICATIONS OF THE CONCRETE REINFORCING STEEL INSTITUTE.
7. REINFORCEMENT PLACING TOLERANCES SHALL BE:
SPACING $\pm 1"$
CLEARING $\pm 1/4"$
8. MINIMUM COVER FOR REINFORCING STEEL (EXCEPT IN THE DECK) SHALL BE 2" IN BACK FACES OF SUBSTRUCTURES AGAINST EARTH, 4" IN PIER COLUMNS AND CAP BEAMS, AND 3" ELSEWHERE, UNLESS OTHERWISE SHOWN.
9. FLAME CUTTING OF EPOXY COATED REINFORCING STEEL SHALL NOT BE PERMITTED.
10. ALL EXPOSED EDGES OF CONCRETE IN THE SUBSTRUCTURE AND THE SUPERSTRUCTURE SHALL BE CHAMFERED $1 \times 1"$, UNLESS OTHERWISE SHOWN.
11. IN ALL HORIZONTAL AND VERTICAL CONSTRUCTION JOINTS, SHEAR KEYS SHALL BE FORMED AS SHOWN IN THE TYPICAL BRIDGE DETAILS SHEET 17, AND THEY SHALL BE CONTINUED UP TO 3' FROM EACH END OF THE JOINT. THE UPWARD KEY SHALL BE PLACED INTEGRAL WITH THE CONCRETE BELOW THE JOINT.
12. HORIZONTAL AND VERTICAL CONCRETE CONSTRUCTION JOINTS SHALL BE MONOLITHIC AND CONTINUOUS FOR THE FULL LENGTH OF JOINT.
13. THE COST OF INSTALLING PVC WATERSTOPS, AS SHOWN IN THE PLANS, SHALL BE SUBSIDIARY ITEM 501.25, "CONCRETE CLASS B". THE TYPE OF PVC WATERSTOP TO BE USED SHALL BE SUBMITTED BY THE CONTRACTOR TO THE ENGINEER FOR APPROVAL.
14. TEMPORARY EROSION CONTROL MEASURES SHALL INCLUDE PLACEMENT OF SILT FENCE AND HAY BALES AS DEPICTED ON THE EROSION AND SEDIMENT CONTROL SHEET OR AS DIRECTED BY THE ENGINEER.

15. THE CONTRACTOR SHALL CALL "DIG-SAFE" PRIOR TO PERFORMING ANY EXCAVATION, IN ACCORDANCE WITH DIG-SAFE'S RULES OF NOTIFICATION. THE COST OF COORDINATING WITH DIG-SAFE AND THE FOLLOWING UTILITY COMPANIES SHALL BE SUBSIDIARY TO ITEM 635.10, "MOBILIZATION": BELL ATLANTIC, GREEN MOUNTAIN POWER CORP. AND NOVA CABLE. THE COST OF ANY EXPLORATORY EXCAVATION BY THE CONTRACTOR TO ASCERTAIN UTILITY LOCATIONS SHALL BE PAID FOR UNDER ITEM 204.25, "STRUCTURE EXCAVATION IN ACCORDANCE WITH THE SPECIAL PROVISIONS. ANY DAMAGE TO UTILITIES CAUSED BY THE CONTRACTOR SHALL BE REPAIRED IMMEDIATELY AS DIRECTED BY THE RESPECTIVE UTILITY COMPANY TO THE ENGINEER AT THE CONTRACTOR'S OWN EXPENSE.

16. WATER REPELLENT SHALL BE APPLIED TO ALL EXPOSED CONCRETE SURFACES.

17. JOINTS AND SCORE MARKS SHALL BE CONSTRUCTED AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

18. ALL STRUCTURAL STEEL SHALL CONFORM TO AASHTO M270 GR 50W (UNPAINTED) EXCEPT AS NOTED ON THE PLANS. 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).

19. DECK CONCRETE SHALL BE "CONCRETE CLASS A". ALL OTHER CONCRETE SHALL BE "CONCRETE CLASS B". 3/4" INCH STONE SHALL BE USED AS THE COARSE AGGREGATE IN THE CONCRETE, CLASS B, USED IN THE PIER PLACEMENT.

20. SURFACES OF BRIDGE SEATS UNDER BEARING DEVICES SHALL BE LEVEL WITH A CONSTRUCTION TOLERANCE OF 0.005 RADIAN. OTHER BRIDGE SEAT AREAS SHALL BE SLOPED $1/4"$ PER FOOT. ABUTMENT SEATS SHALL BE SLOPED FULL WIDTH TOWARD CENTER SPAN. THE ENTIRE BRIDGE SEAT SURFACE SHALL BE SMOOTH STEEL TROWEL FINISHED.

ALL DIMENSIONS ARE HORIZONTAL OR VERTICAL AND ARE GIVEN AT 68 DEGREES F.

FOUNDATION:

22. SPREAD FOOTING SHALL BE CONSTRUCTED ON A 1'-0" THICK MAT OF GRANULAR BACKFILL FOR STRUCTURES, ITEM 204.30.

23. GRANULAR BACKFILL SHALL BE COMPACTED TO 95 PERCENT OF MAXIMUM DRY DENSITY.

24. TEMPORARY STEEL SHEET PILING TO BE DESIGNED BY CONTRACTOR.

SURVEY INFORMATION:

25. THESE PLANS ARE BASED ON THE ORIGINAL BLAKELY ROAD BRIDGE DRAWINGS AND A RECENT SURVEY SUPPLIED TO THE V.A.O.T. BY OTHERS. PERTINENT INFORMATION, SUCH AS R.O.W. LINES AND SITE ELEVATIONS ARE TO BE VERIFIED BY THE CONTRACTOR PRIOR TO THE START OF WORK. THE LOCATION OF THE EXISTING BLAKELY ROAD PIER 2 FOOTING IS TO BE FIELD VERIFIED BEFORE LAYING OUT SUBSTRUCTURES.

TRAFFIC CONTROL:

26. TRAFFIC IS TO BE CONTROLLED AND MAINTAINED AT ALL TIMES PER THE APPLICABLE V.A.O.T. SPECIFICATIONS IN ITEM 527.10, SECTION 104.04, AND THE STANDARD SHEETS LISTED ON THE TITLE SHEET.

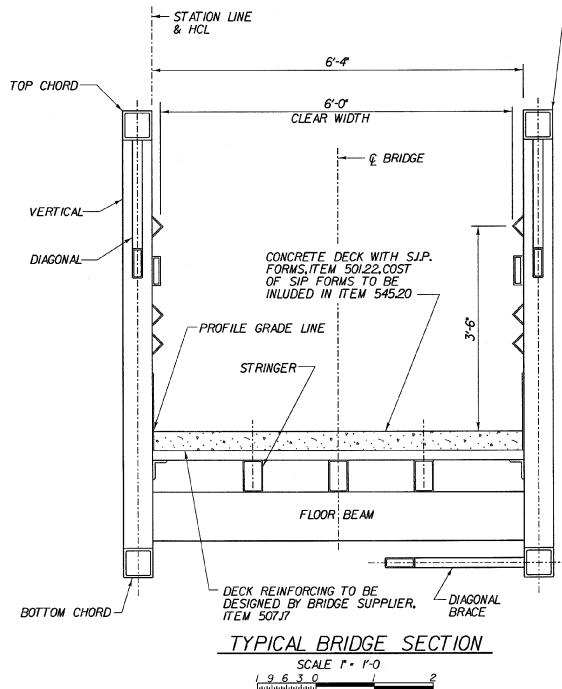
27. THE COST OF ARROW BOARDS OR CHANGEABLE MESSAGE SIGNS IS TO BE INCLUDED IN THE TRAFFIC CONTROL, ITEM 641.0.

MISCELLANEOUS:

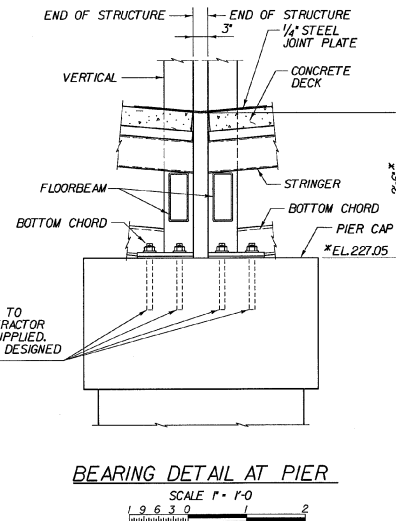
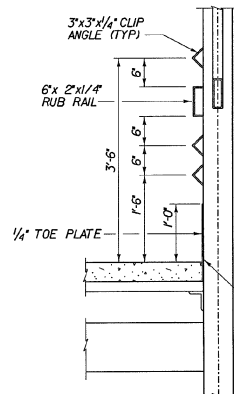
28. GALVANIZED COATED CHAIN LINK FENCE - ITEM 620.11 IS TO BE ERECTED ON THE PEDESTRIAN BRIDGE WINDWALLS AND THE CONCRETE BIN TYPE RETAINING WALLS, SNOW BARRIER (GALV.). ITEM 620.75 SHALL BE USED TO EXTEND THE EXISTING SNOW BARRIER ON THE SOUTH SIDE OF BLAKELY ROAD BRIDGE, OVER THE BRIDGES FULL LENGTH.

STATE OF VERMONT AGENCY OF TRANSPORTATION

Town Of	COLCHESTER	Bridge No.	
Highway No.	I-89	Log Sta.	
BLAKELY RD. PEDESTRIAN BRIDGE OVER I-89			
GENERAL NOTES			
Designed By	Drawn by K. DETRICK		
Checked By	M. OLSTAD	Date	7/2001
PROJECT	PROJECT NO. 84-089-1(133) STP EN 9988		
U.G.C. Info.			
Bridge Sheet No.	Sheet 12 OF 23		

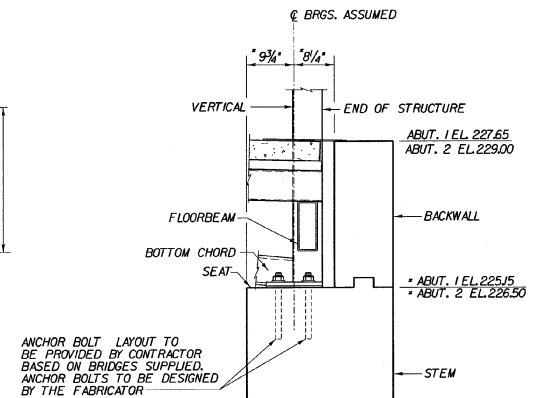


PREFABRICATED MULTI-MODULAR BRIDGE (MOD.)
ITEM 545.20 UNPAINTED M270 GR50W
WEATHERING STEEL CONTINENTAL HALF-THROUGH
H-SECTION, MODEL NUMBER HI-SO (OR APPROVED EQUAL)



* NOTE:

TOP OF PIER ELEVATION SET ON ASSUMPTION THAT TOP OF DECK TO BOTTOM OF PREFABRICATED PEDESTRIAN BRIDGE BEARINGS IS 2'-6". ELEVATION IS TO BE SET BY THE CONTRACTOR TO FIT ACTUAL BRIDGE SUPPLIED BY ADJUSTING COLUMN HEIGHT.

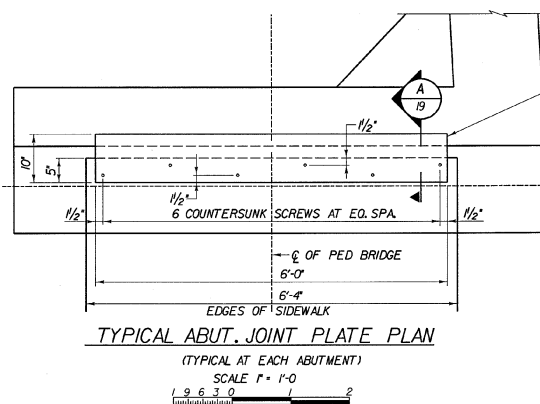


* NOTE:

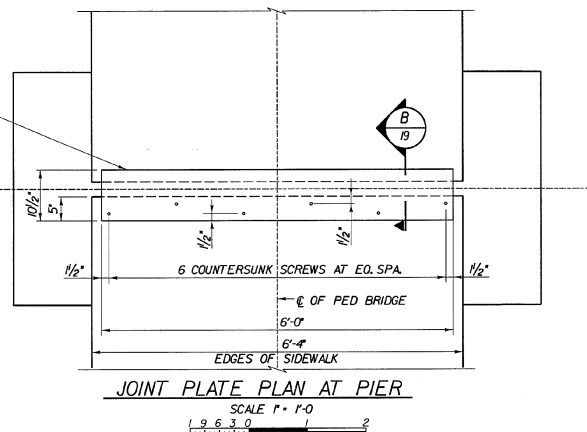
SEAT ELEVATION SET ON ASSUMPTION THAT TOP OF DECK TO BOTTOM OF PREFABRICATED PEDESTRIAN BRIDGE BEARINGS IS 2'-6". ELEVATION IS TO BE SET BY THE CONTRACTOR TO FIT ACTUAL BRIDGE SUPPLIED BY ADJUSTING SEAT ELEVATION, CENTERLINE OF BEARINGS TO BE SET BY CONTRACTOR ALSO.

LOAD TABLE					
SPAN LENGTH (FT)	MANUFACTURER	MODEL	DL REACTION (k)	LL REACTION (k)	SNOW LOAD REACTION (k)
125	CONTINENTAL	HI-SO	20J	16.8	19.8
140	CONTINENTAL	HI-SO	25.8	18.8	22.2
125	STEADFAST		15.0	13.3	16.8
140	STEADFAST		17.8	13.4	21.0

NOTE: REACTIONS ARE PER BEARING



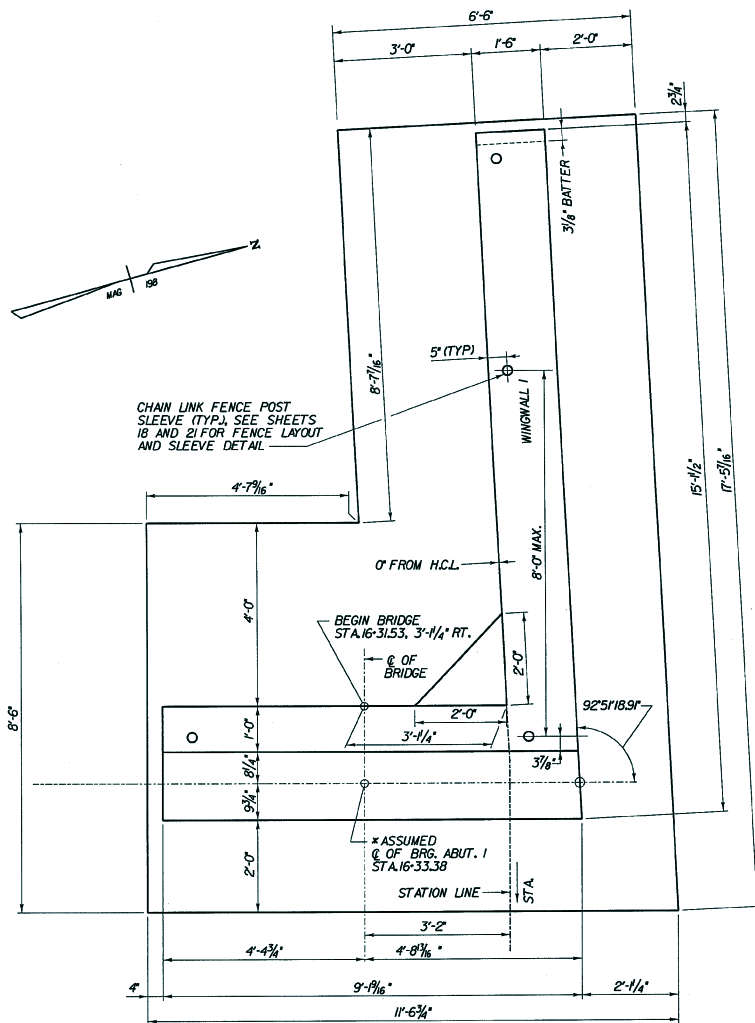
COST OF JOINT PLATES AT ABUTMENTS AND PIERS IS SUBSIDIARY TO ITEM 545.20



STATE OF VERMONT AGENCY OF TRANSPORTATION

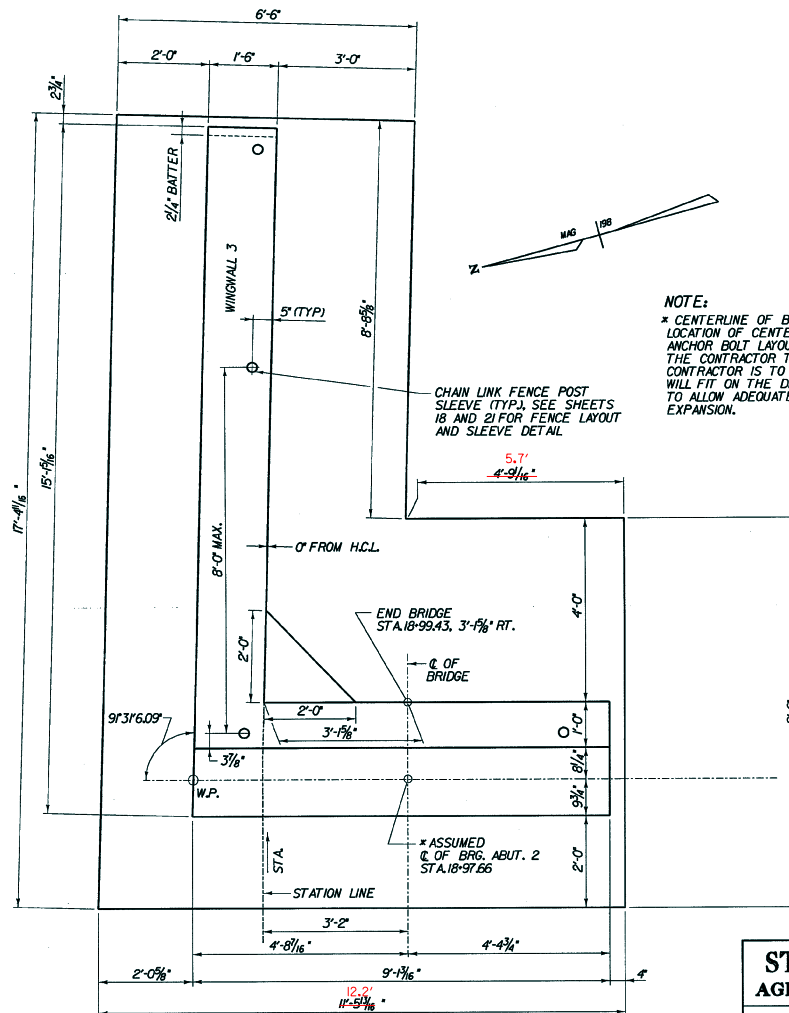
Town Of	COLCHESTER	Bridge No.	
Highway No.	1-89	Log Sta.	
		Surv. Sta.	
BLAKELY RD. PEDESTRIAN BRIDGE OVER I-89			
TYPICAL BRIDGE DETAILS			
Designed By	D. STECIAK	Drawn by	J. LAGONE
Checked By	M. OLSTAD	Bridge Design Supervisor	
PROJECT	COLCHESTER	PROJECT NO.	M-089-3(33)
		STP. EX. 99(8)	
L.G.C. Info.			
Bridge Sheet No.			

CHA CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
HARRIS, ORLEANS, ALBANY, NEW YORK, OFFICE



ABUTMENT 1 PLAN

SCALE 3/4" = 1'-0"



ABUTMENT 2 PLAN

SCALE 3/4" = 1'-0"

NOTE:

* CENTERLINE OF BEARING STATION IS ASSUMED. LOCATION OF CENTERLINE OF BEARINGS AND ANCHOR BOLT LAYOUT IS TO BE DETERMINED BY THE CONTRACTOR TO FIT ACTUAL BRIDGE SUPPLIED. CONTRACTOR IS TO VERIFY THAT ACTUAL BRIDGE SUPPLIED WILL FIT ON THE DESIGNED ABUTMENT SEAT CONFIGURATION TO ALLOW ADEQUATE ROOM FOR BEARINGS AND THERMAL EXPANSION.

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of	COLCHESTER	Bridge No.	
Highway No.	I-89	Log Sta.	
		Surv. Sta.	
BLAKELY RD. PEDESTRIAN BRIDGE OVER I-89			
ABUTMENT 1 & 2 PLAN			
Designed By	D. STECIAR	Drawn by	K. DETRICK/J. LAGONE
Checked By	M. OLSTAD	Bridge Design Supervisor	
PROJECT	COLCHESTER	Date	7/2001
		Date	7/2001
PROJECT NO.	84-089-3(33)	STP. EX. 99(0)	
Bridge Sheet No.		Sheet	14 OF 23

CHA CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS
& LANDSCAPE ARCHITECTS
100 MARKS DRIVE ALBANY, NEW YORK, 12208

ELEVATION - ABUTMENT 1

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

1 0 1 2

feet

ELEVATION - WINGWALL 3

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

ELEVATION - WINGWALL 1

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

0 1 2

1" = 1'-0"

ELEVATION - ABUTMENT 2

SCALE 1/2" = 1'-0"

1 0 1 2

(A) TYPICAL ABUTMENT SECTION
(ABUTMENT 1 SHOWN, ABUTMENT 2 SIMILAR)

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

1 0 1 2

-ASSUMED TOP OF DECK TO BOTTOM OF PREFABRICATED PEDESTRIAN BRIDGE BEARINGS. DIMENSIONS AND SEAT ELEVATIONS ARE TO BE ADJUSTED BY CONTRACTOR TO FIT ACTUAL BRIDGE SUPPLIED.

TYPICAL WINGWALL SECTION
(WINGWALL 1 SHOWN, WINGWALL 2 SIMILAR)
SCALE 1/2" = 1'-0"
1 0 1 2

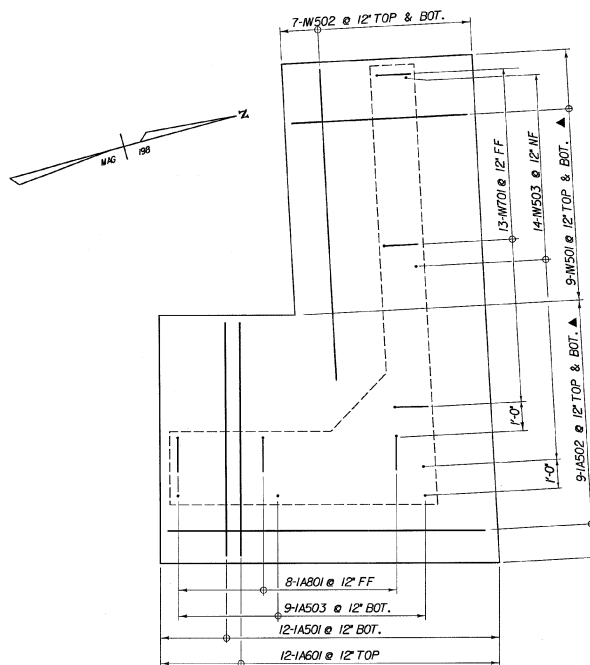
KEY:

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



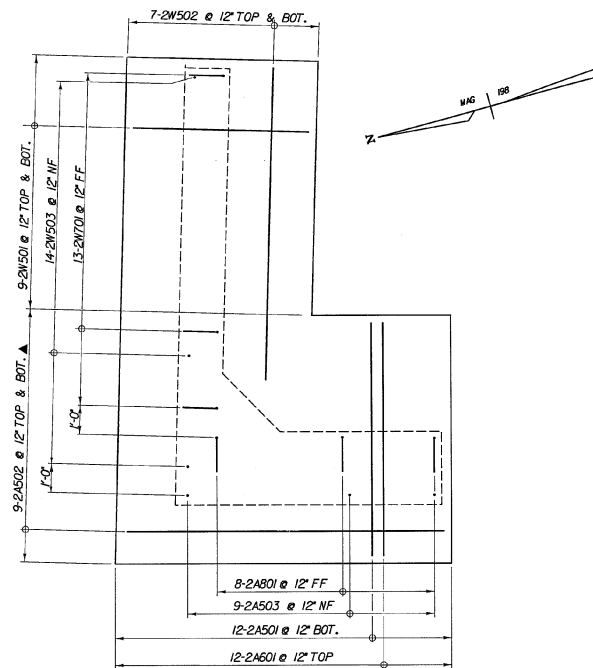
STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of COLCHESTER		Bridge No. Log Sta. Surv. Sta.	
Highway No. I-89			
BLAKELY RD. PEDESTRIAN BRIDGE OVER I-89			
ABUTMENTS, WINGWALLS & ELEVATIONS & SECTIONS			
Designed By D. STECIAK		Drawn by K. DETRICK & LAGONE	
Checked By Date M. OLSTAD 7/2001		Bridge Design Supervisor M. OLSTAD Date 7/2001	
PROJECT COLCHESTER		PROJECT NO. M-89-20-3(33) STP EN 99(8)	
L.G.C. Info.			
Bridge Sheet No.		Sheet 15 OF 23	



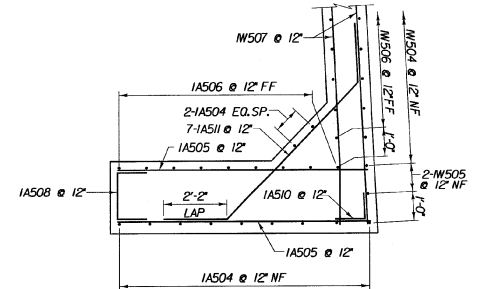
ABUTMENT 1 FOOTING REINFORCING PLAN

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



ABUTMENT 2 FOOTING REINFORCING PLAN

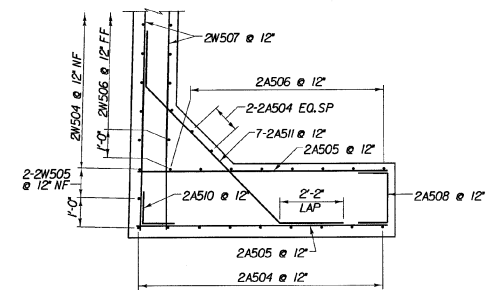
SCALE 1/2" = 1'-0"
1 0 2



C ABUT.1 CORNER & FILLET DETAILS

S-15

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



C ABUT.2 CORNER & FILLET DETAILS

S-15

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

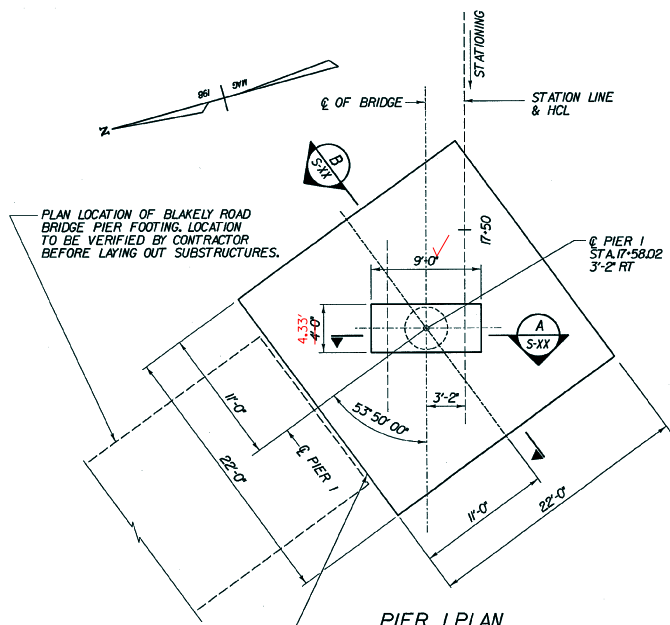
KEY:

- NF = NEAR FACE
- FF = FAR FACE
- EF = EACH FACE
- ▲ = CUT TO FIT IN FIELD
- 3" CLR. UNLESS OTHERWISE SPECIFIED ON THE PLANS.
- 2'-2" MINIMUM LAP (TYP)

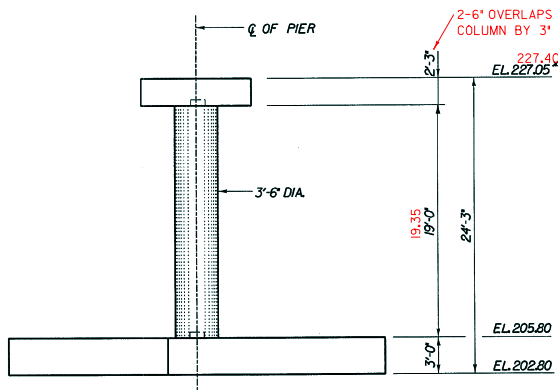
STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of	COLCHESTER	Bridge No.	
Highway No.	1-89	Log Sta.	
		Surv. Sta.	
BLAKELY RD. PEDESTRIAN BRIDGE OVER I-89			
ABUTMENT 1 & 2 FOOTING PLAN & DETAILS			
Designed By	D. STECIAK	Drawn by	K. DETRICK/J. LAGONE
Checked By	M. OLSTAD	Bridge Design Supervisor	M. OLSTAD
Date	7/2001	Date	7/2001
PROJECT	COLCHESTER	PROJECT NO.	14-009-3333
			S.T.P. EX 99(8)
L.G.C. Info.		Bridge Sheet No.	

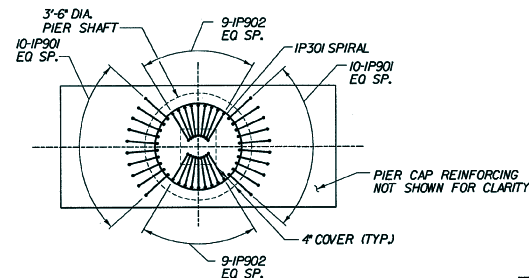
CHA CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, ARCHITECTS, PLANNERS & LANDSCAPE ARCHITECTS
400 WEST STREET, SUITE 200, COLCHESTER, VT 05445



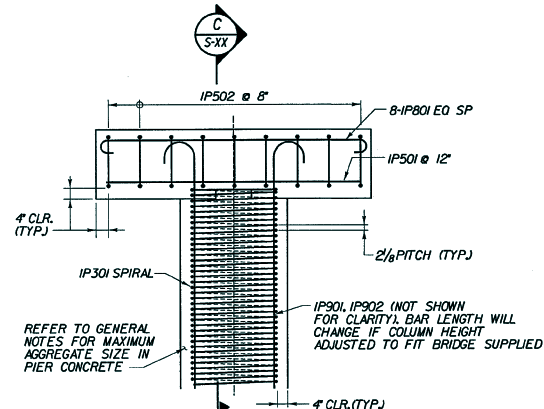
PLACE 1" THICK FOAM MATERIAL AGAINST EXISTING FOOTING TO ACT AS BOND BREAKER AND ALLOW FOR INDEPENDANT MOVEMENT ON THE THE FOOTINGS. COST TO BE INCLUDED IN ITEM 50125, CONCRETE, CLASS B



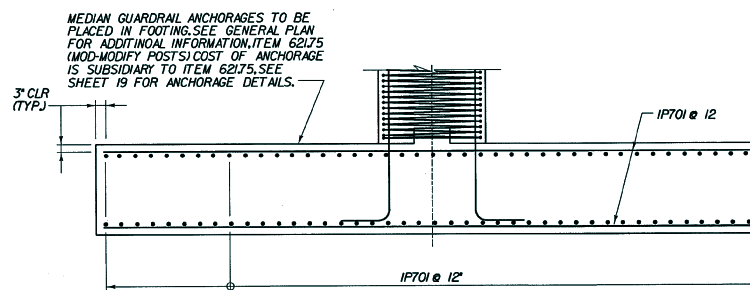
PIER 1 ELEVATION
SCALE 1" = 5'-0"



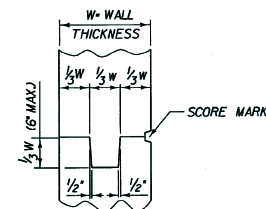
PLAN CAP
SCALE 1/2" = 1'-0"



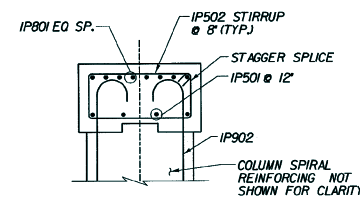
PIER REINFORCING SECTION
SCALE 1/2" = 1'-0"



PIER REINFORCING SECTION
SCALE 1/2" = 1'-0"



TYPICAL CONCRETE CONSTRUCTION JOINT
(NOT TO SCALE)



PIER CAP REINFORCING SECTION
SCALE 1/2" = 1'-0"

NOTE:
TOP OF PIER ELEVATION SET ON ASSUMPTION THAT TOP OF DECK TO BOTTOM OF PREFABRICATED PEDESTRIAN BRIDGE BEARINGS IS 2'-6" ELEVATION IS TO BE ADJUSTED BY THE CONTRACTOR TO FIT ACTUAL BRIDGE SUPPLIED BY ADJUSTING COLUMN HEIGHT.

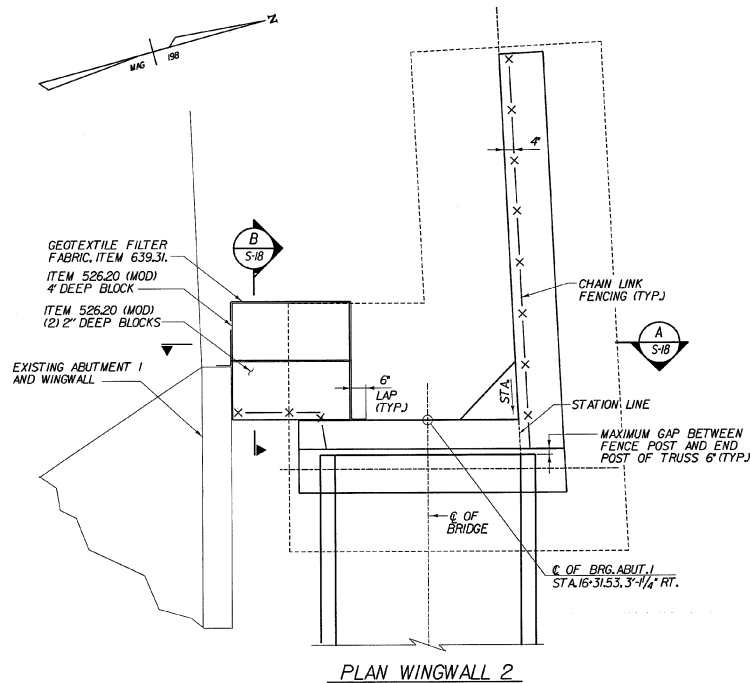
KEY:
NF = NEAR FACE
FF = FAR FACE
EF = EACH FACE
▲ = CUT TO FIT IN FIELD
3" CLR. UNLESS OTHERWISE SPECIFIED ON THE PLANS.

STATE OF VERMONT AGENCY OF TRANSPORTATION

Town Of	COLCHESTER,	Bridge No.	
Highway No.	1-89	Log Sta.	
		Surv. Sta.	
BLAKELY RD. PEDESTRIAN BRIDGE OVER 1-89			
PIER ELEVATION AND REINFORCING DETAILS			
Designed By	D. STECIAK	Drawn by	J. LAGONE
Checked By	M. OLSTAD	Bridge Design Supervisor	M. OLSTAD
PROJECT	COLCHESTER	PROJECT NO.	M-089-3(33)
		STP	EH 99(8)
L&C. Info.		Bridge Sheet No.	

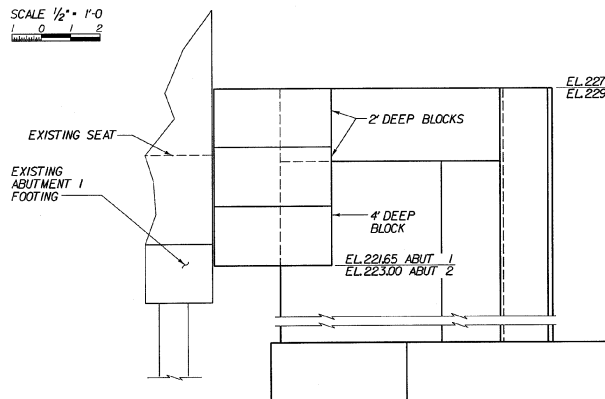
CHA CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, PLANNERS, ARCHITECTS
& LANDSCAPE ARCHITECTS
100 WATER STREET, SUITE 200, VERMONT, VT 05401

FILE NAME: \\VING\cadd\10\blakely\blakely.dwg
DATE/TIME: 10/24/2001 10:24:28
USER: JCL

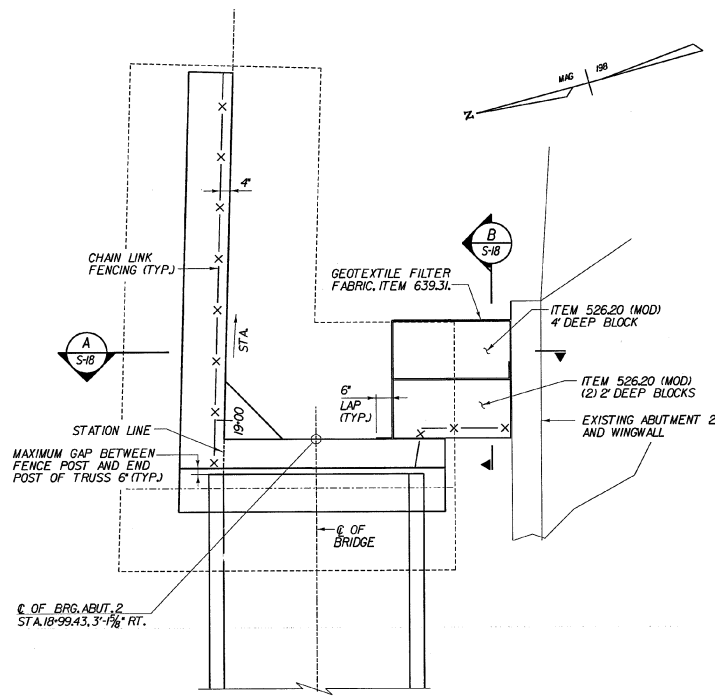


PLAN WINGWALL 2

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

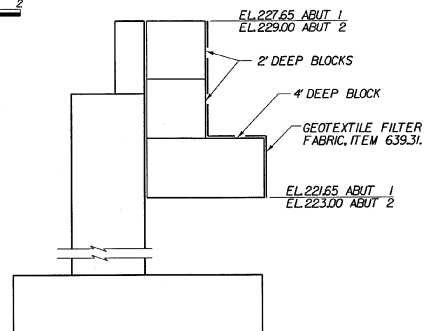


A
S-18
SECTION
(ABUTMENT 1 SHOWN, ABUT. 2 SIM.)
SCALE 1/2" = 1'-0"
1 0 1 2



PLAN WINGWALL 4

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



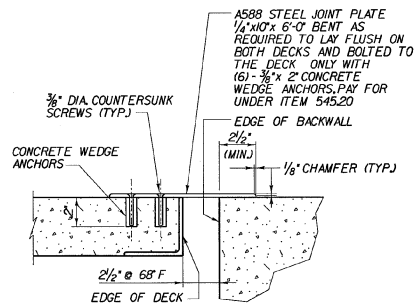
B
S-18
SECTION
(ABUTMENT 1 SHOWN, ABUT. 2 SIM.)
SCALE 1/2" = 1'-0"
1 0 1 2

STATE OF VERMONT AGENCY OF TRANSPORTATION

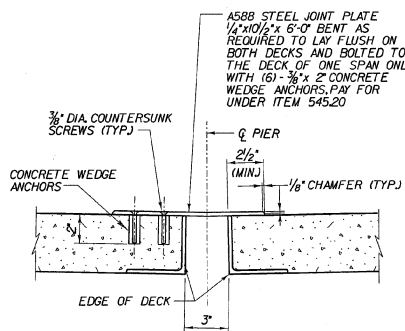
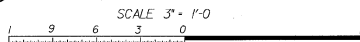
Town Of	COLCHESTER	Bridge No.	
Highway No.	I-89	Log Sta.	
		Surv. Sta.	
BLAKELY RD. PEDESTRIAN BRIDGE OVER I-89			
WINGWALLS 2 & 4 PLAN AND SECTIONS			
Designed By	D. STECIAK	Drawn by	J. LAGONE
Checked By	M. OLSTAD	Bridge Design Supervisor	M. OLSTAD
PROJECT	COLCHESTER	PROJECT NO.	IM-089-3(33)
			STP EH 9989

U.C. Info. _____
Bridge Sheet No. _____ Sheet 18 OF 23

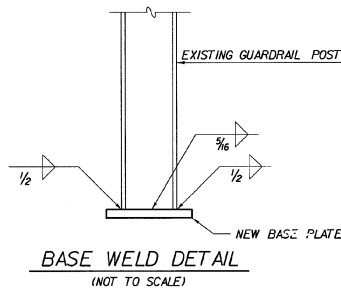
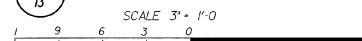
CHA CLOUGH, HARBOUR
& ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS
& LANDSCAPE ARCHITECTS
HARRISON CIRCLE ALBANY, NEW YORK 12208



A TYPICAL ABUT. JOINT PLATE SECTION

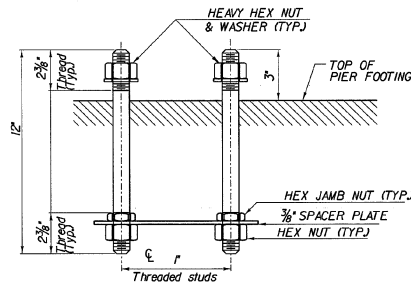


B PIER JOINT PLATE SECTION



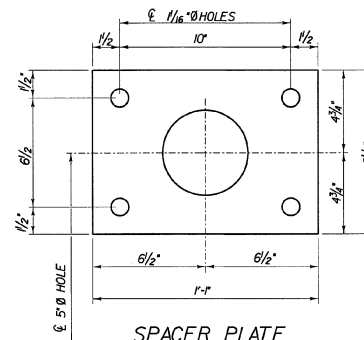
BASE WELD DETAIL

(NOT TO SCALE)



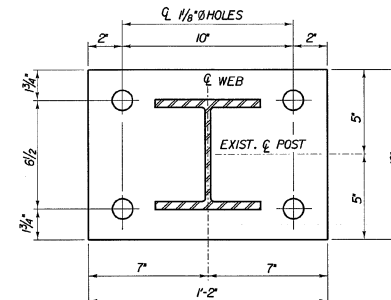
RAIL POST ANCHORAGE

(NOT TO SCALE)



SPACER PLATE

(NOT TO SCALE)



POST & BASE PLATE

(NOT TO SCALE)

NOTES

- All work and materials shall conform to the provisions of Section 525 - Railings of the Standard Specifications for Construction.
- Rail posts shall be set normal to grade.
- All parts shall be galvanized after fabrication in accordance with AASHTO M232. Parts shall be blast cleaned prior to galvanizing in accordance with SSPC - SP6.
- Rail posts anchoring nuts shall be tightened to a snug fit and given an additional 45 degree turn.
- Rail bars may be attached using M16 AASHTO M164M (Type 1) or M20 ASTM F568M, Class 4.5 round head bolts inserted through the face of the bar. Holes in posts shall be 1/16\"/>
- Holes in rails for rail bar attachment may be field drilled. Holes shall be coated with an approved zinc rich paint prior to erection.
- If there is a conflict between these Standard Details and the Design Drawings, the requirements of the Design drawings shall be followed.
- Weld base plates to bottom of existing median rail, which conflicts with proposed Pedestrian Pier Footing (7 locations). Drill new rail mounting holes in posts and reset existing rail. Cut off posts flush with top of posts. Coat top of posts and base plate weld with approved zinc-rich paint.
- Cost of rail post anchorages is subsidiary to Item 62175 removing and resetting guardrail (mod-mod posts).

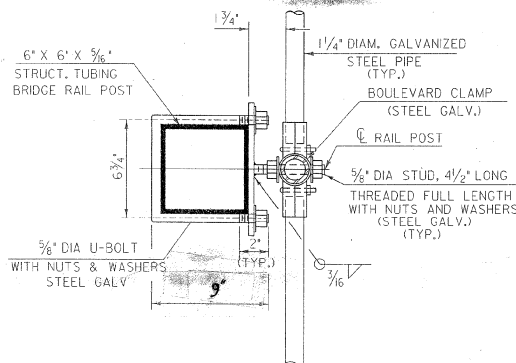
MATERIALS

Rail posts: ASTM A500, Grade B or ASTM A501
 Rail posts: ASTM A709/A709M, Grade 50
 All other shapes & plates: ASTM A709/A709M, Grade 36
 Anchor studs: ASTM F568M, Class 8.8
 All other bolts: AASHTO M164M, Type 1
 Nuts for ASTM F568M, Class 4.5 bolts, Class 8.8 studs and AASHTO M164M Type 1 bolts shall comply with AASHTO M291M.
 Washers shall comply with ASTM F436M specification.
 3 mm pad shall comply with standard specification subsection 731.01 or 731.02.
 Set screws for delineation devices shall conform to ASTM F880M, Class A1-70, Condition CW, Alloy Type 304.

STATE OF VERMONT AGENCY OF TRANSPORTATION

Town of	COLCHESTER	Bridge No.	
Highway No.	1-89	Log Sta.	
BLAKELY RD. PEDESTRIAN BRIDGE OVER 1-89			
MISCELLANEOUS DETAILS			
Designed By	D. STECIAK	Drawn by	J. LADONE
Checked By	M. OLSTAD	Bridge Design Supervisor	M. OLSTAD
Date	7/2001	Date	7/2001
PROJECT	COLCHESTER	PROJECT NO.	IN-089-1/331
			STP. NO. 99.98
LOG. INFO.			
Bridge Sheet No.		Sheet	19 OF 23

SNOW FENCE DETAILS



SECTION A-A

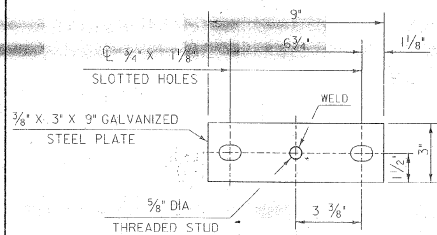
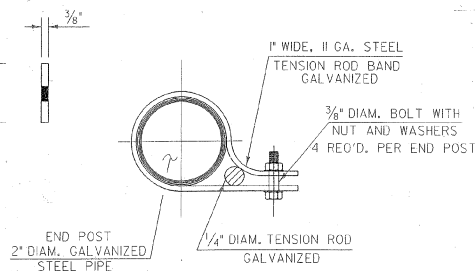
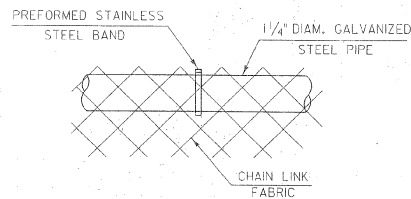


PLATE DETAILS

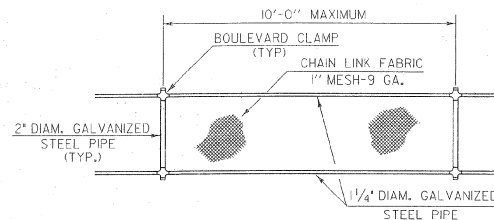
PLAN VIEW AT END POST



TENSION ROD BAND



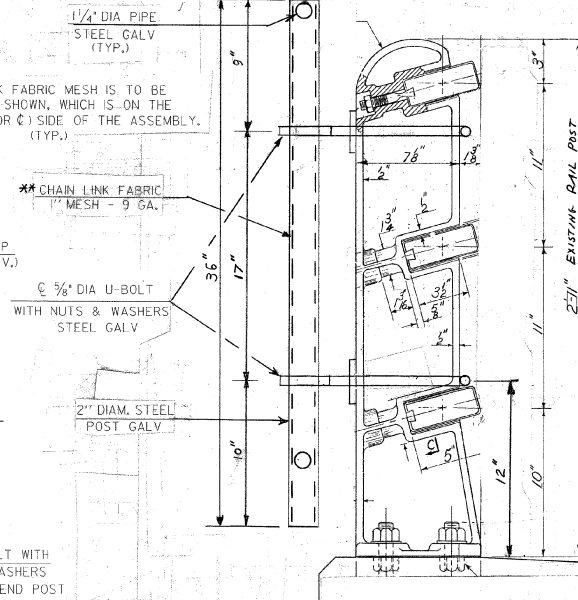
DETAIL A



ELEVATION SNOW BARRIER

DETAILS ON THIS SHEET NOT TO SCALE
ALL DIMENSIONS IN INCHES UNLESS OTHERWISE NOTED

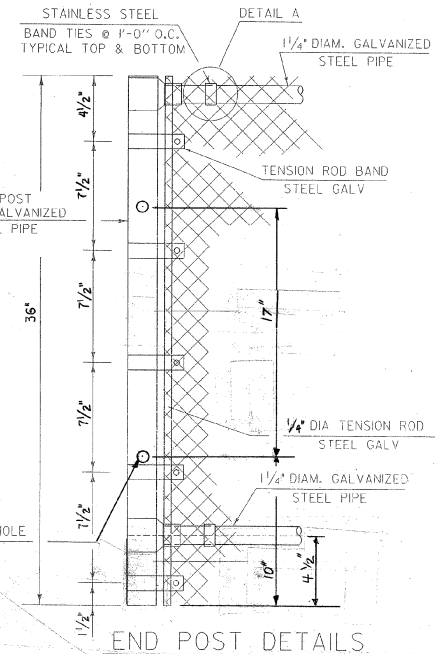
** THE CHAIN LINK FABRIC MESH IS TO BE INSTALLED AS SHOWN, WHICH IS ON THE BRIDGE RAIL (OR ϕ) SIDE OF THE ASSEMBLY. (TYP.)



TYPICAL SECTION

GENERAL NOTES

1. THREADS OF STUDS AND U-BOLTS TO BE 5/8"-11 UNC.
2. ALL CONNECTION PLATES TO BE GALVANIZED AFTER FABRICATION.
3. 1/4" PIPE LENGTH SHALL BE FIELD CUT TO FIT POST SPACING.
4. CHAIN LINK FABRIC TO BE KNUCKLED TOP AND BOTTOM.
5. ALL BOLTS, NUTS AND WASHERS SHALL CONFORM TO THE SPECIFICATIONS FOR ASTM A307.
6. ALL STEEL PLATES SHALL CONFORM TO THE SPECIFICATION FOR AASHTO M-270 GRADE 36.
7. ALL GALVANIZING SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-181 WITH HARDWARE AND FITTINGS CONFORMING TO THE REQUIREMENTS OF AASHTO M-111 OR AASHTO M-232 WHICHEVER IS APPLICABLE. ALL BOLTS, NUTS AND WASHERS SHALL BE EITHER HOT-DIP GALVANIZED IN ACCORDANCE WITH THE ABOVE AASHTO REQUIREMENTS OR MECHANICALLY GALVANIZED USING A MECHANICALLY DEPOSITED PROCESS CONFORMING TO THE REQUIREMENTS OF AASHTO M-298, CLASS 100.
8. GALVANIZING CHAIN-LINK FABRIC SHALL BE TYPE I (ZINC) CLASS D AS SPECIFIED IN AASHTO M-181.
9. SNOW BARRIER SHALL BEGIN AT THE BRIDGE RAIL POST WHICH WILL PROVIDE A MIN. DISTANCE OF 20' (AS SHOWN) OR AS DIRECTED BY THE ENGINEER.
10. ALL REFERENCES TO THE DIAMETERS OF GALVANIZED STEEL PIPE SHALL REFER TO THE OUTSIDE DIAMETER (O. D.).



ADDITIONAL NOTES

1. THE EXISTING BRIDGE RAIL IS 3 INCHES WIDE.
2. THE 5/8" DIAMETER U-BOLT IS DETAILED FOR SIX INCH WIDE POST. THE CONTRACTOR MAY DECREASE THIS FOR A 3 INCH WIDE POST.
3. SHOP DRAWINGS ARE TO BE SENT TO THE VTRANS STRUCTURES PROJECT MANAGER FOR REVIEW.

STATE OF VERMONT AGENCY OF TRANSPORTATION

Town Of	COLCHESTER	Bridge No.	75
Highway No.	BLAKELY ROAD	Surf. S70.	
INSTALLATION OF PERMANENT SNOW FENCE			
ON BRIDGES WITH CLEAR VIEW RAIL			
Designed By	G. Newbury	Drawn By	J. Gruchacz/D. Newton
Checked By		Date	
		Bridge Design	Superclass
			S. FARNSWORTH
PROJECT	COLCHESTER	PROJECT NO.	IM 089-3(33)
I.G.C. Info.	/struct/etd/snow/fence	and end2	
Bridge Sheet No.		Sheet	19A of 23

PLOTTED 11-JUL-1995

Figure 10 displays 30 diagrams illustrating various types of pipe joints and connections, categorized into 10 groups (1-10). Each diagram is labeled with a letter (A through T) and a number (1 through 30).

- Group 1:** Diagrams 1, 2, 3, 4, 5, 6, 7, 8, 9. These show various flange and welded joint configurations for pipes of different diameters and wall thicknesses.
- Group 2:** Diagrams 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30. These show various bolted and welded joint configurations for pipes of different diameters and wall thicknesses.

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," ASADOPTED BY ASTM A 63-51. 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 PRACTICE SHOULD HAVE LIMITS INDICATED.
 - a. ALL DIMENSIONS ARE OUT TO OUT OF BAR EXCEPT "A" AND "G" ON STANDARD 180 DEGREE AND 135 DEGREE HOOKS.
 - b. "J" DIMENSION ON 180 DEGREE HOOKS TO BE SHOWN ONLY WHERE NECESSARY TO RESTRICT HOOK SIZE, OTHERWISE, STANDARD HOOKS ARE TO BE USED.
 - c. "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 BAR TO BE CUT IN FIELD.
9. ◆ DENOTES BARS TO BE BENT IN FIELD.
10. * DENOTES ONE EXTRA BAR ADDED FOR TESTING PURPOSES.
11. △ DENOTES TWO EXTRA BARS ADDED FOR TESTING PURPOSES.
12. 'E' IN PREFIX DENOTES EPOXY COATED REINFORCING STEEL.

Town Of COLCHESTER		Bridge No. Log Sta.	
Highway No. I-89		Surv. Sta.	
BLAKELY RD. PEDESTRIAN BRIDGE OVER I-89			
REINFORCED STEEL SCHEDULE			
Designed By D. STECIAK		Drawn by K. DETRICK/A. LAGOME	
Checked By	Date	Bridge Design Supervisor	Date
M. OLSTAD	7/2001	M. OLSTAD	7/2001
PROJECT COLCHESTER		PROJECT NO. M-089-3333 STP EH 9908I	
L.G.C. Info.			
Bridge Sheet No.		Sheet 20 Of 23	

TYPICAL SECTIONS

TYPICAL SECTION WITH BLOCK RETAINING WALL
(NOT TO SCALE)
STA.11-96+ TO STA.12-00+
STA.22-30+ TO STA.22-34+

TYPICAL SECTION AT GRADE
(NOT TO SCALE)
STA.10-50 TO STA.11-96+
STA.23-96+ TO STA.24-22-80

TYPICAL SECTION WITH BLOCK RETAINING WALL
(NOT TO SCALE)
STA.12-00+ TO STA.15-90+
STA.20-70+ TO STA.22-30+

DETAIL-SLEEVE FOR CHAIN LINK POST ATTACHMENT
(NOT TO SCALE)

NOTES:

- THE EXISTING EMBANKMENT IS TO BE UNDERCUT ONE FOOT BELOW BOTTOM OF BLOCKS USING THE ITEM 204.25 "STRUCTURE EXCAVATION". THE ITEM 204.30 "GRANULAR BACKFILL FOR STRUCTURES" IS TO BE USED UNDER AND BEHIND THE CONCRETE BLOCKS UP TO ONE FOOT BELOW ITEM 618.15 "BITUMINOUS CONCRETE SIDEWALK".
- ONE FOOT OF THE ITEM 301.25 "SUBBASE OF CRUSHED GRAVEL" IS TO EXTEND FROM THE EXISTING SLOPE, AFTER THE EXISTING TOP SOIL IS REMOVED TO THE NEW BLOCKS.
- THE COST OF FURNISHING STEEL PIPE SLEEVES AND DRILLING THE CHAIN LINK SLEEVES INTO THE CONCRETE BLOCKS SHALL BE SUBSIDIARY TO THE ITEM 620.11 "CHAIN LINK FENCE - 4 FEET".
- MOUNTING HARDWARE AND ANY REQUIRED MODIFICATION OF EXISTING GUARDRAIL POSTS IS SUBSIDIARY TO ITEM 525.15 METAL HAND RAILING (MOD-2 X 6 PRESSURE TREATED TIMBER).

SLEEVE NOTES:
PRE-CUT SLEEVES WITH 2 BOLT HOLES AT 8" DOWN TO BE FURNISHED BY FENCE SUPPLIER TO CONCRETE SUPPLIER.
POSTS TO BE SPACED AT 8'-0" ON CENTER (EVERY OTHER BLOCK).
CAST IN-PLACE, VERTICAL.

STATE OF VERMONT AGENCY OF TRANSPORTATION			
Town Of	COLCHESTER	Bridge No.	
Highway No.	I-89	Log Sta.	Surv. Sta.
BLAKELY RD. PEDESTRIAN BRIDGE OVER I-89			
TYPICAL SECTIONS			
Designed By	D. STECIAK	Drawn by	K. DETRICK/J. LAGONE
Checked By	M. OLSTAD	Bridge Design Supervisor	M. OLSTAD
PROJECT	COLCHESTER	PROJECT NO.	W-093-3(33) STP EH 99(8)
L.O.C. Info.		Bridge Sheet No.	

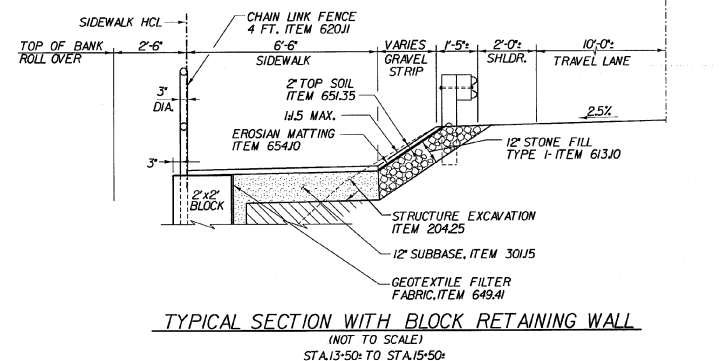
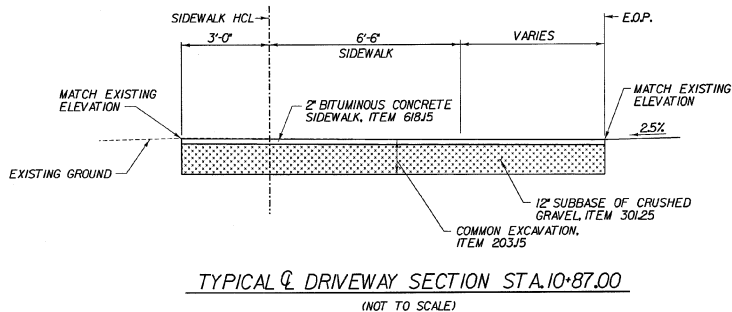
(NOT TO SCALE)

STA.10+50 TO STA.11+96:
STA.23+96: TO STA.24+22.60

1. THE EXISTING EMBANKMENT IS TO BE UNDERCUT ONE FOOT BELOW BOTTOM OF BLOCKS USING THE ITEM 20425 "STRUCTURE EXCAVATION". THE ITEM 20430 "GRANULAR BACKFILL FOR STRUCTURES" IS TO BE USED UNDER AND BEHIND THE CONCRETE BLOCKS UP TO ONE FOOT BELOW ITEM 616J5 "BITUMINOUS CONCRETE SIDEWALK".
2. ONE FOOT OF THE ITEM 30125 "SUBBASE OF CRUSHED GRAVEL" IS TO EXTEND FROM THE EXISTING SLOPE. AFTER THE EXISTING TOP SOIL IS REMOVED. TO THE NEW BLOCKS.
3. THE COST OF FURNISHING STEEL PIPE SLEEVES AND DRILLING THE CHAIN LINK SLEEVES INTO THE CONCRETE BLOCKS SHALL BE SUBSIDIARY TO THE ITEM 620J1 "CHAIN LINK FENCE - 4 FEET".
4. MOUNTING HARDWARE AND ANY REQUIRED MODIFICATION OF EXISTING GUARDRAIL POSTS IS SUBSIDIARY TO ITEM 525J5 METAL HAND RAILING (MOD-2 x 6 PRESSURE TREATED TIMBER).

(NOT TO SCALE)

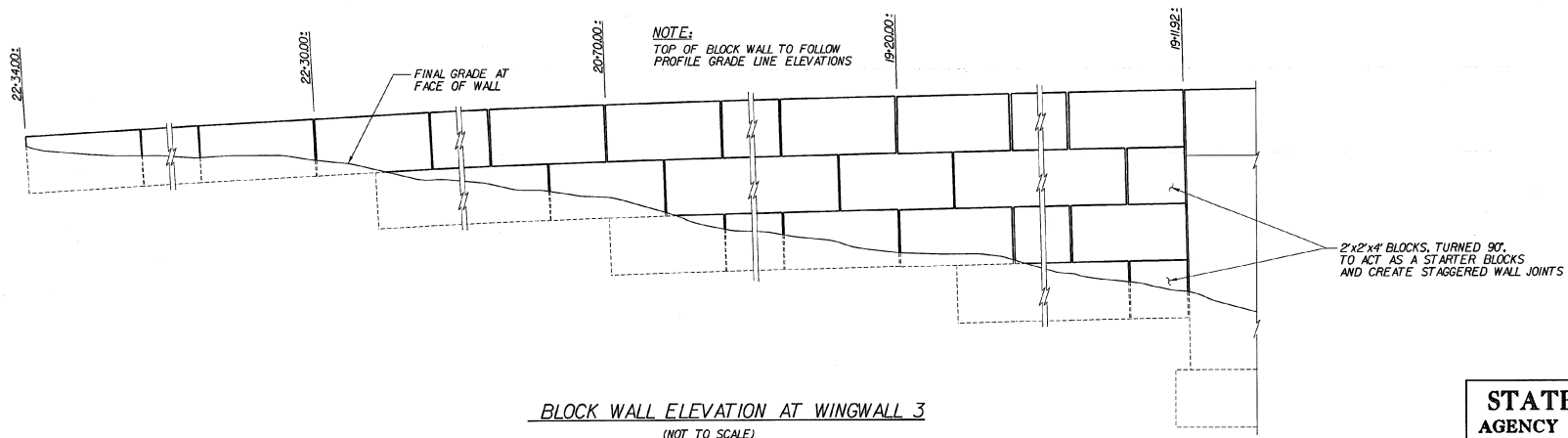
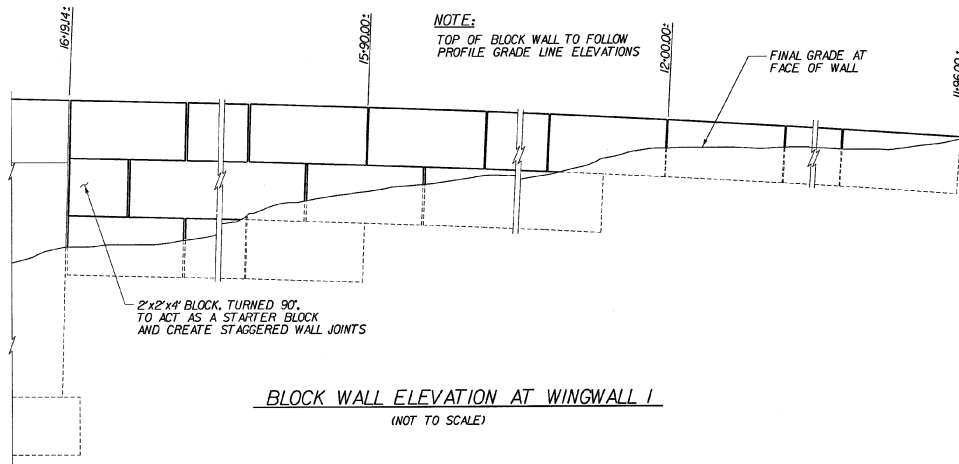
STATE OF VERMONT			
AGENCY OF TRANSPORTATION			
Town of COLCHESTER		Bridge No.	
Highway No. I-89		Log Sta.	
		Surv. Sta.	
BLAKELY RD. PEDESTRIAN BRIDGE OVER I-89			
TYPICAL SECTIONS			
Designed By D. STECIAK		Drawn by K. DETRIK/J. LAGONE	
Checked By Date		Bridge Design Supervisor Date 7/20/01	
M. OLSTAD		M. OLSTAD	
PROJECT COLCHESTER		PROJECT No. VT-089-3/333 STP EN 998B	
I.G.C. Info.			
Bridge Sheet No.		Sheet 21 OF 23	



1. THE EXISTING EMBANKMENT IS TO BE UNDERCUT ONE FOOT BELOW BOTTOM OF BLOCKS USING THE ITEM 20425 "STRUCTURE EXCAVATION." THE ITEM 20430 "GRANULAR BACKFILL FOR STRUCTURES" IS TO BE USED UNDER AND BEHIND THE CONCRETE BLOCKS UP TO ONE FOOT BELOW ITEM 618J5 "BITUMINOUS CONCRETE SIDEWALK".
2. ONE FOOT OF THE ITEM 30125 "SUBBASE OF CRUSHED GRAVEL" IS TO EXTEND FROM THE EXISTING SLOPE, AFTER THE EXISTING TOP SOIL IS REMOVED, TO THE NEW BLOCKS.
3. THE COST OF FURNISHING STEEL PIPE SLEEVES AND DRILLING THE CHAIN LINK SLEEVES INTO THE CONCRETE BLOCKS SHALL BE SUBSIDIARY TO THE ITEM 620J1 "CHAIN LINK FENCE - 4 FEET".
4. MOUNTING HARDWARE AND ANY REQUIRED MODIFICATION OF EXISTING CHAIN LINK IS SUBSIDIARY TO ITEM 525J5 "METAL HAND RAILING (WOOD, 2 X 6 PRESSURE TREATED LUMBER)".

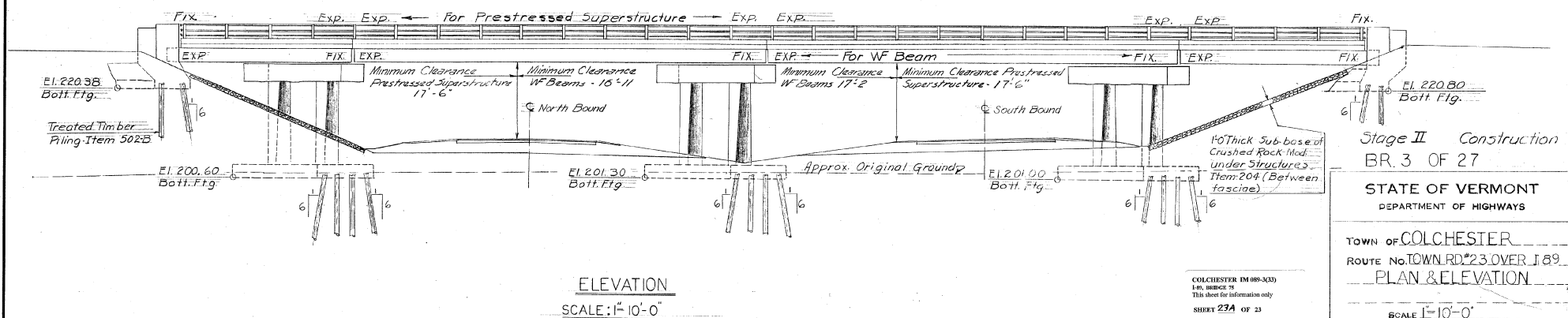
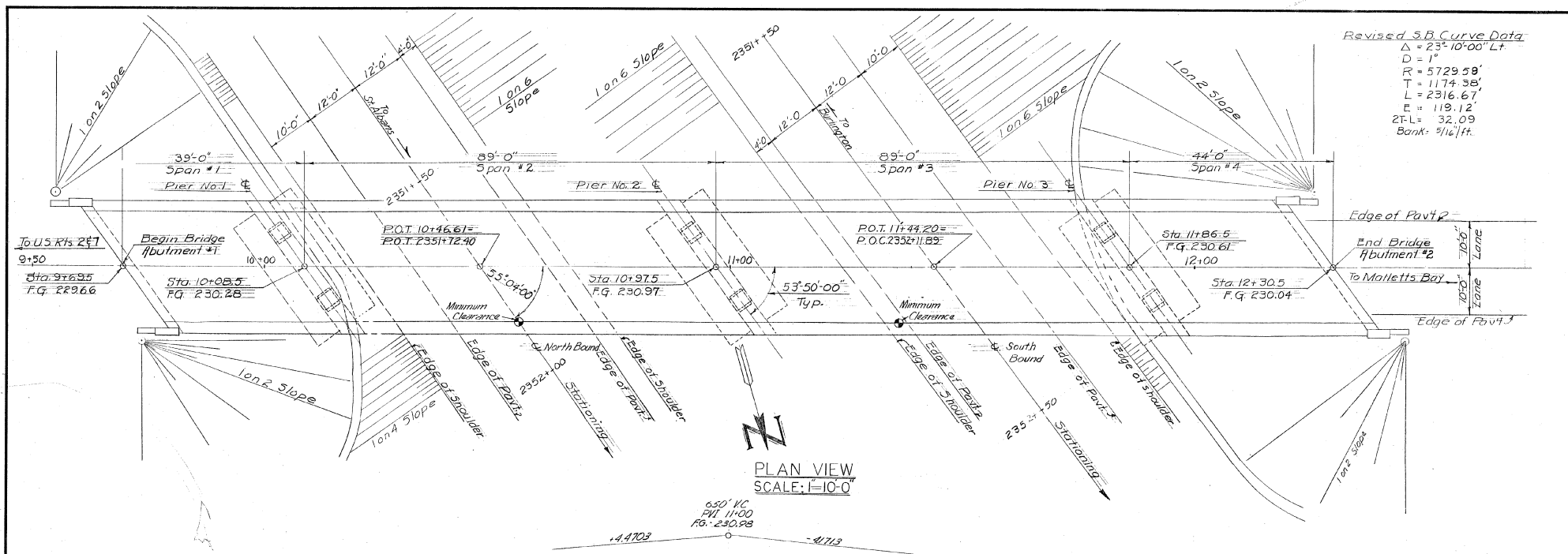
Town of	COLCHESTER	Bridge No.	
Highway No.	I-89	Log Sta.	
		Surv. Sta.	
BLAKELY RD, PEDESTRIAN BRIDGE OVER I-89			
TYPICAL SECTIONS			
Designed By D. STECIAK		Drawn by K. DETRICK/J. LAGONE	
Checked By	Date	Bridge Design Supervisor	Date
M. OLSTAD	7/2001	M. OLSTAD	7/2001
PROJECT		PROJECT NO.	
COLCHESTER		84-089-3(33) S1P EH 99(0)	

I.G.C. Info.	
Bridge Sheet No.	Sheet 22 OF 23



**STATE OF VERMONT
AGENCY OF TRANSPORTATION**

Town Of	COLCHESTER	Bridge No.	
Highway No.	1-89	Log Sta.	
		Surv. Sta.	
BLAKELY RD. PEDESTRIAN BRIDGE OVER I-89			
BLOCK WALL ELEVATIONS AT WINGWALLS 1 AND 3			
Designed By	D. STECIAK	Drawn by	J. LAGONE
Checked By	M. OLSTAD	Bridge Design Supervisor	M. OLSTAD
	7/2001	Date	7/2001
PROJECT	COLCHESTER	PROJECT NO.	M-089-3(33) STP EH 99(B)
I/G.C. Info.			
Bridge Sheet No.		Sheet 23 OF 23	



COLCHESTER (M 889-303)
 1-61, BRIDGE 75
 This sheet for information only
 SHEET 23A OF 23

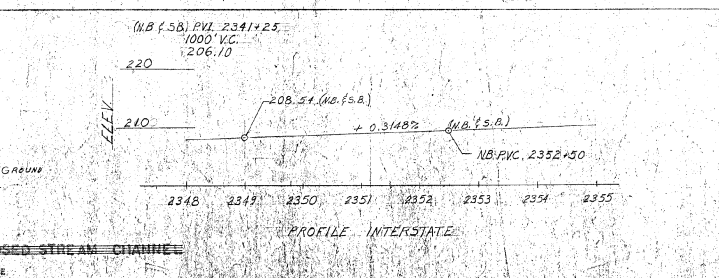
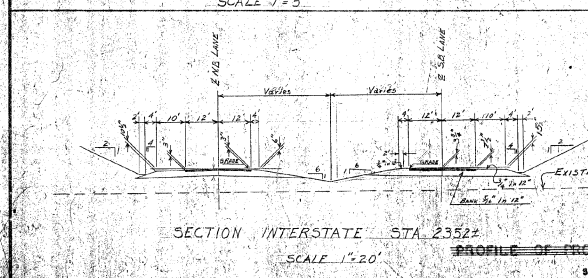
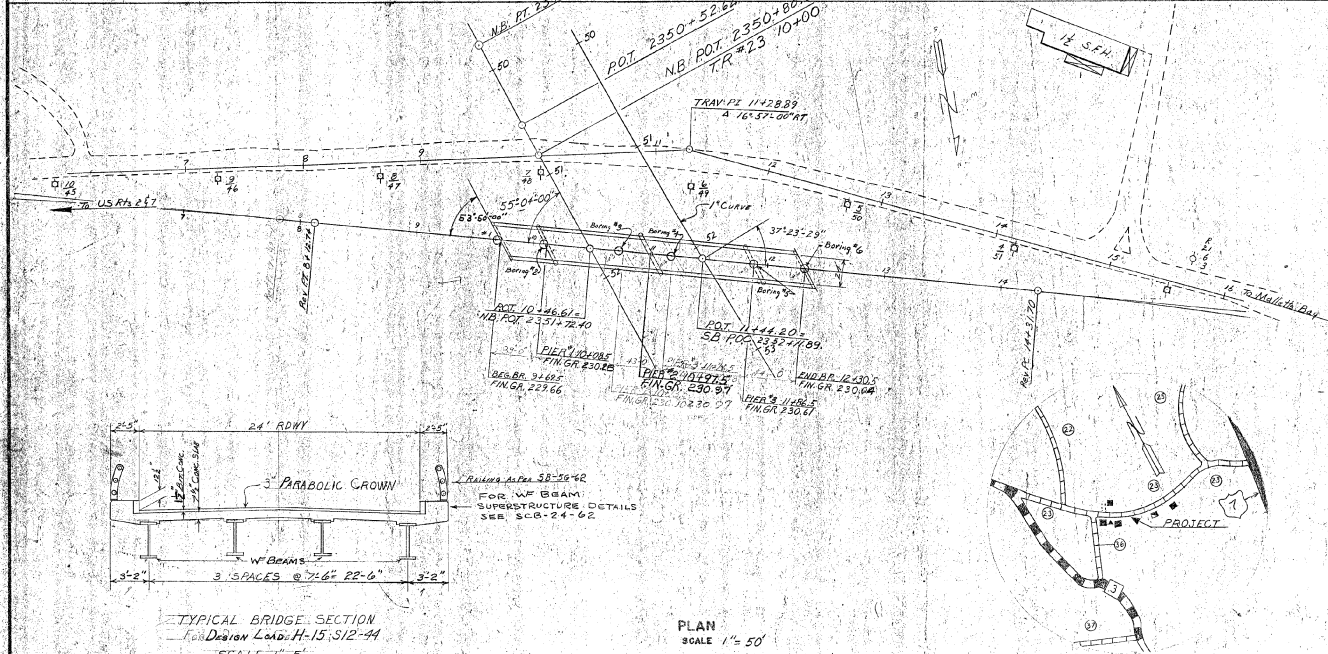
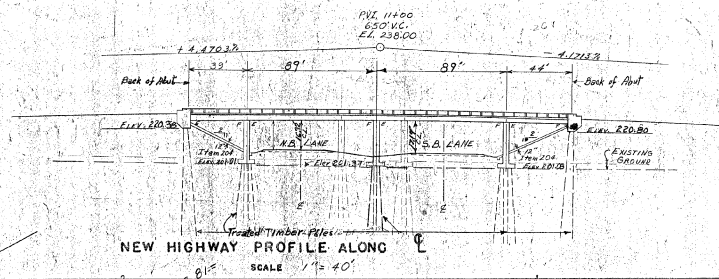
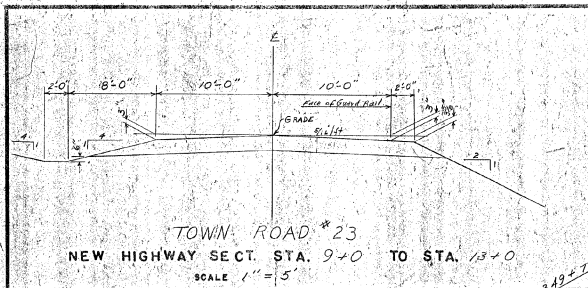
Stage II Construction
 BR. 3 OF 27

STATE OF VERMONT
 DEPARTMENT OF HIGHWAYS

TOWN OF COLCHESTER
 ROUTE NO. TOWN RD. #23 OVER J. 89
 PLAN & ELEVATION

SCALE 1"=10'-0"
 SURVEYED BY BRUCE
 DRAWN BY G.V.K. CHECKED BY JOL
 PROJECT No. 189-3(23)
 SHEET 26 OF 265

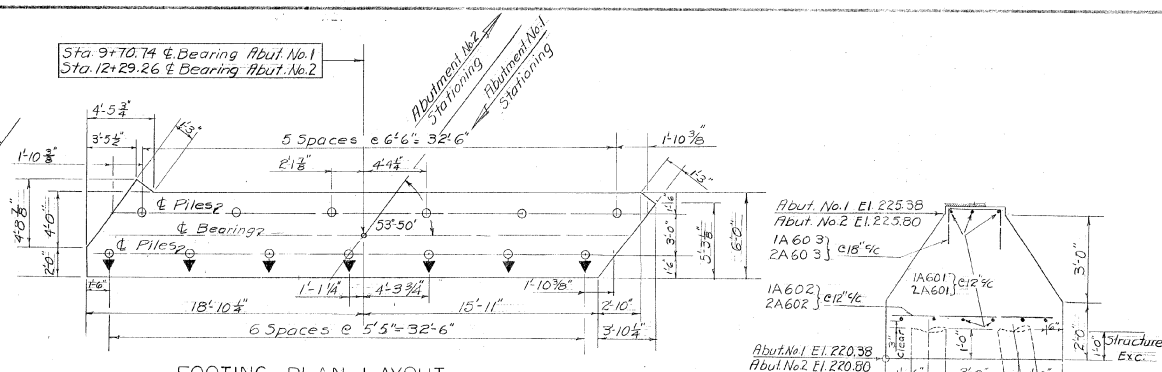
CONT. NO. 1 # 71 (19)



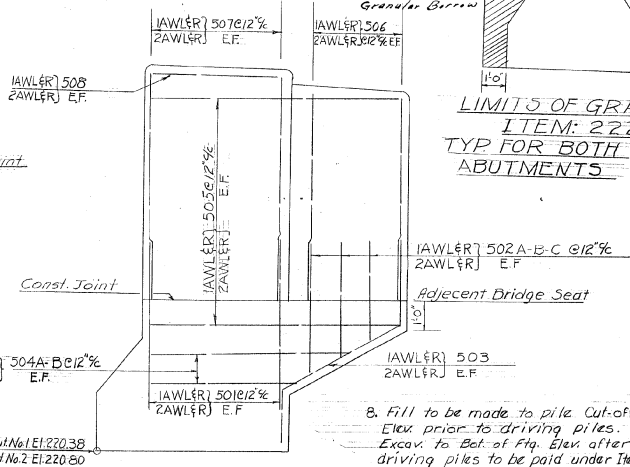
HIGHWAY NO. Town Road #23 NAME OF HIGHWAY
STRUCTURE NO. 0 COUNTY CHITTENDEN TOWN COLCHESTER
PROJECT NO. I 89-3(19) LOCATION M.L. STA. 2352 ±
TOWN ROAD #23 OVER INTERSTATE
EXISTING STRUCTURE
1 RATED LOADING OF EXISTING STRUCTURE N/A
2 TYPE OF EXISTING STRUCTURE N/A
3 UNDER-CLEARANCE ELEVATION OF EXISTING STRUCTURE N/A COST OF REMOVAL
4 WHAT DISPOSITION SHOULD BE MADE OF EXISTING STRUCTURE
5 SHOULD EXISTING STRUCTURE BE USED TO MAINTAIN TRAFFIC DURING CONSTRUCTION OF NEW STRUCTURE
6 SHOULD NEW TEMPORARY STRUCTURE BE BUILT
7 ORDINARY HIGH WATER SURFACE ELEV. AT EXISTING STRUCTURE WATERWAY TO ORDINARY H.W.
8 EXTREME HIGH WATER AT EXISTING STRUCTURE WATERWAY TO EXTREME H.W.
9 SPAN OF EXISTING BRIDGE UPSTREAM WATERWAY TO EXTREME H.W.
10 TYPE OF FOUNDATION UNDER EXISTING ABUTMENTS
11 DOES ALL WATER AT FLOOD ELEVATION PASS THROUGH EXISTING STRUCTURE
12 IF NOT AT WHAT ELEVATION IS RELIEF AFFORDED
13 ADDITIONAL WATERWAY AREA PROVIDED
NEW STRUCTURE
1 RECOMMENDED TYPE OF STRUCTURE PRESTRESSED CONCRETE OR W/BEAM BRIDGE
2 RECOMMENDED CLEAR SPAN OR SPANS 39'-89'-44'
MEASURED PARALLEL TO NEW HIGHWAY 39'-89'-44'
MEASURED AT RIGHT ANGLES TO EXISTING INTERSTATE 31.48-71.85-71.85-26.52
3 ARE THERE OBJECTIONS TO A PIER IN THE STREAM, ANSWER YES OR NO N/A
4 ORDINARY HIGH WATER ELEVATION AT NEW STRUCTURE N/A
5 EXTREME HIGH WATER ELEVATION AT NEW STRUCTURE SOURCE OF INFORMATION
6 IS ALL WATER INTENDED TO PASS THROUGH NEW STRUCTURE N/A
7 DOES STREAM REACH ITS MAXIMUM HIGH WATER ELEVATION RAPIDLY N/A IF ORDINARY RISE RAPID
8 LOW WATER ELEVATION AT NEW STRUCTURE N/A
9 DRAINAGE AREA IN ACRES ABOVE STRUCTURE N/A CHARACTER OF TERRAINE N/A
10 IS STREAM EVER DRY N/A
11 VELOCITY OF STREAM AT HIGH WATER STAGE N/A ESTIMATED DISCHARGE N/A
12 AREA FULL OPENINGS N/A AREA BELOW ORDINARY H.W. N/A
13 CHARACTER OF SCOUR N/A DRIFT N/A ICE N/A
14 ESTIMATED DRAINAGE AREA ABOVE NATURAL OR ARTIFICIAL STORAGE
15 VERTICAL CLEARANCE ABOVE FLOOD ELEVATION N/A
16 ARE SIDEWALKS REQUIRED, IF SO ON WHAT SIDE N/A BOTH SIDES N/A
17 RECOMMENDED TYPE OF PAVEMENT SEE CONTRACT
18 TRAFFIC TO BE MAINTAINED UNDER ITEM NO. ONE OR TWO PROBABLE COST
19 PROBABLE COST OF CLEARING AND GRUBBING STREAM CHANNEL AT STRUCTURE SITE N/A
20 SHOULD PROVISIONS BE MADE FOR PUBLIC UTILITIES
21 ESTIMATED ALLOWABLE LOAD ON FOUNDATIONS 20 TONS SHOULD PILES BE USED YES BUT LATER APPROVED

FOUNDATION INFORMATION
OBTAINED FOR DESIGN PURPOSES ONLY, AND THE STATE ASSUMES NO RESPONSIBILITY WHATSOEVER FOR THE SUFFICIENCY OR ACCURACY OF THE INFORMATION SHOWN. BOULDERS MAY BE ENCOUNTERED AT ANY PIER OR ABUTMENT LOCATION.

TYPICAL SECT FOR PRESTRESSED CONCRETE SUPERSTRUCTURE FOR 89' SPAN TYP
BR. 4 OF 27
STATE OF VERMONT
DEPARTMENT OF HIGHWAYS
TOWN ROAD #23 IN THE TOWNS OF
COLCHESTER
ROUTE NO. I 89 STA. 2352 ±
TOWN ROAD #23 OVER INTERSTATE
CONTRACT NO. 1 + 72 (19)
SHEET 77 OF 265
Stage II Construction
CORRECTED 11/13/60
APPROVED
SHEET 23B OF 23
COLCHESTER IM 89-3(33)
IN REPLY TO
This sheet for information only
APPROVED
ASSISTANCE CHIEF ENGINEER



FOOTING PLAN LAYOUT
ABUTMENT NO. 1 & 2
SCALE: $\frac{1}{4}" = 1'-0"$



LIMITS OF GRAVEL-BACKFILL
ITEM: 222
TYP FOR BOTH
ABUTMENTS

1. For General
2. The 1A60

Notes

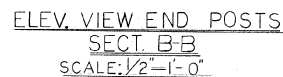
- 1. Piles see BR.1 of 27.
- 2. JA602, 2A601 & 2A602 bars are old to fit skew ends.
- 3. Ring steel schedule see BR.5

shall be poured monolithic with beam up to adjacent beam seat.

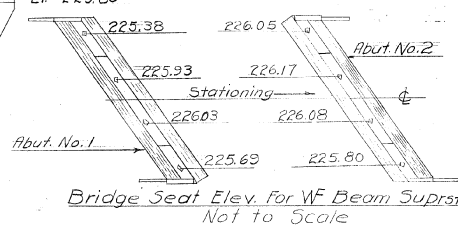
lengths of piles are 80ft for nents. front row of piles to be 6. Test piles driven to 90'. Order 90 piles. n on this sheet are typical for ture, except as follows:

- 1. Location of bridge seats are for open structure.
- 2. Bridge seats are shown for structure.
- 3. Elevation - are for WF Beam Superstructure

in floutments shall be Concrete Item 401-B



ELEV. VIEW END POSTS
SECT. B-B
SCALE: 1/2"=1'-0"

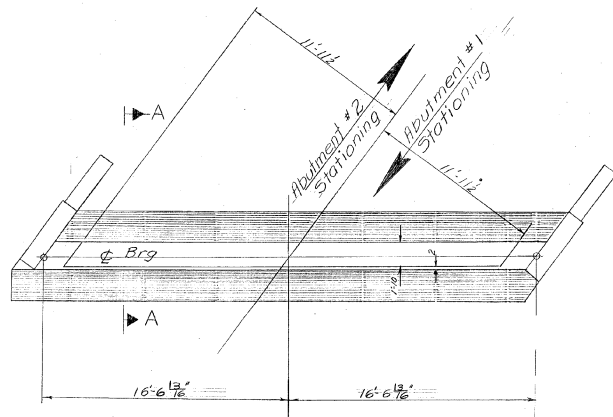


COLCHESTER IN 809-3333
 Est. number 75
 This sheet for information only

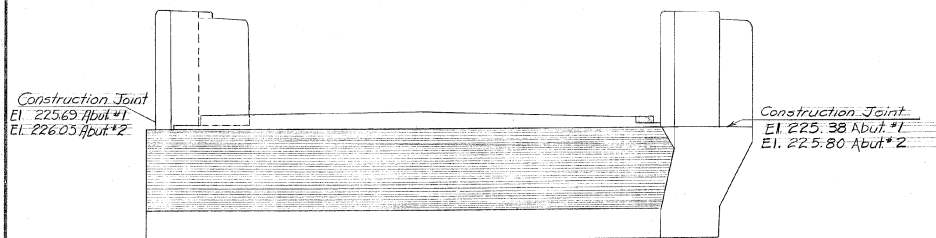
SHEET 23C OF 23

BR.10 OF 27 *Stage I Const.*STATE OF VERMONT
DEPARTMENT OF HIGHWAYS

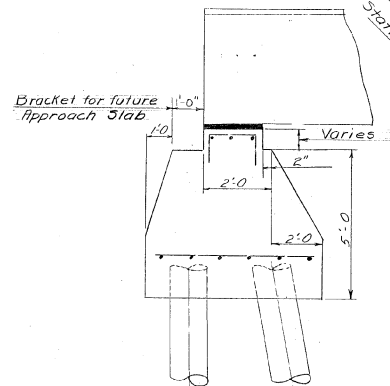
TOWN OF COLCHESTER
ROUTE NO. TOWN RD. 23 OVER I89
ABUTMENT NO. 1 & 2, DETAILS FOR
W/BE AM SUPERSTRUCTURE
SCALE AS SHOWN
SURVEYED BY BRUCE
DRAWN BY G.V.K. CHECKED BY AAK.
PROJECT NO. I89-3(19)
SHEET 78 OF 265



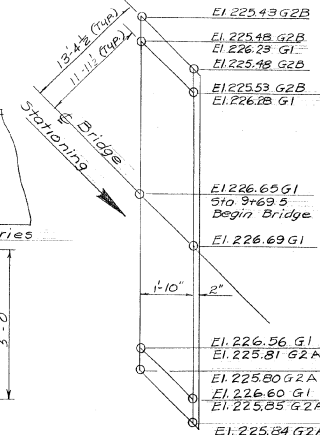
ABUTMENT NO. 1 & 2
PLAN VIEW
SCALE: 1/4" = 1'-0"



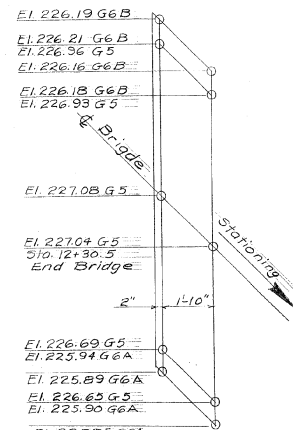
ABUTMENT NO. 1 & 2, ELEVATION
SCALE: 1/4" = 1'-0"



SECTION A-A
TYP. ABUT. DETAIL
FOR PRESTRESSED SUPERSTRUCTURE
SCALE: 1/2" = 1'-0"



ABUTMENT NO. 1



ABUTMENT NO. 2

BRIDGE SEAT ELEVATIONS

- Notes:
- For General notes See BR. I of 27
 - For additional dimensions & elevations, pile plan layout, and other details see Br. 10 of 27.
 - The end posts above low bridge seat elev. shall not be poured until superstructure is in place.

See Sheet 2 of 27 for Final Quantities

ITEM NO.	ITEM	UNIT	NET	OVERSUN	TOTAL	FINAL
106-A	CHAN. EXCAV. OF EARTH	C.Y.				
106-B	CHAN. EXCAV. OF ROCK	C.Y.				
106-C	UNCLASS. CHAN. EXCAV.	C.Y.				
107	STRUCT. EXCAV.	C.Y.				
401-B	CONC. CLASS B (MCD.)	C.Y.				
402	REINF. STEEL	LBS.				
407	ASPHALT-AC. COATING	S.Y.				
502-B	TREATED TIMBER PILING	L.F.				
503	SPLICES FOR STEEL PILING	EA.				
504	STEEL PILING	L.F.				
502-A	UNTREATED TIMBER PILING	L.F.				

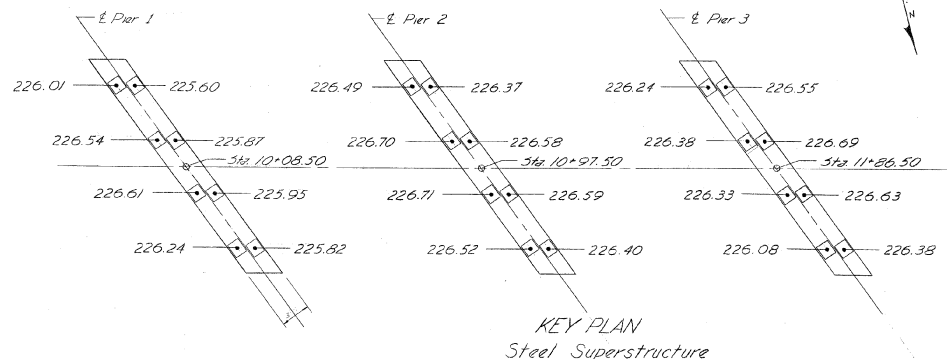
COLCHESTER (M 88-333)
Iss. source 15
This sheet for information only
SHEET 22D OF 23

Stage I Construction
BR. II OF 27

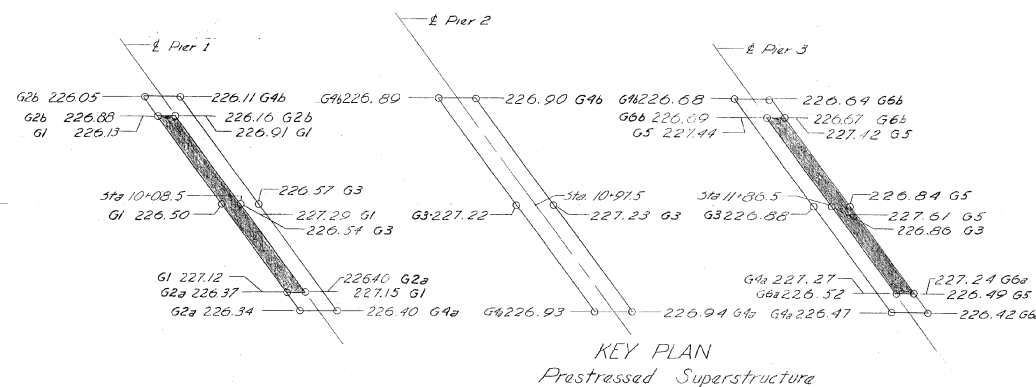
STATE OF VERMONT
DEPARTMENT OF HIGHWAYS

TOWN OF COLCHESTER
ROUTE NO. TOWN ROAD #23 OVER I-89
ABUTMENT NO. 1 & 2 DETAILS FOR
PRESTRESSED SUPERSTRUCTURE
SCALE AS SHOWN
SURVEYED BY BRUCE
DRAWN BY G.V.K. CHECKED BY VOL
PROJECT NO. 189-3(19)
SHEET 72 OF 265

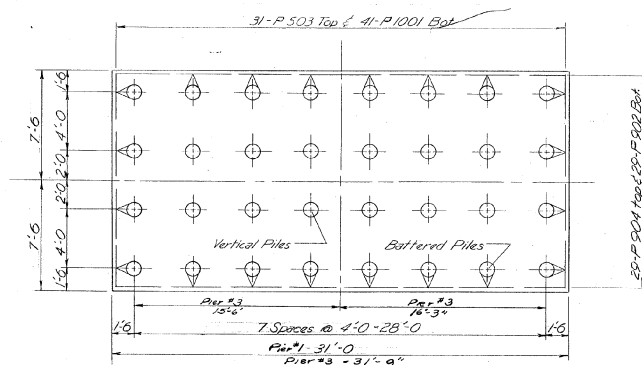
CONT. NO. 1



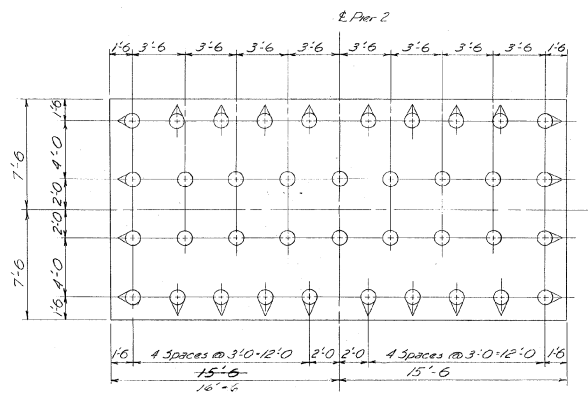
KEY PLAN
Steel Superstructure



KEY PLAN
Prestressed Superstructure



Footing Plan - Pier 1 & Pier 3
SCALE 4" = 1'-0"



Footing Plan - Pier 2
SCALE 4" = 1'-0"

NOTES

- For general notes see B.R.1 of 27.
- The estimated length of piles is 60' for all piers. All edge piles shall be battered away from the footing - 1 on 6.
- The WF superstructure expansion plates and drain troughs shall be as indicated on 5CB-D3-62 - Type B (draw over the side of the pier cap).

See Sheet 2 of 27 for Final Quantities

ITEM NO.	ITEM	UNIT	NET	OVERLAP	TOTAL	FINAL
105-A	CHAN. EXCAV. OF EARTH	C.Y.				
106-B	CHAN. EXCAV. OF FEED	C.Y.				
106-C	UNCLAS. CHAN. EXCAV.	C.Y.				
107	STRUCT. EXCAV.	C.Y.				
401-B	CONC. CLASS B (WOOD)	C.Y.				
402	REINF. STEEL	LBS.				
407	ASPHALTIC-ASB. COATING	S.Y.				
502-B	TREATED TIMBER PILING	L.F.				
503	SPLICES FOR STEEL PILING	EA.				
504	STEEL PILING	L.F.				
502-A	UNTREATED TIMBER PILING	L.F.				

COLCHESTER (M 08-303)
L.B. 2002-75
This sheet for information only
SHEET 23E OF 23

Stage I Construction
B.R.12 of 27

STATE OF VERMONT
DEPARTMENT OF HIGHWAYS

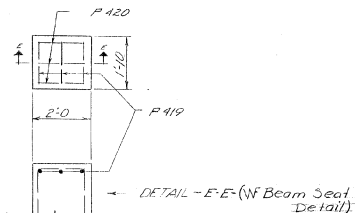
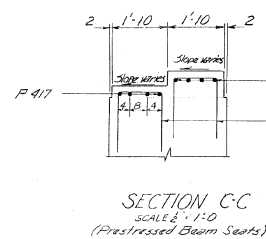
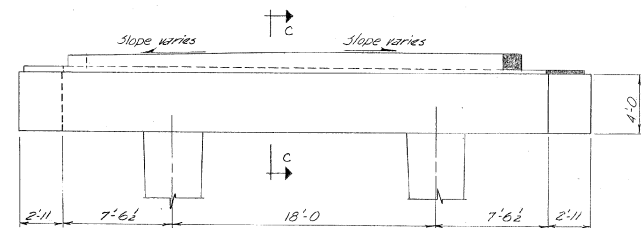
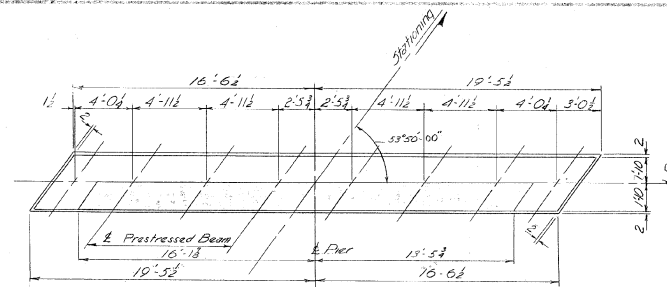
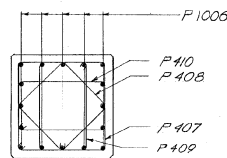
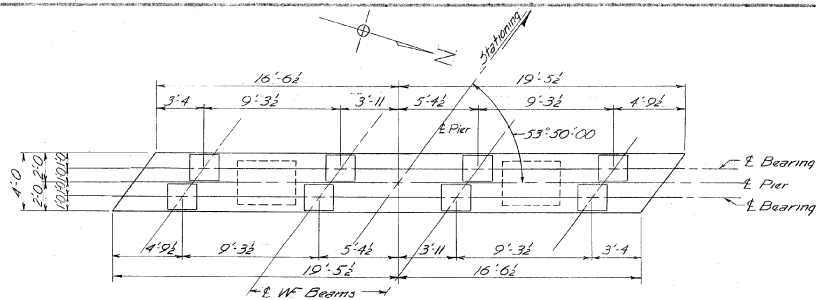
TOWN OF COLCHESTER
ROUTE NO. 123 Over I-89
PIER-DETAILS

SCALE: AS SHOWN

DESIGNED BY: G.V.K.

PROJECT NO. 189-3(5)
SHEET 80 OF 265

CONT. NO. 1



SECTION D-D SCALE 1/2" BR. 13 of 27

For notes see sheet BR 1 of 27

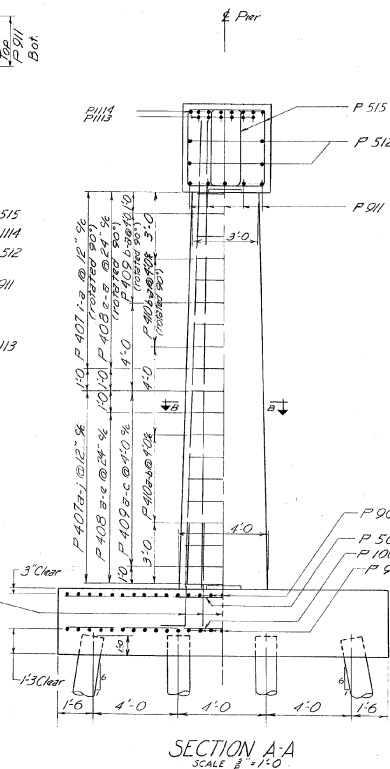
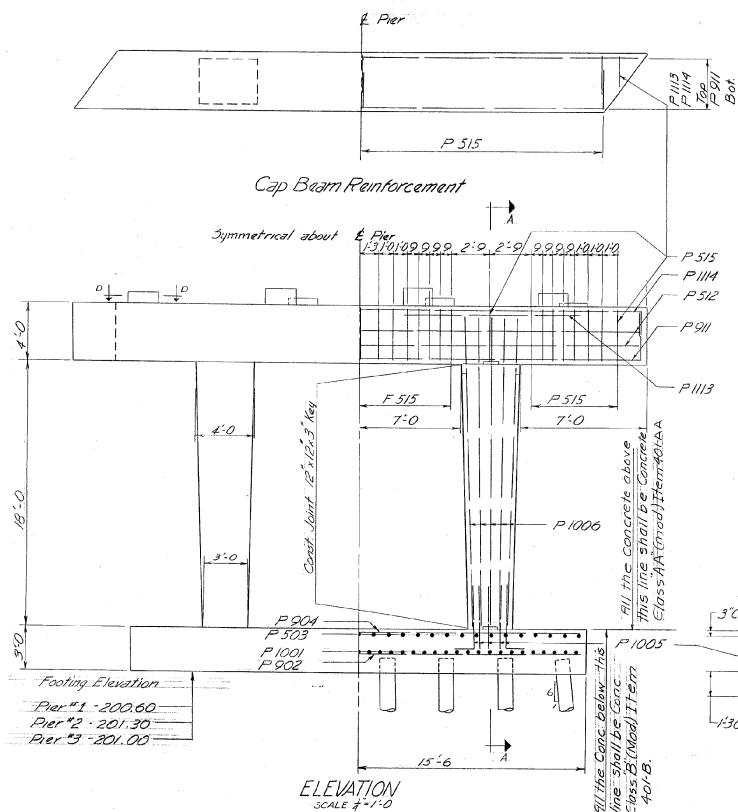
ITEM NO.	ITEM	UNIT	NET	OVERTUN	TOTAL	FINAL
105-A	CHAL. EXCAV. OF EARTH	C. Y.				
105-B	CHAL. EXCAV. OF ROCK	S. Y.				
105-C	UNCLASD. CHAL. EXCAV.	C. Y.				
107	STRUCT. EXCAV.	C. Y.				
401-B	CONC. CLASS B (MOD.)	C. Y.				
402	REIN. STEEL	LBS.				
407	ASPHALT/TAKE COATING	S. Y.				
502-B	TREATED HARDER PILING	L. F.				
503	SPLICES FOR STEEL PILING	EA.				
504	STEEL PILING	L. F.				
502-A	UNTREATED HARDER PILING	L. F.				

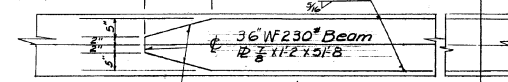
STATE OF VERMONT
DEPARTMENT OF HIGHWAYS
BRIDGE - SI-B2

TOWN OF COLCHESTER
ROUTE NO. 123 over I-89
PIER DETAILS - 1.2 & 3
PRESTRESSED W-BEAM
SCALE - AS SHOWN

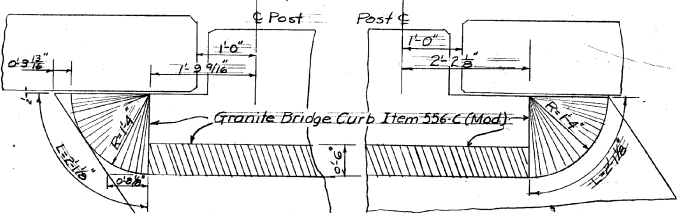
DESIGNED BY: [Signature]
DRAWN BY: VOL. CHECKED BY: G.V.K. 1/62
PROJECT NO. 1-89-3(5)
SHEET 81 OF 265

CONT. NO. 1





BOTTOM COVER PL DETAIL
FOR 89FT. SPAN



Notes

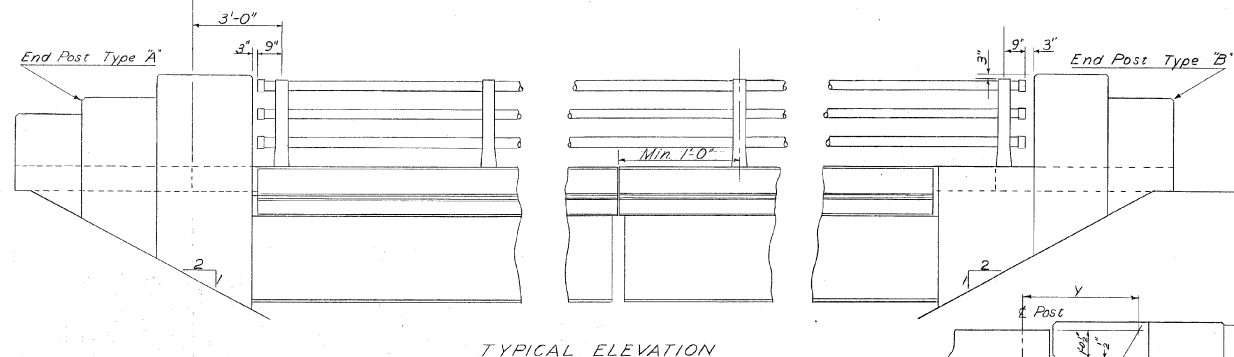
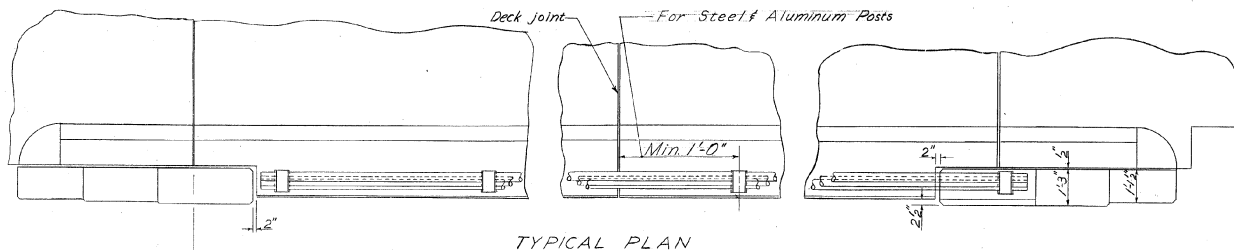
1. For General Notes See Br 1 of 27

2. For additional details see standard: 5CB-24-62,
5CB-D1, D3, D6, D7, D8 & D9-62, 5B-5G-62

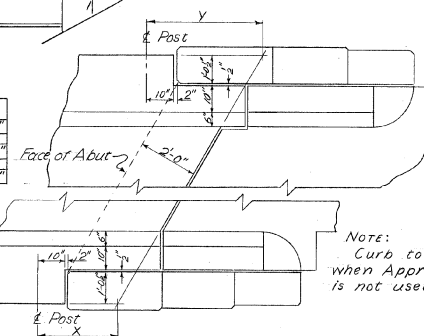
BR.14 OF 27 *Stage I Construction*

TOWN OF COLCHESTER
ROUTE NO. TOWN RD #23 OVER I-89
FRAMING-RAILING &
CURBING PLAN DETAILS
SCALE AS SHOWN
SURVEYED BY BRUCE
DRAWN BY G.V.K. CHECKED BY KOL
PROJECT NO. I-89-3(19)
SHEET 82 OF 265

CONT. NO. 1



SKEW	X	Y
15°	2'-9 1/2"	3'-4 1/2"
30°	2'-8 1/2"	3'-10 3/8"
45°	2'-9 1/2"	4'-10 1/2"



GENERAL RAILING NOTES

All posts to be set normal to the grade.
Prior to fabrication of the railing, shop drawings shall be submitted to the Highway Department for approval.
One anchor bolt template shall be supplied for each type of post.
Tubular rails, rail posts, box section inserts, wedges, end caps, anchor bolts, nuts, washers, anchor bolt templates, shims & all labor, tools, equipment and incidentals necessary to complete the acceptable railing installation shall be included in the Unit Price bid for Item 572.
All bolts, nuts & washers shall be galvanized to ASTM-A-153-61.

GALVANIZED METAL RAILING

Intermediate Three Tube Post - Malleable Iron Casting - A.S.T.M. A-47 GR 35018, galvanize to A.S.T.M. A-123-59.
Maximum post spacing shall be 10'-0".

Except for end sections and panels over expansion joints, all rails shall run continuous through two consecutive posts. Rails shall be so arranged, that no more than two splices will be adjacent to any given post. (In effect stagger joints as much as is practical.)

ALUMINUM RAILING

Posts shall meet A.A.S.H.O. Designation M-193-61. Rails shall meet A.S.T.M. Specification B 235-61 Alloy-6061 Cond. T-6.
Maximum post spacing shall be 7'-2".

Aluminum railing posts are to be set on pads 1/2" thick of a non-conductive material meeting the approval of the Engineer and the edges are to be sealed with an Aluminum Impregnated Caulking Compound.

Except for end sections all rails shall run continuous through three consecutive railing spans. With the exclusion of the end posts, the joints shall be placed so that there will be no more than one rail splice at each post.

GALVANIZED METAL RAILING (CONTINUED)

All rail splices and end caps shall be tested after galvanizing to assure proper clearances for field erection.

Note:
Curb to be modified when Approach Slab is not used.

COLCHESTER IN (08-303)
L.S. BRIDGE 75
This sheet for information only
SHEET 23H OF 23

REVISIONS & CORRECTIONS
Note added for testing rail splices after galvanizing. 9/29/64 WMS.

Drawn By: *W* Date: Dec. 1, 1962
Traced By: *W* Date: Dec. 1, 1962
Checked By: *WMS* Date: Dec. 1, 1962
Recommended *WMS* 12/7/62
For Approval Bridge Engineer Date
Recommended *WMS* 12/7/62
For Approval Assist. Chief Engineer Date
Approved By: *G. S. Smith* 1/4/63
Chief Engineer Date

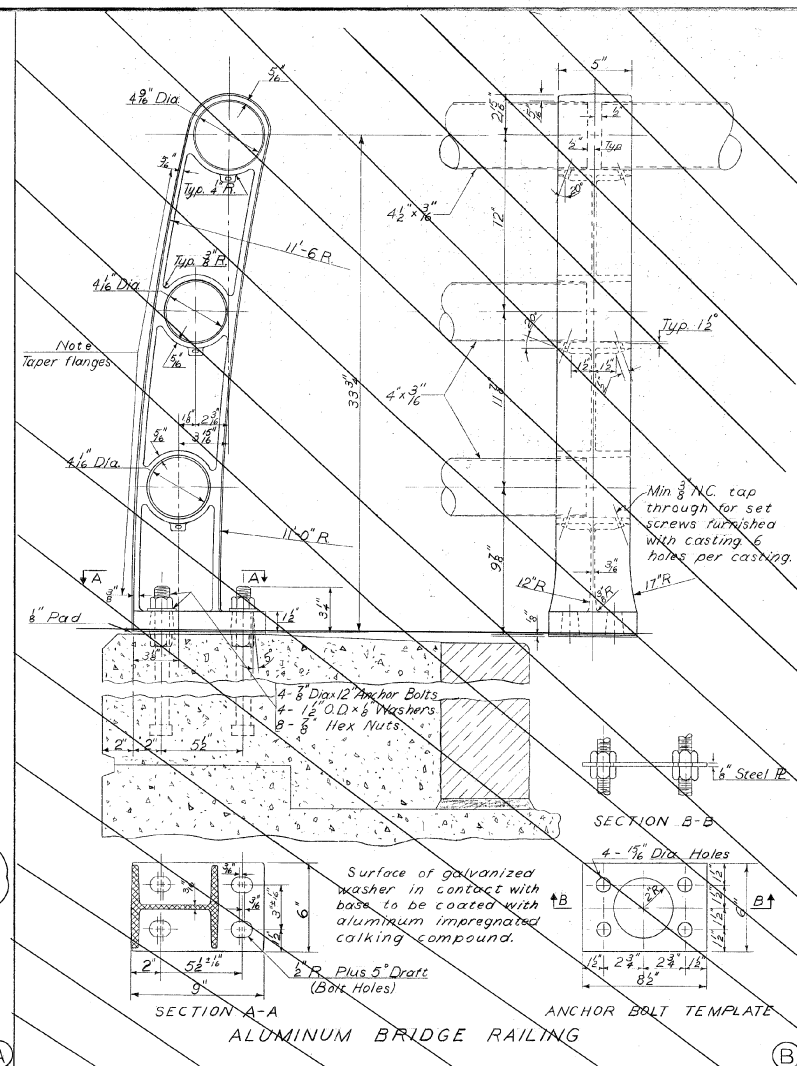
DETAILS OF BRIDGE RAILING PLAN & ELEVATION

EITHER ALUMINUM OR GALVANIZED METAL
RAILING MAY BE USED

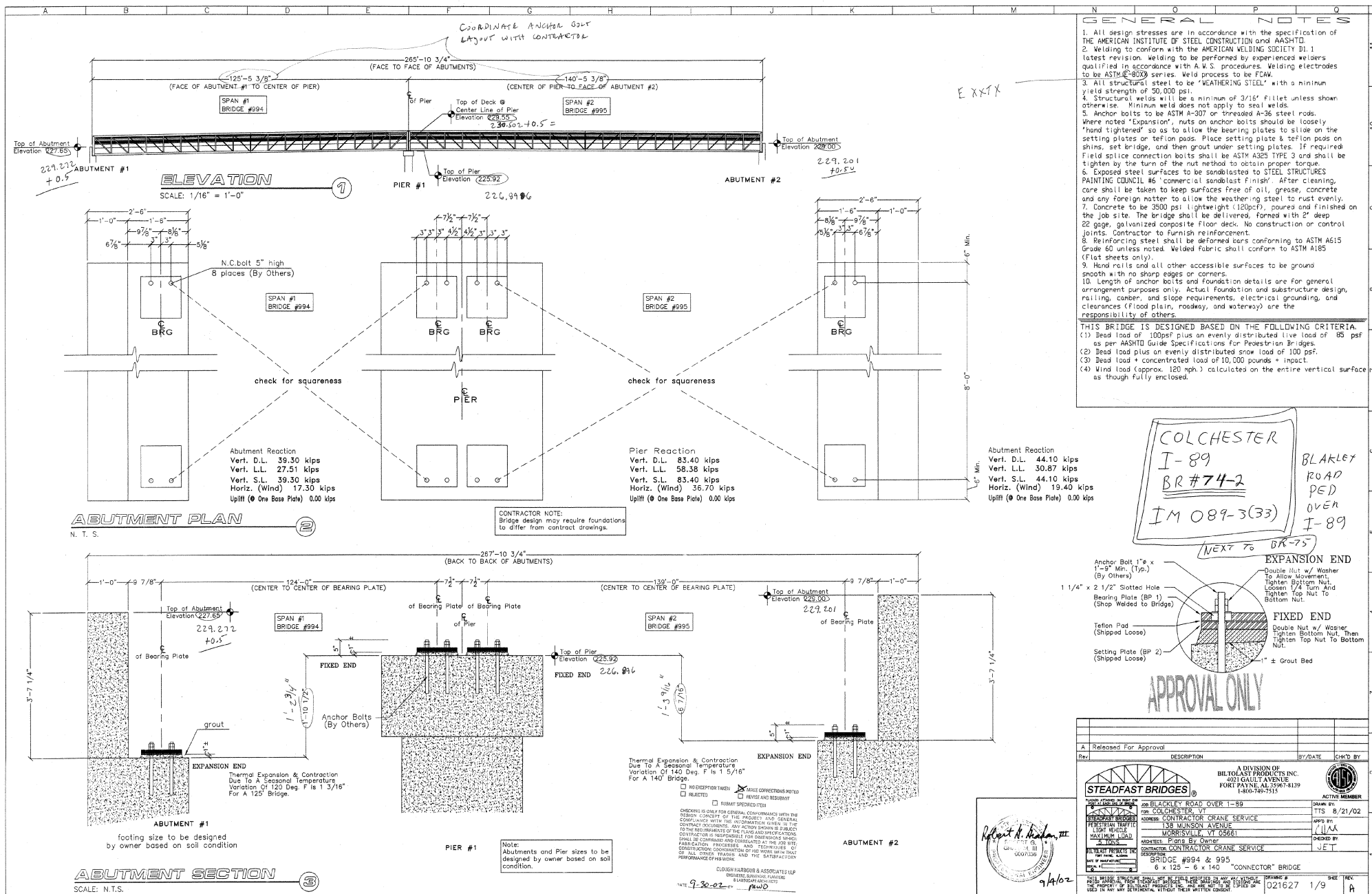
VERMONT
DEPARTMENT OF HIGHWAYS
STRUCTURE STANDARDS

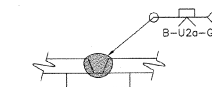
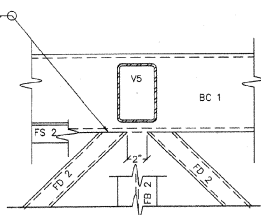
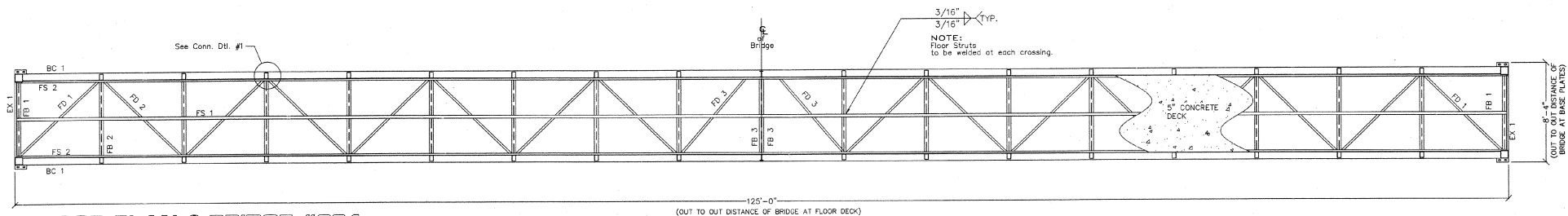
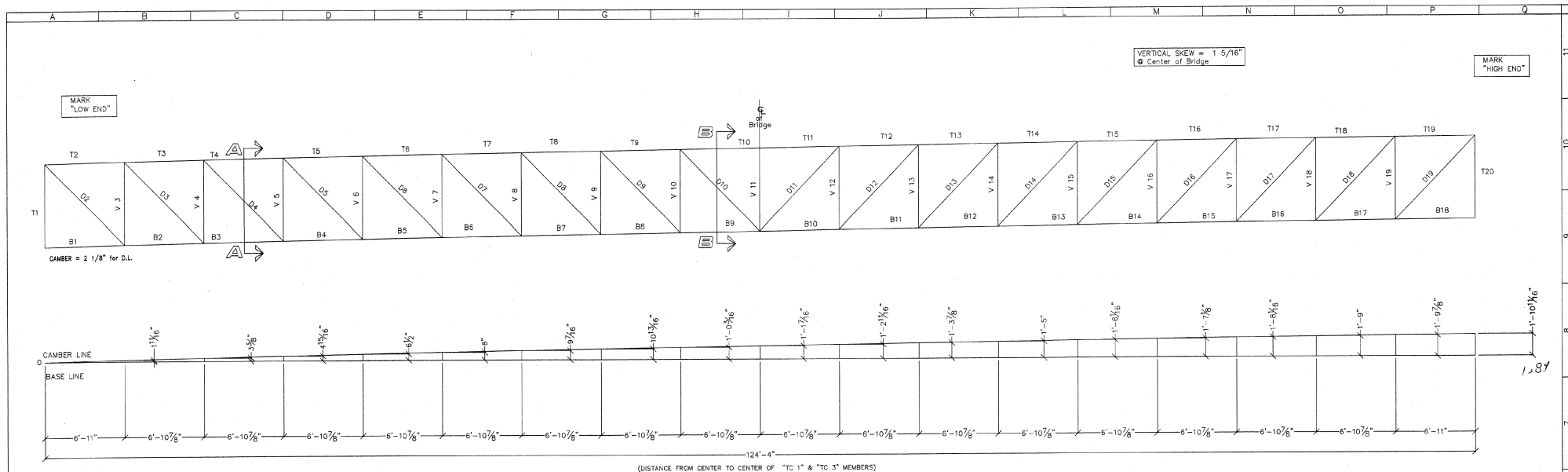
SB-5G-62

SHEET 1 OF 2



COLCHESTER IM 089-3(33
I-89, BRIDGE 75
This sheet for information only
SHEET 23I OF 23





NO EXCEPTIONS FOR THESE PROJECTS
☒ MAKE CORRECTIONS NOTED
☐ REVISE AND RESUBMIT
☐ SUBMIT FOR APPROVAL

CHECKING IS ONLY FOR GENERAL CONFORMANCE WITH THE DESIGN CONCEPT OF THE PROJECT AND GENERAL COMPLIANCE WITH THE INFORMATION GIVEN IN THE CONTRACT DOCUMENTS. THE CONTRACTOR IS RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION GIVEN IN THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION GIVEN IN THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION GIVEN IN THE CONTRACT DOCUMENTS.

DATE 9-30-02 BY MWO

Robert A. Anderson
 PROJECT ENGINEER
 0007036

APPROVAL ONLY

Rev.	DESCRIPTION	BY/DATE	CHKD BY
A	Released For Approval		

STEADFAST BRIDGES®

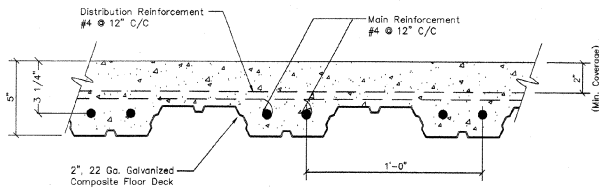
FOR BLACKLEY ROAD OVER I-89
 FOR COLCHESTER, VT
 ADDRESS: CONTRACTOR CRANE SERVICE
 138 MANSION AVENUE
 MORRISVILLE, VT 05661

DESIGNED BY: JET
 CHECKED BY: JET

BRIDGE #994
 6 x 125 "CONNECTOR" BRIDGE

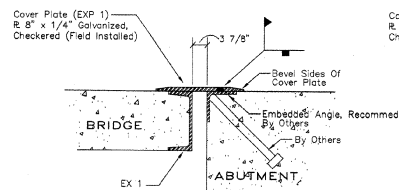
DATE 9/14/02

021627 2/9



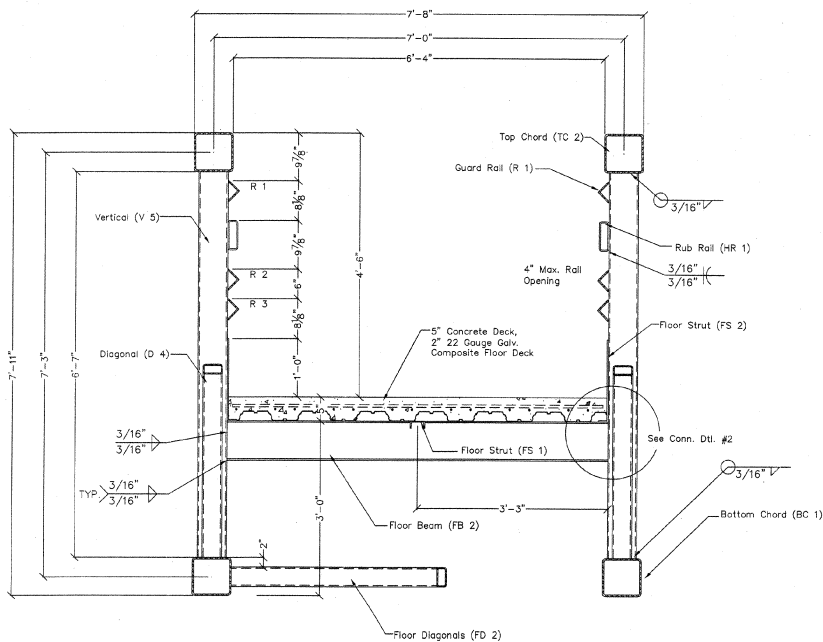
CONG. DECK REINFORCEMENT

SCALE: 3" = 1'-0"



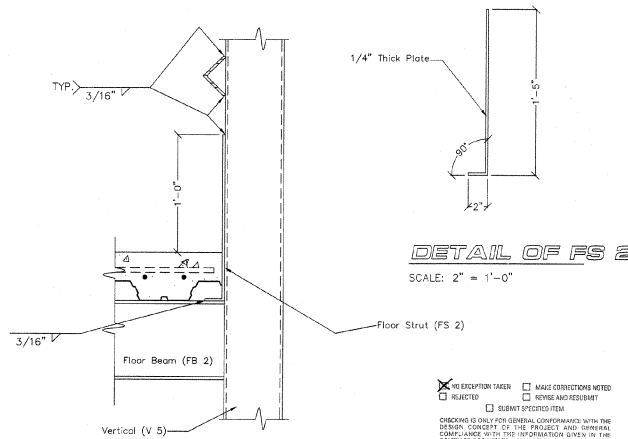
COVER PLATE DETAIL

SCALE: 3" = 1'-0"



SECTION "A - A" @ BRIDGE #994

SCALE: 1" = 1'-0"



DETAIL OF FS 2

SCALE: 2" = 1'-0"

- ☒ NO EXCEPTION TAKEN
☐ SELECTED
☐ RELEVANT SPECIFICATIONS

CHANGES TO BE MADE IN THE DESIGN OF THE PROJECT AND/OR MATERIAL COMPLIANCE WITH THE INFORMATION GIVEN IN THE CONTRACT DOCUMENTS, ANY ACTION BEING SUBJECT TO THE REQUIREMENTS OF THE PLANS AND SPECIFICATIONS. CONTRACTOR IS RESPONSIBLE FOR ENGINEERING WHICH SHALL BE COORDINATED AND COULDED BY THE JOB SITE SUPERVISOR. COORDINATION OF THE WORK WITH THAT OF ALL OTHER TRADES AND THE SATISFACTORY PERFORMANCE OF THE WORK.

CLUGGON HARBOR & ASSOCIATES LLP
ENGINEERS ARCHITECTS
HARBORFRONT PROJECTS
DATE 9-30-02 BY *MMW*

Robert B. Hickman
9/4/02

BILL OF MATERIALS

JOB: 021627 FOR: COLCHESTER, VT. 6X125 CONNECTOR

STEEL ASTM A588 or A242 TUBE: A587 or A508 PLATE: A588 or A242

NO.	MARK	DESCRIPTION	FEET	INCHES	WEIGHT PER FOOT	TOTAL	UNIT
2	TC 1	HSS 8 x 8 x 3/8	7	10 13/16	37.69	604	16
4	TC 2	HSS 8 x 8 x 3/8	62	6 1/8	37.69	9,460	251
2	TC 3	HSS 8 x 8 x 3/8	7	11 1/8	37.69	604	16
4	BC 1	HSS 6 x 6 x 1/4	61	10 1/8	25.82	6,404	248
16	V3-V10	HSS 6 x 4 x 1/4	6	7	15.62	1,656	106
16	V12-V19	HSS 6 x 4 x 1/4	6	7	15.62	1,656	106
4	V 11	C 6 x 8.2	6	7	6.20	222	27
4	D2-D3	HSS 4 x 4 x 1/4	9	2 1/2	12.21	452	37
14	D4-D10	HSS 4 x 2 x 1/4	9	2 3/4	8.81	1,146	130
14	D11-D17	HSS 4 x 2 x 1/4	9	4 3/8	8.81	1,166	132
4	D18-D19	HSS 4 x 4 x 1/4	9	4 1/4	12.21	464	38
2	FB 1	W 10 x 33	6	4	33.00	429	13
16	FB 2	W 8 x 15	6	5	15.00	1,560	104
2	FB 3	C 8 x 11.5	6	6	11.50	150	13
14	FD 1	HSS 4 x 2 x 1/4	9	3	8.81	168	19
14	FD 2	HSS 4 x 2 x 1/4	9	3	8.81	1,146	130
2	FD 3	HSS 4 x 2 x 1/4	8	5 5/8	8.81	150	17
1	FS 1	C 3 x 4.1	125	0 3/16	4.10	517	126
2	FS 2	PL 19 x 1/4 ("L" SHAPED)	125	0 3/16	16.15	4,070	252
2	EX 1	C 5 x 6.2	6	4	6.20	81	13
2	HR 1	HSS 6 x 2 x 1/4	125	0 3/4	12.21	1,539	128
6	RI-R3	3 x 3 x 1/4	125	0 3/4	4.90	3,680	751
18	DECK	2" 22 GAUGE COMP. (36")	21	0	6.00	2,268	378
4	BP 1	PL 12 x 3/4	1	0 1/2	30.60	153	5
8	SP 1	PL 6 1/2 x 1/2	2	2	11.10	200	18
8	SP 2	PL 6 1/2 x 1/2	2	6	11.10	222	20
8	SP 3	PL 3 x 1/2	0	4	5.10	15	3
6	CONN. BOLT ASTM 325 3/4"	0	2 1/2			2	
128	CONN. BOLT ASTM 325 7/8"	0	2 1/2			36	
16	CONN. BOLT ASTM 325 3/4"	0	1 3/4			5	

SUB TOTAL 40,233#

ITEMS TO SHIP LOOSE WITH BRIDGE				
4 BP 2 PL 12 x 1/2	1	0 1/2	20.40	102
4 FRICITIONLESS PADS 11 x 1/8	1	0 1/2	0	1

TOTAL LIFTING WEIGHT: 40,328#

APPROVAL ONLY

A. Released For Approval

Revised: _____ DESCRIPTION: _____ BY/DATE: _____ CHG'D BY: _____

STEADFAST BRIDGES

A DIVISION OF
BILTOLAST PRODUCTS INC.
4021 GAULT AVENUE
FORT PAYNE, AL 35967-1139
1-800-749-7215

FOR: COLCHESTER, VT.
BLACKLEY ROAD OVER I-89
CONTRACTOR CRANE SERVICE
138 MUNSON AVENUE
MORRISVILLE, VT 05661

ARCHITECT: PHOTON, INC. CHARTERED
CONSTRUCTION CONTRACTOR CRANE SERVICE

BRIDGE #994
6 x 125 "CONNECTOR" BRIDGE

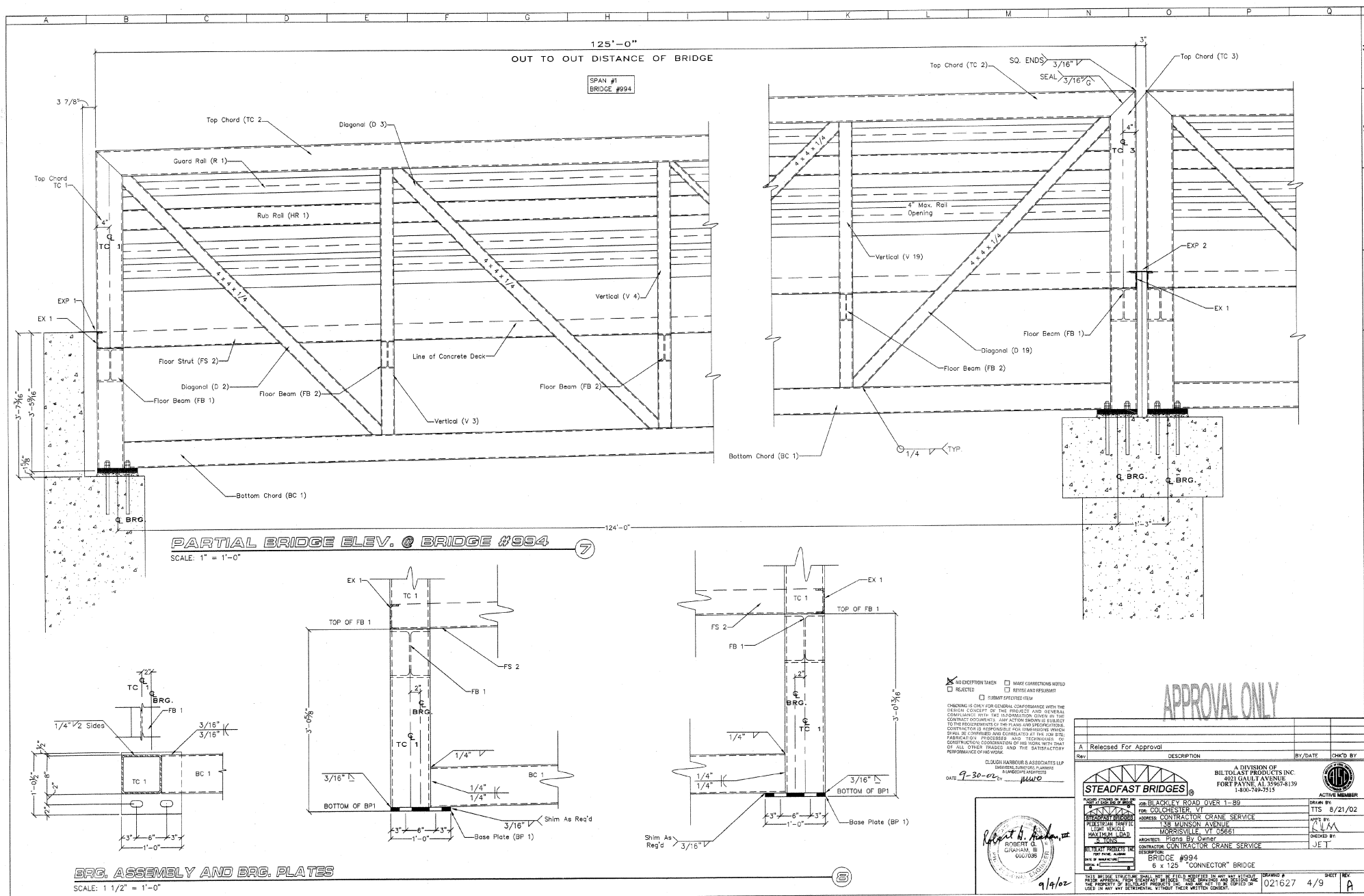
DATE: 9/4/02

THIS BRIDGE STRUCTURE SHALL BE THE PROPERTY OF THE STATE OF VERMONT. IT IS THE PROPERTY OF STEADFAST BRIDGES, INC. AND SHALL BE USED ONLY FOR THE PURPOSES FOR WHICH IT WAS DESIGNED AND CONSTRUCTED. IT IS NOT TO BE USED FOR ANY OTHER PURPOSES WITHOUT THE WRITTEN CONSENT OF STEADFAST BRIDGES, INC.

DRAWN BY: TTS 8/21/02
CHECKED BY: JET
DESIGNED BY: JET

DATE: 9/4/02

021627 3/9 A





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

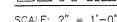
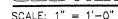
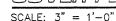
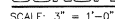
CHECKING IS ONLY FOR GENERAL CONFORMANCE WITH THE DESIGN CONCEPT OF THE PROJECT AND GENERAL CONTRACT DOCUMENTS. ANY ACTION SHOWN SUBJECT TO THE REQUIREMENTS OF THE PLANS AND SPECIFICATIONS. CONTRACTOR IS RESPONSIBLE FOR DIMENSIONS WHICH SHALL BE CONFIRMED AND APPROVED BY THE JOB SITE FABRICATION PROCESSES AND TECHNIQUES OF CONSTRUCTION; COOPERATION OF HIS WORK WITH THAT OF ALL OTHERS AND HIS OWN SATISFACTORY PERFORMANCE OF HIS WORK.

CLIVE H. HARRISON & ASSOCIATES LLP
ENGINEERS, SURVEYORS & LANDSCAPE ARCHITECTS

DATE 9-30-02 BY mwb

APPROACH

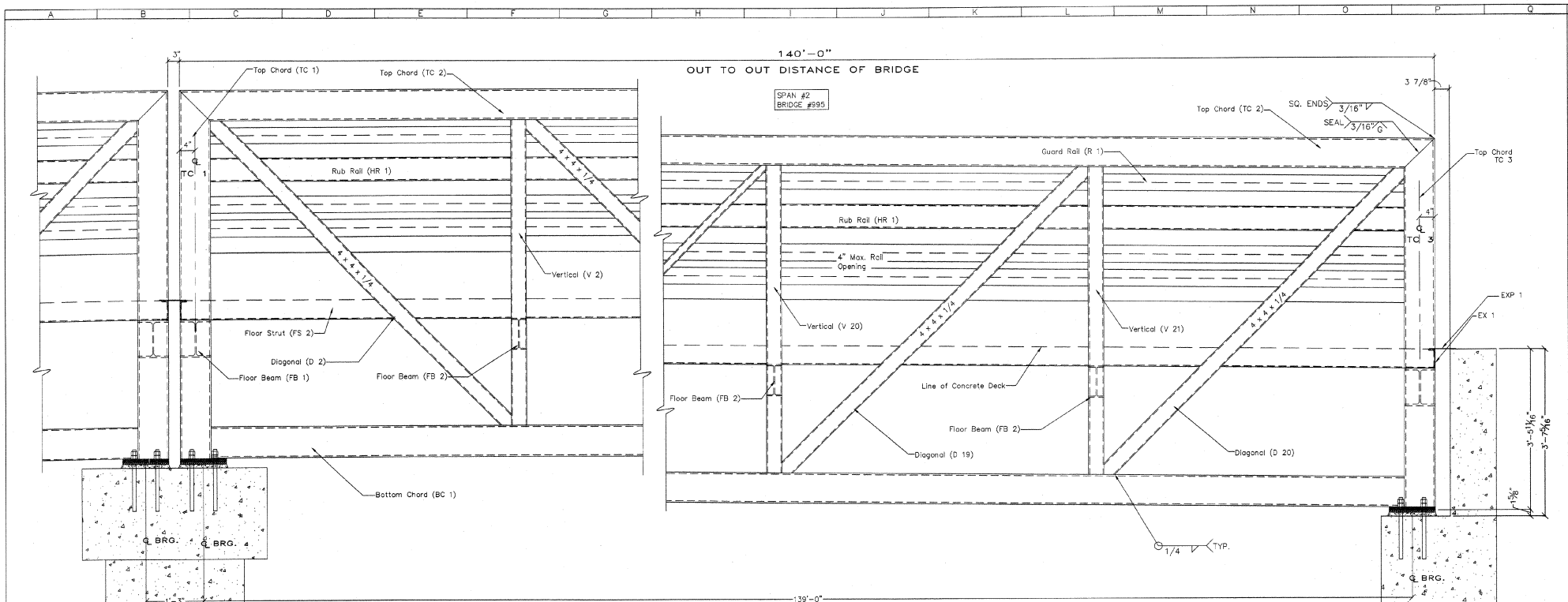
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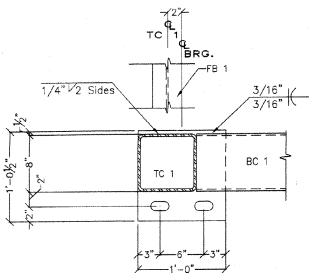
THIS BRIDGE STRUCTURE SHALL NOT BE FIELD MODIFIED IN ANY WAY WITHOUT PRIOR APPROVAL FROM STEADFAST BRIDGES. THESE DRAWINGS AND NOTATIONS ARE	DRAWING #	SHEET	REV.
	0021623 3/0		0

APPROVAL ONLY

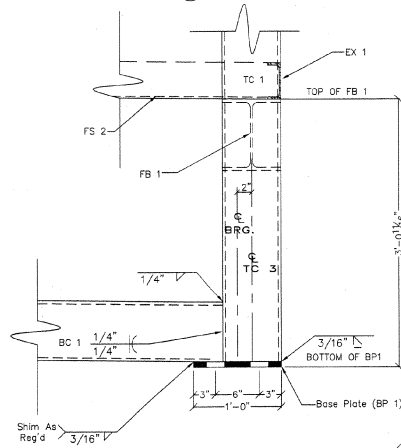
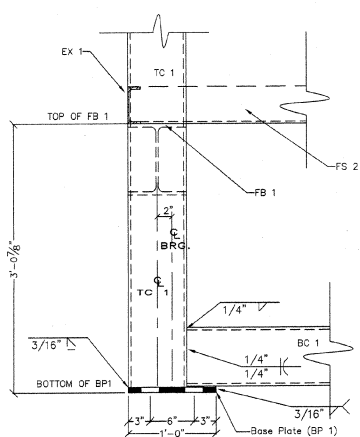
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	0021623 3/0		0



PARTIAL BRIDGE ELEV. @ BRIDGE #994
SCALE: 1" = 1'-0"



BRG. ASSEMBLY AND BRG. PLATES
SCALE: 1 1/2" = 1'-0"



NO EXCEPTION TAKEN
REJECTED
SUBMIT SPECIFIED ITEM
OBSERVE 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 DRAWN IS SUBJECT TO THE REQUIREMENTS OF THE AIA AND AMERICAN CONTRACTOR IS RESPONSIBLE FOR CHANGES WHICH SHALL BE CORRECTED AND COMPLETED AT THE JOB SITE. FABRICATION, ERECTION AND MAINTENANCE OF THE CONSTRUCTION COORDINATION OF THE WORK WITH THAT OF ALL OTHER TRADES AND THE SATISFACTORY PERFORMANCE OF THE WORK.

CLOSER HARBOR & ASSOCIATES LLP
REGISTERED PROFESSIONAL ENGINEER
DATE: 9-30-02 BY: *mwp*



9/4/02

APPROVAL ONLY

A Released For Approval		Rev.	DESCRIPTION	BY/DATE	CHK'D BY
STEADFAST BRIDGES® A DIVISION OF BILTOLAST PRODUCTS INC. 2021 GAULT AVENUE FORT PAYNE, AL 35967-8139 1-800-749-7515 FOR BLACKLEY ROAD OVER 1-89 IN COLCHESTER, VT CONTRACTOR CRANE SERVICE 198 MUNSON AVENUE MORRISVILLE, VT 05661 ARCHITECT: CHOPS BY CHOPS CONTRACTOR: CONTRACTOR CRANE SERVICE BRIDGE #995 6 x 140 "CONNECTOR" BRIDGE DATE: 9/4/02 DRAWN BY: JET CHECKED BY: JET APPROVED BY: JET PROJECT NO: 021627 SHEET NO: 8/9 REV: A					

