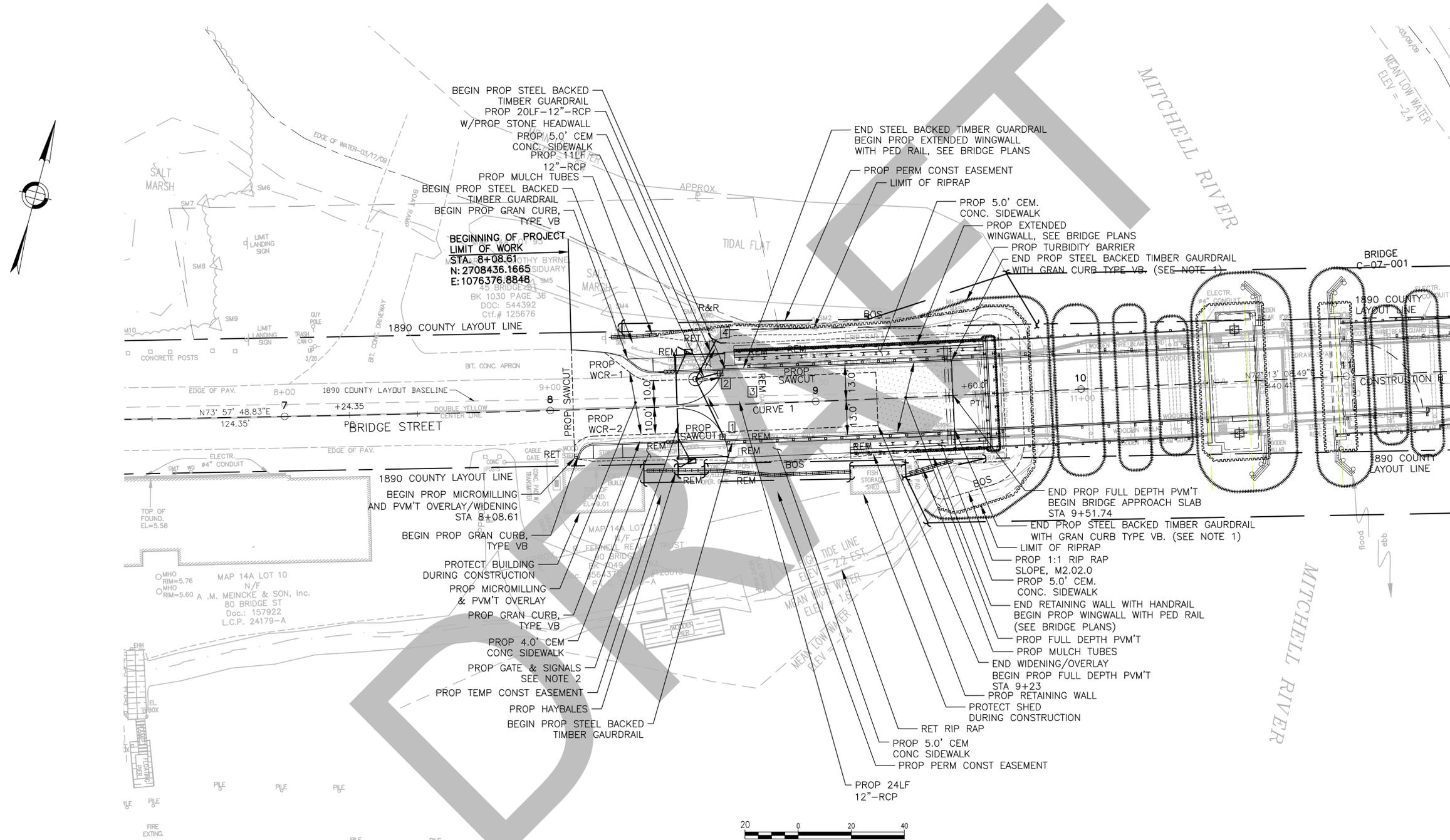


STEEL BACKED (TL-2) TIMBER GUARD DETAILS

DRAINAGE DETAILS

1. STA 8+29 23.5 LT TO STA 8+71 21.0 LT, FLARED END (FE) TREATMENT TL-2
2. STA 8+75 13.0 LT TO STA 9+49 13.0 LT, BURIED END (BE) TREATMENT TL-2
3. STA 8+63 13.0 RT TO STA 9+49 13.0 RT, BURIED END (BE) TREATMENT TL-2

SEE BELOW



FOR CONTINUATION SEE PLAN SHEET 13

NOTES:

- 1) FOR TRANSITION DETAILS FROM VB CURB TO TL-2 BRIDGE RAIL, SEE BRIDGE DETAILS.
- 2) FOR GATE AND SIGNAL DETAILS, SEE BRIDGE DETAILS.
- 3) FOR SUBMARINE CABLE LOCATION AND DETAILS, SEE BRIDGE PLANS
- 4) FOR \curvearrowright CURVE & COORDINATE DATA SEE GRADING AND TIE PLANS

DRAINAGE STRUCTURE DATA

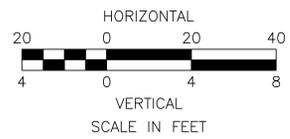
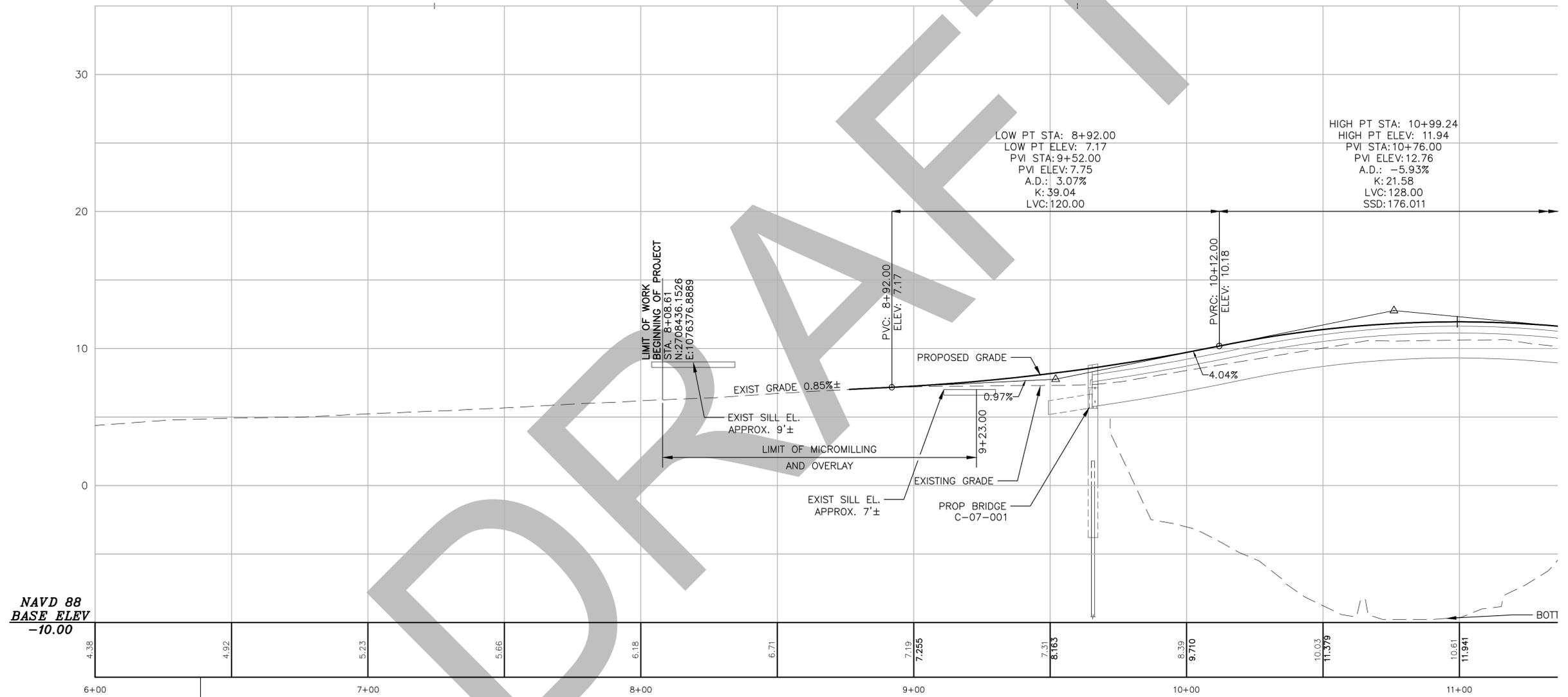
STRUCTURE NO.	TYPE	STATION	OFFSET	RIM ELEV	INV. IN	INV. OUT
1	CBCI	8+64.0	12.0' RT	6.06'	-	2.72'
2	CBCI	8+64.0	12.0' LT	6.32'	-	2.58'
3	DMH	8+76.0	10.0' LT	6.63'	2.46'	2.36'
4	HW	8+65.5	21.0' LT	-	2.3'	-

FOR PROFILE SEE SHEET 14

PLOTTER: 1/27/2013 2:46 PM BY: HANSEN, HANSON DRAWING: 603690-01-000-CONSTRUCTION PLAN SHEET 13

CHATHAM BRIDGE STREET			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	XXX-XXXX (XXX)	14	8
PROJECT FILE NO. 603690			

PROFILE - BRIDGE STREET
SHEET 1 OF 2

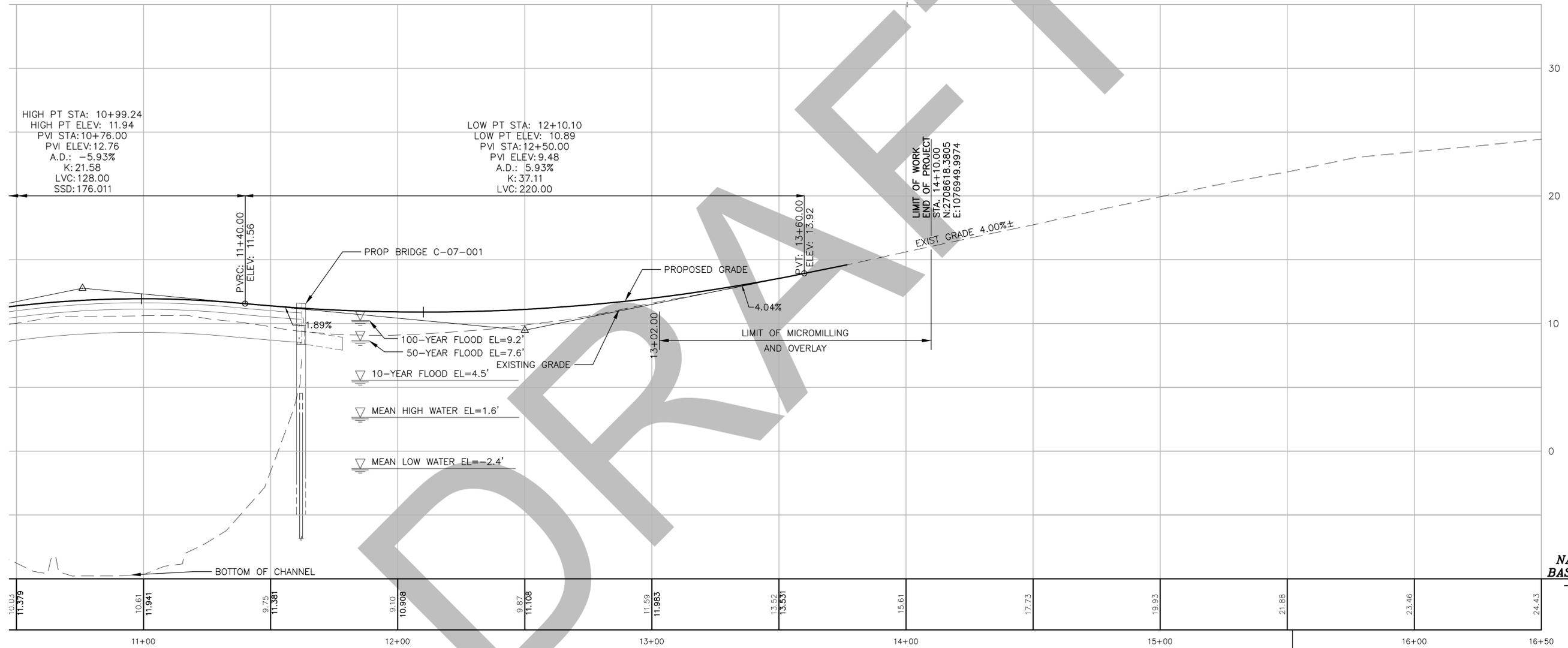


FOR CONSTRUCTION PLAN SEE SHEET 12

PLOTTED: 1/2/2013 2:46 PM BY: HABER, JAMAND
 DRAWING: P:\WORK\603690\CHATHAM\BRIDGE STREET\BRIDGE\BRIDGE.PLOT
 11/12/2013 2:15 PM BY: HABER, JAMAND

CHATHAM BRIDGE STREET			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	XXX-XXXX (XXX)	15	8
PROJECT FILE NO. 603690			

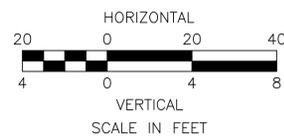
PROFILE - BRIDGE STREET
SHEET 2 OF 2



FOR CONTINUATION SEE PLAN SHEET 14

NAVD 88
BASE ELEV
-10.00

TEMP BENCHMARK *2
CB/DH PNT*50
STA. 15+52.39 29.66 LT
N: 2708684.3360
E: 1077080.8818
ELEV = 24.68



FOR CONSTRUCTION PLAN SEE SHEET 13

PLOTTED: 1/2/2013 2:46 PM BY: HABER, JAMAND
DRAWING: P:\MSDC-SEDMASSHIGHWAY\2008_SPSRSM\3\JAMAND\CHATHAM BRIDGE\1000_CADD\GIS - GRADE\13.10_CADD\13.10_PNT*50.DWG DATE: 1/2/2013 2:45 PM BY: HABER, JAMAND

CHATHAM BRIDGE STREET			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	XXX-XXXX (XXX)	16	8
PROJECT FILE NO. 603690			

GRADING AND TIE PLAN
SHEET 1 OF 2

BRIDGE STREET CONSTRUCTION BASELINE DATA

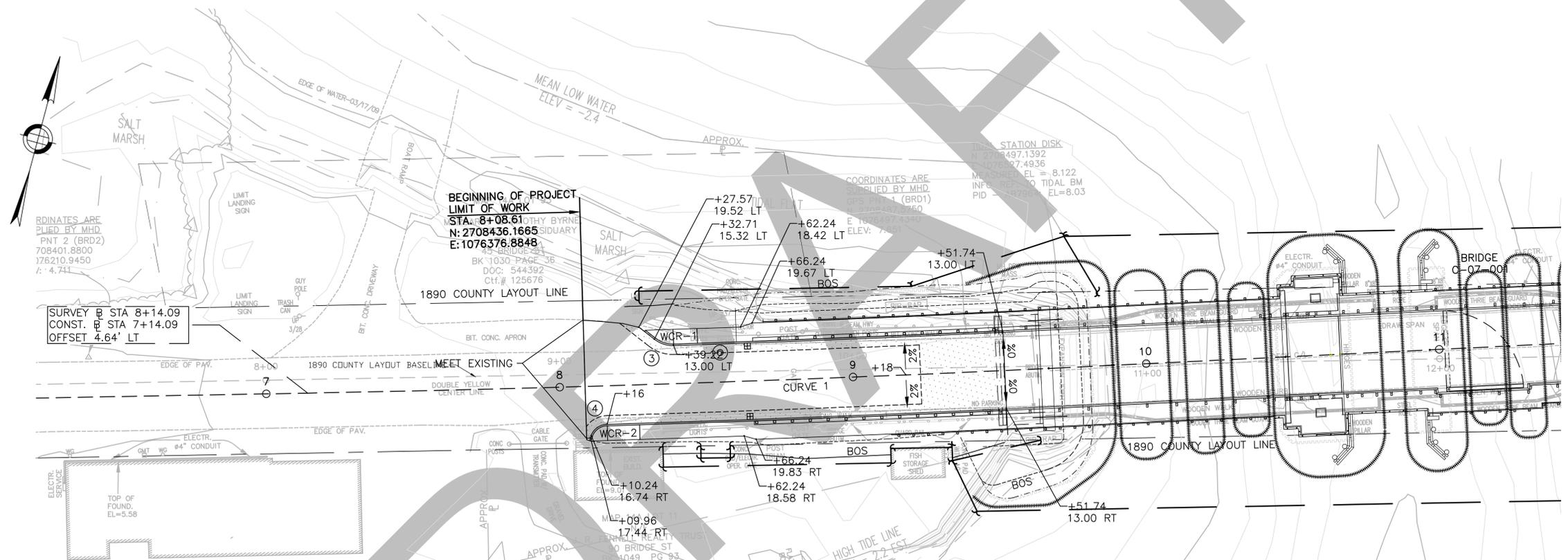
DESCRIPTION	TANGENT/CURVE DATA	NORTHING	EASTING
START STA 6+00.00	L=124.35' N73°57'49"E	2708378.0974	1076176.5189
PC STA 7+24.347	CURVE 1 L=235.667' Δ=1°44'40" R=7740.000' T=117.843'	2708412.4485	1076296.0285
PT STA 9+60.01		2708480.9890	1076521.4990
PC STA 14+00.43	CURVE 2 L=363.765' Δ=1°54'35" R=1780.000' T=182.540'	2708615.4820	1076940.8740
PT STA 17+64.192		2708689.8983	1077296.2768
END STA 18+00.00	L=35.808' N84°07'44"E	2708693.5612	1077331.8971

CURVE DATA

NUMBER	RADIUS	LENGTH	TANGENT	DELTA
③	10.0'	7.04'	3.67'	40°21'12"
④	6.00'	7.11'	4.04'	67°51'56"

1890 COUNTY BASELINE DATA

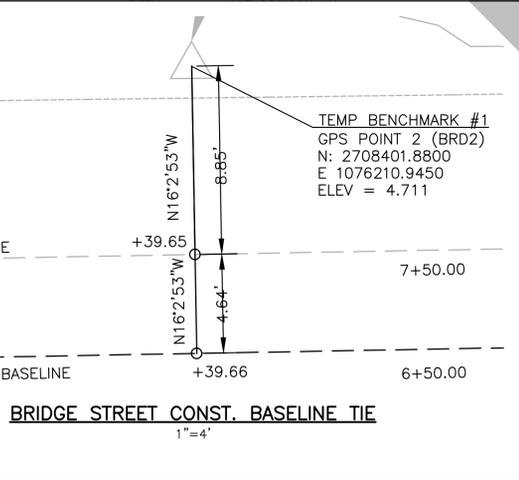
DESCRIPTION	TANGENT/CURVE DATA	NORTHING	EASTING
START STA 0+00.00	L=1336.27' N73°57'49"E	2708189.0488	1075502.5173
PI STA 13+36.27	L=229.86' N64°03'14"E	2708558.1915	1076786.7880
PI STA 15+66.13	L=705.83' N84°07'44"E	2708658.7613	1076993.4794
PI STA 22+71.96	L=128.04' N84°02'54"E	2708730.9619	1077695.6069
END STA 24+00.00		2708744.2384	1077822.9567



SURVEY B STA 8+14.09
CONST. B STA 7+14.09
OFFSET 4.64' LT

BEGINNING OF PROJECT
LIMIT OF WORK
STA. 8+08.61
N: 2708436.1665
E: 1076376.8848

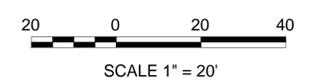
COORDINATES ARE
OBTAINED BY MHD
GPS POINT 2 (BRD2)
N: 2708401.8800
E: 1076210.9450
ELEV: 4.711



FOR CONTINUATION SEE PLAN SHEET 17

LEGEND

- WCR-X WHEEL CHAIR RAMP
- ⊗ CURVE



PLOT: 1/2/2013 2:46 PM BY: HABER, JAMAND
DRAWING: 603690-GRADING AND TIE PLAN - 17

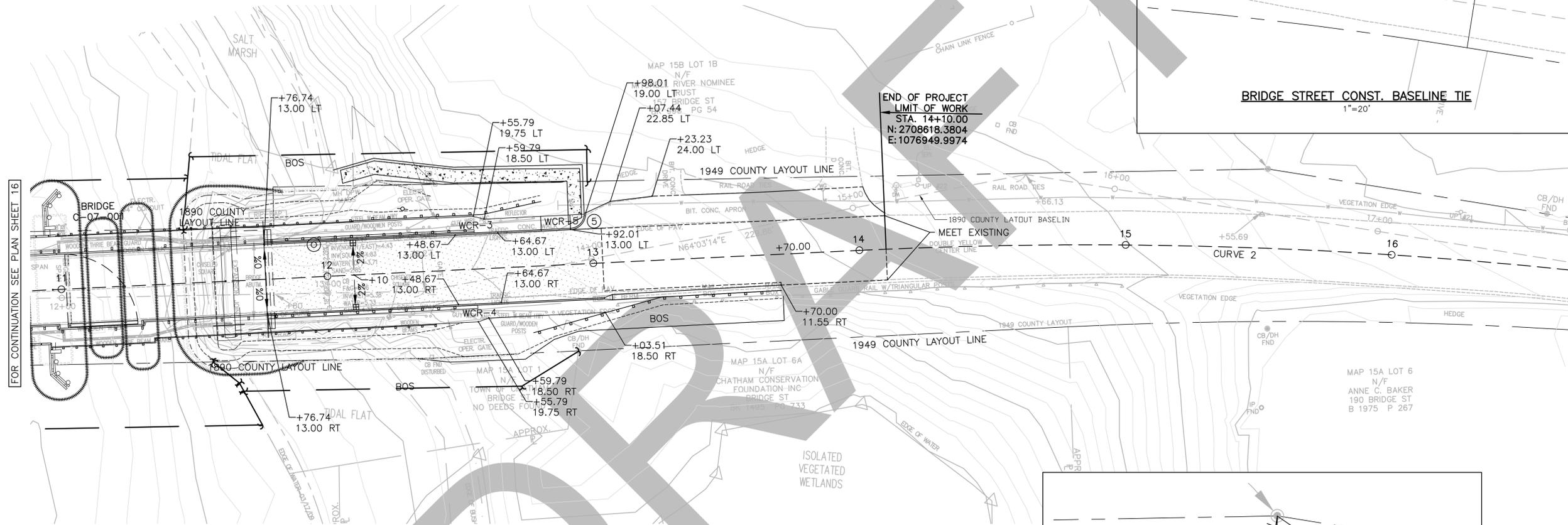
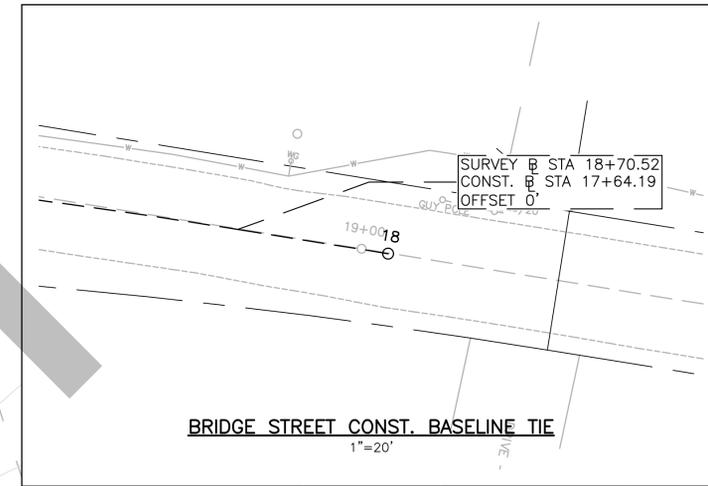
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	XXX-XXXX (XXX)	17	8
PROJECT FILE NO. 603690			



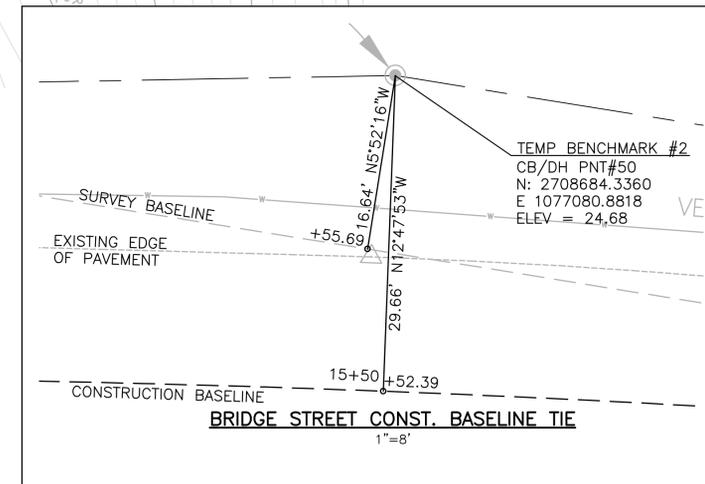
BOUND LOCATION			
STATION	OFFSET	NORTH	EAST
12+42.08	32.29' LT	2708597.8767	1076780.2258
12+37.70	32.17' RT	2708535.1576	1076795.7428

CURVE DATA

NUMBER	RADIUS	LENGTH	TANGENT	DELTA
(5)	6.00'	9.43'	6.00'	90°00'00"

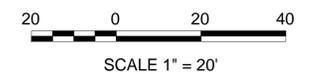


END OF PROJECT
LIMIT OF WORK
STA. 14+10.00
N: 2708618.3804
E: 1076949.9974



LEGEND

- WCR-X WHEEL CHAIR RAMP
- (X) CURVE

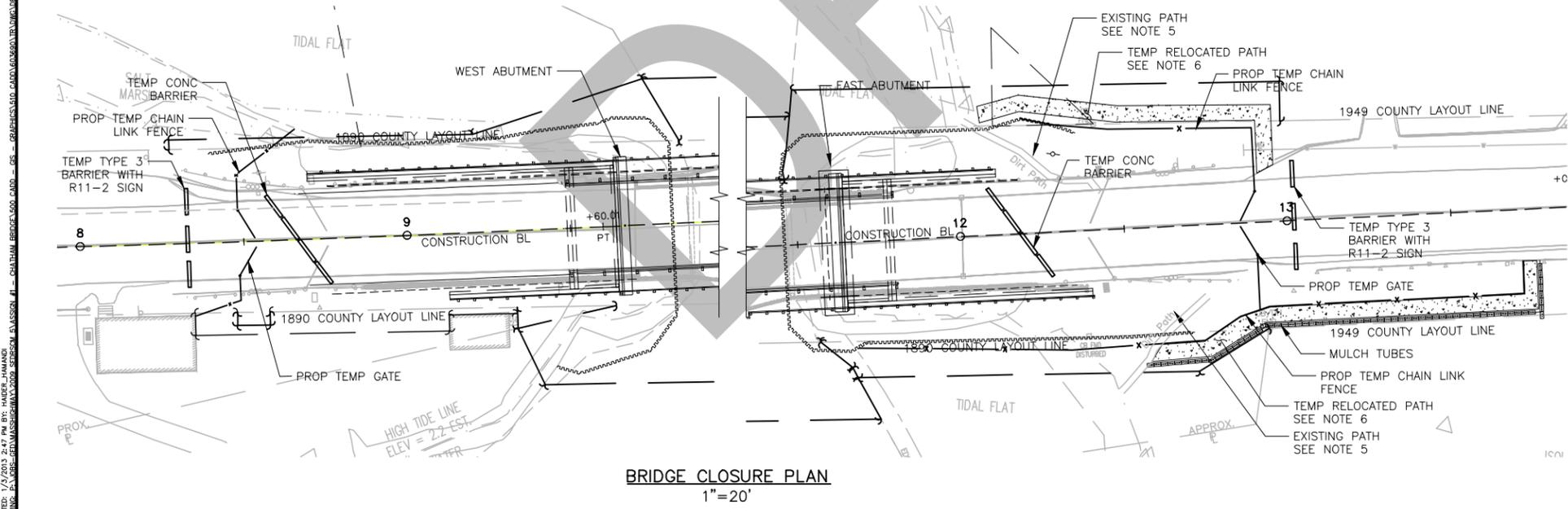
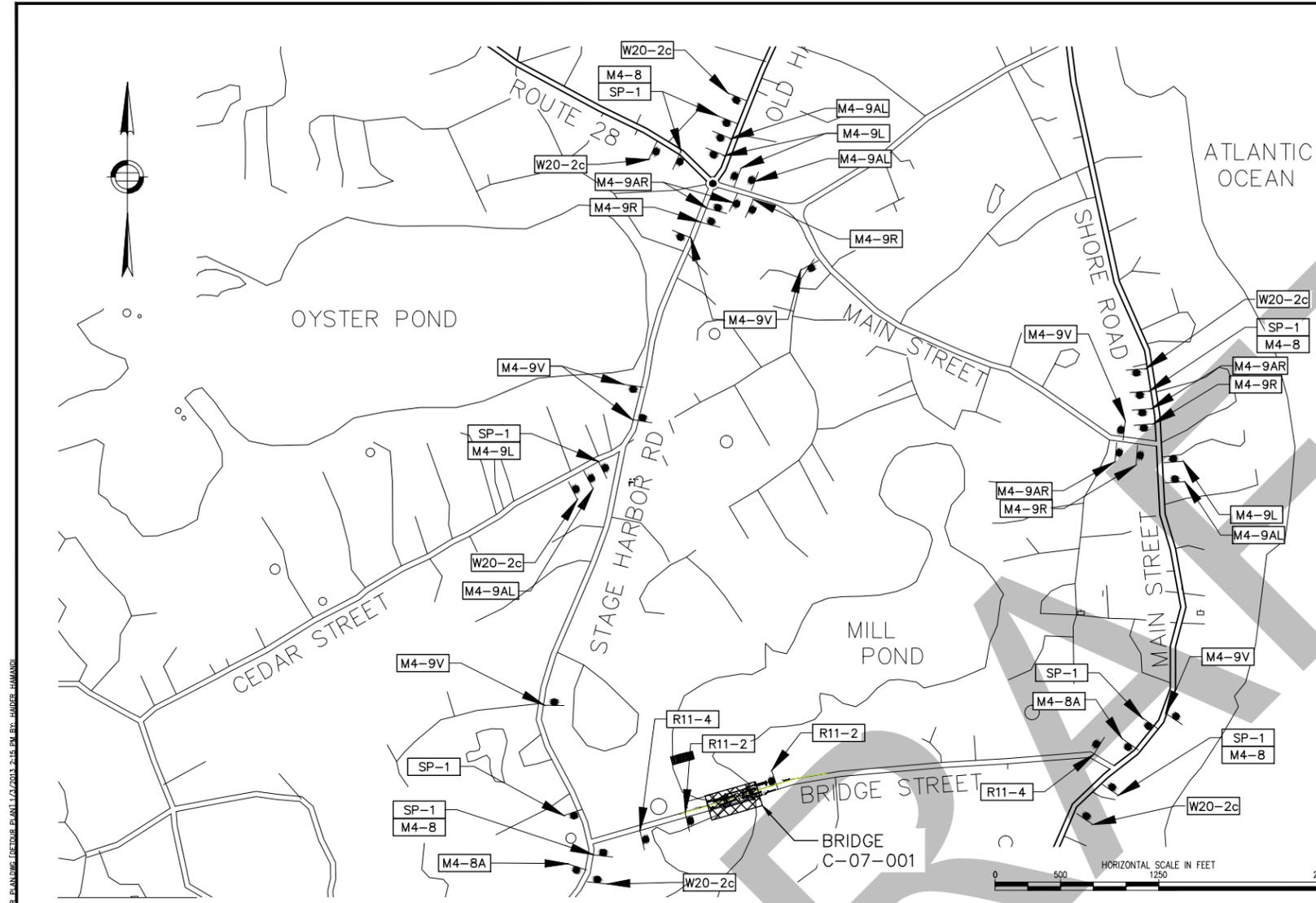


PLOTTED: 1/27/2013 2:46 PM BY: HABER, JAMAND
 DRAWING: P:\MOB-GEN\MASSHIGHWAY\2008\603690\CHATHAM BRIDGE\2008\GRADING AND TIE PLAN - 21/1/2/2013 2:46 PM BY: HABER, JAMAND

FOR CONTINUATION SEE PLAN SHEET 16

CONSTRUCTION SIGN SUMMARY

IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS (in)			NUMBER OF SIGNS REQUIRED	COLOR			AREA PER SIGN IN SQUARE FEET	TOTAL AREA IN SQUARE FEET
	WIDTH (in)	HEIGHT (in)		LETTER HEIGHT	VERTICAL SPACING	ARROW RTE. MKR.		BACK-GROUND	LEGEND	BORDER		
M4-9(V/L/R)	30	24	DETOUR →	SEE M.U.T.C.D.			7-(M4-9V) 4-(M4-9L) 4-(M4-9R)	SEE M.U.T.C.D.			5.0	75
M4-9(AL/AR)	30	24	↔ DETOUR				4-(M4-9L) 4-(M4-9R)				5.0	40
M4-8A	24	18	END DETOUR				2				3.0	6
R11-4	60	30	ROAD CLOSED TO THRU TRAFFIC				2				12.5	25
R11-2	48	30	BRIDGE CLOSED				2				10.0	20
M4-8	24	12	DETOUR				5				2.0	10
W20-2c	36	36	⚠ DETOUR AHEAD				6				9.0	54
SP-1	60	24	BRIDGE STREET BRIDGE CLOSED	6	6	4	8	ORANGE	BLACK	BLACK	10.0	80
TOTAL AREA OF SIGNS (SQUARE FEET)											310	

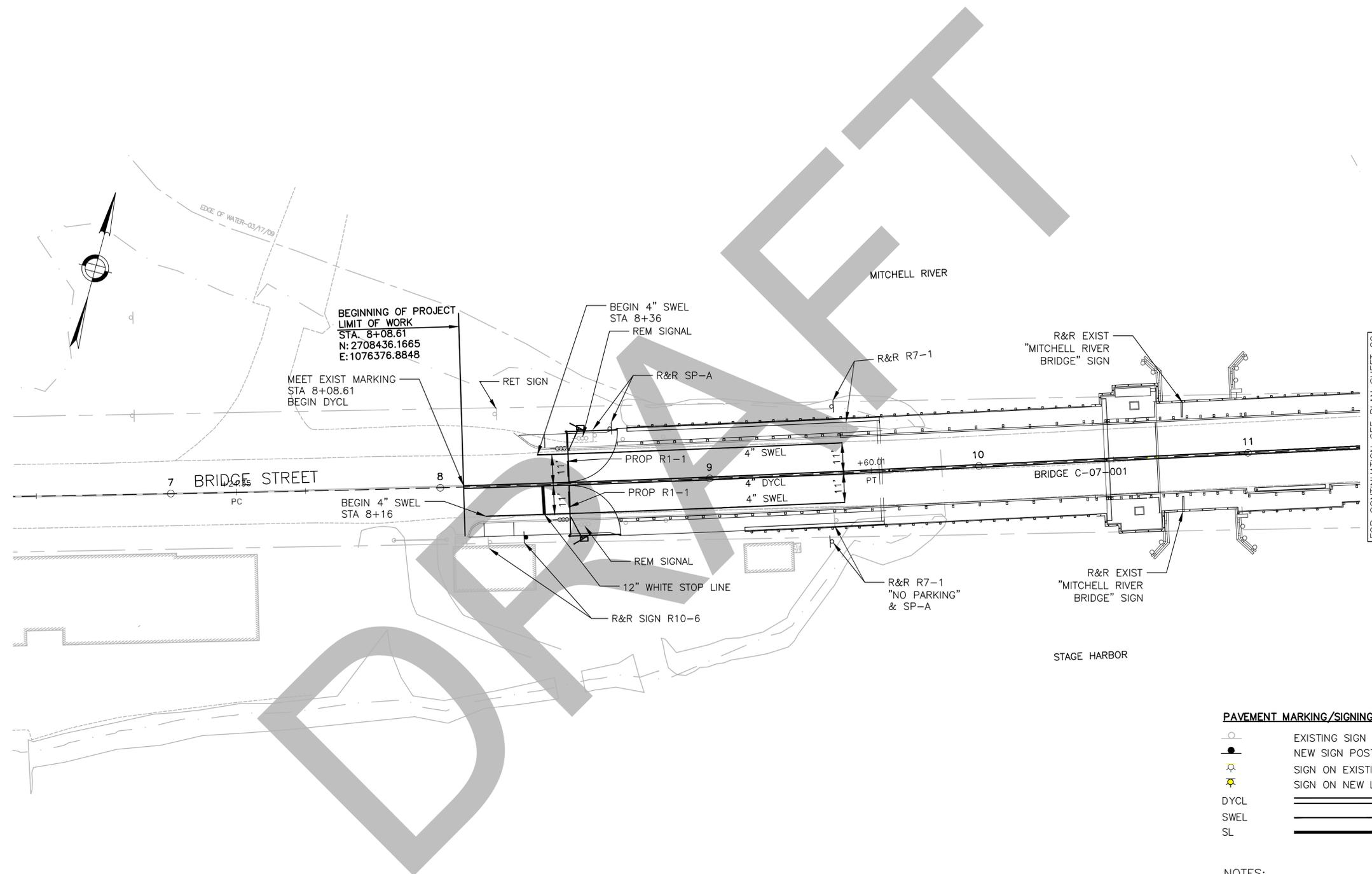


- TRAFFIC MANAGEMENT NOTES:**
- DETOUR PLAN MUST BE APPROVED IN WRITING IN ADVANCE BY THE TOWN OF CHATHAMd
 - THE CONTRACTOR SHALL NOTIFY ABUTTERS OF BRIDGE AT LEAST 48 HOURS IN ADVANCE OF THE START OF ANY WORK THAT WILL REQUIRE THE TEMPORARY CLOSURE OF ACCESS.
 - ALL SIGNS SHALL CONFORM TO THE CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, THE F.H.W.A. STANDARD HIGHWAY SIGNS AND DETAILS AND MASSHIGHWAY 1990 STANDARD DRAWINGS FOR SIGNS AND SUPPORTS, THE METRIC/ENGLISH SUPPLEMENTAL DRAWINGS AND PLANS.
 - TYPE AND METHOD OF MOUNTING SHOWN MAY VARY DUE TO ACTUAL PLACEMENT, PLACEMENT LOCATIONS AND FIELD CONDITIONS, AND AS DIRECTED BY THE ENGINEER.
 - THE EXISTING PATHWAY MUST BE MAINTAINED UNTIL THE CLEARED AREA BEYOND THE PROJECT LIMIT OF WORK HAS BEEN COMPLETED.
 - CLEARED AREA BETWEEN EXISTING COUNTY LAYOUT LINE AND PROPOSED PROJECT LIMITS. THIS AREA WILL FUNCTION AS A TEMPORARY PEDESTRIAN ACCESS TO RESOURCE AREA.

PLOTTED: 1/27/2013 2:47 PM BY: HADLER, HANAMANI
 DRAWING: 65-008-TEMPORARY TRAFFIC CONTROL PLAN FOR BRIDGE STREET, CHATHAM, MASSACHUSETTS

CHATHAM BRIDGE STREET			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	XXX-XXXX (XXX)	19	8
PROJECT FILE NO. 603690			

PAVEMENT MARKINGS & SIGNS
SHEET 1 OF 2



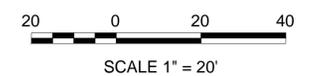
FOR CONTINUATION SEE PLAN SHEET 20

PAVEMENT MARKING/SIGNING SYMBOLS AND ABBREVIATIONS

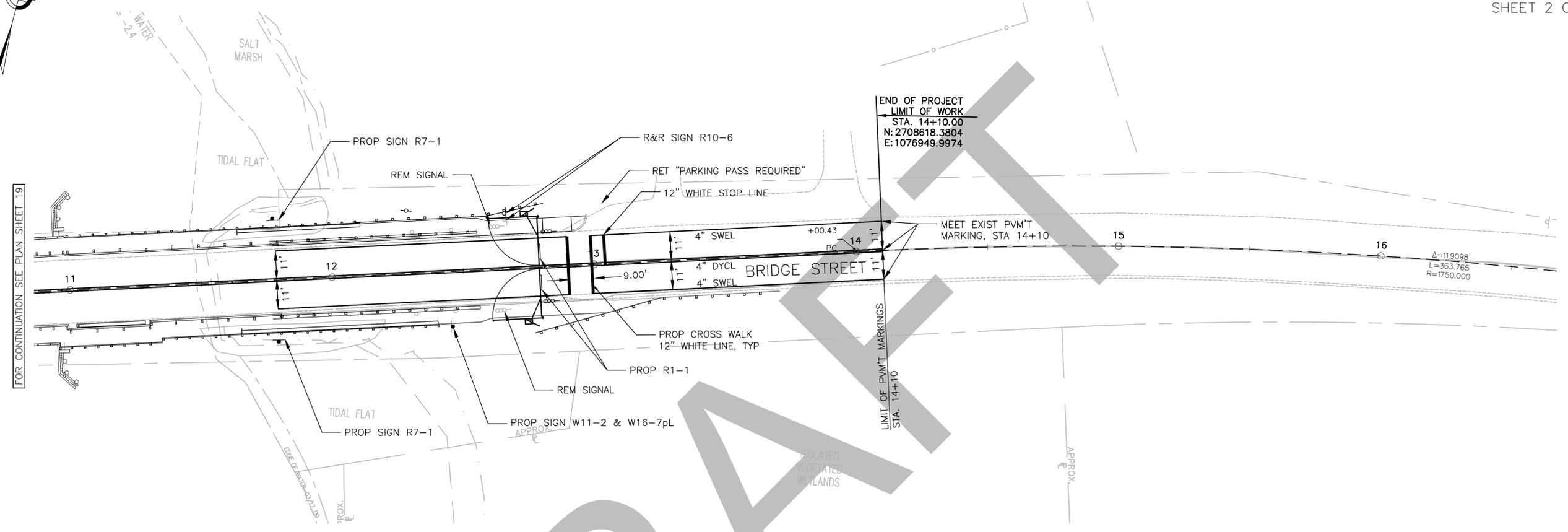
	EXISTING SIGN POST
	NEW SIGN POST
	SIGN ON EXISTING LIGHT POLE
	SIGN ON NEW LIGHT POLE
DYCL	4" DOUBLE YELLOW CENTER LINE
SWEL	4" SOLID WHITE EDGE LINE
SL	12" SOLID WHITE STOP LINE

NOTES:

- 1) SEE PAVEMENT MARKINGS SHEET 2 OF 2 FOR SIGN SUMMARY
- 2) PAVEMENT MARKINGS SHALL BE THERMOPLASTIC



PLOTTER: 1/2/2013 2:47 PM BY: HABER, HAMDY
DRAWING: P:\MOB-GEN\MASSHIGHWAY\008-SPRSON\41-CHATHAM BRIDGE\1000.CADD - GIS - GRAPHICS\1000.CADD\008-SPRSON\PAVEMENT MARKINGS\08-PAVEMENT MARKINGS.DWG



SIGN SUMMARY

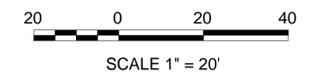
IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS (INCHES)			NUMBER OF SIGNS REQUIRED	COLOR			POST SIZE AND NUMBER REQUIRED	UNIT AREA (S.F.)	AREA IN SQUARE FEET
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	ARROW RTE. MKR.		BACK-GROUND	LEGEND	BORDER			
R1-1	24" x 24" OCTAGON			SEE M.U.T.C.D.			4	SEE M.U.T.C.D.			MOUNTED ON GATE	19.32	77.28
R10-6	R&R						2 EXIST				P-5 2 REQ'D	6	12
R7-1	12"	18"					2				P-5 2 REQ'D	1.5	3
R7-1	R&R						2 EXIST				P-5 2 REQ'D	N/A	N/A
SP-A	R&R						2 EXIST				WITH R7-1	N/A	N/A
W11-2	30"	30"					2				P-5 1 REQ'D	6.25	12.50
W16-7pL	24"	12"					2				P-5 1 REQ'D	2.00	4.00
TOTAL AREA OF SIGNS (SQUARE FEET)												108.78	

PAVEMENT MARKING/SIGNING SYMBOLS AND ABBREVIATIONS

- EXISTING SIGN POST
- NEW SIGN POST
- SIGN ON EXISTING LIGHT POLE
- SIGN ON NEW LIGHT POLE
- DYCL 4" DOUBLE YELLOW CENTER LINE
- SWEL 4" SOLID WHITE EDGE LINE
- SL 12" SOLID WHITE STOP LINE

NOTES:

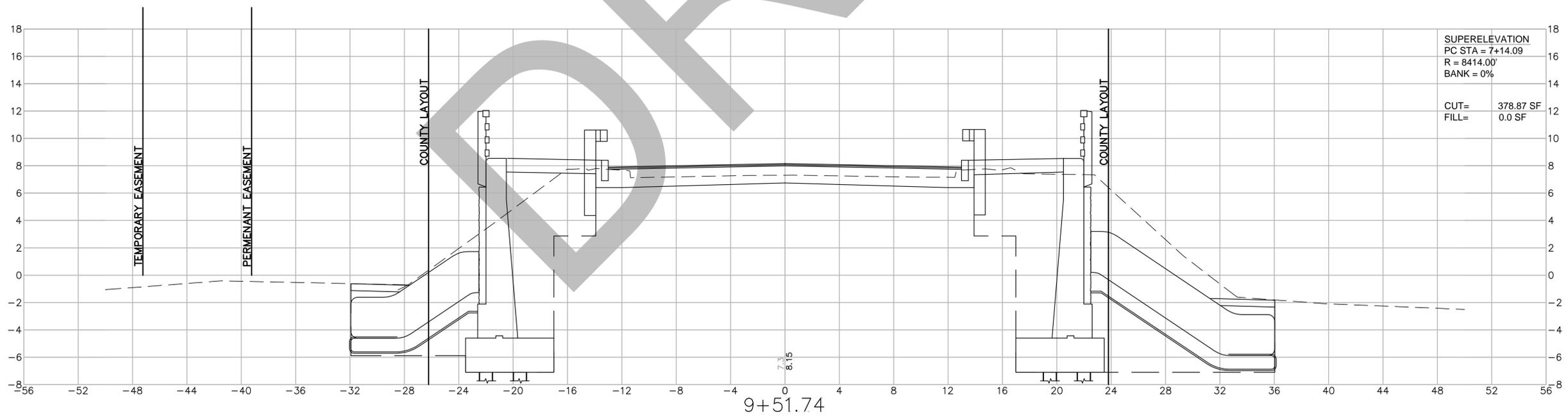
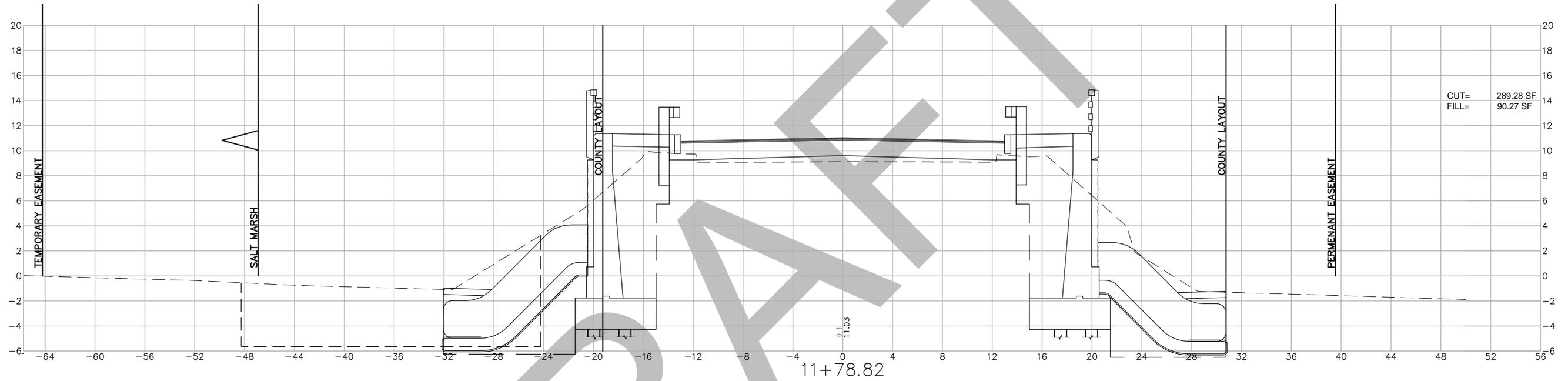
- 1) ALL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC.
- 2) USE THE CURRENT EDITION OF THE MUTCD, 1979 STD. HWY SIGNS AND SECTION M9.30.0 TYPE III OF THE MASSDOT STANDARD SPECIFICATIONS FOR TEXT DIMENSIONS AND COLOR.
- 3) SEE MASSDOT STANDARD DRAWINGS FOR SIGNS AND SUPPORTS, 1990.



PLOTTED: 1/2/2013 2:47 PM BY: HABER, HAMANDI
 DRAWING: P:\JOBS-GEN\MASSHIGHWAY\2009-SPR\S05M-A\SSON - CHATHAM BRIDGE STOOD CAD - GIS - GRAPHICS\A10_CADD\JOBSETUP\TDR\PAVEMENT MARKINGS.DWG - PAVEMENT MARKINGS - 2/12/2013 2:16 PM BY: HABER, HAMANDI

CHATHAM BRIDGE STREET			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	XXX-XXXX (XXX)	22	8
PROJECT FILE NO. 603690			

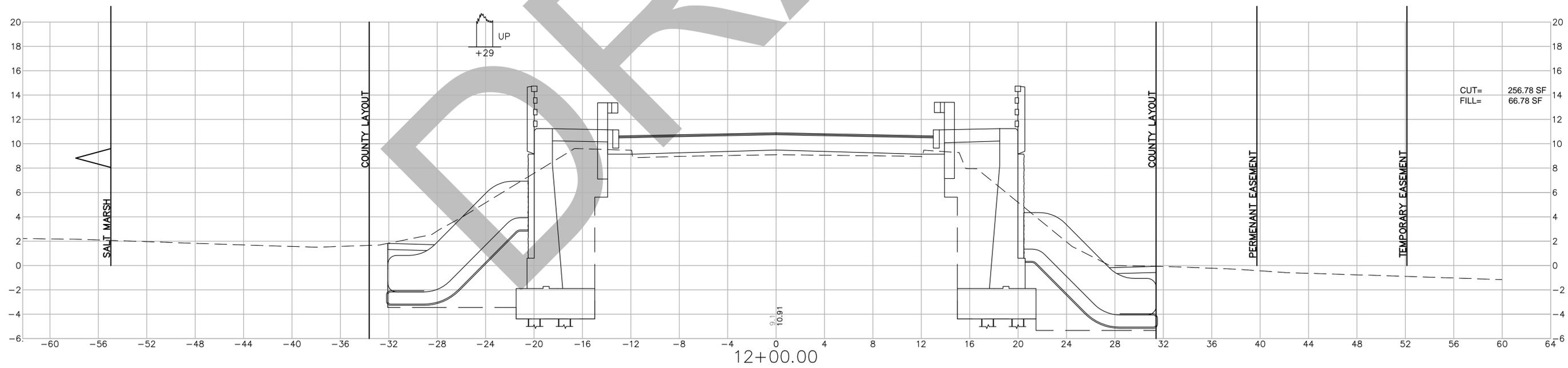
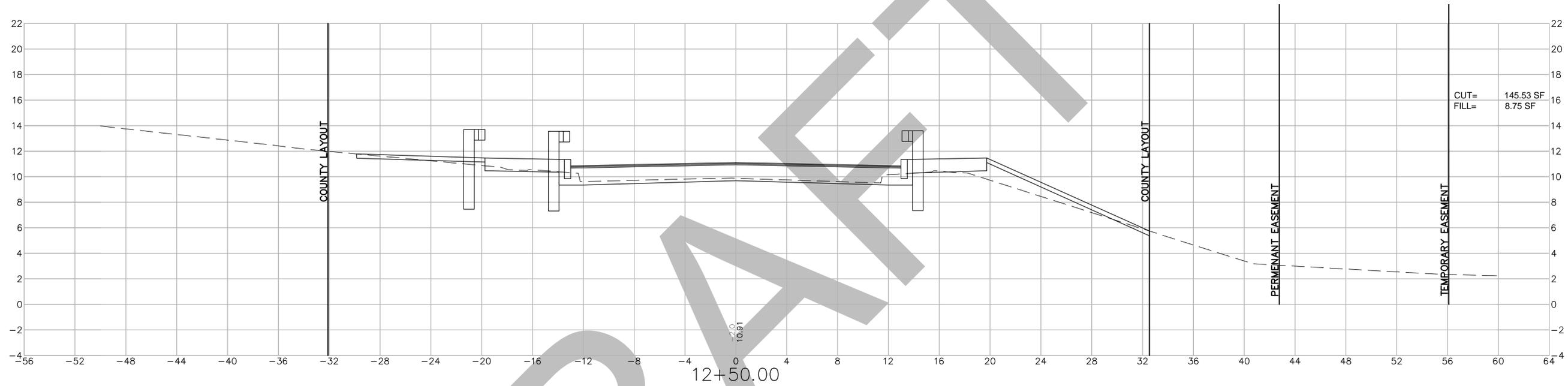
CROSS SECTIONS
SHEET 2 OF 5



PLOTTED: 1/17/2013 2:47 PM BY: JAMES HAMMOND
 DRAWING: D:\MSR\603690\WALDORF\SECTION\DWG\CROSS_SECTION_211.dwg
 PLOT: D:\MSR\603690\WALDORF\SECTION\DWG\CROSS_SECTION_211.dwg

CHATHAM BRIDGE STREET			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	XXX-XXXX (XXX)	23	8
PROJECT FILE NO. 603690			

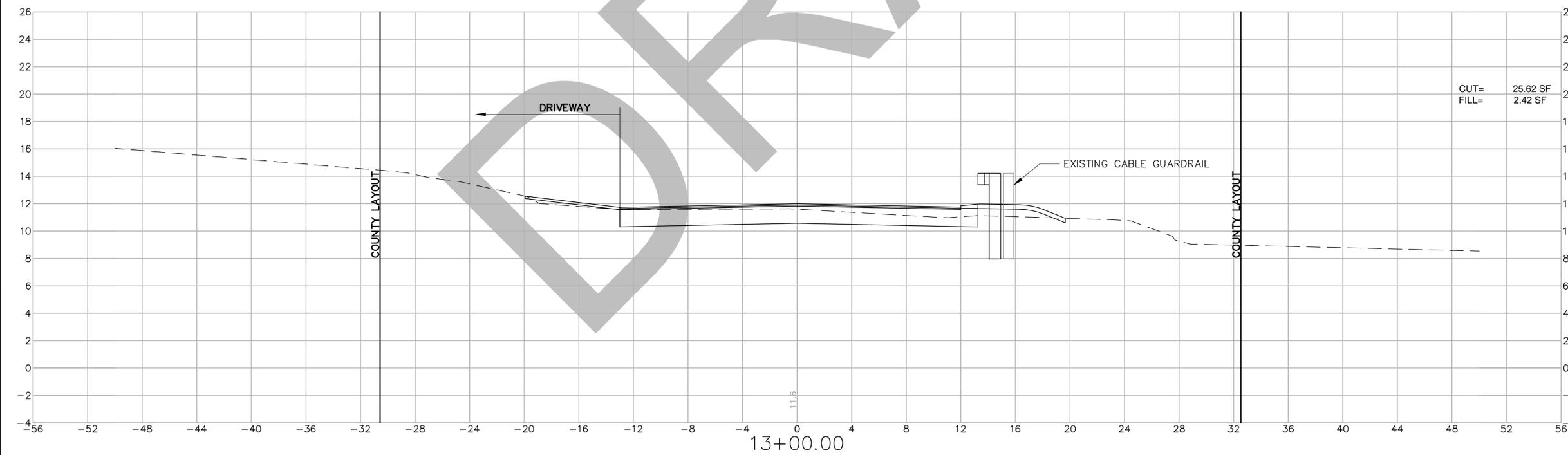
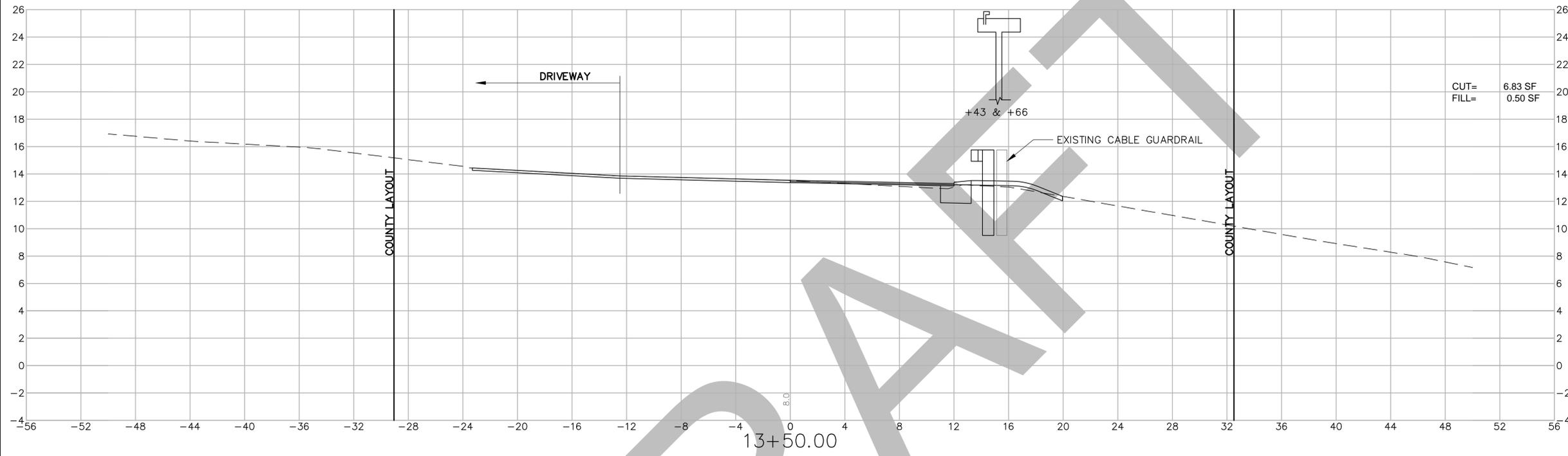
CROSS SECTIONS
SHEET 3 OF 5



PLOTTED: 1/2/2013 2:47 PM BY: HANER, HANANI
 DRAWING: P:\MSDC\603690\CHATHAM\BRIDGE STREET\SECTION 3.DWG
 DATE: 1/2/2013 2:10 PM BY: HANER, HANANI

CHATHAM BRIDGE STREET			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	XXX-XXXX (XXX)	24	8
PROJECT FILE NO. 603690			

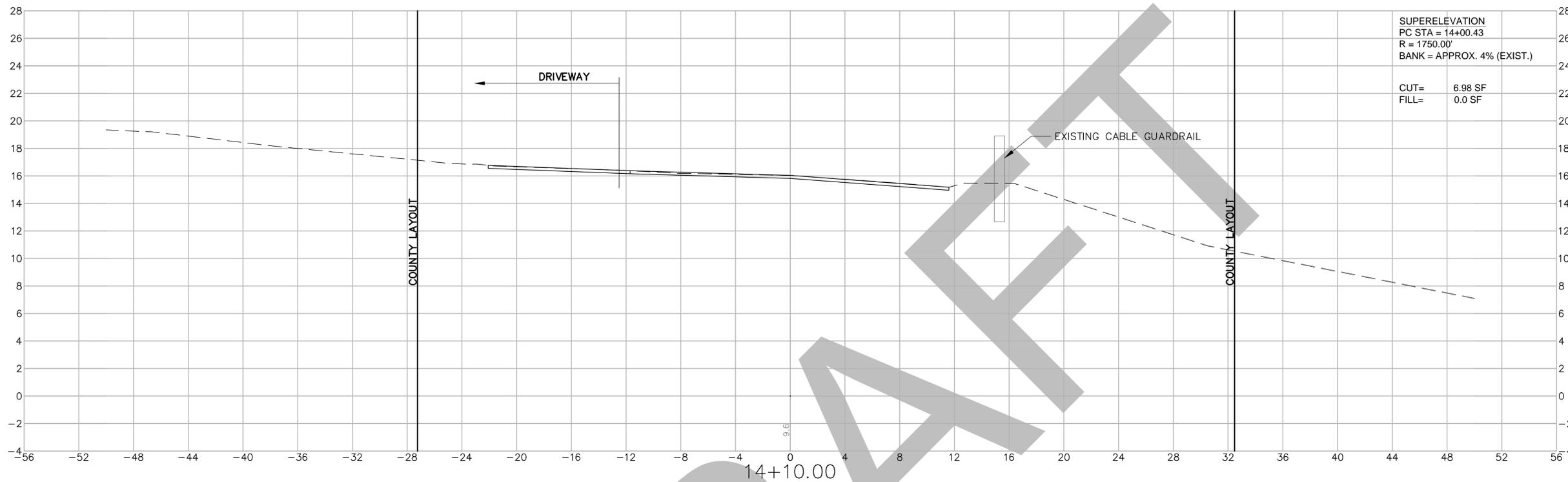
CROSS SECTIONS
SHEET 4 OF 5



PLOTTED: 1/2/2013 2:48 PM BY: HANDEH-HAMADI
 DRAWING: P:\MOB-SEDMISSIGMA\2008-2009\CHATHAM BRIDGE STREET\SECTION 4.dwg
 SECTION: 4.17/2/2013 2:10 PM BY: HANDEH-HAMADI

CHATHAM BRIDGE STREET			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	XXX-XXXX (XXX)	25	8
PROJECT FILE NO. 603690			

CROSS SECTIONS
SHEET 5 OF 5



PLOTTED: 1/2/2013 2:48 PM BY: HABER, JAMANDI
 DRAWING: P:\MS08-SEMASS\CHATHAM\2008_SECTION\CHATHAM BRIDGE STREET\SECTION 5.dwg CROSS SECTION - 5/17/2013 2:10 PM BY: HABER, JAMANDI