

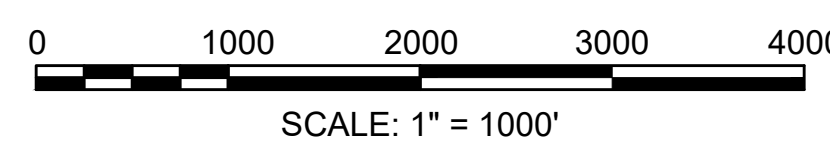
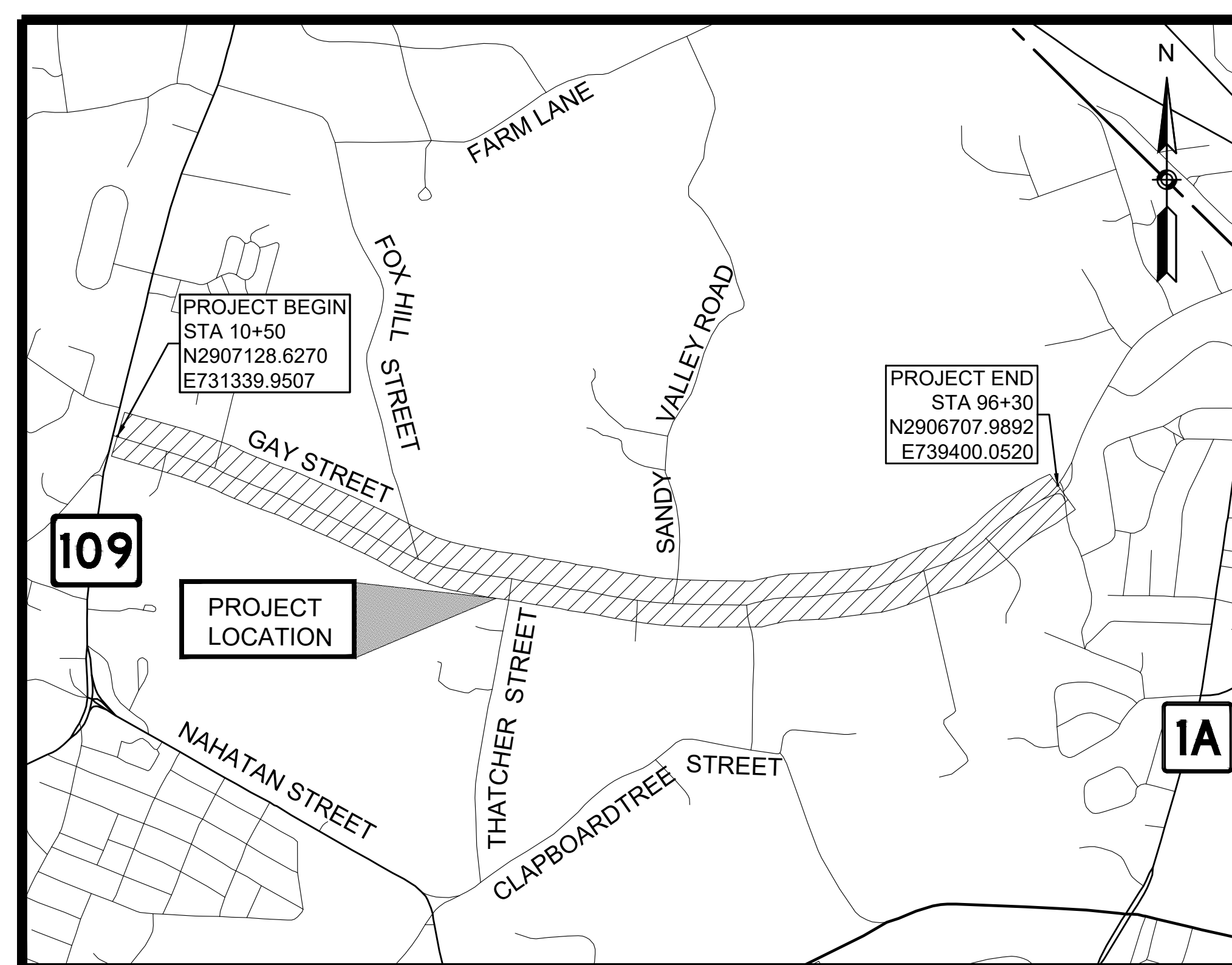
TRANSPORTATION IMPROVEMENT PROJECT

PLAN & PROFILE OF
 GAY STREET
 IN THE TOWN OF
 WESTWOOD
 NORFOLK COUNTY

THE MASSACHUSETTS HIGHWAY DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES DATED 1988, AS AMENDED, THE SUPPLEMENTAL SPECIFICATIONS DATED APRIL 1, 2019, THE OCTOBER 2017 CONSTRUCTION STANDARD DETAILS, THE 2015 OVERHEAD SIGNAL STRUCTURE AND FOUNDATION STANDARD DRAWINGS, MASSDOT TRAFFIC MANAGEMENT PLANS AND DETAIL DRAWINGS, THE LATEST MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS WITH MASSACHUSETTS AMENDMENTS, THE 1990 STANDARD DRAWINGS FOR SIGNS AND SUPPORTS, THE 1968 STANDARD DRAWINGS FOR TRAFFIC SIGNALS AND HIGHWAY LIGHTING, AND THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK, WILL GOVERN.

FINAL DESIGN SUBMITTAL

INDEX	
SHEET NO.	DESCRIPTION
1	TITLE SHEET & INDEX
2	LEGEND & ABBREVIATIONS
3	TYPICAL SECTIONS & PAVEMENT NOTES
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44	WHEELCHAIR RAMP & DRIVEWAY DETAILS
45	RETAINING WALL DETAILS
46-108	CROSS SECTIONS



LENGTH OF PROJECT = 8,580 FEET = 1.625 MILES

DATE	DESCRIPTION	REV #
2/6/2020	FINAL DESIGN SUBMITTAL	3
2/3/2020	FINAL DESIGN SUBMITTAL	2
10/30/2019	90% SUBMITTAL	1
1/18/2019	50% SUBMITTAL	-

TEC
The Engineering Corp.

TEC, Inc.

146 Dascomb Road Andover, MA 01810 978-794-1792	311 Main Street 2nd Floor Worcester, MA 01608 508-868-5104	169 Ocean Blvd, Unit 3 PO Box 249 Hampton, NH 03842 603-601-8154
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www.TheEngineeringCorp.com

DESIGNED BY LEN	CHECKED BY JPC	DATE 11/16/18
DRAWN BY LEN/SPL	APPROVED BY JAR	PROJECT NO. T0755

GENERAL SYMBOLS

Table with columns for EXISTING, PROPOSED, and DESCRIPTION. Contains symbols for various infrastructure elements like wells, manholes, poles, fences, and boundaries.

TRAFFIC SYMBOLS

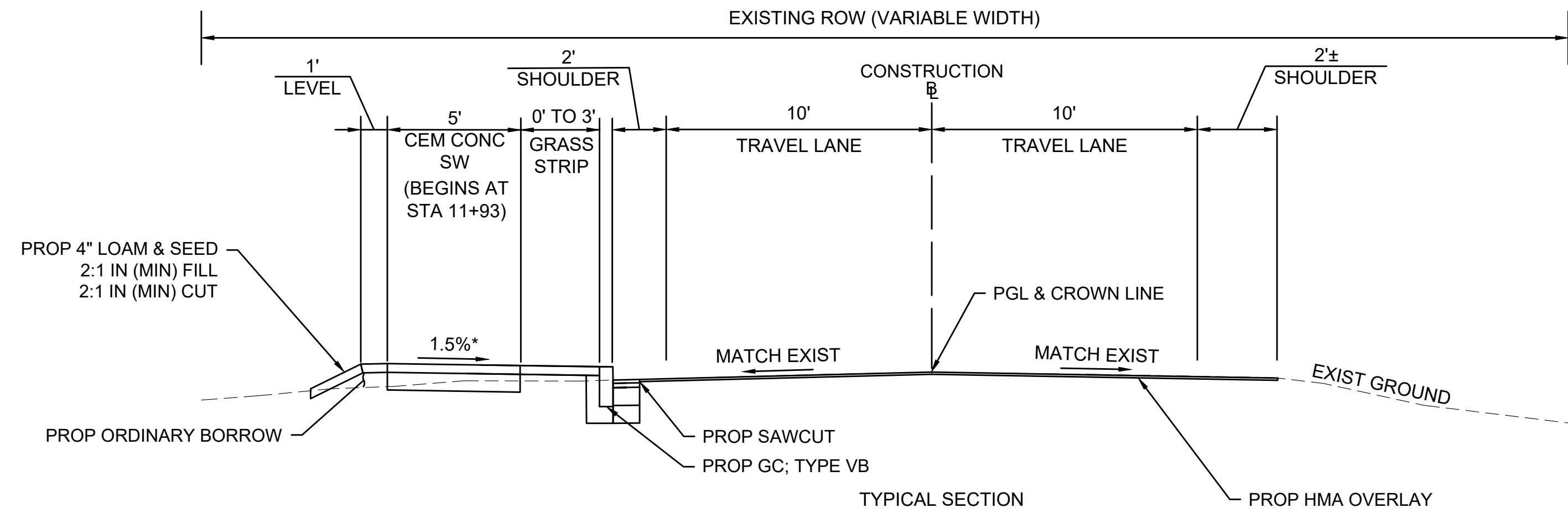
Table with columns for EXISTING, PROPOSED, and DESCRIPTION. Contains symbols for traffic control elements like cabinets, foundations, arms, and signal heads.

PAVEMENT MARKINGS SYMBOLS

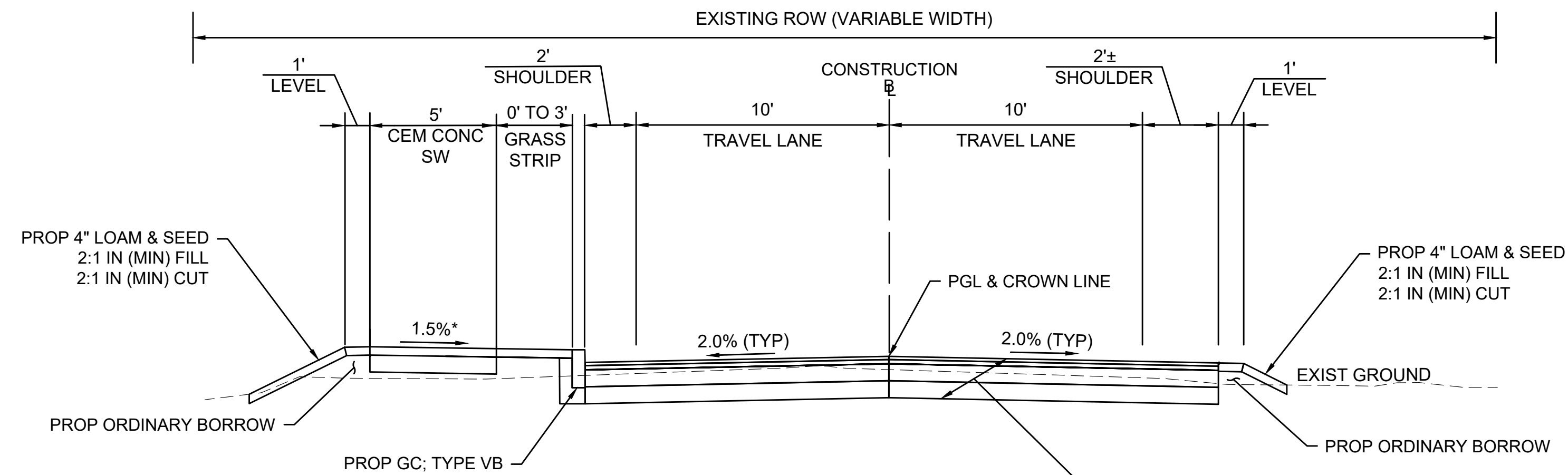
Table with columns for EXISTING, PROPOSED, and DESCRIPTION. Contains symbols for various pavement markings such as arrows, stop lines, crosswalks, and lane lines.

ABBREVIATIONS

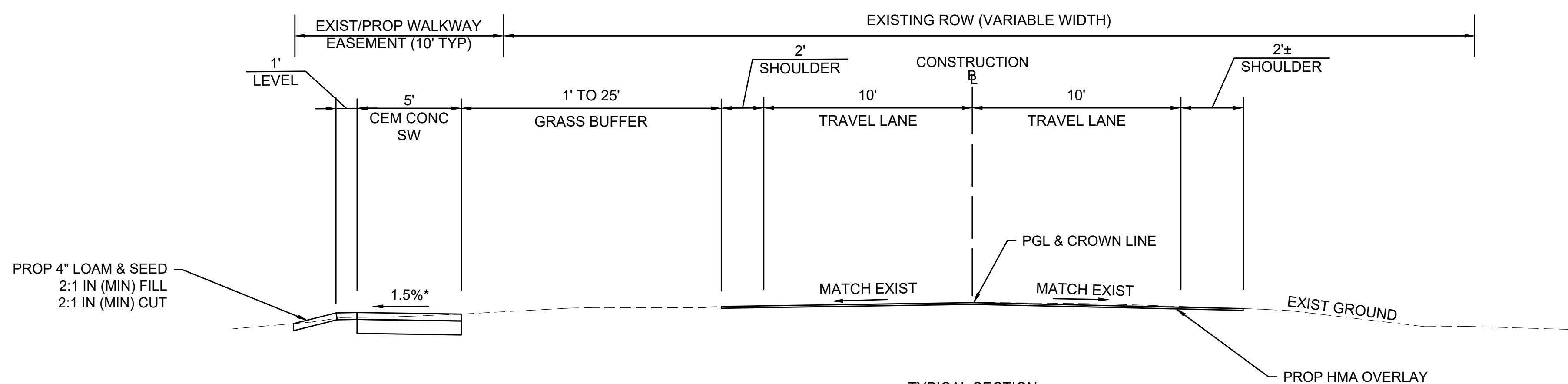
Table listing abbreviations for GENERAL, ABBREVIATIONS (cont.), and TRAFFIC SIGNAL ABBREVIATIONS. Includes terms like AADT, ABAN, ADJ, and CAB.



TYPICAL SECTION
GAY STREET
STA 10+50± TO 23+27±;
STA 26+81± TO 33+75±;
STA 37+67± TO 39+00±;
STA 46+50± TO 69+40±;
STA 51+25± TO 51+75±;
STA 72+50± TO 96+30±
NTS
* TOLERANCE FOR CONSTRUCTION = ±0.5%



TYPICAL SECTION
GAY STREET
STA 23+27± TO 26+81±;
STA 33+75± TO 37+67±;
STA 42+26± TO 42+76±;
STA 51+25± TO 51+75±;
NTS
* TOLERANCE FOR CONSTRUCTION = ±0.5%



TYPICAL SECTION
GAY STREET
STA 39+00± TO 46+50±;
STA 69+40± TO 72+50±;
NTS
* TOLERANCE FOR CONSTRUCTION = ±0.5%

PAVEMENT NOTES

PROPOSED FULL DEPTH PAVEMENT

SURFACE: 1½" HMA SURFACE COURSE STANDARD TOP OVER
1½" HMA INTERMEDIATE COURSE - BINDER COURSE

BASE: 3¼" HMA BASE COURSE OVER

SUBBASE: 12" GRAVEL BORROW, TYPE B (COMPACTED)

PROPOSED FULL DEPTH PAVEMENT LESS THAN 4' WIDE

SURFACE: 1½" HMA SURFACE COURSE STANDARD TOP OVER
1½" HMA INTERMEDIATE COURSE - BINDER COURSE

BASE: 3¼" HMA BASE COURSE OVER

SUBBASE: 12" GRAVEL BORROW, TYPE B (COMPACTED)

PROPOSED HMA OVERLAY

SURFACE: 1½" HMA SURFACE COURSE - STANDARD TOP

PROPOSED TEMPORARY TRENCH PATCH

SURFACE: 2" HMA INTERMEDIATE COURSE - BINDER (ITEM 472.) OVER

BASE: EXISTING MATERIAL SUITABLE FOR RE-USE (SEE VARIOUS TRENCH DETAILS)

PROPOSED CEMENT CONCRETE SIDEWALKS/ WHEELCHAIR RAMPS

SURFACE: 4" CEMENT CONCRETE (AIR ENTRAINED, 4000 PSI, ¾", 610)

BASE: 8" GRAVEL BORROW, TYPE b (COMPACTED).

PROPOSED CEMENT CONCRETE SIDEWALK THROUGH DRIVEWAY

SURFACE: 6" CEMENT CONCRETE (AIR ENTRAINED, 4000 PSI, ¾", 610)

BASE: 8" GRAVEL BORROW, TYPE b (COMPACTED)

PROPOSED HMA DRIVEWAY (TO MATCH EXISTING)

SURFACE: 1½" SURFACE COURSE - STANDARD TOP (ITEM 703) OVER
2" INTERMEDIATE COURSE - BINDER (ITEM 703) OVER

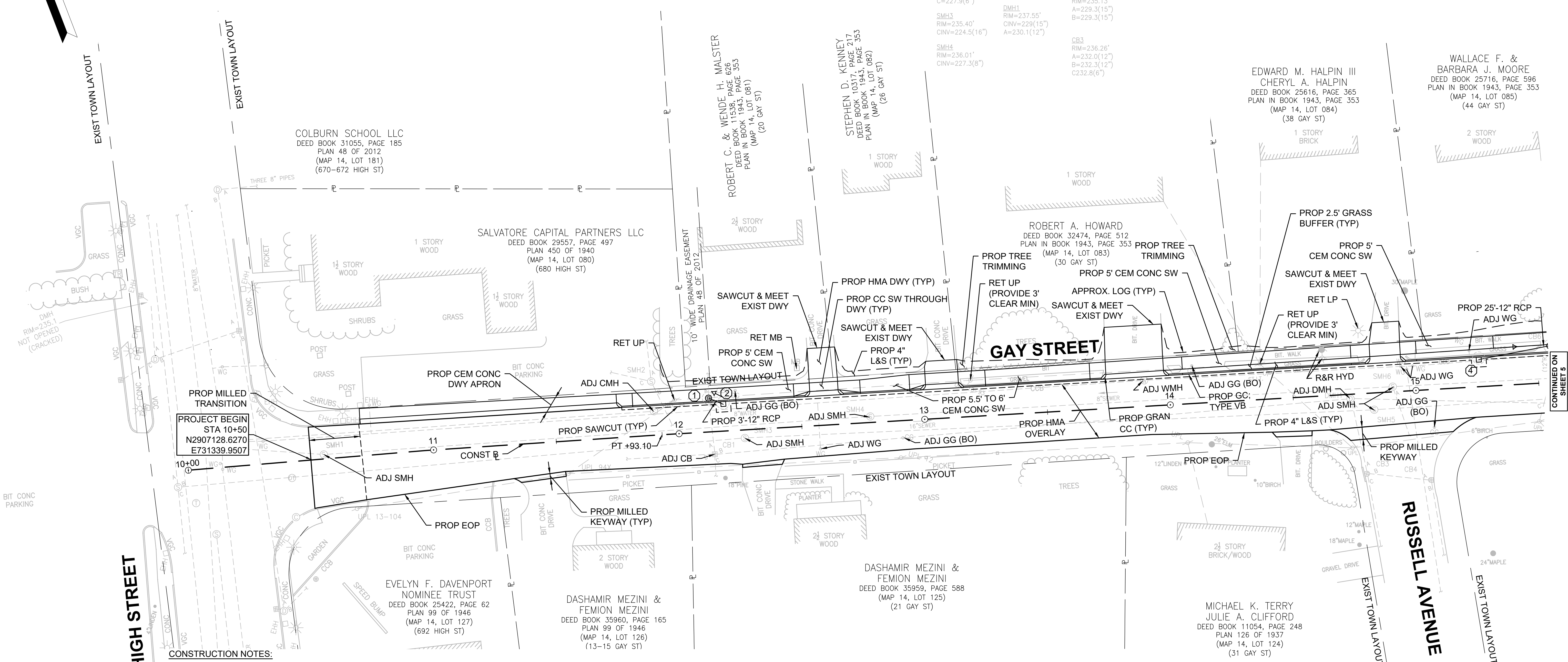
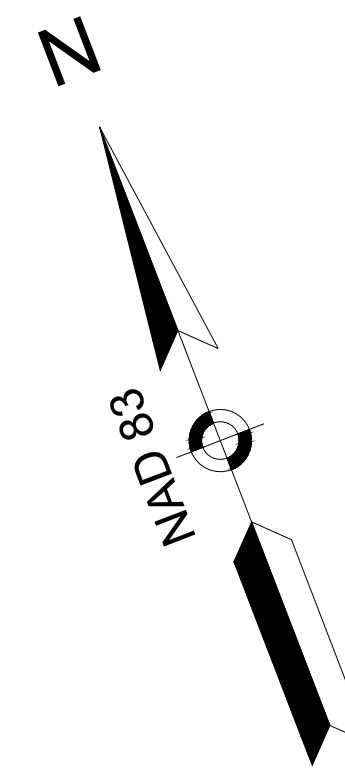
BASE: 8" SUITABLE EXISTING GRAVEL (COMPACTED);
ADD GRAVEL BORROW, TYPE b AS REQUIRED

GENERAL PAVEMENT NOTES:

1. ASPHALT EMULSION FOR TACK COAT SHALL BE APPLIED BETWEEN ALL ASPHALT SURFACES AND SAWCUT JOINTS BEFORE PAVING. HMA JOINT SEALANT SHALL BE APPLIED TO ALL COLD JOINTS (LONGITUDINAL AND TRANSVERSE) BEFORE PAVING SURFACE COURSE. ASPHALT EMULSION FOR TACK COAT SHALL BE APPLIED AT A RATE OF 0.05 GAL/SY, EXCEPT OVER MILLED AND CEMENT CONCRETE SURFACES, WHERE THE APPLICATION RATE SHALL BE 0.07 GAL/SY. ALL SURFACES SHALL BE CLEAN OF ALL ORGANICS, DEBRIS, AND SAND PRIOR TO PAVING.
2. ALL HMA SHALL BE PRODUCED WITH WMA ADDITIVE.
3. ALL HMA SHALL BE IN ACCORDANCE WITH SECTION 450.
4. ASPHALT EMULSION FOR TACK COAT SHALL BE RS-1H TO RESIST TRACKING OF TACK BY HAUL VEHICLES.
5. HMA FOR WALKS AND DRIVEWAYS SHALL BE IN ACCORDANCE WITH SECTION 700.
6. ALL EXISTING GRAVEL BORROW MEETING SPECIFICATION SHALL BE RETAINED IN PLACE, COMPACTED, AND LEVELED AS REQUIRED.

PROPOSED DRAINAGE STRUCTURE DATA							
NO.	TYPE	STATION	OFFSET	RIM ELEV.	INV. ELEV. IN	INV. ELEV. OUT	REMARKS
①	CIT TO DMH	12+12.9	13.7' LT	235.81	231.30 (2)	222.9(EX CB)	R&S FRAME & GRATE
②	PROP CBCI	12+18.7	10.8' LT	235.36	-	231.35 (1)	4' SUMP, OFFSET TOP

EXISTING INVERT TABLE			
SMH1 RIM=234.64 CINV=226.3(8")	SMH5 RIM=237.43' CINV=223.9(16")	CB1 RIM=235.07' A=229.4(15") B=229.3(15") C=229.9(12") D=229.2(15")	CB4 RIM=236.29' A=232.3(12") B=233.0(6")
SMH2 RIM=235.15' A=227.9(6") B=227.8(6") C=227.9(6")	SMH6 RIM=237.64' CINV=228.1(8") A=228.4(6")	CB2 RIM=235.13' A=229.3(15") B=229.3(15")	
SMH3 RIM=235.40' CINV=224.5(16")	DMH1 RIM=237.55' CINV=229(15") A=230.1(12")	CB3 RIM=236.26' A=232.0(12") B=232.3(12") C232.8(6")	
SMH4 RIM=236.01' CINV=227.3(8")			

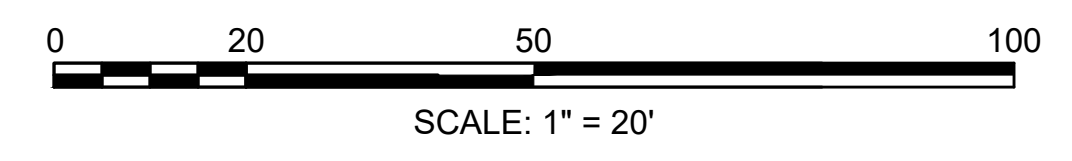


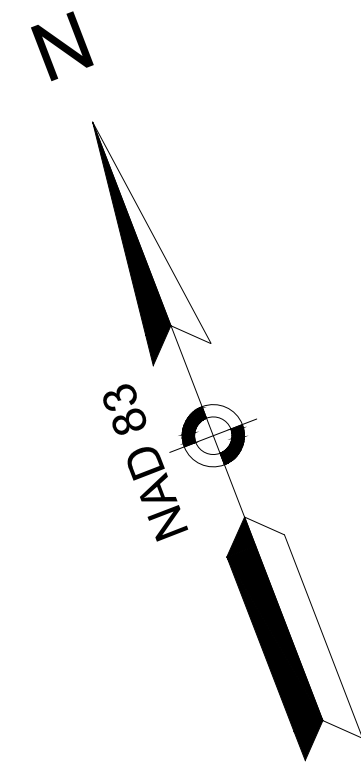
HIGH STREET

RUSSELL AVENUE

CONSTRUCTION NOTES:

- EXISTING CONDITIONS INFORMATION COMPILED FROM SURVEY BY HANCOCK ASSOCIATES, BOSTON, MA PERFORMED IN AUGUST 2016 (TO BUCKBOARD LANE) AND BY TEC, INC., ANDOVER, MA, PERFORMED IN NOVEMBER 2017 (EAST OF BUCKBOARD LANE).
HORIZONTAL DATUM = NAD83 (MASSACHUSETTS STATE PLANE COORDINATES)
VERTICAL DATUM = NAVD 88
- THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL CONTACT DIGSAFE (1-888-DIGSAFE) A MINIMUM OF 72 HOURS PRIOR TO ANY CONSTRUCTION TO VERIFY THE LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
- WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED TO THE ENGINEER FOR RESOLUTION OF THE CONFLICT.
- ALL MUNICIPALLY OWNED UTILITY STRUCTURES (CATCH BASINS, DRAIN MANHOLES, WATER GATES, ETC.) SHALL BE ADJUSTED BY THE CONTRACTOR TO FINISHED GRADE UNLESS DIRECTED OTHERWISE. THE CONTRACTOR SHALL COORDINATE WITH THE MILLVILLE HIGHWAY DEPARTMENT TO ALLOW FOR THE REPLACEMENT OF EXISTING UTILITY STRUCTURES IN POOR CONDITION. THESE REPLACEMENT UTILITY STRUCTURES TO BE PROVIDED AND INSTALLED BY THE HIGHWAY DEPARTMENT.
- ALL PRIVATELY OWNED UTILITY STRUCTURES (GAS GATES, ELECTRIC /TELEPHONE MANHOLES, ETC.) SHALL BE ADJUSTED TO FINISHED GRADE BY THE PRIVATE UTILITY COMPANY, UNLESS DIRECTED OTHERWISE. THE CONTRACTOR SHALL COORDINATE WITH PRIVATE UTILITY COMPANIES FOR THE ALTERATION AND ADJUSTMENT, AS NECESSARY.
- PROPOSED LATERAL DRAIN PIPES SHALL BE INSTALLED WITH A PITCH OF 1.0% (MINIMUM) UNLESS OTHERWISE NOTED.
- AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT THE CONTRACTORS EXPENSE.
- ALL DISTURBED AREAS OUTSIDE THE CURBLINE AND WITHIN THE LIMIT OF GRADING SHALL BE STABILIZED WITH 4" LOAM AND SEED, UNLESS
- THE TERM "PROPOSED" (PROP) MEANS WORK TO BE CONSTRUCTED USING NEW MATERIALS OR, WHERE APPLICABLE, RE-USING EXISTING MATERIALS IDENTIFIED AS "REMOVE AND RESET" (R&R), AS DIRECTED BY THE ENGINEER.
- THE TERM "MEET EXIST" MEANS TO MEET BOTH THE EXISTING ALIGNMENT AND ELEVATION.
- ALL EXISTING TREES WITHIN THE PROJECT LIMITS SHALL BE RETAINED AND PROTECTED WITH TREE PROTECTION UNLESS INDICATED OTHERWISE ON THE DRAWINGS. ALL PROVIDED DIMENSIONS REFER TO THE DIAMETER AT BREST HEIGHT.
- AN UNOBSTRUCTED PATH OF TRAVEL WITH A MINIMUM WIDTH OF 3'-0" (EXCLUDING THE WIDTH OF CURB) SHALL BE MAINTAINED PAST ALL OBSTRUCTIONS (UTILITY POLES, LIGHT POLES, SIGNS, MAILBOXES, ALONG DRIVEWAY OPENINGS, ETC.)
- CONTRACTOR SHALL RETAIN THE SERVICES OF A MASSACHUSETTS CERTIFIED ARBORIST FOR ALL TREE REMOVAL AND/OR PRUNING.
- DETECTABLE WARNING PANELS ARE REQUIRED ON ALL PROPOSED WHEELCHAIR RAMPS AND SHALL BE INSTALLED IN ACCORDANCE WITH MASSDOT CONSTRUCTIONS STANDARDS.
- ELECTRONIC FILES TO BE PROVIDED BY THE ENGINEER TO THE CONTRACTOR FOR LAYOUT PURPOSES.
- ALL EXISTING CURB THAT IS SUITABLE FOR REUSE SHALL BE USED IN THE PROPOSED WORK, CURB SUITABLE FOR REUSE WILL BE DETERMINED BY THE ENGINEER IN FIELD.
- ALL GRANITE AND CEMENT CONCRETE CURB SHALL BE CONSTRUCTED WITH A SIX INCH REVEAL, UNLESS OTHERWISE NOTED.





WALLACE F. &
BARBARA J. MOORE
DEED BOOK 25716, PAGE 596
PLAN IN BOOK 1943, PAGE 353
(MAP 14, LOT 085)
(44 GAY ST)

PROPOSED DRAINAGE STRUCTURE DATA							
NO.	TYPE	STATION	OFFSET	RIM ELEV.	INV. ELEV. IN	INV. ELEV. OUT	REMARKS
③	CIT TO DMH	15+55.3	15.0' LT	238.05	233.70 (4) 233.8 (EX) 234.3 (EX)	231.1 (EX)	R&S FRAME & GRATE, RETAIN SUMP
④	PROP CBCI	15+26.2	13.1' LT	238.21	-	234.20 (3)	OFFSET TOP
⑤	CIT TO DMH	18+99.3	15.1' LT	238.76	235.60 (6) 235.8 (EX) 235.6 (EX)	235.5 (EX)	R&S FRAME & GRATE
⑥	PROP CB	19+15.2	14.5' LT	238.91	-	235.85 (5)	4' SUMP, OFFSET TOP
⑦	PROP DMH	20+00.5	5.0' LT	238.06	235.20	231.65 (EX)	
⑧	PROP GI	20+00.9	11.0' LT	237.78	-	235.25 (7)	REM CB

DAVID &
DOROTHY A. CONLEY
DEED BOOK 4548, PAGE 526
PLAN IN BOOK 1767, PAGE 485
(MAP 14, LOT 089)
(74 GAY ST)

94 GAY STREET
NOMINEE TRUST
DEED BOOK 23213, PAGE 233
PLAN 1130 OF 1948
(MAP 14, LOT 105)
(94 GAY ST)

JEFFREY R. SMITH
ALICE R. POIRIER
DEED BOOK 7632, PAGE 96
PLAN 707 OF 1928
(MAP 14, LOT 104)
(78 GAY ST)

IAN S. WATSON &
LAURA IRWIN COLLINS
DEED BOOK 35235, PAGE 406
PLAN IN BOOK 1943, PAGE 353
(MAP 14, LOT 088)
(58 GAY ST)

CHRISTINE E. CANNON &
KEVIN V. COUGHLIN
DEED BOOK 35931, PAGE 348
PLAN IN BOOK 1943, PAGE 353
(MAP 14, LOT 087)
(56 GAY ST)

ALEXANDER JONES &
SARA PERKINS JONES
DEED BOOK 36140, PAGE 410
PLAN IN BOOK 1943, PAGE 353
(MAP 14, LOT 086)
(50 GAY ST)

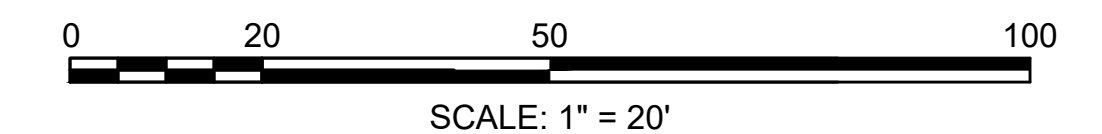
KERRY CAPADILUPO
DEED BOOK 35234, PAGE 364
PLAN 1910 OF 1986, BOOK 348
(MAP 14, LOT 168)
(85 GAY ST)

FREDRICK P. & LIDIJA ORTLOFF
DEED BOOK 8458, PAGE 432
PLAN 1910 OF 1986, BOOK 348
(MAP 14, LOT 117)
(65 GAY ST)

BANIS REALTY TRUST
DEED BOOK 33839, PAGE 226
PLAN 126 OF 1937
(MAP 14, LOT 118)
(39 GAY ST)

EXISTING INVERT TABLE

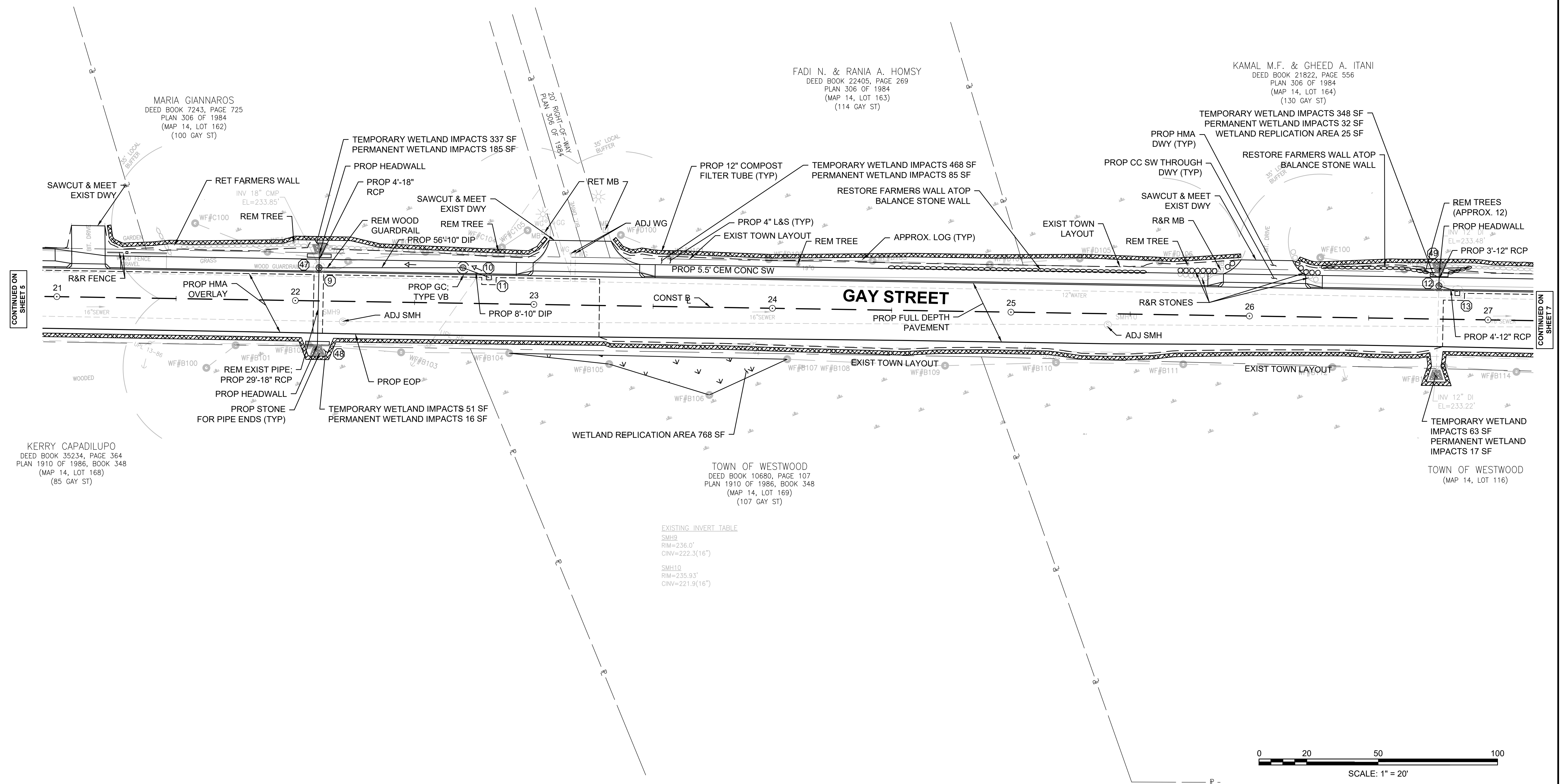
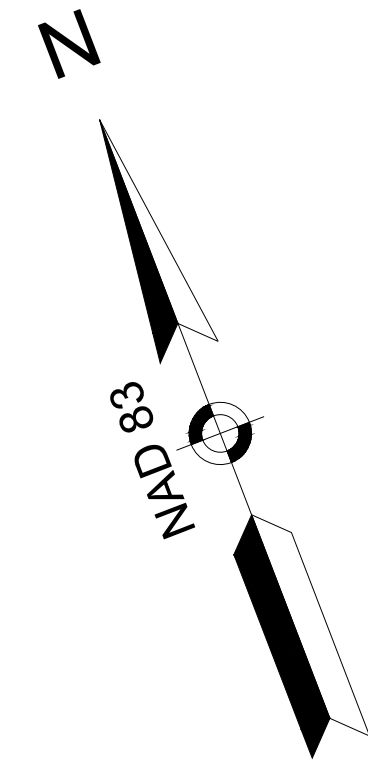
SMH5 RIM=237.83' CINV=228.7(8")	DMH2 RIM=237.79' CINV=230.3	CB6 RIM=237.29' A=234.3(12") B=233.8(8") C=231.1(15")	CB10 RIM=237.73' INV=234.6
SMH6 RIM=237.76' A=223.5(16") B=223.7(16")	DMH3 RIM=238.32' INV TO CB=233.9(8")	CB7 RIM=237.93' A=235.6(8") B=235.8(8") C=235.5(6")	CB11 RIM=237.57' A=231.7(12") B=234.7(8")
SMH7 RIM=238.31' CINV=223.0(16")	DMH4 RIM=238.26' A=232.6(12") B=231.0(12") C=230.8(12")	CB8 RIM=237.87 CINV=230.4(12")	CB12 RIM=237.64' A=231.4(12") B=231.2(12")
SMH8 RIM=238.40' A=230.3(8") B=230.2(8")	CB5 RIM=237.18' A=230.5(15") B=229.9(15") C=230.0(15")	CB9 RIM=237.88' DROP IN=235.9(8")	



CONTINUED ON
SHEET 4

CONTINUED ON
SHEET 6

PROPOSED DRAINAGE STRUCTURE DATA							
NO.	TYPE	STATION	OFFSET	RIM ELEV.	INV. ELEV. IN	INV. ELEV. OUT	REMARKS
9	PROP DMH	22+09.7	13.9' LT	236.53	233.90 (10) 234.80 (48)	233.90 (47)	SPECIAL SHALLOW DMH
10	PROP DMH	22+70.0	14.9' LT	236.35	234.12 (11)	234.12 (9)	SPECIAL SHALLOW DMH
11	PROP GICI	22+81.0	11.0' LT	235.83	-	234.15 (10)	4" FRAME & GRATE
47	PROP HDWL	22+09.7	18.9' LT	-	-	233.85 (9)	
48	PROP HDWL	22+09.6	17.8' LT	-	235.35	-	



CONTINUED ON
SHEET 5

CONTINUED ON
SHEET 7

KERRY CAPADILUPO
DEED BOOK 35234, PAGE 364
PLAN 1910 OF 1986, BOOK 348
(MAP 14, LOT 168)
(85 GAY ST)

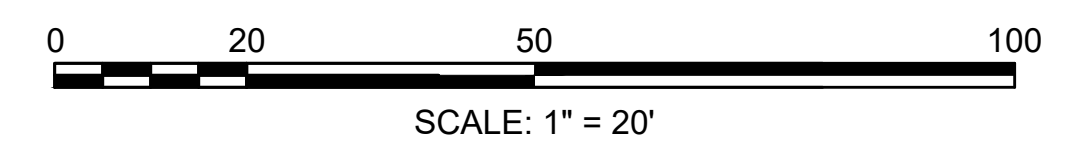
MARIA GIANNAROS
DEED BOOK 7243, PAGE 725
PLAN 306 OF 1984
(MAP 14, LOT 162)
(100 GAY ST)

FADI N. & RANIA A. HOMSY
DEED BOOK 22405, PAGE 269
PLAN 306 OF 1984
(MAP 14, LOT 163)
(114 GAY ST)

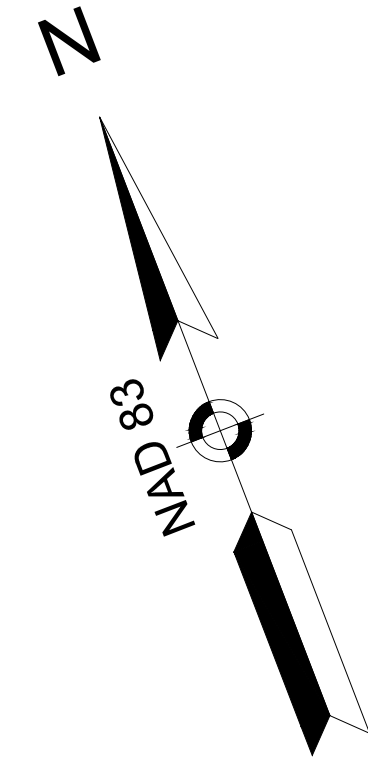
KAMAL M.F. & GHEED A. ITANI
DEED BOOK 21822, PAGE 556
PLAN 306 OF 1984
(MAP 14, LOT 164)
(130 GAY ST)

TOWN OF WESTWOOD
DEED BOOK 10680, PAGE 107
PLAN 1910 OF 1986, BOOK 348
(MAP 14, LOT 169)
(107 GAY ST)

EXISTING INVERT TABLE
SMH9
RIM=236.0'
CIN=222.3(16")
SMH10
RIM=235.93'
CIN=221.9(16")



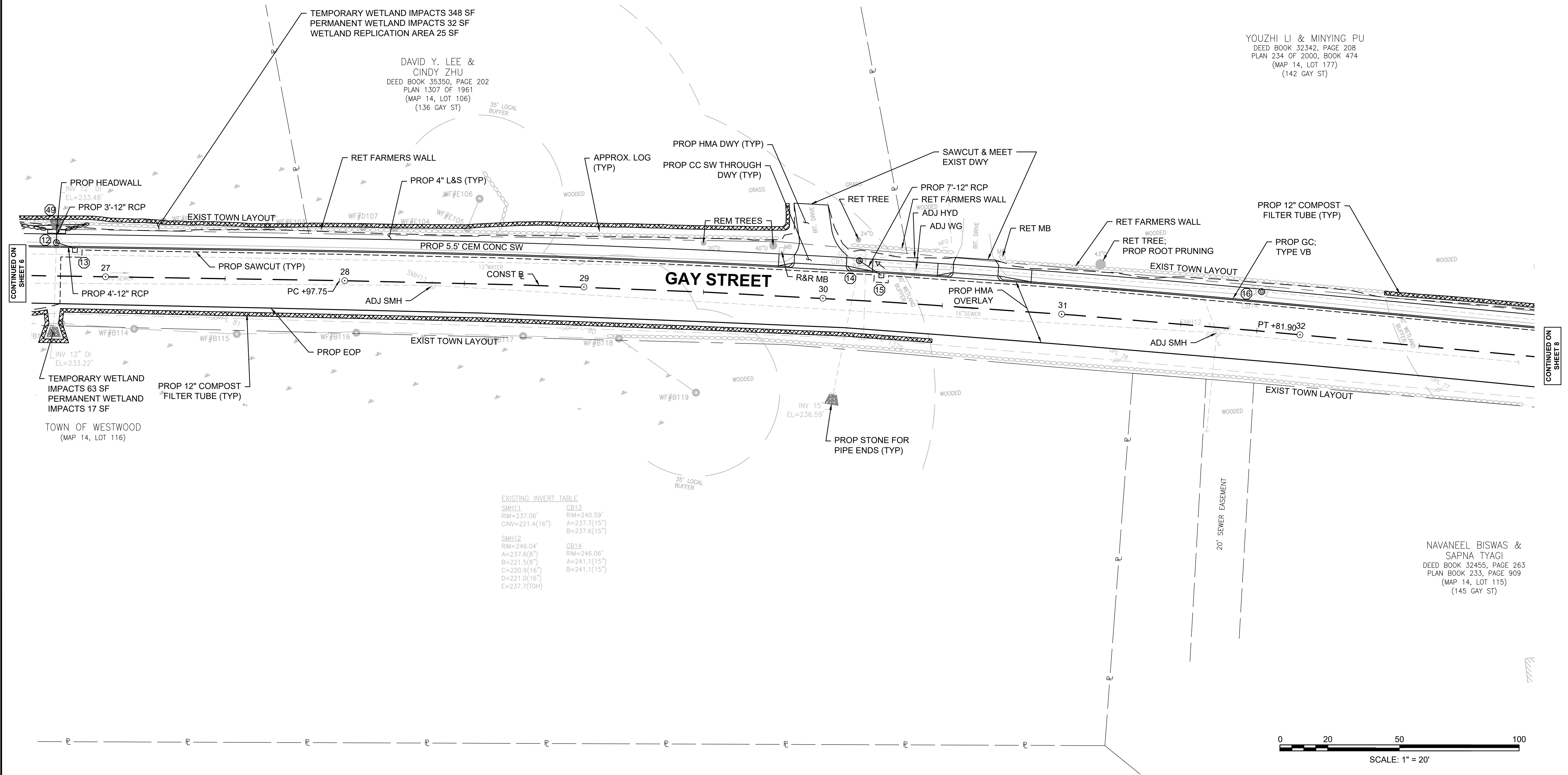
PROPOSED DRAINAGE STRUCTURE DATA							
NO.	TYPE	STATION	OFFSET	RIM ELEV.	INV. ELEV. IN	INV. ELEV. OUT	REMARKS
12	PROP DMH	26+79.2	14.0' LT	236.34	233.50 (13) 233.48 (49)	233.45 (EX)	4' SUMP, OFFSET TOP
13	PROP CBCI	26+87.0	11.7' LT	235.77	-	233.60 (12)	SPECIAL SHALLOW CB; OFFSET TOP
14	CIT TO DMH	30+14.3	16.6' LT	241.64	238.65 (14) 237.7 (EX)	237.6 (EX)	
15	PROP GICI	30+23.8	11.0' LT	241.32	-	238.80 (14)	
16	CIT TO DMH	31+82.3	16.5' LT	246.92	-	241.1 (EX)	5' DIAMETER, R&S FRAME & GRATE, RETAIN SUMP
49	PROP HDWL	26+78.9	18.8' LT	-	233.5 (12)	-	



YOUZHI LI & MINYING PU
DEED BOOK 32342, PAGE 208
PLAN 234 OF 2000, BOOK 474
(MAP 14, LOT 177)
(142 GAY ST)

DAVID Y. LEE &
CINDY ZHU
DEED BOOK 35350, PAGE 202
PLAN 1307 OF 1961
(MAP 14, LOT 106)
(136 GAY ST)

TEMPORARY WETLAND IMPACTS 348 SF
PERMANENT WETLAND IMPACTS 32 SF
WETLAND REPLICATION AREA 25 SF



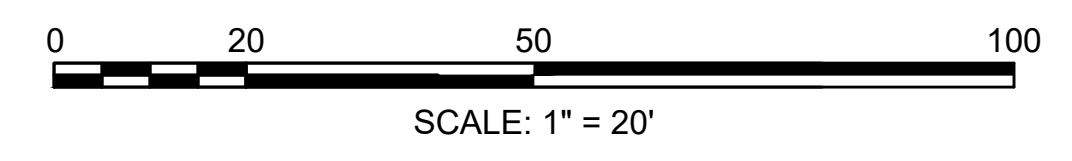
CONTINUED ON
SHEET 6

CONTINUED ON
SHEET 8

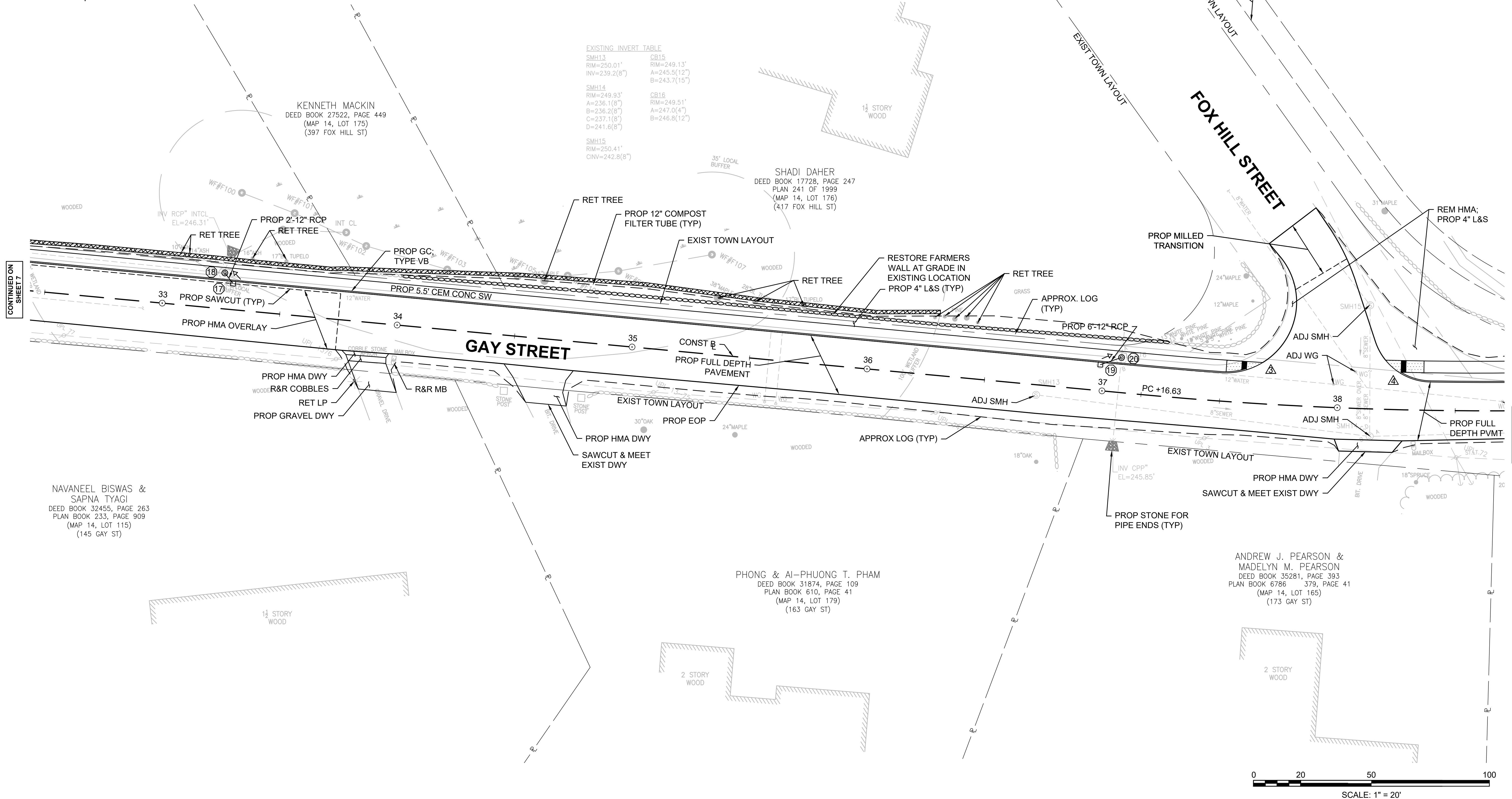
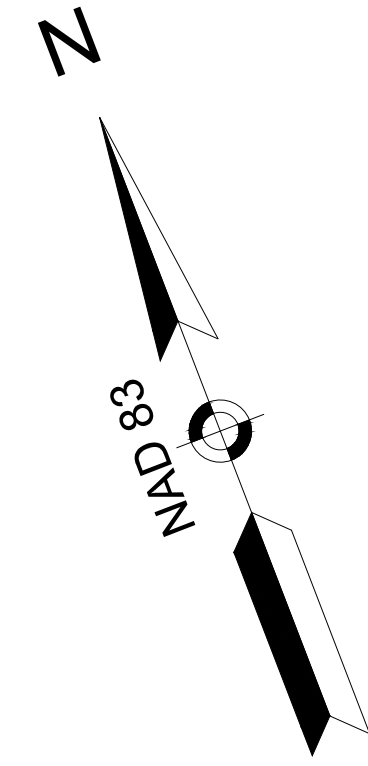
EXISTING INVERT TABLE

SMH11	CB13
RIM=237.06'	RIM=240.59'
CINV=221.4(16")	A=237.7(15")
	B=237.6(15")
SMH12	CB14
RIM=246.04'	RIM=246.06'
A=237.6(8")	A=241.1(15")
B=221.5(8")	B=241.1(15")
C=220.9(16")	
D=221.0(16")	
E=237.7(TOH)	

NAVANEEL BISWAS &
SAPNA TYAGI
DEED BOOK 32455, PAGE 263
PLAN BOOK 233, PAGE 909
(MAP 14, LOT 115)
(145 GAY ST)



PROPOSED DRAINAGE STRUCTURE DATA							
NO.	TYPE	STATION	OFFSET	RIM ELEV.	INV. ELEV. IN	INV. ELEV. OUT	REMARKS
17	PROP GICI	23+29.2	11.0' LT	249.38	-	246.90 (18)	
18	CIT TO DMH	33+25.2	15.2' LT	249.93	246.85 (17) 245.5 (EX)	243.7 (EX)	R&S FRAME & GRATE; RETAIN SUMP
19	PROP GICI	36+98.3	11.0' LT	250.52	-	248.00 (20)	
20	CIT TO DMH	37+07.0	14.8' LT	250.99	247.85 (19) 247.0 (EX)	246.8 (EX)	R&S FRAME & GRATE; RETAIN SUMP



EXISTING INVERT TABLE

SMH13 RIM=250.01' INV=239.2(8")	CB15 RIM=249.13' A=245.5(12") B=243.7(15")
SMH14 RIM=249.93' A=236.1(8") B=236.2(8") C=237.1(8") D=241.6(8")	CB16 RIM=249.51' A=247.0(4") B=246.8(12")
SMH15 RIM=250.41' INV=242.8(8")	

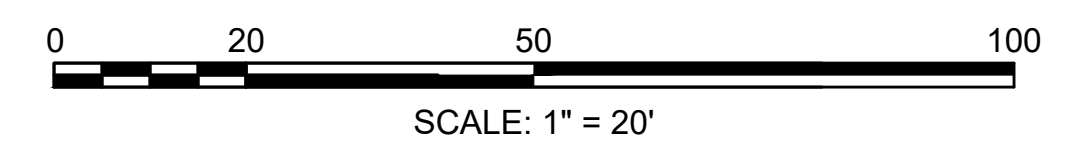
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SHEET 7

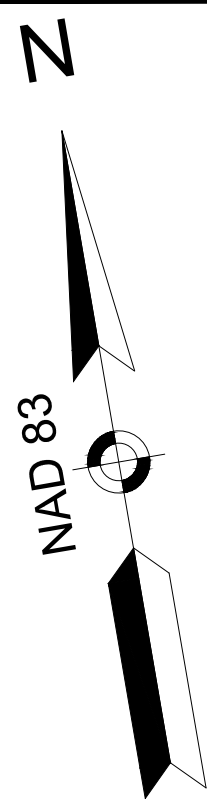
CONTINUED ON
SHEET 9

NAVANEEL BISWAS &
SAPNA TYAGI
DEED BOOK 32455, PAGE 263
PLAN BOOK 233, PAGE 909
(MAP 14, LOT 115)
(145 GAY ST)

PHONG & AI-PHUNG T. PHAM
DEED BOOK 31874, PAGE 109
PLAN BOOK 610, PAGE 41
(MAP 14, LOT 179)
(163 GAY ST)

ANDREW J. PEARSON &
MADELYN M. PEARSON
DEED BOOK 35281, PAGE 393
PLAN BOOK 6786 379, PAGE 41
(MAP 14, LOT 165)
(173 GAY ST)





SRIDHAR SRINIVASAN &
VIBA SRIDHAR
DEED BOOK 35709, PAGE 371
PLAN BOOK 554, PLAN 60
(MAP 15, LOT 004)
(5 FOX MEADOW DR)

MATTHEW LOCK
DEED BOOK 33462, PAGE 127
PLAN BOOK 554, PLAN 60
(MAP 15, LOT 031)
(7 FOX MEADOW DR)

GANSON NOMINEE TRUST
DEED BOOK 13960, PAGE 551
PLAN BOOK 6786, PAGE 379
(MAP 14, LOT 166)
(193 GAY ST)

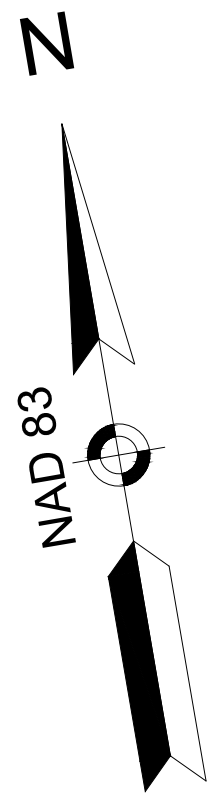
CHRISTOPHER M. ROSSI &
JENNIE GOOSSEN
DEED BOOK 33092, PAGE 451
PLAN BOOK 613, PAGE 22
(MAP 14, LOT 180)
(215 GAY ST)

EXISTING INVERT TABLE
SMH16
RIM=247.55'
CINV=232.4(15")
(8"RECORD)
SMH17
RIM=239.45'
CINV=227.1(8")



CONTINUED ON
SHEET 8

CONTINUED ON
SHEET 10

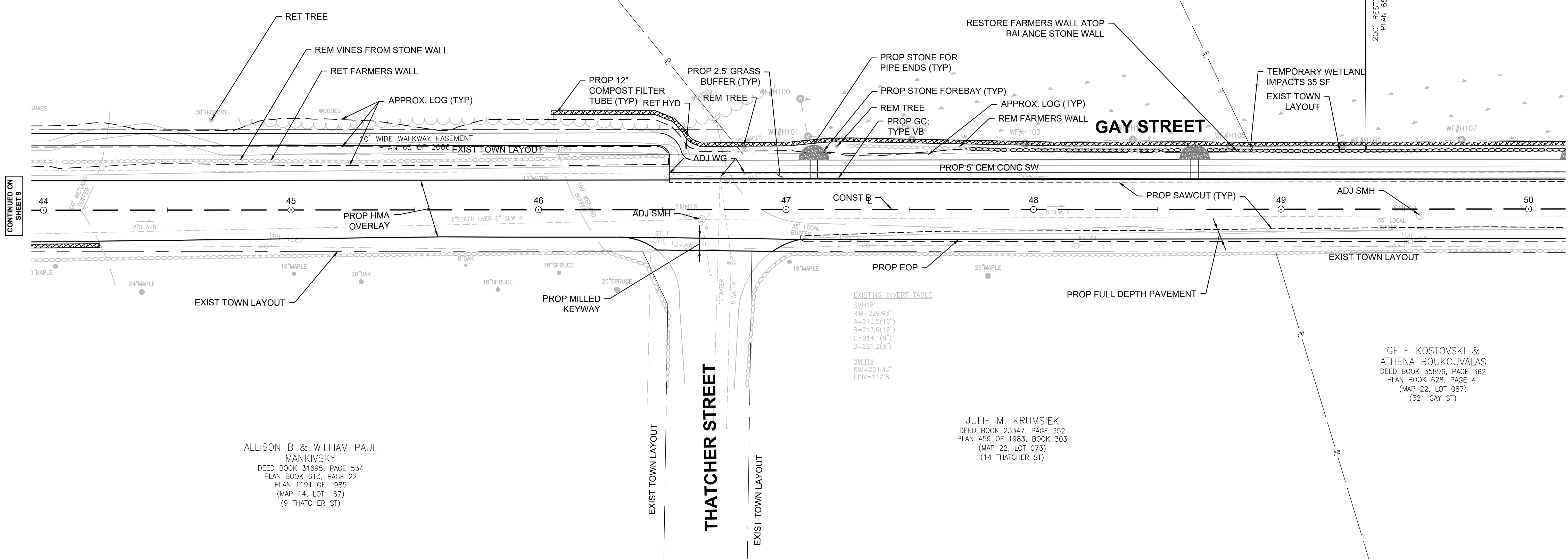


MATTHEW LOCK
DEED BOOK 33462, PAGE 127
PLAN BOOK 554, PLAN 60
(MAP 15, LOT 031)
(7 FOX MEADOW DR)

ARKADY NAIMAN &
EUGINA NAIMAN
DEED BOOK 35368, PAGE 1
PLAN BOOK 554, PLAN 60
(MAP 15, LOT 034)
(9 FOX MEADOW DR)

ASAAD IRREVOCABLE FAMILY TRUST
DEED BOOK 29135, PAGE 457
PLAN BOOK 554, PLAN 60
(MAP 15, LOT 035)
(11 FOX MEADOW DR)

200' RESTRICTED AREA
PLAN 65 OF 2006



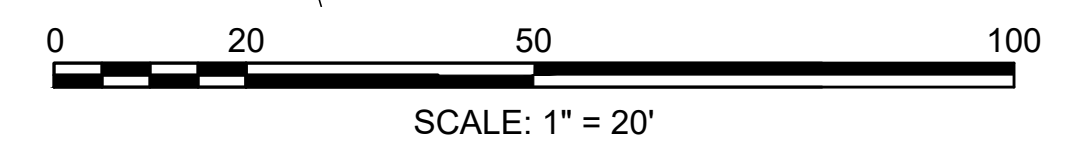
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SHEET 9

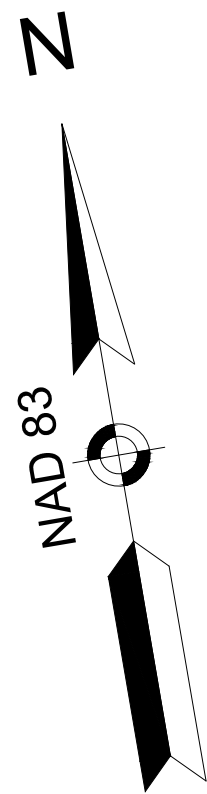
CONTINUED ON
SHEET 11

ALLISON B & WILLIAM PAUL
MANKIVSKY
DEED BOOK 31695, PAGE 534
PLAN BOOK 613, PAGE 22
PLAN 1191 OF 1985
(MAP 14, LOT 167)
(9 THATCHER ST)

JULIE M. KRUMSIEK
DEED BOOK 23347, PAGE 352
PLAN 459 OF 1983, BOOK 303
(MAP 22, LOT 073)
(14 THATCHER ST)

GELE KOSTOVSKI &
ATHENA BOUKOUVALAS
DEED BOOK 35896, PAGE 362
PLAN BOOK 628, PAGE 41
(MAP 22, LOT 087)
(321 GAY ST)





PROPOSED DRAINAGE STRUCTURE DATA							
NO.	TYPE	STATION	OFFSET	RIM ELEV.	INV. ELEV. IN	INV. ELEV. OUT	REMARKS
21	PROP HDWL	53+19.8	21.6' LT	-	-	212.65	
22	PROP DMH	53+19.8	16.1' LT	216.12	213.05 (23) 212.80 (24)	212.70 (21)	R&S FRAME & GRATE; REM CB
23	PROP GICI	53+19.8	11.0' LT	215.59	-	213.10 (22)	
24	PROP GICI	53+58.0	11.0' LT	215.52	-	213.00 (22)	

**WESTWOOD
GAY STREET
CONSTRUCTION PLANS - 8 OF 15
SHEET 11 OF 108**

DANIELLE DWYER KAPLAN
L.C. CERT #183131
L.C. PLAN #12075F
(MAP 15, LOT 008)
(364 GAY ST)

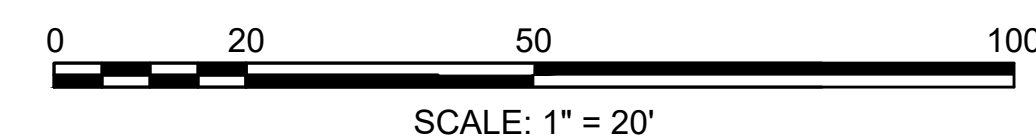
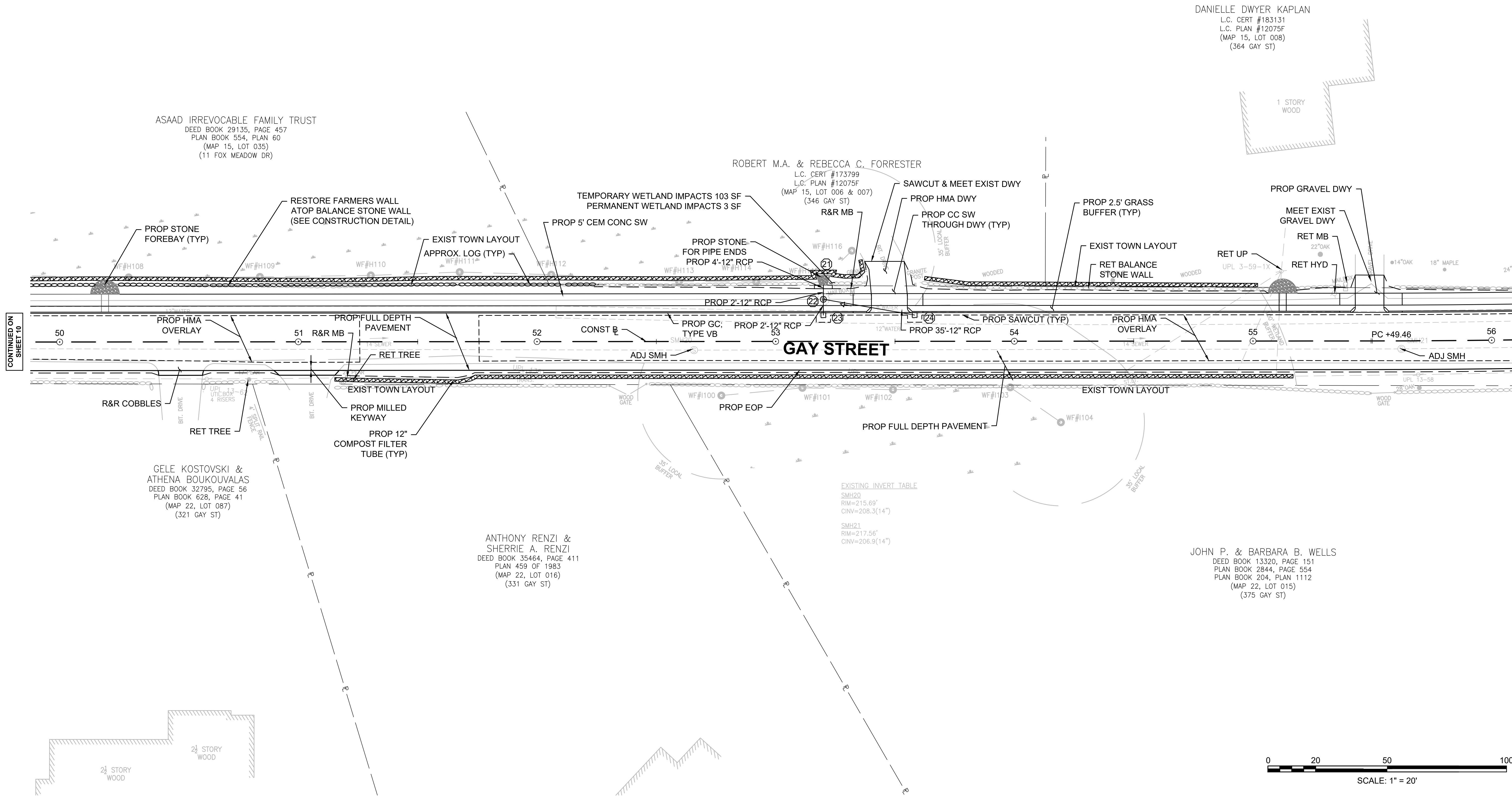
ASAAD IRREVOCABLE FAMILY TRUST
DEED BOOK 29135, PAGE 457
PLAN BOOK 554, PLAN 60
(MAP 15, LOT 035)
(11 FOX MEADOW DR)

ROBERT M.A. & REBECCA C. FORRESTER
L.C. CERT #173799
L.C. PLAN #12075F
(MAP 15, LOT 006 & 007)
(346 GAY ST)

GELE KOSTOVSKI &
ATHENA BOUKOUVALAS
DEED BOOK 32795, PAGE 56
PLAN BOOK 628, PAGE 41
(MAP 22, LOT 087)
(321 GAY ST)

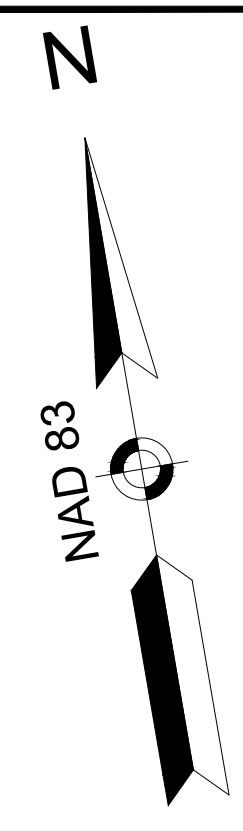
ANTHONY RENZI &
SHERRIE A. RENZI
DEED BOOK 35464, PAGE 411
PLAN 459 OF 1983
(MAP 22, LOT 016)
(331 GAY ST)

JOHN P. & BARBARA B. WELLS
DEED BOOK 13320, PAGE 151
PLAN BOOK 2844, PAGE 554
PLAN BOOK 204, PLAN 1112
(MAP 22, LOT 015)
(375 GAY ST)

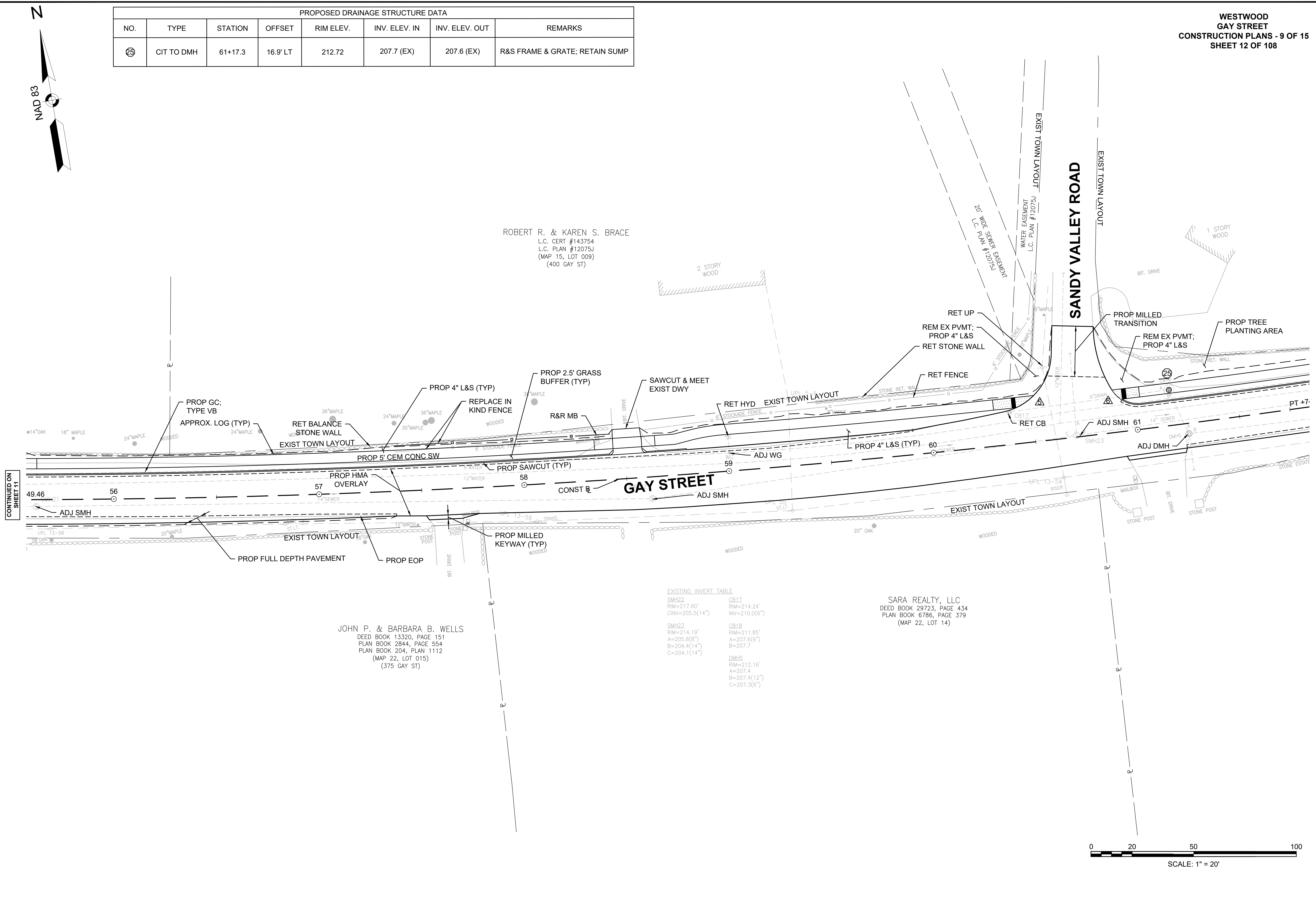


CONTINUED ON
SHEET 10

CONTINUED ON
SHEET 12



PROPOSED DRAINAGE STRUCTURE DATA							
NO.	TYPE	STATION	OFFSET	RIM ELEV.	INV. ELEV. IN	INV. ELEV. OUT	REMARKS
25	CIT TO DMH	61+17.3	16.9' LT	212.72	207.7 (EX)	207.6 (EX)	R&S FRAME & GRATE; RETAIN SUMP



CONTINUED ON SHEET 11

CONTINUED ON SHEET 13

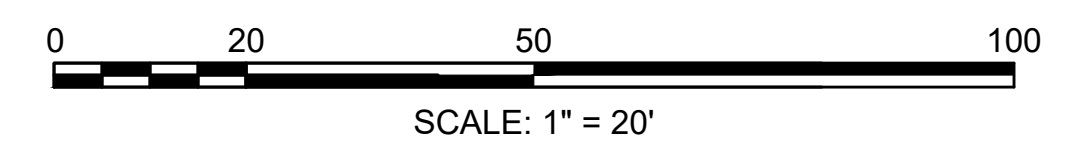
ROBERT R. & KAREN S. BRACE
L.C. CERT #143754
L.C. PLAN #12075J
(MAP 15, LOT 009)
(400 GAY ST)

JOHN P. & BARBARA B. WELLS
DEED BOOK 13320, PAGE 151
PLAN BOOK 2844, PAGE 554
PLAN BOOK 204, PLAN 1112
(MAP 22, LOT 015)
(375 GAY ST)

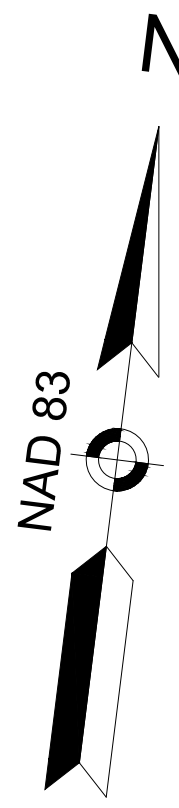
EXISTING INVERT TABLE

SMH22 RIM=217.60' CIN=205.5(14")	CB17 RIM=214.24' INV=210.0(6")
SMH23 RIM=214.19' A=205.8(8") B=204.4(14") C=204.1(14")	CB18 RIM=211.85' A=207.6(6") B=207.7
	DMH5 RIM=212.16' A=207.4 B=207.4(12") C=207.3(6")

SARA REALTY, LLC
DEED BOOK 29723, PAGE 434
PLAN BOOK 6786, PAGE 379
(MAP 22, LOT 14)

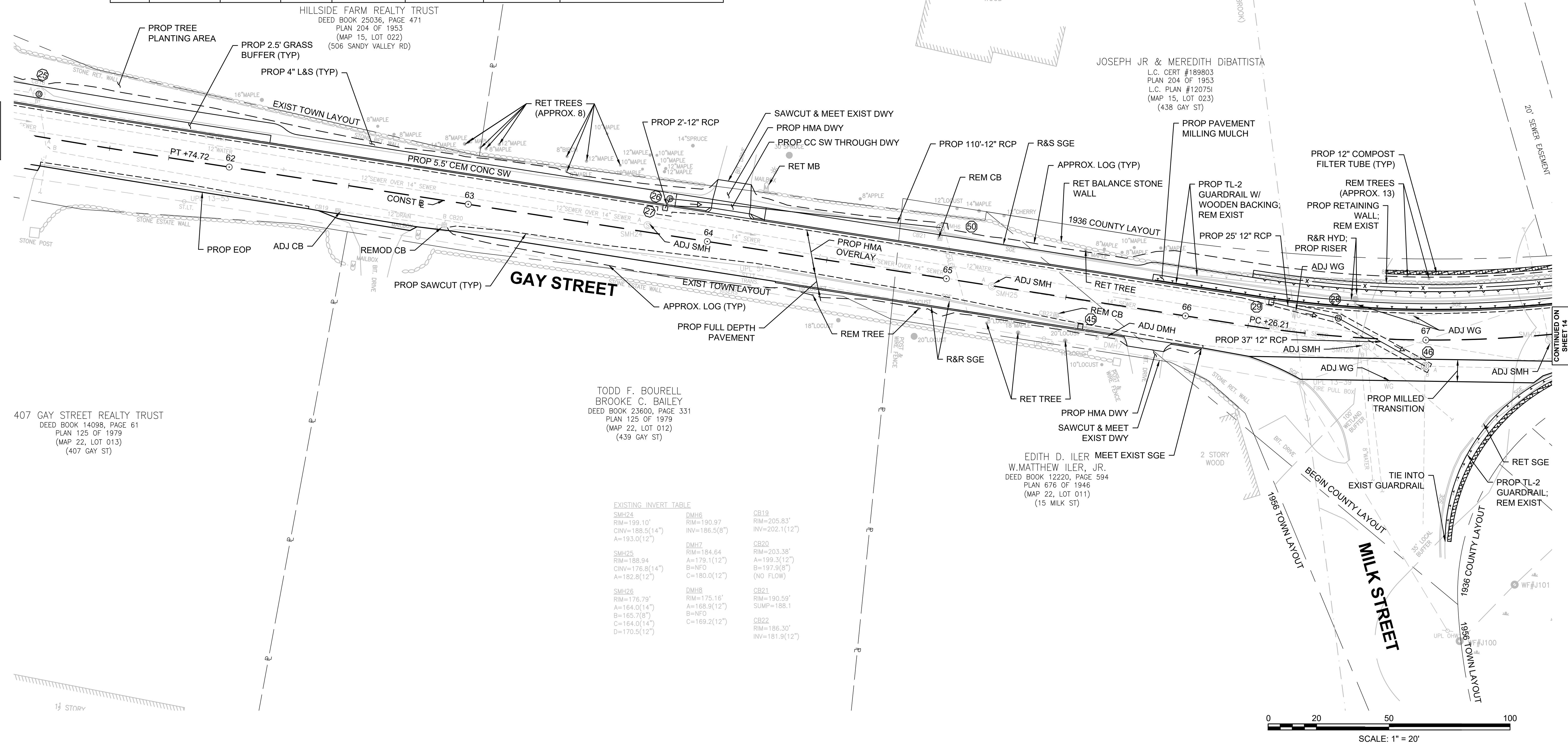


PROPOSED DRAINAGE STRUCTURE DATA							
NO.	TYPE	STATION	OFFSET	RIM ELEV.	INV. ELEV. IN	INV. ELEV. OUT	REMARKS
26	PROP DMH	63+81.7	15.1' LT	199.05	196.05 (27)	189.20 (50)	
27	PROP GICI	63+80.4	11.0' LT	198.60	-	196.10 (26)	
28	PROP DMH	66+62.5	7.3' LT	177.62	174.10 (29)	171.05 (46)	
29	PROP CB	66+34.1	11.0' LT	179.71	-	174.60 (28)	OFFSET TOP
45	PROP CBCI	65+57.5	11.0' RT	185.55	-	182.00 (EX)	OFFSET TOP, 4' SUMP
49	EX DMH	66+99.5	10.8' RT	175.30	171.80 (28) 169.2 (EX)	168.9 (EX)	CORE HOLE IN EXIST
50	EX DMH				187.00 (26)	186.5 (EX)	CORE HOLE IN EXIST



CONTINUED ON
SHEET 12

CONTINUED ON
SHEET 14



407 GAY STREET REALTY TRUST
DEED BOOK 14098, PAGE 61
PLAN 125 OF 1979
(MAP 22, LOT 013)
(407 GAY ST)

HILLSIDE FARM REALTY TRUST
DEED BOOK 25036, PAGE 471
PLAN 204 OF 1953
(MAP 15, LOT 022)
(506 SANDY VALLEY RD)

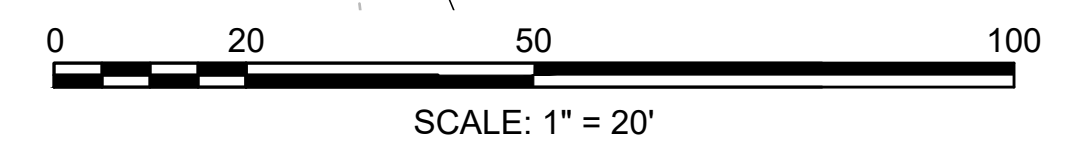
TODD F. BOURELL
BROOKE C. BAILEY
DEED BOOK 23600, PAGE 331
PLAN 125 OF 1979
(MAP 22, LOT 012)
(439 GAY ST)

JOSEPH JR & MEREDITH DIBATTISTA
L.C. CERT #189803
PLAN 204 OF 1953
L.C. PLAN #120751
(MAP 15, LOT 023)
(438 GAY ST)

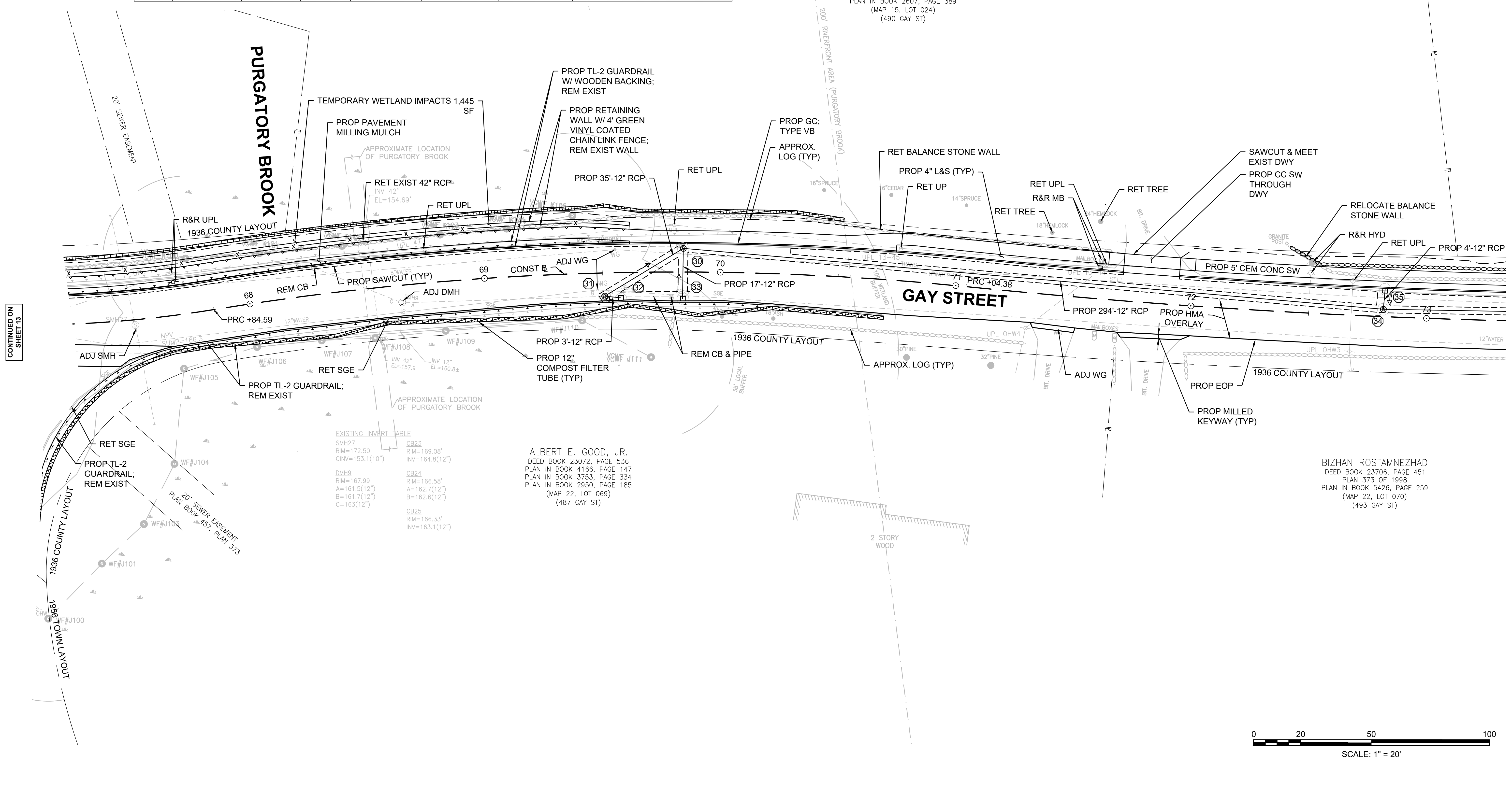
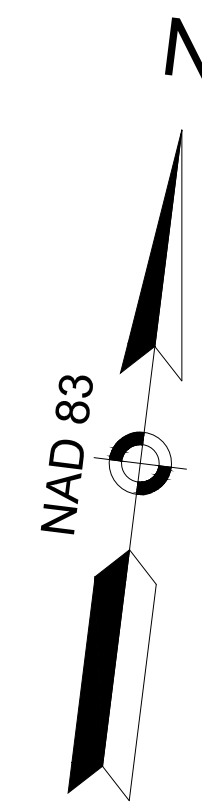
EDITH D. ILER
W. MATTHEW ILER, JR.
DEED BOOK 12220, PAGE 594
PLAN 676 OF 1946
(MAP 22, LOT 011)
(15 MILK ST)

EXISTING INVERT TABLE

SMH24 RIM=199.10' CINV=188.5(14") A=193.0(12")	DMH6 RIM=190.97 INV=186.5(8")	CB19 RIM=205.83' INV=202.1(12")
SMH25 RIM=188.94 CINV=176.8(14") A=182.8(12")	DMH7 RIM=184.64 A=179.1(12") B=NFO C=180.0(12")	CB20 RIM=203.38' A=199.3(12") B=197.9(8") (NO FLOW)
SMH26 RIM=176.79' A=164.0(14") B=165.7(8") C=164.0(14") D=170.5(12")	DMH8 RIM=175.16' A=168.9(12") B=NFO C=169.2(12")	CB21 RIM=190.59' SUMP=188.1
		CB22 RIM=186.30' INV=181.9(12")

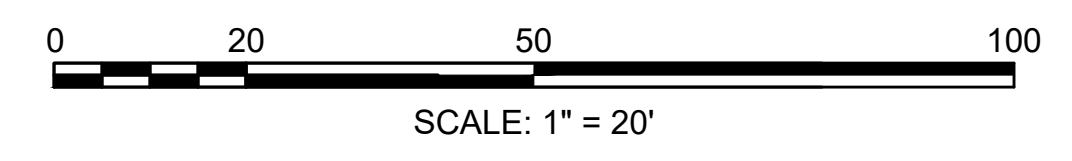


PROPOSED DRAINAGE STRUCTURE DATA							
NO.	TYPE	STATION	OFFSET	RIM ELEV.	INV. ELEV. IN	INV. ELEV. OUT	REMARKS
60	PROP CB	69+84.0	10.0' LT	167.58	163.50 (33) 163.50 (34)	163.40 (31)	4' SUMP, MANHOLE F&C
61	CIT TO DMH	69+50.5	9.9' RT	166.86	162.70(30) 162.70 (32)	162.6 (EX)	
62	PROP CBCI	69+57.4	10.8' RT	166.72	-	162.75 (31)	4' SUMP, OFFSET TOP
63	PROP CBCI	69+83.7	11.3' RT	166.57	-	163.65 (30)	
64	PROP DMH	72+81.3	3.1' LT	172.77	168.70 (35) 167.30 (36)	166.45 (30)	
65	PROP CBCI	72+81.6	11.6' LT	172.92	-	168.90 (34)	4' SUMP, OFFSET TOP

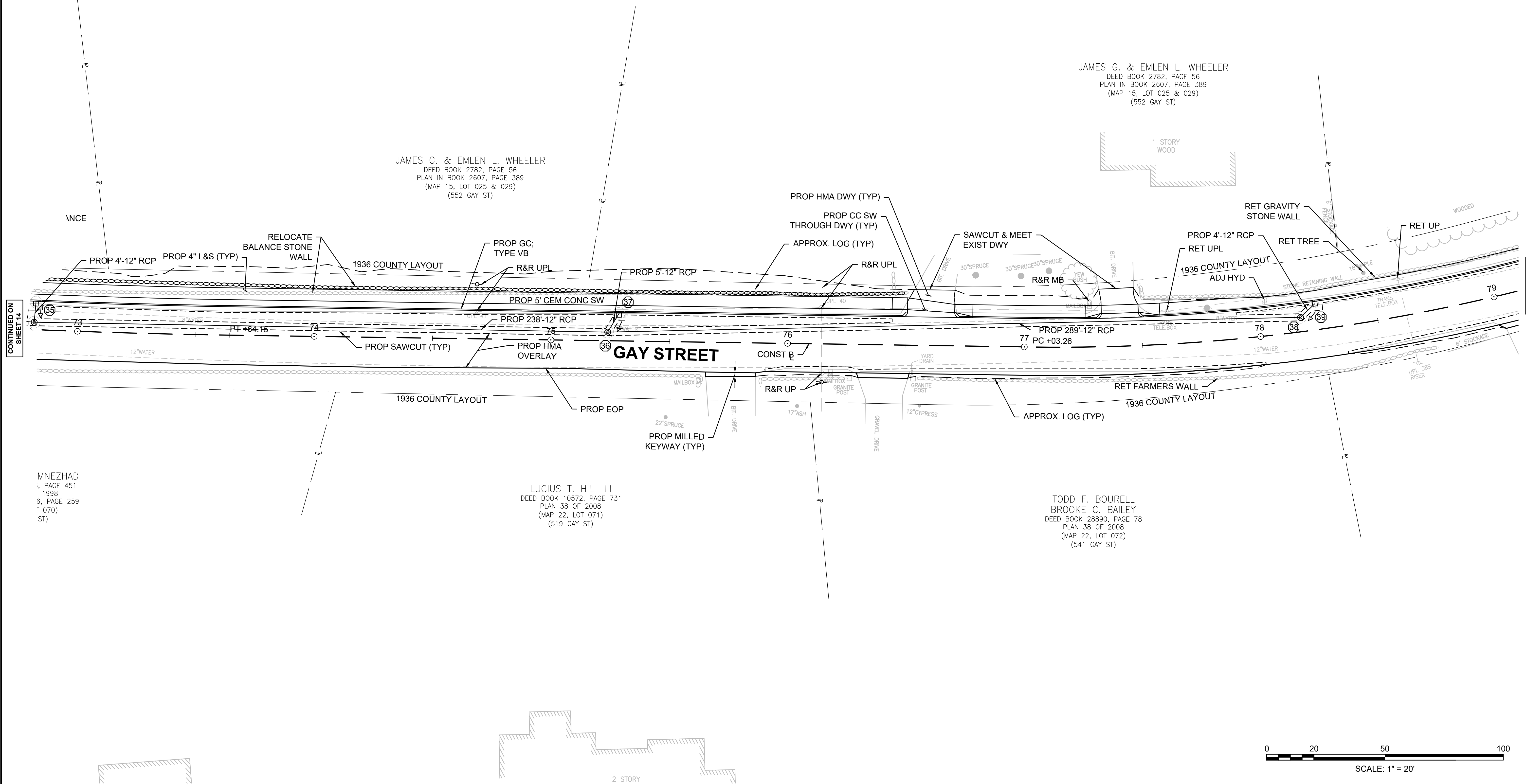
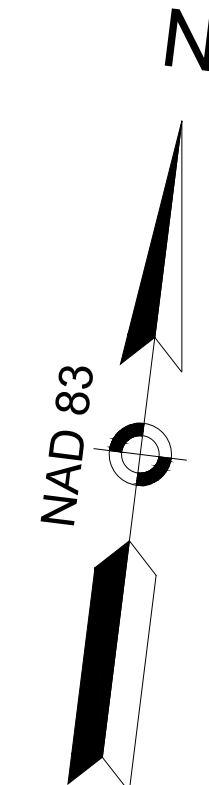


CONTINUED ON SHEET 13

CONTINUED ON SHEET 15



PROPOSED DRAINAGE STRUCTURE DATA							
NO.	TYPE	STATION	OFFSET	RIM ELEV.	INV. ELEV. IN	INV. ELEV. OUT	REMARKS
36	PROP DMH	75+28.3	11.6' LT	173.74	169.85 (37) 169.80 (38)	169.70 (34)	
37	PROP CBCI	75+23.6	3.7' LT	174.02	-	170.00 (36)	4' SUMP, OFFSET TOP
38	PROP DMH	78+17.4	6.1' LT	177.52	175.10 (39)	172.65 (36)	
39	PROP GICI	78+24.2	11.0' LT	177.71	-	175.20 (38)	



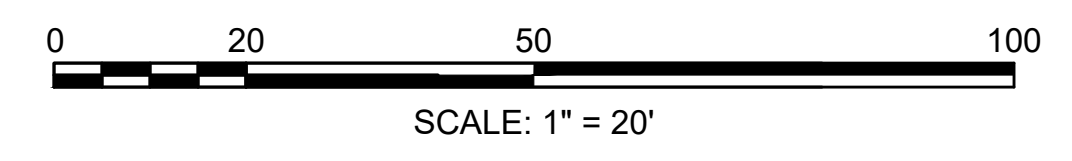
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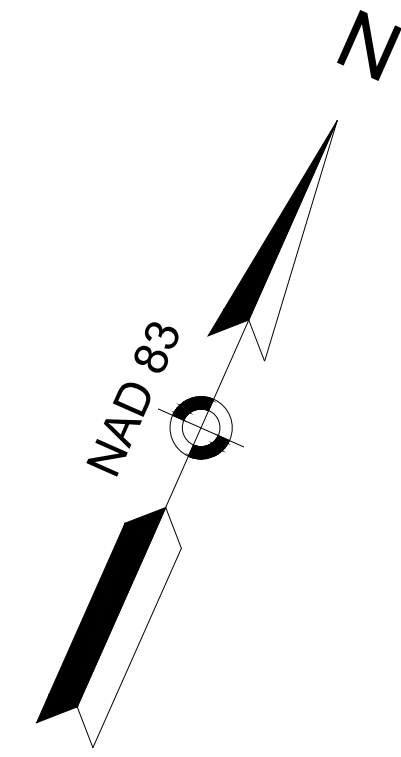
CONTINUED ON
SHEET 16

MNEZHAD
PAGE 451
1998
5, PAGE 259
(070)
ST)

LUCIUS T. HILL III
DEED BOOK 10572, PAGE 731
PLAN 38 OF 2008
(MAP 22, LOT 071)
(519 GAY ST)

TODD F. BOURELL
BROOKE C. BAILEY
DEED BOOK 28890, PAGE 78
PLAN 38 OF 2008
(MAP 22, LOT 072)
(541 GAY ST)





CONTINUED ON
 SHEET 15

CONTINUED ON
 SHEET 17

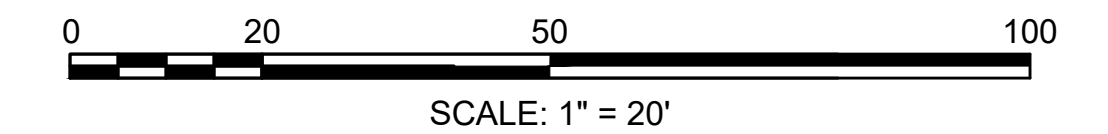
DUNCAN M. & ELLEN BROMLEY MCFARLAND
 DEED BOOK 22416, PAGE 216
 PLAN 217 OF 2003
 (MAP 16, LOT 449)
 (572 GAY ST)

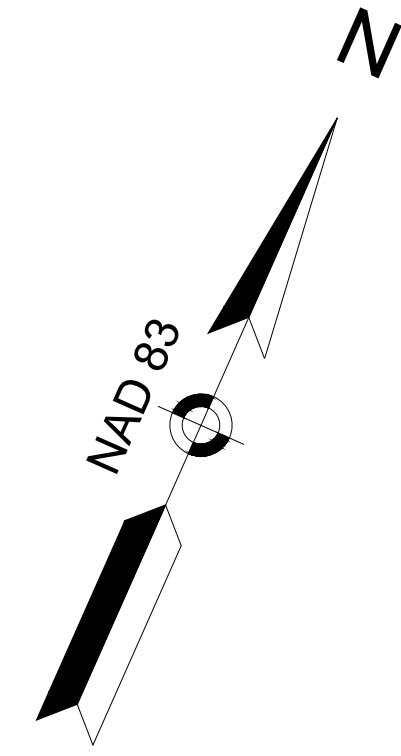
DUNCAN M. & ELLEN BROMLEY MCFARLAND
 DEED BOOK 22416, PAGE 216
 PLAN 217 OF 2003
 (MAP 16, LOT 450)
 (588 GAY ST)

ESTATE II REALTY TRUST
 DEED BOOK 22883, PAGE 438
 PLAN IN BOOK 3754, PAGE 546
 PLAN IN BOOK 3246, PAGE 165
 (MAP 16, LOT 435)
 (565 GAY ST)

WESTWOOD AFFORDABLE HOUSING ASSOCIATES,
 INC.
 DEED BOOK 27073, PAGE 391
 PLAN 494 OF 1964
 (MAP 16, LOT 433)
 (581 GAY ST)

F AND M PROPERTY TRUST
 DEED BOOK 10050, PAGE 560
 PLAN 18 OF 1991
 (MAP 16, LOT 436)
 (587A GAY ST)



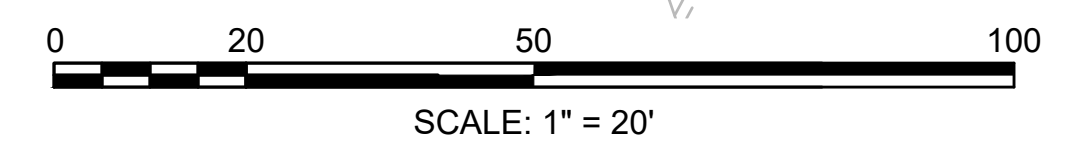
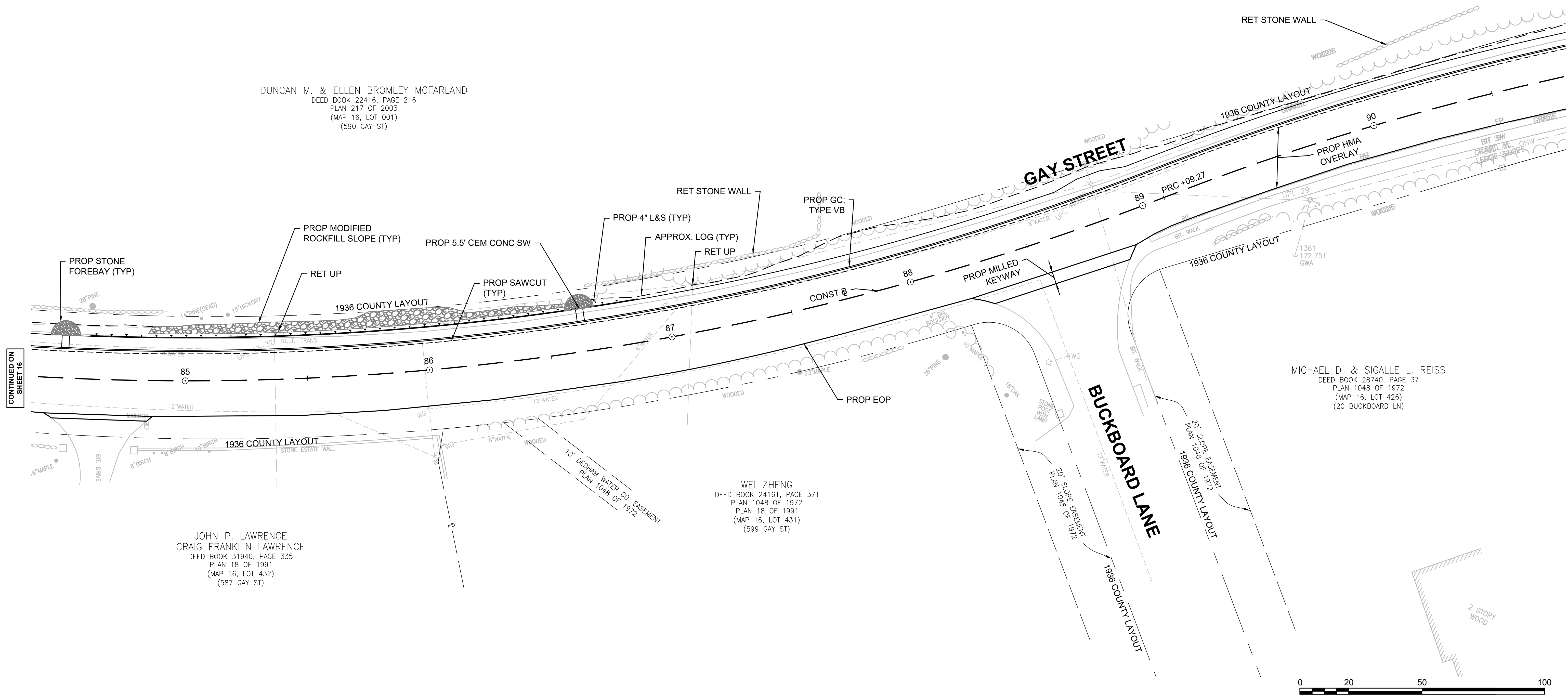


DUNCAN M. & ELLEN BROMLEY MCFARLAND
 DEED BOOK 22416, PAGE 216
 PLAN 217 OF 2003
 (MAP 16, LOT 001)
 (590 GAY ST)

MICHAEL D. & SIGALLE L. REISS
 DEED BOOK 28740, PAGE 37
 PLAN 1048 OF 1972
 (MAP 16, LOT 426)
 (20 BUCKBOARD LN)

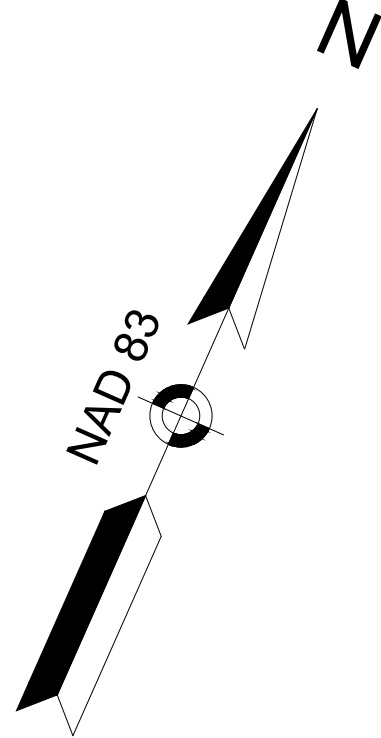
JOHN P. LAWRENCE
 CRAIG FRANKLIN LAWRENCE
 DEED BOOK 31940, PAGE 335
 PLAN 18 OF 1991
 (MAP 16, LOT 432)
 (587 GAY ST)

WEI ZHENG
 DEED BOOK 24161, PAGE 371
 PLAN 1048 OF 1972
 PLAN 18 OF 1991
 (MAP 16, LOT 431)
 (599 GAY ST)



CONTINUED ON SHEET 16

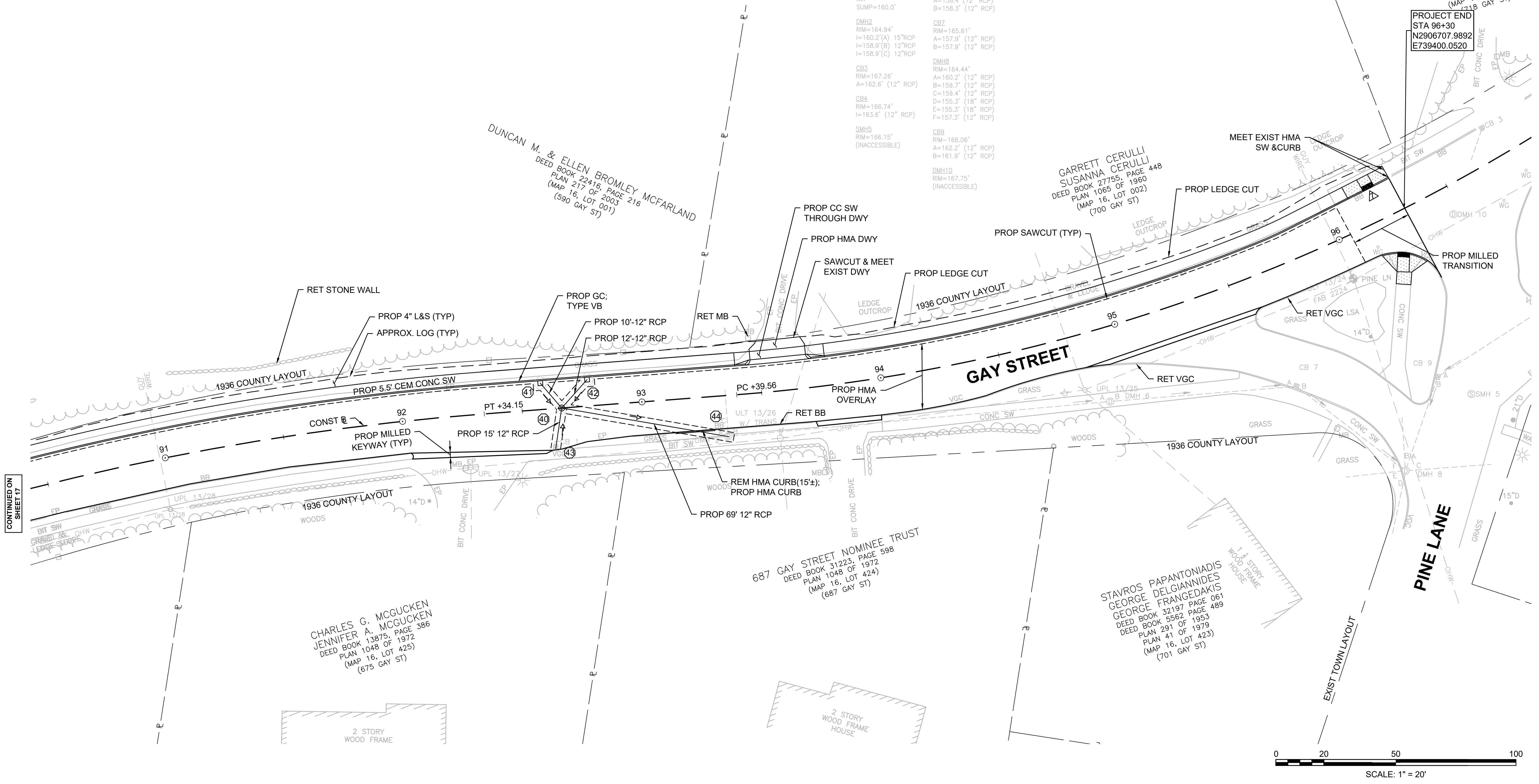
CONTINUED ON SHEET 18



PROPOSED DRAINAGE STRUCTURE DATA							
NO.	TYPE	STATION	OFFSET	RIM ELEV.	INV. ELEV. IN	INV. ELEV. OUT	REMARKS
40	PROP DMH	92+66.4	0.0'	164.57	160.85 (41) 160.90 (42) 160.85 (43)	160.75 (44)	
41	PROP CB	92+58.3	11.0' LT	164.65	-	160.65 (40)	
42	PROP CB	92+77.3	11.0' LT	164.65	-	160.65 (40)	
43	EXIST CB	92+62.1	16.7' RT	164.54	-	160.55 (40)	CORE HOLE & PLUG HOLE IN EXIST
44	EXIST DMH	93+34.3	17.2' RT	164.95	159.35 (40) 158.9 (EX) 160.2 (EX)	158.9 (EX)	CORE HOLE & PLUG HOLE IN EXIST

EXISTING INVERT TABLE

CB1 RIM=163.88' NVP SUMP=160.0'	DMH6 RIM=166.81' A=158.4 (12" RCP) B=158.3 (12" RCP)
DMH2 RIM=164.94' I=160.2'(A) 15"RCP I=158.9'(B) 12"RCP I=158.9'(C) 12"RCP	CB7 RIM=165.61' A=157.9' (12" RCP) B=157.9' (12" RCP)
CB3 RIM=167.26' A=162.6' (12" RCP)	DMH8 RIM=164.44' A=160.2' (12" RCP) B=159.7' (12" RCP) C=159.4' (12" RCP) D=155.3' (18" RCP) E=155.3' (18" RCP) F=157.3' (12" RCP)
CB4 RIM=166.74' I=163.6' (12" RCP)	CB9 RIM=166.06' A=162.2' (12" RCP) B=161.9' (12" RCP)
SMH5 RIM=166.15' (INACCESSIBLE)	DMH10 RIM=167.75' (INACCESSIBLE)



ELEANOR ESKIN STONE
RAE L. ESKIN
SHERRY A. ASKIN
DEED BOOK 24843, PAGE 527
PLAN 1065 OF 1960
(MAP 16, LOT 003)
(718 GAY ST)

PROJECT END
STA 96+30
N2906707.9892
E739400.0520

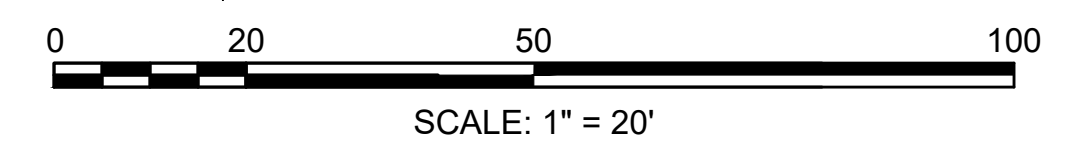
GARRETT CERULLI
SUSANNA CERULLI
DEED BOOK 27755, PAGE 448
PLAN 1065 OF 1960
(MAP 16, LOT 002)
(700 GAY ST)

DUNCAN M. & ELLEN BROMLEY MCFARLAND
DEED BOOK 22416, PAGE 216
PLAN 217 OF 2003
(MAP 16, LOT 001)
(590 GAY ST)

687 GAY STREET NOMINEE TRUST
DEED BOOK 31223, PAGE 598
PLAN 1048 OF 1972
(MAP 16, LOT 424)
(687 GAY ST)

STAVROS PAPANTONIADIS
GEORGE DELGIANNIDES
GEORGE FRANGEDAKIS
DEED BOOK 32197, PAGE 061
DEED BOOK 5562, PAGE 489
DEED BOOK 291 OF 1953
PLAN 41 OF 1979
(MAP 16, LOT 423)
(701 GAY ST)

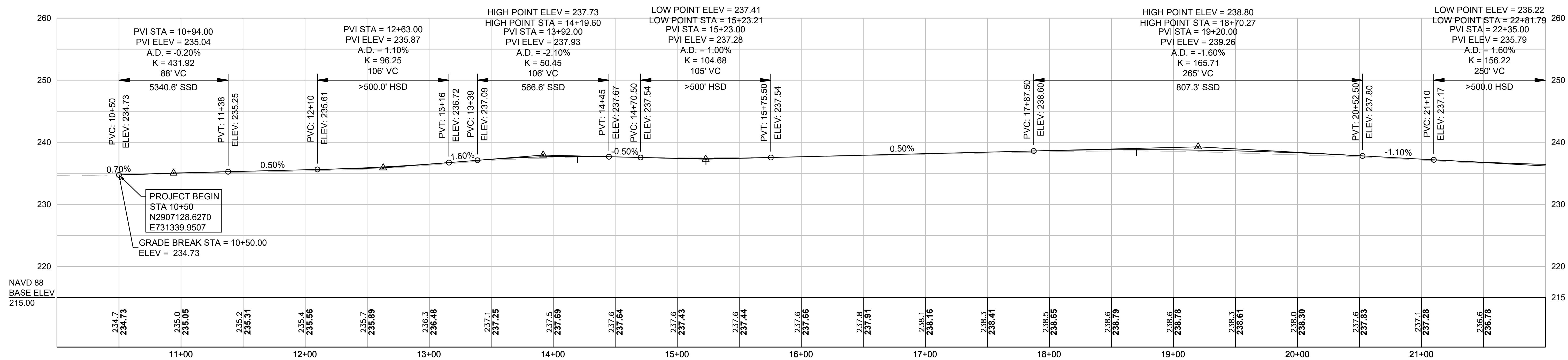
CHARLES G. MCGUCKEN
JENNIFER A. MCGUCKEN
DEED BOOK 13875, PAGE 386
PLAN 1048 OF 1972
(MAP 16, LOT 425)
(675 GAY ST)



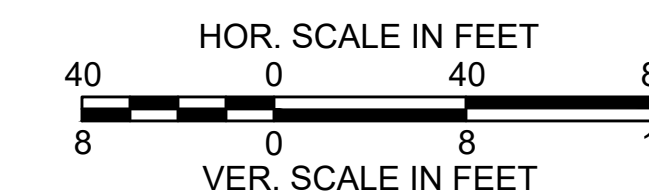
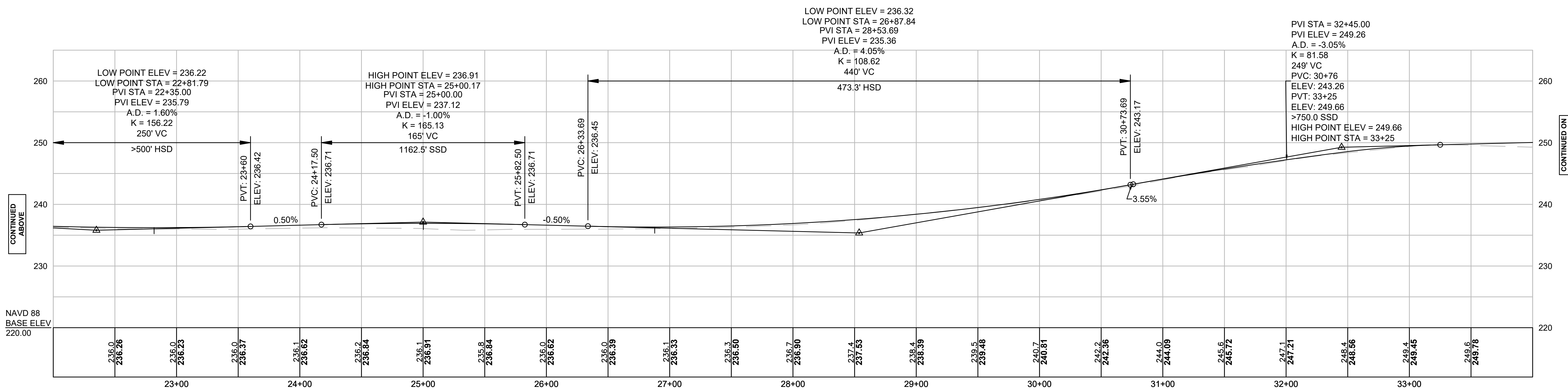
CONTINUED ON
SHEET 17

PROFILE NOTE: EXCEPT FOR WIDENING AT STATIONS 47+40 TO 57+05, 61+22 TO 62+34, 62+92 TO 66+08, AND 75+90 TO 77+52, IT IS INTENDED TO MATCH THE EXISTING ROADWAY GRADING WITH A PAVEMENT OVERLAY PROPOSED. FULL DEPTH PAVEMENT, ALONG THE LINES AND GRADES OF THE PROPOSED PROFILE, IS PROPOSED FROM STATIONS 23+25 TO 26+75, 33+75 TO 37+75, 42+25 TO 42+75, AND 51+25 TO 51+75.

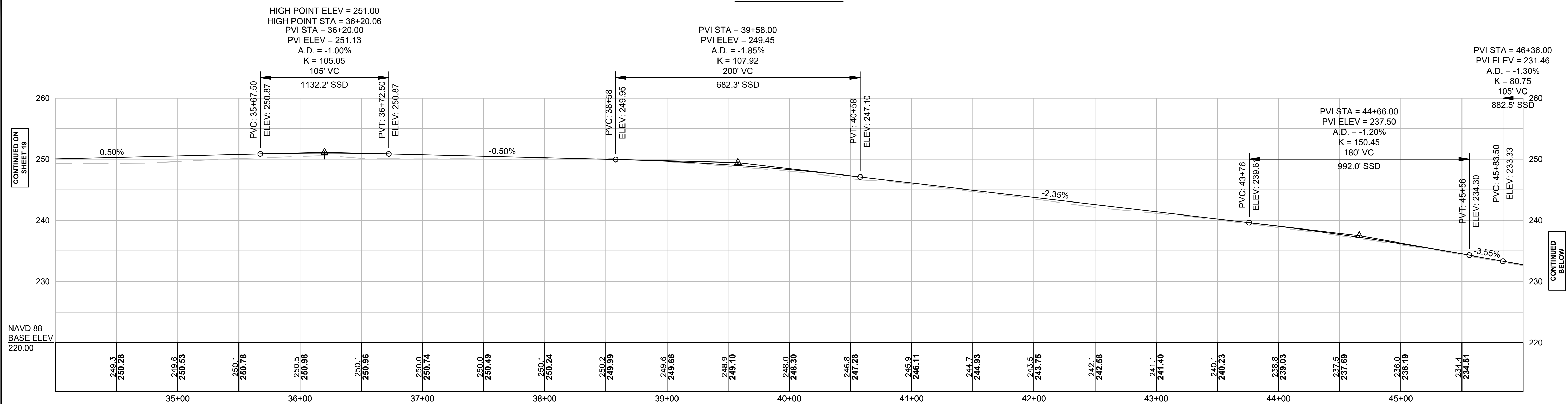
GAY STREET



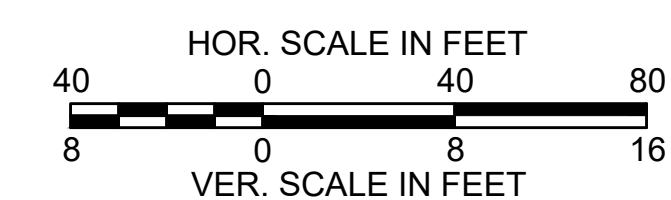
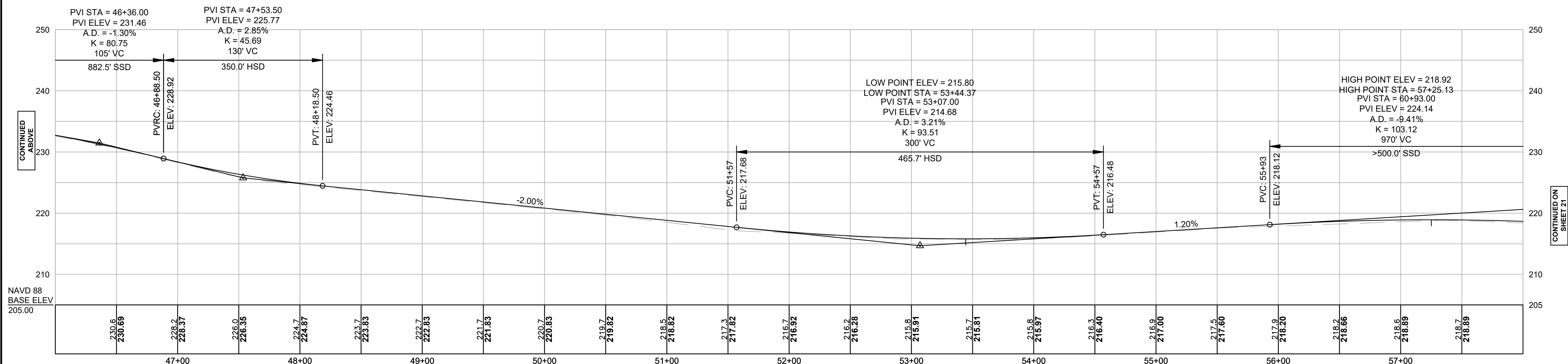
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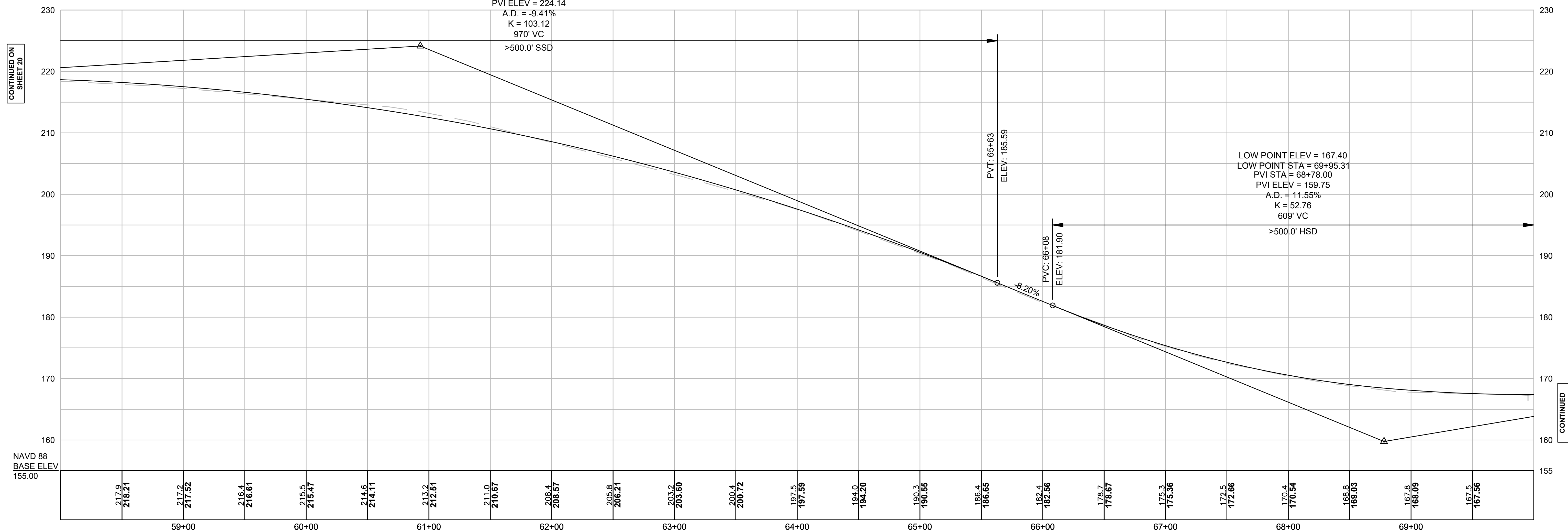
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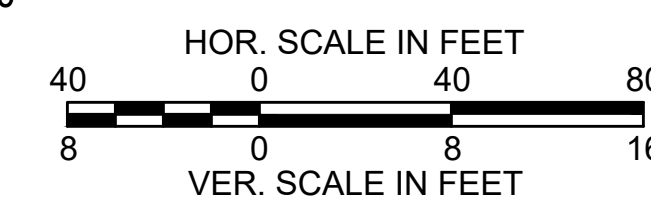
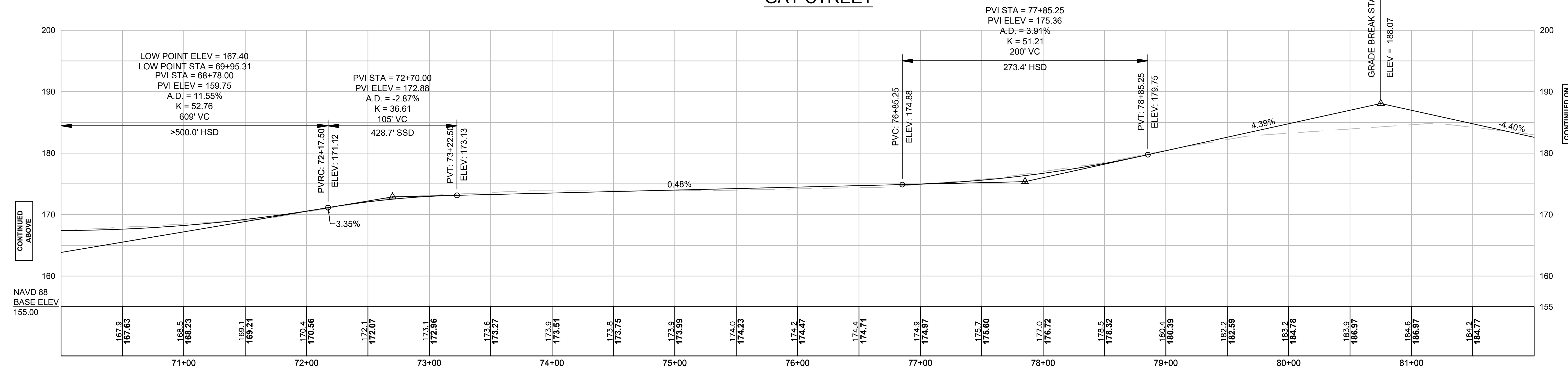
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GAY STREET



GAY STREET



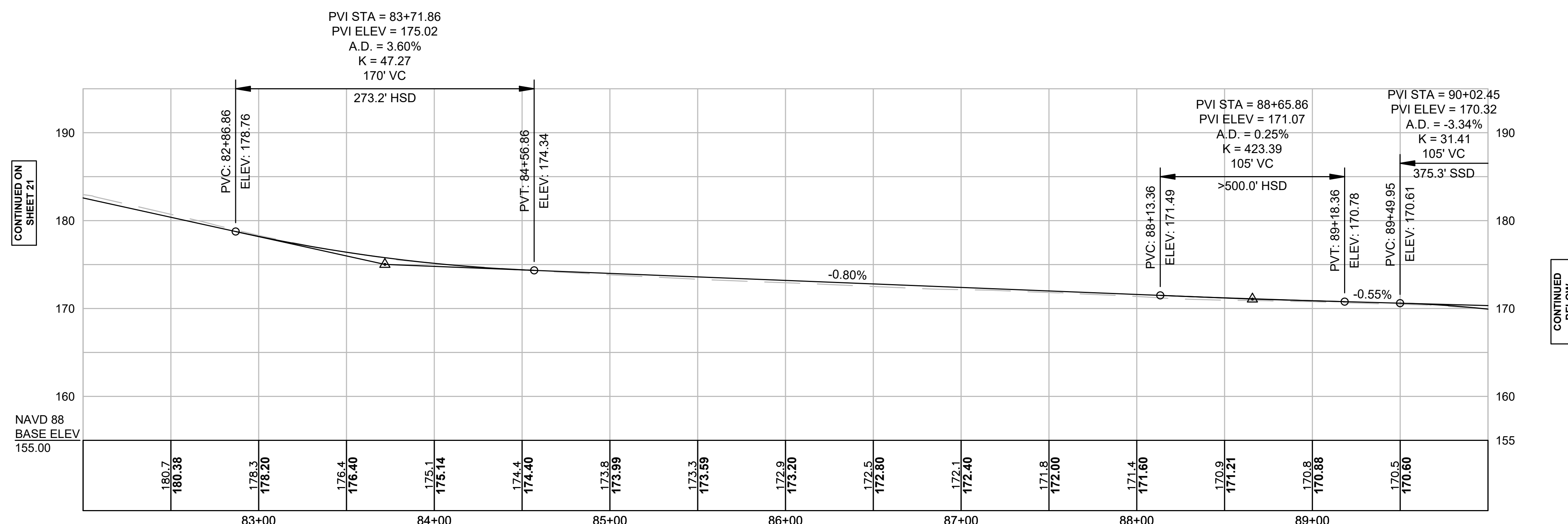
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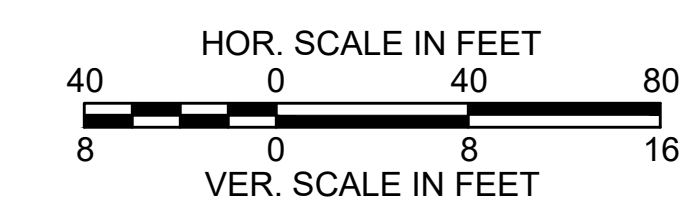
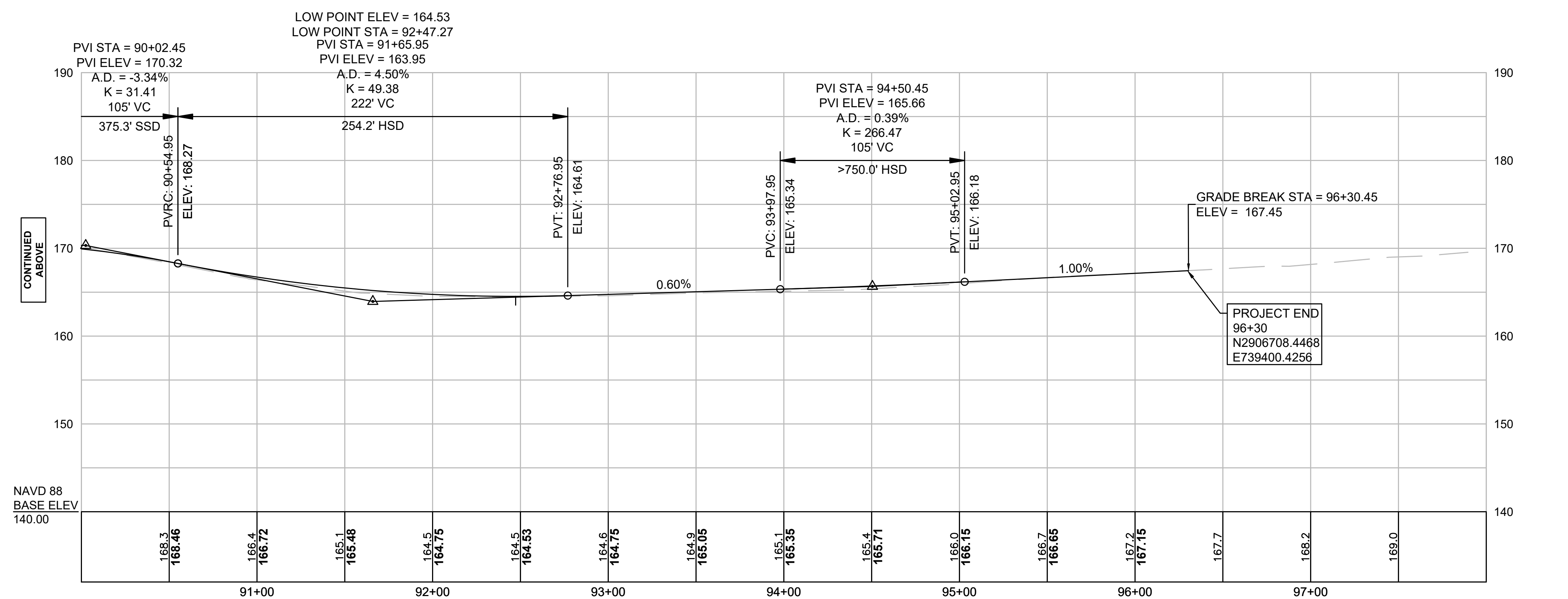
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ON
SHEET 22

GAY STREET



GAY STREET

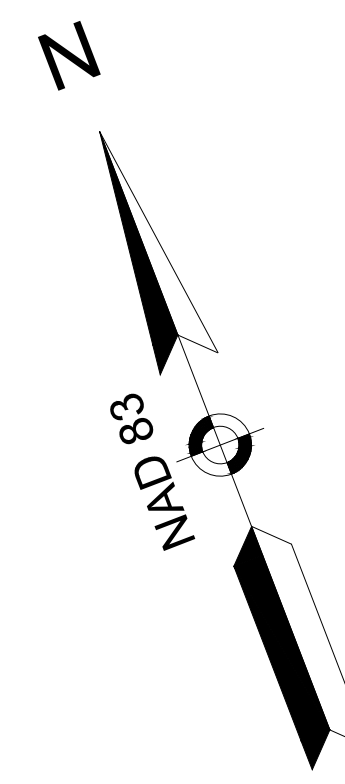


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 96+30
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 E739400.4256



PROJECT BEGIN
 STA 10+50
 N2907128.6270
 E731339.9507

HIGH STREET

COLBURN SCHOOL LLC
 DEED BOOK 31055, PAGE 185
 PLAN 48 OF 2012
 (MAP 14, LOT 181)
 (670-672 HIGH ST)

SALVATORE CAPITAL PARTNERS LLC
 DEED BOOK 29557, PAGE 497
 PLAN 450 OF 1940
 (MAP 14, LOT 080)
 (680 HIGH ST)

ROBERT C. & WENDE H. MALSTER
 DEED BOOK 11538, PAGE 626
 PLAN IN BOOK 1943, PAGE 353
 (MAP 14, LOT 081)
 (20 GAY ST)

STEPHEN D. KENNEY
 DEED BOOK 10317, PAGE 217
 DEED BOOK 1943, PAGE 353
 PLAN IN BOOK 1943, PAGE 353
 (MAP 14, LOT 082)
 (26 GAY ST)

ROBERT A. HOWARD
 DEED BOOK 32474, PAGE 512
 PLAN IN BOOK 1943, PAGE 353
 (MAP 14, LOT 083)
 (30 GAY ST)

EDWARD M. HALPIN III
 CHERYL A. HALPIN
 DEED BOOK 25616, PAGE 365
 PLAN IN BOOK 1943, PAGE 353
 (MAP 14, LOT 084)
 (38 GAY ST)

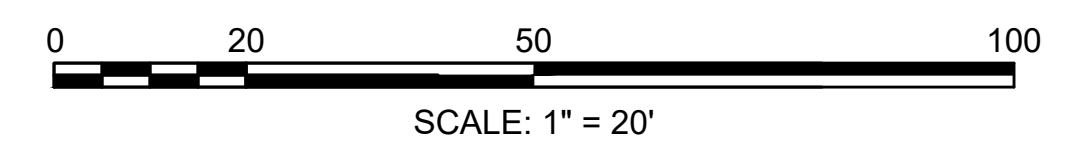
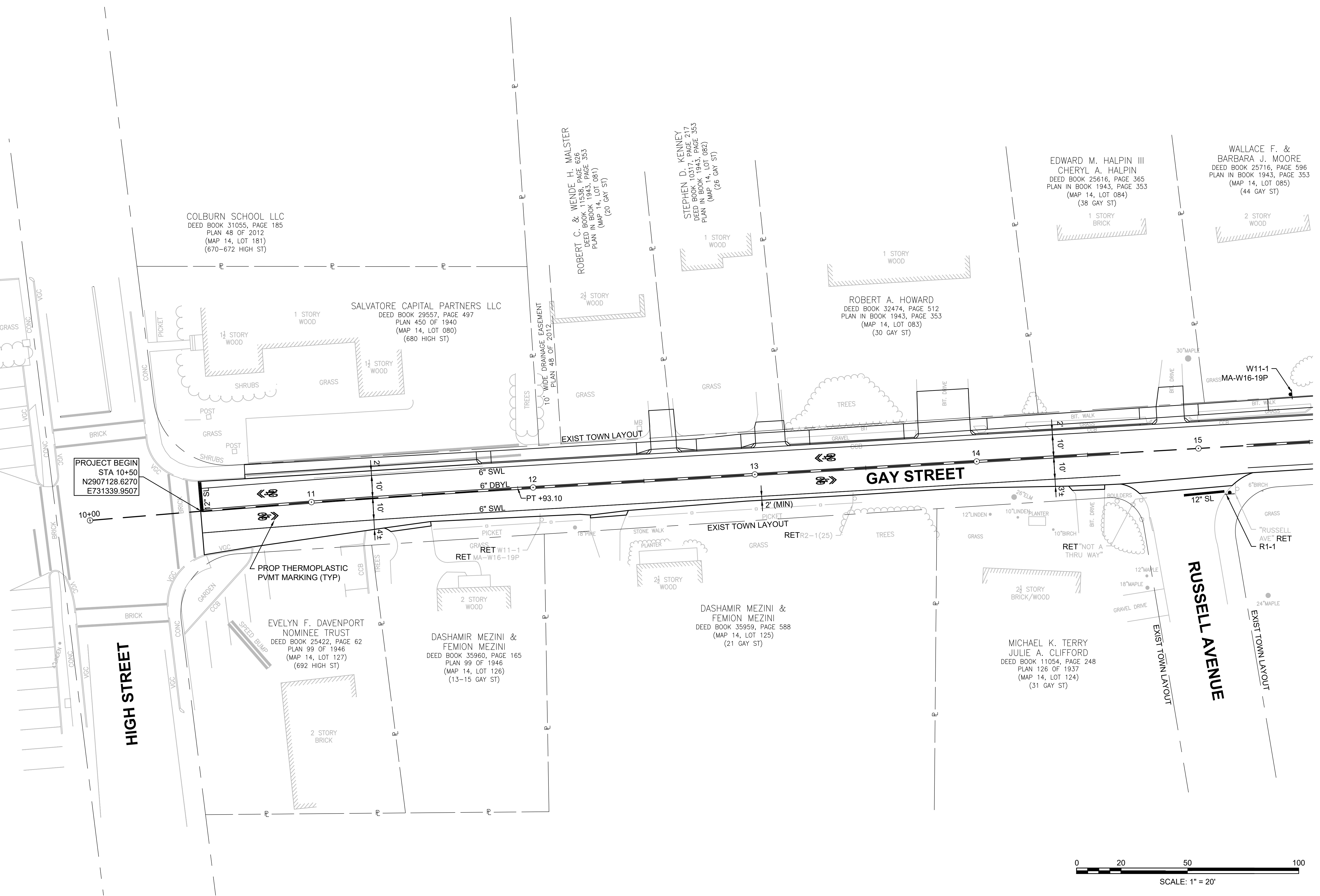
WALLACE F. &
 BARBARA J. MOORE
 DEED BOOK 25716, PAGE 596
 PLAN IN BOOK 1943, PAGE 353
 (MAP 14, LOT 085)
 (44 GAY ST)

EVELYN F. DAVENPORT
 NOMINEE TRUST
 DEED BOOK 25422, PAGE 62
 PLAN 99 OF 1946
 (MAP 14, LOT 127)
 (692 HIGH ST)

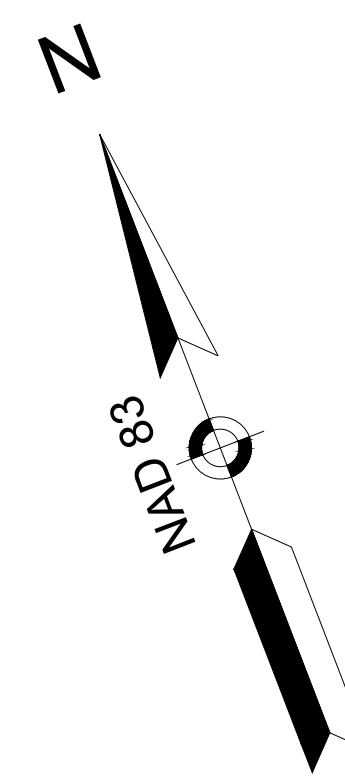
DASHAMIR MEZINI &
 FEMION MEZINI
 DEED BOOK 35960, PAGE 165
 PLAN 99 OF 1946
 (MAP 14, LOT 126)
 (13-15 GAY ST)

DASHAMIR MEZINI &
 FEMION MEZINI
 DEED BOOK 35959, PAGE 588
 (MAP 14, LOT 125)
 (21 GAY ST)

MICHAEL K. TERRY
 JULIE A. CLIFFORD
 DEED BOOK 11054, PAGE 248
 PLAN 126 OF 1937
 (MAP 14, LOT 124)
 (31 GAY ST)



CONTINUED ON
 SHEET 24



WALLACE F. &
 BARBARA J. MOORE
 DEED BOOK 25716, PAGE 596
 PLAN IN BOOK 1943, PAGE 353
 (MAP 14, LOT 085)
 (44 GAY ST)

ALEXANDER JONES &
 SARA PERKINS JONES
 DEED BOOK 36140, PAGE 410
 PLAN IN BOOK 1943, PAGE 353
 (MAP 14, LOT 086)
 (50 GAY ST)

CHRISTINE E. CANNON &
 KEVIN V. COUGHLIN
 DEED BOOK 35931, PAGE 348
 PLAN IN BOOK 1943, PAGE 353
 (MAP 14, LOT 087)
 (56 GAY ST)

IAN S. WATSON &
 LAURA IRWIN COLLINS
 DEED BOOK 35235, PAGE 406
 PLAN IN BOOK 1943, PAGE 353
 (MAP 14, LOT 088)
 (58 GAY ST)

DAVID &
 DOROTHY A. CONLEY
 DEED BOOK 4548, PAGE 526
 PLAN IN BOOK 1767, PAGE 485
 (MAP 14, LOT 089)
 (74 GAY ST)

JEFFREY R. SMITH
 ALICE R. POIRIER
 DEED BOOK 7632, PAGE 96
 PLAN 707 OF 1928
 (MAP 14, LOT 104)
 (78 GAY ST)

94 GAY STREET
 NOMINEE TRUST
 DEED BOOK 23213, PAGE 233
 PLAN 1130 OF 1948
 (MAP 14, LOT 105)
 (94 GAY ST)

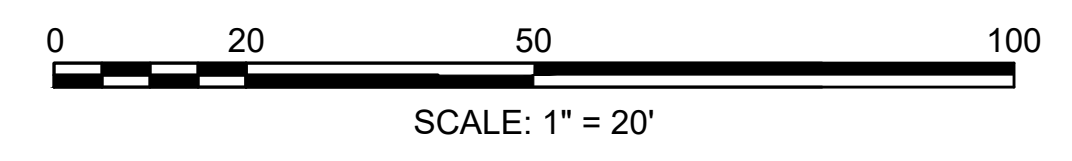
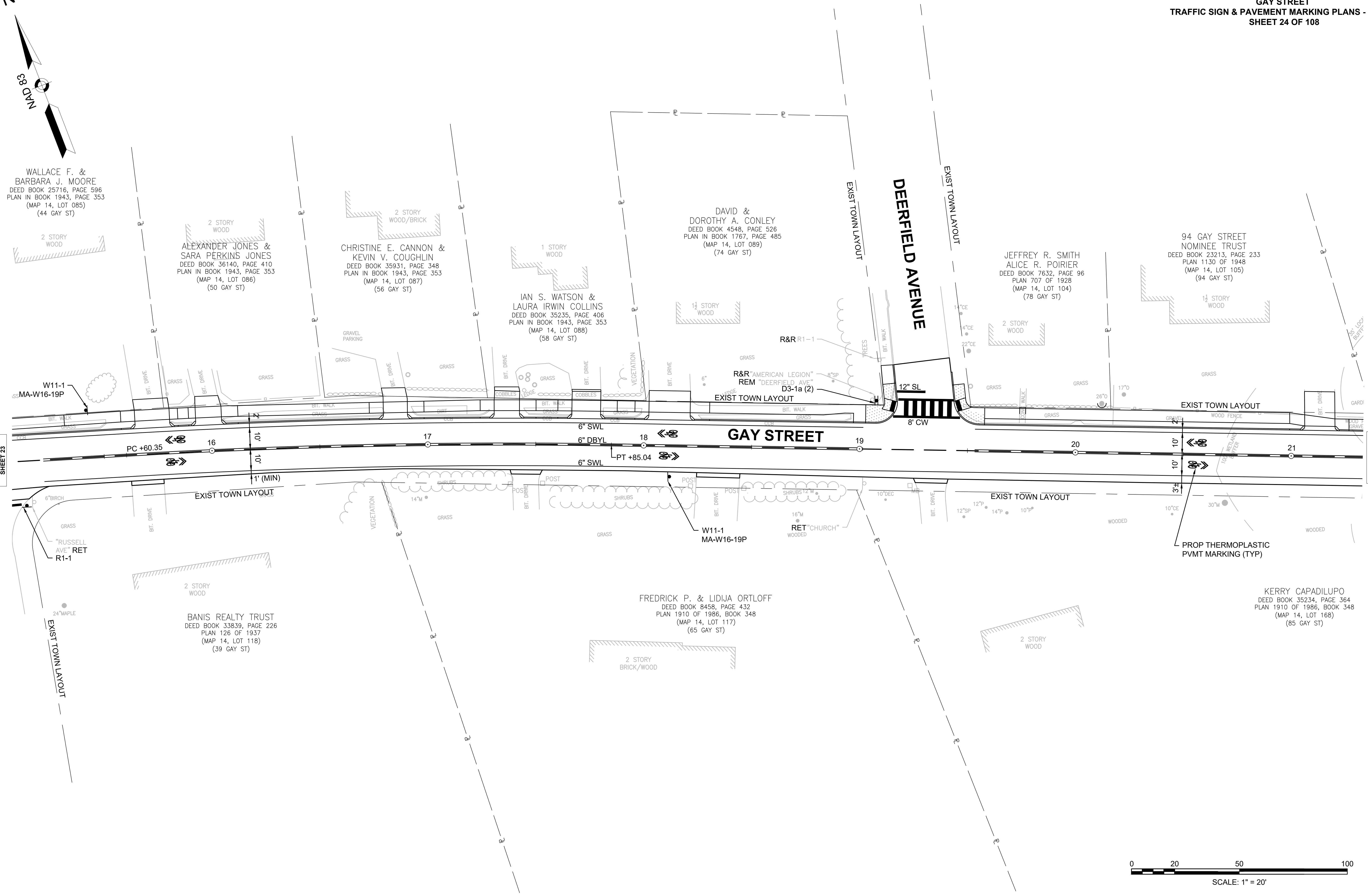
BANIS REALTY TRUST
 DEED BOOK 33839, PAGE 226
 PLAN 126 OF 1937
 (MAP 14, LOT 118)
 (39 GAY ST)

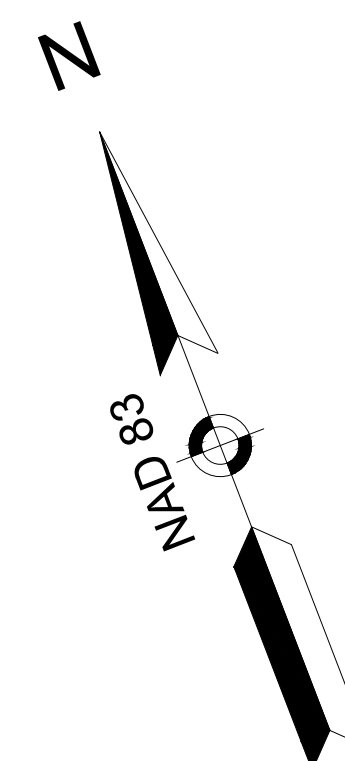
FREDRICK P. & LIDIJA ORTLOFF
 DEED BOOK 8458, PAGE 432
 PLAN 1910 OF 1986, BOOK 348
 (MAP 14, LOT 117)
 (65 GAY ST)

KERRY CAPADILUPO
 DEED BOOK 35234, PAGE 364
 PLAN 1910 OF 1986, BOOK 348
 (MAP 14, LOT 168)
 (85 GAY ST)

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 SHEET 23

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 SHEET 25





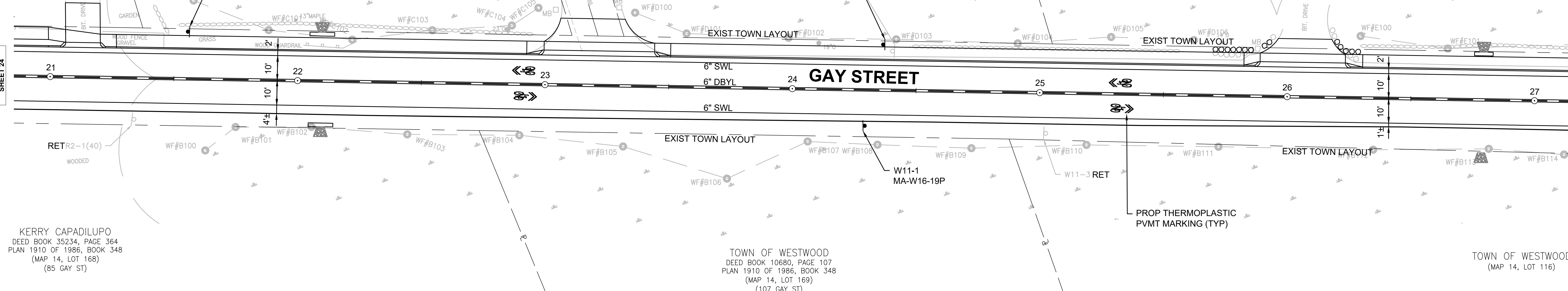
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CONTINUED ON
SHEET 26

MARIA GIANNAROS
 DEED BOOK 7243, PAGE 725
 PLAN 306 OF 1984
 (MAP 14, LOT 162)
 (100 GAY ST)

FADI N. & RANIA A. HOMSY
 DEED BOOK 22405, PAGE 269
 PLAN 306 OF 1984
 (MAP 14, LOT 163)
 (114 GAY ST)

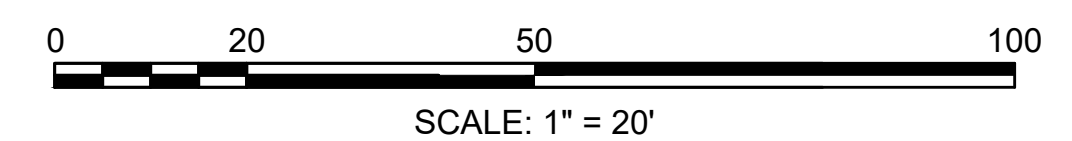
KAMAL M.F. & GHEED A. ITANI
 DEED BOOK 21822, PAGE 556
 PLAN 306 OF 1984
 (MAP 14, LOT 164)
 (130 GAY ST)

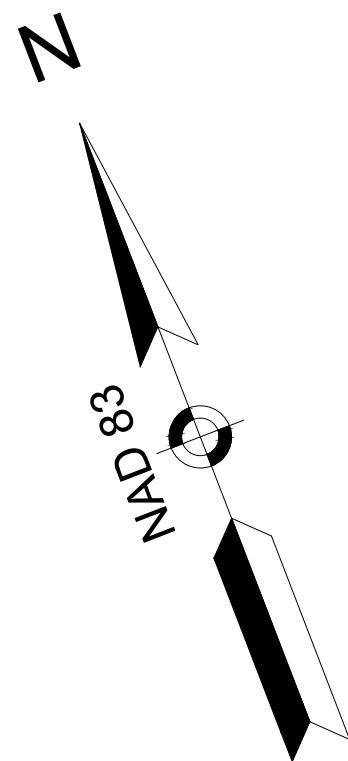


KERRY CAPADILUPO
 DEED BOOK 35234, PAGE 364
 PLAN 1910 OF 1986, BOOK 348
 (MAP 14, LOT 168)
 (85 GAY ST)

TOWN OF WESTWOOD
 DEED BOOK 10680, PAGE 107
 PLAN 1910 OF 1986, BOOK 348
 (MAP 14, LOT 169)
 (107 GAY ST)

TOWN OF WESTWOOD
 (MAP 14, LOT 116)





YOUZHI LI & MINYING PU
 DEED BOOK 32342, PAGE 208
 PLAN 234 OF 2000, BOOK 474
 (MAP 14, LOT 177)
 (142 GAY ST)

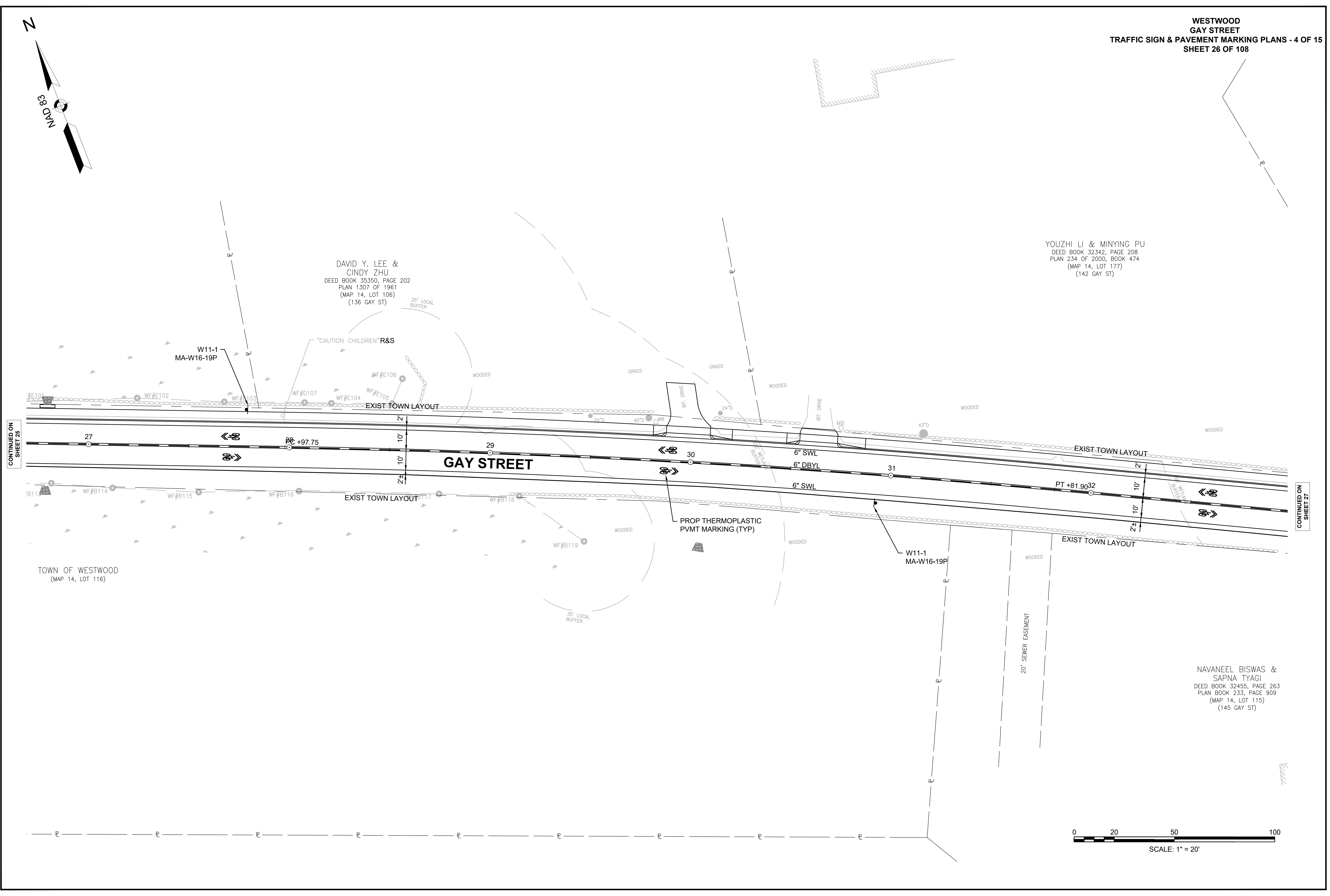
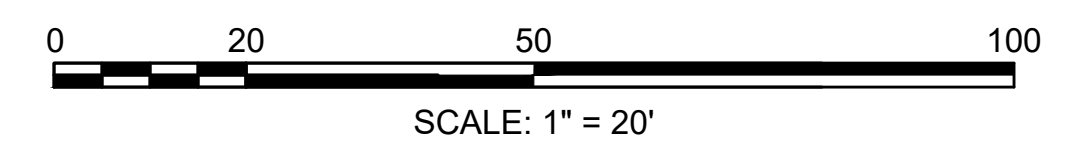
DAVID Y. LEE &
 CINDY ZHU
 DEED BOOK 35350, PAGE 202
 PLAN 1307 OF 1961
 (MAP 14, LOT 106)
 (136 GAY ST)

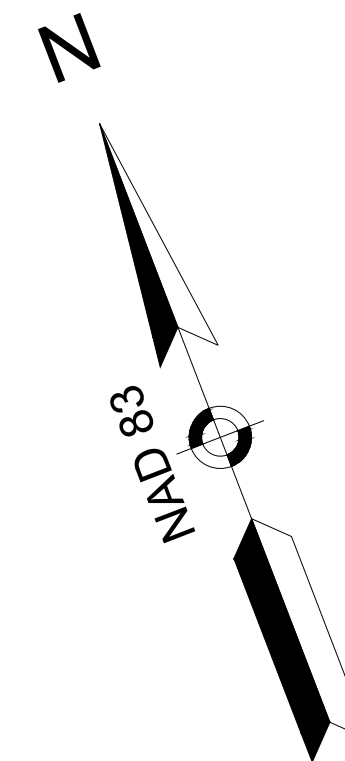
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 SHEET 27

TOWN OF WESTWOOD
 (MAP 14, LOT 116)

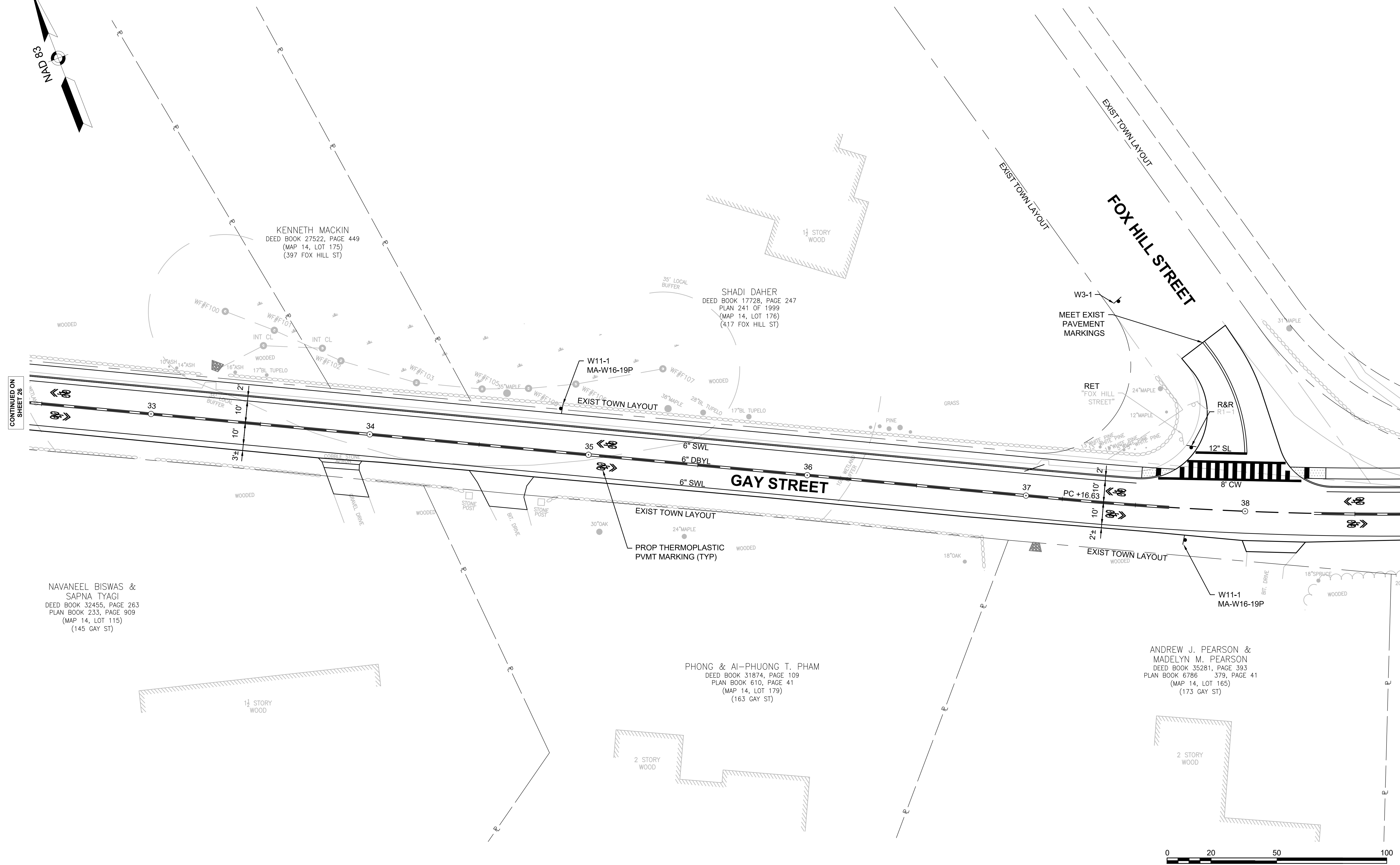
NAVANEEL BISWAS &
 SAPNA TYAGI
 DEED BOOK 32455, PAGE 263
 PLAN BOOK 233, PAGE 909
 (MAP 14, LOT 115)
 (145 GAY ST)





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SHEET 26

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SHEET 28



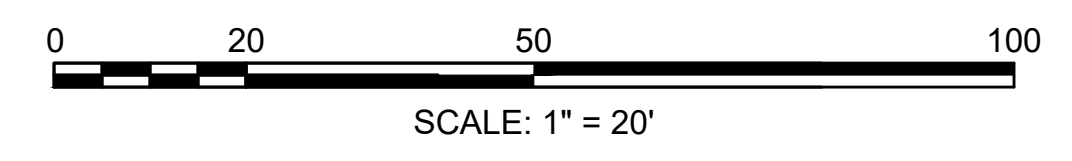
NAVANEEL BISWAS &
 SAPNA TYAGI
 DEED BOOK 32455, PAGE 263
 PLAN BOOK 233, PAGE 909
 (MAP 14, LOT 115)
 (145 GAY ST)

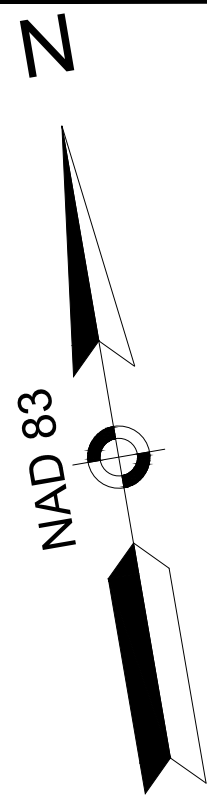
KENNETH MACKIN
 DEED BOOK 27522, PAGE 449
 (MAP 14, LOT 175)
 (397 FOX HILL ST)

SHADI DAHER
 DEED BOOK 17728, PAGE 247
 PLAN 241 OF 1999
 (MAP 14, LOT 176)
 (417 FOX HILL ST)

PHONG & AI-PHONG T. PHAM
 DEED BOOK 31874, PAGE 109
 PLAN BOOK 610, PAGE 41
 (MAP 14, LOT 179)
 (163 GAY ST)

ANDREW J. PEARSON &
 MADELYN M. PEARSON
 DEED BOOK 35281, PAGE 393
 PLAN BOOK 6786 379, PAGE 41
 (MAP 14, LOT 165)
 (173 GAY ST)



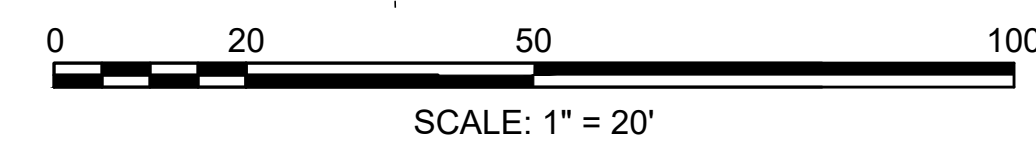
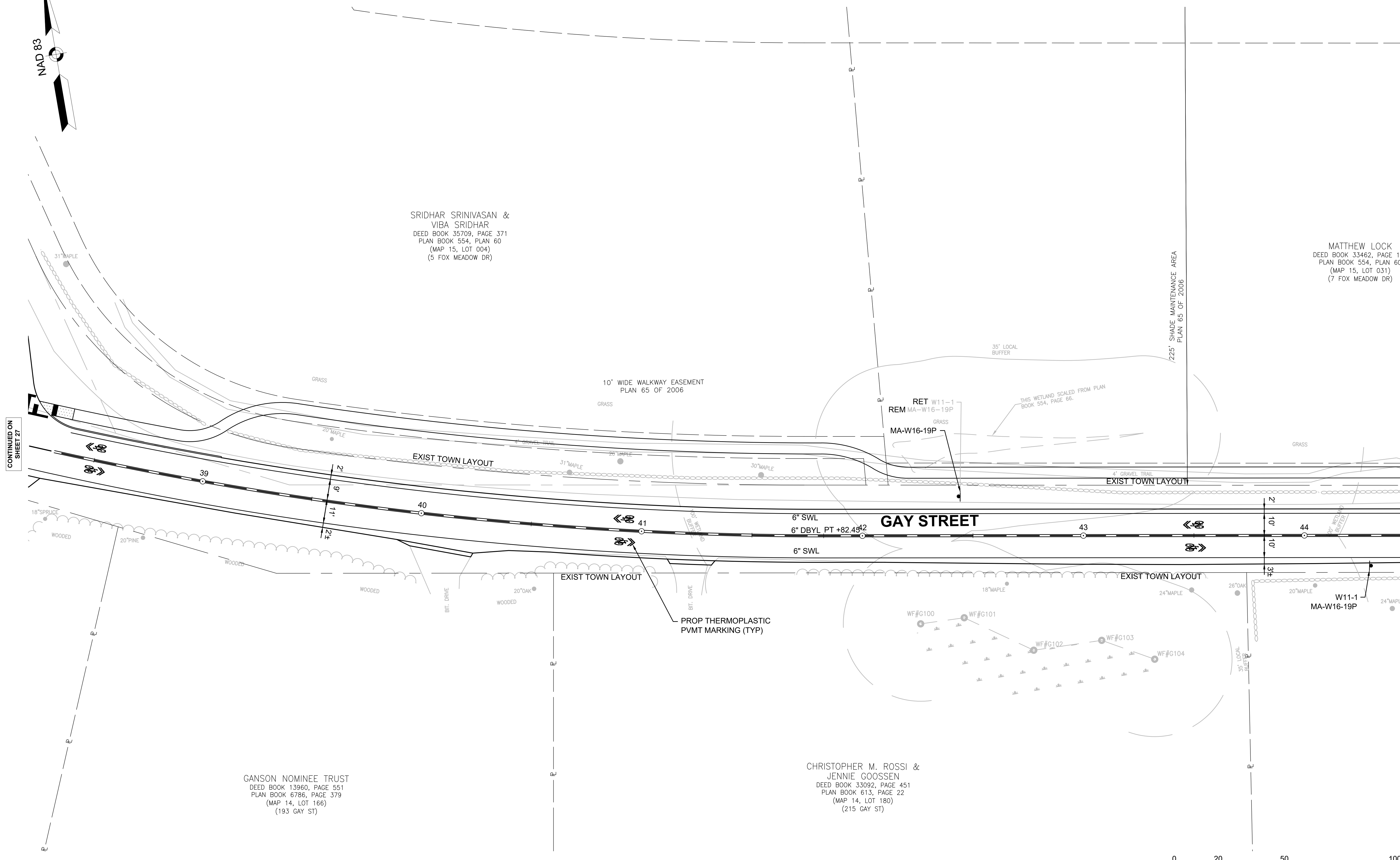


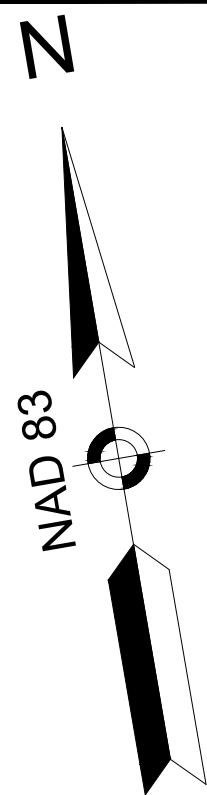
SRIDHAR SRINIVASAN &
 VIBA SRIDHAR
 DEED BOOK 35709, PAGE 371
 PLAN BOOK 554, PLAN 60
 (MAP 15, LOT 004)
 (5 FOX MEADOW DR)

MATTHEW LOCK
 DEED BOOK 33462, PAGE 127
 PLAN BOOK 554, PLAN 60
 (MAP 15, LOT 031)
 (7 FOX MEADOW DR)

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 SHEET 27

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 SHEET 29



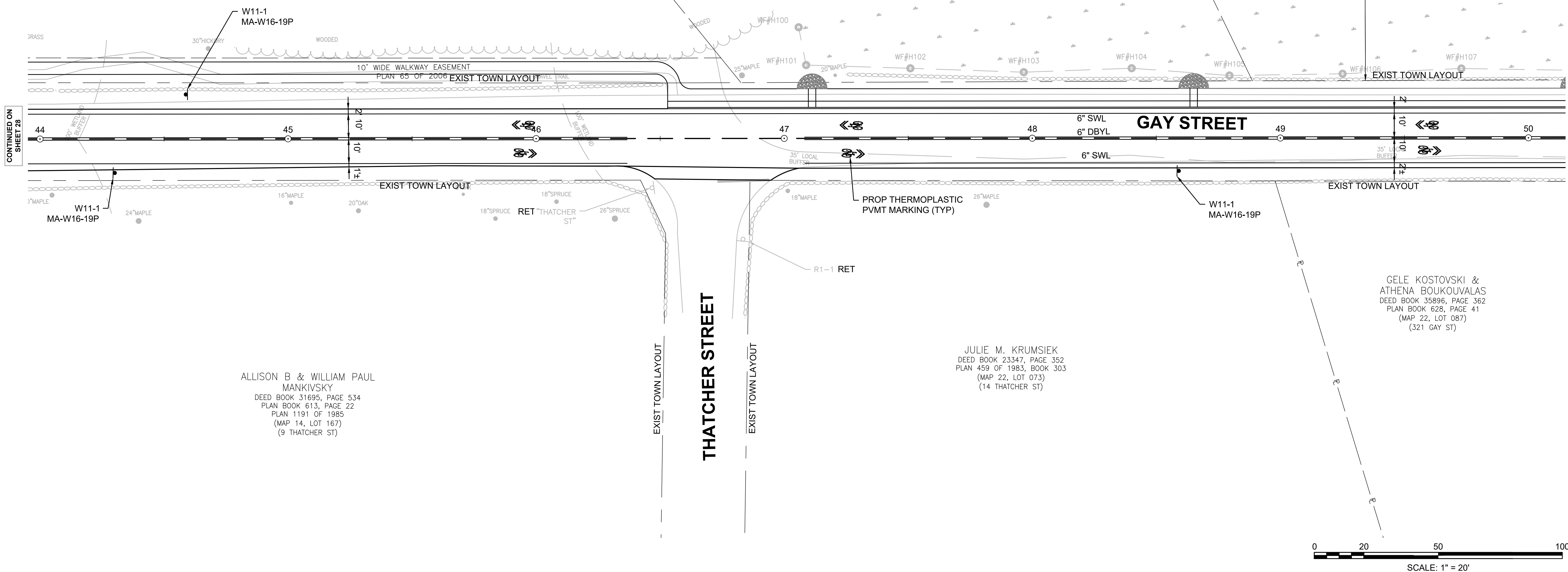


MATTHEW LOCK
DEED BOOK 33462, PAGE 127
PLAN BOOK 554, PLAN 60
(MAP 15, LOT 031)
(7 FOX MEADOW DR)

ARKADY NAIMAN &
EUGINA NAIMAN
DEED BOOK 35368, PAGE 1
PLAN BOOK 554, PLAN 60
(MAP 15, LOT 034)
(9 FOX MEADOW DR)

ASAAD IRREVOCABLE FAMILY TRUST
DEED BOOK 29135, PAGE 457
PLAN BOOK 554, PLAN 60
(MAP 15, LOT 035)
(11 FOX MEADOW DR)

200' RESTRICTED AREA
PLAN 65 OF 2006



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SHEET 28

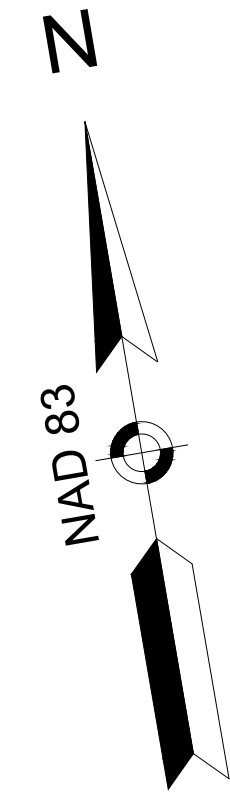
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ALLISON B & WILLIAM PAUL
MANKIVSKY
DEED BOOK 31695, PAGE 534
PLAN BOOK 613, PAGE 22
PLAN 1191 OF 1985
(MAP 14, LOT 167)
(9 THATCHER ST)

JULIE M. KRUMSIEK
DEED BOOK 23347, PAGE 352
PLAN 459 OF 1983, BOOK 303
(MAP 22, LOT 073)
(14 THATCHER ST)

GELE KOSTOVSKI &
ATHENA BOUKOUVALAS
DEED BOOK 35896, PAGE 362
PLAN BOOK 628, PAGE 41
(MAP 22, LOT 087)
(321 GAY ST)





ASAAD IRREVOCABLE FAMILY TRUST
 DEED BOOK 29135, PAGE 457
 PLAN BOOK 554, PLAN 60
 (MAP 15, LOT 035)
 (11 FOX MEADOW DR)

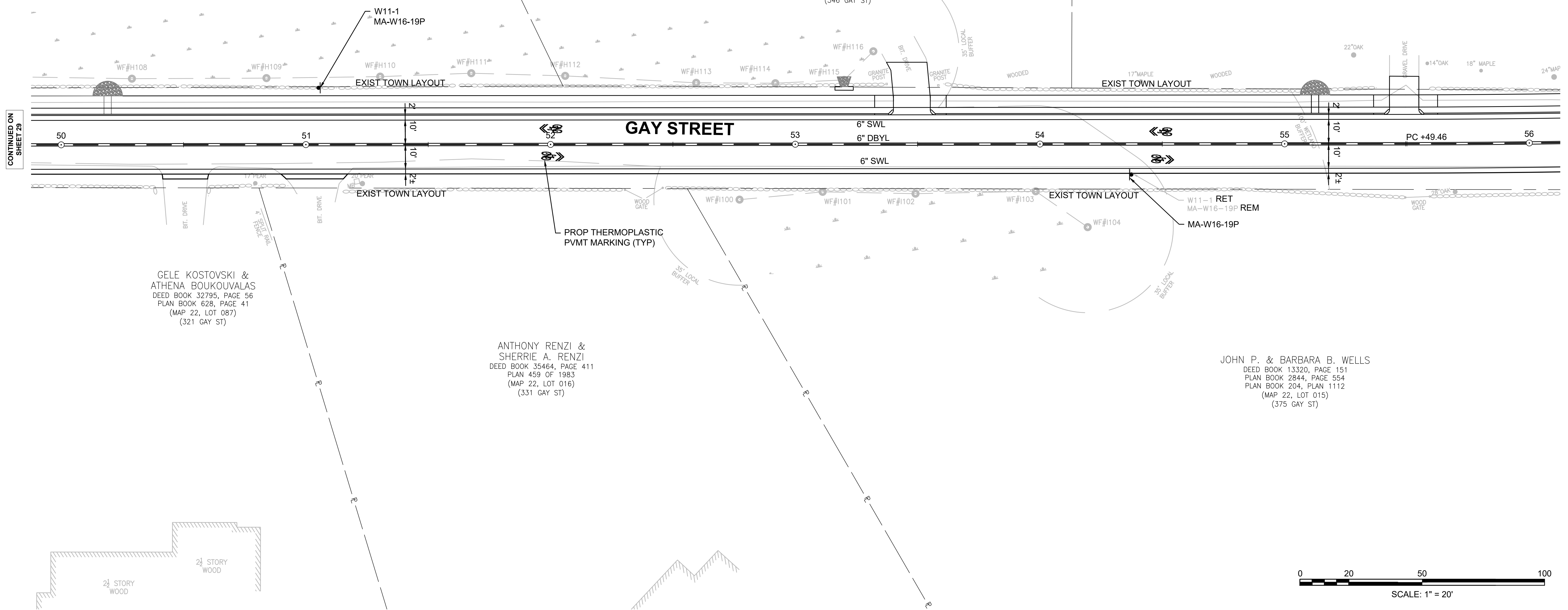
ROBERT M.A. & REBECCA C. FORRESTER
 L.C. CERT #173799
 L.C. PLAN #12075F
 (MAP 15, LOT 006 & 007)
 (346 GAY ST)

DANIELLE DWYER KAPLAN
 L.C. CERT #183131
 L.C. PLAN #12075F
 (MAP 15, LOT 008)
 (364 GAY ST)

GELE KOSTOVSKI &
 ATHENA BOUKOUVALAS
 DEED BOOK 32795, PAGE 56
 PLAN BOOK 628, PAGE 41
 (MAP 22, LOT 087)
 (321 GAY ST)

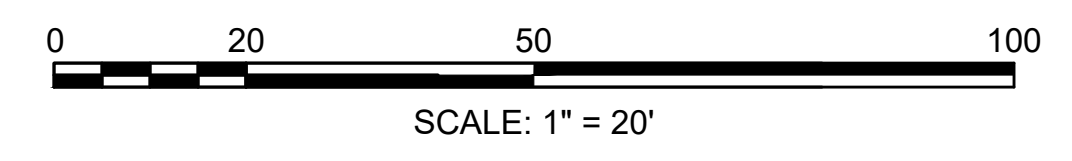
ANTHONY RENZI &
 SHERRIE A. RENZI
 DEED BOOK 35464, PAGE 411
 PLAN 459 OF 1983
 (MAP 22, LOT 016)
 (331 GAY ST)

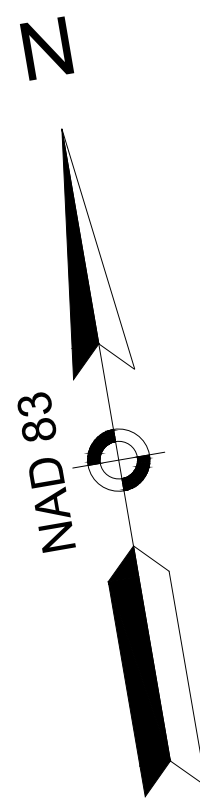
JOHN P. & BARBARA B. WELLS
 DEED BOOK 13320, PAGE 151
 PLAN BOOK 2844, PAGE 554
 PLAN BOOK 204, PLAN 1112
 (MAP 22, LOT 015)
 (375 GAY ST)



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 SHEET 29

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 SHEET 31

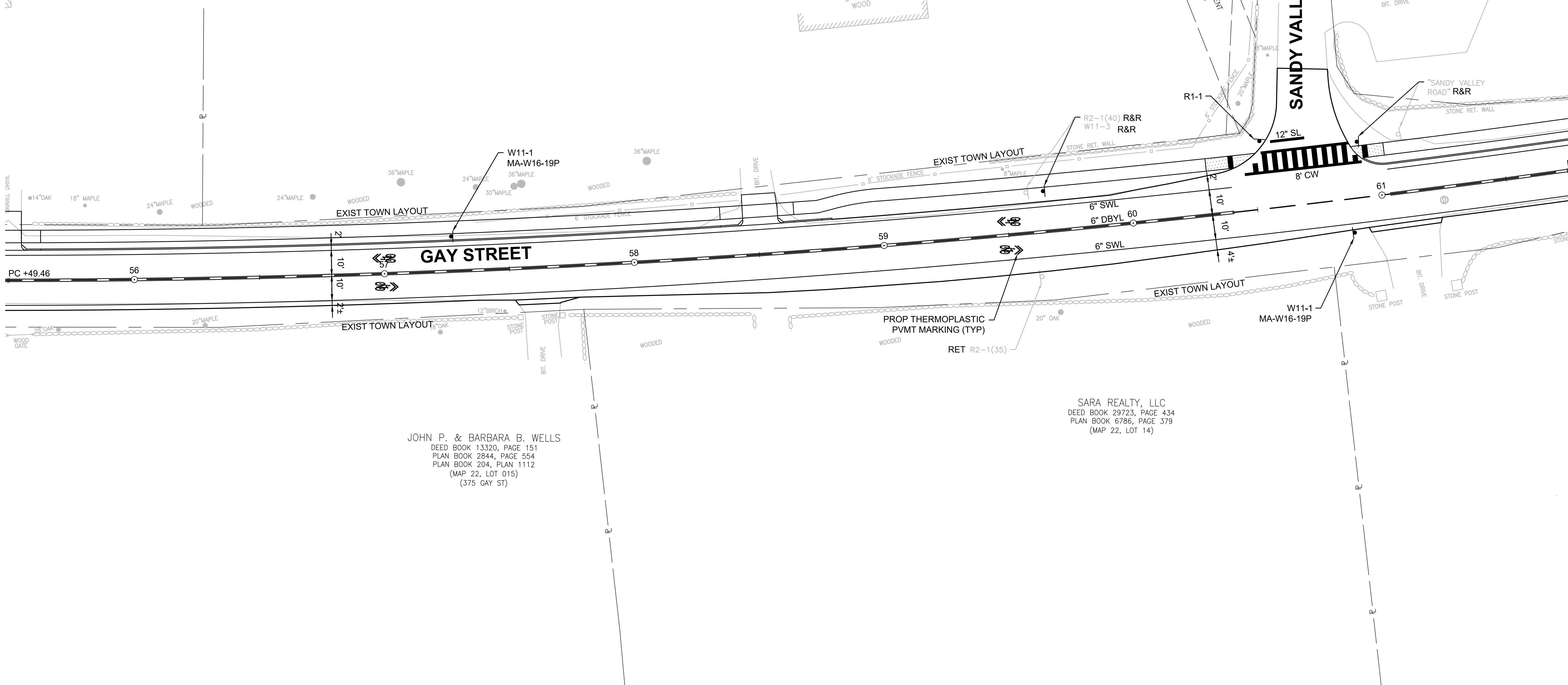




ROBERT R. & KAREN S. BRACE
 L.C. CERT #143754
 L.C. PLAN #12075J
 (MAP 15, LOT 009)
 (400 GAY ST)



SANDY VALLEY ROAD

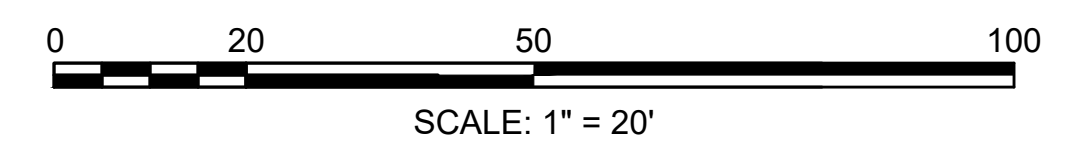


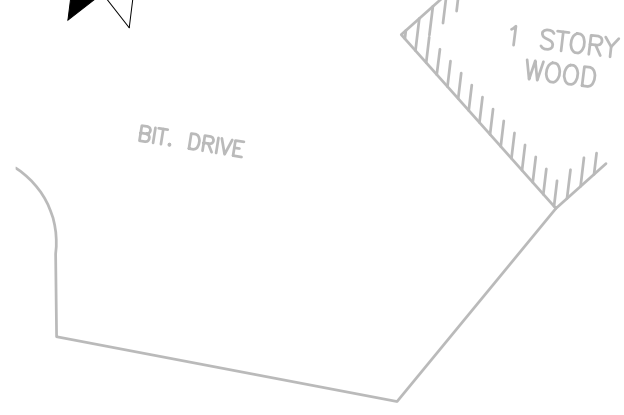
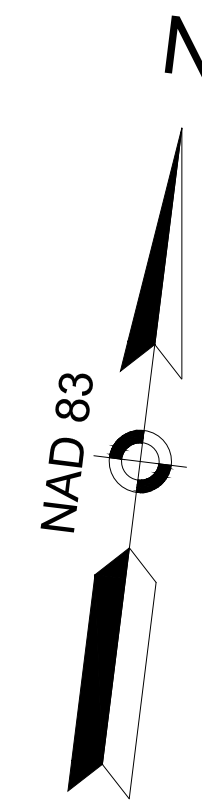
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 SHEET 32

JOHN P. & BARBARA B. WELLS
 DEED BOOK 13320, PAGE 151
 PLAN BOOK 2844, PAGE 554
 PLAN BOOK 204, PLAN 1112
 (MAP 22, LOT 015)
 (375 GAY ST)

SARA REALTY, LLC
 DEED BOOK 29723, PAGE 434
 PLAN BOOK 6786, PAGE 379
 (MAP 22, LOT 14)





HILLSIDE FARM REALTY TRUST
DEED BOOK 25036, PAGE 471
PLAN 204 OF 1953
(MAP 15, LOT 022)
(506 SANDY VALLEY RD)

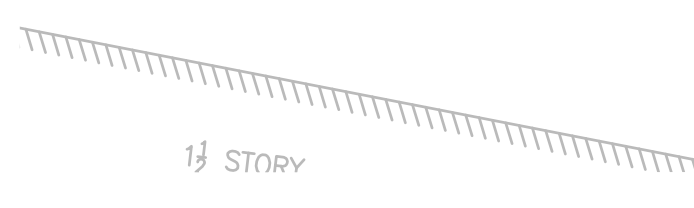
JOSEPH JR & MEREDITH DIBATTISTA
L.C. CERT #189803
PLAN 204 OF 1953
L.C. PLAN #120751
(MAP 15, LOT 023)
(438 GAY ST)

W11-1
MA-W16-19P

TODD F. BOURELL
BROOKE C. BAILEY
DEED BOOK 23600, PAGE 331
PLAN 125 OF 1979
(MAP 22, LOT 012)
(439 GAY ST)

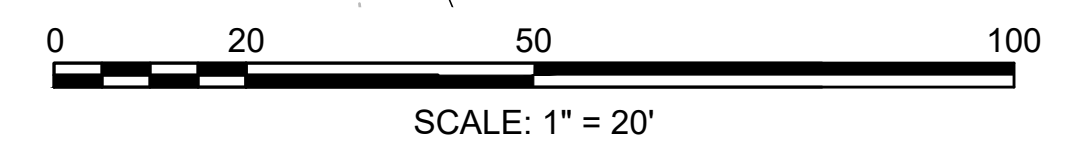
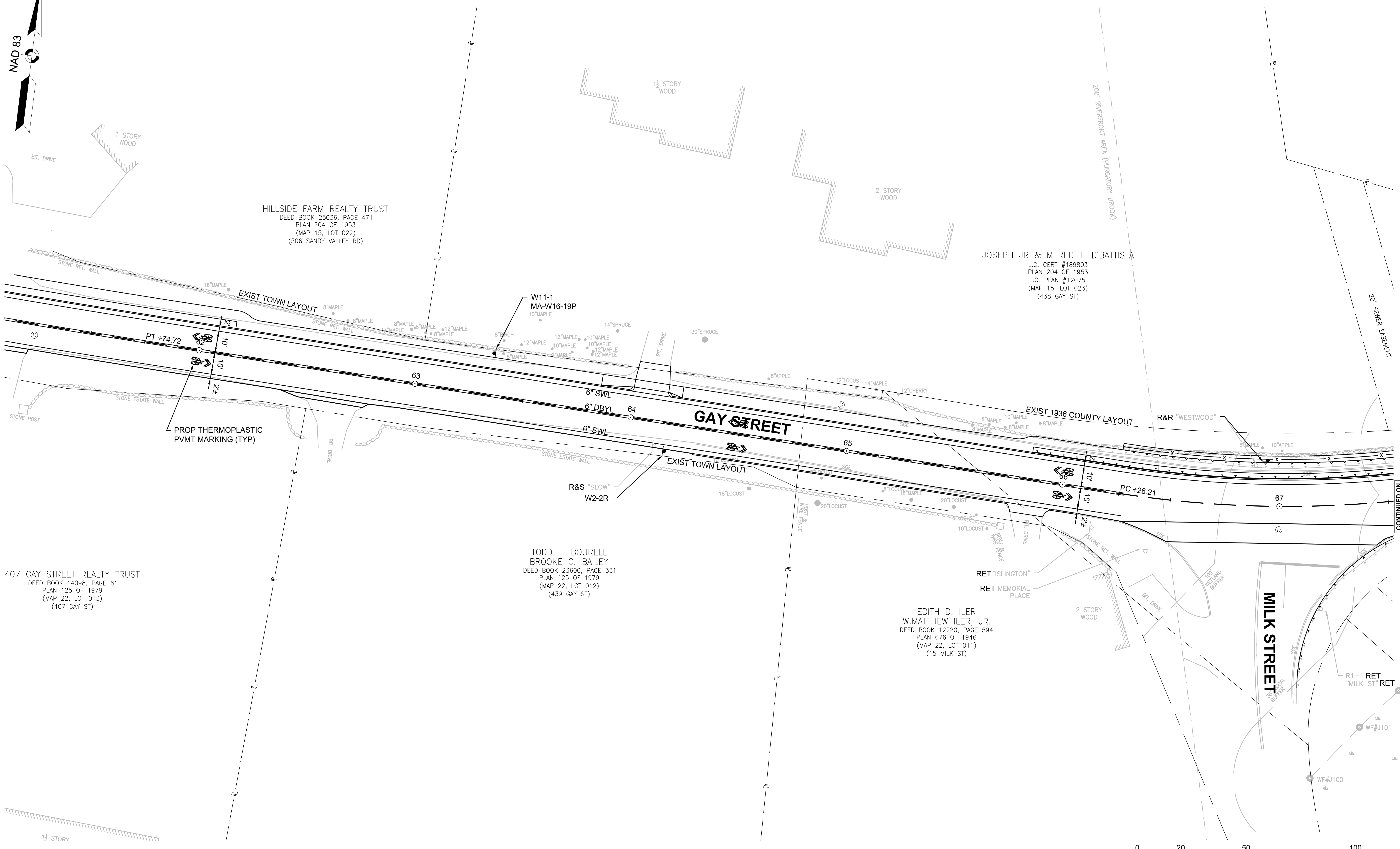
EDITH D. ILER
W. MATTHEW ILER, JR.
DEED BOOK 12220, PAGE 594
PLAN 676 OF 1946
(MAP 22, LOT 011)
(15 MILK ST)

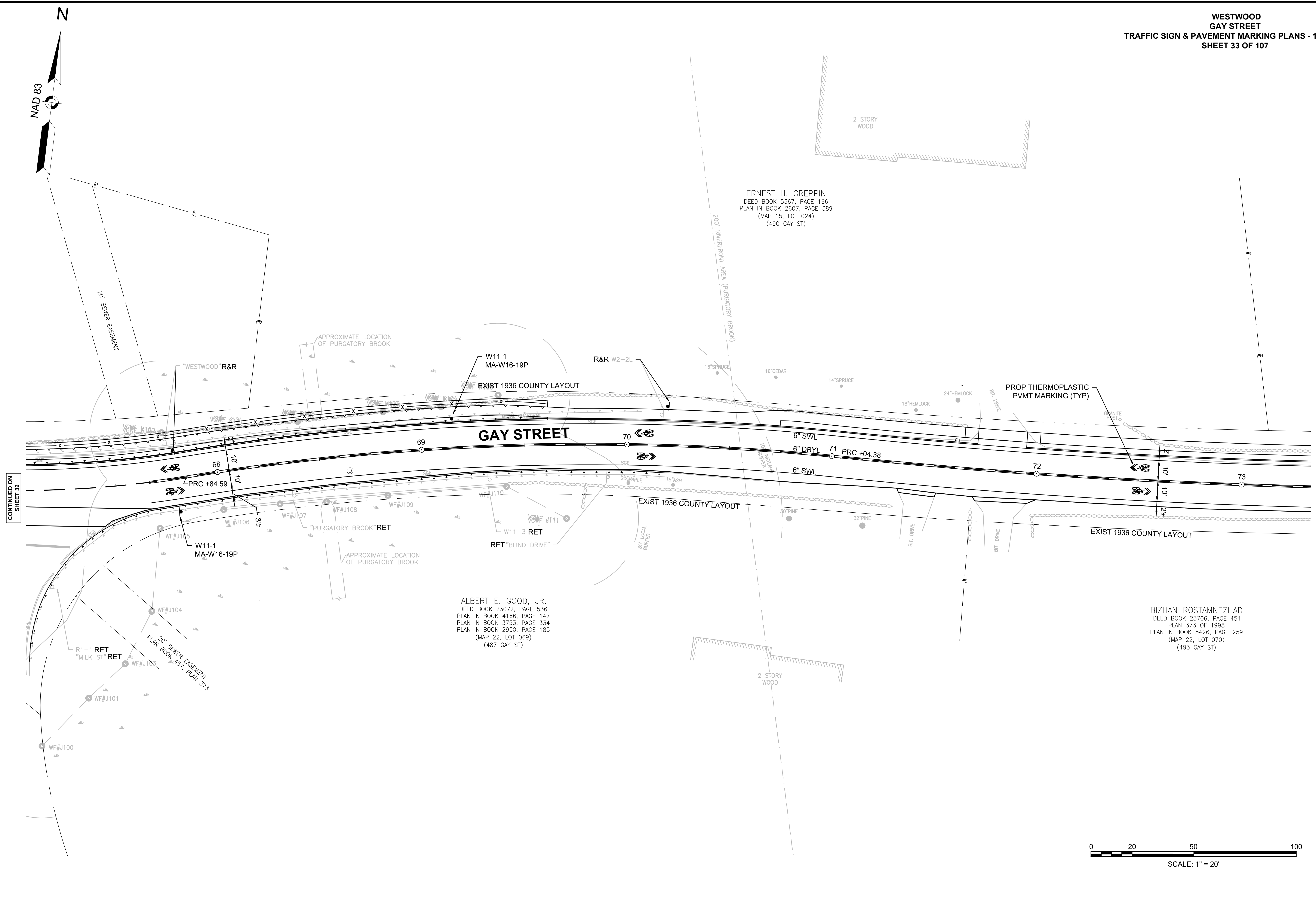
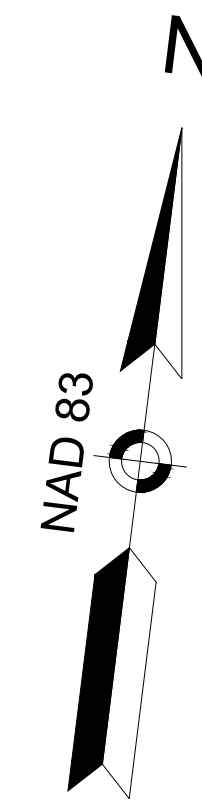
407 GAY STREET REALTY TRUST
DEED BOOK 14098, PAGE 61
PLAN 125 OF 1979
(MAP 22, LOT 013)
(407 GAY ST)



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SHEET 31

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SHEET 33





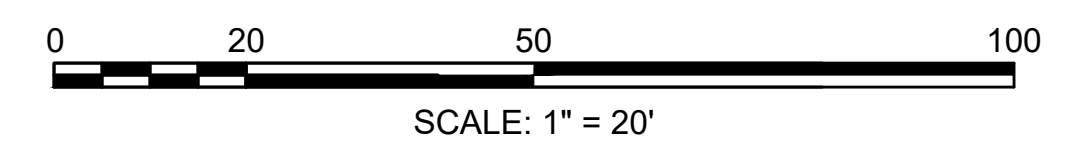
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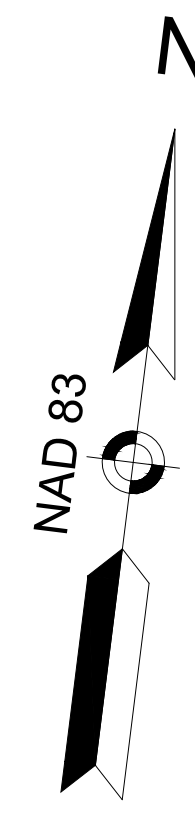
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ALBERT E. GOOD, JR.
 DEED BOOK 23072, PAGE 536
 PLAN IN BOOK 4166, PAGE 147
 PLAN IN BOOK 3753, PAGE 334
 PLAN IN BOOK 2950, PAGE 185
 (MAP 22, LOT 069)
 (487 GAY ST)

ERNEST H. GREPPIN
 DEED BOOK 5367, PAGE 166
 PLAN IN BOOK 2607, PAGE 389
 (MAP 15, LOT 024)
 (490 GAY ST)

BIZHAN ROSTAMNEZHAD
 DEED BOOK 23706, PAGE 451
 PLAN 373 OF 1998
 PLAN IN BOOK 5426, PAGE 259
 (MAP 22, LOT 070)
 (493 GAY ST)



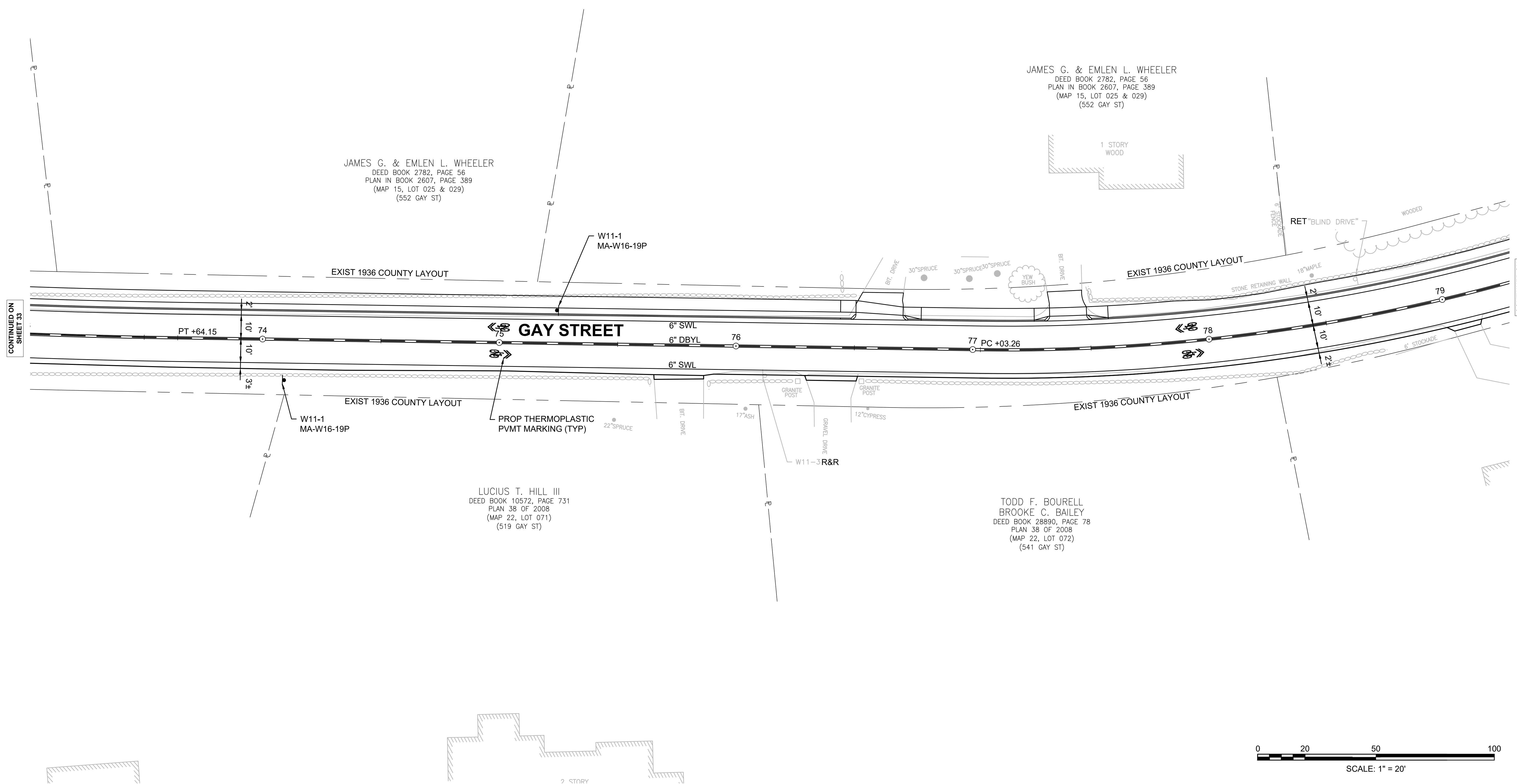


JAMES G. & EMLEN L. WHEELER
 DEED BOOK 2782, PAGE 56
 PLAN IN BOOK 2607, PAGE 389
 (MAP 15, LOT 025 & 029)
 (552 GAY ST)

JAMES G. & EMLEN L. WHEELER
 DEED BOOK 2782, PAGE 56
 PLAN IN BOOK 2607, PAGE 389
 (MAP 15, LOT 025 & 029)
 (552 GAY ST)

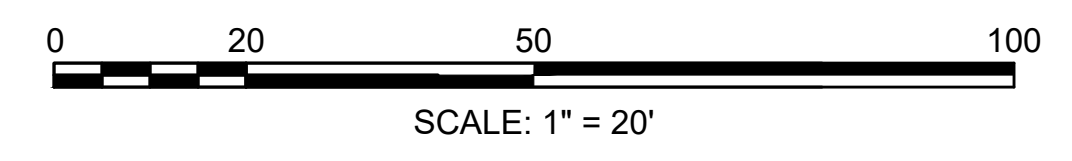
TODD F. BOURELL
 BROOKE C. BAILEY
 DEED BOOK 28890, PAGE 78
 PLAN 38 OF 2008
 (MAP 22, LOT 072)
 (541 GAY ST)

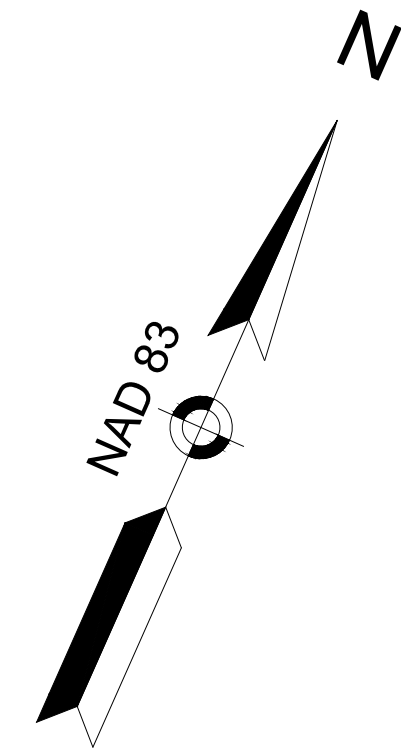
LUCIUS T. HILL III
 DEED BOOK 10572, PAGE 731
 PLAN 38 OF 2008
 (MAP 22, LOT 071)
 (519 GAY ST)



CONTINUED ON
SHEET 33

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SHEET 35





DUNCAN M. & ELLEN BROMLEY MCFARLAND
 DEED BOOK 22416, PAGE 216
 PLAN 217 OF 2003
 (MAP 16, LOT 449)
 (572 GAY ST)

DUNCAN M. & ELLEN BROMLEY MCFARLAND
 DEED BOOK 22416, PAGE 216
 PLAN 217 OF 2003
 (MAP 16, LOT 450)
 (588 GAY ST)

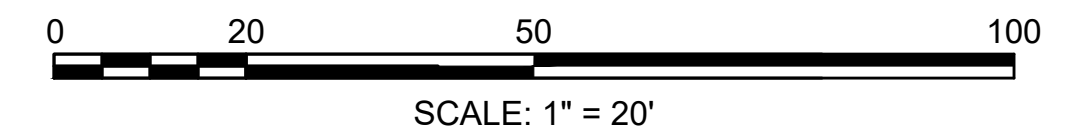
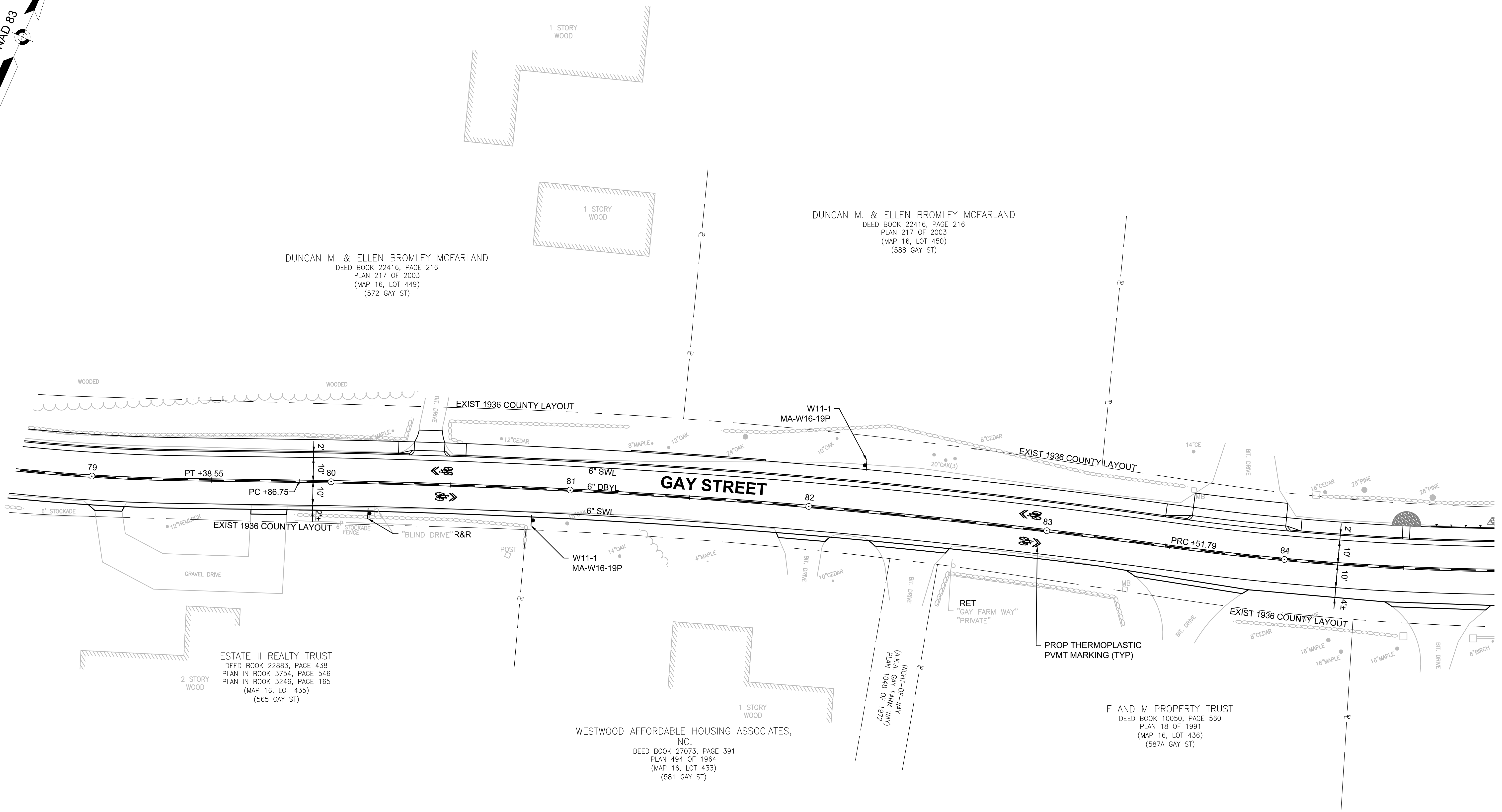
ESTATE II REALTY TRUST
 DEED BOOK 22883, PAGE 438
 PLAN IN BOOK 3754, PAGE 546
 PLAN IN BOOK 3246, PAGE 165
 (MAP 16, LOT 435)
 (565 GAY ST)

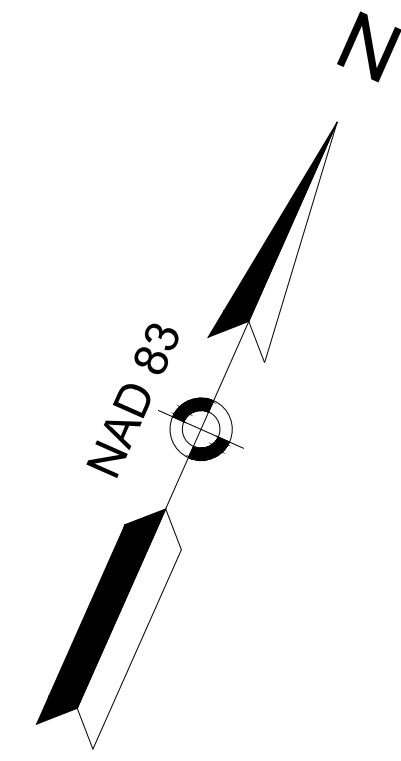
WESTWOOD AFFORDABLE HOUSING ASSOCIATES,
 INC.
 DEED BOOK 27073, PAGE 391
 PLAN 494 OF 1964
 (MAP 16, LOT 433)
 (581 GAY ST)

F AND M PROPERTY TRUST
 DEED BOOK 10050, PAGE 560
 PLAN 18 OF 1991
 (MAP 16, LOT 436)
 (587A GAY ST)

CONTINUED ON
 SHEET 34

CONTINUED ON
 SHEET 36





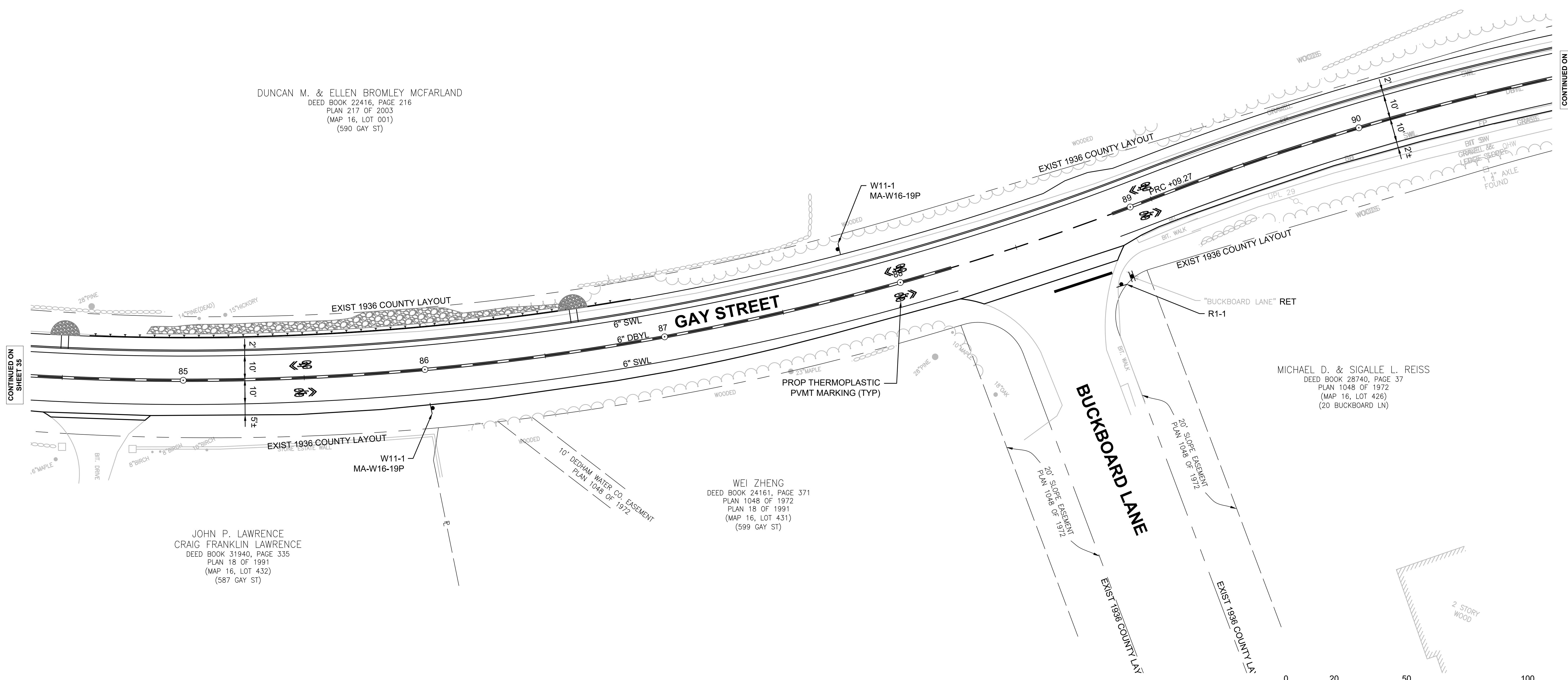
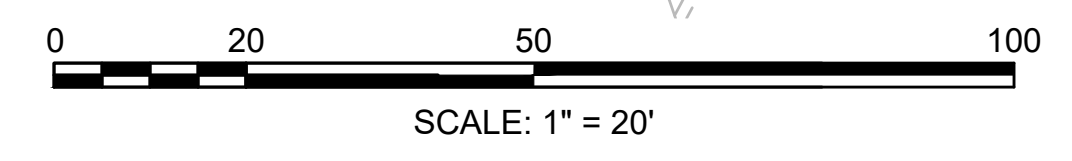
DUNCAN M. & ELLEN BROMLEY MCFARLAND
 DEED BOOK 22416, PAGE 216
 PLAN 217 OF 2003
 (MAP 16, LOT 001)
 (590 GAY ST)

MICHAEL D. & SIGALLE L. REISS
 DEED BOOK 28740, PAGE 37
 PLAN 1048 OF 1972
 (MAP 16, LOT 426)
 (20 BUCKBOARD LN)

JOHN P. LAWRENCE
 CRAIG FRANKLIN LAWRENCE
 DEED BOOK 31940, PAGE 335
 PLAN 18 OF 1991
 (MAP 16, LOT 432)
 (587 GAY ST)

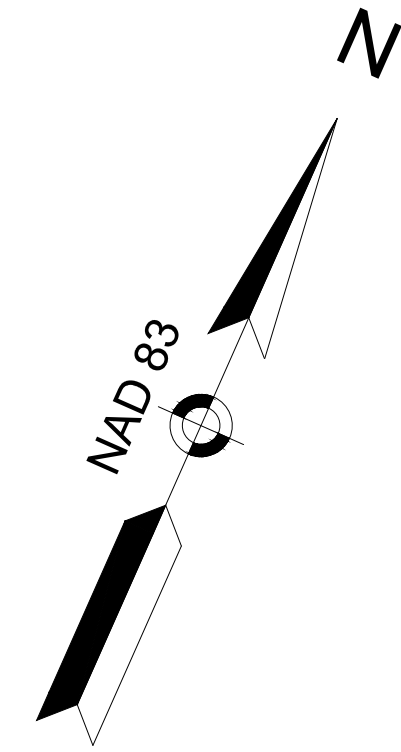
WEI ZHENG
 DEED BOOK 24161, PAGE 371
 PLAN 1048 OF 1972
 PLAN 18 OF 1991
 (MAP 16, LOT 431)
 (599 GAY ST)

10' DEDHAM WATER CO. EASEMENT
 PLAN 1048 OF 1972



CONTINUED ON SHEET 35

CONTINUED ON SHEET 37



ELEANOR ESKIN STONE
 RAE L. ESKIN
 SHERRY A. ASKIN
 DEED BOOK 24843, PAGE 523
 PLAN 1065 OF 1960
 (MAP 16, LOT 003)
 (718 GAY ST)

PROJECT END
 STA 96+30
 N2906707.9892
 E739400.0520

DUNCAN M. & ELLEN BROMLEY MCFARLAND
 DEED BOOK 22416, PAGE 216
 PLAN 217 OF 2003
 (MAP 16, LOT 001)
 (590 GAY ST)

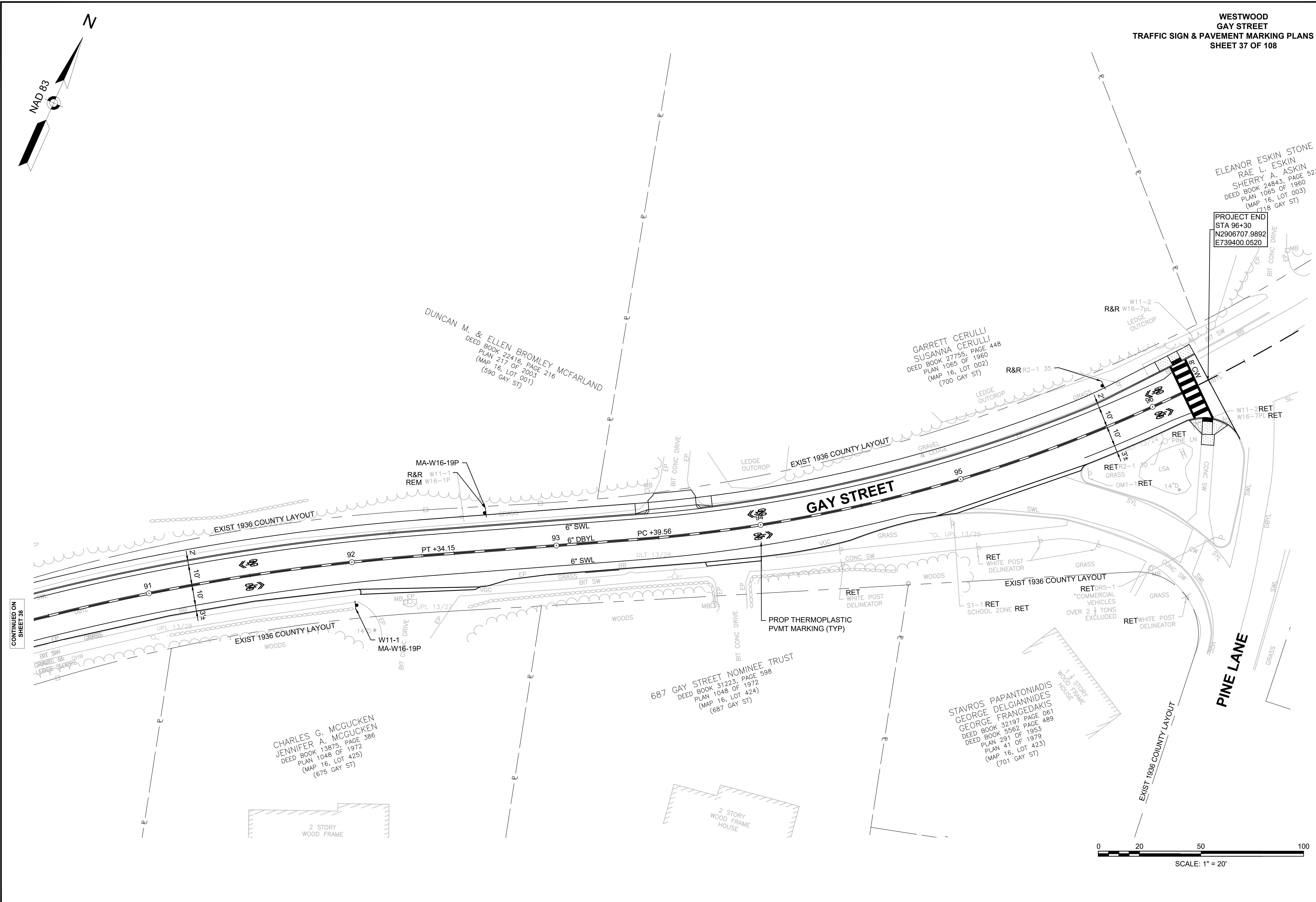
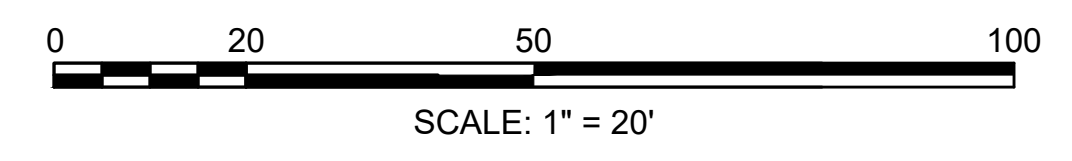
GARRETT CERULLI
 SUSANNA CERULLI
 DEED BOOK 27755, PAGE 448
 PLAN 1065 OF 1960
 (MAP 16, LOT 002)
 (700 GAY ST)






CHARLES G. MCGUCKEN
 JENNIFER A. MCGUCKEN
 DEED BOOK 13875, PAGE 386
 PLAN 1048 OF 1972
 (MAP 16, LOT 425)
 (675 GAY ST)

687 GAY STREET NOMINEE TRUST
 DEED BOOK 31223, PAGE 598
 PLAN 1048 OF 1972
 (MAP 16, LOT 424)
 (687 GAY ST)

STAVROS PAPANTONIADIS
 GEORGE DELGIANNIDIS
 GEORGE FRANGEDAKIS
 DEED BOOK 32197, PAGE 061
 DEED BOOK 5562, PAGE 489
 DEED BOOK 291 OF 1953
 PLAN 41 OF 1979
 (MAP 16, LOT 423)
 (701 GAY ST)

CONTINUED ON
 SHEET 36



TRAFFIC SIGN SUMMARY													
IDENTIFICATION NUMBER	SIZE OF SIGN (in)		LEGEND	TEXT DIMENSIONS (in)			NUMBER OF SIGNS REQUIRED	COLOR			SIZE AND NUMBER OF POSTS REQUIRED	UNIT AREA (SF)	TOTAL AREA (SF)
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	ARROW RTE. MKR		BACK-GROUND	LEGEND	BORDER			
R1-1	30	30			①		3	RED	WHITE	WHITE	3	6.25	18.75
W2-2R	30	30					1	FLUORESCENT YELLOW-GREEN	BLACK	BLACK	1	6.25	6.25
W3-1	30	30					1	FLUORESCENT YELLOW-GREEN	BLACK	BLACK	1	6.25	6.25
W11-1	30	30					24	FLUORESCENT YELLOW-GREEN	BLACK	BLACK	0 MOUNT W/ MA-W16-19P	6.25	150.00
MA-W16-19P	24	18			↓		27	FLUORESCENT YELLOW-GREEN	BLACK	BLACK	27	3.00	81.00

TRAFFIC SIGN SUMMARY													
IDENTIFICATION NUMBER	SIZE OF SIGN (in)		LEGEND	TEXT DIMENSIONS (in)			NUMBER OF SIGNS REQUIRED	COLOR			SIZE AND NUMBER OF POSTS REQUIRED	UNIT AREA (SF)	TOTAL AREA (SF)
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	ARROW RTE. MKR		BACK-GROUND	LEGEND	BORDER			
MA-D3-1a	48	12	SEE BELOW	6C / 4.0C	3.00 3.00	N/A	2	GREEN	WHITE	WHITE	2	PAID UNDER ITEM 874.	



MA-D3-1a

NOTES:

- SEE 2009 MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS FOR TEXT AND LEGEND DIMENSIONS.
- THE MINIMUM MOUNTING HEIGHT OF POST-MOUNTED SIGNS, MEASURED VERTICALLY FROM THE BOTTOM OF THE SIGN TO THE TOP OF CURB OR SIDEWALK, OR THE ELEVATION OF THE NEAR EDGE OF TRAVEL WAY, SHALL BE 7 FEET UNLESS OTHERWISE SPECIFIED.
- A MINIMUM OF 3'-0" PATH OF TRAVEL CLEARANCE, EXCLUDING CURB, IS REQUIRED WHEN PLACING SIGNS.
- CONTRACTOR SHALL OBTAIN CITY SEAL DETAIL AND SUBMIT SHEET SIGN LAYOUTS TO ENGINEER FOR APPROVAL PRIOR TO FABRICATION.

NOTES:

- ALL TEMPORARY TRAFFIC CONTROL WORK SHALL CONFORM TO THE LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) AND ALL REVISIONS, UNLESS SUPERCEDED BY THESE PLANS.
- ALL SIGN LEGENDS, BORDERS, AND MOUNTING SHALL BE IN ACCORDANCE WITH THE MUTCD.
- TEMPORARY CONSTRUCTION SIGNING AND ALL OTHER TRAFFIC CONTROL DEVICES SHALL BE IN PLACE PRIOR TO THE START OF ANY WORK.
- TEMPORARY CONSTRUCTION SIGNING, BARRICADES, AND ALL OTHER NECESSARY WORK ZONE TRAFFIC CONTROL DEVICES SHALL BE REMOVED FROM THE HIGHWAY OR COVERED WHEN THEY ARE NOT REQUIRED FOR CONTROL OF TRAFFIC.
- SIGNS AND SIGN SUPPORTS LOCATED ON OR NEAR THE TRAVELED WAY, CHANNELIZING DEVICES, BARRIERS, AND CRASH ATTENUATORS MUST PASS THE CRITERIA SET FORTH IN THE "MANUAL FOR ASSESSING SAFETY HARDWARE" (MASH).
- CONTRACTORS SHALL NOTIFY EACH ABUTTER AT LEAST 24 HOURS IN ADVANCE OF THE START OF ANY WORK THAT WILL REQUIRE THE TEMPORARY CLOSURE OF ACCESS, SUCH AS CONDUIT INSTALLATION, EXISTING PAVEMENT EXCAVATION, TEMPORARY DRIVEWAY PAVEMENT PLACEMENT, AND SIMILAR OPERATIONS.
- THE FIRST TEN PLASTIC DRUMS OF A TAPER SHALL BE MOUNTED WITH TYPE A SEQUENTIAL WARNING LIGHTS.
- THE ADVISORY SPEED LIMIT, IF REQUIRED, SHALL BE DETERMINED BY THE ENGINEER.
- DISTANCES ARE A GUIDE AND MAY BE ADJUSTED IN THE FIELD BY THE ENGINEER.
- MAXIMUM SPACING OF TRAFFIC DEVICES IN A TAPER (DRUMS OR CONES) IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH.
- MINIMUM LANE WIDTH IS TO BE 11 FEET UNLESS OTHERWISE SHOWN. MINIMUM LANE WIDTH TO BE MEASURED FROM THE EDGE OF DRUMS OR MEDIAN BARRIER.
- ALL SIGNS SHALL BE MOUNTED ON THEIR OWN STANDARD SIGN SUPPORTS.

LEGEND:

- REFLECTORIZED PLASTIC DRUM OR 36" CONE
- ▨ WORK ZONE
- 🚚 WORK VEHICLE
- P/F POLICE/FLAGGER DETAIL
- ➡ DIRECTION OF TRAFFIC
- 🚚 TRUCK MOUNTED ATTENUATOR
- ▨ TYPE III BARRICADE
- 🚦 IMPACT ATTENUATOR
- ➡ TRAFFIC OR PEDESTRIAN SIGNAL
- 📄 CHANGEABLE MESSAGE SIGN
- ▨ MEDIAN BARRIER
- ➡ SIGN
- ➡ ARROW BOARD
- ▨ MEDIAN BARRIER WITH WARNING LIGHTS

SUGGESTED WORK ZONE WARNING SIGN SPACING

ROAD TYPE	DISTANCE BETWEEN SIGNS **		
	A	B	C
LOCAL OR LOW VOLUME ROADWAYS*	350	350	350
MOST OTHER ROADWAYS*	500	500	500
FREEWAYS AND EXPRESSWAYS*	1,000	1,500	2,640

- * ROAD TYPE TO BE DETERMINED BY MASSDOT OFFICE OF TRANSPORTATION PLANNING.
- ** DISTANCES ARE SHOWN IN FEET. THE COLUMN HEADINGS A, B, AND C ARE THE DIMENSIONS SHOWN IN THE DETAIL/TYPICAL SETUP FIGURES. THE A DIMENSION IS THE DISTANCE FROM THE TRANSITION OR POINT OF RESTRICTION TO THE FIRST SIGN. THE B DIMENSION IS THE DISTANCE BETWEEN THE FIRST AND SECOND SIGNS. THE C DIMENSION IS THE DISTANCE BETWEEN THE SECOND AND THIRD SIGNS. (THE "THIRD" SIGN IS THE FIRST ONE TYPICALLY ENCOUNTERED BY A DRIVER APPROACHING A TEMPORARY TRAFFIC CONTROL (TTC) ZONE.)
- THE "THIRD" SIGN ABOVE IS TYPICALLY REFERRED TO AS AN "ADVANCE WARNING" SIGN ON THE TTCZ SETUPS. THESE ADVANCE WARNING SIGNS ARE LOCATED PRIOR TO THE PROJECT LIMITS ON ALL APPROACHES (i.e. THE W20-1 SERIES (ROAD WORK XX FT) SIGNS), AND USUALLY REMAIN FOR THE DURATION OF THE PROJECT. ADDITIONAL SIGNS (i.e. "RIGHT LANE CLOSED 1 MILE" AND "LEFT LANE CLOSED 1 MILE") HAVE BEEN SHOWN IN SOME FIGURES AS EXAMPLES OF REINFORCEMENT SIGN PLACEMENT BUT ARE USED IN RARE OCCASIONS.
- THE FIRST AND SECOND WARNING SIGNS ABOVE ARE REFERRED TO AS THE OPERATIONAL (DAY-TO-DAY) WORK ZONE SIGNS AND MAY BE MOVED DEPENDING ON WHERE THE SPECIFIC ROADWAY WORK FOR THAT DAY IS LOCATED.
- R2-10a SIGNS SHALL BE PLACED BETWEEN THE SECOND AND THIRD SIGNS AS DESCRIBED ABOVE.
- R2-10a, R2-10e, AND W20-1 SERIES SIGNS ARE TO BE INCLUDED ON ALL DETAILS/TYPICAL SETUPS.

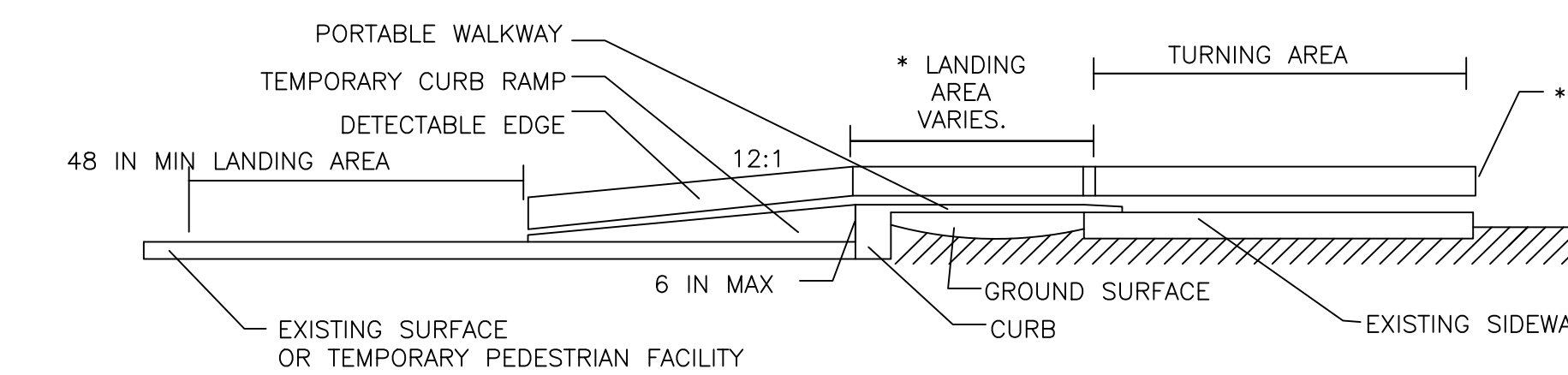
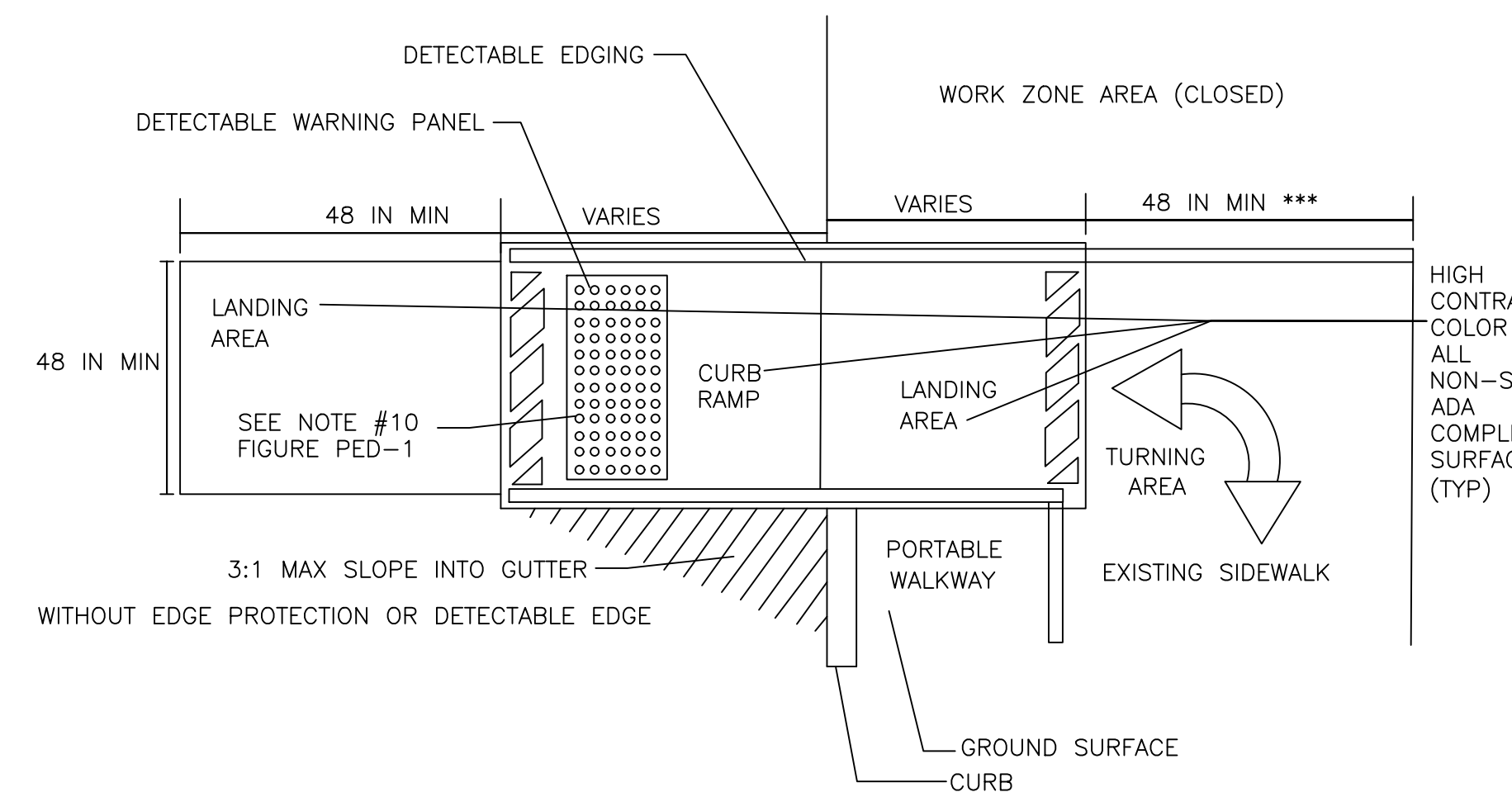
TAPER LENGTH CRITERIA FOR TEMPORARY TRAFFIC CONTROL ZONES

TYPE OF TAPER	TAPER LENGTH (L)*
MERGING TAPER	AT LEAST L
SHIFTING TAPER	AT LEAST 0.5L
SHOULDER TAPER	AT LEAST 0.33L
ONE-LANE, TWO-WAY TRAFFIC TAPER	50 FT MIN. 100 FT MAX.
DOWNSTREAM TAPER	50 FT MIN. 100 FT MAX. PER LANE

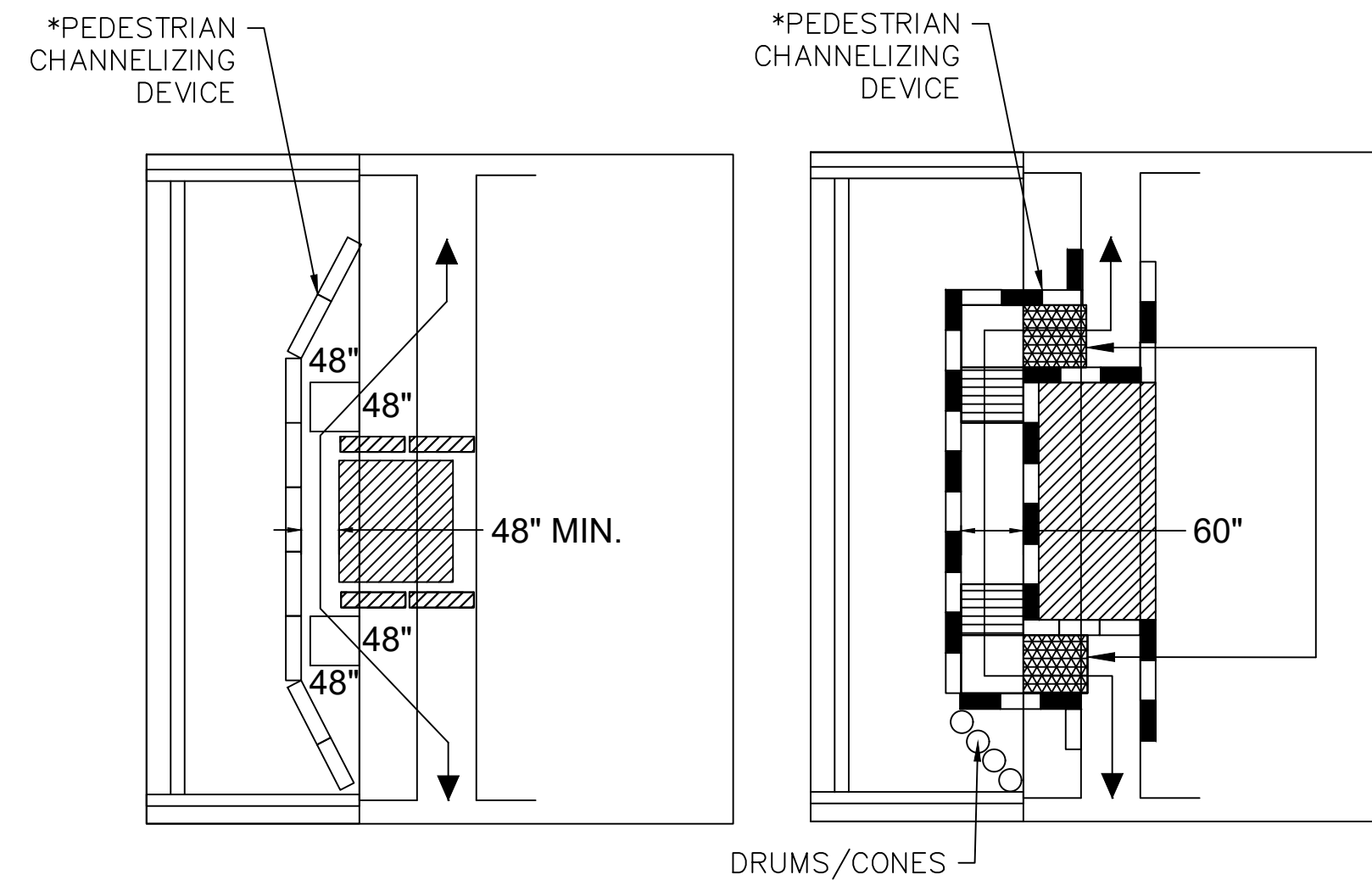
FORMULAS FOR DETERMINING TAPER LENGTHS

SPEED LIMIT (S)	TAPER LENGTH (L) FEET
40 MPH OR LESS	$L = \frac{WS^2}{60}$
45 MPH OR MORE	$L = WS$

WHERE: L = TAPER LENGTH IN FEET
W = WIDTH OF OFFSET IN FEET
S = POSTED SPEED LIMIT, OR OFF-PEAK 85TH-PERCENTILE SPEED PRIOR TO WORK STARTING, OR THE ANTICIPATED OPERATING SPEED IN MPH



TEMPORARY CURB RAMP

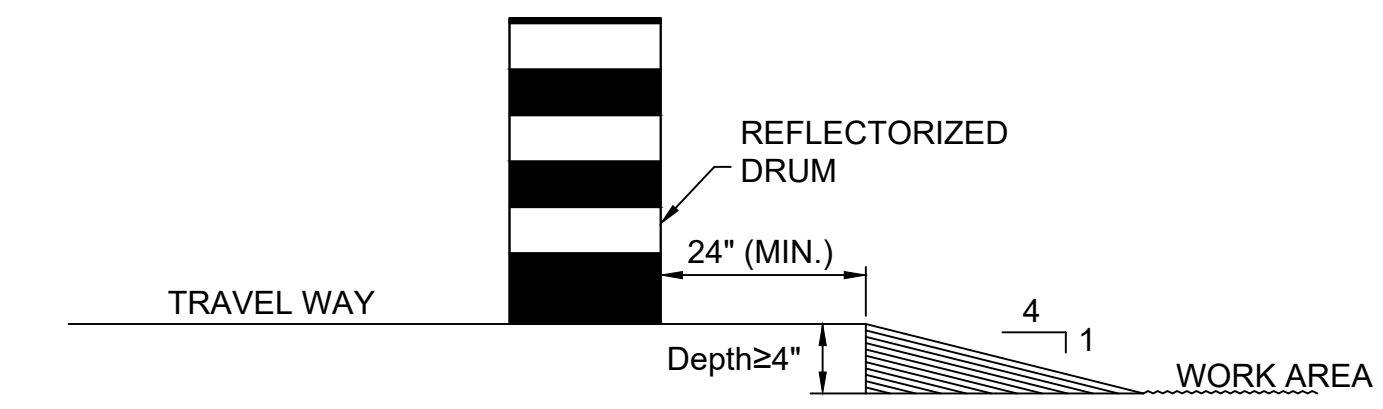


- WHEN EXISTING PEDESTRIAN FACILITIES ARE DISRUPTED, CLOSED, OR RELOCATED IN A TTC ZONE, TEMPORARY FACILITIES SHALL BE PROVIDED AND THEY SHALL BE DETECTABLE AND INCLUDE ACCESSIBILITY FEATURES CONSISTENT WITH THE FEATURES PRESENT IN THE EXISTING PEDESTRIAN FACILITY.
- A PEDESTRIAN CHANNELIZING DEVICE THAT IS DETECTABLE BY A PERSON WITH A VISUAL DISABILITY TRAVELING WITH THE AID OF A LONG CANE SHALL BE PLACED ACROSS THE FULL WIDTH OF THE CLOSED SIDEWALK.
- WHEN USED, TEMPORARY RAMPS SHALL COMPLY WITH AMERICANS WITH DISABILITIES ACT (SEE FIGURES PED-1 & PED-2).
- THE ALTERNATE PATHWAY SHOULD HAVE A SMOOTH CONTINUOUS HARD SURFACE FOR THE ENTIRE LENGTH OF THE TEMPORARY PEDESTRIAN FACILITY.
- THE PROTECTIVE REQUIREMENTS OF A TTC SITUATION HAVE PRIORITY IN DETERMINING THE NEED FOR TEMPORARY TRAFFIC BARRIERS AND THEIR USE IN THIS SITUATION SHOULD BE BASED ON ENGINEERING JUDGMENT.
- AUDIBLE INFORMATION DEVICES SHOULD BE CONSIDERED WHERE MIBLOCK CLOSINGS AND CHANGED CROSSWALK AREAS CAUSE INADEQUATE COMMUNICATION TO BE PROVIDED TO PEDESTRIANS WHO HAVE VISUAL DISABILITIES.

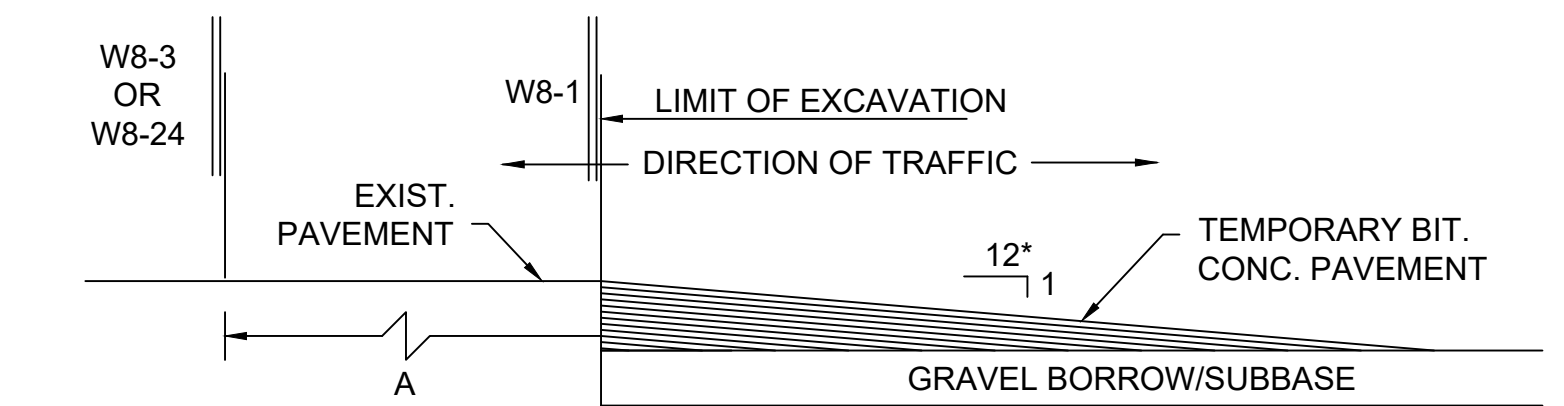
AUDIBLE DEVICES

FOR LONG TERM SIDEWALK CLOSURES (AT A MINIMUM OVERNIGHT) A FORM OF SPEECH MESSAGING FOR PEDESTRIANS WITH VISUAL DISABILITIES SHALL BE PROVIDED. AUDIBLE INFORMATION DEVICES SUCH AS DETECTABLE BARRIERS OR BARRICADES AND OTHER PASSIVE PEDESTRIAN ACTIVATION (MOTION ACTIVATED) DEVICES SHOULD BE CONSIDERED FOR THESE CASES. THESE AUDIBLE DEVICES CAN BE MOUNTABLE OR STAND ALONE.

- * -LANDING AREA USED TO OVERLAP NON-ADA COMPLIANT SURFACES.
- ** -DETECTABLE EDGE REMOVED IF A CONTINUOUS SIDEWALK.
- *** -60 IN. IF AN OBSTRUCTION IS AT BACK OF SIDEWALK



LATERAL DROP-OFF DETAIL
NOT TO SCALE

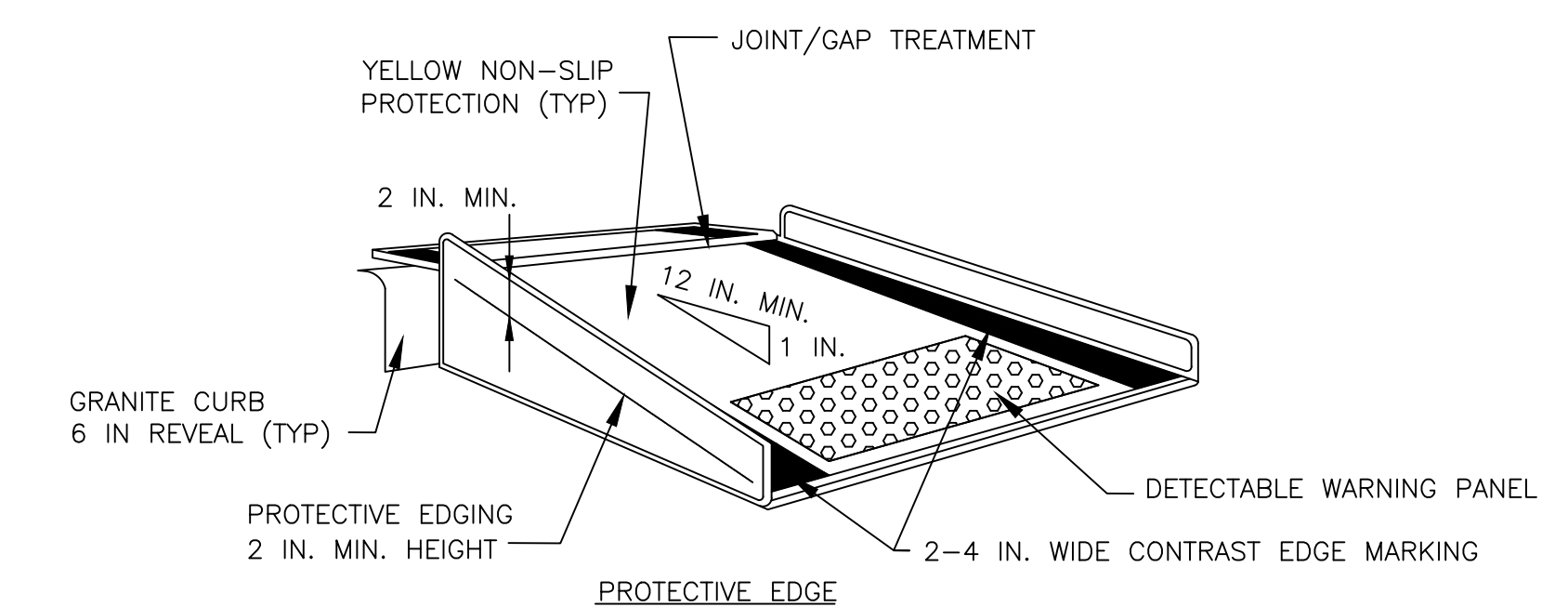
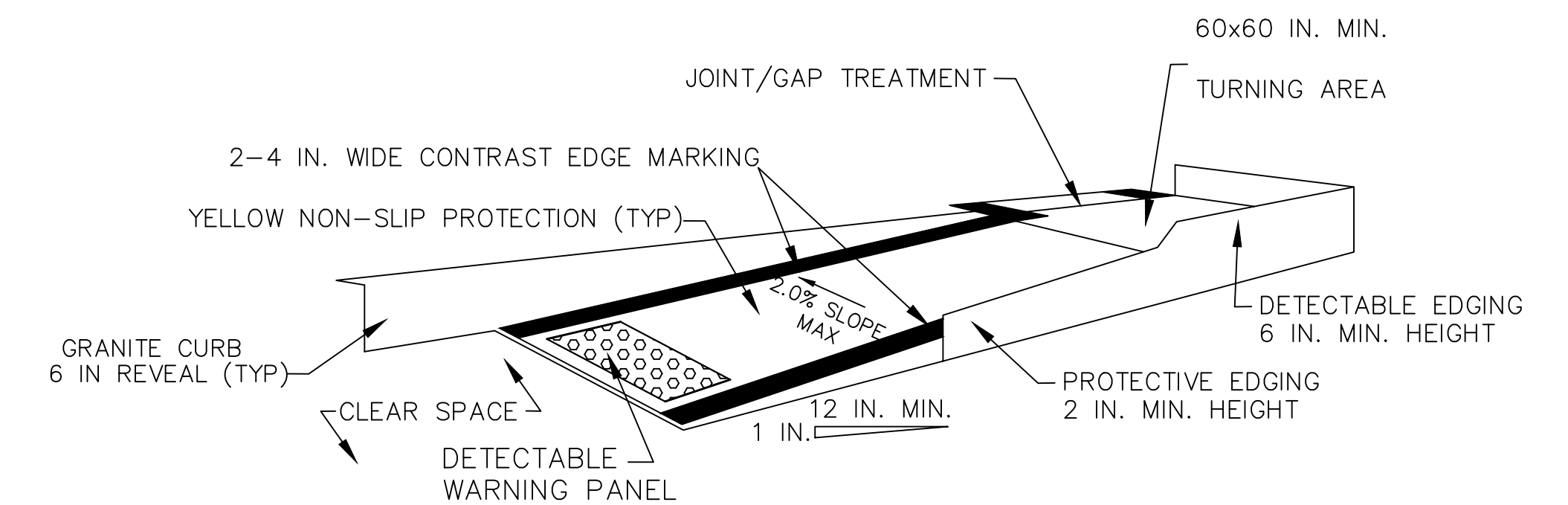


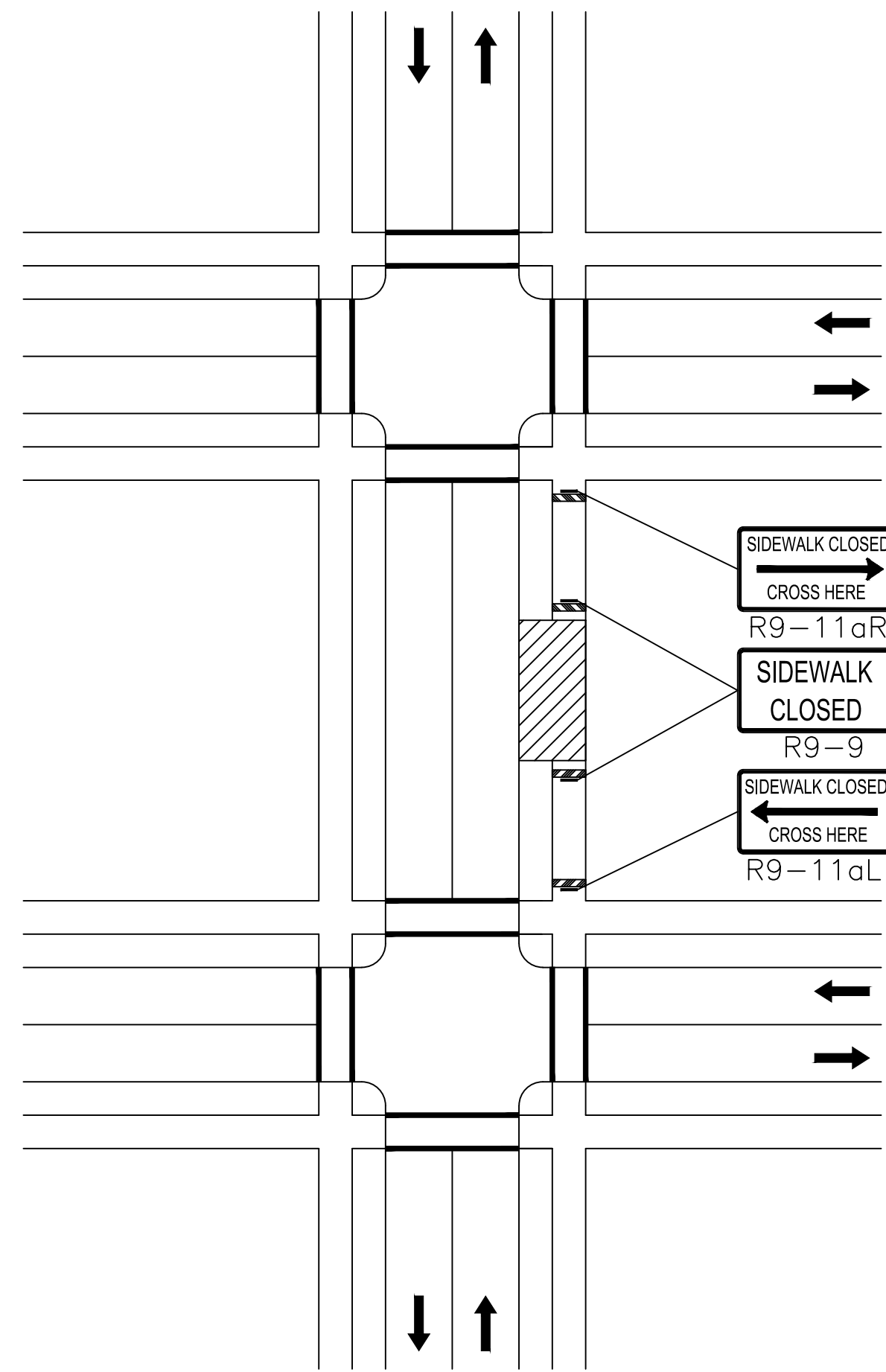
LONGITUDINAL DROP-OFF DETAIL
NOT TO SCALE
* - INCREASE SLOPE RATIO FOR HIGHER SPEEDS

PEDESTRIAN TYPICAL DETAILS

NOTES:

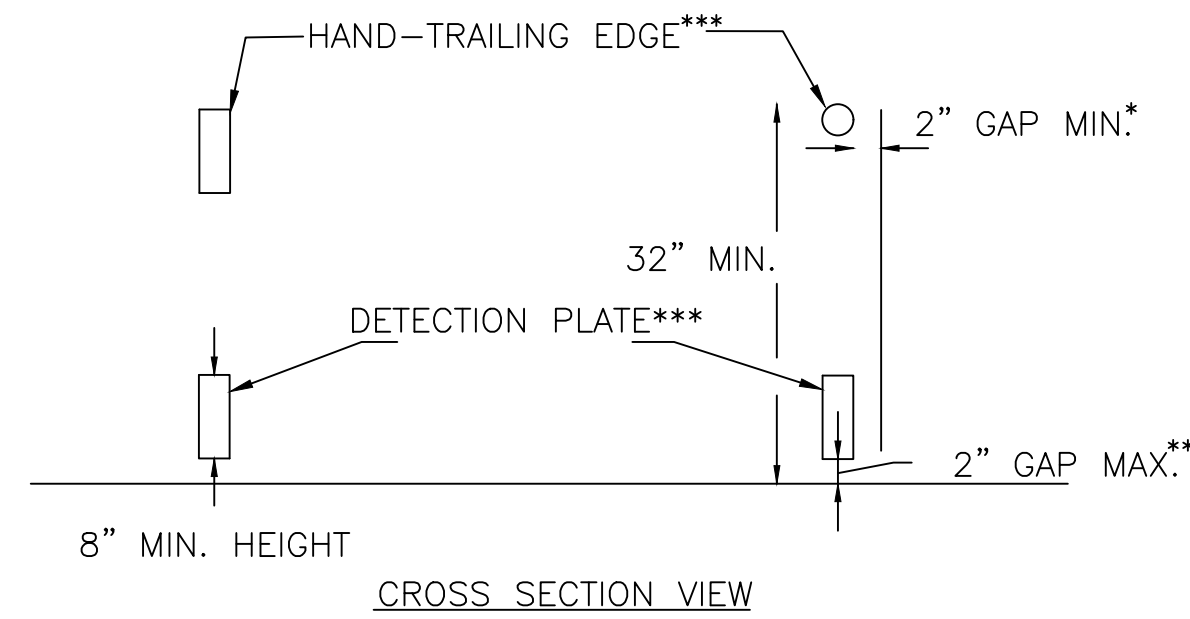
- CURB RAMPS SHALL BE 60 IN. MINIMUM WIDTH WITH A FIRM, STABLE AND NON-SLIP SURFACE.
- PROTECTIVE EDGING WITH A 2 IN. MINIMUM HEIGHT SHALL BE INSTALLED WHEN THE CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6 IN. OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN THE CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3 IN. OR MORE.
- DETECTABLE EDGING WITH 6 IN. MINIMUM HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).
- THE CURB RAMP WALKWAY AND LANDING AREA SURFACE SHALL BE OF A SOLID CONTINUOUS CONTRASTING COLOR ABUTTING UP TO THE EXISTING SIDEWALK.
- CURB RAMPS AND LANDINGS SHOULD HAVE A 1:50 (2%) MAX CROSS-SLOPE.
- CLEAR SPACE OF 48x48 IN. MINIMUM SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.
- WATER FLOW IN THE GUTTER SYSTEM SHALL HAVE MINIMAL RESTRICTION.
- LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 0.5 IN. WIDTH.
- CHANGES BETWEEN SURFACE HEIGHTS SHOULD NOT EXCEED 0.5 IN. LATERAL EDGES SHOULD BE VERTICAL UP TO 0.25 IN. HIGH, AND BEVELED AT 1:2 BETWEEN 0.25 IN. AND 0.5 IN. HEIGHT.
- IF A TEMPORARY PEDESTRIAN RAMP LEADS TO A CROSSWALK, THEN A DETECTABLE WARNING PAD MUST BE ADHERED TO THE BASE OF THE RAMP. IF IT LEADS TO A PROTECTED PEDESTRIAN BYPASS THAT DOES NOT CONFLICT WITH VEHICULAR TRAFFIC, THEN A PAD SHALL NOT BE INSTALLED ON THE RAMP.





NOTE: IF A MINIMUM WIDTH OF 48" OF SOLID SMOOTH UNOBSTRUCTED SURFACE REMAINS ALONG THE WORK AREA THEN THE DETAIL CAN BE DISREGARDED. DELINEATION OF THE WORK AREA WILL STILL BE REQUIRED. ALL PEDESTRIAN DETOUR ROUTES SHALL BE ADA/MAAB COMPLIANT IN THEIR ENTIRETY.

SIDEWALK CLOSED WITHOUT DETOUR



PEDESTRIAN CHANNELIZING DEVICE

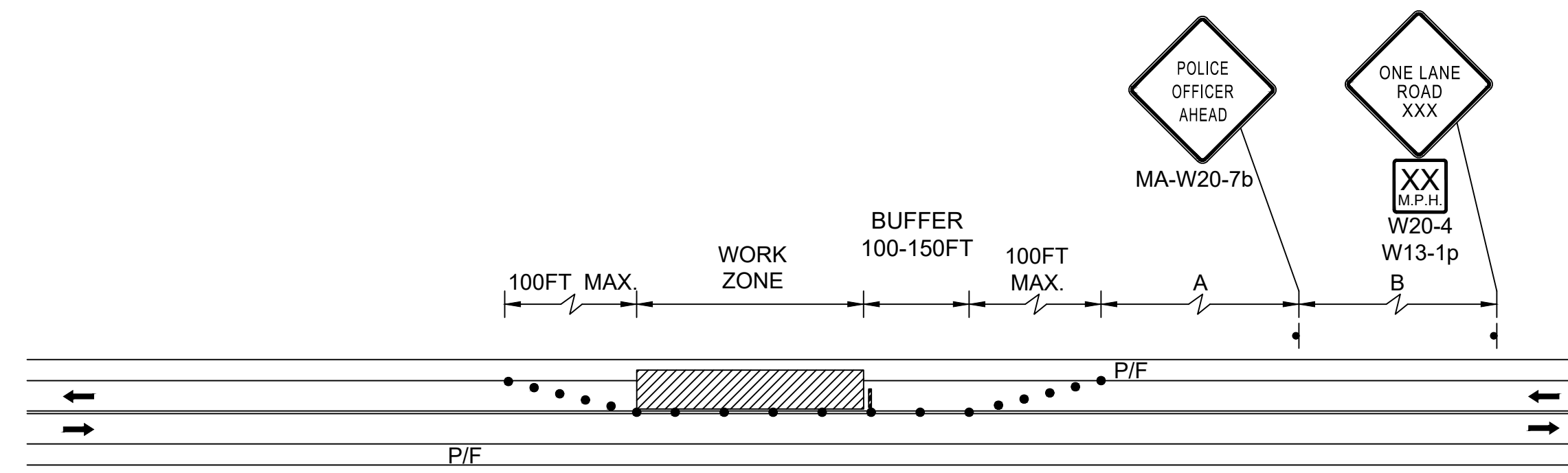
NOTES:

* THERE SHALL BE A 2 INCH GAP BETWEEN THE HAND-TRAILING EDGE AND ITS SUPPORT.

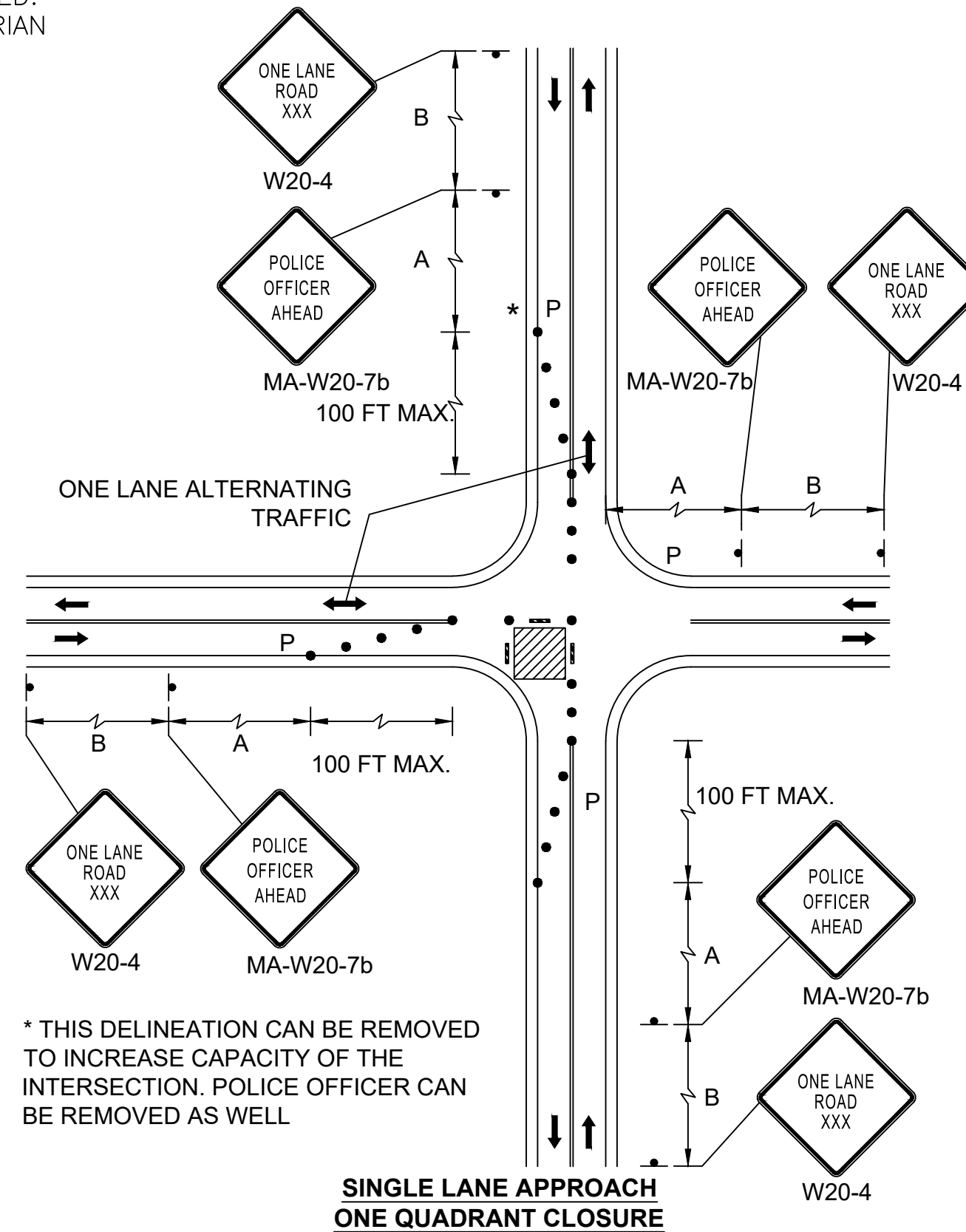
** A MAXIMUM 2 INCH GAP BETWEEN THE BOTTOM OF THE BOTTOM RAIL AND THE SURFACE MAY BE USED TO PROVIDE DRAINAGE.

*** THE HAND-TRAILING EDGE AND DETECTION PLATE SHALL BE CONTINUOUS THROUGHOUT THE LENGTH OF THE PATH SUCH THAT A PEDESTRIAN USER WITH A LONG CANE CAN FOLLOW IT.

PEDESTRIAN DETAILS

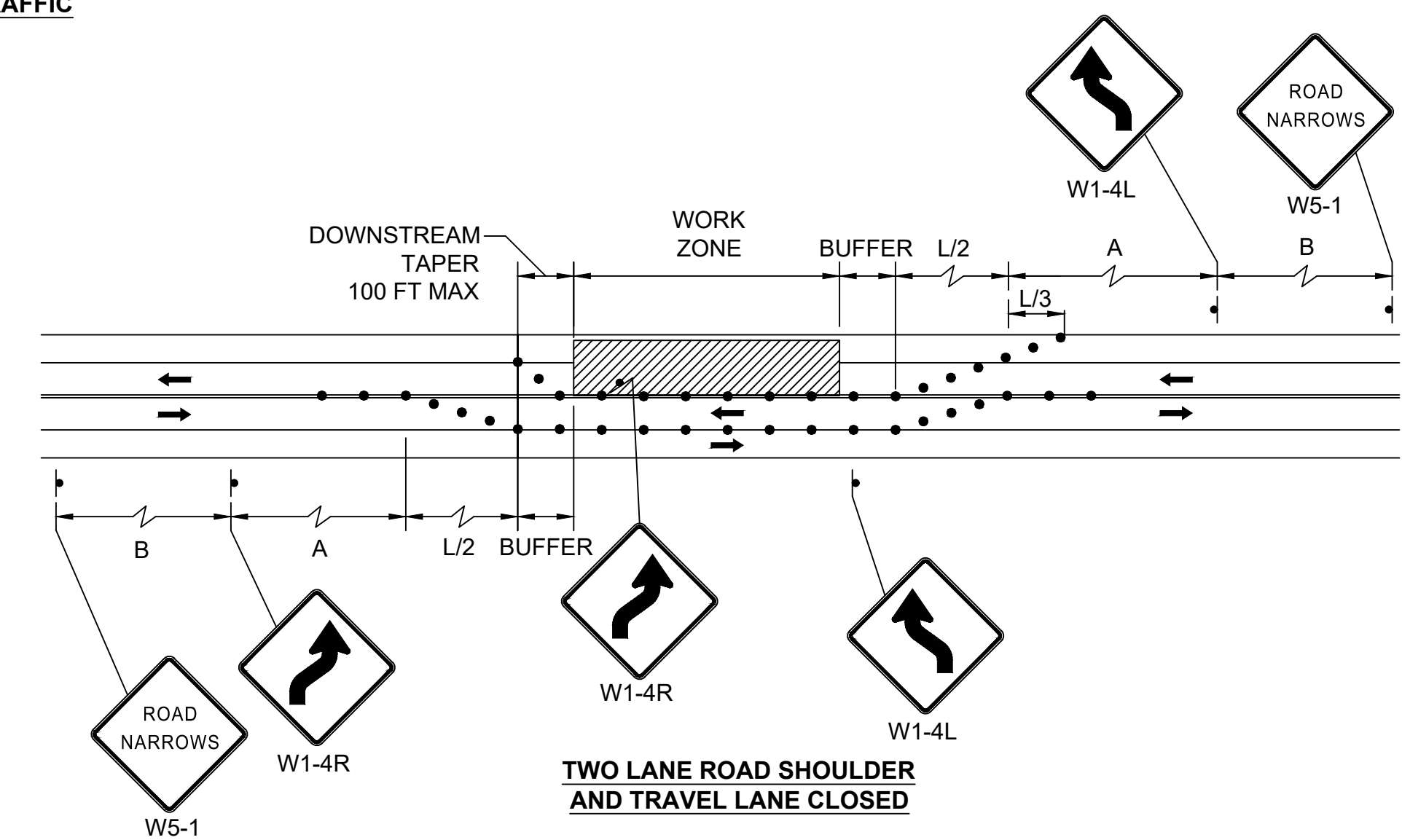


TWO LANE ROAD ONE LANE ALTERNATING TRAFFIC

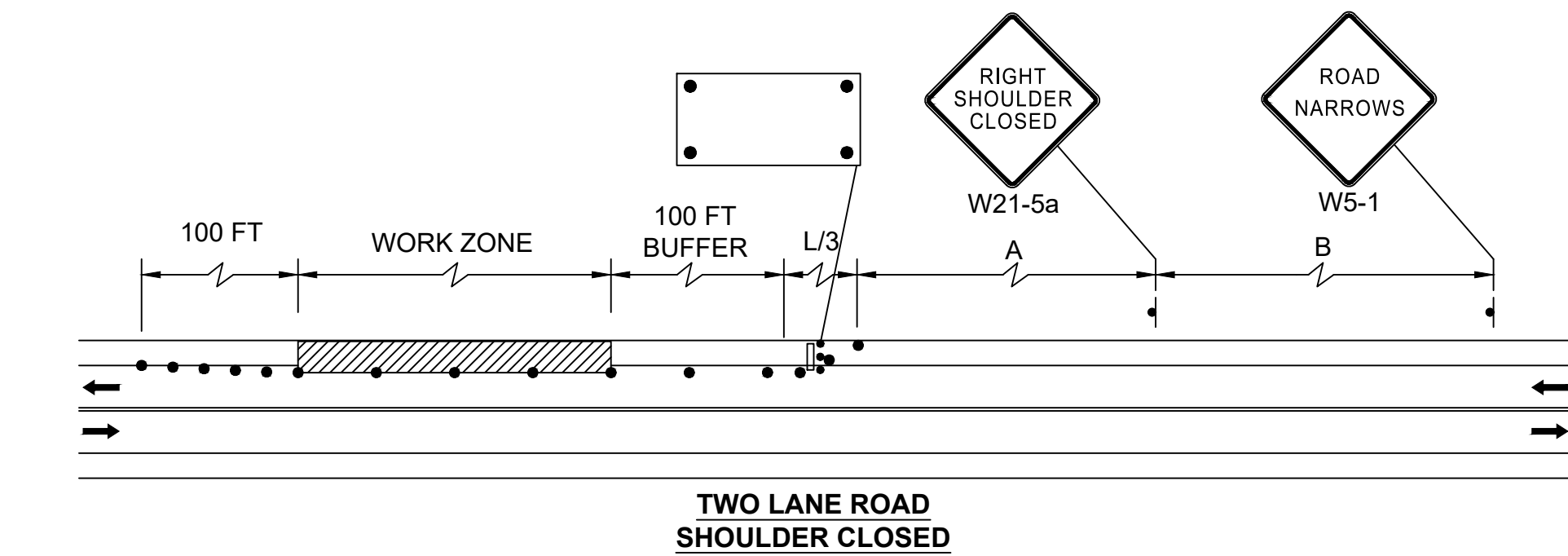


* THIS DELINEATION CAN BE REMOVED TO INCREASE CAPACITY OF THE INTERSECTION. POLICE OFFICER CAN BE REMOVED AS WELL.

SINGLE LANE APPROACH ONE QUADRANT CLOSURE

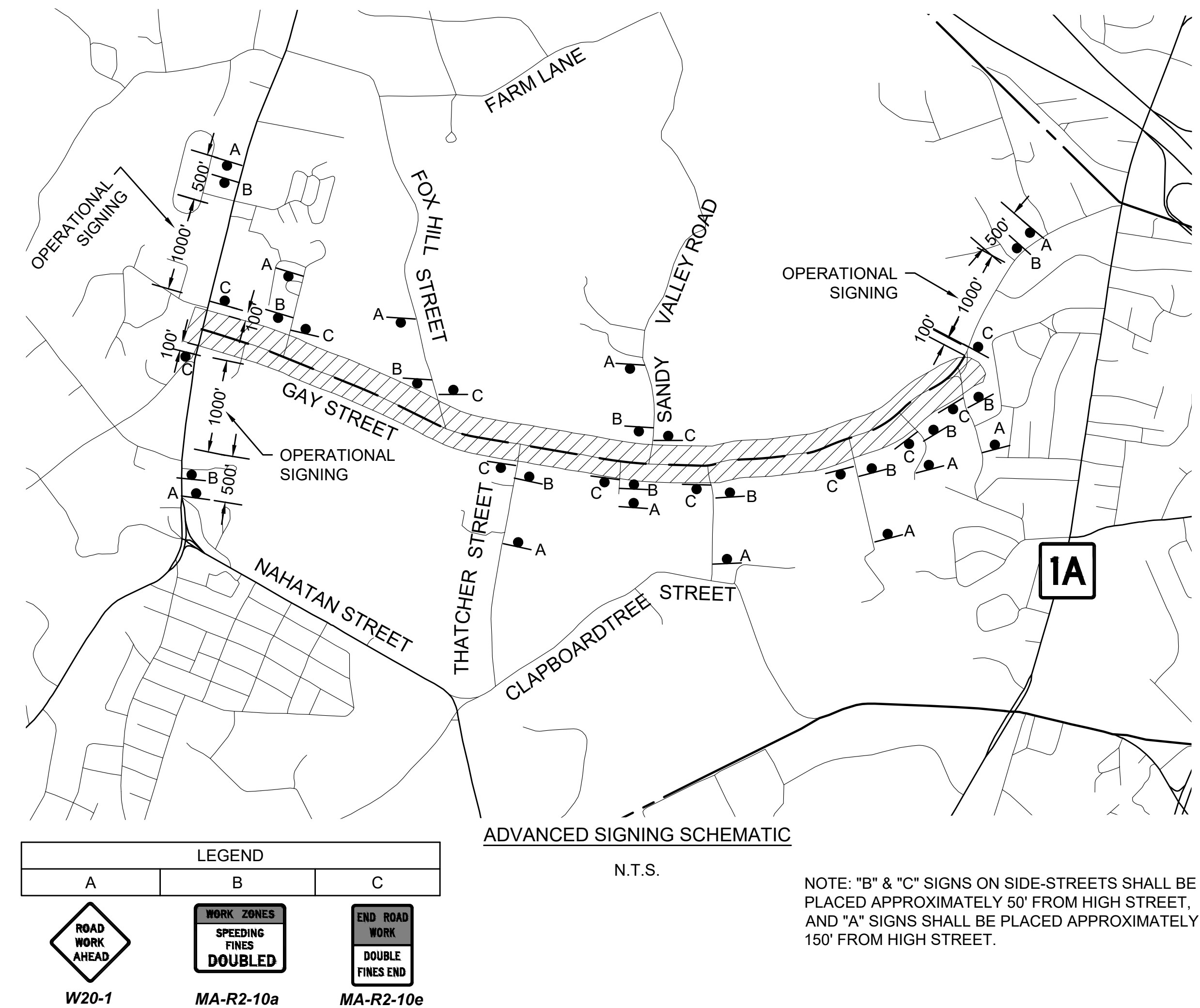


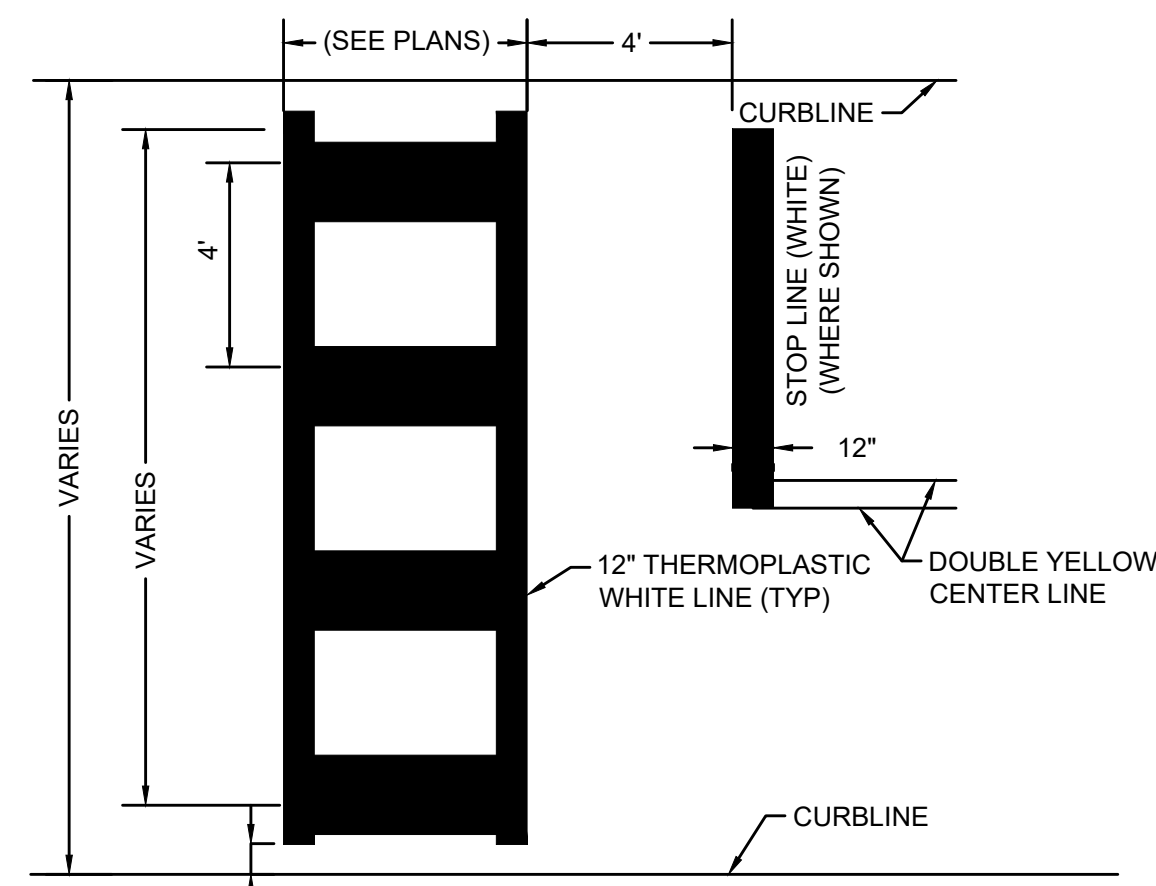
TWO LANE ROAD SHOULDER AND TRAVEL LANE CLOSED



TWO LANE ROAD SHOULDER CLOSED

TRAFFIC SIGN SUMMARY												
IDENTIFICATION NUMBER	SIZE OF SIGN (in)		LEGEND	TEXT DIMENSIONS (in)			COLOR			NUMBER OF SIGNS REQUIRED	UNIT AREA (SF)	TOTAL AREA (SF)
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	ARROW RTE. MKR	BACK-GROUND	LEGEND	BORDER			
MA-R2-10a	48	36		MASSDOT STANDARD SIGN			FL. ORANGE WHITE	BLACK BLACK	BLACK BLACK	12	12.00	144.00
MA-R2-10e	36	48					FL. ORANGE WHITE	BLACK BLACK	BLACK BLACK	12	12.00	144.00
R9-9	24	12					WHITE	BLACK	BLACK	2	2.00	4.00
R9-11aL	24	12					WHITE	BLACK	BLACK	1	2.00	2.00
R9-11aR	24	12					WHITE	BLACK	BLACK	1	2.00	2.00
W1-4L	36	36					FL. ORANGE	BLACK	BLACK	2	9.00	18.00
W1-4R	36	36					FL. ORANGE	BLACK	BLACK	2	9.00	18.00
W5-1	36	36					FL. ORANGE	BLACK	BLACK	2	9.00	18.00
W8-1	36	36					FL. ORANGE	BLACK	BLACK	2	9.00	18.00
W8-3	36	36					FL. ORANGE	BLACK	BLACK	2	9.00	18.00
W8-24	36	36					FL. ORANGE	BLACK	BLACK	2	9.00	18.00
W20-1	36	36		SEE 2009 MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS			FL. ORANGE	BLACK	BLACK	12	9.00	108.00
W20-4	36	36		SEE 2009 MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS			FL. ORANGE	BLACK	BLACK	4	9.00	36.00
MA-W20-7b	36	36		MASSDOT STANDARD SIGN			FL. ORANGE	BLACK	BLACK	4	9.00	36.00
W21-5a	36	36		SEE 2009 MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS			FL. ORANGE	BLACK	BLACK	1	9.00	9.00

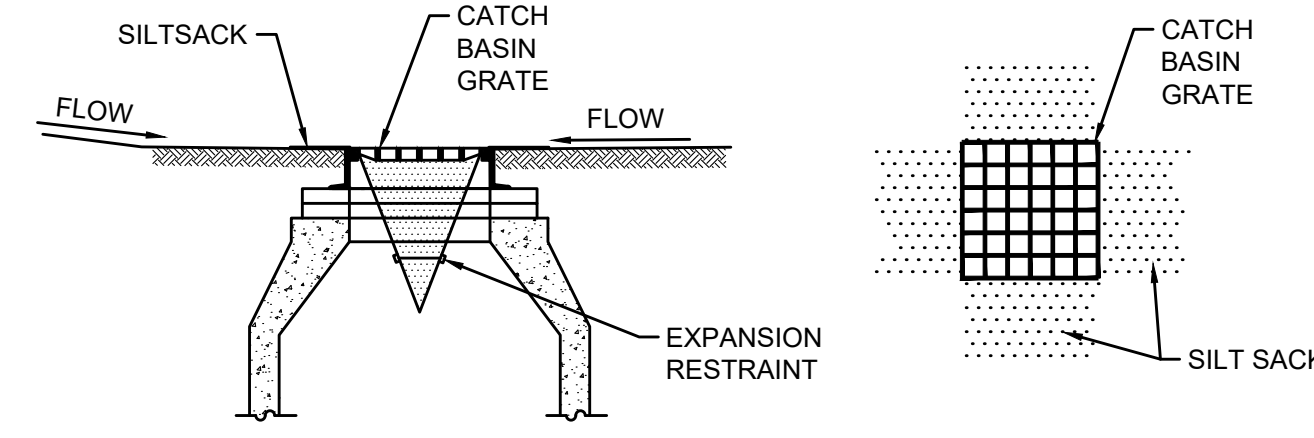




CROSSWALK PAVEMENT MARKING

- NOTES:
- ALL 12" LINES SHALL BE APPLIED IN ONE APPLICATION, NO COMBINATION OF LINES (TWO - 6" LINES) WILL BE ACCEPTED.
 - LAYOUT OF CROSSWALKS SHALL BE APPROVED BY THE ENGINEER PRIOR TO APPLICATION.

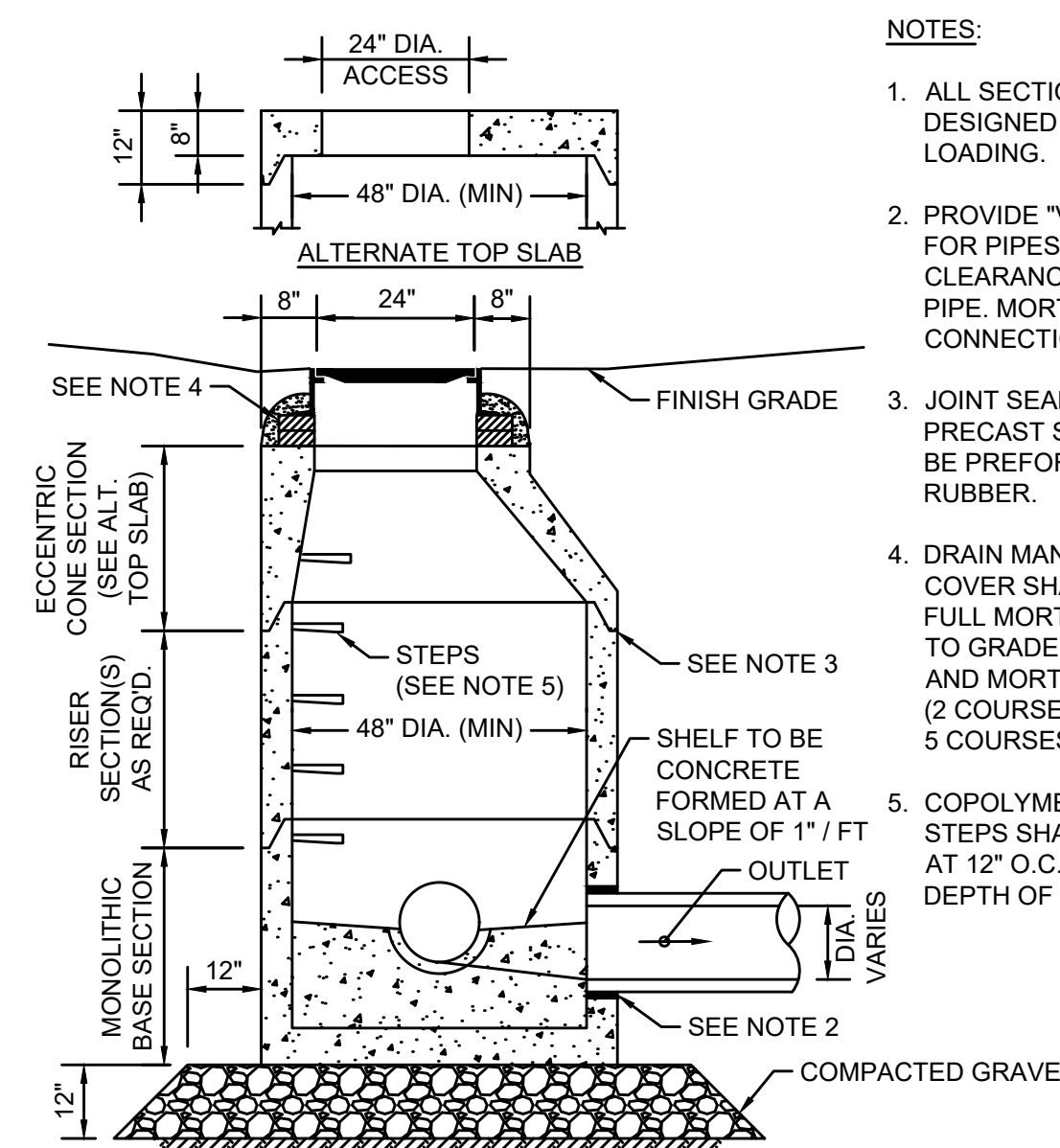
N.T.S.



INLET PROTECTION SILT SACK IN CATCH BASIN

- NOTES:
- INSTALL SILT SACK IN EXISTING CATCH BASINS BEFORE COMMENCING WORK, AND IN NEW CATCH BASINS IMMEDIATELY AFTER INSTALLATION OF STRUCTURE. MAINTAIN UNTIL BINDER COURSE PAVING IS COMPLETE OR A PERMANENT STAND OF GRASS HAS BEEN ESTABLISHED.
 - GRATE TO BE PLACED OVER SILT SACK.
 - SILT SACK SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS AND CLEANING OR REPLACEMENT SHALL BE PERFORMED PROMPTLY AS NEEDED.

N.T.S.

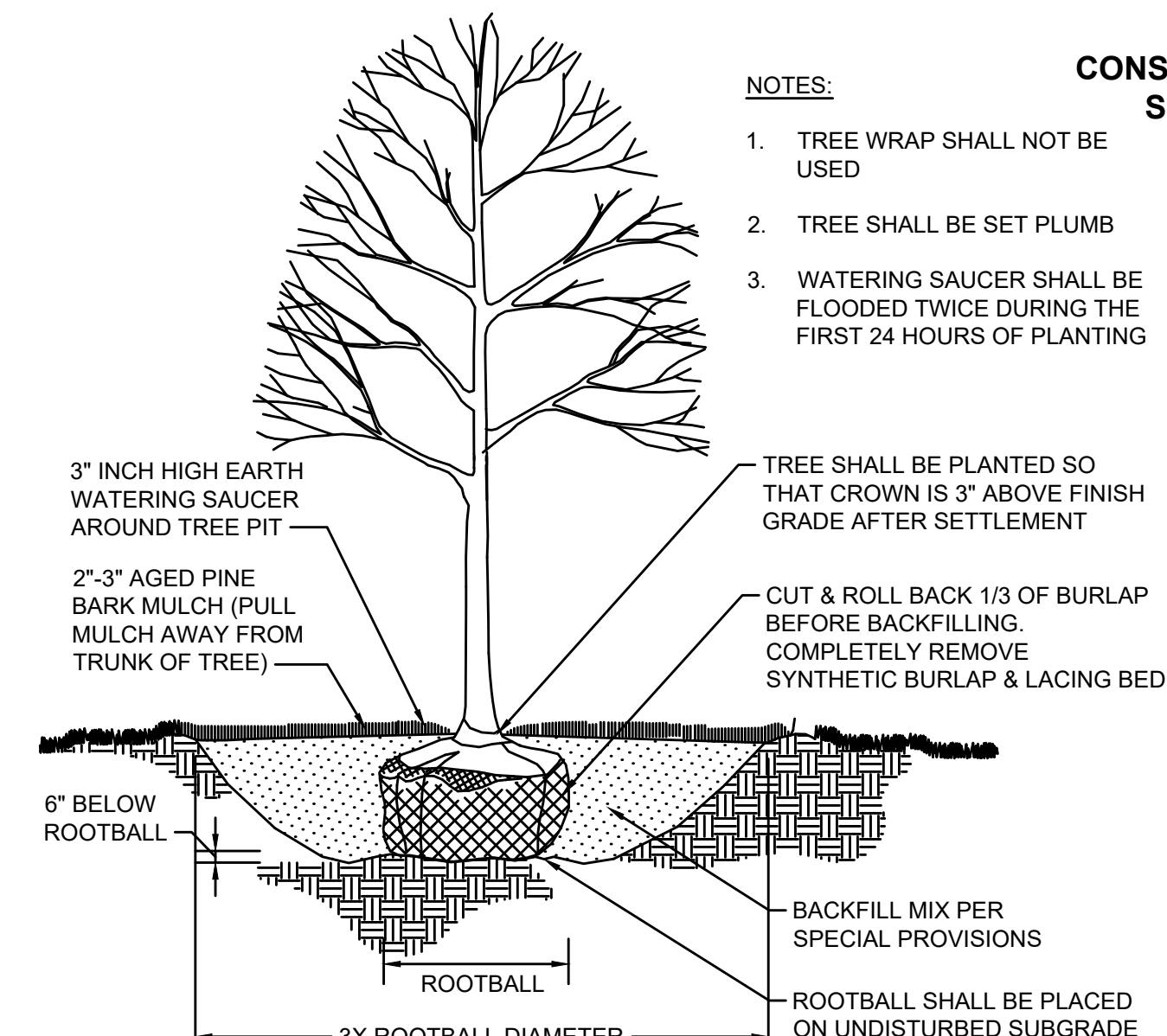


DRAIN MANHOLE

NOTES:

- ALL SECTIONS SHALL BE DESIGNED FOR HL-93 LOADING.
- PROVIDE "V" KNOCKOUTS FOR PIPES WITH 2" MAX CLEARANCE TO OUTSIDE OF PIPE. MORTAR ALL PIPE CONNECTIONS.
- JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PREFORMED BUTYL RUBBER.
- DRAIN MANHOLE FRAME AND COVER SHALL BE SET IN FULL MORTAR BED. ADJUST TO GRADE WITH CLAY BRICK AND MORTAR. (2 COURSES TYP 5 COURSES MAX)
- COPOLYMER MANHOLE STEPS SHALL BE INSTALLED AT 12" O.C. FOR THE FULL DEPTH OF THE STRUCTURE.

N.T.S.



DECIDUOUS TREE PLANTING

NOTES:

- TREE WRAP SHALL NOT BE USED
- TREE SHALL BE SET PLUMB
- WATERING SAUCER SHALL BE FLOODED TWICE DURING THE FIRST 24 HOURS OF PLANTING

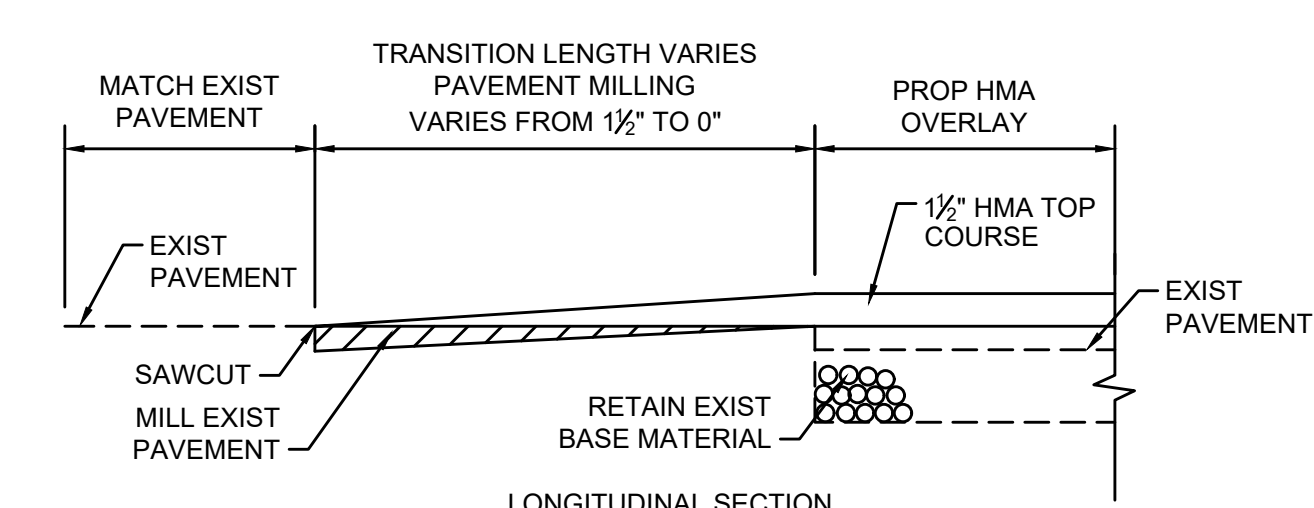
TREE SHALL BE PLANTED SO THAT CROWN IS 3" ABOVE FINISH GRADE AFTER SETTLEMENT

CUT & ROLL BACK 1/3 OF BURLAP BEFORE BACKFILLING. COMPLETELY REMOVE SYNTHETIC BURLAP & LACING BED

BACKFILL MIX PER SPECIAL PROVISIONS

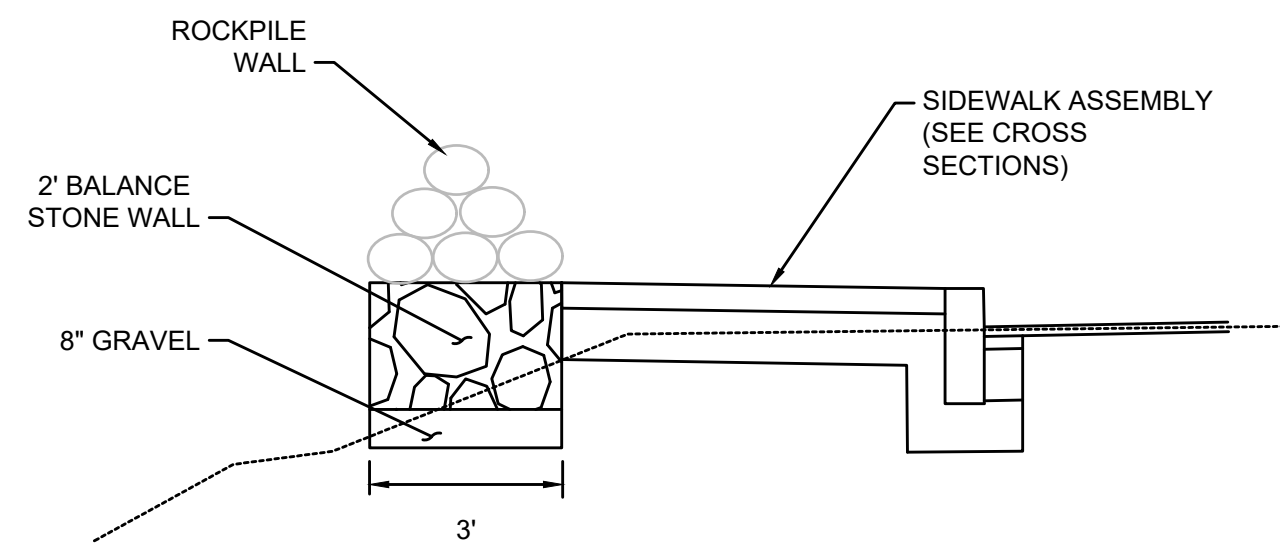
ROOTBALL SHALL BE PLACED ON UNDISTURBED SUBGRADE

N.T.S.



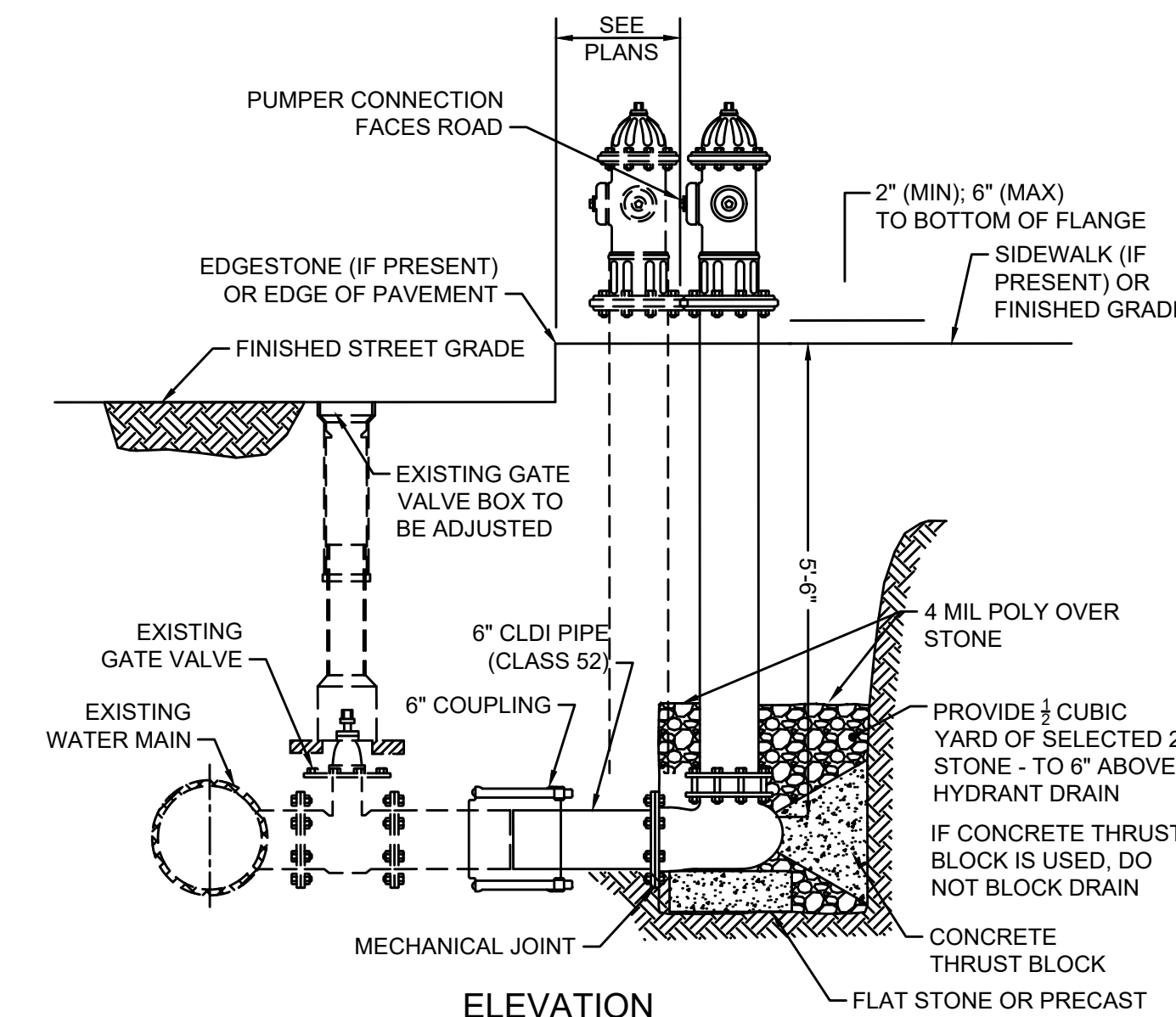
HMA OVERLAY TRANSITION

N.T.S.



BALANCE STONE WALL TOPPED W/ ROCKPILE WALL

N.T.S.



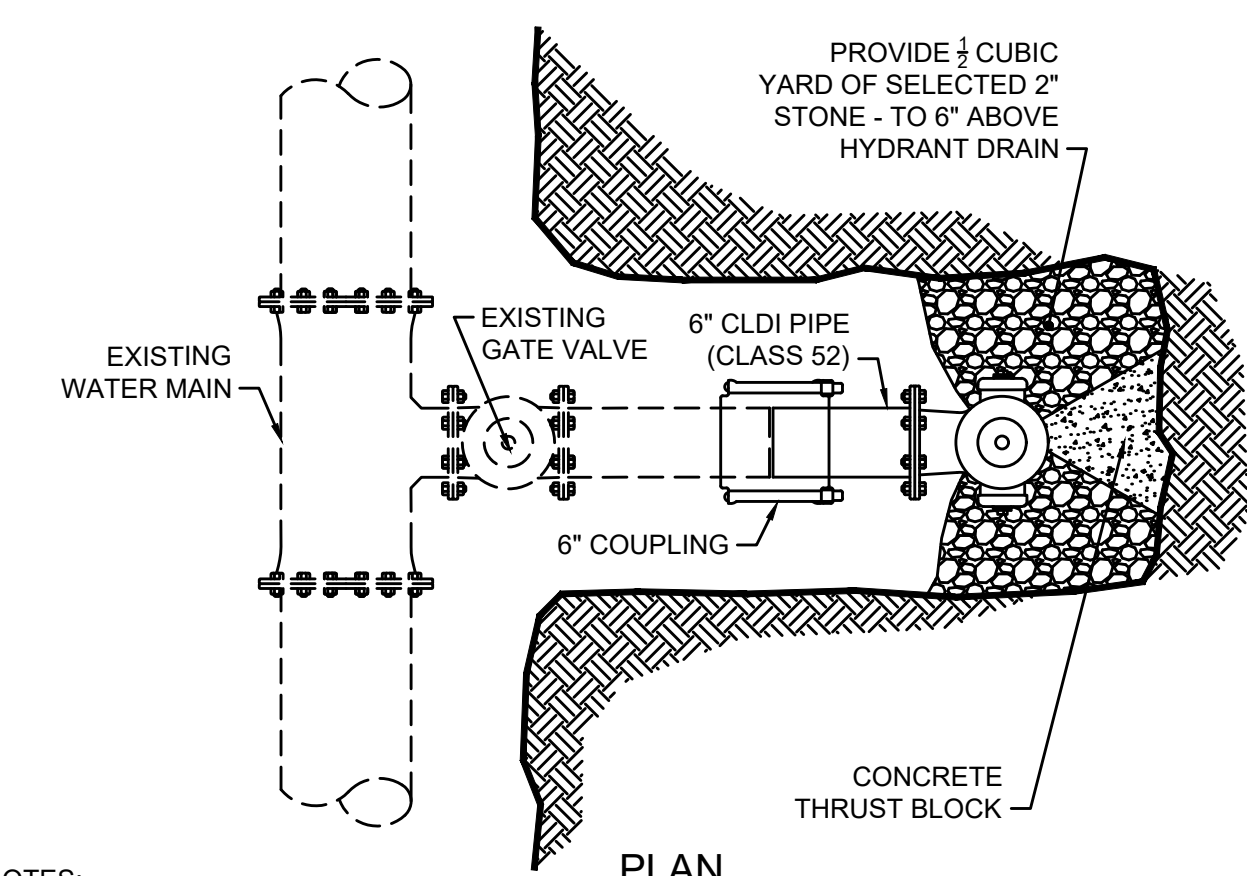
HYDRANT REMOVED AND RESET

N.T.S.

NOTES:

- ALL CONCRETE TO BE CAST-IN-PLACE (MIN 3000 PSI)
- CONCRETE THRUST BLOCK TO BE USED ONLY WHERE IT WILL BEAR ON UNDISTURBED EARTH.
- CONTRACTOR SHALL SHIELD HYDRANT BASE DRAIN HOLES, MECHANICAL JOINT GLANDS, AND BOLTS DURING PLACEMENT OF CONCRETE THRUST BLOCKS. DRAIN HOLES, GLANDS AND BOLTS, SHALL BE VERIFIED AS OPEN AND FREE OF OBSTRUCTIONS PRIOR TO BACKFILLING.

N.T.S.

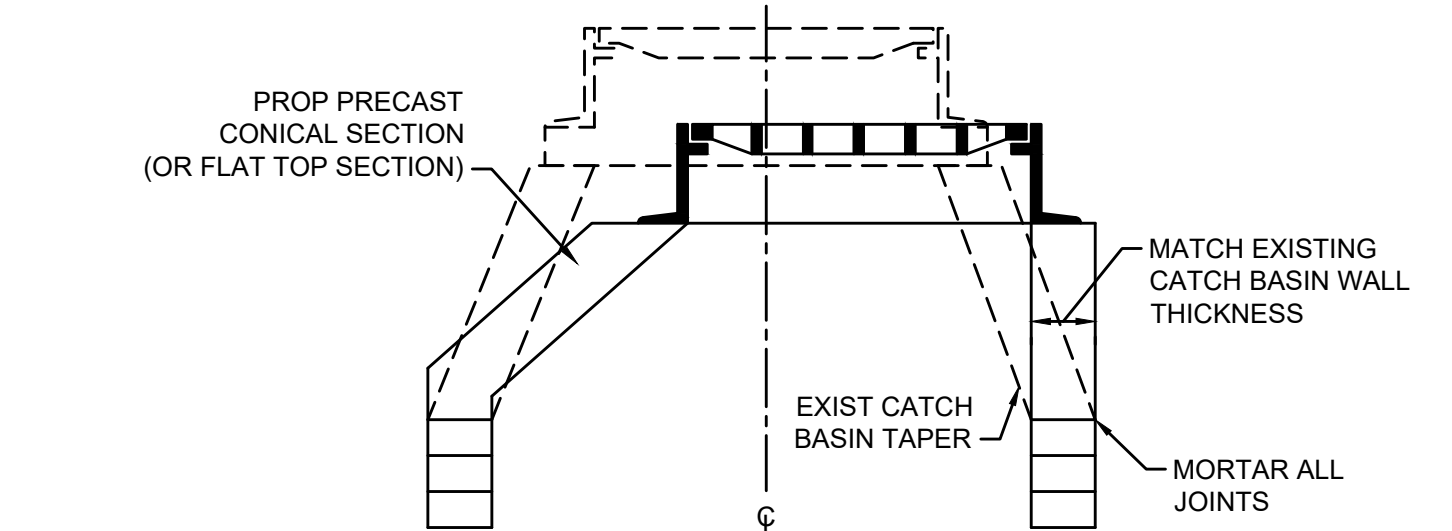


PLAN

NOTES:

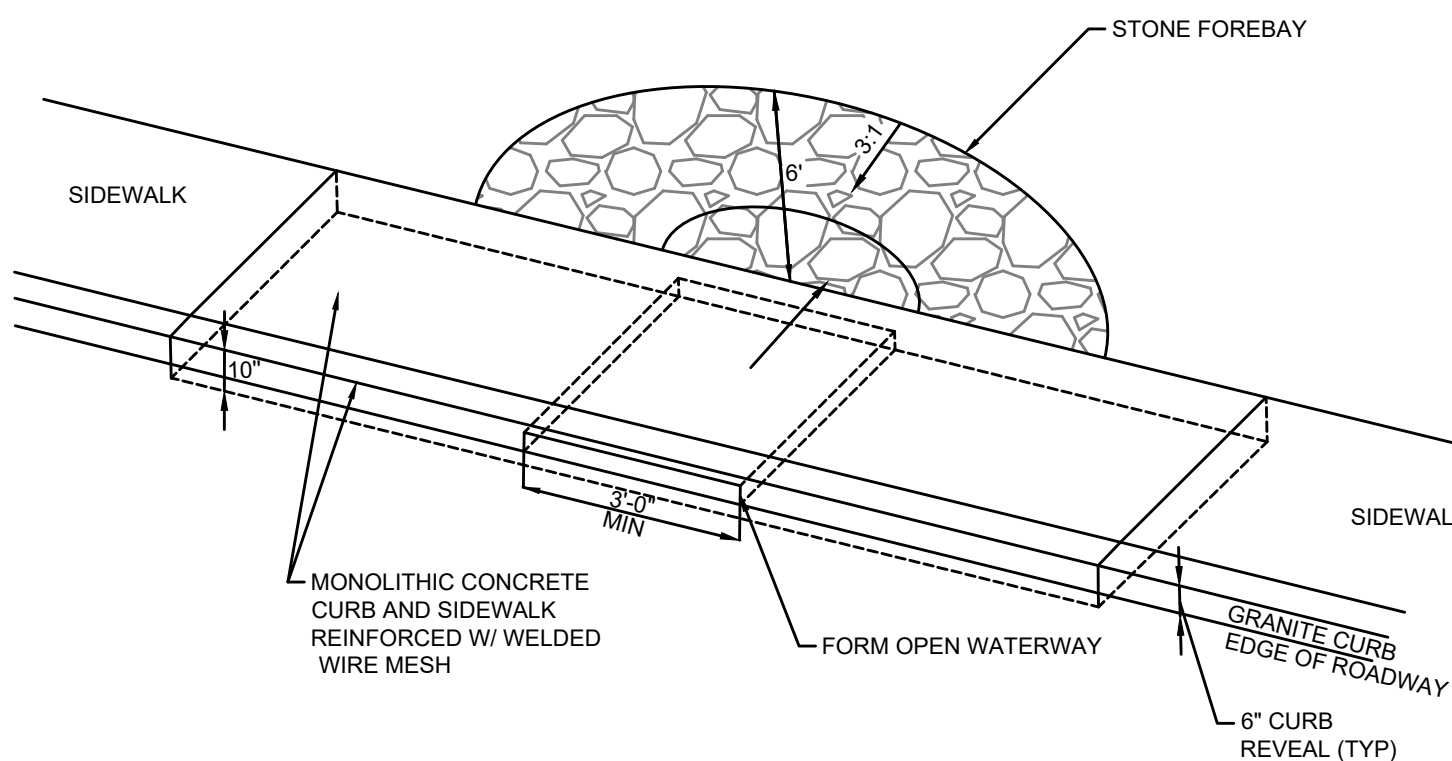
- ALL CONCRETE TO BE CAST-IN-PLACE (MIN 3000 PSI)
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N.T.S.



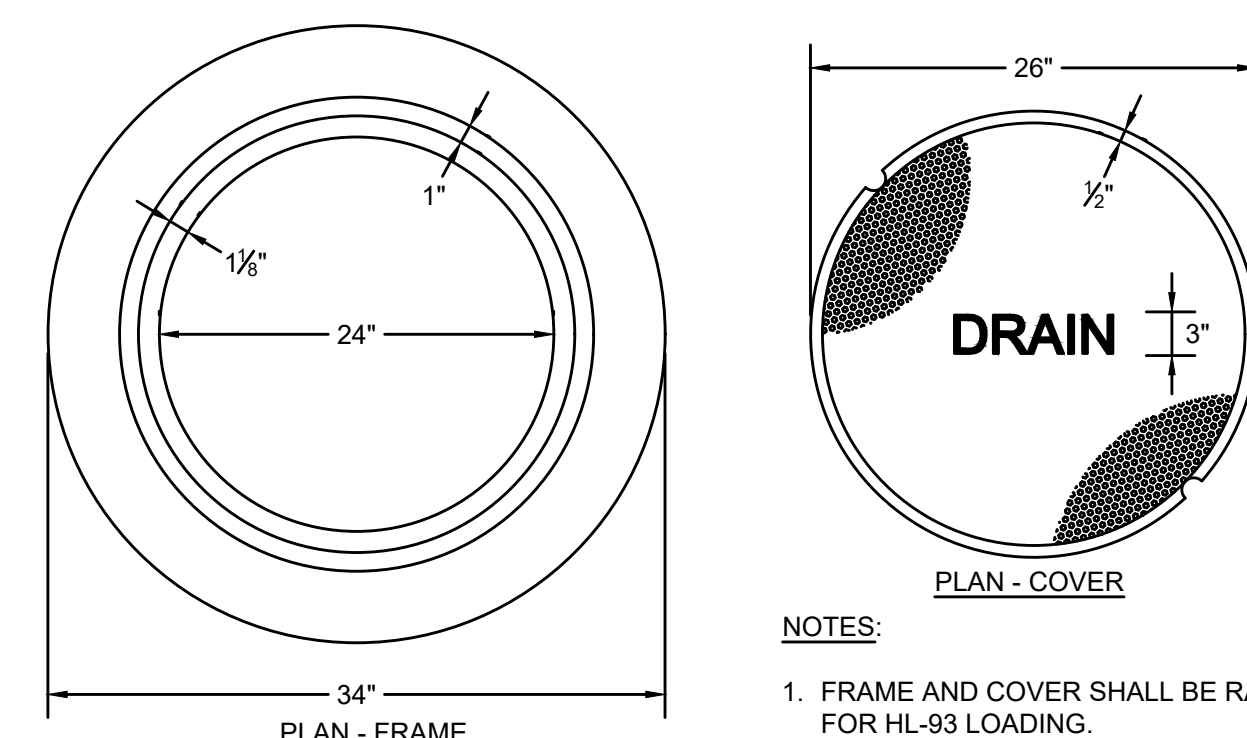
CATCH BASIN REMODEL

N.T.S.



CURB INLET WITH STONE FOREBAY

N.T.S.

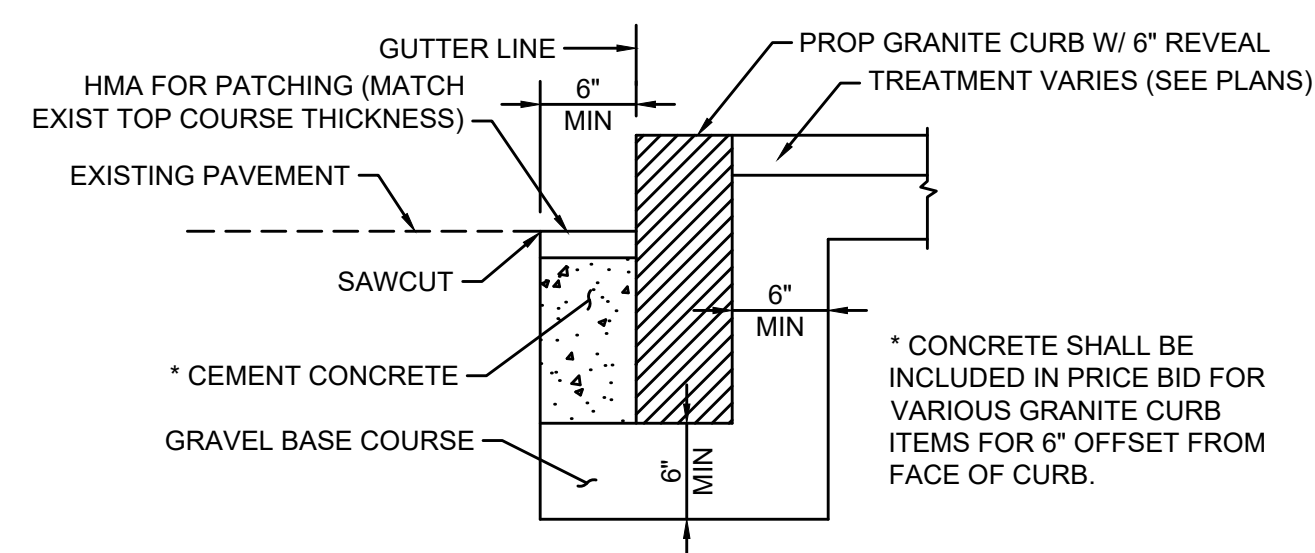


MANHOLE FRAME & COVER

N.T.S.

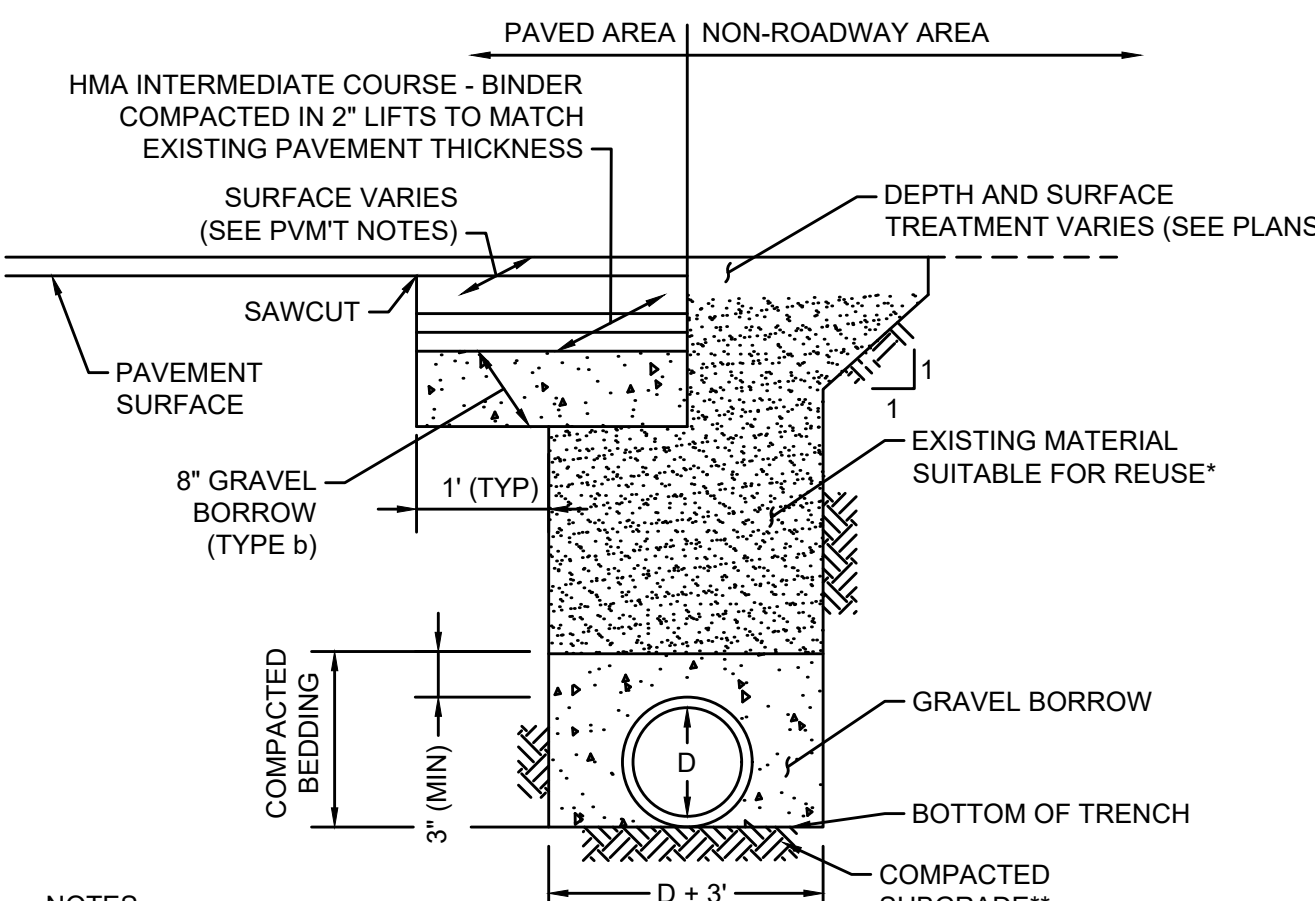
NOTES:

- FRAME AND COVER SHALL BE RATED FOR HL-93 LOADING.
- MATERIAL - CAST IRON.
- MINIMUM MASS - 265 LBS.
- ALL MH FRAMES AND COVERS SHALL BE ADA AND AAB COMPLIANT.
- MANHOLE COVERS SHALL HAVE A DIAMOND PATTERN, PICK HOLES, AND THE WORD "DRAIN" OR "SEWER" CAST IN 3-INCH LETTERS.



GRANITE CURB IN EXISTING PAVEMENT

N.T.S.



UTILITY TRENCH

N.T.S.

NOTES:

- * EXISTING MATERIAL OBTAINED FROM EXCAVATION THAT IS DETERMINED TO BE SUITABLE, AND APPROVED BY THE ENGINEER SHALL BE USED. BACKFILL SHALL BE PLACED IN LAYERS NO MORE THAN 6" IN DEPTH AND THOROUGHLY COMPACTED. BACKFILLING TO A POINT 2" OVER THE PIPE SHALL CONTAIN NO STONES LARGER THAN 3".
- **SOFT OR UNSUITABLE MATERIAL EXISTING BELOW THE REQUIRED BEDDING GRADE SHALL BE REMOVED AS DIRECTED AND REPLACED WITH SAND, GRAVEL, CRUSHED STONE OR OTHER SUITABLE MATERIAL AND THOROUGHLY COMPACTED.

WETLAND REPLICATION SPECIFICATIONS & GENERAL NOTES:

REPLICATION SITE SELECTION

THE WETLAND REPLICATION AREA SELECTED IS PROPOSED NEAR THE BORDERING VEGETATED WETLAND. THE PROPOSED WETLAND REPLICATION IS 793 S. F. AND WILL CONSIST OF PLANTING WETLAND SHRUBS AS SHOWN ON THE DETAILS OR AS DIRECTED BY THE PROFESSIONAL WETLAND SCIENTIST. THE REPLICATION AREA SHOULD BE ADJACENT TO THE MAIN WETLAND AREA. IN ADDITION IT IS LOCATED ADJACENT TO THE NATURAL WETLAND AND THIS WILL AID IN RE-VEGETATION BY OPPORTUNISTIC NATIVE SPECIES.

HYDROLOGY

THE HYDROLOGY AT THE REPLICATION SITE IS CRITICAL IN CONTROLLING THE PLANT COMMUNITY THAT DEVELOPS, AND MANY OF THE ECOLOGICAL FUNCTIONS OF THE SITE. THERE WILL BE UNRESTRICTED HYDRAULIC CONNECTIONS BETWEEN THE REPLICATED WETLAND AND WATER SOURCE. THE REPLICATION AREA WILL BE EXCAVATED TO THE GROUNDWATER ELEVATION AND SHALL BE FED BY RUNOFF FROM GAY STREET. INITIAL EXCAVATION FOR THE REPLICATION AREA SHALL BE CONDUCTED AT THE SAME TIME AS THE WETLAND FILLING. FINISHED GRADES OF THE REPLICATION AREA SHALL BE ADJUSTED IN THE FIELD BY A QUALIFIED WETLAND SCIENTIST TO ASSURE PROPER HYDROLOGIC CONNECTION WITH ADJACENT WETLAND AND PROPER RELATION TO GROUNDWATER ELEVATIONS TO ASSURE THE AREA WILL PERMANENTLY FUNCTION AS WETLAND.

SOILS

AN IMPORTANT FACTOR IN THE SUCCESS OF A REPLICATION AREA IS THE PROPER USE OF SOILS EITHER TRANSLOCATED (I.E. THE RELOCATION AND REUSE OF HYDRIC SOILS FROM THE IMPACTED RESOURCE AREA TO THE PROPOSED REPLICATION AREA) FROM THE IMPACTED WETLAND OR SOIL AMENDMENTS BROUGHT FROM OFF-SITE.

SOIL TRANSLLOCATION

SOIL TRANSLLOCATION IS THE PREFERRED METHODOLOGY FOR OBTAINING REPLICATION SOILS. A WETLAND SCIENTIST, PRIOR TO THE USE AND INSTALLATION, WILL INSPECT THE SOIL. PRIOR TO PLACEMENT OF HYDRIC SOILS IN THE REPLICATION AREA, ALL EXCAVATION OF THE REPLICATION AREA TO APPROPRIATE SUBGRADE ELEVATIONS SHOULD BE COMPLETED. SOIL TAKEN FROM AREAS WHERE THE INVASIVE SPECIES ARE PRESENT SHOULD ALWAYS BE AVOIDED. A QUALIFIED SOIL SCIENTIST SHALL INSPECT THE EXCAVATED AREA.

SOIL AMENDMENTS

COMPOST IS TO BE MIXED WITH TOPSOIL AS AN AMENDMENT. THE OBJECTIVE IS TO OBTAIN APPROXIMATELY 50% ORGANIC MATERIAL/TOPSOIL. AFTER THE SOIL IS MANAGED FOR PROPER CONSISTENCY (E.G. LOOSE TO FRIABLE), THE SOIL CONSISTENCY SHOULD BE TESTED. IF THE PROPER CONSISTENCY HAS NOT BEEN ACHIEVED, FURTHER EFFORTS SHOULD BE UNDERTAKEN TO ACHIEVE PROPER CONSISTENCY. SURVEYING OF SUBGRADES AND FINISHED ELEVATIONS SHOULD BE CONDUCTED FREQUENTLY DURING CONSTRUCTION. TO SUPPLEMENT ORGANIC MATERIAL, IT IS RECOMMENDED THAT COURSE WOODY DEBRIS (E.G. LOGS) BE SCATTERED ON THE REPLICATION AREA IN BETWEEN PLANTINGS TO ADD STRUCTURE AND A LONG-TERM SOURCE OF DECAYING ORGANIC MATERIAL, TO COVER AT LEAST FIVE PERCENT OF THE AREA. SOILS TO BE USED AT THE MITIGATION SITE SHOULD BE USED IMMEDIATELY IF POSSIBLE AND STOCKPILED FOR AS LITTLE TIME AS POSSIBLE. WHILE STOCKPILED, THE SOILS SHOULD BE KEPT WET AND NOT BE ALLOWED TO DRY OUT. CONTAMINATION OF THESE SOILS SHOULD BE PREVENTED. THEY SHOULD BE TRANSPORTED IN VEHICLES THAT HAVE BEEN WASHED SO THAT NO EXOTIC/INVASIVE SEEDS FROM OTHER SITES GET MIXED IN WITH THEM.

PLANTING REQUIREMENTS

A QUALIFIED PROFESSIONAL, WITH TRAINING IN WETLAND SCIENCE, SHALL OVERSEE PLANTING PROCEDURES. SHRUBS SHOULD BE PLANTED 8-10 FEET ON CENTER IN A RANDOM PATTERN. PROPOSED PLANTS SHALL BE SUBMITTED TO WETLAND SCIENTIST FOR APPROVAL.

INVASIVE SPECIES

IF THE FOLLOWING INVASIVE SPECIES ARE FOUND GROWING IN REPLICATION AREAS, MEASURES SHOULD BE TAKEN TO ELIMINATE THEM AS SOON AS POSSIBLE BY HAND WEEDING. SOILS FROM EXISTING WETLANDS CONTAINING THESE SPECIES SHOULD NEVER BE USED IN REPLICATION AREAS.

- PURPLE LOOSESTRIFE (LYTHRUM SALICARIA)
- PHRAGMITES (PHRAGMITES AUSTRALIS)
- BUCKTHORN (RHAMNUS FRANGULA ALNUS)
- HONEYSUCKLES (LONICERA SPP.)
- GARLIC MUSTARD (ALLIARIA PETIOLATA)
- JAPANESE KNOTWEED (POLYGONUM CUSPIDATUM OR FALLOPIA JAPONICA)
- JAPANESE STILL GRASS (MICROSTEGIUM VIRMINEURUM)
- REED CANARY GRASS (PHALARIS ARUNDINACEA)
- BITTERSWEET NIGHTSHADE (CELASTRUS ORBICULATUS)
- BLACK SWALLOW-WORT (CYANCHUM NIGRUM)
- PALE SWALLOW-WORT (CYANCHUM ROSSICUM)
- MULTIFLORA ROSE (ROSA MULTIFLORA)

TRUCKS THAT HAVE PREVIOUSLY BEEN ON OTHER SITES SHOULD BE WASHED PRIOR TO INTRODUCTION TO THE REPLICATION SITE SO THAT MUD/DIRT WITH EXOTIC/INVASIVE SEEDS IS NOT INADVERTENTLY BROUGHT TO THE REPLICATION SITE.

TIMING OF PLANTINGS

ALL PLANTING SHOULD OCCUR AT THE BEGINNING OR END OF THE GROWING SEASON. FALL PLANTINGS SHOULD BE DONE BEFORE THE FIRST FROST. SHRUBS AND TREES, HOWEVER, MAY BE PLANTED UP TO NOVEMBER 15, WEATHER PERMITTING.

EROSION CONTROL

EROSION CONTROLS WILL BE PLACED ALONG THE BOUNDARY OF THE WETLAND REPLICATION AREA. UPON COMPLETION OF THE REPLICATION AREA, INSTALLATION OF SILTATION FENCING AND COMPOST FILTER TUBES BETWEEN THE REPLICATION AREA AND THE ADJACENT UPLAND WILL BE PROVIDED TO PREVENT SILT FROM ENTERING THE REPLICATION AREA. PRIOR TO PERMANENT ESTABLISHMENT OF VEGETATION IN THE REPLICATION AREA, SOILS WILL BE TEMPORARILY STABILIZED TO PREVENT IMPACTS FROM EROSION BY MULCHING AND SEEDING WITH A WETLAND SEED MIXTURE UNTIL RE-ESTABLISHMENT OF WETLAND VEGETATION OCCURS. HYDRO SEEDING IS A VALUABLE EROSION CONTROL MEASURE AND MAY DISCOURAGE COLONIZATION BY INVASIVE SPECIES. ALL EMBANKMENT SLOPES ADJACENT TO WETLAND REPLICATION AREAS SHOULD HAVE SLOPES NO GREATER THAN 2H:1V UNLESS STABILIZED BY STRUCTURAL MEANS. BIOENGINEERING STABILIZATION METHODS ARE RECOMMENDED FOR SLOPE STABILIZATION ORGANIC SOILS AND WETLAND VEGETATION SHOULD NOT BE PLACED IN THE REPLICATION AREA UNTIL THE WETLAND SCIENTIST HAS VERIFIED THAT THE FINAL EXCAVATED GRADE FOR THE REPLICATION AREA WILL ALLOW THE FINISHED GRADE OF THE REPLICATION SITE TO MEET THE DESIGN SPECIFICATIONS. FOLLOWING EXCAVATION WORK, FINAL GRADING AND LANDSCAPING SHOULD BE COMPLETED AS SOON AS POSSIBLE TO MINIMIZE EROSION. ALL EXPOSED SOIL WILL BE STABILIZED USING SEED-FREE MULCH OR OTHER APPROPRIATE EROSION CONTROL MEASURES IN THE EVENT THAT SEASONAL CONDITIONS RESULT IN A DELAY IN PLANTING. IF THE SITE IS EXCAVATED TO THE SUBGRADE IN THE FALL AND A DELAY IS INEVITABLE, CONSIDERATION SHOULD BE GIVEN TO STABILIZING THE SITE FOR WINTER, AND CONDUCTING FINAL GRADING IN THE SPRING.

MONITORING REQUIREMENTS

MONITORING IS CRITICAL IN WETLAND REPLICATION EFFORTS DUE TO THE COMPLEX ISSUES THAT CAN ARISE WHEN TRYING TO REPLACE THE SPECIFIC ECOLOGICAL CONDITIONS OF WETLANDS. MONITORING TO ENSURE THAT THE PROJECT IS BUILT ACCORDING TO THE DESIGN SPECIFICATIONS WILL ENSURE THAT THE MOST COMMON CAUSE OF FAILURE IS AVOIDED. A QUALIFIED WETLAND SCIENTIST SHALL BE ON-SITE TO MONITOR THE EXCAVATION, GRADING, AND PLANTING OF THE REPLICATION AREA. THE WETLAND SCIENTIST SHALL BE PRESENT DURING THE MOST IMPORTANT TASKS IN REPLICATION CONSTRUCTION INCLUDING:

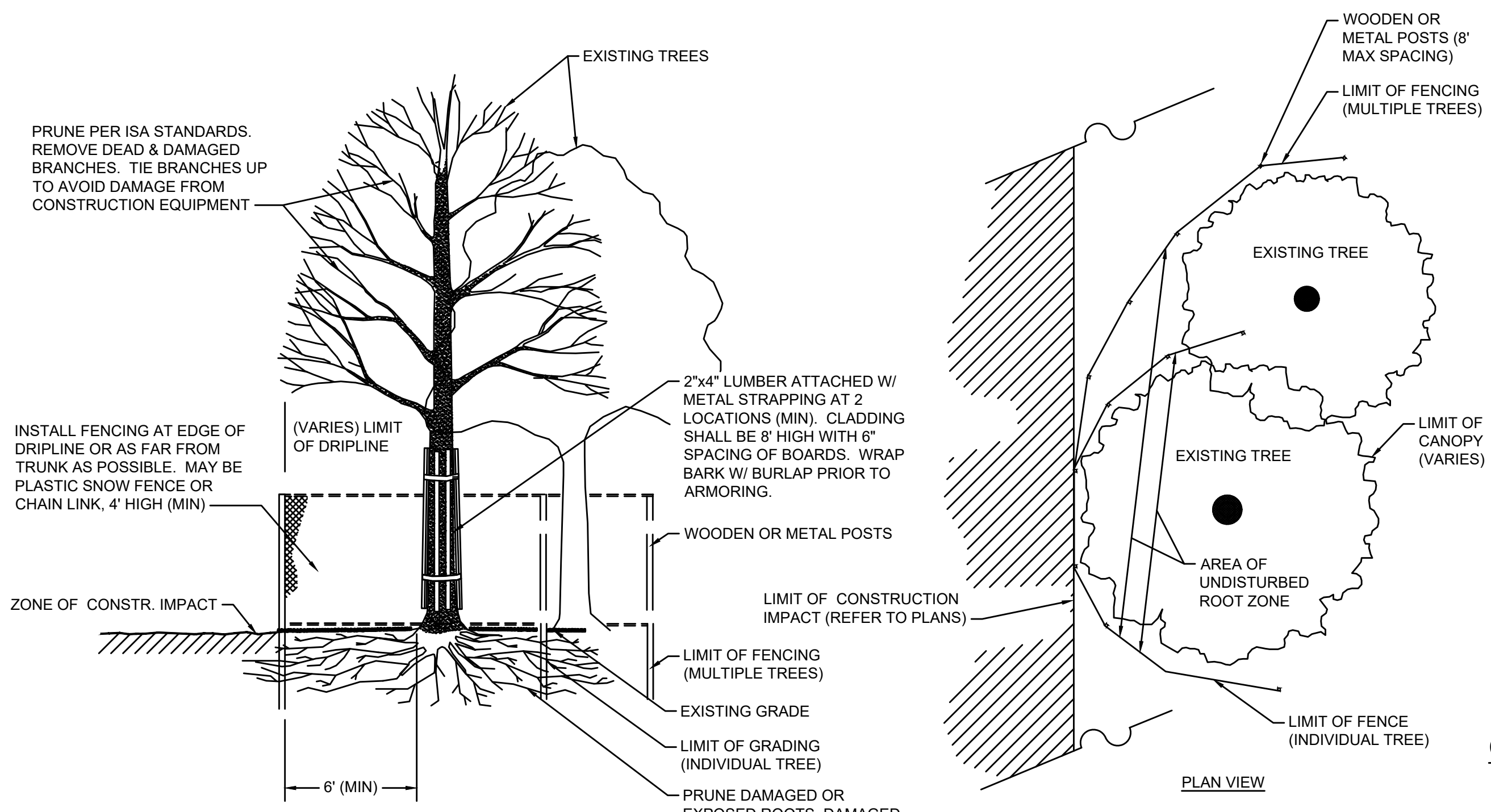
1. BEFORE EXCAVATION OR EROSION CONTROL INSTALLATION WORK BEGINS TO INSPECT SITE FLAGGING;
2. DURING EXCAVATION OF THE ALTERED AREA IF VEGETATION IS TO BE TRANSLOCATED TO THE REPLICATION AREA TO ENSURE SURVIVAL OF THE PLANTINGS;
3. BEFORE SOIL TRANSLLOCATION OR ADDITION INTO THE REPLICATION AREA TO INSPECT EXCAVATED ELEVATIONS AND LIKELY POST-CONSTRUCTION GROUND WATER ELEVATIONS FOR THE REPLICATION AREA;
4. AFTER EACH STAGE OF GRADING WORK IS COMPLETED TO INSPECT FINISHED ELEVATIONS;
5. DURING PLANTING AND SEEDING AND AFTER THE FIRST MONTH OF THE GROWING SEASON TO INSPECT PROPAGATION TECHNIQUES.

MONITORING REPORT & SCHEDULE

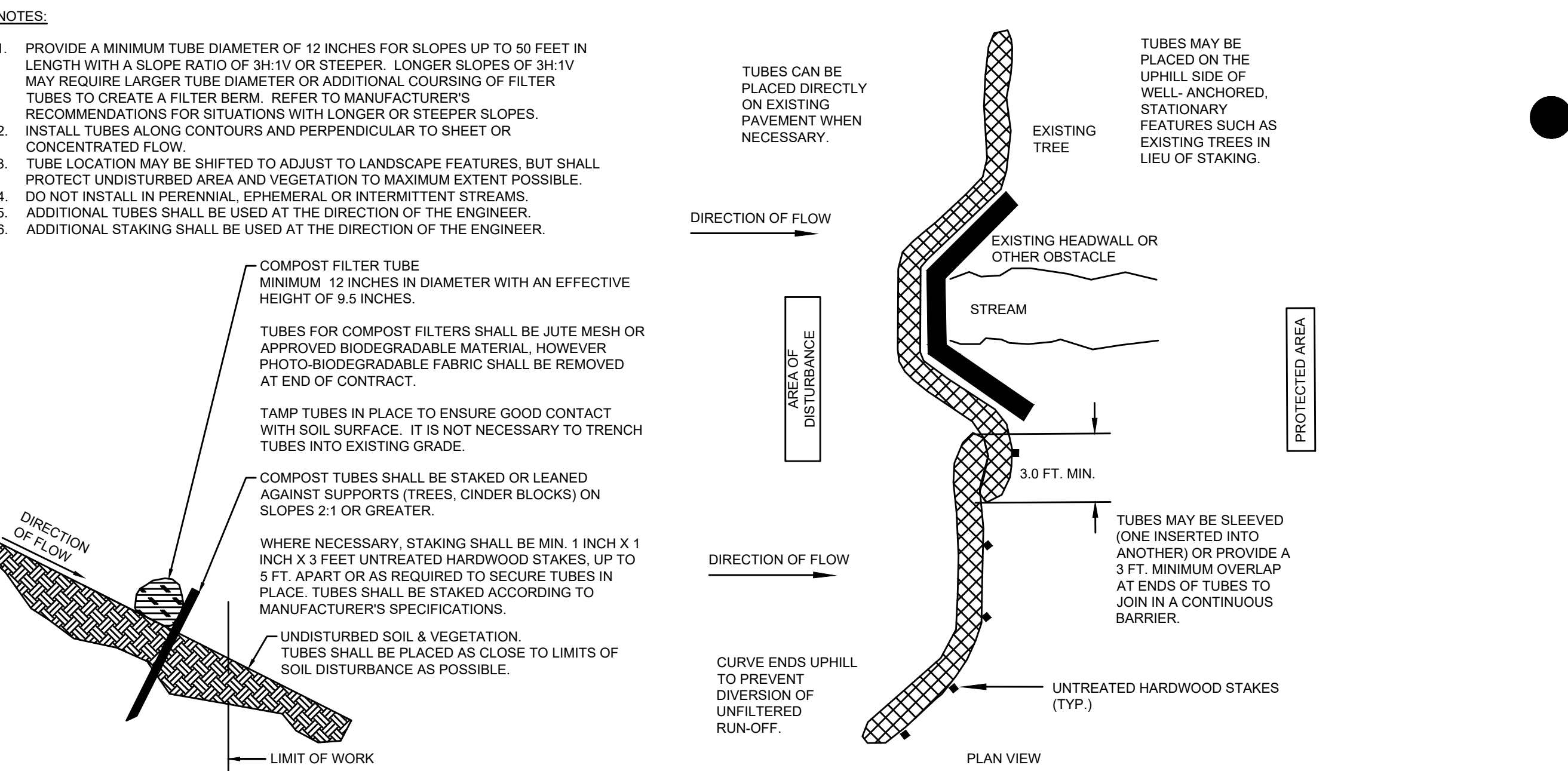
1. END OF FIRST GROWING SEASON: AT THE END OF THE FIRST FULL GROWING SEASON BEFORE PLANTS ENTER DORMANCY, TYPICALLY IN SEPTEMBER, INSPECT TO DOCUMENT THE MONITORING PARAMETERS DEFINED IN THE MASSDOT CONTRACT DOCUMENTS AND SPECIAL PROVISIONS.
2. END OF SECOND GROWING SEASON: AT THE END OF THE SECOND GROWING SEASON BEFORE PLANTS ENTER DORMANCY, TYPICALLY IN SEPTEMBER, INSPECT TO DOCUMENT THE MONITORING PARAMETERS DEFINED IN THE MASSDOT CONTRACT DOCUMENTS AND SPECIAL PROVISIONS.

GENERAL NOTES

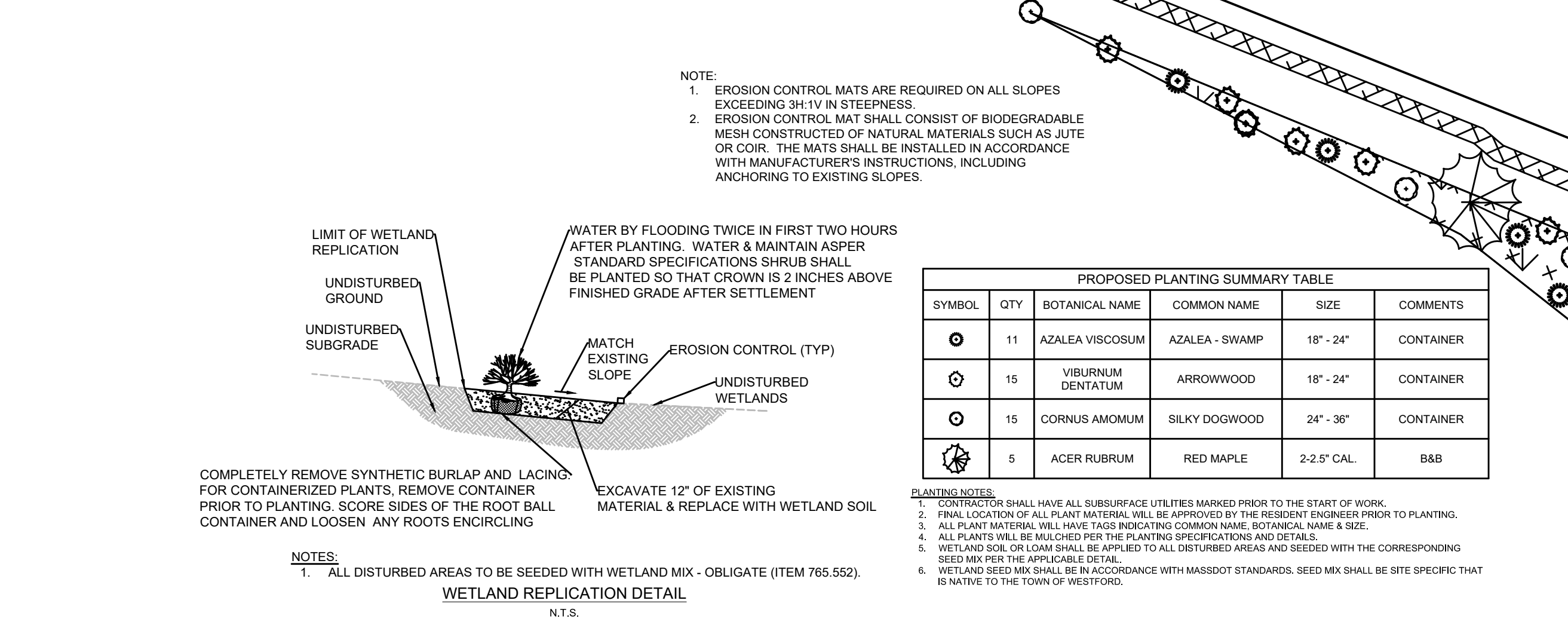
1. ALL WETLAND REPLICATION WORK SHALL BE PERFORMED UNDER THE DIRECTION OF A QUALIFIED WETLAND SCIENTIST AND IN ACCORDANCE WITH THE ORDER OF CONDITIONS ISSUED BY THE WESTWOOD CONSERVATION COMMISSION AND THE SPECIFICATIONS AND PROCEDURES OUTLINED ON THIS SHEET.
2. ALL WORK, MATERIALS, ETC. REQUIRED TO CONSTRUCT THE WETLAND REPLICATION AREA SHALL BE INCLUDED IN THE BID PRICE.



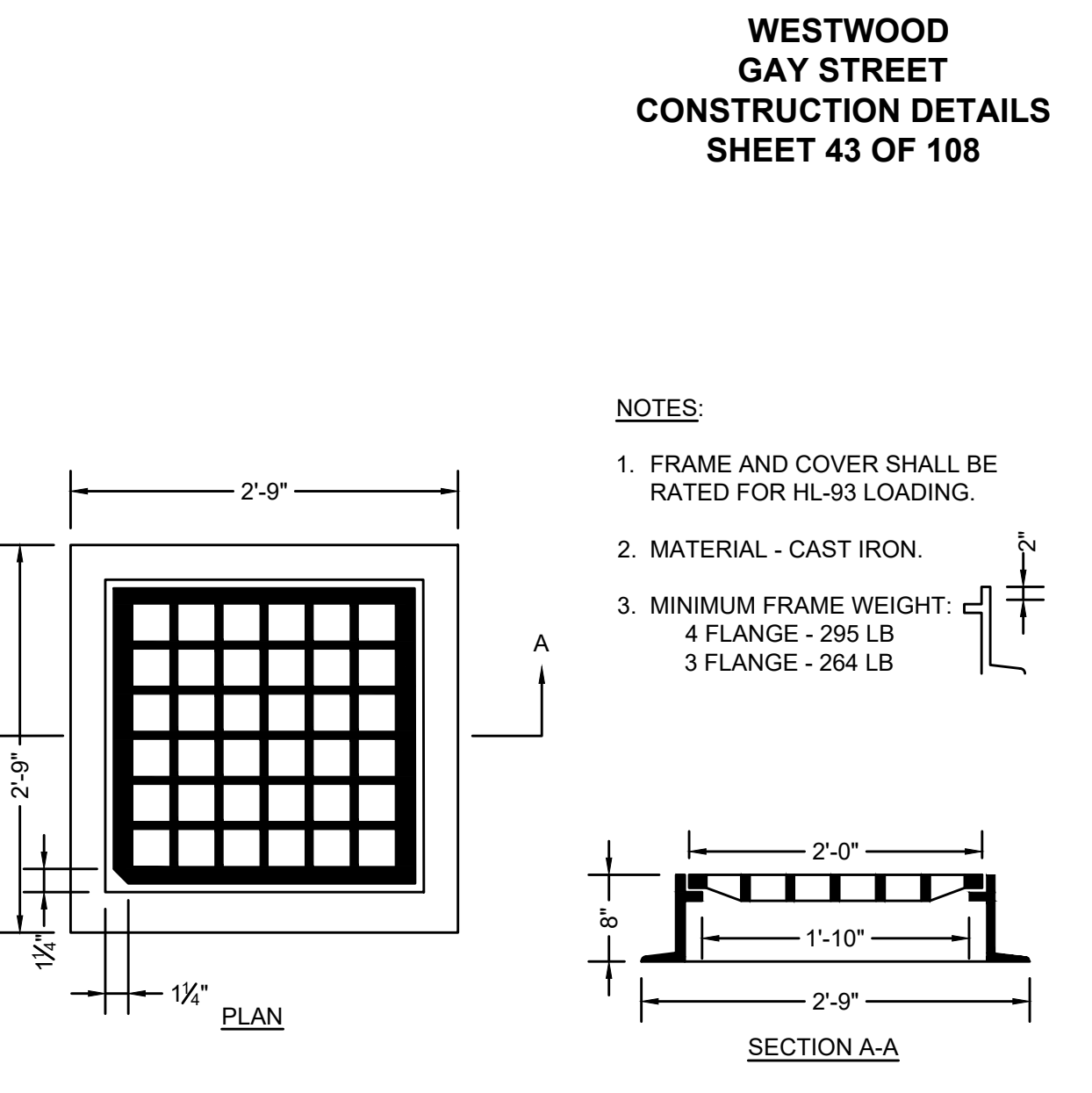
TREE PROTECTION
N.T.S.



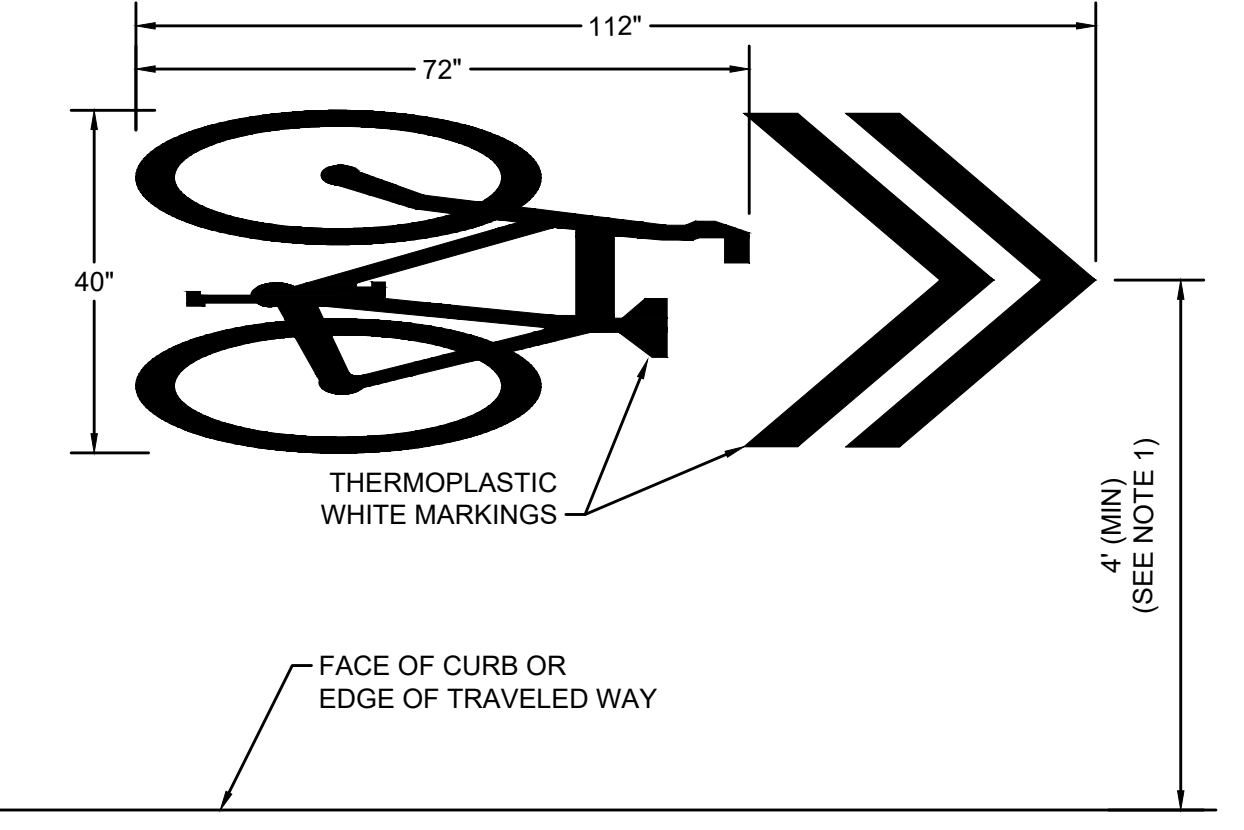
COMPOST FILTER TUBE
N.T.S.



WETLAND REPLICATION DETAIL
N.T.S.



CATCH BASIN FRAME & GRATE (MUNICIPAL STANDARD)
N.T.S.



SHARED LANE PAVEMENT MARKING
N.T.S.

PROPOSED PLANTING SUMMARY TABLE

SYMBOL	QTY	BOTANICAL NAME	COMMON NAME	SIZE	COMMENTS
⊙	11	AZALEA VISCOSUM	AZALEA - SWAMP	18" - 24"	CONTAINER
⊙	15	VIBURNUM DENTATUM	ARROWWOOD	18" - 24"	CONTAINER
⊙	15	CORNUS AMOMUM	SILKY DOGWOOD	24" - 36"	CONTAINER
⊙	5	ACER RUBRUM	RED MAPLE	2-2.5' CAL.	B&B

- PLANTING NOTES:**
1. CONTRACTOR SHALL HAVE ALL SUBSURFACE UTILITIES MARKED PRIOR TO THE START OF WORK.
 2. FINAL LOCATION OF ALL PLANT MATERIAL WILL BE APPROVED BY THE RESIDENT ENGINEER PRIOR TO PLANTING.
 3. ALL PLANT MATERIAL WILL HAVE THE FOLLOWING INFORMATION: BOTANICAL NAME & SIZE.
 4. ALL PLANTS WILL BE MULCHED PER THE PLANTING SPECIFICATIONS AND DETAILS.
 5. WETLAND SEED MIX SHALL BE APPLIED TO ALL DISTURBED AREAS AND SEEDING WITH THE CORRESPONDING SEED MIX PER THE APPLICABLE DETAIL.
 6. WETLAND SEED MIX SHALL BE IN ACCORDANCE WITH MASSDOT STANDARDS, SEED MIX SHALL BE SITE SPECIFIC THAT IS NATIVE TO THE TOWN OF WESTFORD.

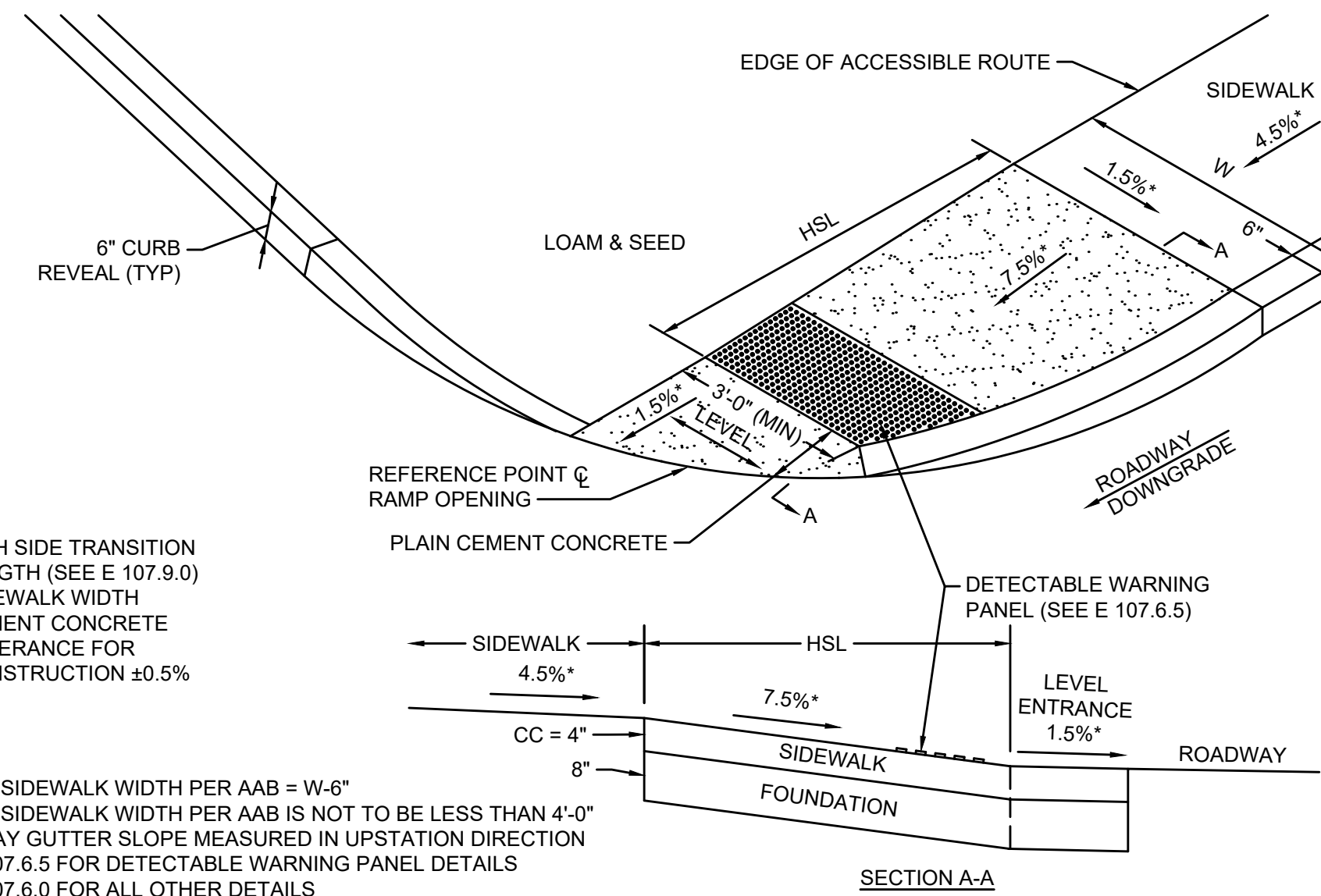
- NOTES:**
1. FRAME AND COVER SHALL BE RATED FOR HL-93 LOADING.
 2. MATERIAL - CAST IRON.
 3. MINIMUM FRAME WEIGHT:
4 FLANGE - 295 LB
3 FLANGE - 264 LB

WHEELCHAIR RAMP NOTES:

1. A MINIMUM OF 3'-0" CLEAR (EXCLUDING CURB WIDTH) SHALL BE MAINTAINED AT ANY PERMANENT OBSTACLE IN ACCESSIBLE ROUTE (I.E., HYDRANTS, UTILITY POLES, TREE WELLS, SIGNS, ETC.).
2. CURB TREATMENT VARIES, SEE PLANS FOR CURB TYPE.
3. RAMP, CURB AND ADJACENT PAVEMENTS SHALL BE GRADED TO PREVENT PONDING.
4. ELIMINATE CURBING AT RAMP WHERE IT ABUTS ROADWAY.
5. DETECTABLE WARNING PANELS ARE REQUIRED ON ALL OF THE PROPOSED WHEELCHAIR RAMPS AND ARE TO BE INSTALLED IN ACCORDANCE WITH CONSTRUCTION STANDARD E 107.6.5 (OCTOBER 2017). CONTRACTOR SHALL PROVIDE 6" BETWEEN DETECTABLE WARNING PANEL AND EDGE OF CONCRETE WHERE IT ABUTS LOAM & SEED.
6. WHEELCHAIR RAMP SLOPES AND CROSS SLOPES SHALL HAVE A CONSTRUCTION TOLERANCE OF ±0.5%.
7. DETECTABLE WARNING PANELS SHALL BE YELLOW IN COLOR.

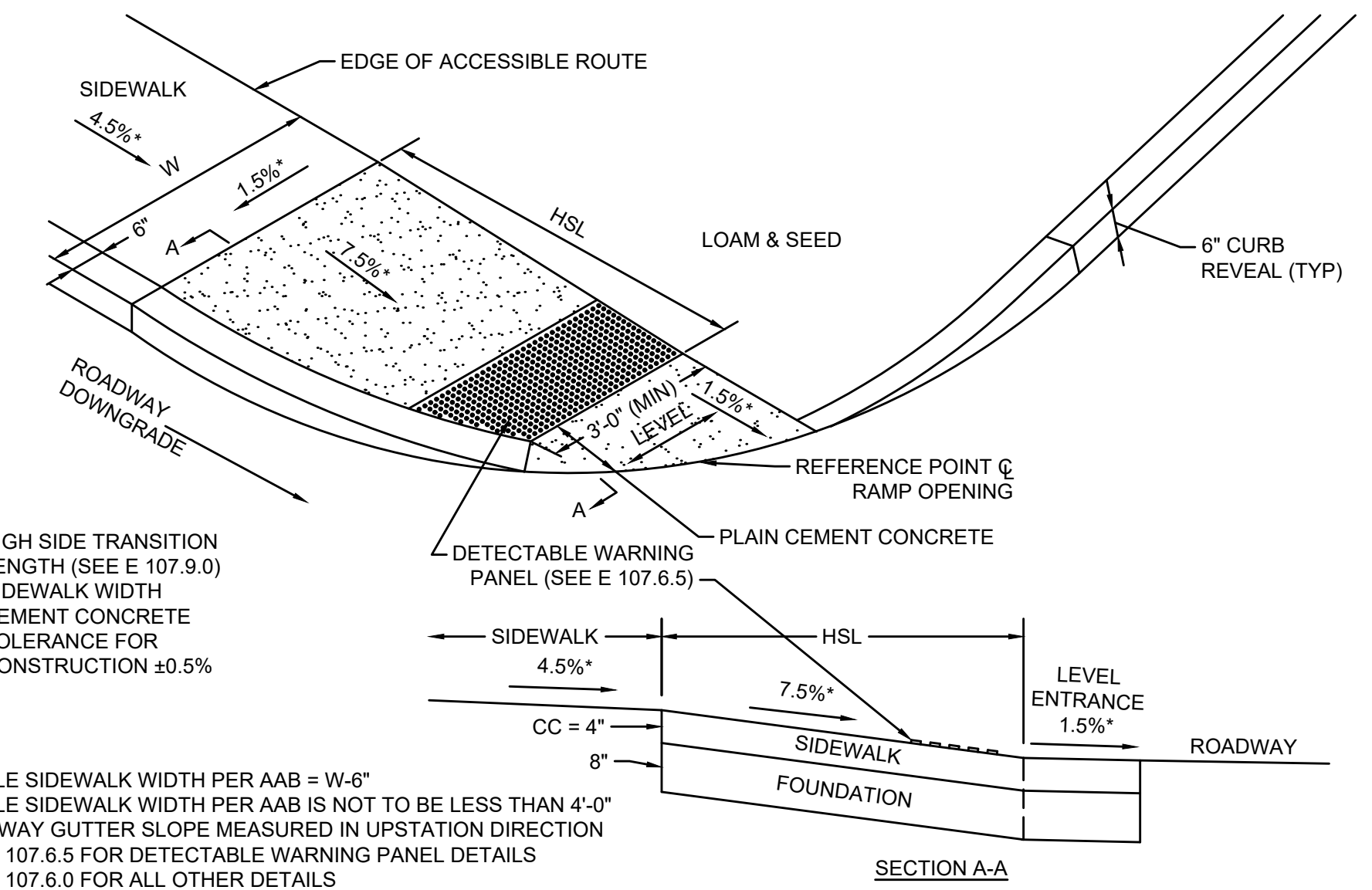
WHEELCHAIR RAMP NOTES

N.T.S.



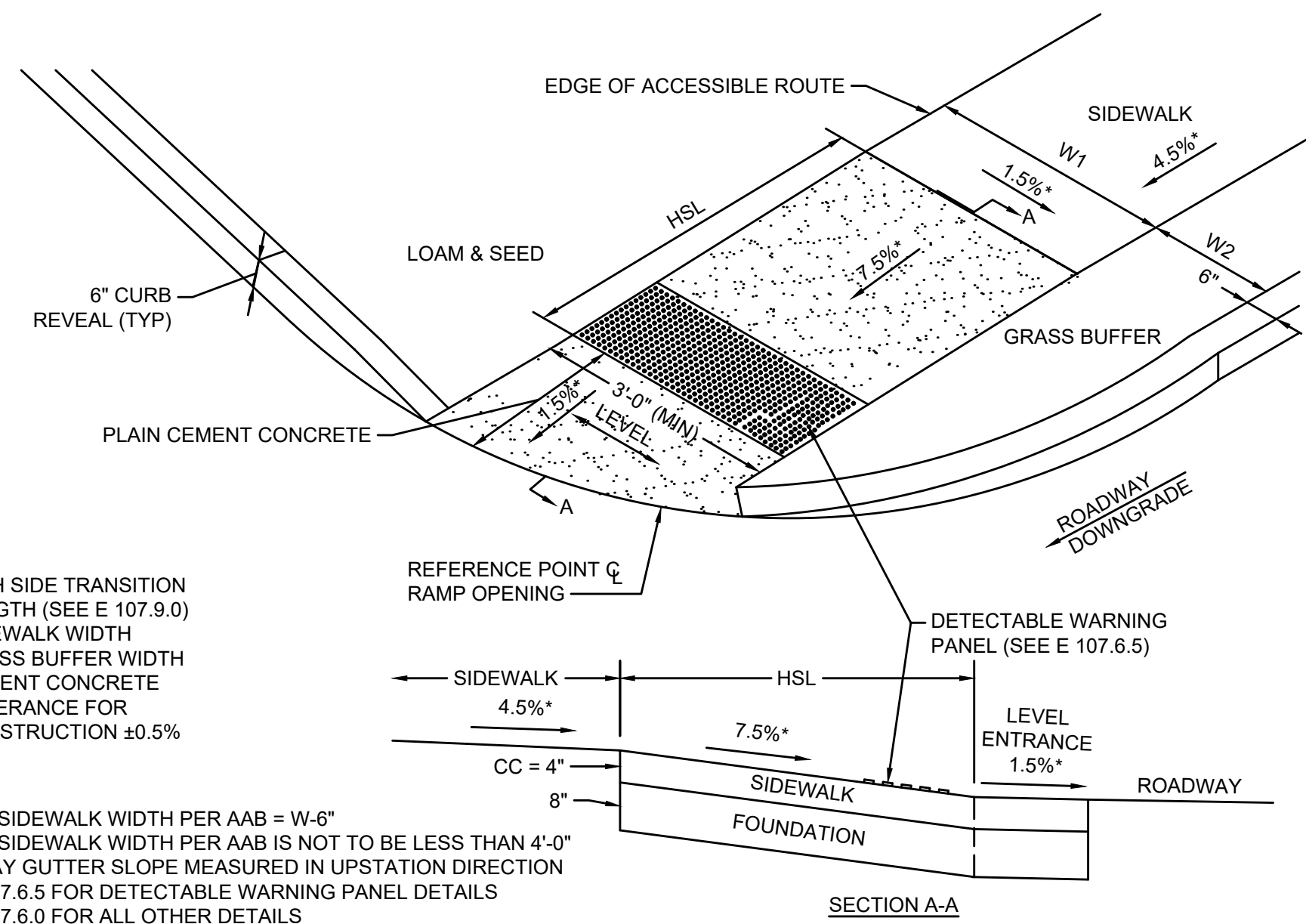
WHEELCHAIR RAMP TYPE 1

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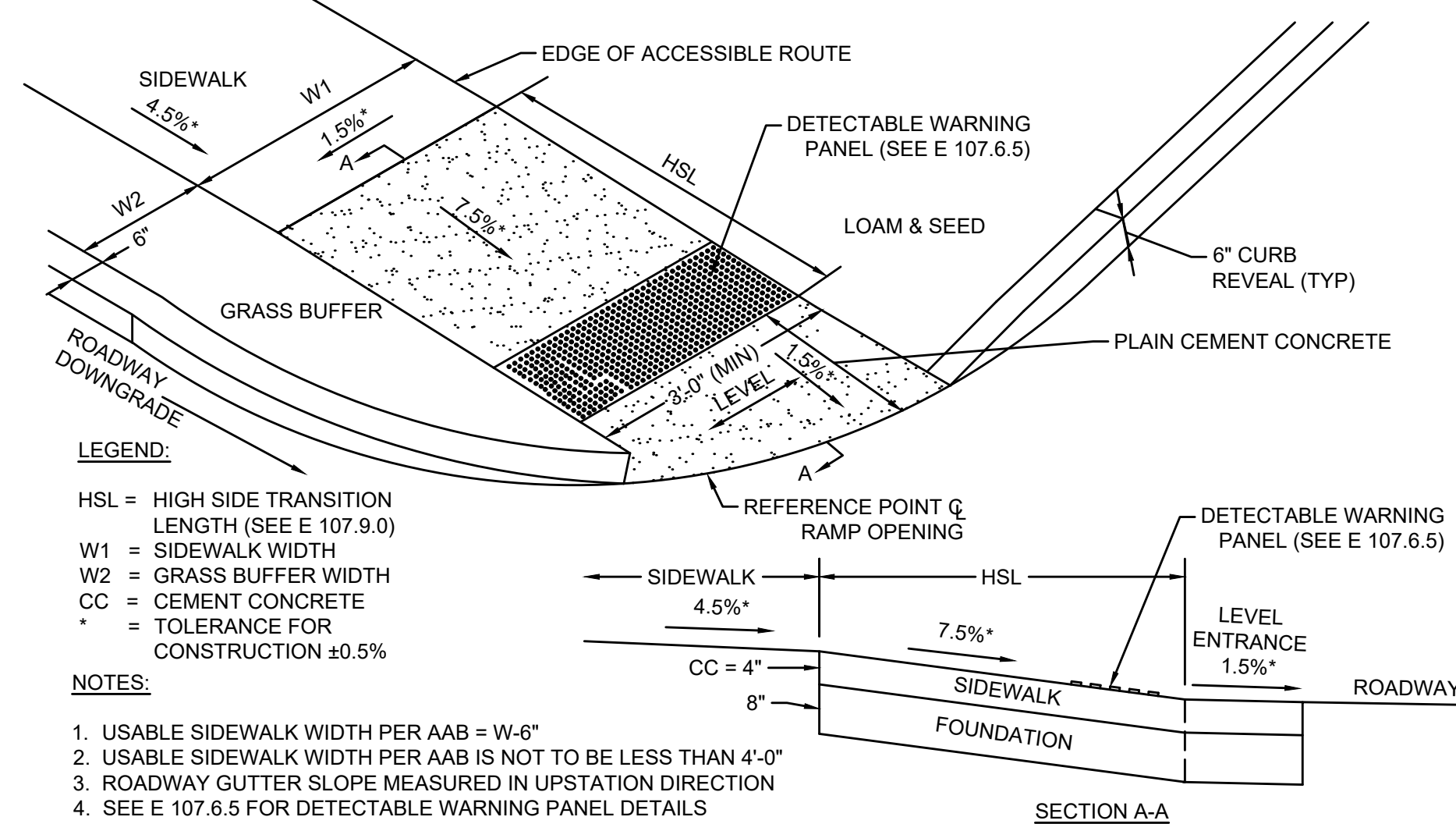
WHEELCHAIR RAMP TYPE 2

N.T.S.



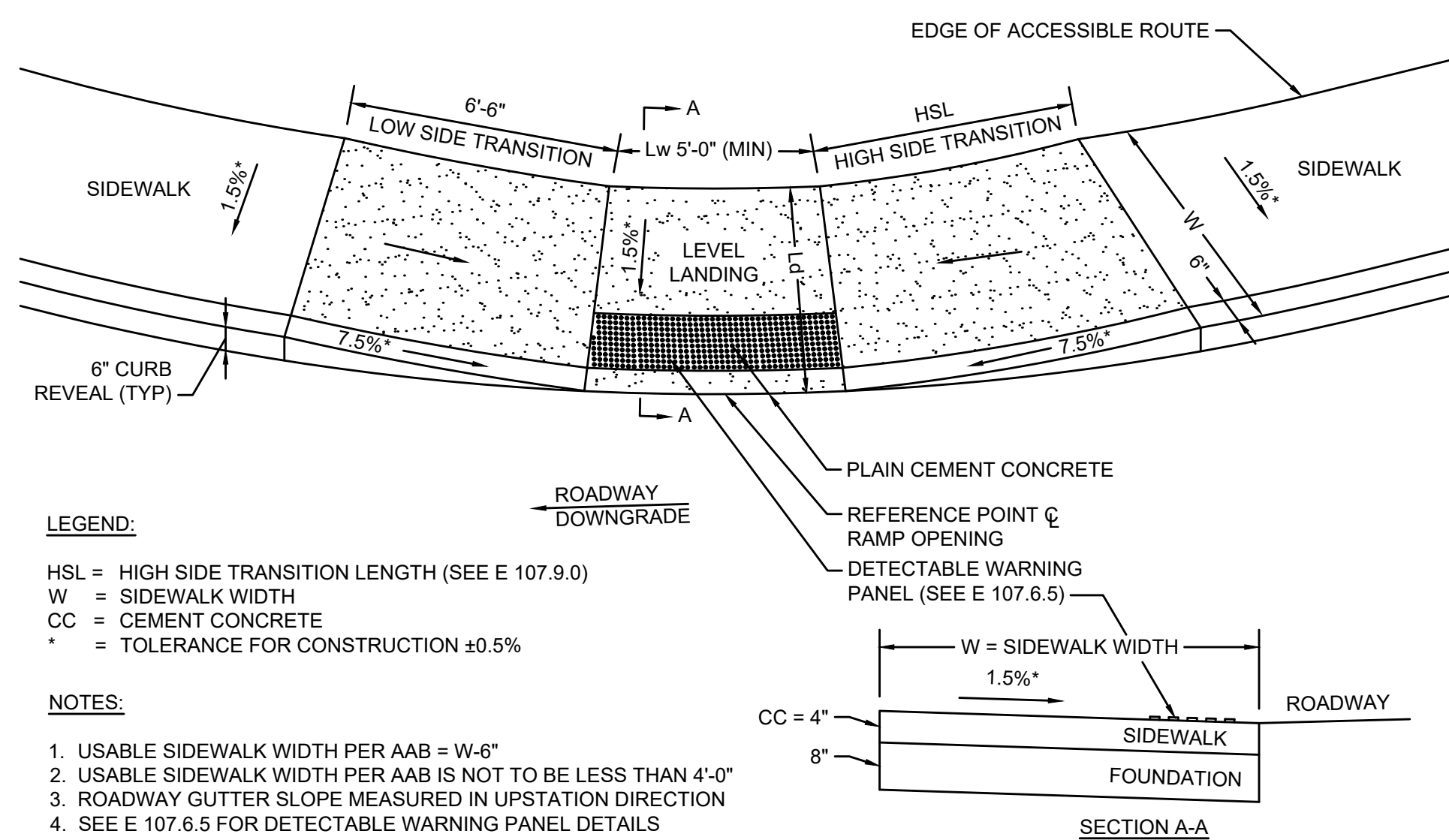
WHEELCHAIR RAMP TYPE 3

N.T.S.



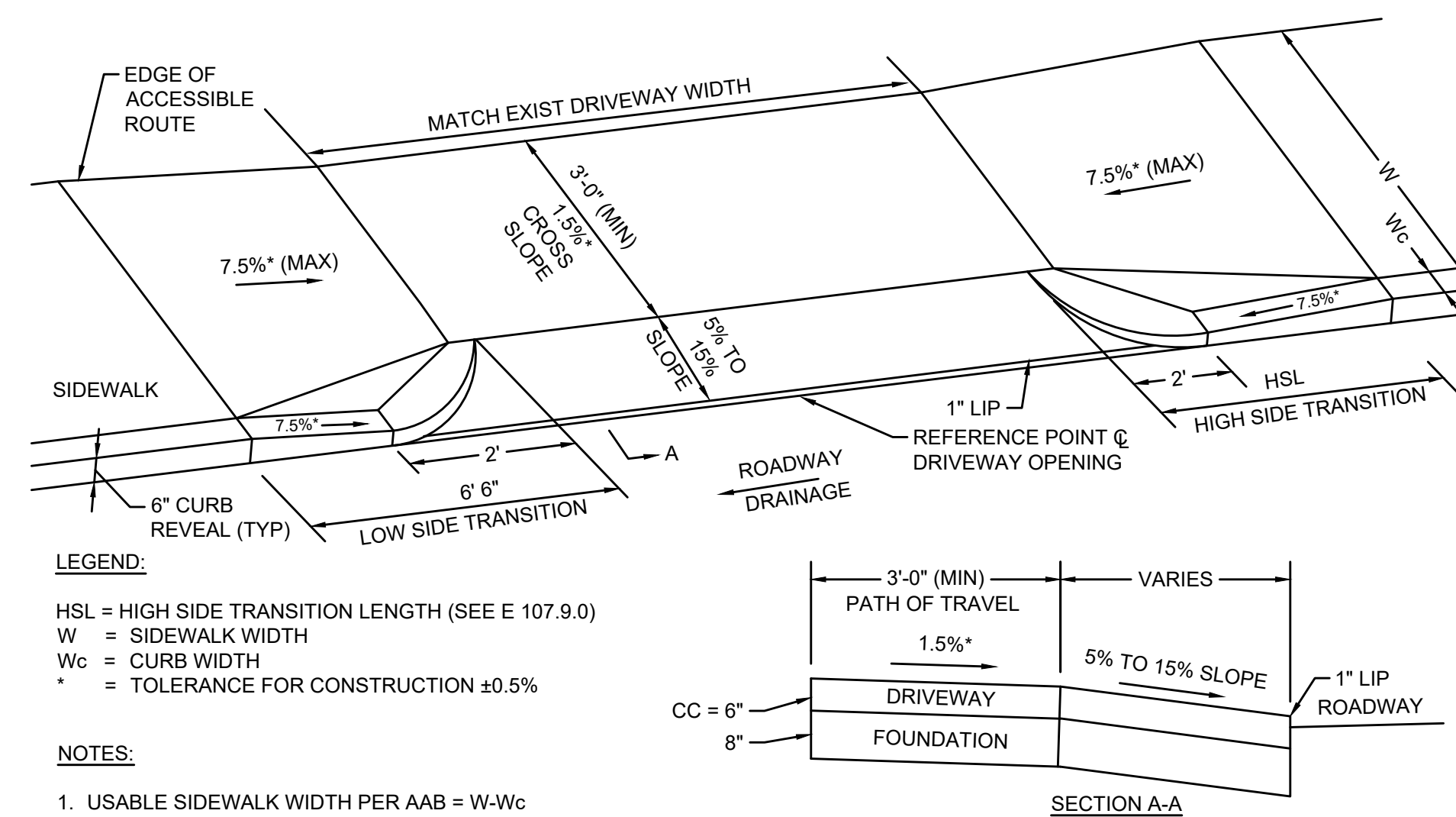
WHEELCHAIR RAMP TYPE 4

N.T.S.



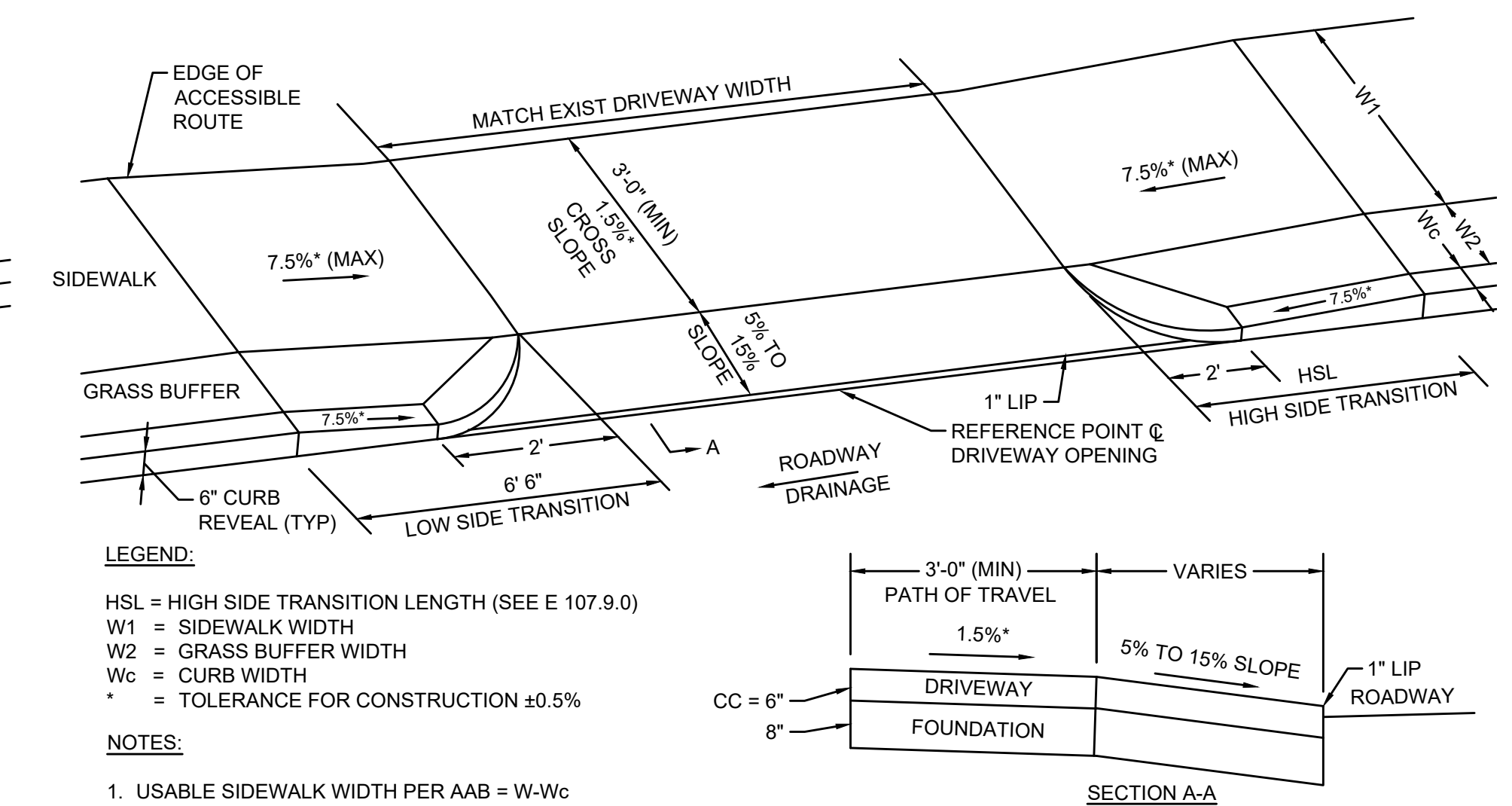
WHEELCHAIR RAMP TYPE 3

N.T.S.



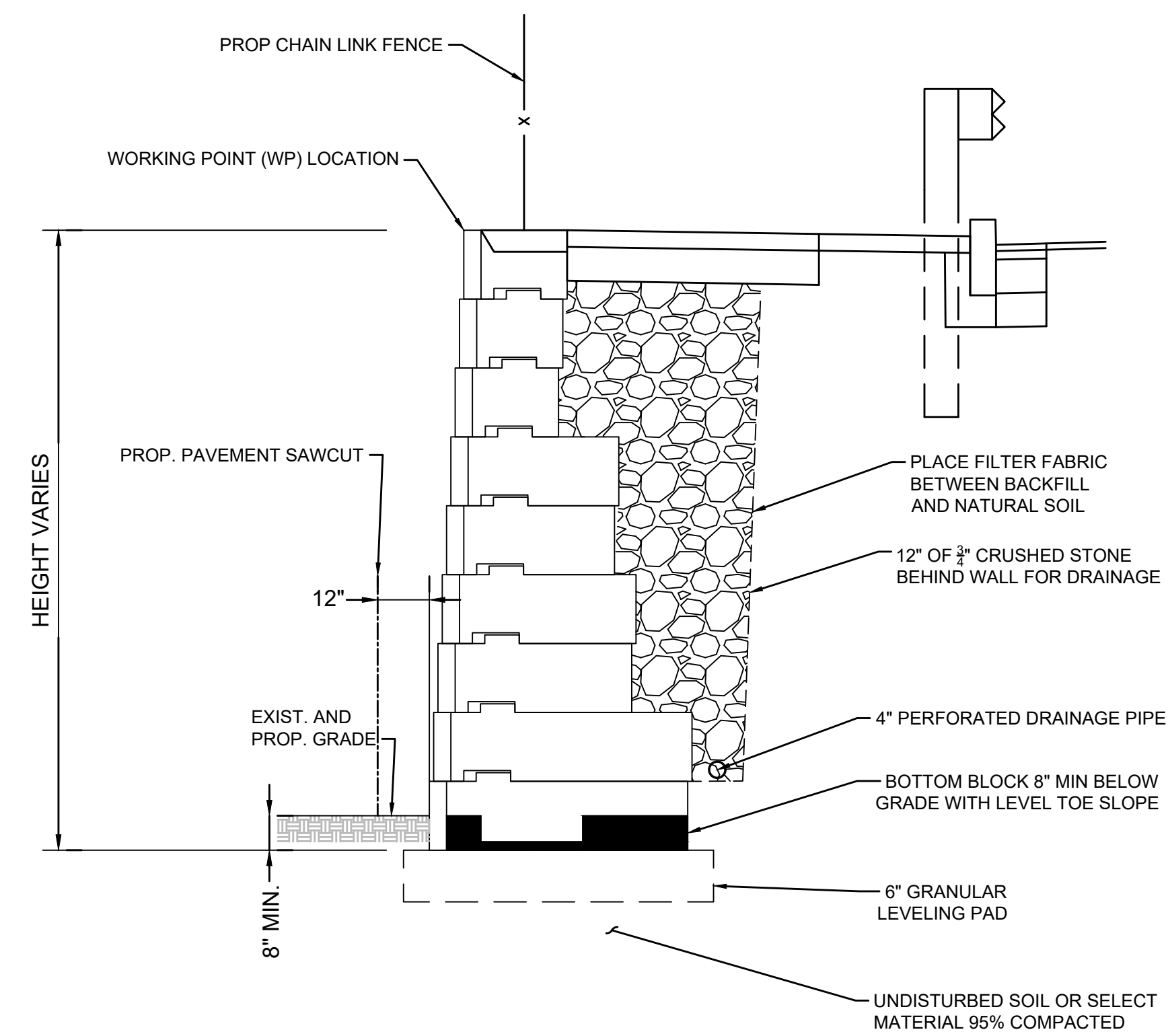
SIDEWALK THROUGH DRIVEWAY TYPE 1

N.T.S.



SIDEWALK THROUGH DRIVEWAY TYPE 2

N.T.S.



NOTES:

1. DETAILS FOR MODULAR CONCRETE BLOCK WALL ARE CONCEPTUAL ONLY. ACTUAL WALL IS TO BE DESIGNED BY CONTRACTOR.

PROPOSED WALL SECTION

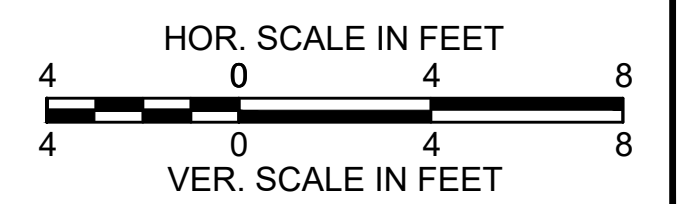
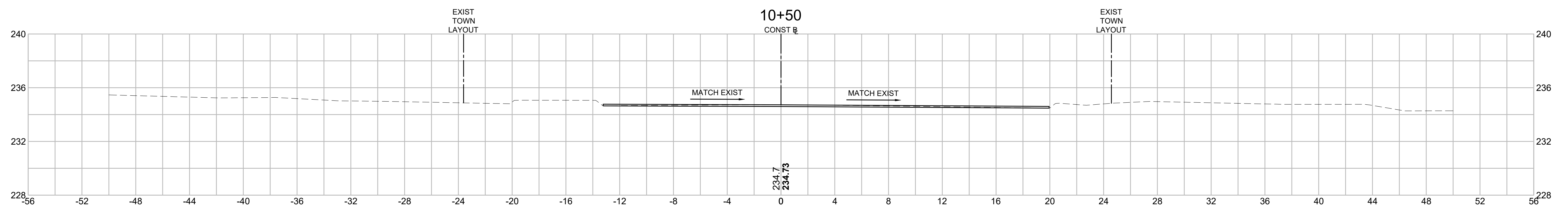
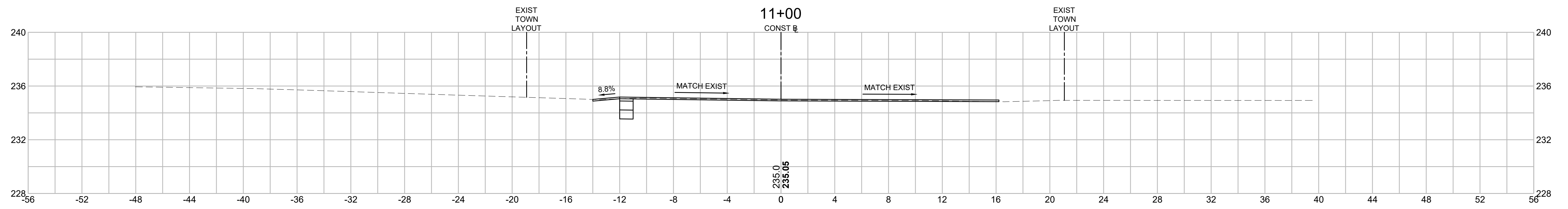
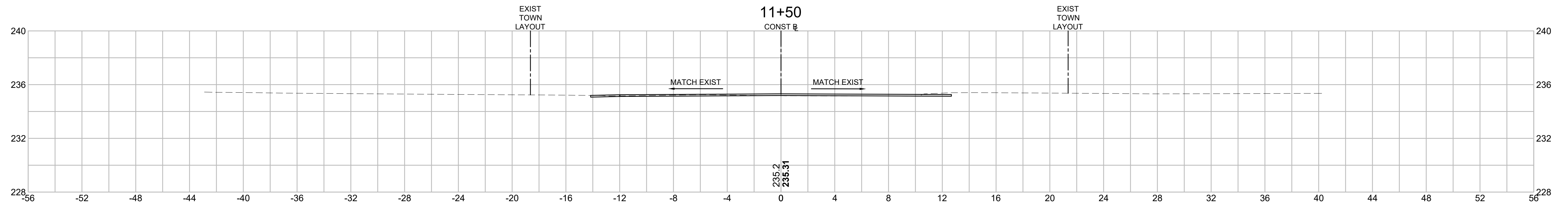
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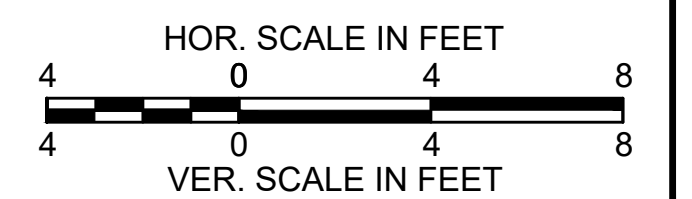
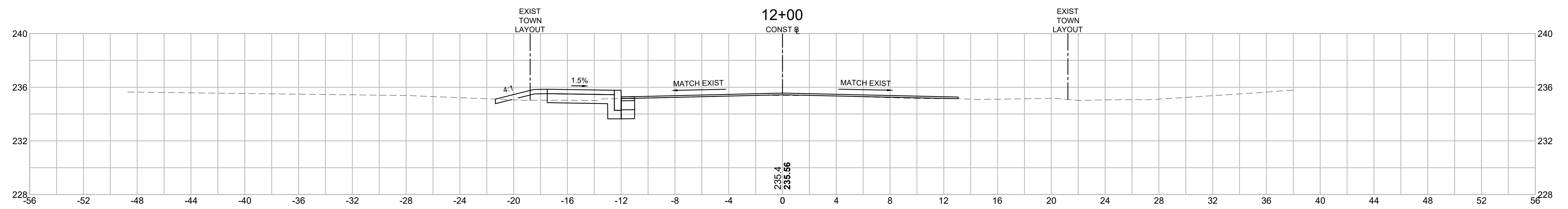
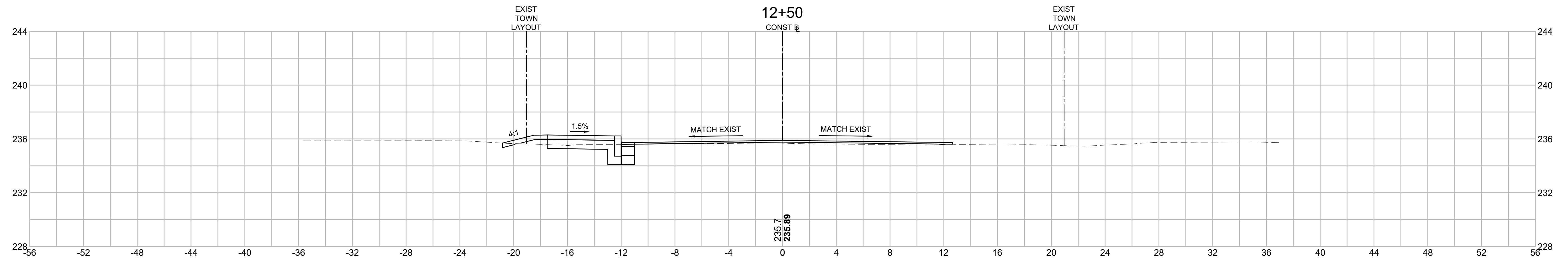
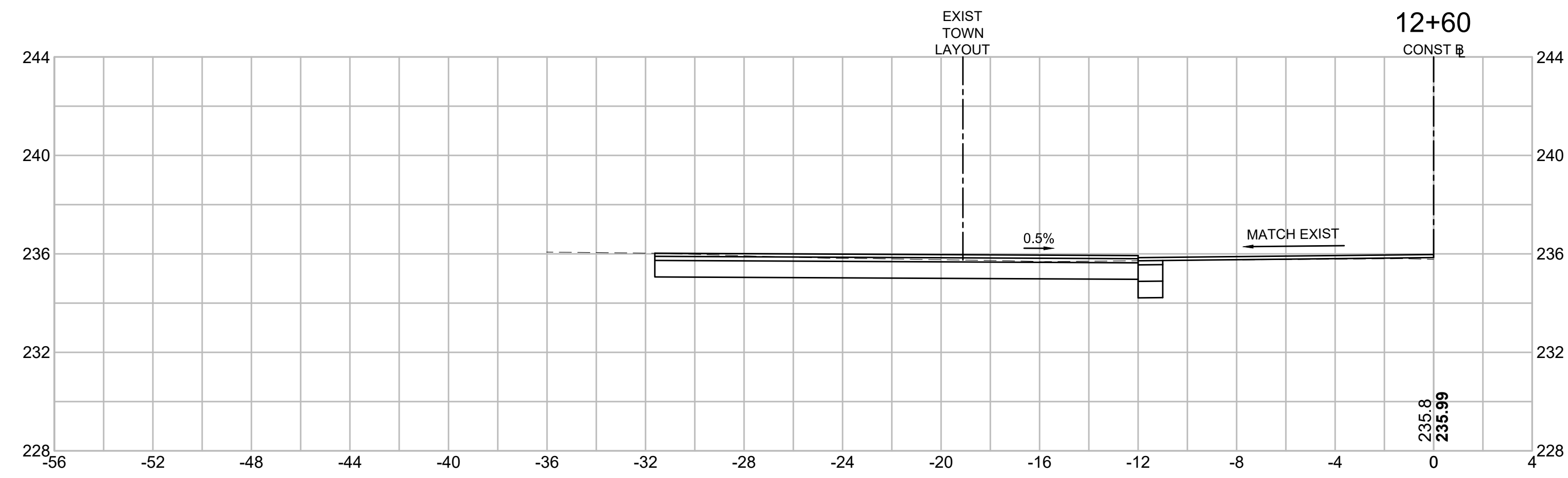
WORKING POINTS	STA	OFFSET	ELEVATIONS (FT.)		
			TOP OF PROPOSED WALL	PROPOSED GRADE IN FRONT OF WALL	EXIST TOP OF WALL ELEVATION
WP1	66+25	23.00 Lt	181.0000	178.6000	179.6000
WP2	66+50	23.00 Lt	181.0000	174.0000	177.1000
WP3	66+75	23.00 Lt	178.0000	169.8000	173.3000
WP4	67+00	23.00 Lt	178.0000	167.7000	171.2000
WP5	67+25	23.00 Lt	175.0000	166.0000	169.5000
WP6	67+50	23.00 Lt	175.0000	165.3000	169.8000
WP7	67+75	23.00 Lt	172.0000	163.0000	169.0000
WP8	68+00	23.00 Lt	172.0000	165.6000	168.6000
WP9	68+25	23.00 Lt	172.0000	161.1000	168.1000
WP10	68+50	23.00 Lt	172.0000	161.8000	167.8000
WP11	68+75	23.00 Lt	169.0000	161.2000	167.2000
WP12	69+00	23.00 Lt	169.0000	160.1000	166.1000
WP13	69+25	23.00 Lt	169.0000	160.8000	165.8000
WP14	69+50	23.00 Lt	169.0000	162.3000	166.3000

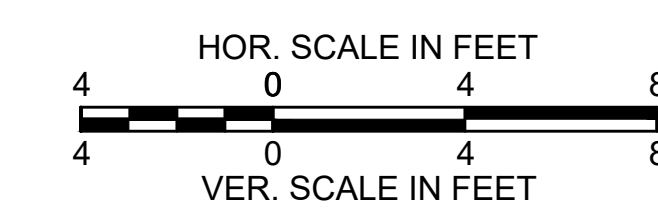
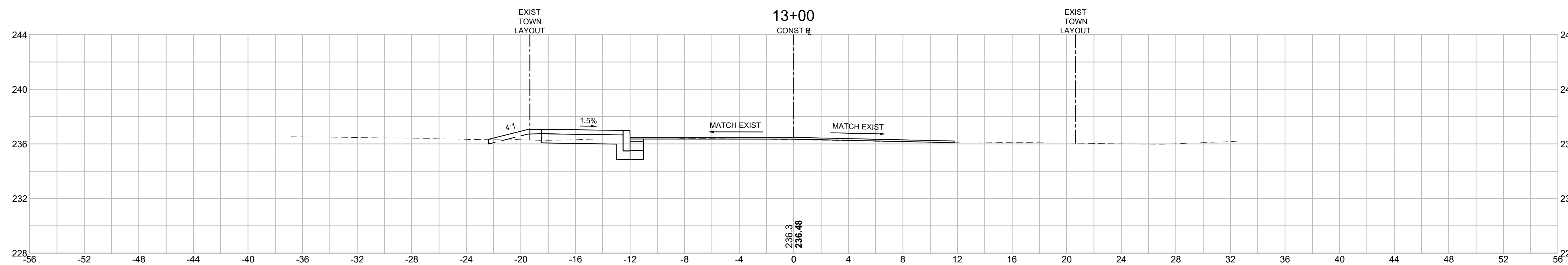
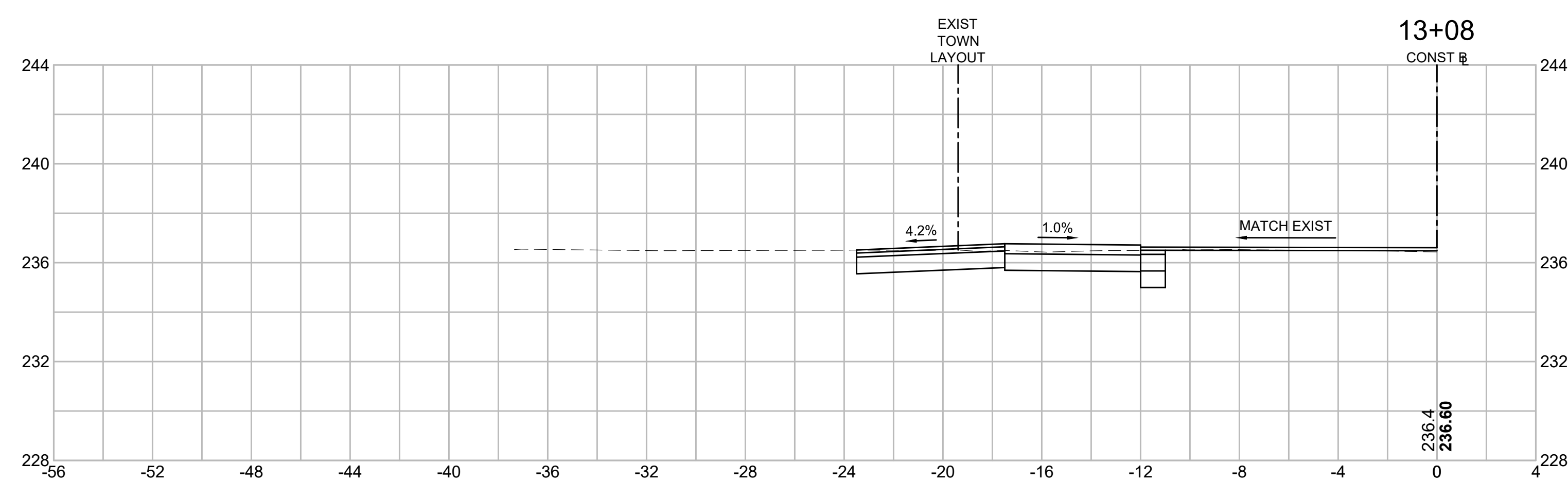
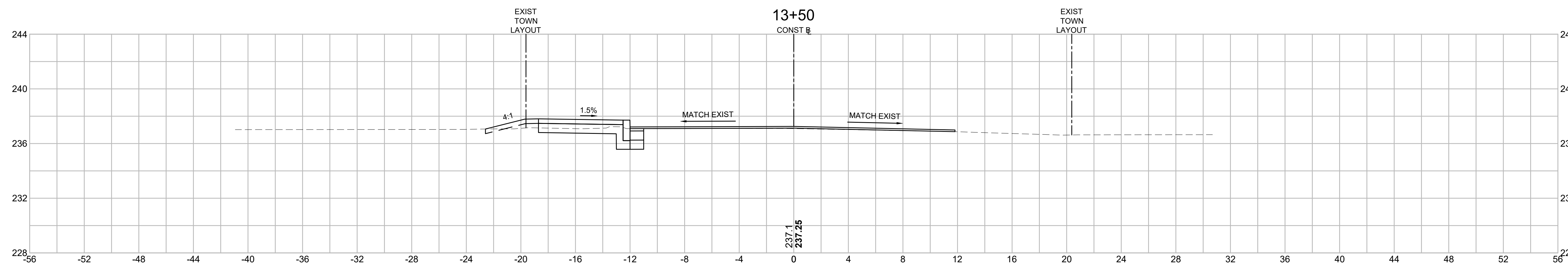
- ** ELEVATIONS BASED ON NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988
 ** PROPOSED GRADE IN FRONT OF WALL TO MATCH ELEVATION AT BOTTOM OF EXISTING WALL

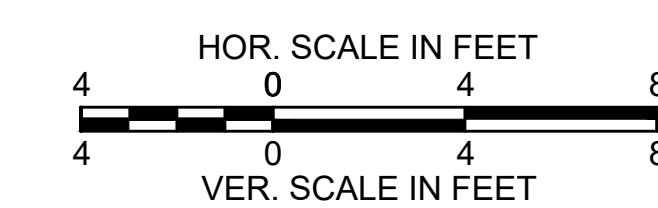
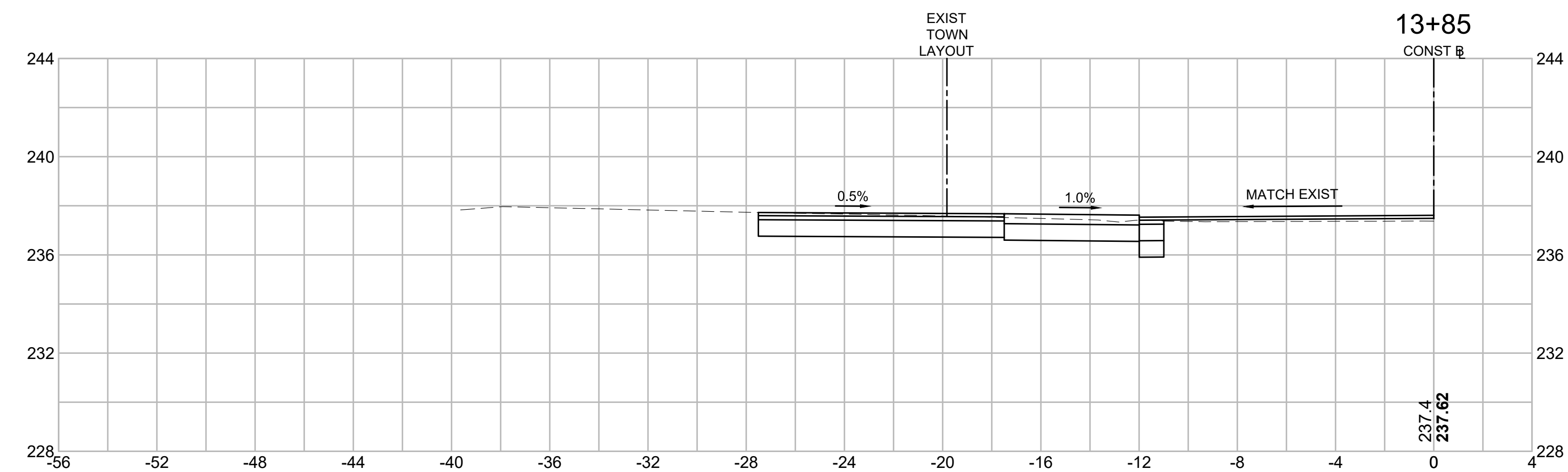
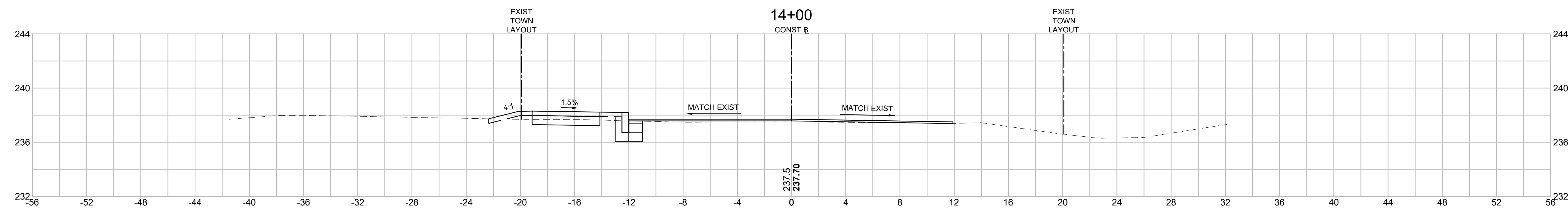
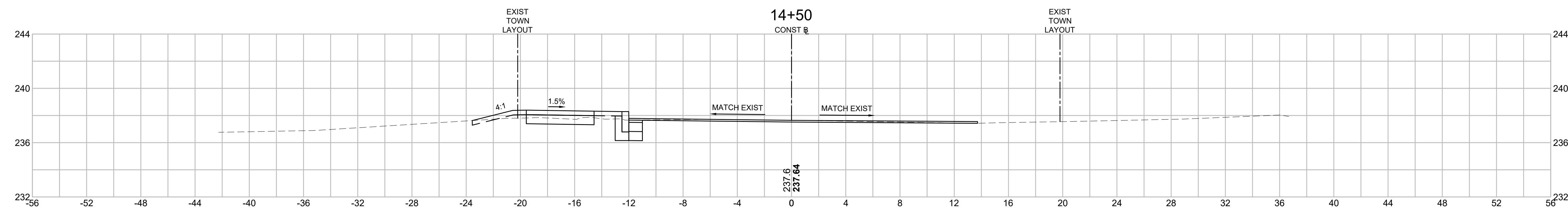
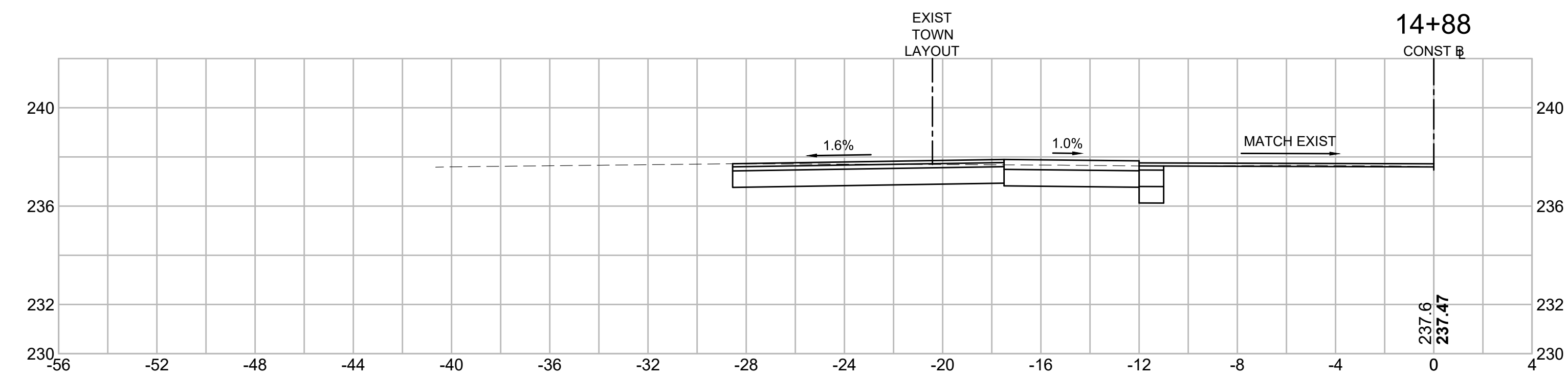
RETAINING WALL WORKING POINT DETAIL

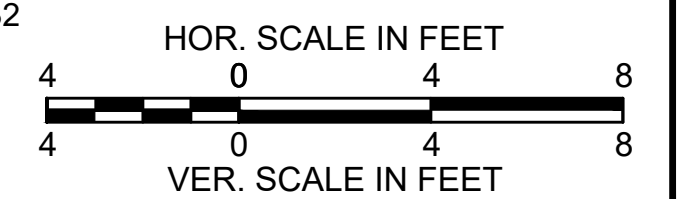
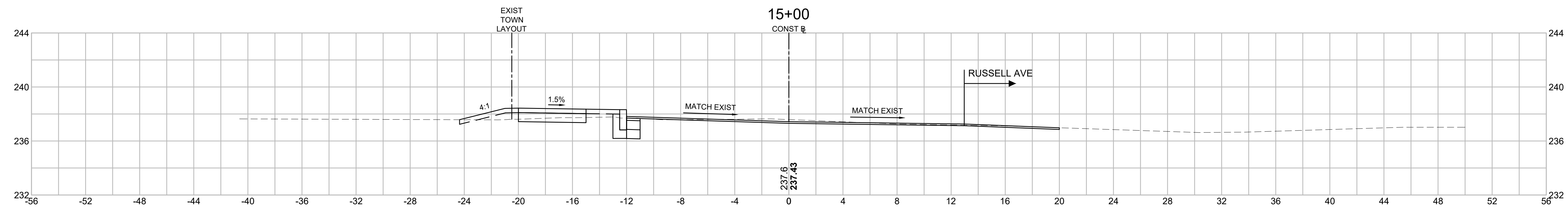
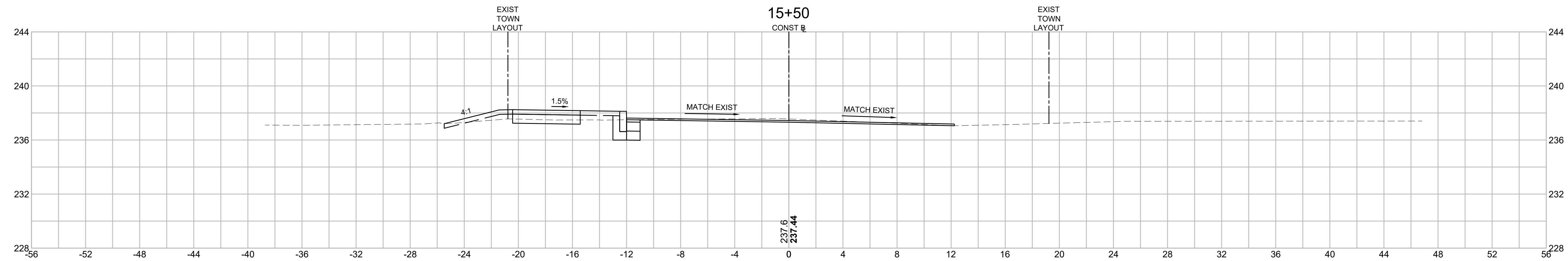
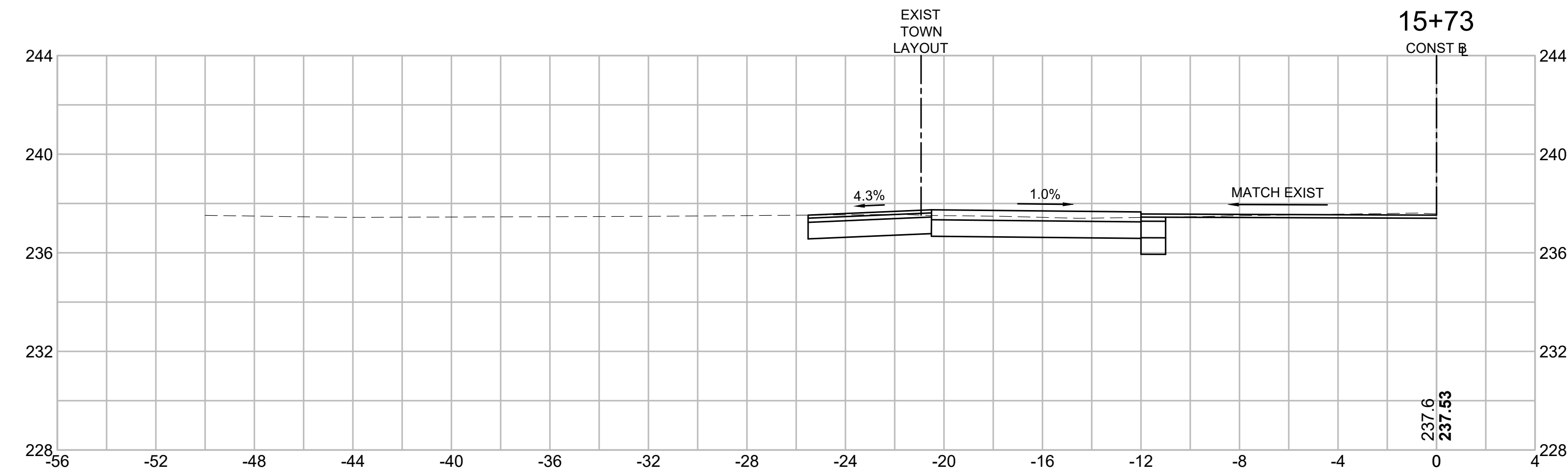
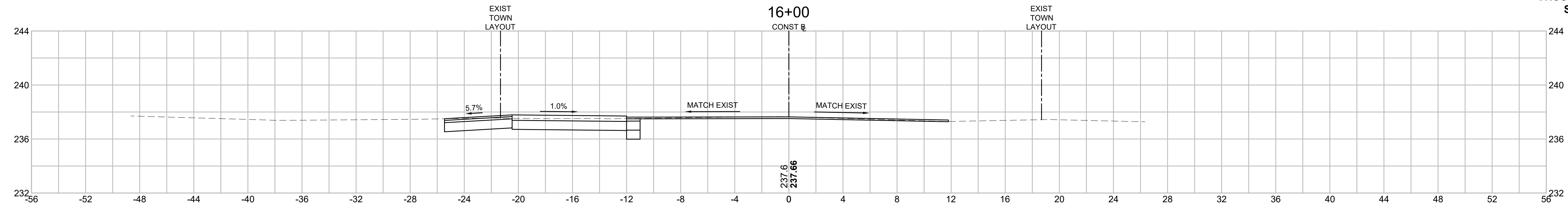
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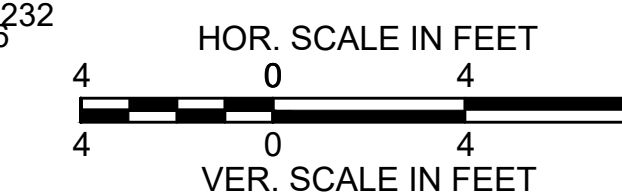
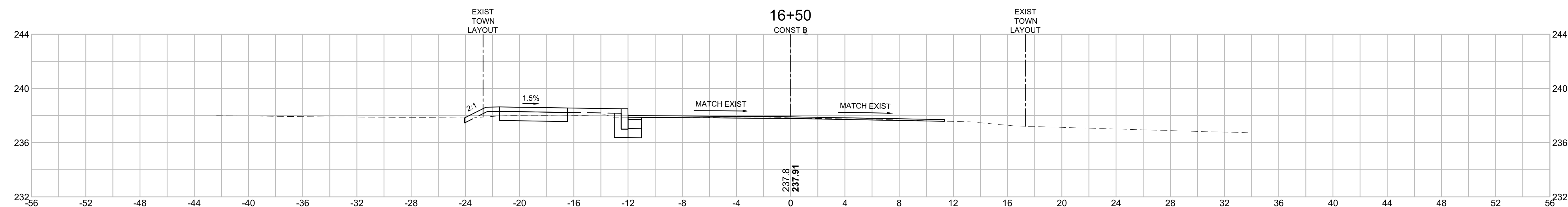
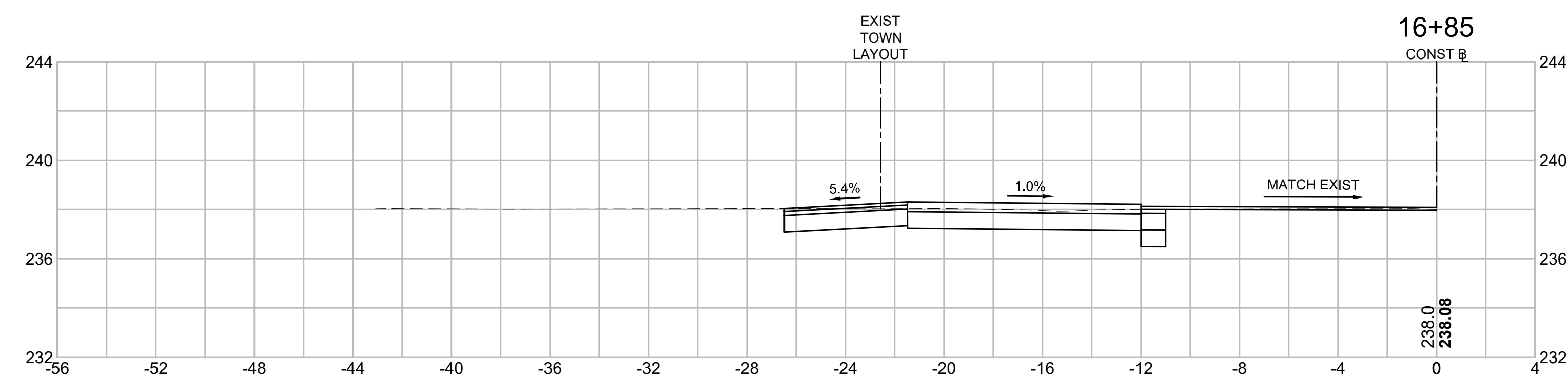
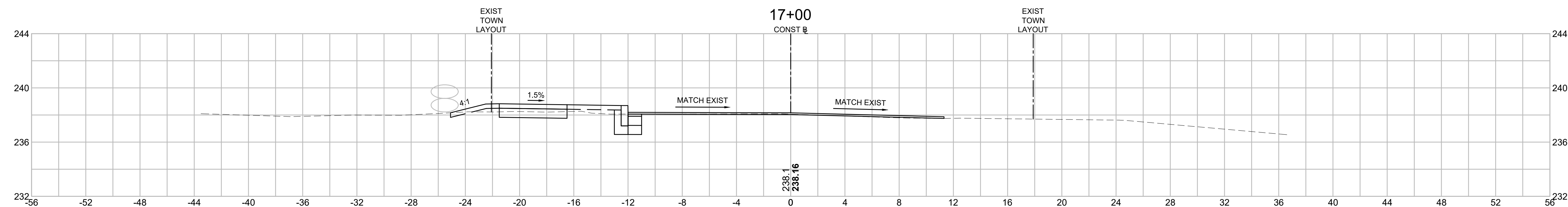
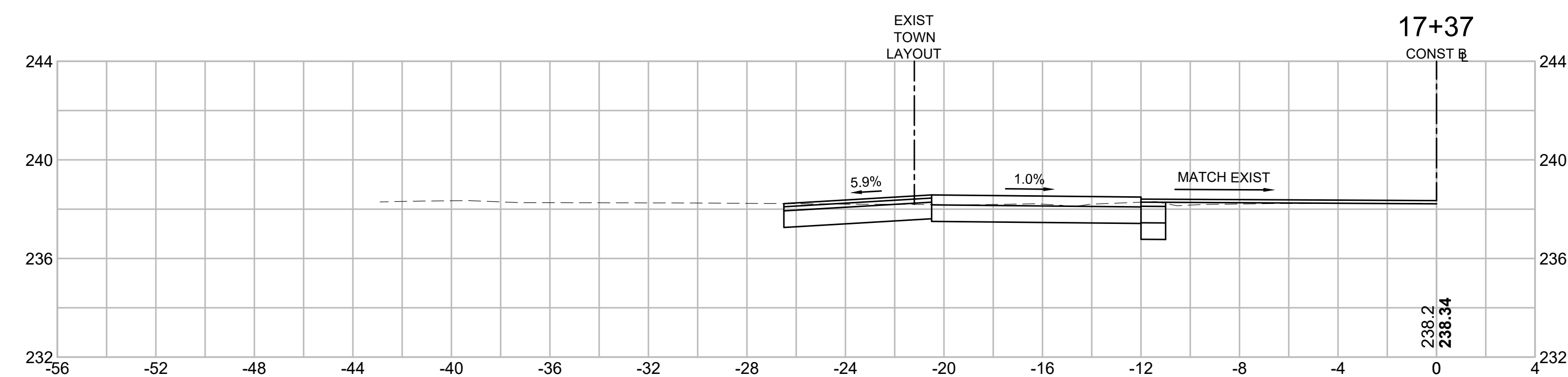


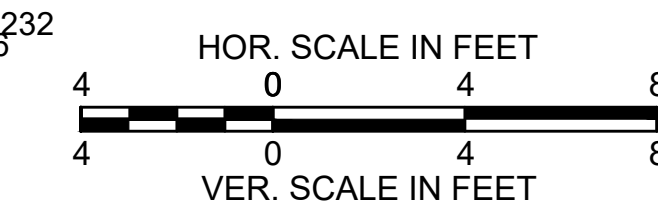
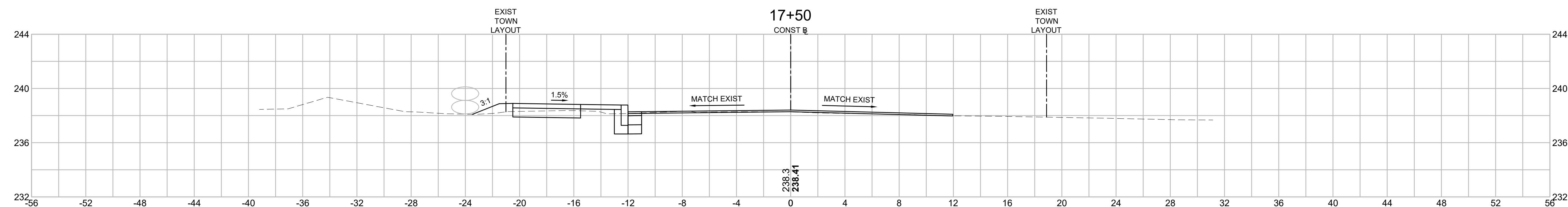
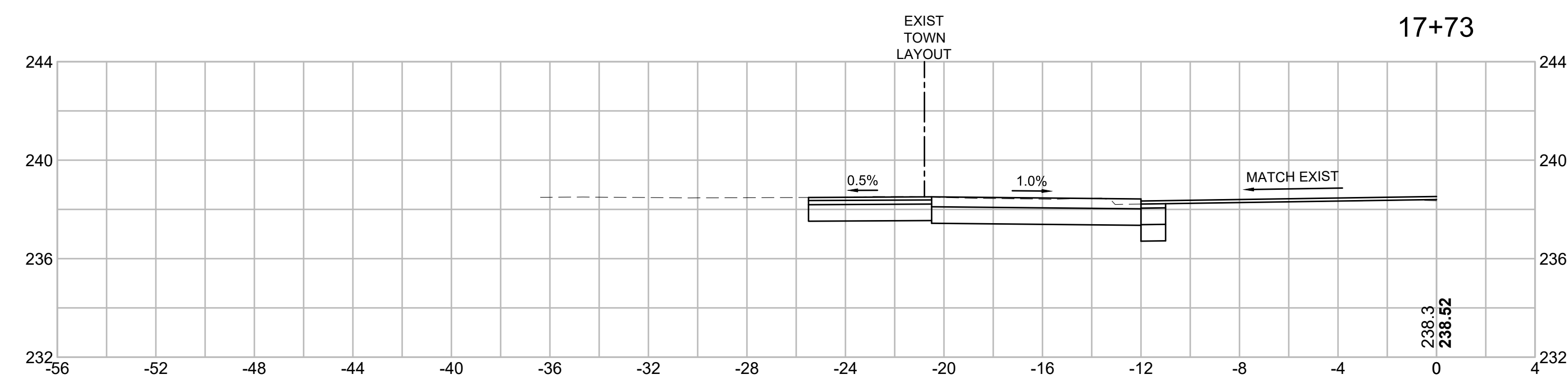
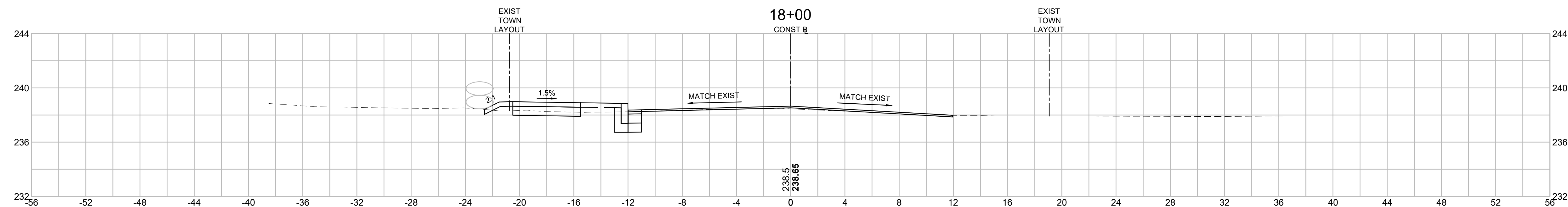
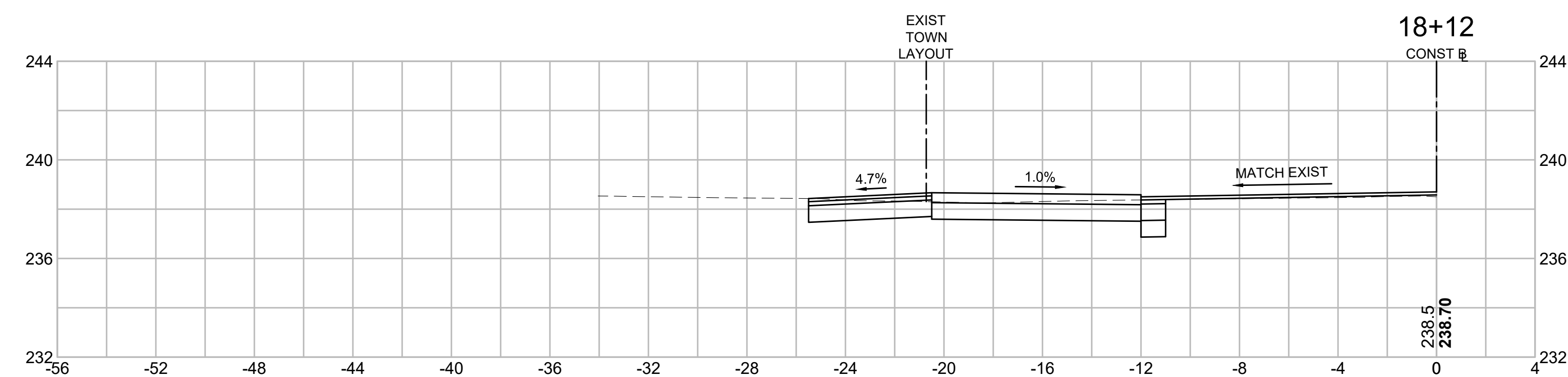


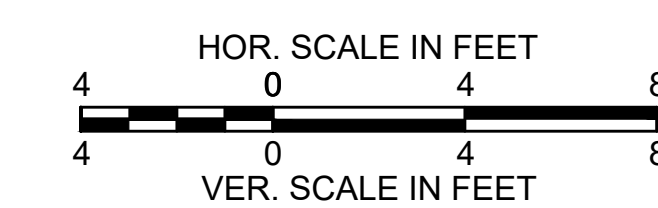
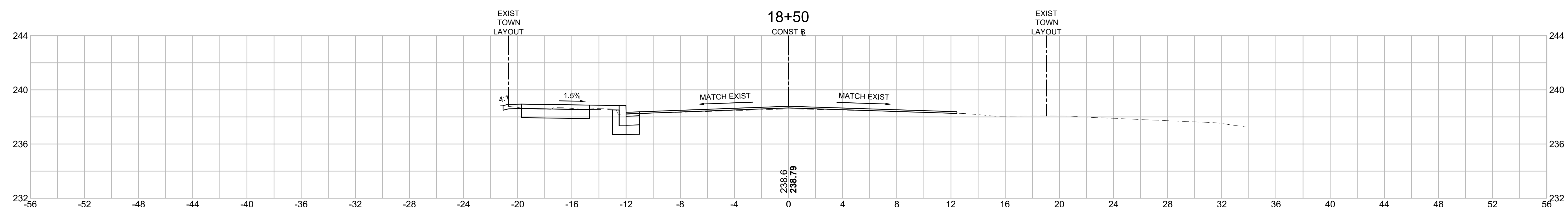
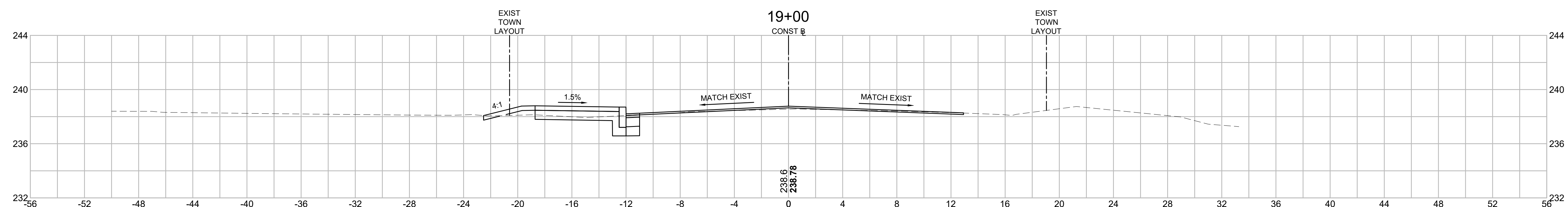
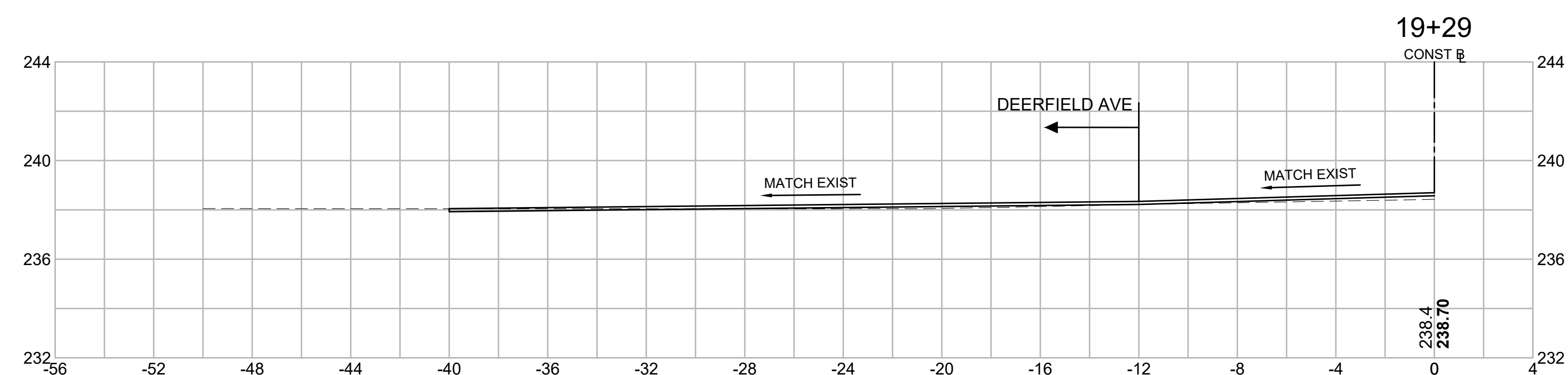


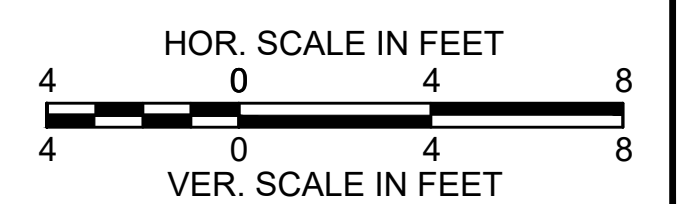
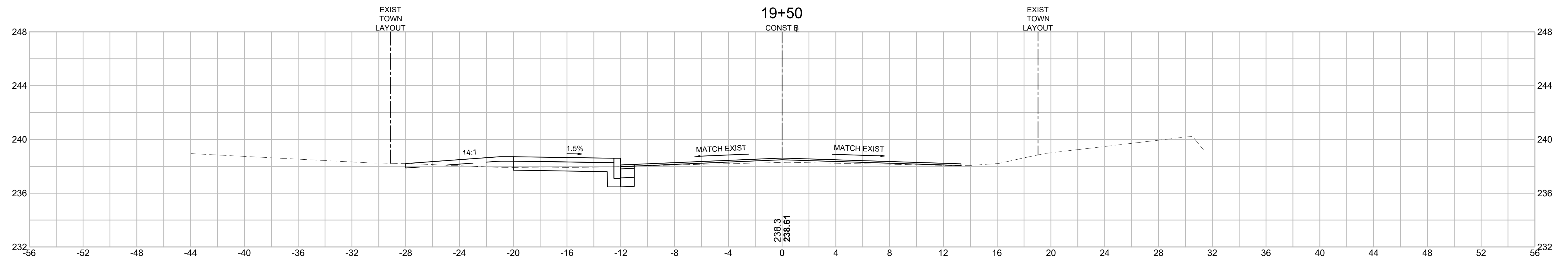
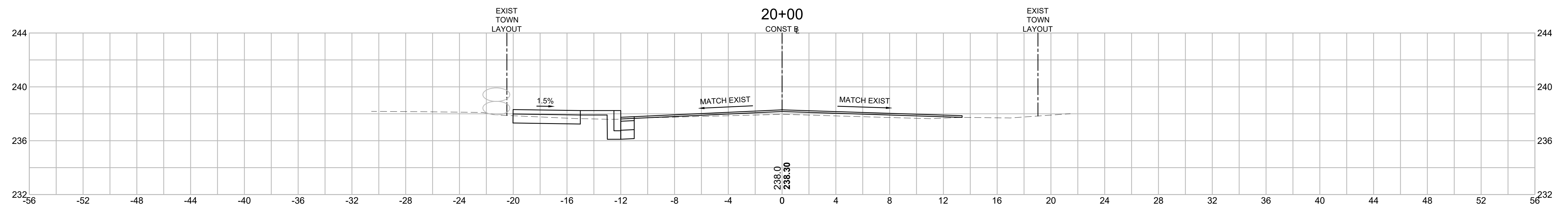
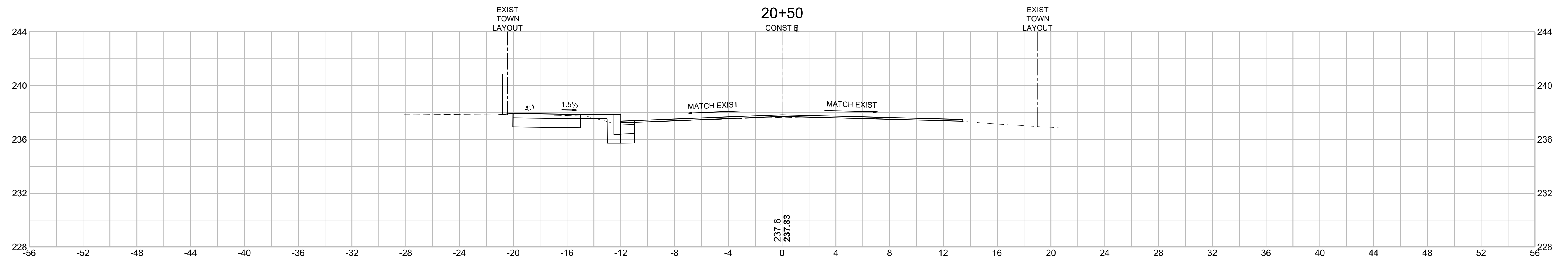


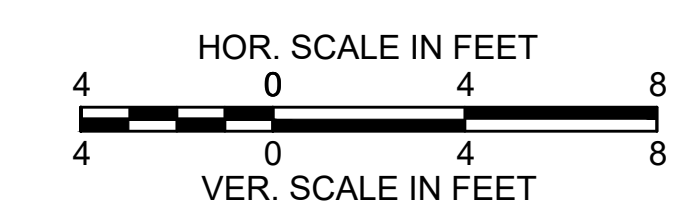
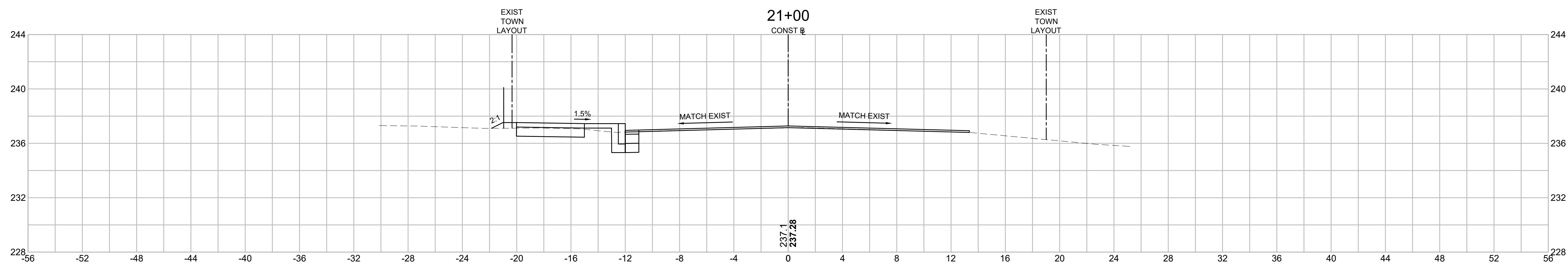
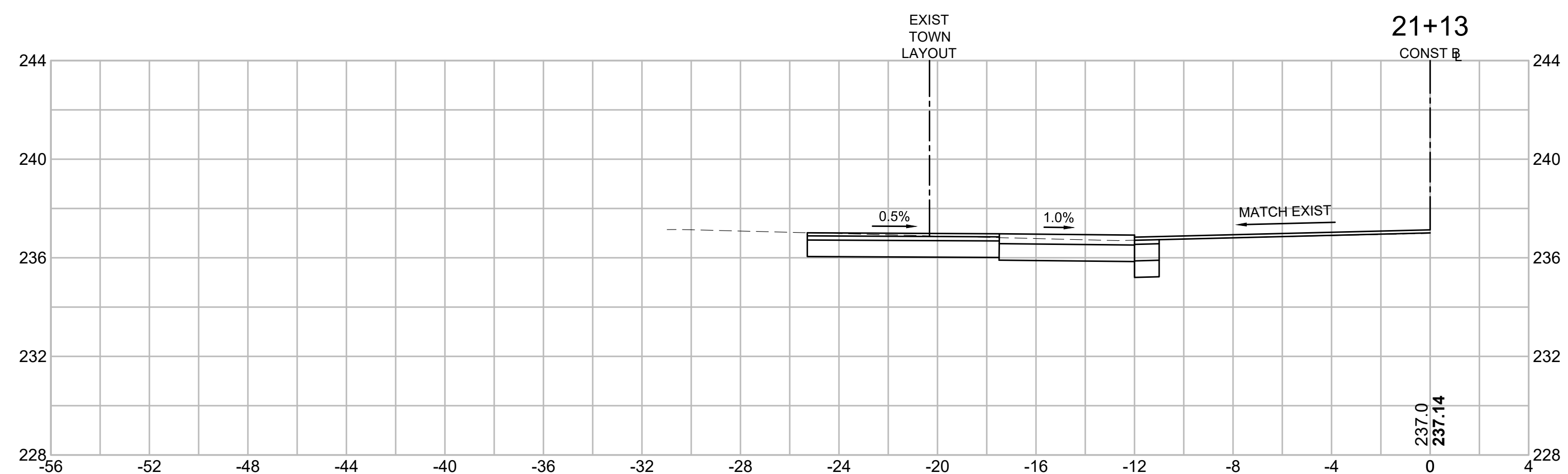
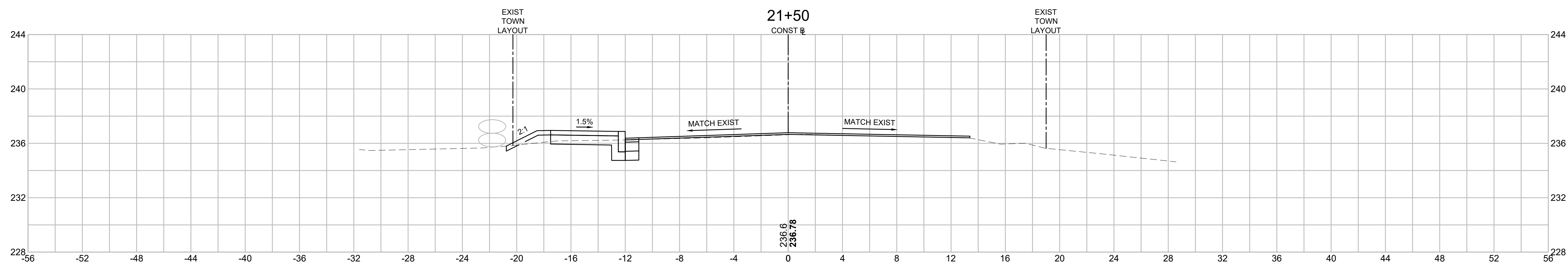


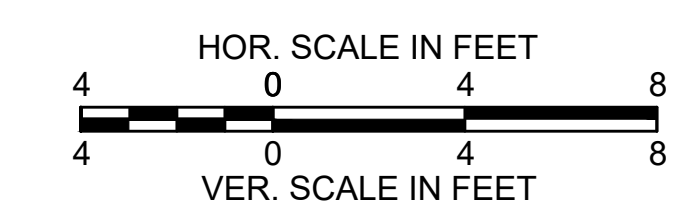
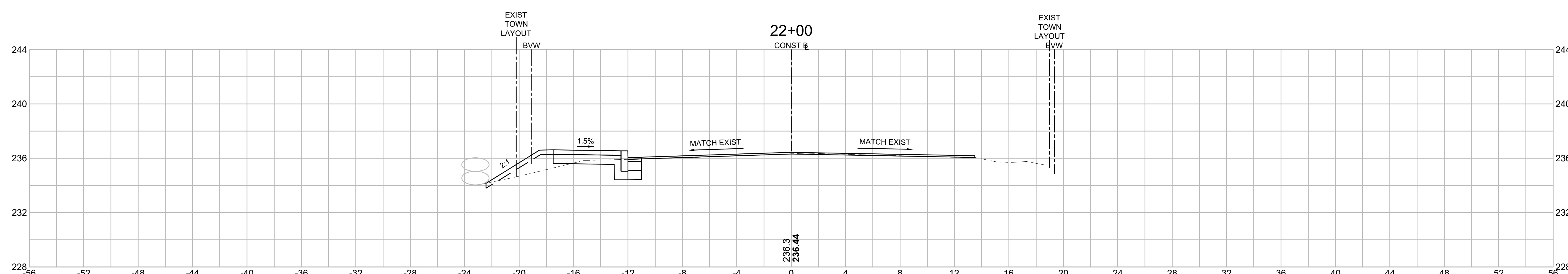
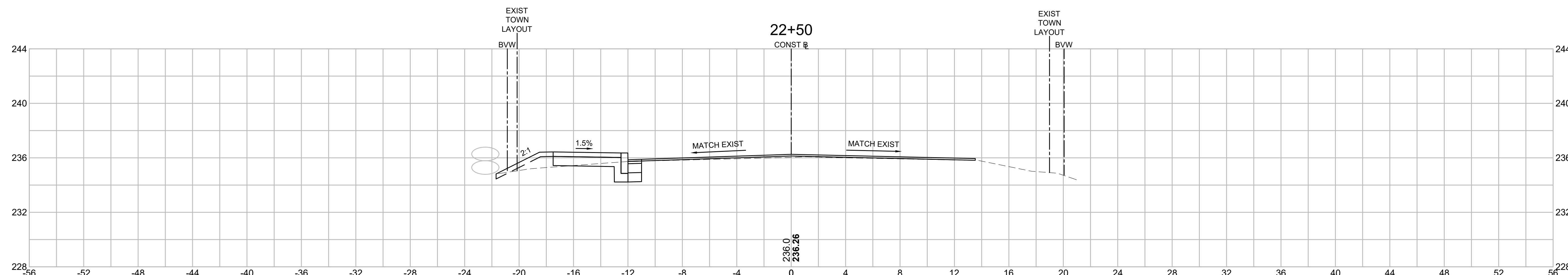
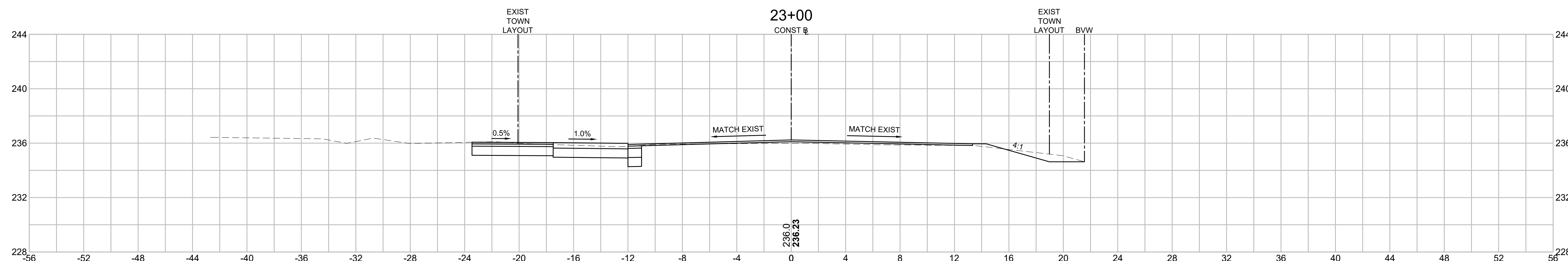


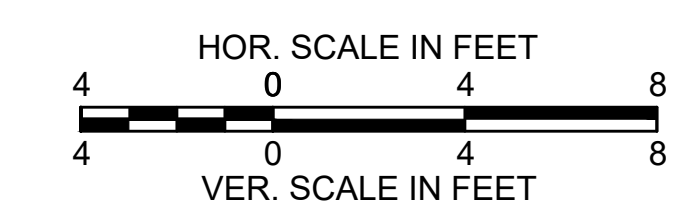
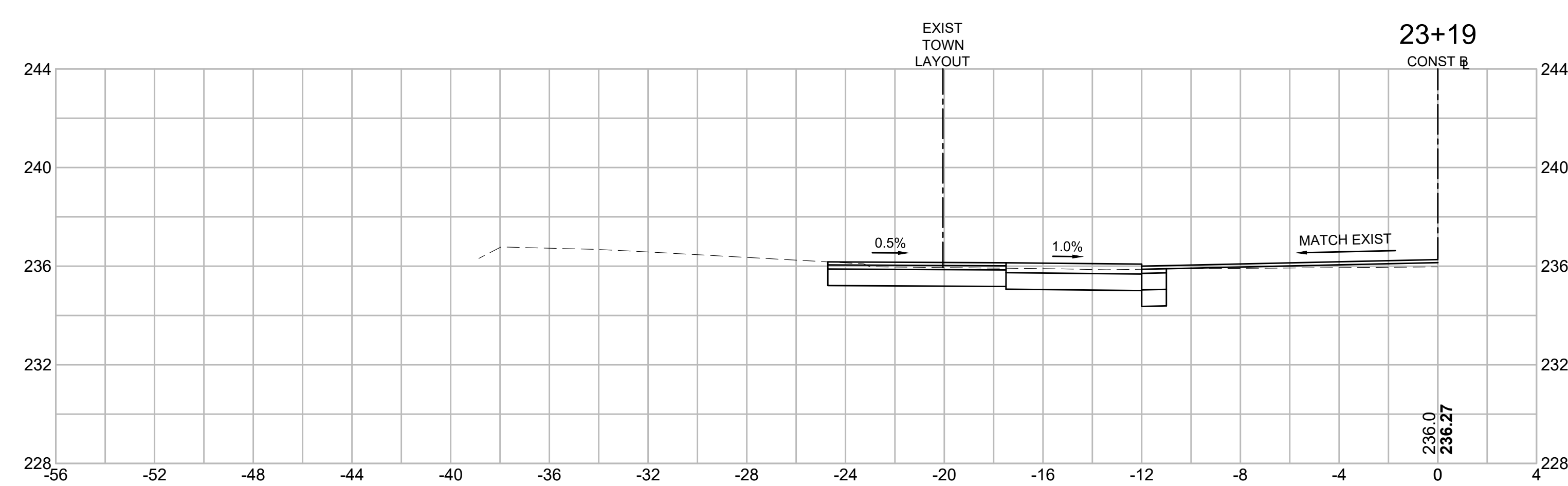
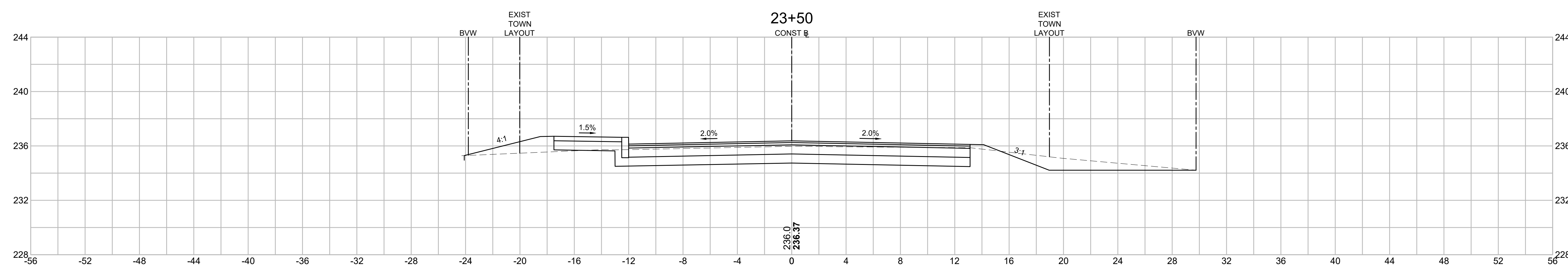
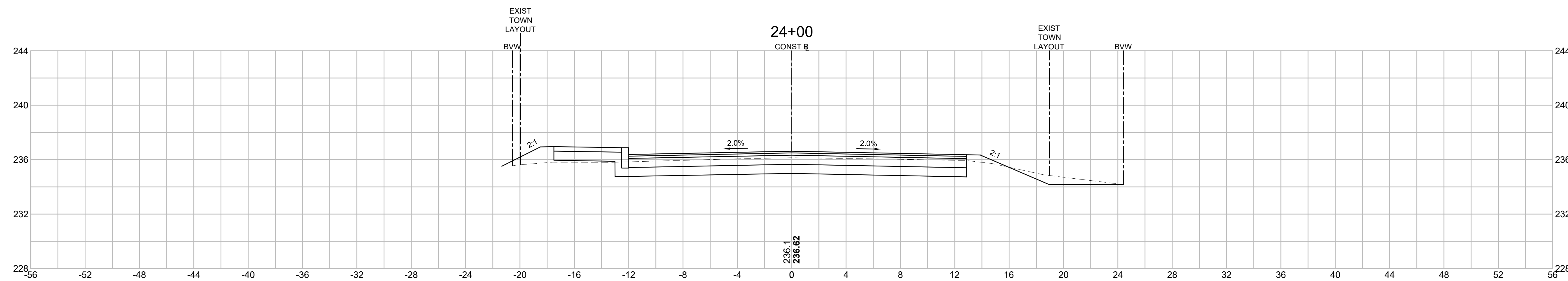


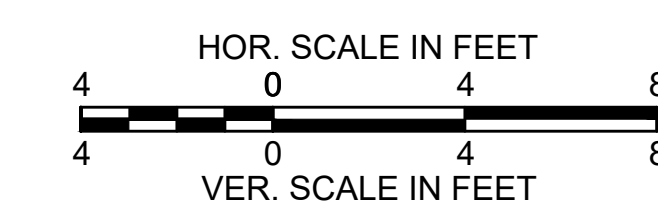
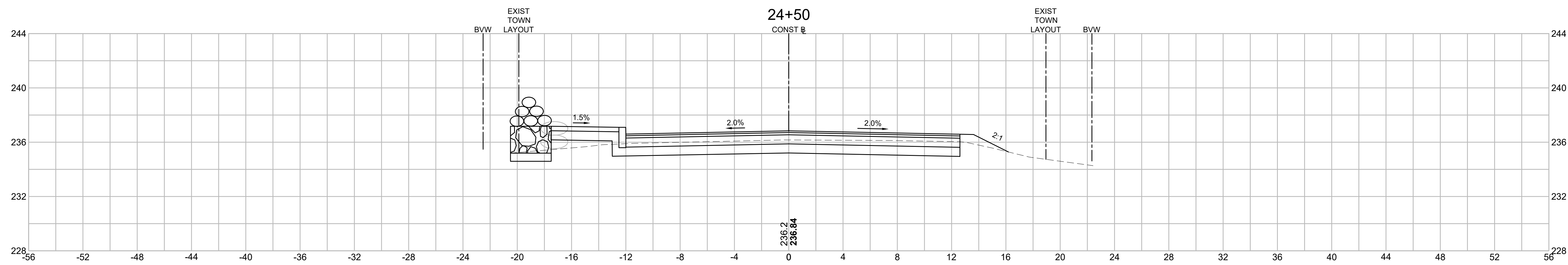
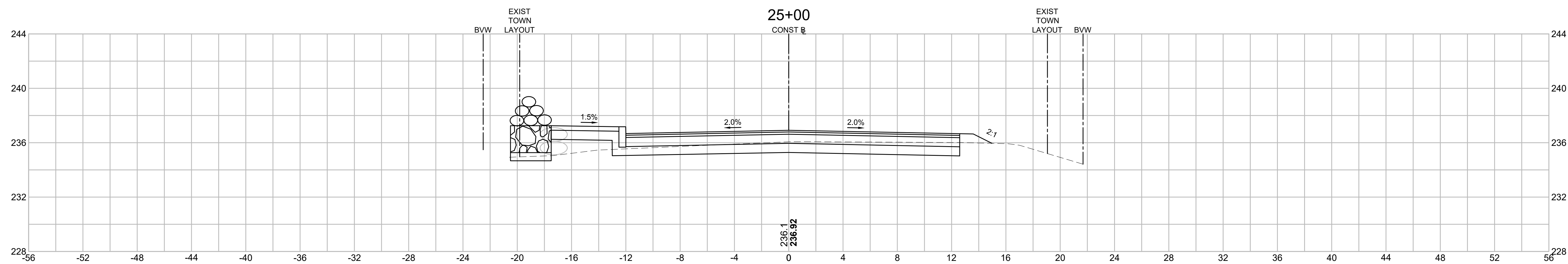
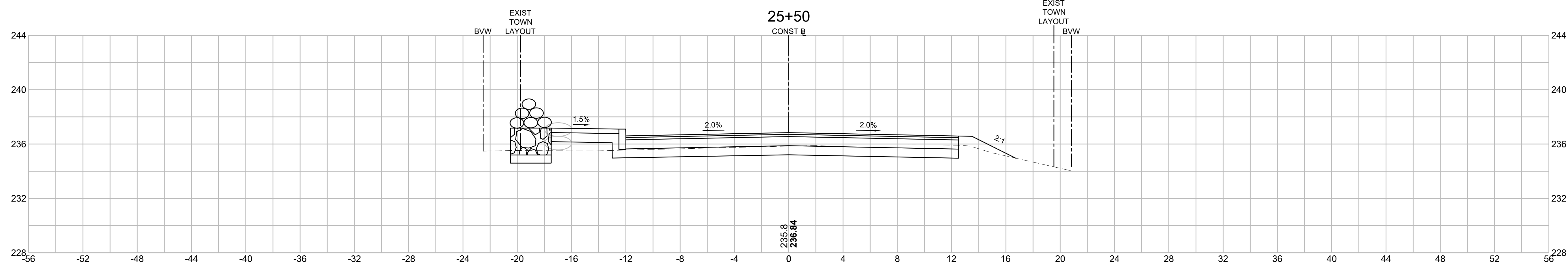


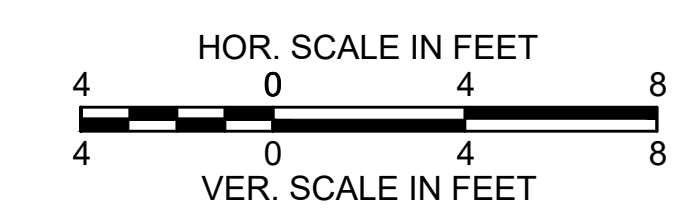
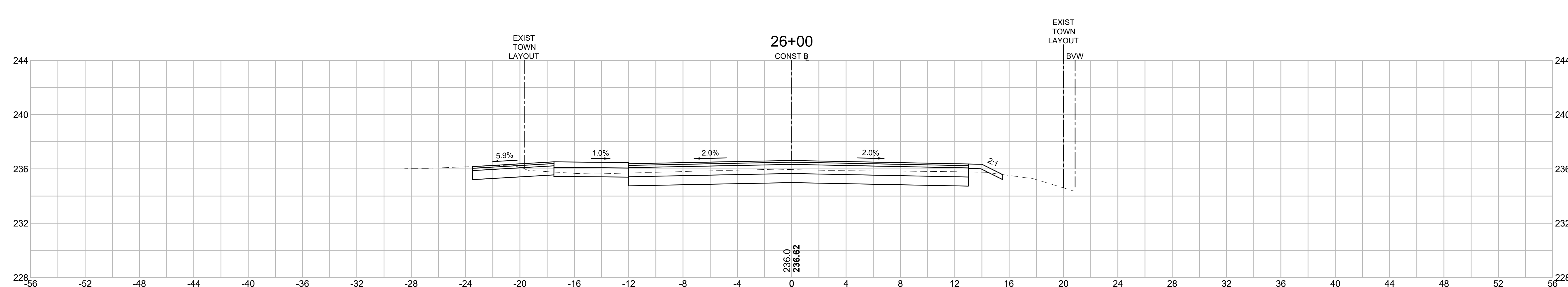
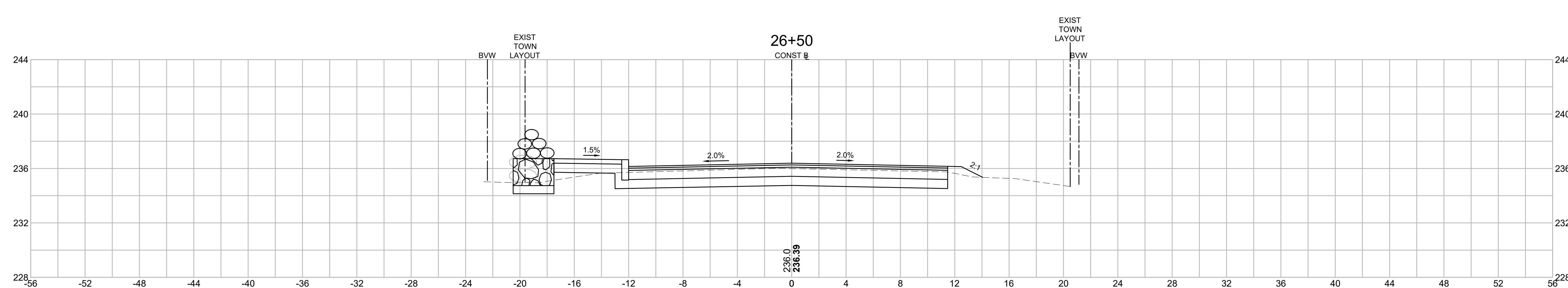
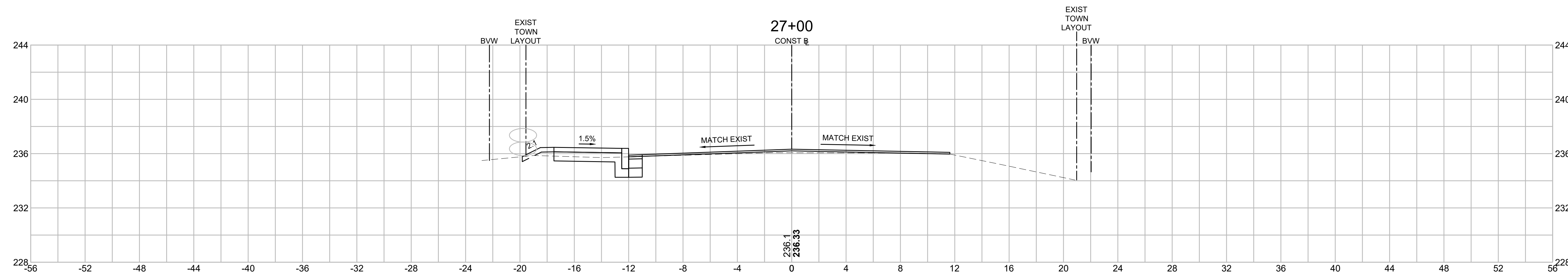


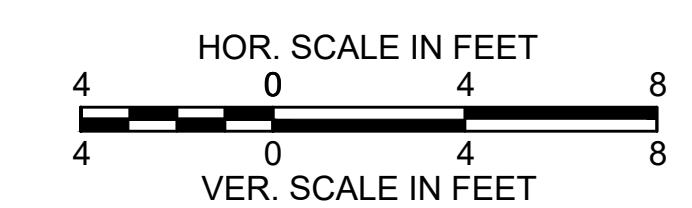
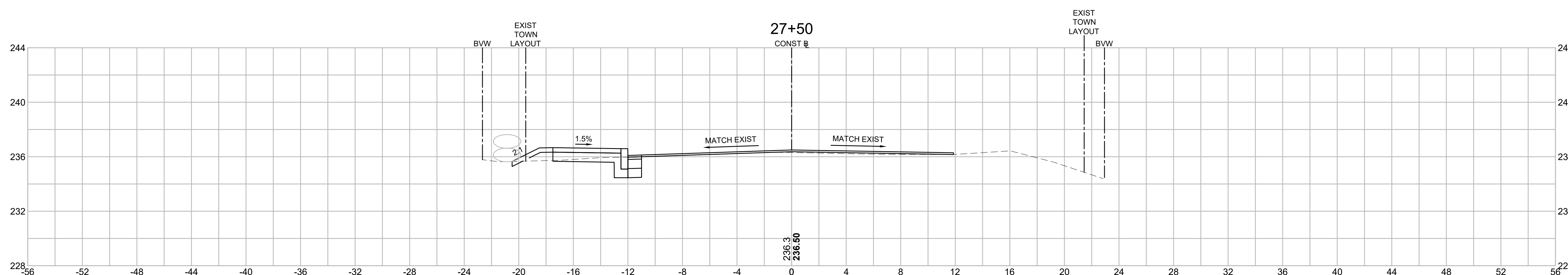
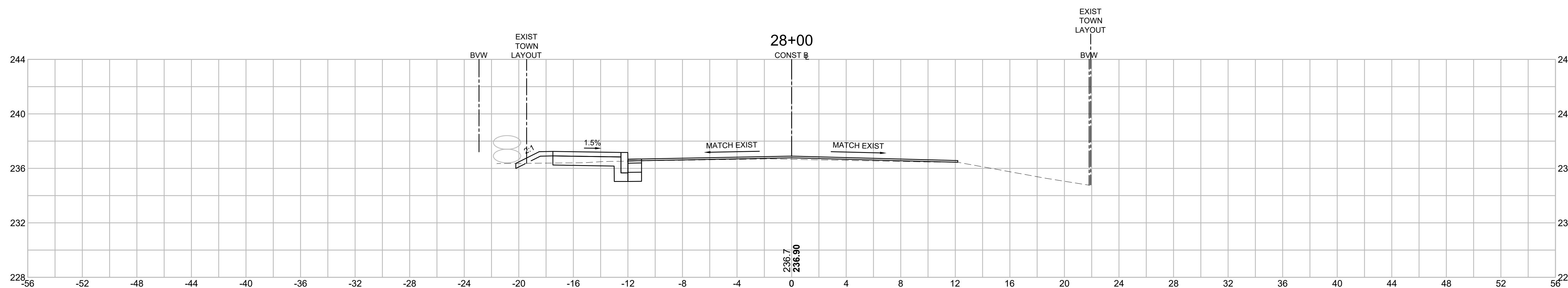
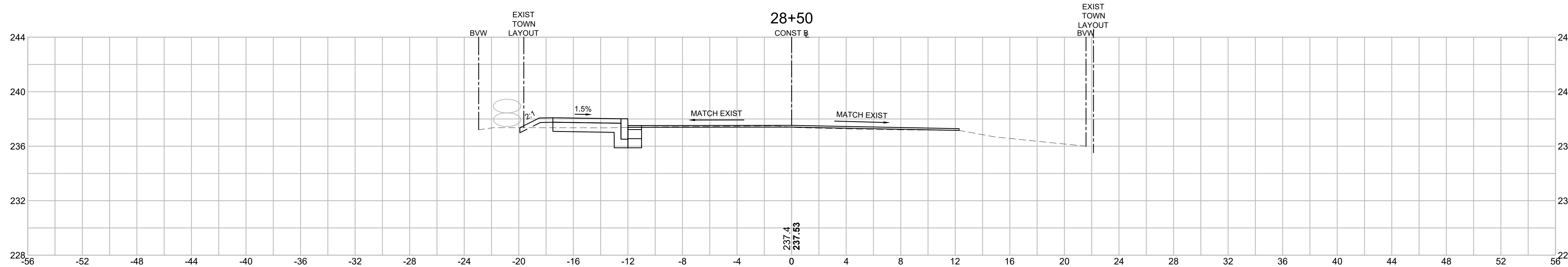


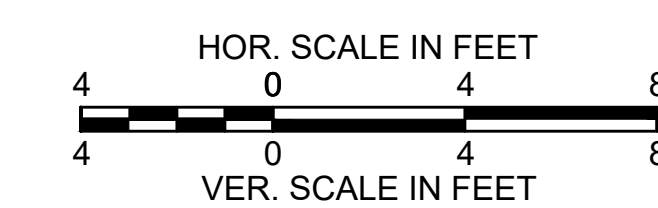
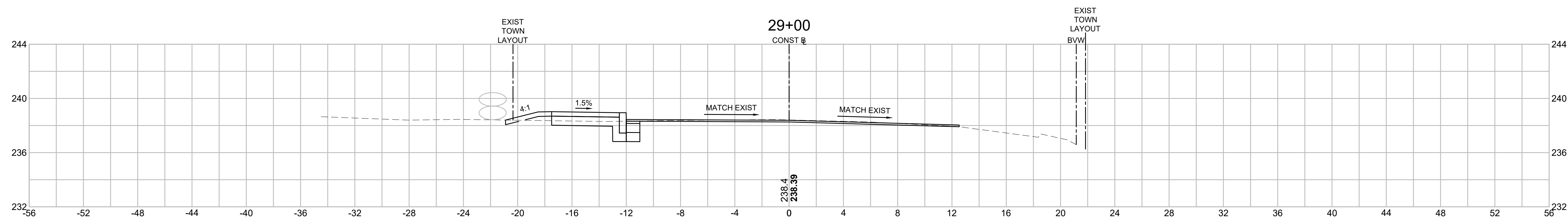
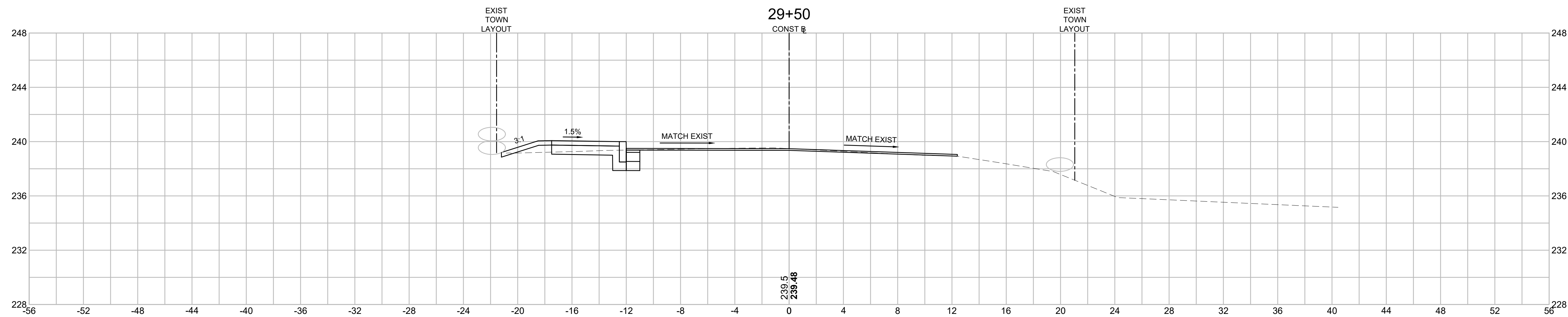
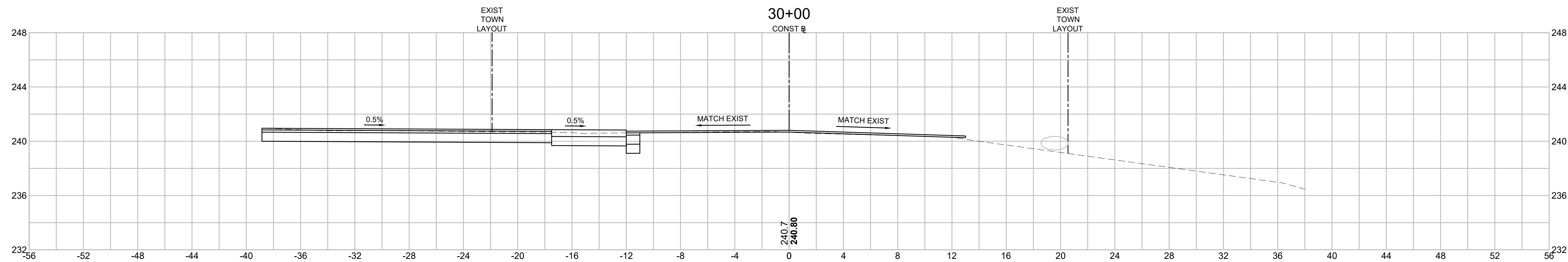


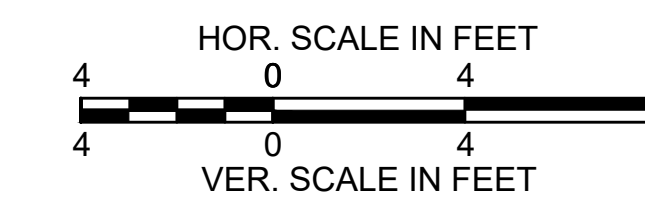
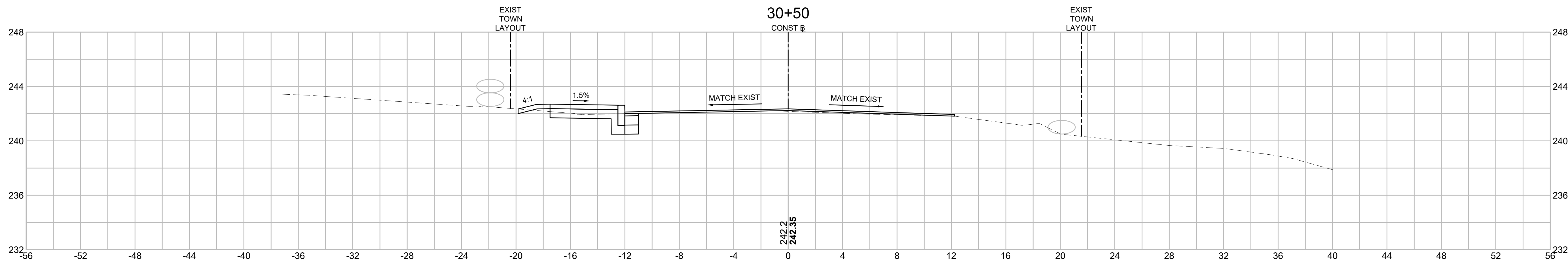
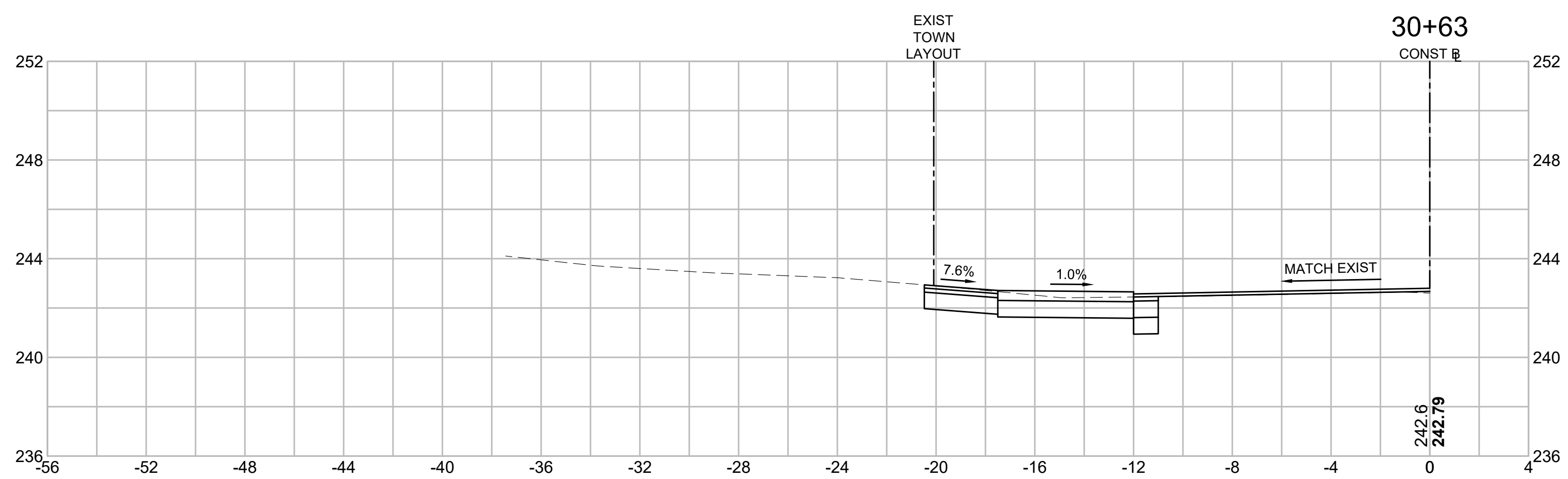
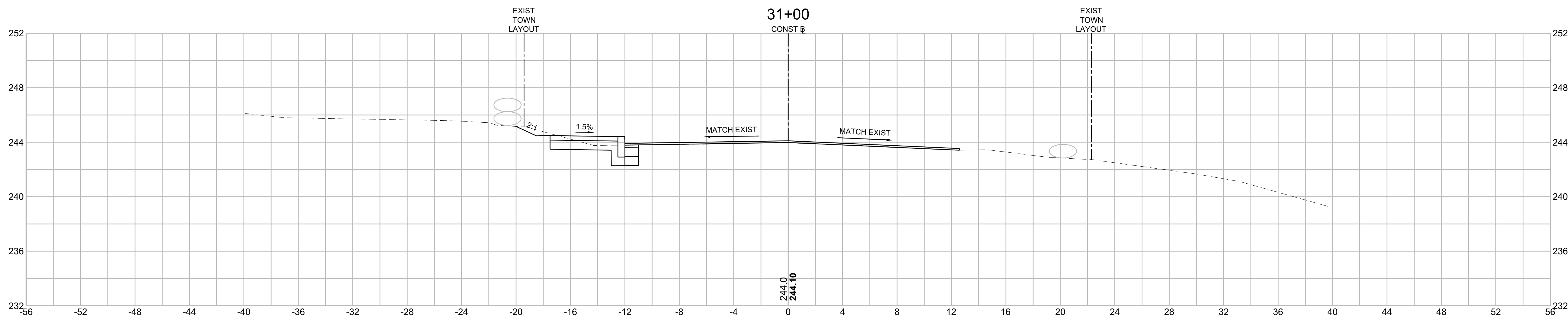


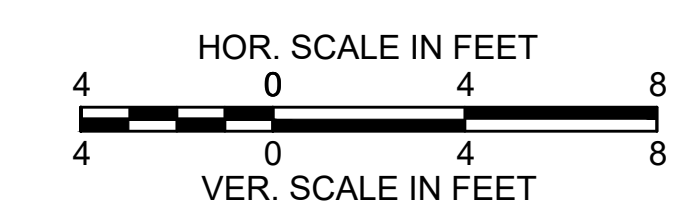
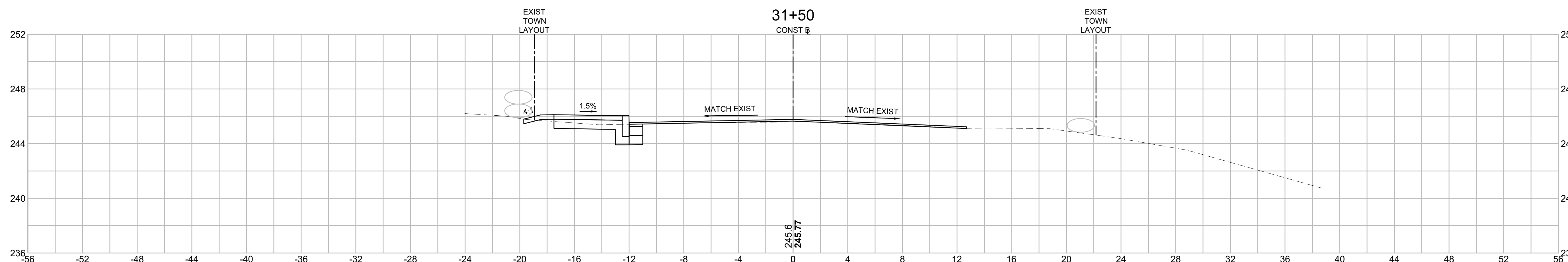
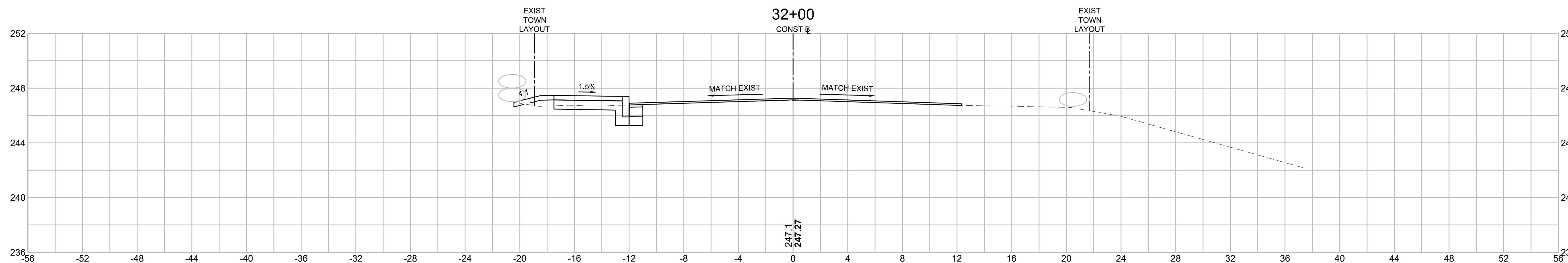
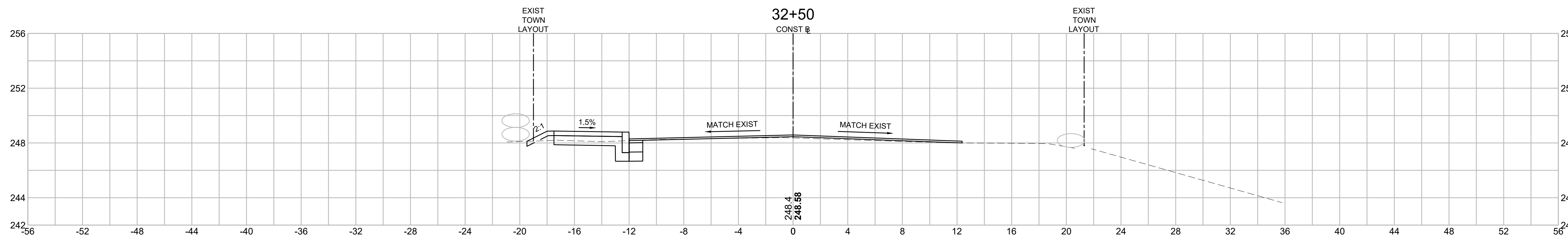


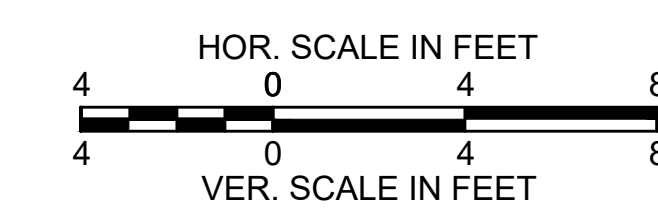
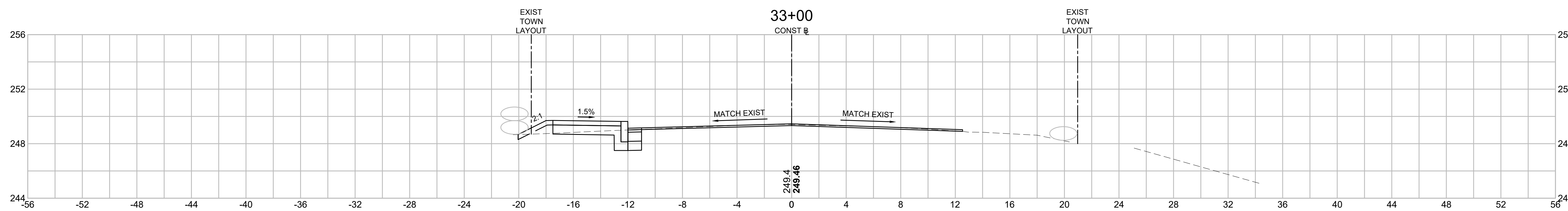
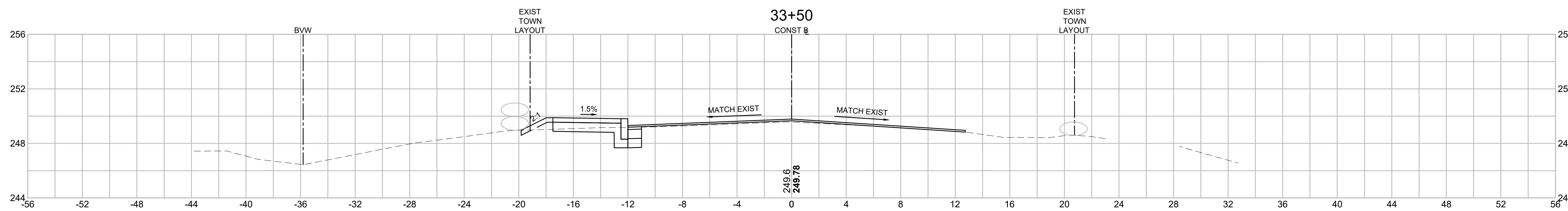
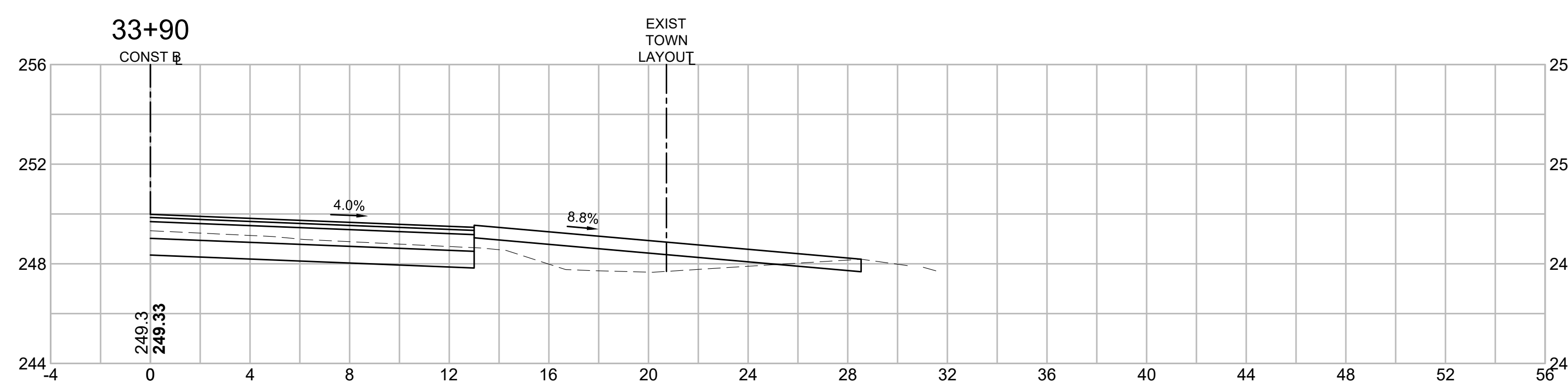
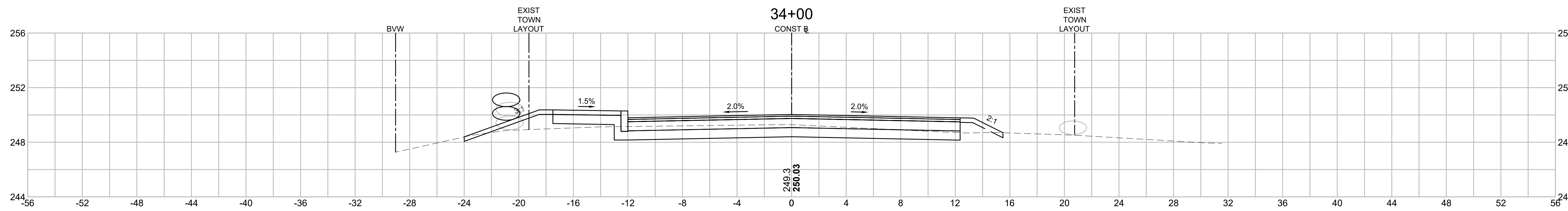


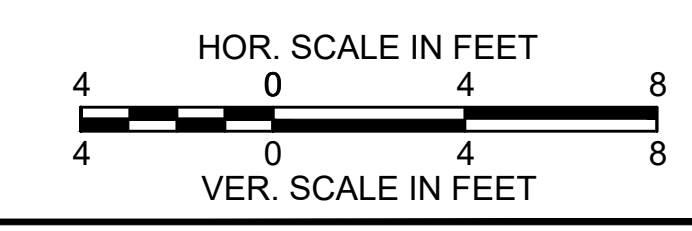
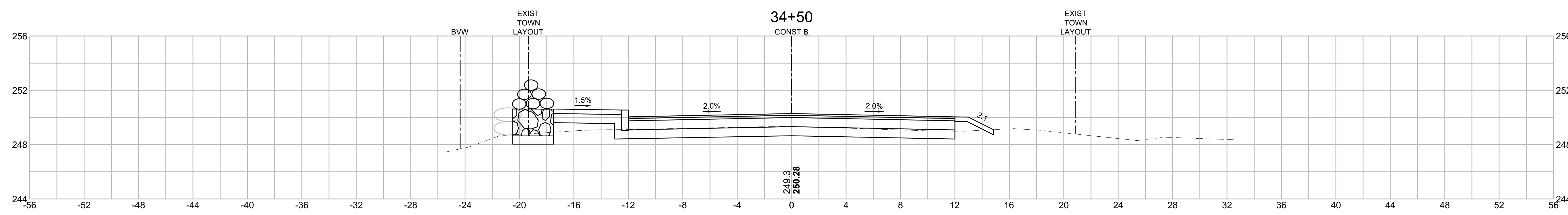
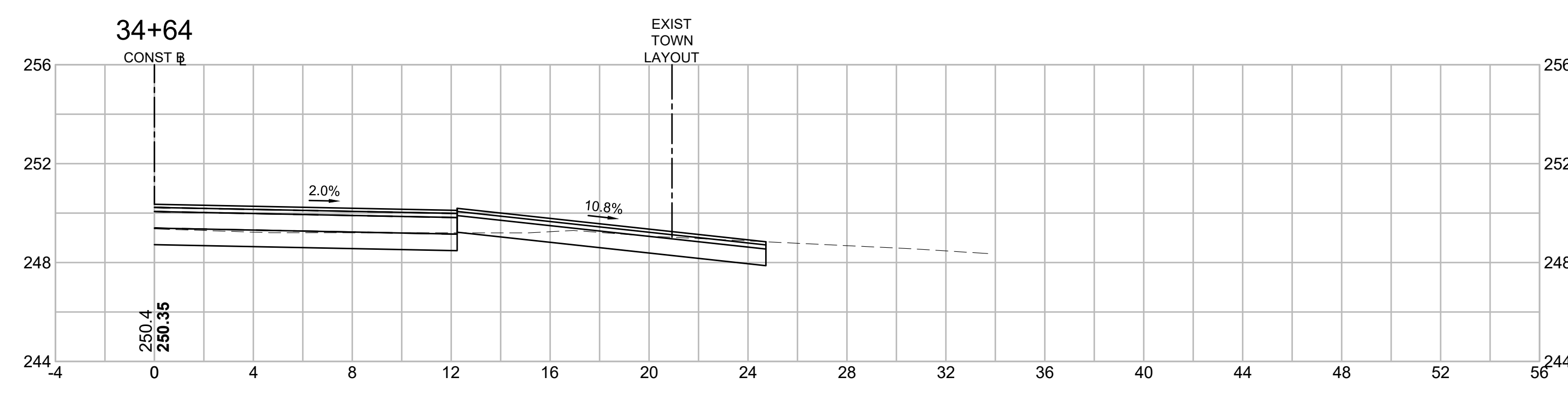
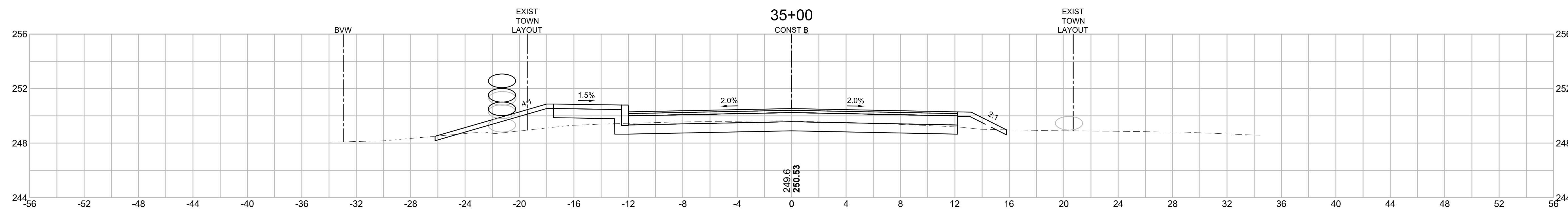
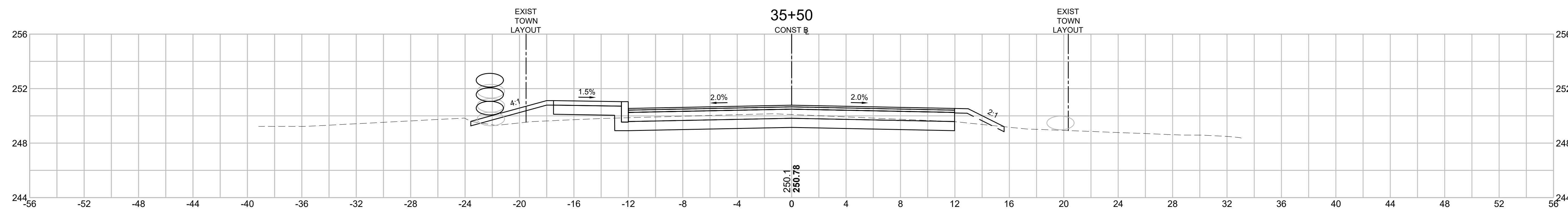


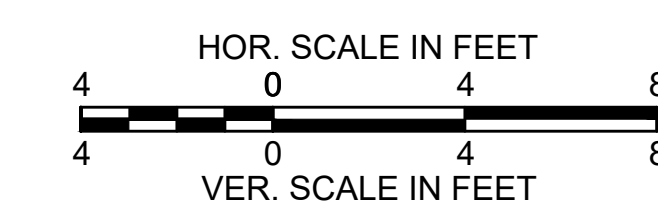
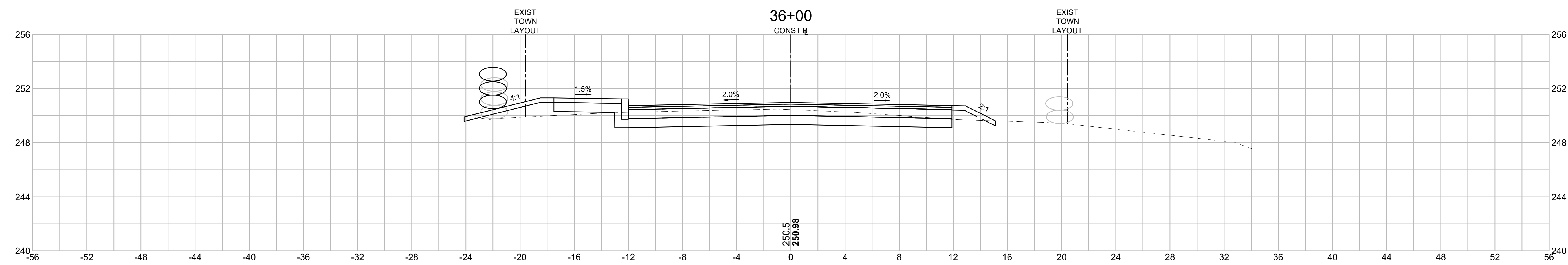
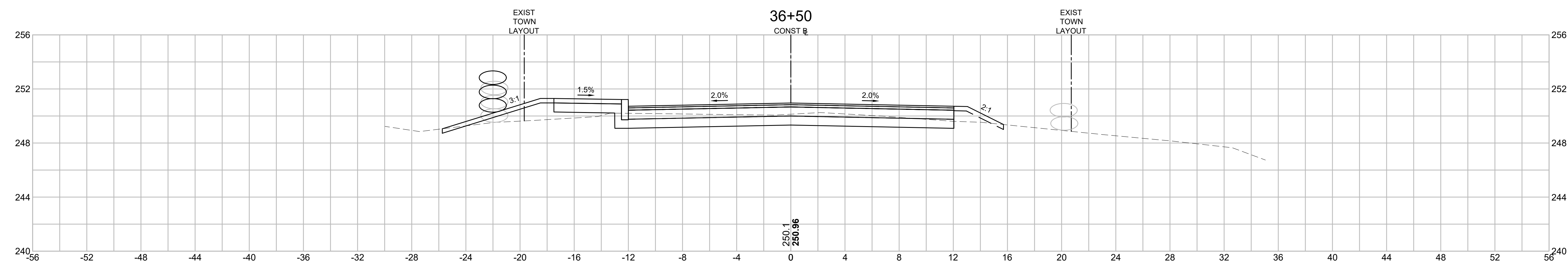
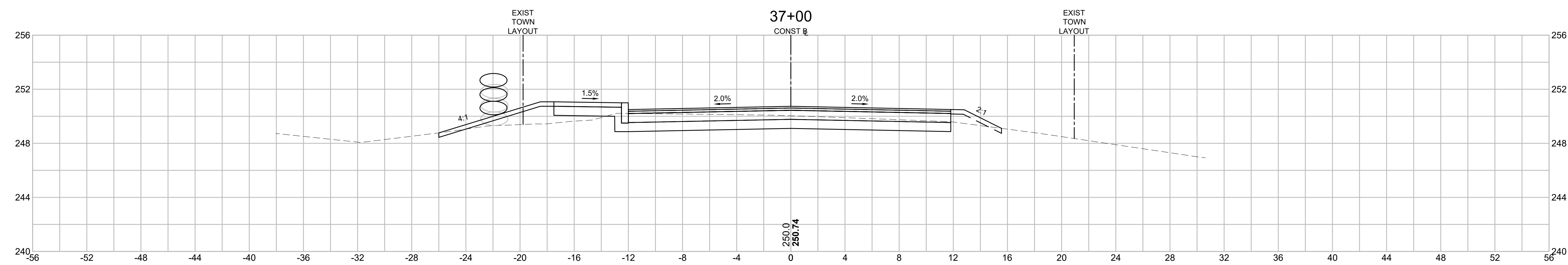


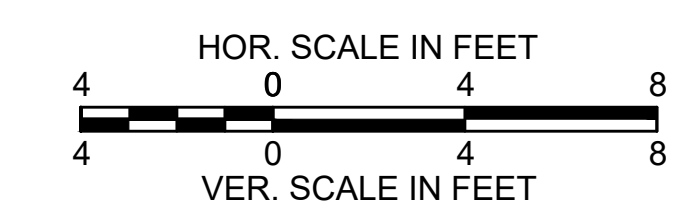
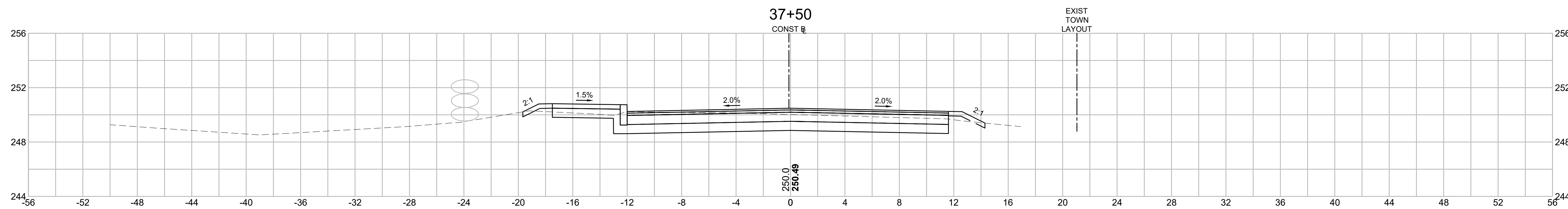
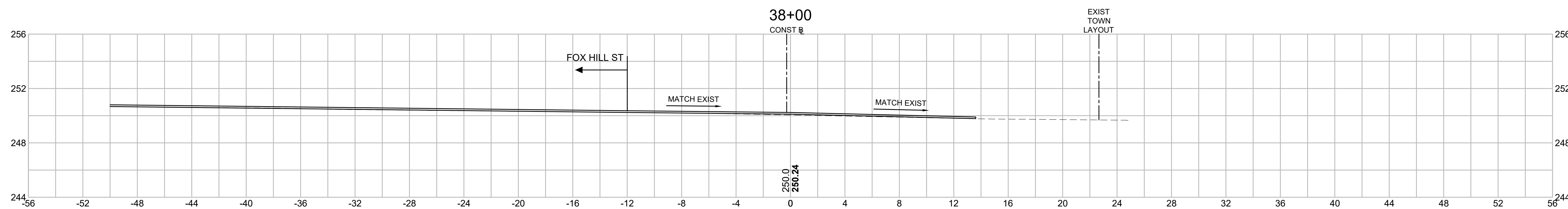
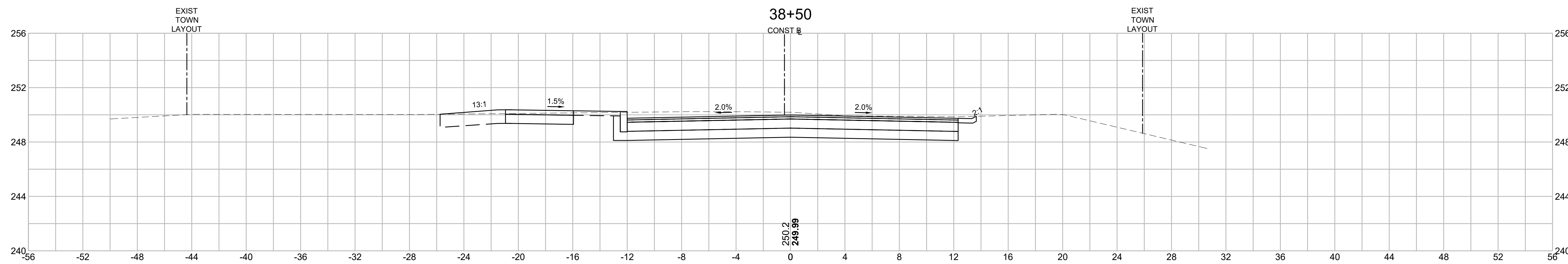


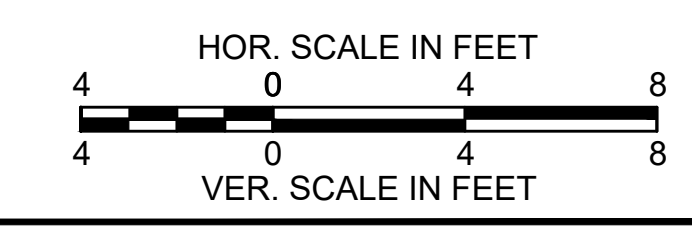
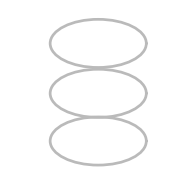
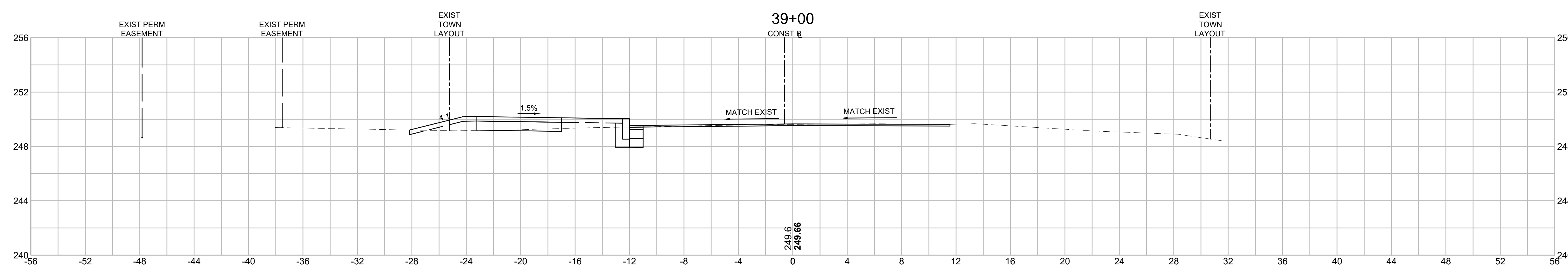
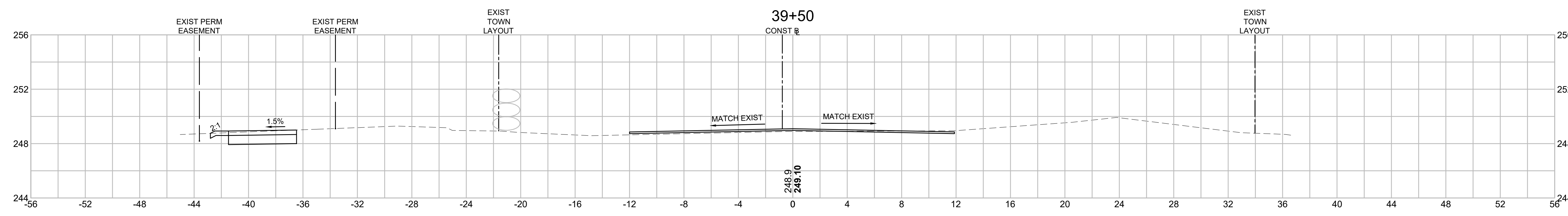
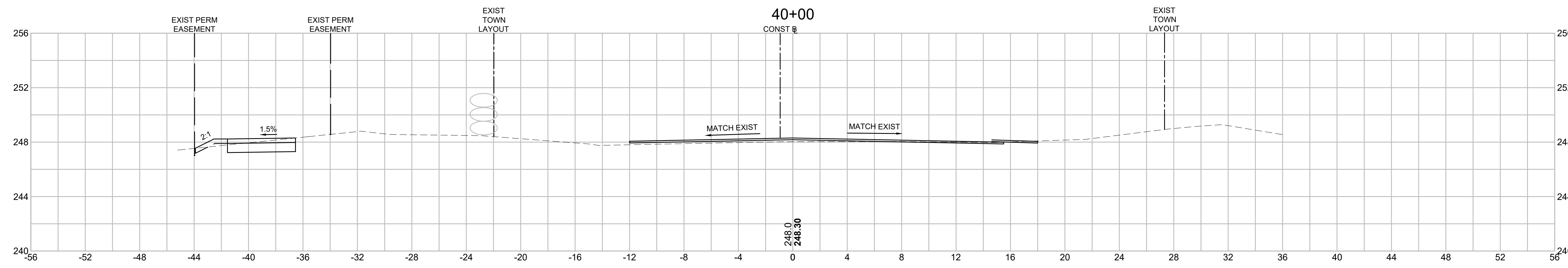


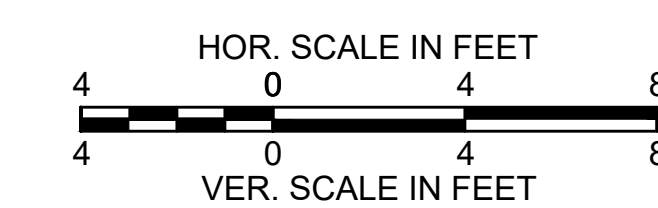
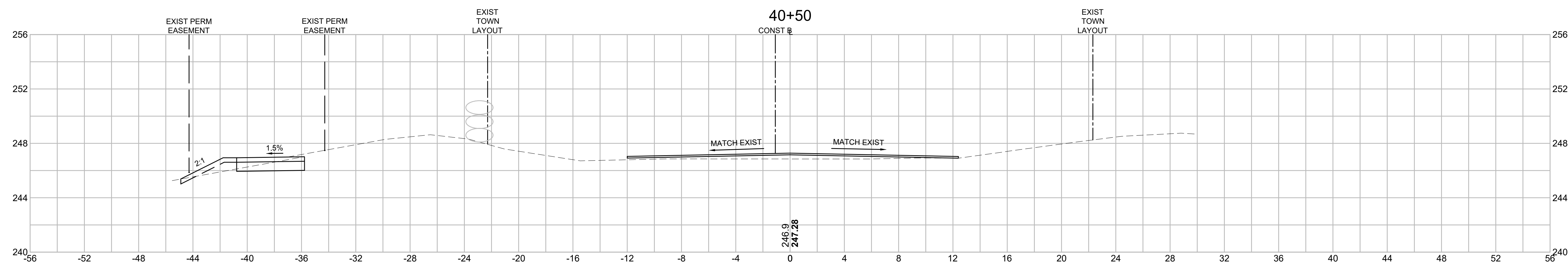
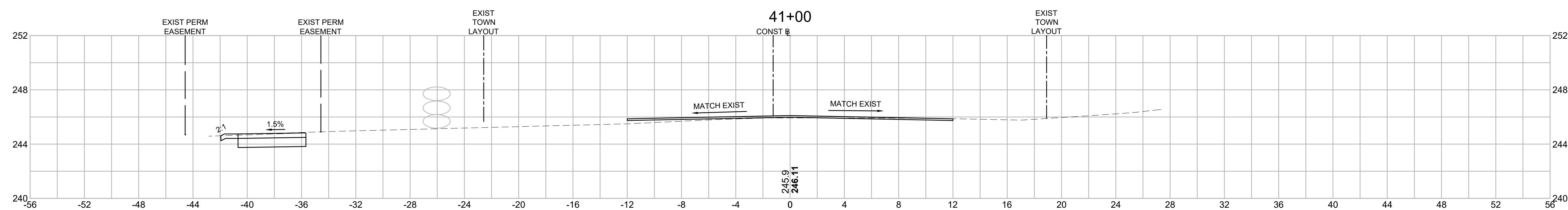
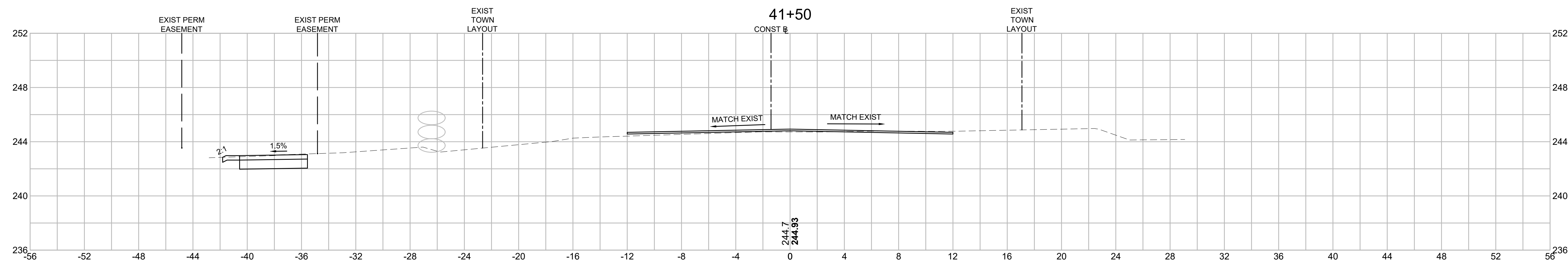


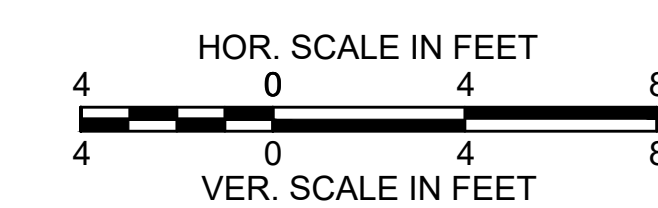
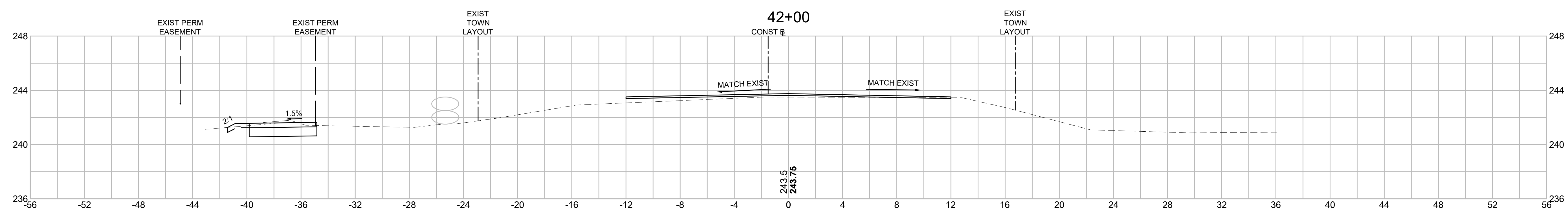
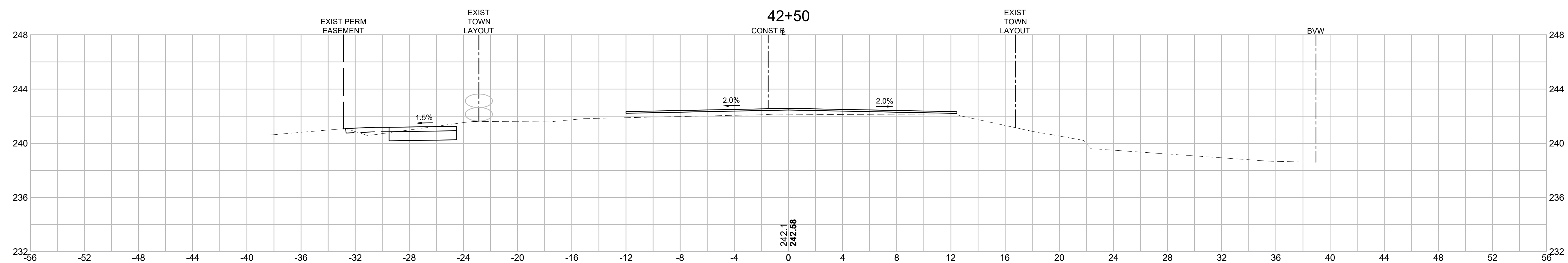
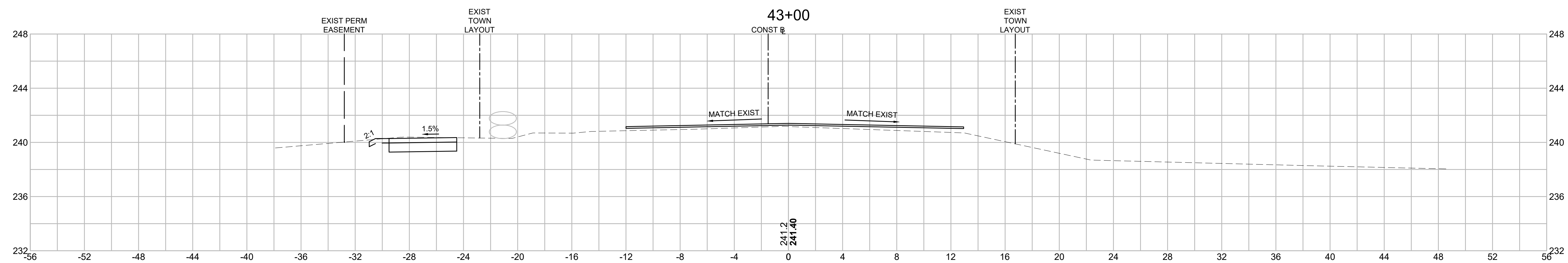


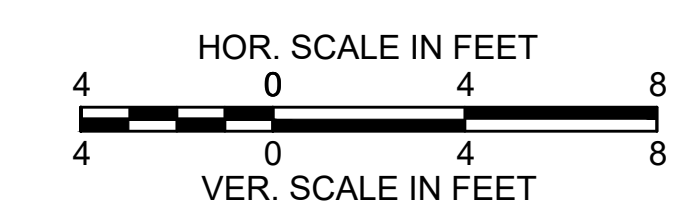
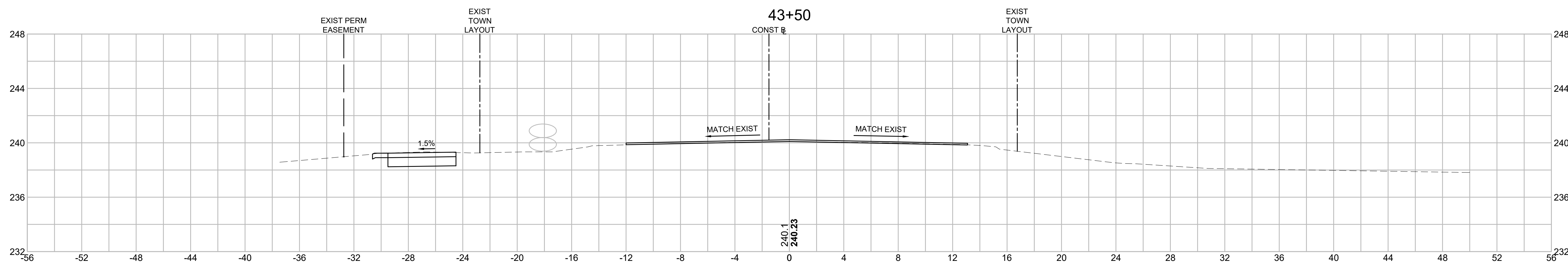
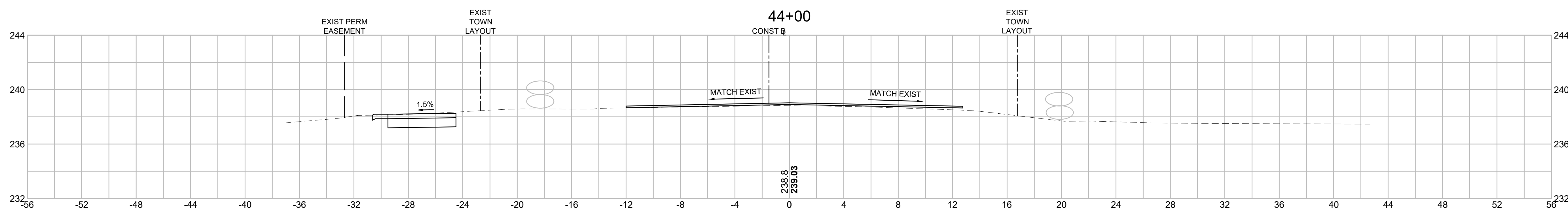
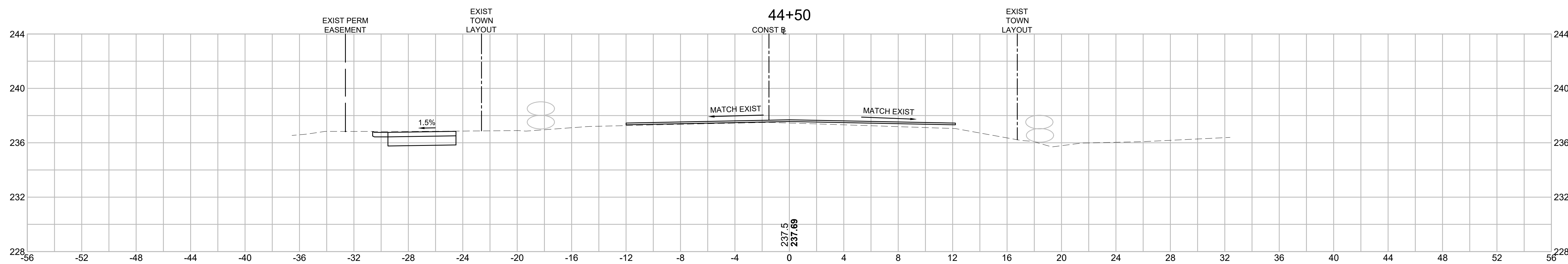


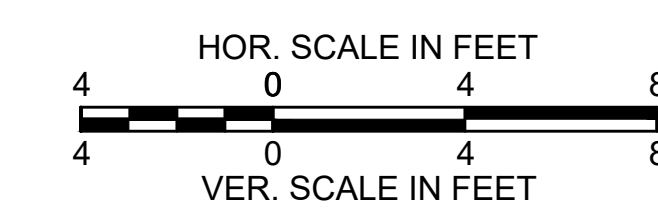
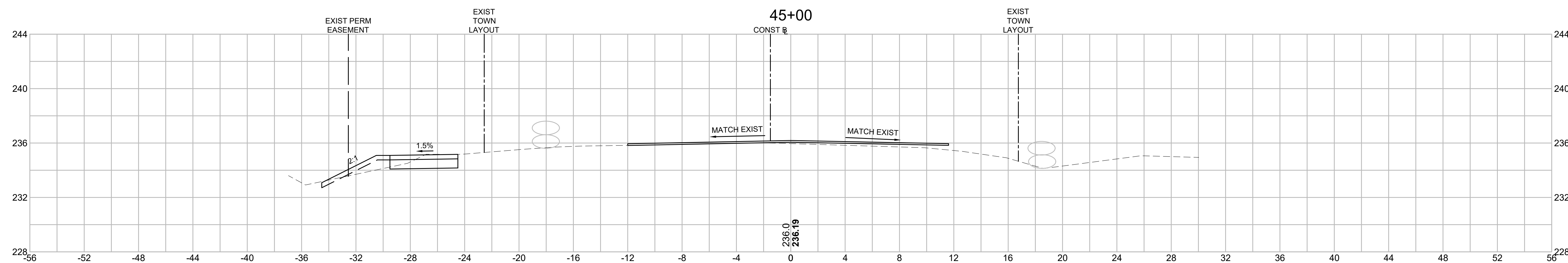
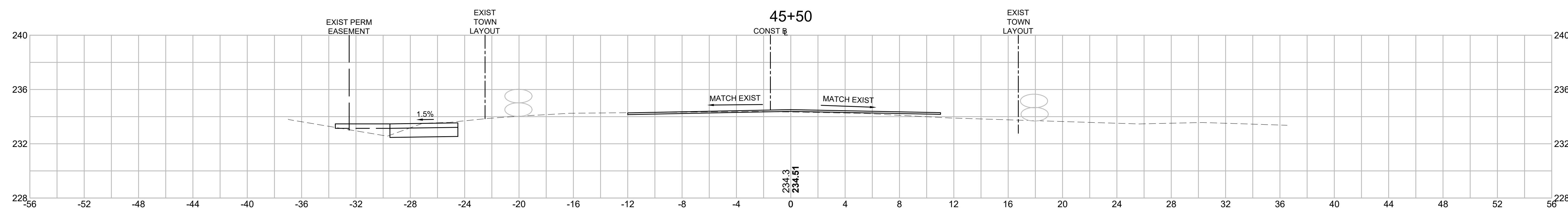
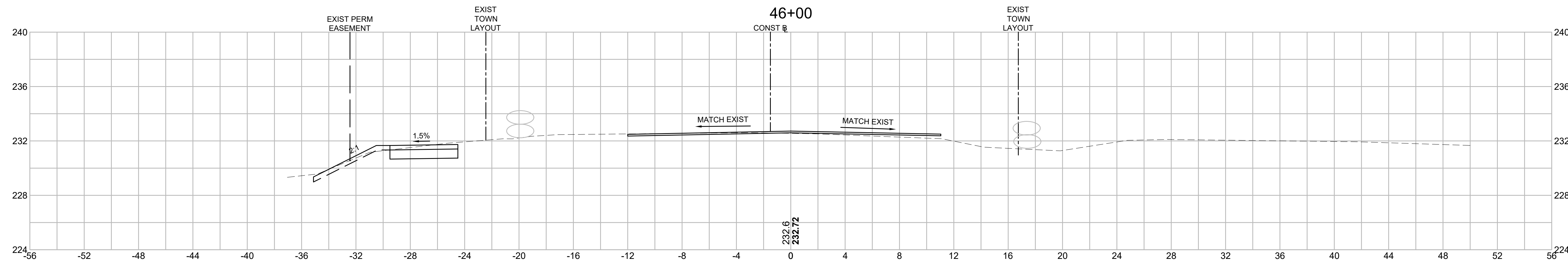


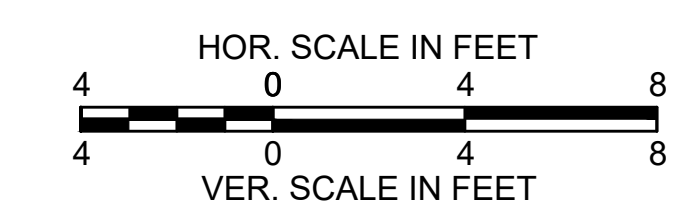
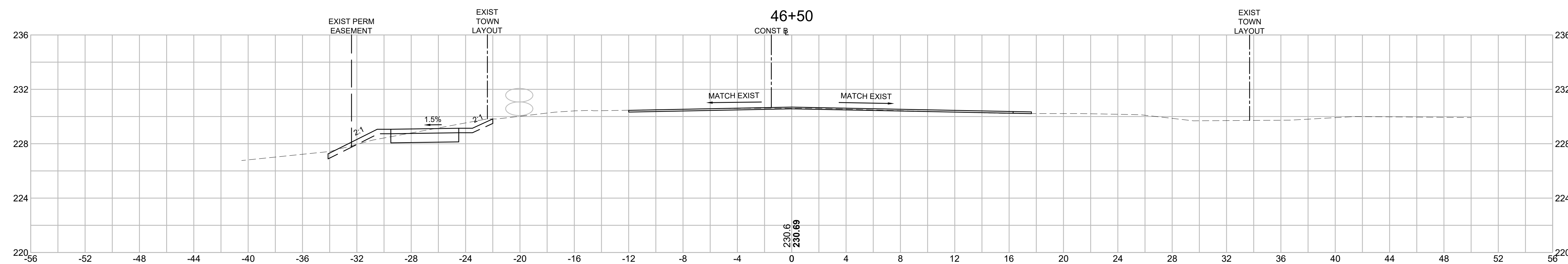
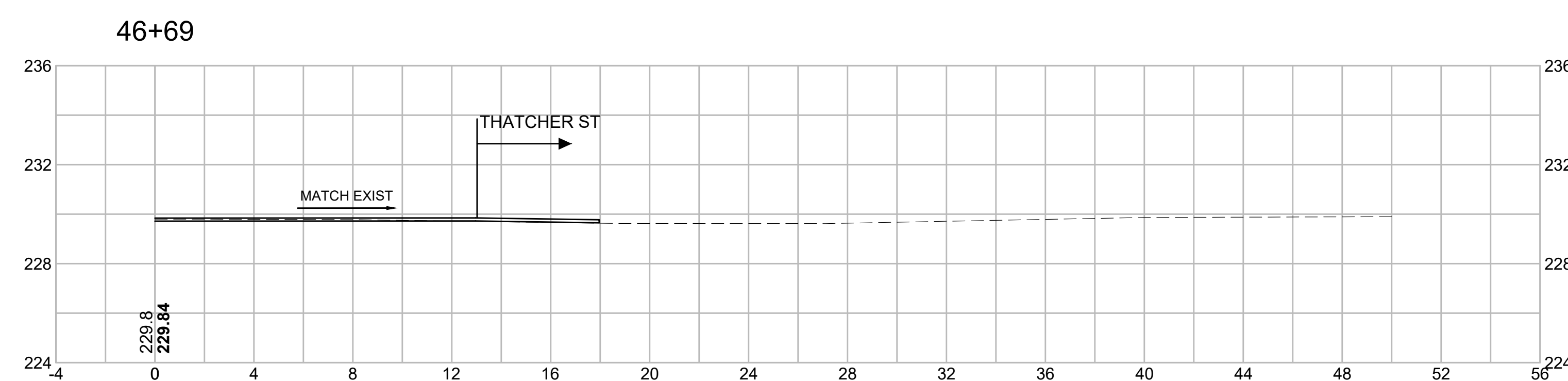
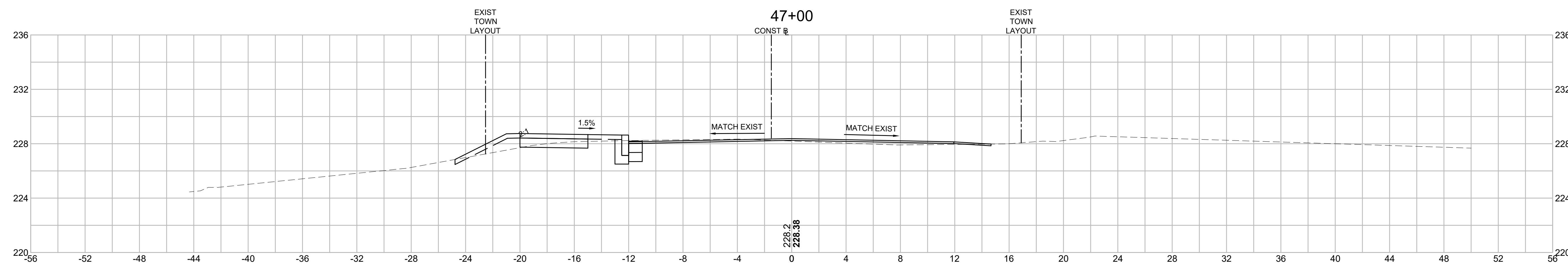


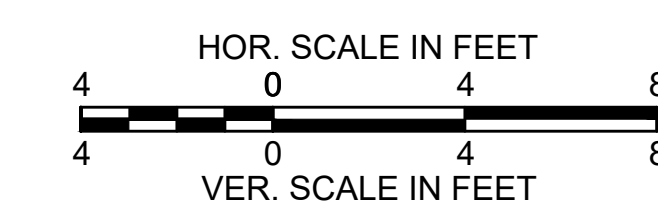
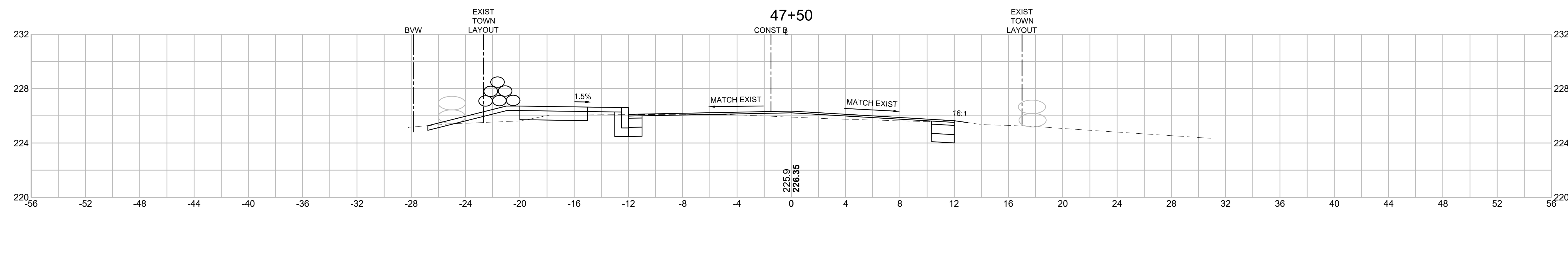
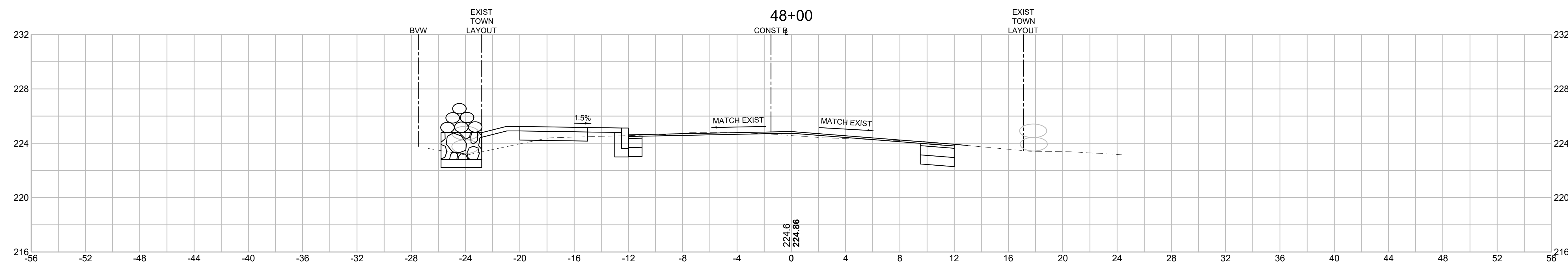
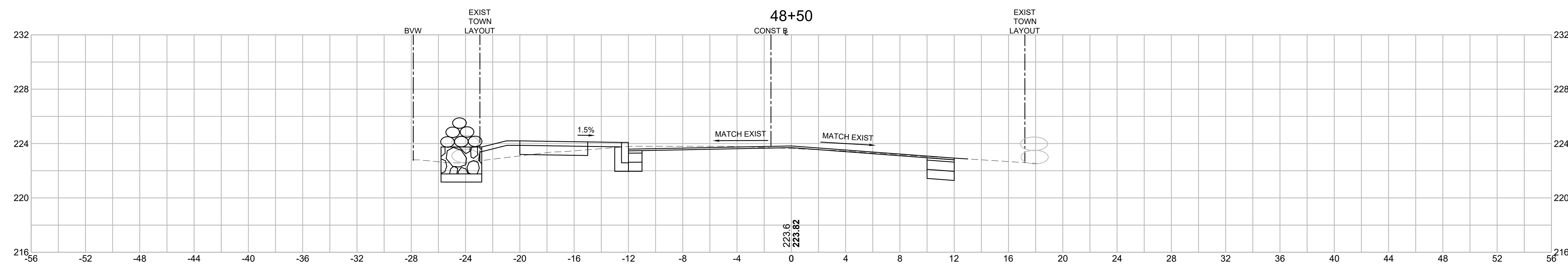


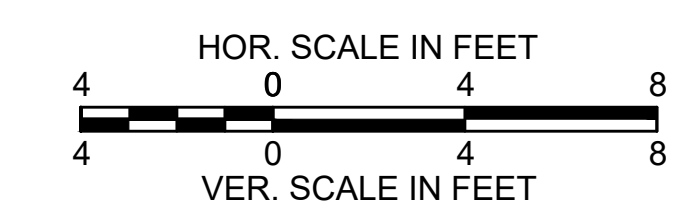
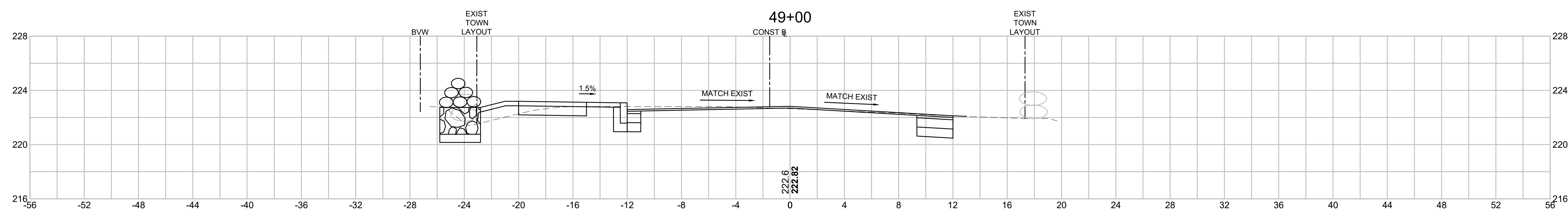
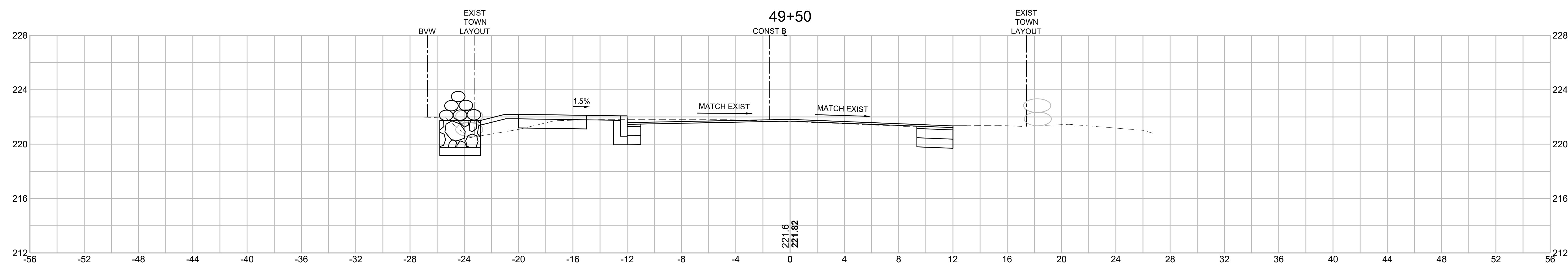
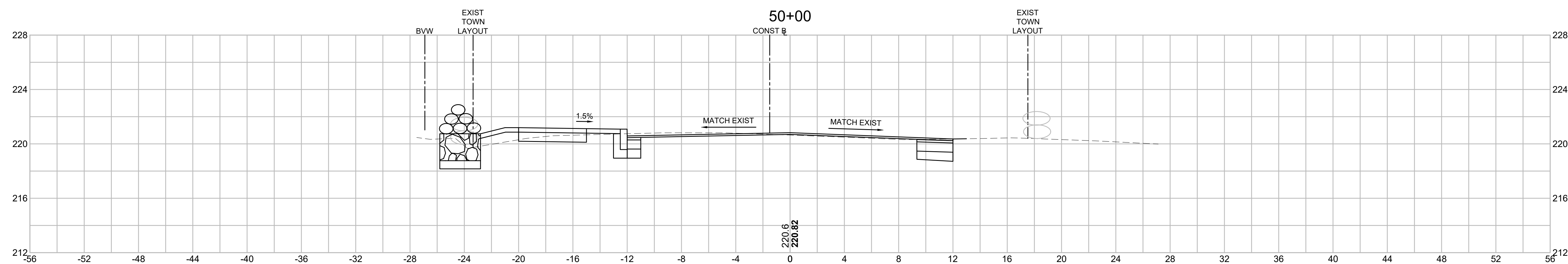


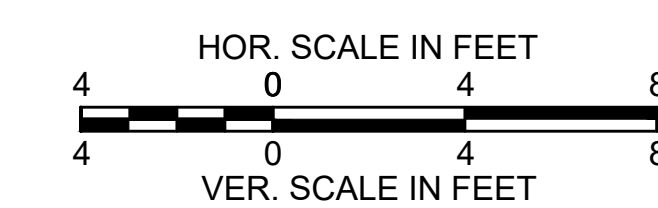
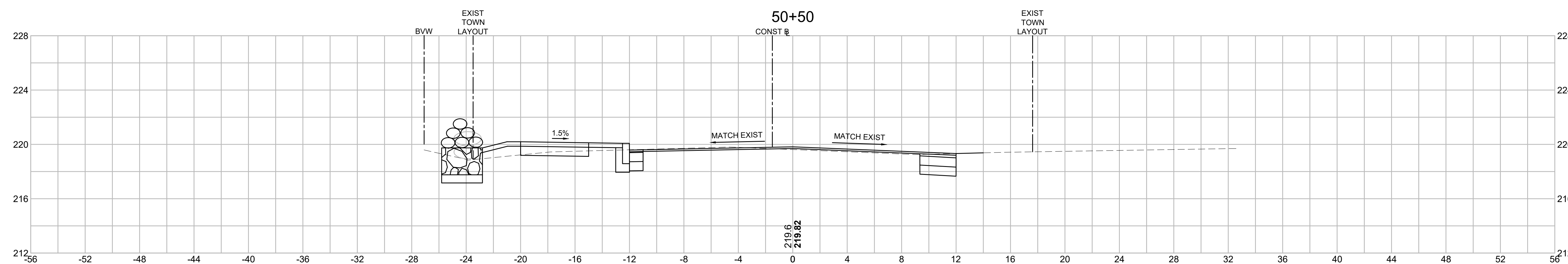
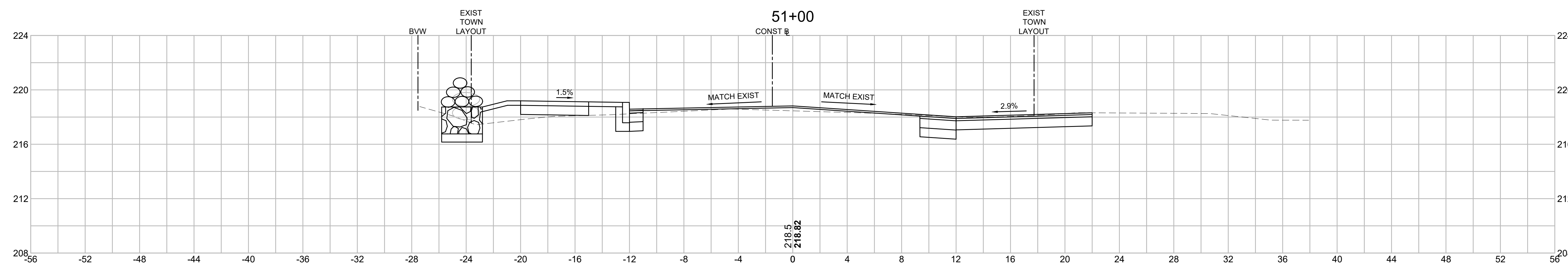
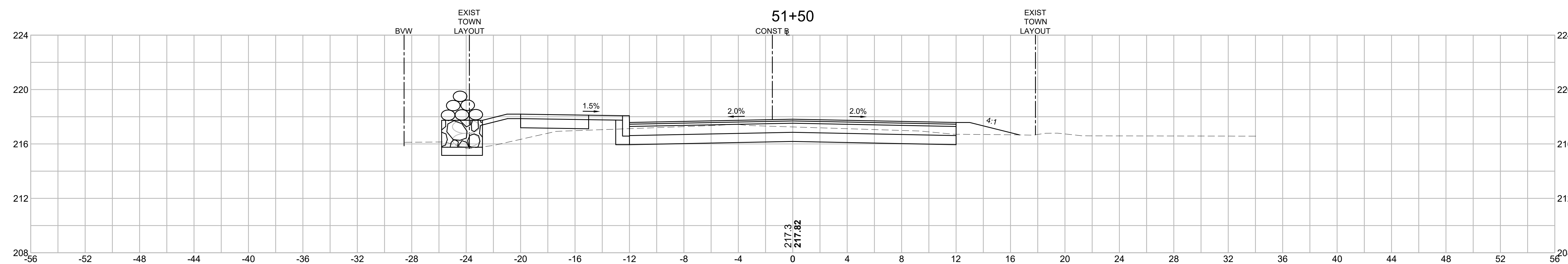


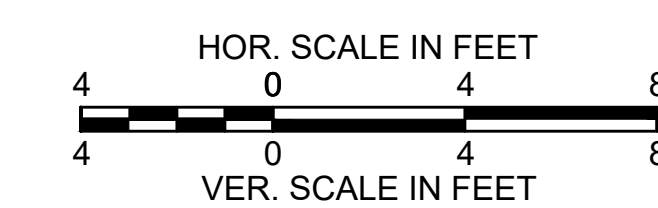
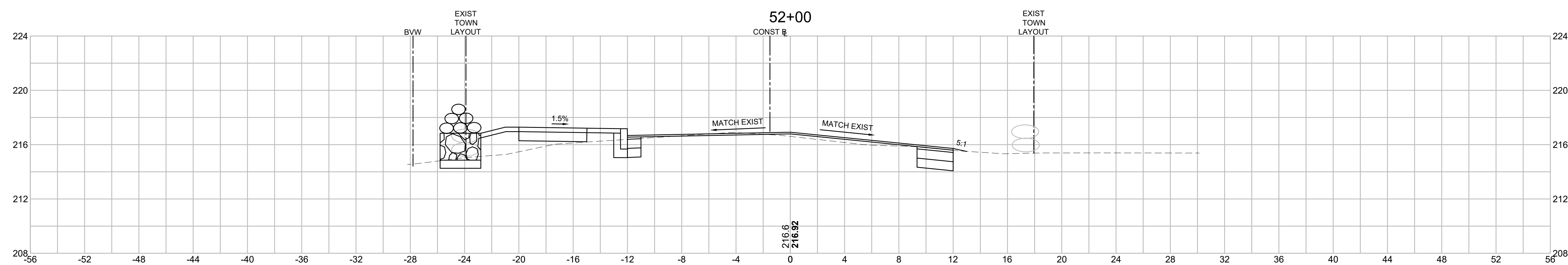
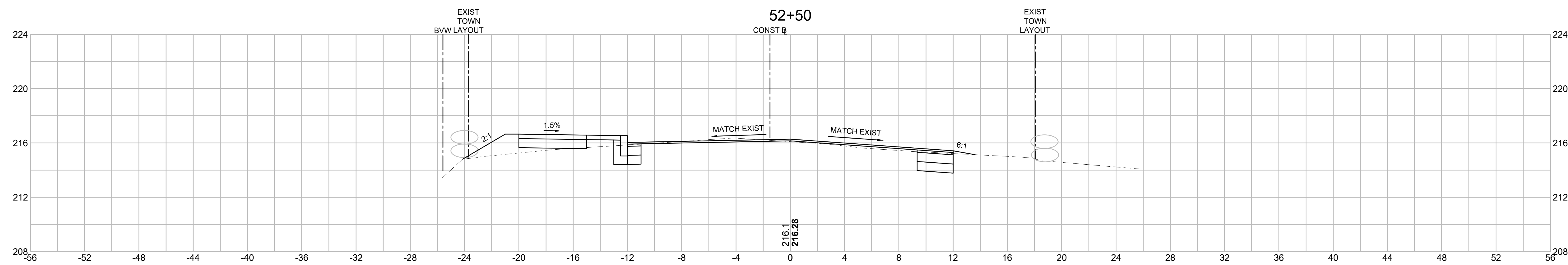
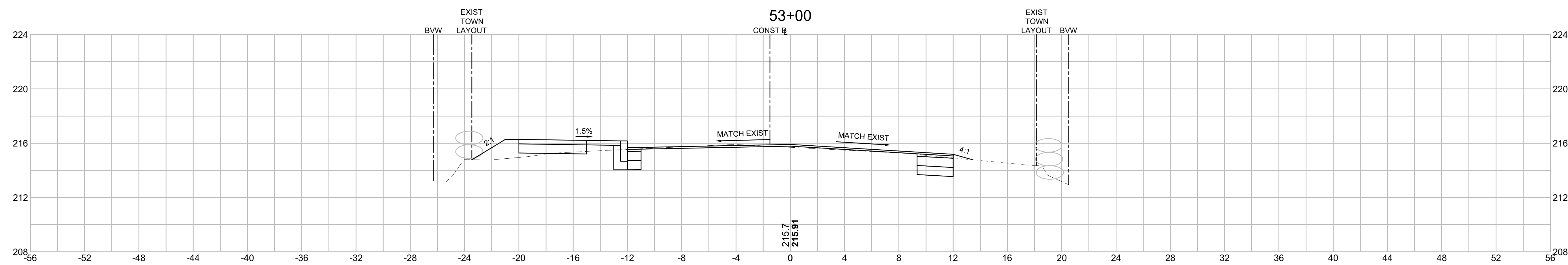


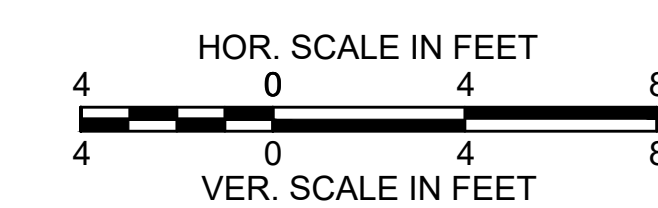
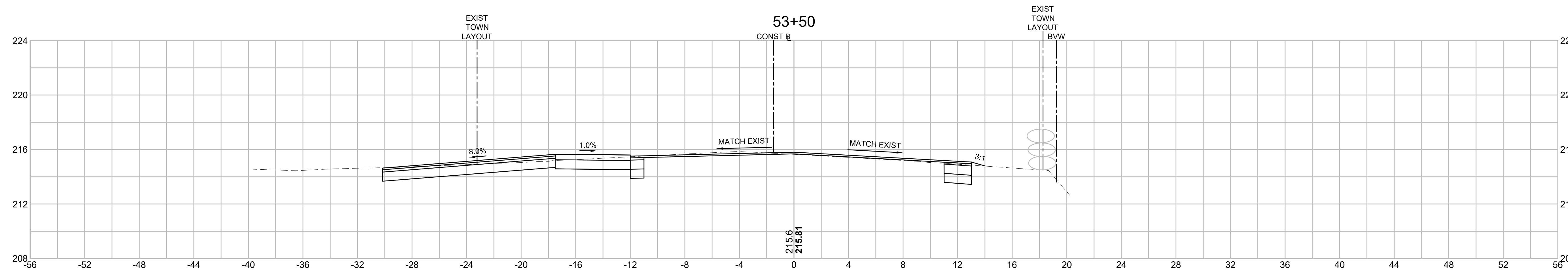
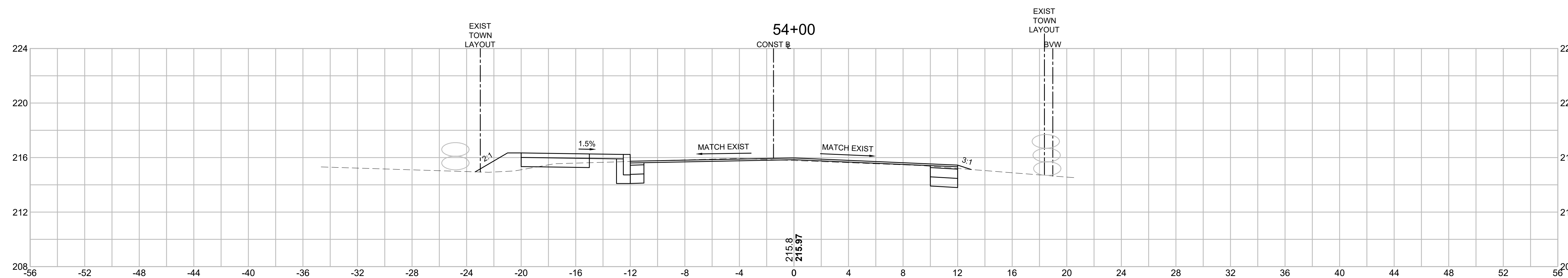
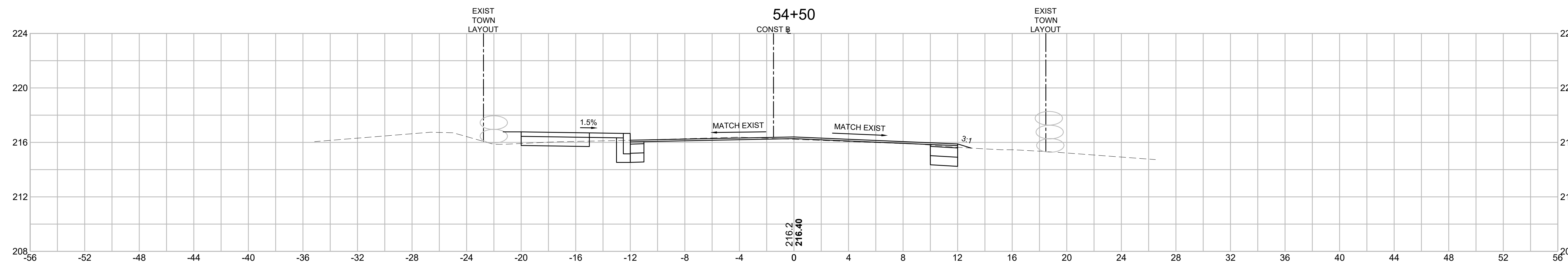


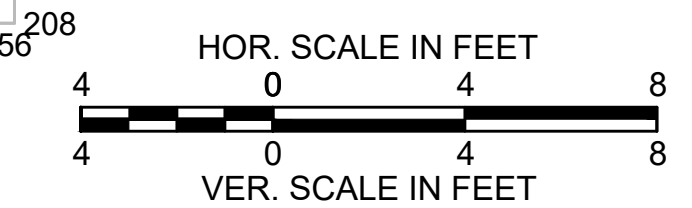
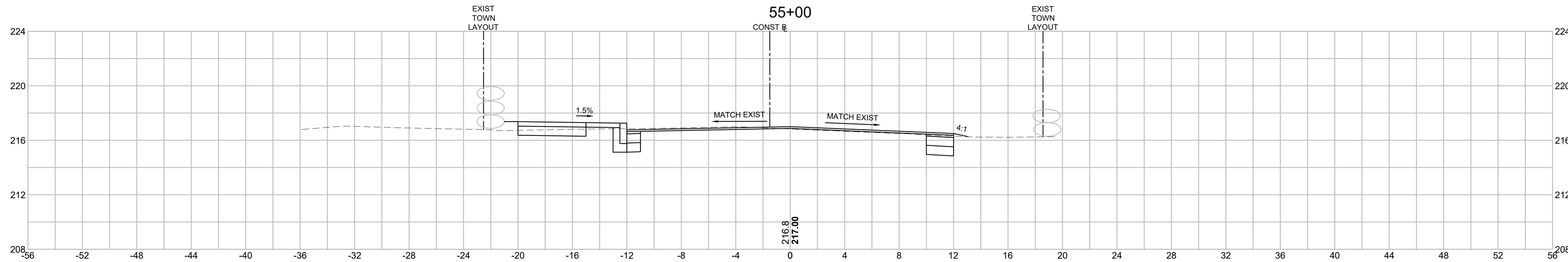
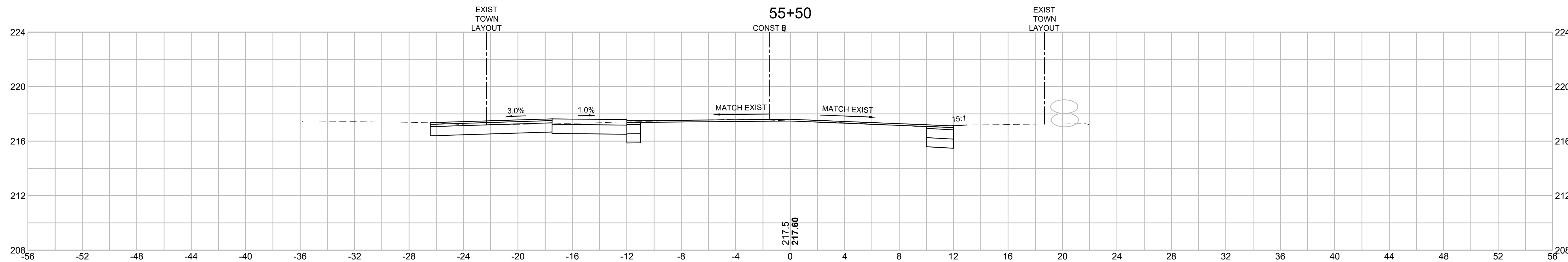
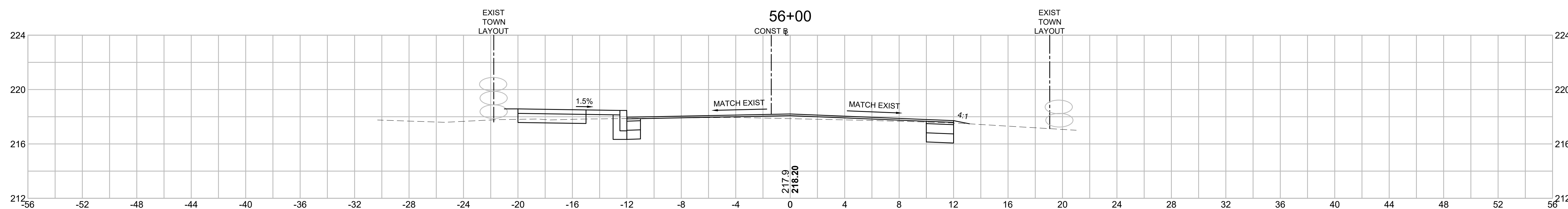
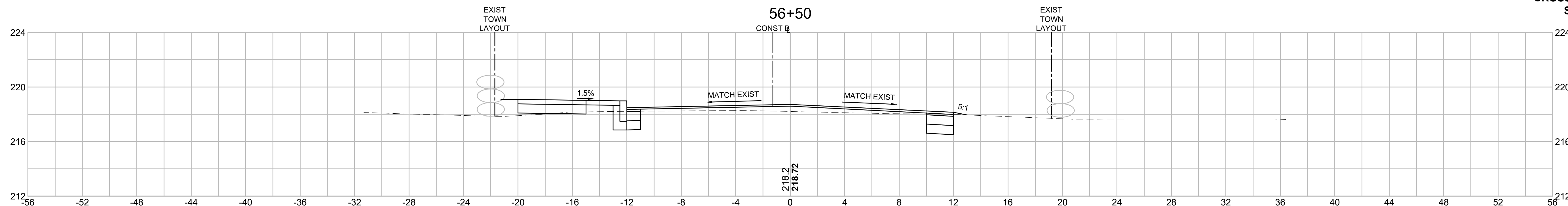


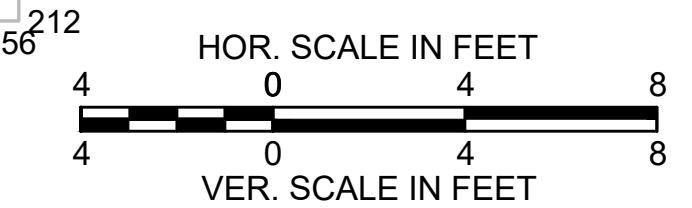
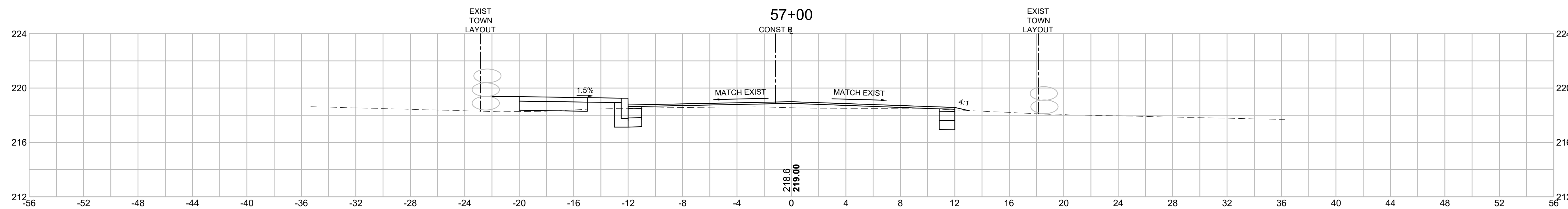
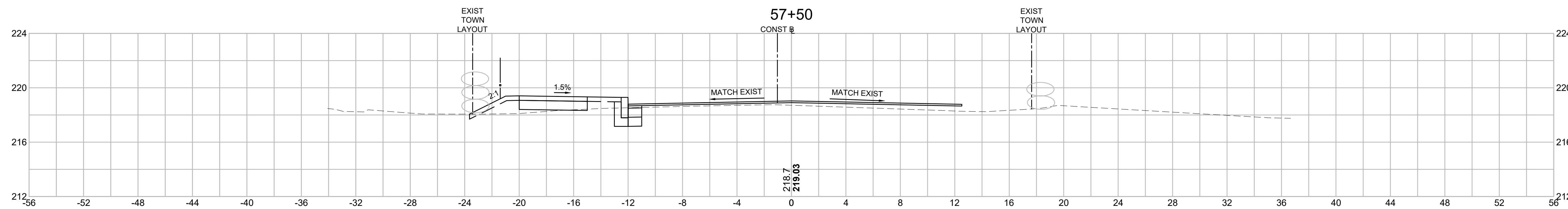
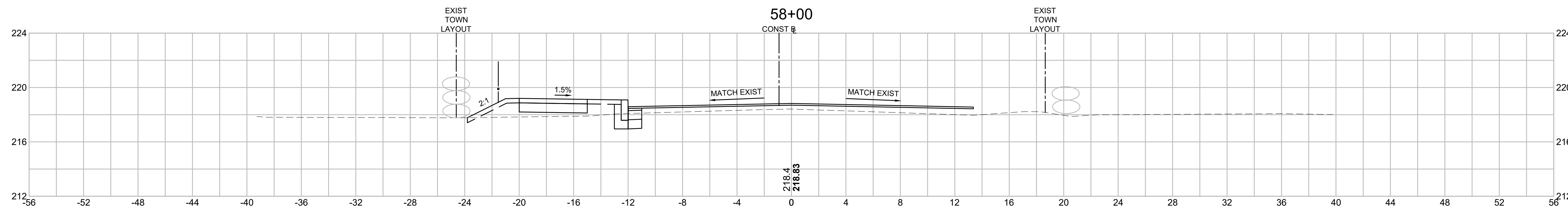
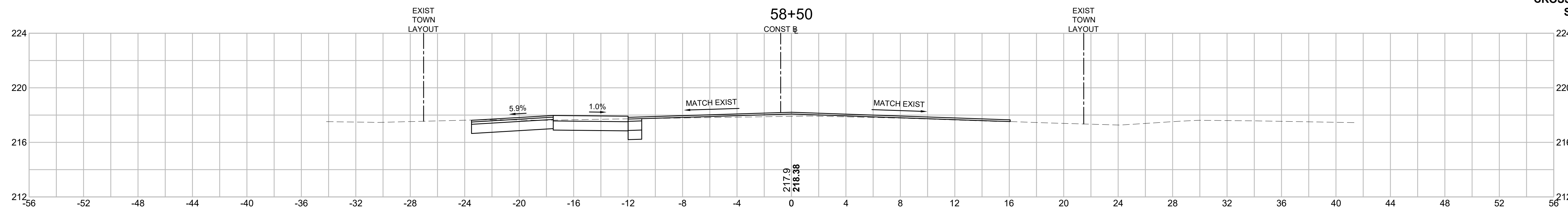


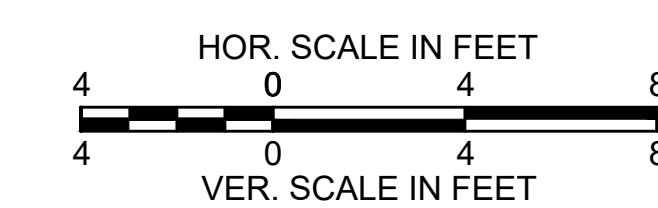
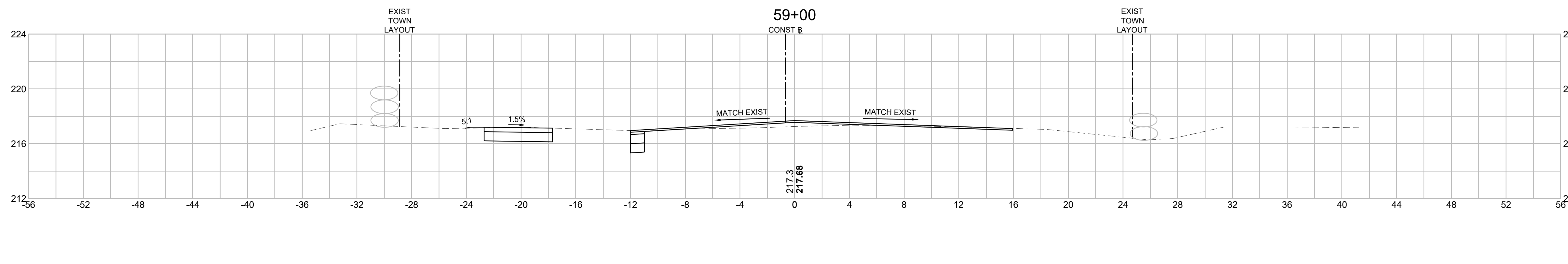
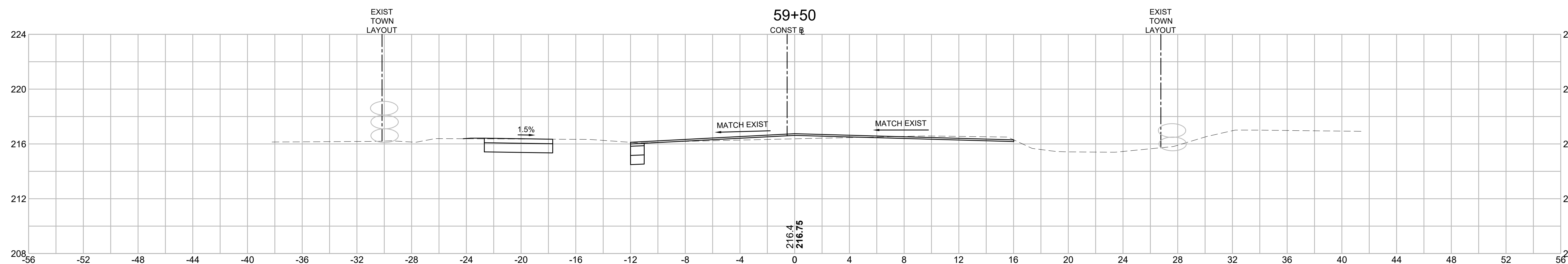
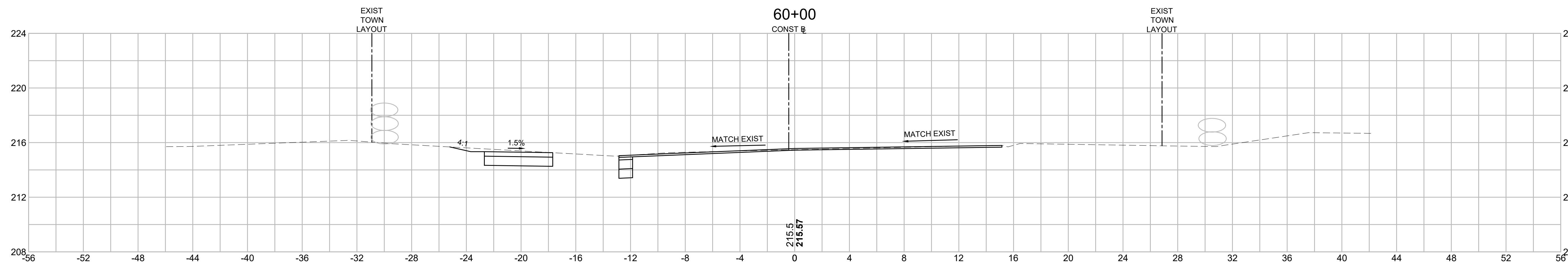


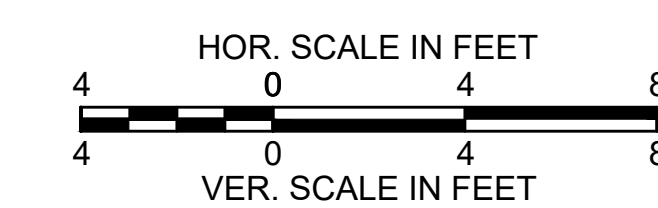
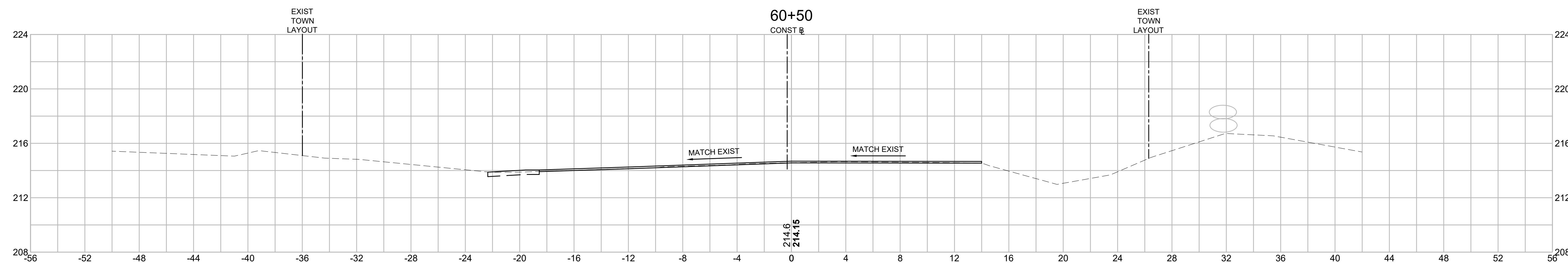
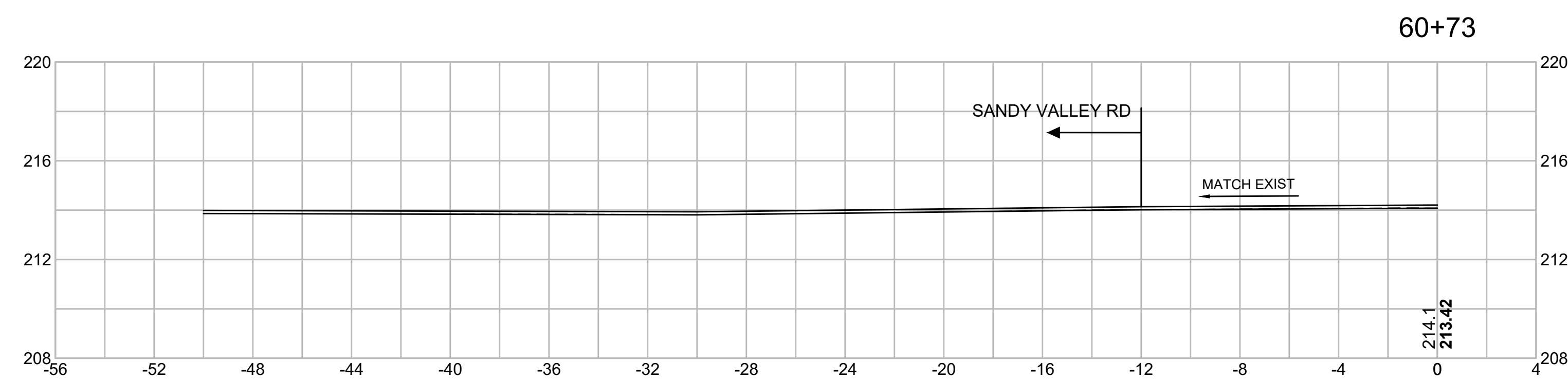
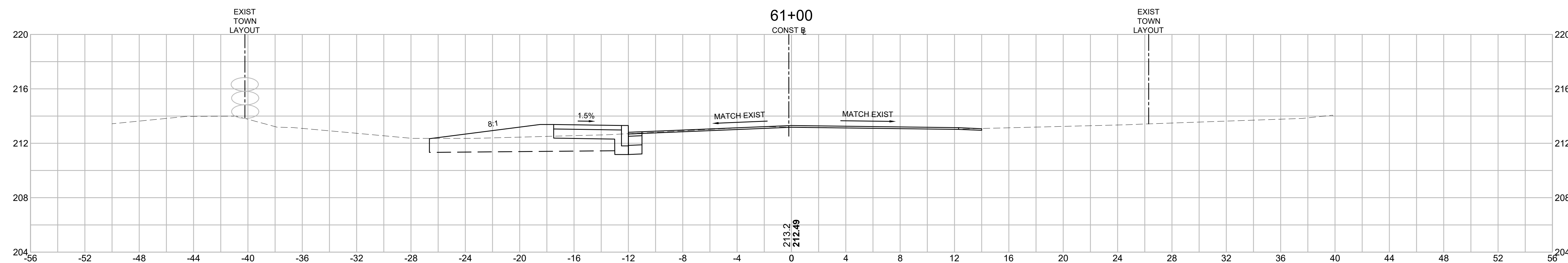


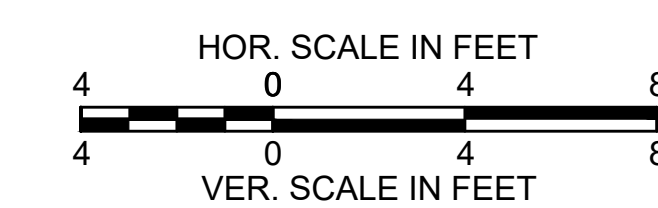
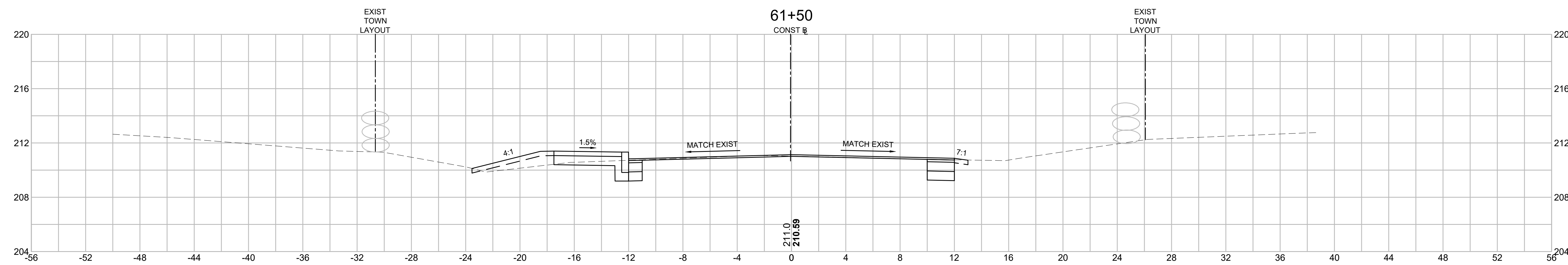
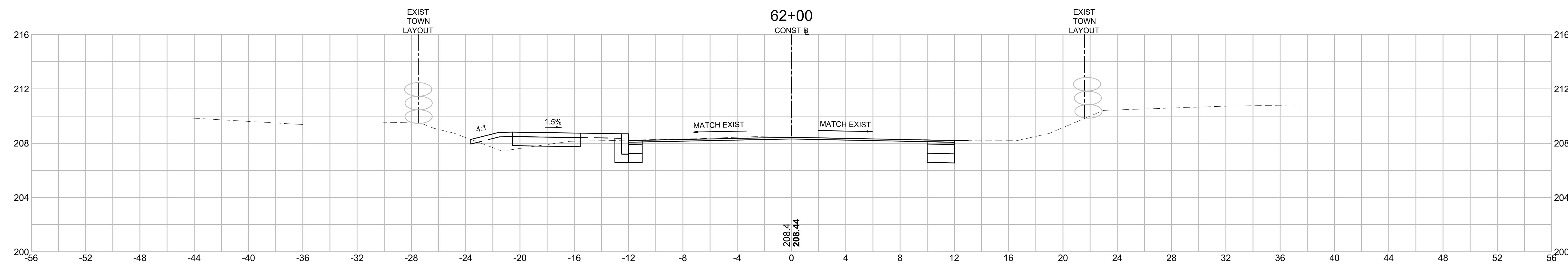
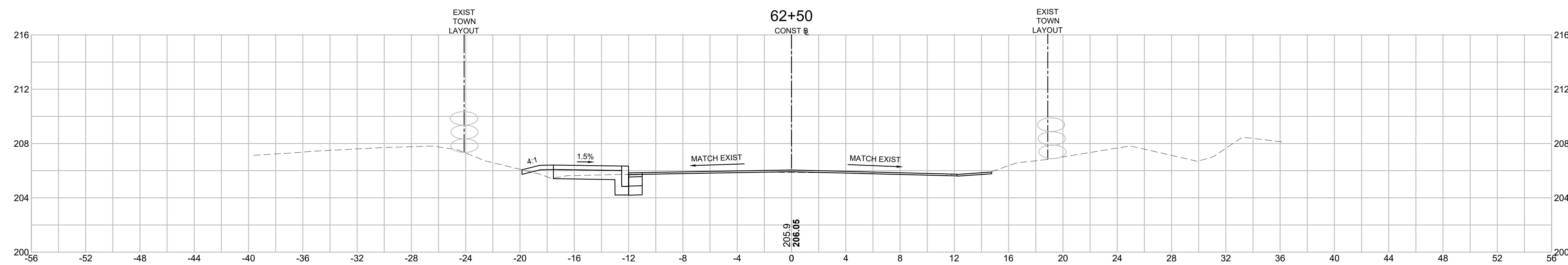


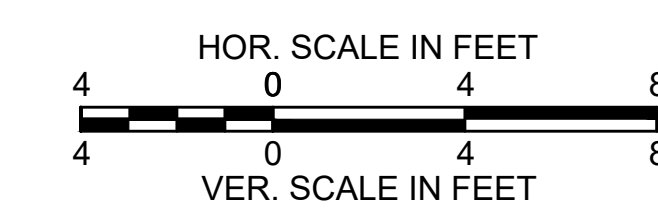
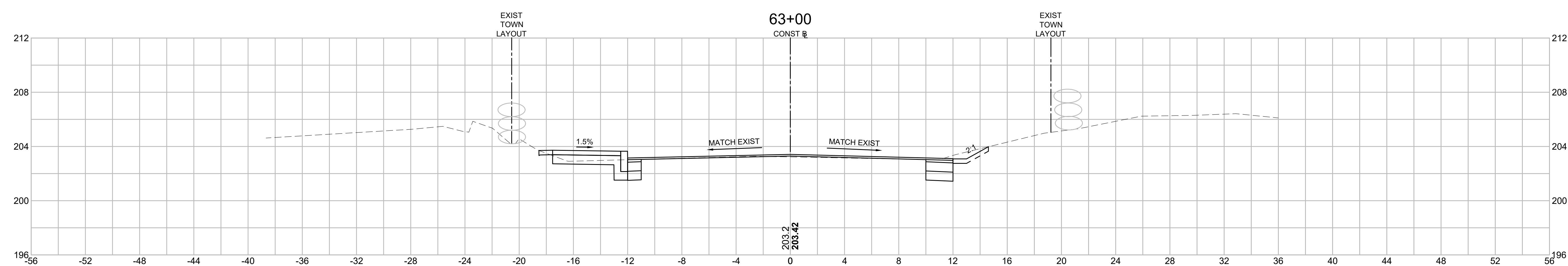
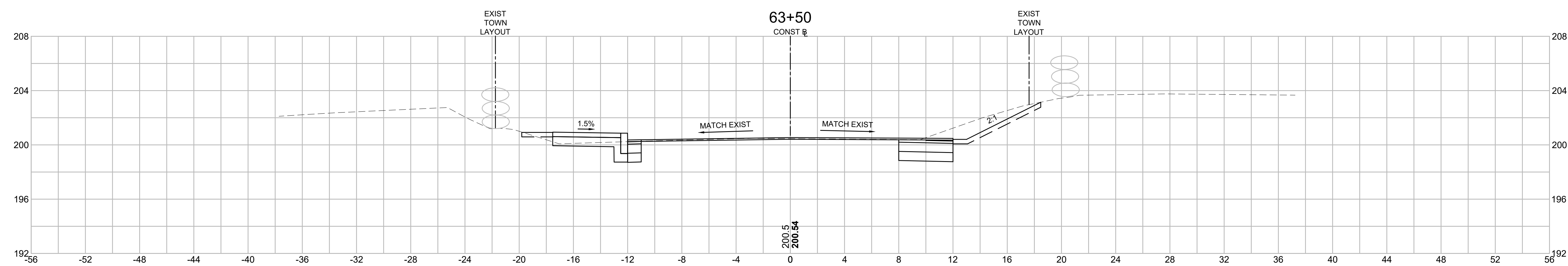
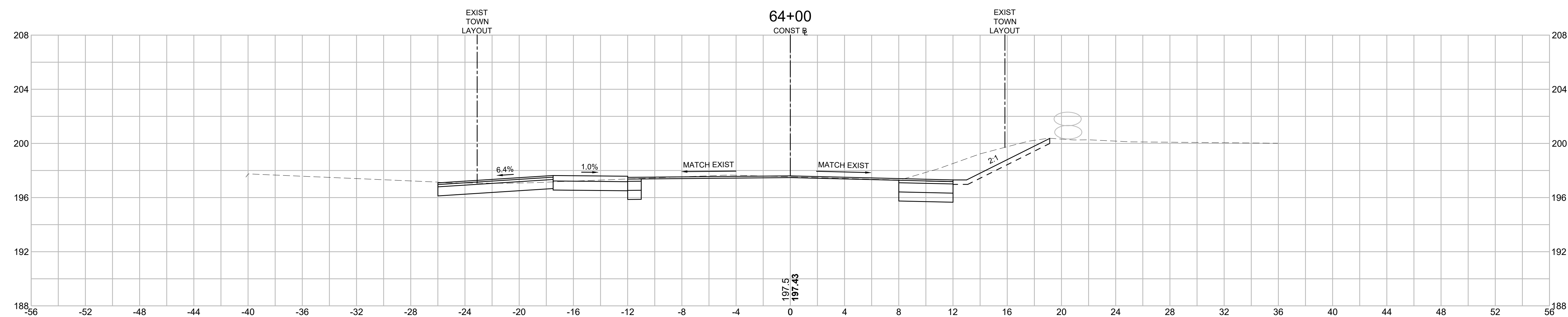


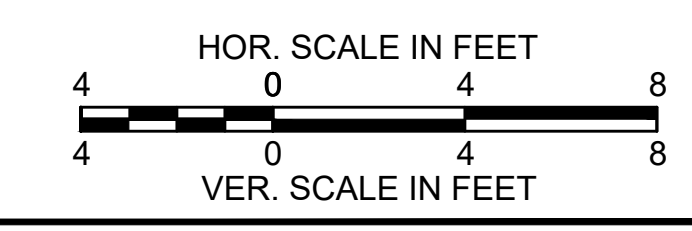
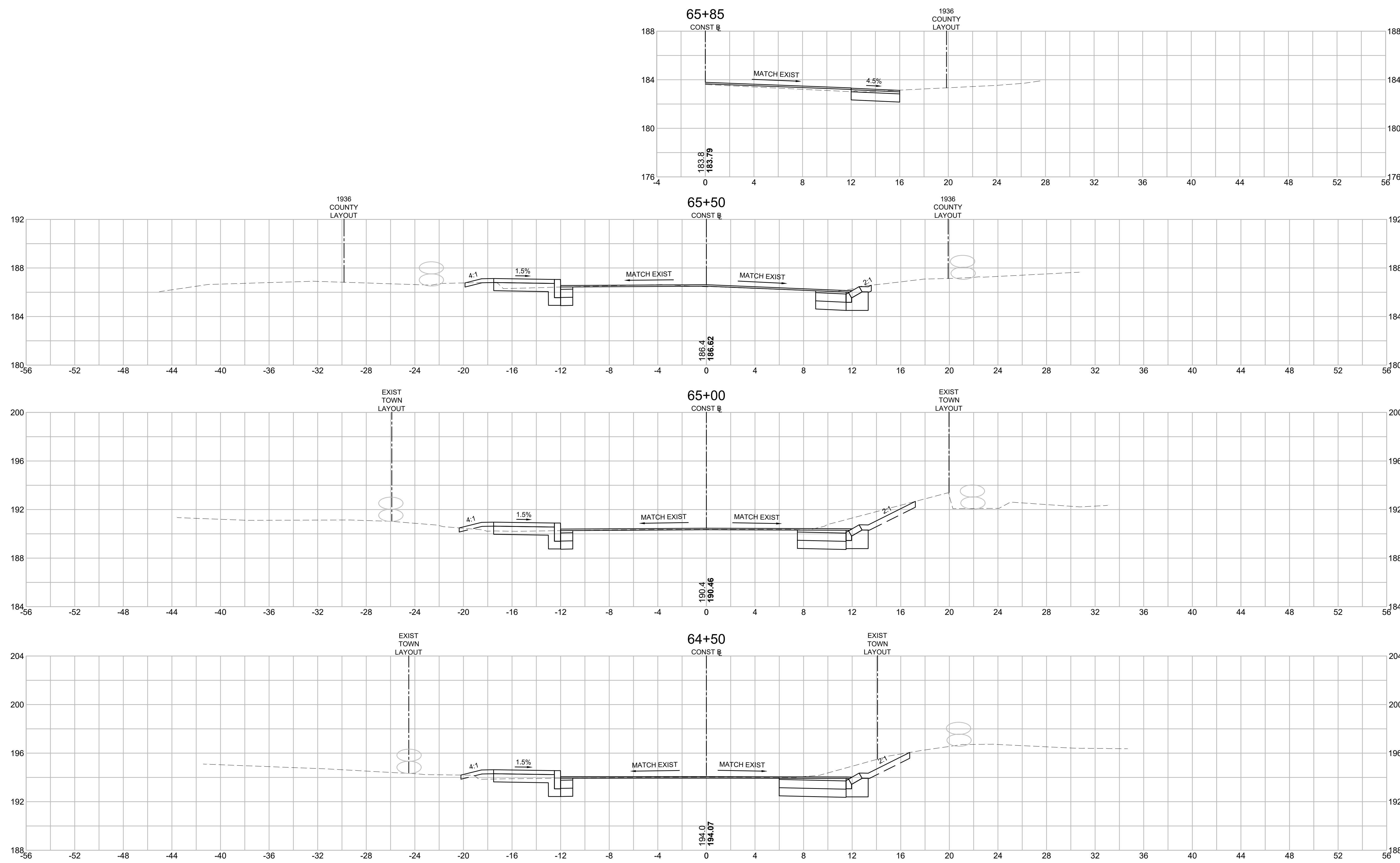


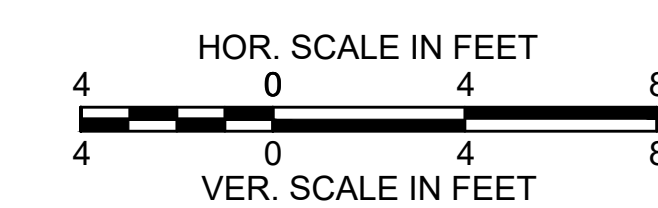
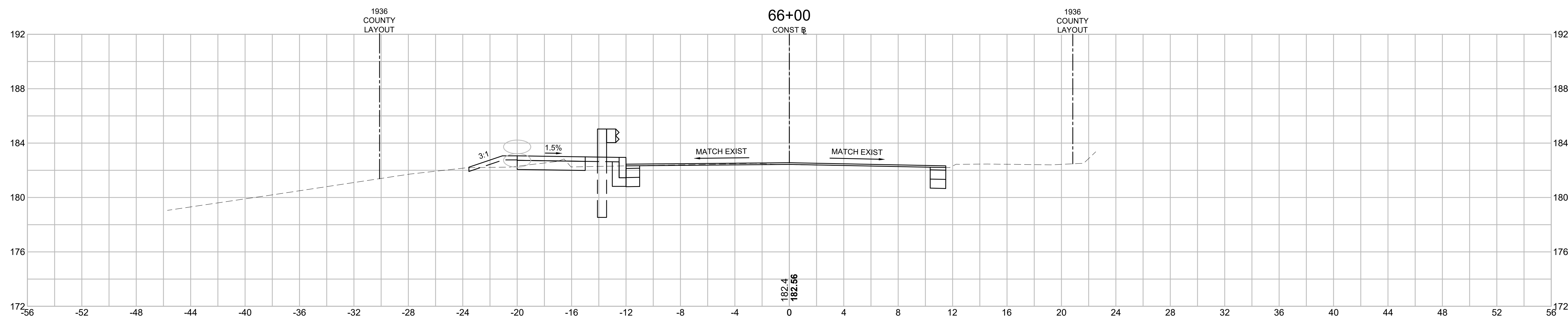
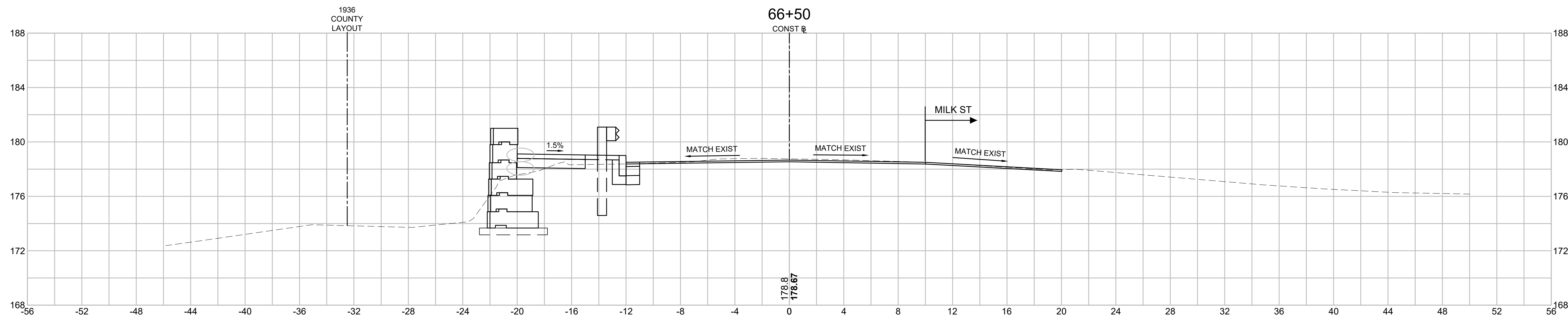
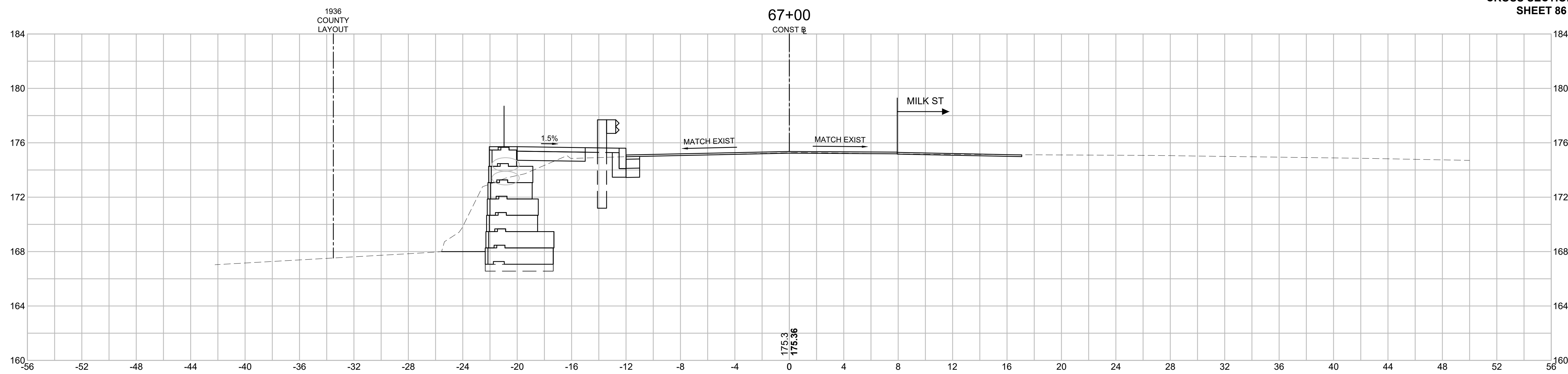




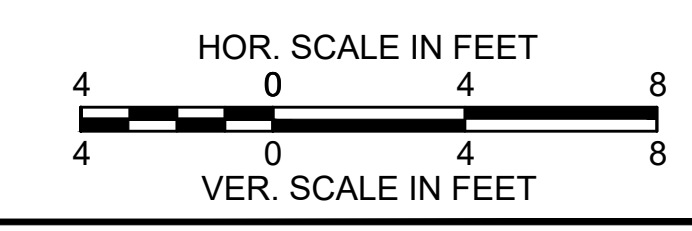
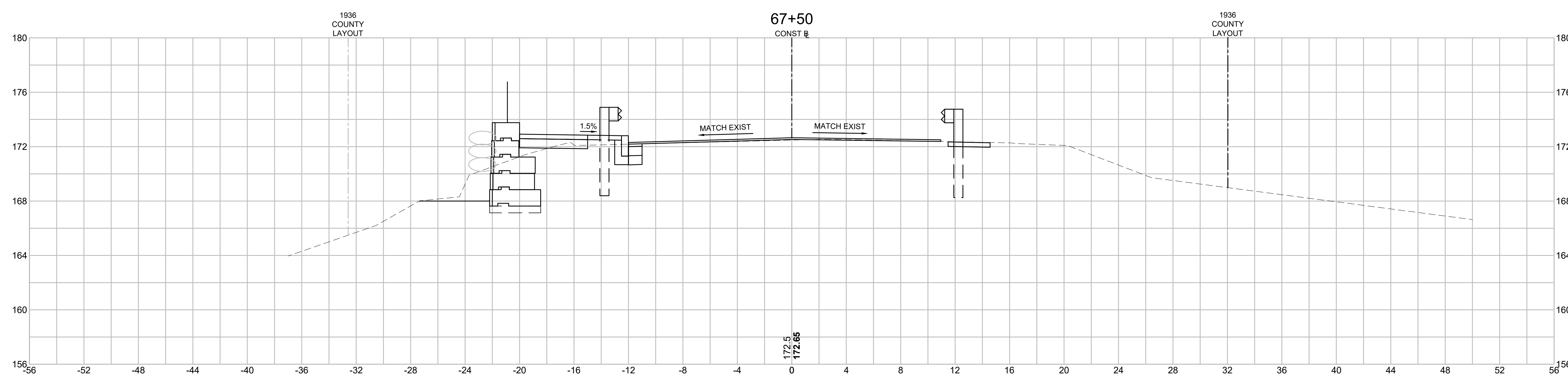
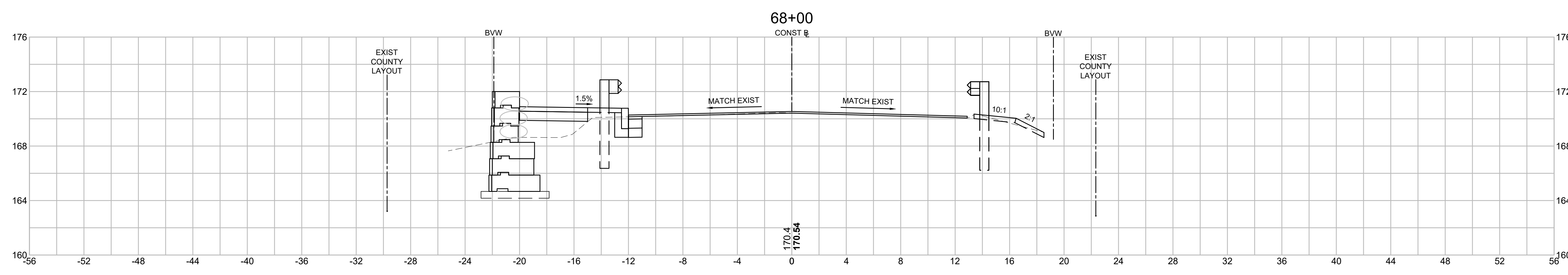
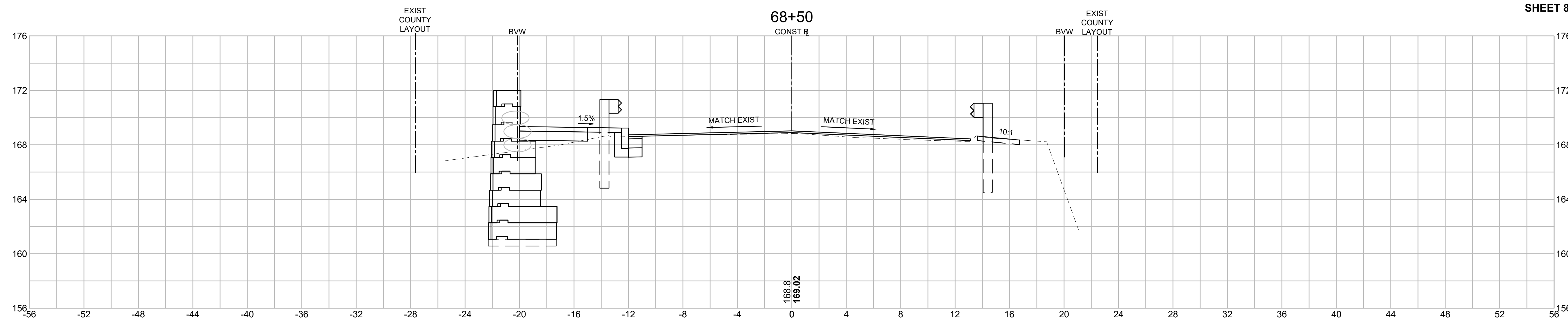


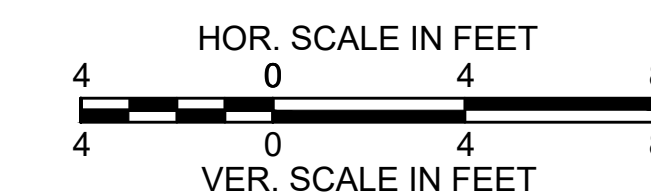
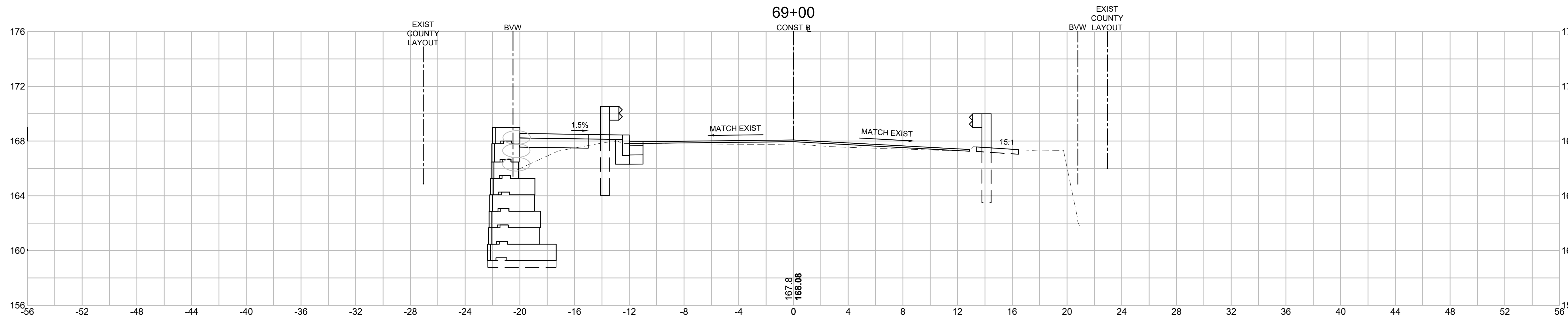
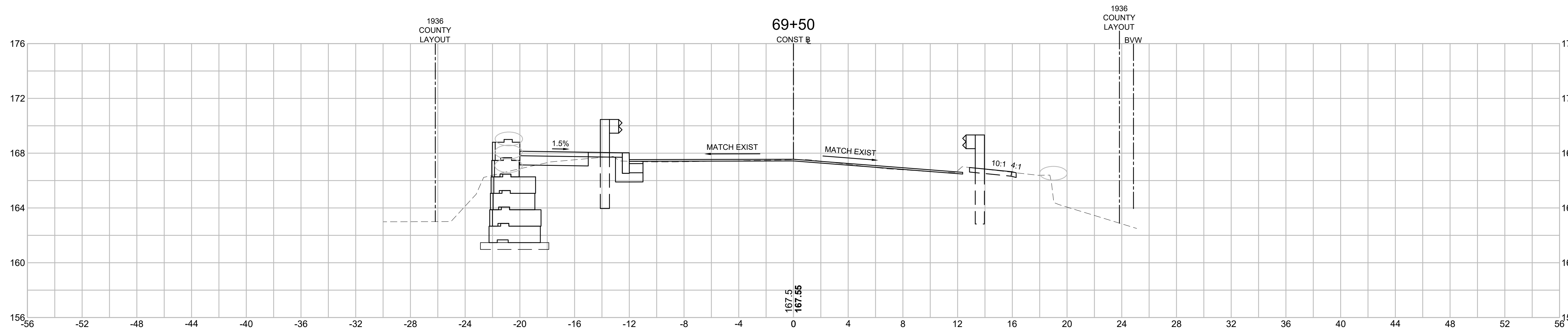
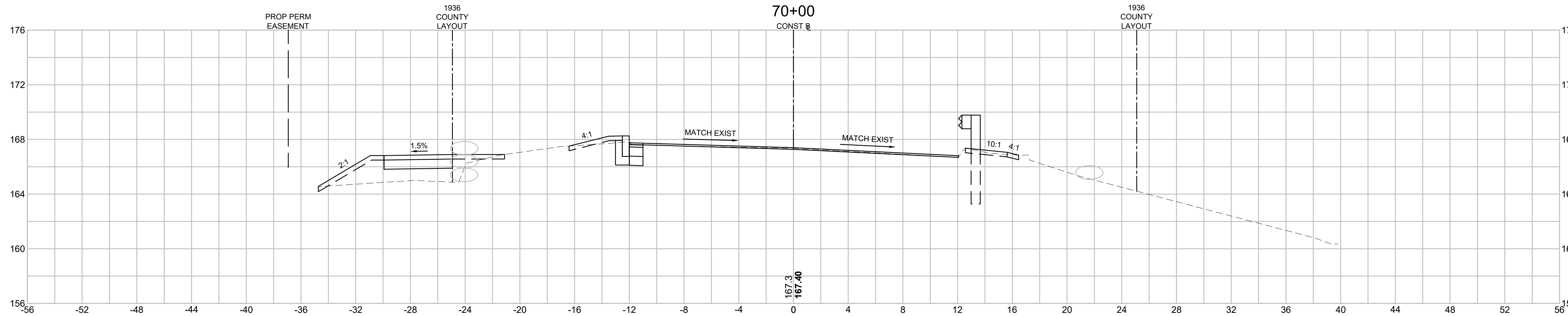


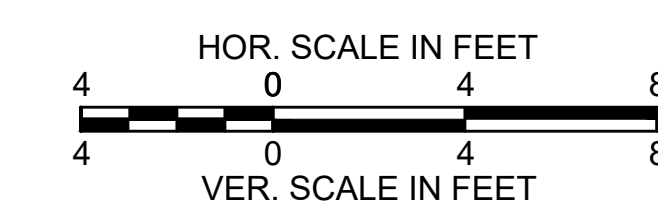
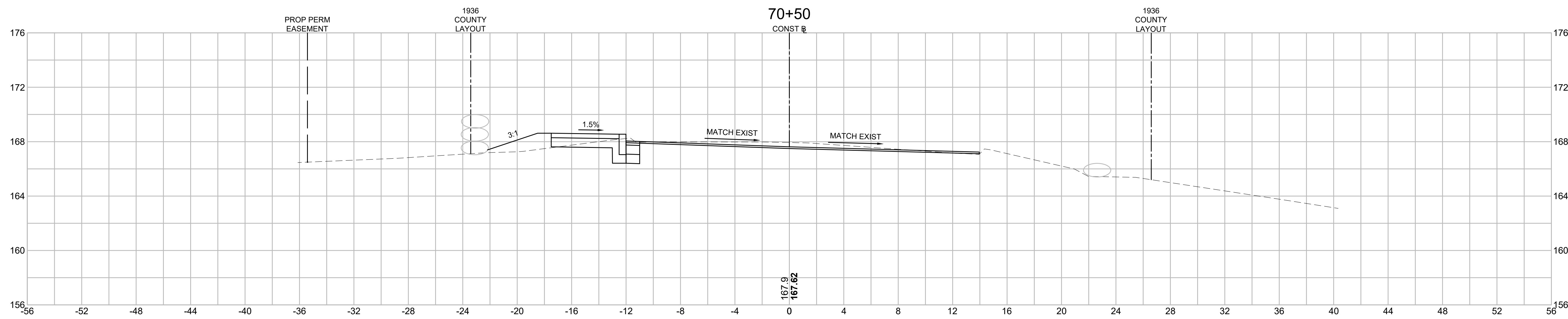
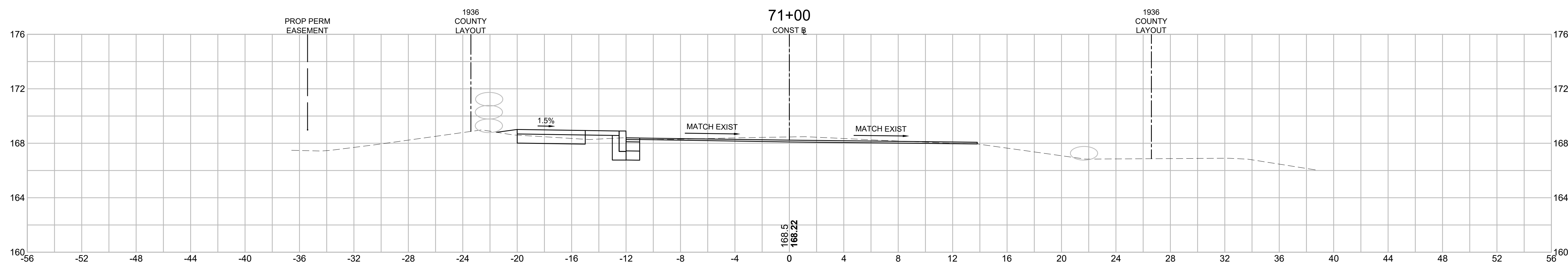
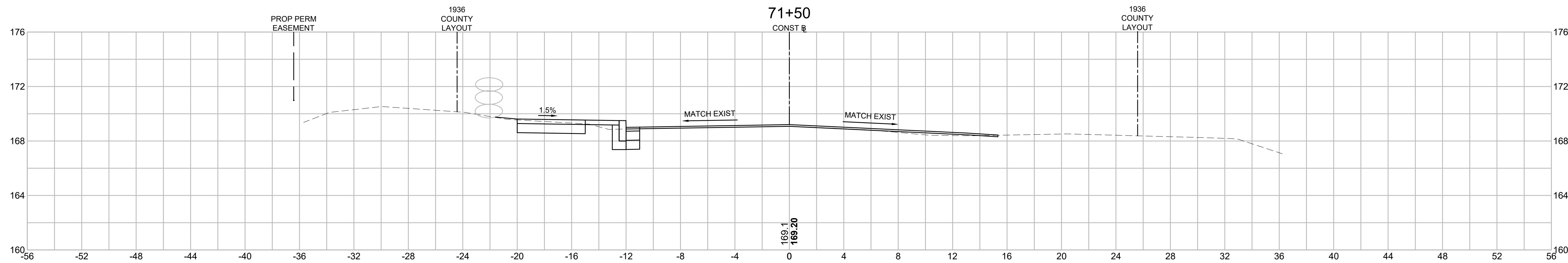


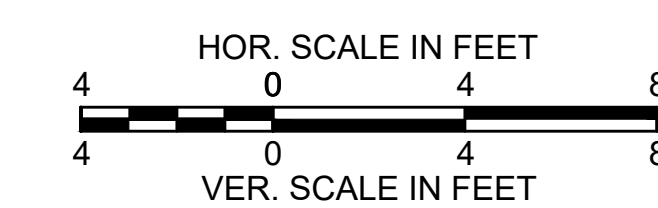
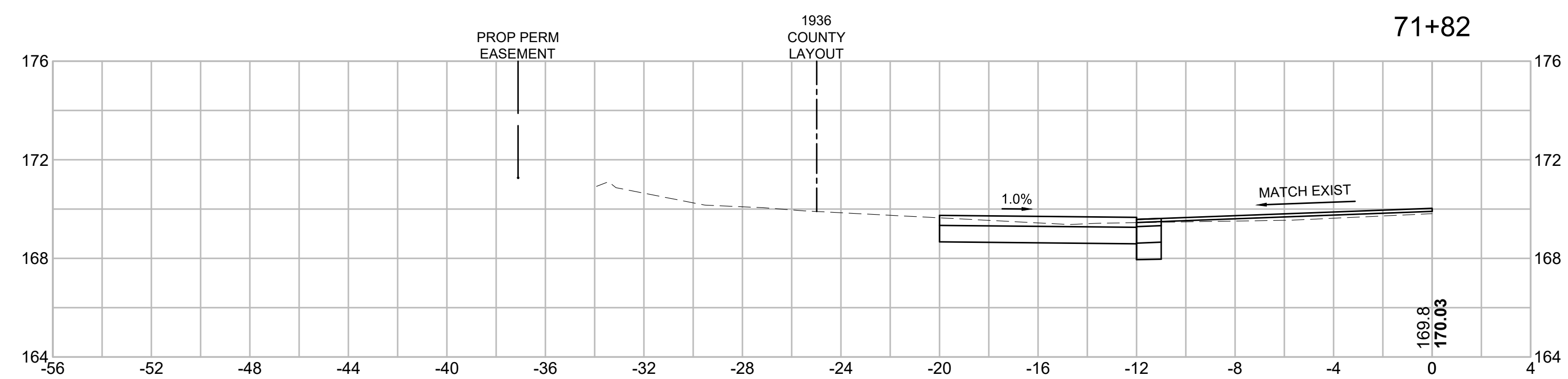
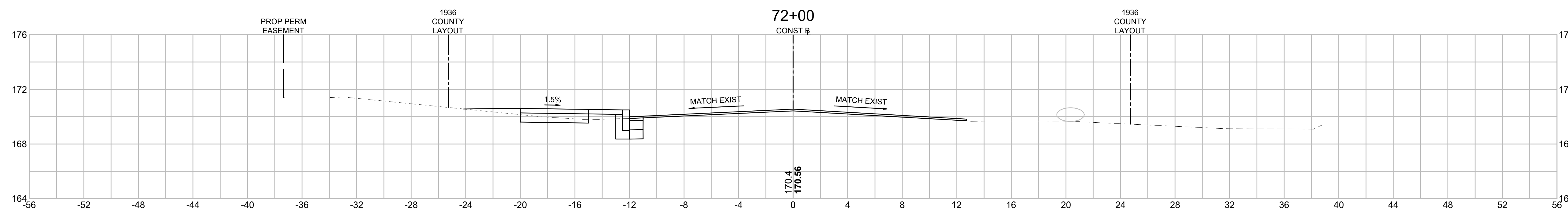
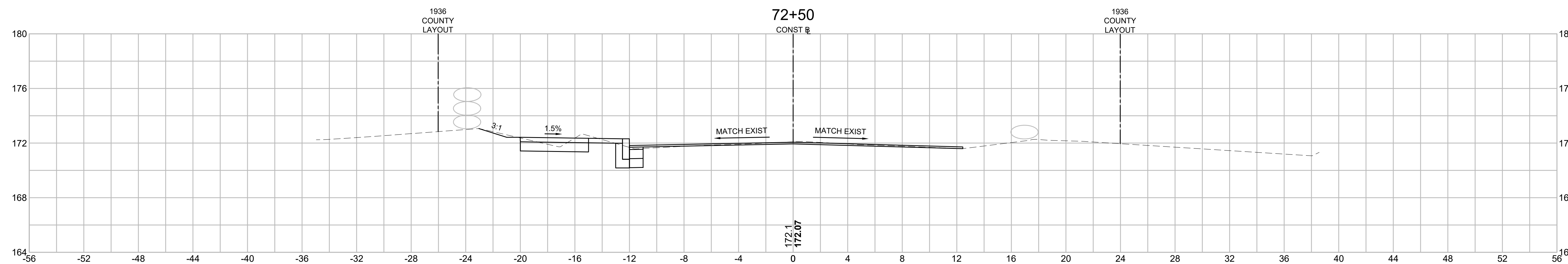


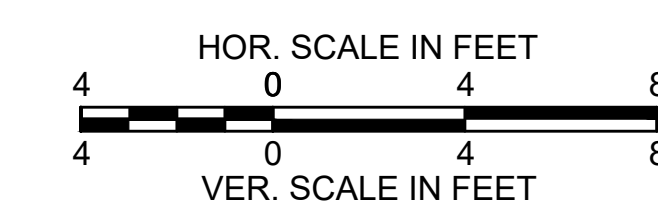
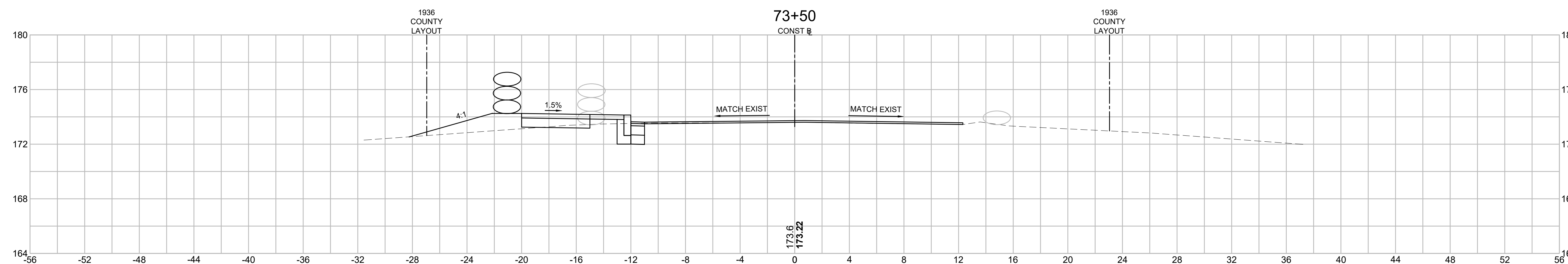
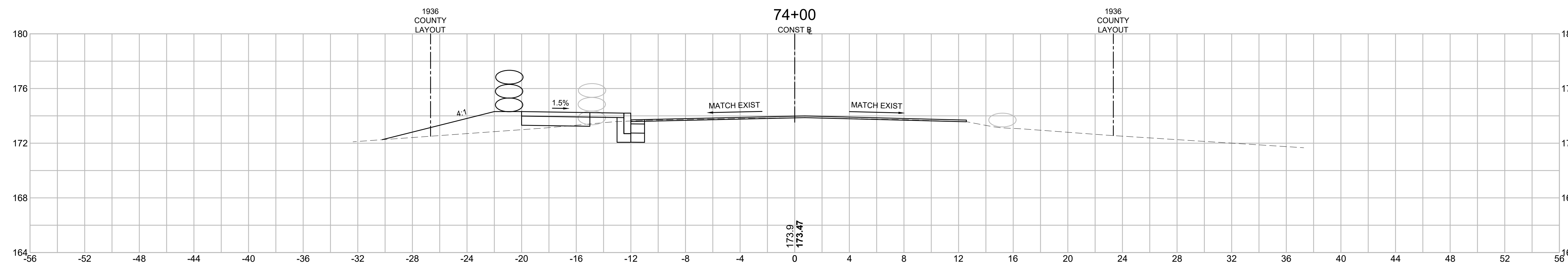
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GAY STREET
CROSS SECTIONS - 42 OF 63
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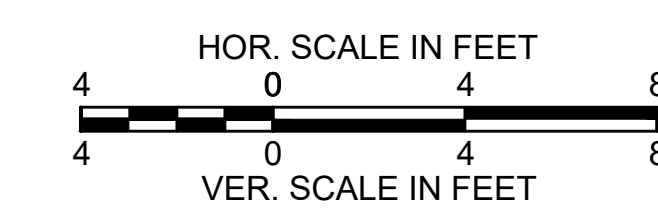
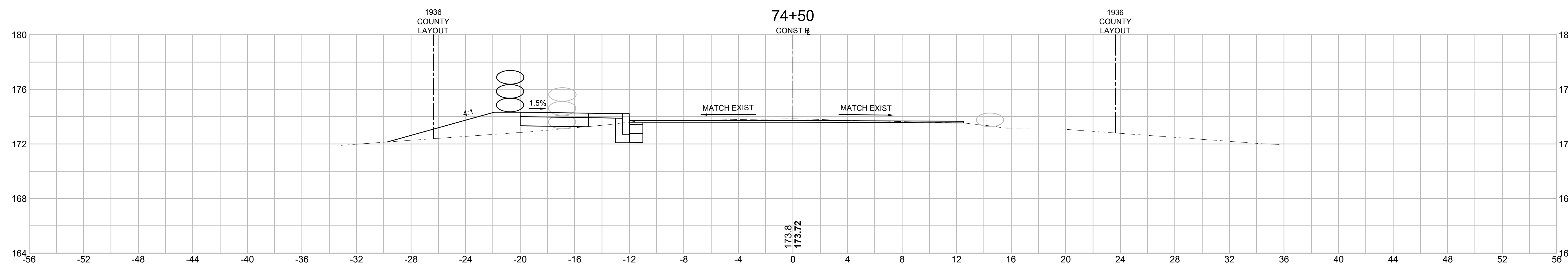
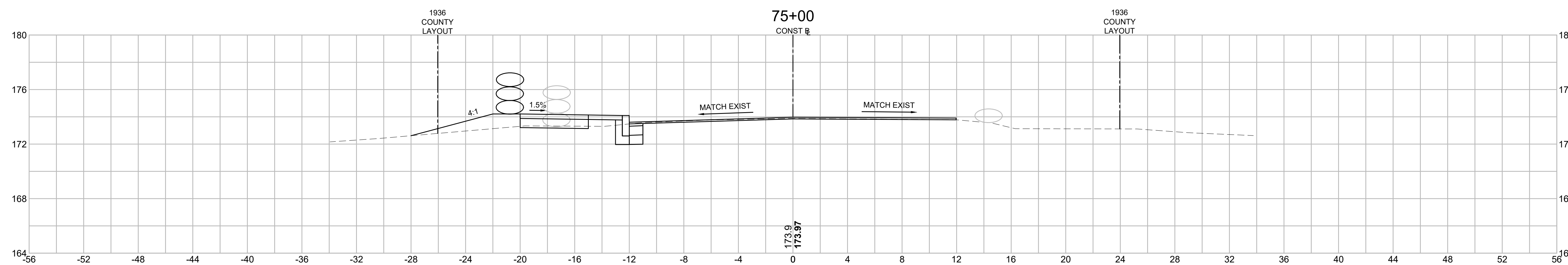
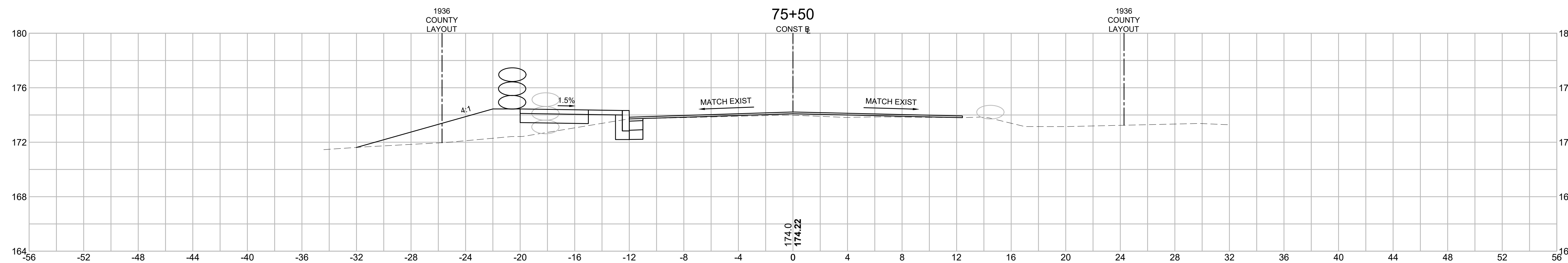


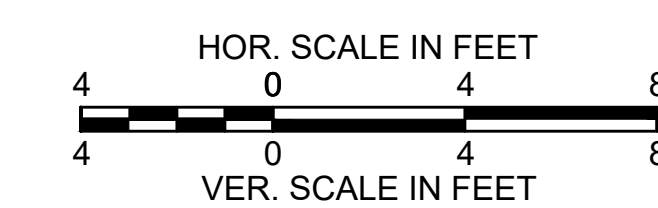
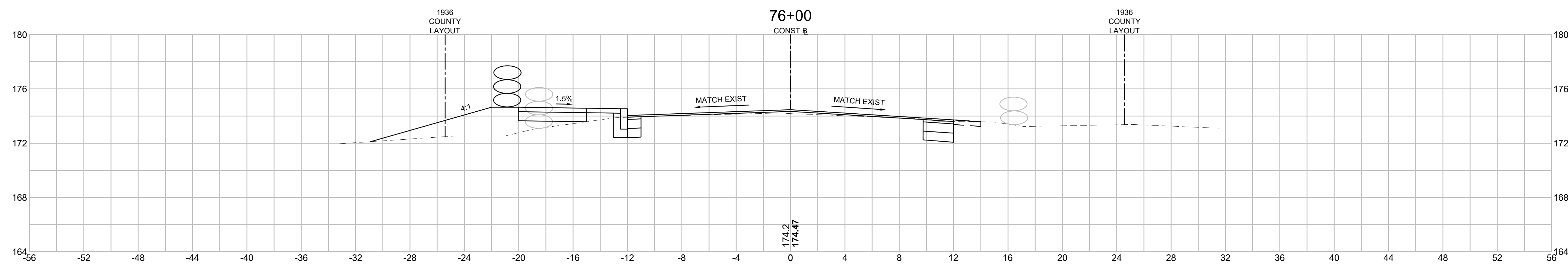
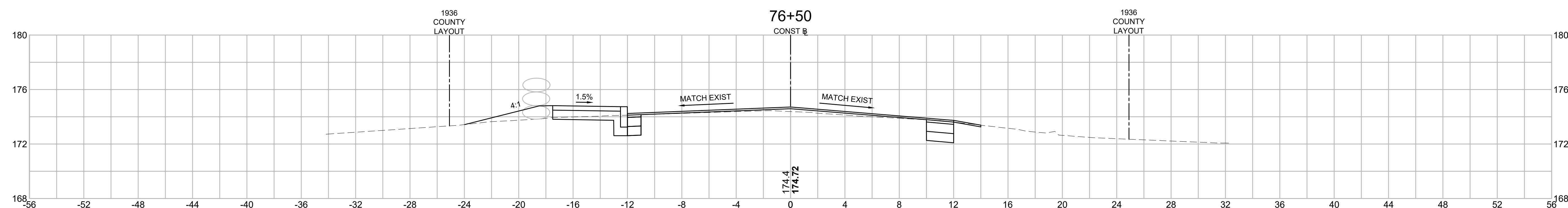
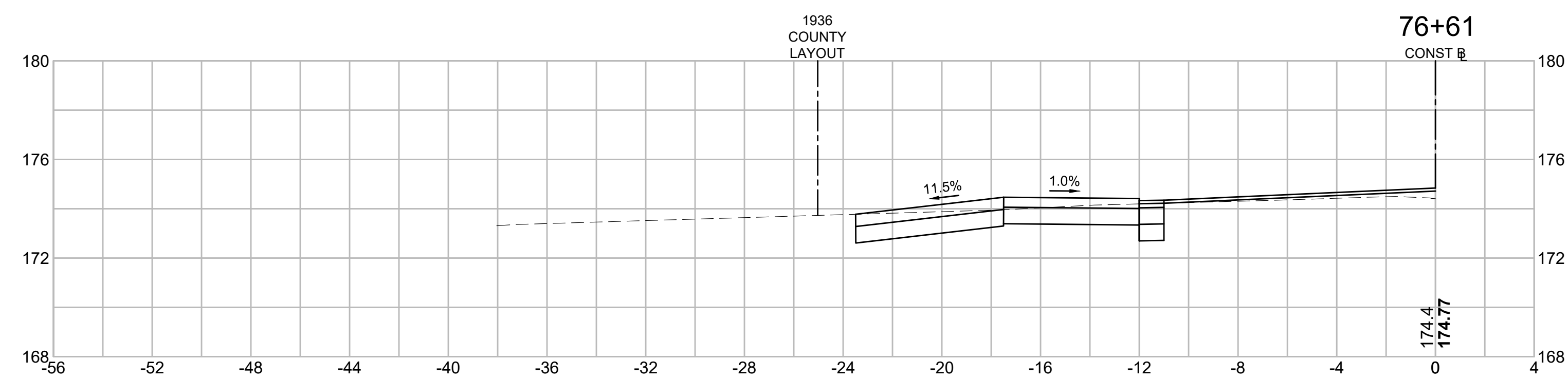


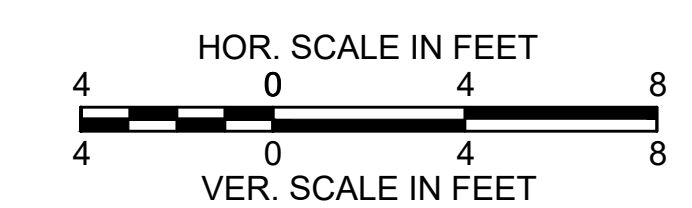
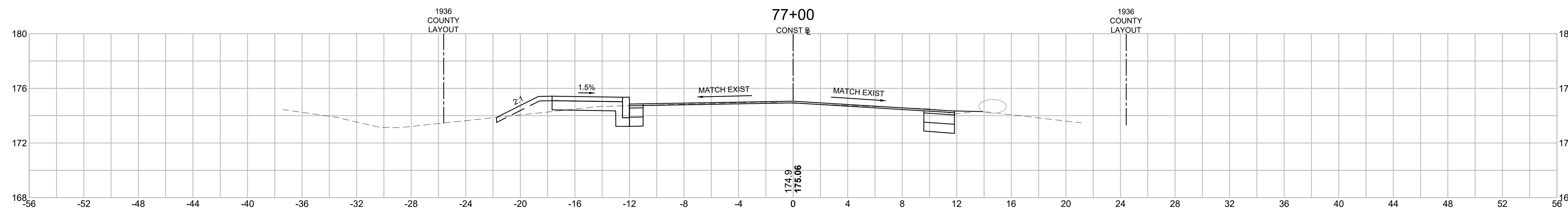
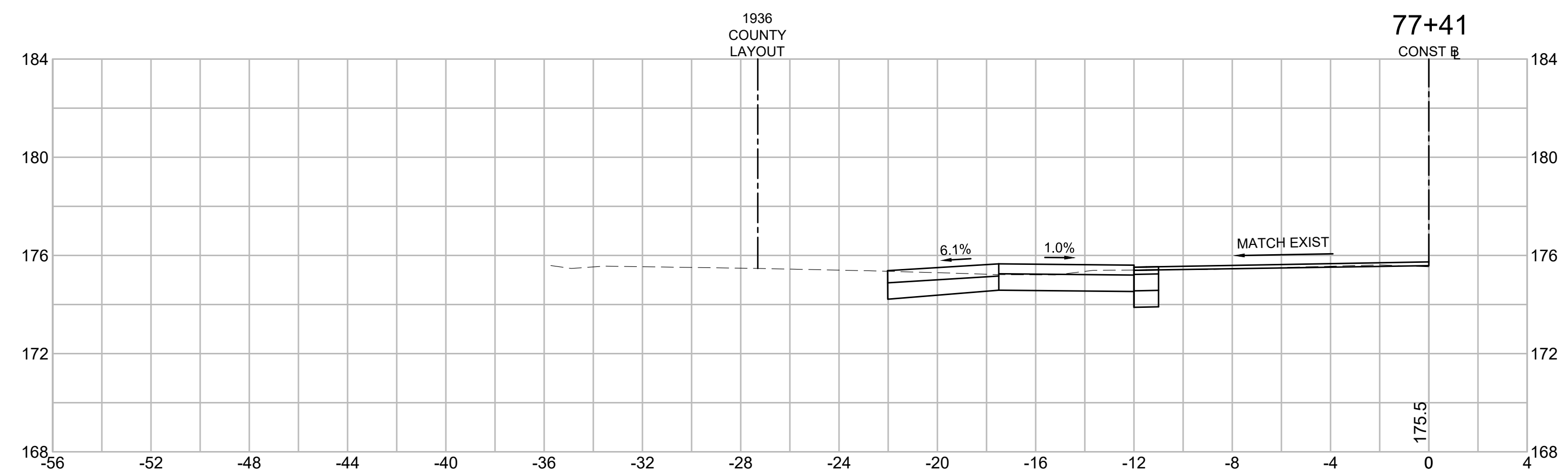
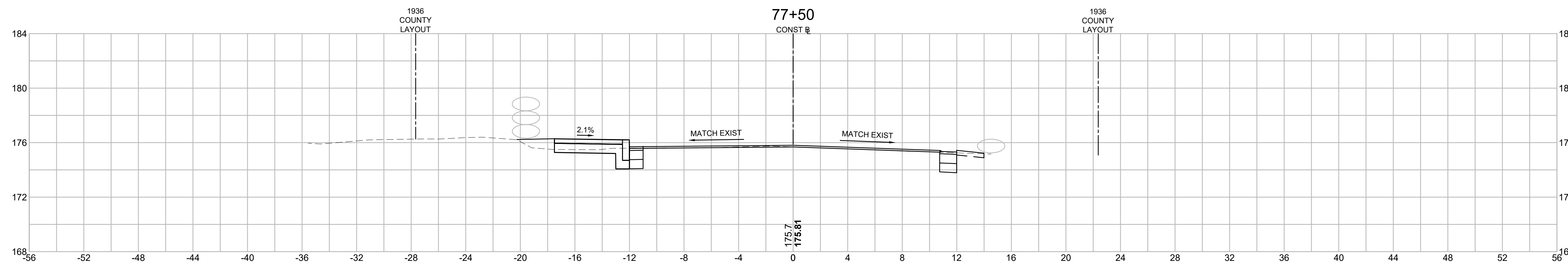


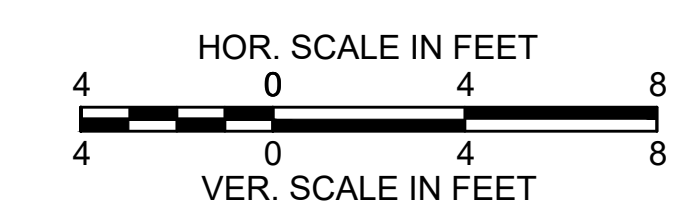
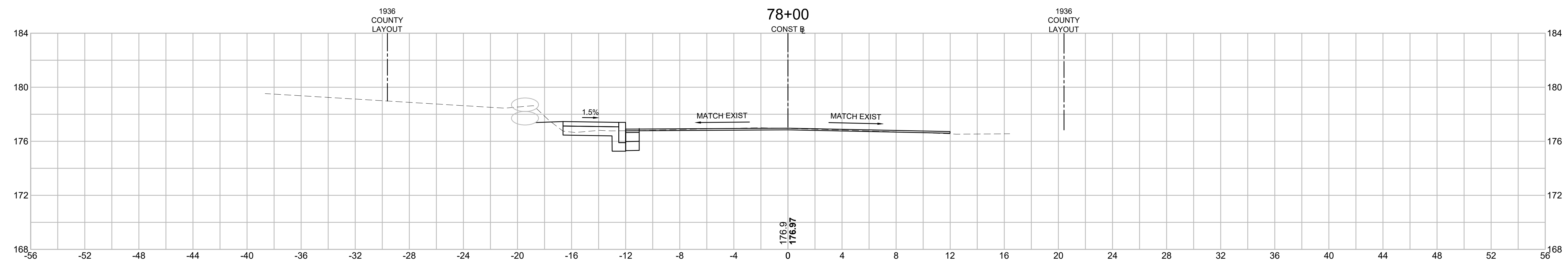
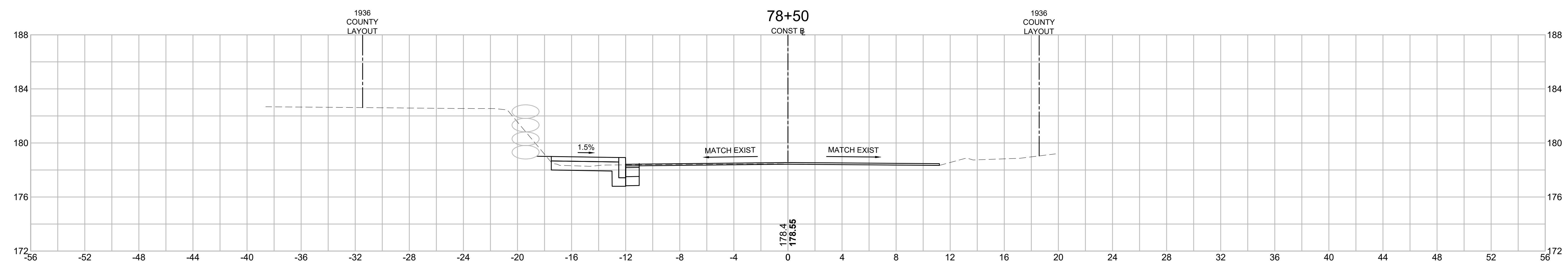
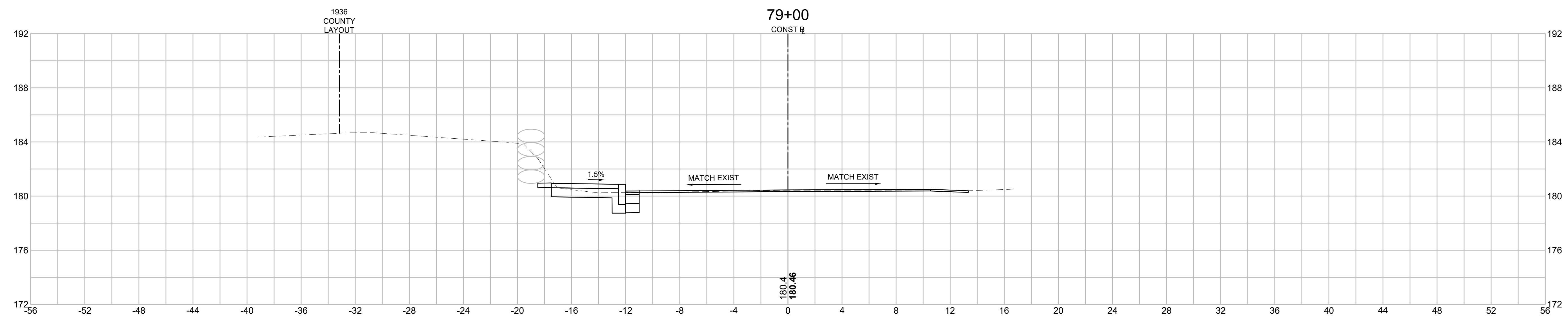


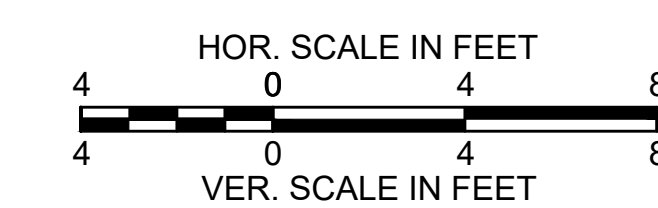
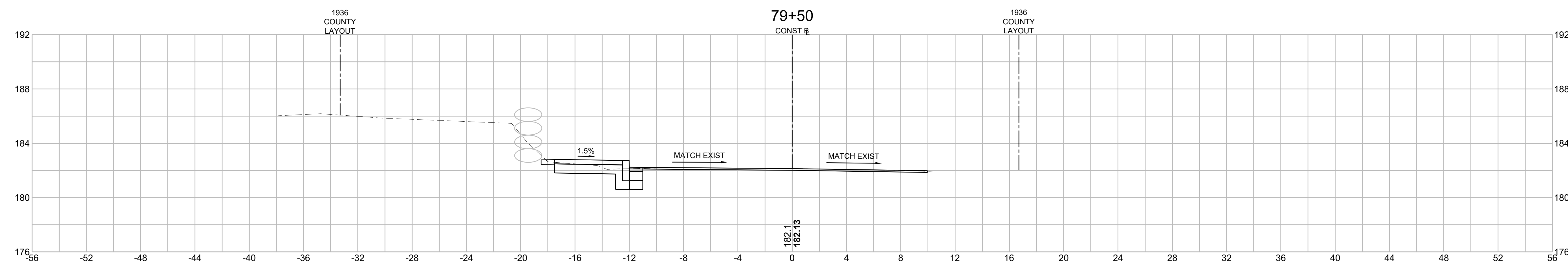
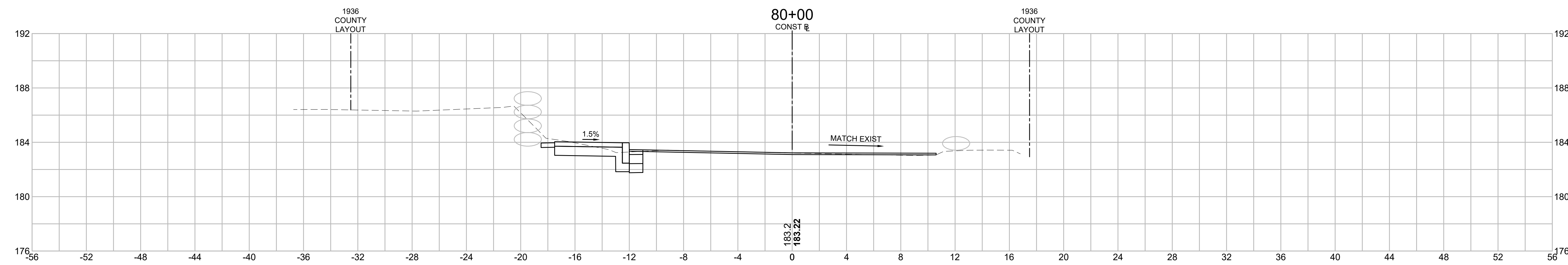
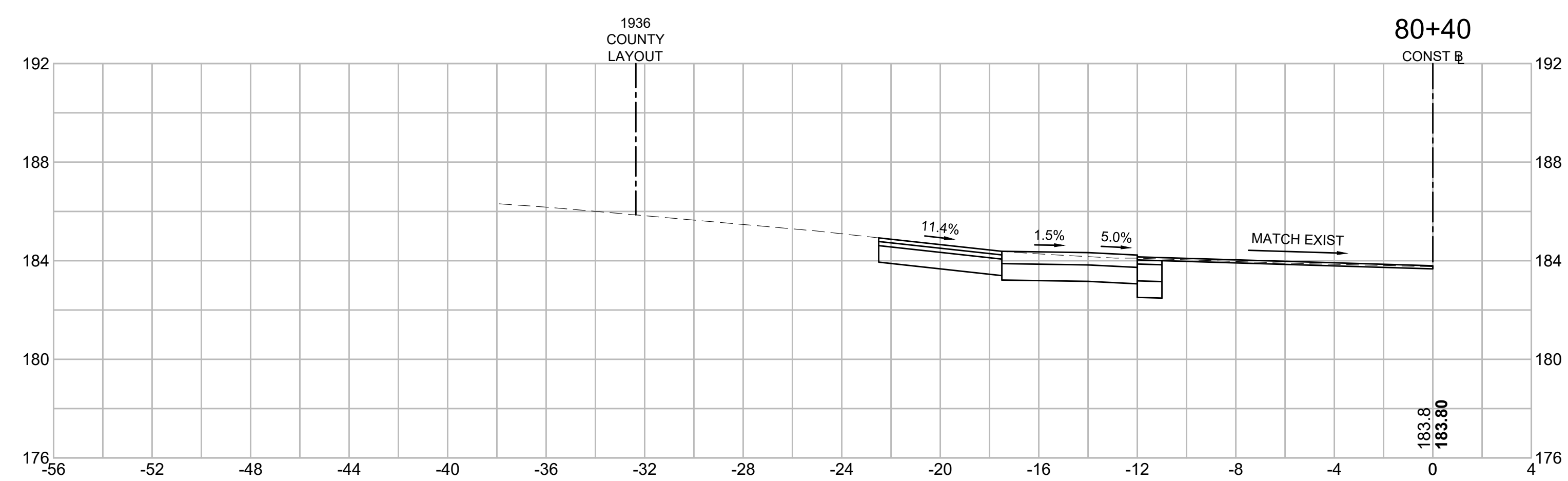


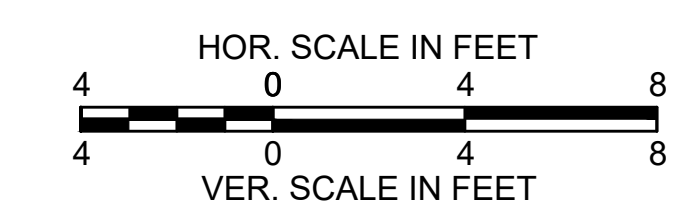
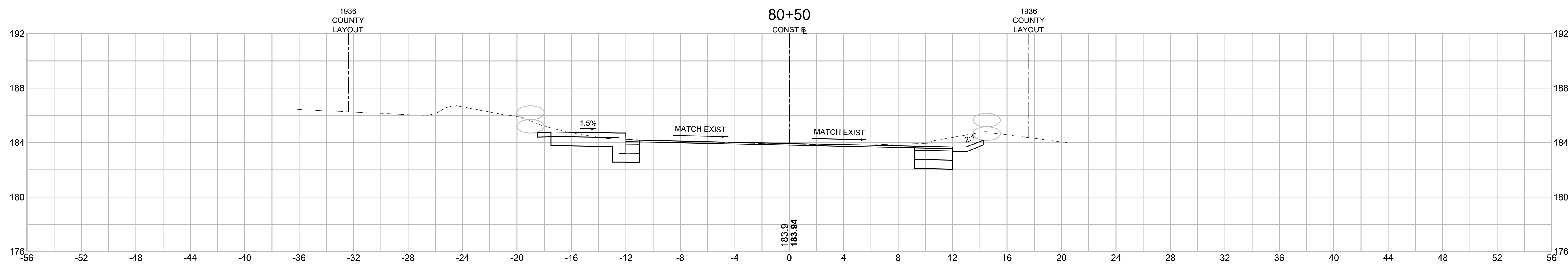
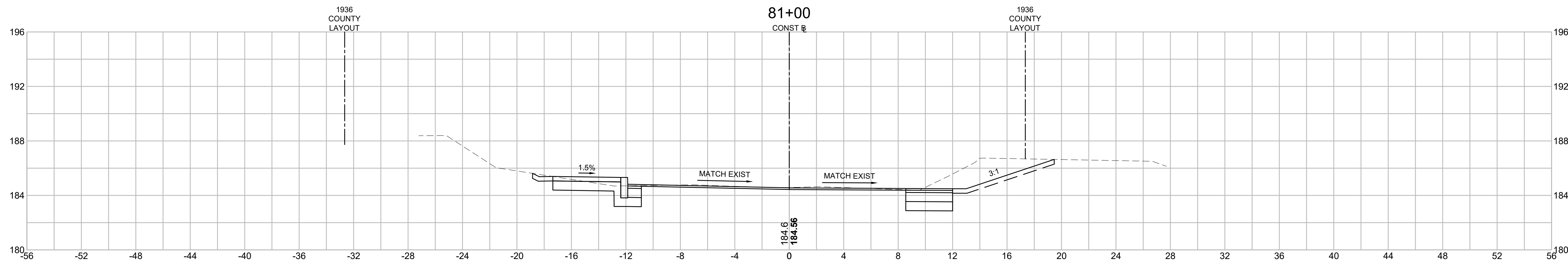
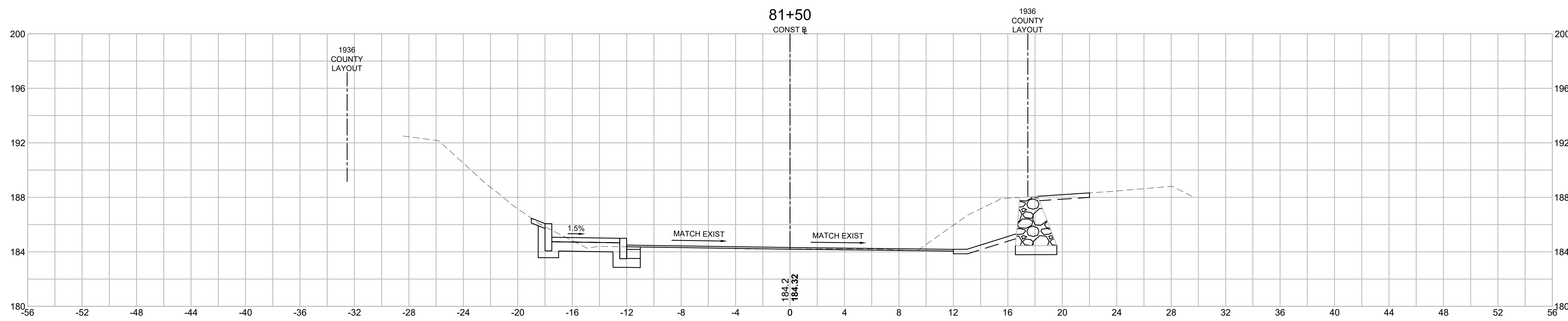


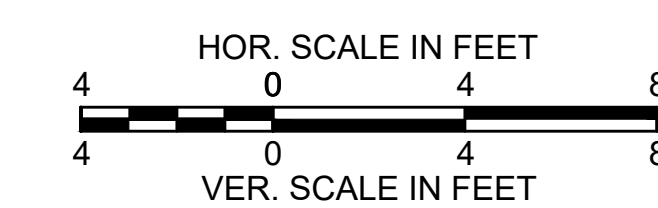
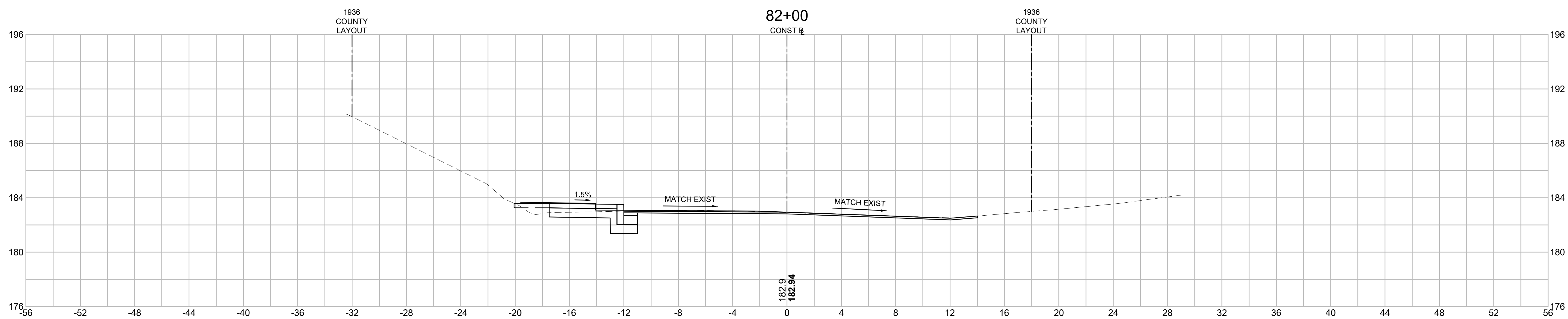
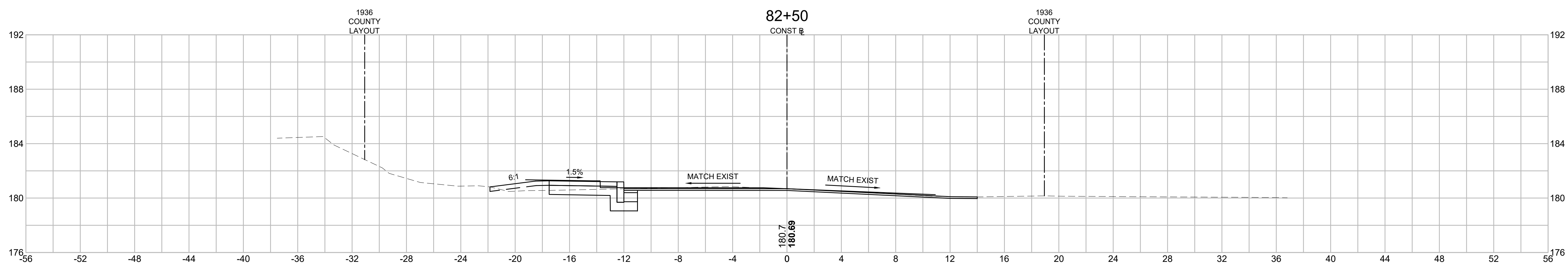
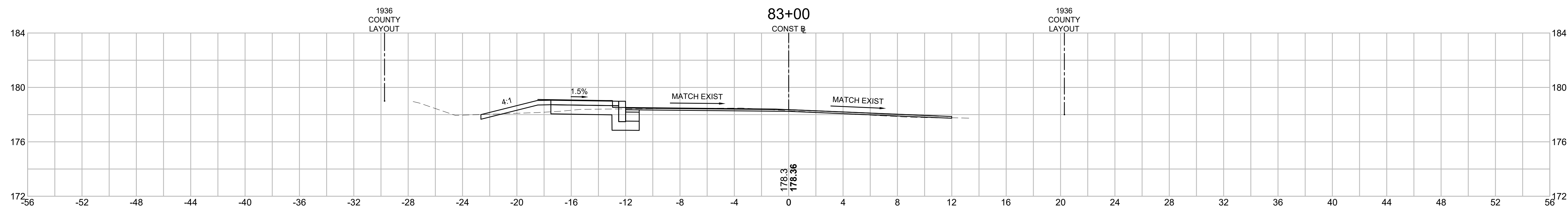


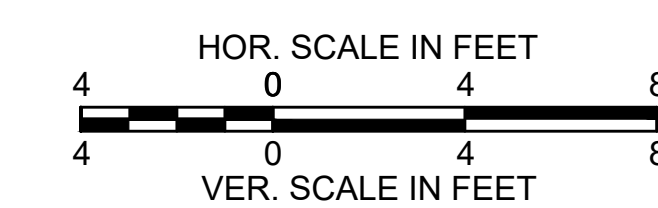
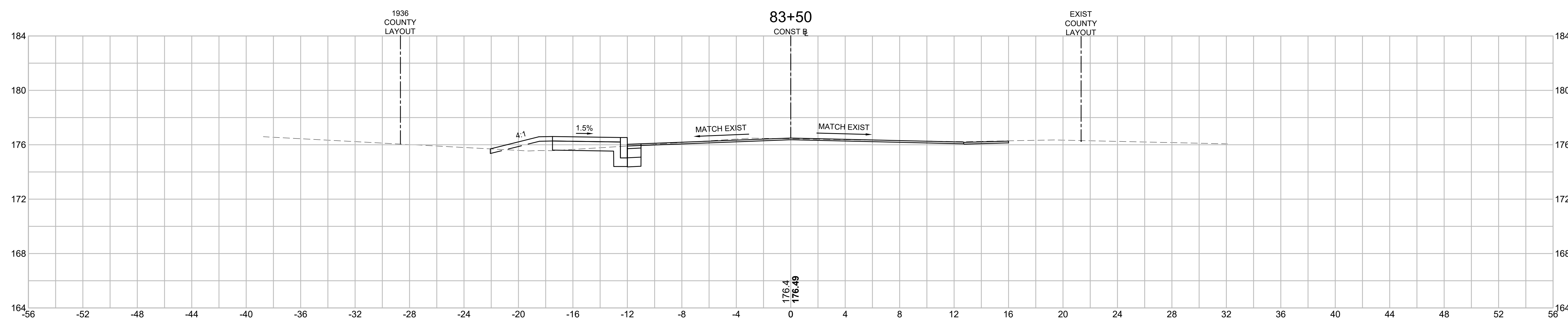
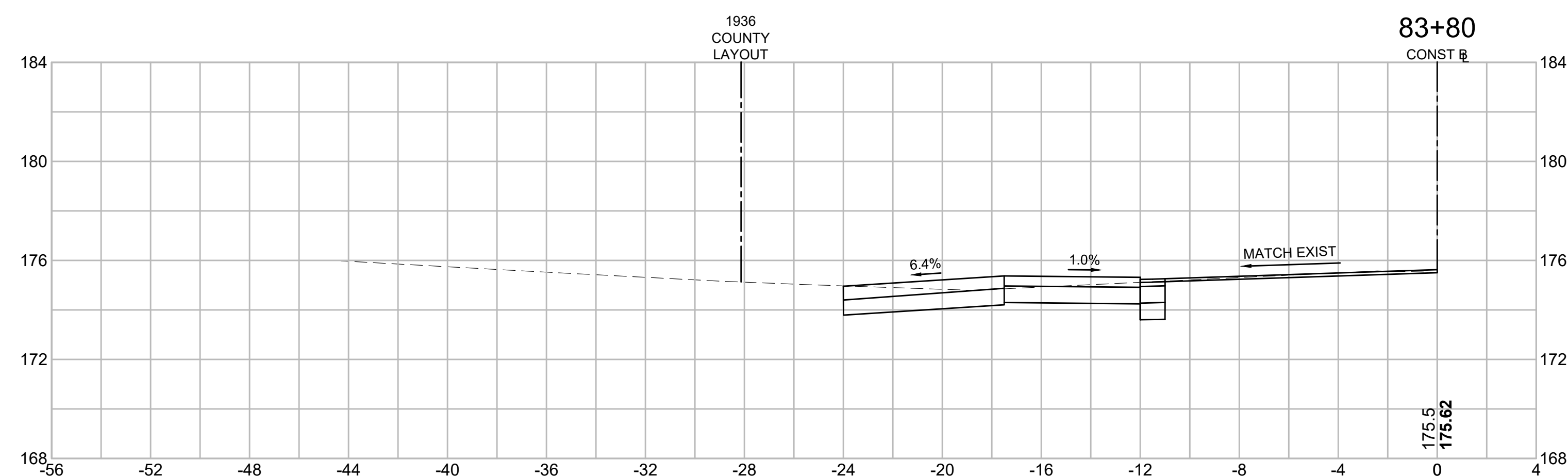
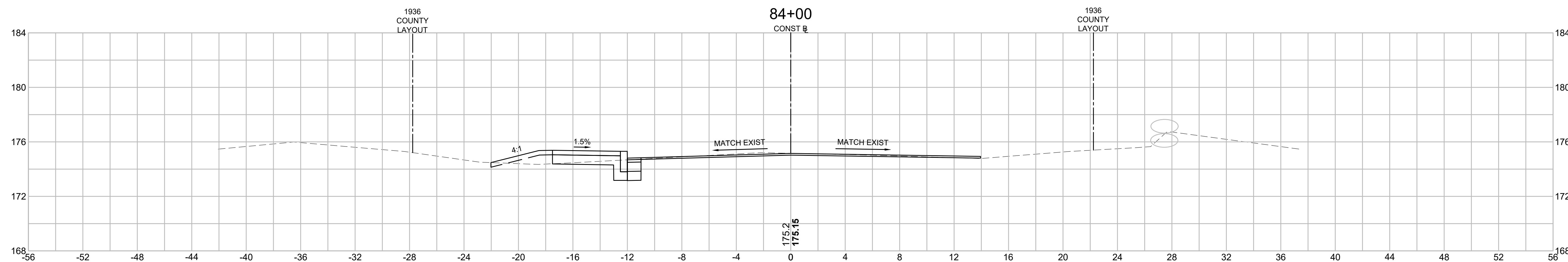


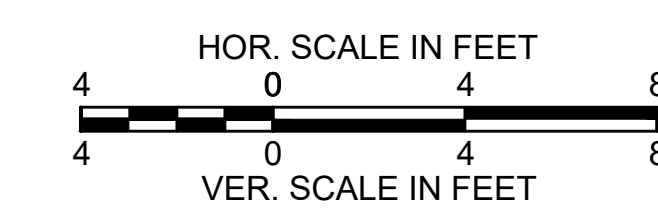
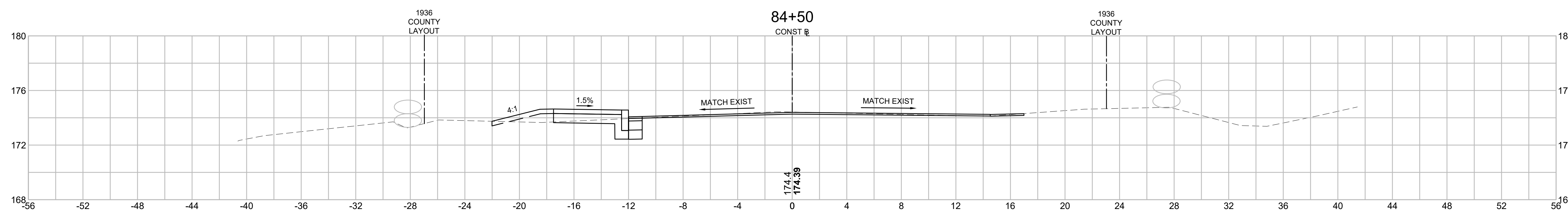
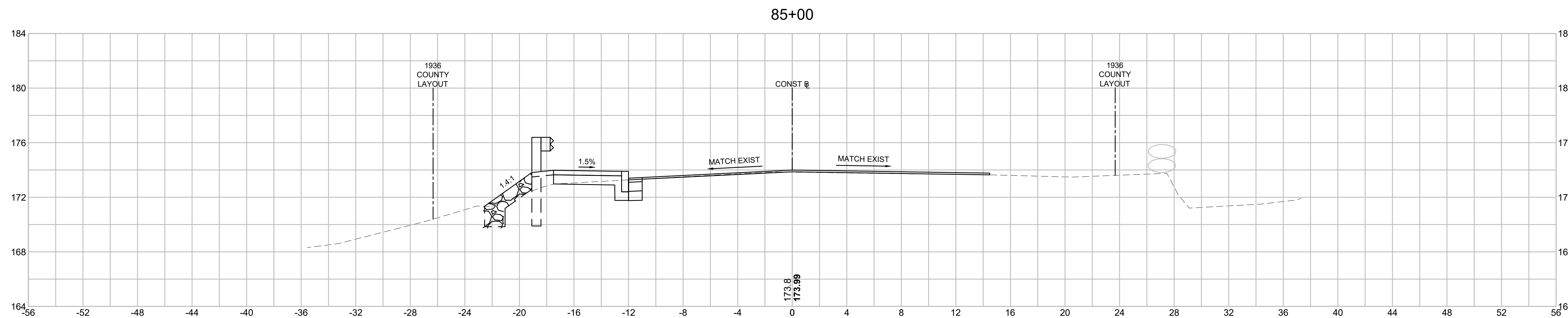
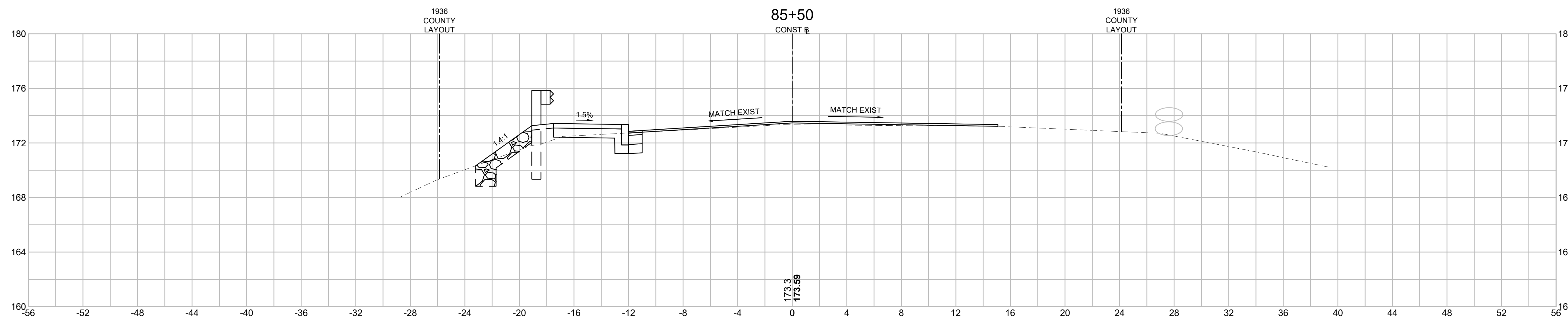


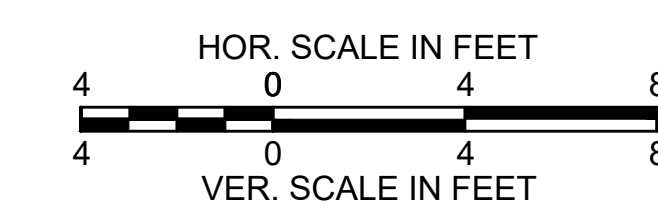
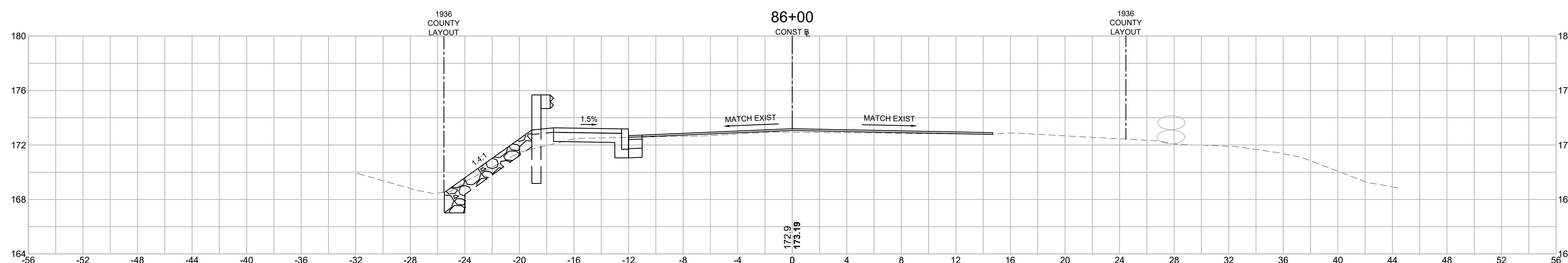
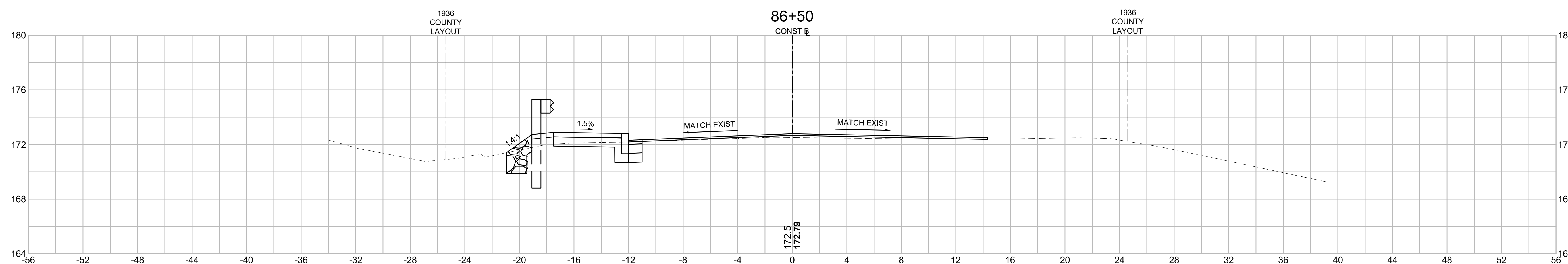
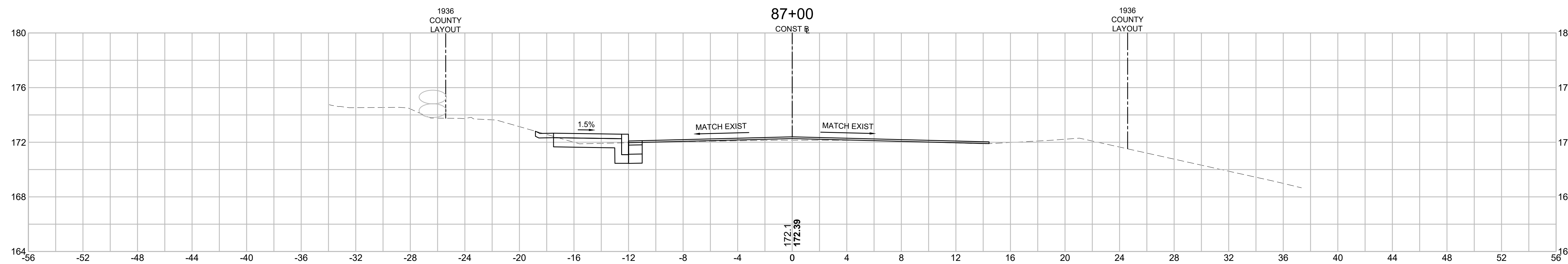




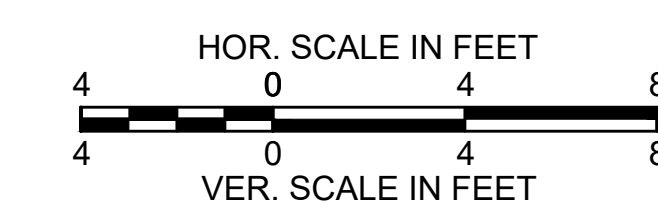
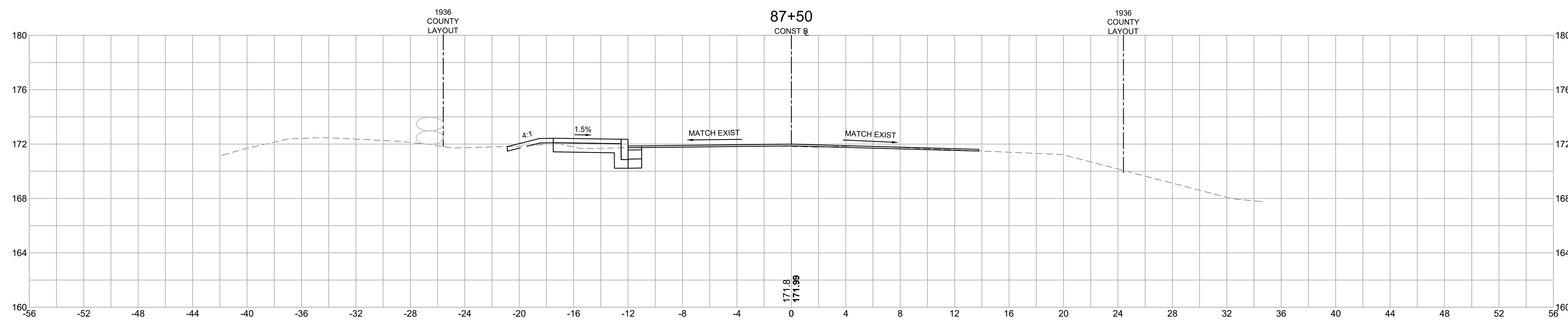
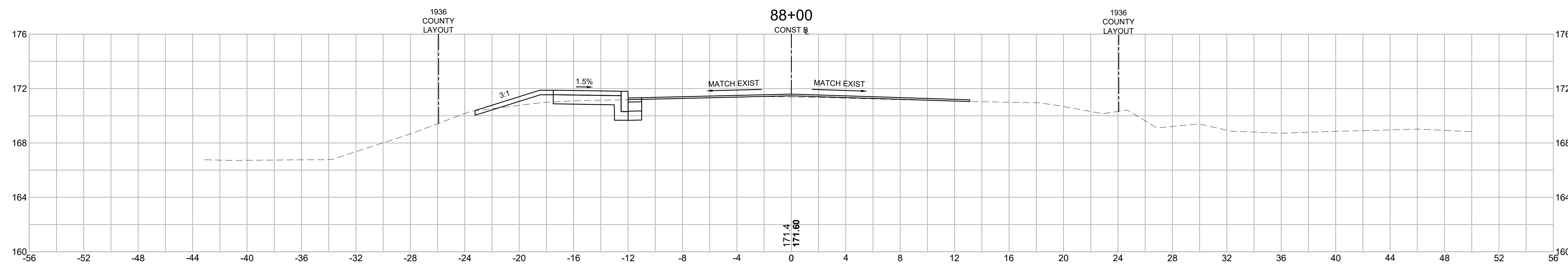
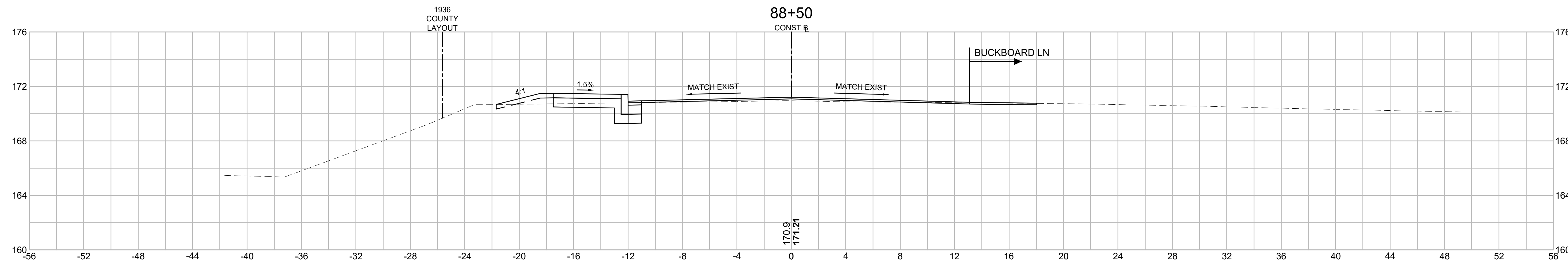




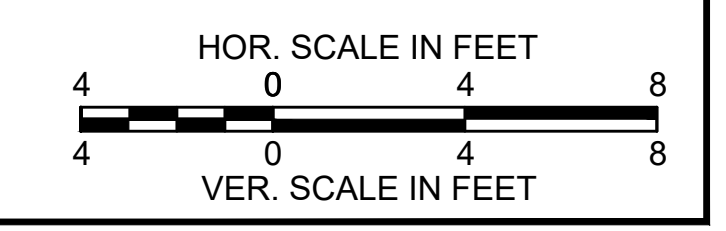
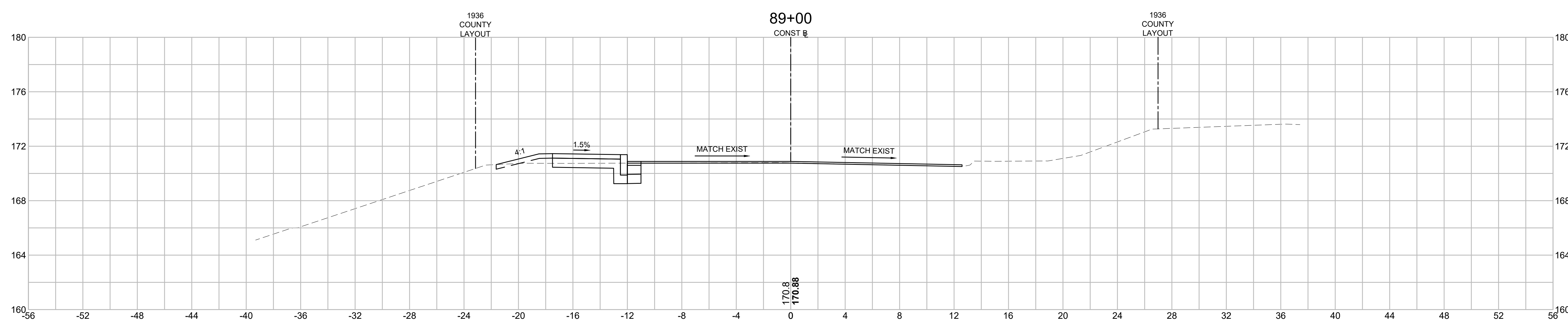
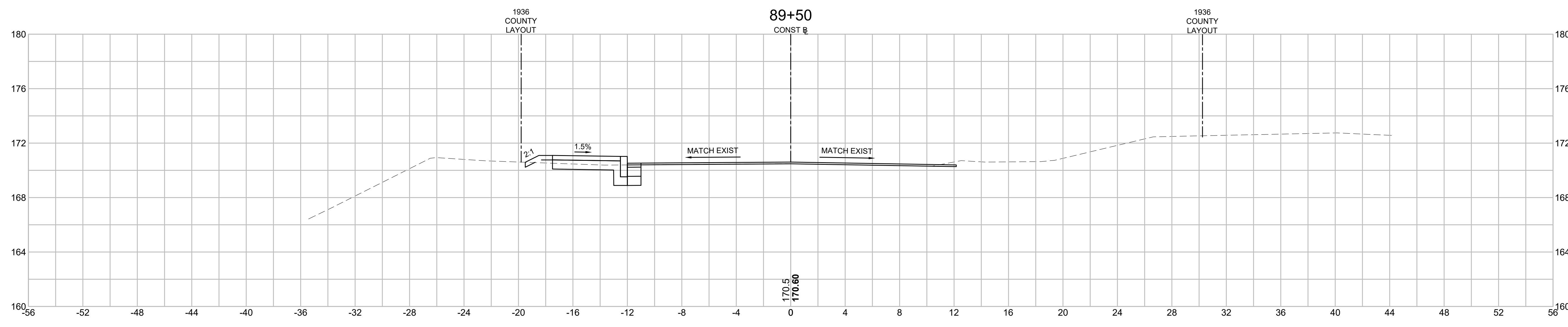
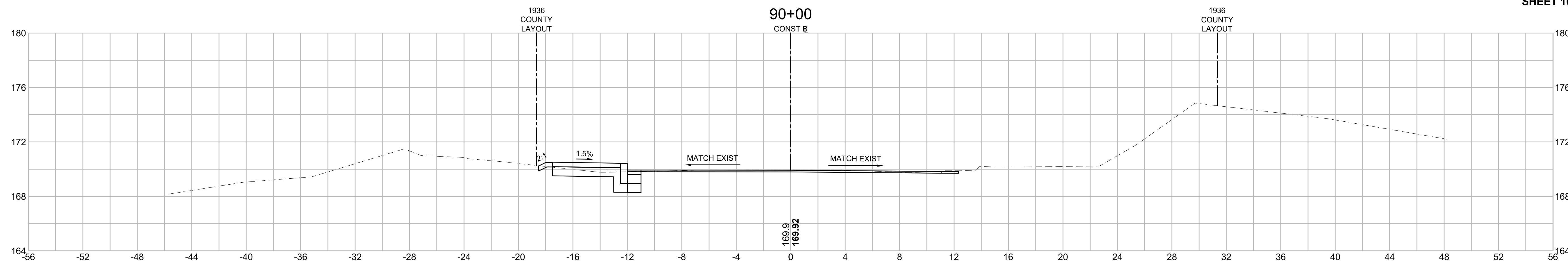




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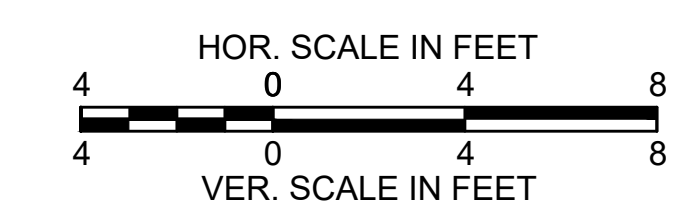
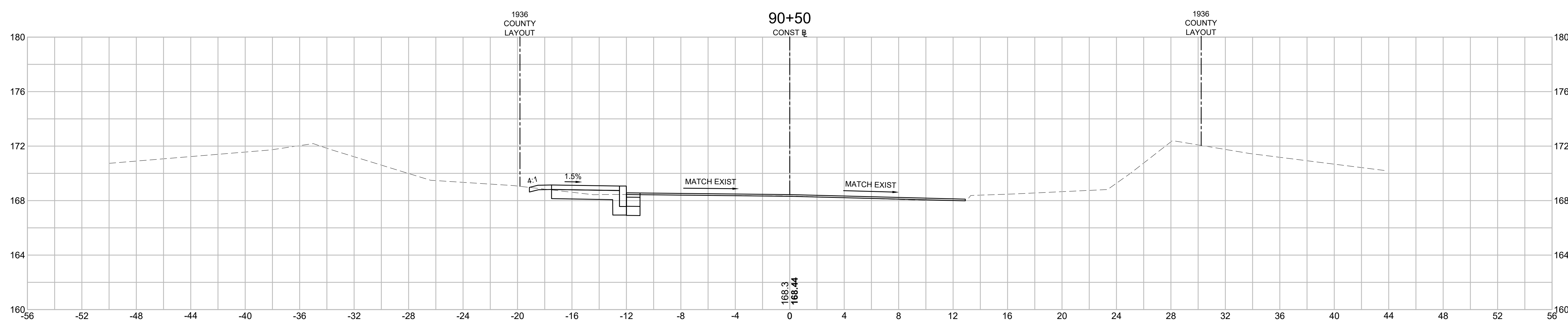
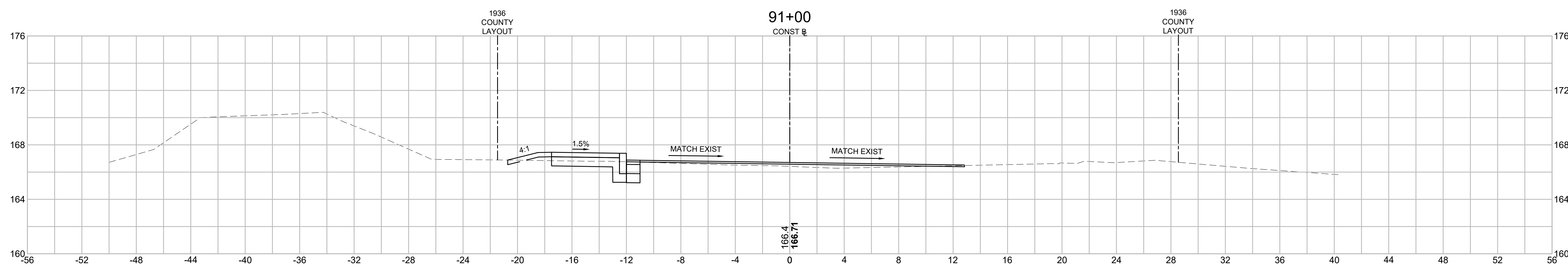
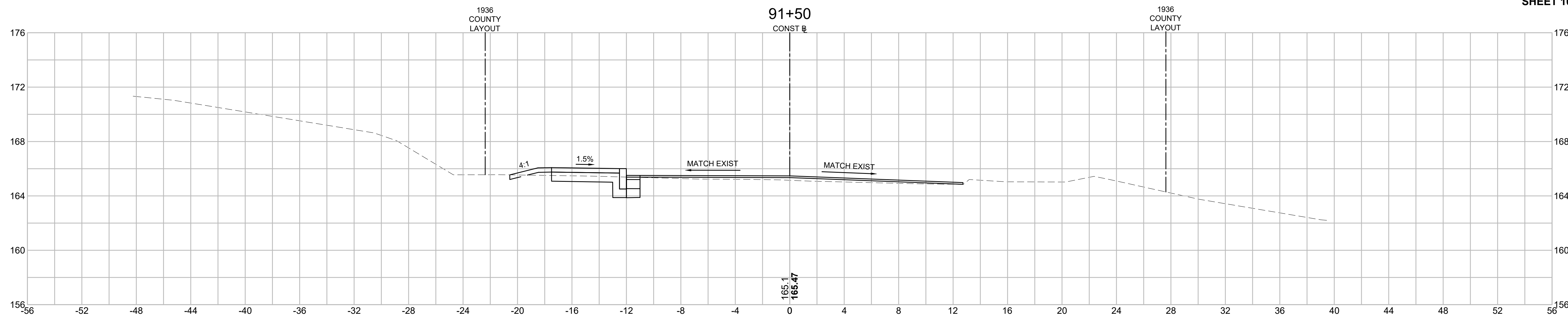


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