

TOWN OF OXFORD
DEPARTMENT OF PUBLIC WORKS

PLAN AND PROFILE OF
FRENCH RIVER REGIONAL SHARED-USED PATH-PHASE I

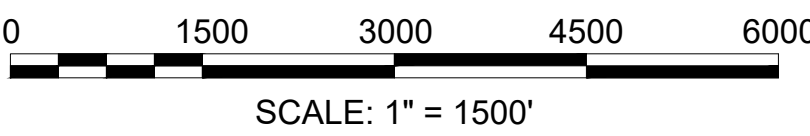
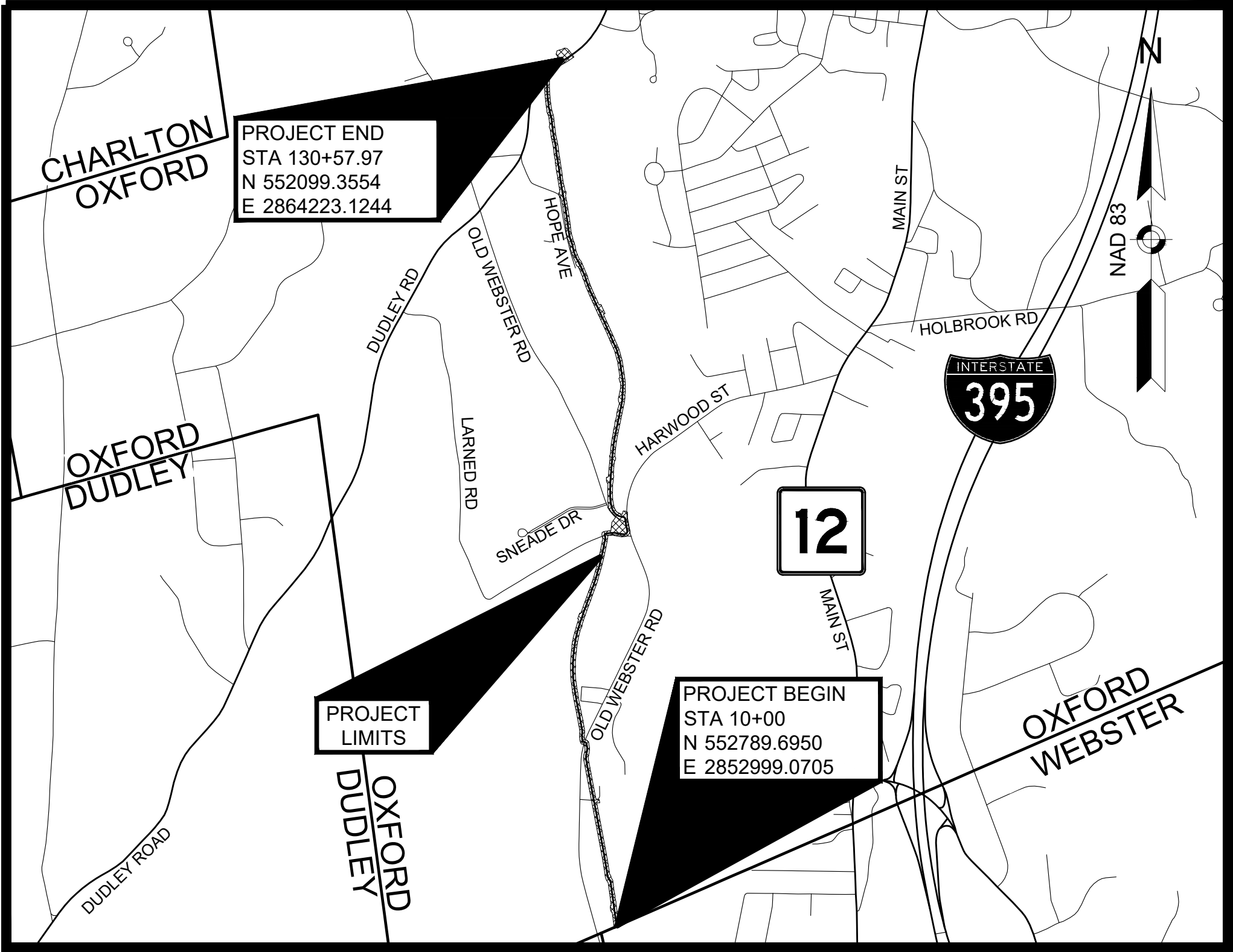
IN THE TOWN OF
OXFORD
WORCESTER COUNTY

OXFORD
FRENCH RIVER REGIONAL SHARED-USE PATH - PHASE 1
TITLE & INDEX SHEET
SHEET 1 OF 123

THESE PLANS ARE SUPPLEMENTED BY THE OCTOBER 2017 CONSTRUCTION STANDARD DETAILS,
THE 2015 OVERHEAD SIGNAL STRUCTURE AND FOUNDATION STANDARD DRAWINGS, MASSDOT
TRAFFIC MANAGEMENT PLANS AND DETAIL DRAWINGS, 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.

FINAL DESIGN SUBMITTAL

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LENGTH OF PROJECT = 12057.97 FEET = 2.28 MILES

DATE	DESCRIPTION	REV #

PETER C. ENGLE
No. 53736
REGISTERED
PROFESSIONAL ENGINEER
COMMONWEALTH OF MASSACHUSETTS

2/4/2025

TEC
The Engineering Corp

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APPROVED BY: JMD	DESIGNED BY: ZC/JD/FAS	DATE: June 25, 2024
CHECKED BY: JMD/ZC	DRAWN BY: ZC/JD/FAS	TEC PROJECT NO: T1421

EXISTING	PROPOSED	DESCRIPTION
		JERSEY BARRIER
		CATCH BASIN
		CATCH BASIN CURB INLET
		FLAG POLE
		GAS PUMP
		MAIL BOX
		POST SQUARE
		POST CIRCULAR
		WELL
		ELECTRIC HANDHOLE
		FENCE GATE POST
		GAS GATE
		BORING HOLE
		MONITORING WELL
		TEST PIT
		HYDRANT
		LIGHT POLE
		COUNTY BOUND
		GPS POINT
		CABLE MANHOLE
		DRAINAGE MANHOLE
		ELECTRIC MANHOLE
		GAS MANHOLE
		MISC MANHOLE
		SEWER MANHOLE
		TELEPHONE MANHOLE
		WATER MANHOLE
		MASSACHUSETTS HIGHWAY BOUND
		MONUMENT
		STONE BOUND
		TOWN OR CITY BOUND
		TRAVERSE OR TRIANGULATION STATION
		TROLLEY POLE OR GUY POLE
		TRANSMISSION POLE
		UTILITY POLE W/ FIREBOX
		UTILITY POLE WITH DOUBLE LIGHT
		UTILITY POLE W / 1 LIGHT
		UTILITY POLE
		BUSH
		TREE
		STUMP
		SWAMP / MARSH
		WATER GATE
		PARKING METER
		OVERHEAD CABLE/WIRE
		CURBING
		CONTOURS (ON-THE-GROUND SURVEY DATA)
		CONTOURS (PHOTOGRAMMETRIC DATA)
		UNDERGROUND DRAIN PIPE (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND ELECTRIC DUCT (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND GAS MAIN (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND SEWER MAIN (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND TELEPHONE DUCT (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND WATER MAIN (DOUBLE LINE 24 INCH AND OVER)
		BALANCED STONE WALL
		GUARD RAIL - STEEL POSTS
		GUARD RAIL - WOOD POSTS/WOODEN SAFETY RAIL
		GUARD RAIL - DOUBLE FACE - STEEL POSTS
		GUARD RAIL - DOUBLE FACE - WOOD POSTS
		CHAIN LINK OR METAL FENCE
		WOOD FENCE/WOODEN PRIVACY FENCE
		SEDIMENT CONTROL BARRIER
		COIR LOG SEDIMENT BARRIER
		TREE LINE
		SAWCUT LINE
		TOP OR BOTTOM OF SLOPE
		LIMIT OF EDGE OF PAVEMENT OR COLD PLANE AND OVERLAY
		BANK OF RIVER OR STREAM
		BORDER OF WETLAND
		100 FT WETLAND BUFFER
		200 FT RIVERFRONT BUFFER
		STATE HIGHWAY LAYOUT
		TOWN OR CITY LAYOUT
		COUNTY LAYOUT
		RAILROAD SIDELINE
		TOWN OR CITY BOUNDARY LINE
		PROPERTY LINE OR APPROXIMATE PROPERTY LINE
		EASEMENT

EXISTING	PROPOSED	DESCRIPTION
		CONTROLLER PHASE ACTUATED
		TRAFFIC SIGNAL HEAD (SIZE AS NOTED)
		WIRE LOOP DETECTOR (6' x 6' TYP UNLESS OTHERWISE SPECIFIED)
		VIDEO DETECTION CAMERA
		MICROWAVE DETECTOR
		PEDESTRIAN PUSH BUTTON, SIGN (DIRECTIONAL ARROW AS SHOWN) AND SADDLE
		EMERGENCY PREEMPTION CONFIRMATION STROBE LIGHT
		VEHICULAR SIGNAL HEAD
		VEHICULAR SIGNAL HEAD, OPTICALLY PROGRAMMED
		FLASHING BEACON
		PEDESTRIAN SIGNAL HEAD, (TYPE AS NOTED OR AS SPECIFIED)
		RAILROAD SIGNAL
		SIGNAL POST AND BASE (ALPHA-NUMERIC DESIGNATION NOTED)
		MAST ARM, SHAFT AND BASE (ARM LENGTH AS NOTED)
		HIGH MAST POLE OR TOWER
		SIGN AND POST
		SIGN AND POST (2 POSTS)
		MAST ARM WITH LUMINAIRE
		OPTICAL PRE-EMPTION DETECTOR
		CONTROL CABINET, GROUND MOUNTED
		CONTROL CABINET, POLE MOUNTED
		FLASHING BEACON CONTROL AND METER PEDESTAL
		LOAD CENTER ASSEMBLY
		PULL BOX 12"x12" (OR AS NOTED)
		ELECTRIC HANDHOLE 12"x24" (OR AS NOTED)
		TRAFFIC SIGNAL CONDUIT
		RAPID RECTANGULAR FLASHING BEACON (RRFB)

EXISTING	PROPOSED	DESCRIPTION
	 ONLY	PAVEMENT ARROW - WHITE LEGEND "ONLY" - WHITE
	SL	STOP LINE
	CW	CROSSWALK
	SWL	SOLID WHITE LINE
	SYL	SOLID YELLOW LINE
	BWL	BROKEN WHITE LINE
	BYL	BROKEN YELLOW LINE
	DWL	DOTTED WHITE LINE
	DYL	DOTTED YELLOW LINE
	DWLEx	DOTTED WHITE LINE EXTENSION
	DYLEx	DOTTED YELLOW LINE EXTENSION
	DBWL	DOUBLE WHITE LINE
	DBYL	DOUBLE YELLOW LINE

GENERAL	
AADT	ANNUAL AVERAGE DAILY TRAFFIC
ABAN	ABANDON
ADA	AMERICANS WITH DISABILITIES ACT
ADJ	ADJUST
APPROX.	APPROXIMATE
A.C.	ASPHALT CONCRETE
ACCM PIPE	ASPHALT COATED CORRUGATED METAL PIPE
BIT.	BITUMINOUS
BC	BOTTOM OF CURB
BD.	BOUND
BL	BASELINE
BLDG	BUILDING
BM	BENCHMARK
BO	BY OTHERS
BOS	BOTTOM OF SLOPE
BR.	BRIDGE
CB	CATCH BASIN
CBCI	CATCH BASIN WITH CURB INLET
CC	CEMENT CONCRETE
CCM	CEMENT CONCRETE MASONRY
CEM	CEMENT
CI	CURB INLET
CIP	CAST IRON PIPE
CLF	CHAIN LINK FENCE
CL	CENTERLINE
CMP	CORRUGATED METAL PIPE
CSP	CORRUGATED STEEL PIPE
CO.	COUNTY
CONC	CONCRETE
CONT	CONTINUOUS
CONST	CONSTRUCTION
CR GR	CROWN GRADE
DHV	DESIGN HOURLY VOLUME
DI	DRIP INLET
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DW	STEADY DON'T WALK - PORTLAND ORANGE
DWY	DRIVEWAY
ELEV (or EL.)	ELEVATION
EMB	EMBANKMENT
EOP	EDGE OF PAVEMENT
EXIST (or EX)	EXISTING
EXC	EXCAVATION
F&C	FRAME AND COVER
F&G	FRAME AND GRATE
FDN.	FOUNDATION
FLDSTN	FIELDSTONE
GAR	GARAGE
GD	GROUND
GG	GAS GATE
GI	GUTTER INLET
GIP	GALVANIZED IRON PIPE
GRAN	GRANITE
GRAV	GRAVEL
GRD	GUARD
HDW	HEADWALL
HMA	HOT MIX ASPHALT
HOR	HORIZONTAL
HYD	HYDRANT
INV	INVERT
JCT	JUNCTION
L	LENGTH OF CURVE
LB	LEACH BASIN
LP	LIGHT POLE
LT	LEFT
MAX	MAXIMUM
MB	MAILBOX
MH	MANHOLE
MHB	MASSACHUSETTS HIGHWAY BOUND
MIN	MINIMUM
M&O	MILL & OVERLAY
NIC	NOT IN CONTRACT
NO.	NUMBER
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
PCR	PEDESTRIAN CURB RAMP
P.G.L.	PROFILE GRADE LINE
PI	POINT OF INTERSECTION
POC	POINT ON CURVE
POT	POINT ON TANGENT
PRC	POINT OF REVERSE CURVATURE
PROJ	PROJECT
PROP	PROPOSED
PSB	PLANTABLE SOIL BORROW
PT	POINT OF TANGENCY

<u>GENERAL</u>	
PVC	POINT OF VERTICAL CURVATURE
PVI	POINT OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENCY
PVMT	PAVEMENT
PWW	PAVED WATER WAY
R	RADIUS OF CURVATURE
R&D	REMOVE AND DISPOSE
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
RDWY	ROADWAY
REM	REMOVE
RET	RETAIN
RET WALL	RETAINING WALL
ROW	RIGHT OF WAY
RR	RAILROAD
R&R	REMOVE AND RESET
R&S	REMOVE AND STACK
RT	RIGHT
SB	STONE BOUND
SHLD	SHOULDER
SMH	SEWER MANHOLE
ST	STREET
STA	STATION
SSD	STOPPING SIGHT DISTANCE
SHLO	STATE HIGHWAY LAYOUT LINE
SW	SIDEWALK
T	TANGENT DISTANCE OF CURVE/TRUCK %
TAN	TANGENT
TEMP	TEMPORARY
TC	TOP OF CURB
TOS	TOP OF SLOPE
TYP	TYPICAL
UP	UTILITY POLE
VAR	VARIABLE
VERT	VERTICAL
VC	VERTICAL CURVE
WG	WATER GATE
WIP	WROUGHT IRON PIPE
WM	WATER METER/WATER MAIN
X-SECT	CROSS SECTION

CAB	CABINET
CCVE	CLOSED CIRCUIT VIDEO EQUIPMENT
DW	STEADY UPRAISED HAND
FDW	FLASHING UPRAISED HAND
FR	FLASHING CIRCULAR RED
FRL	FLASHING RED LEFT ARROW
FRR	FLASHING RED RIGHT ARROW
FY	FLASHING CIRCULAR YELLOW
FYL	FLASHING YELLOW LEFT ARROW
FYR	FLASHING YELLOW RIGHT ARROW
G	STEADY CIRCULAR GREEN
GL	STEADY GREEN LEFT ARROW
GR	STEADY GREEN RIGHT ARROW
GSL	STEADY GREEN SLASH LEFT ARROW
GSR	STEADY GREEN SLASH RIGHT ARROW
GV	STEADY GREEN VERTICAL ARROW
OL	OVERLAP
PED	PEDESTRIAN
PTZ	PAN, TILT, ZOOM
R	STEADY CIRCULAR RED
RL	STEADY RED LEFT ARROW
RR	STEADY RED RIGHT ARROW
RREB	RAPID RECTANGULAR FLASHING BEACON
TR SIG	TRAFFIC SIGNAL
TSC	TRAFFIC SIGNAL CONDUIT
W	STEADY WALKING PERSON
Y	STEADY CIRCULAR YELLOW
YL	STEADY YELLOW LEFT ARROW

GENERAL NOTES:

1.

EXISTING CONDITIONS INFORMATION COMPILED FROM SURVEY PERFORMED BY HANCOCK SURVEY ASSOCIATES, INC. IN APRIL OF 2024. HORIZONTAL DATUM REFERS TO THE MASSACHUSETTS STATE PLANE COORDINATE SYSTEM, NAD83, MAINLAND ZONE. VERTICAL DATUM REFERS TO THE NORTH AMERICAN VERTICAL DATUM OF 1988, NAVD88.
2.

ALL EXISTING RAIL ROAD PROPERTY LINES, TOWN, AND COUNTY LAYOUT LINES HAVE BEEN ESTABLISHED FROM AN ON-THE-GROUND SURVEY SUPPLEMENTED WITH RECORDS RESEARCH. ALL PRIVATE PROPERTY LINES HAVE BEEN ESTABLISHED FROM AVAILABLE INFORMATION AND THEIR EXACT LOCATION ARE NOT GUARANTEED.
3.

EXISTING EASEMENTS FOR PROPERTIES LOCATED ALONG THE EASTERN SIDE OF HOPE AVENUE CAN BE FOUND ON WORCESTER REGISTRY OF DEEDS, PLAN BOOK 953, PLAN 113, TITLED "DEFINITIVE SUBDIVISION PLAN IN OXFORD, MA", DATED AUGUST 10, 2020.
4.

WETLANDS WERE DELINEATED BY ECOTEC, INC. IN DECEMBER OF 2023.
5.

ALL OBJECTS SHALL BE A MINIMUM DISTANCE OF 2'-0" (EXCLUDING THE WIDTH OF THE CURB) FROM THE SHARED USE PATH (UTILITY POLES, SIGNS, MAILBOXES, ALONG DRIVEWAY OPENINGS, ECT.).
6.

THE TERM "PROPOSED" (PROP) MEANS WORK TO BE CONSTRUCTED USING NEW MATERIAL OR, WHERE APPLICABLE, RE-USING EXISTING MATERIALS IDENTIFIED AS "REMOVE AND RESET" (R&R), AS APPROVED BY THE ENGINEER.
7.

THE PROJECT PROPOSES WORK WHICH APPEARS SUBJECT TO THE MASSACHUSETTS WETLANDS PROTECTION ACT 310 CMR 10.00.
8.

THE PROJECT PROPOSES WORK WHICH APPEARS SUBJECT TO THE TOWN OF OXFORD STORMWATER MANAGEMENT AND LAND DISTURBANCE BYLAWS AND REGULATIONS.
9.

THE PROJECT PROPOSES WORK WHICH APPEARS TO REQUIRE COVERAGE UNDER THE EPA NPDES CONSTRUCTION GENERAL PERMIT.
10.

THE PROJECT PROPOSES WORK WHICH MAY BE SUBJECT TO ARTICLE 97 REGULATION AND IT IS THE OWNER/TOWN RESPONSIBILITY TO OBTAIN ANY NECESSARY APPROVALS/LEGISLATION PRIOR TO CONSTRUCTION
11.

THE OWNER/TOWN SHALL OBTAIN ALL APPLICABLE PERMITS PRIOR TO CONSTRUCTION.
12.

THE OWNER/TOWN SHALL PROVIDE COPIES OF ALL APPLICABLE PERMITS TO THE CONTRACTOR PRIOR TO CONSTRUCTION.
13.

THE OWNER/TOWN SHALL OBTAIN ALL LEGAL PERMISSIONS FROM PRIVATE PROPERTY OWNERS OF LAND ON WHICH THE PROJECT PROPOSES WORK PRIOR TO CONSTRUCTION INCLUDING BUT NOT LIMITED TO:
MASS ELECTRIC CO, 40 SYLVAN ROAD, WALTHAM, MA 02451
DUDLEY CONSERVATION LAND TRUST INC, 24 HEALY ROAD, DUDLEY, MA 01571

UTILITY NOTES:

1.

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE 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.
2.

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.
3.

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 TOWN OF OXFORD TO ALLOW FOR THE REPLACEMENT OF EXISTING UTILITY STRUCTURES IN POOR CONDITION.
4.

ALL PRIVATELY OWNED UTILITY STRUCTURES (WATER 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 AQUARION WATER COMPANY (1-800-732-9678) FOR THE ALTERATION, ADJUSTMENT OR REPLACEMENT OF ANY WATER UTILITIES AS NECESSARY. THE CONTRACTOR SHALL COORDINATE WITH PRIVATE UTILITY COMPANIES FOR THE ALTERATION AND ADJUSTMENT, AS NECESSARY.

CONSTRUCTION NOTES:

1.

AREAS OUTSIDE THE LIMITS OF PROPOSED WORK/GRADING DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT THE CONTRACTORS EXPENSE.
2.

ALL DISTURBED AREAS BETWEEN THE SHARED-USE PATH AND THE LIMIT OF GRADING SHALL BE STABILIZED WITH 4" LOAM AND SEED, UNLESS OTHERWISE NOTED.
3.

THE TERM "MEET EXIST" MEANS TO MEET BOTH THE EXISTING ALIGNMENT AND/OR ELEVATION.
4.

DETECTABLE WARNING PANELS ARE REQUIRED ON ALL PROPOSED WHEELCHAIR RAMPS AND SHALL BE INSTALLED IN ACCORDANCE WITH MASSDOT CONSTRUCTION STANDARDS. CONTRACTOR RESPONSIBILITY TO CONSTRUCT PEDESTRIAN/BIKE/PARKING FACILITIES (OR ALL FACILITIES) IN COMPLIANCE WITH ADA/MAAB.
5.

ALL PROPOSED RADII SHALL BE 2.0', UNLESS OTHERWISE NOTED.
6.

ALL EXISTING TREES PROXIMATE TO THE PROPOSED IMPROVEMENTS SHALL BE RETAINED AND PROTECTED, UNLESS OTHERWISE NOTED.
7.

EXISTING PRIVATE SHRUBS AND LANDSCAPE BEDS DAMAGED BY THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS SHALL BE RESTORED AND REPLACED IN KIND AT THE COST OF THE CONTRACTOR, UNLESS OTHERWISE NOTED.

EROSION & SEDIMENT CONTROL NOTES:

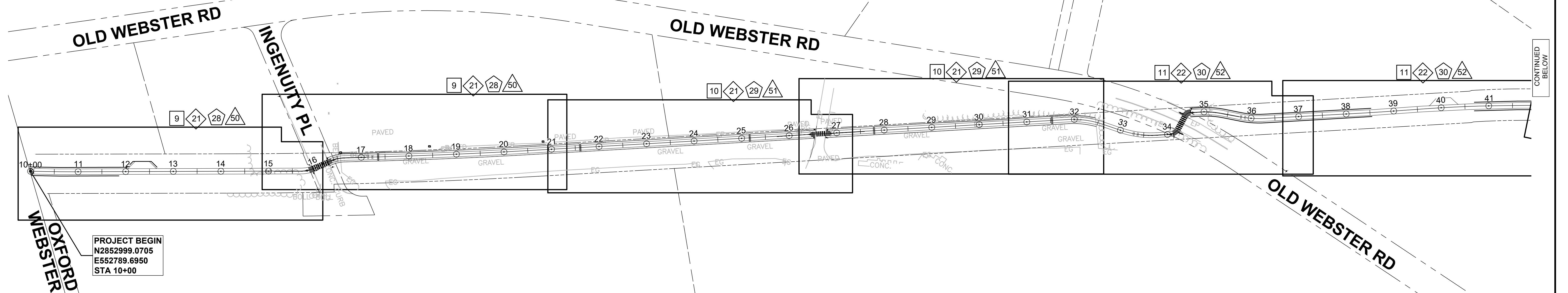
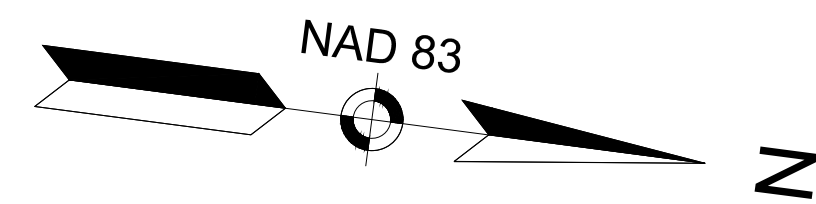
1.

PRIOR TO ANY LAND DISTURBANCE, CONTRACTOR SHALL INSTALL PROPOSED EROSION AND SEDIMENT CONTROL DEVICES AS SHOWN ON THE APPROVED PLANS. WHERE SLOPES STEEPER THAN 2:1, PROPOSED SILT FENCE LINE SHALL BE REINFORCED WITH A WIRE BACK FENCING. CONTRACTOR SHALL INSPECT EROSION AND SEDIMENT CONTROL DEVICES AFTER EACH STORM EVENT AND REMOVE ANY ACCUMULATED SEDIMENT THAT REACHES ½ THE HEIGHT ALONG THE SEDIMENT CONTROL BARRIERS AND PERFORM ANY REPAIR/REPLACE ANY EROSION AND SEDIMENT CONTROL DEVICES WHEN NECESSARY.
2.

DISTURB AREAS REMAINING IDLE FOR MORE THAN 14 DAYS SHALL BE STABILIZED.

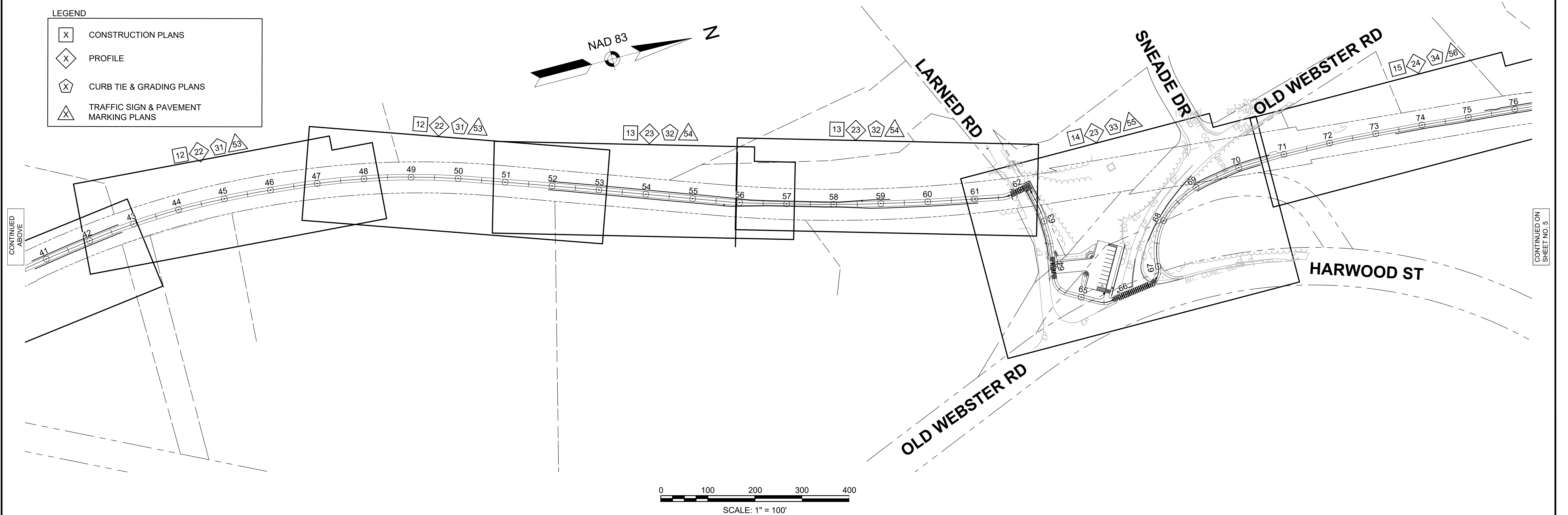
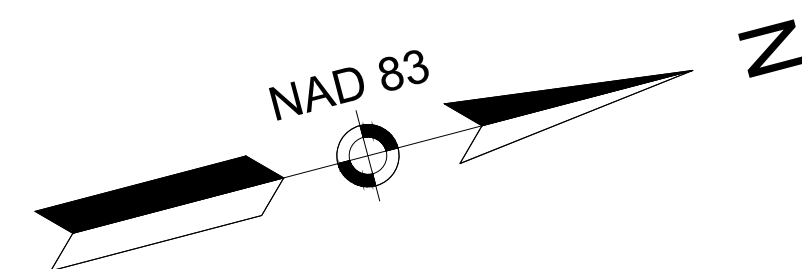
LEGEND

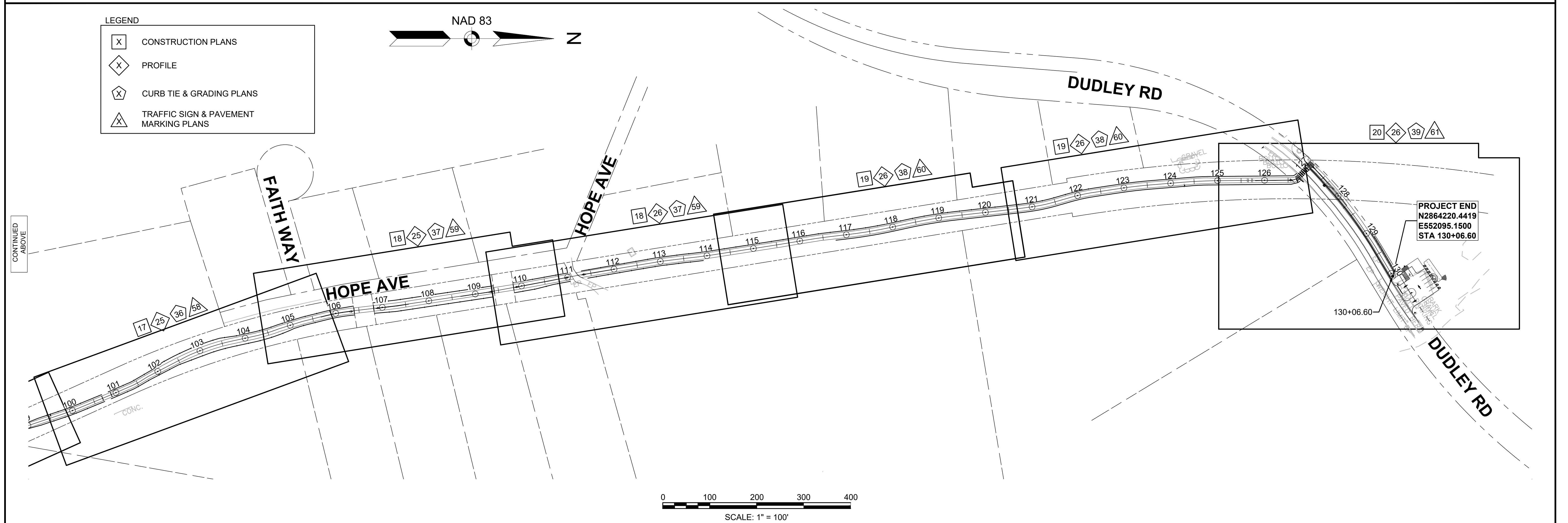
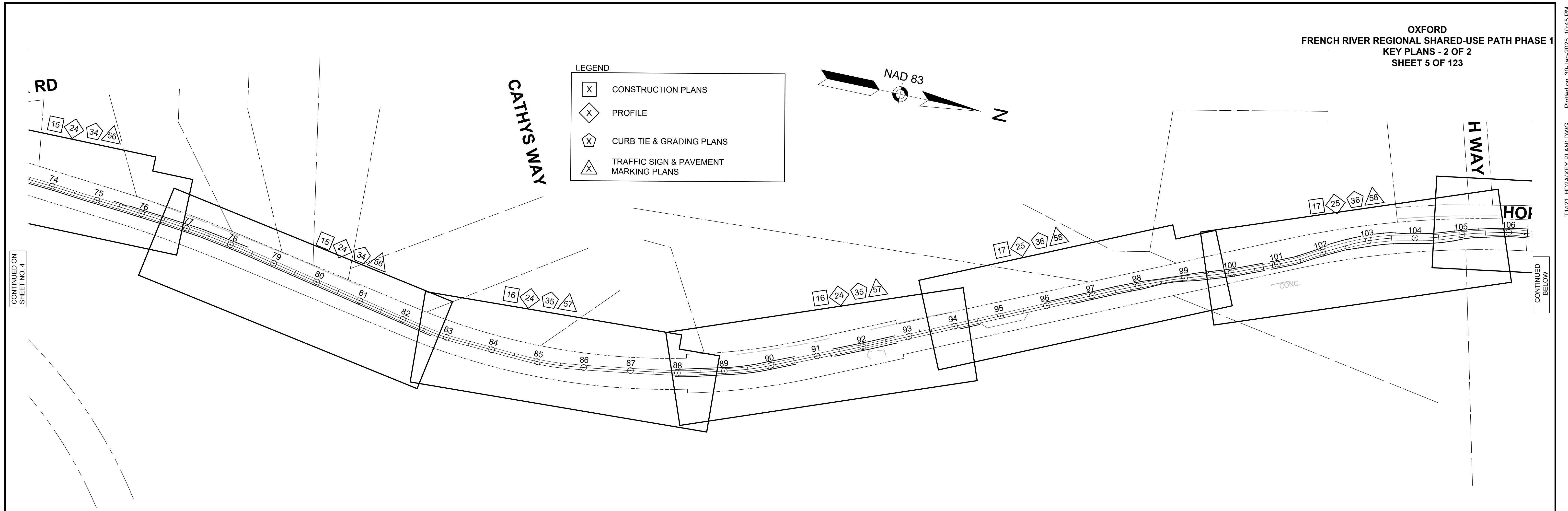
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- X PROFILE
- X CURB TIE & GRADING PLANS
- X TRAFFIC SIGN & PAVEMENT MARKING PLANS

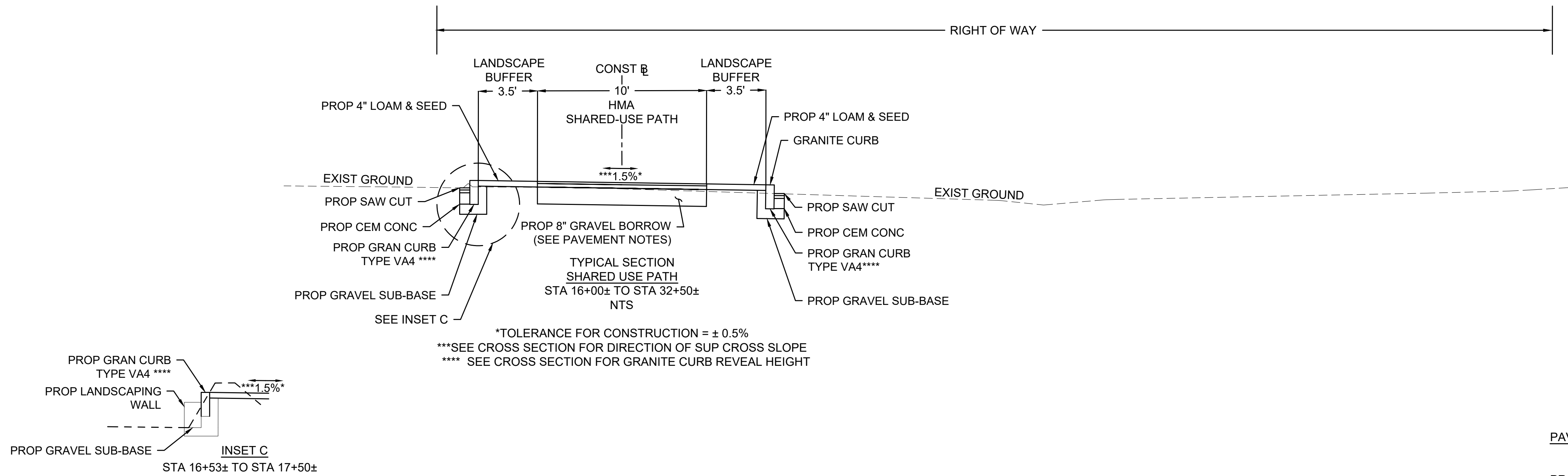


LEGEND

- X CONSTRUCTION PLANS
- X PROFILE
- X CURB TIE & GRADING PLANS
- X TRAFFIC SIGN & PAVEMENT MARKING PLANS







PAVEMENT NOTES

PROPOSED HMA SHARED USE PATH/ HMA DRIVEWAY

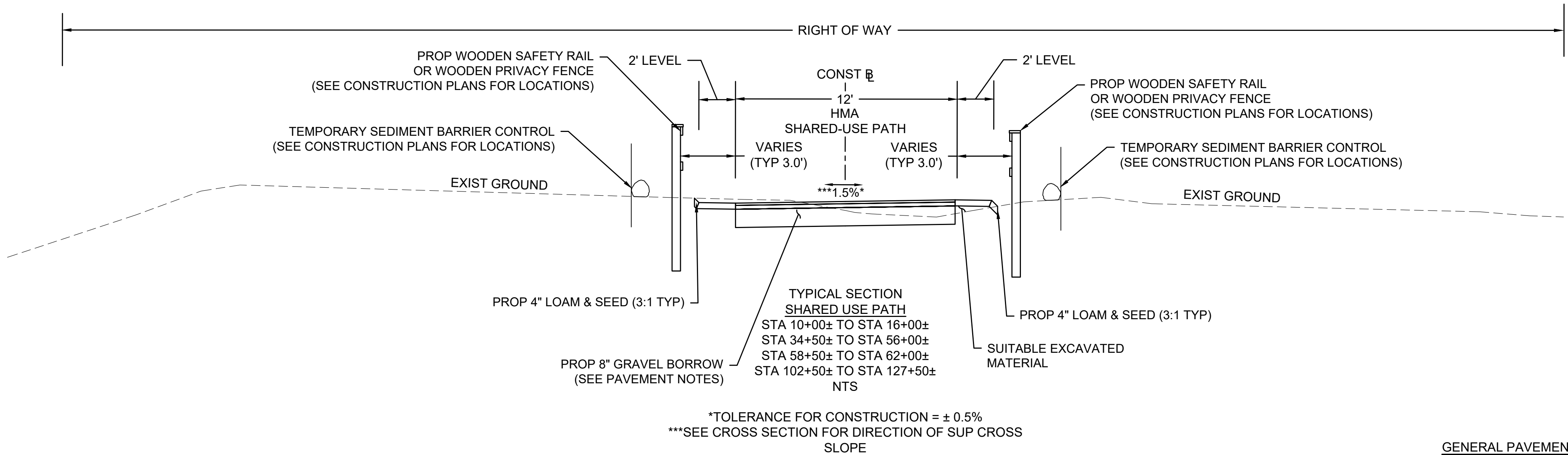
SURFACE: 1½" SUPERPAVE SURFACE COURSE - 9.5 (SSC - 9.5) OVER
2½" SUPERPAVE SURFACE COURSE - 12.5 (SSC - 12.5) OVER

BASE: 8" GRAVEL BORROW, TYPE b

PROPOSED CEMENT CONCRETE SIDEWALKS / PEDESTRIAN CURB RAMPS

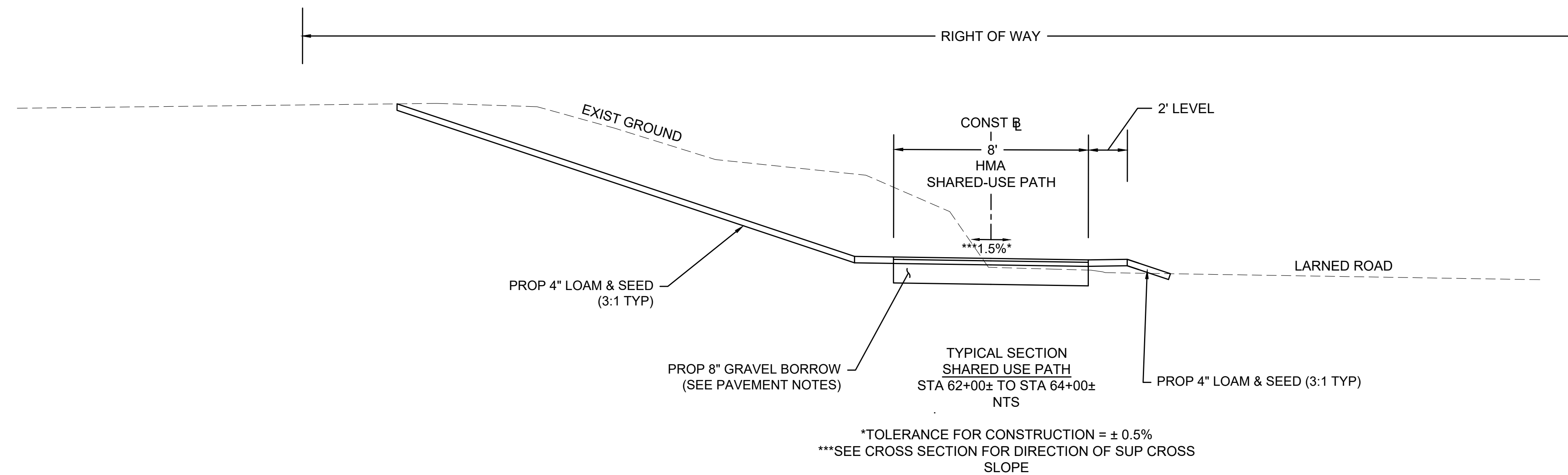
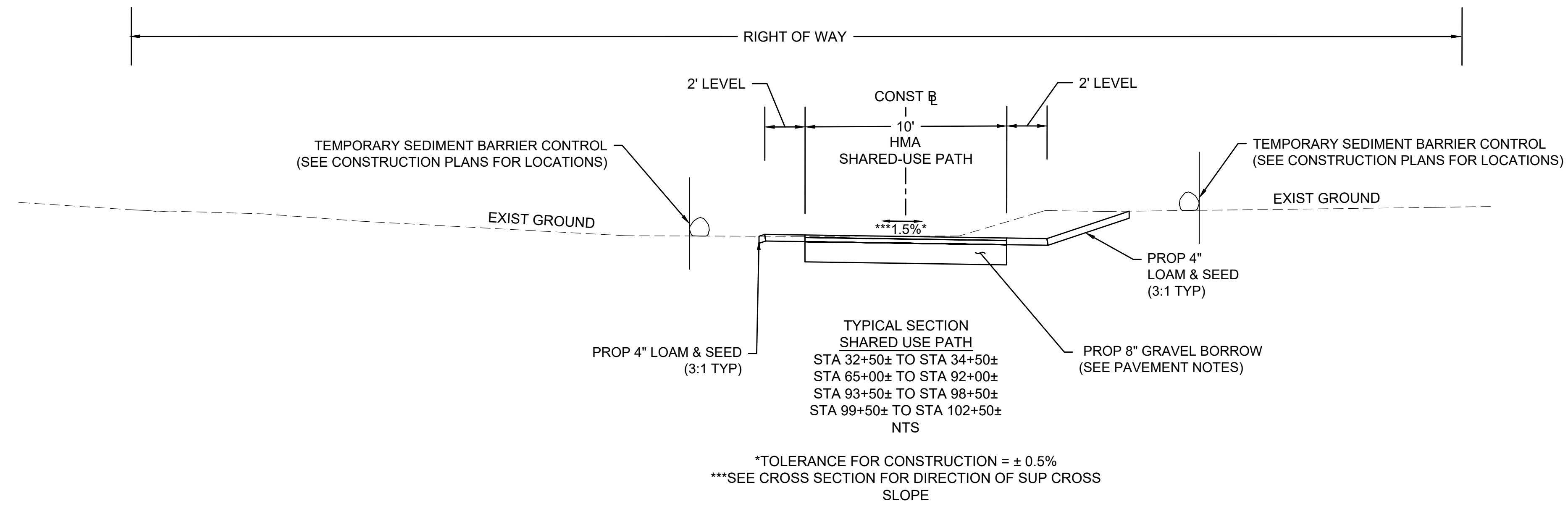
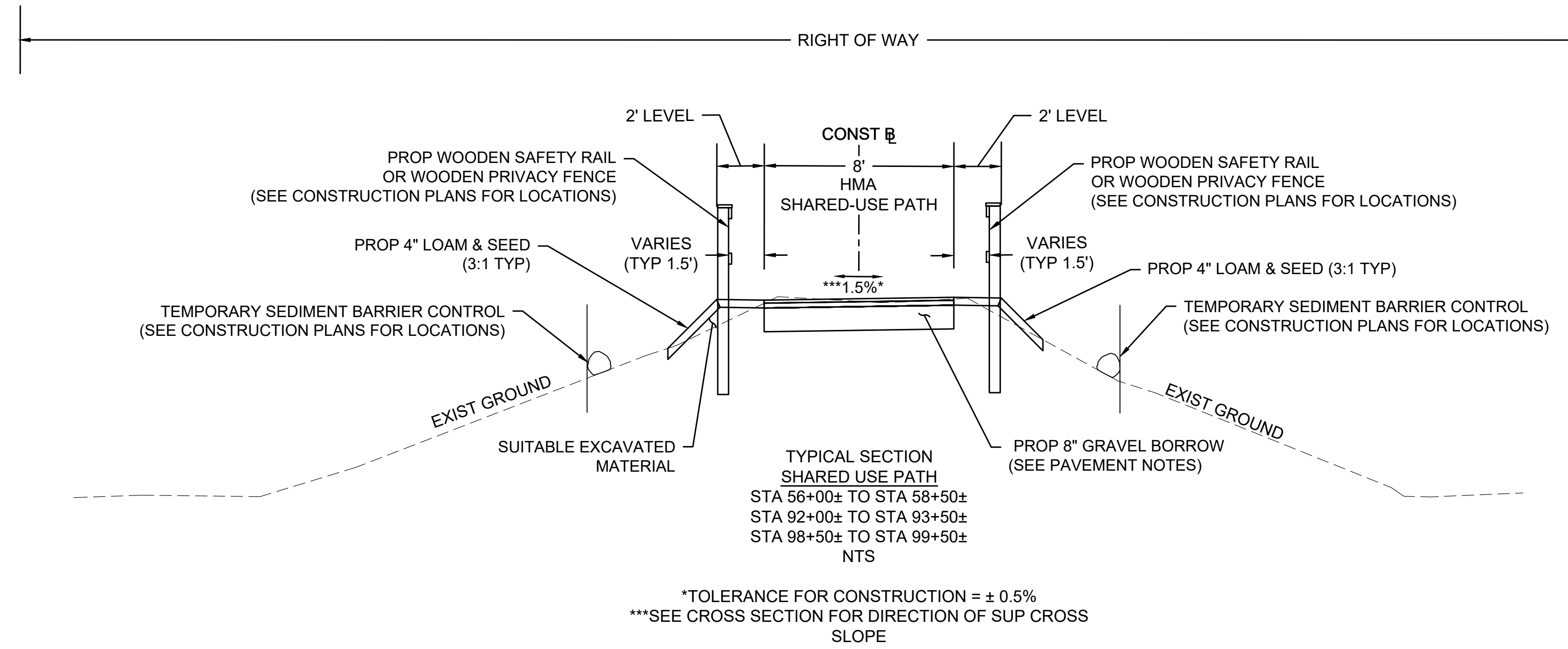
SURFACE: 4" CEMENT CONCRETE (AIR ENTRAINED, 4000 PSI, ¾", 610)

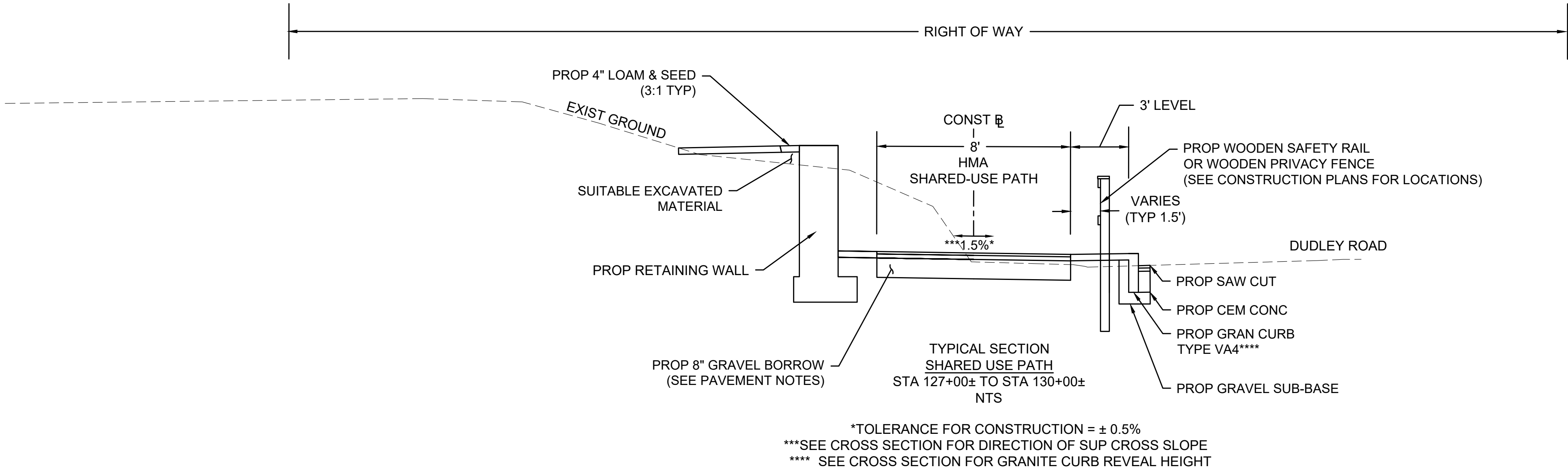
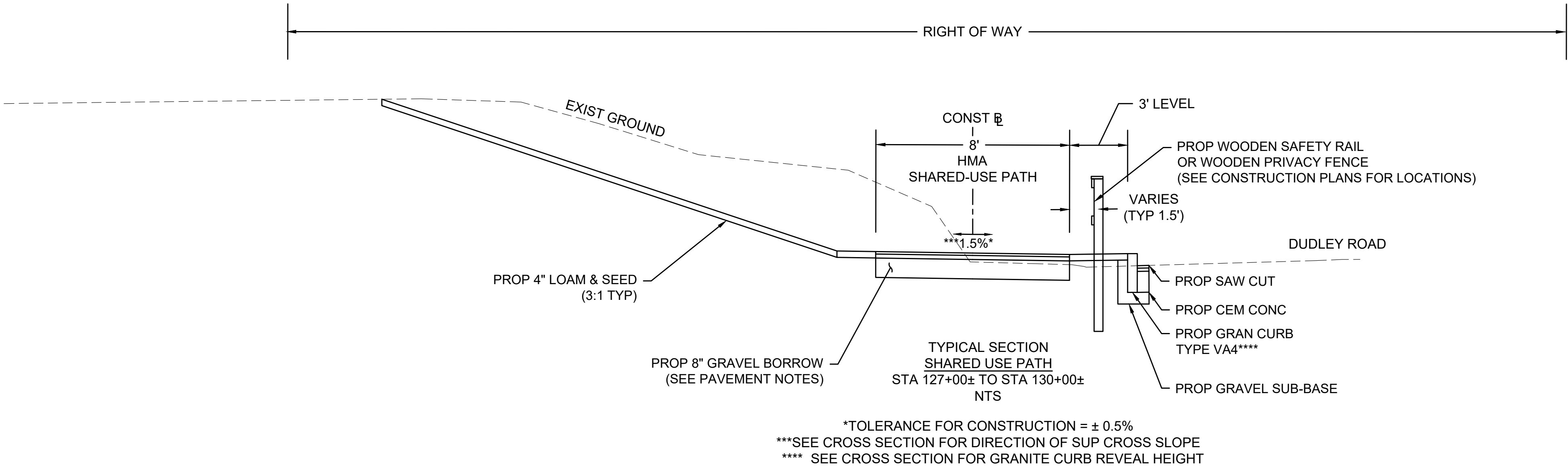
BASE: 8" GRAVEL BORROW, TYPE b



GENERAL PAVEMENT NOTES:

1. ASPHALT EMULSION FOR TACK COAT SHALL BE APPLIED BETWEEN ALL ASPHALT SURFACES AND SAWCUT JOINTS BEFORE PAVING. HMA JOINT ADHESIVE 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 CONSISTENT WITH STANDARD SPECIFICATION 450.43G2. ALL SURFACES SHALL BE CLEAN OF ALL ORGANICS, DEBRIS, AND SAND PRIOR TO PAVING.
2. ALL HMA SHALL BE IN ACCORDANCE WITH SECTION 450.
3. ASPHALT EMULSION FOR TACK COAT SHALL BE RS-1H TO RESIST TRACKING OF TACK BY HAUL VEHICLES.
4. HMA FOR WALKS AND DRIVEWAYS SHALL BE IN ACCORDANCE WITH SECTION 700.
5. ALL GRAVEL BORROW MEETING SPECIFICATION SHALL BE RETAINED IN PLACE, COMPACTED, AND LEVELED AS REQUIRED.

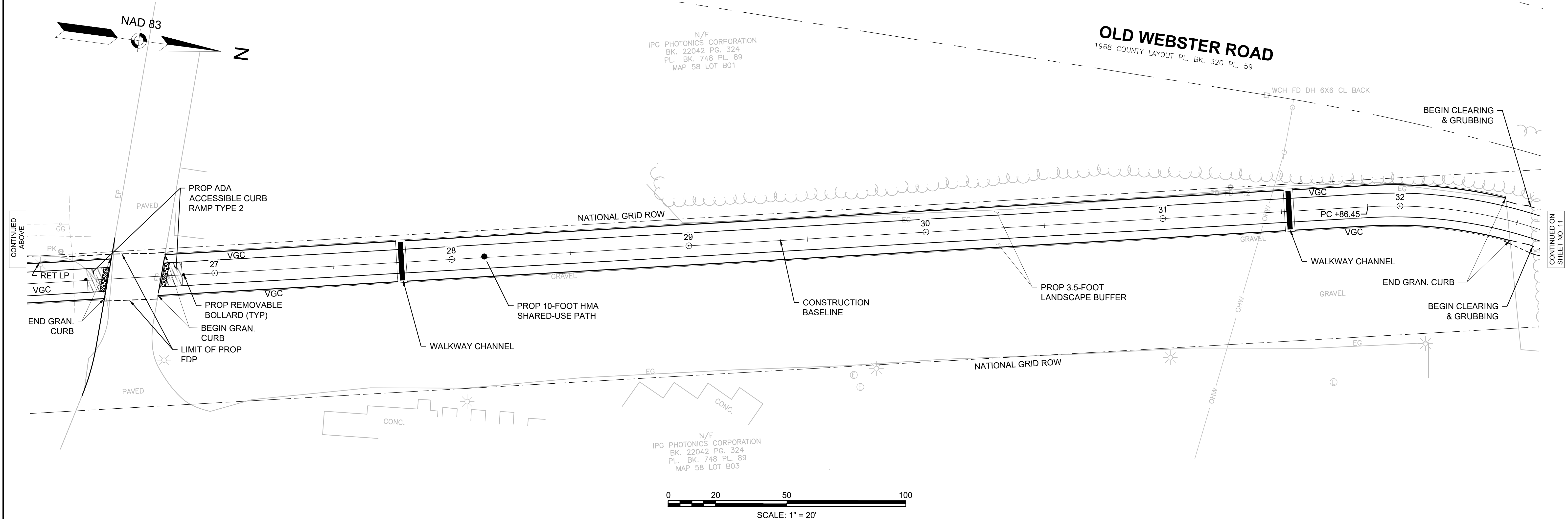
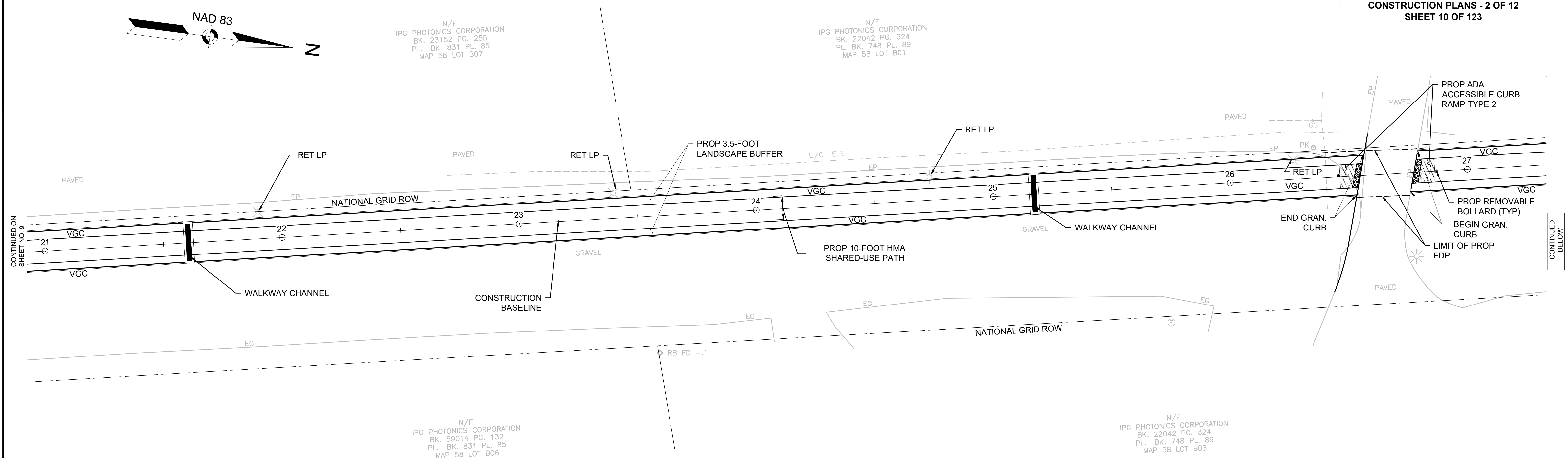




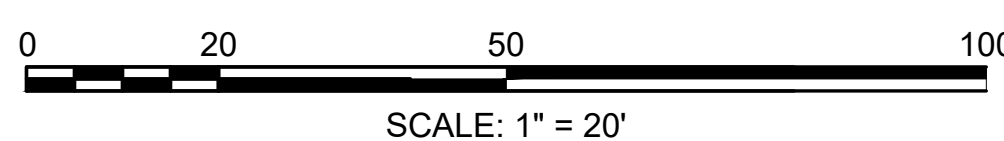
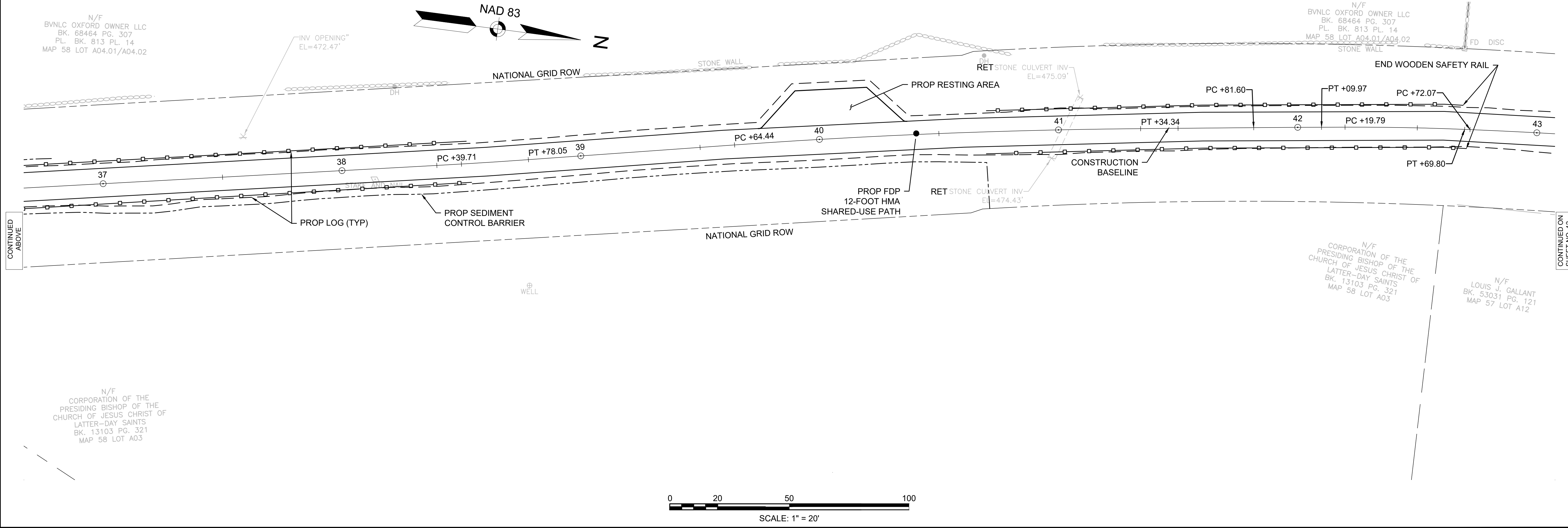
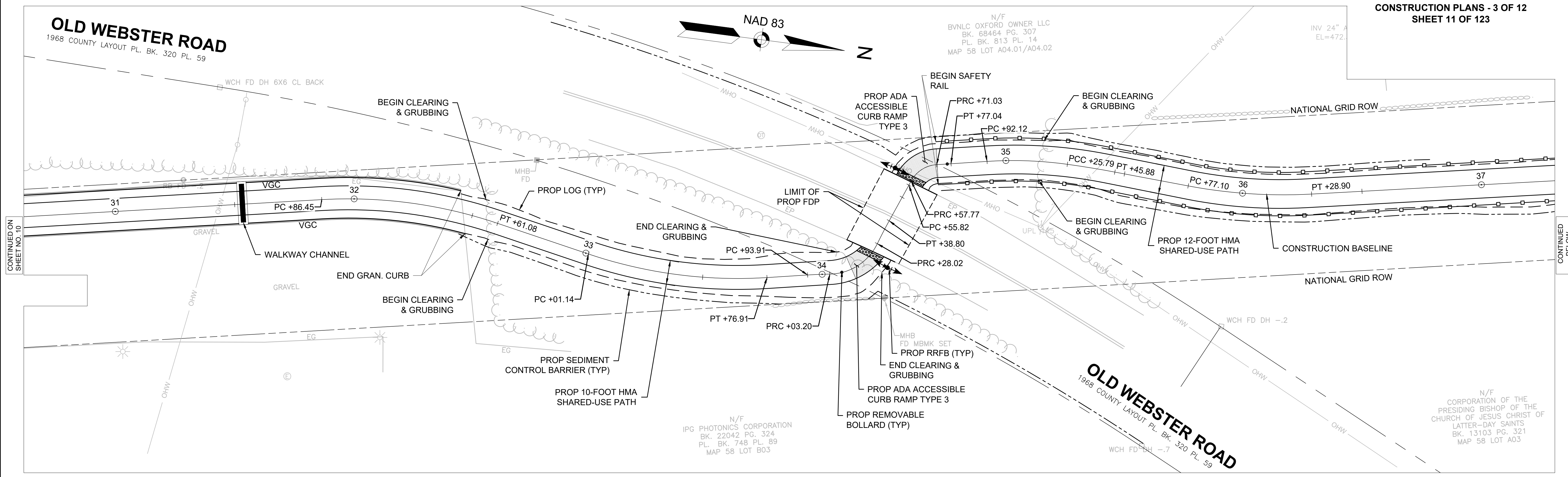
T1421_HD4(CONSTRUCTION PLANS).DWG Plotted on 30-Jan-2025 10:45 PM



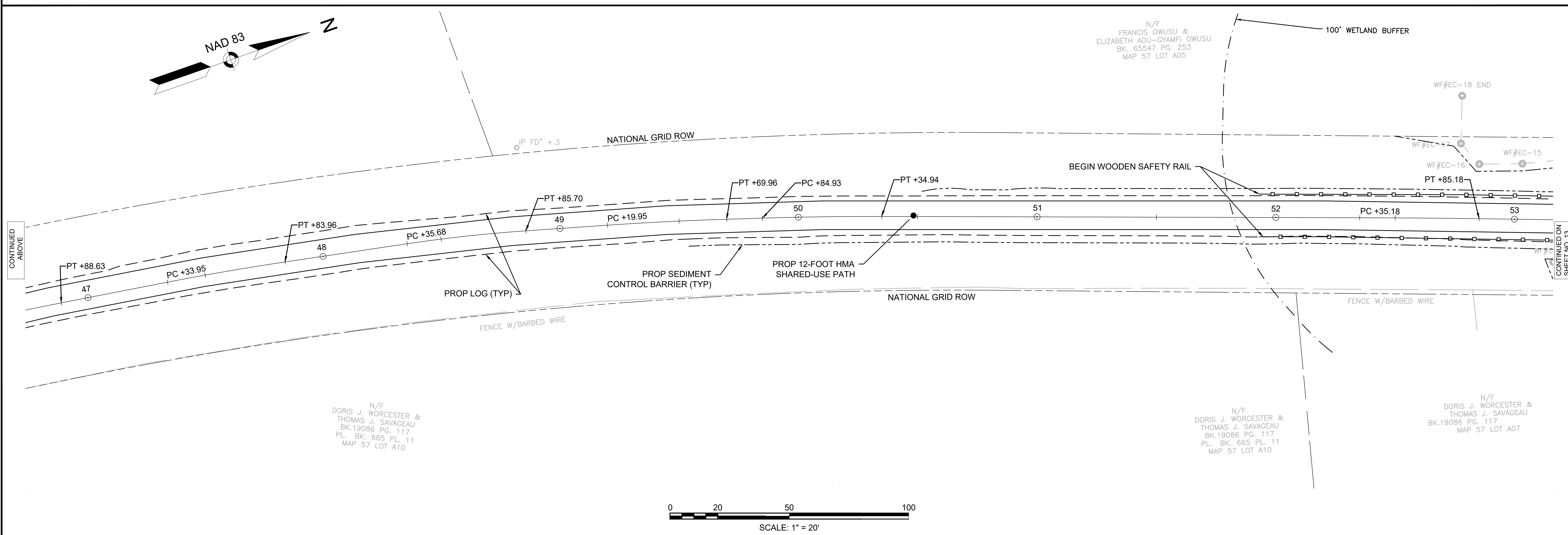
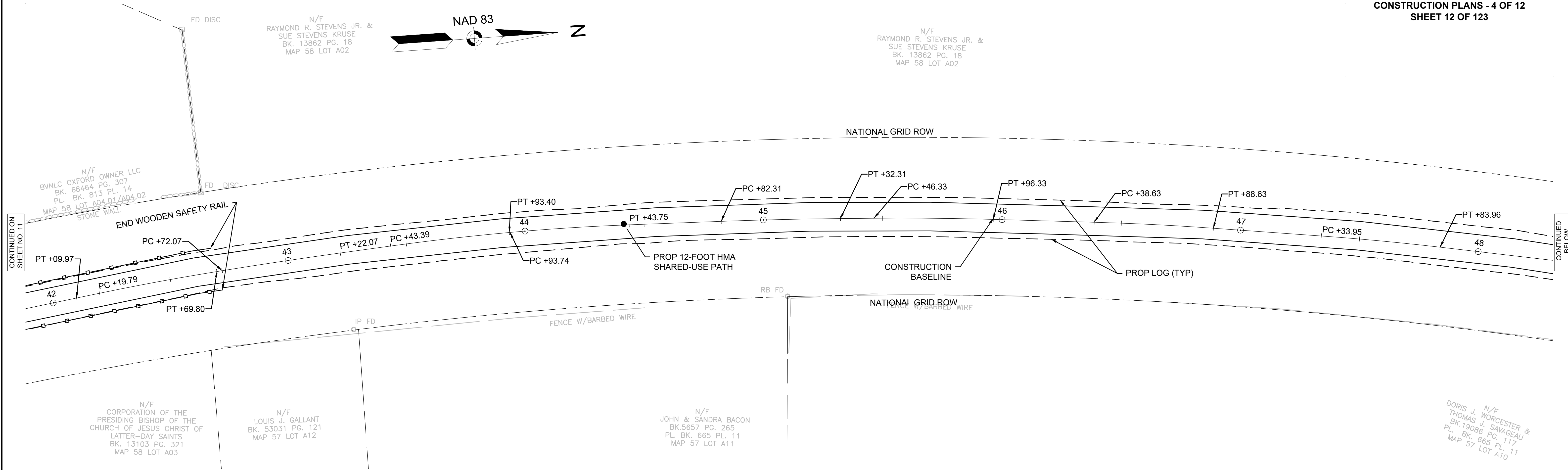
OXFORD
FRENCH RIVER SHARED-USE PATH PHASE 1
CONSTRUCTION PLANS - 2 OF 12
SHEET 10 OF 123



OXFORD
FRENCH RIVER SHARED-USE PATH PHASE 1
CONSTRUCTION PLANS - 3 OF 12
SHEET 11 OF 123



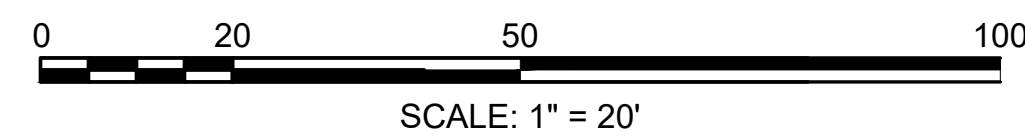
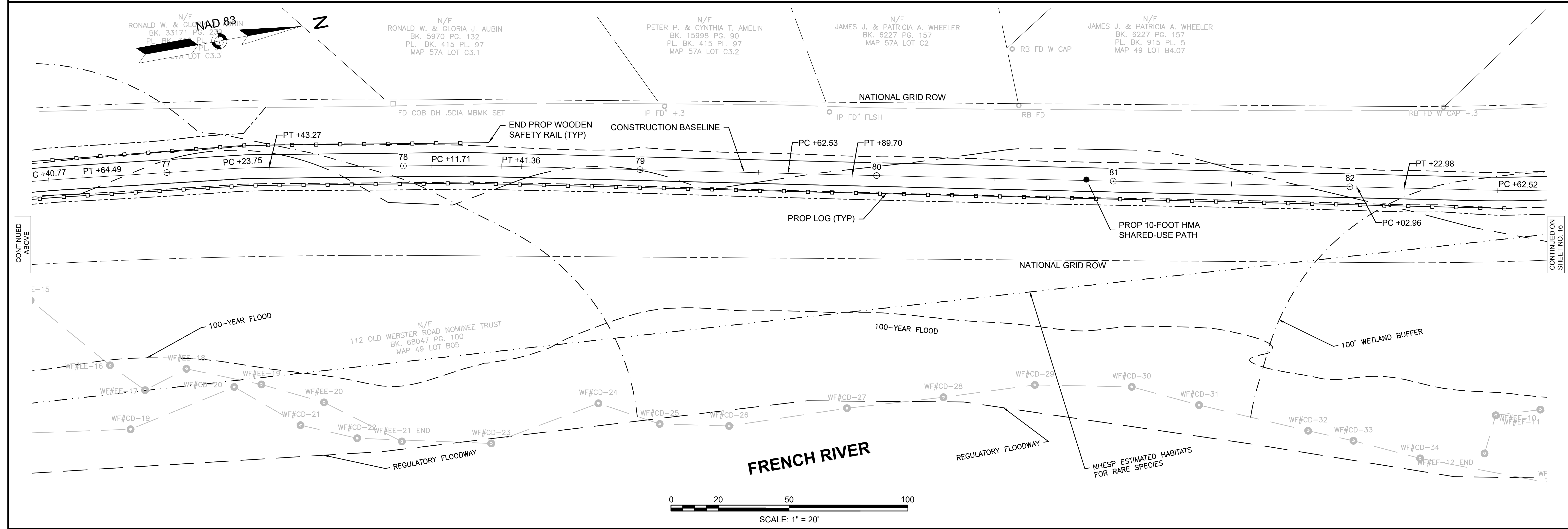
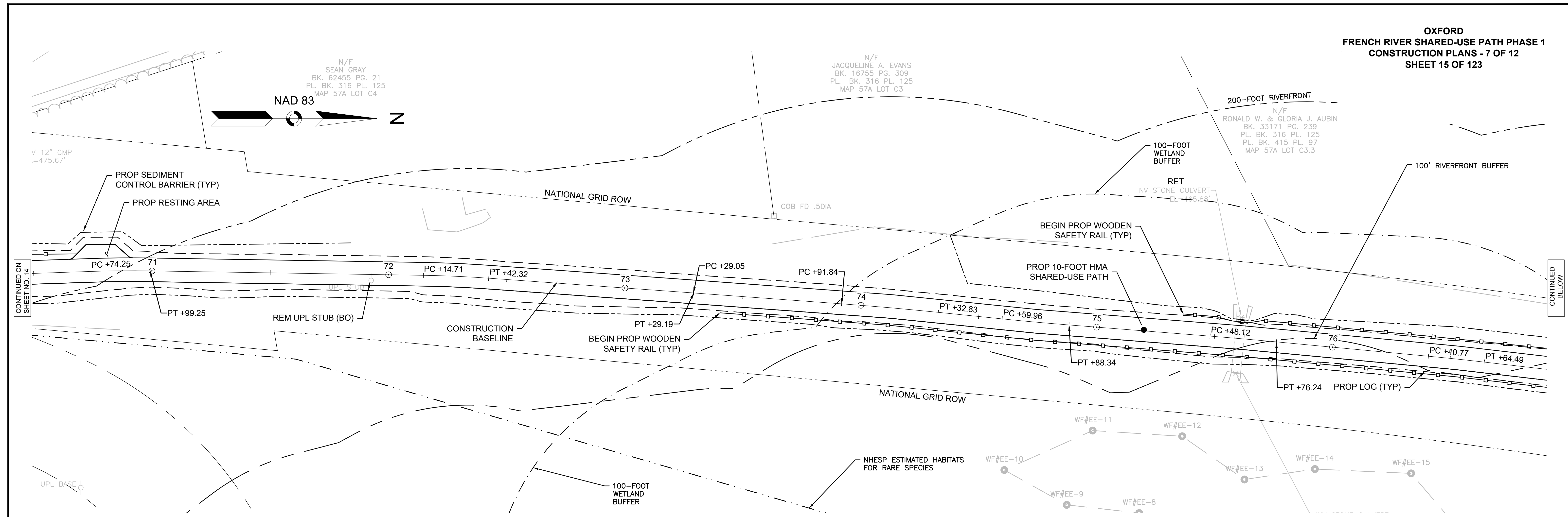
OXFORD
FRENCH RIVER SHARED-USE PATH PHASE 1
CONSTRUCTION PLANS - 4 OF 12
SHEET 12 OF 123



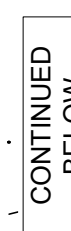




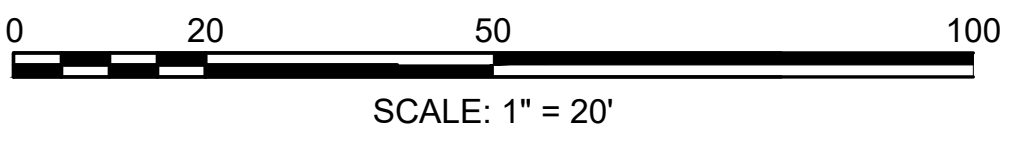
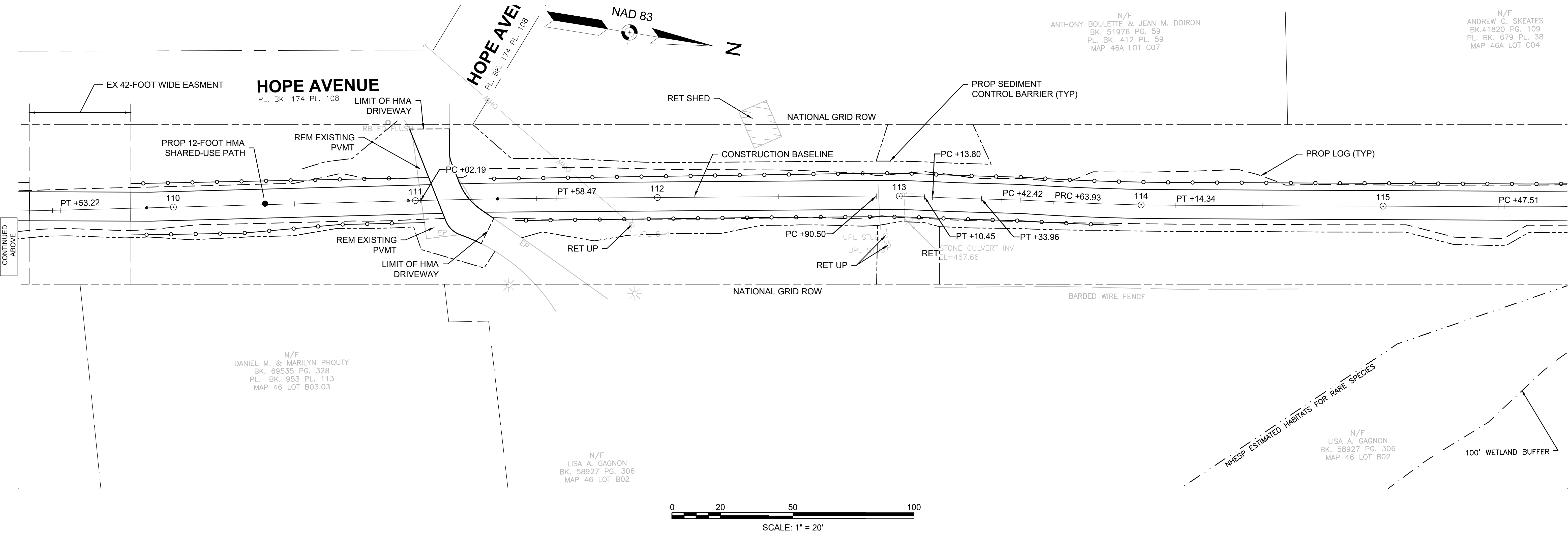
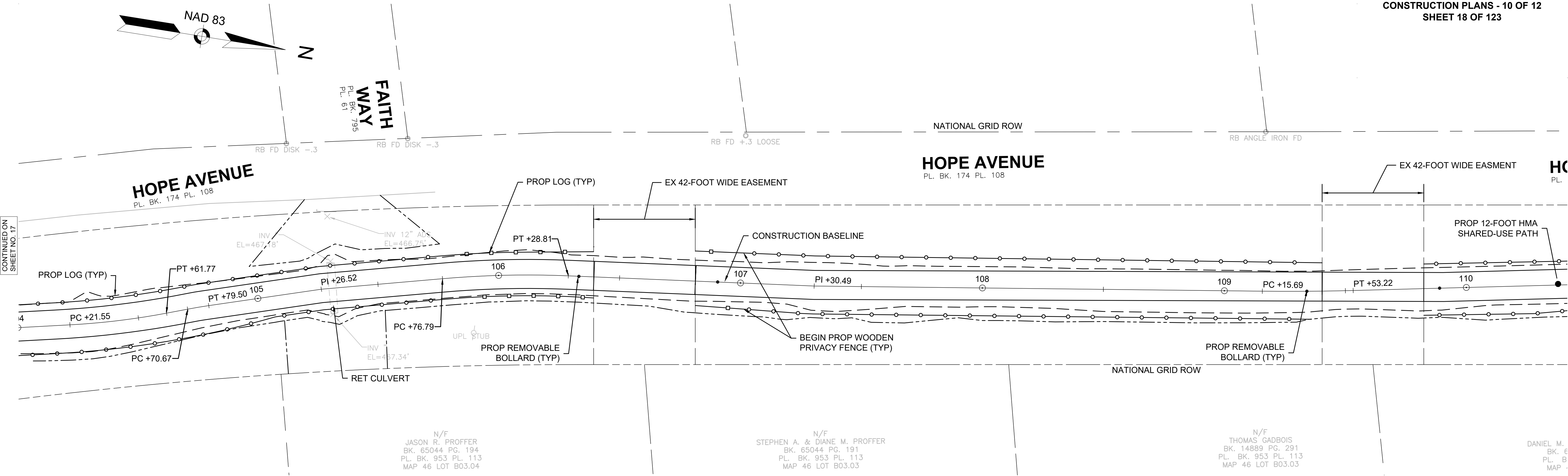
OXFORD
FRENCH RIVER SHARED-USE PATH PHASE 1
CONSTRUCTION PLANS - 7 OF 12
SHEET 15 OF 123



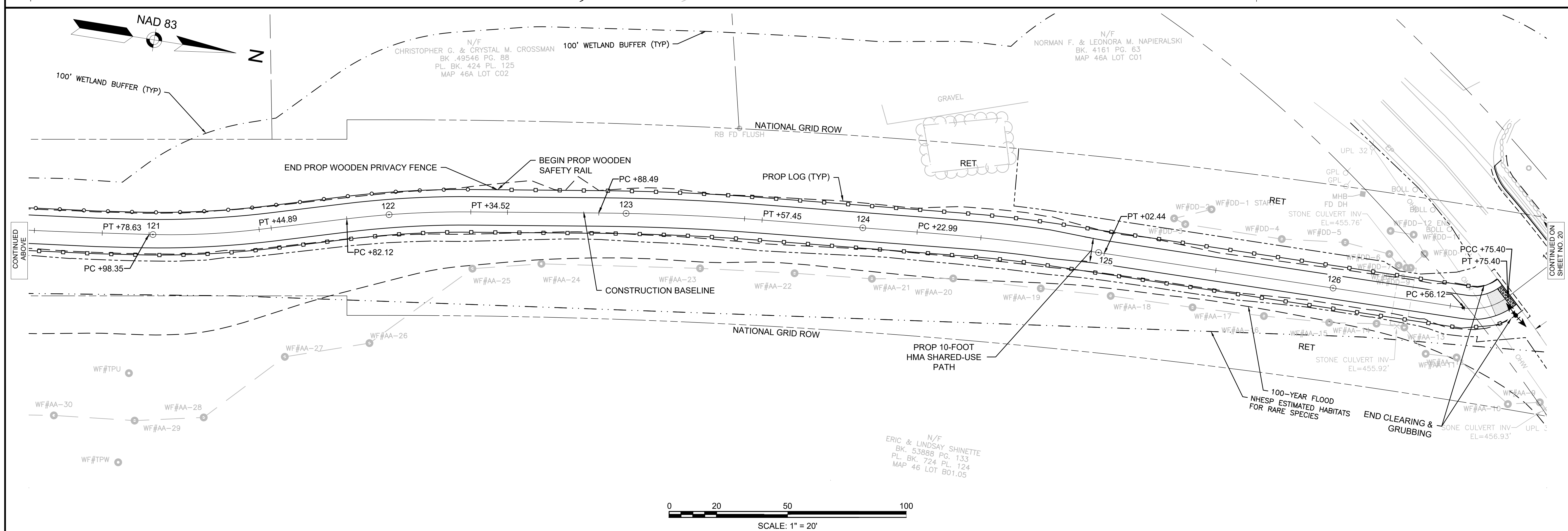
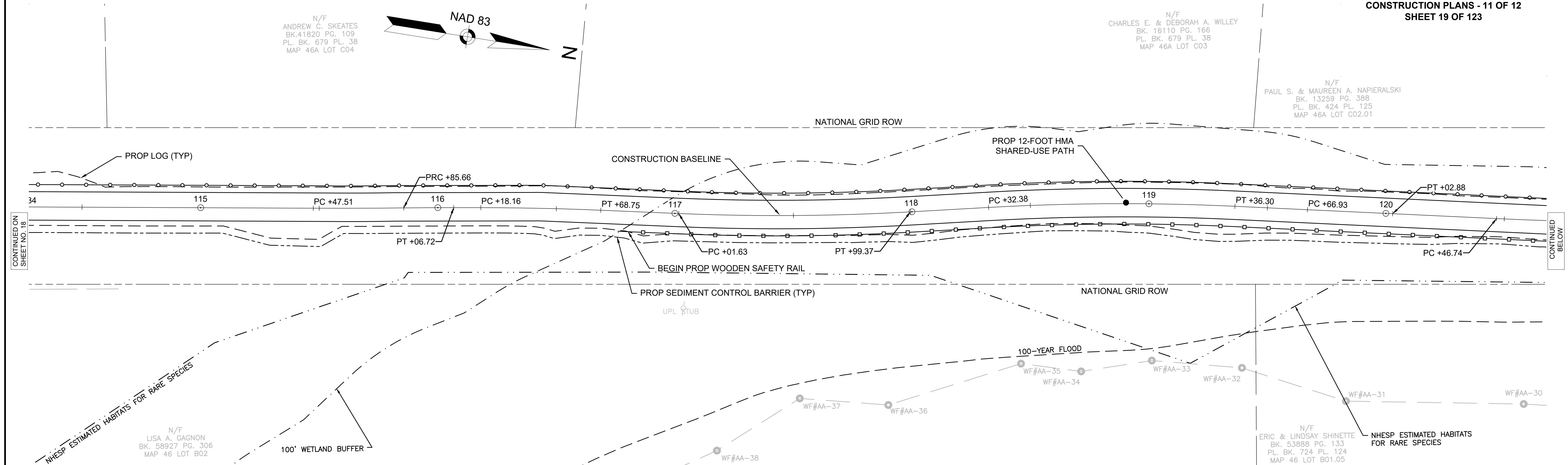
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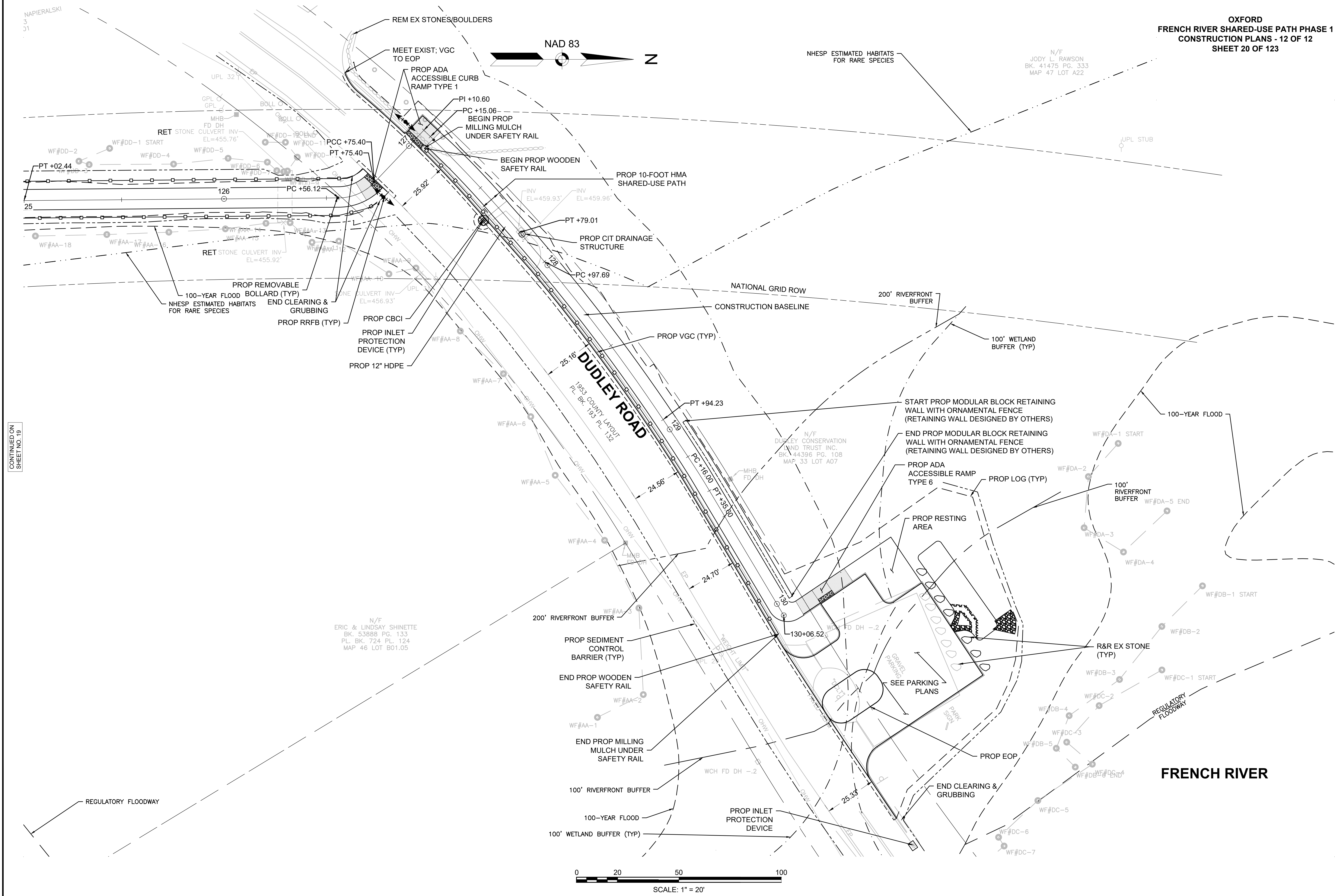






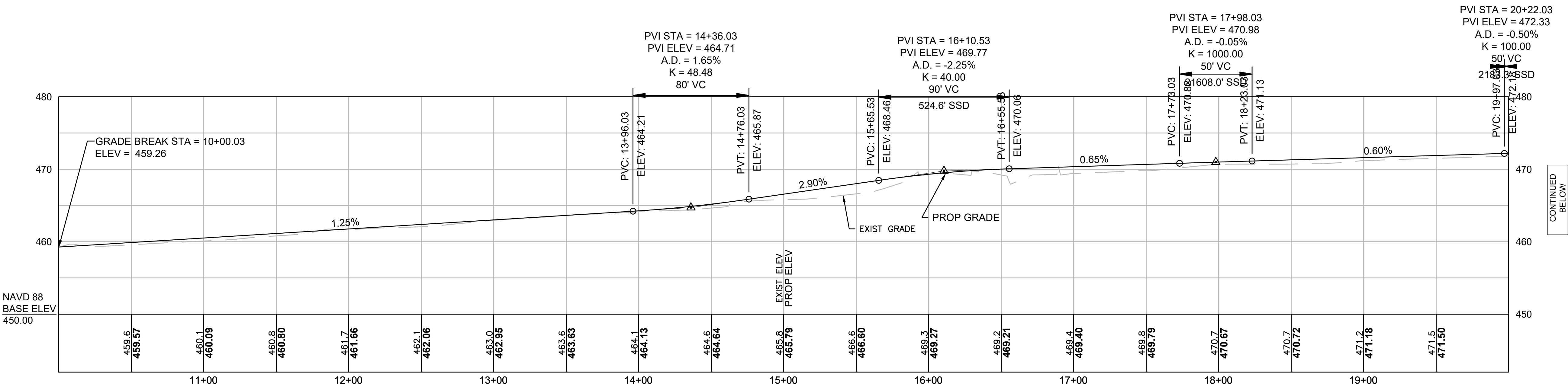
OXFORD
FRENCH RIVER SHARED-USE PATH PHASE 1
CONSTRUCTION PLANS - 11 OF 12
SHEET 19 OF 123



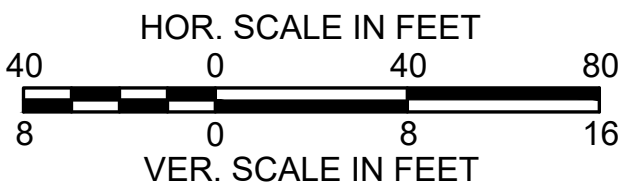
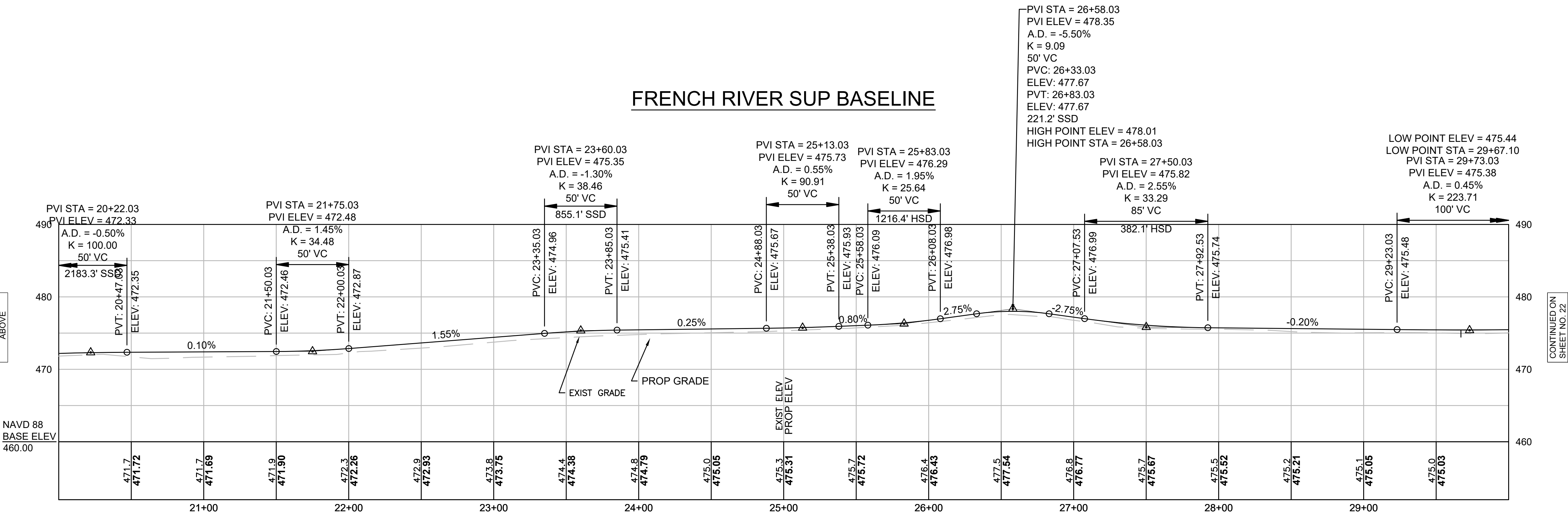


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SHEET NO. 19

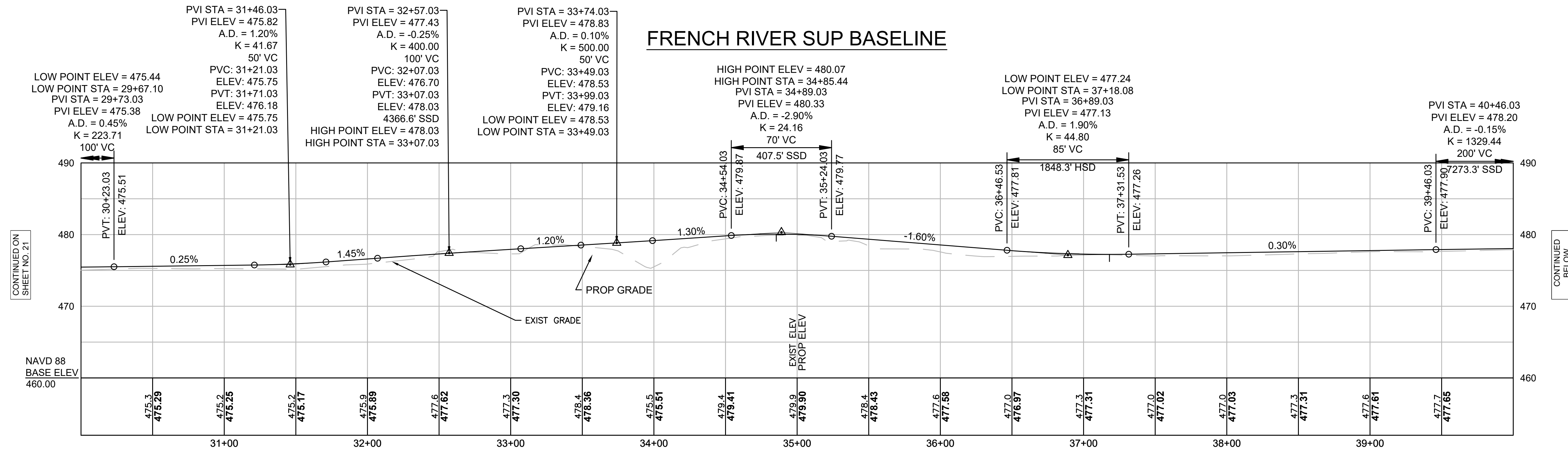
FRENCH RIVER SUP BASELINE



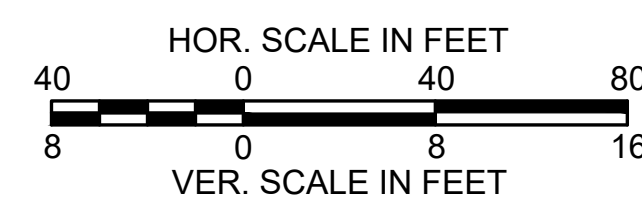
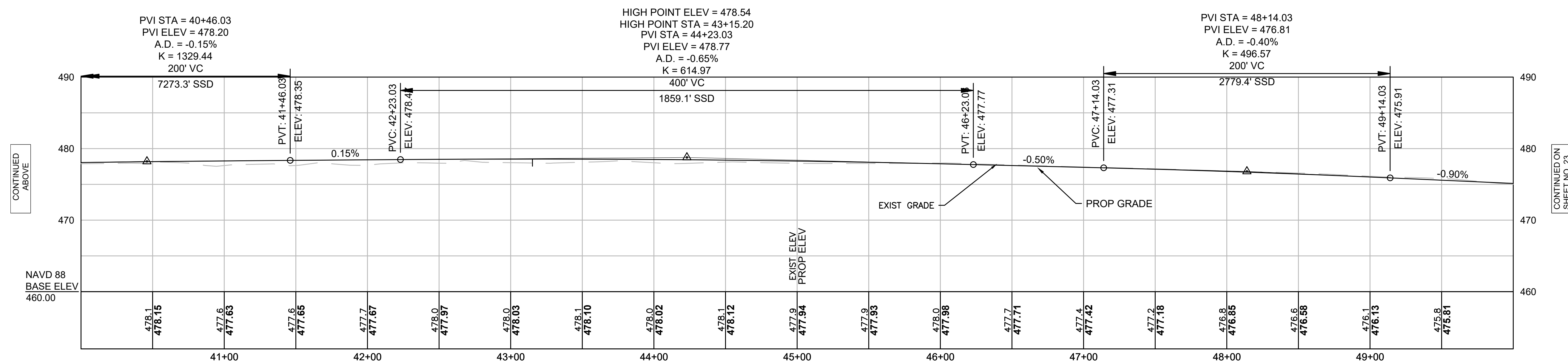
FRENCH RIVER SUP BASELINE



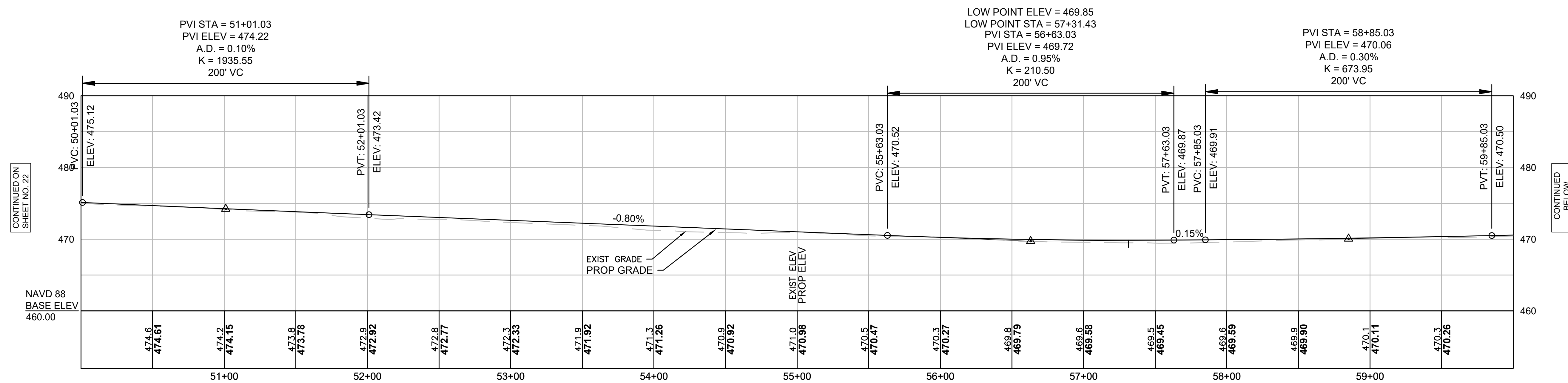
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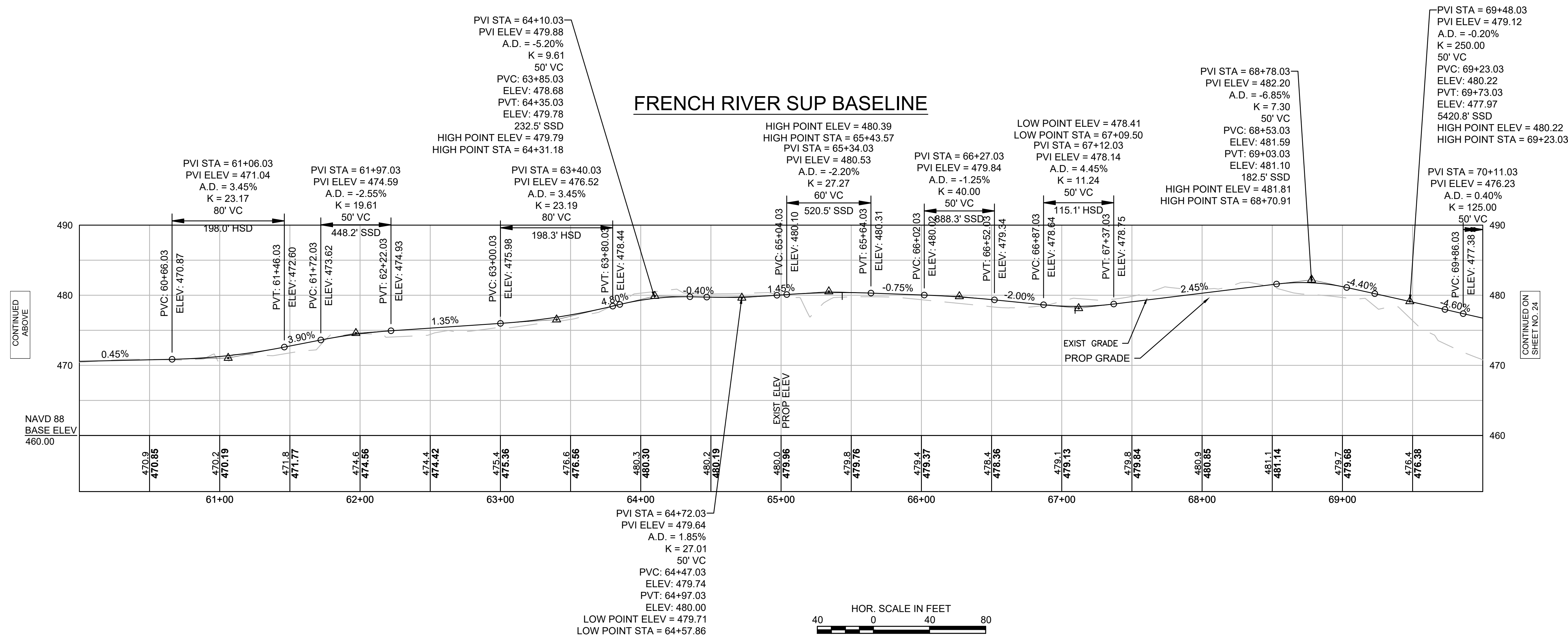
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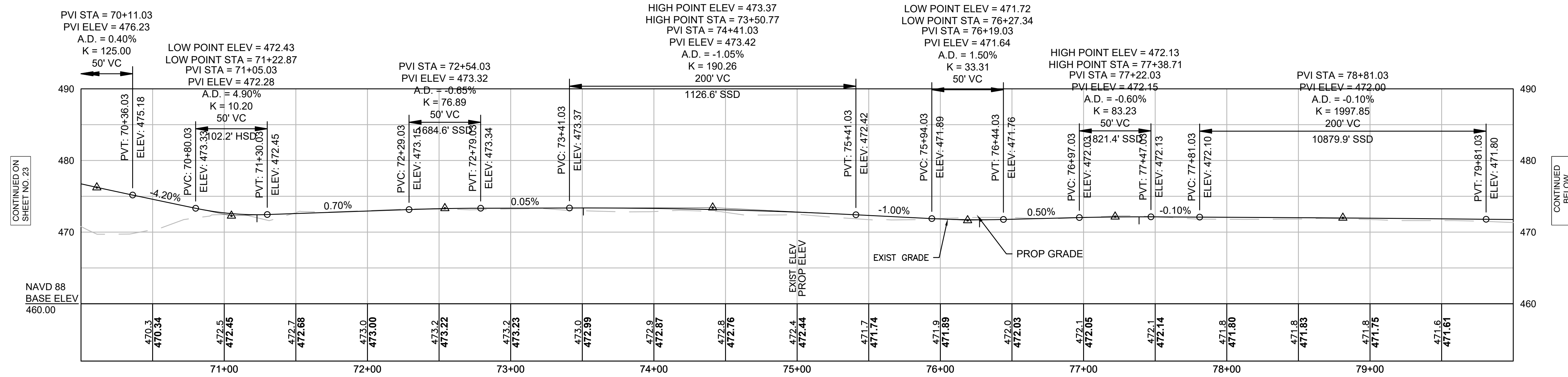
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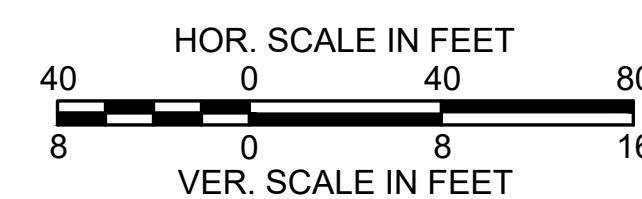
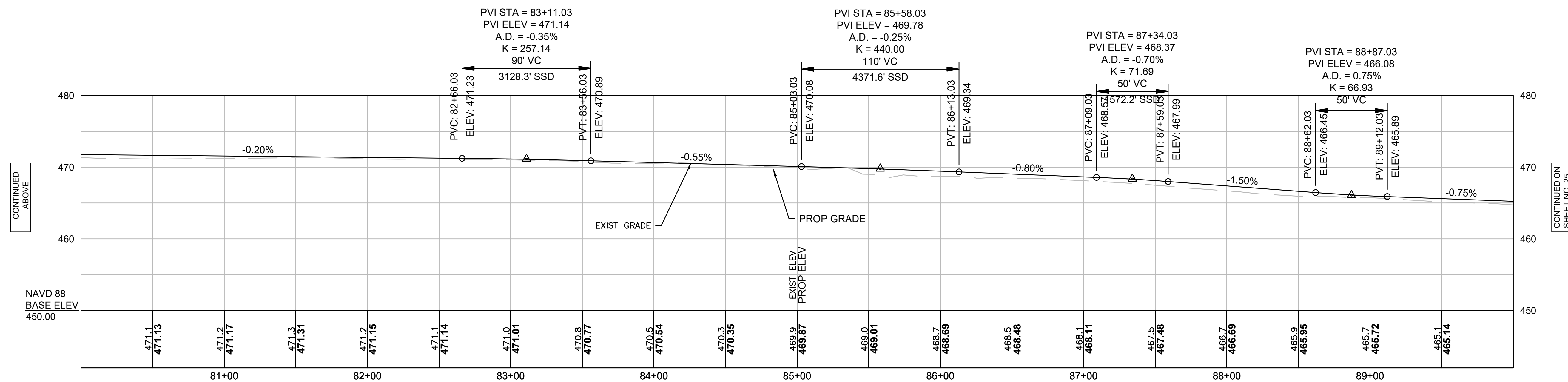
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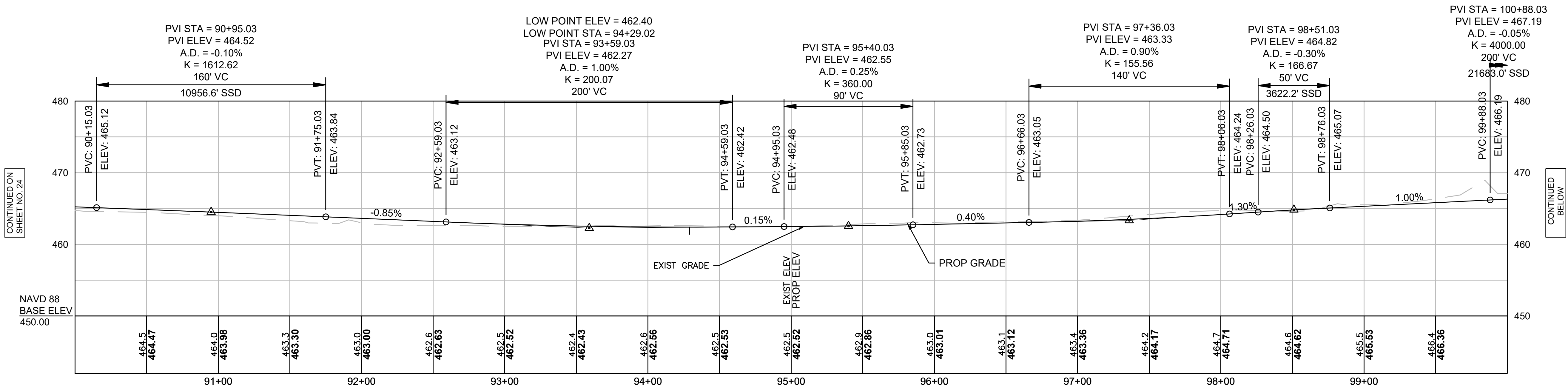
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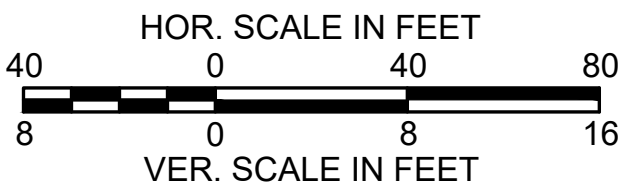
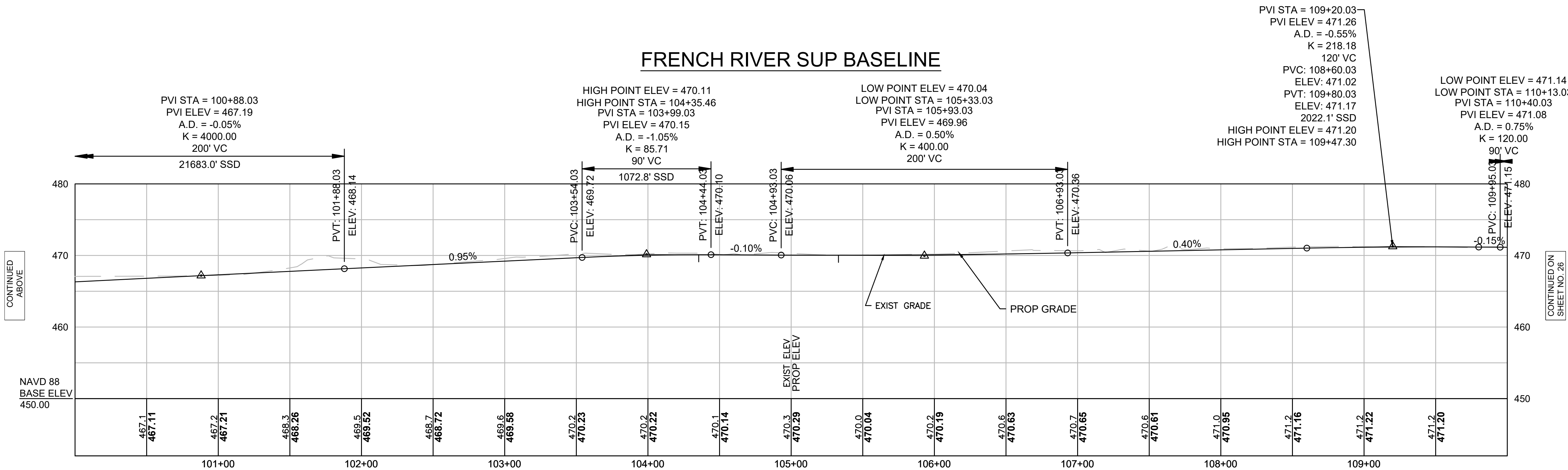
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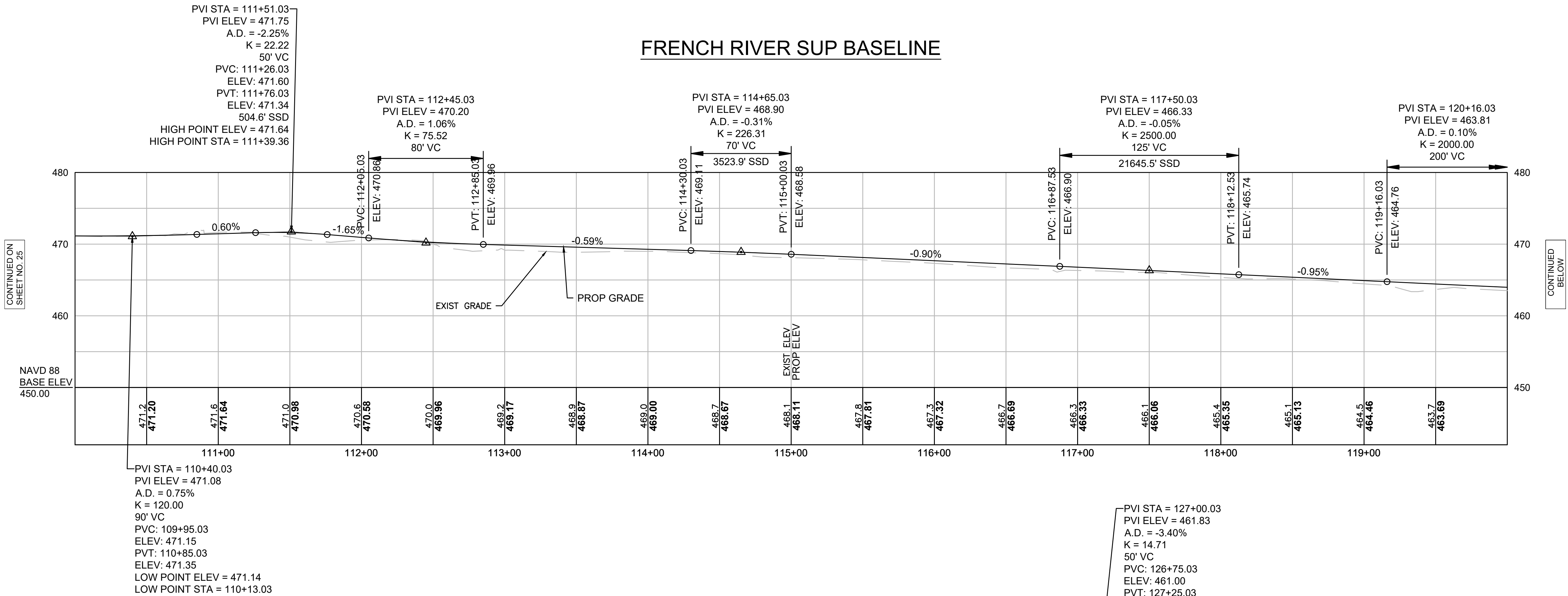
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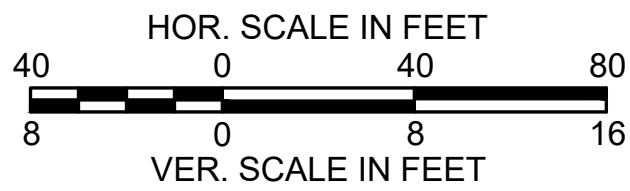
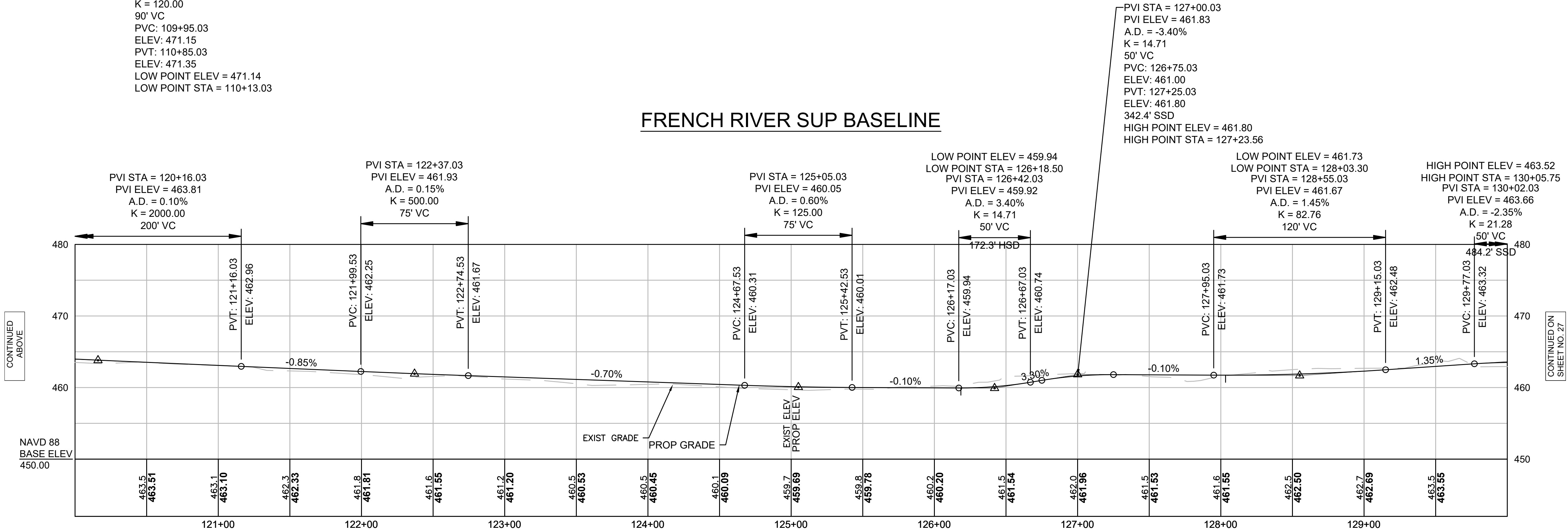
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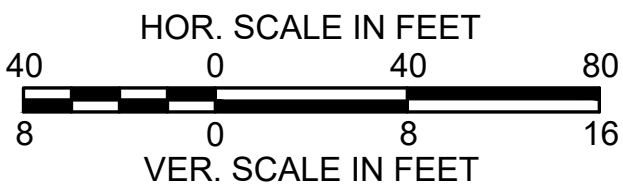
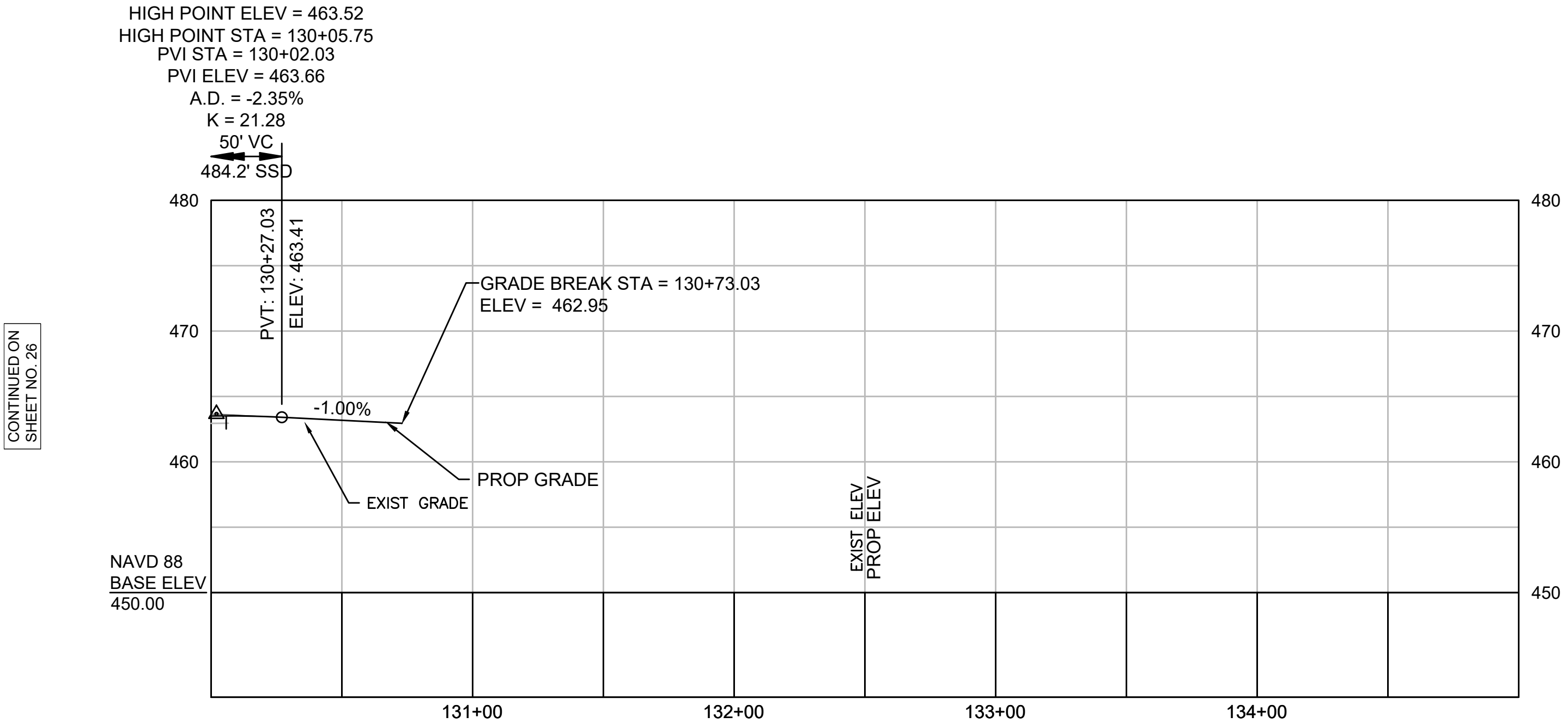
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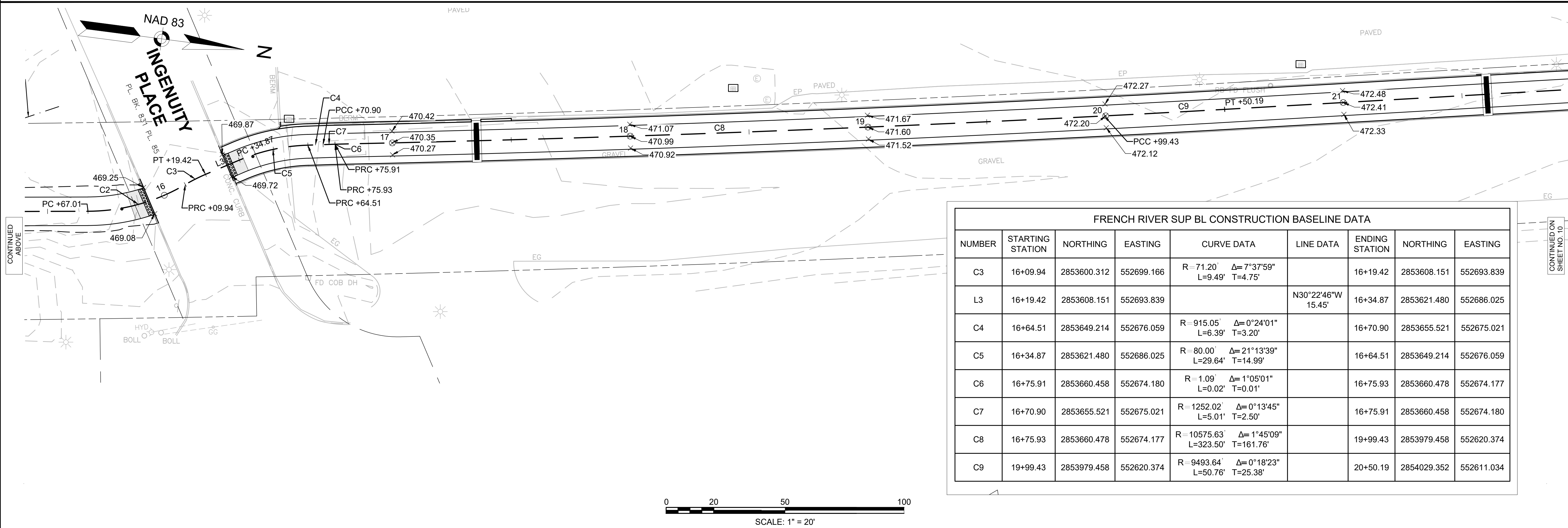
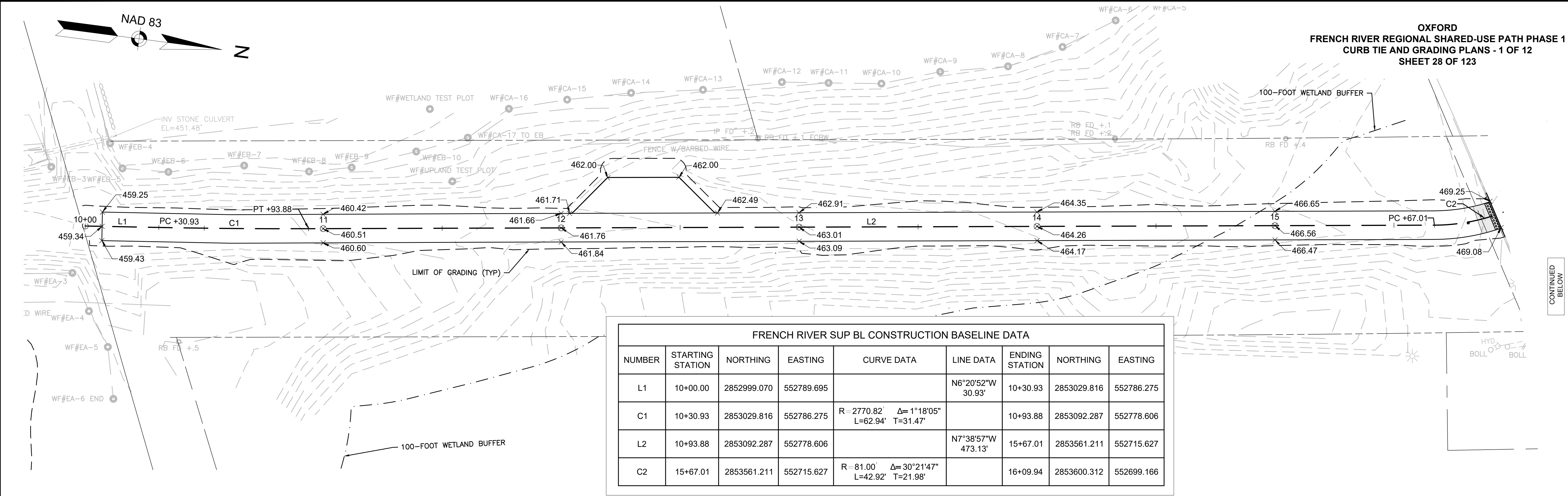


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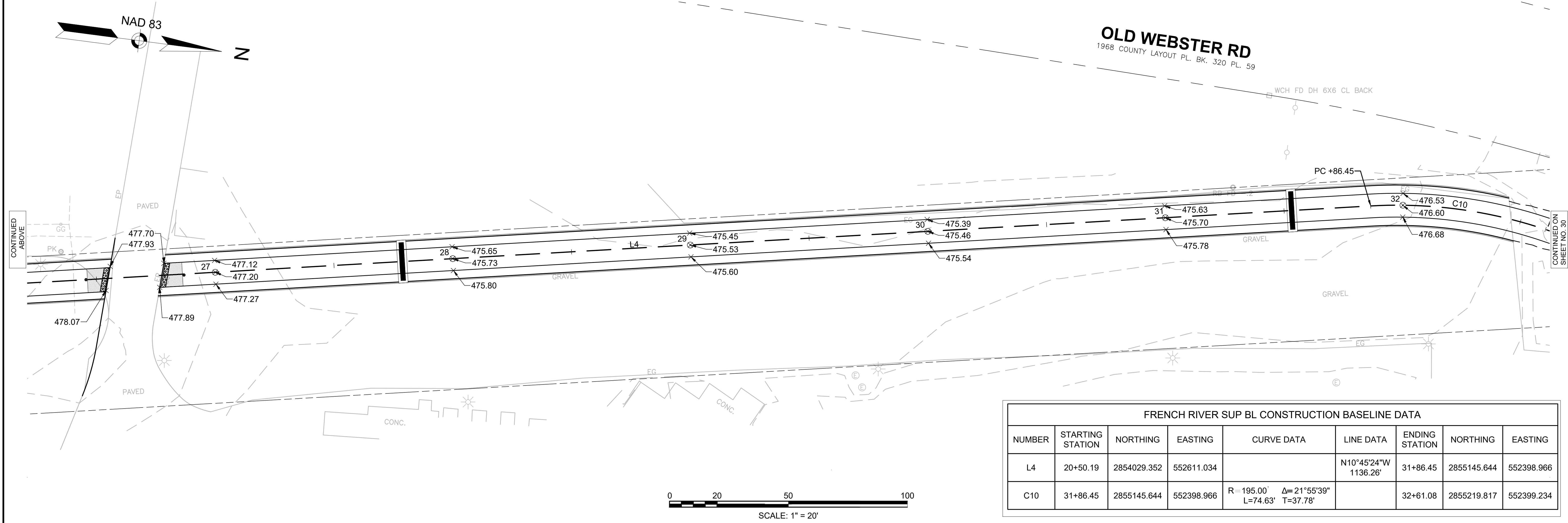
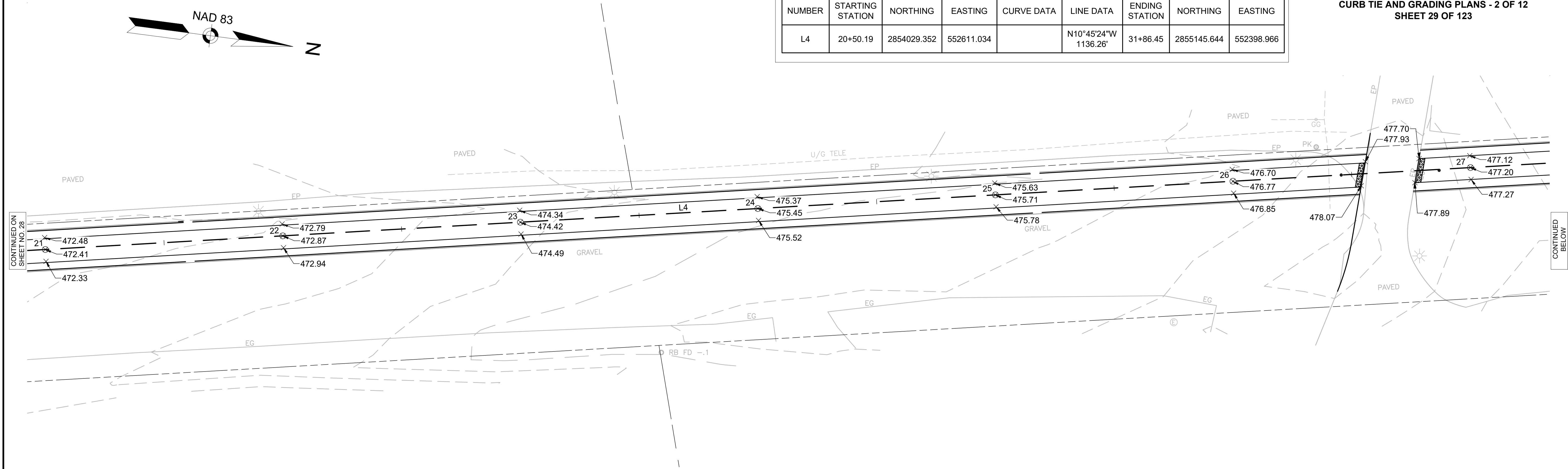
FRENCH RIVER SUP BASELINE





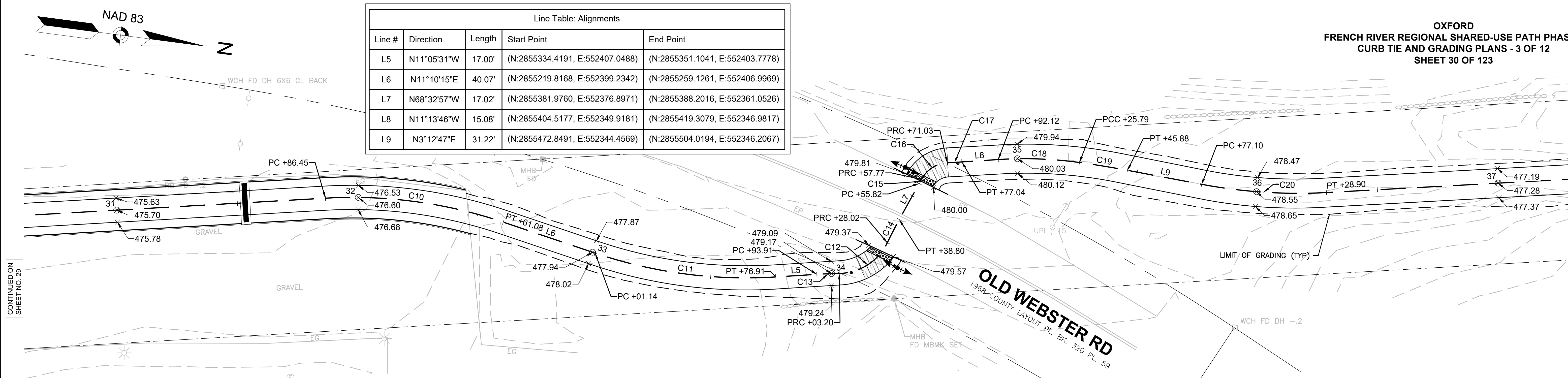
FRENCH RIVER SUP BL CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
L4	20+50.19	2854029.352	552611.034		N10°45'24"W 1136.26'	31+86.45	2855145.644	552398.966

OXFORD
FRENCH RIVER REGIONAL SHARED-USE PATH PHASE 1
CURB TIE AND GRADING PLANS - 2 OF 12
SHEET 29 OF 123



FRENCH RIVER SUP BL CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
L4	20+50.19	2854029.352	552611.034		N10°45'24"W 1136.26'	31+86.45	2855145.644	552398.966
C10	31+86.45	2855145.644	552398.966	R=195.00' Δ=21°55'39" L=74.63' T=37.78'		32+61.08	2855219.817	552399.234

OXFORD
FRENCH RIVER REGIONAL SHARED-USE PATH PHASE 1
CURB TIE AND GRADING PLANS - 3 OF 12
SHEET 30 OF 123

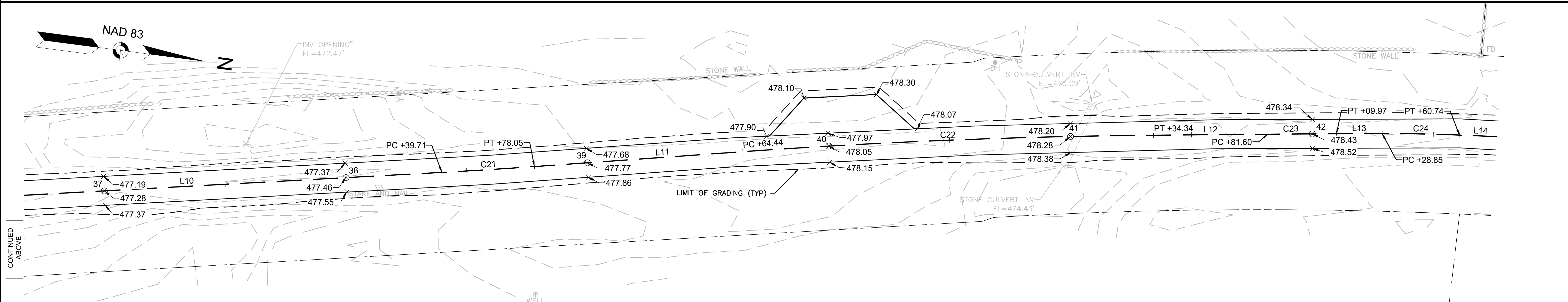


Line Table: Alignments				
Line #	Direction	Length	Start Point	End Point
L5	N11°05'31"W	17.00'	(N:2855334.4191, E:552407.0488)	(N:2855351.1041, E:552403.7778)
L6	N11°10'15"E	40.07'	(N:2855219.8168, E:552399.2342)	(N:2855259.1261, E:552406.9969)
L7	N68°32'57"W	17.02'	(N:2855381.9760, E:552376.8971)	(N:2855388.2016, E:552361.0526)
L8	N11°13'46"W	15.08'	(N:2855404.5177, E:552349.9181)	(N:2855419.3079, E:552346.9817)
L9	N3°12'47"E	31.22'	(N:2855472.8491, E:552344.4569)	(N:2855504.0194, E:552346.2067)

Curve Table: Alignments					
Curve #	Radius	Length	Chord Direction	Start Point	End Point
C10	195.00'	74.628'	N 0° 12' 26" E	(N:2855145.6442,E:552398.9661)	(N:2855219.8168,E:552399.2342)
C11	195.00'	75.769'	N 0° 02' 22" E	(N:2855259.1261,E:552406.9969)	(N:2855334.4191,E:552407.0488)
C12	22.50'	24.821'	N 40° 02' 09" W	(N:2855360.2501,E:552402.2041)	(N:2855378.3049,E:552387.0352)
C13	200.00'	9.281'	N 9° 45' 45" W	(N:2855351.1041,E:552403.7778)	(N:2855360.2501,E:552402.2041)

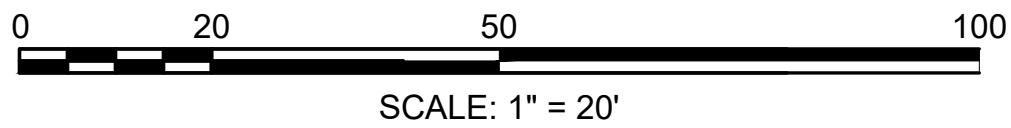
Curve Table: Alignments					
Curve #	Radius	Length	Chord Direction	Start Point	End Point
C14	200.00'	10.784'	N 70° 05' 38" W	(N:2855378.3049,E:552387.0352)	(N:2855381.9760,E:552376.8971)
C15	154.71'	1.949'	N 68° 54' 36" W	(N:2855388.2016,E:552361.0526)	(N:2855388.9028,E:552359.2346)
C16	13.00'	13.262'	N 40° 02' 44" W	(N:2855388.9028,E:552359.2346)	(N:2855398.6207,E:552351.0671)
C17	841.26'	6.008'	N 11° 01' 29" W	(N:2855398.6207,E:552351.0671)	(N:2855404.5177,E:552349.9181)

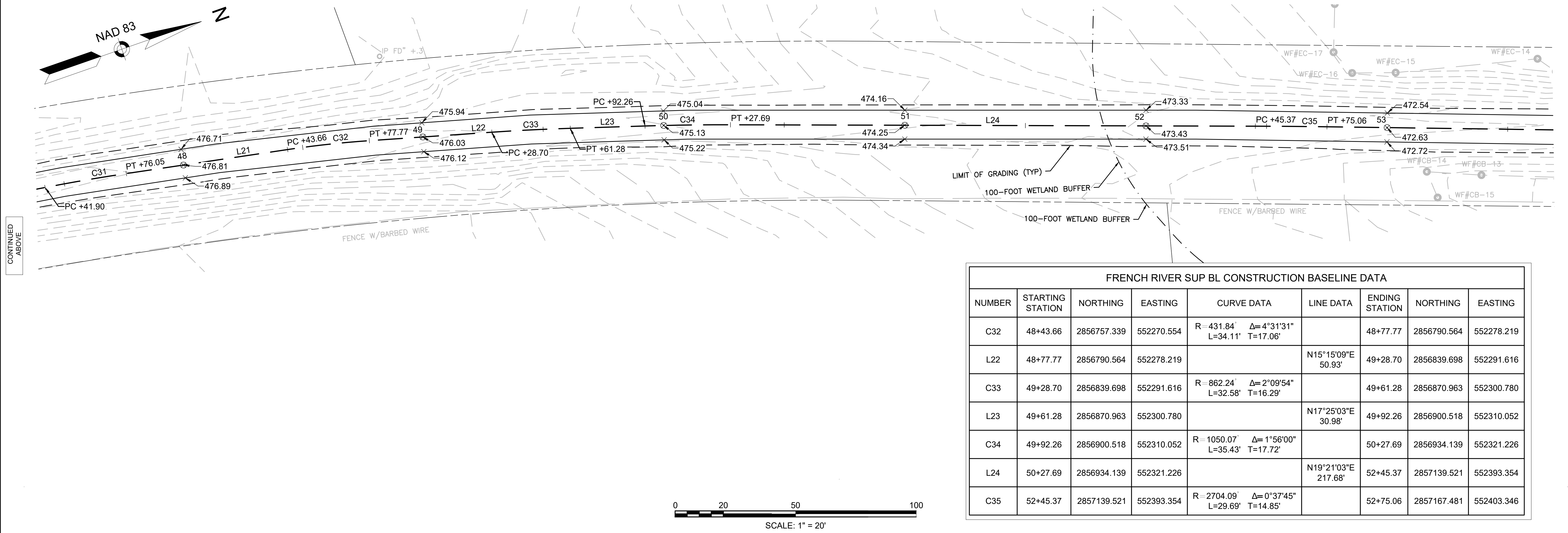
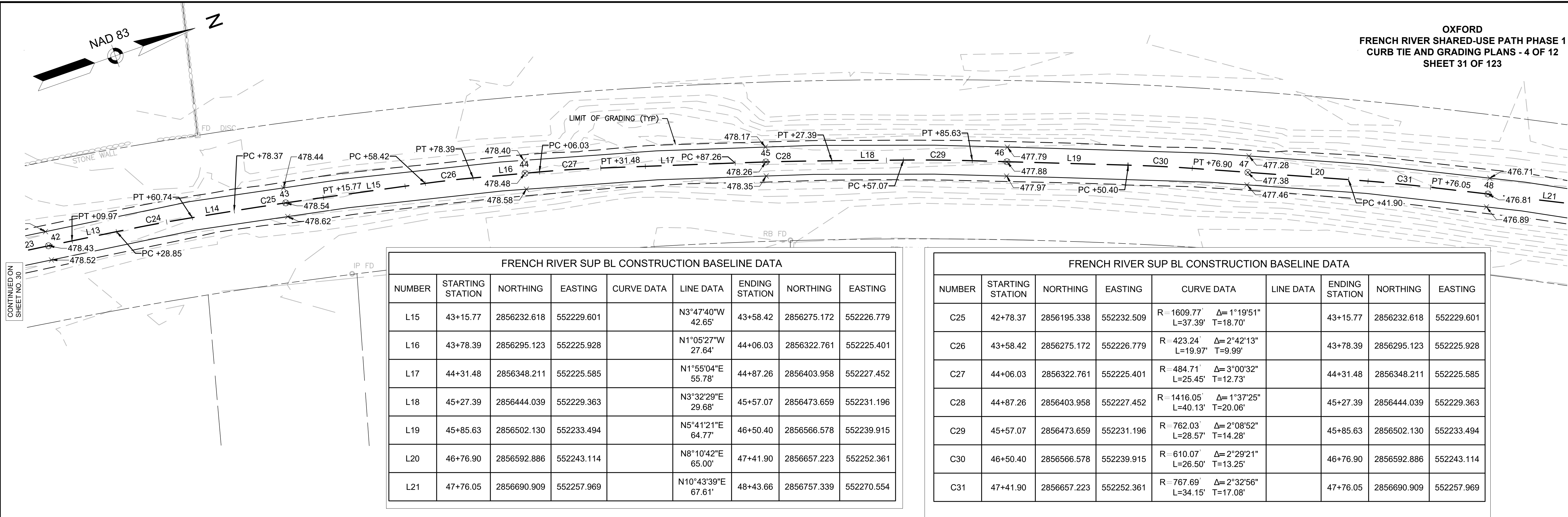
Curve Table: Alignments					
Curve #	Radius	Length	Chord Direction	Start Point	End Point
C18	165.46'	33.664'	N 5° 24' 03" W	(N:2855419.3079,E:552346.9817)	(N:2855452.7645,E:552343.8186)
C19	413.41'	20.097'	N 1° 49' 13" E	(N:2855452.7645,E:552343.8186)	(N:2855472.8491,E:552344.4569)
C20	214.76'	51.797'	N 3° 41' 48" W	(N:2855504.0194,E:552346.2067)	(N:2855555.5838,E:552342.8751)



FRENCH RIVER SUP BL CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
C21	38+39.71	2855762.792	552304.073	R = 2302.53' Δ= 0°57'14" L=38.34' T=19.17"		38+78.05	2855800.414	552296.704
C22	39+64.44	2855885.056	552279.390	R = 2714.20' Δ= 3°35'12" L=169.90' T=84.98"		41+34.34	2856052.469	552250.572
C23	41+81.60	2856099.271	552244.017	R = 5324.36' Δ= 0°18'19" L=28.37' T=14.19"		42+09.97	2856127.378	552240.156
C24	42+28.85	2856146.084	552237.637	R = 718.69' Δ= 2°32'34" L=31.90' T=15.95"		42+60.74	2856177.779	552234.084

FRENCH RIVER SUP BL CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
L10	36+28.90	2855555.584	552342.875		N10°36'23"W 210.81'	38+39.71	2855762.792	552304.073
L11	38+78.05	2855800.414	552296.704		N11°33'37"W 86.40'	39+64.44	2855885.056	552279.390
L12	41+34.34	2856052.469	552250.572		N7°58'25"W 47.26'	41+81.60	2856099.271	552244.017
L13	42+09.97	2856127.378	552240.156		N7°40'06"W 18.87'	42+28.85	2856146.084	552237.637
L14	42+60.74	2856177.779	552234.084		N5°07'32"W 17.63'	42+78.37	2856195.338	552232.509







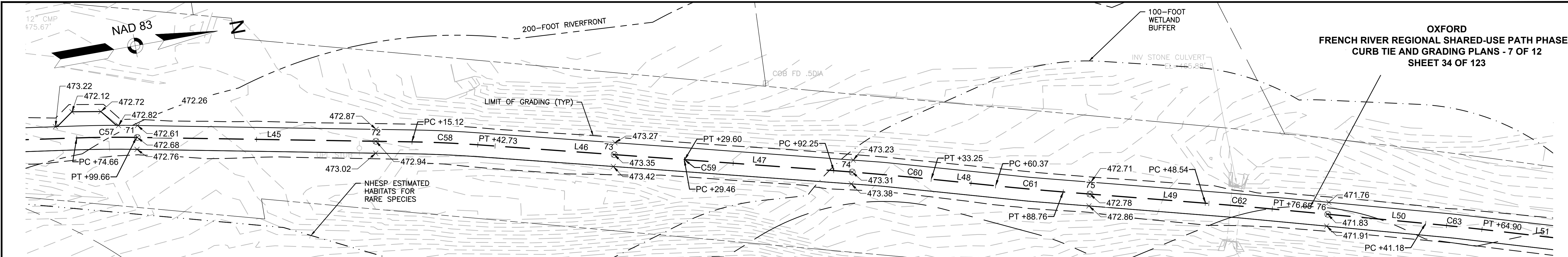
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BELOW



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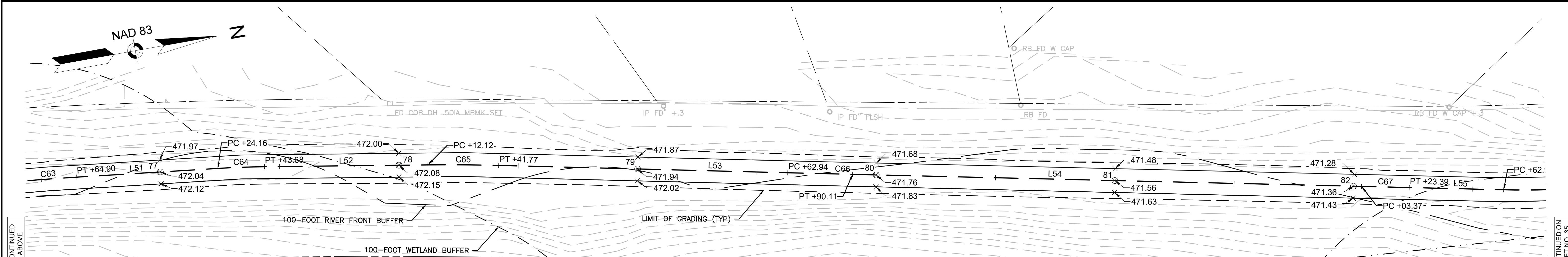
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MassDOT DWT Name: MassDOT_C3D_Standard
MassDOT DWT Version: v2023
MassDOT CAD Standard Release: r5.1.1
Release Date: December 2023



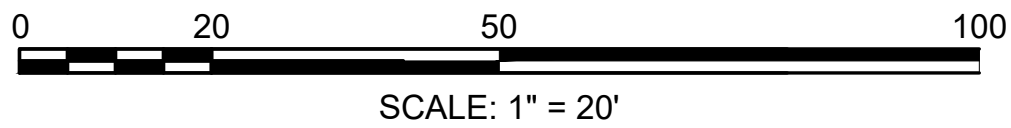
FRENCH RIVER SUP BL CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
C57	70+74.66	2858591.842	552708.381	R = 495.00' Δ= 2°53'38" L=25.00' T=12.50'		70+99.66	2858616.839	552708.155
L45	70+99.66	2858616.839	552708.155		N0°55'40"E 115.46'	72+15.12	2858732.280	552710.025
C58	72+15.12	2858732.280	552710.025	R = 495.00' Δ= 3°11'45" L=27.61' T=13.81'		72+42.73	2858759.859	552711.241
L46	72+42.73	2858759.859	552711.241		N4°07'25"E 86.73'	73+29.46	2858846.364	552717.478
C59	73+29.46	2858846.364	552717.478	R = 100.00' Δ= 0°04'58" L=0.14' T=0.07'		73+29.60	2858846.508	552717.488
L47	73+29.60	2858846.508	552717.488		N4°12'23"E 62.65'	73+92.25	2858908.989	552722.084
C60	73+92.25	2858908.989	552722.084	R = 1426.71' Δ= 1°38'47" L=40.99' T=20.50'		74+33.25	2858949.823	552725.677

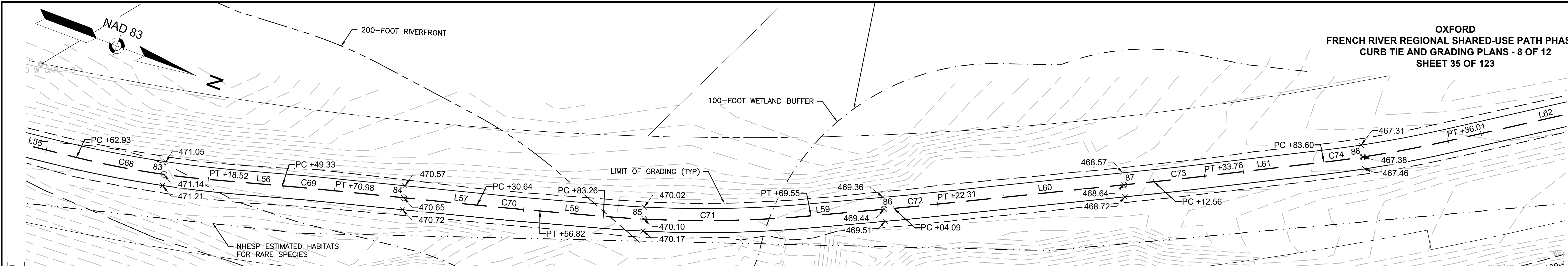
FRENCH RIVER SUP BL CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
L48	74+33.25	2858949.823	552725.677		N5°51'09"E 27.13'	74+60.37	2858976.808	552728.443
C61	74+60.37	2858976.808	552728.443	R = 1228.01' Δ= 1°19'28" L=28.38' T=14.19'		74+88.76	2859005.075	552731.011
L49	74+88.76	2859005.075	552731.011		N4°31'42"E 59.78'	75+48.54	2859064.668	552735.731
C62	75+48.54	2859064.668	552735.731	R = 1876.80' Δ= 0°51'30" L=28.12' T=14.06'		75+76.65	2859092.681	552738.160
L50	75+76.65	2859092.681	552738.160		N5°23'12"E 64.53'	76+41.18	2859156.924	552744.218
C63	76+41.18	2859156.924	552744.218	R = 1092.77' Δ= 1°14'38" L=23.72' T=11.86'		76+64.90	2859180.517	552746.701



FRENCH RIVER SUP BL CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
L51	76+64.90	2859180.517	552746.701		N6°37'50"E 59.26'	77+24.16	2859239.379	552753.544
C64	77+24.16	2859239.379	552753.544	R = 384.77' Δ= 2°54'25" L=19.52' T=9.76'		77+43.68	2859258.704	552756.289
L52	77+43.68	2859258.704	552756.289		N9°32'14"E 68.43'	78+12.12	2859326.190	552767.627
C65	78+12.12	2859326.190	552767.627	R = 813.39' Δ= 2°05'19" L=29.65' T=14.83'		78+41.77	2859355.335	552773.072
L53	78+41.77	2859355.335	552773.072		N11°37'33"E 121.17'	79+62.94	2859474.019	552797.490

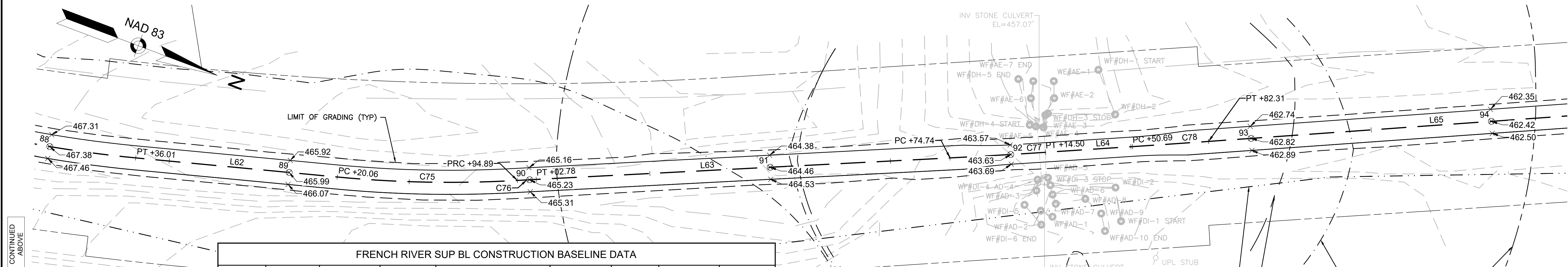
FRENCH RIVER SUP BL CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
C66	79+62.94	2859474.019	552797.490	R = 15541.60' Δ= 0°06'01" L=27.18' T=13.59'		79+90.11	2859500.643	552802.944
L54	79+90.11	2859500.643	552802.944		N11°31'33"E 213.26'	82+03.37	2859709.598	552845.554
C67	82+03.37	2859709.598	552845.554	R = 54645.90' Δ= 0°01'16" L=20.02' T=10.01'		82+23.39	2859729.211	552849.557
L55	82+23.39	2859729.211	552849.557		N11°32'48"E 39.54'	82+62.93	2859767.956	552857.472



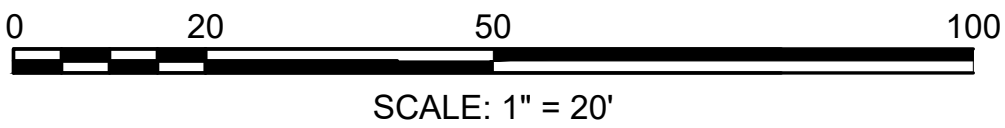


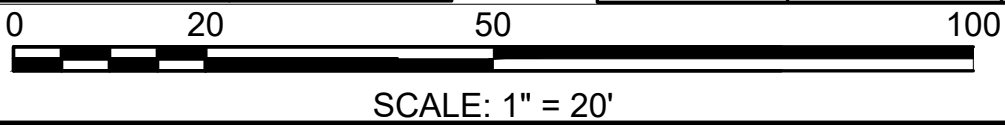
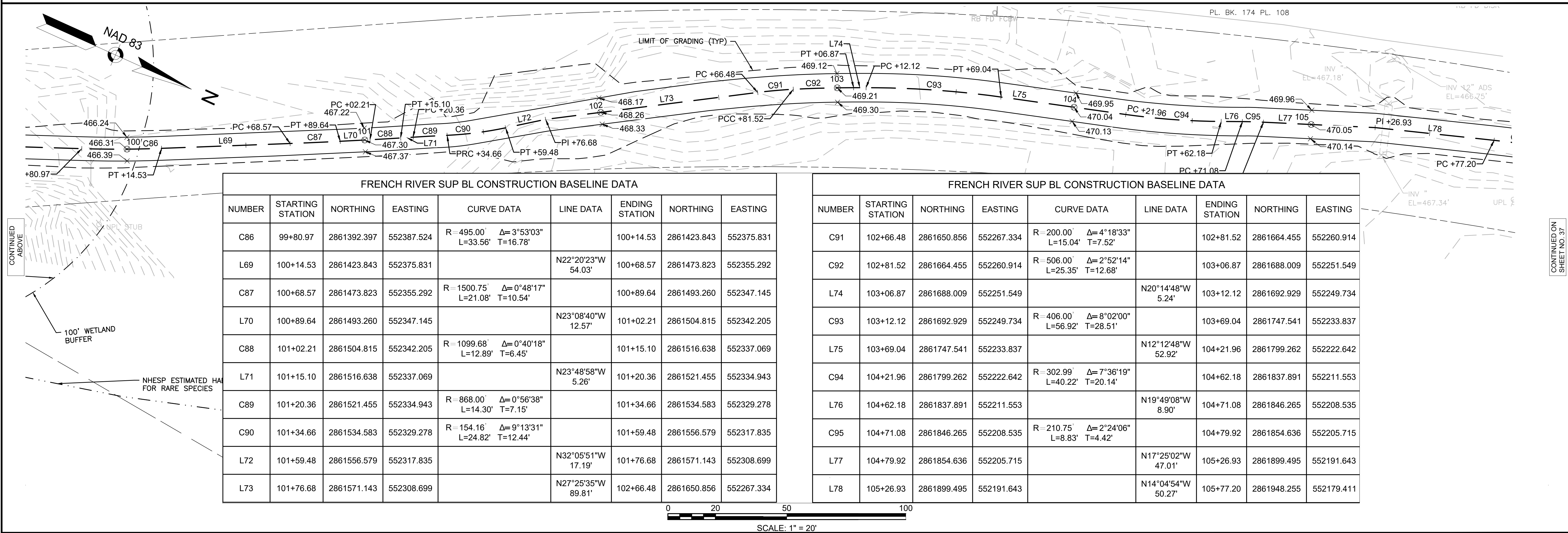
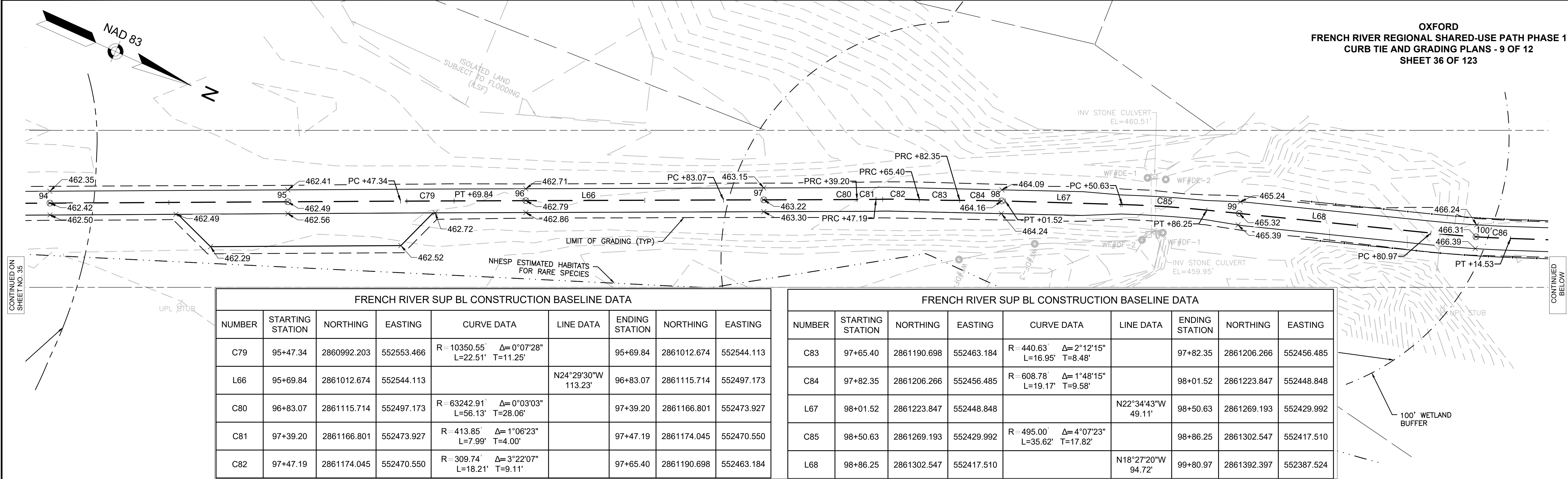
FRENCH RIVER SUP BL CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
C68	82+62.93	2859767.956	552857.472	R = 353.94' Δ= 8°59'56" L=55.59' T=27.85'		83+18.52	2859823.070	552864.286
L56	83+18.52	2859823.070	552864.286		N2°32'52"E 30.81'	83+49.33	2859853.845	552865.655
C69	83+49.33	2859853.845	552865.655	R = 1515.59' Δ= 0°49'06" L=21.65' T=10.82'		83+70.98	2859875.465	552866.772
L57	83+70.98	2859875.465	552866.772		N3°21'58"E 59.66'	84+30.64	2859935.026	552870.275
C70	84+30.64	2859935.026	552870.275	R = 1610.72' Δ= 0°55'52" L=26.18' T=13.09'		84+56.82	2859961.171	552871.600
L58	84+56.82	2859961.171	552871.600		N2°26'06"E 26.44'	84+83.26	2859987.584	552872.723
C71	84+83.26	2859987.584	552872.723	R = 495.00' Δ= 9°59'17" L=86.29' T=43.25'		85+69.55	2860073.679	552868.875

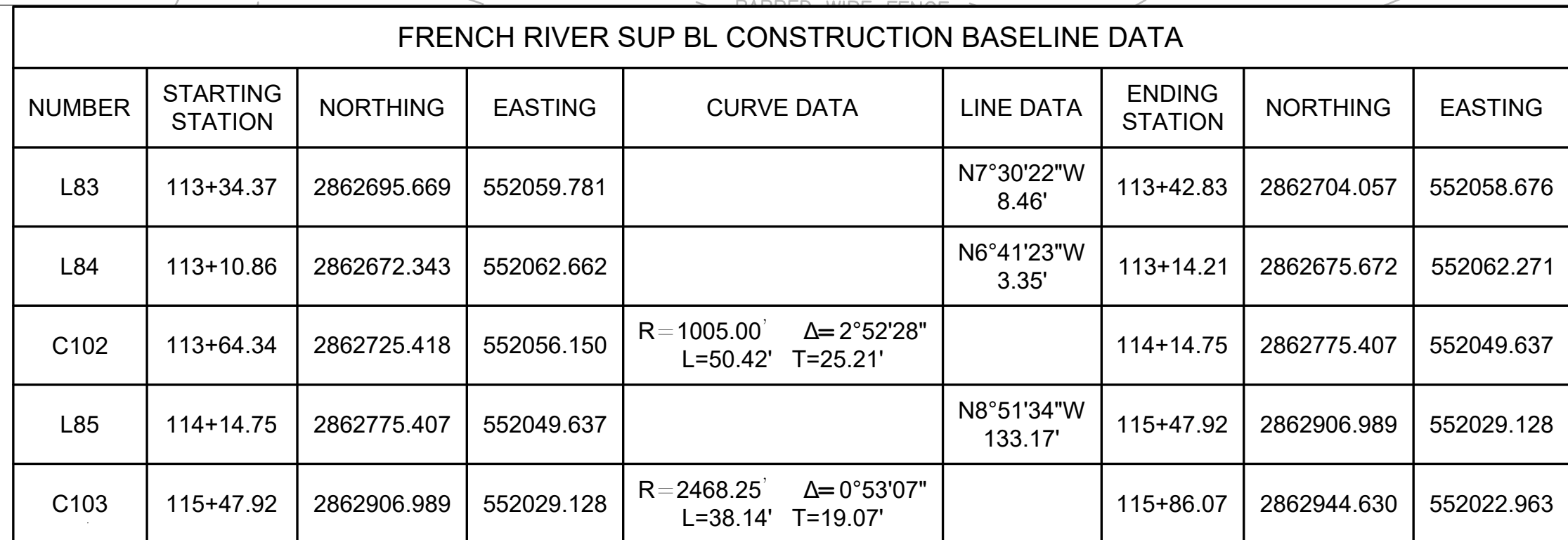
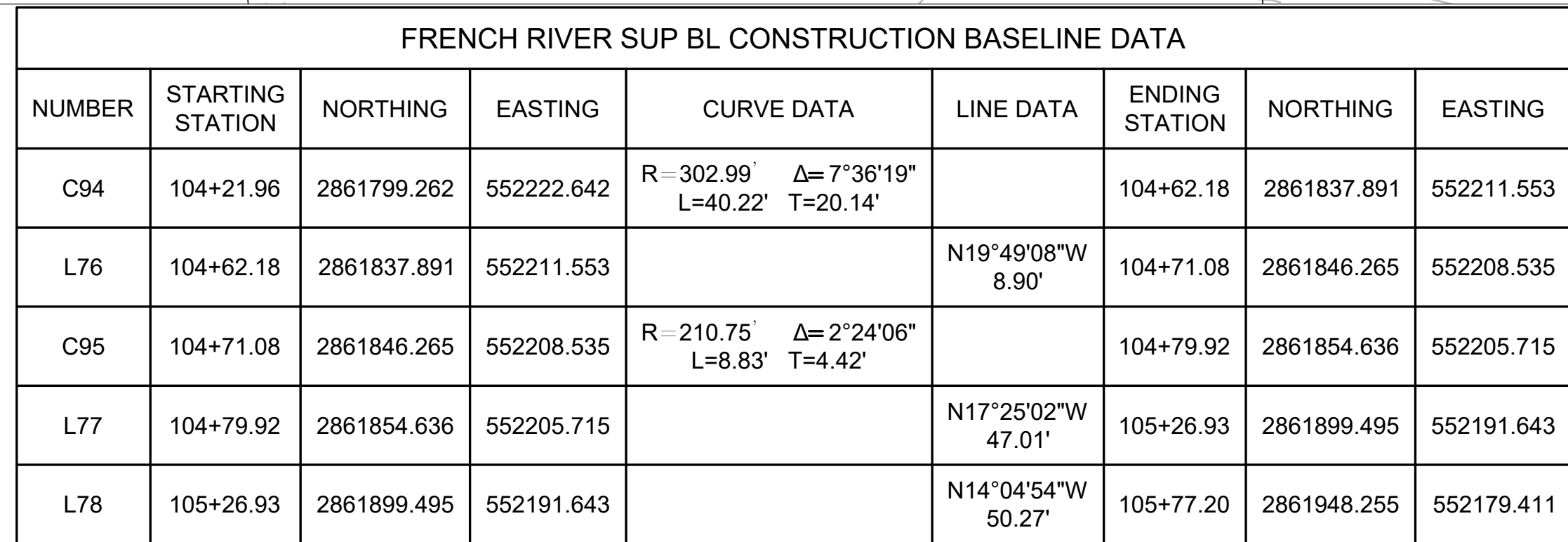
FRENCH RIVER SUP BL CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
L59	85+69.55	2860073.679	552868.875		N7°33'11"W 34.54'	86+04.09	2860107.918	552864.336
C72	86+04.09	2860107.918	552864.336	R = 1348.73' Δ= 0°46'27" L=18.22' T=9.11'		86+22.31	2860125.967	552861.818
L60	86+22.31	2860125.967	552861.818		N8°19'38"W 90.25'	87+12.56	2860215.265	552848.748
C73	87+12.56	2860215.265	552848.748	R = 1614.20' Δ= 0°45'09" L=21.20' T=10.60'		87+33.76	2860236.223	552845.540
L61	87+33.76	2860236.223	552845.540		N9°04'47"W 49.84'	87+83.60	2860285.437	552837.675
C74	87+83.60	2860285.437	552837.675	R = 495.00' Δ= 6°04'00" L=52.41' T=26.23'		88+36.01	2860336.659	552826.681
L62	88+36.01	2860336.659	552826.681		N15°08'47"W 84.05'	89+20.06	2860417.788	552804.720

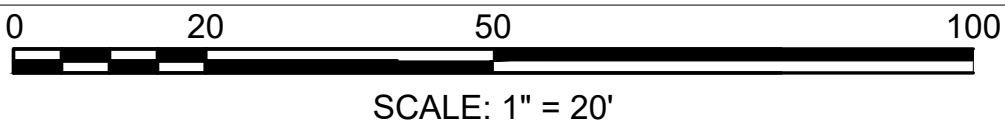
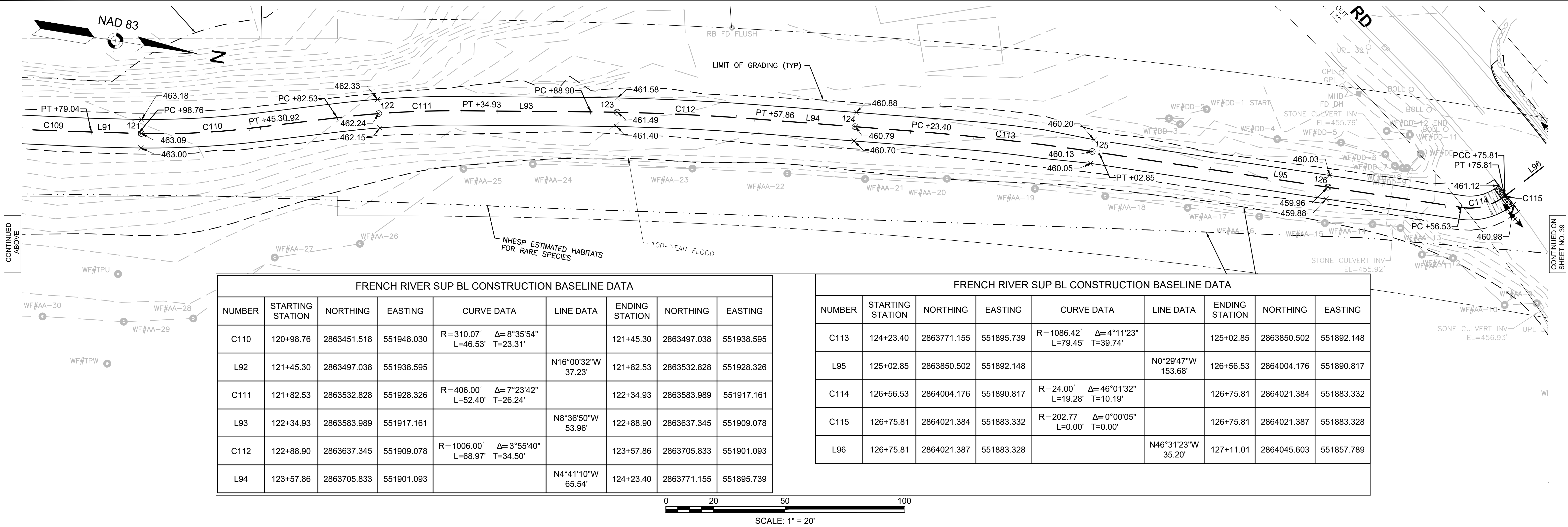
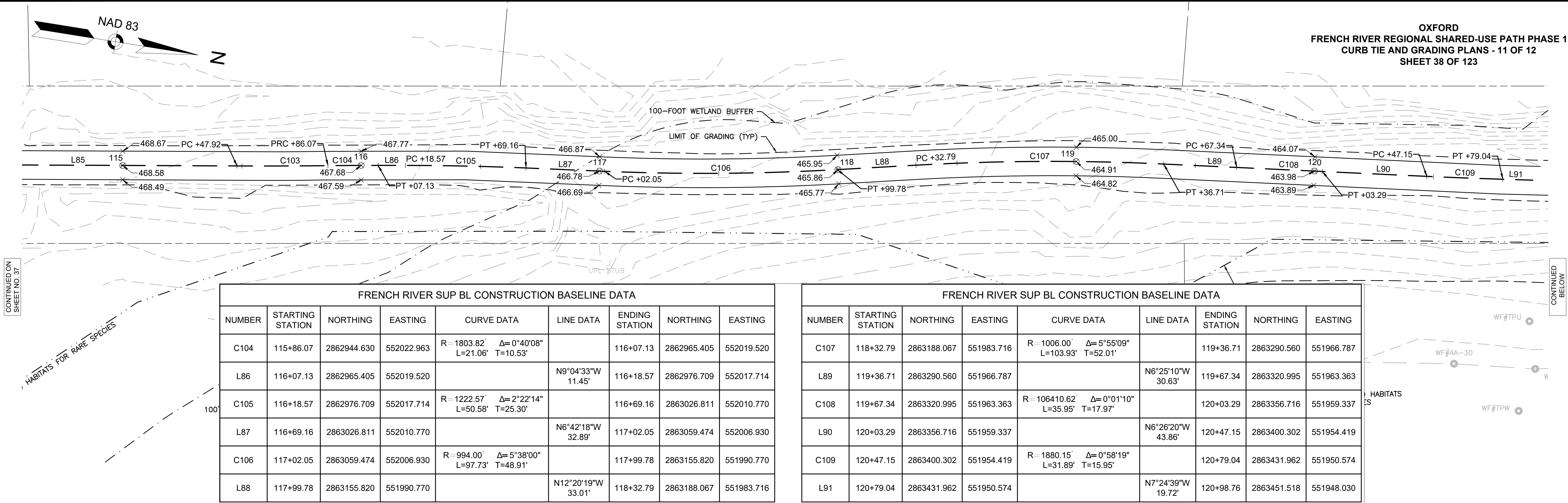


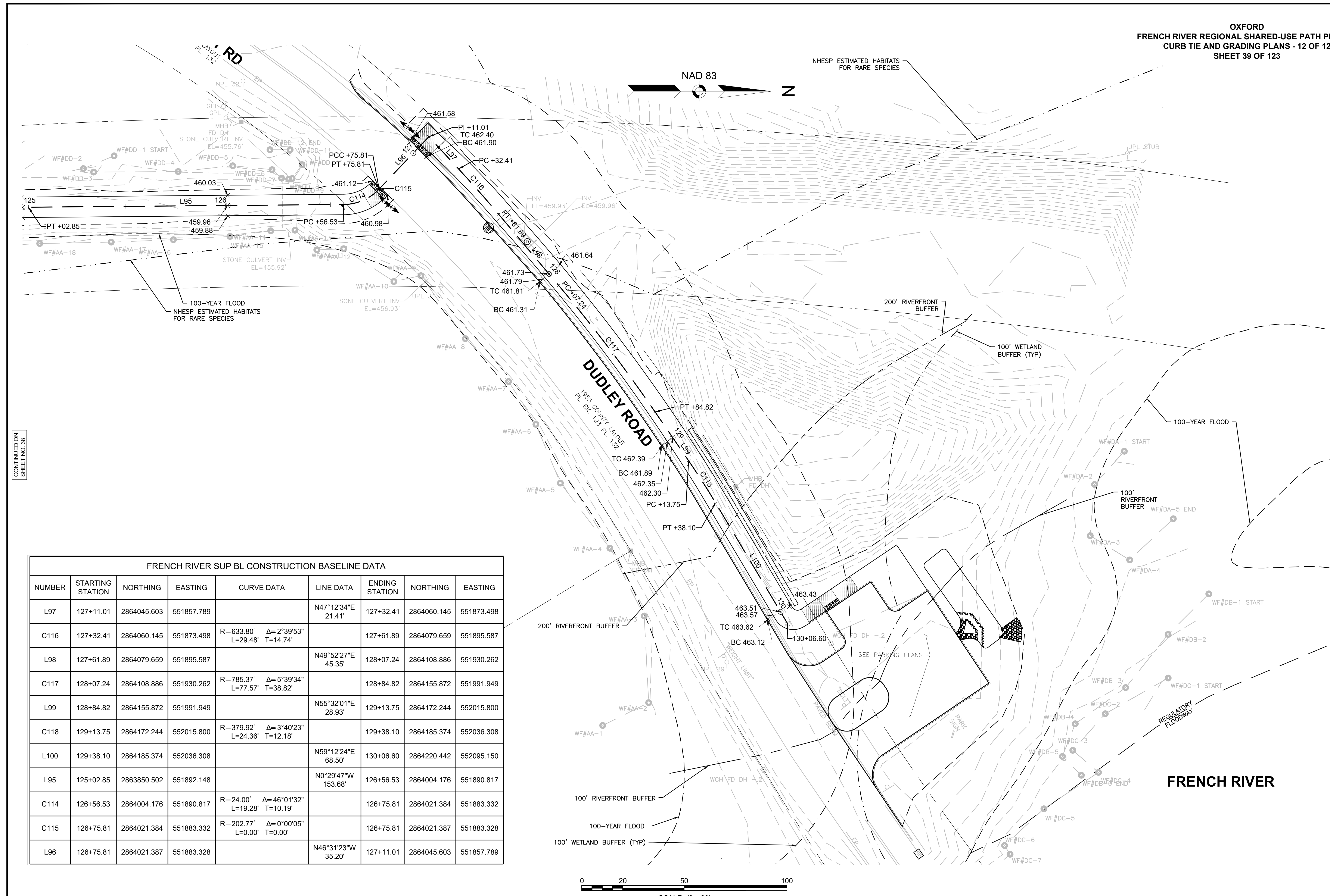
FRENCH RIVER SUP BL CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
C75	89+20.06	2860417.788	552804.720	R = 495.00' Δ= 8°39'41" L=74.83' T=37.49'		89+94.89	2860488.267	552779.794
C76	89+94.89	2860488.267	552779.794	R = 1628.01' Δ= 0°16'40" L=7.89' T=3.95'		90+02.78	2860495.497	552776.625
L63	90+02.78	2860495.497	552776.625		N23°31'48"W 171.96'	91+74.74	2860653.157	552707.975
C77	91+74.74	2860653.157	552707.975	R = 2915.76' Δ= 0°46'53" L=39.76' T=19.88'		92+14.50	2860689.500	552691.854
L64	92+14.50	2860689.500	552691.854		N24°18'40"W 36.19'	92+50.69	2860722.477	552676.956
C78	92+50.69	2860722.477	552676.956	R = 5937.64' Δ= 0°18'19" L=31.62' T=15.81'		92+82.31	2860751.261	552663.861
L65	92+82.31	2860751.261	552663.861		N24°36'59"W 265.03'	95+47.34	2860992.203	552553.466





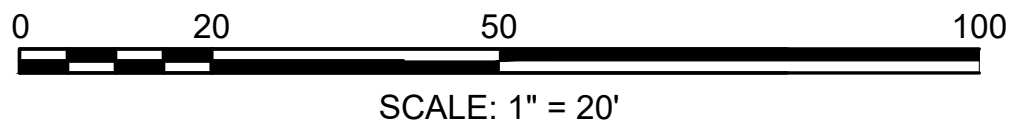






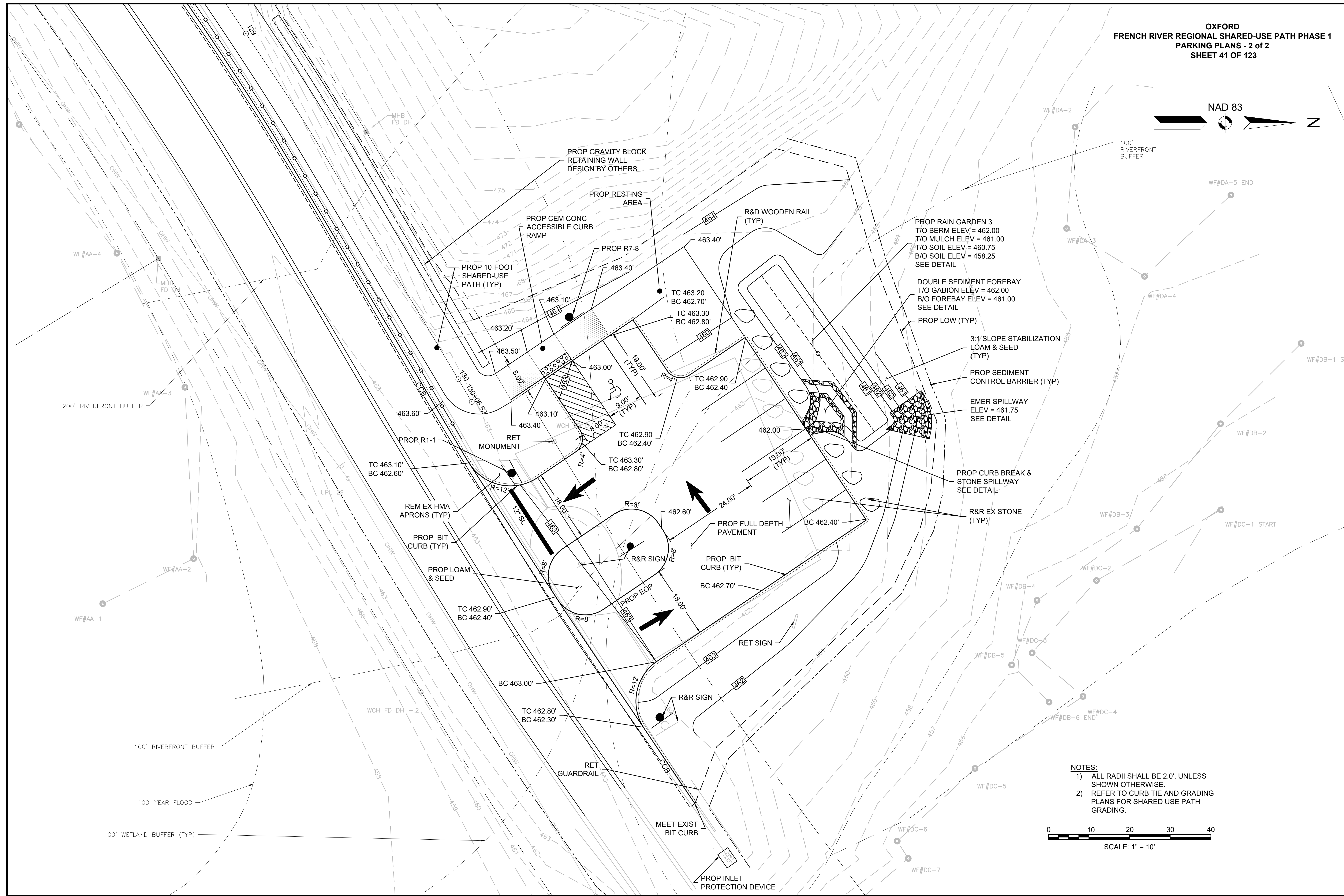
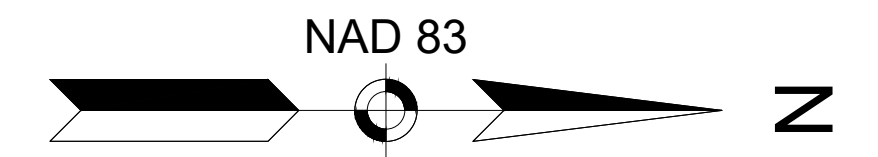
CONTINUED ON
SHEET NO. 38

FRENCH RIVER SUP BL CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
L97	127+11.01	2864045.603	551857.789		N47°12'34"E 21.41'	127+32.41	2864060.145	551873.498
C116	127+32.41	2864060.145	551873.498	R= 633.80' L=29.48' Δ= 2°39'53" T=14.74'		127+61.89	2864079.659	551895.587
L98	127+61.89	2864079.659	551895.587		N49°52'27"E 45.35'	128+07.24	2864108.886	551930.262
C117	128+07.24	2864108.886	551930.262	R= 785.37' L=77.57' Δ= 5°39'34" T=38.82'		128+84.82	2864155.872	551991.949
L99	128+84.82	2864155.872	551991.949		N55°32'01"E 28.93'	129+13.75	2864172.244	552015.800
C118	129+13.75	2864172.244	552015.800	R= 379.92' L=24.36' Δ= 3°40'23" T=12.18'		129+38.10	2864185.374	552036.308
L100	129+38.10	2864185.374	552036.308		N59°12'24"E 68.50'	130+06.60	2864220.442	552095.150
L95	125+02.85	2863850.502	551892.148		N0°29'47"W 153.68'	126+56.53	2864004.176	551890.817
C114	126+56.53	2864004.176	551890.817	R= 24.00' L=19.28' Δ= 46°01'32" T=10.19'		126+75.81	2864021.384	551883.332
C115	126+75.81	2864021.384	551883.332	R= 202.77' L=0.00' Δ= 0°00'05" T=0.00'		126+75.81	2864021.387	551883.328
L96	126+75.81	2864021.387	551883.328		N46°31'23"W 35.20'	127+11.01	2864045.603	551857.789

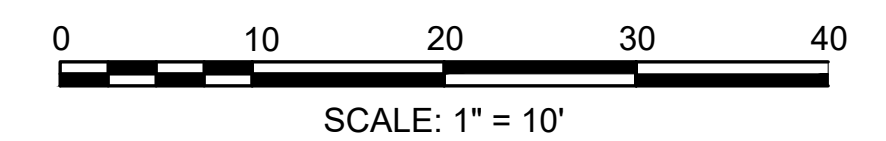




OXFORD
FRENCH RIVER REGIONAL SHARED-USE PATH PHASE 1
PARKING PLANS - 2 of 2
SHEET 41 OF 123



- NOTES:
- 1) ALL RADII SHALL BE 2.0', UNLESS SHOWN OTHERWISE.
 - 2) REFER TO CURB TIE AND GRADING PLANS FOR SHARED USE PATH GRADING.



T1421_LANDSCAPE PLANS.DWG Plotted on 30-Jan-2025 10:44 PM

CONTINUED ON
SHEET NO. 42

T1421 LANDSCAPE PLANS.DWG Plotted on 30-Jan-2025 10:34 PM

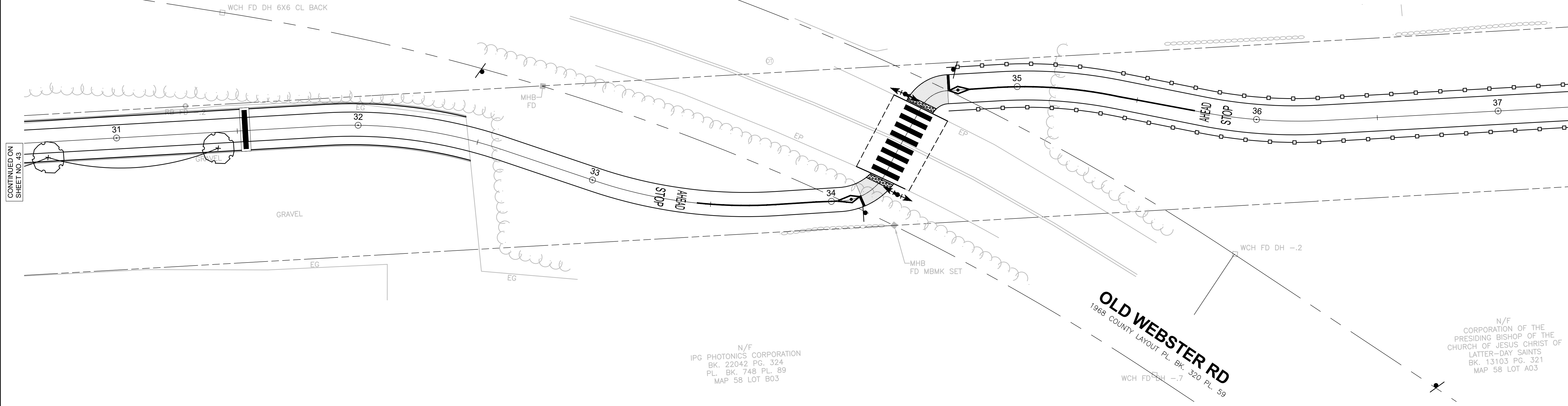


OXFORD
FRENCH RIVER SHARED-USE PATH PHASE 1
LANDSCAPE PLANS - 3 OF 8
SHEET 44 OF 123

INV 24" A
EL=472..

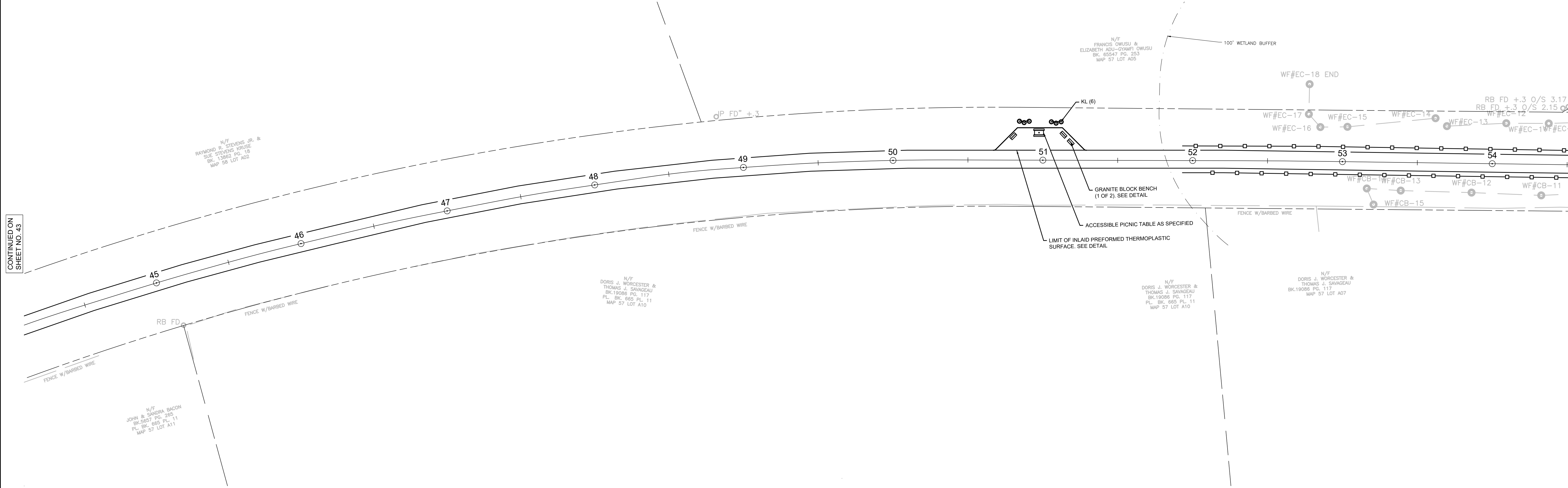
N/F
BVNLC OXFORD OWNER LLC
BK. 68464 PG. 307
PL. BK. 813 PL. 14
MAP 58 LOT A04.01/A04.02

OLD WEBSTER RD
1968 COUNTY LAYOUT PL. BK. 320 PL. 59



N/F
IPG PHOTONICS CORPORATION
BK. 22042 PG. 324
PL. BK. 748 PL. 89
MAP 58 LOT B03

N/F
CORPORATION OF THE
PRESIDING BISHOP OF THE
CHURCH OF JESUS CHRIST OF
LATTER-DAY SAINTS
BK. 13103 PG. 321
MAP 58 LOT A03



N/F
RAYMOND R. STEVENS JR. &
SUE STEVENS KRUSE
BK. 13662 PG. 18
MAP 58 LOT A02

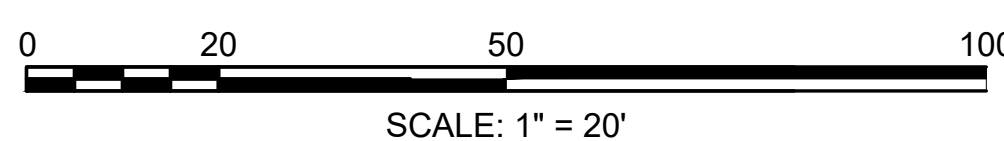
N/F
FRANCIS OWUSU &
ELIZABETH ADU-GYAMFI OWUSU
BK. 65547 PG. 253
MAP 57 LOT A05

N/F
DORIS J. WORCESTER &
THOMAS J. SAVAGEAU
BK. 19086 PG. 117
PL. BK. 665 PL. 11
MAP 57 LOT A10

N/F
DORIS J. WORCESTER &
THOMAS J. SAVAGEAU
BK. 19086 PG. 117
PL. BK. 665 PL. 11
MAP 57 LOT A10

N/F
DORIS J. WORCESTER &
THOMAS J. SAVAGEAU
BK. 19086 PG. 117
MAP 57 LOT A07

N/F
JOHN & SANDRA BACON
BK. 5557 PG. 285
PL. BK. 665 PL. 11
MAP 57 LOT A11



OXFORD
FRENCH RIVER SHARED-USE PATH PHASE 1
LANDSCAPE PLANS - 4 OF 8
SHEET 45 OF 123

BK. 60249 PG. 55
PL. BK. 607 PL. 40
MAP 57A LOT B7.01

CB
RIM=480.49'
INV.=476.7' FD WHC
WELL

BK. 607 PL. 40

SNEADE DR

OLD WEBSTER RD

INV. 12" CI
EL.=475.67

FD ROUGH CUT SS DH NOEL

N/F
OWNERS UNKNOWN
MAP 57A LOT C9

N/F
DAVID NOONEY
BK. 54913 PG. 75
MAP 57 LOT A07.04

N/F
TOWN OF OXFORD
MAP 57A LOT E1

HARWOOD ST
1955 COUNTY LAYOUT PL. BK. 209 PL. 4

HARWOOD ST
1955 COUNTY LAYOUT PL. BK. 209 PL. 4

FRENCH RIVER

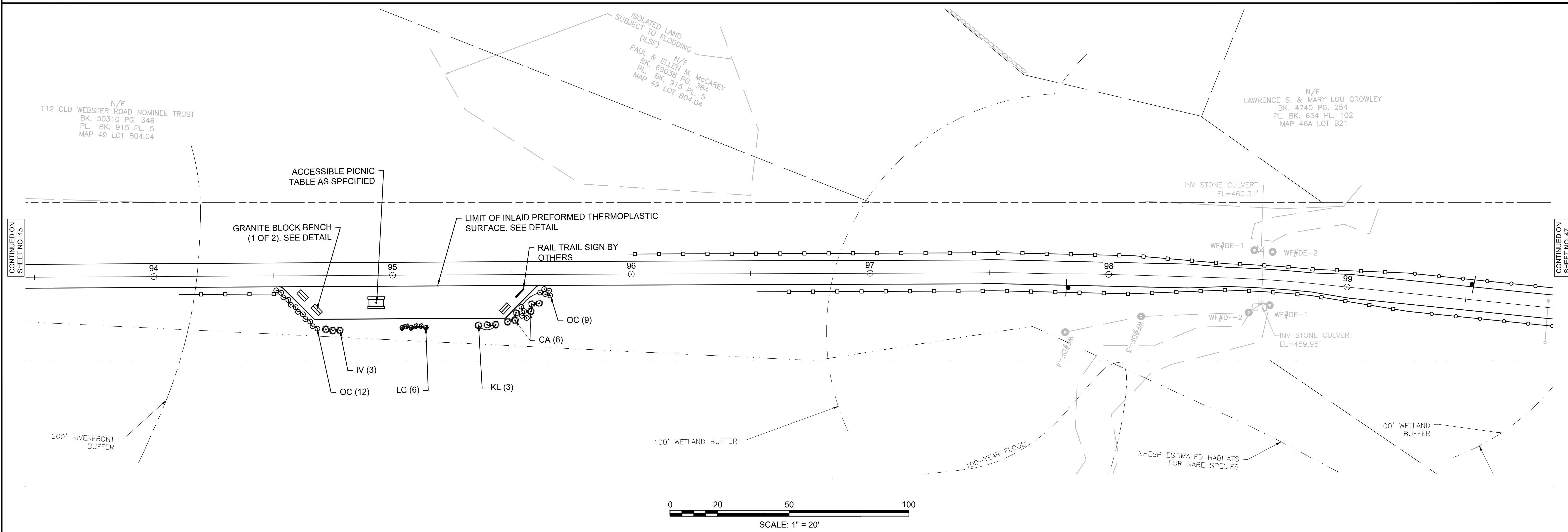
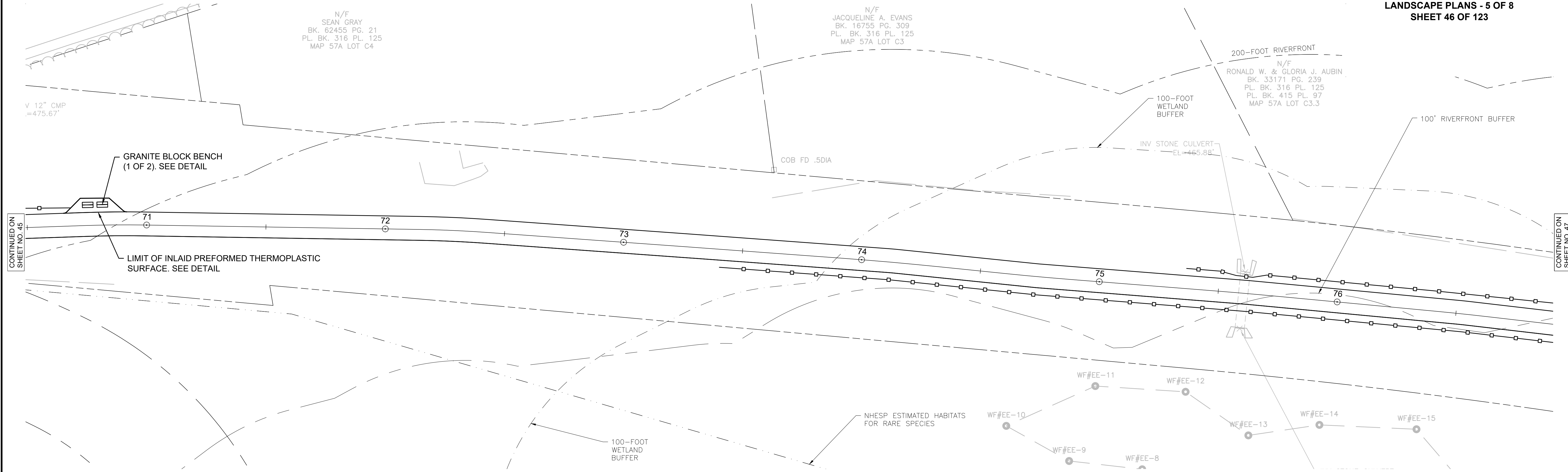
WF#CE-2 WF#CE-1

0 20 50 100
SCALE: 1" = 20'

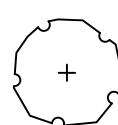
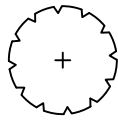
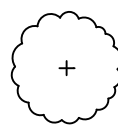
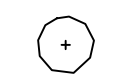
CONTINUED ON
SHEET NO. 44

CONTINUED ON
SHEET NO. 46

OXFORD
FRENCH RIVER SHARED-USE PATH PHASE 1
LANDSCAPE PLANS - 5 OF 8
SHEET 46 OF 123



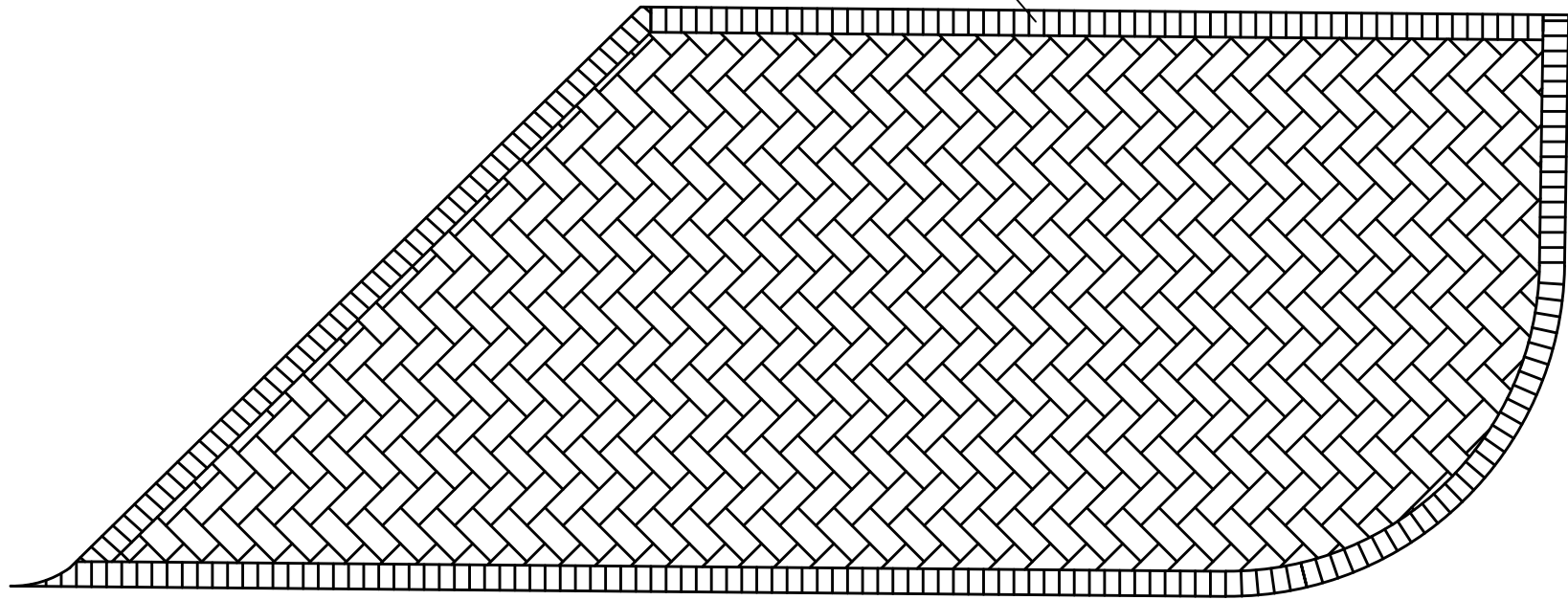


	Plant Schedule					
	Symbol	Quantity	Botanical Name	Common Name	Size	Root
	Trees					
	AR	27	ACER RUBRUM 'ARMSTRONG'	RED MAPLE 'ARMSTRONG'	2-2.5" CAL.	BB
	TC	31	TILIA CORDATA 'GREENSPIRE'	GREENSPIRE LITTLELEAF LINDEN	2-2.5" CAL.	BB
	AC	11	AMELANCHIER CANADENSIS	SERVICE BERRY	5'-6' H	MULTI-STEMMED
	CC	4	CERCIS CANADENSIS	EASTERN REDBUD	2-2.5" CAL.	BB
	Shrubs					
	VC	3	VACCINIUM CORYMBOSUM	HIGHBUSH BLUEBERRY	3'-3.5' H	BB
	HQ	3	HYDRANGEA QUERCIFOLIA 'SNOW QUEEN'	OAKLEAF HYDRANGEA 'SNOW QUEEN'	3'-3.5' H	BB
	CA	24	CLETHRA ALNIFOLIA	SUMMERSWEET 'HUMMINGBIRD'	3'-3.5' H	
	KL	12	KALMIA LATIFOLIA	MOUNTAIN LAUREL	3'-4' H	COLLECTED
	IV	12	ILEX VERTICILLATA 'WINTER RED'	WINTER RED WINTERBERRY	2'-2.5' H	1 MALE
	Perennials					
	RC	34	AQUILEGIA CANADENSIS	RED COLUMBINE	#3 POT	
	LC	28	LOBELIA CARDINALIS	CARDINAL FLOWER	#3 POT	
	MF	16	MONARDA FISTULOSA	WILD BERGAMOT	#2 POT	
	AA	18	ASTILBE X ARENSDII 'AMETHYST'	AMETHYST ASTILBE	#2 POT	
	VR	13	VERONICA SPICATA 'GOODNESS GROWS'	GOODNESS GROWS SPIKE SPEEDWELL	#2 POT	
	RL	36	RUDBECKIA LACINIATA	CUTLEAF CONEFLOWER	#2 POT	
	OC	37	OSMUNDA CINNAMOMEA	CINNAMON FERN	#2 POT	

LANDSCAPE NOTES

- UNLESS OTHERWISE NOTED, ALL EXISTING TREES AND OTHER PLANT MATERIAL TO BE PROTECTED FOR THE DURATION OF THE PROJECT.
- PRIOR TO THE PRE-CONSTRUCTION MEETING, CONTRACTOR SHALL CALL "DIGSAFE" TO HAVE EXISTING UTILITIES MARKED. CONTRACTOR SHALL MAINTAIN MARKINGS FOR THE DURATION OF THE PROJECT.
- THE CONTRACTOR SHALL SUPPLY ALL PLANT MATERIAL IN QUANTITIES SUFFICIENT TO COMPLETE THE PLANTING PLAN AS SHOWN ON THE PLANS.
- ALL PLANT MATERIAL TO CONFORM TO THE GUIDELINES ESTABLISHED BY "THE AMERICAN STANDARD FOR NURSERY STOCK" PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC. ANSI Z60.1 –LATEST EDITION.
- ALL PLANT MATERIAL TO BE APPROVED BY THE LANDSCAPE ARCHITECT
- STAKE LOCATIONS OF PLANT MATERIAL FOR APPROVAL BY LANDSCAPE ARCHITECT PRIOR TO COMMENCEMENT OF WORK.
- KALMIA LATIFOLIA (MOUNTAIN LAUREL) SHALL BE COLLECTED IN THE WILD. NURSERY GROWN PLANTS SHALL NOT BE ACCEPTED.
- ALL DISTURBED AREAS NOT SHOWN AS HARDSCAPE, MULCH BEDS, OR OTHER SPECIFIED MATERIAL SHALL RECEIVE A MINIMUM 4" LAYER OF LOAM AND SEED.
- LANDSCAPE CONTRACTOR TO GUARANTEE ALL PLANT MATERIAL FOR TWO FULL YEARS FROM DATE OF ACCEPTANCE.
- CONTRACTOR SHALL REPAIR OR REPLACE ANY MATERIALS DAMAGED DURING CONSTRUCTION PRIOR TO FINAL ACCEPTANCE.
- CONTRACTOR TO SUBMIT A WATERING SCHEDULE FOR THE SIXTY DAY MAINTENANCE PERIOD FOR REVIEW BY THE LANDSCAPE ARCHITECT AND OWNER FOR ALL PROPOSED PLANT MATERIAL.
- SEE LANDSCAPE DETAILS FOR ADDITIONAL PLANTING INFORMATION
- IN THE EVENT OF A DISCREPANCY BETWEEN THE PLANT QUANTITIES SHOWN ON THE PLAN AND IN THE PLANT SCHEDULE, THE QUANTITY SHOWN ON THE PLAN SHALL TAKE PRECEDENCE.

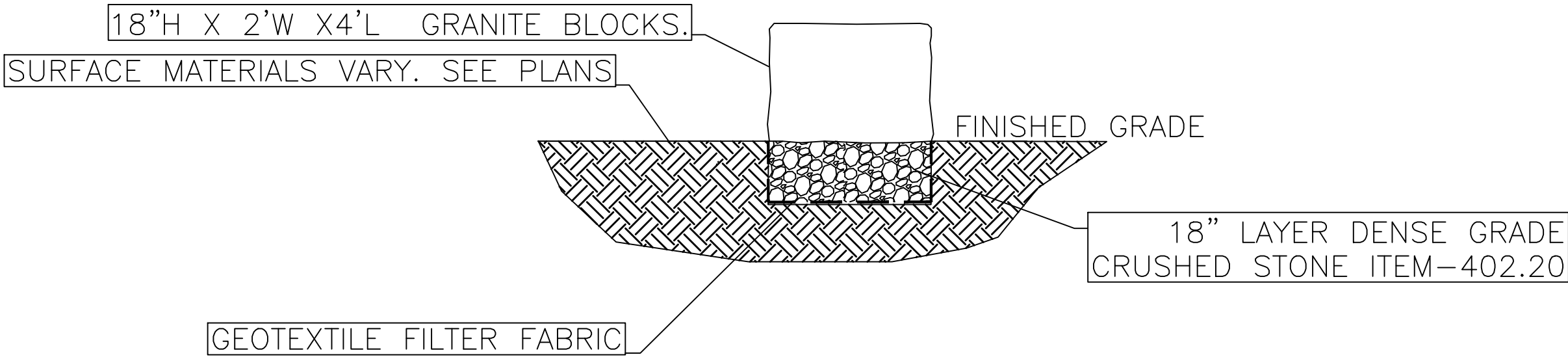
INLAID PREFORMED THERMOPLASTIC
AS MANUFACTURED BY ENNIS FLINT
OR APPROVED EQUAL
COLOR: TERRACOTTA
FIELD PATTERN: HERRINGBONE
BORDER PATTERN: SOLDIER COURSE



NOTES:

1. INLAID PREFORMED THERMOPLASTIC SHALL BE APPLIED TO ALL REST AREAS BORDERING THE RAIL TRAIL AS SHOWN ON THE LANDSCAPE PLANS. DIMENSIONS OF REST AREAS VARY.
2. BORDER PATTERN SHALL BE APPLIED TO ALL SIDES OF THE REST AREA
3. FINISH SURFACE SHALL BE FLUSH WITH THE RAIL TRAIL OR ADJACENT SIDEWALK

INLAID PREFORMED THERMOPLASTIC PATTERN DETAIL

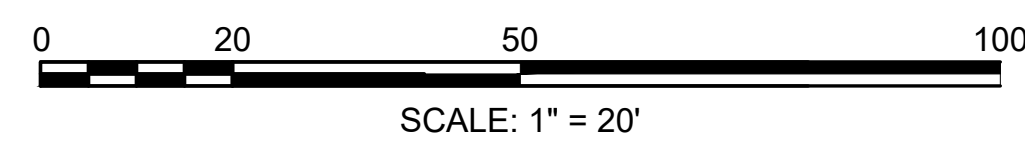
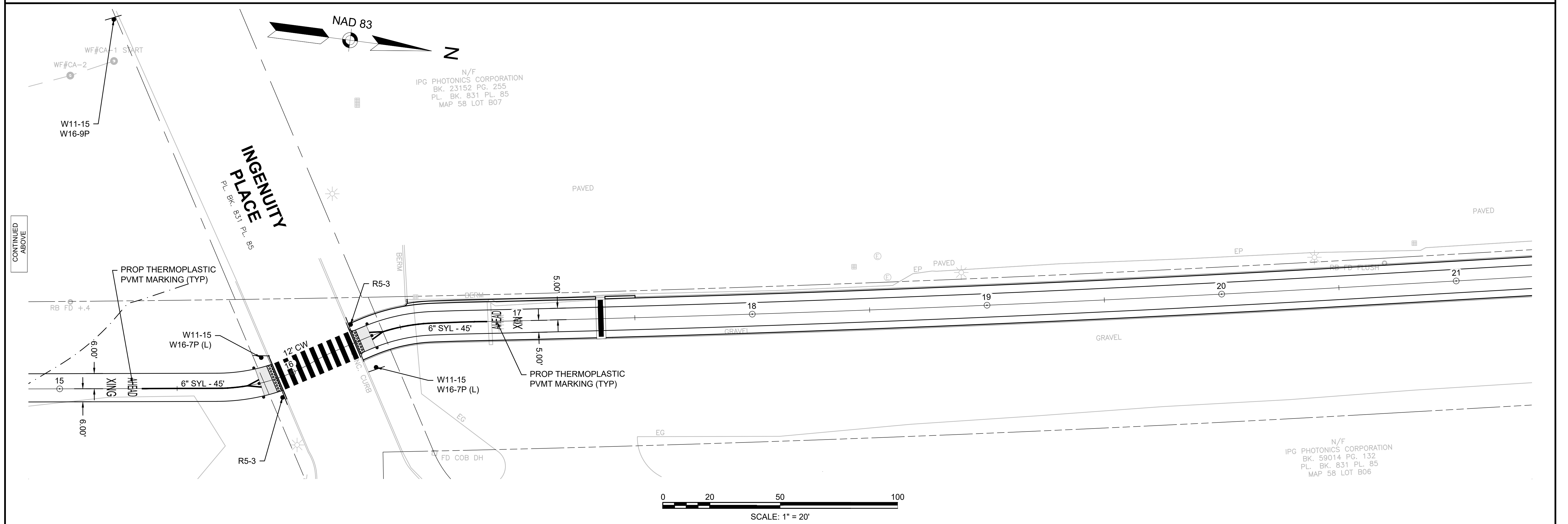
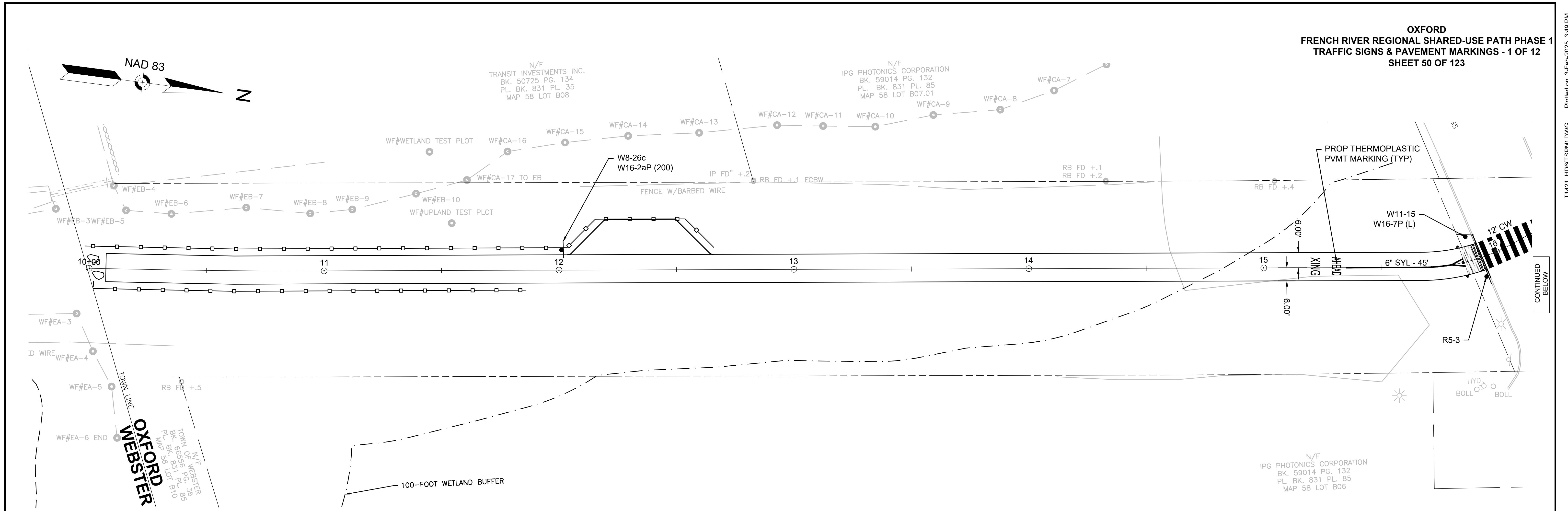


NOTES:

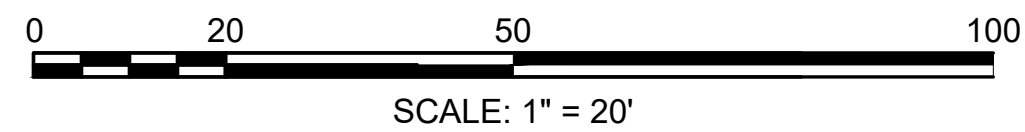
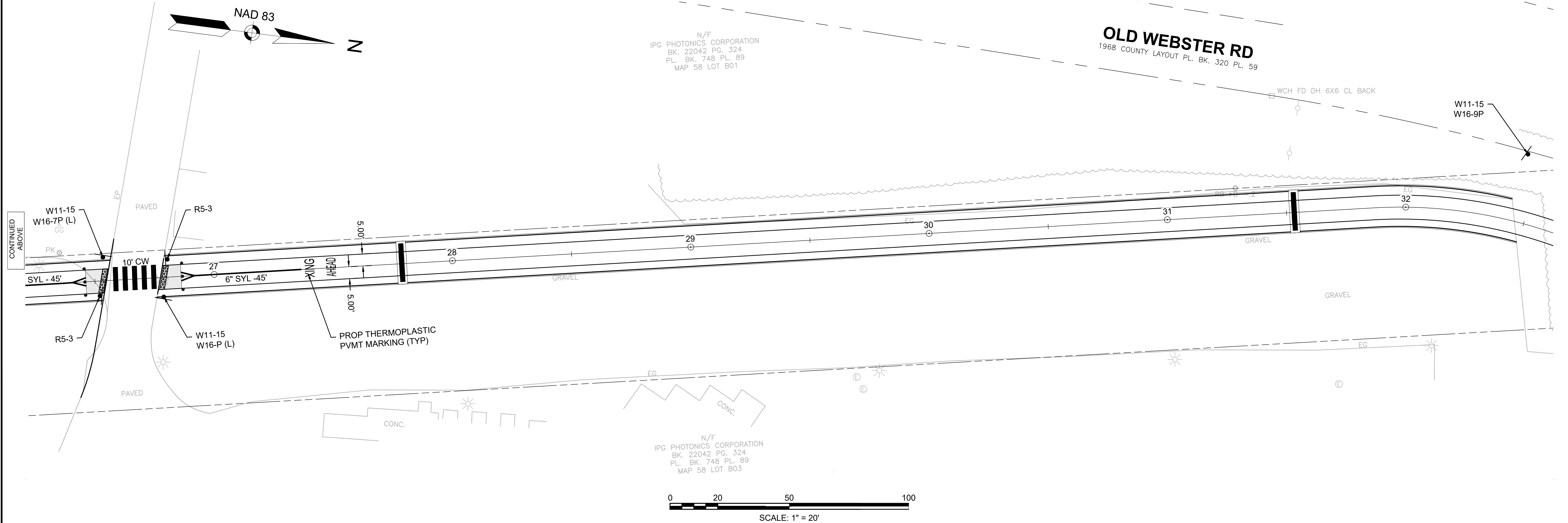
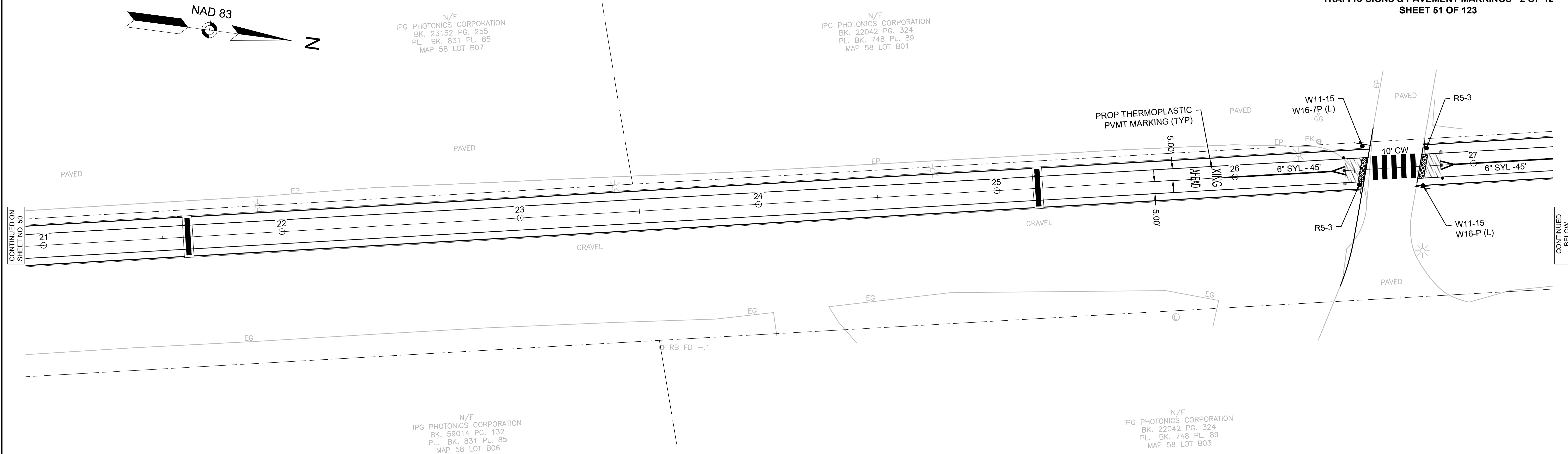
1. GRANITE BLOCKS TO BE RECLAIMED BRIDGE BLOCK OR APPROVED EQUAL. BLOCKS SHALL BE SPLIT FACE
2. BLOCKS SHALL HAVE A UNIFORM THICKNESS AND HEIGHT AND SHALL BE SET INTO THE GRAVEL AS TO NOT HAVE ANY MOVEMENT ONCE INSTALLED.
3. BLOCKS SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO BEING INSTALLED

RECLAIMED GRANITE BLOCK BENCHES

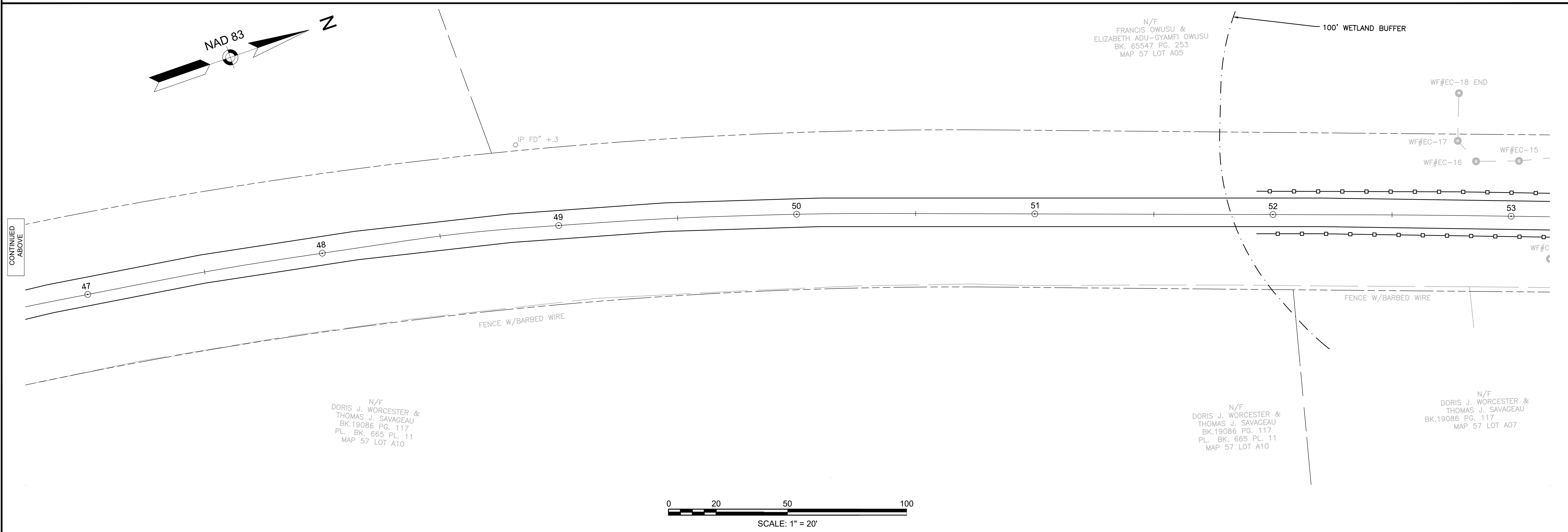
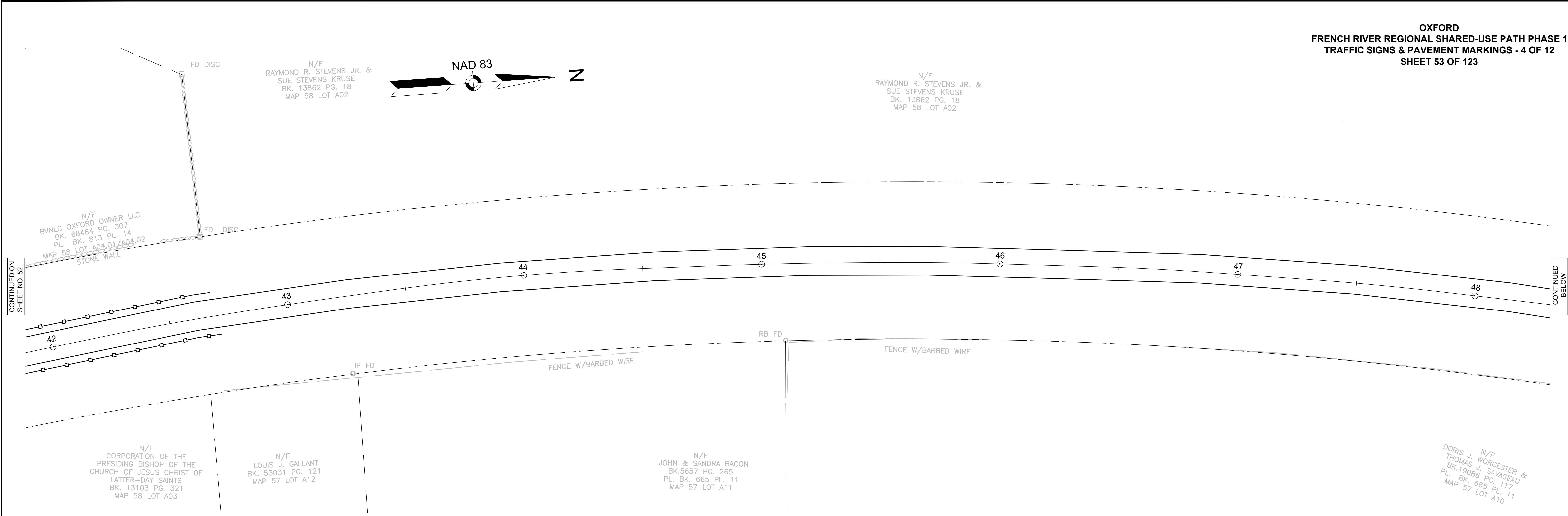
OXFORD
FRENCH RIVER REGIONAL SHARED-USE PATH PHASE 1
TRAFFIC SIGNS & PAVEMENT MARKINGS - 1 OF 12
SHEET 50 OF 123

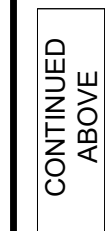


OXFORD
FRENCH RIVER REGIONAL SHARED-USE PATH PHASE 1
TRAFFIC SIGNS & PAVEMENT MARKINGS - 2 OF 12
SHEET 51 OF 123



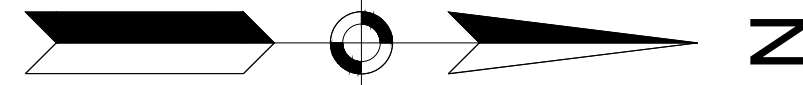






BK. 60249 PG. 55
PL. BK. 607 PL. 40
MAP 57A LOT B7.01

NAD 83

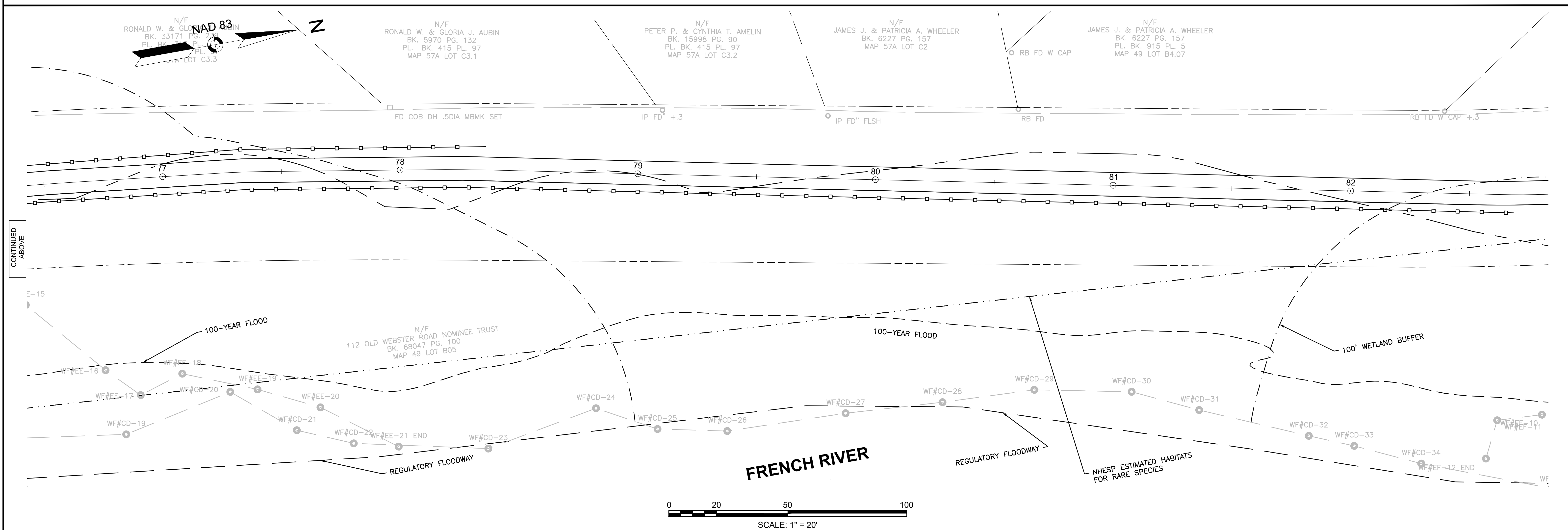
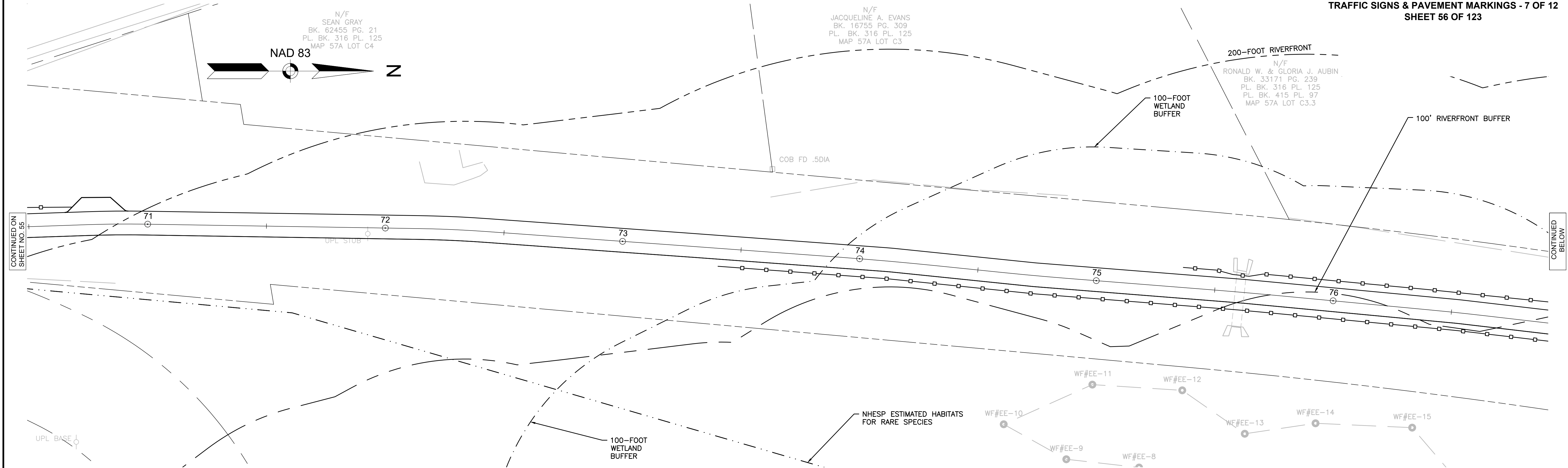


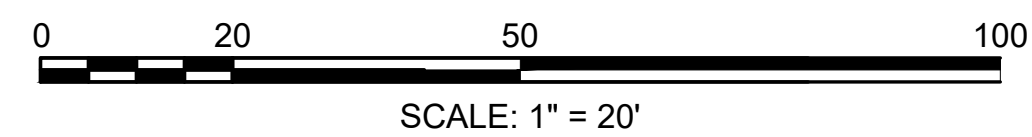
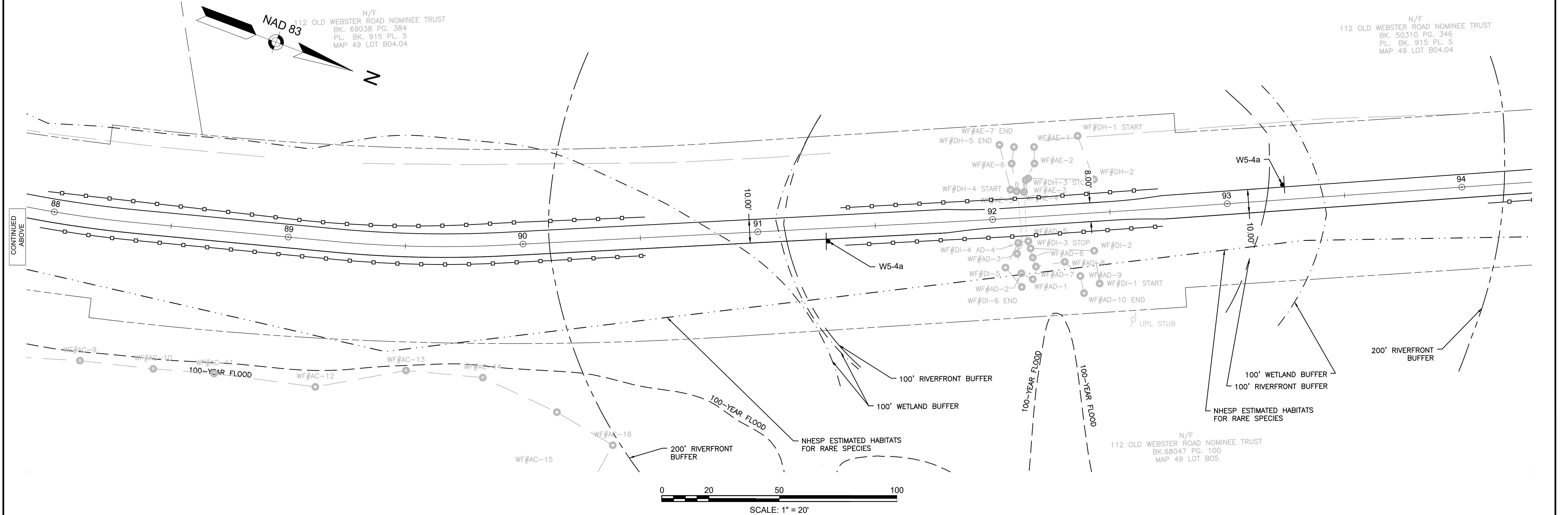
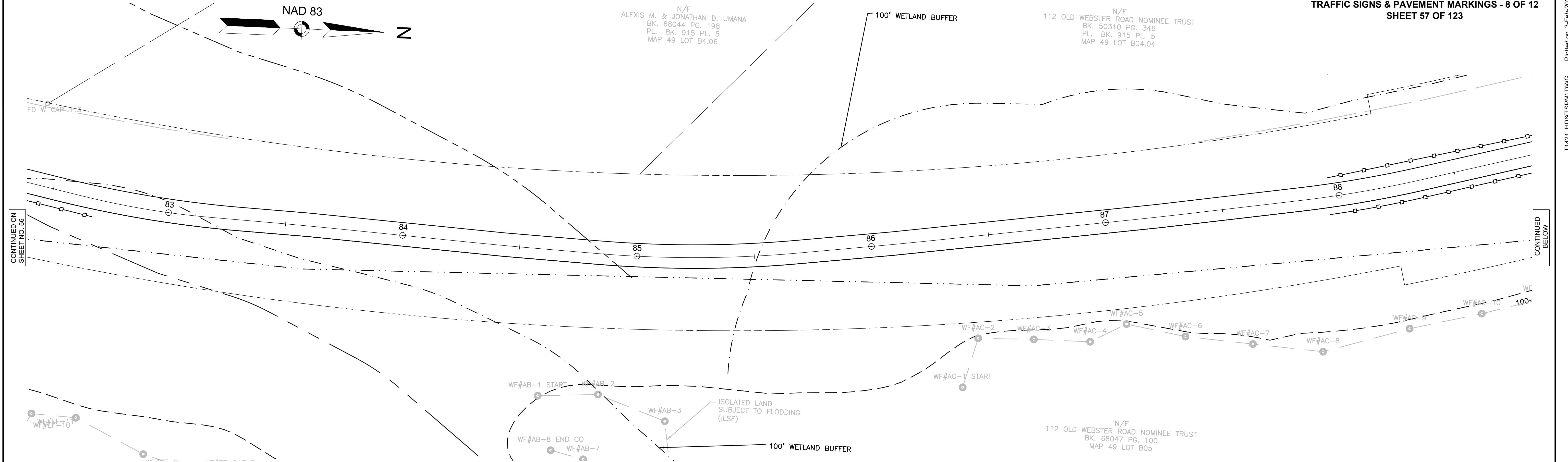
CONTINUED ON
SHEET NO. 54

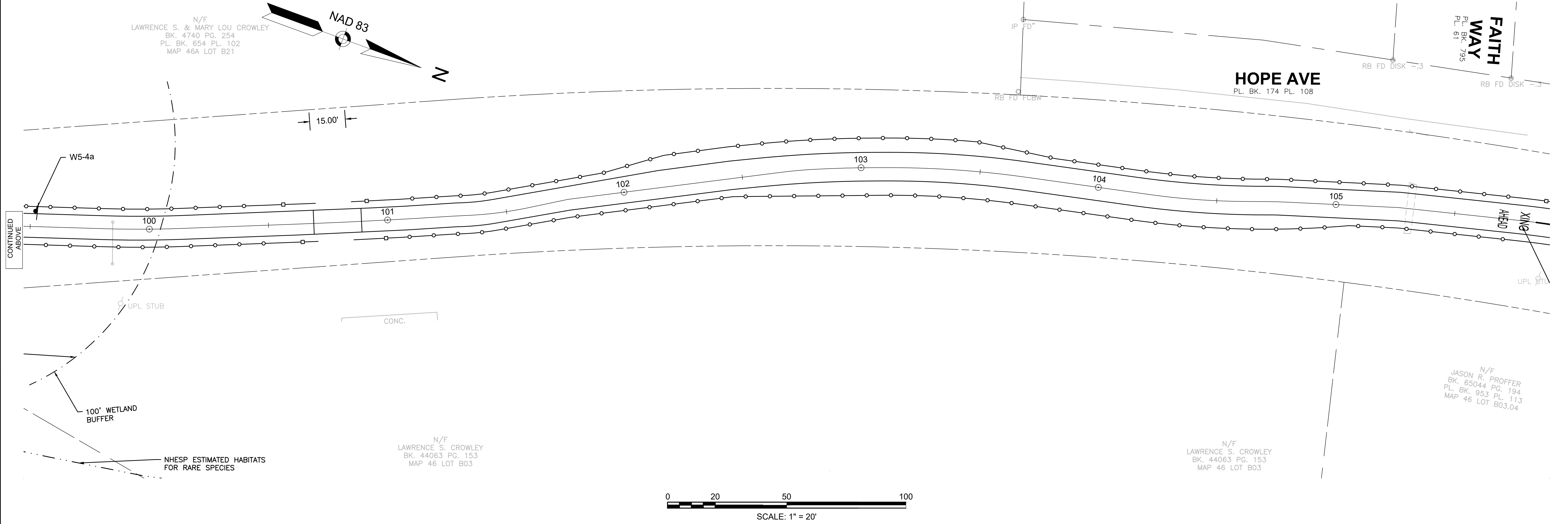
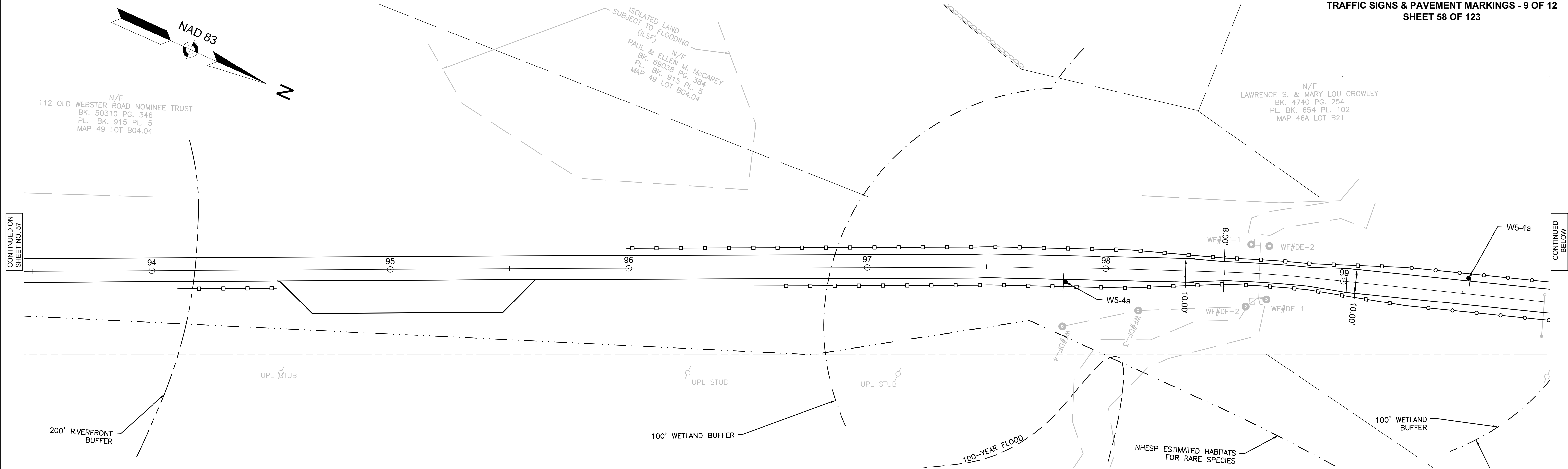
N/F
DAVID NOONEY
BK. 54913 PG. 75
MAP 57 LOT A07.04

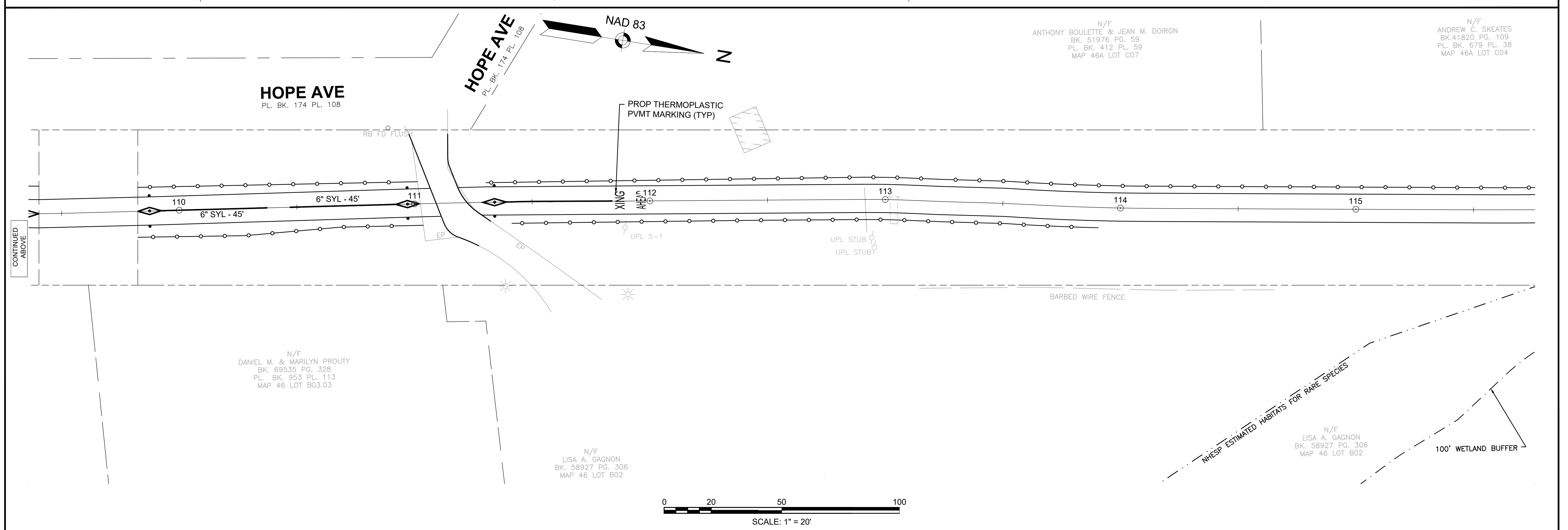
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SCALE: 1" = 20'

OXFORD
FRENCH RIVER REGIONAL SHARED-USE PATH PHASE 1
TRAFFIC SIGNS & PAVEMENT MARKINGS - 7 OF 12
SHEET 56 OF 123



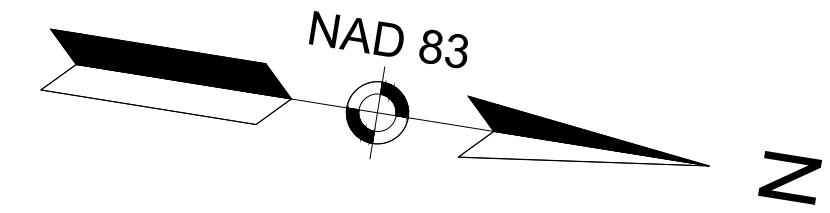






OXFORD
FRENCH RIVER REGIONAL SHARED-USE PATH PHASE 1
TRAFFIC SIGNS & PAVEMENT MARKINGS - 11 OF 12
SHEET 60 OF 123

N/F
ANDREW C. SKEATES
BK. 41820 PG. 109
PL. BK. 679 PL. 38
MAP 46A LOT C04

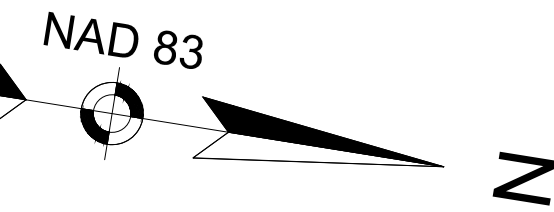
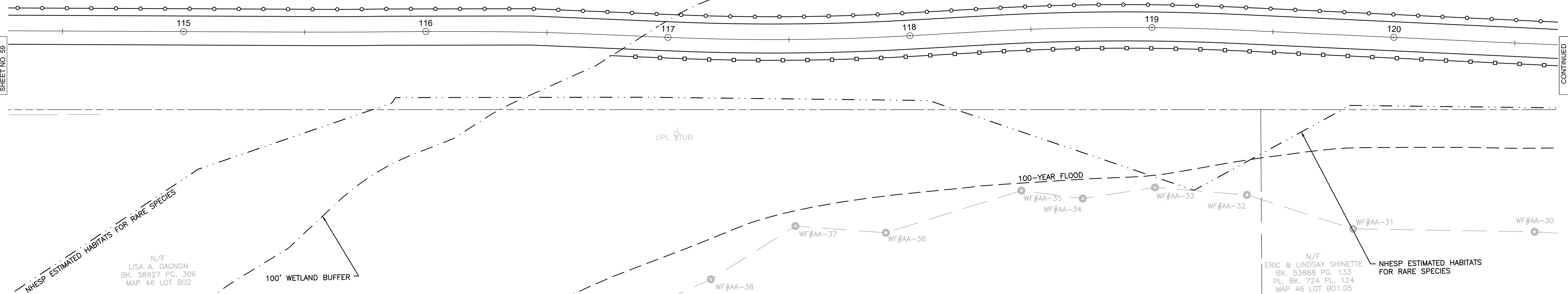


N/F
CHARLES E. & DEBORAH A. WILLEY
BK. 16110 PG. 166
PL. BK. 679 PL. 38
MAP 46A LOT C03

N/F
PAUL S. & MAUREEN A. NAPIERLSKI
BK. 13259 PG. 388
PL. BK. 424 PL. 125
MAP 46A LOT C02.01

CONTINUED ON
SHEET NO. 59

CONTINUED
BELOW

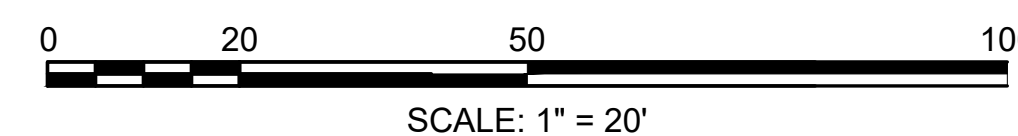
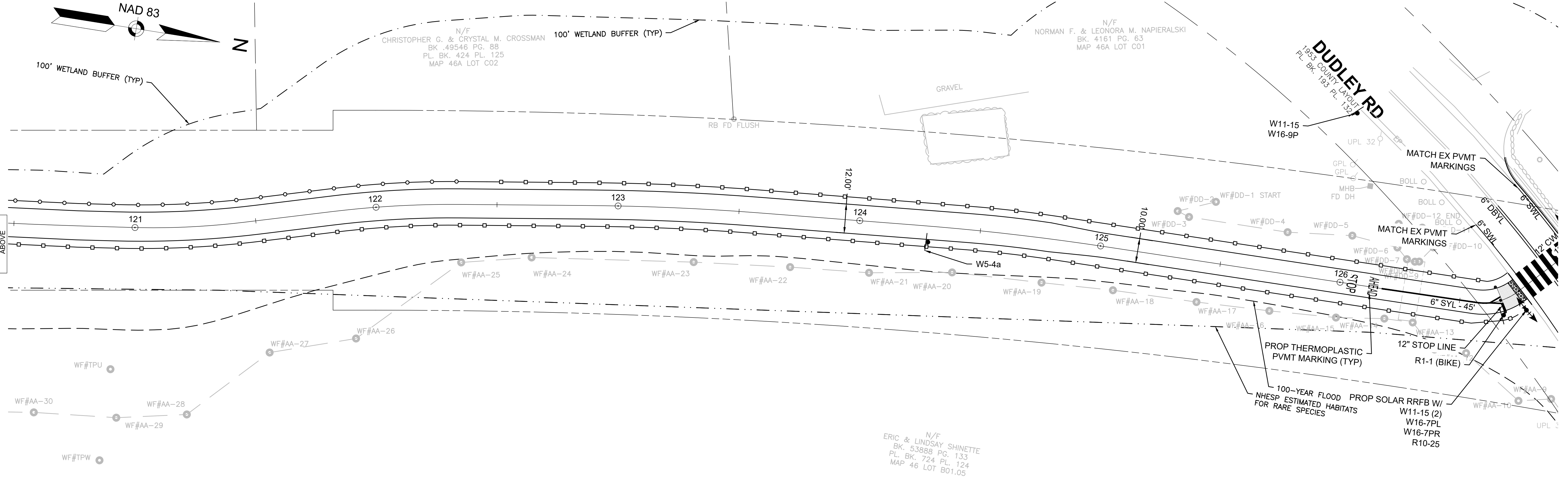


N/F
CHRISTOPHER G. & CRYSTAL M. CROSSMAN
BK. 49546 PG. 88
PL. BK. 424 PL. 125
MAP 46A LOT C02

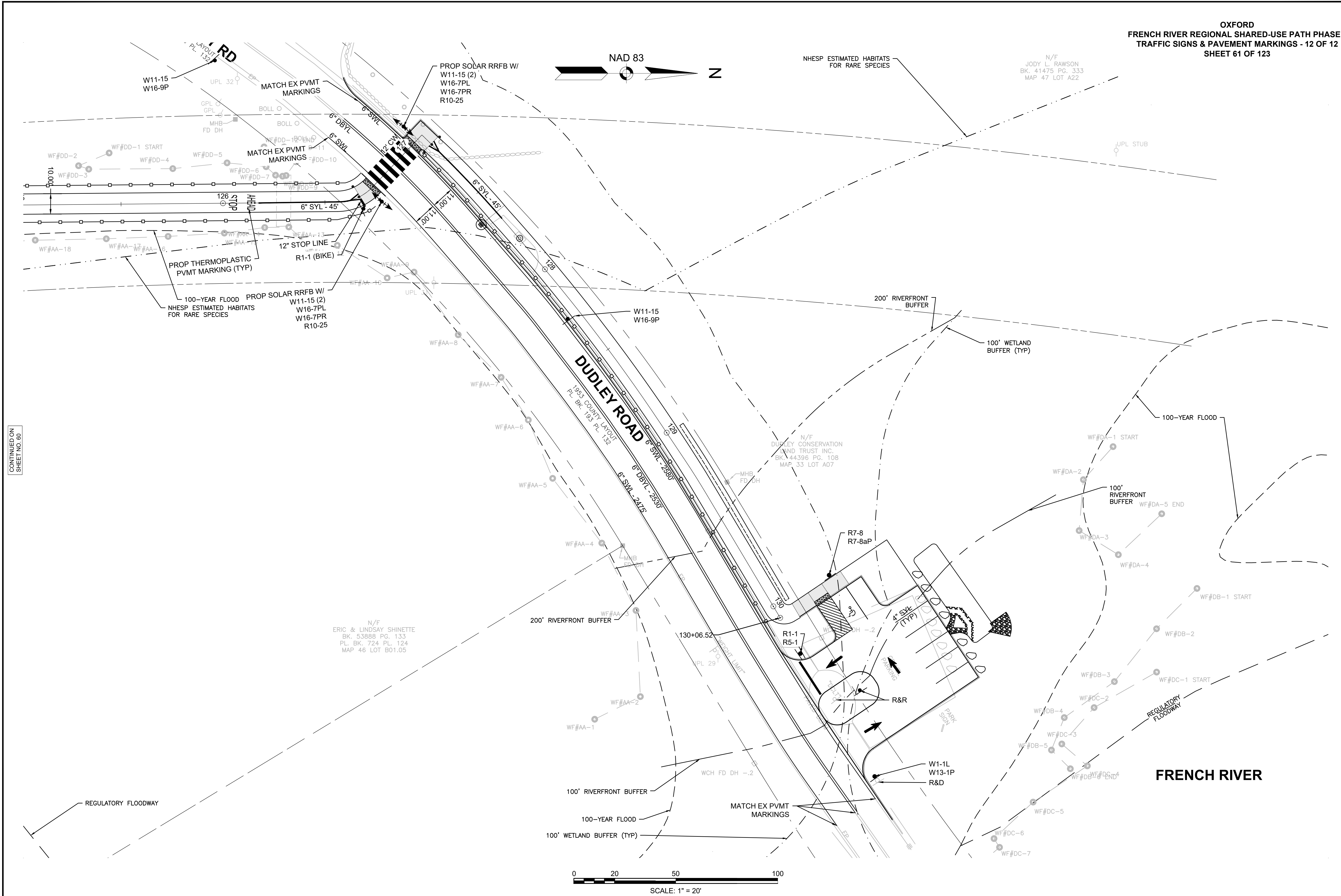
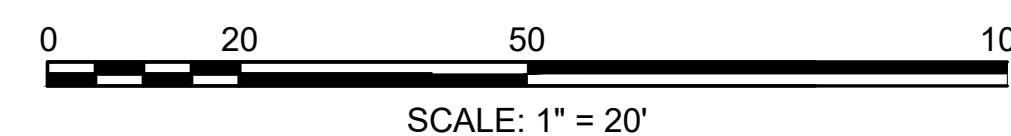
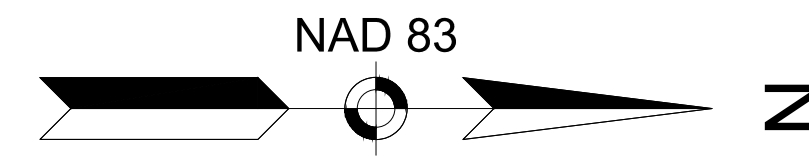
N/F
NORMAN F. & LEONORA M. NAPIERLSKI
BK. 4161 PG. 63
MAP 46A LOT C01

DUDLEY RD
1993 COUNTY LAYOUT
PL. BK. 193 PL. 132

CONTINUED
ABOVE



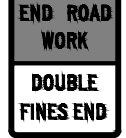
CONTINUED ON
SHEET NO. 60



NOTES:

- ① SEE 2009 MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS FOR TEXT AND LEGEND DIMENSIONS.
2. 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.
3. A MINIMUM OF 3'-0" PATH OF TRAVEL CLEARANCE, EXCLUDING CURB, IS REQUIRED WHEN PLACING SIGNS.

TRAFFIC SIGN SUMMARY													
IDENTIFICATION NUMBER	SIZE OF SIGN (in)			TEXT DIMENSIONS (in)			NUMBER OF SIGNS REQUIRED	COLOR			SIZE AND NUMBER OF POSTS REQUIRED	UNIT AREA (SF)	TOTAL AREA (SF)
	WIDTH	HEIGHT		LEGEND	LETTER HEIGHT	VERTICAL SPACING		ARROW RTE. MKR	BACK-GROUND	LEGEND			
R1-1	30	30					2	RED	WHITE	WHITE	P5 2	6.25	12.50
R1-1 (Bike)	18	18					4	RED	WHITE	WHITE	P5 4	2.25	9.00
R5-1	30	30					1	WHITE	RED / WHITE	WHITE	P5 1	6.25	6.25
R5-3	24	24					4	WHITE	BLACK	BLACK	MOUNT W/ R1-1 (BIKE) 4	4.00	16.00
R7-8	12	18					2	WHITE	GREEN / BLUE	GREEN	P5 2	1.50	3.00
R7-8aP	12	6					2	WHITE	GREEN	GREEN	MOUNT W/ R7-8 2	0.50	1.00
R10-25	9	12					4	WHITE	BLACK	BLACK	MOUNT W/ RRFB 4	0.75	3.00
W5-4a	30	30					7	YELLOW	BLACK	BLACK	P5 7	6.25	43.75
W8-26c	30	30					1	YELLOW	BLACK	BLACK	P5 1	6.25	6.25
W11-15	30	30					21	YELLOW	BLACK	BLACK	P5 13	6.25	131.25
						FL YELLOW-GREEN		MOUNT W/ RRFB 8					
W16-2aP (200)	21	15					1	YELLOW	BLACK	BLACK	MOUNT W/ W8-26c 1	2.19	2.19
W16-7PL	21	15					10	YELLOW	BLACK	BLACK	P5 6	2.19	21.88
						FL YELLOW-GREEN		MOUNT W/ RRFB 4					
W16-7PR	21	15					4	FL YELLOW-GREEN	BLACK	BLACK	MOUNT W/ RRFB 4	2.19	8.75
W16-9P	24	12					7	FL YELLOW-GREEN	BLACK	BLACK	MOUNT W/ W11-15 8	2.00	14.00

TEMPORARY TRAFFIC CONTROL 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	8	12.00	96.00
MA-R2-10e	36	48					FL. ORANGE WHITE	BLACK BLACK	BLACK BLACK	8	12.00	96.00
W20-1	36	36		SEE 2009 MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS			FL. ORANGE	BLACK	BLACK	7	9.00	63.00

ROAD TYPE	SUGGESTED WORK ZONE WARNING SIGN SPACING		DISTANCE BETWEEN SIGNS **	
	A	B	C	
LOCAL OR LOW VOLUME ROADWAYS *	350	350	350	
MOST OTHER ROADWAYS *	500	500	600	
FREEWAYS AND EXPRESSWAYS *	1,000	1500	2640	

ROAD TYPE TO BE DETERMINED BY MASSDOT OFFICE OF TRANSPORTATION PLANNING.

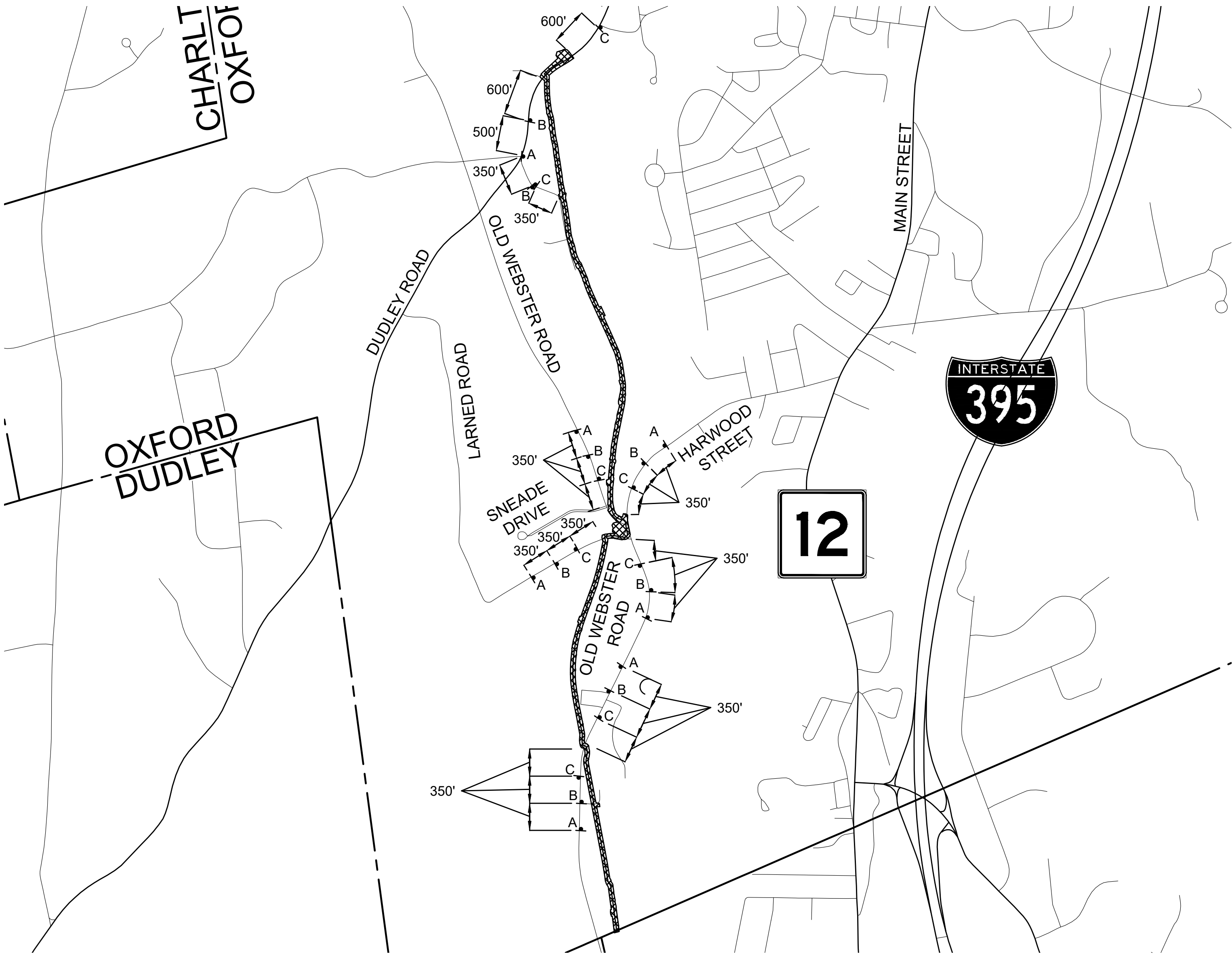
DISTANCES ARE SHOWN IN FEET. THE COLUMN HEADINGS A, B, AND C ARE THE DIMENSIONS SHOWN IN THE DETAIL/ TYPICAL SETUP FIGURES. THE A DIMENSION IS THE DISTANCE FROM THE TRANSITION OR POINT OF RESTRICTION TO THE FIRST SIGN. THE B DIMENSION IS THE DISTANCE BETWEEN THE FIRST AND SECOND SIGNS. THE C DIMENSION 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 TTCP 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.

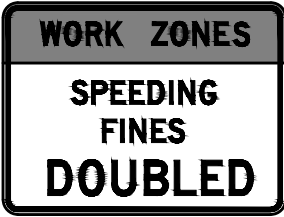
MA-R2-10a SIGNS SHALL BE PLACED BETWEEN THE SECOND AND THIRD SIGNS AS DESCRIBED ABOVE.

MA-R2-10a, MA-R2-10e, AND W20-1 SERIES SIGNS ARE TO BE INCLUDED ON ALL DETAILS/TYPICAL SETUPS FOR WORK ZONES.

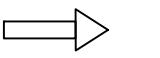
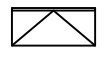
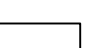


ADVANCED SIGNING SCHEMATIC

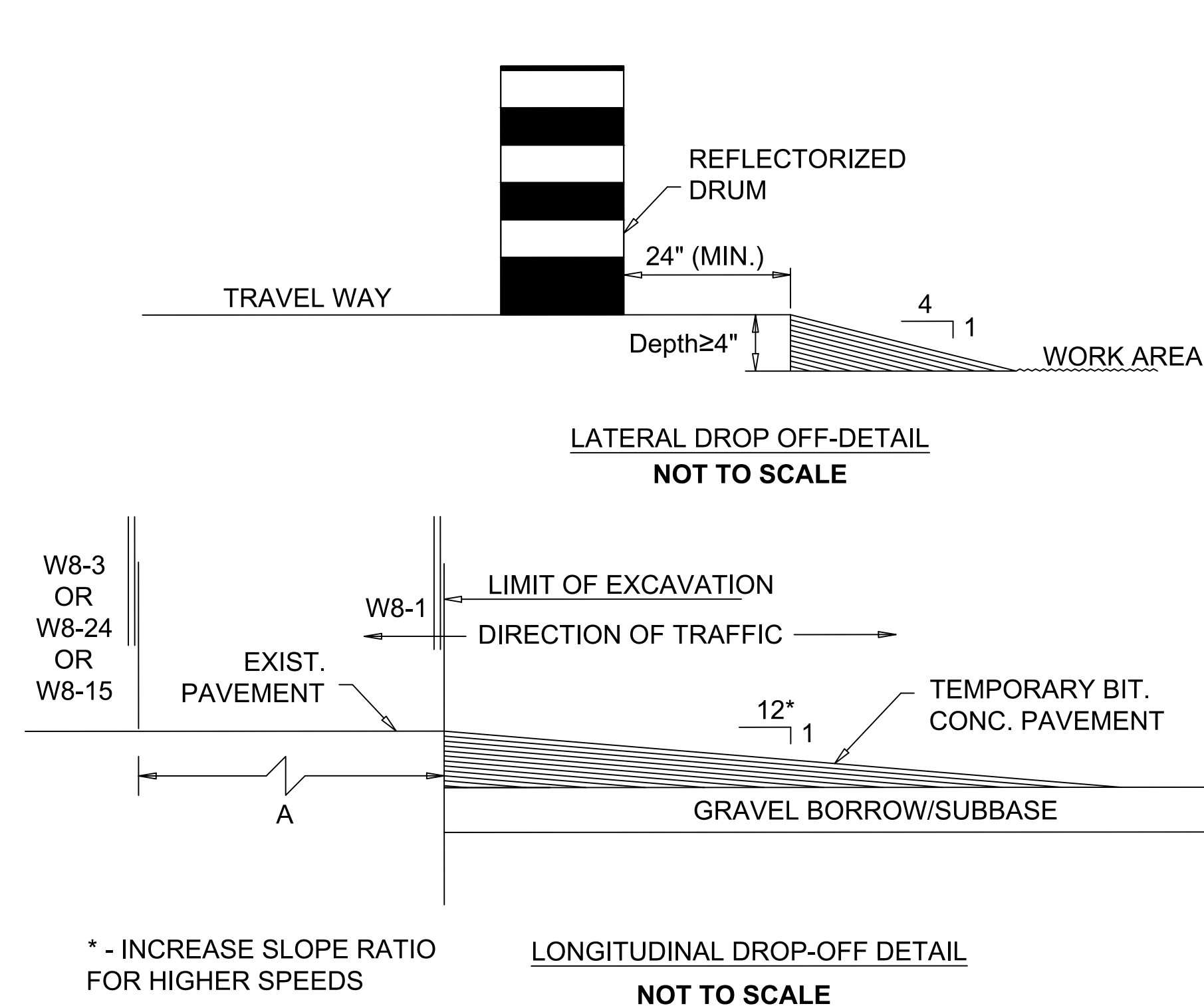
N.T.A.

LEGEND		
A	B	C
		
W20-1	MA-R2-10a	MA-R2-10e

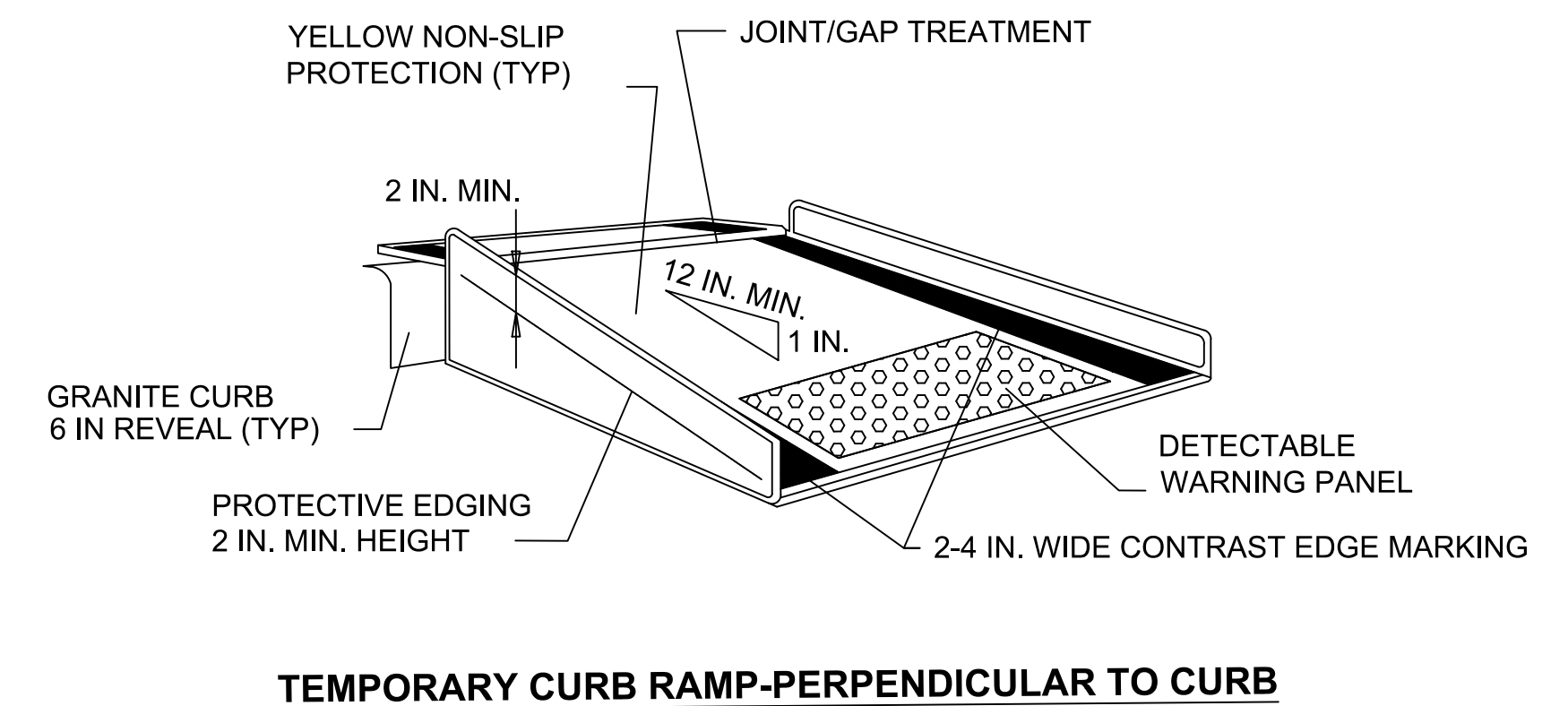
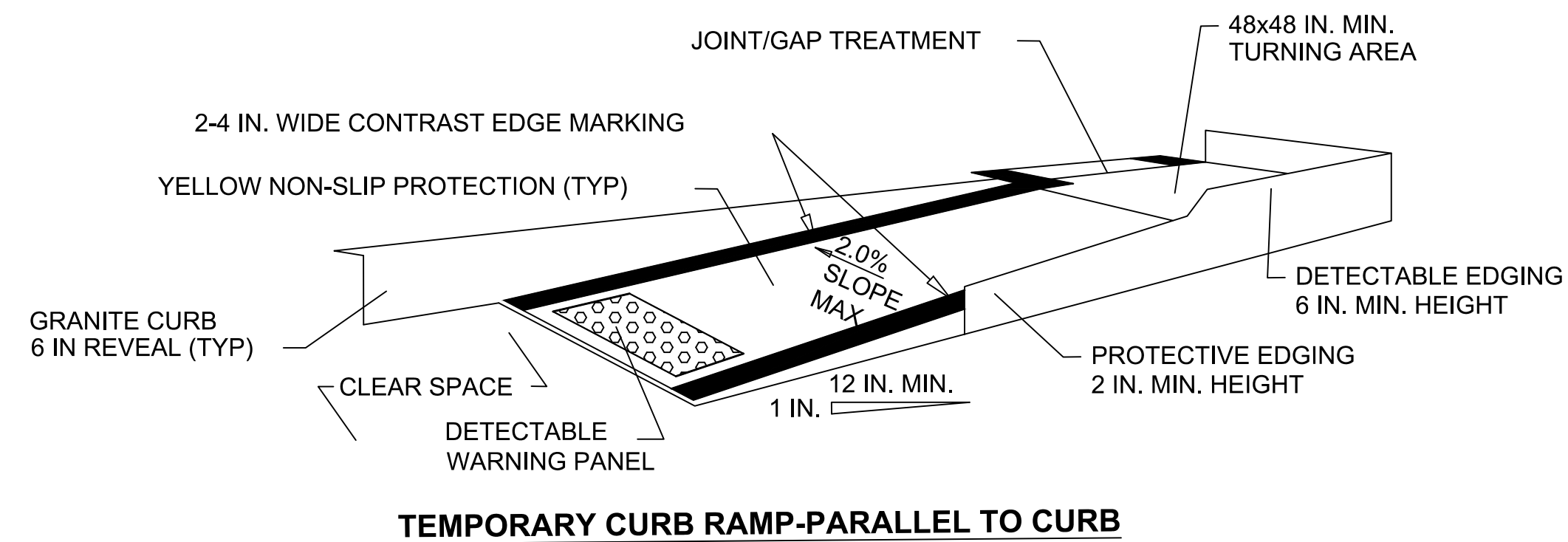
1. ALL TEMPORARY TRAFFIC CONTROL WORK SHALL CONFORM TO THE LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) AND ALL REVISIONS, UNLESS SUPERCEDED BY THESE PLANS.
2. ALL SIGN LEGENDS, BORDERS, AND MOUNTING SHALL BE IN ACCORDANCE WITH THE MUTCD.
3. TEMPORARY CONSTRUCTION SIGNING AND ALL OTHER TRAFFIC CONTROL DEVICES SHALL BE IN PLACE PRIOR TO THE START OF ANY WORK.
4. 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.
5. 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).
6. 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.
7. THE FIRST TEN PLASTIC DRUMS OF A TAPER SHALL BE MOUNTED WITH SEQUENTIAL FLASHING LIGHTS WHEN USED FOR NIGHT WORK BETWEEN DUSK AND DAWN.
8. THE ADVISORY SPEED LIMIT, IF REQUIRED, SHALL BE DETERMINED BY THE ENGINEER.
9. DISTANCES SHOWN IN THIS DOCUMENT MY BE ADJUSTED IN THE FIELD BY THE ENGINEER DUE TO SITE CONSTRAINTS.
10. MAXIMUM SPACING OF TRAFFIC DEVICES IN A TAPER (DRUMS OR CONES) IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH.
11. 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.
12. ALL SIGNS SHALL BE MOUNTED ON THEIR OWN STANDARD SIGN SUPPORTS.
13. TWO DIRECTIONS OF TRAVEL SHALL BE MAINTAINED ON ALL ROADS WITHIN THE PROJECT LIMITS BEFORE 9:00 AM & AFTER 3:00 PM
14. THE CONTRACTOR SHALL TEMPORARILY REMOVE TELEPHONE MANHOLE CASTINGS AND RISERS, PLACE GRAVEL SUB-BASE MATERIAL AND PLACE STEEL PLATES OVER THE MANHOLE STRUCTURES PRIOR TO OPENING THE ROADWAY TO TRAFFIC IN THE VICINITY OF THE EXISTING TELEPHONE MANHOLES AND CONDUIT.
15. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH LAWRENCE STANDARD WORK HOURS FOR CONSTRUCTION AS STATED IN THE SPECIAL PROVISIONS: MONDAY THROUGH FRIDAY (EXCLUDING HOLIDAYS) 7:00 AM TO 3:00 PM

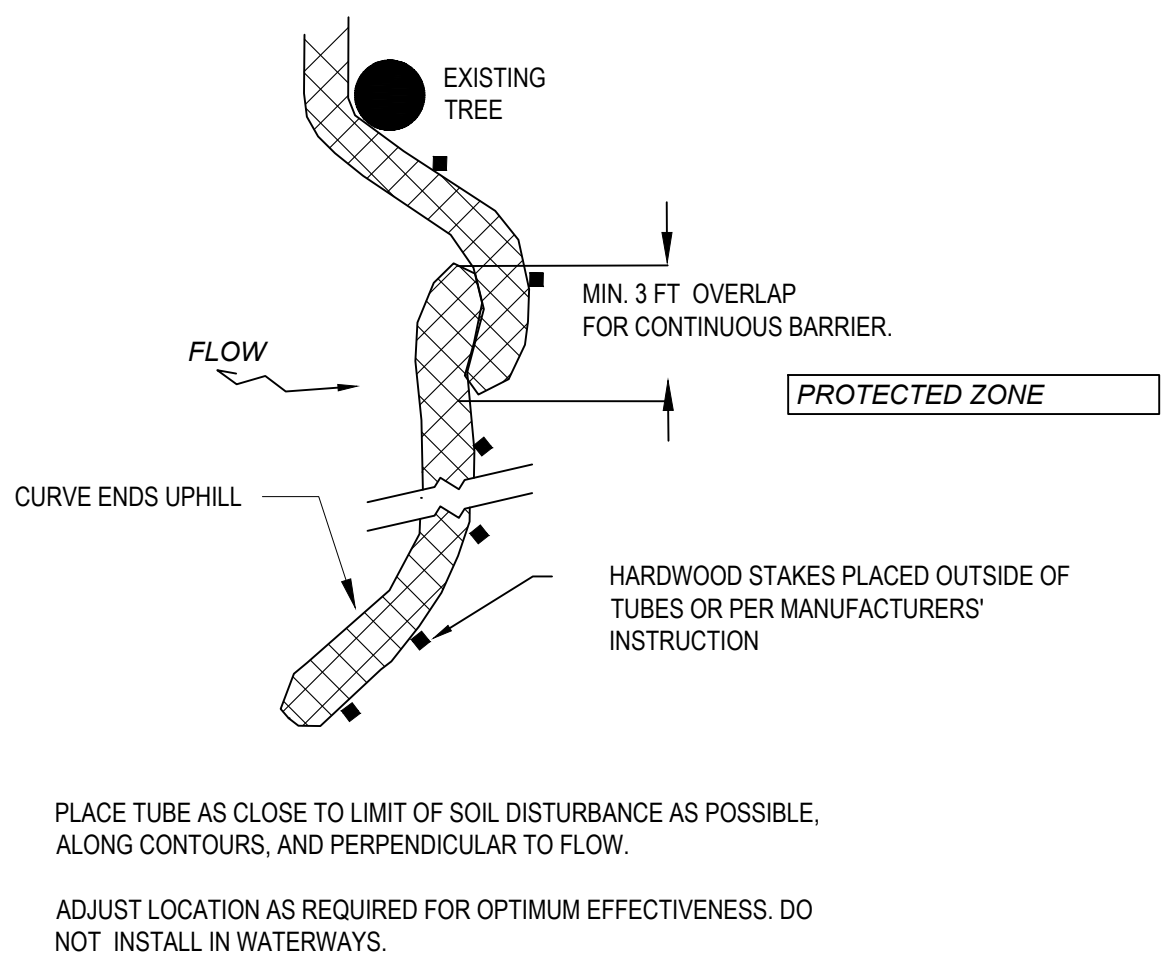
- | | | |
|---|--|--|
| ● REFLECTORIZED PLASTIC DRUM OR 36" CONE |  WORK ZONE |  WORK VEHICLE |
| P/F POLICE/FLAGGER DETAIL |  DIRECTION OF TRAFFIC |  TRUCK MOUNTED ATTENUATOR |
|  TYPE III BARRICADE |  IMPACT ATTENUATOR |  TRAFFIC OR PEDESTRIAN SIGNAL |
|  CHANGEABLE MESSAGE SIGN |  MEDIAN BARRIER |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

1. PEDESTRIAN CURB RAMPS SHALL BE 60 IN. MINIMUM WIDTH WITH A FIRM, STABLE AND NON-SLIP SURFACE.
2. 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 SLOP 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.
3. DETECTABLE EDGING WITH 6 IN. MINIMUM HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).
4. THE CURB RAMP WALKWAY AND LANDING AREA SURFACE SHALL BE OF A SOLID CONTINUOUS CONTRASTING COLOR ABUTTING UP TO THE EXISTING SIDEWALK.
5. CURB RAMPS AND LANDINGS SHOULD HAVE A 1:50 (2%) MAX CROSS-SLOPE.
6. CLEAR SPACE OF 48x48 IN. MINIMUM SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.
7. WATER FLOW IN THE GUTTER SYSTEM SHALL HAVE MINIMAL RESTRICTION.
8. LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 0.5 IN. WIDTH.
9. 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.
10. 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.

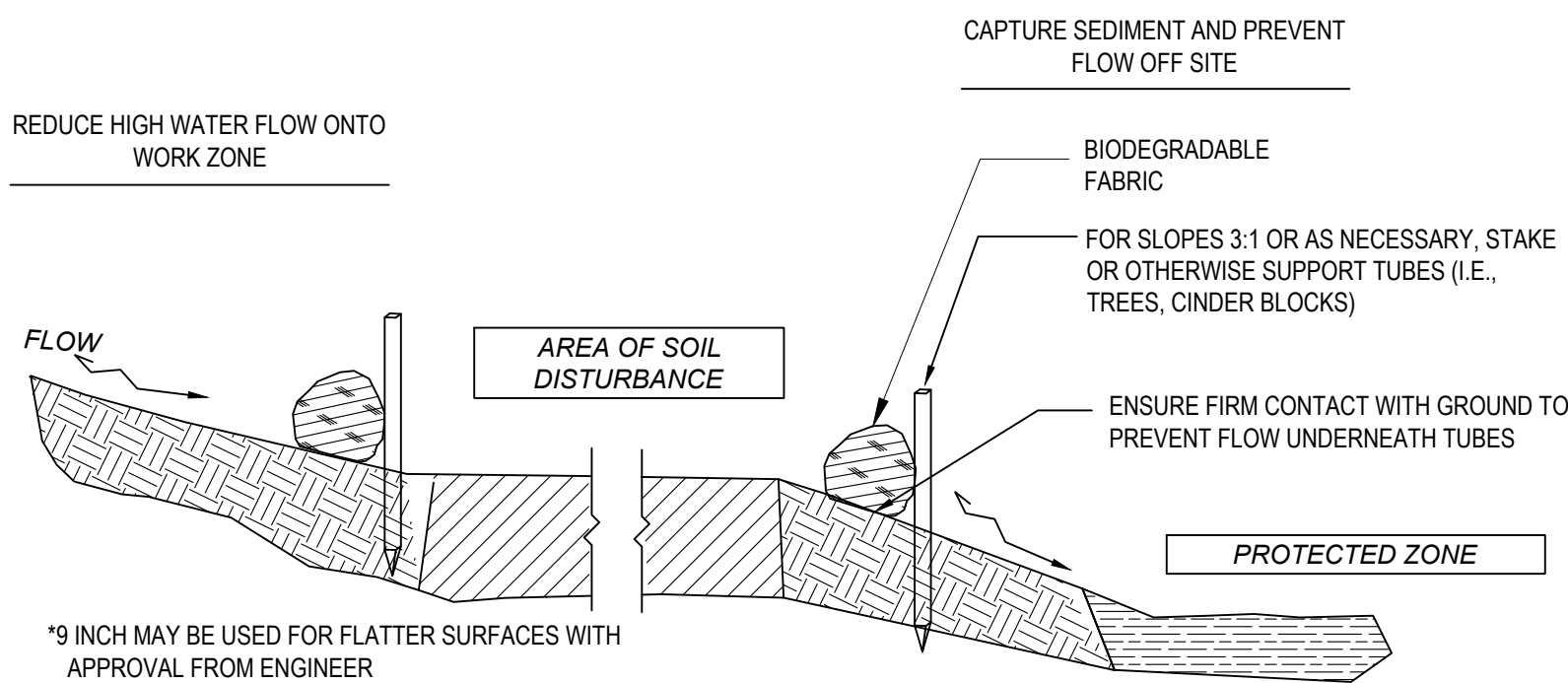


LATERAL AND LONGITUDINAL DROP-OFF DETAILS



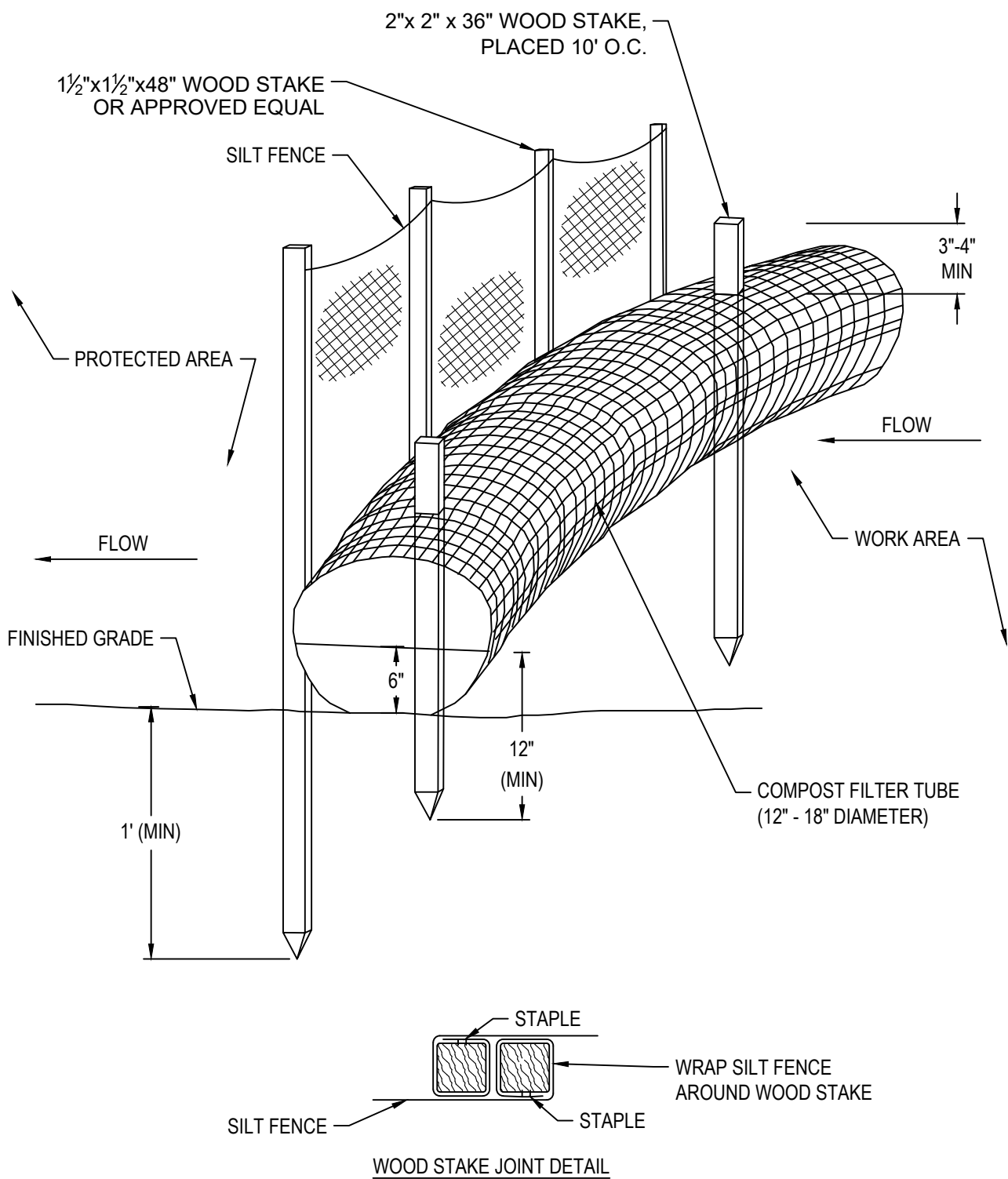


PLAN VIEW



SECTION VIEW

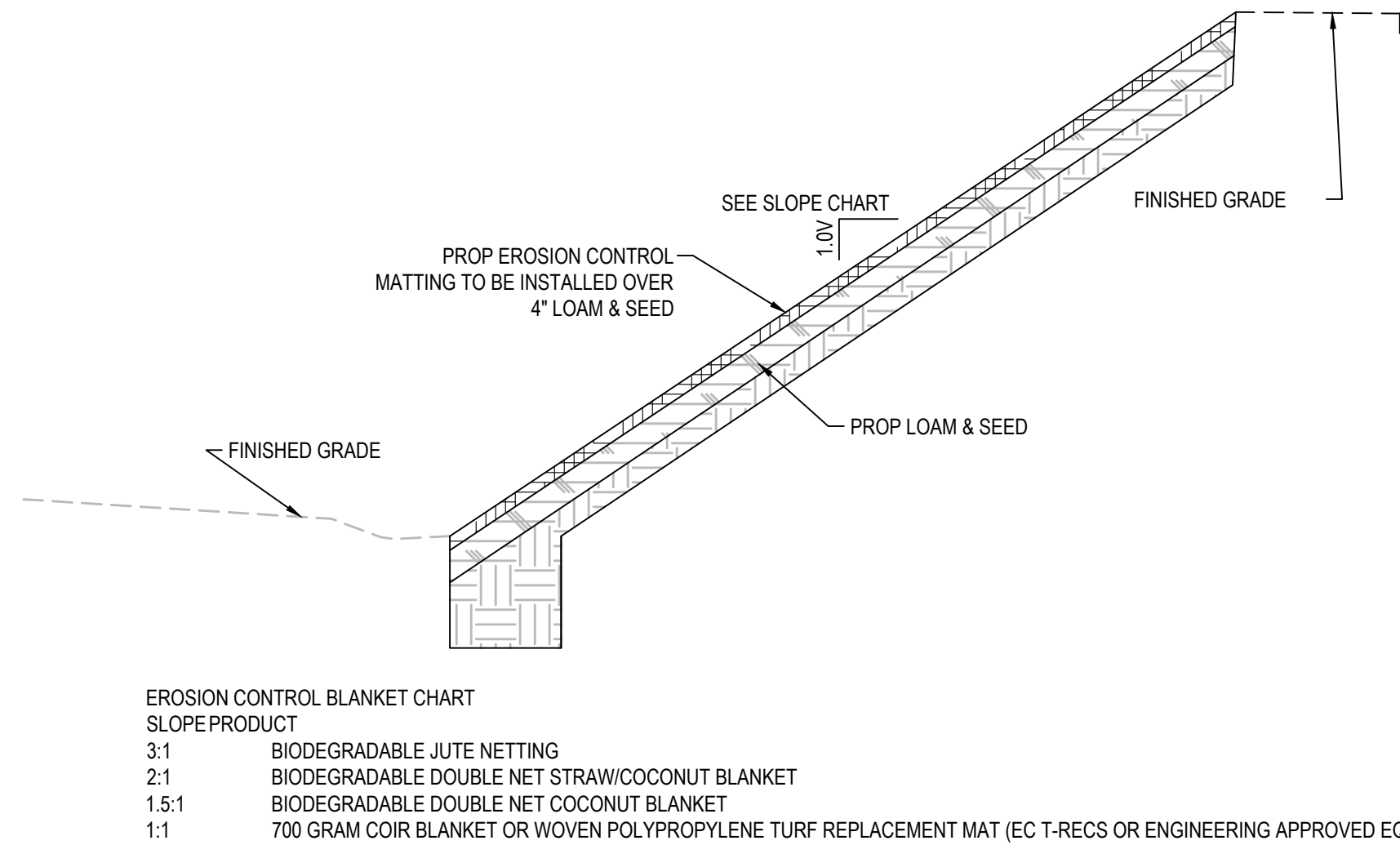
SEDIMENT CONTROL BARRIER - COMPOST FILTER TUBE
N.T.S.



NOTES:

1. SILT FENCE SHALL BE FASTENED SECURELY TO POSTS WITH STAPLES. POSTS SHALL BE SPACED 8'-10' ON CENTER.
2. WHEN TWO SECTIONS OF SILT FENCE ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
3. ENTRENCH SILT FENCE BUT NOT FILTER TUBE.
4. INSPECTIONS SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED, OR WHEN SEDIMENT ACCUMULATES TO HALF THE HEIGHT OF FENCING.
5. CONFIGURE TUBES AROUND EXISTING FEATURES TO MINIMIZE SITE DISTURBANCE AND MAXIMIZE CAPTURE AREA OF STORMWATER RUN-OFF. TUBES SHALL BE PLACED PERPENDICULARLY TO STORMWATER FLOW WHERE POSSIBLE.
6. TUBES FOR COMPOST FILTERS SHALL BE JUTE MESH OR APPROVED BIODEGRADABLE MATERIAL. ADDITIONAL TUBES SHALL BE USED AT THE DIRECTION OF THE ENGINEER.
7. TAMP TUBES IN PLACE TO ENSURE GOOD CONTACT WITH SOIL SURFACE. IT IS NOT NECESSARY TO TRENCH TUBES INTO EXISTING GRADE.
8. WHEN STAKING IS NOT POSSIBLE, SUCH AS WHEN TUBES MUST BE PLACED ON PAVEMENT, HEAVY CONCRETE OR CINDER BLOCKS CAN BE USED BEHIND TUBES UP TO 5 FT. APART OR AS REQUIRED TO SECURE TUBES IN PLACE. DO NOT PUNCTURE TUBES WITH STAKES.
9. TUBES CAN BE PLACED DIRECTLY ON EXISTING PAVEMENT WHEN NECESSARY.
10. UPON COMPLETION OF PROJECT, ALL EROSION CONTROL DEVICES SHALL BE REMOVED FROM PROJECT LIMITS.

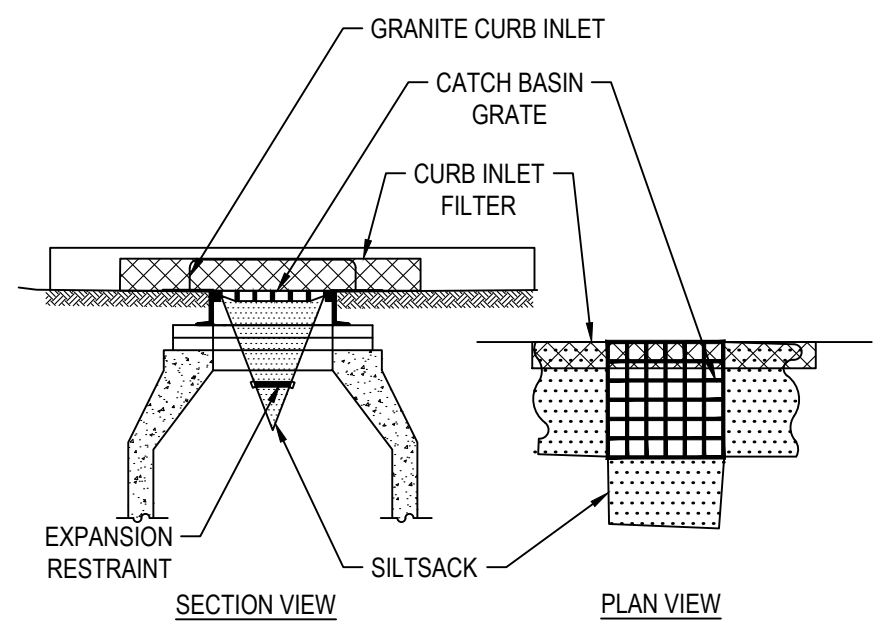
SEDIMENT CONTROL BARRIER - COMPOST FILTER TUBE WITH SILT FENCE
N.T.S.



NOTES:

- 1) OPTIONAL USE OF STAPLES/ANCHORS TO STABILIZED THE EROSION CONTROL MATTING IS RECOMMENDED.

EROSION CONTROL MATTING
N.T.S.



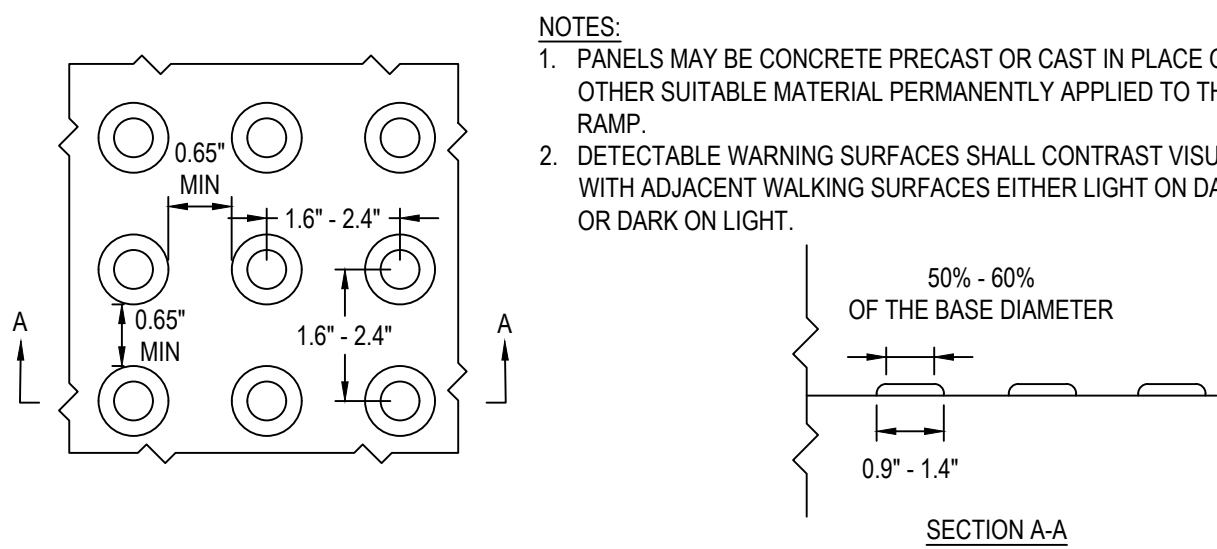
NOTES:

1. 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.
2. GRATE TO BE PLACED OVER SILT SACK.
3. SILT SACK SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS AND CLEANING OR REPLACEMENT SHALL BE PERFORMED PROMPTLY AS NEEDED.

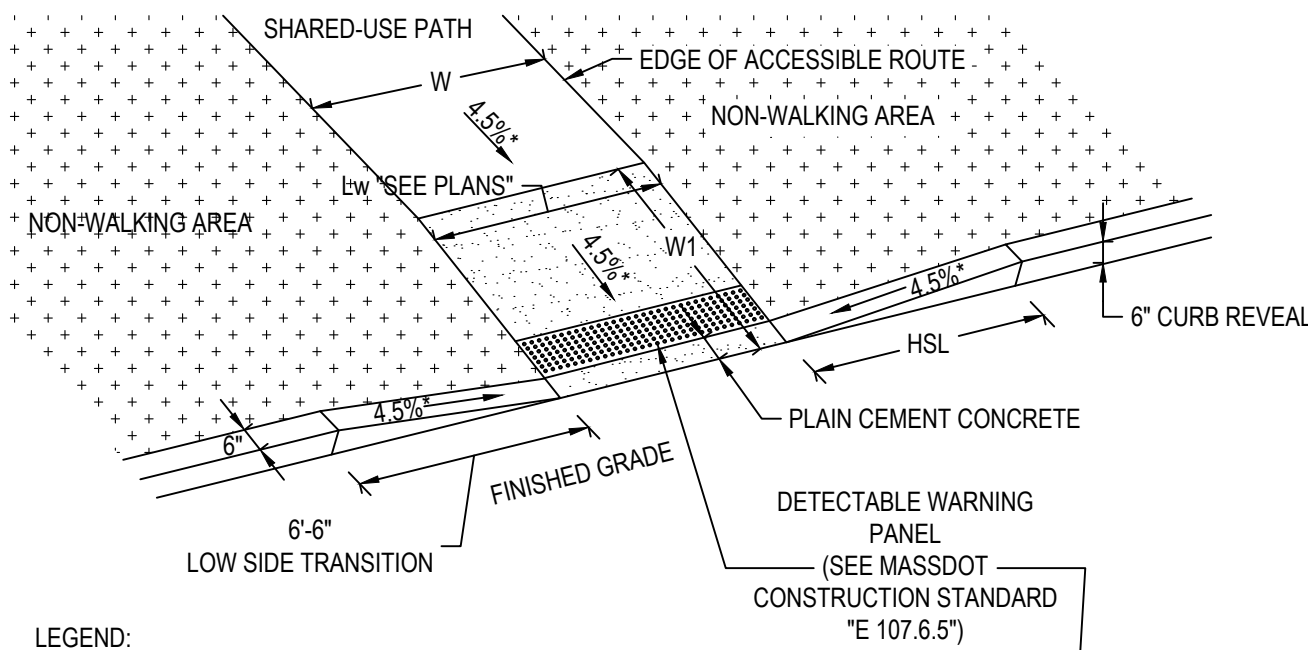
INLET PROTECTION DEVICE - SILT SACK WITH CURB INLET FILTER
N.T.S.

ACCESSIBLE CURB RAMP NOTES:

1. MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE EXCLUDING CURB RAMPS SHALL BE DESIGNED TO 4.5% ±0.5%
2. A MINIMUM OF 3'-0" CLEAR SHALL BE MAINTAINED AT ANY PERMANENT OBSTACLE IN ACCESSIBLE ROUTE (I.E., HYDRANTS, UTILITY POLES, TREE WELLS, SIGNS, ETC.).
3. CURB TREATMENT VARIES, SEE PLANS FOR CURB TYPE.
4. RAMP, CURB AND ADJACENT PAVEMENTS SHALL BE GRADED TO PREVENT PONDING.
5. WHERE ACCESSIBLE ROUTES ARE LESS THAN 5' IN WIDTH (EXCLUDING CURBING) A 5'x5' PASSING AREA SHALL BE PROVIDED AT INTERVALS NOT TO EXCEED 200 FT.
6. ELIMINATE CURBING AT RAMP WHERE IT ABUTS ROADWAY.
7. 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 (JUNE 2014). CONTRACTOR SHALL PROVIDE 6" BETWEEN DETECTABLE WARNING PANEL AND EDGE OF CONCRETE WHERE IT ABUTS LOAM & SEED.
8. WHEELCHAIR RAMP SLOPES AND CROSS SLOPES SHALL HAVE A CONSTRUCTION TOLERANCE OF ±0.5%.
9. DETECTABLE WARNING PANELS SHALL BE BRICK RED OR YELLOW IN COLOR AS APPROVED BY THE LOCAL DPW.



DETECTABLE WARNING PANEL
N.T.S.

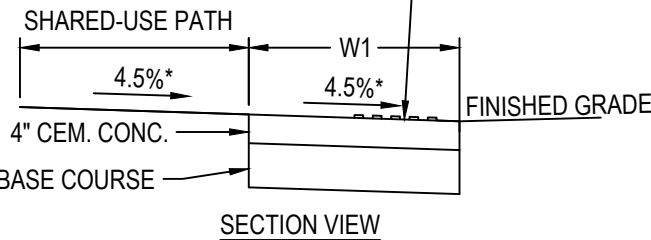


LEGEND:

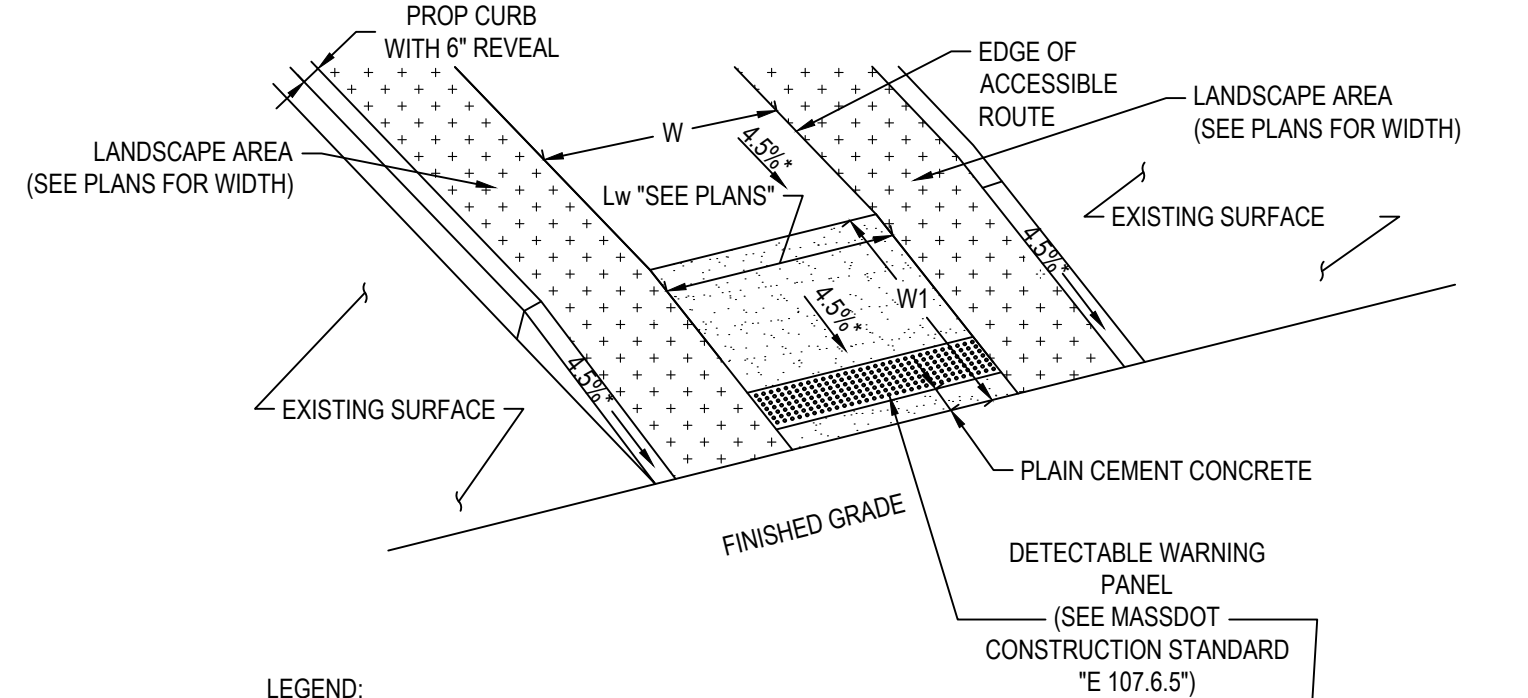
HSL = HIGH SIDE TRANSITION LENGTH (SEE MASSDOT CONSTRUCTION STANDARD *E 107.9.0*)
W = SHARED-USE PATH WIDTH
W1 = PERPENDICULAR RAMP LENGTH
* = TOLERANCE FOR CONSTRUCTION ±0.5%

NOTES:

1. USABLE SIDEWALK WIDTH PER AAB IS NOT TO BE LESS THAN 4'-0"
2. ROADWAY GUTTER SLOPE MEASURED IN UPSTATION DIRECTION
3. SEE MASSDOT CONSTRUCTION STANDARD *E 107.6.5* FOR DETECTABLE WARNING PANEL DETAILS



ADA ACCESSIBLE CURB RAMP TYPE 1
N.T.S.

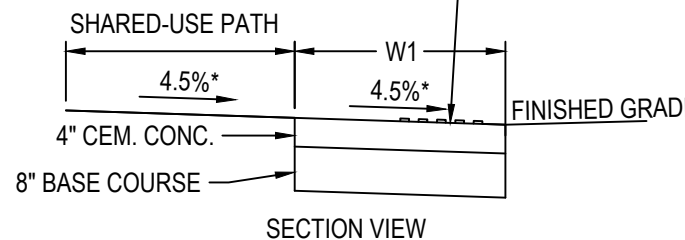


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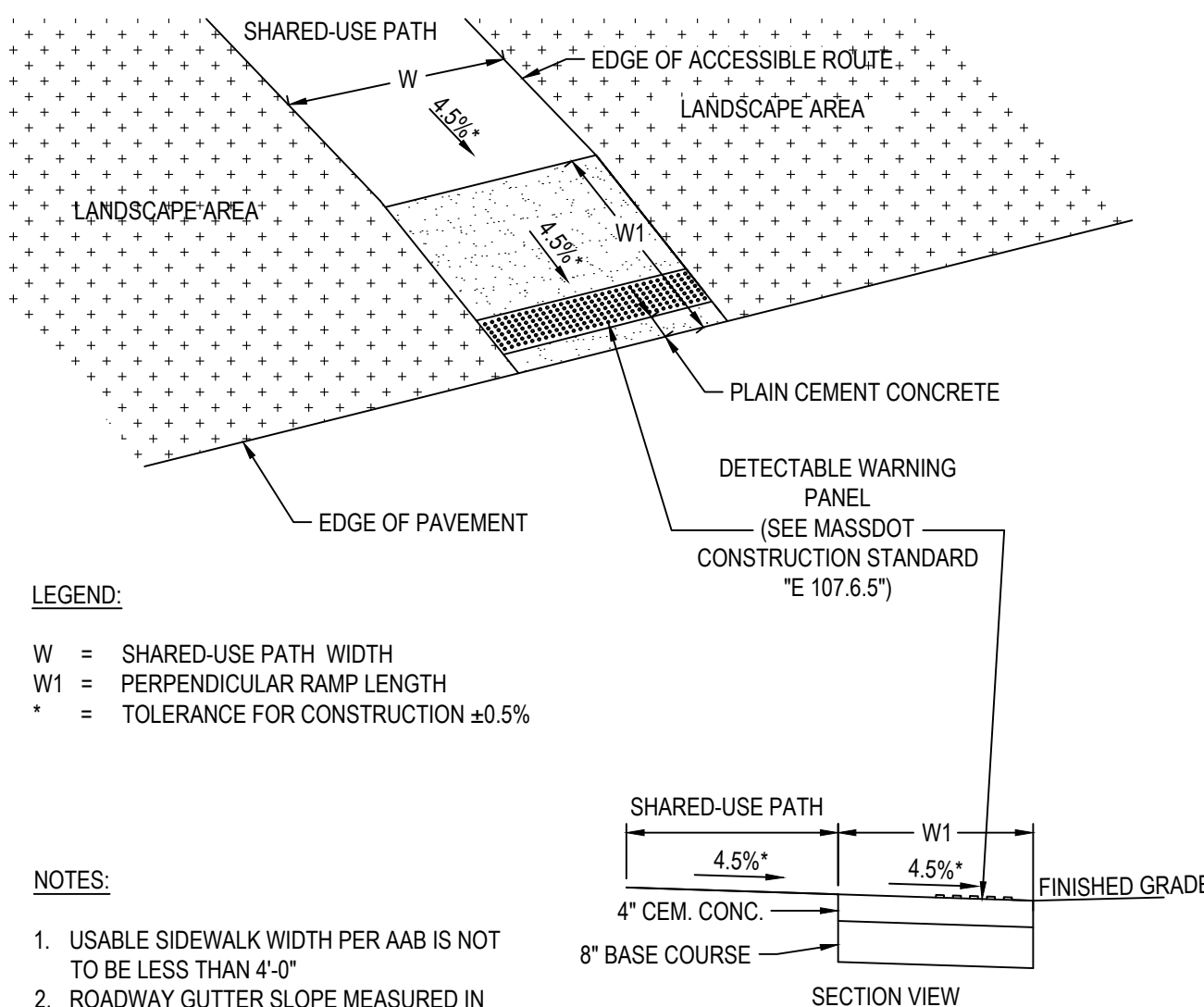
W = SHARED-USE PATH WIDTH
W1 = PERPENDICULAR RAMP LENGTH
* = TOLERANCE FOR CONSTRUCTION ±0.5%

NOTES:

1. USABLE SIDEWALK WIDTH PER AAB IS NOT TO BE LESS THAN 4'-0"
2. ROADWAY GUTTER SLOPE MEASURED IN UPSTATION DIRECTION
3. SEE MASSDOT CONSTRUCTION STANDARD *E 107.6.5* FOR DETECTABLE WARNING PANEL DETAILS



ADA ACCESSIBLE CURB RAMP TYPE 2
N.T.S.

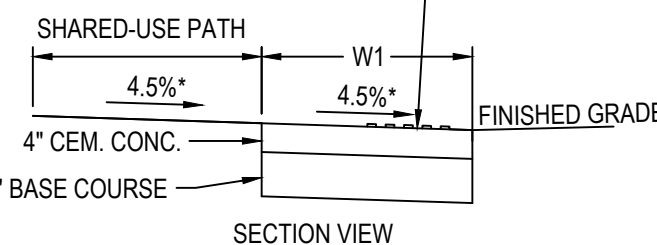


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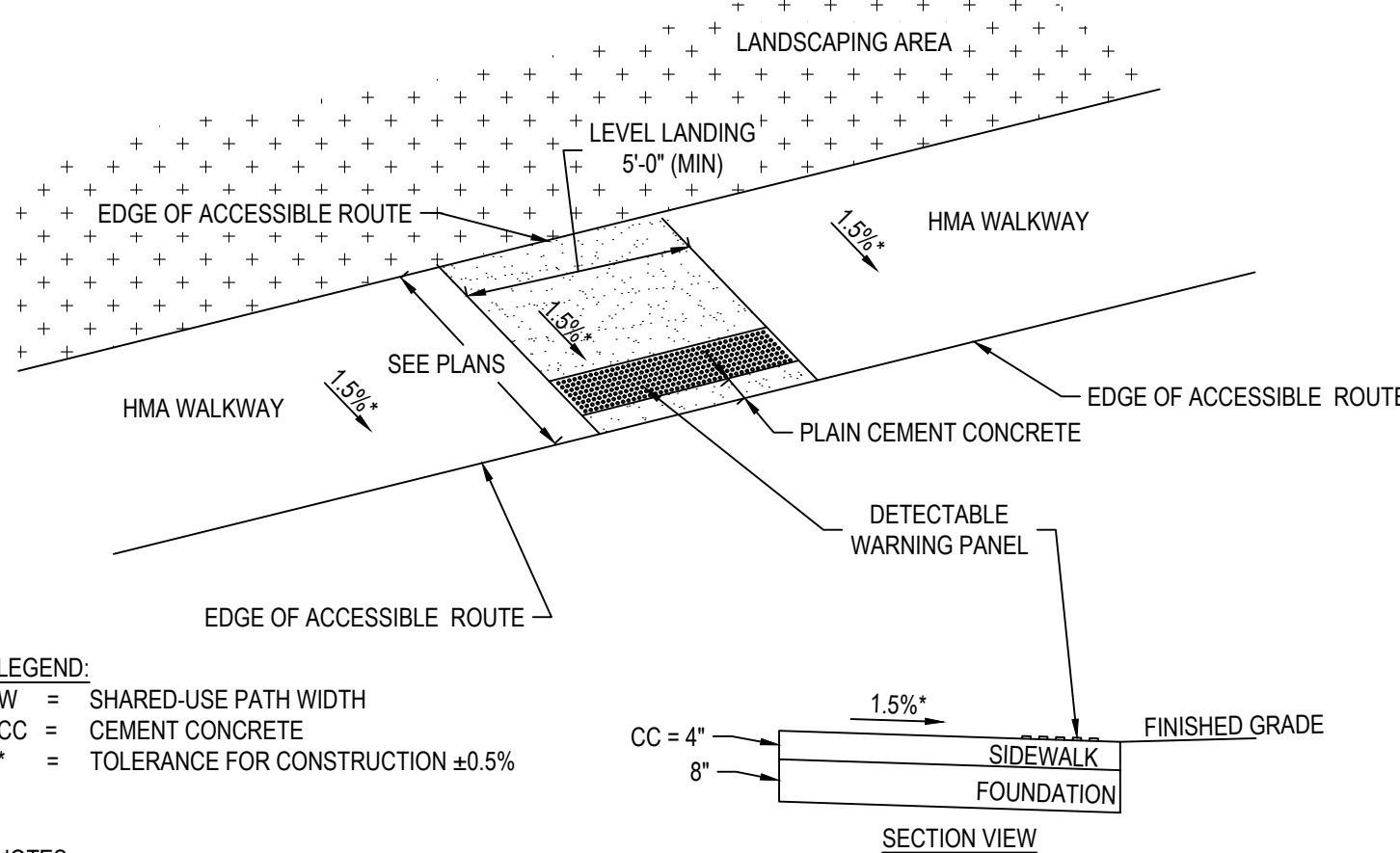
W = SHARED-USE PATH WIDTH
W1 = PERPENDICULAR RAMP LENGTH
* = TOLERANCE FOR CONSTRUCTION ±0.5%

NOTES:

1. USABLE SIDEWALK WIDTH PER AAB IS NOT TO BE LESS THAN 4'-0"
2. ROADWAY GUTTER SLOPE MEASURED IN UPSTATION DIRECTION
3. SEE MASSDOT CONSTRUCTION STANDARD *E 107.6.5* FOR DETECTABLE WARNING PANEL DETAILS



ADA ACCESSIBLE CURB RAMP TYPE 3
N.T.S.

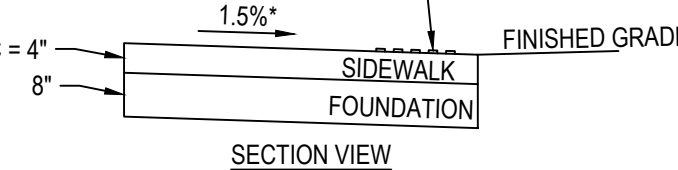


LEGEND:

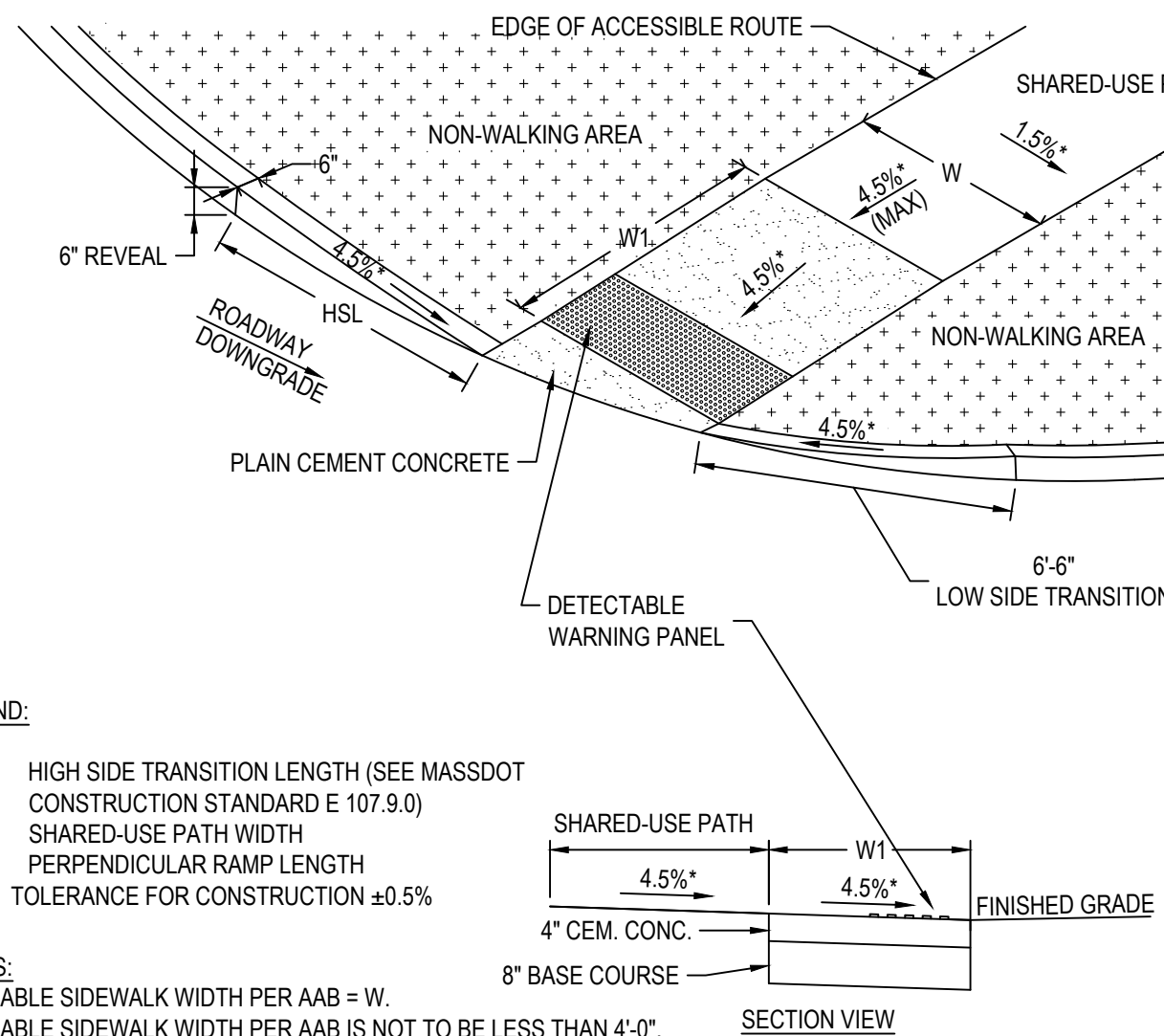
W = SHARED-USE PATH WIDTH
CC = CEMENT CONCRETE
* = TOLERANCE FOR CONSTRUCTION ±0.5%

NOTES:

1. USABLE SIDEWALK WIDTH PER AAB IS NOT TO BE LESS THAN 4'-0"
2. ROADWAY GUTTER SLOPE MEASURED IN UPSTATION DIRECTION
3. SEE MASSDOT CONSTRUCTION STANDARD E 107.6.5 FOR DETECTABLE WARNING PANEL DETAILS.
4. SEE MASSDOT CONSTRUCTION STANDARD E 107.2.1 FOR ALL OTHER DETAILS.



ADA ACCESSIBLE CURB RAMP TYPE 4
N.T.S.

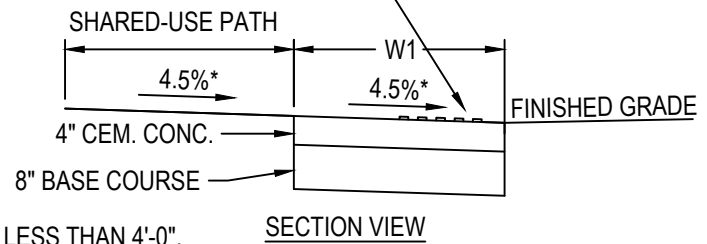


LEGEND:

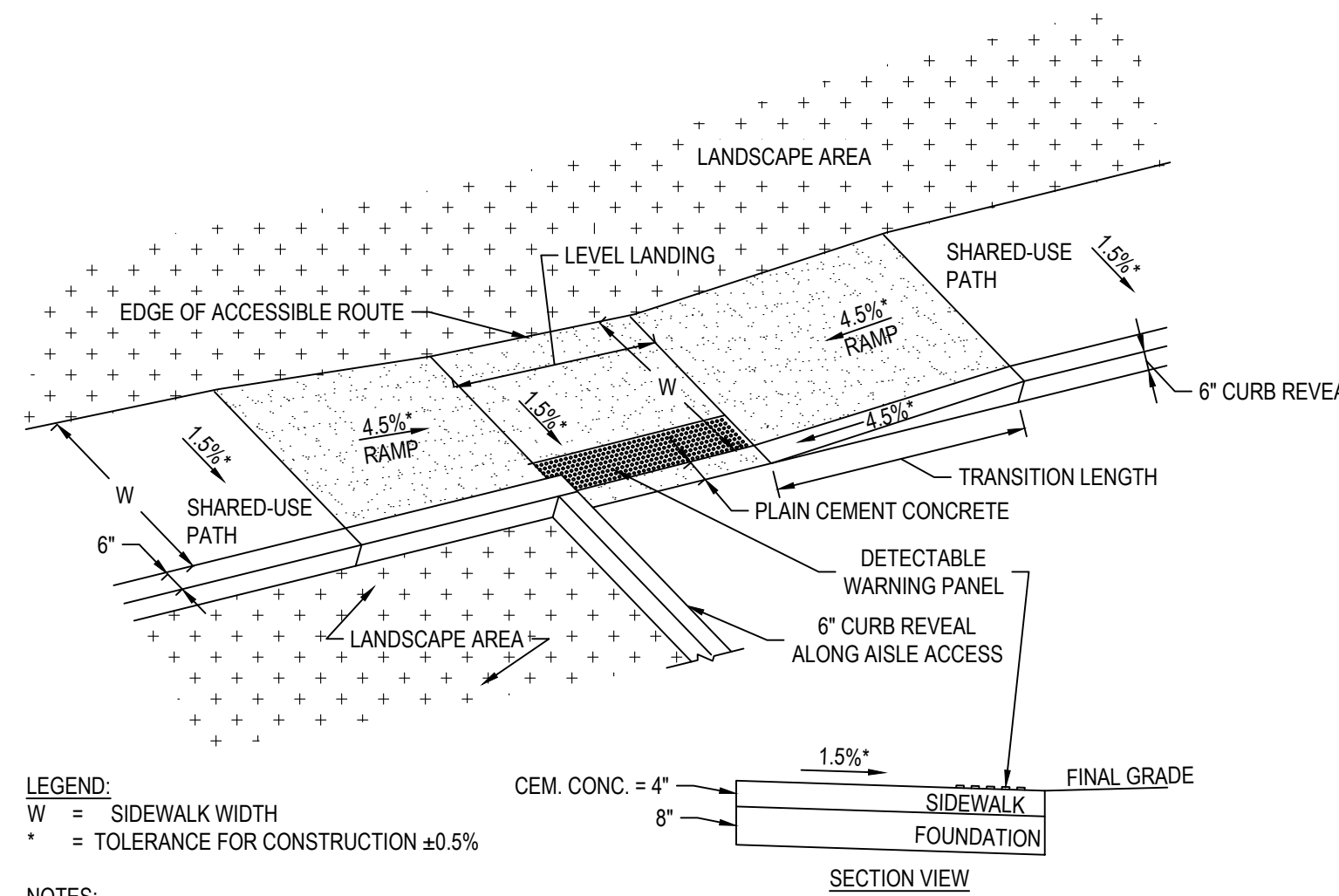
HSL = HIGH SIDE TRANSITION LENGTH (SEE MASSDOT CONSTRUCTION STANDARD E 107.9.0)
W = SHARED-USE PATH WIDTH
W1 = PERPENDICULAR RAMP LENGTH
* = TOLERANCE FOR CONSTRUCTION ±0.5%

NOTES:

1. USABLE SIDEWALK WIDTH PER AAB = W.
2. USABLE SIDEWALK WIDTH PER AAB IS NOT TO BE LESS THAN 4'-0"
3. ROADWAY GUTTER SLOPE MEASURED IN UPSTATION DIRECTION.
4. SEE MASSDOT CONSTRUCTION STANDARD E 107.6.5 FOR DETECTABLE WARNING PANEL DETAILS.



ADA ACCESSIBLE CURB RAMP TYPE 5
N.T.S.



LEGEND:

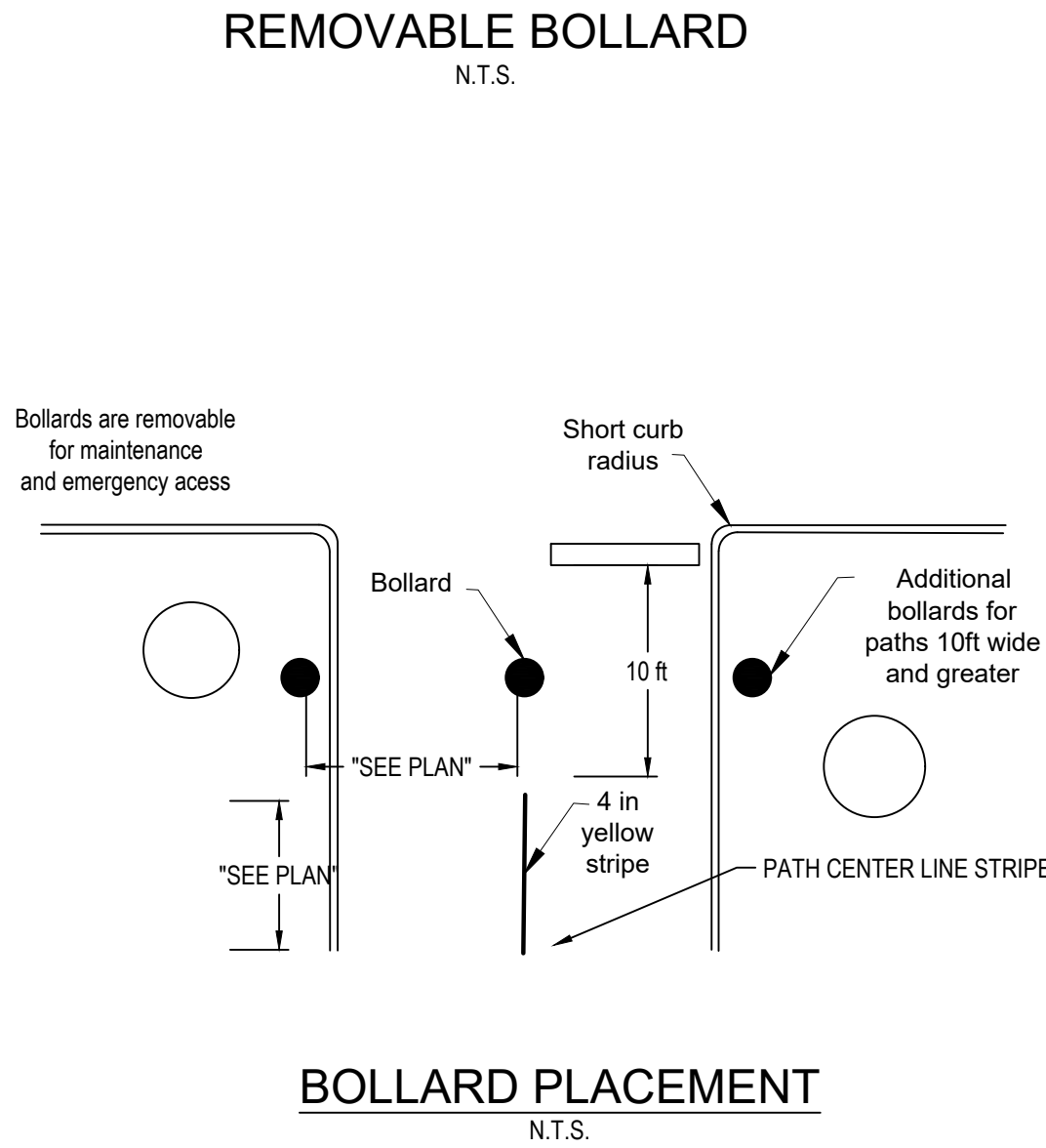
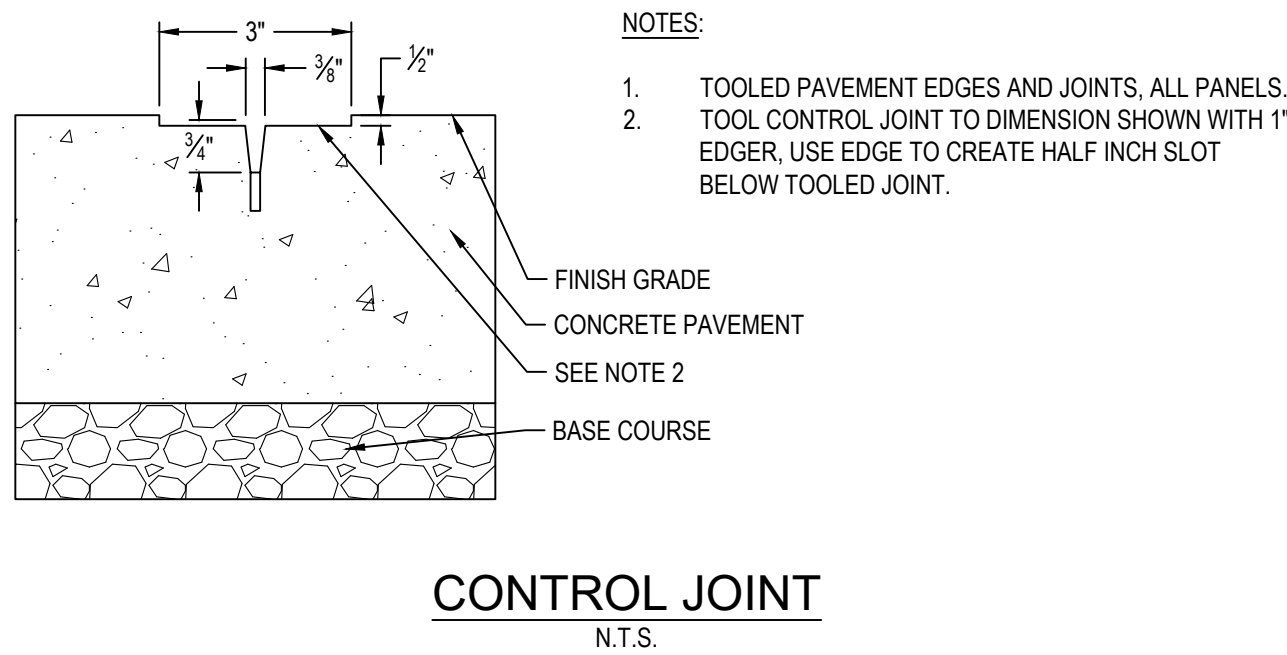
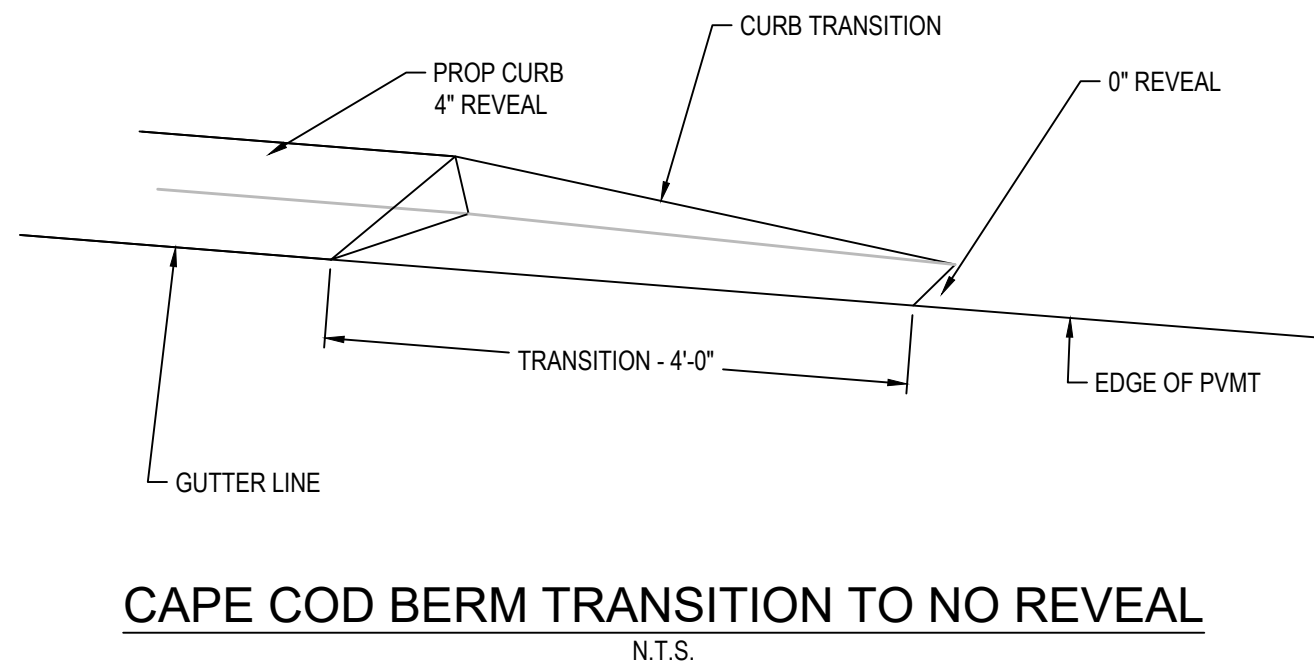
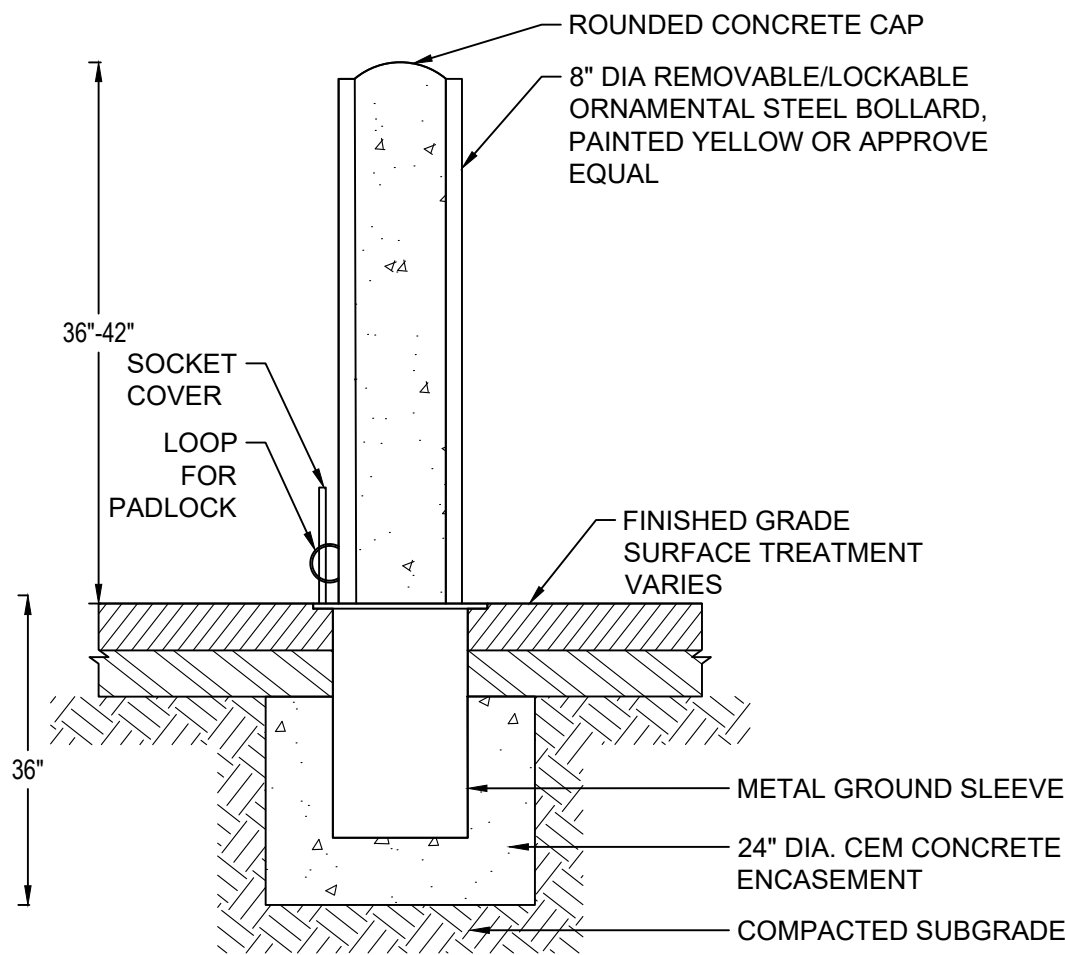
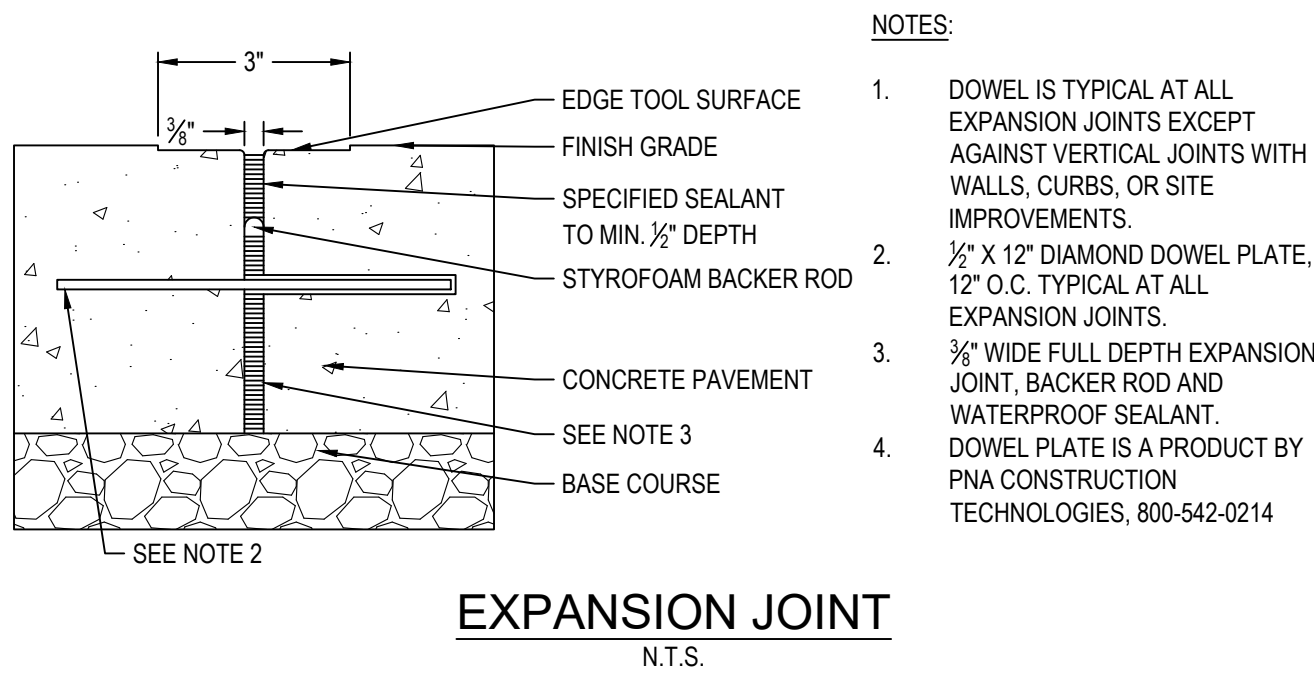
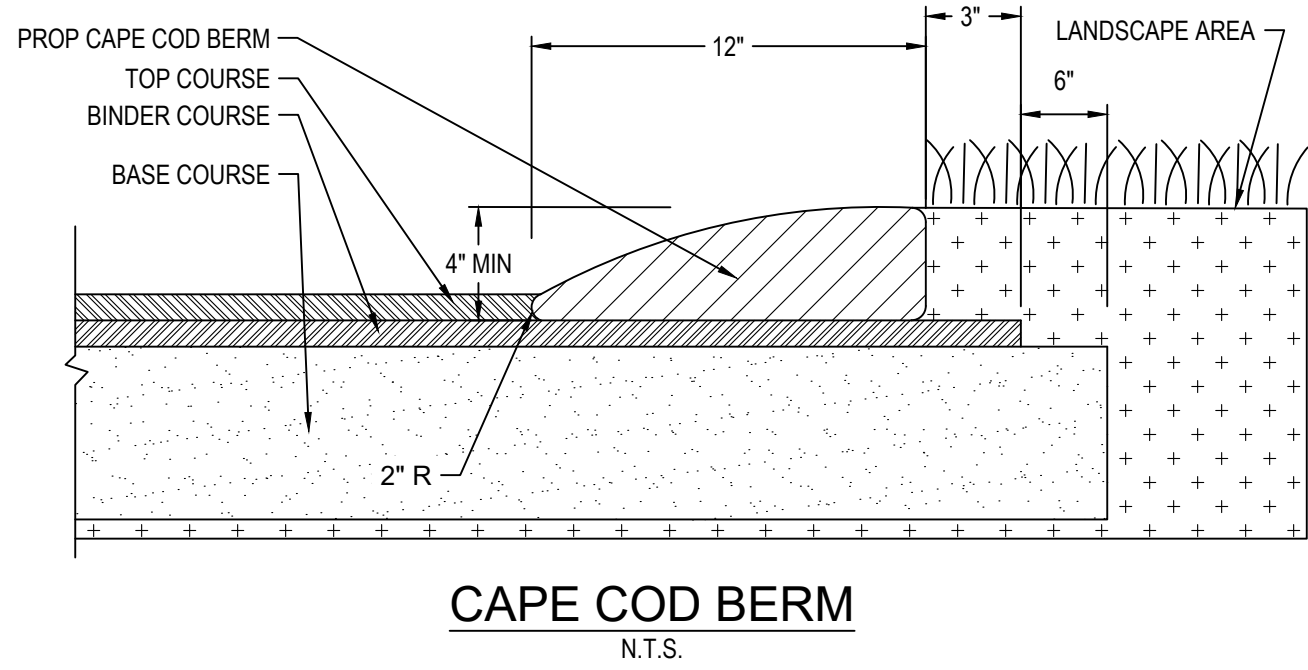
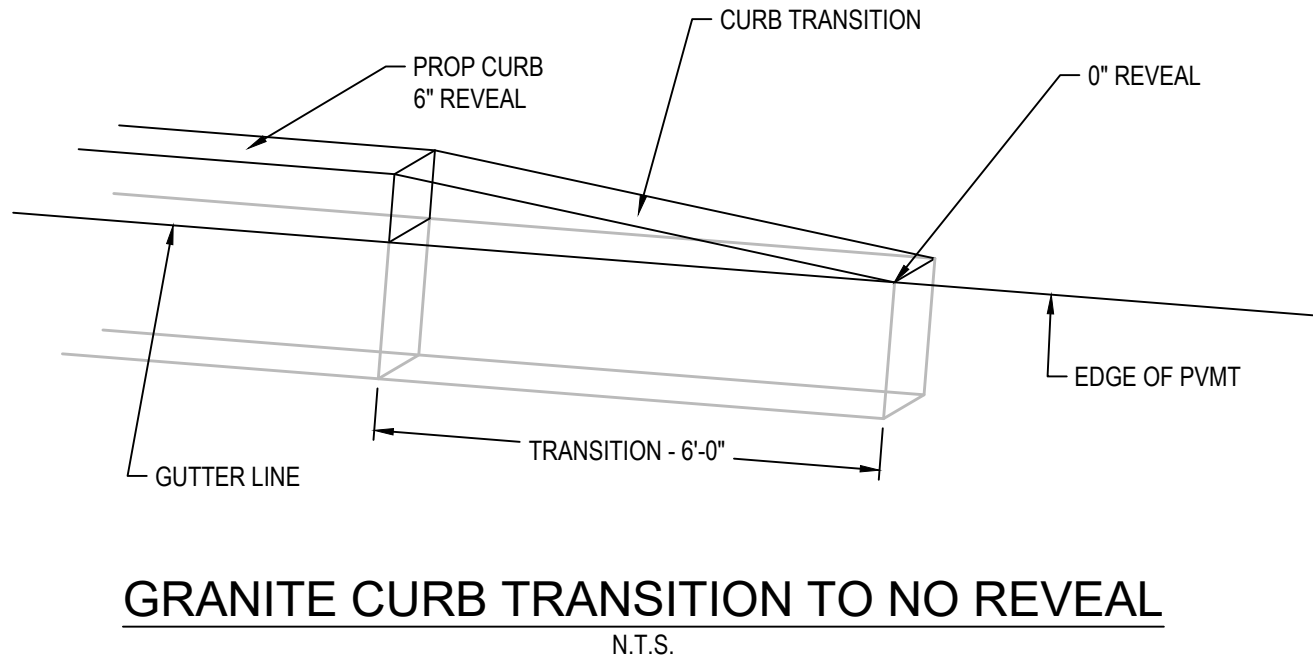
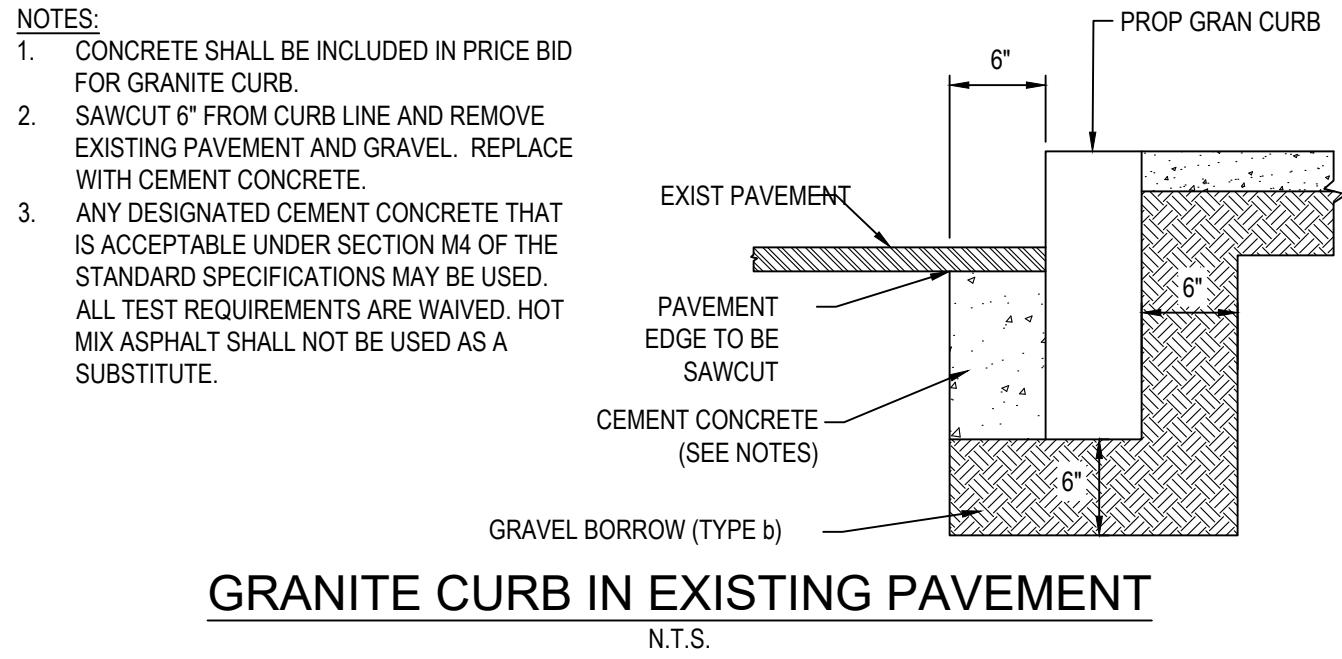
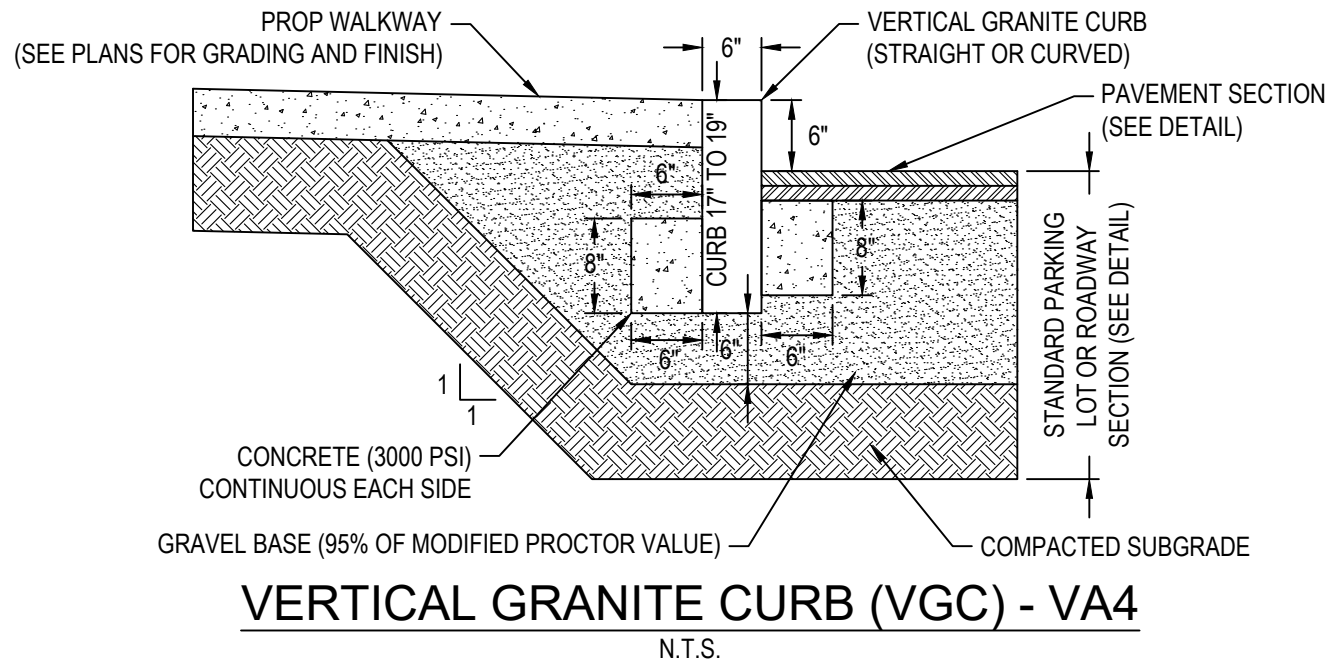
W = SIDEWALK WIDTH
* = TOLERANCE FOR CONSTRUCTION ±0.5%

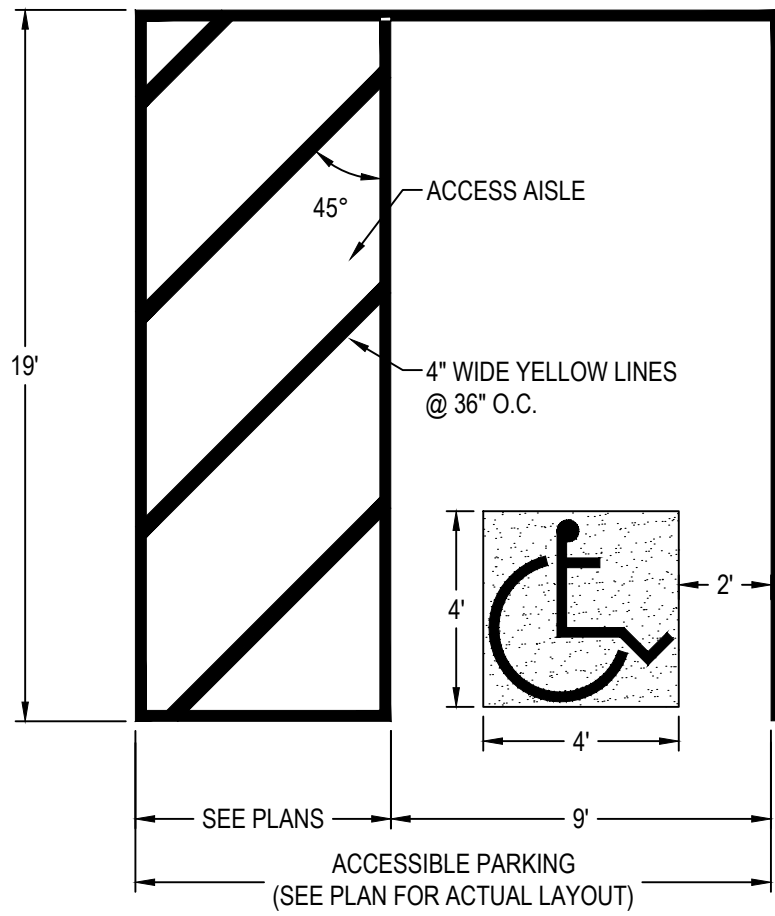
NOTES:

1. USABLE SIDEWALK WIDTH PER AAB IS NOT TO BE LESS THAN 4'-0"
2. ROADWAY GUTTER SLOPE MEASURED IN UPSTATION DIRECTION.
3. SEE MASSDOT CONSTRUCTION STANDARD E 107.6.5 FOR DETECTABLE WARNING PANEL DETAILS.
4. SEE MASSDOT CONSTRUCTION STANDARD E 107.2.1 FOR ALL OTHER DETAILS.

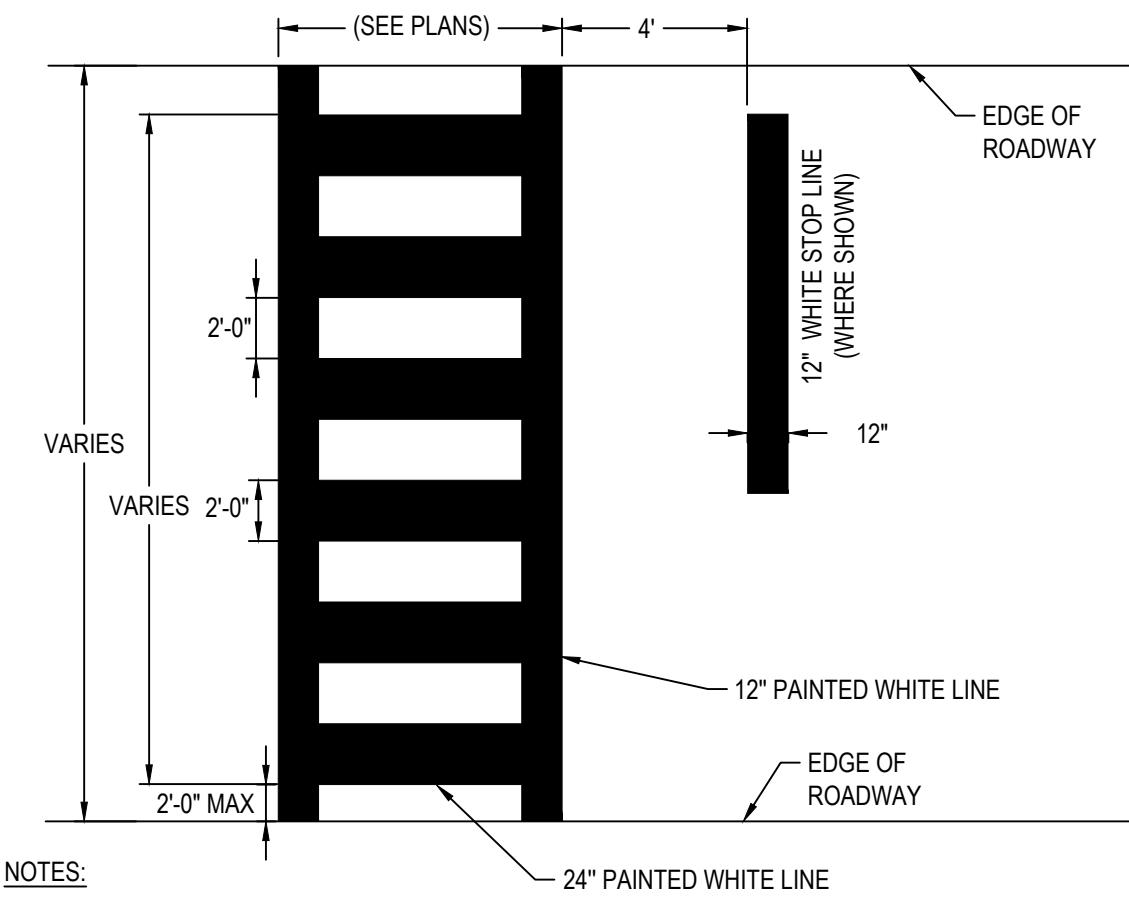


ADA ACCESSIBLE CURB RAMP TYPE 6
N.T.S.



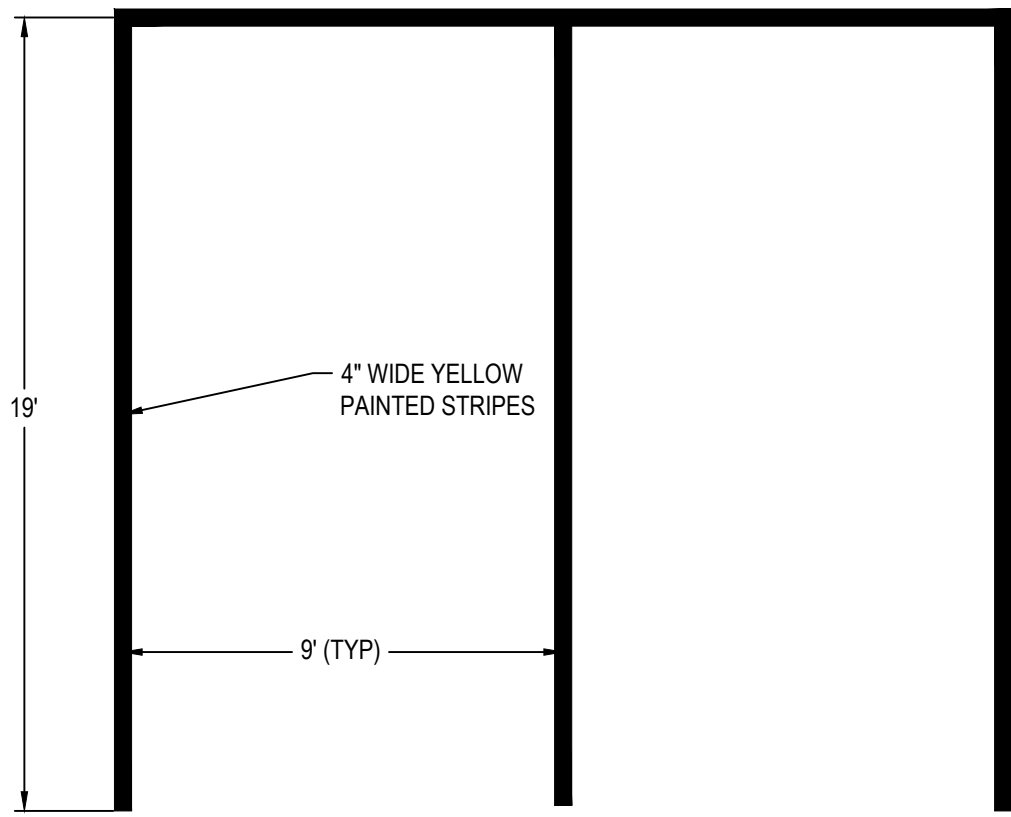


ACCESSIBLE PARKING SPACE
N.T.S.

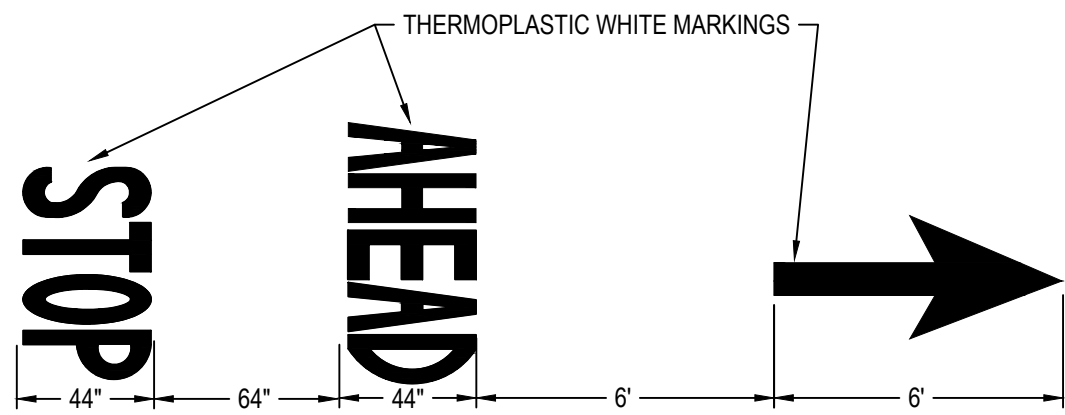


- NOTES:
- ALL 12" LINES SHALL BE APPLIED IN ONE APPLICATION, NO COMBINATION OF LINES (TWO - 6" LINES) WILL BE ACCEPTED. ALL 24" LINES MAY BE EITHER ONE 24" LINE OR A COMBINATION OF TWO - 12" LINES.
 - LAYOUT OF CROSSWALKS SHALL BE APPROVED BY THE ENGINEER PRIOR TO APPLICATION.
 - CROSSWALK BARS SHALL BE PLACED OUTSIDE THE VEHICULAR WHEEL PATH WHEREVER POSSIBLE.

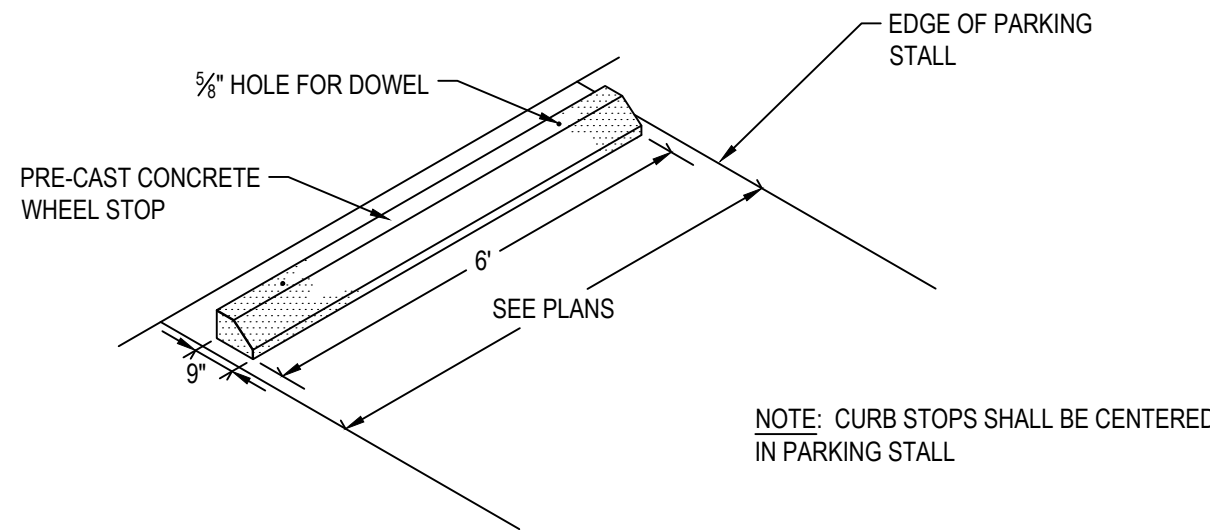
CROSSWALK PAVEMENT MARKING
N.T.S.



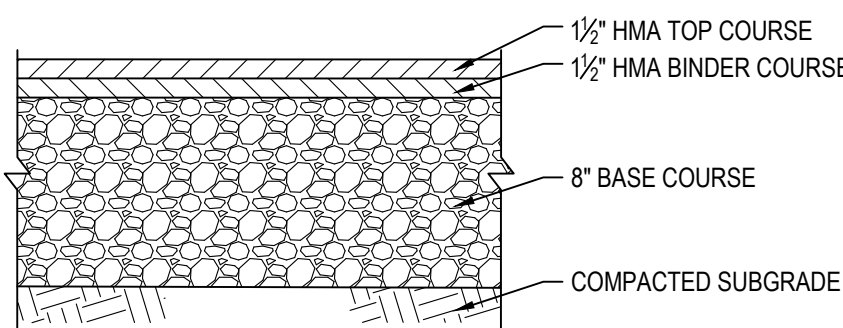
PARKING STALL PAVEMENT MARKING
N.T.S.



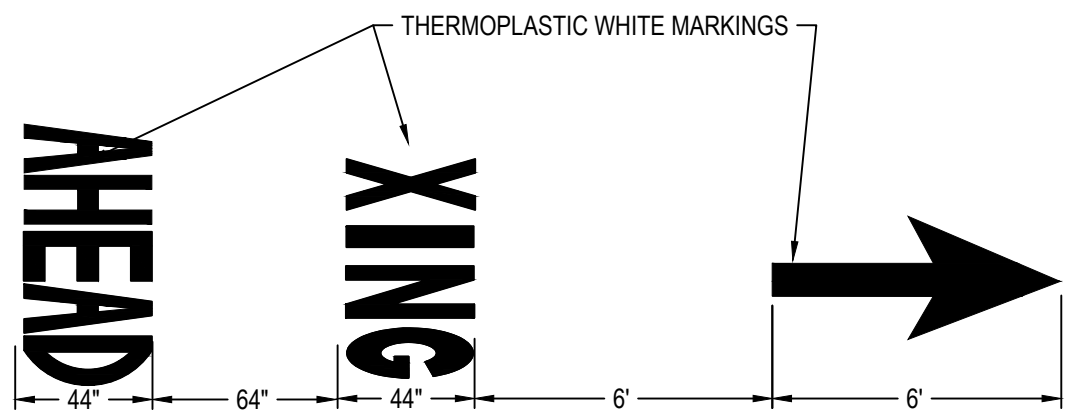
STOP AHEAD PAVEMENT MARKING
N.T.S.



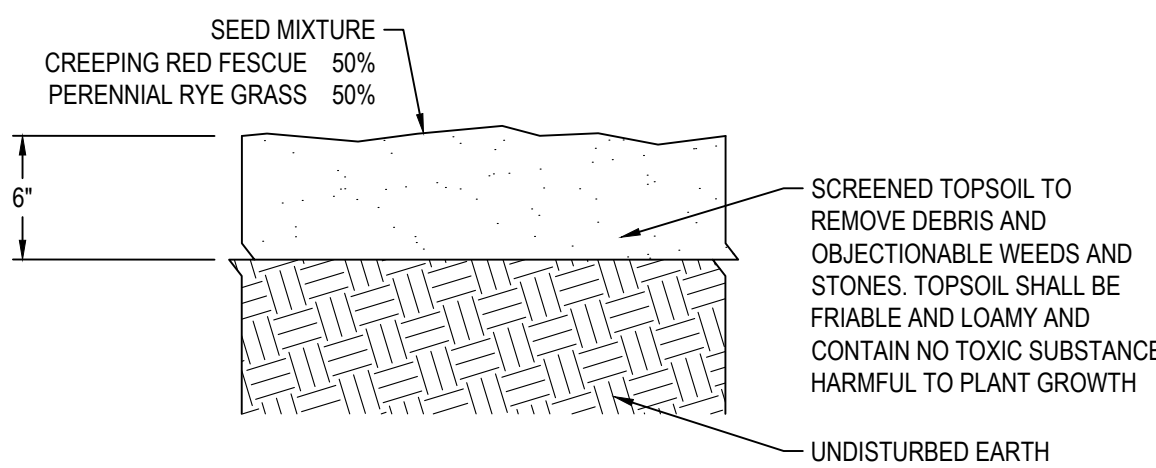
CONCRETE WHEEL STOP
N.T.S.



HMA SHARED-USE PATH PAVEMENT
N.T.S.

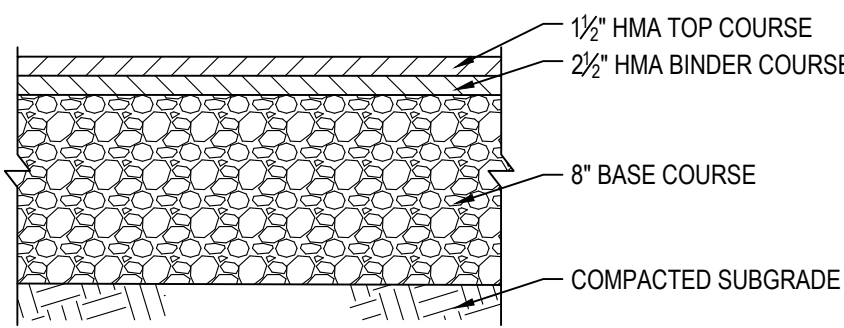


CROSSING AHEAD PAVEMENT MARKING
N.T.S.

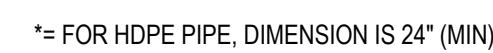


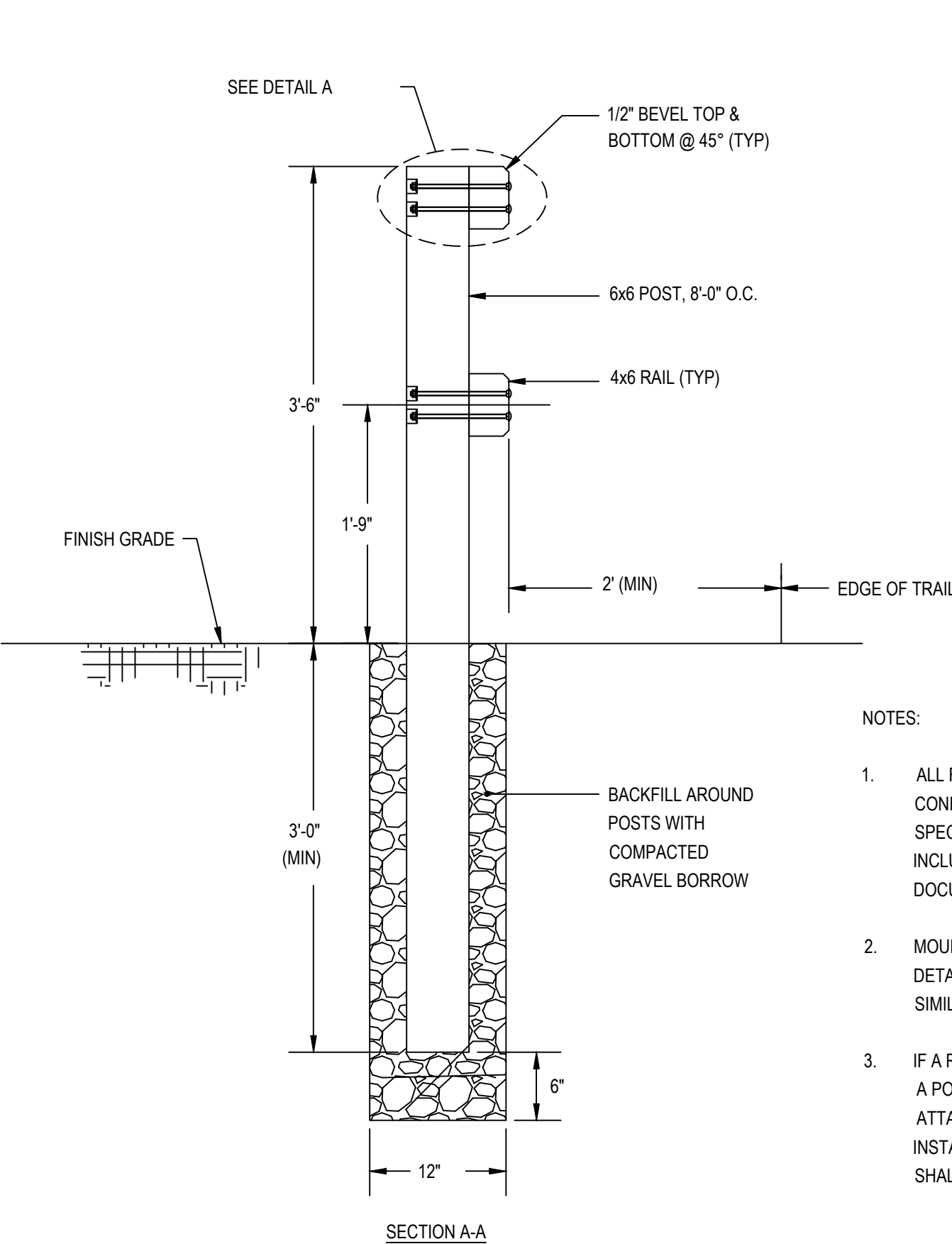
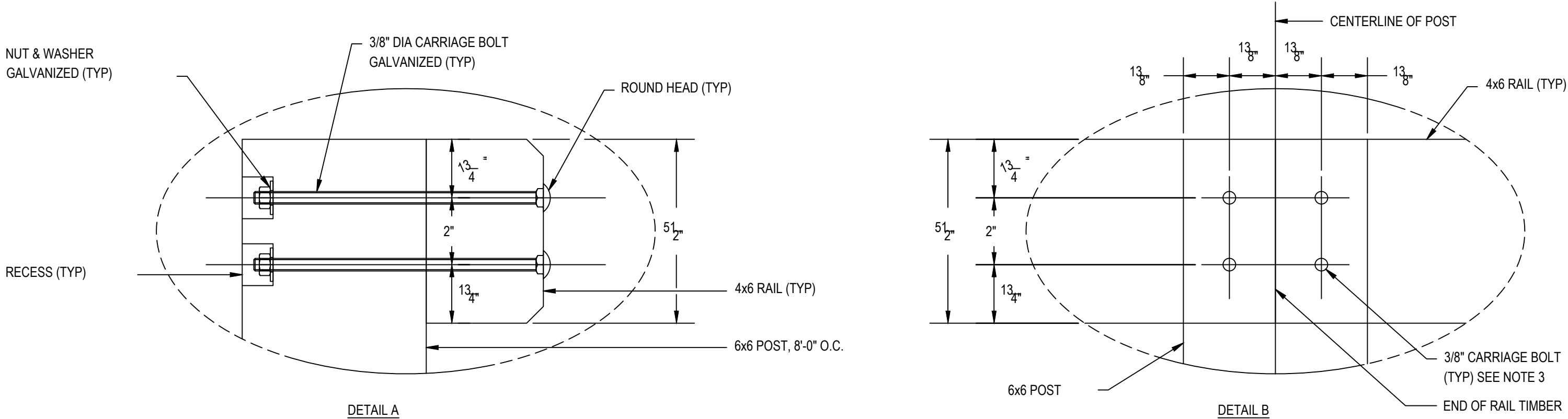
- NOTES:
- GRASS SEED SHALL BE SPREAD DURING THE GROWING SEASON AT THE RATE OF FOUR (4) POUNDS PER ONE THOUSAND (1000) SQUARE FEET. IT SHALL BE A MIXTURE OF CREEPING RED FESCUE AND PERENNIAL RYE GRASS. IT SHALL BE PROPERLY FERTILIZED, LIMED, AND WATERED. A GUARANTEE PERIOD OF ONE (1) YEAR FROM FULL GROWTH AND FINAL BOND RELEASE SHALL BE HONORED BY THE SUBDIVIDER

LOAM AND SEED
N.T.S.

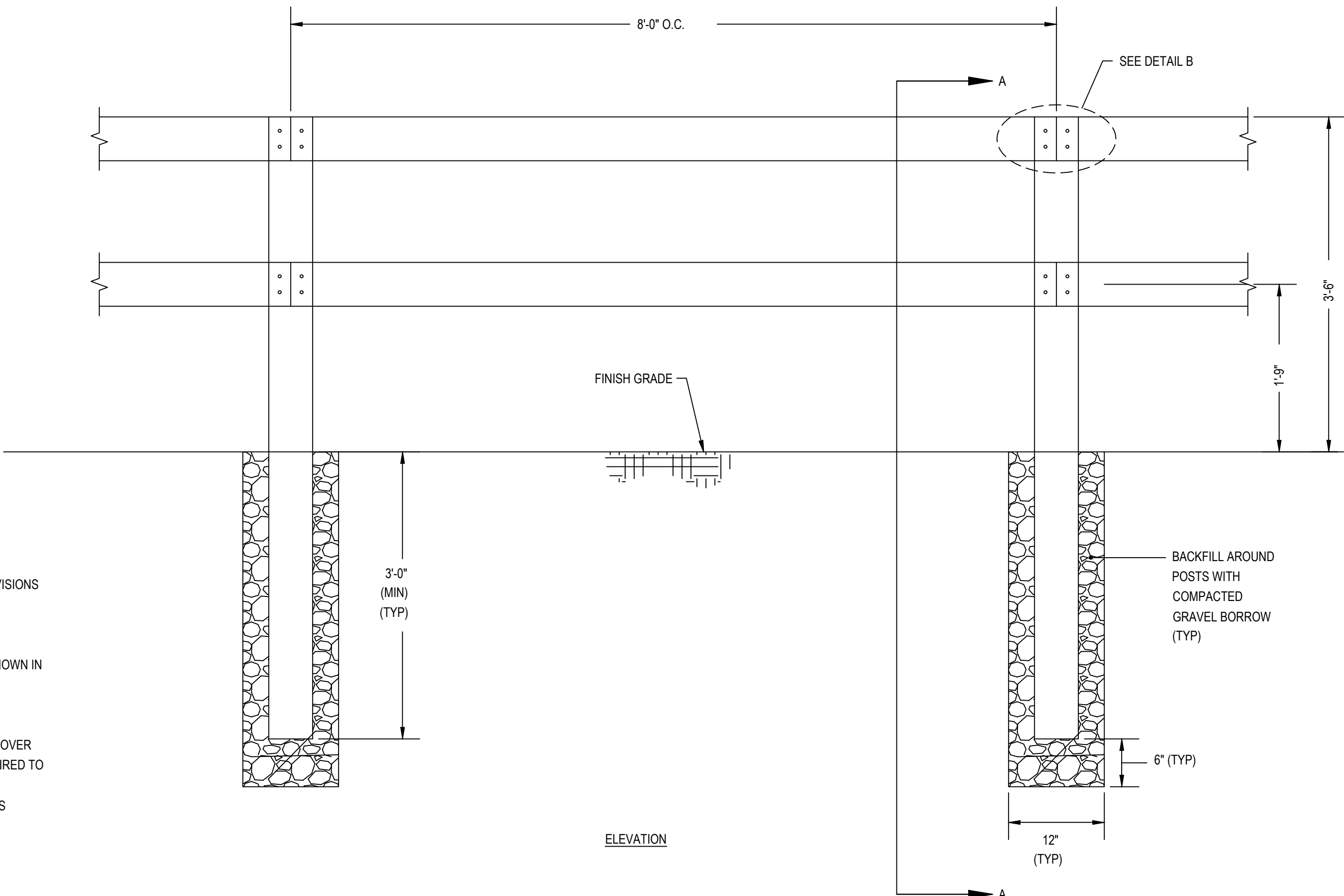


FULL DEPTH PAVEMENT
N.T.S.

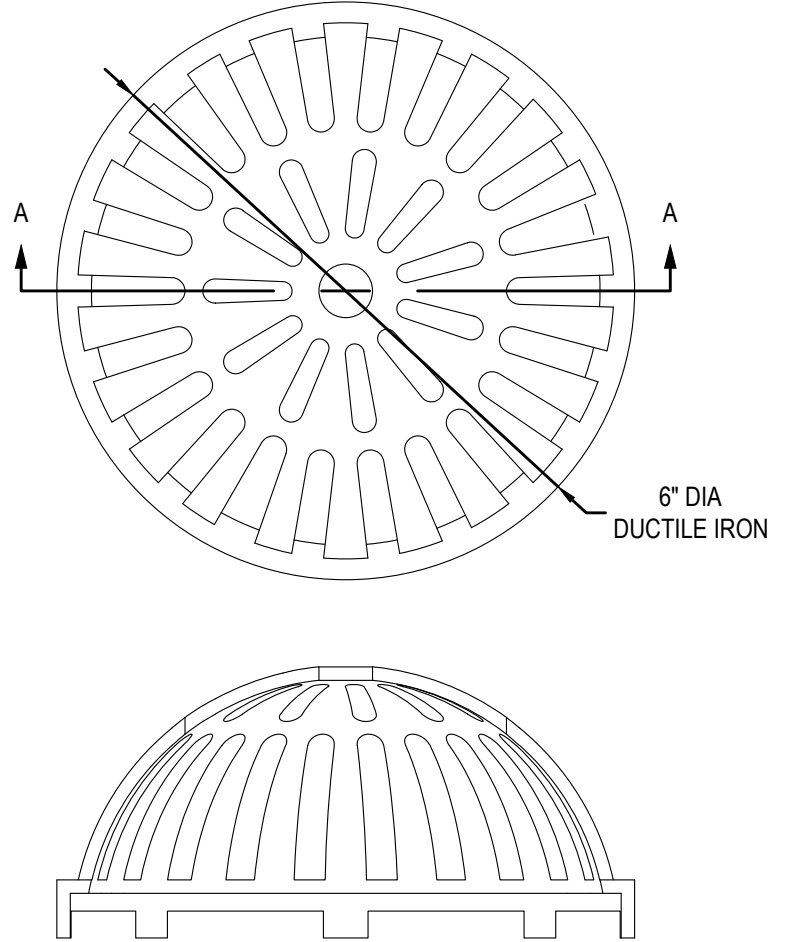




- NOTES:
1. ALL FENCING MATERIAL SHALL CONFORM TO THE STANDARD SPECIFICATIONS & SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENTS.
 2. MOUNTING FOR UPPER RAIL IS SHOWN IN DETAIL A. MOUNT LOWER RAIL IN SIMILAR FASHION.
 3. IF A RAIL TIMBER IS CONTINUOUS OVER A POST ONLY 2 BOLTS ARE REQUIRED TO ATTACH RAIL TO POST. BOLTS INSTALLED ON CONTINUOUS RAILS SHALL BE CENTERED ON POST.

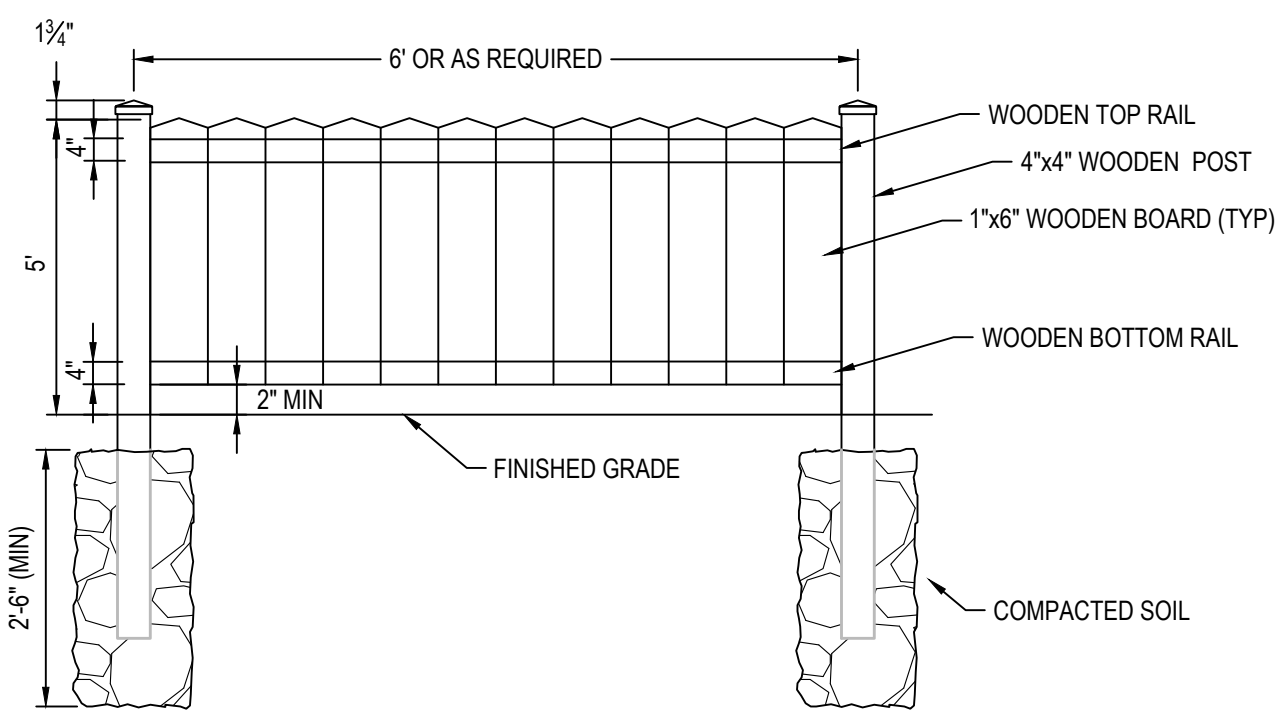


WOODEN SAFETY RAIL
N.T.S.

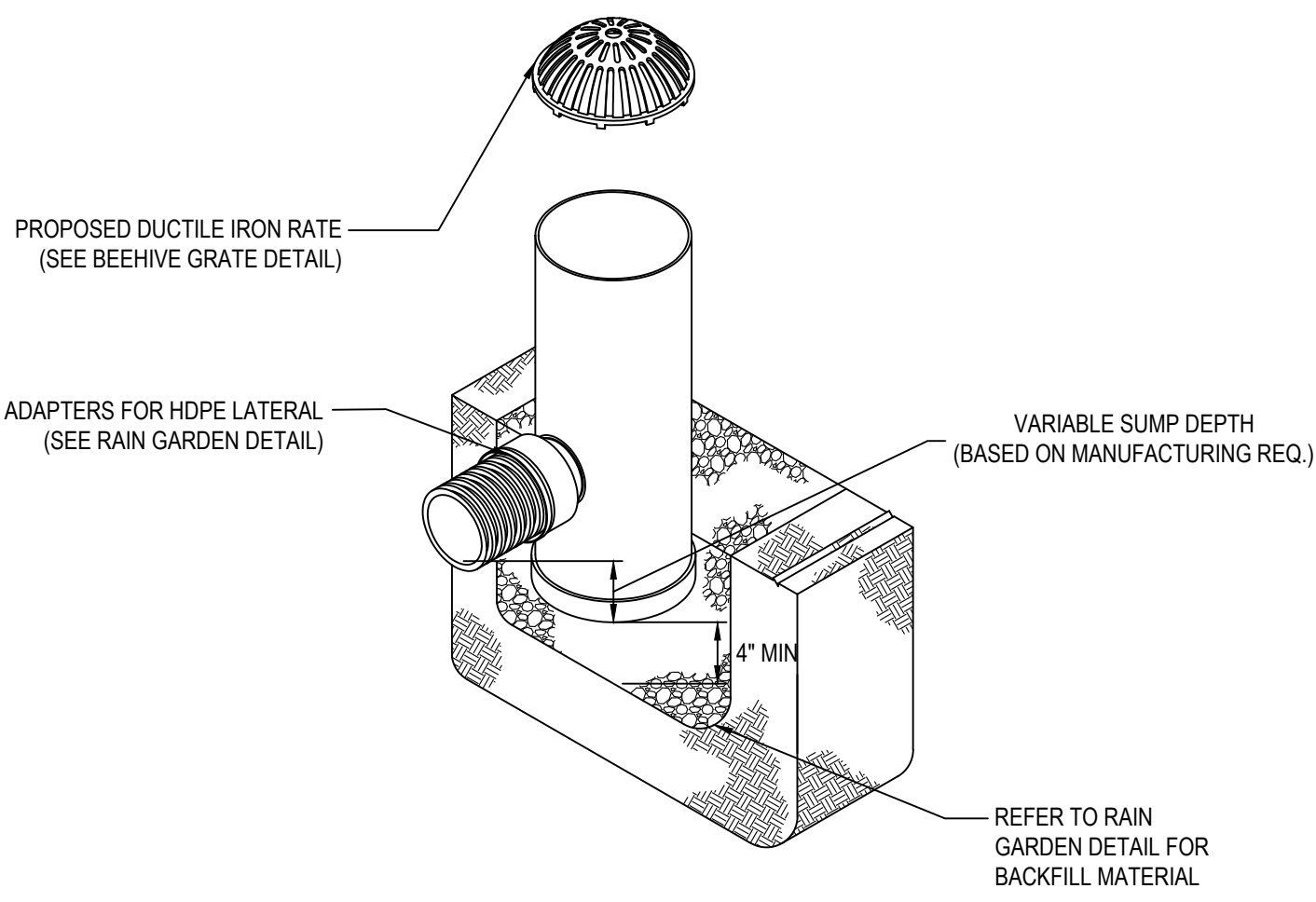


NOTE:
1. GRATE SHALL BE ADS NYLOPLAST OR APPROVED EQUAL.

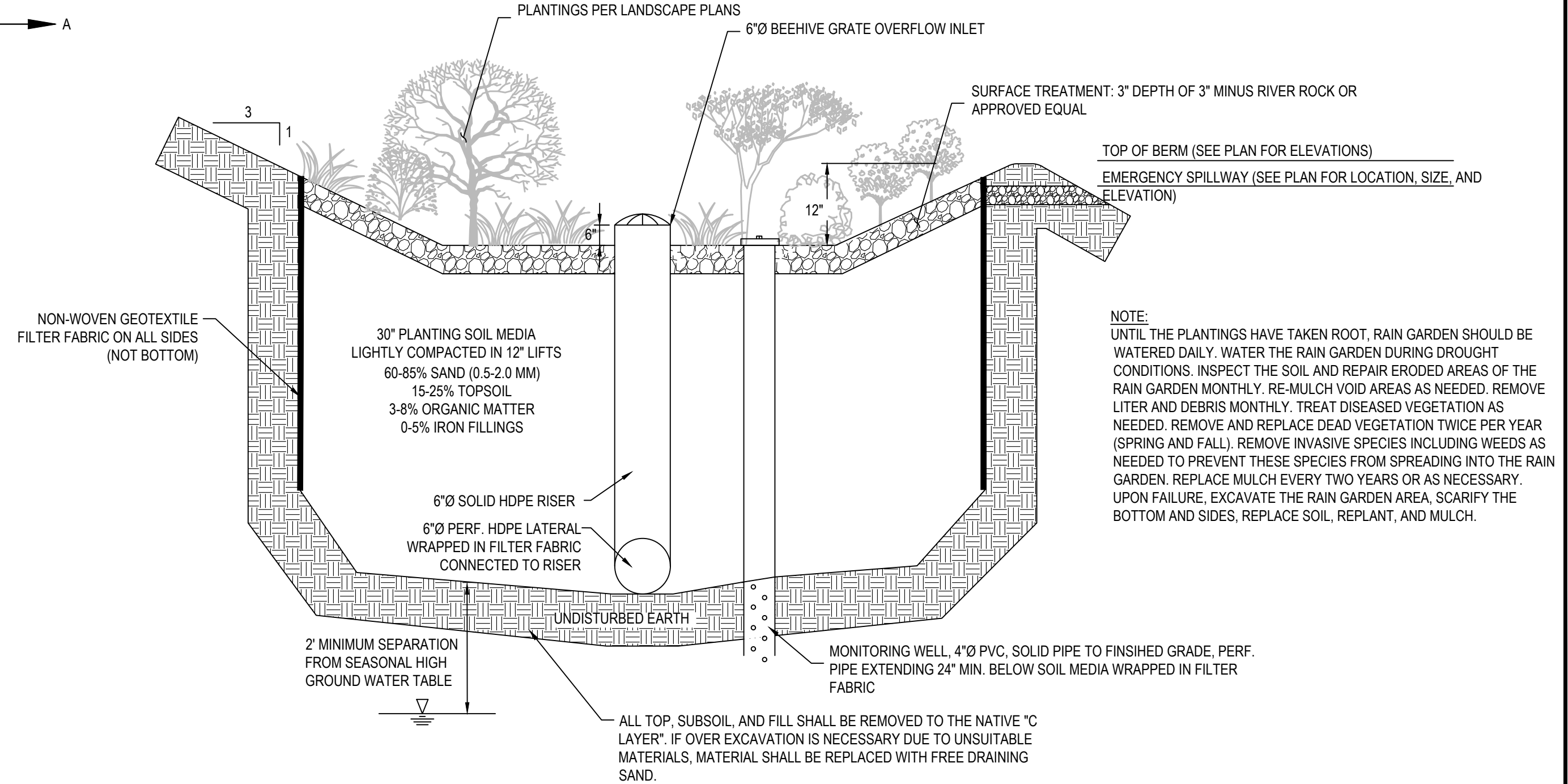
BEEHIVE GRATE
N.T.S.



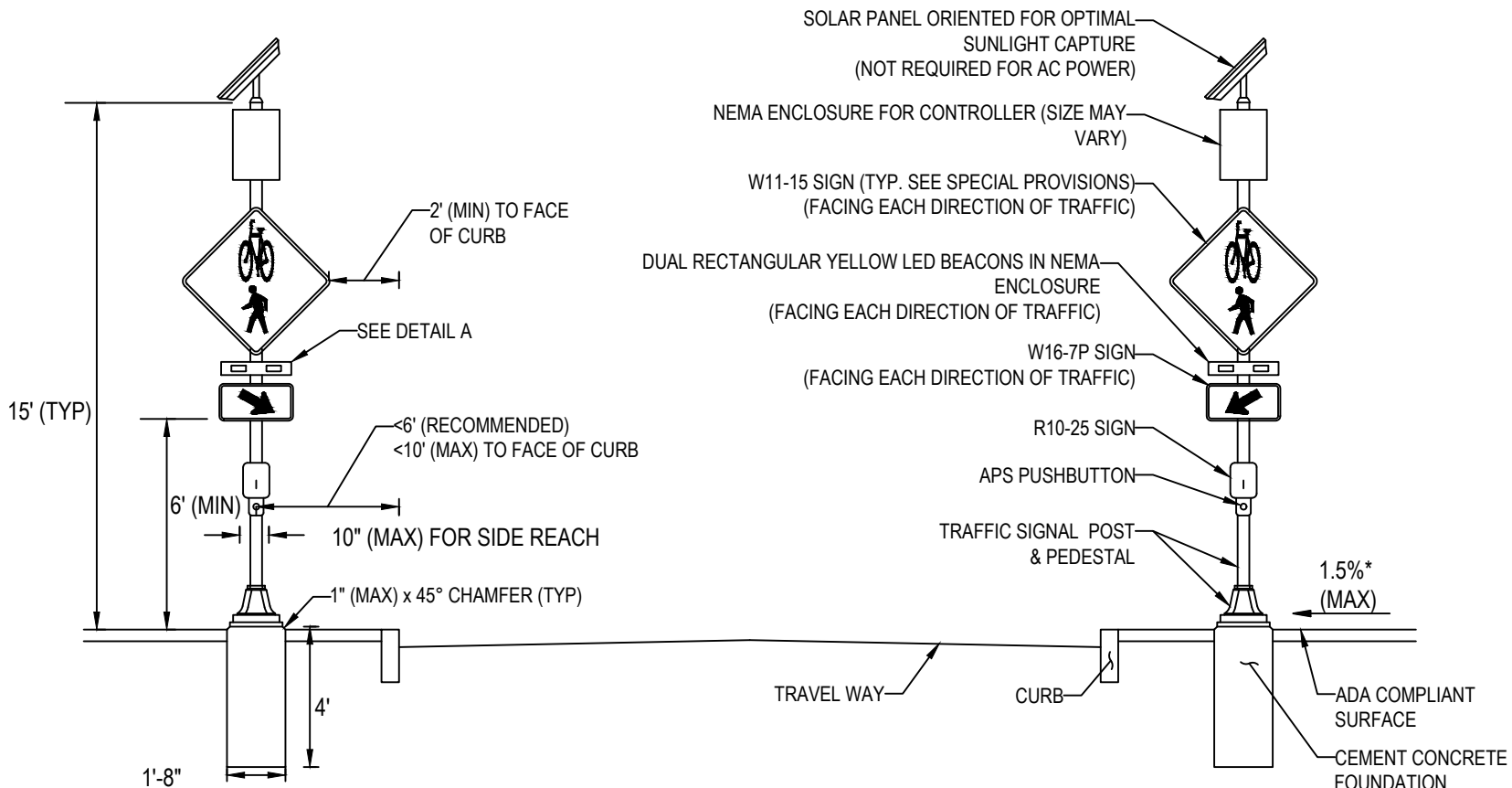
WOODEN PRIVACY FENCE
N.T.S.



HDPE RISER WITH DOME GRATE
N.T.S.



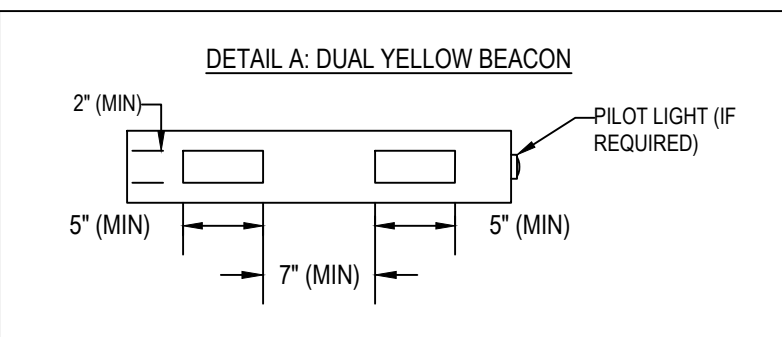
RAIN GARDEN
N.T.S.



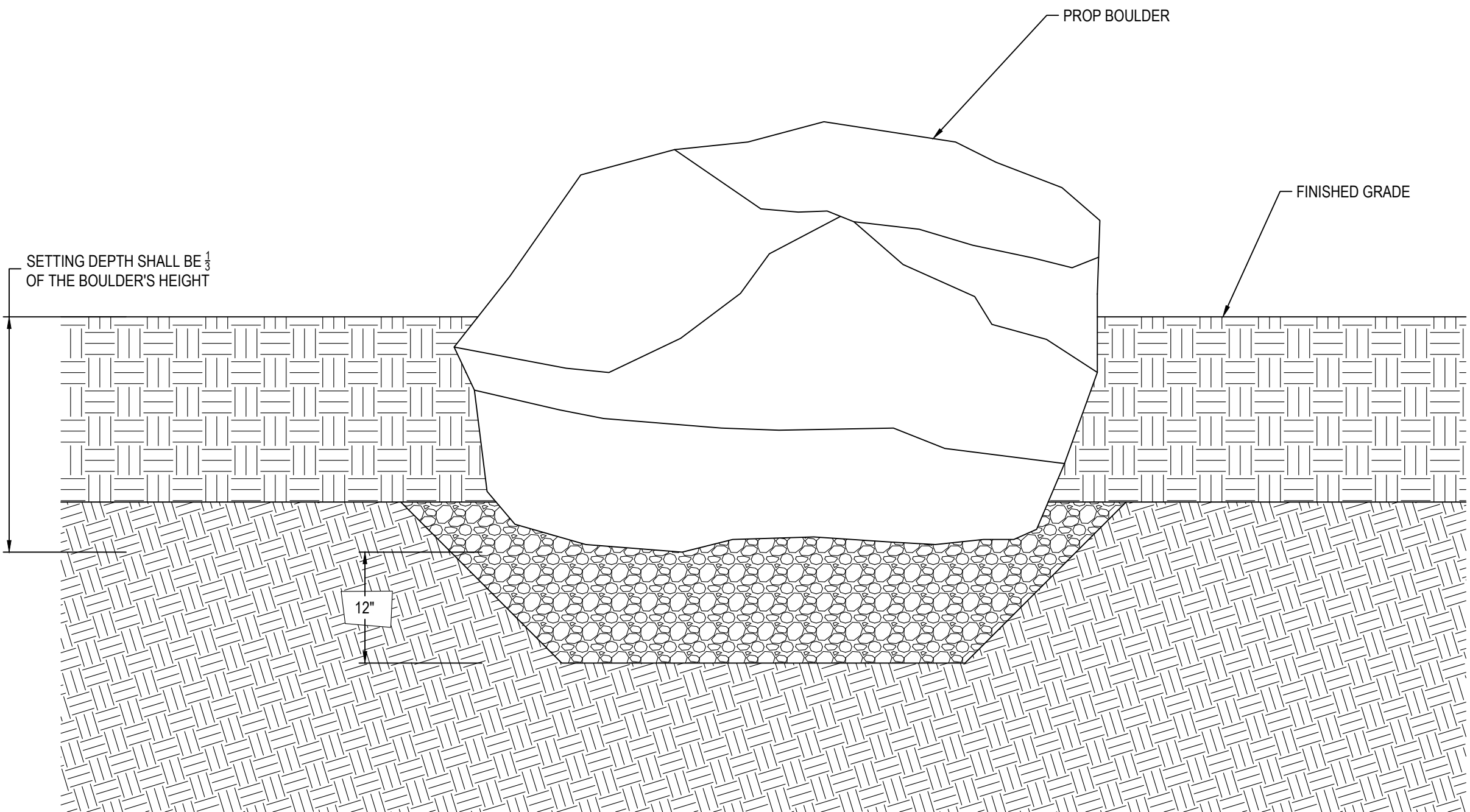
- NOTES:
- CROSSWALK AND ADA-COMPLIANT RAMPS NOT SHOWN. SEE PLANS FOR LOCATIONS.
 - REFER TO THE SPECIAL PROVISIONS FOR SIGN DIMENSIONS.
 - ALL CONDUIT, PULL BOXES, SERVICE CONNECTIONS, AND EQUIPMENT GROUNDING REQUIRED FOR AC POWER IS NOT SHOWN IN THIS DETAIL AND SHALL BE PAID FOR SEPARATELY UNDER THEIR RESPECTIVE PAY ITEMS.
 - ACCESS TO ALL PEDESTRIAN ACTUATED CONTROLS SHALL BE ADA/AAB COMPLIANT
 - *0.5% CONSTRUCTION TOLERANCE FOR CROSS-SLOPE

- MAJOR ITEMS LIST
- 2 CEMENT CONCRETE FOUNDATIONS PER 812.30.1
 - 2 15' TRAFFIC SIGNAL POSTS & PEDESTALS
 - 2 APS PUSHBUTTON SYSTEMS
 - 4 DUAL RECTANGULAR YELLOW LED BEACONS IN NEMA ENCLOSURES
 - 2 R10-25 SIGNS
 - 4 W11-15 SIGNS
 - 2 W16-7pL SIGNS
 - 2 W16-7pR SIGNS
 - 2 SOLAR PANEL SYSTEMS (NOT REQUIRED FOR AC POWER)
 - 2 NEMA ENCLOSURES FOR ALL COMPONENTS NEEDED TO MEET FUNCTIONAL REQUIREMENTS PER SPECIAL PROVISIONS
 - 2 BATTERY SYSTEMS (NOT REQUIRED FOR AC POWER)

PLUS ALL MOUNTING AND SUPPORTING HARDWARE AND WIRING NECESSARY TO COMPLETE A WORKING SYSTEM.



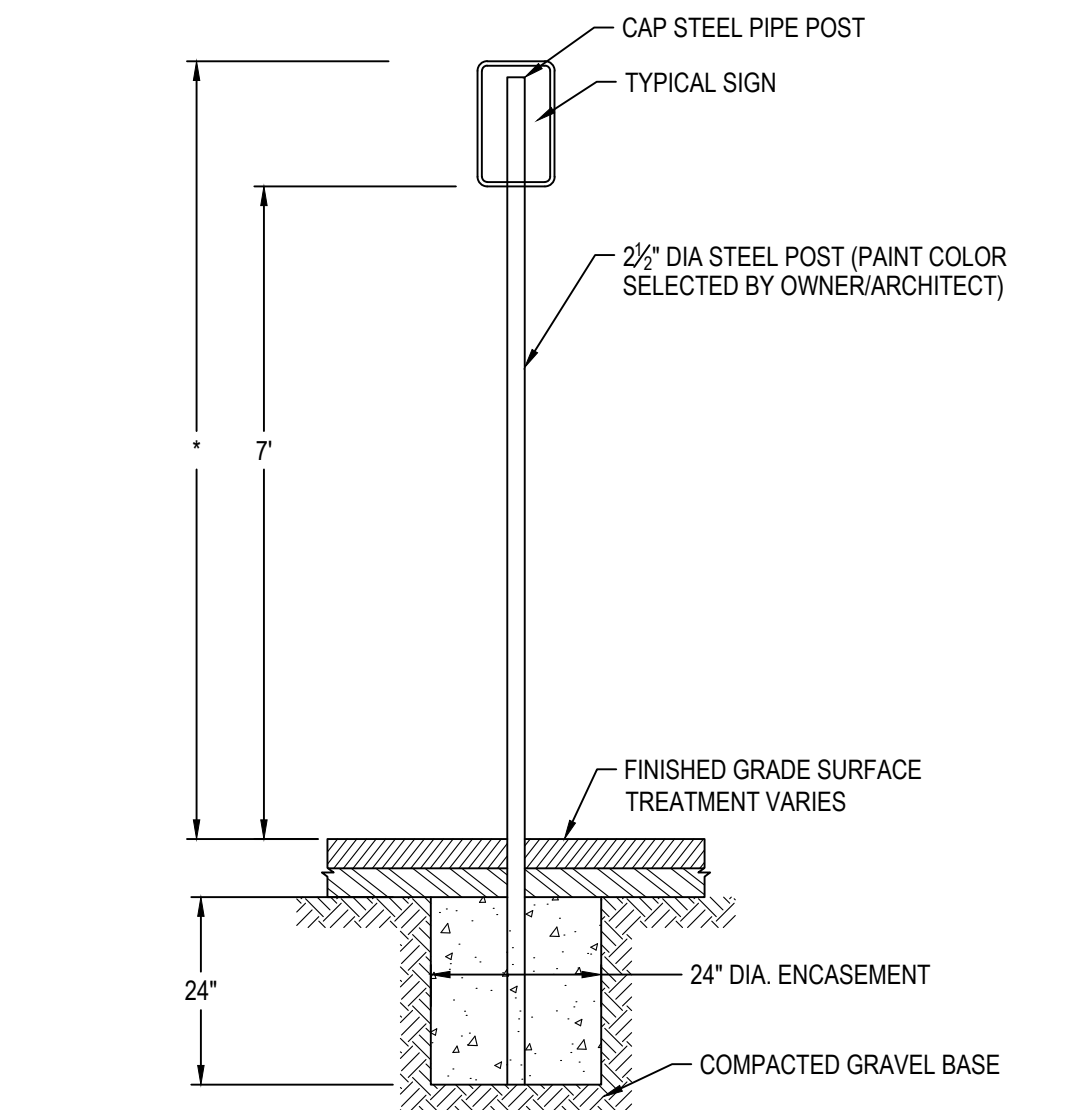
RECTANGULAR RAPID FLASHING BEACON (RRFB)
N.T.S.



NOTES:

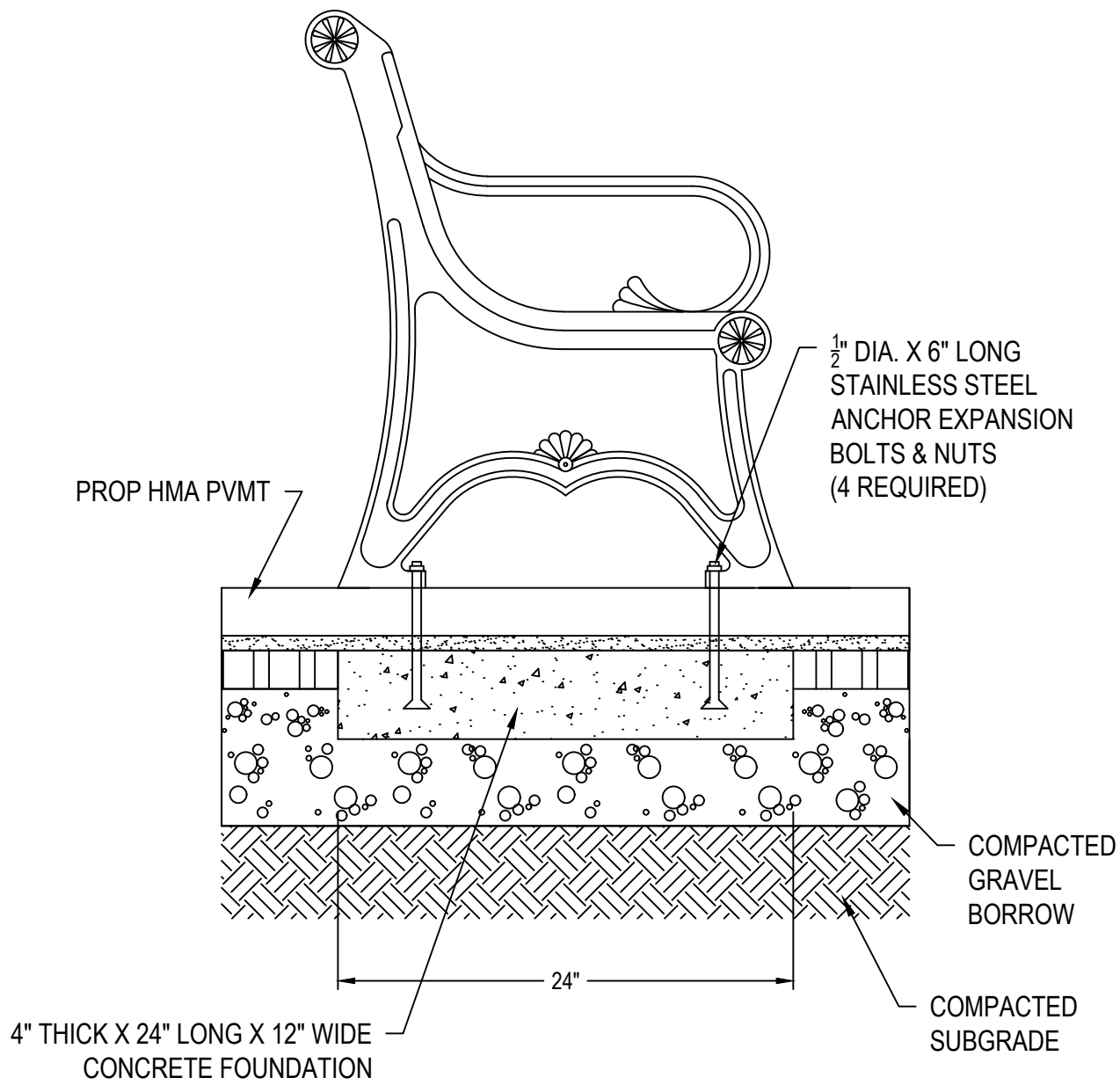
- PROPOSED BOULDER SHALL BE A MINIMUM OF 3 FEET WIDE AND 2 FEET TALL.

BOULDER
N.T.S.

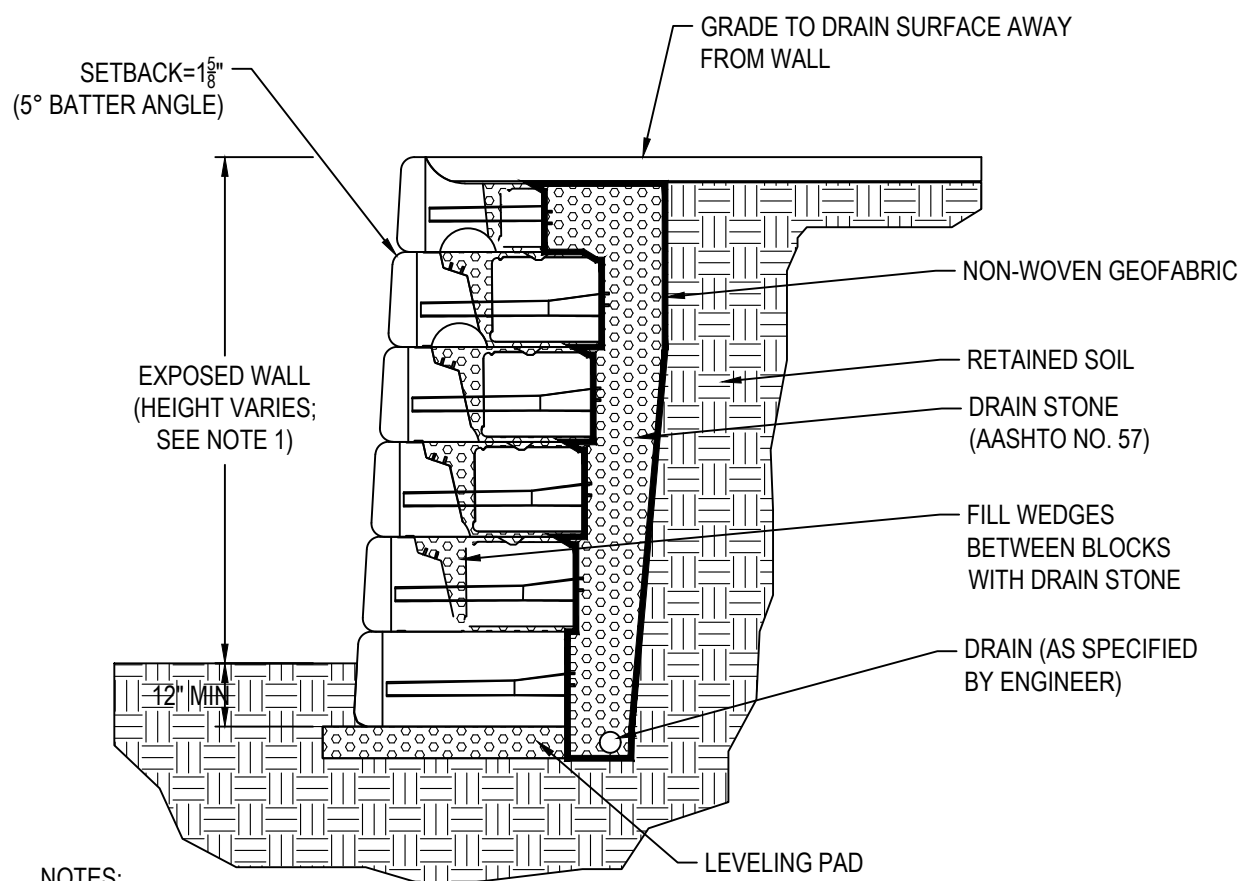


*THIS DIMENSION SHALL BE A MINIMUM OF 5' AND A MAXIMUM OF 8' FOR ACCESSIBLE SIGNAGE IN THE COMMONWEALTH OF MASSACHUSETTS.

SIGN POST
N.T.S.



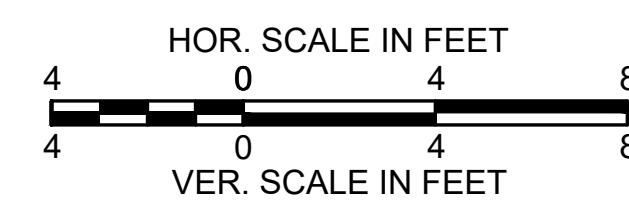
BENCH FOUNDATION
N.T.S.

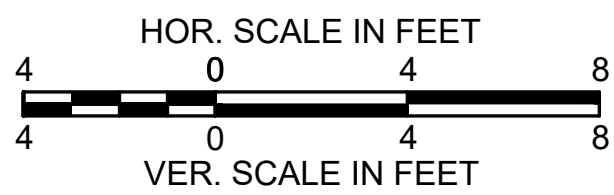
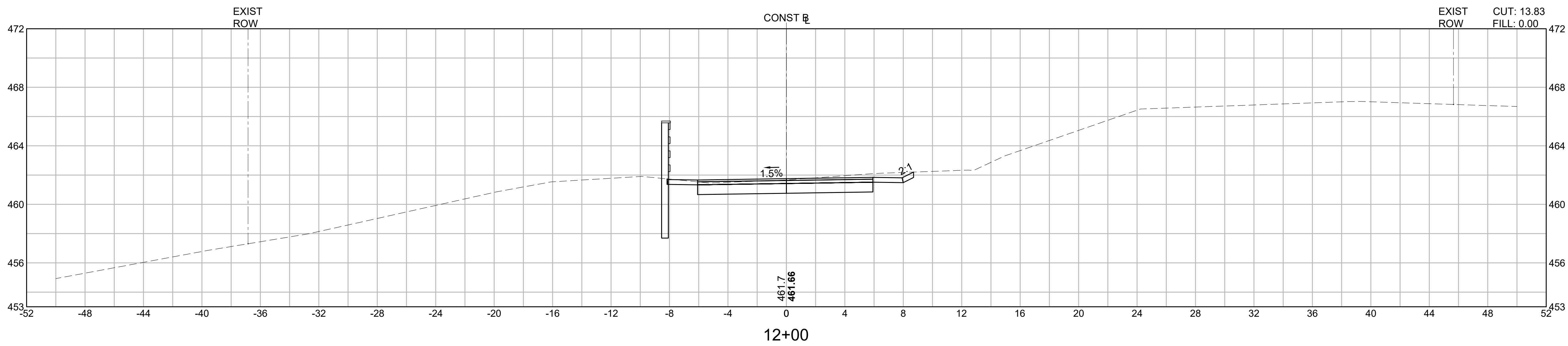
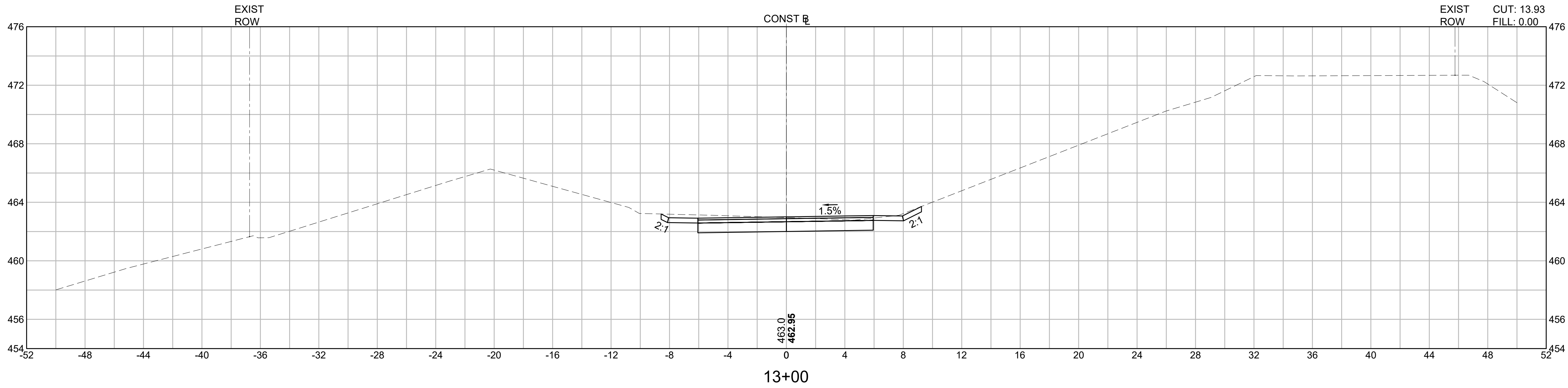


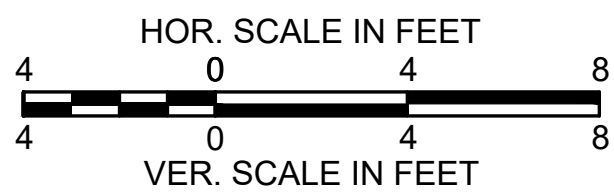
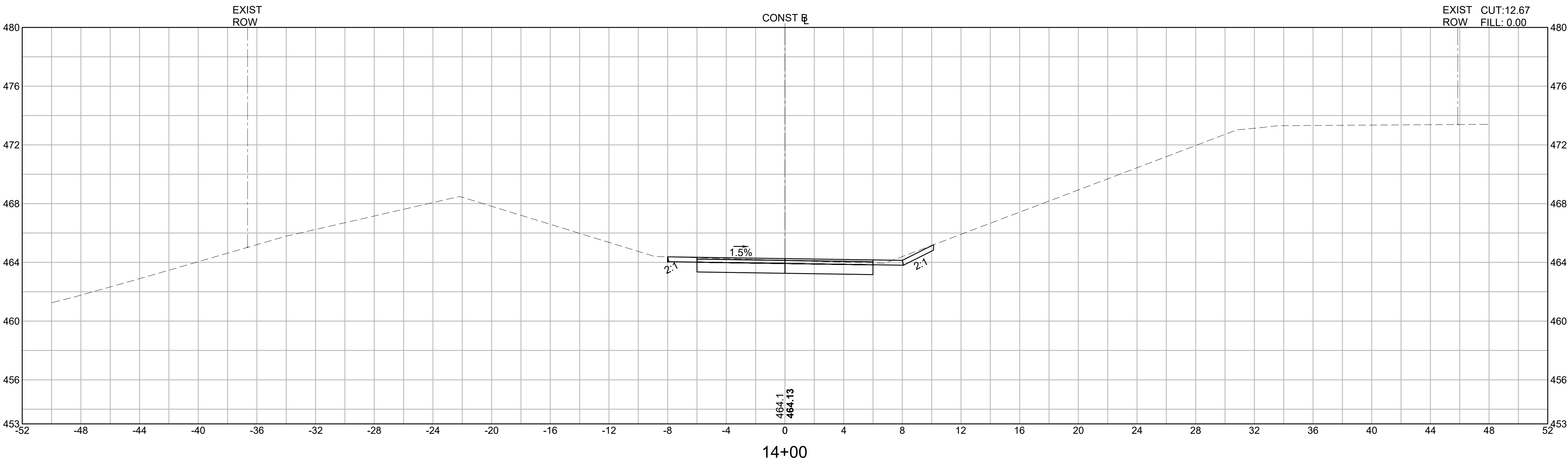
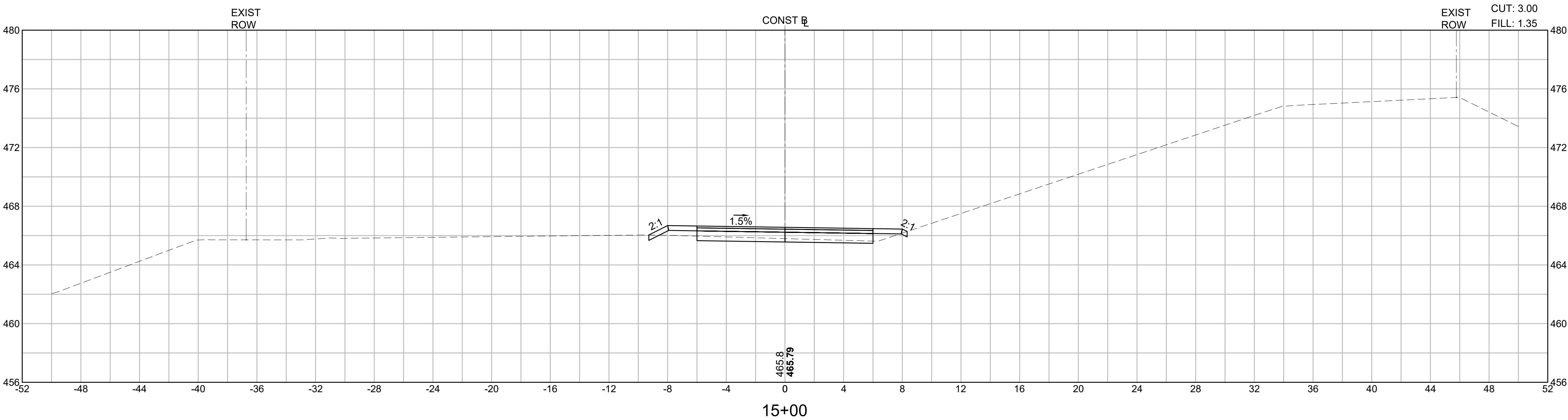
NOTES:

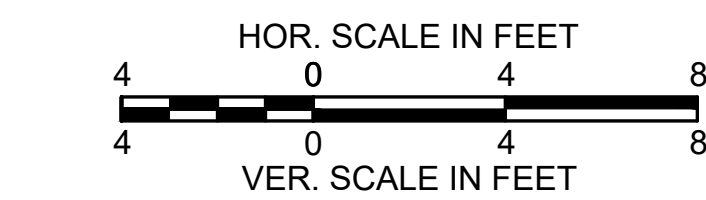
- WALL HEIGHTS OVER 4 FEET WILL REQUIRE A FINAL WALL DESIGN STAMPED BY A STRUCTURAL ENGINEER.
- FINAL WALL DESIGN TO BE SUBJECT TO THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER INCLUDING DESIGN ON LATERAL EARTH PRESSURES, GLOBAL STABILITY, FILL MATERIALS ADJACENT TO THE WALLS AND REQUIRED GEOGRID REINFORCEMENT.

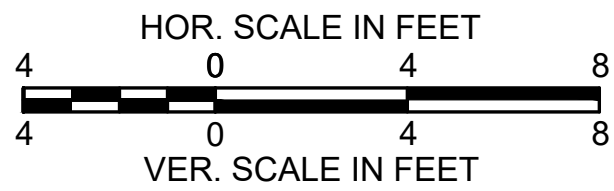
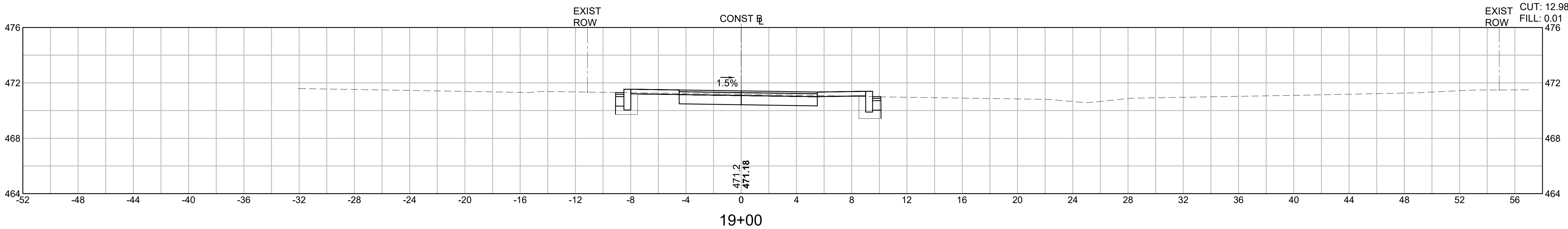
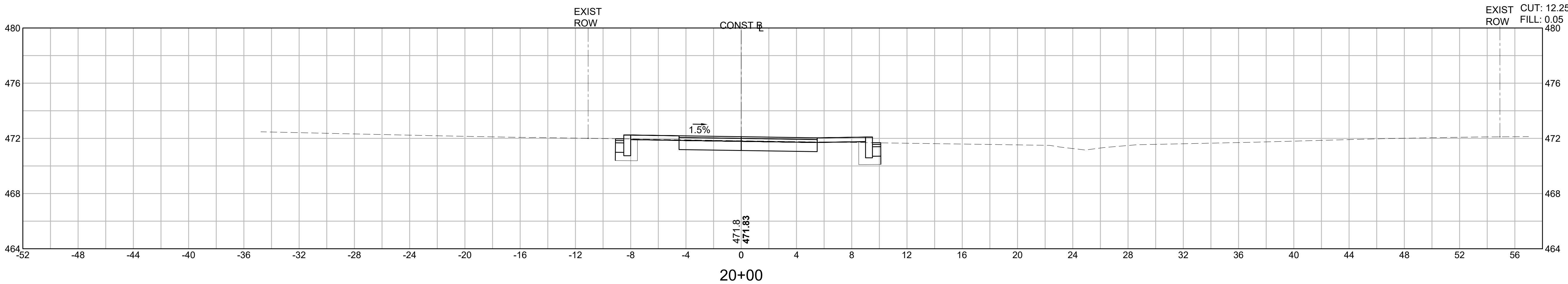
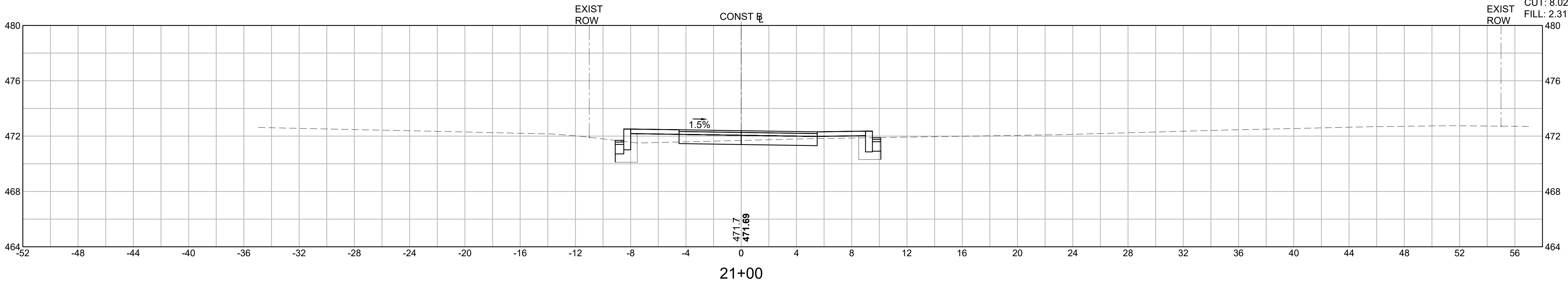
SEGMENTAL BLOCK RETAINING WALL
N.T.S.

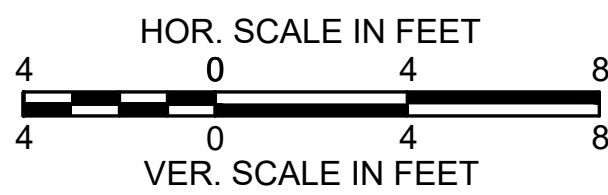
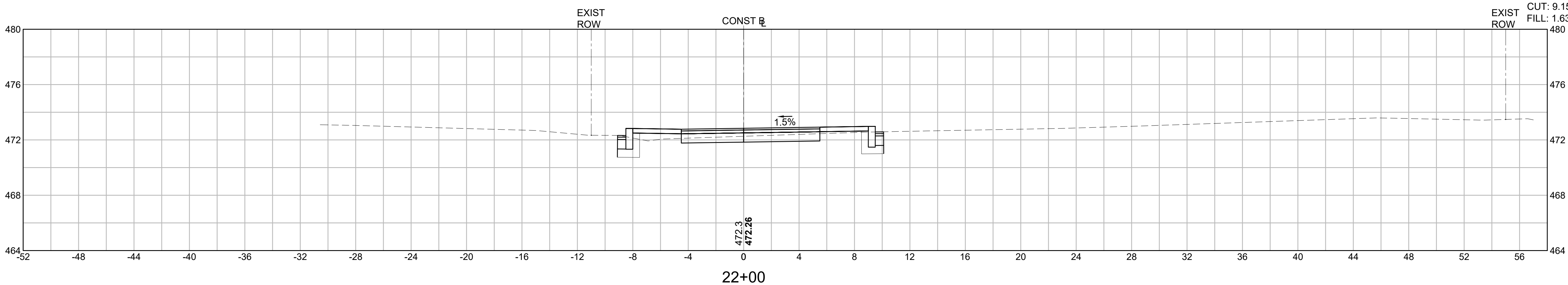
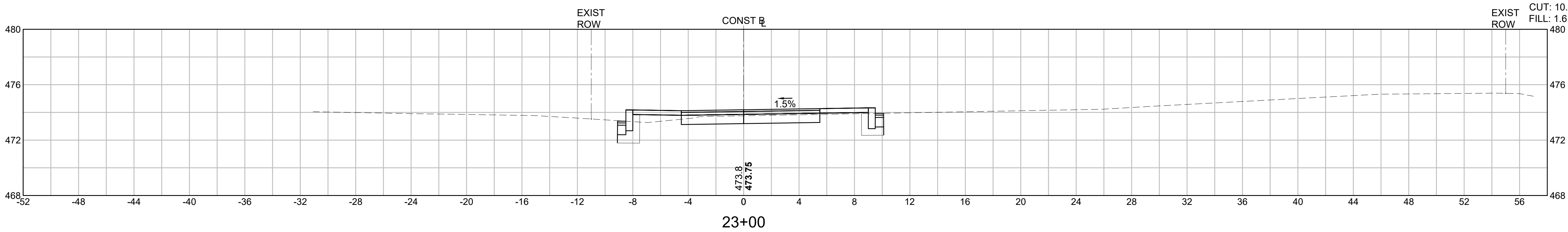
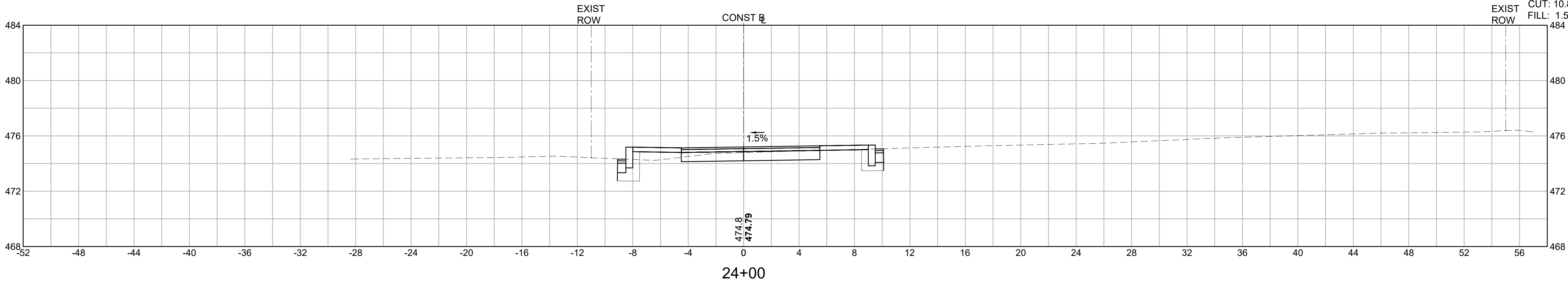


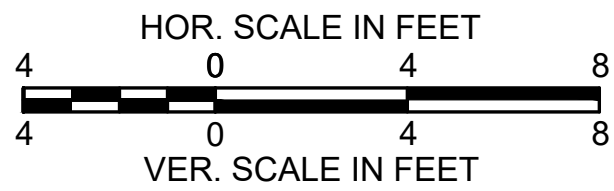
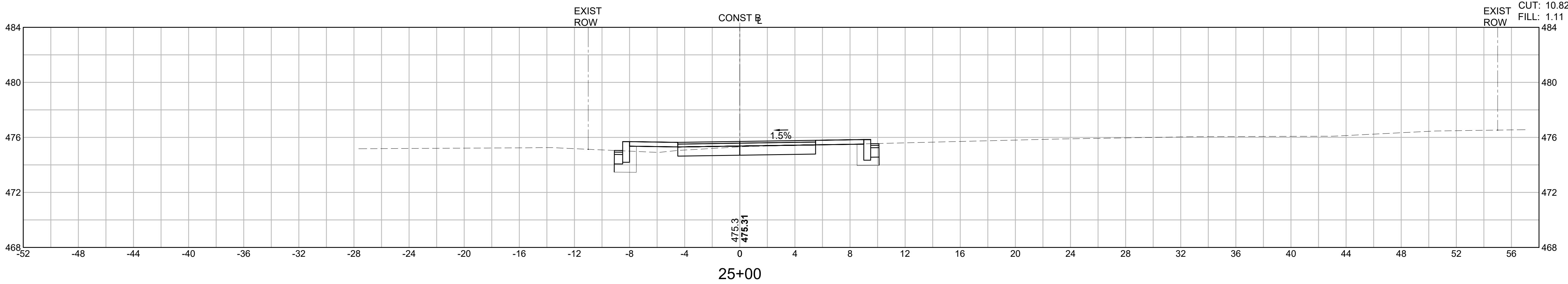
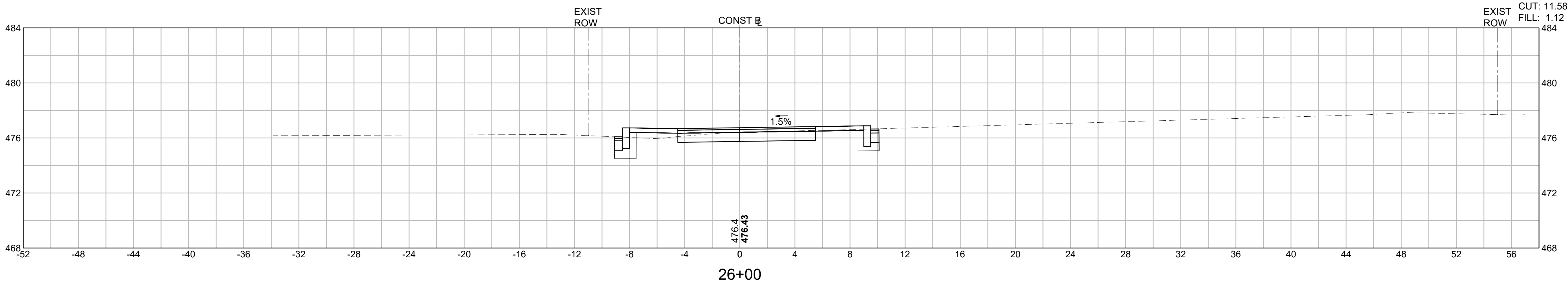
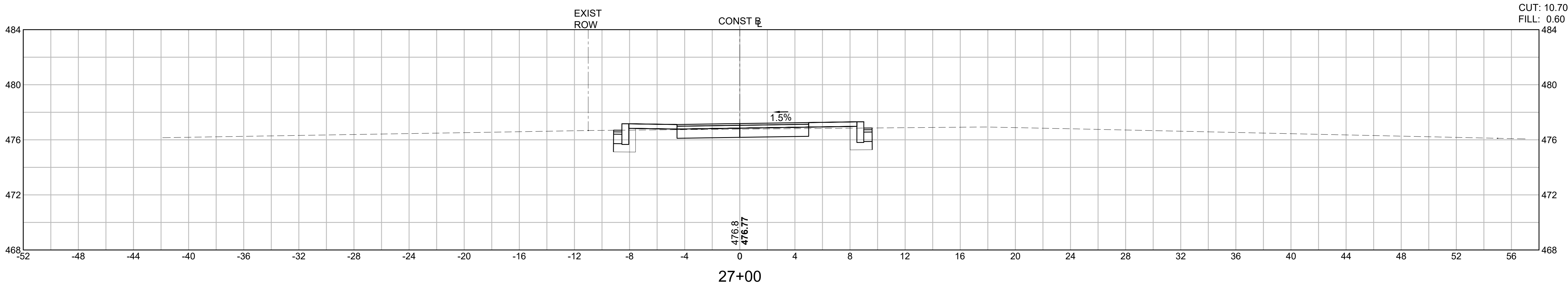


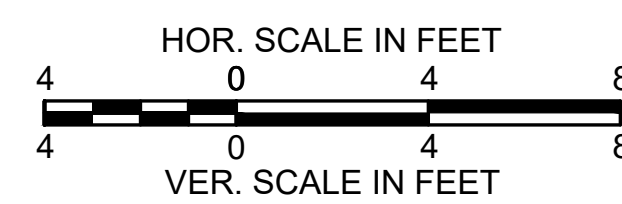


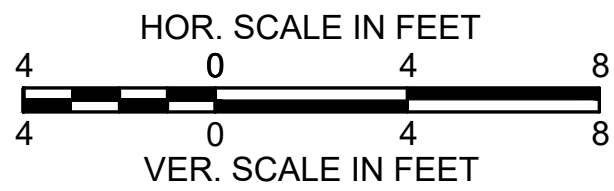
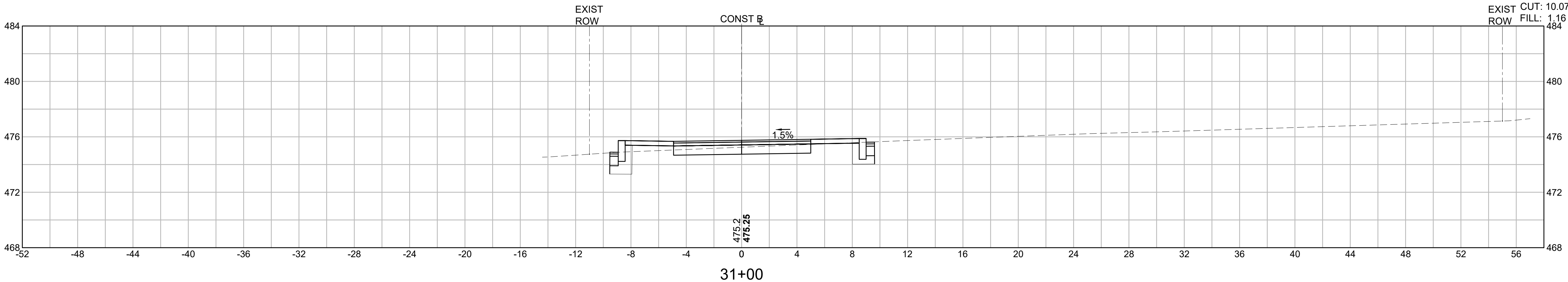
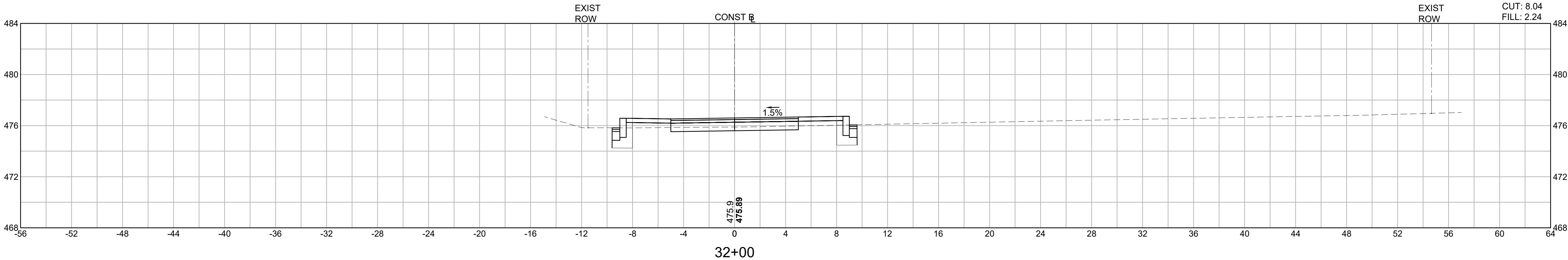
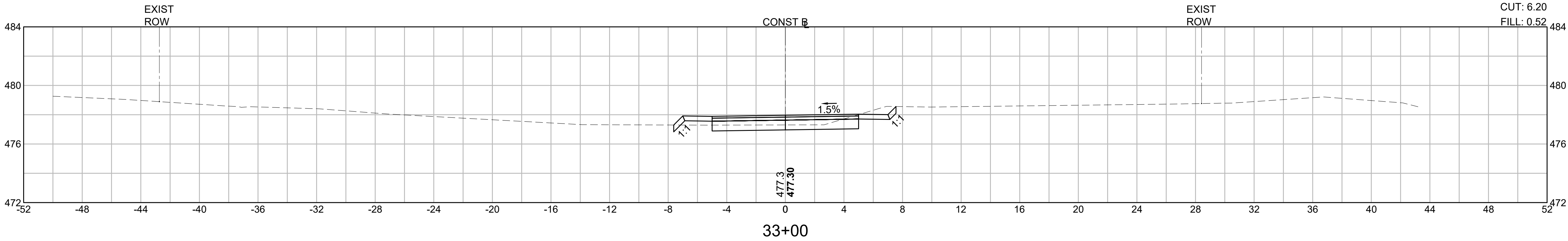


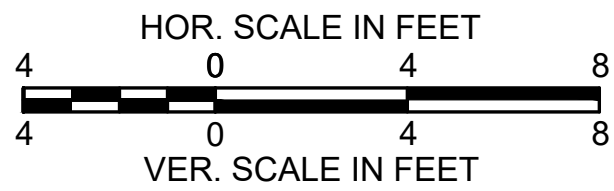
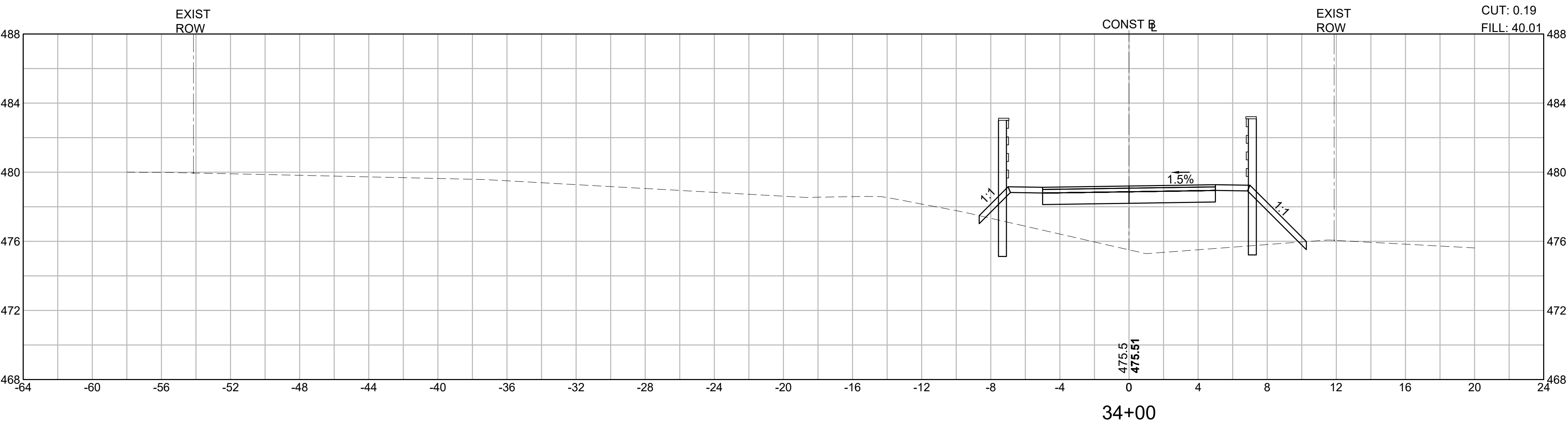
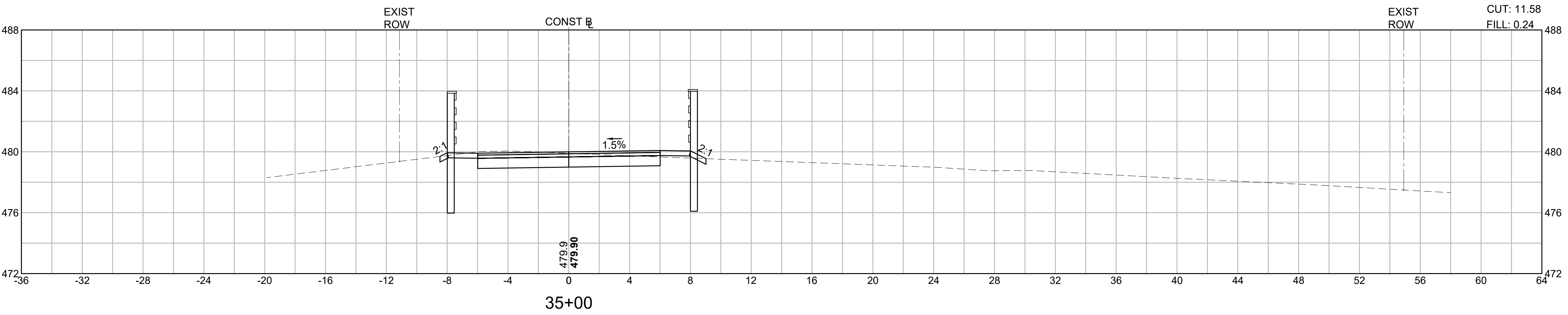
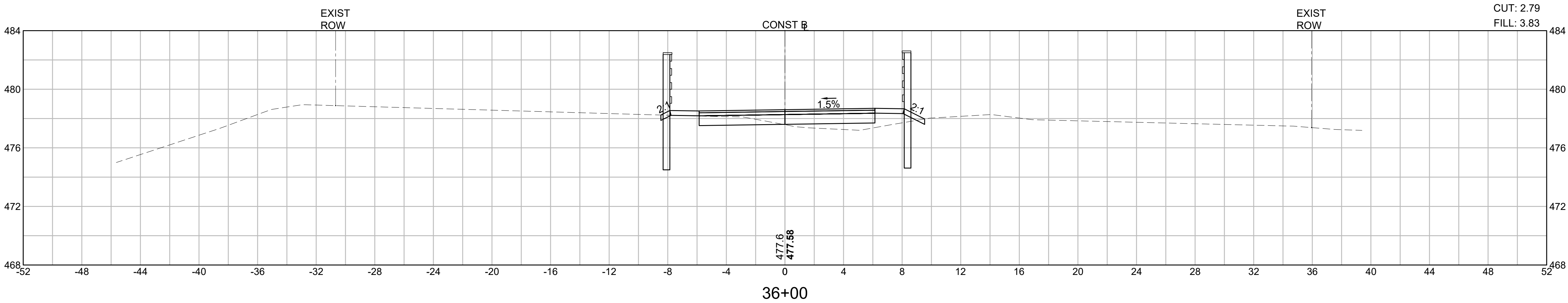


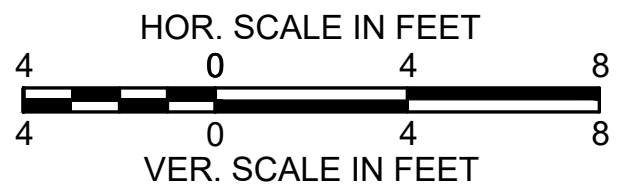
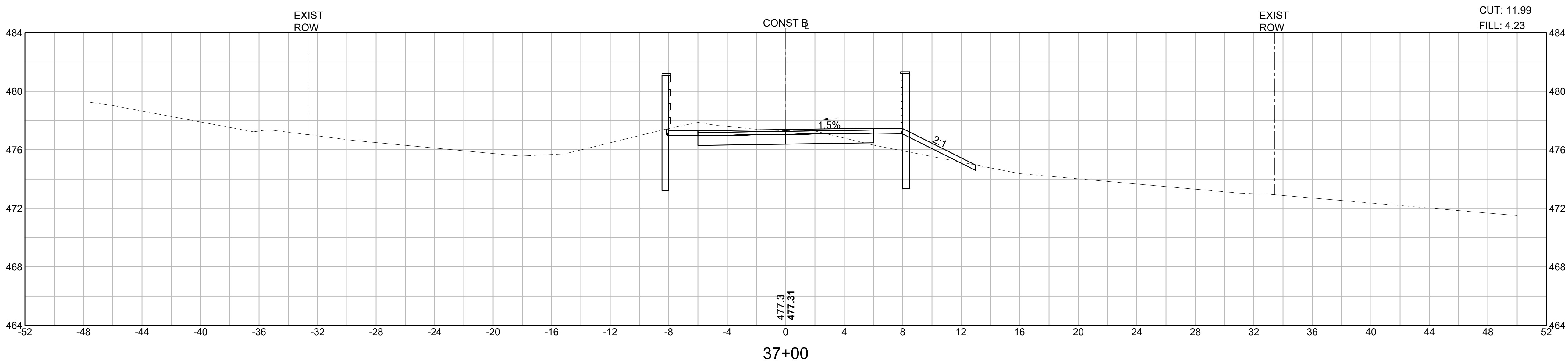
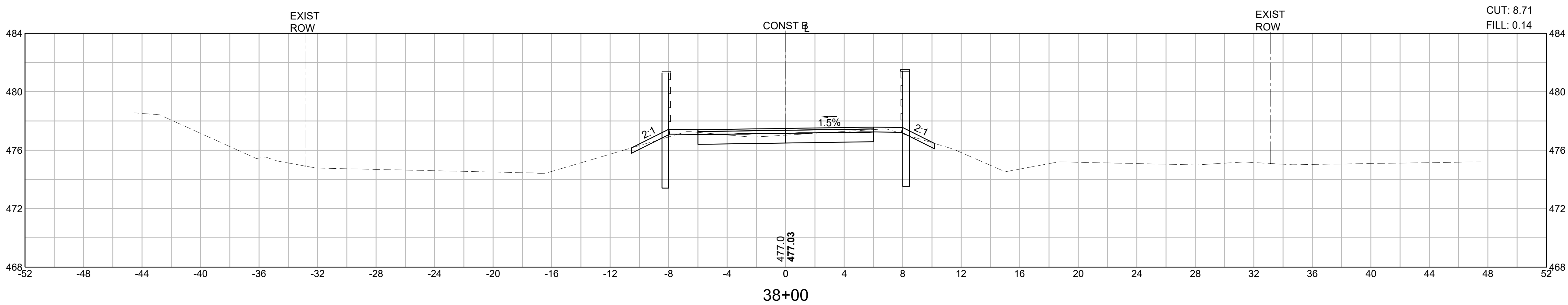
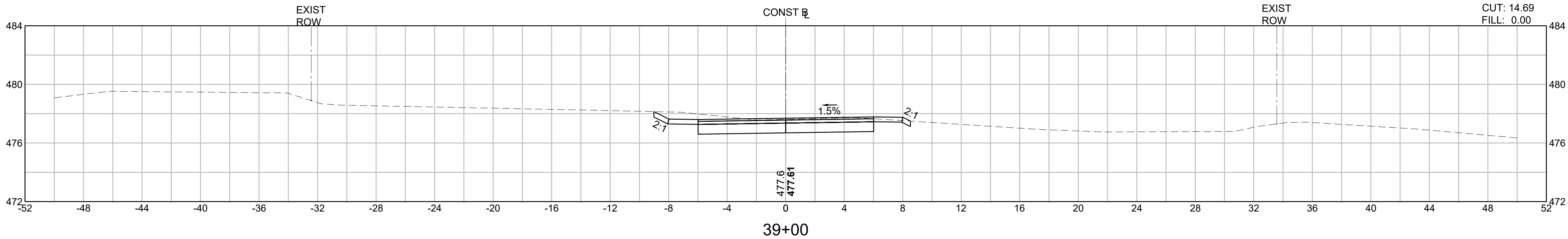


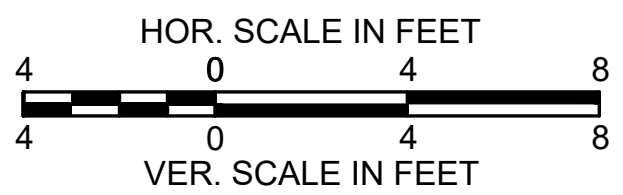
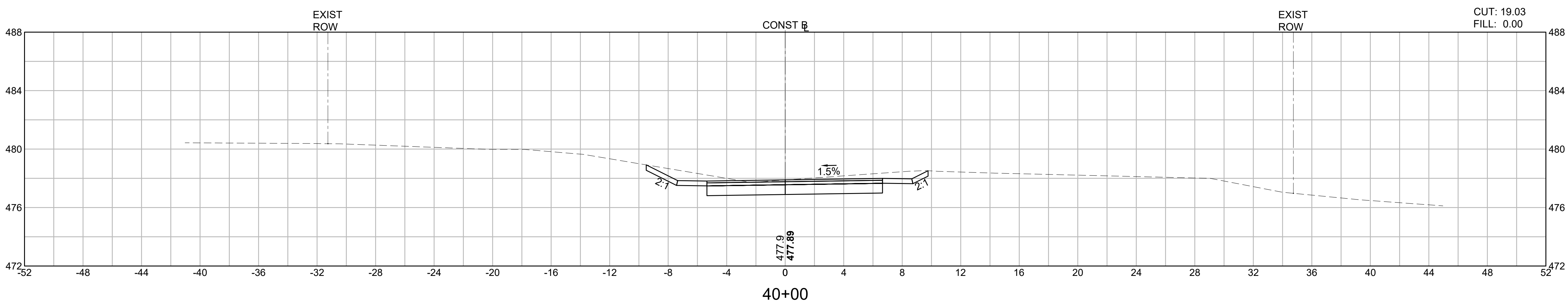
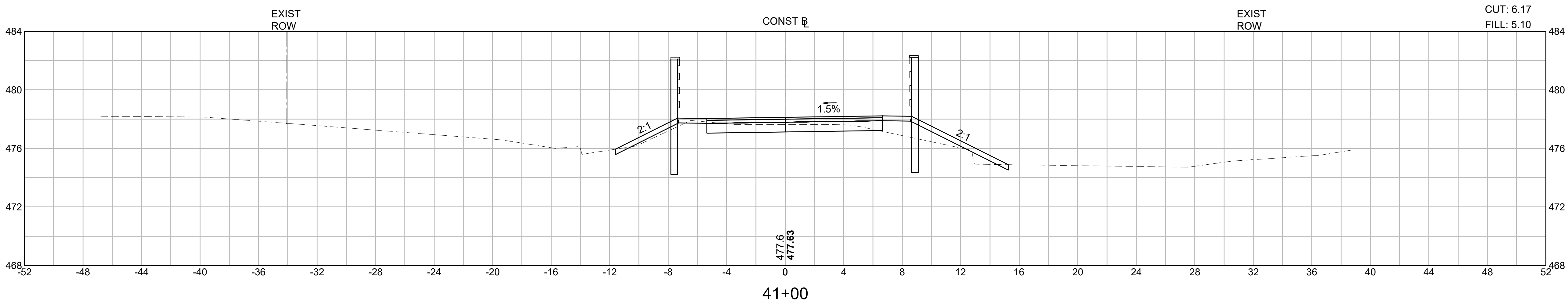
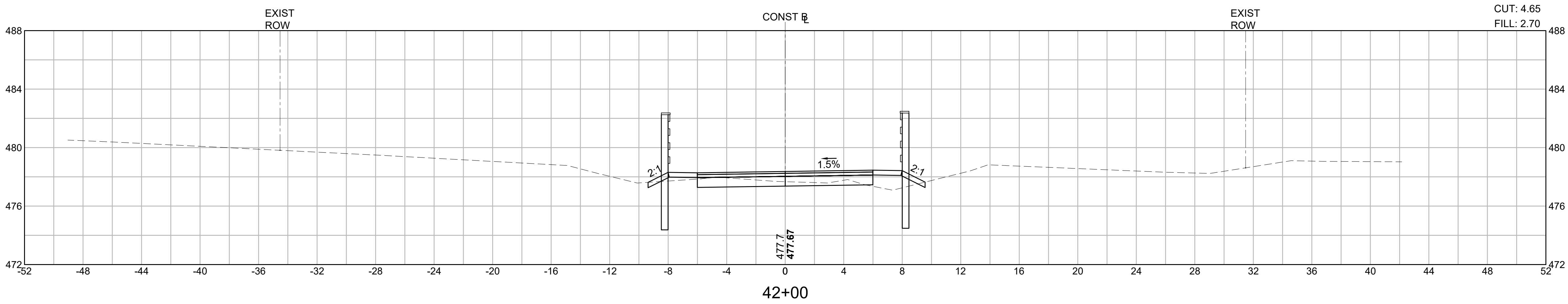


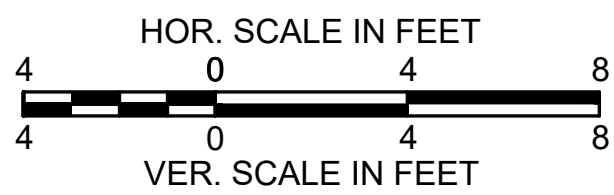
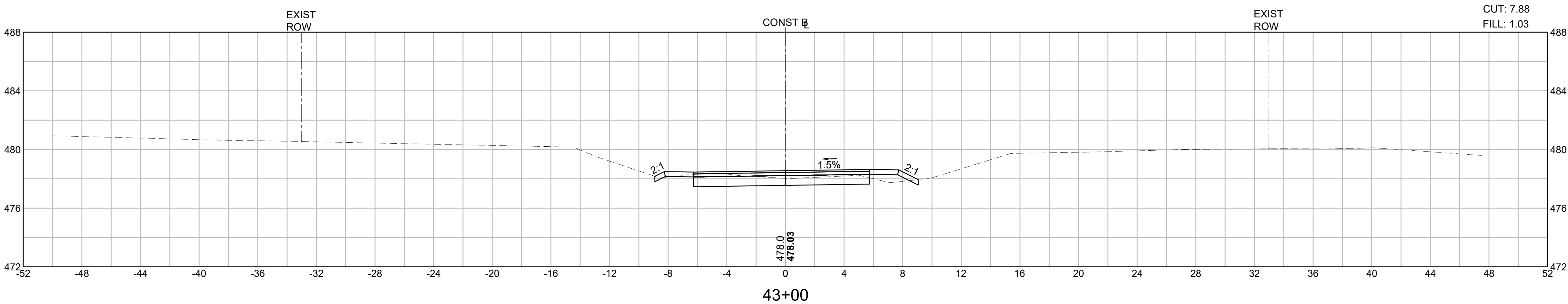
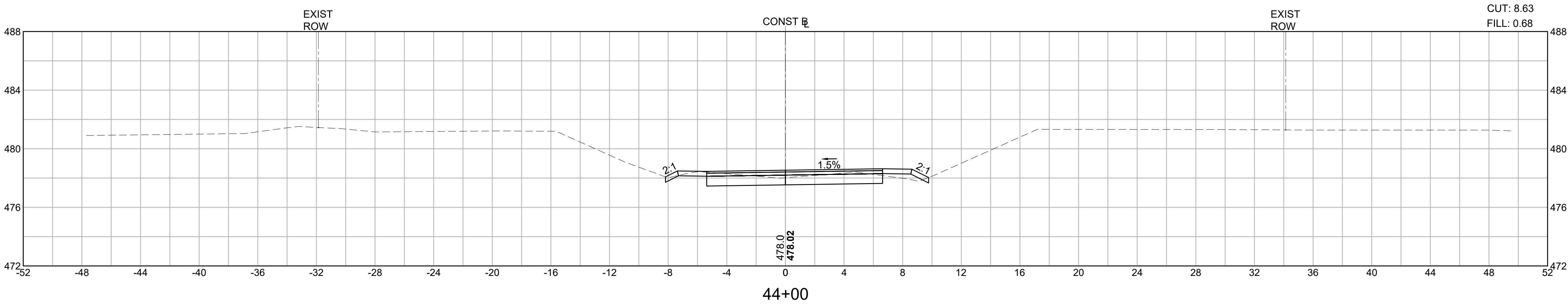
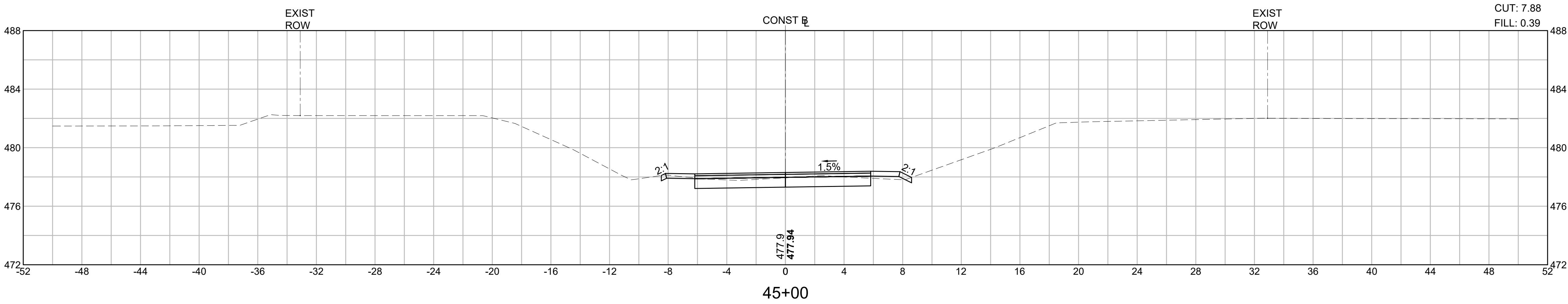


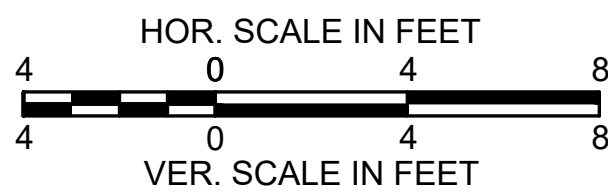
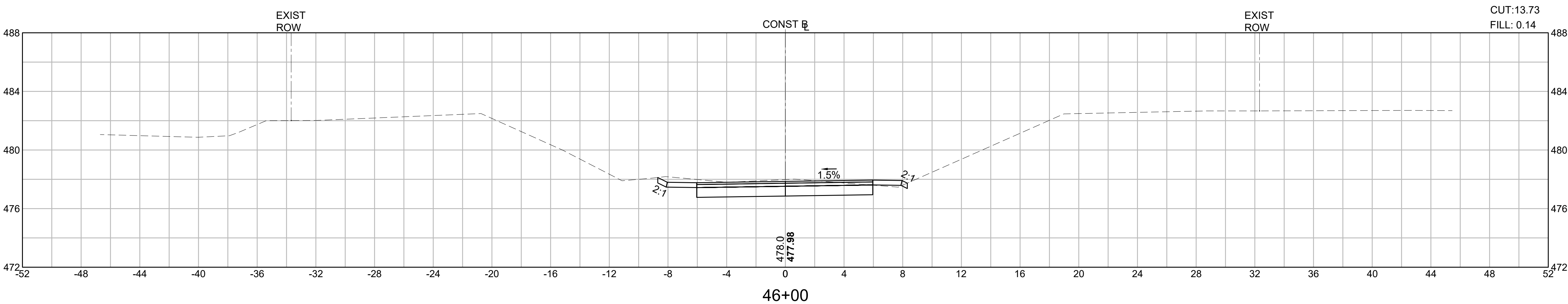
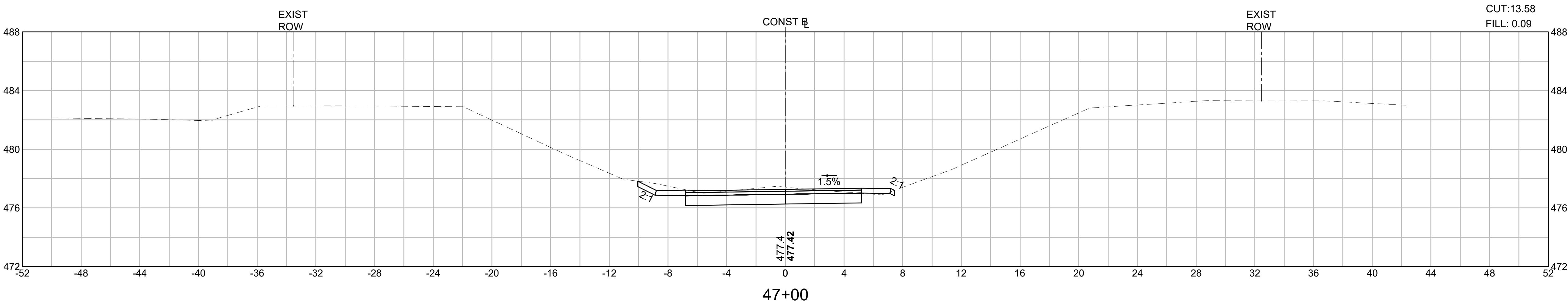


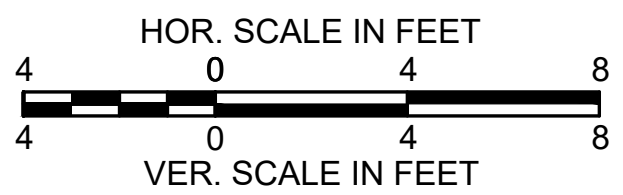
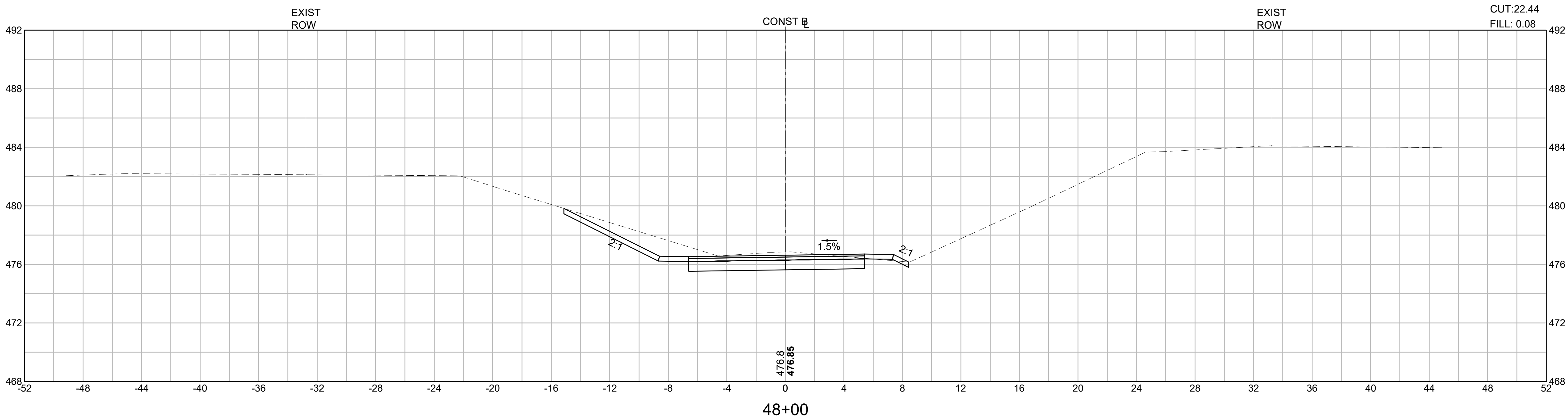
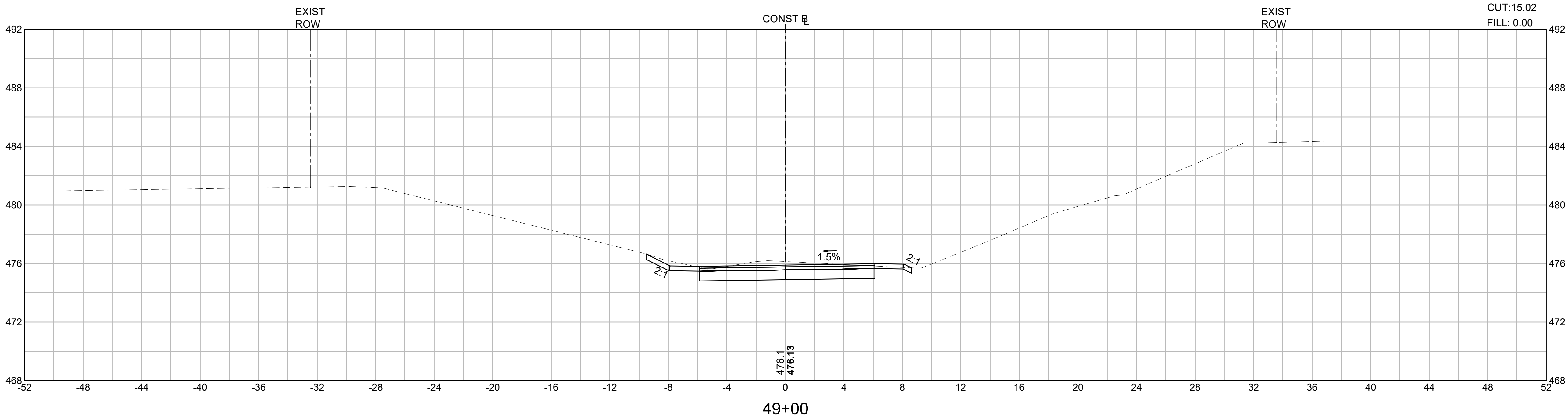


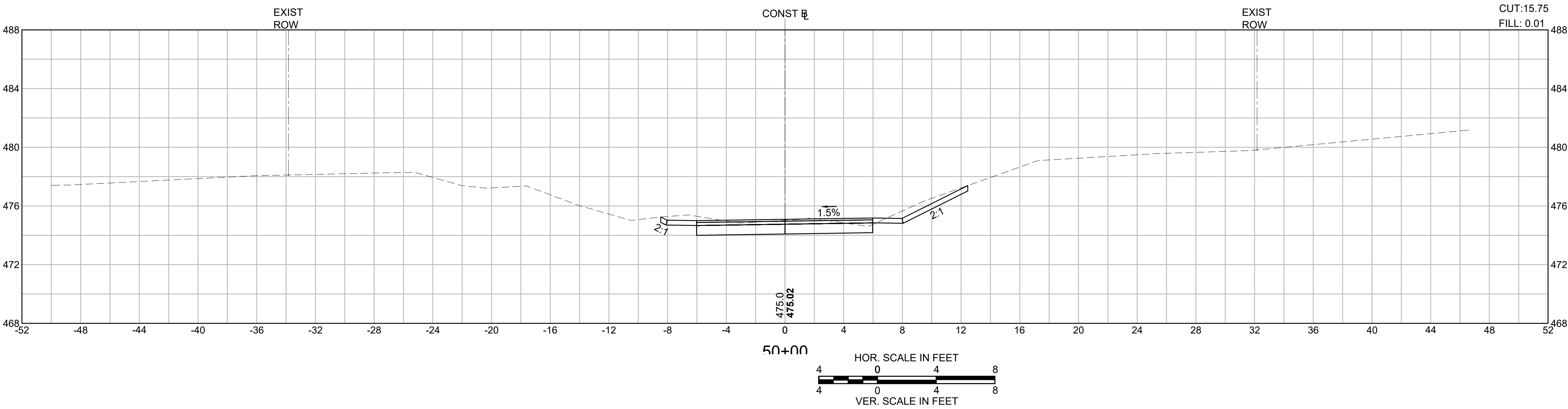
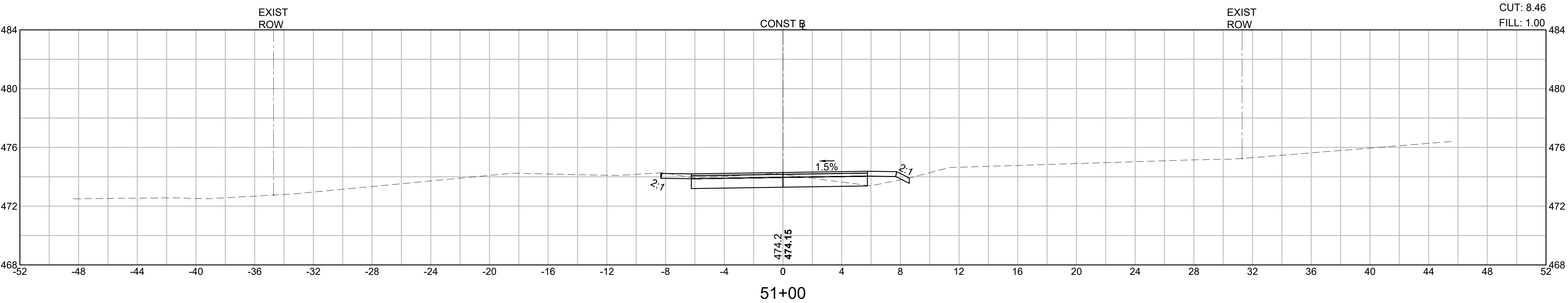
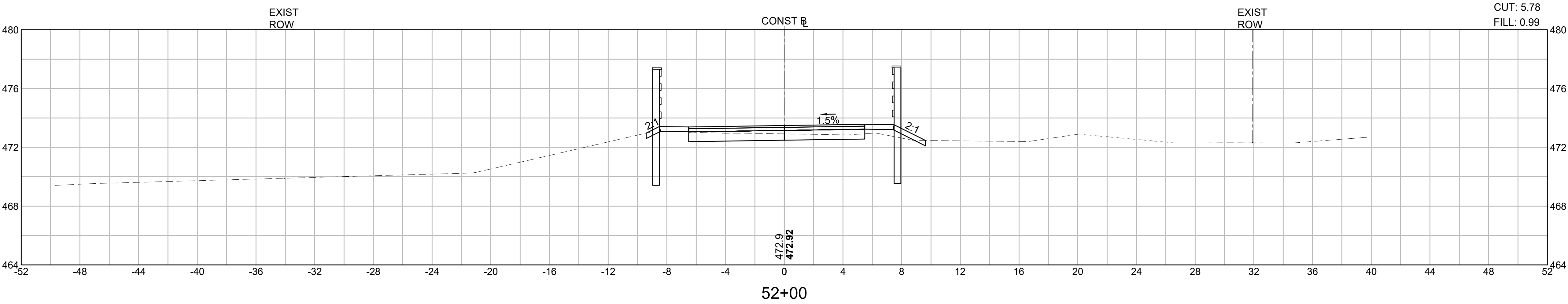












1421_HD11(CROSS SECTIONS).DWG
Plotted on 30-Jan-2025 8:33 PM

