

See Sheet 1A For Index of Sheets
See Sheet 1B For Standard Symbology Sheet

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PERMIT DRAWING
SHEET 1 OF 14

DATE: 11/28/2023

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-5777C	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
44648.3.4	N/A	DESIGN-BUILD	

CRAVEN COUNTY

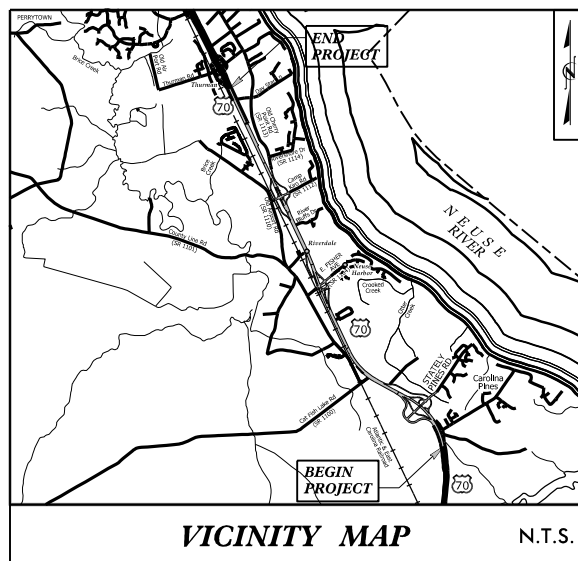
LOCATION: U.S. 70 FROM THE HAVELOCK BYPASS TO EAST OF S.R. 1116 (THURMAN ROAD)

TYPE OF WORK: GRADING, DRAINAGE, PAVING, SIGNING, ITS AND STRUCTURES

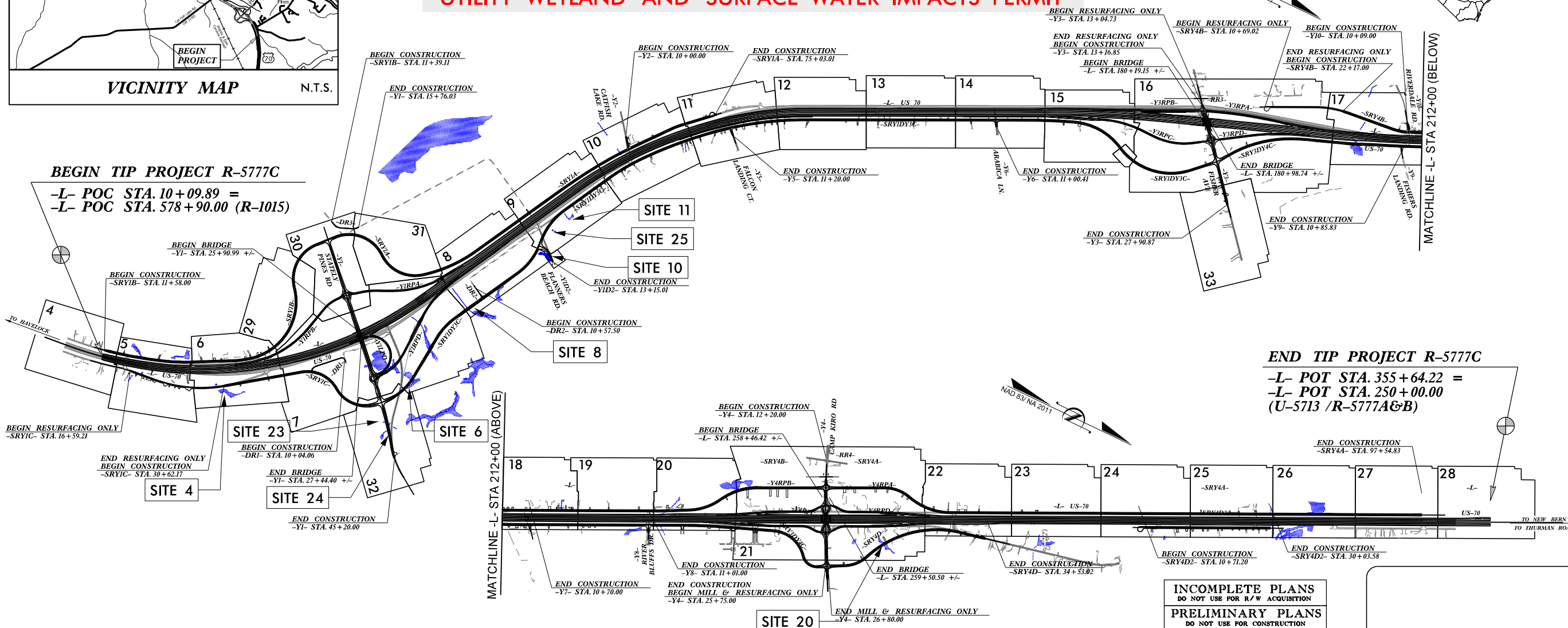
UTILITY WETLAND AND SURFACE WATER IMPACTS PERMIT

TIP PROJECT: R-5777C

CONTRACT: C204695



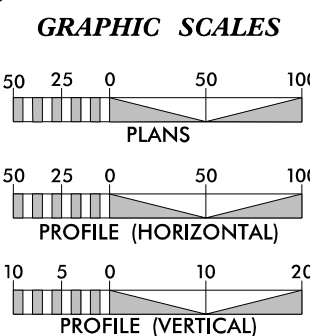
BEGIN TIP PROJECT R-5777C
-L- POC STA. 10+09.89 =
-L- POC STA. 578+90.00 (R-1015)



END TIP PROJECT R-5777C
-L- POT STA. 355+64.22 =
-L- POT STA. 250+00.00
(U-5713 /R-5777A&B)

THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARY OF THE CITY OF NEW BERN
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III.
THIS IS A CONTROLLED ACCESS PROJECT WITH ACCESS BEING LIMITED TO INTERCHANGES.

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED



DESIGN DATA

ADT 2019 =	31,800
ADT 2045 =	41,800
K =	9%
D =	55%
T =	8%*
V =	75 MPH
* (TTST=3%+ DUAL 5%)	
FUNC. CLASSIFICATION =	INTERSTATE STATEWIDE TIER

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT R-5777C =	6.486 MILES
LENGTH STRUCTURE TIP PROJECT R-5777C =	0.058 MILES
TOTAL LENGTH OF TIP PROJECT R-5777C =	6.544 MILES

NCDOT CONTACT: BYRON KYLE
NCDOT - DESIGN-BUILD UNIT

PLANS PREPARED FOR THE NCDOT BY:

Balfour Beatty

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
JANUARY 17, 2023

LETTING DATE:
JANUARY 17, 2023

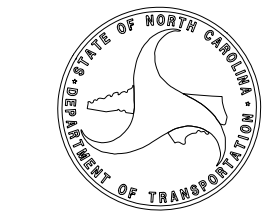
HYDRAULICS ENGINEER

NC LICENSE NUMBER F-0991
900 W TRADE ST STE 715,
CHARLOTTE, NC 28202

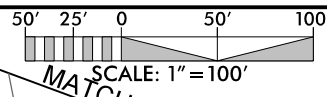
J. ADAM FREEMAN, PE
PROJECT ENGINEER

NARONG PHAL, PE
PROJECT DESIGN ENGINEER

SIGNATURE: _____
ROADWAY DESIGN ENGINEER



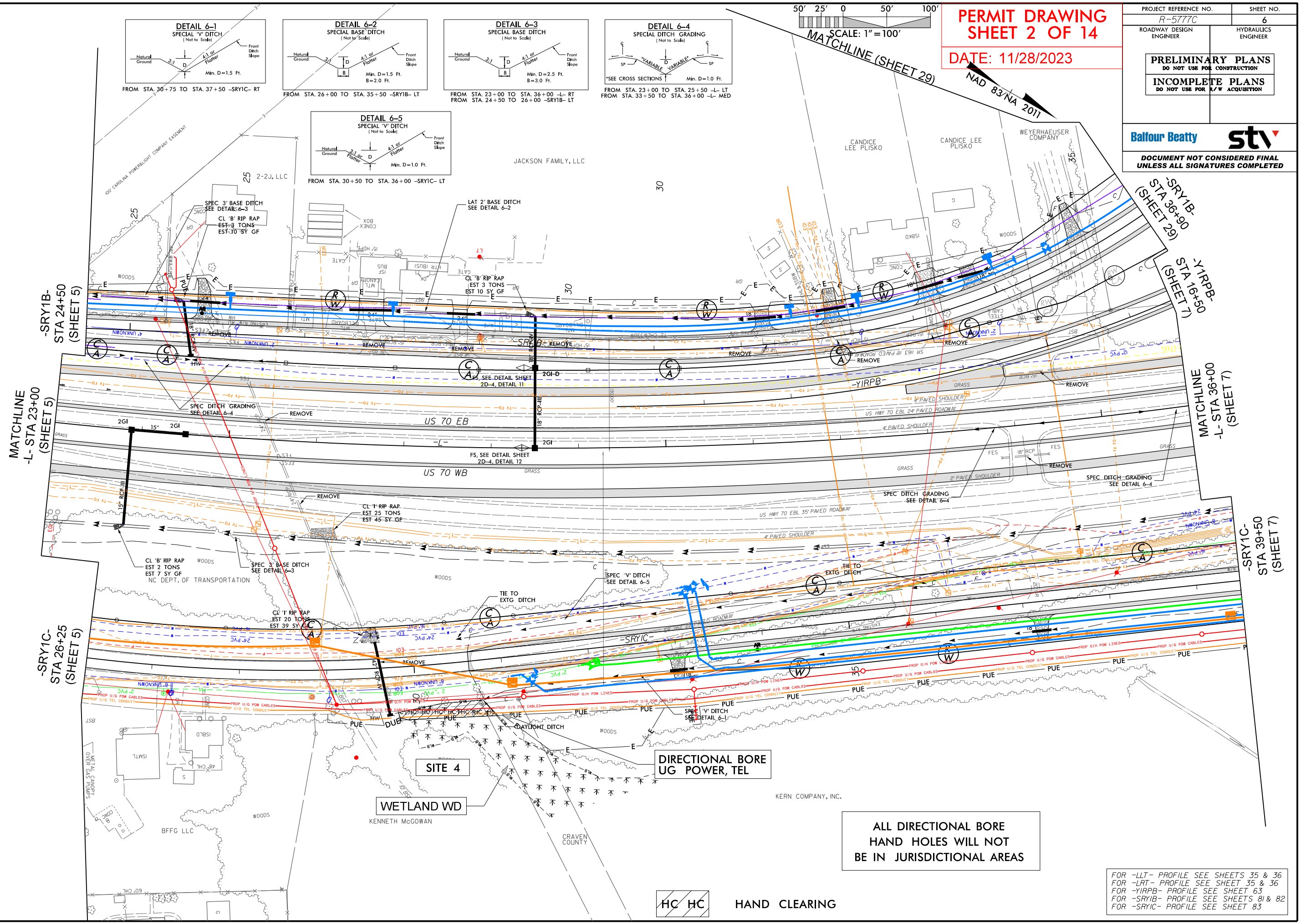
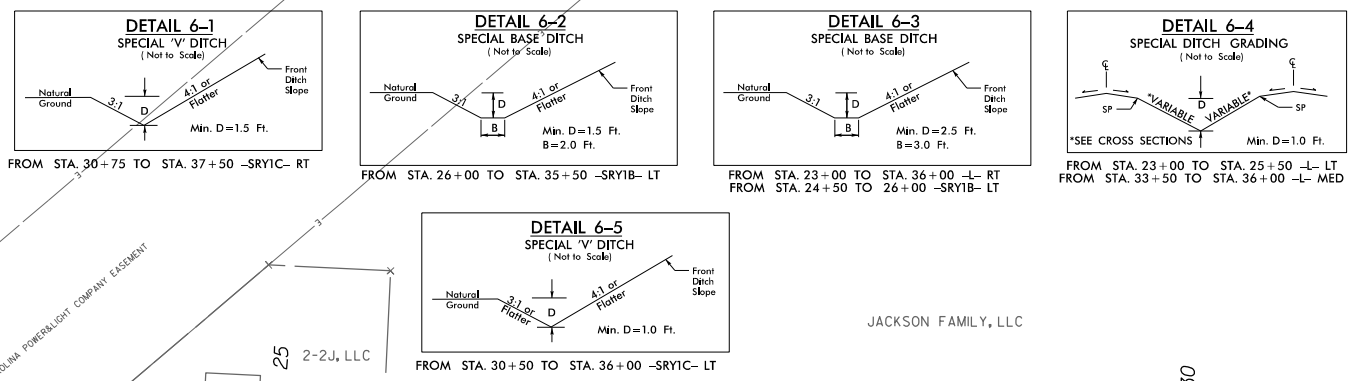
11/28/2023 R-5777C-Hyd_prm_wet_util_psh_01.dgn inarvey



**PERMIT DRAWING
SHEET 2 OF 14**

DATE: 11/28/2023

PROJECT REFERENCE NO. R-5777C	SHEET NO. 6
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	
INCOMPLETE PLANS DO NOT USE FOR A/W ACQUISITION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



DIRECTIONAL BORE
UG POWER, TEL

ALL DIRECTIONAL BORE
HAND HOLES WILL NOT
BE IN JURISDICTIONAL AREAS

HC HC HAND CLEARING

FOR -LLT- PROFILE SEE SHEETS 35 & 36
 FOR -LRT- PROFILE SEE SHEET 35 & 36
 FOR -YIRPB- PROFILE SEE SHEET 63
 FOR -SRYIB- PROFILE SEE SHEETS 81 & 82
 FOR -SRYIC- PROFILE SEE SHEET 83

11/28/2023 R-5777C-Hyd.prm-wet_util_psh_06.dgn

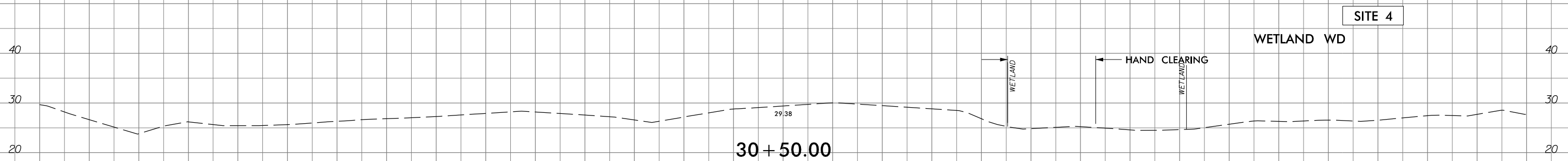
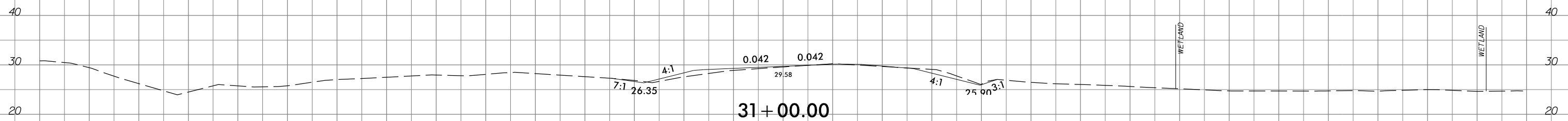
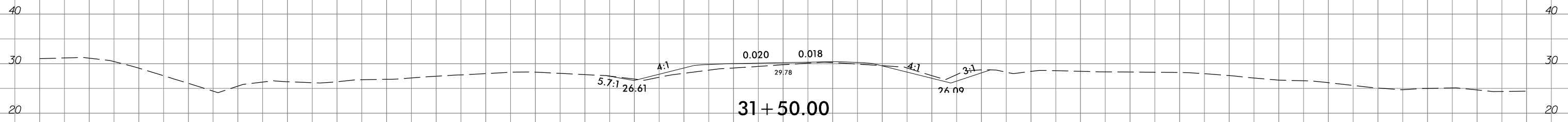
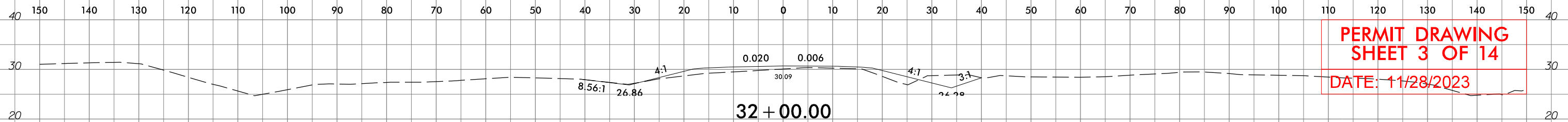
6/23/16



PROJ. REFERENCE NO.
R-5777C

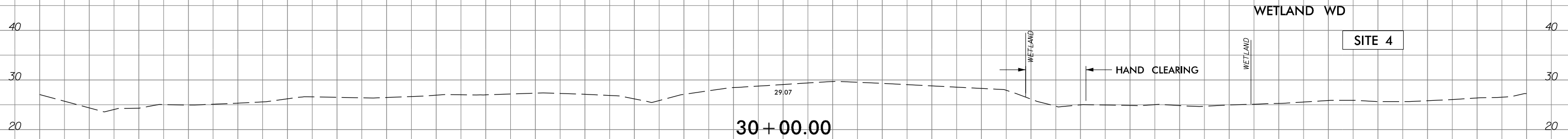
SHEET NO.
SRY1C-1

PERMIT DRAWING
SHEET 3 OF 14
DATE: 11/28/2023



SITE 4

WETLAND WD



SITE 4

WETLAND WD

-SRY1C-

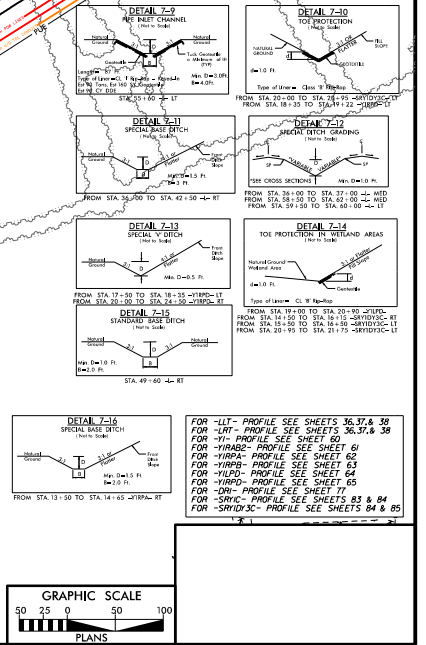
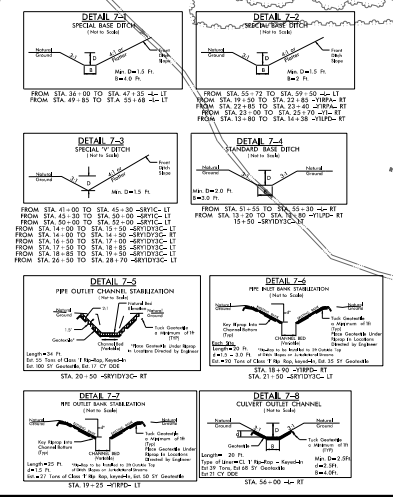
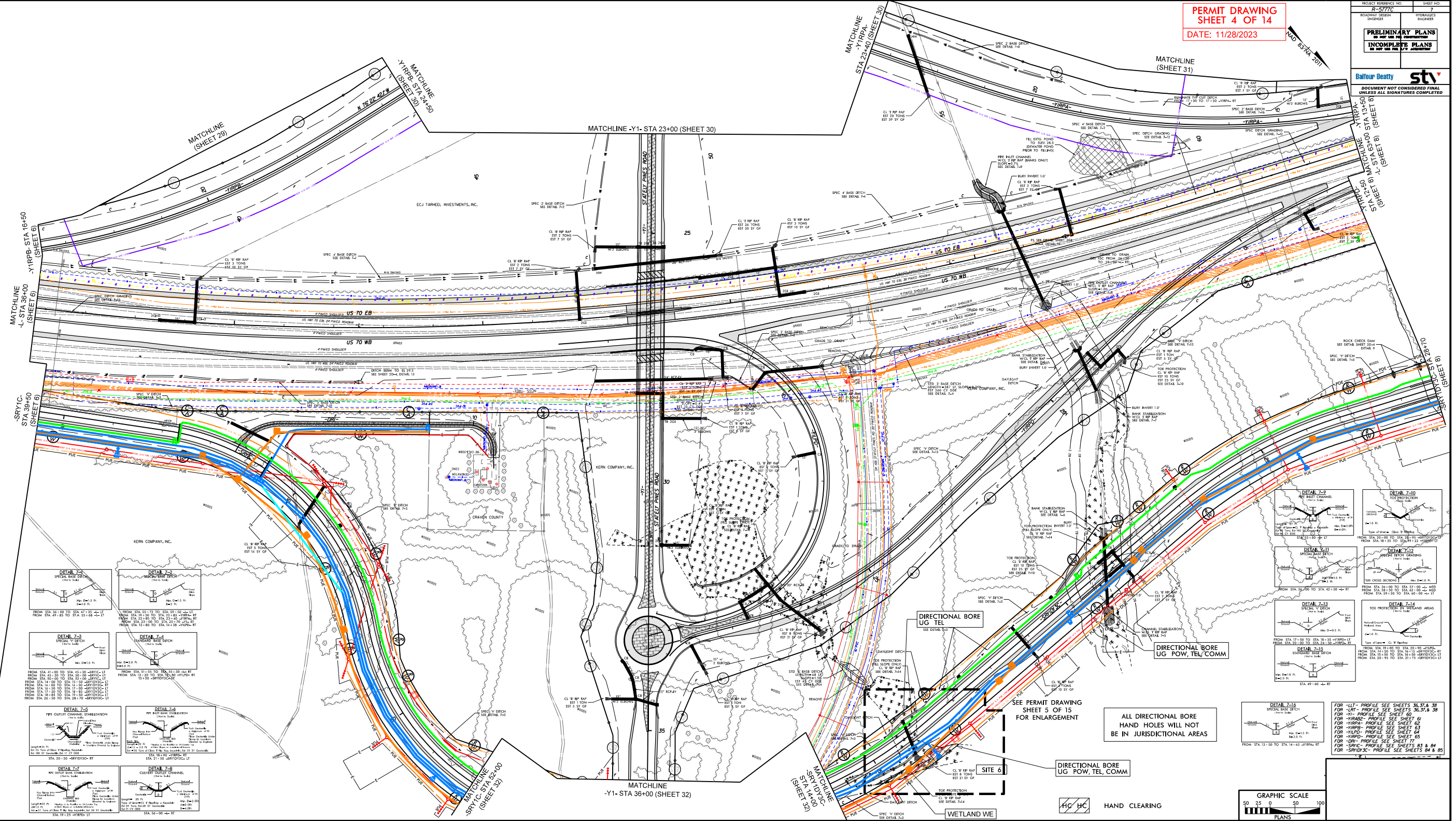
11/28/2023
R-5777C-Hyd-prm-wet_util_06-1-xpl.dgn
jharvey

6/2/99

1/28/2023
R-5777C_Hgd.prm_wetland.dwg

PERMIT DRAWING
SHEET 4 OF 14
DATE: 11/28/2023

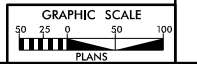
PROJECT REFERENCE NO.	R-5777C	SHEET NO.	7
ROADWAY DESIGN ENGINEER	BALFOUR BEATTY	HYDRAULIC ENGINEER	
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION INCOMPLETE PLANS DO NOT USE FOR THE STATE OF CALIFORNIA			
Balfour Beatty st DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			



ALL DIRECTIONAL BORE
HAND HOLES WILL NOT
BE IN JURISDICTIONAL AREAS

DIRECTIONAL BORE
UG POW, TEL, COMM

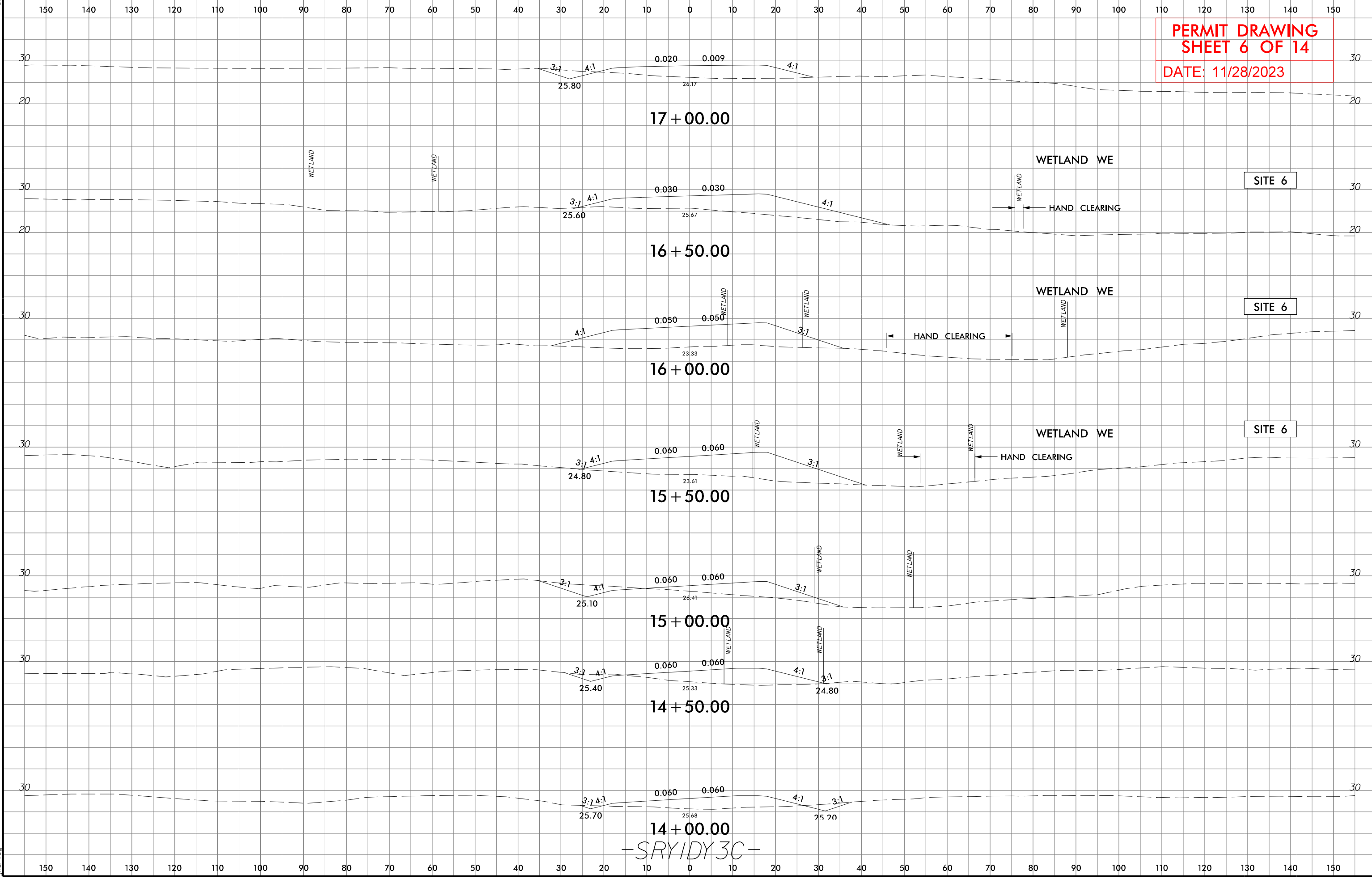
HC HC HAND CLEARING



SEE PERMIT DRAWING
SHEET 5 OF 15
FOR ENLARGEMENT

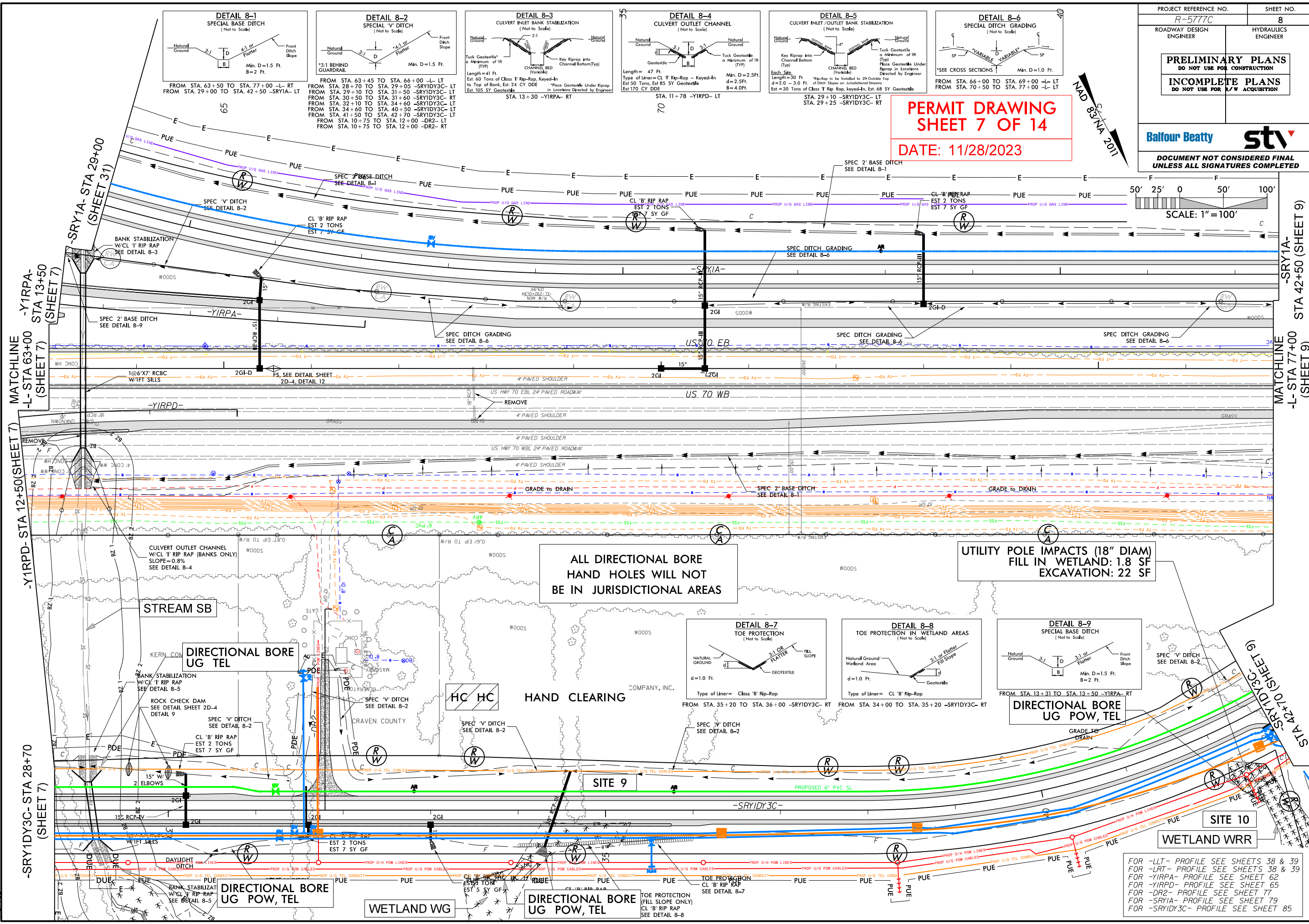
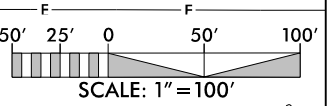


PERMIT DRAWING
SHEET 6 OF 14
DATE: 11/28/2023



-SRY1DY3C-

PERMIT DRAWING
SHEET 7 OF 14
DATE: 11/28/2023



ALL DIRECTIONAL BORE
HAND HOLES WILL NOT
BE IN JURISDICTIONAL AREAS

UTILITY POLE IMPACTS (18" DIAM)
FILL IN WETLAND: 1.8 SF
EXCAVATION: 22 SF

DIRECTIONAL BORE
UG TEL

DIRECTIONAL BORE
UG POW, TEL

DIRECTIONAL BORE
UG POW, TEL

DIRECTIONAL BORE
UG POW, TEL

FOR -LLT- PROFILE SEE SHEETS 38 & 39
FOR -LRT- PROFILE SEE SHEETS 38 & 39
FOR -YIRPA- PROFILE SEE SHEET 62
FOR -YIRPD- PROFILE SEE SHEET 65
FOR -DR2- PROFILE SEE SHEET 77
FOR -SRY1A- PROFILE SEE SHEET 79
FOR -SRY1DY3C- PROFILE SEE SHEET 85

11/28/2023 R-5777C_Hyd_prm_wet_util_psh_08.dgn

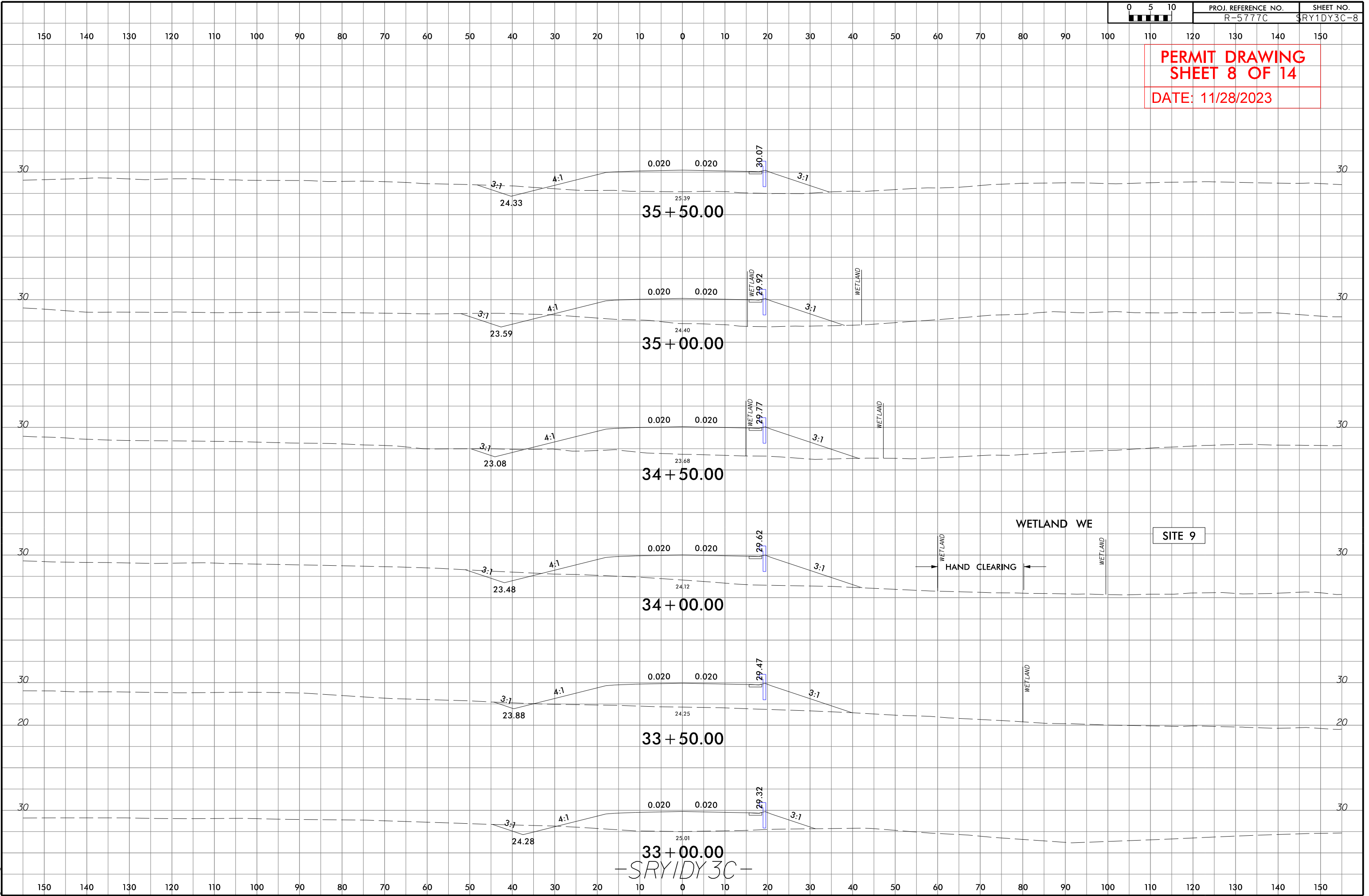
6/23/16



PROJ. REFERENCE NO. R-5777C SHEET NO. SRY1DY3C-8

PERMIT DRAWING
SHEET 8 OF 14

DATE: 11/28/2023



11/28/2023
R-5777C-Hyd-prm-wet_util_psh_08-1-xpl.dgn
jharvey

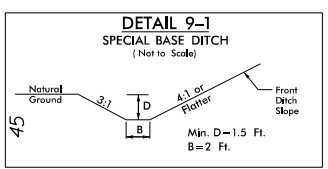
33+00.00
-SRY1DY3C-

Balfour Beatty **stv**

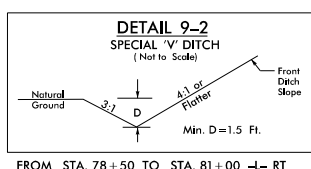
DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

PERMIT DRAWING
SHEET 9 OF 14

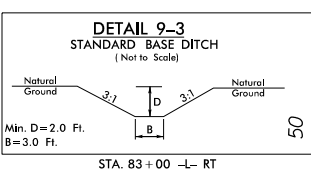
DATE: 11/28/2023



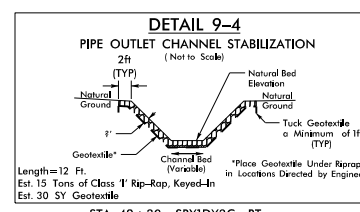
FROM STA. 77+00 TO STA. 78+50 -L- RT
FROM STA. 42+50 TO STA. 44+10 -SRY1A- LT
FROM STA. 44+50 TO STA. 48+44 -SRY1A- LT
FROM STA. 48+44 TO STA. 53+44 -SRY1A- LT
FROM STA. 53+44 TO STA. 56+50 -SRY1A- LT



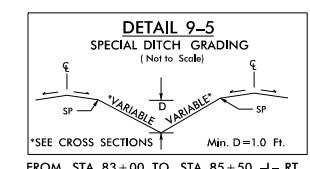
FROM STA. 78+50 TO STA. 81+00 -L- RT
FROM STA. 81+00 TO STA. 83+00 -L- RT
FROM STA. 42+70 TO STA. 43+57 -SRY1D3C- LT
FROM STA. 43+57 TO STA. 46+00 -SRY1D3C- RT
FROM STA. 47+50 TO STA. 49+28 -SRY1D3C- RT
FROM STA. 49+32 TO STA. 53+90 -SRY1D3C- RT
FROM STA. 54+20 TO STA. 57+00 -SRY1D3C- RT
FROM STA. 10+50 TO STA. 13+15 -Y1D2- LT
FROM STA. 11+00 TO STA. 12+50 -Y1D2- RT



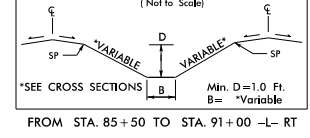
STA. 83+00 -L- RT



Length=12 Ft.
Est. 15 Tons of Class 1 Rip-Rap, Keyed-In
Est. 30 SY Geotextile
STA. 49+30 -SRY1D3C- RT

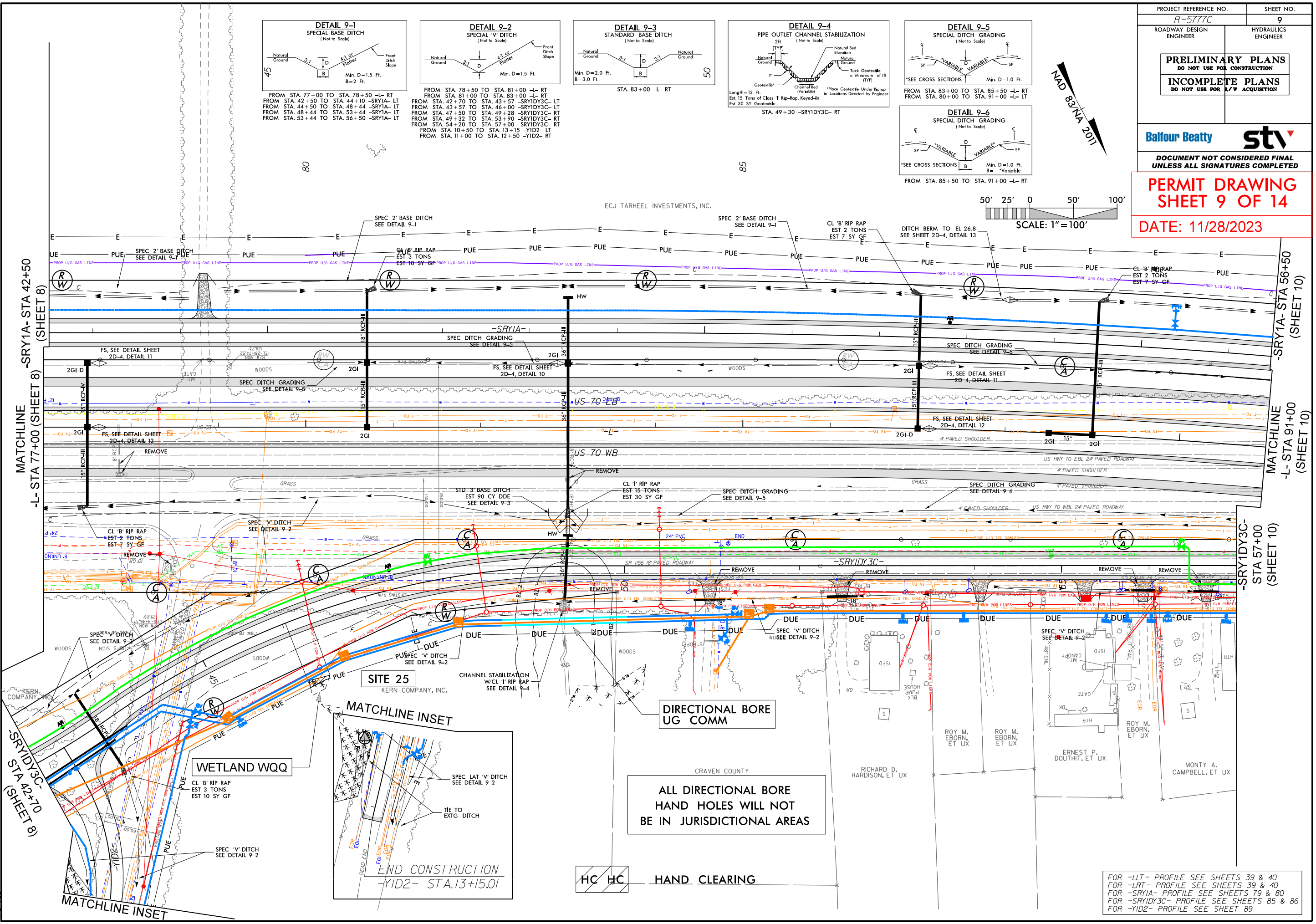
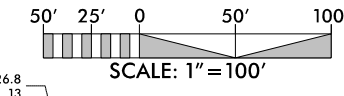


FROM STA. 83+00 TO STA. 85+50 -L- RT
FROM STA. 80+00 TO STA. 91+00 -L- RT



FROM STA. 85+50 TO STA. 91+00 -L- RT

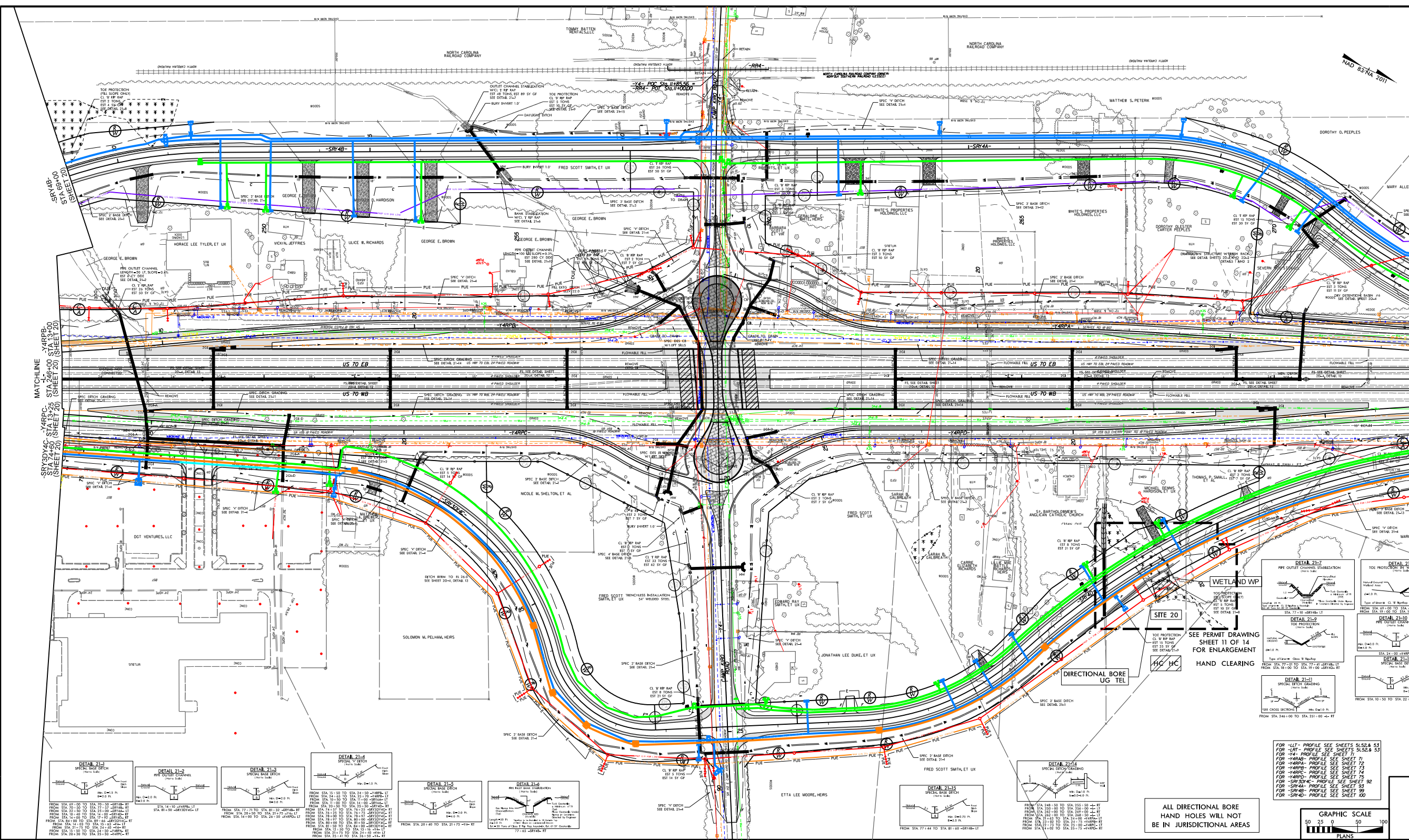
NAD 83/NA 2011



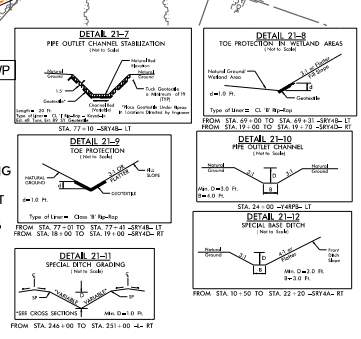
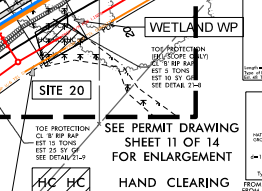
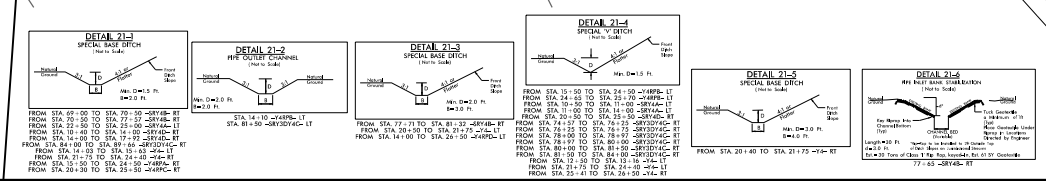
11/28/2023 R-5777C-Hyd-prm-wet-uti_psh_09.dgn

FOR -LLT- PROFILE SEE SHEETS 39 & 40
FOR -LRT- PROFILE SEE SHEETS 39 & 40
FOR -SRY1A- PROFILE SEE SHEETS 79 & 80
FOR -SRY1D3C- PROFILE SEE SHEETS 85 & 86
FOR -Y1D2- PROFILE SEE SHEET 89

6/2/99
1/28/2023
R-5777C_Hpd.pw.net.unl.plt_21.dgn

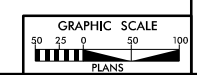


PROJECT REFERENCE NO. R-5777C SHEET NO. 21
ROADWAY DESIGN ENGINEER: [Signature] SURVEILLOR ENGINEER: [Signature]
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
INCOMPLETE PLANS
DO NOT USE FOR PERMITS OR RECORDS
Balfour Beatty **stv**
DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES ARE PRESENT
PERMIT DRAWING
SHEET 10 OF 14
DATE: 11/28/2023



FOR -LIT- PROFILE SEE SHEETS 54, 52 & 53
FOR -SRT- PROFILE SEE SHEETS 54, 52 & 53
FOR -Y4- PROFILE SEE SHEET 71
FOR -HARPA- PROFILE SEE SHEET 72
FOR -HARPA- PROFILE SEE SHEET 73
FOR -HARPA- PROFILE SEE SHEET 74
FOR -HARPA- PROFILE SEE SHEET 75
FOR -SRD4C- PROFILE SEE SHEET 92
FOR -SRD4A- PROFILE SEE SHEET 93
FOR -SRD4B- PROFILE SEE SHEET 99
FOR -SRD4D- PROFILE SEE SHEET 100

ALL DIRECTIONAL BORE
HAND HOLES WILL NOT
BE IN JURISDICTIONAL AREAS



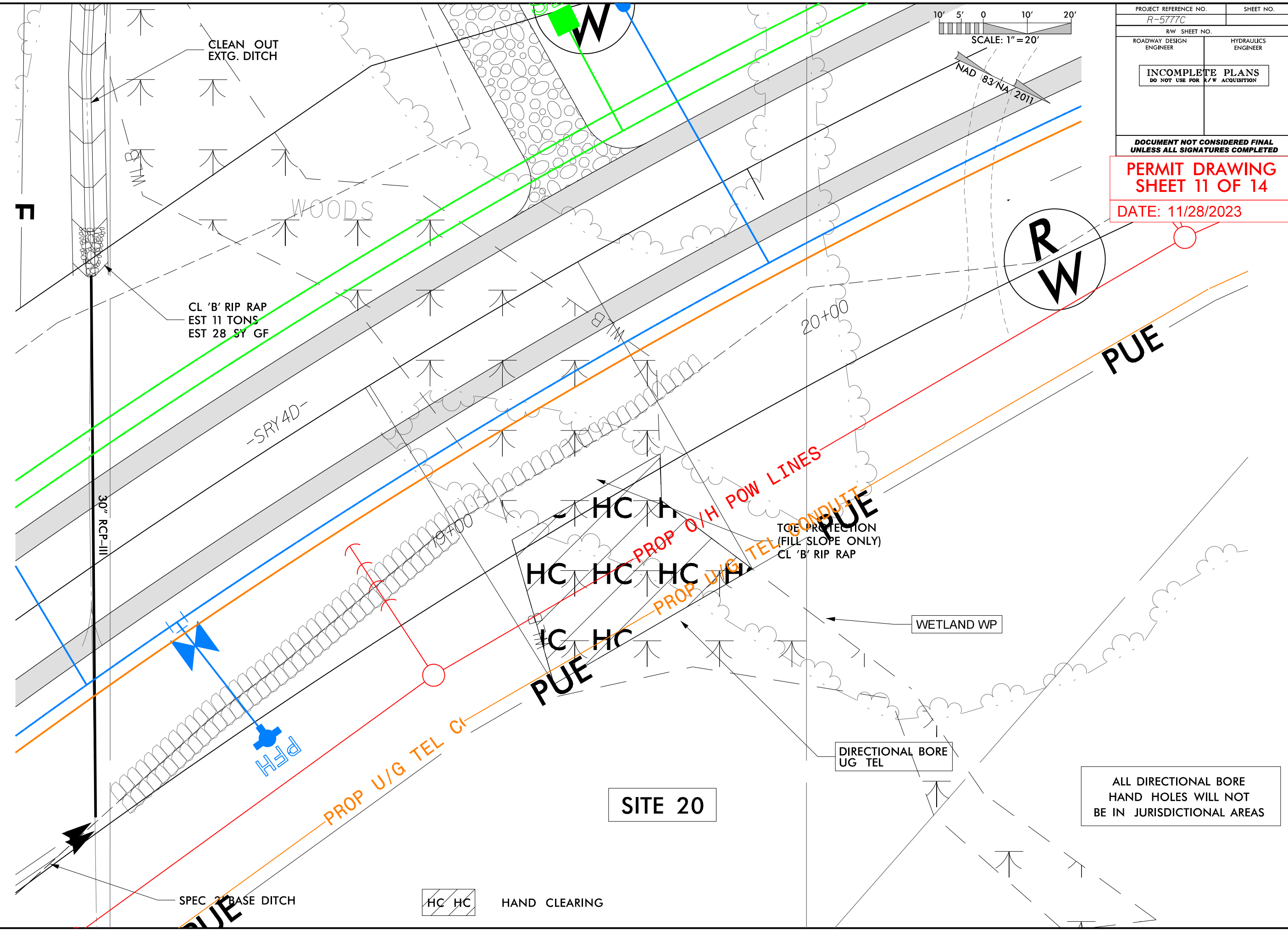
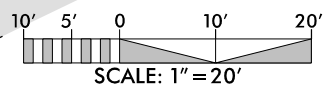
8/17/99

PROJECT REFERENCE NO. R-5777C	SHEET NO.
R/W SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION	

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

PERMIT DRAWING
SHEET 11 OF 14

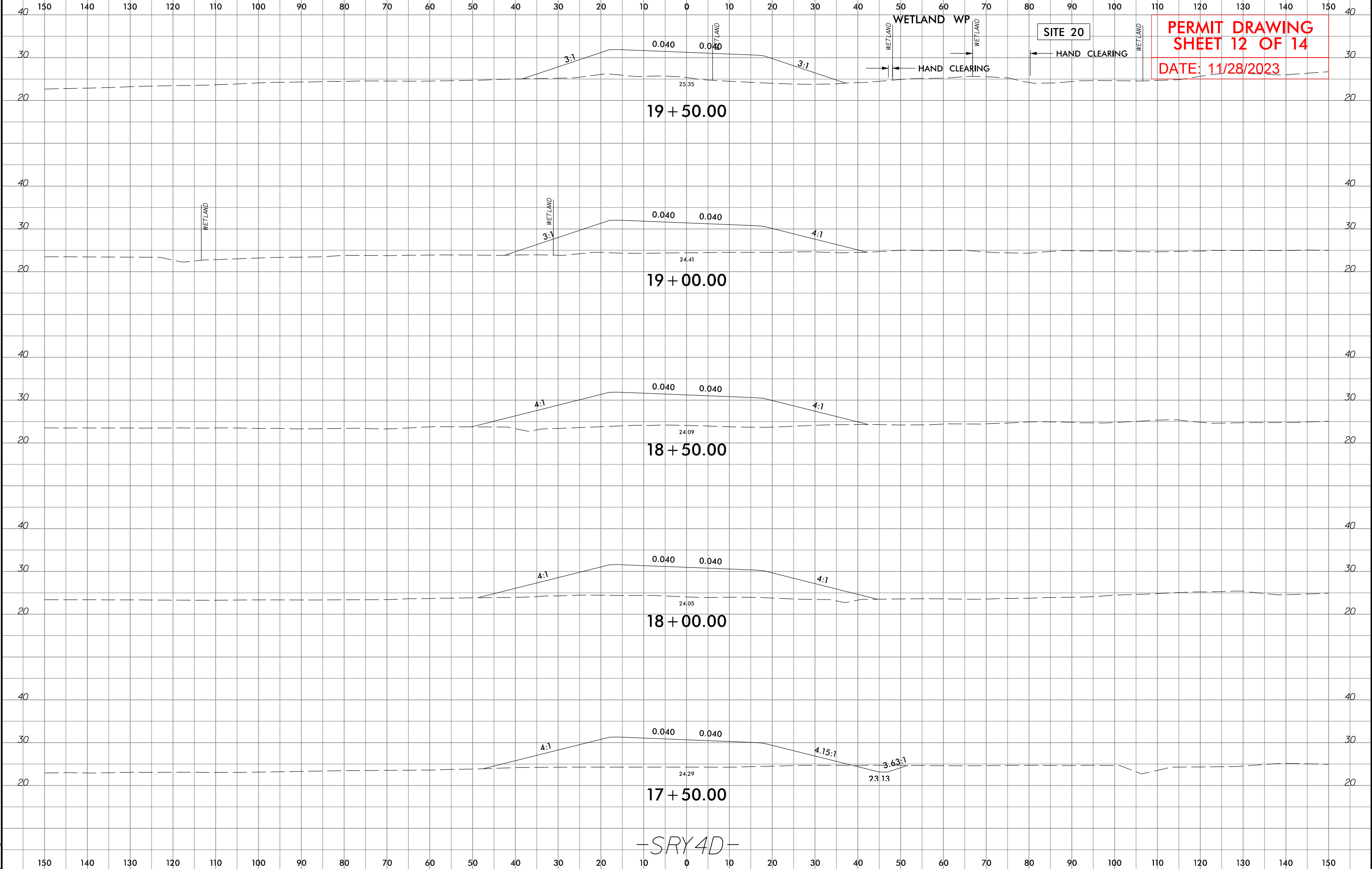
DATE: 11/28/2023



11/28/2023 R-5777C-Hyd.prm-wet_util_psh_21-1-1-V1.rvt

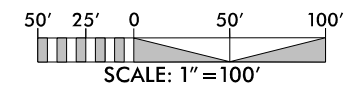
SITE 20

ALL DIRECTIONAL BORE
HAND HOLES WILL NOT
BE IN JURISDICTIONAL AREAS



PERMIT DRAWING
SHEET 12 OF 14
DATE: 11/28/2023

-SRY4D-

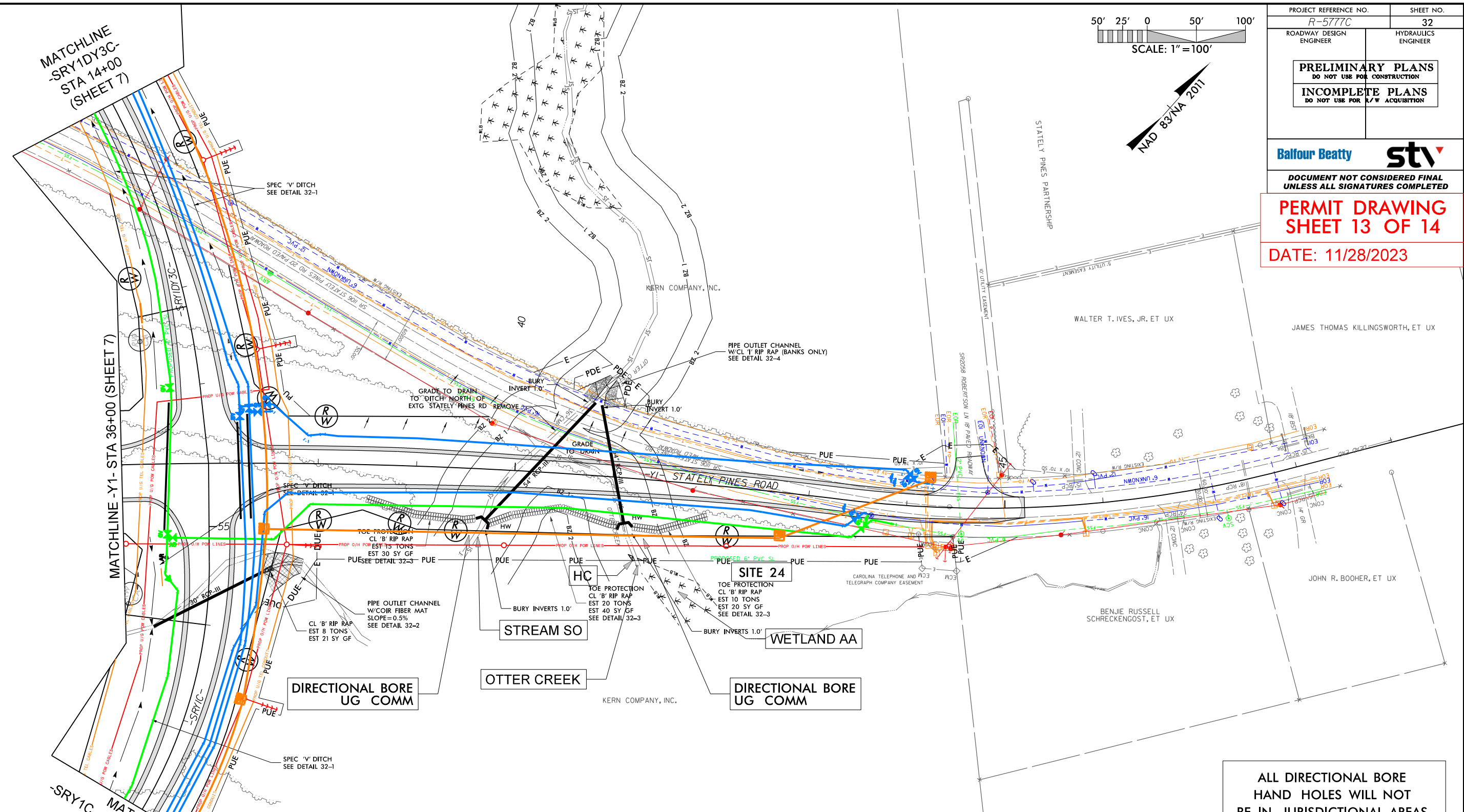


PROJECT REFERENCE NO. R-5777C	SHEET NO. 32
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	
INCOMPLETE PLANS DO NOT USE FOR A/W ACQUISITION	

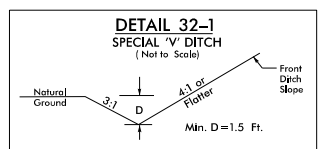
Balfour Beatty **stv**
DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

PERMIT DRAWING
SHEET 13 OF 14

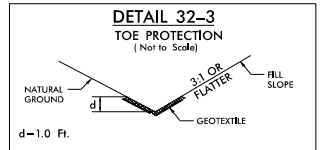
DATE: 11/28/2023



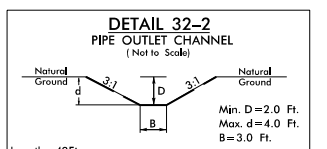
ALL DIRECTIONAL BORE
HAND HOLES WILL NOT
BE IN JURISDICTIONAL AREAS



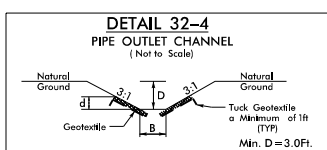
FROM STA. 52+00 TO STA. 53+88 -SRY1C- LT
FROM STA. 53+91 TO STA. 54+90 -SRY1C- LT
FROM STA. 11+00 TO STA. 14+00 -SRY1DY3C- LT
FROM STA. 12+00 TO STA. 14+00 -SRY1DY3C- RT



Type of Liner - Class 'B' Rip-Rap
FROM STA. 38+50 TO STA. 39+62 -Y1- RT
FROM STA. 39+76 TO STA. 41+09 -Y1- RT
FROM STA. 41+24 TO STA. 42+00 -Y1- RT



Length=42Ft.
Type of Liner=120 SY COIR FIBER MAT
Est. 40 CY DDE
STA. 54+60 -SRY1C- RT



Length= 30 Ft.
Type of Liner=CL 1' Rip-Rap - Keyed-In
Est 52 Tons, Est 90 SY Geotextile
STA. 40+90 -Y1- LT



TEMPORARY SURFACE WATER IMPACTS



HAND CLEARING

FOR -Y1- PROFILE SEE SHEETS 60 & 61
FOR -SRY1C- PROFILE SEE SHEET 84
FOR -SRY1DY3C- PROFILE SEE SHEET 84

R:\2023\Hyd.prm.wet.utl.psh_32.dgn

WETLAND AND SURFACE WATER IMPACTS SUMMARY

Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS					SURFACE WATER IMPACTS				
			Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)
4	29+79 to 30+89-SRY1C-RT	UTILITY					0.04					
6	15+01 to 16+52-SRY1DY3C-R	UTILITY					0.07					
9	33+49 to 34+26-SRY1DY3C-R	UTILITY					0.02					
10	42+03 to 42+44-SRY1DY3C-R	UTILITY					0.03					
20	19+01 Tto 19+56-SRY4D-RT	UTILITY					0.03					
22	329+72 to 331+45-L-LT	UTILITY					0.03					
24	41+21 to 41+38-Y1-RT	UTILITY					< 0.01					
25	46+04 to 46+32-SRY1DY3C-R	UTILITY					< 0.01					
TOTALS*:							0.21			0	0	0

*Rounded totals are sum of actual impacts

NOTES:

Site 10: Utility Pole Impacts (Fill -18" Diameter Pole) = 1.8 sf
 Site 10: Utility Pole Impacts (Excavation - Pole Installation = 22 sf

NC DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 11-28-2023
 CRAVEN
 R-5777C
 44648.3.4
 SHEET 14 OF 14