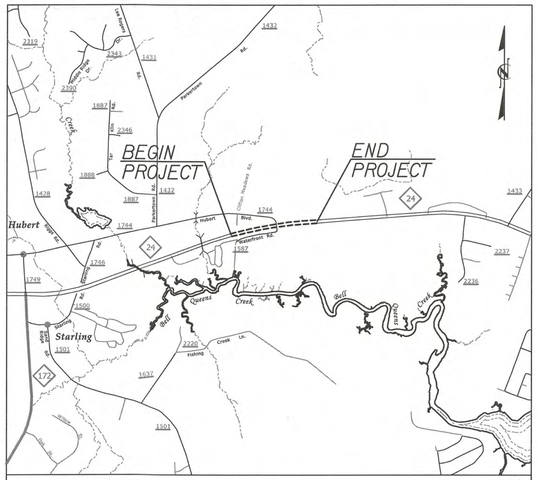
09/08/99

TIP PROJECT: W-5203C

CONTRACT: DC00070

See Sheet 1-A For Index of Sheets



N.T.S.

VICINITY MAP

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

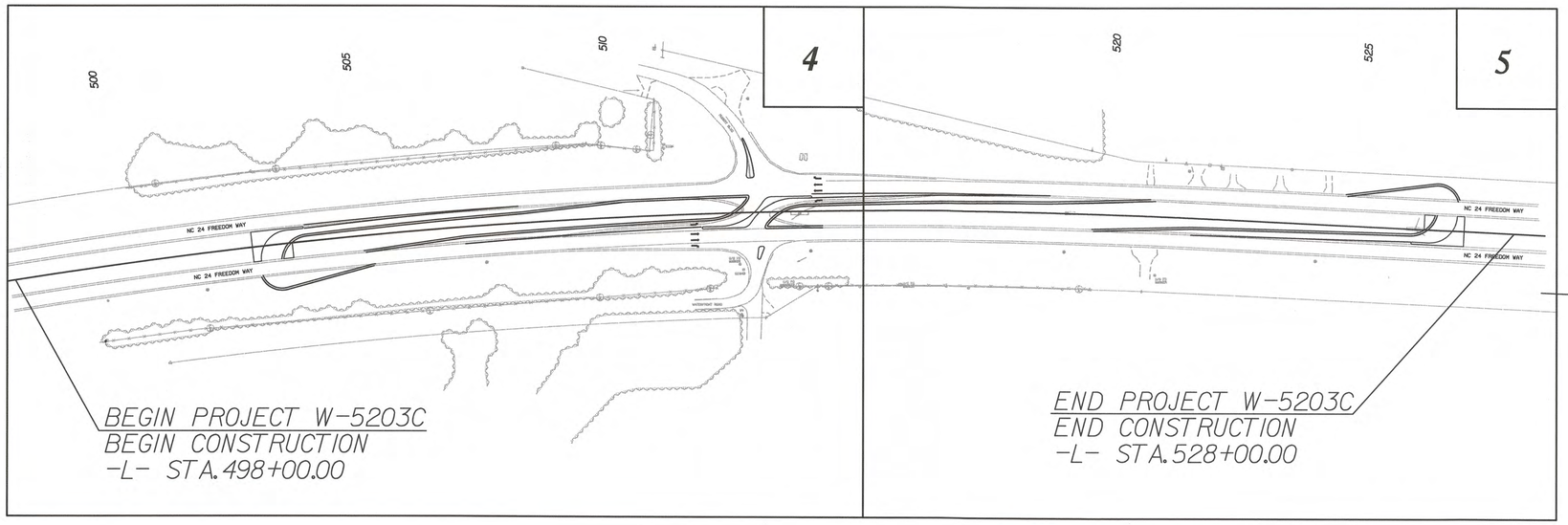
ONSLOW COUNTY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	W-5203C	1	53

STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
45333.1.1		PE
45333.3.FS3		CONSTR.

LOCATION: DIRECTIONAL CROSSOVER WITH MEDIAN U-TURNS AT THE INTERSECTION OF NC 24 AND SR 1744 (HUBERT BLVD.) IN HUBERT, N.C.

TYPE OF WORK: GRADING, DRAINAGE & PAVING



GRAPHIC SCALES

50 25 0 50 100 — PLANS

50 25 0 50 100 — PROFILE (HORIZONTAL)

10 5 0 10 20 — PROFILE (VERTICAL)

DESIGN DATA

ADT 2012 = 22000
ADT 2035 = 22000
DHV = 10 %
D = 60 %
T = 6 % *
V = 60 MPH
* TTST = DUAL
FUNC CLASS = PRINCIPAL ARTERIAL STATEWIDE TIER

PROJECT LENGTH

LENGTH OF ROADWAY TIP PROJECT W-5203C = 0.568 MI.

TOTAL LENGTH OF TIP PROJECT W-5203C = 0.568 MI.

Prepared In the Office of:

HNTB NORTH CAROLINA, P.C.
343 E. Six Forks Road, Suite 200
Raleigh, North Carolina 27609
NC License No: C-1554

2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:

LETTING DATE: June 5, 2014

ENRICO A. ROQUE, P.E. — PROJECT ENGINEER

BRIAN BLACKWELL, E.I. — PROJECT DESIGN ENGINEER

SCOTT COOKE, P.E. — NCDOT CONTACT

HYDRAULICS ENGINEER

SIGNATURE: P.E. 4/10/14

NORTH CAROLINA PROFESSIONAL SEAL 15764 ENGINEER JAMES A. BYRD

ROADWAY DESIGN ENGINEER

SIGNATURE: P.E. 4/10/14

NORTH CAROLINA PROFESSIONAL SEAL 19824 ENGINEER ENRICO A. ROQUE

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

P.E.

STATE HIGHWAY DESIGN ENGINEER

9:32:51 AM
$$$$PROJNAME$$$$ rdy_tsh.dgn

PROJECT REFERENCE NO.	SHEET NO.
W-5203C	1-A

ROADWAY DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 19824 ENGINEER
4/2/14

GENERAL NOTES AND INDEX OF SHEETS

INDEX OF SHEETS

SHEET NUMBER	SHEET
1	TITLE SHEET
1-A	INDEX OF SHEETS, GENERAL NOTES & LIST OF STANDARD DRAWINGS
1-B	CONVENTIONAL PLAN SHEET SYMBOLS
2	TYPICAL SECTION SHEET
2A	INTERSECTION DETAILS
3	SUMMARY OF QUANTITIES: EARTHWORK, DRAINAGE
4 - 5	PLAN SHEETS
6 - 7	PROFILE SHEETS
TMP-1 THRU TMP-11	TRANSPORTATION MANAGEMENT PLANS
PMP-1 THRU PMP-3	FINAL PAVEMENT MARKING PLANS
EC-1 THRU EC-6	EROSION CONTROL PLANS
SIGN-1 THRU SIGN-3	SIGNING PLANS
X-1 THRU X-17	-L- CROSS SECTION SHEETS

EFF. 01-17-2012
REV. 10-30-2012

2012 ROADWAY ENGLISH STANDARD DRAWINGS

The following Roadway Standards as appear in "Roadway Standard Drawings" Highway Design Branch – N. C. Department of Transportation – Raleigh, N. C., Dated January, 2012 are applicable to this project and by reference hereby are considered a part of these plans:

STD.NO. TITLE
DIVISION 2 – EARTHWORK
200.02 Method of Clearing – Method II
225.04 Method of Obtaining Superelevation – Two Lane Pavement
DIVISION 3 – PIPE CULVERTS
300.01 Method of Pipe Installation
DIVISION 5 – SUBGRADE, BASES AND SHOULDERS
560.01 Method of Shoulder Construction – High Side of Superelevated Curve – Method I
DIVISION 6 – ASPHALT BASES AND PAVEMENTS
654.01 Pavement Repairs
DIVISION 8 – INCIDENTALS
840.03 Frame, Grates and Hood – for Use on Standard Catch Basin
840.19 Concrete Grated Drop Inlet Type 'D' – 12" thru 36" Pipe
840.22 Frames and Wide SLot Sag Grates – for use with Std. Dwg 840.19
840.31 Concrete Junction Box
840.32 Brick Junction Box
840.36 Traffic Bearing Grated Drop Inlet
840.37 Steel Grate and Frame – for use with Std. Dwg 840.36
840.54 Manhole Frame and Cover

GENERAL NOTES: 2012 SPECIFICATIONS

EFFECTIVE: 01-17-2012
REVISED: 07-30-2012

GRADE LINE:
GRADING AND SURFACING:

THE GRADE LINES SHOWN DENOTE THE FINISHED ELEVATION OF THE PROPOSED SURFACING AT GRADE POINTS SHOWN ON THE TYPICAL SECTIONS. GRADE LINES MAY BE ADJUSTED AT THEIR BEGINNING AND ENDING AND AT STRUCTURES AS DIRECTED BY THE ENGINEER IN ORDER TO SECURE A PROPER TIE-IN.

CLEARING:

CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II.

SUPERELEVATION:

ALL CURVES ON THIS PROJECT SHALL BE SUPERELEVATED IN ACCORDANCE WITH STD. NO. 225.04
SUPERELEVATION IS TO BE REVOLVED ABOUT THE GRADE POINTS SHOWN ON THE TYPICAL SECTIONS.

SHOULDER CONSTRUCTION:

ASPHALT, EARTH, AND CONCRETE SHOULDER CONSTRUCTION ON THE HIGH SIDE OF SUPERELEVATED CURVES SHALL BE IN ACCORDANCE WITH STD. 560.01.

SIDE ROADS:

THE CONTRACTOR WILL BE REQUIRED TO DO ALL NECESSARY WORK TO PROVIDE SUITABLE CONNECTIONS WITH ALL ROADS, STREETS, AND DRIVES ENTERING THIS PROJECT. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PARTICULAR ITEMS INVOLVED.

SUBSURFACE PLANS:

NO SUBSURFACE PLANS ARE AVAILABLE ON THIS PROJECT. THE CONTRACTOR SHOULD MAKE HIS OWN INVESTIGATION AS TO THE SUBSURFACE CONDITIONS.

UTILITIES:

UTILITY OWNERS ON THIS PROJECT ARE

Phone – CENTURYLINK – Contact ROD MEDLIN at (252) 413-771.

Water – ONWASA – Contact CARL BAKER at (910) 937-7521.

ANY RELOCATION OF EXISTING UTILITIES WILL BE ACCOMPLISHED BY OTHERS.

1:44:23 PM
$$$$USERNAME$$$$ W-5203C_rdu_gen_1A.dgn

12/05/11

PROJECT REFERENCE NO.	SHEET NO.
W-5203C	I-B

Note: Not to Scale

**S.U.E. = Subsurface Utility Engineering*

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

CONVENTIONAL PLAN SHEET SYMBOLS

BOUNDARIES AND PROPERTY:

- State Line
- County Line
- Township Line
- City Line
- Reservation Line
- Property Line
- Existing Iron Pin — EIP
- Property Corner
- Property Monument — ECM
- Parcel/Sequence Number — 123
- Existing Fence Line
- Proposed Woven Wire Fence
- Proposed Chain Link Fence
- Proposed Barbed Wire Fence
- Existing Wetland Boundary — WLB
- Proposed Wetland Boundary — WLB
- Existing Endangered Animal Boundary — EAB
- Existing Endangered Plant Boundary — EPB
- Known Soil Contamination: Area or Site
- Potential Soil Contamination: Area or Site

BUILDINGS AND OTHER CULTURE:

- Gas Pump Vent or U/G Tank Cap
- Sign — S
- Well — W
- Small Mine
- Foundation
- Area Outline
- Cemetery
- Building
- School
- Church
- Dam

HYDROLOGY:

- Stream or Body of Water
- Hydro, Pool or Reservoir
- Jurisdictional Stream — JS
- Buffer Zone 1 — BZ 1
- Buffer Zone 2 — BZ 2
- Flow Arrow
- Disappearing Stream
- Spring
- Wetland
- Proposed Lateral, Tail, Head Ditch — FLOW
- False Sump

RAILROADS:

- Standard Gauge — CSX TRANSPORTATION
- RR Signal Milepost — MILEPOST 35
- Switch — SWITCH
- RR Abandoned
- RR Dismantled

RIGHT OF WAY:

- Baseline Control Point
- Existing Right of Way Marker
- Existing Right of Way Line
- Proposed Right of Way Line — RW
- Proposed Right of Way Line with Iron Pin and Cap Marker — RW
- Proposed Right of Way Line with Concrete or Granite R/W Marker — RW
- Proposed Control of Access Line with Concrete C/A Marker — CA
- Existing Control of Access — CA
- Proposed Control of Access — CA
- Existing Easement Line — E
- Proposed Temporary Construction Easement — E
- Proposed Temporary Drainage Easement — TDE
- Proposed Permanent Drainage Easement — PDE
- Proposed Permanent Drainage / Utility Easement — DUE
- Proposed Permanent Utility Easement — PUE
- Proposed Temporary Utility Easement — TUE
- Proposed Aerial Utility Easement — AUE
- Proposed Permanent Easement with Iron Pin and Cap Marker

ROADS AND RELATED FEATURES:

- Existing Edge of Pavement
- Existing Curb
- Proposed Slope Stakes Cut — C
- Proposed Slope Stakes Fill — F
- Proposed Curb Ramp — CR
- Existing Metal Guardrail
- Proposed Guardrail
- Existing Cable Guiderail
- Proposed Cable Guiderail
- Equality Symbol
- Pavement Removal

VEGETATION:

- Single Tree
- Single Shrub
- Hedge
- Woods Line
- Orchard
- Vineyard — Vineyard

EXISTING STRUCTURES:

MAJOR:

- Bridge, Tunnel or Box Culvert — CONC
- Bridge Wing Wall, Head Wall and End Wall — CONC WW

MINOR:

- Head and End Wall — CONC HW
- Pipe Culvert
- Footbridge
- Drainage Box: Catch Basin, DI or JB — CB
- Paved Ditch Gutter
- Storm Sewer Manhole — S
- Storm Sewer — S

UTILITIES:

POWER:

- Existing Power Pole
- Proposed Power Pole
- Existing Joint Use Pole
- Proposed Joint Use Pole
- Power Manhole — P
- Power Line Tower
- Power Transformer
- U/G Power Cable Hand Hole
- H-Frame Pole
- Recorded U/G Power Line — P
- Designated U/G Power Line (S.U.E.*) — P

TELEPHONE:

- Existing Telephone Pole
- Proposed Telephone Pole
- Telephone Manhole — T
- Telephone Booth
- Telephone Pedestal — T
- Telephone Cell Tower
- U/G Telephone Cable Hand Hole — HH
- Recorded U/G Telephone Cable — T
- Designated U/G Telephone Cable (S.U.E.*) — T
- Recorded U/G Telephone Conduit — TC
- Designated U/G Telephone Conduit (S.U.E.*) — TC
- Recorded U/G Fiber Optics Cable — T FO
- Designated U/G Fiber Optics Cable (S.U.E.*) — T FO

WATER:

- Water Manhole — W
- Water Meter
- Water Valve
- Water Hydrant
- Recorded U/G Water Line — W
- Designated U/G Water Line (S.U.E.*) — W
- Above Ground Water Line — A/G Water

TV:

- TV Satellite Dish
- TV Pedestal — C
- TV Tower
- U/G TV Cable Hand Hole — HH
- Recorded U/G TV Cable — TV
- Designated U/G TV Cable (S.U.E.*) — TV
- Recorded U/G Fiber Optic Cable — TV FO
- Designated U/G Fiber Optic Cable (S.U.E.*) — TV FO

GAS:

- Gas Valve
- Gas Meter
- Recorded U/G Gas Line — G
- Designated U/G Gas Line (S.U.E.*) — G
- Above Ground Gas Line — A/G Gas

SANITARY SEWER:

- Sanitary Sewer Manhole
- Sanitary Sewer Cleanout
- U/G Sanitary Sewer Line — SS
- Above Ground Sanitary Sewer — A/G Sanitary Sewer
- Recorded SS Forced Main Line — FSS
- Designated SS Forced Main Line (S.U.E.*) — FSS

MISCELLANEOUS:

- Utility Pole
- Utility Pole with Base
- Utility Located Object
- Utility Traffic Signal Box — S
- Utility Unknown U/G Line — ?UTL
- U/G Tank; Water, Gas, Oil
- Underground Storage Tank, Approx. Loc. — UST
- A/G Tank; Water, Gas, Oil
- Geoenvironmental Boring
- U/G Test Hole (S.U.E.*)
- Abandoned According to Utility Records — AATUR
- End of Information — E.O.I.

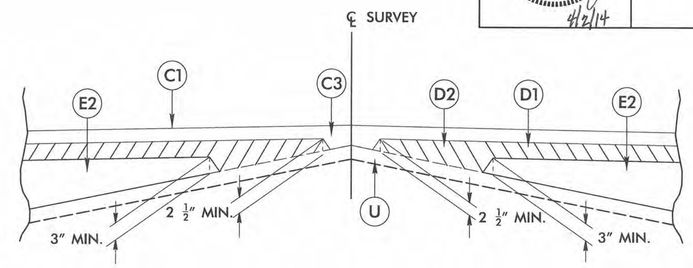
PROJECT REFERENCE NO.	SHEET NO.
W-5203C	2
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	

NORTH CAROLINA PROFESSIONAL SEAL 19824 ENGINEER R. O. A. K. O. U. 4/2/14

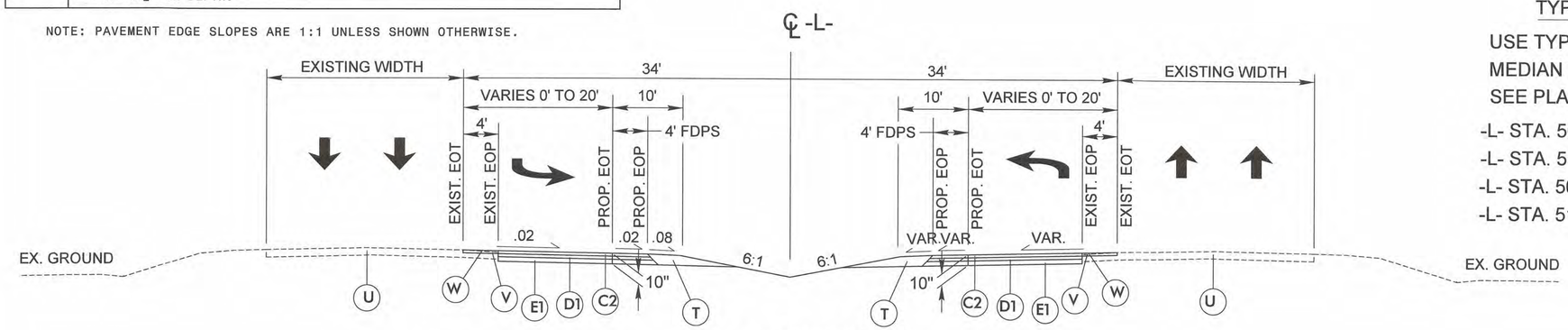
PAVEMENT SCHEDULE

C1	PROP. APPROX. 1 ½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.	R1	5" MONOLITHIC ISLAND
C2	PROP. APPROX. 3" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.	T	EARTH MATERIAL.
C3	PROP. VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 112 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT TO EXCEED 2" IN DEPTH.	U	EXISTING PAVEMENT.
D1	PROP. APPROX. 3" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.	V	1 ½" MILLING
D2	PROP. VAR. DEPTH ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH, TO BE PLACED IN LAYERS NOT LESS THAN 2¼" IN DEPTH OR GREATER THAN 4" IN DEPTH.	W	VARIABLE DEPTH ASPHALT PAVEMENT (SEE STANDARD WEDGING DETAIL SHEET No. 2)
E1	PROP. APPROX. 4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.		
E2	PROP. VAR. DEPTH ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT LESS THAN 3" IN DEPTH OR GREATER THAN 5½" IN DEPTH.		

NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.



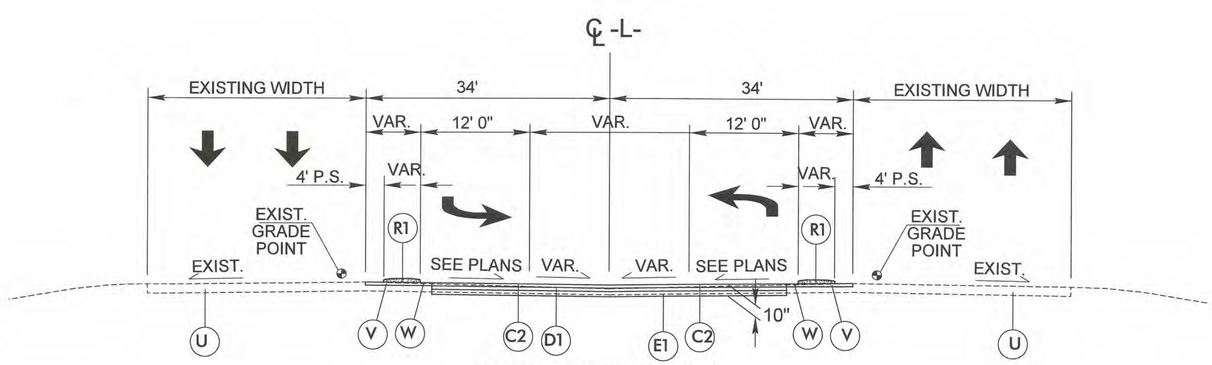
Detail Showing Method of Wedging



TYPICAL SECTION N0. 1

USE TYPICAL SECTION NO. 1 FOR
MEDIAN TURN LANE
SEE PLANS FOR TAPER LENGTHS AND LOCATIONS

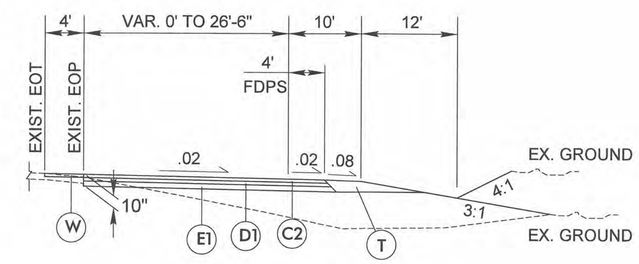
-L- STA. 503+82 +/- TO -L- STA. 510+18 +/- LT
-L- STA. 513+92 +/- TO -L- STA. 520+82 +/- LT
-L- STA. 504+99 +/- TO -L- STA. 511+66 +/- RT
-L- STA. 519+57 +/- TO -L- STA. 525+94 +/- RT



TYPICAL SECTION N0. 2

MEDIAN CROSSOVER LANE
SEE PLANS FOR TAPER LENGTHS AND LOCATIONS

-L- STA. 502+77 +/- TO -L- STA. 503+82 +/- MED
* -L- STA. 511+66 +/- TO -L- STA. 513+92 +/- MED
-L- STA. 525+94 +/- TO -L- STA. 527+00 +/- MED



TYPICAL SECTION N0. 3

USE TYPICAL SECTION NO. 3 FOR
U-TURN BULBOUT LOCATIONS

-L- STA. 502+92 +/- TO -L- STA. 505+16 +/- RT
-L- STA. 524+61 +/- TO -L- STA. 526+88 +/- LT

* NOTE: EXISTING MEDIAN CROSSOVER TO BE MILLED, WEDGED, AND OVERLAYED.
PROPOSED MONOLITHIC ISLAND TO BE SURFACED MOUNTED (SEE PLANS).

REVISIONS

8/17/99

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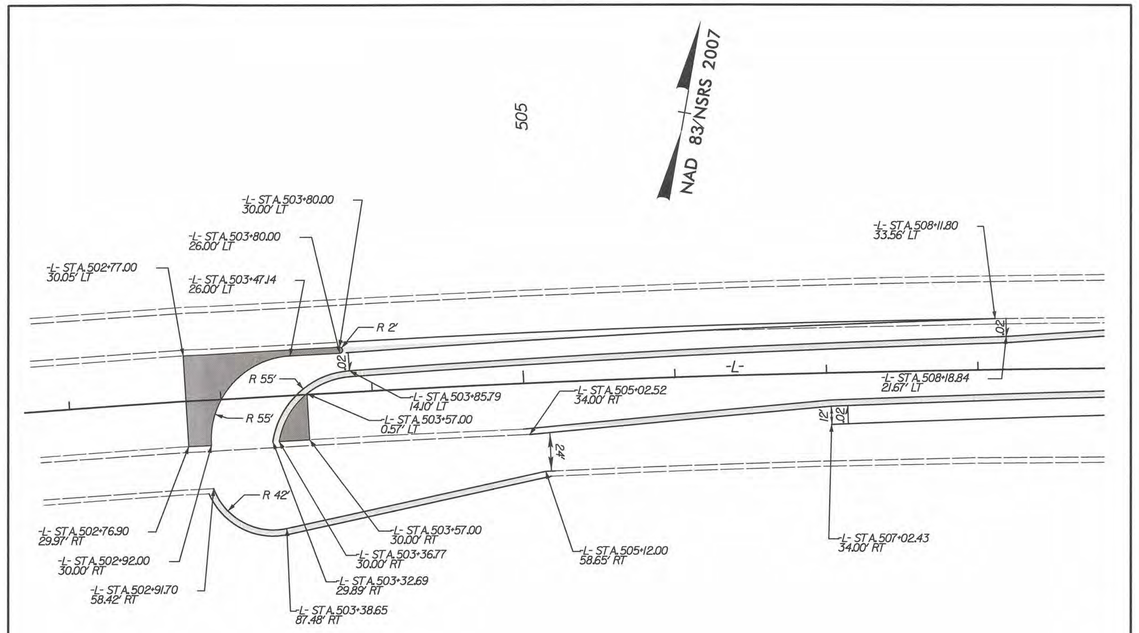
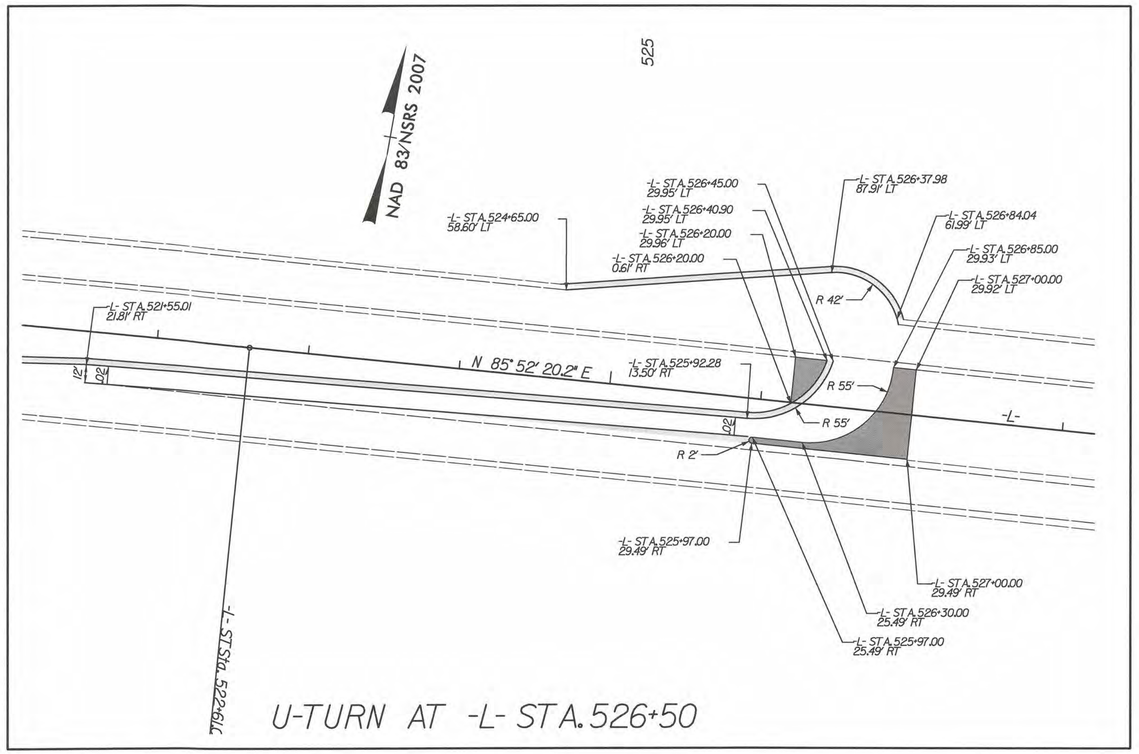
PROJECT REFERENCE NO.	SHEET NO.
W-5203C	2A
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	

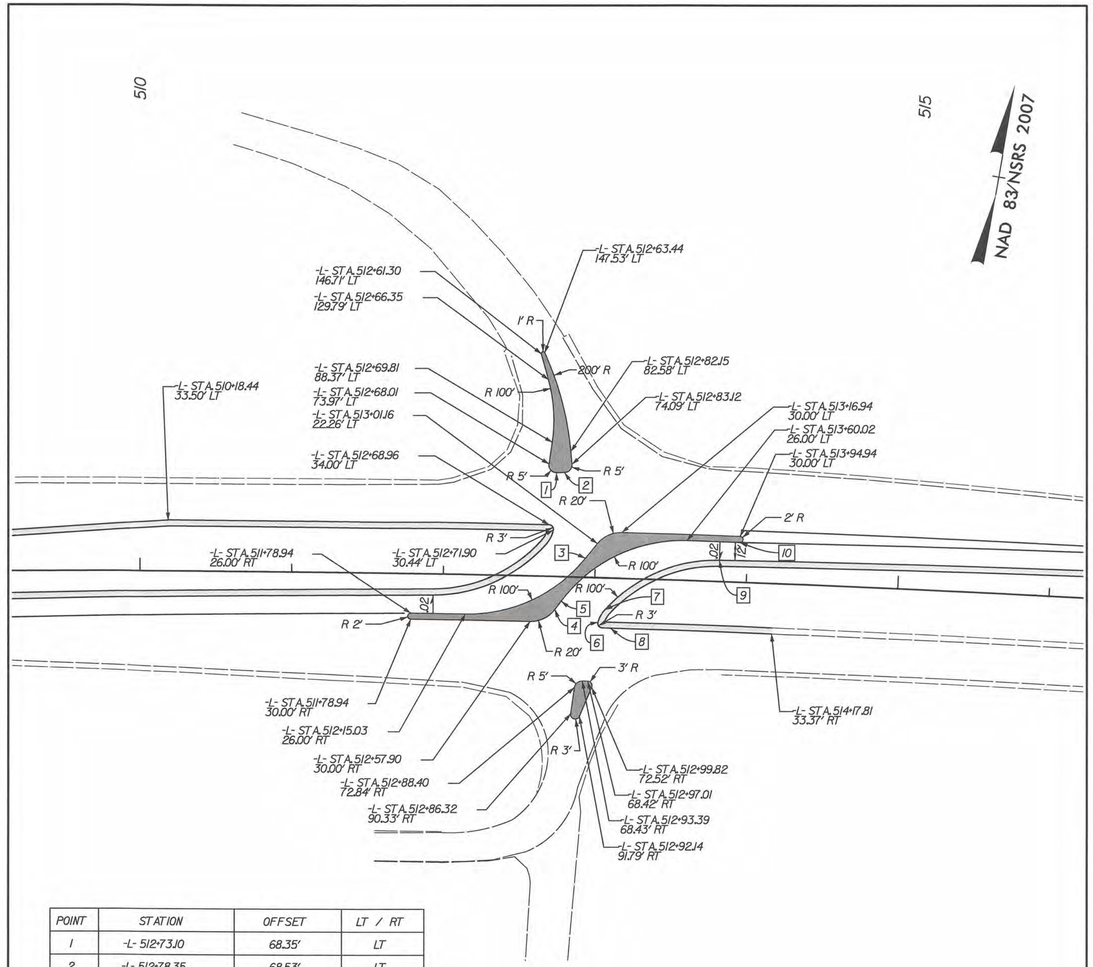
INTERSECTION DETAILS



U-TURN AT -L- STA. 503+50



U-TURN AT -L- STA. 526+50



POINT	STATION	OFFSET	LT / RT
1	-L- 512+73.10	68.35'	LT
2	-L- 512+78.35	68.53'	LT
3	-L- 512+93.46	12.34'	LT
4	-L- 512+74.18	21.65'	RT
5	-L- 512+78.16	16.10'	RT
6	-L- 513+02.83	29.43'	RT
7	-L- 513+07.12	21.12'	RT
8	-L- 513+11.31	33.12'	RT
9	-L- 513+81.76	13.83'	LT
10	-L- 513+94.95	26.00'	LT

LEFT-TURNS AT -L- STA. 513+00

8/17/99

REVISIONS

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PROJECT REFERENCE NO.	SHEET NO.
W-5203C	3
R/W SHEET NO.	

Note: Approximate quantities only. Unclassified Excavation, Borrow Excavation, Fine Grading, and Removal of Existing Pavement will be paid for at the contract lump sum price for "Grading."

SUMMARY OF QUANTITIES
SUMMARY OF EARTHWORK
IN CUBIC YARDS

STATION	STATION	UNCLASSIFIED EXCAVATION	UNDERCUT	UNSUITABLE UNCLASSIFIED EXCAVATION	EMBANK. +%	BORROW	WASTE
-L- STA. 502+50.00	-L- STA. 527+00.00	1712	2000	600	4401	3289	2600
SHOULDER MATERIAL					833	833	2600
PROJECT TOTAL		1712	2000		5234	4122	2600
EST. 5% TO REPLACE TOP SOIL ON BORROW PIT						206	
GRAND TOTALS:		1712	2000			4328	
CONTINGENCY UNDERCUT			1000				
SAY:		1750	3000			4400	2600

EST. SHALLOW UNDERCUT: 1000 CY
EST. GEOTECH FOR SOIL STABILIZATION: 7400 SY
EST. SELECT MATERIALS: 3600 CY
EST. CL IV SUBGRADE STABILIZATION MATERIAL: 1900 TONS

DRAINAGE SUMMARY

STATION / SIZE / THICKNESS OR GAUGE	LOCATION (LT,RT, OR CL)	STRUCTURE NO. FROM	STRUCTURE NO. TO	TOP ELEVATION	INVERT ELEVATION	INVERT ELEVATION	SLOPE CRITICAL	CLASS III R.C. PIPE (UNLESS NOTED OTHERWISE) 15"	18"	24"	QUANTITIES FOR DRAINAGE STRUCTURES PER EACH (0 THRU 5.0')	TOTAL L.F. FOR PAY QUANTITY SHALL BE COL.'A' + (1.3 X COL. 'B') A: 5.0' THRU 10.0'	B: 10.0' AND ABOVE		GRATED D.I., TYPE 'D' STD. 840.19	FRAME AND GRATE STD. 840.22	J.B STD. 840.31 OR STD. 840.32	GRATED D.I., TYPE 'B' STD. 840.36	T.B.D.I. FRAME AND GRATE STD. 840.37	M.H. FRAME AND COVER STD. 840.54	CONVERT EXISTING D.I. TO J.B.	CONC. COLLARS CL. "B" C.Y. STD 840.72	PIPE REMOVAL LIN.FT.	REMARKS
-L- 502+92	RT	0401		23.45							1							1	1					
-L- 502+92	RT	0401	0402		20.57	19.83		120																
-L- 504+16	LT	0402	0403		20.08	19.83			16													0.4465	4	REMOVE FLARED END SECTION
-L- 504+13	RT	0403		22.00							1				1	1								
-L- 504+13	RT	0403	0404		19.83	19.53																	4	REMOVE FLARED END SECTION
-L- 503+89	RT	0404	OUT		19.53	19.46			28													0.4465	4	REMOVE FLARED END SECTION
-L- 512+92	CL	0405		26.68							1							1	1					
-L- 513+32	RT	0405	EX.		23.19	22.07		80																CLASS IV RCP
-L- 525+54	LT	IN	0501		23.91	22.76				96														
-L- 526+48	LT	IN	0501		23.20	22.76				84														CLASS IV RCP
-L- 526+04	LT	0501		27.60							1	0.84					1			1				
-L- 526+04	LT	0501	0502		21.76	21.63				8												0.5526		
-L- 525+85	LT	0503		26.60							1				1	1								
-L- 525+94	LT	0503	0504		24.68	24.58		20																
-L- 527+12	LT	0505		27.10							1				1	1								
-L- 526+57	LT	0505	0504		25.18	24.64		108																CLASS IV RCP
-L- 526+02	LT	0504		28.75																1	1			
TOTAL								328	44	188	6	0.84			3	3	1	2	2	2	1	1.4456	12	

ABBREVIATIONS

C.B.	CATCH BASIN
N.D.I.	NARROW DROP INLET
D.I.	DROP INLET
M.D.I.	MEDIAN DROP INLET
M.D.I. (N.S.)	MEDIAN DROP INLET (NARROW SLOT)
J.B.	JUNCTION BOX
M.H.	MANHOLE
T.B.D.I.	TRAFFIC BEARING DROP INLET
T.B.J.B.	TRAFFIC BEARING JUCTION BOX

REVISIONS

8/17/99

7:39:48 AM
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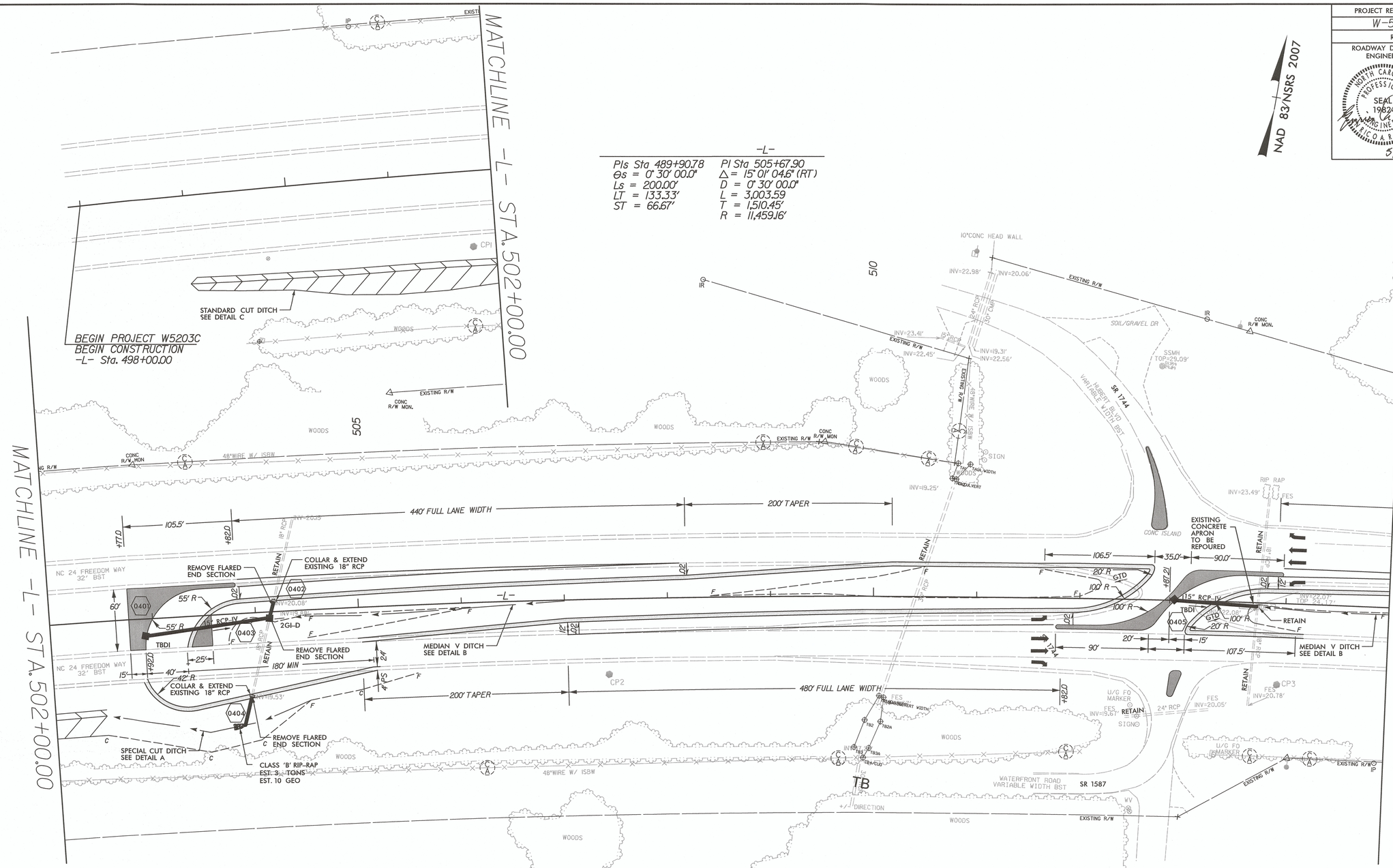
$$$$$$$$PRNAME$$$$

PROJECT REFERENCE NO.	SHEET NO.
W-5203C	4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
5/12/14	5/12/14

NAD 83/NSRS 2007

-L-

PIs Sta 489+90.78	PI Sta 505+67.90
Θs = 0° 30' 00.0"	Δ = 15° 01' 04.6" (RT)
Ls = 200.00'	D = 0° 30' 00.0"
LT = 133.33'	L = 3,003.59
ST = 66.67'	T = 1,510.45'
	R = 11,459.16'



DATUM DESCRIPTION

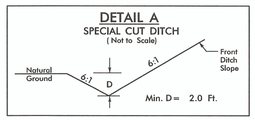
THE COORDINATE SYSTEM FOR THIS PROJECT IS BASED ON STATE PLANE COORDINATES NAD 83/NSRS 2007
THE GRID FACTOR USED ON THIS PROJECT IS: 1.000000000

THE N.C. LAMBERT GRID BEARING AND HORIZONTAL GROUND DISTANCE FROM 'CP3' TO -L- STATION 488+57.45 IS S 77° 29' 23" W 2523.35'

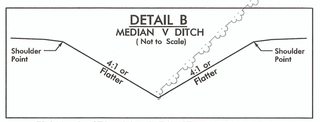
ALL LINEAR DIMENSIONS ARE GRID DISTANCES
VERTICAL DATUM USED IS NAVD 88

GPS CONTROL POINTS

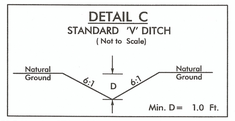
POINT	NORTHING	EASTING	ELEV
CP1	356196.40	2537423.04	21.29
CP2	356319.14	2537969.52	23.63
CP3	356421.40	2538608.82	25.20
CP4	356482.86	2539110.58	26.34
CP5	356525.12	2539610.52	27.68



FROM -L- STA. 502+50 TO STA. 504+50 LT



FROM -L- STA. 504+13 TO STA. 507+00 MED.
FROM -L- STA. 513+72 TO STA. 515+00 MED.



FROM -L- STA. 499+00 TO STA. 502+50 RT

NOTE:
FOR -L- PROFILE SEE SHEET No. 6 AND No. 7
FOR MONOLITHIC ISLAND DETAIL
SEE SHEET No. 2A

REVISIONS

8/17/99

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PROJECT REFERENCE NO.	SHEET NO.
W-5203C	5
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 19824 ENGINEER JAMES A. ROQUEMORE 5/12/14	NORTH CAROLINA PROFESSIONAL SEAL 15764 ENGINEER JAMES A. BARD 5/12/14

-L-
PI Sta 505+67.90
Δ = 15° 01' 04.6" (RT)
D = 0° 30' 00.0"
L = 3,003.59'
T = 1,510.45'
R = 11,459.16'

-L-
PIs Sta 521+27.71
Θs = 0° 30' 00.0"
Ls = 200.00'
LT = 133.33'
ST = 66.67'

NAD 83/NSRS 2007

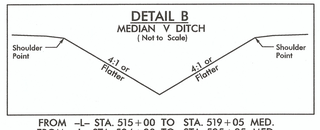
515 520 525

MATCHLINE -L- STA. 515+00.00
SEE SHEET 4

WOODS
EXISTING R/W
480' FULL LANE WIDTH
200' TAPER
15" RCP INV=25.27'
INV=25.53'
CONC R/W MON.
SSMH TOP=23.48'
18" HDPE INV=27.01'
INV=27.30'
CONC MON.
FES INV=26.25'
15" RCP
FES INV=25.53'
24" RCP
FES INV=25.55'
RETAIN
INV=23.28'
JB W/MH
0501
COLLAR & EXTEND EXISTING 24" RCP
24" RCP
24" RCP-IV
0502
RETAIN
42' R
40'
15'
180' MIN
NC 24 FREEDOM WAY
32' BST
CONVERT DI TO JB w/MH
0503
25'
2GI-D
N 85° 52' 20.2" E
55' R
15" RCP-IV
60'
0505
-L-
2GI-D
15" RCP
CONC DITCH
0504
55' R
CONC DITCH
INV=22.85'
TOP 25.20'
15" RCP
RETAIN
MEDIAN V DITCH
SEE DETAIL B
NC 24 FREEDOM WAY
32' BST
CP4
FES INV=20.73'
INV=22.15'
15" HDPE
INV=22.80'
200' TAPER
FES INV=22.41'
24" RCP
FES INV=22.91'
U/G FO MARKER
CP5
440' FULL LANE WIDTH
105'
FES INV=19.64'
U/G FO MARKER
INV=24.81'
15" HDPE
INV=21.41'
48"VINYL RAIL
EXISTING R/W
CONC R/W MON.
EXISTING R/W
EXISTING R/W
END PROJECT W5203C
END CONSTRUCTION
-L- Sta. 528+00.00

-L- CSSta. 520+61.04
-L- STSta. 522+61.04
-L- POTSta. 528+61.04

DETAIL B
MEDIAN V DITCH
(Not to Scale)



FROM -L- STA. 515+00 TO STA. 519+05 MED.
FROM -L- STA. 524+30 TO STA. 525+85 MED.

NOTE:
FOR -L- PROFILE SEE SHEET No.6 and No.7
FOR MONOLITHIC ISLAND DETAILS SEE
SHEET No.2A

REVISIONS

8/17/99

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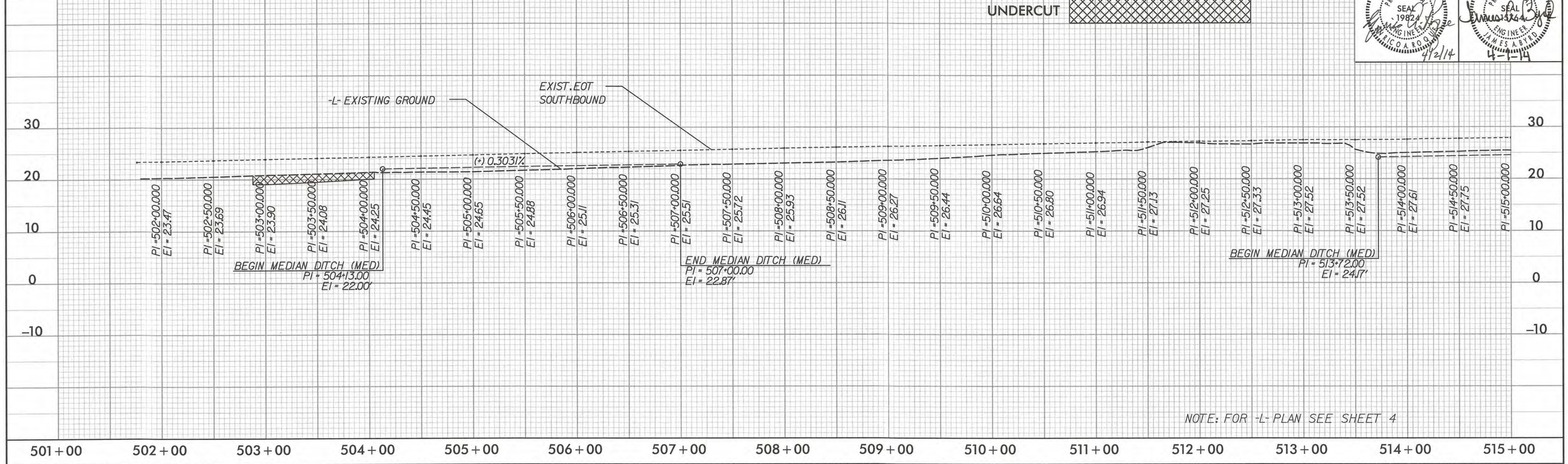
PROJECT REFERENCE NO.	SHEET NO.
W-5203C	6
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

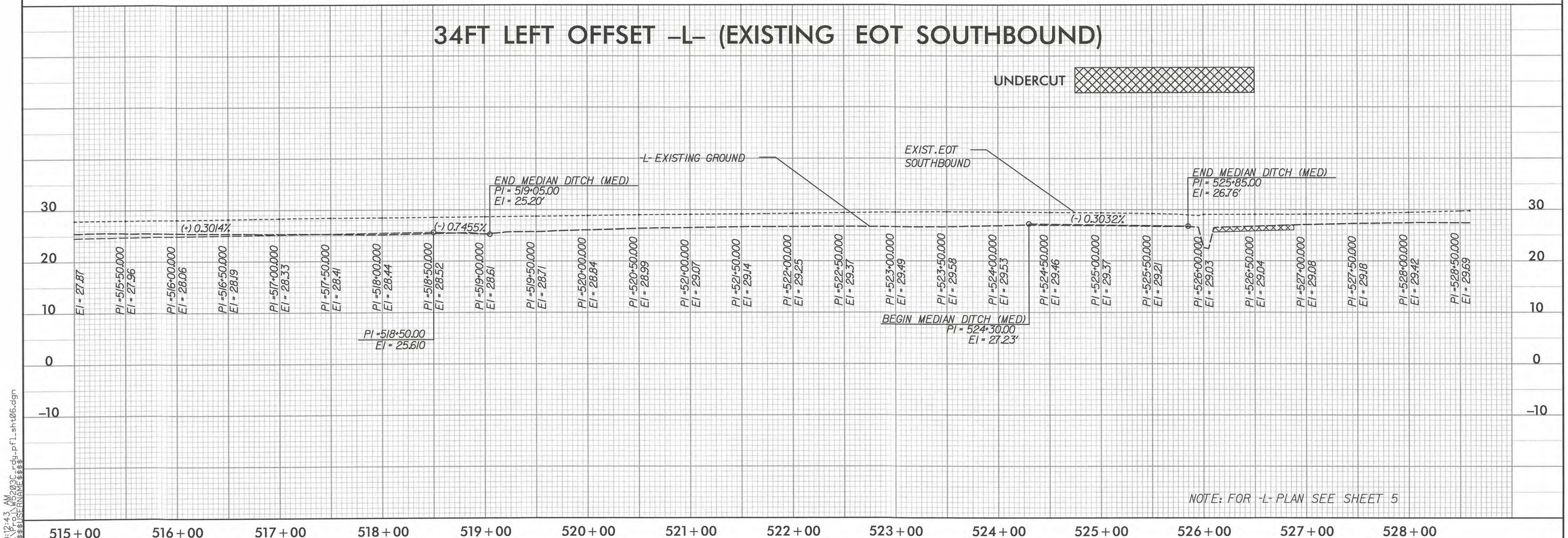
NORTH CAROLINA PROFESSIONAL SEAL 19824 ENGINEER RICHARD O. ROBINSON 4/2/14

NORTH CAROLINA PROFESSIONAL SEAL 12 ENGINEER JAMES A. BYRD 4-1-14

34FT LEFT OFFSET –L– (EXISTING EOT SOUTHBOUND)



34FT LEFT OFFSET –L– (EXISTING EOT SOUTHBOUND)



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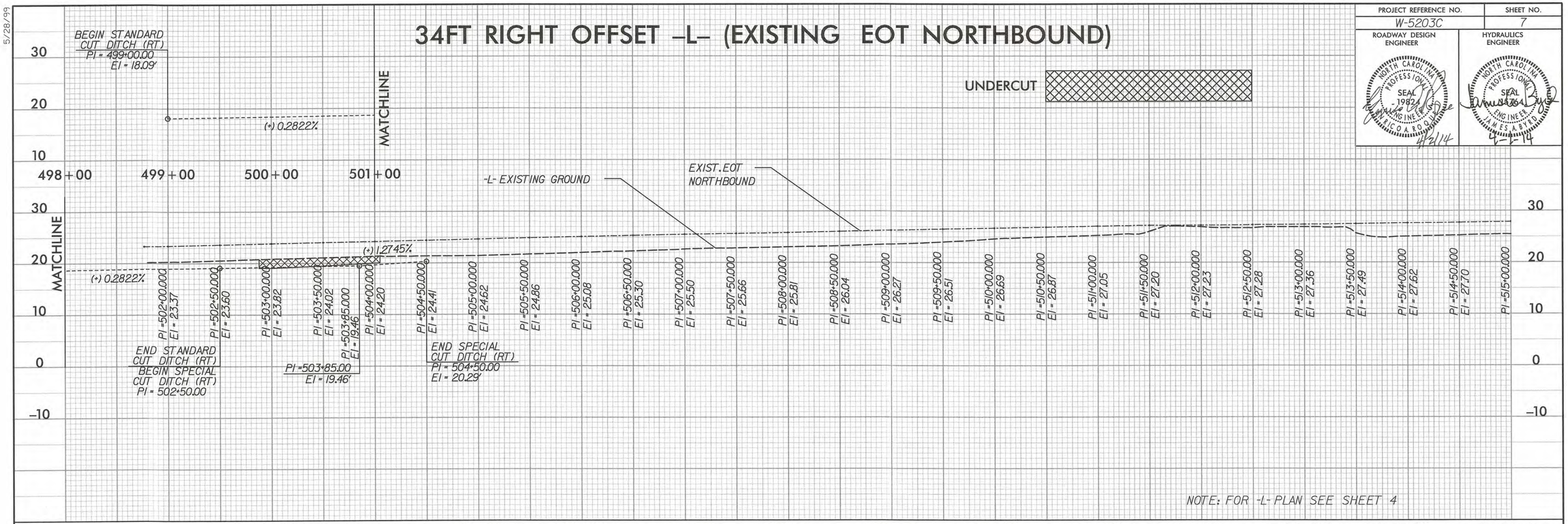
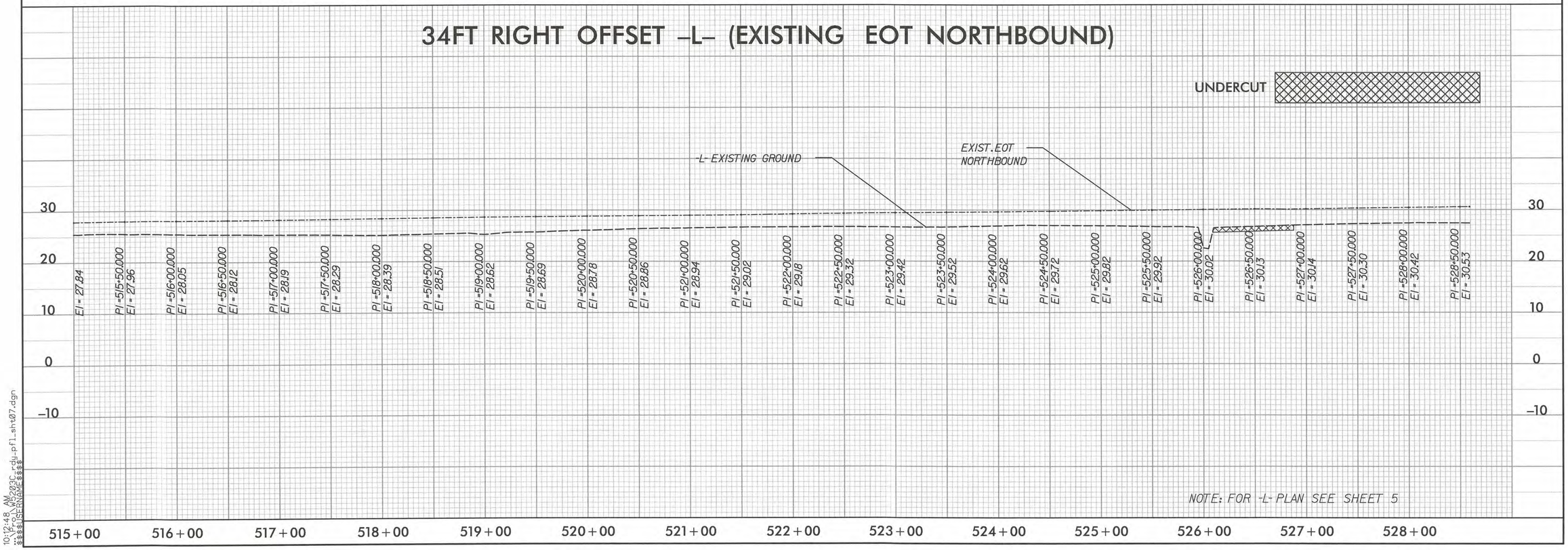
PROJECT REFERENCE NO.	SHEET NO.
W-5203C	7
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER





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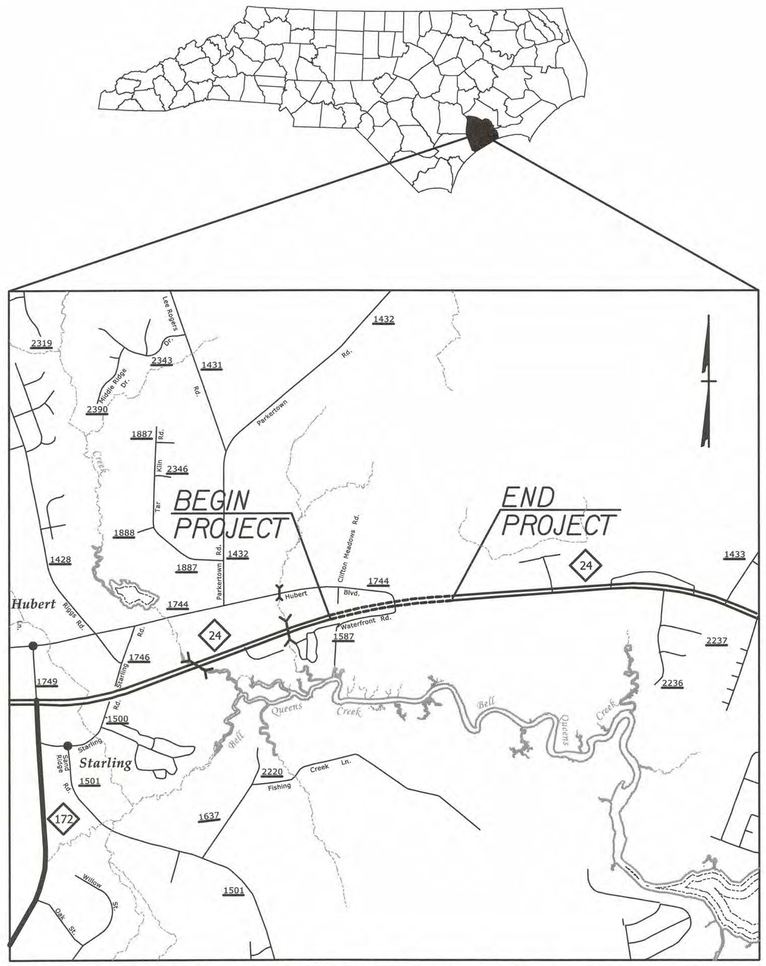
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN

ONSLOW COUNTY



LOCATION: DIRECTIONAL CROSSOVER WITH MEDIAN U-TURNS AT THE INTERSECTION OF NC 24 AND SR 1744 (HUBERT BLVD.) IN HUBERT, N.C.

INDEX OF SHEETS

SHEET NO.	TITLE
TMP-1	TITLE SHEET AND INDEX OF SHEETS
TMP-1A	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, LEGEND, AND TEMPORARY PAVEMENT MARKING
TMP-1B	GENERAL NOTES
TMP-2	CUT SECTIONS
TMP-3	PHASING & LOCAL NOTES
TMP-4 THRU 7	PHASE I DETAILS
TMP-8 & 9	PHASE II DETAILS

SHEET NO.
TMP-1

W-5203C

TIP PROJECT:

HNTB
HNTB NORTH CAROLINA, P.C.
343 E. Six Forks Road, Suite 200
Raleigh, North Carolina 27609
NC License No: C-1554

R. B. EARLY, PE — *TRAFFIC CONTROL PROJECT ENGINEER*
R. B. EARLY, PE — *TRAFFIC CONTROL PROJECT DESIGN ENGINEER*
J. A. PHILLIPS — *TRAFFIC CONTROL DESIGN ENGINEER*

APPROVED: Rhonda B. Early
DATE: 3.28.14

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 023521 ENGINEER RHONDA B. EARLY

WORK ZONE SAFETY & MOBILITY
"from the MOUNTAINS to the COAST"

N.C.D.O.T. WORK ZONE TRAFFIC CONTROL
1561 MAIL SERVICE CENTER (MSC) RALEIGH, NC 27699-1561
750 N. GREENFIELD PARKWAY, GARNER, NC 27529 (DELIVERY)
PHONE: (919) 773-2800 FAX: (919) 771-2745

KATHERINE HITE, P.E. *DIVISION TRAFFIC ENGINEER*

DIVISION OF HIGHWAYS * STATE OF NORTH CAROLINA * DEPARTMENT OF TRANSPORTATION * WORK ZONE TRAFFIC CONTROL

REVISIONS

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ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS SHOWN IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANAUARY 2012 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
1101.01	WORK ZONE ADVANCE WARNING SIGNS
1101.02	TEMPORARY LANE CLOSURES
1101.04	TEMPORARY SHOULDER CLOSURES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1130.01	DRUM
1135.01	CONES
1145.01	BARRICADES
1150.01	FLAGGING DEVICES
1180.01	SKINNY-DRUM
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO-LANE AND MULTI-LANE ROADWAYS
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.05	PAVEMENT MARKINGS - TURN LANES

HNTB
HNTB NORTH CAROLINA, P.C.
343 E. Six Forks Road, Suite 200
Raleigh, North Carolina 27609
NC License No: C-1554

PROJ. REFERENCE NO.	SHEET NO.
W-5203C	TMP-1A

LEGEND

GENERAL

DIRECTION OF TRAFFIC FLOW
DIRECTION OF PEDESTRIAN TRAFFIC FLOW
EXIST. PVMT.
NORTH ARROW
PROPOSED PVMT.
WORK AREA
REMOVAL
ONGOING CONSTRUCTION
WEDGE / WIDEN (USING LANE CLOSURES)
TEMPORARY PAVEMENT

TRAFFIC CONTROL DEVICES

BARRICADE (TYPE III)
CONE
DRUM
SKINNY DRUM
TUBULAR MARKER
TEMPORARY CRASH CUSHION
FLASHING ARROW PANEL (TYPE C)
FLAGGER
LAW ENFORCEMENT
TRUCK MOUNTED IMPACT ATTENUATOR (TMIA)
CHANGEABLE MESSAGE SIGN

TEMPORARY SIGNING

PORTABLE SIGN
STATIONARY SIGN
STATIONARY OR PORTABLE SIGN

SIGNALS

EXISTING
PROPOSED
TEMPORARY

PAVEMENT MARKINGS

EXISTING LINES
TEMPORARY LINES

PAVEMENT MARKERS

CRYSTAL/CRYSTAL
CRYSTAL/RED
YELLOW/YELLOW

PAVEMENT MARKING SYMBOLS

PAVEMENT MARKING SYMBOLS

TEMPORARY PAVEMENT MARKING

SYMBOL	DESCRIPTION	PAY ITEM
	PAVEMENT MARKING LINES	
		PAINT (4")
P8	2 FT WHITE MINI SKIP	
P9	2 FT YELLOW MINI SKIP	
PA	WHITE EDGE LINE	
PB	YELLOW EDGE LINE	
PD	3 FT WHITE MINI SKIP	
		PAINT (8")
PN	WHITE GORE LINE	
		PAINT (12")
PO	WHITE DIAGONAL	

NOTE: FOR EACH PAINT PAVEMENT MARKING ITEM, REFER TO GENERAL NOTE (U) FOR NUMBER OF APPLICATIONS.

APPROVED: Rhonda B. Early DATE: 3-28-14

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 023521 ENGINEER RHONDA B. EARLY

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
WORK ZONE TRAFFIC CONTROL

TRANSPORTATION MANAGEMENT PLAN

ROADWAY STANDARD DRAWINGS & LEGENDS

REVISIONS

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GENERAL NOTES

CHANGES MAY BE REQUIRED WHEN PHYSICAL DIMENSIONS IN THE DETAIL DRAWINGS, STANDARD DETAILS AND ROADWAY DETAILS ARE NOT ATTAINABLE TO MEET FIELD CONDITIONS, OR RESULT IN DUPLICATE, OR UNDESIRED OVERLAPPING OF DEVICES. MODIFICATION MAY INCLUDE: MOVING, SUPPLEMENTING, COVERING OR REMOVAL OF DEVICES, AS DIRECTED BY THE ENGINEER.

THE FOLLOWING GENERAL NOTES APPLY AT ALL TIMES FOR THE DURATION OF THE CONSTRUCTION PROJECT, EXCEPT WHEN OTHERWISE NOTED IN THE PLAN, OR DIRECTED BY THE ENGINEER.

TIME RESTRICTIONS

A) DO NOT CLOSE OR NARROW TRAVEL LANES AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS
NC 24 (FREEDOM WAY)	MONDAY THRU FRIDAY 7:00 AM - 9:00 AM & 4:00 PM - 6:00 PM

B) DO NOT CLOSE OR NARROW TRAVEL LANES DURING HOLIDAYS AND SPECIAL EVENTS AS FOLLOWS:

ROAD NAME

NC 24 (FREEDOM WAY)

HOLIDAY

1. FOR ANY UNEXPECTED OCCURRENCE THAT CREATES UNUSUALLY HIGH TRAFFIC VOLUMES, AS DIRECTED BY THE ENGINEER.

2. FOR NEW YEAR'S, BETWEEN THE HOURS OF 7:00 A.M. DECEMBER 31ST TO 6:00 P.M. JANUARY 2ND. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY THEN UNTIL 6:00 P.M. THE FOLLOWING TUESDAY.

3. FOR EASTER, BETWEEN THE HOURS OF 7:00 A.M. THURSDAY AND 6:00 P.M. MONDAY.

4. FOR MEMORIAL DAY, BETWEEN THE HOURS OF 7:00 A.M. FRIDAY TO 6:00 P.M. TUESDAY.

5. FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 7:00 A.M. THE DAY BEFORE INDEPENDENCE DAY AND 6:00 P.M. THE DAY AFTER INDEPENDENCE DAY.

   IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY THEN BETWEEN THE HOURS OF 7:00 A.M. THE THURSDAY BEFORE INDEPENDENCE DAY AND 6:00 P.M. THE TUESDAY AFTER INDEPENDENCE DAY.

6. FOR LABOR DAY, BETWEEN THE HOURS OF 7:00 A.M. FRIDAY TO 6:00 P.M. TUESDAY.

7. FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 7:00 A.M. TUESDAY TO 6:00 P.M. MONDAY.

8. FOR CHRISTMAS, BETWEEN THE HOURS OF 7:00 A.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 6:00 P.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.

C) DO NOT CONDUCT ANY HAULING OPERATIONS AGAINST THE FLOW OF TRAFFIC OF AN OPEN TRAVELWAY UNLESS THE HAULING OPERATION IS PROTECTED BY BARRIER OR GUARDRAIL OR AS DIRECTED BY THE ENGINEER.

LANE CLOSURE REQUIREMENTS

D) REMOVE LANE CLOSURE DEVICES FROM THE LANE WHEN WORK IS NOT BEING PERFORMED BEHIND THE LANE CLOSURE OR WHEN A LANE CLOSURE IS NO LONGER NEEDED OR AS DIRECTED BY THE ENGINEER.

E) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN 15 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN SHOULDER USING ROADWAY STANDARD DRAWING NO. 1101.04 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL OR A LANE CLOSURE IS INSTALLED.

F) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO AN UNDIVIDED FACILITY AND WITHIN 5 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.

   WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO A DIVIDED FACILITY AND WITHIN 10 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.

G) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN A LANE OF TRAVEL OF AN UNDIVIDED OR DIVIDED FACILITY, CLOSE THE LANE ACCORDING TO THE TRAFFIC CONTROL PLANS, ROADWAY STANDARD DRAWINGS OR AS DIRECTED BY THE ENGINEER. CONDUCT THE WORK SO THAT ALL PERSONNEL AND/OR EQUIPMENT REMAINS WITHIN THE CLOSED TRAVEL LANE.

H) DO NOT WORK SIMULTANEOUSLY WITHIN 15 FT ON BOTH SIDES OF AN OPEN TRAVELWAY, RAMP, OR LOOP WITHIN THE SAME LOCATION UNLESS PROTECTED WITH GUARDRAIL OR BARRIER.

PAVEMENT EDGE DROP OFF REQUIREMENTS

I) BACKFILL AT A 6:1 SLOPE UP TO THE EDGE AND ELEVATION OF EXISTING PAVEMENT IN AREAS ADJACENT TO AN OPENED TRAVEL LANE THAT HAS AN EDGE OF PAVEMENT DROP-OFF AS FOLLOWS:

   BACKFILL DROP-OFFS THAT EXCEED 2 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS OF 45 MPH OR GREATER.

   BACKFILL DROP-OFFS THAT EXCEED 3 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS LESS THAN 45 MPH.

   BACKFILL WITH SUITABLE COMPACTED MATERIAL, AS APPROVED BY THE ENGINEER, AT NO EXPENSE TO THE DEPARTMENT.

J) DO NOT EXCEED A DIFFERENCE OF 2 INCHES IN ELEVATION BETWEEN OPEN LANES OF TRAFFIC FOR NOMINAL LIFTS OF 1.5 INCHES. INSTALL ADVANCE WARNING "UNEVEN LANES" SIGNS (W8-11) 350' IN ADVANCE AND A MINIMUM OF EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

TRAFFIC PATTERN ALTERATIONS

K) NOTIFY THE ENGINEER TWENTY ONE (21) CALENDAR DAYS PRIOR TO ANY TRAFFIC PATTERN ALTERATION.

SIGNING

L) INSTALL ADVANCE WORK ZONE WARNING SIGNS WHEN WORK IS WITHIN 40 FT FROM THE EDGE OF TRAVEL LANE AND NO MORE THAN THREE (3) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.

M) PROVIDE SIGNING AND DEVICES REQUIRED TO CLOSE THE ROAD ACCORDING TO THE ROADWAY STANDARD DRAWINGS AND TRAFFIC CONTROL PLANS.

   PROVIDE SIGNING REQUIRED FOR THE OFF-SITE DETOUR ROUTE AS SHOWN IN THE TRAFFIC CONTROL PLANS.

N) COVER OR REMOVE ALL SIGNS AND DEVICES REQUIRED TO CLOSE THE ROAD WHEN ROAD CLOSURE IS NOT IN OPERATION.

   COVER OR REMOVE ALL SIGNS REQUIRED FOR THE OFF-SITE DETOUR WHEN THE DETOUR IS NOT IN OPERATION.

O) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.

P) INSTALL BLACK ON ORANGE "DIP" SIGNS (W8-2) AND/OR "BUMP" SIGNS (W8-1) 350' IN ADVANCE OF THE UNEVEN AREA, OR AS DIRECTED BY THE ENGINEER.

TRAFFIC CONTROL DEVICES

Q) WHEN LANE CLOSURES ARE NOT IN EFFECT SPACE CHANNELIZING DEVICES IN WORK AREAS NO GREATER IN FEET THAN TWICE THE POSTED SPEED LIMIT (MPH), EXCEPT 10 FT ON-CENTER IN RADII, AND 3 FT OFF THE EDGE OF AN OPENED TRAVELWAY. REFER TO STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES SECTIONS 1130 (DRUMS), 1135 (CONES), AND 1180 (SKINNY DRUMS) FOR ADDITIONAL REQUIREMENTS.

R) PLACE TYPE III BARRICADES, WITH "ROAD CLOSED" SIGN R11-2 ATTACHED OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.

S) PLACE ADDITIONAL SETS OF THREE CHANNELIZING DEVICES (DRUMS) PERPENDICULAR TO THE EDGE OF THE TRAVELWAY ON 500 FT CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC.

PAVEMENT MARKINGS AND MARKERS

T) INSTALL TEMPORARY PAVEMENT MARKINGS AND TEMPORARY PAVEMENT MARKERS ON INTERIM LAYERS OF PAVEMENT AS FOLLOWS:

ROAD NAME	MARKING	MARKER
ALL ROADS	PAINT	NONE

U) PLACE ONE APPLICATION OF PAINT FOR TEMPORARY TRAFFIC PATTERNS. PLACE A SECOND APPLICATION OF PAINT SIX (6) MONTHS AFTER THE INITIAL APPLICATION AND EVERY SIX MONTHS AS DIRECTED BY THE ENGINEER.

V) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.

W) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY'S OPERATION.

X) TRACE THE PROPOSED MONOLITHIC ISLAND LOCATIONS WITH PROPER COLOR PAVEMENT MARKINGS PRIOR TO INSTALLATION. PLACE DRUMS TO DELINEATE ANY PROPOSED MONOLITHIC ISLANDS BEFORE INSTALLATION.

MISCELLANEOUS

Y) IN THE EVENT A TIE-IN CANNOT BE MADE IN ONE DAYS TIME, BRING THE TIE-IN AREA TO AN APPROPRIATE ROADWAY ELEVATION, AS DETERMINED BY THE ENGINEER. PLACE BLACK ON ORANGE "LOOSE GRAVEL" SIGNS (W8-7) AND BLACK ON ORANGE "PAVEMENT ENDS" SIGNS (W8-3) 350 FT AND 700 FT RESPECTIVELY IN ADVANCE OF THE UNEVEN AREAS. USE DRUMS TO DELINEATE THE EDGE OF ROADWAY ALONG UNPAVED AREAS.

APPROVED: Rhonda B. Early DATE: 3-28-14

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 023521 ENGINEER RHONDA B. EARLY

DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION WORK ZONE TRAFFIC CONTROL

TRANSPORTATION MANAGEMENT PLAN

GENERAL NOTES

8/17/99

REVISIONS

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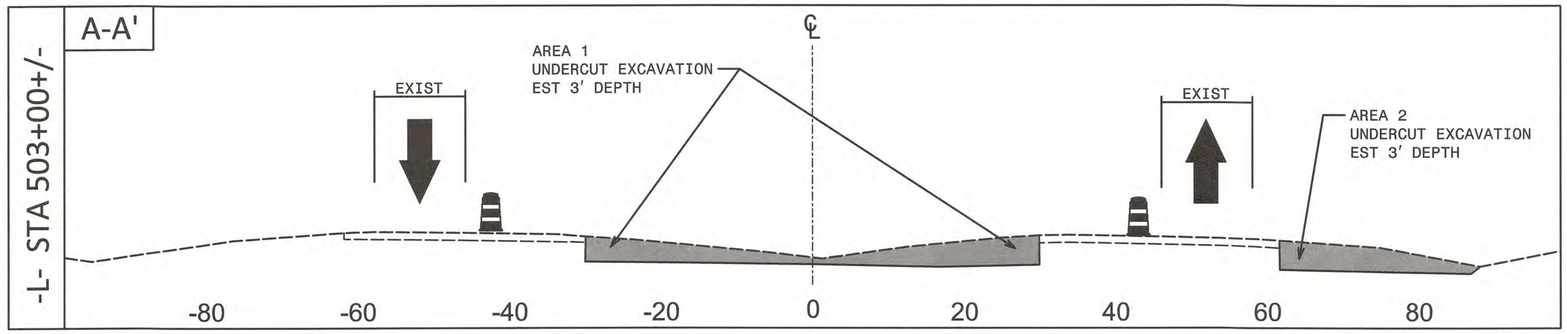
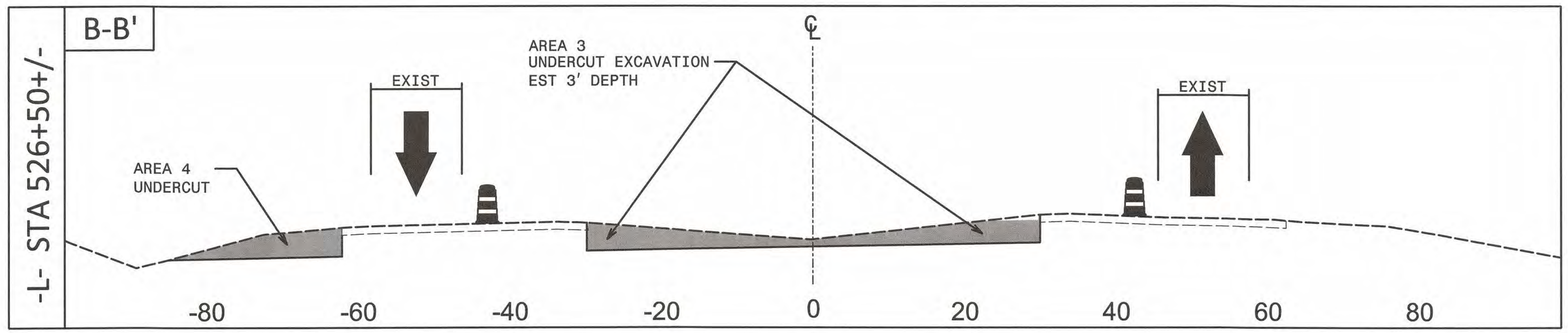
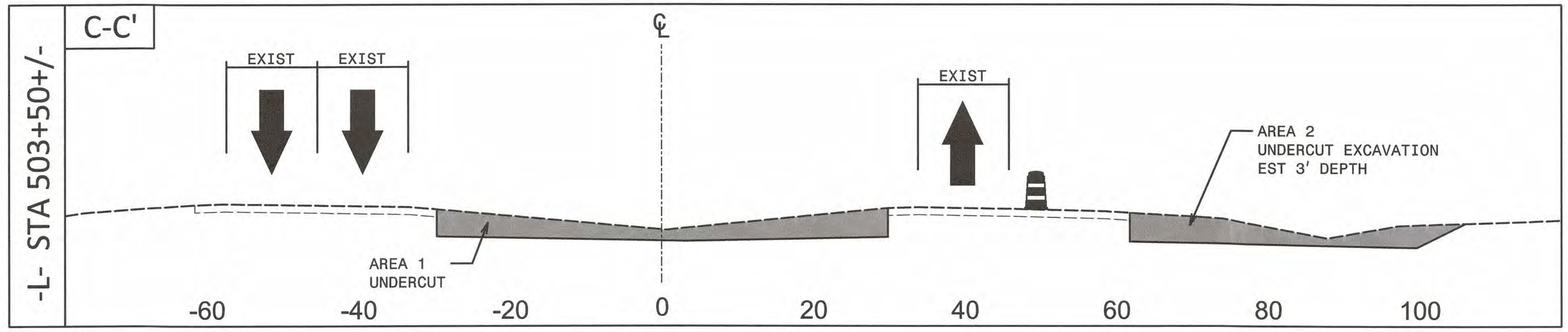
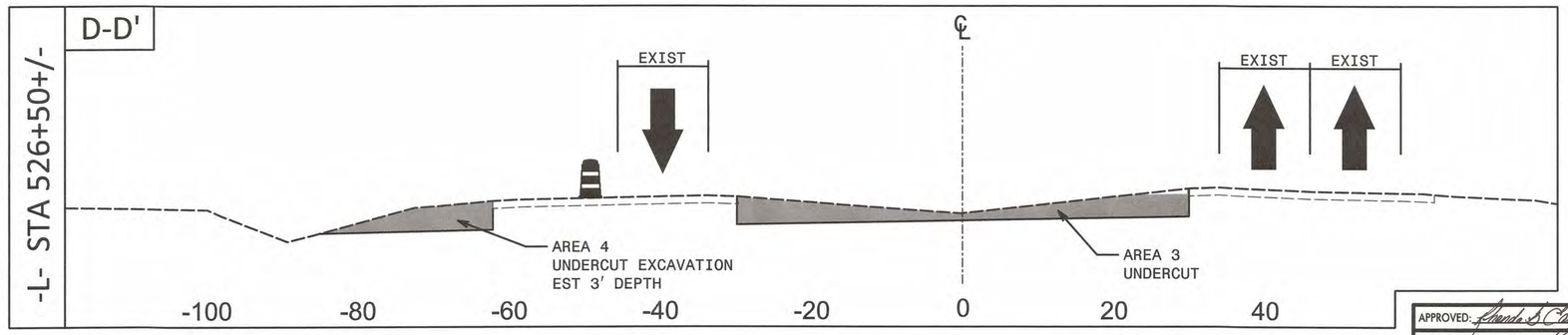
HNTB NORTH CAROLINA, P.C.
343 E. Six Forks Road, Suite 200
Raleigh, North Carolina 27609
NC License No: C-1554

PROJ. REFERENCE NO.	SHEET NO.
W-5203C	TMP-2









APPROVED: Rhonda B. Early DATE: 3-28-14

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 023521 ENGINEER RHONDA B. EARLY

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
WORK ZONE TRAFFIC CONTROL

TRANSPORTATION MANAGEMENT PLAN

PHASE I
CUT SECTIONS

8/17/99

REVISIONS

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PHASING

NOTES:

REPLACE MARKINGS AND RETURN TRAFFIC TO THE CURRENT TRAFFIC PATTERN AT THE END OF EACH WORK PERIOD UNLESS OTHERWISE NOTED IN THE PHASING OR DIRECTED BY THE ENGINEER.

MAINTAIN VEHICULAR ACCESS TO ALL RESIDENCES AND BUSINESSES DURING THE LIFE OF THE CONTRACT UNLESS OTHERWISE NOTED IN THE PHASING OR DIRECTED BY THE ENGINEER.

COMPLETE ANY PROPOSED WIDENING IN SUCH A MANNER THAT PONDING OF WATER WILL NOT OCCUR IN THE TRAVEL LANE. THIS MAY REQUIRE WEDGING &/OR MILLING AND A COMBINATION OF INSTALLATION OF PROPOSED PIPES, TEMPORARY PIPES, STEEL PLATES, AND TEMPORARY MEDIAN AND OUTSIDE DITCHES.

THE TERM "RSD" DENOTES ROADWAY STANDARD DRAWING.

PHASE I

*** REFER TO SHEETS TMP-4 & TMP-5 FOR DETAILS ***

STEP 1: USING RSD 1101.02 (SHEET 3 OF 15), COMPLETE THE UNDERCUT EXCAVATION BY EITHER PERFORMING ONLY AS MUCH WORK THAT CAN BE COMPLETED ACCORDING TO LANE CLOSURE RESTRICTIONS OR COORDINATE EACH AREAS TIME FRAME WITH ENGINEER TO WORK IN A CONTINUOUS MANNER (24/7) UNTIL SAID AREA IS COMPLETE. COMPLETION INCLUDES SAFING-UP THE DISTURBED AREA PRIOR TO OPENING ADJACENT LANE:

* UNDERCUT AREA 1: CLOSE MEDIAN LANE IN BOTH DIRECTIONS OF TRAVEL, COMPLETE UNDERCUT EXCAVATION AND REPAIR MEDIAN AREA. OPEN ALL LANES TO TRAFFIC. REFER TO SHEET TMP-4. (LN-1, LN-2)
* UNDERCUT AREA 2: CLOSE RIGHT EB LANE, COMPLETE UNDERCUT EXCAVATION AND REPAIR SHOULDER AREA. OPEN ALL LANES TO TRAFFIC. REFER TO SHEET TMP-5. (LN-1, LN-2)
* UNDERCUT AREA 3: CLOSE MEDIAN LANE IN BOTH DIRECTIONS OF TRAVEL, COMPLETE UNDERCUT EXCAVATION AND REPAIR MEDIAN AREA. OPEN ALL LANES TO TRAFFIC. REFER TO SHEET TMP-4. (LN-1, LN-2)
* UNDERCUT AREA 4: CLOSE RIGHT WB LANE, COMPLETE UNDERCUT EXCAVATION AND REPAIR SHOULDER AREA. OPEN ALL LANES TO TRAFFIC. REFER TO SHEET TMP-5. (LN-1, LN-2)

*** REFER TO SHEETS TMP-6 & TMP-7 FOR DETAILS ***

STEP 2: USING RSD 1101.02 (SHEET 3 OF 15), CONSTRUCT THE FOLLOWING UP TO AND INCLUDING FINAL LAYER OF SURFACE COURSE:

* -L- FROM STA 502+77+/- TO STA 510+18+/- (MEDIAN WIDENING)
* -L- FROM STA 502+87+/- TO STA 505+19+/- (EB RT LANE WIDENING)
* -L- FROM STA 519+57+/- TO STA 527+00+/- (MEDIAN WIDENING)
* -L- FROM STA 524+61+/- TO STA 526+89+/- (WB RT LANE WIDENING)

STEP 3: PLACE TEMPORARY PAVEMENT MARKING AS SHOWN ON SHEETS TMP-8 & TMP-9 AND OPEN MEDIAN LEFT TURN MOVEMENTS AT -L- STA 503+00+/- AND STA 526+50+/- TO TRAFFIC. USE DRUMS AND BARRICADES TO CLOSE EXISTING MEDIAN LEFT TURN LANES AND MEDIAN CROSSOVER AT HUBERT BLVD. (NOTE: PROPOSED SIGNING FOR U-TURN MOVEMENTS MUST BE IN PLACE PRIOR TO ALTERING TRAFFIC PATTERN - SEE GENERAL NOTE "O".)

PHASE II

*** REFER TO SHEETS TMP-8 & TMP-9 FOR DETAILS ***

STEP 1: USING RSD 1101.02 (SHEET 3 OF 15), CONSTRUCT -L- FROM STA 504+98+/- TO STA 520+82+/- (MEDIAN WIDENING) UP TO AND INCLUDING FINAL LAYER OF SURFACE COURSE.

STEP 2: USING RSD 1101.02 (SHEETS 1 & 3) AS NEEDED, CONSTRUCT PROPOSED ISLANDS ON HUBERT BLVD AND WATERFRONT RD.

STEP 3: USING RSD 1101.02 (SHEETS 1 & 3) AS NEEDED, PLACE FINAL LAYER OF SURFACE COURSE AND FINAL MARKINGS AND OPEN MEDIAN LEFT TURN MOVEMENTS AT-L- STA 513+00+/- TO TRAFFIC. (LN-3)

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PROJ. REFERENCE NO.	SHEET NO.
W-5203C	TMP-3

LOCAL NOTES

LN-1 EVERY ATTEMPT SHALL BE MADE TO SCHEDULE AND EXPEDITE THIS WORK TO CAUSE THE LEAST INCONVENIENCE TO THE TRAVELING PUBLIC.

LN-2 EXCEPTIONS MAY BE MADE TO ALLOW UNDERCUT EXCAVATION TO CONTINUE INTO RESTRICTED PEAK HOUR TIMES IF APPROPRIATELY COORDINATED WITH THE ENGINEER.

LN-3 SEE ROADWAY PLANS FOR PAVING LIMITS OF FINAL SURFACE COURSE.

APPROVED: Rhonda B. Early DATE: 3-28-14

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 023521 ENGINEER RHONDA B. EARLY

DIVISION OF HIGHWAYS * STATE OF NORTH CAROLINA * DEPARTMENT OF TRANSPORTATION * WORK ZONE TRAFFIC CONTROL

TRANSPORTATION MANAGEMENT PLAN

PHASING & LOCAL NOTES

8/17/99

REVISIONS

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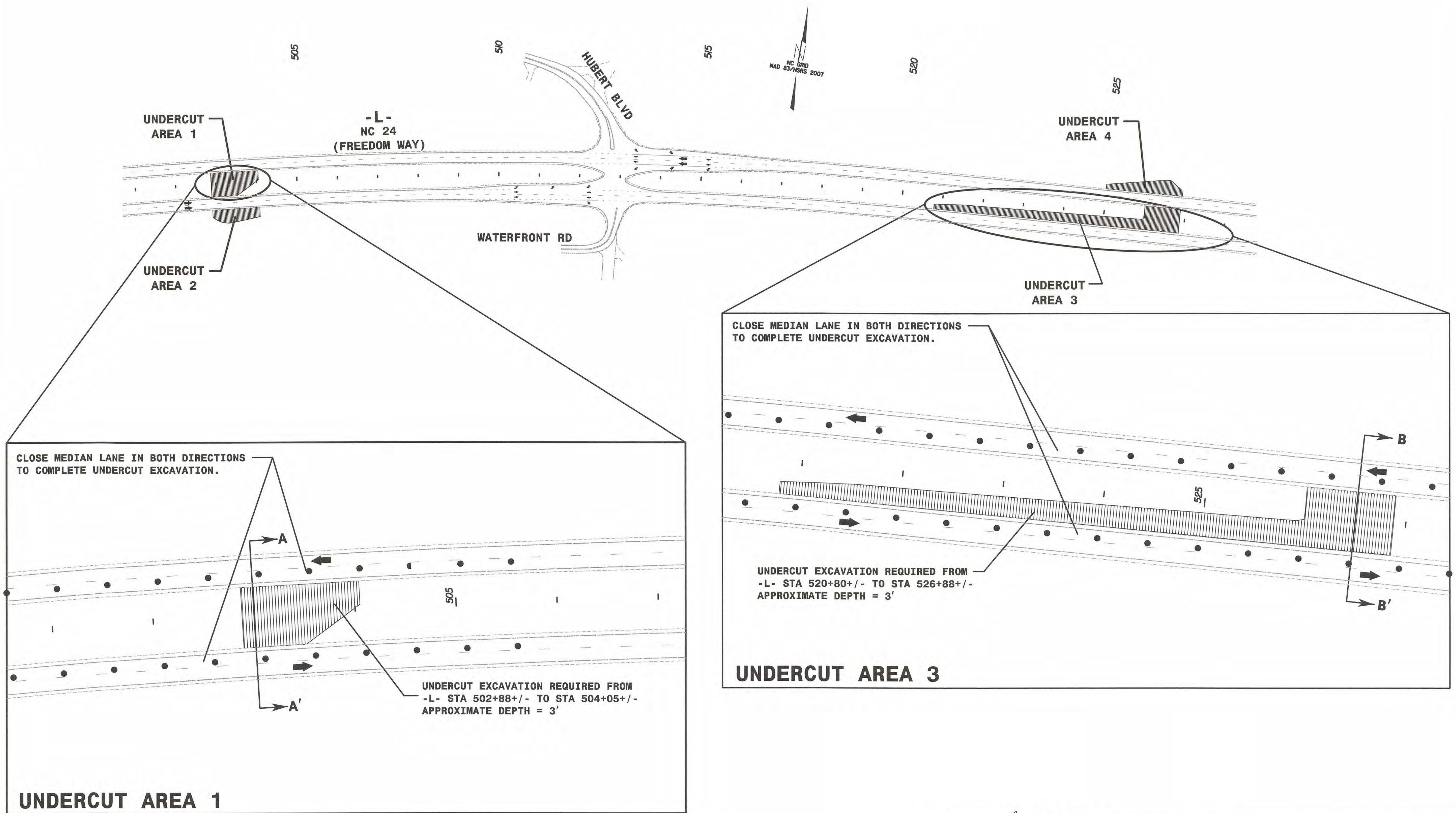
PROJ. REFERENCE NO.	SHEET NO.
W-5203C	TMP-4



THE UNDERCUT EXCAVATION LIMITS SHOWN ON THIS SHEET WERE PROVIDED IN A GEOTECHNICAL REPORT FOR DESIGN AND CONSTRUCTION RECOMMENDATIONS BY THE EASTERN REGIONAL GEOTECHNICAL MANAGER. THE DOCUMENT WAS SUBMITTED TO THE DDC ENGINEER SCOTT E. COOKE, PE ON JANUARY 28, 2014.

APPROVED: [signature] DATE: 3-28-14

SEAL: NORTH CAROLINA PROFESSIONAL SEAL 023521 ENGINEER RHONDA B. EARLY

DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION WORK ZONE TRAFFIC CONTROL

TRANSPORTATION MANAGEMENT PLAN

PHASE I DETAIL

REVISIONS

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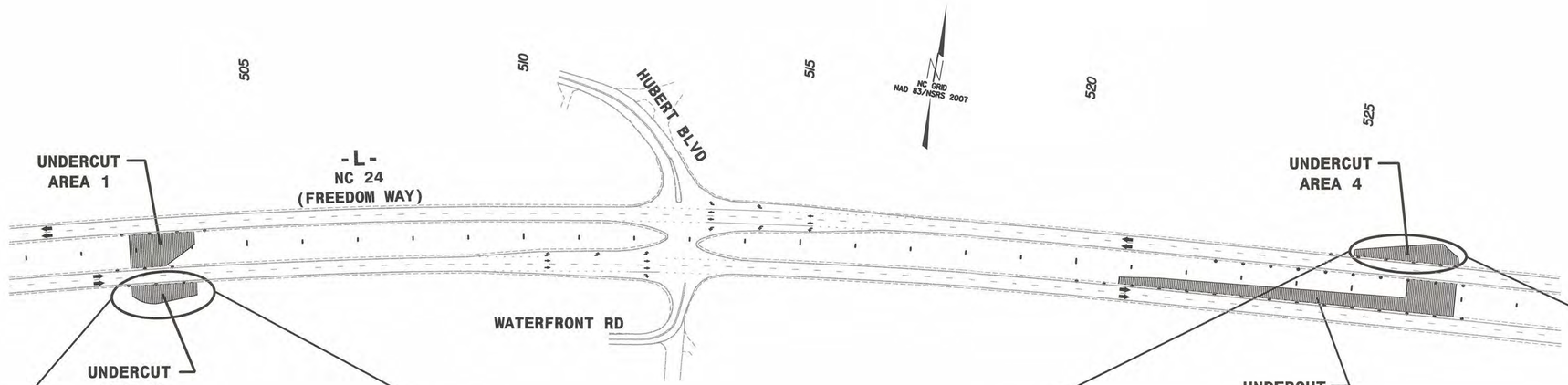
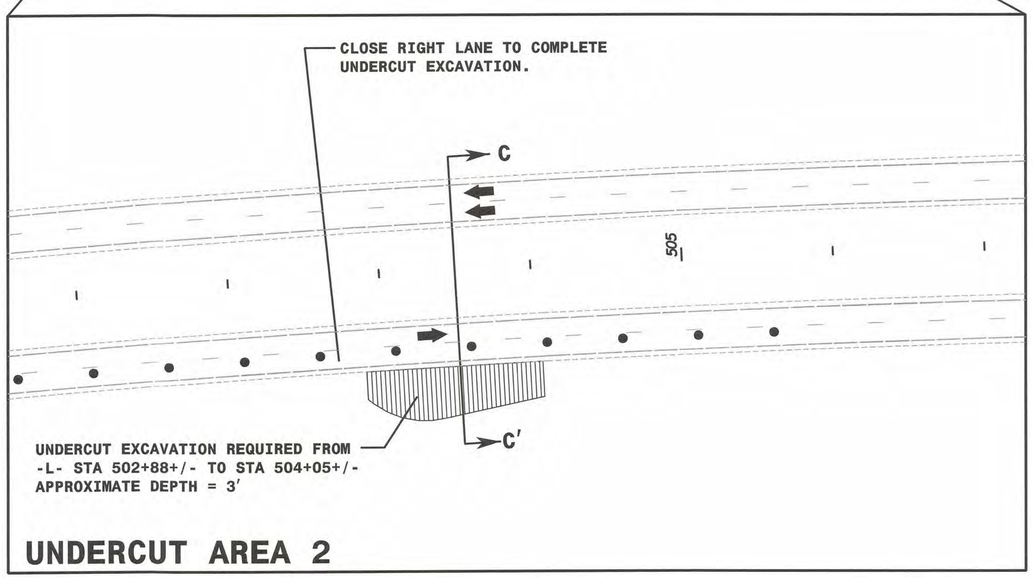
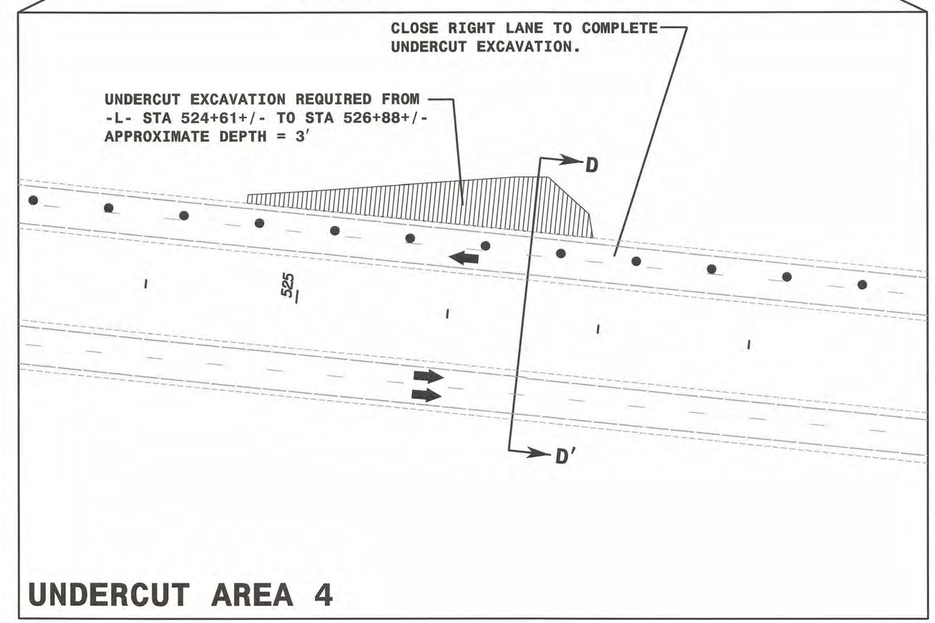
NC License No: C-1554

PROJ. REFERENCE NO.	SHEET NO.
W-5203C	TMP-5





UNDERCUT AREA 2



UNDERCUT AREA 4

THE UNDERCUT EXCAVATION LIMITS SHOWN ON THIS SHEET WERE PROVIDED IN A GEOTECHNICAL REPORT FOR DESIGN AND CONSTRUCTION RECOMMENDATIONS BY THE EASTERN REGIONAL GEOTECHNICAL MANAGER. THE DOCUMENT WAS SUBMITTED TO THE DDC ENGINEER SCOTT E. COOKE, PE ON JANUARY 28, 2014.

APPROVED: Rhonda B. Early DATE: 3-28-14

SEAL

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DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
WORK ZONE TRAFFIC CONTROL

TRANSPORTATION MANAGEMENT PLAN

PHASE I DETAIL

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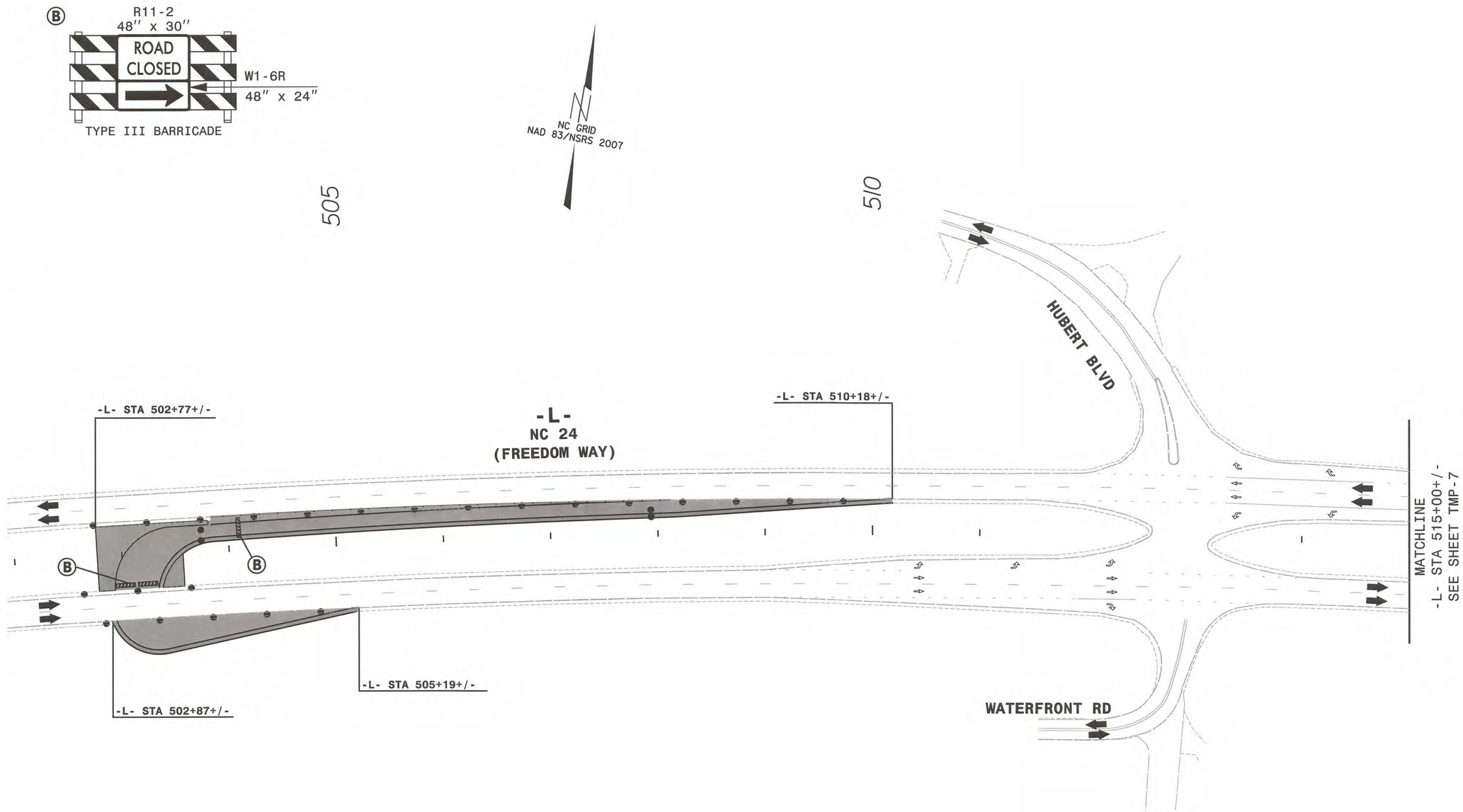
PROJ. REFERENCE NO.	SHEET NO.
W-5203C	TMP-6



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DEPARTMENT OF TRANSPORTATION
WORK ZONE TRAFFIC CONTROL

TRANSPORTATION MANAGEMENT PLAN

PHASE I DETAIL

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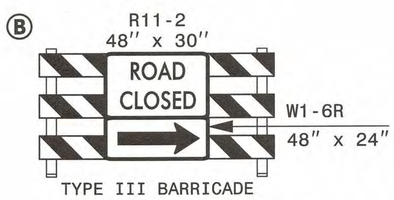
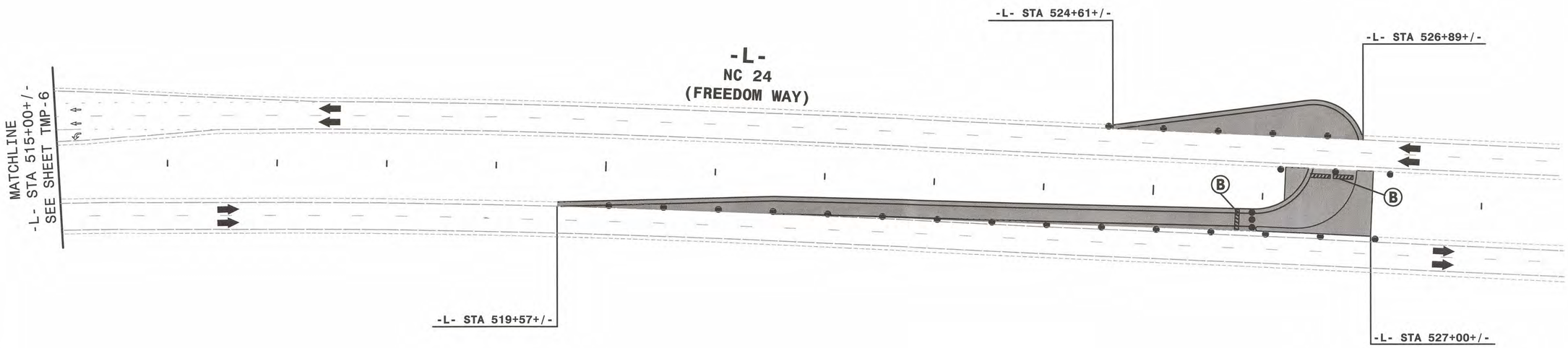
PROJ. REFERENCE NO.	SHEET NO.
W-5203C	TMP-7





APPROVED: Rhonda B. Early DATE: 3-28-14

SEAL

TRANSPORTATION
MANAGEMENT PLAN

PHASE I
DETAIL

8/17/99

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Raleigh, North Carolina 27609
NC License No: C-1554

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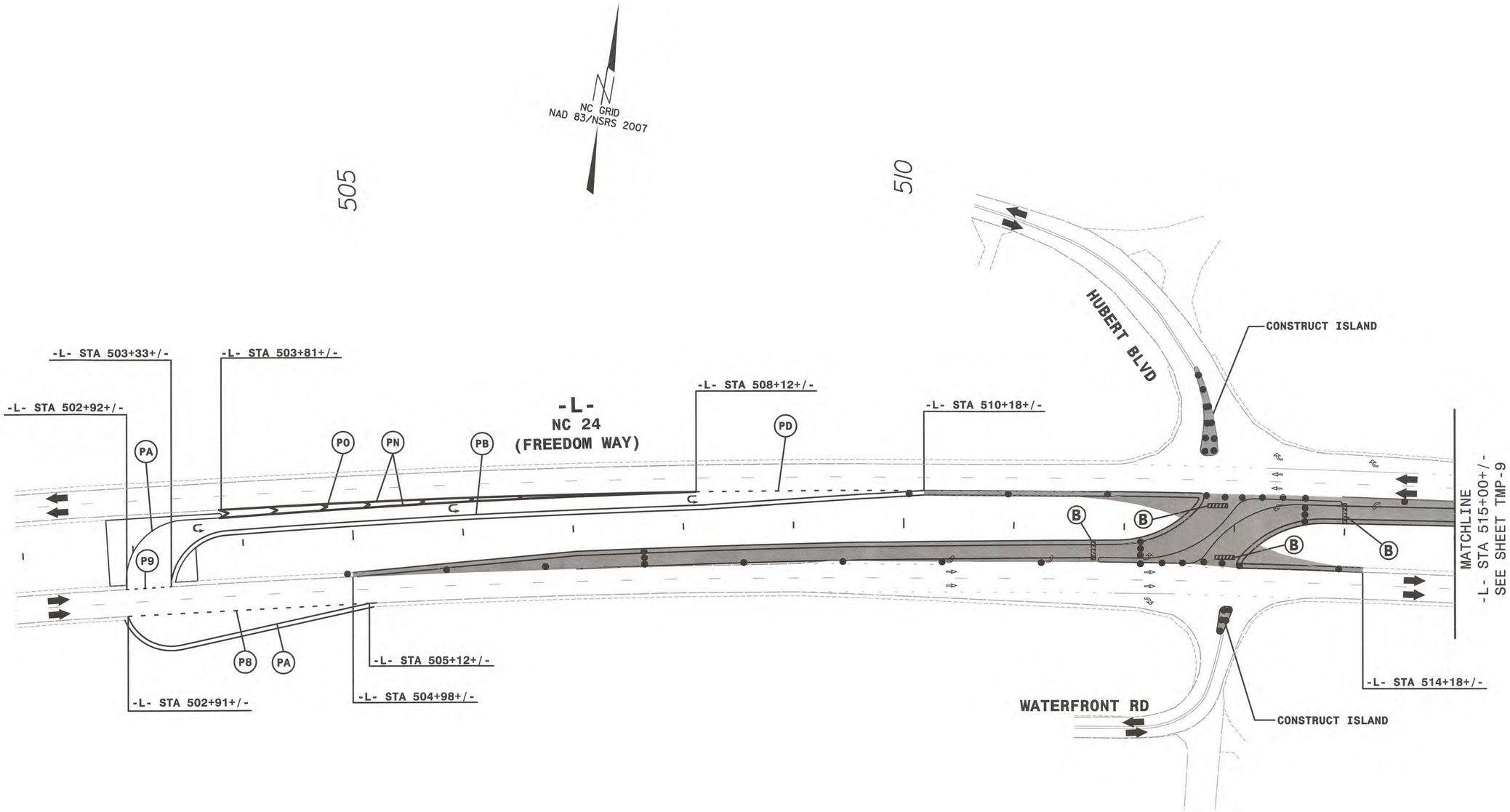

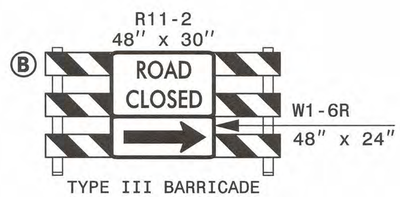

SIGNS FOR U-TURN MOVEMENTS MUST BE IN PLACE PRIOR TO ALTERING TRAFFIC PATTERN.

APPROVED: Rhonda B. Early DATE: 3-28-14

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 023521 ENGINEER RHONDA B. EARLY

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
WORK ZONE TRAFFIC CONTROL

TRANSPORTATION MANAGEMENT PLAN

PHASE II DETAIL

8/17/99

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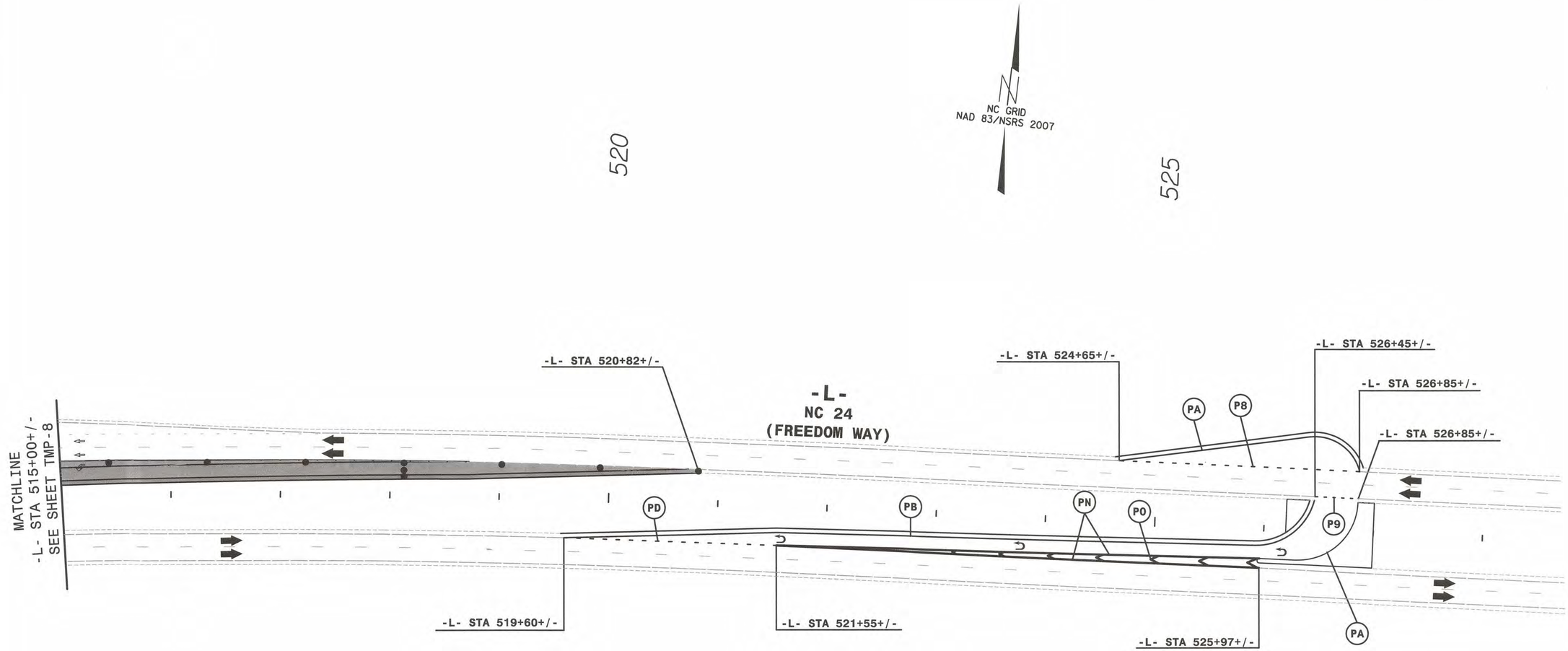

SIGNS FOR U-TURN MOVEMENTS MUST BE IN PLACE PRIOR TO ALTERING TRAFFIC PATTERN.

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DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
WORK ZONE TRAFFIC CONTROL

TRANSPORTATION MANAGEMENT PLAN

PHASE II DETAIL

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TIP NO.	SHEET NO.
W-5203C	PMP-1

APPROVED: Rhonda B. Early
DATE: 2-5-14

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 023521 ENGINEER RHONDA B. EARLY

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING PLAN
ONSLOW COUNTY

LOCATION: DIRECTIONAL CROSSOVER WITH MEDIAN U-TURNS AT THE INTERSECTION NC 24 AND SR 1744 (HUBERT BLVD.) IN HUBERT, N.C.

ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2012 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - 2 LANE AND MULTI LANE ROADWAYS
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.05	PAVEMENT MARKINGS - TURN LANES
1205.09	PAVEMENT MARKINGS - PAINTED ISLANDS
1250.01	RAISED PAVEMENT MARKERS - INSTALLATION SPACING
1253.01	RAISED PAVEMENT MARKERS - SNOWPLOWABLE

GENERAL NOTES

THE FOLLOWING GENERAL NOTES APPLY AT ALL TIMES FOR THE DURATION OF THE CONSTRUCTION PROJECT, EXCEPT WHEN OTHERWISE NOTED IN THE PLAN, OR DIRECTED BY THE ENGINEER.

A) INSTALL PAVEMENT MARKINGS AND PAVEMENT MARKERS ON THE FINAL SURFACE AS FOLLOWS:

ROAD NAME	MARKING	MARKER
-L-	THERMOPLASTIC	SNOWPLOWABLE

B) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.

C) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS THAT HAVE BEEN DAMAGED BY THE END OF EACH DAY'S OPERATION.

D) MARKERS SHALL BE INSTALLED ACCORDING TO THE NCDOT ROADWAY STANDARD DRAWING 1250.01.

E) STOPBAR LOCATIONS AT NON-SIGNALIZED INTERSECTIONS MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER.

FINAL PAVEMENT MARKING SCHEDULE

MATERIAL	SYMBOL	DESCRIPTION
PAVEMENT MARKING		
THERMOPLASTIC (4", 90 MILS)		
	TA	WHITE EDGE LINE
	TB	YELLOW EDGE LINE
THERMOPLASTIC (4", 120 MILS)		
	T8	WHITE MINI-SKIP 2'/6'
	T9	YELLOW MINI-SKIP 2'/6'
	TD	WHITE MINI-SKIP 3'/9'
THERMOPLASTIC (8", 90 MILS)		
	TN	WHITE GORE LINE
THERMOPLASTIC (12", 90 MILS)		
	TU	WHITE DIAGONAL
THERMOPLASTIC (24", 90 MILS)		
	T2	WHITE STOPBAR

INDEX

SHEET NO.	DESCRIPTION
PMP-1	PAVEMENT MARKING PLAN COVER SHEET
PMP-2 AND PMP-3	PAVEMENT MARKING DETAILS

LEGEND

GENERAL

- DIRECTION OF TRAFFIC FLOW
- NORTH ARROW
- PROPOSED PVMT.
- EXIST. PVMT.

PAVEMENT MARKINGS

- PAVEMENT MARKING SYMBOLS

PLAN REVIEWED BY: N.C.D.O.T. DIVISION 3

Katherine Hite, PE — DIVISION TRAFFIC ENGINEER

PLAN PREPARED BY: HNTB NORTH CAROLINA

R. B. Early, PE — PROJECT ENGINEER
J. Phillips — PROJECT DESIGNER

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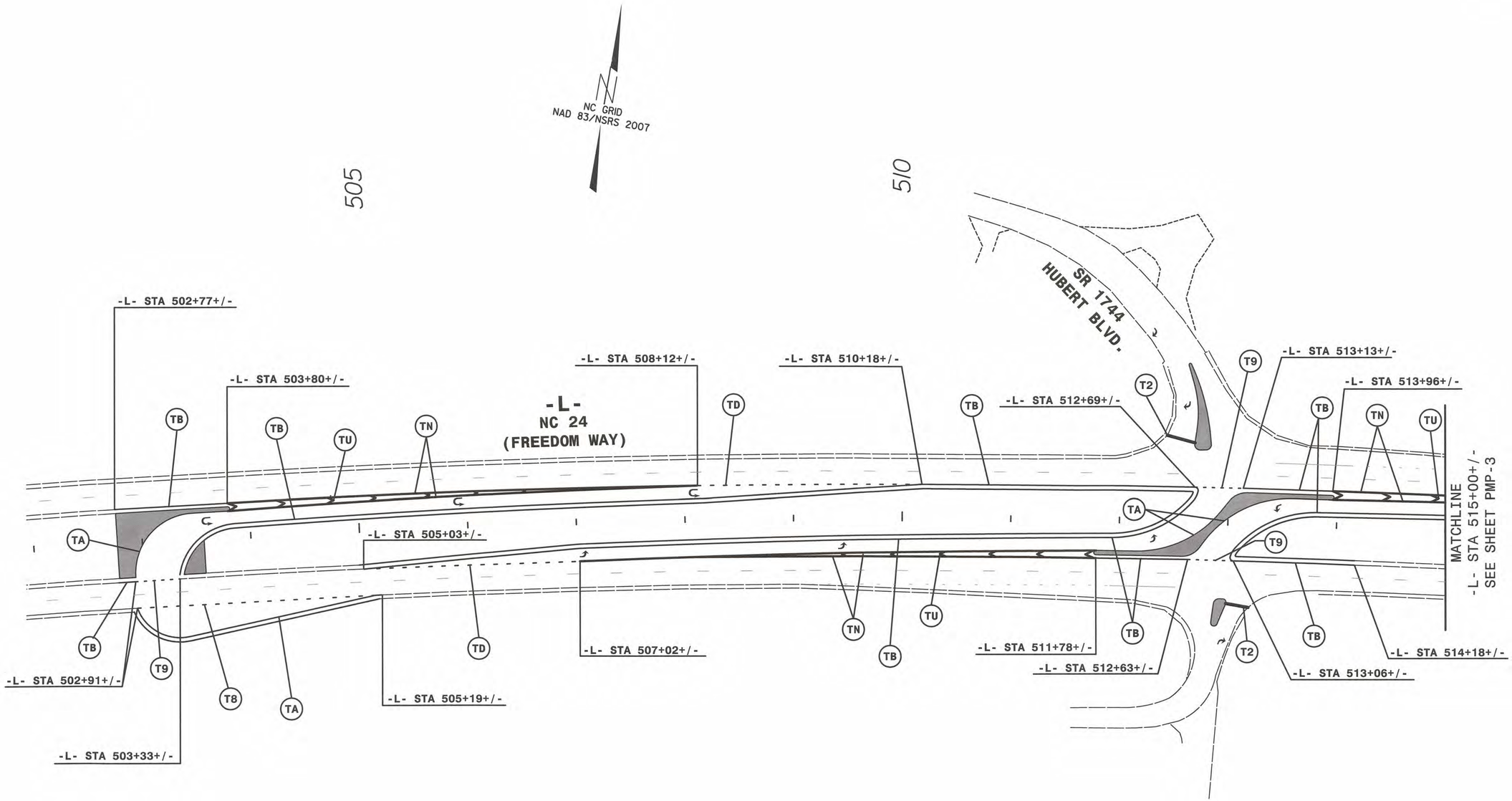
C-1554

PROJ. REFERENCE NO.	SHEET NO.
W-5203C	PMP-2



NOTE: ALL LANE WIDTHS ARE 12' UNLESS OTHERWISE SHOWN.

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APPROVED: Rhonda B. Early DATE: 2-5-14

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 023521 ENGINEER RHONDA B. EARLY

DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION WORK ZONE TRAFFIC CONTROL

TRANSPORTATION MANAGEMENT PLAN

FINAL PAVEMENT MARKING PLANS

REVISIONS

8/17/99

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PROJ. REFERENCE NO.	SHEET NO.
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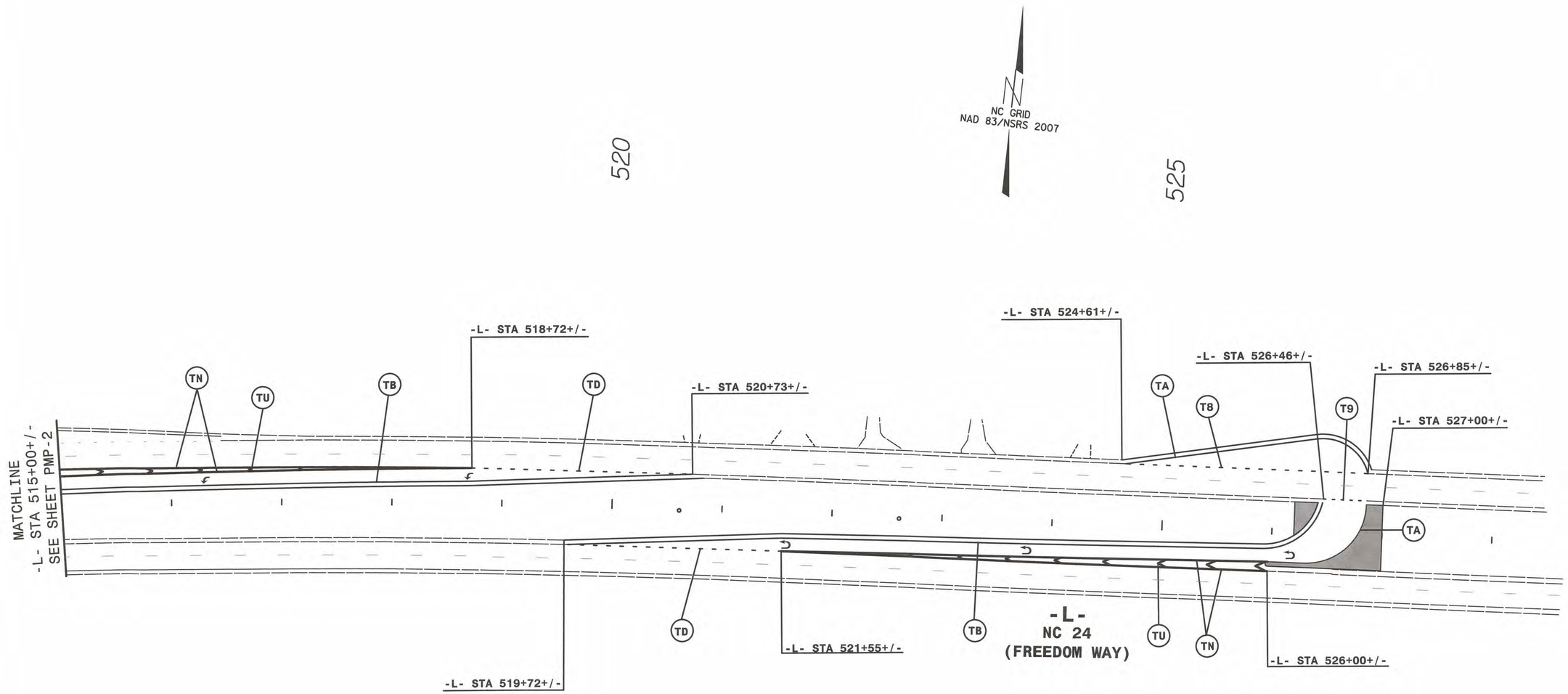

NOTE: ALL LANE WIDTHS ARE 12' UNLESS OTHERWISE SHOWN.

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DIVISION OF HIGHWAYS * STATE OF NORTH CAROLINA * DEPARTMENT OF TRANSPORTATION * WORK ZONE TRAFFIC CONTROL

TRANSPORTATION MANAGEMENT PLAN

FINAL PAVEMENT MARKING PLANS

REVISIONS

8/17/99

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TIP PROJECT: W-5203C

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	W-5203C	EC-1	6

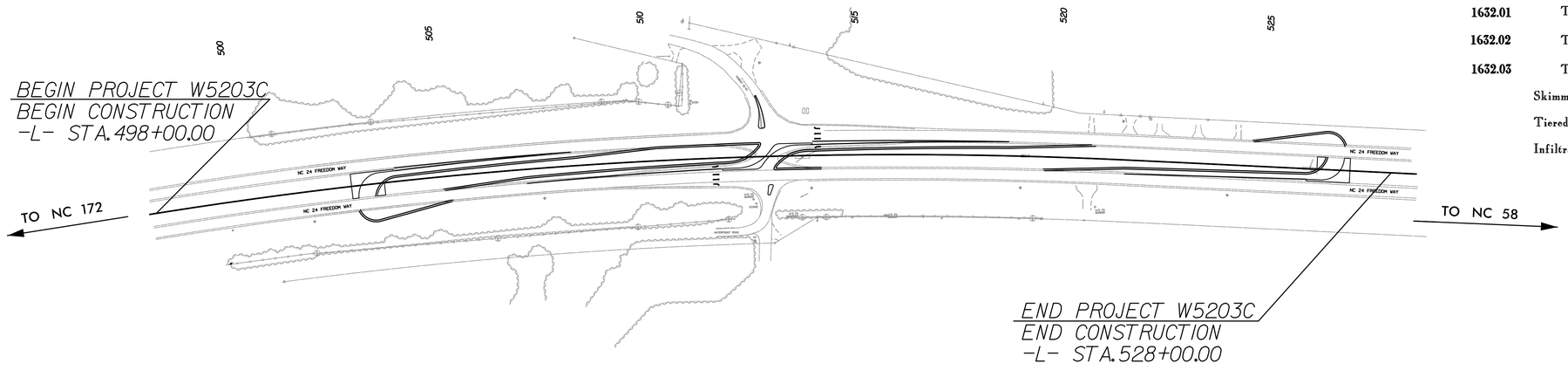
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL

LOCATION: DIRECTIONAL CROSSOVER WITH MEDIAN U-TURNS AT THE INTERSECTION OF NC 24 AND SR 1744 (HUBERT BLVD.) IN HUBERT, N.C.

TYPE OF WORK: GRADING, DRAINAGE & PAVING



EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
1630.03	Temporary Silt Ditch	TSD
1630.05	Temporary Diversion	TD
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1622.01	Temporary Berms and Slope Drains	
	Silt Basin Type B	
1633.01	Temporary Rock Silt Check Type-A	
	Temporary Rock Silt Check Type-A with Matting and Polyacrylamide (PAM)	
	Temporary Rock Silt Check Type-B	
	Wattle / Coir Fiber Wattle	
	Wattle / Coir Fiber Wattle with Polyacrylamide (PAM)	
1634.01	Temporary Rock Sediment Dam Type-A	
1634.02	Temporary Rock Sediment Dam Type-B	
1635.01	Rock Pipe Inlet Sediment Trap Type-A	
1635.02	Rock Pipe Inlet Sediment Trap Type-B	
1630.04	Stilling Basin	
1630.06	Special Stilling Basin	
	Rock Inlet Sediment Trap:	
1632.01	Type A	A
1632.02	Type B	B
1632.03	Type C	C
	Skimmer Basin	
	Tiered Skimmer Basin	
	Infiltration Basin	

GRAPHIC SCALE

50 25 0 50 100
PLANS

50 25 0 50 100
PROFILE (HORIZONTAL)

10 5 0 10 20
PROFILE (VERTICAL)

ROADSIDE ENVIRONMENTAL UNIT
DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY WITH THE REGULATIONS SET FORTH BY THE NCG-010000 GENERAL CONSTRUCTION PERMIT EFFECTIVE AUGUST 3, 2011 ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES DIVISION OF WATER QUALITY.

Prepared In the Office of:

HNTB

HNTB NORTH CAROLINA, P.C.
343 E. Six Forks Road, Suite 200
Raleigh, North Carolina 27609
NC License No: C-1554

2012 STANDARD SPECIFICATIONS

BENTON R. CARROLL, E.I
EROSION CONTROL
LEVEL III
CERTIFICATION #3180

Roadway Standard Drawings

The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated January 2012 and the latest revison thereto are applicable to this project and by reference hereby are considered a part of these plans.

1604.01	Railroad Erosion Control Detail	1632.01	Rock Inlet Sediment Trap Type A
1605.01	Temporary Silt Fence	1632.02	Rock Inlet Sediment Trap Type B
1606.01	Special Sediment Control Fence	1632.03	Rock Inlet Sediment Trap Type C
1607.01	Gravel Construction Entrance	1633.01	Temporary Rock Silt Check Type A
1622.01	Temporary Berms and Slope Drains	1633.02	Temporary Rock Silt Check Type B
1630.01	Riser Basin	1634.01	Temporary Rock Sediment Dam Type A
1630.02	Silt Basin Type B	1634.02	Temporary Rock Sediment Dam Type B
1630.03	Temporary Silt Ditch	1635.01	Rock Pipe Inlet Sediment Trap Type A
1630.04	Stilling Basin	1635.02	Rock Pipe Inlet Sediment Trap Type B
1630.05	Temporary Diversion	1640.01	Coir Fiber Baffle
1630.06	Special Stilling Basin	1645.01	Temporary Stream Crossing
1631.01	Matting Installation		

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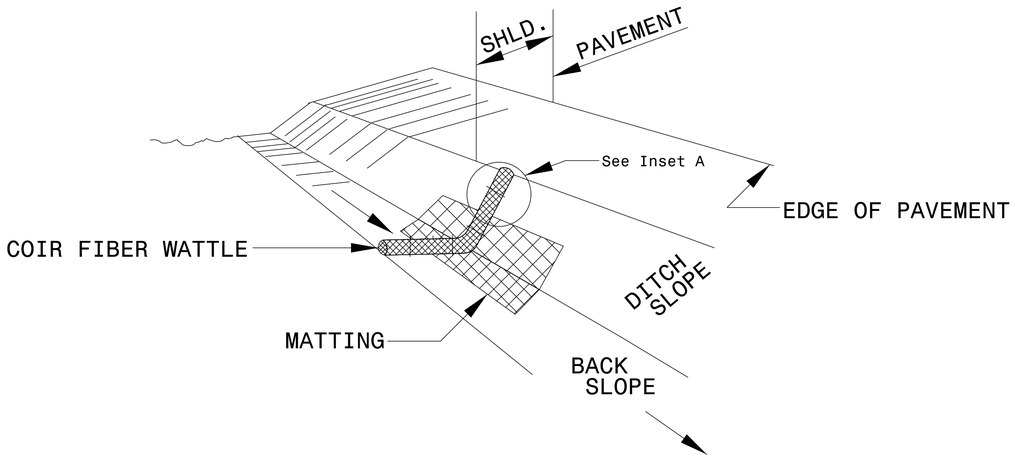
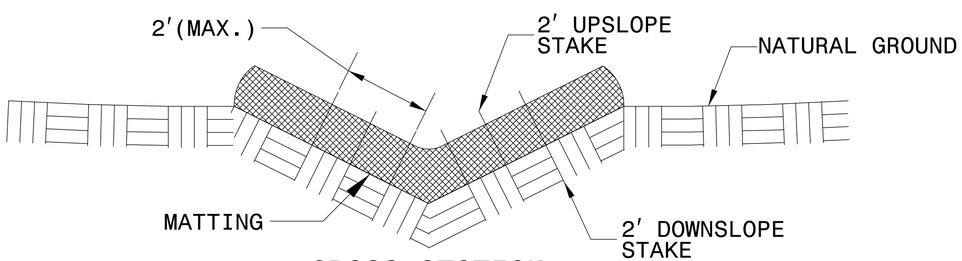
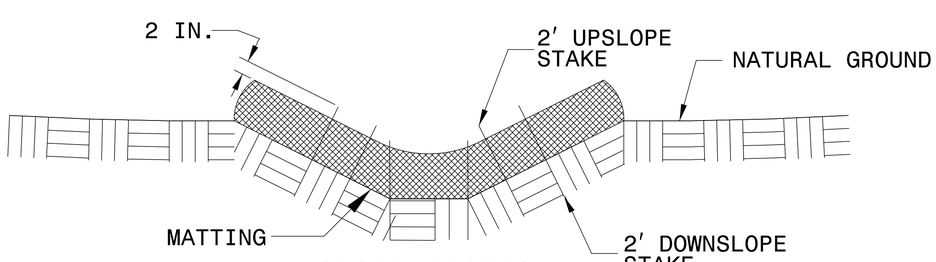
COIR FIBER WATTLE DETAIL



ISOMETRIC VIEW



CROSS SECTION VEE DITCH



CROSS SECTION TRAPEZOIDAL DITCH

NOTES:

USE MINIMUM 12 IN. DIAMETER COIR FIBER (COCONUT FIBER) WATTLE.

USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.

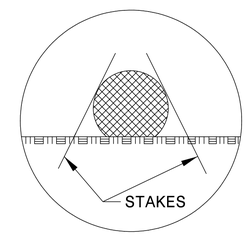
ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.

INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.

PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12″ IN LENGTH.

INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.

INSTALL MATTING IN ACCORDANCE WITH SECTION 1631 OF THE STANDARD SPECIFICATIONS.



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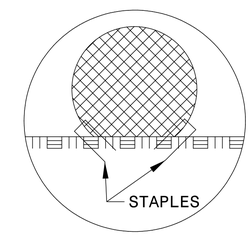
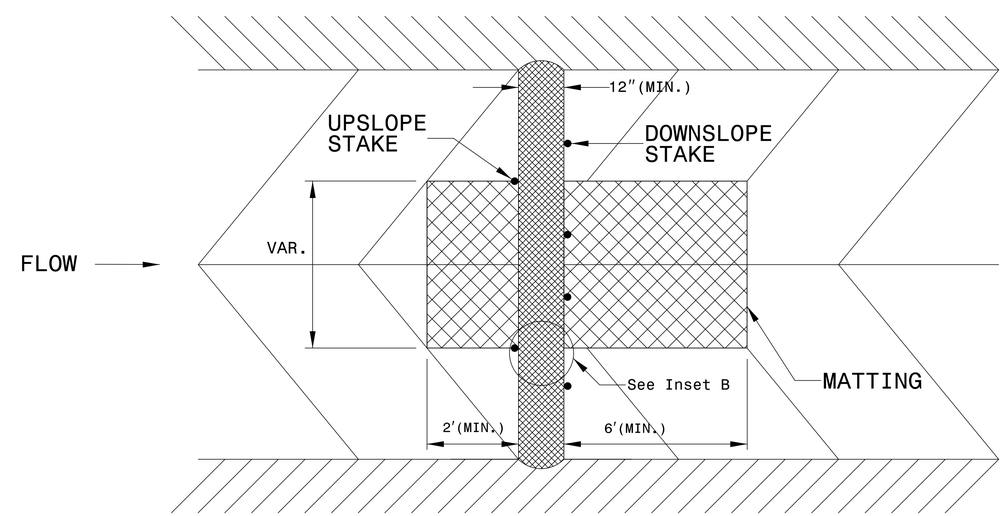


INSET B



TOP VIEW

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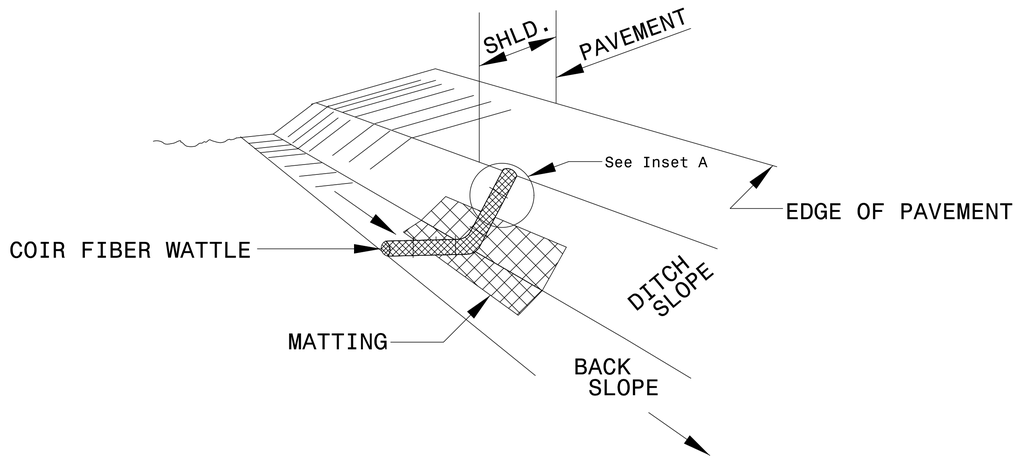
PROJECT REFERENCE NO.	SHEET NO.
W-5203C	EC-3

COIR FIBER WATTLE WITH POLYACRYLAMIDE (PAM) DETAIL



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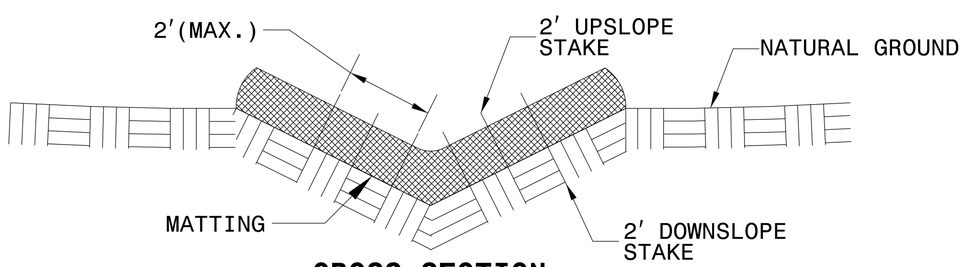
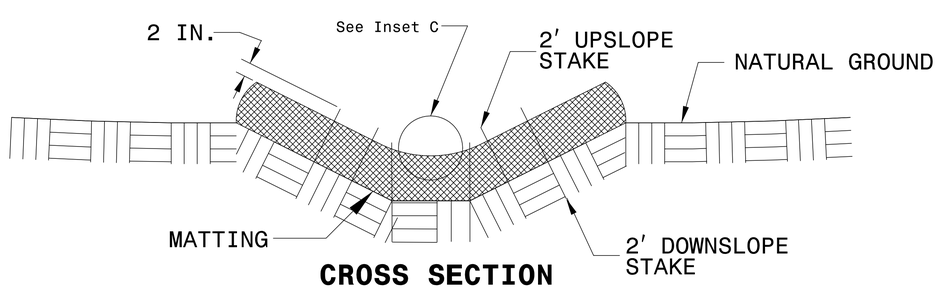


CROSS SECTION VEE DITCH



CROSS SECTION TRAPEZOIDAL DITCH

NOTES:

USE MINIMUM 12 IN. DIAMETER COIR FIBER (COCONUT FIBER) WATTLE.

USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.

ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.

INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.

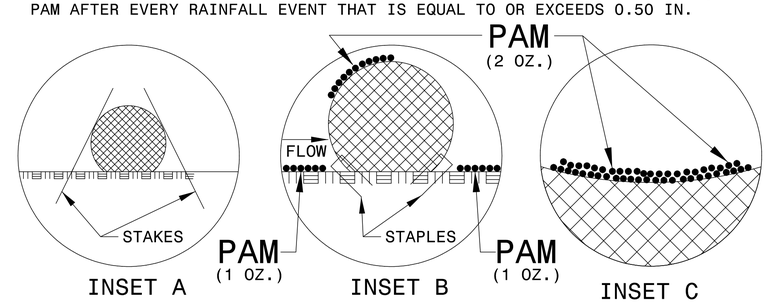
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12″ IN LENGTH.

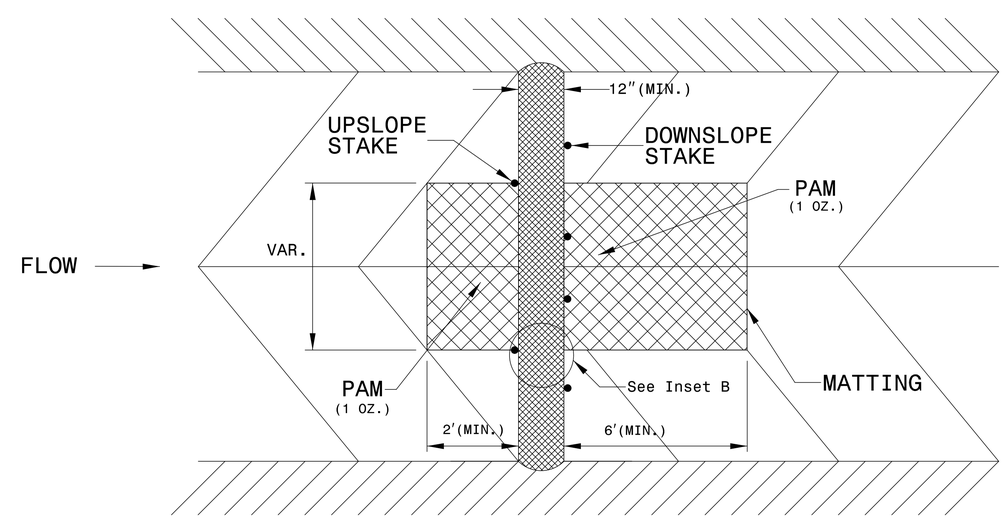
INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.

INSTALL MATTING IN ACCORDANCE WITH SECTION 1631 OF THE STANDARD SPECIFICATIONS.

PRIOR TO POLYACRYLAMIDE (PAM) APPLICATION, OBTAIN A SOIL SAMPLE FROM PROJECT LOCATION, AND FROM OFFSITE MATERIAL, AND ANALYZE FOR APPROPRIATE PAM FLOCCULANT TO BE APPLIED TO EACH WATTLE.

INITIALLY APPLY 2 OUNCES OF ANIONIC OR NEUTRALLY CHARGED PAM OVER WATTLE WHERE WATER WILL FLOW AND 1 OUNCE OF PAM ON MATTING ON EACH SIDE OF WATTLE. REAPPLY PAM AFTER EVERY RAINFALL EVENT THAT IS EQUAL TO OR EXCEEDS 0.50 IN.





TOP VIEW

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PROJECT REFERENCE NO.	SHEET NO.
W-5203C	EC-4

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION TIMEFRAMES

SITE DESCRIPTION	STABILIZATION TIME	TIMEFRAME EXCEPTIONS
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH.
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE, EXCEPT FOR PERIMETERS AND HQW ZONES.

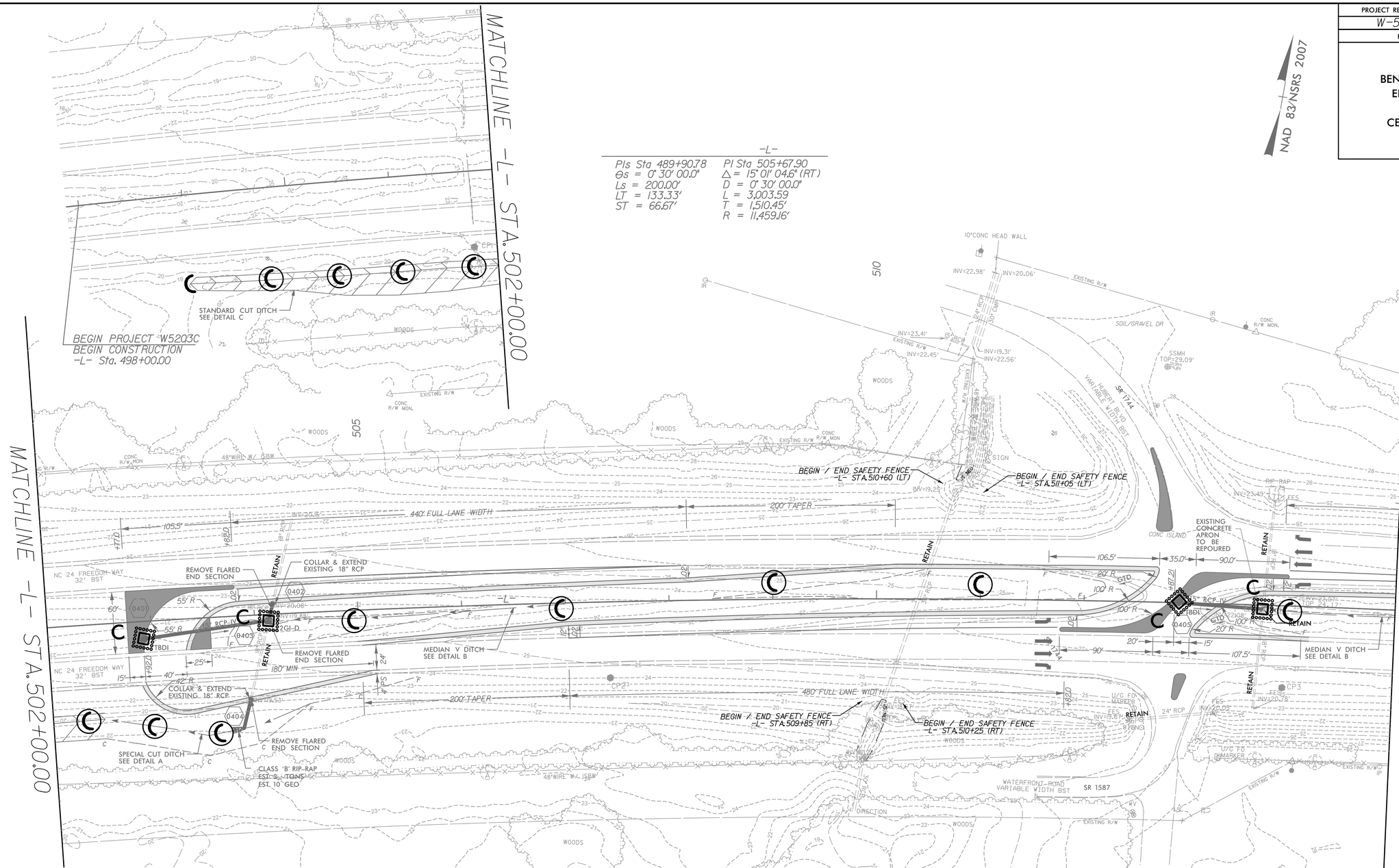
PROJECT REFERENCE NO.	SHEET NO.
W-5203C	EC-5
R/W SHEET NO.	

BENTON R. CARROLL E.I.
EROSION CONTROL
LEVEL III
CERTIFICATION #3180

NAD 83/NSRS 2007

-L-

PIs Sta 489+90.78	PI Sta 505+67.90
Θs = 0° 30' 00.0"	Δ = 15° 01' 04.6" (RT)
Ls = 200.00'	D = 0° 30' 00.0"
LT = 133.33'	L = 3,003.59
ST = 66.67'	T = 1,510.45'
	R = 11,459.16'



DATUM DESCRIPTION

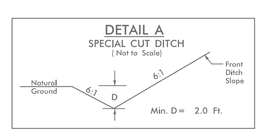
THE COORDINATE SYSTEM FOR THIS PROJECT
IS BASED ON STATE PLANE COORDINATES
NAD 83/NSRS 2007
THE GRID FACTOR USED ON THIS PROJECT
IS: 1.000000000

THE N.C. LAMBERT GRID BEARING AND
HORIZONTAL GROUND DISTANCE FROM
"CP3" TO -L- STATION 488+57.45 IS
S 77° 29' 23" W 2523.35'

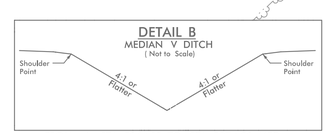
ALL LINEAR DIMENSIONS ARE GRID DISTANCES
VERTICAL DATUM USED IS NAVD 88

GPS CONTROL POINTS

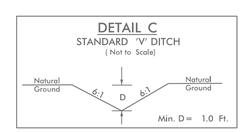
POINT	NORTHING	EASTING	ELEV
CP1	356196.40	2537423.04	21.29
CP2	356319.14	2537969.52	23.63
CP3	356421.40	2538608.82	25.20
CP4	356482.86	2539110.58	26.34
CP5	356525.12	2539610.52	27.68



FROM -L- STA. 502+50 TO STA. 504+50 LT



FROM -L- STA. 504+13 TO STA. 507+00 MED.
FROM -L- STA. 513+72 TO STA. 515+00 MED.



FROM -L- STA. 499+00 TO STA. 502+50 RT

REVISIONS

8/17/99

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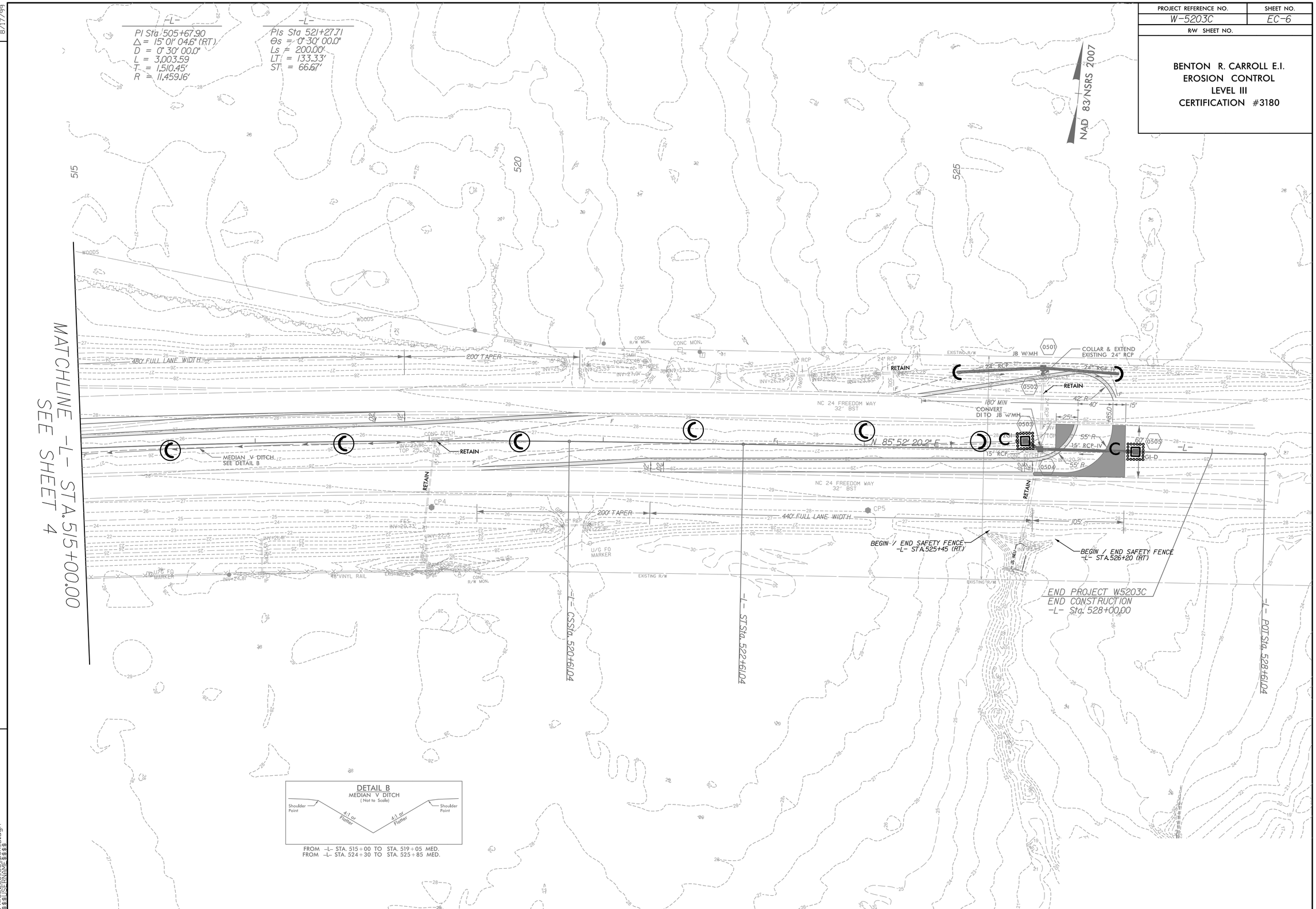
PROJECT REFERENCE NO.	SHEET NO.
W-5203C	EC-6
R/W SHEET NO.	

BENTON R. CARROLL E.I.
EROSION CONTROL
LEVEL III
CERTIFICATION #3180



REVISIONS

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T.I.P.: W-5203C

CONTRACT:

TIP NO.	SHEET NO.
W-5203C	SIGN-1

APPROVED: Andrew Klinksiek

DATE: 02/05/2014

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 40311 ENGINEER ANDREW D. KLINKSIEK

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

SIGNING PLAN
ONSLOW COUNTY

LOCATION: DIRECTIONAL CROSSOVER WITH MEDIAN U-TURNS AT THE INTERSECTION OF NC 24 AND SR 1744 (HUBERT BLVD.) IN HUBERT, N.C.

ROADWAY STANDARD DRAWING

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2012 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
901.50	ARROWS AND SHIELDS
904.10	ORIENTATION OF GROUND MOUNTED SIGNS
904.50	MOUNTING OF TYPE 'D', 'E' AND 'F' SIGNS ON 'U' CHANNEL POSTS

SUMMARY OF QUANTITIES

ITEM NO. DESC. NO.	ITEM NO. SECT. NO.	ITEM DESCRIPTION	QUANTITY	UNIT
4072000000	903	SUPPORTS, 3 LB STEEL U-CHANNEL	556	L.F.
4102000000	904	SIGN ERECTION, TYPE E	28	EA.
4108000000	904	SIGN ERECTION, TYPE F	7	EA.
4155000000	907	DISPOSAL OF SIGN SYSTEM, U-CHANNEL	20	EA.

GENERAL NOTES

- SIGNS FURNISHED BY STATE
- IF REMOVAL OR RELOCATION OF SIGNS ON PRIVATE STREET (NON-STATE MAINTAINED) IS REQUIRED DUE TO CONSTRUCTION, THE CONTRACTOR SHALL INFORM THE ENGINEER. THE WORK WILL BE COMPLETED BY OTHERS.
- SIGNING PLANS DO NOT INCLUDE TEMPORARY CONSTRUCTION SIGNING, SEE TRAFFIC CONTROL PLANS. SEE PAVEMENT MARKING PLAN FOR PAVEMENT MARKING DESIGN.
- WHEN NOT STATIONED OR DIMENSIONED ON PLANS, ALL 'E' AND 'F' SIGNS SHALL BE FIELD LOCATED BY THE ENGINEER.
- ALL OTHER TYPE 'E' AND 'F' SIGNS SHALL BE GRADE C REFLECTIVE SHEETING.

PAY ITEM NOTES

1 SIGN ERECTION, TYPE D, E, AND F
2 DISPOSAL OF SIGN SYSTEM, U-CHANNEL

INDEX

SHEET NO.	DESCRIPTION
SIGN-1	TITLE SHEET
SIGN-2	TYPE E AND F SIGNS
SIGN-3	SIGN DETAIL SHEET

PLAN PREPARED BY :

HNTB

HNTB NORTH CAROLINA, P.C.
343 E. Six Forks Road, Suite 200
Raleigh, North Carolina 27609
NC License No: C-1554

A.D. KLINKSIEK, PE, PTOE — *SIGNING PROJECT ENGINEER*

T.R. TERRELL — *SIGNING DESIGN TECHNICIAN*

TIP NO.	SHEET NO.
W-5203C	SIGN-2

APPROVED: Andrew Klin

DATE: 02/05/2014

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 40311 ENGINEER ANDREW D. KLINKSIEK

(401) QUANTITY REQ'D 2

54" X 18"
R6-1(L)

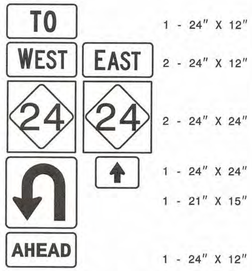
TWO "U" POSTS PER SIGN

(406) QUANTITY REQ'D 2

18" X 18"
OM1-3

MOUNTED BELOW 405 IN 2 INSTALLATIONS

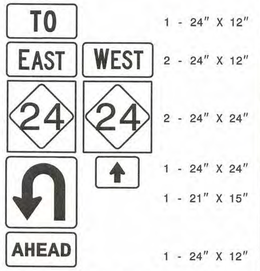
(501)



1 - 24" X 12"
2 - 24" X 12"
2 - 24" X 24"
1 - 24" X 24"
1 - 21" X 15"
1 - 24" X 12"

TWO "U" POSTS PER SIGN

(505)



1 - 24" X 12"
2 - 24" X 12"
2 - 24" X 24"
1 - 24" X 24"
1 - 21" X 15"
1 - 24" X 12"

TWO "U" POSTS PER SIGN

(402) QUANTITY REQ'D 4

36" X 36"
R3-4

ONE "U" POST PER SIGN

(407) QUANTITY REQ'D 4

36" X 36"
R1-1

ONE "U" POST PER SIGN

(502)

1 - 24" X 12"
1 - 24" X 24"
1 - 24" X 24"

ONE "U" POST PER SIGN

(506)

1 - 24" X 12"
1 - 24" X 24"
1 - 24" X 24"

ONE "U" POST PER SIGN

(403) QUANTITY REQ'D 4

36" X 36"
W12-1

ONE "U" POST PER SIGN

(408) QUANTITY REQ'D 4

24" X 24"
R3-2

MOUNTED BELOW 407 IN 4 INSTALLATIONS

(503)

1 - 24" X 12"
1 - 24" X 24"

ONE "U" POST PER SIGN

(507)

1 - 24" X 12"
1 - 24" X 24"

ONE "U" POST PER SIGN

(404) QUANTITY REQ'D 2

54" X 18"
R6-1(R)

TWO "U" POSTS PER SIGN

(409) QUANTITY REQ'D 2

30" X 36"
R2-1

ONE "U" POST PER SIGN

(504)

1 - 24" X 12"
2 - 24" X 12"
2 - 24" X 24"
2 - 21" X 15"

TWO "U" POSTS PER SIGN

(405) QUANTITY REQ'D 2

24" X 30"
R4-7

TWO "U" POSTS PER SIGN

(410) QUANTITY REQ'D 2

36" X 36"
W23-2

ONE "U" POST PER SIGN

HNTB
HNTB NORTH CAROLINA, P.C.
343 E. Six Forks Road, Suite 200
Raleigh, North Carolina 27609
NC License No: C-1554

TYPE "E" & "F" SIGNS

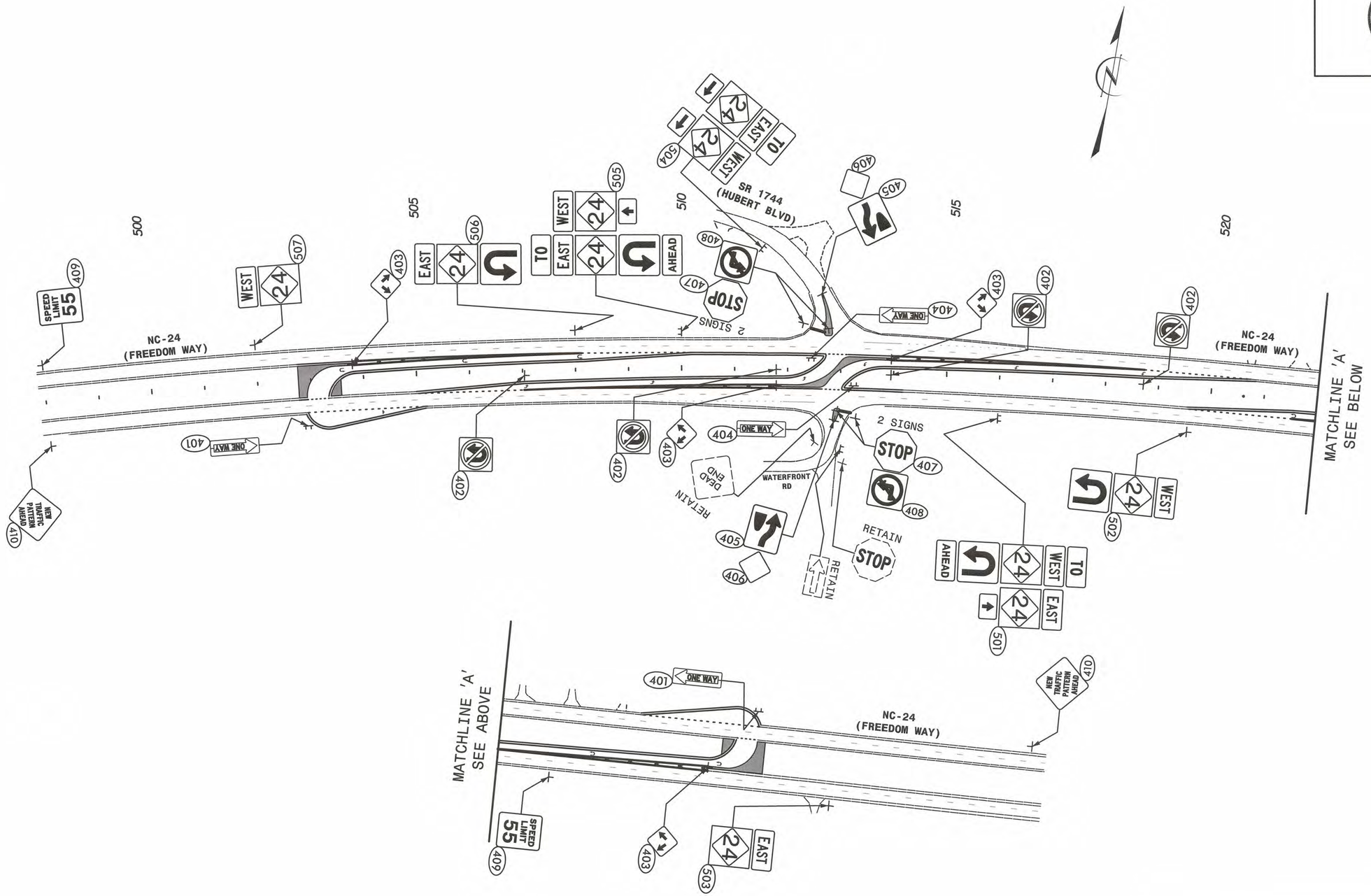
TIP NO.	SHEET NO.
W-5203C	SIGN-3

APPROVED: Andrew Klinksiek

DATE: 02/05/2014

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 40311 ENGINEER ANDREW D. KLINKSIEK



NOTES:
REMOVE AND DISPOSE OF EXISTING SIGNS WITHIN PROJECT LIMITS UNLESS OTHERWISE NOTED.
ALL PROPOSED SIGNS SEE PAY ITEM NOTE 1 UNLESS OTHERWISE NOTED.

HNTB

HNTB NORTH CAROLINA, P.C.
343 E. Six Forks Road, Suite 200
Raleigh, North Carolina 27609
NC License No: C-1554

EXISTING AND PROPOSED SIGNS

PROJ. REFERENCE NO.	SHEET NO.	TOTAL SHEETS
W5203C	X-1	20

Note: Approximate quantities only. Unclassified Excavation, Borrow Excavation, Fine Grading, and Removal of Existing Pavement will be paid for at the contract lump sum price for "Grading."

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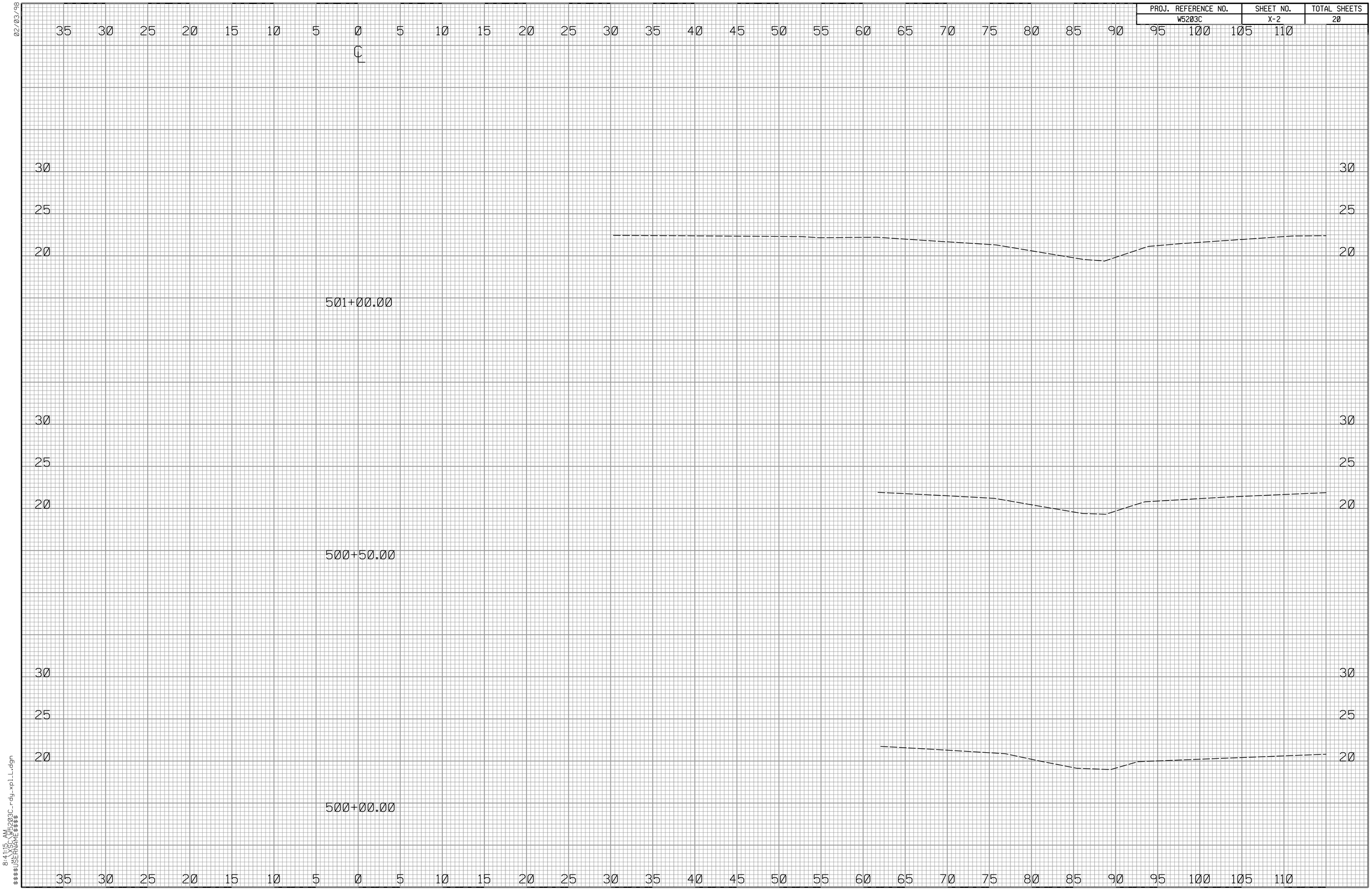

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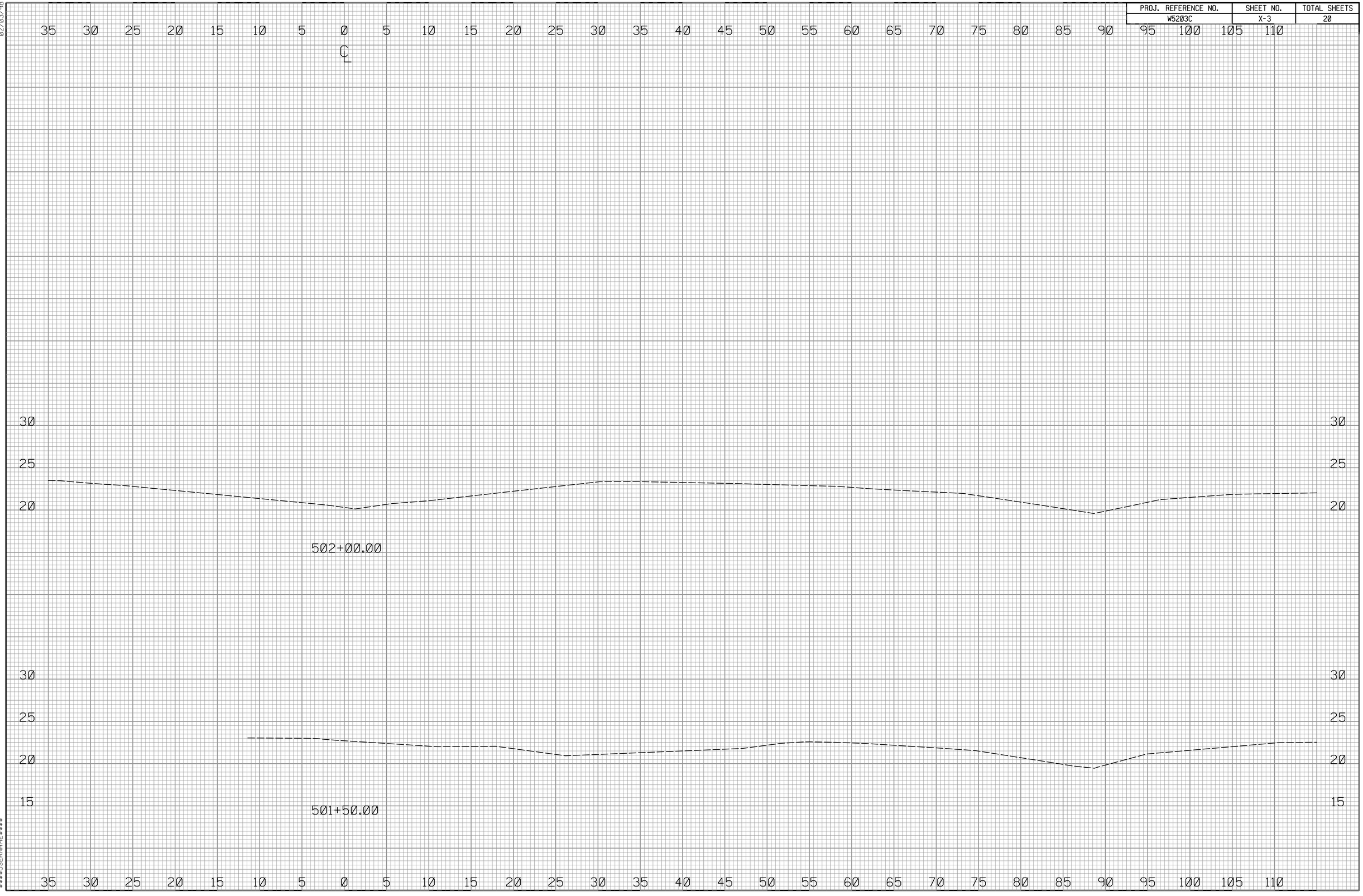

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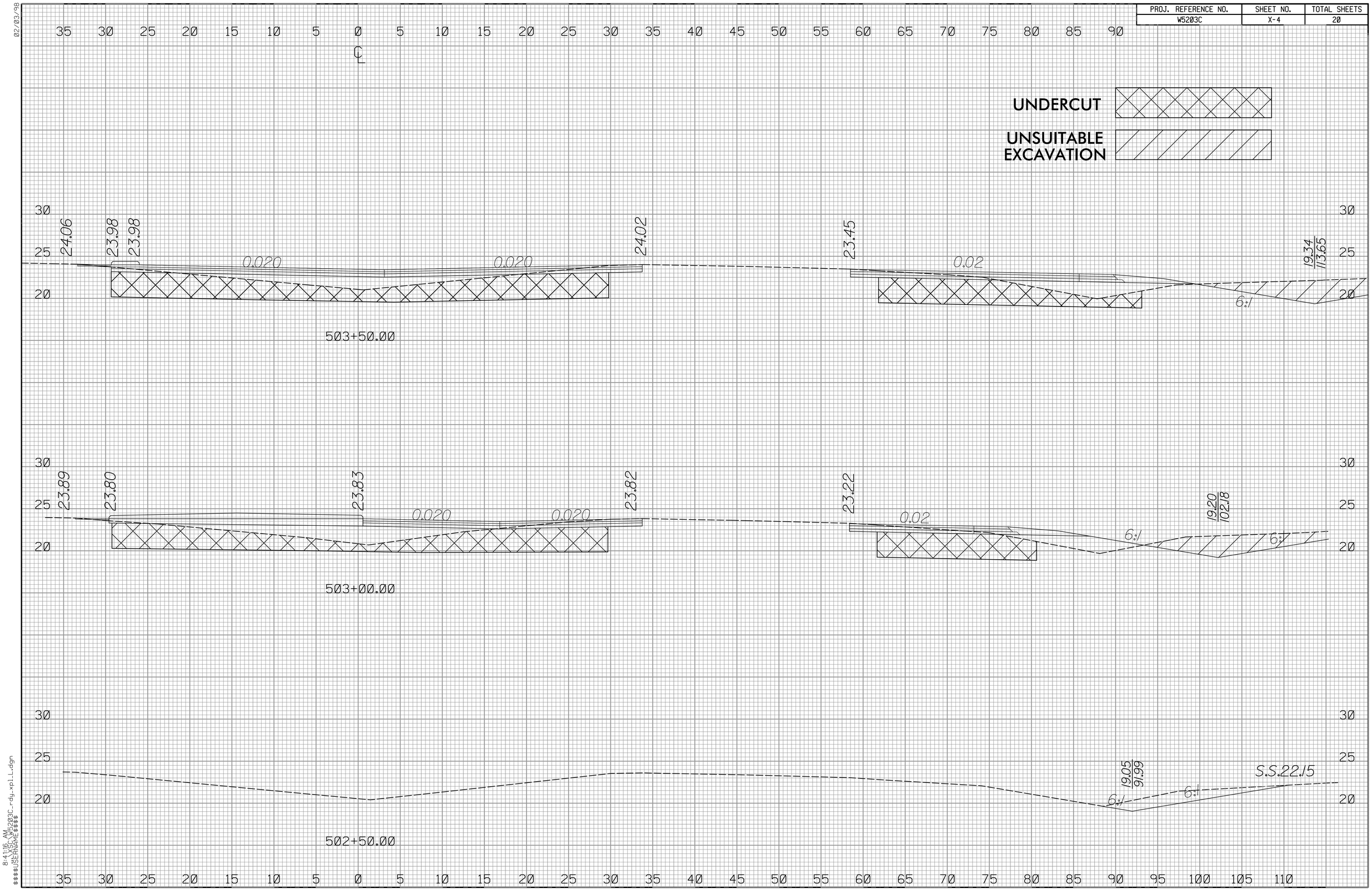

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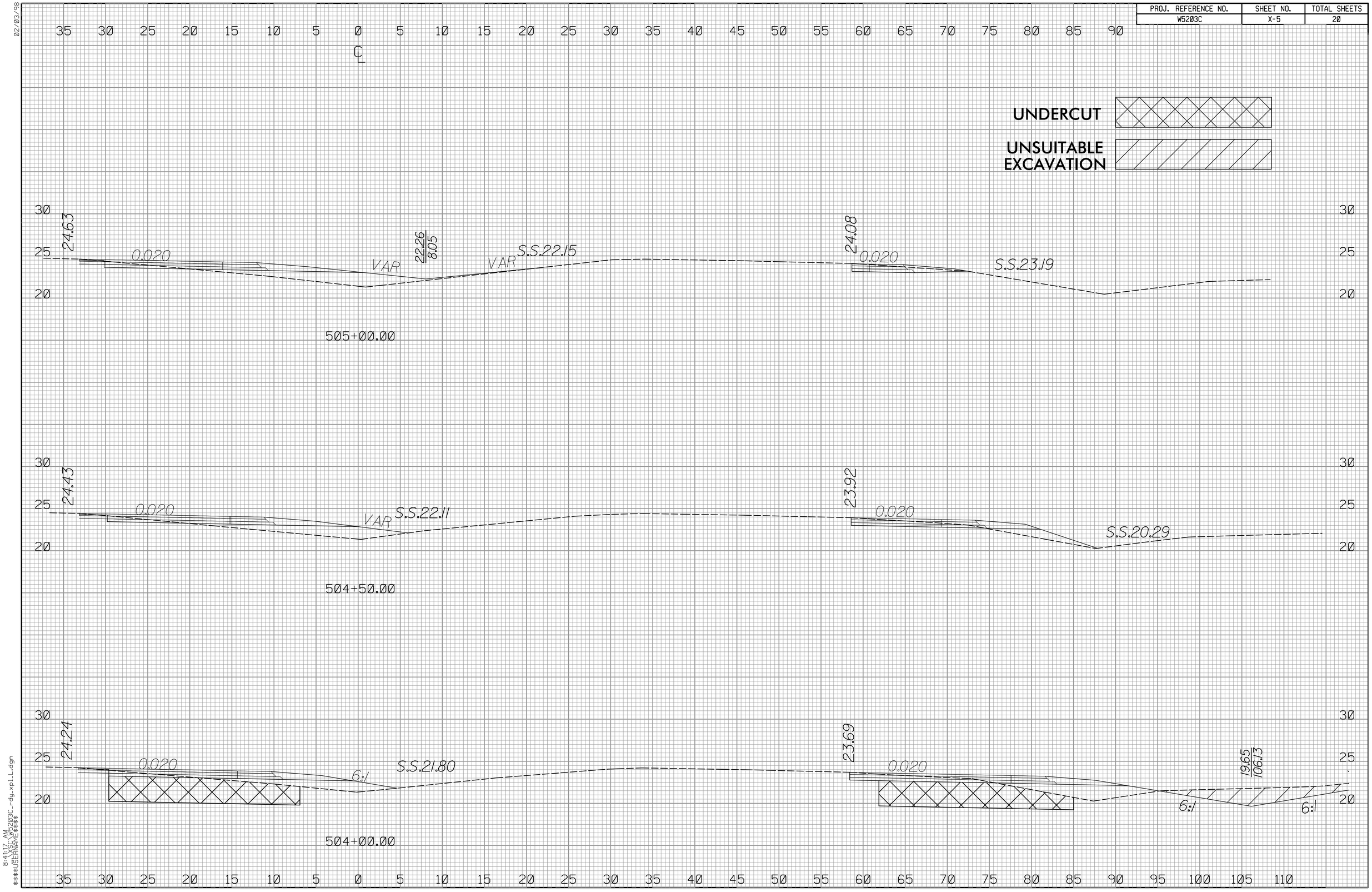

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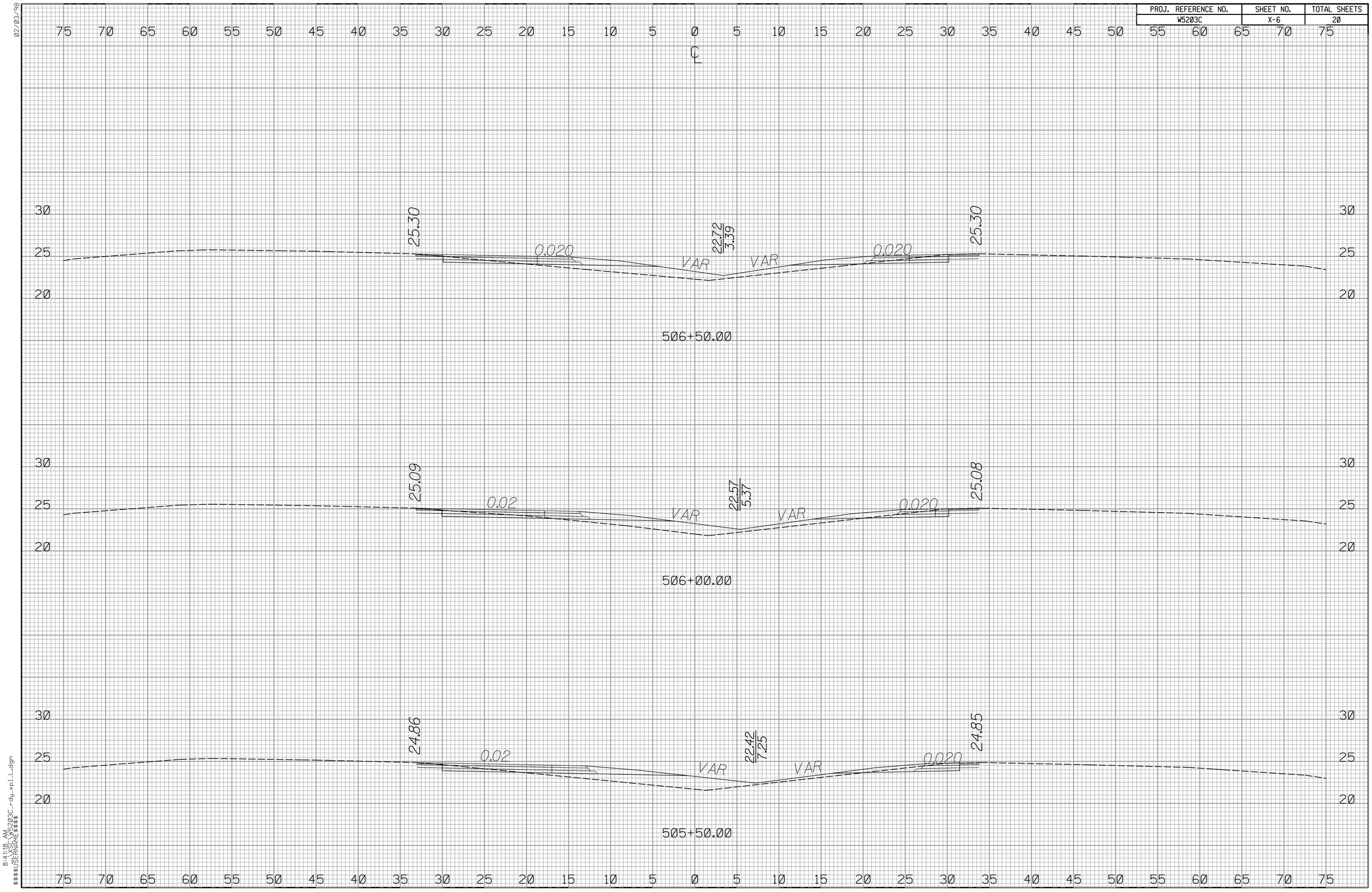

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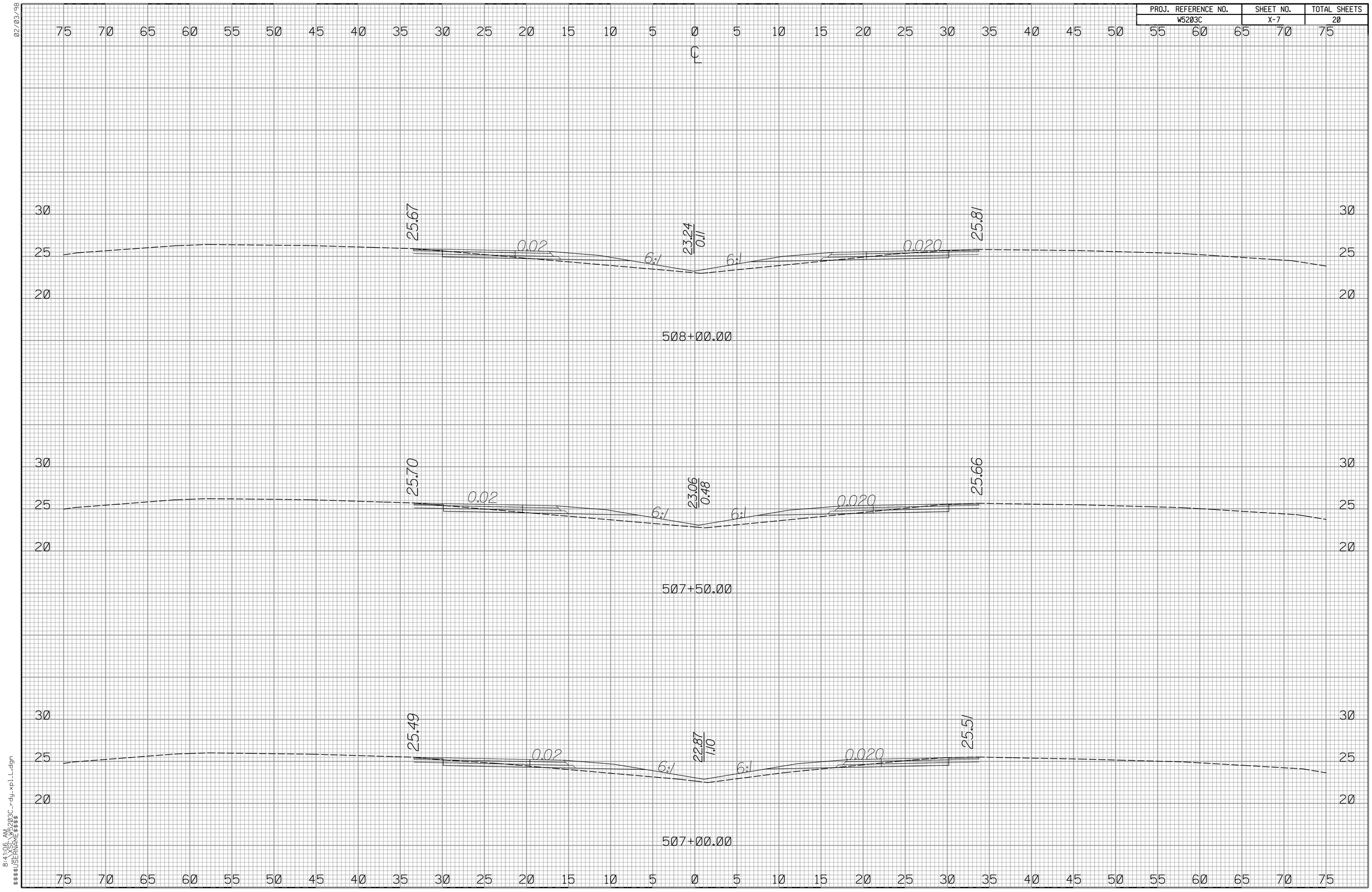

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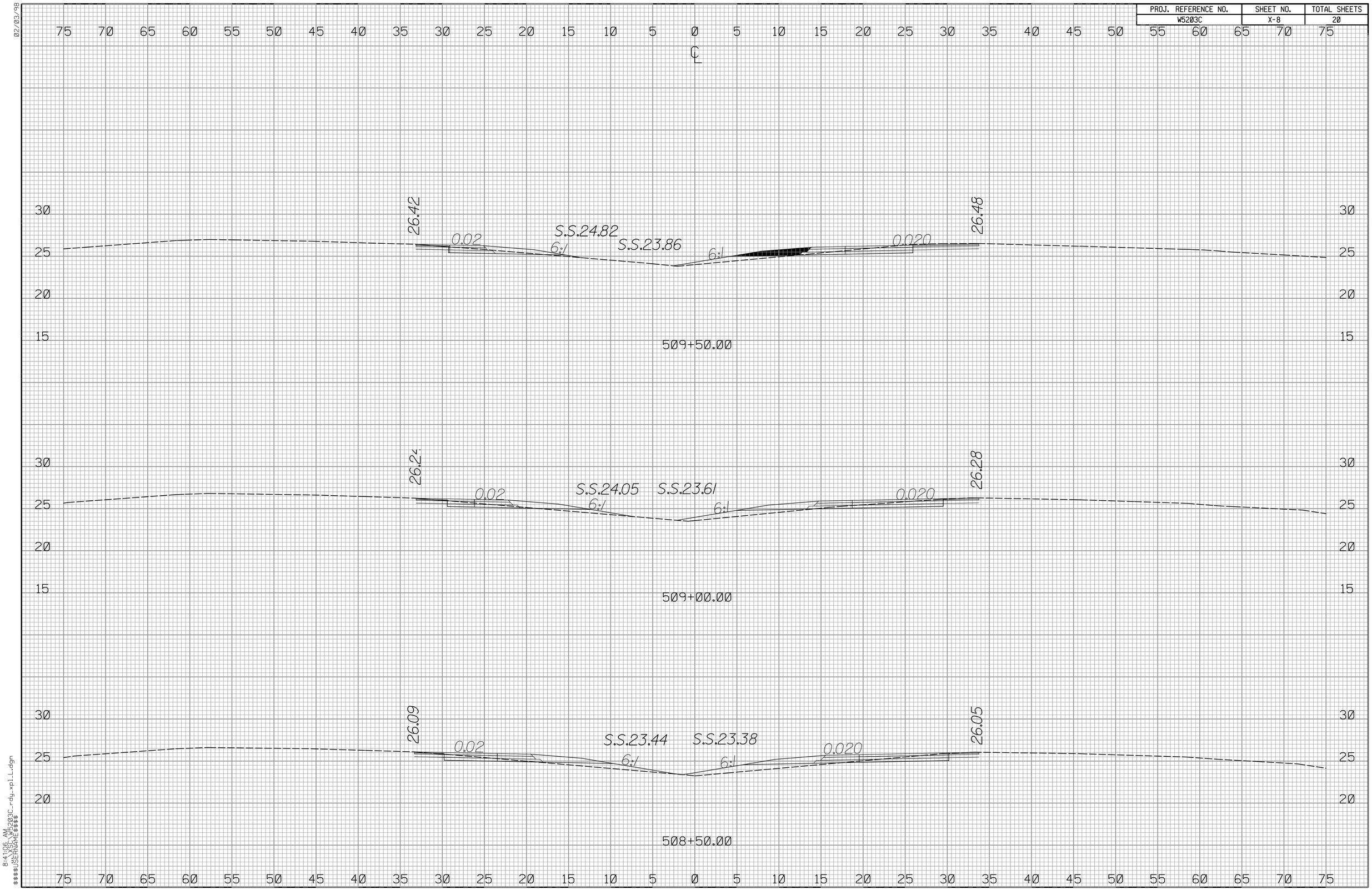

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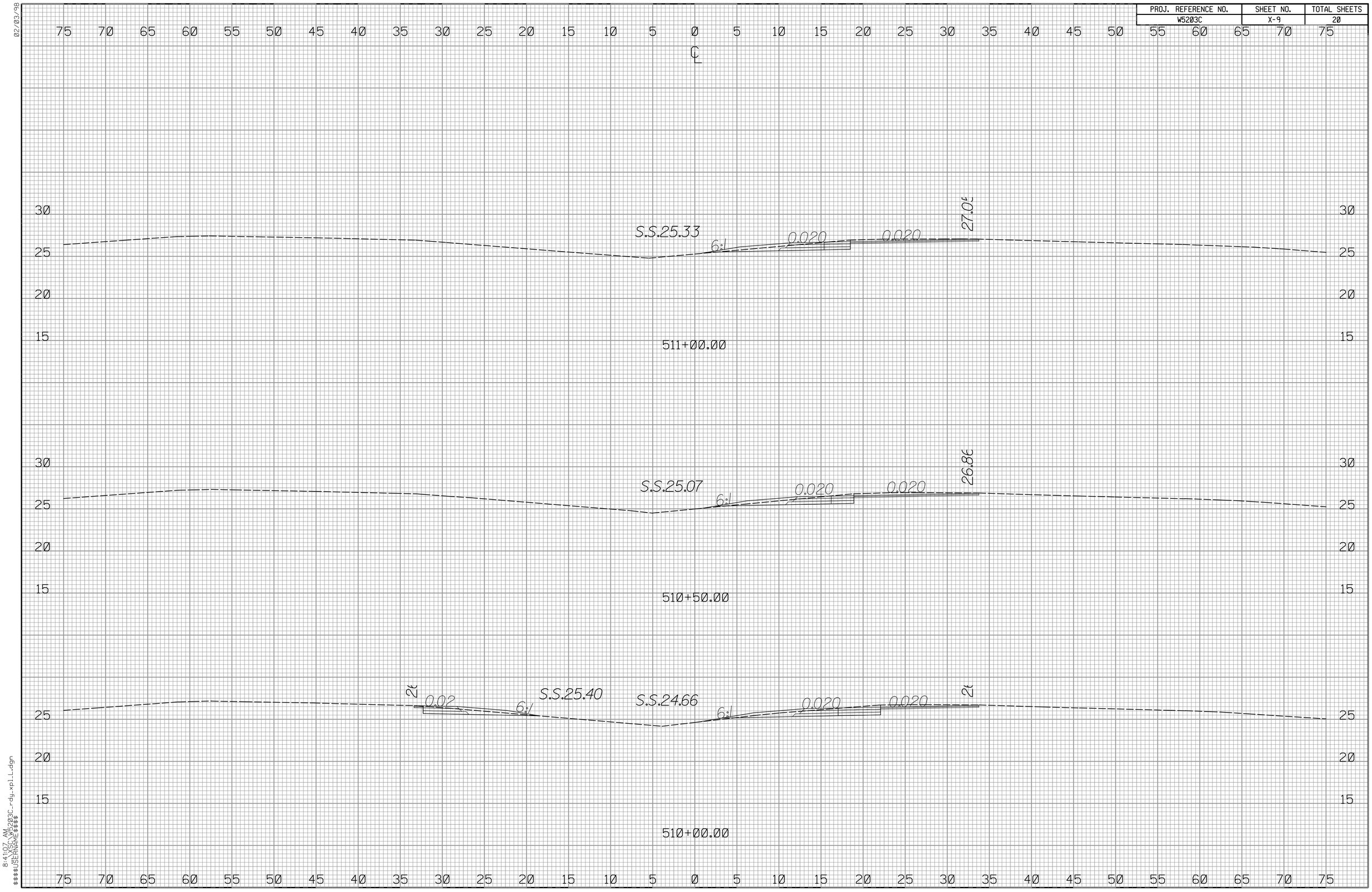

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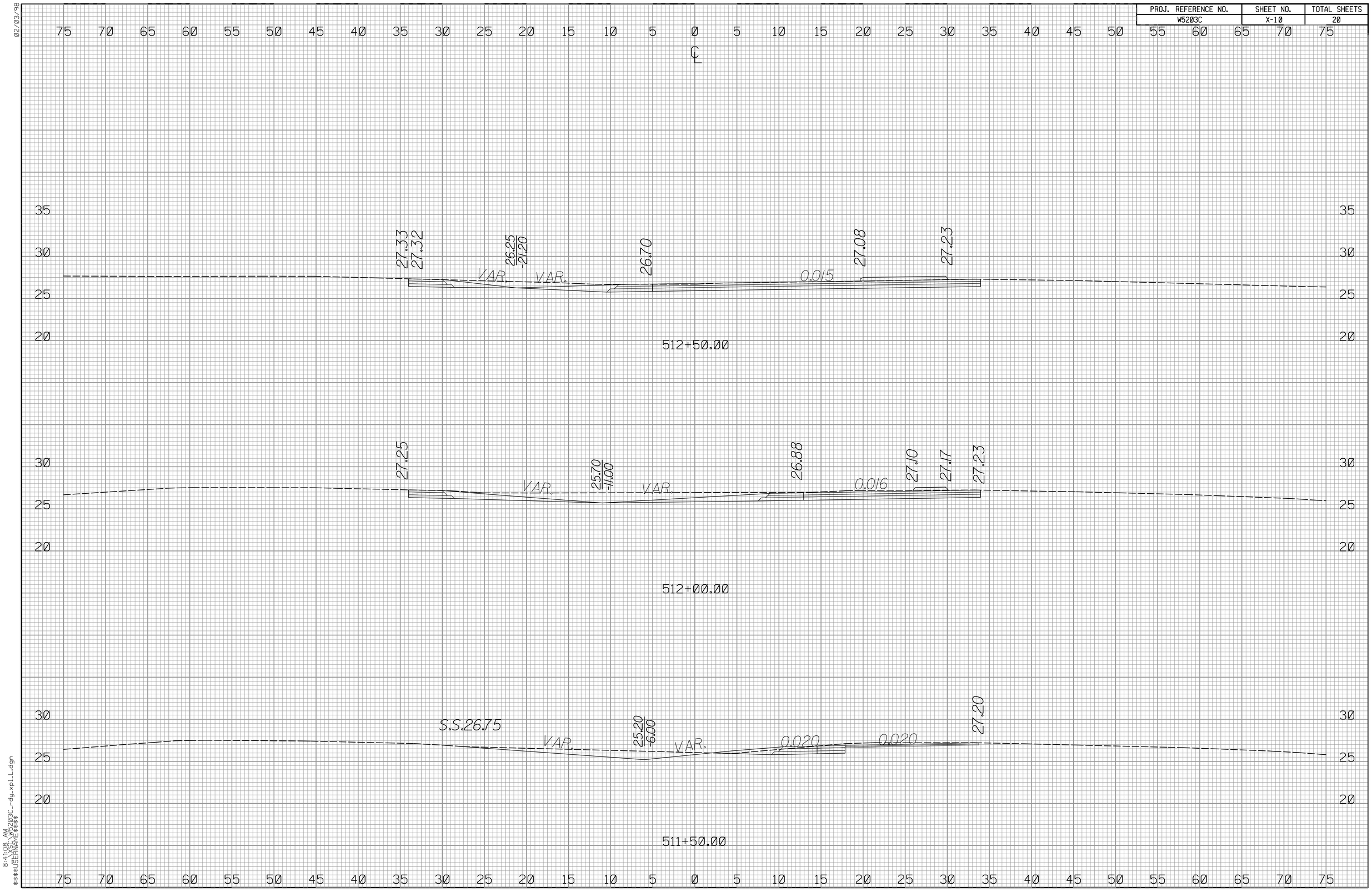

02/03/98

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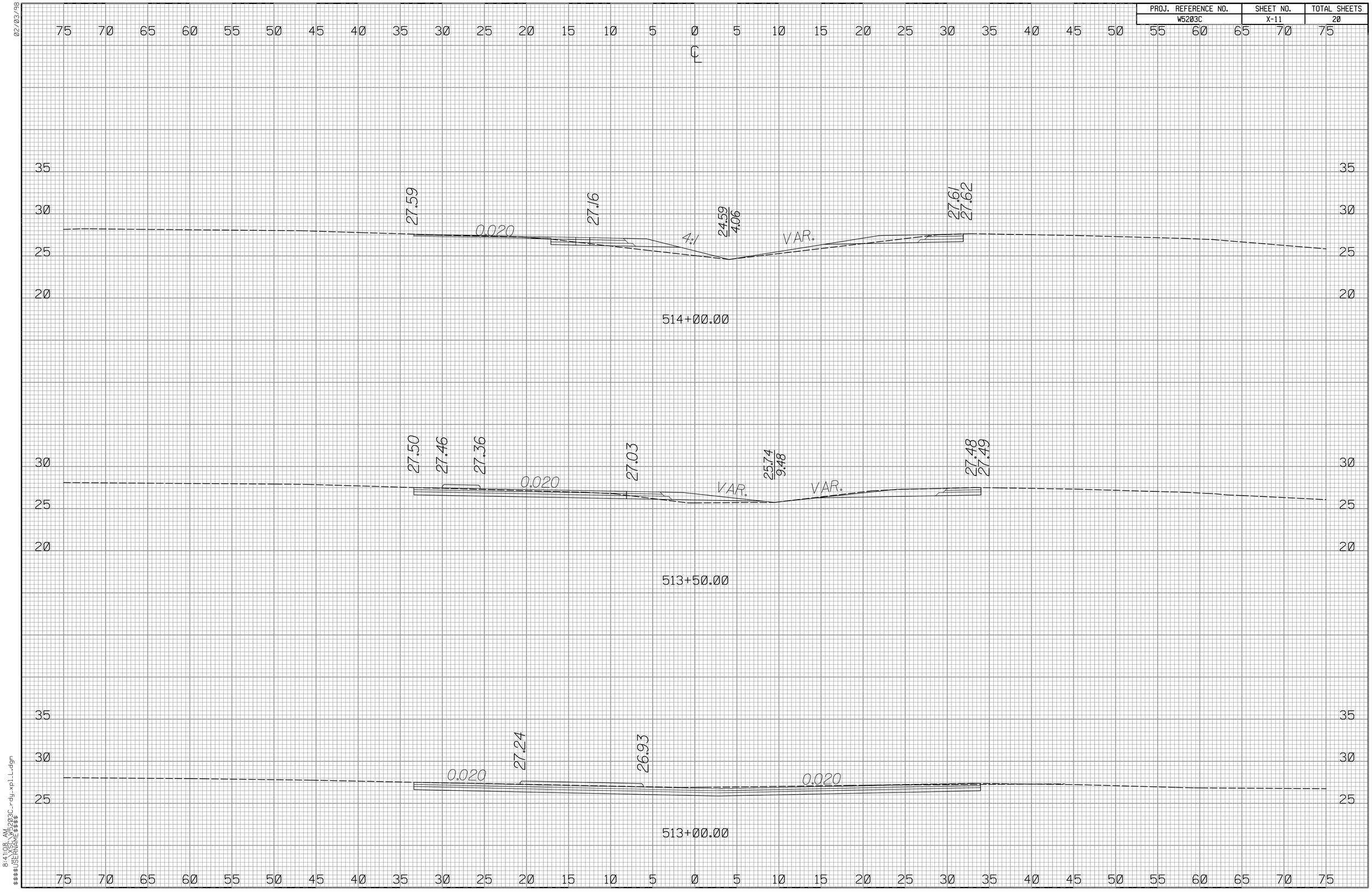

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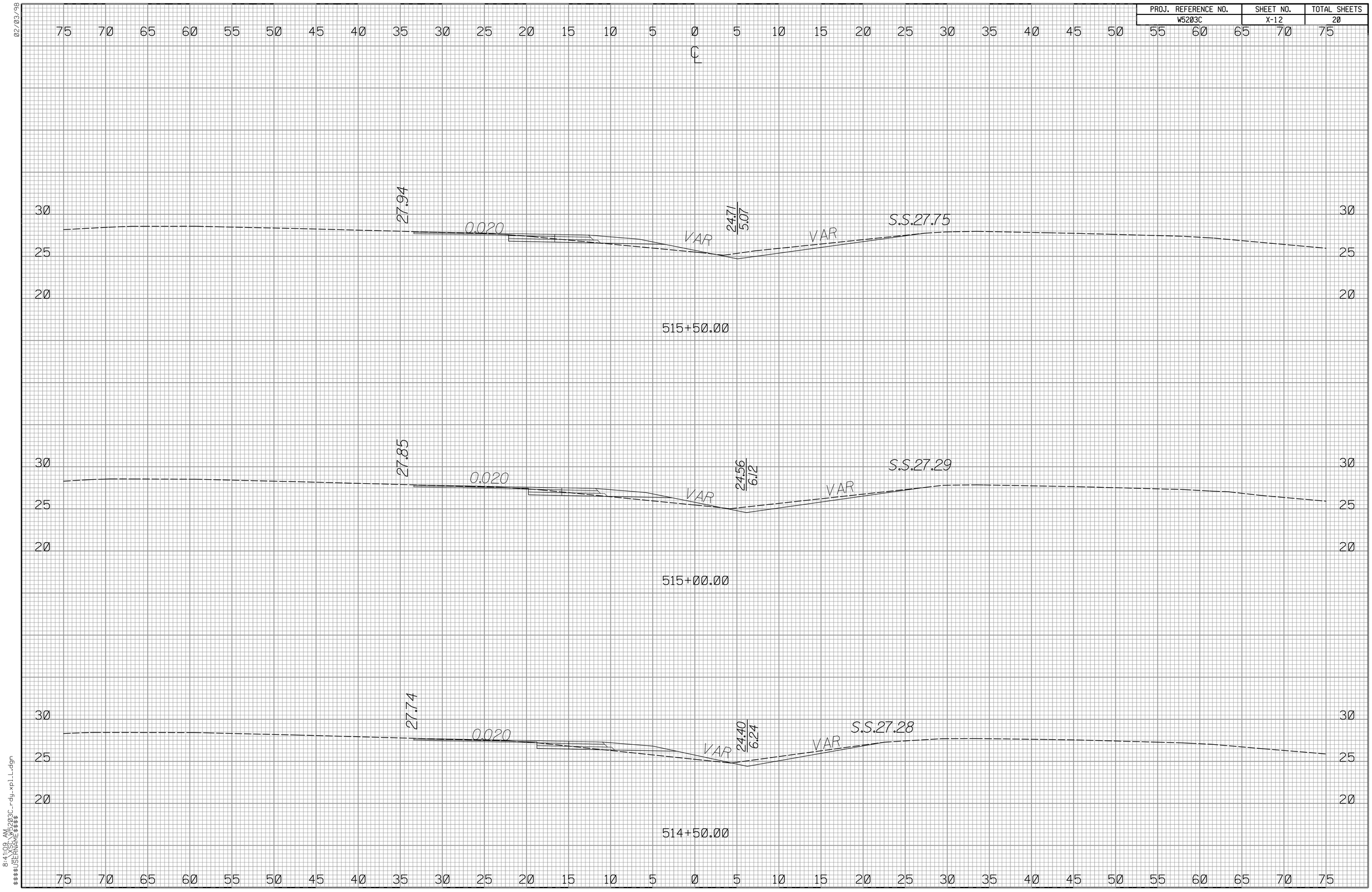

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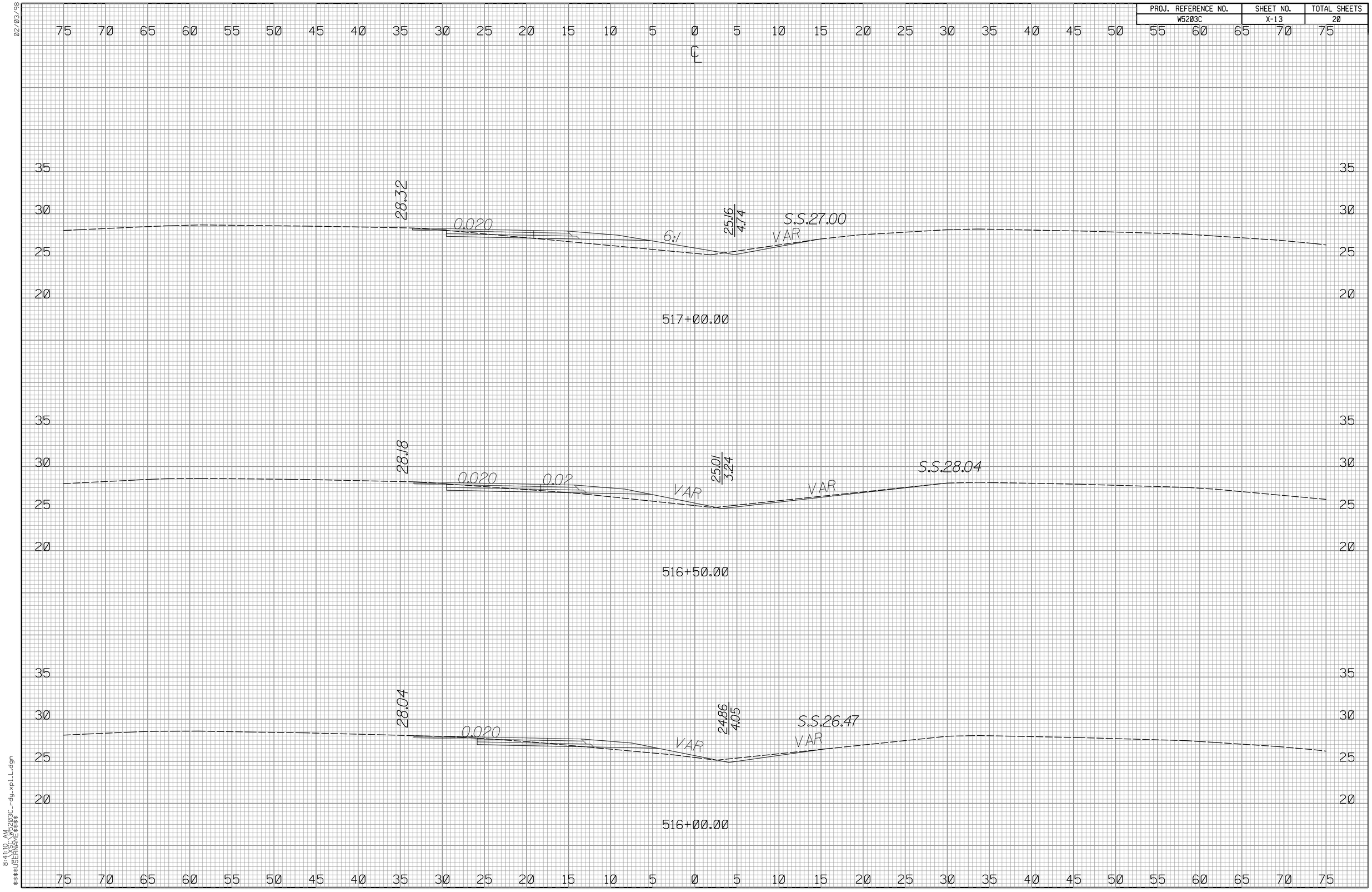

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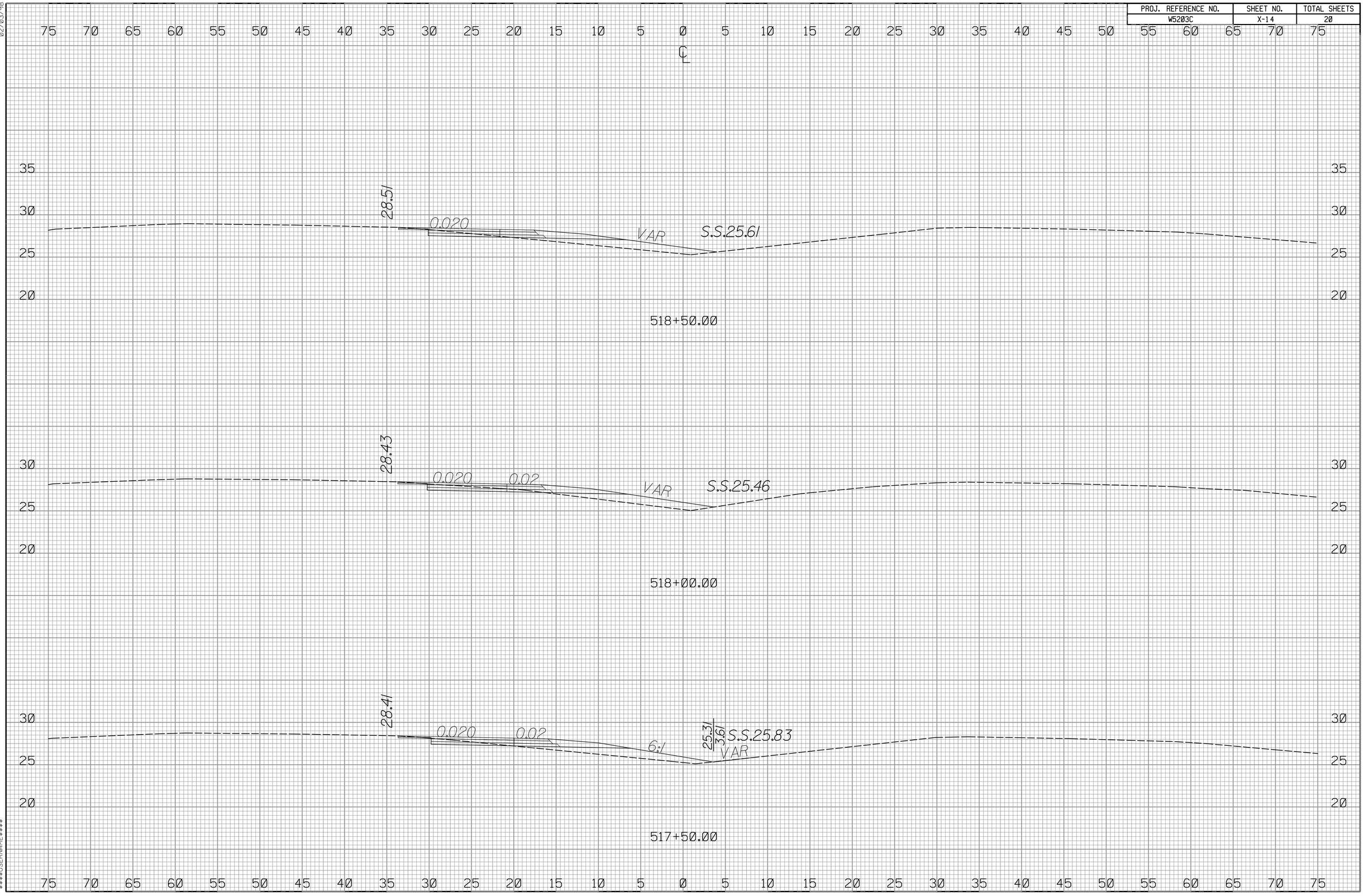

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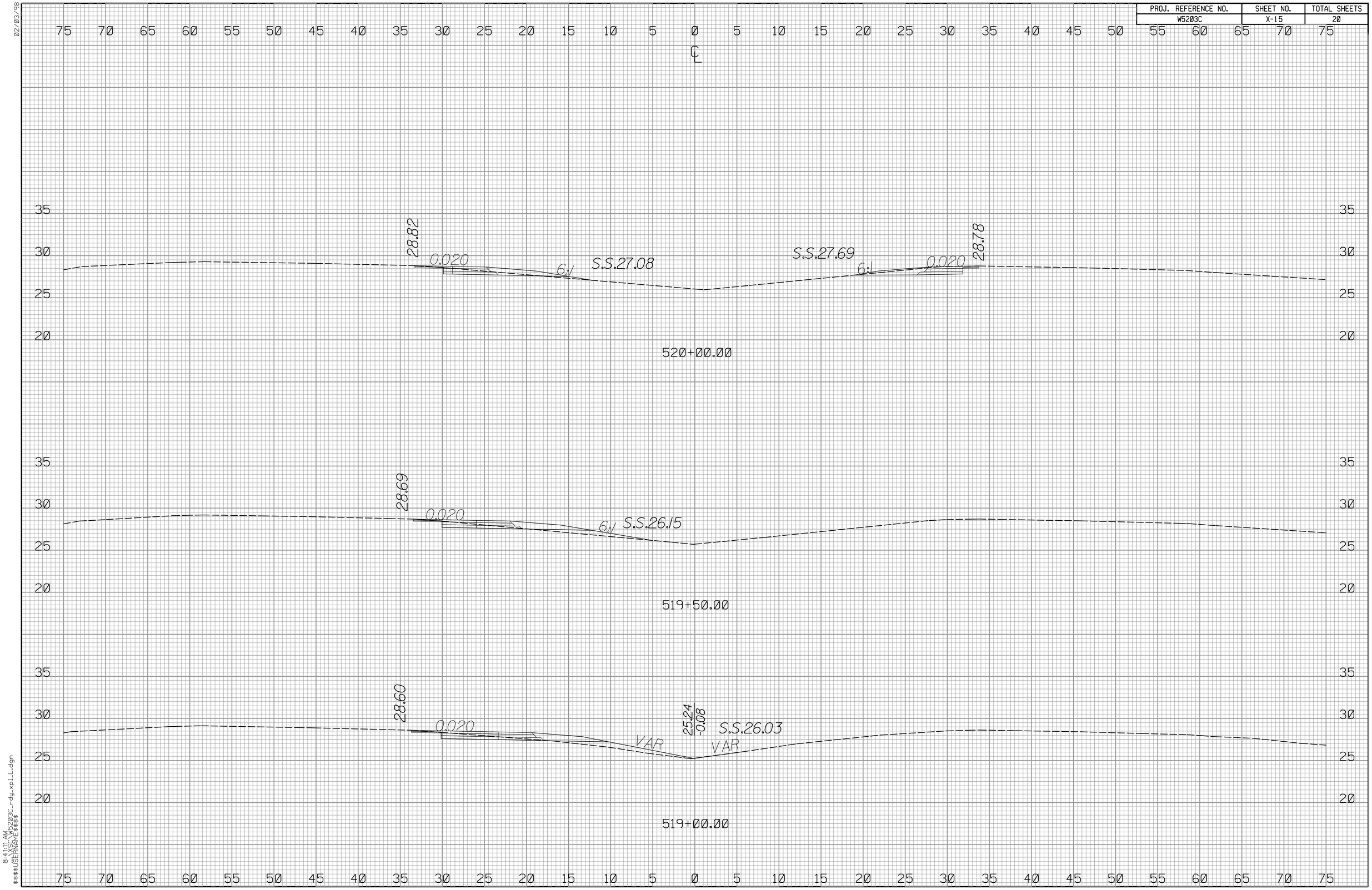

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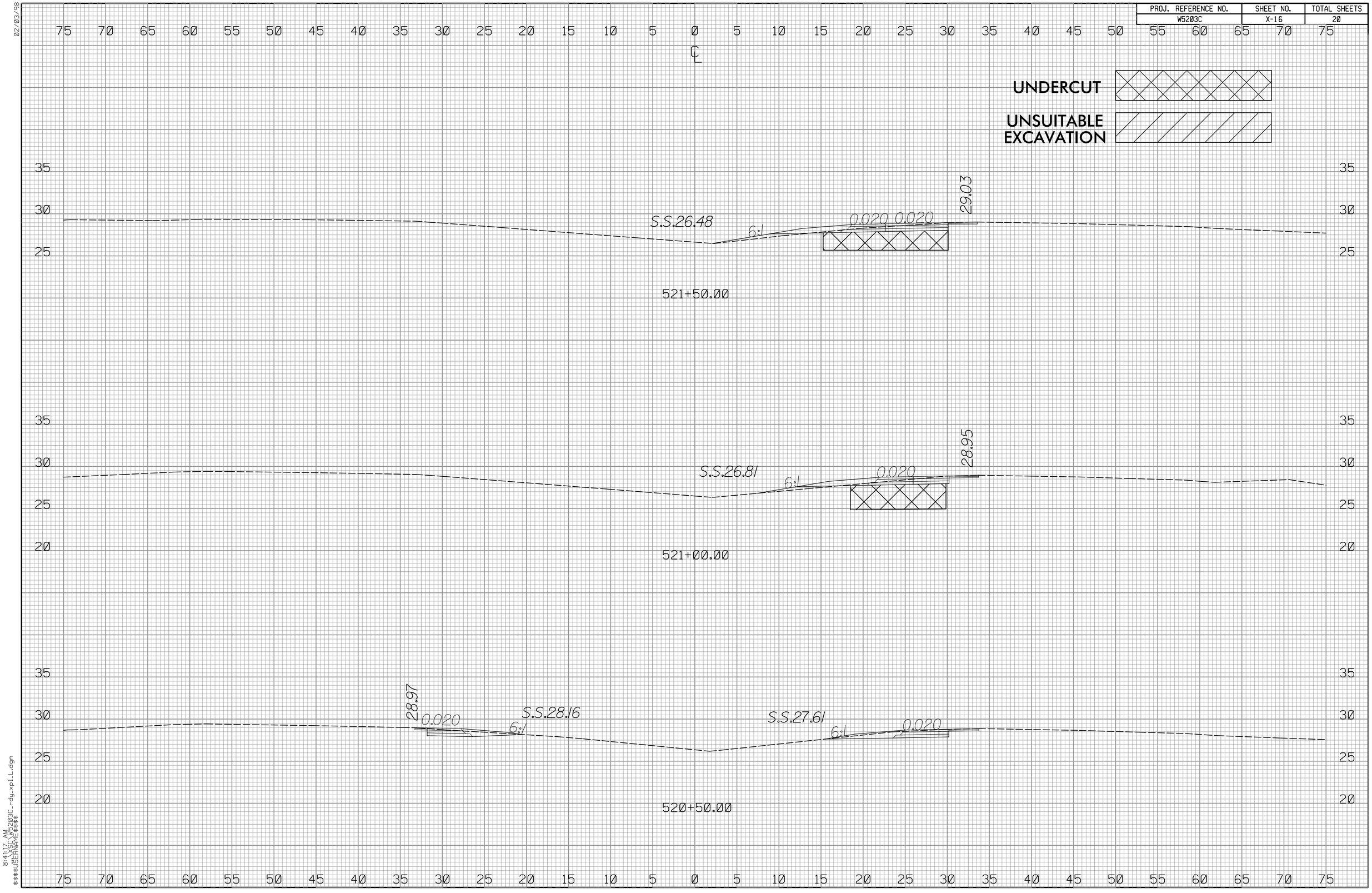

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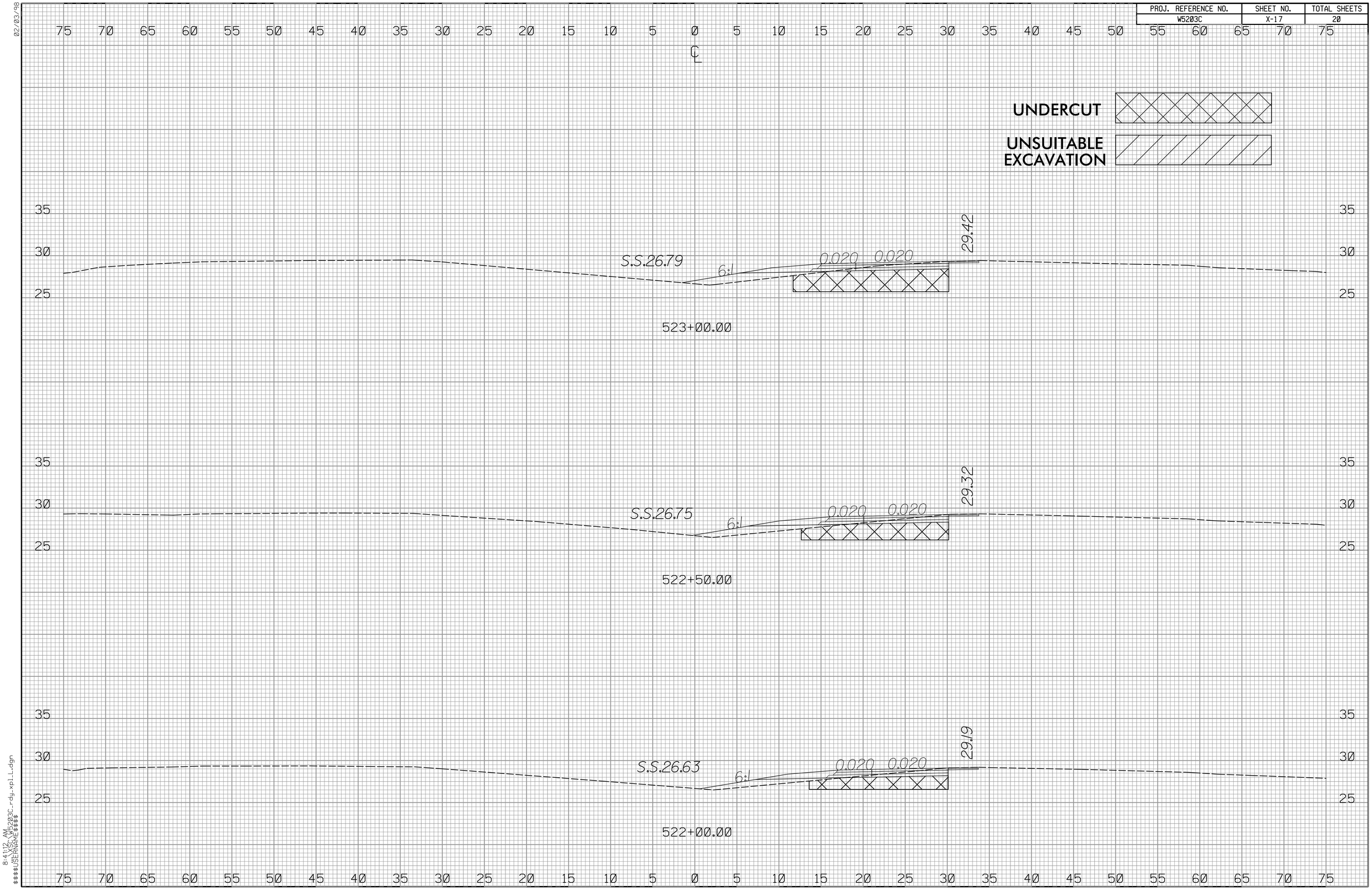

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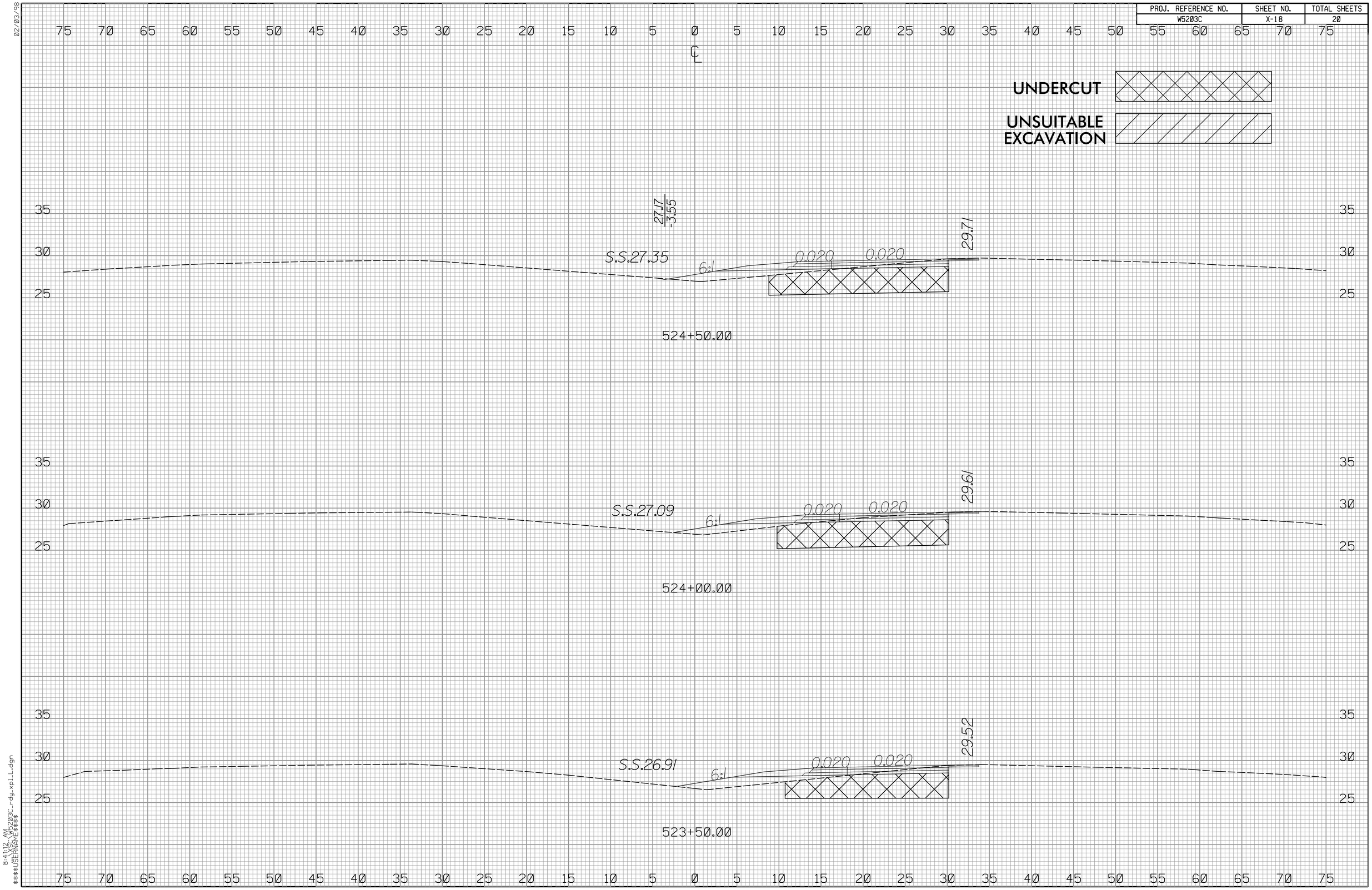

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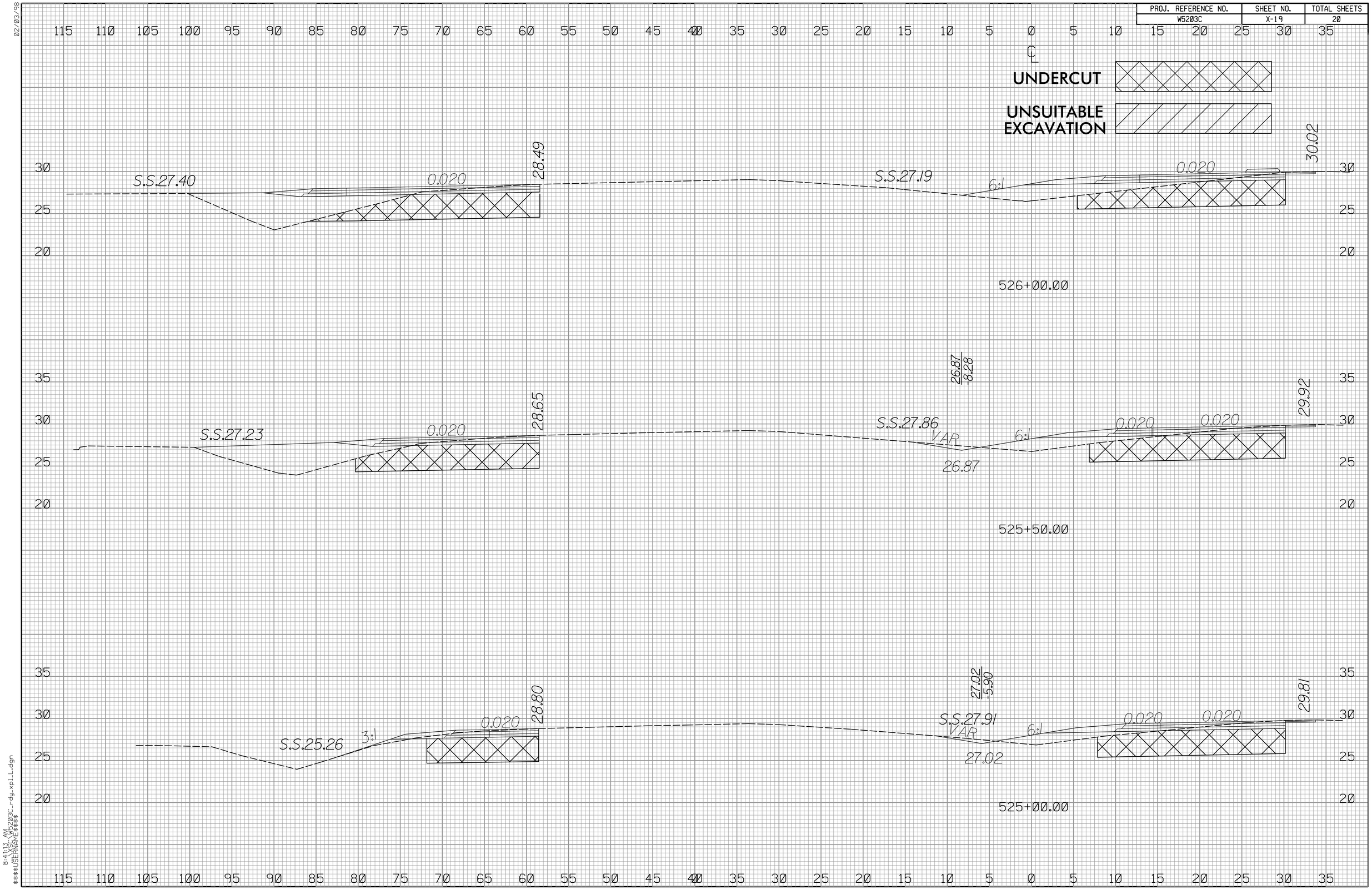

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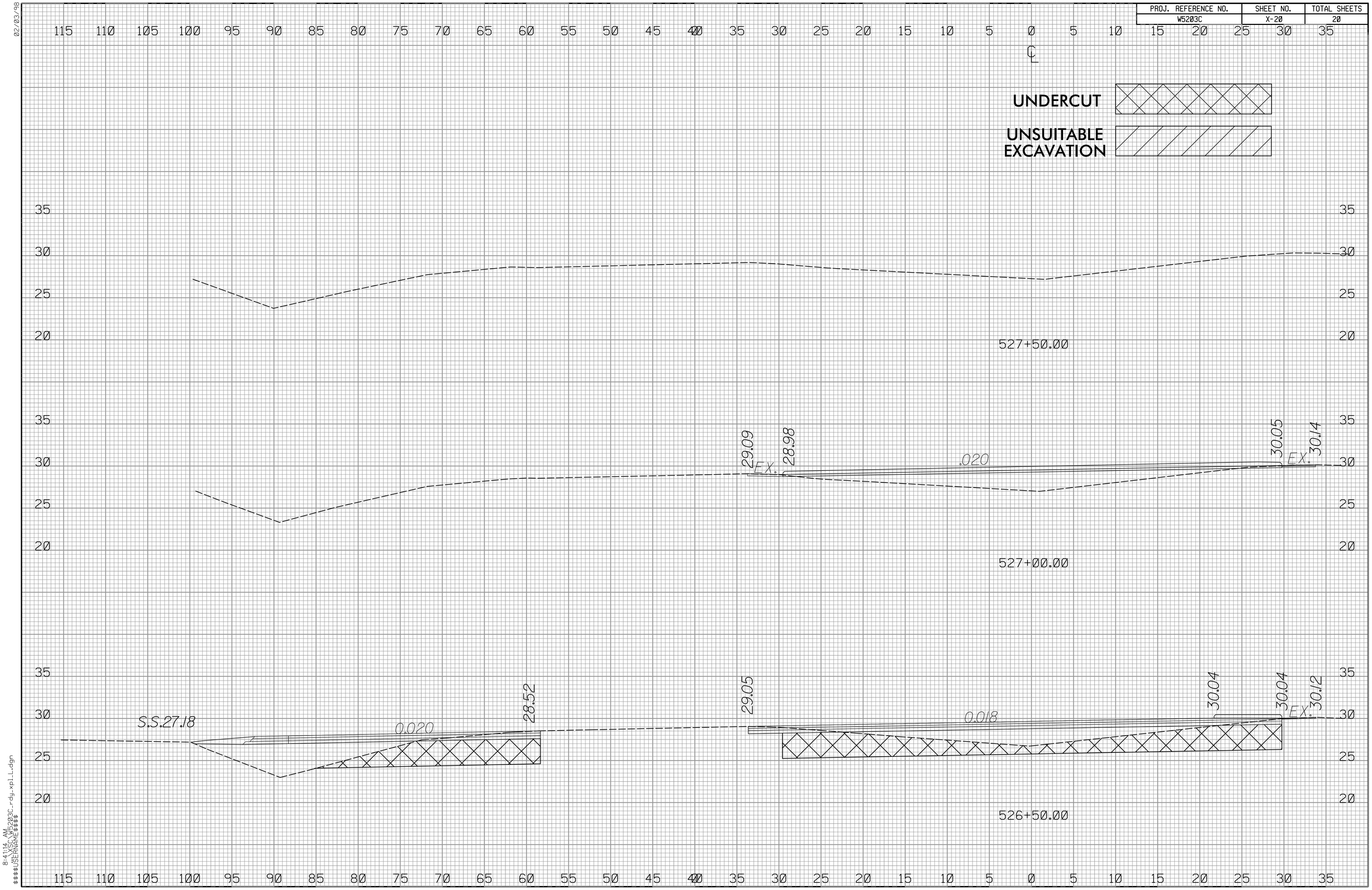

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