

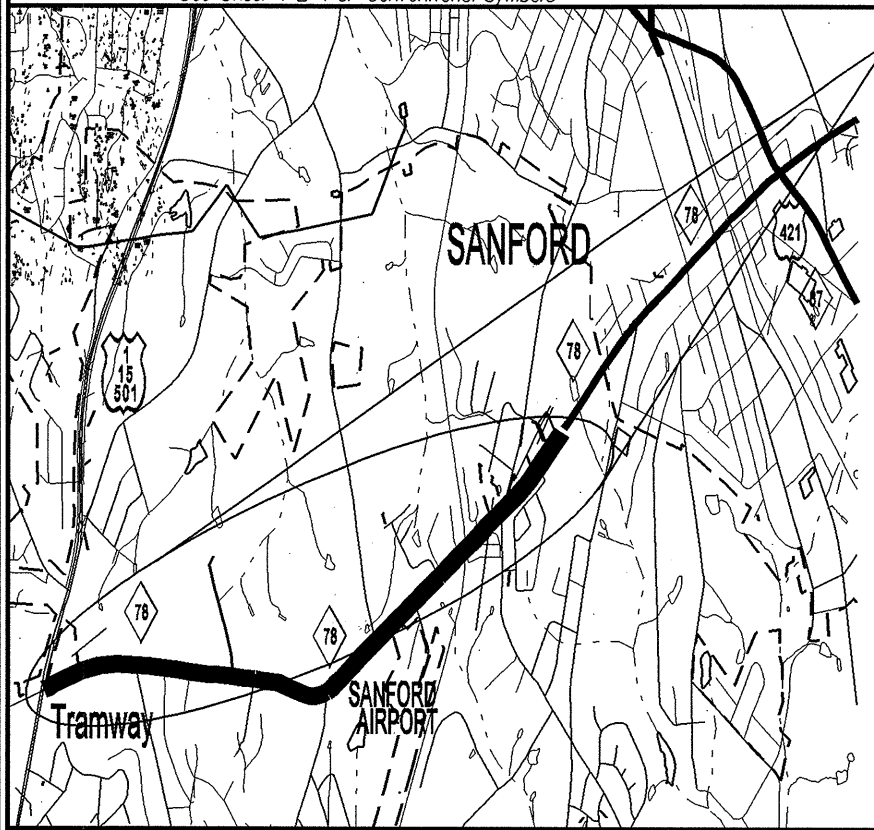
09/08/09

NC 78

TIP PROJECT: R-5141

CONTRACT:

See Sheet 1-A For Index of Sheets
See Sheet 1-B For Conventional Symbols



VICINITY MAP

PROJECT LOCATION

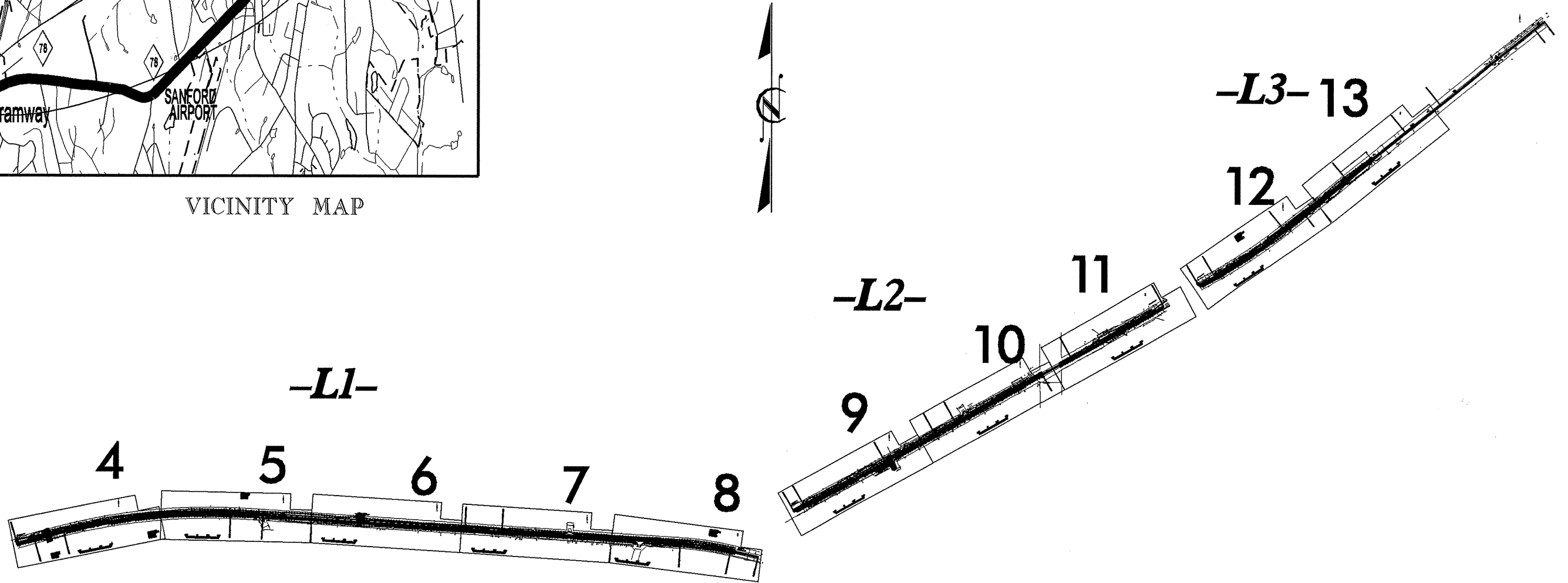
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

LEE COUNTY

LOCATION: NC 78 (TRAMWAY RD) FROM TRAMWAY AT US 1
TO APPROXIMATELY 0.37 MILES EAST OF
SR 1146 (ST. ANDREW'S RD)

TYPE OF WORK: WIDENING, DRAINAGE, PAVING, PAVEMENT MARKINGS &
MARKERS, AND EROSION CONTROL

STATE	WEB ELEMENT	SHEET NO.	TOTAL SHEETS
N.C.	R-5141	1	
WEB ELEMENT	F.A. PROJ. NO.	DESCRIPTION	
45041.1STI	F.A. STM-0078(4)	PE, R/W	
45041.3STI	F.A. STM-0078(4)	CONST.	



07-APR-2009 09:04
D:\rdy\lee\nc78_widening\psh\nc-78_tsh.dgn
michael AT D8CAD239396

Prepared In the Office of:
DIVISION OF HIGHWAYS
DIVISION 8 DESIGN & CONSTRUCT UNIT
902 N. SANDHILLS BLVD.
ABERDEEN NC 28315
PLANS PREPARED BY: ???

PROJECT LENGTH
ROADWAY: 2.45 MILES
STRUCTURE: _____ MILES
TOTAL: 2.45 MILES

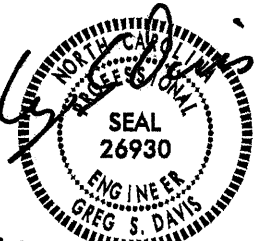
DIVISION OF HIGHWAYS

2006 STANDARD SPECIFICATIONS

LETTING DATE:
JUNE, 16 2009



DIVISION DESIGN & CONSTRUCT ENGINEER



4-7-09

INDEX OF SHEETS

INDEX OF SHEETS

SHEET NUMBER	SHEET
1	TITLE SHEET
1-A	INDEX OF SHEETS
1-B	CONVENTIONAL SYMBOLS
2	TYPICAL SECTION
2-A	DETAIL OF ANCHORAGE FOR FRAMES
3 THRU 3-A	SUMMARY OF QUANTITIES
3-B THRU 3-D	LIST OF PIPES, ENDWALLS, ETC.
3-E	SUMMARY OF EARTHWORK
4 THRU 13	PLAN SHEETS
TCP-1	TRAFFIC CONTROL SHEET
PM-1	PAVEMENT MARKING LEGEND AND NOTES
PM-2 THRU PM-11	PAVEMENT MARKING PLAN SHEETS
ECP-1	EROSION CONTROL TITLE SHEET
ECP-2	EROSION CONTROL NOTES, DETAILS
ECP-3 THRU ECP-12	EROSION CONTROL PLAN SHEETS
X-A THRU X-B	CROSS SECTION SUMMARY
X-1 THRU X-127	CROSS SECTIONS

GENERAL NOTES: 2006 SPECIFICATIONS

EFFECTIVE: 07-18-06
REVISED: 07-30-08

GRADING AND SURFACING OR RESURFACING AND WIDENING:

THE GRADE LINES SHOWN DENOTE THE FINISHED ELEVATION OF THE PROPOSED SURFACING AT GRADE POINTS SHOWN ON THE TYPICAL SECTIONS. WHERE NO GRADE LINES ARE SHOWN, THE PROFILES SHOWN DENOTE THE TOP ELEVATION OF THE EXISTING PAVEMENT ALONG THE CENTER LINE OF SURVEY ON WHICH THE PROPOSED RESURFACING WILL BE PLACED. GRADE LINES MAY BE ADJUSTED 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 III.

SHOULDER CONSTRUCTION:

ASPHALT, EARTH, AND CONCRETE SHOULDER CONSTRUCTION ON THE HIGH SIDE OF SUPERELEVATED CURVES SHALL BE IN ACCORDANCE WITH STD. NO. 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

ANY RELOCATION OF EXISTING UTILITIES WILL BE ACCOMPLISHED BY OTHERS PRIOR TO CONSTRUCTION.

2006 ROADWAY ENGLISH STANDARD DRAWINGS

EFF. 07-18-06
REV. 01-02-07

The following Roadway Standards as appear in "Roadway Standard Drawings" Highway Design Branch - N. C. Department of Transportation - Raleigh, N. C., Dated July 18, 2006 are applicable to this project and by reference hereby are considered a part of these plans:

STD.NO.	TITLE
DIVISION 2 - EARTHWORK	
200.03	Method of Clearing - Method III
225.02	Guide for Grading Subgrade - Secondary and Local

DIVISION 3 - PIPE CULVERTS

300.01	Method of Pipe Installation - Method 'A'
310.10	Driveway Pipe Construction

DIVISION 5 - SUBGRADE, BASES AND SHOULDERS

560.01	Method of Shoulder Construction - High Side of Superelevated Curve - Method I
560.02	Method of Shoulder Construction - High Side of Superelevated Curve - Method II

DIVISION 8 - INCIDENTALS

840.14	Concrete Drop Inlet
840.15	Brick Drop Inlet
840.16	Drop Inlet Frame and Grates
840.31	Concrete Junction Box - 12" thru 66" Pipe
840.32	Brick Junction Box - 12" thru 66"
840.54	Manhole Frame and Cover
840.72	Pipe Collar
876.02	Guide for Rip Rap at Pipe Outlets

STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

CONVENTIONAL PLAN SHEET SYMBOLS

BOUNDARIES AND PROPERTY:

Table listing symbols for boundaries and property: State Line, County Line, Township Line, City Line, Reservation Line, Property Line, Existing Iron Pin, Property Corner, Property Monument, Parcel/Sequence Number, Existing Fence Line, Proposed Woven Wire Fence, Proposed Chain Link Fence, Proposed Barbed Wire Fence, Existing Wetland Boundary, Proposed Wetland Boundary, Existing Endangered Animal Boundary, Existing Endangered Plant Boundary.

BUILDINGS AND OTHER CULTURE:

Table listing symbols for buildings and other culture: Gas Pump Vent or U/G Tank Cap, Sign, Well, Small Mine, Foundation, Area Outline, Cemetery, Building, School, Church, Dam.

HYDROLOGY:

Table listing symbols for hydrology: Stream or Body of Water, Hydro, Pool or Reservoir, Jurisdictional Stream, Buffer Zone 1, Buffer Zone 2, Flow Arrow, Disappearing Stream, Spring, Wetland, Proposed Lateral, Tail, Head Ditch, False Sump.

RAILROADS:

Table listing symbols for railroads: Standard Gauge, RR Signal Milepost, Switch, RR Abandoned, RR Dismantled.

RIGHT OF WAY:

Table listing symbols for right of way: Baseline Control Point, Existing Right of Way Marker, Existing Right of Way Line, Proposed Right of Way Line, Proposed Right of Way Line with Iron Pin and Cap Marker, Proposed Right of Way Line with Concrete or Granite Marker, Existing Control of Access, Proposed Control of Access, Existing Easement Line, Proposed Temporary Construction Easement, Proposed Temporary Drainage Easement, Proposed Permanent Drainage Easement, Proposed Permanent Utility Easement.

ROADS AND RELATED FEATURES:

Table listing symbols for roads and related features: Existing Edge of Pavement, Existing Curb, Proposed Slope Stakes Cut, Proposed Slope Stakes Fill, Proposed Wheel Chair Ramp, Proposed Wheel Chair Ramp Curb Cut, Curb Cut for Future Wheel Chair Ramp, Existing Metal Guardrail, Proposed Guardrail, Existing Cable Guiderail, Proposed Cable Guiderail, Equality Symbol, Pavement Removal.

VEGETATION:

Table listing symbols for vegetation: Single Tree, Single Shrub, Hedge, Woods Line, Orchard, Vineyard.

EXISTING STRUCTURES:

Table listing symbols for existing structures: MAJOR: Bridge, Tunnel or Box Culvert, Bridge Wing Wall, Head Wall and End Wall; MINOR: Head and End Wall, Pipe Culvert, Footbridge, Drainage Box: Catch Basin, DI or JB, Paved Ditch Gutter, Storm Sewer Manhole, Storm Sewer.

UTILITIES:

Table listing symbols for utilities: POWER: Existing Power Pole, Proposed Power Pole, Existing Joint Use Pole, Proposed Joint Use Pole, Power Manhole, Power Line Tower, Power Transformer, U/G Power Cable Hand Hole, H-Frame Pole, Recorded U/G Power Line, Designated U/G Power Line (S.U.E.*).

TELEPHONE:

Table listing symbols for telephone: Existing Telephone Pole, Proposed Telephone Pole, Telephone Manhole, Telephone Booth, Telephone Pedestal, Telephone Cell Tower, U/G Telephone Cable Hand Hole, Recorded U/G Telephone Cable, Designated U/G Telephone Cable (S.U.E.*), Recorded U/G Telephone Conduit, Designated U/G Telephone Conduit (S.U.E.*), Recorded U/G Fiber Optics Cable, Designated U/G Fiber Optics Cable (S.U.E.*).

WATER:

Table listing symbols for water: Water Manhole, Water Meter, Water Valve, Water Hydrant, Recorded U/G Water Line, Designated U/G Water Line (S.U.E.*), Above Ground Water Line.

TV:

Table listing symbols for TV: TV Satellite Dish, TV Pedestal, TV Tower, U/G TV Cable Hand Hole, Recorded U/G TV Cable, Designated U/G TV Cable (S.U.E.*), Recorded U/G Fiber Optic Cable, Designated U/G Fiber Optic Cable (S.U.E.*).

GAS:

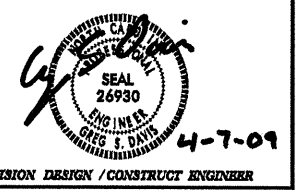
Table listing symbols for gas: Gas Valve, Gas Meter, Recorded U/G Gas Line, Designated U/G Gas Line (S.U.E.*), Above Ground Gas Line.

SANITARY SEWER:

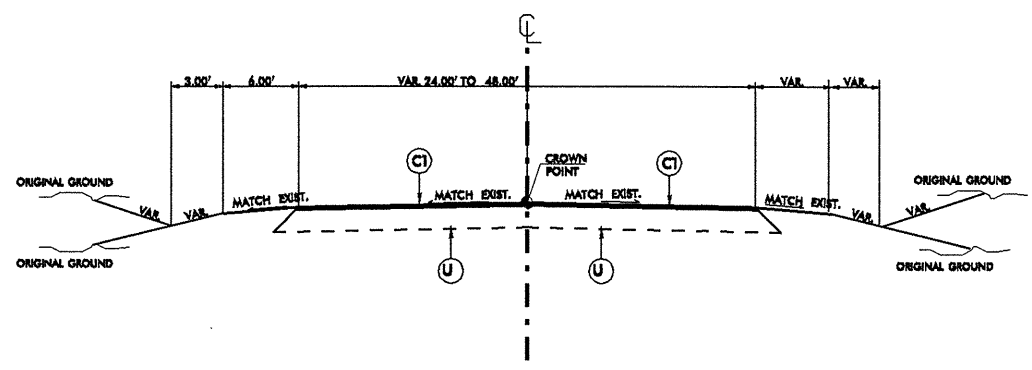
Table listing symbols for sanitary sewer: Sanitary Sewer Manhole, Sanitary Sewer Cleanout, U/G Sanitary Sewer Line, Above Ground Sanitary Sewer, Recorded SS Forced Main Line, Designated SS Forced Main Line (S.U.E.*).

MISCELLANEOUS:

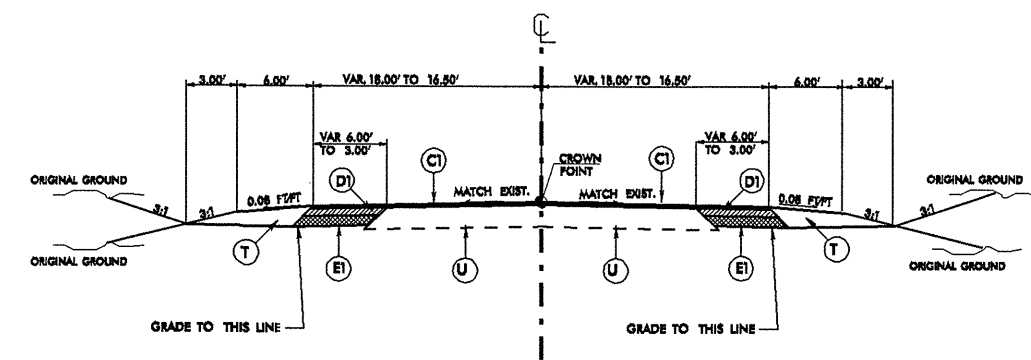
Table listing symbols for miscellaneous: Utility Pole, Utility Pole with Base, Utility Located Object, Utility Traffic Signal Box, Utility Unknown U/G Line, U/G Tank; Water, Gas, Oil, A/G Tank; Water, Gas, Oil, U/G Test Hole (S.U.E.*), Abandoned According to Utility Records, End of Information.



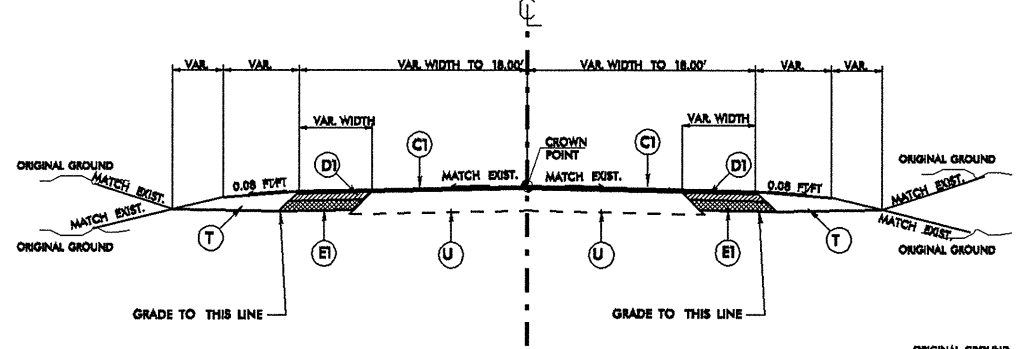
TYPICAL SECTION NO. 1
 USE TYPICAL SECTION NO. 1
 VARIABLE WIDTH RESURFACING
 FROM US 1 TO -L1- 11+11 &
 FROM -L2- 47+17 TO -L3- 10+00.



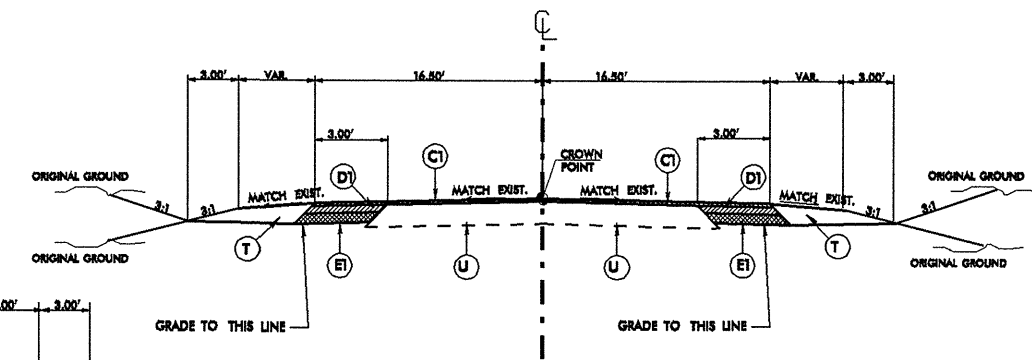
TYPICAL SECTION NO. 4
 USE TYPICAL SECTION NO. 4
 FROM -L2- 32+37 TO -L2- 33+37



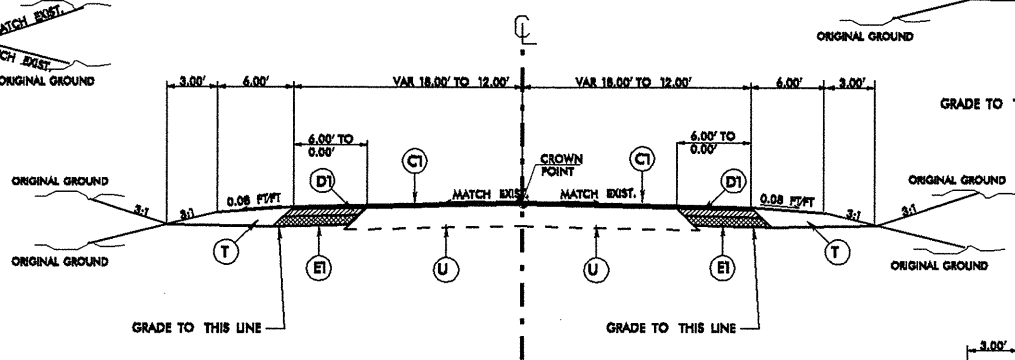
TYPICAL SECTION NO. 2
 USE TYPICAL SECTION NO. 2
 FROM -L1- 74+00 TO -L1- 77+00 &
 FROM -L2- 10+00 TO -L2- 14+00 &
 FROM -L2- 42+45 TO -L2- 47+17
 FROM -L3- 10+00 TO -L3- 11+86.



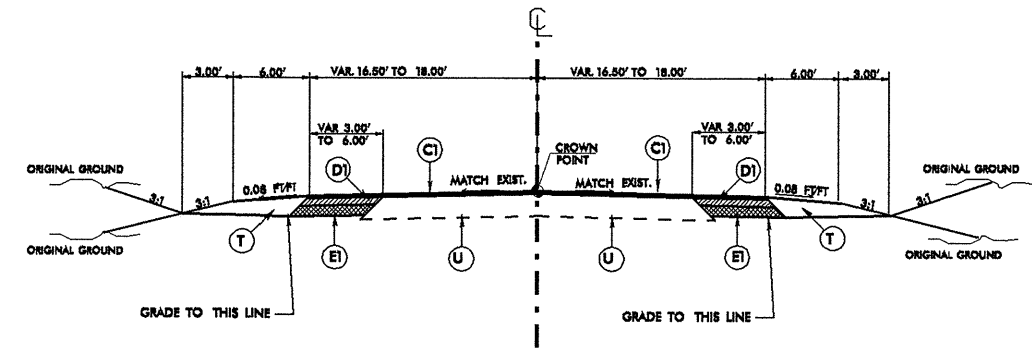
TYPICAL SECTION NO. 5
 USE TYPICAL SECTION NO. 5
 FROM -L2- 33+37 TO -L2- 35+10 &
 FROM -L2- 37+10 TO -L2- 41+45



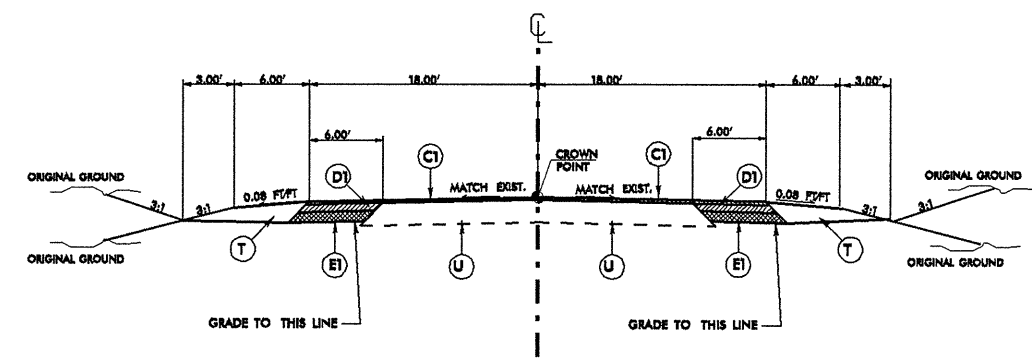
TYPICAL SECTION NO. 7
 USE TYPICAL SECTION NO. 7
 FROM -L3- 26+95 TO -L3- 30+00.



TYPICAL SECTION NO. 6
 USE TYPICAL SECTION NO. 6
 FROM -L2- 41+45 TO -L2- 42+45



TYPICAL SECTION NO. 3
 USE TYPICAL SECTION NO. 3
 FROM -L1- 11+11 TO -L1- 74+00 &
 FROM -L2- 14+00 TO -L2- 32+37 &
 FROM -L3- 11+86 TO -L3- 26+95.



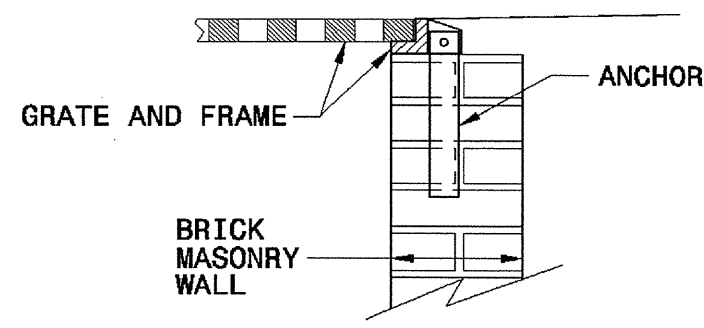
PAVEMENT SCHEDULE	
C1	PROP. APPROX. 2" (TWO) ASPHALT CONCRETE SURFACE COURSE, TYPE 89.00, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
D1	PROP. APPROX. 4" (FOUR) ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 118.00, AT AN AVERAGE RATE OF 488 LBS. PER SQ. YD.
E1	PROP. APPROX. 3 1/4" ASPHALT CONCRETE BASE COURSE, TYPE 528.00, AT AN AVERAGE RATE OF 827 LBS. PER SQ. YD.
U	EXISTING PAVEMENT.
T	EARTH MATERIAL.

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

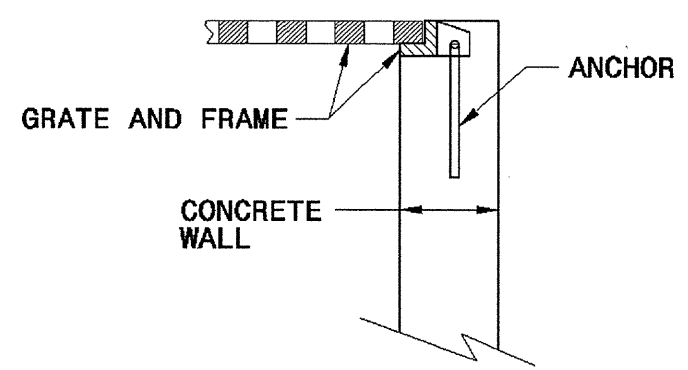
NOTE:
 ALL SLOPES ARE 3:1 UNLESS NOTED DIFFERENT IN THE CROSS SECTIONS.
 ALL SLOPES ARE SUBJECT TO CHANGE AT THE ENGINEERS DIRECTIONS.

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

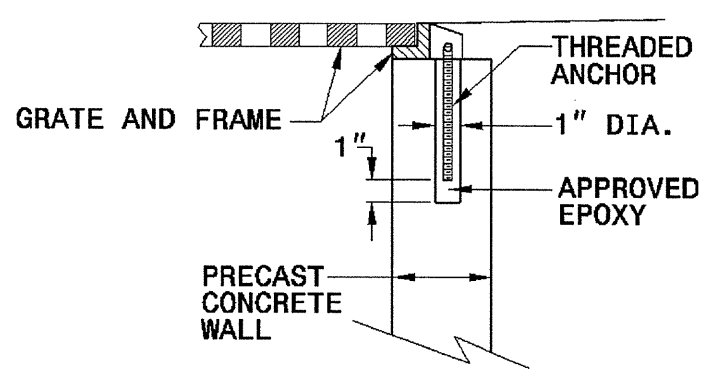
ENGLISH DETAIL DRAWING FOR
ANCHORAGE FOR FRAMES
BRICK/CONCRETE/PRECAST CONCRETE



BRICK MASONRY CONSTRUCTION



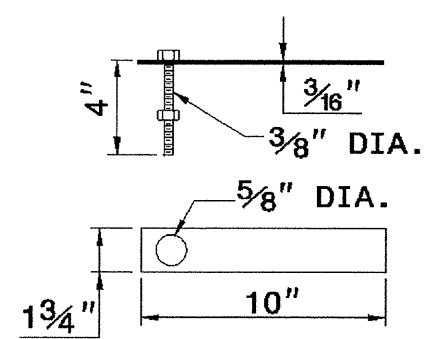
CONCRETE CONSTRUCTION



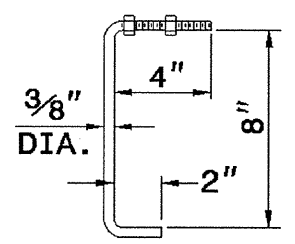
PRECAST CONCRETE CONSTRUCTION

DETAIL SHOWING ANCHORAGE OF FRAME FOR GRATED DROP INLET

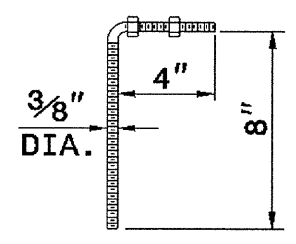
NOTE:
CONSTRUCT GRATED DROP INLET TO COINCIDE WITH NORMAL OR SUPERELEVATED SHOULDER OR PAVEMENT SLOPE.



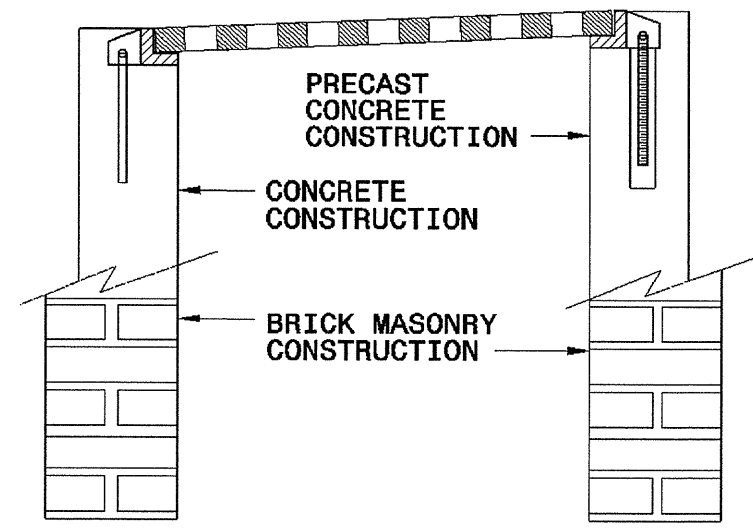
MASONRY ANCHOR
3/8" DIA. BOLT WITH PLATE



CONCRETE ANCHOR
3/8" DIA. BENT BAR



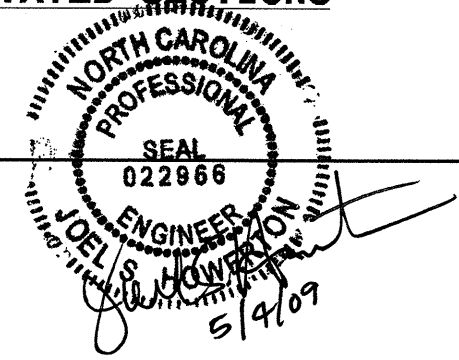
PRECAST CONCRETE ANCHOR
3/8" DIA. BENT BAR



FRAME AND GRATE INSTALLATION FOR NORMAL CROWN AND SUPERELEVATED SECTIONS

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR
ANCHORAGE FOR FRAMES
BRICK/CONCRETE/PRECAST CONCRETE



PROJECT NO.	SHEET NO.	TOTAL NO.
R-5141	3	

SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	FINAL SURFACE TESTING REQUIRED	LENGTH MI	WIDTH FT	GRADING LS	SUPPLEMENTARY CLEARING & GRUBBING ACR	FOUND. COND. MATERIAL, MINOR STRUCTURES TON	15" RC PIPE CULVERT, CLASS III LF	18" RC PIPE CULVERT, CLASS III LF	24" RC PIPE CULVERT, CLASS III LF	36" RC PIPE CULVERT, CLASS III LF	PIPE REMOVAL LF	INCIDENTAL STONE BASE TONS	INCIDENTAL MILLING SY	BASE COURSE, B25.0C TONS	INTER-MEDIATE COURSE, I19.0C TONS	SURFACE COURSE, S9.5C TONS	PG 64-22 PLANT MIX TONS	PG 70-22 PLANT MIX TONS	PIPE COLLAR CY
R-5141	Lee	1	NC 78	FROM US 1 NORTH TO -L1- 77+00	1,2,3	No	1.26	24	*	*	98	798	40	72		752	280	100	3,055	2,160	3,225	233	195	1.6
		2	NC 78	FROM STA. -L2- 10+00 TO -L3- 10+00	1,2,3,4,5,6	No	0.81	24	*	*	115	708	228	140		790	180	150	1,200	850	2,055	92	123	1.6
		3	NC 78	FROM STA. -L3- 10+00 TO 30+00	2,3,7	No	0.38	24	*	*	70	260	390		8	563	80	60	795	580	955	61	57	0.8
TOTAL FOR PROJ NO. 45041.3.ST1							2.45		1	1	283	1766	658	212	8	2105	540	310	5,050	3,590	6,235	386	375	4.0
GRAND TOTAL							2.45		1	1	283	1766	658	212	8	2105	540	310	5,050	3,590	6,235	386	375	4.0

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	MASONRY DRAINAGE STRUCTURE EA	FRAME WITH COVER, STD. 840.54 EA	STEEL FRAME WITH 2 GRATES, STD. 840.16 EA	RIP RAP, CLASS B TN	FILTER FABRIC FOR DRAINAGE SY	TEMP. SILT FENCE LF	EROSION CONTROL STONE, CLASS A TON	EROSION CONTROL STONE, CLASS B TON	SEDIMENT CONTROL STONE TON	TEMP. MULCHING ACR	MATTING (EROSION CONTROL) SY	PERMANENT SOIL REIN-FORCEMENT MAT SY	1/4" HARDWARE CLOTH LF	WATTLE LF	COIR FIBER BAFFLES LF	SEED & MULCHING AC	POLYACRYL AMIDE (PAM) LB
R-5141	Lee	1	NC 78	FROM US 1 NORTH TO -L1- 77+00	1,2,3	1	1		13	38	3,545	18	170	80	4.00	8,570			380	274	4.04	17
		2	NC 78	FROM STA. -L2- 10+00 TO -L3- 10+00	1,2,3,4,5,6	1		1	13	38	3,880	18	190	88	1.50	4,300		20	120	270	1.54	6
		3	NC 78	FROM STA. -L3- 10+00 TO 30+00	2,3,7				11	28	255	14	80	32	0.40	3,470	1,375		230	256	0.48	10
TOTAL FOR PROJ NO. 45041.3.ST1						2	1	1	37	104	7,680	50	440	200	5.90	16,340	1,375	20	730	800	6.06	33
GRAND TOTAL						2	1	1	37	104	7,680	50	440	200	5.90	16,340	1,375	20	730	800	6.06	33

PROJECT NO.	SHEET NO.	TOTAL NO.
R-5141	3-A	

THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TRAFFIC CONTROL LS	4685000000-E	4686000000-E			4697000000-E	4695000000-E	4710000000-E	4725000000-E			4770000000-E	4810000000-E	4850000000-E	4900000000-N	
						4" X 90 M WHITE THERMO LF	4" X 120 M WHITE THERMO LF	4" X 120 M YELLOW THERMO LF	8" X 120 M WHITE THERMO LF	8" X 90 M YELLOW THERMO LF	24" X 120 M WHITE THERMO LF	THERMO LT ARROW 90 M EA	THERMO STR & RT ARROW 90 M EA	THERMO STR ARROW 90 M EA	COLD- APPLIED PLASTIC PAVEMENT MARKINGS, TYPE 3 (4") LF	4" WHITE PAINT LF	4" YELLOW PAINT LF	4" LINE REMOVAL LF	CYAN & RED MARKERS EA	YELLOW & YELLOW MARKERS EA
R-5141	Lee	1	NC 78	FROM US 1 NORTH TO -L1- 77+00	*	16,720	335	15,300		275		39	2			16,000	15,000		8	335
		2	NC 78	FROM STA. -L2- 10+00 TO -L3- 10+00	*	9,050	350	9,375	100	285	140	30	4	2	900	9,000	8,800	800	20	200
		3	NC 78	FROM STA. -L3- 10+00 TO 30+00	*	4,005	30	4,675		65		10				4,000	4,700			101
TOTAL FOR PROJ NO. R-5141					Lump Sum	29,775	715	29,350	100	625	140	79	6	2	900	29,000	28,500	800	28	636
							30,065						87			57,500			664	
GRAND TOTAL					Lump Sum	29,775	715	29,350	100	625	140	79	6	2	900	29,000	28,500	800	28	636
							30,065						87			57,500			664	

COMPUTED BY: MRT DATE: MAR 10 09
CHECKED BY: GSD DATE: MAR 31, 2009

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PROJECT NO. R-5141 SHEET NO. 3-D

LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES 48" & UNDER)

Table with columns for Station, Location, Structure No., Top Elevation, Invert Elevation, Slope, Pipe Class (R.C. or Bituminous Coated C.S.), Pipe Size (12" to 48"), Endwalls, Quantities, Frame, Grates, and Hood Standard, Remarks, and Pipe Removal Lin. Ft. Includes sub-totals for Sheet and Project.

COMPUTED BY: MRT DATE: 3-31-09
 CHECKED BY: GSD DATE: 3-31-09

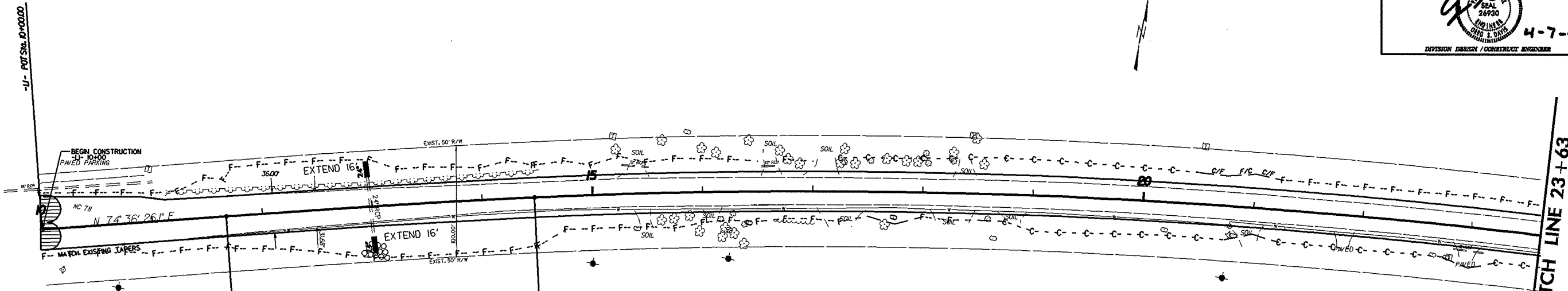
PROJECT NO. R-5141 SHEET NO. 3-E

**STATE OF NORTH CAROLINA
 DIVISION OF HIGHWAYS
 SUMMARY OF EARTHWORK**

Station	Station	Uncl. Excav.	Embank. +%	Borrow	Waste
-L1-					
10+00	77+00	4225	2208		2017
-L2-					
10+00	35+10	1799	847		952
37+10	47+00	278	306	28	
-L3-					
10+00	30+00	1633	407		1226
SUBTOTALS:		7935	3768	28	4195
WASTE TO REPLACE BORROW				-28	-28
PROJECT TOTALS:		7935			4167
GRAND TOTALS:		7935			4167
SAY:		7935			4170

Shoulder Borrow: 3706 CY

Approximate quantities only. Unclassified excavation, fine grading, clearing and grubbing, shoulder borrow and removal of existing pavement (for pipe installation at paved driveways) will be paid for at the lump sum price for "Grading".

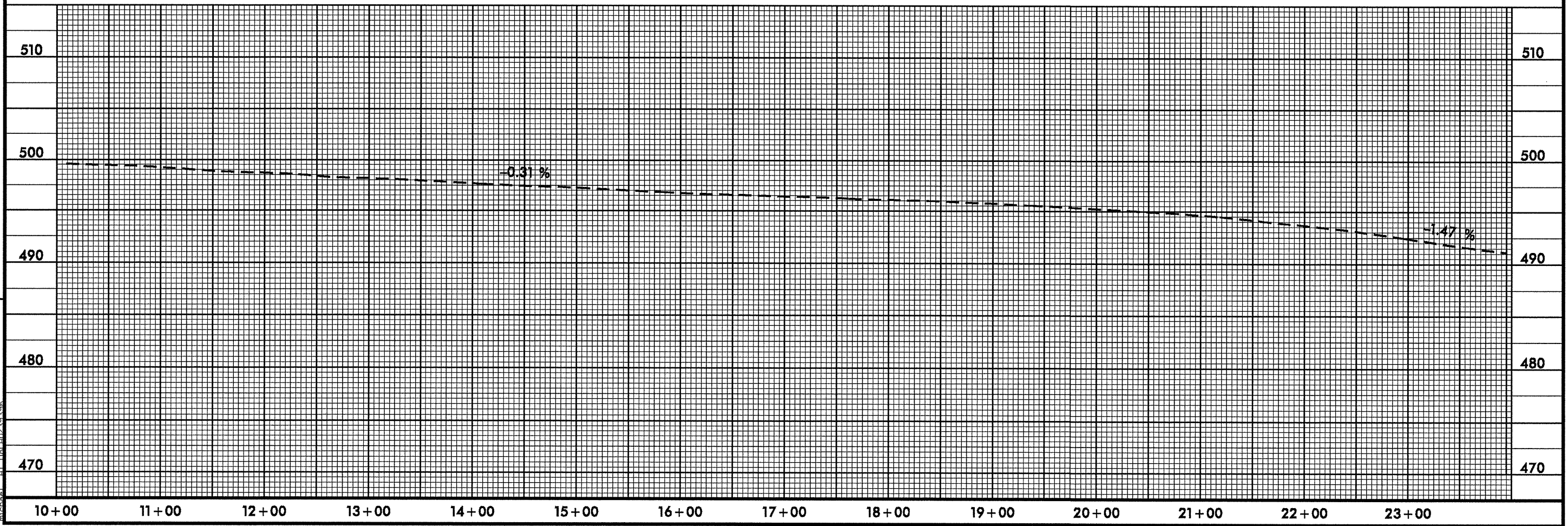


PIs Sta 13+54.31
 Gs = 1°26'05.8"
 Ls = 280.00'
 LT = 186.67'
 ST = 93.34'



PI Sta 22+35.09
 Δ = 16°02'13.0" (RT)
 D = 1°01'29.9"
 L = 1564.63'
 T = 787.46'
 R = 5590.00'

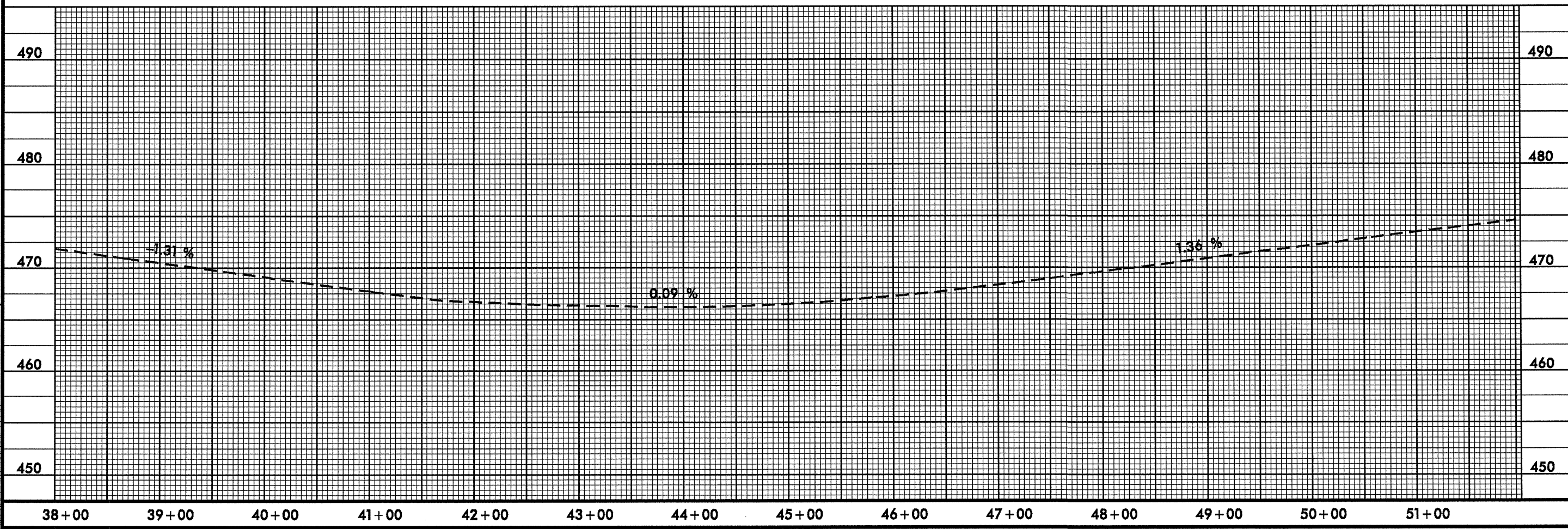
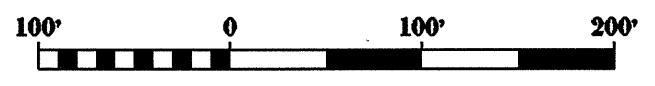
REVISIONS



07-APR-2009 09:04
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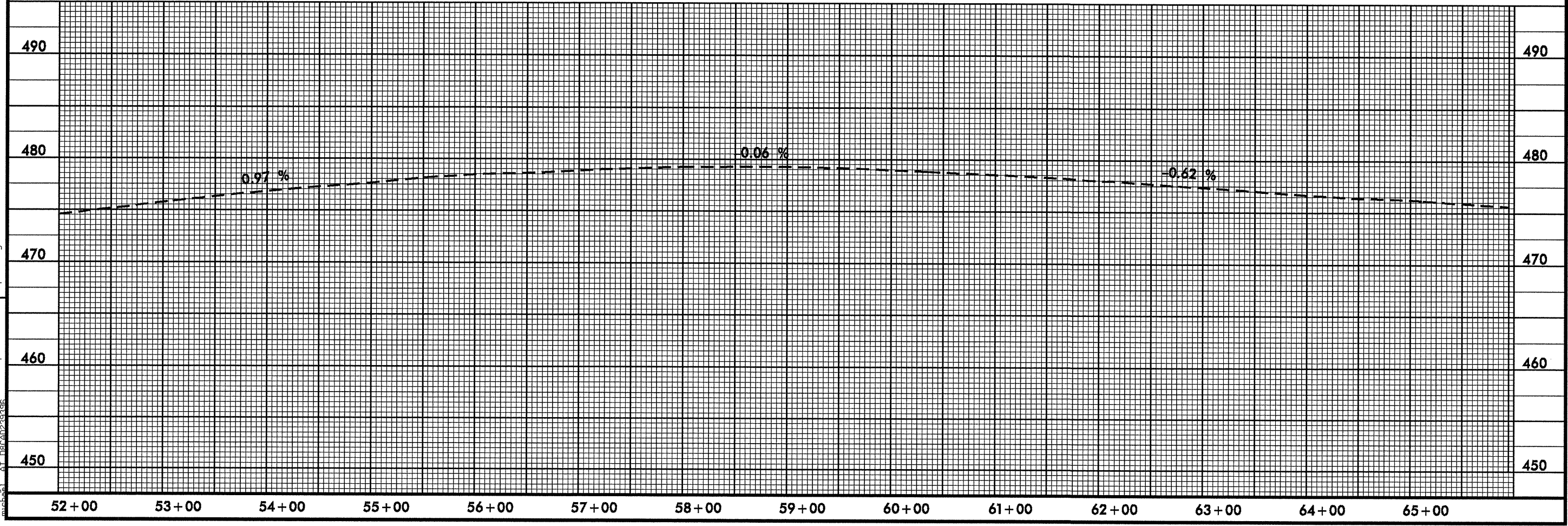
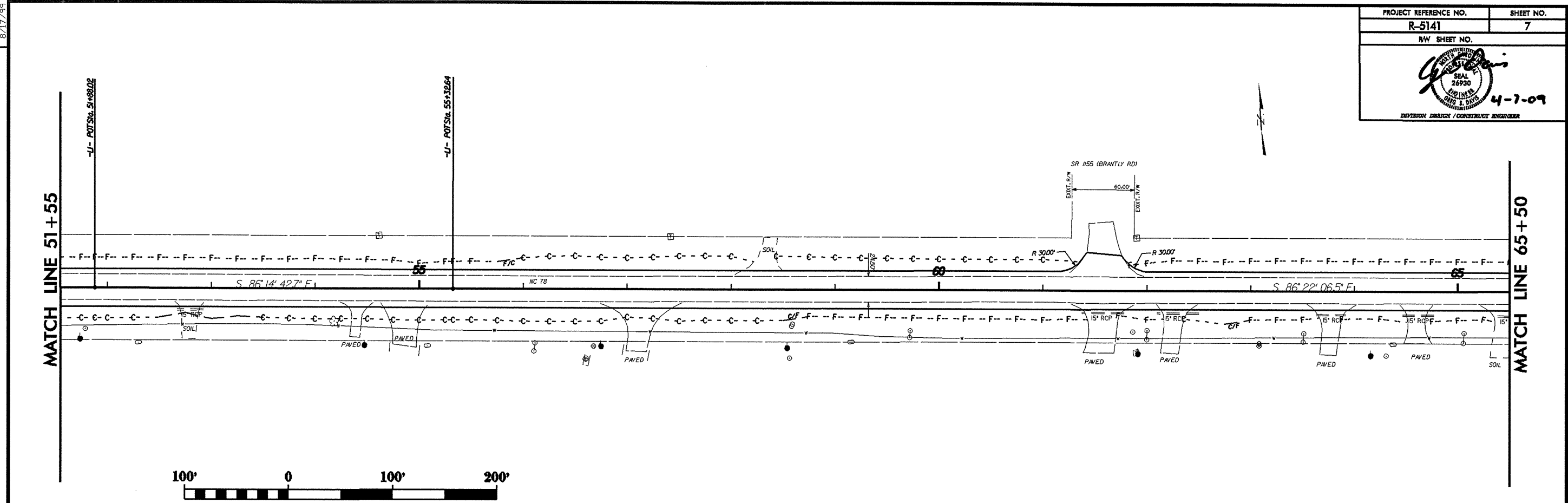
MATCH LINE 37+60

MATCH LINE 51+55



REVISIONS

09-APR-2009 11:55
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 8/17/99



REVISIONS

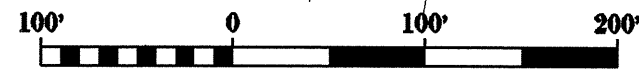
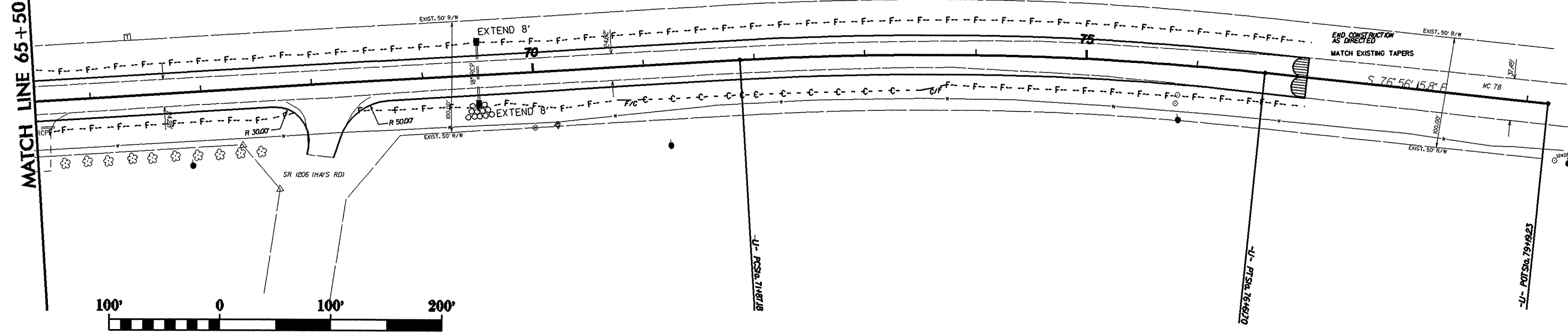
07-APR-2009 09:04 \\delaware\nc-78a\psh\dsm\nc78a.psh.7.dgn
 8/17/99

8/17/99

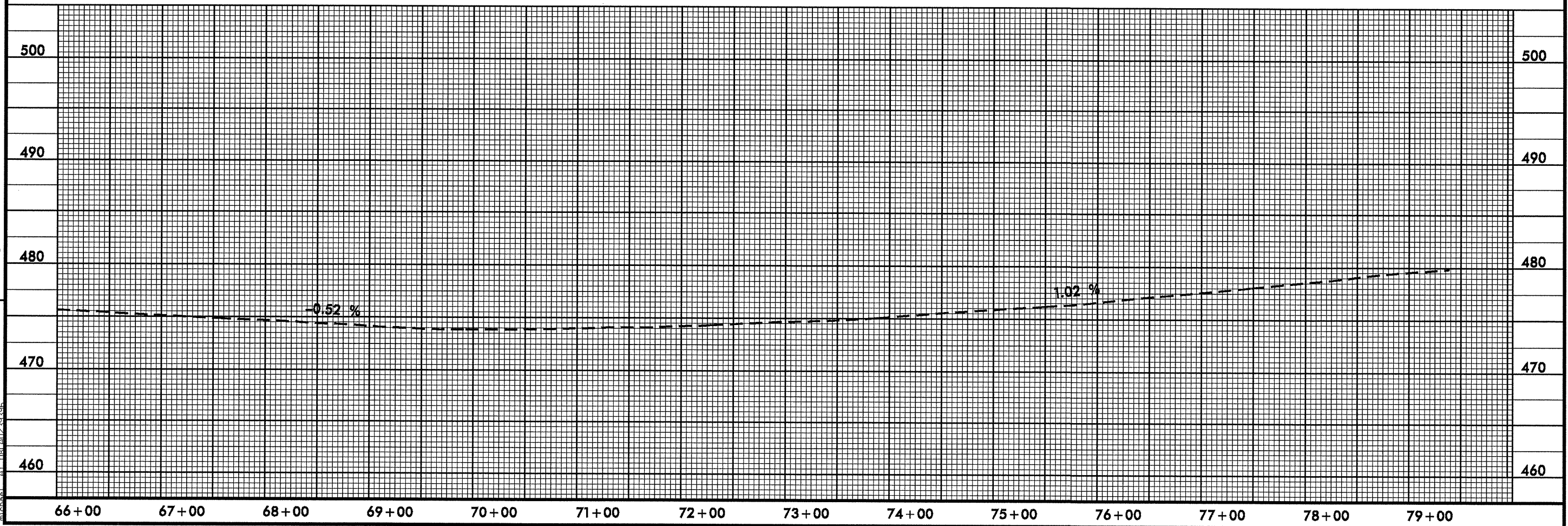
PROJECT REFERENCE NO. R-5141	SHEET NO. 8
RW SHEET NO.	
DIVISION DESIGN / CONSTRUCTION ENGINEER	

PI Sta 74+24.98
 $\Delta = 9^\circ 25' 50.7''$ (RT)
 $D = 159' 14.6''$
 $L = 474.53'$
 $T = 237.80'$
 $R = 2882.95'$

MATCH LINE 65+50



REVISIONS

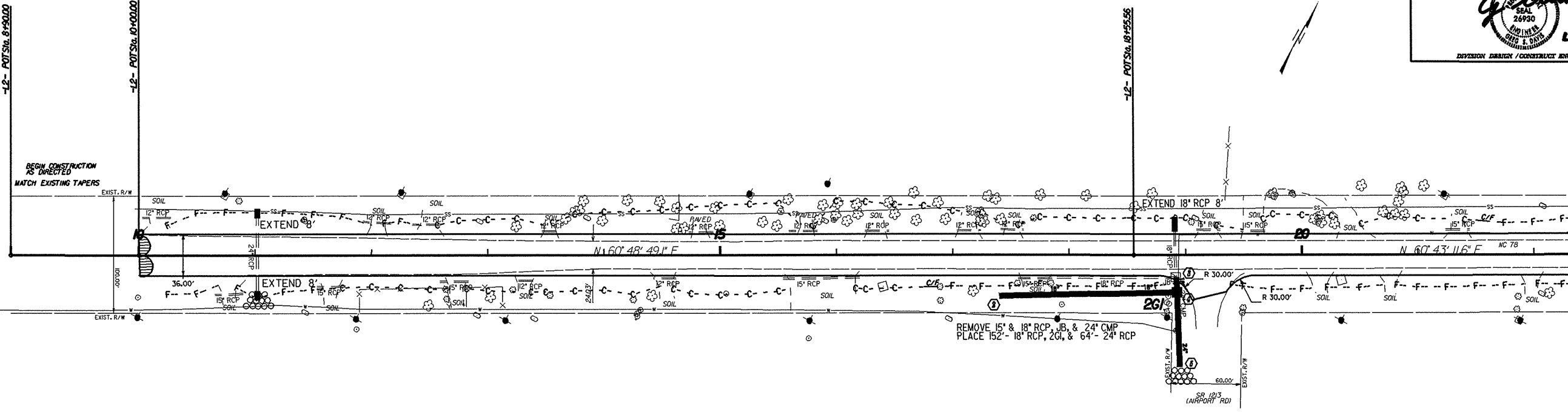


07-APR-2008 09:04
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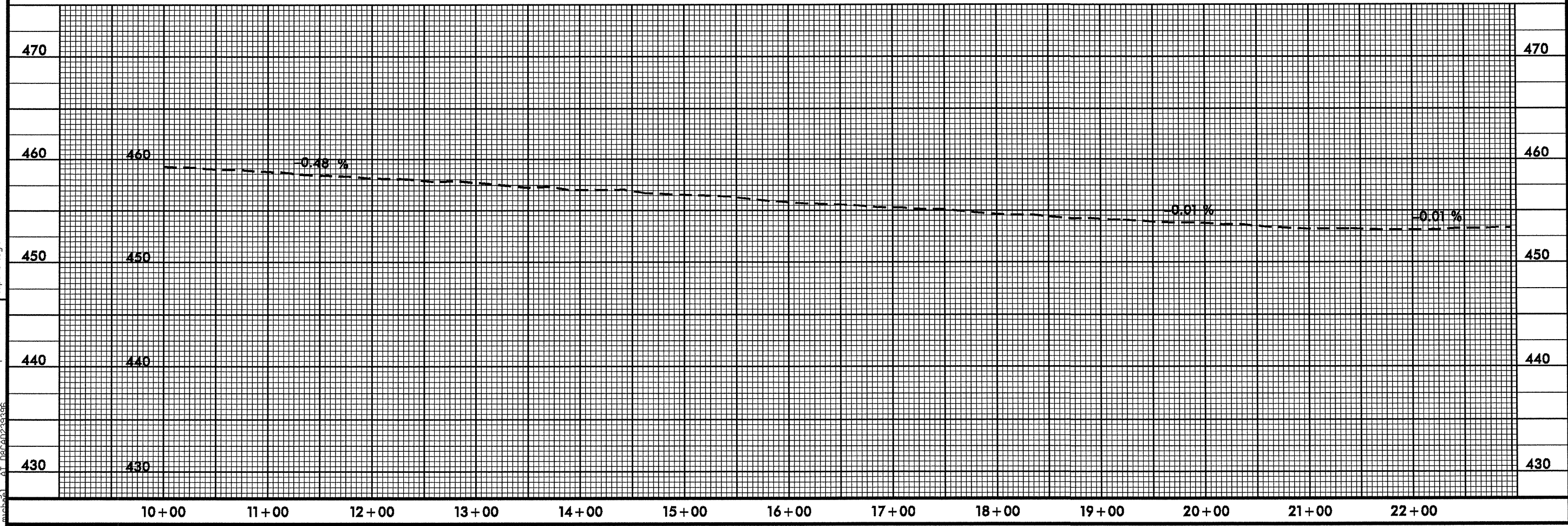
8/17/99

MATCH LINE 10+00 Ext. -155.00

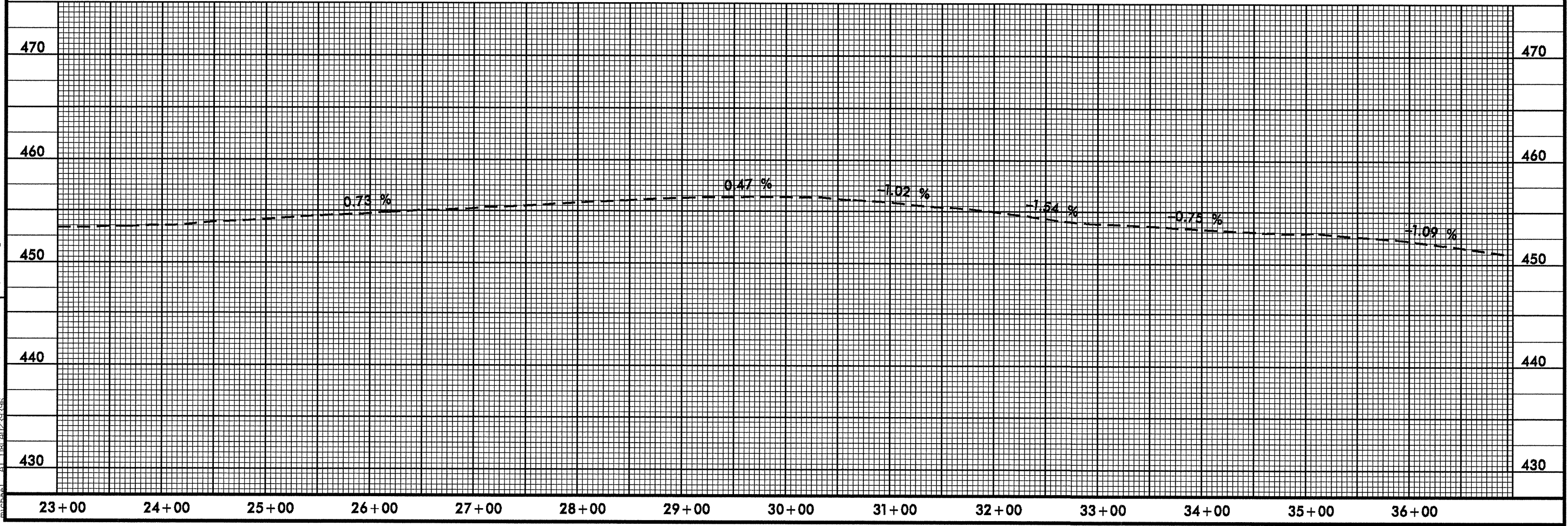
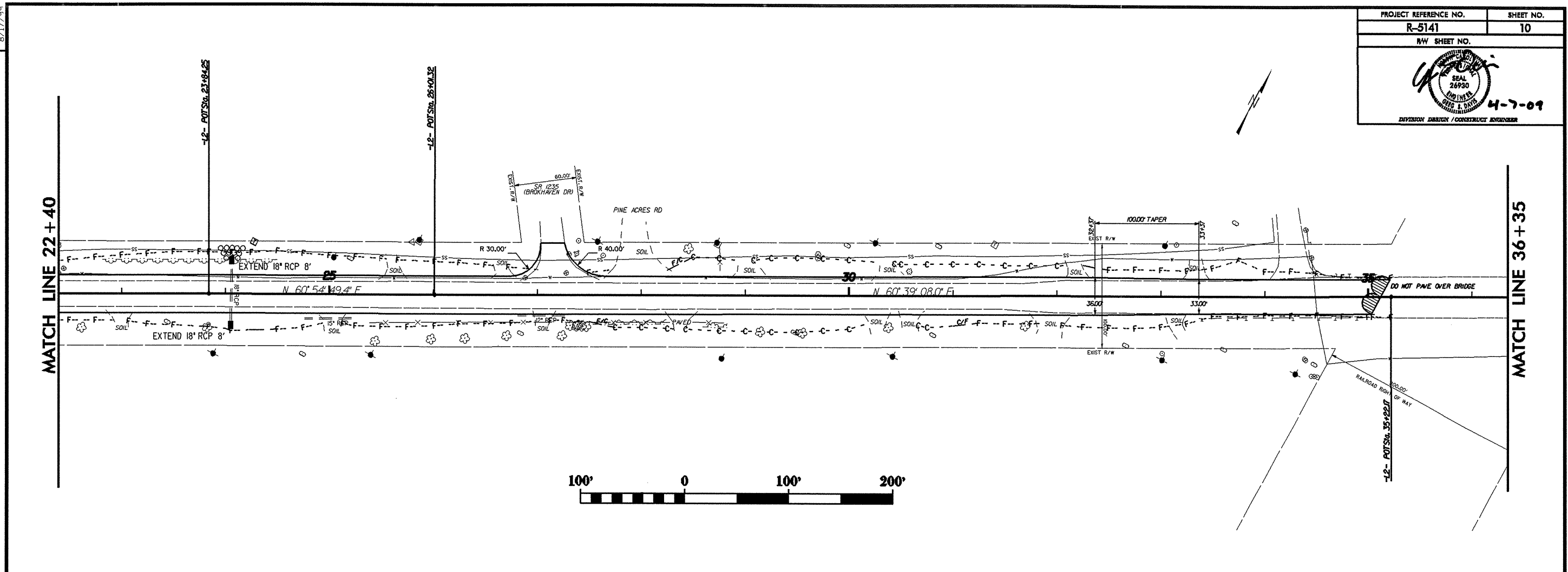
MATCH LINE 22+40



REVISIONS



09-APR-2009 11:49 ... 78b\psh\psh\dan\nc-78b\psh\psh\dan\nc-78b.psh_9.dgn



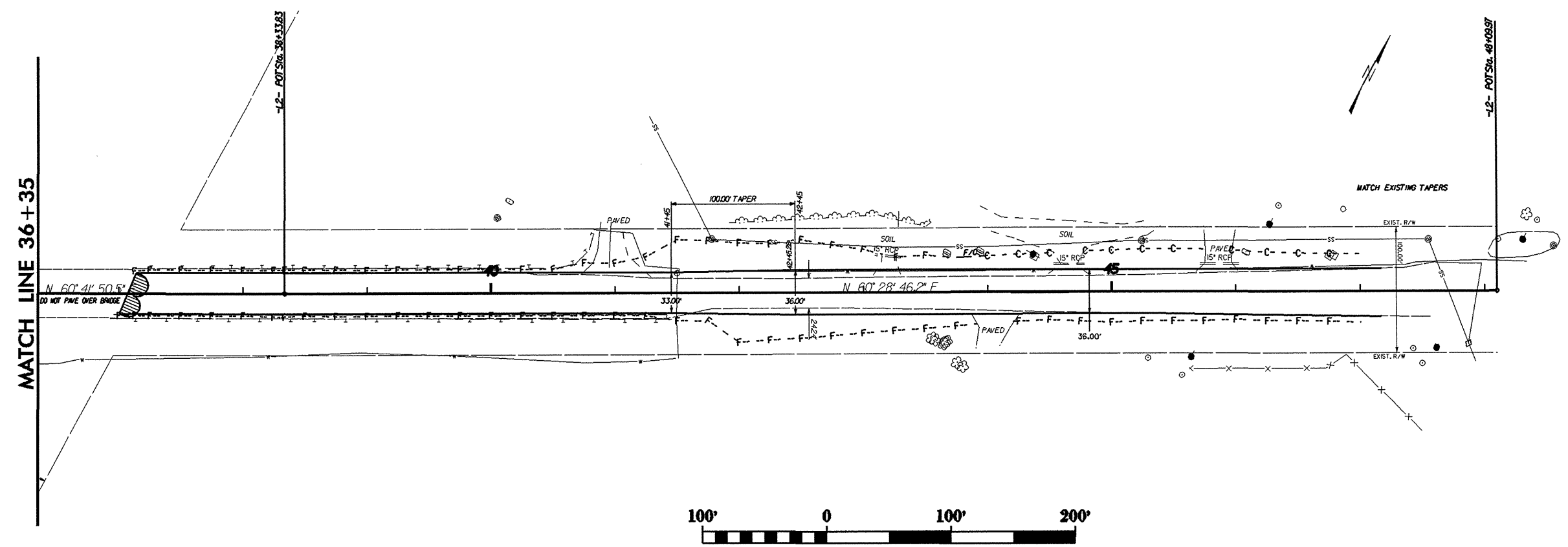
REVISIONS

8/17/99
 07-APR-2009 09:04
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 b.psh.10.dgn

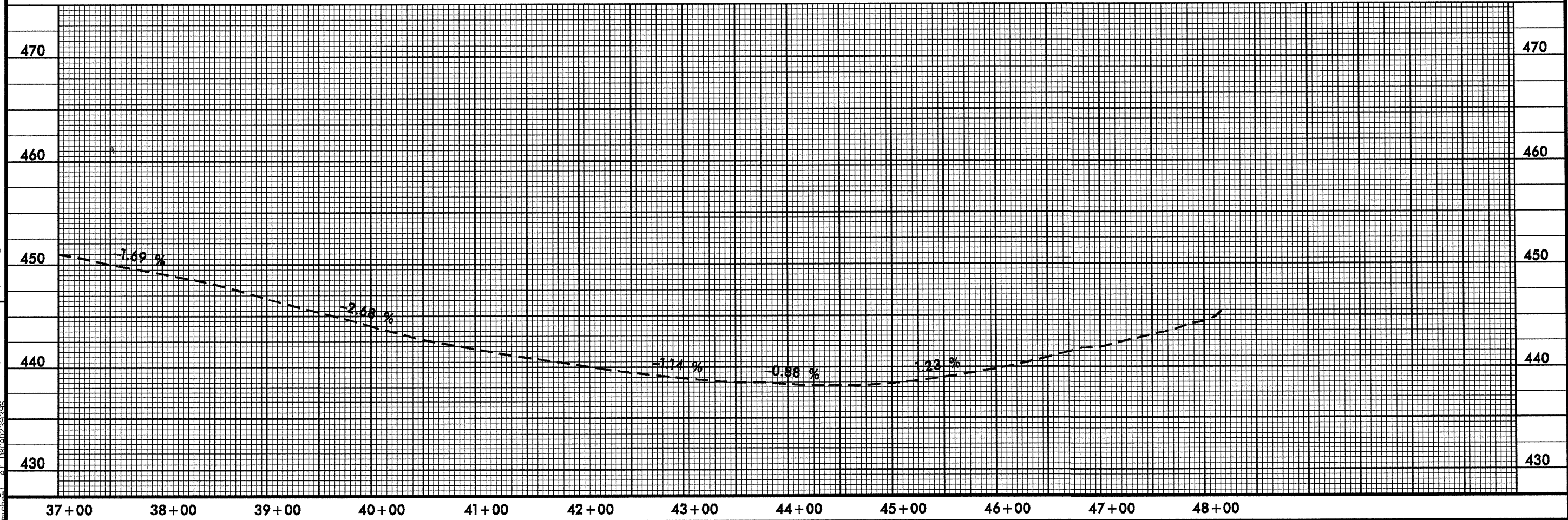
8/17/99

MATCH LINE 36+35

-12- POT SW 48+00.57



REVISIONS

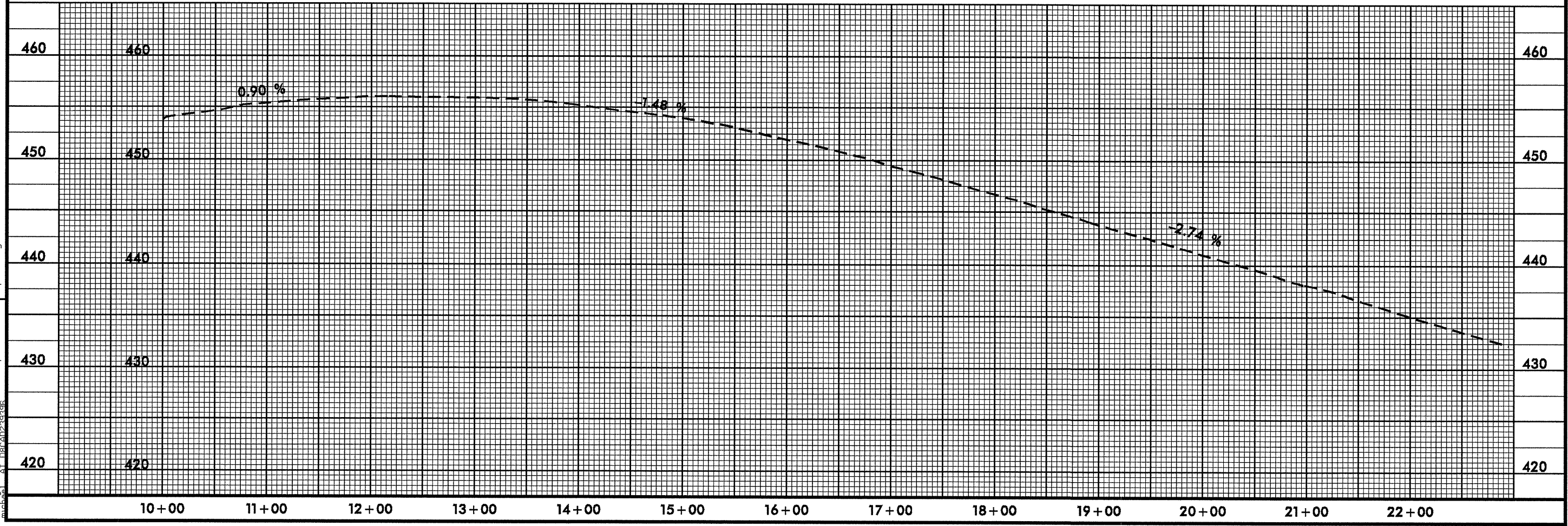
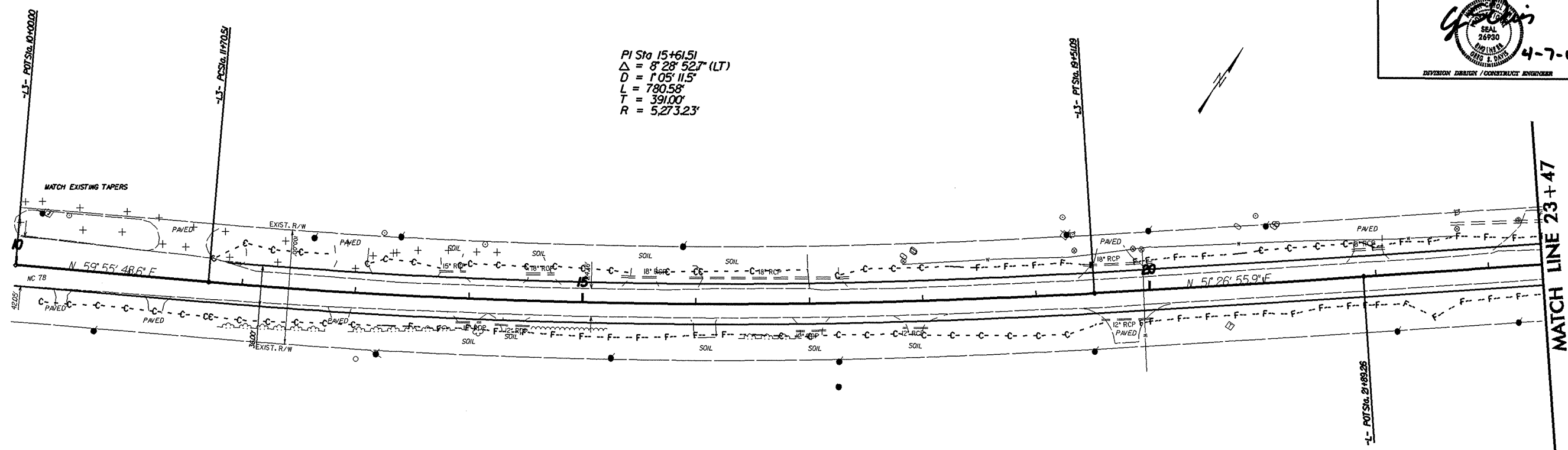


09-APR 2009 12:44
 C:\Users\jacob\Documents\Projects\78b\paf\dam\nc\78_b_paf_11.dgn
 11-11-09 10:32:38 AM

8/17/99

PROJECT REFERENCE NO. R-5141	SHEET NO. 12
NW SHEET NO.	
INTEGRATION DESIGN / CONSTRUCTION ENGINEER	


PI Sta 15+61.51
 $\Delta = 8^{\circ}28'52.7''$ (LT)
 $D = 1^{\circ}05'11.5''$
 $L = 780.58'$
 $T = 391.00'$
 $R = 5,273.23'$

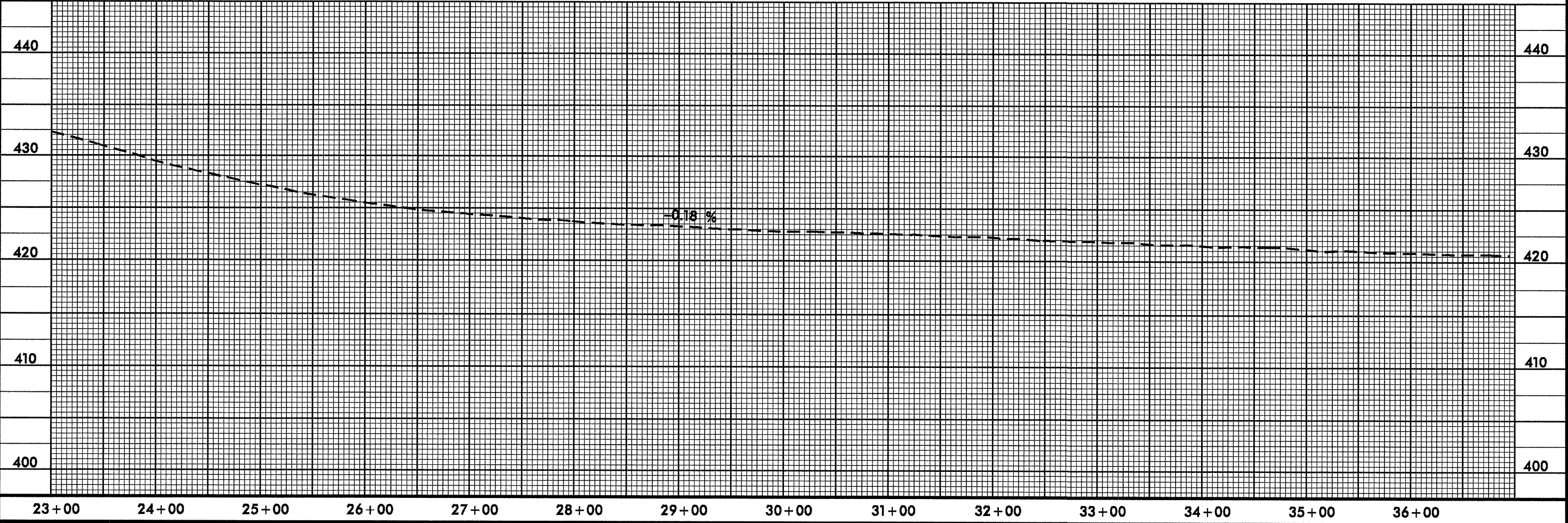
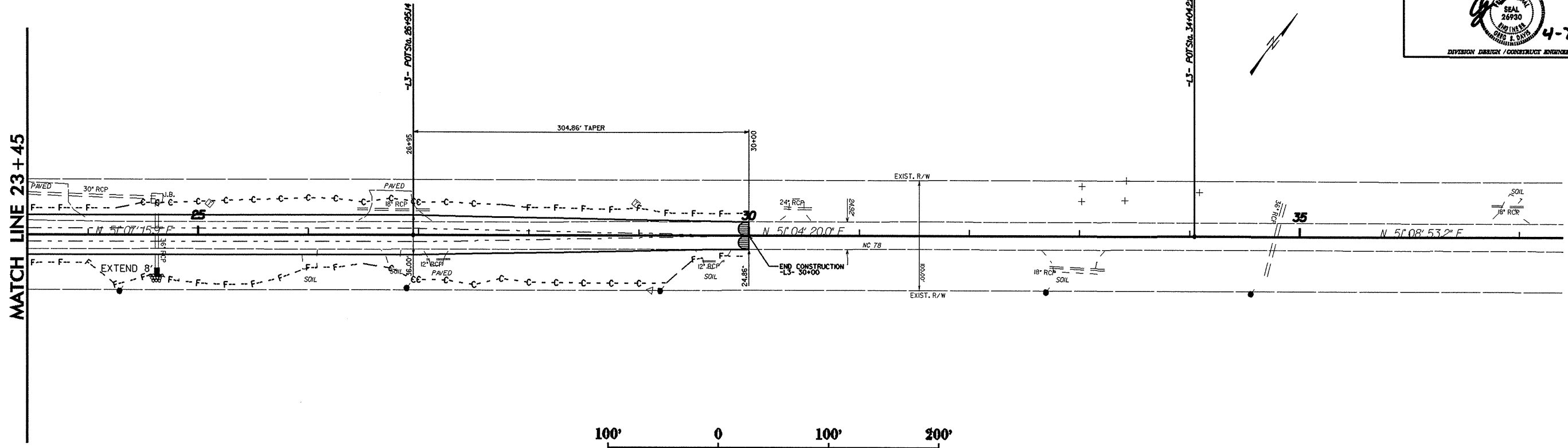


REVISIONS

07-Apr-2009 09:04
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8/17/99

PROJECT REFERENCE NO.	SHEET NO.
R-5141	13
NW SHEET NO.	
	
4-7-09	
DIVISION DESIGN / CONSTRUCTION ENGINEER	



REVISIONS

07-APR-2009 09:04
C:\psh\psh\den\nc-78e\psh\den\nc78e\c-psh_13.dgn