

See Sheet 1-A For Index of Sheets

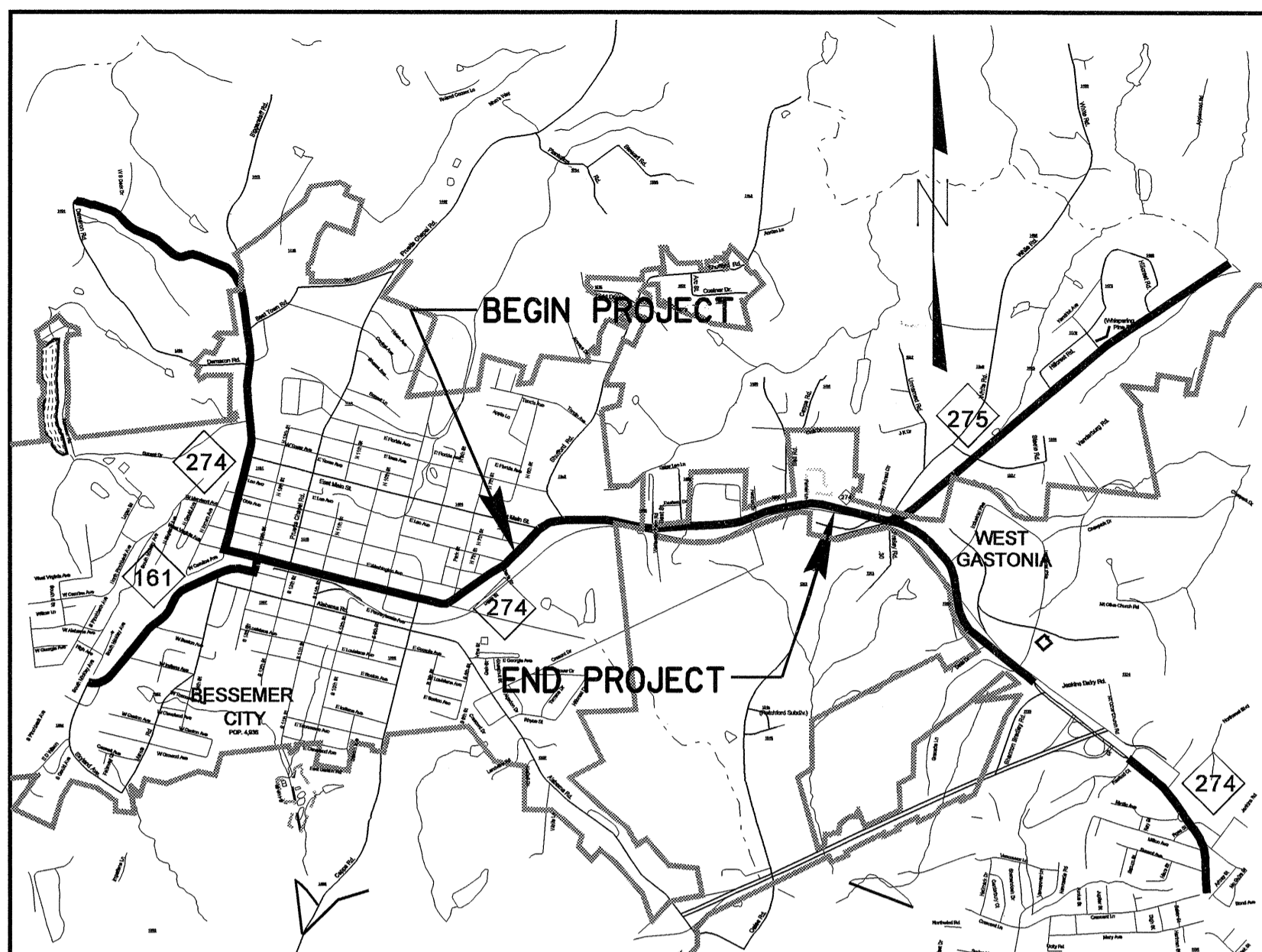
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

GASTON COUNTY

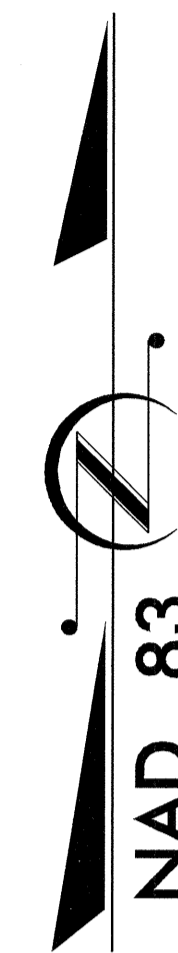
**LOCATION: NC 274, GASTONIA HIGHWAY FROM SR 1484,
MAINE AVE, TO WEST OF NC 275**

TYPE OF WORK: GRADING, DRAINAGE, PAVING, AND SIGNALS

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-3405	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
34937.1.1	STP-274(2)	PE	
34937.2.2	STP-274(2)	RAW, UTIL.	
34937.3.ST1		CONSTRUCTION	

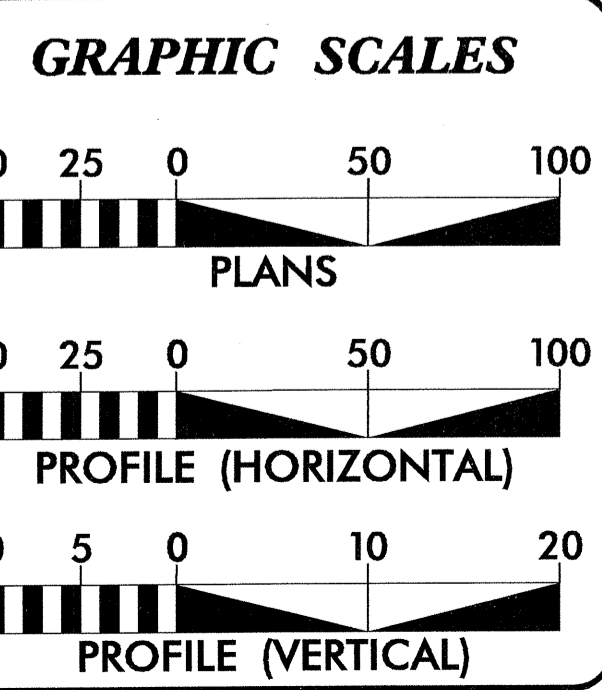
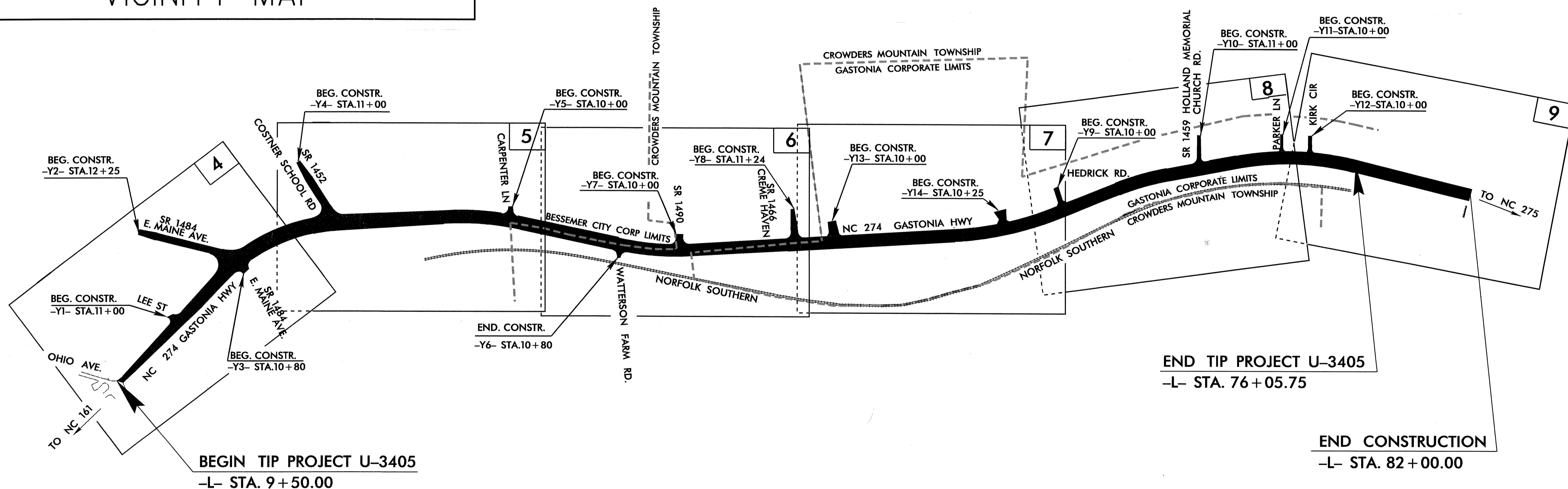


VICINITY MAP



TIP PROJECT: U-3405

CONTRACT: C202095



DESIGN DATA

ADT 2009 =	16900
ADT 2025 =	21400
DHV =	9 %
D =	55 %
T =	3 % *
V =	50 MPH
* TTST 1	DUAL 2

PROJECT LENGTH

LENGTH OF ROADWAY PROJECT F.A. PROJECT STP-274(2) =	1.261 MI.
TOTAL LENGTH OF STATE PROJECT 34937.1.1 =	1.261 MI.

Prepared in the Office of:
DIVISION OF HIGHWAYS
1000 Birch Ridge Dr., Raleigh NC, 27610

2006 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
AUGUST 20, 2004

LETTING DATE:
MARCH 17, 2009

JIMMY GOODNIGHT, PE
PROJECT ENGINEER

TIM GOINS
PROJECT DESIGN ENGINEER

HYDRAULIC ENGINEER

Professional Engineer Seal 10885
Signature: [Signature]
P.E. 1-22-09

ROADWAY DESIGN ENGINEER

Professional Engineer Seal 14493
Signature: [Signature]
P.E. 1-23-09

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

Professional Engineer Seal
Signature: [Signature]
P.E. [Name]

15-JAN-2009 18:05
P:\PROJ\WORK\PROJ\U3405.TSH
\$\$\$\$\$USERNAME\$\$\$\$\$

Note: Not to Scale

*S.U.E. = Subsurface Utility Engineering

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 UG 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, Proposed Temporary Utility Easement, Proposed Permanent Easement with Iron Pin and Cap Marker.

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, 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.

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, UG Power Cable Hand Hole, H-Frame Pole, Recorded UG Power Line, Designated UG Power Line (S.U.E.*); TELEPHONE: Existing Telephone Pole, Proposed Telephone Pole, Telephone Manhole, Telephone Booth, Telephone Pedestal, Telephone Cell Tower, UG Telephone Cable Hand Hole, Recorded UG Telephone Cable, Designated UG Telephone Cable (S.U.E.*), Recorded UG Telephone Conduit, Designated UG Telephone Conduit (S.U.E.*), Recorded UG Fiber Optics Cable, Designated UG Fiber Optics Cable (S.U.E.*).

WATER:

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

TV:

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

GAS:

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

SANITARY SEWER:

Table listing symbols for sanitary sewer: Sanitary Sewer Manhole, Sanitary Sewer Cleanout, UG 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 UG Line, UG Tank; Water, Gas, Oil, AG Tank; Water, Gas, Oil, UG Test Hole (S.U.E.*), Abandoned According to Utility Records, End of Information.

SURVEY CONTROL SHEET U-3405

PROJECT REFERENCE NO.	SHEET NO.
U-3405	1-D
Location and Surveys	

BL POINT	DESC.	NORTH	EAST	ELEVATION	L STATION	OFFSET
LS02	U3405-2	567164.5840	1323432.6030	904.68	18+68.41	51.30 LT
LS04	BL-4	567262.2442	1323942.4504	893.05	23+81.85	27.50 RT
LS06	BL-6	567330.2747	1324797.8047	883.73	32+37.71	21.29 LT
LS07	BL-7	567206.3163	1325343.3180	883.81	37+95.97	10.56 LT
LS08	BL-8	567161.1624	1325722.4335	886.68	41+79.92	0.59 RT
LS10	BL-10	567196.5131	1326242.6435	887.41	47+01.30	4.63 LT
LS12	BL-12	567222.6057	1327293.5186	890.78	57+47.22	42.93 RT
LS13	BL-13	567405.9141	1327726.6883	883.77	62+11.18	0.83 LT
LS14	BL-14	567590.4441	1328313.7045	869.78	68+27.59	8.53 LT
LS16	BL-16	567647.1053	1328811.6850	861.53	73+29.94	4.16 RT
LS17	BL-17	567422.8243	1329890.5506	856.74	OUTSIDE PROJECT LIMITS	
LS18	BL-18	567343.4373	1330191.1174	856.85	OUTSIDE PROJECT LIMITS	
LS19	BL-19	567304.0026	1330391.3122	856.35	OUTSIDE PROJECT LIMITS	
LS52	U2408-2	567119.4730	1330895.7080	853.85	OUTSIDE PROJECT LIMITS	

.....
 BM1 ELEVATION = 918.72
 N 567104 E 1322987
 L STATION 15+22 314 LEFT
 RR SPIKE IN ROOT OF A 42 INCH PIN OAK

.....
 BM2 ELEVATION = 878.27
 N 567492 E 1324777
 L STATION 31+97 178 LEFT
 RR SPIKE IN BASE OF 9 INCH PECAN TREE

.....
 BM3 ELEVATION = 878.60
 N 567587 E 1326290
 L STATION 47+71 392 LEFT
 RR SPIKE IN BASE OF 12 INCH PIN OAK

.....
 BM4 ELEVATION = 885.92
 N 567573 E 1327764
 L STATION 63+08 142 LEFT
 RR SPIKE IN BASE OF 9 INCH MAPLE

.....
 BM5 ELEVATION = 867.37
 N 567877 E 1328910
 L STATION 74+07 231 LEFT
 RR SPIKE IN BASE OF 30 INCH WHITE OAK

.....
 BM6 ELEVATION = 851.87
 N 567141 E 1330416
 L STATION 76+06
 S 70° 33' 46.3" E DIST 1412.82
 RR SPIKE IN BASE OF A QUADRUPLE OAK

BY POINT	DESC.	NORTH	EAST	ELEVATION	L STATION	OFFSET
LS62	BY-62	567310.4322	1322805.6086	908.54	15+44.11	587.69 LT
LS03	BY-3	567218.1182	1323109.1927	909.78	16+89.56	305.68 LT
LS55	U3405-2	567164.5840	1323432.6030	904.68	18+68.41	51.30 LT

BY1 POINT	DESC.	NORTH	EAST	ELEVATION	Y4 STATION	OFFSET
LS63	BY1-63	567777.5800	1323593.5308	897.27	OUTSIDE PROJECT LIMITS	
LS05	BY1-5	567548.8790	1323747.8186	893.59	11+56.78	20.38 RT
LS56	BL-4	567262.2442	1323942.4504	893.05	OUTSIDE PROJECT LIMITS	

BY3 POINT	DESC.	NORTH	EAST	ELEVATION	Y7 STATION	OFFSET
LS09	BY3-9	567486.6611	1325708.8623	863.14	OUTSIDE PROJECT LIMITS	
LS57	BL-8	567161.1624	1325722.4335	886.68	12+84.40	44.14 LT

BY4 POINT	DESC.	NORTH	EAST	ELEVATION	Y8 STATION	OFFSET
LS11	BY4-11	567473.3499	1326236.8387	882.54	10+12.52	12.47 RT
LS58	BL-10	567196.5131	1326242.6435	887.41	12+88.89	29.56 RT

BY6 POINT	DESC.	NORTH	EAST	ELEVATION	Y10 STATION	OFFSET
LS15	BY6-15	567867.2565	1328316.2493	861.21	10+31.66	14.93 RT
LS59	BL-14	567590.4441	1328313.7045	869.78	13+08.48	16.09 RT

BY14 POINT	DESC.	NORTH	EAST	ELEVATION	L STATION	OFFSET
LS60	U3405-2	567164.5840	1323432.6030	904.68	18+68.41	51.30 LT
LS20	BY14-20	567075.0772	1324126.9100	890.05	25+54.06	226.00 RT
LS21	BY14-21	567179.7378	1324918.2407	885.04	33+85.55	103.25 RT
LS22	BY14-22	566978.7858	1325886.8203	884.32	43+33.44	192.08 RT
LS23	BY14-23	566881.8016	1326619.6214	878.56	50+59.38	331.42 RT
LS24	BY14-24	566967.9005	1327165.1851	875.80	55+99.76	278.21 RT
LS25	BY14-25	567220.7554	1327674.4555	876.12	60+93.70	151.52 RT
LS26	BY14-26	567510.7549	1328422.1916	869.53	69+19.59	89.74 RT
LS27	BY14-27	567456.7917	1329291.1579	858.79	OUTSIDE PROJECT LIMITS	
LS28	BY14-28	567241.6979	1330316.9462	858.39	OUTSIDE PROJECT LIMITS	
LS61	U2408-2	567119.4730	1330895.7080	853.85	OUTSIDE PROJECT LIMITS	

DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "U2408-4"

WITH NAD 83 STATE PLANE GRID COORDINATES OF NORTHING: 563190.468(ft) EASTING: 1334443.657(ft)

THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.999838033

THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "U2408-4" TO L- STATION 9+52.43 IS N74°13'16.49"W 120845.148

ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES
 VERTICAL DATUM USED IS NGVD 29

NOTES:

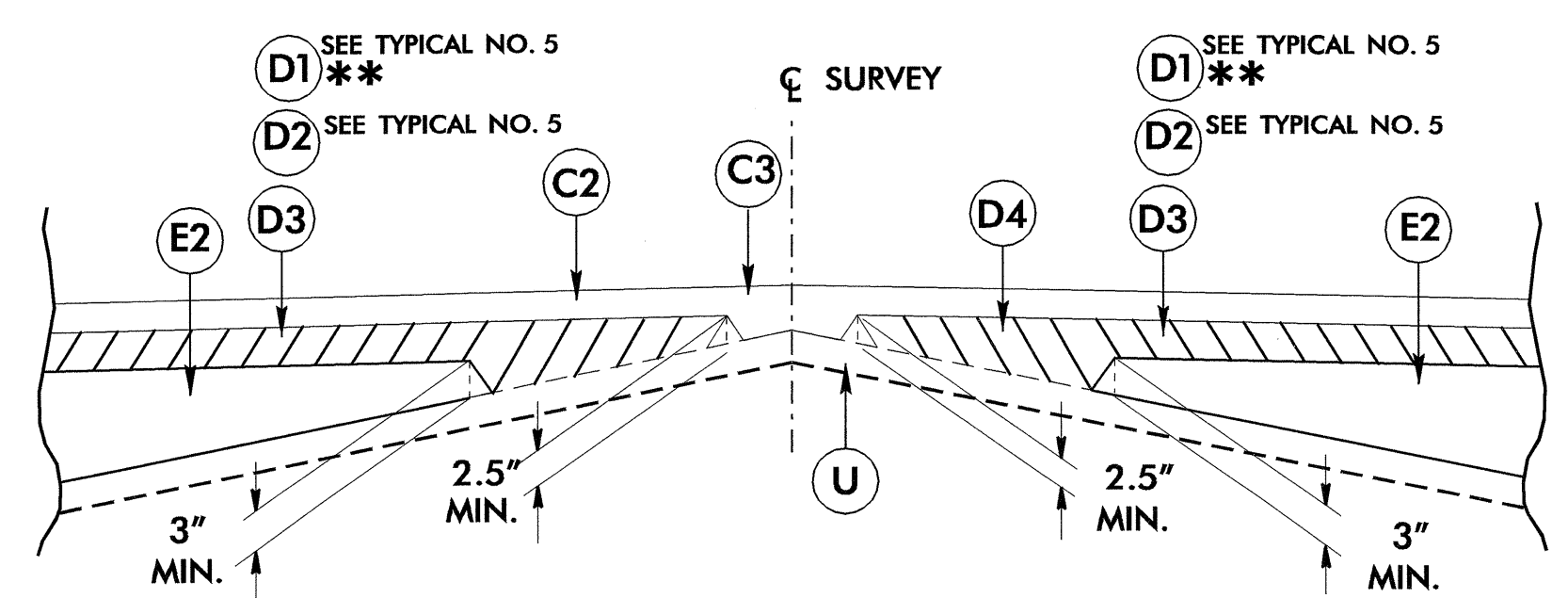
- THE CONTROL DATA FOR THIS PROJECT CAN BE FOUND ELECTRONICALLY BY SELECTING PROJECT CONTROL DATA AT:
- HTTP://WWW.DOH.DOT.STATE.NC.US/PRECONSTRUCT/HIGHWAY/LOCATION/PROJECT
- SITE CALIBRATION INFORMATION HAS NOT BEEN PROVIDED FOR THIS PROJECT.
- IF FURTHER INFORMATION IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.
- ⊙ INDICATES GEODETIC CONTROL MONUMENTS USED OR SET FOR HORIZONTAL PROJECT CONTROL BY THE NCDOT LOCATION AND SURVEYS UNIT.
- PROJECT CONTROL ESTABLISHED USING GLOBAL POSITIONING SYSTEM.

NOTE: DRAWING NOT TO SCALE

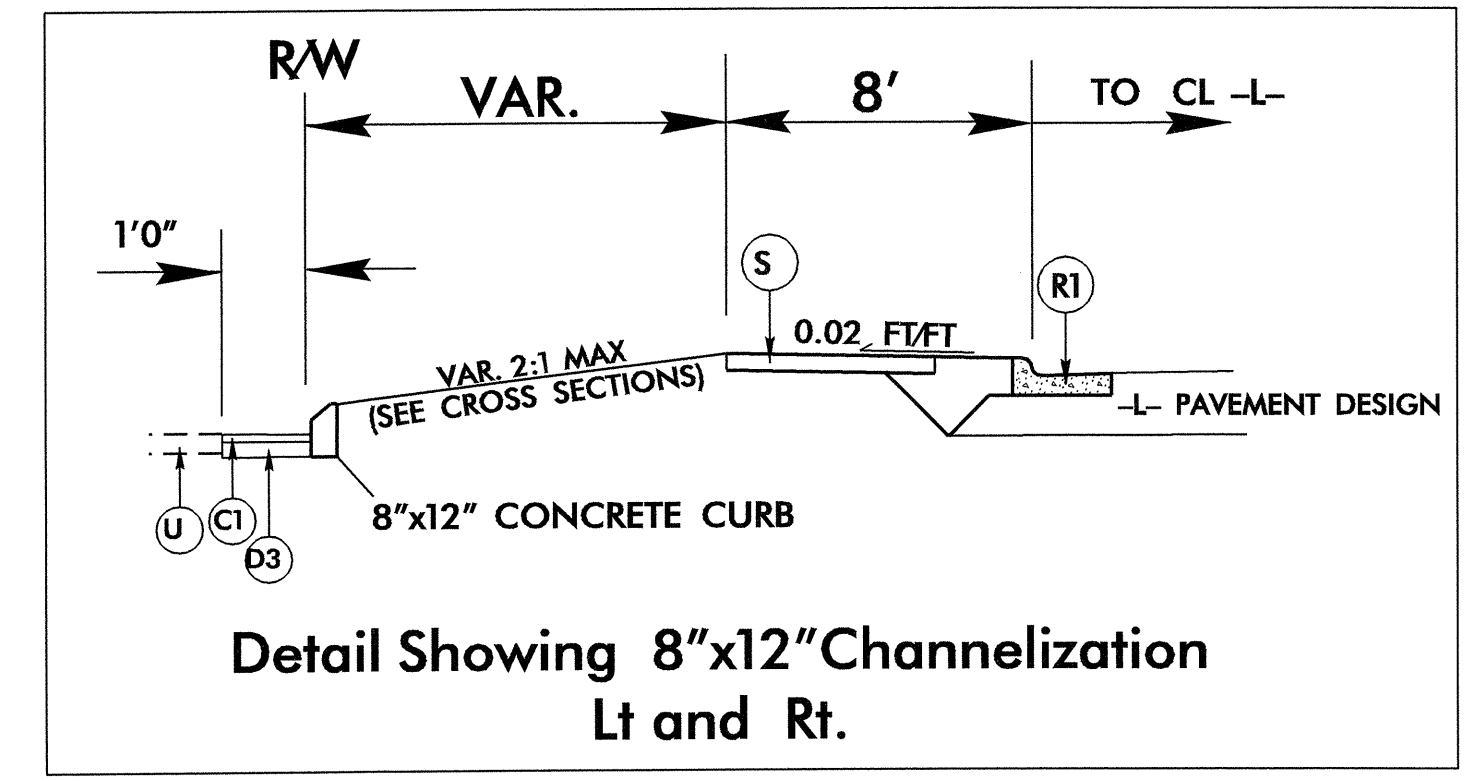
PAVEMENT SCHEDULE

C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
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.
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.
D1	PROP. APPROX. 2.5" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
D2	PROP. APPROX. 3" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 342 LBS. PER SQ. YD.
D3	PROP. APPROX. 4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
D4	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 2.5" IN DEPTH OR GREATER THAN 4" IN DEPTH.
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 5.5" IN DEPTH.
J1	PROP. 8" AGGREGATE BASE COURSE.
R1	2'-6" CONCRETE CURB AND GUTTER.
R2	EXISTING 2'-6" CONCRETE CURB AND GUTTER. (TO BE REMOVED)
S	4" CONCRETE SIDEWALK.
T	EARTH MATERIAL.
U	EXISTING PAVEMENT.
W	VARIABLE DEPTH ASPHALT PAVEMENT (SEE STANDARD WEDGING DETAIL)

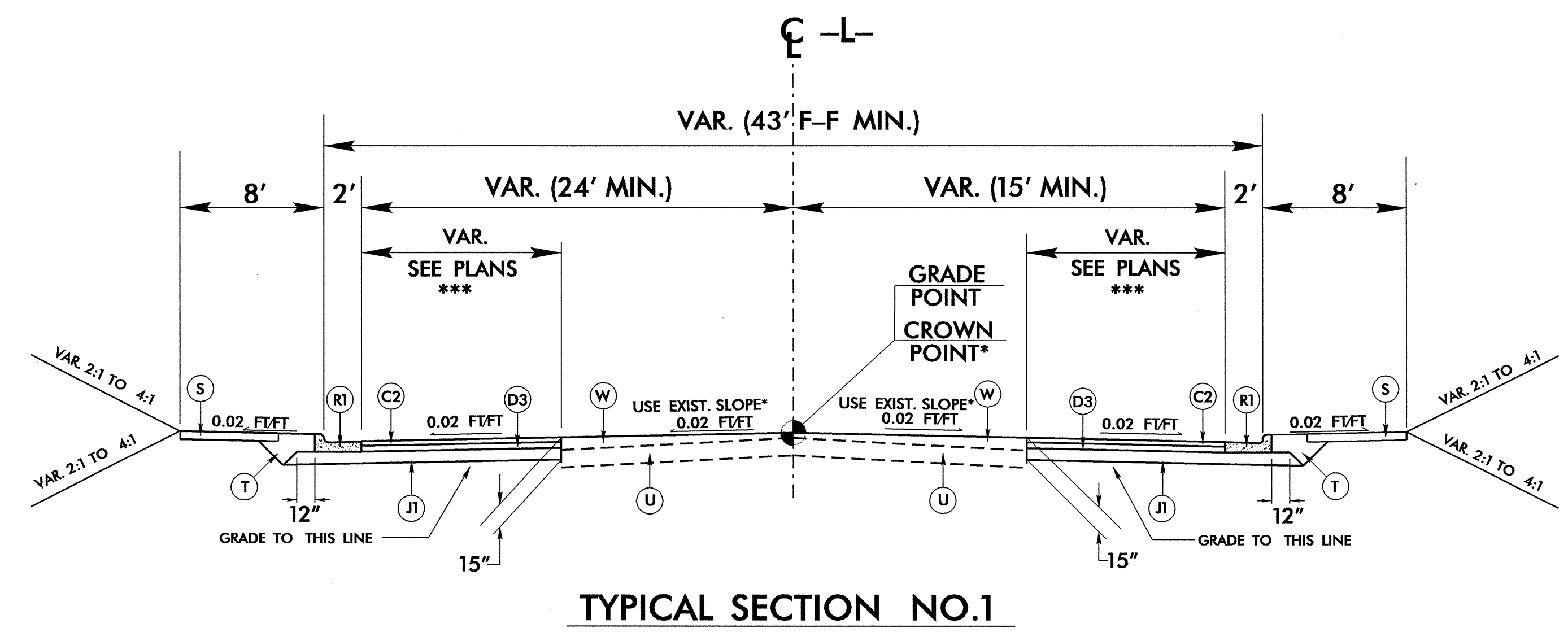
NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.



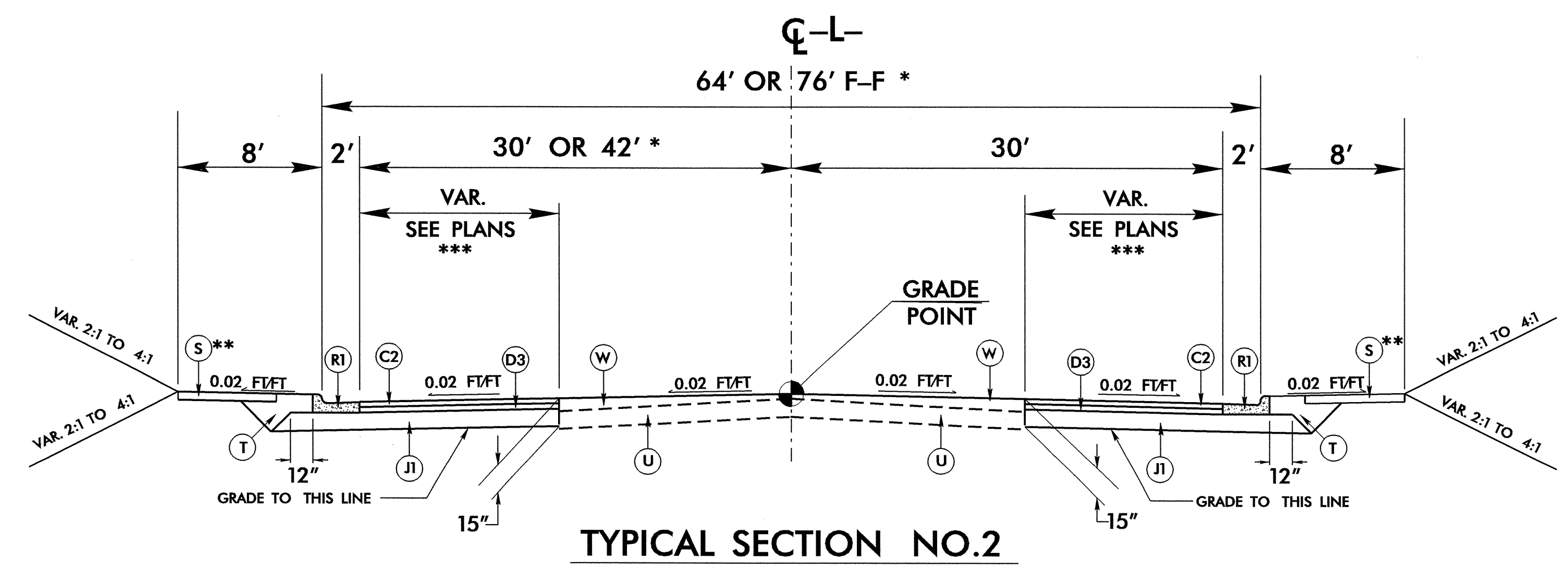
Detail Showing Method of Wedging



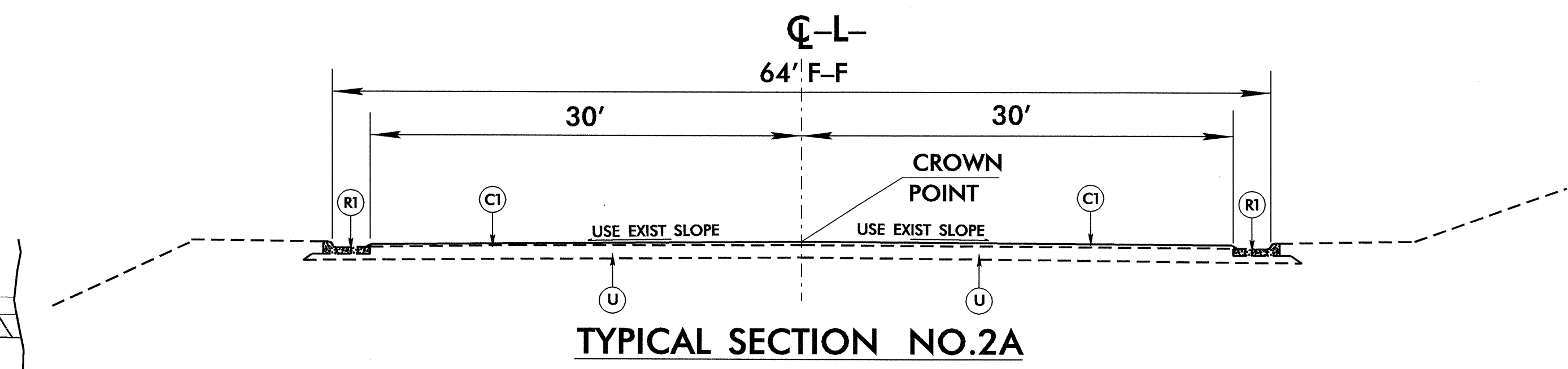
Detail Showing 8"x12" Channelization Lt and Rt.



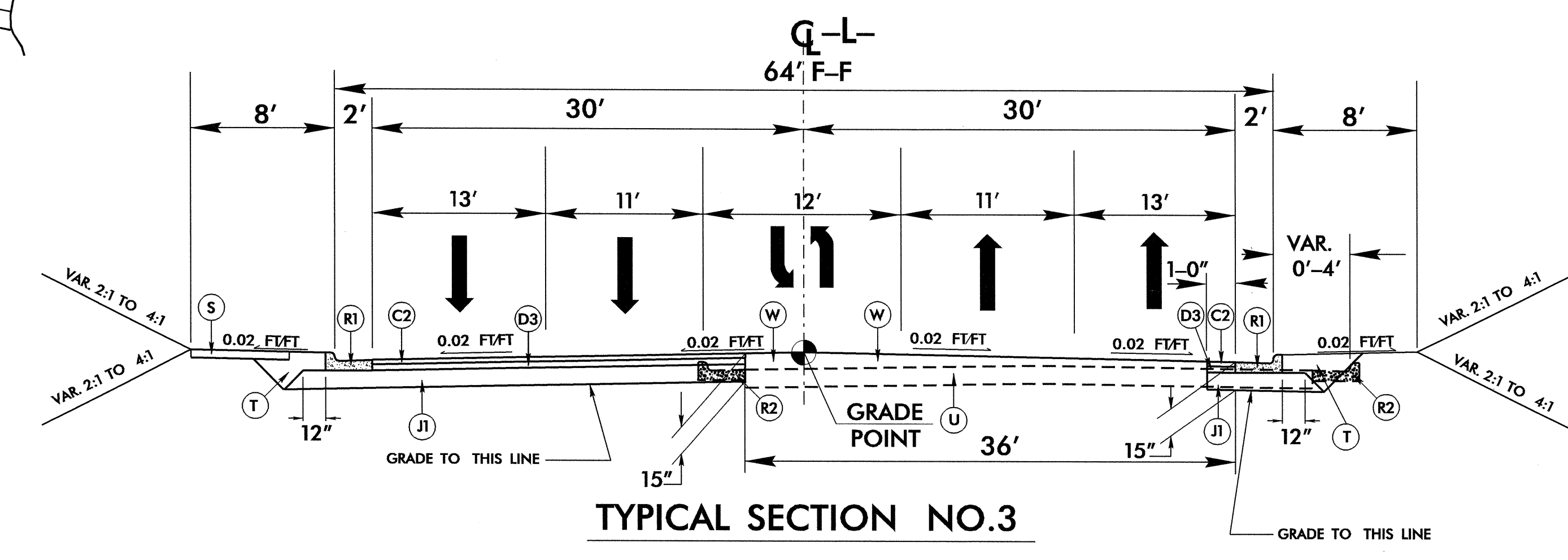
TYPICAL SECTION NO.1



TYPICAL SECTION NO.2



TYPICAL SECTION NO.2A



TYPICAL SECTION NO.3

PROJECT REFERENCE NO. U-3405	SHEET NO. 2
ROADWAY DESIGN ENGINEER [Signature]	PAVEMENT DESIGN ENGINEER [Signature]
SEAL 14493 [Stamp]	SEAL 22896 [Stamp]

USE TYPICAL SECTION NO. 1

- * -L- STA. 9+50.00 TO 10+00.00
- L- STA. 10+00.00 TO 16+68.21

USE TYPICAL SECTION NO. 2

- L- STA. 16+68.21 TO 32+80.00
- L- STA. 39+00.00 TO 49+50.00
- L- STA. 59+60.00 TO 76+05.75

* NOTE: ADD TURN LANE (SEE PLANS)
-L- STA. 23+00.00 TO 26+90.51 (LT)

** NOTE:
OMIT SIDEWALK PLACEMENT AS FOLLOWS:
-L- STA. 32+47.01 TO 41+60.15 (RT)
-L- STA. 41+36.00 TO 49+02.00 (LT)

*** NOTE:
FOR NARROW WIDENING (<6' WIDE),
REPLACE 8" ABC (J1) WITH 4" B25.0B (E1)

USE TYPICAL SECTION NO. 2A

- L- STA. 76+05.75 TO 82+00.00

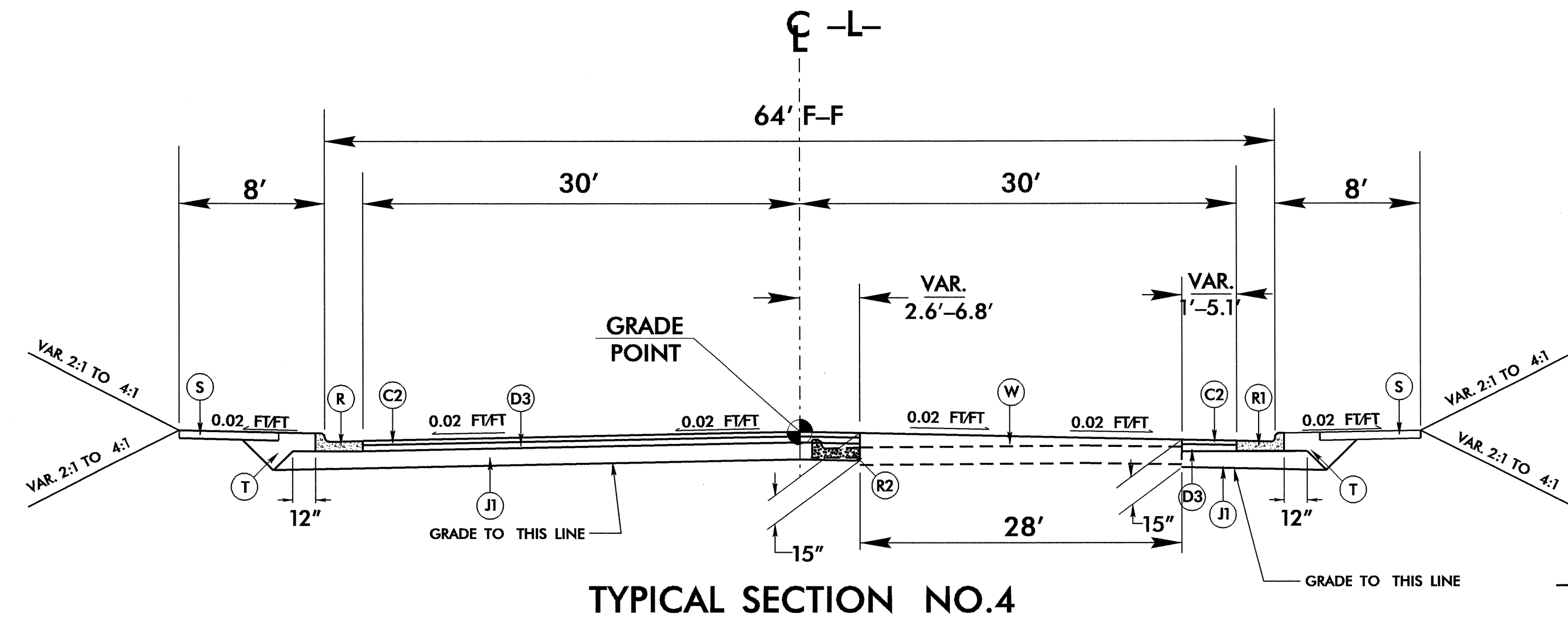
USE TYPICAL SECTION NO. 3

- L- STA. 32+80.00 TO 39+00.00

NOTE: PREPARATION OF EXISTING PAVEMENT SURFACE
CLEAN AND SEAL TRANSVERSE CRACKS WIDER THAN
0.5" AND OVERLAY THE EXISTING MAINLINE
PAVEMENT WITH 1.5" S9.5B

PROJECT REFERENCE NO. U-3405	SHEET NO. 2-A
ROADWAY DESIGN ENGINEER NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 14493 JAMES STARFOUR GOODENOUGH, JR.	PAVEMENT DESIGN ENGINEER NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 22896 CLARK S. MORRISON

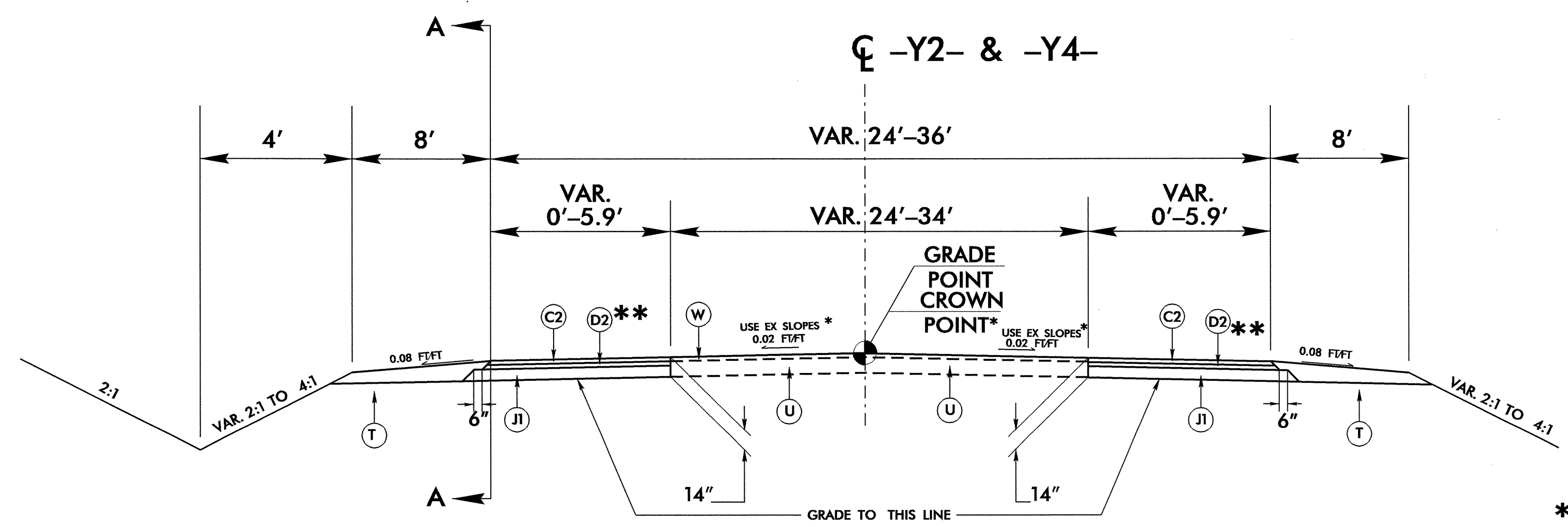
J. D. Starfour 1-9-09
Clark S. Morrison 1-8-09



TYPICAL SECTION NO.4

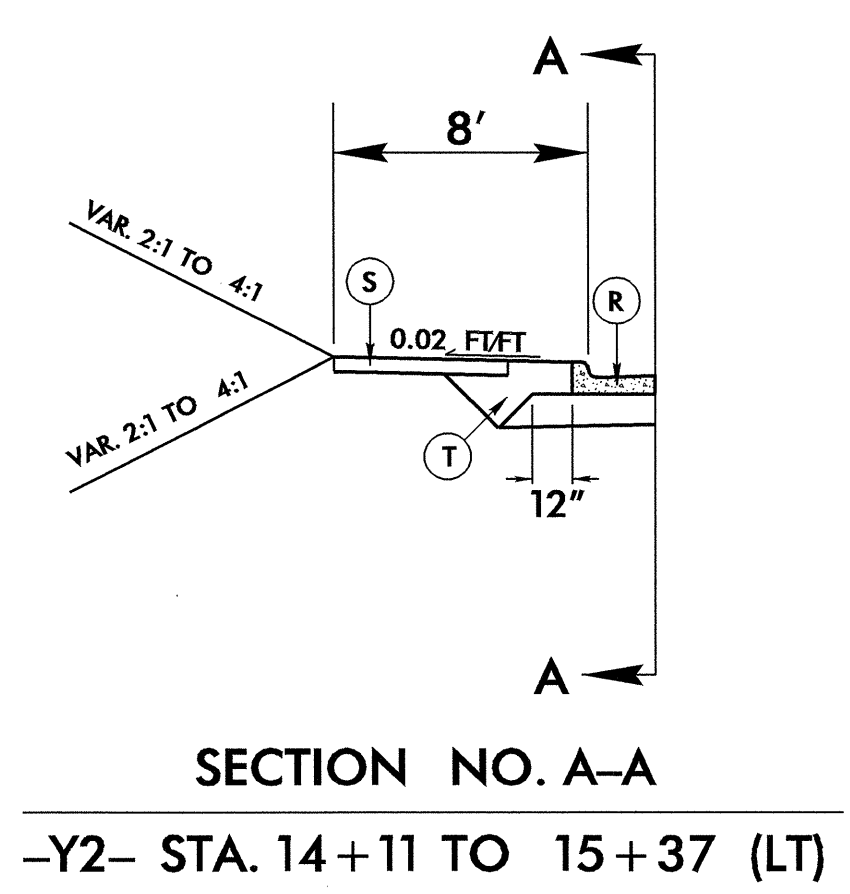
USE TYPICAL SECTION NO. 4
-L- STA. 49+50.00 to 59+60.00

PAVEMENT SCHEDULE	
C1	1.5" S9.5B
C2	3" S9.5B
C3	VAR. S9.5B
D1	2.5" I19.0B
D2	3" I19.0B
D3	4" I19.0B
D4	VAR. I19.0B
E1	4" B25.0B
E2	VAR. B25.0B
J1	8" ABC
R1	2'-6" CONC. C & G
R2	EXIST. 2'-6" CONC. C & G
S	4" CONC. SIDEWALK
T	EARTH MATERIAL
U	EXISTING PAVEMENT
W	WEDGING VAR. DEPTH ASPH.

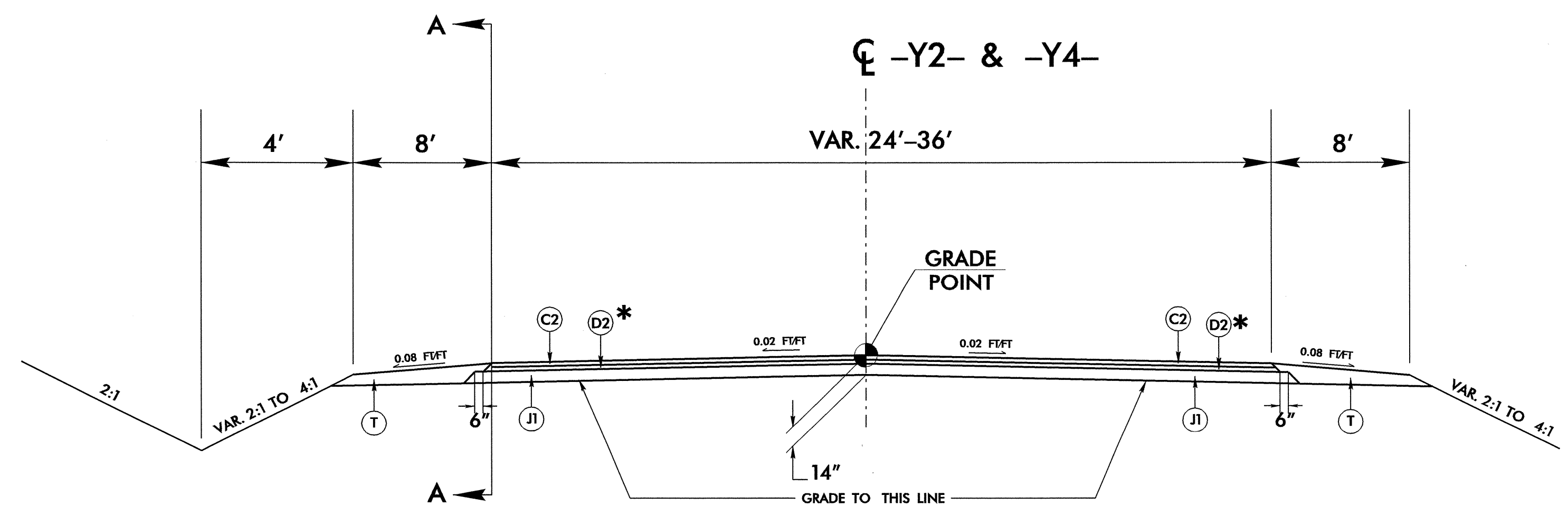


TYPICAL SECTION NO. 5

USE TYPICAL SECTION NO. 5
* -Y2- STA. 12+25.00 TO 13+00.00
-Y2- STA. 13+00.00 TO 13+50.00
** -Y4- STA. 11+00.00 TO 11+50.00 (USE D1, 2.5" I19.0B)

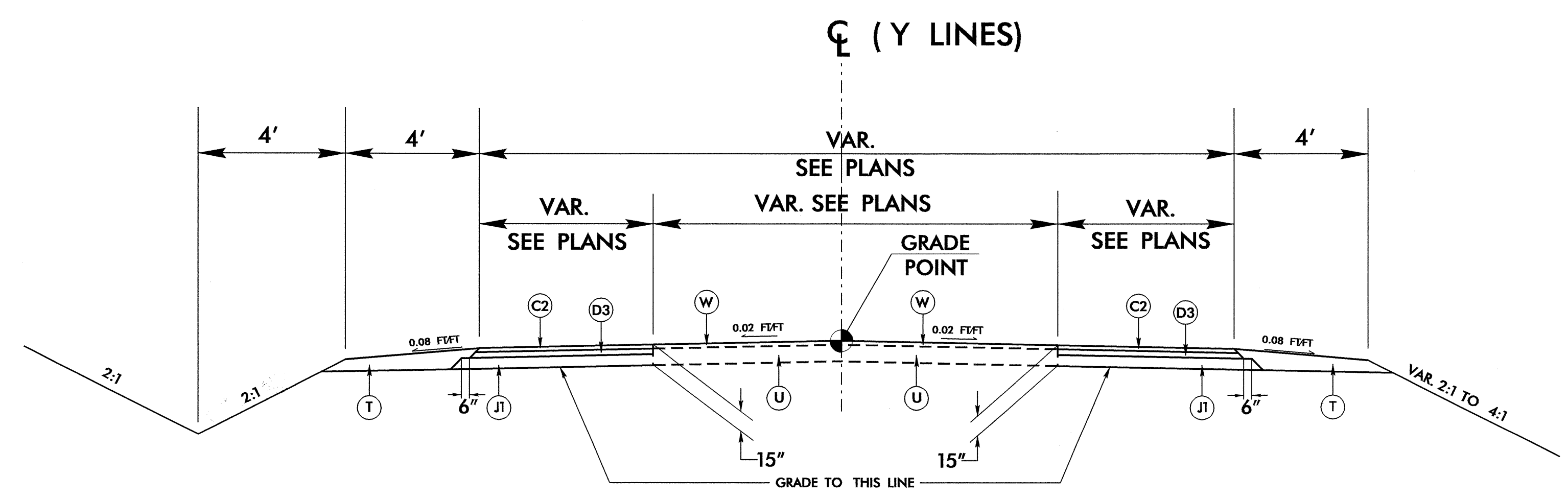


SECTION NO. A-A
-Y2- STA. 14+11 TO 15+37 (LT)



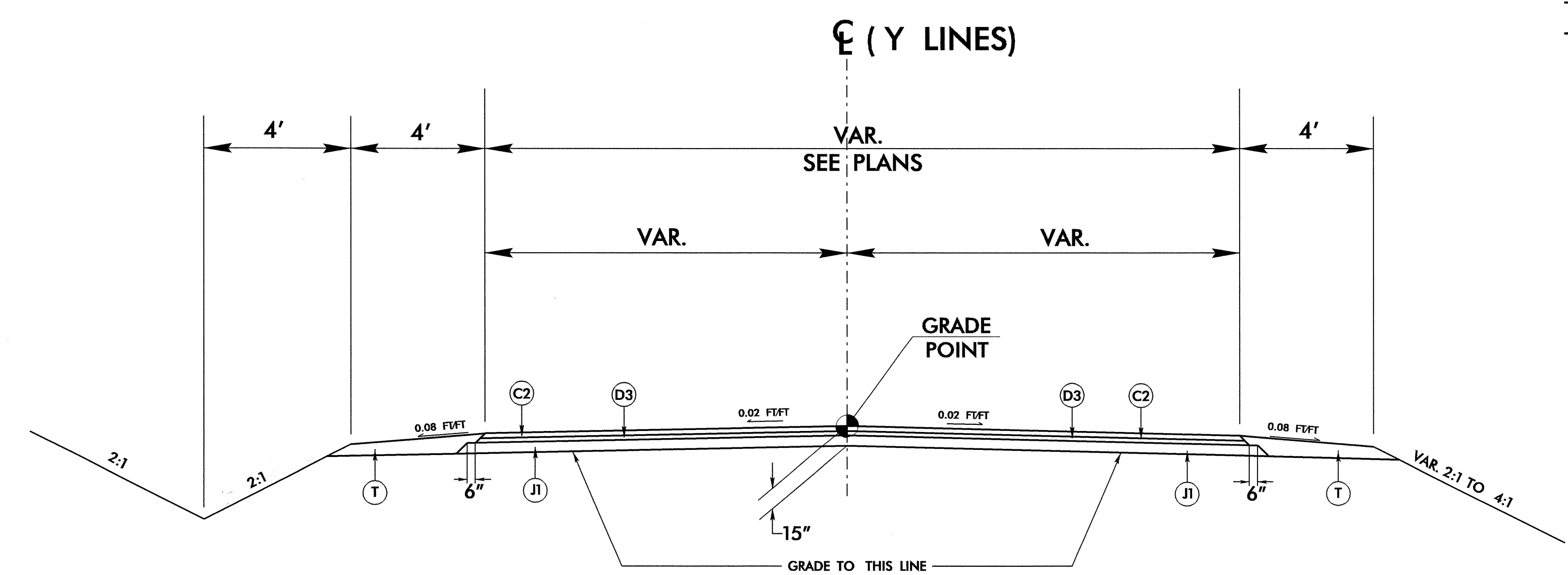
TYPICAL SECTION NO. 6

USE TYPICAL SECTION NO. 6
-Y2- STA. 13+50.00 TO 15+94.88
*-Y4- STA. 11+50.00 TO 14+10.62 (USE D1, 2.5" I19.0B)



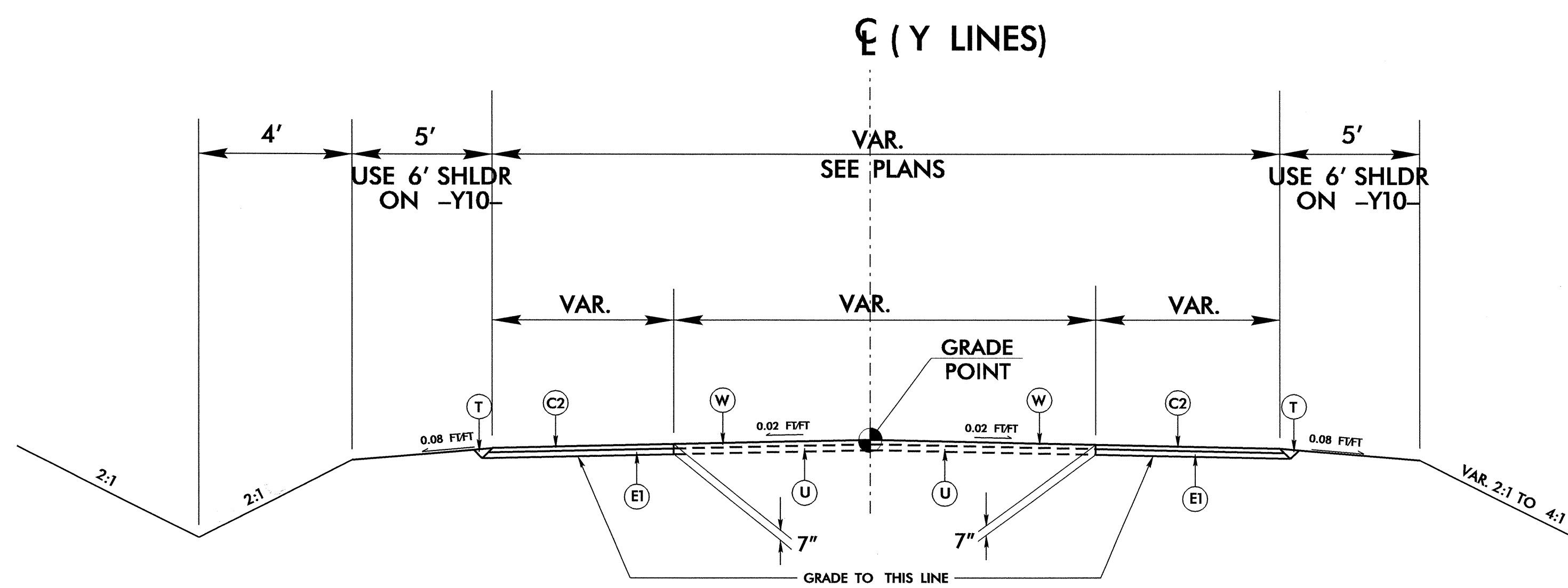
TYPICAL SECTION NO. 7

- USE TYPICAL SECTION NO. 7
- Y5- STA. 10+00.00 TO 10+15.00
 - Y6- STA. 10+30.69 TO 10+80.00
 - Y7- STA. 11+00.00 TO 12+56.97
 - Y12- STA. 10+00.00 TO 11+20.29
 - Y13- STA. 10+00.00 TO 10+69.85



TYPICAL SECTION NO. 8

- USE TYPICAL SECTION NO. 8
- Y5- STA. 10+15.00 TO 10+93.55
 - Y9- STA. 10+00.00 TO 11+49.52
 - Y11- STA. 10+00.00 TO 11+10.00
 - Y14- STA. 10+25.00 TO 10+69.35



TYPICAL SECTION NO. 9

- USE TYPICAL SECTION NO. 9
- Y8- STA. 11+24.00 TO 12+64.24
 - Y10- STA. 11+00.00 TO 12+83.53

PAVEMENT SCHEDULE	
C1	1.5" S9.5B
C2	3" S9.5B
C3	VAR. S9.5B
D1	2.5" I19.0B
D2	3" I19.0B
D3	4" I19.0B
D4	VAR. I19.0B
E1	4" B25.0B
E2	VAR. B25.0B
J1	8" ABC
R1	2'-6" CONC. C & G
R2	EXIST. 2'-6" CONC. C & G
S	4" CONC. SIDEWALK
T	EARTH MATERIAL
U	EXISTING PAVEMENT
W	WEDGING VAR. DEPTH ASPH.

6/22/99
 08-JAN-2009 14:59 2405.tjp
 33 88105789416 88 33

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

SUMMARY OF QUANTITIES

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
ROADWAY SUMMARY OF QUANTITIES FOR CONTRACT - C202095

ItemNumber	Sec #	Quantity	Unit	Description	ItemNumber	Sec #	Quantity	Unit	Description	ItemNumber	Sec #	Quantity	Unit	Description	ItemNumber	Sec #	Quantity	Unit	Description	
000100000-N	800	Lump Sum		MOBILIZATION	353300000-E	866	156	LF	CHAIN LINK FENCE, *** FABRIC (72")	531900000-E	1505	25	CY	CLASS B CONCRETE FOR ENCASING UTILITY LINES	700000000-E	1705	6	EA	PEDESTRIAN SIGNAL HEAD (***, ** SECTION) (16", 1 SECTION WITH COUNT-DOWN)	
000100000-E	200	Lump Sum		CLEARING & GRUBBING .. ACRE(S)	353600000-E	866	78	LF	CHAIN LINK FENCE, 48" FABRIC	532520000-E	1510	275	LF	2" WATER LINE						
000800000-E	200	1	ACR	SUPPLEMENTARY CLEARING & GRUBBING	353900000-E	866	4	EA	METAL LINE POSTS FOR *** CHAIN LINK FENCE (60")	532560000-E	1510	1,465	LF	6" WATER LINE	706000000-E	1705	3,480	LF	SIGNAL CABLE	
002200000-E	225	5,000	CY	UNCLASSIFIED EXCAVATION	353900000-E	866	13	EA	METAL LINE POSTS FOR *** CHAIN LINK FENCE (72")	532800000-E	1510	165	LF	8" WATER LINE	712000000-E	1705	21	EA	VEHICLE SIGNAL HEAD (12", 3 SECTION)	
003600000-E	225	5,000	CY	UNDERCUT EXCAVATION	354200000-E	866	7	EA	METAL LINE POSTS FOR 48" CHAIN LINK FENCE	532600000-E	1510	20	LF	10" WATER LINE	713200000-E	1705	3	EA	VEHICLE SIGNAL HEAD (12", 4 SECTION)	
008000000-E	SP	3,500	TON	CLASS IV SUBGRADE STABILIZATION	354500000-E	866	6	EA	METAL TERMINAL POSTS FOR *** CHAIN LINK FENCE (60")	532620000-E	1510	6,918	LF	12" WATER LINE	714400000-E	1705	2	EA	VEHICLE SIGNAL HEAD (12", 5 SECTION)	
010600000-E	230	20,500	CY	BORROW EXCAVATION	354800000-E	866	4	EA	METAL TERMINAL POSTS FOR *** CHAIN LINK FENCE (60")	553600000-E	1515	4	EA	2" VALVE	726400000-E	1710	1,510	LF	MESSENGER CABLE (3/8")	
013400000-E	240	10	CY	DRAINAGE DITCH EXCAVATION	355700000-E	866	516	LF	ADDITIONAL BARBED WIRE	554000000-E	1515	2	EA	6" VALVE	730000000-E	1715	1,415	LF	UNPAVED TRENCHING (***** (2, 2"))	
015600000-E	250	350	SY	REMOVAL OF EXISTING ASPHALT PAVEMENT	357200000-E	867	284	LF	CHAIN LINK FENCE RESET	555200000-E	1515	1	EA	10" VALVE	732400000-N	1716	10	EA	JUNCTION BOX (STANDARD SIZE)	
019500000-E	265	500	CY	SELECT GRANULAR MATERIAL	357500000-E	SP	16	LF	GENERIC FENCING ITEM 36" WOOD FENCE	555800000-E	1515	8	EA	12" VALVE	736000000-N	1720	4	EA	WOOD POLE	
019600000-E	270	7,000	SY	FABRIC FOR SOIL STABILIZATION	357500000-E	SP	16	LF	GENERIC FENCING ITEM 36" WOOD FENCE	557160000-E	1515	2	EA	6" TAPPING VALVE	737200000-N	1721	8	EA	GUY ASSEMBLY	
031800000-E	300	1,000	TON	FOUNDATION CONDITIONING MATERIAL, MINOR STRS	357500000-E	SP	16	LF	GENERIC FENCING ITEM 36" WOOD FENCE	558910000-E	1515	2	EA	1" AIR RELEASE VALVE	740800000-E	1722	1	EA	1" RISER WITH WEATHERHEAD	
037800000-E	310	1,220	LF	24" RC PIPE CULVERTS, CLASS III	357500000-E	SP	16	LF	GENERIC FENCING ITEM 36" WOOD FENCE	560600000-E	1515	4	EA	2" BLOW OFF	742000000-E	1722	2	EA	2" RISER WITH WEATHERHEAD	
099500000-E	340	3,625	LF	PIPE REMOVAL	357500000-E	SP	16	LF	GENERIC FENCING ITEM 36" WOOD FENCE	564800000-N	1515	24	EA	RELOCATE WATER METER	744400000-E	1725	1,870	LF	INDUCTIVE LOOP SAWCUT	
101100000-N	500	Lump Sum		FINE GRADING	362800000-E	876	15	TON	RIP RAP, CLASS I	564900000-N	1515	36	EA	RECONNECT WATER METER	745600000-E	1726	6,980	LF	LEAD-IN CABLE (***** (14-2))	
111000000-E	510	1,000	TON	STABILIZER AGGREGATE	364900000-E	876	20	TON	RIP RAP, CLASS B	567200000-N	1515	9	EA	RELOCATE FIRE HYDRANT	748400000-N	SP	3	EA	MICROWAVE VEHICLE DETECTOR	
112100000-E	520	16,425	TON	AGGREGATE BASE COURSE	365600000-E	876	990	SY	FILTER FABRIC FOR DRAINAGE	569130000-E	1520	492	LF	8" SANITARY GRAVITY SEWER	757514200-N	SP	2	EA	900MHZ WIRELESS RADIO SYSTEM	
122000000-E	545	2,000	TON	INCIDENTAL STONE BASE	407200000-E	903	967	LF	SUPPORTS, 3-LB STEEL U-CHANNEL	569140000-E	1520	583	LF	10" SANITARY GRAVITY SEWER	757600000-N	SP	8	EA	METAL STRAIN SIGNAL POLE	
148900000-E	610	5,195	TON	ASPHALT CONC BASE COURSE, TYPE B25.0B	409600000-N	904	1	EA	SIGN ERECTION, TYPE D	570920000-E	1520	502	LF	4" FORCE MAIN SEWER	761300000-N	SP	8	EA	SOIL TEST	
149800000-E	610	10,745	TON	ASPHALT CONC INTERMEDIATE COURSE, TYPE I19.0B	410200000-N	904	42	EA	SIGN ERECTION, TYPE E	576800000-N	1520	60	EA	SANITARY SEWER CLEAN-OUT	761410000-E	SP	48	CY	DRILLED PIER FOUNDATION	
151900000-E	610	9,465	TON	ASPHALT CONC SURFACE COURSE, TYPE S9.5B	411610000-N	904	2	EA	SIGN ERECTION, RELOCATE, TYPE **** (GROUND MOUNTED) (D)	577500000-E	1525	12	EA	4" DIA UTILITY MANHOLE	763600000-N	1745	1	EA	SIGN FOR SIGNALS	
156000000-E	620	1,300	TON	ASPHALT BINDER FOR PLANT MIX, GRADE PG 64-22	415500000-N	907	28	EA	DISPOSAL OF SIGN SYSTEM, U-CHANNEL	580000000-E	1530	4,376	LF	ABANDON 6" UTILITY PIPE	768400000-N	1750	2	EA	SIGNAL CABINET FOUNDATION	
169300000-E	654	550	TON	ASPHALT PLANT MIX, PAVEMENT REPAIR	440000000-E	1110	320	SF	WORK ZONE SIGNS (STATIONARY)	580100000-E	1530	1,156.5	LF	ABANDON 8" UTILITY PIPE	775600000-N	1751	2	EA	CONTROLLER WITH CABINET (TYPE 2070L, BASE MOUNTED)	
170200000-E	657	200	LB	SEALING EXISTING PAVEMENT CRACKS & JOINTS	440500000-E	1110	200	SF	WORK ZONE SIGNS (PORTABLE)	580200000-E	1530	587	LF	ABANDON 10" UTILITY PIPE	778000000-N	1751	12	EA	DETECTOR CARD (TYPE 2070L)	
202200000-E	815	112	CY	SUBDRAIN EXCAVATION	441000000-E	1110	170	SF	WORK ZONE SIGNS (BARRICADE MOUNTED)	580400000-E	1530	4,623	LF	ABANDON 12" UTILITY PIPE	790100000-N	1753	2	EA	CABINET BASE EXTENDER	
203300000-E	815	84	CY	SUBDRAIN FINE AGGREGATE	441500000-N	1115	1	EA	FLASHING ARROW PANELS, TYPE C	581500000-N	1530	1	EA	REMOVE WATER METER	798000000-N	SP	1	EA	GENERIC SIGNAL ITEM (FURNISH WIRELESS RADIO LIGHTNING ARRESTOR)	
204400000-E	815	500	LF	6" PERFORATED SUBDRAIN PIPE	442000000-N	1120	1	EA	CHANGEABLE MESSAGE SIGN	581550000-N	1530	2	EA	REMOVE FIRE HYDRANT	798000000-N	SP	1	EA	GENERIC SIGNAL ITEM (FURNISH WIRELESS RADIO MODEM)	
205500000-E	815	15	EA	6" SUBDRAIN PIPE WYES, TEES, & ELBOWS	443000000-N	1130	500	EA	DRUMS	582800000-N	1530	6	EA	REMOVE UTILITY MANHOLE						
206600000-N	815	1	EA	CONCRETE PAD FOR SUBDRAIN PIPE OUTLET	443500000-N	1135	75	EA	CONES	588200000-N	SP	1	EA	GENERIC UTILITY ITEM PROPOSED METER VAULT						
207700000-E	815	6	LF	6" OUTLET PIPE (SUBDRAINS)	444500000-E	1145	120	LF	BARRICADES (TYPE III)	588200000-N	SP	1	EA	GENERIC UTILITY ITEM REMOVE EXISTING METER VAULT						
226400000-E	840	0.09	CY	PIPE PLUGS	445500000-N	1150	1,200	MD	FLAGGER	600000000-E	1605	16,300	LF	TEMPORARY SILT FENCE	036600000-E	310	4,996	LF	15" RC PIPE CULVERTS, CLASS III	
228600000-N	840	81	EA	MASONRY DRAINAGE STRUCTURES	448000000-N	1165	1	EA	TMIA	600600000-E	1610	720	TON	STONE FOR EROSION CONTROL, CLASS A	037200000-E	310	1,156	LF	18" RC PIPE CULVERTS, CLASS III	
230800000-E	840	8.7	LF	MASONRY DRAINAGE STRUCTURES	451000000-N	SP	50	HR	POLICE	600900000-E	1610	1,240	TON	STONE FOR EROSION CONTROL, CLASS B	038400000-E	310	1,452	LF	30" RC PIPE CULVERTS, CLASS III	
235200000-N	840	22	EA	FRAME WITH GRATE, STD 840.*** (STD 840.16)	465000000-N	1251	200	EA	TEMPORARY RAISED PAVEMENT MARKERS	601200000-E	1610	945	TON	SEDIMENT CONTROL STONE						
236700000-N	840	1	EA	FRAME WITH TWO GRATES, STD 840.29	465000000-E	1205	420	LF	THERMOPLASTIC PAVEMENT MARKING LINES (8", 90 MILS)	601500000-E	1615	6.5	ACR	TEMPORARY MULCHING	036600000-E	310	3,816	LF	15" RC PIPE CULVERTS, CLASS III	
237400000-N	840	7	EA	FRAME WITH GRATE & HOOD, STD 840.03, TYPE ** (E)	469700000-E	1205	360	LF	THERMOPLASTIC PAVEMENT MARKING LINES (8", 120 MILS)	601800000-E	1620	150	LB	SEED FOR TEMPORARY SEEDING	037200000-E	310	1,140	LF	18" RC PIPE CULVERTS, CLASS III	
237400000-N	840	26	EA	FRAME WITH GRATE & HOOD, STD 840.03, TYPE ** (F)	471000000-E	1205	460	LF	THERMOPLASTIC PAVEMENT MARKING LINES (24", 120 MILS)	602100000-E	1620	0.75	TON	FERTILIZER FOR TEMPORARY SEEDING	038400000-E	310	1,044	LF	30" RC PIPE CULVERTS, CLASS III	
237400000-N	840	16	EA	FRAME WITH GRATE & HOOD, STD 840.03, TYPE ** (G)	472100000-E	1205	8	EA	THERMOPLASTIC PAVEMENT MARKING CHARACTER (120 MILS)	602400000-E	1622	140	LF	TEMPORARY SLOPE DRAINS	054000000-E	SP	1,180	LF	**** ALUMINIZED CORRUGATED STEEL PIPE CULVERTS, **** THICK (15", 0.064")	
239600000-N	840	9	EA	FRAME WITH COVER, STD 840.54	472500000-E	1205	75	EA	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS)	602700000-N	1622	2	EA	INLET PROTECTION AT TEMPORARY SLOPE DRAINS	054000000-E	SP	16	LF	**** ALUMINIZED CORRUGATED STEEL PIPE CULVERTS, **** THICK (18", 0.064")	
253500000-E	846	1,100	LF	***X*** CONCRETE CURB (8" X 12")	481000000-E	1205	92,430	LF	PAINT PAVEMENT MARKING LINES (4")	603000000-E	1630	2,465	CY	SILT EXCAVATION	054000000-E	SP	408	LF	**** ALUMINIZED CORRUGATED STEEL PIPE CULVERTS, **** THICK (30", 0.079")	
254200000-E	846	410	LF	1'-6" CONCRETE CURB & GUTTER	482000000-E	1205	970	LF	PAINT PAVEMENT MARKING LINES (8")	603800000-E	SP	50	SY	PERMANENT SOIL REINFORCEMENT MAT						
254900000-E	846	12,330	LF	2'-6" CONCRETE CURB & GUTTER	483500000-E	1205	1,600	LF	PAINT PAVEMENT MARKING LINES (24")	604200000-E	1632	1,600	LF	1/4" HARDWARE CLOTH						
259100000-E	848	5,680	SY	4" CONCRETE SIDEWALK	484500000-N	1205	42	EA	PAINT PAVEMENT MARKING SYMBOL	608400000-E	1660	10	ACR	SEEDING & MULCHING						
260500000-N	848	70	EA	CONCRETE WHEELCHAIR RAMPS	484700000-E	1205	27,700	LF	POLYUREA PAVEMENT MARKING LINES (4", *****) (STANDARD GLASS BEADS)	608700000-E	1660	5	ACR	MOWING	036600000-E	310	3,816	LF	15" RC PIPE CULVERTS, CLASS III	
261200000-E	848	930	SY	6" CONCRETE DRIVEWAY	487100000-E	1205	325	LF	POLYUREA PAVEMENT MARKING LINES (8", *****) (STANDARD GLASS BEADS)	609000000-E	1661	50	LB	SEED FOR REPAIR SEEDING	037200000-E	310	1,140	LF	18" RC PIPE CULVERTS, CLASS III	
283000000-N	858	5	EA	ADJUSTMENT OF MANHOLES	487500000-N	1205	12	EA	REMOVAL OF PAVEMENT MARKING SYMBOLS & CHARACTERS	609300000-E	1661	0.25	TON	FERTILIZER FOR REPAIR SEEDING	038400000-E	310	1,044	LF	30" RC PIPE CULVERTS, CLASS III	
284500000-N	858	62	EA	ADJUSTMENT OF METER BOXES OR VALVE BOXES	490500000-N	1253	480	EA	SNOWPLOWABLE PAVEMENT MARKERS	609600000-E	1662	150	LB	SEED FOR SUPPLEMENTAL SEEDING	053600000-E	SP	1,180	LF	**** HDPE PIPE CULVERTS (15")	
353300000-E	866	32	LF	CHAIN LINK FENCE, *** FABRIC (60")						610800000-E	1665	4	TON	FERTILIZER TOPDRESSING	053600000-E	SP	16	LF	**** HDPE PIPE CULVERTS (18")	
										611400000-N	SP	5	HR	SPECIALIZED HAND MOWING	053600000-E	SP	16	LF	**** HDPE PIPE CULVERTS (18")	
										611700000-N	SP	27	EA	RESPONSE FOR EROSION CONTROL	053600000-E	SP	408	LF	**** HDPE PIPE CULVERTS (30")	

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STATE OF NORTH CAROLINA
 DIVISION OF HIGHWAYS

MISCELLANEOUS SUMMARIES

SUMMARY OF 48" CHAIN LINK FENCE

STATION TO STATION	LOCATION	FABRIC (LF)	END BRACE	CORNER BRACE	LINE BRACE	LINE POSTS	TERMINAL POSTS
-L- STA. 26+78.00 TO STA. 26+80.32	RT	16.00	1.00		1.00	1.33	2.00
-Y10- STA. 11+50.34 TO STA. 12+12.15	RT	62.00	1.00		1.00	5.17	2.00
TOTAL		78.00				6.50	4.00
SAY		78.00				7.00	4.00

SUMMARY OF 60" CHAIN LINK FENCE

STATION TO STATION	LOCATION	FABRIC (LF)	END BRACE	CORNER BRACE	LINE BRACE	LINE POSTS	TERMINAL POSTS
-L- STA. 27+74.00 TO STA. 27+74.00	RT	16.00	1.00		1.00	1.33	2.00
TOTAL		16.00				1.33	2.00
SAY		16.00				2.00	2.00

SUMMARY OF 60" CHAIN LINK FENCE w/3 STRAND BARBED WIRE

STATION TO STATION	LOCATION	FABRIC (LF)	END BRACE	CORNER BRACE	LINE BRACE	LINE POSTS	TERMINAL POSTS
-L- STA. 24+70.63 TO STA. 24+70.78	LT	16.00	1.00		1.00	1.33	2.00
TOTAL		16.00				1.33	2.00
SAY		16.00				2.00	2.00

SUMMARY OF 72" CHAIN LINK FENCE w/3 STRAND BARBED WIRE

STATION TO STATION	LOCATION	FABRIC (LF)	END BRACE	CORNER BRACE	LINE BRACE	LINE POSTS	TERMINAL POSTS
-L- STA. 28+73.73 TO STA. 29+77.79	RT	110.00	1.00		1.00	9.17	2.00
-L- STA. 30+01.40 TO STA. 30+27.94	RT	30.00	1.00		1.00	2.50	2.00
-L- STA. 62+31.73 TO STA. 62+32.83	RT	16.00	1.00		1.00	1.33	2.00
TOTAL		156.00				13.00	6.00
SAY		156.00				13.00	6.00

SUMMARY OF 36" WOOD FENCE

STATION TO STATION	LOCATION	LENGTH
-L- STA. 39+05.41 TO STA. 39+06.85	RT	16.00
TOTAL		16.00
SAY		16.00

SUMMARY OF CHAIN LINK FENCE RESET

STATION TO STATION	LOCATION	RESET
-L- STA. 24+72 TO STA. 26+26	LT	212.00
-L- STA. 26+73 TO STA. 27+74	RT	72.00
TOTAL		284.00

SUMMARY OF ASPHALT PAVEMENT REMOVAL

LINE	STATION TO STATION	LOCATION	AREA
-Y2-	STA. 13+50 TO STA. 15+95	LTRT	79.78
-Y4-	STA. 11+50 TO STA. 14+11	LTRT	115.67
-Y5-	STA. 10+15 TO STA. 10+94	LTRT	34.44
-Y9-	STA. 10+00 TO STA. 11+50	LTRT	30.33
-Y11-	STA. 10+00 TO STA. 11+10	LTRT	50.67
-Y14-	STA. 10+25 TO STA. 10+69	LTRT	38.67
	TOTAL		349.56
	SAY		350.00

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SUMMARY OF EARTHWORK IN CUBIC YARDS

STATION TO STATION	TOTAL EXCAV. (UNCL.)	EMBANK. +20%	BORROW	WASTE
SUMMARY NO. 1				
-L- (LT) STA. 9+50.00 TO STA. 38+00.00	396	9,728	9,332	
-Y2- STA. 13+00.00 TO STA. 15+00.00	126	198	72	
-Y4- STA. 11+00.00 TO STA. 13+50.00	99	1,392	1,293	
-Y5- STA. 10+00.00 TO STA. 10+50.00	32	336	304	
SUMMARY NO. 1 TOTAL	653	11,654	11,001	
SUMMARY NO. 2				
-L- (RT) STA. 9+50.00 TO STA. 38+00.00	1,123	1,414	291	
SUMMARY NO. 2 TOTAL	1,123	1,414	291	
SUMMARY NO. 3				
-L- (LT) STA. 38+00.00 TO STA. 67+00.00	2,962	4,398	1,436	
-Y7- STA. 11+00.00 TO STA. 12+00.00	86	8		78
-Y8- STA. 11+50.00 TO STA. 12+00.00	12	58	46	
-Y9- STA. 10+00.00 TO STA. 11+00.00	46			46
-Y14- STA. 10+00.00 TO STA. 10+50.00	53	44		9
SUB-TOTAL	3,159	4,508	1,482	133
WASTE IN LIEU OF BORROW				133
SUMMARY NO. 3 TOTAL	3,159	4,508	1,349	
SUMMARY NO. 4				
-L- (RT) STA. 38+00.00 TO STA. 67+00.00	254	2,503	2,249	
SUMMARY NO. 4 TOTAL	254	2,503	2,249	
SUMMARY NO. 5				
-L- (LT) STA. 67+00.00 TO STA. 76+00.00	2	3,168	3,166	
-Y10- STA. 11+00.00 TO STA. 12+00.00	157	8		149
-Y11- STA. 10+00.00 TO STA. 11+50.00	6	202	196	
-Y12- STA. 10+00.00 TO STA. 10+50.00	26			26
SUB-TOTAL	191	3,378	3,362	175
WASTE IN LIEU OF BORROW				175
SUMMARY NO. 5 TOTAL	191	3,378	3,187	

STATION TO STATION	TOTAL EXCAV. (UNCL.)	EMBANK. +20%	BORROW	WASTE
SUMMARY NO. 6				
-L- (RT) STA. 67+00.00 TO STA. 76+00.00	46	982	936	
SUMMARY NO. 6 TOTAL	46	982	936	
SUMMARY TOTALS				
	5,426	24,439	19,013	
SHOULDER MATERIAL				
LOSS DUE TO CLEARING & GRUBBING	500		500	
PROJECT TOTAL	4,926		19,513	
EST. 5% TO REPLACE TOP SOIL ON BORROW PIT				
			976	
GRAND TOTAL	4,926	24,439	20,489	
SAY	5,000		20,500	

UNDERCUT EXCAVATION = 5,000 CY
 SELECT GRANULAR MATERIAL = 500 CY

NOTE: Earthwork quantities are calculated by the Roadway Design Unit. These earthwork quantities are based in part on subsurface data provided by the Geotechnical Engineering Unit.

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STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

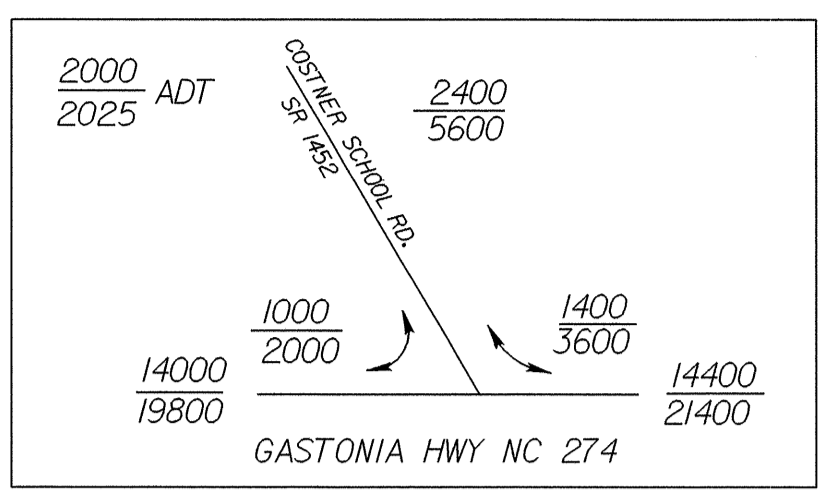
PARCEL INDEX SHEET

PARCEL No.	SHEET No.	PROPERTY OWNER NAME
1	4	BESSEMER CITY CHURCH OF GOD
2	4	H. N. R. LIMITED PARTNERSHIP
3	4	HOWARD N.ROBINSON, JR.
4	4 & 5	DONALD W. JOHNSON
5	4	H. N. R. LIMITED PARTNERSHIP
6	4	NANCY C. GRANT
7	4	H. N. R. LIMITED PARTNERSHIP
8	4	CITADEL MANAGEMENT, LLC
9	4	JOHN R. O'BREN
10	4	H. N. R. LIMITED PARTNERSHIP
11	4	EVERGREEN MANOR REVCO, LLC
11A	4	J. GARRY GREEN
12	5	TEDDY E. BESS
13	5	ALBERT DIFLORIO
14	5	H. N. R. LIMITED PARTNERSHIP
15	5	HAYWOOD EQUITY GROUP LIMITED PARTNERSHIP
16	5 & 6	INGLES MARKETS. INC.
17	5	H. N. R. LIMITED PARTNERSHIP
18	5, 6, 7, 8, & 9	NORFOLK & SOUTHERN R R
19	6	LEWIS SCOTT ANDERSON & TRACIE ANDERSON
20	6	FIRST CAROLINA FEDERAL SAVINGS BANK
21	6	BOB TATE CONSTRUCTION, INC.
22	6	BOBBY J. TATE
23	6	HOWARD N. ROBINSON, JR.
24	6	RONNIE R. FREEMAN
25	6 & 7	G. GLENN ADAMS (1/2) & WILLIAM S. STINNETT (1/2)
26	6 & 7	SOUTHLAND INVESTMENT GROUP OF GASTONIA, INC.
27	7	NORDBERG TRANSCO. INC
28	7 & 8	JAMES E. BEAVER
29	7	LARRY B. REYNOLDS
30	7	DUKE ENERGY CORPORATION
31	8	HENRY J. MOOSE, JR.
32	8	CLYDE BALDWIN
33	8	SANDRA V. CONRAD
34	8	JAMES D. CONRAD
35	8	MIKE PAYNE & SUSAN ANITA PAYNE
35A	8	BRIAN A. DRUM & JULIE C. DRUM
36	8	BUEL S. TRUESDALE & KAY B. TRUESDALE
37	8 & 9	LLOYD LARRY LAWS
38	8 & 9	JAMES W. KIRK

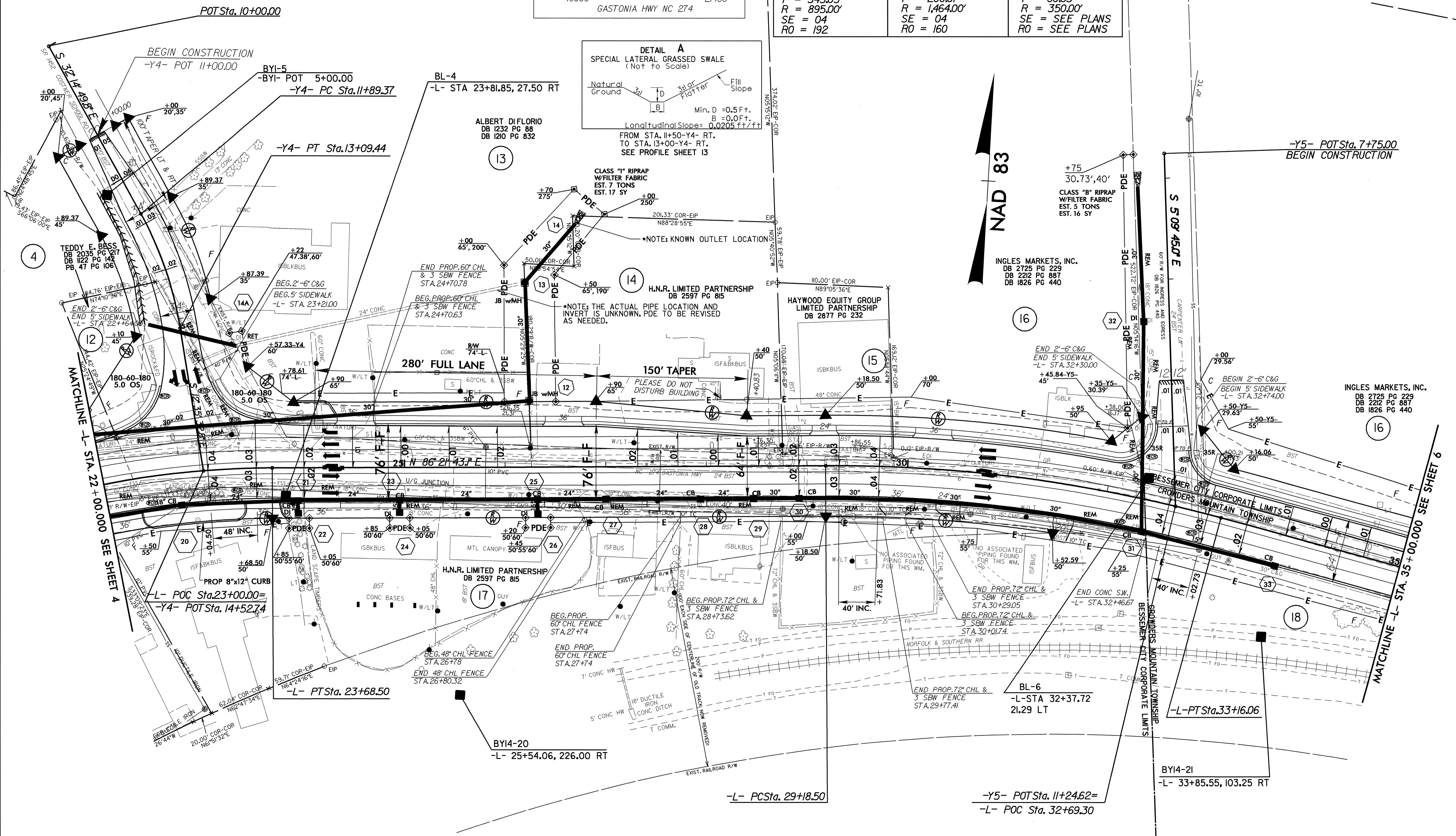
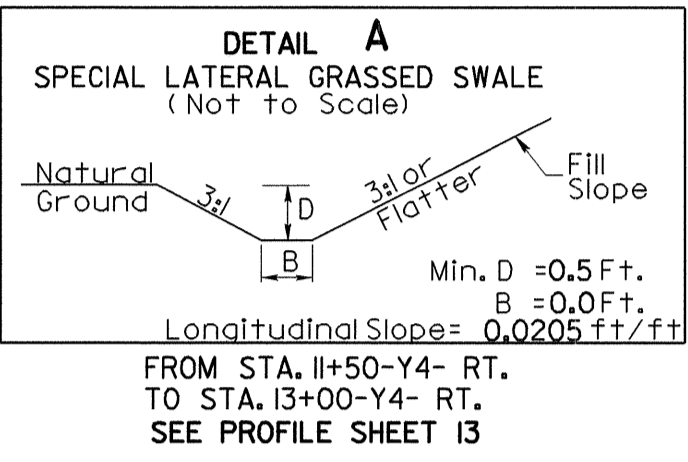
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REVISIONS

PROJECT REFERENCE NO. U-3405	SHEET NO. 5
RW SHEET NO.	
ROADWAY DESIGN ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 14493	HYDRAULICS ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 19885
<i>J. S. [Signature]</i> 1-9-09	<i>W. B. [Signature]</i> 1-22-09



-L-	-L-	-Y4-
PI Sta 20+54.88	PI Sta 31+18.51	PI Sta 12+50.00
$\Delta = 42' 10'' 00.0''$ (RT)	$\Delta = 15' 33'' 33.8''$ (RT)	$\Delta = 19' 39'' 17.0''$ (RT)
$D = 6' 24'' 06.3''$	$D = 3' 54'' 49.1''$	$D = 16' 22'' 12.8''$
$L = 658.67'$	$L = 397.57'$	$L = 120.06'$
$T = 345.05'$	$T = 200.01'$	$T = 60.63'$
$R = 895.00'$	$R = 1,464.00'$	$R = 350.00'$
$SE = 04$	$SE = 04$	$SE = \text{SEE PLANS}$
$RO = 192$	$RO = 160$	$RO = \text{SEE PLANS}$



31-DEC-2008 16:27 u:\3405\05.psh
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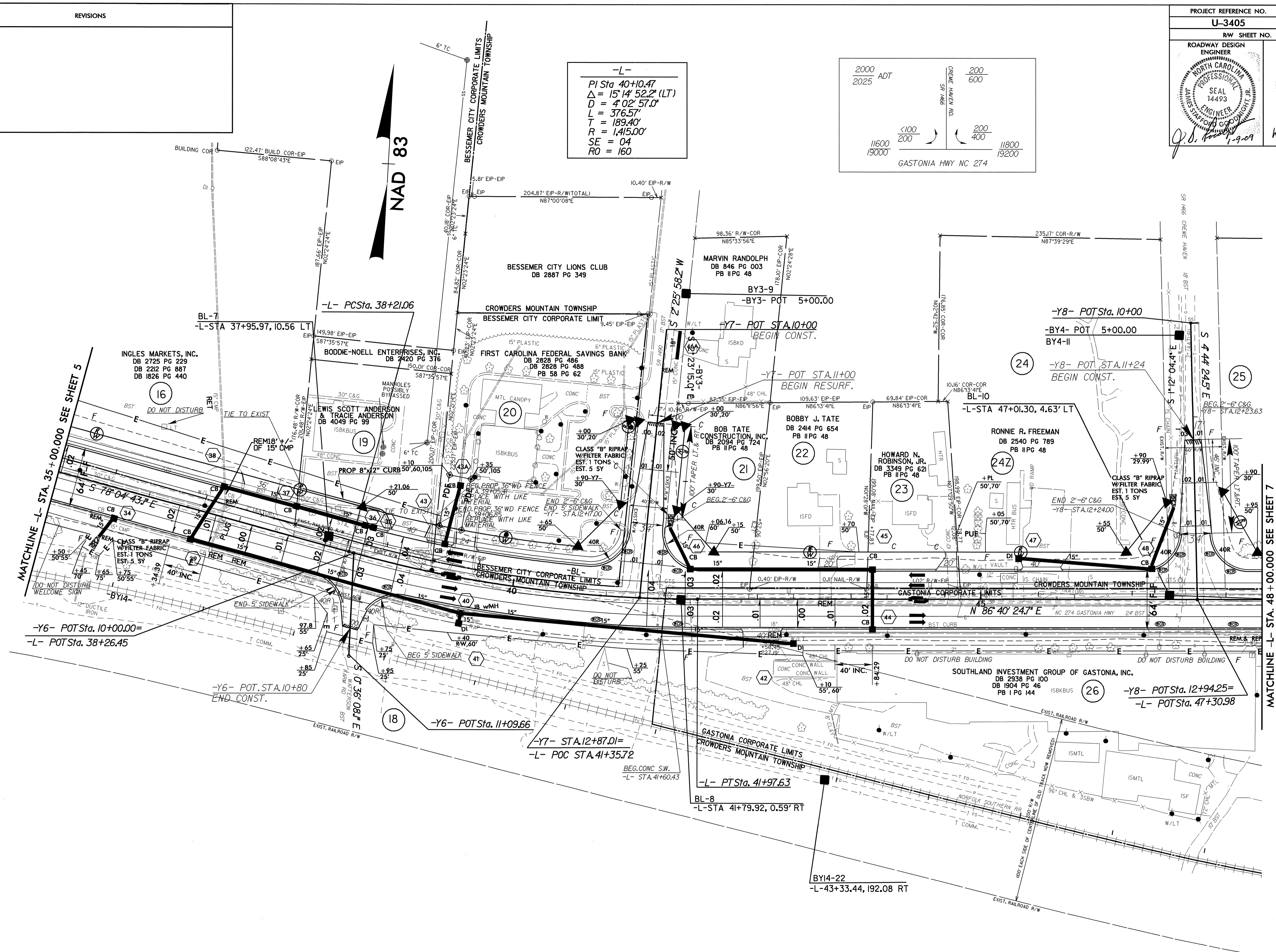
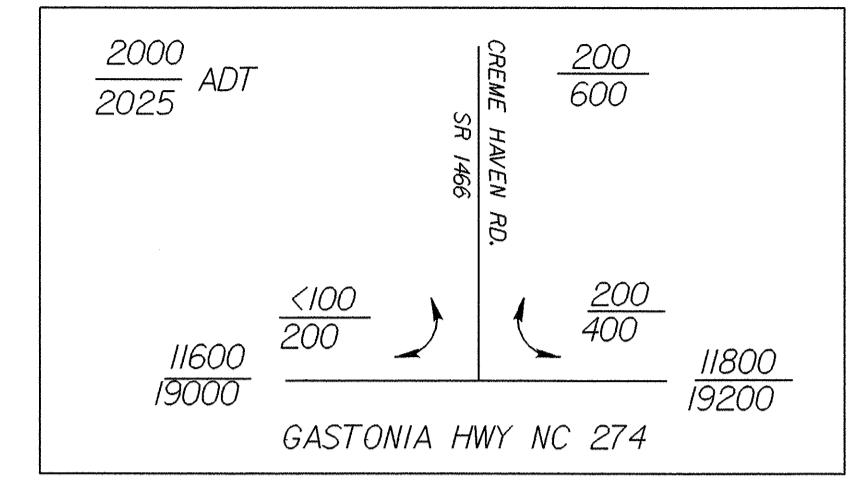
NOTE: SEE SHEET NO'S 10, 11 & 12 FOR -L- PROFILE
SHEET NO'S 13 & 14 FOR -Y- PROFILE

7/12/09

REVISIONS

PROJECT REFERENCE NO. U-3405	SHEET NO. 6
RW SHEET NO.	
ROADWAY DESIGN ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 14493 JAMES STAFFORD GOODRIGHT JR. 1-9-09	HYDRAULICS ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 18865 W.D. JONES 1-22-09

-L-
 PI Sta 40+10.47
 $\Delta = 15' 14" 52.2" (LT)$
 $D = 4' 02" 57.0"$
 $L = 376.57'$
 $T = 189.40'$
 $R = 1,415.00'$
 $SE = 04$
 $RO = 160$



NOTE: SEE SHEET NO'S 10, 11 & 12 FOR -L- PROFILE
 SHEET NO'S 13 & 14 FOR -Y- PROFILE

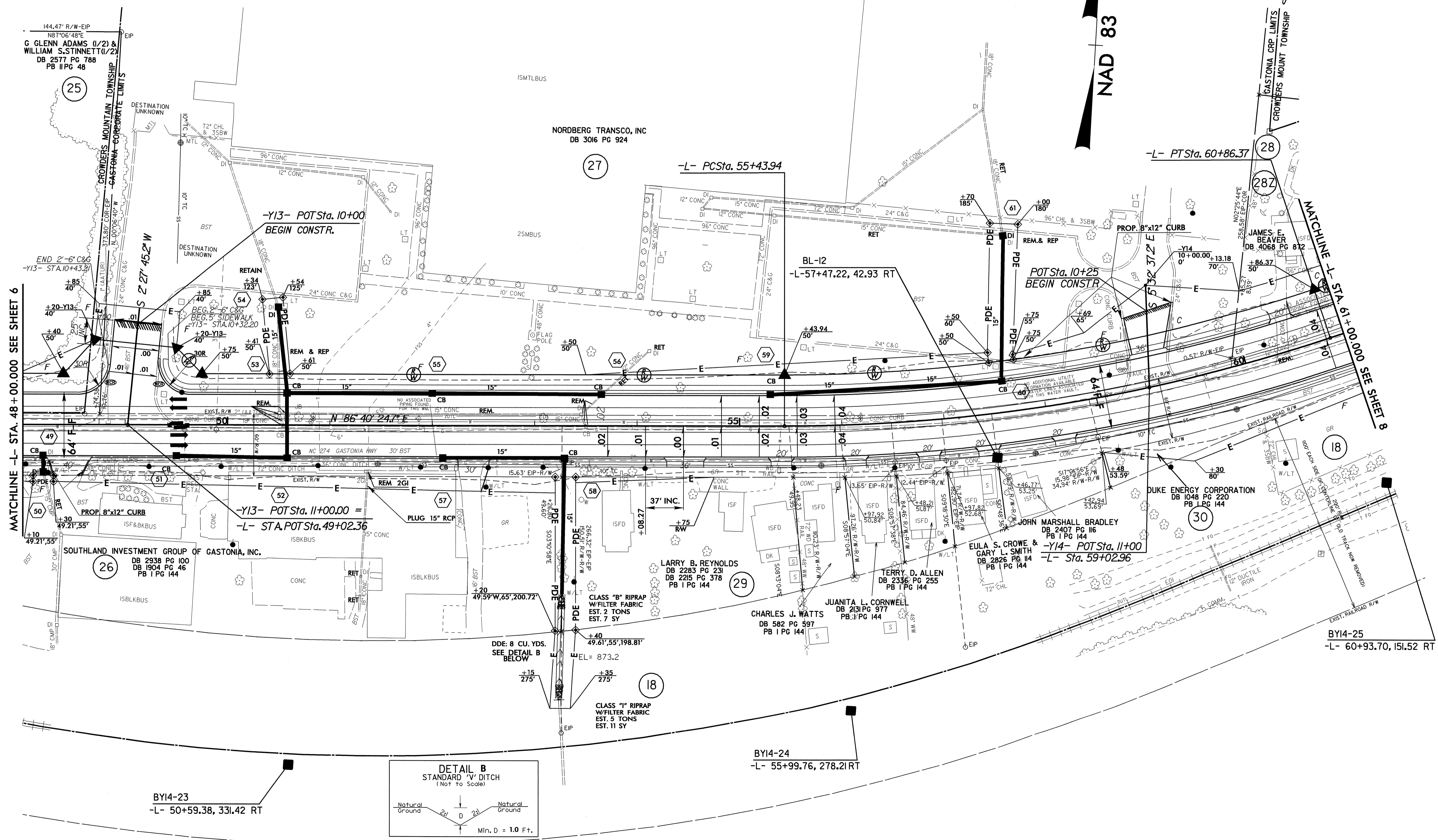
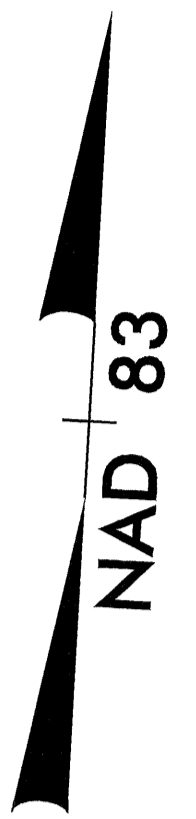
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7/2/99

REVISIONS

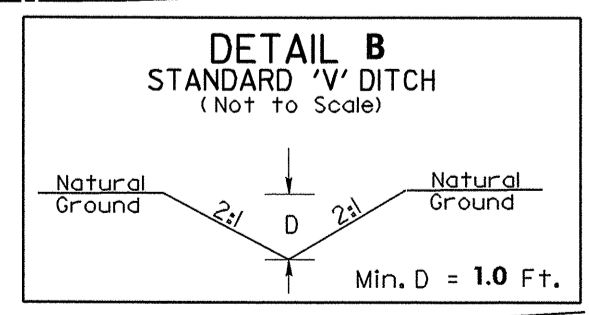
PROJECT REFERENCE NO. U-3405	SHEET NO. 7
RW SHEET NO.	
ROADWAY DESIGN ENGINEER 	HYDRAULICS ENGINEER

-L-
 PI Sta 58+7.55
 $\Delta = 18^{\circ} 33' 16.5" (LT)$
 $D = 3^{\circ} 25' 14.3"$
 $L = 542.43'$
 $T = 273.61'$
 $R = 1,675.00'$
 $SE = 04$
 $RO = \text{SEE PLANS}$



MATCHLINE -L- STA. 48+00.00 SEE SHEET 6

MATCHLINE -L- STA. 61+00.00 SEE SHEET 8



NOTE: SEE SHEET NO'S 10, 11 & 12 FOR -L- PROFILE
 SHEET NO'S 13 & 14 FOR -Y- PROFILE

31-DEC-2008 15:39
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7/2/99

REVISIONS

PROJECT REFERENCE NO. U-3405	SHEET NO. 9
RW SHEET NO.	
ROADWAY DESIGN ENGINEER 	HYDRAULICS ENGINEER
DARRELL GENE MELTON DB 1258 PG 224 DB 1856 PG 49 PB 6 PG 53	

-L-

PI Sta 73+43.86
 $\Delta = 24' 38" 07.5" (RT)$
 $D = 5' 12" 31.3"$
 $L = 472.97'$
 $T = 240.19'$
 $R = 1,000.00'$
 $SE = 04$
 $RO = \text{SEE PLANS}$

STA.82+00 -L- END RESURFACING

CROWDERS MOUNTAIN TOWNSHIP
GASTONIA CORPORATE LIMITS (PB 39 PG 6)
(230' OFFSET FROM CENTERLINE NC-274)

RUTHERFORD ELECTRIC MEMBERSHIP CORPORATION
DB 606 PG 270
PB 6 PG 53

MARY E. LYTTON
DB 722 PG 292
DB 698 PG 246
PB 6 PG 53

JERRY DEAN HEFFNER
DB 2102 PG 830
PB 6 PG 53

LLOYD LARRY LAWS
DB 1514 PG 856
PB 6 PG 53

JAMES W. KIRK
DB 1466 PG 190
PB 6 PG 53

JAMES W. KIRK
DB 2234 PG 321

BL-16
-L- 73+29.94, 4.16 RT

BL-17
-BL- PINC 70+79.82

Y12- POT Sta. 10+00
BEGIN CONST

Y12- POT Sta. 11+50.39
-L- POT Sta. 74+12.90

BY14-27
-L- STA. 78+44.26 99.82 RT

END TIP PROJECT U-3405
-L- STA.76+05.75

MATCHLINE
-L- STA. 73+00.00 SEE SHEET 8

GASTONIA CORPORATE LIMITS (PB 39 PG 6)
230' OFFSET FROM CENTERLINE OATES RD.
CROWDERS MOUNTAIN TOWNSHIP

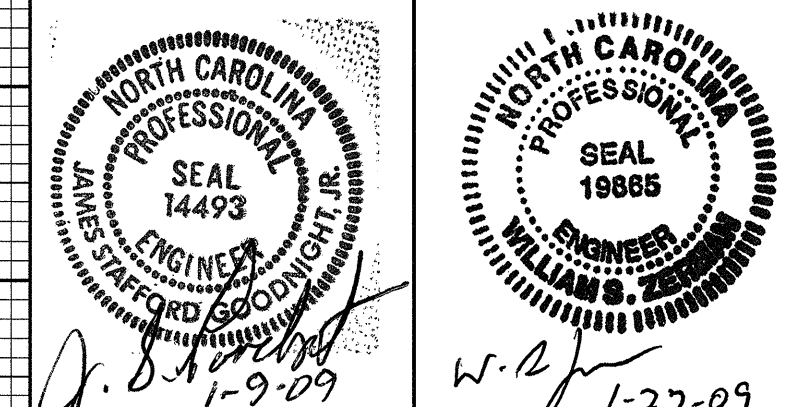
NOTE: SEE SHEET NO.'S 10, 11 & 12 FOR -L- PROFILE
SHEET NO.'S 13 & 14 FOR -Y- PROFILE

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10/26/98

BEGIN GRADE
-L- STA. 10+00.00
EL. 929.23

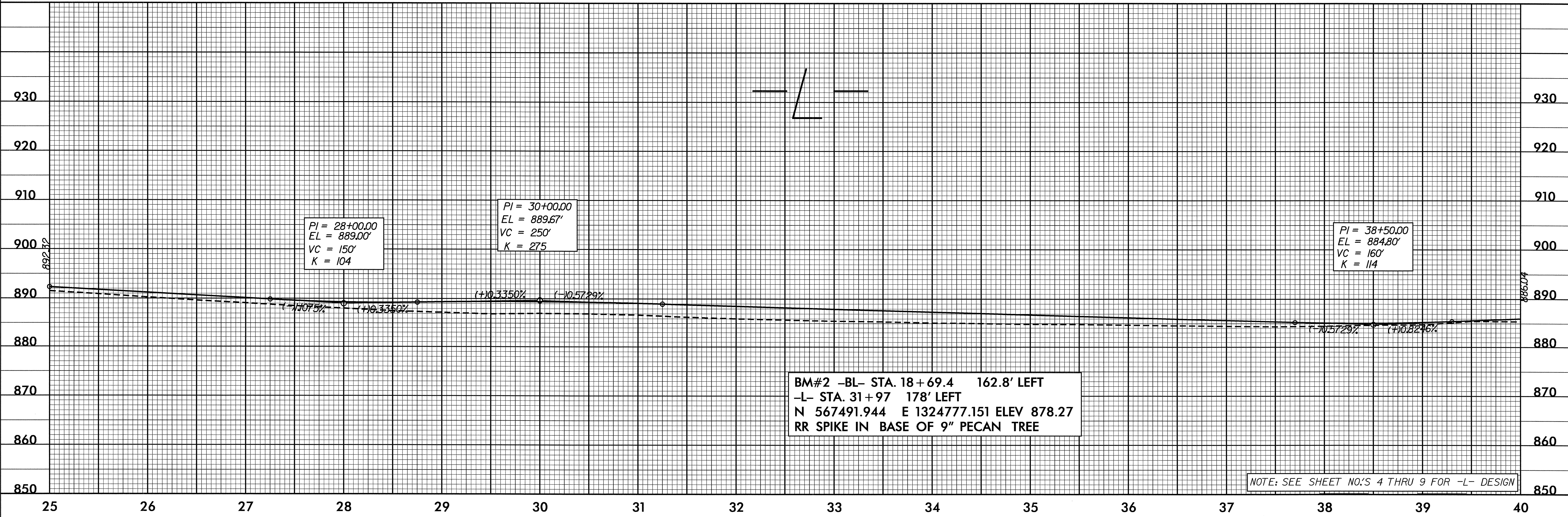
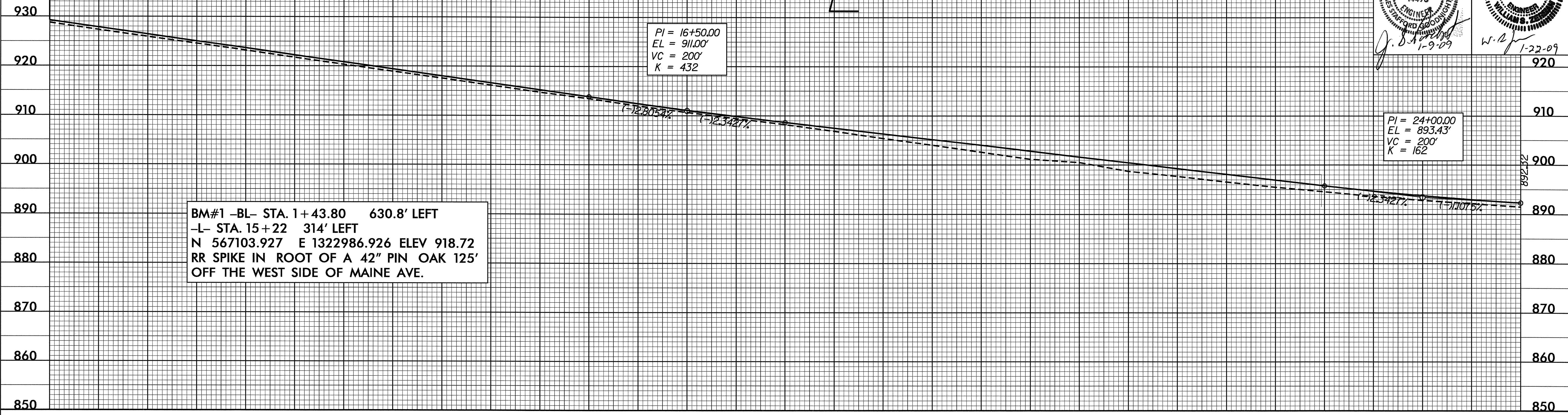
PROJECT REFERENCE NO. U-3405
SHEET NO. 10



PI = 16+50.00
EL = 911.00'
VC = 200'
K = 432

PI = 24+00.00
EL = 893.43'
VC = 200'
K = 162

BM#1 -BL- STA. 1+43.80 630.8' LEFT
-L- STA. 15+22 314' LEFT
N 567103.927 E 1322986.926 ELEV 918.72
RR SPIKE IN ROOT OF A 42" PIN OAK 125'
OFF THE WEST SIDE OF MAINE AVE.



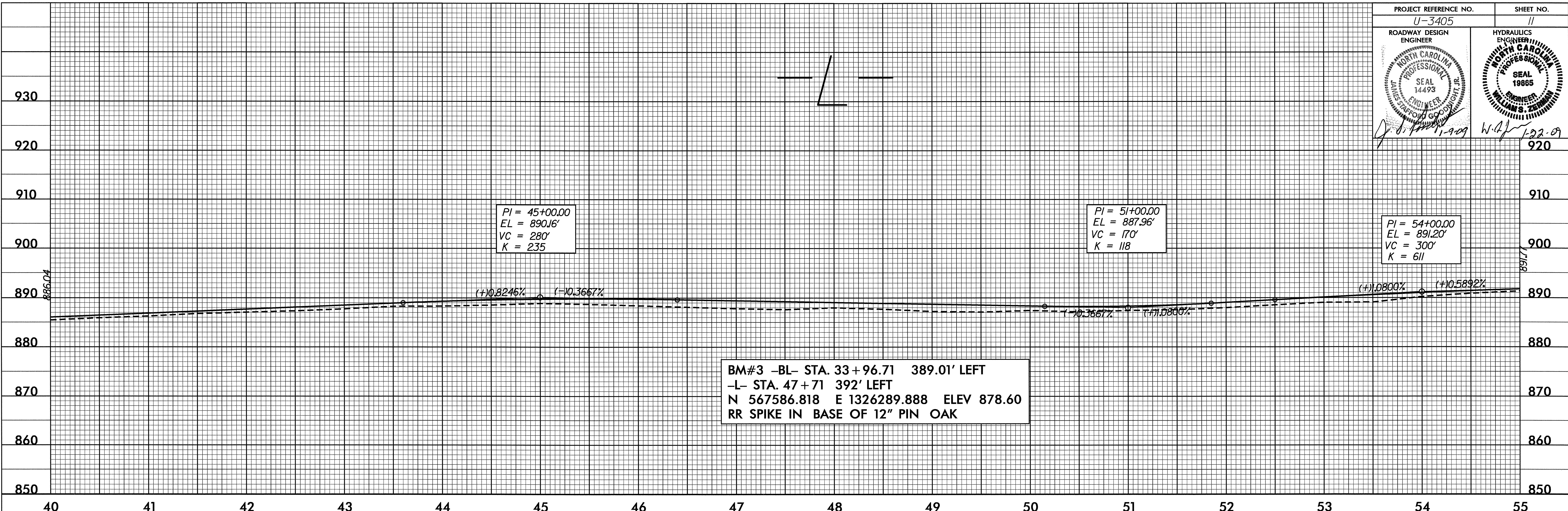
BM#2 -BL- STA. 18+69.4 162.8' LEFT
-L- STA. 31+97 178' LEFT
N 567491.944 E 1324777.151 ELEV 878.27
RR SPIKE IN BASE OF 9" PECAN TREE

NOTE: SEE SHEET NO'S 4 THRU 9 FOR -L- DESIGN

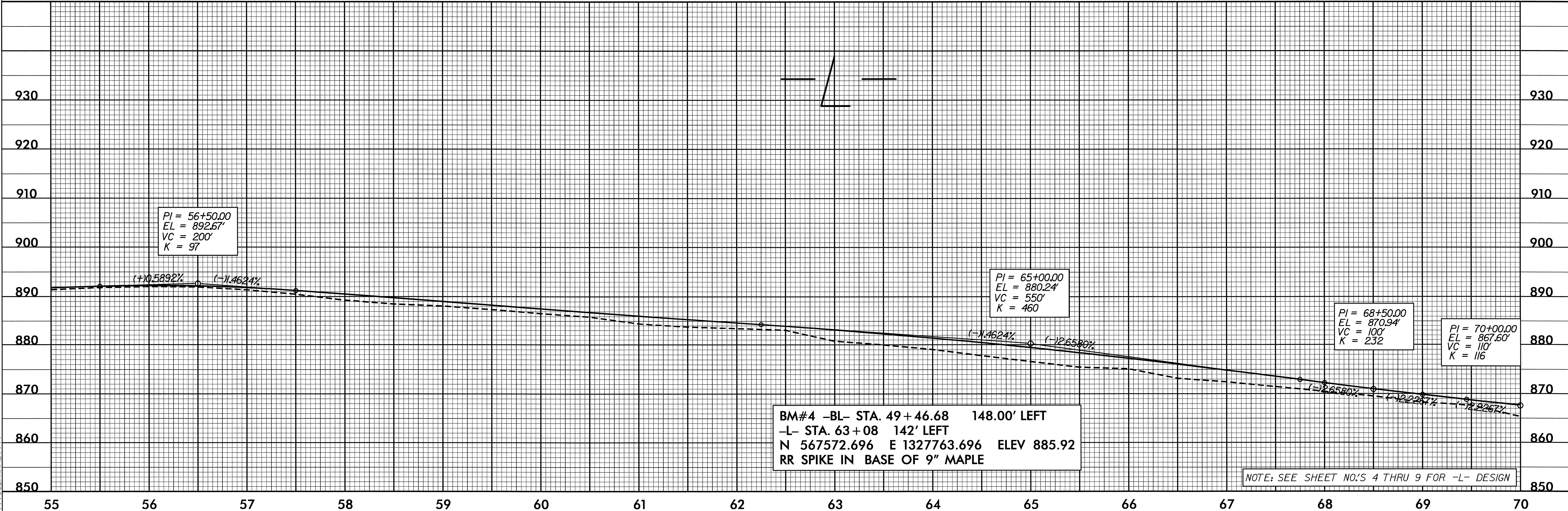
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10/26/98

PROJECT REFERENCE NO. U-3405	SHEET NO. 11
ROADWAY DESIGN ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 14493 STAFFORD GOODWIN	HYDRAULICS ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 19865 WILLIAMS, ZEMMEL
<i>Stafford Goodwin</i> 1-9-09	<i>Williams, Zemmell</i> 1-22-09



BM#3 -BL- STA. 33+96.71 389.01' LEFT
 -L- STA. 47+71 392' LEFT
 N 567586.818 E 1326289.888 ELEV 878.60
 RR SPIKE IN BASE OF 12" PIN OAK



BM#4 -BL- STA. 49+46.68 148.00' LEFT
 -L- STA. 63+08 142' LEFT
 N 567572.696 E 1327763.696 ELEV 885.92
 RR SPIKE IN BASE OF 9" MAPLE

NOTE: SEE SHEET NO'S 4 THRU 9 FOR -L- DESIGN

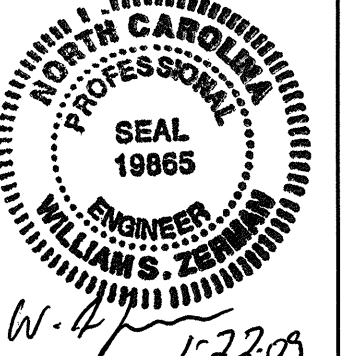
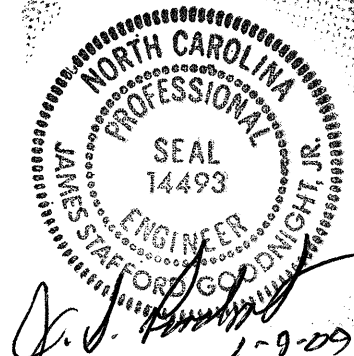
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10/26/98

PROJECT REFERENCE NO. U-3405 SHEET NO. 12

ROADWAY DESIGN ENGINEER

HYDRAULICS ENGINEER



J. D. [Signature]

W. H. [Signature]

930

920

910

900

890

880

870

860

850

920

910

900

890

880

870

860

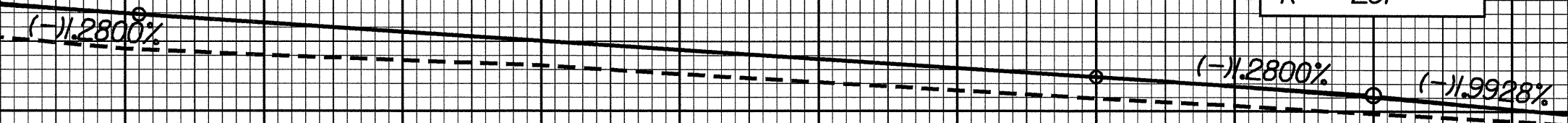
850

BM#5 -BL- STA. 60+27.21 245.14' LEFT
-L- STA. 74+07 231' LEFT
N 567877.072 E 1328909.867 ELEV 867.37
RR SPIKE IN BASE OF 30" WHITE OAK

PI = 70+00.00
EL = 867.60'
VC = 110'
K = 116

PI = 75+00.00
EL = 861.20'
VC = 200'
K = 281

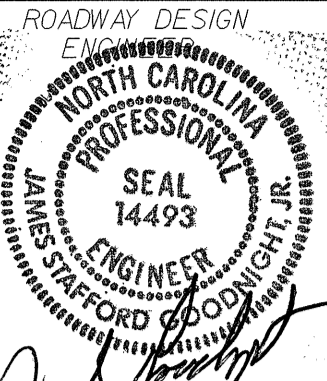

END GRADE
L = STA. 76+05.68
EL. 859.09



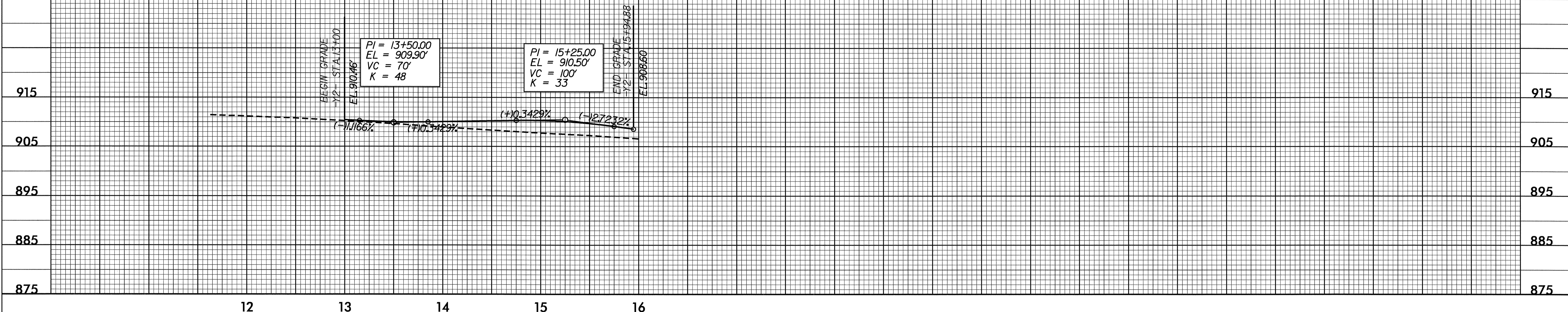
70 71 72 73 74 75 76 77 78

NOTE: SEE SHEET NO'S 4 THRU 9 FOR -L- DESIGN

10/26/98

PROJECT REFERENCE NO. U-3405	SHEET NO. 13
	
<p><i>J. S. [Signature]</i> 1-9-09</p> <p><i>W. S. Z...</i> 1-22-09</p>	

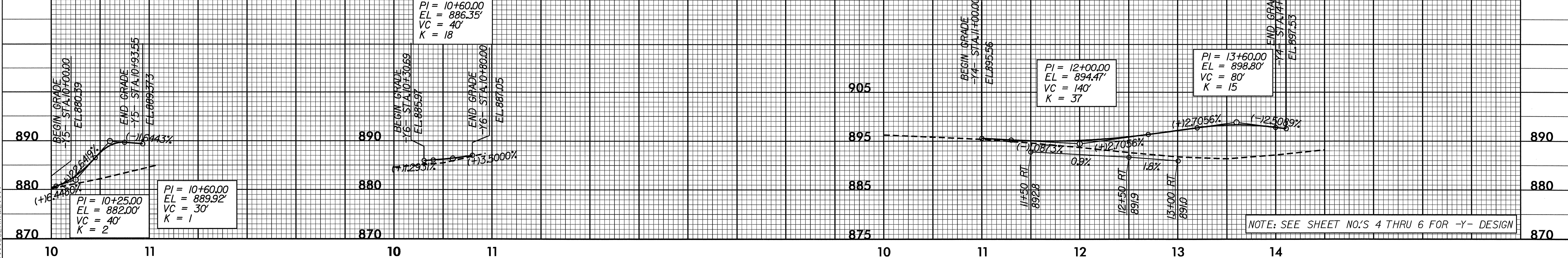
-Y2-



-Y5-

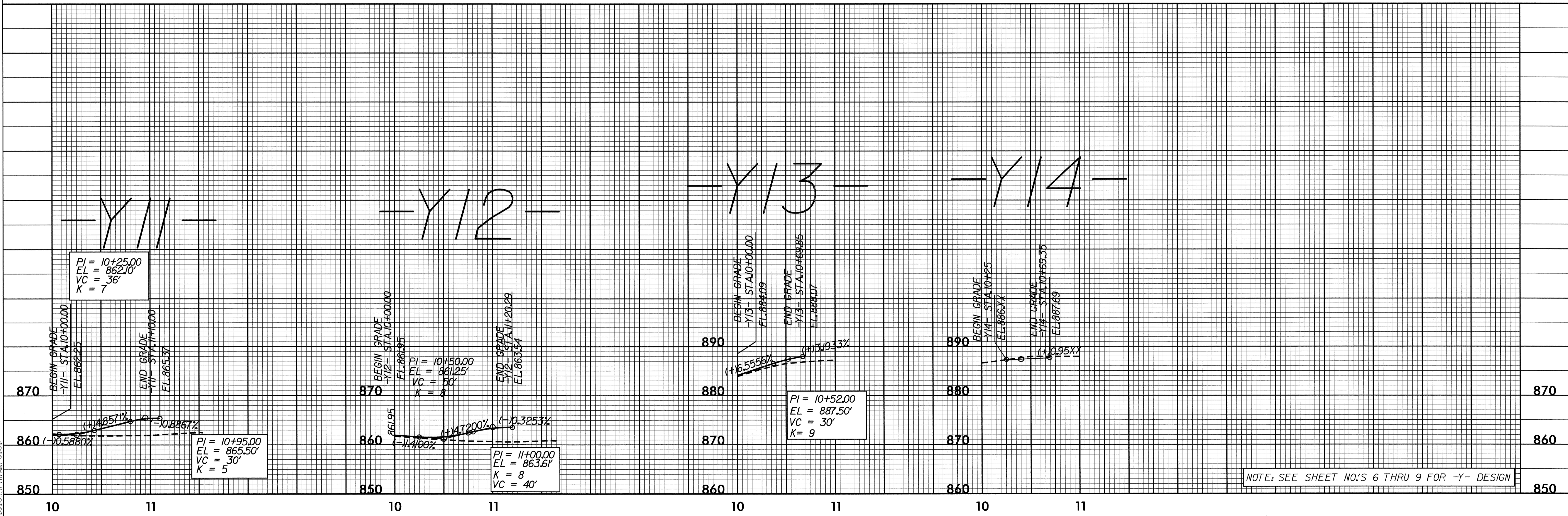
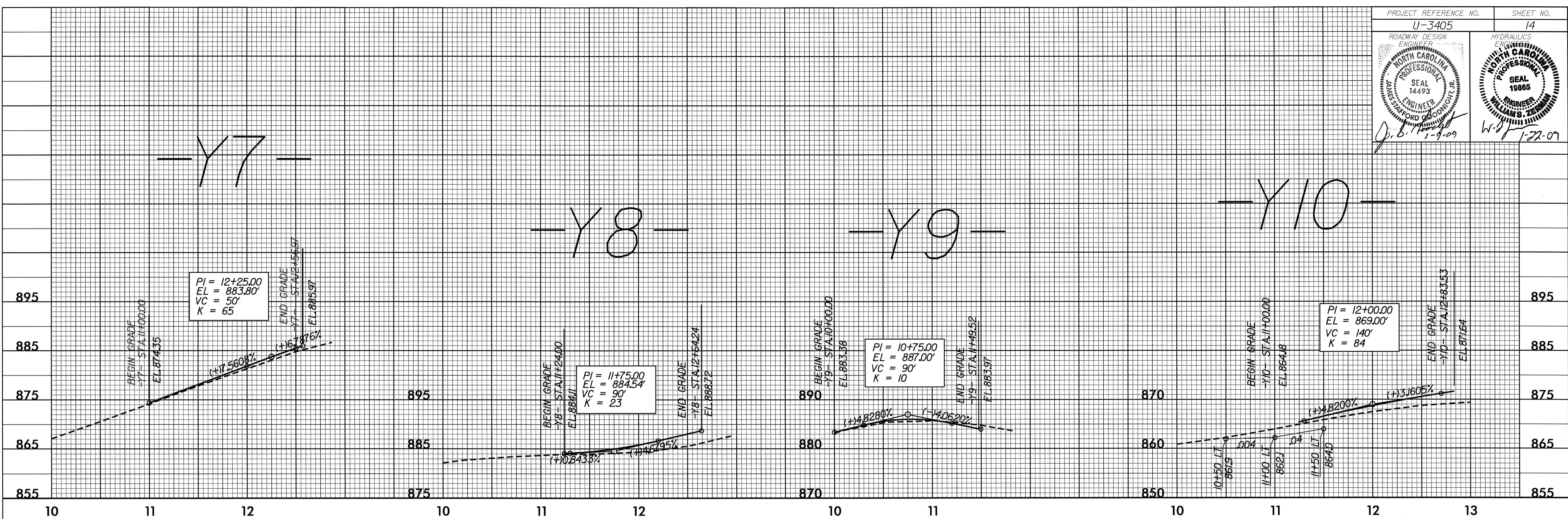
-Y6-

-Y4-



NOTE: SEE SHEET NO.'S 4 THRU 6 FOR -Y- DESIGN

31-DEC-2008 15:30 31-DEC-2008 15:30 \\srs\user\NAME\3405.dwg



NOTE: SEE SHEET NO'S 6 THRU 9 FOR -Y- DESIGN