

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-5709C	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
50138.184	HSIP-0017 (158)	PE	

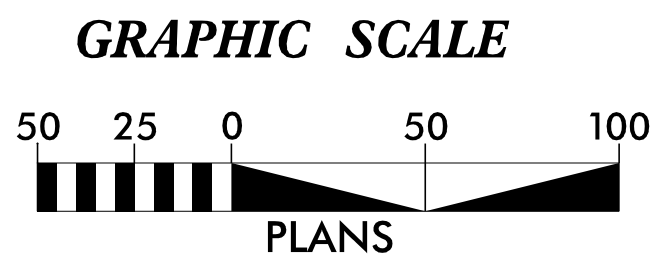
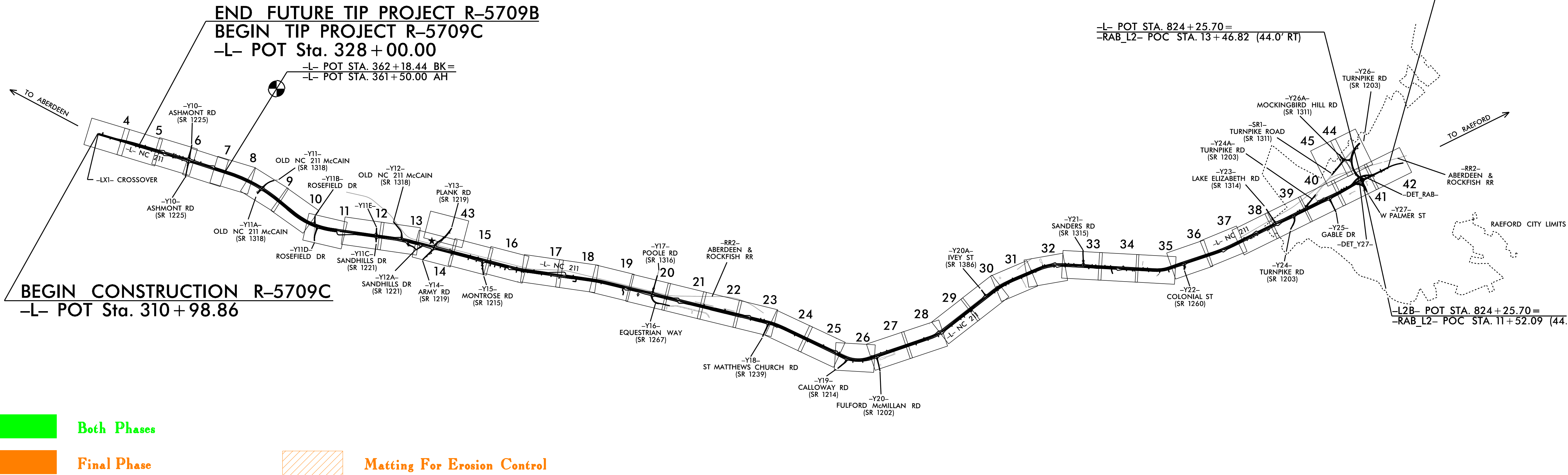
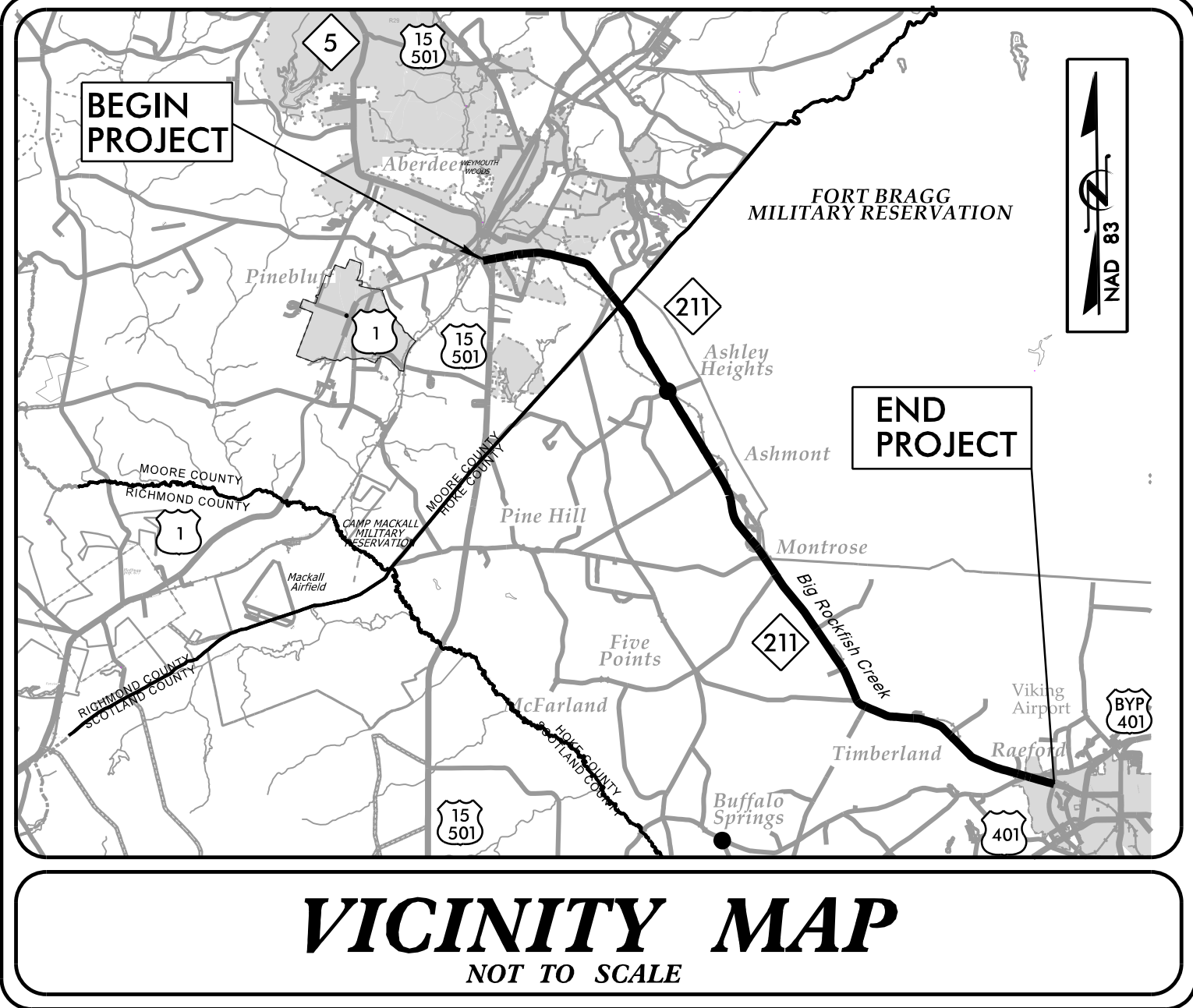
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL

HOKE COUNTY

LOCATION: NC 211 FROM US 15/US 501 IN ABERDEEN TO SR 1244
(WEST PALMER ST) /SR 1311 (MOCKINGBIRD HILL RD) IN RAEFORD

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



THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY WITH THE REGULATIONS SET FORTH BY THE NCG 010000 GENERAL STORMWATER CONSTRUCTION PERMIT ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF ENERGY, MINERAL, AND LAND RESOURCES.

RK&K

Prepared in the Office of:
RK&K, LLP
8601 SIX FORKS ROAD, SUITE 700
RALEIGH, NORTH CAROLINA 27609
NC LINCENSE NO. F-0112
1-888-521-4455 OR 919-878-9560
Designed by:
COURTLAND HOFFMAN, PE 4312
NAME LEVEL III CERTIFICATION NO.

Roadway Standard Drawings

The "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated January 2024 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

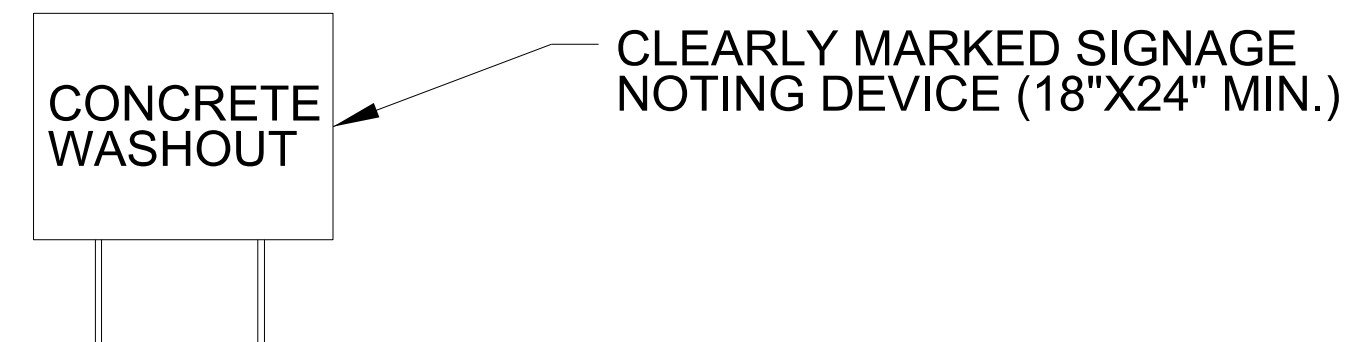
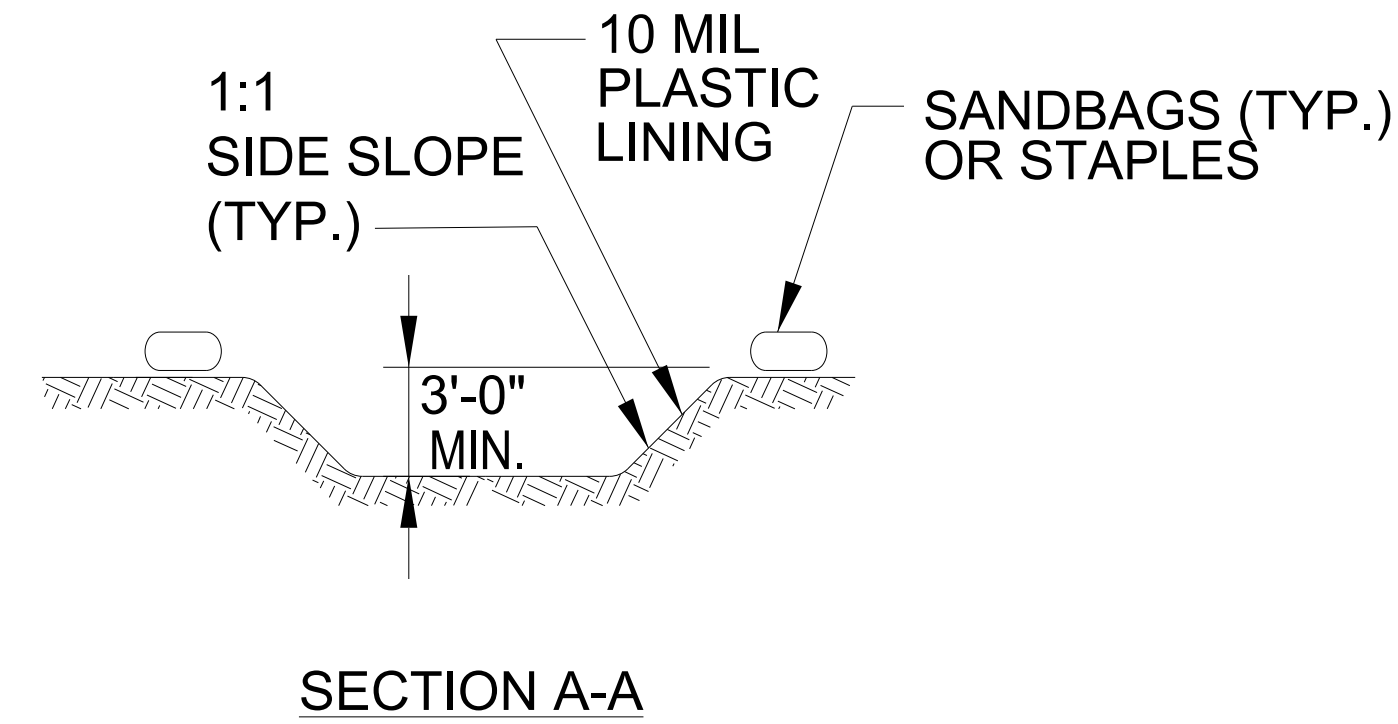
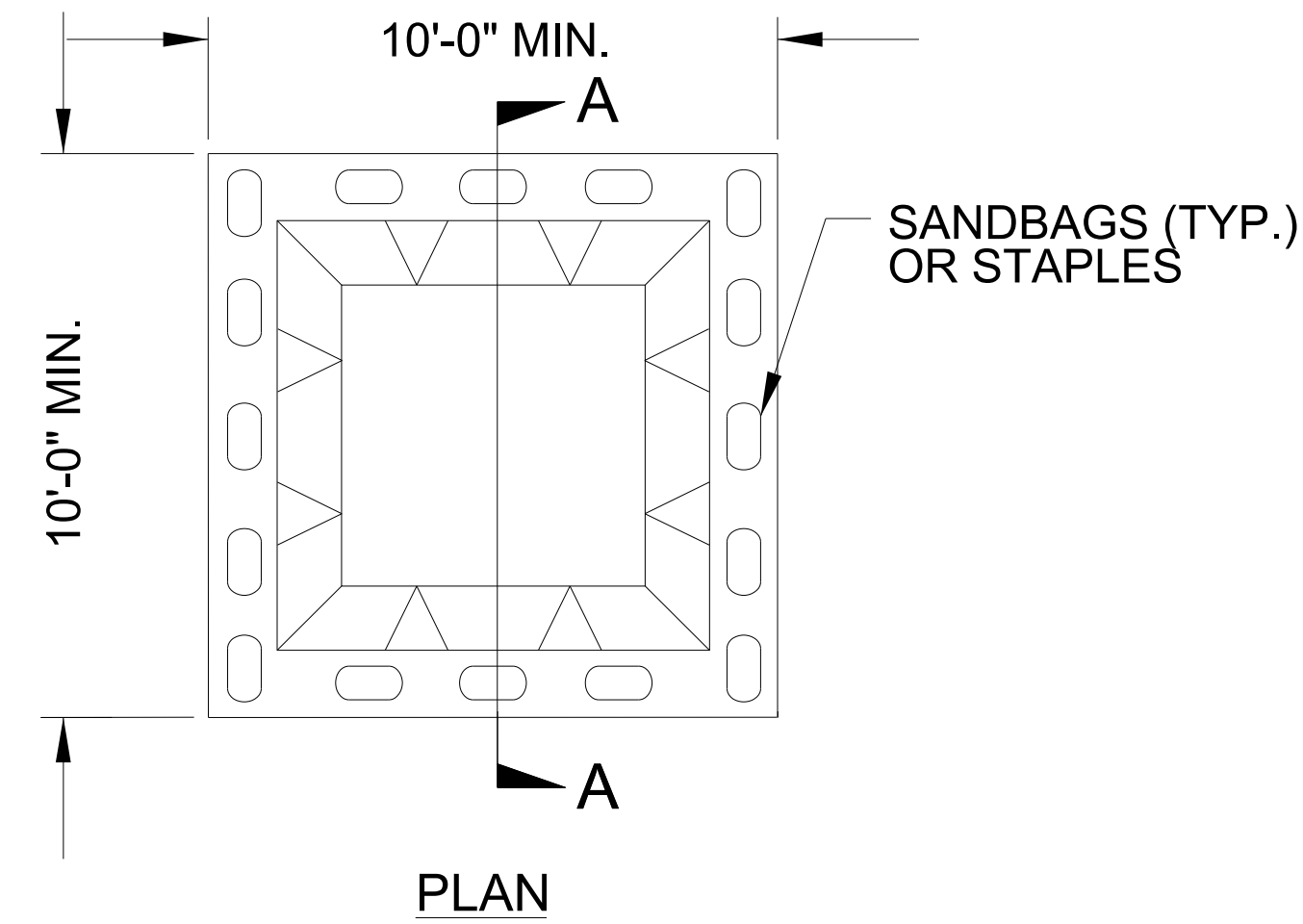
PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-02
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

EROSION & SEDIMENT CONTROL LEGEND

Std. #	Description	Symbol	Std. #	Description	Symbol
1605.01	Temporary Silt Fence		1633.01	Temporary Rock Silt Check Type A	
1606.01	Special Sediment Control Fence		1633.02	Temporary Rock Silt Check Type B	
1622.01	Temporary Berms and Slope Drains		1633.03	Temporary Rock Silt Check Type A with Excelsior Matting and Flocculant	
1630.02	Silt Basin Type B		1634.01	Temporary Rock Sediment Dam Type A	
1630.03	Temporary Silt Ditch		1634.02	Temporary Rock Sediment Dam Type B	
1630.04	Stilling Basin		1635.01	Rock Pipe Inlet Sediment Trap Type A	
1630.05	Temporary Diversion		1635.02	Rock Pipe Inlet Sediment Trap Type B	
1630.06	Special Stilling Basin		1636.01	Excelsior Wattle Check	
1630.07	Skimmer Basin		1636.01	Excelsior Wattle Check with Flocculant	
1630.08	Tiered Skimmer Basin		1636.01	Coir Fiber Wattle Check	
1630.09	Earthen Dam with Skimmer		1636.01	Coir Fiber Wattle Check with Flocculant	
	Infiltration Basin		1636.02	Silt Fence Excelsior Wattle Break	
	Rock Inlet Sediment Trap:			Silt Fence Coir Fiber Wattle Break	
1632.01	Type A				
1632.02	Type B		1636.03	Excelsior Wattle Barrier	
1632.03	Type C		1636.03	Coir Fiber Wattle Barrier	

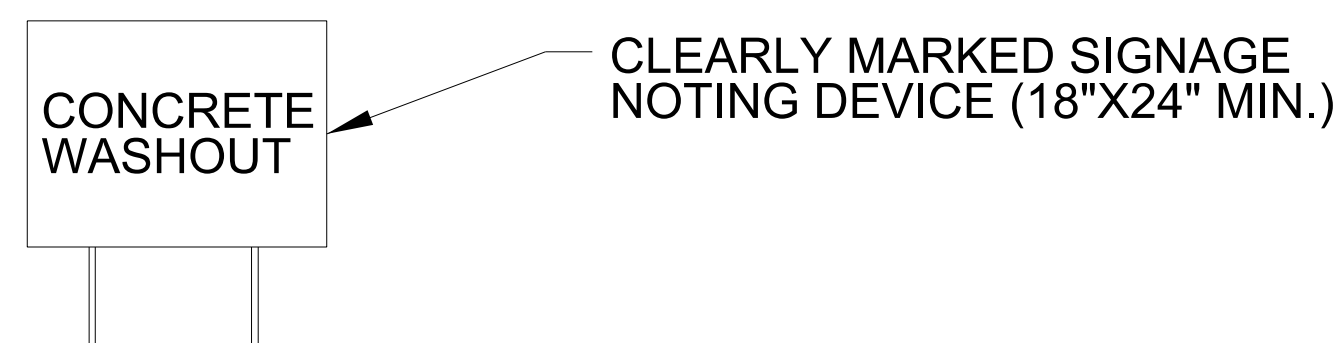
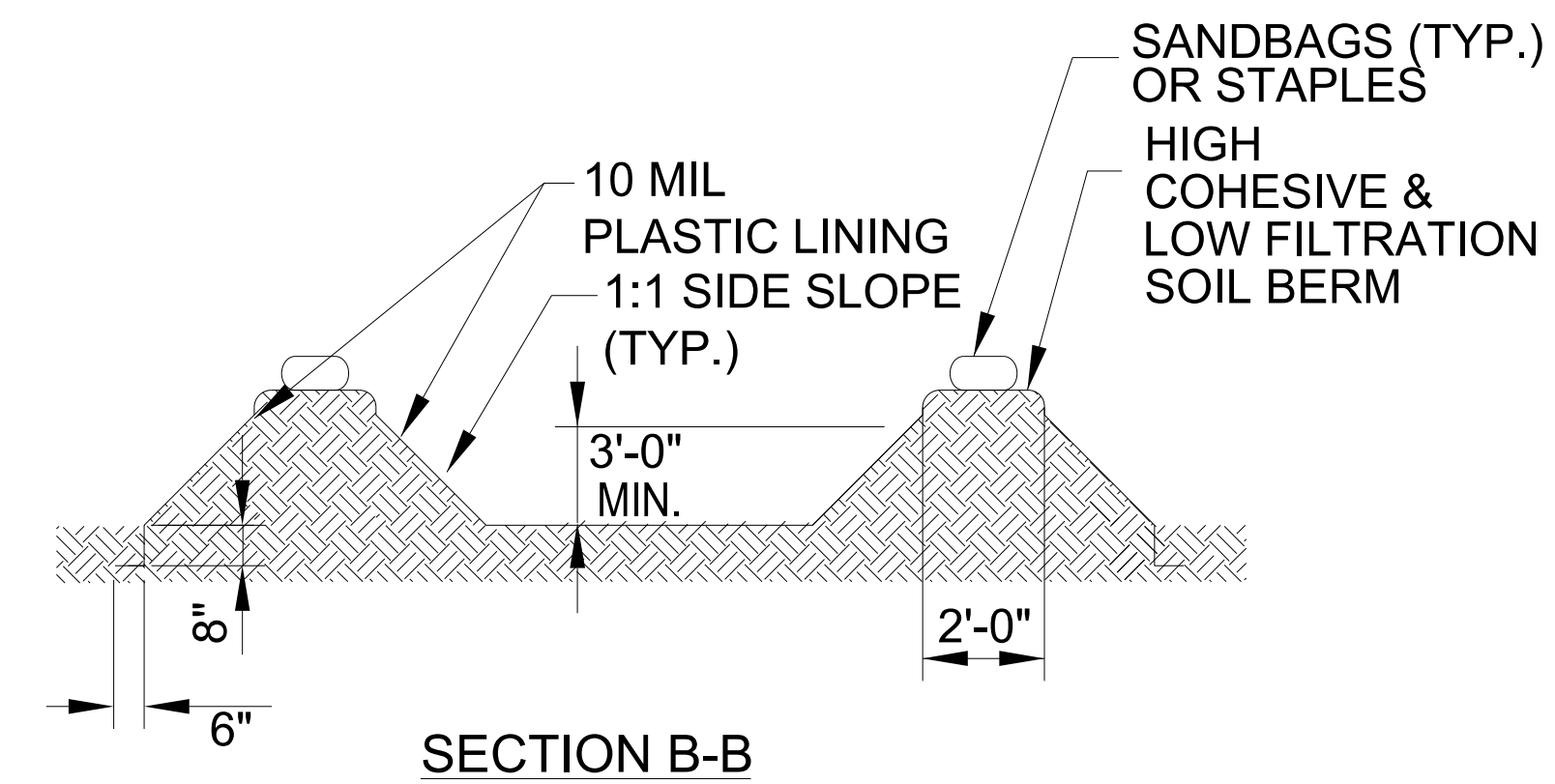
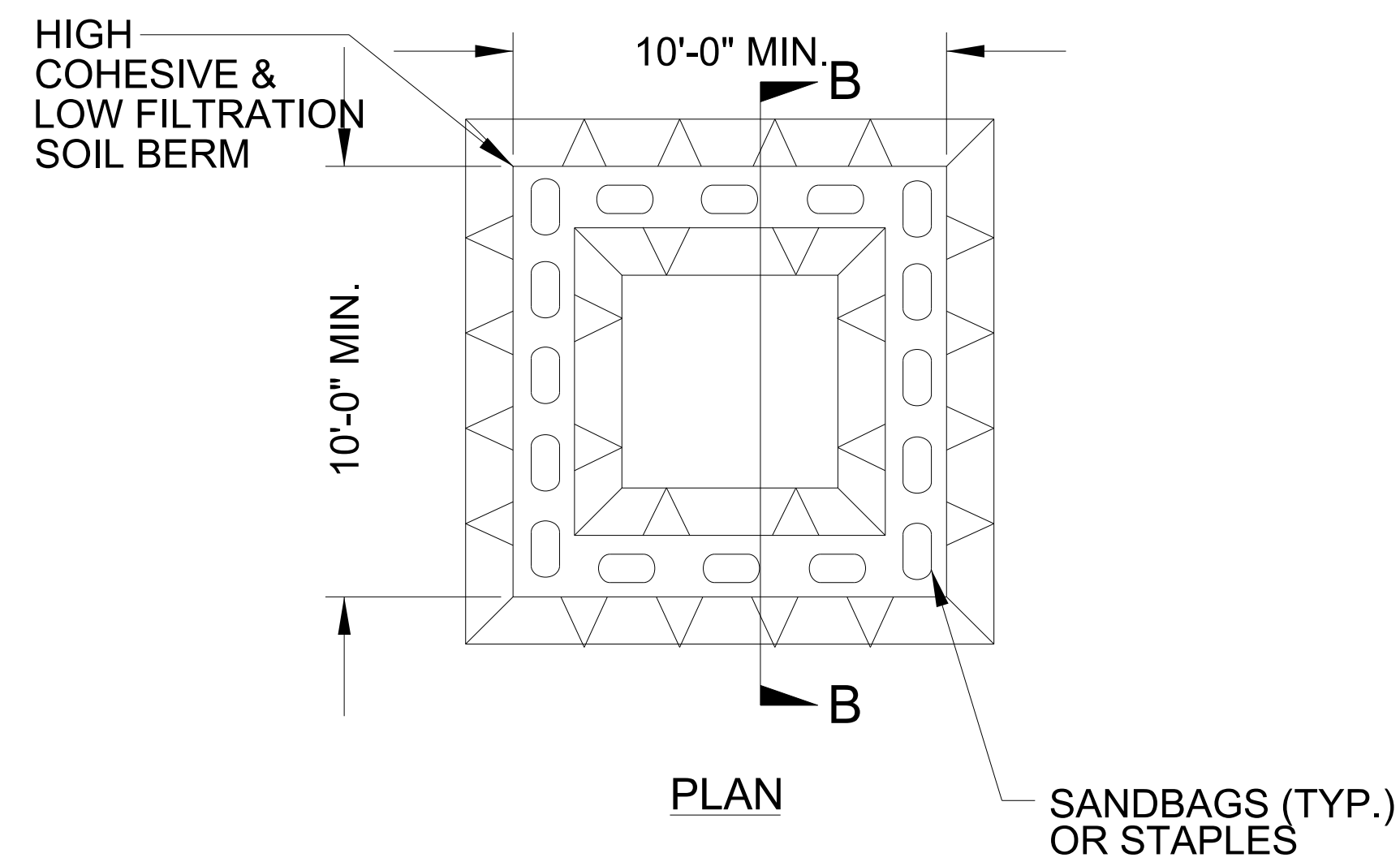
ONSITE CONCRETE WASHOUT STRUCTURE WITH LINER

PROJECT REFERENCE NO.	SHEET NO.
<i>R-5709C</i>	<i>EC-02A</i>
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



BELOW GRADE WASHOUT STRUCTURE
NOT TO SCALE

- NOTES:
1. ACTUAL LOCATION DETERMINED IN FIELD
 2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM 12 INCHES OF FREEBOARD.
 3. CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARLY MARKED WITH SIGNAGE NOTING DEVICE.



ABOVE GRADE WASHOUT STRUCTURE
NOT TO SCALE

- NOTES:
1. ACTUAL LOCATION DETERMINED IN FIELD
 2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM 12 INCHES OF FREEBOARD.
 3. CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARLY MARKED WITH SIGNAGE NOTING DEVICE.

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

PROJECT REFERENCE NO.	SHEET NO.
<i>R-5709C</i>	<i>EC-03</i>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SOIL STABILIZATION SUMMARY SHEET

PERMANENT SOIL REINFORCEMENT MAT

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
4	-LXI-	10+00	12+68	LT	745
6	-L-	338+50	339+00	LT	75
8	-L-	361+50	362+00	RT	55
9	-L-	381+50	384+50	LT	320
9	-YIII-	11+08	11+50	RT	35
10	-L-	385+00	385+80	LT	120
10	-L-	385+80	386+00	LT	30
10	-L-	389+50	390+50	LT	125
10	-L-	390+50	391+00	LT	65
10	-L-	391+00	391+50	LT	65
10	-L-	393+00	393+50	LT	60
11	-L-	409+50	410+00	LT	60
12	-L-	418+00	419+15	LT	160
12	-L-	419+15	420+50	LT	185
12	-L-	424+00	424+82	LT	75
12	-YIIC-	10+67	11+28	RT	80
13	-L-	431+00	432+50	LT	190
13	-YI2-	11+07	12+00	RT	95
15	-YI5-	13+30	13+65	RT	30
16	-L-	471+00	471+50	LT	75
16	-L-	479+00	479+18	RT	20
16	-L-	480+50	481+00	RT	90
17	-L-	489+50	490+00	RT	80
18	-L-	497+50	498+00	RT	60
18	-L-	498+00	499+37	RT	160
18	-L-	506+00	507+50	RT	265
20	-L-	526+91	527+36	RT	45
20	-L-	527+84	528+41	RT	60
21	-L-	541+00	542+00	RT	150
21	-L-	543+00	544+50	RT	190

PERMANENT SOIL REINFORCEMENT MAT

[illegible]

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

PROJECT REFERENCE NO.		SHEET NO.
R-5709C		EC-03A
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER

SOIL STABILIZATION SUMMARY SHEET

EROSION CONTROL MATTING

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
4-5	-LXI-	18+68	22+69	LT	805
5	-LXI-	22+69	24+19	LT	300
5	-LXI-	24+19	26+19	LT	400
5	-L-	321+00	330+00	RT	900
5	-L-	328+00	329+00	LT	150
5	-L-	330+50	333+50	LT	300
6	-L-	337+50	338+25	LT	115
6	-L-	338+25	338+50	LT	40
6	-Y10-	15+00	16+00	RT	150
7	-L-	358+00	358+88	RT	135
8	-L-	360+50	361+50	RT	105
8	-L-	368+00	370+00	LT	180
8	-L-	368+50	370+00	RT	105
8	-L-	370+00	371+00	LT	90
8	-L-	370+00	370+50	RT	35
9	-L-	376+00	376+39	RT	35
9	-L-	376+00	376+36	LT	35
9	-Y11A-	11+00	11+50	LT	40
11	-L-	399+50	400+50	LT	90
12	-L-	392+00	393+00	RT	70
13	-L-	428+00	428+50	RT	45
13	-L-	435+44	436+50	LT	95
13	-L-	436+50	438+00	LT	135
13	-L-	437+50	438+28	LT	160
14	-L-	445+50	447+00	LT	205
14	-Y13-	11+50	12+00	LT	80
14	-Y13-	12+00	12+44	RT	35
14	-Y13-	15+50	18+00	LT	280
14	-Y14-	10+50	11+00	LT	145
14	-Y13-	12+00	12+44	RT	35

EROSION CONTROL MATTING

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
14	-Y13-	15+50	18+00	LT	280
14	-Y14-	10+50	11+00	LT	145
14	-Y14-	11+00	11+50	LT	85
14	-Y14-	12+00	14+00	RT	155
15	-L-	467+49	468+04	RT	45
15	-Y15-	11+75	12+25	LT	40
15	-Y15-	12+25	12+75	LT	40
15	-Y15-	12+50	13+30	RT	65
15	-Y15-	12+75	14+50	LT	135
16	-L-	476+50	477+75	LT	115
16	-L-	477+75	479+00	LT	115
16	-L-	479+00	480+50	RT	115
16	-L-	480+50	481+00	LT	45
16	-L-	481+00	483+00	LT	180
17	-L-	484+00	485+50	LT	135
17	-L-	485+50	487+00	LT	135
17	-L-	487+00	487+50	LT	45
18	-L-	497+50	498+00	LT	45
18	-L-	498+00	499+34	LT	120
18	-L-	499+50	500+00	RT	35
18	-L-	500+00	501+00	RT	70
18	-L-	502+00	503+00	RT	80
18	-L-	507+50	511+50	LT	355
19	-L-	511+50	512+00	LT	45
20	-L-	524+50	528+61	LT	365
20	-L-	524+50	526+00	RT	135
20	-L-	525+50	526+00	LT	45
20	-L-	526+00	527+50	LT	135
20	-L-	526+00	526+50	RT	45
20	-L-	526+50	526+91	RT	40

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

PROJECT REFERENCE NO.		SHEET NO.
R-5709C		EC-03B
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER

SOIL STABILIZATION SUMMARY SHEET

EROSION CONTROL MATTING

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
20	-L-	529+00	532+00	LT	265
21	-L-	544+50	545+48	RT	125
21	-L-	545+48	546+00	RT	40
21	-L-	544+00	54550	LT	175
21	-L-	551+50	55200	LT	60
22	-L-	562+50	563+50	MED	200
23	-L-	573+50	575+50	LT	180
23	-L-	575+50	576+83	LT	120
24	-L-	582+50	585+00	MED	500
24	-L-	585+00	587+61	MED	395
25	-L-	595+00	596+00	RT	80
25	-L-	596+00	607+00	RT	1630
26	-L-	607+00	610+77	RT	475
26	-L-	612+00	616+50	RT	565
27	-Y20-	13+00	13+50	LT	40
27	-Y20-	13+00	13+50	RT	40
27	-Y20-	13+50	14+90	LT	110
29	-L-	654+00	656+70	MED	270
29	-L-	656+70	659+19	LT	220
29	-L-	656+70	657+09	LT	30
30	-L-	665+15	670+50	LT	475
31	-L-	681+00	684+00	RT	265
31	-L-	685+50	686+92	LT	130
31	-L-	686+92	690+00	LT	275
32	-L-	690+00	691+00	RT	80
32	-L-	692+00	696+00	RT	355
32	-L-	699+00	699+50	RT	45
32	-L-	699+50	700+00	RT	45
32	-L-	705+00	707+50	RT	225
32	-L-	707+50	708+27	RT	55

EROSION CONTROL MATTING

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
33	-L-	705+00	706+00	MED	50
33	-L-	708+66	710+03	LT	125
33	-L-	710+00	711+50	RT	135
33	-L-	715+00	715+50	LT	45
33	-L-	715+00	716+40	RT	100
33	-Y21-	10+71	12+00	RT	115
33	-Y21-	10+81	11+50	LT	65
34	-L-	717+00	717+50	LT	70
34	-L-	717+50	718+50	LT	140
34	-L-	718+50	719+00	LT	75
34	-L-	726+50	727+00	LT	45
34	-L-	729+00	730+00	LT	90
35	-L-	731+36	731+50	LT	15
35	-L-	733+50	734+50	LT	90
35	-L-	734+50	736+00	LT	135
35	-L-	736+00	736+50	RT	45
35	-L-	743+00	745+00	LT	180
35	-L-	743+50	745+00	RT	105
36	-L-	745+00	747+50	RT	225
36	-L-	746+50	750+50	LT	355
36	-L-	747+50	748+50	RT	70
36	-L-	751+00	752+42	LT	100
36	-L-	751+00	752+00	RT	70
36	-L-	752+00	752+48	RT	35
36	-L-	752+42	753+50	LT	75
36	-L-	753+50	755+00	LT	135
36	-L-	756+50	757+00	RT	45
36	-Y22-	11+00	11+59	LT	55
37	-L-	766+50	768+00	LT	135
37	-L-	767+50	769+00	RT	135

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

PROJECT REFERENCE NO. R-5709C		SHEET NO. EC-03C
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER

SOIL STABILIZATION SUMMARY SHEET

EROSION CONTROL MATTING

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
37	-L-	768+00	770+00	LT	140
37	-L-	769+00	769+50	RT	45
37	-L-	770+50	772+50	RT	180
38	-L-	778+50	779+50	RT	90
39	-L-	786+00	786+97	LT	90
39	-L-	786+50	788+00	RT	135
39	-L-	787+79	796+28	LT	1500
39	-L-	788+00	794+32	RT	560
39	-L-	796+28	797+16	LT	160
39	-Y23-	10+85	11+50	RT	50
39	-Y24-	12+50	13+00	LT	65
39	-Y24-	13+00	13+50	LT	65
39	-Y24-	13+50	15+00	LT	190
40	-L-	800+00	803+50	M	350
40	-L-	806+50	808+00	RT	105
40	-L-	808+00	809+54	RT	140
40	-L-	809+00	809+95	LT	85
40	-L-	809+95	811+00	LT	95
40	-L-	810+49	810+98	RT	70
40	-L-	810+98	812+30	RT	185
41	-L-	818+50	820+50	RT	180
41	-L-	820+50	822+50	RT	180
41	-L-	821+50	822+50	LT	90
41	-L-	822+50	822+96	LT	45
41	-L-	822+96	823+30	LT	30
41	-L-	825+00	826+50	RT	115
41	-Y26-	10+45	11+13	RT	55
41	-Y26-	11+13	13+00	RT	145
41	-Y26-	11+41	12+48	LT	95
41	-Y26-	13+00	14+00	RT	80

EROSION CONTROL MATTING

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
41	-Y26-	14+00	14+50	RT	45
41	-Y26-	18+50	23+50	RT	445
41	-Y27-	11+12	13+00	RT	145
42	-L2B-	832+50	834+00	LT	135
44	-Y26-	15+00	18+50	RT	270
44	-Y26-	19+50	21+50	LT	155
44	-Y26A-	10+50	11+00	LT	40
44	-Y26A-	10+50	11+00	RT	40
44	-Y26A-	11+00	13+19	RT	220
44	-Y26A-	11+00	12+50	LT	115
44	-Y26A-	13+00	15+10	RT	190
4-5	-L-	320+00	322+00	LT	300
6-7	-L-	349+00	352+00	RT	450
7-8	-L-	359+50	360+50	LT	150
8-9	-L-	370+50	371+50	RT	70
10-11	-L-	398+50	399+50	LT	90
27-28	-L-	623+50	643+00	RT	1720
28-29	-L-	647+75	656+70	LT	790
29-30	-L-	656+00	665+15	RT	810
29-30	-L-	659+19	665+15	LT	530
31-32	-L-	701+00	705+00	RT	355
32-33	-L-	700+50	704+00	LT	310
33-34	-L-	716+39	720+50	RT	315
34-35	-L-	730+00	731+36	LT	120
36-37	-L-	758+00	760+00	MED	400
39-40	-L-	797+16	800+50	LT	590
			SUBTOTAL		32,570
MISCELLANEOUS MATTING TO BE INSTALLED AS DIRECTED BY THE ENGINEER					251,630
TOTAL					284,200
GAY					285,000

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

PROJECT REFERENCE NO.		SHEET NO.
R-5709C		EC-03D
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER

SOIL STABILIZATION SUMMARY SHEET

EROSION CONTROL EXCELSIOR MATTING

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
4	-LXI-	12+68	18+68	LT	900
5	-L-	329+00	329+50	LT	75
6	-L-	336+00	337+00	LT	150
6	-L-	337+00	337+50	LT	75
6	-YIO-	18+00	19+50	RT	225
8	-L-	367+50	368+50	RT	70
9	-L-	378+50	381+50	LT	345
10	-L-	387+50	389+50	LT	200
10	-L-	391+50	393+00	LT	190
10	-L-	393+50	396+00	LT	175
11	-L-	402+50	403+50	LT	125
11	-L-	403+50	404+00	LT	65
11	-L-	404+00	406+84	LT	355
11	-L-	406+84	407+50	LT	85
11	-L-	407+50	409+50	LT	230
11	-L-	410+00	412+00	LT	230
12	-L-	391+00	392+00	RT	70
12	-L-	426+00	427+00	RT	90
12	-L-	413+50	415+64	LT	250
12	-L-	415+64	417+00	LT	225
12	-YIIE-	10+64	11+50	RT	110
13	-L-	427+00	428+00	RT	90
14	-YI3-	18+00	19+00	LT	115
14	-YI4-	11+50	13+00	LT	250
14	-YI4-	13+00	14+50	LT	190
14	-YI4-	14+00	14+50	RT	40
15	-L-	458+50	460+00	LT	115
15	-YI5-	13+65	14+50	RT	70
17	-L-	490+00	495+00	RT	575
17	-L-	495+00	495+50	RT	60

EROSION CONTROL EXCELSIOR MATTING

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
17	-L-	496+00	497+50	LT	175
18	-L-	497+00	497+50	LT	45
18	-L-	499+34	500+50	LT	160
18	-L-	500+50	501+00	LT	70
18	-L-	501+00	502+00	RT	70
18	-L-	505+35	506+00	RT	50
21	-L-	542+00	543+00	RT	100
21	-L-	546+00	547+00	RT	80
28	-L-	643+00	644+50	LT	135
31	-L-	685+50	686+25	RT	70
31	-L-	686+92	687+42	RT	40
32	-L-	691+00	692+00	RT	80
32	-L-	698+00	700+50	LT	225
33	-L-	704+00	706+00	LT	180
33	-L-	706+00	708+27	LT	205
33	-L-	711+50	715+00	RT	245
33	-L-	716+38	717+00	LT	105
34	-L-	720+50	722+50	RT	155
34	-L-	722+50	723+50	RT	80
34	-L-	723+50	724+00	RT	40
34	-L-	727+00	729+00	LT	180
35	-L-	731+50	732+50	RT	115
35	-L-	732+50	733+27	RT	90
35	-L-	736+50	737+93	RT	100
35	-L-	737+93	741+34	RT	345
36	-L-	750+11	751+00	RT	65
36	-L-	750+50	751+00	LT	45
36	-L-	752+48	755+00	RT	175
36	-L-	755+00	756+00	RT	70
36	-L-	756+00	756+50	RT	35

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

PROJECT REFERENCE NO.	SHEET NO.
<i>R-5709C</i>	<i>EC-03E</i>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SOIL STABILIZATION SUMMARY SHEET

EROSION CONTROL EXCELSIOR MATTING

[illegible]

EROSION CONTROL EXCELSIOR MATTING

[illegible]

PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-3F
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SOIL STABILIZATION TIMEFRAMES

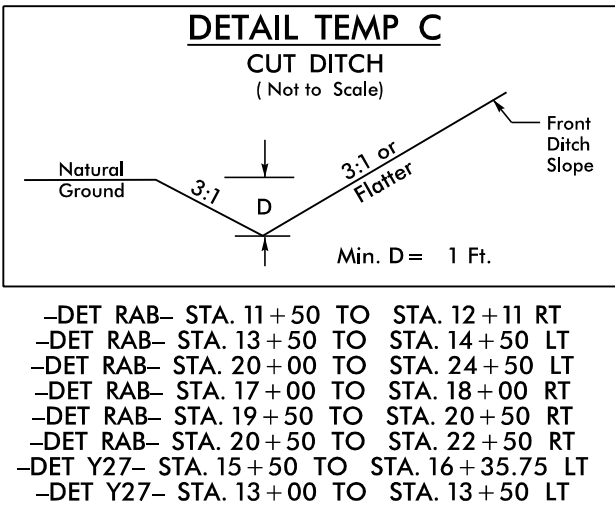
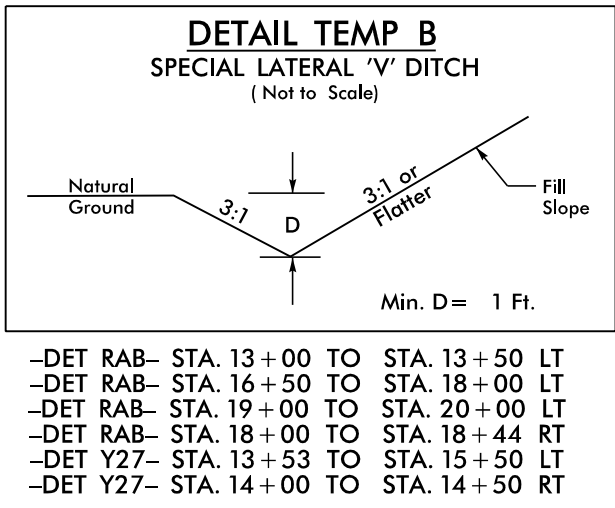
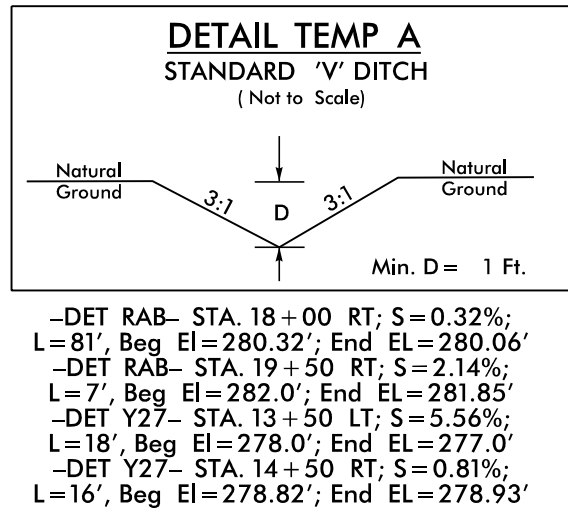
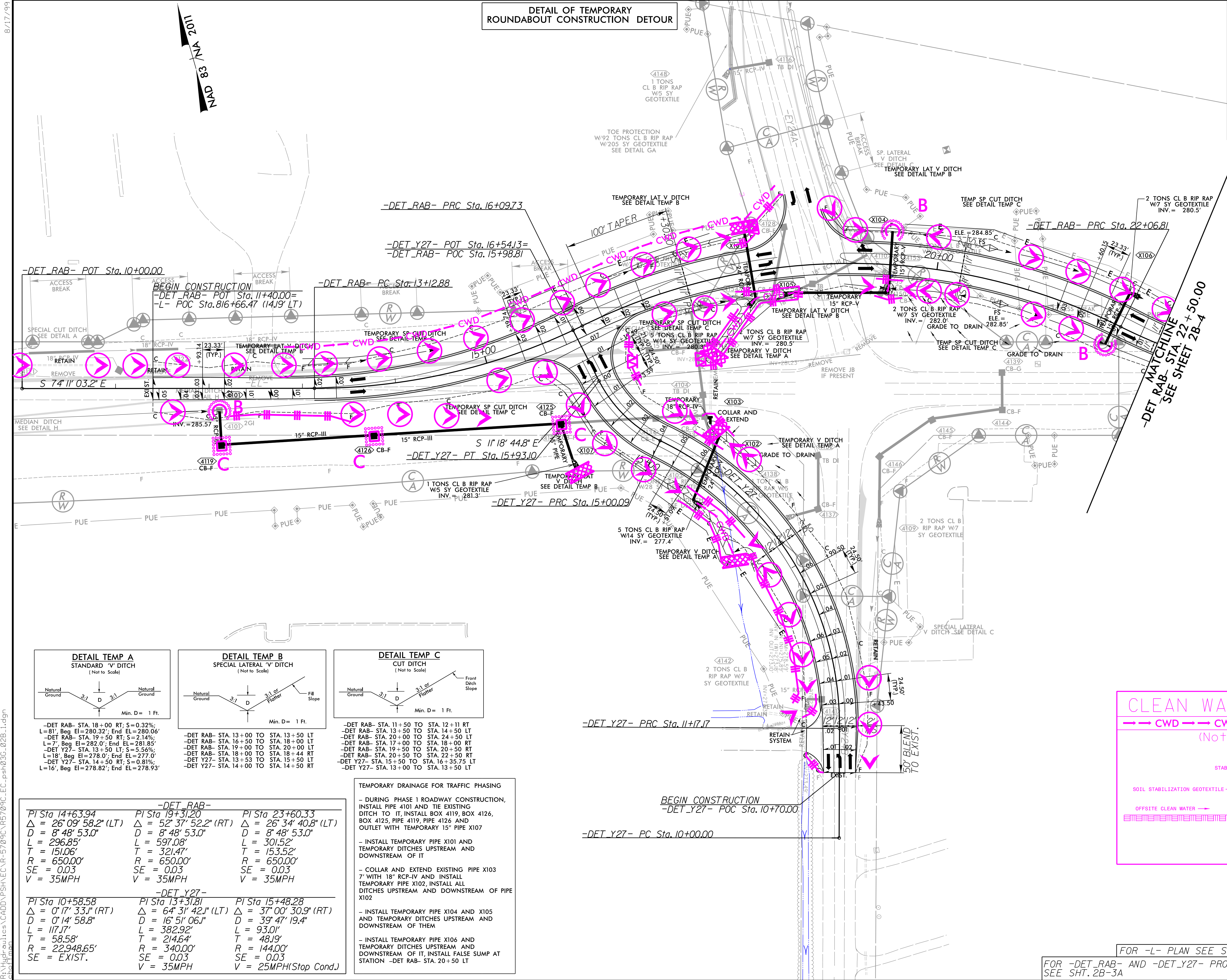
SITE DESCRIPTION	STABILIZATION TIME	TIMEFRAME EXCEPTIONS
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10’ OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 TO 4:1	14 DAYS	7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

8/17/99

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shoefn

DETAIL OF TEMPORARY
ROUNABOUT CONSTRUCTION DETOUR

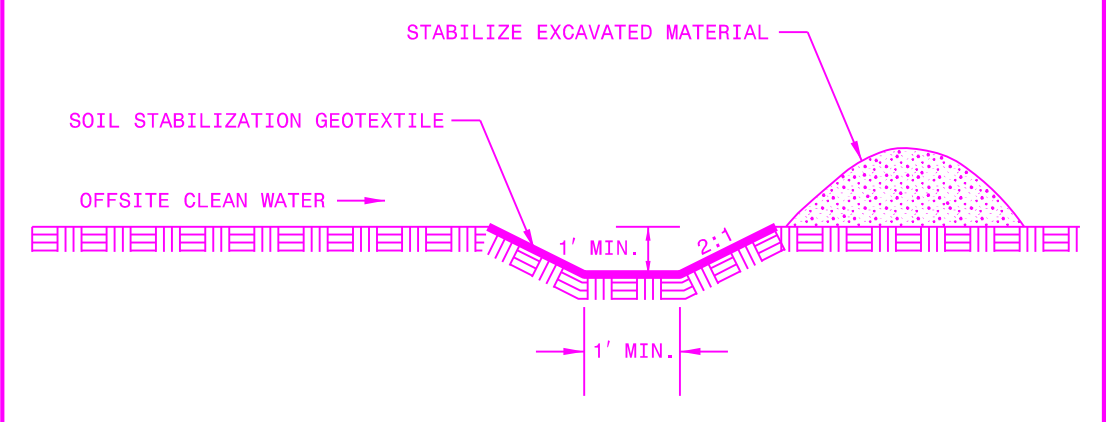
PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-36/CONST.2B-1
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



-DET_RAB-		
PI Sta 14+63.94	PI Sta 19+31.20	PI Sta 23+60.33
Δ = 26° 09' 58.2" (LT)	Δ = 52° 37' 52.2" (RT)	Δ = 26° 34' 40.8" (LT)
D = 8' 48" 53.0"	D = 8' 48" 53.0"	D = 8' 48" 53.0"
L = 296.85'	L = 597.08'	L = 301.52'
T = 151.06'	T = 321.47'	T = 153.52'
R = 650.00'	R = 650.00'	R = 650.00'
SE = 0.03	SE = 0.03	SE = 0.03
V = 35MPH	V = 35MPH	V = 35MPH
-DET_Y27-		
PI Sta 10+58.58	PI Sta 13+31.81	PI Sta 15+48.28
Δ = 0° 17' 33.1" (RT)	Δ = 64° 31' 42.1" (LT)	Δ = 37° 00' 30.9" (RT)
D = 0° 14' 58.8"	D = 16° 51' 06.1"	D = 39° 47' 19.4"
L = 117.17'	L = 382.92'	L = 93.01'
T = 58.58'	T = 214.64'	T = 48.19'
R = 22,948.65'	R = 340.00'	R = 144.00'
SE = EXIST.	SE = 0.03	SE = 0.03
	V = 35MPH	V = 25MPH(Stop Cond.)

- TEMPORARY DRAINAGE FOR TRAFFIC PHASING**
- DURING PHASE 1 ROADWAY CONSTRUCTION, INSTALL PIPE 4101 AND TIE EXISTING DITCH TO IT, INSTALL BOX 4119, BOX 4126, BOX 4125, PIPE 4119, PIPE 4126 AND OUTLET WITH TEMPORARY 15" PIPE X107
 - INSTALL TEMPORARY PIPE X101 AND TEMPORARY DITCHES UPSTREAM AND DOWNSTREAM OF IT
 - COLLAR AND EXTEND EXISTING PIPE X103 7' WITH 18" RCP-IV AND INSTALL TEMPORARY PIPE X102, INSTALL ALL DITCHES UPSTREAM AND DOWNSTREAM OF PIPE X102
 - INSTALL TEMPORARY PIPE X104 AND X105 AND TEMPORARY DITCHES UPSTREAM AND DOWNSTREAM OF THEM
 - INSTALL TEMPORARY PIPE X106 AND TEMPORARY DITCHES UPSTREAM AND DOWNSTREAM OF IT, INSTALL FALSE SUMP AT STATION -DET_RAB- STA. 20+50 LT

CLEAN WATER DIVERSION
(Not to Scale)



8/17/99

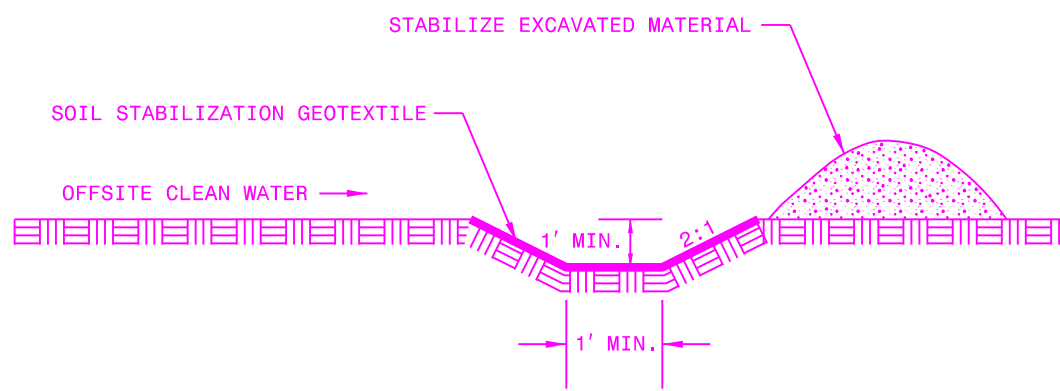
DETAIL OF TEMPORARY
ROUNDBOUT CONSTRUCTION DETOUR

PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-3H/CONST.2B-2
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

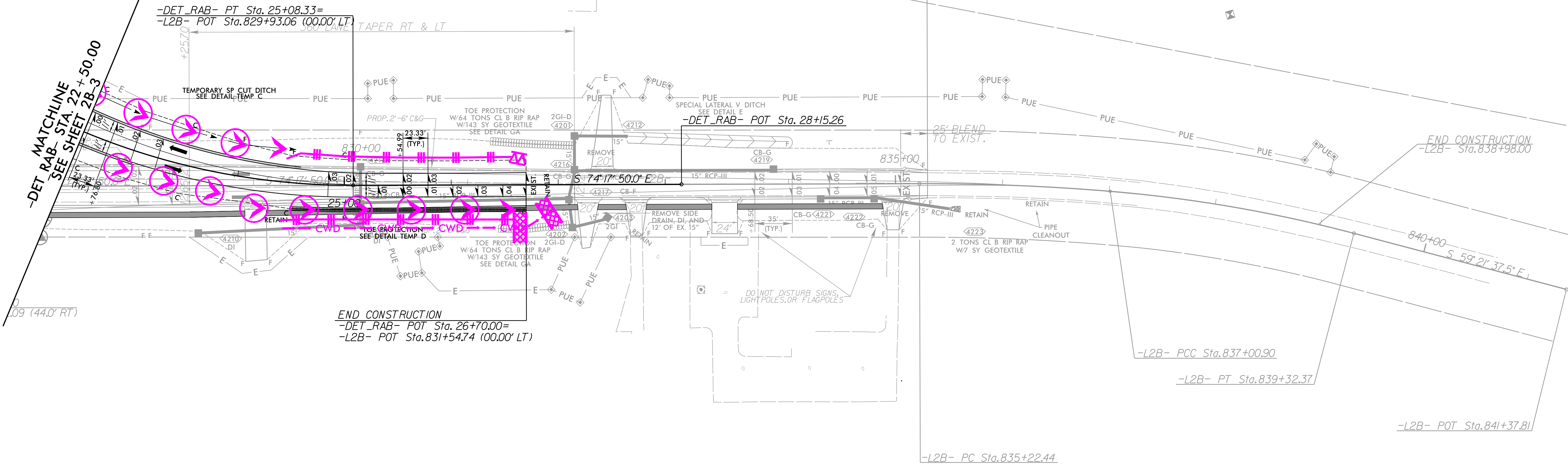
CLEAN WATER DIVERSION

→ CWD → → CWD → → CWD → → CWD →

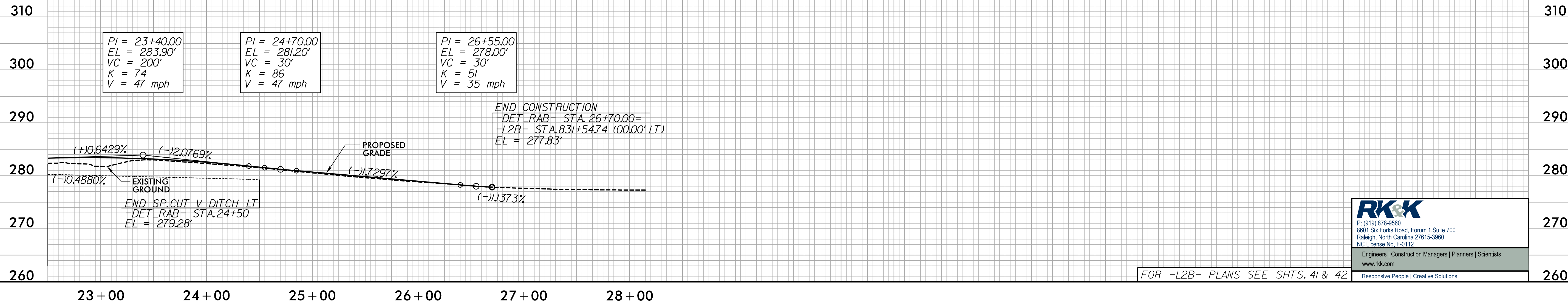
(Not to Scale)



END TIP PROJECT
R-5709C
-L2B- POC Sta. 835+30.00



-DET_RAB-



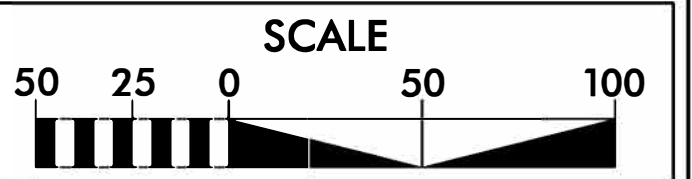
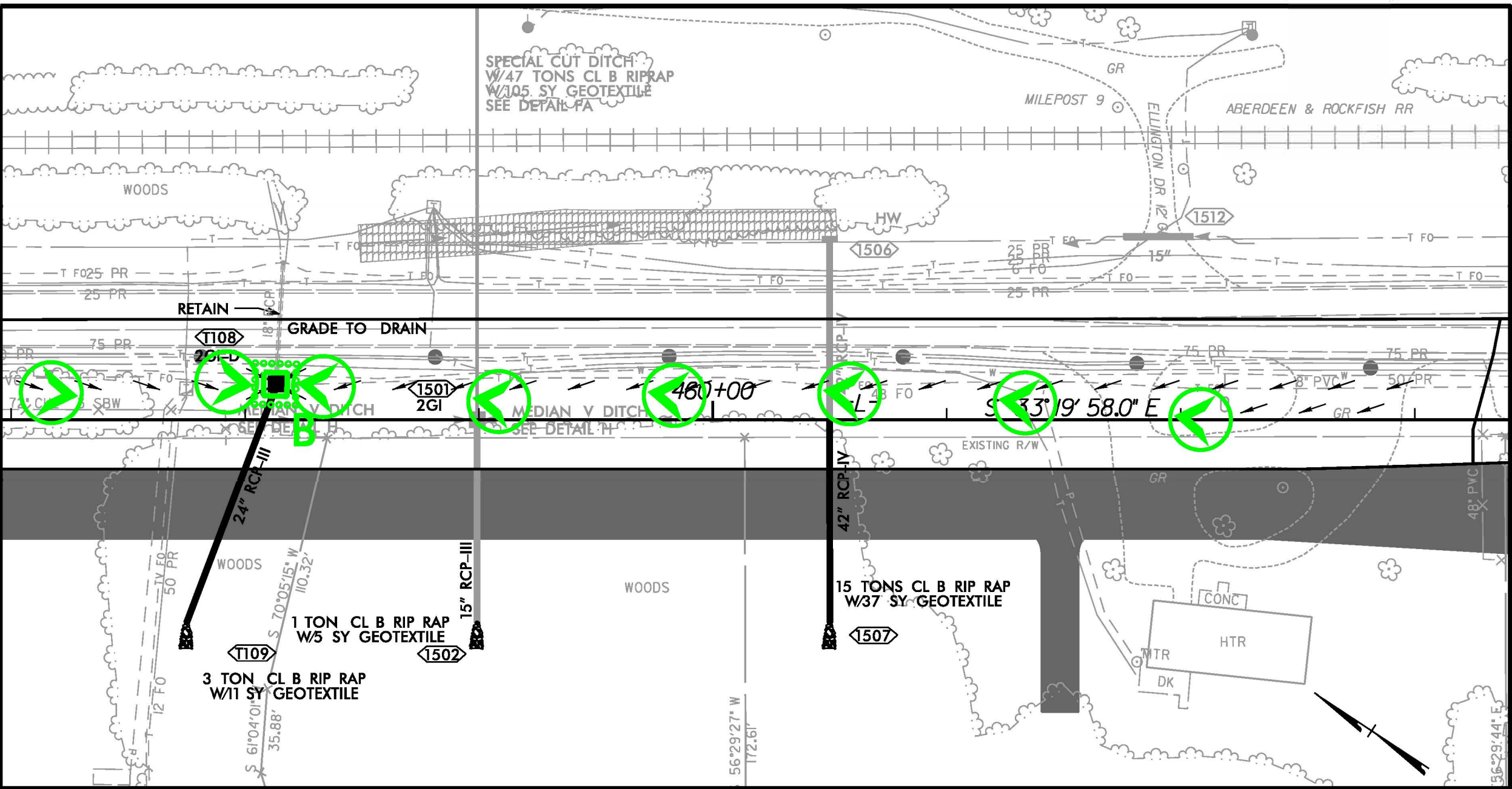
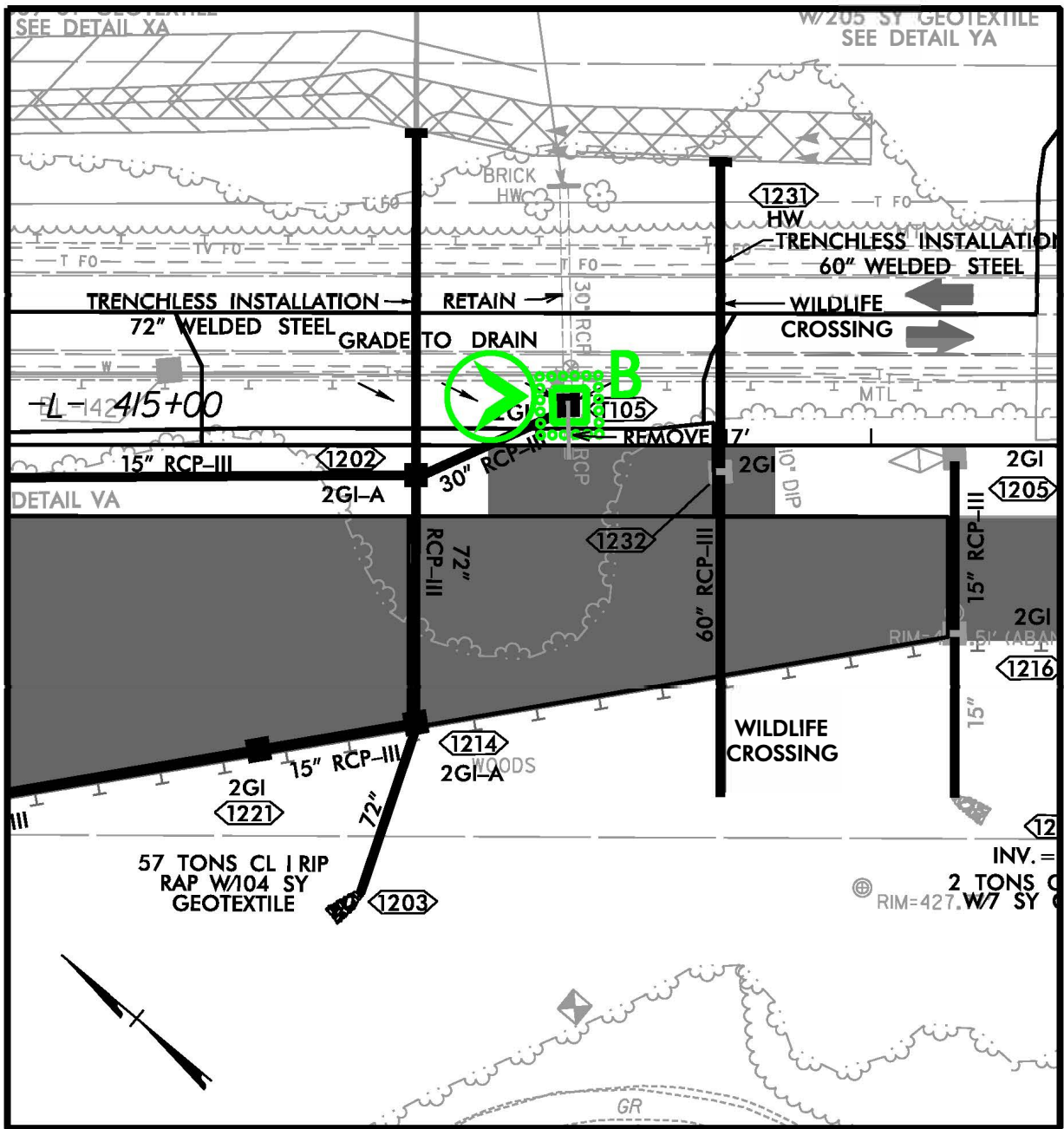
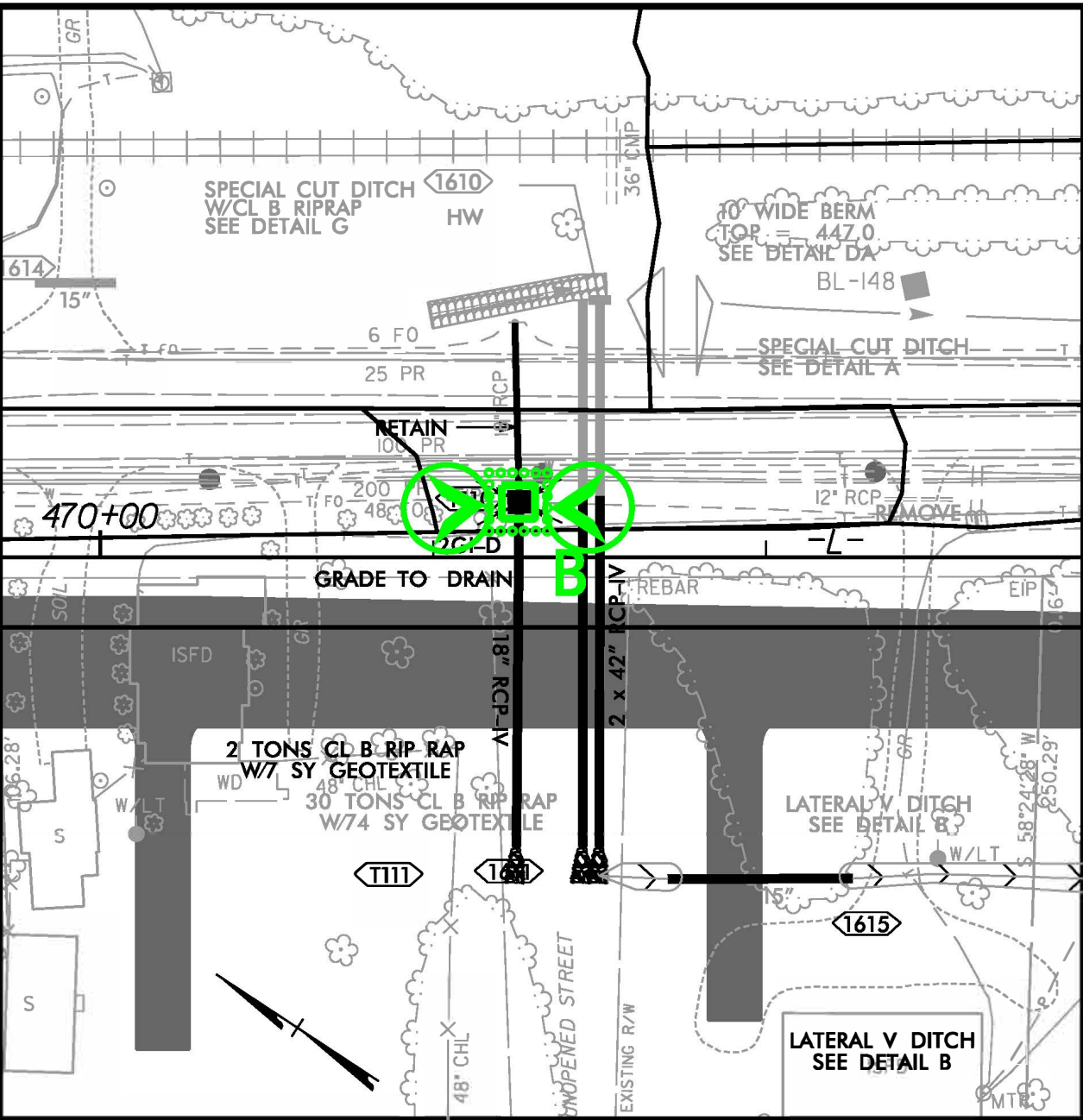
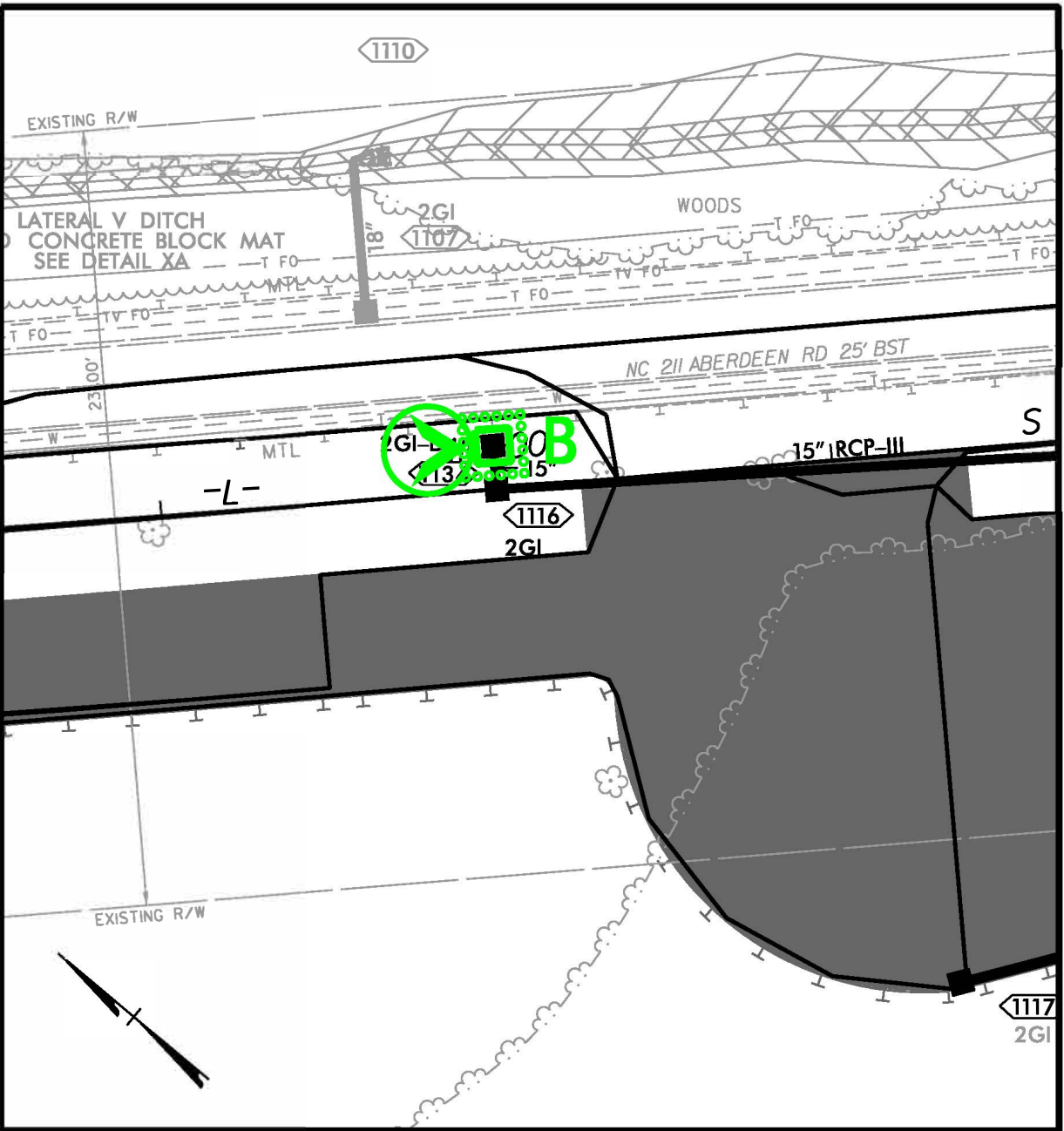
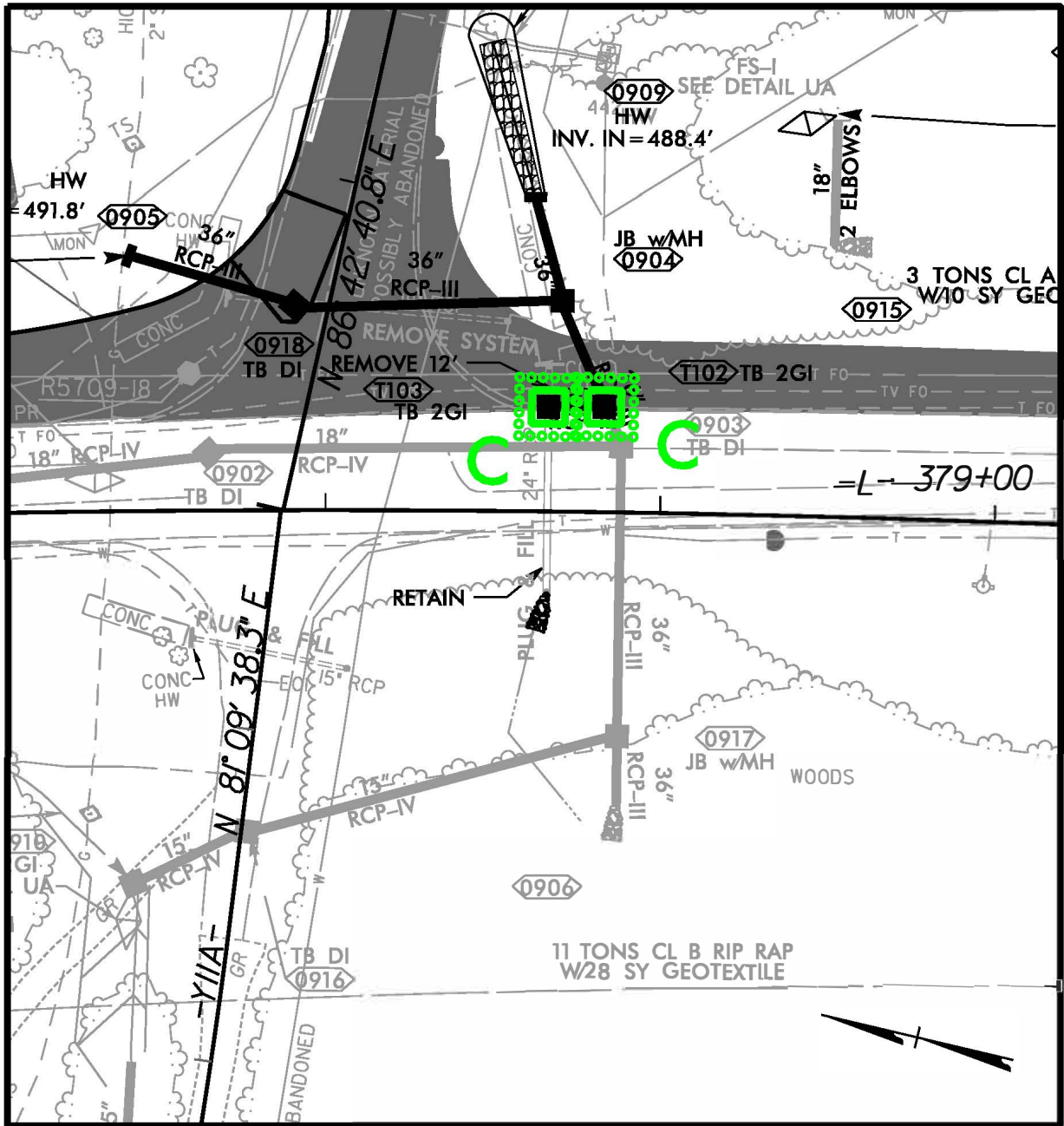
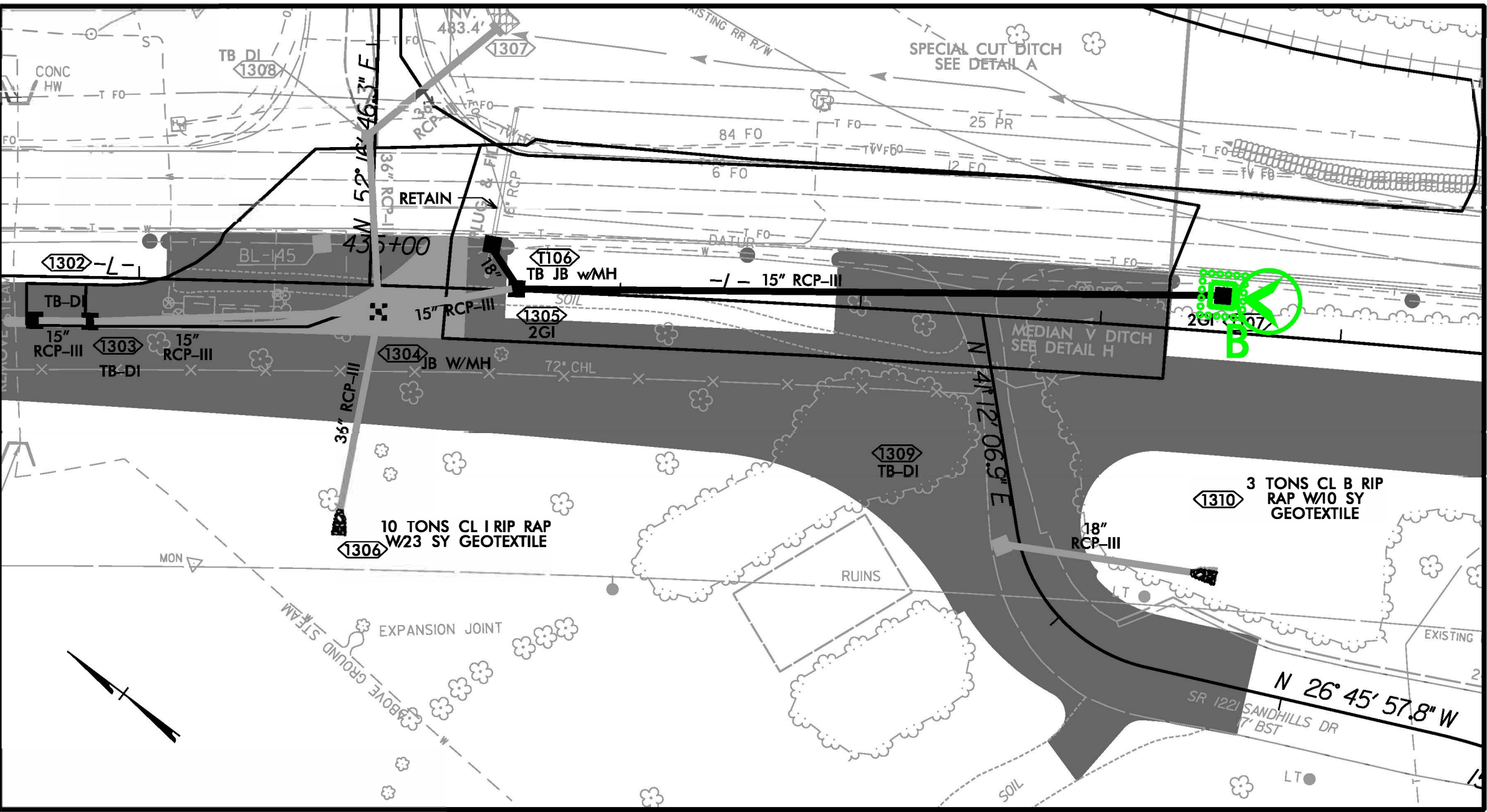
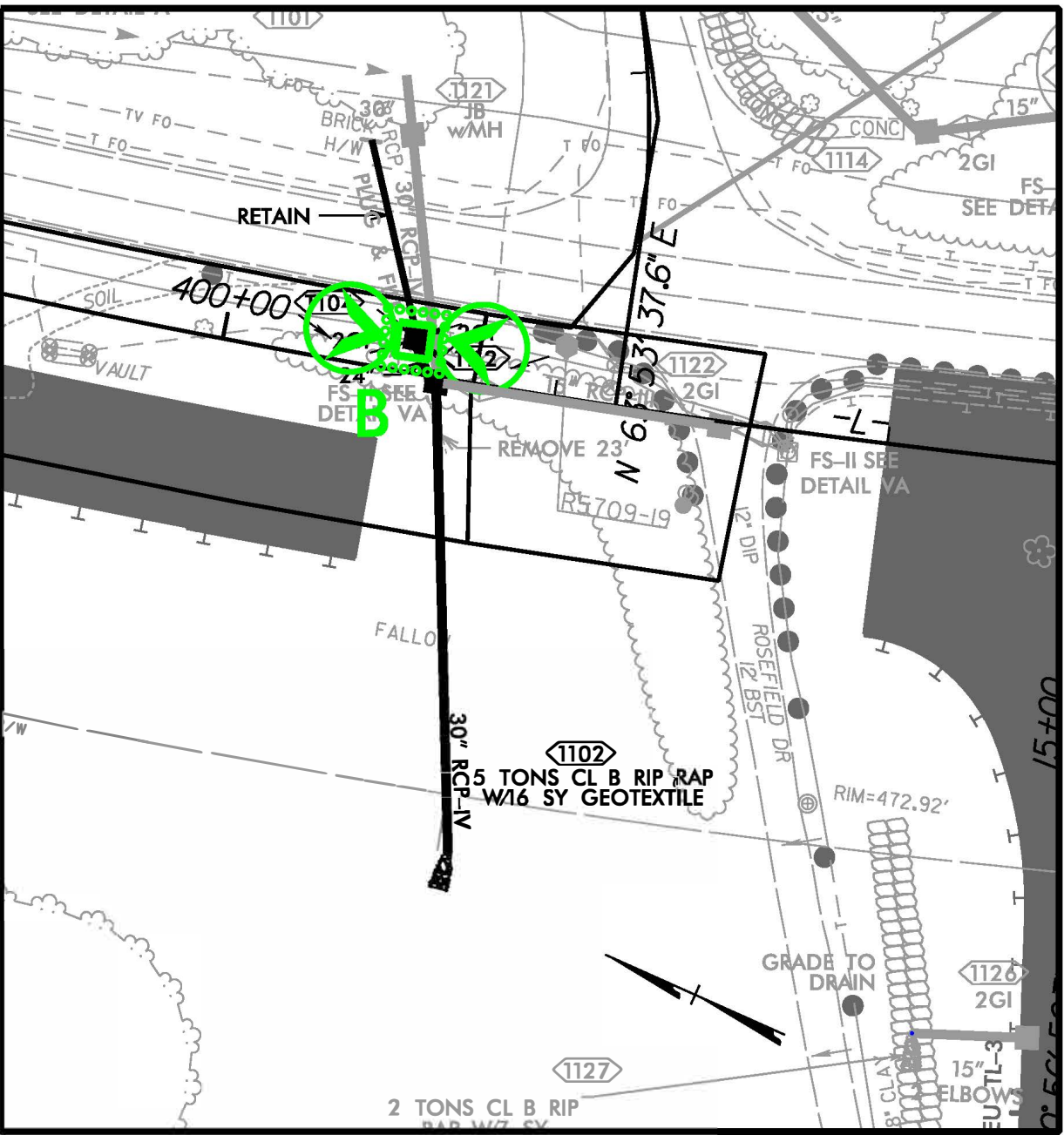
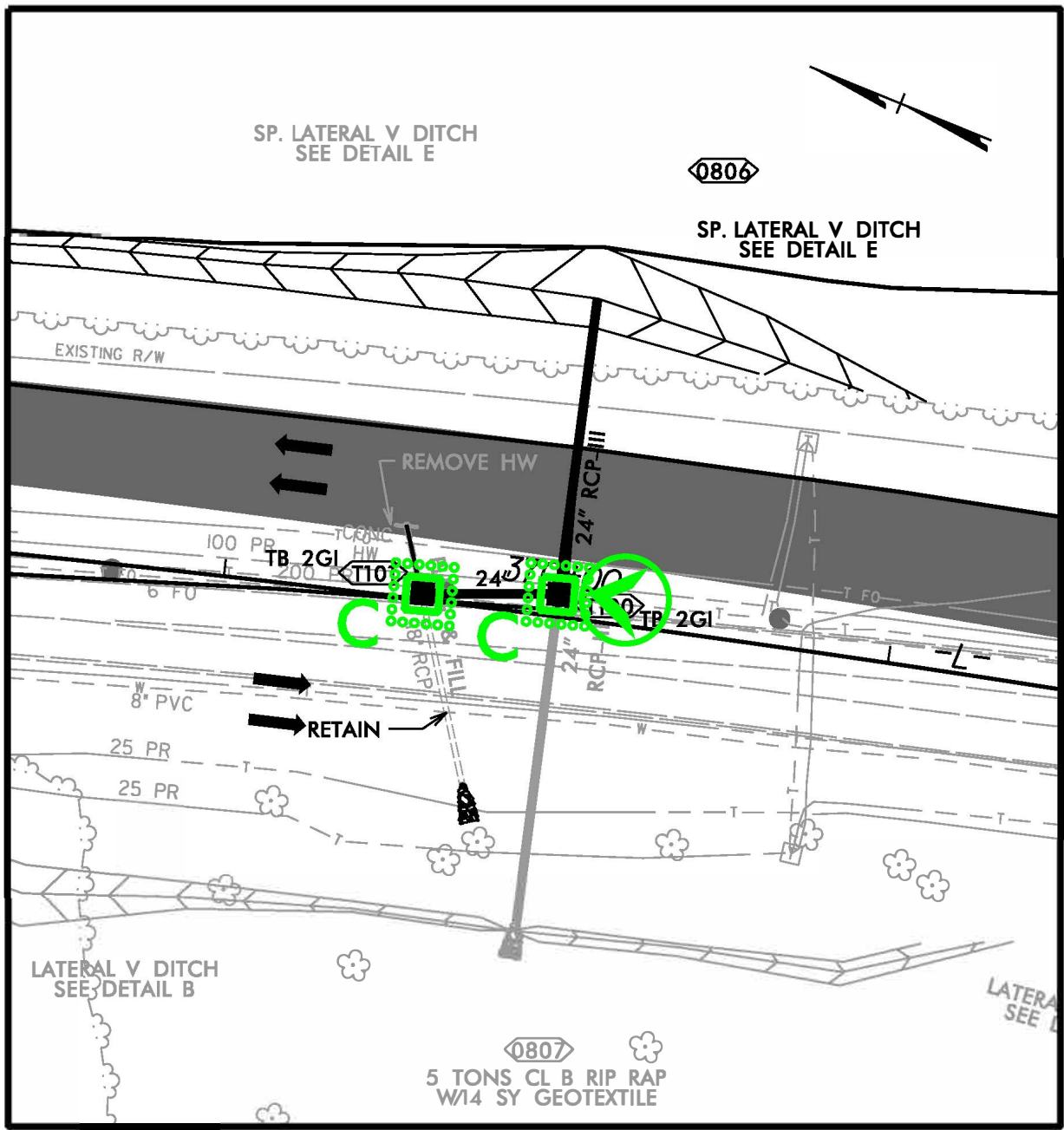
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FOR -L2B- PLANS SEE SHTS. 41 & 42

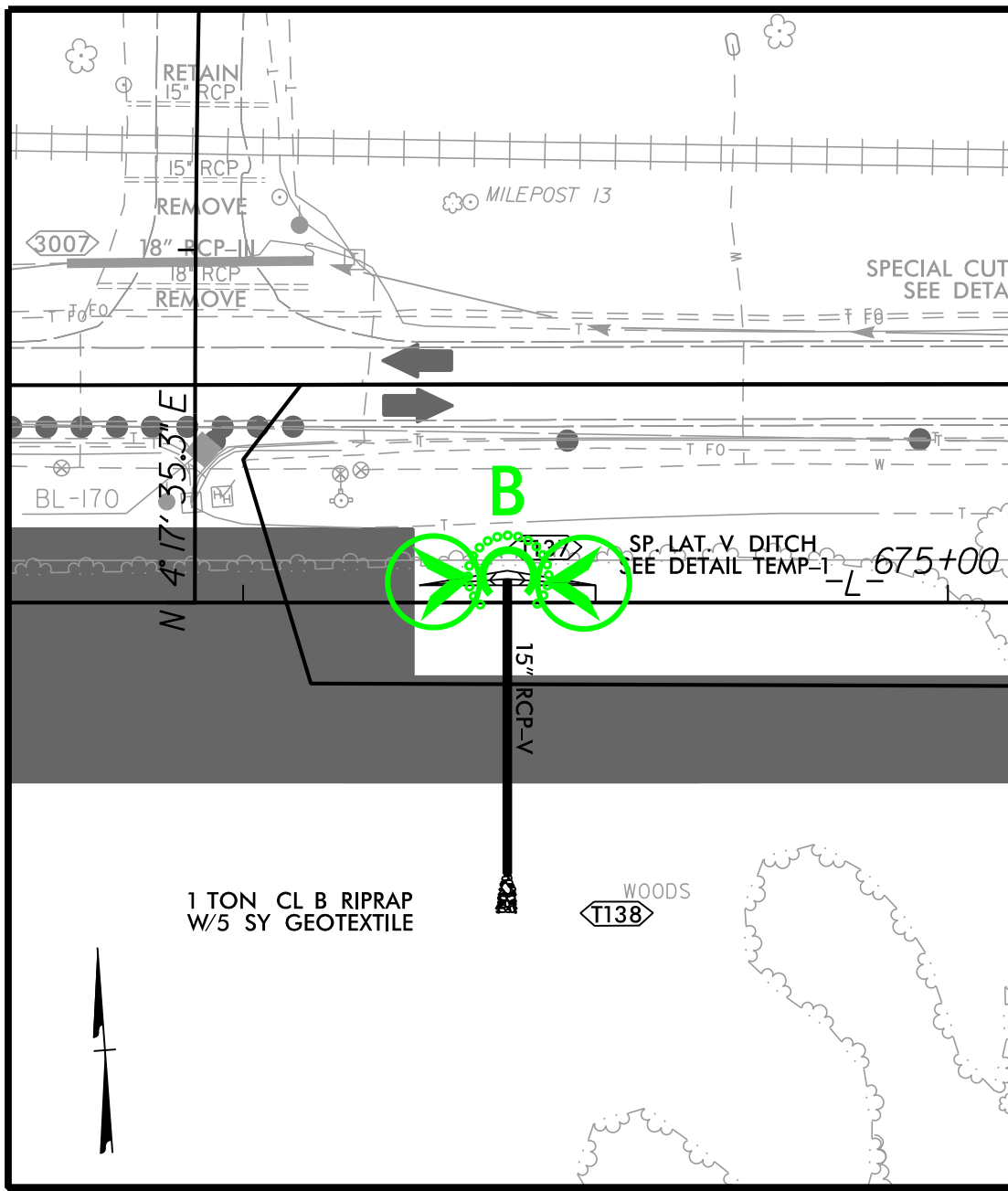
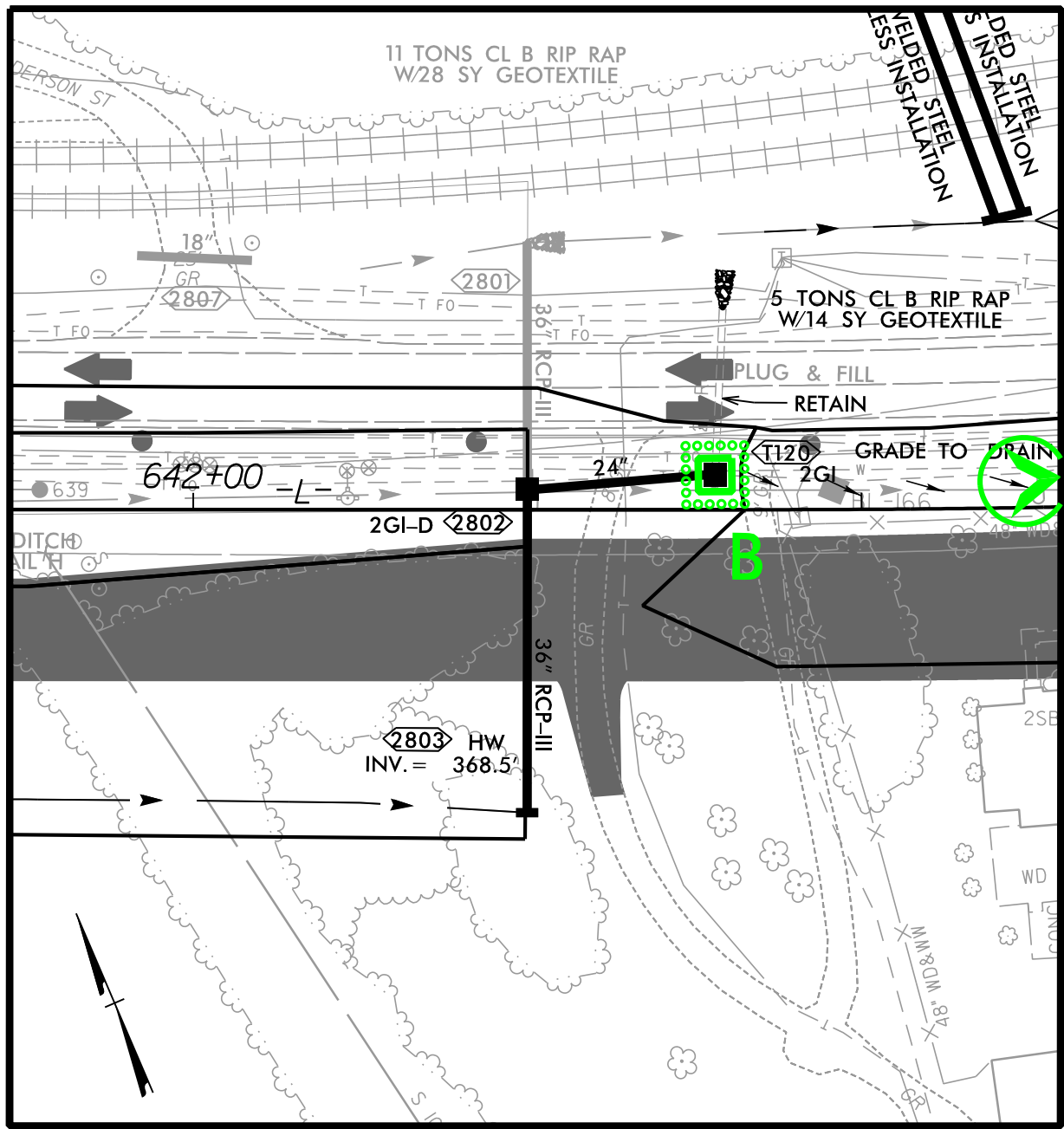
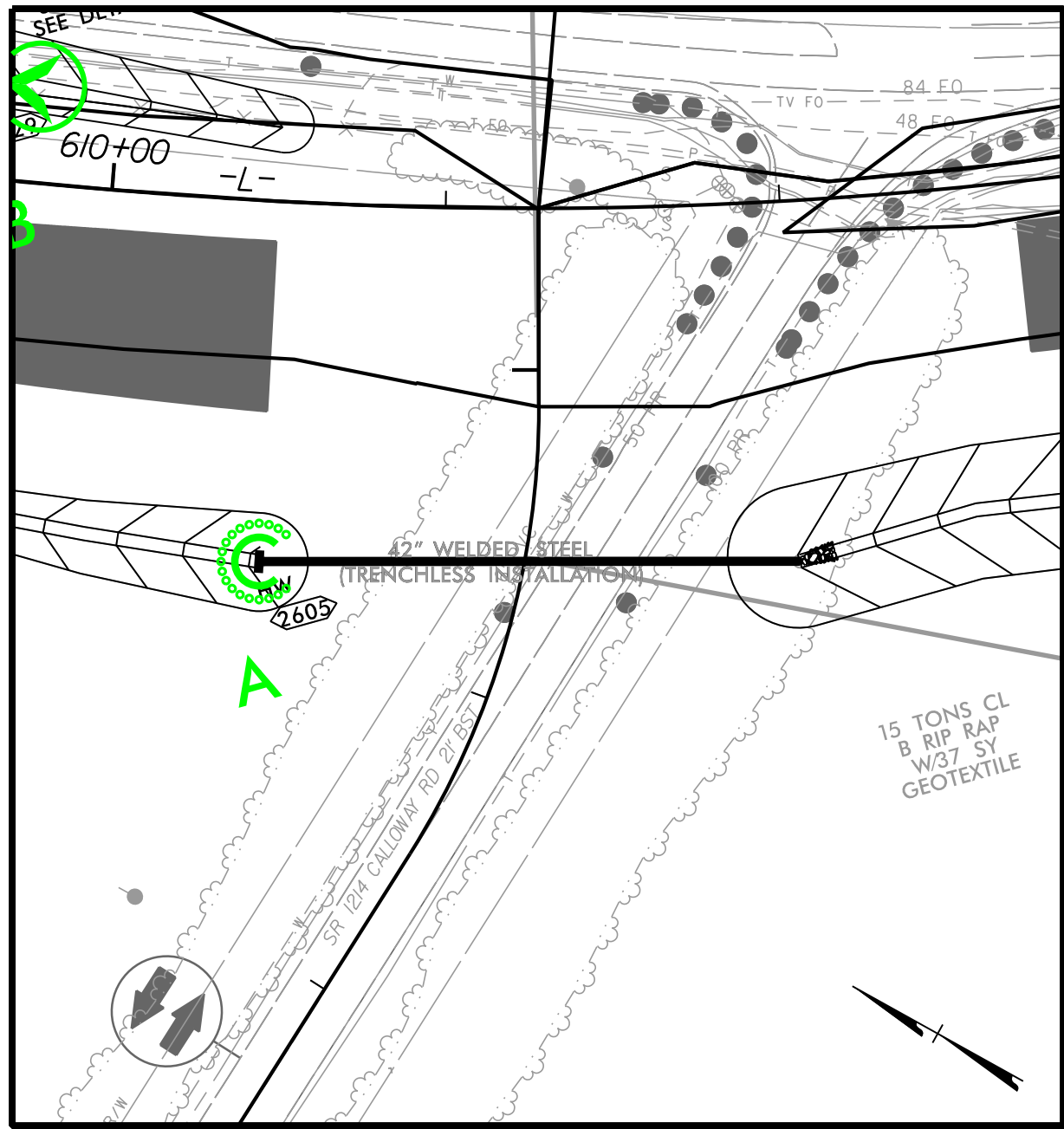
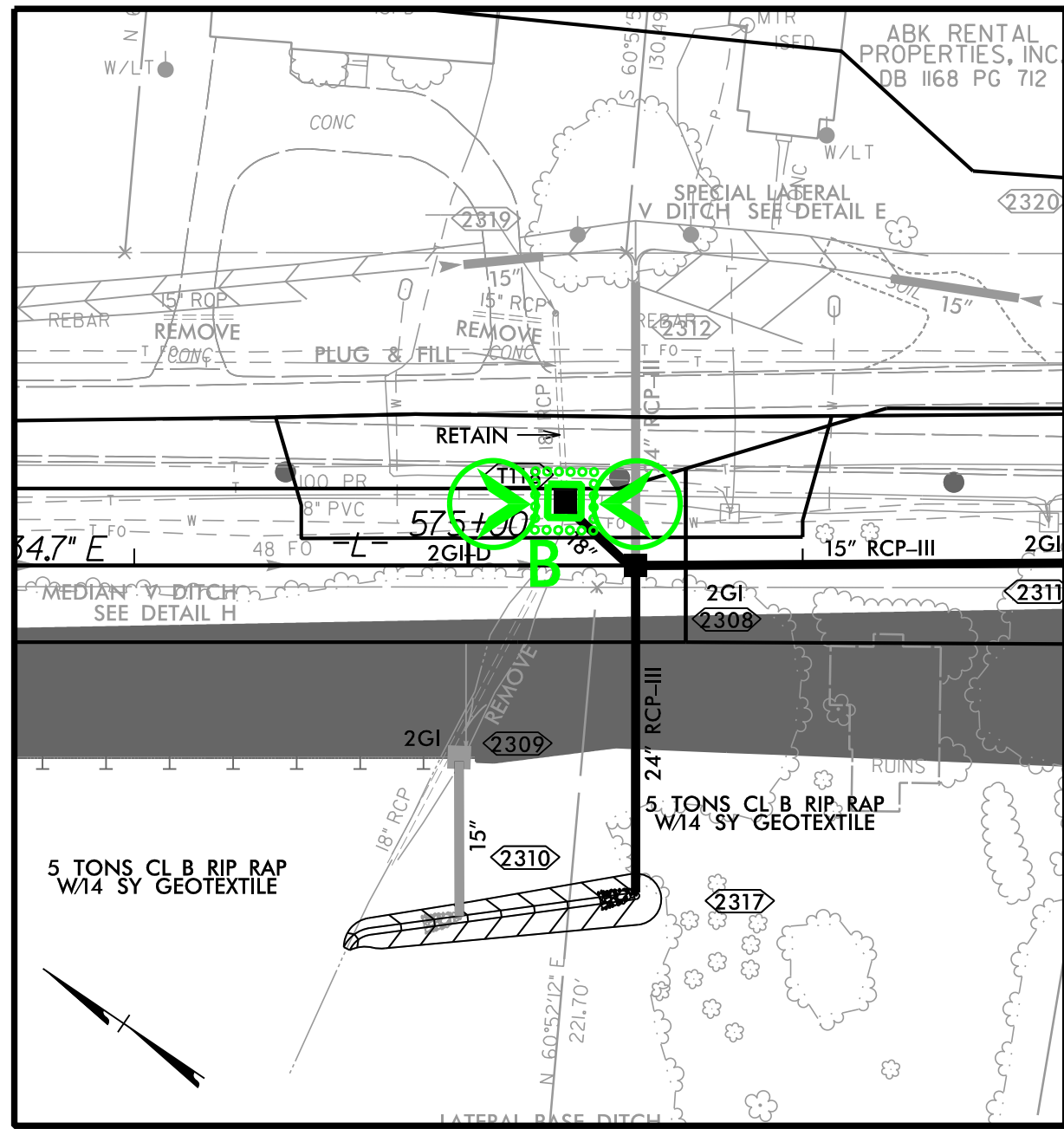
8/28/2024
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shofman

PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-3J/CONST.2B-19
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

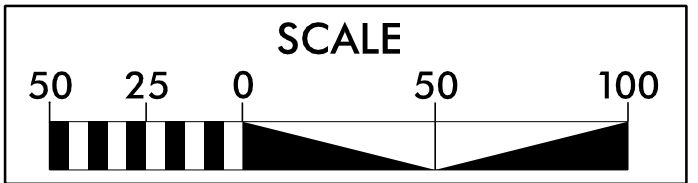
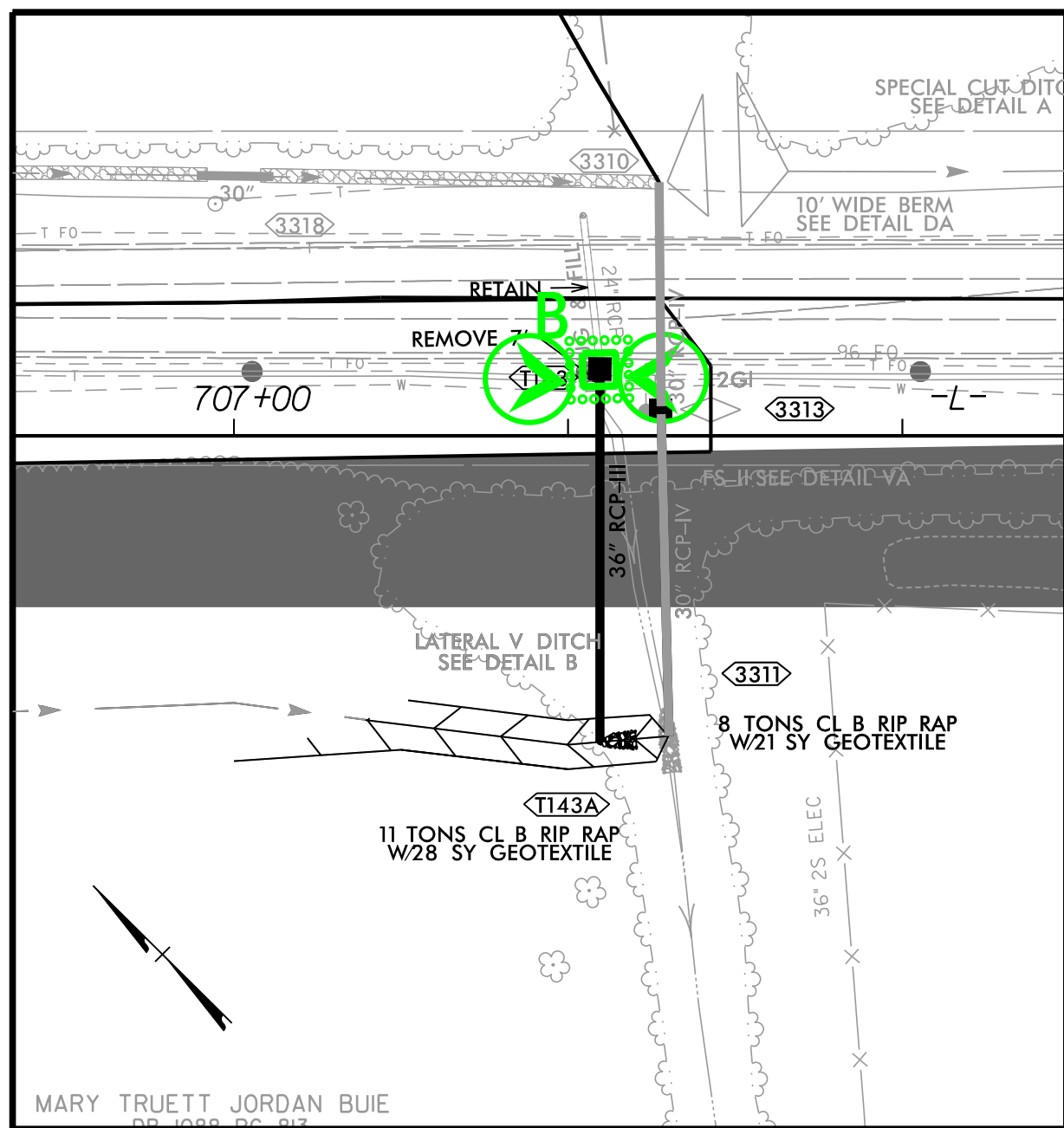
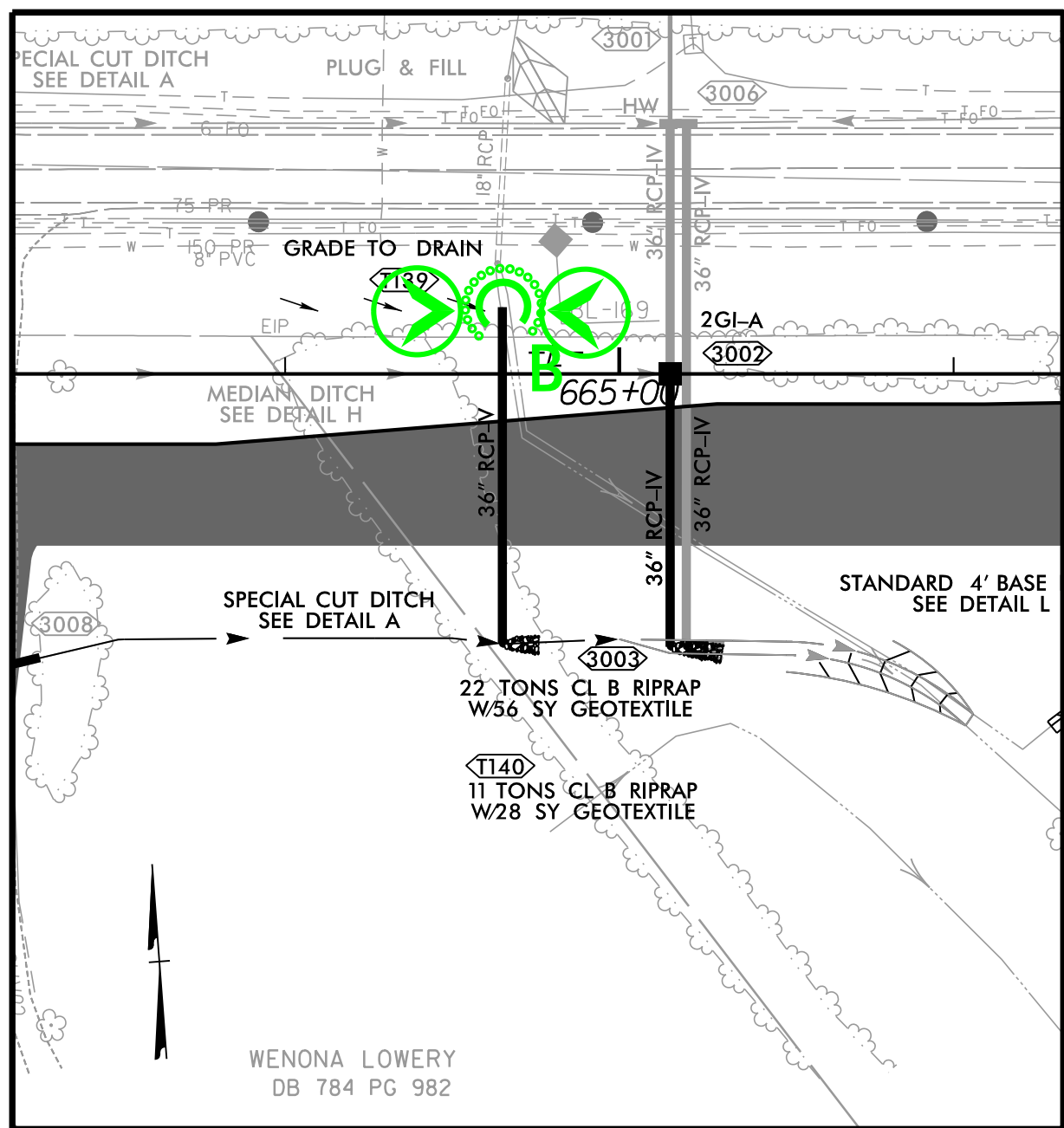
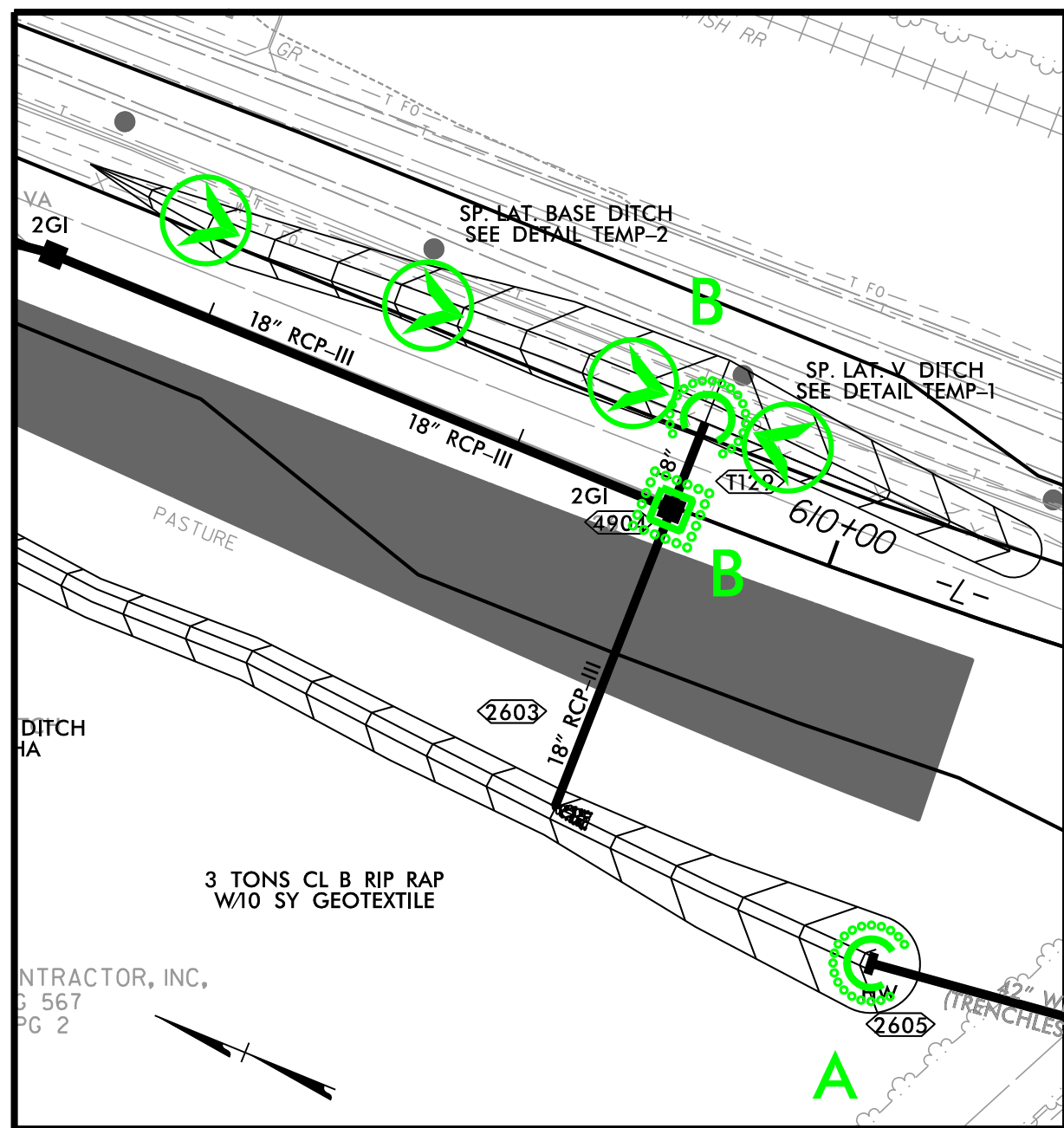
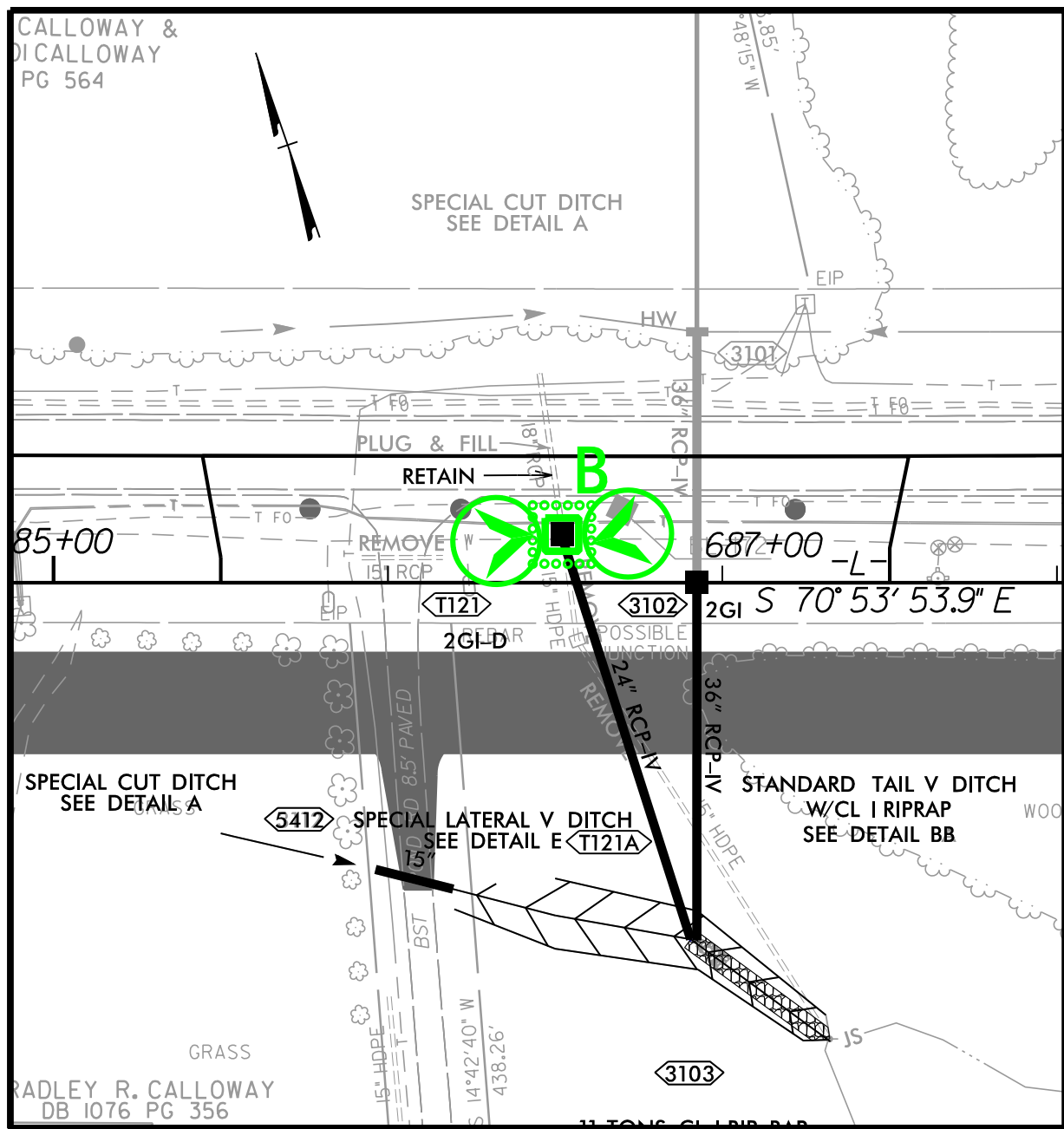
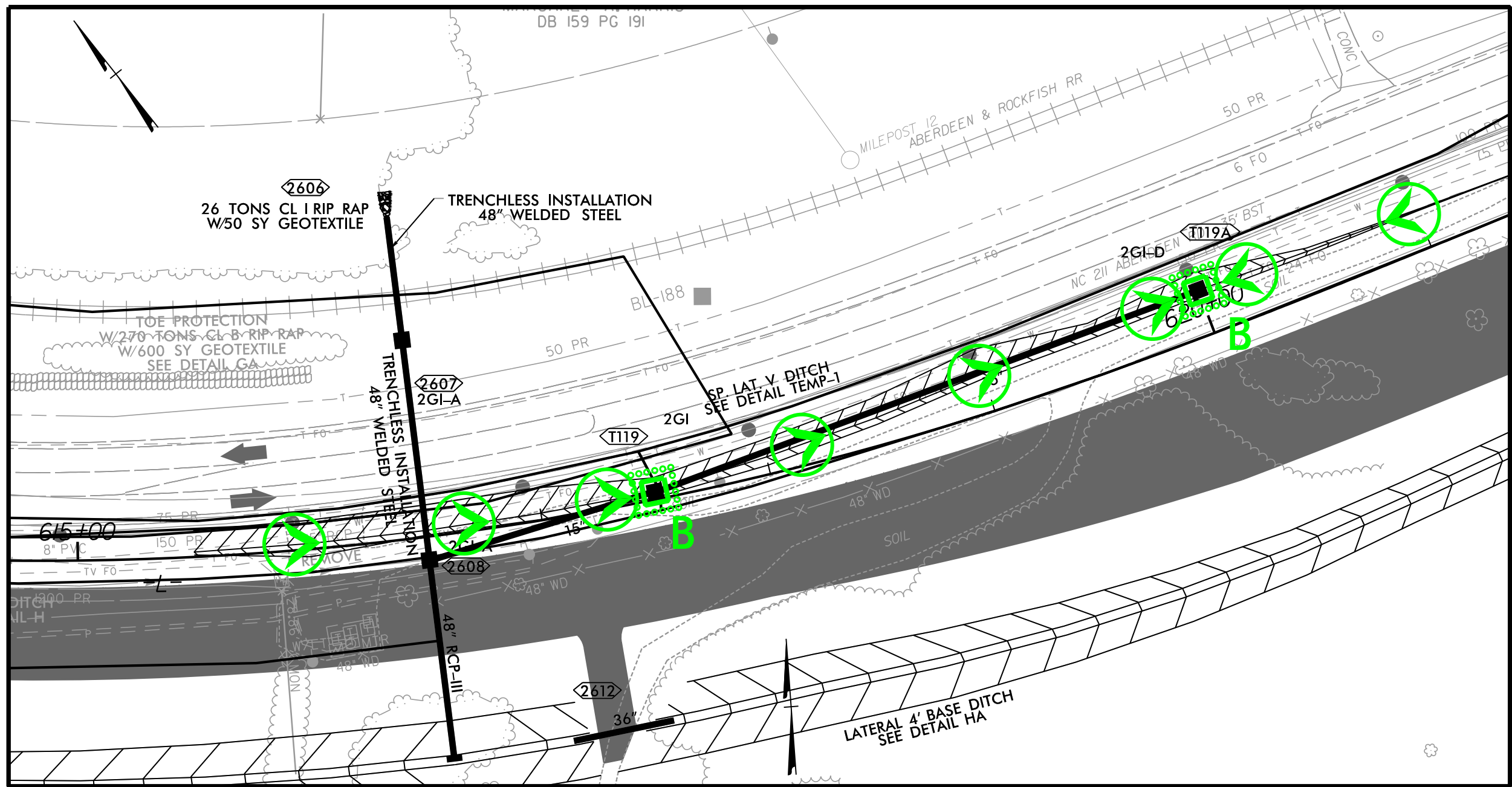
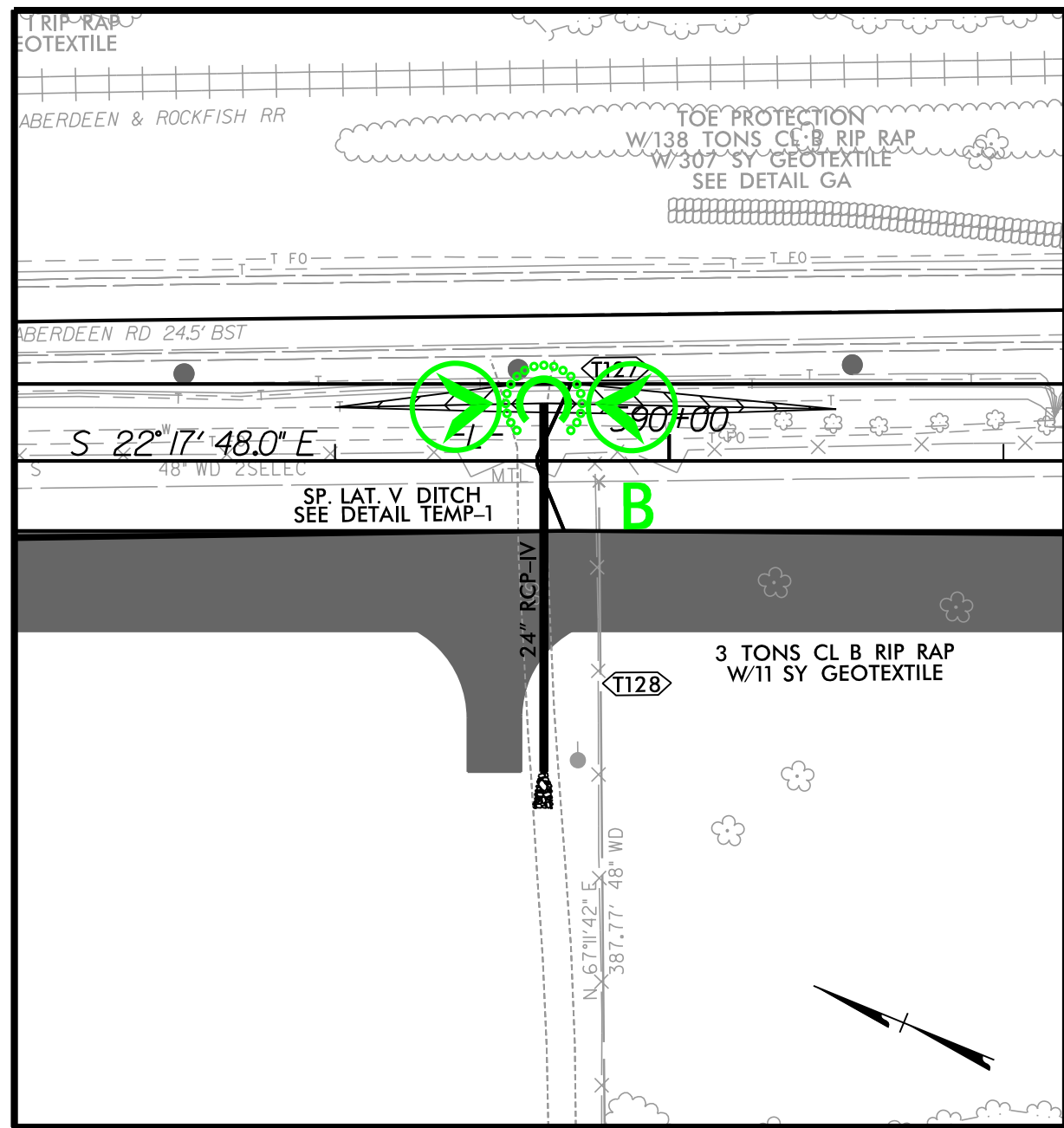
TEMPORARY
DRAINAGE PIPE
LOCATION
DETAILS FOR
INFORMATION
USE



8/17/99



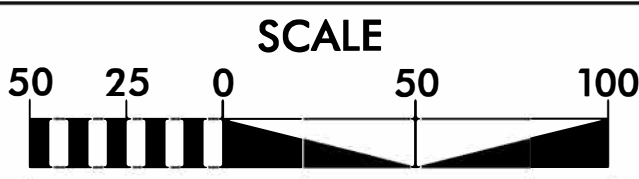
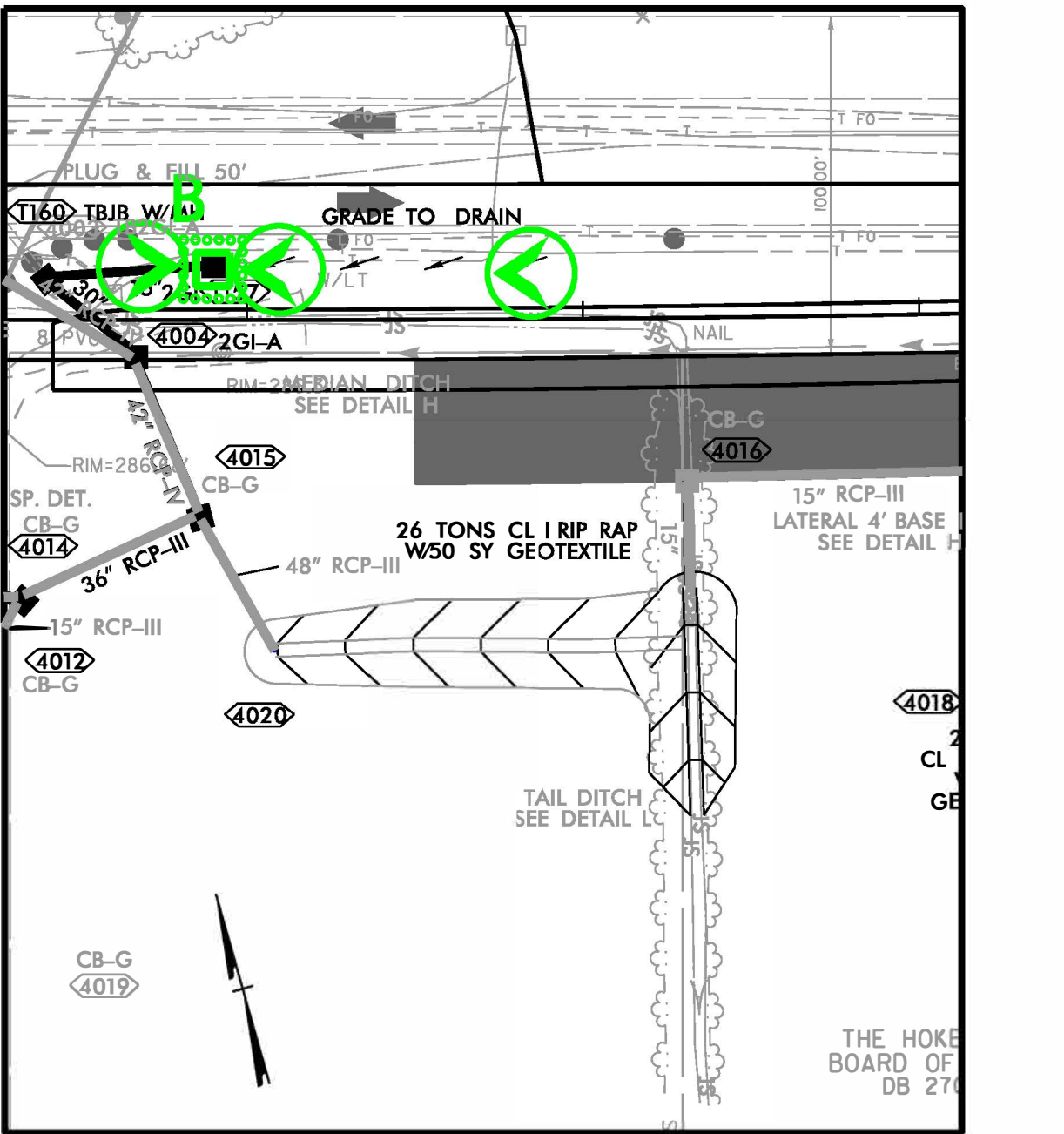
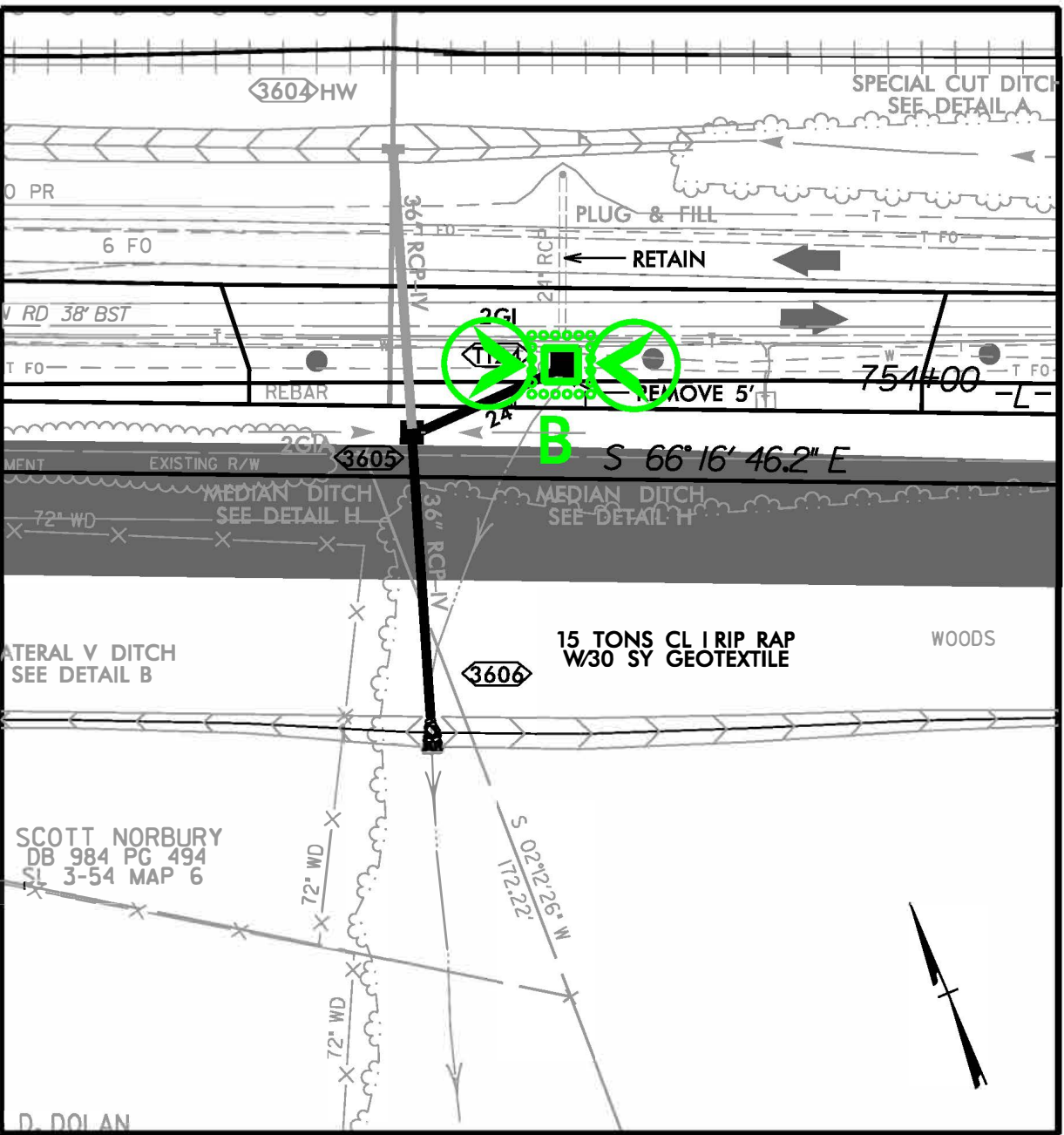
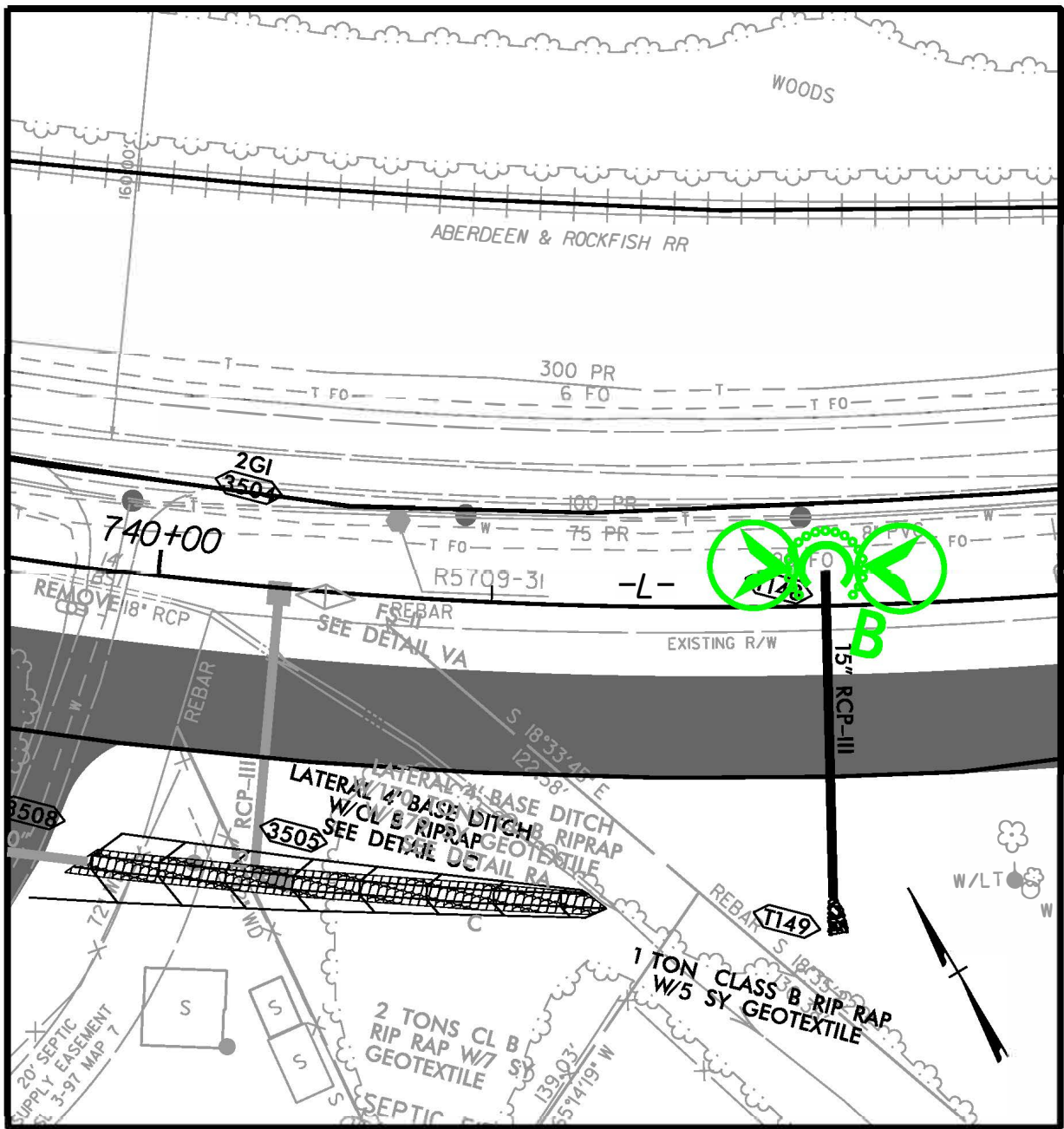
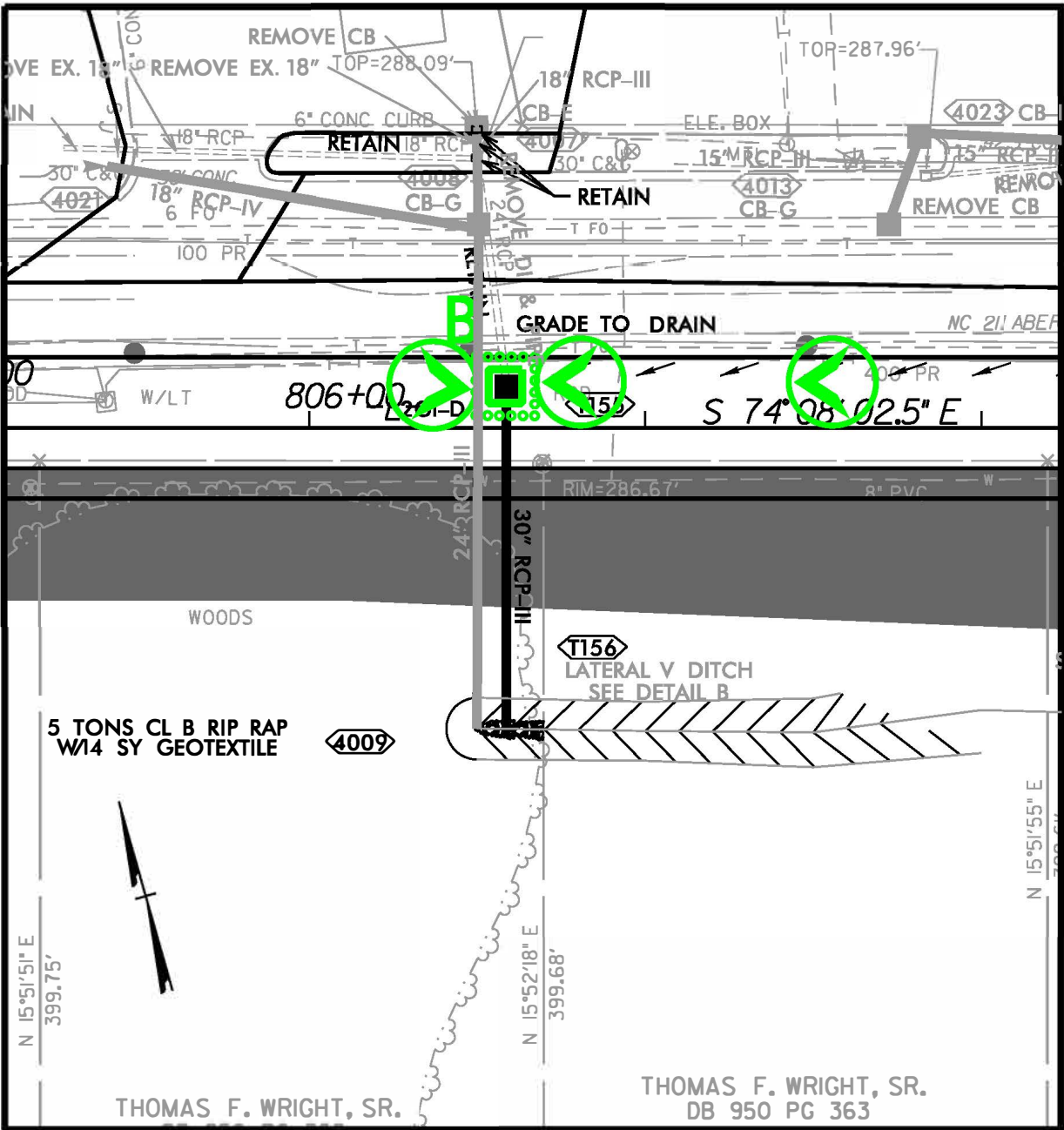
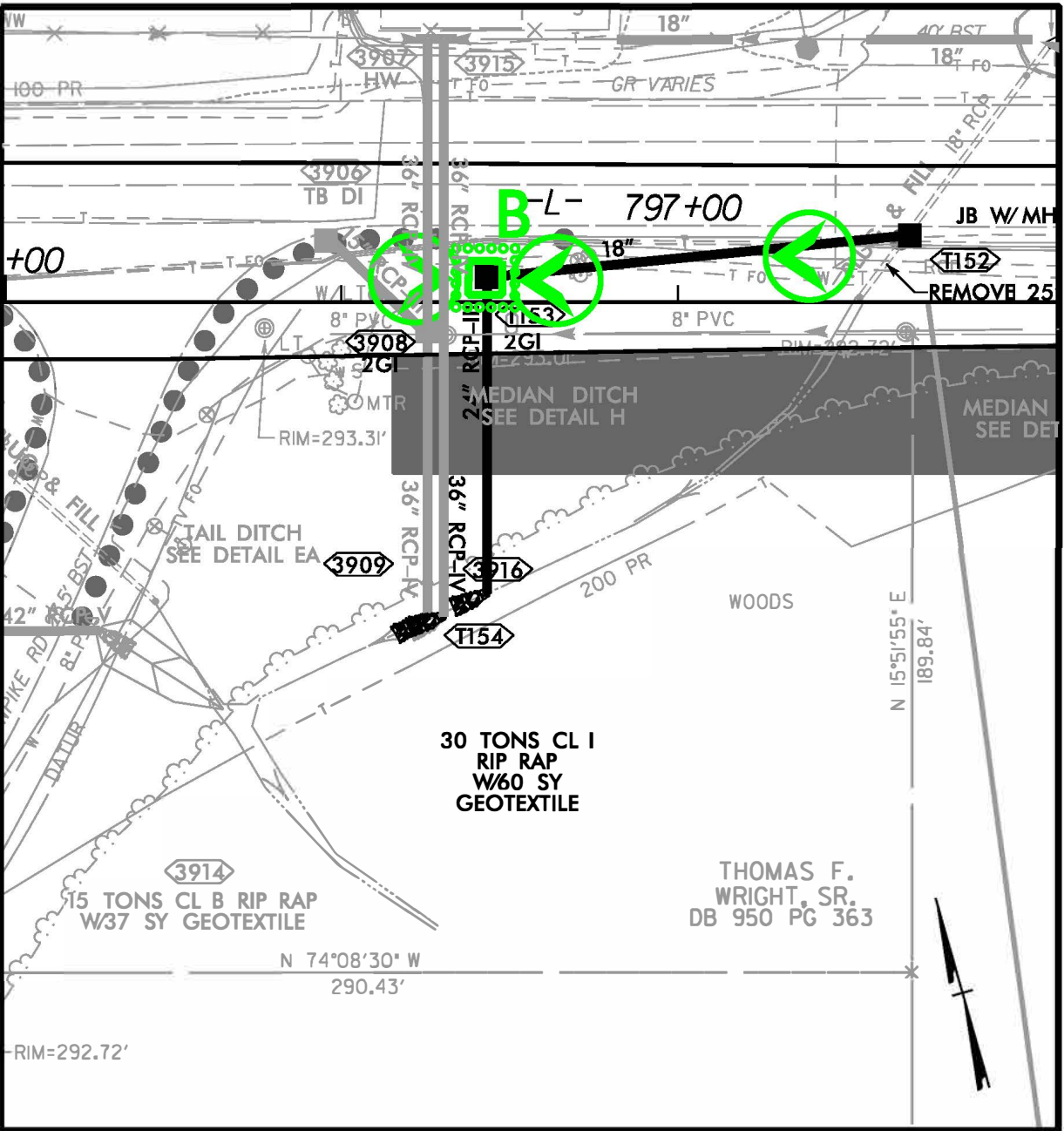
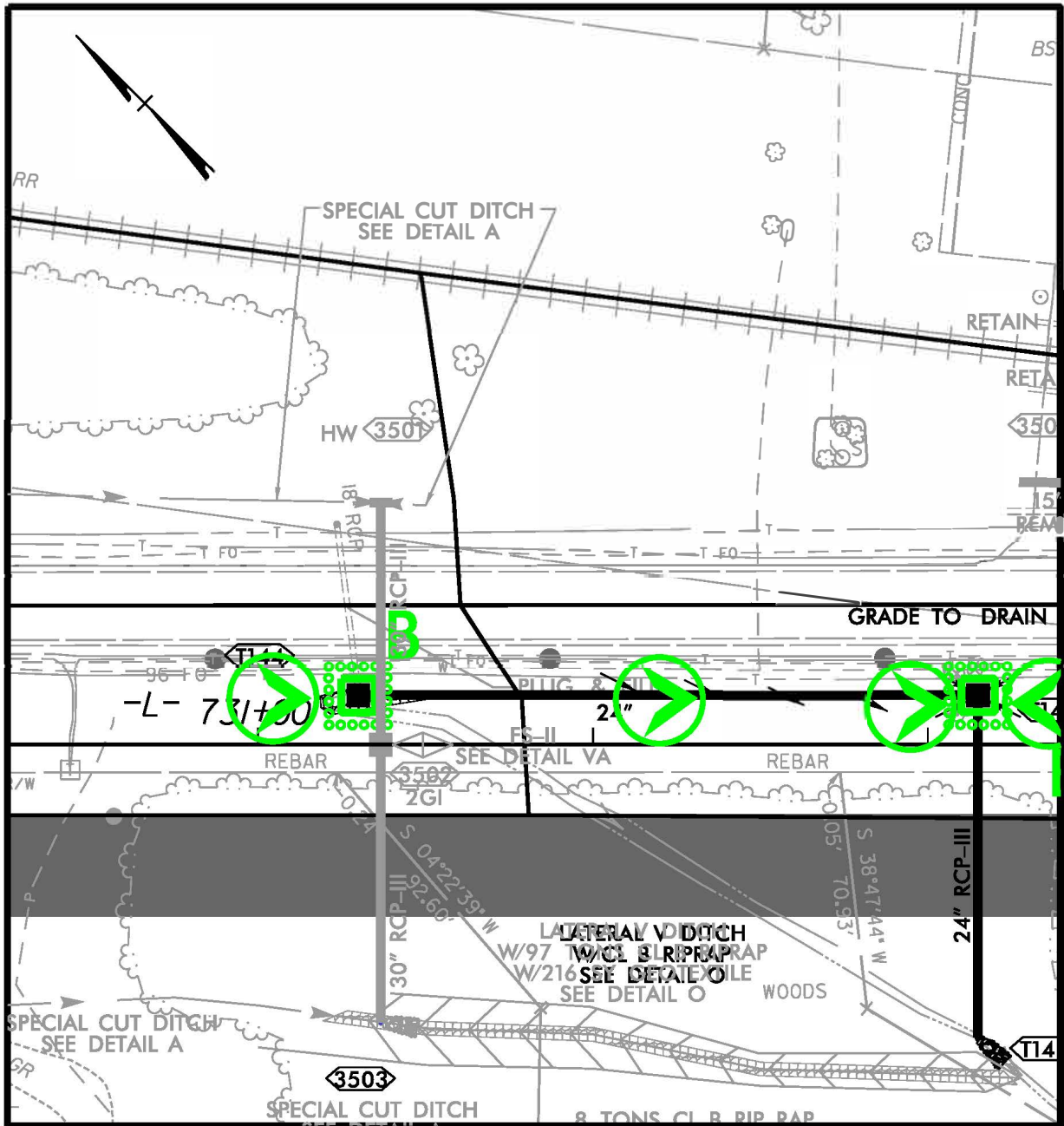
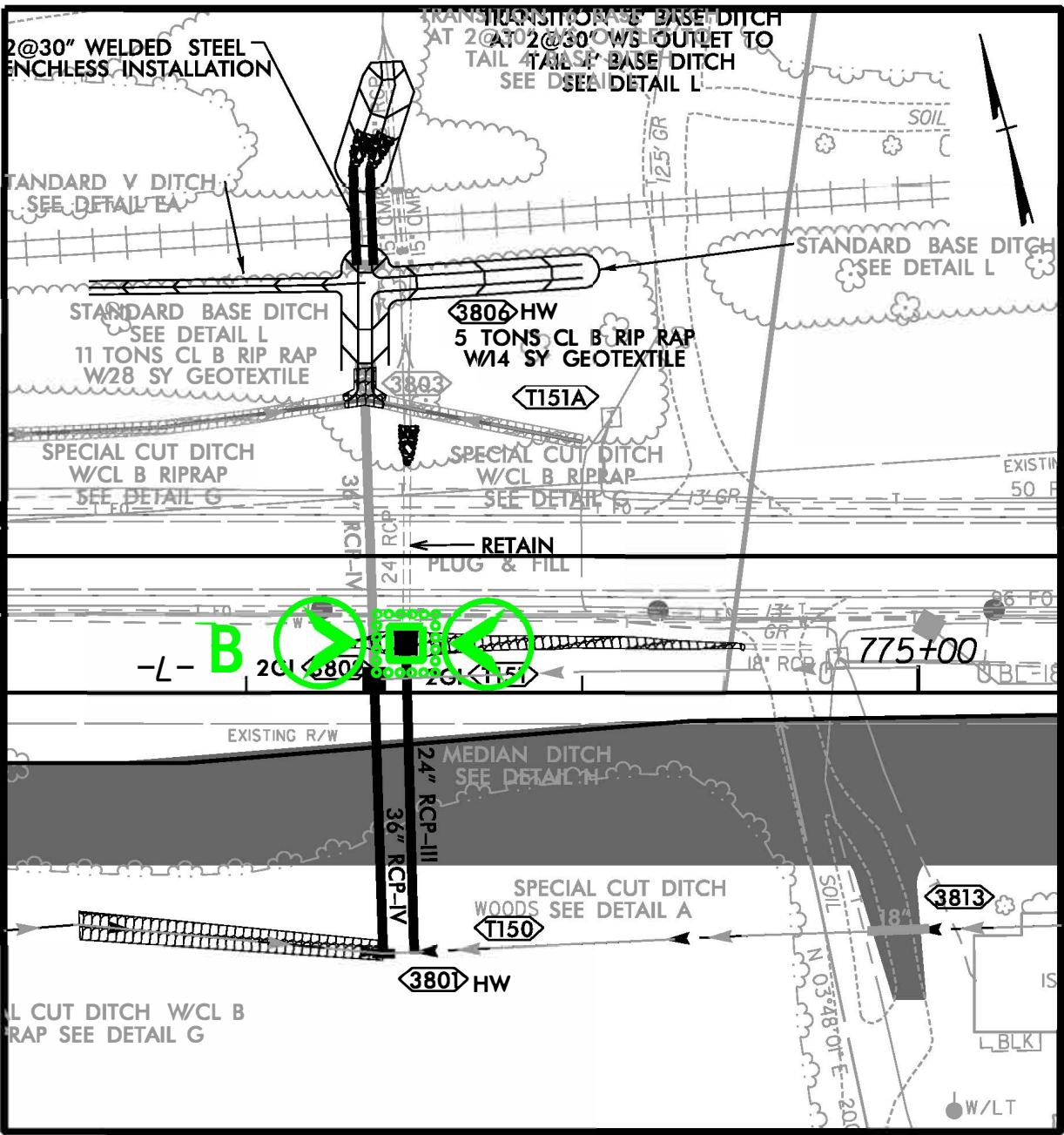
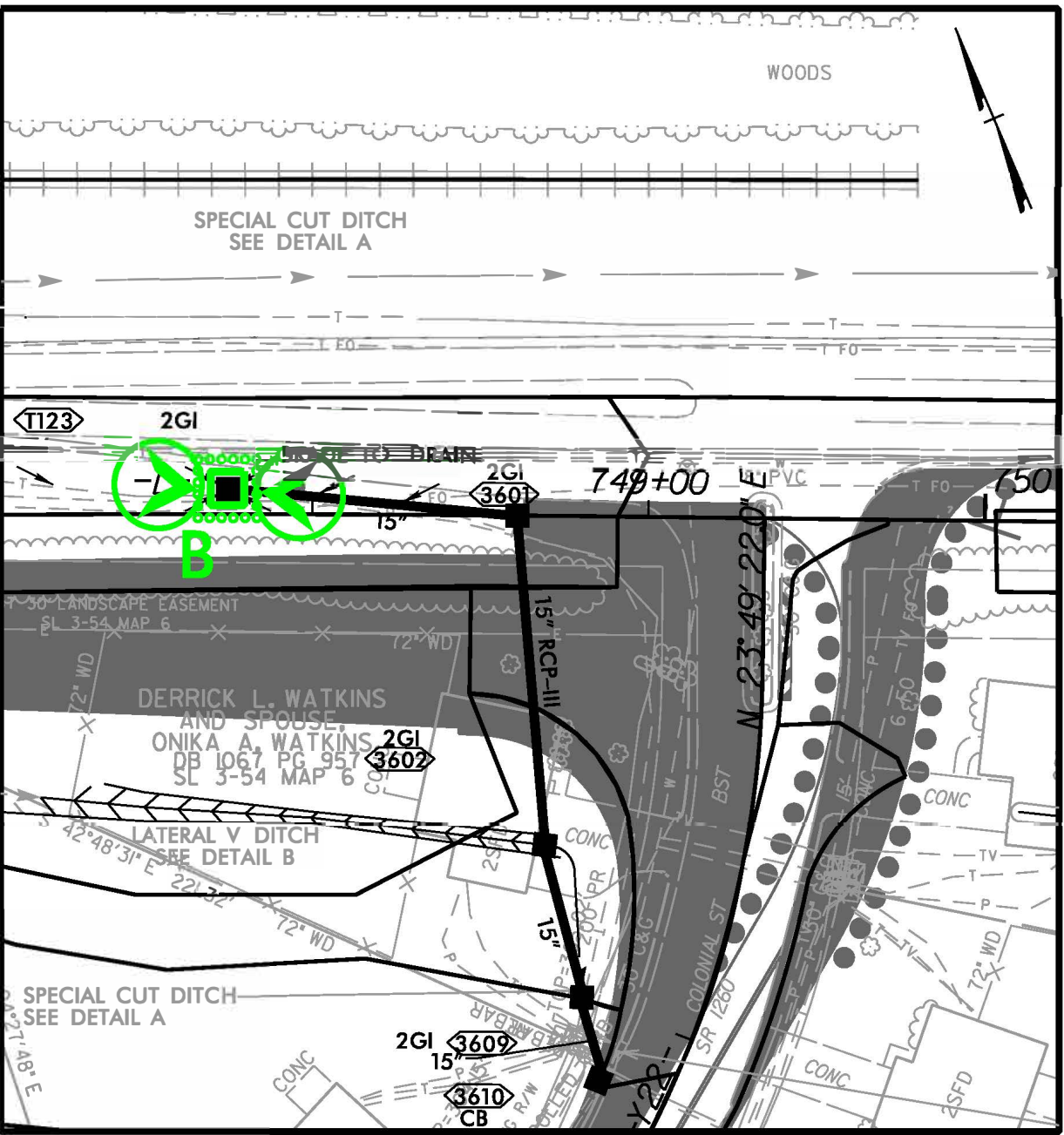
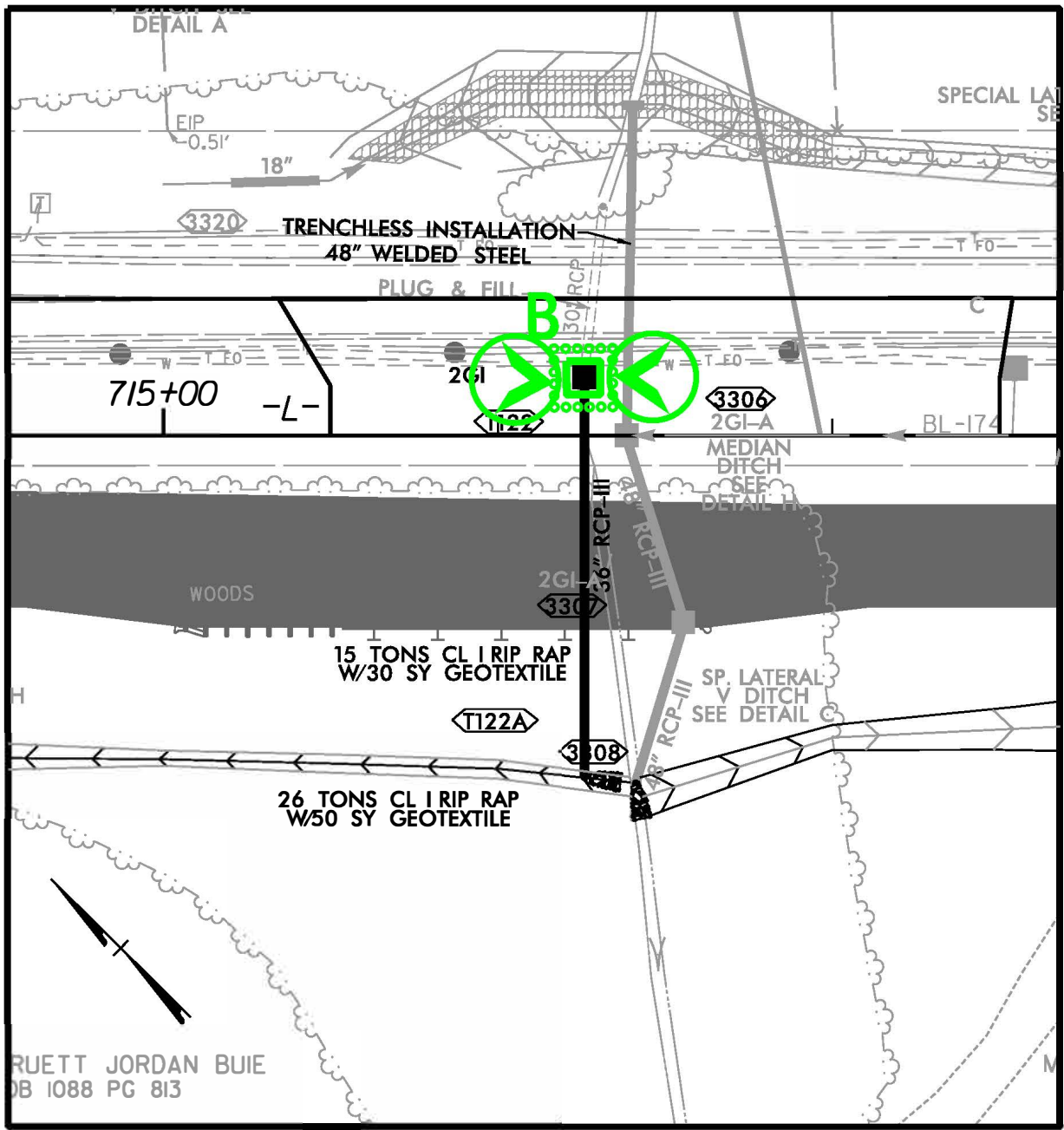
TEMPORARY DRAINAGE PIPE LOCATION DETAILS FOR INFORMATION USE



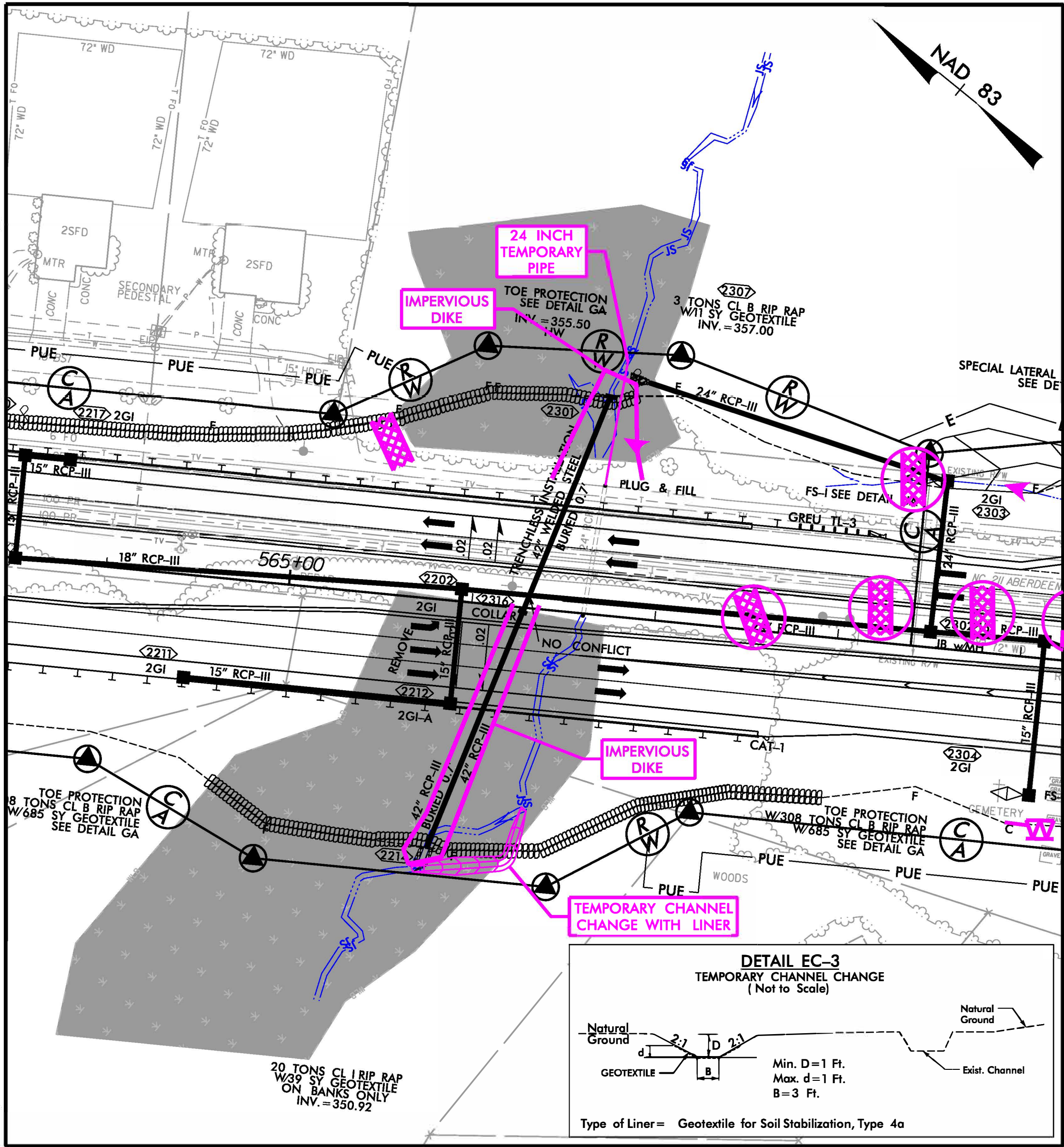
8/17/99

PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-3M/CONST.2B-22
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

TEMPORARY
DRAINAGE PIPE
LOCATION
DETAILS FOR
INFORMATION
USE

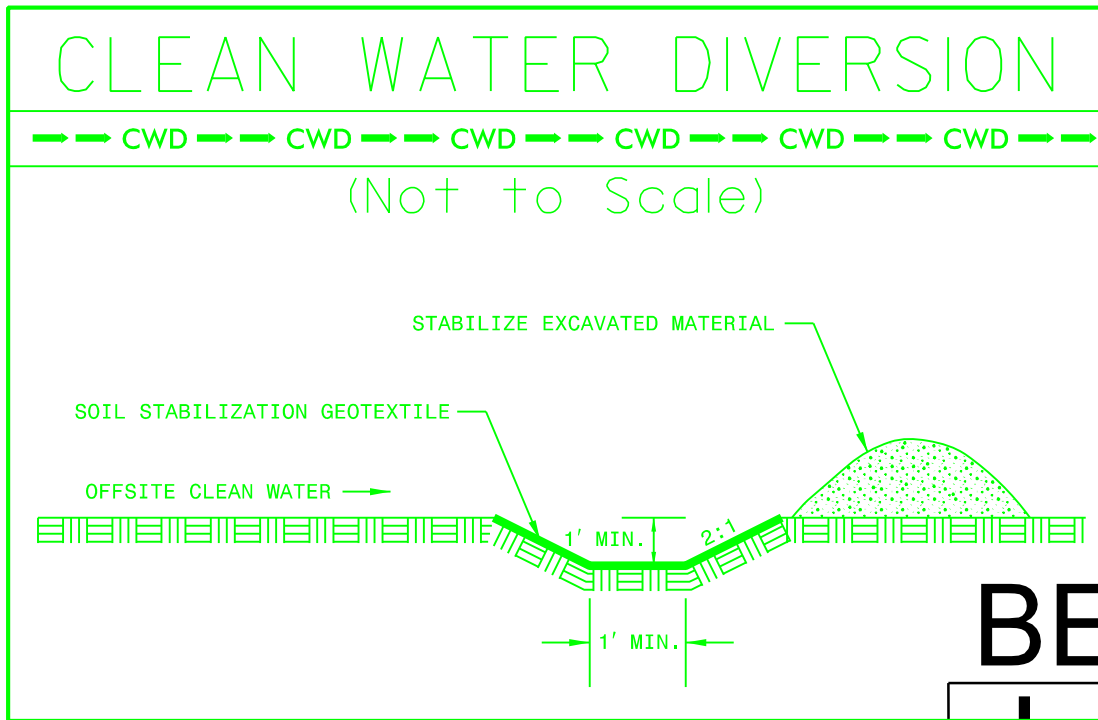


PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-3N/CONST.23
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



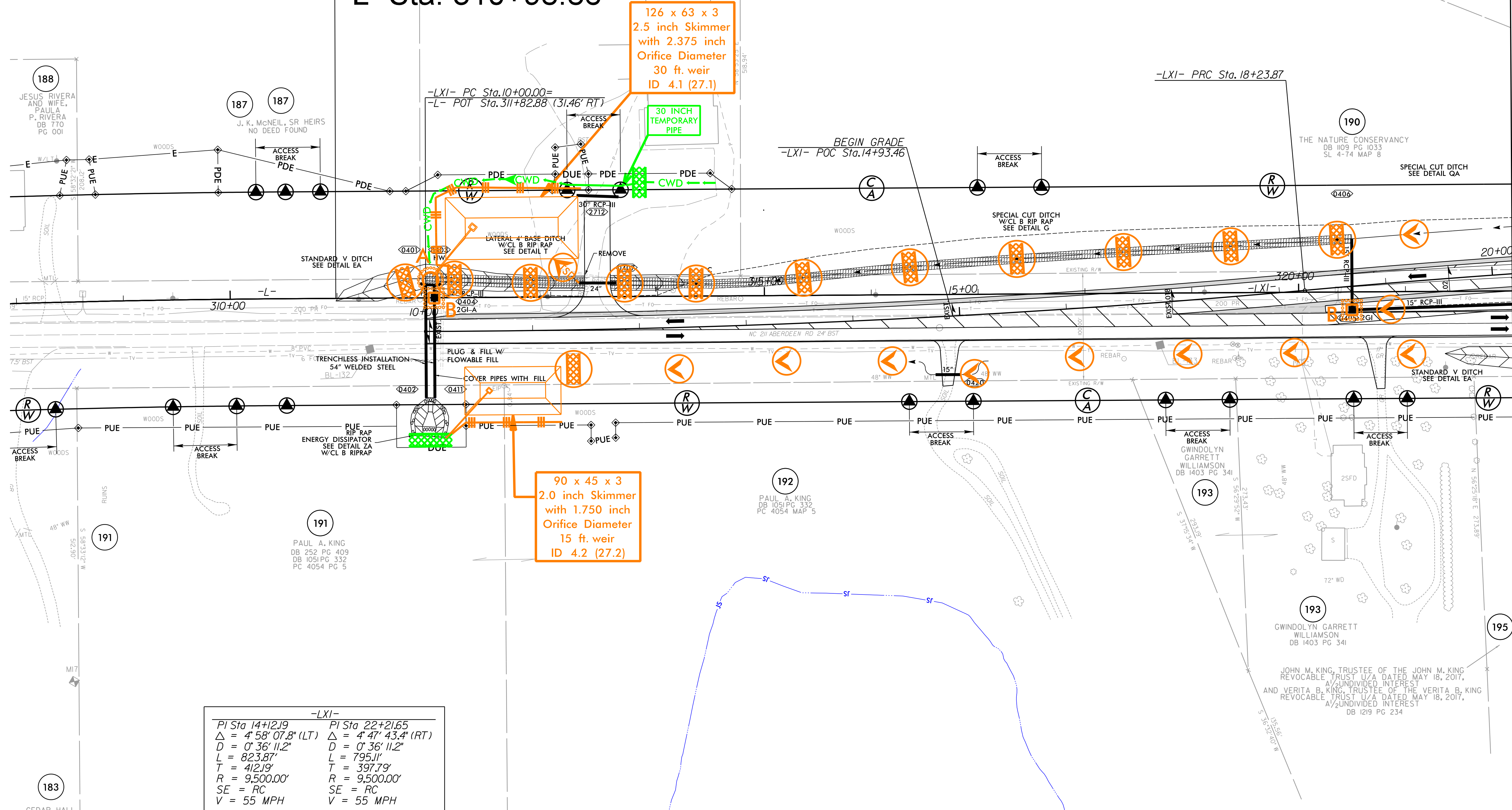
42" WS TRENCHLESS INSTALLATION STA. 565+88 -L2-

1. MAINTAIN TRAFFIC ON EXISTING ROADWAY.
2. CONSTRUCT TEMPORARY CHANNEL CHANGE OUTSIDE SLOPE STAKE LINE PRIOR TO CLEARING AND GRUBBING PHASE FOR USE WITH CLEAN WATER DIVERSION.
3. UTILIZE SPECIAL STILLING BASIN FOR DEWATERING.
4. INSTALL 24" TEMPORARY PIPE AND REMAINDER OF TEMPORARY CHANNEL CHANGE TO MAINTAIN FLOW THROUGH EXISTING PIPE.
5. INSTALL IMPERVIOUS DIKES AND DEWATER WORK AREAS.
6. INSTALL 42" WELDED STEEL PIPE VIA TRENCHLESS INSTALLATION.
7. INSTALL COLLARS AND RCP SECTIONS TO EXTEND 42" WELDED STEEL PIPE.
8. COMPLETE CHANNEL WORK AND STABILIZATION.
9. REMOVE IMPERVIOUS DIKES, TEMPORARY PIPE, AND SECTION OF TEMPORARY CHANNEL CHANGE WITHIN SLOPE STAKE LINE TO ROUTE FLOW THROUGH 42" PIPE. MAINTAIN TEMPORARY CHANNEL CHANGE OUTSIDE OF SLOPE STAKE LINE FOR USE WITH CLEAN WATER DIVERSION IN FINAL PHASE.
10. REMOVE ACCESSIBLE SECTIONS OF EXISTING 24" CMP. PLUG AND FILL SECTION UNDER EXISTING ROAD.
11. COMPLETE ANY OUTSTANDING CHANNEL WORK AND STABILIZATION.
12. COMPLETE ROADWAY WORK.



BEGIN CONSTRUCTION

-L- Sta. 310+98.86



-LXI-	
PI Sta 14+12.19	PI Sta 22+21.65
$\Delta = 4' 58' 07.8''$ (LT)	$\Delta = 4' 47' 43.4''$ (RT)
$D = 0' 36' 11.2''$	$D = 0' 36' 11.2''$
$L = 823.87'$	$L = 795.11'$
$T = 412.19'$	$T = 397.79'$
$R = 9,500.00'$	$R = 9,500.00'$
$SE = RC$	$SE = RC$
$V = 55$ MPH	$V = 55$ MPH

FOR -LXI- PROFILE, SEE SHEET NO. 46

ALL DRIVEWAYS ARE 16 FEET IN WIDTH WITH 10-FOOT RADII UNLESS OTHERWISE NOTED
MATCH EXISTING DRIVE TYPE UNLESS OTHERWISE NOTED



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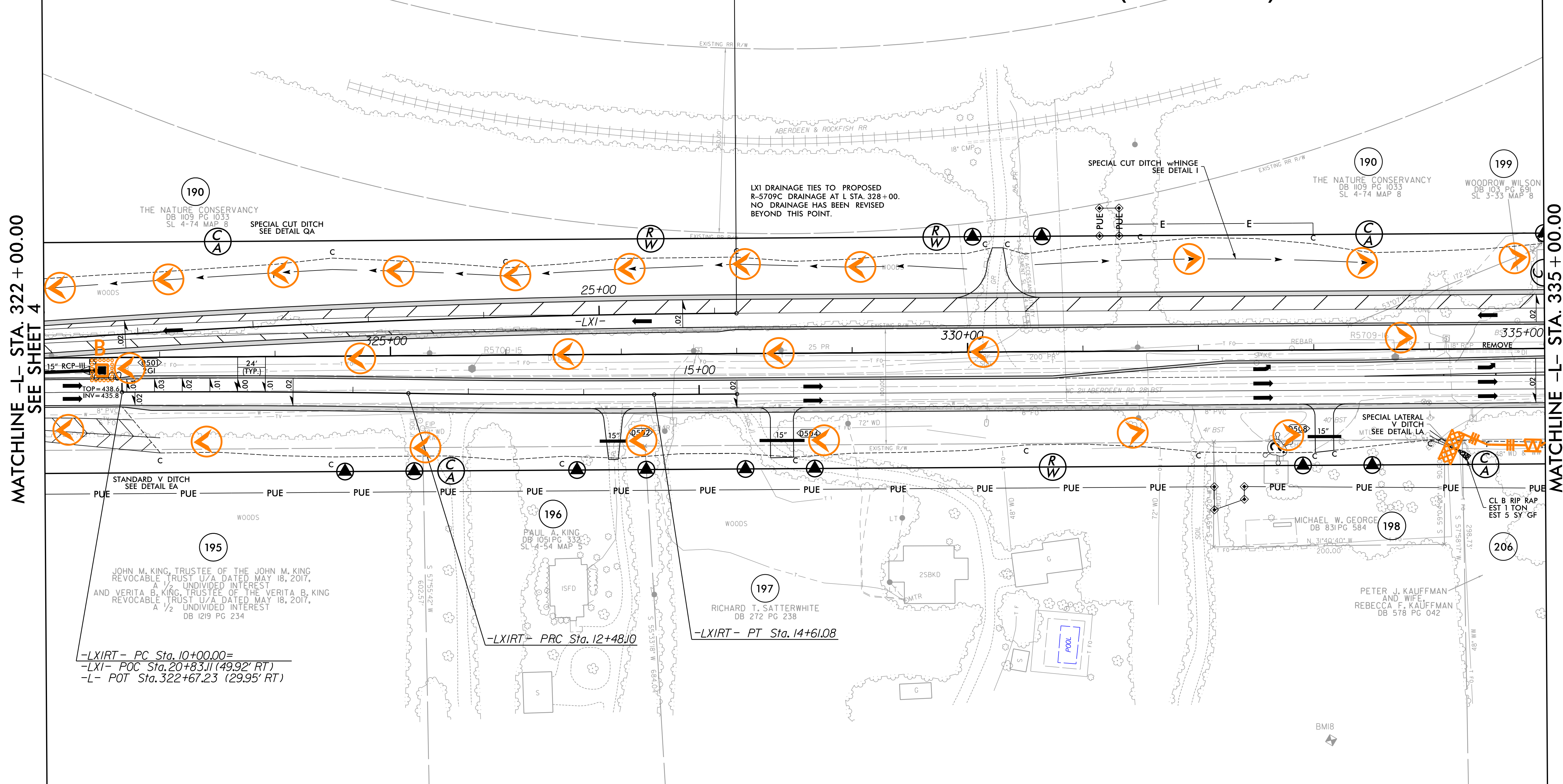
END FUTURE TIP PROJECT R-5709B
(TO BE CONSTRUCTED BY OTHERS)

BEGIN TIP PROJECT R-5709C

-LX1- PT Sta. 26+18.97=

-LX1RT- POT Sta. 15+32.80=

-L- POT Sta. 328+00.00 (35.00' LT)



MATCHLINE -L- STA. 322 + 00.00
SEE SHEET 4

MATCHLINE -L- STA. 335 + 00.00
 SEE SHEET /

-LXI-		-LXIRT-	
<i>PI Sta 22+21.65</i>	<i>PI Sta 11+24.06</i>	<i>PI Sta 13+54.60</i>	
$\Delta = 4^{\circ} 47' 43.4''$ (RT)	$\Delta = 1^{\circ} 20' 27.7''$ (RT)	$\Delta = 1^{\circ} 17' 04.3''$ (LT)	
<i>D = 0^{\circ} 36' 11.2''</i>	<i>D = 0^{\circ} 32' 25.9''</i>	<i>D = 0^{\circ} 36' 11.2''</i>	
<i>L = 795.1J</i>	<i>L = 248.10J</i>	<i>L = 212.92J</i>	
<i>T = 397.79'</i>	<i>T = 124.06'</i>	<i>T = 106.50'</i>	
<i>R = 9,500.00'</i>	<i>R = 10,600.00'</i>	<i>R = 9,500.00'</i>	
<i>SE = RC</i>	<i>SE = RC</i>	<i>SE = RC</i>	
<i>V = 55 MPH</i>	<i>V = 55 MPH</i>	<i>V = 55 MPH</i>	

USE METHOD II CLEARING
STA. 333+00 TO 335+00

FOR -L- PROFILE, SEE SHEET NO. 47
FOR -LX1- PROFILE, SEE SHEET NO. 46
FOR -LX1RT- PROFILE, SEE SHEET NO. 46

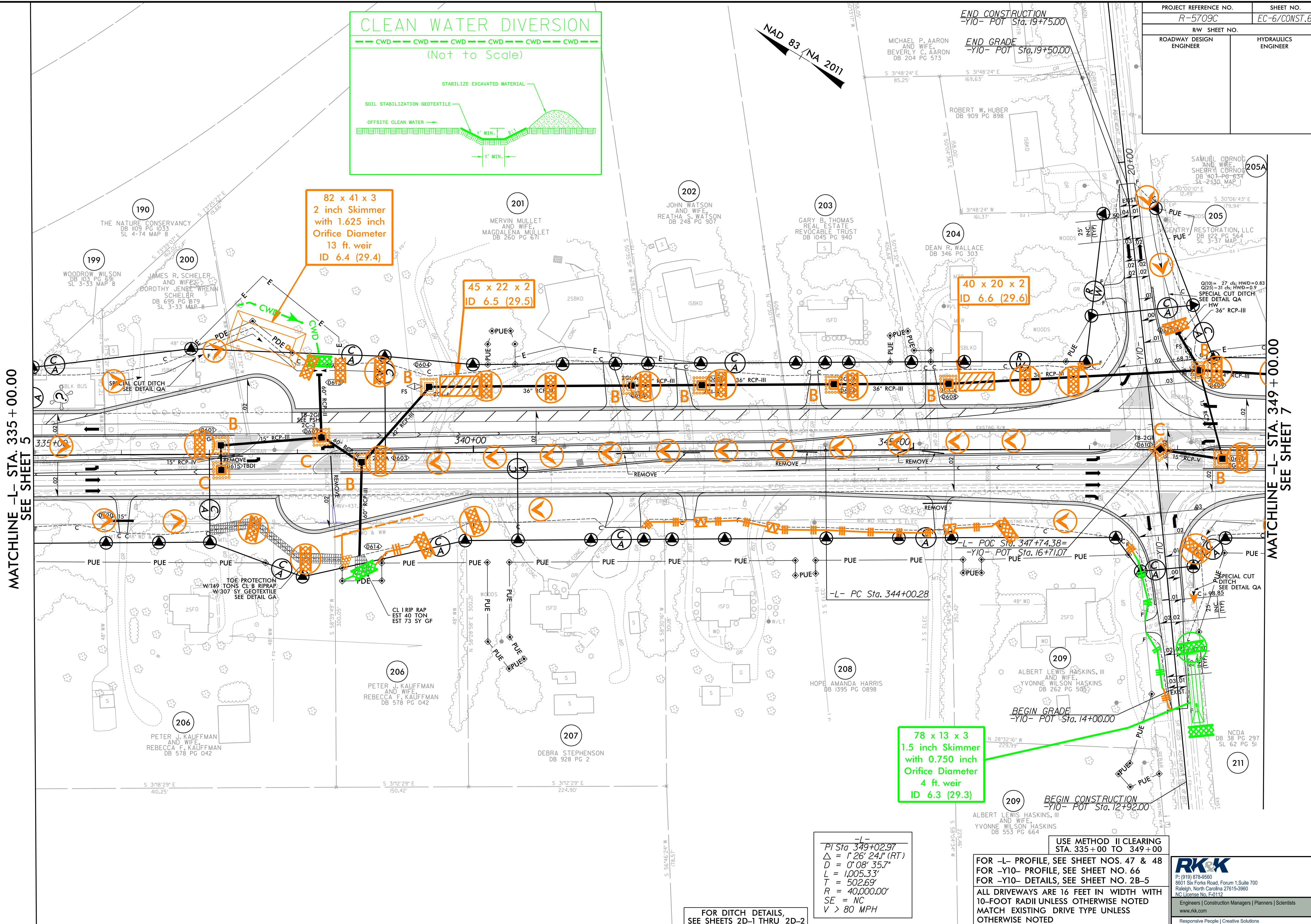
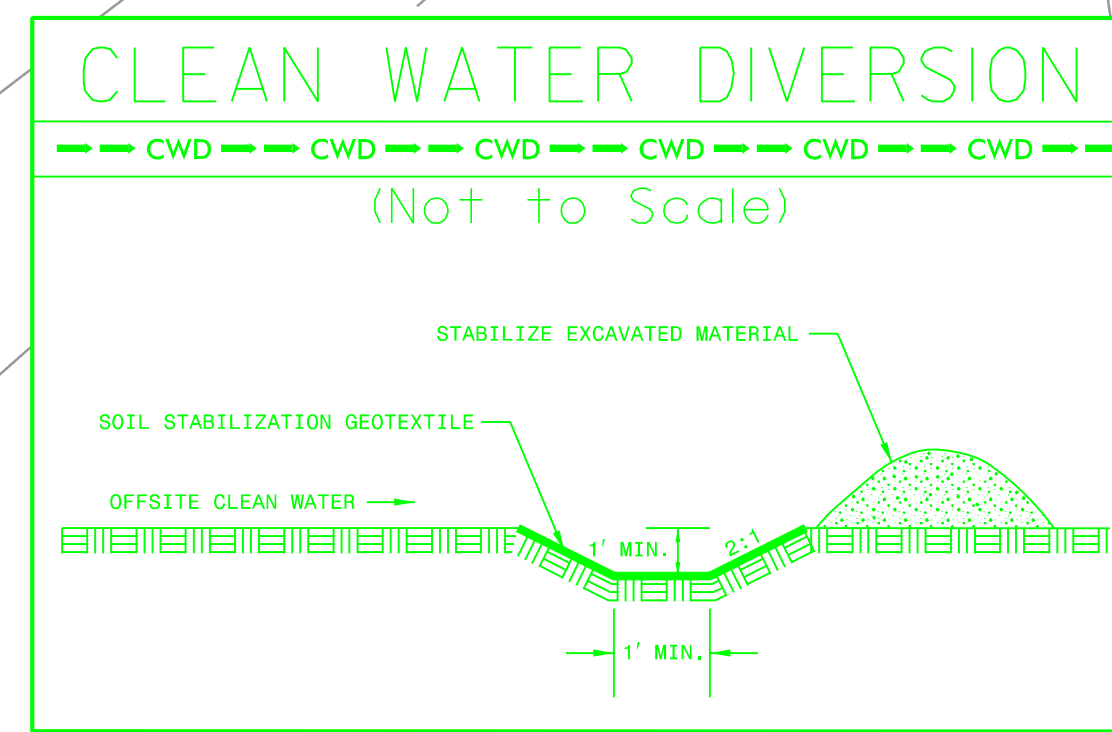
ALL DRIVEWAYS ARE 16 FEET IN WIDTH WITH
10-FOOT RADII UNLESS OTHERWISE NOTED
MATCH EXISTING DRIVE TYPE UNLESS
OTHERWISE NOTED



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-L-

PI Sta 349+02.97
 $\Delta = 1^{\circ} 26' 24.1''$ (RT)
 $D = 0^{\circ} 08' 35.7''$
 $L = 1,005.33'$
 $T = 502.69'$
 $R = 40,000.00'$
 $SE = NC$
 $V > 80$ MPH

DB 5 PG 664

USE METHOD II CLEARING STA. 335+00 TO 349+00

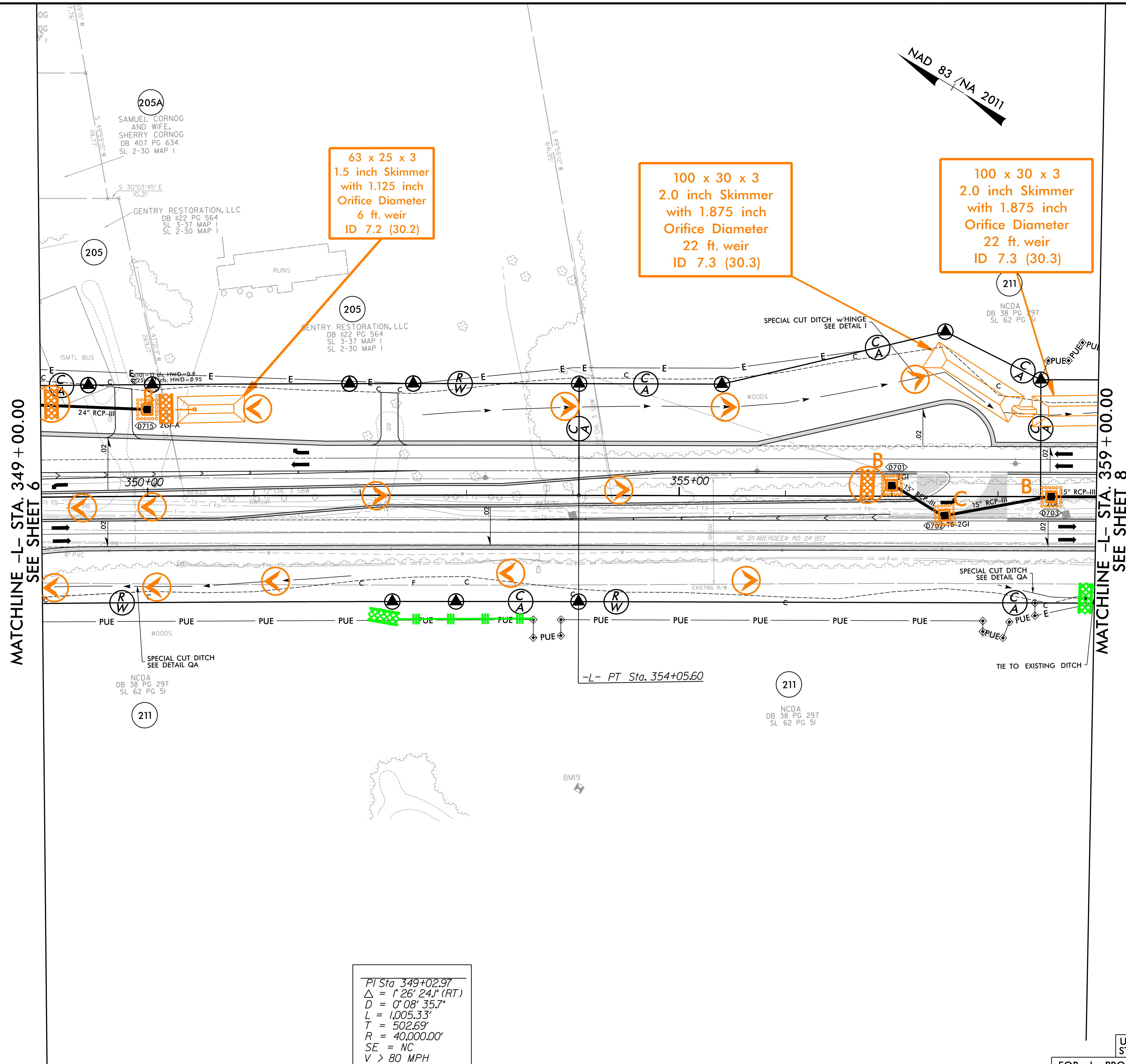
FOR -L- PROFILE, SEE SHEET NOS. 47 & 48
FOR -Y10- PROFILE, SEE SHEET NO. 66
FOR -Y10- DETAILS, SEE SHEET NO. 2B-5

ALL DRIVEWAYS ARE 16 FEET IN WIDTH WITH
10-FOOT RADII UNLESS OTHERWISE NOTED
MATCH EXISTING DRIVE TYPE UNLESS
OTHERWISE NOTED

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USE METHOD II CLEARING
STA. 349+00 TO 359+00

FOR -L- PROFILE, SEE SHEET NO. 48

ALL DRIVEWAYS ARE 16 FEET IN WIDTH WITH
10-FOOT RADII UNLESS OTHERWISE NOTED
MATCH EXISTING DRIVE TYPE UNLESS
OTHERWISE NOTED



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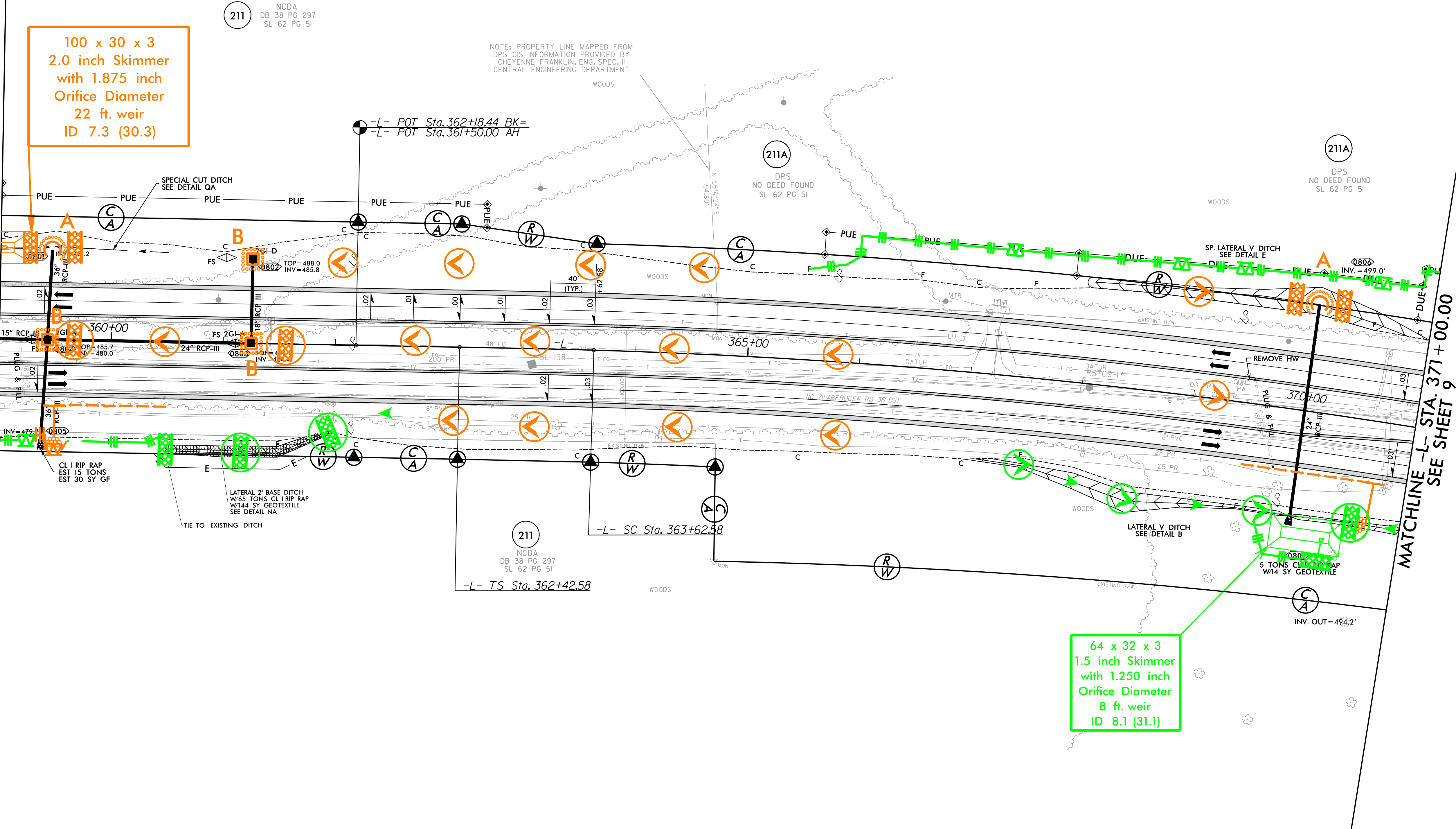
8/17/99

8/28/2024
C:\Users\chadman\OneDrive\Documents\Projects\5709C\5709C_EC.pst8.dgn

PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-81.CONST.B
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NAD 83 / NA 2011

MATCHLINE -L- STA. 359 + 00.00
SEE SHEET 7



-L-	-L-
PIs Sta 363+22.58	PI Sta 373+94.34
Os = 0° 36' 11.2"	Δ = 20° 31' 12.3" (RT)
Ls = 120.00'	D = 1° 00' 18.7"
LT = 80.00'	L = 2,041.41'
ST = 40.00'	T = 1,031.76'
	R = 5,700.00'
	SE = 0.03
	V = 60MPH

USE METHOD II CLEARING
STA. 359 + 00 TO 371 + 00
FOR DITCH DETAILS,
SEE SHEETS 2D-1 THRU 2D-2
FOR -L- PROFILE, SEE SHEET NOS. 48-49
ALL DRIVEWAYS ARE 16 FEET IN WIDTH WITH
10-FOOT RADII UNLESS OTHERWISE NOTED
MATCH EXISTING DRIVE TYPE UNLESS
OTHERWISE NOTED

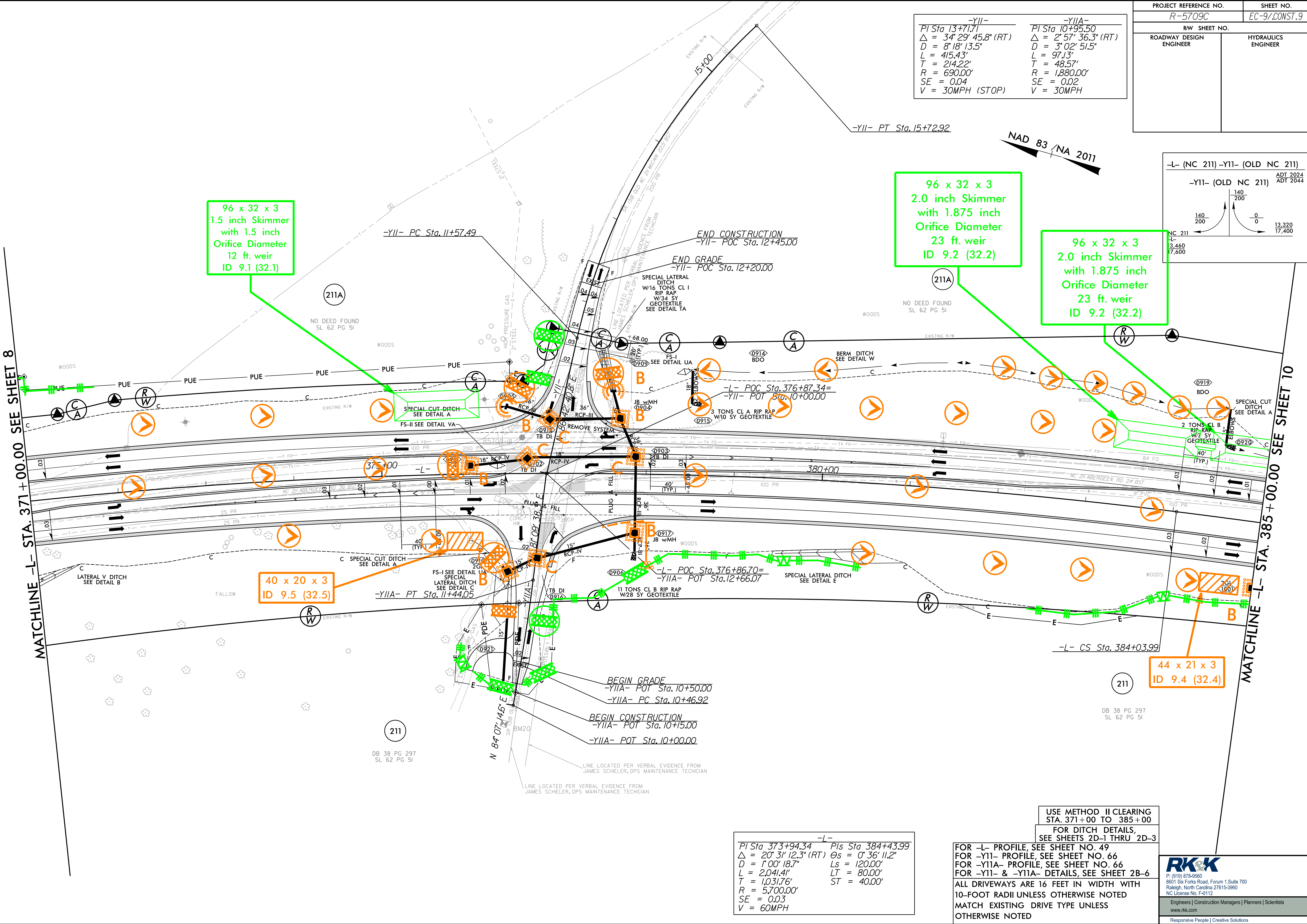
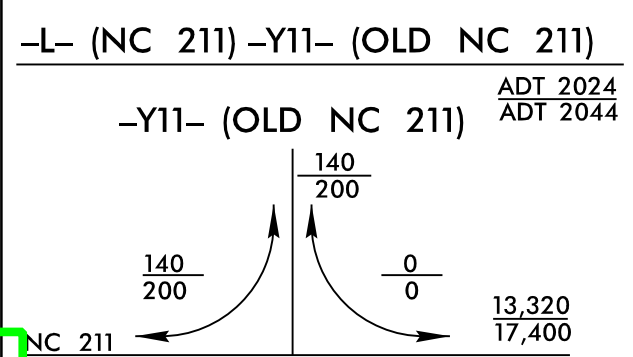
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chaffman

PROJECT REFERENCE NO.		SHEET NO.	
R-5709C		EC-9/CONST.9	
RW SHEET NO.		HYDRAULICS ENGINEER	
ROADWAY DESIGN ENGINEER			

-YII-	-YIIA-
PI Sta 13+71.71	PI Sta 10+95.50
$\Delta = 34' 29" 45.8" (RT)$	$\Delta = 2' 57" 36.3" (RT)$
$D = 8' 18" 13.5"$	$D = 3' 02" 51.5"$
$L = 415.43'$	$L = 97.13'$
$T = 214.22'$	$T = 48.57'$
$R = 690.00'$	$R = 1,880.00'$
$SE = 0.04$	$SE = 0.02$
$V = 30MPH (STOP)$	$V = 30MPH$



-L-	-L-
PI Sta 373+94.34	PI Sta 384+43.99
$\Delta = 20' 31" 12.3" (RT)$	$\Delta = 0' 36" 11.2"$
$D = 1' 00" 18.7"$	$D = 120.00'$
$L = 2,041.41'$	$L = 80.00'$
$T = 1,031.76'$	$T = 40.00'$
$R = 5,700.00'$	
$SE = 0.03$	
$V = 60MPH$	

USE METHOD II CLEARING
STA. 371+00 TO 385+00
FOR DITCH DETAILS,
SEE SHEETS 2D-1 THRU 2D-3

FOR -L- PROFILE, SEE SHEET NO. 49
FOR -YII- PROFILE, SEE SHEET NO. 66
FOR -YIIA- PROFILE, SEE SHEET NO. 66
FOR -YII- & -YIIA- DETAILS, SEE SHEET 2B-6

ALL DRIVEWAYS ARE 16 FEET IN WIDTH WITH
10-FOOT RADII UNLESS OTHERWISE NOTED
MATCH EXISTING DRIVE TYPE UNLESS
OTHERWISE NOTED

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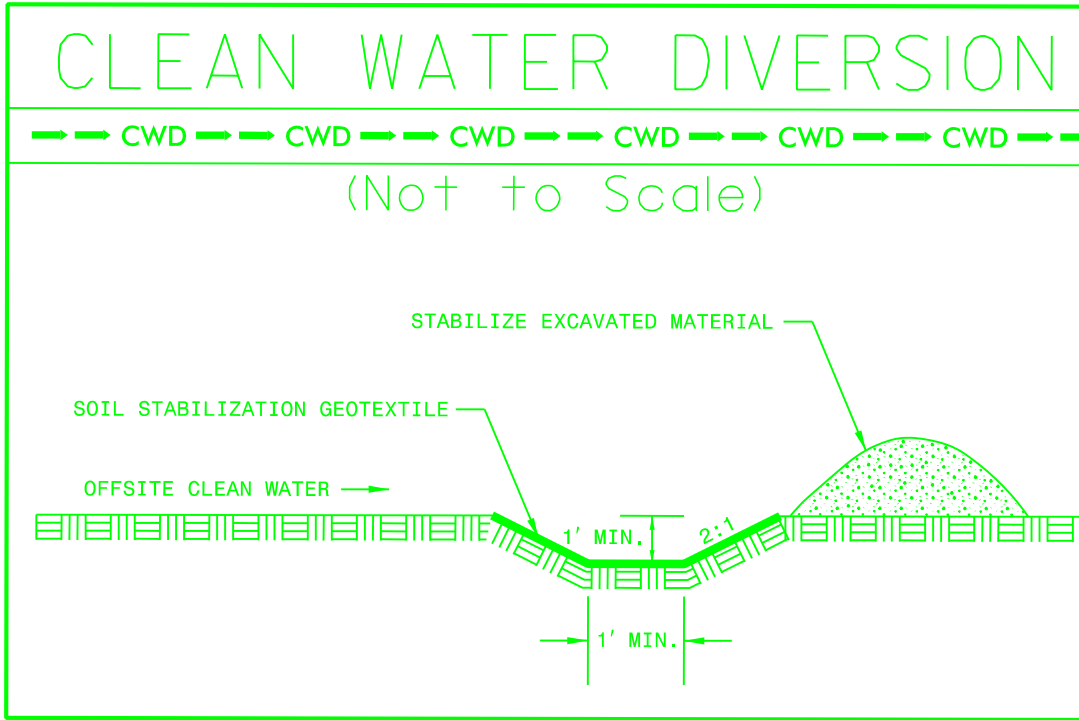
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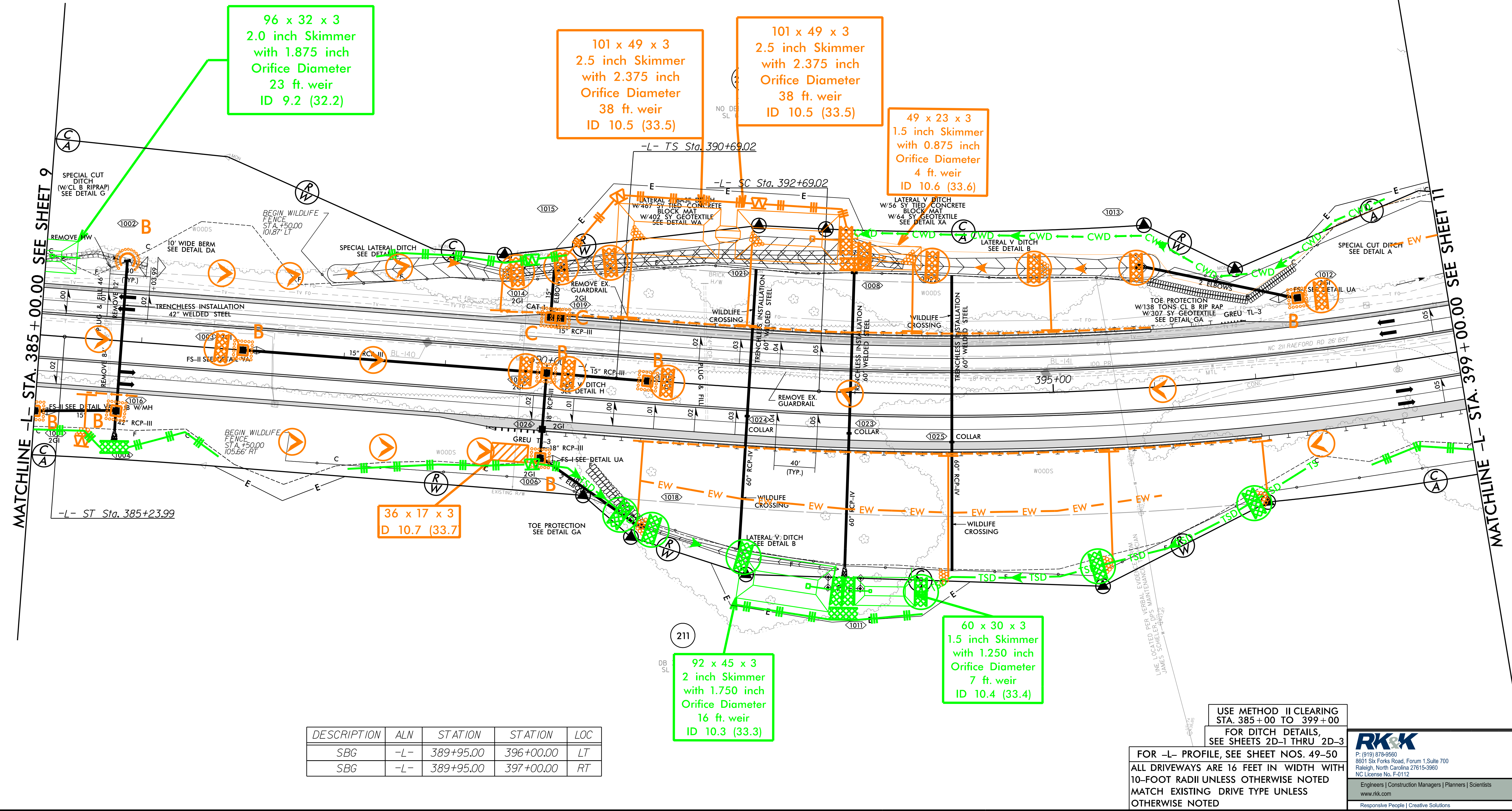
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8/23/2024
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choffman



NAD 83 /NA 2011

PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-10/CONST.10
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



DESCRIPTION	ALN	STATION	STATION	LOC
SBG	-L-	389+95.00	396+00.00	LT
SBG	-L-	389+95.00	397+00.00	RT

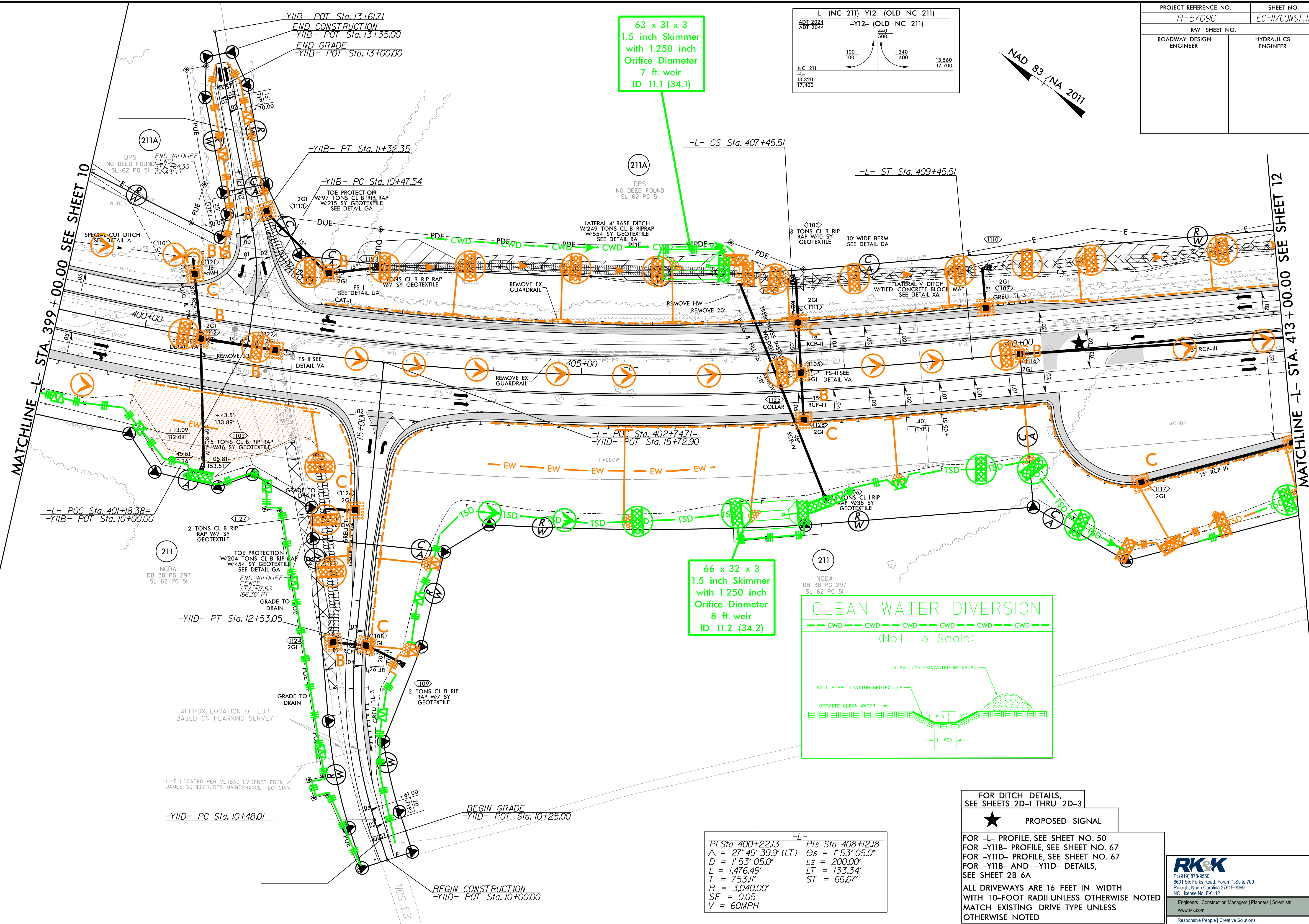
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FOR DITCH DETAILS,
SEE SHEETS 2D-1 THRU 2D-3

★

PROPOSED SIGNAL

FOR -L- PROFILE, SEE SHEET NO. 50
FOR -Y11B- PROFILE, SEE SHEET NO. 67
FOR -Y11D- PROFILE, SEE SHEET NO. 67
FOR -Y11B- AND -Y11D- DETAILS,
SEE SHEET 2B-6A

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WITH 10-FOOT RADII UNLESS OTHERWISE NOTED
MATCH EXISTING DRIVE TYPE UNLESS
OTHERWISE NOTED

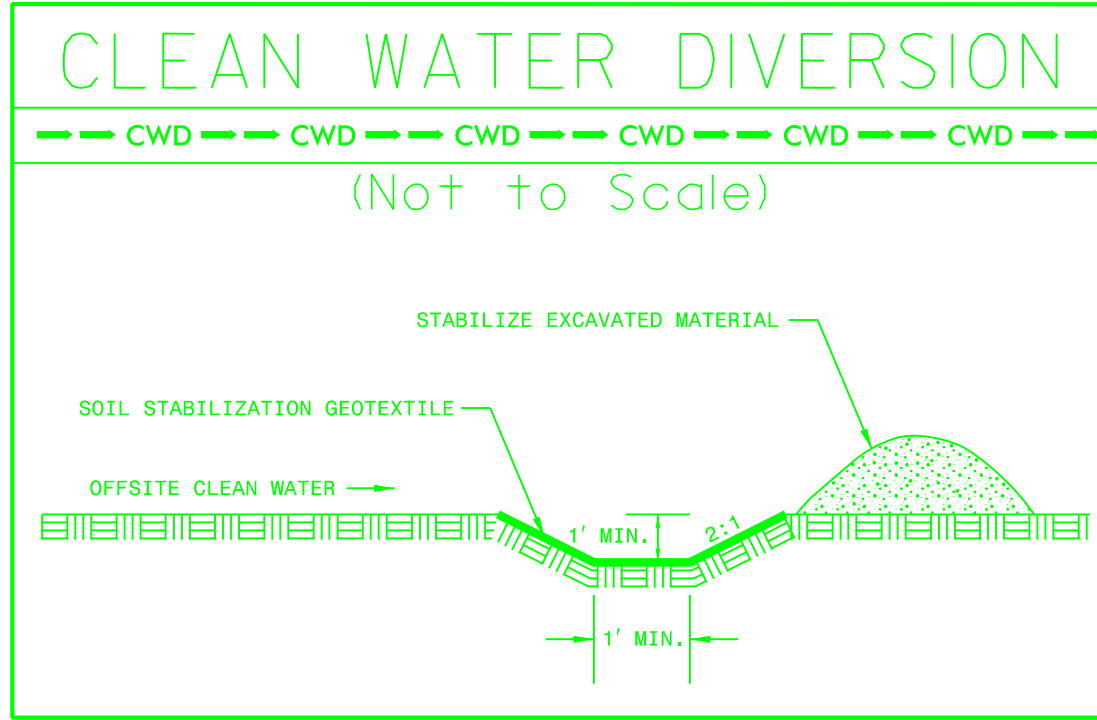


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PROJECT REFERENCE NO.		SHEET NO.	
R-5709C		EC-12/CONST.12	
R/W SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	



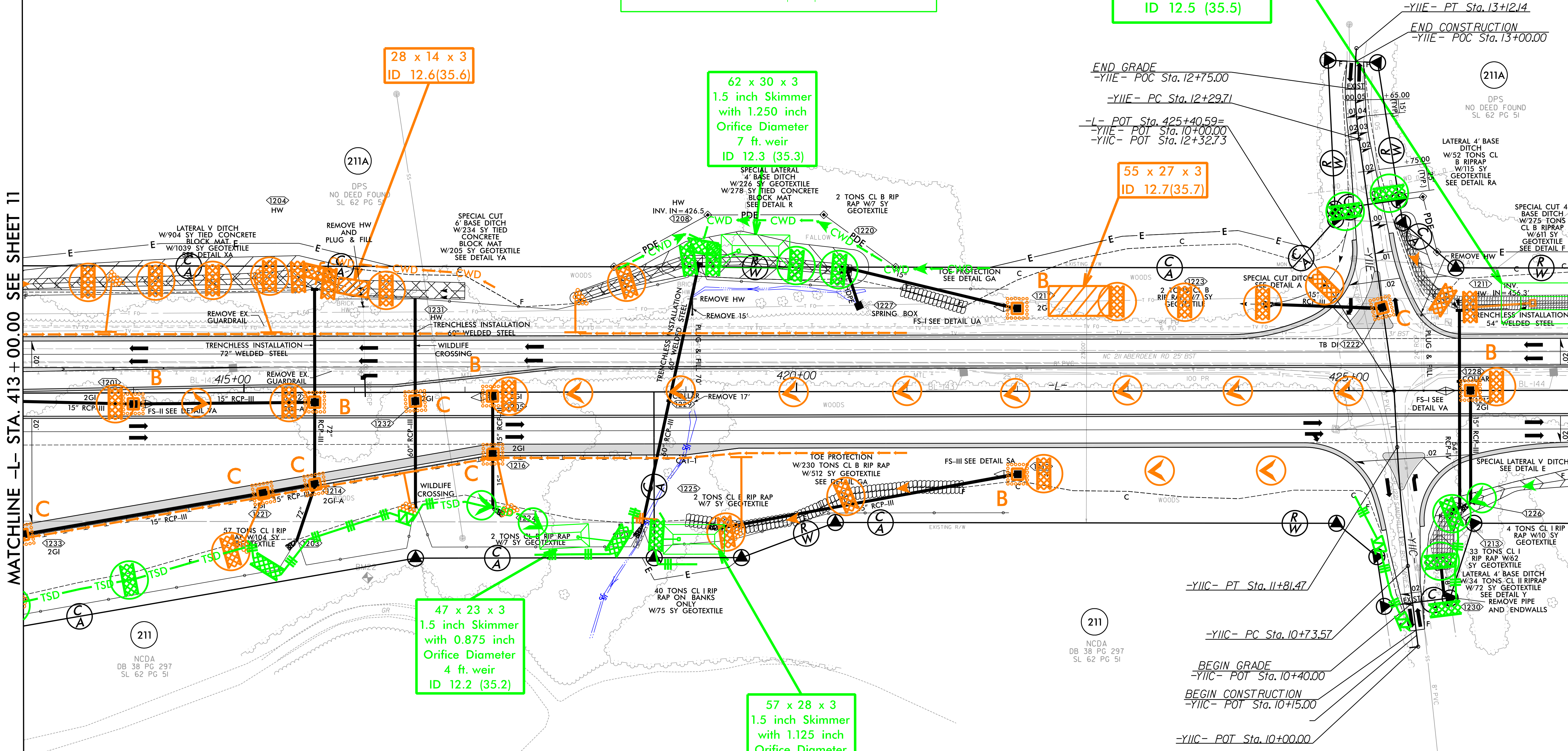
-Y11E-
PI Sta 12+71.09
 $\Delta = 12^{\circ} 35' 43.7''$ (RT)
 $D = 15^{\circ} 16' 43.9''$
 $L = 82.44'$
 $T = 41.39'$
 $R = 375.00'$
 $SE = 0.04$
 $V = 30$ MPH

111 x 37 x 3
2.5 inch Skimmer
with 2.125 inch
Orifice Diameter
30 ft. weir
ID 12.5 (35.5)

NAD 83 (NA 2011)

MATCHLINE -L- STA. 413+00.00 SEE SHEET 11

MATCHLINE -L- STA. 427+00.00 SEE SHEET 13



-Y11C-
PI Sta 11+27.54
 $\Delta = 4^{\circ} 07' 17.7''$ (RT)
 $D = 3^{\circ} 49' 11.0''$
 $L = 107.90'$
 $T = 53.97'$
 $R = 1,500.00'$
 $SE = NC$
 $V = 30$ MPH

FOR DITCH DETAILS,
SEE SHEETS 2D-1 THRU 2D-3

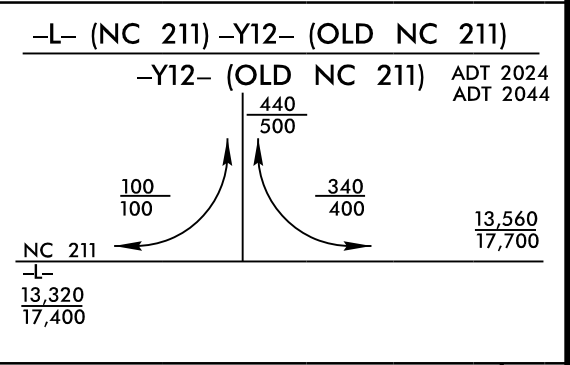
FOR -L- PROFILE, SEE SHEET NOS. 50-51
FOR -Y11C- PROFILE, SEE SHEET NO. 67
FOR -Y11E- PROFILE, SEE SHEET NO. 67
FOR -Y11C- AND -Y11E- DETAILS,
SEE SHEET 2B-6B

ALL DRIVEWAYS ARE 16 FEET IN WIDTH WITH
10-FOOT RADII UNLESS OTHERWISE NOTED
MATCH EXISTING DRIVE TYPE UNLESS
OTHERWISE NOTED

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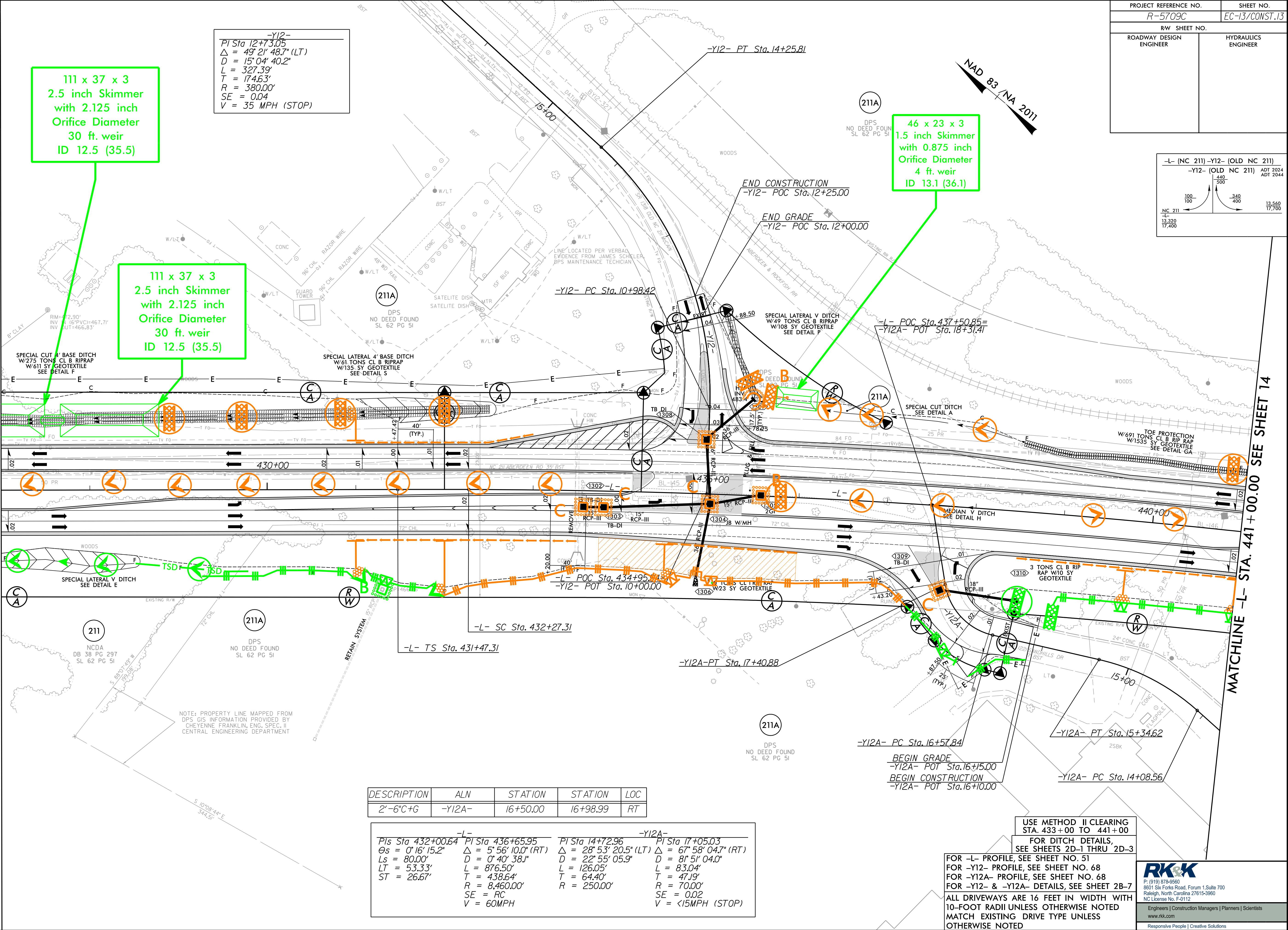
8/28/2024
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PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-13/CONST.13
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



MATCHLINE -L- STA. 427+20.00 SEE SHEET 12

MATCHLINE -L- STA. 441+00.00 SEE SHEET 14



DESCRIPTION	ALN	STATION	STATION	LOC
2'-6\"C+G	-Y12A-	16+50.00	16+98.99	RT

-L-		-Y12A-	
PI Sta 432+00.64	PI Sta 436+65.95	PI Sta 14+72.96	PI Sta 17+05.03
$\Delta = 0^\circ 16' 15.2''$	$\Delta = 5^\circ 56' 10.0''$ (RT)	$\Delta = 28^\circ 53' 20.5''$ (LT)	$\Delta = 67^\circ 58' 04.7''$ (RT)
$L_s = 80.00'$	$D = 0^\circ 40' 38.1''$	$D = 22^\circ 55' 05.9''$	$D = 81^\circ 51' 04.0''$
$LT = 53.33'$	$L = 876.50'$	$L = 126.05'$	$L = 83.04'$
$ST = 26.67'$	$T = 438.64'$	$T = 64.40'$	$T = 47.19'$
	$R = 8,460.00'$	$R = 250.00'$	$R = 70.00'$
	$SE = RC$		$SE = 0.02$
	$V = 60MPH$		$V = <15MPH$ (STOP)

USE METHOD II CLEARING
STA. 433+00 TO 441+00

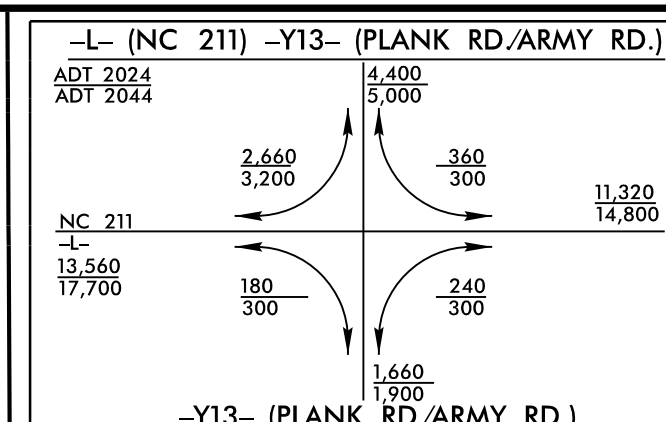
FOR DITCH DETAILS,
SEE SHEETS 2D-1 THRU 2D-3

FOR -L- PROFILE, SEE SHEET NO. 51
FOR -Y12- PROFILE, SEE SHEET NO. 68
FOR -Y12A- PROFILE, SEE SHEET NO. 68
FOR -Y12- & -Y12A- DETAILS, SEE SHEET 2B-7

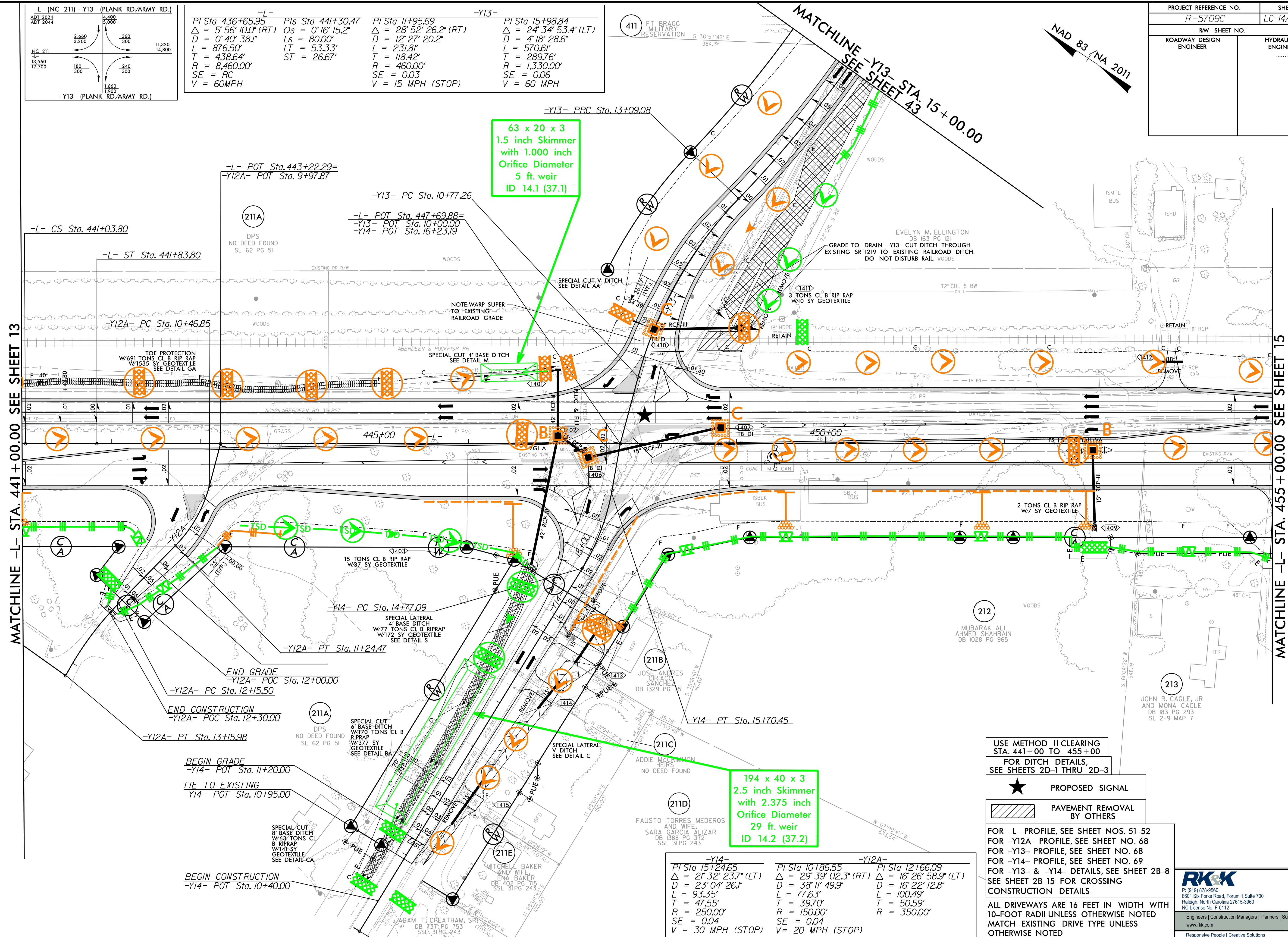
ALL DRIVEWAYS ARE 16 FEET IN WIDTH WITH
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-L-		-YJ3-	
<i>PI Sta 436+65.95</i>	<i>Pls Sta 441+30.47</i>	<i>PI Sta 11+95.69</i>	<i>PI Sta 15+98.84</i>
$\Delta = 5^{\circ} 56' 10.0" (RT)$	$\Theta_s = 0^{\circ} 16' 15.2"$	$\Delta = 28^{\circ} 52' 26.2" (RT)$	$\Delta = 24^{\circ} 34' 53.4" (LT)$
$D = 0^{\circ} 40' 38.1"$	$Ls = 80.00'$	$D = 12^{\circ} 27' 20.2"$	$D = 4^{\circ} 18' 28.6"$
$L = 876.50'$	$Lt = 53.33'$	$L = 231.81'$	$L = 570.61'$
$T = 438.64'$	$ST = 26.67'$	$T = 118.42'$	$T = 289.76'$
$R = 8,460.00'$		$R = 460.00'$	$R = 1,330.00'$
$SE = RC$		$SE = 0.03$	$SE = 0.06$
$V = 60MPH$		$V = 15 MPH (STOP)$	$V = 60 MPH$



USE METHOD II CLEARING STA. 441+00 TO 455+00
FOR DITCH DETAILS, SEE SHEETS 2D-1 THRU 2D-

	PROPOSED SIGNAL
	PAVEMENT REMOVAL BY OTHERS

FOR -L- PROFILE, SEE SHEET NOS. 51-52
FOR -Y12A- PROFILE, SEE SHEET NO. 68
FOR -Y13- PROFILE, SEE SHEET NO. 68
FOR -Y14- PROFILE, SEE SHEET NO. 69
FOR -Y13- & -Y14- DETAILS, SEE SHEET 2B-8
SEE SHEET 2B-15 FOR CROSSING
CONSTRUCTION DETAILS

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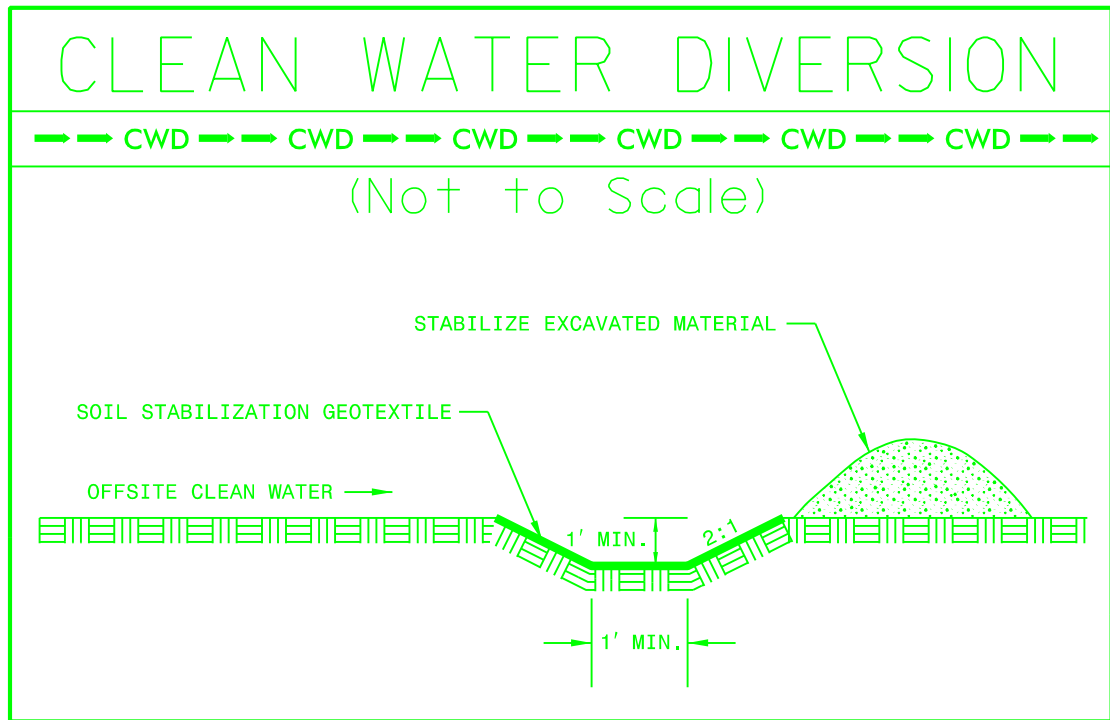
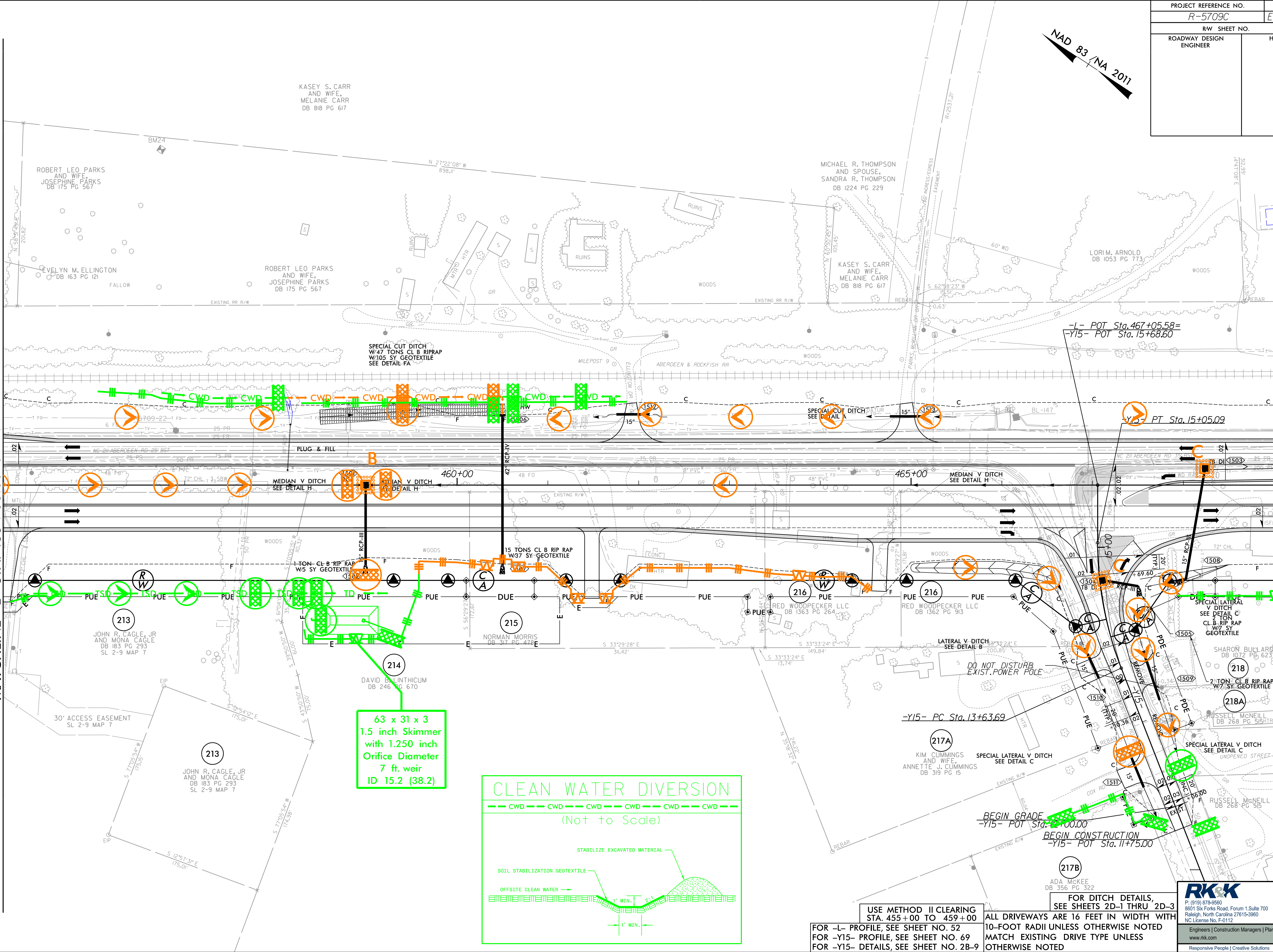
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chris.hogan

PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-15/CONST.15
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

MATCHLINE -L- STA. 455+00.00 SEE SHEET 14

MATCHLINE -L- STA. 469+00.00 SEE SHEET 16



USE METHOD II CLEARING
STA. 455+00 TO 459+00
FOR -L- PROFILE, SEE SHEET NO. 52
FOR -Y15- PROFILE, SEE SHEET NO. 69
FOR -Y15- DETAILS, SEE SHEET NO. 2B-9

FOR DITCH DETAILS,
SEE SHEETS 2D-1 THRU 2D-3
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10-FOOT RADII UNLESS OTHERWISE NOTED
MATCH EXISTING DRIVE TYPE UNLESS
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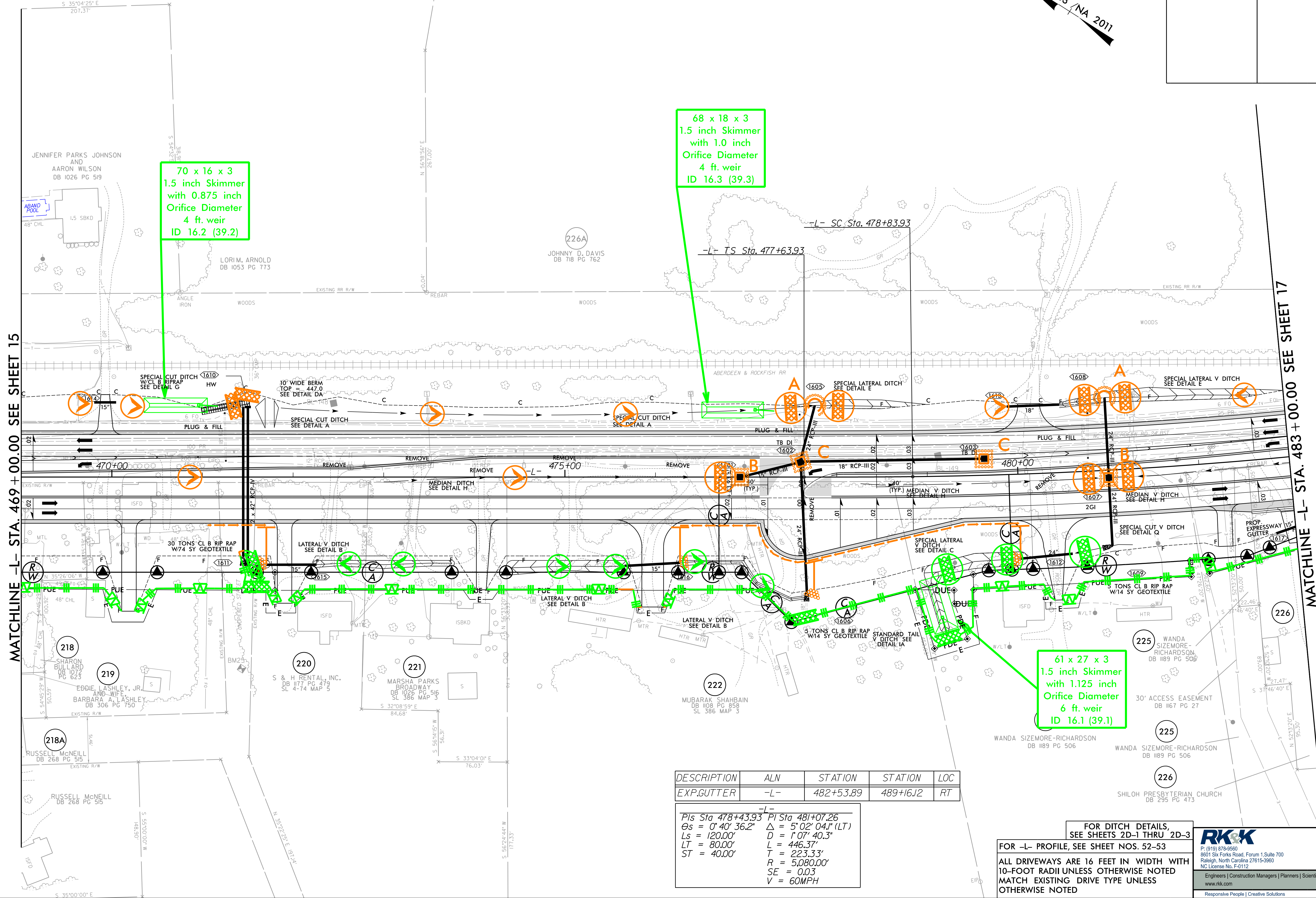
8/28/2024
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chadman

PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-16/CONST.16
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NAD 83 / NA 2011

MATCHLINE -L- STA. 469 + 00.00 SEE SHEET 15

MATCHLINE -L- STA. 483 + 00.00 SEE SHEET 17



DESCRIPTION	ALN	STATION	STATION	LOC
EXP.GUTTER	-L-	482+53.89	489+16.12	RT

PIs Sta 478+43.93 PI Sta 481+07.26
Gs = 0' 40' 36.2" Δ = 5' 02' 04.1" (LT)
Ls = 120.00' D = 1' 07' 40.3"
LT = 80.00' L = 446.37'
ST = 40.00' T = 223.33'
R = 5,080.00'
SE = 0.03
V = 60MPH

FOR DITCH DETAILS,
SEE SHEETS 2D-1 THRU 2D-3

FOR -L- PROFILE, SEE SHEET NOS. 52-53

ALL DRIVEWAYS ARE 16 FEET IN WIDTH WITH
10-FOOT RADII UNLESS OTHERWISE NOTED
MATCH EXISTING DRIVE TYPE UNLESS
OTHERWISE NOTED



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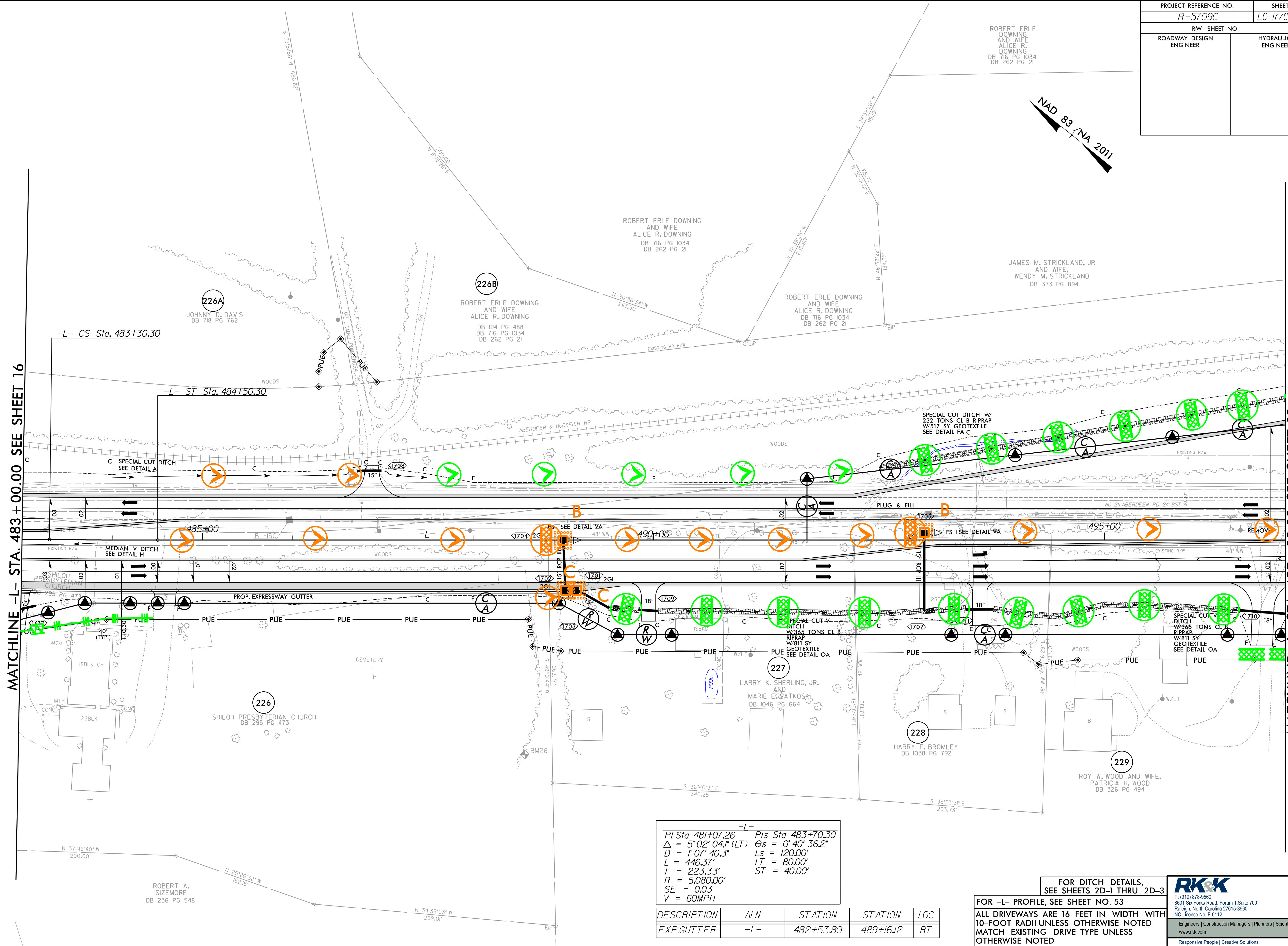
8/17/99

8/28/2024
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chadman

MATCHLINE -L- STA. 483+00.00 SEE SHEET 16

MATCHLINE -L- STA. 497+00.00 SEE SHEET 18

PROJECT REFERENCE NO.		SHEET NO.	
R-5709C		EC-17/CONST.17	
R/W SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	



-L- PI Sta 481+07.26 $\Delta = 5' 02' 04.1''$ (LT) $D = 1' 07' 40.3''$ $L = 446.37'$ $T = 223.33'$ $R = 5,080.00'$ $SE = 0.03$ $V = 60MPH$		-L- PIs Sta 483+70.30 $\Theta s = 0' 40' 36.2''$ $Ls = 120.00'$ $LT = 80.00'$ $ST = 40.00'$	
--	--	--	--

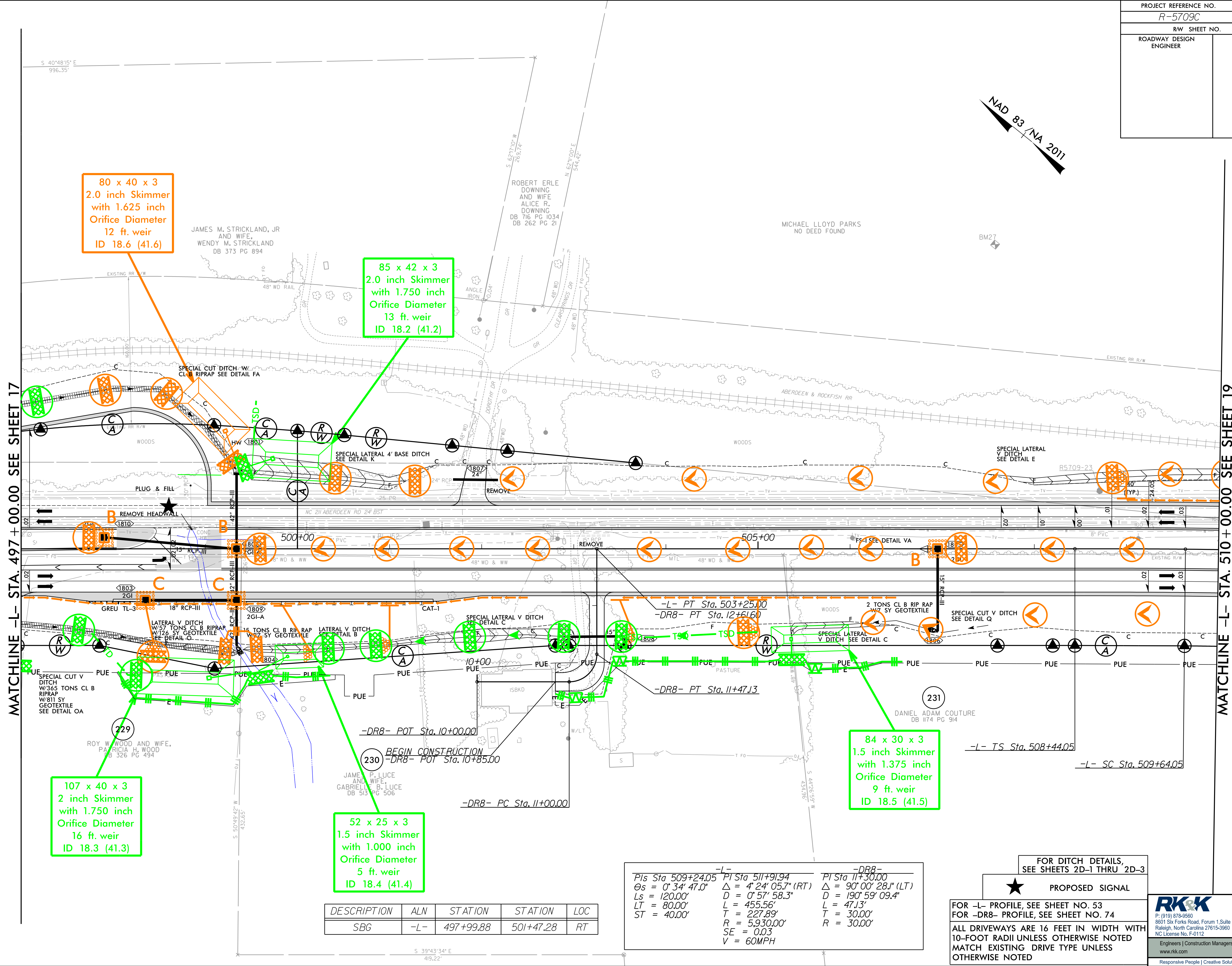
DESCRIPTION	ALN	STATION	STATION	LOC
EXP.GUTTER	-L-	482+53.89	489+16.12	RT

FOR DITCH DETAILS,
SEE SHEETS 2D-1 THRU 2D-3
FOR -L- PROFILE, SEE SHEET NO. 53
ALL DRIVEWAYS ARE 16 FEET IN WIDTH WITH
10-FOOT RADII UNLESS OTHERWISE NOTED
MATCH EXISTING DRIVE TYPE UNLESS
OTHERWISE NOTED

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PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-18/CONST.18
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



DESCRIPTION	ALN	STATION	STATION	LOC
SBG	-L-	497+99.88	501+47.28	RT

PIs Sta 509+24.05	PI Sta 511+91.94	PI Sta 11+30.00
$\theta_s = 0^\circ 34' 47.0''$	$\Delta = 4^\circ 24' 05.7''$ (RT)	$\Delta = 90^\circ 00' 28.1''$ (LT)
$L_s = 120.00'$	$D = 0^\circ 57' 58.3''$	$D = 190^\circ 59' 09.4''$
$LT = 80.00'$	$L = 455.56'$	$L = 47.13'$
$ST = 40.00'$	$T = 227.89'$	$T = 30.00'$
	$R = 5,930.00'$	$R = 30.00'$
	$SE = 0.03$	
	$V = 60MPH$	

FOR DITCH DETAILS,
SEE SHEETS 2D-1 THRU 2D-3

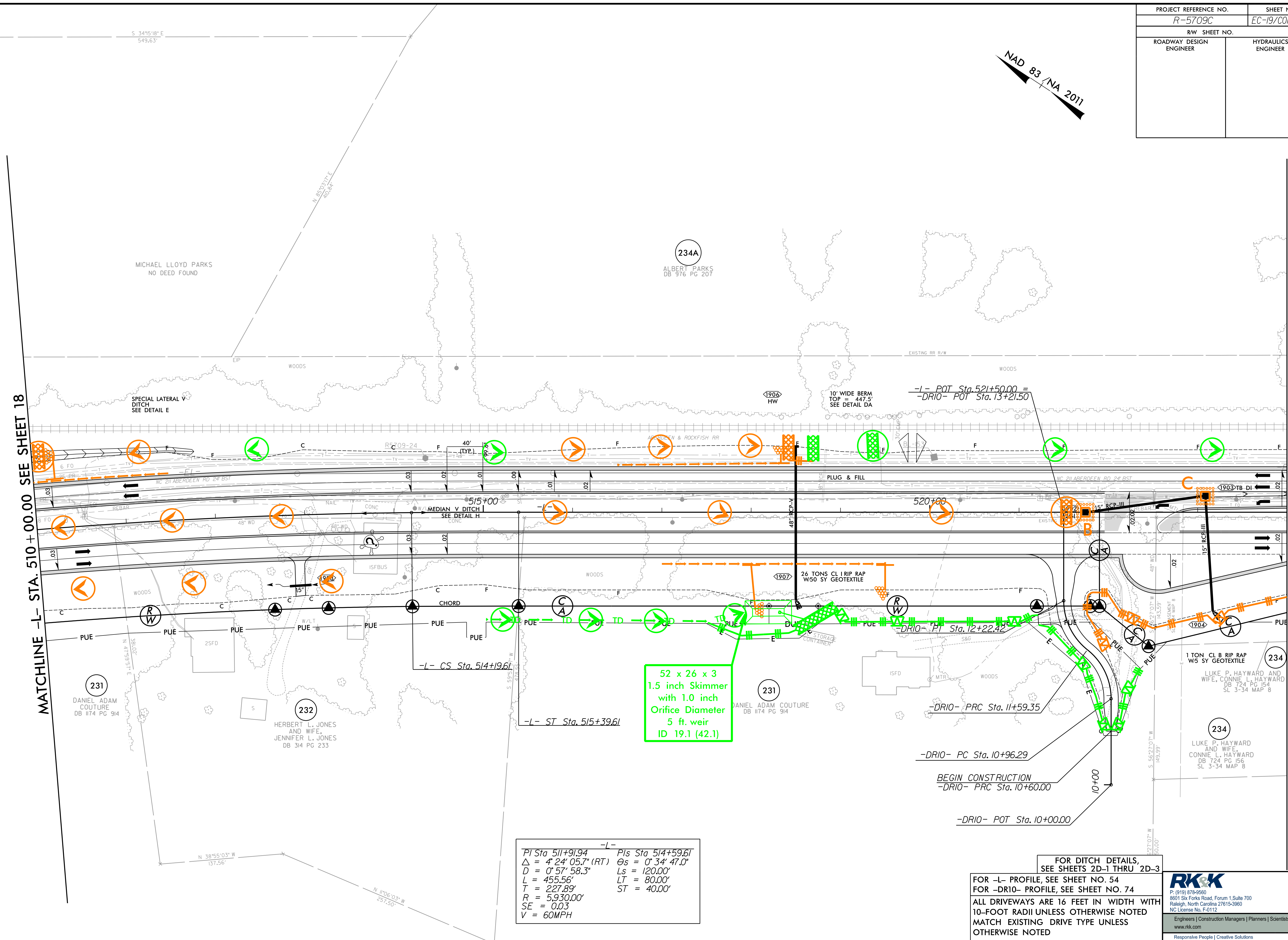
★ PROPOSED SIGNAL

FOR -L- PROFILE, SEE SHEET NO. 53
FOR -DR8- PROFILE, SEE SHEET NO. 74

ALL DRIVEWAYS ARE 16 FEET IN WIDTH WITH
10-FOOT RADII UNLESS OTHERWISE NOTED
MATCH EXISTING DRIVE TYPE UNLESS
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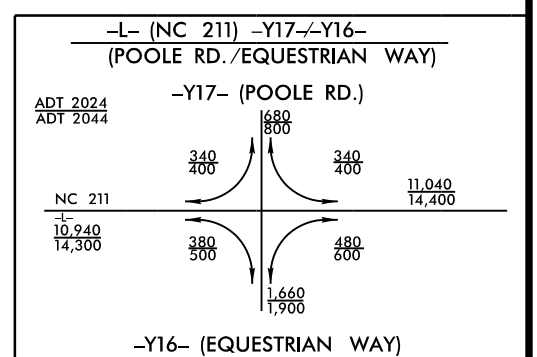
	FOR DITCH DETAILS, SEE SHEETS 2D-1 THRU 2D-3
FOR -L- PROFILE, SEE SHEET NO. 54 FOR -DR10- PROFILE, SEE SHEET NO. 74	
ALL DRIVEWAYS ARE 16 FEET IN WIDTH WITH 10-FOOT RADII UNLESS OTHERWISE NOTED MATCH EXISTING DRIVE TYPE UNLESS OTHERWISE NOTED	

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-Y16-	
<i>PI Sta 13+57.20</i>	<i>PI Sta 16+96.54</i>
$\Delta = 9^{\circ} 09' 58.1'' (LT)$	$\Delta = 84^{\circ} 59' 30.4'' (RT)$
$D = 5^{\circ} 50' 47.4''$	$D = 20^{\circ} 06' 13.6''$
$L = 156.78'$	$L = 422.77'$
$T = 78.56'$	$T = 261.12'$
$R = 980.00'$	$R = 285.00'$
	$SE = 0.04$
	$V = 30 \text{ MPH}$

-Y16- PRC Sta. 14+35.42
BEGIN GRADE
-Y16- POC Sta. 14+25.00
BEGIN CONSTRUCTION
-Y16- POC Sta. 13+45.00

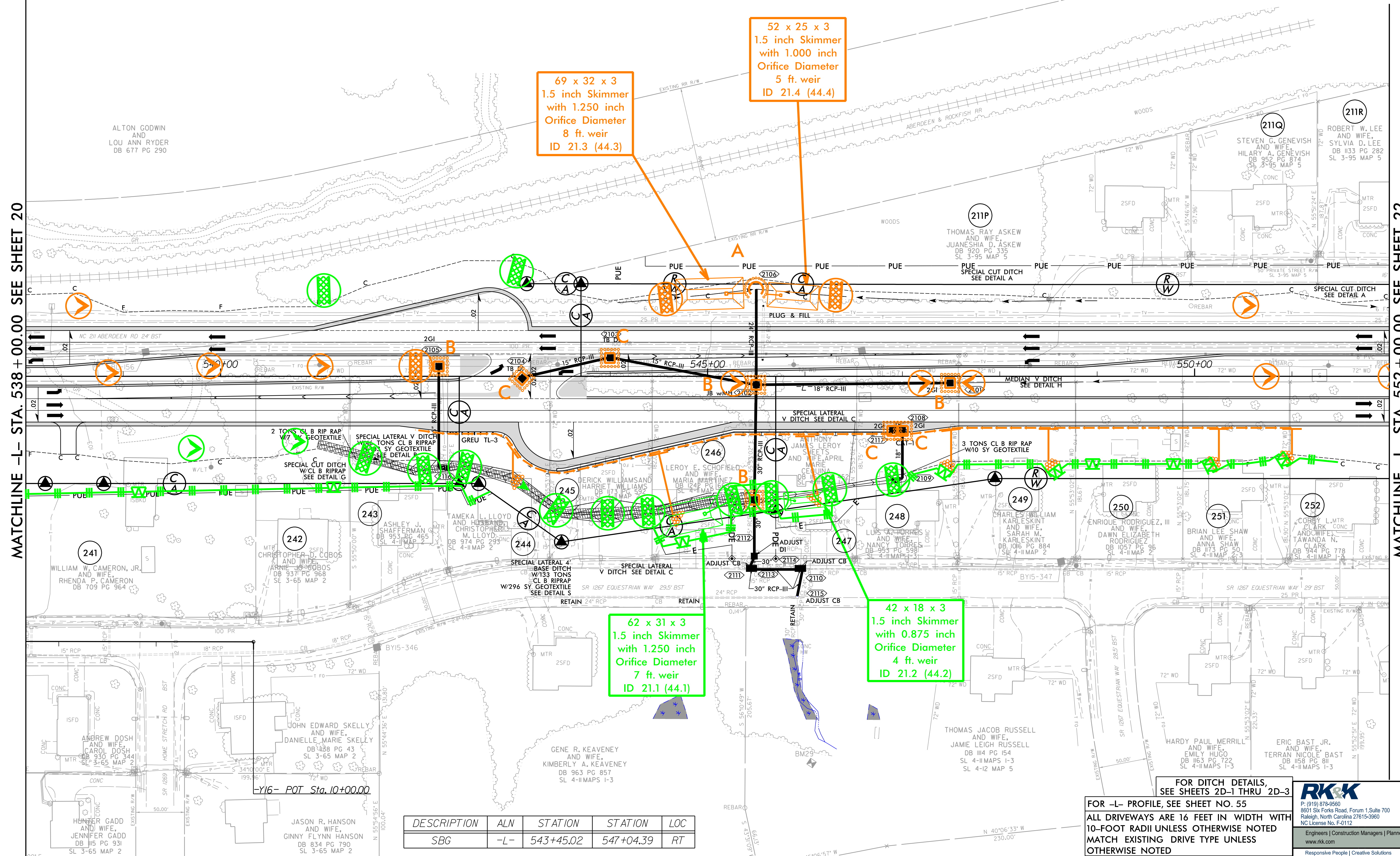
FOR DITCH DE
SEE SHEETS 2D-1 T

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10-FOOT RADII UNLESS OTHERWISE
MATCH EXISTING DRIVE TYPE UNLESS
OTHERWISE NOTED

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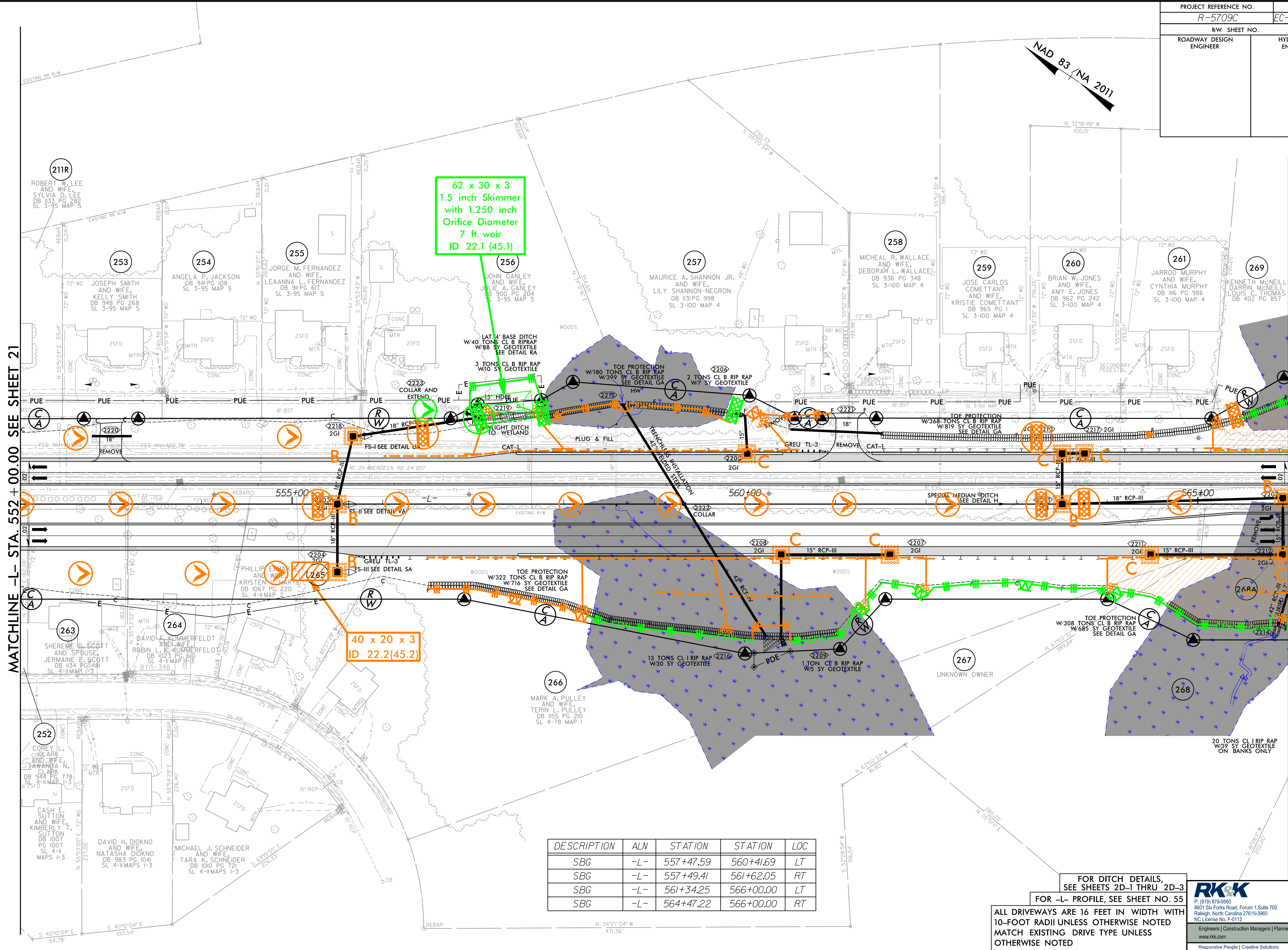


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CHAD PSH

MATCHLINE -L- STA. 552 + 00.00 SEE SHEET 21

MATCHLINE -L- STA. 566 + 00.00 SEE SHEET 23

PROJECT REFERENCE NO. R-5709C		SHEET NO. EC-22/CONST.22	
RW SHEET NO.		HYDRAULICS ENGINEER	
ROADWAY DESIGN ENGINEER			

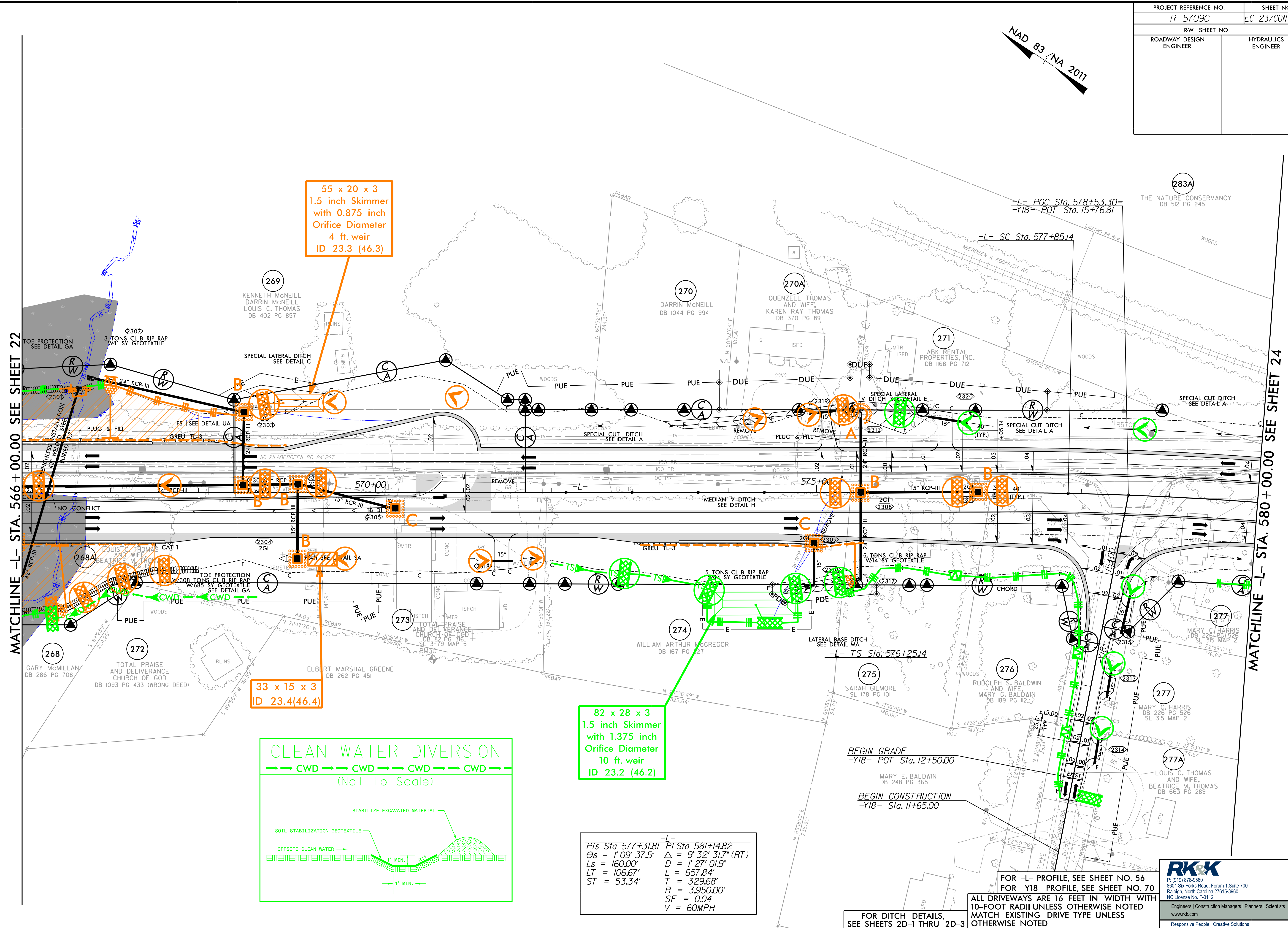


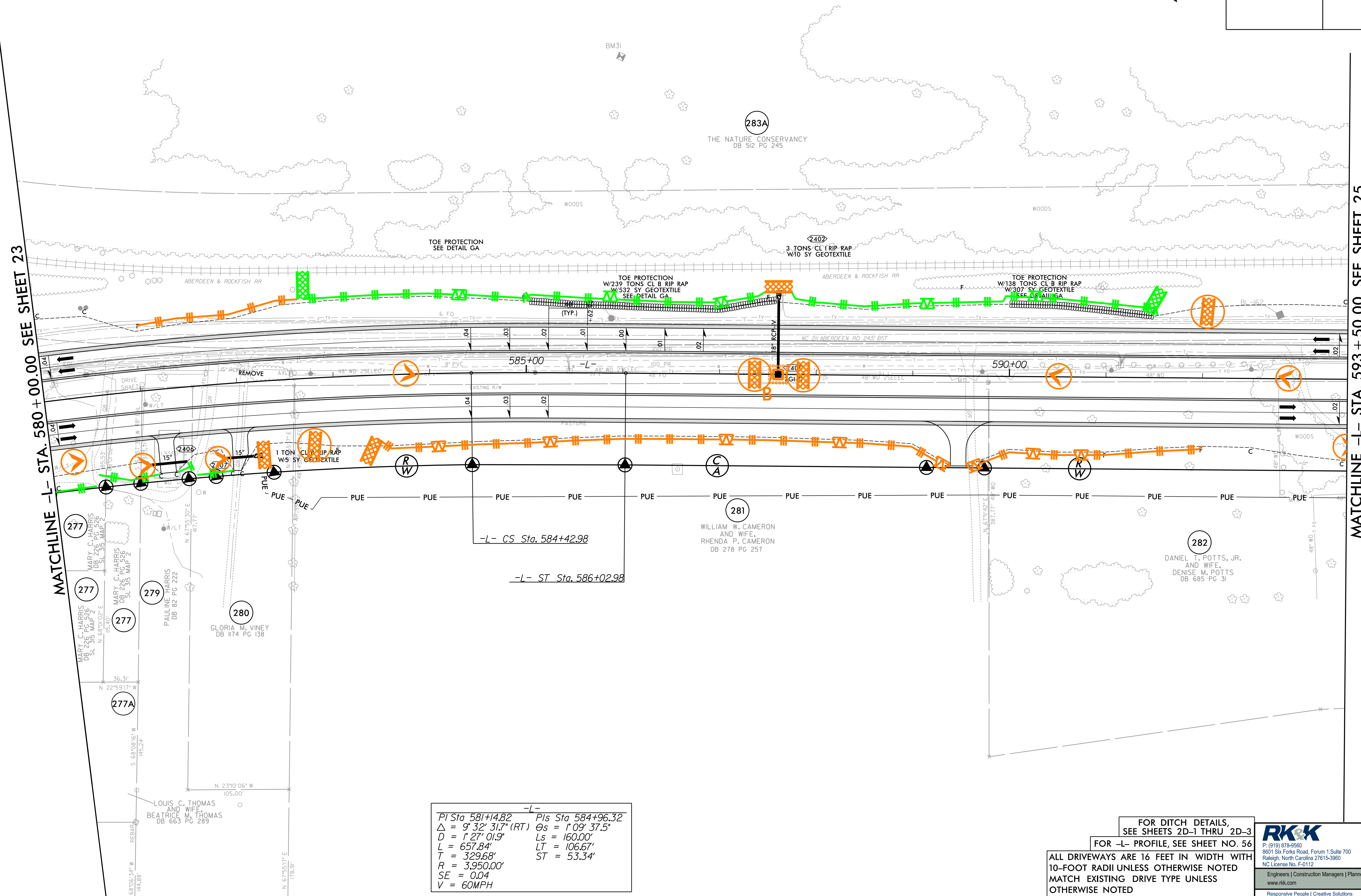
DESCRIPTION	ALN	STATION	STATION	LOC
SBG	-L-	557+47.59	560+41.69	LT
SBG	-L-	557+49.41	561+62.05	RT
SBG	-L-	561+34.25	566+00.00	LT
SBG	-L-	564+47.22	566+00.00	RT

FOR DITCH DETAILS,
SEE SHEETS 2D-1 THRU 2D-3
FOR -L- PROFILE, SEE SHEET NO. 55

ALL DRIVEWAYS ARE 16 FEET IN WIDTH WITH
10-FOOT RADII UNLESS OTHERWISE NOTED
MATCH EXISTING DRIVE TYPE UNLESS
OTHERWISE NOTED

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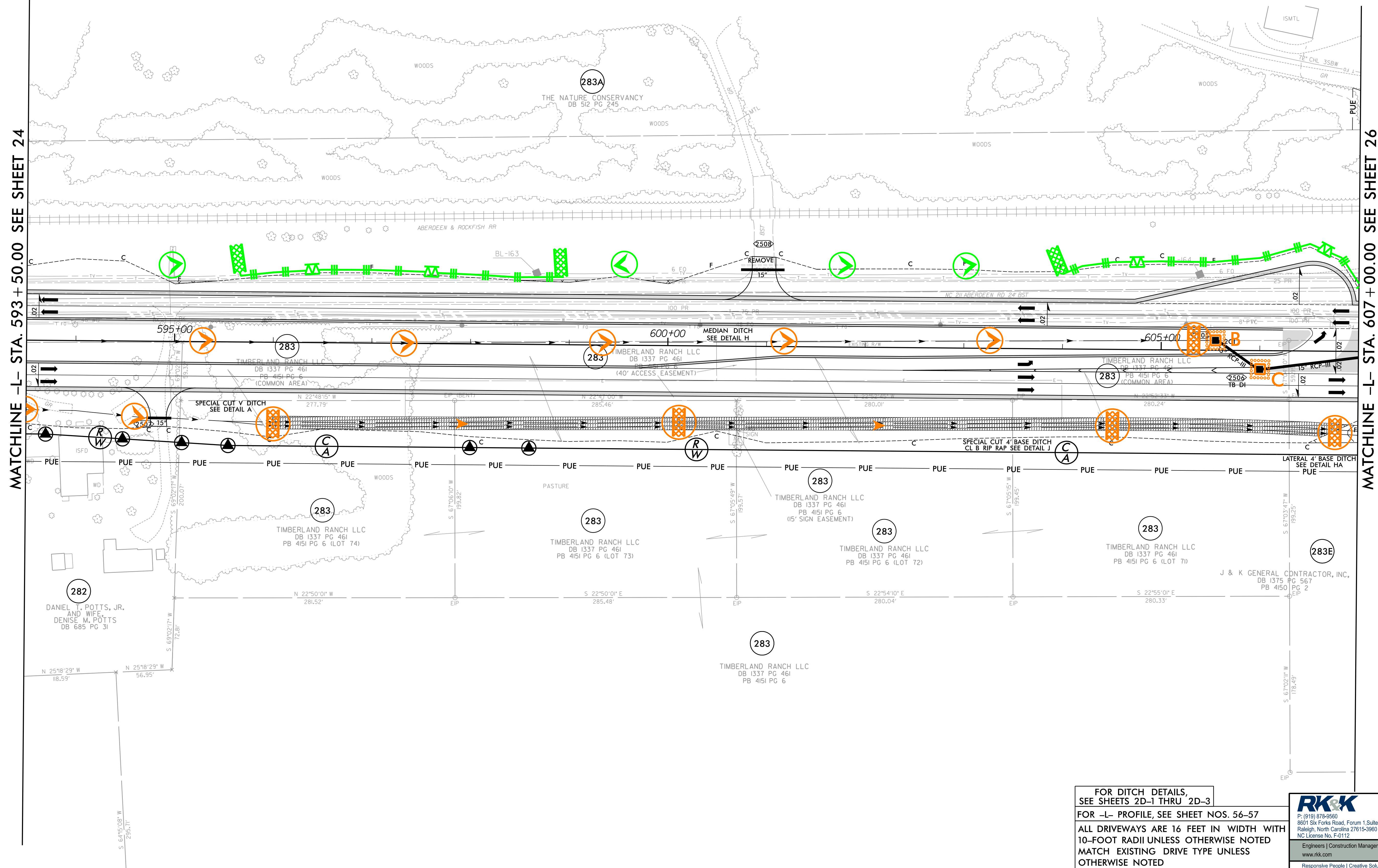


FOR DITCH DETAILS,
SEE SHEETS 2D-1 THRU 2D-3
FOR -L- PROFILE, SEE SHEET NO. 56
ALL DRIVEWAYS ARE 16 FEET IN WIDTH WITH
10-FOOT RADII UNLESS OTHERWISE NOTED
MATCH EXISTING DRIVE TYPE UNLESS
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FOR DITCH DETAILS,
SEE SHEETS 2D-1 THRU 2D-3

FOR -L- PROFILE, SEE SHEET NOS. 56-57

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10-FOOT RADII UNLESS OTHERWISE NOTED
MATCH EXISTING DRIVE TYPE UNLESS
OTHERWISE NOTED



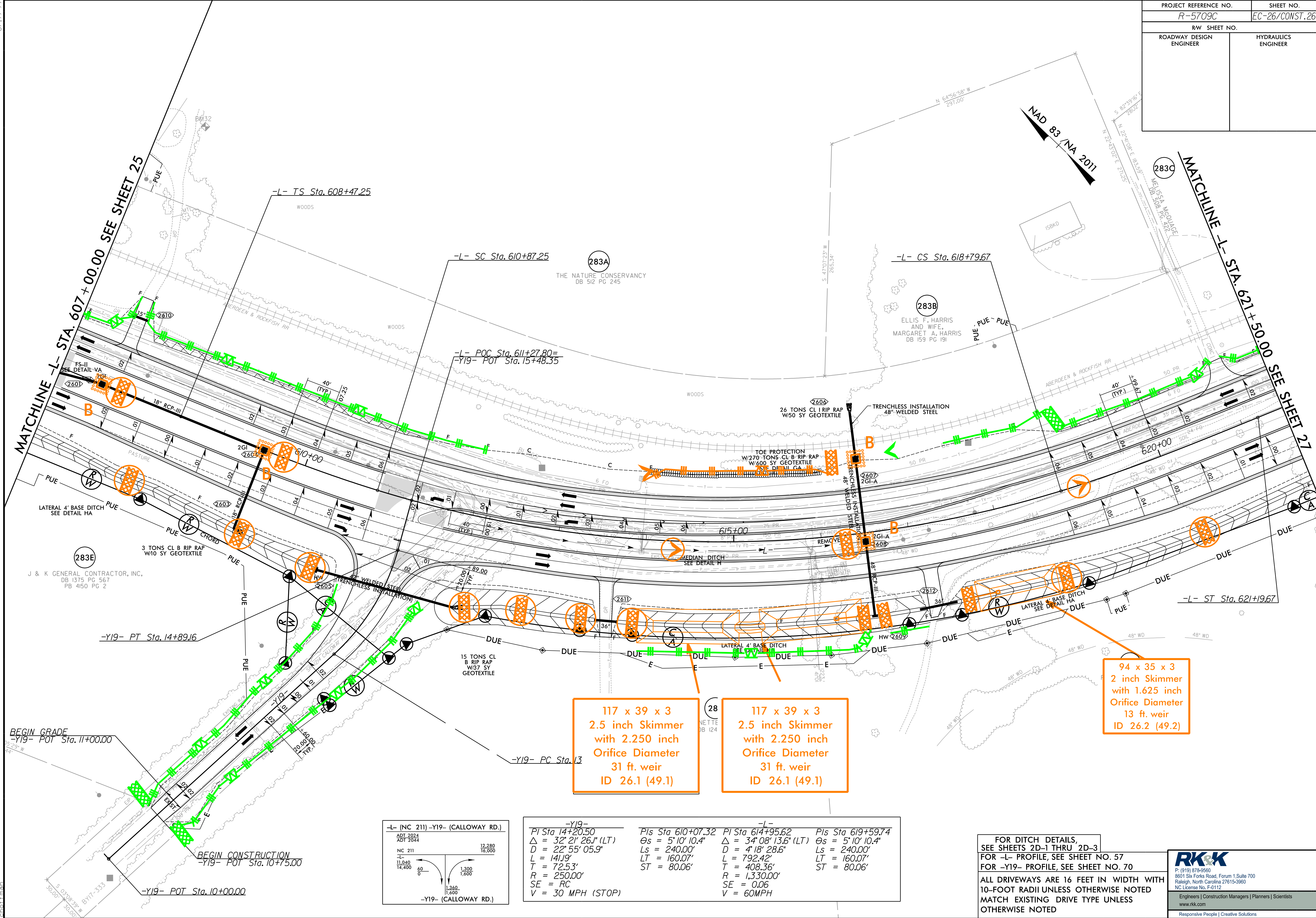
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chadman

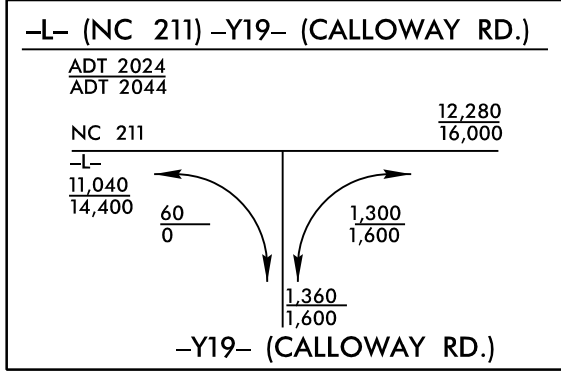
PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-26/CONST.26
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



117 x 39 x 3
2.5 inch Skimmer
with 2.250 inch
Orifice Diameter
31 ft. weir
ID 26.1 (49.1)

117 x 39 x 3
2.5 inch Skimmer
with 2.250 inch
Orifice Diameter
31 ft. weir
ID 26.1 (49.1)

94 x 35 x 3
2 inch Skimmer
with 1.625 inch
Orifice Diameter
13 ft. weir
ID 26.2 (49.2)



-Y19- PI Sta 14+20.50 $\Delta = 32' 21" 26.1"$ (LT) $D = 22' 55' 05.9"$ $L = 141.19'$ $T = 72.53'$ $R = 250.00'$ $SE = RC$ $V = 30 \text{ MPH (STOP)}$	PIs Sta 610+07.32 $\theta_s = 5' 10' 10.4"$ $L_s = 240.00'$ $LT = 160.07'$ $ST = 80.06'$	-L- PI Sta 614+95.62 $\Delta = 34' 08' 13.6"$ (LT) $D = 4' 18' 28.6"$ $L = 792.42'$ $T = 408.36'$ $R = 1,330.00'$ $SE = 0.06$ $V = 60 \text{ MPH}$	PIs Sta 619+59.74 $\theta_s = 5' 10' 10.4"$ $L_s = 240.00'$ $LT = 160.07'$ $ST = 80.06'$
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FOR DITCH DETAILS,
SEE SHEETS 2D-1 THRU 2D-3
FOR -L- PROFILE, SEE SHEET NO. 57
FOR -Y19- PROFILE, SEE SHEET NO. 70
ALL DRIVEWAYS ARE 16 FEET IN WIDTH WITH
10-FOOT RADII UNLESS OTHERWISE NOTED
MATCH EXISTING DRIVE TYPE UNLESS
OTHERWISE NOTED

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