

TOWN OF BELLEAIR
DEPARTMENT OF PUBLIC WORKS



CONTRACT PLANS
PALMETTO ROAD NORTH
STREET AND DRAINAGE IMPROVEMENTS



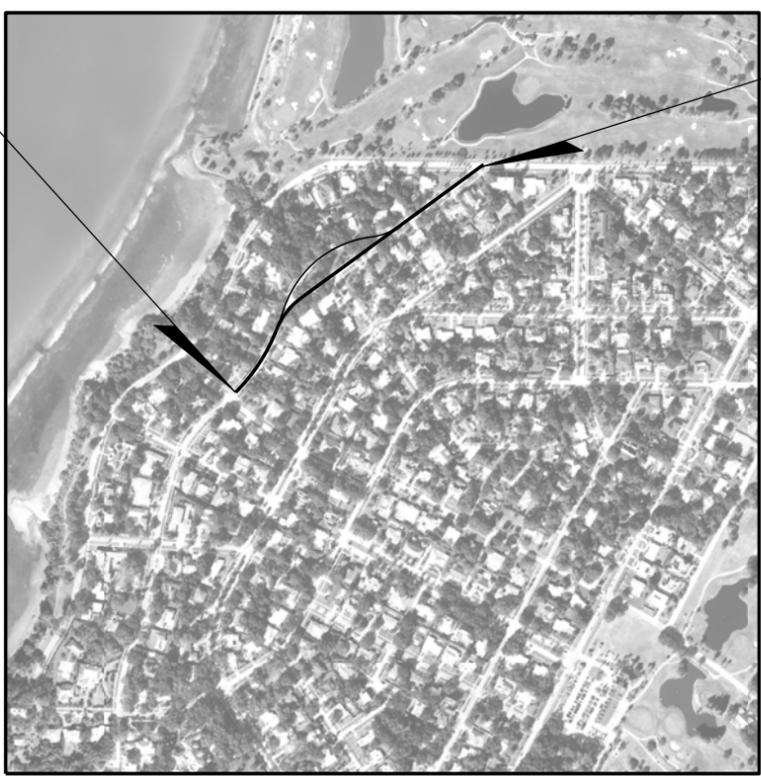
PROJECT LOCATION

END PROJECT
STA. 42+56.69 @ SURVEY PALMETTO RD.

INDEX OF ROADWAY PLANS

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45-48	UTILITY ADJUSTMENTS
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BEGIN PROJECT
STA. 26+95.71 @ SURVEY PALMETTO RD.



GOVERNING STANDARD PLANS:

Florida Department of Transportation, FY 2019-20 Standard Plans for Road and Bridge Construction and applicable Interim Revisions (IRs).

Standard Plans for Road Construction and associated IRs are available at the following website: <http://www.fdot.gov/design/standardplans>

APPLICABLE IRs:

Standard Plans for Bridge Construction are included in the Structures Plans Component

GOVERNING STANDARD SPECIFICATIONS:

Florida Department of Transportation, JANUARY 2020 Standard Specifications for Road and Bridge Construction at the following website: <http://www.fdot.gov/programmanagement/Implemented/SpecBooks>

TOWN OF BELLEAIR COMMISSIONERS

- | | |
|---------------------------|-------------------|
| MAYOR: | GARY H. KATICA |
| DEPUTY MAYOR: | KARLA RETTSTATT |
| COMMISSIONER: | TOM SHELLY |
| COMMISSIONER: | TOM KUREY |
| COMMISSIONER: | MICHAEL WILKINSON |
| TOWN OF BELLEAIR MANAGER: | JP MURPHY |
| TOWN PROJECT MANAGER: | KEITH BODEKER |

PLANS PREPARED BY:
VINCENT E. SHINE, P.E., NO. 67387
RS&H, INC.
1715 N. WESTSHORE BLVD, SUITE 600
TAMPA, FL 33607
(813) 289-5550
CONTRACT NO. 28832
VENDOR NO. F592986466006
CERTIFICATE OF AUTHORIZATION NO.: 5620

ENGINEER OF RECORD: VINCENT E. SHINE, P.E.
P.E. NO.: 67387

NOTE: THE SCALE OF THESE PLANS MAY HAVE CHANGED DUE TO REPRODUCTION.

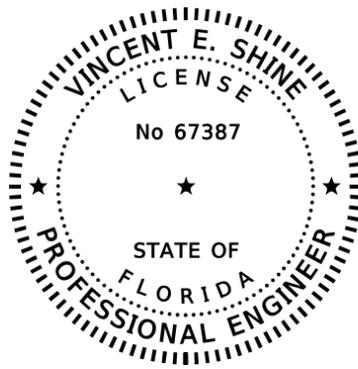
PROJECT LENGTH IS BASED ON @ OF SURVEY

LENGTH OF PROJECT		
	LINEAR FEET	MILES
ROADWAY	1561.0	0.296
BRIDGES		
NET LENGTH OF PROJECT	1561.0	0.296
EXCEPTIONS		
GROSS LENGTH OF PROJECT	1561.0	0.296

REVISIONS		
DATE	BY	DESCRIPTION

FISCAL YEAR	SHEET NO.
20	1

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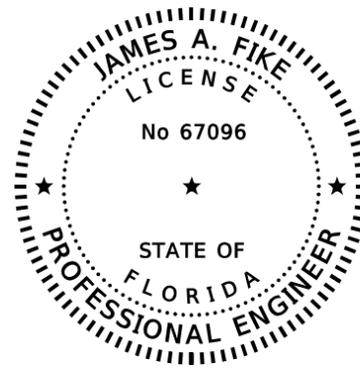
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RS&H, INC.
1715 N. WESTSHORE BOULEVARD SUITE 600
TAMPA, FLORIDA 33607-3999
CERTIFICATE OF AUTHORIZATION: 5620
VINCENT E. SHINE, P.E. NO. 67387

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE
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JAMES A. FIKE, P.E. NO. 67096

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SHEET NO.	SHEET DESCRIPTION
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5	EXISTING DRAINAGE STRUCTURES DATA
10	SUMMARY OF DRAINAGE STRUCTURES
24-29	DRAINAGE STRUCTURES
43-44	STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

RS&H

RS&H, Inc.
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(813)289-5550 FAX: (813)289-0263

www.rsandh.com
FL.Cert.Nos: AAC001886
EB0005620 LCC000210



PUBLIC WORKS DEPARTMENT
901 PONCE DE LEON BLVD.
BELLEAIR, FL 33756

**PALMETTO ROAD NORTH
STREET AND DRAINAGE
IMPROVEMENTS**

SUB-CONSULTANTS

Mckim & Creed, Inc.
3903 Northdale Boulevard,
Suite 140W
Tampa, Florida 33624
(813) 549-3740

APPROVED BY:

VINCENT SHINE, P.E.
FLA. REG. NO. 67387
DATE: _____

REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED:

REVIEWED BY: VES

DRAWN BY: SPJ

DESIGNED BY: SPJ

HORIZONTAL SCALE:

VERTICAL SCALE:

AEP NO.: 104-1091-002

SHEET TITLE

SIGNATURE SHEET

SHEET NUMBER

2

RS&H, Inc.
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 901 PONCE DE LEON BLVD.
 BELLEAIR, FL 33756

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 FLA. REG. NO. 67096
 DATE: _____

REVISIONS

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DATE ISSUED:

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DESIGNED BY: RRM

HORIZONTAL SCALE:

VERTICAL SCALE:

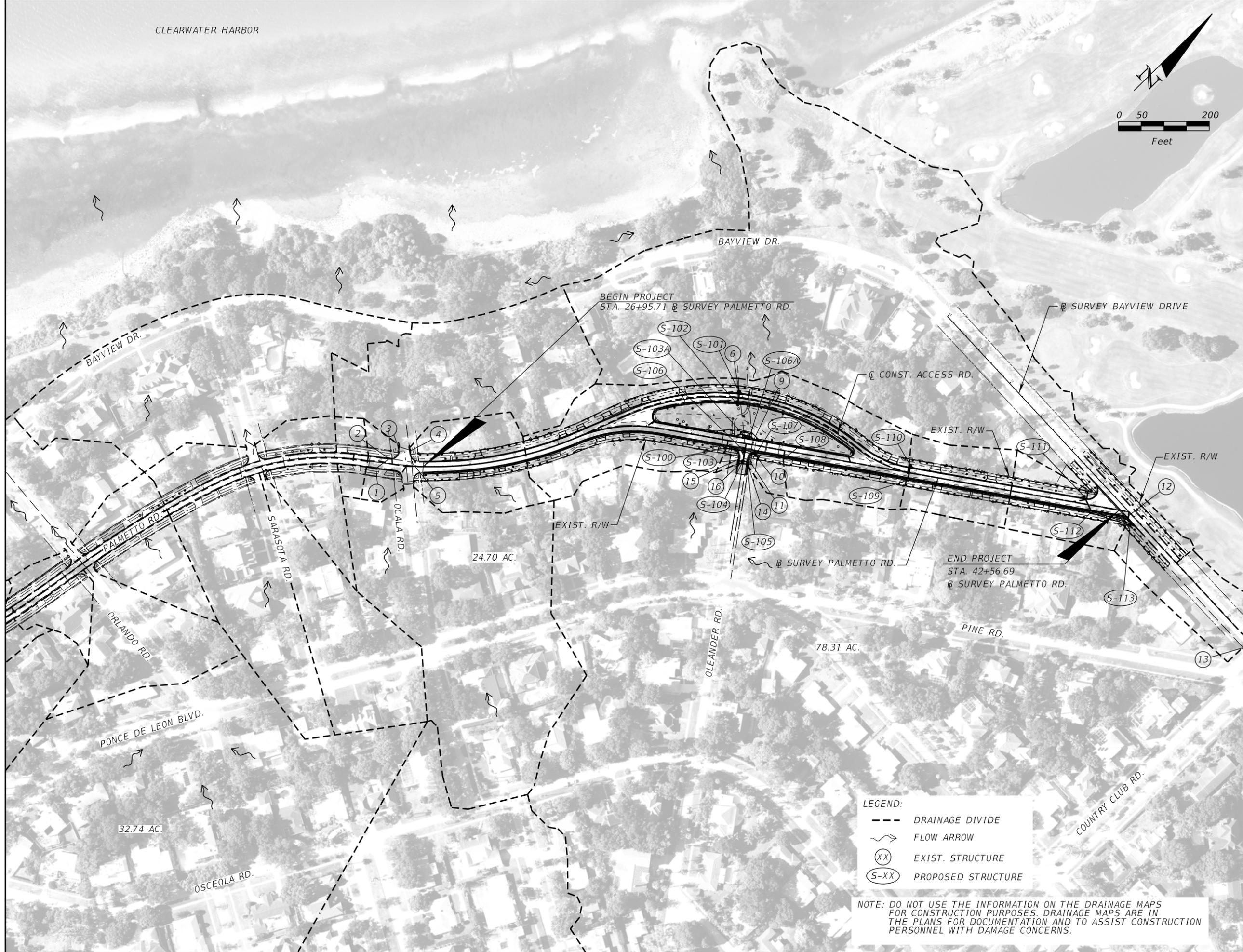
AEP NO.: 104-1091-002

SHEET TITLE

DRAINAGE MAP

SHEET NUMBER

4



- LEGEND:**
- DRAINAGE DIVIDE
 - ~> FLOW ARROW
 - (XX) EXIST. STRUCTURE
 - (S-XX) PROPOSED STRUCTURE

NOTE: DO NOT USE THE INFORMATION ON THE DRAINAGE MAPS FOR CONSTRUCTION PURPOSES. DRAINAGE MAPS ARE IN THE PLANS FOR DOCUMENTATION AND TO ASSIST CONSTRUCTION PERSONNEL WITH DAMAGE CONCERNS.

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EXISTING STORM SEWER INFORMATION

- | | | |
|--|--|--|
| ① storm inlet
top 34.61'
ie. 30.25' | ⑦ storm inlet
top 34.14'
ie. se 21.87'
ie. nw 21.74' | ⑬ storm mh
rim 36.38'
ie. w 30.76' |
| ② storm inlet
top 34.62'
ie. s 30.15'
ie. ne 29.99' | ⑧ storm mh
rim 33.55'
ie. nw 23.26'
ie. ne 23.07' | ⑭ storm inlet
top 33.02'
ie. ne 26.71'
ie. se 23.24'
ie. sw 23.23' |
| ③ storm inlet
top 34.48'
ie. 30.84' | ⑨ storm mh
rim 33.93'
ie. nw 29.28'
ie. ne 29.18' | ⑮ storm inlet
top 33.00'
ie. ne 27.78' |
| ④ storm inlet
top 34.48'
ie. sw 30.36'
ie. nw 27.46'
ie. se 29.07' | ⑩ storm inlet
top 33.53'
bottom el. 27.68'
could not access | ⑯ storm mh
rim 33.53'
ie. sw 27.35'
ie. nw 23.26'
ie. ne 23.07' |
| ⑤ storm MH
rim 34.83'
ie. sw 29.24'
ie. nw 28.82'
ie. se 28.73' | ⑪ storm mh
rim 34.13'
ie. nw 26.19'
pipe sw
could not access | |
| ⑥ storm MH
rim 29.12'
ie. se 18.71'
ie. nw 17.07' | ⑫ storm inlet
top 35.63'
ie. e 30.15'
ie. sw 30.04' | |



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APPROVED BY:

JAMES FIKE, P.E.
FLA. REG. NO. 67096
DATE: _____

REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED: _____

REVIEWED BY: JAF

DRAWN BY: JAB

DESIGNED BY: JAB

HORIZONTAL SCALE: _____

VERTICAL SCALE: _____

AEP NO.: 104-1091-002

SHEET TITLE

**EXISTING DRAINAGE
STRUCTURES DATA**

SHEET NUMBER

5

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APPROVED BY:

VINCENT SHINE, P.E.
FLA. REG. NO. 67387
DATE: _____

REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED:

REVIEWED BY: VES

DRAWN BY: SPJ

DESIGNED BY: SPJ

HORIZONTAL SCALE:

VERTICAL SCALE:

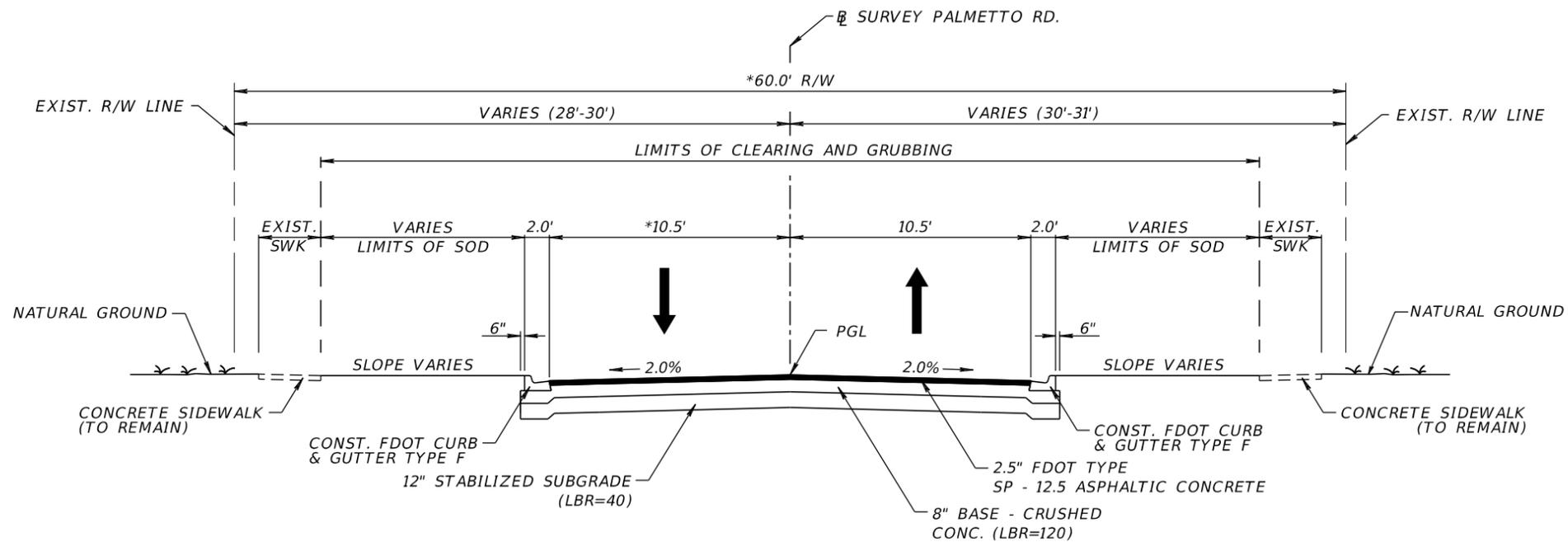
AEP NO.: 104-1091-002

SHEET TITLE

TYPICAL SECTION

SHEET NUMBER

6



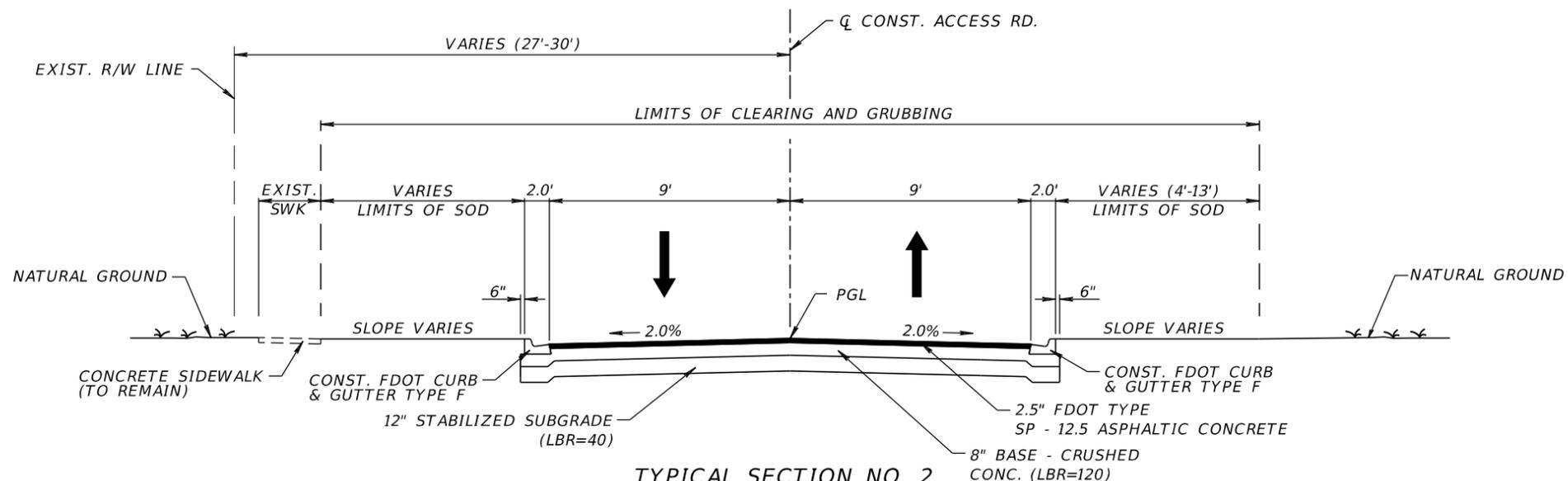
**TYPICAL SECTION NO. 1
PALMETTO ROAD
STA. 26+95.71 TO STA. 42+56.69**

DESIGN SPEED = 30 MPH
POSTED SPEED = 30 MPH

TRAVEL LANES

OPTIONAL BASE GROUP 6 (CRUSHED CONCRETE ONLY) (8") WITH
TYPE SP-12.5 ASPHALTIC CONCRETE (TRAFFIC C) (2 1/2")

* R/W AND LANE VARIES IN
LOCATION OF ACCESS RD.



**TYPICAL SECTION NO. 2
ACCESS ROAD
STA. 11+88.92 TO STA. 16+52.56**

DESIGN SPEED = 30 MPH
POSTED SPEED = 30 MPH

TRAVEL LANES

OPTIONAL BASE GROUP 6 (CRUSHED CONCRETE ONLY) (8") WITH
TYPE SP-12.5 ASPHALTIC CONCRETE (TRAFFIC C) (2 1/2")

NOTE:

1. PAVEMENT DESIGN PROVIDED BY THE TOWN OF BELLEAIR, DEPT. OF PUBLIC WORKS

SUB-CONSULTANTS

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Tampa, Florida 33624
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REVISIONS

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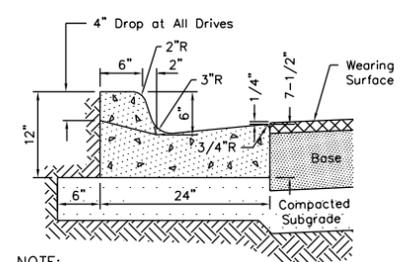
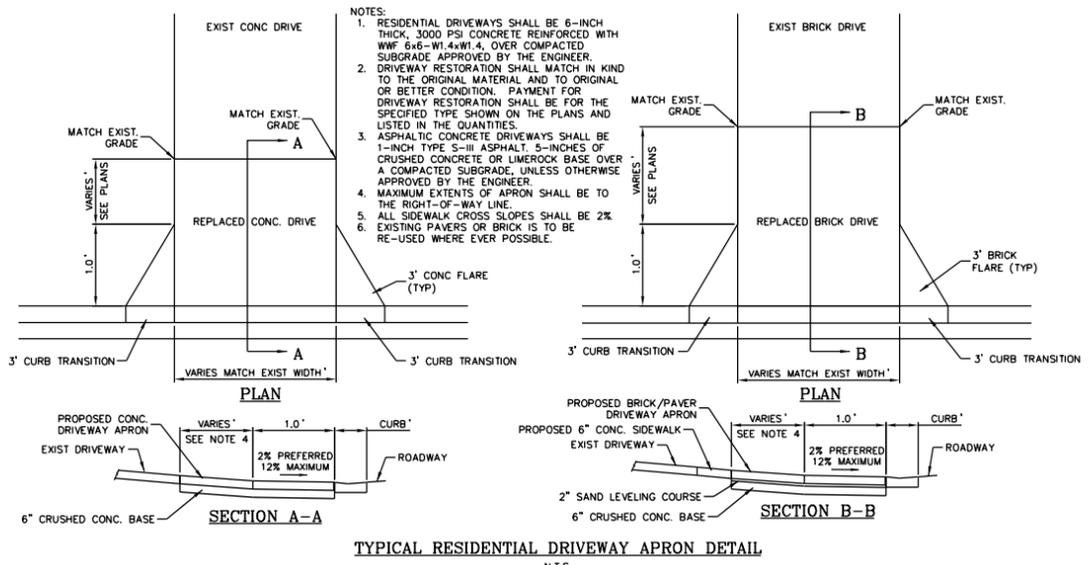
AEP NO.: 104-1091-002

SHEET TITLE

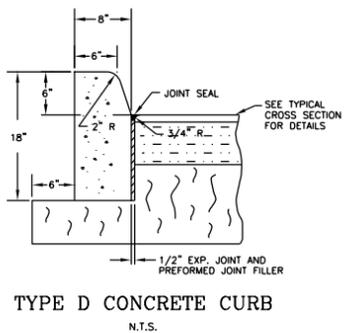
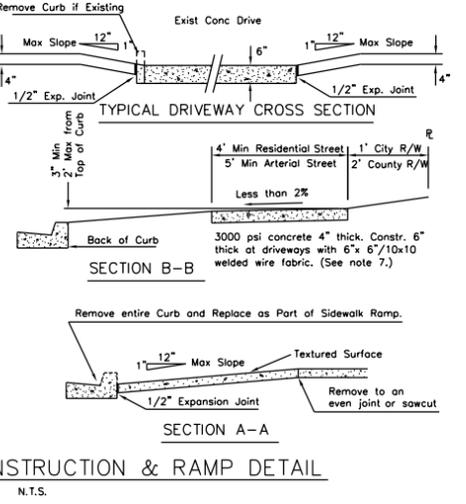
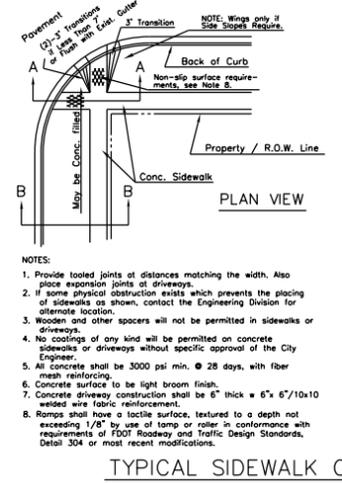
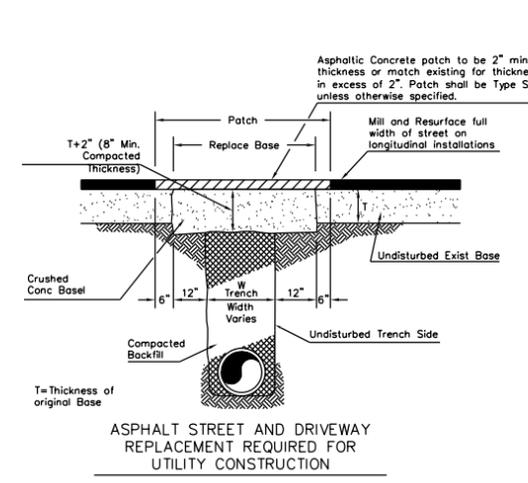
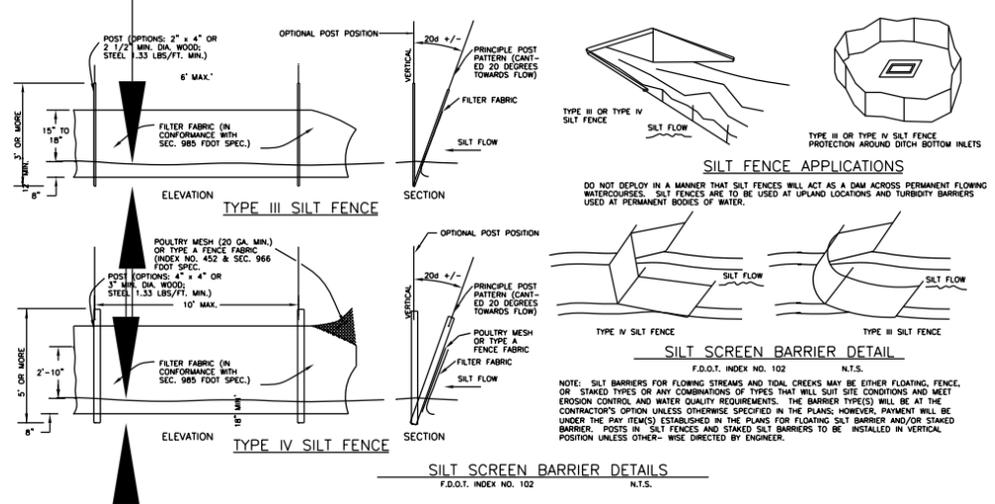
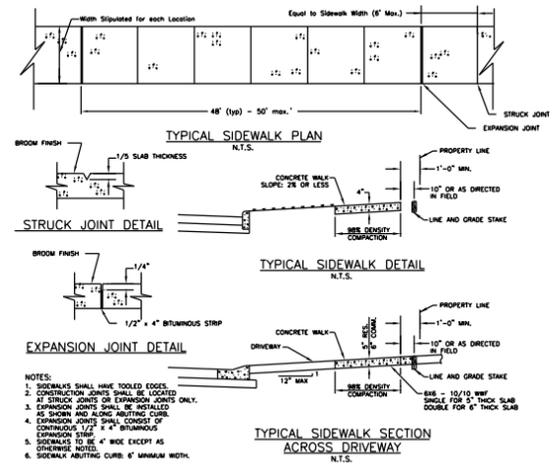
ROADWAY DETAILS (1)

SHEET NUMBER

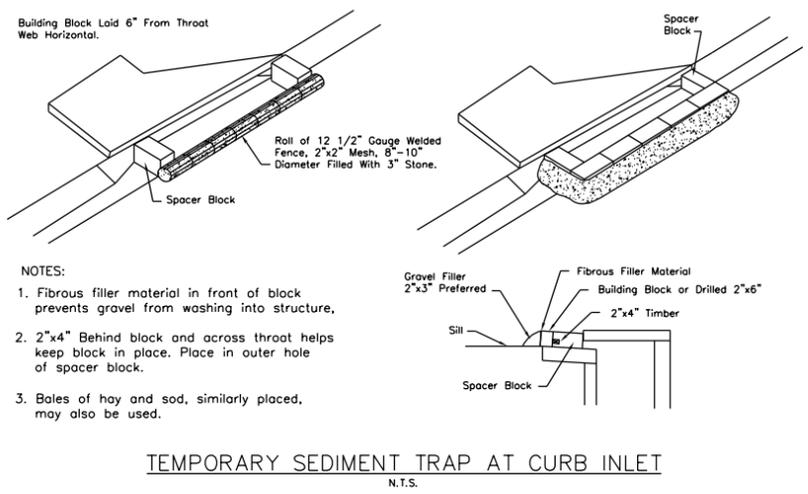
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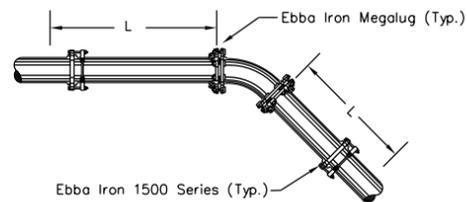
NOTE:
When used on high side of roadways, the cross slope of the gutter shall match the cross slope of the adjacent pavement and the thickness of the lip shall be 6", unless otherwise shown on plans.



SPECIAL NOTE FOR SIDEWALK RAMPS:
ALL SIDEWALK RAMP FORMS TO BE INSPECTED BY THE TOWN OF BELLEAIR BEFORE POURING, TOWN INSPECTOR TO DEMIFY RAMP TO BE INSTALLED IF DEEMED NECESSARY.



NOTES:
1. Fibrous filler material in front of block prevents gravel from washing into structure,
2. 2"x4" Behind block and across throat helps keep block in place. Place in outer hole of spacer block.
3. Bales of hay and sod, similarly placed, may also be used.



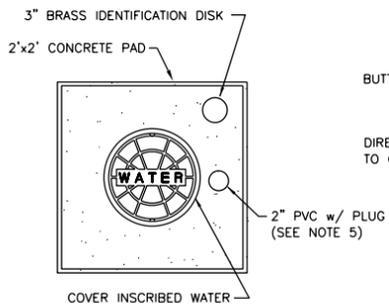
ON ALL TEES, A MINIMUM OF 5' SHALL BE RESTRAINED ON EACH RUN LEG
 L = MINIMUM LENGTH TO BE RESTRAINED ON EACH SIDE OF FITTING (ft.)
 FIGURES BASED ON 30" BURY DEPTH, 150 PSI TEST PRESSURE.
 8" PVC MAXIMUM SIZE USED IN SYSTEM

NOM. PIPE SIZE	ELBOWS (deg.)				VALVE TEES BRANCH	DEAD END
	11.25	22.50	45	90		
LENGTH IN FEET (L)						
4"	2	4	9	21	28	46
6"	3	6	12	29	47	65
8"	4	8	16	38	66	85

- NOTES:
 THRUST RESTRAINT AT FITTINGS AND VALVES SHALL BE EBBA IRON MEGALUG RESTRAINERS.
 THRUST RESTRAINT BETWEEN PIPE JOINTS SHALL BE EBBA IRON 1500 SERIES RESTRAINERS.
- BEND - INLET AND OUTLET
 - TEE - OUTLET BRANCH
 - OFFSETS - INLET AND OUTLET
 - CAPS
 - PLUGS
 - DEAD ENDS
 - HYDRANT RUNOUTS SHALL BE RESTRAINED AS DEAD ENDS

PVC PIPE THRUST RESTRAINING

N.T.S.

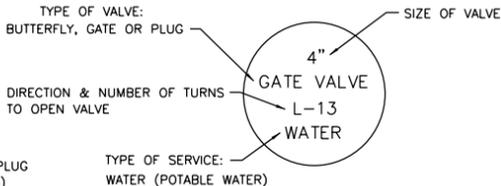


WATER VALVE BOX CONCRETE PAD PLAN VIEW

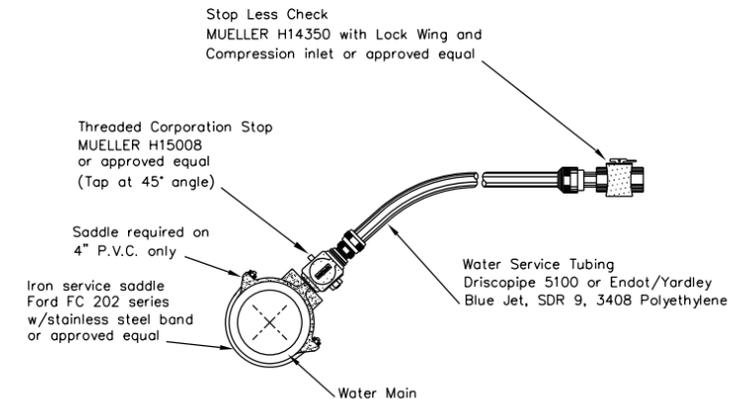
N.T.S.

NOTES:

- EXTENSION ON VALVE BOX SHALL BE SET SO AS TO RESERVE 1/2 OF THE ADJUSTMENT LENGTH FOR FUTURE USE.
- OPERATING NUT SHALL BE SET SO AS TO BE WITHIN 12" TO 18" OF GRADE.
- INSTALL 3" BRASS IDENTIFICATION DISK IN CONCRETE.
- INSTALL 2" PVC WITH PLUG FOR TRACER WIRE STORAGE.
- LOCATOR WIRE ACCESS - 2" (WHITE OR GRAY) SCHEDULE 80 PVC, BRASS FEMALE ADAPTOR COUPLING AND 2" BRASS PLUG W/ RECESS NUT. TERMINATE INSULATED, SOLID 12 GAUGE COPPER TRACER WIRE AT TOP W/ A MINIMUM 12" OF EXTRA WIRE.

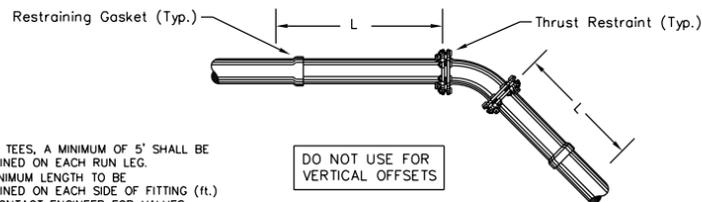


3" BRASS IDENTIFICATION DISK



CHLORINATION TAP

N.T.S.



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 L = MINIMUM LENGTH TO BE RESTRAINED ON EACH SIDE OF FITTING (ft.)
 ☆ = CONTACT ENGINEER FOR VALUES
 FIGURES BASED ON 30" BURY DEPTH, 150 PSI TEST PRESSURE
 FIGURES DON'T APPLY TO POLY WRAPPED PIPE

DO NOT USE FOR VERTICAL OFFSETS

NOM. PIPE SIZE	ELBOWS (deg.)				VALVE TEES BRANCH	DEAD END
	11.25	22.50	45	90		
LENGTH IN FEET (L)						
4"	2	3	7	17	18	30
6"	2	5	10	23	30	42
8"	3	6	12	30	42	54
12"	4	8	17	42	☆	76
16"	5	10	22	53	☆	97
20"	6	13	26	63	☆	117

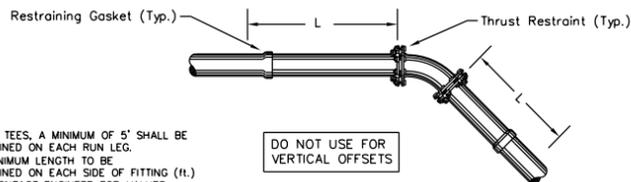
THE FOLLOWING JOINTS MUST BE RESTRAINED IN ALL APPLICATIONS:

- BEND - INLET AND OUTLET
- TEE - ALL BRANCHES
- OFFSETS - INLET AND OUTLET
- CAPS
- PLUGS
- DEAD ENDS
- HYDRANT RUNOUTS SHALL BE RESTRAINED AS DEAD ENDS

NOTE:
 THRUST RESTRAINT ON SLIP-JOINT DUCTILE IRON PIPE SHALL BE U.S. PIPE FIELD LOCK GASKETS FOR TYTON JOINT PIPE OR AMERICAN FAST-GRIP GASKETS FOR AMERICAN FASTITE PIPE. THRUST RESTRAINT ON DUCTILE IRON FITTINGS SHALL BE PROVIDED BY THE USE OF MEGALUG RETAINERS AND MECHANICAL JOINT FITTINGS.

DUCTILE IRON PIPE THRUST RESTRAINING

N.T.S.



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 ☆ = CONTACT ENGINEER FOR VALUES
 FIGURES BASED ON 30" BURY DEPTH, 150 PSI TEST PRESSURE
 FIGURES DON'T APPLY TO POLY WRAPPED PIPE

DO NOT USE FOR VERTICAL OFFSETS

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	11.25	22.50	45	90		
LENGTH IN FEET (L)						
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6"	2	5	10	23	30	42
8"	3	6	12	30	42	54
**12"	4	8	17	42	☆	76
16"	5	10	22	53	☆	97
20"	6	13	26	63	☆	117

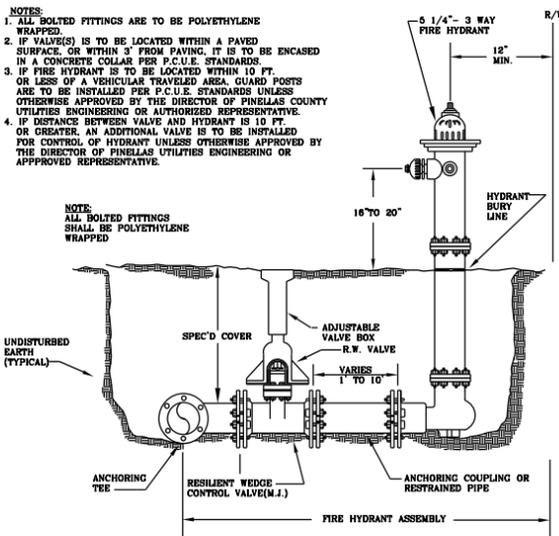
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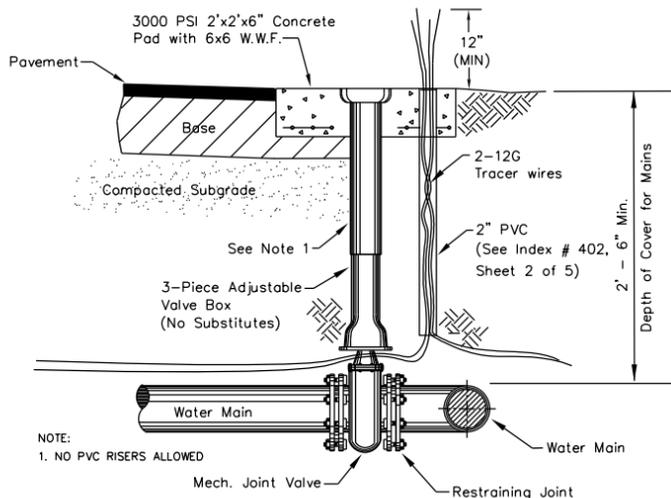
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PIPE THRUST RESTRAINING

N.T.S.



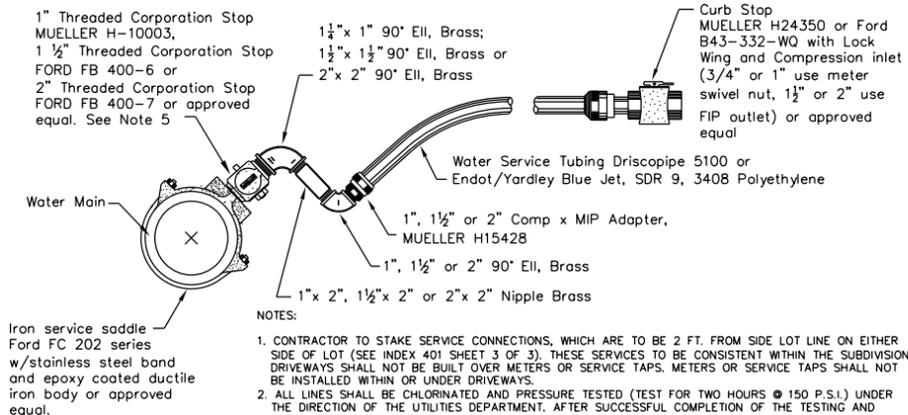
FIRE HYDRANT ASSEMBLY STANDARD DETAIL



TYPICAL VALVE & BOX SETTING

N.T.S.

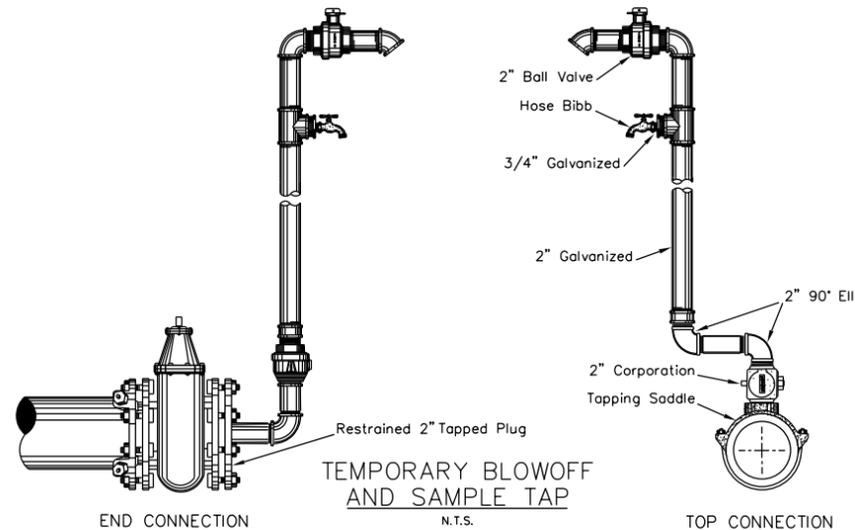
NOTE:
 1. NO PVC RISERS ALLOWED



WATER MAIN SERVICE CONNECTION DETAIL

N.T.S.

- NOTES:
- CONTRACTOR TO STAKE SERVICE CONNECTIONS, WHICH ARE TO BE 2 FT. FROM SIDE LOT LINE ON EITHER SIDE OF LOT (SEE INDEX 401 SHEET 3 OF 3). THESE SERVICES TO BE CONSISTENT WITHIN THE SUBDIVISION. DRIVEWAYS SHALL NOT BE BUILT OVER METERS OR SERVICE TAPS. METERS OR SERVICE TAPS SHALL NOT BE INSTALLED WITHIN OR UNDER DRIVEWAYS.
 - ALL LINES SHALL BE CHLORINATED AND PRESSURE TESTED (TEST FOR TWO HOURS @ 150 P.S.I.) UNDER THE DIRECTION OF THE UTILITIES DEPARTMENT. AFTER SUCCESSFUL COMPLETION OF THE TESTING AND CHLORINATION, THE PRESSURE SHALL REMAIN ON THE SYSTEM AT ALL TIMES.
 - TEN FT. SEPARATION REQUIRED BETWEEN PARALLEL WATER & SANITARY SEWER LINES.
 - SADDLE IS REQUIRED FOR ALL SERVICE CONNECTIONS TO MAINS.
 - TAPS SHOULD BE MADE ON A 45° ANGLE FROM TOP OF PIPE. FOR COVER 12" OR LESS, TAP SHALL BE MADE ON A 90° ANGLE FROM TOP OF PIPE.
 - MINIMUM DISTANCE BETWEEN SERVICE TAPS TO BE NOT LESS THAN 36".



TEMPORARY BLOWOFF AND SAMPLE TAP

N.T.S.

RS&H

RS&H, Inc.
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 (813)289-5550 FAX: (813)289-0263

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 FL.Cert.Nos: AAC001886
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BELLEAIR
 INC. 1913

PUBLIC WORKS DEPARTMENT
 901 PONCE DE LEON BLVD.
 BELLEAIR, FL 33756

PALMETTO ROAD NORTH STREET AND DRAINAGE IMPROVEMENTS

SUB-CONSULTANTS

Mckim & Creed, Inc.
 3903 Northdale Boulevard,
 Suite 140W
 Tampa, Florida 33624
 (813) 549-3740

APPROVED BY:

VINCENT SHINE, P.E.
 FLA. REG. NO. 67387
 DATE: _____

REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED:

REVIEWED BY: VES

DRAWN BY: SPJ

DESIGNED BY: SPJ

HORIZONTAL SCALE:

VERTICAL SCALE:

AEP NO.: 104-1091-002

SHEET TITLE

ROADWAY DETAILS (3)

SHEET NUMBER

GENERAL NOTES

1. LOCATION, ELEVATION, AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES, AND OTHER FEATURES INCLUDING UNDERDRAINS ARE SHOWN IN ACCORDANCE WITH THE BEST INFORMATION AVAILABLE AT TIME OF THE PREPARATION OF THESE PLANS BUT DO NOT PURPORT TO BE ABSOLUTELY CORRECT.
2. VERIFY THE LOCATION, ELEVATION, AND DIMENSIONS OF ALL EXISTING UTILITIES, STRUCTURES, AND OTHERS FEATURES AFFECTING HIS WORK AND SHALL COMPLY WITH ALL STATE, TOWN, AND LOCAL ORDINANCES AND OBTAIN ANY NECESSARY WORK PERMITS THAT MAY BE REQUIRED PRIOR TO CONSTRUCTION.
3. UTILITIES NOT UNDER THIS CONTRACT TO BE ADJUSTED BY UTILITY OWNERS.
4. PROVIDE AT LEAST 48 HOURS NOTICE TO THE VARIOUS UTILITY COMPANIES, INCLUDING THE TOWN TRAFFIC CONTROL SERVICES AT 744-5670, IN ORDER TO LOCATE AND IDENTIFY THEIR EXISTING UNDERGROUND FACILITIES PRIOR TO CONSTRUCTION, AS ESTABLISHED BY THE "UNDERGROUND FACILITY DAMAGE PREVENTION AND SAFETY ACT".
5. COORDINATE THE CONSTRUCTION SCHEDULE BETWEEN THE CONTRACTOR & ALL UTILITY AGENCIES.

NOTE : THIS INCLUDES MEETING WITH UTILITY AGENCIES PRIOR TO THE PRE-CONSTRUCTION CONFERENCE TO ADJUST THEIR SCHEDULES TO COINCIDE WITH THE CONTRACTORS CONSTRUCTION SCHEDULE. (REFERENCE CONTRACT DOCUMENTS.)
6. ALL STREET SIGNS AND STREET MARKERS ARE TO BE REMOVED AND RELOCATED AS DIRECTED BY THE ENGINEER.
7. THE TOWN RESERVES THE RIGHT TO PERFORM QUALITY ASSURANCE TESTING ON ALL MATERIALS DELIVERED TO PROJECT AND TO REJECT ALL MATERIALS NOT MEETING ACCEPTABLE STANDARDS.
8. WHERE CONNECTION TO EXISTING ACCESS IS NOT INDICATED ON THE PLANS, PROPER CONNECTION IS TO BE MADE AT THE DIRECTION OF THE TOWN PROJECT MANAGER. WHERE EXISTING ACCESS CONNECTIONS ARE SHOWN ON THE PLANS, SUCH CONNECTIONS MAY BE MOVED, ADJUSTED, MODIFIED, ADDED OR DELETED UPON REQUEST BY THE PROPERTY OWNER AND APPROVAL BY THE TOWN PROJECT MANAGER. ALL APPROVALS BY THE TOWN PROJECT MANAGER SHALL BE SUBJECT TO CONFORMANCE WITH APPLICABLE STANDARDS, CODES AND REGULATIONS, AND CONDITIONED UPON GRANT OF ANY NECESSARY RIGHT OF ENTRY BY THE PROPERTY OWNER WITHOUT CHARGE TO THE TOWN.

UPON PROPERTY OWNER'S REQUEST, MADE PRIOR TO COMMENCEMENT OF PROJECT CONSTRUCTION, THE TOWN MAY SUBSTITUTE A GRAVITY WALL FOR A GRADED AND HARMONIZED SLOPE OR VICE VERSA CONTINGENT UPON TOWN PROJECT MANAGER APPROVAL, WHICH APPROVAL SHALL BE SUBJECT TO CONFORMANCE WITH APPLICABLE STANDARDS, CODES AND REGULATIONS, AND CONDITIONED UPON GRANT OF ANY NECESSARY RIGHT OF ENTRY BY THE PROPERTY OWNER WITHOUT CHARGE TO THE TOWN.
9. NO STABILIZING WILL BE REQUIRED FOR PAVED TURNOUTS TO PRIVATE PROPERTY.
10. ALL EXISTING DRAINAGE STRUCTURES WITHIN THE RIGHT-OF-WAY SHALL REMAIN UNLESS SHOWN ON THE PLANS TO BE REMOVED.
11. IN THE EVENT EXCAVATION OF UNSUITABLE MATERIAL IS REQUIRED, IT MAY BE USED TO FLATTEN SLOPES IN AREAS PER STD. INDEX 505 & APPROVED BY THE ENGINEER.
12. COMPLETE STAKE-OUT OF THE PROJECT, I.E., LINE, GRADE, SLOPE STAKE, UTILITY RELOCATIONS OR ANY OTHER STAKE-OUT THAT MAY BE REQUIRED TO COMPLETE THE PROJECT IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. ANY AND ALL EXPENSES INCURRED FOR THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR OTHER ITEMS. NO ADDITIONAL PAYMENT SHALL BE MADE FOR THIS WORK.
13. OVERALL CLEAN-UP SHALL BE ACCOMPLISHED BY THE CONTRACTOR IN ACCORDANCE WITH TOWN STANDARDS OR AS DIRECTED BY THE ENGINEER. ANY AND ALL EXPENSES INCURRED FOR THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR OTHER ITEMS.
14. PROTECT PRIVATE PROPERTY AT ALL COST. ANY DAMAGE CAUSED BY THE CONTRACTOR IN THE PERFORMANCE OF HIS WORK SHALL BE CORRECTED TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE. PAYMENT SHALL NOT BE MADE FOR THIS WORK.
15. ANY DAMAGE TO STATE, COUNTY, OR TOWN ROADS CAUSED BY THE CONTRACTOR'S HAULING OR EXCAVATION EQUIPMENT SHALL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER. PAYMENT SHALL NOT BE MADE FOR THIS WORK.
16. ALL SIDEWALK RAMPS SHALL BE BUILT PER THE LATEST FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS AT THE TIME OF BID.
17. ALL EROSION CONTROL FENCES AND BARRIERS SHALL BE ERECTED PRIOR TO ANY LAND ALTERATIONS, MAINTAINED DURING CONSTRUCTION, AND REMOVED FOLLOWING SOIL STABILIZATION AND FINAL DRESSING.

18. ALL SYMBOLS AND ABBREVIATIONS SHALL MEET F.D.O.T. ROADWAY AND TRAFFIC DESIGN STANDARDS AS PER STANDARD PLANS FY 2019-20.
19. ALL PRECAUTIONS ARE TO BE TAKEN BY THE CONTRACTOR TO MAINTAIN FLOW INTEGRITY OF STORMWATER RUNOFF DURING RAIN EVENTS AT ALL TIMES.
20. THERE SHALL BE NO CHANGE IN OR DEVIATION FROM THESE PLANS WITHOUT PRIOR APPROVAL BY THE ENGINEER. IF POSSIBLE SIDEWALK DEFLECTION WILL AVOID TREE REMOVAL, CONTACT ENGINEER FOR REVIEW.
21. ALL EARTHWORK AND COMPACTION SHALL BE INSPECTED BY THE ENGINEER OR HIS DULY APPOINTED REPRESENTATIVE PRIOR TO FILLING OR CONSTRUCTING.
22. MAINTAIN SLOPES AND SOD UNTIL COMPLETION AND ACCEPTANCE OF TOTAL PROJECT. UNTIL ACCEPTANCE, ALL EROSION, SILTATION AND MAINTENANCE OF GRADES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
23. SPRINKLE OR OTHERWISE APPLY WATER TO EXPOSED CONSTRUCTION AREAS TO CONTROL SIGNIFICANT WIND EROSION AND FUGITIVE DUST.
24. ALL AREAS DISTURBED BY CONSTRUCTION ARE TO BE SODDED UNLESS NOTED OTHERWISE ON PLANS. ALL ITEMS DISTURBED BY CONSTRUCTION SHALL BE REPLACED, CONSTRUCTION.
25. ALL PROPOSED GROUND ELEVATIONS ARE FINISHED SOD ELEVATIONS, FINISH GRADING SHALL BE 0.2 FEET LESS THAN ELEVATIONS SHOWN TO ALLOW FOR THICKNESS OF SOD.
26. ALL CONSTRUCTION SHALL BE IN COMPLIANCE WITH THE AMERICANS WITH DISABILITIES ACT AND THE FLORIDA ACCESSIBILITY CODE (ARTICLE I, SECTION 74-4 (3), PAGE 4).
27. THE USE OF VIBRATORY ROLLERS FOR COMPACTION EFFORTS IS NOT ALLOWED ON THIS PROJECT.
28. CURB INLET ELEVATIONS AND OFFSETS IDENTIFIED AT THE THEORETICAL GUTTER ELEV. PER FDOT STANDARD PLANS.
29. A QUALIFIED STORMWATER MANAGEMENT INSPECTOR IS REQUIRED THAT HAS BEEN CERTIFIED THROUGH THE FDEP ON SITE DURING ALL CONSTRUCTION ACTIVITIES.
30. THE CONTRACTOR WILL REQUEST A PRE-POUR INSPECTION BY THE DESIGNATED TOWN INSPECTOR. THE CONTRACTOR SHALL NOT POUR ANY SIDEWALK OR SIDEWALK RAMP CONCRETE UNTIL IT PASSES A "PRE-POUR" INSPECTION AND TOWN INSPECTOR APPROVES THAT ALL DE-ROOTING AND CLEARING AND GRUBBING REQUIREMENTS, IF ANY, ARE PERFORMED IN ACCORDANCE WITH THIS SPECIFICATION, TO VERIFY THAT ALL FORM WORK IS SUFFICIENT, AND THAT THE SUBGRADE IS CUT TO THE PROPER DEPTH AND COMPACTED PROPERLY. WORK NOT IN ACCORDANCE WITH A COUNTY "POST-POUR" INSPECTION MAY REQUIRE THE COMPLETE REMOVAL OF REJECTED WORK OR RESULT IN A REDUCED PAYMENT OF THE DELIVERABLE. THE PRE-POUR INSPECTION APPROVAL SHALL NOT RELEASE THE CONTRACTOR FROM THE RESPONSIBILITY OF COMPLETING ALL WORK IN ACCORDANCE WITH PLANS AND SPECIFICATIONS OR DIRECTIONS OF THE ENGINEER.

TRAFFIC CONTROL GENERAL NOTES

1. FURNISH, ERECT AND MAINTAIN ALL NECESSARY TRAFFIC CONTROL AND SAFETY DEVICES, IN ACCORDANCE WITH THE U.S. DEPARTMENT OF TRANSPORTATION "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" 2009, AND THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD PLANS FY 2020-21, AS AMENDED BY THE SPECIFICATIONS FOR THIS PROJECT.
2. TRAFFIC CONTROL SHALL BE PERFORMED IN ACCORDANCE WITH FDOT STANDARD INDEX NO. 102-000.
3. WHENEVER CONSTRUCTION EQUIPMENT IS DRIVEN OR TRANSPORTED ON THE OPEN TRAVEL LANES, THE CONTRACTOR SHALL UTILIZE FDOT STANDARD INDEX NO. 102-015.
4. THE MINIMUM TEMPORARY LANE WIDTH ALLOWED IS TEN (10) FEET.
5. PROVIDE A DEDICATED CREW FOR THE INSTALLATION, MAINTENANCE CONTROL DEVICES (I.E. BARRICADES, SIGNS, ARROW BOARDS, ETC.) THIS CREW SHALL CONSIST OF THE CONTRACTOR'S WORK FORCE WHOSE SOLE RESPONSIBILITY WILL BE THE MAINTENANCE OF TRAFFIC CONTROL DEVICES. FURNISH A WORK VEHICLE TO AID IN MAINTAINING THE CONTROL DEVICES.
6. EXISTING POSTED SPEED IS TO BE MAINTAINED DURING ALL PHASES OF CONSTRUCTION.
7. PROVIDE ANY AND ALL MATERIALS AND EQUIPMENT NEEDED TO MEET THE DROPOFF REQUIREMENTS OF FDOT STANDARD INDEX NO. 102-000. PAYMENT FOR ALL MATERIALS SHALL BE RESURFACED PRIOR TO OPENING TO TRAFFIC. IN THE EVENT THAT PAVEMENT OPERATION ARE STOPPED DUE TO WEATHER CONDITIONS OR TRAFFIC CONGESTION, THE CONTRACTOR'S ATTENTION IS DIRECTED TO STANDARD INDEX NO. 102-000, SHEET 2 OF 8 - DROP-OFFS.
8. INSTALL EROSION CONTROL MEASURES IN ACCORDANCE WITH GUIDELINES PRESENT IN THE STORMWATER POLLUTION PREVENTION PLANS DURING CONSTRUCTION OPERATIONS TO ENSURE SAFE VEHICULAR OPERATIONS AS WELL AS TO PROHIBIT ANY UNDUE IMPACT ON OFF-SITE DRAINAGE OR ENVIRONMENTAL CONCERNS.

9. ALL COSTS FOR INSTALLATION OF TEMPORARY BARRIER WALL, 1:4 SLOPES FOR DROPOFFS OR TEMPORARY CURB SHALL BE INCLUDED IN THE COST OF MAINTENANCE OF TRAFFIC.
10. ALL TRENCHES SHALL BE BACKFILLED COMPLETELY TO PROVIDE SAFE CROSSING BY THE END OF EACH WORK DAY OR WHENEVER THE WORK BECOMES INACTIVE. DO NOT OPEN ANY AREA THAT CANNOT BE BACKFILLED IN THE SAME DAY OPERATION. ALL TRENCHING OR EXCAVATION WITHIN THE PAVEMENT AREA SHALL BE PERFORMED PRIOR TO CONSTRUCTION AND MILLING & RESURFACING OPERATIONS.
11. THE TRAFFIC AND TRAVEL WAYS SHALL NOT BE ALTERED BY THE CONTRACTOR TO CREATE A WORK ZONE UNTIL ALL LABOR AND MATERIAL ARE AVAILABLE FOR THE THE CONSTRUCTION OF THAT AREA.
12. TAKE ALL NECESSARY PRECAUTIONS TO PREVENT MILLED MATERIAL FROM ENTERING THE DRAINAGE SYSTEM. THE CONTRACTOR IS RESPONSIBLE FOR KEEPING INLETS CLEAN OF PAVING MATERIALS, SILT, LIME ROCK AND DEBRIS DURING THE CONSTRUCTION AT NO ADDITIONAL COST.
13. PROVISIONS FOR THE REMOVAL OF STORMWATER FROM THE ROADWAYS DURING CONSTRUCTION SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO USE.
14. PROVIDE, AS A MINIMUM, A 1:250 FEATHERING RATE, FOR ANY PAVEMENT ELEVATION CHANGE CAUSED BY MILLING OR RESURFACING ACTIVITIES THAT MOTORISTS WILL TRAVERSE DURING WORK.
15. MAINTAIN THE EXISTING LEVEL OF ILLUMINATION ON THE TRAVELED ROADWAY DURING CONSTRUCTION.
16. PRIOR TO IMPLEMENTING FULL ROAD CLOSURE, SUBMIT A DETOUR PLAN FOR THE TOWN AND ENGINEER'S APPROVAL.

TREE PROTECTION GENERAL NOTES

1. IF ANY TREES ARE DAMAGED BY CONSTRUCTION ACTIVITY OR OTHER MEANS WITHIN THE DAMAGED BY CONSTRUCTION ACTIVITY OR OTHER MEANS WITHIN THE CONSTRUCTION PERIOD, TREE TO ORIGINAL CONDITION WITH NO COMPENSATION FROM THE TOWN.
2. WHERE EXCAVATION IS IN CLOSE PROXIMITY OF TREES TO BE SAVED, USE CAUTION NOT TO DAMAGE THE ROOT SYSTEM. NO EQUIPMENT, SUPPLIES OR VEHICLES SHALL BE PARKED OR STORED WITHIN THE TREES DRIP LINE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ENFORCE THESE REQUIREMENTS.
3. PARKING OF VEHICLES AND EQUIPMENT OR STOCKPILES OF MATERIALS WITHIN THE DRIPLINE OF TREES IS PROHIBITED. TREE PROTECTION BARRICADES MAY BE REQUIRED IF THE CONTRACTOR FAILS TO MEET THESE SPECIFICATIONS.
4. THE CONTRACTOR IS RESPONSIBLE FOR ALL UNAUTHORIZED CUTTING OR DAMAGE TO ANY EXISTING TREES AND SHRUBS CAUSED BY CARELESS OPERATION OF EQUIPMENT, STOCKPILING OF MATERIALS, ETC. THIS SHALL INCLUDE COMPACTION BY DRIVING OR PARKING INSIDE THE DRIPLINE, OR THE SPILLING OF OIL, GASOLINE, OR OTHER DELETERIOUS MATERIALS WITHIN THE DRIPLINE.
5. AVOID SCRAPING LOWER LIMBS OR GOUGING BARK OF TREES BY HEAVY EQUIPMENT OR CONST. MATERIALS. INSTALL BARRICADES OR WRAP TREE TRUNKS AS NEEDED.
6. ANY PRUNING DONE TO THE TREE SHALL BE DIRECTED BY A CERTIFIED ARBORIST THAT HAS BEEN APPROVED BY THE TOWN MANAGER OR PUBLIC WORKS DIRECTOR. IF LIMBS ARE ACCIDENTALLY BROKEN BY EQUIPMENT, REMOVE THE JAGGED EDGE BY SAWING AT THE BROKEN LIMB'S JUNCTION WITH THE TRUNK OR NEXT LARGER LIMB. COORDINATION WITH ARBORIST IS REQUIRED.
7. NO MATERIALS SHALL BE BURNED ON SITE.
8. EXISTING GRADE AROUND ALL TREE ROOTS SHALL BE MAINTAINED UNLESS OTHERWISE INDICATED ON DRAWINGS.
9. PROVIDE CLEAN, NATURAL SOILS WITHIN THE AFFECTED AREA OF THE DRIPLINE, AS DETERMINED BY THE TOWN.
10. TREES THAT REQUIRE BARRIERS ARE TO FOLLOW FDOT STANDARD PLANS INDEX NO. 110-100 - TREE PROTECTION BARRIER.



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VERTICAL SCALE:

AEP NO.: 104-1091-002

SHEET TITLE

GENERAL NOTES

SHEET NUMBER

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

SURVEY NOTES

1. TYPE OF SURVEY: TOPOGRAPHIC SURVEY
2. DATE OF SURVEY: JUNE 24, 2019
3. SURVEY CREW: DAN McINTURFF and KYLE McCLUNG.
4. ELEVATIONS SHOWN HEREON ARE IN FEET AND REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1983, ADJUSTMENT OF 2011 (NAD83/99), FLORIDA STATE PLANE WEST ZONE, AND THE VERTICAL DATUM OF NORTH AMERICAN VERTICAL DATUM OF 1988 (NAV88).

 REFERENCE BENCHMARK IS CITY OF PINELLAS BENCHMARK NO. 757, STAMPED: HALL O, PINELLAS TOWN DISK, LOCATED AT THE INTERSECTION OF INDIAN ROCKS ROAD (STATE ROAD 697) AND ALTHEA ROAD. STATION IS LOCATED IN THE NORTHEAST CORNER OF THE INTERSECTION, 29.5 FEET SOUTHWEST OF A 12 INCH PALM TREE, 28.0 FEET NORTH OF CENTER OF ALTHEA ROAD, 21.5 FEET SOUTHEAST OF CENTER OF INDIAN ROCKS ROAD. SET IN TOP OF A 12 INCH DIAMETER ROUND CONCRETE MONUMENT THAT IS FLUSH WITH THE TOP OF THE GROUND.

 ELEVATION = 47.43'

 REFERENCE BENCHMARK IS CITY OF PINELLAS BENCHMARK NO. 758, STAMPED: HALL P, PINELLAS TOWN DISK, LOCATED AT THE TRI-INTERSECTION OF INDIAN ROCKS ROAD (STATE ROAD 697), PONCE DE LEON BLVD. AND COUNTRY CLUB ROAD. STATION IS LOCATED IN THE NORTHWEST CORNER OF THE INTERSECTION, 21.0 FEET NORTHWEST OF CENTER OF INDIAN ROCKS ROAD, 16.0 FEET SOUTHWEST OF A CONCRETE LAMP POST, 11.8 FEET SOUTH OF A 16 INCH PALM TREE, 2.5 FEET SOUTH OF SOUTH EDGE OF SIDEWALK. SET IN TOP OF A 12 INCH DIAMETER ROUND CONCRETE MONUMENT THAT IS FLUSH WITH THE TOP OF THE GROUND.

 ELEVATION = 46.29'
6. NO UNDERGROUND INSTALLATIONS OR IMPROVEMENTS HAVE BEEN LOCATED EXCEPT AS SHOWN.
7. NO INSTRUMENTS OF RECORD REFLECTING EASEMENTS, RIGHT OF WAY AND/OR OWNERSHIP WERE FURNISHED TO THIS SURVEYOR EXCEPT AS SHOWN.
8. THIS SURVEY DOES NOT REFLECT NOR DETERMINE OWNERSHIP.
9. ALL MEASUREMENTS, DISTANCES, ELEVATIONS AND FEATURES SHOWN WERE PERFORMED IN STRICT ACCORDANCE WITH THE MINIMUM TECHNICAL STANDARDS SET FORTH IN CHAPTER 61G17-6, FLORIDA ADMINISTRATION CODE.
10. USE OF THIS SURVEY BY ANYONE OTHER THAN THOSE PREPARED FOR WILL BE THE RE-USERS SOLE RISK WITHOUT LIABILITY TO THE SURVEYOR.
11. THERE MAY BE ITEMS DRAWN OUT OF SCALE TO GRAPHICALLY SHOW THEIR LOCATION.
12. ONLY TREES FOUR (4) INCHES AND LARGER DIAMETER AT BREAST HEIGHT (DBH), WERE LOCATED AND SHOWN ON MAP OF SURVEY.

TOPOGRAPHIC SYMBOL LEGEND

- (P) = PLAT
- P.B. = PLAT BOOK
- CONC. = CONCRETE
- MON. = MONUMENT
- R/W = RIGHT-OF-WAY
- FND. = FOUND
- (D) = DEED
- (M) = MEASURED
- PG. = PAGE
- T.B.M. = TEMPORARY BENCHMARK
- O.R.B. = OFFICIAL RECORD BOOK
- PID = PROPERTY IDENTIFICATION
- NO. = NUMBER
- R.C.P. = REINFORCED CONCRETE PIPE
- C.M.P. = CORRUGATED METAL PIPE
- ES = EDGE OF SHELL
- TB = TOP OF BANK
- B.C = BACK OF CURB
- FPL = FLORIDA POWER & LIGHT
- VER. = VERIZON
- CATV = CABLE TELEVISION
- N&D = NAIL AND DISK
- I.P. = IRON PIPE
- I.R. = IRON ROD
- EP = EDGE OF PAVEMENT
- DR. = DRIVE
- U/G = UNDERGROUND
- DRAIN. = DRAINAGE
- M.E.S. = MITERED END SECTION
- EASE. = EASEMENT
- RS = RADIUS
- - NAIL FOUND
- - CONCRETE MONUMENT FOUND
- - IRON ROD & CAP SET
- - IRON ROD FOUND
- ⊕ - IRON PIPE FOUND
- ⊙ - NAIL & DISK FOUND
- ⊖ - BACKFLOW
- + - SIGN
- ⊗ - UTILITY POLE
- ⊘ - LIGHT POLE
- ⊙ - GUY WIRE
- ⊙ - BENCH MARK SET
- ⊗ - SERVICE BOX
- ⊗ - MISCELLANEOUS POLE
- ⊗ - TRAFFIC SIGNAL SUPPORT
- ⊗ - WATER FOUNTAIN/SHOWER
- ⊗ - U/G ELECTRIC
- ⊗ - VALVE
- ⊗ - FIRE HYDRANT
- ⊗ - METER
- ⊗ - SANITARY MANHOLE
- ⊗ - WELL
- ⊗ - HAND HOLE
- ⊗ - PHONE RISER(VERIZON)
- ☎ - PALM TREE
- ☎ - PINE TREE
- ☎ - OAK TREE

EXISTING SYMBOLS LEGEND

- EXISTING STORM MANHOLE
- ⊞ EXISTING ELECTRIC BOX
- ⊞ EXISTING ELECTRIC MANHOLE
- ⊞ EXISTING GAS VALVE
- ⊞ EXISTING GAS METER
- ▲ EXISTING SIGN
- ⊞ EXISTING MAIL BOX
- EXISTING SURVEY CORNER
- ⊞ EXISTING TRAFFIC BOX
- ☆ EXISTING CONC LIGHT POLE
- ☆ EXISTING LIGHT POST
- ⊞ EXISTING CONC POWER POLE
- ⊞ EXISTING METAL POLE
- ⊞ EXISTING WOOD POWER POLE
- ⊞ EXISTING WOOD POST
- ← EXISTING GUY WIRE
- ⊞ EXISTING SANITARY CLEANOUT
- ⊞ EXISTING SANITARY MANHOLE
- ⊞ EXISTING BUSH
- ⊞ EXISTING BOTTLE BRUSH
- ⊞ EXISTING CHINABERRY
- ⊞ EXISTING CITRUS
- ⊞ EXISTING CHERRY LAUREL
- ⊞ EXISTING EAR
- ▽ EXISTING EVERGREEN
- ⊞ EXISTING OLEANDER
- EXISTING LUGUSTRUM
- ☆ EXISTING JACARANDA
- ▽ EXISTING MAGNOLIA
- ☆ EXISTING MAPLE
- EXISTING OAK
- ☎ EXISTING PALM
- △ EXISTING PINE
- ▽ EXISTING HOLLY
- ⊞ EXISTING CAMPHOR
- ⊞ EXISTING CEDAR
- ⊞ EXISTING SWEET GUM
- ⊞ EXISTING BANYON
- ⊞ EXISTING TELEPHONE BOX
- ⊞ EXISTING TELEPHONE MANHOLE
- ⊞ EXISTING BACKFLOW PREVENTER
- ⊞ EXISTING FIRE HYDRANT
- ⊞ EXISTING WATER METER
- ⊞ EXISTING RECLAIMED WATER METER
- ⊞ EXISTING WATER VALVE
- ⊞ EXISTING RECLAIMED WATER VALVE
- ▽ EXISTING SPRINKLER
- ⊞^{sv} EXISTING SPRINKLER VALVE



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SURVEY NOTES

SHEET NUMBER

PALMETTO ROAD

CURVE BL-3
 PI STA. = 28+72.07
 Δ = 23° 47' 05" (LT)
 D = 6° 53' 05"
 T = 175.26
 L = 345.47
 R = 832.21
 PC STA. = 26+96.81
 PT STA. = 30+42.28
 e = NC

CURVE BL-4
 PI STA. = 31+38.56
 Δ = 32° 31' 54" (RT)
 D = 17° 21' 44"
 T = 96.29
 L = 187.37
 R = 330.00
 PC STA. = 30+42.28
 PT STA. = 32+29.65
 e = NC

CURVE CL-1
 PI STA. = 10+05.41
 Δ = 0° 44' 43" (LT)
 D = 6° 53' 05"
 T = 5.41
 L = 10.82
 R = 832.21
 PC STA. = 10+00.00
 PT STA. = 10+10.82
 e = NC

CURVE CL-2
 PI STA. = 14+17.15
 Δ = 62° 05' 50" (RT)
 D = 11° 44' 27"
 T = 293.78
 L = 528.89
 R = 488.00
 PC STA. = 11+23.37
 PT STA. = 16+52.26
 e = NC



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REVIEWED BY: VES

DRAWN BY: SPJ

DESIGNED BY: SPJ

HORIZONTAL SCALE:

VERTICAL SCALE:

AEP NO.: 104-1091-002

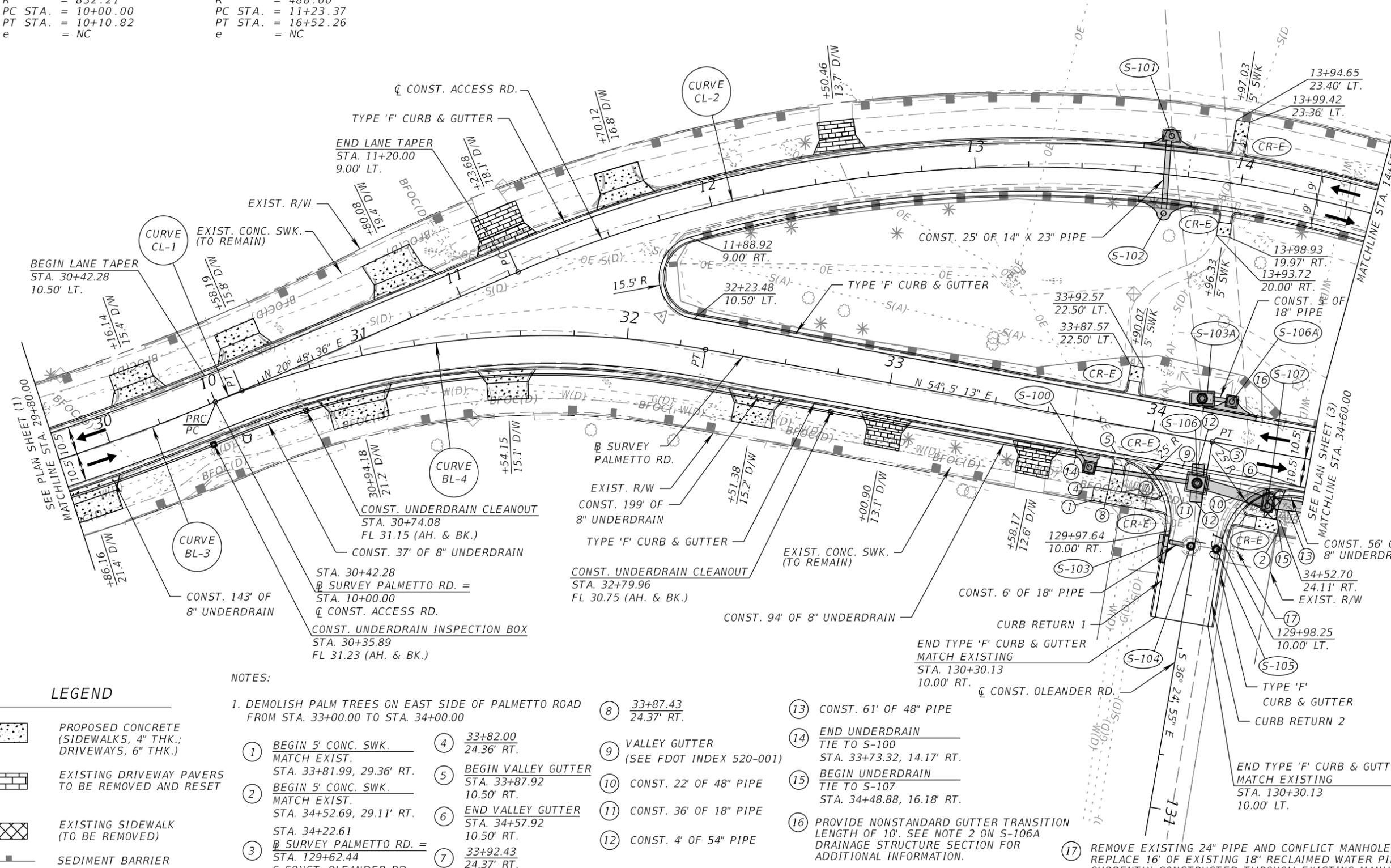
SHEET TITLE

**ROADWAY PLANS (2)
 STA. 29+80 TO STA. 34+60**

SHEET NUMBER

14

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



LEGEND

- PROPOSED CONCRETE (SIDEWALKS, 4" THK.; DRIVEWAYS, 6" THK.)
- EXISTING DRIVEWAY PAVERS TO BE REMOVED AND RESET
- EXISTING SIDEWALK (TO BE REMOVED)
- SEDIMENT BARRIER

NOTES:

1. DEMOLISH PALM TREES ON EAST SIDE OF PALMETTO ROAD FROM STA. 33+00.00 TO STA. 34+00.00
2. BEGIN 5' CONC. SWK. MATCH EXIST. STA. 33+81.99, 29.36' RT.
3. BEGIN 5' CONC. SWK. MATCH EXIST. STA. 34+52.69, 29.11' RT.
4. BEGIN VALLEY GUTTER STA. 33+87.92, 10.50' RT.
5. END VALLEY GUTTER STA. 34+57.92, 10.50' RT.
6. BEGIN UNDERDRAIN STA. 129+62.44, 24.37' RT.
7. END UNDERDRAIN STA. 33+73.32, 14.17' RT.
8. BEGIN UNDERDRAIN TIE TO S-100 STA. 33+73.32, 14.17' RT.
9. BEGIN UNDERDRAIN TIE TO S-107 STA. 34+48.88, 16.18' RT.
10. PROVIDE NONSTANDARD GUTTER TRANSITION LENGTH OF 10'. SEE NOTE 2 ON S-106A DRAINAGE STRUCTURE SECTION FOR ADDITIONAL INFORMATION.
11. REMOVE EXISTING 24" PIPE AND CONFLICT MANHOLE. REPLACE 16' OF EXISTING 18" RECLAIMED WATER PIPE CURRENTLY CONSTRUCTED THROUGH EXISTING MANHOLE.

PALMETTO ROAD



RS&H, Inc.
1715 N. Westshore Blvd., Suite 600
Tampa, Florida 33607
(813)289-5550 FAX: (813)289-0263
www.rsandh.com
FL.Cert.Nos: AAC001886
EB0005620 LCC000210



PUBLIC WORKS DEPARTMENT
901 PONCE DE LEON BLVD.
BELLEAIR, FL 33756

PALMETTO ROAD NORTH
STREET AND DRAINAGE
IMPROVEMENTS

SUB-CONSULTANTS

Mckim & Creed, Inc.
3903 Northdale Boulevard,
Suite 140W
Tampa, Florida 33624
(813) 549-3740

APPROVED BY:

VINCENT SHINE, P.E.
FLA. REG. NO. 67387
DATE: _____

REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED:

REVIEWED BY: VES

DRAWN BY: SPJ

DESIGNED BY: SPJ

HORIZONTAL SCALE:

VERTICAL SCALE:

AEP NO.: 104-1091-002

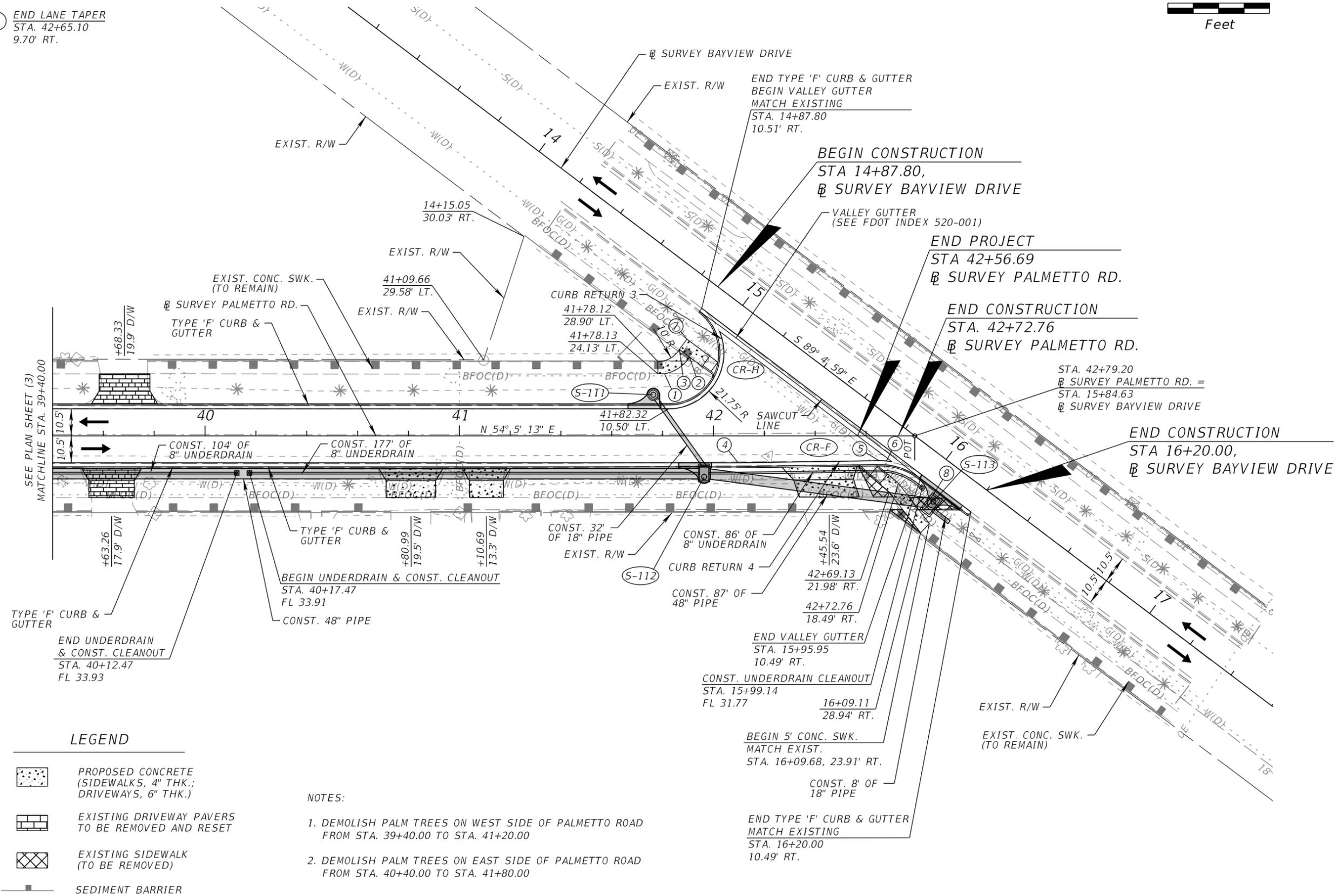
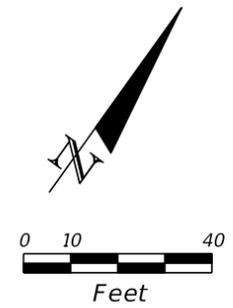
SHEET TITLE

ROADWAY PLANS (4)
STA. 39+40 TO STA. 42+65

SHEET NUMBER

16

- ① 41+80.75
24.14' LT.
- ② 41+90.63
30.65' LT.
- ③ 41+86.60
33.63' LT.
- ④ BEGIN LANE TAPER
STA. 42+09.70
10.50' RT.
- ⑤ END LANE TAPER
STA. 42+65.10
9.70' RT.
- ⑥ 27.5' R
- ⑦ 41+89.57
37.65' LT.
- ⑧ END UNDERDRAIN
TIE TO S-113
16+04.15, 14.16' RT.



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SUB-CONSULTANTS

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 (813) 549-3740

APPROVED BY:

VINCENT SHINE, P.E.
 FLA. REG. NO. 67387
 DATE: _____

REVISIONS

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HORIZONTAL SCALE: _____

VERTICAL SCALE: _____

AEP NO.: 104-1091-002

SHEET TITLE

ROADWAY PROFILES (1)
 PALMETTO RD.
 STA. 25+00 TO STA. 29+80

SHEET NUMBER

17

TBM # CP105
 MAG. NAIL AND DISC
 STA. 26+77.09 (9.59' LT.)
 EL. 34.83

e = NC

BEGIN PROJECT
 BEGIN PROFILE
 MATCH EXIST. PAVT.
 STA 26+95.71 @ SURVEY PALMETTO RD.
 EL. 35.32'

EXIST. GROUND AT
 @ SURVEY PALMETTO RD.

EXIST. GROUND AT @ SURVEY PALMETTO RD.

EXIST. 2" WM (RT.)

PROPOSED PGL

EXIST. 6" WM (LT.)

EXIST. 6" SAN (LT.)

(+) 0.440% (-) 0.470%

150' V.C.
 K = 165

PI +30.00
 EL. 36.35

+55.00 EL. 36.02
 36.04

36.11

36.16

36.18

36.18

36.15

36.10

34.91

35.32

36.09

25+00

26+00

27+00

28+00

29+00

SCALE : 1" = 40' HORIZ.
 1" = 4' VERT.

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DRAWN BY: SPJ

DESIGNED BY: SPJ

HORIZONTAL SCALE: _____

VERTICAL SCALE: _____

AEP NO.: 104-1091-002

SHEET TITLE

ROADWAY PROFILES (2)
 PALMETTO RD.
 STA. 29+80 TO STA. 34+60

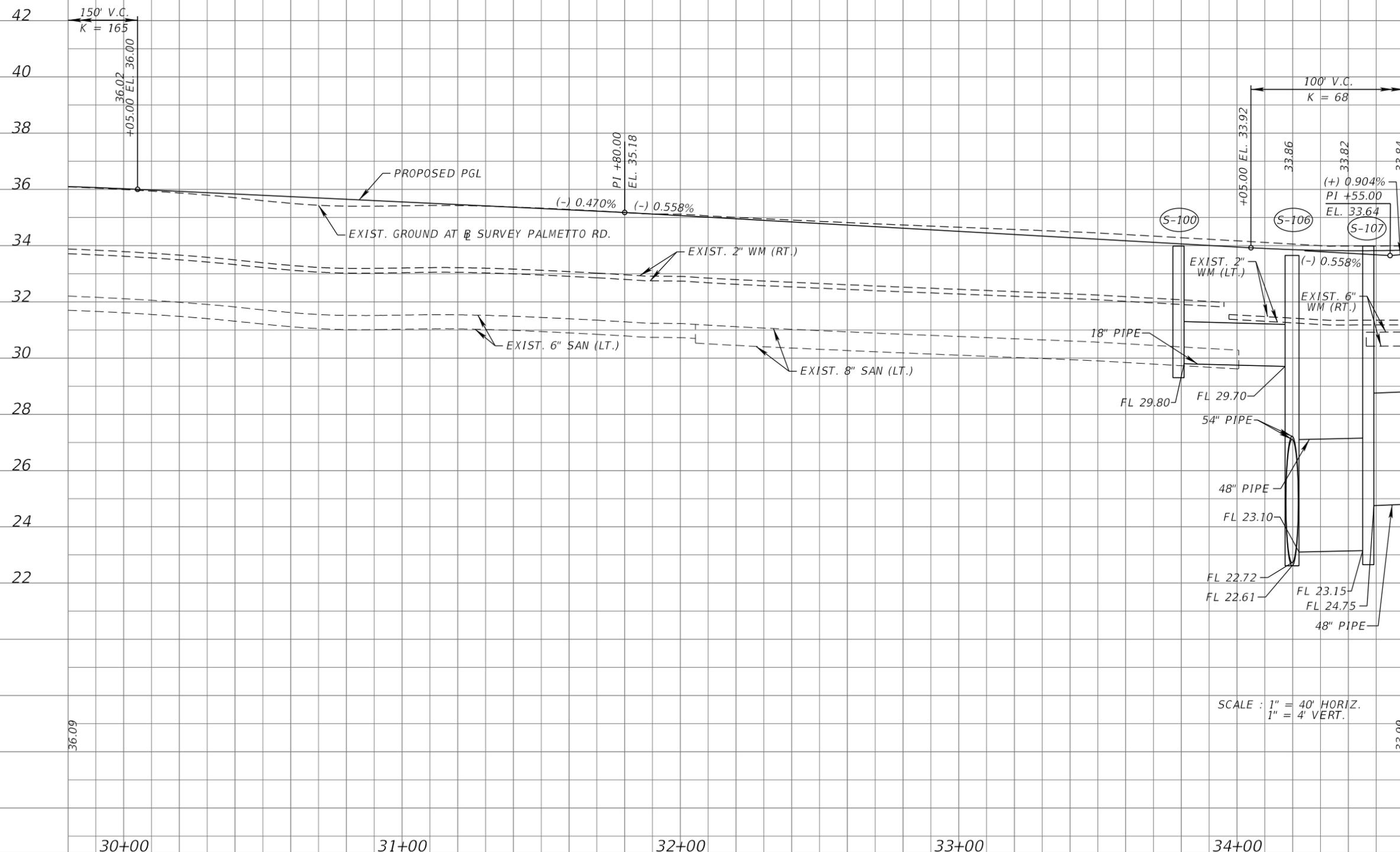
SHEET NUMBER

18

e = NC

TBM # CP106
 MAG. NAIL AND DISC
 STA. 32+11.59 (9.72' LT.)
 EL. 34.48

OLEANDER RD.



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VERTICAL SCALE:

AEP NO.: 104-1091-002

SHEET TITLE

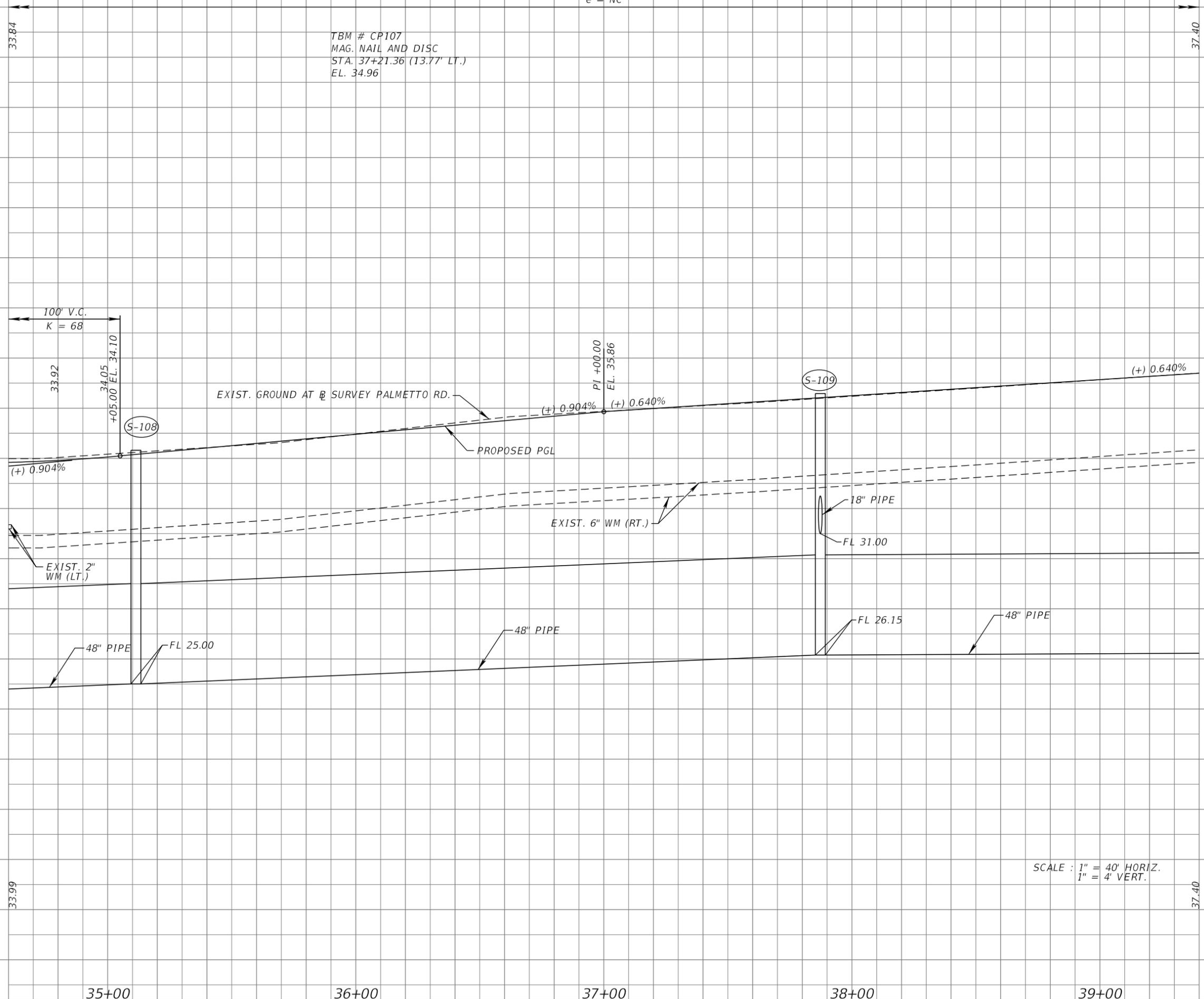
ROADWAY PROFILES (3)
 PALMETTO RD.
 STA. 34+60 TO STA. 39+40

SHEET NUMBER

19

e = NC

TBM # CP107
 MAG. NAIL AND DISC
 STA. 37+21.36 (13.77' LT.)
 EL. 34.96



SCALE : 1" = 40' HORIZ.
 1" = 4' VERT.

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VERTICAL SCALE:

AEP NO.: 104-1091-002

SHEET TITLE

ROADWAY PROFILES (4)
PALMETTO RD.
STA. 39+40 TO STA. 42+65

SHEET NUMBER

20

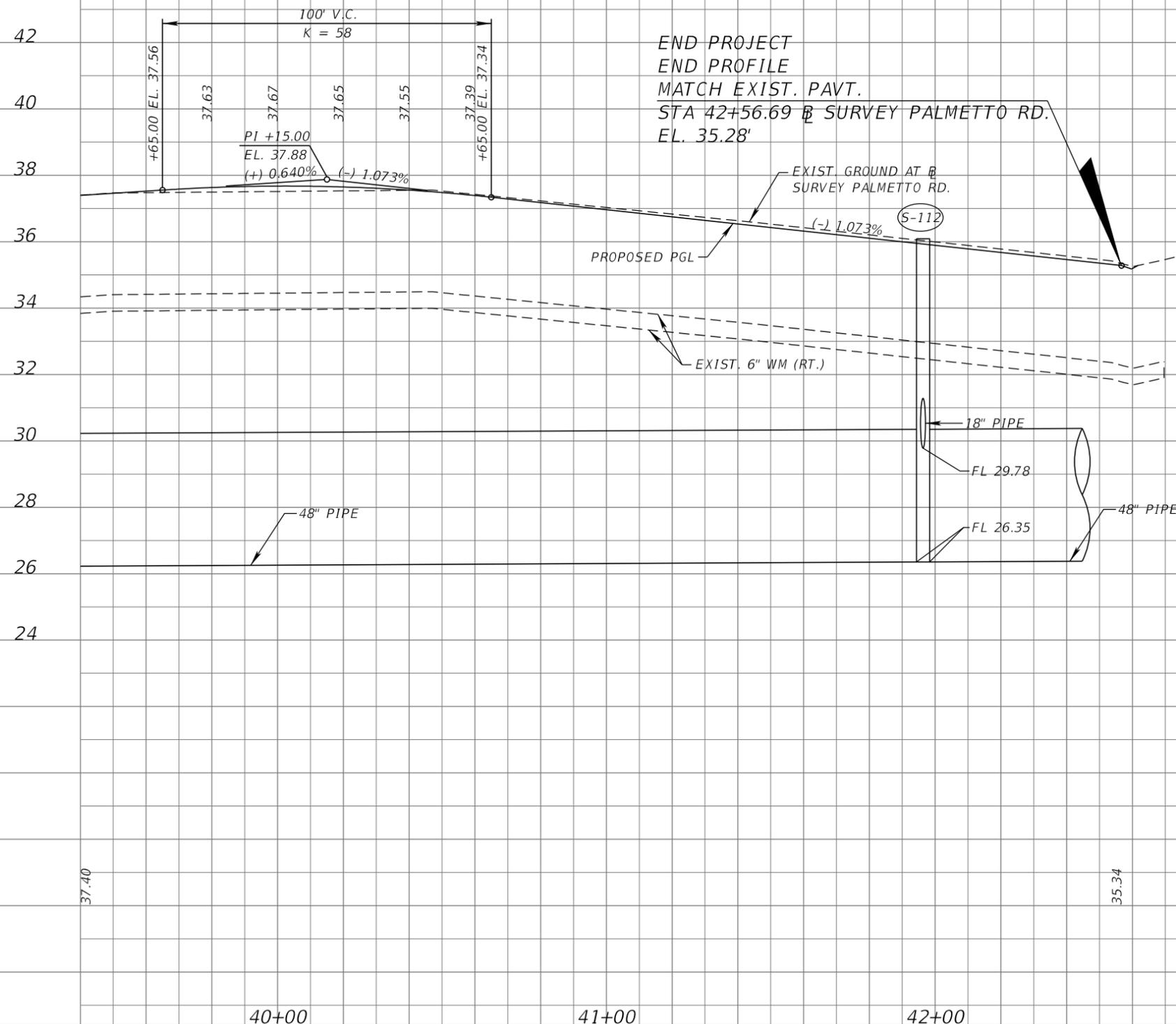
e = NC

TBM # CP108
MAG. NAIL AND DISC
STA. 42+21.54 (8.01' LT.)
EL. 35.69

50' TRAN
NB LANE
NC TO 0%

35.28

BAYVIEW DR.



SCALE : 1" = 40' HORIZ.
1" = 4' VERT.

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 (813) 549-3740

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VERTICAL SCALE:

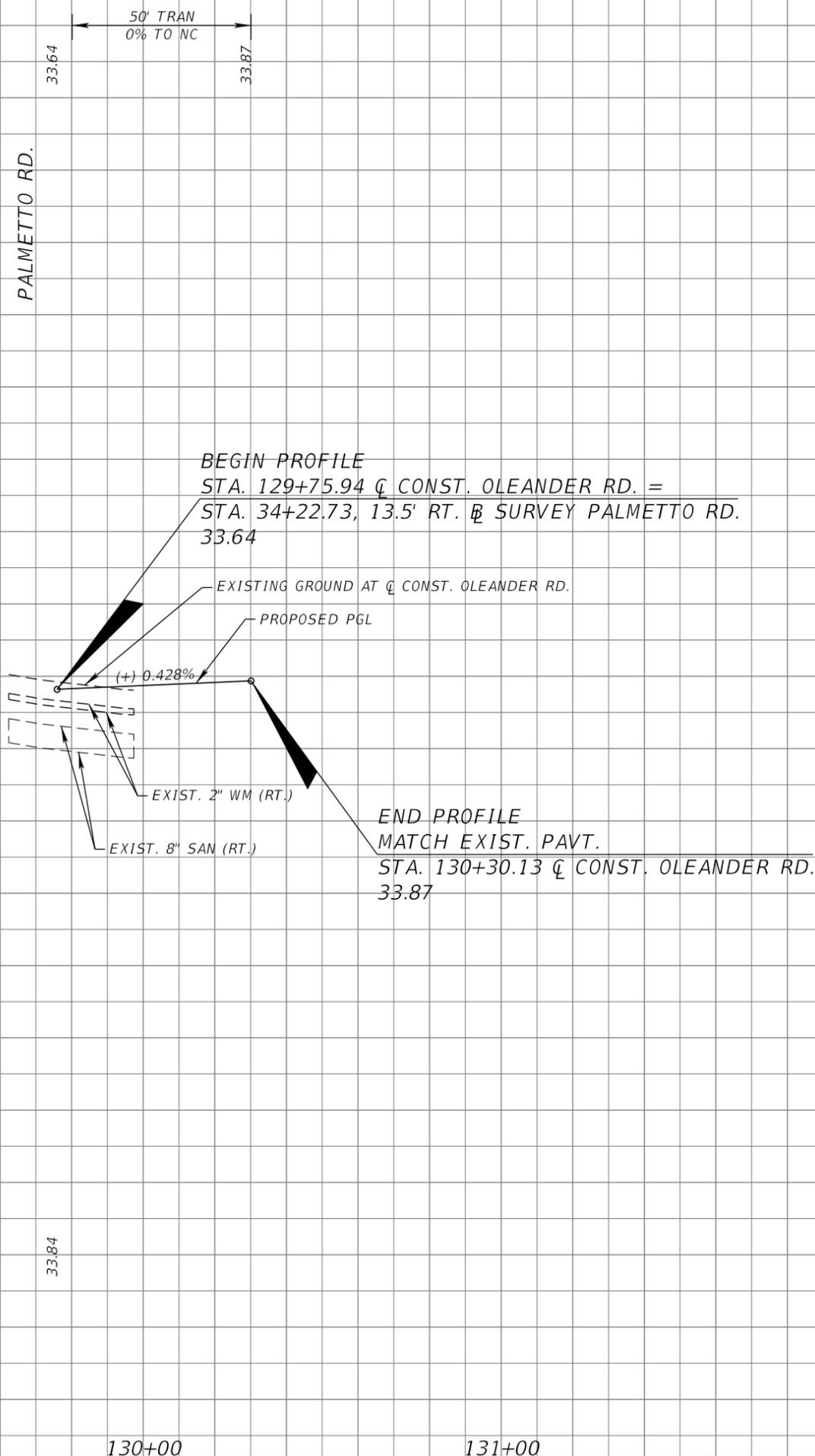
AEP NO.: 104-1091-002

SHEET TITLE

ROADWAY PROFILES (5)
 OLEANDER RD.
 STA. 129+60 TO STA. 130+30

SHEET NUMBER

21



SCALE : 1" = 40' HORIZ.
 1" = 4' VERT.

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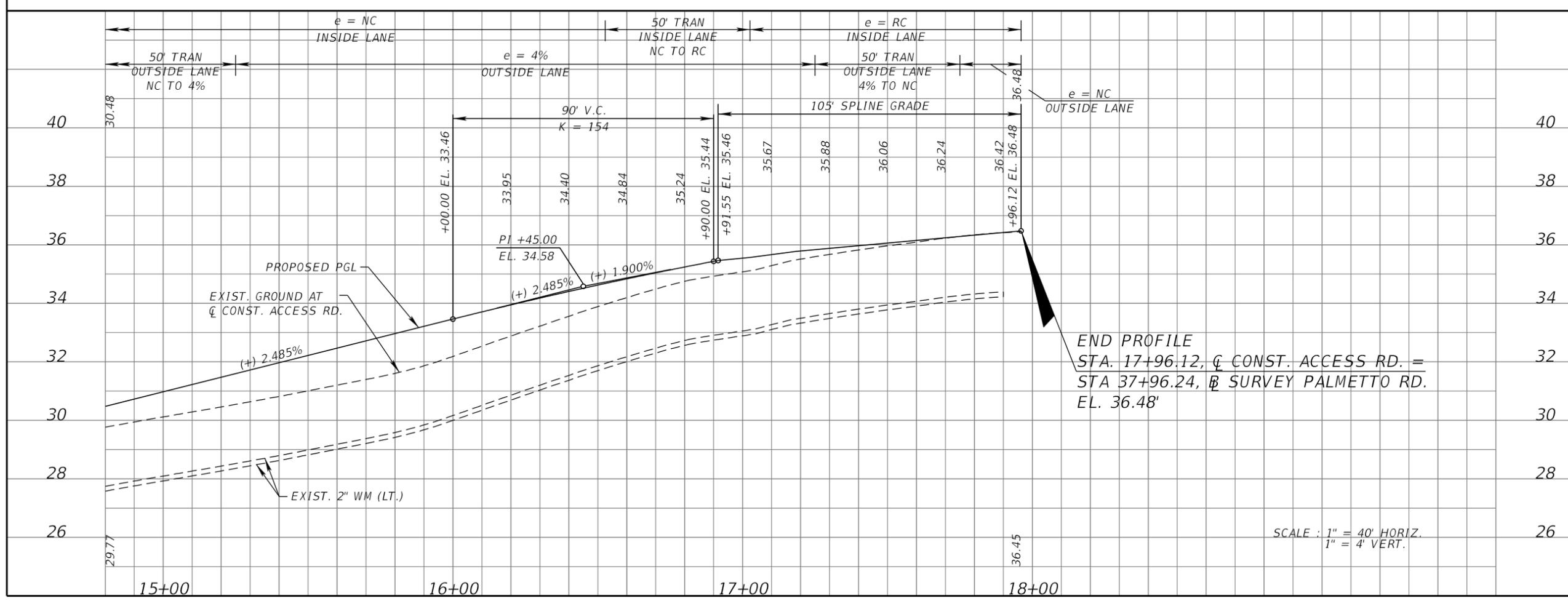
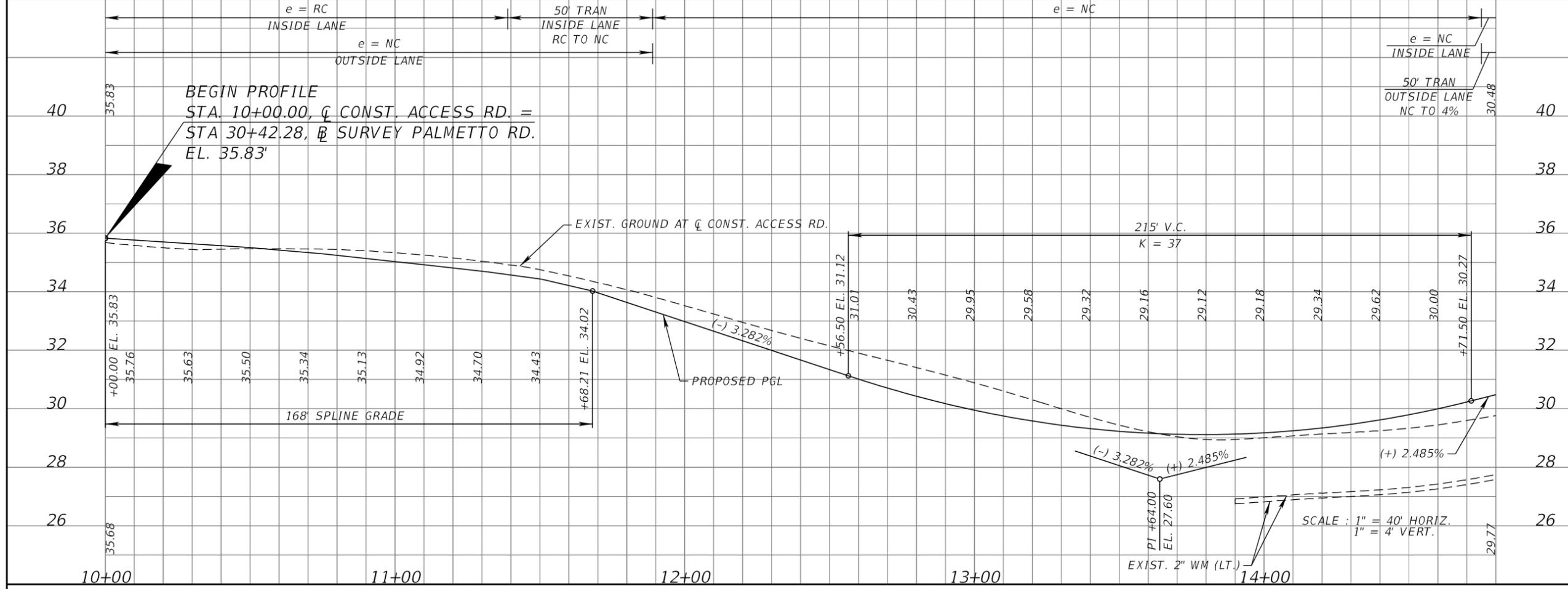
NO.	DESCRIPTION	DATE

DATE ISSUED: _____
 REVIEWED BY: VES
 DRAWN BY: SPJ
 DESIGNED BY: SPJ
 HORIZONTAL SCALE: _____
 VERTICAL SCALE: _____
 AEP NO.: 104-1091-002

SHEET TITLE
 ROADWAY PROFILES (6)
 ACCESS RD.
 STA. 10+00 TO STA. 18+00

SHEET NUMBER

22



SCALE : 1" = 40' HORIZ.
 1" = 4' VERT.

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RETURN NO. 1

RETURN NO. 2



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VERTICAL SCALE:

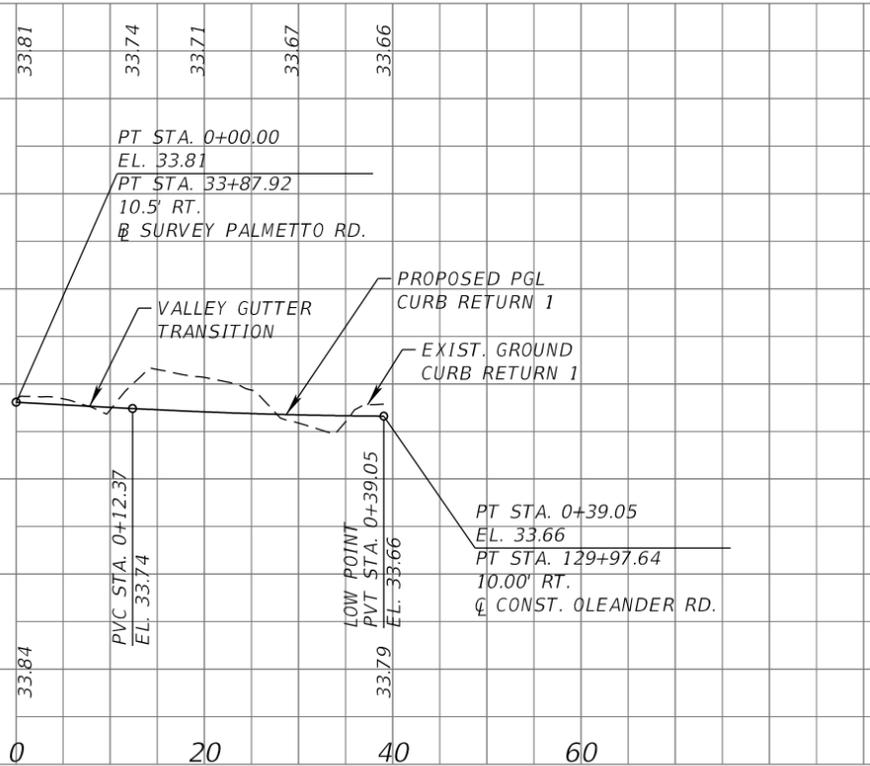
AEP NO.: 104-1091-002

SHEET TITLE

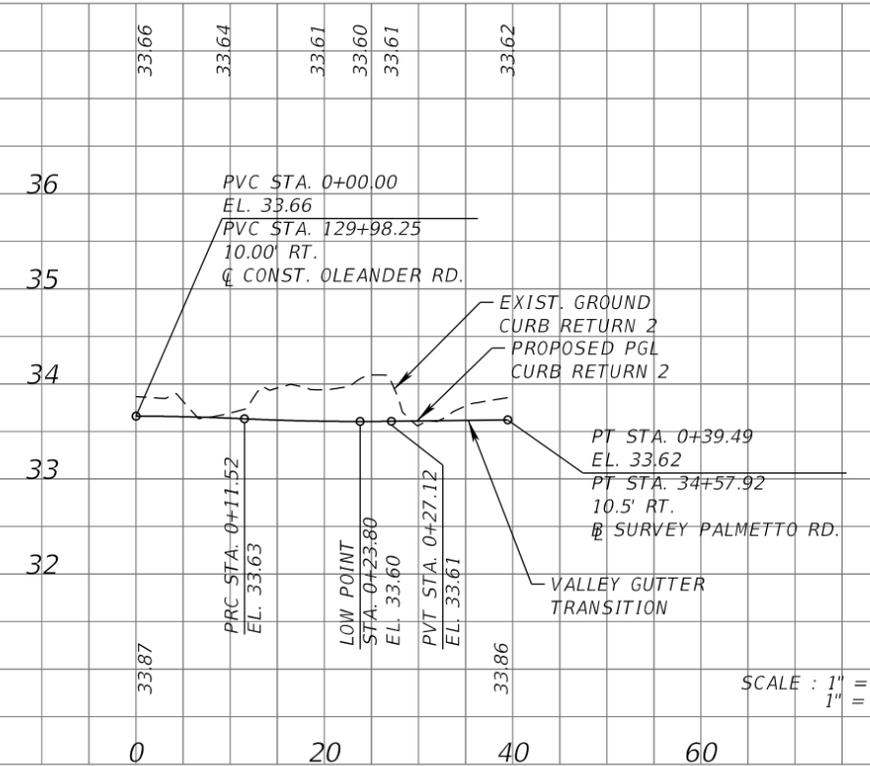
SPECIAL PROFILES

SHEET NUMBER

23



SOUTHWEST CORNER
PALMETTO RD. AT OLEANDER RD.

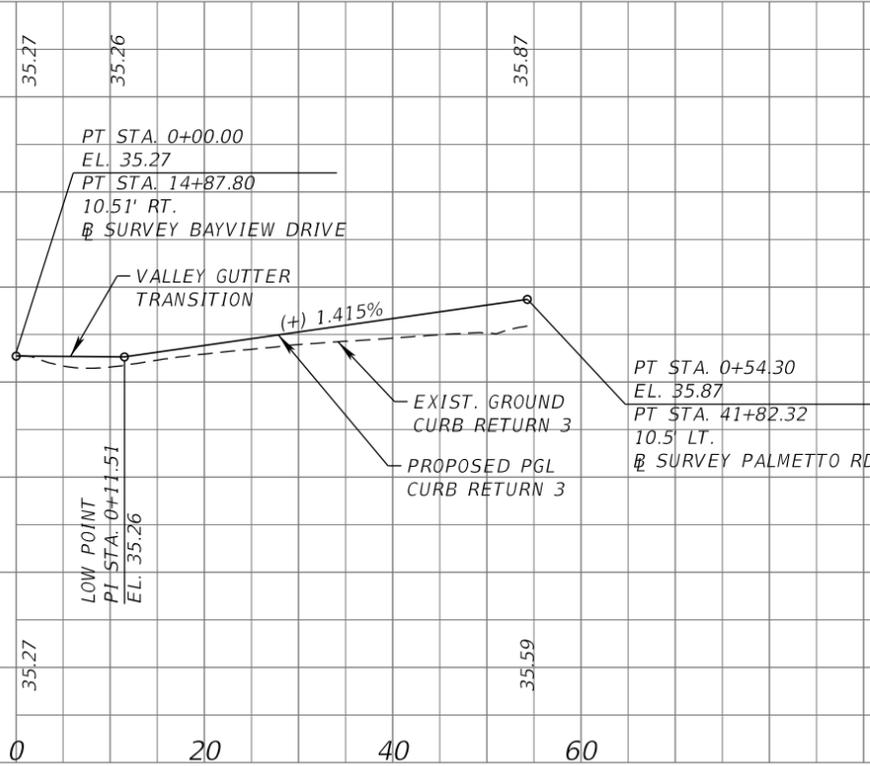


SOUTHEAST CORNER
PALMETTO RD. AT OLEANDER RD.

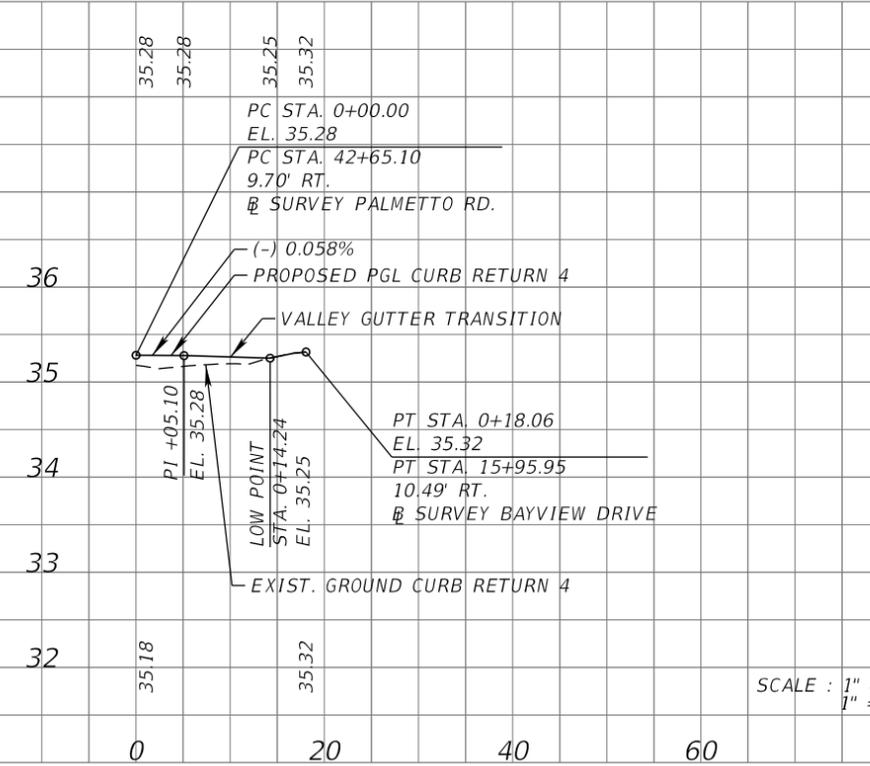
SCALE : 1" = 20' HORIZ.
1" = 2' VERT.

RETURN NO. 3

RETURN NO. 4



SOUTHWEST CORNER
PALMETTO RD. AT BAYVIEW DR.



SOUTHEAST CORNER
PALMETTO RD. AT BAYVIEW DR.

SCALE : 1" = 20' HORIZ.
1" = 2' VERT.

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← SURVEY PALMETTO RD.

S-103A

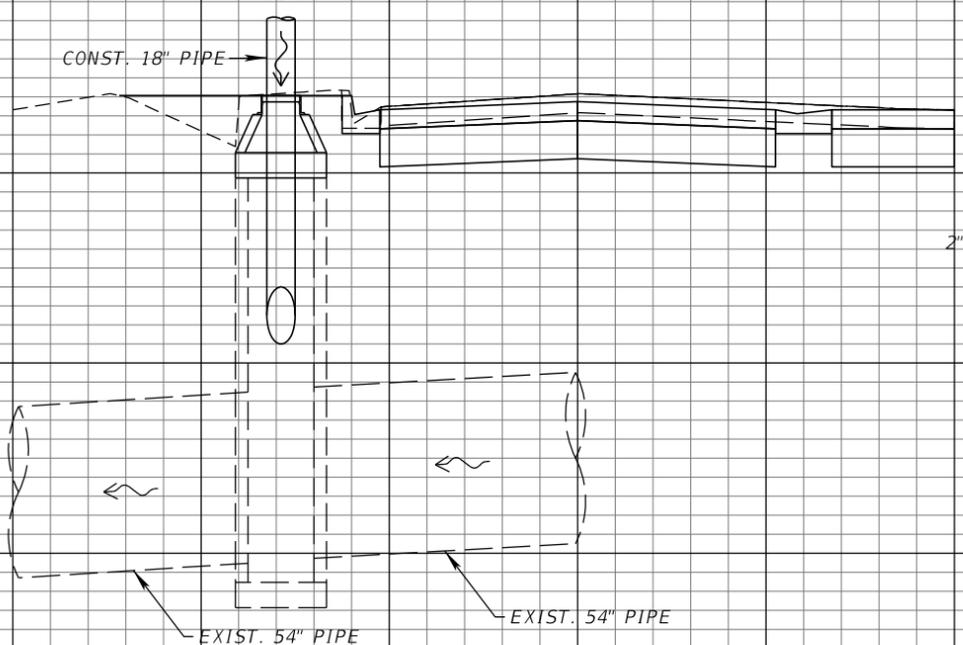
STA. 34+16.09 (15.20' LT.)
CONST. MANHOLE TYPE 8 (PARTIAL)
EX. J-BOTTOM, ALT. B (8.0' X 4.0')
RIM EL. 34.03
FL 27.50' (AH.) (SEE NOTE 2)
EX. FL 21.87' (RT.)
EX. FL 21.74' (LT.)
INDEX NO. 425-001, 425-010

FROM
S-106A

CONST. 18" PIPE

2" WM

144
BFOC
2" GM



S-103A

34+16.09

NOTES:

1. 5' OF 8" NONPERFORATED UNDERDRAIN OUTLET PIPE TO BE PROVIDED AT THE CONNECTIONS TO ALL STORM DRAIN STRUCTURES.
2. CONTRACTOR TO FIELD VERIFY ELEVATION OF EXISTING TOP SLAB AND ADJUST PROPOSED FLOWLINE ELEVATION AS NEEDED TO MAINTAIN A MINIMUM OF 1.5' FROM THE OUTSIDE OF THE PROPOSED PIPE TO THE BOTTOM OF THE PROPOSED TOP SLAB.
3. CONTRACTOR TO UTILIZE RCP CLASS III FOR ALL STORM DRAIN PIPE UNLESS OTHERWISE NOTED.

S-100

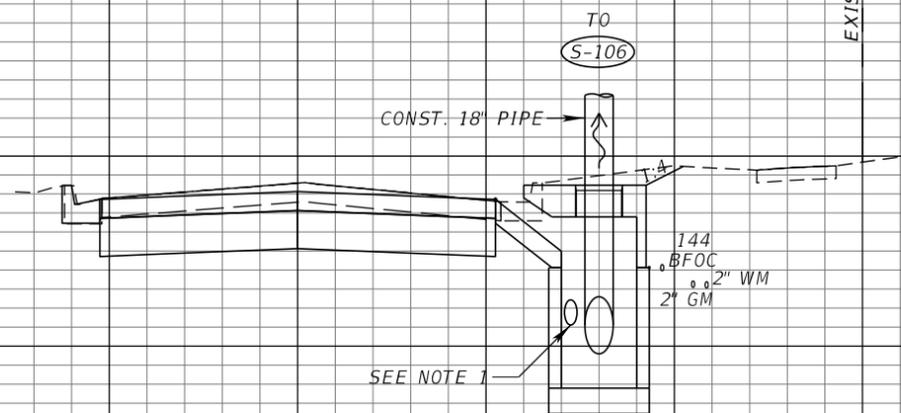
STA. 33+78.96 (17.51' RT.)
CONST. CURB INLET TYPE 3
THEO. G.P. EL. 33.73
FL 29.80' (AH.)
FL 30.56' (BK.) (8" UNDERDRAIN)
INDEX NO. 425-020

TO
S-106

CONST. 18" PIPE

8" SAN

144
BFOC
2" WM
2" GM



EXIST. R/W

S-100

33+78.96

← SURVEY PALMETTO RD.

1" = 10' Horizontal
1" = 5' Vertical

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TOWN OF
BELLEAIR
INC. 1923

PUBLIC WORKS DEPARTMENT
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BELLEAIR, FL 33756

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Tampa, Florida 33624
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APPROVED BY:

JAMES FIKE, P.E.
FLA. REG. NO. 67096
DATE: _____

REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED:

REVIEWED BY: JAF

DRAWN BY: JAB

DESIGNED BY: JAB

HORIZONTAL SCALE:

VERTICAL SCALE:

AEP NO.: 104-1091-002

SHEET TITLE

DRAINAGE STRUCTURES

SHEET NUMBER

24

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← SURVEY PALMETTO RD.

(S-107)

STA. 34+47.15 (19.66' RT.)
CONST. CURB INLET TYPE 3
J-BOTTOM, ALT. B (6.0' X 3.5')
THEO. G.P. EL. 33.48
FL 24.75' (AH.)
FL 23.15' (BK.)
FL 29.94' (AH.) (8" UNDERDRAIN)
INDEX NO. 425-010, 425-020

FROM (S-108)

CONST. 48" PIPE

144 BFOC
2" GM
6" WM 6" WM

SEE NOTE 1

CONST. 48" PIPE

TO (S-106)

(S-106A)

STA. 34+27.27 (16.00' LT.)
CONST. CURB INLET TYPE 2
THEO. G.P. EL. 33.50
FL 28.50' (BK.)
INDEX NO. 425-020

SEE NOTE 2

CONST. 18" PIPE

TO (S-103A)

(S-107)

34+47.15

NOTES:

- 1. 5' OF 8" NONPERFORATED UNDERDRAIN OUTLET PIPE TO BE PROVIDED AT THE CONNECTIONS TO ALL STORM DRAIN STRUCTURES.
- 2. CONTRACTOR TO ENSURE THAT THE GUTTER ELEVATION AT STA. 34+43 IN THE 10' LENGTH OF NONSTANDARD GUTTER TRANSITION UPSTREAM OF S-106A IS SET AT OR BELOW ELEVATION 33.44 IN ORDER TO MAINTAIN POSITIVE FLOW TO THE INLET.



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VERTICAL SCALE:

AEP NO.: 104-1091-002

SHEET TITLE

DRAINAGE STRUCTURES

SHEET NUMBER

25

1" = 10' Horizontal
1" = 5' Vertical

← SURVEY PALMETTO RD.

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← SURVEY PALMETTO RD.

(S-109)

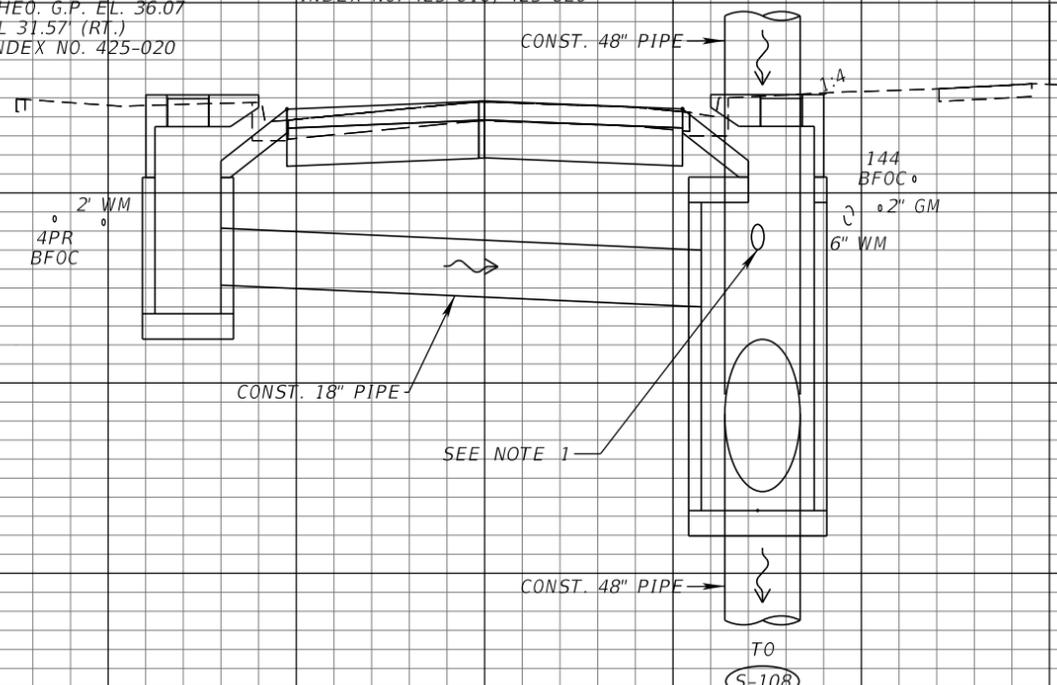
STA. 37+87.28 (16.00' RT.)
CONST. CURB INLET TYPE 1
J-BOTTOM, ALT. B (6.0' X 3.5')
THEO. G.P. EL. 36.08
FL 26.15' (AH. & BK.)
FL 31.00' (LT.)
FL 32.51' (AH.) (8" UNDERDRAIN)
INDEX NO. 425-010, 425-020

(S-110)

STA. 37+87.28 (16.00' LT.)
CONST. CURB INLET TYPE 1
THEO. G.P. EL. 36.07
FL 31.57' (RT.)
INDEX NO. 425-020

FROM (S-112)

EXIST. R/W



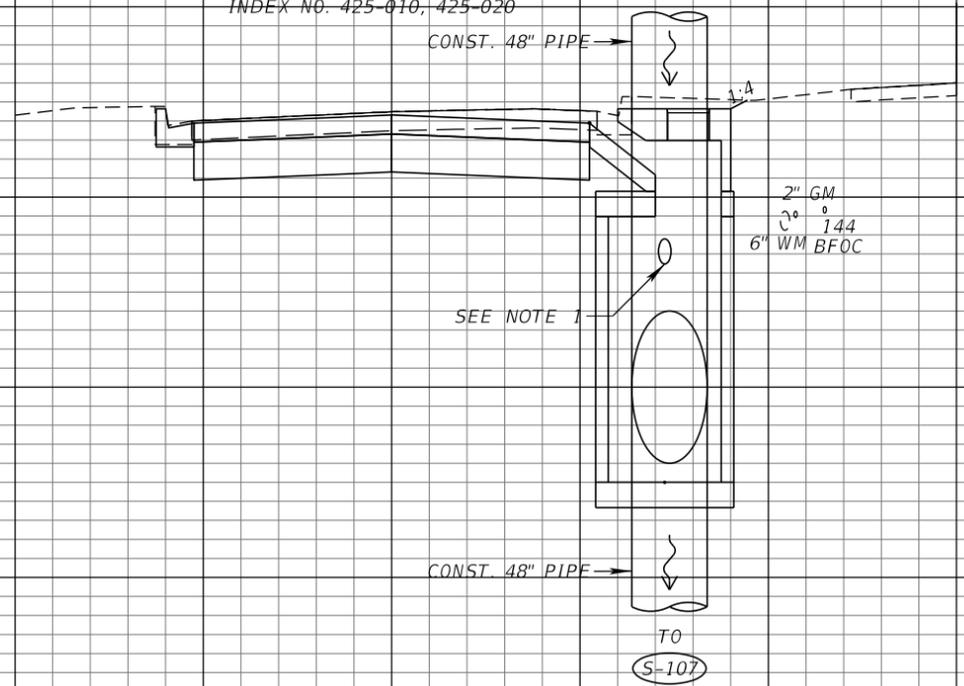
NOTE 1:
5' OF 8" NONPERFORATED UNDERDRAIN OUTLET PIPE TO BE PROVIDED
AT THE CONNECTIONS TO ALL STORM DRAIN STRUCTURES.

(S-108)

STA. 35+11.38 (16.00' RT.)
CONST. CURB INLET TYPE 1
J-BOTTOM, ALT. B (6.0' X 3.5')
THEO. G.P. EL. 33.81
FL 25.00' (AH. & BK.)
FL 30.24' (AH.) (8" UNDERDRAIN)
INDEX NO. 425-010, 425-020

FROM (S-109)

EXIST. R/W



(S-109)

(S-110)

37+87.28

(S-108)

35+11.38

← SURVEY PALMETTO RD.

1" = 10' Horizontal
1" = 5' Vertical

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TOWN OF BELLEAIR
INC. 1923

PUBLIC WORKS DEPARTMENT
901 PONCE DE LEON BLVD.
BELLEAIR, FL 33756

PALMETTO ROAD NORTH
STREET AND DRAINAGE
IMPROVEMENTS

SUB-CONSULTANTS

Mckim & Creed, Inc.
3903 Northdale Boulevard,
Suite 140W
Tampa, Florida 33624
(813) 549-3740

APPROVED BY:

JAMES FIKE, P.E.
FLA. REG. NO. 67096
DATE: _____

REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED:

REVIEWED BY: JAF

DRAWN BY: JAB

DESIGNED BY: JAB

HORIZONTAL SCALE:

VERTICAL SCALE:

AEP NO.: 104-1091-002

SHEET TITLE

DRAINAGE STRUCTURES

SHEET NUMBER

26

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

← SURVEY PALMETTO RD.

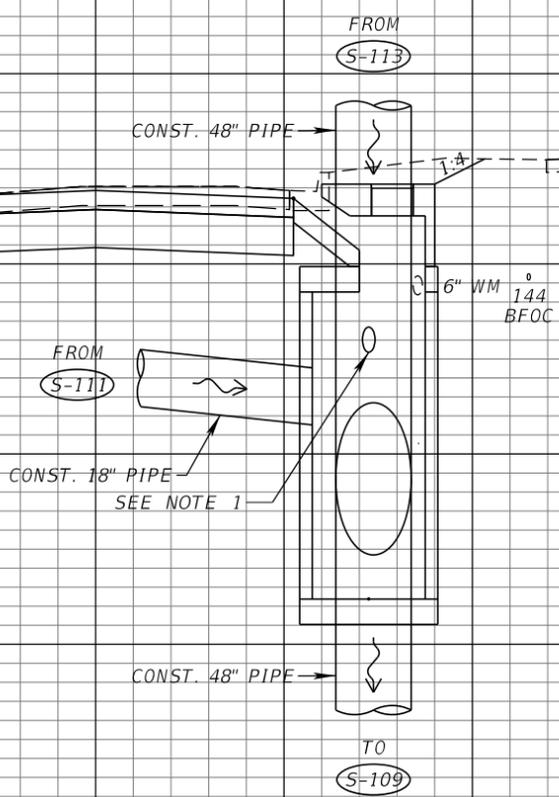
(S-112)

STA. 41+96.32 (16.00' RT.)
CONST. CURB INLET TYPE 1
J-BOTTOM, ALT. B (6.0' X 3.5')
THEO. G.P. EL. 35.59
FL 26.35' (AH. & BK.)
FL 29.78' (LT.)
FL 31.68' (AH. & BK.) (8" UNDERDRAIN)
INDEX NO. 425-010, 425-020

EXIST. R/W

36
34
32
30
28
26
24

2" GM 6" WM
4PR BFOC 4PR BFOC



NOTE 1:
5' OF 8" NONPERFORATED UNDERDRAIN OUTLET PIPE TO BE PROVIDED
AT THE CONNECTIONS TO ALL STORM DRAIN STRUCTURES.

(S-112)
41+96.32



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SHEET TITLE

DRAINAGE STRUCTURES

SHEET NUMBER

27

1" = 10' Horizontal
1" = 5' Vertical

← SURVEY PALMETTO RD.

(S-111)

STA. 41+76.32 (16.00' LT.)
CONST. CURB INLET TYPE 1
ALT. A
THEO. G.P. EL. 35.80
FL 30.00' (RT.)
INDEX NO. 425-020

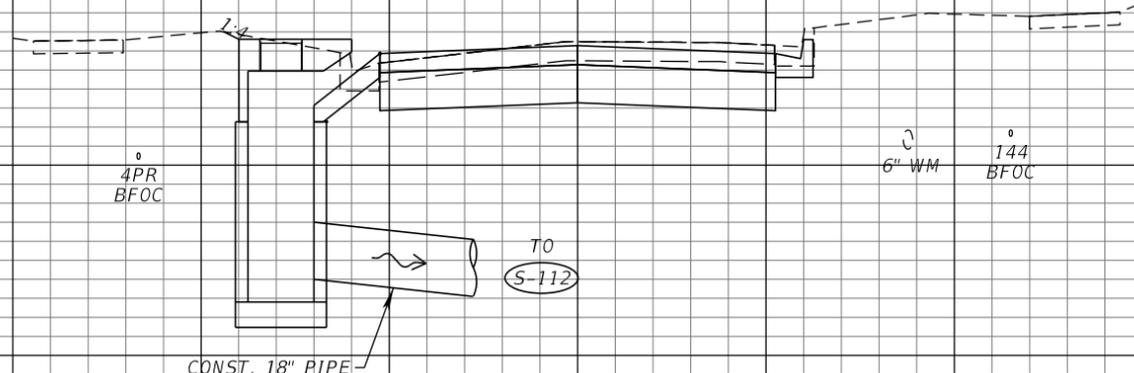
EXIST. R/W

36
34
32
30
28

2" GM 6" WM
4PR BFOC

4PR BFOC

6" WM 144 BFOC



(S-111)
41+76.32

70 60 50 40 30 20 10 0 10 20 30 40 50

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 DRAWN BY: JAB
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 HORIZONTAL SCALE: _____
 VERTICAL SCALE: _____
 AEP NO.: 104-1091-002

SHEET TITLE

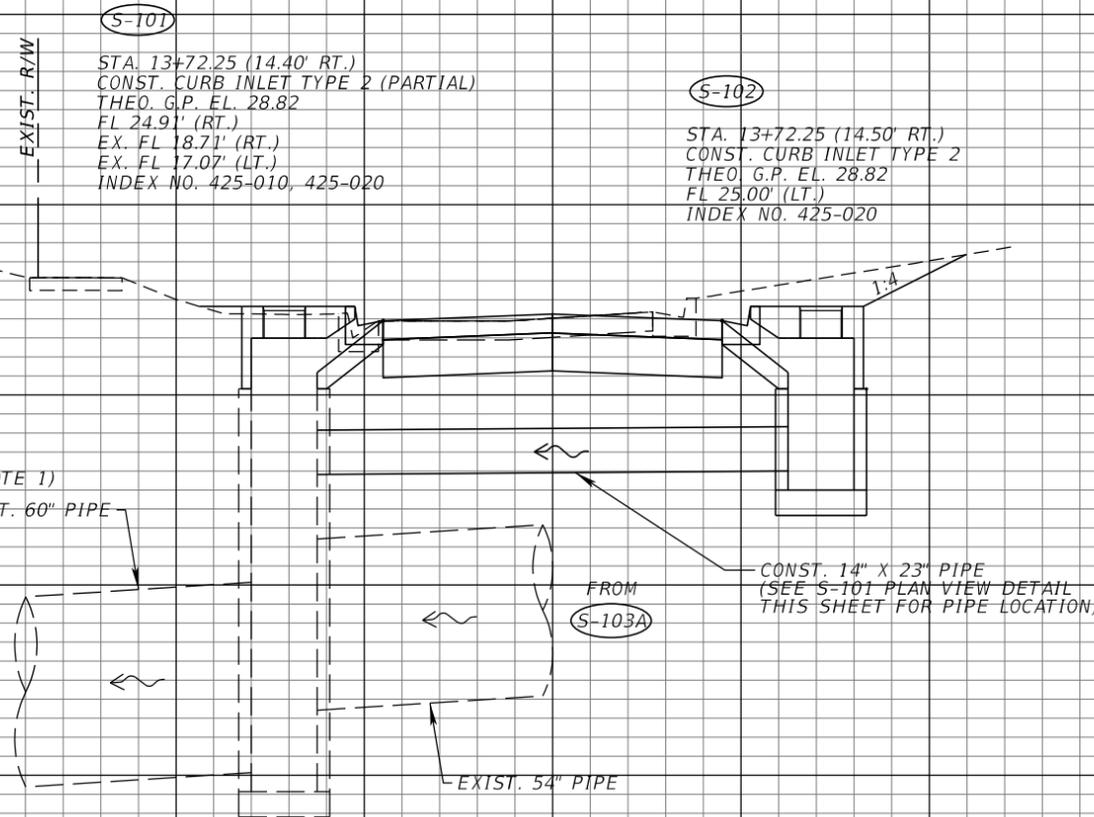
DRAINAGE STRUCTURES

SHEET NUMBER

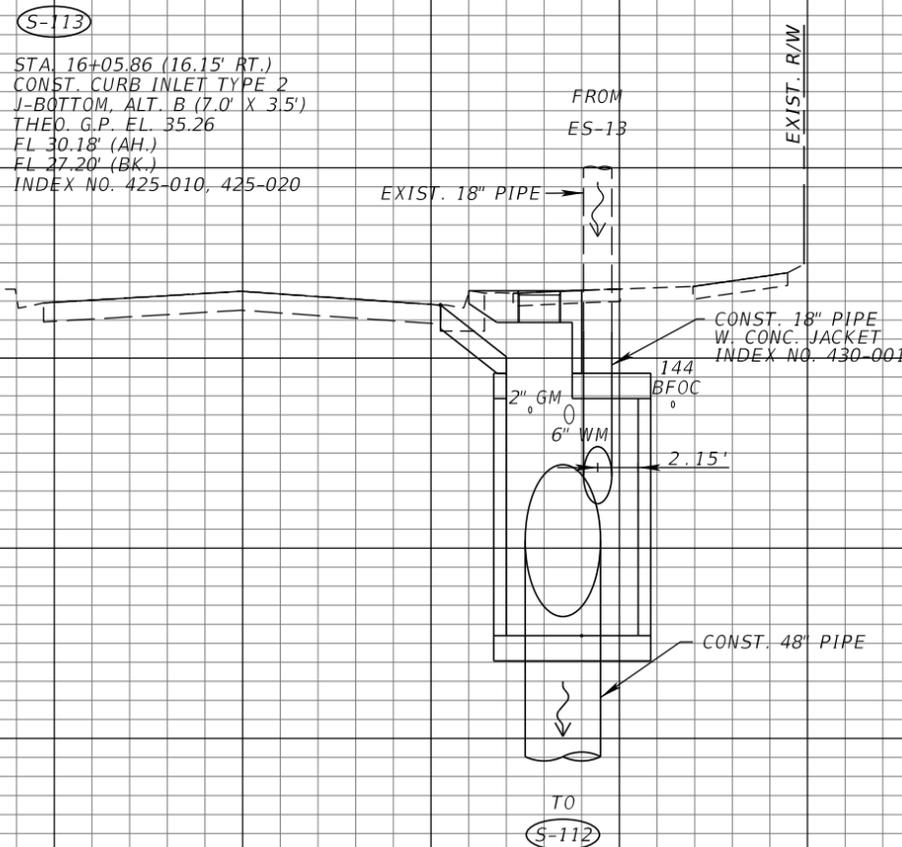
28

CONTRACTOR TO FIELD
 VERIFY DIMENSIONS PRIOR
 TO ORDERING MATERIALS
 FOR TOP SLAB AND INLET.

S-101 PLAN VIEW DETAIL
 NTS



NOTES:
 1. CONTRACTOR TO PLACE OUTSIDE OF PROPOSED PIPE WITH A 2" OFFSET TO INTERIOR WALL.



1" = 10' Horizontal
 1" = 5' Vertical

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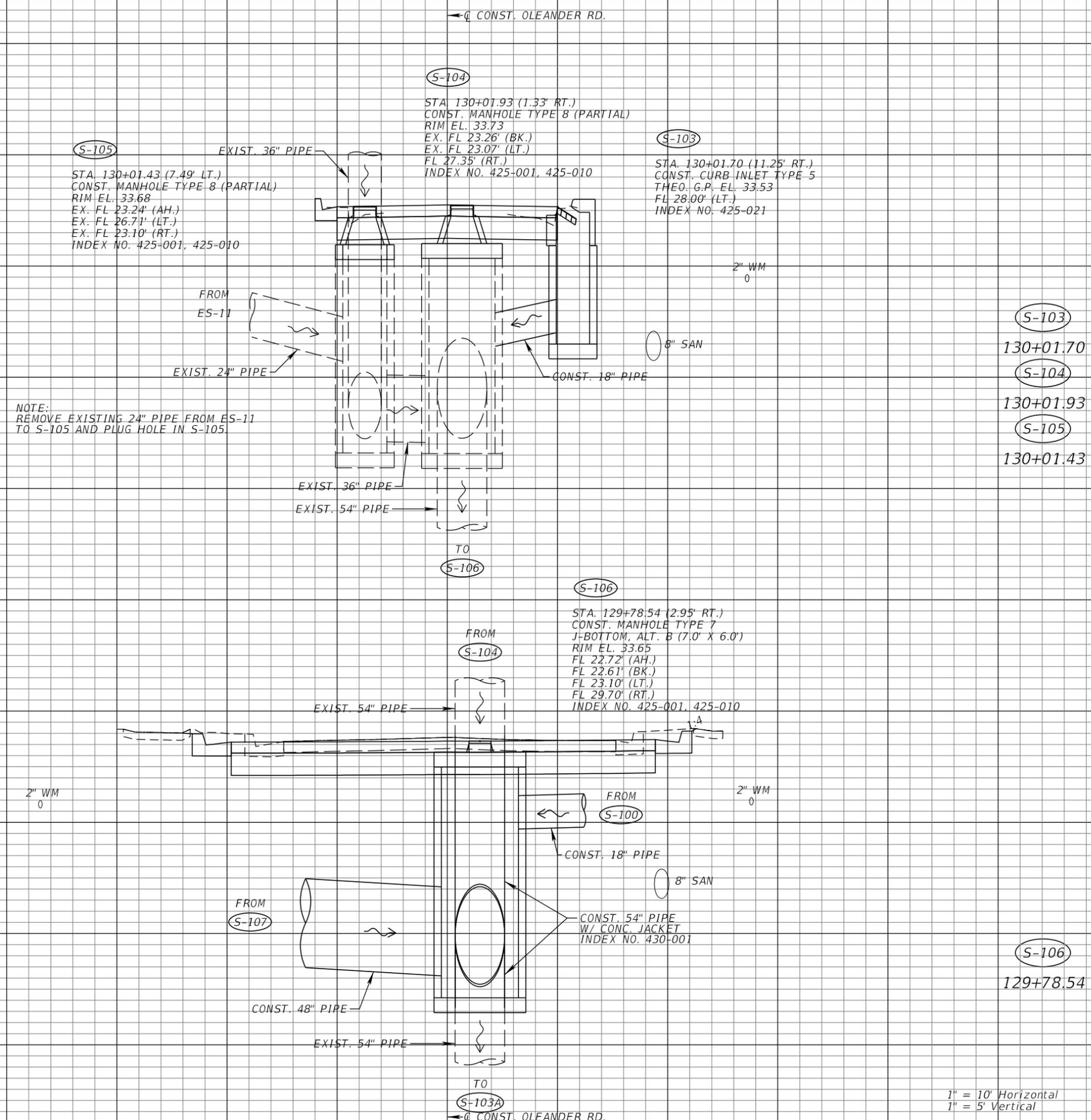
AEP NO.: 104-1091-002

SHEET TITLE

DRAINAGE STRUCTURES

SHEET NUMBER

29



NOTE:
REMOVE EXISTING 24\"/>

1" = 10' Horizontal
1" = 5' Vertical

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← SURVEY PALMETTO RD.

Regular Exc.		Embankment	
A	V	A	V



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APPROVED BY:

VINCENT SHINE, P.E.
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REVISIONS

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DATE ISSUED:

REVIEWED BY: VES

DRAWN BY: SPJ

DESIGNED BY: SPJ

HORIZONTAL SCALE:

VERTICAL SCALE:

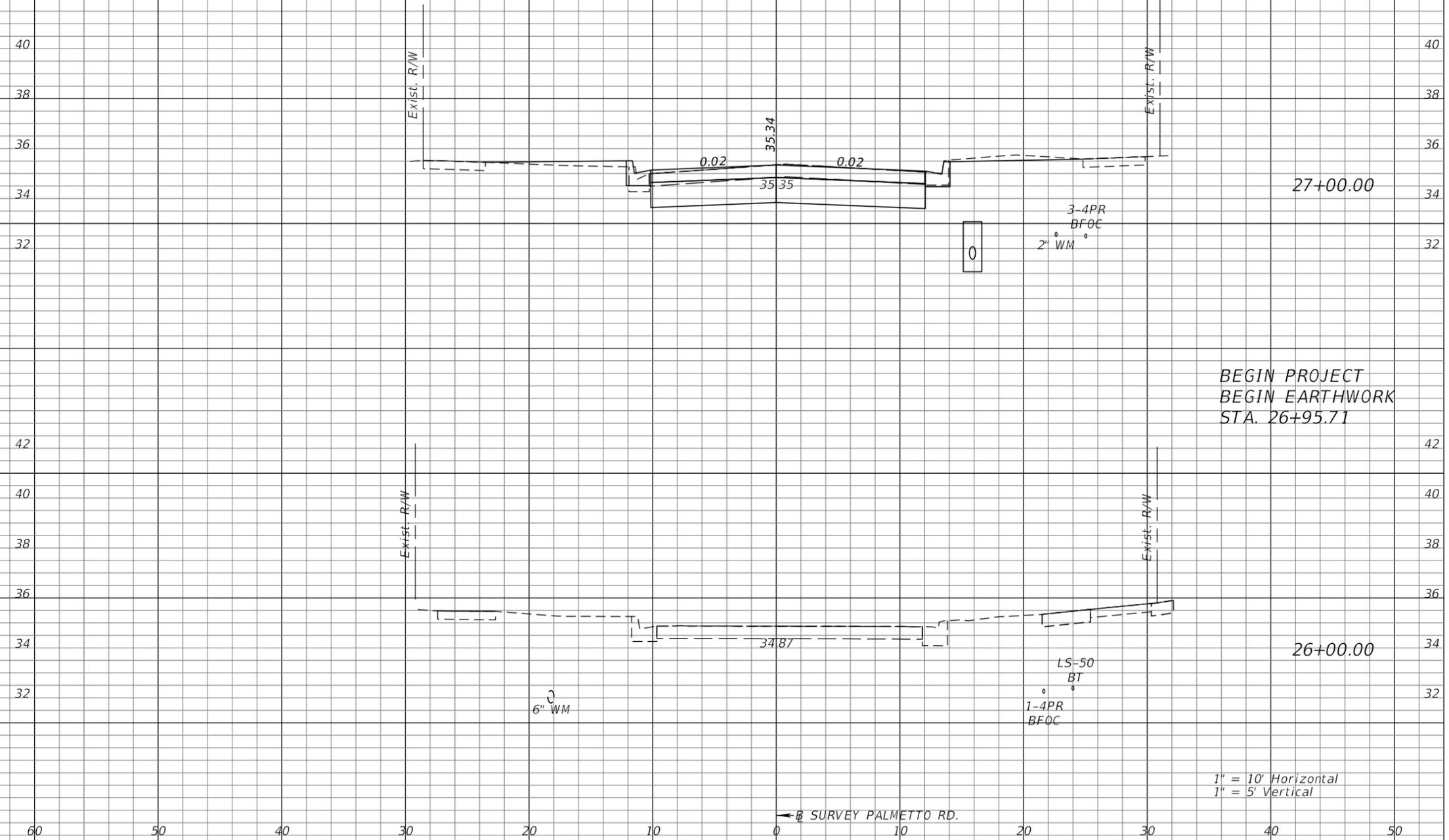
AEP NO.: 104-1091-002

SHEET TITLE

**CROSS SECTIONS
 PALMETTO ROAD**

SHEET NUMBER

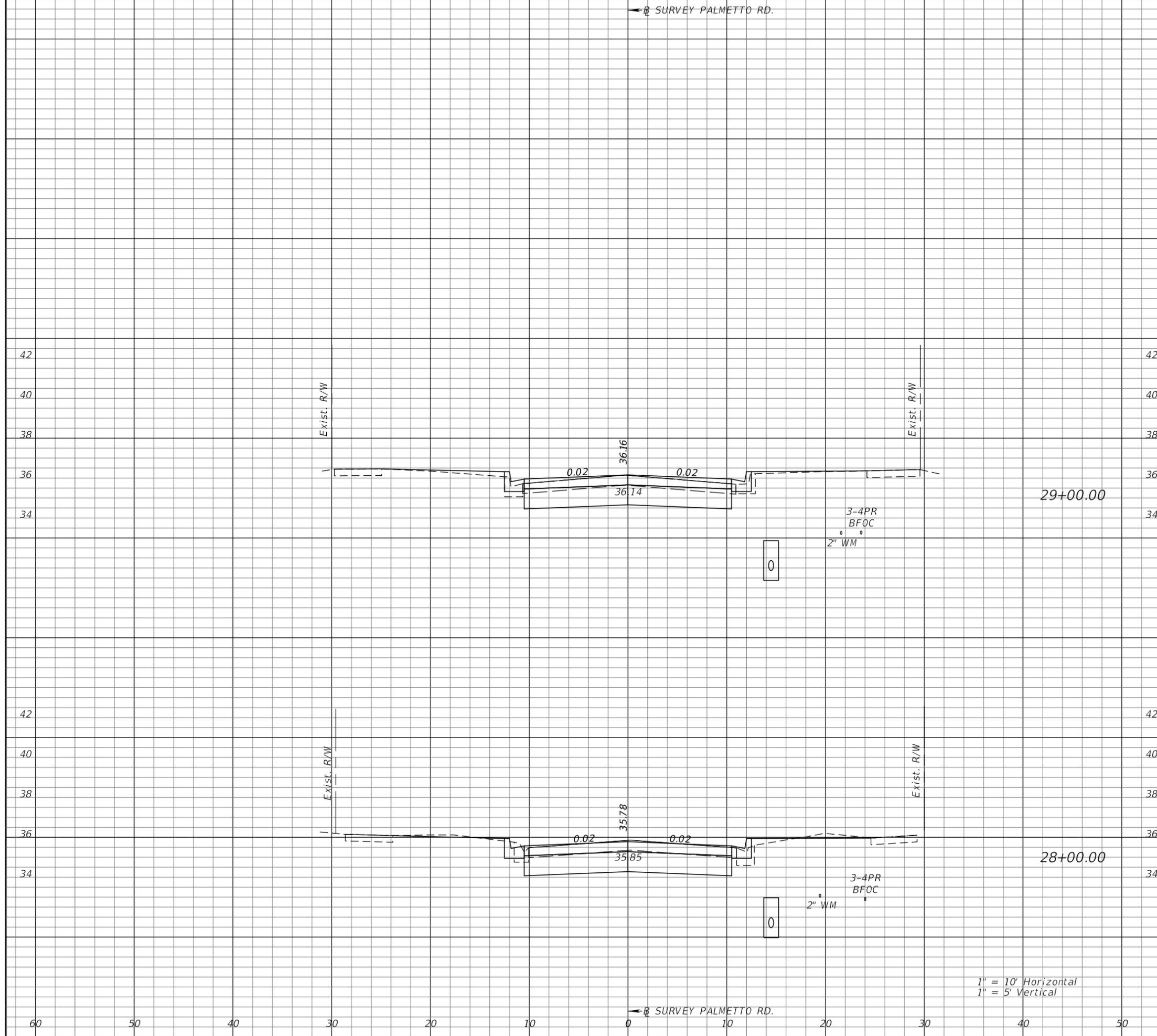
30



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← SURVEY PALMETTO RD.

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Regular		Exc.		Embankment	
A	V	A	V	A	V
30.7	122	1.8	5	35.1	133



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DRAWN BY: SPJ
DESIGNED BY: SPJ
HORIZONTAL SCALE: _____
VERTICAL SCALE: _____
AEP NO.: 104-1091-002

SHEET TITLE

CROSS SECTIONS PALMETTO ROAD

SHEET NUMBER

31

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← SURVEY PALMETTO RD.

← SURVEY PALMETTO RD.

1" = 10' Horizontal
1" = 5' Vertical

← SURVEY PALMETTO RD.

Regular Exc.		Embankment	
A	V	A	V



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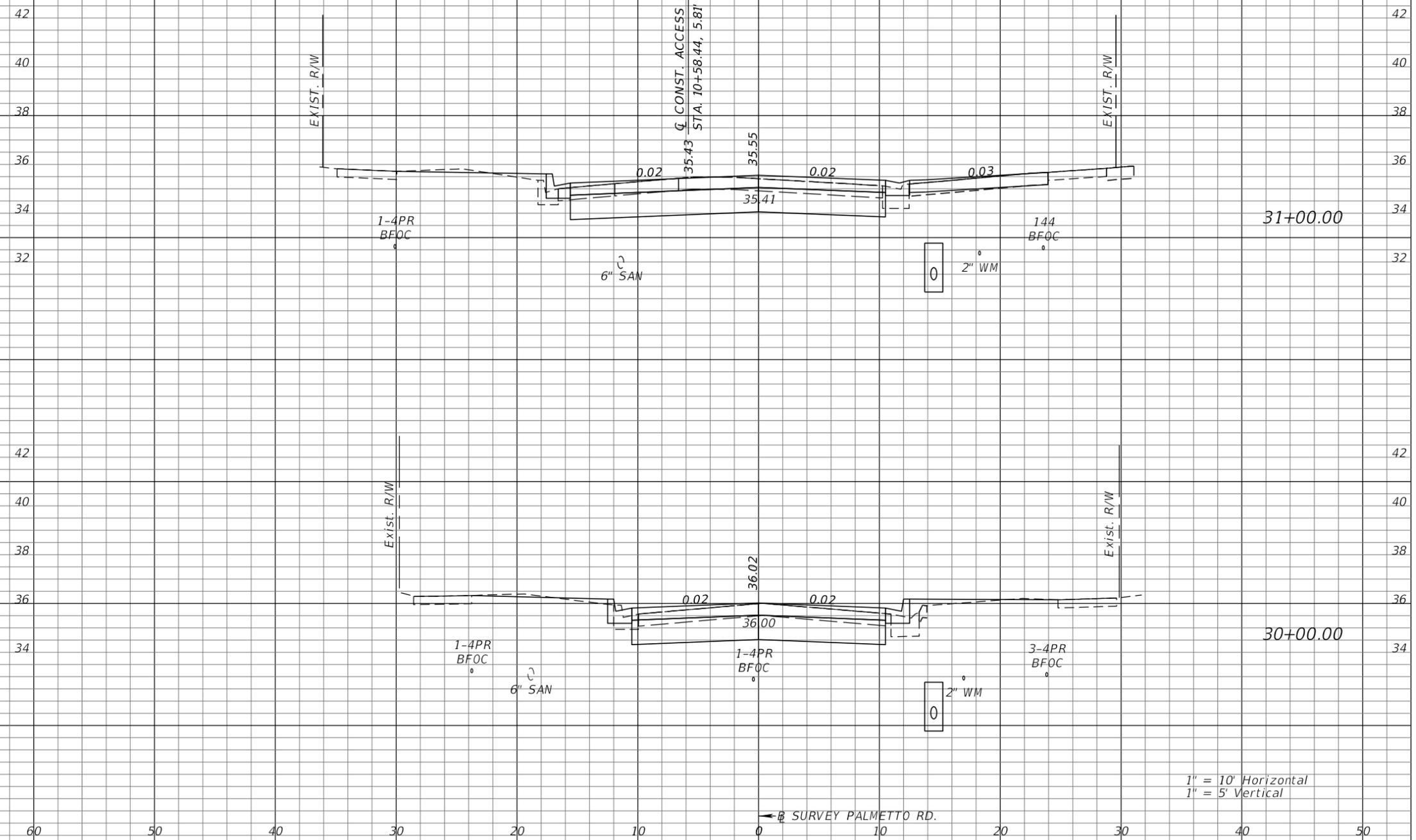
AEP NO.: 104-1091-002

SHEET TITLE

**CROSS SECTIONS
 PALMETTO ROAD**

SHEET NUMBER

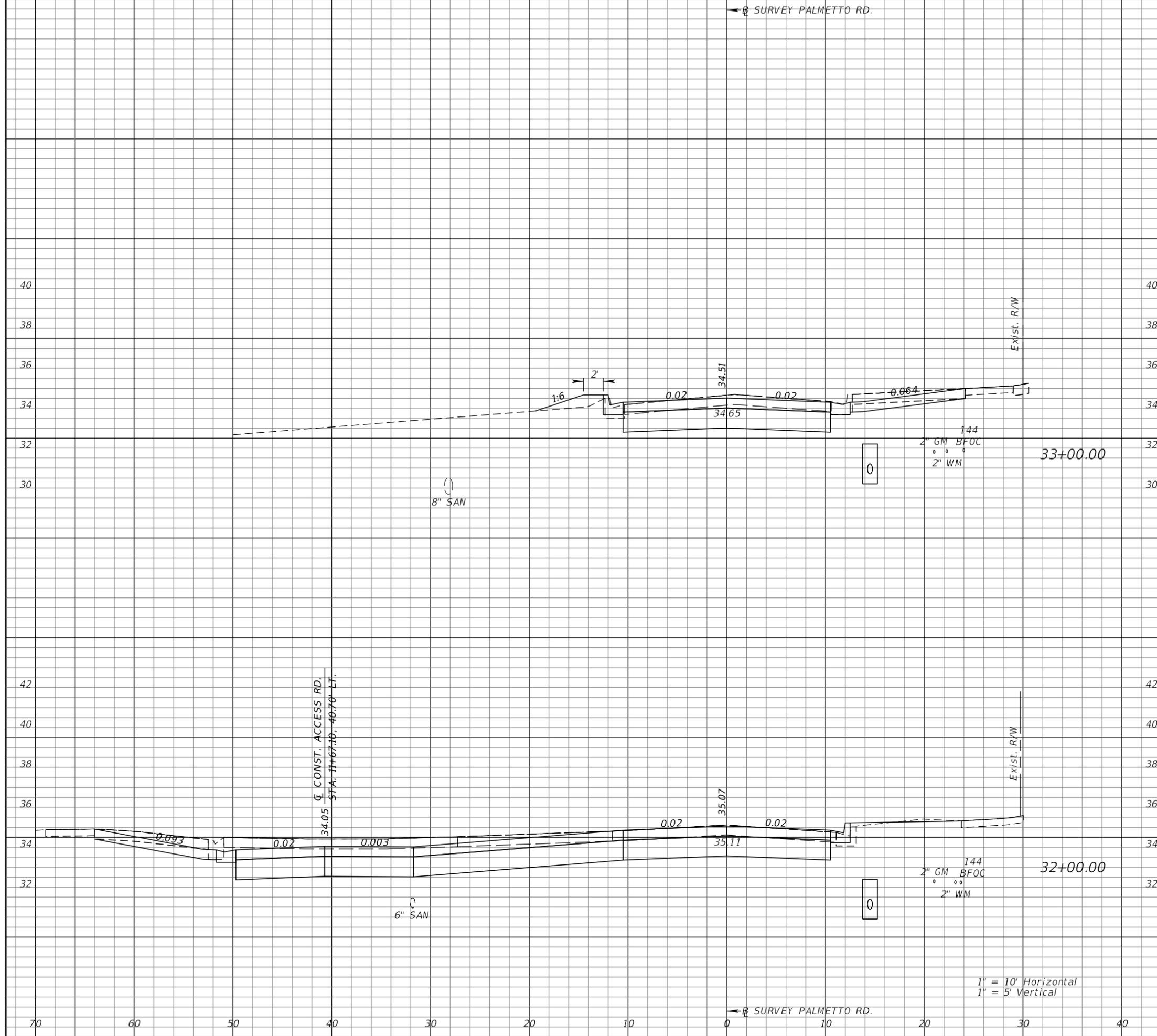
32



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← SURVEY PALMETTO RD.

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Station	Regular		Exc.		Embankment	
	A	V	A	V	A	V
32+00.00	110.2	275	0.5	2		
33+00.00	38.0	274	2.4	5		



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HORIZONTAL SCALE: _____
VERTICAL SCALE: _____
AEP NO.: 104-1091-002

SHEET TITLE
**CROSS SECTIONS
PALMETTO ROAD**

SHEET NUMBER
33

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1" = 5' Vertical

← SURVEY PALMETTO RD.

Regular Exc.		Embankment	
A	V	A	V



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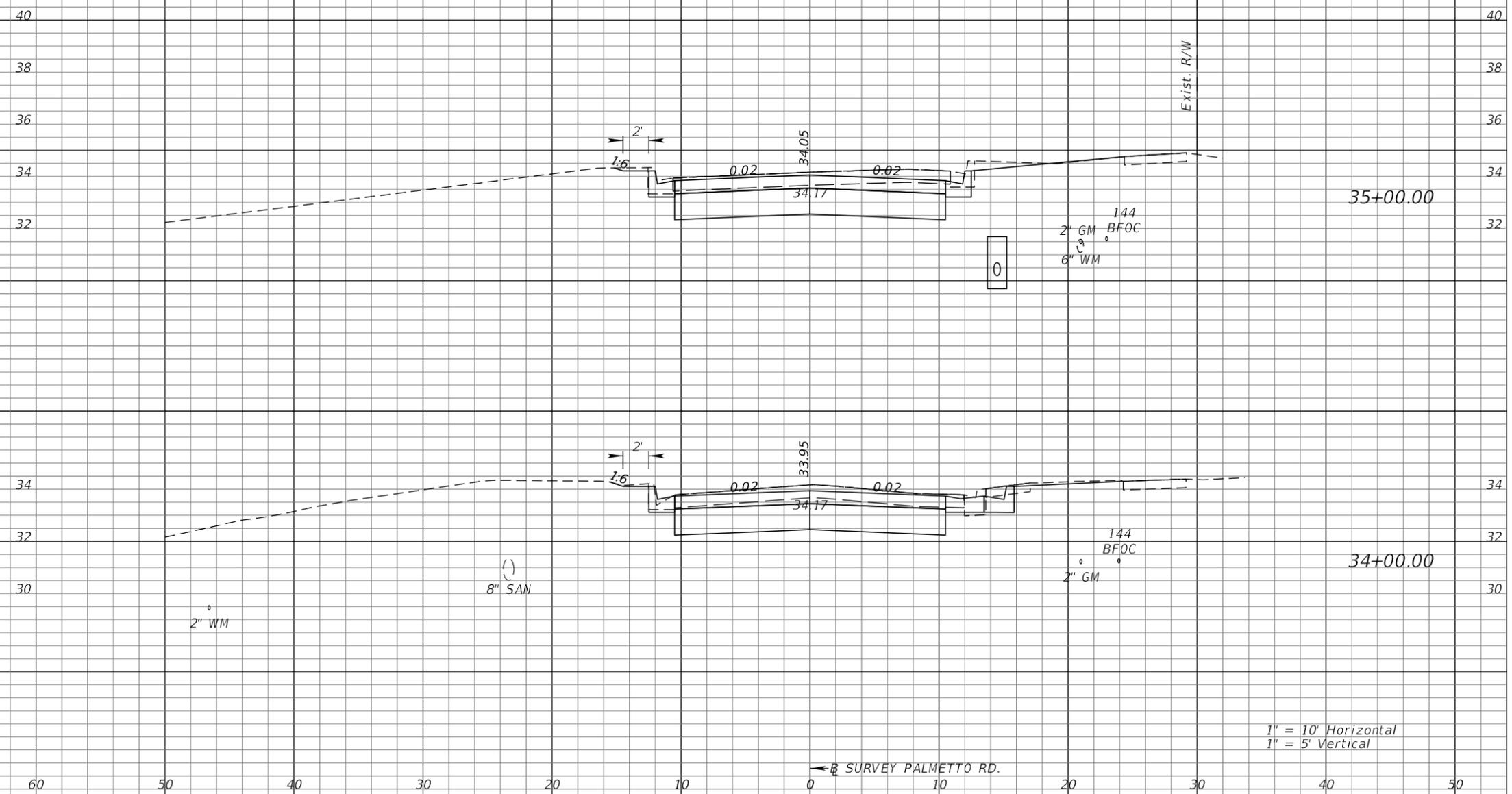
AEP NO.: 104-1091-002

SHEET TITLE

**CROSS SECTIONS
 PALMETTO ROAD**

SHEET NUMBER

34



1" = 10' Horizontal
 1" = 5' Vertical

← SURVEY PALMETTO RD.

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← SURVEY PALMETTO RD.

Regular Exc.		Embankment	
A	V	A	V



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HORIZONTAL SCALE: _____

VERTICAL SCALE: _____

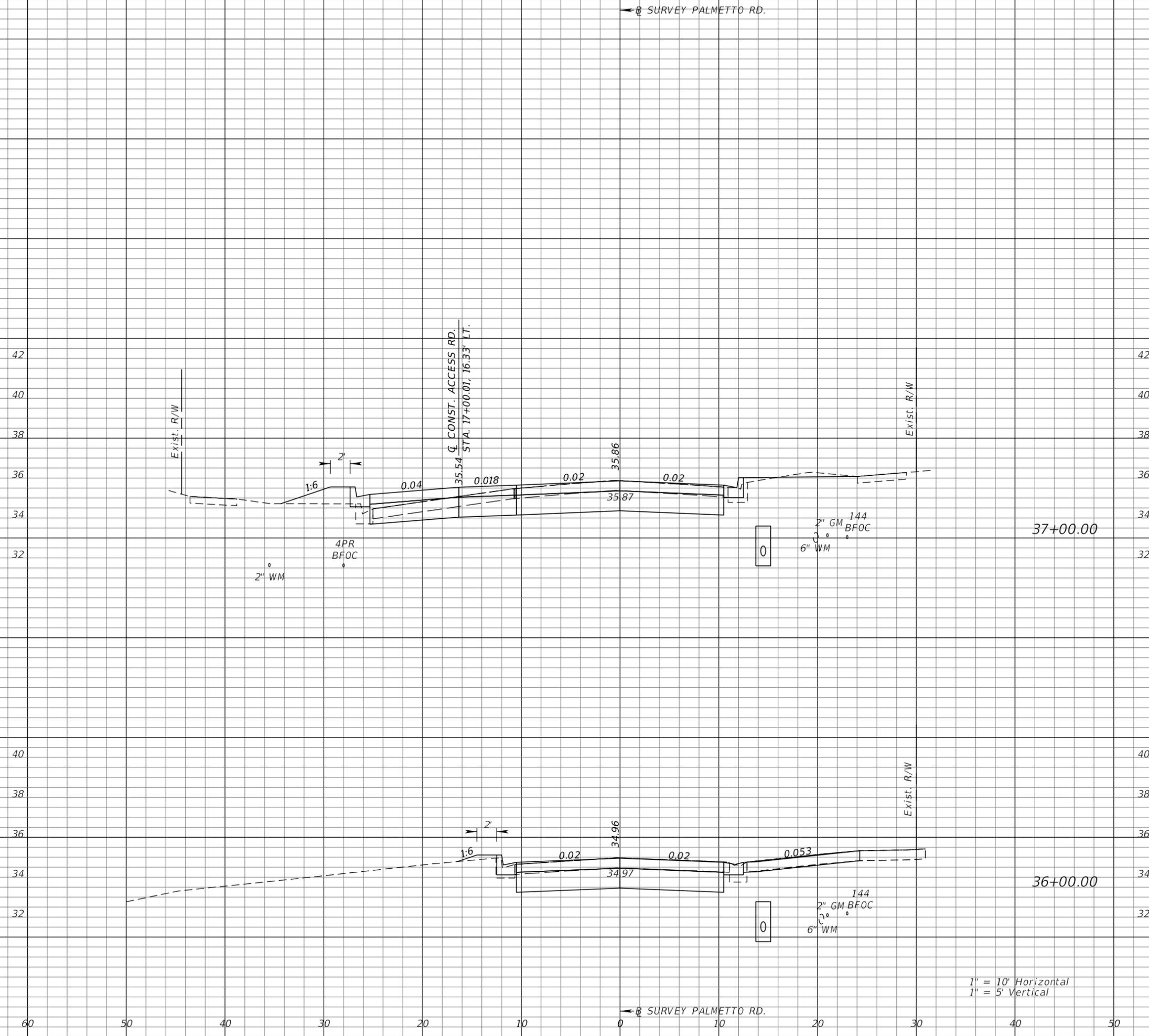
AEP NO.: 104-1091-002

SHEET TITLE

**CROSS SECTIONS
 PALMETTO ROAD**

SHEET NUMBER

35



1" = 10' Horizontal
 1" = 5' Vertical

← SURVEY PALMETTO RD.

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← SURVEY PALMETTO RD.

Regular Exc.		Embankment	
A	V	A	V



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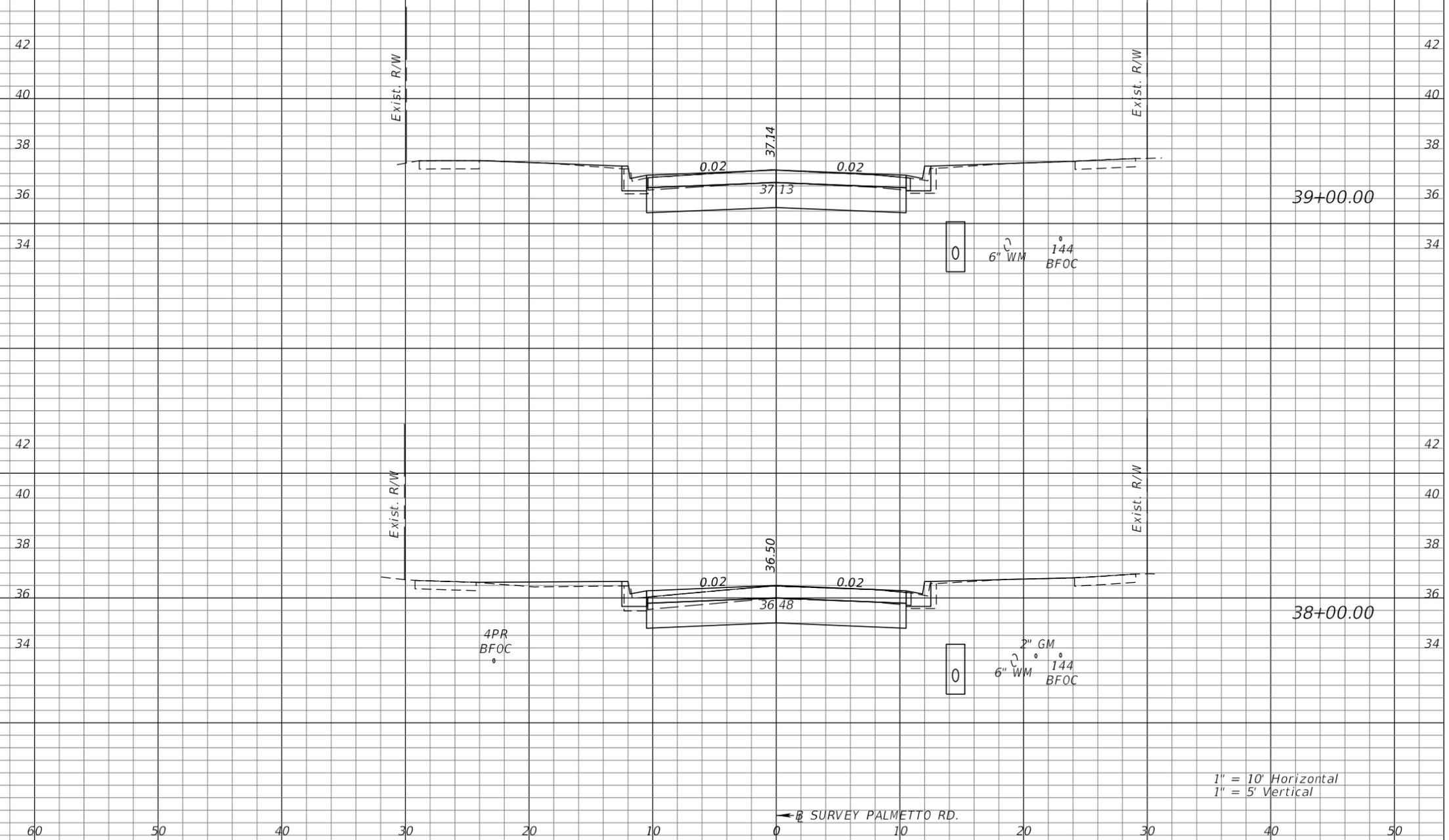
AEP NO.: 104-1091-002

SHEET TITLE

**CROSS SECTIONS
 PALMETTO ROAD**

SHEET NUMBER

36



1" = 10' Horizontal
 1" = 5' Vertical

← SURVEY PALMETTO RD.

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← SURVEY PALMETTO RD.

Regular Exc.		Embankment	
A	V	A	V



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VERTICAL SCALE:

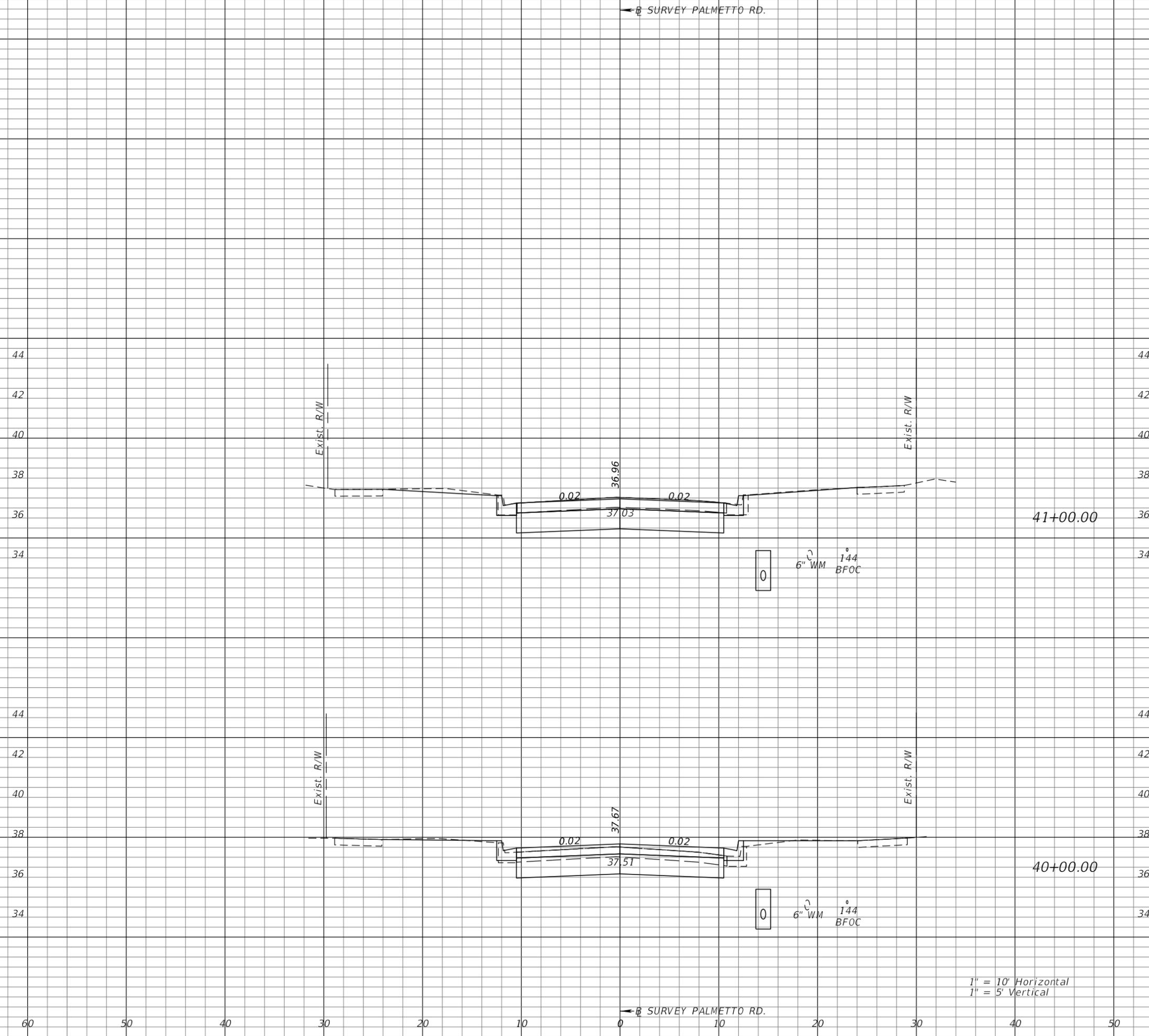
AEP NO.: 104-1091-002

SHEET TITLE

**CROSS SECTIONS
 PALMETTO ROAD**

SHEET NUMBER

37



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A	V	A	V



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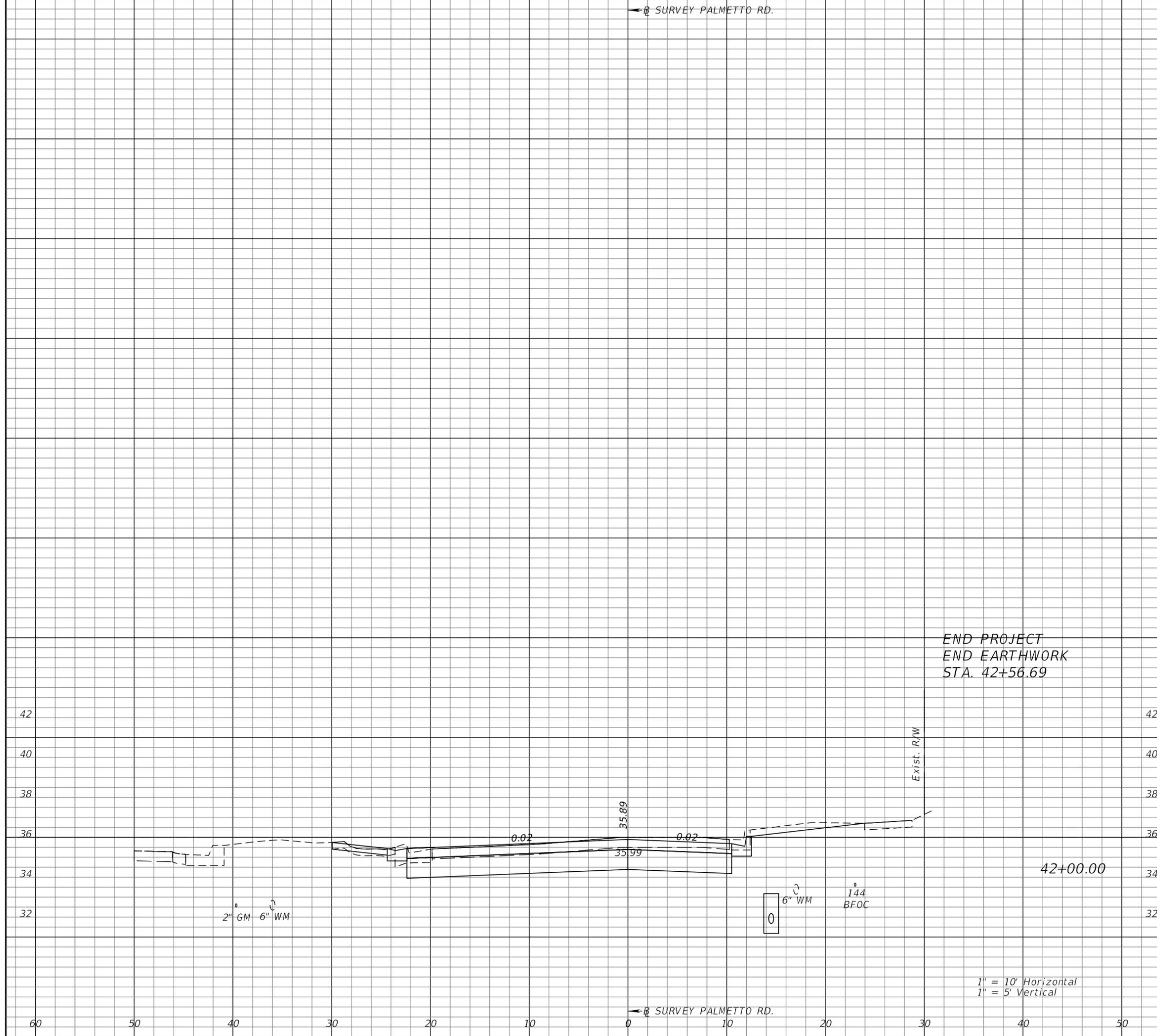
AEP NO.: 104-1091-002

SHEET TITLE

**CROSS SECTIONS
 PALMETTO ROAD**

SHEET NUMBER

38



END PROJECT
 END EARTHWORK
 STA. 42+56.69

Exist. R/W

42+00.00

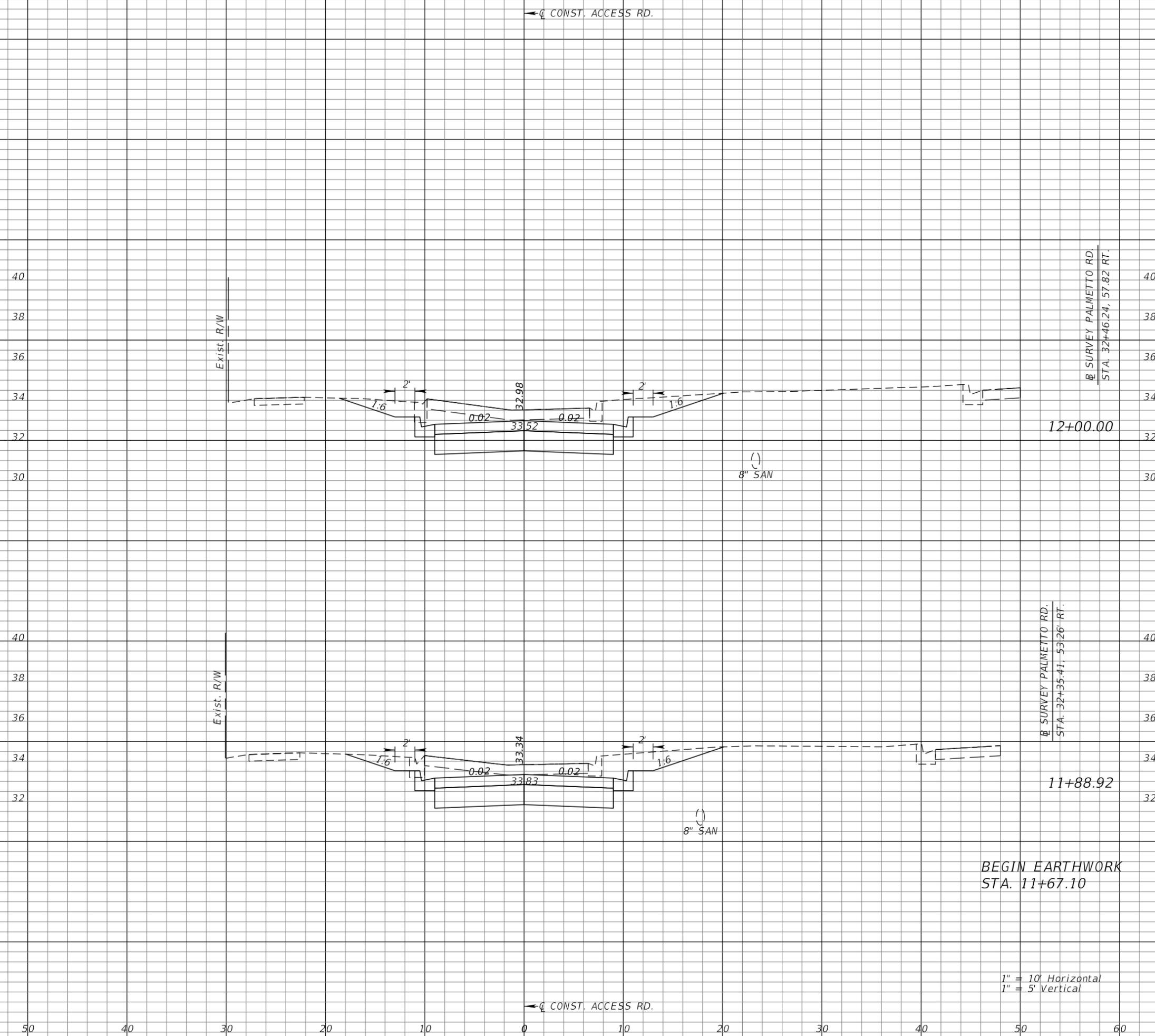
2" GM 6" WM

6" WM 144 BFOC

1" = 10' Horizontal
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← SURVEY PALMETTO RD.

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Regular Exc.		Embankment	
A	V	A	V
57.7	23	0.0	0
55.0	44	0.0	0

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BELLEAIR
INC. 1913

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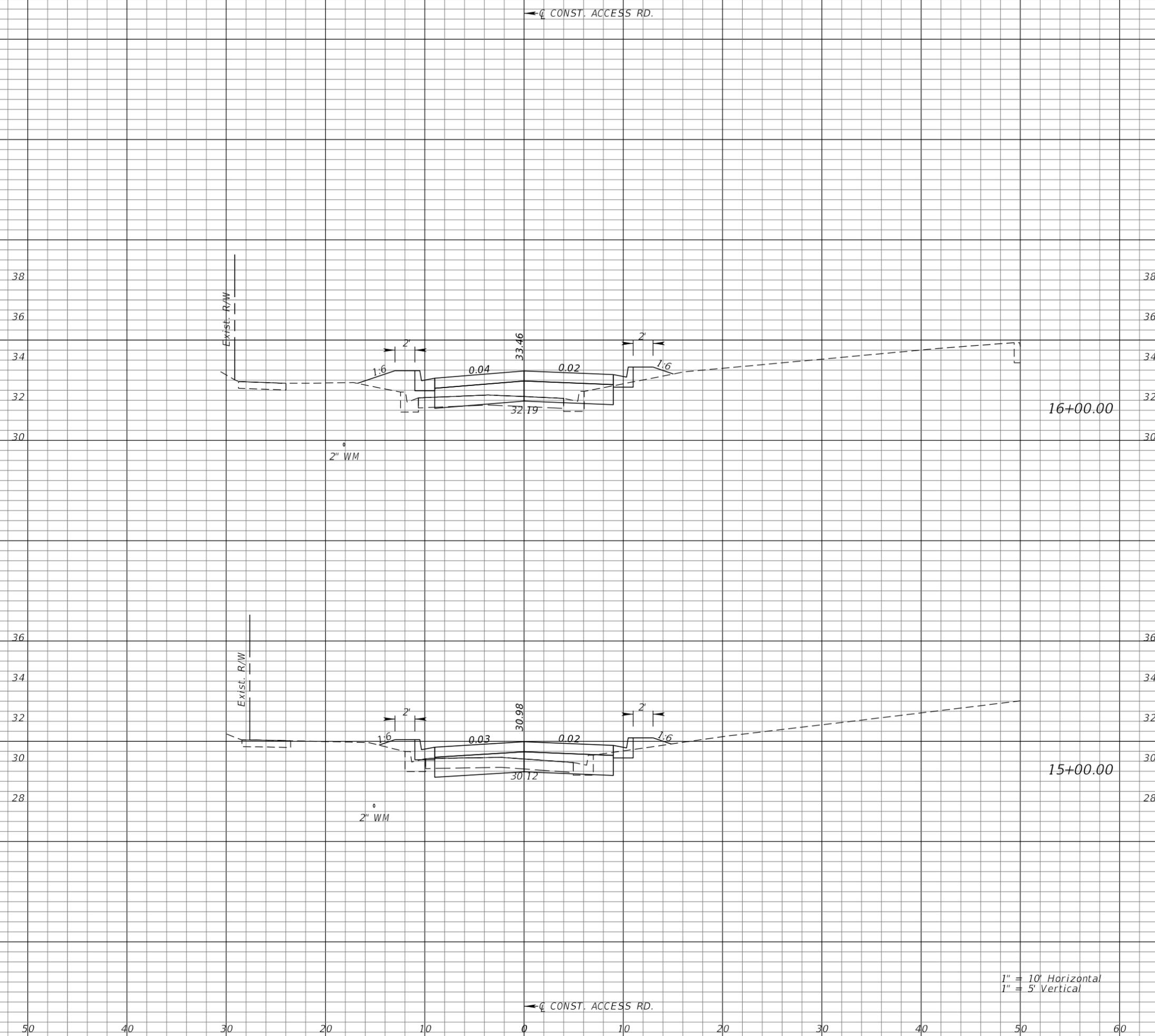
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DRAWN BY: SPJ
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HORIZONTAL SCALE: _____
VERTICAL SCALE: _____
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SHEET TITLE
**CROSS SECTIONS
ACCESS ROAD**

SHEET NUMBER
39

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1" = 5' Vertical



Regular Exc.		Embankment	
A	V	A	V
7.9	42	6.9	19
14.6	83	3.1	6



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APPROVED BY:

VINCENT SHINE, P.E.
 FLA. REG. NO. 67387
 DATE: _____

REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED:

REVIEWED BY: VES

DRAWN BY: SPJ

DESIGNED BY: SPJ

HORIZONTAL SCALE:

VERTICAL SCALE:

AEP NO.: 104-1091-002

SHEET TITLE

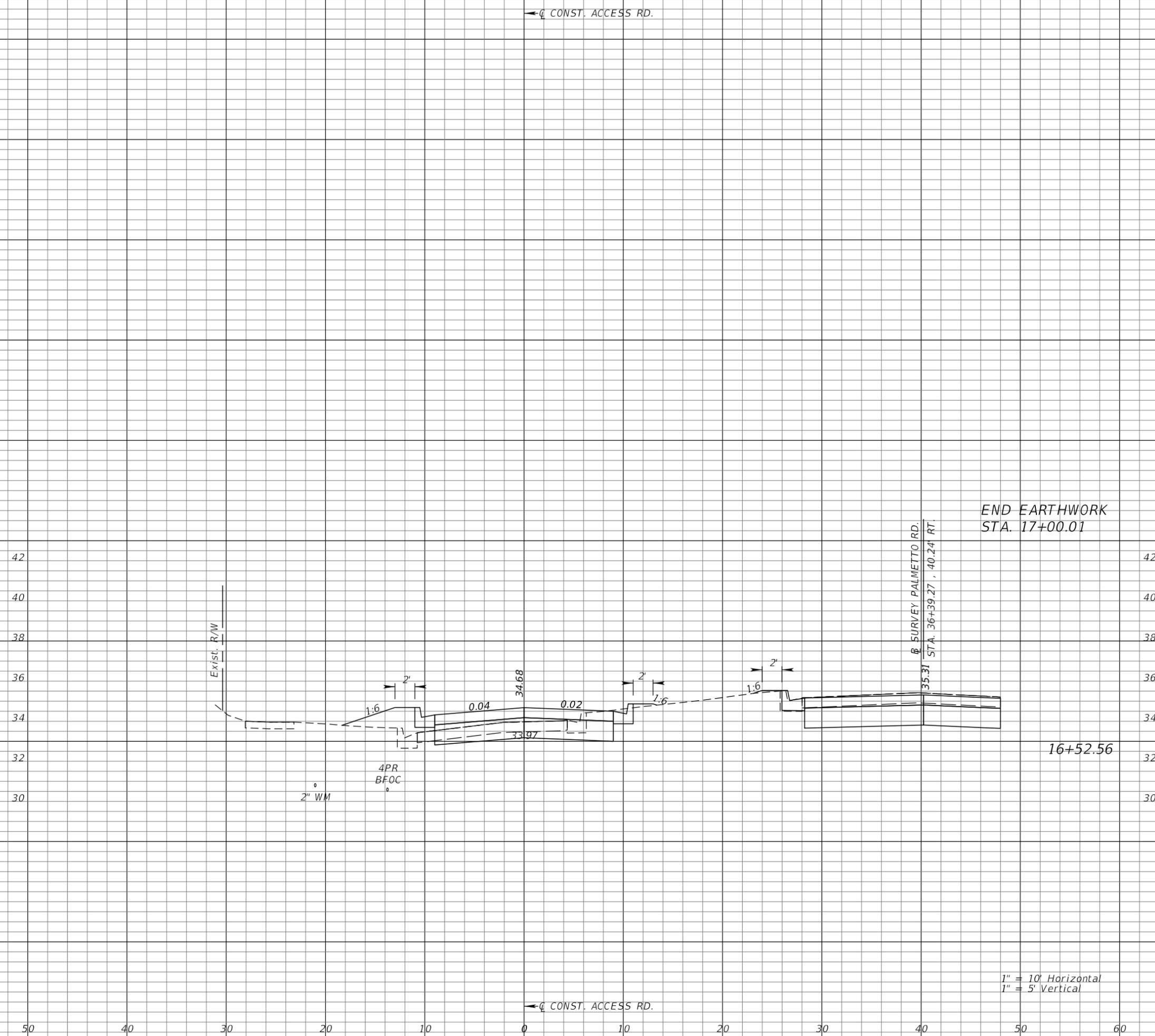
**CROSS SECTIONS
 ACCESS ROAD**

SHEET NUMBER

41

1" = 10' Horizontal
 1" = 5' Vertical

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Regular Exc.		Embankment	
A	V	A	V
18.3	32	6.1	11
18.3	26	6.1	13



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Tampa, Florida 33607
(813)289-5550 FAX: (813)289-0263
www.rsandh.com
FL.Cert.Nos: AAC001886
EB0005620 LCC000210



PUBLIC WORKS DEPARTMENT
901 PONCE DE LEON BLVD.
BELLEAIR, FL 33756

PALMETTO ROAD NORTH STREET AND DRAINAGE IMPROVEMENTS

SUB-CONSULTANTS
Mckim & Creed, Inc.
3903 Northdale Boulevard,
Suite 140W
Tampa, Florida 33624
(813) 549-3740

APPROVED BY:

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HORIZONTAL SCALE: _____
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SHEET TITLE
**CROSS SECTIONS
ACCESS ROAD**

SHEET NUMBER
42

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1" = 10' Horizontal
1" = 5' Vertical

The following narrative of the Storm water Pollution Prevention Plan contains references to the Standard Specifications for Road and Bridge Construction, the Design Standards, and other sheets of these construction plans. The first sheet of the construction plans (called the Key sheet) contains an index to the other sheets. The complete Storm water Pollution Prevention Plan includes several items: this narrative description, the documents referenced in this narrative, the contractor's approved Erosion Control Plan required by Specification Section 104, and reports of inspections made during construction.

1.0 SITE DESCRIPTION

1.a Nature of Construction Activities

This project, located in Pinellas County, proposes to reconstruct Palmetto Road to the north from approximately 25 LF north of the intersection of Palmetto Road and Ocala Road to Bayview Drive. Includes drainage improvements along Palmetto Road and near the intersection of Bayview Drive and underdrain installation along Palmetto Road.

1.b Sequence of Major Soil Disturbing Activities

Per FDOT Specification Section 104 Erosion Control Plan, the contractor shall be required to prepare a site specific Erosion Control Plan along with a Detailed Construction Schedule to indicate dates of major grading activities and determine sequences of temporary and permanent soil disturbing activities on all portions of the project. The contractor will be required to modify the plan or materials to adapt to seasonal variations, construction activity variations, or as directed by the engineer. Applicable erosion control devices and implementation procedures are supplied in the State of Florida Erosion and Sediment Control Designer and Reviewer Manual dated July 2013. The engineer is responsible for determining if any modifications or additional controls are required and to obtain deployment schedules for the implementation of all additional erosion control devices from the contractor.

1.c General Notes

- (a) All erosion control devices for each phase of work are to be installed prior to beginning work on that phase.
- (b) Install staked silt fence where listed in the contractor's approved erosion control plan for perimeter controls before the land is disturbed.
- (c) Provide synthetic bales where listed in the contractor's approved erosion control plan for ditch blocks during construction.
- (d) Provide inlet protection at inlet openings.
- (e) Cover or stabilize disturbed areas as soon as possible.
- (f) Do no disturb an area until it is necessary for construction to proceed.
- (g) Time construction activities to limit impact from seasonal climate changes or weather events.
- (h) Do no remove perimeter controls until after all upstream areas are fully stabilized and permanent grassing is established.
- (i) It is the contractors responsibility to obtain any dewatering permits necessary from all relevant regulatory agencies.

1.d Area Estimates

Total Site Area: 3.5 acres.
Total Area to be disturbed: 1.85 acres.

1.e Runoff Data

Runoff Coefficients:
Before: 0.70
After: 0.70

Soils Data: Soil types encountered along the project corridor are predominantly comprised of Myakka soils and Urban Land. Both soil types are categorized in the hydrologic group "A/D" and both are poorly drained due to the presence of silty material.

1.f Site Map

The construction plans will substitute as site maps. Locations of the required information are described below. The sheet numbers for all items discussed are identified on the Key Sheet of the construction plans.

- * Drainage Patterns: The flow directions are shown on the drainage maps and profiles provided in the construction plans.
- * Approximate Slopes: The slopes of the site can be seen on the plan and profile sheets and cross sections of the construction plans.
- * Areas of Soil Disturbance: The areas to be disturbed are indicated on the plan and profile sheets and cross sections. Any areas where permanent features are shown to be constructed above or below ground will be disturbed.
- * Areas Not to be Disturbed: For the purpose of this plan, it is reasonable to say that all areas of the project will be disturbed during some phase of construction.
- * Locations of Temporary Controls: Locations of temporary controls (i.e., erosion control devices) are shown on the plan sheets included with the construction plans.

* Areas to be Stabilized: Areas of permanent stabilization are shown on the typical sections and the plan and profile sheets.

* Discharge Points to Surface Waters: Clearwater Harbor.

1.g Receiving Waters

This project is located within the jurisdiction of the Southwest Florida Water Management District. Onsite stormwater runoff will discharge into Clearwater Harbor.

2.0 CONTROLS

2.a Erosion and Sediment Controls

In the Section 104 Erosion Control Plan, the contractor shall describe the proposed stabilization and structural practices based on the contractor's proposed Traffic Control Plan. The following recommended guidelines are based on the Traffic Control notes included in the construction plans. Where following the Traffic Control Plan (TCP) notes outlined in these construction plans, the contractor may chose to accept the following guidelines or modify them in the Section 104 Erosion Control Plan, subject to approval of the engineer.

The contractor will be responsible for providing TCP along with Erosion and Sediment Control plans to Southwest Florida Water Management District.

2.a.1 Stabilization Practices

In the Section 104 Erosion Control Plan, the contractor shall describe the stabilization practices proposed to control erosion. The contractor shall initiate all stabilization measures as soon as practical, but in no case more than 7 days, in portions of the site where construction activities have temporarily or permanently ceased. The stabilization practices shall include at least the following, unless otherwise approved by the Engineer.

Temporary:

* Seed and mulch, and sod in accordance with Specification Section 104.

Permanent:

* Asphalt or concrete surface.
* Sod in accordance with Specification Section 104.

2.a.2 Structural Practices

In the Section 104 Erosion Control Plan, the contractor shall describe the proposed structural practices to control or trap sediments and otherwise prevent the discharge of pollutants from exposed areas of the site. Sediment controls shall be in place before disturbing soil upstream of the control. The structural practices shall include at least the following, unless otherwise approved by the Engineer.

Temporary:

* Sediment Barriers in accordance with Specification Section 104 and as shown on the Traffic Control Plans.

* Inlet protection in accordance with Specification 104 and as shown in the traffic control plans. All sediment controls shall be in place prior to any soil disturbing activity upstream of the control.

Permanent:

* Sod



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SUB-CONSULTANTS

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(813) 549-3740

APPROVED BY:

JAMES FIKE, P.E.
FLA. REG. NO. 67096
DATE: _____

REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED:

REVIEWED BY: JF

DRAWN BY: RRM

DESIGNED BY: RRM

HORIZONTAL SCALE:

VERTICAL SCALE:

AEP NO.: 104-1091-002

SHEET TITLE

STORMWATER POLLUTION
PREVENTION PLAN (1)

SHEET NUMBER

43

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2.b Stormwater Management

Stormwater will be conveyed in closed collection systems.

2.c Other Controls

2.c.1 Waste Disposal

In the Section 104 Erosion Control Plan, the contractor shall describe the proposed methods to prevent the discharge of solid material, including building materials, to waters of the United States. The proposed methods shall include at least the following, unless otherwise approved by the Engineer.

- * Providing litter control and collection within the project during construction activities.
- * Disposing of all fertilizer or other chemical containers according to EPA's standard practices as detailed by the manufacturer.
- * Disposing of solid materials including building and construction materials off the project site but not in surface waters.

2.c.2 Offsite Vehicle Tracking

In the Section 104 Erosion Control Plan, the contractor shall describe the proposed methods for minimizing offsite vehicle tracking of sediments and generating dust. The proposed methods shall include at least the following, unless otherwise approved by the Engineer.

- * Soil tracking prevention devices will be installed at all locations where construction vehicles will be carrying soil away from the project site.
- * Construction vehicles will be required to cover their loads to minimize loss of load into the air.

2.c.3 State and Local Regulations for Waste Disposal, Sanitary Sewer or Septic Tank Regulations

In the Section 104 Erosion Control Plan, the contractor shall describe the proposed procedures to comply with applicable state and local regulations for waste disposal, and sanitary sewer or septic systems.

2.c.4 Fertilizers and Pesticides

Fertilizer will be applied according to applicable subsections of Section 570 of the FDOT Standard Specifications for Road and Bridge Construction. The contractor is solely responsible for documenting the use of pesticides in the Section 104 Erosion Control Plan.

2.c.5 Toxic Substances

In the Section 104 Erosion Control Plan, the contractor shall provide a list of toxic substances that are likely to be used on the job and provide a plan addressing the generation, application, migration, storage, and disposal of these substances.

Erosion and turbidity control measures will be installed and maintained around work areas.

I HAVE REVIEWED AND AM AWARE OF THE INFORMATION INCLUDED ON THIS STORMWATER POLLUTION PREVENTION PLAN AND THE ASSOCIATED EROSION AND SEDIMENT CONTROL SHEETS. IT WILL BE MY RESPONSIBILITY TO ENSURE THAT THESE MEASURES ARE MAINTAINED THROUGHOUT THE PROJECT.

KEITH BODEKER, TOWN PROJECT MANAGER

Date

2.d.4 Approved State and Local Plans or Permits

This project is under the jurisdiction of the Southwest Florida Water Management District.

3.0 MAINTENANCE

In the Section 104 Erosion Control Plan, the contractor shall provide a plan for maintaining all erosion and sediments controls throughout construction. The maintenance plan shall at a minimum, comply with specification Section 104.

4.0 INSPECTIONS

Qualified personnel, who are certified through DEP Stormwater, Erosion and Sedimentation Control Inspector training program, shall inspect the following items at least once every seven calendar days and within 24 hours of the end of a storm that is 0.50 inches or greater. To comply, the contractor shall install and maintain rain gages and record the daily rainfall. Where sites have been permanently stabilized, inspections shall be conducted at least once every month. The contractor shall also inspect that controls installed in the field agree with the latest Stormwater Pollution Prevention Plan.

- * Points of discharge to waters of the United States.
- * Points of discharge to municipal separate storm sewer systems.
- * Disturbed areas of the site that have not been finally stabilized.
- * Areas used for storage of materials that are exposed to precipitation.
- * Structural controls.
- * Stormwater management systems.
- * Locations where vehicles enter or exit the site.

The contractor shall initiate repairs within 24 hours of inspections that indicate items are not in good working order.

If inspections indicate that the installed stabilization and structural practices are not sufficient to minimize erosion, retain sediments, and prevent discharging pollutants, the contractor shall provide additional measures, as approved by the Engineer.

5.0 NON-STORMWATER DISCHARGES

In the Section 104 Erosion Control Plan, the contractor shall identify all anticipated non-stormwater discharges (except flows from fire fighting activities). The contractor shall describe the proposed measures to prevent pollution of these non-stormwater discharges.



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APPROVED BY:

JAMES FIKE, P.E.
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DRAWN BY: RRM

DESIGNED BY: RRM

HORIZONTAL SCALE:

VERTICAL SCALE:

AEP NO.: 104-1091-002

SHEET TITLE

STORMWATER POLLUTION
PREVENTION PLAN (2)

SHEET NUMBER

44

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PALMETTO ROAD

UTILITY / AGENCY OWNERS:

DUKE ENERGY
 MARK MICHAEL
 299 1ST AVE N
 ST. PETERSBURG, FL 33701
 PH: 727-418-5307
 EMAIL: DEFDistributionGOV@duke-energy.com

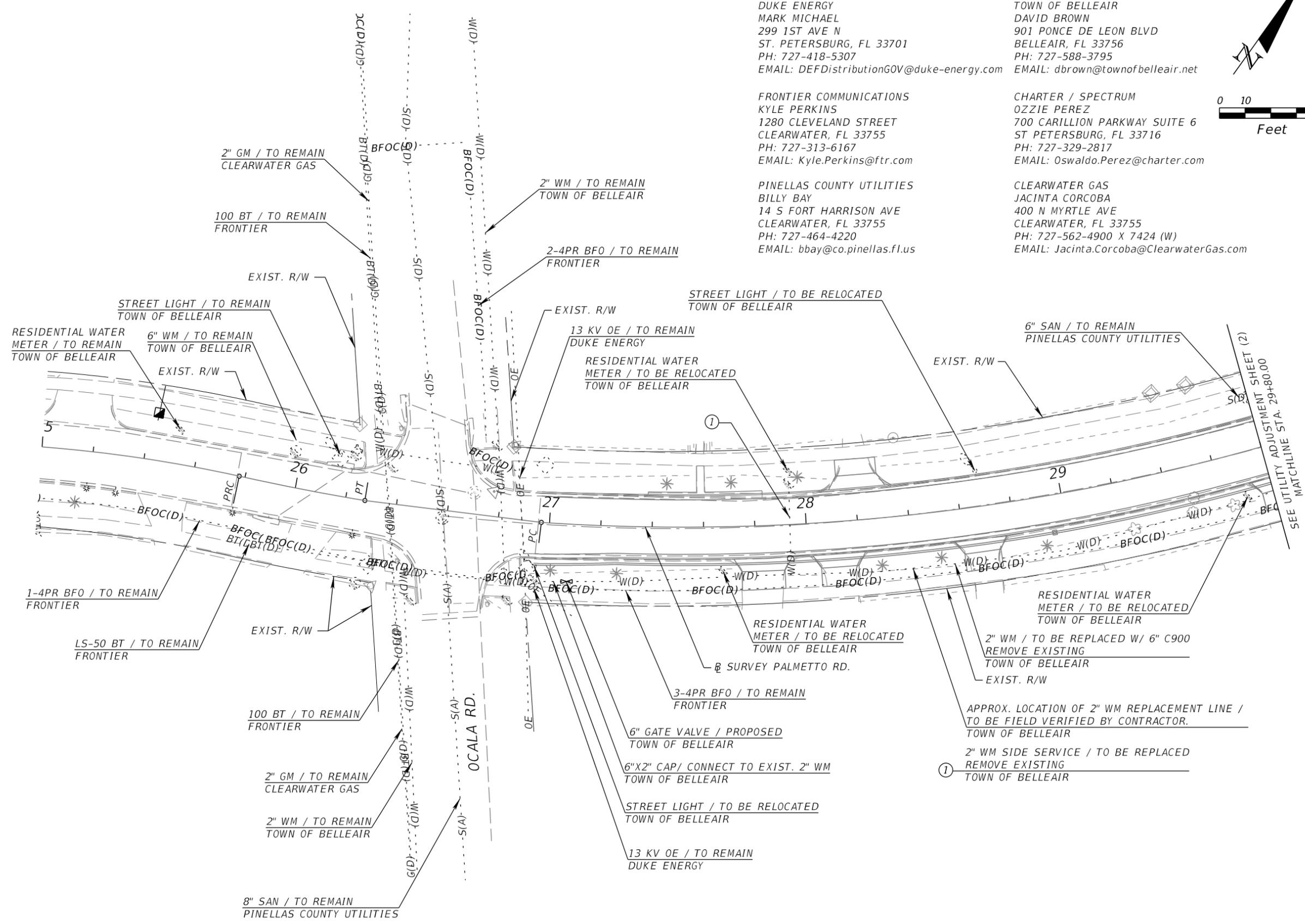
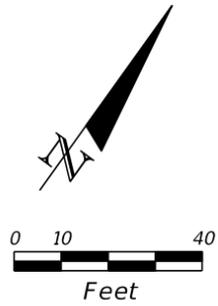
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 BELLEAIR, FL 33756
 PH: 727-588-3795
 EMAIL: dbrown@townofbelleair.net

FRONTIER COMMUNICATIONS
 KYLE PERKINS
 1280 CLEVELAND STREET
 CLEARWATER, FL 33755
 PH: 727-313-6167
 EMAIL: Kyle.Perkins@ftr.com

CHARTER / SPECTRUM
 OZZIE PEREZ
 700 CARILLION PARKWAY SUITE 6
 ST PETERSBURG, FL 33716
 PH: 727-329-2817
 EMAIL: Oswaldo.Perez@charter.com

PINELLAS COUNTY UTILITIES
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 14 S FORT HARRISON AVE
 CLEARWATER, FL 33755
 PH: 727-464-4220
 EMAIL: bbay@co.pinellas.fl.us

CLEARWATER GAS
 JACINTA CORCOBA
 400 N MYRTLE AVE
 CLEARWATER, FL 33755
 PH: 727-562-4900 X 7424 (W)
 EMAIL: Jacinta.Corcoba@ClearwaterGas.com



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VINCENT SHINE, P.E.
 FLA. REG. NO. 67387
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VERTICAL SCALE:

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UTILITY ADJUSTMENTS (1)
 STA. 25+00 TO STA. 29+80

SHEET NUMBER

45

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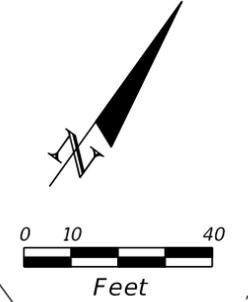
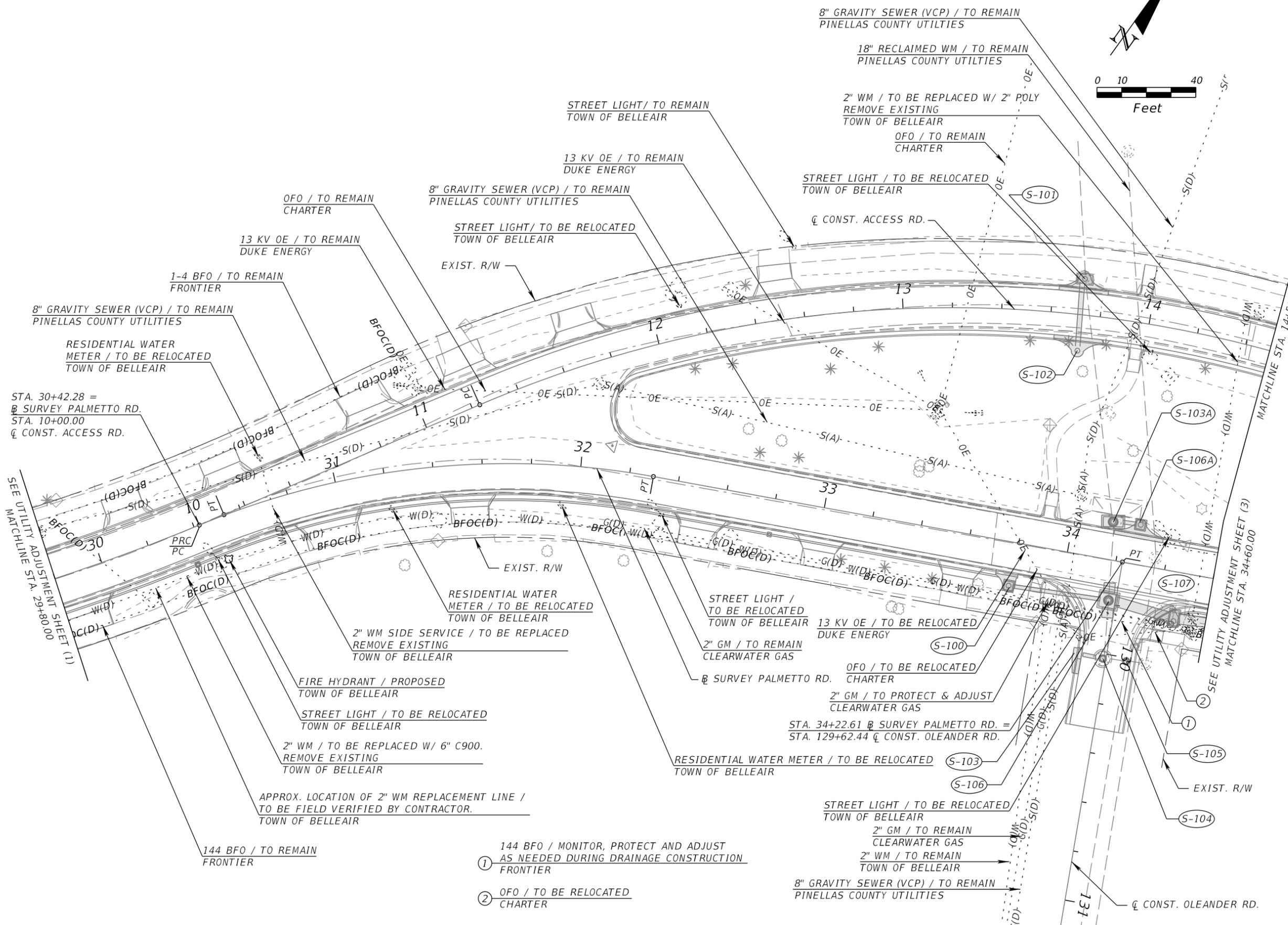
AEP NO.: 104-1091-002

SHEET TITLE

UTILITY ADJUSTMENTS (2)
STA. 29+80 TO STA. 34+60

SHEET NUMBER

46



STA. 30+42.28 =
B SURVEY PALMETTO RD.
STA. 10+00.00
C CONST. ACCESS RD.

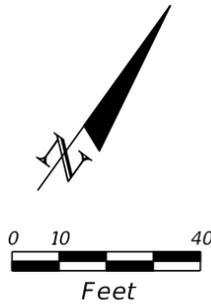
SEE UTILITY ADJUSTMENT SHEET (1)
MATCHLINE STA. 29+80.00

SEE UTILITY ADJUSTMENT SHEET (3)
MATCHLINE STA. 34+60.00

- ① 144 BFO / MONITOR, PROTECT AND ADJUST AS NEEDED DURING DRAINAGE CONSTRUCTION FRONTIER
- ② OFO / TO BE RELOCATED CHARTER

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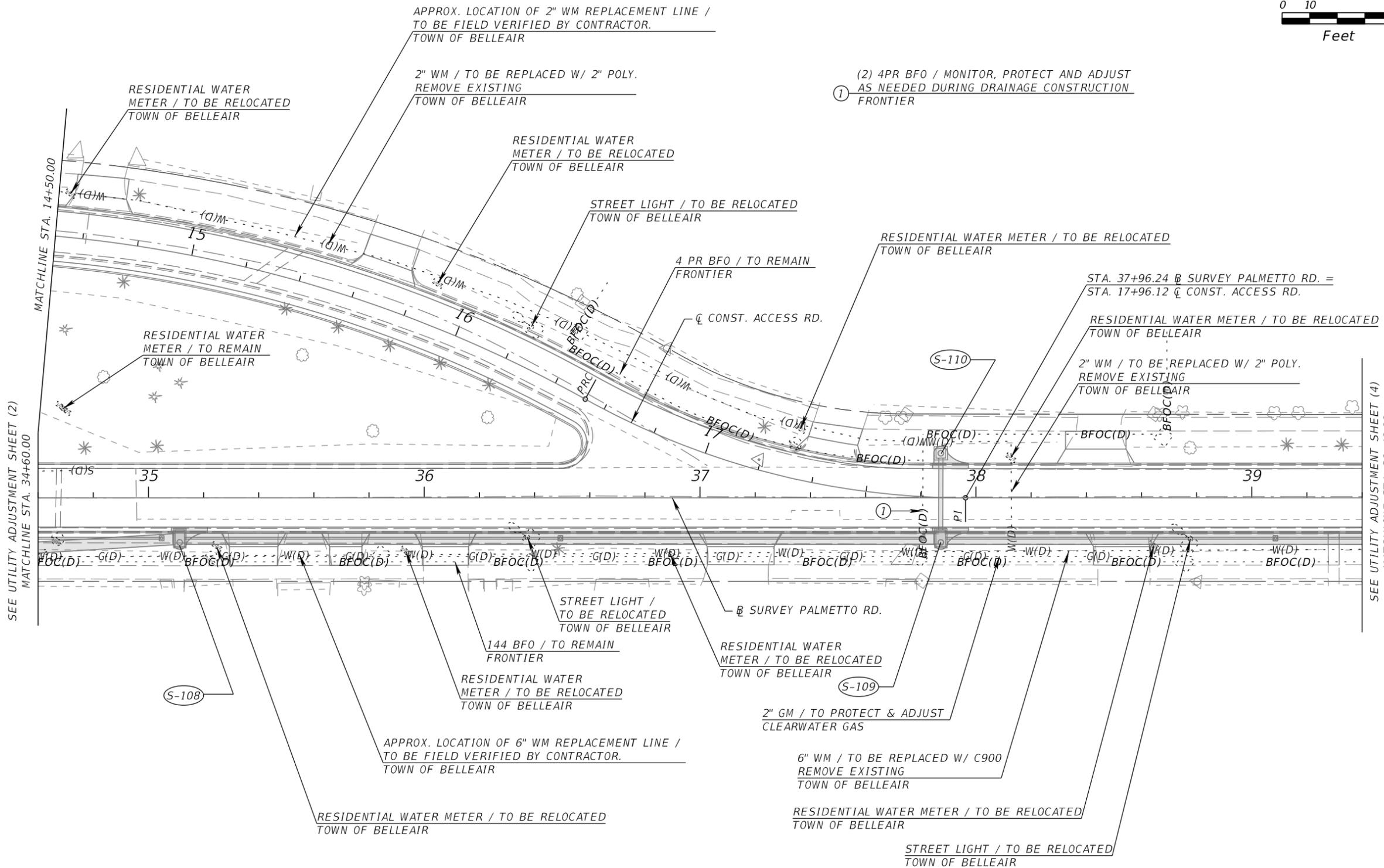
AEP NO.: 104-1091-002

SHEET TITLE

UTILITY ADJUSTMENTS (3)
STA. 34+60 TO STA. 39+40

SHEET NUMBER

47



SEE UTILITY ADJUSTMENT SHEET (2)
MATCHLINE STA. 34+60.00

SEE UTILITY ADJUSTMENT SHEET (4)
MATCHLINE STA. 39+40.00

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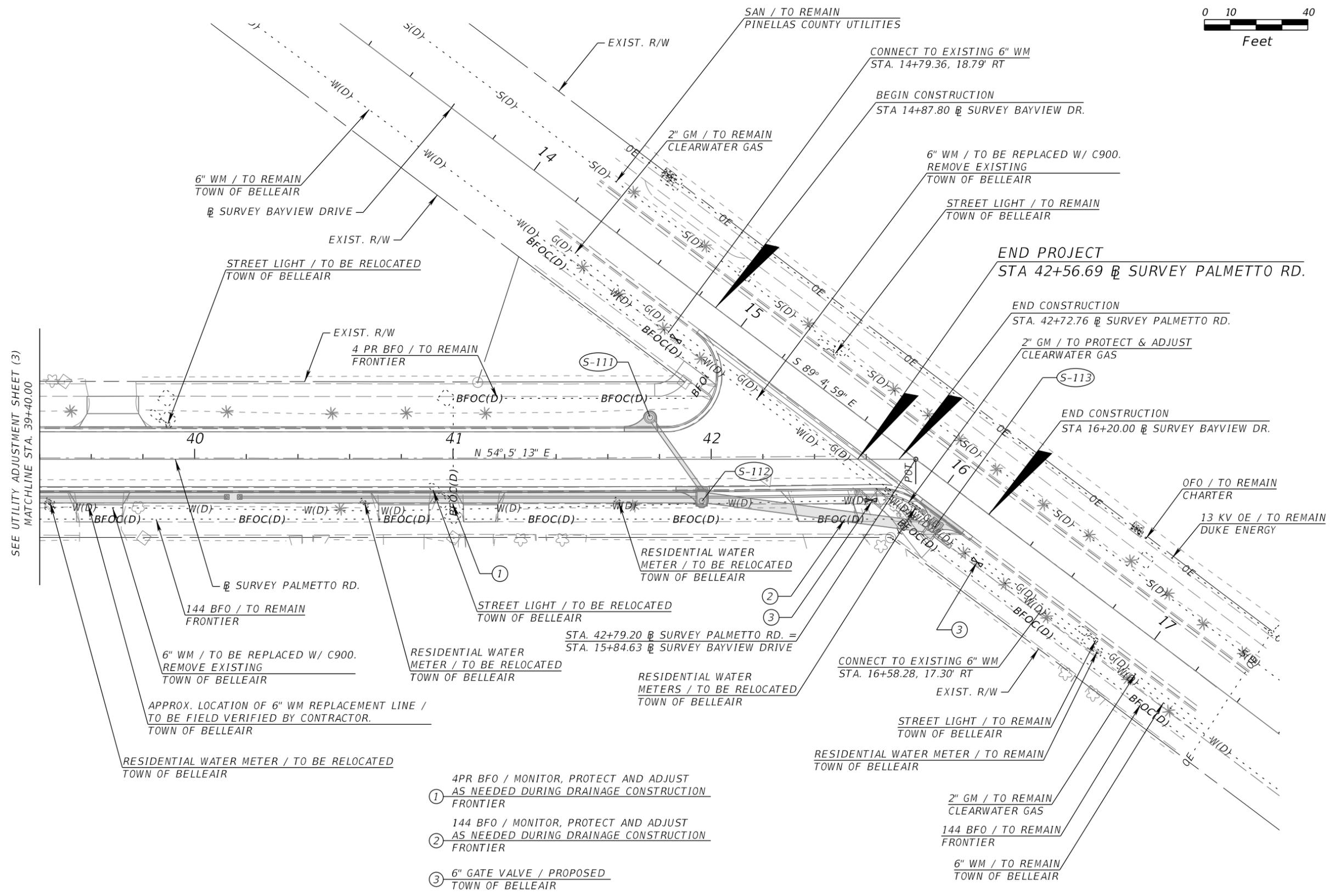
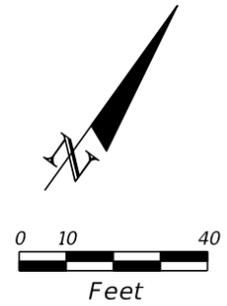
AEP NO.: 104-1091-002

SHEET TITLE

UTILITY ADJUSTMENTS (4)
STA. 39+40 TO STA. 42+65

SHEET NUMBER

48



SEE UTILITY ADJUSTMENT SHEET (3)
MATCHLINE STA. 39+40.00

- ① 4PR BFO / MONITOR, PROTECT AND ADJUST AS NEEDED DURING DRAINAGE CONSTRUCTION FRONTIER
- ② 144 BFO / MONITOR, PROTECT AND ADJUST AS NEEDED DURING DRAINAGE CONSTRUCTION FRONTIER
- ③ 6" GATE VALVE / PROPOSED TOWN OF BELLEAIR

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LIGHTING GENERAL NOTES

1. STREET LIGHT TO BE MANUFACTURED BY:

TRADITIONAL CONCRETE, INC., WASHINGTON STYLE, SERIES 700, MODEL #D713,
 STD. CODE D713-SP-EA-1, COLOR: SALT & PEPPER.
 LUMINAIRE: P/N CP-3091-LAF-512-48W-3000K-120-RAL9005TX
 HEAD MODULE: ROUND, CLEAR FROSTED ACRYLIC, IP 66 WEATHERPROOF
 FITTER: OCTAGONAL
 TRANSITION PLATE: OCTAGONAL, P/N CP3752-RAL9005TX
 OPTICAL/ELECTRICAL : LED, 48W, WARM WHITE, TYPE 5 OPTIC, 120-277 VAC DRIVER
 MODULE
 WIRING: #14-7 AWG, 12" PIGTAIL
 COLOR: JET BLACK

2. JUNCTION BOX TO BE HDPE, LIGHT DUTY (PEDESTRIAN), 300 LB/FT2, APPROX. 17" L X 12" W.
3. PROVIDE ALL WORK TO MEET OR EXCEED REGULATORY REQUIREMENTS, INCLUDING LATEST EDITION OF THE NATIONAL ELECTRIC CODE (NEC), FLORIDA BUILDING CODE AND LOCAL REQUIREMENTS AND BUILDING CODES FOR ELECTRICAL SYSTEMS.
4. PROVIDE ALL EQUIPMENT AND APPURTENANCES FOR A COMPLETE OPERATING INSTALLATION OF ALL ELECTRICAL SYSTEMS.
5. PROVIDE ENGRAVED NAMEPLATES ATTACHED WITH STAINLESS STEEL SCREWS FOR ALL ELECTRICAL EQUIPMENT.
6. ALL CONDUCTORS IN CONDUIT SHALL BE COPPER, 600 VOLT RATED STRANDED CABLES WITH MINIMUM SIZE # 12 AWG THWN-2, UNLESS OTHERWISE SPECIFIED.
7. ALL EQUIPMENT SHALL BE RATED FOR MAXIMUM AVAILABLE VOLTAGE AND GROUND FAULT CURRENT. ALL EQUIPMENT SHALL BE UL LISTED.
8. COORDINATE ELECTRICAL REQUIREMENTS AND MAKE FINAL CONNECTIONS OF EQUIPMENT FURNISHED BY OTHER TRADES.
9. ALL REWIRED CIRCUITS SHALL BE IN NEW CONDUIT, SCHEDULE 80 PVC. DIRECT BURIED CONDUIT SHALL HAVE 18" COVER MINIMUM, WITH METAL CAUTION TAPE 6" ABOVE.
10. PROVIDE GREEN GROUND WIRE IN EACH RACEWAY. SIZE WIRE IN ACCORDANCE WITH TABLE 250.122 OF THE NEC.

11. FOR EXISTING BRANCH CIRCUITS WHERE NEW WIRING WILL NOT BE INSTALLED, INTERCEPT EXISTING BRANCH CIRCUIT AT EXISTING POLE LOCATION AND INSTALL NEW JUNCTION BOX. RUN NEW CONDUIT AND WIRE TO NEW POLE LOCATIONS FROM NEW JUNCTION BOX.
12. ALL WIREWAYS AND JUNCTION BOXES TO BE PROPERLY SIZED PER THE NEC. ALL WIRING TO HAVE WIRE OR CABLE MARKERS.
13. OUTDOOR EQUIPMENT, CONDUIT AND CONNECTIONS SHALL BE WATERPROOF.
14. WHEN MORE THAN ONE CIRCUIT IS CONTAINED IN A CONDUIT RUN, EACH LOAD CONDUCTOR SHALL HAVE ITS OWN SEPARATE NEUTRAL CONDUCTOR. NO SHARED NEUTRALS AND CABLES SHALL BE PERMITTED.
15. STREET LIGHT SPACING TO BE ON ALTERNATING SIDES OF STREET AT APPROXIMATELY +/- 180 FT. INTERVALS, IDEALLY LOCATED ON PROPERTY BOUNDARIES WHENEVER POSSIBLE.
16. TIMER TO BE MOUNTED TO LOAD CONTROL CENTER BOX.
17. LOAD CENTER TO BE SUITABLE AS SERVICE ENTRANCE EQUIPMENT. 10K AIC, MAIN LUGS ONLY, 120/240VAC, 1PH - 3W, AMPACITY AND SIZE PER PANEL SCHEDULES. PROVIDE ALL CIRCUIT BREAKERS, SPACES, AND BRANCH CIRCUIT WIRING PER PANEL SCHEDULES.
18. PROVIDE A CIRCUIT DIRECTORY FOR ALL LOAD CENTERS.
19. PROVIDE A SERVICE ENTRANCE LIGHTNING ARRESTOR DEVICE AT THE MAIN SERVICE ENTRANCE.
20. ALL ELECTRICAL GEAR SHALL BE OF THE SAME MANUFACTURER.
21. WIND LOAD ANALYSIS, IF REQUIRED, WILL BE THE RESPONSIBILITY OF THE TOWN.
22. LIGHT POLE LOCATIONS AND CONDUITS ARE APPROXIMATE AND MUST BE VERIFIED BY THE TOWN OF BELLEAIR CONSTRUCTION MANAGER (KEITH BODEKER) 48 HOURS IN ADVANCED OF INSTALLATION.

RS&H

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 Tampa, Florida 33607
 (813)289-5550 FAX: (813)289-0263
 www.rsandh.com
 FL.Cert.Nos: AAC001886
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TOWN OF
BELLEAIR
INC. 1923

PUBLIC WORKS DEPARTMENT
 901 PONCE DE LEON BLVD.
 BELLEAIR, FL 33756

**PALMETTO ROAD NORTH
 STREET AND DRAINAGE
 IMPROVEMENTS**

SUB-CONSULTANTS

Mckim & Creed, Inc.
 3903 Northdale Boulevard,
 Suite 140W
 Tampa, Florida 33624
 (813) 549-3740

APPROVED BY:

VINCENT SHINE, P.E.
 FLA. REG. NO. 67387
 DATE: _____

REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED:

REVIEWED BY: VES

DRAWN BY: SPJ

DESIGNED BY: SPJ

HORIZONTAL SCALE:

VERTICAL SCALE:

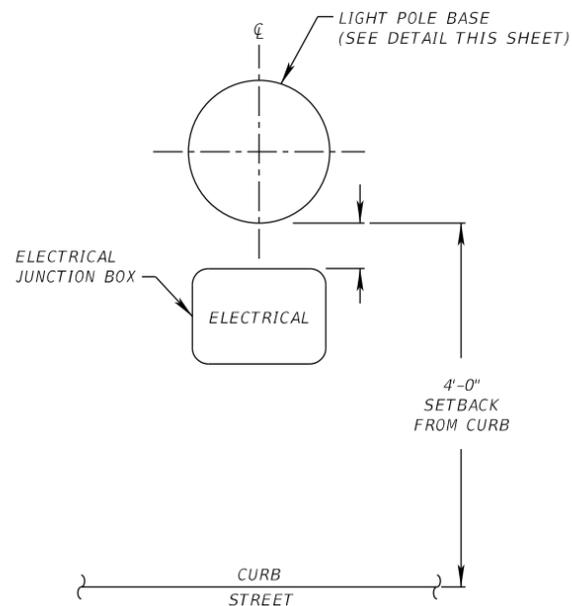
AEP NO.: 104-1091-002

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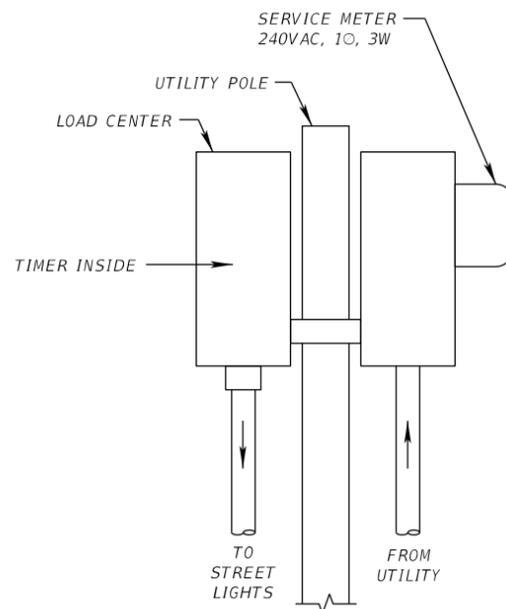
**LIGHTING GENERAL
 NOTES & DETAILS**

SHEET NUMBER

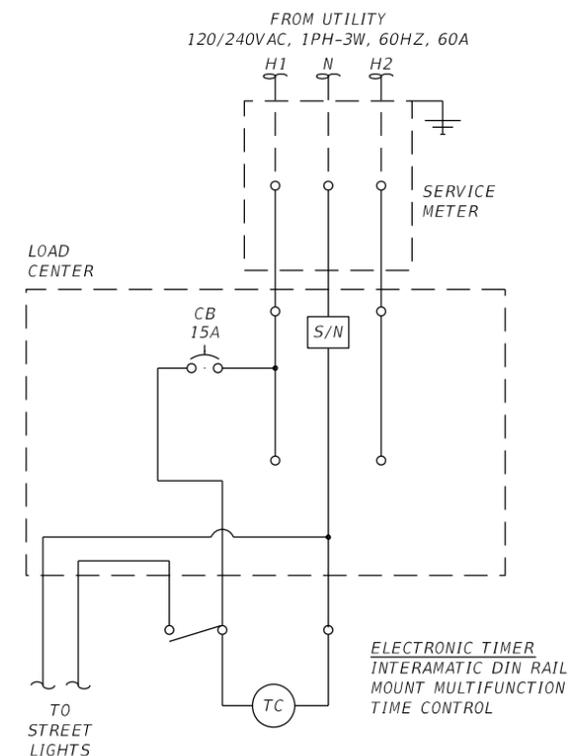
49



TOP VIEW (TYP.)
 N.T.S



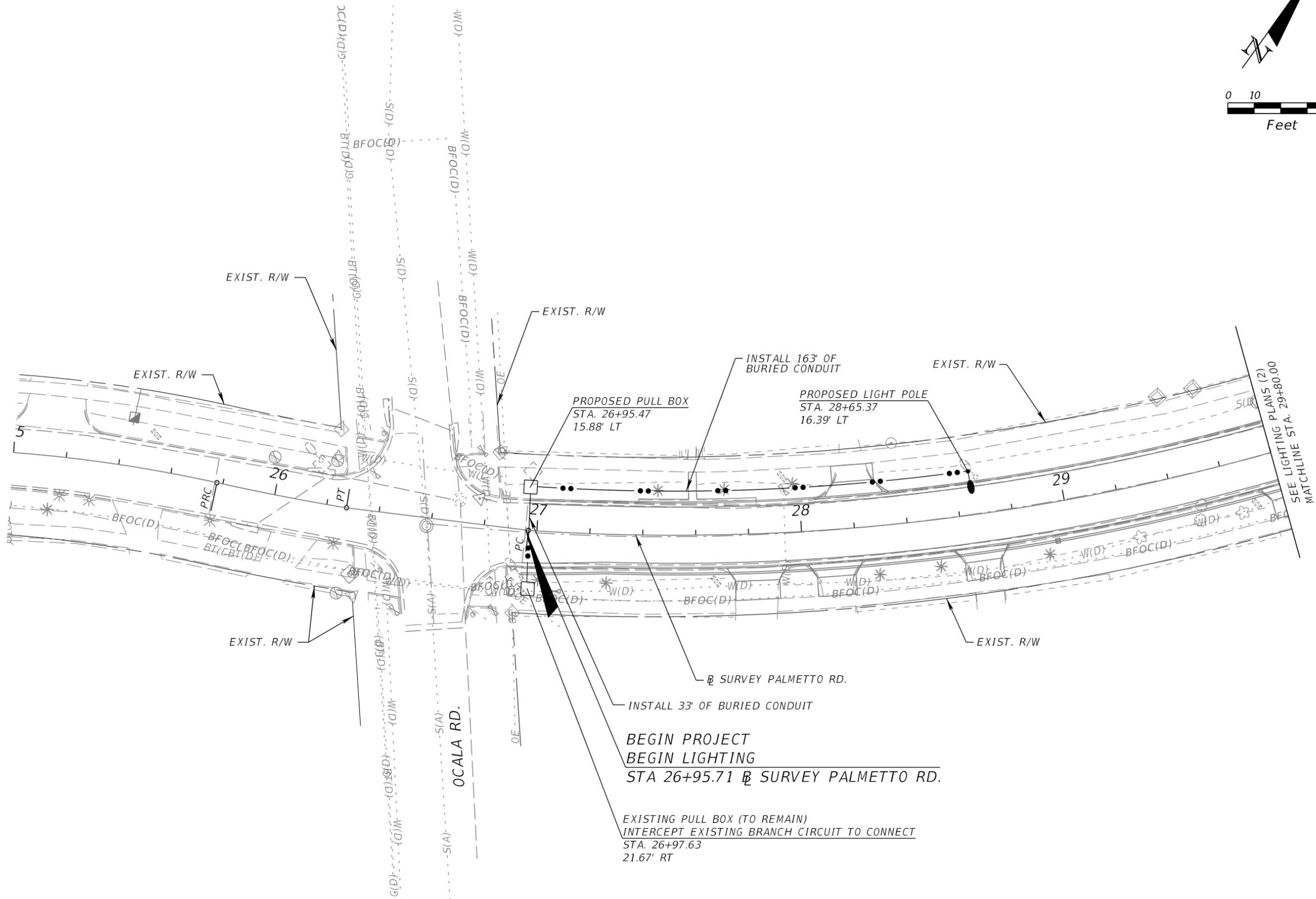
ELECTRICAL RISER MOUNTING DIAGRAM (TYP.)
 N.T.S



ELECTRICAL SERVICE WIRING DIAGRAM (TYP.)
 N.T.S
 (EQUIPMENT GROUNDING NOT SHOWN)

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SHEET TITLE

LIGHTING PLANS (1)
 STA. 25+00 TO STA. 29+80

SHEET NUMBER

50

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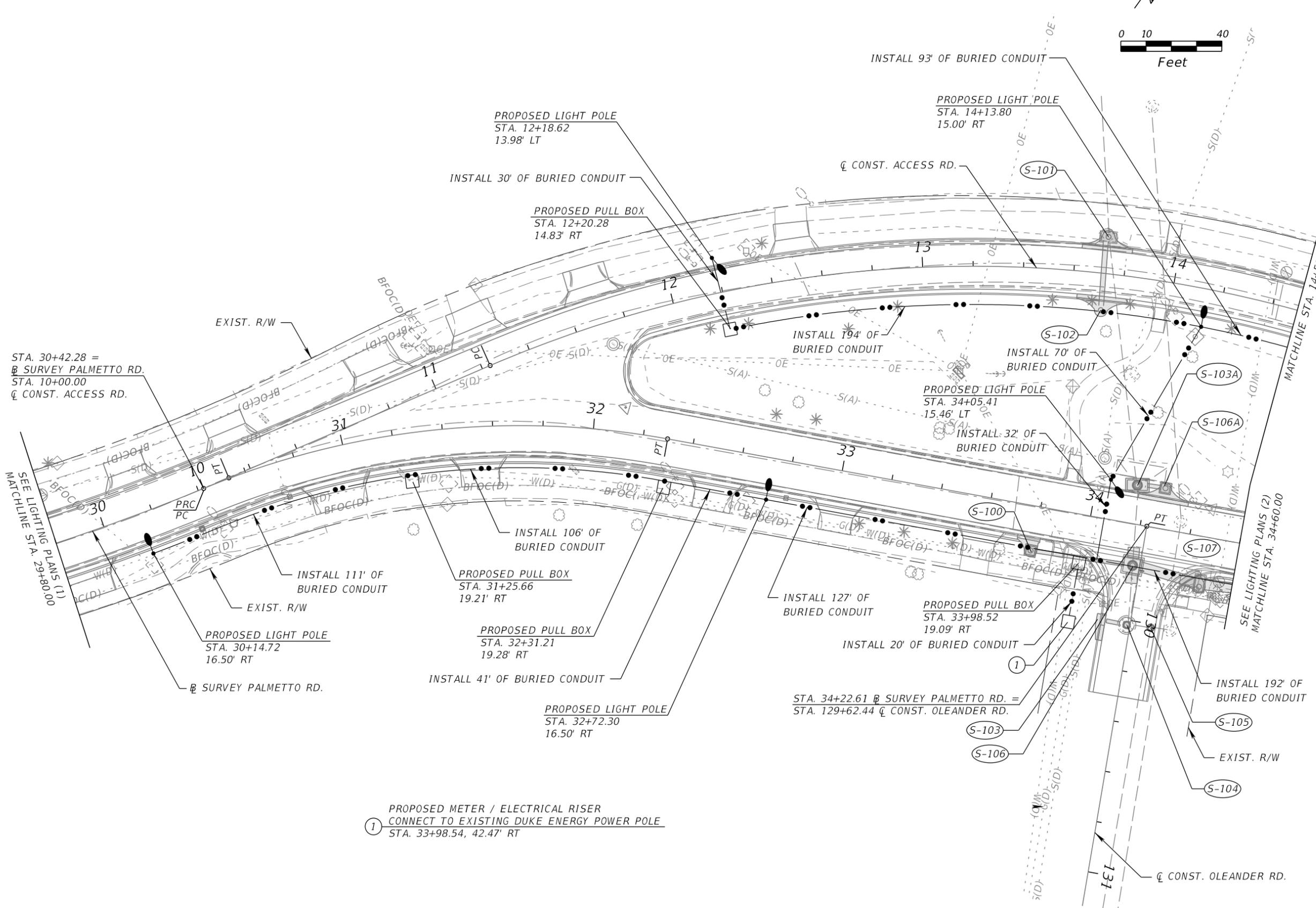
AEP NO.: 104-1091-002

SHEET TITLE

LIGHTING PLANS (2)
STA. 29+80 TO STA. 34+60

SHEET NUMBER

51



STA. 30+42.28 =
B SURVEY PALMETTO RD.
STA. 10+00.00
Q CONST. ACCESS RD.

SEE LIGHTING PLANS (1)
MATCHLINE STA. 29+80.00

B SURVEY PALMETTO RD.

PROPOSED METER / ELECTRICAL RISER
CONNECT TO EXISTING DUKE ENERGY POWER POLE
STA. 33+98.54, 42.47' RT

STA. 34+22.61 B SURVEY PALMETTO RD. =
STA. 129+62.44 Q CONST. OLEANDER RD.

SEE LIGHTING PLANS (2)
MATCHLINE STA. 34+60.00

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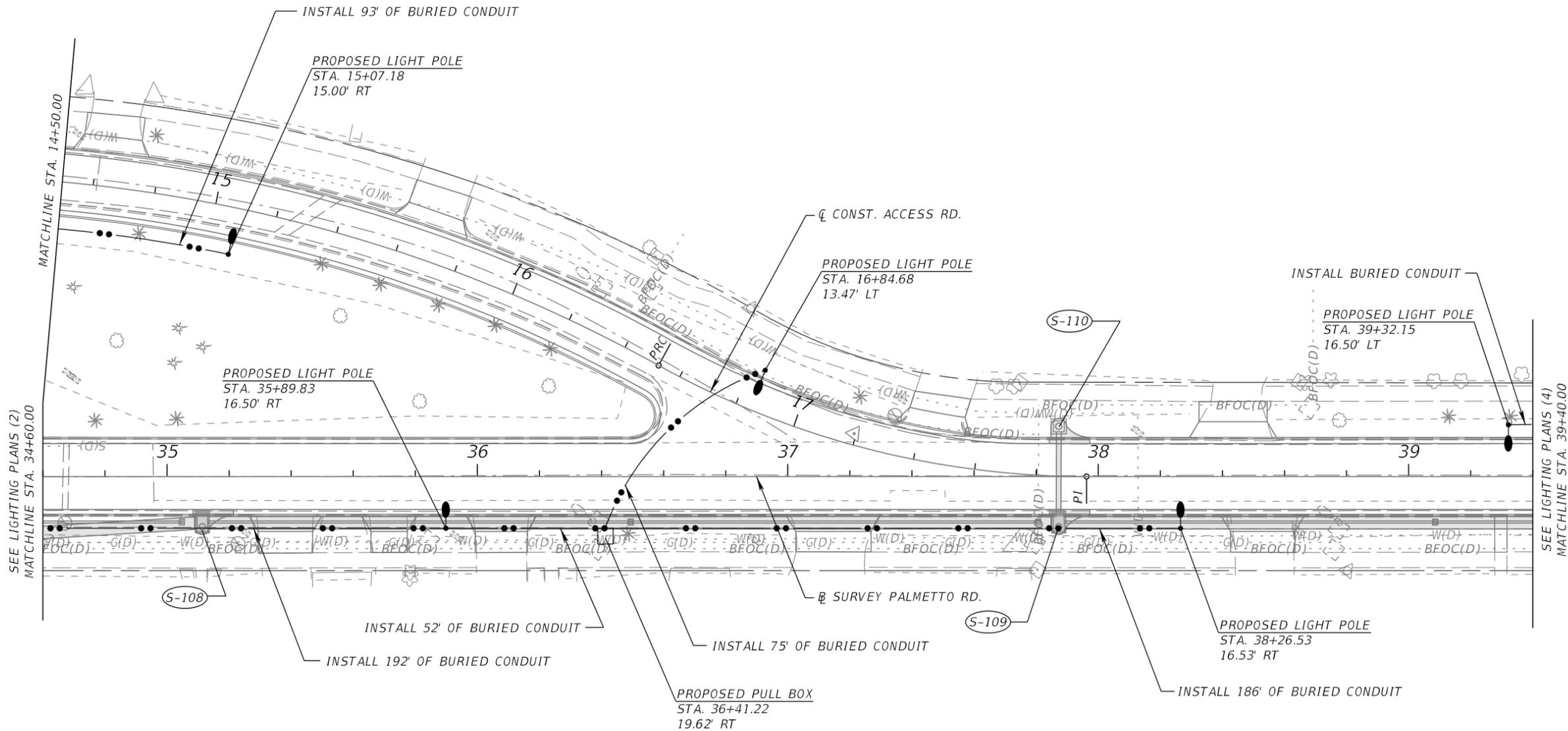
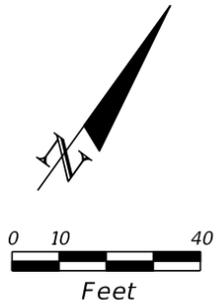
AEP NO.: 104-1091-002

SHEET TITLE

LIGHTING PLANS (3)
 STA. 34+60 TO STA. 39+40

SHEET NUMBER

52

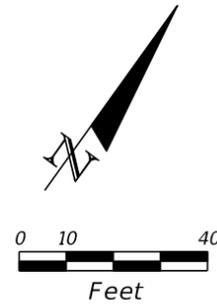


SEE LIGHTING PLANS (2)
 MATCHLINE STA. 34+60.00

SEE LIGHTING PLANS (4)
 MATCHLINE STA. 39+40.00

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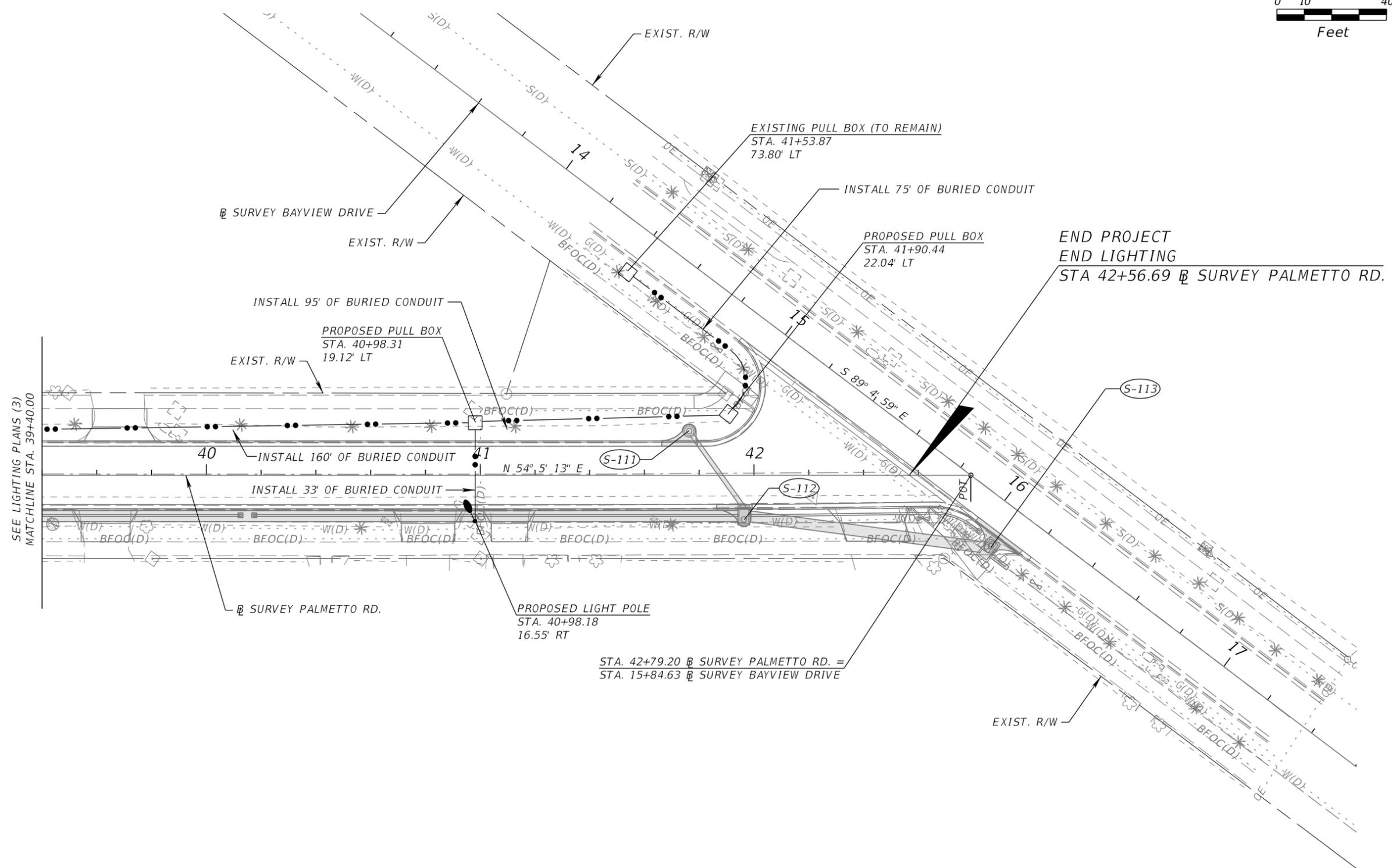
AEP NO.: 104-1091-002

SHEET TITLE

LIGHTING PLANS (4)
STA. 39+40 TO STA. 42+65

SHEET NUMBER

53



SEE LIGHTING PLANS (3)
MATCHLINE STA. 39+40.00

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