

COMPONENTS OF CONTRACT PLANS SET

ROADWAY PLANS

APPENDIX SHEETS - LIGHTING PLAN-PHOTOMETRICS

A DETAILED INDEX APPEARS ON THE KEY SHEET OF EACH COMPONENT

INDEX OF ROADWAY PLANS

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9-10	GENERAL NOTES
11-15	PLAN SHEETS
16-19	PROFILE SHEETS
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23	POND LAYOUT
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LT-3 - LT-6	LIGHTING PLAN SHEET
LT-7	LIGHTING PLAN - LANDSCAPE LIGHTING PLAN
LT-8	LIGHTING PLAN - LANDSCAPE LIGHTING DETAILS
LT-9	LIGHTING PLAN - ELECTRICAL DETAILS
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LT-13 - LT-14	LIGHTING PLAN - ELECTRICAL SPECIFICATIONS
L-1	LANDSCAPE PLAN
L-2	LANDSCAPE DETAILS & PLANT LIST

GOVERNING STANDARD PLANS:  
Florida Department of Transportation, FY2023-24 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: <https://www.fdot.gov/design/standardplans/SPRBC.shtm>

APPLICABLE IRs: None  
Standard Plans for Bridge Construction are included in the Structures Plans Component.

GOVERNING STANDARD SPECIFICATIONS:  
Florida Department of Transportation, July, 2023 Standard Specifications for Road and Bridge Construction at the following website: <http://www.fdot.gov/programmanagement/Implemented/SpecBooks>



PROJECT LOCATION

PROJECT LOCATION

ROADWAY SHOP DRAWINGS  
TO BE SUBMITTED TO:  
LAKE COUNTY PUBLIC WORKS DEPARTMENT  
P.O.BOX. 7800  
TAVARES, FLORIDA, 32778

PLANS PREPARED BY:  
OM ENGINEERING SERVICES, INC.  
621 E. WASHINGTON ST., STE 8  
ORLANDO, FLORIDA 32801  
PHONE: (407)704-7815

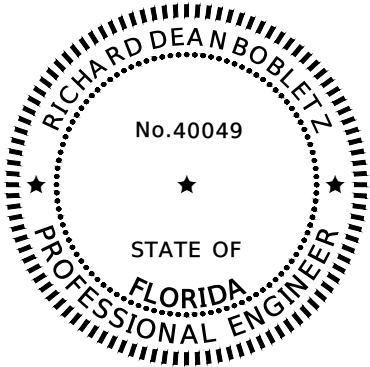
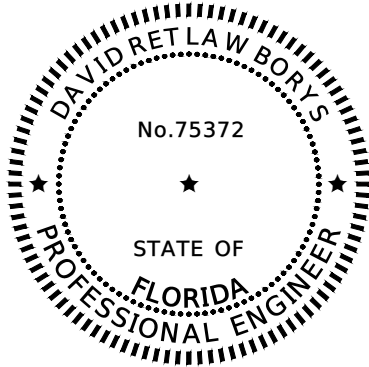
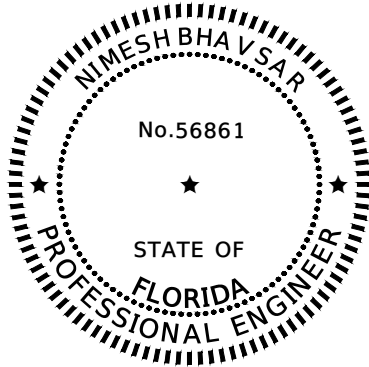
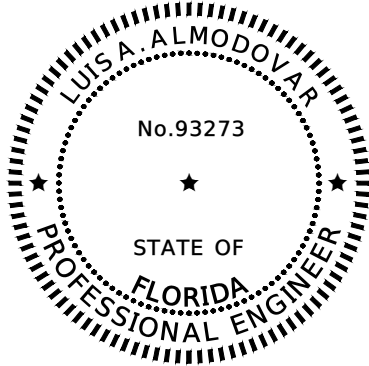
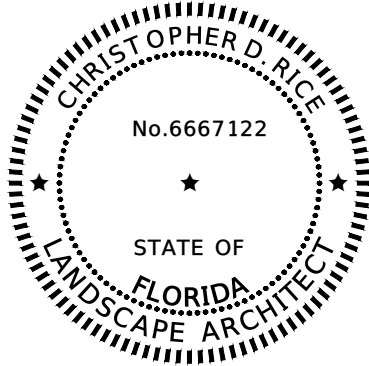


NOTE: THE SCALE OF THESE PLANS MAY  
HAVE CHANGED DUE TO REPRODUCTION

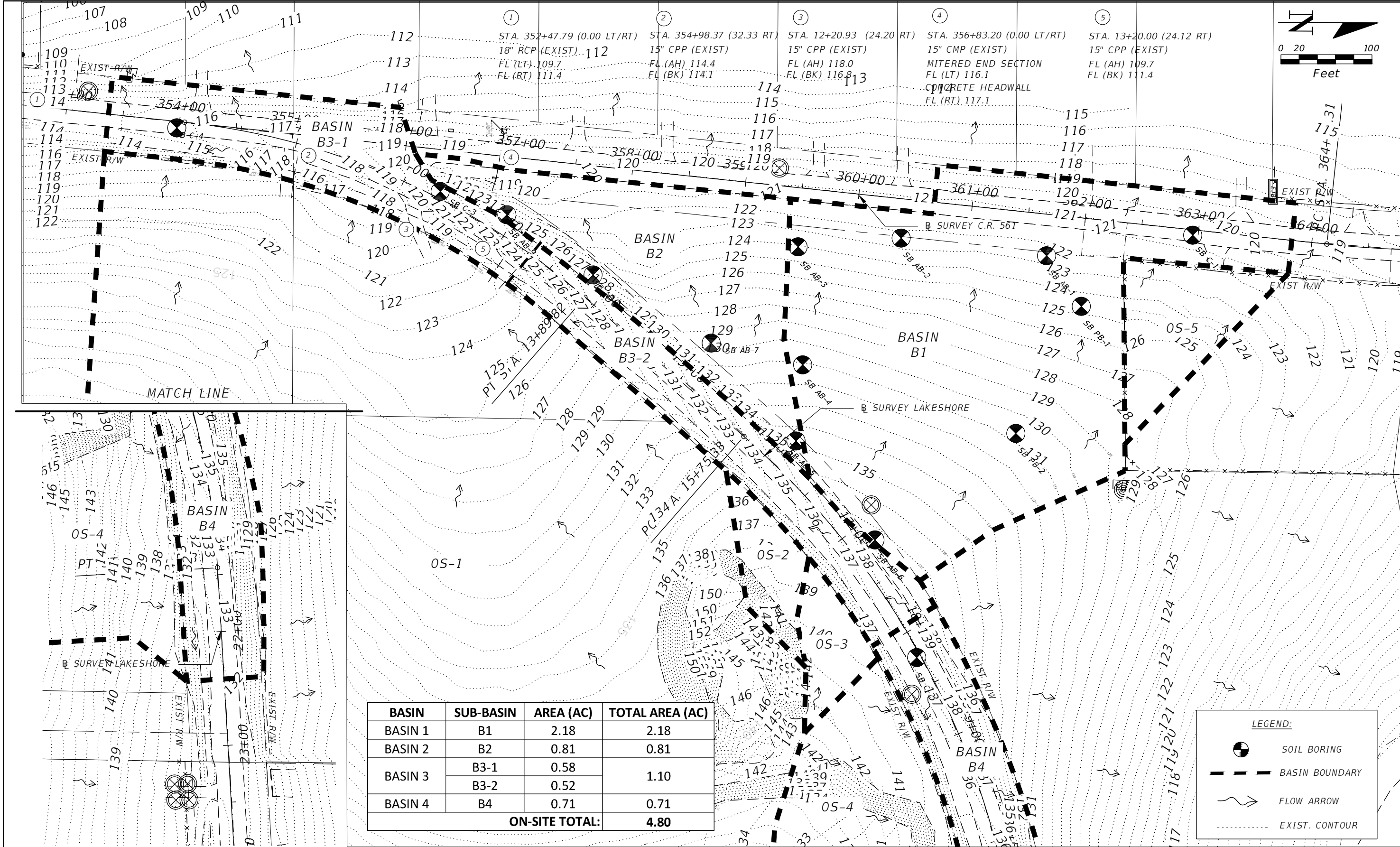
FINAL PLANS SUBMITTAL  
JANUARY 24, 2025

ROADWAY PLANS  
ENGINEER OF RECORD: RICHARD DEAN BOBLETZ, P.E.  
P.E.NO.: 40049


CONSTRUCTION CONTRACT NO.	FISCAL YEAR	SHEET NO.
N/A	N/A	1

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

<div></div> <div>THIS DOCUMENT HAS BEEN DIGITALLY SIGNED AND SEALED BY:</div> <div>ON THE DATE ADJACENT TO THE SEAL.</div> <div>PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED TO BE SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ALL ELECTRONIC COPIES.</div> <div>OM ENGINEERING SERVICES, INC. 621 E. WASHINGTON STREET, SUITE 8 ORLANDO, FLORIDA 32801 RICHARD DEAN BOBLETZ, P.E. NO. 40049</div> <div>THE ABOVE NAMED ENGINEER SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.</div> <table><thead><tr><th>SHEET NO.</th><th>SHEET TITLE</th></tr></thead><tbody><tr><td>1</td><td>KEY SHEET</td></tr><tr><td>2</td><td>SIGNATURE SHEET</td></tr><tr><td>6-7</td><td>TYPICAL SECTIONS</td></tr><tr><td>8</td><td>PROJECT LAYOUT</td></tr><tr><td>9-10</td><td>GENERAL NOTES</td></tr><tr><td>11-15</td><td>PLAN SHEETS</td></tr><tr><td>16-19</td><td>PROFILE SHEETS</td></tr><tr><td>20</td><td>ACCESS DRIVES PLAN AND PROFILE</td></tr><tr><td>25</td><td>CROSS SECTIONS PATTERN LAYOUT</td></tr><tr><td>31-52</td><td>ROADWAY CROSS SECTIONS</td></tr><tr><td>56-74</td><td>TEMPORARY TRAFFIC CONTROL PLANS</td></tr><tr><td>75-79</td><td>UTILITY ADJUSTMENTS SHEETS</td></tr><tr><td>80-84</td><td>SIGNING &amp; PAVEMENT MARKING PLANS</td></tr></tbody></table>		SHEET NO.	SHEET TITLE	1	KEY SHEET	2	SIGNATURE SHEET	6-7	TYPICAL SECTIONS	8	PROJECT LAYOUT	9-10	GENERAL NOTES	11-15	PLAN SHEETS	16-19	PROFILE SHEETS	20	ACCESS DRIVES PLAN AND PROFILE	25	CROSS SECTIONS PATTERN LAYOUT	31-52	ROADWAY CROSS SECTIONS	56-74	TEMPORARY TRAFFIC CONTROL PLANS	75-79	UTILITY ADJUSTMENTS SHEETS	80-84	SIGNING & PAVEMENT MARKING PLANS	<div></div> <div>THIS DOCUMENT HAS BEEN DIGITALLY SIGNED AND SEALED BY:</div> <div>ON THE DATE ADJACENT TO THE SEAL.</div> <div>PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED TO BE SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ALL ELECTRONIC COPIES.</div> <div>OM ENGINEERING SERVICES, INC. 621 E. WASHINGTON STREET, SUITE 8 ORLANDO, FLORIDA 32801 DAVID RETLAW BORYS, P.E. NO. 75372</div> <div>THE ABOVE NAMED ENGINEER SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.</div> <table><thead><tr><th>SHEET NO.</th><th>SHEET TITLE</th></tr></thead><tbody><tr><td>2</td><td>SIGNATURE SHEET</td></tr><tr><td>3-5</td><td>DRAINAGE MAPS</td></tr><tr><td>21</td><td>DRAINAGE PLAN</td></tr><tr><td>22</td><td>DRAINAGE STRUCTURES PROFILE</td></tr><tr><td>23</td><td>POND LAYOUT</td></tr><tr><td>24</td><td>POND OUTFALL PLAN AND PROFILE</td></tr><tr><td>27-30</td><td>POND CROSS SECTIONS</td></tr><tr><td>53-54</td><td>STORMWATER POLLUTION PREVENTION PLAN</td></tr><tr><td>55</td><td>EROSION CONTROL PLAN</td></tr></tbody></table>	SHEET NO.	SHEET TITLE	2	SIGNATURE SHEET	3-5	DRAINAGE MAPS	21	DRAINAGE PLAN	22	DRAINAGE STRUCTURES PROFILE	23	POND LAYOUT	24	POND OUTFALL PLAN AND PROFILE	27-30	POND CROSS SECTIONS	53-54	STORMWATER POLLUTION PREVENTION PLAN	55	EROSION CONTROL PLAN	<div></div> <div>THIS DOCUMENT HAS BEEN DIGITALLY SIGNED AND SEALED BY:</div> <div>ON THE DATE ADJACENT TO THE SEAL.</div> <div>PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED TO BE SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ALL ELECTRONIC COPIES.</div> <div>OM ENGINEERING SERVICES, INC. 621 E. WASHINGTON STREET, SUITE 8 ORLANDO, FLORIDA 32801 NIMESH BHAVSAR, P.E. NO. 56861</div> <div>THE ABOVE NAMED ENGINEER SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.</div> <table><thead><tr><th>SHEET NO.</th><th>SHEET TITLE</th></tr></thead><tbody><tr><td>2</td><td>SIGNATURE SHEET</td></tr><tr><td>LT-1</td><td>LIGHTING PLAN - GENERAL NOTES</td></tr><tr><td>LT-2</td><td>LIGHTING PLAN - POLE DATA TABLE AND LEGEND</td></tr><tr><td>LT-3 - LT-6</td><td>LIGHTING PLAN SHEET</td></tr><tr><td>LT-7</td><td>LIGHTING PLAN - LANDSCAPE LIGHTING PLAN</td></tr><tr><td>LT-8</td><td>LIGHTING PLAN - LANDSCAPE LIGHTING DETAILS</td></tr><tr><td>LT-9</td><td>LIGHTING PLAN - ELECTRICAL DETAILS</td></tr><tr><td>LT-10 - LT-11</td><td>LIGHTING PLAN - SERVICE POINT DETAILS</td></tr><tr><td>LT-12</td><td>LIGHTING PLAN - CONCRETE POLE INSTALLATION DETAIL</td></tr><tr><td>LT-13 - LT-14</td><td>LIGHTING PLAN - ELECTRICAL SPECIFICATIONS</td></tr></tbody></table>	SHEET NO.	SHEET TITLE	2	SIGNATURE SHEET	LT-1	LIGHTING PLAN - GENERAL NOTES	LT-2	LIGHTING PLAN - POLE DATA TABLE AND LEGEND	LT-3 - LT-6	LIGHTING PLAN SHEET	LT-7	LIGHTING PLAN - LANDSCAPE LIGHTING PLAN	LT-8	LIGHTING PLAN - LANDSCAPE LIGHTING DETAILS	LT-9	LIGHTING PLAN - ELECTRICAL DETAILS	LT-10 - LT-11	LIGHTING PLAN - SERVICE POINT DETAILS	LT-12	LIGHTING PLAN - CONCRETE POLE INSTALLATION DETAIL	LT-13 - LT-14	LIGHTING PLAN - ELECTRICAL SPECIFICATIONS
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REVISIONS	
DATE	DESCRIPTION



**OM ENGINEERING SERVICES, INC.**  
Civil • Structural • Inspections

OM ENGINEERING SERVICES, INC.  
621 E. WASHINGTON ST., STE 8  
ORLANDO, FLORIDA 32801  
PHONE NO. (407) 704-7815

ENGINEER OF RECORD: DAVID RETLAW BORYS P.E.  
P.E. LICENSE NUMBER 75372



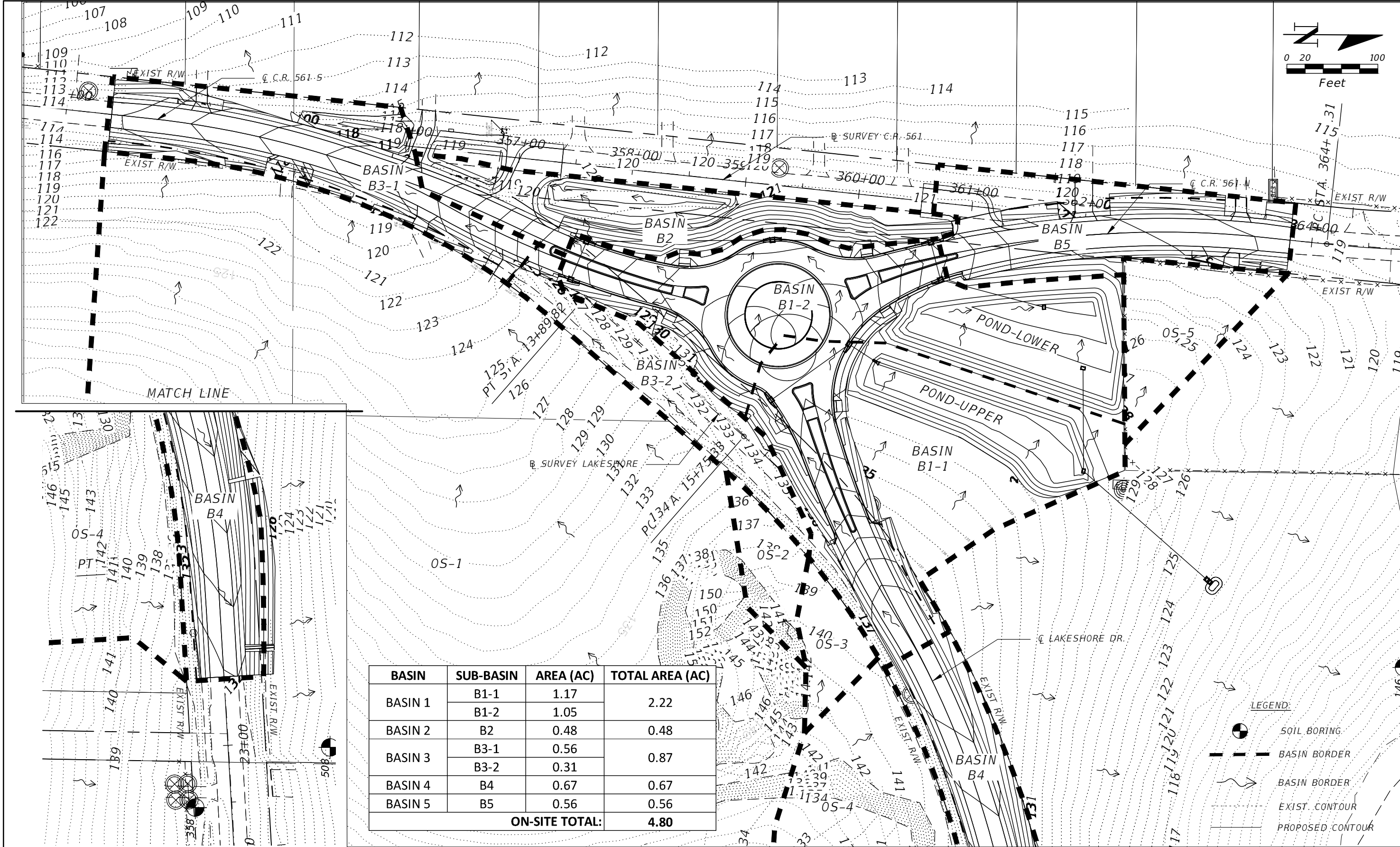
CR 561 & LAKESHORE  
DRIVE ROUNDABOUT

DRAINAGE MAP - PRE


SHEET NO.
3

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REVISIONS	
DATE	DESCRIPTION



**OM ENGINEERING SERVICES, INC.**  
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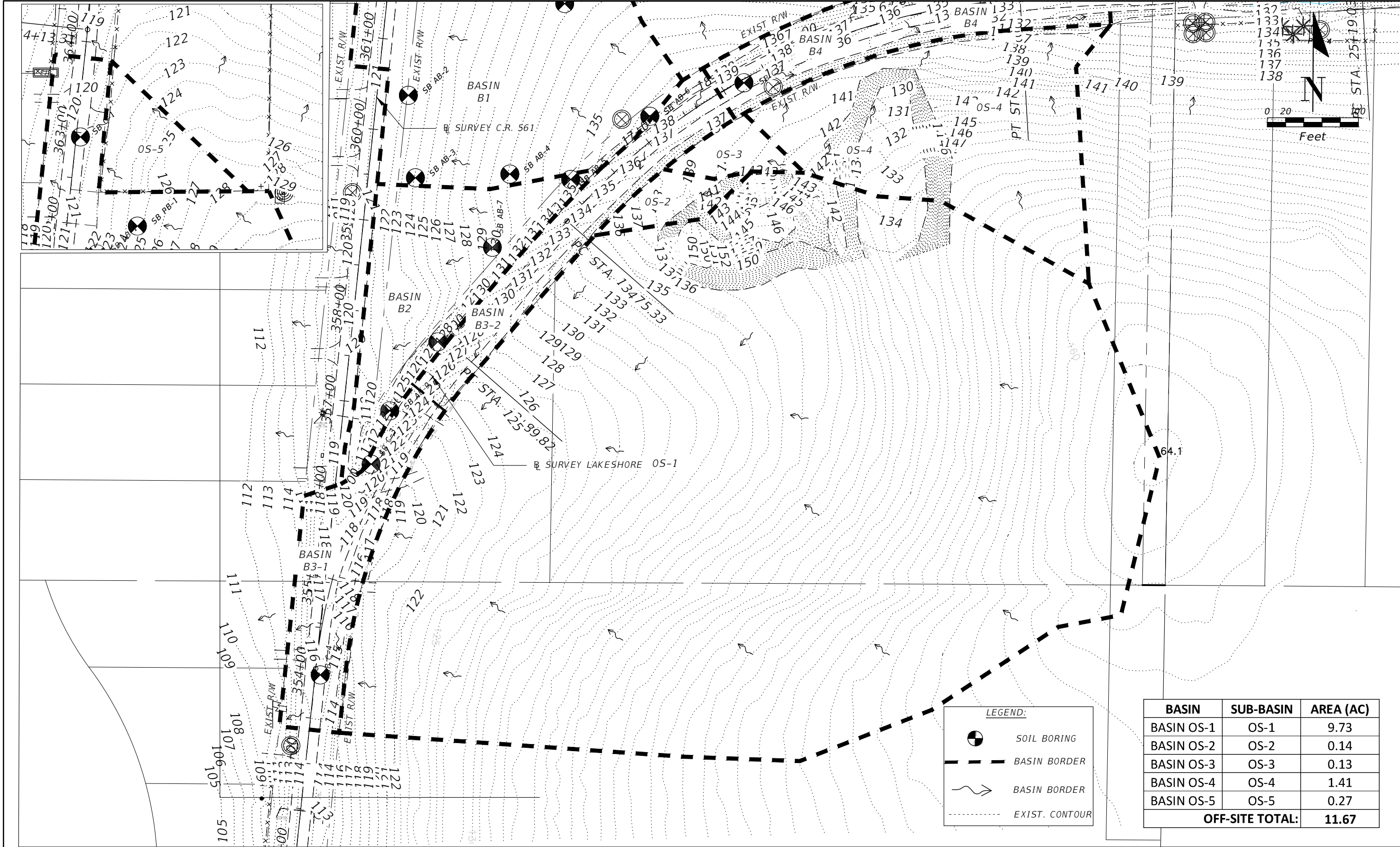
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DRIVE ROUNDABOUT

DRAINAGE MAP - POST

SHEET NO.
4

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REVISIONS	
DATE	DESCRIPTION



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**LAKE COUNTY, FL**  
REAL FLORIDA • REAL CLOSE

*CR 561 & LAKESHORE DRIVE ROUNDABOUT*

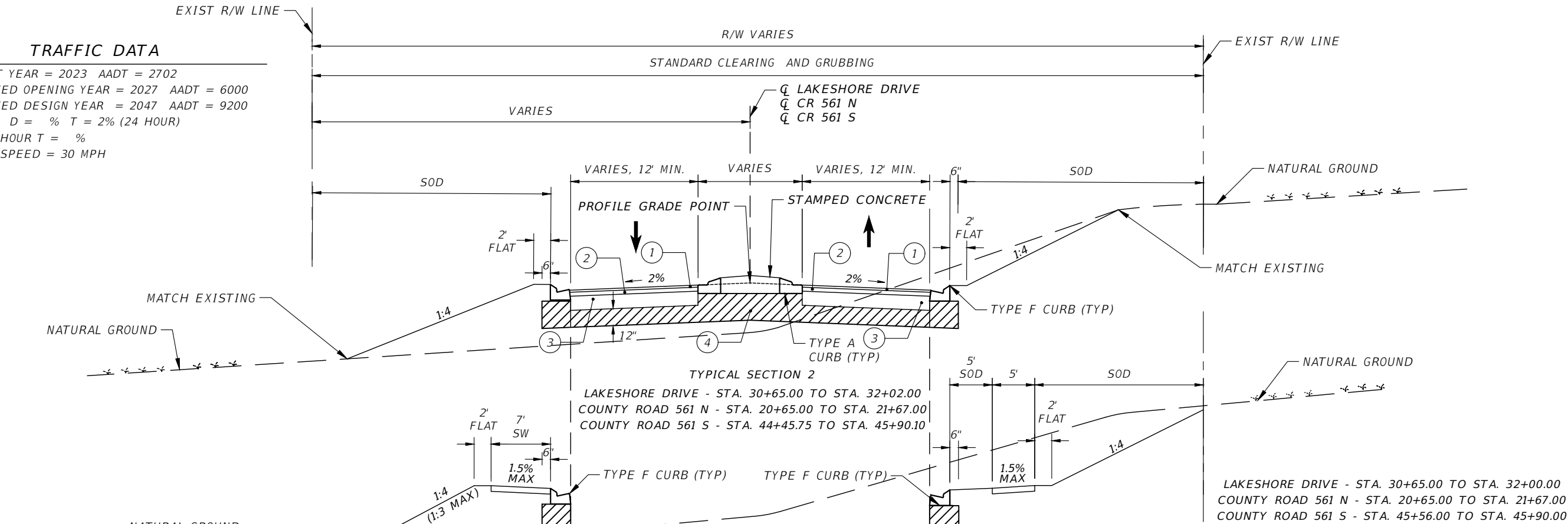
*DRAINAGE MAP - OFFSITE PRE & POST*

SHEET NO.  
**5**

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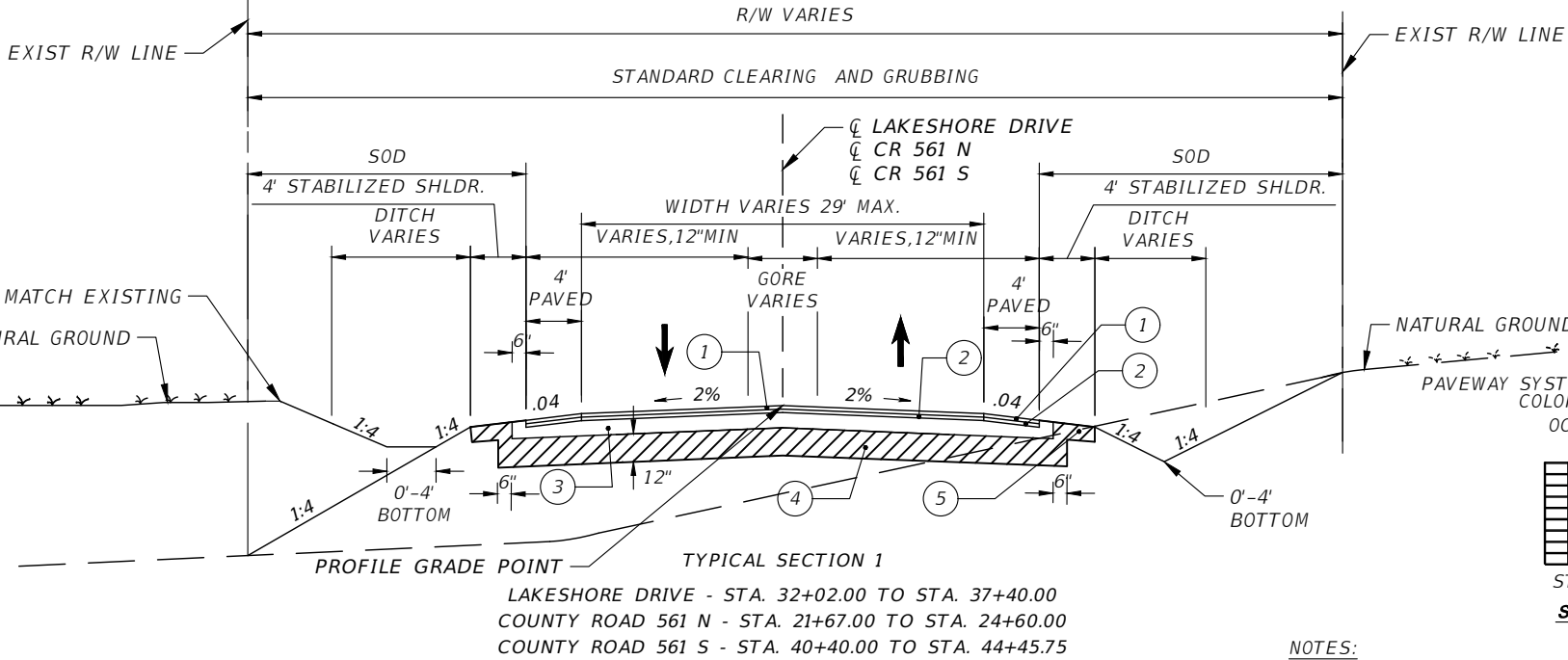
TRAFFIC DATA

CURRENT YEAR = 2023 AADT = 2702  
ESTIMATED OPENING YEAR = 2027 AADT = 6000  
ESTIMATED DESIGN YEAR = 2047 AADT = 9200  
K = % D = % T = 2% (24 HOUR)  
DESIGN HOUR T = %  
DESIGN SPEED = 30 MPH



NEW CONSTRUCTION

KEY	THICKNESS	SPECIFICATIONS
1	1.5"	1.5" FC 12.5 WITH PG 76-22 POLYMER
2	2.5"	2.5" SP 12.5
3	10"	LIMEROCK IN 2 LIFTS - 98% COMPACTION EACH LIFT, A.A.S.H.T.O. T-180, PRIMED & SANDED.
4	12"	12" MIN, TYPE B STABILIZED SUBGRADE MIN. LBR 40, 98% COMPACTION, A.A.S.H.T.O. T-180.
5	6"	TYPE B STABILIZED SHOULDER LBR 40, 98% COMPACTION, T-180



CR 561 & LAKESHORE  
DRIVE ROUNDABOUT

TYPICAL SECTIONS (1)

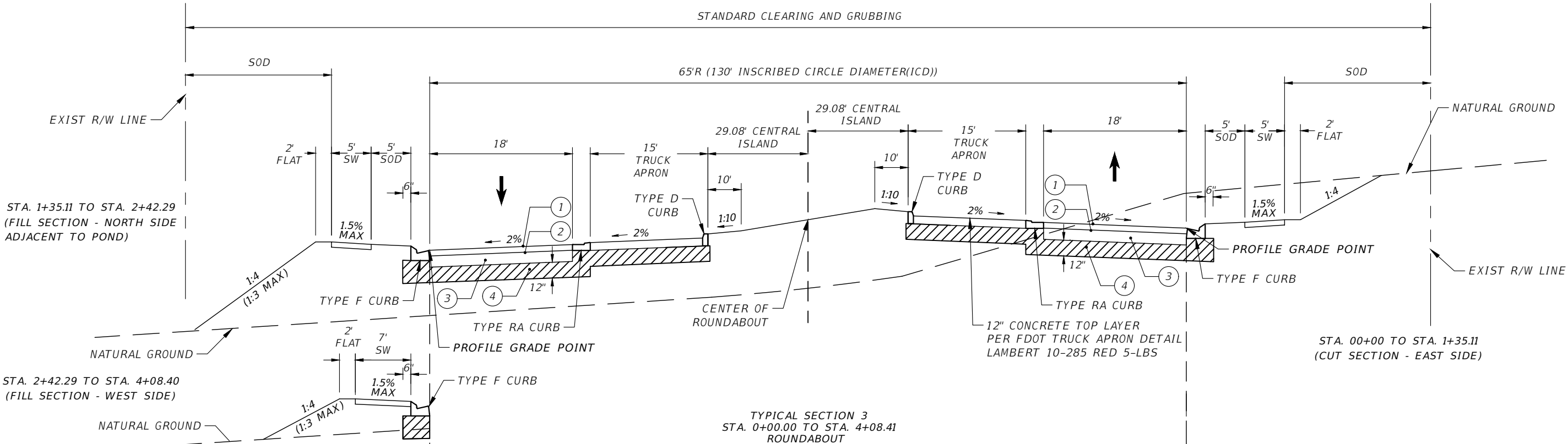
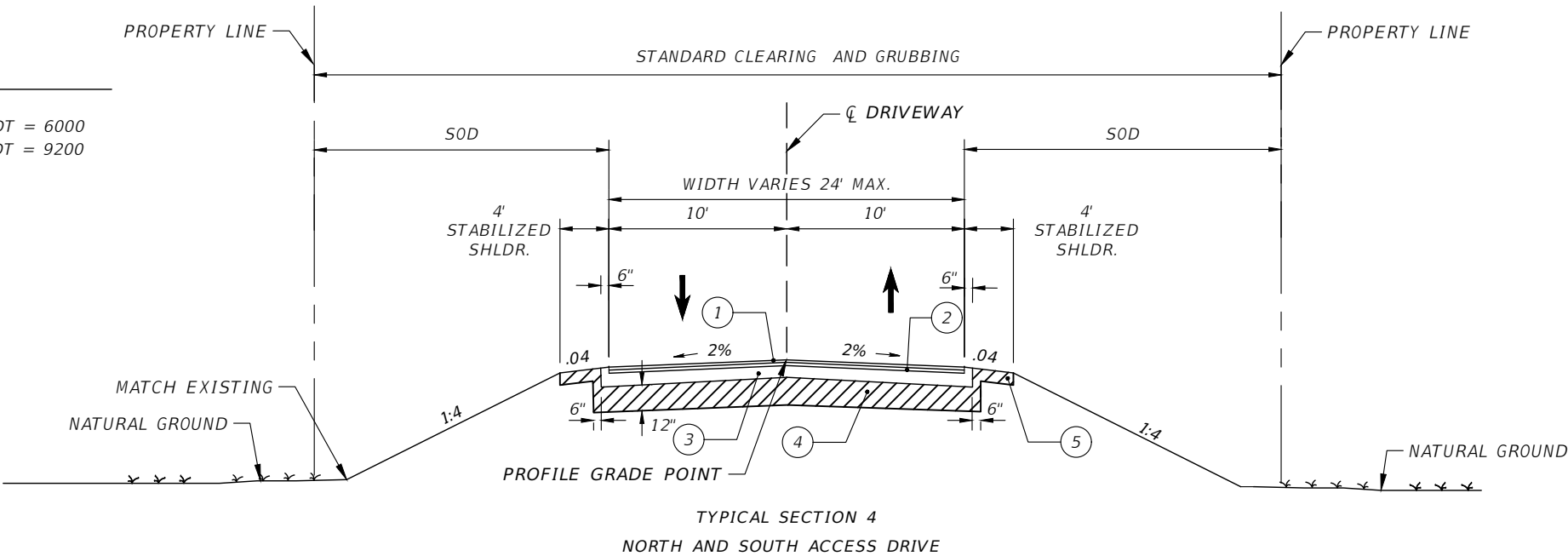
SHEET  
NO.

6



TRAFFIC DATA

CURRENT YEAR = 2023 AADT = 2702  
ESTIMATED OPENING YEAR = 2027 AADT = 6000  
ESTIMATED DESIGN YEAR = 2047 AADT = 9200  
K = % D = % T = 2% (24 HOUR)  
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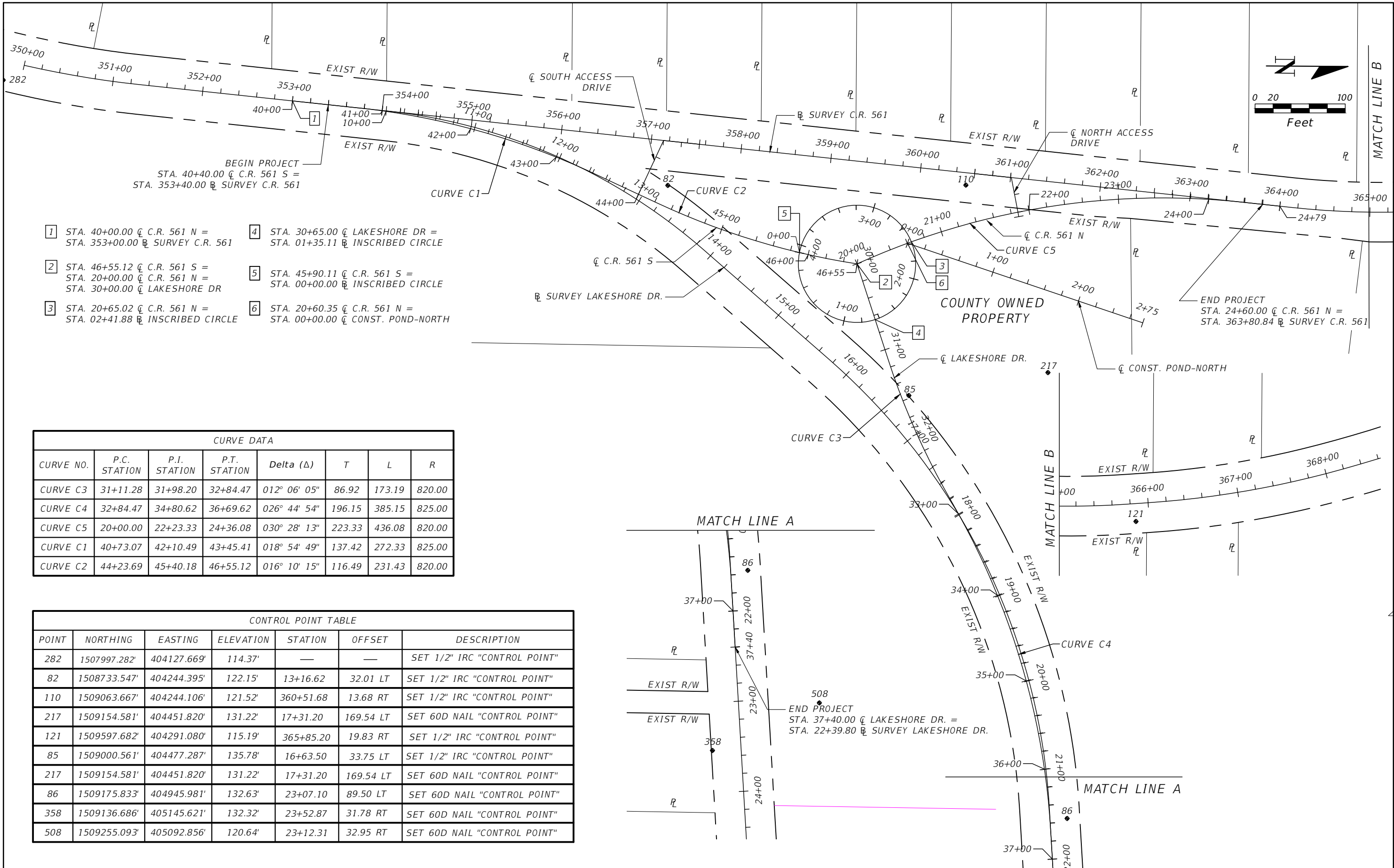
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DRIVE ROUNDABOUT

TYPICAL SECTIONS (2)

SHEET  
NO.

7

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- 1

STA. 40+00.00  $\oslash$  C.R. 561 N =  
STA. 353+00.00  $\oslash$  SURVEY C.R. 561
- 2

STA. 46+55.12  $\oslash$  C.R. 561 S =  
STA. 20+00.00  $\oslash$  C.R. 561 N =  
STA. 30+00.00  $\oslash$  LAKESHORE DR
- 3

STA. 20+65.02  $\oslash$  C.R. 561 N =  
STA. 02+41.88  $\oslash$  INSCRIBED CIRCLE
- 4

STA. 30+65.00  $\oslash$  LAKESHORE DR =  
STA. 01+35.11  $\oslash$  INSCRIBED CIRCLE
- 5

STA. 45+90.11  $\oslash$  C.R. 561 S =  
STA. 00+00.00  $\oslash$  INSCRIBED CIRCLE
- 6

STA. 20+60.35  $\oslash$  C.R. 561 N =  
STA. 00+00.00  $\oslash$  CONST. POND-NORTH

CURVE DATA							
CURVE NO.	P.C. STATION	P.I. STATION	P.T. STATION	Delta ( $\Delta$ )	T	L	R
CURVE C3	31+11.28	31+98.20	32+84.47	012° 06' 05"	86.92	173.19	820.00
CURVE C4	32+84.47	34+80.62	36+69.62	026° 44' 54"	196.15	385.15	825.00
CURVE C5	20+00.00	22+23.33	24+36.08	030° 28' 13"	223.33	436.08	820.00
CURVE C1	40+73.07	42+10.49	43+45.41	018° 54' 49"	137.42	272.33	825.00
CURVE C2	44+23.69	45+40.18	46+55.12	016° 10' 15"	116.49	231.43	820.00

CONTROL POINT TABLE						
POINT	NORTHING	EASTING	ELEVATION	STATION	OFFSET	DESCRIPTION
282	1507997.282'	404127.669'	114.37'	—	—	SET 1/2" IRC "CONTROL POINT"
82	1508733.547'	404244.395'	122.15'	13+16.62	32.01 LT	SET 1/2" IRC "CONTROL POINT"
110	1509063.667'	404244.106'	121.52'	360+51.68	13.68 RT	SET 1/2" IRC "CONTROL POINT"
217	1509154.581'	404451.820'	131.22'	17+31.20	169.54 LT	SET 60D NAIL "CONTROL POINT"
121	1509597.682'	404291.080'	115.19'	365+85.20	19.83 RT	SET 1/2" IRC "CONTROL POINT"
85	1509000.561'	404477.287'	135.78'	16+63.50	33.75 LT	SET 1/2" IRC "CONTROL POINT"
217	1509154.581'	404451.820'	131.22'	17+31.20	169.54 LT	SET 60D NAIL "CONTROL POINT"
86	1509175.833'	404945.981'	132.63'	23+07.10	89.50 LT	SET 60D NAIL "CONTROL POINT"
358	1509136.686'	405145.621'	132.32'	23+52.87	31.78 RT	SET 60D NAIL "CONTROL POINT"
508	1509255.093'	405092.856'	120.64'	23+12.31	32.95 RT	SET 60D NAIL "CONTROL POINT"



GENERAL NOTES:							
<div><div>1. MATERIALS, INSTALLATION, TESTING, AND CONSTRUCTION SHALL BE PER THE STANDARDS AND SPECIFICATIONS OF LAKE COUNTY, FLORIDA, AND THE "FLORIDA DEPARTMENT OF TRANSPORTATION UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE FOR STREETS AND HIGHWAYS" COMMONLY KNOWN AS THE "FLORIDA GREENBOOK" 2018 EDITION, FDOT JULY 2023 STANDARD SPECIFICATIONS AND FDOT FY 2023-2024 STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION, THE MAXIMUM REQUIREMENTS OF ANY SPECIFICATION SHALL APPLY UNLESS OTHERWISE DIRECTED BY THE ENGINEER OF RECORD.</div><div>2. CONTRACTOR SHALL MOBILIZE AND DEMOBILIZE FROM THE PROJECT AS REQUIRED FOR THE COMPLETION OF THE WORK.</div><div>3. PAVEMENT SHALL MEAN ALL ASPHALT AND BASE ASSOCIATED WITH A DRIVING SURFACE AS SHOWN ON THE CONSTRUCTION PLANS.</div><div>4. A CONSTANT SLOPE SHALL BE MAINTAINED BETWEEN DESIGNATED AREAS OF CUT AND FILL.</div><div>5. ALL FILL, INCLUDING SUBGRADE AND SUBBASE PLACED WITHIN PROPOSED ROAD RIGHT-OF-WAY OR EASEMENT, SHALL BE COMPACTED AS FOLLOWS: ROADWAY AREAS UNDER PAVEMENT AND PAVED SHOULDERS SHALL BE 98% MAXIMUM DENSITY, AASHTO T-180, MINIMUM LBR 40 FOR EACH LIFT. EACH LIFT SHALL BE A MAXIMUM OF 6". STABILIZED SHOULDERS SHALL BE TWELVE 12 INCHES DEEP, 98% MAXIMUM DENSITY, AASHTO T-180, MINIMUM LBR 40. BEYOND THE STABILIZED SHOULDER, ALL FILL SHALL BE COMPACTED TO 95% MINIMUM DENSITY. FILL VOLUMES SHOWN DO NOT HAVE A COMPACTION MULTIPLIER FACTORED.THE CONTRACTOR SHALL DETERMINE A COMPACTION FACTOR AND APPLY IT FOR FINAL FILL PLACEMENT VOLUMES, FOR SUBGRADE AND SUBBASE REQUIREMENTS, PLEASE REFER TO A SPECIFIC CROSS-SECTION.</div><div>6. THE CONTRACTOR IS TO SUPPLY THE OWNER'S ENGINEER WITH A COPY OF ALL COMPACTION TESTS AND ASPHALT RESULTS. THE CONTRACTOR IS TO CERTIFY TO THE ENGINEER, IN WRITING, THAT ALL TESTING REQUIREMENTS REQUIRED BY THE LOCAL AND STATE REGULATORY AGENCIES FOR THE IMPROVEMENTS, AS REQUIRED BY THE ENGINEERING CONSTRUCTION DRAWINGS, HAVE BEEN SATISFIED. UNLESS OTHERWISE NOTED, THE COMPACTED SUBGRADE WILL BE TO 98% OF THE MAXIMUM DENSITY AS PER AASHTO T-180.</div><div>7. UNLESS OTHERWISE NOTED, THE ESTABLISHED CLEAR ZONE IS 24 FEET FROM THE NEW EDGE OF THE TRAVEL WAY. ALL ABOVE-GROUND STRUCTURES SUCH AS MAILBOXES, TRAFFIC CONTROL SIGNS, STREET SIGNS, FENCES, ETC., ARE TO BE RELOCATED PER FDOT AND LAKE COUNTY</div></div>		<div><div>8. THE CONTRACTOR SHALL PERFORM THE WORK IN SUCH A MANNER THAT SUCCESSFULLY ACCOMPLISHES THE INTENDED DESIGN WITH MINIMAL IMPACT ON THE EXISTING CONDITIONS. ANY CONSTRUCTION ACTIVITY PERFORMED WITHOUT PRIOR WRITTEN APPROVAL FROM THE ENGINEER OF RECORD THAT IS DEEMED EXCESSIVELY DISRUPTIVE TO EXISTING CONDITIONS OR SIGNIFICANTLY DEVIATES FROM THE LIMITS OF CONSTRUCTION AS SET FORTH BY THESE CONSTRUCTION PLANS SHALL BE CONSIDERED AS PART OF THE ORIGINAL WORK. NO ADDITIONAL COMPENSATION SHALL BE GIVEN TO RESTORE THE DISTURBED AREAS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING ANY SITE DAMAGE IN THE COURSE OF PERFORMING THE WORK.</div><div>9. SHOULD THE CONTRACTOR IDENTIFY ANY APPARENT ERRORS, DISCREPANCIES, OR OMISSIONS, THE CONTRACTOR SHALL NOTIFY THE COUNTY AND ENGINEER OF RECORD WITHIN A REASONABLE TIME FRAME, LESS THAN 48 HOURS AFTER DISCOVERY. THE CONTRACTOR SHALL NOT TAKE ADVANTAGE OF APPARENT ERRORS OR OMISSIONS IN THE DRAWINGS OR SPECIFICATIONS. THE ENGINEER SHALL BE PERMITTED TO MAKE CORRECTIONS AND INTERPRETATIONS AS MAY BE DEEMED NECESSARY FOR FULFILLMENT OF THE INTENT OF THE DESIGN.</div><div>10. THE CONTRACTOR SHALL VERIFY ALL EXISTING ROADWAY CROSS-SLOPES. ALL DETECTABLE WARNINGS ON SIDEWALK TERMINATIONS CONSTRUCTED BY THE CONTRACTOR SHALL EITHER BE CAST IN PLACE ADA MATS, OR COUNTY APPROVED EQUAL LISTED ON THE FDOT APPROVED PRODUCTS LIST (APL). THE COLOR SHALL BE SAFETY BRICK RED.</div><div>11. THE CONTRACTOR SHALL CHECK THE PLANS FOR CONFLICTS AND DISCREPANCIES BEFORE CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY CONFLICTS OR DISCREPANCIES BEFORE PERFORMING ANY WORK IN THE AFFECTED AREA.</div><div>12. ALL SPECIFICATIONS AND DOCUMENTS REFERRED TO SHALL BE THOSE LISTED ON THE KEY SHEET.</div><div>13. THE CONTRACTOR SHALL SUBMIT FOR APPROVAL TO THE OWNER'S ENGINEER SHOP DRAWINGS ON ALL PRECAST AND MANUFACTURED ITEMS FOR THE SUBJECT SITE. FAILURE TO OBTAIN APPROVAL BEFORE INSTALLATION MAY RESULT IN REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE. ALL SHOP DRAWINGS ARE TO BE REVIEWED AND APPROVED BY THE CONTRACTOR BEFORE SUBMITTAL TO THE OWNER'S ENGINEER.</div><div>14. AT LEAST THREE 3 WORKING DAYS BEFORE CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND APPROPRIATE AGENCIES, AND SUPPLY THEM WITH ALL REQUIRED SHOP DRAWINGS, CONTRACTOR'S NAME, STARTING DATE, PROJECTED SCHEDULE, AND OTHER INFORMATION AS REQUIRED. ANY WORK PERFORMED BEFORE NOTIFYING THE ENGINEER, OR, WITHOUT THE AGENCY INSPECTOR PRESENT, IT MAY BE SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.</div></div>		<div><div>15. CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL CONSTRUCTION RECORDS FOLLOWING THE FLORIDA DEPARTMENT OF TRANSPORTATION "FDOT" AND LAKE COUNTY (FLORIDA) REQUIREMENTS, AS APPLICABLE.</div><div>16. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL CONSTRUCTION-RELATED PERMITS, INCLUDING, BUT NOT LIMITED TO, RIGHT OF WAY PERMITS AND MAINTENANCE OF TRAFFIC PERMITS. ALL PERMITS MUST BE POSTED AND MAINTAINED BY THE CONTRACTOR ON A VISIBLE AND WEATHERPROOF PERMIT BOARD AT THE PROJECT SITE.</div><div>17. CONTRACTOR SHALL MEET ALL GENERAL FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION "FDEP", NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM "NPDES", ST.JOHN'S RIVER WATER MANAGEMENT DISTRICT "SJRWMD" AND LOCAL REQUIREMENTS THROUGHOUT THE PROJECT.</div><div>18. CONTRACTOR IS TO PROVIDE TWO (2) SETS OF HARD COPY AS-BUILTS AND ONE ELECTRONIC FILE. THE AS-BUILTS SHALL SHOWN DRAINAGE INFORMATION AS WELL AS EDGE OF PAVEMENT SHOTS FOR THE ROADWAY.</div><div>19. CONTRACTOR SHALL PLACE MATERIALS STORED ALONG THE ROADWAY INSIDE THE RIGHT OF WAY TO CAUSE NO OBSTRUCTIONS TO THE TRAVELING PUBLIC.</div><div>20. CONTRACTOR SHALL BE RESPONSIBLE FOR RESOLVING ALL PUNCH LIST ITEMS PREPARED BY LAKE COUNTY, THE ENGINEER OF RECORD, OR ITS DESIGNEE BEFORE FINAL ACCEPTANCE OF THE PROJECT.</div><div>21. CONTRACTOR SHALL COMPLY WITH ALL LAWS AND ANY APPLICABLE CODES OR AGENCIES HAVING JURISDICTION AS REQUIRED FOR THIS PROJECT.</div></div>		<div><div>2. ALL (PRM's) IRONS AND MONUMENTS SHOWN ON PLANS, OR FOUND, SHALL BE PRESERVED. THE CONTRACTOR SHALL PROTECT ANY IRONS OR MONUMENTS SHOWN IN THE PROPOSED PAVEMENT WITH A CAST IRON VALVE BOX.</div><div>3. THE CONTRACTOR SHALL PROTECT PUBLIC LAND CORNERS WITHIN THE LIMITS OF CONSTRUCTION. IF A CORNER MONUMENT IS IN DANGER OF BEING DESTROYED OR DISTURBED, THE COUNTY SURVEYOR SHALL BE IMMEDIATELY NOTIFIED OF THE DANGER OF BEING DESTROYED OR DISTURBED.</div><div>4. FOR ADDITIONAL SURVEY NOTES, SEE THE SURVEY MAP PREPARED BY SOUTHEASTERN SURVEYING.</div></div>	
				EROSION AND SEDIMENT CONTROL:			
				<div><div>1. THE CONTRACTOR SHALL PROTECT ALL CONSTRUCTED INLETS, MITERED END SECTIONS, AND END WALLS WITH SOD (5' OF SOD IN ALL DIRECTIONS) PER FDOT DESIGN STANDARDS INDEX NO. 570-001, INDEX 524-001, AND AS SHOWN ON THE CONSTRUCTION PLANS.</div><div>2. THE LOCATION OF THE MINIMUM REQUIRED EROSION AND SEDIMENT CONTROL MEASURES, SUCH AS SILT FENCES AND TURBIDITY BARRIERS, ARE SUMMARIZED ON THE PLAN SHEETS.</div><div>3. SOIL TRACKING PREVENTION DEVICES SHALL BE CONSTRUCTED AT POINTS OF EGRESS FROM UNSTABLE AREAS OF THE PROJECT TO ROADS WHERE OFF-SITE TRACKING OF MATERIAL COULD OCCUR.</div><div>4. THE CONTRACTOR SHALL SOD ALL DISTURBED AREAS UNLESS OTHERWISE NOTED. THE CONTRACTOR IS RESPONSIBLE FOR WATERING AND MAINTAINING SOD UNTIL FULLY ESTABLISHED AND AS ADDITIONALLY SHOWN ON THE CONSTRUCTION PLANS.</div><div>5. SOD SHALL BE REPLACED WITH THE ORIGINAL TYPE ON ALL RESIDENTIAL LOTS AND SHOWN ON PLANS.</div><div>6. THE CONTRACTOR SHALL DE-SILT ALL DRAINS, PIPES, AND SWALES WITHIN THE PROJECT BOUNDARY AT COMPLETION OF CONSTRUCTION.</div><div>7. THE CONTRACTOR SHALL OBTAIN A NPDES STORMWATER PERMIT BEFORE CONSTRUCTION.</div><div>8. EROSION AND SEDIMENT CONTROL MEASURES SHOWN ON THE PLAN SHEETS SHALL BE PLACED BEFORE OR AS THE FIRST STEP IN CONSTRUCTION AND ARE THE MINIMUM REQUIRED. ADDITIONAL CONTROLS SHALL BE FURNISHED AS NEEDED AT NO ADDITIONAL COST. MATERIALS FROM WORK ON THESE PROJECTS SHALL BE CONTAINED AND NOT ALLOWED TO COLLECT ON ANY OFF-PERIMETER AREAS OR IN WATERWAYS. SILT FENCES, TURBIDITY BARRIERS, AND OTHER ESSENTIAL EROSION CONTROL MEASURES MUST REMAIN IN PLACE AND IN GOOD CONDITION AT ALL LOCATIONS IN THE CONSTRUCTION PLANS OR AS REQUIRED UNTIL STABILIZED SOILS AND VEGETATION ARE ESTABLISHED AND THE CONTRACT IS COMPLETE. MEASURES SHOWN ARE THE MINIMUM REQUIRED, AND THE CONTRACTOR SHALL ENSURE THAT THERE IS NO DIRECT OR INDIRECT DISCHARGE OF CONSTRUCTION MATERIALS INTO OFF-SITE AREAS OR WATERWAYS. THE CONTRACTOR SHALL REMOVE ALL EROSION AND SEDIMENT CONTROL MEASURES AFTER CONSTRUCTION.</div><div>9. THE CONTRACTOR SHALL INSTALL PEGGED SOD ON ALL SLOPES 3:1 OR STEEPER.</div></div>			
				PUBLIC NOTIFICATION:			
				<div><div>1. BEFORE CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE WRITTEN NOTICE TO ALL RESIDENCES &amp; BUSINESSES ADJACENT TO THE PROJECT LIMITS. A MINIMUM OF 14 CALENDAR DAYS BEFORE CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE TO THE COUNTY A COPY OF THE NOTIFICATION WITH A LIST OF THE PARTIES CONTACTED. THIS NOTICE SHALL INCLUDE, AT A MINIMUM, THE ANTICIPATED CONSTRUCTION SCHEDULE, MAINTENANCE OF TRAFFIC PLANS, AND ANY IMPACTS, PERMANENT OR TEMPORARY, TO THE SUBJECT RESIDENCE AND ITS ADJACENT AREA.</div><div>2. THE CONTRACTOR SHALL ALSO INSTALL PORTABLE CHANGEABLE MESSAGE SIGNS PER FDOT DESIGN MANUAL 2023 INDEX 243 ON COUNTY ROAD IF IMPACTED BY CONSTRUCTION ONE (1) WEEK BEFORE CONSTRUCTION TO INFORM RESIDENTS AND ROADWAY USERS OF THE IMPENDING CONSTRUCTION. THE PCMS SHALL DISPLAY LANE CLOSURE INFORMATION, PER THE TEMPORARY TRAFFIC CONTROL PLANS.</div></div>			
				SURVEY:			
				<div><div>1. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL CONTROL AND BENCHMARK DATA BEFORE CONSTRUCTION. SHOULD THE CONTRACTOR DISCOVER ANY DISCREPANCIES IN DATA, THE CONTRACTOR SHALL BRING THESE DISCREPANCIES TO THE ATTENTION OF THE LAKE COUNTY SURVEY MANAGER AT (352) 253-6049. SEE SIGNED AND SEALED COMPONENT SURVEY PLANS FOR ADDITIONAL INFORMATION ON HORIZONTAL AND VERTICAL DATUM INFORMATION.</div></div>			
REVISIONS		 <div>OM ENGINEERING SERVICES, INC. 621 E. WASHINGTON ST., STE 8 ORLANDO, FLORIDA 32801 PHONE NO. (407) 704-7815</div>		<i>CR 561 &amp; LAKESHORE DRIVE ROUNDABOUT</i>	<i>GENERAL NOTES (1)</i>	SHEET NO.	9
DATE	DESCRIPTION						
		ENGINEER OF RECORD: RICHARD DEAN BOBLETZ P.E. P.E. LICENSE NUMBER 40049					

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

DRAINAGE:

1. ALL CURB INLETS, DITCH BOTTOM INLETS, AND MANHOLES WITHIN THE RIGHT-OF-WAY SHALL HAVE TRAFFIC BEARING FRAMES AND COVERS OR GRATES MEETING HS-20 LOADING REQUIREMENTS.
2. UNLESS OTHERWISE NOTED, ALL EXISTING DRAINAGE STRUCTURES WITHIN THE LIMITS OF CONSTRUCTION ARE TO BE REMOVED.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTING ALL PIPES, PIPE END TREATMENTS, AND DRAINAGE STRUCTURES WITHIN THE LIMITS OF CONSTRUCTION IN A DRY CONDITION OR AS APPROVED BY THE DIRECTOR OF ENGINEERING.
4. CONSTRUCT ALL MITERED END SECTIONS PER FDOT DESIGN STANDARDS INDEX NO. 430-022 FOR CROSS PIPES AND SIDE PIPES, RESPECTIVELY.
5. THE CONTRACTOR SHALL SOD ALL DRAINAGE SWALES.
6. THE CONTRACTOR SHALL MAINTAIN ALL APPLICABLE STORM DRAINAGE SYSTEMS UNTIL THE FINAL ACCEPTANCE OF THE PROJECT.
7. CONTRACTOR IS RESPONSIBLE FOR STORMWATER MANAGEMENT AND PROTECTION OF THE EXISTING STORMWATER SYSTEM DURING ALL CONSTRUCTION. ANY DAMAGE TO THIS SYSTEM MUST BE CORRECTED IMMEDIATELY BY THE CONTRACTOR.

**TREES AND LANDSCAPING:**

1. THE CONTRACTOR SHALL REPLACE LANDSCAPING THAT IS REMOVED OR DESTROYED WITHIN THE LIMITS OF CONSTRUCTION.
2. THE CONTRACTOR SHALL TRIM TREES TO THE RIGHT-OF-WAY LINE OR WITHIN 8' OF EOP TO A HEIGHT OF 18', WHICHEVER IS LESS.

DRIVEWAYS:

1. THE CONTRACTOR SHALL PAVE DRIVEWAYS WITHIN THE RIGHT-OF-WAY.
2. DRIVEWAYS SHALL NOT EXCEED 14% SLOPE.
3. EXISTING CONCRETE DRIVEWAYS WITHIN R/W TO BE RECONSTRUCTED BY CONTRACTOR AND INCLUDE CONCRETE APRONS AS DETAILED ON THE ROADWAY PLAN SHEETS. CONCRETE SHALL BE A MINIMUM OF SIX (6) INCHES THICK, 3,000 PSI. REINFORCED CONCRETE.
4. DRIVEWAY APRONS TO BE CONSTRUCTED WITH 4'x8' TRIANGULAR FLARES PER COUNTY STANDARD DETAIL.
5. DRIVEWAY LOCATIONS AND WIDTHS SHOWN ARE APPROXIMATE AND MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER OF RECORD.
6. PAVEMENT REMOVAL REQUIRED FOR CONSTRUCTION AND SHOWN IN THE CONSTRUCTION PLANS ON SIDE STREETS AND DRIVEWAYS THAT ARE WITHIN THE LIMITS OF THE RIGHT-OF-WAY OF THE COUNTY ROAD SHALL BE RECONSTRUCTED PER COUNTY STANDARDS AND THE PLAN CROSS-SECTIONS. DRIVEWAYS SHALL MATCH EXISTING WIDTH, PAVEMENT DESIGN, AND ELEVATION UNLESS OTHERWISE NOTED.

TRAFFIC CONTROL:

1. THE CONTRACTOR SHALL MAINTAIN TRAFFIC ON EXISTING STREETS AND DRIVEWAYS FOR THE LOCAL TRAFFIC AND PROPERTY OWNERS.
2. ALL ROADS SHALL BE OPEN TO TRAFFIC WITH NO PERMANENT LANE CLOSURES ALLOWED. THE CONTRACTOR SHALL CONFORM TO THE LATEST EDITIONS OF MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND THE FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS, INDEX 102-600 TO 102-680, AS APPLICABLE.
3. ANY TEMPORARY ROAD CLOSURE REQUIRES AN AUTHORIZATION REQUEST MADE TO LAKE COUNTY ROAD OPERATIONS AT (352)343-6439 AND AT LEAST (3) DAYS' NOTICE BEFORE CLOSURE. THE CONTRACTOR IS REQUIRED TO SUPPLY A DETOUR PLAN WHEN REQUESTING A ROADWAY /STREET CLOSURE. NO ROADWAY /STREET CLOSURE SHALL TAKE PLACE WITHOUT THE COUNTY APPROVAL OF THE DETOUR PLAN. THE CONTRACTOR SHALL SUPPLY ALL SIGNAGE ASSOCIATED WITH CLOSURE AND DETOUR.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MAINTENANCE OF TRAFFIC (MOT) REQUIRED FOR THE WORK'S COMPLETION. INCLUDING, BUT NOT LIMITED TO, COORDINATING LANE CLOSURES AND DETOURS WITH THE RESPECTIVE GOVERNING AGENCIES (FDOT AND LAKE COUNTY AND SHALL BE RESPONSIBLE FOR COORDINATING WITH FLORIDA HIGHWAY PATROL (FHP) AND THE LAKE COUNTY SHERIFF'S (LCS) DEPARTMENTS AS MAY BE REQUIRED, AND AS REQUIRED FOR APPROVAL. MODIFICATIONS TO THE MOT PLAN OUTLINED IN THE DRAWINGS MAY BE ALLOWABLE, PROVIDED LAKE COUNTY OR THE ENGINEER OF RECORD AUTHORIZED REPRESENTATIVE APPROVES THE MODIFICATIONS IN WRITING BEFORE ANY MODIFICATION. THE CONTRACTOR SHALL CONDUCT THE WORK AT ALL TIMES IN SUCH MANNER AND SEQUENCE AS TO ENSURE THE LEAST PRACTICABLE INTERFERENCE WITH TRAFFIC.

UTILITIES:

1. CALL SUNSHINE 811 @ 1-800-432-4770 TO CONFIRM UTILITY LOCATIONS. THE LOCATION OF THE UTILITIES SHOWN IN THE PLANS (INCLUDING THOSE DESIGNATED Vv, Vh, AND Vvh) ARE BASED ON LIMITED INVESTIGATION TECHNIQUES AND SHOULD BE CONSIDERED APPROXIMATE ONLY. THE LOCATIONS/ ELEVATIONS APPLY ONLY AT THE POINTS SHOWN. INTERPOLATIONS BETWEEN THESE POINTS HAVE NOT BEEN VERIFIED. THE UTILITIES SHOWN IN THE CONSTRUCTION PLANS MAY NOT BE ALL OF THE UTILITIES ON SITE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY, BEFORE CONSTRUCTION, TO VERIFY ALL EXACT LOCATIONS, ELEVATIONS, AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES, AND OTHER FEATURES (WHETHER OR NOT SHOWN ON THESE PLANS) AFFECTING THIS WORK. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND CONDITIONS BEFORE BEGINNING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE CAUSED BY FAILURE TO COMPLY WITH THESE CONDITIONS.

3. *UTILITY /AGENCY OWNERS (UAO):*

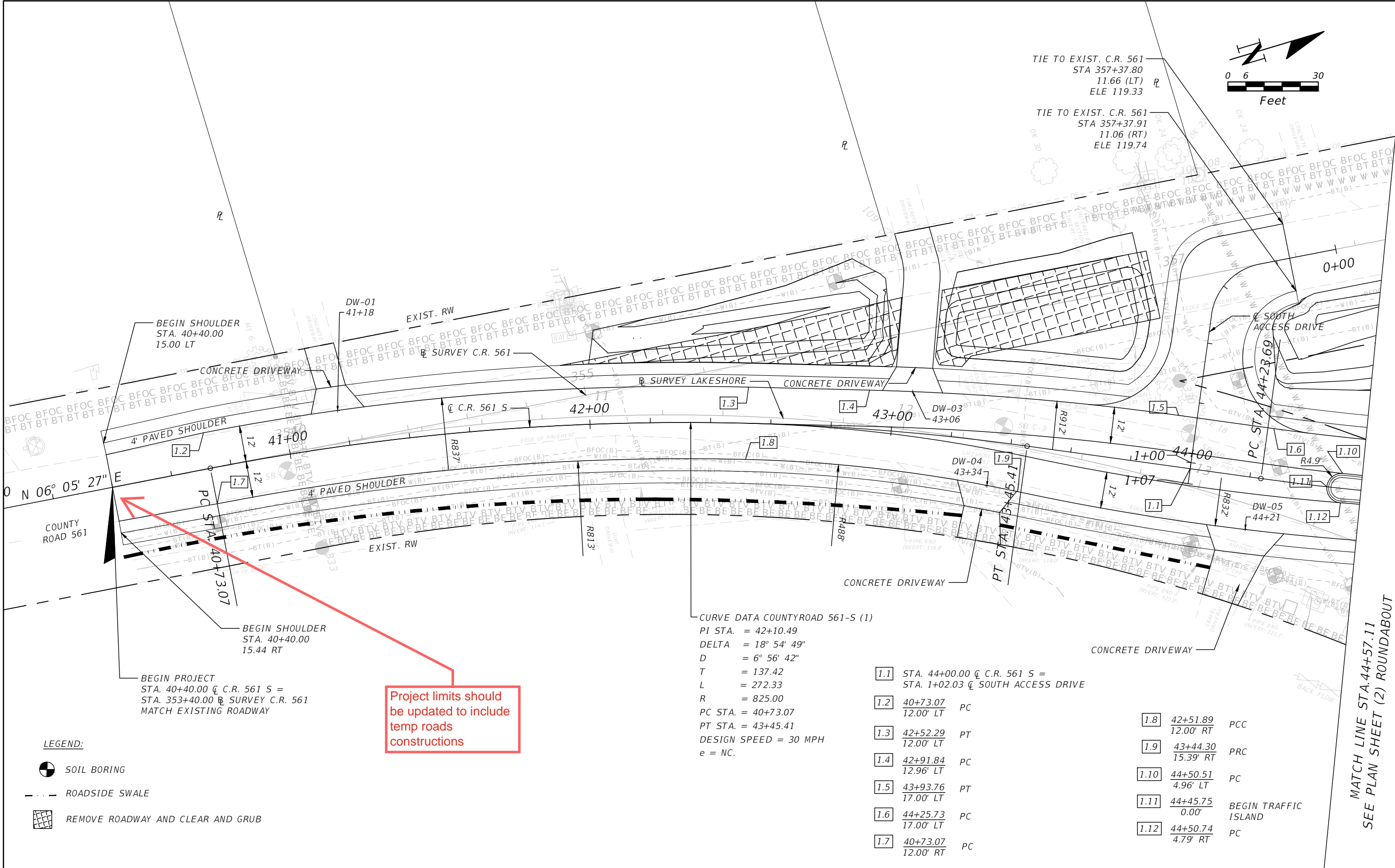
<u><i>C</i>OMPANY:</u>	<u><i>C</i>ONTACT</u>	<u><i>T</i>ELEPHONE NUMBER:</u>
<i>SUMTER ELECTRIC COOPERATIVE, INC (SECO ENERGY)</i>	<i>DAVID PRZYSTAWSKI</i>	<i>352-569-9837</i>
<i>VERIZON (MCI)</i>	<i>TIMOTHY COLE</i>	<i>407-506-8635</i>
<i>SUNSHINE WATER SERVICES</i>	<i>HUNTER TUCKER</i>	<i>407-704-0153</i>
<i>CENTURYLINK (LUMEN)</i>	<i>DAVID COLLADO</i>	<i>401-439-8896</i>
<i>CHARTER COMMUNICATIONS (SPECTRUM)</i>	<i>DEBI SINGH</i>	<i>407-233-9807</i>

2. ANY UTILITIES MARKED WITH QUALITY LEVEL (D) INDICATE INFORMATION WAS OBTAINED SOLELY FROM A REVIEW OF PREVIOUS UTILITY RECORDS, INFORMATION PROVIDED BY THE UTILITY OWNERS AND FROM AN OLDER SURVEY. CONTRACTOR SHOULD VERIFY THE ACCURACY OF SUCH INFORMATION PRIOR TO CONSTRUCTION. AN ASCE QUALITY A OR B WILL BE NECESSARY BEFORE ANY ON-SITE WORK TAKES PLACE.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ALL UTILITIES BEFORE CONSTRUCTION AND COORDINATING UTILITY RELOCATION WITH THE PROJECT CONSTRUCTION. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN AREAS OF BURIED UTILITY COMPANIES TO PERMIT MARKING THE LOCATIONS OF THE EXISTING UNDERGROUND UTILITIES. THE CONTRACTOR SHALL PROVIDE AT LEAST 48 HOURS NOTICE TO THE VARIOUS UTILITY COMPANIES TO PERMIT MARKING THE LOCATIONS OF THE EXISTING UNDERGROUND UTILITIES IN ADVANCE OF CONSTRUCTION BY CALLING "SUNSHINE" AT 1-800-432-4770. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING ALL UTILITIES NOT INCLUDED IN THE "SUNSHINE" PROGRAM.
4. THE CONTRACTOR SHALL PERFORM SOFT DIGS WHEN WORKING NEAR UNDERGROUND UTILITIES TO AVOID UTILITY STRIKES WHILE PERFORMING THE WORK.
5. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO EXISTING FACILITIES, ABOVE OR BELOW GROUND, THAT MAY OCCUR AS A RESULT OF THE WORK PERFORMED BY THE CONTRACTOR.
6. IT IS THE CONTRACTOR'S RESPONSIBILITY TO BECOME FAMILIAR WITH THE PERMIT AND INSPECTION REQUIREMENTS OF THE VARIOUS GOVERNMENTAL AGENCIES. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS BEFORE CONSTRUCTION, AND SCHEDULE INSPECTIONS ACCORDING TO AGENCY INSTRUCTIONS.
7. CHAPTER 556./05 OF THE FLORIDA STATUTES REQUIRES THAT AN EXCAVATOR NOTIFY ALL GAS UTILITIES A MINIMUM OF TWO (2) WORKING DAYS BEFORE EXCAVATING. MAPS, IF ANY, SHOW ONLY THE APPROXIMATE LOCATION OF GAS MAINS AND DO NOT SHOW SERVICE LINES. THE ONLY SAFE AND PROPER WAY TO LOCATE EITHER MAINS OR SERVICE LINES IS BY AN ON-SITE INSPECTION BY THE RESPECTIVE GAS PERSONNEL. THEREFORE, EXCAVATORS SHALL CONTACT VIA TELEPHONE THE RESPECTIVE GAS COMPANY TWO (2) WORKING DAYS BEFORE ENTERING A CONSTRUCTION AREA.

9. CONTRACTOR SHALL FIELD SURVEY AND VERIFY THAT ALL EXISTING UNKNOWN/UNCLAIMED UNDERGROUND UTILITIES ARE ACTIVE OR ABANDON PRIOR TO COMMENCEMENT OF WORK, NOTIFY RESPECTIVE PROPERTY OWNER & UTILITY COMPANY TO CONFIRM PLAN OF ACTION BY CONTRACTOR.
10. WHERE THE WORD "BY OTHERS" IS USED, IT SHALL MEAN THE SCOPE OF WORK INDICATED SHALL BE PROVIDED UNDER SEPARATE CONTRACT BY OTHERS. WHERE THE WORD "BY OTHERS" IS NOT USED, IT SHALL MEAN THE SCOPE OF WORK INDICATED SHALL BE PROVIDED UNDER THIS CONTRACT BY THE CONTRACTOR.
11. CONTRACTOR TO NOTIFY SUMTER ELECTRIC COOPERATIVE, INC (SECO) 4 WEEKS PRIOR TO EXCAVATING/FILLING AROUND THE DUKE ENERGY FACILITIES.
12. ALL STAKING OF PROPOSED CONSTRUCTION TO ALLOW FOR PROPER INSTALLATION/RELOCATION OF UTILITY FACILITIES, AS INDICATED ON THE UTILITY WORK SCHEDULE, SHALL BE PERFORMED BY THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE WITH THE IMPACTED UTILITIES AND STAKE THE ITEMS REQUESTED. THIS STAKING SHALL BE SEPARATE AND IN ADDITION TO THE NORMAL STAKING FOR THE PROJECT. THE COST OF THIS STAKING SHALL BE INCIDENTAL TO AND INCLUDED IN THE COST OF THE PROJECT.
13. WHERE THE WORD "UNKNOWN" IS USED IT SHALL BE UNDERSTOOD TO BE AN UNCLAIMED EXISTING UTILITY NOT IDENTIFIED OR CLAIMED BY RESPECTIVE UTILITY COMPANIES.

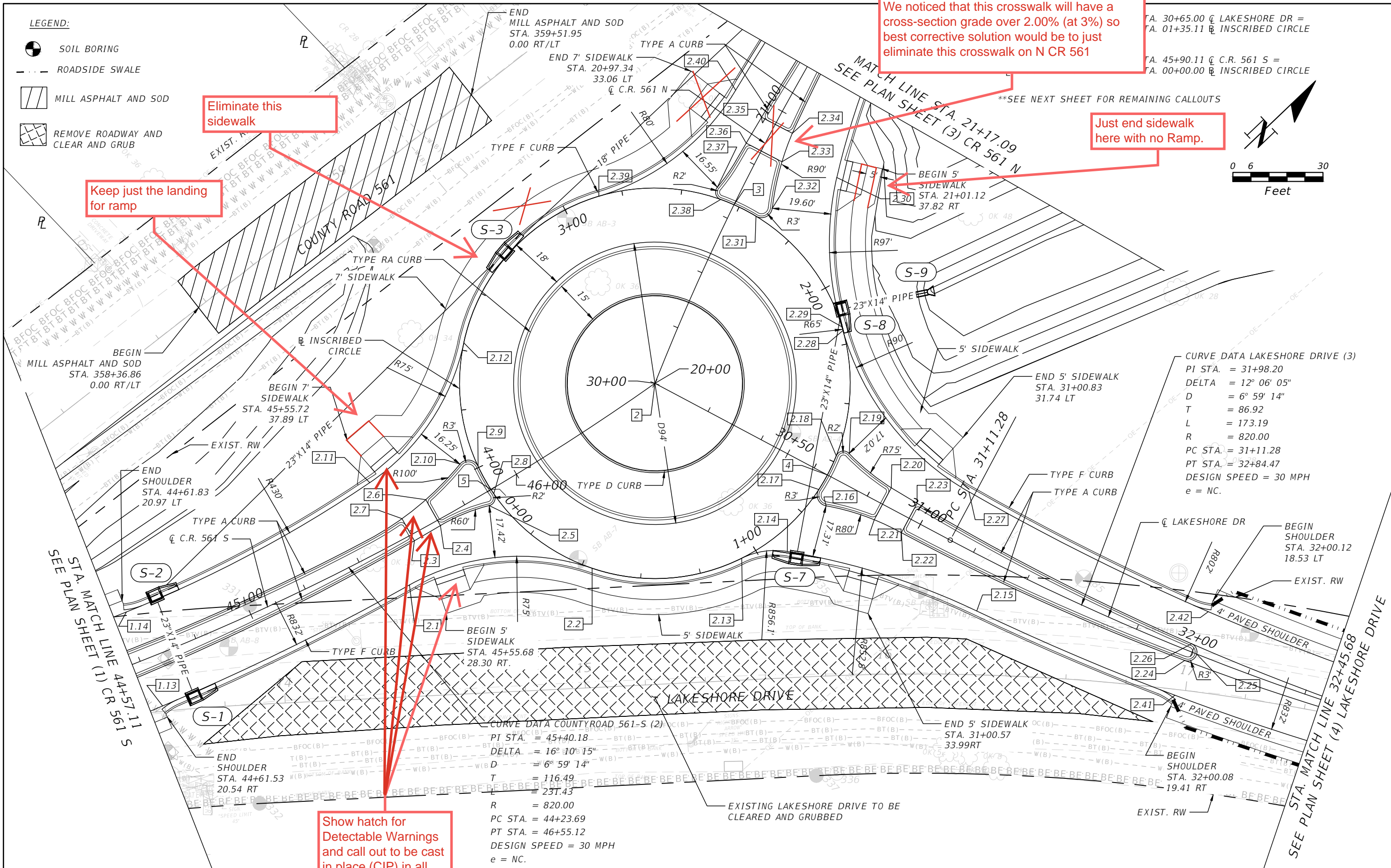
REVISIONS		 <b>OM ENGINEERING SERVICES, INC.</b> Civil • Structural • Inspections	OM ENGINEERING SERVICES, INC. 621 E. WASHINGTON ST., STE 8 ORLANDO, FLORIDA 32801 PHONE NO. (407) 704-7815		<i>CR 561 &amp; LAKESHORE DRIVE ROUNDABOUT</i>	<i>GENERAL NOTES (2)</i>	SHEET NO.
DATE	DESCRIPTION						10





REVISIONS		 <div>OM ENGINEERING SERVICES, INC. 621 E. WASHINGTON ST., STE 8 ORLANDO, FLORIDA 32801 PHONE NO. (407) 704-7815</div>	 <div>LAKE COUNTY, FL REAL FLORIDA • REAL CLOSE</div>	CR 561 & LAKESHORE DRIVE ROUNDABOUT	PLAN SHEET (1) CR 561 S	SHEET NO.  11
DATE	DESCRIPTION					
		ENGINEER OF RECORD: RICHARD DEAN BOBLETZ P.E. P.E. LICENSE NUMBER 40049				

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



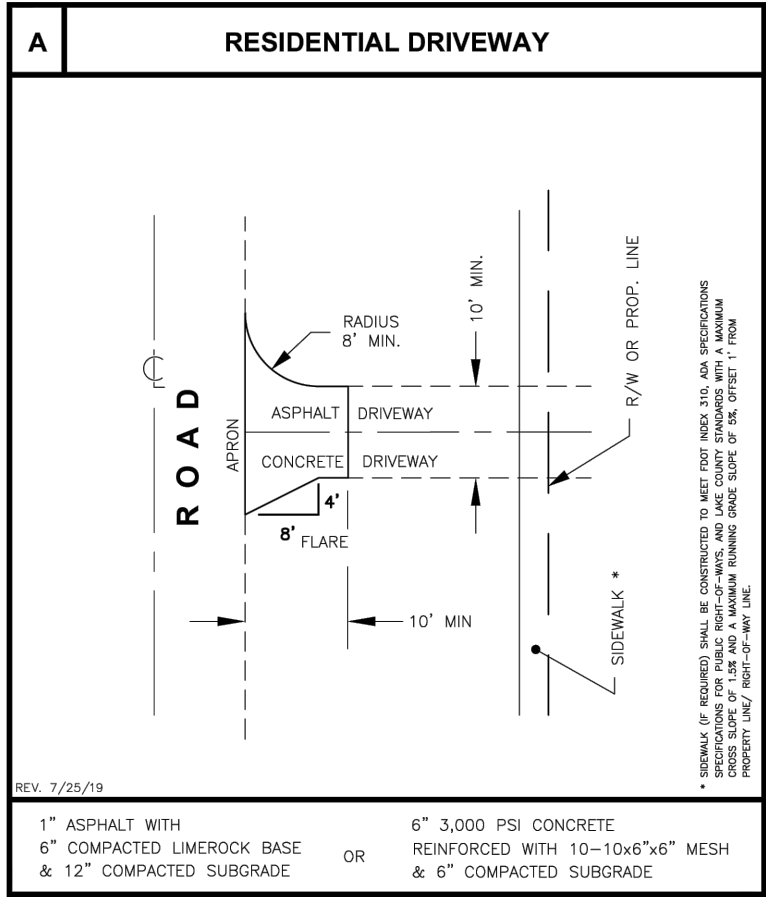
REVISIONS			ENGINEER OF RECORD: RICHARD DEAN BOBLETZ P.E. P.E. LICENSE NUMBER 40049		CR 561 & LAKESHORE DRIVE ROUNDABOUT	PLAN SHEET (2) ROUNDABOUT	SHEET NO. 12
DATE	DESCRIPTION						

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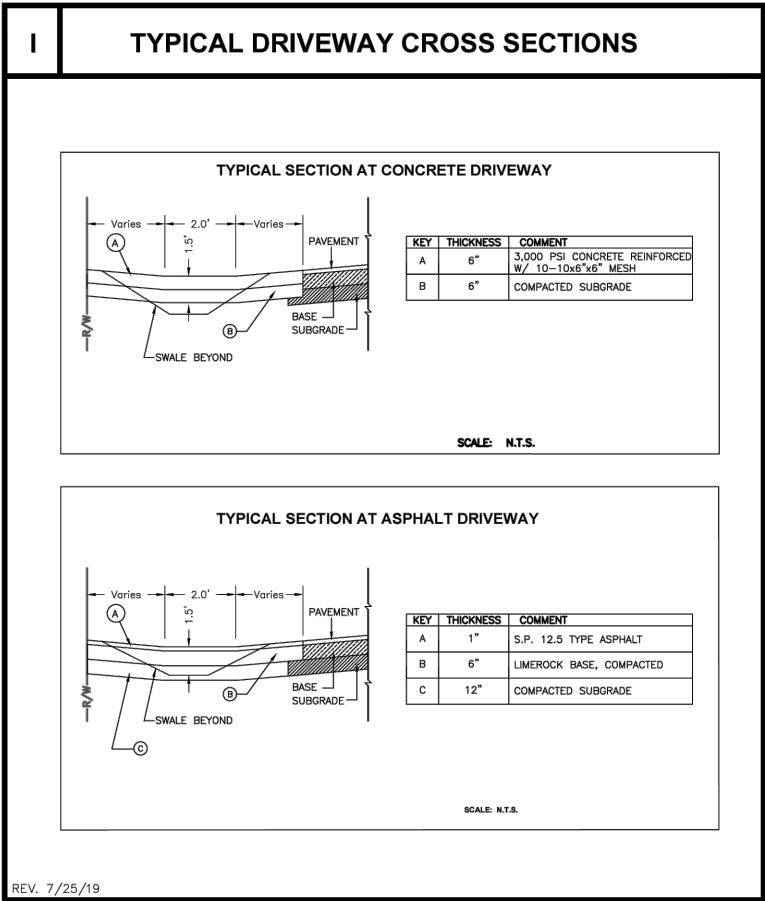




DEPARTMENT OF PUBLIC WORKS  
ENGINEERING DIVISION  
350 N SINCLAIR AVE.  
TAVARES, FLORIDA 32778



DEPARTMENT OF PUBLIC WORKS  
ENGINEERING DIVISION  
350 N SINCLAIR AVE.  
TAVARES, FLORIDA 32778



2.1	45+51.22 14.45' RT
2.2	46+04.97 39.85' RT
2.3	45+59.57 2.26' RT
2.4	45+69.55 2.02' RT
2.5	45+86.89 4.32' RT
2.6	45+69.54 7.88' RT
2.7	45+59.47 6.17' LT
2.8	45+90.19 1.68' RT
2.9	45+90.36 8.82' LT
2.10	45+85.48 12.52' LT
2.11	45+55.65 21.82' LT
2.12	46+08.26 46.41' LT
2.13	30+52.82 37.89' RT
2.14	30+65.15 28.77' RT
2.15	31+29.72 16.89' RT
2.16	30+69.43 9.30' RT
2.17	30+64.76 5.64' RT
2.18	30+64.63 6.96' LT
2.19	30+68.07 9.67' LT
2.20	30+85.75 6.20' LT
2.21	30+85.75 5.87' RT
2.22	30+95.75 5.45' RT
2.23	30+95.75 5.65' LT
2.24	31+98.77 3.43' RT
2.25	32+01.67 0.00'
2.26	31+98.79 2.56' LT
2.27	31+09.21 17.13' LT
2.28	30+47.00 44.90' LT
2.29	20+43.00 44.89' RT
2.30	20+89.01 26.41' RT
2.31	20+64.82 8.27' RT

2.32	20+69.25 11.95' RT
2.33	20+85.09 7.79' RT
2.34	20+95.16 6.41' RT
2.35	20+95.02 5.14' LT
2.36	20+85.09 5.62' LT
2.37	20+67.83 7.52' LT
2.38	20+64.66 4.72' LT
2.39	20+48.59 41.77' LT
2.40	20+95.02 5.14' LT
2.41	32+00.00 15.41' RT
2.42	32+00.00 14.54' LT
1.13	44+61.43 16.55' RT
1.14	44+61.91 16.97' LT

BEGIN TYPE F  
CURB

BEGIN TYPE F  
CURB

REVISIONS	
DATE	DESCRIPTION



OM ENGINEERING SERVICES, INC.  
621 E. WASHINGTON ST., STE 8  
ORLANDO, FLORIDA 32801  
PHONE NO. (407) 704-7815

ENGINEER OF RECORD: RICHARD DEAN BOBLETZ P.E.  
P.E. LICENSE NUMBER 40049



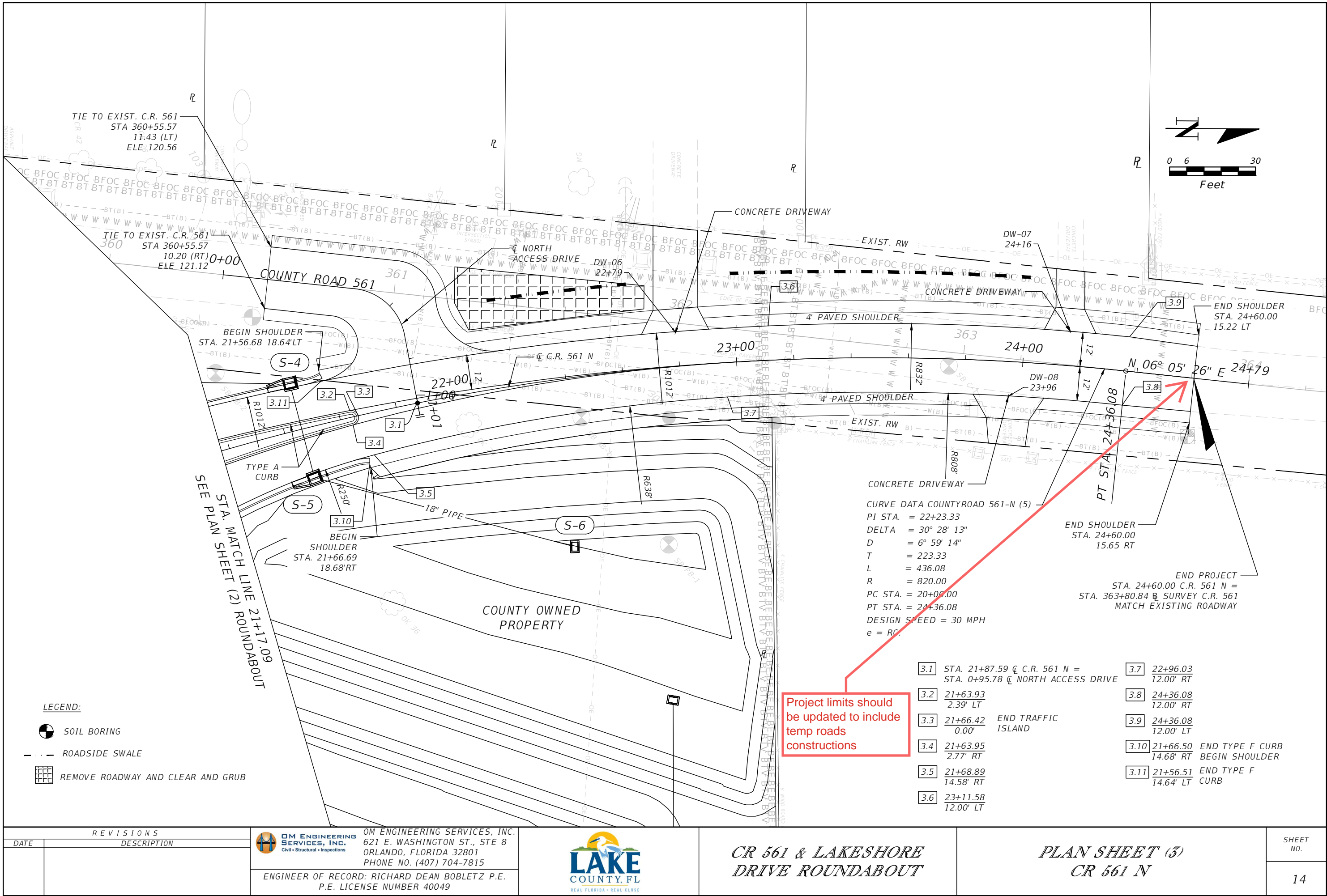
CR 561 & LAKESHORE  
DRIVE ROUNDABOUT

DATA AND DETAIL SHEET

SHEET  
NO.

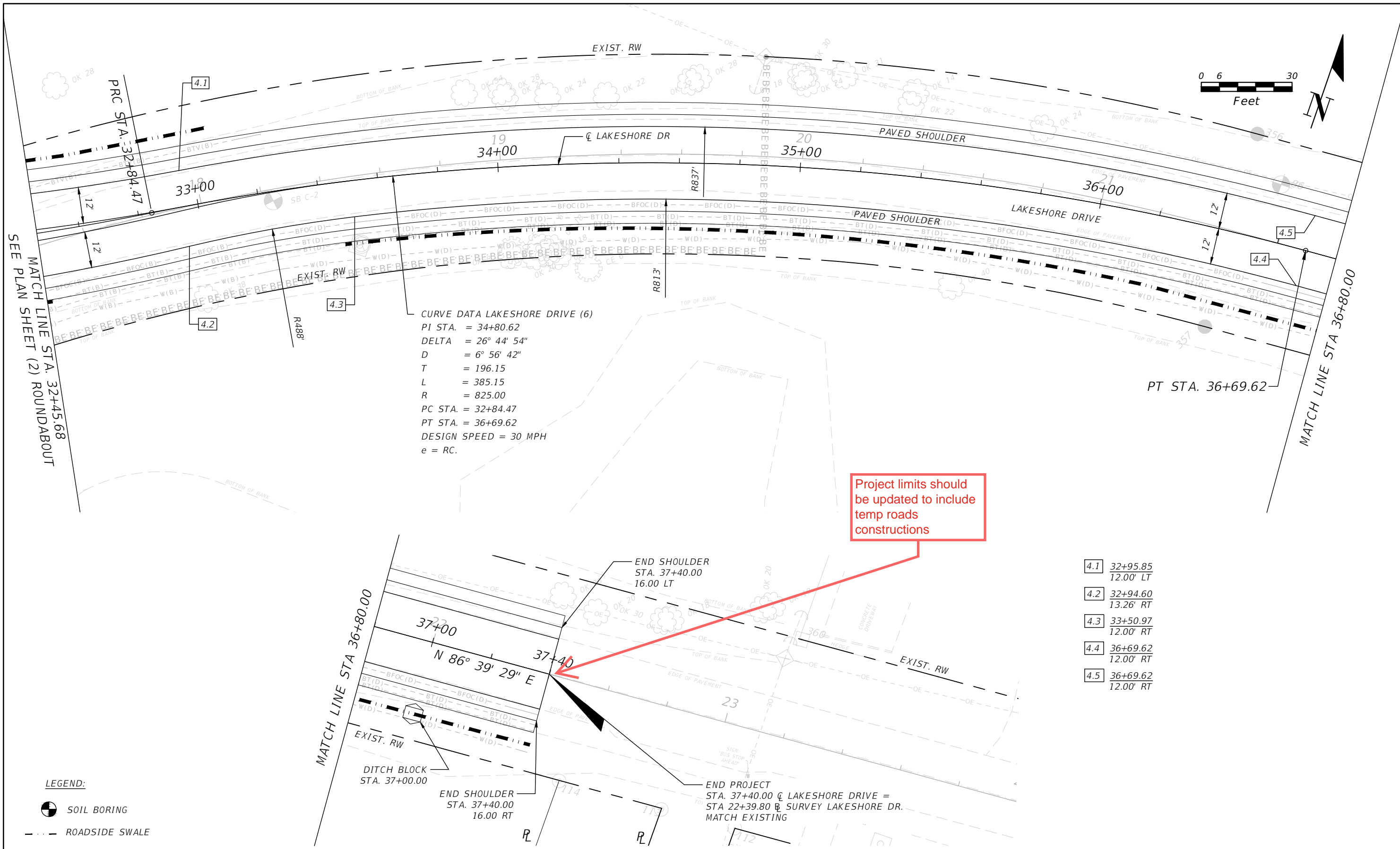
13

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





CURVE DATA LAKESHORE DRIVE (6)  
PI STA. = 34+80.62  
DELTA = 26° 44' 54"  
D = 6° 56' 42"  
T = 196.15  
L = 385.15  
R = 825.00  
PC STA. = 32+84.47  
PT STA. = 36+69.62  
DESIGN SPEED = 30 MPH  
e = RC.

Project limits should  
be updated to include  
temp roads  
constructions

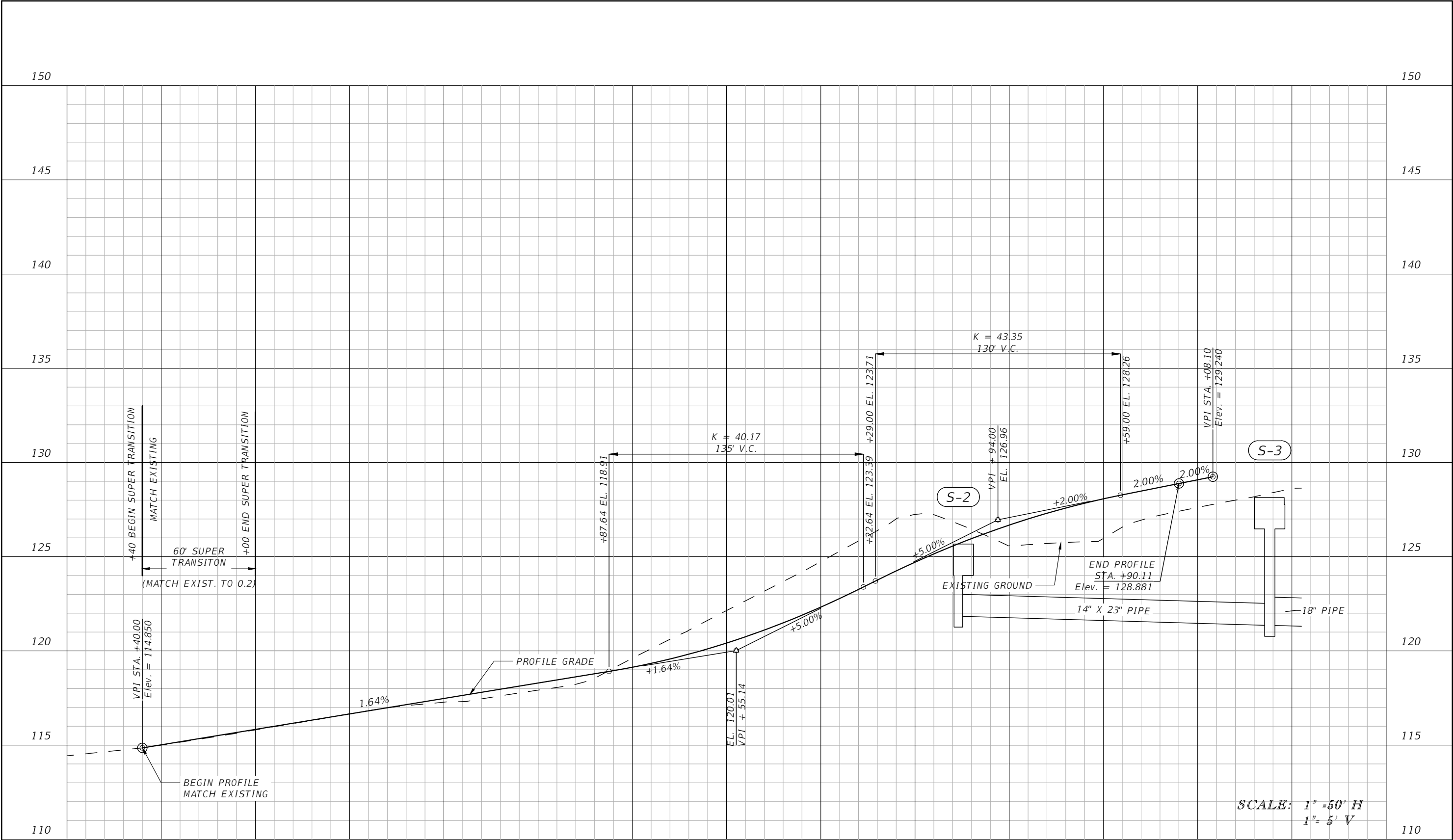
4.1	32+95.85	12.00' LT
4.2	32+94.60	13.26' RT
4.3	33+50.97	12.00' RT
4.4	36+69.62	12.00' RT
4.5	36+69.62	12.00' RT

LEGEND:

- SOIL BORING
- ROADSIDE SWALE

REVISIONS		OM ENGINEERING SERVICES, INC. 621 E. WASHINGTON ST., STE 8 ORLANDO, FLORIDA 32801 PHONE NO. (407) 704-7815 ENGINEER OF RECORD: RICHARD DEAN BOBLETZ P.E. P.E. LICENSE NUMBER 40049		CR 561 & LAKESHORE DRIVE ROUNDABOUT	PLAN SHEET (4) LAKESHORE DRIVE	SHEET NO.  15
DATE	DESCRIPTION					

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

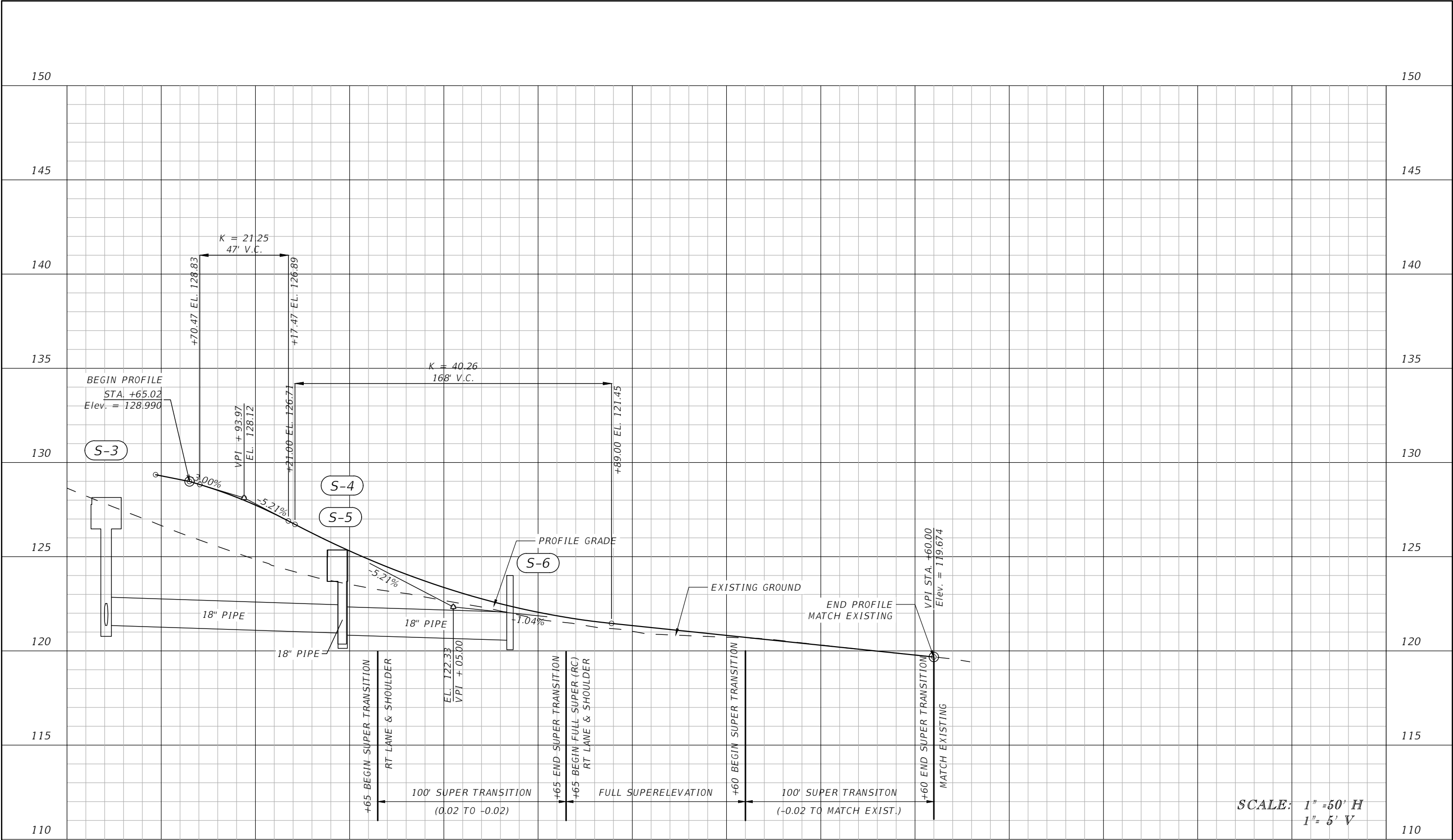


40+00	40+50	41+00	41+50	42+00	42+50	43+00	43+50	44+00	44+50	45+00	45+50	46+00	46+50	47+00
-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------

REVISIONS		 <b>OM ENGINEERING SERVICES, INC.</b> Civil • Structural • Inspections	OM ENGINEERING SERVICES, INC. 621 E. WASHINGTON ST., STE 8 ORLANDO, FLORIDA 32801 PHONE NO. (407) 704-7815	 <b>LAKE COUNTY, FL</b> REAL FLORIDA • REAL CLOSE	<b>CR 561 &amp; LAKESHORE DRIVE ROUNDABOUT</b>	<b>PROFILE SHEET (1)</b> <b>COUNTY ROAD 561 - SOUTH</b> <b>STA 40+40 TO STA 46+08</b>	SHEET NO.  16
DATE	DESCRIPTION						
			ENGINEER OF RECORD: RICHARD DEAN BOBLETZ P.E. P.E. LICENSE NUMBER 40049				


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SCALE: 1" = 50' H  
1" = 5' V

REVISIONS	
DATE	DESCRIPTION



**OM ENGINEERING SERVICES, INC.**  
Civil • Structural • Inspections

OM ENGINEERING SERVICES, INC.  
621 E. WASHINGTON ST., STE 8  
ORLANDO, FLORIDA 32801  
PHONE NO. (407) 704-7815

ENGINEER OF RECORD: RICHARD DEAN BOBLETZ P.E.  
P.E. LICENSE NUMBER 40049

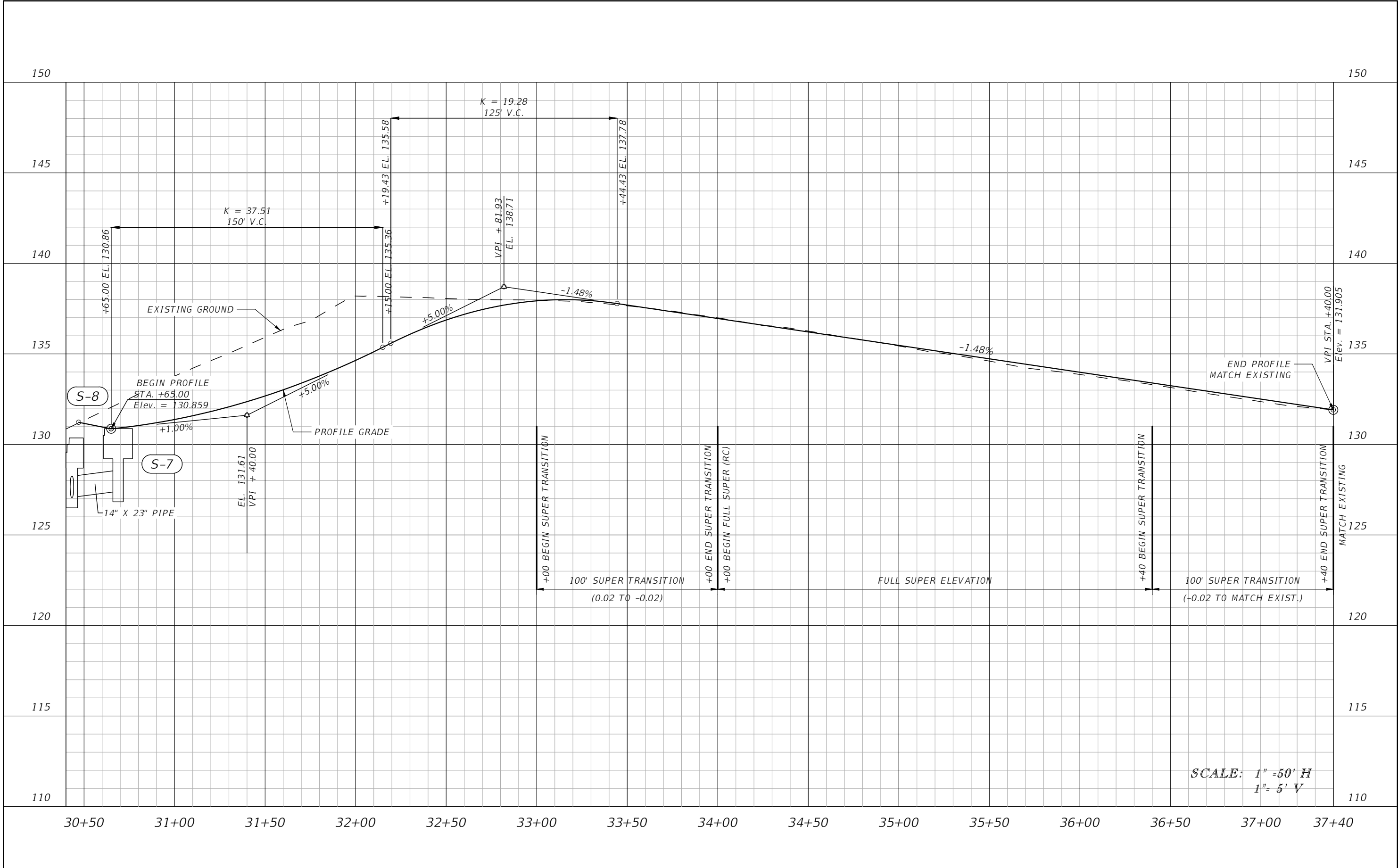


CR 561 & LAKESHORE  
DRIVE ROUNDABOUT

PROFILE SHEET (2)  
COUNTY ROAD 561 - NORTH  
STA 20+65 TO STA 24+60

SHEET NO.
17

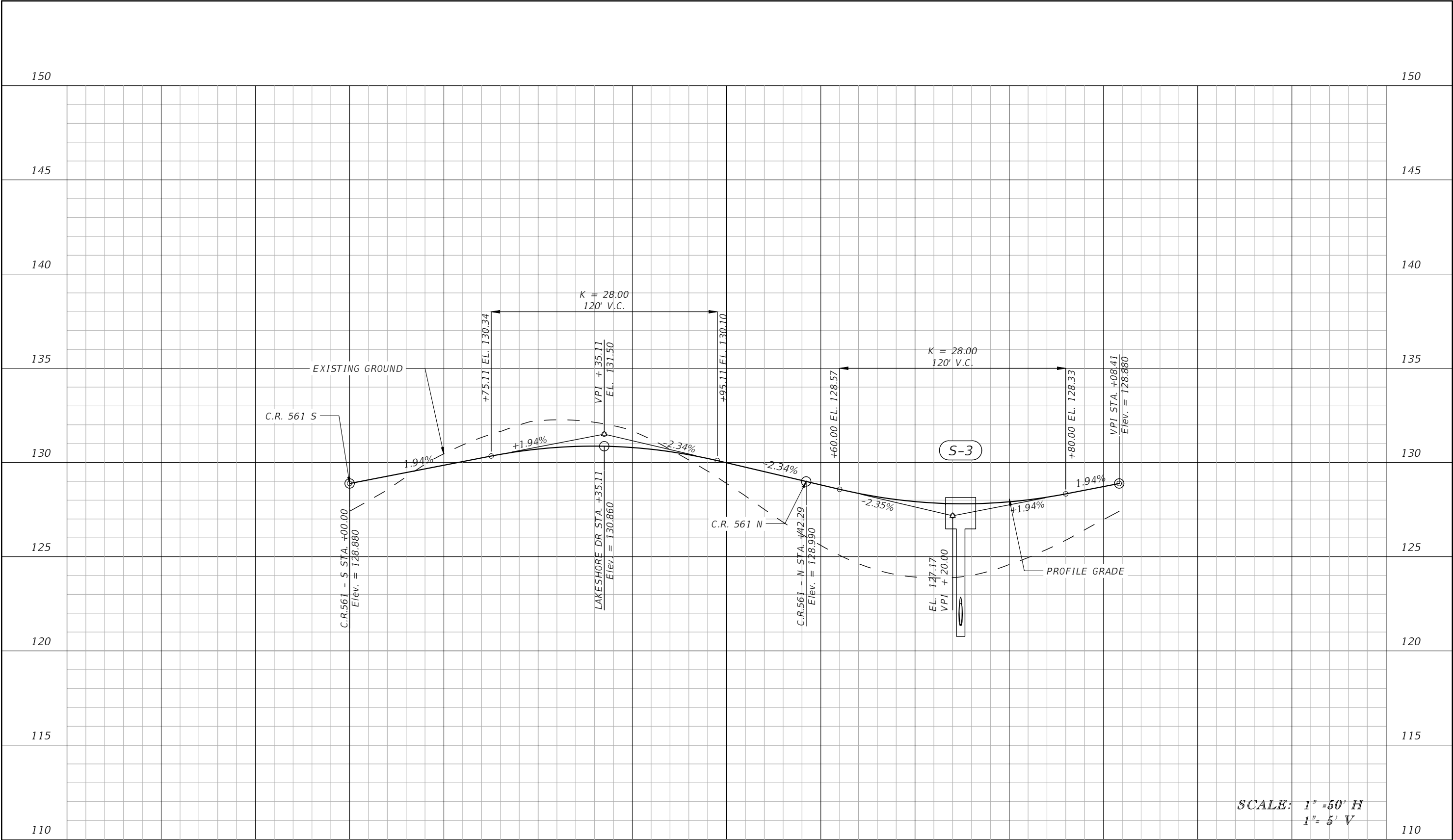
THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



REVISIONS		 <b>OM ENGINEERING SERVICES, INC.</b> Civil • Structural • Inspections 621 E. WASHINGTON ST., STE 8 ORLANDO, FLORIDA 32801 PHONE NO. (407) 704-7815	 <b>LAKE COUNTY, FL</b> REAL FLORIDA • REAL CLOSE	<i>CR 561 &amp; LAKESHORE DRIVE ROUNDABOUT</i>	<i>PROFILE SHEET (3)</i> <i>LAKESHORE DRIVE</i> <i>STA 30+65 TO 37+40</i>	SHEET NO.  18
DATE	DESCRIPTION					
		ENGINEER OF RECORD: RICHARD DEAN BOBLETZ P.E. P.E. LICENSE NUMBER 40049				


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SCALE: 1" = 50' H  
1" = 5' V

REVISIONS	
DATE	DESCRIPTION



**OM ENGINEERING SERVICES, INC.**  
Civil • Structural • Inspections

OM ENGINEERING SERVICES, INC.  
621 E. WASHINGTON ST., STE 8  
ORLANDO, FLORIDA 32801  
PHONE NO. (407) 704-7815

ENGINEER OF RECORD: RICHARD DEAN BOBLETZ P.E.  
P.E. LICENSE NUMBER 40049

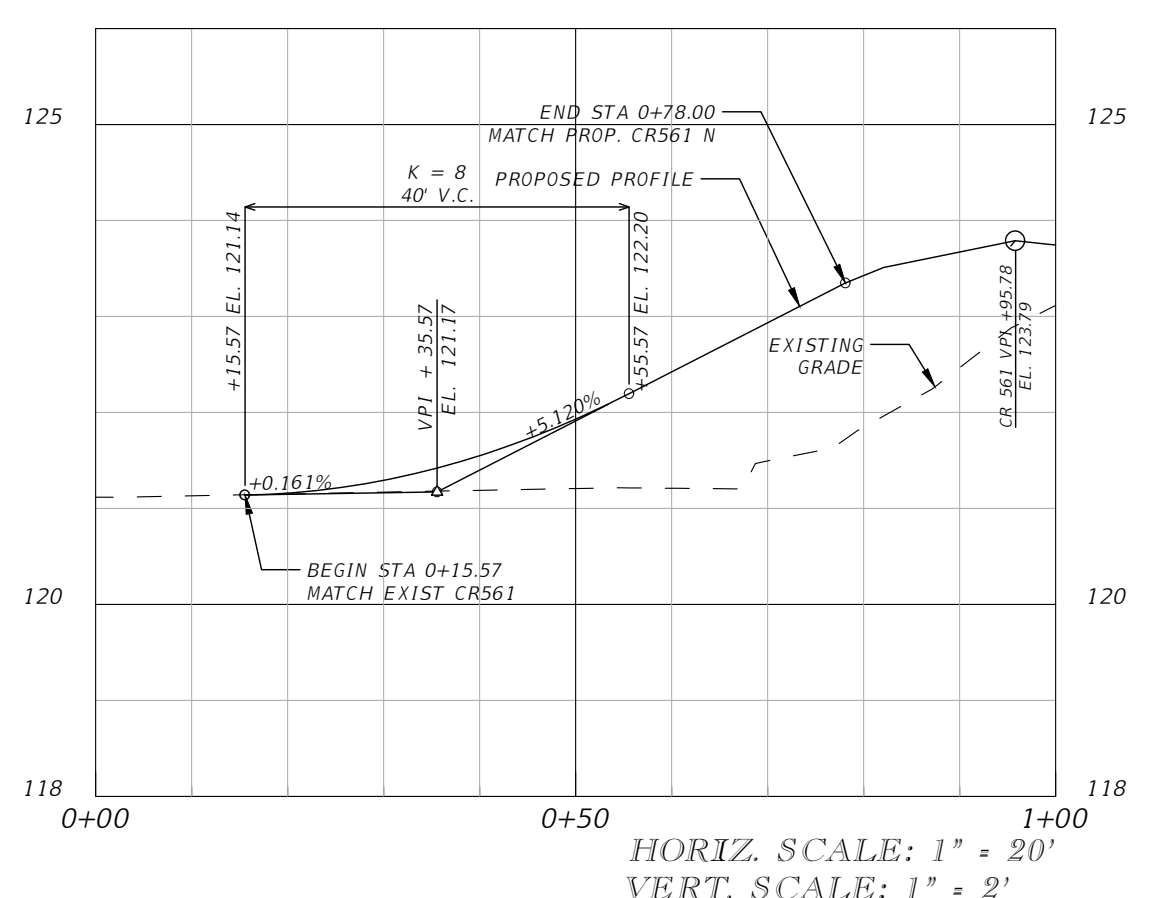
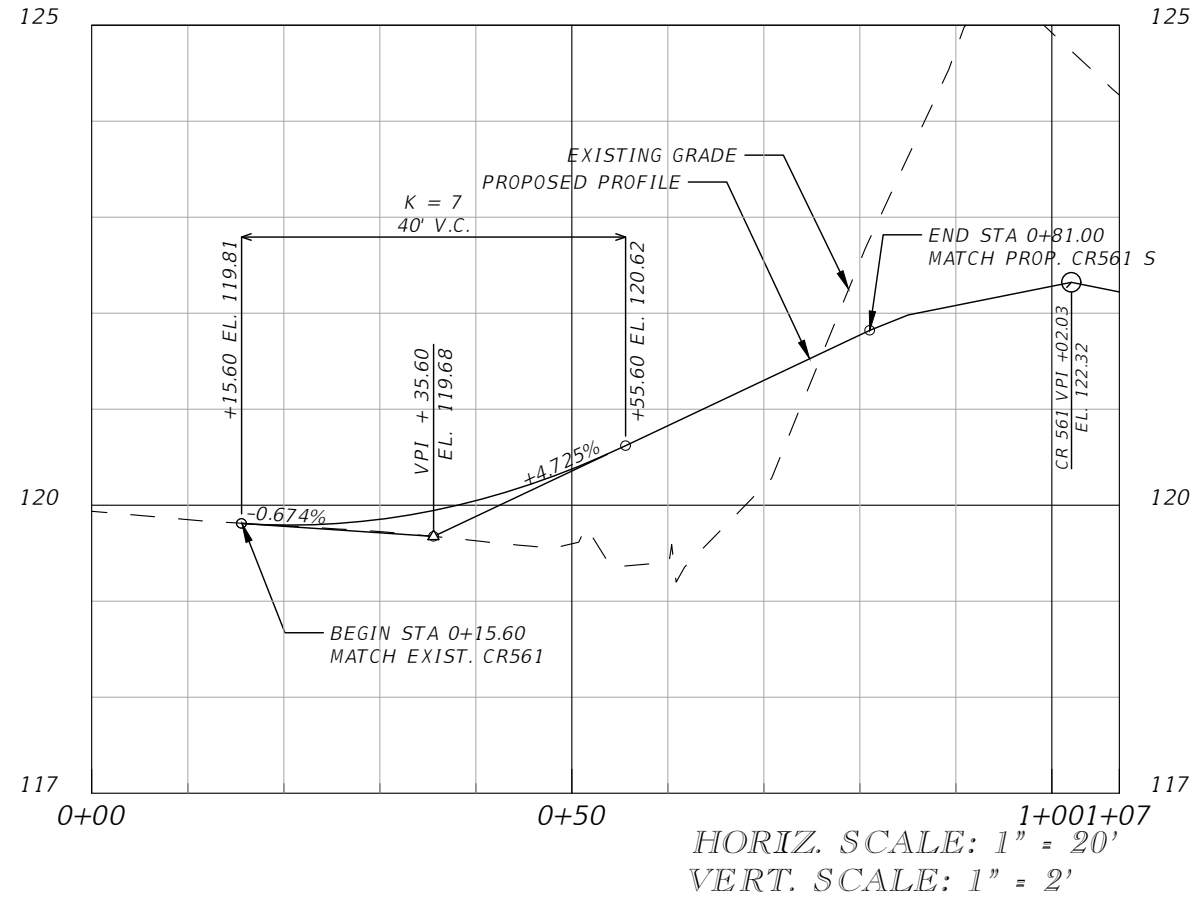
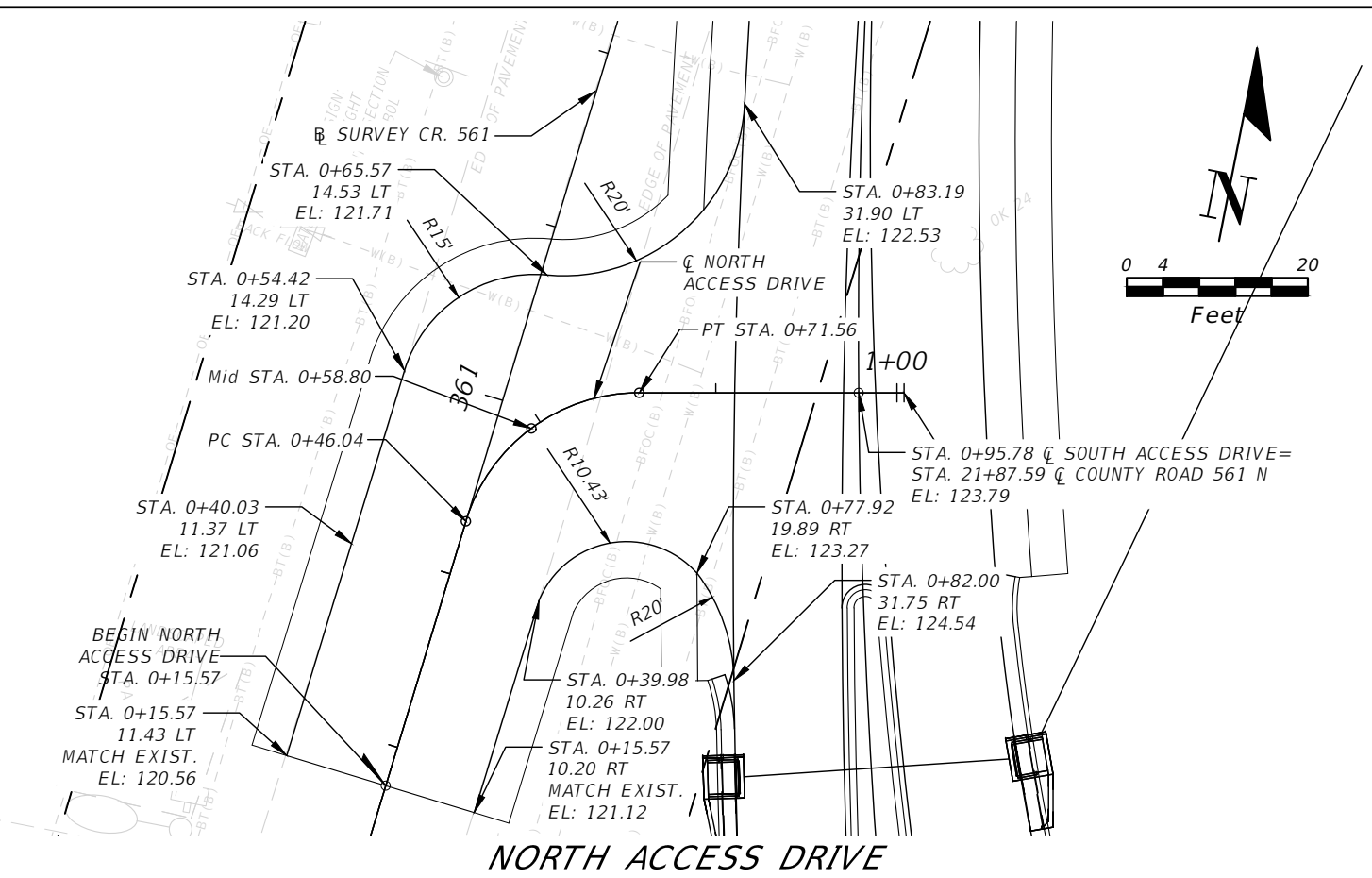
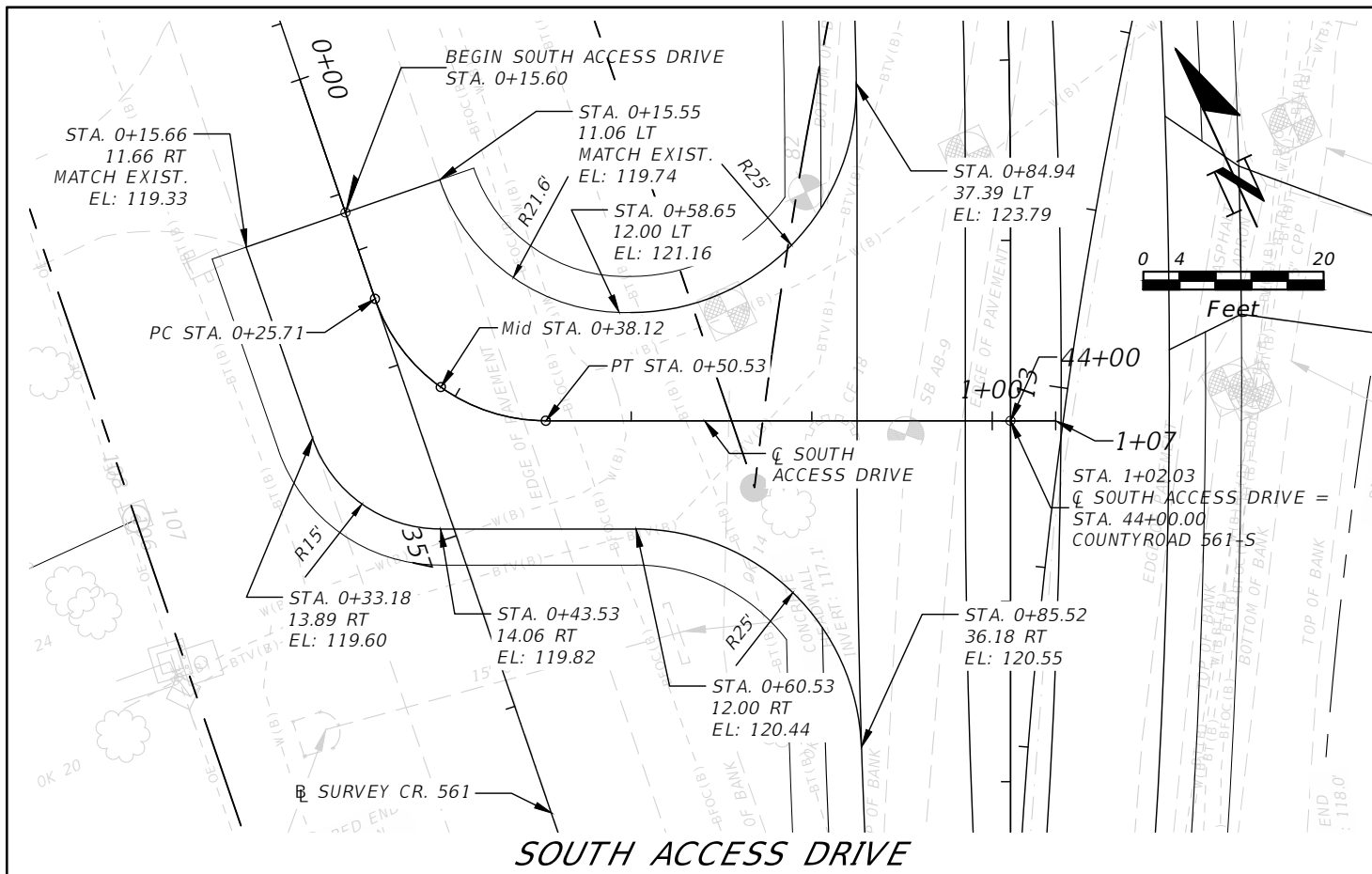


CR 561 & LAKESHORE  
DRIVE ROUNDABOUT

PROFILE SHEET (4)  
INSCRIBED CIRCLE  
STA 0+00.00 TO 4+08.41

SHEET NO.
19

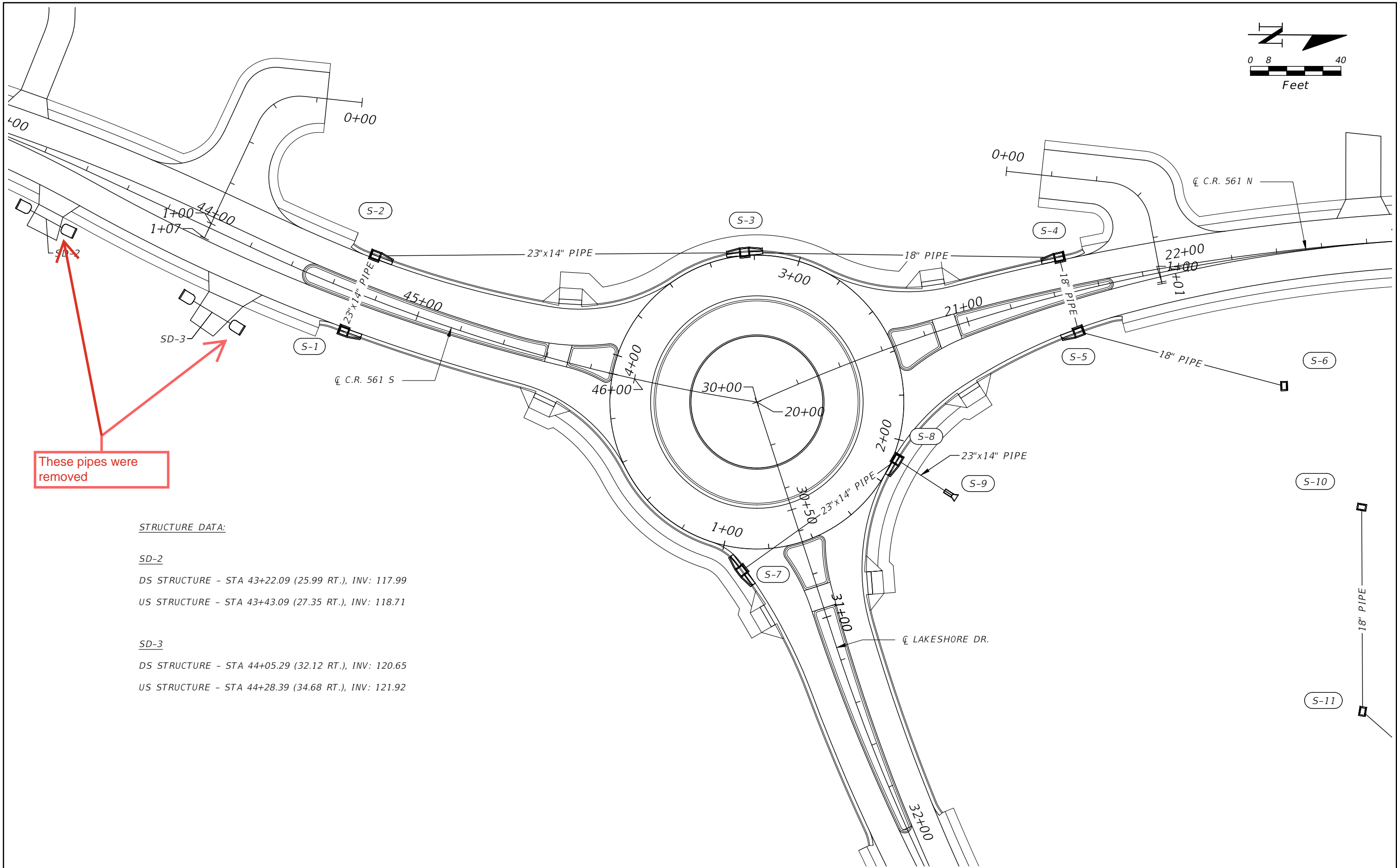
THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



REVISIONS		<b>OM ENGINEERING SERVICES, INC.</b> Civil • Structural • Inspections 621 E. WASHINGTON ST., STE 8 ORLANDO, FLORIDA 32801 PHONE NO. (407) 704-7815 ENGINEER OF RECORD: RICHARD DEAN BOBLETZ P.E. P.E. LICENSE NUMBER 40049	<b>LAKE COUNTY, FL</b> REAL FLORIDA • REAL CLOSE	<b>CR 561 &amp; LAKESHORE DRIVE ROUNDABOUT</b>	<b>PLAN &amp; PROFILE NORTH AND SOUTH ACCESS DRIVES</b>		SHEET NO.  20
DATE	DESCRIPTION						

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STRUCTURE DATA:

SD-2

DS STRUCTURE - STA 43+22.09 (25.99 RT.), INV: 117.99


US STRUCTURE - STA 43+43.09 (27.35 RT.), INV: 118.71

SD-3

DS STRUCTURE - STA 44+05.29 (32.12 RT.), INV: 120.65

US STRUCTURE - STA 44+28.39 (34.68 RT.), INV: 121.92

REVISIONS	
DATE	DESCRIPTION



**OM ENGINEERING SERVICES, INC.**  
Civil • Structural • Inspections

**OM ENGINEERING SERVICES, INC.**  
621 E. WASHINGTON ST., STE 8  
ORLANDO, FLORIDA 32801  
PHONE NO. (407) 704-7815

ENGINEER OF RECORD: DAVID RETLAW BORYS P.E.  
P.E. LICENSE NUMBER 75372

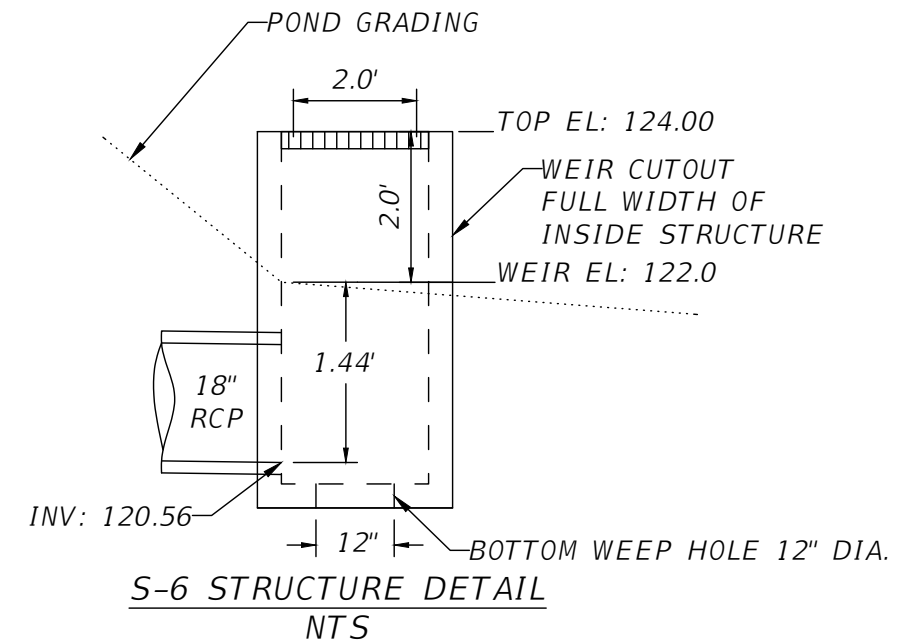
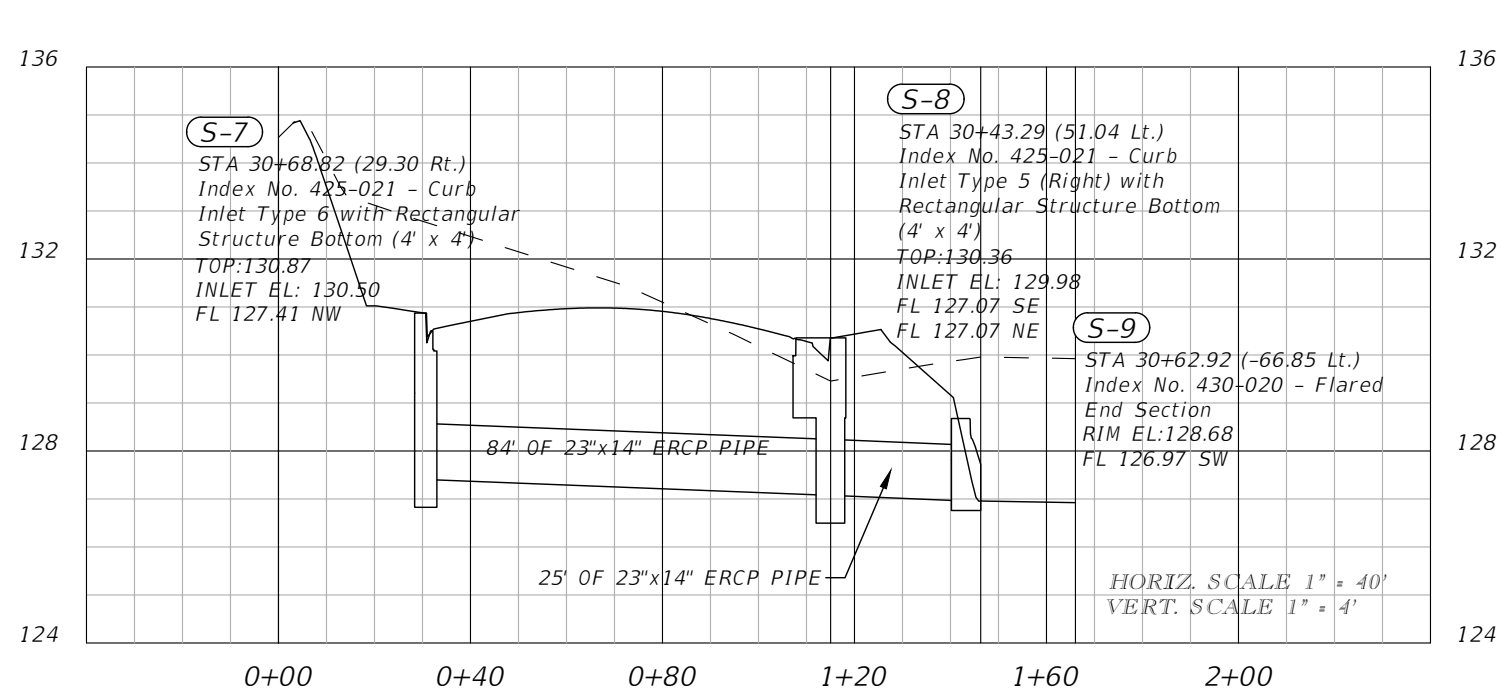
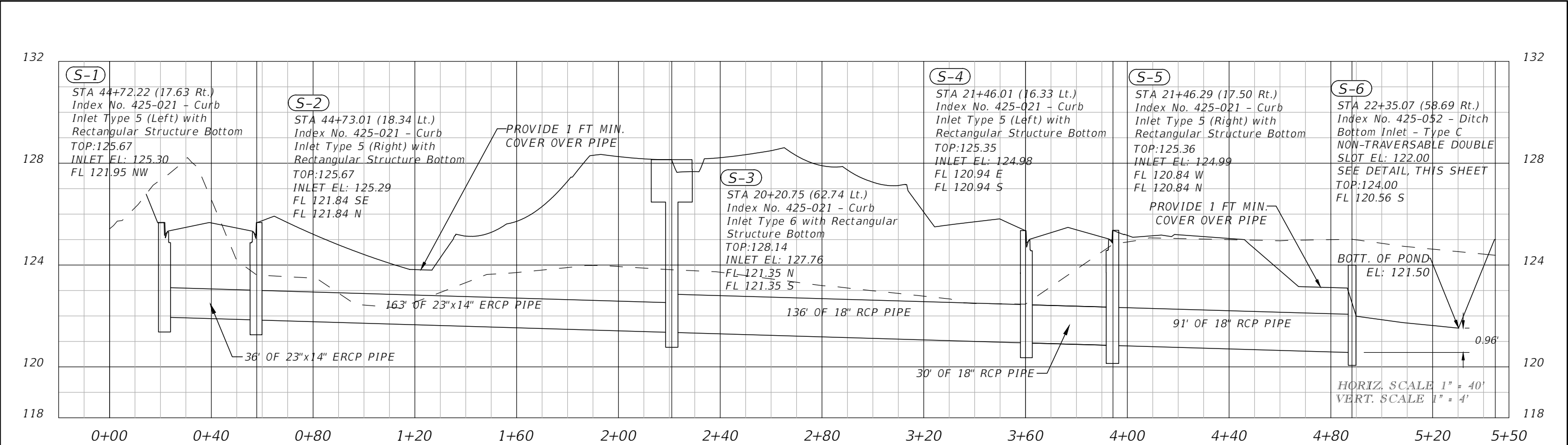


*CR 561 & LAKESHORE  
DRIVE ROUNDABOUT*

*DRAINAGE PLAN*

SHEET NO.
21

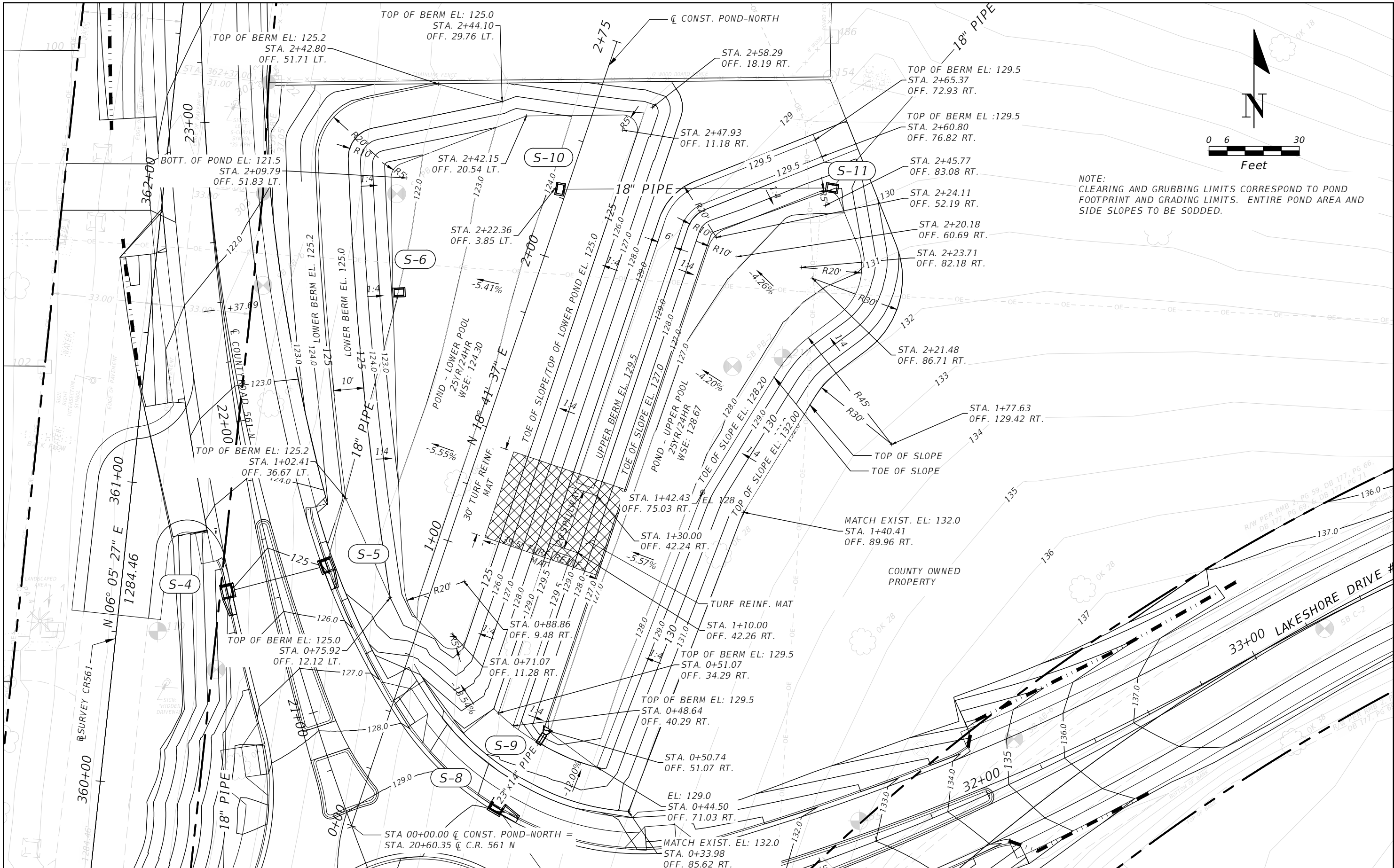
THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



SCALE: 1" = 40' H  
1" = 4' V


REVISIONS			OM ENGINEERING SERVICES, INC. 621 E. WASHINGTON ST., STE 8 ORLANDO, FLORIDA 32801 PHONE NO. (407) 704-7815		CR 561 & LAKESHORE DRIVE ROUNDABOUT	DRAINAGE STRUCTURES PROFILE	SHEET NO.
DATE	DESCRIPTION						
			ENGINEER OF RECORD: DAVID RETLAW BORYS P.E. P.E. LICENSE NUMBER 75372				22

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NOTE:  
CLEARING AND GRUBBING LIMITS CORRESPOND TO POND  
FOOTPRINT AND GRADING LIMITS. ENTIRE POND AREA AND  
SIDE SLOPES TO BE SODDED.

REVISIONS	
DATE	DESCRIPTION



**OM ENGINEERING SERVICES, INC.**  
Civil • Structural • Inspections

OM ENGINEERING SERVICES, INC.  
621 E. WASHINGTON ST., STE 8  
ORLANDO, FLORIDA 32801  
PHONE NO. (407) 704-7815

ENGINEER OF RECORD: DAVID RETLAW BORYS P.E.  
P.E. LICENSE NUMBER 75372



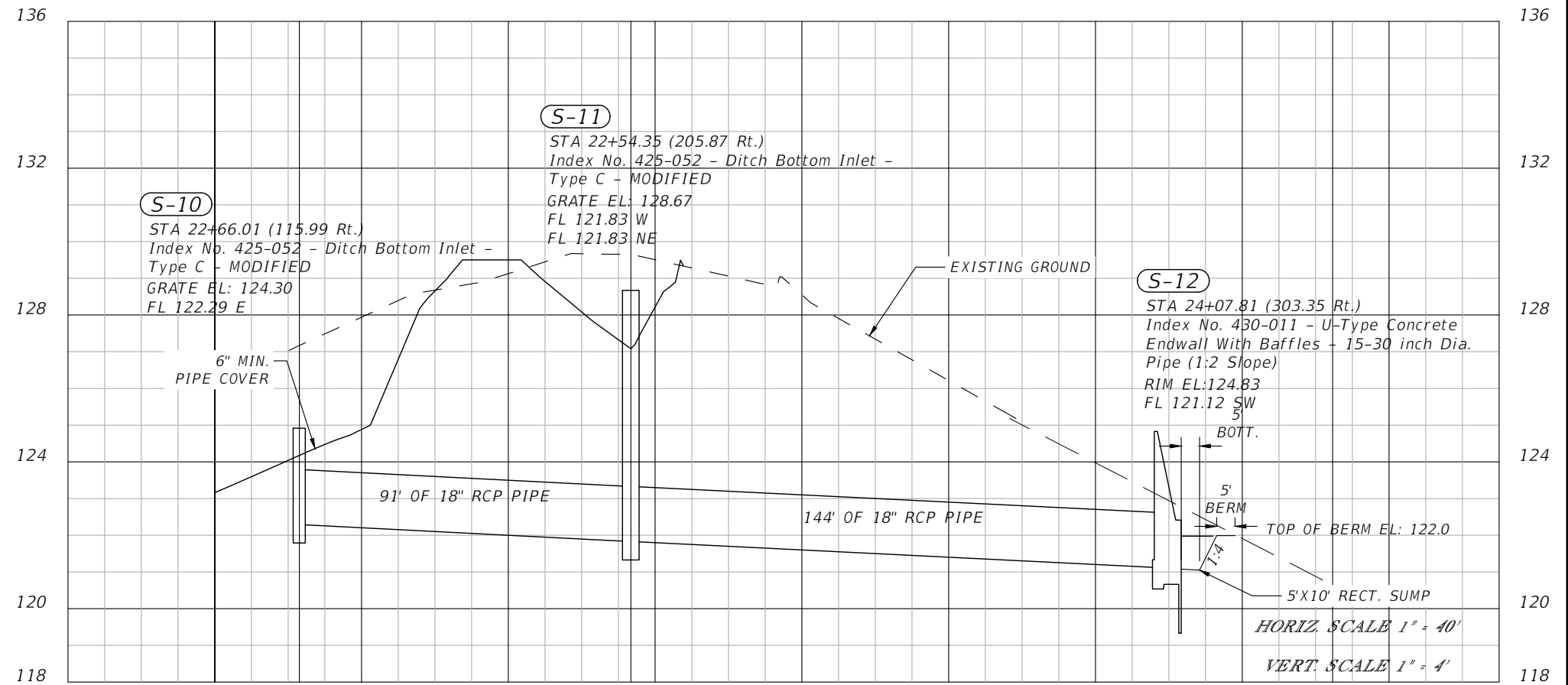
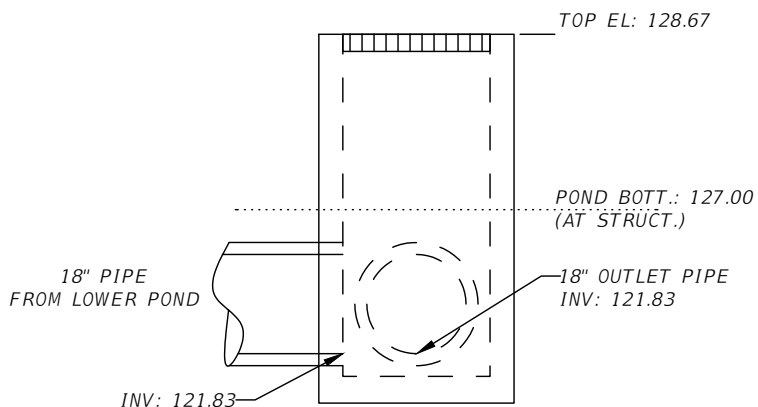
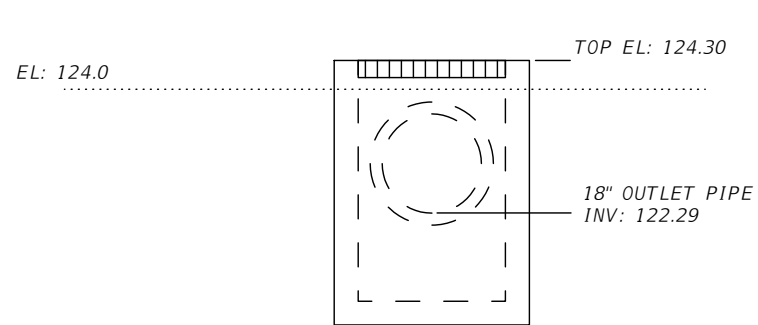
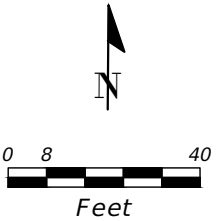
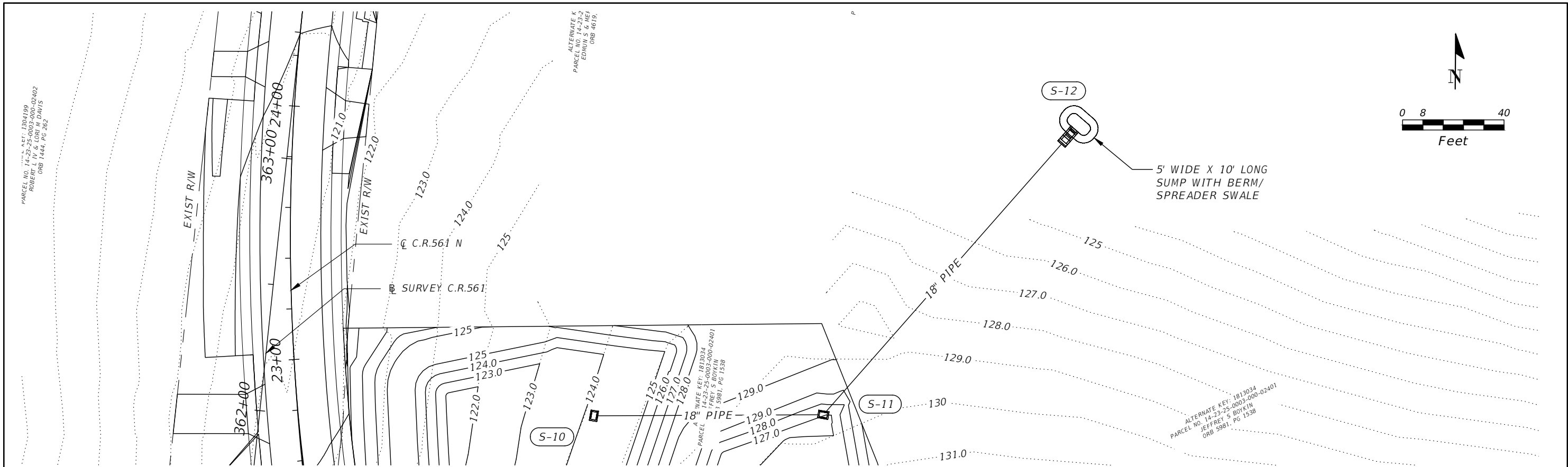
**CR 561 & LAKESHORE  
DRIVE ROUNDABOUT**

**POND LAYOUT  
POND-NORTH**

SHEET NO.
23

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REVISIONS		 <b>OM ENGINEERING SERVICES, INC.</b> Civil • Structural • Inspections 621 E. WASHINGTON ST., STE 8 ORLANDO, FLORIDA 32801 PHONE NO. (407) 704-7815 ENGINEER OF RECORD: DAVID RETLAW BORYS P.E. P.E. LICENSE NUMBER 75372	 <b>LAKE COUNTY, FL</b> REAL FLORIDA • REAL CLOSE	<b>CR 561 &amp; LAKESHORE DRIVE ROUNDABOUT</b>	<b>POND-NORTH OUTFALL PLAN &amp; PROFILE</b>	SHEET NO.  24
DATE	DESCRIPTION					

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

DATE OF SURVEY: SEPTEMBER 2023  
SURVEY MADE BY: TIERRA, INC.  
SUBMITTED BY: LUIS A. ALMODOVAR, P.E.

STATE OF FLORIDA  
DEPARTMENT OF TRANSPORTATION  
MATERIALS AND RESEARCH

DISTRICT: 5  
ROAD NO.: N/A  
COUNTY: LAKE

LAKE COUNTY RSQ NO. 20-0918B  
PROJECT NAME: CR 561 AND LAKESHORE DRIVE ROUNDABOUT

CROSS SECTION SOIL SURVEY FOR THE DESIGN OF ROADS AND PONDS

STRATUM NO.	ORGANIC CONTENT		MOISTURE CONTENT (%)		NO. OF TESTS	SIEVE ANALYSIS RESULTS PERCENT PASS					ATTERBERG LIMITS (%)				DESCRIPTION	CORROSION TEST RESULTS				
	NO. OF TESTS	% ORGANIC	NO. OF TESTS	MOISTURE CONTENT		10 MESH	40 MESH	60 MESH	100 MESH	200 MESH	NO. OF TESTS	LIQUID LIMIT	PLASTIC INDEX	AASHTO GROUP		NO. OF TESTS	RESISTIVITY ohm-cm	CHLORIDE ppm	SULFATES ppm	pH
1	--	--	--	--	5	99-100	65-78	36-48	15-18	7-9	--	--	--	A-3	BROWN TO LIGHT BROWN SAND TO SAND WITH SILT	2	31,000-33,000	30	6-9	7.5-8.1
2	--	--	2	13-14	4	100	70-79	40-46	23-39	20-29	2	25-26	9-10	A-2-4	ORANGE-BROWN SILTY SAND TO SLIGHTLY CLAYEY SAND	--	--	--	--	--
3	--	--	2	14-23	4	99-100	67-85	48-72	35-60	35-40	2	32-55	16	A-2-6/A-6	ORANGE-BROWN CLAYEY SAND TO SANDY CLAY	--	--	--	--	--

EMBANKMENT AND SUBGRADE MATERIAL

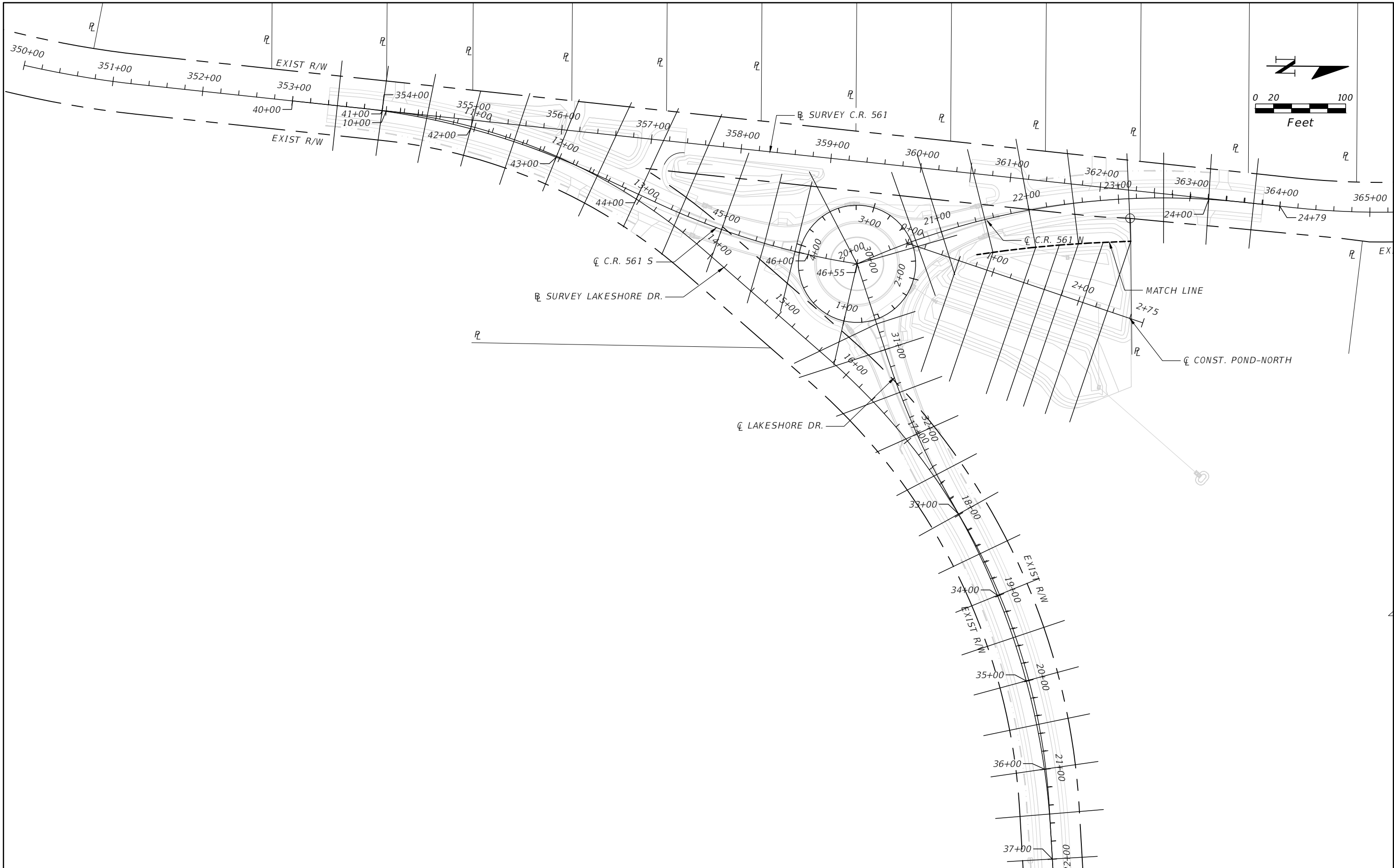
NOTES:

- SOIL ANALYSIS INCLUDES STRATA FORM ROADWAY AND POND AREAS. THE SYMBOL "-" REPRESENTS AN UNMEASURED PARAMETER.
- STRATA 1 AND 2 SHALL BE TREATED AS SELECT (S) IN ACCORDANCE WITH FDOT STANDARD PLANS, INDEX 120-001.
- STRATUM 3 SHALL BE TREATED AS PLASTIC (P) IN ACCORDANCE WITH FDOT STANDARD PLANS, INDEX 120-001.
- STRATUM 2 MAY RETAIN EXCESS MOISTURE AND MAY BE DIFFICULT TO DRY AND COMPACT.

STRATA BOUNDARIES ARE APPROXIMATE. MAKE FINAL CHECK AFTER GRADING.

▼ - GROUNDWATER LEVEL ENCOUNTERED DURING INVESTIGATION  
GNE - GROUNDWATER NOT ENCOUNTERED

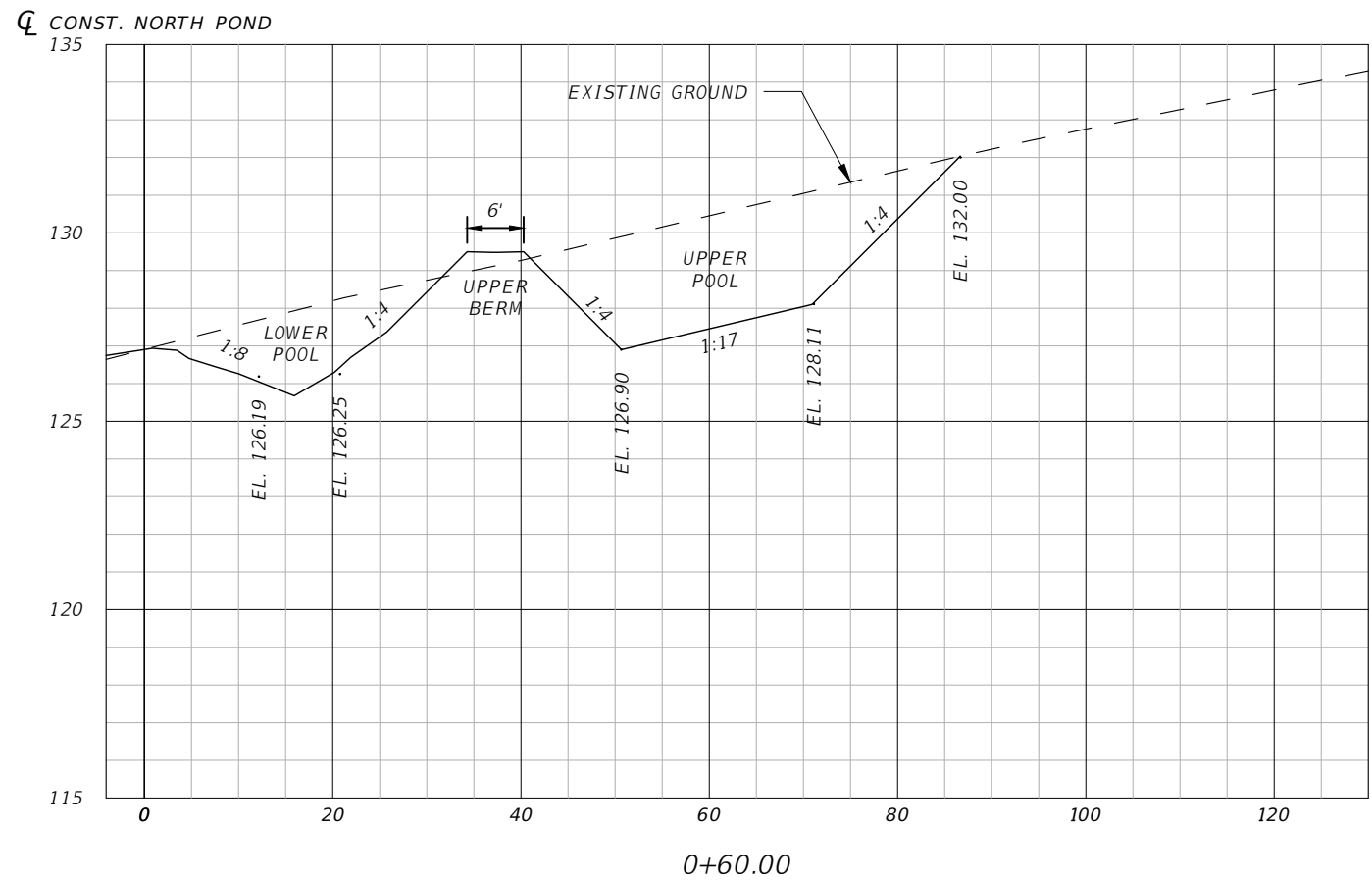
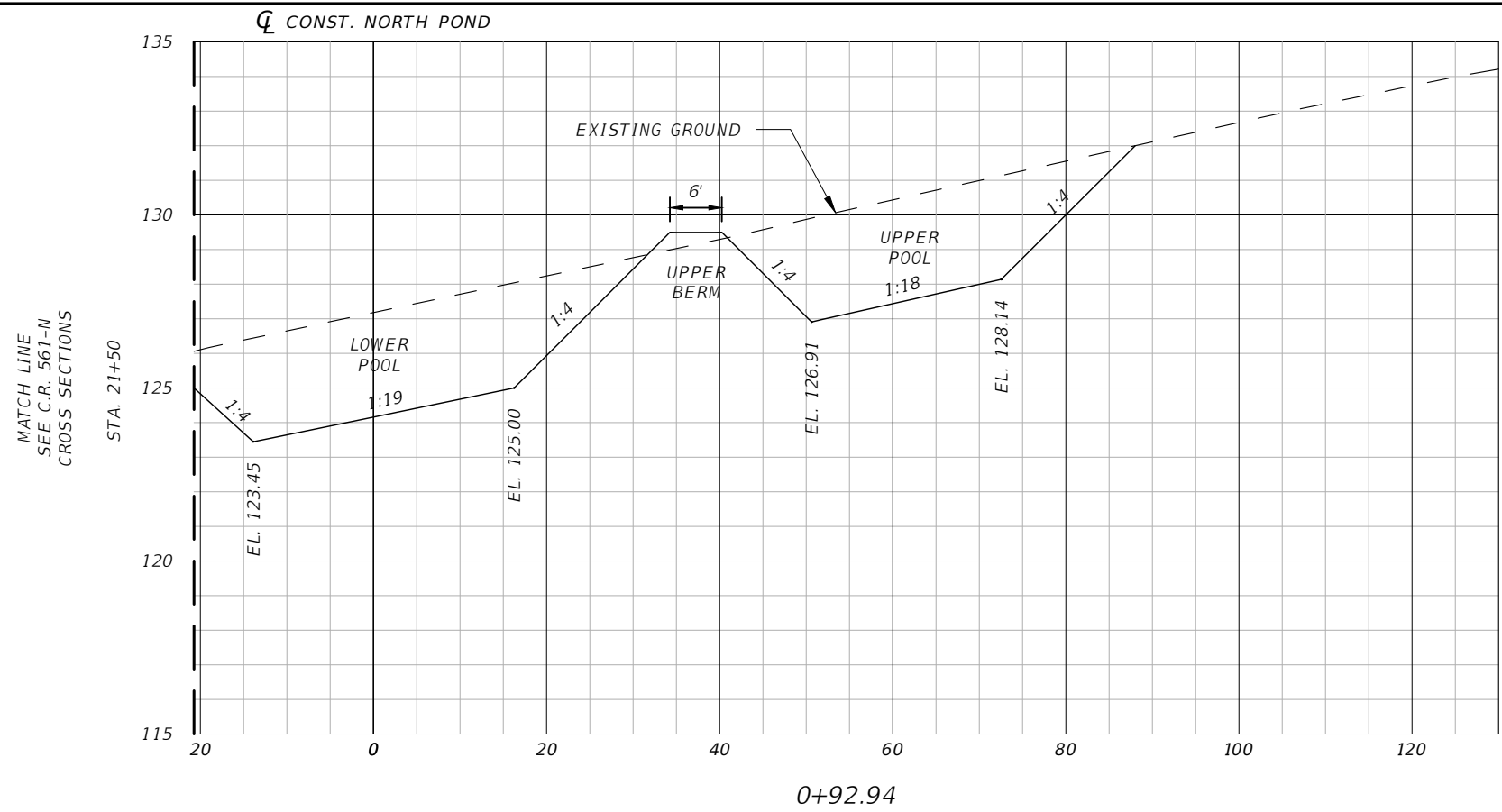
REVISIONS			TIERRA INC. 591 SUSAN B. BRITT COURT WINTER GARDEN, FL 34787  ENGINEER OF RECORD: LUIS A. ALMODOVAR, P.E. P.E. LICENSE NUMBER 93273		CR 561 & LAKESHORE DRIVE ROUNDABOUT	ROADWAY SOIL SURVEY	SHEET NO.
DATE	DESCRIPTION						
							25



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REVISIONS		 <b>OM ENGINEERING SERVICES, INC.</b> 621 E. WASHINGTON ST., STE 8 ORLANDO, FLORIDA 32801 PHONE NO. (407) 704-7815	 <b>LAKE COUNTY, FL</b> REAL FLORIDA - REAL CLOSE	<i>CR 561 &amp; LAKESHORE DRIVE ROUNDABOUT</i>	<i>CROSS SECTIONS PATTERN LAYOUT</i>	SHEET NO.
DATE	DESCRIPTION					26
	ENGINEER OF RECORD: RICHARD DEAN BOBLETZ P.E. P.E. LICENSE NUMBER 40049					

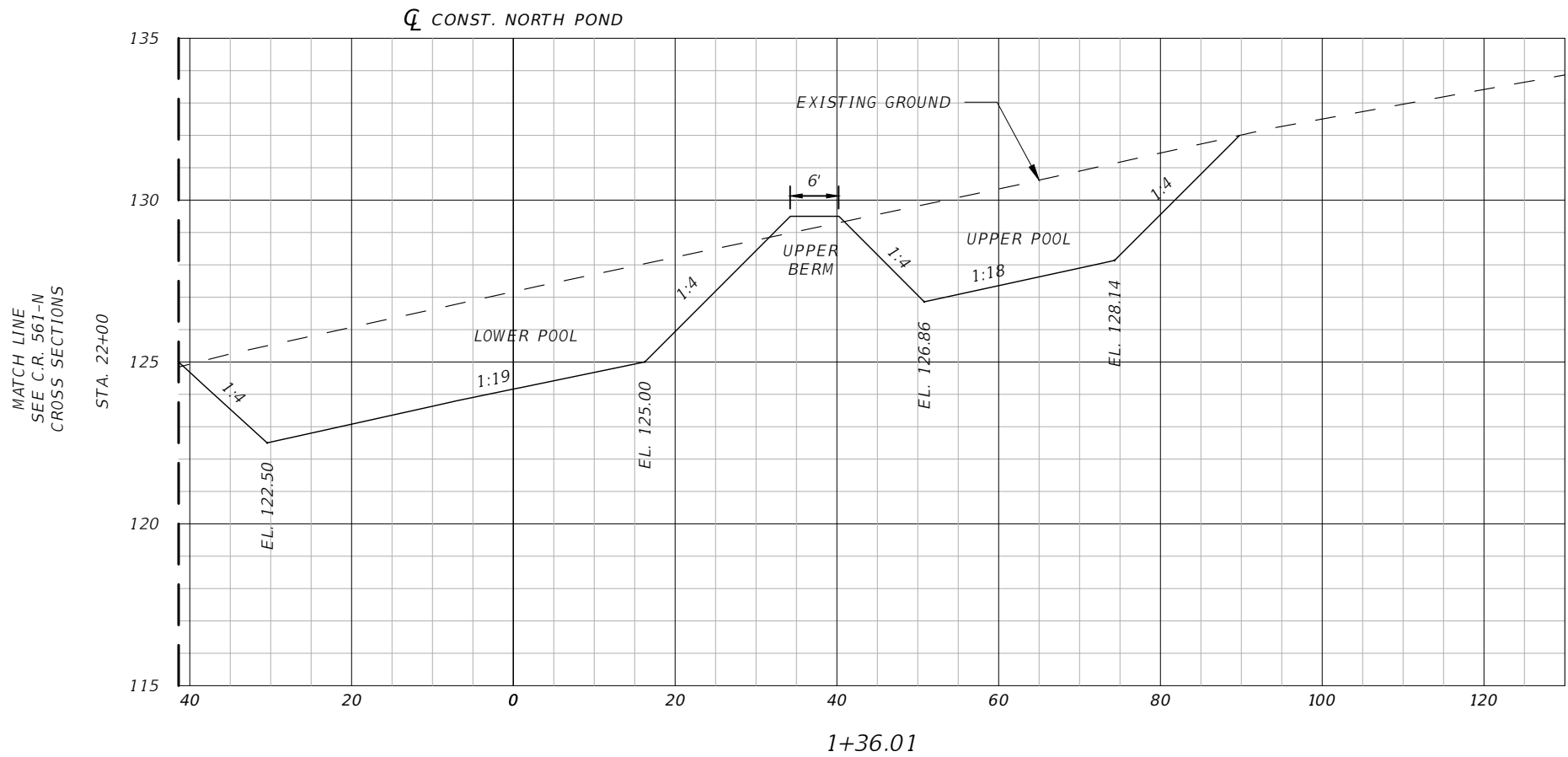
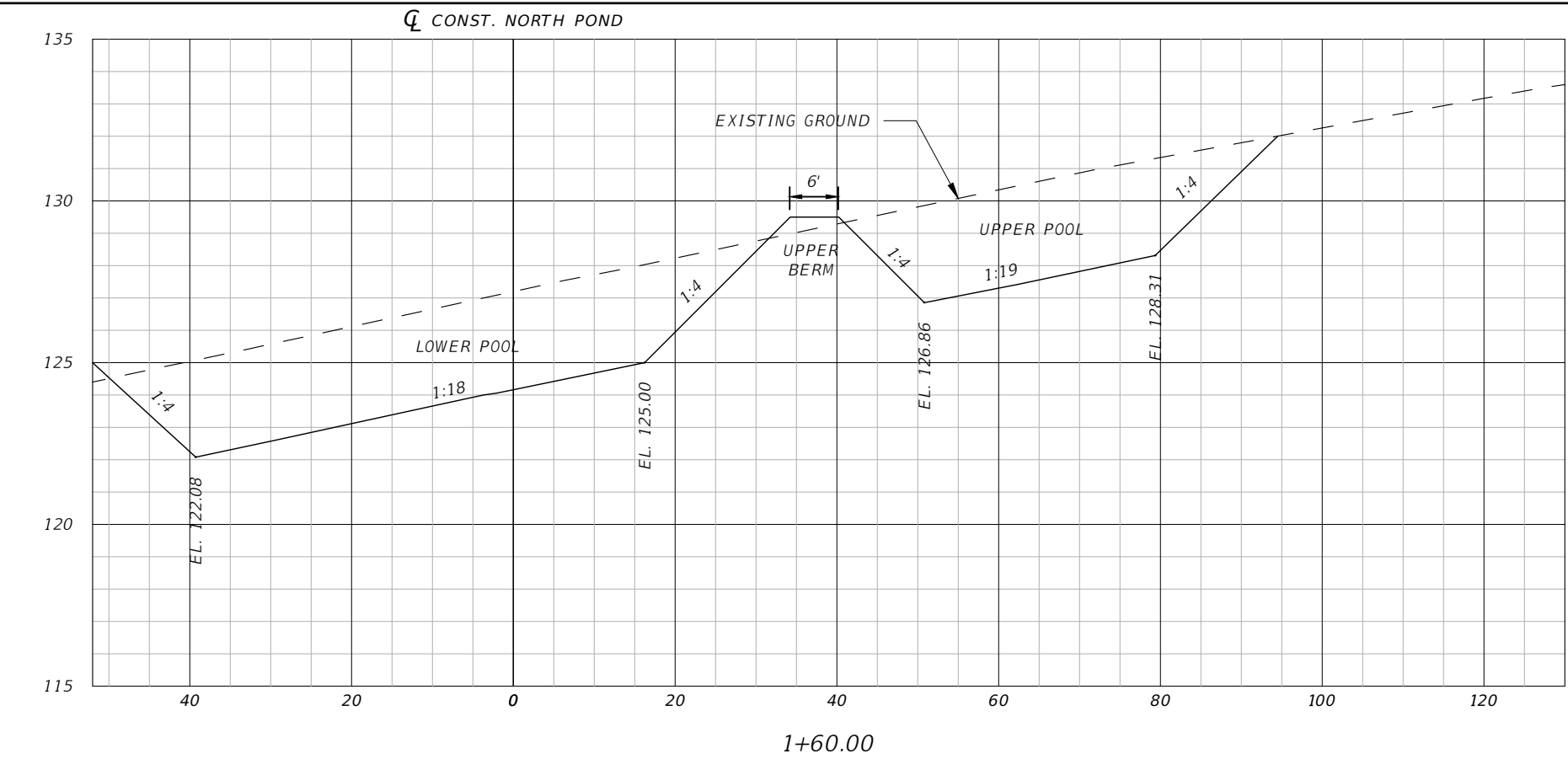




HORIZ. SCALE 1" = 20'

VERT. SCALE 1" = 5'

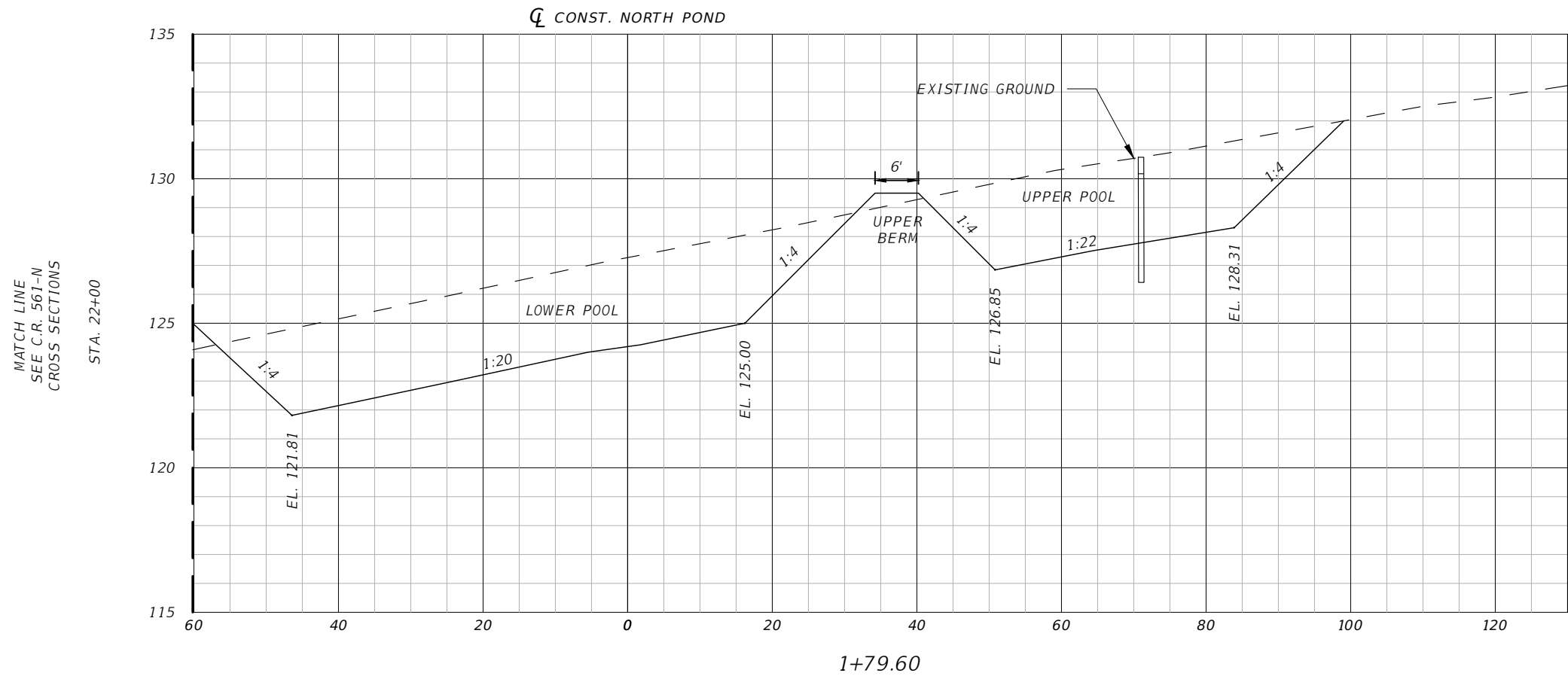
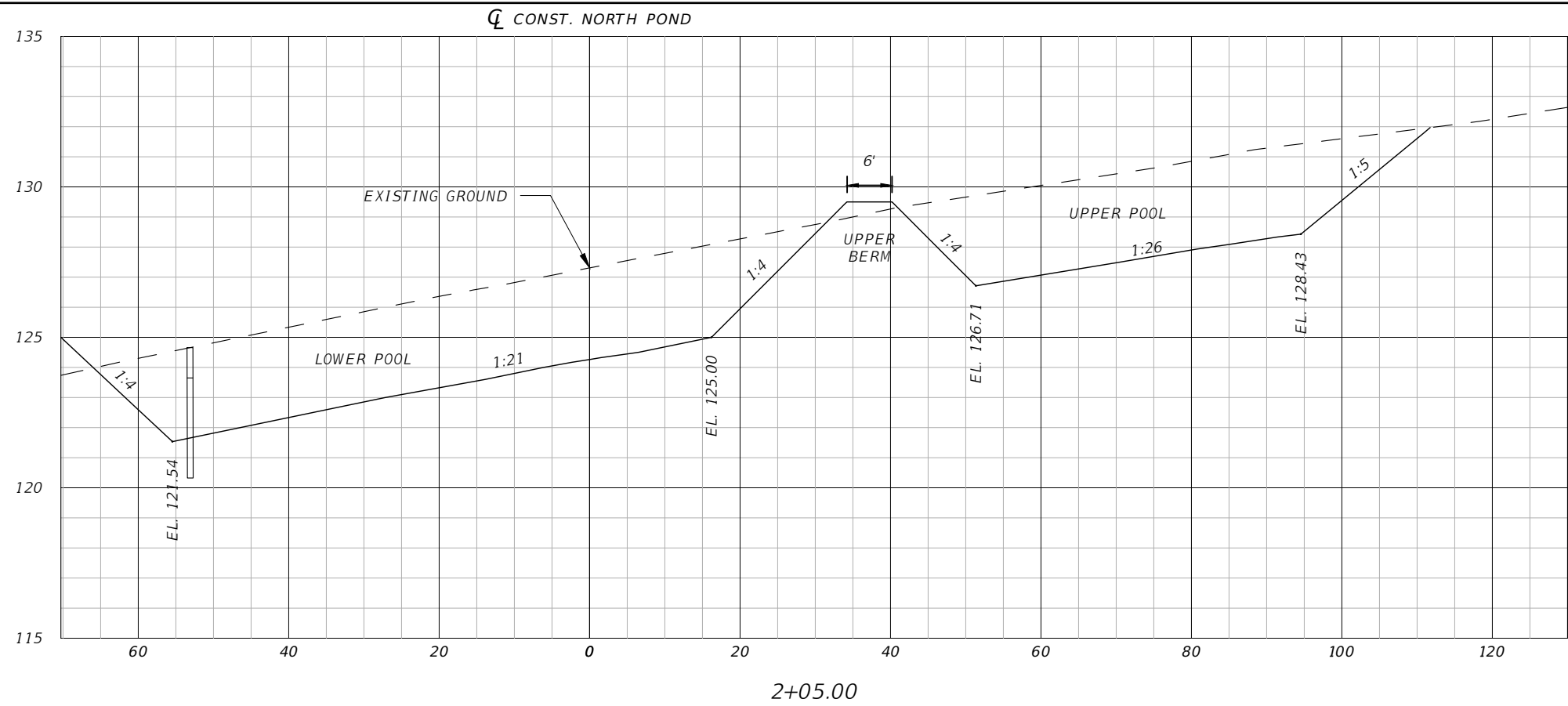
REVISIONS		 <b>OM ENGINEERING SERVICES, INC.</b> <small>Civil • Structural • Inspections</small> 621 E. WASHINGTON ST., STE 8 ORLANDO, FLORIDA 32801 PHONE NO. (407) 704-7815	 <b>LAKE COUNTY, FL</b> <small>REAL FLORIDA • REAL CLOSE</small>	<b>CR 561 &amp; LAKESHORE DRIVE ROUNDABOUT</b>	<b>POND CROSS SECTIONS (1)</b> <b>POND-NORTH</b>	SHEET NO.  <b>27</b>
DATE	DESCRIPTION					
		ENGINEER OF RECORD: DAVID RETLAW BORYS P.E. P.E. LICENSE NUMBER 75372				



HORIZ. SCALE 1" = 20'

VERT. SCALE 1" = 5'

REVISIONS		 <b>OM ENGINEERING SERVICES, INC.</b> Civil • Structural • Inspections 621 E. WASHINGTON ST., STE 8 ORLANDO, FLORIDA 32801 PHONE NO. (407) 704-7815	 <b>LAKE COUNTY, FL</b> REAL FLORIDA • REAL CLOSE	<b>CR 561 &amp; LAKESHORE DRIVE ROUNDABOUT</b>	<b>POND CROSS SECTIONS (2)</b> <b>POND-NORTH</b>	SHEET NO.  <b>28</b>
DATE	DESCRIPTION					
		ENGINEER OF RECORD: DAVID RETLAW BORYS P.E. P.E. LICENSE NUMBER 75372				

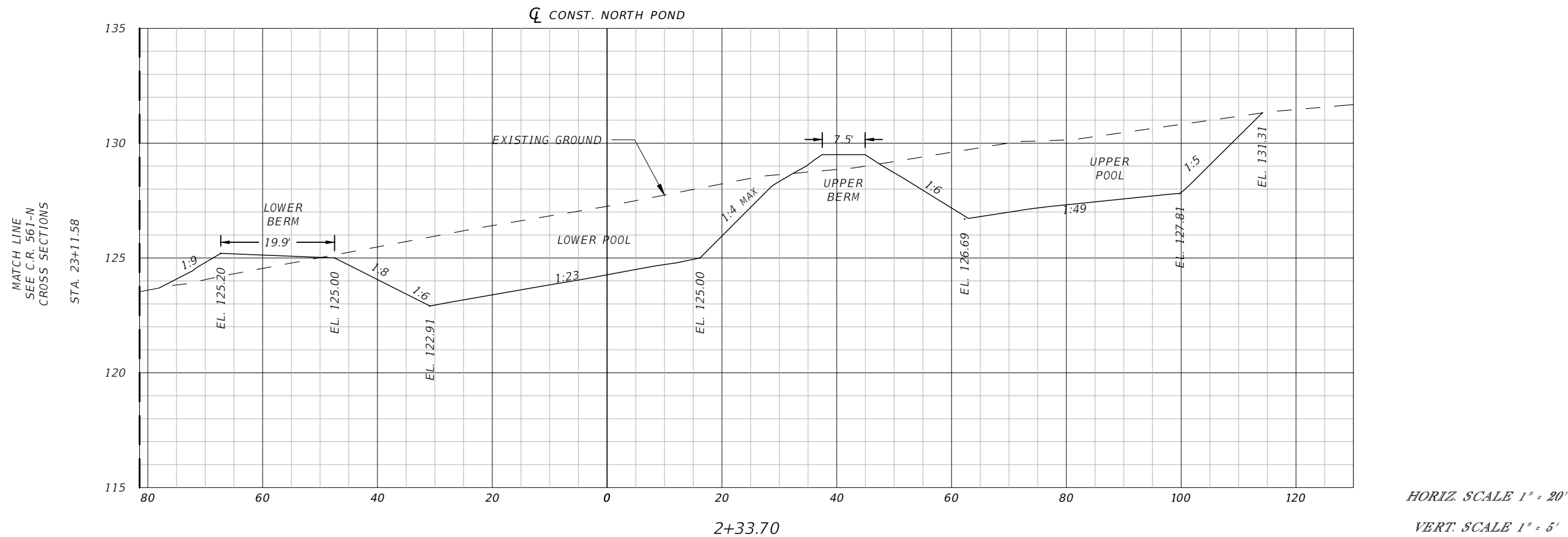


HORIZ. SCALE 1" = 20'

VERT. SCALE 1" = 5'

REVISIONS		 <b>OM ENGINEERING SERVICES, INC.</b> Civil • Structural • Inspections 621 E. WASHINGTON ST., STE 8 ORLANDO, FLORIDA 32801 PHONE NO. (407) 704-7815	 <b>LAKE COUNTY, FL</b> REAL FLORIDA • REAL CLOSE	<i>CR 561 &amp; LAKESHORE DRIVE ROUNDABOUT</i>	<i>POND CROSS SECTIONS (3) POND-NORTH</i>	SHEET NO.
DATE	DESCRIPTION					29
		ENGINEER OF RECORD: DAVID RETLAW BORYS P.E. P.E. LICENSE NUMBER 75372				





REVISIONS	
DATE	DESCRIPTION



OM ENGINEERING SERVICES, INC.  
621 E. WASHINGTON ST., STE 8  
ORLANDO, FLORIDA 32801  
PHONE NO. (407) 704-7815

ENGINEER OF RECORD: DAVID RETLAW BORYS P.E.  
P.E. LICENSE NUMBER 75372

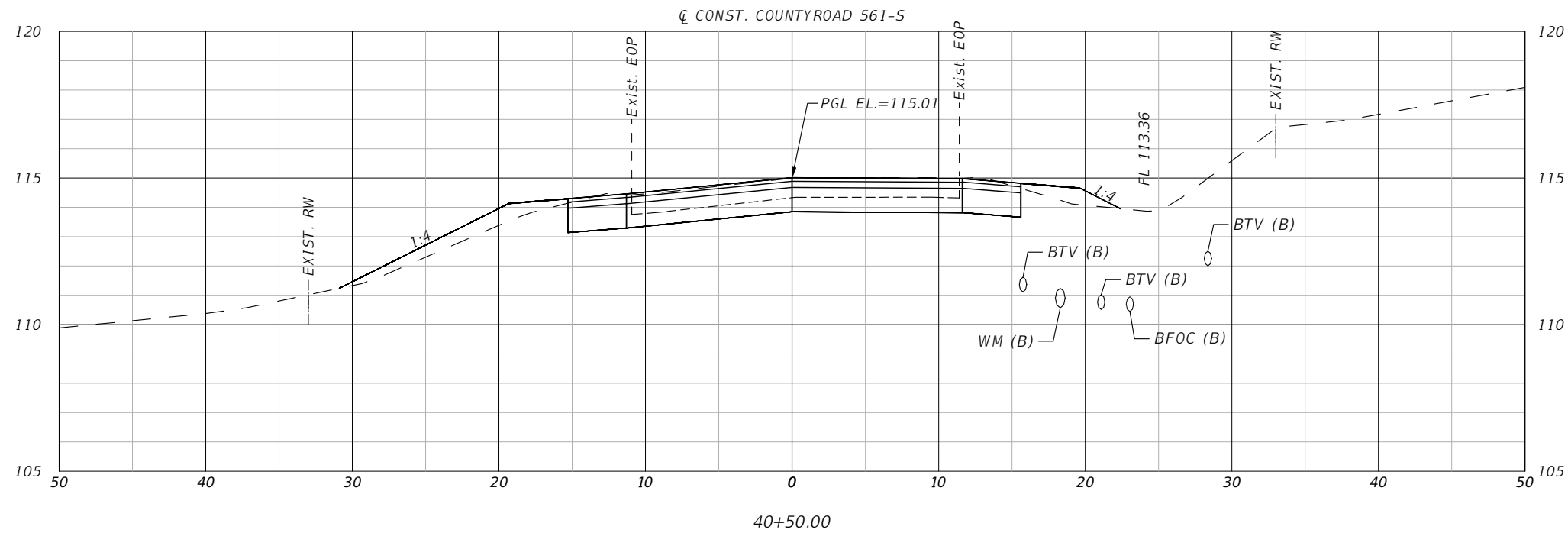
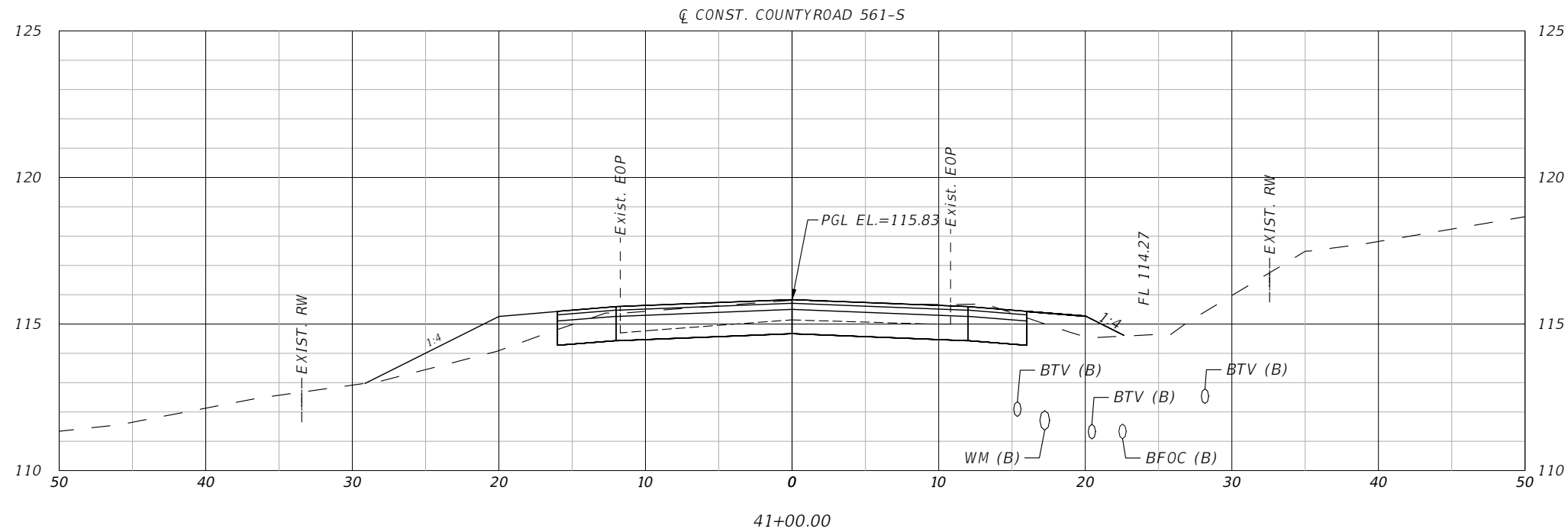


CR 561 & LAKESHORE  
DRIVE ROUNDABOUT

POND CROSS SECTIONS (4)  
POND-NORTH

SHEET  
NO.  
30

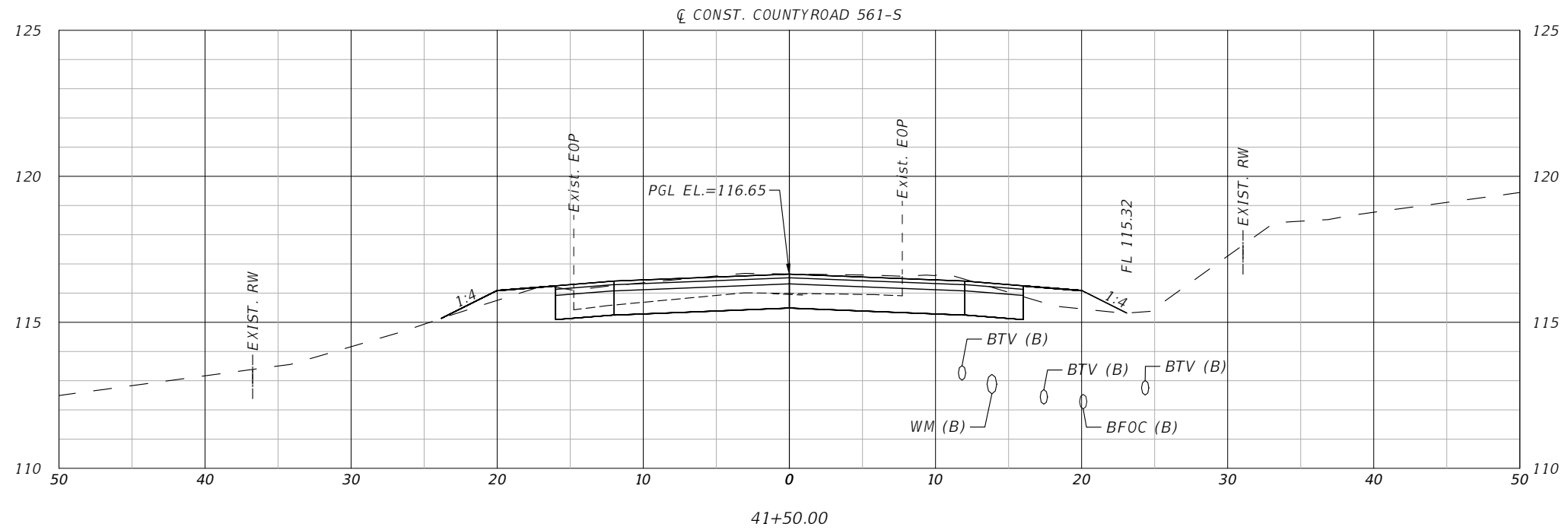
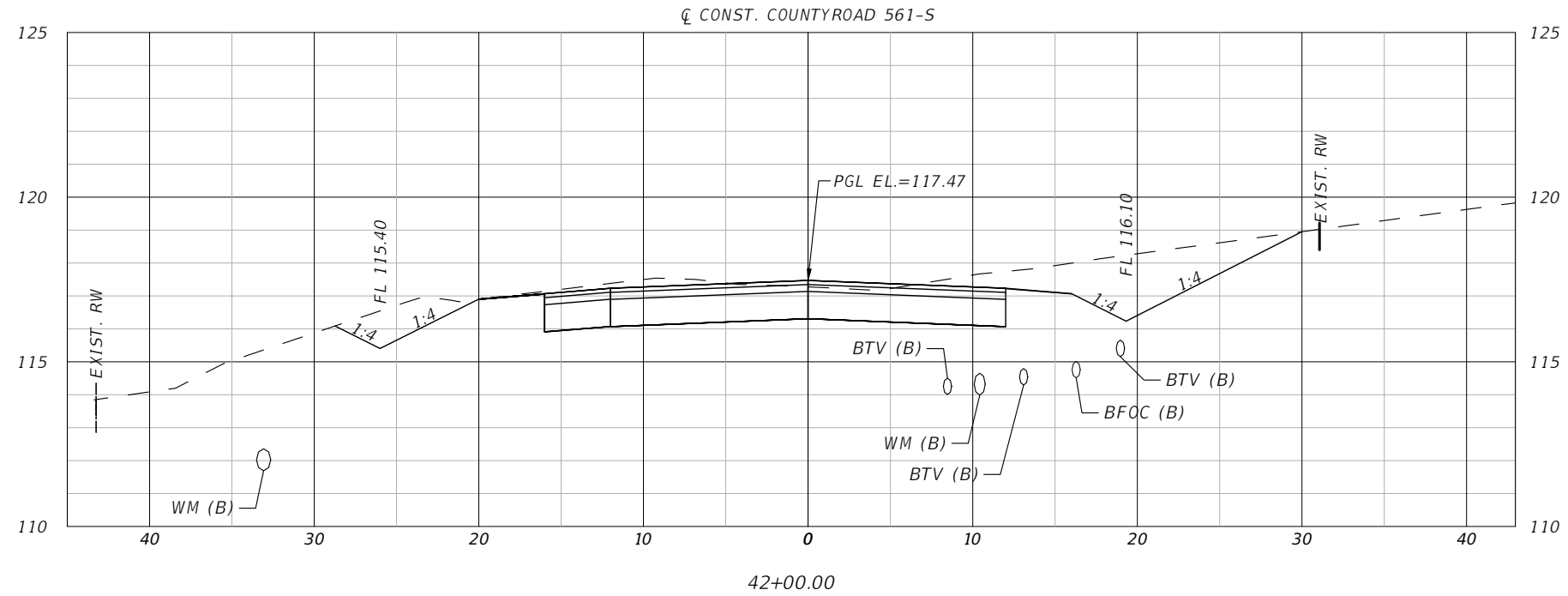
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HORIZ. SCALE 1" = 10'

VERT. SCALE 1" = 5'

REVISIONS		 <b>OM ENGINEERING SERVICES, INC.</b> Civil • Structural • Inspections 621 E. WASHINGTON ST., STE 8 ORLANDO, FLORIDA 32801 PHONE NO. (407) 704-7815	 <b>LAKE COUNTY, FL</b> REAL FLORIDA • REAL CLOSE	<b>CR 561 &amp; LAKESHORE DRIVE ROUNDABOUT</b>	<b>CROSS SECTIONS (1)</b> <b>COUNTY ROAD 561-S</b>	SHEET NO.  <b>31</b>
DATE	DESCRIPTION					
		ENGINEER OF RECORD: RICHARD DEAN BOBLETZ P.E. P.E. LICENSE NUMBER 40049				

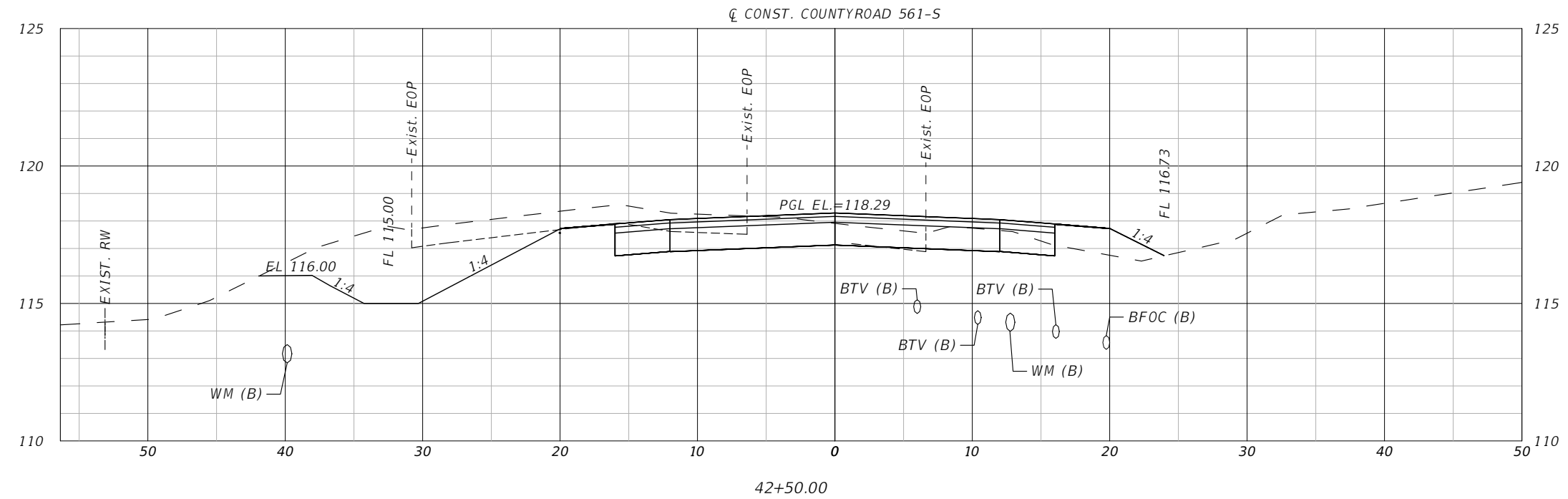
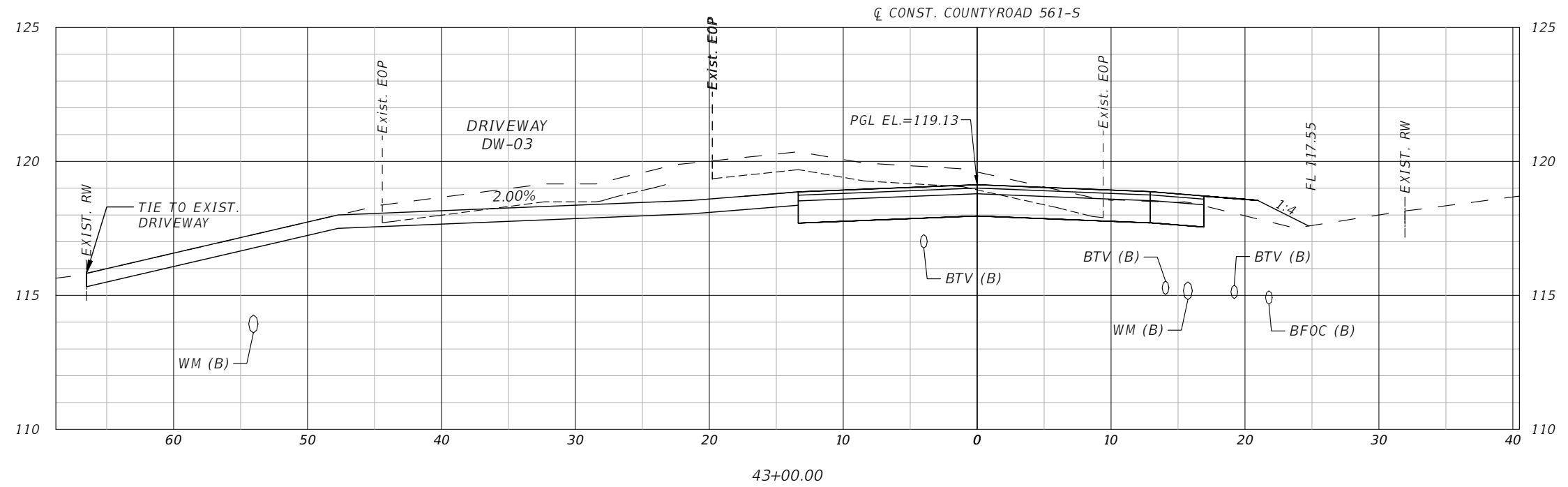


HORIZ. SCALE 1" = 10'

VERT. SCALE 1" = 5'

REVISIONS		 <b>OM ENGINEERING SERVICES, INC.</b> Civil • Structural • Inspections 621 E. WASHINGTON ST., STE 8 ORLANDO, FLORIDA 32801 PHONE NO. (407) 704-7815	 <b>LAKE COUNTY, FL</b> REAL FLORIDA • REAL CLOSE	<b>CR 561 &amp; LAKESHORE DRIVE ROUNDABOUT</b>	<b>CROSS SECTIONS (2)</b> <b>COUNTY ROAD 561-S</b>	SHEET NO.
DATE	DESCRIPTION					32
		ENGINEER OF RECORD: RICHARD DEAN BOBLETZ P.E. P.E. LICENSE NUMBER 40049				



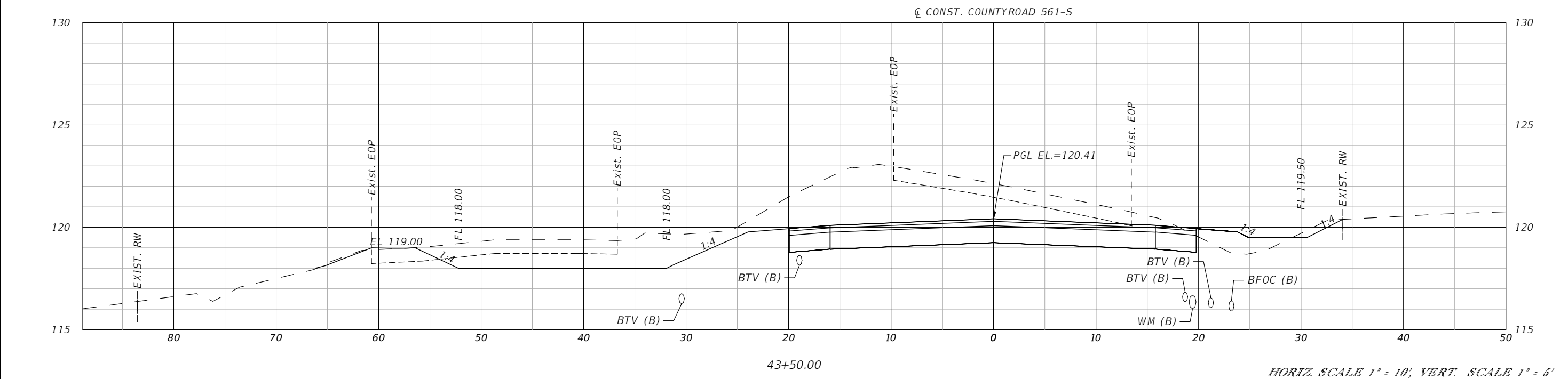
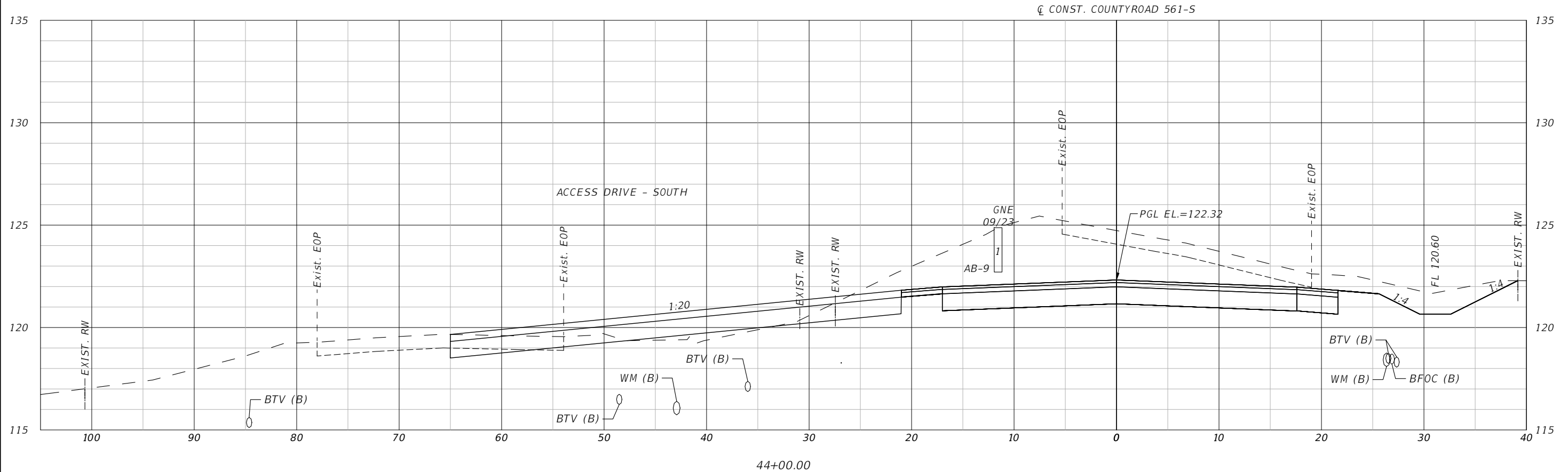


HORIZ. SCALE 1" = 10'

VERT. SCALE 1" = 5'

REVISIONS		 <b>OM ENGINEERING SERVICES, INC.</b> 621 E. WASHINGTON ST., STE 8 ORLANDO, FLORIDA 32801 PHONE NO. (407) 704-7815 ENGINEER OF RECORD: RICHARD DEAN BOBLETZ P.E. P.E. LICENSE NUMBER 40049	 <b>LAKE COUNTY, FL</b> REAL FLORIDA • REAL CLOSE	<b>CR 561 &amp; LAKESHORE DRIVE ROUNDABOUT</b>	<b>CROSS SECTIONS (3) COUNTY ROAD 561-S</b>	SHEET NO.  33
DATE	DESCRIPTION					

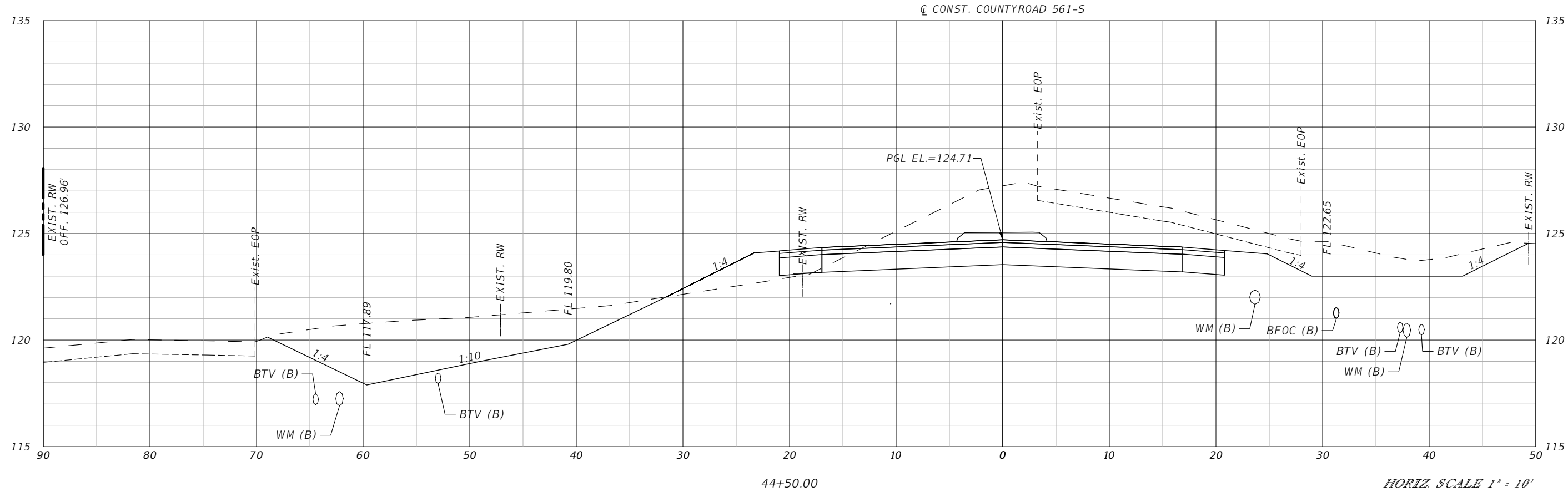
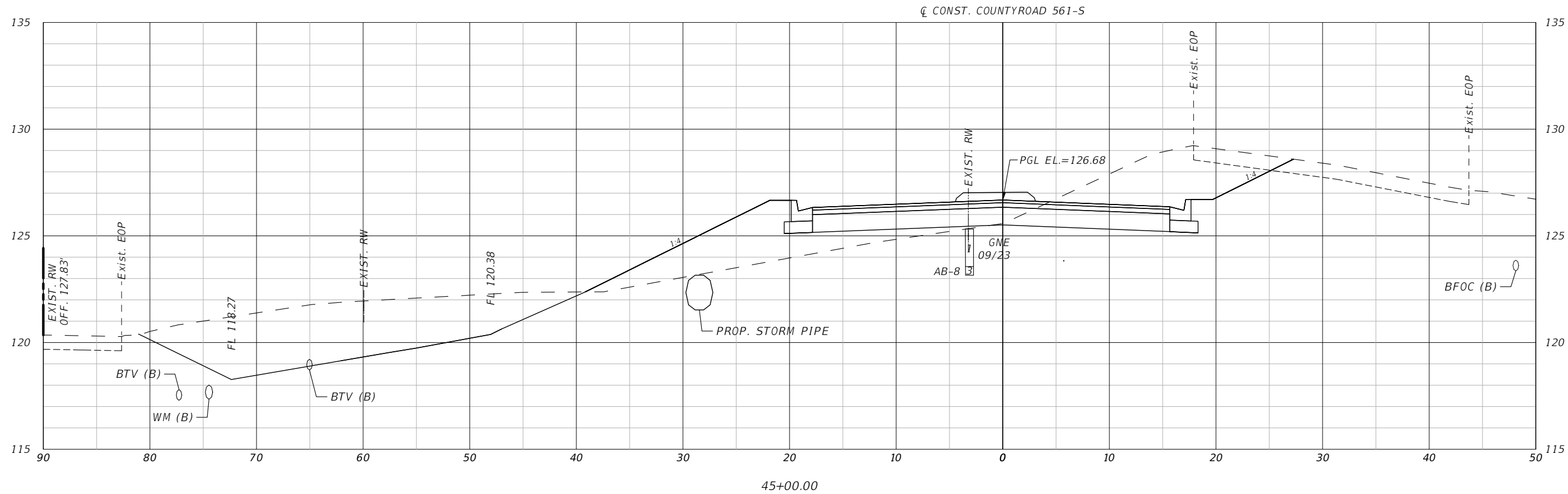
THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



HORIZ. SCALE 1" = 10'; VERT. SCALE 1" = 5'

REVISIONS		 <b>OM ENGINEERING SERVICES, INC.</b> 621 E. WASHINGTON ST., STE 8 ORLANDO, FLORIDA 32801 PHONE NO. (407) 704-7815 ENGINEER OF RECORD: RICHARD DEAN BOBLETZ P.E. P.E. LICENSE NUMBER 40049	 <b>LAKE COUNTY, FL</b> REAL FLORIDA • REAL CLOSE	<b>CR 561 &amp; LAKESHORE DRIVE ROUNDABOUT</b>	<b>CROSS SECTIONS (4) COUNTY ROAD 561-S</b>	SHEET NO.  34
DATE	DESCRIPTION					

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

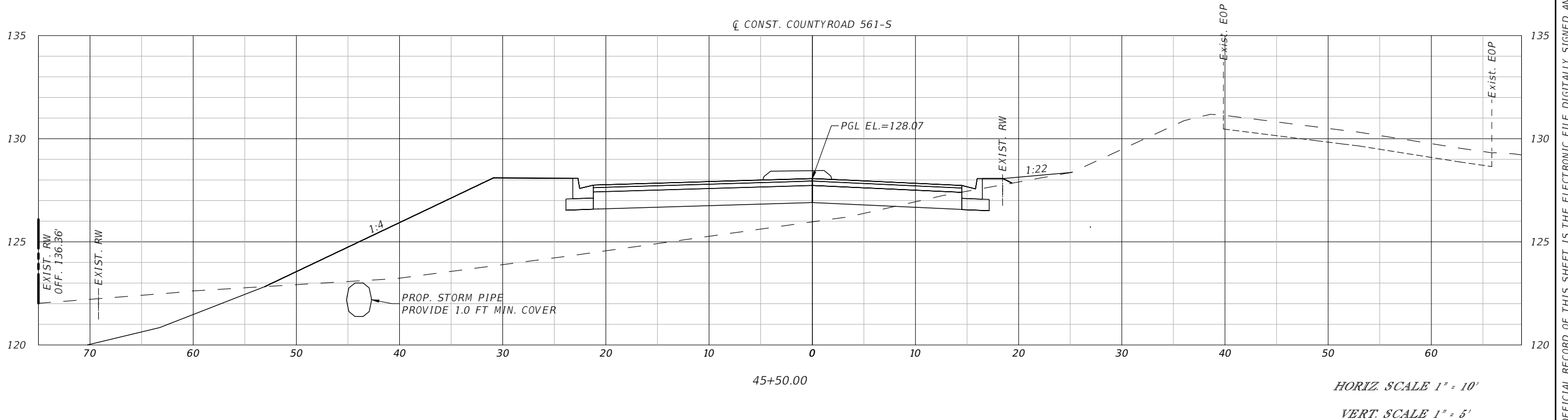
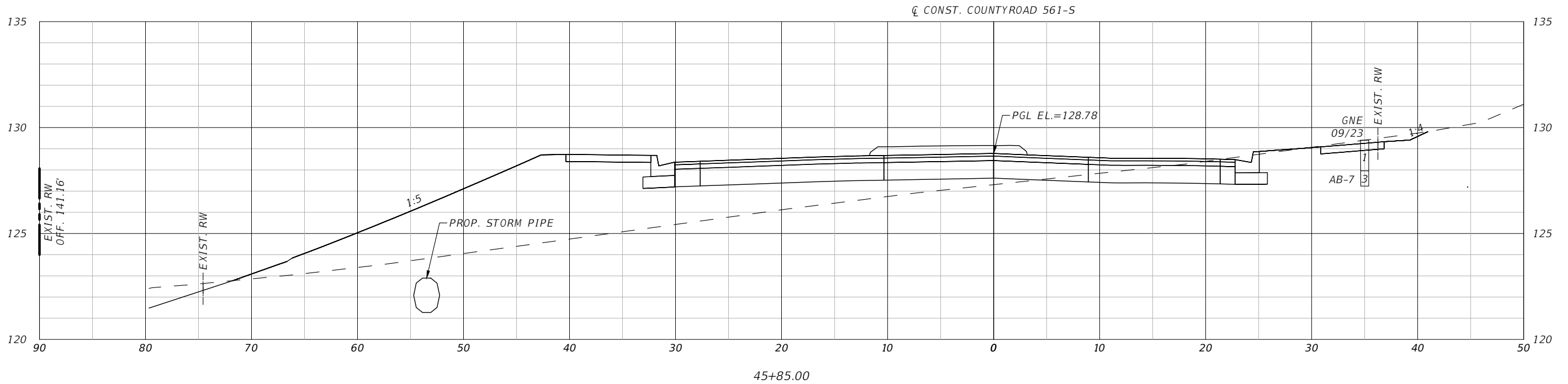


HORIZ. SCALE 1" = 10'

VERT. SCALE 1" = 5'

REVISIONS		 <b>OM ENGINEERING SERVICES, INC.</b> 621 E. WASHINGTON ST., STE 8 ORLANDO, FLORIDA 32801 PHONE NO. (407) 704-7815 ENGINEER OF RECORD: RICHARD DEAN BOBLETZ P.E. P.E. LICENSE NUMBER 40049	 <b>LAKE COUNTY, FL</b> REAL FLORIDA • REAL CLOSE	<b>CR 561 &amp; LAKESHORE DRIVE ROUNDABOUT</b>	<b>CROSS SECTIONS (5) COUNTY ROAD 561-S</b>	SHEET NO.  35
DATE	DESCRIPTION					

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

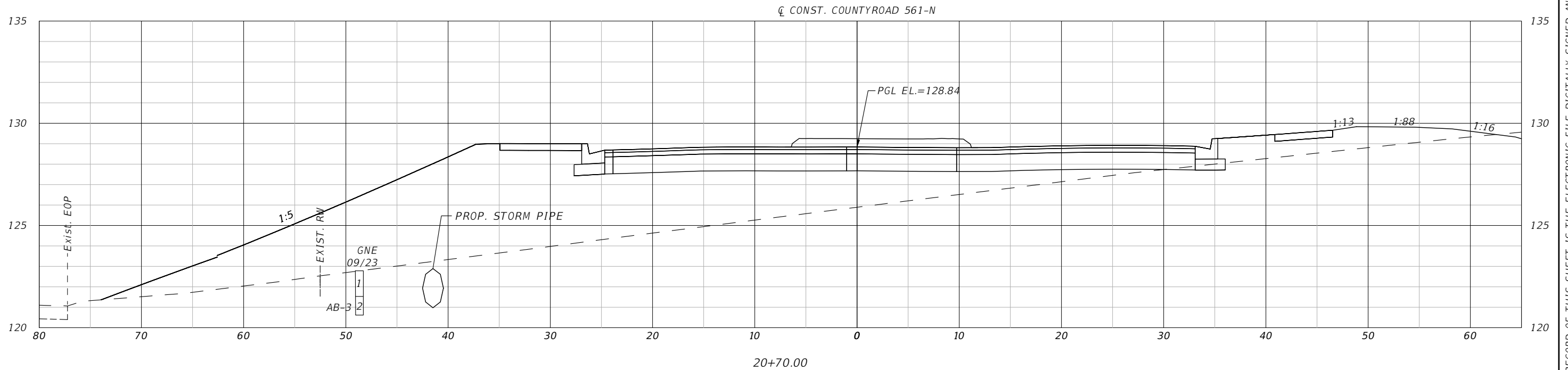
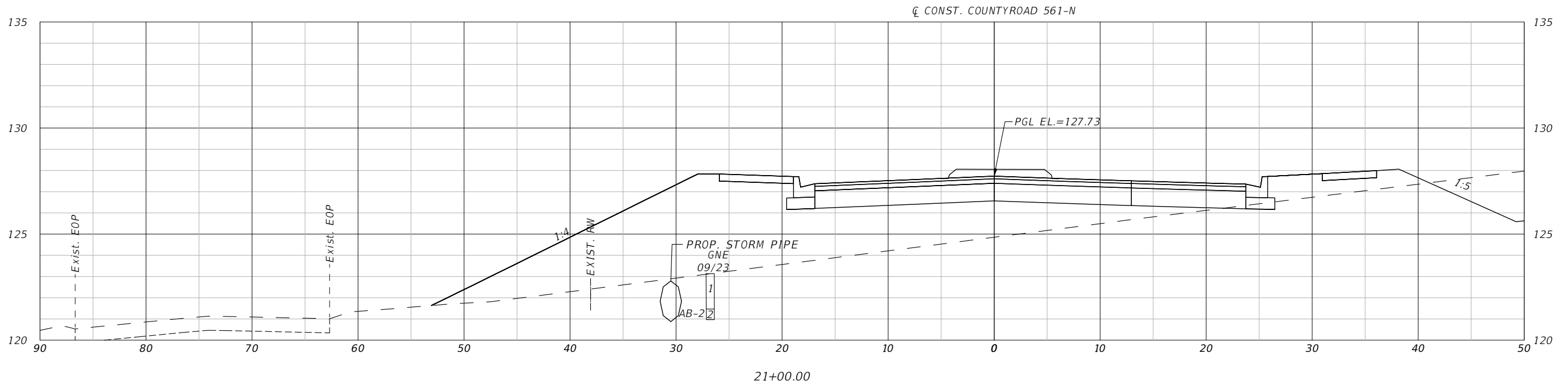


HORIZ. SCALE 1" = 10'  
VERT. SCALE 1" = 5'

REVISIONS		 <b>OM ENGINEERING SERVICES, INC.</b> 621 E. WASHINGTON ST., STE 8 ORLANDO, FLORIDA 32801 PHONE NO. (407) 704-7815 ENGINEER OF RECORD: RICHARD DEAN BOBLETZ P.E. P.E. LICENSE NUMBER 40049	 <b>LAKE COUNTY, FL</b> REAL FLORIDA • REAL CLOSE	<b>CR 561 &amp; LAKESHORE DRIVE ROUNDABOUT</b>	<b>CROSS SECTIONS (6) COUNTY ROAD 561-S</b>	SHEET NO.  36
DATE	DESCRIPTION					

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

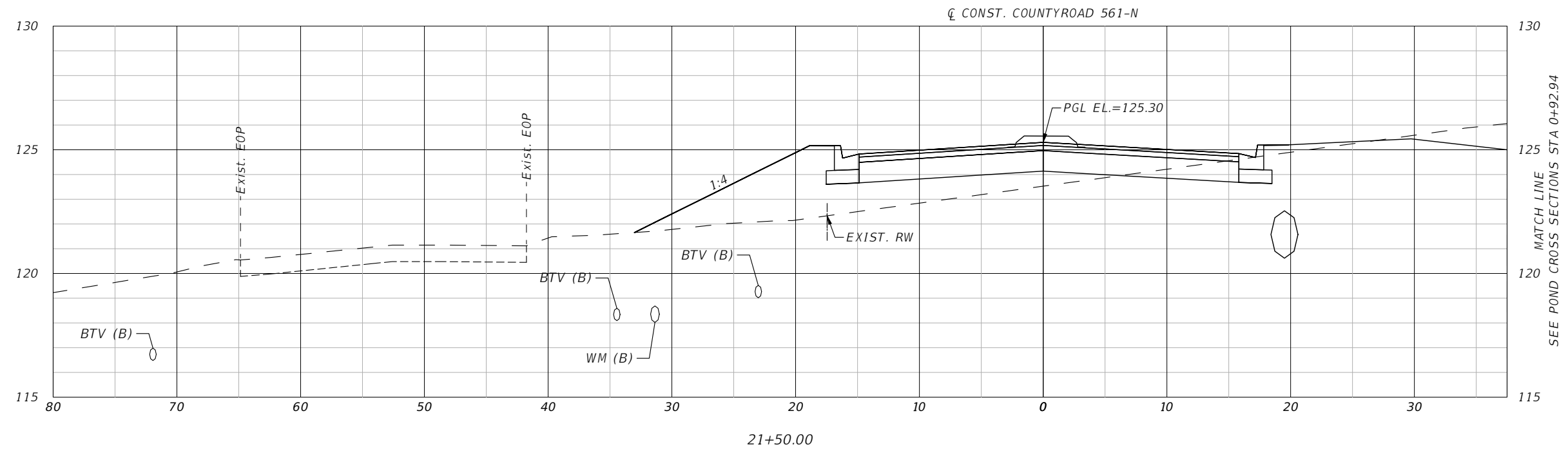
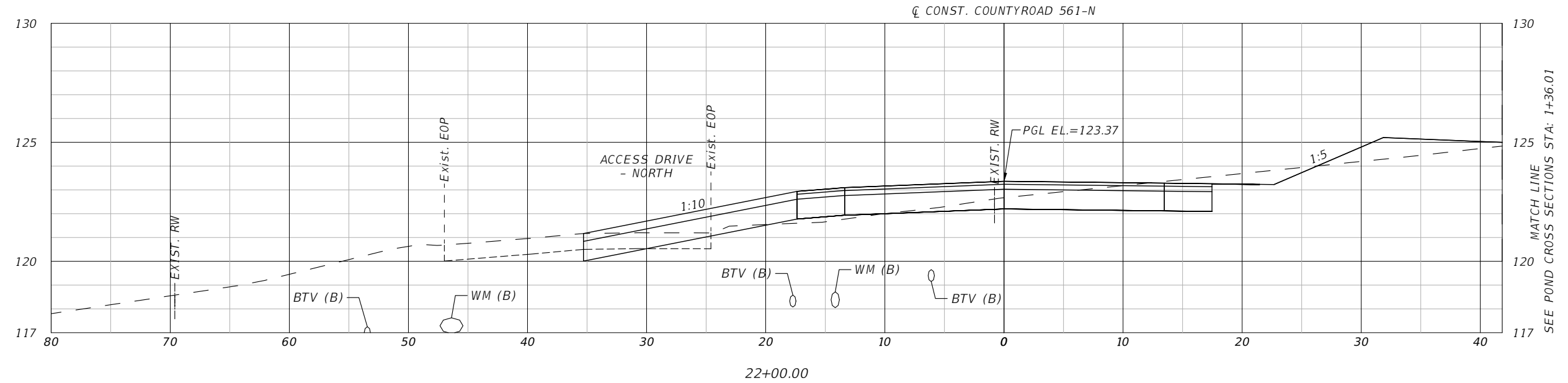




HORIZ. SCALE 1" = 10'

VERT. SCALE 1" = 5'

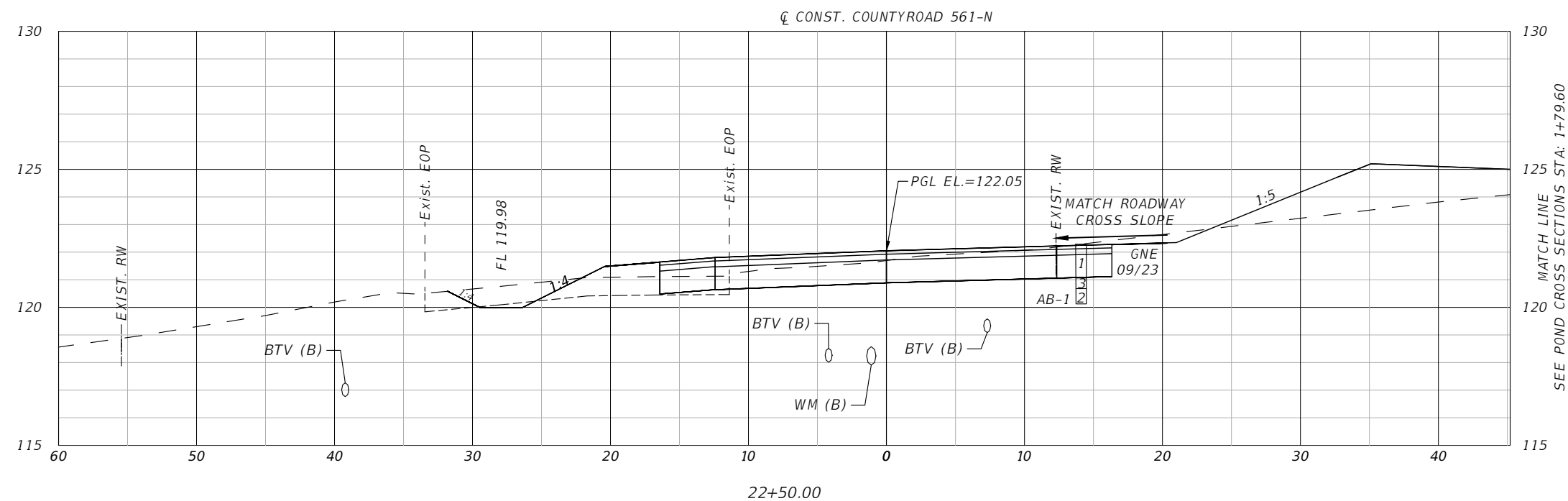
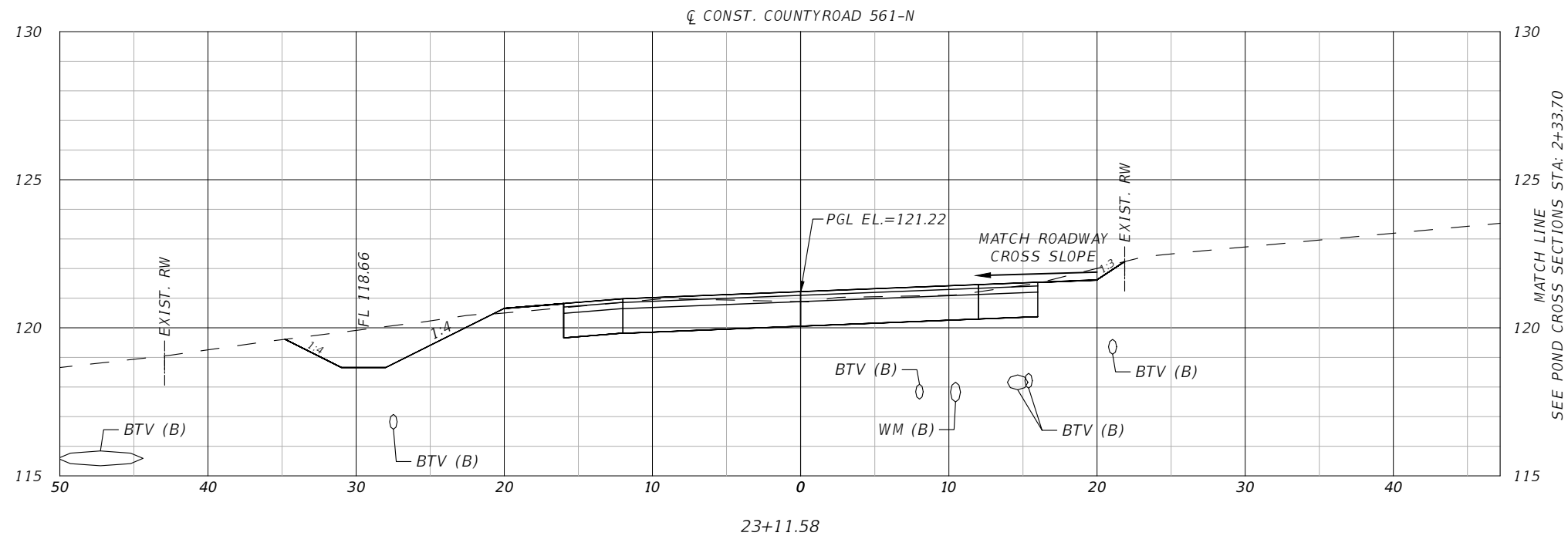
REVISIONS		 <b>OM ENGINEERING SERVICES, INC.</b> Civil • Structural • Inspections 621 E. WASHINGTON ST., STE 8 ORLANDO, FLORIDA 32801 PHONE NO. (407) 704-7815	 <b>LAKE COUNTY, FL</b> REAL FLORIDA • REAL CLOSE	<b>CR 561 &amp; LAKESHORE DRIVE ROUNDABOUT</b>	<b>CROSS SECTIONS (7) COUNTY ROAD 561-N</b>	SHEET NO.  37
DATE	DESCRIPTION					
		ENGINEER OF RECORD: RICHARD DEAN BOBLETZ P.E. P.E. LICENSE NUMBER 40049				



HORIZ. SCALE 1" = 10'

VERT. SCALE 1" = 5'

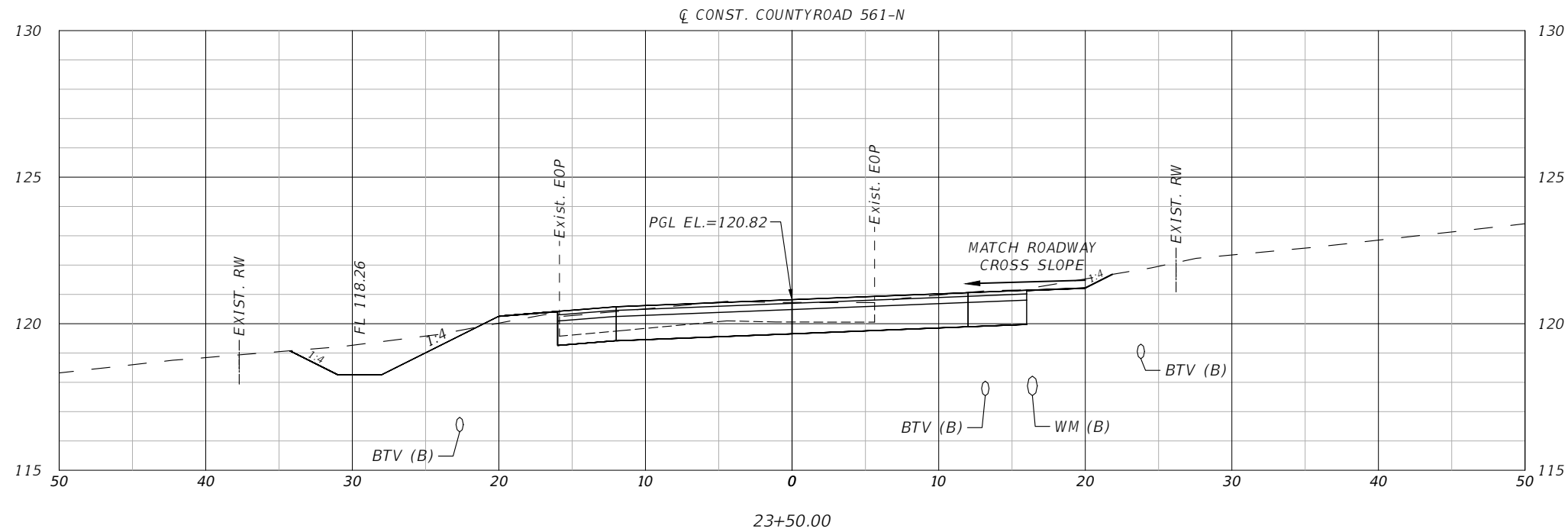
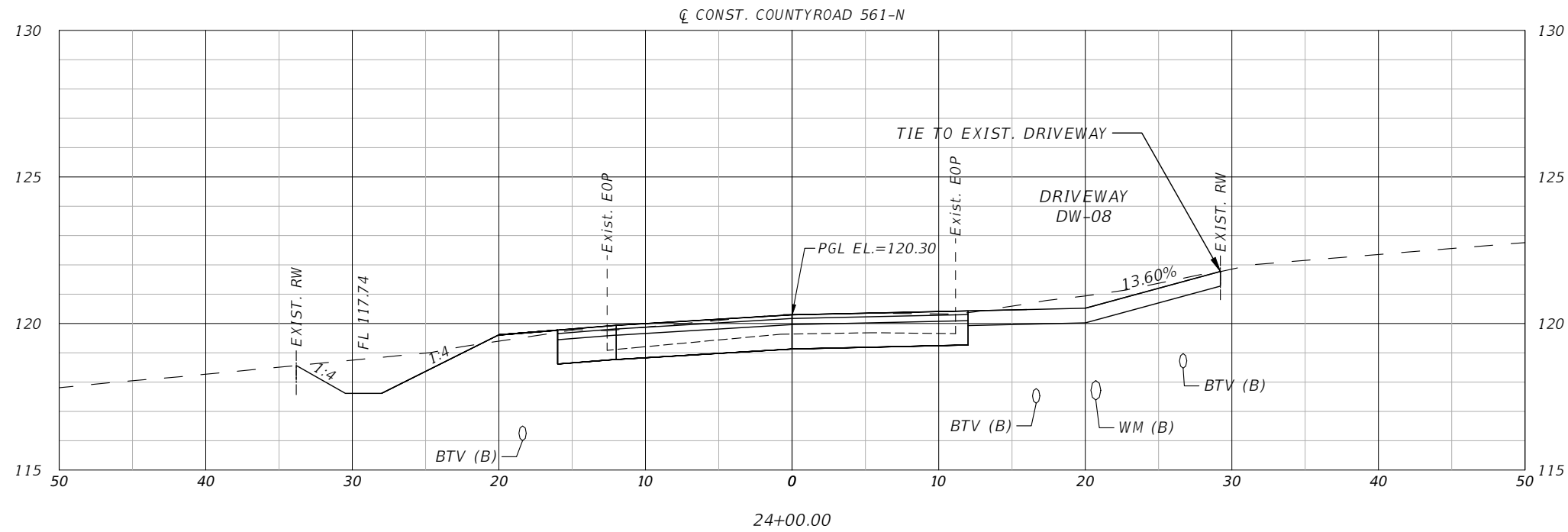
REVISIONS		 <b>OM ENGINEERING SERVICES, INC.</b> 621 E. WASHINGTON ST., STE 8 ORLANDO, FLORIDA 32801 PHONE NO. (407) 704-7815	 <b>LAKE COUNTY, FL</b> REAL FLORIDA - REAL CLOSE	<b>CR 561 &amp; LAKESHORE DRIVE ROUNDABOUT</b>	<b>CROSS SECTIONS (8)</b> <b>COUNTY ROAD 561-N</b>	SHEET NO.  <b>38</b>
DATE	DESCRIPTION					
		ENGINEER OF RECORD: RICHARD DEAN BOBLETZ P.E. P.E. LICENSE NUMBER 40049				



HORIZ. SCALE 1" = 10'

VERT. SCALE 1" = 5'

REVISIONS		 <b>OM ENGINEERING SERVICES, INC.</b> 621 E. WASHINGTON ST., STE 8 ORLANDO, FLORIDA 32801 PHONE NO. (407) 704-7815 ENGINEER OF RECORD: RICHARD DEAN BOBLETZ P.E. P.E. LICENSE NUMBER 40049	 <b>LAKE COUNTY, FL</b> REAL FLORIDA • REAL CLOSE	<b>CR 561 &amp; LAKESHORE DRIVE ROUNDABOUT</b>	<b>CROSS SECTIONS (9) COUNTY ROAD 561-N</b>	SHEET NO.  39
DATE	DESCRIPTION					

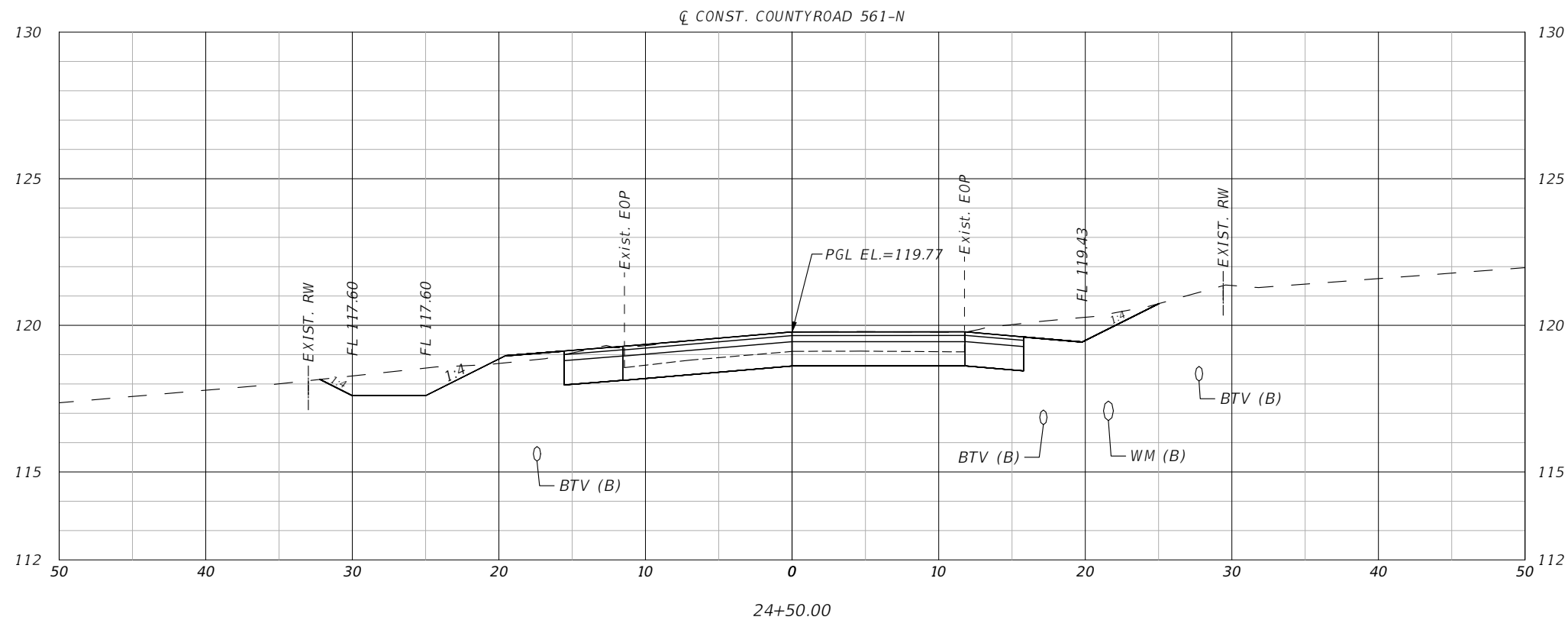


HORIZ. SCALE 1" = 10'

VERT. SCALE 1" = 5'

REVISIONS		 <b>OM ENGINEERING SERVICES, INC.</b> Civil • Structural • Inspections 621 E. WASHINGTON ST., STE 8 ORLANDO, FLORIDA 32801 PHONE NO. (407) 704-7815	 <b>LAKE COUNTY, FL</b> REAL FLORIDA • REAL CLOSE	<b>CR 561 &amp; LAKESHORE DRIVE ROUNDABOUT</b>	<b>CROSS SECTIONS (10) COUNTY ROAD 561-N</b>	SHEET NO.
DATE	DESCRIPTION					40
		ENGINEER OF RECORD: RICHARD DEAN BOBLETZ P.E. P.E. LICENSE NUMBER 40049				

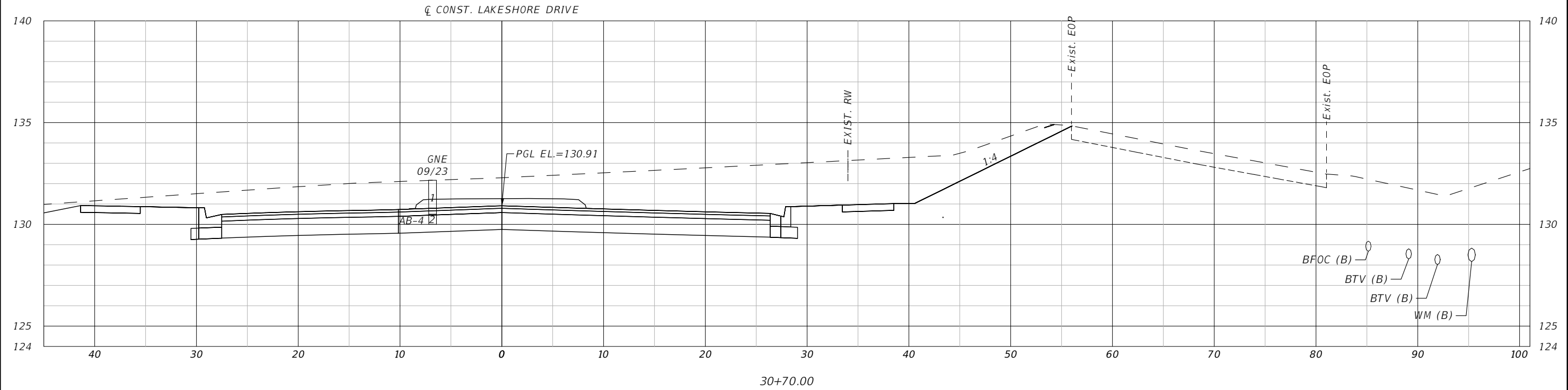
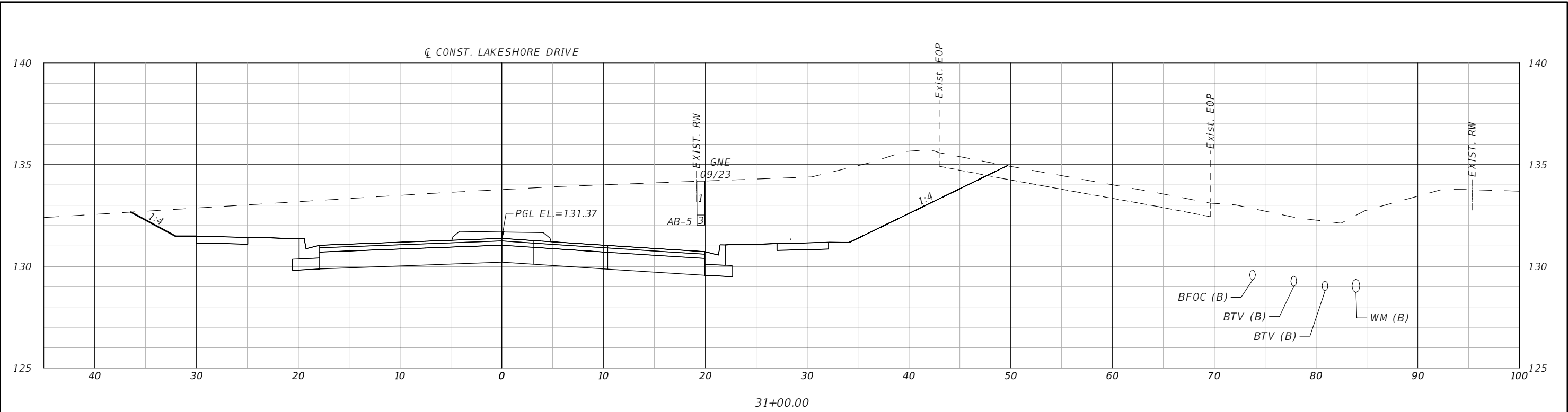




HORIZ. SCALE 1" = 10'

VERT. SCALE 1" = 5'

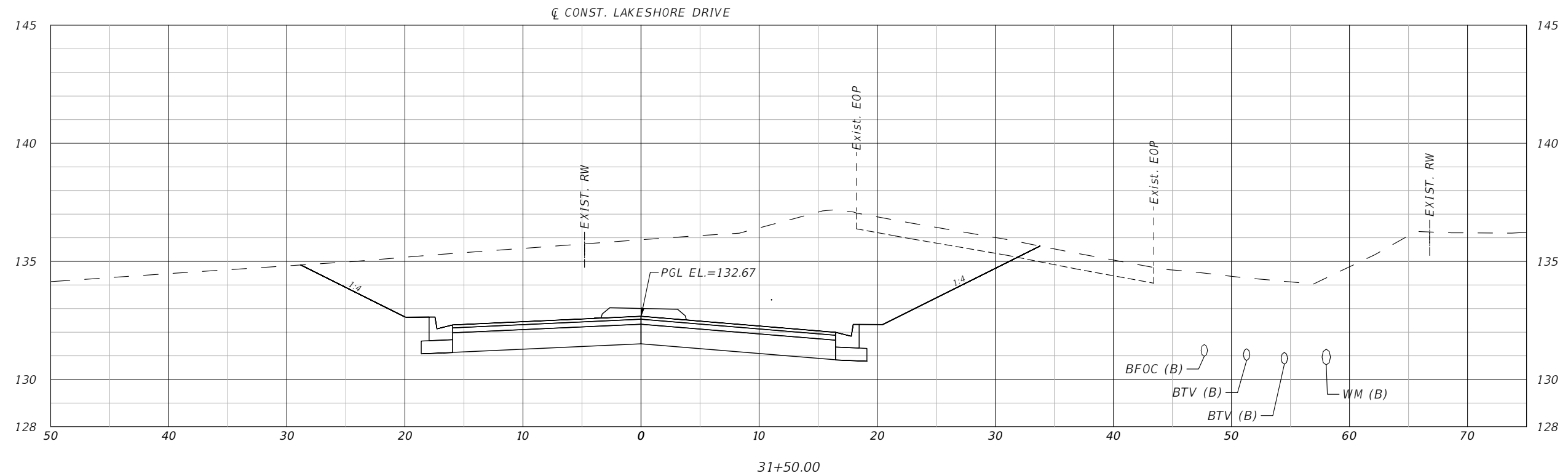
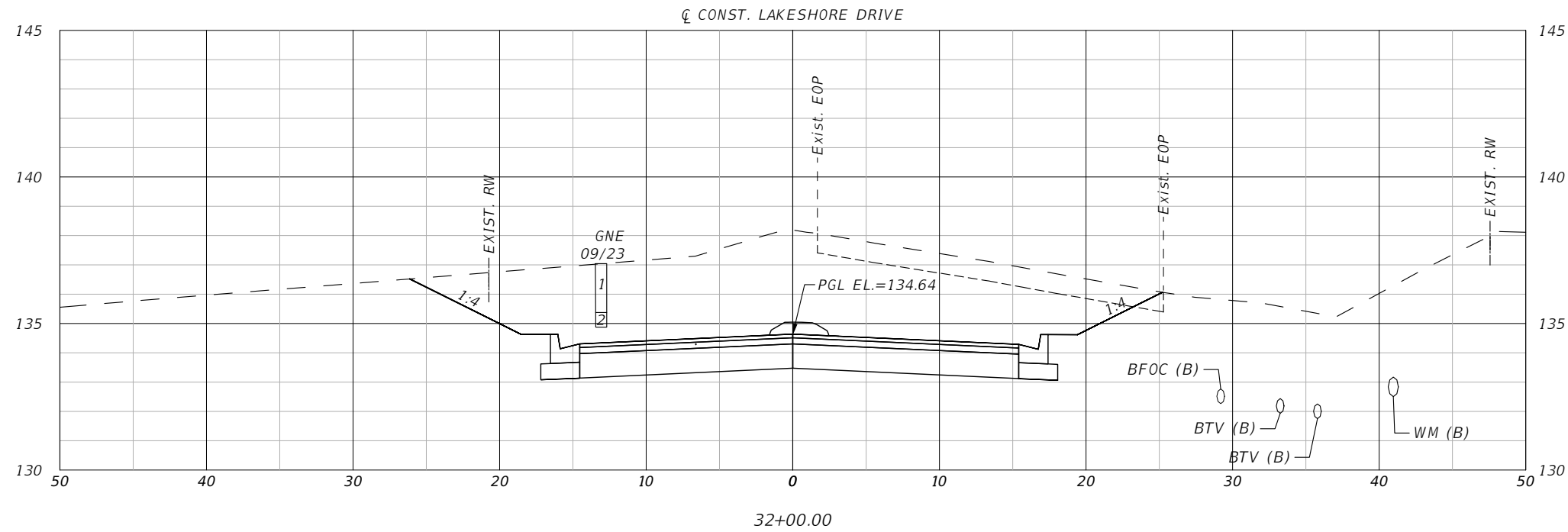
REVISIONS		 <b>OM ENGINEERING SERVICES, INC.</b> Civil • Structural • Inspections 621 E. WASHINGTON ST., STE 8 ORLANDO, FLORIDA 32801 PHONE NO. (407) 704-7815	 <b>LAKE COUNTY, FL</b> REAL FLORIDA • REAL CLOSE	<i>CR 561 &amp; LAKESHORE DRIVE ROUNDABOUT</i>	<i>CROSS SECTIONS (11) COUNTY ROAD 561-N</i>	SHEET NO.
DATE	DESCRIPTION					41
		ENGINEER OF RECORD: RICHARD DEAN BOBLETZ P.E. P.E. LICENSE NUMBER 40049				



HORIZ. SCALE 1" = 10'

VERT. SCALE 1" = 5'

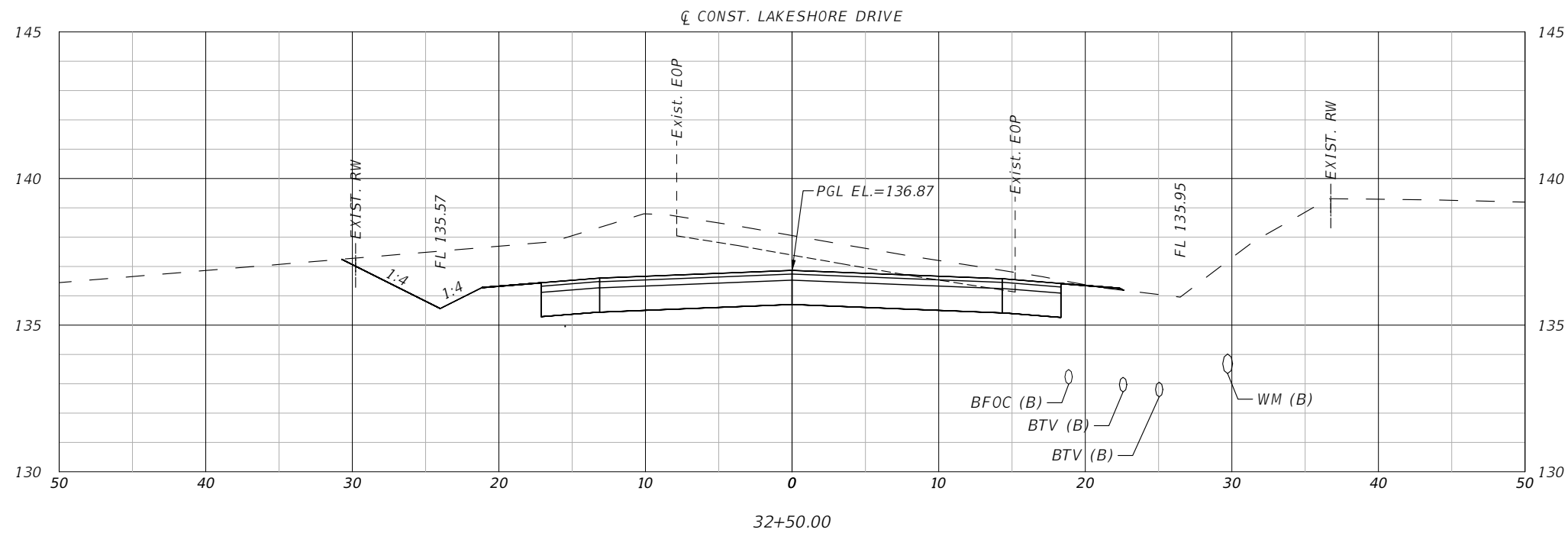
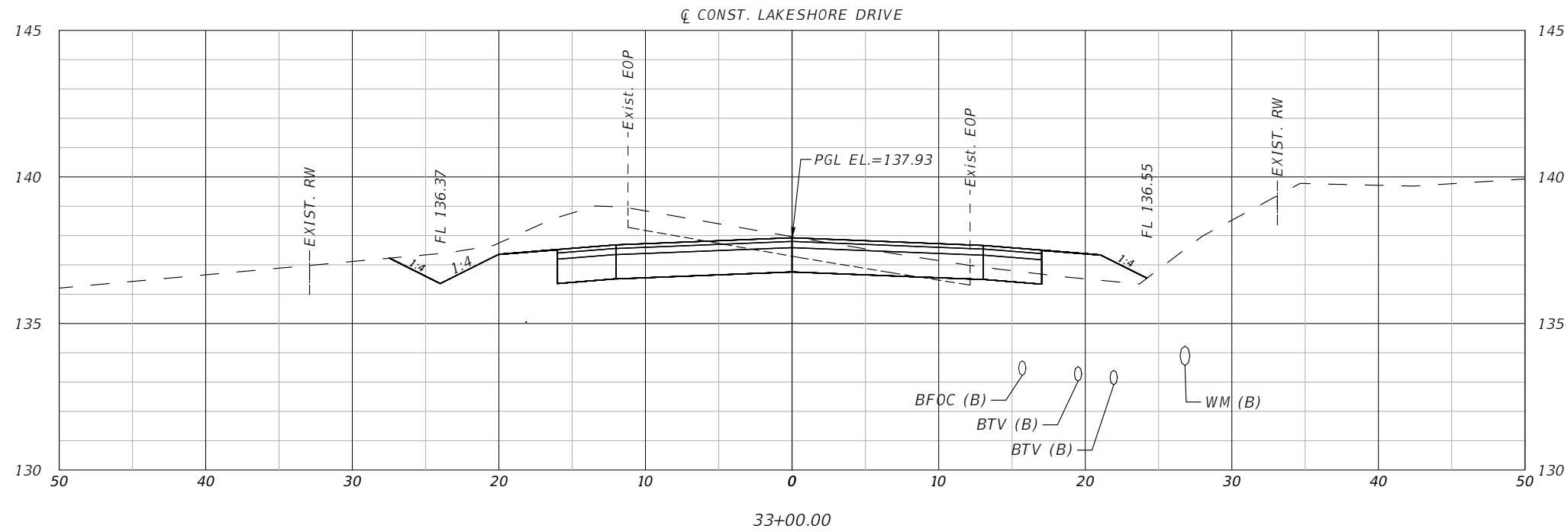
REVISIONS		 <b>OM ENGINEERING SERVICES, INC.</b> 621 E. WASHINGTON ST., STE 8 ORLANDO, FLORIDA 32801 PHONE NO. (407) 704-7815 ENGINEER OF RECORD: RICHARD DEAN BOBLETZ P.E. P.E. LICENSE NUMBER 40049	 <b>LAKE COUNTY, FL</b> REAL FLORIDA • REAL CLOSE	<b>CR 561 &amp; LAKESHORE DRIVE ROUNDABOUT</b>	<b>CROSS SECTIONS (12) LAKESHORE DRIVE</b>	SHEET NO.  42
DATE	DESCRIPTION					



HORIZ. SCALE 1" = 10'

VERT. SCALE 1" = 5'

REVISIONS		 <b>OM ENGINEERING SERVICES, INC.</b> 621 E. WASHINGTON ST., STE 8 ORLANDO, FLORIDA 32801 PHONE NO. (407) 704-7815	 <b>LAKE COUNTY, FL</b> REAL FLORIDA • REAL CLOSE	<b>CR 561 &amp; LAKESHORE DRIVE ROUNDABOUT</b>	<b>CROSS SECTIONS (13) LAKESHORE DRIVE</b>	SHEET NO.  43
DATE	DESCRIPTION					
		ENGINEER OF RECORD: RICHARD DEAN BOBLETZ P.E. P.E. LICENSE NUMBER 40049				

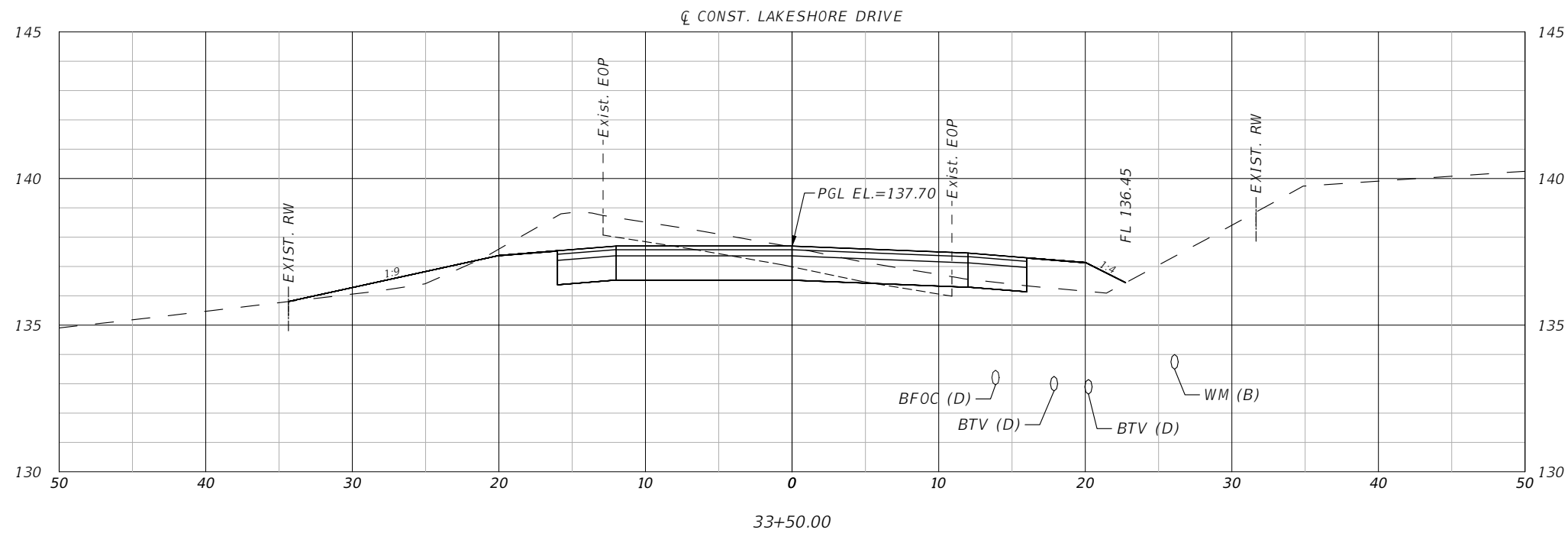
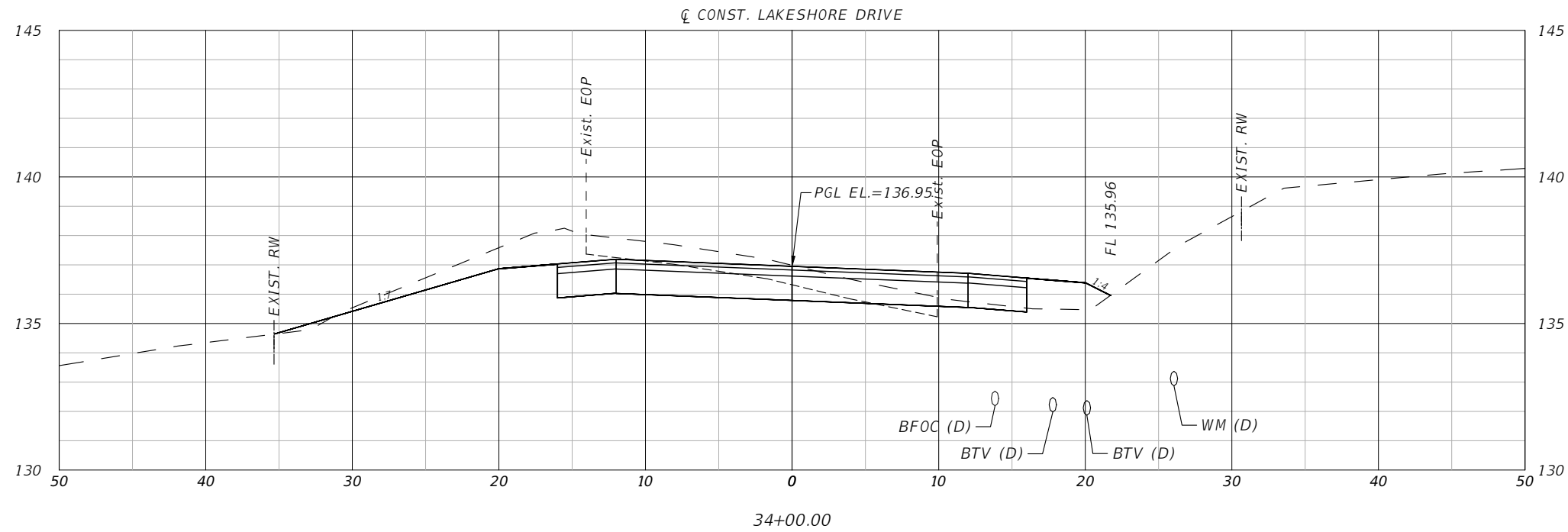


HORIZ. SCALE 1" = 10'

VERT. SCALE 1" = 5'

REVISIONS		 <b>OM ENGINEERING SERVICES, INC.</b> 621 E. WASHINGTON ST., STE 8 ORLANDO, FLORIDA 32801 PHONE NO. (407) 704-7815 ENGINEER OF RECORD: RICHARD DEAN BOBLETZ P.E. P.E. LICENSE NUMBER 40049	 <b>LAKE COUNTY, FL</b> REAL FLORIDA • REAL CLOSE	<b>CR 561 &amp; LAKESHORE DRIVE ROUNDABOUT</b>	<b>CROSS SECTIONS (14) LAKESHORE DRIVE</b>	SHEET NO.
DATE	DESCRIPTION					44

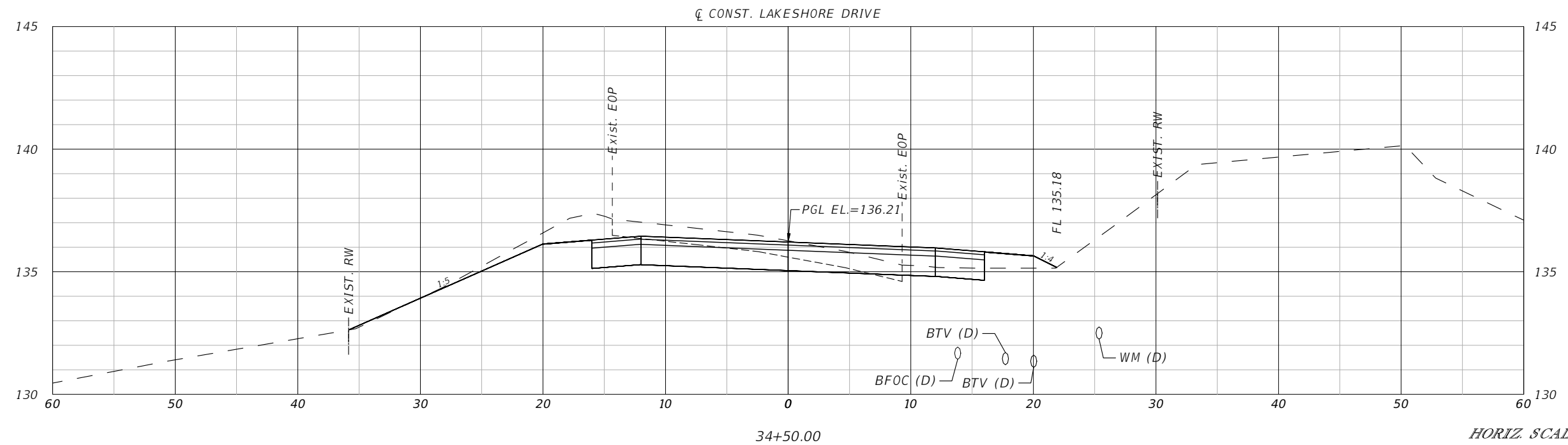
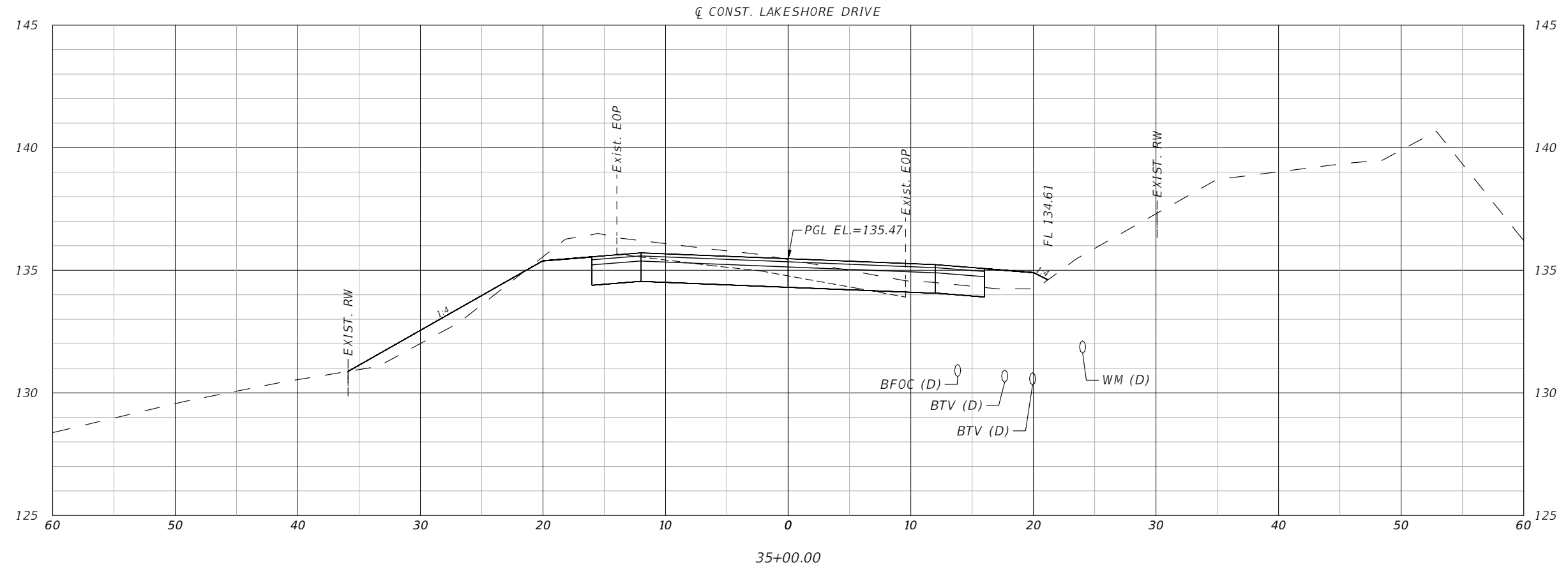




HORIZ. SCALE 1" = 10'

VERT. SCALE 1" = 5'

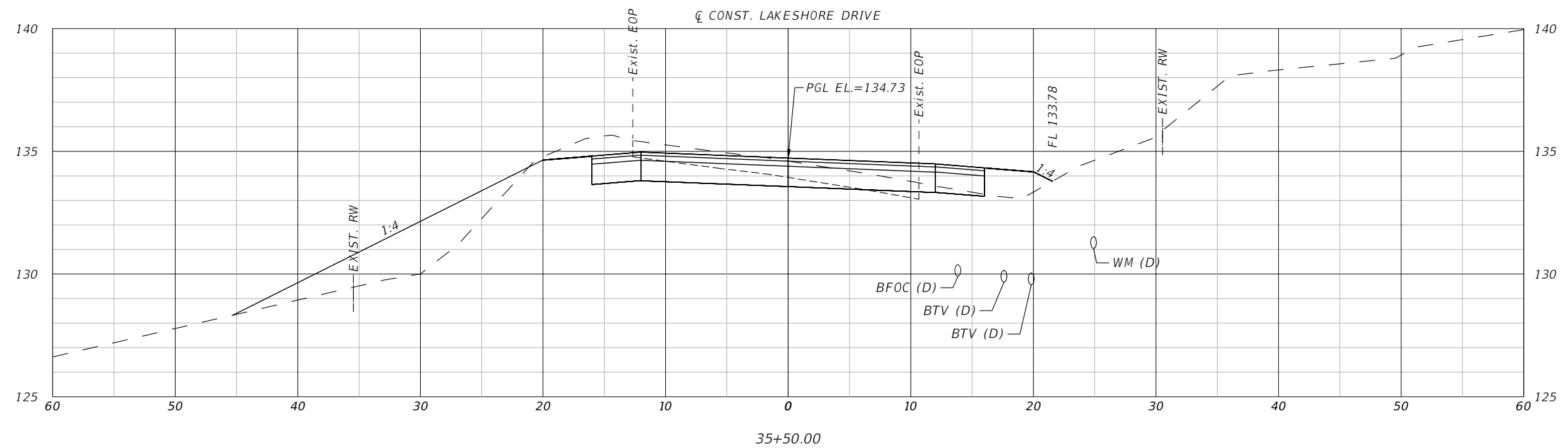
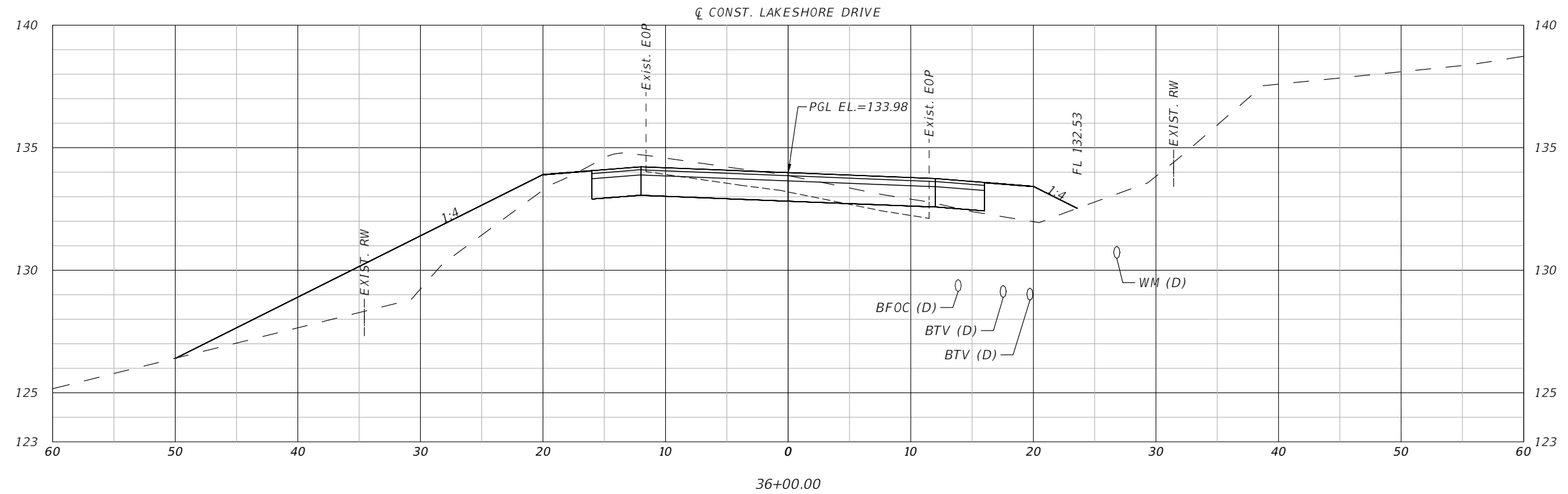
REVISIONS		 <b>OM ENGINEERING SERVICES, INC.</b> 621 E. WASHINGTON ST., STE 8 ORLANDO, FLORIDA 32801 PHONE NO. (407) 704-7815 ENGINEER OF RECORD: RICHARD DEAN BOBLETZ P.E. P.E. LICENSE NUMBER 40049	 <b>LAKE COUNTY, FL</b> REAL FLORIDA • REAL CLOSE	<b>CR 561 &amp; LAKESHORE DRIVE ROUNDABOUT</b>	<b>CROSS SECTIONS (15) LAKESHORE DRIVE</b>	SHEET NO.  <b>45</b>
DATE	DESCRIPTION					



HORIZ. SCALE 1" = 10'

VERT. SCALE 1" = 5'

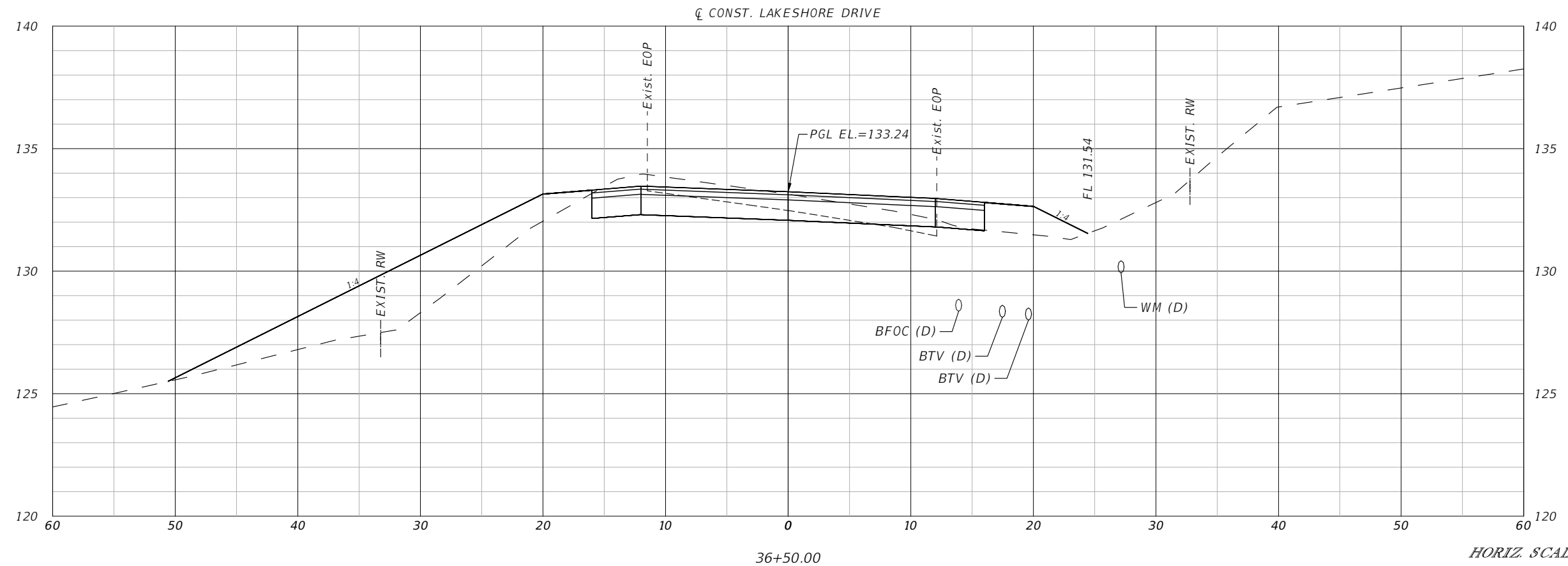
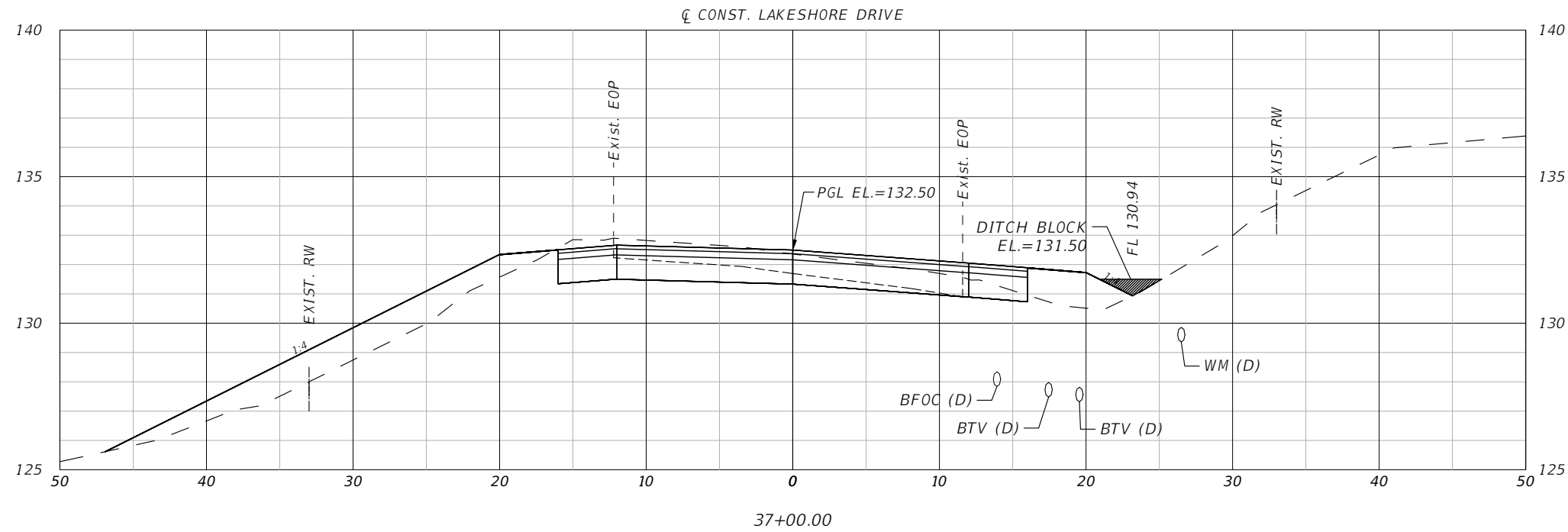
REVISIONS		 <b>OM ENGINEERING SERVICES, INC.</b> Civil • Structural • Inspections 621 E. WASHINGTON ST., STE 8 ORLANDO, FLORIDA 32801 PHONE NO. (407) 704-7815	 <b>LAKE COUNTY, FL</b> REAL FLORIDA • REAL CLOSE	<b>CR 561 &amp; LAKESHORE DRIVE ROUNDABOUT</b>	<b>CROSS SECTIONS (16) LAKESHORE DRIVE</b>	SHEET NO.  46
DATE	DESCRIPTION					
		ENGINEER OF RECORD: RICHARD DEAN BOBLETZ P.E. P.E. LICENSE NUMBER 40049				



HORIZ. SCALE 1" = 10'

VERT. SCALE 1" = 5'

REVISIONS		 <b>OM ENGINEERING SERVICES, INC.</b> Civil • Structural • Inspections 621 E. WASHINGTON ST., STE 8 ORLANDO, FLORIDA 32801 PHONE NO. (407) 704-7815	 <b>LAKE COUNTY, FL</b> REAL FLORIDA • REAL CLOSE	<i>CR 561 &amp; LAKESHORE DRIVE ROUNDABOUT</i>	<i>CROSS SECTIONS (17) LAKESHORE DRIVE</i>	SHEET NO.
DATE	DESCRIPTION					47
		ENGINEER OF RECORD: RICHARD DEAN BOBLETZ P.E. P.E. LICENSE NUMBER 40049				



HORIZ. SCALE 1" = 10'  
VERT. SCALE 1" = 5'

REVISIONS	
DATE	DESCRIPTION



OM ENGINEERING SERVICES, INC.  
621 E. WASHINGTON ST., STE 8  
ORLANDO, FLORIDA 32801  
PHONE NO. (407) 704-7815

ENGINEER OF RECORD: RICHARD DEAN BOBLETZ P.E.  
P.E. LICENSE NUMBER 40049



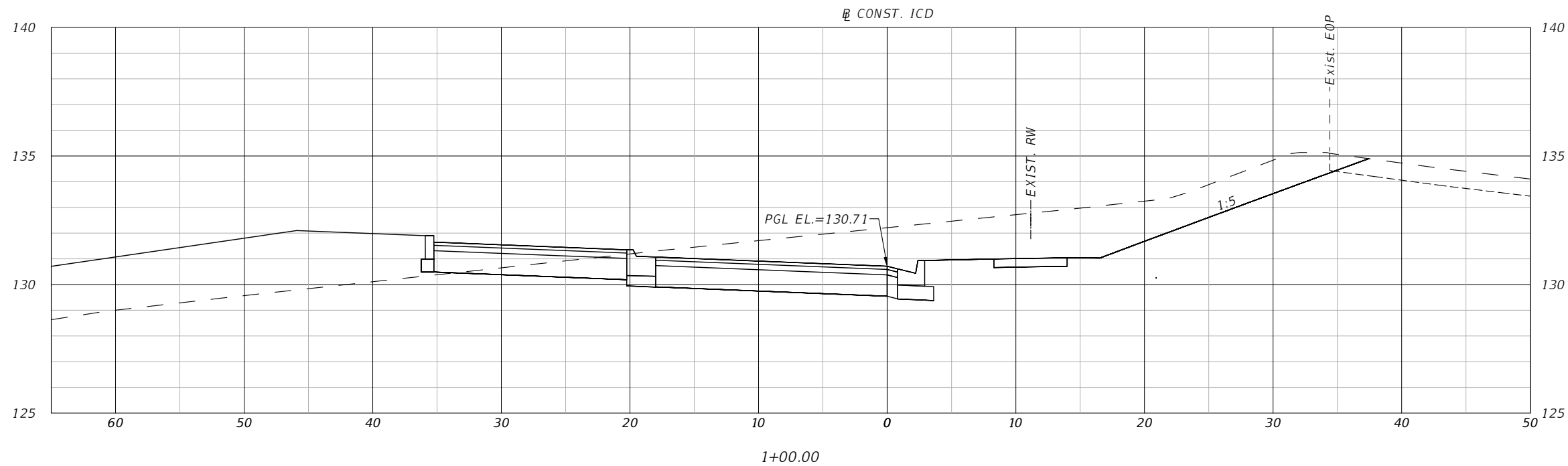
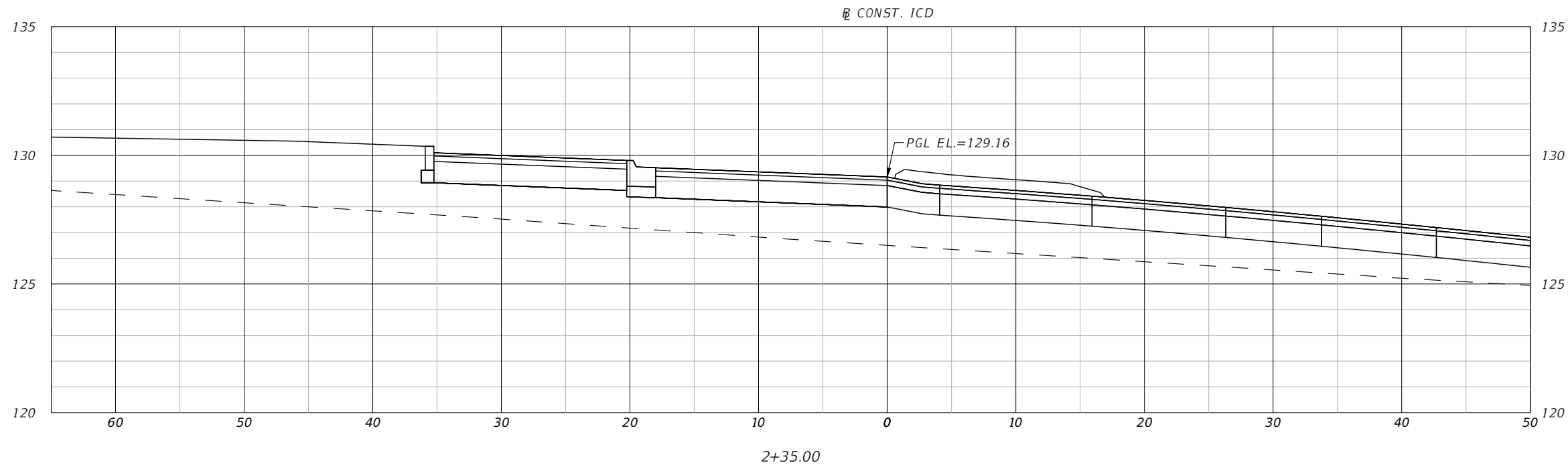
*CR 561 & LAKESHORE  
DRIVE ROUNDABOUT*

*CROSS SECTIONS (18)  
LAKESHORE DRIVE*

SHEET  
NO.

48

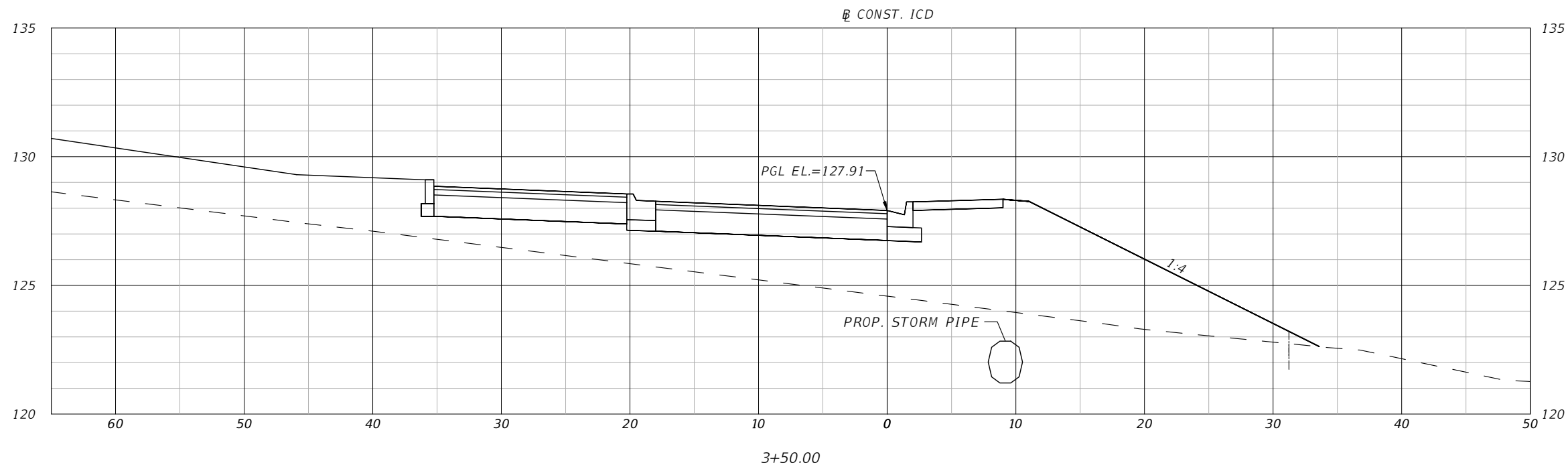




HORIZ. SCALE 1" = 10'

VERT. SCALE 1" = 5'

REVISIONS		 <b>OM ENGINEERING SERVICES, INC.</b> Civil • Structural • Inspections	OM ENGINEERING SERVICES, INC. 621 E. WASHINGTON ST., STE 8 ORLANDO, FLORIDA 32801 PHONE NO. (407) 704-7815	 <b>LAKE COUNTY, FL</b> REAL FLORIDA • REAL CLOSE	<i>CR 561 &amp; LAKESHORE DRIVE ROUNDABOUT</i>	<i>CROSS SECTIONS (19) INSCRIBED CIRCLE</i>	SHEET NO.
DATE	DESCRIPTION						49
		ENGINEER OF RECORD: RICHARD DEAN BOBLETZ P.E. P.E. LICENSE NUMBER 40049					



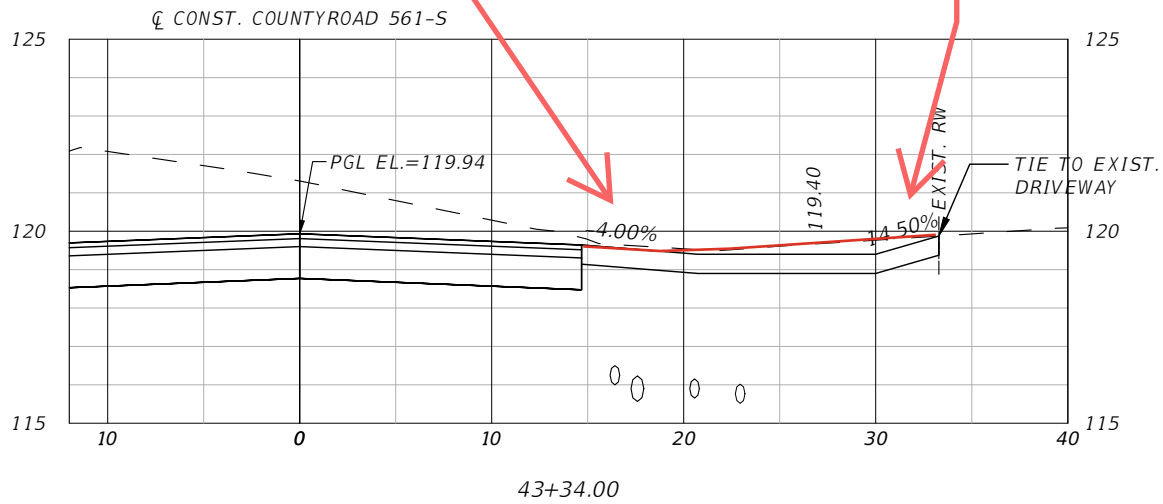
HORIZ. SCALE 1" = 10'

VERT. SCALE 1" = 5'

REVISIONS		 <b>OM ENGINEERING SERVICES, INC.</b> <small>Civil • Structural • Inspections</small> 621 E. WASHINGTON ST., STE 8 ORLANDO, FLORIDA 32801 PHONE NO. (407) 704-7815	 <b>LAKE COUNTY, FL</b> <small>REAL FLORIDA • REAL CLOSE</small>	<b>CR 561 &amp; LAKESHORE DRIVE ROUNDABOUT</b>	<b>CROSS SECTIONS (20)</b> <b>INSCRIBED CIRCLE</b>	SHEET NO.
DATE	DESCRIPTION					50
		ENGINEER OF RECORD: RICHARD DEAN BOBLETZ P.E. P.E. LICENSE NUMBER 40049				

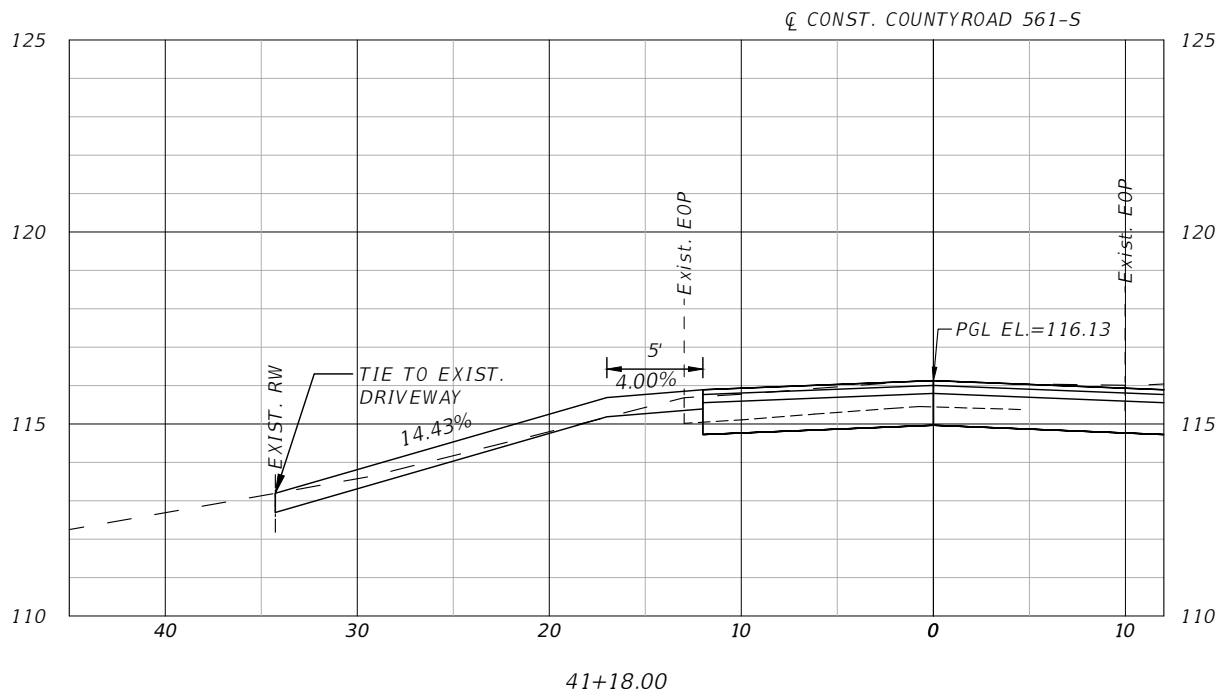
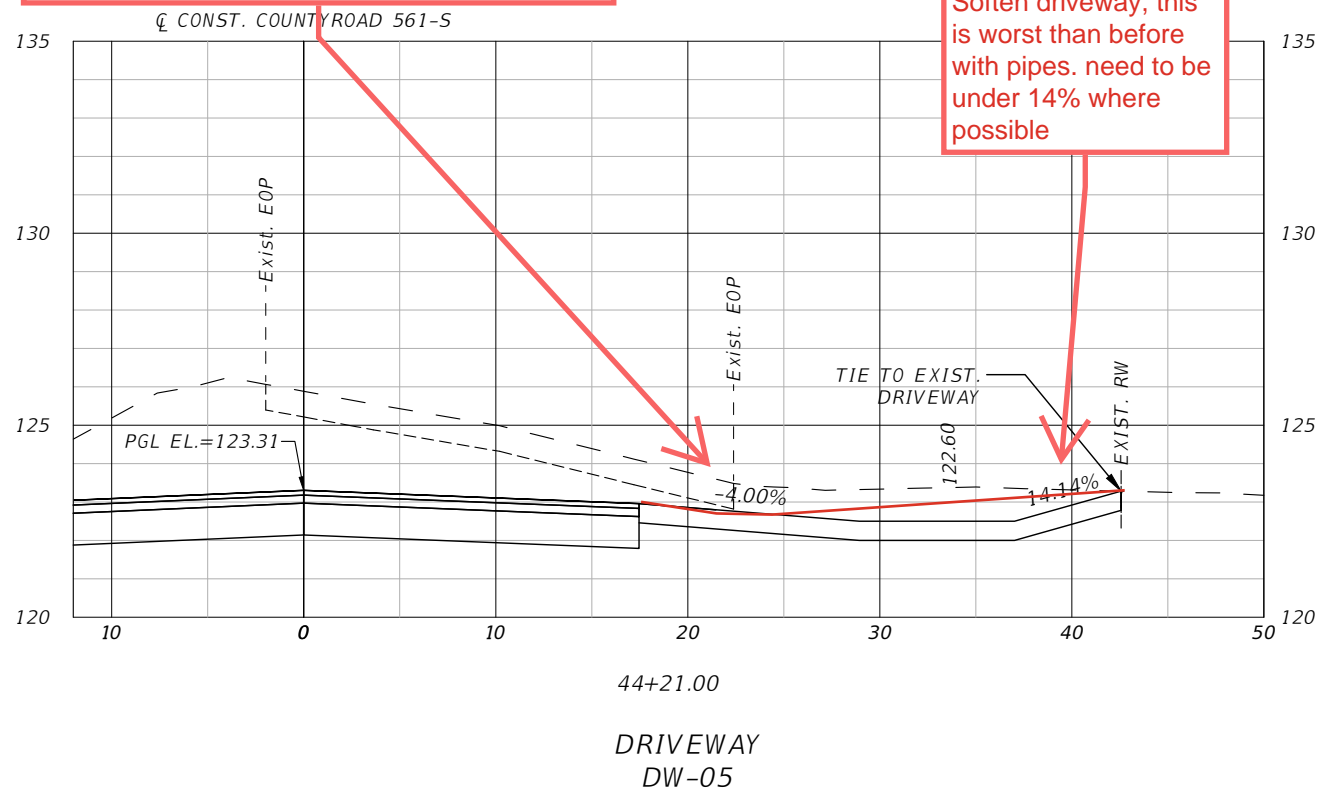
Can do 4% for the 4' (same as shoulder or bit longer as needed), then do the 2' flat, then tie-to-existing. This should provide much better grade on the back slope of driveway

Soften driveway, this is worst than before with pipes. need to be under 14% where possible



Can do 4% for the 4' (same as shoulder or bit longer as needed), then do the 2' flat, then tie-to-existing. This should provide much better grade on the back slope of driveway

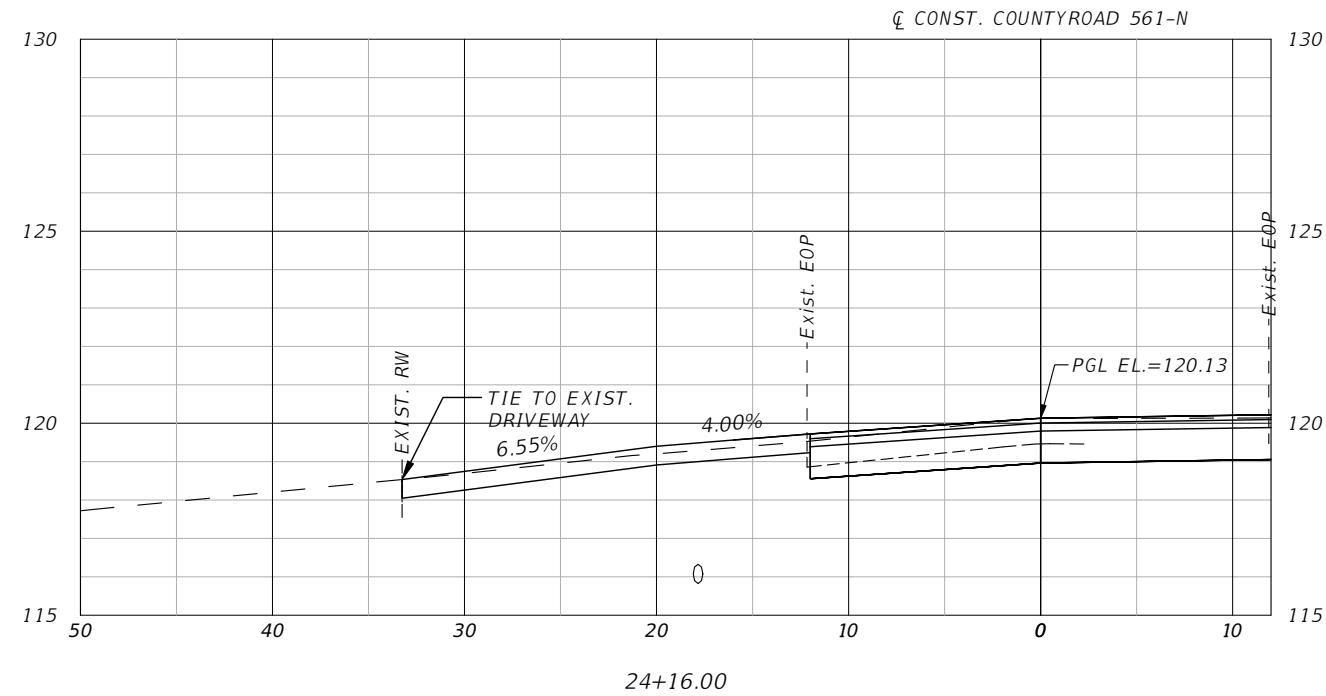
Soften driveway, this is worst than before with pipes. need to be under 14% where possible



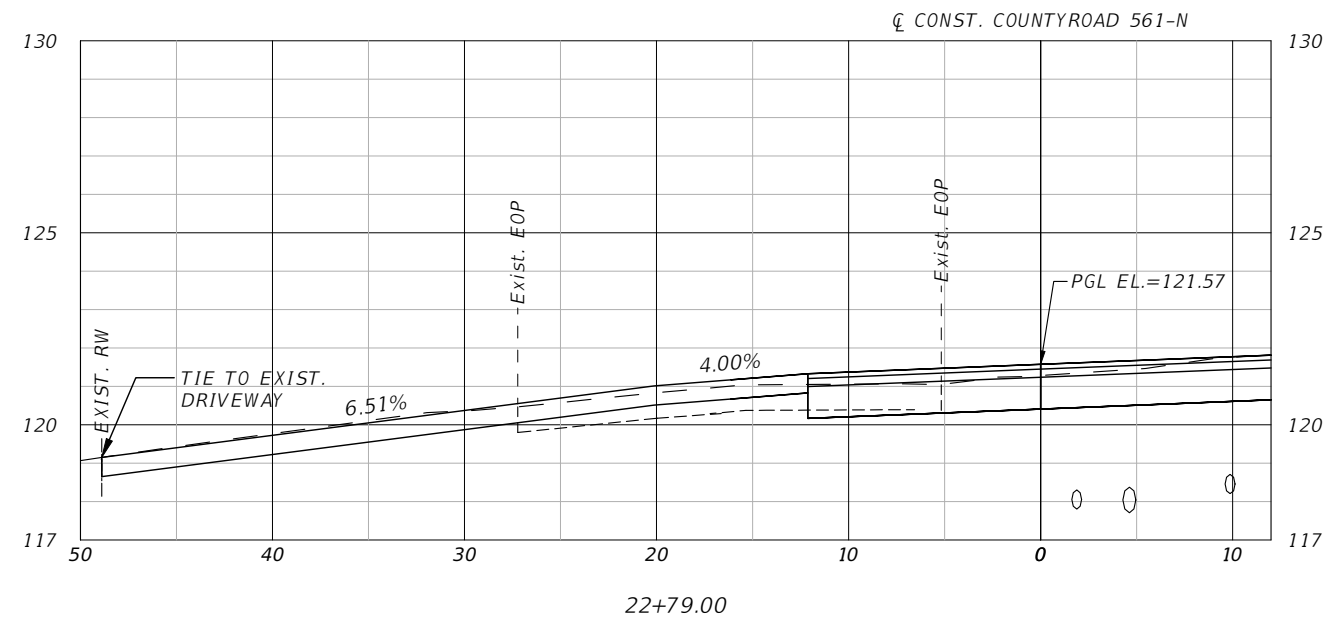
- NOTES:
- SEE SHEET "CROSS SECTIONS (3) COUNTY ROAD 561-S" FOR DRIVEWAY DW-03.
  - CONTRACTOR TO ENSURE 6" DRIVEWAY IS CAST ABOVE THE PROPOSED 15" RCP PIPES.

HORIZ. SCALE 1" = 10'  
VERT. SCALE 1" = 5'

REVISIONS		 <b>OM ENGINEERING SERVICES, INC.</b> Civil • Structural • Inspections 621 E. WASHINGTON ST., STE 8 ORLANDO, FLORIDA 32801 PHONE NO. (407) 704-7815 ENGINEER OF RECORD: RICHARD DEAN BOBLETZ P.E. P.E. LICENSE NUMBER 40049	 <b>LAKE COUNTY, FL</b> REAL FLORIDA • REAL CLOSE	<i>CR 561 &amp; LAKESHORE DRIVE ROUNDABOUT</i>	<i>CROSS SECTIONS (21) DRIVEWAYS</i>	SHEET NO.
DATE	DESCRIPTION					51



DRIVEWAY  
DW-07



DRIVEWAY  
DW-06

NOTES:

1. SEE SHEET "CROSS SECTIONS (10) COUNTY ROAD 561-N" FOR DRIVEWAY DW-08.

HORIZ. SCALE 1" = 10'

VERT. SCALE 1" = 5'

REVISIONS		 <b>OM ENGINEERING SERVICES, INC.</b> <small>Civil • Structural • Inspections</small> 621 E. WASHINGTON ST., STE 8 ORLANDO, FLORIDA 32801 PHONE NO. (407) 704-7815 ENGINEER OF RECORD: RICHARD DEAN BOBLETZ P.E. P.E. LICENSE NUMBER 40049	 <b>LAKE COUNTY, FL</b> <small>REAL FLORIDA • REAL CLOSE</small>	<b>CR 561 &amp; LAKESHORE DRIVE ROUNDABOUT</b>	<b>CROSS SECTIONS (22) DRIVEWAYS</b>	SHEET NO.
DATE	DESCRIPTION					52



THE FOLLOWING NARRATIVE OF THE STORMWATER 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 STORMWATER 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 ACTIVITY:

1.B. THE PROJECT IS THE CONSTRUCTION OF A ROUNDABOUT AT THE INTERSECTION OF C.R. 561 AND LAKESHORE DRIVE. THIS INVOLVES CONSTRUCTING ROADWAY SURFACE, CURB AND GUTTER, SIDEWALK, UNDERGROUND STORM DRAIN SYSTEMS, AND STORMWATER MANAGEMENT FACILITIES.

1.C. SEQUENCE OF MAJOR SOIL DISTURBING ACTIVITIES:

IN THE SEDIMENT AND EROSION CONTROL PLAN, THE CONTRACTOR SHALL PROVIDE A DETAILED SEQUENCE OF CONSTRUCTION FOR ALL CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL FOLLOW THE SEQUENCE OF MAJOR ACTIVITIES DESCRIBED BELOW, UNLESS THE CONTRACTOR PROPOSES A DIFFERENT SEQUENCE THAT IS EQUAL OR BETTER AT CONTROLLING EROSION AND TRAPPING SEDIMENT AND IS APPROVED BY THE ENGINEER.

FOR EACH CONSTRUCTION PHASE, INSTALL PERIMETER CONTROLS AFTER CLEARING AND GRUBBING NECESSARY FOR INSTALLATION OF CONTROLS BUT BEFORE BEGINNING OTHER WORK FOR THE CONSTRUCTION PHASE. REMOVE PERIMETER CONTROLS ONLY AFTER ALL UPSTREAM AREAS ARE STABILIZED.

- CLEARING AND GRUBBING, EARTHWORK, AND STORM DRAIN CONSTRUCTION FOR THE OUTFALL FROM THE PONDS.
- CLEARING AND GRUBBING, EARTHWORK FOR POND CONSTRUCTION.
- STORM DRAIN . CONSTRUCT THE STORM DRAIN PIPE IN THE UPSTREAM DIRECTION.
- EARTHWORK ASSOCIATED WITH THE CONSTRUCTION OF ROADWAY, CURB, SUBGRADE, BASE, PAVEMENT, AND SIDEWALK.

1.A. AREA ESTIMATES:

TOTAL SITE AREA: 4.80 ACRES  
TOTAL AREA TO BE DISTURBED: 4.80 ACRES

1.B. RUNOFF DATA:

RUNOFF COEFFIECIENTS:

BEFORE: 0.62  
DURING: VARIES FROM 0.62 TO 0.76  
AFTER: 0.76

SOILS DATA: THE RESULTS OF THE SOIL BORINGS ALONG THE ROADWAY ARE SHOWN IN THE ROADWAY SOIL SURVEY SHEET(S). THE RESULTS OF SOIL BORINGS DONE IN THE PONDS ARE SHOWN ON THE POND DETAIL SHEETS. THE NUMBERS FOR THESE ARE IDENTIFIED ON THE KEY SHEET OF THESE CONSTRUCTION PLANS. IN GENERAL, THE SOILS ARE CLAYEY SANDS.

OUTFALL INFORMATION:

THERE ARE 2 OUTFALLS.

#1 DESCRIPTION: POND-NORTH.

LOCATION: LATITIUDE 28° 29' 00" N,  
LONGITUDE, 81° 46' 57" W.  
EST.DRAINAGE AREA SIZE: 2.22 ACRES  
RECEIVING WATER NAME: PORTER LAKE.

#2 DESCRIPTION: ROADSIDE SWALES

LOCATION: LATITIUDE 28° 28' 56" N,  
LONGITUDE, 81° 47' 21" W.  
EST.DRAINAGE AREA SIZE: 0.87 ACRES  
RECEIVING WATER NAME: LAKE GLONA.

1.A. SITE MAP:

THE CONSTRUCTION PLANS ARE BEING USED AS THE SITE MAPS. THE LOCATION OF THE REQUIRED INFORMATION IS DESCRIBED BELOW. THE SHEET NUMBERS FOR THE PLAN SHEETS REFERENCED ARE IDENTIFIED ON THE KEY SHEET OF THESE CONSTRUCTION PLANS.

DRAINAGE PATTERNS: THE DRAINAGE BASIN DIVIDES AND FLOW DIRECTIONS ARE SHOWN ON THE DRAINAGE MAPS.

\*APPROXIMATE SLOPES: THE SLOPES OF THE SITE CAN BE SEEN IN THE CROSS SECTION SHEETS AND THE PLAN-PROFILE SHEETS. THERE ARE POND CROSS SECTIONS LOCATED WITH THE POND DETAIL SHEETS.

\*AREAS OF SOIL DISTURBANCE: THE AREAS TO BE DISTURBED ARE INDICATED ON THE PLAN-PROFILE SHEETS, THE CROSS SECTION SHEETS, AND THE POND DETAIL SHEETS. ANY AREAS WHERE PERMANENT FEATURES ARE SHOWN TO BE CONSTRUCTED ABOVE OR BELOW GROUND WILL BE DISTURBED.

\*AREAS NOT TO BE DISTURBED: ESSENTIALLY THE WHOLE PROJECT WILL BE DISTURBED DURING CONSTRUCTION.

\* \*LOCATIONS OF TEMPORARY CONTROLS: THESE ARE SHOWN ON THE EROSION CONTROL SHEETS.

\* LOCATIONS OF PERMANENT CONTROLS: THE STORMWATER PONDS ARE THE PRIMARY PERMANENT STORMWATER MANAGEMENT CONTROLS. THESE ARE SHOWN ON THE POND DETAIL SHEETS.

\* AREAS TO BE STABILIZED: TEMPORARY STABILIZATION PRACTICES ARE SHOWN IN THE SAME LOCATION AS THE TEMPORARY CONTROLS MENTIONED ABOVE. PERMANENT STABILIZATION IS SHOWN ON THE TYPICAL SECTION SHEETS, THE PLAN-PROFILE SHEETS AND THE POND DETAIL SHEETS.

\* SURFACE WATERS: THERE ARE NO SURFACE WATER WITHIN THE SITE.

\* DISCHARGE POINTS TO SURFACE WATERS: THERE IS ONLY ONE. THIS IS SHOWN ON THE PLAN-PROFILE SHEETS AT THE POND OUTFALL.

1.A. RECEIVING WATERS:

SEE ITEM 1.D. FOR THE OUTFALL LOCATIONS AND RECEIVING WATER NAMES. THERE ARE NO WETLAND AREAS ON THE PROJECT SITE.

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DATE	DESCRIPTION					
		ENGINEER OF RECORD: DAVID RETLAW BORYS P.E. P.E. LICENSE NUMBER 75372				

2.0 CONTROLS:

## 2.A. EROSION AND SEDIMENT CONTROLS:

IN THE SEDIMENT AND EROSION CONTROL PLAN, THE CONTRACTOR SHALL DESCRIBE THE PROPOSED STABILIZATION AND STRUCTURAL PRACTICES BASED ON THE CONTRACTOR'S PROPOSED TEMPORARY TRAFFIC CONTROL (TTC) PLAN. THE FOLLOWING RECOMMENDED GUIDELINES ARE BASED ON THE TEMPORARY TRAFFIC CONTROL PLAN OUTLINED IN THE CONSTRUCTION PLANS. WHERE FOLLOWING THE TEMPORARY TRAFFIC CONTROL PLAN OUTLINED IN THESE CONSTRUCTION PLANS, THE CONTRACTOR MAY CHOSE TO ACCEPT THE FOLLOWING GUIDELINES OR MODIFY THEM IN THE SEDIMENT AND EROSION CONTROL PLAN, SUBJECT TO APPROVAL BY THE ENGINEER. AS WORK PROGRESSES, THE CONTRACTOR SHALL MODIFY THE PLAN TO ADAPT TO SEASONAL VARIATION, CHANGES IN CONSTRUCTION ACTIVITIES, AND THE NEED FOR BETTER PRACTICES.

FOR EACH CONSTRUCTION PHASE, INSTALL PERIMETER CONTROLS AFTER CLEARING AND GRUBBING NECESSARY FOR INSTALLATION OF CONTROLS BUT BEFORE BEGINNING OTHER WORK FOR THE CONSTRUCTION PHASE. REMOVE PERIMETER CONTROLS ONLY AFTER ALL UPSTREAM AREAS ARE STABILIZED.

PHASE I OF TEMPORARY TRAFFIC CONTROL PLANS:

IMMEDIATELY AFTER CONSTRUCTING THE  
TEMPORARY PAVEMENT, STABILIZE THE ENTIRE  
AREA BETWEEN THE TEMPORARY PAVEMENT AND  
THE RIGHT OF WAY LINE USING TEMPORARY SOD.

OUTFALL OF POND NORTH:

CONSTRUCT THE OUTFALL PIPE FROM S-10 TOWARDS THE LAKE. THE CONTRACTOR SHALL HAVE INLET PROTECTION AVAILABLE AT ALL TIMES DURING THE PIPE CONSTRUCTION TO SUBSTANTIALLY BLOCK RUNOFF FROM ENTERING THE PIPE. CONSTRUCT PIPE TO THE POND AND CONSTRUCT THE OUTLET STRUCTURE OF THE POND.

POND NORTH CONSTRUCTION:

CLEAR AND GRUB THE POND SITE. INITIALLY EXCAVATE THE POND ONLY ENOUGH TO CONSTRUCT SEDIMENT BARRIERS AS DETAILED IN THE TTC PLAN. THEN EXCAVATE THE POND TO APPROXIMATE PROPOSED DIMENSIONS. TURF ALL DISTURBED AREAS OF THE POND SITE. FINAL GRADING WILL BE DONE AT THE END OF PHASE FOUR OF THE TTC PLAN.

*ROADWAY:*

CONSTRUCT THE STORM DRAIN FROM THE POND  
TO THE ROADWAY AND THEN IN THE UPSTREAM  
DIRECTION ALONG THE ROADWAY, STORM DRAIN.

**POND CONSTRUCTION:**

AFTER ENTIRE BASIN IS PERMANENTLY  
STABILIZED, CONSTRUCT THE POND BOTTOM.

### 2.A.1 STABILIZATION PRACTICES:

IN THE SEDIMENT AND 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:

- \* ARTIFICIAL COVERINGS IN ACCORDANCE  
WITH SPECIFICATION SECTION 104.

- \* TURF AND SOD IN ACCORDANCE WITH SPECIFICATION SECTION 104.

*PERMANENT:*

- \* ASPHALT OR CONCRETE SURFACE.

- \* SOD IN ACCORDANCE WITH  
SPECIFICATION SECTION 570.

### 2.A.2 STRUCTURAL PRACTICES:

IN THE SEDIMENT AND EROSION CONTROL PLAN, THE CONTRACTOR SHALL DESCRIBE THE PROPOSED STRUCTURAL PRACTICES TO CONTROL OR TRAP SEDIMENT 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 DESIGN STANDARD 102 AND SPECIFICATION  
SECTION 104.

- \* INLET PROTECTION IN ACCORDANCE  
WITH DESIGN STANDARD 102 AND SPECIAL  
DETAILS SHOWN IN THE TTC PLAN.

- \* SEDIMENT CONTAINMENT SYSTEM: THE PERMANENT STORMWATER PONDS WILL BE TEMPORARILY MODIFIED ACCORDING TO THE DETAILS IN THE TTC PLAN.

*PERMANENT:*

- \* STORMWATER PONDS.
- \* SOD.

## 2.B STORMWATER MANAGEMENT:

STORM DRAIN SYSTEMS WILL BE CONSTRUCTED TO CONVEY RUNOFF TO ONE STORMWATER POND. THE FACILITIES HAVE BEEN EXEMPTED FROM PERMITTING BY ST. JOHNS RIVER WATER MANAGEMENT DISTRICT AND COMPLY WITH APPLICABLE DESIGN STANDARDS.

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DATE	DESCRIPTION					
		OM ENGINEERING SERVICES, INC. 621 E. WASHINGTON ST., STE 8 ORLANDO, FLORIDA 32801 PHONE NO. (407) 704-7815				54
		ENGINEER OF RECORD: DAVID RETLAW BORYS P.E. P.E. LICENSE NUMBER 75372				

2.C OTHER CONTROLS:

2.C.1 WASTE DISPOSAL:

IN THE SEDIMENT AND EROSION CONTROL PLAN, THE CONTRACTOR SHALL DESCRIBE THE PROPOSED METHODS TO PREVENT THE DISCHARGE OF SOLID MATERIALS, 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, OR WETLANDS.

2.C.2 OFF-SITE VEHICLE TRACKING & DUST CONTROL:

IN THE SEDIMENT AND 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.

- \* COVERING LOADED HAUL TRUCKS WITH TARPAULINS.
- \* REMOVING EXCESS DIRT FROM ROADS DAILY.
- \* STABILIZING CONSTRUCTION ENTRANCES ACCORDING TO DESIGN STANDARD 106.
- \* USING ROADWAY SWEEPERS DURING DUST GENERATING ACTIVITIES SUCH AS EXCAVATION AND MILLING OPERATIONS.

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:

IN THE SEDIMENT AND EROSION CONTROL PLAN, THE CONTRACTOR SHALL DESCRIBE THE PROCEDURES FOR APPLYING FERTILIZERS AND PESTICIDES. THE PROPOSED PROCEDURES SHALL COMPLY WITH APPLICABLE SUBSECTIONS OF SECTION 570 OF THE SPECIFICATIONS.

2.C.5 TOXIC SUBSTANCES:

IN THE SEDIMENT AND 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.

2.D.4 APPROVED STATE AND LOCAL PLANS AND PERMITS:

- \* FDEP RULE CHAPTER 62-25 F.A.C.

3.0 MAINTENANCE:

IN THE SEDIMENT AND EROSION CONTROL PLAN, THE CONTRACTOR SHALL PROVIDE A PLAN FOR MAINTAINING ALL EROSION AND SEDIMENT CONTROLS THROUGHOUT CONSTRUCTION. THE MAINTENANCE PLAN SHALL AT A MINIMUM, COMPLY WITH THE FOLLOWING:

- \* SILT FENCE: MAINTAIN PER SECTION 104. THE CONTRACTOR SHOULD ANTICIPATE REPLACING SILT FENCE ON 12 MONTH INTERVALS.
- \* SEDIMENT BARRIERS: REMOVE SEDIMENT AS PER MANUFACTURER'S RECOMMENDATIONS OR WHEN WATER PONDS IN UNACCEPTABLE AMOUNTS OR AREAS.
- \* PONDS NORTH : THE PONDS ARE TEMPORARY SEDIMENT BASINS UNTIL THE AREAS THAT DRAIN TO THEM ARE STABILIZED, SO UNTIL THEN, REMOVE SEDIMENT FROM THE POND WHEN IT BECOMES 1.5' DEEP AT ANY POINT.

4.0 INSPECTIONS:

QUALIFIED PERSONNEL 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 GAUGES 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 DRAIN 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 SEDIMENT, 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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DATE	DESCRIPTION					
						55



OM ENGINEERING SERVICES, INC.  
621 E. WASHINGTON ST., STE 8  
ORLANDO, FLORIDA 32801  
PHONE NO. (407) 704-7815

ENGINEER OF RECORD: DAVID RETLAW BORYS P.E.  
P.E. LICENSE NUMBER 75372



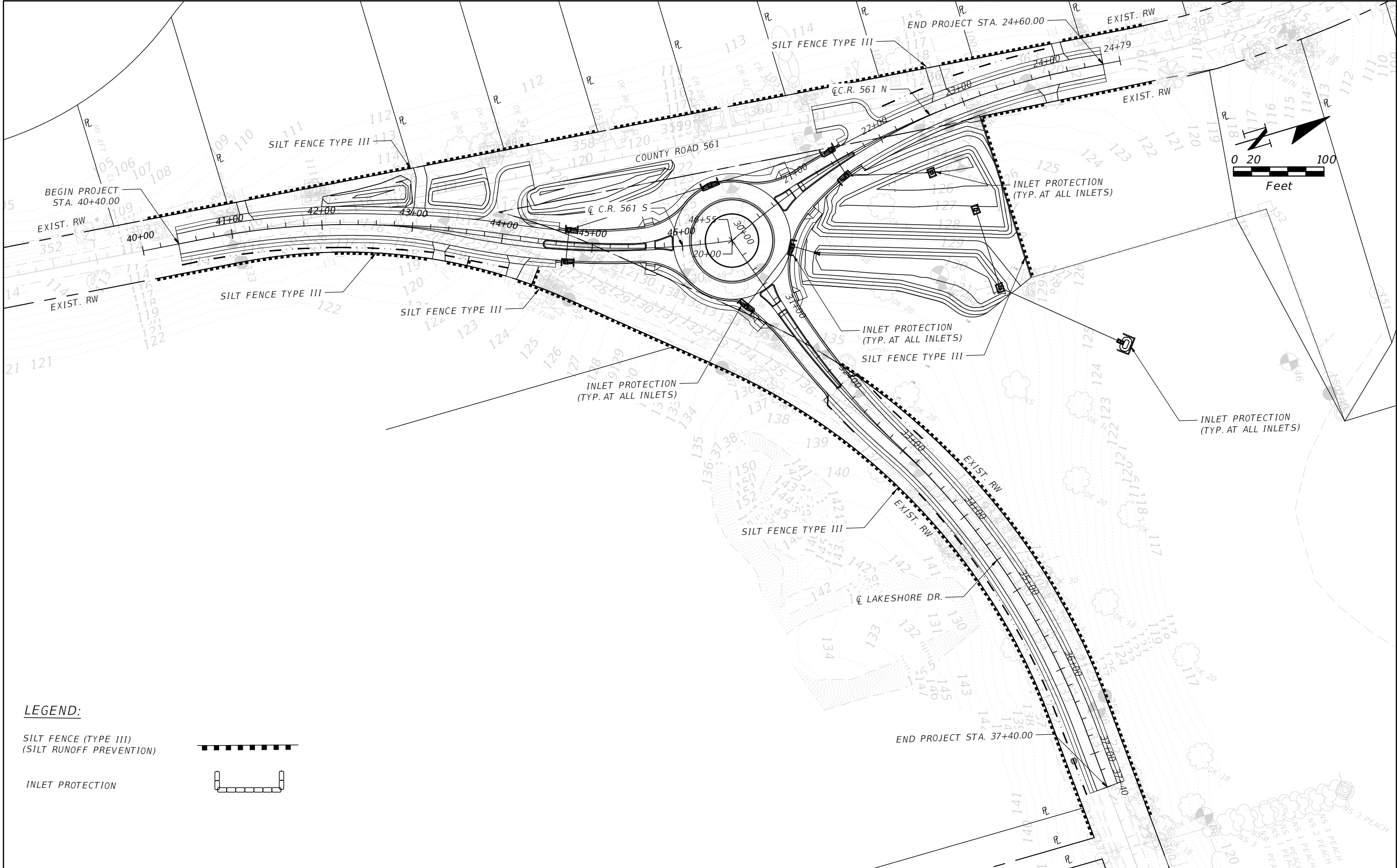
CR 561 & LAKESHORE  
DRIVE ROUNDABOUT

STORMWATER POLLUTION  
PREVENTION PLAN (3)

SHEET  
NO.

55





**LEGEND:**

SILT FENCE (TYPE III)  
(SILT RUNOFF PREVENTION)



INLET PROTECTION



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DATE	DESCRIPTION					
		ENGINEER OF RECORD: DAVID RETLAW BORYS P.E. P.E. LICENSE NUMBER 75372				

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TRAFFIC CONTROL PLAN GENERAL NOTES

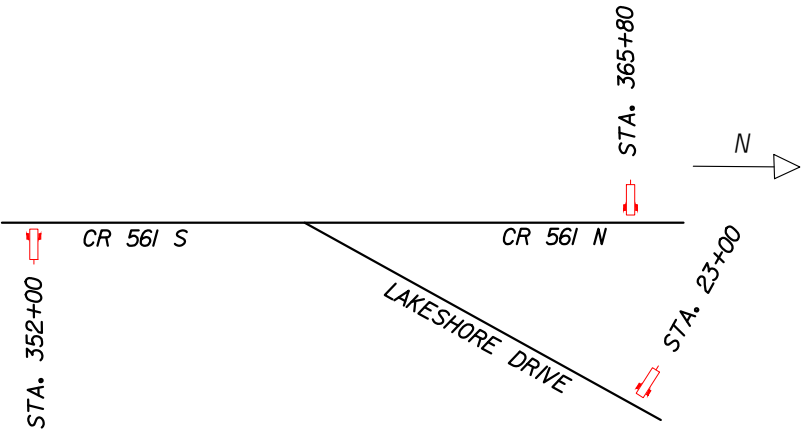
1. ALL MAINTENANCE OF TRAFFIC SHALL ADHERE TO THE REQUIREMENTS OF THE DESIGN FDOT STANDARDS 102 INDEXES.
2. THE DESIGN SPEED DURING ALL PHASES OF CONSTRUCTION SHALL BE 35 MPH. POSTED SPEED SHALL BE 25 MPH.
3. LANE CLOSURES ARE RESTRICTED TO A SINGLE DIRECTION AND MAY NOT BE LONGER THAN 1000 FT. LANE CLOSURES ARE PERMITTED ONLY BETWEEN THE HOURS OF:

7:00 PM TO 7:00 AM

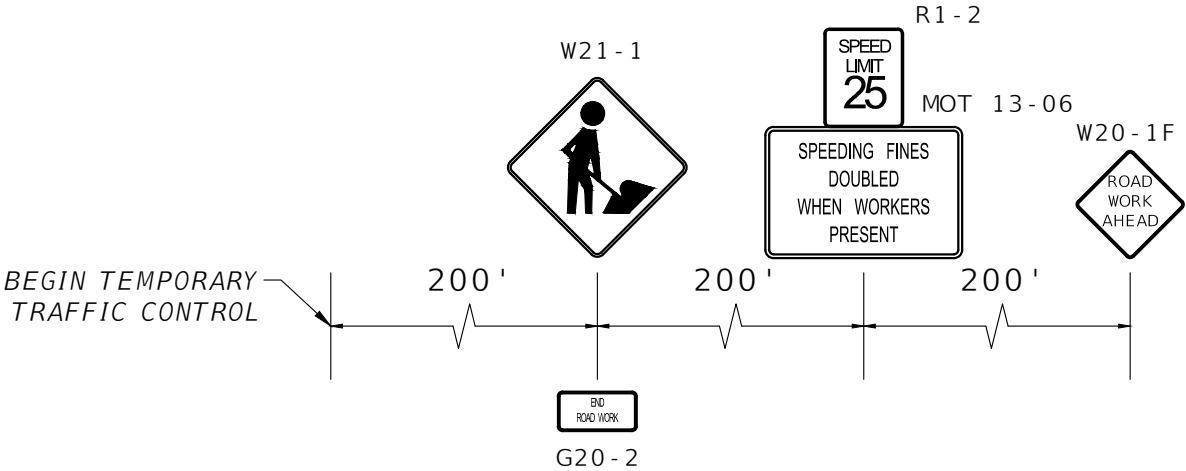
4. DRAINAGE STRUCTURES SHOWN IN THE TRAFFIC CONTROL PLAN MUST BE CONSTRUCTED IN THE PHASE SHOWN OR EARLIER TO MAINTAIN POSITIVE FLOW. ADDITIONAL STRUCTURES AND PIPE RUNS MAY BE CONSTRUCTED IN LIEU OF PLUGGING WALLS AND PIPES. THE CONTRACTOR SHALL CONSIDER UTILITY IMPACTS AND RELOCATION SCHEDULES IF PLANNING TO PERFORM ADDITIONAL DRAINAGE WORK EARLY.
5. COORDINATE ALL LANE CLOSURES AND LANE SHIFTS WORK WITH EMS, LCSO AND THE LAKE COUNTY FIRE DEPARTMENT BY CONTACTING PAUL ANDERSON AT (352) 394-7662 x203 OR BY CELL AT (352) 267-5497. PROVIDE A 24-HOUR CONTACT TO THE FIRE DEPARTMENT.
6. A TRAFFIC CONTROL OFFICER SHALL BE PROVIDED FOR THE DURATION OF ALL TRAFFIC SIGNAL WORK.
7. THE CONTRACTOR SHALL USE PCMS TO NOTIFY THE TRAVELING PUBLIC OF UPCOMING LANE SHIFTS AND LANE CLOSURES. THESE SIGNS SHALL BE INSTALLED A MINIMUM OF SEVEN DAYS PRIOR TO EACH EVENT. ONE SIGN SHALL BE USED AT EACH LOCATION AS SHOWN BELOW.

THE DISPLAYS ARE TO BE AS FOLLOWS:

TRAFFIC SHIFT DISPLAY 1	MM/DD/YY DISPLAY 2
NIGHTLY LANE CLOSURES DISPLAY 1	MM/DD/YY TO MM/DD/YY DISPLAY 2



8. EXISTING STREETS AND DRIVEWAYS SHALL BE MAINTAINED TO LOCAL TRAFFIC AND PROPERTY OWNERS.
9. ANY TEMPORARY ROAD CLOSURE REQUIRES AUTHORIZATION REQUEST MADE TO LAKE COUNTY PUBLIC WORKS/ENGINEERING AND WITH AT LEAST THREE (3) DAYS NOTICE PRIOR TO CLOSURE. CONTRACTOR MUST SUPPLY A DETOUR PLAN WHEN REQUESTING CLOSURE. NO CLOSURE SHALL TAKE PLACE WITHOUT APPROVAL OF THE DETOUR PLAN. CONTRACTOR SHALL SUPPLY ALL SIGNAGE ASSOCIATED WITH CLOSURE AND DETOUR.
10. FOR TEMPORARY PAVEMENT ADD 2" OF ASPHALT ON STABILIZED SUBGRADE
11. ARROWS DENOTE DIRECTION OF TRAFFIC ONLY AND DO NOT REFLECT PAVEMENT MARKINGS
12. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL THE MAINTENANCE ISSUES WITHIN THE PROJECT LIMITS. THEY SHALL RESPOND TO ISSUES WITHIN 24 HOURS.



ADVANCE WARNING SIGNS - CR 56I S  
ADVANCE WARNING SIGNS - CR 56I N  
ADVANCE WARNING SIGNS - LAKESHORE DR

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DATE	DESCRIPTION					57
		ENGINEER OF RECORD: RICHARD DEAN BOBLETZ P.E. P.E. LICENSE NUMBER 40049				

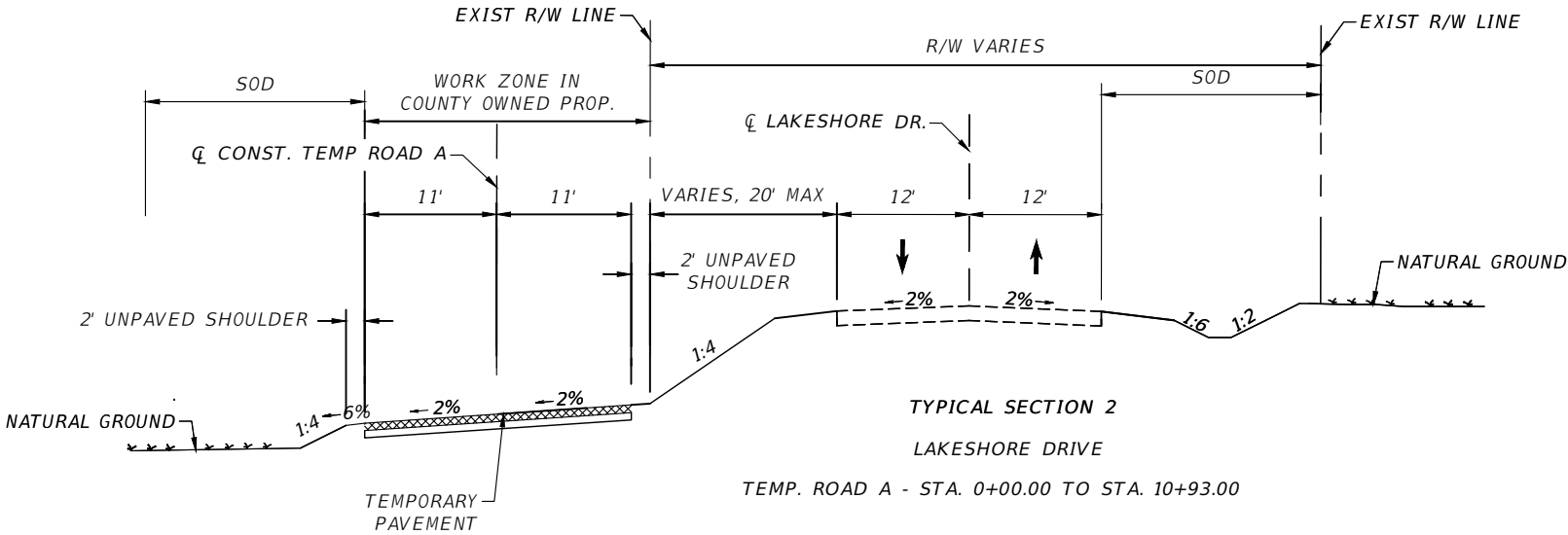
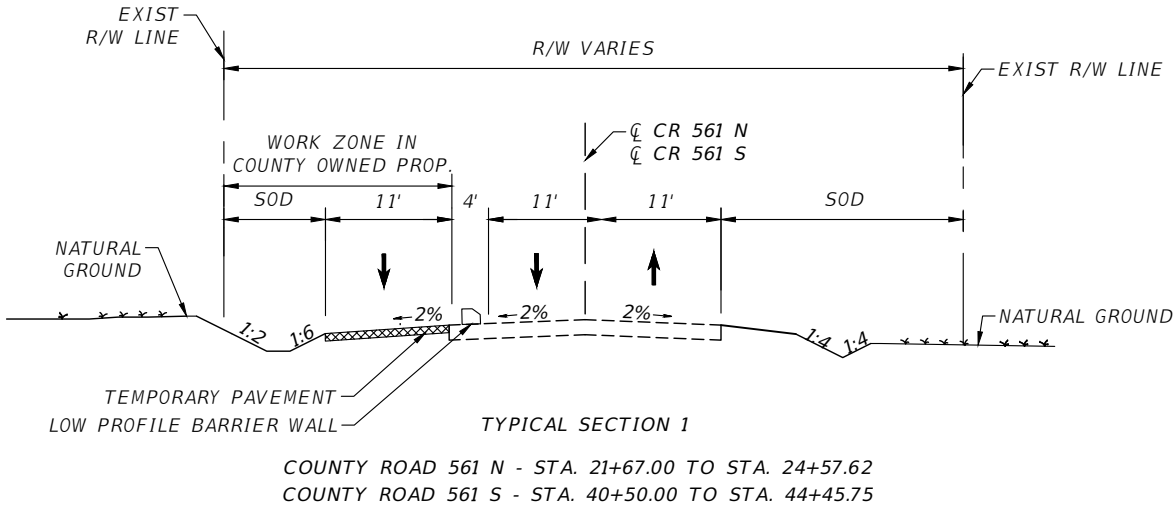


PHASE I

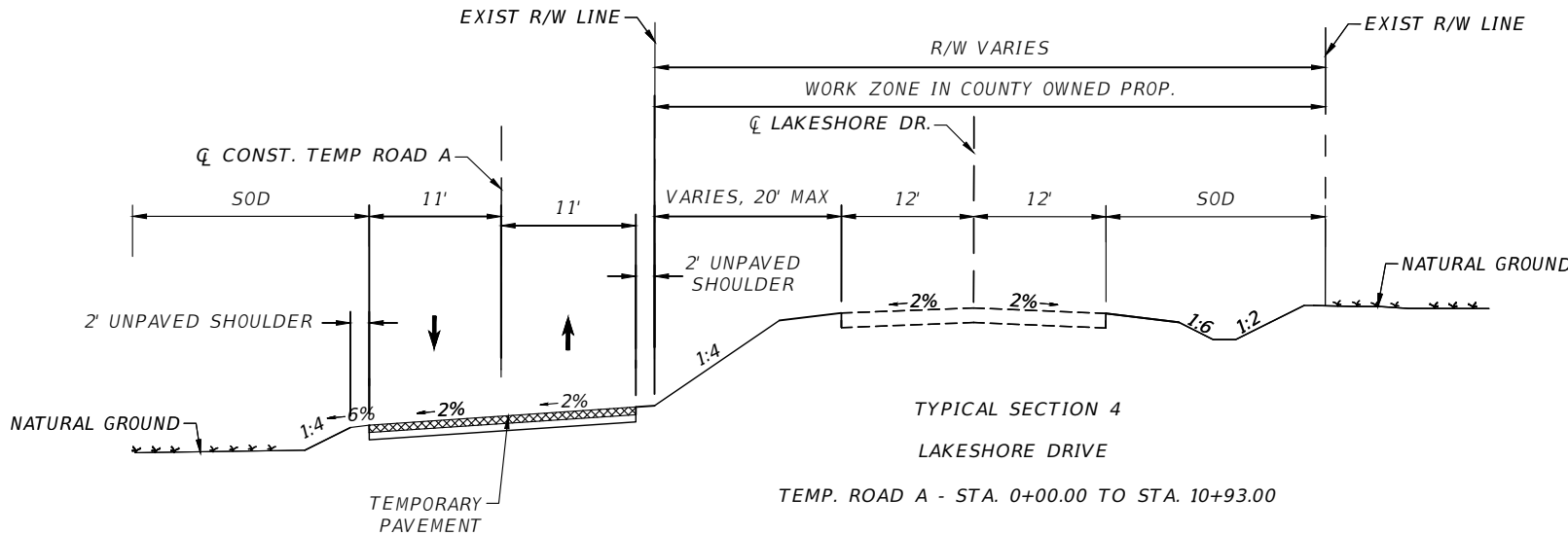
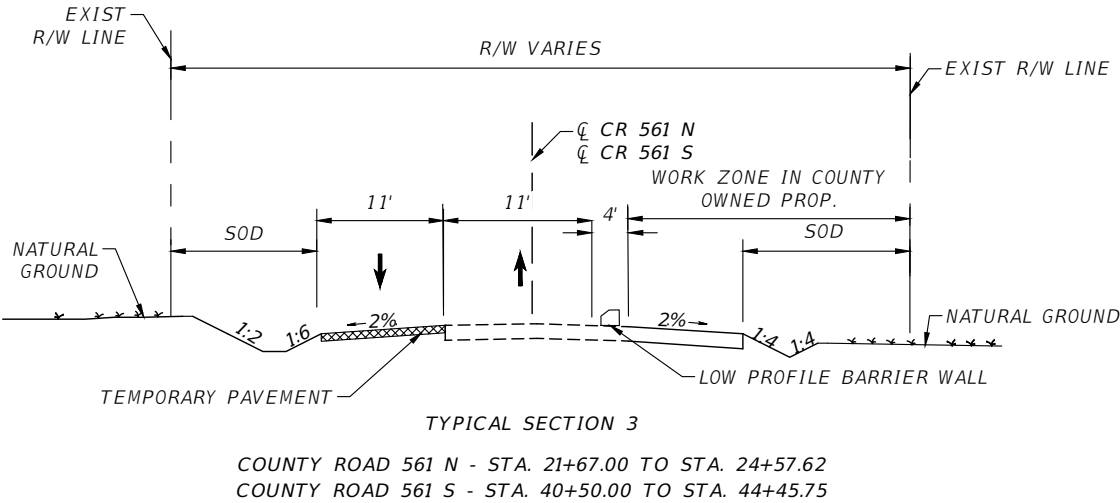
1. CONSTRUCT PONDS
2. CONSTRUCT ROUNDABOUT AND APPROACH LEGS
3. CONSTRUCT TEMPORARY PAVEMENT

PHASE 2

1. SHIFT TRAFFIC TO TEMPORARY PAVEMENT
2. CONSTRUCT PARTIAL APPROACH LEGS
3. CONSTRUCT SOUTHERN DRIVEWAY CONNECTION



PHASE I



PHASE II

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DATE	DESCRIPTION					
		ENGINEER OF RECORD: RICHARD DEAN BOBLETZ P.E. P.E. LICENSE NUMBER 40049				

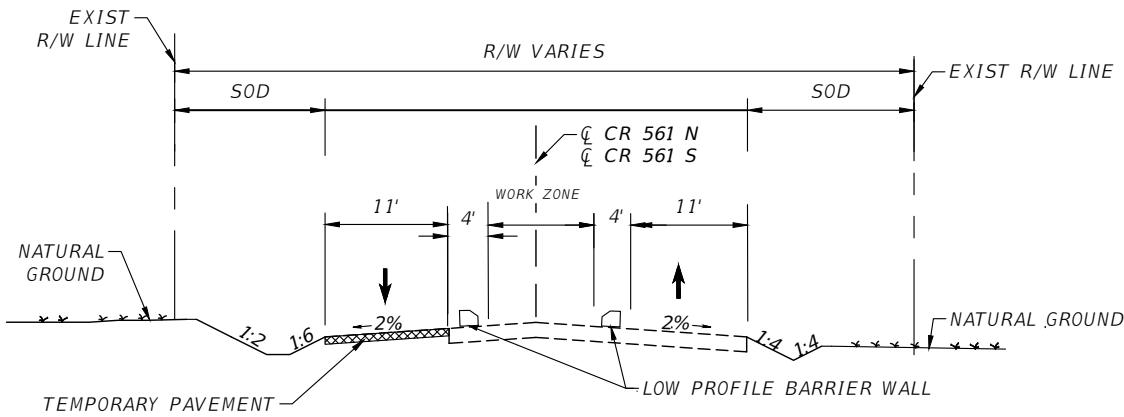
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PHASE 3

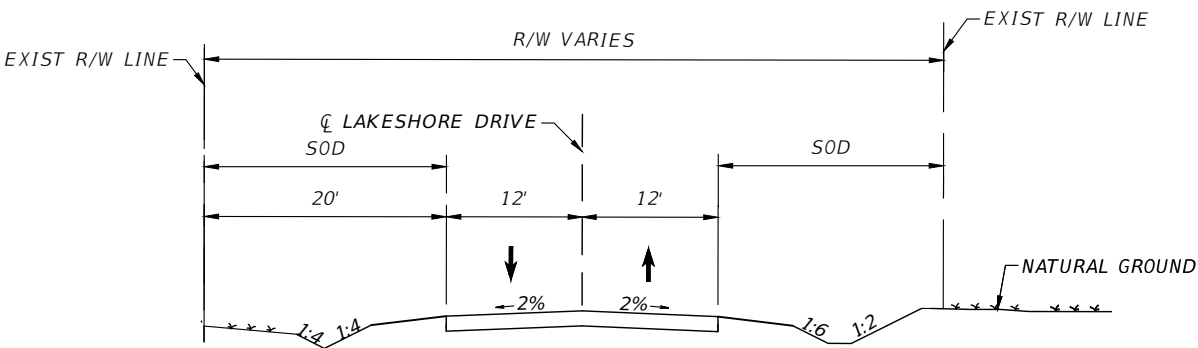
- 1. SHIFT TRAFFIC
- 2. CONSTRUCT REMINDER OF APPROACH LEGS
- 3. CONSTRUCT NORTHERN DRIVEWAY CONNECTION

PHASE 4

- 1. CONSTRUCT SEPARATORS
- 2. CONSTRUCT LANDSCAPING
- 3. FINAL SIGNING AND PAVEMENT MARKINGS

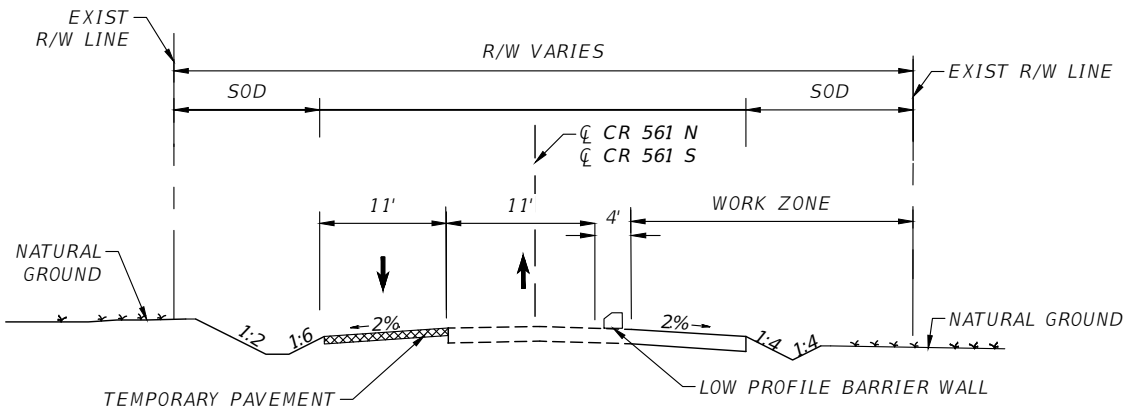


TYPICAL SECTION 5  
COUNTY ROAD 561 N - STA. 21+67.00 TO STA. 24+57.62  
COUNTY ROAD 561 S - STA. 40+50.00 TO STA. 44+45.75



TYPICAL SECTION 6  
LAKESHORE DRIVE - STA. 31+00.00 TO STA. 37+40.00

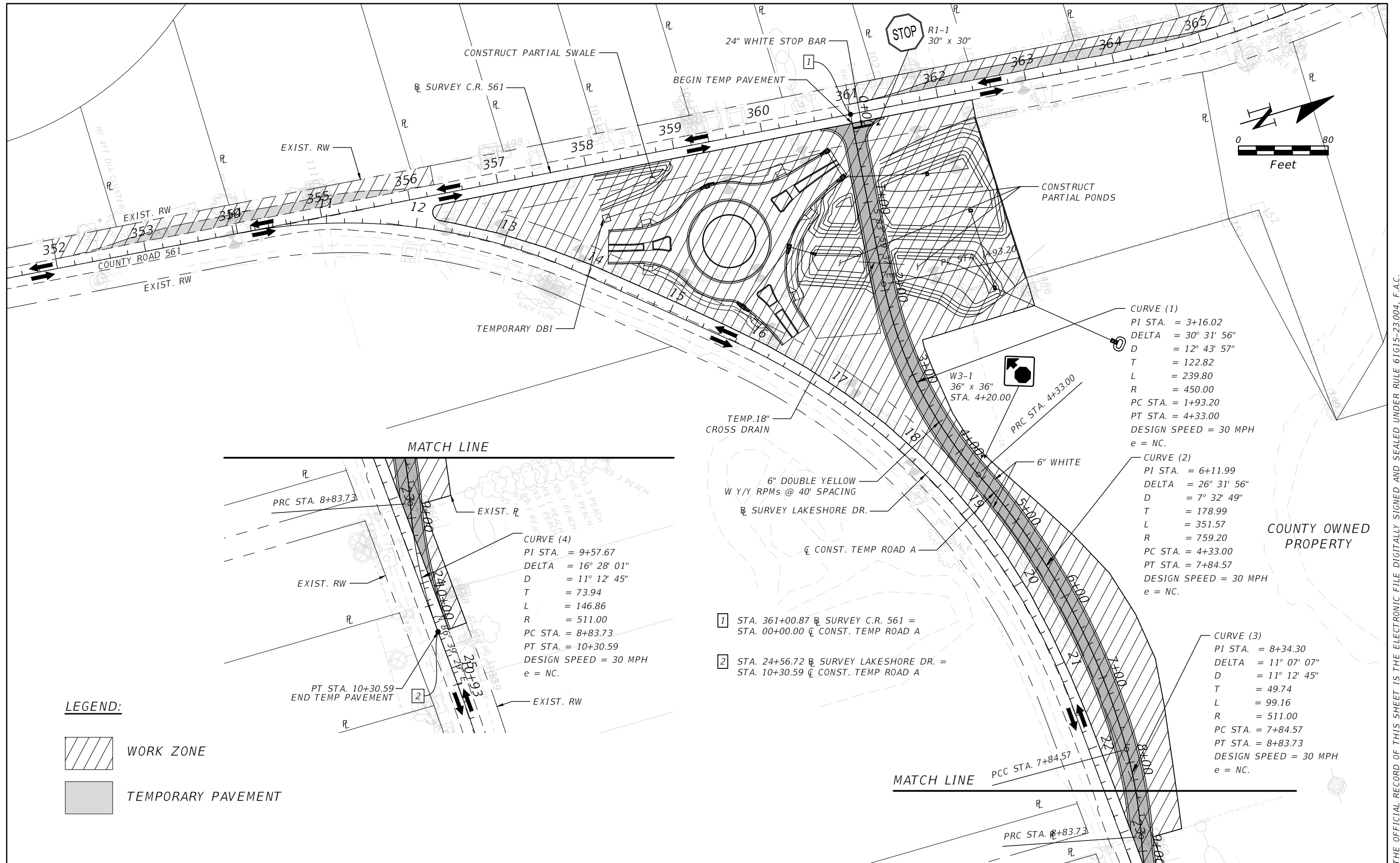
PHASE III





TYPICAL SECTION 7  
COUNTY ROAD 561 S - STA. 40+50.00 TO STA. 44+45.75

PHASE IV

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DATE	DESCRIPTION					
		ENGINEER OF RECORD: RICHARD DEAN BOBLETZ P.E. P.E. LICENSE NUMBER 40049				59



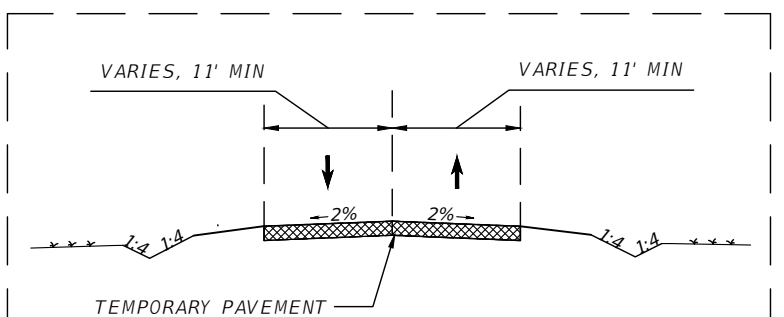
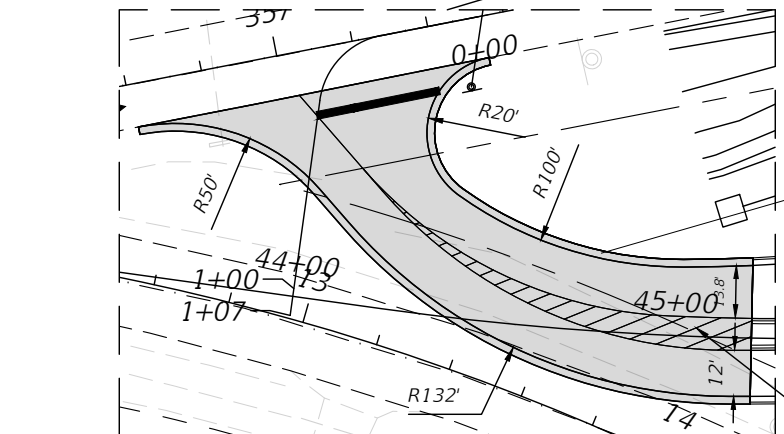
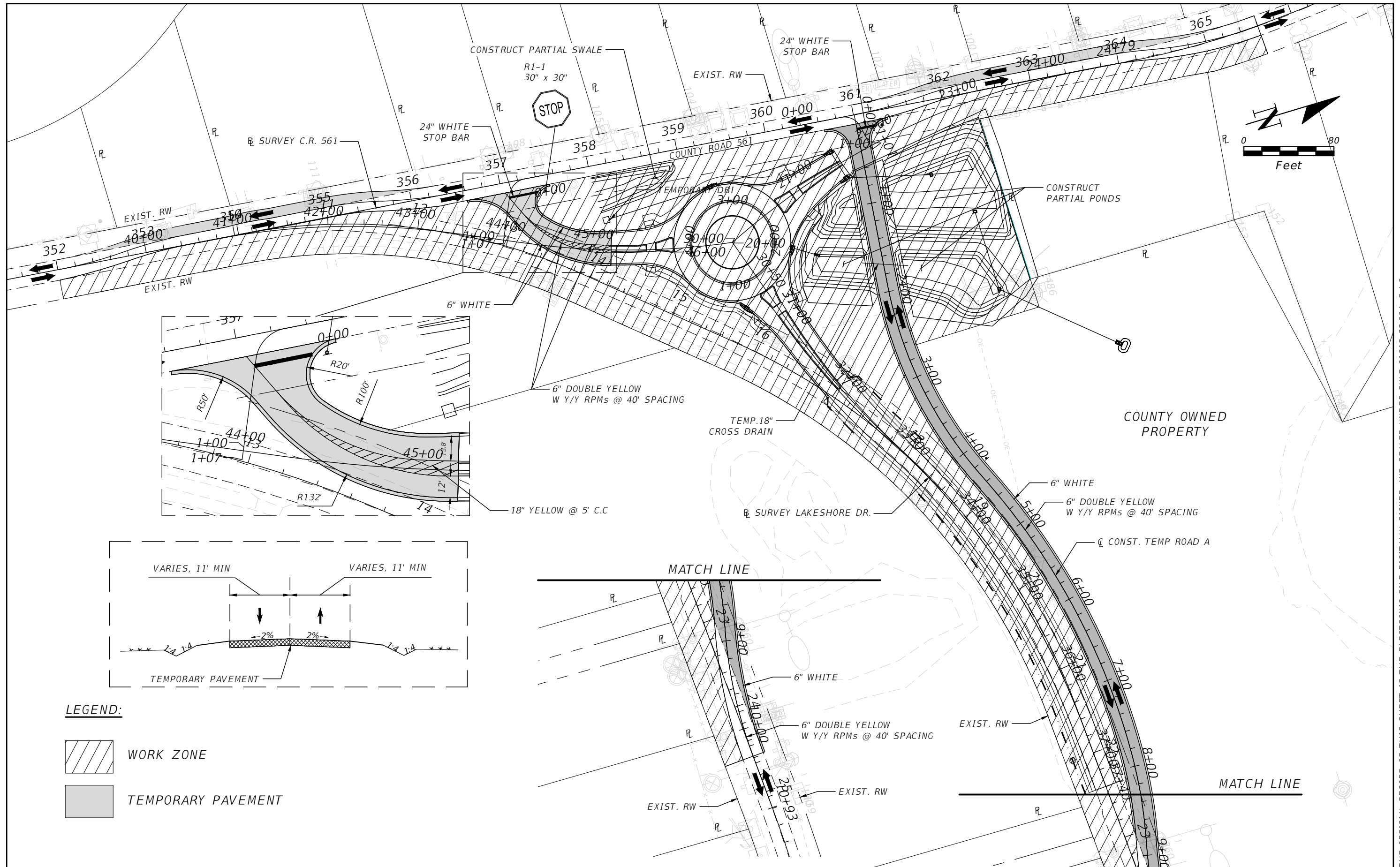
LEGEND:

-  WORK ZONE
-  TEMPORARY PAVEMENT



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DATE	DESCRIPTION						

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**LEGEND:**

-  WORK ZONE
-  TEMPORARY PAVEMENT

REVISIONS	
DATE	DESCRIPTION



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621 E. WASHINGTON ST., STE 8  
ORLANDO, FLORIDA 32801  
PHONE NO. (407) 704-7815

ENGINEER OF RECORD: RICHARD DEAN BOBLETZ P.E.  
P.E. LICENSE NUMBER 40049



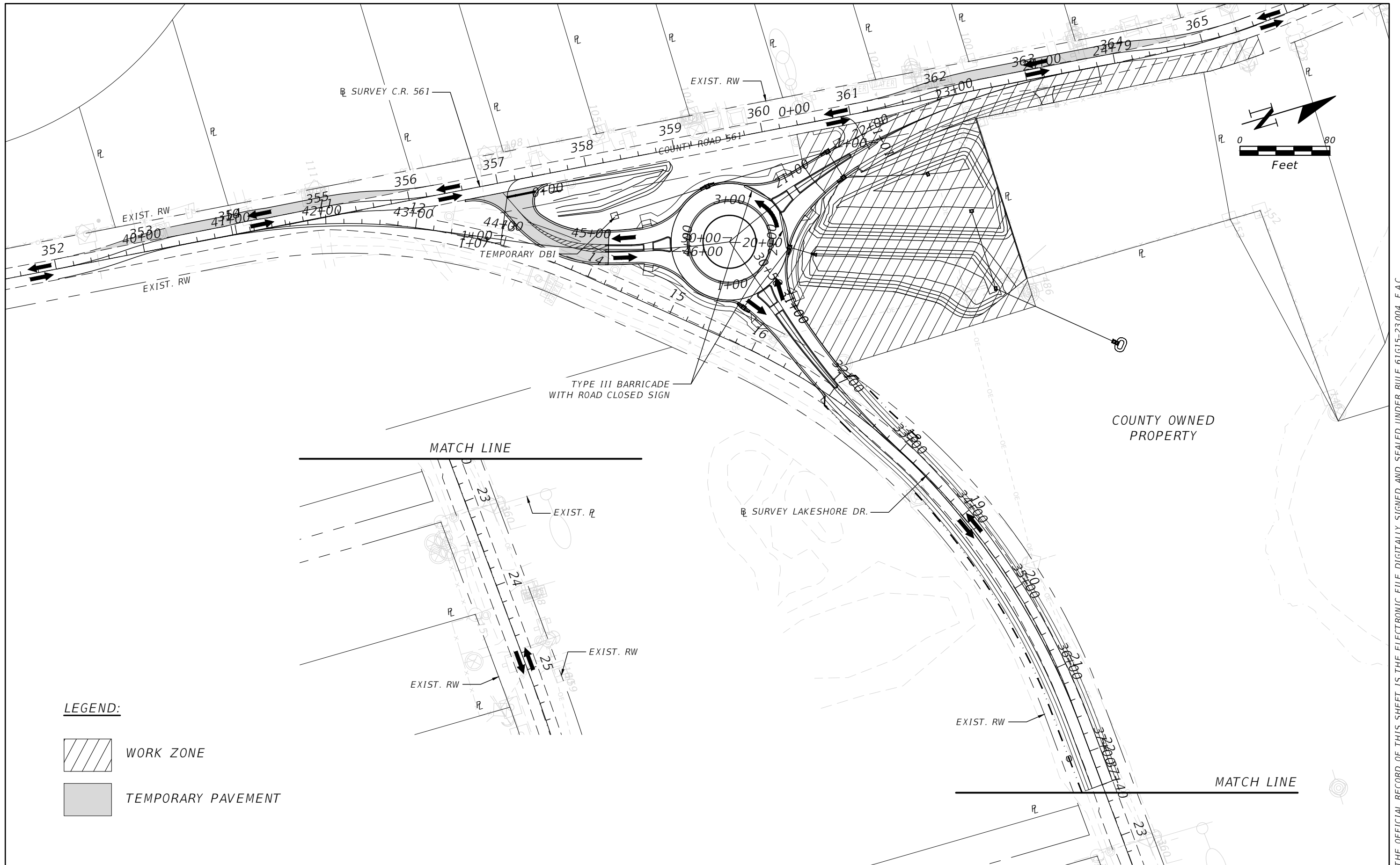
**LAKE COUNTY, FL**  
REAL FLORIDA • REAL CLOSE

**CR 561 & LAKESHORE DRIVE ROUNDABOUT**

**TEMPORARY TRAFFIC CONTROL PLAN - PHASE II A**

SHEET NO.
61

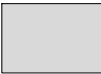
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**LEGEND:**




WORK ZONE



TEMPORARY PAVEMENT

REVISIONS	
DATE	DESCRIPTION



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OM ENGINEERING SERVICES, INC.  
621 E. WASHINGTON ST., STE 8  
ORLANDO, FLORIDA 32801  
PHONE NO. (407) 704-7815

ENGINEER OF RECORD: RICHARD DEAN BOBLETZ P.E.  
P.E. LICENSE NUMBER 40049



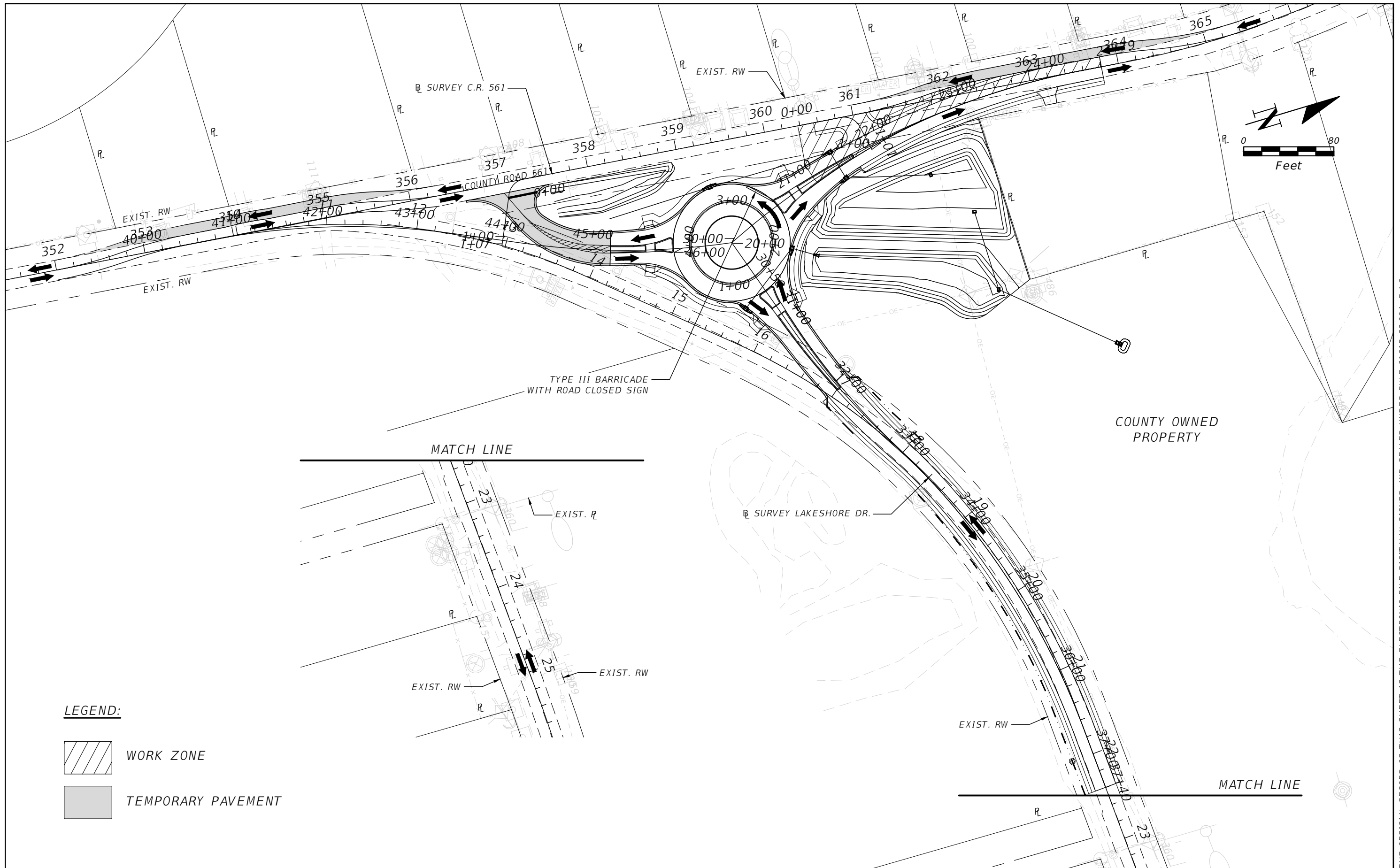
**CR 561 & LAKESHORE  
DRIVE ROUNDABOUT**

**TEMPORARY TRAFFIC  
CONTROL PLAN - PHASE II B**

SHEET NO.
62

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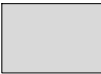




**LEGEND:**




WORK ZONE



TEMPORARY PAVEMENT

REVISIONS	
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P.E. LICENSE NUMBER 40049

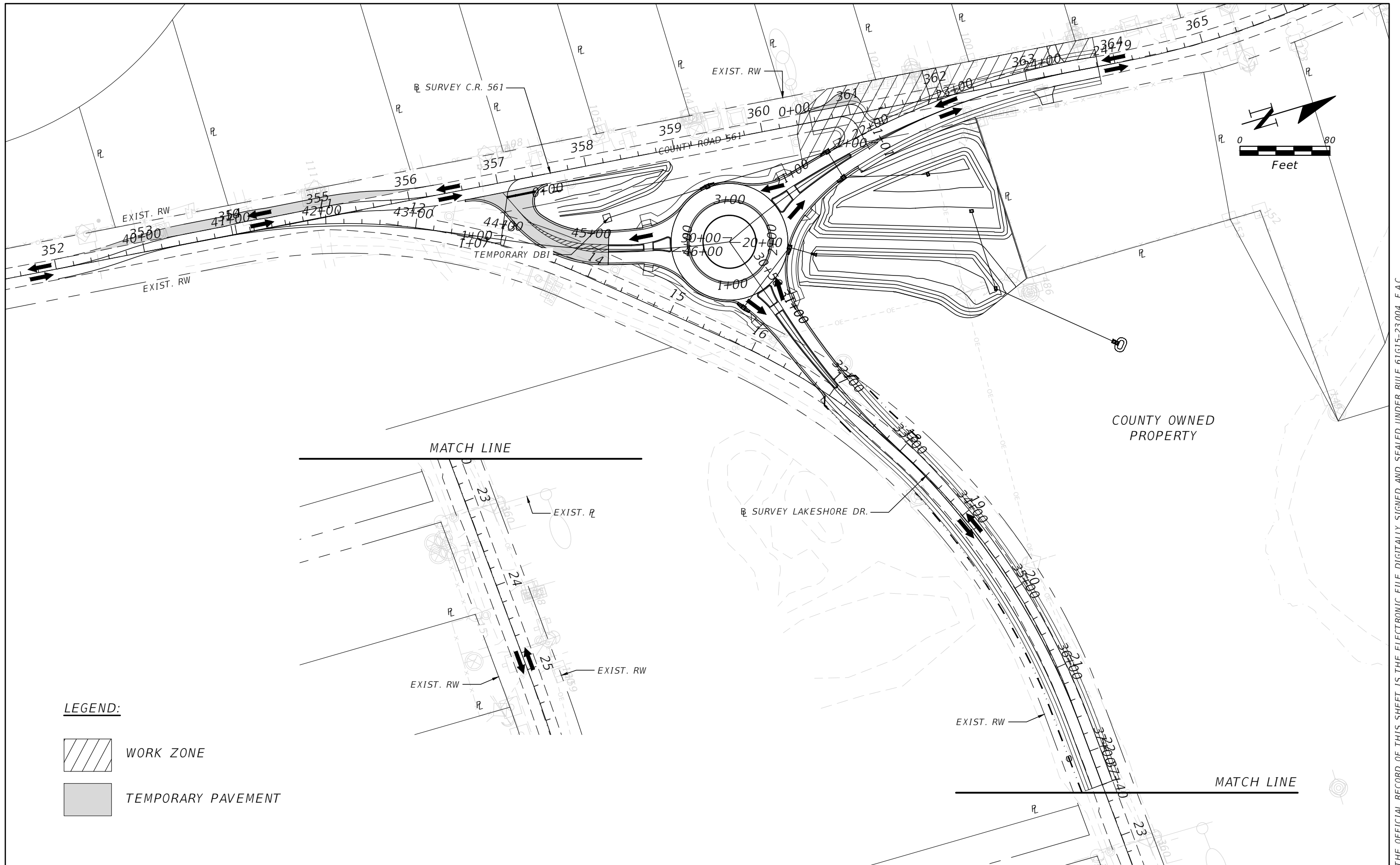


**CR 561 & LAKESHORE  
DRIVE ROUNDABOUT**

**TEMPORARY TRAFFIC  
CONTROL PLAN - PHASE III A**

SHEET NO.
63

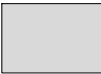
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**LEGEND:**




WORK ZONE



TEMPORARY PAVEMENT

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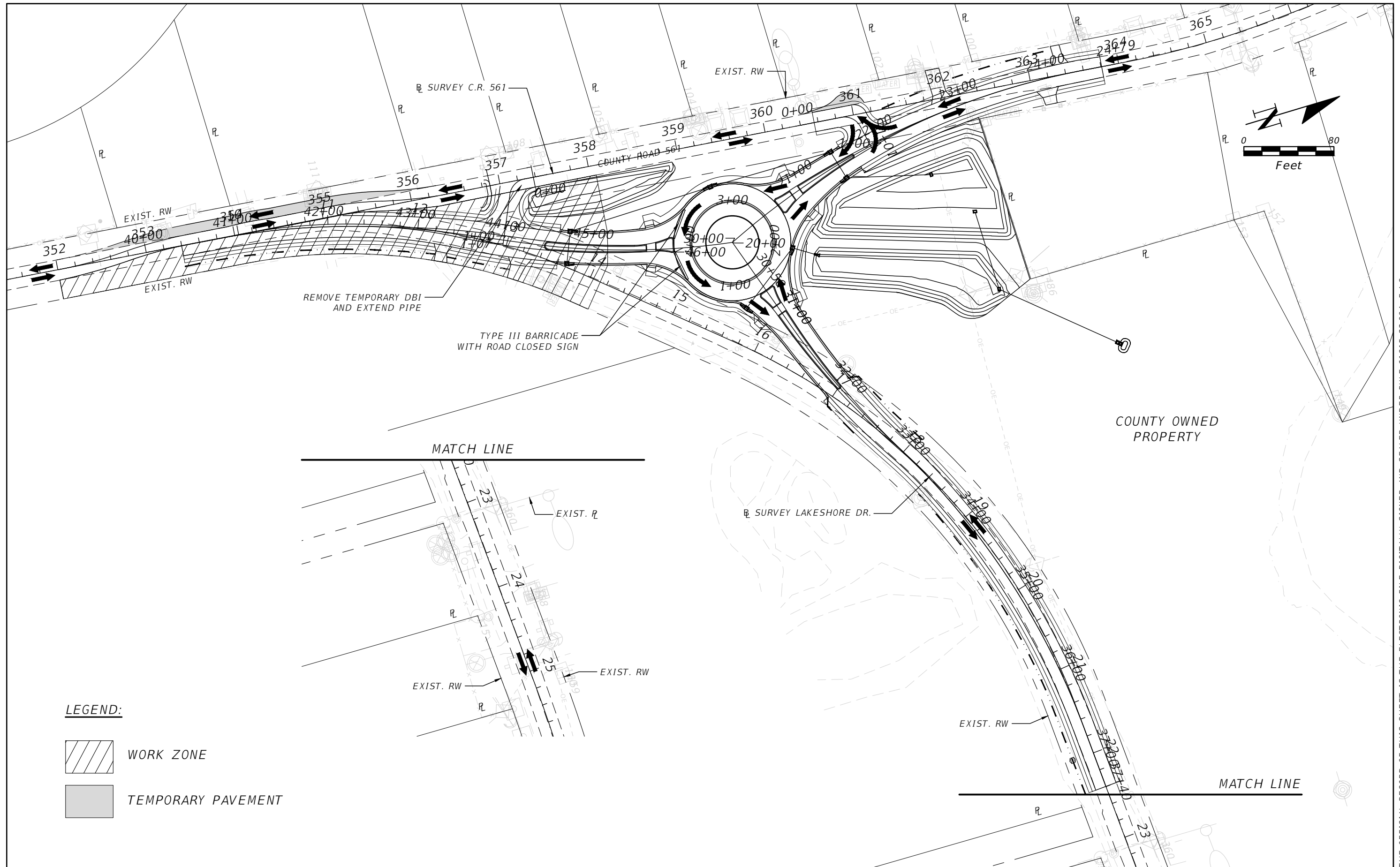
**CR 561 & LAKESHORE  
DRIVE ROUNDABOUT**

**TEMPORARY TRAFFIC  
CONTROL PLAN - PHASE III B**

SHEET NO.  
**64**

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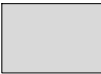




**LEGEND:**




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TEMPORARY PAVEMENT

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ENGINEER OF RECORD: RICHARD DEAN BOBLETZ P.E.  
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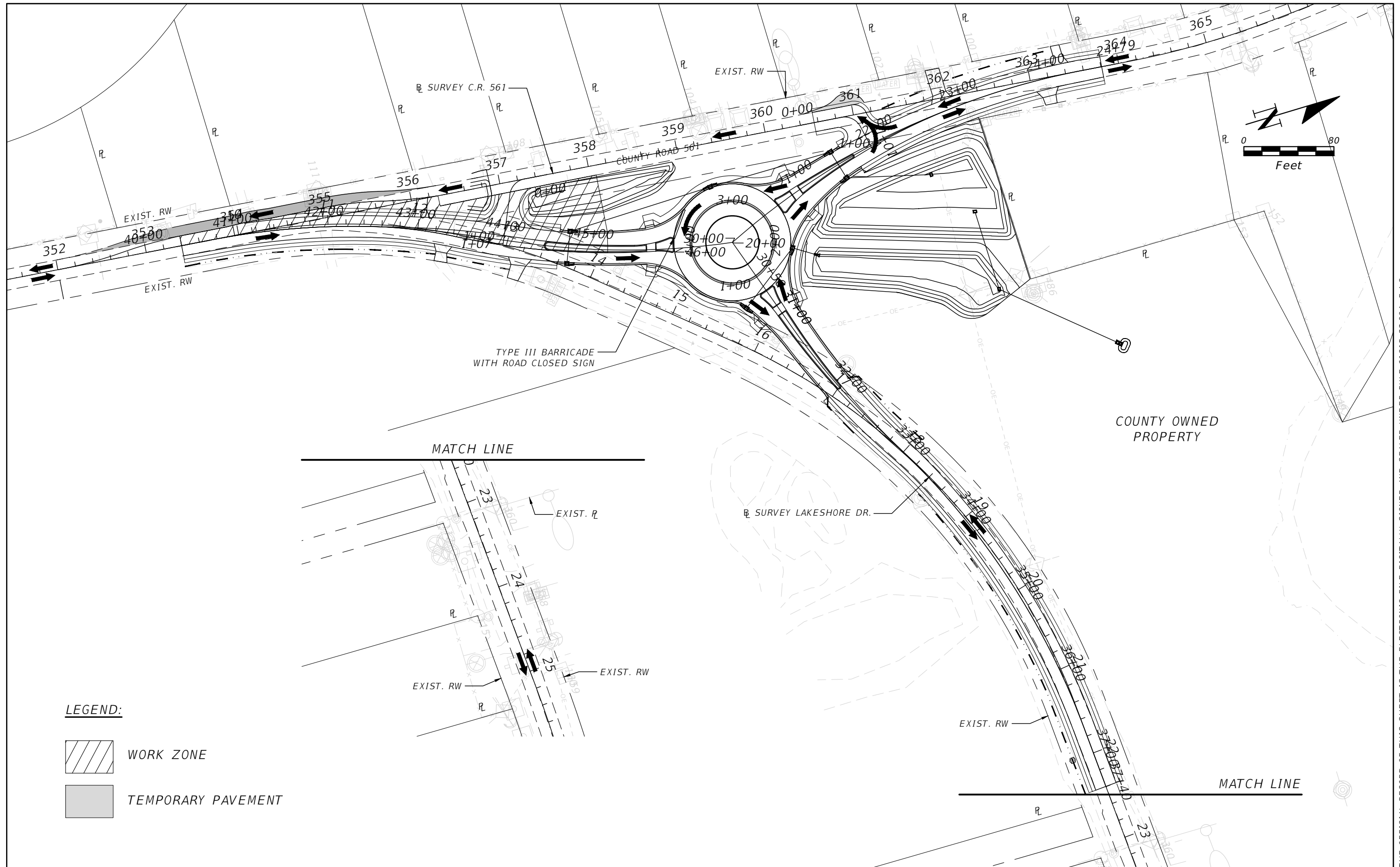


**CR 561 & LAKESHORE  
DRIVE ROUNDABOUT**

**TEMPORARY TRAFFIC  
CONTROL PLAN - PHASE IV A**

SHEET NO.
65

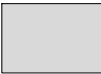
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**LEGEND:**




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TEMPORARY PAVEMENT

REVISIONS	
DATE	DESCRIPTION



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ENGINEER OF RECORD: RICHARD DEAN BOBLETZ P.E.  
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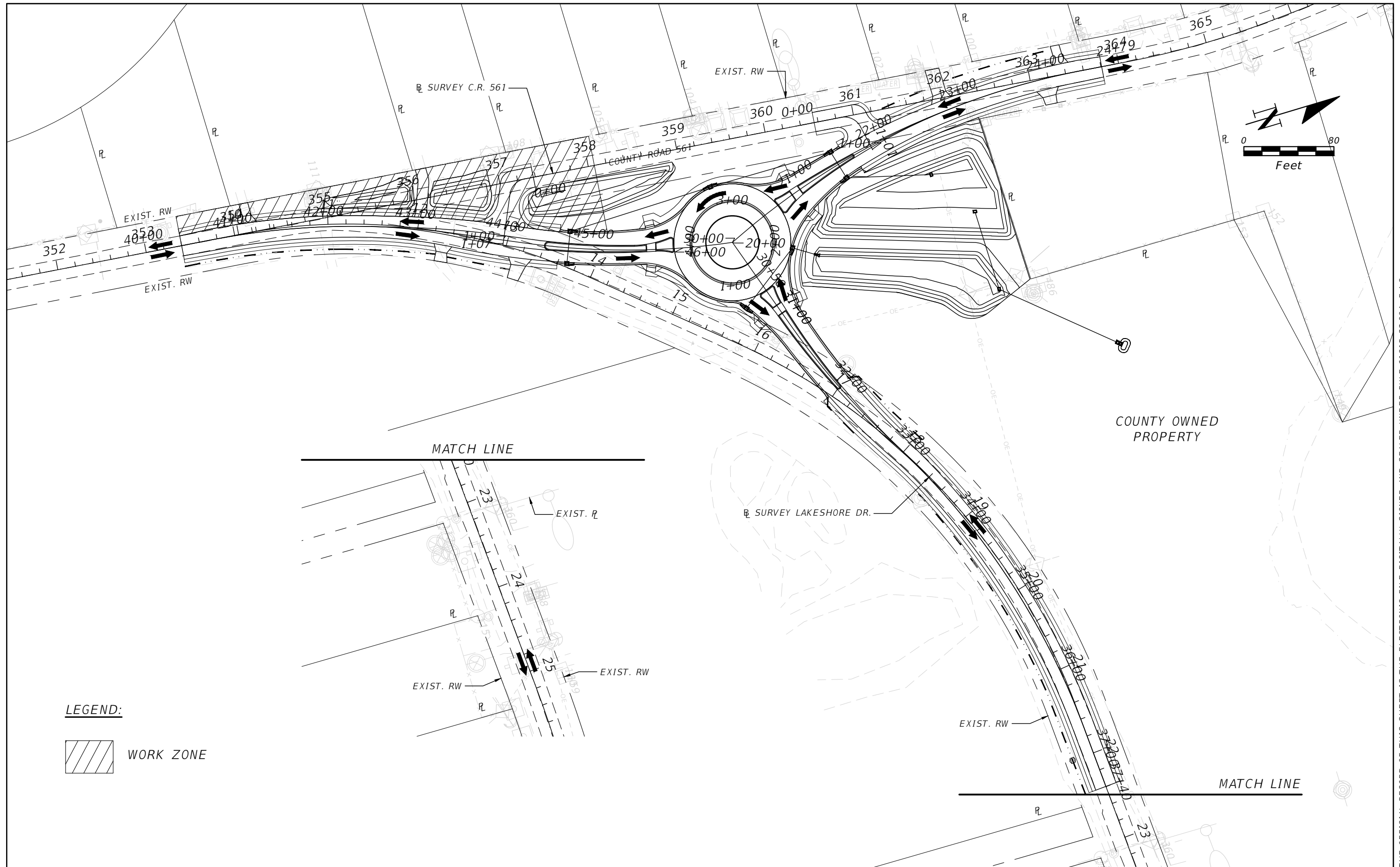
**CR 561 & LAKESHORE  
DRIVE ROUNDABOUT**

**TEMPORARY TRAFFIC  
CONTROL PLAN - PHASE IV B**

SHEET NO.
66

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**LEGEND:**

 WORK ZONE

REVISIONS	
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PHONE NO. (407) 704-7815

ENGINEER OF RECORD: RICHARD DEAN BOBLETZ P.E.  
P.E. LICENSE NUMBER 40049



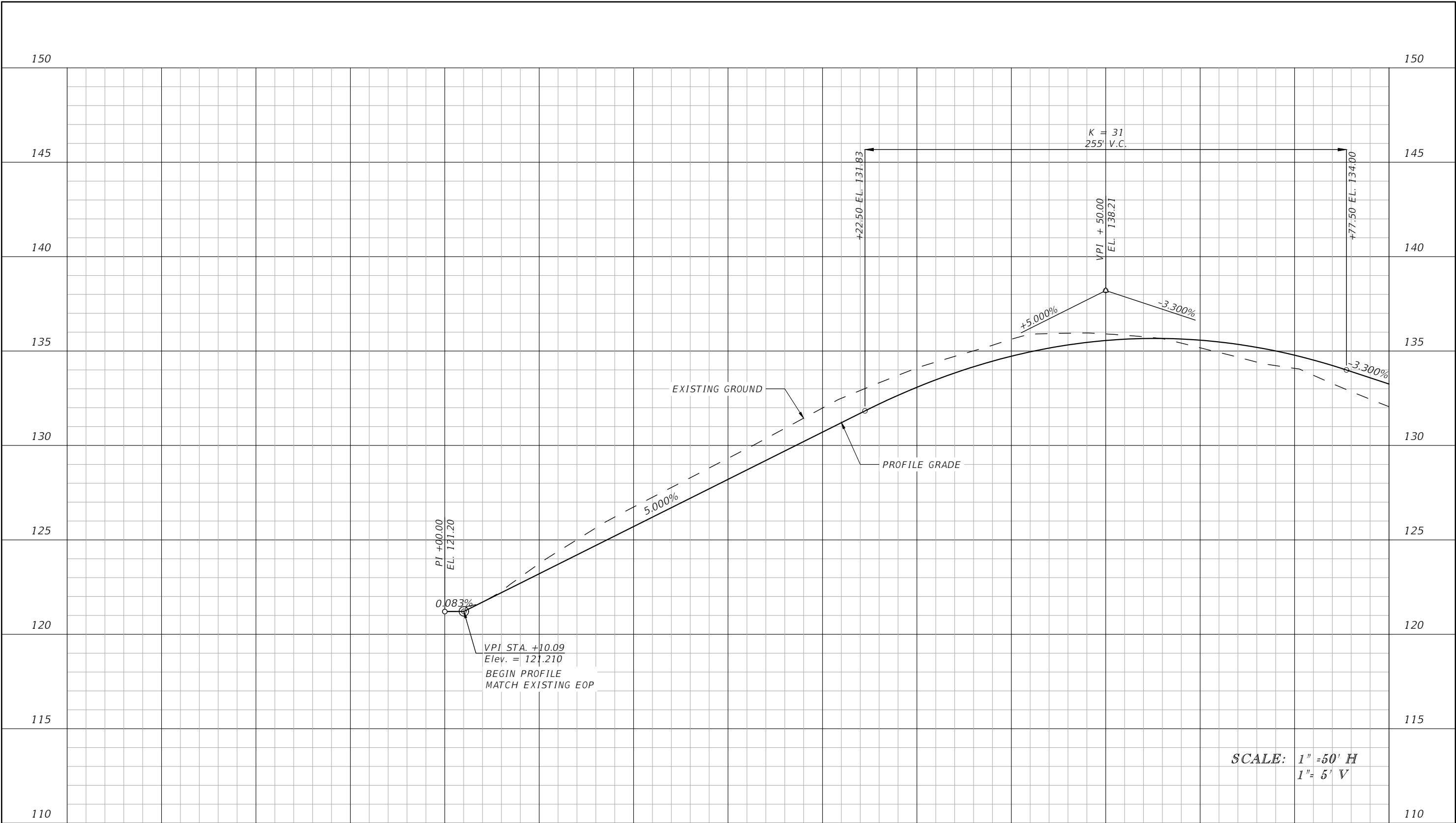
**CR 561 & LAKESHORE  
DRIVE ROUNDABOUT**

**TEMPORARY TRAFFIC  
CONTROL PLAN - PHASE IV C**

SHEET NO.
67

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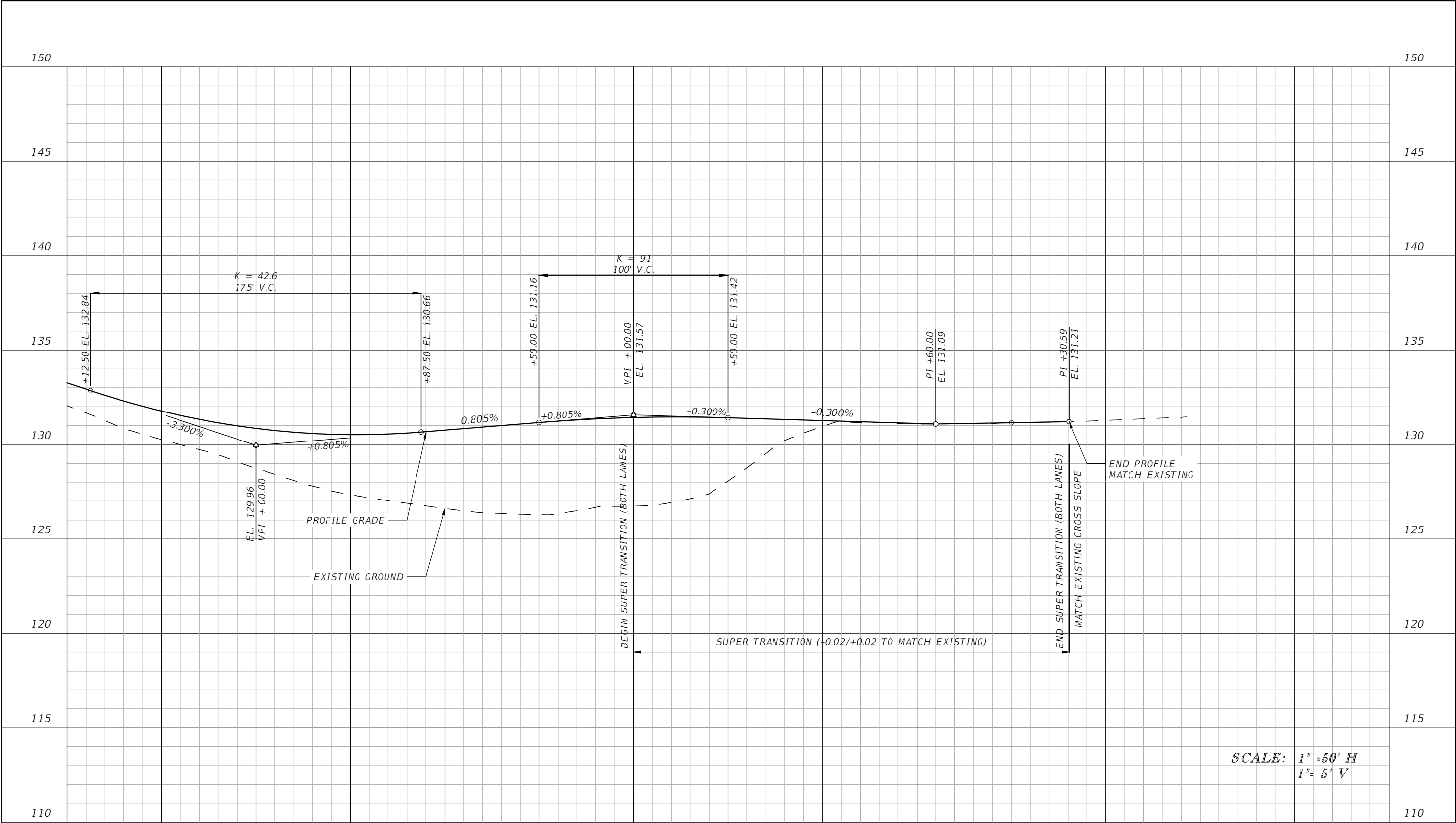




-1+00		0+00	1+00	2+00	3+00	4+00	5+00
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REVISIONS		 <div>OM ENGINEERING SERVICES, INC. 621 E. WASHINGTON ST., STE 8 ORLANDO, FLORIDA 32801 PHONE NO. (407) 704-7815</div>	 <div>LAKE COUNTY, FL REAL FLORIDA • REAL CLOSE</div>	CR 561 & LAKESHORE DRIVE ROUNDABOUT	TEMP ROAD A PROFILE (1)	SHEET NO.
DATE	DESCRIPTION					68

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SCALE: 1" = 50' H  
1" = 5' V

REVISIONS	
DATE	DESCRIPTION



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PHONE NO. (407) 704-7815

ENGINEER OF RECORD: RICHARD DEAN BOBLETZ P.E.  
P.E. LICENSE NUMBER 40049

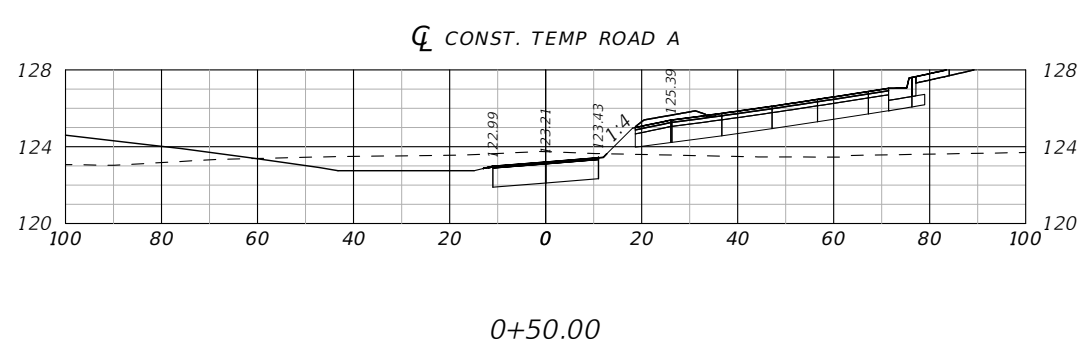
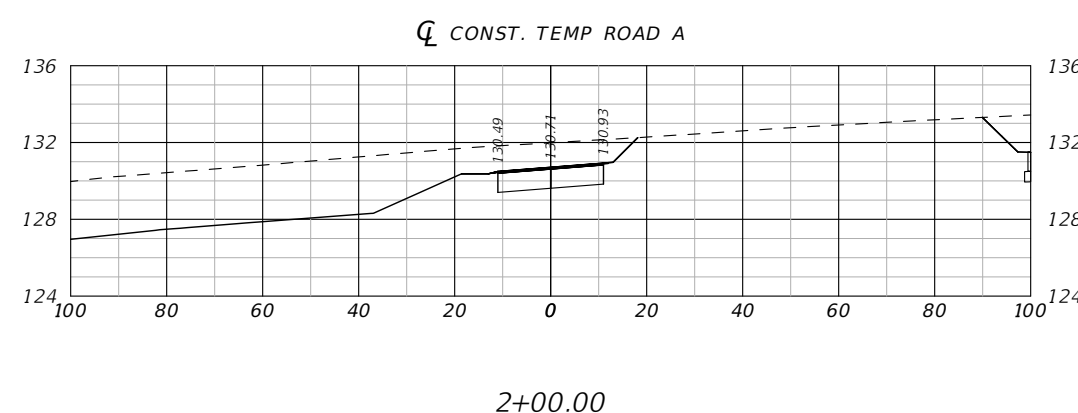
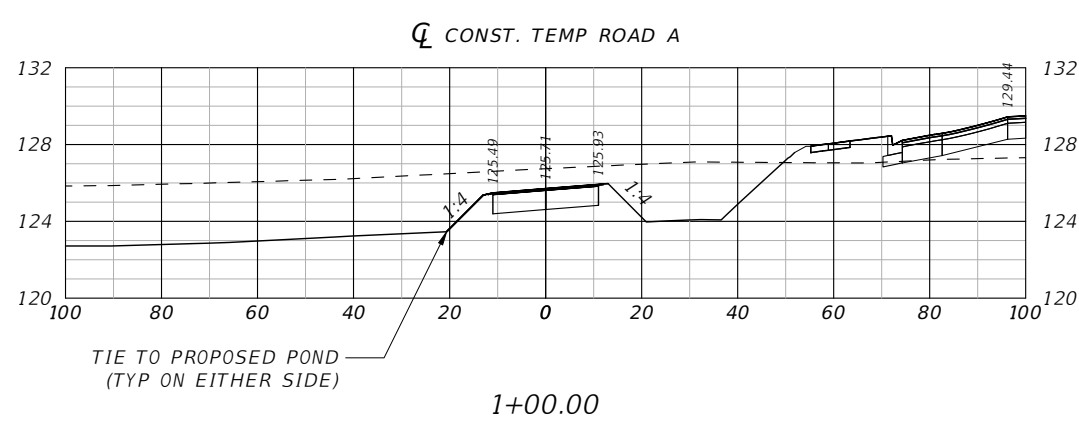
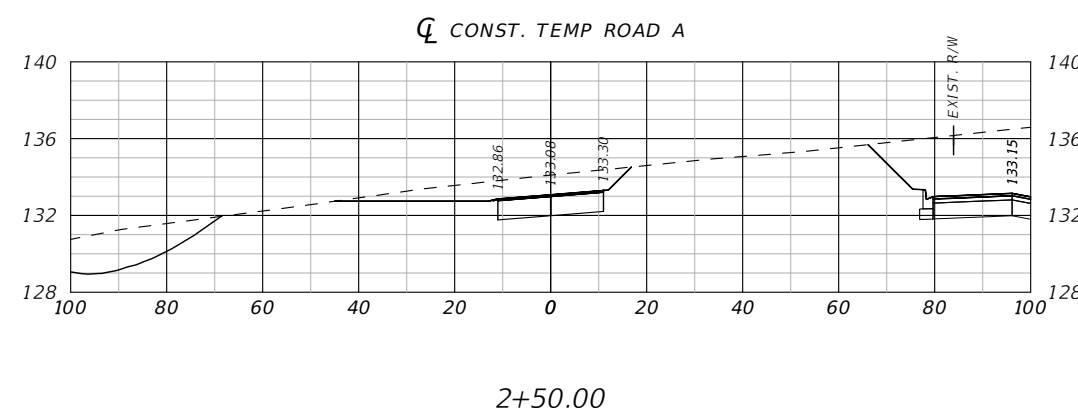
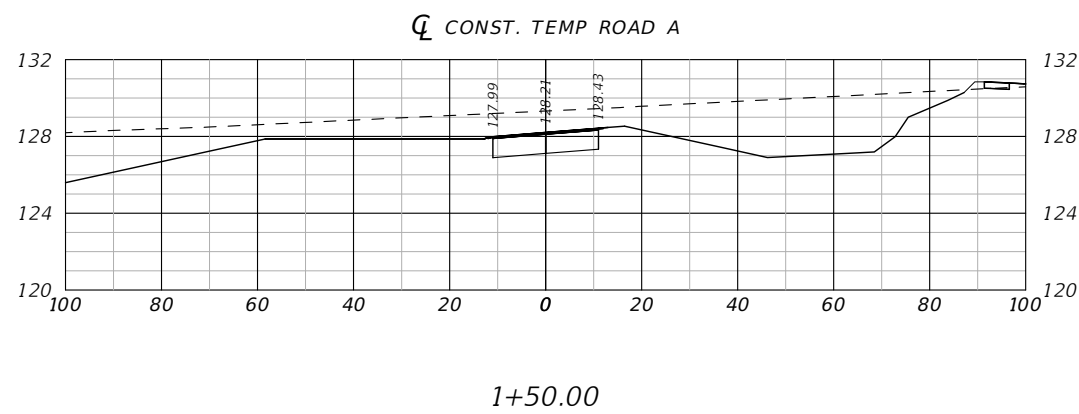


CR 561 & LAKESHORE  
DRIVE ROUNDABOUT

TEMP ROAD A  
PROFILE (2)

SHEET NO.
69

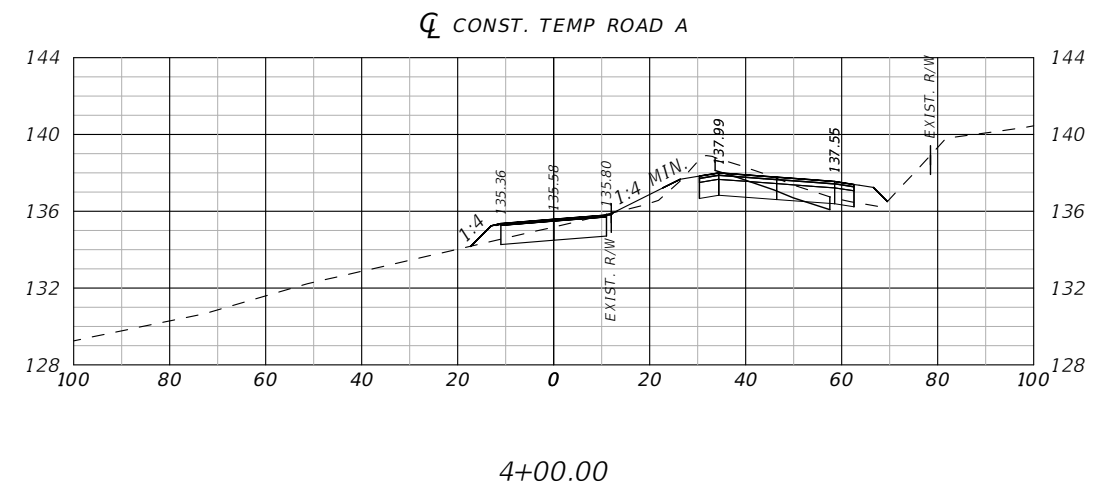
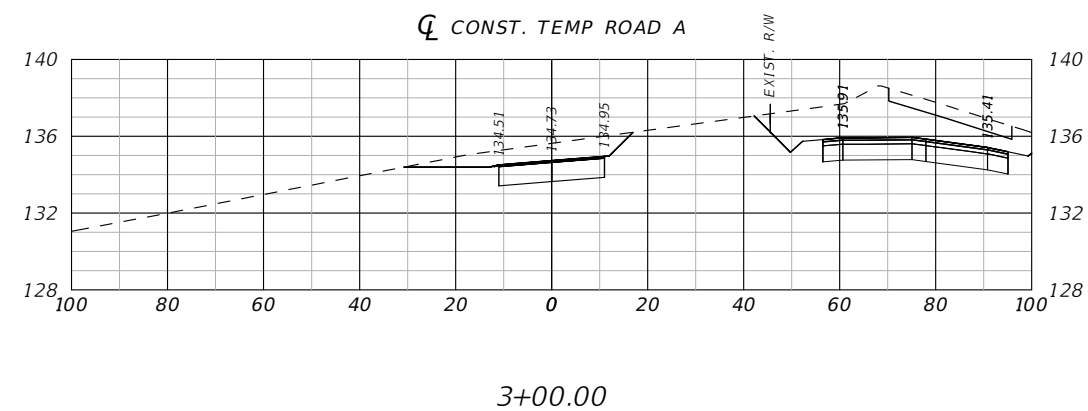
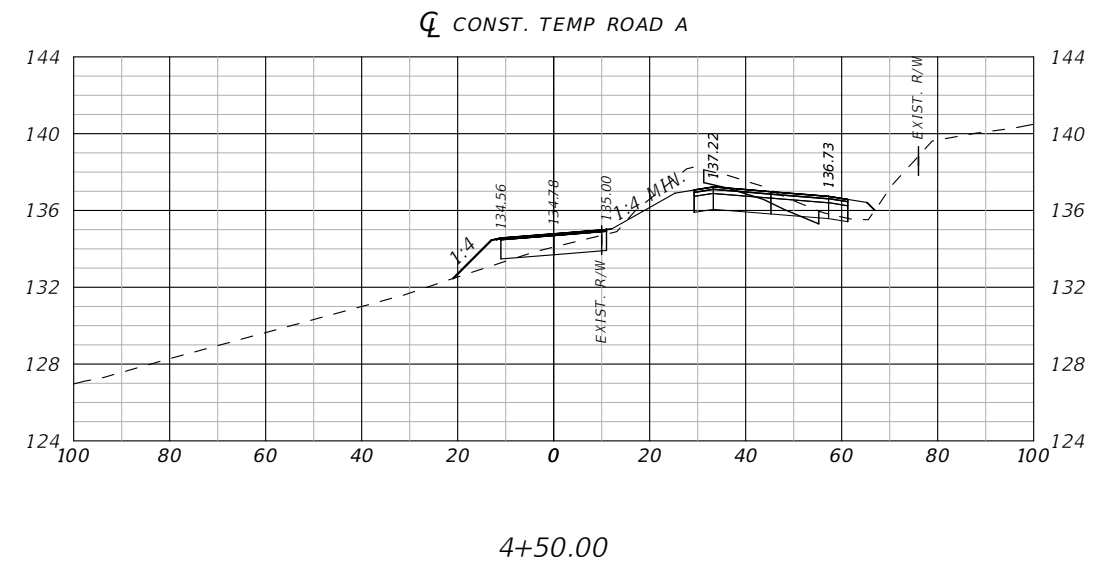
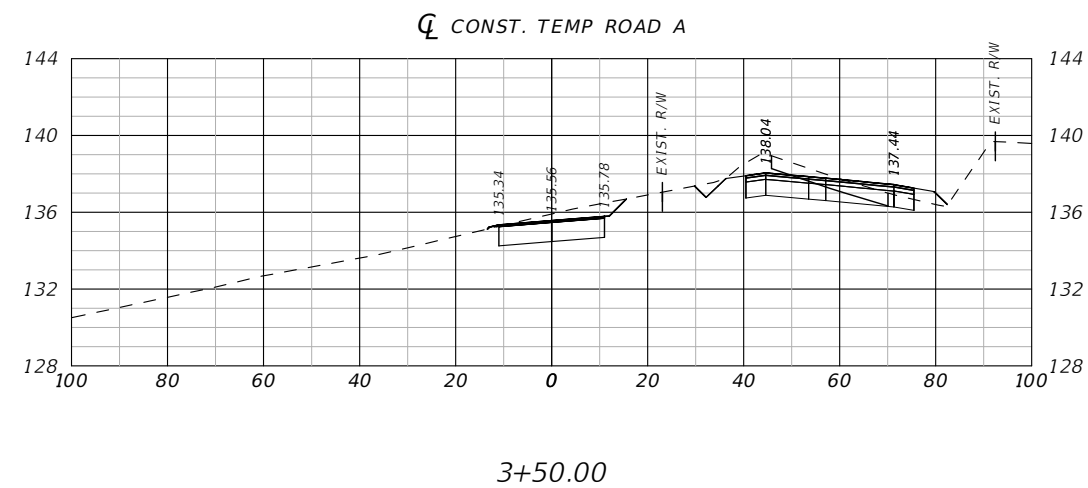
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SCALE: 1" = 40' H  
1" = 10' V

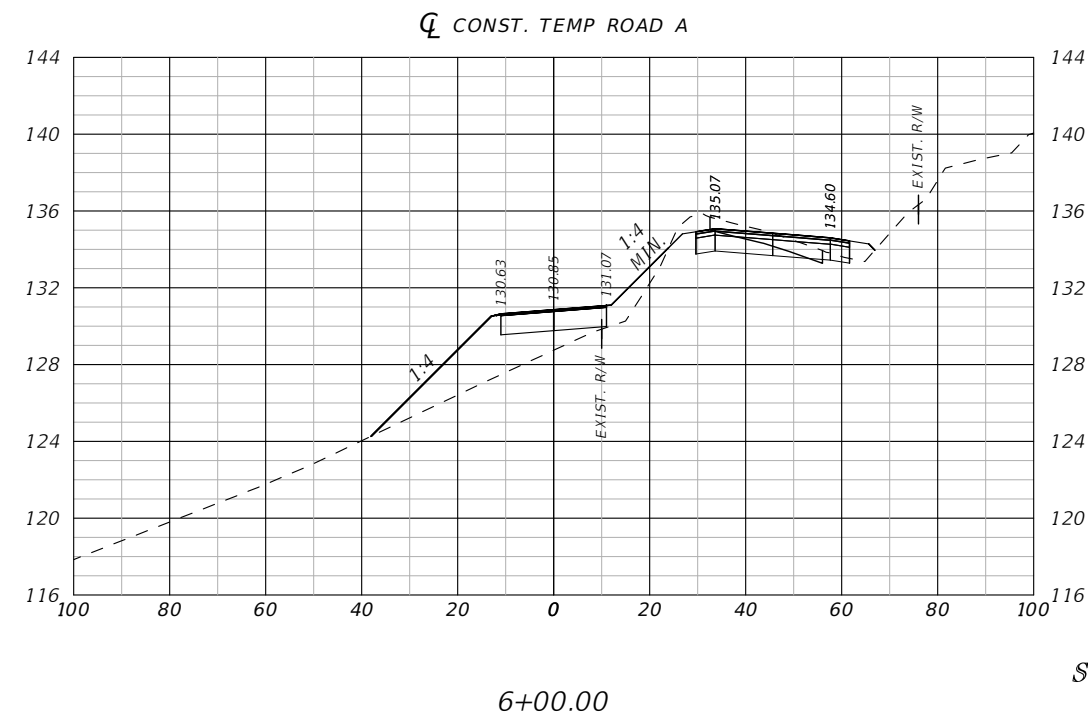
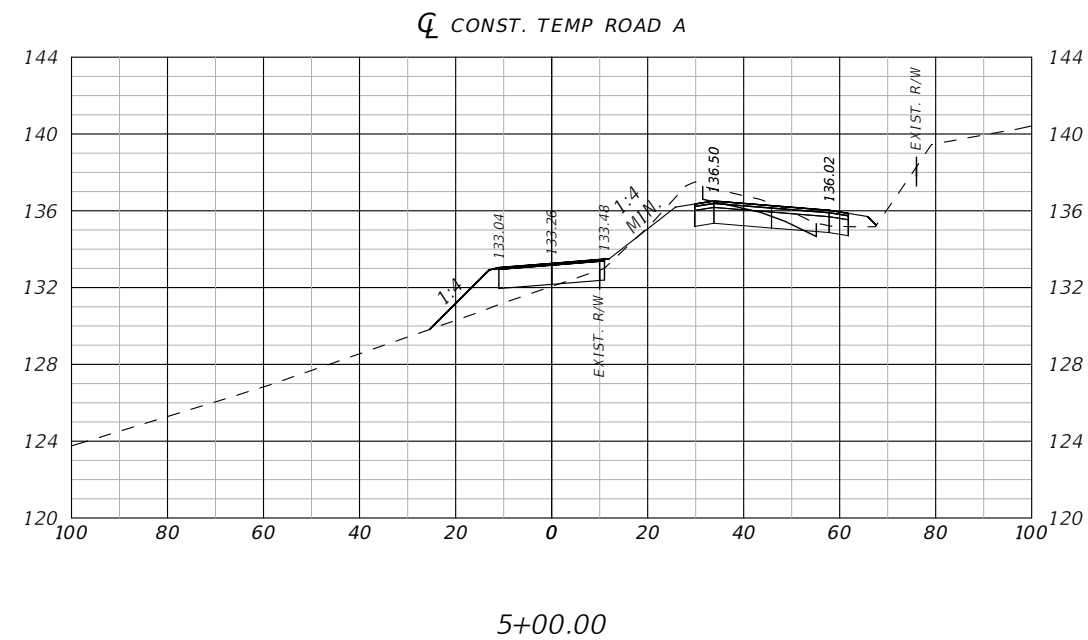
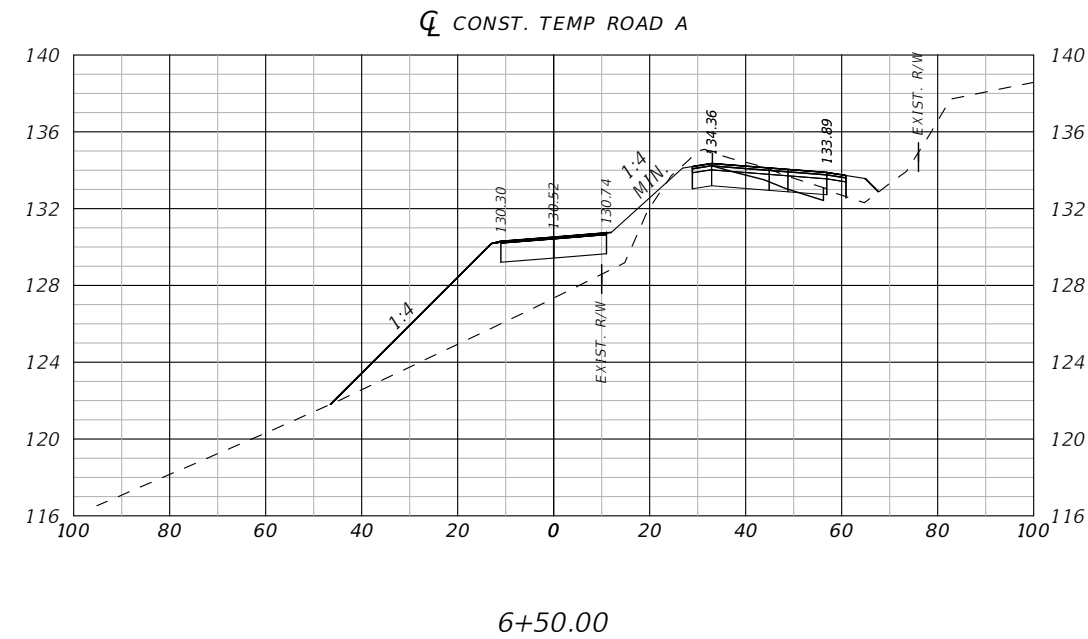
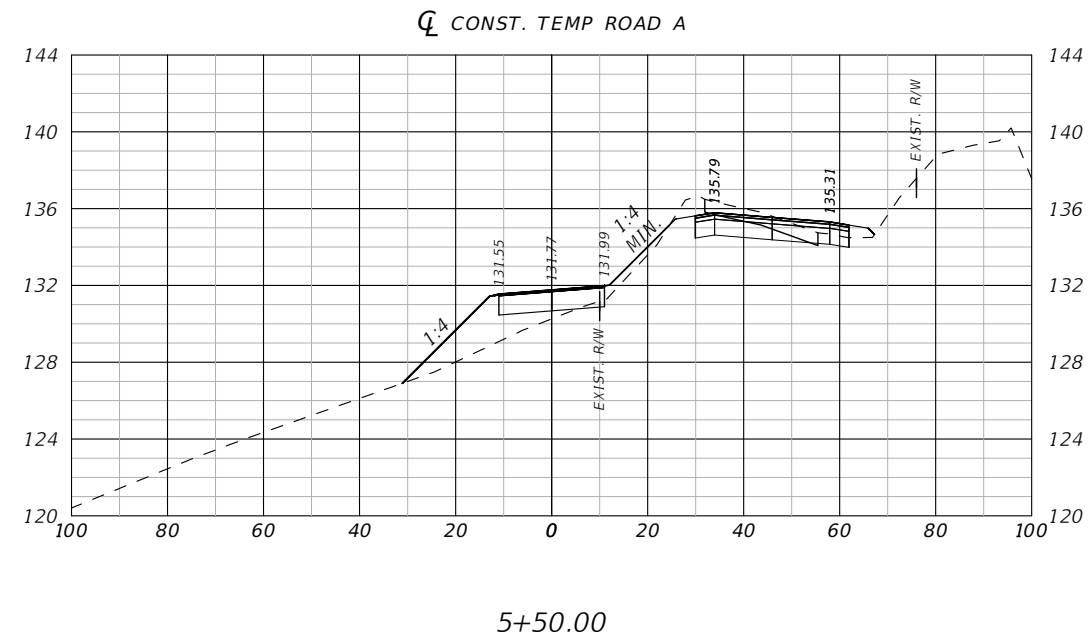
REVISIONS		 <b>OM ENGINEERING SERVICES, INC.</b> Civil • Structural • Inspections 621 E. WASHINGTON ST., STE 8 ORLANDO, FLORIDA 32801 PHONE NO. (407) 704-7815 ENGINEER OF RECORD: RICHARD DEAN BOBLETZ P.E. P.E. LICENSE NUMBER 40049	 LAKE COUNTY, FL REAL FLORIDA • REAL CLOSE	<i>CR 561 &amp; LAKESHORE DRIVE ROUNDABOUT</i>	<i>TEMP ROAD A CROSS SECTIONS (1)</i>	SHEET NO.
DATE	DESCRIPTION					70

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SCALE:  $1'' = 40' H$   
 $1'' = 10' V$

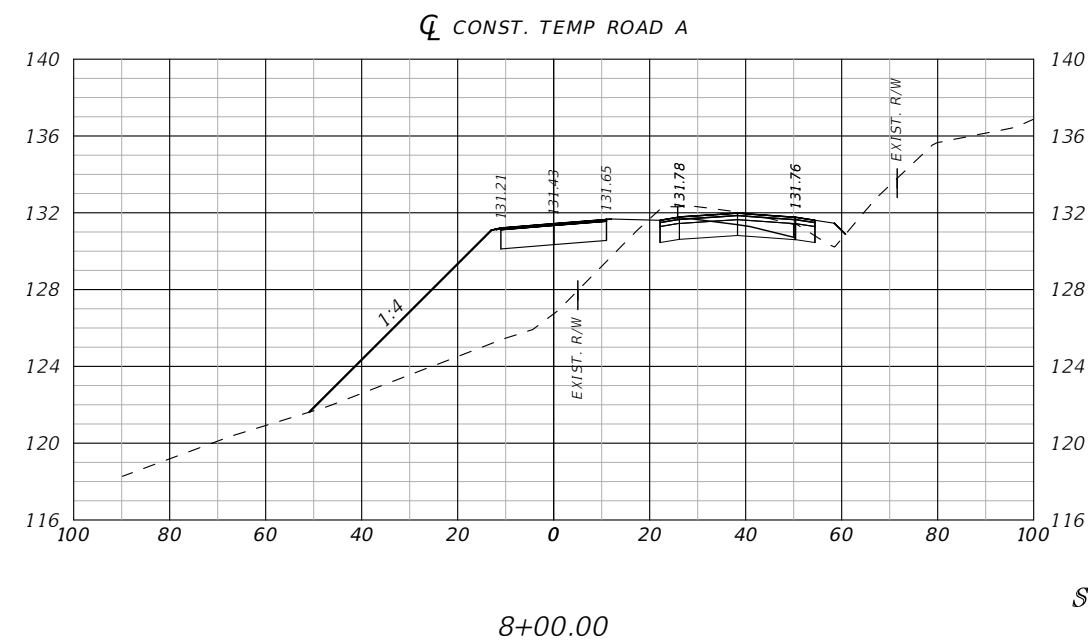
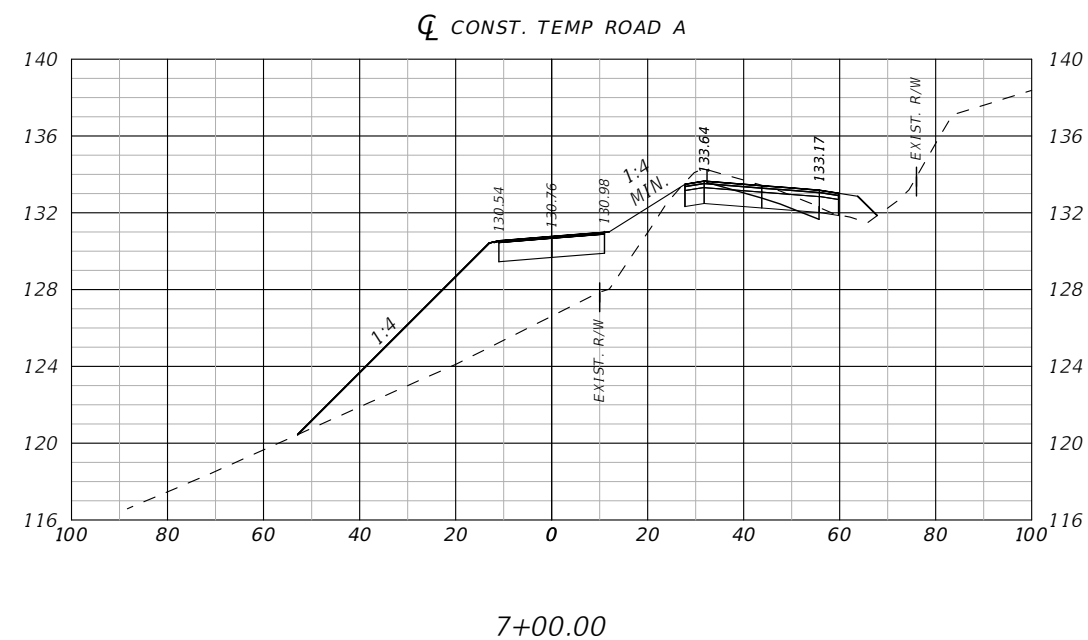
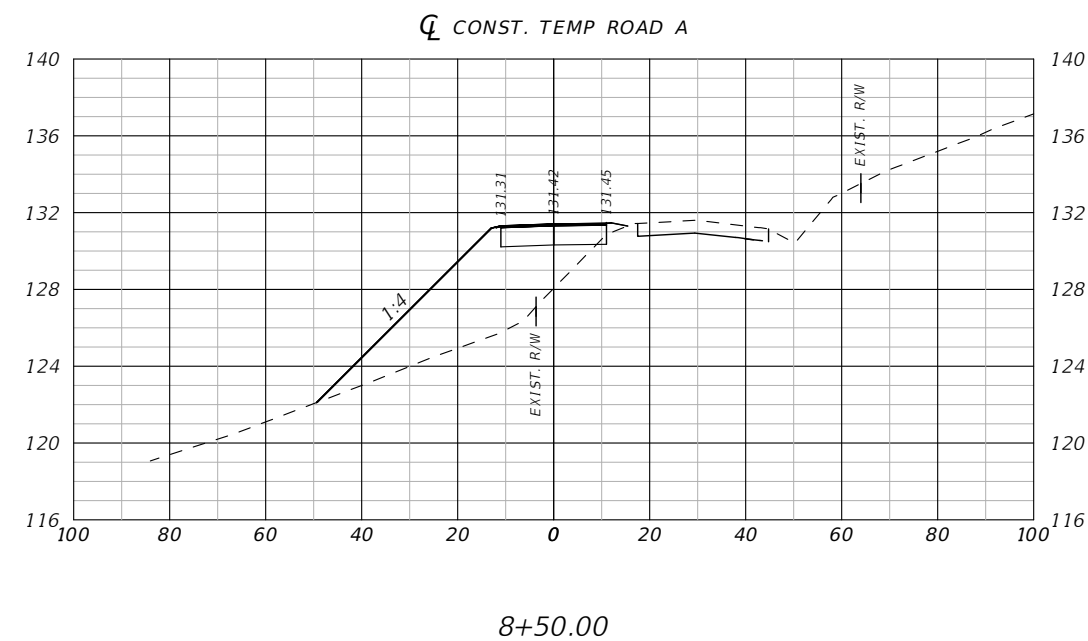
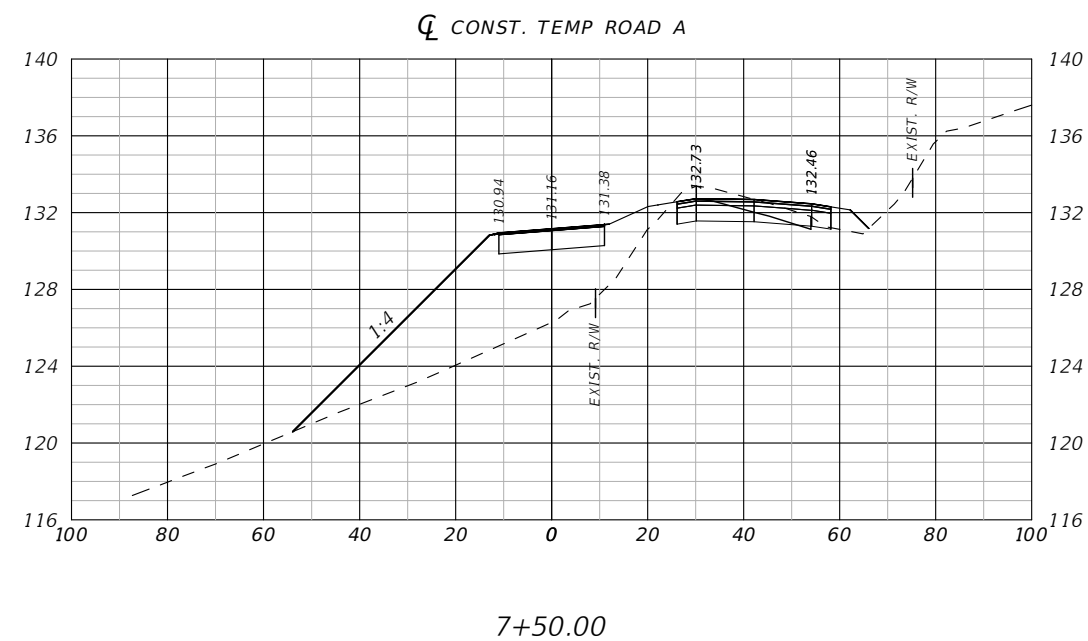
REVISIONS		 <div>OM ENGINEERING SERVICES, INC. Civil • Structural • Inspections</div>	<div>OM ENGINEERING SERVICES, INC. 621 E. WASHINGTON ST., STE 8 ORLANDO, FLORIDA 32801 PHONE NO. (407) 704-7815</div>		<div>CR 561 &amp; LAKESHORE DRIVE ROUNDABOUT</div>	<div>TEMP ROAD A CROSS SECTIONS (2)</div>	SHEET NO.
DATE	DESCRIPTION						
<div>ENGINEER OF RECORD: RICHARD DEAN BOBLETZ P.E. P.E. LICENSE NUMBER 40049</div>							71



SCALE: 1" = 40' H  
1" = 10' V

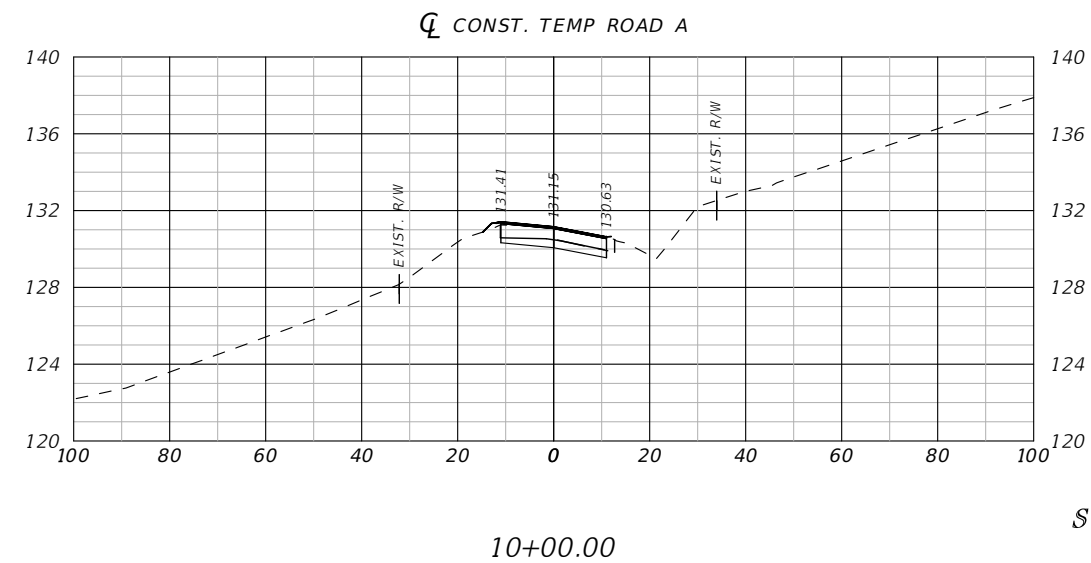
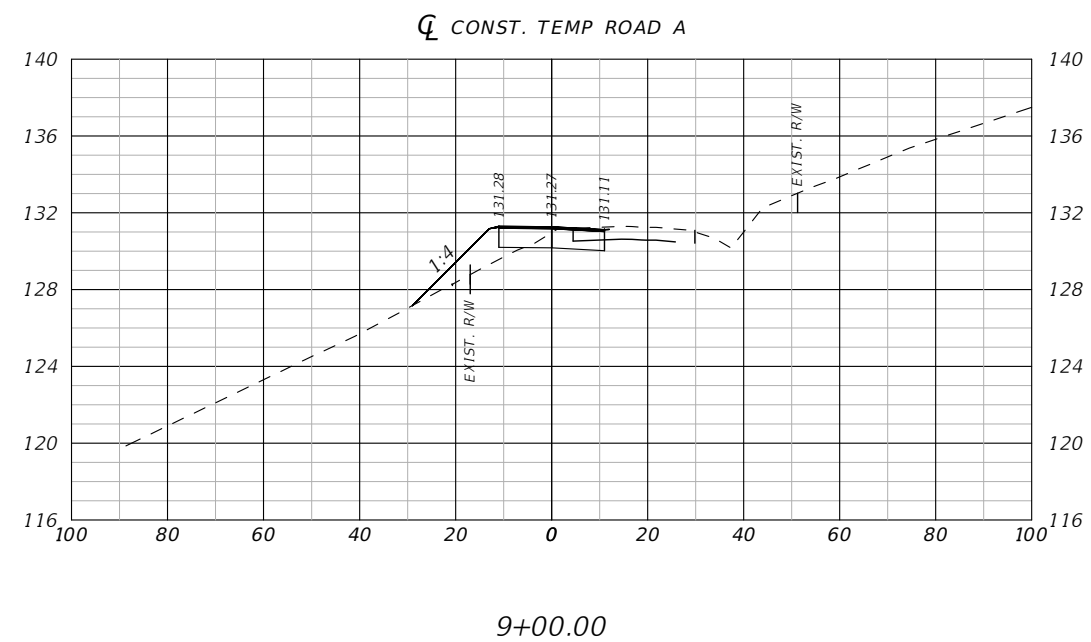
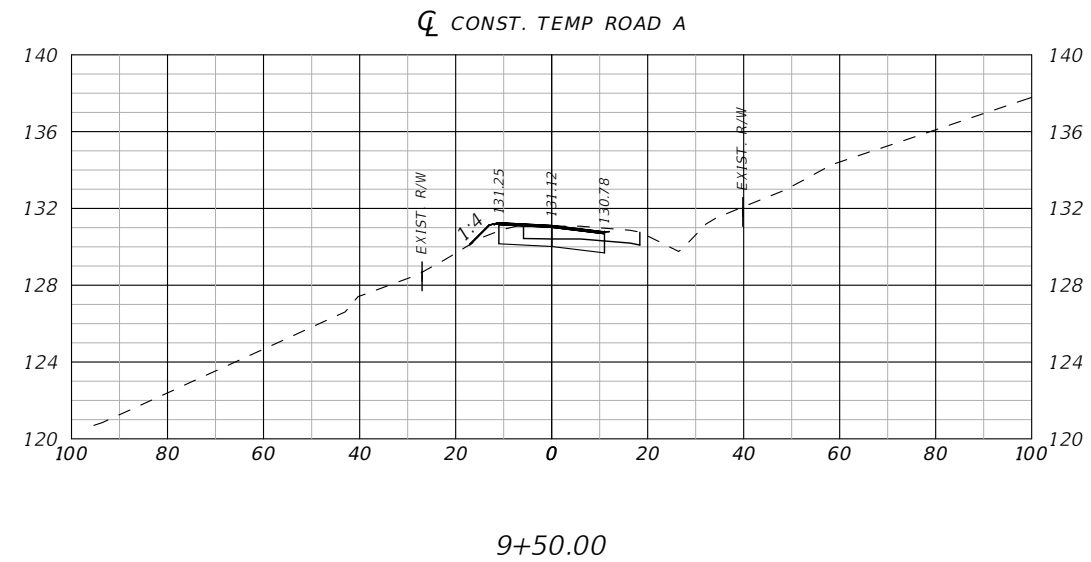
REVISIONS		 <b>OM ENGINEERING SERVICES, INC.</b> Civil • Structural • Inspections 621 E. WASHINGTON ST., STE 8 ORLANDO, FLORIDA 32801 PHONE NO. (407) 704-7815 ENGINEER OF RECORD: RICHARD DEAN BOBLETZ P.E. P.E. LICENSE NUMBER 40049	 <b>LAKE COUNTY, FL</b> REAL FLORIDA • REAL CLOSE	<i>CR 561 &amp; LAKESHORE DRIVE ROUNDABOUT</i>	<i>TEMP ROAD A CROSS SECTIONS (3)</i>	SHEET NO.
DATE	DESCRIPTION					72





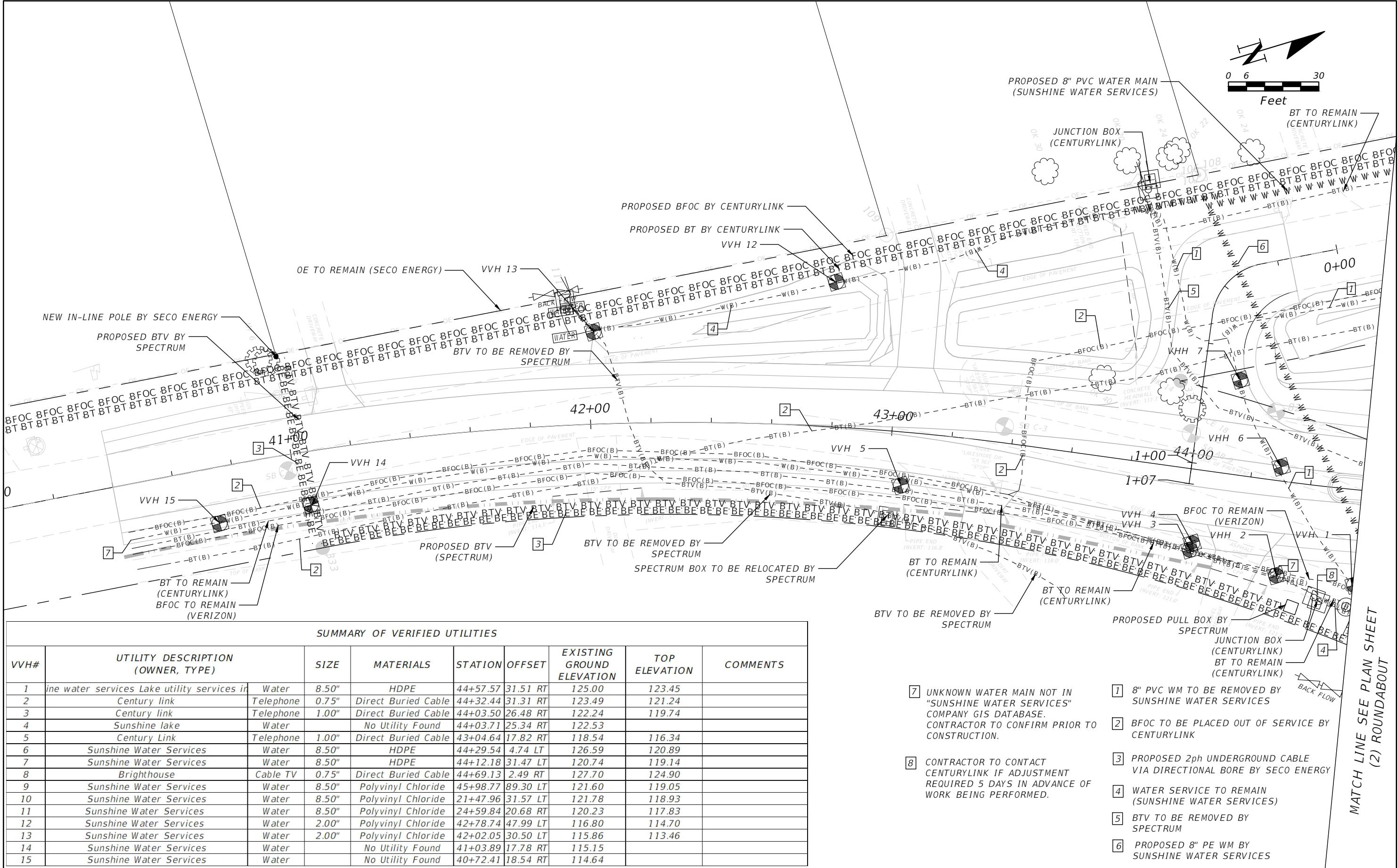
SCALE: 1" = 40' H  
1" = 10' V

REVISIONS		 <b>OM ENGINEERING SERVICES, INC.</b> Civil • Structural • Inspections 621 E. WASHINGTON ST., STE 8 ORLANDO, FLORIDA 32801 PHONE NO. (407) 704-7815 ENGINEER OF RECORD: RICHARD DEAN BOBLETZ P.E. P.E. LICENSE NUMBER 40049	 <b>LAKE COUNTY, FL</b> REAL FLORIDA • REAL CLOSE	<b>CR 561 &amp; LAKESHORE DRIVE ROUNDABOUT</b>	<b>TEMP ROAD A CROSS SECTIONS (4)</b>	SHEET NO.
DATE	DESCRIPTION					73



SCALE: 1" = 40' H  
1" = 10' V

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DATE	DESCRIPTION					74
		ENGINEER OF RECORD: RICHARD DEAN BOBLETZ P.E. P.E. LICENSE NUMBER 40049				



SUMMARY OF VERIFIED UTILITIES										
VVH#	UTILITY DESCRIPTION (OWNER, TYPE)		SIZE	MATERIALS	STATION	OFFSET	EXISTING GROUND ELEVATION	TOP ELEVATION	COMMENTS	
1	line water services	Lake utility services in	Water	8.50"	HDPE	44+57.57	31.51 RT	125.00	123.45	
2	Century link	Telephone	0.75"	Direct Buried Cable	44+32.44	31.31 RT	123.49	121.24		
3	Century link	Telephone	1.00"	Direct Buried Cable	44+03.50	26.48 RT	122.24	119.74		
4	Sunshine lake	Water		No Utility Found	44+03.71	25.34 RT	122.53			
5	Century Link	Telephone	1.00"	Direct Buried Cable	43+04.64	17.82 RT	118.54	116.34		
6	Sunshine Water Services	Water	8.50"	HDPE	44+29.54	4.74 LT	126.59	120.89		
7	Sunshine Water Services	Water	8.50"	HDPE	44+12.18	31.47 LT	120.74	119.14		
8	Brighthouse	Cable TV	0.75"	Direct Buried Cable	44+69.13	2.49 RT	127.70	124.90		
9	Sunshine Water Services	Water	8.50"	Polyvinyl Chloride	45+98.77	89.30 LT	121.60	119.05		
10	Sunshine Water Services	Water	8.50"	Polyvinyl Chloride	21+47.96	31.57 LT	121.78	118.93		
11	Sunshine Water Services	Water	8.50"	Polyvinyl Chloride	24+59.84	20.68 RT	120.23	117.83		
12	Sunshine Water Services	Water	2.00"	Polyvinyl Chloride	42+78.74	47.99 LT	116.80	114.70		
13	Sunshine Water Services	Water	2.00"	Polyvinyl Chloride	42+02.05	30.50 LT	115.86	113.46		
14	Sunshine Water Services	Water		No Utility Found	41+03.89	17.78 RT	115.15			
15	Sunshine Water Services	Water		No Utility Found	40+72.41	18.54 RT	114.64			

- 7

UNKNOWN WATER MAIN NOT IN "SUNSHINE WATER SERVICES" COMPANY GIS DATABASE. CONTRACTOR TO CONFIRM PRIOR TO CONSTRUCTION.
- 8

CONTRACTOR TO CONTACT CENTURYLINK IF ADJUSTMENT REQUIRED 5 DAYS IN ADVANCE OF WORK BEING PERFORMED.

- 1

8" PVC WM TO BE REMOVED BY SUNSHINE WATER SERVICES
- 2

BFOC TO BE PLACED OUT OF SERVICE BY CENTURYLINK
- 3

PROPOSED 2ph UNDERGROUND CABLE VIA DIRECTIONAL BORE BY SECO ENERGY
- 4

WATER SERVICE TO REMAIN (SUNSHINE WATER SERVICES)
- 5

BTV TO BE REMOVED BY SPECTRUM
- 6

PROPOSED 8" PE WM BY SUNSHINE WATER SERVICES

REVISIONS

DATE	DESCRIPTION



OM ENGINEERING SERVICES, INC.

621 E. WASHINGTON ST., STE 8  
ORLANDO, FLORIDA 32801  
PHONE NO. (407) 704-7815

ENGINEER OF RECORD: RICHARD DEAN BOBLETZ P.E.

P.E. LICENSE NUMBER 40049



LAKE COUNTY, FL

REAL FLORIDA • REAL CLOSE

CR 561 & LAKESHORE DRIVE ROUNDABOUT

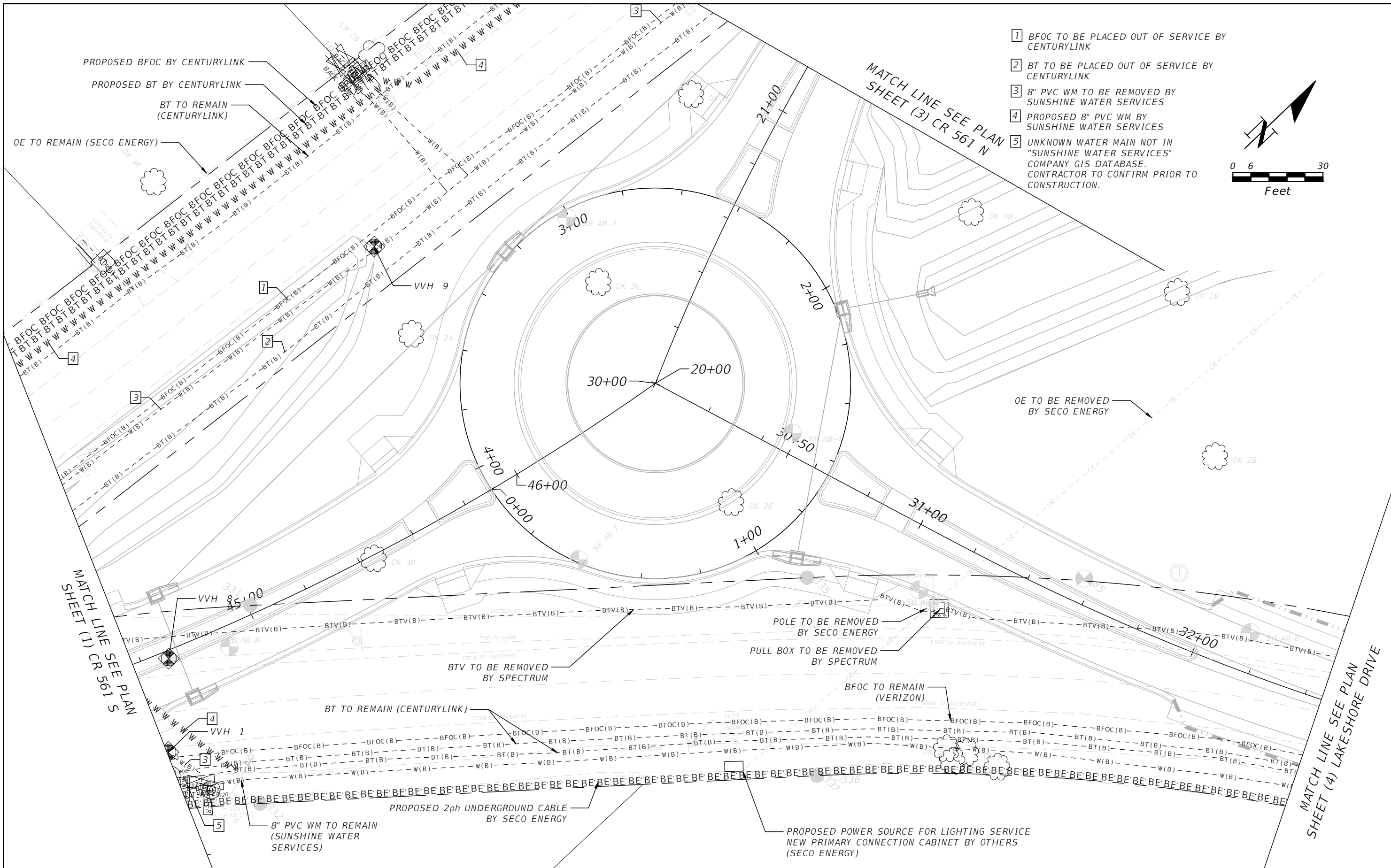
UTILITY ADJUSTMENTS (1)  
CR 561 S

SHEET NO.

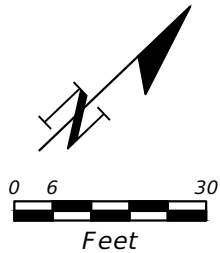
75

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- 1 BFOC TO BE PLACED OUT OF SERVICE BY CENTURYLINK
- 2 BT TO BE PLACED OUT OF SERVICE BY CENTURYLINK
- 3 8" PVC WM TO BE REMOVED BY SUNSHINE WATER SERVICES
- 4 PROPOSED 8" PVC WM BY SUNSHINE WATER SERVICES
- 5 UNKNOWN WATER MAIN NOT IN "SUNSHINE WATER SERVICES" COMPANY GIS DATABASE. CONTRACTOR TO CONFIRM PRIOR TO CONSTRUCTION.



REVISIONS	
DATE	DESCRIPTION



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**ENGINEER OF RECORD: RICHARD DEAN BOBLETZ P.E.**  
P.E. LICENSE NUMBER 40049



**LAKE COUNTY, FL**  
REAL FLORIDA • REAL CLOSE

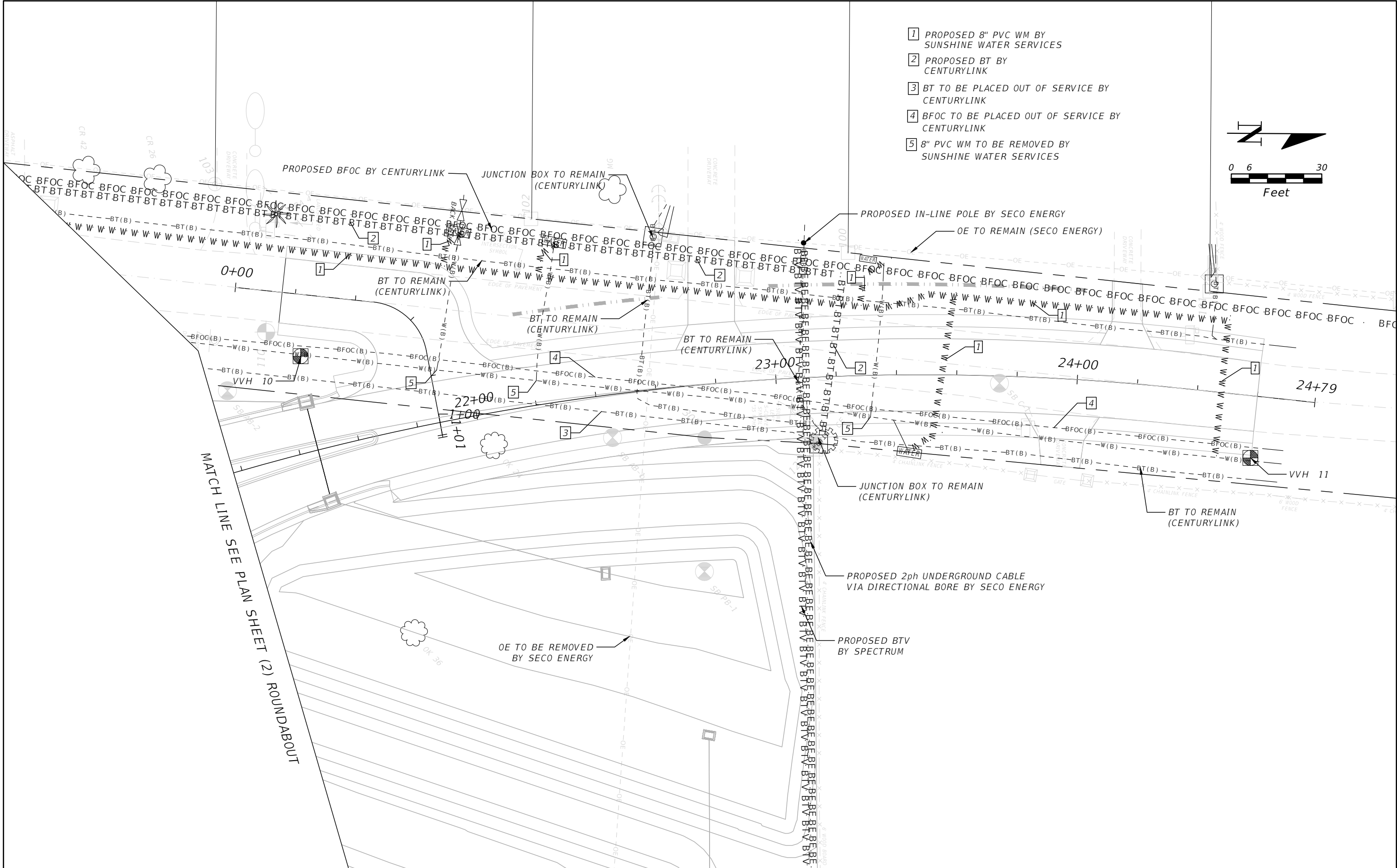
**OM ENGINEERING SERVICES, INC.**  
621 E. WASHINGTON ST., STE 8  
ORLANDO, FLORIDA 32801  
PHONE NO. (407) 704-7815

**CR 561 & LAKESHORE DRIVE ROUNDABOUT**

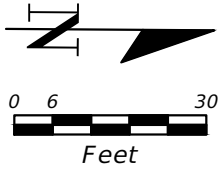
**UTILITY ADJUSTMENTS (2)**  
**ROUNDABOUT**

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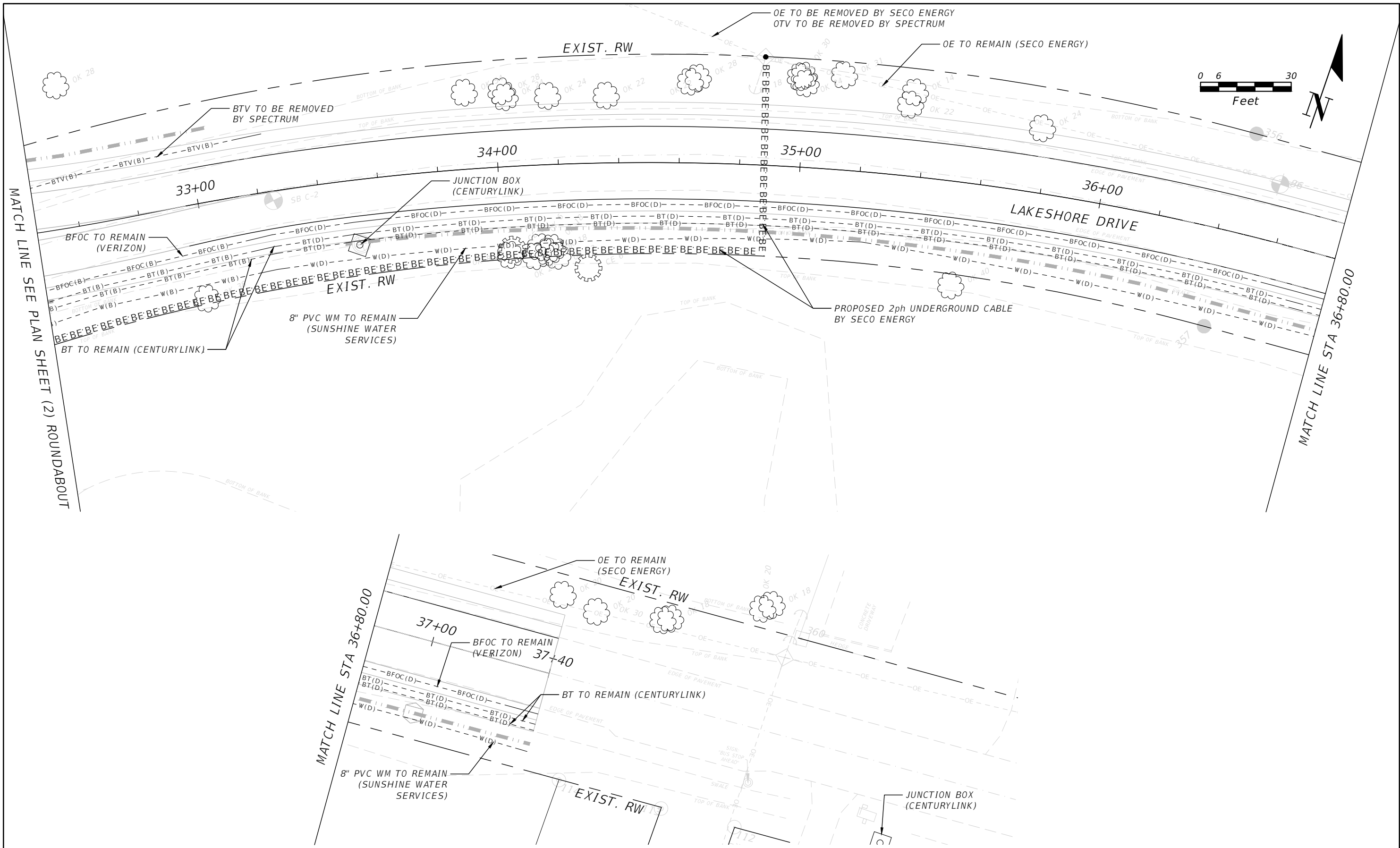


- 1 PROPOSED 8" PVC WM BY SUNSHINE WATER SERVICES
- 2 PROPOSED BT BY CENTURYLINK
- 3 BT TO BE PLACED OUT OF SERVICE BY CENTURYLINK
- 4 BFOC TO BE PLACED OUT OF SERVICE BY CENTURYLINK
- 5 8" PVC WM TO BE REMOVED BY SUNSHINE WATER SERVICES




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DATE	DESCRIPTION					

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PHONE NO. (407) 704-7815  
  
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P.E. LICENSE NUMBER 40049

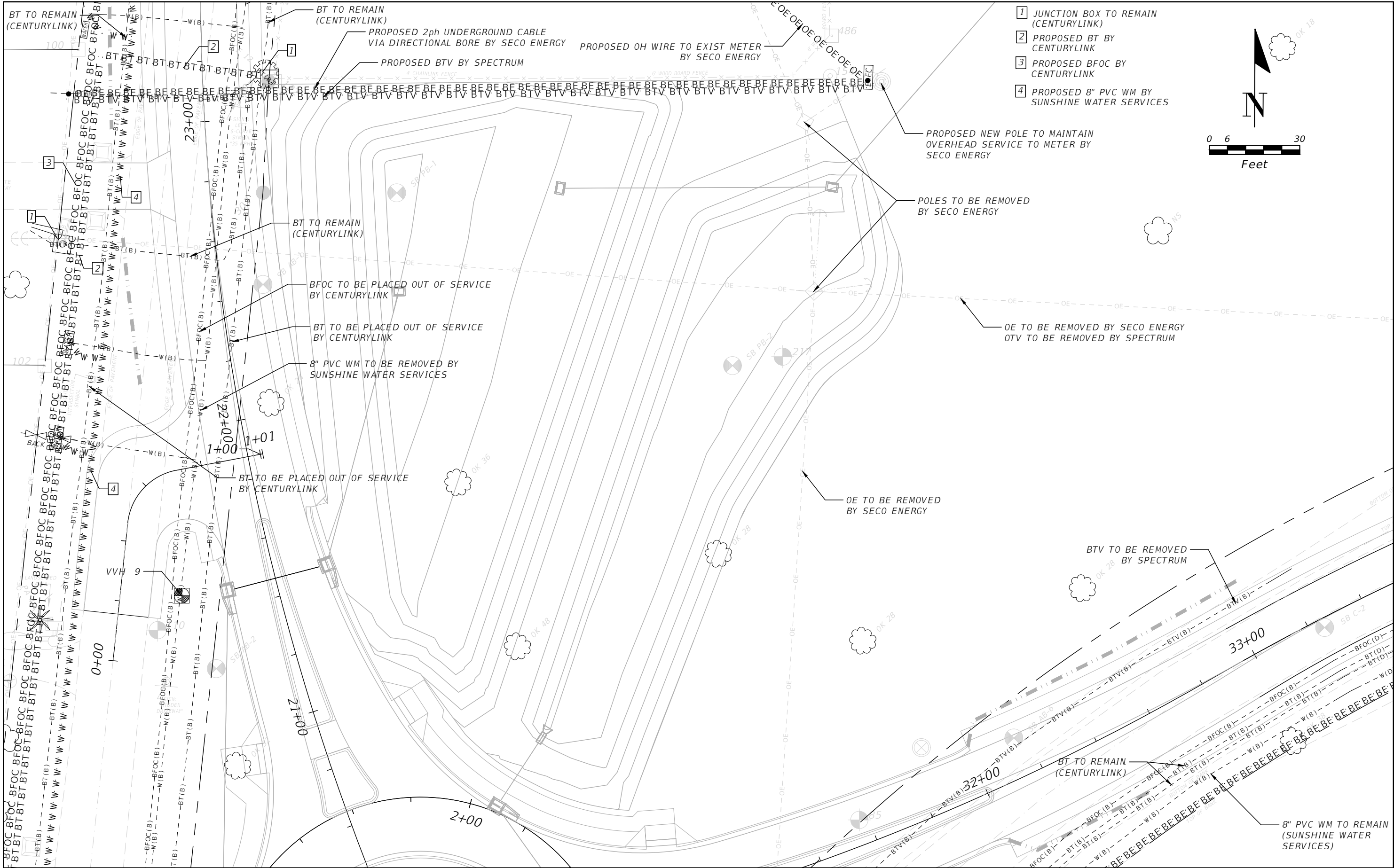


**CR 561 & LAKESHORE  
DRIVE ROUNDABOUT**


**UTILITY ADJUSTMENTS (4)  
LAKESHORE DRIVE**

SHEET  
NO.  
  
78

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OM ENGINEERING SERVICES, INC.  
621 E. WASHINGTON ST., STE 8  
ORLANDO, FLORIDA 32801  
PHONE NO. (407) 704-7815

ENGINEER OF RECORD: RICHARD DEAN BOBLETZ P.E.  
P.E. LICENSE NUMBER 40049



CR 561 & LAKESHORE  
DRIVE ROUNDABOUT

UTILITY ADJUSTMENTS (5)  
POND-NORTH

SHEET NO.
79

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

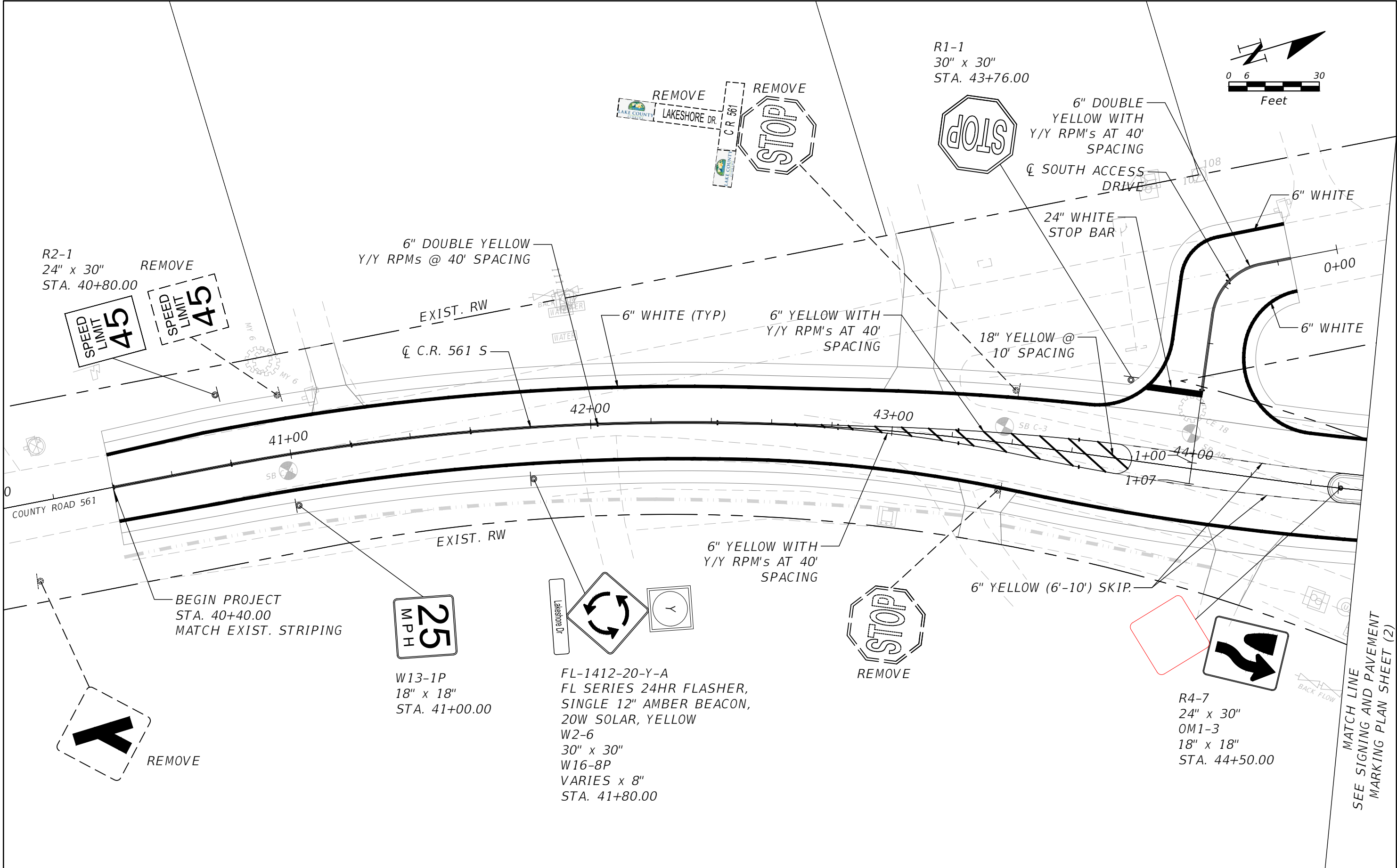


SIGNING & PAVEMENT MARKING GENERAL NOTES:

1.
- ALL PAVEMENT MARKINGS SHALL BE LEAD AND SOLVENT-FREE REFLECTORIZED THERMOPLASTIC PAVEMENT MARKINGS UNLESS OTHERWISE NOTED.
2.
- ALL PAVEMENT MARKINGS SHALL CONFORM TO THE LATEST EDITION OF FDOT STANDARDS, INCLUDING BUT NOT LIMITED TO 'STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, DESIGN STANDARDS, THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD, 2009 R1&R2), AND LAKE COUNTY SPECIFICATIONS. WHERE THE SPECIFICATIONS CONFLICT, THE MAXIMUM REQUIREMENTS SHALL APPLY UNLESS OTHERWISE DIRECTED BY THE RECORD ENGINEER.
3.
- ALL CENTERLINE PAVEMENT MARKINGS SHALL HAVE REFLECTIVE RAISED PAVEMENT MARKINGS (RPMS) PER FDOT STANDARDS INDEX 706-001 UNLESS OTHERWISE NOTED.
4.
- ALL EXISTING SIGNS ARE TO BE REMOVED UNLESS OTHERWISE NOTED ON THE PLANS. ALL TRAFFIC CONTROL SIGNS DISTURBED OR DAMAGED DURING CONSTRUCTION SHALL BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE COUNTY.
5.
- THE CONTRACTOR SHALL COORDINATE ALL PAVEMENT MARKINGS, SIGNING, AND SIGNAL WORK WITH LAKE COUNTY TRAFFIC OPERATIONS. THE CONTRACTOR SHALL NOTIFY LAKE COUNTY TRAFFIC OPERATIONS (352) 742-1766 AT LEAST 48 HOURS BEFORE THE COMMENCEMENT OF ANY PAVEMENT MARKINGS, SIGNING, OR SIGNAL WORK.
6.
- ALL SIGNS AND SIGNAL EQUIPMENT TO BE REMOVED ARE THE PROPERTY OF LAKE COUNTY. THESE ITEMS SHALL BE RETURNED TO LAKE COUNTY TRAFFIC OPERATIONS OR DISPOSED BY THE CONTRACTOR AT LAKE COUNTY TRAFFIC OPERATIONS' DIRECTION.
7.
- ALL MATERIALS AND HARDWARE SHALL BE FDOT APPROVED AND PRE-APPROVED BY LAKE COUNTY TRAFFIC OPERATIONS BEFORE INSTALLATION.
8.
- EXISTING PAVEMENT MARKINGS DESIGNATED FOR REMOVAL SHALL BE MILLED AND RESURFACED FOLLOWING FDOT REQUIREMENTS AND SPECIFICATIONS, SECTION 711.
9.
- IF PRESENT, LAKE EXPRESS BUS STOP SIGNS ARE NOT TO BE REMOVED NOR MOVED BY THE CONTRACTOR. ALL MOVES SHALL BE COORDINATED WITH AND HANDLED BY THE LAKE EXPRESS BUS STOP COORDINATOR AND SHALL BE CONTACTED 2 WEEKS BEFORE ANY SCHEDULED REMOVAL/RELOCATES OF THE BUS BENCHES AND SIGNS.
10.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY POST SIZES AND LENGTH BEFORE FABRICATION. THE CONTRACTOR MAY USE ALTERNATE POST MATERIAL UPON PROVIDING JUSTIFICATION TO THE ENGINEER OF RECORD.
11.
- FOR LOCATIONS THAT SPECIFY PREFORMED THERMOPLASTIC MARKINGS, THE CONTRACTOR SHALL FOLLOW THE MANUFACTURER'S SURFACE PREPARATION PROCEDURES, INCLUDING THE USE OF SURFACE-APPLIED ADHESIVE/PRIMER.

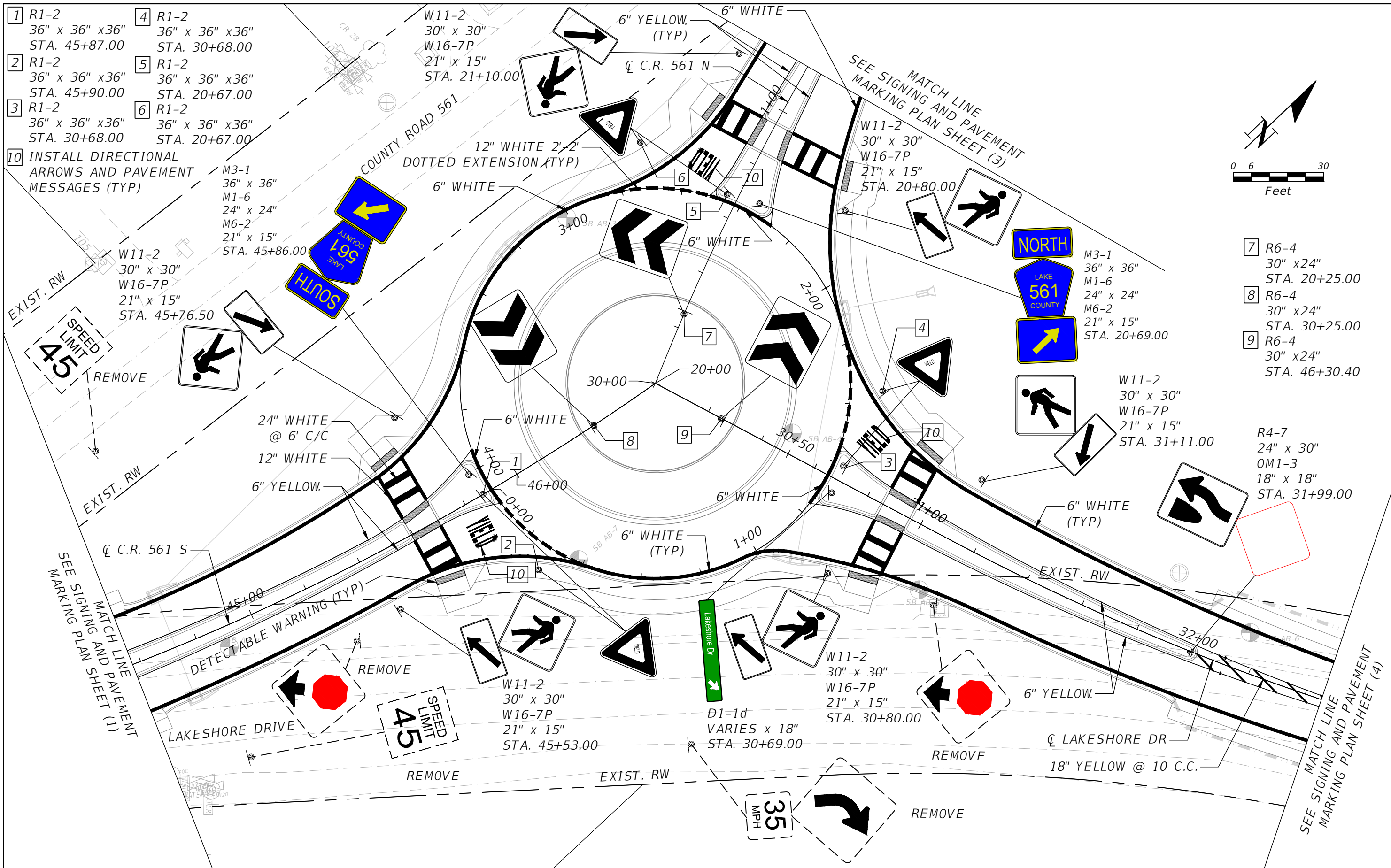
R E V I S I O N S		 <div>OM ENGINEERING SERVICES, INC. 621 E. WASHINGTON ST., STE 8 ORLANDO, FLORIDA 32801 PHONE NO. (407) 704-7815</div>		CR 561 & LAKESHORE DRIVE ROUNDABOUT	SIGNING AND PAVEMENT MARKING GENERAL NOTES (1)	SHEET NO.
DATE	DESCRIPTION					80





REVISIONS		 <div>OM ENGINEERING SERVICES, INC. 621 E. WASHINGTON ST., STE 8 ORLANDO, FLORIDA 32801 PHONE NO. (407) 704-7815</div>	 <div>LAKE COUNTY, FL REAL FLORIDA • REAL CLOSE</div>	CR 561 & LAKESHORE DRIVE ROUNDABOUT	SIGNING AND PAVEMENT MARKING (1) CR 561 S	SHEET NO.  81
DATE	DESCRIPTION					
		ENGINEER OF RECORD: RICHARD DEAN BOBLETZ P.E. P.E. LICENSE NUMBER 40049				

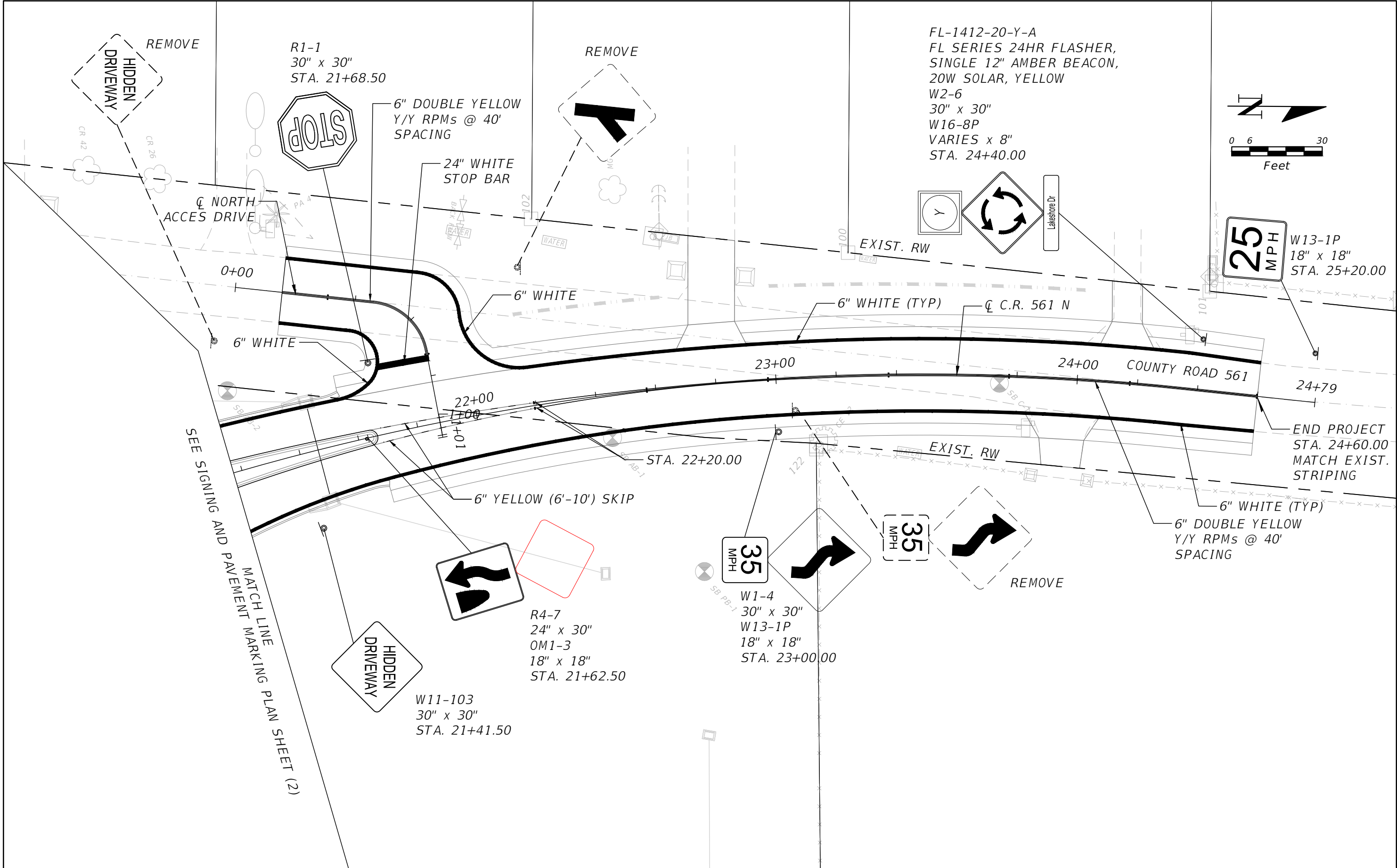
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REVISIONS		 <b>OM ENGINEERING SERVICES, INC.</b> Civil • Structural • Inspections 621 E. WASHINGTON ST., STE 8 ORLANDO, FLORIDA 32801 PHONE NO. (407) 704-7815	 <b>LAKE COUNTY, FL</b> REAL FLORIDA • REAL CLOSE	<b>CR 561 &amp; LAKESHORE DRIVE ROUNDABOUT</b>	<b>SIGNING AND PAVEMENT MARKING (2) ROUNDABOUT</b>	SHEET NO.  82
DATE	DESCRIPTION					
		ENGINEER OF RECORD: RICHARD DEAN BOBLETZ P.E. P.E. LICENSE NUMBER 40049				

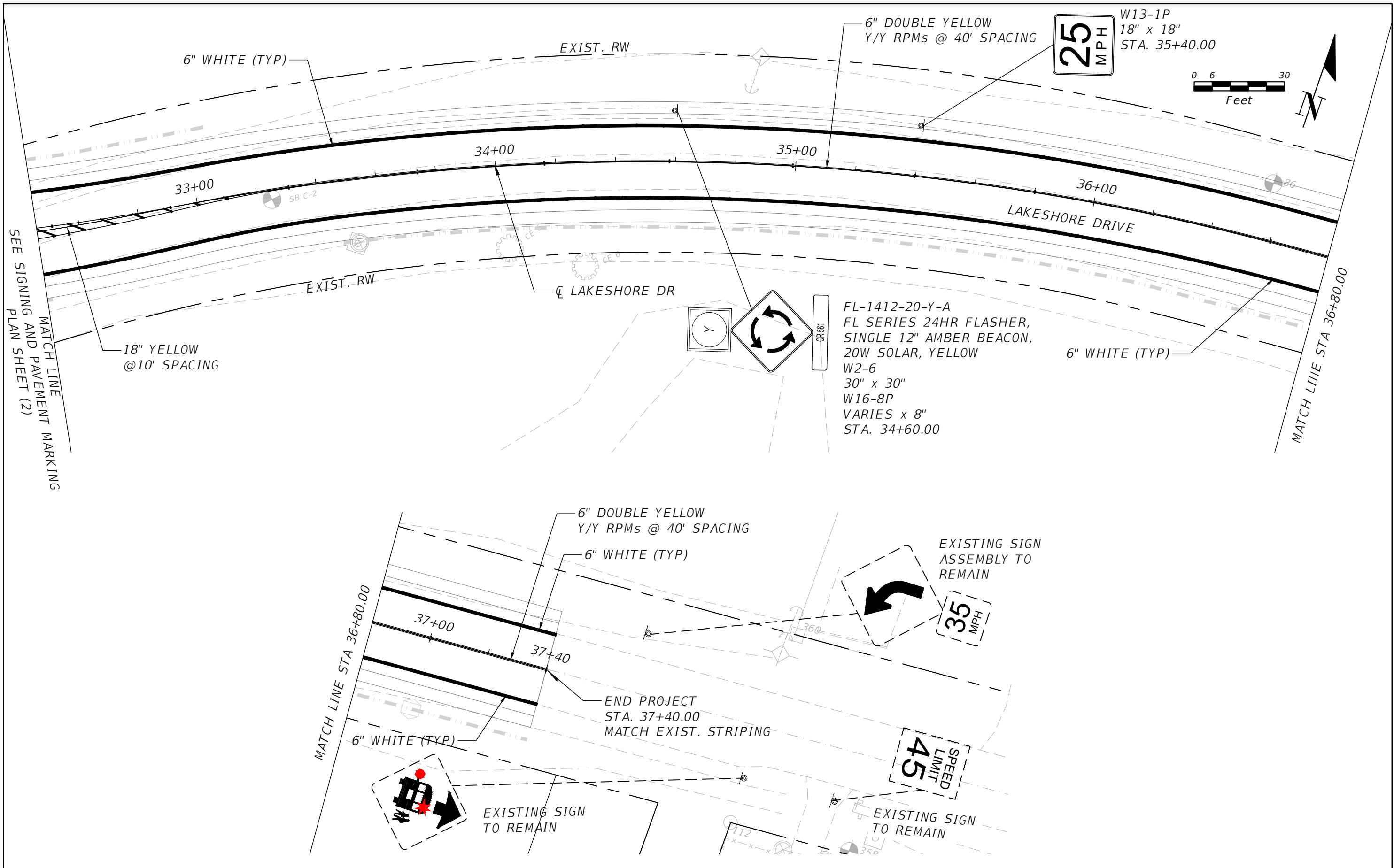
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REVISIONS		 <b>OM ENGINEERING SERVICES, INC.</b> Civil • Structural • Inspections 621 E. WASHINGTON ST., STE 8 ORLANDO, FLORIDA 32801 PHONE NO. (407) 704-7815	 <b>LAKE COUNTY, FL</b> REAL FLORIDA • REAL CLOSE	<i>CR 561 &amp; LAKESHORE DRIVE ROUNDABOUT</i>	<i>SIGNING AND PAVEMENT MARKING (3) CR 561 N</i>	SHEET NO.
DATE	DESCRIPTION					
		ENGINEER OF RECORD: RICHARD DEAN BOBLETZ P.E. P.E. LICENSE NUMBER 40049				83



REVISIONS		 <b>OM ENGINEERING SERVICES, INC.</b> Civil • Structural • Inspections 621 E. WASHINGTON ST., STE 8 ORLANDO, FLORIDA 32801 PHONE NO. (407) 704-7815 ENGINEER OF RECORD: RICHARD DEAN BOBLETZ P.E. P.E. LICENSE NUMBER 40049	 <b>LAKE COUNTY, FL</b> REAL FLORIDA • REAL CLOSE	<b>CR 561 &amp; LAKESHORE DRIVE ROUNDABOUT</b>	<b>SIGNING AND PAVEMENT MARKING (4) LAKESHORE DRIVE</b>	SHEET NO.  84
DATE	DESCRIPTION					

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GENERAL NOTES:

1.

A PRE-CONSTRUCTION MEETING SHALL BE SCHEDULED BY GENERAL CONTRACTOR WITH LAKE COUNTY TRAFFIC OPERATIONS, (352) 742-1766, PRIOR TO ANY CONSTRUCTION.
2.

IT SHALL BE NOTED THAT NO TEST BORINGS BE MADE WHERE CONDUIT RUNS ARE TO BE INSTALLED. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO EXAMINE THE JOB SITE CONDITIONS PRIOR TO SUBMITTING PROPOSALS ,NOTIFY EOR AND LAKE COUNTY.
3.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING LAKE COUNTY TRAFFIC OPERATIONS, AT 352-742-1766, 48 HOURS IN ADVANCE OF ALL PHASES OF CONSTRUCTION.
4.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ALL NECESSARY PERMITS INCLUDING THE ELECTRIC PERMIT. THE APPLICATION FOR POWER SHOULD BE COORDINATED WITH LAKE COUNTY TRAFFIC OPERATIONS.
5.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE POWER COMPANY (SECO ENERGY) PROVIDING THE ELECTRICAL POWER, TO DETERMINE IF ANY ADDITIONAL FEES ARE REQUIRED TO CONNECT POWER. IF REQUIRED, THE FEE SHALL BE INCLUDED AS PART OF BID ITEM PAYMENT FOR ELECTRICAL SERVICE ASSEMBLY. COORDINATE DELIVERY SCHEDULE OF NEW EQUIPMENT FURNISHED BY SECO ENERGY. NOTIFY LAKE COUNTY OF ANY LONG LEAD ITEMS.  
  
CONTACT: SECO ENERGY    DAVID PRZYSTAWSKI        (352) 569-9837
6.

VERIFY THE EXACT LOCATIONS OF ALL UTILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR PRIOR TO BEGINNING OF CONSTRUCTION.
7.

ALL MATERIALS AND HARDWARE SHALL BE F.D.O.T. APPROVED LIST (APL), AND PRE-APPROVED BY LAKE COUNTY TRAFFIC OPERATIONS.
8.

PULL BOX COVERS SHALL BE F.D.O.T. APPROVED NON METALLIC WITH RECESSED COVER LOGO "TRAFFIC LIGHTING". PROVIDE TRAFFIC RATED COVERS WHERE APPLICABLE.
9.

PULL BOXES SHALL BE LOCATED AWAY FROM EDGE OF PAVEMENT, OR BEHIND A CURB WHEN POSSIBLE, ATTEMPTING TO KEEP AWAY FROM THE BOTTOM OF A DITCH OR RETENTION AREA, AND WHERE LARGE VEHICLES PARK.
10.

DIRECTIONAL BORES SHALL BE INSTALLED BELOW EXISTING AND PROPOSED UTILITIES. CONTRACTOR SHALL REFERENCE CR 561 AT LAKESHORE DRIVE ROUNDABOUT PLANS AND COORDINATE WITH LAKE COUNTY INSPECTOR PRIOR TO DIRECTIONAL BORES.
11.

CONTRACTOR SHALL STAKE POLES AND COORDINATE WITH LAKE COUNTY INSPECTOR ON LOCATION PRIOR TO INSTALLATION OF POLES.

REVISIONS		 <div>OM ENGINEERING SERVICES, INC. 621 E. WASHINGTON ST., STE 8 ORLANDO, FLORIDA 32801 PHONE NO. (407) 704-7815</div>		CR 561 & LAKESHORE DRIVE ROUNDABOUT	LIGHTING PLAN GENERAL NOTES ROUNDABOUT	SHEET NO.
DATE	DESCRIPTION					LT-1

POLE DATA										
POLE NO.	CIRCUIT	STATION	SYMBOL	BASELINE	DIST. OF ARM	LUMUNAIRE WATTAGE	MOUNTING HEIGHT	POLE OFFSET	SIDE	PAY ITEM
1	A-1	STA. 0+59.93	SL-2	⦿ INSCRIBED CIRCLE	8'	212	30'	13.67'	RT	715-4-12
2	A-1	STA. 3+19.00	SL-2	⦿ INSCRIBED CIRCLE	8'	212	30'	10.88'	RT	715-4-12
3	A-1	STA. 1+86.22	SL-2	⦿ INSCRIBED CIRCLE	8'	212	30'	16.35'	RT	715-4-12
4	A-1	STA. 42+99.02	SL-1	⦿ C.R. 561 S	8'	87	30'	24.89'	RT	715-4-12
5	A-1	STA. 44+40.00	SL-1	⦿ C.R. 561 S	8'	87	30'	25.87'	LT	715-4-12
6	A-1	STA. 45+24.97	SL-1	⦿ C.R. 561 S	8'	87	30'	20.12'	RT	715-4-12
7	A-1	STA. 31+36.18	SL-1	⦿ LAKESHORE DR	8'	87	30'	25.14'	LT	715-4-12
8	A-1	STA. 21+25.72	SL-1	⦿ C.R. 561 N	8'	87	30'	21.56'	LT	715-4-12
9	A-1	STA. 22+48.44	SL-1	⦿ C.R. 561 N	8'	87	30'	23.81'	LT	715-4-12
10	A-1	STA. 23+64.76	SL-1	⦿ C.R. 561 N	8'	87	30'	22.78'	LT	715-4-12
11	A-1	STA. 32+73.78	SL-1	⦿ LAKESHORE DR	8'	87	30'	23.85'	LT	715-4-12
12	A-1	STA. 33+79.31	SL-1	⦿ LAKESHORE DR	8'	87	30'	19.16'	RT	715-4-12

LIGHT FIXTURE SCHEDULE								
TYPE	MANUFACTURER	CATALOG NO.	LAMP DATA			VOLTS	MOUNTING	NOTES
			NO.	WATTS	TYPE			
SL-1	EVOLVE	ERL1-0-11-C5-30-D-GRAY-GIT ELSHS-ERLI-GRAY	1	87	LED	240	POLE (30 FT)	1
SL-2	EVOLVE	ERL2-0-27-C5-30-D-GRAY-GIT ELSHS-ERL2-GRAY	1	212	LED	240	POLE (30 FT)	1
ROUND CONCRETE POLE	TRADITIONAL CONCRETE	D330-SK-E-AWG-T-TEA	----	----	----	----	36 FT	2

NOTES:

1. FIXTURE PROVIDED WITH HOUSE SIDE SHIELDS.
2. POLE PROVIDED WITH TAPERED ELLIPTICAL 8FT SKY GRAY ARM. CONTRACTOR SHALL INSTALL FIXTURE ON ARM. COORDINATE WITH MANUFACTURER TO FURNISH AND INSTALL A COMPLETE UNIT (POLE, ARM & FIXTURE).

GENERAL NOTE:

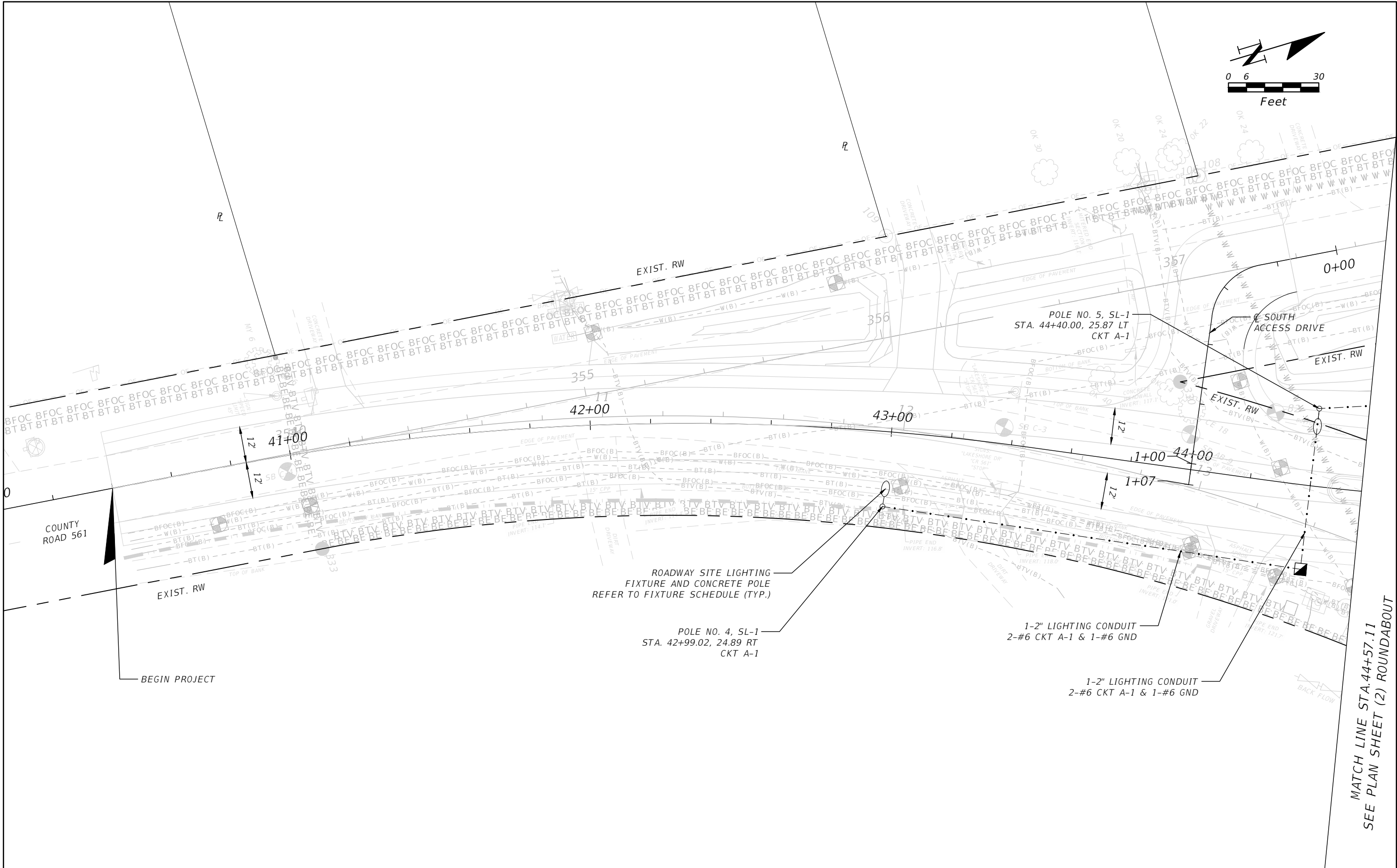
IF CONTRACTOR (EC) PROPOSES TO PROVIDE ALTERNATE LIGHTING AND POLE MANUFACTURE THEY SHALL SUBMIT TO EOR AND LAKE COUNTY FOR PRIOR APPROVAL. IF APPROVED GC SHALL BE RESPONSIBLE FOR SUBMITTING SHOP DRAWINGS WITH ALTERNATE MANUFACTURES CUT SHEETS AND PHOTOMETRICS TO COMPLY WITH DESIGN CRITERIA.

ROUNDAABOUT				ROADWAY			
LIGHTING DESIGN CRITERIA				LIGHTING DESIGN CRITERIA			
AVERAGE INITIAL INTENSITY	3.0 FOOT CANDLES	AVERAGE INITIAL INTENSITY	1.0 FOOT CANDLES				
VERTICAL ILLUMINATION LEVEL	1.5 FOOT CANDLES	UNIFORMITY RATIO AVG./MIN.	4:1 OR LESS				
UNIFORMITY RATIO AVG./MIN.	4:1 OR LESS	MAX./MIN.	10:1 OR LESS				
MAX./MIN.	10:1 OR LESS	WIND SPEED	140 MPH				
WIND SPEED	140 MPH						

LEGEND

SYMBOLS	DESCRIPTION
	SINGLE ARM CONVENTIONAL ROADWAY MOUNTED 87 WATT LED LUMINAIRE AND POLE. DESIGNED FOR TYPE III MEDIUM DISTRIBUTION. LUMINAIRE WIRED FOR 240 VOLT OPERATION. REFER TO LIGHTING FIXTURE SCHEDULE.
	SINGLE ARM CONVENTIONAL ROADWAY MOUNTED 212 WATT LED LUMINAIRE AND POLE. DESIGNED FOR TYPE III MEDIUM DISTRIBUTION. LUMINAIRE WIRED FOR 240 VOLT OPERATION. REFER TO LIGHTING FIXTURE SCHEDULE.
	OPEN TRENCH CONDUIT WITH CONDUCTORS INSIDE (CONDUCTOR SIZE AS SHOWN ON PLAN SHEETS) FDOT PAY ITEMS: 630-2-11 & 715-1-12
	NEMA 3R PULL BOX
	PROPOSED LOAD CENTER. REFER TO SERVICE POINT DETAIL SHEETS. COORDINATE EXACT LOCATION WITH LAKE COUNTY AND SECO ENERGY. FDOT PAY ITEMS: 639-1-121, 639-2-1, 639-3-11, 641-2-11

REVISIONS			<div>OM ENGINEERING SERVICES, INC. 621 E. WASHINGTON ST., STE 8 ORLANDO, FLORIDA 32801 PHONE NO. (407) 704-7815</div>		CR 561 & LAKESHORE DRIVE ROUNDAABOUT	LIGHTING PLAN POLE DATA TABLE AND LEGEND ROUNDAABOUT	SHEET NO.
DATE	DESCRIPTION						
							LT-2



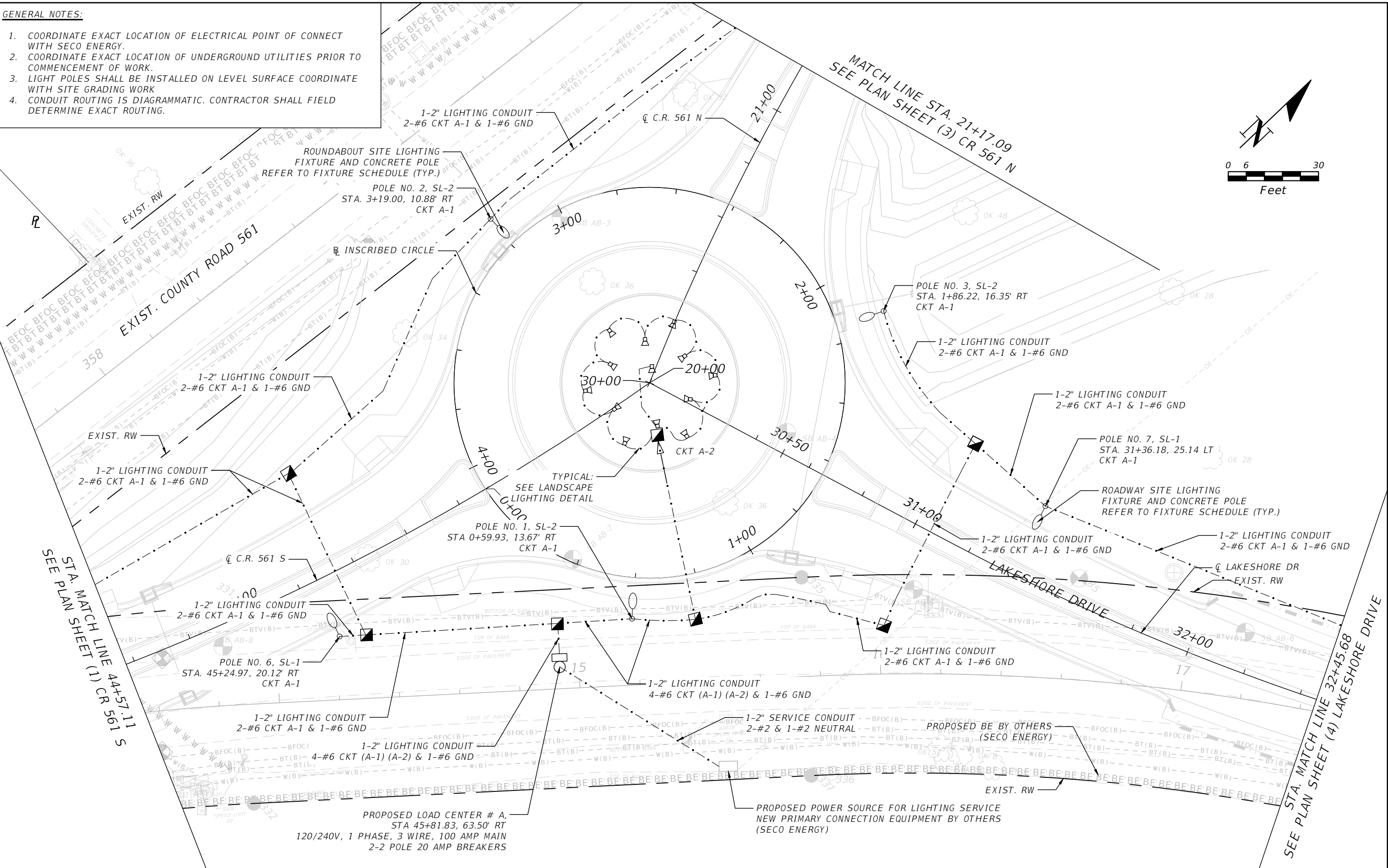
REVISIONS		 <b>OM ENGINEERING SERVICES, INC.</b> Civil • Structural • Inspections 621 E. WASHINGTON ST., STE 8 ORLANDO, FLORIDA 32801 PHONE NO. (407) 704-7815  ENGINEER OF RECORD: NIMESH BHAVSAR, P.E. P.E. LICENSE NUMBER 56861	 <b>LAKE COUNTY, FL</b> REAL FLORIDA • REAL CLOSE	<b>CR 561 &amp; LAKESHORE DRIVE ROUNDABOUT</b>	<b>LIGHTING PLAN</b> <b>CR 561 S</b>	SHEET NO.
DATE	DESCRIPTION					LT-3

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GENERAL NOTES:

1. COORDINATE EXACT LOCATION OF ELECTRICAL POINT OF CONNECT WITH SECO ENERGY.
2. COORDINATE EXACT LOCATION OF UNDERGROUND UTILITIES PRIOR TO COMMENCEMENT OF WORK.
3. LIGHT POLES SHALL BE INSTALLED ON LEVEL SURFACE COORDINATE WITH SITE GRADING WORK
4. CONDUIT ROUTING IS DIAGRAMMATIC. CONTRACTOR SHALL FIELD DETERMINE EXACT ROUTING.



REVISIONS	
DATE	DESCRIPTION



**OM ENGINEERING SERVICES, INC.**  
Civil • Structural • Inspections

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PHONE NO. (407) 704-7815

ENGINEER OF RECORD: NIMESH BHAVSAR, P.E.  
P.E. LICENSE NUMBER 56861



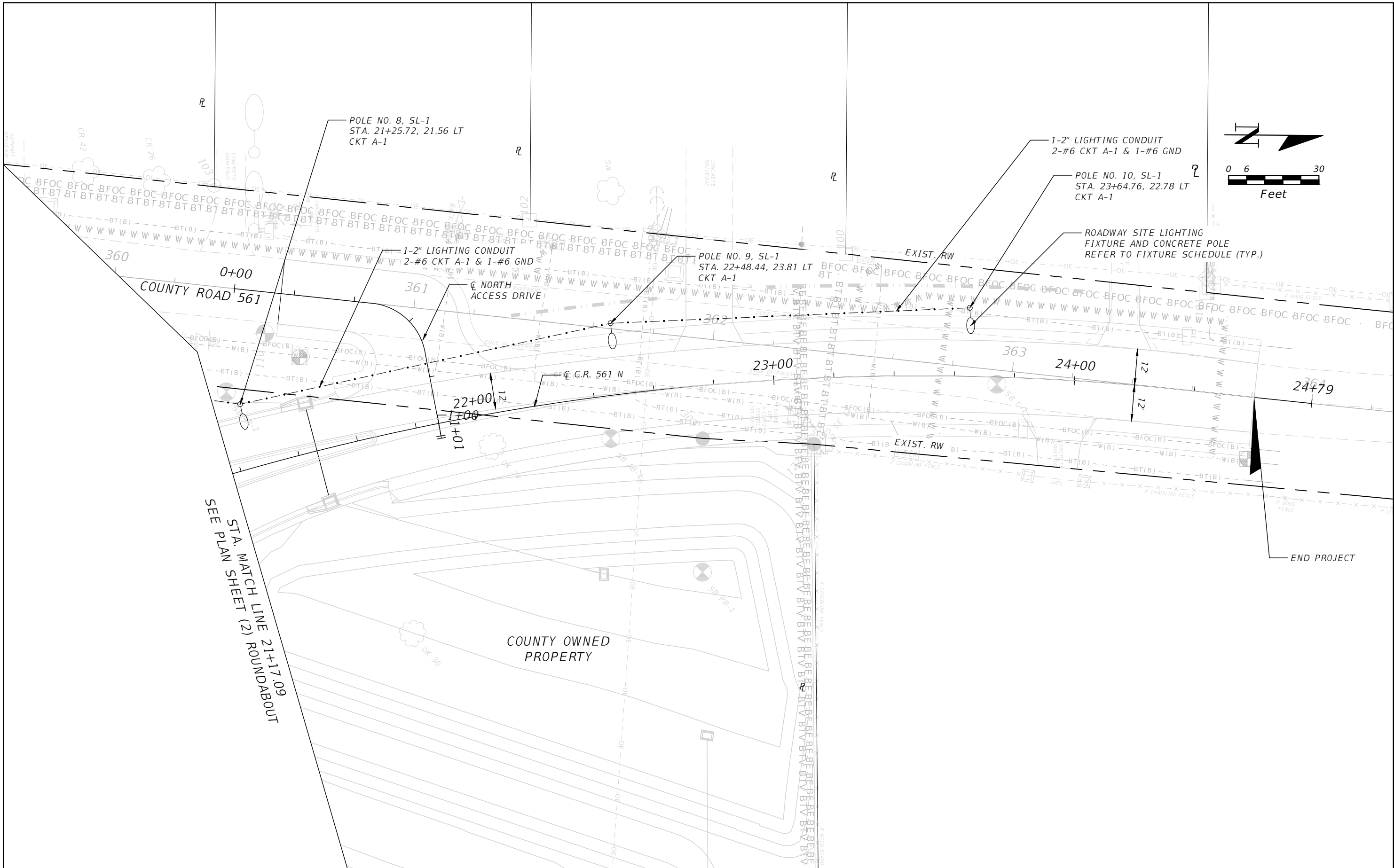
**LAKE COUNTY, FL**  
REAL FLORIDA • REAL CLOSE

CR 561 & LAKESHORE  
DRIVE ROUNDABOUT

LIGHTING PLAN  
ROUNDABOUT

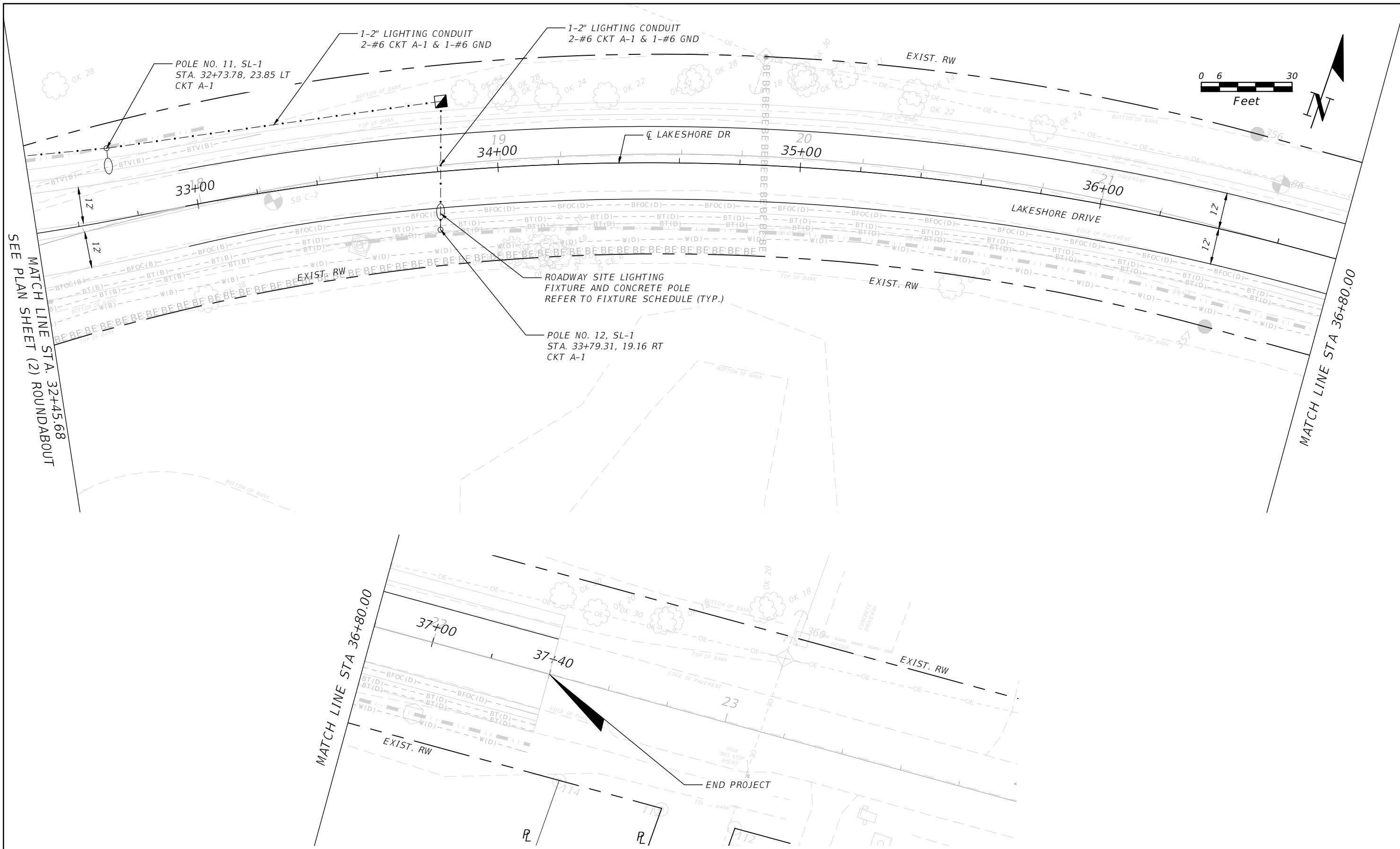
SHEET NO.
LT-4






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DATE	DESCRIPTION					LT-5
		ENGINEER OF RECORD: NIMESH BHAVSAR, P.E. P.E. LICENSE NUMBER 56861				



REVISIONS	
DATE	DESCRIPTION



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P.E. LICENSE NUMBER 56861



**CR 561 & LAKESHORE  
DRIVE ROUNDABOUT**

**LIGHTING PLAN  
LAKESHORE DRIVE**

SHEET NO.  
**LT-6**

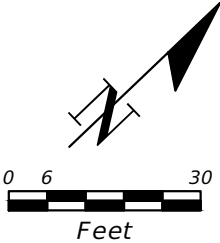
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LIGHT FIXTURE SCHEDULE




MARK	LAMP DATA		FIXTURE DESCRIPTION	FIXTURE DATA		MOUNT	VOLTAGE	NOTE
	NO.	TYPE		MANUFACTURER	CATALOG NUMBER			
L1	-	LED (20W)	LED FLOODLIGHT. ADJUSTABLE STANCHION MOUNTED. WITH GLARE SHIELD.	KIM LIGHTING	KFL1-8L-20-3K7-WF  UNV-K-LTG-HS-SM18-LTG	GRADE	240	

LIGHTING FIXTURE GENERAL NOTES:

1. CONTRACTOR SHALL PROVIDE ALL REQUIRED FIXTURE MOUNTING HARDWARE.
2. SPECIFIED FINISH IS GRAY. VERIFY EXACT FINISH WITH LAKE COUNTY PRIOR TO SUBMITTING SHOP DRAWINGS.
3. IF CONTRACTOR (EC) PROPOSES TO PROVIDE ALTERNATE LANDSCAPE LIGHTING MANUFACTURE THEY SHALL SUBMIT TO EOR AND LAKE COUNTY FOR PRIOR APPROVAL. IF APPROVED GC SHALL BE RESPONSIBLE FOR SUBMITTING SHOP DRAWINGS WITH ALTERNATE MANUFACTURES CUT SHEETS AND MOUNTING HARDWARE TO COMPLY WITH DESIGN CRITERIA.

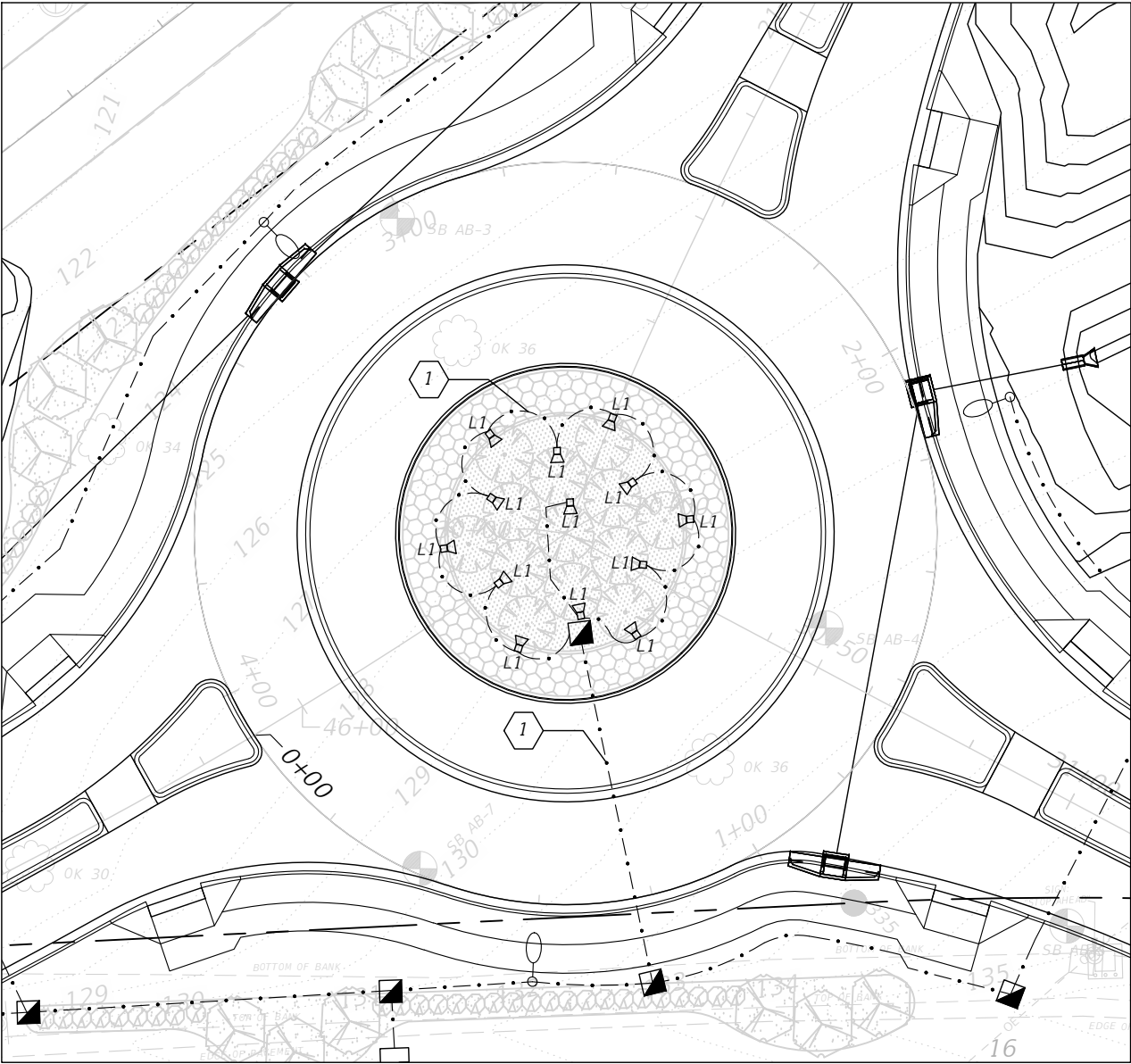


SYMBOL LEGEND

-  L1 GRADE MOUNTING LED FLOODLIGHT SEE MOUNTING DETAIL AND LIGHT FIXTURE SCHEDULE.
-  NEMA 3R IN-GRADE PULLBOX. SEE DETAIL.
-  BRANCH CIRCUIT CONDUCTORS IN CONDUIT AS SHOWN IN PLAN VIEW OF LANDSCAPE LIGHTING DETAIL

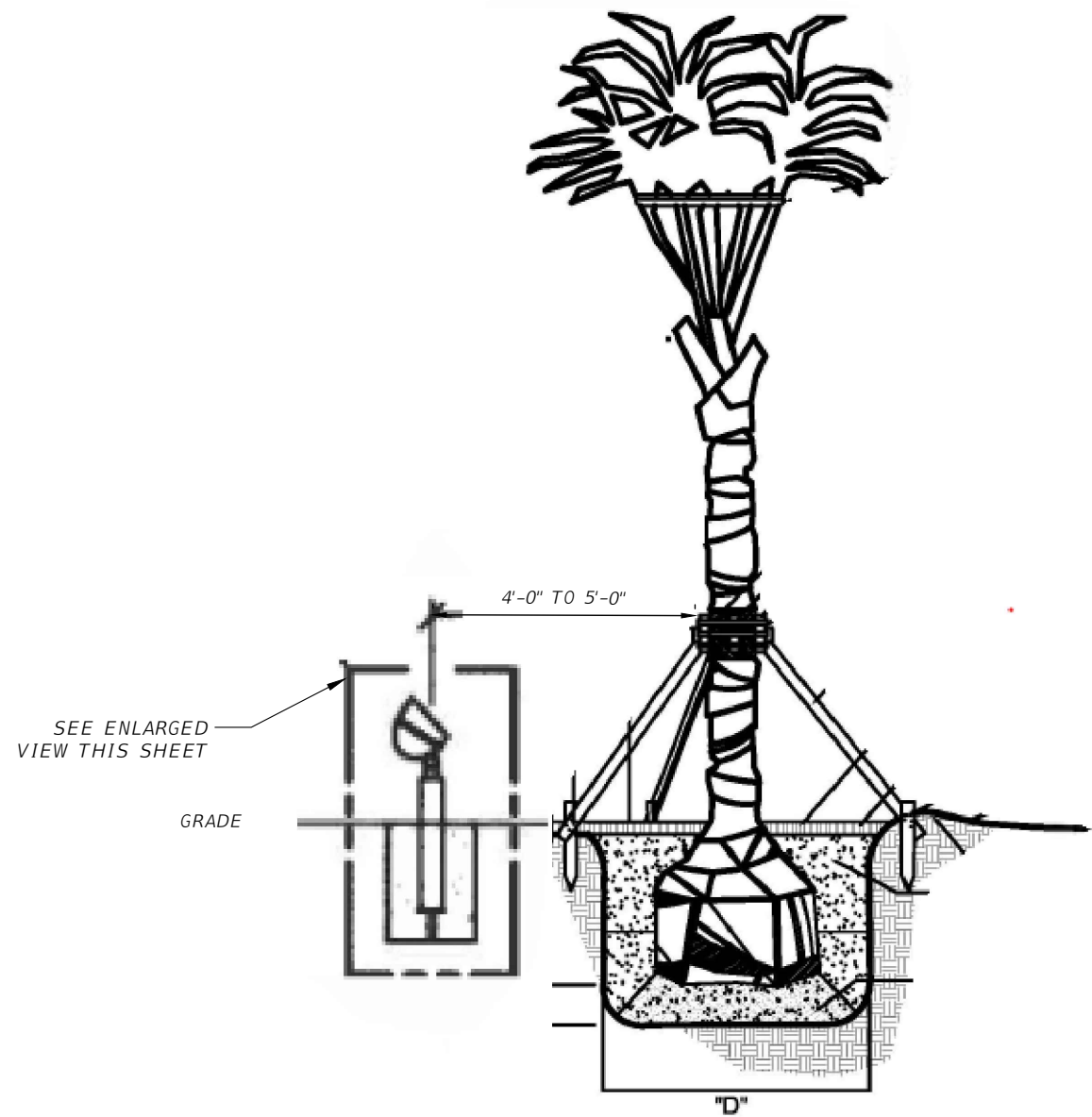
REFERENCE NOTES:

-  1-2" LIGHTING CONDUIT 2-#6 AWG UNDERGROUND BRANCH CIRCUIT CONDUCTORS AND 1-#6 GROUND FOR LANDSCAPE LIGHTING CIRCUIT A-2.



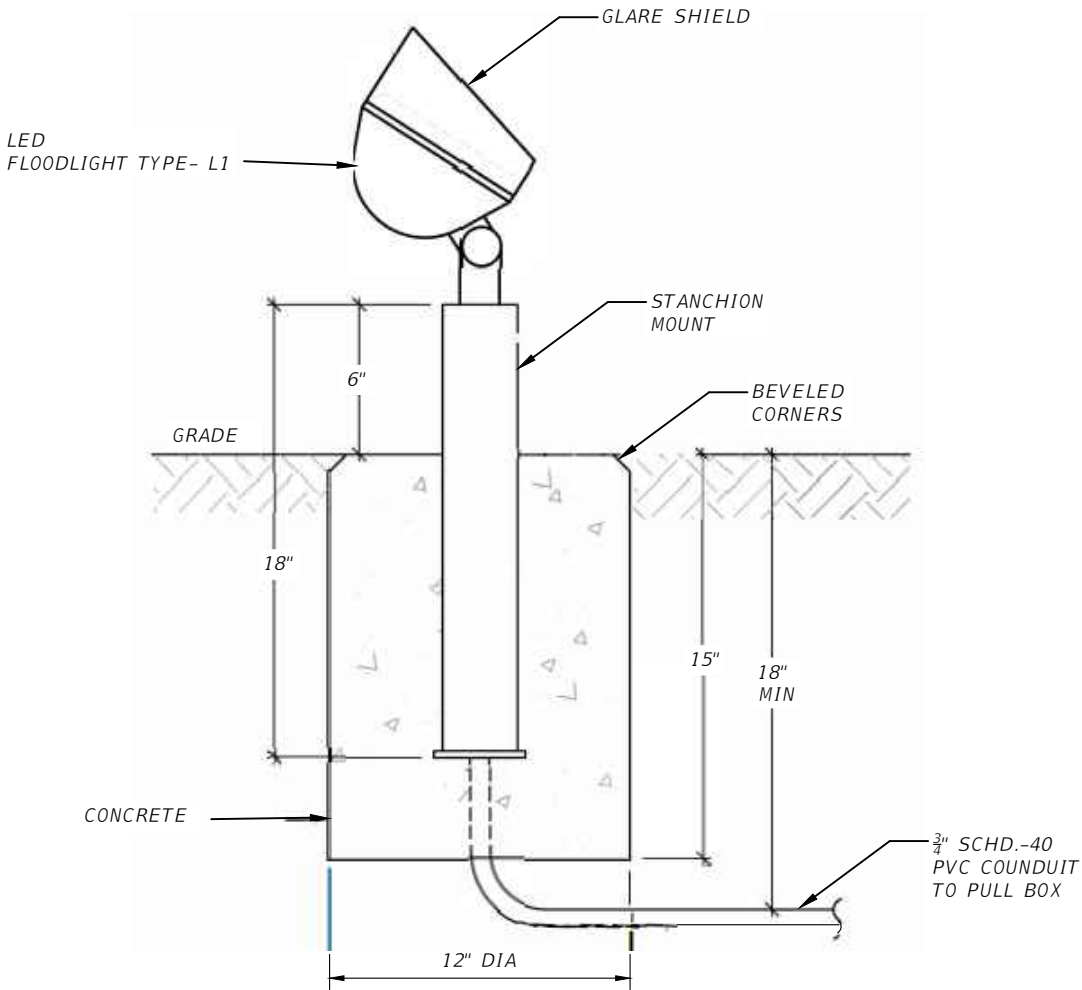
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DATE	DESCRIPTION					
		ENGINEER OF RECORD: NIMESH BHAVSAR, P.E. P.E. LICENSE NUMBER 56861				





LANDSCAPE FIXTURE MOUNTING DETAIL.  
(NOT TO SCALE)

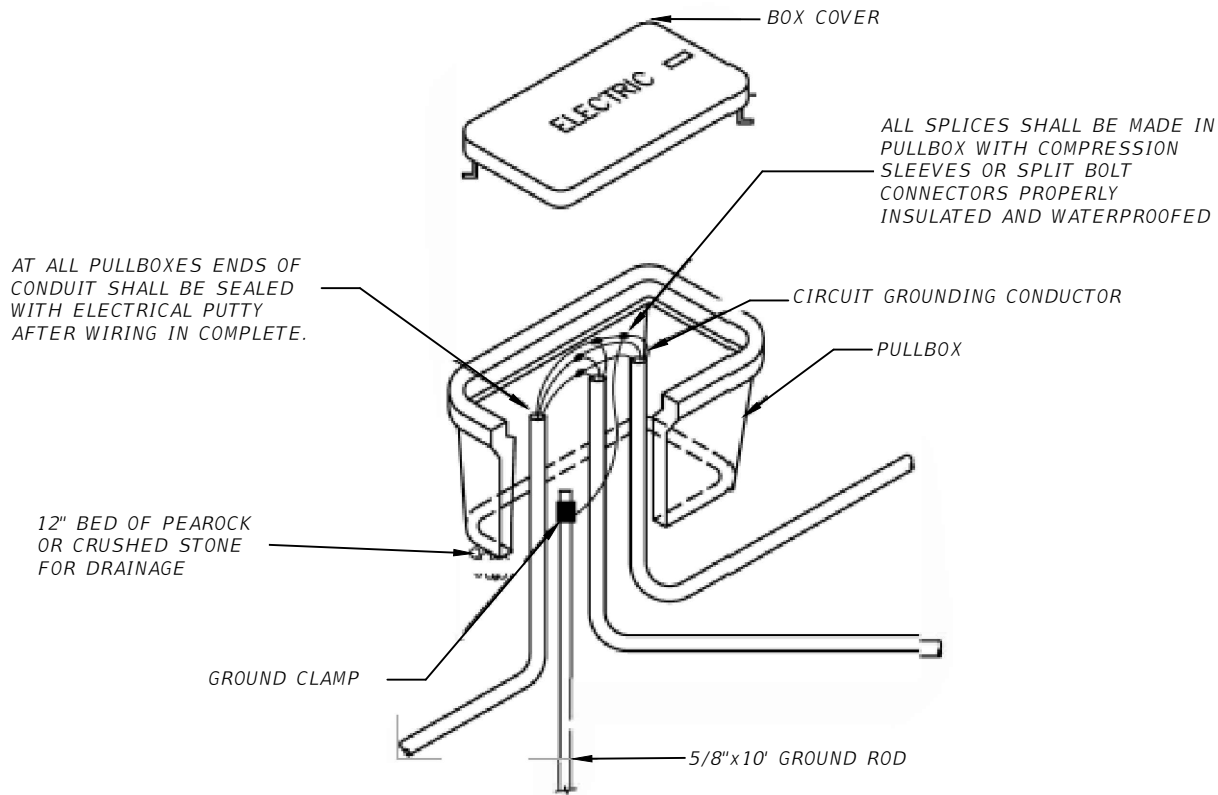
NOTES:  
ANGLE OF FIXTURE TO BE ADJUSTED IN THE FIELD AS COORDINATED WITH LAKE COUNTY.



LANDSCAPE FIXTURE ENLARGED DETAIL  
(NOT TO SCALE)

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DATE	DESCRIPTION					



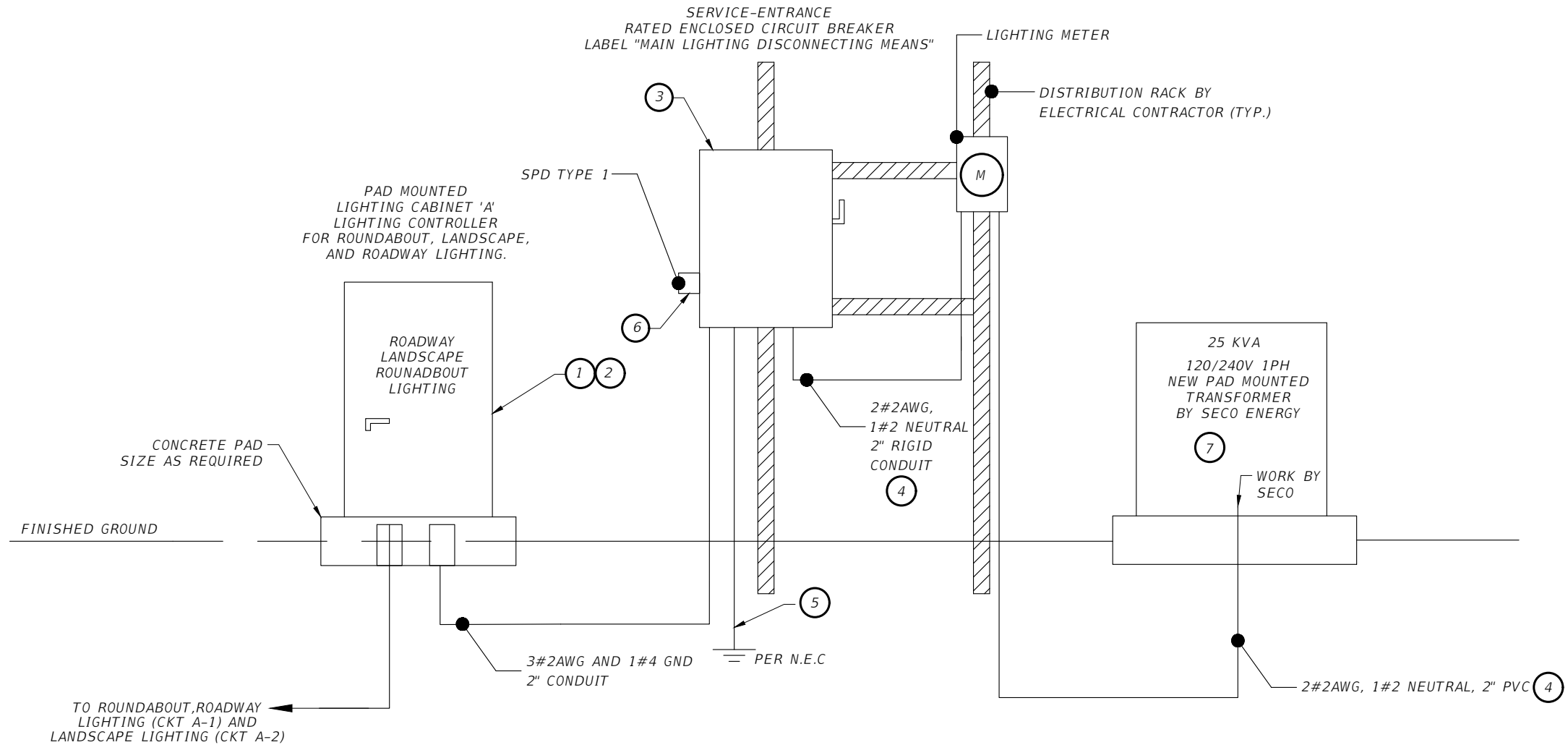


GENERAL NOTES:

1. BOX SHALL BE NEMA 3R QUARTZITE, 13"x24"x18" WITHOUT BOTTOM, WITH UL LABEL. NATURAL GRAY COLOR UNLESS SPECIFIED OTHERWISE.
2. COVER LOGO SHALL READ "ELECTRIC".
3. PROVIDE 6 TO 8 INCHES OF GRAVEL OR CRUSHED ROCK BASE FOR DRAINAGE.
4. BOXES MAY BE NESTED FOR DEEP CONDUIT AND FOR MORE WORKING ROOM.
5. SPLICES AND TAPS FOR CONDUCTORS SHALL BE UL LISTED FOR WET LOCATIONS.
6. LOCATE PULL BOX IN GRASS AREA WHEN POSSIBLE. COORDINATE ELEVATION WITH SITE GRADING. NO BOXES SHALL BE LOCATED IN SIDEWALKS OR ROADWAYS.

TYPICAL IN-GRADE PULL BOX WIRING DETAIL  
NOT TO SCALE

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DATE	DESCRIPTION					LT-9
		ENGINEER OF RECORD: NIMESH BHAVSAR, P.E. P.E. LICENSE NUMBER 56861				



LOAD CENTER A- ELECTRICAL RISER DIAGRAM

(NOT TO SCALE)

SERVICE POINT SPECIAL NOTES:

1. CONTRACTOR SHALL COORDINATE WITH THE LOCAL POWER COMPANY FOR UTILITY TRANSFORMER CONNECTIONS.
2. METER SOCKET AND GROUNDING FURNISHED AND INSTALLED BY CONTRACTOR PER THE POWER COMPANY'S REQUIREMENTS. METER FURNISHED BY THE POWER COMPANY.
3. SECO ENERGY'S POINT OF CONTACT IS MR. DAVID PRYZSTWASKI PHONE NO. (352) 569-9837

PANELBOARD SCHEDULE NOTES:

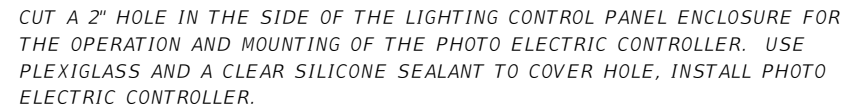
1. ALL MAIN AND BRANCH CIRCUIT BREAKERS SHALL BE A MINIMUM OF 18 KAIC FULLY RATED. VERIFY EXACT A/C RATING WITH POWER COMPANY AND ADJUST ACCORDINGLY.
2. PANELBOARD SHALL BE NEMA 1, UL 67 RATED WITH COPPER BUSSING, EQUIPPED WITH NEUTRAL BUS, GROUND BUS, TO BE INSTALLED INSIDE THE LIGHTING CABINET.
3. CONTRACTOR SHALL PROVIDE TYPEWRITTEN PANELBOARD CIRCUIT DIRECTORY WITH A CLEAR PLASTIC COVER TO BE PLACED INSIDE THE PANELBOARD DOOR. THE CIRCUIT DIRECTORY INFORMATION SHALL MATCH THE POLE IDENTIFICATION TAG INFORMATION.

ELECTRICAL RISER DIAGRAM KEYED NOTES:

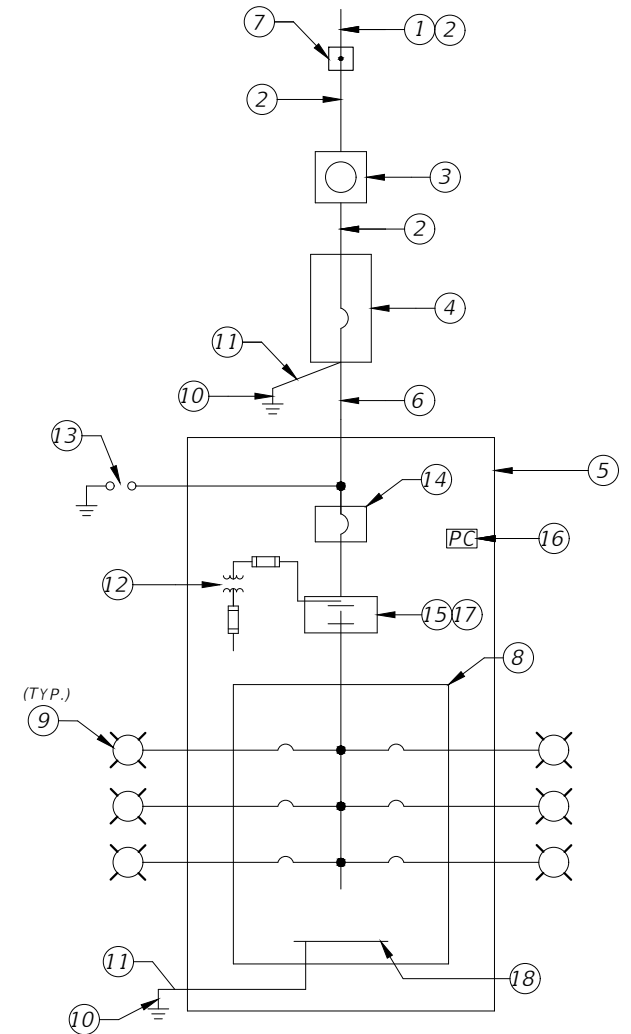
1. LIGHTING CABINET SHALL BE FACTORY ASSEMBLED AND TESTED PRIOR TO SHIPMENT TO THE PROJECT SITE FOR INSTALLATION. ALL COMPONENT DEVICES SHALL BE UL LISTED AND LABELED. THE FULLY ASSEMBLED LIGHTING CABINET SHALL BE CERTIFIED BY UL.
2. CONTRACTOR SHALL FURNISH LIGHTING CABINET SIZED TO ACCOMMODATE THE COMPONENT DEVICES AND MATERIAL SPECIFIED TO BE INSTALLED INSIDE THE CABINET. CABINET SHALL BE NEMA 4X, STAINLESS STEEL, SINGLE CONTINUOUS HINGED DOOR WITH BACK PANEL AND PAD LOCK.
3. SERVICE-ENTRANCE RATED ENCLOSED CIRCUIT BREAKER USED, NEMA 4X, STAINLESS STEEL, MAIN BONDING JUMPER, 2 POLES, S/N, 100A, 35,000 AIC, 240 V OPERATION.
4. SERVICE CONDUCTORS, 2-NO. 2 AWG PHASE AND 1-NO. 2 AWG NEUTRAL, USING 2" PVC SCHEDULE 40 FOR UNDERGROUND AND RIGID CONDUITS FOR THE ABOVE GROUND INSTALLATIONS.
5. COPPER CLAD GROUNDING RODS, 5/8", 40' LONG MINIMUM, 12" UNDER THE FINAL GRADE, EXOTHERMIC WELD. USE #4 AWG TO BE CONNECTED TO GROUND ROD VIA EXOTHERMIC WELD.
6. SURGE PROTECTION DEVICE (SPD), TYPE 1, PER LATEST UL, IEEE/ANSI AND NEC REQUIREMENTS.
7. COORDINATE EXACT LOCATION OF NEW PAD MOUNTED TRANSFORMER WITH SECO ENERGY.

REVISIONS		 <b>OM ENGINEERING SERVICES, INC.</b> Civil • Structural • Inspections 621 E. WASHINGTON ST., STE 8 ORLANDO, FLORIDA 32801 PHONE NO. (407) 704-7815  ENGINEER OF RECORD: NIMESH BHAVSAR, P.E. P.E. LICENSE NUMBER 56861	 <b>LAKE COUNTY, FL</b> REAL FLORIDA • REAL CLOSE	<i>CR 561 &amp; LAKESHORE DRIVE ROUNDABOUT</i>	<i>LIGHTING PLAN SERVICE POINT DETAILS (1) ROUNDABOUT</i>	SHEET NO.
DATE	DESCRIPTION					LT-10

1. 120/240V, SINGLE PHASE, 3-WIRE UNDERGROUND POWER SERVICE.
2. 2-#2 AWG UNDERGROUNDED SERVICE CONDUCTORS & 1-#2 AWG GROUNDED SERVICE CONDUCTOR (NEUTRAL) ON 2" UNDERGROUND CONDUIT.
3. METER SOCKET BY CONTRACTOR, METER BY THE LOCAL POWER COMPANY.
4. SERVICE ENTRANCE-RATED MAIN DISCONNECT: 240V, 2 POLE, S/N, 100A, 35,000 AIC MIN. RATED ENCLOSED CIRCUIT BREAKER, NEMA 4X, STAINLESS STEEL.
5. LIGHTING CONTROL PANEL ENCLOSURE. DIMENSIONS AS NECESSARY FOR EQUIPMENT INSIDE. GROUND MOUNTED CABINET PER STANDARD PLAN 639-002.
6. SECONDARY CONDUCTORS, 2-#2, 1-#2 (NEUTRAL), 1-#4 GROUND IN 2" PVC 40 FOR UNDERGROUND AND 2" RIGID CONDUIT ABOVE GROUND
7. POINT OF SERVICE: UTILITY COMPANY INSTALLED HANDHOLE. CONTRACTOR TO PROVIDE 10' OF SLACK SERVICE FEEDER FOR CONNECTION BY UTILITY COMPANY.
8. MAIN LUG ONLY PANELBOARD IN NEMA 1 ENCLOSURE. NUMBER AND RATING OF BRANCH CIRCUIT BREAKERS SHALL BE AS INDICATED ON PANELBOARD SCHEDULE.
9. BRANCH CIRCUIT TO ROADWAY LUMINAIRES IN 2" UNDERGROUND CONDUIT, REFER TO PANELBOARD SCHEDULES AND LIGHTING PLAN SHEETS FOR ADDITIONAL INFORMATION.
10.  $\frac{5}{8}$ " COPPER CLAD GROUND ROD, 40' LONG.
11. #6 INSULATED COPPER GROUND WIRE. BOND THE SERVICE NEUTRAL TO GROUND AT SERVICE MAIN DISCONNECT.
12. FUSED CONTROL TRANSFORMER, 240 V PRIMARY, 120 V SECONDARY. SIZE CONDUCTORS ACCORDING TO MANUFACTURER'S RECOMMENDATION, AND SIZE FUSE PER NEC.
13. SURGE PROTECTION DEVICE (SPD) UNIT TO BE INSTALLED OUTSIDE OF ENCLOSURE AS PER FDOT STANDARD INDEX. SPD UNIT SHALL COMPLY WITH UL 1449, LATEST EDITION, TYPE 1, 20 KA, INCLUDING ALL MODES OF PROTECTION.
14. LIGHTING CONTROL PANEL MAIN BREAKER IN NEMA 1 ENCLOSURE: 240V, 2 POLE, S/N, 100A, 18K AIC MIN. RATED.
15. 100A 2 POLE, ELECTRICALLY HELD, LIGHTING CONTACTOR, NEMA 1, 120V COIL, 600V RATED.
16. PHOTOELECTRIC CONTROLLER, 120V RATED.
17. HAND-OFF AUTOMATIC SELECTOR SWITCH (PART OF LIGHTING CONTRACTOR)
18. GROUND BUS.



ONE LINE DIAGRAM DISTRIBUTION POINT



1. REFER TO LIGHTING PLAN SHEETS FOR APPROXIMATE LOCATION OF THE POINT OF CONNECTION. COORDINATE WITH THE LOCAL POWER COMPANY FOR THE SERVICE SOURCE AND POINT OF CONNECTION, EXACT LOCATIONS AND NECESSARY REQUIREMENTS FOR A COMPLETE AND OPERATIONAL ELECTRICAL POWER SERVICE.
2. THE ELECTRICAL COMPONENTS LAYOUT SHOWN IN RISER DIAGRAM AND WIRING SCHEMATIC DETAIL ARE DIAGRAMMATIC. CONTRACTOR SHALL TAKE RESPONSIBILITY TO INSTALL THE ENTIRE SYSTEM IN ACCORDANCE WITH THE LATEST REQUIREMENTS OF THE NEC AND LOCAL POWER COMPANY REQUIREMENTS.
3. ALL CONDUCTORS SHALL HAVE THHN/THWN-2 INSULATION TYPE ON THIS PROJECT.
4. ALL BRANCH BREAKERS SHALL USE 240V OPERATING VOLTAGE FOR SINGLE-PHASE APPLICATION.
5. THE LEAD LENGTH OF SPD DURING INSTALLATION SHALL BE SHORT AND STRAIGHT AS POSSIBLE.

VOLTAGE:120/240

PHASE: 1

WIRES: 3

PANELBOARD SCHEDULE "A"

MAINS TYPE: LUG

MAIN RATING: 100 A

AIC: 18,000 A

CKT NO.	CKT NAME	DESCRIPTION	TRIP	POLES	LOAD(VA)	LOAD(VA)	POLES	TRIP	CKT NAME	DESCRIPTION	CKT NO.
1	A-1	ROADWAY LIGHTING	20A	2	1419	260	2	20A	A-2	LANDSCAPE LIGHTING	2
—	—	SPD TYPE 2	30A	2							

LOAD

1419

260

TOTAL LOAD (VA):

1,679

TOTAL AMPS @ 240V:

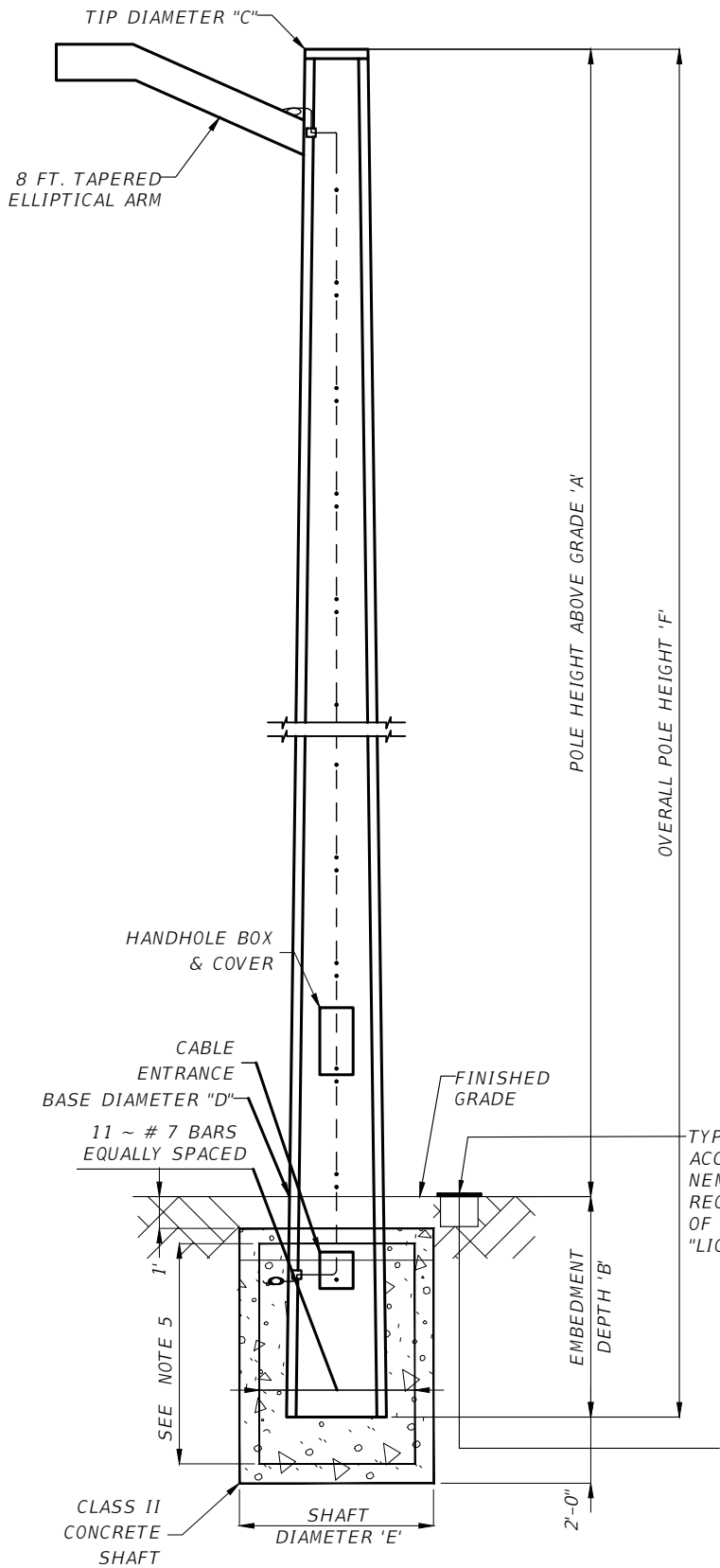
7

TOTAL DEMAND LOAD (AMPS) :

8.75

PANEL SHALL BE SQ "D" OR APPROVED EQUAL, COORDINATE WITH LAKE COUNTY.

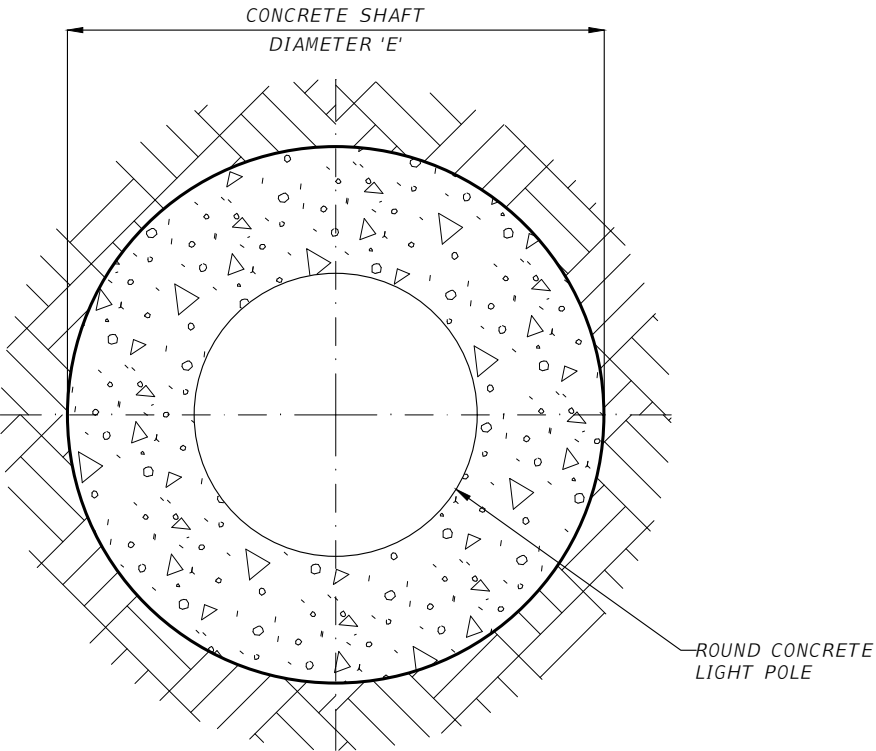
REVISIONS		 <b>OM ENGINEERING SERVICES, INC.</b> Civil • Structural • Inspections	OM ENGINEERING SERVICES, INC. 621 E. WASHINGTON ST., STE 8 ORLANDO, FLORIDA 32801 PHONE NO. (407) 704-7815		CR 561 & LAKESHORE DRIVE ROUNDABOUT	LIGHTING PLAN SERVICE POINT DETAILS (2) ROUNDABOUT	SHEET NO.
DATE	DESCRIPTION						ENGINEER OF RECORD: NIMESH BHAVSAR, P.E. P.E. LICENSE NUMBER 56861



LIGHT POLE ELEVATION DETAIL

NOTES:

- POLE EMBEDMENT HAS BEEN DESIGNED FOR A WIND SPEED OF 140MPH.
- CONTRACTOR TO SUBMIT SHOP DRAWINGS PRIOR TO INSTALLATION OF POLE.
- THE FOLLOWING GEOTECHNICAL PROPERTIES ARE BASED ON THE REPORT FROM TIERRA SIGNED AND SEALED BY KENNETH L. SYMONDS JR., PE TO DETERMINE EMBEDMENT DEPTH  
  
USCS SOIL CLASSIFICATION: SP/SP-SM/SM  
SUBMERGED SOIL UNIT WEIGHT: 50 PCF  
SOIL ANGLE OF FRICTION: 30 DEGREES  
VERTICAL BEARING PRESSURE: 2000 PSF  
LATERAL BEARING PRESSURE: 150 PSF/FT
- CONCRETE SHALL BE CLASS II CONCRETE WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3.4 KSI AND CONFORM TO FDOT SPECIFICATIONS 346 AND 400. REINFORCING STEEL SHALL CONFORM TO FDOT SPECIFICATION 415. DEPTHS FOR SHAFTS SHOWN ARE FOR SLOPES EQUAL TO OR FLATTER THAN 1:4. FOR SLOPE STEEPER THAN 1:4 AND EQUAL TO OR FLATTER THAN 1:2 ADD 2'-6" TO FOUNDATION DEPTHS SHOWN.
- FOUNDATION TIE REINFORCEMENT: #4 TIE BARS @ 9" CENTERS (MAX.). PROVIDE A CLEAR COVER OF 4" FOR ALL REINFORCEMENT.
- SL-1 POLES SHALL BE TRADITIONAL CONCRETE INC., 300 SERIES D330-SK-E-AWG-T-TEA OR EQUIVALENT. POLE SHALL HAVE SKY GRAY FINISH AND TAPERED ELLIPTICAL 8FT SKY GRAY ARM.
- SL-2 POLES SHALL BE TRADITIONAL CONCRETE INC., 300 SERIES D330-SK-E-AWG-T-TEA OR EQUIVALENT. POLE SHALL HAVE SKY GRAY FINISH AND TAPERED ELLIPTICAL 8FT SKY GRAY ARM.



LIGHT POLE PLAN

LIGHT POLE DIMENSIONS		
POLE	SL-1	SL-2
TRADITIONAL CONCRETE INC. CATALOG	300 SERIES D330-SK-E-AWG-T-TEA	300 SERIES D330-SK-E-AWG-T-TEA
POLE HEIGHT ABOVE GRADE 'A'	30'-0"	30'-0"
EMBEDMENT DEPTH 'B'	6'-0"	6'-0"
POLE TIP DIAMETER 'C'	5"	5"
POLE BASE DIAMETER 'D'	8-3/4"	8-3/4"
SHAFT DIAMETER 'E'	4'-0"	4'-0"
OVERALL POLE HEIGHT 'F'	36'-0"	36'-0"

REVISIONS	
DATE	DESCRIPTION



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P.E. LICENSE NUMBER 56861



CR 561 & LAKESHORE  
DRIVE ROUNDABOUT

LIGHTING PLAN  
CONCRETE POLE INSTALLATION  
DETAIL - ROUNDABOUT

SHEET  
NO.

LT-11

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



ELECTRICAL SPECIFICATIONS

SECTION 16028 - CODES, FEES, AND STANDARDS

CODES AND FEES

UNLESS SPECIFICALLY NOTED TO THE CONTRARY, FURNISH ALL EQUIPMENT, MATERIALS LABOR, AND INSTALL AND TEST IN ACCORDANCE WITH APPLICABLE SECTIONS OF THE FOLLOWING CODES AND STANDARDS:

- NFPA-70 NATIONAL ELECIRICAL CODE
- ACCESSIBILITY REQUIREMENTS MANUAL, DEPARTMENT OF COMMUNITY AFFAIRS
- FLORIDA BUILDING CODE
- FLORIDA FIRE PREVENTION CODE
- ANSI: AMERICAN STANDARDS INSTIUIE, INC.
- ASTM: AMERICAN SOCIETY FOR TESTING AND MATERIALS
- NEMA: NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
- NESC: NATIONAL ELECTRIC SAFETY CODE
- NFPA: NATIONAL FIRE PROJECTION ASSOCIATION
- UL: UNDERWRITTERS' LABORATORIES, INC.
- APPLICABLE LOCAL CODES
- APPLICABLE FDOT REQUIREMENTS

OBTAIN PERMITS AND INSPECTIONS FROM AUTHORITIES HAVING JURISDICTION. DELIVER CERTIFICATES OF INSPECTION TO THE OWNER AT TIME OF ACCEPTANCE INSPECTION.

STANDARDS

ALL MATERIALS SHALL BE NEW, FREE OF DEFECTS, AND SHALL BE UL LISTED, BEAR THE UL LABEL OR BE LABELED OR LISTED WITH AN APPROVED, NATIONALLY RECOGNIZED ELECTRICAL TESTING AGENCY. WHERE NO LABELING OR LISTING SERVICE IS AVAILABLE FOR CERTAIN TYPE OF EQUIPMENT, TEST DATA SHALL BE SUBMITTED TO PROVE TO THE OWNER THAT EQUIPMENT MEETS OR EXCEEDS AVAILABLE STANDARDS.

SECTION 16050 - BASIC REQUIREMENTS

1.1 RELATED DOCUMENTS

THE OTHER CONTRACT DOCUMENTS COMPLEMENT THE REQUIREMENTS OF THIS SECTION.

1.2 SCOPE

THE WORK SHALL INCLUDE, BUT NOT BE LIMITED TO, FURNISHING A COMPLETE ELECTRICAL SYSTEM AS SHOWN ON THE DRAWINGS.

DRAWINGS FOR THE WORK ARE DIAGRAMMATIC, INTENDED TO CONVEY THE SCOPE OF THE WORK AND TO INDICATE THE GENERAL ARRANGEMENT AND LOCATIONS OF THE WORK. BECAUSE OF THE SCALE OF THE DRAWINGS, CERTAIN BASIC ITEMS SUCH AS CONDUIT FITTINGS, ACCESS PANELS, SLEEVES, PULL AND JUNCTION BOXES MAY NOT BE SHOWN. WHERE SUCH ITEMS ARE REQUIRED BY CODE,FDOT OR BY OTHER SECTIONS, SUCH ITEMS SHALL BE INCLUDED.

EQUIPMENT SPECIFICATION MAY NOT DEAL INDIVIDUALLY WITH MINUTE ITEMS SUCH AS COMPONENTS, PARTS, CONTROLS AND DEVICES WHICH MAY BE REQUIRED TO PRODUCE THE EQUIPMENT PERFORMANCE SPECIFIED OR AS REQUIRED TO MEET THE EQUIPMENT WARRANTIES. WHERE SUCH ITEMS ARE REQUIRED, THEY SHALL BE INCLUDED BY THE SUPPLIER OF THE EQUIPMENT, WHETHER OR NOT SPECIFICALLY INDICATED.

COORDINATE WITH ALL TRADES IN SUBMITTAL OF SHOP DRAWINGS. SHOP DRAWINGS SHALL DETAIL SPACE CONDITIONS TO THE SATISFACTION OF ALL CONCERNED TRADES, SUBJECT TO REVIEW AND FINAL ACCEPTANCE BY THE ARCHITECT. IN THE EVENT THAT THE CONTRACTOR INSTALLS HIS WORK BEFORE COORDINATING WITH OTHER TRADES OR SO AS TO CAUSE ANY INTERFERENCE WITH WORK OF OTHER TRADES, THE NECESSARY CHANGES SHALL BE MADE IN THE WORK TO CORRECT THE CONDITION, AT NO ADDITIONAL COST TO LAKE COUNTY.

1.3 TEMPORARY LIGHTING AND POWER

FURNISH, INSTALL AND MAINTAIN TEMPORARY LIGHTING AND POWER TO BE USED BY ALL TRADES DURING CONSTRUCTION. THE ENTIRE SYSTEM SHALL BE GROUNDED. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL UTILITY COSTS FOR TEMPORARY SERVICE.

1.4 SUPERVISION OF THE WORK

PROVIDE FIELD SUPERINTENDENT WHO HAS HAD A MINIMUM OF FOUR (4) YEARS PREVIOUS SUCCESSFUL EXPERIENCE ON PROJECTS OF COMPARABLE SIZES AND COMPLEXITY. SUPERINTENDENT SHALL BE PRESENT AT ALL TIMES THAT WORK UNDER THIS DIVISION IS BEING INSTALLED OR AFFECTED.

1.5 DELIVERY AND STORAGE

HANDLE, STORE AND PROTECT EQUIPMENT AND MATERIALS IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND WITH THE REQUIREMENTS OF NAPA 708, APPENDIX J, TITLED "EQUIPMENT STORAGE AND MAINTENANCE DURING CONSTRUCTION. REPLACE DAMAGED OR DEFECTIVE ITEMS WITH NEW ITEMS.

1.6 ELECTRICAL CONNECTIONS

CONNECTIONS SHALL BE TIGHTENED TO THE TORQUE VALUES RECOMMENDED BY THAT DEVICE MANUFACTURERS INSTRUCTIONS. IF THESE VALUES ARE NOT LISTED, TIGHTEN TO POUND-INCH OR POUND-FOOT VALUES RECOMMENDED IN UL STANDARD 4868, A SUMMARY OF WHICH MAY BE FOUND IN SECTION 110-14 OF THE NATIONAL ELECTRIC CODE HANDBOOK.

1.7 TESTS

SYSTEMS SHALL BE TESTED BY THE CONTRACTOR AND PLACED IN PROPER WORKING ORDER PRIOR TO DEMONSTRATE TING SYSTEMS TO LAKE COUNTY.

AFTER WORK IS COMPLETED, A LOAD BALANCE TEST SHALL BE MADE FOR EACH PANELBOARD TO DEMONSTRATE THAT WITH FULL LIGHTING AND MECHANICAL LOAD, THE BALANCE BETWEEN PHASES IS WITHIN 15% UNBALANCED BEYOND THIS LIMIT SHALL BE CORRECTED, MAINTAINING PROPER PHASE RELATION TO NEUTRAL AT ALL TIMES.

PERFORM SUCH TESTS AS REQUIRED BY AUTHORITIES HAVING JURISDICTION OVER THE SITE.

1.8 DEMONSTRATIONS

PRIOR TO ACCEPTANCE OF THE WORK, THE CONTRACTOR SHALL DEMONSTRATE TO LAKE COUNTY, OR HIS DESIGNATED REPRESENTATIVE, ALL FEATURES AND FUNCTIONS OF ALL SYSTEMS AND SHALL INSTRUCT LAKE COUNTY IN THE PROPER OPERATION OF THE SYSTEMS. EACH SYSTEM SHALL BE DEMONSTRATED ONCE.

THE DEMONSTRATIONS SHALL CONSIST OF NOT LESS THAN THE FOLLOWING:

POINT OUT THE ACTUAL LOCATION OF EACH COMPONENT OF A SYSTEM DEMONSTRATE ITS FUNCTION AND ITS RELATIONSHIP TO OTHER COMPONENTS WITHIN THE SYSTEM.

SYSTEMS TO BE DEMONSTRATED SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING:

- POWER DISTRIBUTION SYSTEMS
- LIGHTING AND LIGHTING CONTROL SYSTEMS

CONTRACTOR SHALL FURNISH THE NECESSARY TRAINED PERSONNEL TO PERFORM THE DEMONSTRATIONS AND INSTRUCTIONS, AND SHALL ARRANGE TO HAVE THE MANUFACTURER'S REPRESENTATIVES PRESENT TO ASSIST WITH THE DEMONSTRATIONS.

CONTRACTOR SHALL ARRANGE WITH LAKE COUNTY AND THE ENGINEER, THE DATES AND TIMES FOR PERFORMING EACH DEMONSTRATION.

1.9 IDENTIFICATION

CONTRACTOR SHALL PROVIDE IDENTIFICATION FOR WIRING SYSTEMS AND EQUIPMENT.

LETTERING FOR IDENTIFICATION SHALL BE OF SIGN PAINTERS QUALITY OR STENCIL LETTERING. PAINT SHALL BE FAST DRYING SIGN ENAMEL. ALL PULL AND JUNCTION BOXES FOR THESE SYSTEMS IN SERVICE AREAS, ABOVE ACCESSIBLE CEILINGS AND IN ACCESSIBLE CHASES SHALL HAVE ONE-HALF INCH HIGH BLACK LETTERING IDENTIFYING THE SYSTEM. LETTERING PRINTED NEATLY AND LEGIBLY WITH PERMANENT "MAGIC MARKER" IS ACCEPTABLE FOR LETTERING OF BOXES ABOVE CEILINGS.

POWER AND LIGHTING CIRCUITS SHALL HAVE CONDUCTORS COLOR CODED OR BANDED, IN EACH JUNCTION AND PULL BOX.

NAMEPLATES:

- THE FOLLOWING ITEMS SHALL BE EQUIPPED WITH NAMEPLATES: ALL MOTOR

STARTERS, PUSHBUTTON STATIONS, CONTROL PANELS, TIME SWITCHES, DISCONNECT SWITCHES, PANELBOARDS, TRANSFORMERS, CONTRACTORS OR RELAYS IN SEPARATE ENCLOSURES, POWER RECEPTACLES WHERE THE NOMINAL VOLTAGE BETWEEN ANY PAIR OR CONTACTS IS GREATER THAN 150V, ALL SWITCHES CONTROLLING OUTLETS OR EQUIPMENT WHERE THE OUTLETS ARE NOT LOCATED WITHIN SIGHT OF THE CONTROLLING SWITCH, AND CABINETS. SPECIAL ELECTRICAL SYSTEMS SHALL BE IDENTIFIED AT TERMINAL CABINETS AND EQUIPMENT RACKS.

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DATE	DESCRIPTION					
						LT-12



OM ENGINEERING SERVICES, INC.  
621 E. WASHINGTON ST., STE 8  
ORLANDO, FLORIDA 32801  
PHONE NO. (407) 704-7815

ENGINEER OF RECORD: NIMESH BHAVSAR, P.E.  
P.E. LICENSE NUMBER 56861



CR 561 & LAKESHORE  
DRIVE ROUNDABOUT

LIGHTING PLAN  
ELECTRICAL SPECIFICATIONS (1)  
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NAMEPLATES CONTINUED

-- NAMEPLATES SHALL ADEQUATELY DESCRIBE THE FUNCTION OF THE PARTICULAR EQUIPMENT INVOLVED. WHERE NAMEPLATES ARE DETAILED ON THE DRAWINGS, INSCRIPTION AND SIZE OF LETTERS SHALL BE AS SHOWN ON THE SHOP DRAWINGS SUBMITTED FOR APPROVAL NAMEPLATES FOR PANELBOARD SHALL INCLUDE THE PANEL DESIGNATION, VOLTAGE, PHASE, AND SOURCE. FOR EXAMPLE, •PANEL 3PA, 120/208V, 3-PHASE, 4-WIRE, FED FROM XFMR T-3A. THE NAME OF THE MACHINE ON THE NAMEPLATES FOR A PARTICULAR MACHINE SHALL BE THE SAME AS THE ONE USED ON ALL MOTOR STARTERS, DISCONNECT AND P.B. STATION NAMEPLATES FOR THAT MACHINE.

-- NAMEPLATES SHALL BE LAMINATED PHENOLIC PLASTIC, BLACK FRONT WITH WHITE CORE, SELF ADHESIVE BACK WITH LETTERING ETCHED THROUGH THE OUTER COVERING. WITH PLATED OR STAINLESS STEEL SCREWS. NAMEPLATES TO IDENTIFY EMERGENCY AND FIRE ALARM DEVICES SHALL BE RED LAMINATE.

PANELBOARDS SHALL HAVE TYPE-WRITTEN CIRCUIT DIRECTORIES INSTALLED INSIDE THE DOORS UNDER TRANSPARENT PLASTIC COVERS.

1.10 SUBMITTALS

PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED.

- WITHIN THIRTY (30) DAYS AFTER AWARD OF THE CONTRACT, THE CONTRACTOR SHALL SUBMIT TO THE OWNER AND ENGINEER, FOR APPROVAL, A LIST OF MANUFACTURES' NAMES OF MATERIAL AND EQUIPMENT HE PROPOSES TO PROVIDE. IN THE EVENT ANY ITEMS OF MATERIAL OR EQUIPMENT CONTAINED THEREIN FAIL TO COMPLY WITH THE CONTRACT DOCUMENTS, SUCH ITEMS WILL BE REJECTED.

- ALL SUBMITTALS SHALL BE A MINIMUM OF SIX (6) COPIES AND SHALL BE BOUND IN A THREE RING BINDER. SUBMITTALS SHALL BE DIVIDED WITH TABBED SEPARATORS INDICATING SPECIFICATION SECTION NUMBERS. ALL PRODUCT DATA SHALL BE CLEARLY MARKED IN INK WITH THE CORRESPONDING EQUIPMENT IDENTIFICATION NUMBERS AS INDICATED IN THE CONTRACT DOCUMENTS.

- MARK-OUT ITEMS ON PRODUCT DATA SHEETS WHICH CONSTITUTE INFORMATION NOT PERTAINING TO THE EQUIPMENT SPECIFIED.

SUBMITTAL DATA FOR ELECTRICAL EQUIPMENT SHALL CONSIST OF SHOP DRAWINGS AND/OR CATALOG CUTS SHOWING TECHNICAL DATA NECESSARY TO EVALUATE THE MATERIAL OR EQUIPMENT, TO INCLUDE DIMENSIONS, WIRING DIAGRAMS, PERFORMANCE CURVES, RATINGS, CONTROL SEQUENCE AND OTHER DESCRIPTIVE DATA NECESSARY TO DESCRIBE FULLY THE ITEM PROPOSED AND ITS OPERATING CHARACTERISTICS. ANY SUBMITTAL DATA IN THE FOLLOWING ELECTRICAL SECTIONS, SPECIFIC TO THAT SECTION, IS IN ADDITION TO SUBMITTAL REQUIREMENTS OF THIS SECTION.

1.11 RECORD DRAWINGS

AT THE JOB SITE, MAINTAIN A SET OF PRINTS ON WHICH ARE RECORDED ALL FORMAL FIELD CHANGES AND OTHER PORTIONS OF THE WORK THAT VARY SIGNIFICANTLY FROM THE CONTRACT DOCUMENTS. INDICATE ACTUAL ROUTING OF ELECTRICAL FEEDERS.

DELIVER RECORD DRAWINGS TO LAKE COUNTY AND ENGINEER IN THE QUANTITY AND MANNER SPECIFIED IN DIVISION 1 - GENERAL REQUIREMENTS.

1.12 MAINTENANCE MANUALS

PROVIDE THREE (3) MAINTENANCE MANUALS CONTAINING PRODUCT DATA, SHOP DRAWINGS, WIRING DIAGRAMS, INSTRUCTIONS AND PART LISTS FOR MAINTAINING AND OPERATION ELECTRICAL SYSTEMS AND EQUIPMENT. INCLUDE A DESCRIPTION OF NORMAL ADJUSTMENTS AND A LIST OF ITEMS REQUIRING PERIODIC MAINTENANCE AND THE FREQUENCY REQUIRED. PROVIDE LAKE COUNTY WITH ANY SPECIAL TOOLS REQUIRED.

DELIVER MAINTENANCE MANUALS TO LAKE COUNTY AT THE TIME OF THE DEMONSTRATION OF SYSTEMS AND EQUIPMENT.

SECTION 16111 - RACEWAYS

APPROVED RACEWAY MATERIALS INCLUDE GRS, IMC AND EMT. SCHEDULE-40 PVC RACEWAYS ARE PERMITTED FOR UNDERGROUND ONLY. NO OTHER RACEWAY MATERIALS ARE PERMITTED WITHOUT PRIOR AUTHORIZATION.

HOT-DIPPED GALVANIZED (GRS), THREADED TYPE CONFORMING TO ANSI C80.1 AND UL 6. USE WHERE EXPOSED TO THE EXTERIOR AND AT ALL CONCRETE PENETRATIONS. BITUMASTIC COATING REQUIRED AT CONCRETE PENETRATIONS.

ELECTRICAL METALLIC TUBING (EMT) AND INTERMEDIATE METAL CONDUIT (IMC)

HOMERUNS SHALL BE DEFINED AS ORIGINATING AT THE BRANCH OVER CURRENT DEVICE AND CONTINUE TO THE FIRST BRANCH EQUIPMENT, DEVICE OR FIXTURE.

SECTION 16120 - WIRES AND CABLES (600 VOLTS AND LESS)

WIRE AND CABLE

ALL CONDUCTORS SHALL BE COPPER.

TYPE THHN/THWN, SINGLE CONDUCTOR, NO. 12 MINIMUM FOR GENERAL USE WIRING.

ALL SPECIFIED CONDUCTOR SIZES HAVE BEEN SIZED TO ACCOMMODATE FOR VOLTAGE DROP AS REQUIRED BY FBC 13-413 AND NEC 210.19(A)(1) FPN #4.

CONDUCTOR SIZES FOR LIGHTING, RECEPTACLES AND SMALL MOTOR BRANCH CIRCUITS, WITH LESS THAN 30 AMPERE CONNECTED LOAD, MAY NOT BE SHOWN ON DRAWING. CONDUCTORS FOR SUCH CIRCUITS SHALL BE SIZED AS FOLLOWS:

120 VOLT CIRCUITS: CONDUCTOR SIZE FOR BRANCH CIRCUITS 75 FEET IN LENGTH FOR BRANCH CIRCUIT PANEL TO CENTER OF LOAD SHALL NOT BE SMALLER THAN No. 12; UP TO 125 FEET NOT SMALLER THAN No. 10, UP TO 175 FEET NOT SMALLER THAN No. 8.

277 VOLT CIRCUITS: CONDUCTOR SIZE FOR BRANCH CIRCUITS 150 FEET IN LENGTH FOR BRANCH CIRCUIT PANEL TO CENTER OF LOAD SHALL NOT BE SMALLER THAN No. 12; UP TO 200 FEET NOT SMALLER THAN No. 10, UP TO 350 FEET NOT SMALLER THAN No. 8.

EACH MULTI WIRE BRANCH CIRCUIT SHALL BE PROVIDED WITH MEANS THAT WILL SIMULTANEOUSLY DISCONNECT ALL UNGROUNDED CONDUCTORS AT THE POINT WHERE THE BRANCH CIRCUIT ORIGINATES.

SECTION 16450 - GROUNDING

CONDUCTORS

PROVIDE ELECTRICAL GROUNDING CONDUCTORS FOR GROUNDING CONNECTIONS MATCHING POWER SUPPLY WIRING MATERIALS AND SIZED ACCORDING TO NEC. CONDUCTORS SHALL BE COPPER.

SECTION 16500 - LIGHTING FIXTURES AND POLES

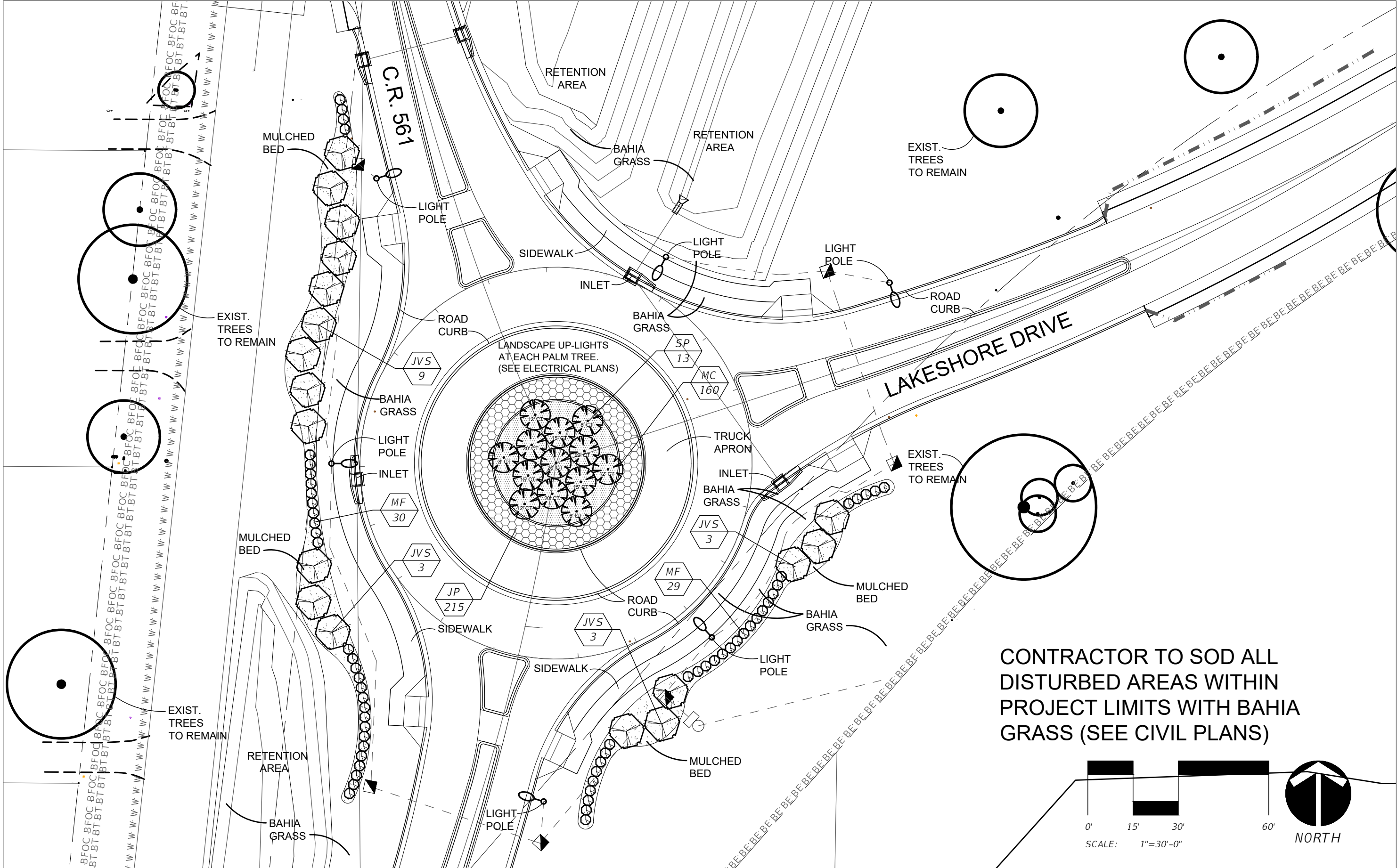
PROVIDE FIXTURES, AS SCHEDULED ON THE DRAWINGS.

VERIFY EXACT FINISH OF FIXTURES AND POLES WITH LAKE COUNTY PRIOR TO SUBMITTING SHOP DRAWINGS.

IF CONTRACTOR OR ELECTRICAL CONTRACTOR PROPOSES TO SUBMIT ALTERNATE MANUFACTURES OF SPECIFIED FIXTURES OR POLES THEY SHALL SUBMIT ALTERNATE PACKAGE TO LAKE COUNTY AND ENGINEER FOR PRIOR APPROVAL WHILE BIDDING. ALTERNATE PACKAGE WITHOUT PRIOR APPROVAL WILL NOT BE ACCEPTED FOR THE PROJECT.

REVISIONS		 <b>OM ENGINEERING SERVICES, INC.</b> Civil • Structural • Inspections	 OM ENGINEERING SERVICES, INC. 621 E. WASHINGTON ST., STE 8 ORLANDO, FLORIDA 32801 PHONE NO. (407) 704-7815		<i>CR 561 &amp; LAKESHORE DRIVE ROUNDABOUT</i>	<i>LIGHTING PLAN ELECTRICAL SPECIFICATIONS (2) ROUNDABOUT</i>	SHEET NO.
DATE	DESCRIPTION						
							LT-13


ENGINEER OF RECORD: NIMESH BHAVSAR, P.E.  
P.E. LICENSE NUMBER 56861




REVISIONS	
DATE	DESCRIPTION



QM ENGINEERING  
SERVICES, INC.  
Civil • Structural • Inspections



BORRELLI PARTNERS  
ARCHITECTURE PLANNING LANDSCAPE INTERIORS  
729 W. PALM BEACH BLVD., SUITE 200, PALM BEACH, FL 33480  
TEL: 561.834.1111 FAX: 561.834.1112



LAKE  
COUNTY, FL  
REAL FLORIDA • REAL CLOSE

L.A. OF RECORD: CHRISTOPHER D. RICE, PLA, ASLA  
PLA LICENSE NUMBER 6667122

CR 561 & LAKESHORE  
DRIVE ROUNDABOUT

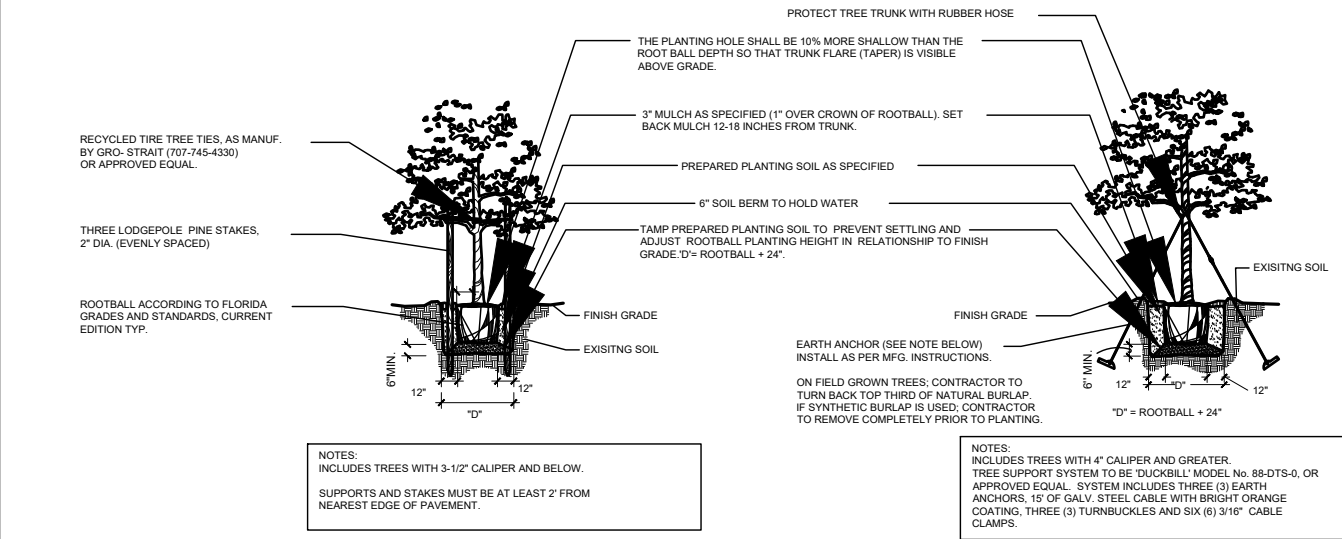
LANDSCAPE PLAN

SHEET  
NO.  
L-1

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

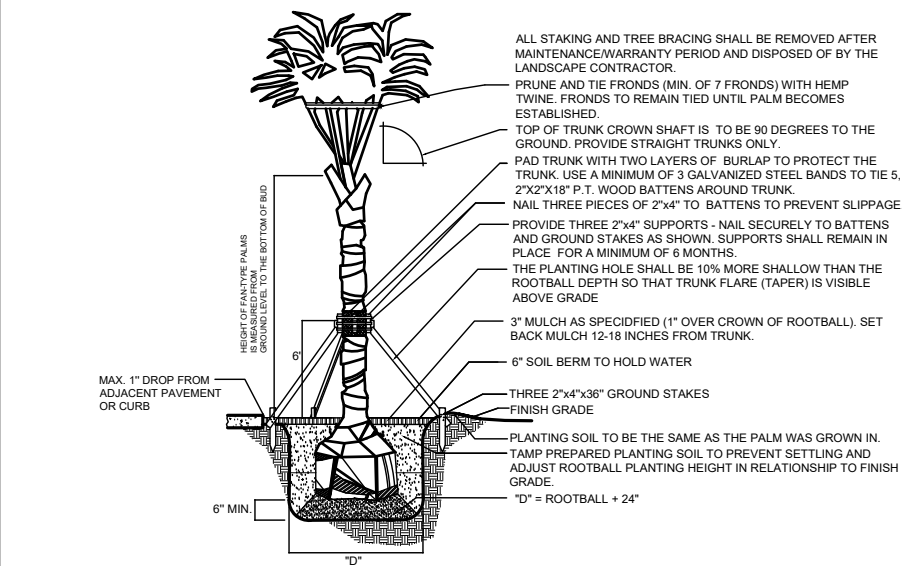
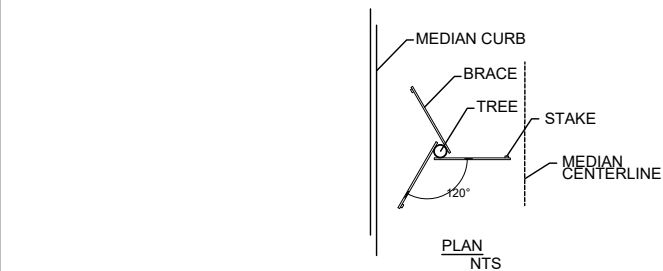


NOTE:  
CONTRACTOR SHALL ASSURE PERCOLATION OF ALL  
PLANTING BEDS/PITS PRIOR TO INSTALLATION.



## 1 SMALL AND LARGE TREE PLANTING

N.T.S.



## 2 PALM PLANTING DETAIL

N.T.S.

REVISIONS	
DATE	DESCRIPTION



L.A. OF RECORD: CHRISTOPHER D. RICE, PLA,ASLA  
PLA LICENSE NUMBER 6667122



CR 561 & LAKESHORE  
DRIVE ROUNDABOUT

LANDSCAPE DETAILS  
AND PLANT LIST

SHEET  
NO.

L-2

## PLANT LIST

SYMBOL	QUANTITY	BOTANICAL NAME	COMMON NAME	DESCRIPTION	WATER USE / NATIVE
TREES					
JVS	18	JUNIPERUS VIRGINIANA	SOUTHERN RED CEDAR	14'-16" HT. X 5'-6" SPRD.; 3" CAL.; FULL TO GROUND.	SPACE AS SHOWN GUY
SP	13	SABAL PALMETTO	CABBAGE PALM	3@8', 3@12', 3@15', 4@20' C.T.; STRAIGHT TRUNKS REGENERATED IN NURSERY.	SPACE AS SHOWN GUY
SHRUBS					
MC	160	MUHLENBERGIA CAPILLARIS	MUHLY GRASS	18" HT. X 18" SPRD.; 3 GAL.; FULL.	36" O.C.
MF	59	MYRCIANTHES FRAGRANS	SIMPSON'S STOPPER	36" HT. X 30" SPRD.; 7 GAL.; FULL.	36" O.C.
JP	215	JUNIPERUS CHINENSIS 'PARSONII'	PARSON'S JUNIPER	10'-12" HT. X 15" SPRD.; 3 GAL.; FULL.	30" O.C.
SOD					
	SEE PLANS	PASPALUM NOTATUM 'ARGENTINE'	ARGENTINE BAHIA GRASS	SOLID SOD, FREE OF PESTS AND DISEASES.	FIELD VERIFY QTY.
MULCH					
	SEE PLANS	HARDWOOD MULCH	HARDWOOD MULCH	FREE OF DIRT AND DEBRIS.	FIELD VERIFY QTY.

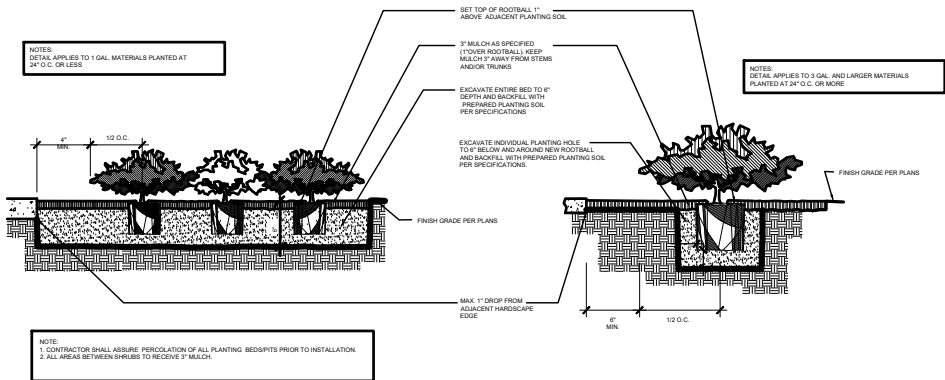
\*PLANT SIZE TO SUPERCEDE ANY GALLONAGE LISTING.

### LANDSCAPE PLANTING AND CONTRACTOR NOTES:

- ALL TREES SHALL BE TAGGED BY OWNER'S REPRESENTATIVE / LANDSCAPE ARCHITECT PRIOR TO DELIVERY TO THE PROJECT SITE. TAGGING SHALL TAKE PLACE WITHIN 21 DAYS PRIOR TO PLANTING.
- EACH LANDSCAPE PLANTING ISLAND AREAS SHALL HAVE AGRONOMIC TESTING AND RECOMMENDATIONS FOR PLANTING BACKFILL AMENDMENTS IN THE BIDDING REQUIREMENTS. THERE SHALL BE ONE TEST FOR EACH 250 L.F. OF PLANTED ISLANDS.
- IN THE EVENT THAT THE PLANTING AREA DOES NOT PERCOLATE WATER AS NEEDED FOR PLANT SURVIVAL, THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL REMEDIAL EFFORTS TO CORRECT ANY SUBSURFACE DRAINAGE DEFICIENCIES.
- ALL PLANTS MUST BE HEALTHY, VIGOROUS MATERIAL FREE OF PESTS AND DISEASES.
- ALL PLANTS SHALL BE FLORIDA NO. 1 OR BETTER, AS GRADED IN FLORIDA GRADES AND STANDARDS FOR NURSERY PLANTS.
- ALL PLANTS ARE SUBJECT TO APPROVAL BY THE LANDSCAPE ARCHITECT AND OWNER BEFORE, DURING, AND AFTER INSTALLATION.
- ALL SINGLE-TRUNKED TREES SHALL BE STRAIGHT TRUNKED WITH ONE CENTRAL LEADER AND HAVE A FULL, DENSE CROWN.
- ALL TREES SHALL BE STAKED AND GUYED AS SHOWN IN PLANTING DETAILS.
- ALL MULCH PLANTING AREAS SHALL BE A MINIMUM OF 3" IN DEPTH.
- ALL PLANTING AREAS SHALL HAVE A MINIMUM OF 3" TOPSOIL.
- ALL TREES SHALL BE FREE OF OPEN WOUNDS AND WOUND SCARS IN THE CLEAR TRUNK AREA.
- ANY SYNTHETIC BURLAP AND/OR WIRE BASKETS MUST BE TOTALLY REMOVED PRIOR TO INSTALLATION OF PLANT MATERIAL. IF NATURAL BURLAP IS USED, IT MAY BE TURNED DOWN 1/3 OF THE ROOTBALL.
- TREES SHALL NOT BE PLACED WITHIN 10' OF ANY FIRE PROTECTION EQUIPMENT AND NOT WITHIN 10' OF ANY UTILITIES. ALL UTILITIES SHALL BE MARKED FOR THE LANDSCAPE CONTRACTOR BY THE GENERAL CONTRACTOR AT THE G.C.'S EXPENSE.
- TREES SHALL NOT BE PLACED WHERE THEY WILL OBSCURE ANY VIEWS TO TRAFFIC, PEDESTRIANS OR SIGNAGE. CONTRACTOR TO FIELD ADJUST TREE LOCATIONS TO AVOID CONFLICTS. IF PLANTING IS QUESTIONABLE, CONTRACTOR TO CONTACT LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE TO DISCUSS RELOCATION.
- CONTRACTOR SHALL TAKE CARE TO PROTECT ALL TREES AND LANDSCAPING MATERIAL WITHIN PROJECT LIMITS AS WELL AS EXISTING TREES IMMEDIATELY ADJACENT TO PROJECT LIMITS. IF THE EXISTING LANDSCAPE, TREES OR OTHER RELATED MATERIALS ARE IMPACTED DURING LANDSCAPE INSTALLATION THEN THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REPLACEMENTS, AS WELL AS, ALL OTHER ASPECTS OF REMEDIATION INCLUDING BUT NOT LIMITED TO: TREES, SHRUBS, GROUNDCOVERS, SOD, AND ANY OTHER MATERIALS IMPACTED BY CONSTRUCTION.
- SOIL CONDITIONS MAY VARY THROUGHOUT THE SITE AND CONTRACTOR TO SHALL PROVIDE PROPER EQUIPMENT FOR PROPER EXCAVATION.
- CONTRACTOR SHALL INCLUDE THE COSTS OF EXCAVATION, DISPOSAL OF EXCESS MATERIALS, BACKFILL, SOIL AMENDMENTS, SPECIAL BED PREPERATION, MULCH, TREE STAKING AND GUYING, FERTILIZER, WATERING FOR PLANT ESTABLISHMENT, SITE CLEAN-UP AND MAINTAINENCE WITHIN BID NUMBER.
- CONTRACTOR SHALL SOD ALL DAMAGED GRASS AREAS DISTURBED DURING CONSTRUCTION. SEE LANDSCAPE SPECIFICATIONS FOR SOD INSTALLATION.
- THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING, IN FULL, ALL LANDSCAPE PLANTING AREAS, UNTIL THE JOB IS ACCEPTED IN FULL BY THE OWNER. "IN FULL" MEANS WATERING, PEST CONTROL, MULCHING, MOWING, FERTILIZING AND RESETTING TREES THAT ARE OUT OF PLUMB.
- THE LANDSCAPE CONTRACTOR SHALL COMPLETELY GUARANTEE ALL INSTALLED PLANT MATERIAL FOR A PERIOD OF ONE CALENDAR YEAR BEGINNING ON THE DATE OF 100% COMPLETION. ANY AND ALL REQUIRED PLANTS DEAD OR IN SUBSTANDARD CONDITION SHALL BE REPLACED PROMPTLY AND AT NO ADDITIONAL COST TO THE OWNER.
- THE LANDSCAPE CONTRACTOR SHALL STAKE THE LOCATIONS OF ALL PLANT MATERIAL AND PLANTING BED LINES FOR REVIEW BY THE LANDSCAPE ARCHITECT AND OWNER.
- THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL WRITTEN PLANT QUANTITIES PRIOR TO INITIATION OF THE WORK. IN THE EVENT THAT THE PLANS CONTRADICT THE PLANT LIST, THE PLANS SHALL RULE.
- THE LANDSCAPE CONTRACTOR SHALL BE FAMILIAR WITH AND ACCEPT THE EXISTING SITE CONDITIONS PRIOR TO INITIATION OF THE WORK. ANY VARIATION FROM THE SPECIFIED WORK SHALL BE THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR.
- THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES, DRAINAGE STRUCTURES, CURBS, SIDEWALKS, AND ANY OTHER OBJECTS WHICH MIGHT BE DAMAGED DURING THE WORK.
- THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE TO MAKE ANY AND ALL NECESSARY REPAIRS TO DAMAGE CAUSED BY HIS WORK AT NO ADDITIONAL COST TO THE OWNER OR LANDSCAPE ARCHITECT.
- THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS, AND FOLLOWING ALL APPLICABLE LOCAL CODES PERTAINING TO THE PROJECT DURING THE COURSE OF THEIR WORK.

## 3 SHRUB / GROUNDCOVER PLANTING

N.T.S.



NOTE:  
DETAIL APPLIES TO 3 GAL. AND LARGER MATERIALS PLANTED AT 24" O.C. OR MORE.

NOTE:  
1. CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANTING BEDS/PITS PRIOR TO INSTALLATION.  
2. ALL AREAS BETWEEN SHRUBS TO RECEIVE 3" MULCH.

NOTE:  
DETAIL APPLIES TO 1 GAL. MATERIALS PLANTED AT 24" O.C. OR LESS.

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Luminaire Schedule										
Symbol	Qty	Label	Arrangement	Tag	LLF	Luminaire Lumens	Luminaire Watts	Mounting Height	Arm	Max Candella
	9	ERL1_11C530_____	Single	Roadway	1.000	10500	87	30	8	7208
	3	ERL2_27C530_____	Single	Roundabout	1.000	25900	212	30	8	17689

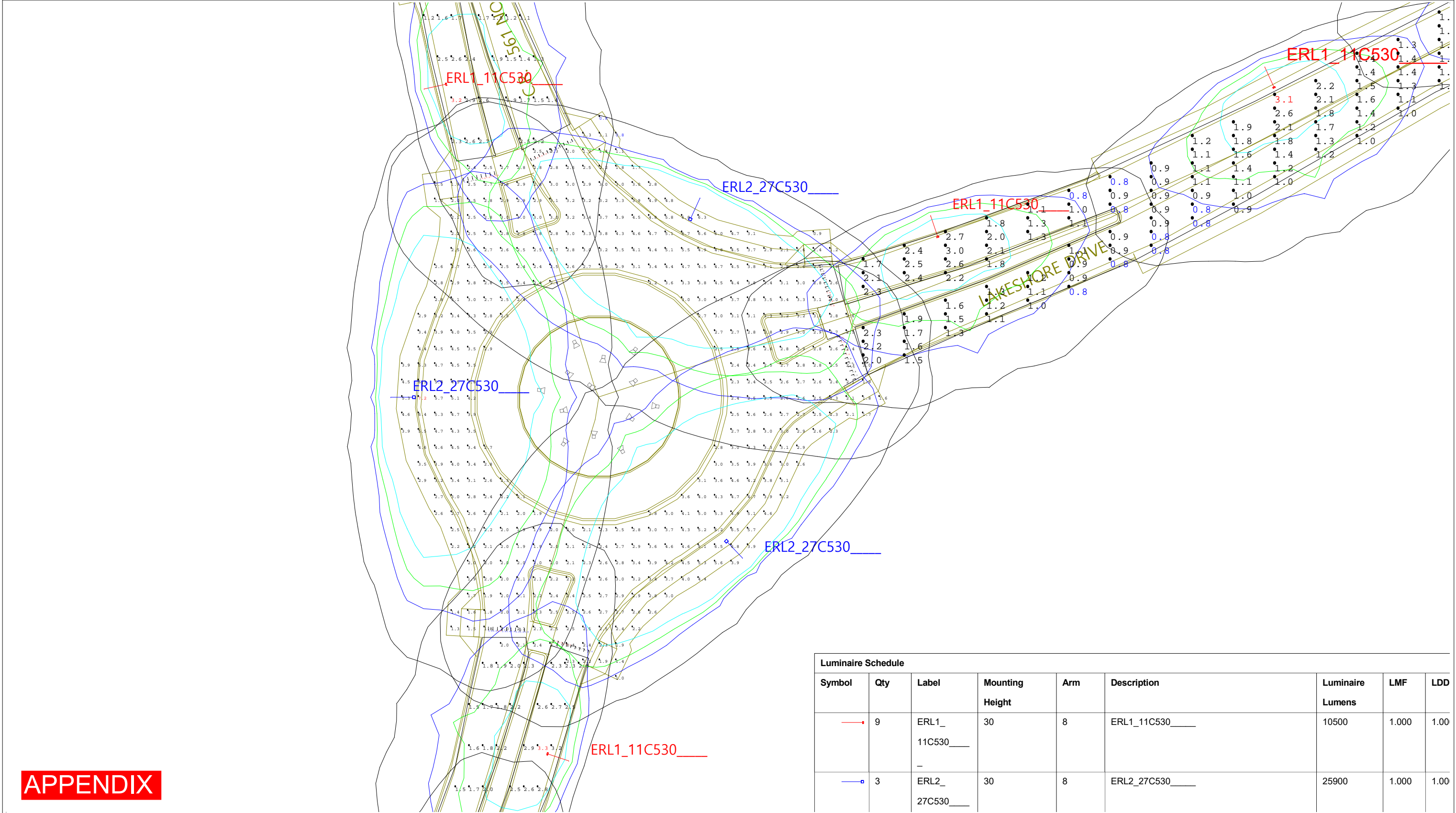
Calculation Summary			
Project: Crosswalks			
Label	CalcType	Units	Avg
561 North Vertical Entrance	Illuminance	Fc	1.86
561 North Vertical Exit	Illuminance	Fc	2.55
561 South Vertical Entrance	Illuminance	Fc	1.94
561 South Vertical Exit	Illuminance	Fc	2.41
Lakeshore Vertical Entrance	Illuminance	Fc	1.56
Lakeshore Vertical Exit	Illuminance	Fc	2.88

Calculation Summary							
Project: Roundabout							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Roundabout Horizontal	Illuminance	Fc	3.07	7.2	0.8	3.84	9.00

Calculation Summary							
Project: Roadway							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Roadway HFC CR 561 North	Illuminance	Fc	1.51	3.2	0.9	1.68	3.56
Roadway HFC CR 561 South	Illuminance	Fc	1.52	3.3	0.6	2.53	5.50
Roadway HFC Lakeshore Dr	Illuminance	Fc	1.51	3.1	0.8	1.89	3.88

APPENDIX

TARGET ILLUMINANCE				DESIGNER:DAVID VAUGHAN	<b>DOT LIGHTING INC.</b>	<b>LIGHTING DESIGN</b>				PAGE NO.
AVRAGE FC	AVG/MIN	MAX/MIN		Date:3/11/2025		COUNTY	ROAD DESCRIPTION	REFERENCE NO.		
				PROVIDED FOR: OM Engineering		6353 MILLSTONE DR NEW PORT RICHEY,FL 34688 TEL:727-375-0555	Lake	CR 651 @ Lakeshore		1

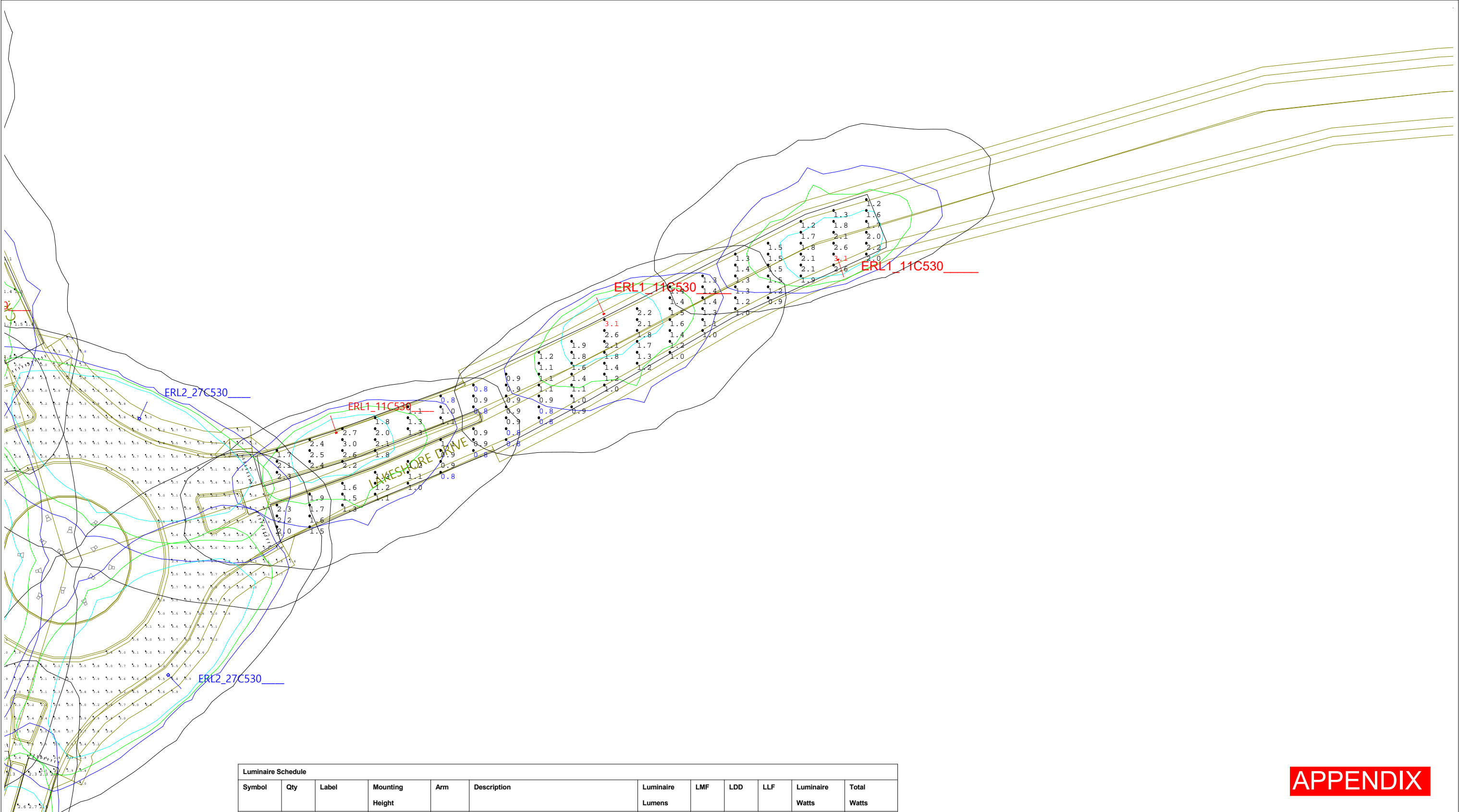


APPENDIX



APPENDIX

TARGET ILLUMINANCE				DESIGNER:DAVID VAUGHAN		<b>DOT LIGHTING INC.</b> 6353 MILLSTONE DR NEW PORT RICHEY,FL 34688 TEL:727-375-0555	<b>LIGHTING DESIGN</b>				PAGE NO.
AVRAGE FC	AVG/MIN	MAX/MIN		Date:3/11/2025			COUNTY	ROAD DESCRIPTION	REFERENCE NO.		
				PROVIDED FOR: OM Engineering			Lake	CR 651 @ Lakeshore			3

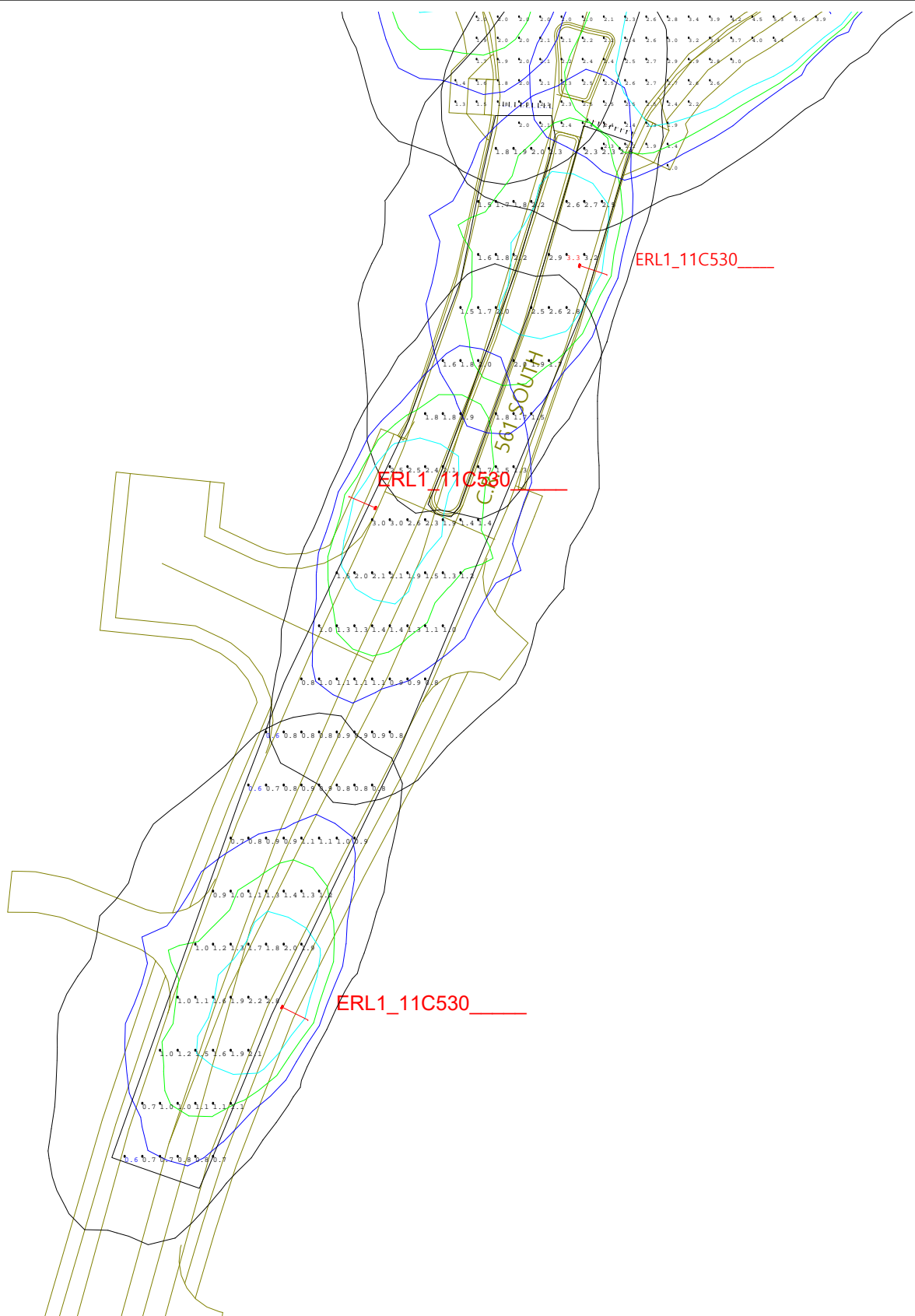




Luminaire Schedule											
Symbol	Qty	Label	Mounting Height	Arm	Description	Luminaire Lumens	LMF	LDD	LLF	Luminaire Watts	Total Watts

APPENDIX

TARGET ILLUMINANCE				DESIGNER: DAVID VAUGHAN	DOT LIGHTING INC.	6353 MILLSTONE DR NEW PORT RICHEY, FL 34688 TEL: 727-375-0555		LIGHTING DESIGN				PAGE NO.
AVRAGE FC	AVG/MIN	MAX/MIN		Date: 3/11/2025				COUNTY	ROAD DESCRIPTION	REFERENCE NO.		4
				PROVIDED FOR: OM Engineering				Lake	CR 651 @ Lakeshore			





Luminaire Schedule									
Symbol	Qty	Label	Mounting Height	Arm	Description	Luminaire Lumens	LMF	LDD	LLF
	9	ERL1_11C530____ —	30	8	ERL1_11C530____	10500	1.000	1.000	1.000
	3	ERL2_27C530____ —	30	8	ERL2_27C530____	25900	1.000	1.000	1.000

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
561 North Vertical Entrance	Illuminance	Fc	1.86	N.A.	N.A.	N.A.	N.A.
561 North Vertical Exit	Illuminance	Fc	2.55	N.A.	N.A.	N.A.	N.A.
561 South Vertical Entrance	Illuminance	Fc	1.94	N.A.	N.A.	N.A.	N.A.
561 South Vertical Exit	Illuminance	Fc	2.41	N.A.	N.A.	N.A.	N.A.
Lakeshore Vertical Entrance	Illuminance	Fc	1.56	N.A.	N.A.	N.A.	N.A.
Lakeshore Vertical Exit	Illuminance	Fc	2.88	N.A.	N.A.	N.A.	N.A.
Roadway HFC CR 561 North	Illuminance	Fc	1.51	3.2	0.9	1.68	3.56
Roadway HFC CR 561 South	Illuminance	Fc	1.52	3.3	0.6	2.53	5.50
Roadway HFC Lakeshore Dr	Illuminance	Fc	1.51	3.1	0.8	1.89	3.88
Roundabout Horizontal	Illuminance	Fc	3.07	7.2	0.8	3.84	9.00

ROUNDABOUT LIGHTING DESIGN CRITERIA

AVERAGE 'INITIAL' INTENSITY: 3.0 STD 1.5 MIN  
AVERAGE VERTICAL INTENSITY: 1.5 STD 1.0 MIN  
UNIFORMITY RATIO: AVG./MIN. 4:1, MAX./MIN. 10:1

ROADWAY LIGHTING DESIGN CRITERIA

AVERAGE 'INITIAL' INTENSITY: 1.0 FOOT-CANDLES  
UNIFORMITY RATIO: AVG./MIN. 4:1, MAX./MIN. 10:1

APPENDIX

TARGET ILLUMINANCE				DESIGNER:DAVID VAUGHAN	<b>DOT LIGHTING INC.</b> 6353 MILLSTONE DR NEW PORT RICHEY,FL 34688 TEL:727-375-0555	<b>LIGHTING DESIGN</b>				PAGE NO.
AVRAGE FC	AVG/MIN	MAX/MIN		Date:3/11/2025						
				PROVIDED FOR: OM Engineering						5