



OSCEOLA COUNTY, FLORIDA
PUBLIC WORKS DEPARTMENT

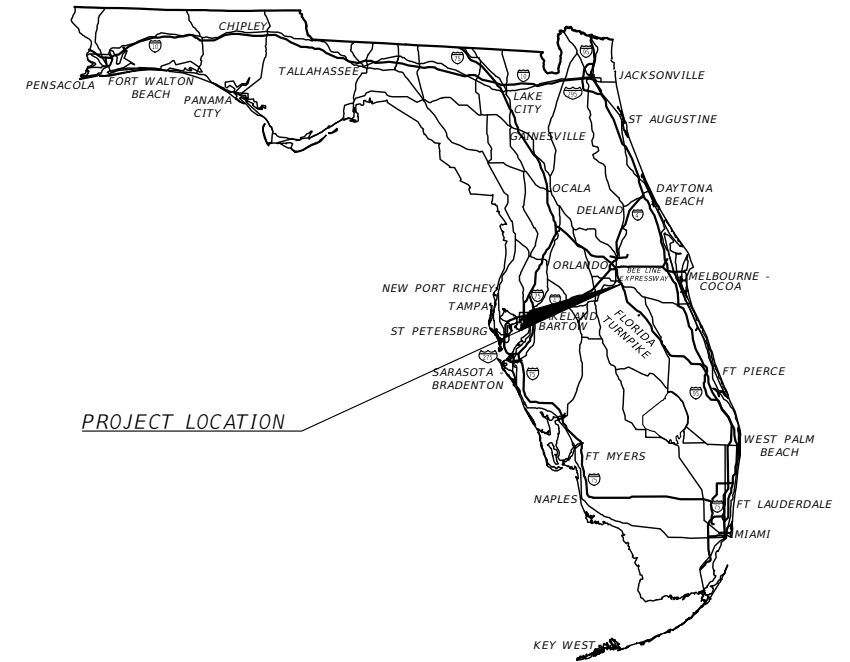
CONTRACT PLANS

FORTUNE RD AND SIMPSON RD
INTERSECTION IMPROVEMENT PLANS

FPID: 443548-1-58-01

FAN: D522-081-B

INTELLIGENT TRANSPORTATION
SYSTEMS PLANS




INDEX OF ITS PLANS

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IT-35	CAMERA MOUNTING BRACKET DETAIL

SHOP DRAWINGS TO BE SUBMITTED TO:

JARED N. KNIGHT, P.E.
VANASSE HANGEN BRUSTLIN, INC.
225 E. ROBINSON STREET, SUITE 300
ORLANDO, FL 32801

PLANS PREPARED BY:

 Engineers | Scientists
Planners | Designers
225 E. Robinson Street, Suite 300
Orlando, FL 32801 (407)839-4006
Certificate of Authorization # 3932

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

OSCEOLA COUNTY PUBLIC WORKS

BRANDON ARRINGTON	CHAIRMAN OF THE BOARD OF COUNTY COMMISSIONERS
VIVIANA JANER	VICE CHAIRWOMAN OF THE BOARD OF COUNTY COMMISSIONERS
PEGGY CHOUNDHRY	COUNTY COMMISSIONER
CHERYL GRIEB	COUNTY COMMISSIONER
RICKY BOOTH	COUNTY COMMISSIONER
DON FISHER	COUNTY MANAGER
TAWNY H OLORE, P.E.	DIRECTOR OF TRANSPORTATION AND TRANSIT

GOVERNING STANDARD PLANS:
Florida Department of Transportation, FY2022-23 Standard plans for
Road and Bridge Construction and applicable Interim Revisions (Irs).

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

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

GOVERNING STANDARD SPECIFICATIONS:
Florida Department of Transportation, July, 2022 Standard
Specifications for Road and Bridge Construction at the following
website:
<http://www.fdot.gov/programmanagement/Implemented/SpecBooks>

FINAL PLANSET
DATE: DECEMBER 20, 2022

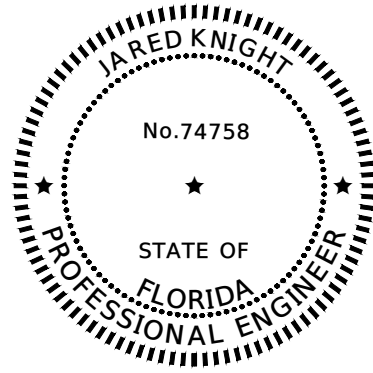
OSCEOLA COUNTY PROJECT MANAGER: STEVEN KANE, P.E.

ITS PLANS
PROFESSIONAL OF RECORD: JARED N. KNIGHT, P.E.

P.E. NO.: 74758

FISCAL YEAR	SHEET NO.
22	IT-1

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



THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY:

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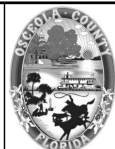
VANASSE HANGEN BRUSTLIN, INC.
 TRANSPORTATION, LAND DEVELOPMENT,
 ENVIRONMENTAL SERVICES
 225 E. ROBINSON ST., SUITE 300
 LANDMARK CENTER TWO
 ORLANDO, FL 32801
 CERTIFICATE OF AUTHORIZATION #3932
 JARED KNIGHT, P.E. NO. 74758

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.

PLAN INDEX

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IT-35	CAMERA MOUNTING BRACKET DETAIL

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REVISIONS				 <small>Engineers Scientists Planners Designers 225 E. Robinson Street, Suite 300 Orlando, FL 32801 (407)839-4006 Certificate of Authorization # 3932</small>	 OSCEOLA COUNTY FLORIDA	SIGNATURE SHEET	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION				IT-2

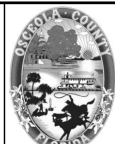
TABULATION OF QUANTITIES

PAY ITEM NO.	DESCRIPTION	UNIT	SHEET NUMBERS												TOTAL THIS SHEET		GRAND TOTAL			
			IT-8		IT-9		IT-10		IT-11		IT-12		IT-13		IT-14		PLAN	FINAL	PLAN	FINAL
			PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL						
630-2-11	CONDUIT, FURNISH & INSTALL, OPEN TRENCH	LF			325		425		305		338					1,393				
630-2-12	CONDUIT, FURNISH & INSTALL, DIRECTIONAL BORE	LF	777		685		300		395		237					2,394				
633-1-121	FIBER OPTIC CABLE, F&I, UNDERGROUND, 2-12 FIBERS	LF																		
633-1-123	FIBER OPTIC CABLE, F&I, UNDERGROUND, 49-96 FIBERS	LF	927		1265		775		750		765		585		720	5,787				
633-1-620	FIBER OPTIC CABLE, REMOVE, UNDERGROUND	LF											485		720	1,205				
633-2-31	FIBER OPTIC CONNECTION, INSTALL, SPLICE	EA	72		8						72		6			158				
633-2-32	FIBER OPTIC CONNECTION, INSTALL, TERMINATION	EA																		
633-3-11	FIBER OPTIC CONNECTION HARDWARE, F&I, SPLICE ENCLOSURE	EA	1		1						1		1			4				
633-3-14	FIBER OPTIC CONNECTION HARDWARE, F&I, BUFFER TUBE FAN OUT KIT	EA			1											1				
633-3-15	FIBER OPTIC CONNECTION HARDWARE, F&I, PRETERMINATED PATCH PANEL	EA			1											1				
633-3-51	FIBER OPTIC CONNECTION HARDWARE, ADJUST/MODIFY SPLICE ENCLOSURE	EA			1											1				
633-8-1	MULTI-CONDUCTOR COMMUNICATION CABLE, FURNISH & INSTALL	LF			55											55				
635-2-12	PULL & SPLICE BOX, F&I, 24" X 36" COVER SIZE	EA	1		2		1		1		2					7				
635-2-13	PULL & SPLICE BOX, F&I, 30" X 60" RECTANGULAR OR 36" ROUND COVER SIZE	EA	1		1						1					3				
660-6-121	VEHICLE DETECTION SYSTEM- AV1, BLUETOOTH, FURNISH & INSTALL, CABINET EQUIPMENT	EA			1											1				
660-6-122	VEHICLE DETECTION SYSTEM- AV1, BLUETOOTH, FURNISH & INSTALL, ABOVE GROUND EQUIPMENT	EA			1											1				
682-1-113	ITS CCTV CAMERA, F&I, DOME PTZ ENCLOSURE - PRESSURIZED, IP, HIGH DEFINITION	EA			1											1				
684-1-1	MANAGED FIELD ETHERNET SWITCH, FURNISH & INSTALL	EA			1								1			2				
684-1-6	MANAGED FIELD ETHERNET SWITCH, REMOVE- CABINET TO REMAIN	EA											1			1				

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION



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OSCEOLA COUNTY
FLORIDA

TABULATION OF QUANTITIES

SHEET NO.
IT-3

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TABULATION OF QUANTITIES

PAY ITEM NO.	DESCRIPTION	UNIT	SHEET NUMBERS														TOTAL THIS SHEET		GRAND TOTAL	
			IT-15		IT-16		IT-17		IT-18		IT-19		IT-20		IT-21		PLAN	FINAL	PLAN	FINAL
			PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL						
630-2-11	CONDUIT, FURNISH & INSTALL, OPEN TRENCH	LF																		
630-2-12	CONDUIT, FURNISH & INSTALL, DIRECTIONAL BORE	LF											280		510		790			
633-1-121	FIBER OPTIC CABLE, F&I, UNDERGROUND, 2-12 FIBERS	LF																		
633-1-123	FIBER OPTIC CABLE, F&I, UNDERGROUND, 49-96 FIBERS	LF	945		720		1025		725		715		925		510		5,565			
633-1-620	FIBER OPTIC CABLE, REMOVE, UNDERGROUND	LF	745		720		775		725		715		545				4,225			
633-2-31	FIBER OPTIC CONNECTION, INSTALL, SPLICE	EA	12				12										24			
633-2-32	FIBER OPTIC CONNECTION, INSTALL, TERMINATION	EA																		
633-3-11	FIBER OPTIC CONNECTION HARDWARE, F&I, SPLICE ENCLOSURE	EA	1				1										2			
633-3-14	FIBER OPTIC CONNECTION HARDWARE, F&I, BUFFER TUBE FAN OUT KIT	EA																		
633-3-15	FIBER OPTIC CONNECTION HARDWARE, F&I, PRETERMINATED PATCH PANEL	EA																		
633-3-51	FIBER OPTIC CONNECTION HARDWARE, ADJUST/MODIFY SPLICE ENCLOSURE	EA																		
633-8-1	MULTI-CONDUCTOR COMMUNICATION CABLE, FURNISH & INSTALL	LF																		
635-2-12	PULL & SPLICE BOX, F&I, 24" X 36" COVER SIZE	EA																		
635-2-13	PULL & SPLICE BOX, F&I, 30" X 60" RECTANGULAR OR 36" ROUND COVER SIZE	EA																		
660-6-121	VEHICLE DETECTION SYSTEM- AVI, BLUETOOTH, FURNISH & INSTALL, CABINET EQUIPMENT	EA																		
660-6-122	VEHICLE DETECTION SYSTEM- AVI, BLUETOOTH, FURNISH & INSTALL, ABOVE GROUND EQUIPMENT	EA																		
682-1-113	ITS CCTV CAMERA, F&I, DOME PTZ ENCLOSURE - PRESSURIZED, 1P, HIGH DEFINITION	EA																		
684-1-1	MANAGED FIELD ETHERNET SWITCH, FURNISH & INSTALL	EA																		
684-1-6	MANAGED FIELD ETHERNET SWITCH, REMOVE- CABINET TO REMAIN	EA																		

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION


 Engineers | Scientists
 Planners | Designers
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 Jared Knight, P.E.
 PE # 74758



OSCEOLA COUNTY
FLORIDA

TABULATION OF QUANTITIES

SHEET NO.
IT-4

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TABULATION OF QUANTITIES

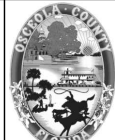
PAY ITEM NO.	DESCRIPTION	UNIT	SHEET NUMBERS												TOTAL THIS SHEET		GRAND TOTAL	
			IT-22		IT-23		IT-24											
			PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL
630-2-11	CONDUIT, FURNISH & INSTALL, OPEN TRENCH	LF			10		125										135	1,528
630-2-12	CONDUIT, FURNISH & INSTALL, DIRECTIONAL BORE	LF	585		680		540										1,805	4,989
633-1-121	FIBER OPTIC CABLE, F&I, UNDERGROUND, 2-12 FIBERS	LF			10												10	10
633-1-123	FIBER OPTIC CABLE, F&I, UNDERGROUND, 49-96 FIBERS	LF	635		930		715										2,280	13,632
633-1-620	FIBER OPTIC CABLE, REMOVE, UNDERGROUND	LF																5,430
633-2-31	FIBER OPTIC CONNECTION, INSTALL, SPLICE	EA			12												12	194
633-2-32	FIBER OPTIC CONNECTION, INSTALL, TERMINATION	EA			12												12	12
633-3-11	FIBER OPTIC CONNECTION HARDWARE, F&I, SPLICE ENCLOSURE	EA			1												1	7
633-3-14	FIBER OPTIC CONNECTION HARDWARE, F&I, BUFFER TUBE FAN OUT KIT	EA																1
633-3-15	FIBER OPTIC CONNECTION HARDWARE, F&I, PRETERMINATED PATCH PANEL	EA																1
633-3-51	FIBER OPTIC CONNECTION HARDWARE, ADJUST/MODIFY SPLICE ENCLOSURE	EA																1
633-8-1	MULTI-CONDUCTOR COMMUNICATION CABLE, FURNISH & INSTALL	LF																55
635-2-12	PULL & SPLICE BOX, F&I, 24" X 36" COVER SIZE	EA	1		1		1										3	10
635-2-13	PULL & SPLICE BOX, F&I, 30" X 60" RECTANGULAR OR 36" ROUND COVER SIZE	EA			1												1	4
660-6-121	VEHICLE DETECTION SYSTEM- AV1, BLUETOOTH, FURNISH & INSTALL, CABINET EQUIPMENT	EA																1
660-6-122	VEHICLE DETECTION SYSTEM- AV1, BLUETOOTH, FURNISH & INSTALL, ABOVE GROUND EQUIPMENT	EA																1
682-1-113	ITS CCTV CAMERA, F&I, DOME PTZ ENCLOSURE - PRESSURIZED, IP, HIGH DEFINITION	EA																1
684-1-1	MANAGED FIELD ETHERNET SWITCH, FURNISH & INSTALL	EA																2
684-1-6	MANAGED FIELD ETHERNET SWITCH, REMOVE- CABINET TO REMAIN	EA																1

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REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION



Engineers | Scientists
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Jared Knight, P.E.
PE # 74758



OSCEOLA COUNTY
FLORIDA

TABULATION OF QUANTITIES

SHEET NO.
IT-5

GENERAL:

1. THESE PLANS REFLECT CONDITIONS KNOWN DURING PLAN DEVELOPMENT IN THE EVENT ACTUAL PHYSICAL CONDITIONS PREVENT THE APPLICATION OF THE PROGRESSION OF ANY WORK SPECIFIED IN THESE PLANS. NOTIFY THE ENGINEER IMMEDIATELY AND PRIOR TO ANY FURTHER WORK ACTIVITY.
2. END OF REEL SPLICES SHALL OCCUR AT A SPLICE VAULT THAT IS ADJACENT TO A LHUB. SPACING BETWEEN END OF REEL SPLICES SHALL BE NO LESS THAN 25,000 LF APART.
3. ALL FIELD WIRING SHALL BE NEATLY BUNDLED AND CLEARLY IDENTIFIED WITH PERMANENT LEGIBLE, WEATHER PROOF TAGS THAT ARE SECURELY ATTACHED TO EACH CABLE. THE TAGGING SYSTEM PROPOSED SHALL BE SUBMITTED FOR APPROVAL WITH THE OTHER EQUIPMENT SUBMITTALS REQUIRED FOR THIS PROJECT. THE COST SHALL BE INCIDENTAL TO THE INSTALLATION OF THE FIBER OPTIC CABLE AND ITS DEVICES.
4. PRIOR TO ANY EQUIPMENT ORDER, SUBMIT FOR REVIEW AND APPROVAL THE EQUIPMENT SPECIFICATIONS OF DESIGN AND SHOP DRAWINGS, INCLUDING PLAN ATTACHMENTS FOR ALL MATERIAL PROPOSED FOR THIS PROJECT.
5. CONTRACTOR MUST WEED EAT, MOW AND REMOVE LITTER AROUND EQUIPMENT STAGING AREAS UNTIL WORK HAS BEEN COMPLETED (I.E. POLES, CONDUIT RUNS, ETC.). THE CONTRACTOR SHALL MARK THIS AREA AND WILL BE EXPECTED TO MAINTAIN THE AREA IN ADDITION TO ANY OTHER AREAS THAT THE CONTRACTOR FEELS COULD BE IMPACTED BY MOWERS. THE CONTRACTOR SHALL PROPERLY MARK THESE AREAS (CONES OR STAKES WITH MARKING TAPE AROUND THE PERIMETER). THE PERIMETER SHALL CONSIST OF A 5' RADIUS AROUND ITS AND SERVICE POLES IN ADDITION. A 5' STRIP SHALL BE MAINTAINED ON EACH SIDE OF CONDUIT AND TRENCHING RUNS.
6. SOD MUST BE USED TO RESTORE ANY AREAS IMPACTED BY CONSTRUCTION. THE COST OF REQUIRED SOD SHALL BE INCIDENTAL TO THE PAY ITEMS.
7. CONTRACTOR SHALL NOTIFY OSCEOLA COUNTY TMC (407-742-9201) OF NETWORK DOWNTIME AND ALL SPLICING ACTIVITIES OCCURRING WITHIN THE PROJECT LIMITS, AND DURATION OF THOSE SPLICING ACTIVITIES WITHIN 24 HOURS OF SPLICING ANY FOC.
8. REMOVAL OF EXISTING FIBER SHALL BE INCLUDED IN THE COST OF CLEARING AND GRUBBING IN LOCATIONS WHERE THE EXISTING FIBER OPTIC CABLE IS WITHIN THE LIMITS OF CLEARING AND GRUBBING. IN LOCATIONS WHERE THE EXISTING FIBER IS OUTSIDE THE LIMITS OF CLEARING AND GRUBBING, THE PAY ITEM FOR FIBER REMOVAL SHALL BE USED.
9. RETURN ALL EXISTING REMOVED EQUIPMENT INCLUDING POWER SUPPLIES TO OSCEOLA COUNTY.
10. NETWORK COMMUNICATION IS TO BE MAINTAINED THROUGHOUT PROJECT CONSTRUCTION. CONTRACTOR SHALL BE AWARE AND COORDINATE WITH 443548-1-58-01 ROADWAY CONSTRUCTION TO ENSURE NETWORK COMMUNICATION IS MAINTAINED.

CONDUIT:

1. CONDUIT LOCATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. CONDUIT SHALL BE PLACED WITHIN THE RIGHT-OF-WAY BUT CAN BE ADJUSTED TO FIT AROUND THE EXISTING AND PROPOSED UTILITIES. ANY DEVIATION FROM THE PLANS SHALL BE RECORDED IN THE AS-BUILT PLANS.
2. CONDUIT RUN SHALL NOT EXCEED 270 DEGREE OF BENDS BETWEEN PULL BOXES.
3. ALL HDPE CONDUIT CONNECTIONS SHALL BE JOINED WITH A MECHANICAL COUPLE OR APPROVED EQUAL.
4. MINIMUM REQUIRED CONDUIT BURY DEPTHS SHALL BE MAINTAINED, WHERE CONFLICTS OCCUR WITH DRAINAGE OR OTHER UTILITIES PER THESE PLANS.
5. ALL CONDUIT TRENCHES SHALL BE BACK FILLED COMPLETELY TO PROVIDE SAFE CROSSING BY THE END OF THE WORK DAY OR WHENEVER THE WORK ZONE BECOMES INACTIVE AND COMMUNICATIONS HAVE BEEN TRANSFERRED TO THE NEW CABLE. DO NOT OPEN ANY AREA THAT CAN NOT BE BACK FILLED IN THE SAME DAY/NIGHT OPERATION.
6. THE PLANS SHOW THE GENERAL ROUTE AND LOCATION OF CONDUIT AND EQUIPMENT RELATIVE TO MAJOR PHYSICAL FEATURES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FIELD LOCATE ALL ABOVEGROUND AND UNDERGROUND CONFLICTS IN ADVANCE OF THE PLACEMENT OF ANY CONDUIT OR OTHER FACILITIES. THE CONTRACTOR SHALL FIELD MARK THE PROPOSED ALIGNMENT FOR REVIEW AND CONCURRENCE BY THE ENGINEER PRIOR TO TRENCHING AND/OR PLACEMENT.
7. TERMINATE ALL SPARE CONDUITS IN A PULL BOX OR CABINET AND CAP AND SEAL ENDS.
8. WHERE CONDUIT IS CALLED OUT TO BE INTERCEPTED, THE CONDUIT SHALL BE REDIRECTED AND TIED INTO THE PROPOSED CONDUIT. THE PROPOSED NEW CABLING (FOC OR COMPOSITE) IS NOT TO RUN THROUGH THE EXISTING PULL BOXES IN THESE CASES, COST ARE INCIDENTAL TO THE PAY ITEMS.

PULL BOXES:

1. THE STACKING OF PULL BOXES IS NOT ALLOWED.
2. THE RELOCATION OF PULL BOXES IS NOT ALLOWED.

CABLING NOTES:

1. ZIP TIES ARE NOT ALLOWED ON ANY COMMUNICATION CABLING. IF CABLES NEED TO BE SECURED OUTSIDE THE CABLE MANAGEMENT EQUIPMENT THEN VELCRO IS ACCEPTABLE FOR THIS PURPOSE.
2. FIBER CABLING WILL NOT BE COILED INSIDE THE CABINET. FIBER CABLE SLACK SHALL BE COILED IN THE PULL BOX OR SPLICE VAULT NEXT TO THE CABINET.
3. POWER CABLES AND COMMUNICATION CABLE WILL NOT OCCUPY THE SAME CABLE MANAGEMENT RACEWAY.
4. STRANDED WIRES THAT HAVE THE INSULATION STRIPPED IN ORDER ACCESS THE CONDUCTIVE MATERIAL WILL BE TINNED OR HAVE A TERMINAL CRIMPED ON THE END.
5. MAINTAIN EXISTING FIBER INFRASTRUCTURE UNTIL NEW SYSTEM IS READY TO BE INTEGRATED. EXISTING 72 SM SHALL NOT BE REMOVED PRIOR TO INSTALLING NEW 72 SM FIBER.

PAY ITEM DESCRIPTION:

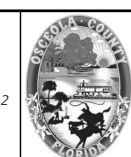
1. 633-1-620: CONTRACTOR SHALL USE PAY ITEM TO REMOVE EXISTING FIBER AT LOCATIONS AS CALLED OUT IN THE PLANS WHERE FIBER IS TO BE TAKEN OUT OF SERVICE BEYOND THE LIMITS OF CLEAR AND GRUBBING.
2. 633-3-15: PAY ITEM INCLUDES COST OF PRETERMINATED 12 SM PIGTAILS AND FIBER JUMPERS. PIGTAILS SHALL HAVE 100' OF SLACK AT SPLICE PULL BOX AND 50' OF SLACK AT FIBER PULL BOX.
3. 633-8-1: CONTRACTOR SHALL FURNISH AND INSTALL 1 - CAT6 CABLE AND 1 - 14 AWG, 3 CONDUCTOR CABLE. QUANTITY OF PAY ITEM IS PER LENGTH OF WIRE RUN NOT PER EACH CABLE TYPE.
4. 660-6-121: CONTRACTOR SHALL FURNISH AND INSTALL AN ITERIS VANTAGE VELOCITY BLUETOOTH READER.
5. 660-6-122: CONTRACTOR SHALL FURNISH AND INSTALL AN BLUETOOTH ANTENNA AND ALL CABLING. PAY ITEM INCLUDES ALL LABOR AND MATERIALS FOR MOUNTING AND INSTALLING ANTENNA ON TRAFFIC AND ITS CABINETS.
6. 682-1-113: CONTRACTOR SHALL FURNISH AND INSTALL A TKH SIQURA PD910 WITH A POWER SUPPLY OR APPROVED EQUAL AND ALL ANCILLARY EQUIPMENT FOR A COMPLETE INSTALLATION (POWER SUPPLY, SURGE, MOUNTING HARDWARE).
7. 684-1-1: CONTRACTOR SHALL FURNISH AND INSTALL AN ITS EXPRESS 8042-V3 OR APPROVED EQUAL. ALL NECESSARY PATCH CHORDS TO TERMINATE CABINET EQUIPMENT TO EDGE SWITCH, PROGRAMMING SWITCHES AND EQUIPMENT WITH IP ADDRESSES AND CONFIGURATION SETTINGS PROVIDED BY OSCEOLA COUNTY SHALL BE INCLUDED UNDER THIS PAY ITEM. REQUEST FOR NETWORK INFORMATION WILL BE REQUESTED 14 DAYS PRIOR TO INSTALLATION.

LEGEND	
SYMBOLS	DESCRIPTION
— — — — —	EXISTING CONDUIT
— · — · — · — · —	INSTALL NEW UNDERGROUND HDPE CONDUIT
— · — · — · — · —	INSTALL NEW DIRECTIONAL BORE HDPE CONDUIT
	PROPOSED CCTV
	EXISTING TRAFFIC CONTROLLER CABINET
	PROPOSED ELECTRICAL PULL BOX
	PROPOSED FIBER PULL BOX
	PROPOSED RECTANGULAR FIBER SPLICE BOX
	EXISTING FIBER PULL BOX

REVISIONS			
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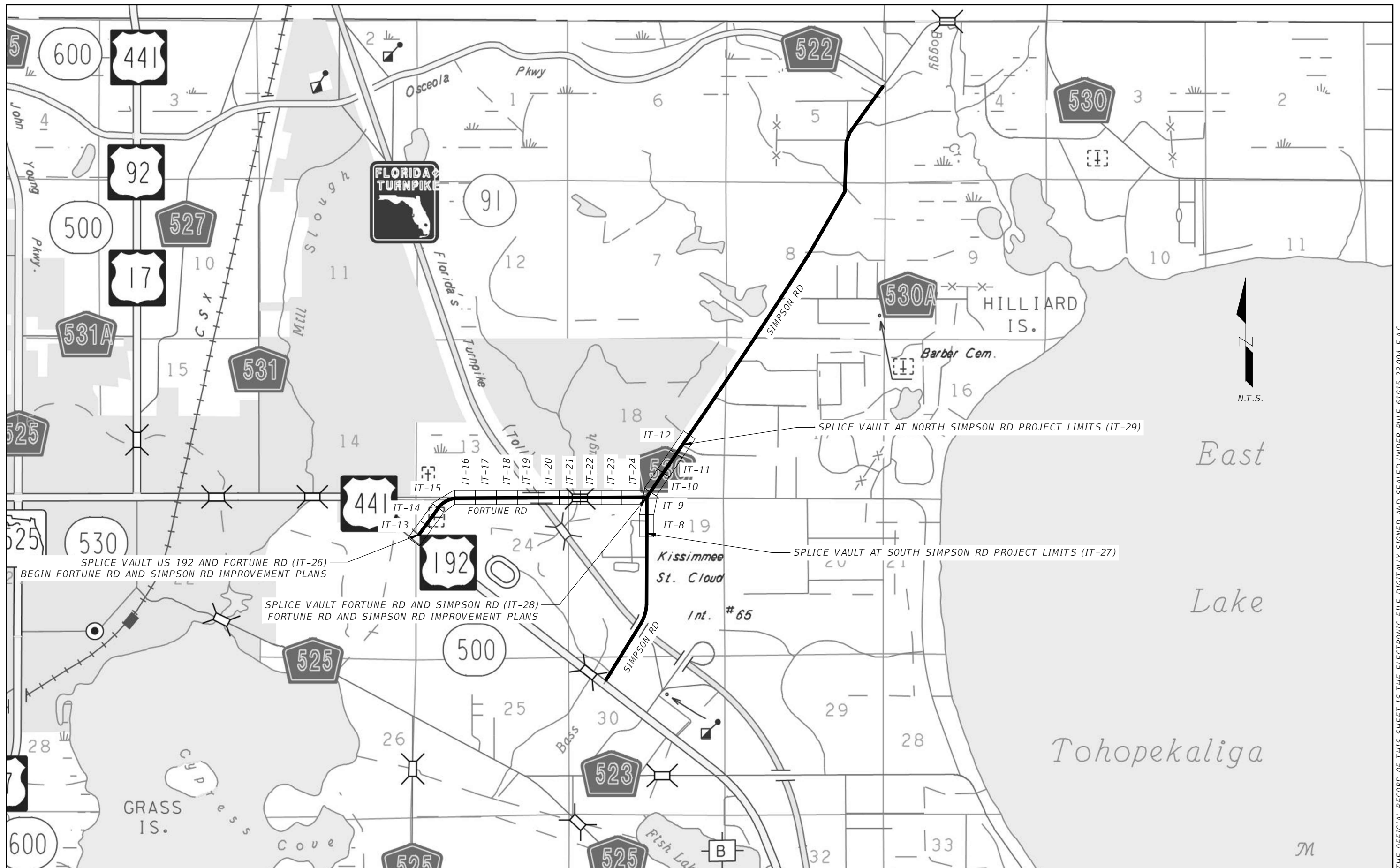


OSCEOLA COUNTY
FLORIDA

GENERAL NOTES

SHEET NO.
IT-6

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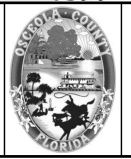


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OSCEOLA COUNTY
FLORIDA

PROJECT LAYOUT

SHEET NO.
IT-7

N 1" = 50'

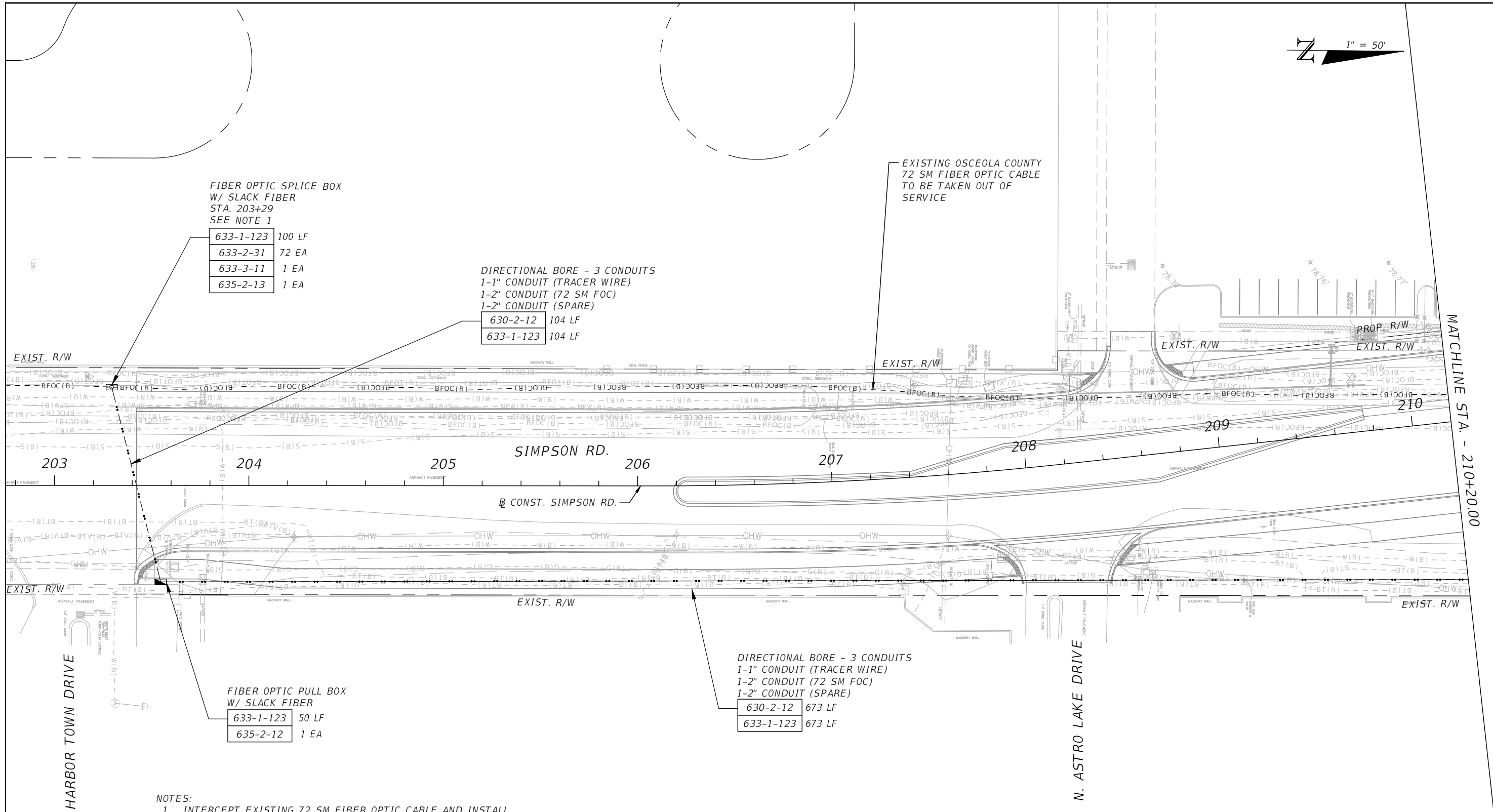
FIBER OPTIC SPLICE BOX
W/ SLACK FIBER
STA. 203+29
SEE NOTE 1

633-1-123	100 LF
633-2-31	72 EA
633-3-11	1 EA
635-2-13	1 EA

DIRECTIONAL BORE - 3 CONDUITS
1-1" CONDUIT (TRACER WIRE)
1-2" CONDUIT (72 SM FOC)
1-2" CONDUIT (SPARE)

630-2-12	104 LF
633-1-123	104 LF

EXISTING OSCEOLA COUNTY
72 SM FIBER OPTIC CABLE
TO BE TAKEN OUT OF
SERVICE

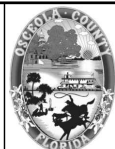


NOTES:
1. INTERCEPT EXISTING 72 SM FIBER OPTIC CABLE AND INSTALL FIBER SPLICE VAULT. BUTT SPLICE PROPOSED 72 SM TO EXISTING OSCEOLA 72 SM FIBER SOUTH.

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DATE	DESCRIPTION	DATE	DESCRIPTION

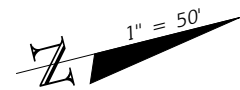
vhb
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OSCEOLA COUNTY
FLORIDA

ITS PLAN SHEET

SHEET NO.
IT-8



MATCHLINE STA. - 122+20.00 (SEE SHEET IT-24)

FIBER OPTIC PULL BOX
W/ SLACK FIBER

TRENCH LINE - 2 CONDUITS
1-2" CONDUIT (72 SM FOC)
1-2" CONDUIT (SPARE)

630-2-11 120 LF
633-1-123 120 LF

TRENCH LINE - 2 CONDUITS
1-2" CONDUIT (72 SM FOC)
1-2" CONDUIT (SPARE)

630-2-11 205 LF
633-1-123 205 LF

FIBER OPTIC PULL BOX
W/ SLACK FIBER

633-1-123 50 LF
635-2-12 1 EA

FIBER SPLICE VAULT
W/ SLACK FIBER
STA. 213+63

200 LF 633-1-123
8 EA 633-2-31
1 EA 633-3-11
1 EA 633-3-51
1 EA 635-2-13

DIRECTIONAL BORE - 3 CONDUITS
1-1" CONDUIT (TRACER WIRE)
1-2" CONDUIT (12 SM DROP FOC)
1-2" CONDUIT (SPARE)

45 LF 630-2-12

EXISTING OSCEOLA COUNTY
72 SM FIBER OPTIC CABLE
TO BE TAKEN OUT OF
SERVICE

DIRECTIONAL BORE - 3 CONDUITS
1-1" CONDUIT (TRACER WIRE)
1-2" CONDUIT (72 SM FOC)
1-2" CONDUIT (SPARE)

630-2-12 200 LF
633-1-123 200 LF

DIRECTIONAL BORE - 3 CONDUITS
1-1" CONDUIT (TRACER WIRE)
1-2" CONDUIT (72 SM FOC)
1-2" CONDUIT (SPARE)

630-2-12 120 LF
633-1-123 120 LF

FIBER OPTIC PULL BOX
W/ SLACK FIBER

50 LF 633-1-123
1 EA 635-2-12

-UTILIZE
SIGNAL CABINET
-INSTALL
BLUETOOTH READER

633-3-14 1 EA
633-3-15 1 EA
660-6-121 1 EA
660-6-122 1 EA
684-1-1 1 EA

-UTILIZE
SIGNAL VIDEO DETECTION CONDUIT
(CCTV CABLE)

30 LF 633-8-1

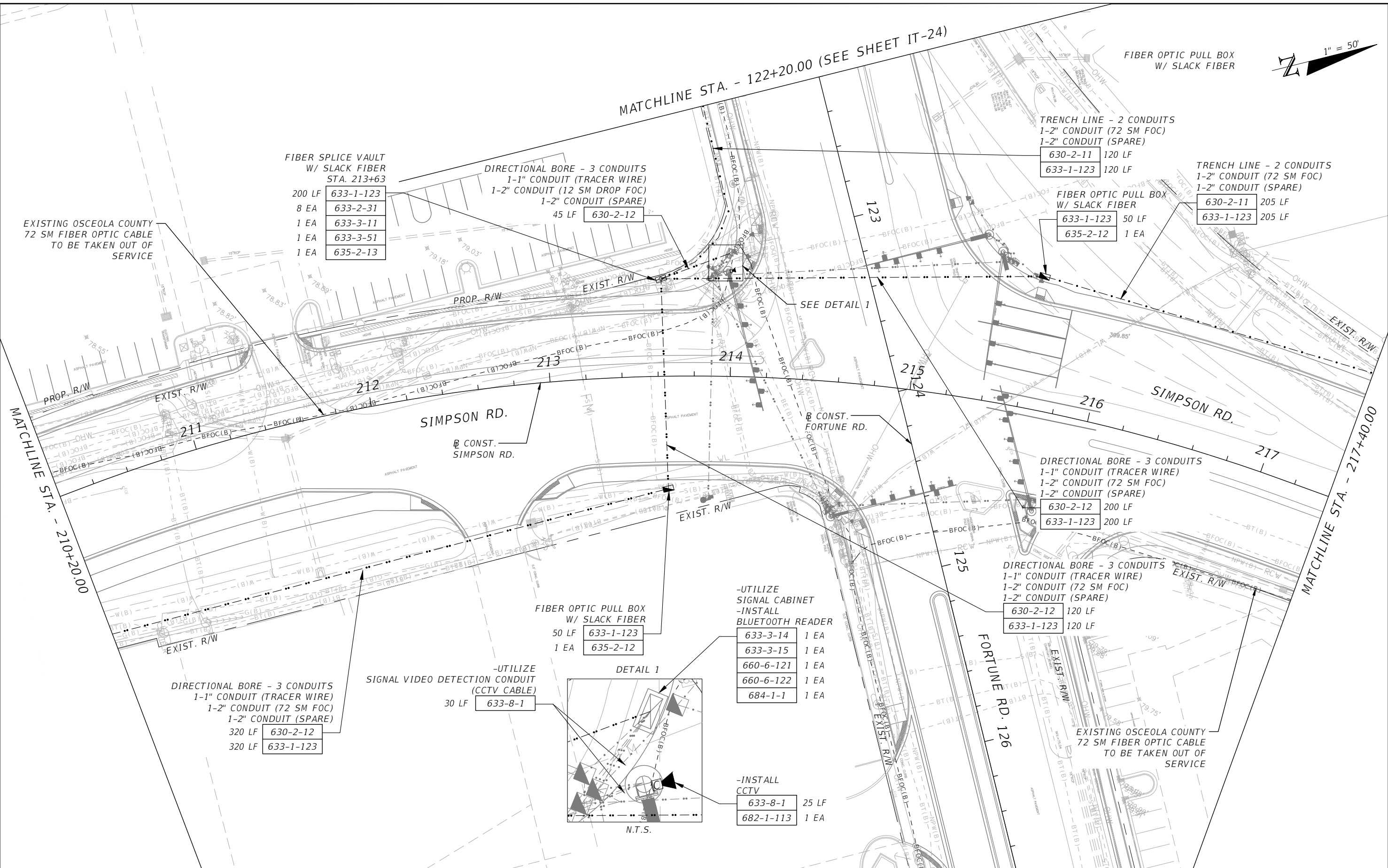
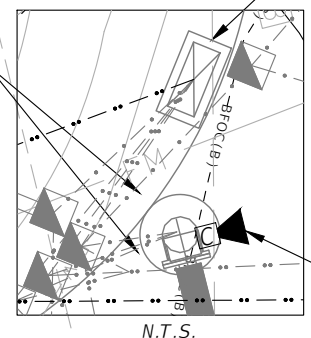
-INSTALL
CCTV

633-8-1 25 LF
682-1-113 1 EA

DIRECTIONAL BORE - 3 CONDUITS
1-1" CONDUIT (TRACER WIRE)
1-2" CONDUIT (72 SM FOC)
1-2" CONDUIT (SPARE)

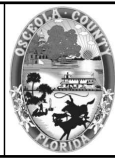
320 LF 630-2-12
320 LF 633-1-123

EXISTING OSCEOLA COUNTY
72 SM FIBER OPTIC CABLE
TO BE TAKEN OUT OF
SERVICE



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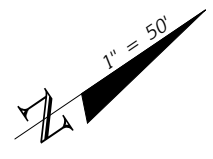


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ITS PLAN SHEET

SHEET
NO.
IT-9

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TRENCH LINE - 2 CONDUITS
 1-2" CONDUIT (72 SM FOC)
 1-2" CONDUIT (SPARE)
 425 LF 630-2-11
 425 LF 633-1-123

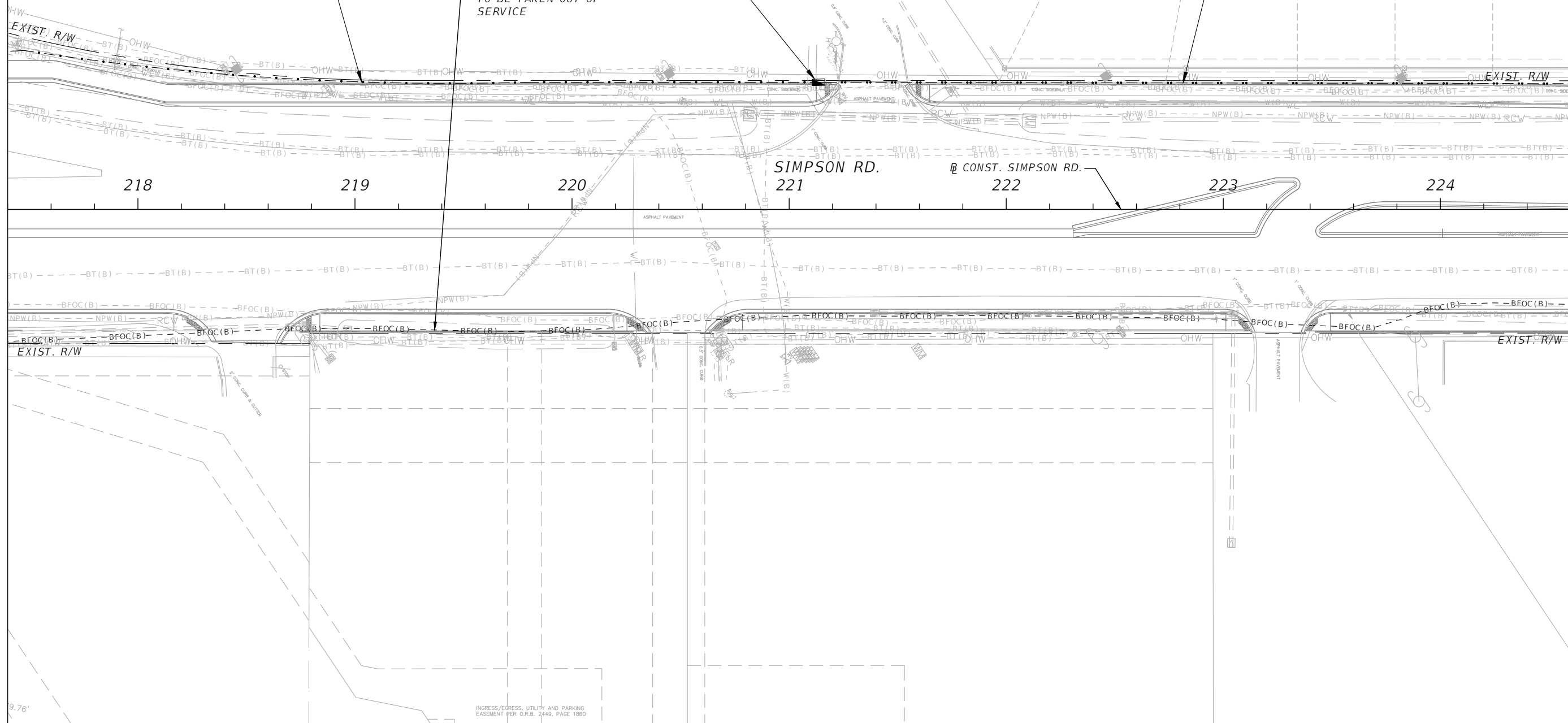
FIBER OPTIC PULL BOX
 W/ SLACK FIBER
 50 LF 633-1-123
 1 EA 635-2-12

DIRECTIONAL BORE - 3 CONDUITS
 1-1" CONDUIT (TRACER WIRE)
 1-2" CONDUIT (72 SM FOC)
 1-2" CONDUIT (SPARE)
 630-2-12 300 LF
 633-1-123 300 LF

EXISTING OSCEOLA COUNTY
 72 SM FIBER OPTIC CABLE
 TO BE TAKEN OUT OF
 SERVICE

MATCHLINE STA. - 217+40.00

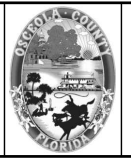
MATCHLINE STA. - 224+60.00



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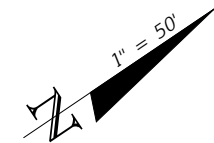


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ITS PLAN SHEET

SHEET NO.
 IT-10

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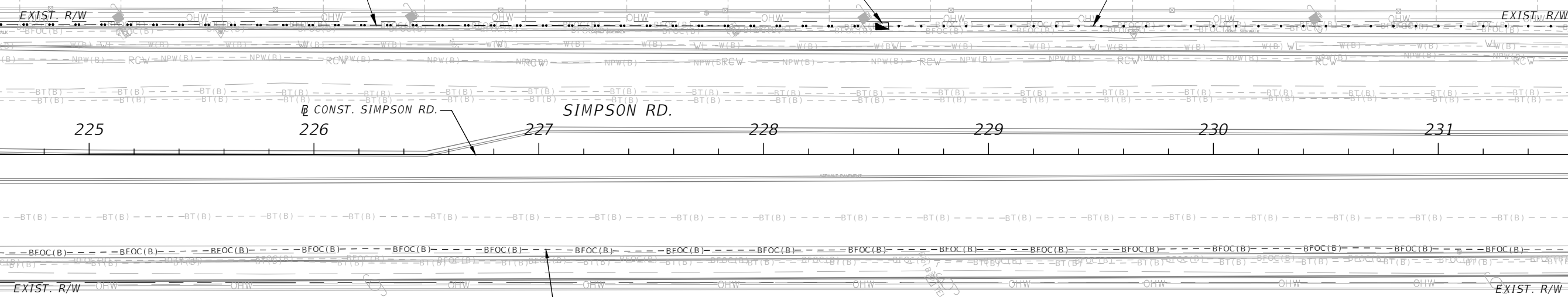
DIRECTIONAL BORE - 3 CONDUITS
 1-1" CONDUIT (TRACER WIRE)
 1-2" CONDUIT (72 SM FOC)
 1-2" CONDUIT (SPARE)
 395 LF 630-2-12
 395 LF 633-1-123

FIBER OPTIC PULL BOX
 W/ SLACK FIBER
 50 LF 633-1-123
 1 EA 635-2-12

TRENCH LINE - 2 CONDUITS
 1-2" CONDUIT (72 SM FOC)
 1-2" CONDUIT (SPARE)
 630-2-11 305 LF
 633-1-123 305 LF

MATCHLINE STA. - 224+60.00

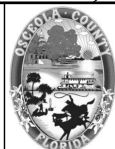
MATCHLINE STA. - 231+60.00



EXISTING OSCEOLA COUNTY
 72 SM FIBER OPTIC CABLE
 TO BE TAKEN OUT OF
 SERVICE

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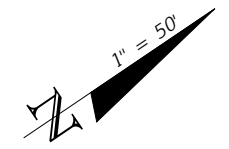


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ITS PLAN SHEET

SHEET NO.
 IT-11

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DIRECTIONAL BORE - 3 CONDUITS
 1-1" CONDUIT (TRACER WIRE)
 1-2" CONDUIT (72 SM FOC)
 1-2" CONDUIT (SPARE)
 630-2-12 115 LF
 633-1-123 115 LF

FIBER OPTIC PULL BOX W/ SLICK FIBER
 633-1-123 50 LF
 635-2-12 1 EA

DIRECTIONAL BORE - 3 CONDUITS
 1-1" CONDUIT (TRACER WIRE)
 1-2" CONDUIT (72 SM FOC)
 1-2" CONDUIT (SPARE)
 630-2-12 122 LF
 633-1-123 122 LF

TRENCH LINE - 2 CONDUITS
 1-2" CONDUIT (72 SM FOC)
 1-2" CONDUIT (SPARE)
 338 LF 630-2-11
 338 LF 633-1-123

FIBER OPTIC PULL BOX W/ SLACK FIBER
 50 LF 633-1-123
 1 EA 635-2-12

FIBER OPTIC SPLICE BOX W/ SLACK FIBER
 STA. 236+12
 633-1-123 100 LF
 633-2-31 72 EA
 633-3-11 1 EA
 635-2-13 1 EA
 (SEE NOTE 1)

NOTES:
 1. INTERCEPT EXISTING 72 SM FIBER OPTIC CABLE AND INSTALL FIBER SPLICE VAULT. BUTT SPLICE PROPOSED 72 SM TO EXISTING OSCEOLA 72 SM FIBER NORTH.

EXISTING OSCEOLA COUNTY 72 SM FIBER OPTIC CABLE TO BE TAKEN OUT OF SERVICE

MATCHLINE STA. - 231+60.00

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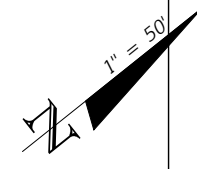
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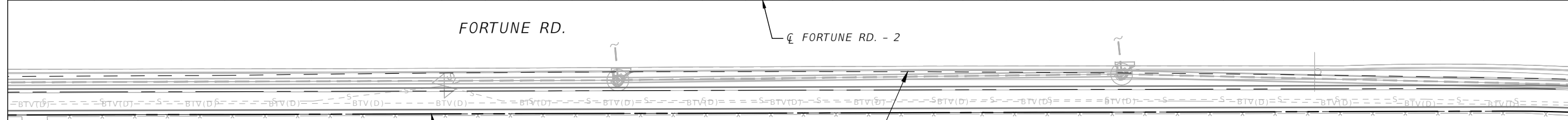
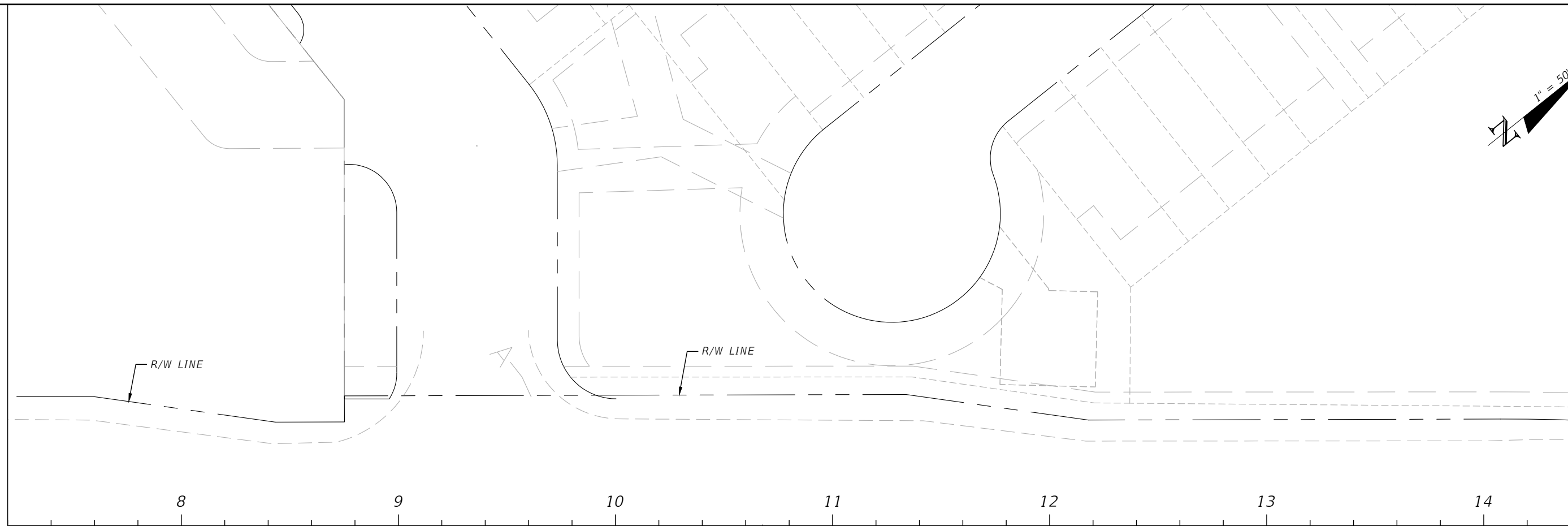
ITS PLAN SHEET

SHEET NO.
 IT-12



MATCHLINE STA. - 7+20.00

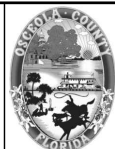
MATCHLINE STA. - 14+40.00



-UTILIZE
 EX. CONDUIT (72 SM FOC)
 REMOVE EX. 24SM/12MM FOC
 720 LF 633-1-123
 720 LF 633-1-620

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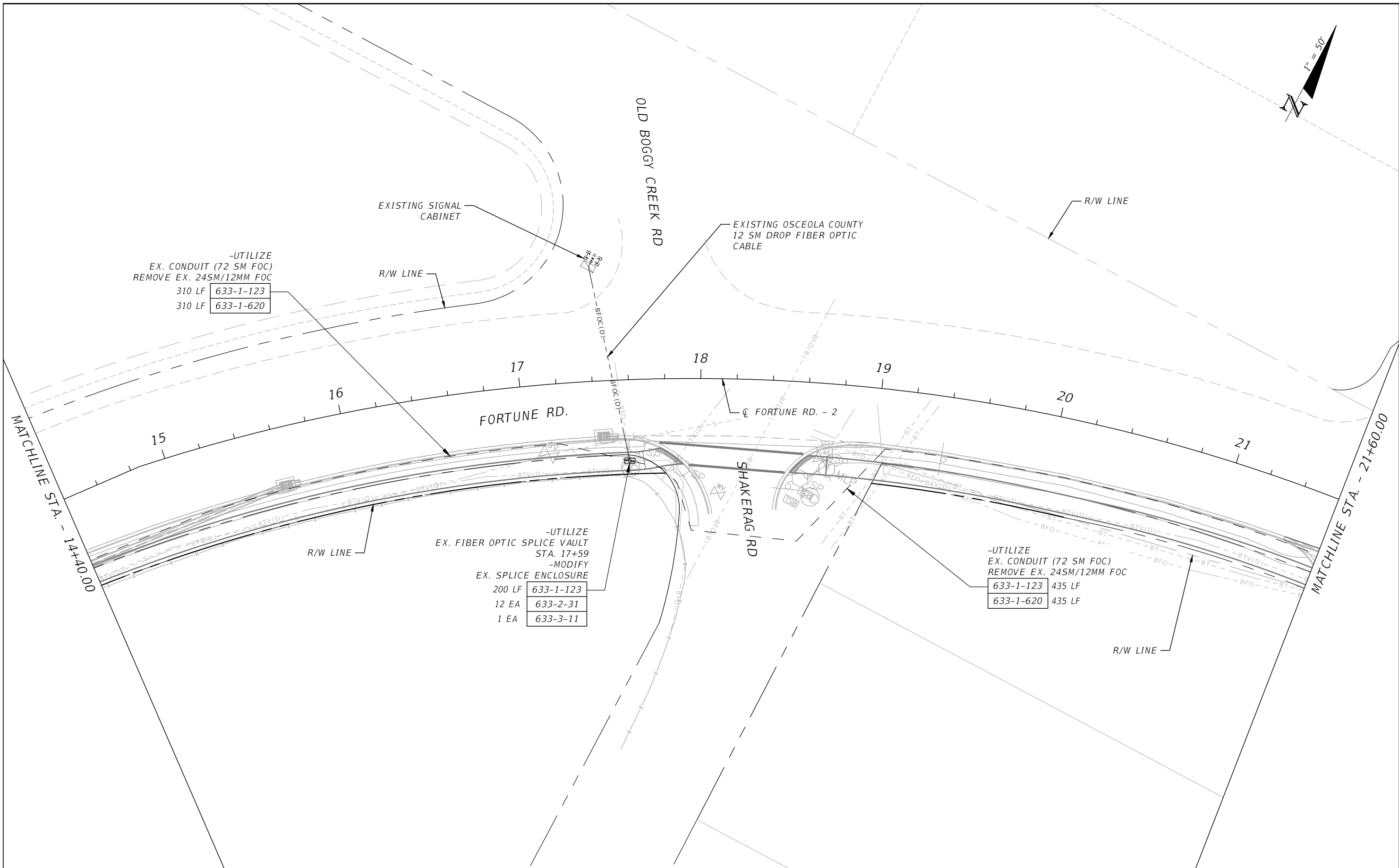


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ITS PLAN SHEET

SHEET NO.
 IT-14

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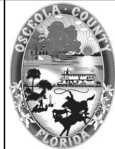


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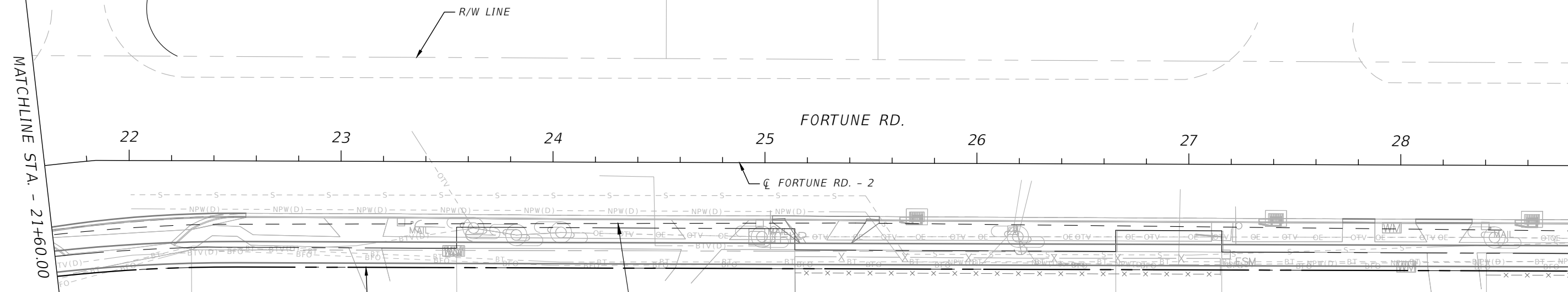
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OSCEOLA COUNTY
FLORIDA

ITS PLAN SHEET

SHEET NO.
IT-15



-UTILIZE
EX. CONDUIT (72 SM FOC)
REMOVE EX. 245M/12MM FOC

633-1-123	720 LF
633-1-620	720 LF

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ITS PLAN SHEET

SHEET
NO.
IT-16

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MATCHLINE STA. - 28+80.00

MATCHLINE STA. - 36+00.00

29 30 31 32 33 34 35

FORTUNE RD.

☉ FORTUNE RD. - 2

BILL BECK BLVD

BILL BECK BLVD

-UTILIZE
EX. CONDUIT (72 SM FOC)
REMOVE EX. 24SM/12MM FOC
40 LF 633-1-123
40 LF 633-1-620

-UTILIZE
EX. CONDUIT (72 SM FOC)
REMOVE EX. 24SM/12MM FOC
105 LF 633-1-123
105 LF 633-1-620

-UTILIZE
EX. FIBER OPTIC PULL BOX
72 SM FOC SLACK FIBER
50 LF 633-1-123

-UTILIZE
EX. CONDUIT (72 SM FOC)
REMOVE EX. 24SM/12MM FOC
633-1-123 630 LF
633-1-620 630 LF

-UTILIZE
EX. FIBER OPTIC SPLICE VAULT
STA. 35+09
-MODIFY
EX. SPLICE ENCLOSURE
200 LF 633-1-123
12 EA 633-2-31
1 EA 633-3-11

EXISTING OSCEOLA COUNTY
12 SM DROP FIBER OPTIC
CABLE

EXISTING SIGNAL CABINET

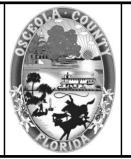
R/W LINE

GATE 6' WOOD FENCE

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ITS PLAN SHEET

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IT-17

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-UTILIZE
EX. CONDUIT (72 SM FOC)
REMOVE EX. 24SM/12MM FOC
725 LF 633-1-123
725 LF 633-1-620

R/W LINE

FORTUNE RD.

MATCHLINE STA. - 36+00.00

MATCHLINE STA. - 43+20.00

37 38 39 40 41 42 43

☉ FORTUNE RD. - 2

R/W LINE

BILL BECK BLVD

BILL BECK BLVD

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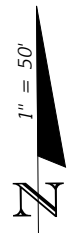


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ITS PLAN SHEET

SHEET NO.
IT-18

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-UTILIZE
 EX. CONDUIT (72 SM FOC)
 REMOVE EX. 245M/12MM FOC
 633-1-123 715 LF
 633-1-620 715 LF

R/W LINE

R/W LINE

FORTUNE RD.

☉ FORTUNE RD. - 2

MATCHLINE STA. - 43+20.00

MATCHLINE STA. - 50+40.00

44

45

46

47

48

49

50

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SHEET NO.

IT-19

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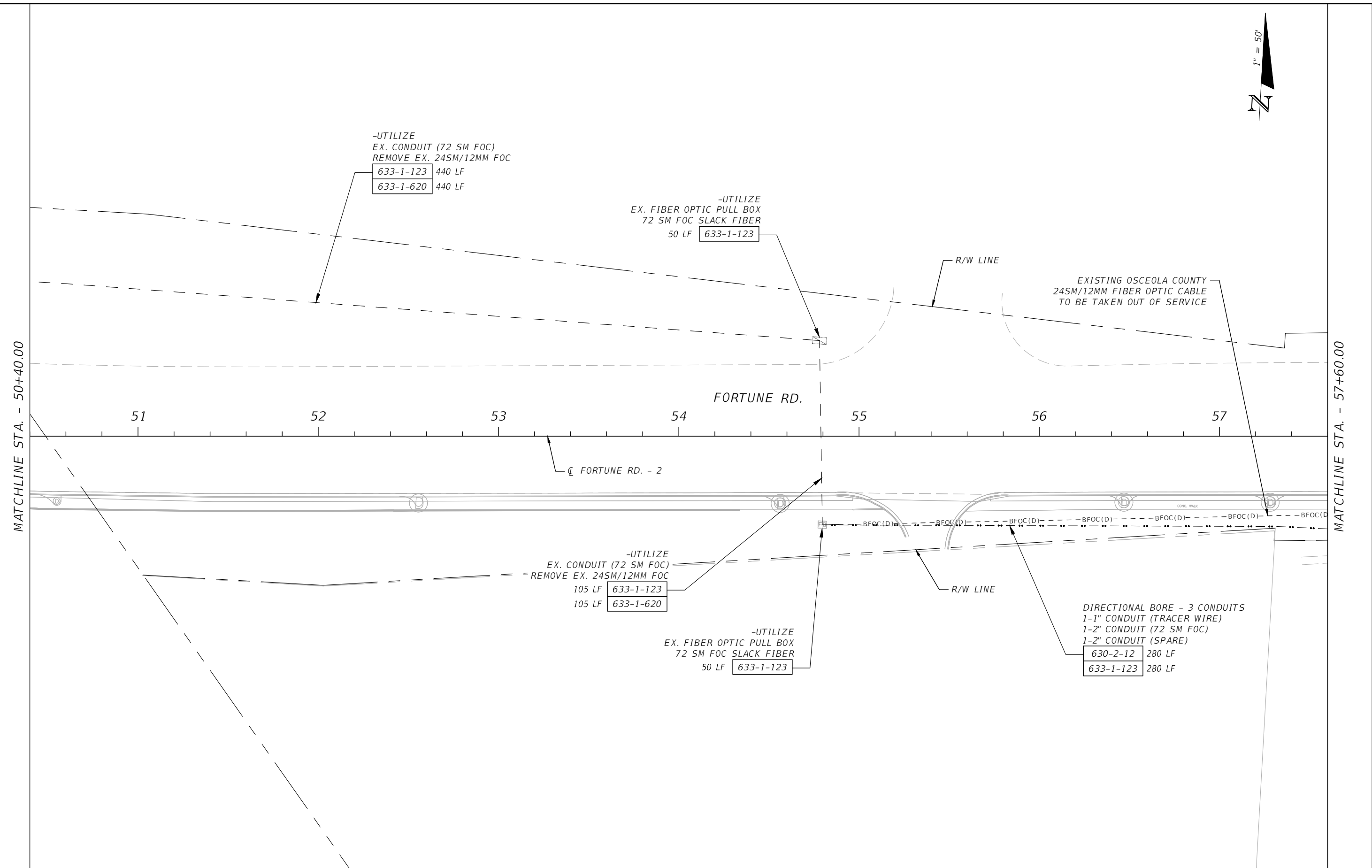
-UTILIZE
EX. CONDUIT (72 SM FOC)
REMOVE EX. 24SM/12MM FOC
633-1-123 440 LF
633-1-620 440 LF

-UTILIZE
EX. FIBER OPTIC PULL BOX
72 SM FOC SLACK FIBER
50 LF 633-1-123

EXISTING OSCEOLA COUNTY
24SM/12MM FIBER OPTIC CABLE
TO BE TAKEN OUT OF SERVICE

MATCHLINE STA. - 50+40.00

MATCHLINE STA. - 57+60.00



51

52

53

54

55

56

57

FORTUNE RD.

☒ FORTUNE RD. - 2

-UTILIZE
EX. CONDUIT (72 SM FOC)
REMOVE EX. 24SM/12MM FOC
105 LF 633-1-123
105 LF 633-1-620

-UTILIZE
EX. FIBER OPTIC PULL BOX
72 SM FOC SLACK FIBER
50 LF 633-1-123

DIRECTIONAL BORE - 3 CONDUITS
1-1" CONDUIT (TRACER WIRE)
1-2" CONDUIT (72 SM FOC)
1-2" CONDUIT (SPARE)
630-2-12 280 LF
633-1-123 280 LF

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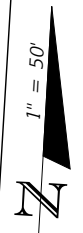


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ITS PLAN SHEET

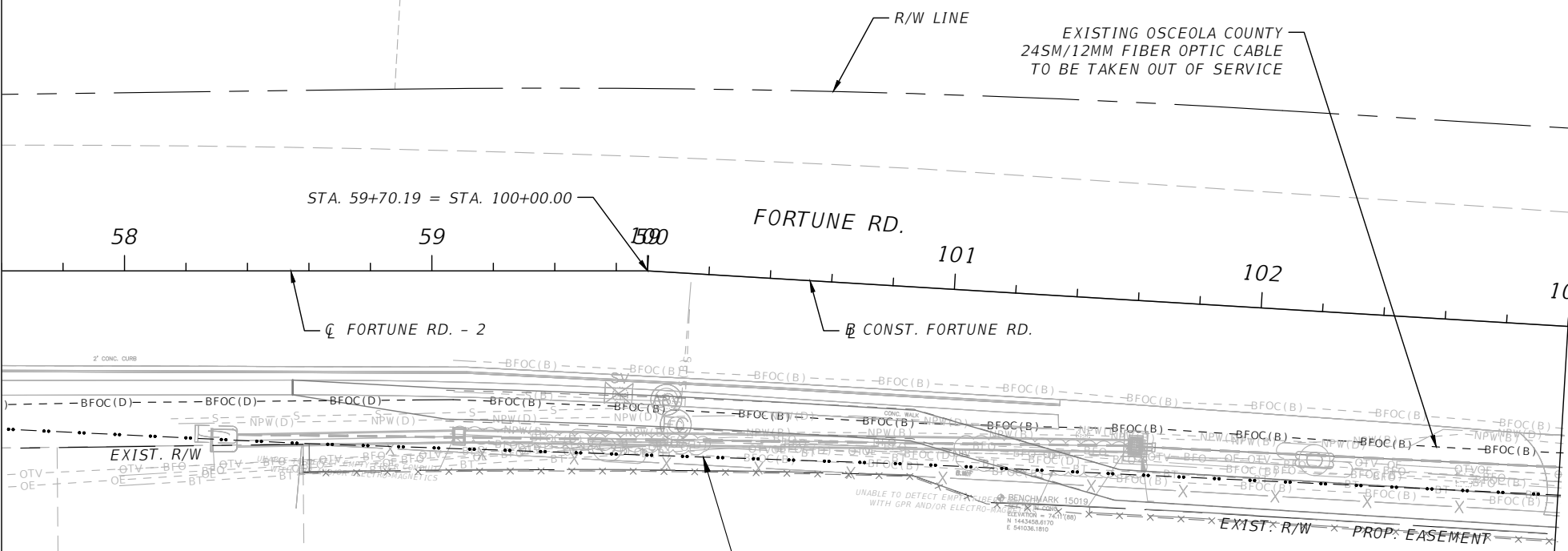
SHEET
NO.
IT-20

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MATCHLINE STA. - 57+60.00

MATCHLINE STA. - 103+00.00

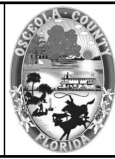


DIRECTIONAL BORE - 3 CONDUITS
 1-1" CONDUIT (TRACER WIRE)
 1-2" CONDUIT (72 SM FOC)
 1-2" CONDUIT (SPARE)
 630-2-12 510 LF
 633-1-123 510 LF

REVISIONS			
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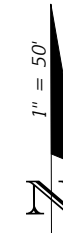


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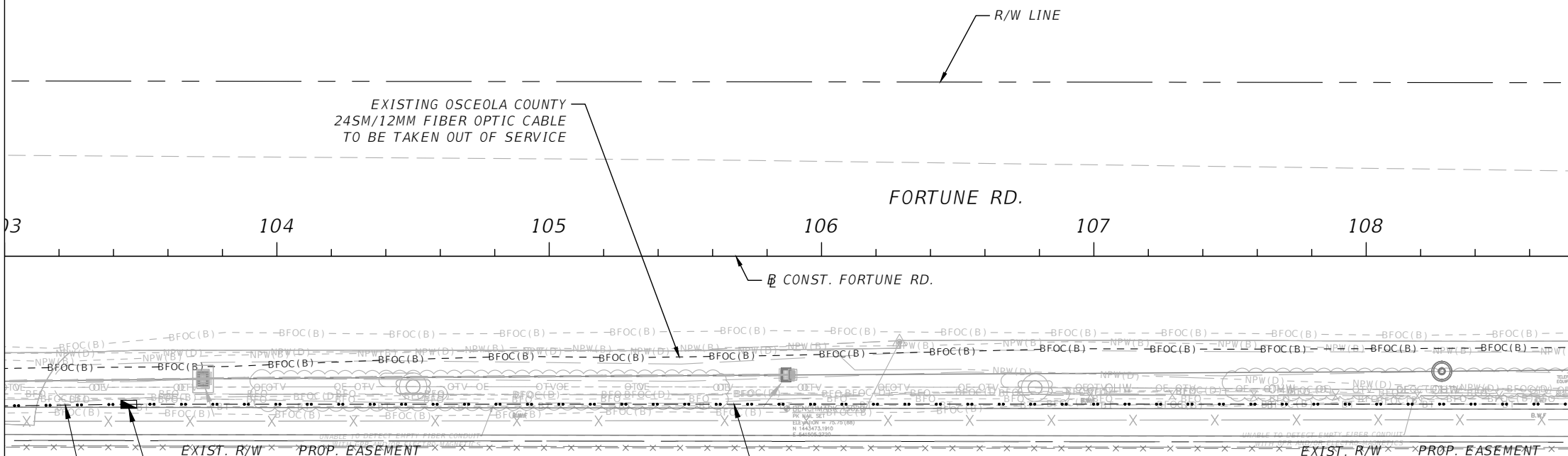
SHEET NO.
 IT-21

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MATCHLINE STA. - 103+00.00

MATCHLINE STA. - 108+80.00



FIBER OPTIC PULL BOX
W/ SLACK FIBER

633-1-123	50 LF
635-2-12	1 EA

DIRECTIONAL BORE - 3 CONDUITS
1-1" CONDUIT (TRACER WIRE)
1-2" CONDUIT (72 SM FOC)
1-2" CONDUIT (SPARE)

630-2-12	50 LF
633-1-123	50 LF

DIRECTIONAL BORE - 3 CONDUITS
1-1" CONDUIT (TRACER WIRE)
1-2" CONDUIT (72 SM FOC)
1-2" CONDUIT (SPARE)

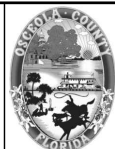
630-2-12	535 LF
633-1-123	535 LF

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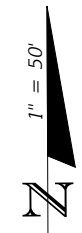


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ITS PLAN SHEET

SHEET
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IT-22

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MATCHLINE STA. - 108+80.00

MATCHLINE STA. - 115+60.00

LAKESIDE DR

EXIST. R/W

FORTUNE RD.

CONST. FORTUNE RD.

EXISTING OSCEOLA COUNTY
24SM/12MM FIBER OPTIC CABLE
TO BE TAKEN OUT OF SERVICE

EXISTING OSCEOLA COUNTY
72 SM FIBER OPTIC CABLE
TO BE TAKEN OUT OF SERVICE

FIBER SPLICE VAULT
W/ SLACK FIBER
STA. 110+56

200 LF	633-1-123
12 EA	633-2-31
1 EA	633-3-11
1 EA	635-2-13

DIRECTIONAL BORE - 3 CONDUITS
1-1" CONDUIT (TRACER WIRE)
1-2" CONDUIT (72 SM FOC)
1-2" CONDUIT (SPARE)

630-2-12	175 LF
633-1-123	175 LF

DIRECTIONAL BORE - 3 CONDUITS
1-1" CONDUIT (TRACER WIRE)
1-2" CONDUIT (72 SM FOC)
1-2" CONDUIT (SPARE)

630-2-12	365 LF
633-1-123	365 LF

EXISTING SIGNAL CABINET

633-2-32	12 EA
----------	-------

TRENCH LINE - 1 CONDUIT
1-2" CONDUIT (12 SM DROP FOC)
SEE NOTE 1

630-2-11	10 LF
633-1-121	10 LF

FIBER OPTIC PULL BOX
W/ SLACK FIBER

50 LF	633-1-123
1 EA	635-2-12

DIRECTIONAL BORE - 3 CONDUITS
1-1" CONDUIT (TRACER WIRE)
1-2" CONDUIT (72 SM FOC)
1-2" CONDUIT (SPARE)

630-2-12	140 LF
633-1-123	140 LF

NOTES:
1. TRENCHING WILL INCLUDE INTERCEPTING EXISTING CONDUIT SWEEP FOR FIBER ENTERING THE EXISTING SIGNAL CABINET.

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OSCEOLA COUNTY
FLORIDA

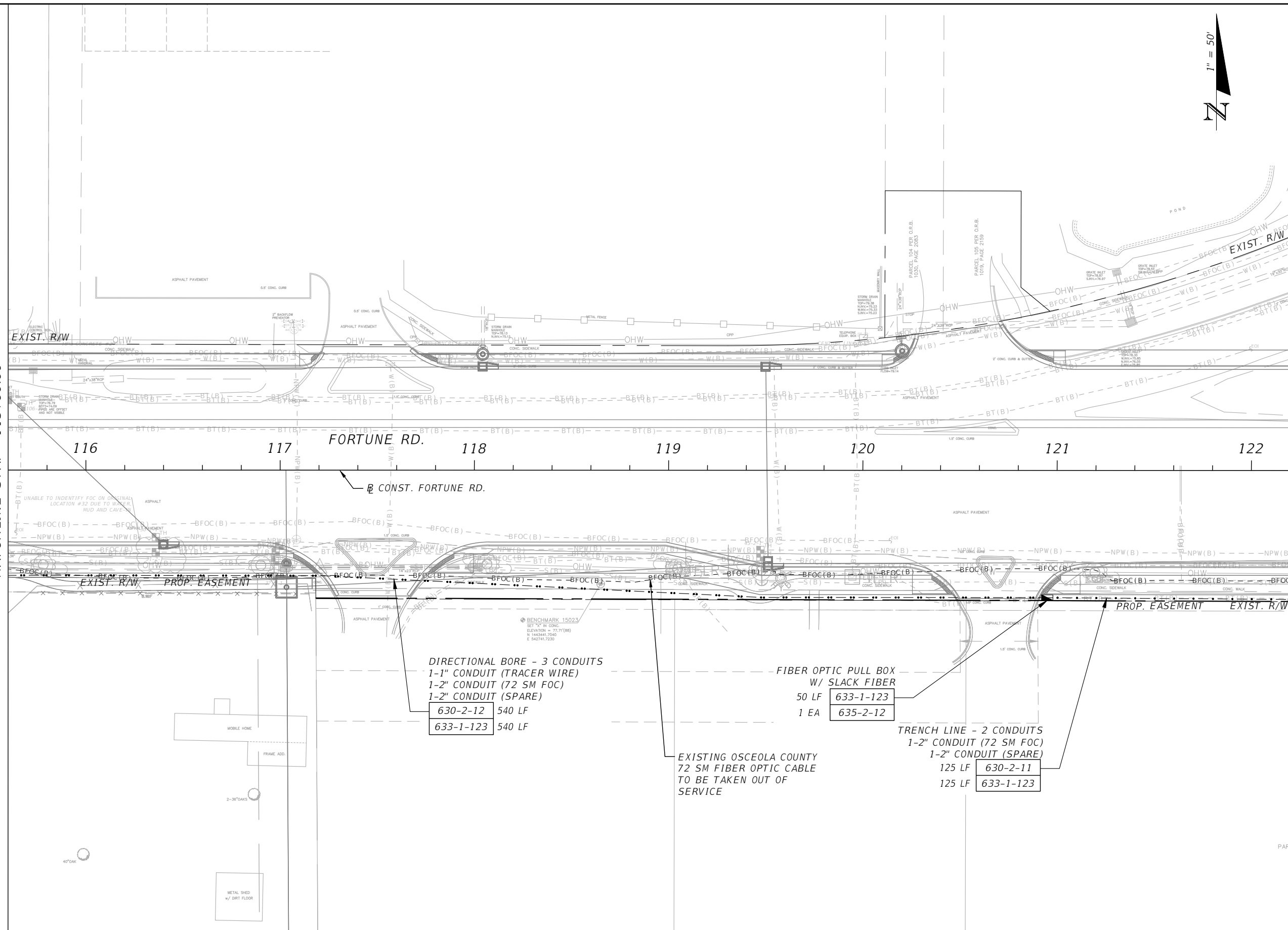
ITS PLAN SHEET

SHEET NO.
IT-23

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MATCHLINE STA. - 115+60.00



MATCHLINE STA. - 122+20.00 (SEE SHEET IT-9)

DIRECTIONAL BORE - 3 CONDUITS
 1-1" CONDUIT (TRACER WIRE)
 1-2" CONDUIT (72 SM FOC)
 1-2" CONDUIT (SPARE)
 630-2-12 540 LF
 633-1-123 540 LF

**FIBER OPTIC PULL BOX
 W/ SLACK FIBER**
 50 LF 633-1-123
 1 EA 635-2-12

**EXISTING OSCEOLA COUNTY
 72 SM FIBER OPTIC CABLE
 TO BE TAKEN OUT OF
 SERVICE**

TRENCH LINE - 2 CONDUITS
 1-2" CONDUIT (72 SM FOC)
 1-2" CONDUIT (SPARE)
 125 LF 630-2-11
 125 LF 633-1-123

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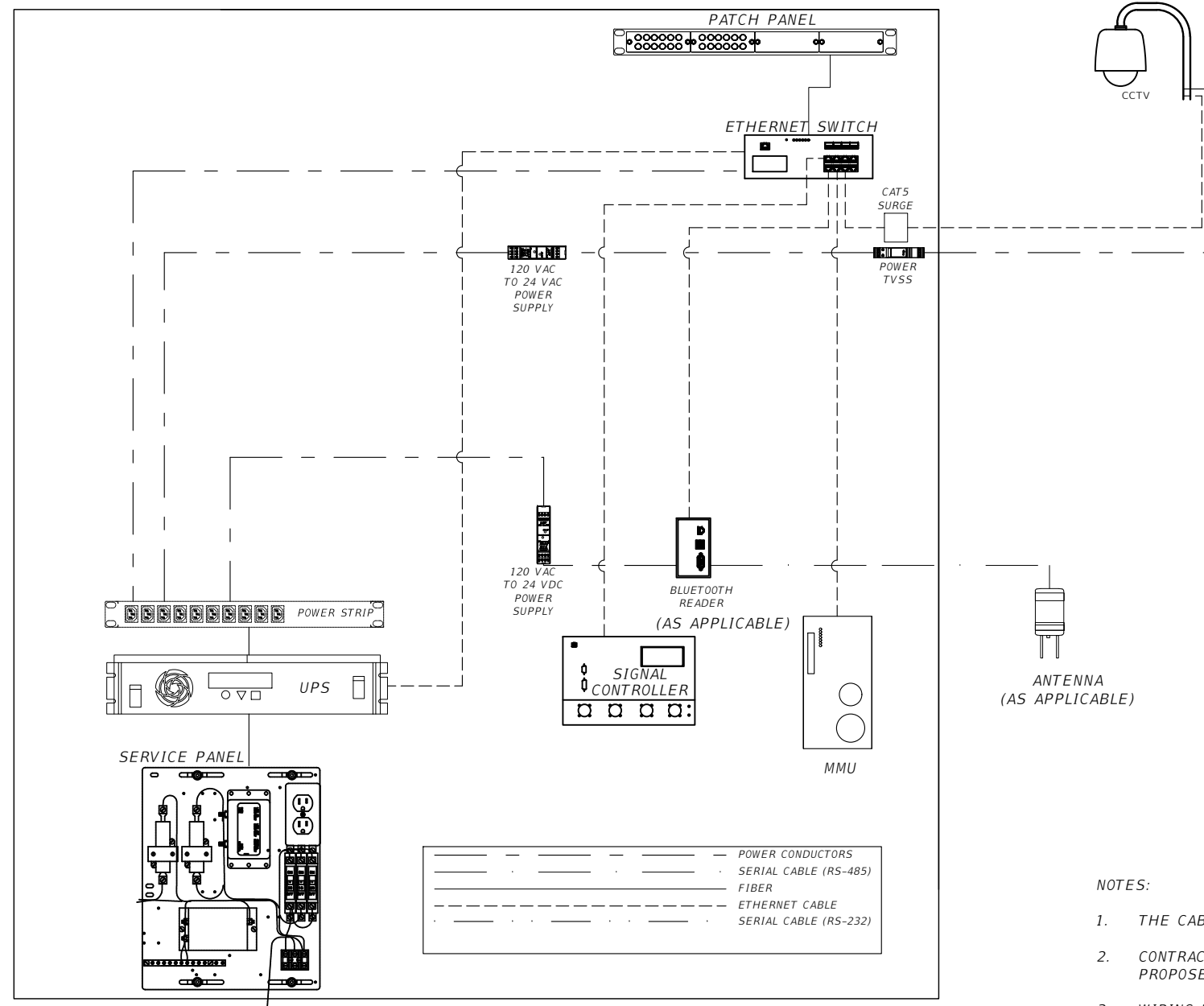
**OSCEOLA COUNTY
 FLORIDA**

ITS PLAN SHEET

SHEET NO.
IT-24

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POWER AND COMMUNICATIONS SCHEMATIC
SIGNAL CABINET

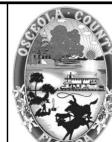


NOTES:

1. THE CABINET SHALL PROVIDE FOR DIN RAIL MOUNTED EQUIPMENT.
2. CONTRACTOR IS RESPONSIBLE FOR FINDING AVAILABLE SPACE IN SIGNAL CABINET FOR PROPOSED EQUIPMENT.
3. WIRING DIAGRAM IS TYPICAL. ADDITIONAL DEVICES MAY BE PRESENT IN SIGNAL CABINET.

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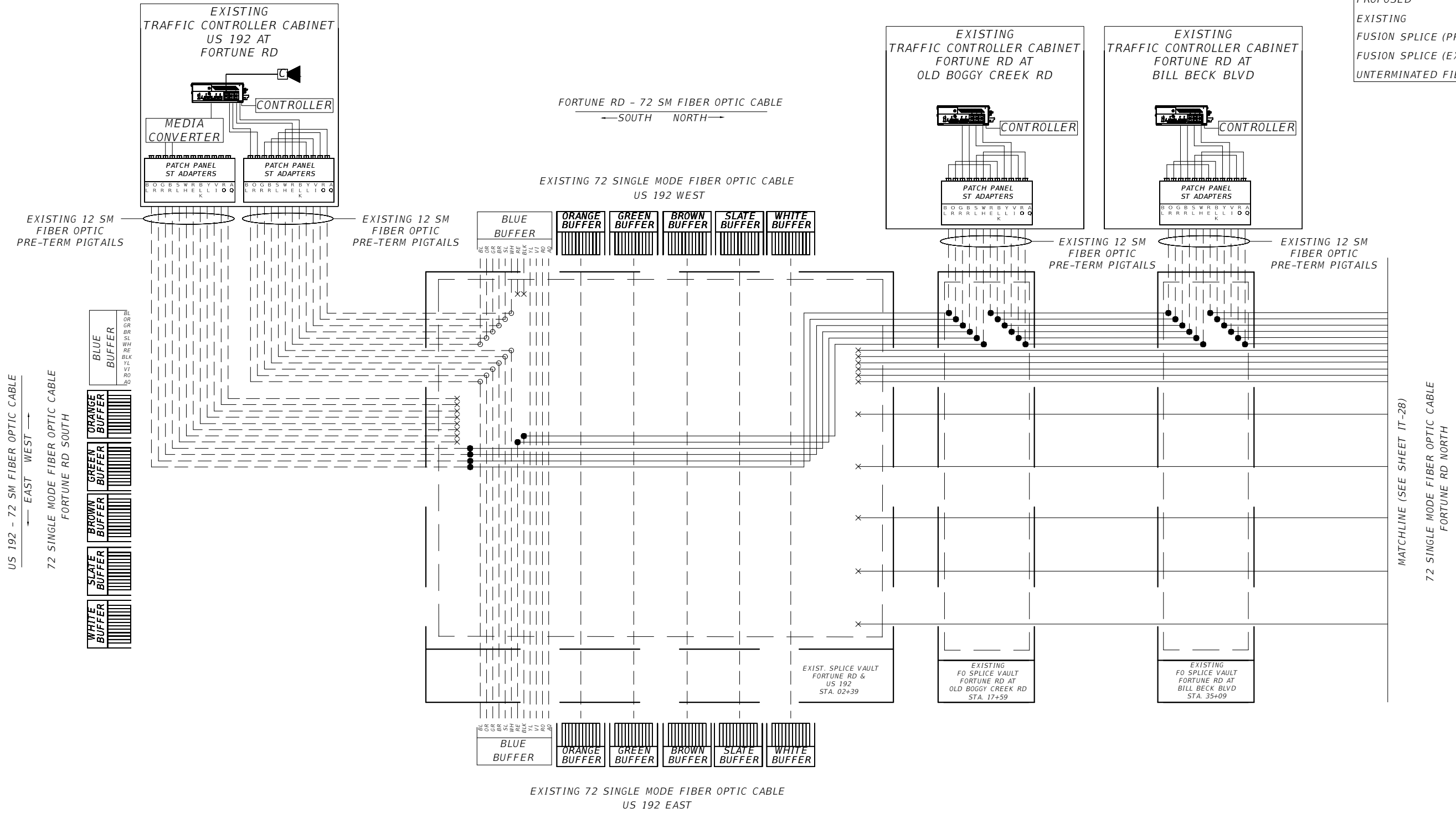
ITS CABINET DETAIL
(SIGNAL CABINET)

SHEET
NO.
IT-25

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LEGEND:

- ETHERNET SWITCH 
- PROPOSED 
- EXISTING 
- FUSION SPLICE (PROPOSED) 
- FUSION SPLICE (EXISTING) 
- UNTERMINATED FIBER 



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SPLICE DIAGRAM

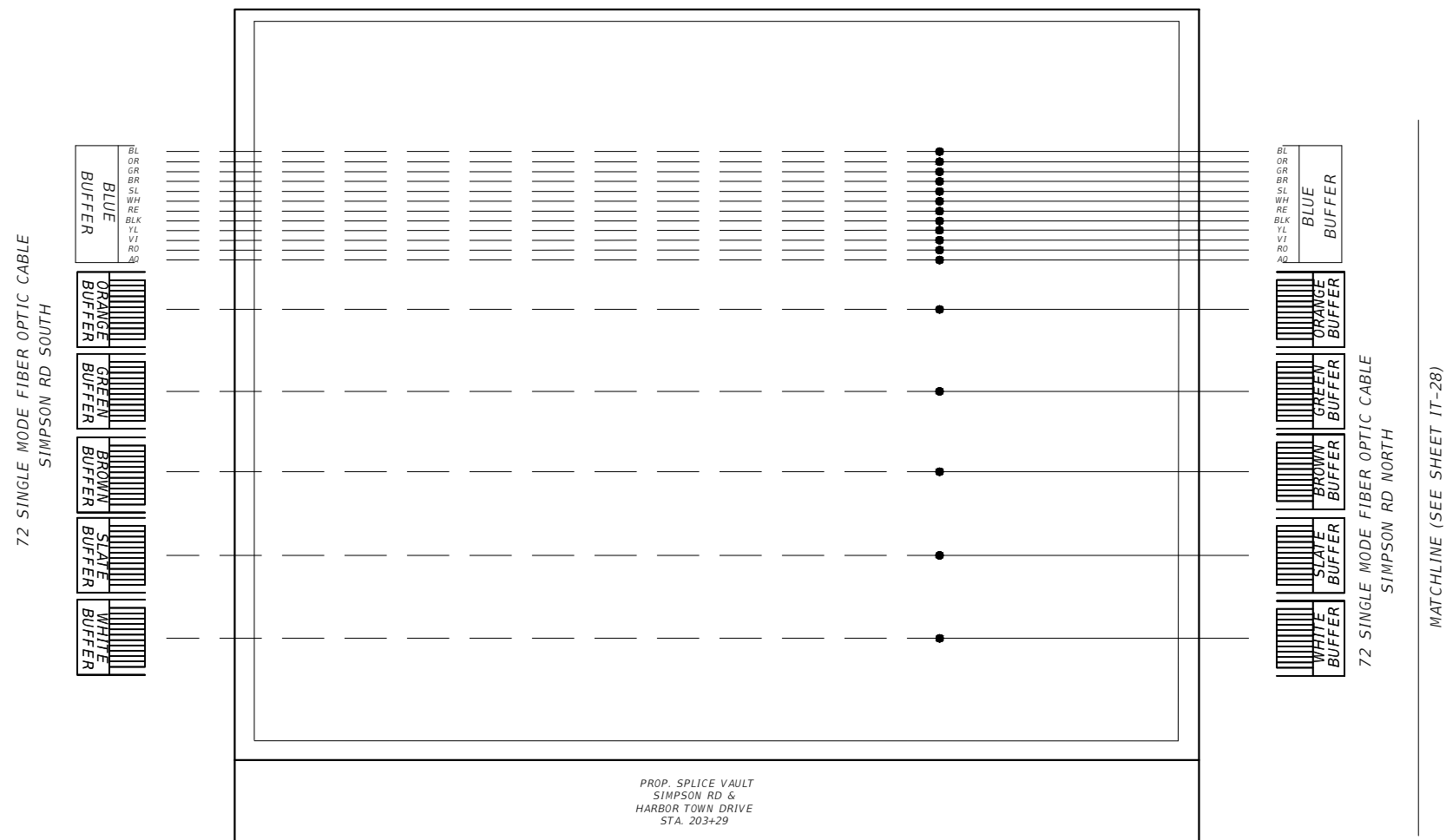
SHEET NO.
IT-26

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SIMPSON RD - 72 SM FIBER OPTIC CABLE
 — SOUTH NORTH —

LEGEND:

ETHERNET SWITCH	
PROPOSED	— — —
EXISTING	- - -
FUSION SPLICE (PROPOSED)	●
FUSION SPLICE (EXISTING)	○
UNTERMINATED FIBER	×

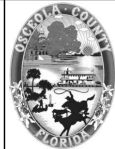


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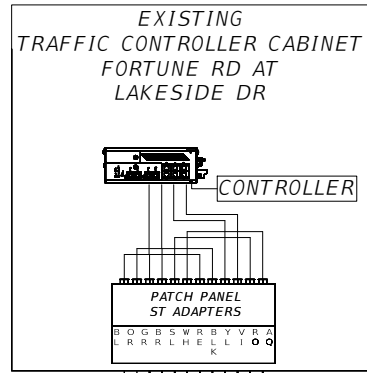
OSCEOLA COUNTY
FLORIDA

SPLICE DIAGRAM

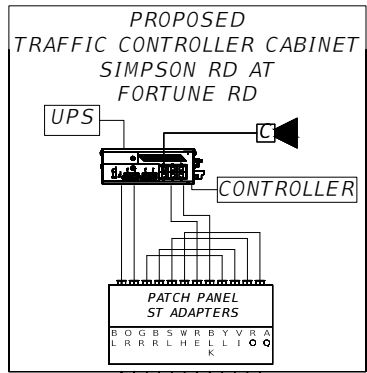
SHEET NO.
IT-27

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72 SINGLE MODE FIBER OPTIC CABLE
FORTUNE RD WEST
MATCHLINE (SEE SHEET IT-26)



PROPOSED 12 SM FIBER OPTIC PRE-TERM PIGTAILS

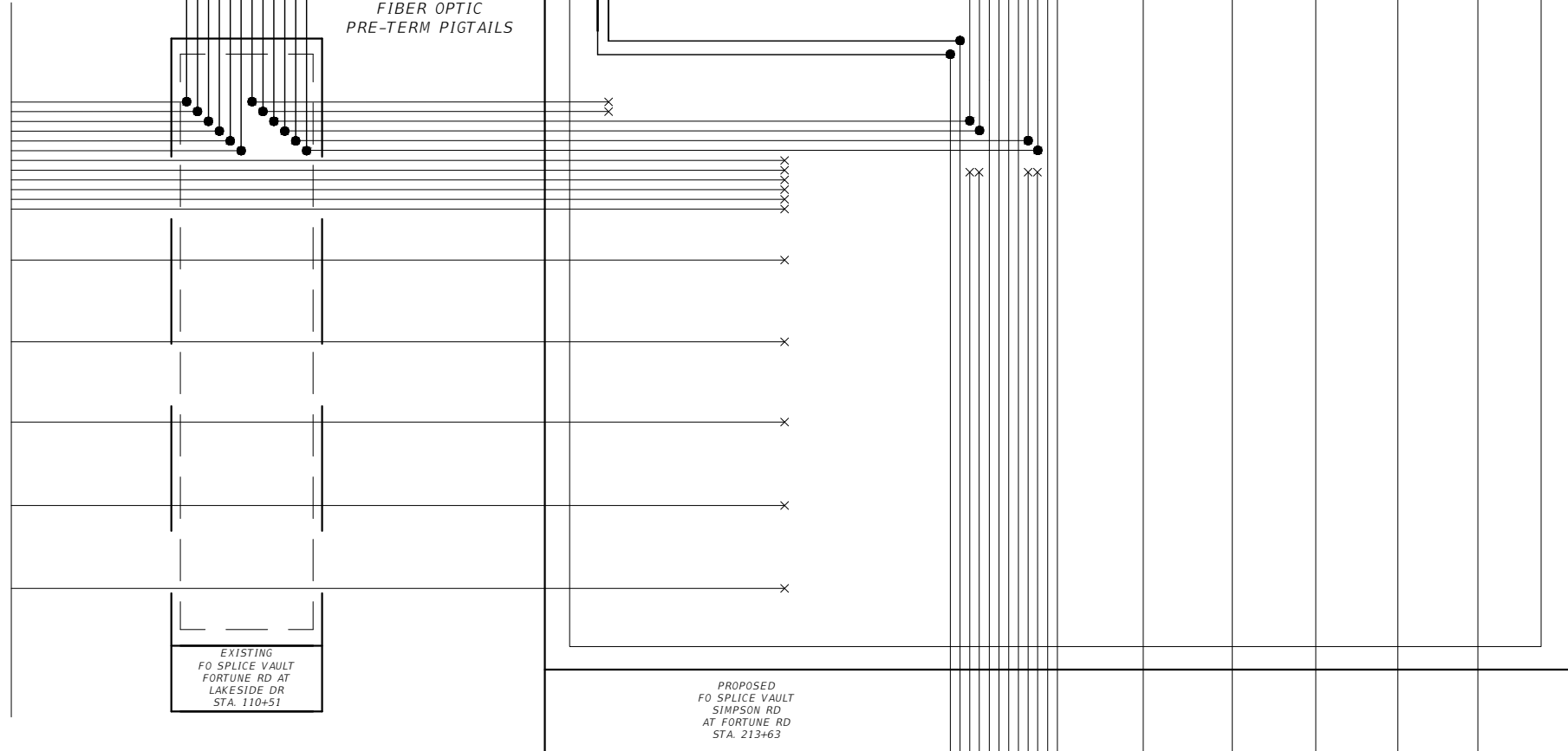
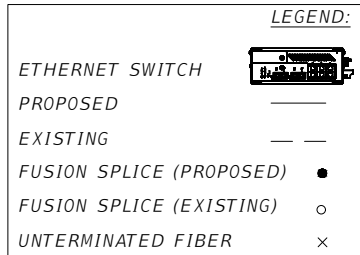


PROPOSED 12 SM FIBER OPTIC PRE-TERM PIGTAILS

FORTUNE RD - 72 SM FIBER OPTIC CABLE
WEST EAST

MATCHLINE (SEE SHEET IT-29)

72 SINGLE MODE FIBER OPTIC CABLE
SIMPSON RD NORTH



72 SINGLE MODE FIBER OPTIC CABLE
FORTUNE RD EAST

SIMPSON RD - 72 SM FIBER OPTIC CABLE
SOUTH NORTH

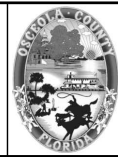


72 SINGLE MODE FIBER OPTIC CABLE - SIMPSON RD SOUTH

MATCHLINE (SEE SHEET IT-27)

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SPLICE DIAGRAM

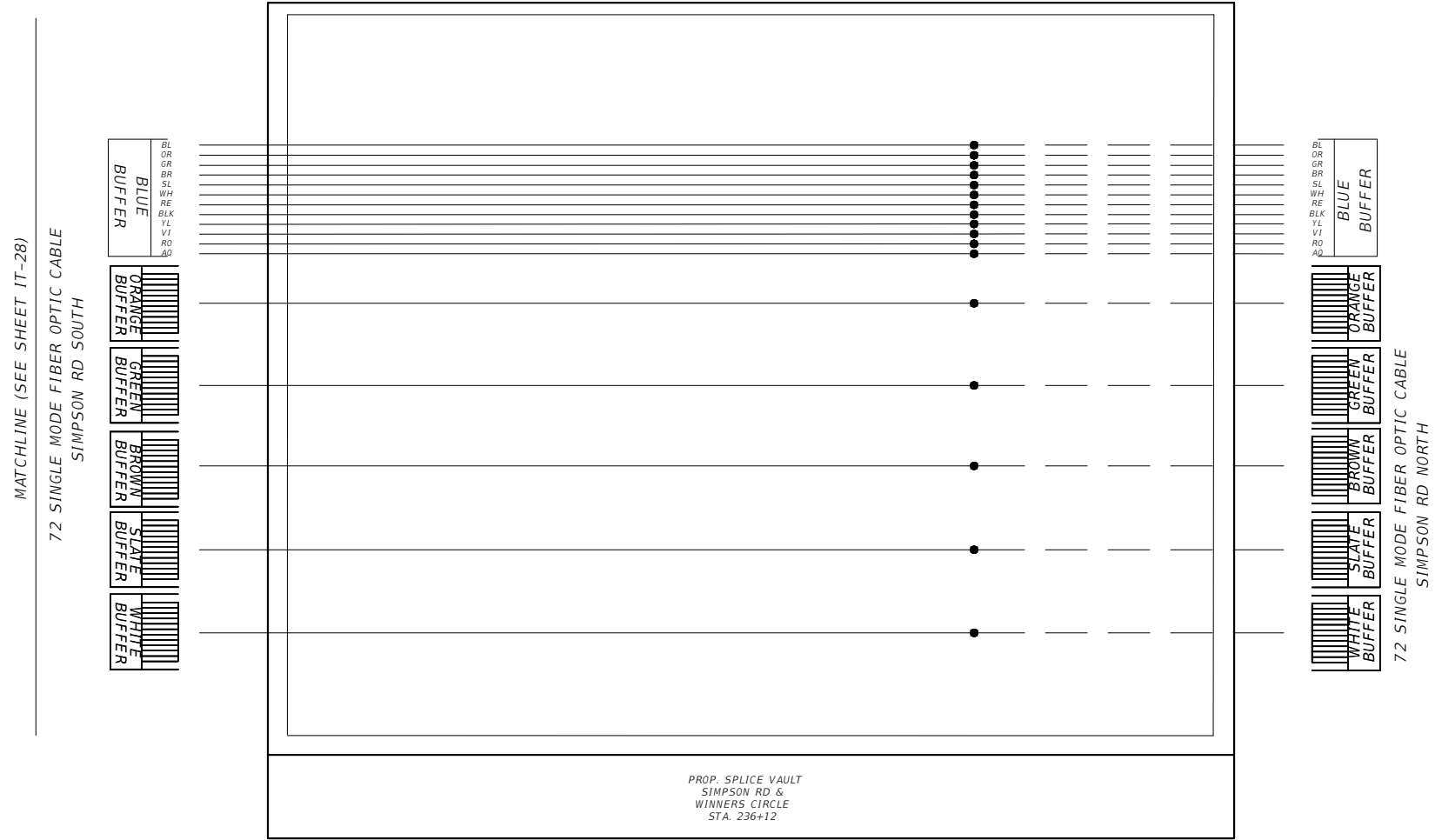
SHEET NO.
IT-28

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SIMPSON RD - 72 SM FIBER OPTIC CABLE
 ← SOUTH NORTH →

LEGEND:

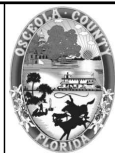
- ETHERNET SWITCH 
- PROPOSED 
- EXISTING 
- FUSION SPLICE (PROPOSED) ●
- FUSION SPLICE (EXISTING) ○
- UNTERMINATED FIBER ×



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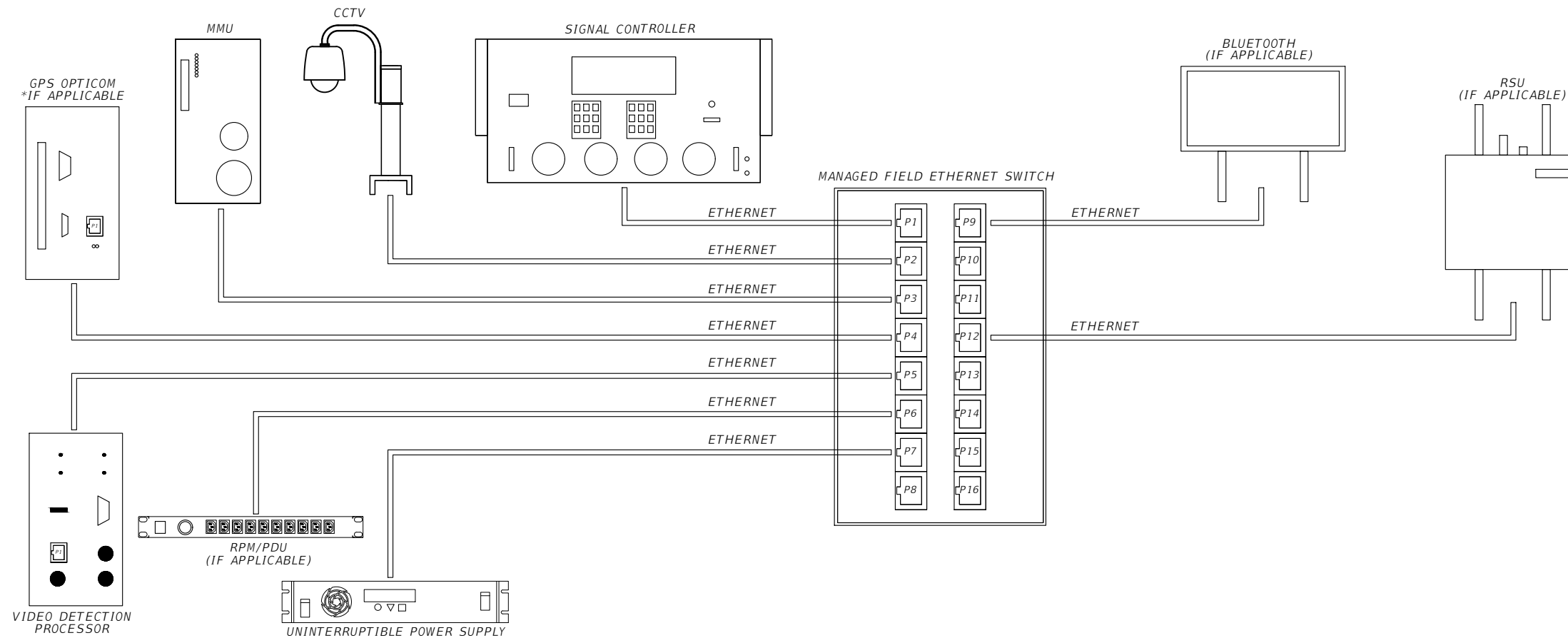
SPLICE DIAGRAM

SHEET
 NO.
 IT-29

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ETHERNET SWITCH PORT ASSIGNMENT:

- | | |
|------------------------------|---------|
| SIGNAL CONTROLLER | PORT 1 |
| CCTV | PORT 2 |
| MMU | PORT 3 |
| GPS OPTICOM | PORT 4 |
| VIDEO DETECTION | PORT 5 |
| RPM/PDU | PORT 6 |
| UNINTERRUPTIBLE POWER SUPPLY | PORT 7 |
| VIDEO ACCESS PORT | PORT 8 |
| BLUETOOTH | PORT 9 |
| SPARE | PORT 10 |
| MAINTENANCE PORT | PORT 11 |
| RSU | PORT 12 |



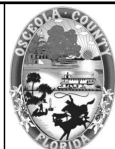
NOTE:

PORT ASSIGNMENTS SHOWN ARE FOR PROPOSED ETHERNET SWITCHES ONLY. CONTRACTOR SHALL MAINTAIN EXISTING ETHERNET SWITCHES PORT ASSIGNMENTS.

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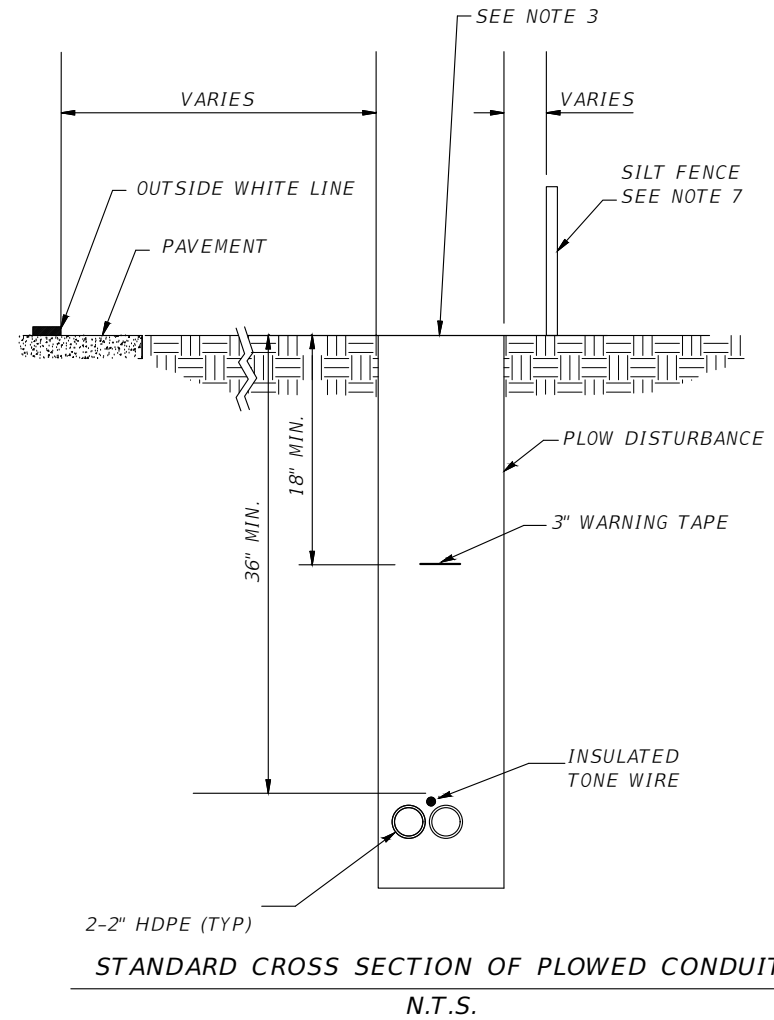
ETHERNET SWITCH DETAIL

SHEET NO.
IT-30

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NOTES:

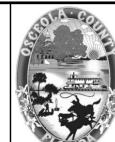
1. TRAFFIC CONTROL FOR LONGITUDINAL INSTALLATION SHALL BE IN ACCORDANCE WITH FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD PLANS.
2. A MINIMUM OF 2'- 0" SHALL BE MAINTAINED FROM EXISTING LANDSCAPE FEATURES.
3. CONSTRUCTION CORRIDOR SHALL BE RESTORED TO ORIGINAL OR IMPROVED CONDITION IMMEDIATELY AFTER COMPLETING THE INSTALLATION OF THE CONDUIT.
4. JOINT COUPLINGS WILL BE USED AS NECESSARY.
5. CONDUIT PATH WILL BE ROUTED TO AVOID ANY OBSTRUCTIONS SHOULD OBSTRUCTIONS BE ENCOUNTERED, THE FOLLOWING HIERARCHY WILL BE ADHERED TO:
 - A. ROUTE CONDUIT AROUND OBSTRUCTION USING SWEEPING BENDS.
 - B. IF A CANNOT BE ACCOMPLISHED, CONDUIT ROUTING WILL BE MADE UNDER THE OBSTRUCTION.
 - C. IF A OR B CANNOT BE ACCOMPLISHED, THEN CONDUIT CAN BE INSTALLED PER FDOT CONDUIT INSTALLATION DETAILS INDEX 630-001 SHEET 4.
6. ALL CONCRETE SHALL BE FDOT APPROVED CLASS 1.
7. USE SILT FENCE AS SHOWN IN THE PLANS WHERE WETLANDS ARE PRESENT.



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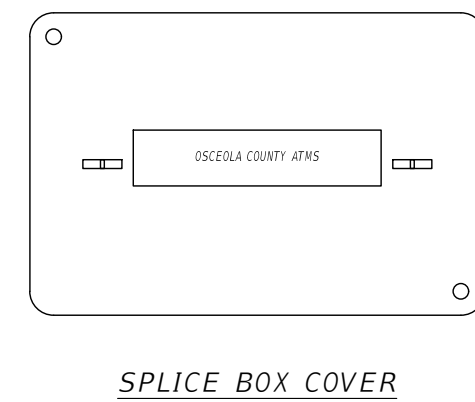
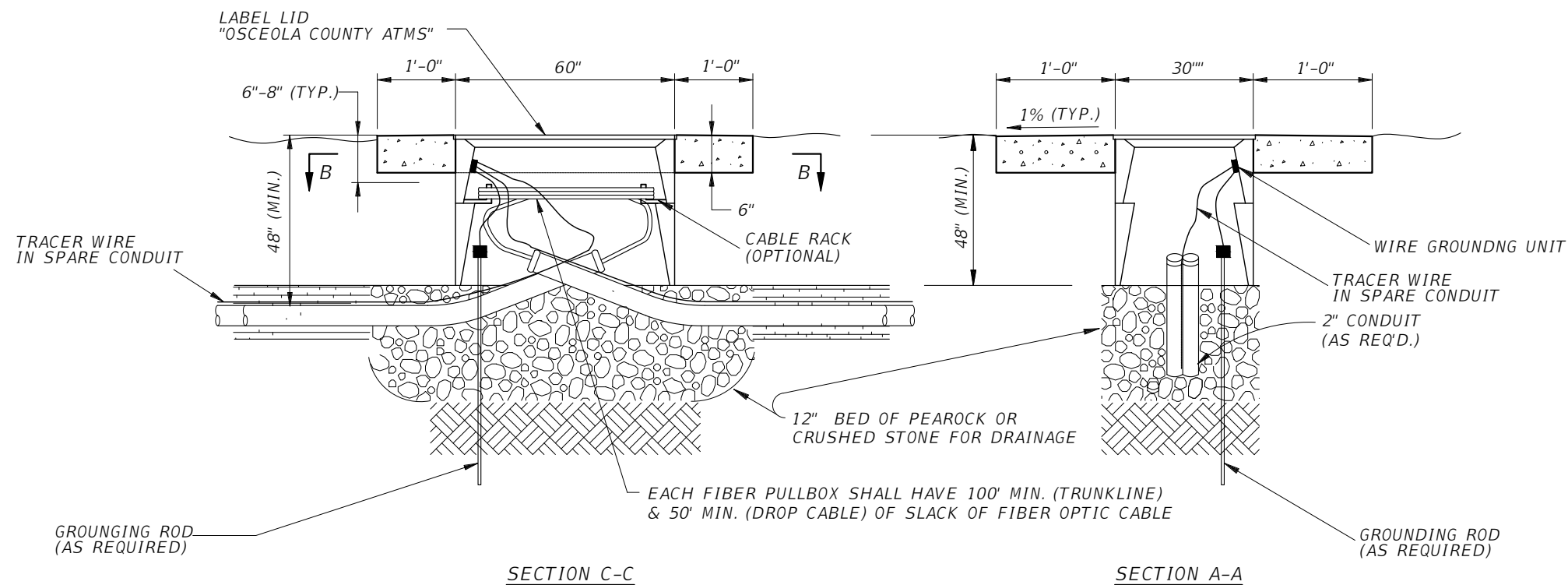
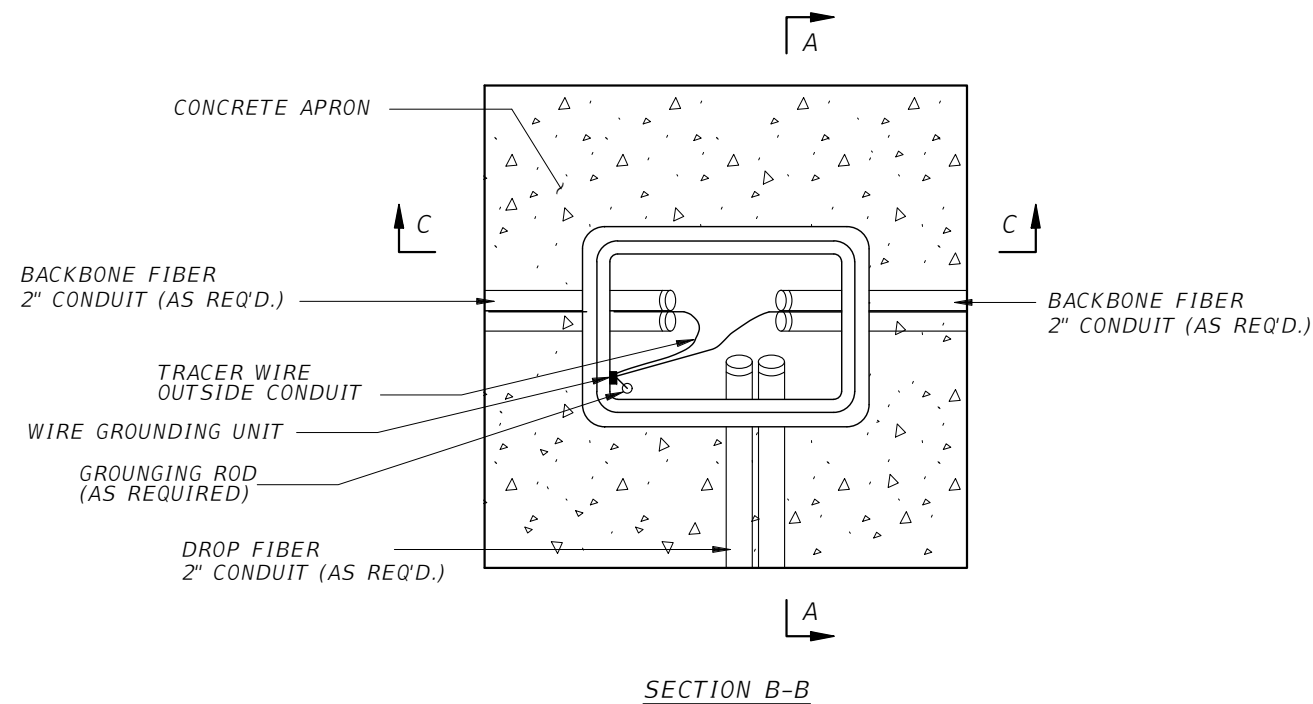
TRENCHING AND PLOWING
DETAILS

SHEET
NO.
IT-31

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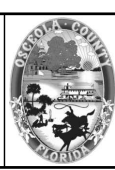
NOTES:

1. REFER TO FLORIDA DEPARTMENT OF TRANSPORTATION, FY 2020-21 STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION FOR PULL BOX REQUIREMENTS.
2. FIBER OPTIC PULL BOXES SHALL NOT CONTAIN ELECTRICAL CONDUIT OR CONDUCTOR. ELECTRICAL CONDUIT AND CONDUCTORS SHALL BE INSTALLED IN SEPARATE PULL BOXES.
3. CONDUIT C/L SHALL BE ALIGNED TO TOP EDGE OF PULL BOX TO FACILITATE CABLE PULLING.
4. ALL PULL BOXES SHALL HAVE MINIMUM 1'-0" WIDE x 6" DEEP CONCRETE APRONS SLOPED AWAY FROM PULL BOX. THE COST OF APRON IS TO BE INCLUDED IN THE COST OF EACH PULL BOX.
5. WIRE GROUNDING UNITS (WGU) FOR TRACER WIRE REQUIRED IN FIBER SPLICE VAULTS.
6. FIBER OPTIC SPLICE BOX SHALL NOT BE INSTALLED IN ROADWAYS OR DRIVEWAYS.
7. FIBER OPTIC SPLICE BOX LENGTH (LONG SIDE) SHALL BE PARALLEL TO THE CONDUIT RUN. WHEN THE CONDUIT RUN IS PERPENDICULAR AT THE JUNCTION POINT, THE SPLICE BOX SHALL BE PARALLEL TO THE ROADWAY.
8. SPARE FIBER OPTIC CABLE IS TO BE WOUND NEATLY AND CAREFULLY, AS NOT TO EXCEED THE MINIMUM ALLOWABLE BENDING RADIUS OF THE FIBER OPTIC CABLE.
9. 5/8" COPPER BONDED GROUND RODS SHALL BE USED (AS REQUIRED).
10. GROUNDING WIRES SHALL BE EXOTHERMICALLY WELDED TO GROUND RODS (AS REQUIRED).
11. NOTE THAT THE DIMENSIONS SHOWN ARE THE TYPICAL DIMENSIONS AND MANY VARY SLIGHTLY DEPENDING ON THE MANUFACTURER.



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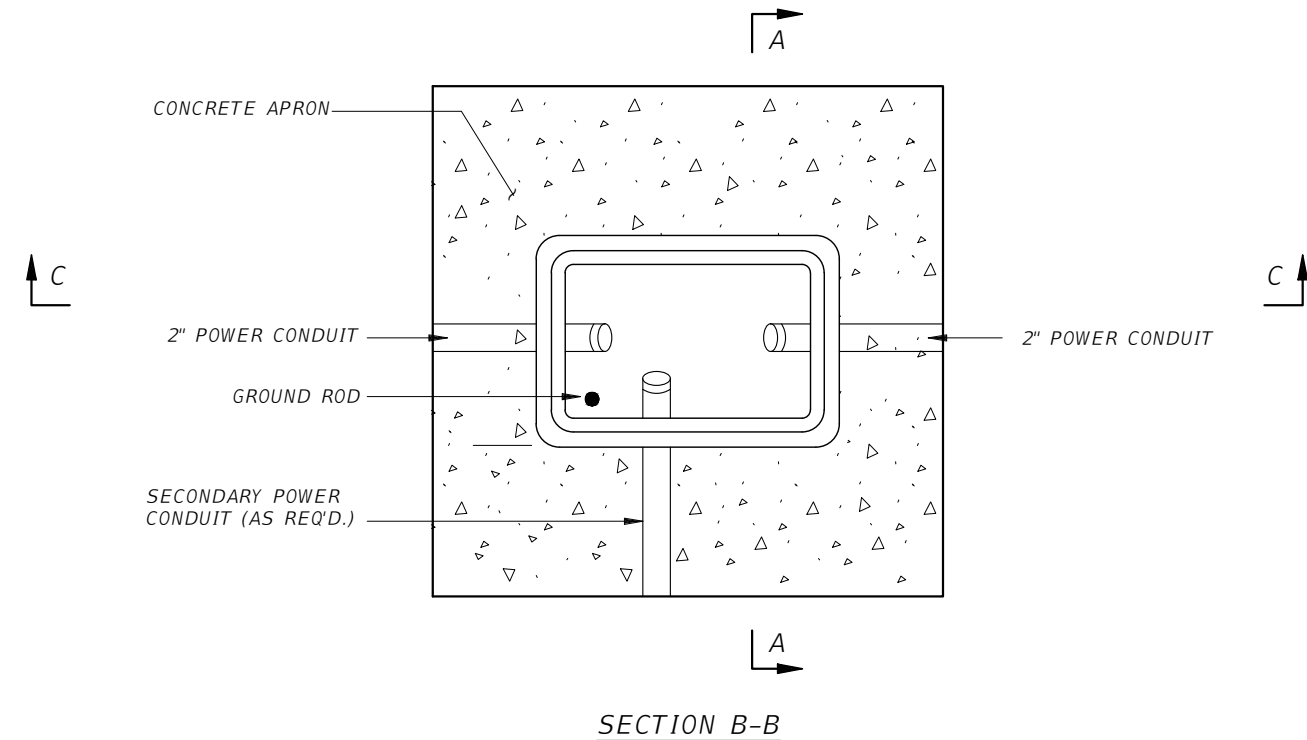


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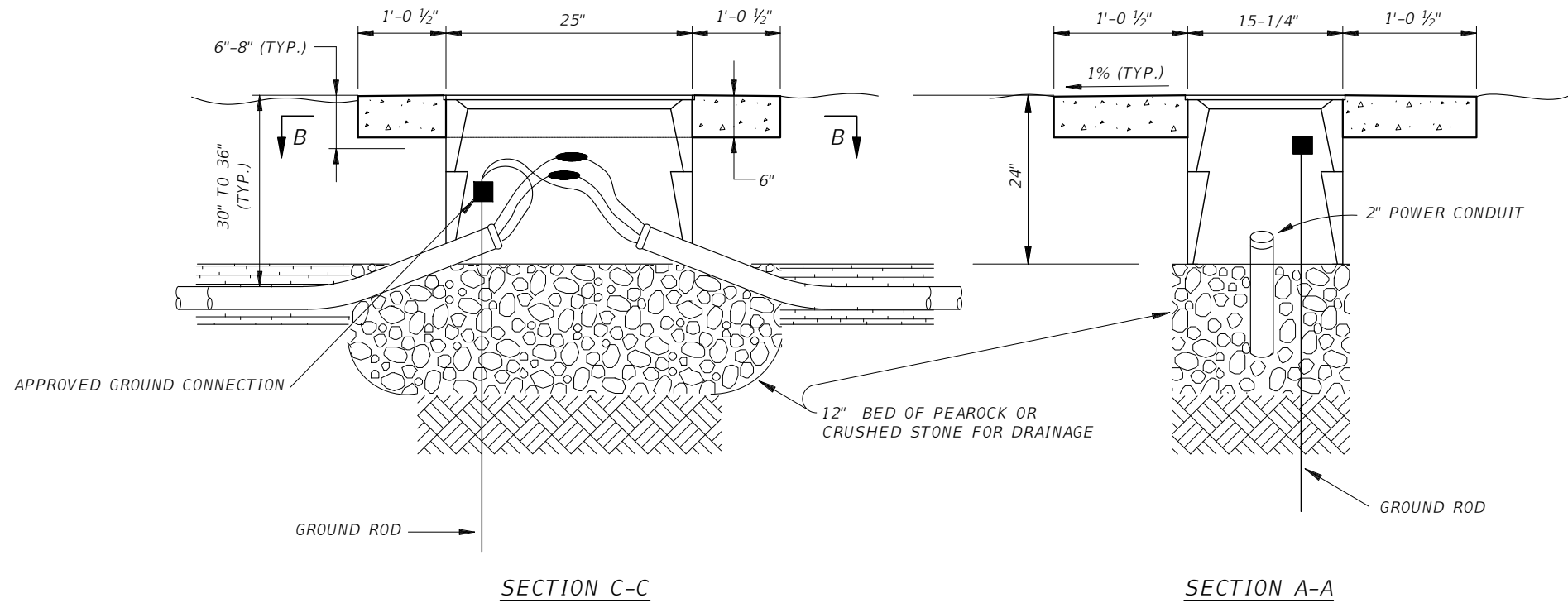
FIBER OPTIC SPLICE
 BOX DETAIL

SHEET
 NO.
 IT-32

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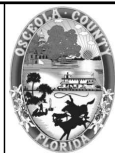


- NOTES:
1. REFER TO FLORIDA DEPARTMENT OF TRANSPORTATION, FY 2020-21 STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION FOR PULL BOX REQUIREMENTS.
 2. ELECTRICAL CABLES SHALL BE INSTALLED IN A SEPARATE CONDUIT/PULL BOX SYSTEM FROM THE FIBER OPTIC CONDUIT/PULL BOX SYSTEM. ELECTRICAL AND FIBER OPTIC CONDUITS MAY BE CO-LOCATED WITHIN THE SAME TRENCH AS SHOWN ON THE PLANS.
 3. ALL FIBER OPTIC, SIGNAL, & ELECTRIC PULL BOXES SHALL HAVE MINIMUM 1'-0" WIDE x 6" DEEP CONC APRONS SLOPED AWAY FROM PULL BOX. THE COST OF APRON IS TO BE INCLUDED IN THE COST OF EACH PULL BOX.
 4. ALL SPLICES SHALL BE MADE IN PULLBOX PROPERLY TAPED AND WEATHERPROOFED.
 5. PULL BOXES SHALL BE PER FLORIDA STANDARD PLAN 635-001. PULL BOXES SHALL BE LISTED IN THE FDOT APPROVED PRODUCTS LIST (APL).
 6. PULL BOXES SHALL NOT BE INSTALLED IN ROADWAYS, DRIVEWAYS, PEDESTRIAN RAMPS, OR FLARES UNLESS DIRECTED BY THE ENGINEER.
 7. NOTE THAT DIMENSIONS SHOWN ARE THE TYPICAL DIMENSIONS AND MAY VARY DEPENDING ON MANUFACTURER.



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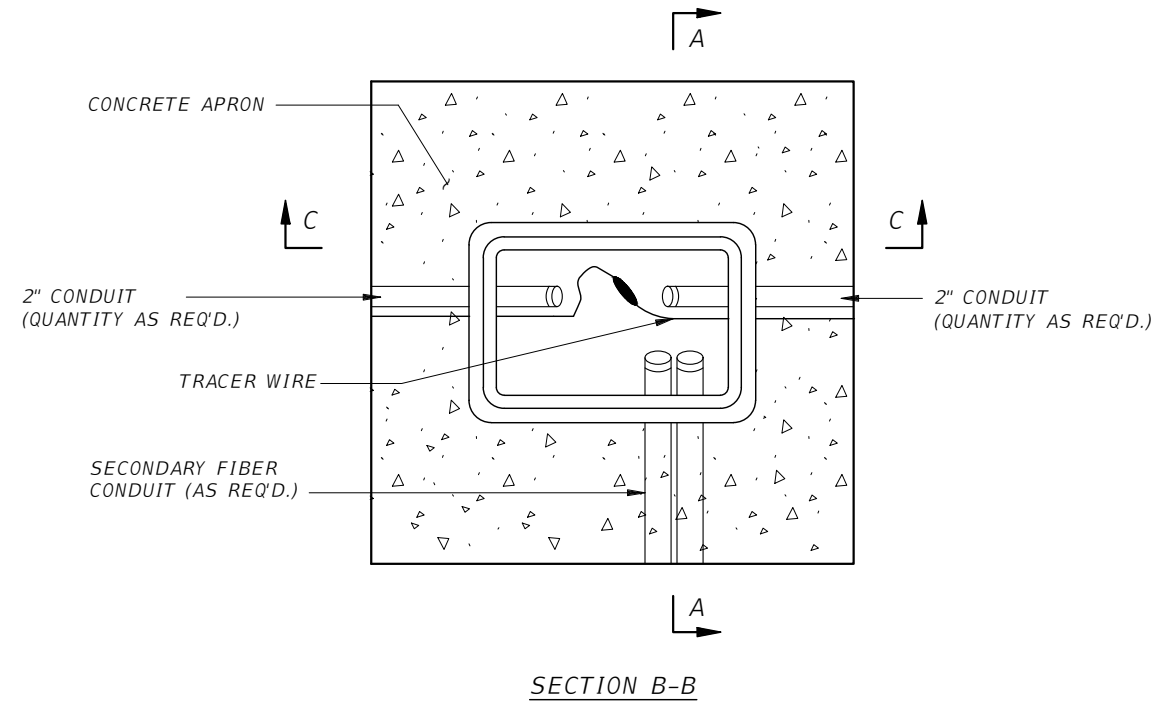


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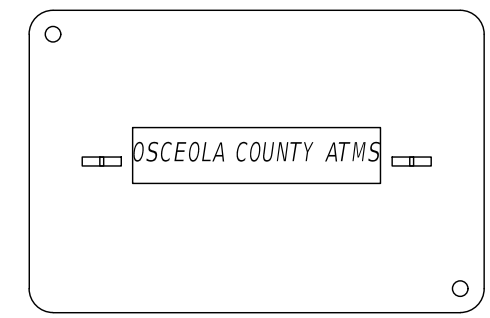
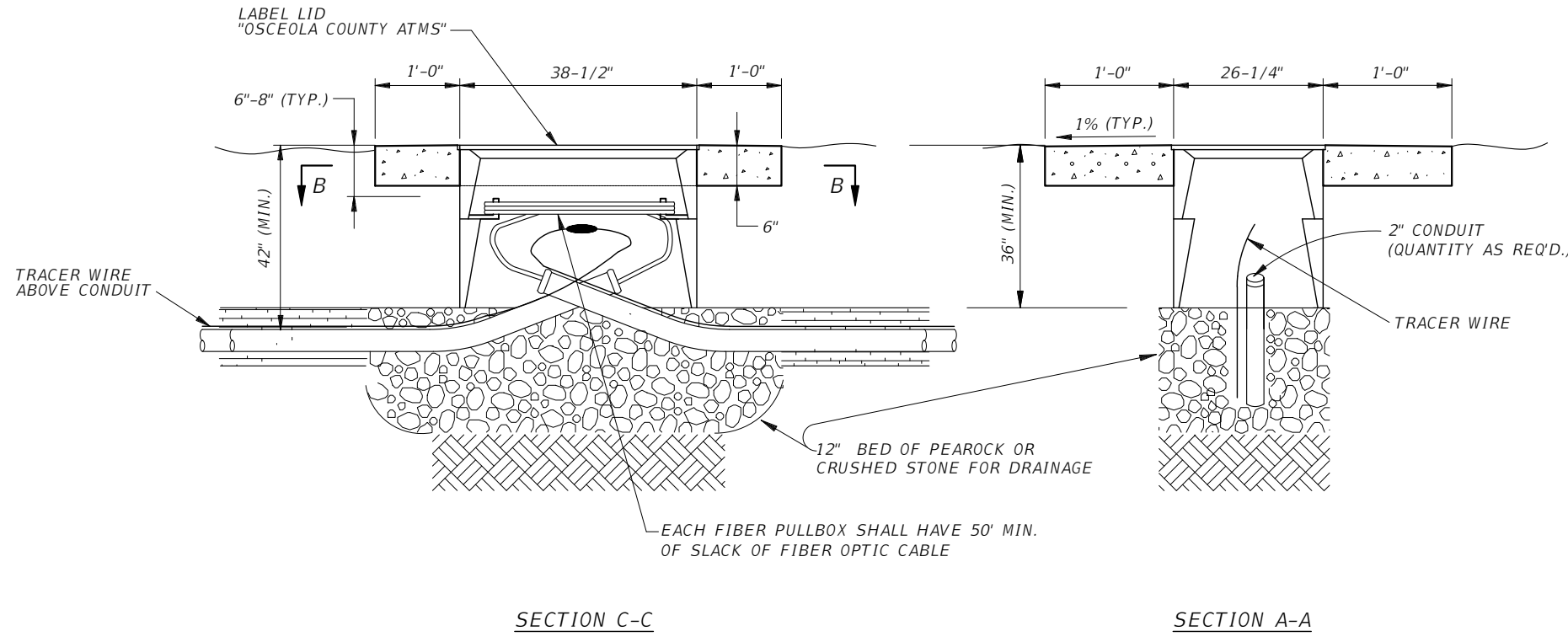
ELECTRICAL PULL BOX
DETAIL

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- NOTES:
1. REFER TO FLORIDA DEPARTMENT OF TRANSPORTATION, FY 2020-21 STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION FOR PULL BOX REQUIREMENTS.
 2. FIBER OPTIC PULL BOXES SHALL NOT CONTAIN ELECTRICAL CONDUIT OR CONDUCTOR. ELECTRICAL CONDUIT AND CONDUCTORS SHALL BE INSTALLED IN SEPARATE PULL BOXES.
 3. CONDUIT C/L SHALL BE ALIGNED TO TOP EDGE OF PULL BOX TO FACILITATE CABLE PULLING.
 4. ALL PULL BOXES SHALL HAVE MINIMUM 1'-0" WIDE x 6" DEEP CONCRETE APRONS SLOPED AWAY FROM PULL BOX. THE COST OF APRON IS TO BE INCLUDED IN THE COST OF EACH PULL BOX.
 5. FIBER OPTIC SPLICE BOX SHALL NOT BE INSTALLED IN ROADWAYS OR DRIVEWAYS.
 6. SPARE FIBER OPTIC CABLE IS TO BE WOUND NEATLY AND CAREFULLY, AS NOT TO EXCEED THE MINIMUM ALLOWABLE BENDING RADIUS OF THE FIBER OPTIC CABLE.
 7. 5/8" COPPER BONDED GROUND RODS SHALL BE USED (AS REQUIRED).
 8. GROUNDING WIRES SHALL BE EXOTHERMICALLY WELDED TO GROUND RODS (AS REQUIRED).
 9. NOTE THAT THE DIMENSIONS SHOWN ARE THE TYPICAL DIMENSIONS AND MANY VARY SLIGHTLY DEPENDING ON THE MANUFACTURER.



FIBER BOX COVER

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION


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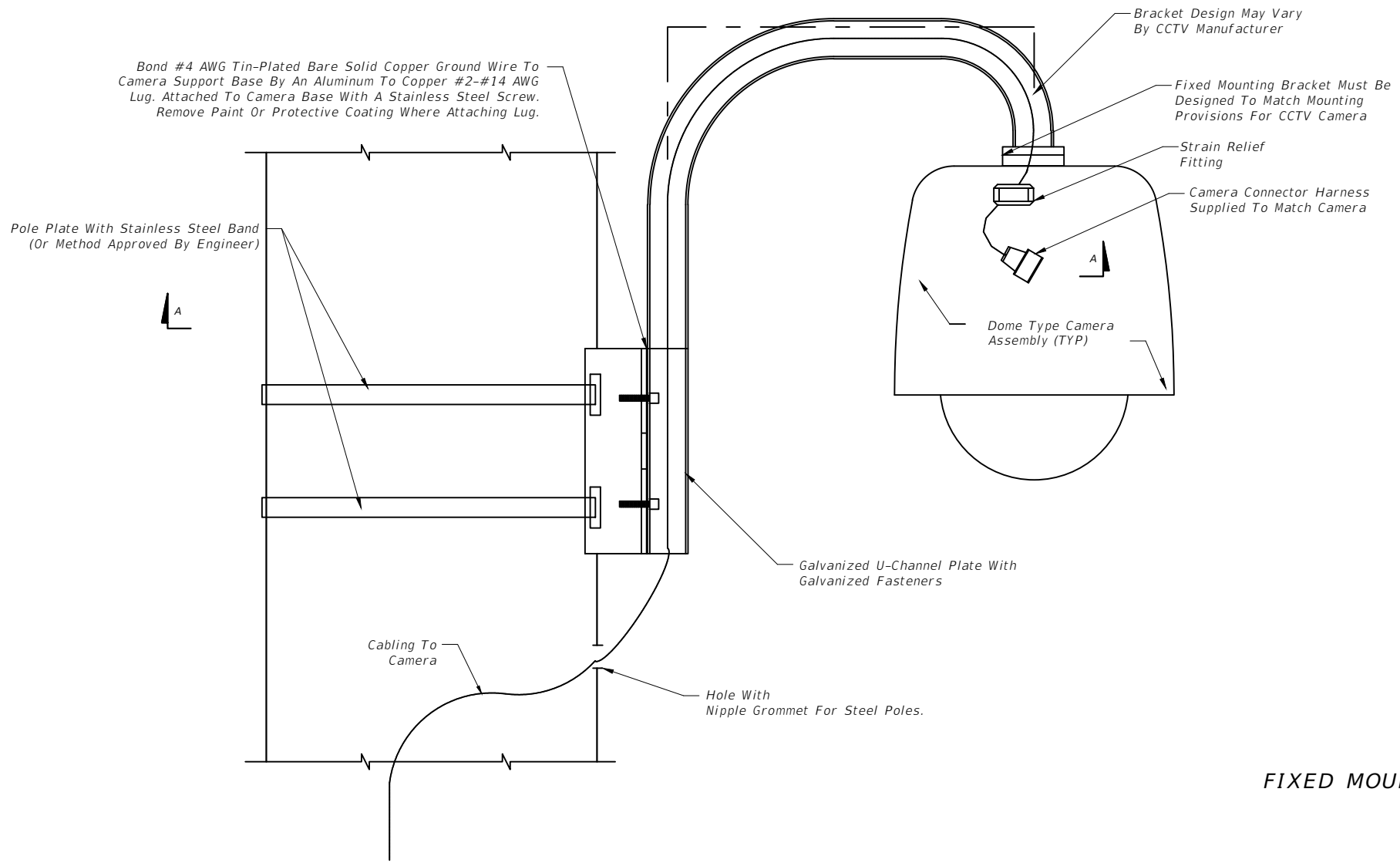


OSCEOLA COUNTY
FLORIDA

FIBER PULL BOX
DETAIL

SHEET
NO.
IT-34

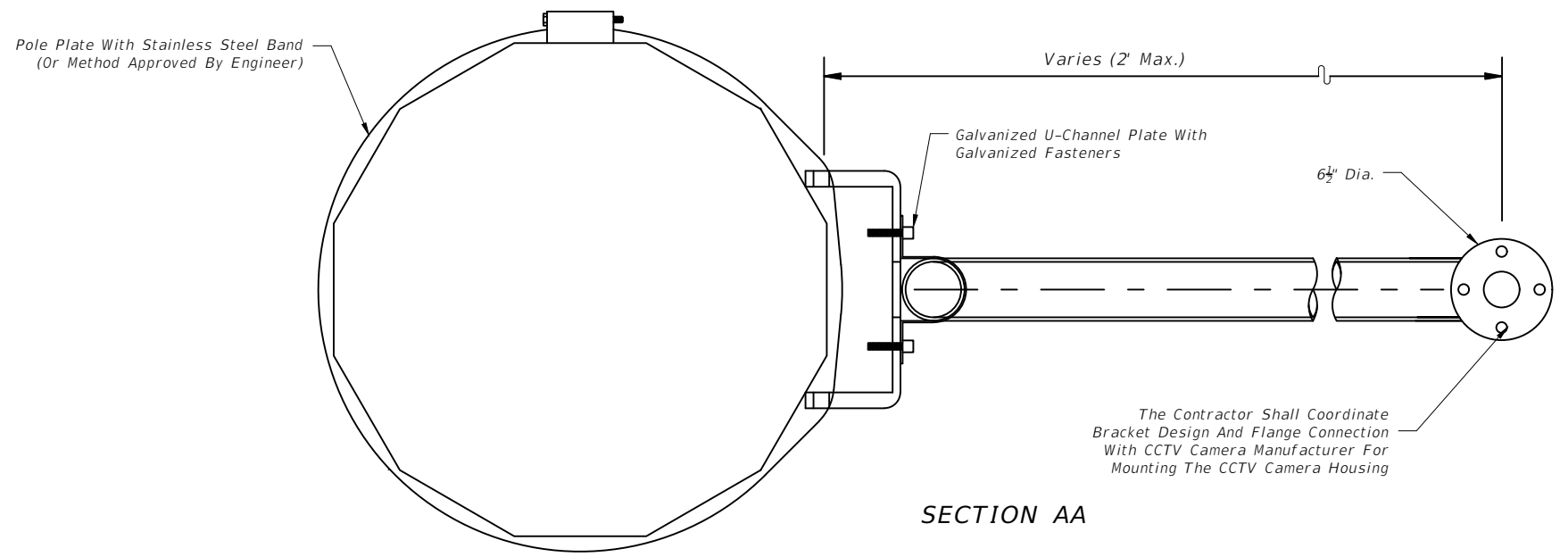
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GENERAL NOTES:

1. Verify the pole type, the dimensions of the pole at the point of installation of the camera mount, and angle with respect to the roadway before manufacturing camera mount assembly.
2. Design camera mounting arm and connection to the pole according to FDOT Structures Manual (current edition).
3. No field welding shall be permitted.
4. Mounting bracket arm shall be level after installation.
5. The contractor shall submit shop drawings for the proposed fixed mounting arm, signed and sealed by a Professional Engineer registered in the State of Florida, to the Engineer for review and approval.
6. See Index 649-031 for mast arm details.
7. Galvanized pipe connections and conduit entry points shall be sealed in accordance with Specification 630.

FIXED MOUNTING BRACKET DETAIL
Not To Scale

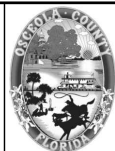


SECTION AA

CAMERA MOUNTING WITH FIXED BRACKET

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CAMERA MOUNTING BRACKET
DETAIL

SHEET
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