

ST. LUCIE COUNTY

JOHNSTON ROAD AT CANAL 17 CROSS DRAIN REPLACEMENT

ST. LUCIE COUNTY PROJECT No. 16202

INDEX OF PLANS

SHEET No.	SHEET DESCRIPTION
1	COVER SHEET
2	GENERAL NOTES
3	SUMMARY OF PAY ITEMS
4	HORIZONTAL & VERTICAL CONTROL
5	TYPICAL SECTION
6	PLAN SHEETS
7 - 8	REVTMENT DETAILS
9 - 10	MISCELLANEOUS DETAILS
11 - 14	JOHNSTON ROAD CROSS SECTIONS
15 - 16	EROSION CONTROL GENERAL NOTES
17	EROSION CONTROL
18	SIGNING & MARKING



BOARD OF COUNTY COMMISSIONERS

JAMES CLASBY	DISTRICT 1
LARRY LEET	DISTRICT 2
ERIN LOWRY	DISTRICT 3
JAMIE FOWLER	DISTRICT 4
CATHY TOWNSEND	DISTRICT 5

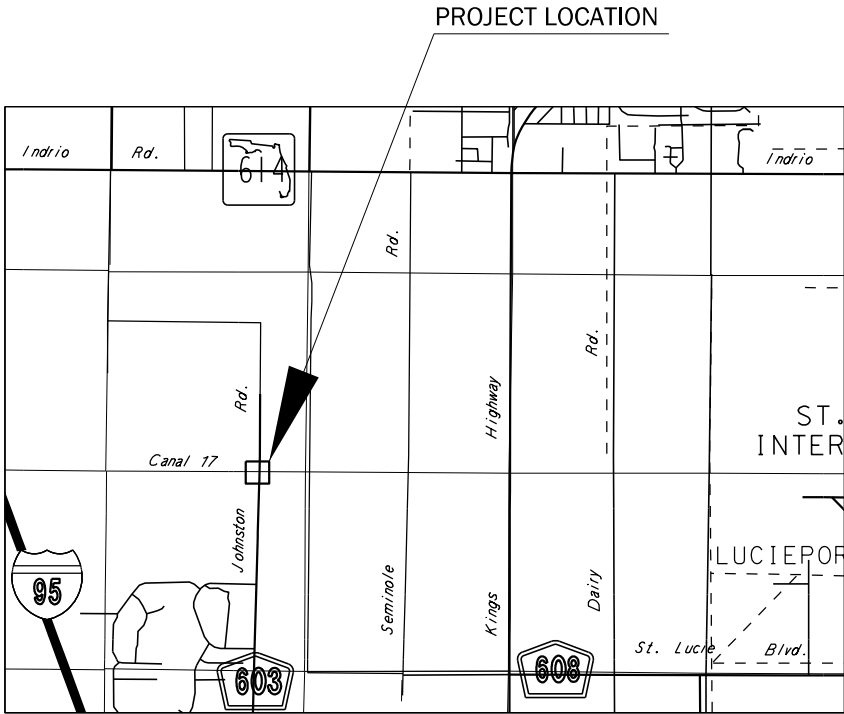
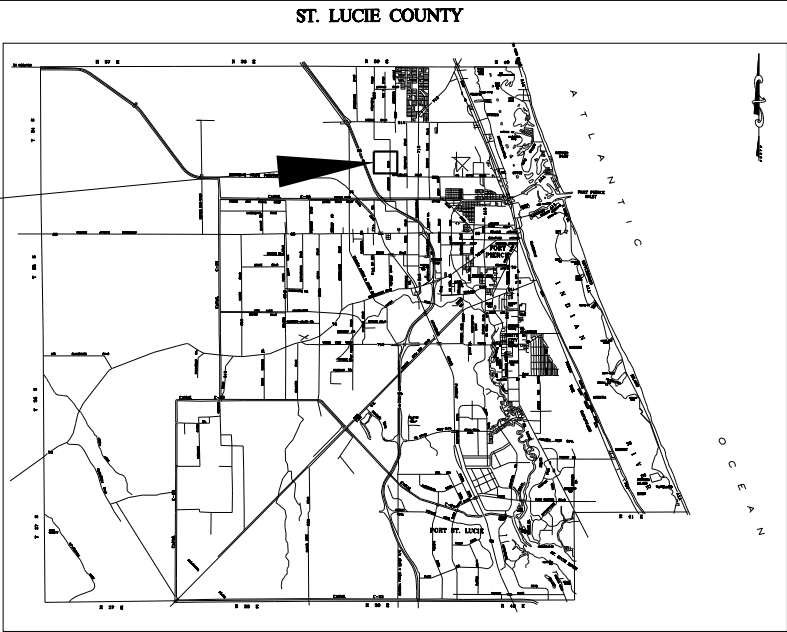
COUNTY ADMINISTRATION

GEORGE LANDRY COUNTY ADMINISTRATOR

PUBLIC WORKS DEPARTMENT

PATRICK DAYAN, P.E. PUBLIC WORKS DIRECTOR
DAN ZRALLACK, P.E. COUNTY ENGINEER

BID SET
FEBRUARY 2025



LOCATION MAP - N.T.S.

SOUTHWEST QUARTER SECTION OF SECTION 22
TOWNSHIP 34 S, RANGE 39 E

ENGINEER OF RECORD BRIAN A. GOOD
P. E. NO. 56939

Kimley»Horn

445 24TH STREET, SUITE 200
VERO BEACH, FL 32960
(772) 794-4100
PROJECT NUMBER: 047203115
REGISTRY No. 35106

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

48 HOURS BEFORE DIGGING
CALL TOLL FREE
1-800-432-4770
CALL SUNSHINE
NOTIFICATION CENTER

1) GOVERNING SPECIFICATIONS: FLORIDA DEPARTMENT OF TRANSPORTATION, "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" DATED FY 2023-24.

2) CONSTRUCTION DETAILS SHALL BE IN ACCORDANCE WITH FLORIDA DEPARTMENT OF TRANSPORTATION, STANDARD PLANS DATED FY 2023-24.

3) ANY GEODETIC MONUMENT WITHIN THE LIMITS OF CONSTRUCTION IS TO BE PROTECTED. IF IN DANGER OF DAMAGE, NOTIFY:

ALEXEY GILEV, PSM 7079
ST. LUCIE COUNTY SURVEYOR
(772) 462-1707

4) EXISTING SECTION CORNERS AND ¼ SECTION CORNERS, AND OTHER LAND MARKERS OR MONUMENTS LOCATED WITHIN PROPOSED CONSTRUCTION ARE TO BE REFERENCED BY THE CONTRACTOR PRIOR TO CONSTRUCTION AND RESET AFTER CONSTRUCTION USING A REGISTERED LAND SURVEYOR LICENSED IN THE STATE OF FLORIDA. THE SURVEYOR AND MAPPER SHALL FILE UPDATED CERTIFIED CORNER RECORDS WITH THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, BUREAU OF SURVEYING AND MAPPING.

5) B.M. DATA IS NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

6) CONTRACTOR SHALL ADJUST ALL UTILITY LIDS AND COVERS TO FINISHED GRADE AS REQUIRED.

7) ALL EXISTING DRAINAGE STRUCTURES WITHIN THE LIMITS OF CONSTRUCTION SHALL BE REMOVED UNLESS OTHERWISE NOTED. ALL STRUCTURES IDENTIFIED TO BE REMOVED SHALL BE LEGALLY DISPOSED OF BY THE CONTRACTOR.

8) THE CONTRACTOR SHALL RESTORE ALL AREAS DISTURBED BY THIS CONSTRUCTION TO A CONDITION EQUAL TO, OR BETTER THAN THAT NOW EXISTS.

9) ITEMS IN CONFLICT WITH CONSTRUCTION SUCH AS EXISTING DRAINAGE STRUCTURES, AND EXCESS EXCAVATIONS ARE TO BE REMOVED BY CONTRACTOR AND DISPOSED OF IN A LEGAL AND PROPER MANNER AWAY FROM THE JOB SITE AT THE CONTRACTOR'S EXPENSE UNLESS THE ITEMS ARE TO BE REUSED ON THE PROJECT.

10) THE CONTRACTOR IS TO USE CAUTION WHEN WORKING IN OR AROUND AREAS OF OVERHEAD TRANSMISSION LINES, UNDERGROUND UTILITIES, OR NEAR CANAL BANKS.

11) EXISTING UTILITIES ARE TO REMAIN IN PLACE UNLESS OTHERWISE NOTED.

12) THE LOCATION OF EXISTING UTILITIES SHOWN ARE APPROXIMATE ONLY; THE EXACT LOCATION SHALL BE DETERMINED BY THE CONTRACTOR DURING CONSTRUCTION. RELOCATION OF UTILITIES SHALL BE COORDINATED WITH UTILITY COMPANIES AFTER IDENTIFICATION OF CONFLICT BY CONTRACTOR. CONTRACTOR SHALL NOTIFY ENGINEER IN ADVANCE BEFORE ANY RELOCATION.

13) PRIOR TO COMMENCEMENT OF ANY EXCAVATION, THE CONTRACTOR SHALL COMPLY WITH CHAPTER 556 OF FLORIDA STATUTES, UNDERGROUND FACILITY DAMAGE PREVENTION AND SAFETY.

14) THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES TO REMAIN IN PLACE.

15) THE CONTRACTOR SHALL CALL SUNSHINE (1-800-432-4770) FOR FIELD LOCATIONS TWO (2) BUSINESS DAYS BEFORE DIGGING NEAR UNDERGROUND UTILITIES. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE TO CONTACT ANY UTILITY OWNER(S) THAT MAY NOT BE A "SUNSHINE" MEMBER.

16) THE MAINTENANCE OF TRAFFIC FOR THIS PROJECT SHALL BE IN ACCORDANCE WITH THE APPLICABLE FDOT INDEX NUMBERS (102-XXX SERIES) AND THESE DOCUMENTS; THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS (U.S. DEPARTMENT OF TRANSPORTATION, FHWA), SHALL BE FOLLOWED IN THE DESIGN, APPLICATION, INSTALLATION, MAINTENANCE AND REMOVAL OF ALL TRAFFIC CONTROL DEVICES, WARNING DEVICES AND BARRIERS NECESSARY TO PROTECT THE PUBLIC AND WORKMEN FROM HAZARDS WITHIN THE PROJECT LIMITS.

17) STAGING AND MATERIAL STORAGE SHALL NOT BE CONDUCTED ON ABUTTING PRIVATE PROPERTY WITHOUT WRITTEN APPROVAL FROM THE PROPERTY OWNER AND SHALL BE SUBMITTED TO ST. LUCIE COUNTY PROJECT MANAGER.

18) EROSION CONTROL MEASURES SHALL BE TAKEN BY CONTRACTOR DURING CONSTRUCTION AS PER FDOT EROSION AND SEDIMENT CONTROL MANUAL (LATEST EDITION):

A. SILT FENCE SHALL BE INSTALLED ALONG THE ENTIRE PERIMETER OF THE PROJECT ADJACENT TO ANY SOIL DISTURBING ACTIVITIES.
B. ALL DRAINAGE STRUCTURES ARE TO BE PROTECTED DURING CONSTRUCTION PER FDOT EROSION AND SEDIMENT CONTROL MANUAL (LATEST EDITION).
C. ALL DAMAGED WORK SHALL BE RESTORED AT NO COST TO THE COUNTY.

19) ALL THERMOPLASTIC PAVEMENT STRIPING IS DIMENSIONED FROM CENTER OF STRIPE TO CENTER OF STRIPE.

20) ALL WORK, INCLUDING HARMONIZATION, SHALL BE COMPLETED FROM AND WITHIN EXISTING COUNTY RIGHT-OF-WAY, UNLESS NOTED OTHERWISE.

21) THE CONTRACTOR SHALL COORDINATE SELECTION AND REVIEW OF ANY PROPOSED STAGING AREAS ASSOCIATED WITH THIS PROJECT WITH ST LUCIE COUNTY PROJECT MANAGER (MICHAEL HELLER, (772) 332-5415).

R E V I S I O N S						<div><div>Kimley»Horn</div><div>BRIAN A. GOOD, P.E. P.E. LICENSE NUMBER 56939 445 24th STREET, SUITE 200 VERO BEACH, FL 32960 (772) 794-4100 REGISTRY No. 35106</div></div>	ST. LUCIE COUNTY BOARD OF COUNTY COMMISSIONERS		GENERAL NOTES	SHEET NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION		JOHNSTON ROAD AT CANAL 17 CROSS DRAIN REPLACEMENT			2

rebecca.mulroney

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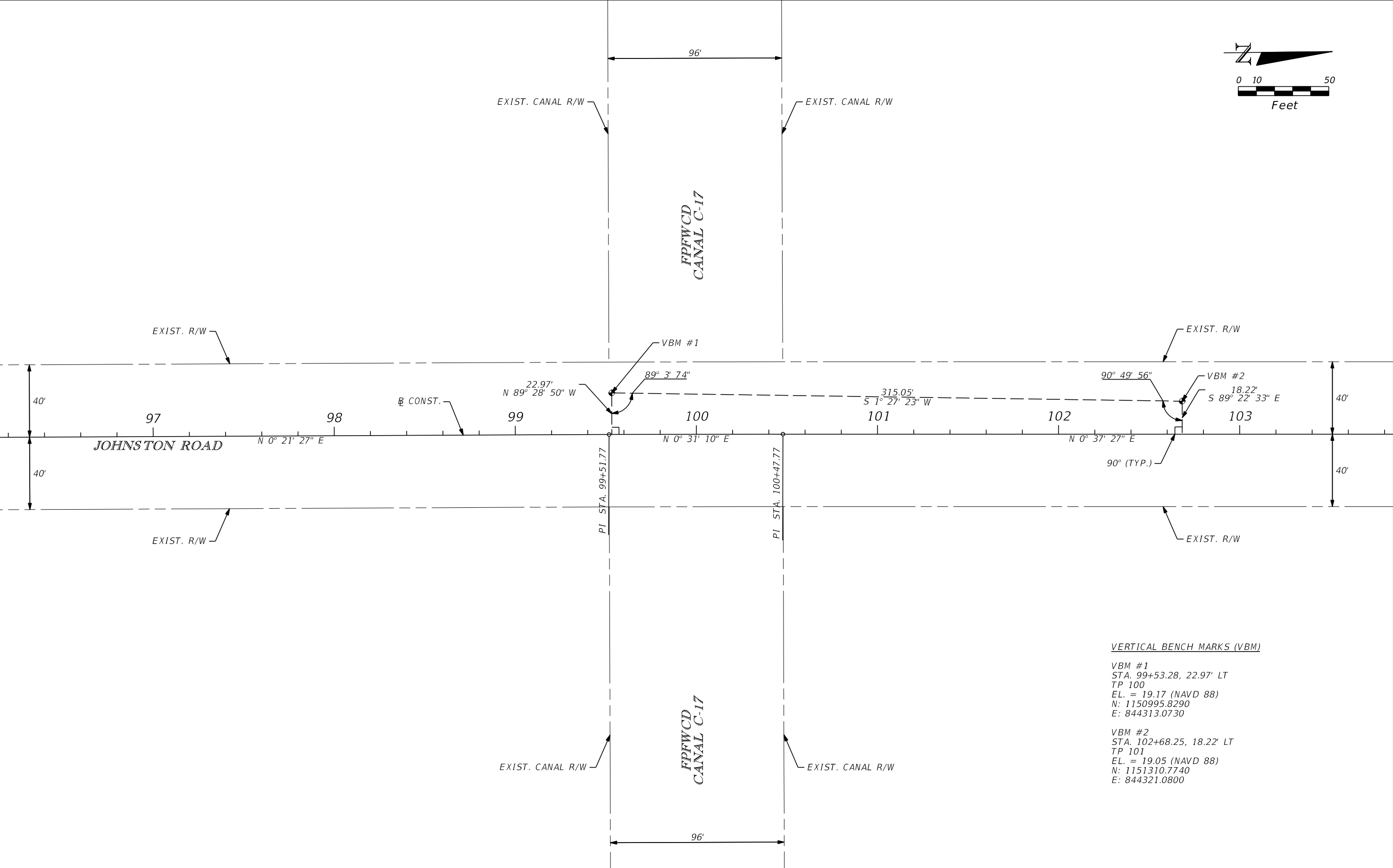
K:\VRB_Roadway\047203115 - Johnston Road and Canal 17\CADD\RDWY\GNNTRD01.DGN

SUMMARY OF PAY ITEMS

PAY ITEM NO.	DESCRIPTION	UNIT	PROJECT QUANTITY
ROADWAY PAY ITEMS			
101-1A	MOBILIZATION/DEMOBILIZATION	LS	1
102-1A	MAINTENANCE OF TRAFFIC	LS	1
104-1A	PREVENTION, CONTROL & ABATEMENT OF EROSION AND WATER POLLUTION	LS	1
199-1A	CONSTRUCTION LAYOUT/RECORD DRAWINGS	LS	1
110-1-1	CLEARING & GRUBBING	LS	1
120-1A	EXCAVATION/EMBANKMENT	LS	1
285-718A	CEMENTED COQUINA (LBR 100) (18")	SY	89
334-1-13A	SUPERPAVE ASPHALTIC CONCRETE (TYPE SP-9.5)(TRAFFIC C) (1")	TN	22
334-1-13B	SUPERPAVE ASPHALTIC CONCRETE (TYPE SP-12.5)(TRAFFIC C) (1.5")	TN	8
400-2-1	CONCRETE, CLASS II (4000 PSI) (CONCRETE COLLARS)	CY	12.7
400-80A	MAINTENANCE OF EXISTING DRAINAGE	LS	1
400-91	CONSTRUCTION DEWATERING	LS	1
407-1-11A	PRECAST CONCRETE BOX CULVERT (10' SPAN x 6' RISE)	LF	144
430-174-124	PIPE CULVERT (RCP) (24") (S/CD) (CL III)	LF	256
430-984-129	MITERED END SECTION (SD, 24" ROUND)	EA	4
530-3-4	RIP-RAP (F&I) (DITCH LINING)	TN	500
530-74	BEDDING PAD	TN	270
536-73	GUARDRAIL (REMOVAL)	LF	392
550-10-110	FENCING (TYPE A, 4 FT HEIGHT)	LF	305
550-60-518	FENCE GATE (REMOVE & RESET)	EA	1
570-1-2	PERFORMANCE TURF (SOD) (BAHIA)	SY	2400
700-1-11	SINGLE POST SIGN (F&I) (GROUND MOUNT) (< 12 SF)	AS	4
706-1-3	RAISED PAVEMENT MARKERS (BI-DIRECTIONAL AMBER)	EA	8
711-11-121	THERMOPLASTIC PAVEMENT MARKING (6" WHITE)	LF	260
711-11-231	THERMOPLASTIC PAVEMENT MARKING (6" YELLOW) (10'-30' SKIP)	LF	130
1000-1A	UTILITY COORDINATION	LS	1

PAY ITEM FOOTNOTES

101-1A	COST TO INCLUDE, BUT NOT LIMITED TO, MOWING EXISTING SOD AND MAINTENANCE OF EXISTING RIGHT OF WAY WITHIN THE PROJECT LIMITS INCLUSIVE OF MOWING AND LITTER REMOVAL FOR THE PROJECT
102-1A	MAINTENANCE OF TRAFFIC COSTS SHALL INCLUDE BUT NOT LIMITED TO CONSTRUCTION SIGNS, TEMPORARY BARRICADES, VARIABLE MESSAGE SIGNS, TEMPORARY REFLECTIVE MARKERS, TEMPORARY PAVEMENT MARKINGS, INCIDENTAL TEMPORARY PAVEMENT, DUST CONTROL, ANY TEMPORARY DRAINAGE ELEMENTS BEYOND WHAT IS SPECIFIED IN THE CONTRACT DOCUMENTS, AND ALL ITEMS NECESSARY TO MEET THE MAINTENANCE OF TRAFFIC REQUIREMENTS OF THE FLORIDA DEPARTMENT OF TRANSPORTATION AS PRESCRIBED IN SECTION 102-XXX OF THE FDOT STANDARD PLANS.
120-1A	ALL GRADING INCLUDING FINAL GRADING TO BE INCLUDED IN COST OF EXCAVATION AND EMBANKMENT.
285-718A	THE COST OF PRIME COAT SHALL BE INCLUDED IN THE PRICE OF THE BASE MATERIAL.
334-1-13X	THE COST OF THE TACK COAT SHALL BE INCLUDED IN THE PRICE OF ASPHALT.
400-80A	COST TO INCLUDE, BUT NOT LIMITED TO THE REQUIRED MANPOWER, EQUIPMENT, MATERIALS, AND ANY OTHER ITEMS NECESSARY TO SUPPLY, INSTALL AND MAINTAIN THE PUMP SYSTEM OF 27,000 GPM TO HANDLE PEAK FLOW DURING A STORM EVENT. THE PUMP SHALL BE MOBILIZED AND SET UP WITHIN 24 HOURS AFTER APPROVAL AND WRITTEN NOTIFICATION FROM THE COUNTY IN ADVANCE OF THE ANTICIPATED ARRIVAL OF A STORM. THE PUMPING SYSTEM MAY BE REQUIRED TO BE OPERATED 24 HOURS PER DAY. THIS PAY ITEM WILL NOT BE INVOICED IF NOT USED.
400-91	COST TO INCLUDE, BUT NOT LIMITED TO TEMPORARY DAMS AND TEMPORARY DEWATERING PUMPING/OPERATIONS BEYOND TEMPORARY PUMPING SYSTEMS.
550-10-110	IDENTIFIED QUANTITY INCLUDES TEMPORARY FENCING TO BE INSTALLED AND REMOVED. UNIT PRICE TO INCLUDE COST OF REMOVING TEMPORARY FENCING.
570-1-2	COST OF PERFORMANCE TURF TO INCLUDE SOD, FERTILIZER, MOWING, WATERING, TOOLS, EQUIPMENT, PEGGING, LABOR AND ALL INCIDENTAL ITEMS NECESSARY.



VERTICAL BENCH MARKS (VBM)

VBM #1
STA. 99+53.28, 22.97' LT
TP 100
EL. = 19.17 (NAVD 88)
N: 1150995.8290
E: 844313.0730

VBM #2
STA. 102+68.25, 18.22' LT
TP 101
EL. = 19.05 (NAVD 88)
N: 1151310.7740
E: 844321.0800

REVISIONS						Kimley»Horn	ST. LUCIE COUNTY BOARD OF COUNTY COMMISSIONERS	HORIZONTAL & VERTICAL CONTROL	SHEET NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION				
									4

S-100

STA. 99+19.55, 30.41' RT
CONST. 24" MES
INDEX NO. 430-022
FL INV. = 15.10

S-101

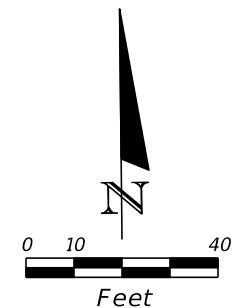
STA. 99+31.05, 29.36' LT
CONST. 24" MES
INDEX NO. 430-022
FL INV. = 15.20

S-102

STA. 100+78.08, 30.21' RT
CONST. 24" MES
INDEX NO. 430-022
FL INV. = 15.20

S-103

STA. 100+81.15, 30.78' LT
CONST. 24" MES
INDEX NO. 430-022
FL INV. = 15.20



CONTRACTOR TO INSTALL TEMPORARY
REVETMENT TO PREVENT EROSION
DURING TEMPORARY PUMP OPERATION
(TYP.)

NOTES:

(A)

CONSTRUCT TEMPORARY COFFERDAM
(STEEL SHEETING OR EARTHEN BERM)
WITH MAXIMUM CREST ELEVATION OF
17.00 NAVD. TEMPORARY COFFERDAM
SHALL BE REMOVED AND ALL
DISTURBED AREAS STABILIZED WITH
SOD UPON PROJECT COMPLETION. COST TO BE
INCLUDED WITHIN PAY ITEM 400-90A.

(B)

CONSTRUCT TEMPORARY PUMPING SYSTEM
WITH MINIMUM PUMPING CAPACITY OF
37,000 GPM (85 CFS). COST TO BE
INCLUDED WITHIN PAY ITEM 400-90A.

EXIST. GUARDRAIL TO BE REMOVED
CONST. 66 LF OF 24" RCP
EXIST. GUARDRAIL TO BE REMOVED
OUTFALL, FL INV. = 11.60

EXIST. CANAL R/W
EXIST. FENCE TO REMAIN

EXIST. CANAL R/W
EXIST. FENCE TO REMAIN

CONST. 4' STANDARD TYPE 'A' FENCE
(REFER TO DETAILS)

CONST. 58 LF OF 24" RCP

EXIST. GUARDRAIL TO BE REMOVED

EXIST. FENCE TO REMAIN

EXIST. R/W

EXIST. R/W

EXIST. FENCE TO REMAIN

4FT BARBED WIRE
FENCE, (TYP.)

EXIST. GUARDRAIL TO BE REMOVED

CONST. 66 LF OF 24" RCP

EXIST. GUARDRAIL TO BE REMOVED

OUTFALL, FL INV. = 11.60

EXIST. CANAL R/W

EXIST. FENCE TO REMAIN

24" CMP
INV.=14.47

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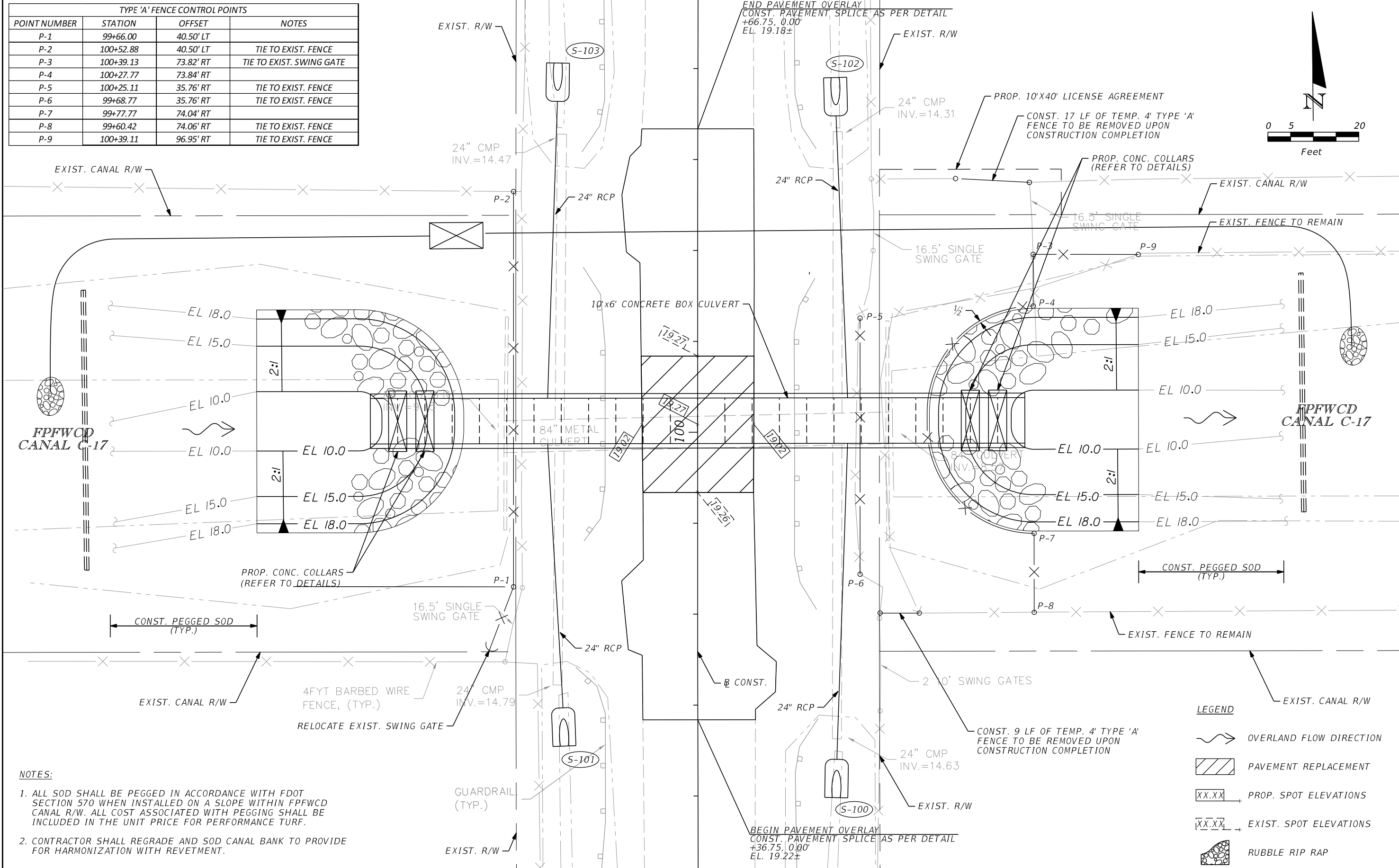
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TYPE 'A' FENCE CONTROL POINTS			
POINT NUMBER	STATION	OFFSET	NOTES
P-1	99+66.00	40.50' LT	
P-2	100+52.88	40.50' LT	TIE TO EXIST. FENCE
P-3	100+39.13	73.82' RT	TIE TO EXIST. SWING GATE
P-4	100+27.77	73.84' RT	
P-5	100+25.11	35.76' RT	TIE TO EXIST. FENCE
P-6	99+68.77	35.76' RT	TIE TO EXIST. FENCE
P-7	99+77.77	74.04' RT	
P-8	99+60.42	74.06' RT	TIE TO EXIST. FENCE
P-9	100+39.11	96.95' RT	TIE TO EXIST. FENCE



- NOTES:
- ALL SOD SHALL BE PEGGED IN ACCORDANCE WITH FDOT SECTION 570 WHEN INSTALLED ON A SLOPE WITHIN FPFWCD CANAL R/W. ALL COST ASSOCIATED WITH PEGGING SHALL BE INCLUDED IN THE UNIT PRICE FOR PERFORMANCE TURF.
 - CONTRACTOR SHALL REGRADE AND SOD CANAL BANK TO PROVIDE FOR HARMONIZATION WITH REVETMENT.

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Kimley»Horn

BRIAN A. GOOD, P.E.
P.E. LICENSE NUMBER 56939
445 24th STREET, SUITE 200
VERO BEACH, FL 32960
(772) 794-4100
REGISTRY No. 35106

ST. LUCIE COUNTY

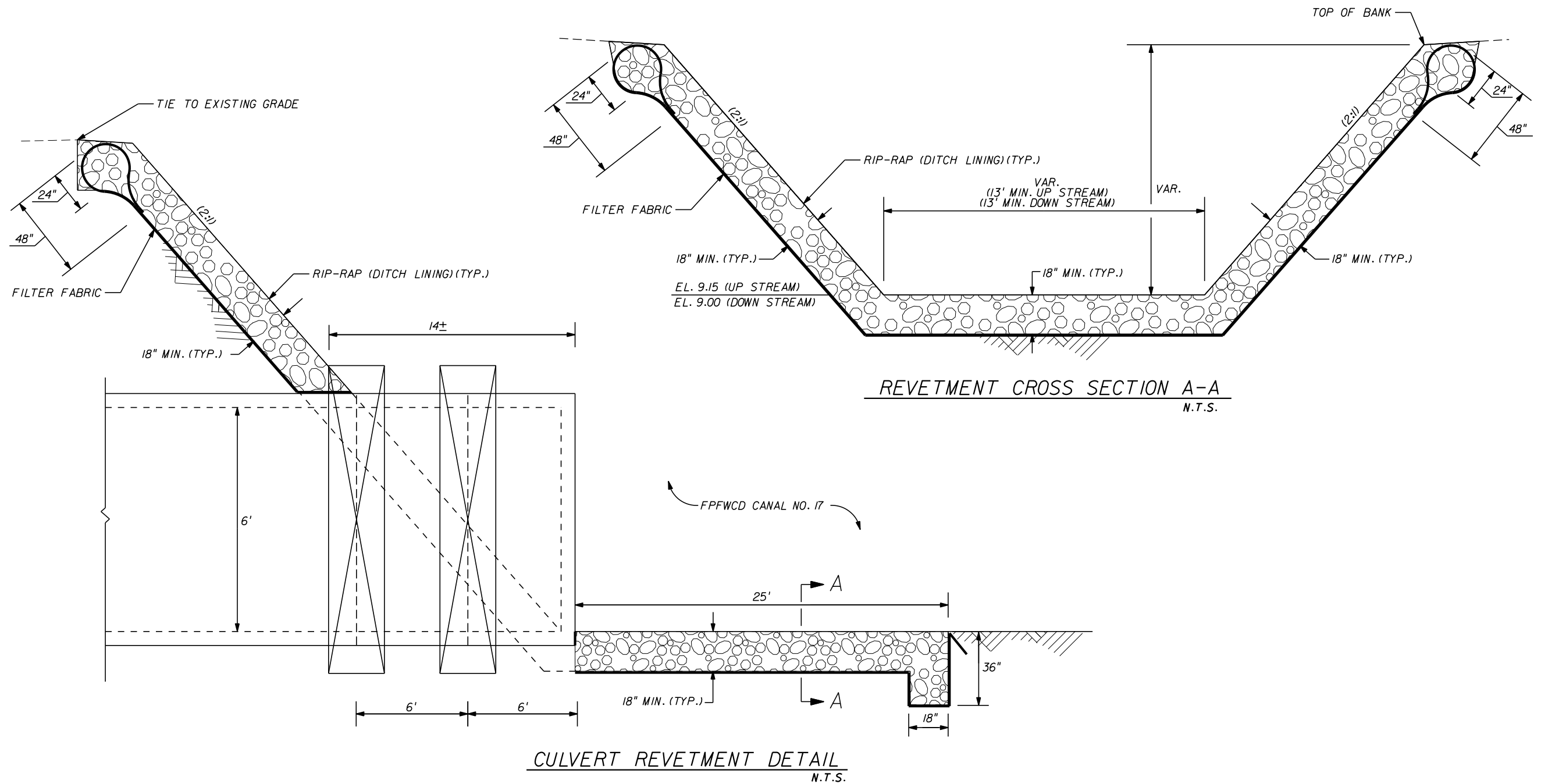
BOARD OF COUNTY COMMISSIONERS

JOHNSTON ROAD AT CANAL 17

CROSS DRAIN REPLACEMENT

REVETMENT DETAILS

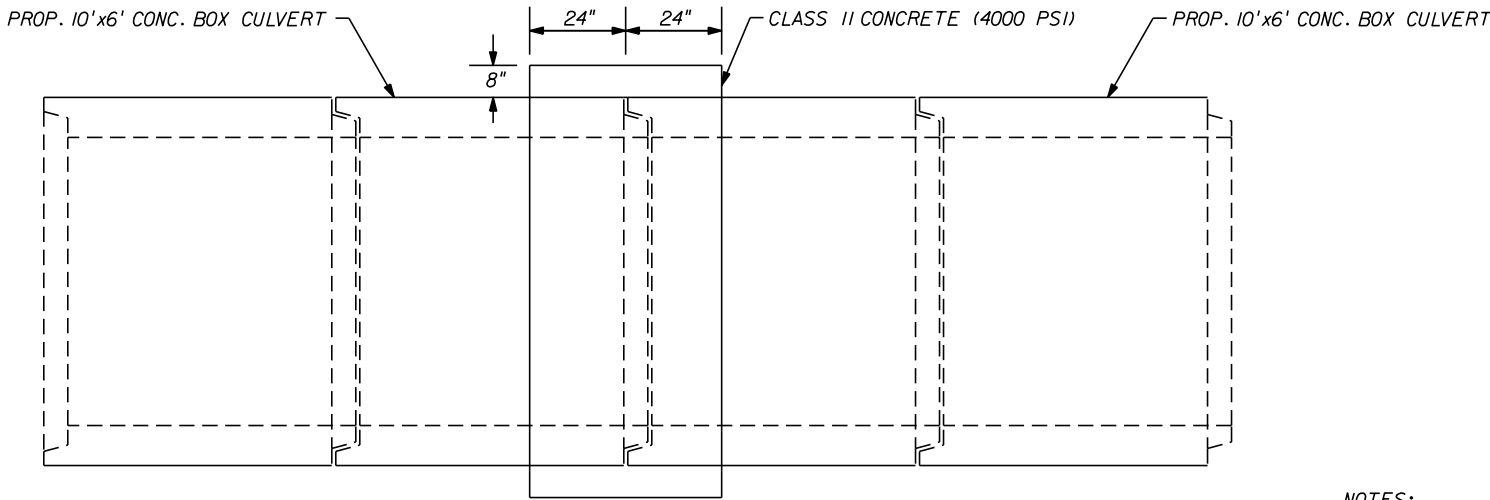
SHEET NO. 7



NOTES:

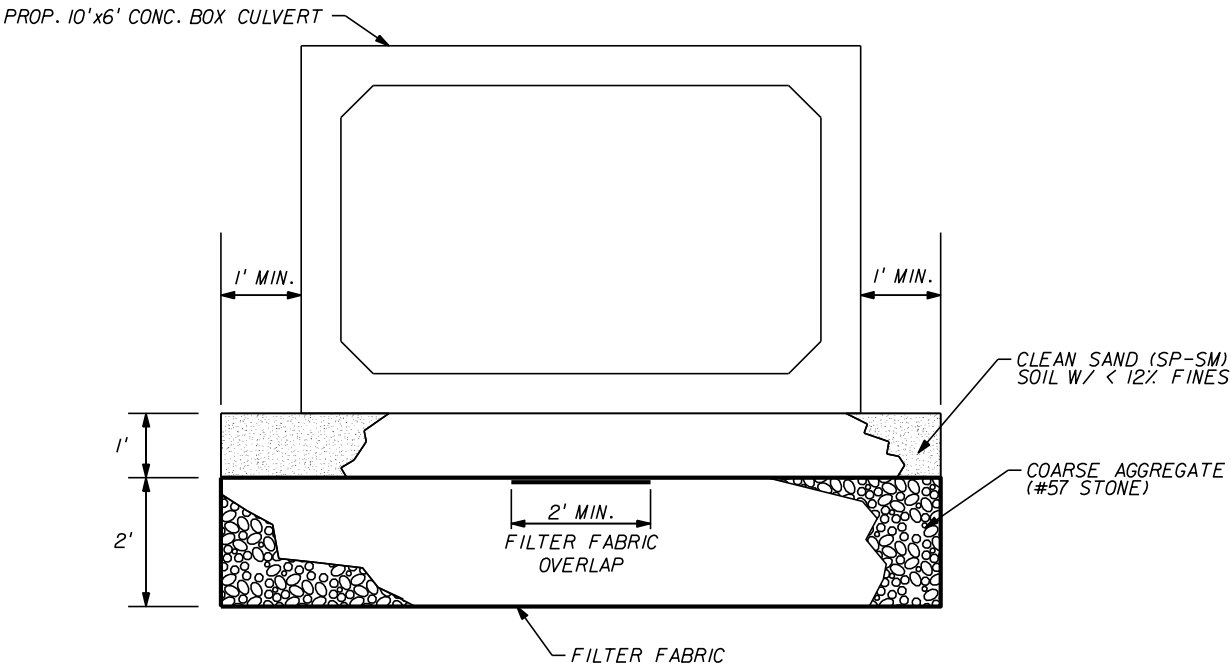
1. COST OF FILTER FABRIC TO BE INCLUDED IN THE CONTRACT UNIT PRICE FOR RIP-RAP.
2. RIP-RAP MATERIAL AND INSTALLATION SHALL BE IN ACCORDANCE WITH FDOT SECTION 530.

REVISIONS						<div>Kimley»Horn</div> <div> BRIAN A. GOOD, P.E. P.E. LICENSE NUMBER 56939 445 24th STREET, SUITE 200 VERO BEACH, FL 32960 (772) 794-4100 REGISTRY No. 35106 </div>	<div>ST. LUCIE COUNTY</div> <div>BOARD OF COUNTY COMMISSIONERS</div> <div>JOHNSTON ROAD AT CANAL 17</div> <div>CROSS DRAIN REPLACEMENT</div>	REVELTMENT DETAILS	SHEET NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION				8



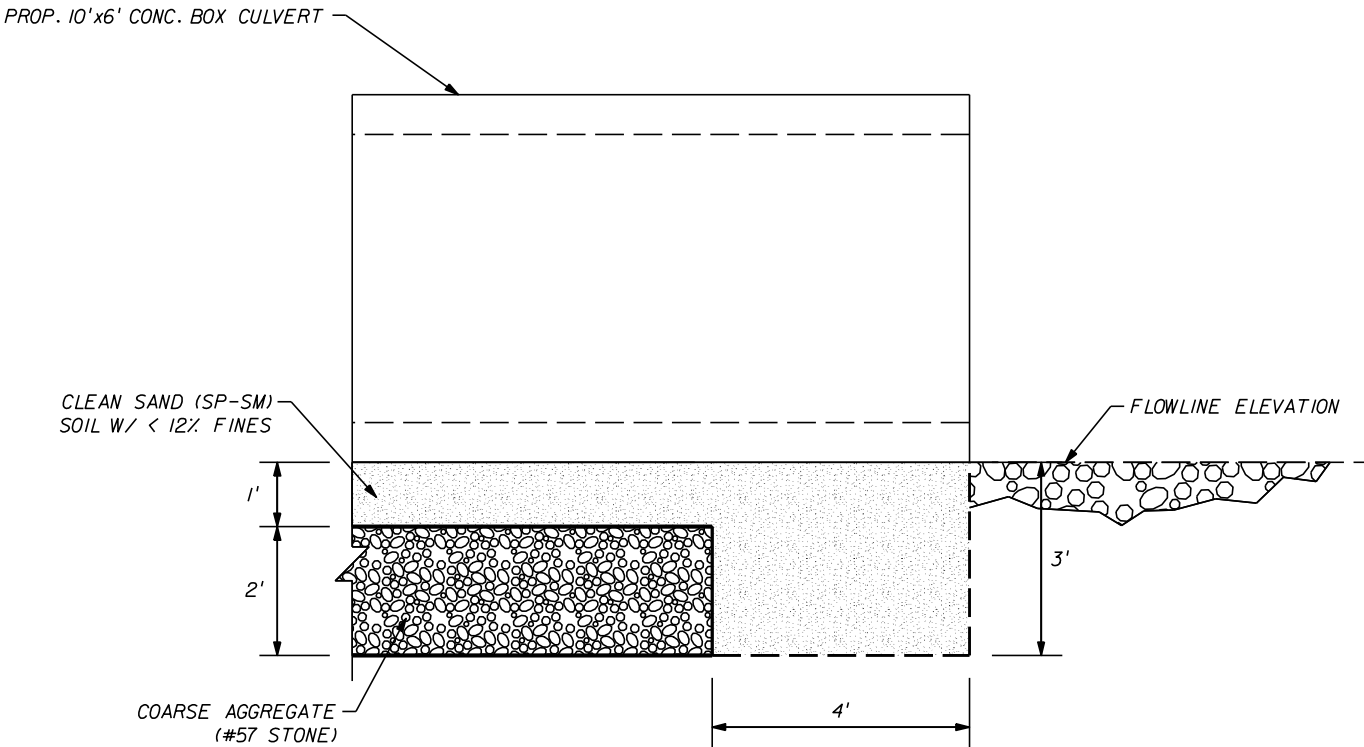
RCBC CONCRETE COLLAR DETAIL
N.T.S.

NOTE:
ALL MATERIAL AND LABOR ASSOCIATED WITH CONSTRUCTION OF RCBC CONCRETE COLLARS ARE TO BE INCLUDED WITHIN PAY ITEM 400-2-1.



- NOTES:
- THE FILTER FABRIC SHALL MEET THE SPECIFICATIONS FOR TYPE D-3 FABRIC, AS SPECIFIED IN FDOT INDEX 400-289.
 - BEDDING STONE SHALL BE PLACED ON FIRM UNYIELDING UNDISTURBED GROUND.
 - COST ASSOCIATED WITH EXCAVATION, FILTER FABRIC, COARSE AGGREGATE & CLEAN SAND SHALL BE INCLUDED WITHIN UNIT PRICE FOR PRE-CAST CONCRETE BOX CULVERT.

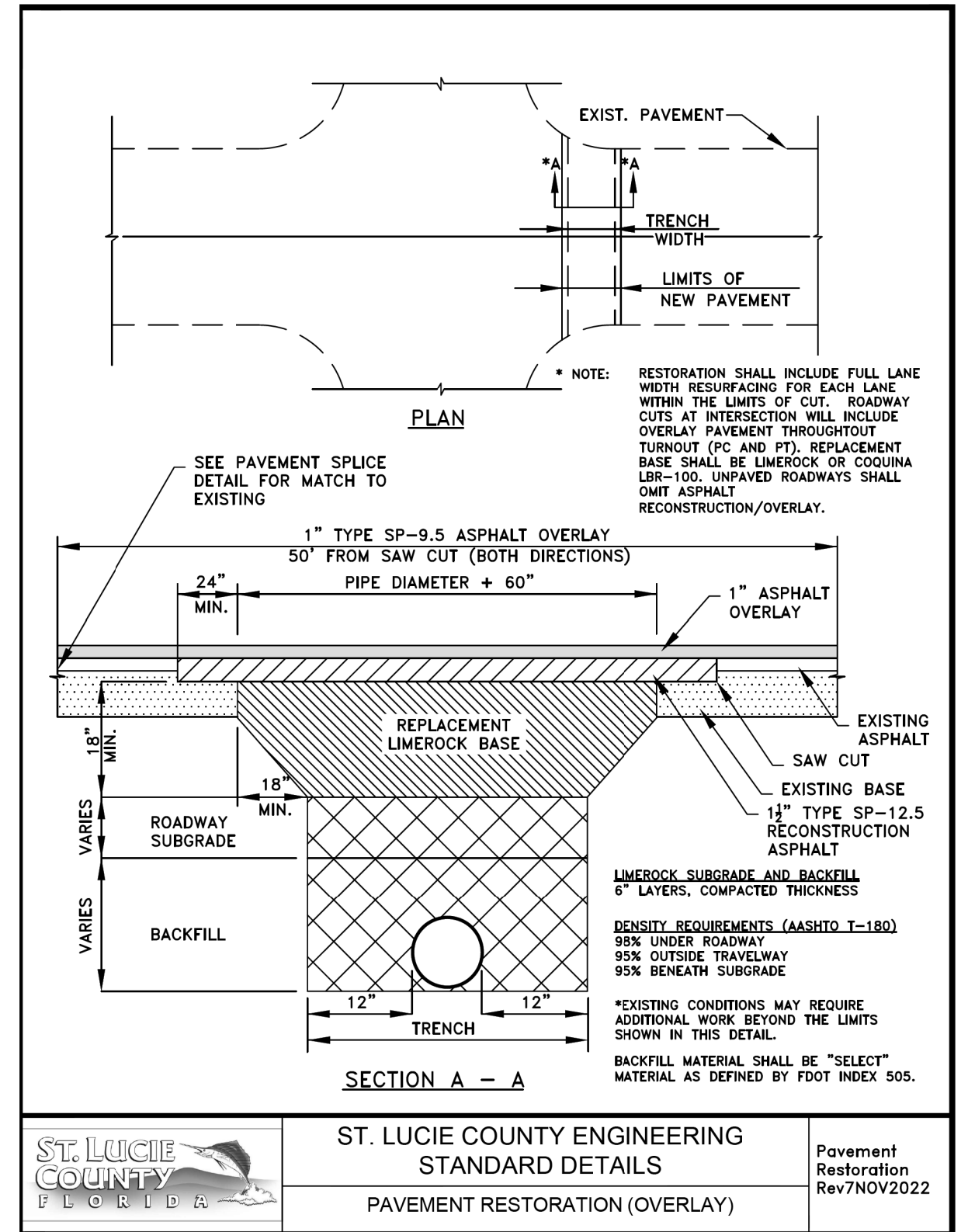
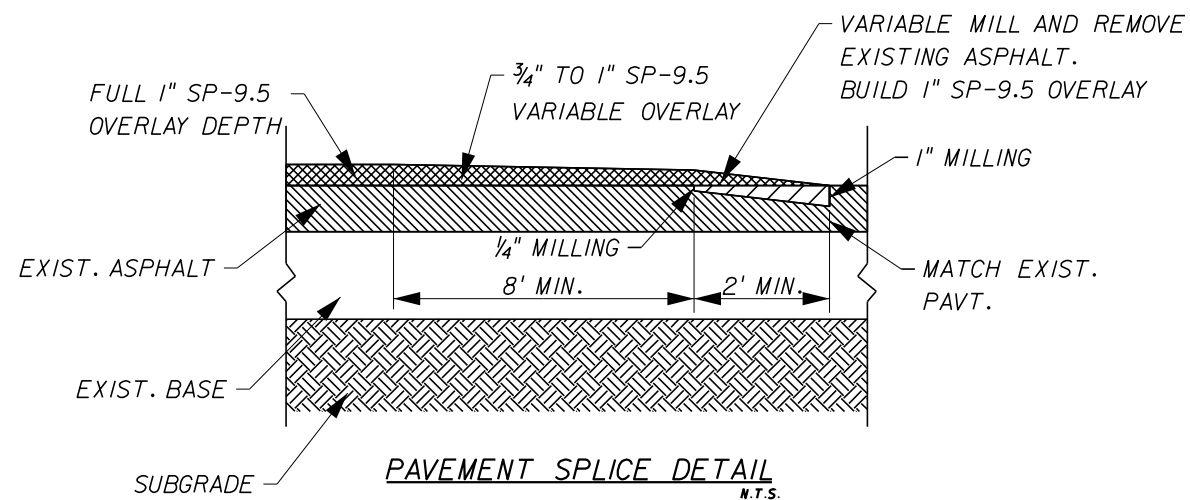
TYPICAL REINFORCED BEDDING PAD DETAIL
N.T.S.



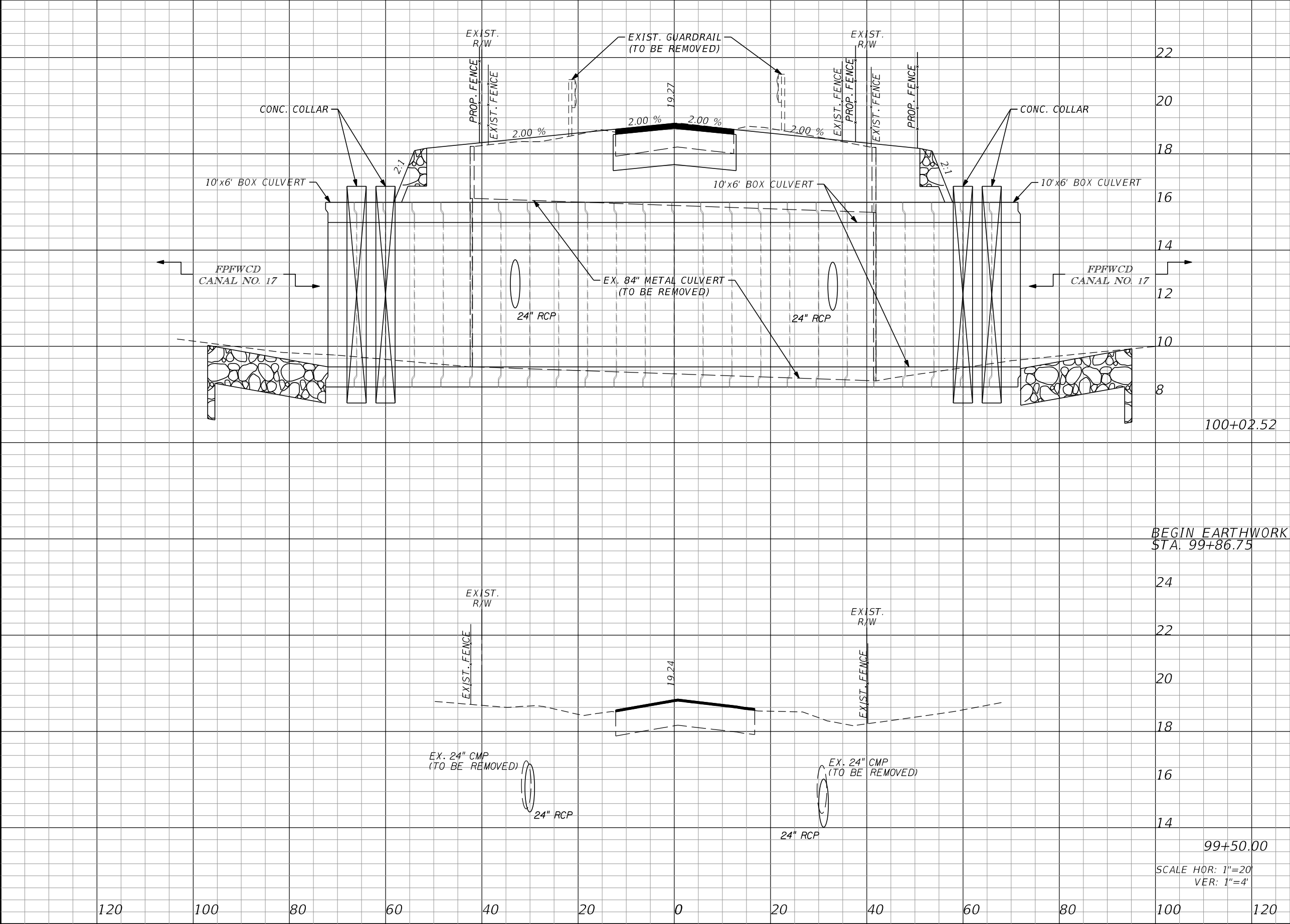
TERMINAL SEGMENT BEDDING PAD DETAIL
N.T.S.

REVISIONS						Kimley»Horn	ST. LUCIE COUNTY BOARD OF COUNTY COMMISSIONERS JOHNSTON ROAD AT CANAL 17 CROSS DRAIN REPLACEMENT	MISCELLANEOUS DETAILS	SHEET NO. 9
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION				
						BRIAN A. GOOD, P.E. P.E. LICENSE NUMBER 56939 445 24th STREET, SUITE 200 VERO BEACH, FL 32960 (772) 794-4100 REGISTRY No. 35106			

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REVISIONS						<div>Kimley»Horn</div> <div> BRIAN A. GOOD, P.E. P.E. LICENSE NUMBER 56939 445 24th STREET, SUITE 200 VERO BEACH, FL 32960 (772) 794-4100 REGISTRY No. 35106 </div>	ST. LUCIE COUNTY BOARD OF COUNTY COMMISSIONERS JOHNSTON ROAD AT CANAL 17 CROSS DRAIN REPLACEMENT		MISCELLANEOUS DETAILS		SHEET NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION						10



Regular		Exc.	Embankment	
A	V	A	V	
60.6		0.1		
	57.0		0.1	
	0.0		0.0	
	0.0		0.0	

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Kimley»Horn

BRIAN A. GOOD, P.E.
P.E. LICENSE NUMBER 56939
445 24TH STREET, SUITE 200
VERO BEACH, FL 32960
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REGISTRY No. 35106

ST. LUCIE COUNTY
BOARD OF COUNTY COMMISSIONERS
JOHNSTON ROAD AT CANAL 17
CROSS DRAIN REPLACEMENT

JOHNSTON ROAD
CROSS SECTIONS

12

1. SITE DESCRIPTION

- A. CONSTRUCTION ACTIVITY: JOHNSTON ROAD AT CANAL 17 CROSS DRAIN REPLACEMENT.
- B. SEQUENCE OF MAJOR SOIL DISTURBING ACTIVITIES: SOIL DISTURBING ACTIVITIES WILL TAKE PLACE DURING MUCH OF THE ANTICIPATED CONSTRUCTION PERIOD OF THIS PROJECT. THE FOLLOWING SOIL DISTURBING ACTIVITIES ARE LISTED IN THE APPROXIMATE ORDER IN WHICH THEY ARE ANTICIPATED TO OCCUR.

- 1. INSTALL STABILIZED CONSTRUCTION ENTRANCE(S)
- 2. CLEARING AND GRUBBING
- 3. STORMWATER MANAGEMENT FACILITY CONSTRUCTION
- 4. EXCAVATION OF SOILS
- 5. EMBANKMENT CONSTRUCTION
- 6. STABILIZATION AND TEMPORARY SODDING
- 7. ROADWAY GRADING AND CONSTRUCTION
- 8. FINAL GRADING AND SODDING

- C. TOTAL PROJECT AREA: 0.47 AC
TOTAL AREA TO BE DISTURBED: 0.47 AC

D. RUNOFF DATA:

THE FOLLOWING IS A LIST OF THE DRAINAGE BASIN, THE AREA OF THE BASIN AND THE RUNOFF COEFFICIENT BEFORE, DURING, AND AFTER CONSTRUCTION.

BASIN	AREA (AC.)	BEFORE CONSTRUCTION	DURING CONSTRUCTION	AFTER CONSTRUCTION
JOHNSTON ROAD	0.47	0.45	.47	0.45

E. SITE MAP: SEE KEY SHEET

F. RECEIVING WATERS: FPFWCD CANAL 17

2. CONTROLS

- A. EROSION AND SEDIMENT CONTROLS: THE SOIL EROSION AND SEDIMENT CONTROLS SHALL BE MAINTAINED BY THE CONTRACTOR TO MINIMIZE THE AMOUNT OF SOIL DISTURBED, PREVENT OFFSITE RUNOFF FROM DISCHARGING ACROSS DISTURBED AREAS, AND REMOVE ON-SITE SEDIMENT PRIOR TO DISCHARGE OF RUNOFF FROM THE SITE.

ALL ITEMS REPRESENTED IN THE FOLLOWING DISCUSSION ARE TREATED IN DETAIL IN THE "FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION OR WILL BE IMPLEMENTED BY THE ENGINEER IN A MANNER APPROPRIATE TO ENVIRONMENTALLY SENSITIVE CONSTRUCTION PRACTICES. THE CONTRACTOR WILL GENERATE SITE SPECIFIC EROSION CONTROL PLAN INCLUDING AN IMPLEMENTATION SCHEDULE FOR EACH PHASE OF CONSTRUCTION OPERATIONS OR ACTIVITIES. THE CONTRACTOR WILL ALSO BE REQUIRED TO MODIFY THE PLAN OR MATERIALS TO ADAPT TO SEASONAL VARIATIONS AND SUPPLY CONTRACT TIME SCHEDULES FOR THE IMPLEMENTATION OF EACH SUBUNIT.

- (A) STABILIZATION PRACTICES: DURING CONSTRUCTION THE CONTRACTOR WILL PROVIDE TEMPORARY SEEDING FOR AREAS WHICH HAVE BEEN CLEARED AND NOT REWORKED WITHIN 14 CALENDAR DAYS. THE ENTIRE CLEARED AND UNPAVED PORTION OF THE PROJECT WILL BE SODDED UPON COMPLETION. BARE SOIL AREAS WILL BE KEPT TO A MINIMUM. STABILIZATION PRACTICES WILL INCLUDE:

PERMANENT SODDING
LIMITING STEEP SLOPES
MINIMIZING THE AREA OF DISTURBED SOILS AT ANY GIVEN TIME
PRESERVATION OF NATURAL VEGETATION
SOIL RETAINING MEASURES
DUST CONTROL

- (B) STRUCTURAL PRACTICES WILL INCLUDE:

STAKED SILT FENCES (LF)
SYNTHETIC BALES (LF)
ROCK BAGS (EA)
STORM DRAIN INLET PROTECTION
FLOATING TURBIDITY

- (C) PHASING OF CONTROLS

PHASE I - INSTALLATION OF ENVIRONMENTAL CONTROL FEATURES

- A. ENVIRONMENTAL CONTROL FEATURES AS PROVIDED IN PLANS QUANTITIES ARE TO BE INSTALLED THROUGHOUT THE CLEARING AND GRUBBING LIMITS OF ENVIRONMENTALLY SENSITIVE AREAS AS SHOWN IN PLANS (PRIOR TO CLEARING AND GRUBBING).
- B. THE CONTRACTOR WILL BE REQUIRED TO PREPARE A SITE SPECIFIC EROSION CONTROL PLAN ALONG WITH A SPECIFIC CONSTRUCTION SCHEDULE FOR IMPLEMENTATION. THE CONTRACTOR WILL ALSO BE REQUIRED TO MODIFY THE PLAN OR MATERIALS TO ADAPT TO SEASONAL VARIATIONS.

PHASE II - CLEARING AND GRUBBING

CLEARING AND GRUBBING SHALL BE DONE AS INDICATED ON THE TYPICAL SECTIONS OR AS NOTED IN THE PLANS.

PHASE III - EXCAVATION OF MUCK SOILS AND EMBANKMENT

ENVIRONMENTAL CONTROLS INCLUDING SYNTHETIC BALES, SILT FENCES, SEDIMENTATION BASINS AND OTHER CONTROLS, AS APPROPRIATE, SHALL BE IN PLACE PRIOR TO THE INITIATION OF EMBANKMENT CONSTRUCTION.

PHASE IV - DRAINAGE SYSTEM OR ENVIRONMENTAL CONTROL FEATURES

- A. ENVIRONMENTAL CONTROL FEATURES AS PROVIDED IN PLANS QUANTITIES ARE TO BE INSTALLED IN ALL AREAS OF EXCAVATION OR FILL FOR DRAINAGE SYSTEM OR STRUCTURE CONSTRUCTION PRIOR TO SUCH EXCAVATION OR FILL. ALL STREAMS OR DITCHES ARE TO BE PROTECTED FROM EROSION OR SILTATION BY THE METHODS DETAILED IN THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP). INLET ENTRANCES ARE ALSO TO BE PROTECTED FROM SILTATION AS DETAILED IN THE SWPPP. THESE INCLUDE STAKED SYNTHETIC BALES, SEDIMENT BASINS, TURBIDITY BARRIERS, SILT FENCE BARRIERS AND OTHERS, AS APPROPRIATE.
- B. THE CONTRACTOR WILL BE RESPONSIBLE FOR MONITORING ANY ACTIVITIES FOR VIOLATION OF WATER QUALITY STANDARDS AS THEY RELATE TO TURBIDITY (29 NTU'S ABOVE BACKGROUND). TESTING WILL TAKE PLACE TO SUBSTANTIATE THE INTENT OF THE PROJECT PERMITS THROUGHOUT THE DURATION OF THE PROJECT. IF THE WATER QUALITY STANDARD IS VIOLATED, SEDIMENT AND EROSION CONTROL MEASURES WILL BE REEVALUATED AND RE-INSTALLED AS DIRECTED BY THE ENGINEER.

PHASE V - PERMANENT ENVIRONMENTAL CONTROLS

TEMPORARY ENVIRONMENTAL CONTROLS WILL BE REMOVED AFTER NEW IMPROVEMENTS HAVE BEEN OPENED, AND PERMANENT EROSION, SEDIMENT AND STORM WATER CONTROL ARE IN PLACE AND FUNCTIONING. FINAL CLEAN UP WILL TAKE PLACE AND ANY TEMPORARY SURFACE WATER DIVERSIONS OR CONTROL FEATURES WILL BE CONNECTED TO THE PERMITTED STORMWATER MANAGEMENT SYSTEM.

- B. STORMWATER MANAGEMENT: STORMWATER MANAGEMENT WILL BE VIA THE PERMITTED STORMWATER MANAGEMENT SYSTEM.

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DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION				15

C. OTHER CONTROLS

- A) WASTE DISPOSAL: THE CONTRACTOR WILL PROVIDE LITTER CONTROL AND COLLECTION WITHIN THE PROJECT BOUNDARIES DURING CONSTRUCTION ACTIVITIES. ALL FERTILIZER, HYDROCARBON, OR OTHER CHEMICAL CONTAINERS SHALL BE DISPOSED OF BY THE CONTRACTOR ACCORDING TO EPA'S STANDARD
- B) OFF-SITE VEHICLE TRACKING: WILL BE CONTROLLED BY THE FOLLOWING METHODS:
- HAUL ROADS DAMPENED FOR DUST CONTROL
 - LOADED HAUL TRUCKS TO BE COVERED WITH TARPAULIN
 - EXCESS DIRT ON ROADS TO BE REMOVED DAILY
 - SOIL TRACKING PREVENTION DEVICE TYPE A
- C) SANITARY WASTE: ANY FIELD OFFICES WILL HAVE PORTABLE TOILET FACILITIES OR THE CONTRACTOR WILL OBTAIN PERMITS FOR SEWAGE TREATMENT IN ACCORDANCE WITH 10D-6 F.A.C. "STANDARDS FOR ON-SITE SEWAGE DISPOSAL SYSTEMS".
- D) FERTILIZERS AND PESTICIDES: FERTILIZERS WILL BE USED ON THIS PROJECT IN ACCORDANCE WITH "FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" SECTION 982. TO AVOID NUTRIENT LOADING TO SURFACE WATERS, FERTILIZERS USED ON THIS PROJECT WILL NOT BE APPLIED WITHIN FIFTY (50) FEET OF ANY SURFACE WATERS WITHIN THE PROJECT LIMITS.

D. PERMITS

THE FOLLOWING PERMITS HAVE BEEN OBTAINED FOR THE PROJECT:

SFWMD ENVIRONMENTAL RESOURCE GENERAL PERMIT No. 56-104656-P
FPFWCD CONNECTION PERMIT No. 020-011-17
FDEP STATE 404 GENERAL PERMIT No. 56-419011-001, 002-SFG

THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING THE FOLLOWING PERMITS:

FDEP - NPDES PERMIT
SFWMD - TEMPORARY DEWATERING PERMIT (IF NEEDED)

ADDITIONAL PERMIT FEES ARE TO BE INCLUDED IN THE COST OF MOBILIZATION 101-1A

3. MAINTENANCE

THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAILY INSPECTION AND MAINTENANCE OF ALL EROSION CONTROL DEVICES THROUGHOUT THE CONSTRUCTION PHASE OF THE PROJECT. MAINTENANCE SHALL BE CONDUCTED IN ACCORDANCE WITH "FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" SECTION 104 AND "FDOT EROSION AND SEDIMENT CONTROL MANUAL".

THE CONTRACTOR WILL BE RESPONSIBLE FOR MAINTENANCE AND REPAIRS OF EROSION AND SEDIMENT CONTROL DEVICES, AND REMOVAL OF EROSION AND SEDIMENT CONTROL DEVICES UNTIL ACCEPTANCE OF THE COMPLETED PROJECT BY THE COUNTY.

MAINTENANCE AND REPAIR REQUIRED FOR THE CONTROL AND ABATEMENT OF EROSION AND WATER POLLUTION SHALL BE INCLUDED IN THE COST OF PAY ITEM 104-1A.

THE FOLLOWING PRACTICES WILL BE USED TO MAINTAIN EROSION AND SEDIMENT CONTROLS:

GENERAL:

THE CONTRACTOR SHALL INSTALL AND MAINTAIN RAIN GAUGES ON THE PROJECT SITE AND RECORD WEEKLY RAINFALL IN ACCORDANCE WITH NPDES PERMIT NO. FLR 100000. ALL CONTROL MEASURES WILL BE MAINTAINED BY THE CONTRACTOR.

ALL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER. IF A REPAIR IS NECESSARY, IT WILL BE INITIATED WITHIN 24 HOURS OF REPORT.

STRUCTURAL PRACTICES CONTROLS:

BUILT-UP SEDIMENT WILL BE REMOVED FROM SILT FENCE AND STOKED TURBIDITY BARRIERS NOT LATER THAN WHEN IT HAS REACHED ONE-THIRD THE HEIGHT OF THE FENCE.

SODDING AND PLANTING WILL BE INSPECTED FOR BARE SPOTS, WASHOUTS, AND HEALTHY GROWTH.

SOIL TRACKING PREVENTION DEVICE, TYPE A SHALL BE MAINTAINED TO PREVENT CLOGGING OF ROCK BEDDING WHICH MAY IMPEDE THE USEFULNESS OF THE STRUCTURE.

FLOATING TURBIDITY BARRIER WILL BE MAINTAINED WITH RESPECT TO DEPTH OF SEDIMENT AND ENSURE THAT THE FABRIC IS ATTACHED SECURELY TO THE FLOATS AND ANCHORED PROPERLY AT THE BOTTOM FOR PROPER SEDIMENT CONTROL.

4. INSPECTION

ALL EROSION AND WATER POLLUTION ABATEMENT AND CONTROL MEASURES WILL BE INSPECTED DAILY BY THE CONTRACTOR.

INSPECTIONS ARE TO BE PERFORMED BY QUALIFIED PERSONNEL WHO HAVE COMPLETED THE FLORIDA STORM WATER, EROSION AND SEDIMENT CONTROL TRAINING AND CERTIFICATION PROGRAM FOR INSPECTORS AND CONTRACTORS WHO HAVE PASSED THE EXAMINATION.

INSPECTION AREAS: LOCATIONS OR AREAS TO BE INSPECTED INCLUDE BUT ARE NOT LIMITED TO:

- DISCHARGE POINTS TO WATERS OF THE UNITED STATES
- DISCHARGE POINTS TO MS4 FACILITIES
- AREAS NOT MEETING THE "FINAL STABILIZATION" CRITERIA
- MATERIALS STORAGE/STOCKPILES
- SEDIMENTATION FACILITIES
- STRUCTURAL FACILITIES
- VEHICLE ENTRANCES/EXITS
- ON-SITE STORMWATER MANAGEMENT SYSTEMS

THE CONTRACTOR SHALL USE THE CONSTRUCTION INSPECTION REPORT FORM 650-040-03 FOR DAILY INSPECTIONS.

THE CONTRACTOR'S DAILY INSPECTIONS REQUIRED FOR THE CONTROL AND ABATEMENT OF EROSION AND WATER POLLUTION SHALL BE INCLUDED IN THE COST OF PAY ITEM 104-1A.

TRACKING AND REPORTING

THE CONTRACTOR IS RESPONSIBLE FOR COMPLETING THE INSPECTION REPORT FORM 650-040-03 EVERY 7 DAYS AND AFTER ANY 0.50 INCH (OR MORE) RAINFALL EVENT. A COPY OF THE INSPECTION REPORT SHALL BE SUBMITTED TO THE ENGINEER WEEKLY.

THE COUNTY SHALL MAINTAIN ALL RECORDS SUBMITTED BY THE CONTRACTOR.

PREPARATION OF THE CONTRACTOR'S WEEKLY REPORTS OF INSPECTIONS, MAINTENANCE AND REPAIRS REQUIRED FOR THE CONTROL AND ABATEMENT OF EROSION AND WATER POLLUTION SHALL BE INCLUDED IN THE COST OF PAY ITEM 104-1A.

5. NON-STORM WATER DISCHARE AND HAZARDOUS WASTE

THE CONTRACTOR WILL PROVIDE ST. LUCIE COUNTY WITH AN EROSION CONTROL PLAN THAT INCORPORATES THE CONSTRUCTION SCHEDULE AND WILL INCLUDE SPILL REPORTING AND RESPONSE. WHEN THE CONTRACTOR ENCOUNTERS A SPILL, CONSTRUCTION WILL STOP WORKAND WORK WILL NOT RESUME UNTIL DIRECTED BY THE ENGINEER. DISPOSITION OF HAZARDOUS WASTE WILL BE MADE IN ACCORDANCE WITH ANY REQUIREMENTS AND REGULATIONS OF ANY LOCAL, STATE OR FEDERAL AGENCY HAVING JURISDICTION.

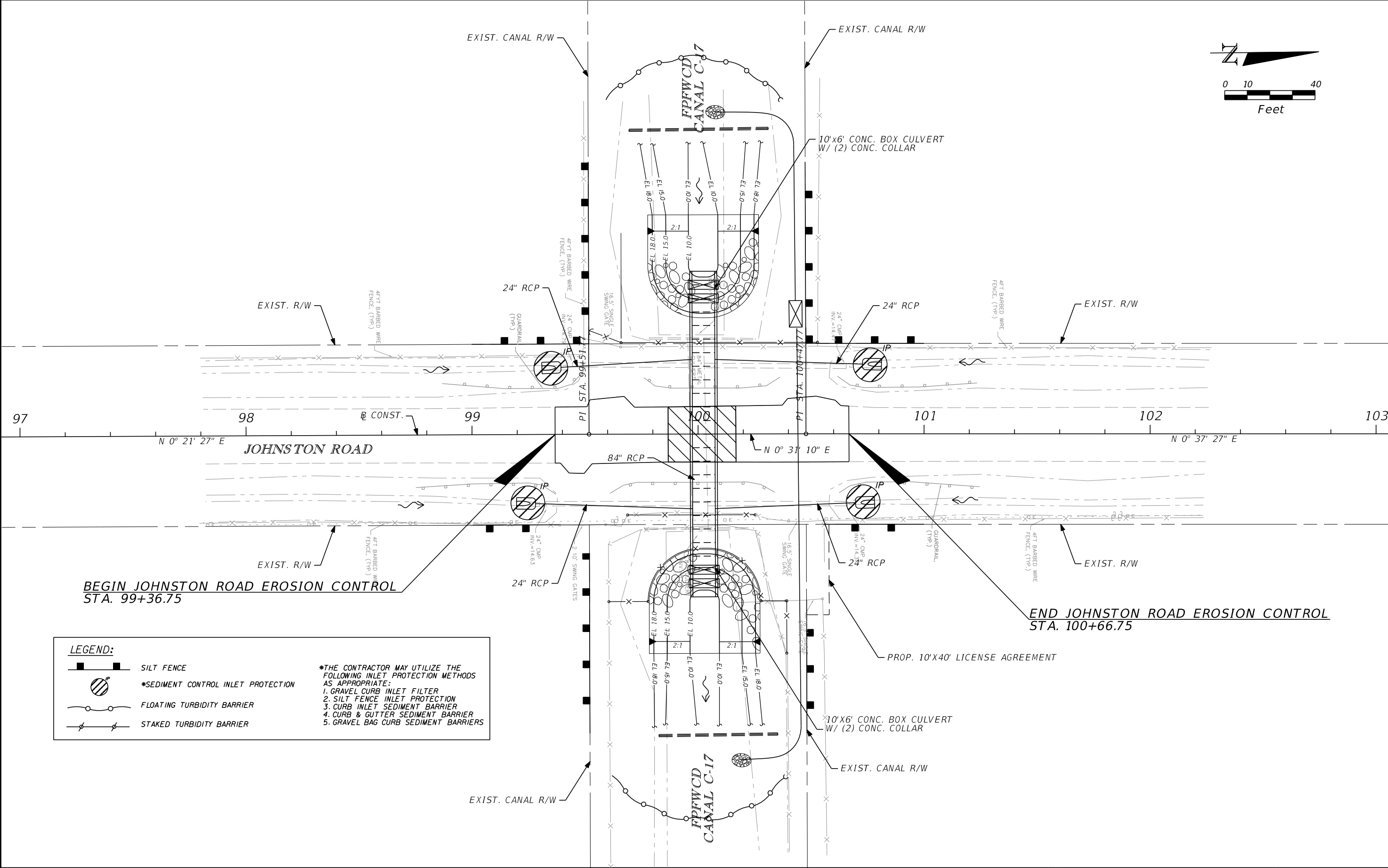
6. REFERENCES

THE CONSTRUCTION PLANS AND SPECIFICATIONS FOR JOHNSTON ROAD AT CANAL 17 CROSS DRAIN REPLACEMENT ARE HEREBY REFERENCED AND MADE PART OF THIS STORMWATER POLLUTION PREVENTION PLAN.

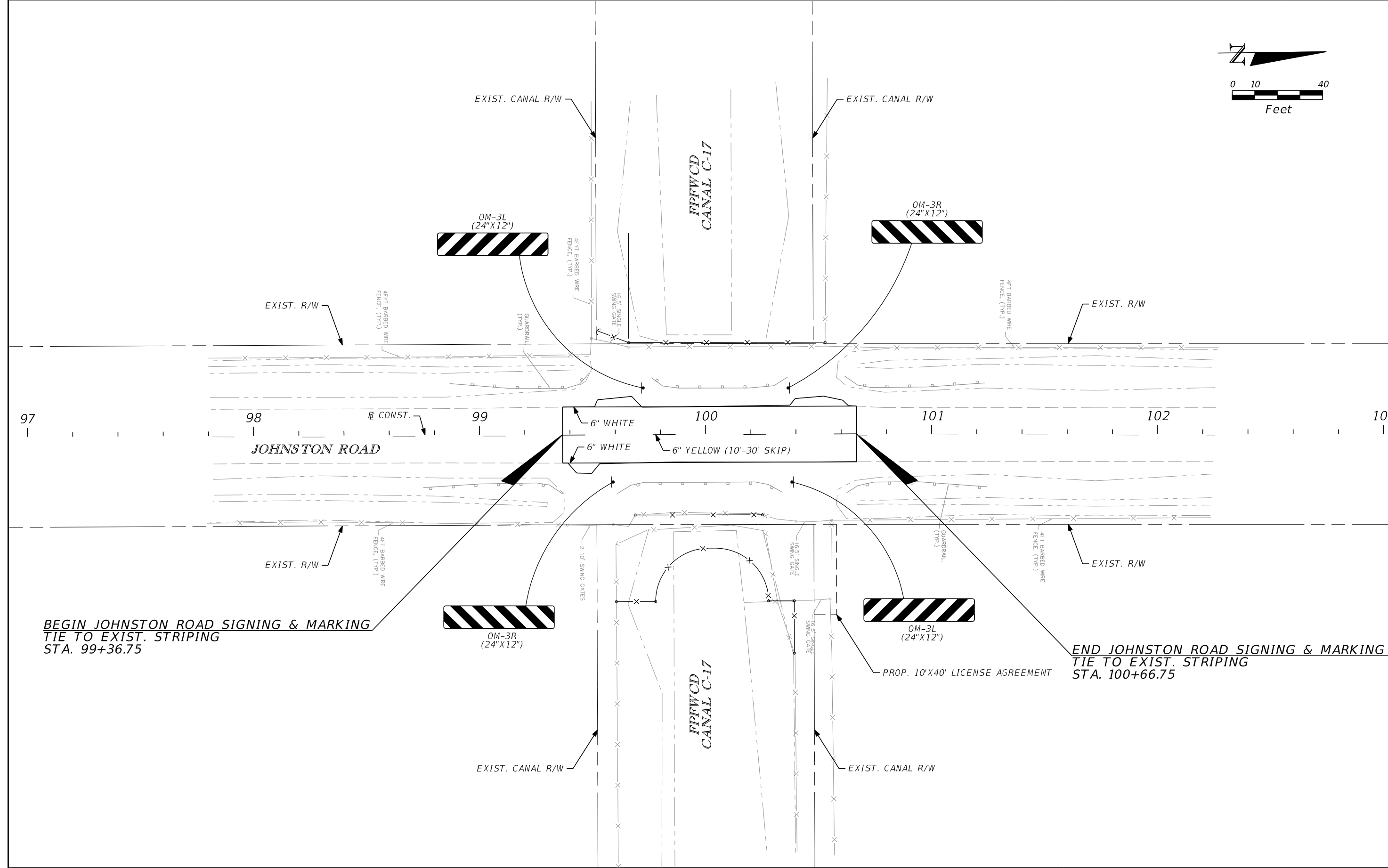
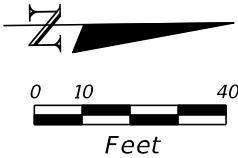
7. QUANTITIES

SEE CONSTRUCTION PLANS SUMMARY OF QUANTITIES SHEETS FOR EROSION CONTROL QUANTITY TABULATION.

R E V I S I O N S						<div>Kimley»Horn</div> <div>BRIAN A. GOOD, P.E. P.E. LICENSE NUMBER 56939 445 24th STREET, SUITE 200 VERO BEACH, FL 32960 (772) 794-4100 REGISTRY No. 35106</div>	<div>ST. LUCIE COUNTY</div> <div>BOARD OF COUNTY COMMISSIONERS</div> <div>JOHNSTON ROAD AT CANAL 17</div> <div>CROSS DRAIN REPLACEMENT</div>	<div>EROSION CONTROL</div> <div>GENERAL NOTES</div>	SHEET NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION				16



REVISIONS						Kimley»Horn	ST. LUCIE COUNTY BOARD OF COUNTY COMMISSIONERS JOHNSTON ROAD AT CANAL 17 CROSS DRAIN REPLACEMENT	EROSION CONTROL	SHEET NO. 17
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BEGIN JOHNSTON ROAD SIGNING & MARKING
TIE TO EXIST. STRIPING
STA. 99+36.75

END JOHNSTON ROAD SIGNING & MARKING
TIE TO EXIST. STRIPING
STA. 100+66.75

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DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION				18