## CONSTRUCTION PLANS FOR

# PEACE RIVER WATER TREATMENT FACILITY ENTRANCE



## Peace River Manasota Regional Water Supply Authority Board of Directors:

Elton Langford, Chair DeSoto County Commissioner

Bill Truex, Vice Chair Charlotte County Commissioner

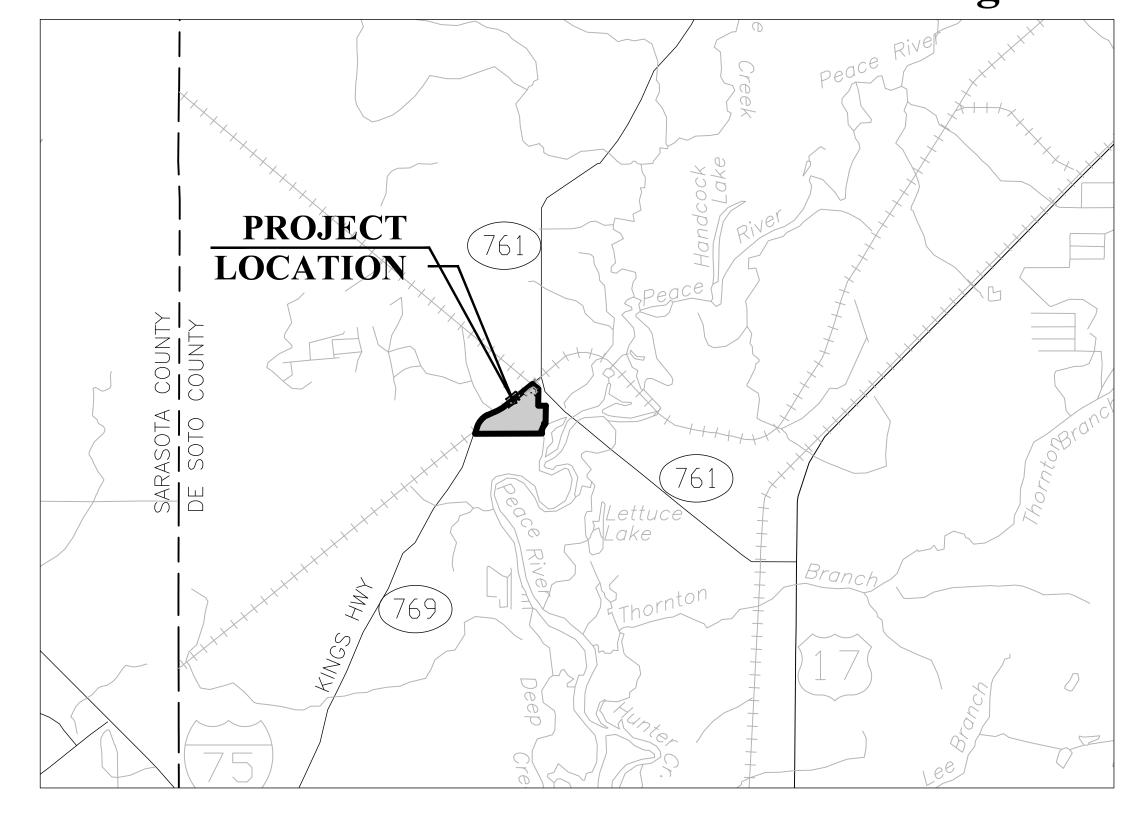
George Kruse
Manatee County Commissioner

Michael A. Moran Sarasota County Commissioner

## SECTION 10,15, TOWNSHIP 39 S., RANGE 23 E. DESOTO COUNTY, FLORIDA

27° 05' 27.44" Latitude -82° 00' 10.29" Longitude

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### JOHNS

Prepared By:

ENGINEERING

1-800-432-4770

STATE, COUNTIES & CITIES ARE "NOT" PART OF THE ONE CALL SYSTEM.THEY

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#### **LOCATION MAP**

0 2500 5000 10000 (INTENDED DISPLAY SCALE: 1"=5000')

FEBRUARY 2024

#### Prepared For:

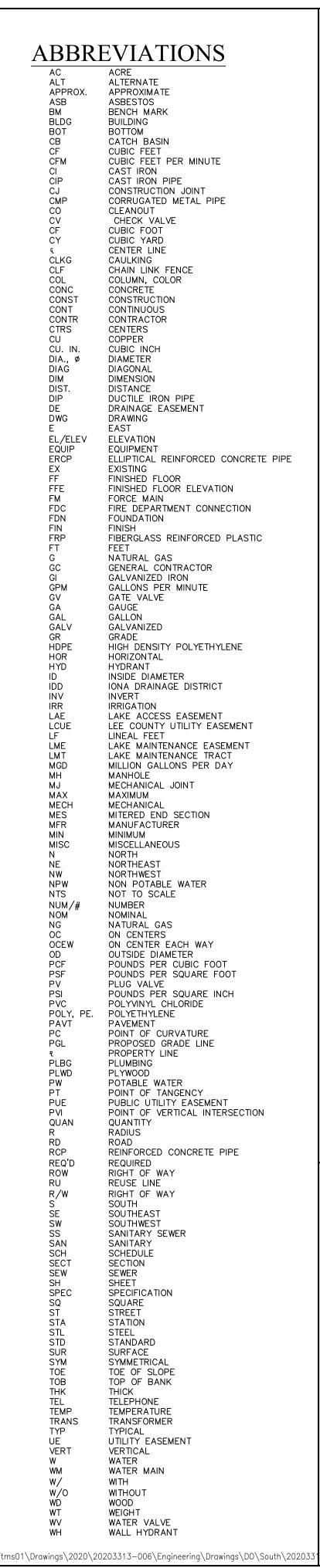
PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY

> 9415 TOWN CENTER PARKWAY LAKEWOOD RANCH, FLORIDA 34202 PHONE: (941) 316-1776 FAX: (941) 316-1772

REGISTERED PROFESSIONAL ENGINEER FLORIDA LICENSE NO. 66574

ERIK LEE HOWARD, PE

DATE



#### **SYMBOLS** GATE VALVE IRRIGATION SERVICE (DOUBLE) IRRIGATION SERVICE (SINGLE) TEE ASSEMBLY SEWER SERVICE (DOUBLE) REDUCER SEWER SERVICE (SINGLE) WATER SERVICE (DOUBLE) FIRE HYDRANT WATER SERVICE (SINGLE) FIRE HYDRANT ASSEMBLY W/ GATE VALVE HEADWALL DRAINAGE INLET (SEE PLAN FOR TYPES) MITERED END SECTION THROAT INLET MANHOLE W/ NUMBER FLARED END SECTION PLUG VALVE **HATCH PATTERNS**

EXISTING LAKE

TO BE FILLED

#### PROPOSED LAKE JPLAND BUFFER JPLAND PRESERVE LITTORAL SHELF AREA COMPENSATING LITTORAL INDIGENOUS AREA PLANTING AREA NATURAL AREA RIPRAP / GRAVEL $\vee$ $\vee$ $\vee$ FILTER MARSH BRICK PAVERS EXISTING LAKE VARY IN SCALE & ANGLE **LINETYPES EXISTING**

WETLAND

#### 

#### GENERAL NOTES:

- 1. ELEVATIONS REFERENCE TO NAVD 1988. CONVERSION TO NGVD 1929 IS: NAVD 1988 + 1.11' = NGVD 1929.
- 2. THIS PROJECT WILL NOT ADVERSELY IMPACT ANY SURFACE WATER OR GROUNDWATER.
- 3. THE LOCATION OF EXISTING UTILITIES, PAVEMENT, VEGETATION, AND MISCELLANEOUS IMPROVEMENTS ARE APPROXIMATE ONLY. THE EXACT LOCATIONS SHALL BE FIELD VERIFIED BY THE CONTRACTOR.
- 4. ANY PUBLIC LAND CORNER WITHIN THE LIMITS OF CONSTRUCTION IS TO BE PROTECTED. IF A CORNER MONUMENT IS IN DANGER OF BEING DESTROYED AND HAS NOT BEEN PROPERLY REFERENCED, THE CONTRACTOR SHOULD NOTIFY THE OWNER/ENGINEER WITHOUT DELAY.
- 5. EXISTING FACILITIES SHALL BE RESTORED TO A CONDITION EQUIVALENT TO THAT WHICH EXISTED PRIOR TO COMMENCING CONSTRUCTION, AT NO ADDITIONAL COST TO OWNER.
- 6. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH STATE OF FLORIDA, DEPARTMENT OF TRANSPORTATION, STANDARD PLANS AND DESIGN MANUAL, (LATEST EDITION), LEE COUNTY DEVELOPMENT STANDARDS AND SPECIFICATIONS AND LEE COUNTY UTILITIES REQUIREMENTS.
- 7. LOCATIONS OF INLETS AND STORM DRAINS MAY BE FIELD ADJUSTED TO PRESERVE EXISTING VEGETATION WITH PERMISSION OF ENGINEER.
- 8. THE CONTRACTOR IS REQUIRED TO ADJUST ALL VALVE BOXES, MANHOLE RIMS, GRATES, ETC. AS NECESSARY TO MATCH PROPOSED GRADES.
- 9. CONTRACTOR SHALL NOTIFY THE LEE COUNTY DIVISION OF DEVELOPMENT REVIEW A MINIMUM OF 72 HOURS PRIOR TO ALL REQUIRED INSPECTIONS.
- 10. CONTRACTOR TO PROVIDE SILT FENCE AND OTHER APPROPRIATE MEASURES TO EFFECT THE FILTRATION OF SURFACE WATER FLOWS AND TO PROVIDE EROSION PROTECTION DURING CONSTRUCTION ACTIVITIES. PROTECTION IS TO BE MAINTAINED DURING THE CONSTRUCTION PERIOD UNTIL DISTURBED SOILS HAVE BEEN STABILIZED WITH GRASS OR SUITABLE EROSION PROTECTION TREATMENT.
- 11. PROPOSED ROADWAYS SHOWN ARE PRIVATE AND SHALL BE PRIVATELY MAINTAINED.
- 12. ALL UNPAVED AREAS DISTURBED DURING CONSTRUCTION SHALL BE SEEDED AND MULCHED UNLESS NOTED OTHERWISE.
- 13. EXISTING OFF—SITE DRAINAGE PATTERNS SHALL BE MAINTAINED DURING CONSTRUCTION.
- 14. CONTRACTOR SHALL RETAIN, ON THE WORK SITE, COPIES OF ANY PERMITS NECESSARY FOR CONSTRUCTION.
- 15. CONTRACTOR SHALL PROMPTLY REPORT ALL FIELD CHANGES TO THE ENGINEER.
- 16. CONTRACTOR SHALL CLEAR ALL EXCAVATION AND FILL AREAS AS SHOWN ON THE PLANS; ACTUAL LIMITS OF CLEARING MAYBE ADJUSTED IN THE FIELD BY OWNER OR ENGINEER.
- 17. CONTRACTOR SHALL REMOVE ALL MUCK AND OTHER UNSUITABLE MATERIAL FROM FILL AREAS PRIOR TO PLACEMENT OF FILL. ALL MUCK AND OTHER UNSUITABLE MATERIAL EXCAVATED FROM LAKES OR REMOVED FROM FILL AREAS SHALL BE STOCKPILED AT THE PROPOSED PROJECT AS DETERMINED BY THE OWNER.
- 18. SITE GRADES MAY BE ADJUSTED IN FIELD BY ENGINEER.
- 19. LOCATION OF STORM DRAINAGE HEADWALLS ARE SUBJECT TO MODIFICATION IN THE FIELD BY OWNER OR ENGINEER TO PRESERVE EXISTING VEGETATION.
- 20. CONTRACTOR SHALL USE DESIGNATED CONSTRUCTION ENTRANCES FOR EMPLOYEES AND DELIVERY OF MATERIALS.21. DURING CONSTRUCTION, GRATE INLET AND JUNCTION BOX OPENINGS SHALL
- BE COVERED WITH FILTER FABRIC (MIRAFI 140N OR APPROVED EQUAL) TO PREVENT DEBRIS AND FILL FROM FALLING INTO THE INLET.

  22. THE CONTRACTOR SHALL ACCURATELY PLOT THE LOCATIONS AND DEPTHS
- OF ALL IMPROVEMENTS INSTALLED ON A FINAL SET OF RECORDED DRAWINGS WHICH SHALL BE DELIVERED TO THE ENGINEER.
- 23. CONTRACTOR IS REQUIRED TO OBTAIN FROM THE ENGINEER AND OWNER WRITTEN APPROVAL FOR ANY DEVIATIONS FROM THE PLANS AND/OR SPECIFICATIONS.
- 24. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING TRAFFIC AND USAGE OF THE EXISTING STREETS ADJACENT TO THE PROJECT, ALL MAINTENANCE OF TRAFFIC SHALL BE IN ACCORDANCE WITH THE FDOT STANDARD PLANS INDEX 102-600 SERIES.
- 25. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY REQUIRED DEWATERING PERMITS.
- 26. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY REQUIRED TREE REMOVAL PERMITS.
- 27. ALL CONSTRUCTION DEBRIS AND OTHER WASTE MATERIAL SHALL BE DISPOSED OF OFF SITE IN ACCORDANCE WITH APPLICABLE REGULATION
- 28. CONTRACTOR TO VERIFY ENGINEER'S BUILDING FOOTPRINT SIZE MATCHES ARCHITECTS BUILDING SIZE BEFORE BEGINNING CONSTRUCTION.

### SIGNING AND PAVEMENT MARKING NOTES:

- 1. ALL SIGNING AND PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH FDOT STANDARDS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION), FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS (LATEST EDITION), "THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (LATEST EDITION)," AND THE CURRENT LEE COUNTY DEPARTMENT OF TRANSPORTATION REQUIREMENTS.
- 2. MATCH EXISTING PAVEMENT MARKINGS AT EXISTING ROADS.
- 3. MAINTENANCE OF TRAFFIC SHALL BE IN ACCORDANCE WITH THE FDOT STANDARD PLANS INDEX 102-600 SERIES (LATEST EDITION).
- 4. CONTRACTOR SHALL SET ROADWAY GROUND MOUNT SIGNS AT PROPER DEFLECTION ANGLE TO THE ROADWAY IN ACCORDANCE WITH FDOT INDEX NUMBER 700-001.
- 5. SEE FDOT INDEX NUMBERS 711-001 AND 706-001 FOR ADDITIONAL SIGNING AND MARKING DETAILS.

### PAVING, GRADING AND DRAINAGE NOTES:

- 1. THIS SITE CAN BE UTILIZED SAFELY FOR BUILDING PURPOSES WITHOUT UNDUE DANGER FROM FLOODING OR ADVERSE SOIL CONDITIONS.
- 2. LENGTH OF STORM DRAIN PIPES ARE APPROXIMATE AND ARE MEASURED
- FROM CENTER OF STRUCTURE.

  3. CONTRACTOR SHALL NOTIFY THE LEE COUNTY DIVISION OF DEVELOPMENT
- 4. CONTRACTOR SHALL NOTIFY THE OWNER AND CONTACT ALL UTILITY COMPANIES FOR LOCATIONS OF EXISTING UTILITIES IN THE AREA 72 HOURS (MIN.) PRIOR TO COMMENCING CONSTRUCTION.

SERVICES A MINIMUM OF 72 HOURS PRIOR TO ALL REQUIRED INSPECTIONS.

- 5. PLACE 200 S.F. OF SOD AROUND ALL INLETS, HEADWALLS, AND CONTROL STRUCTURES. USE ARGENTINE BAHIA AND CONFORM TO FDOT SECTION 575.
- 6. PLACE 18" OF SOD CONTINUOUS ALONG EDGES OF PAVEMENT OF ALL ROADS AND/OR CURB, LAYING PARALLEL WITH THE ROAD MAINTAINING 2" BELOW FINISHED PAVEMENT GRADE.
- 7. THE STORM DRAINAGE PIPING AND FILTRATION SYSTEM SHALL BE SUBJECTED TO A VISUAL INSPECTION BY THE OWNER'S ENGINEER PRIOR TO THE PLACEMENT OF BACKFILL. CONTRACTOR TO NOTIFY THE ENGINEER 48 HOURS IN ADVANCED TO SCHEDULE INSPECTION.
- 8. THE CONTRACTOR SHALL MAINTAIN THE STORM DRAINAGE SYSTEM UNTIL FINAL ACCEPTANCE OF THE PROJECT. THE STORM SYSTEM WILL BE INSPECTED BY THE OWNER'S ENGINEER PRIOR TO FINAL ACCEPTANCE.
- 9. FINISHED GRADE OUTSIDE OF BUILDINGS MUST BE 4"-6" BELOW THE FINISHED FLOOR ELEVATION.
- 10. FINISHED GRADE ALONG EDGE OF PAVEMENT MUST BE AT LEAST 3" BELOW EDGE OF PAVEMENT GRADE.

## FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD DETAIL NOTES:

ALL REFERENCES TO FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD PLANS ARE (LATEST EDITION) DESIGN STANDARDS (ENGLISH UNITS). THESE INDEXES WERE PREPARED BY OR AT THE DIRECTION OF FDOT AND WERE FURNISHED TO JOHNSON ENGINEERING, INC.

THE DESIGN STANDARDS REFERENCED WITHIN THIS PLAN SET HAVE BEEN INCORPORATED HEREIN VERBATIM AS SET FORTH WITHIN THE ABOVE REFERENCED FDOT DESIGN STANDARDS.

#### EXISTING UTILITY NOTE:

CONTRACTOR TO CONTACT "SUNSHINE 811" FOR LOCATES TWO BUSINESS DAYS BEFORE YOU DIG, 1-800-432-4770. STATE, COUNTIES, AND CITIES ARE NOT PART OF THE ONE CALL SYSTEM, THEY MUST BE CALLED INDIVIDUALLY.

#### SITE DEMOLITION:

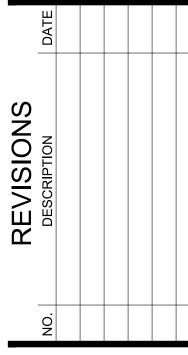
. ANY SITE DEMOLITION IS BASED ON AVAILABLE INFORMATION PROVIDED TO ENGINEER AND MAY NOT COVER ALL ASPECTS OF THE PROJECT. INCLUDING BUT NOT LIMITED TO IRRIGATION LINES/SERVICES AND ELECTRICAL SERVICES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COVER ALL EXISTING IMPROVEMENTS TO BE REMOVED IN THEIR DEMOLITION BUDGET.

JOHNSON ENGINEERING

JOHNSON ENGINEERING, INC. 2122 JOHNSON STREET P.O. BOX 1550 FORT MYERS, FLORIDA 33902-1550 PHONE: (239) 334-0046 FAX: (239) 334-3661 E.B. #642 & L.B. #642

Peace River
Manasota
Regional Water Supply Authorit

PEACE RIVER WATER
TREATMENT FACILITY
ENTRANCE
DESOTO COUNTY, FLORID

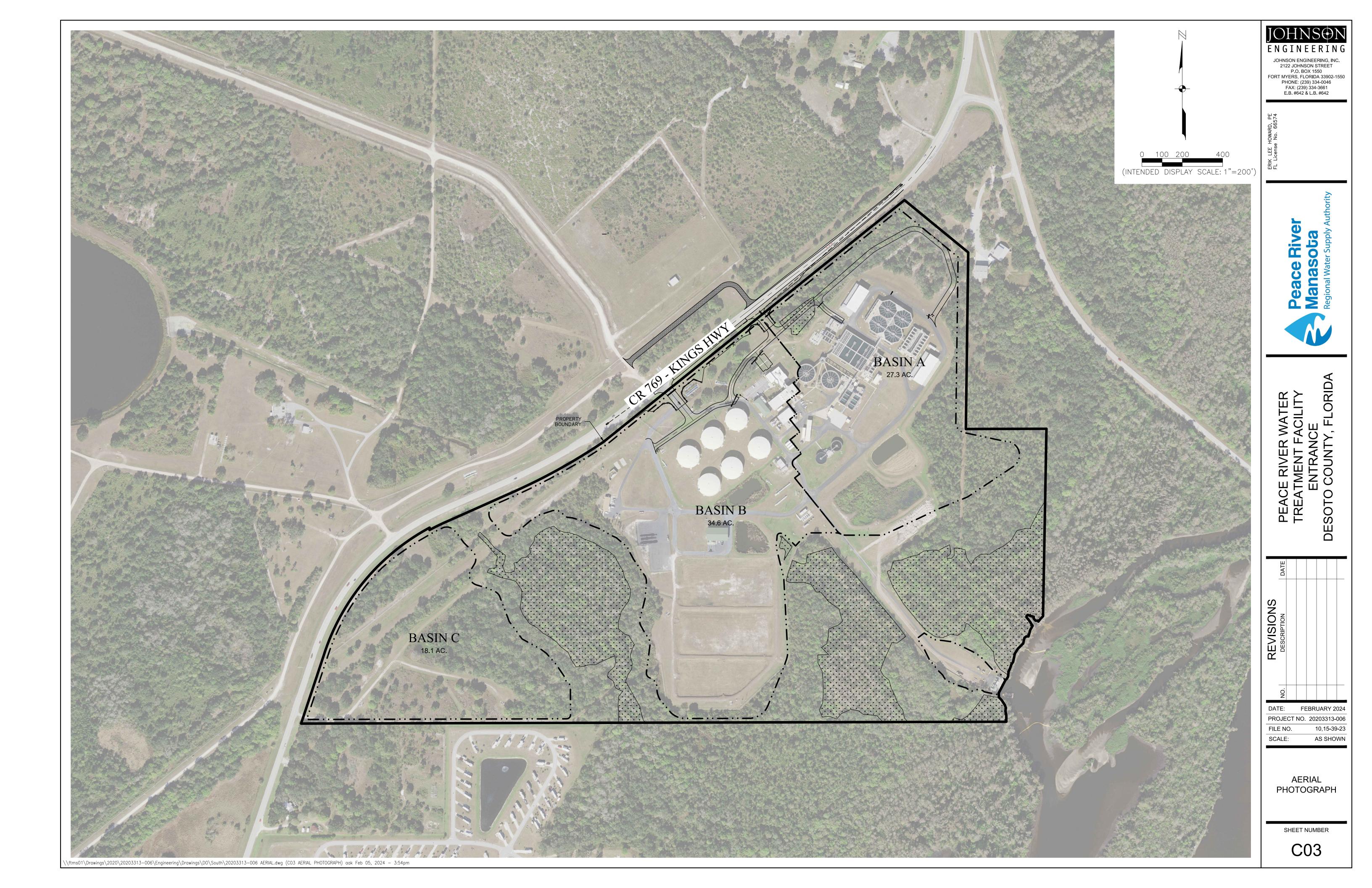


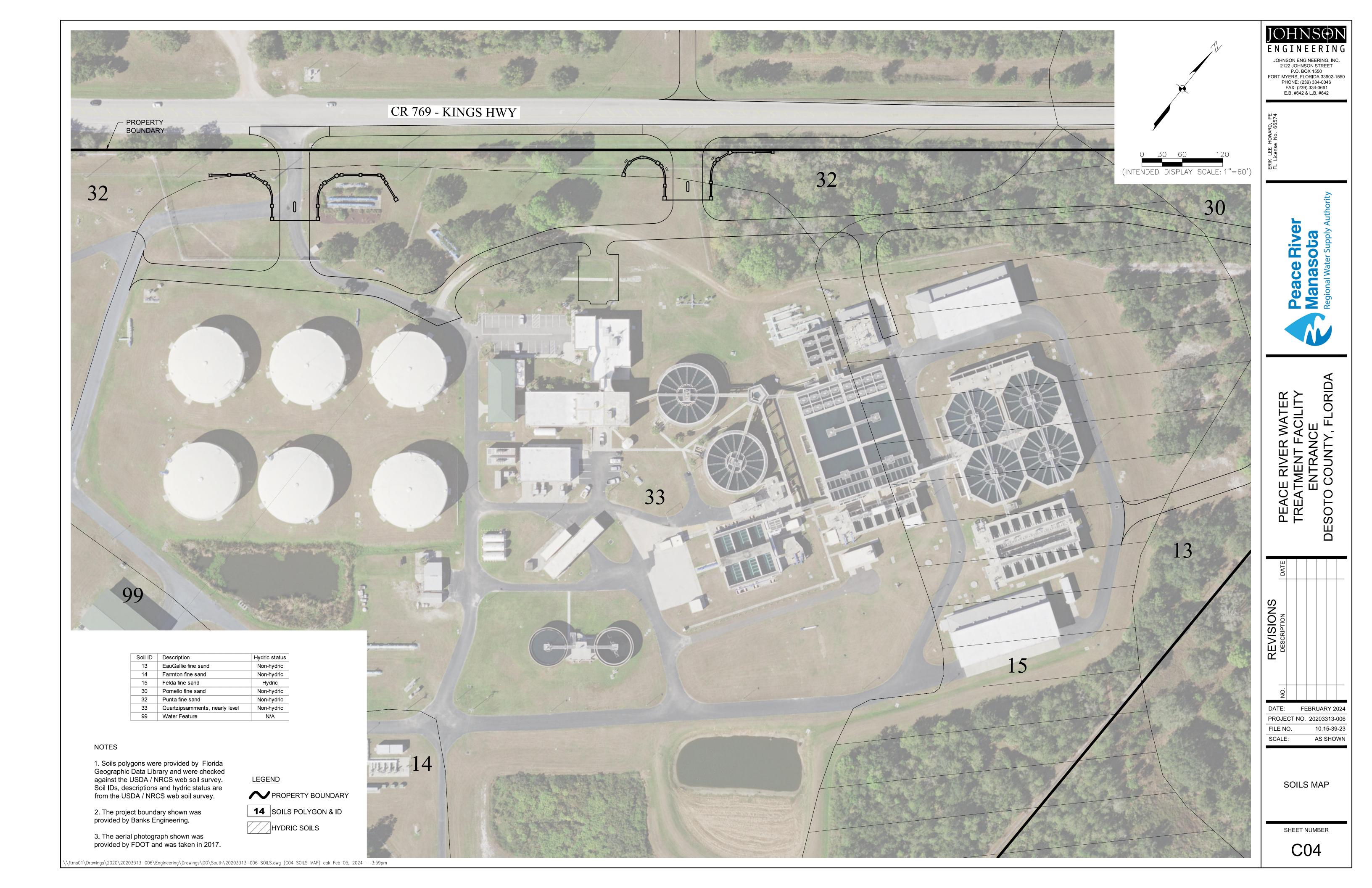
DATE: FEBRUARY 2024
PROJECT NO. 20203313-006
FILE NO. 10,15-39-23
SCALE: AS SHOWN

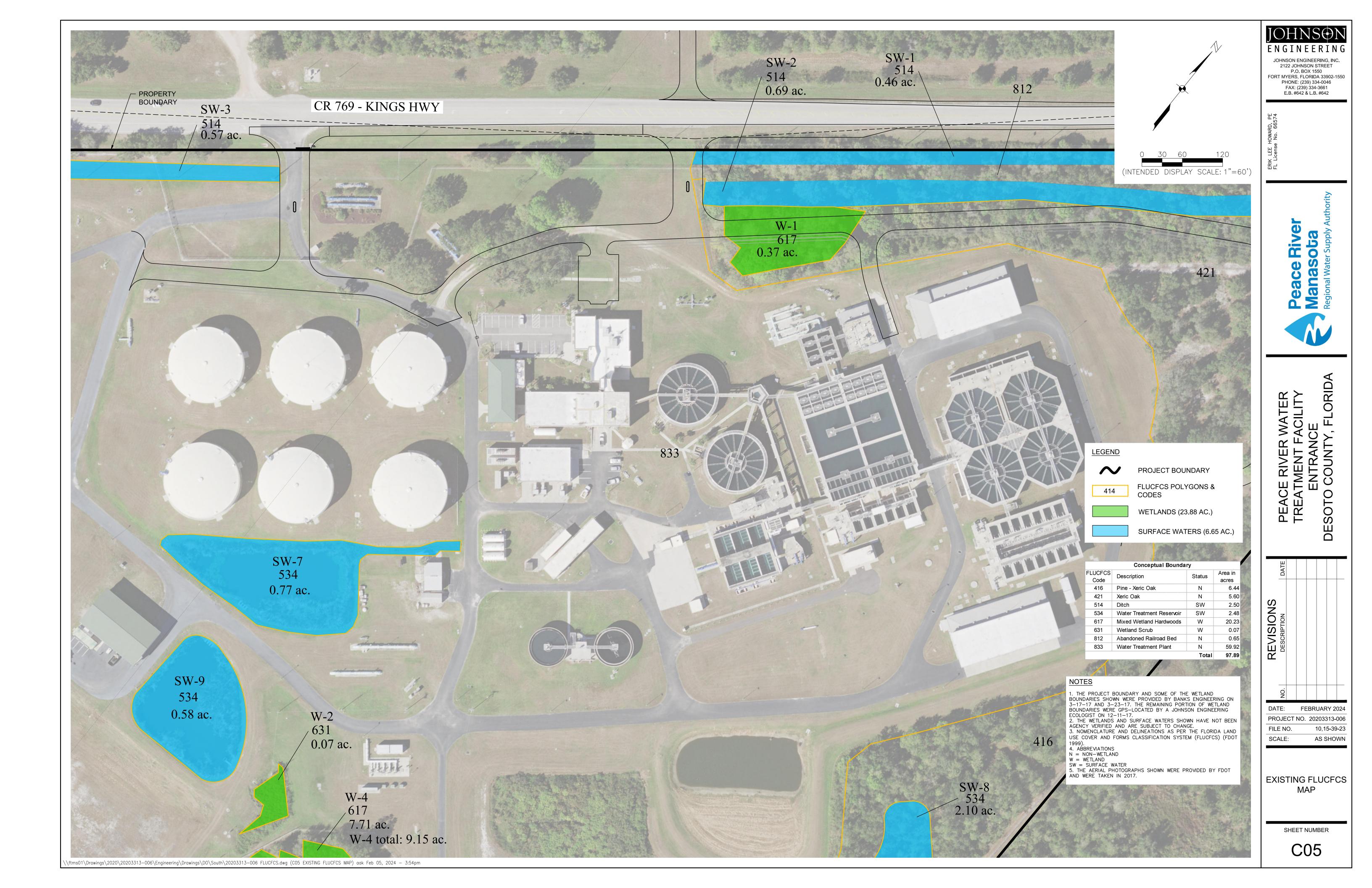
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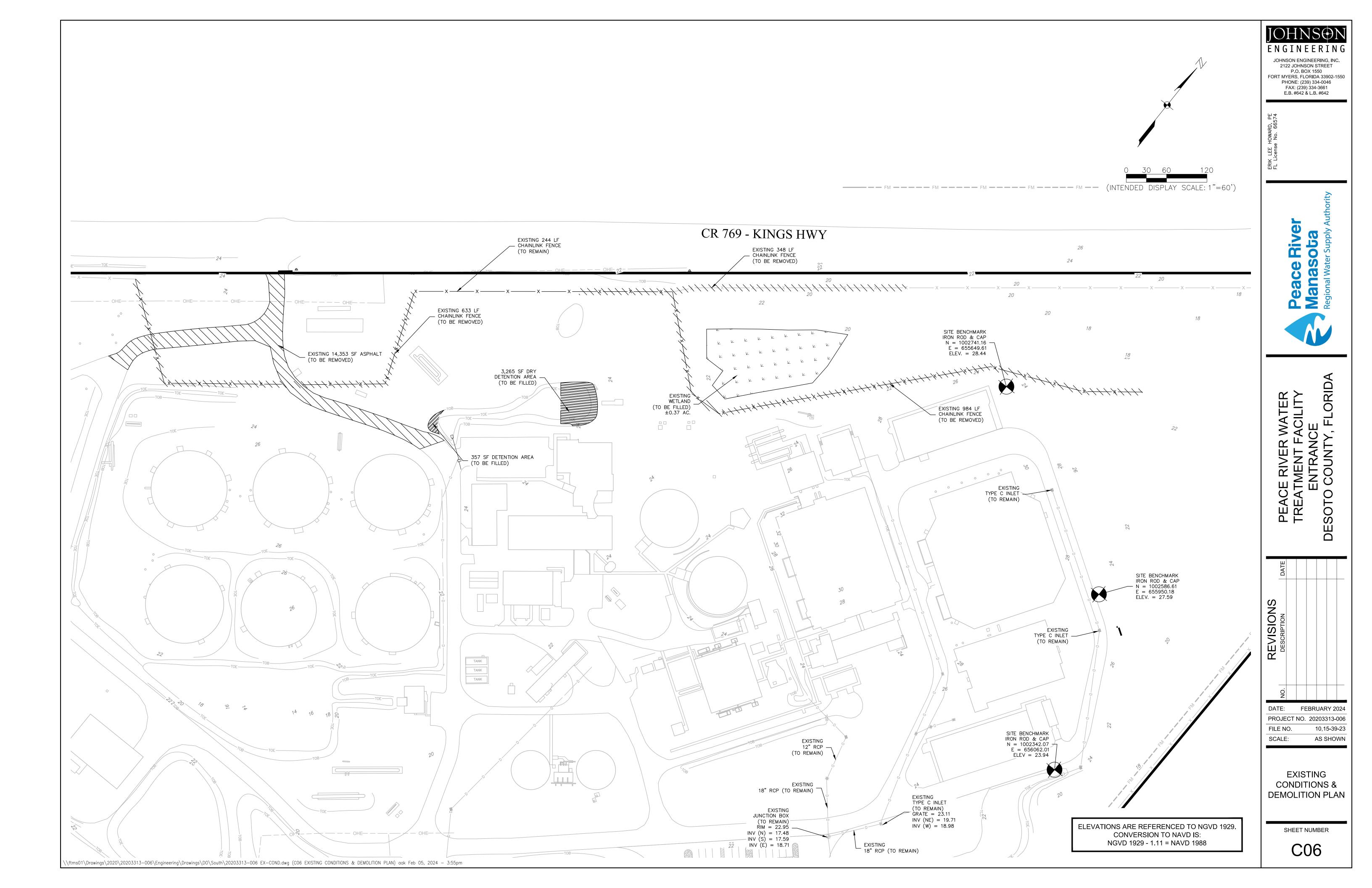
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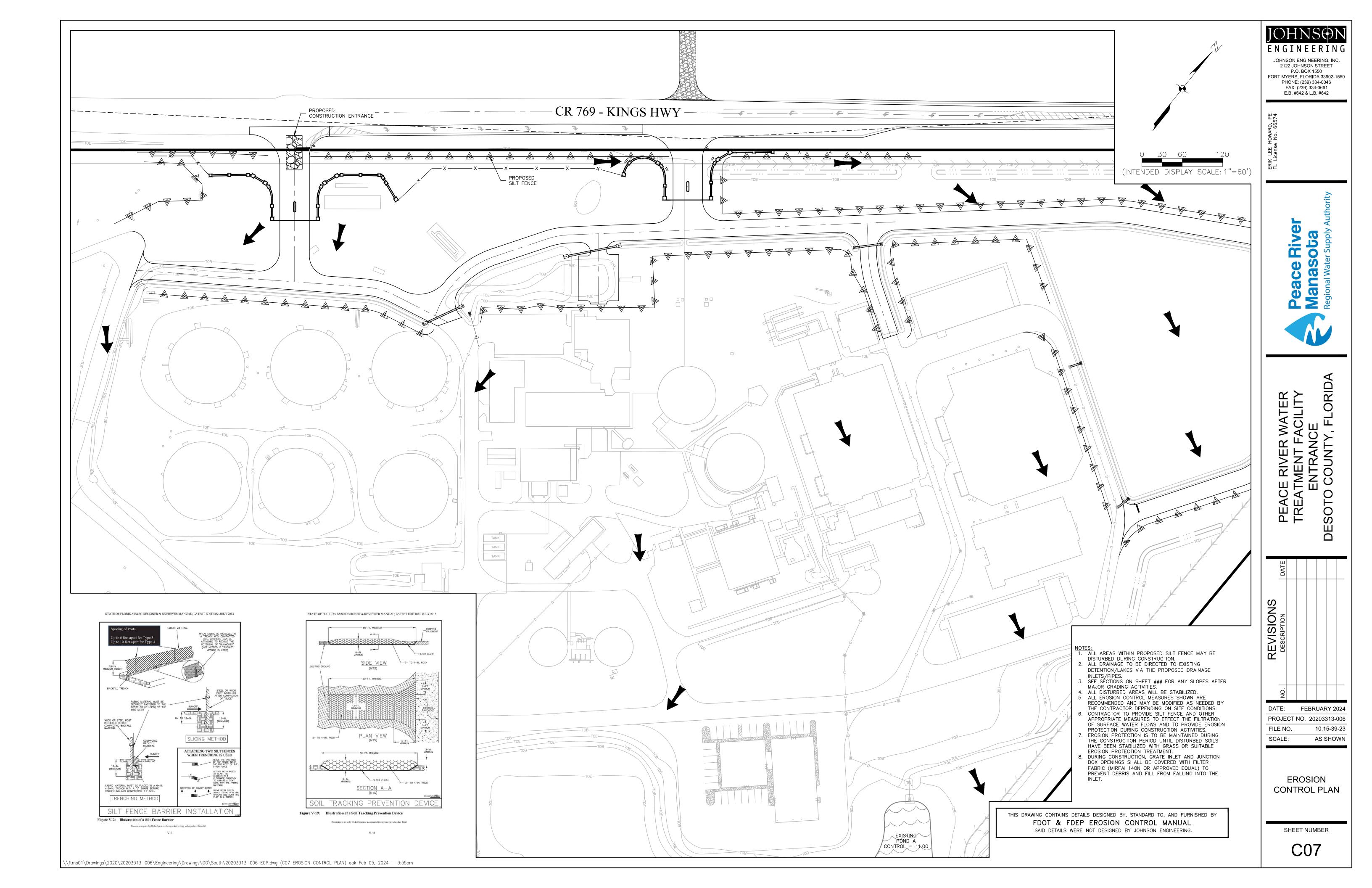
C02

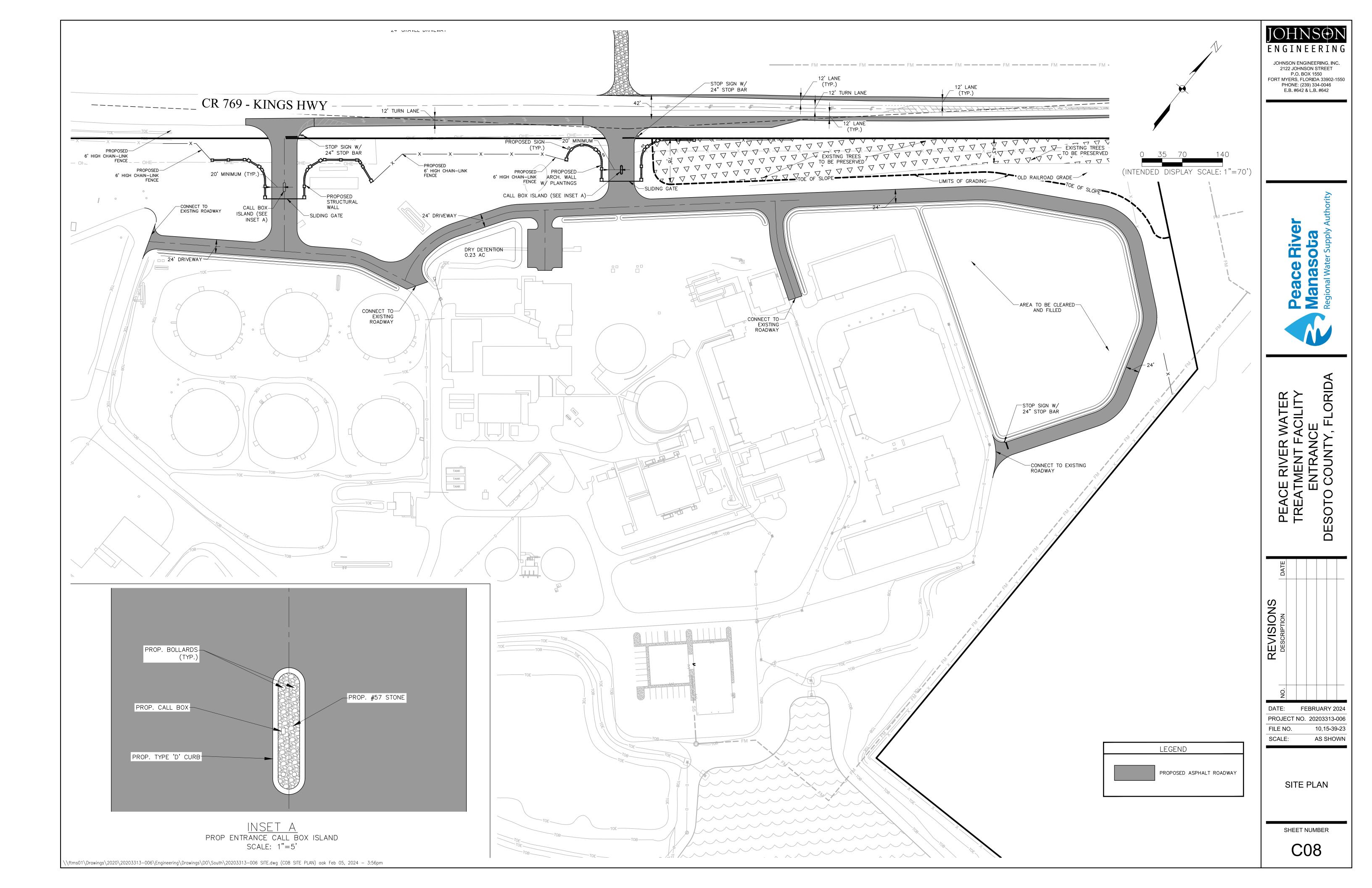


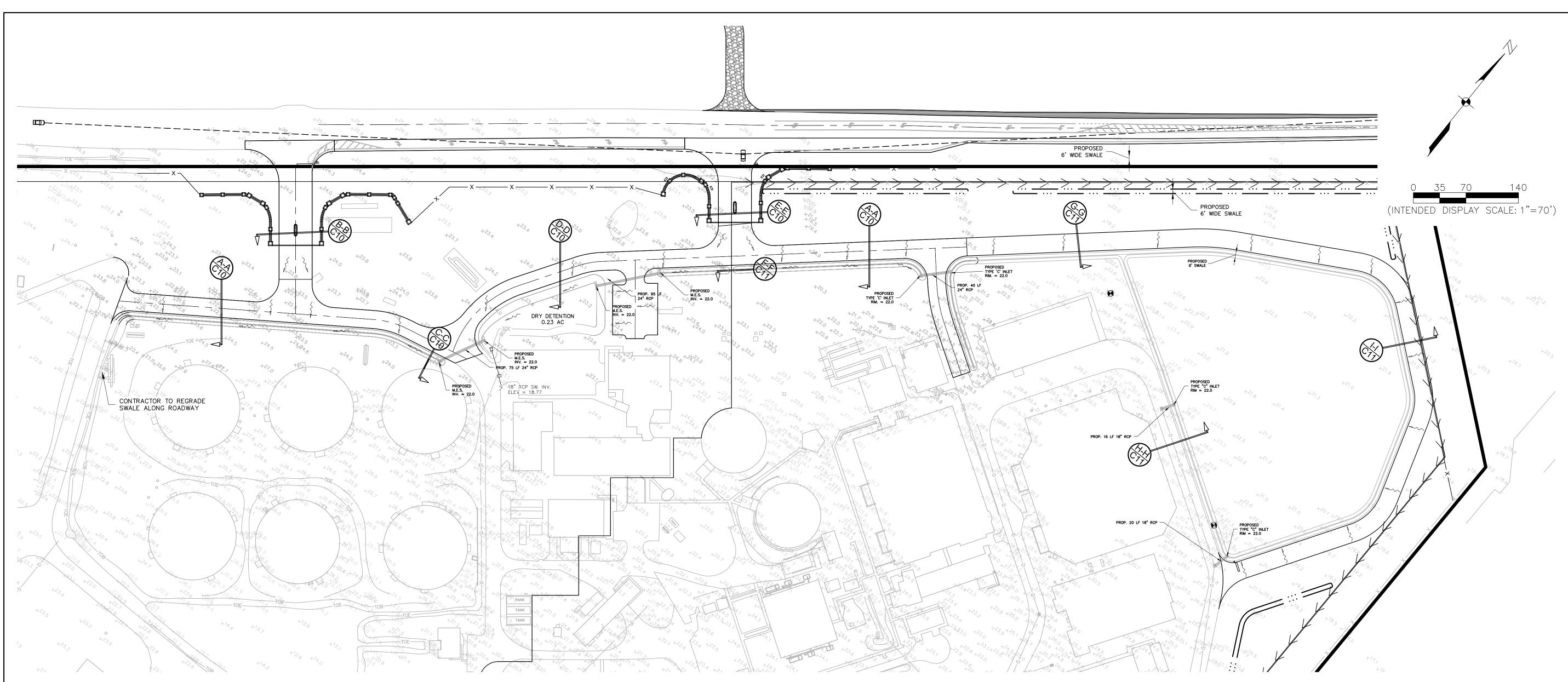












Design Summary

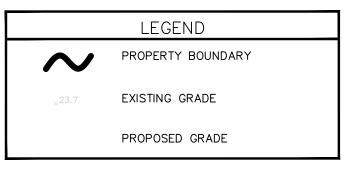
Design Summary			
Water Quality			
Control Elevation (ft, NGVD)	11.0		
Required Water Quality Volume (ac-ft)	2.12		
Water Quality Elevation (ft, NGVD)	11.51		
25 Year 1 Day Storm			
Rainfall (in)	8.1		
Allowable Discharge <sup>*</sup> (cfs)	36.5		
Design Discharge** (cfs)	25.6		
Peak Stage (ft, NGVD)	13.9		
Minimum Berm Elevation (ft, NGVD)	15.0		
100 Year 1 Day Storm			
Rainfall (in)	10.1		
FEMA Elevation** (ft, NAVD)	11.6		
FEMA Elevation (ft, NGVD)	12.7		
Peak Stage (ft, NGVD)	14.8		
Minimum Finished Floor Elevation (ft, NGVD)	17.0		

\* The allowable discharge rate is based on 1.48 cfs/ac from

previous permits.

\*\* From DeSoto County Flood Insurance Study.

NGVD = NAVD + 1.1 ft



ELEVATIONS ARE REFERENCED TO NGVD 1929.

CONVERSION TO NAVD IS:

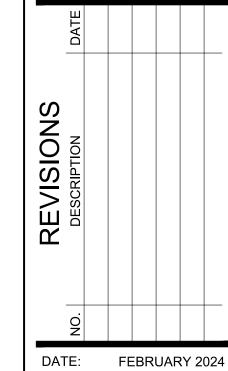
NGVD 1929 - 1.11 = NAVD 1988

Peace Riv Manasota Regional Water Supp

ENGINEERING

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PEACE RIVER WATER
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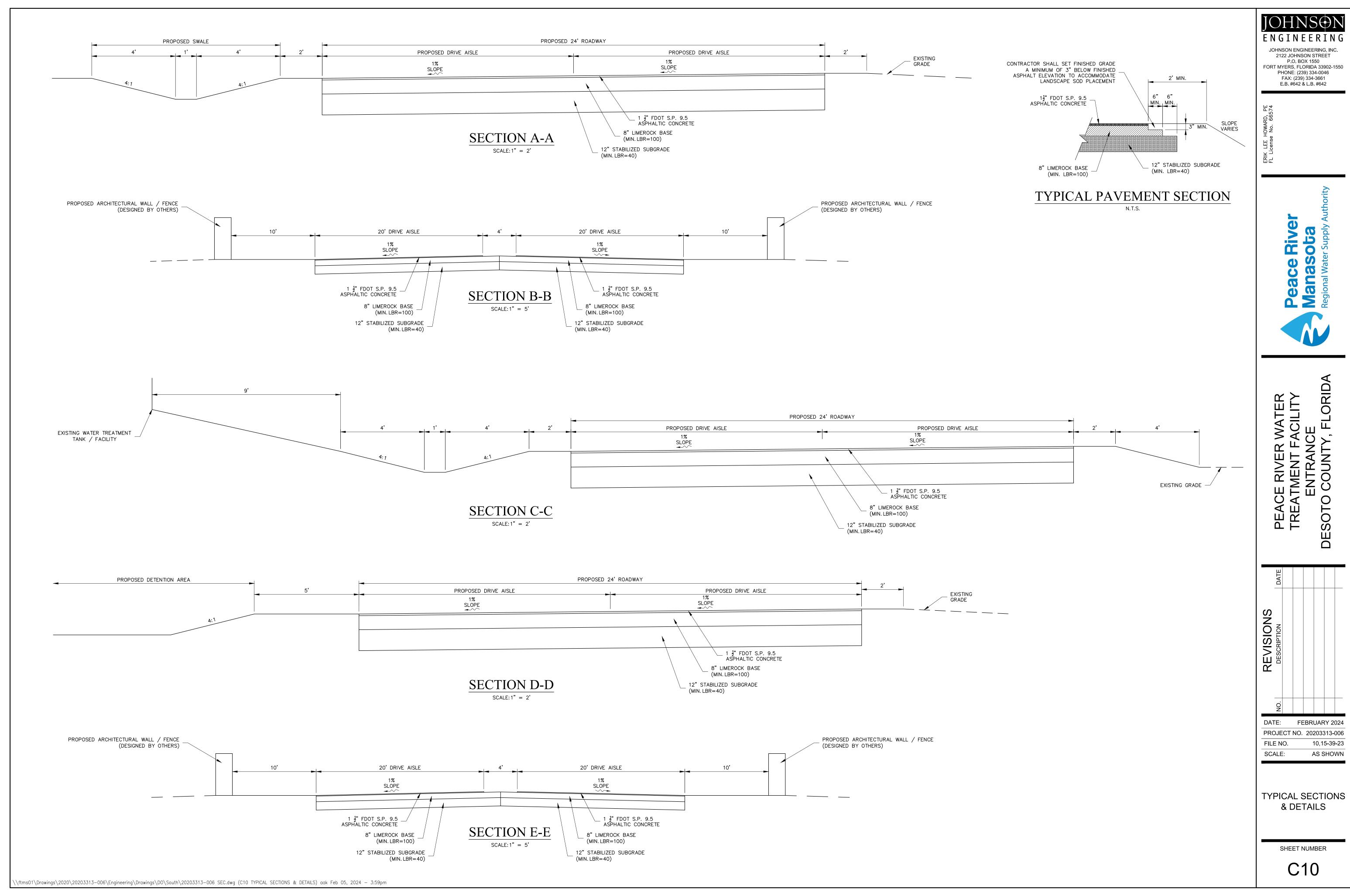
 SCALE: AS SHOWN

PAVING, GRADING,

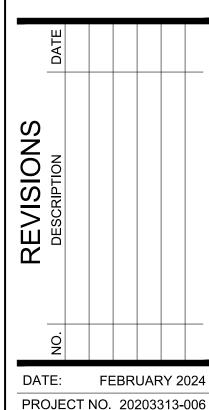
& DRAINAGE PLAN

SHEET NUMBER

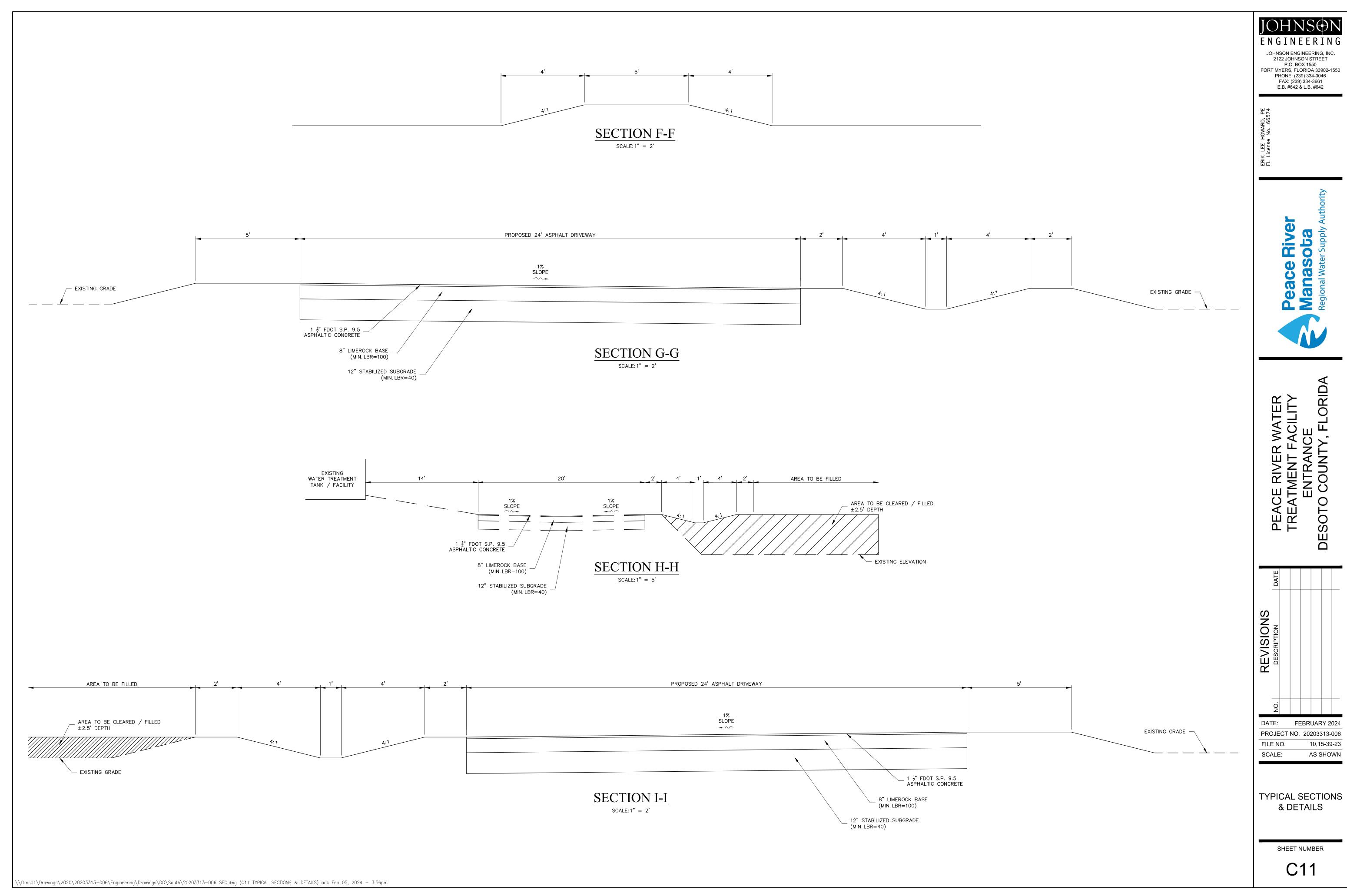
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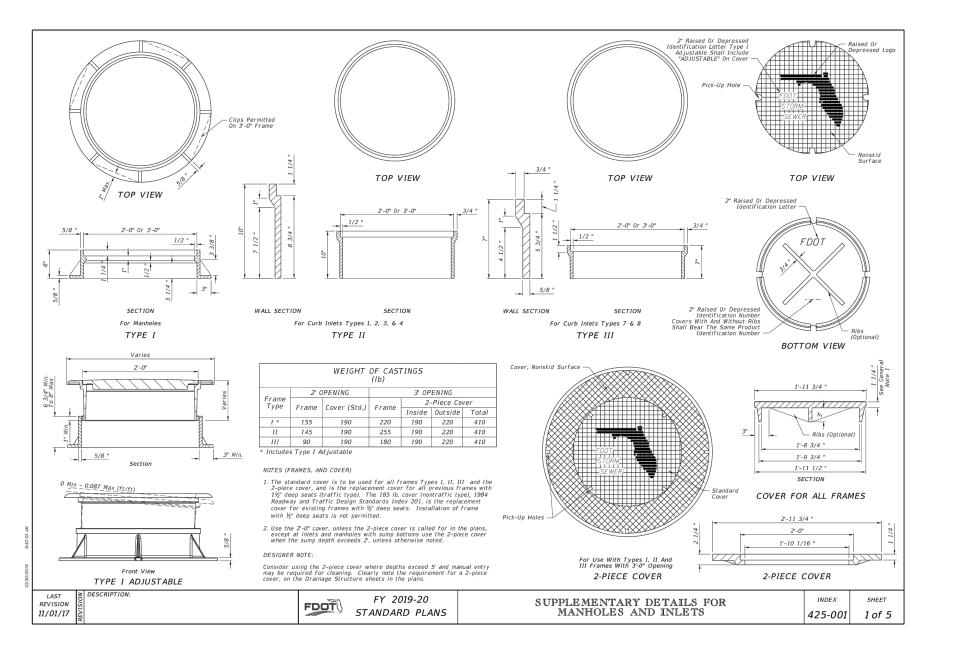
ENGINEERING JOHNSON ENGINEERING, INC. 2122 JOHNSON STREET P.O. BOX 1550 FORT MYERS, FLORIDA 33902-1550 PHONE: (239) 334-0046

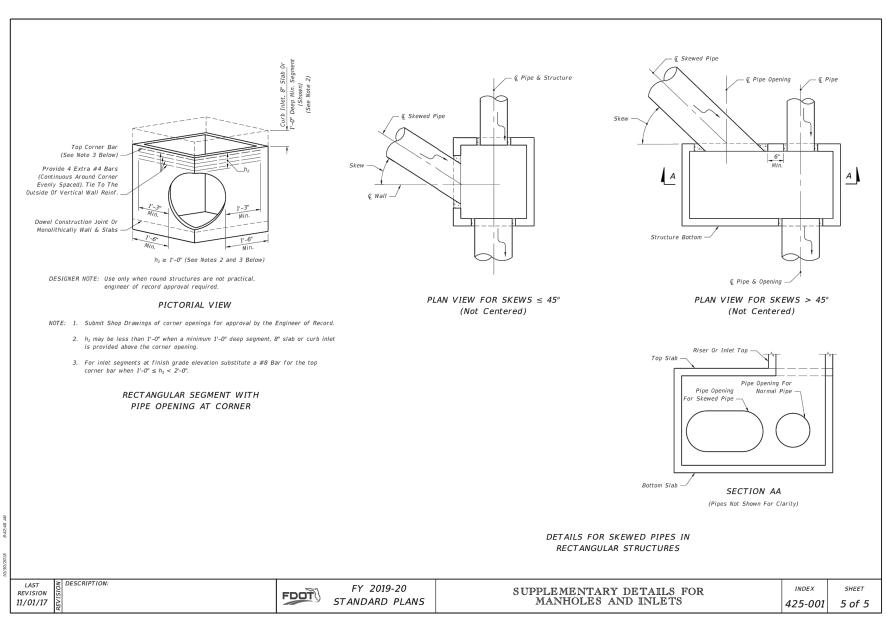


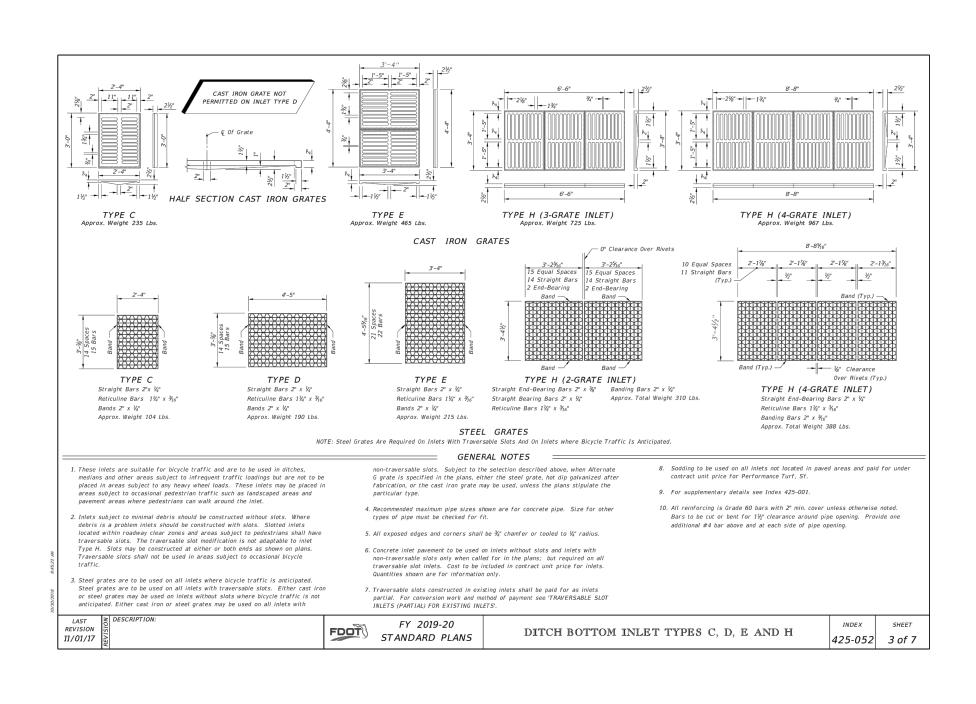
10,15-39-23 AS SHOWN

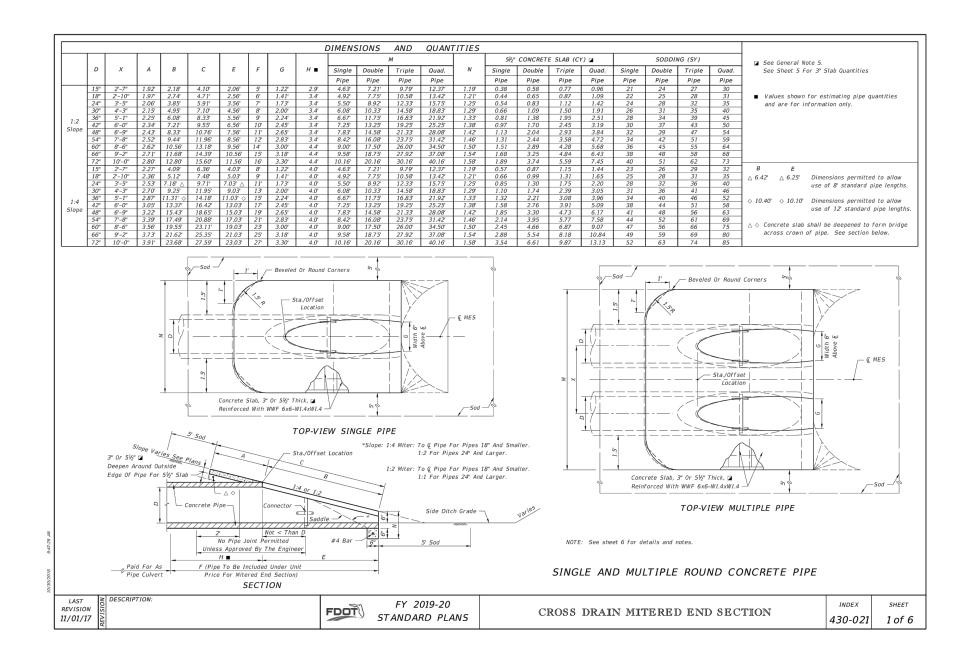


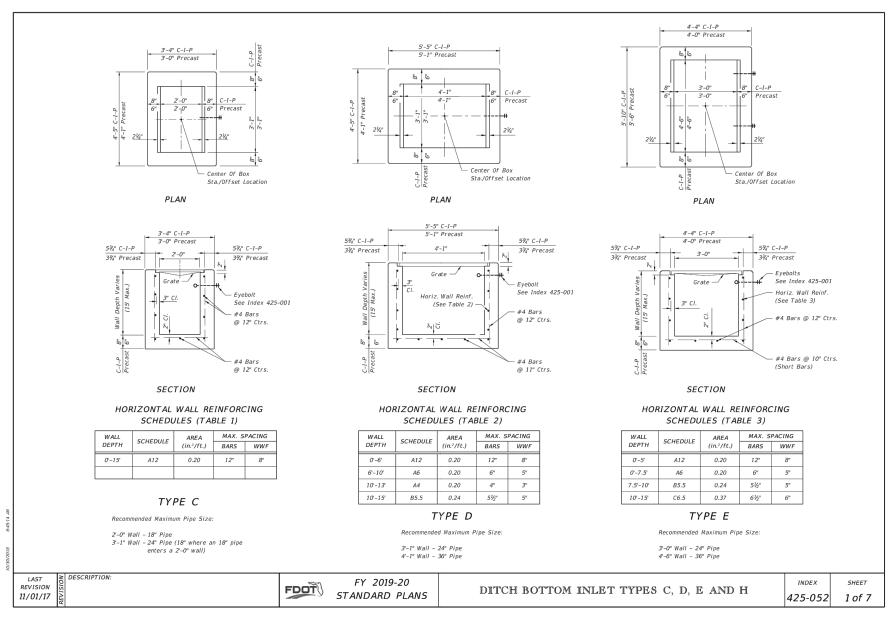
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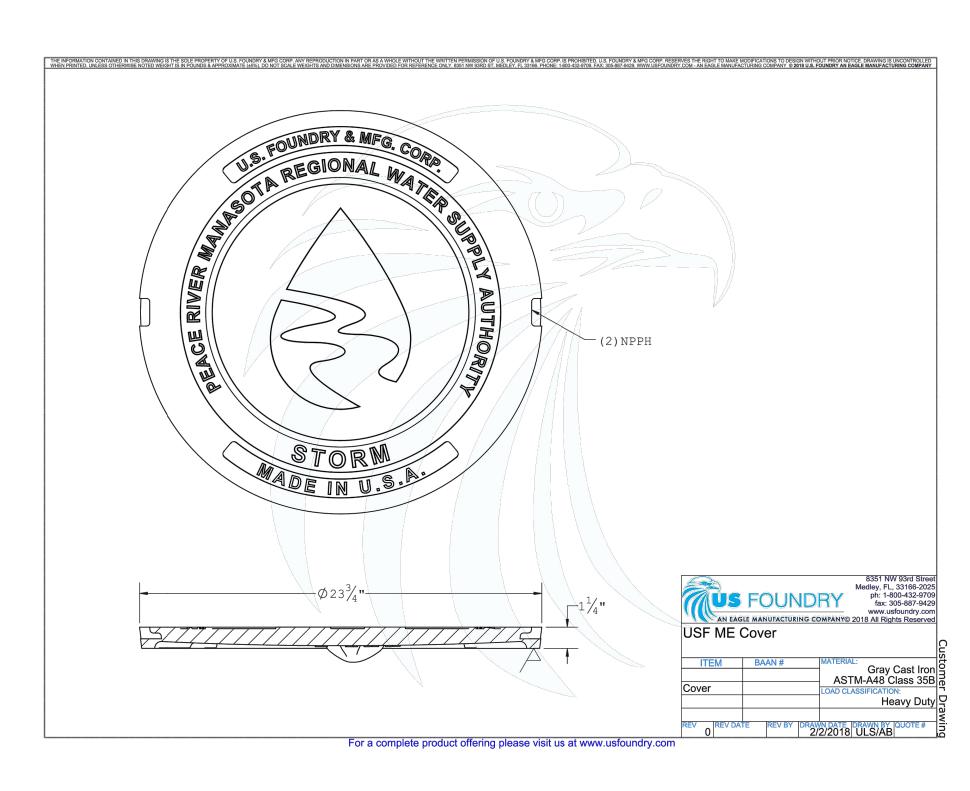




THIS DRAWING CONTAINS DETAILS DESIGNED BY, STANDARD TO, AND FURNISHED BY

FLORIDA DEPARTMENT OF TRANSPORTATION

SAID DETAILS WERE NOT DESIGNED BY JOHNSON ENGINEERING.



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ERIK LEE HOWARD, PE FL License No. 66574

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Regional Water Supply Authority

PEACE RIVER WATER
TREATMENT FACILITY
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DATE: FEBRUARY 2024
PROJECT NO. 20203313-006
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FDOT DETAILS

AS SHOWN

SCALE:

SHEET NUMBER

C12