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CITY OF FORT LAUDERDALE

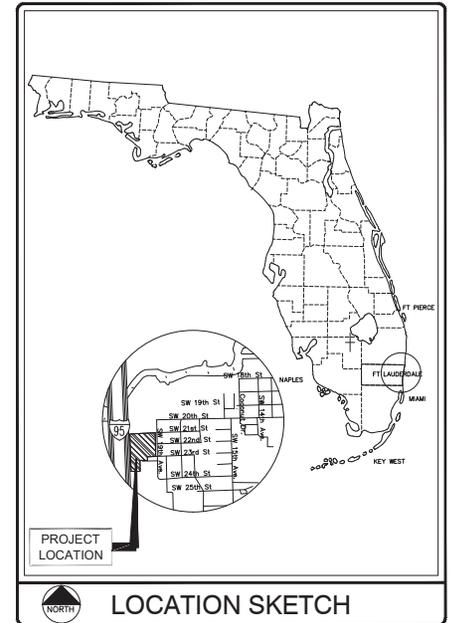
PROJECT #11419 STORMWATER IMPROVEMENTS RIVER OAKS STORMWATER PRESERVE

FORT LAUDERDALE, FLORIDA

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- Mitigation Design & Monitoring
- T&E Species Surveys
- Phase I ESA's



**PROJECT #11419
RIVER OAKS
STORMWATER PRESERVE**

**CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE**
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

FORT LAUDERDALE CITY COMMISSION

| | |
|-----------------------|-----------------------------|
| JOHN P. "JACK" SEILER | MAYOR |
| BRUCE G. ROBERTS | COMMISSIONER - DISTRICT I |
| DEAN J. TRANTALIS | COMMISSIONER - DISTRICT II |
| ROBERT L. MCKENZIE | COMMISSIONER - DISTRICT III |
| ROMNEY ROGERS | COMMISSIONER - DISTRICT IV |

| | | |
|-------------------------|----------------------------|------------------|
| PROJECT MANAGER | JOB TITLE | PHONE NO. |
| PATRICK J. GIBNEY, P.E. | VICE PRESIDENT ENGINEERING | 954-739-6400 |

DATE: 01/10/2019
CAD FILE: 11419-COVER
DRAWING FILE No.: 4-135-B1

BID SET

GENERAL NOTES:

- CONTRACTOR SHALL MAINTAIN ACCESS TO PRIVATE PROPERTY AT ALL TIMES.
- REFER TO SPECIFICATION SECTION 01001 AND 01520 FOR DETAILED REQUIREMENTS FOR SEQUENCE OF CONSTRUCTION AND CONSTRUCTION CONSTRAINTS.
- SITE INFORMATION HAS BEEN PROVIDED BY SITE SURVEY PREPARED CRAVEN THOMPSON & ASSOCIATES, INC.
- HORIZONTAL CONTROL IS REFERENCED TO THE FLORIDA STATE PLANE COORDINATE SYSTEM, EAST ZONE, BASED ON THE NORTH AMERICAN DATUM OF 1983 (NAD 83). VERTICAL CONTROL IS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
- RECORD DRAWINGS USED FOR EXISTING FEATURES: XXXXX. RECORD DRAWINGS MAY BE OBTAINED FROM THE OWNER UPON REQUEST.
- CONTRACTOR SHALL VERIFY FIELD CONDITIONS BEFORE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES. CONTRACTOR SHALL VERIFY EXISTING ELEVATIONS AND DIMENSIONS WHERE NEW WORK WILL MATCH EXISTING. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR RESOLUTION PRIOR TO THE COMMENCEMENT OF WORK.
- CONTRACTOR SHALL OBTAIN ALL THE NECESSARY PERMITS FROM THE APPROPRIATE AUTHORITIES, DEPARTMENTS, AND/OR AGENCIES HAVING JURISDICTION PRIOR TO COMMENCING WORK.
- ALL PRACTICAL AND NECESSARY EFFORTS SHALL BE TAKEN DURING CONSTRUCTION TO PREVENT UNNECESSARY TREE REMOVAL AND/OR DAMAGE.
- THE LOCATION OF EXISTING UTILITIES HAS BEEN PREPARED FROM THE MOST RELIABLE INFORMATION AVAILABLE TO THE ENGINEER. THE INFORMATION IS NOT GUARANTEED. THEREFORE THE CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF ALL UTILITIES IN THE FIELD PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITIES.
- UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEY INFORMATION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THEIR EXACT LOCATION AND TO AVOID DAMAGE TO THEM. THE CONTRACTOR SHALL CONTACT SUNSHINE 811 AT PHONE NUMBER 811 OR 1-800-432-4770 TO REQUEST UNDERGROUND UTILITY LOCATION MARK-OUT AT LEAST TWO (2) WORKING DAYS BUT NO MORE THAN TEN (10) WORKING DAYS PRIOR TO BEGINNING EXCAVATION, INCLUDING SOIL DRILLING. THE CONTRACTOR SHALL ALSO CONTACT AND REQUEST UTILITY LOCATION MARK-OUT FROM BURIED UTILITY OWNERS WITH UTILITIES ON THE PROJECT SITE THAT ARE NOT PARTICIPANTS OF SUNSHINE 811.
- CONTRACTOR SHALL REPLACE SURROUNDING LAND COVER AFFECTED BY CONSTRUCTION ACTIVITIES, INCLUDING, BUT NOT LIMITED TO, PAVERS, SIDEWALK, SOD, AND LANDSCAPING, TO EXISTING OR BETTER CONDITIONS.
- CONTRACTOR SHALL TAKE CARE TO AVOID DAMAGE TO EXISTING PAVEMENT, STRUCTURES, AND UTILITIES THAT ARE NOT INDICATED OR TO BE DEMOLISHED OR DAMAGED TO EXISTING PAVEMENT, STRUCTURES, AND UTILITIES NOT INDICATED TO BE DEMOLISHED OR REMOVED SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- WHERE PROPOSED WORK IS IN THE VICINITY OF UTILITY POLES, SUCH THAT SUPPORT OF THE POLE(S) WILL BE REQUIRED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE UTILITY OF THE WORK. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH THE UTILITY FOR SUPPORT OF THE POLE.
- DURING EXCAVATION AND PLACEMENT OF UTILITIES THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE SAFETY REGULATIONS AND SHALL SUBMIT TO THE ENGINEER FOR APPROVAL SHEET PILING, SHORING AND/OR BRACING DESIGNS AS MAY BE NECESSARY TO COMPLY WITH THESE REGULATIONS.
- GROUNDWATER FROM ALL DEWATERING OPERATIONS SHALL BE DISCHARGED TO AN ENVIRONMENTALLY ACCEPTABLE LOCATION IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, OR AS DIRECTED BY THE ENGINEER.
- THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL DEBRIS GENERATED DURING THE PROJECT OFF SITE AT A PROPERLY PERMITTED DISPOSAL FACILITY.
- FOR REFERENCE MONUMENTS, SEE SURVEY DRAWING.
- THE CONTRACTOR IS REQUIRED TO OBTAIN WRITTEN APPROVAL FROM THE ENGINEER FOR ANY DEVIATIONS FROM THE PLANS AND/OR SPECIFICATIONS.
- THE UNDERGROUND CONTRACTOR SHALL MINIMIZE THE WORK AREA AND WIDTH OF TRENCHES TO AVOID DISTURBANCES OF NATURAL VEGETATION. SPOIL FROM TRENCHES SHALL BE PLACED ONLY ON PREVIOUSLY CLEARED AREAS, EXISTING RIGHT-OF-WAY OR APPROVED EASEMENT. THE CONTRACTOR SHALL NOT REMOVE OR DISTURB ANY TREES OR SHRUBS WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- ALL RESTORATION SHALL CONFORM TO THE STANDARDS AND REQUIREMENTS OF THE AGENCIES HAVING JURISDICTION OVER THE RIGHT-OF-WAY WHERE THE PROJECT IS CONSTRUCTED.
- ALL LOOP DETECTORS, COMMUNICATION CABLES AND CONDUITS, IF DAMAGED BY THE CONTRACTOR'S ACTIVITIES, SHALL BE REPAIRED AND/OR REPLACED IN ACCORDANCE WITH BIDDING AND FOOT REQUIREMENTS.
- PIPING, FITTINGS, AND APPURTENANCES FOR DUCTILE IRON PIPE SHALL BE RESTRAINED JOINT WHERE SHOWN ON THE PLANS OR AS OTHERWISE SPECIFICALLY SPECIFIED IN THE CONTRACT DRAWINGS.
- RESILIENT SEATED GATE VALVES WITH BEVEL TYPE GEAR SHALL BE INSTALLED IN HORIZONTAL ORIENTATION WHEN LESS THAN 7- FEET OF COVER FROM TOP OF PIPE IS PRESENT OR AS OTHERWISE SPECIFICALLY SPECIFIED IN THE CONTRACT DRAWINGS.
- NO CONNECTIONS FOR THE PURPOSE OF OBTAINING WATER SUPPLY DURING CONSTRUCTION SHALL BE MADE TO ANY FIRE HYDRANT OR BLOW-OFF STRUCTURE WITHOUT FIRST OBTAINING PERMISSION AND A CONSTRUCTION METER FROM THE CITY OF FORT LAUDERDALE.
- THE CONTRACTOR WILL BE RESPONSIBLE FOR LOCATING, MOVING AND RELOCATING OR REPLACING ALL WATER SERVICES OR SEWER LATERALS WHICH ARE ENCOUNTERED DURING EXCAVATION. THE CONTRACTOR SHALL SUBMIT A WRITTEN PLAN FOR WATER SERVICE AND WASTEWATER SERVICE DISRUPTION FOR APPROVAL 7 (SEVEN) CALENDAR DAYS PRIOR TO THE ANTICIPATED DISRUPTION. THE CONTRACTOR SHALL NOTIFY THE PROPERTY OWNERS 48 HOURS IN ADVANCE OF ANY WORK ON THEIR SERVICES. THIS WORK SHALL BE CONSIDERED INCIDENTAL.
- THE CONTRACTOR MUST INFORM THE CITY AT LEAST 48-HOURS IN ADVANCE OF CONSTRUCTION, IN WRITING IF ANY CONFLICT IS DISCOVERED DURING POT HOLE OPERATIONS FOR CLARIFICATION BY THE CITY.
- IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE UTILITIES DEPARTMENT OF THE CITY OF FORT LAUDERDALE AT LEAST TWO (2) BUSINESS DAYS IN ADVANCE TO COORDINATE ANY ACTIVITY TO BE PERFORMED BY THE CITY'S UTILITIES DEPARTMENT.
- CONTRACTOR SHALL NOT DISTURB AREAS OUTSIDE EXISTING RIGHTS-OF-WAY.
- ALL WORK WITHIN STATE DEPARTMENT OF TRANSPORTATION (FDOT) RIGHT-OF-WAYS SHALL BE IN CONFORMANCE WITH FDOT SPECIFICATIONS AND PERMIT REQUIREMENTS.
- ALL WORK WITHIN BROWARD COUNTY RIGHT-OF-WAYS SHALL BE IN CONFORMANCE WITH THE BROWARD COUNTY MINIMUM STANDARDS AND/OR REQUIREMENTS.
- CONTRACTOR SHALL COMPLY WITH ALL LOCAL CITY, COUNTY AND STATE REGULATIONS PERTAINING TO THE CLOSING OF PUBLIC STREETS FOR USE OF TRAFFIC DURING CONSTRUCTION.
- CONTRACTOR SHALL PREPARE AND SUBMIT MAINTENANCE OF TRAFFIC (MOT) PLANS TO FDOT, CITY OF FORT LAUDERDALE, BROWARD COUNTY AS REQUIRED FOR WORK TO BE DONE WITHIN THEIR R/W PRIOR TO COMMENCEMENT OF WORK. SPECIFIC AGENCY MOT REQUIREMENTS ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- STATIONS SHOWN ON THE DRAWINGS ARE BASED ON THE ESTABLISHED BASELINE AND SHALL NOT BE CONSIDERED AS DISTANCES OR AS A MEASURE OF THE LINEAR FOOTAGE OF PIPE TO BE INSTALLED.
- THE GENERAL INTENT IS TO PROVIDE SEWER SERVICE LATERALS FOR EACH PROPERTY. ALL LATERAL LOCATIONS SHALL BE FIELD ADJUSTED.
- ALL OPEN TRENCHES AND HOLES ADJACENT TO ROADWAY OR WALKWAY SHALL BE PROPERLY MARKED AND BARRICADED TO ASSURE THE SAFETY OF BOTH VEHICULAR AND PEDESTRIAN TRAFFIC.
- TRENCHES OR HOLES NEAR WALKWAYS, IN ROADWAYS OR THEIR SHOULDERS SHALL NOT BE LEFT OPEN DURING NIGHT TIME HOURS WITHOUT ADEQUATE PROTECTION.
- CONTRACTOR SHALL PROMPTLY REPAIR AND RESTORE EXISTING PAVEMENT, SIDEWALKS, CURBS, DRIVEWAYS, PIPES, RESIDENTIAL AND COMMERCIAL SPRINKLER LINES, CONDUIT, CABLES, ETC. AND LANDSCAPE AREAS DAMAGED AS A RESULT OF CONSTRUCTION ACTIVITIES.
- CONTRACTOR SHALL PROVIDE TEMPORARY FENCING AS REQUIRED BY AGENCIES HAVING JURISDICTION OVER THE PROJECT AND/OR WHEN REQUIRED FOR PUBLIC SAFETY.
- THE CONTRACTOR SHALL BE RESPONSIBLE AT ALL TIMES THROUGHOUT THE DURATION OF CONSTRUCTION AND UNTIL ACCEPTANCE OF WORK, FOR THE PROTECTION OF EXISTING AND NEWLY INSTALLED UTILITIES FROM DAMAGE OR DISRUPTION OF SERVICE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TAKING SUCH MEASURES AS NECESSARY TO PROTECT THE HEALTH, SAFETY AND WELFARE OF THOSE PERSONS HAVING ACCESS TO THE WORK SITE.
- LOCATION OF AIR RELEASE VALVES MAY BE FIELD ADJUSTED BY THE ENGINEER OR CITY OF FORT LAUDERDALE AS NECESSARY.
- CONTRACTOR SHALL ADJUST TO GRADE ALL EXISTING UTILITY CASTINGS INCLUDING VALVE BOXES, MANHOLES, HAND HOLES, PULL BOXES, INLETS AND SIMILAR STRUCTURES IN CONSTRUCTION AREA TO BE OVERLAPPED WITH ASPHALT.
- EXISTING TRAFFIC SIGNS SHALL BE RESET UPON COMPLETION PER BROWARD COUNTY TRAFFIC ENGINEERING STANDARDS. COST SHALL BE CONSIDERED INCIDENTAL. CONTRACTOR SHALL REPAIR OR REPLACE DAMAGED TRAFFIC SIGNAL LOOPS PER BROWARD COUNTY TRAFFIC ENGINEERING SPECIFICATIONS; COST SHALL BE INCIDENTAL.
- CONTRACTOR SHALL RESTORE EXISTING PAVEMENT AND PAVEMENT MARKINGS/SIGNAGE TO ORIGINAL PRE-CONSTRUCTION CONDITION OR AS OTHERWISE SPECIFIED IN CONTRACT DOCUMENTS. THIS WORK SHALL BE CONSIDERED INCIDENTAL.
- ALL CONSTRUCTION WITHIN FDOT R/W MUST CONFORM WITH FDOT SPECIFICATIONS, STANDARDS, AND PERMIT REQUIREMENTS. NO WORK SHALL COMMENCE WITHIN FDOT R/W'S WITHOUT AN FDOT PERMIT. FULL LANE WIDTH RESTORATION TO MATCH EXISTING PAVEMENT SECTION IS REQUIRED IN ACCORDANCE WITH FDOT STANDARDS FOR PROPOSED WORK WITHIN FDOT R/W.

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 FLORIDA LICENSED PROFESSIONAL ARCHITECTURE LICENSE No. 00014
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- Phase I ESA's



ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM 1988 (NAVD 1988)



ENGINEER: PATRICK J. GIBNEY
 DATE: 10/22/2019
 DESIGNED BY: SCALE: 1"=2'-0"
 W.R./M.H. CHECKED BY: MGR 1'-4" A.G.
 FIELD BOOK: 104-738-4008
 104-738-4008

DATE: 10/20/2019
 L.C./M.H. W.R./M.H. CHECKED BY: MGR 1'-4" A.G.
 FIELD BOOK:

CITY OF FORT LAUDERDALE
 PUBLIC WORKS DEPARTMENT
 ENGINEERING & ARCHITECTURE
 1000 N.W. 11th Avenue, Fort Lauderdale, Florida 33301

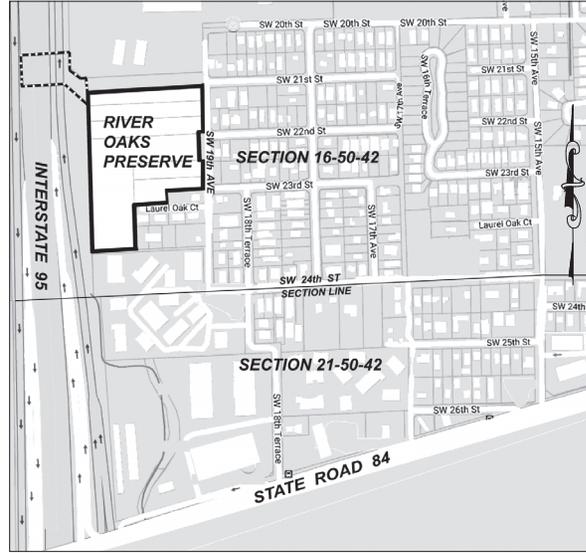
| REVISIONS | | DESCRIPTION | |
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| NO. | DATE | BY | FILED |
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PROJECT # 11419
 RIVER OAKS
 STORMWATER PRESERVE
 GENERAL NOTES

SHEET NO. G-02
 TOTAL: 40
 CAD FILE: 11419-004-SI
 DRAWING FILE NO. 4-135-81

GENERAL NOTES:

- THIS SURVEY DRAWING WAS PREPARED FOR THE EXCLUSIVE USE OF THE CITY OF FORT LAUDERDALE, FLORIDA, AND HAZEN AND SAWYER, INC. FOR THE EXPRESS PURPOSE STATED HEREON AS RELATED TO OUR CONTRACT.
- THE PURPOSE OF THIS SURVEY WAS TO ESTABLISH HORIZONTAL AND VERTICAL CONTROL AND COLLECT ABOVE GROUND AND VISIBLE IMPROVEMENTS WITHIN AND ALONG THE RIGHTS-OF-WAYS DELINEATED HEREON WITHIN THE PROJECT LIMITS. THE IMPROVEMENTS ALSO INCLUDED INFORMATION INSIDE OF THE STORM WATER AND SANITARY SEWER STRUCTURES, IF ACCESSIBLE, SUCH AS, INVERTS, WEIRS, PIPE SIZES AND MATERIALS, AND BOTTOM OF STRUCTURES.
- THE EXPECTED USE OF THIS SURVEY AND MAP IS FOR COMMERCIAL/HIGH RISK, THEREFORE THIS SURVEY IS CLASSIFIED AS COMMERCIAL/HIGH RISK LINEAR AND EXCEEDS THE MINIMUM RELATIVE DISTANCE ACCURACY OF 1 FOOT IN 10,000 FEET AS REQUIRED BY THE FLORIDA STANDARDS OF PRACTICE (S-17, F.A.C.).
- THE ELEVATIONS SHOWN HEREON ARE RELATIVE TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) AND ARE BASED ON THE FOLLOWING BENCHMARKS:
 - (A) FLORIDA DEPARTMENT OF TRANSPORTATION STATE ROAD 84 BENCHMARK C4 ELEVATION = 5.276' (NAVD88) STAMPED 84-86-04-C4 FROM FDOT PROJECT NETWORK CONTROL SPECIFIC PURPOSE SURVEY - FINANCIAL PROJECT NO 228243-1-32-01.
 - (B) FLORIDA DEPARTMENT OF TRANSPORTATION STATE ROAD 84 BENCHMARK C6 ELEVATION = 6.573' (NAVD88) STAMPED 84-86-04-C6 FROM FDOT PROJECT NETWORK CONTROL SPECIFIC PURPOSE SURVEY - FINANCIAL PROJECT NO 228243-1-32-01.
- THIS PROJECT WAS PERFORMED IN THE FIELD DURING THE MONTH OF OCTOBER, 2017 USING INFORMATION FROM A PREVIOUS SURVEY'S UNDER CRAVEN THOMPSON & ASSOCIATES, INC (CTA) PROJECT NUMBER 16-0042-001-01 AND AN EXTENSIVE FIELD SURVEY OF THE SITE AND THE SURROUNDING ROADWAYS WITHIN THE FOLLOWING BROWARD COUNTY RECORDED PLATS:
 - A: PLAT BOOK 9, PAGE 48 "OSCEOLA PARK"
 - B: PLAT BOOK 22, PAGE 34 "OSBOURNE PARK"
 - C: PLAT BOOK 34, PAGE 32 "WOELKE SUBDIVISION"
 - D: PLAT BOOK 127, PAGE 33 "OSCEOLA PARK APARTMENTS"
 - E: PLAT BOOK 155, PAGE 35 "THE R.B.F. PLAT"
 - F: PLAT BOOK 168, PAGE 42 "LAUDERDALE MARINE CENTER"
 - G: PLAT BOOK 175, PAGE 177 "GEORGIAN OAKS"
 - H: PLAT BOOK 176, PAGE 175 "LAUDERDALE MARINE CENTER PLAT NO 11"
 - I: PLAT BOOK 177, PAGE 78 "RIO COLONY"
- THE COORDINATES SHOWN HEREON ARE RELATIVE TO STATE PLANE, FLORIDA EAST ZONE, NAD83 (90), UNITED U.S. SURVEY FEET, AND BASED ON REAL TIME KINEMATIC (RTK) GPS UTILIZING THE TRIMBLE STATE-WIDE VRS NETWORK, AND ADJUSTED TO A STATIC GPS CONTROL NETWORK CTA PERFORMED FOR THE CITY OF FORT LAUDERDALE IN 2016.
- SECTIONAL INFORMATION AND RIGHT-OF-WAY LINES SHOWN HEREON ARE BASED ON THE RECORDED PLATS AND FLORIDA DEPARTMENT OF TRANSPORTATION RIGHT-OF-WAY MAPS AND PROJECT CONTROL NETWORKS.
- CTA FIELD BOOK REFERENCES: FIELD BOOK (FB) 2859, PAGES 44-79 & FB 2860 PAGES 19-39
- ALL PLATS SHOWN HEREON REFER TO RECORDED PLATS IN BROWARD COUNTY.
- NO TITLE DOCUMENTS WERE SUPPLIED TO THE SURVEYOR FOR REVIEW.



LOCATION MAP

PORTION OF SECTION 16 & 21, TOWNSHIP 50 SOUTH, RANGE 42 EAST NOT TO SCALE



CONTROL LEGEND:

- IRON PIPE
- IRON ROD
- NAILKAT
- PERMANENT REFERENCE MONUMENT
- PKNAI SPIKE

ABBREVIATION LEGEND:

- B.C.R BROWARD COUNTY RECORDS
- C.M.P CORRUGATED METAL PIPE
- F.N.D FOUND
- H.D.PE HIGH DENSITY POLYETHYLENE
- I.E. INVERT ELEVATION
- M.H. MANHOLE
- P.B. PLAT BOOK
- P.G. PAGE
- P.R.M. PERMANENT REFERENCE MONUMENT
- P.V.C. POLYVINYL CHLORIDE
- R.E. RIM ELEVATION
- R.O.W. RIGHT OF WAY
- S.A.V. RIM ELEVATION
- T.R. TREE

LEGEND:

- ANCHOR
- BACK FLOW PREVENTER
- BOLLARD
- CATY PEDESTAL
- CATCH BASIN
- ELECTRICAL PULL BOX
- FIRE HYDRANT
- MAILBOX
- OUTFALL
- PLUG
- SANITARY CLEAN OUT
- SANITARY MANHOLE
- SIGN
- STEEL I-BEAM
- TELEPHONE PEDESTAL
- WATER METER
- WATER VALVE
- WOOD POST
- WOOD LIGHT POLE
- WOOD TELEPHONE POLE
- PALM TREE
- SHADE TREE
- PINE TREE
- OVER HEAD WIRES
- TOP OF BANK
- TOE OF SLOPE
- LIMITED ACCESS R/W LINE

DESCRIPTION: PROVIDED BY CLIENT

PARCEL I:

A PORTION OF THE SOUTHWEST ONE-QUARTER (SW 1/4) OF SECTION 16, TOWNSHIP 50 SOUTH, RANGE 42 EAST, BROWARD COUNTY, FLORIDA, MORE PARTICULARLY DESCRIBED AS FOLLOWS: THE SOUTH 72.365 FEET OF THE FOLLOWING DESCRIBED PARCEL:

THAT PORTION OF THE WEST HALF OF THE SOUTHWEST ONE-QUARTER OF THE SOUTHWEST ONE-QUARTER AND THE WEST ONE-HALF OF THE EAST ONE-HALF OF THE SOUTHWEST ONE-QUARTER OF THE SOUTHWEST ONE-QUARTER OF SECTION 16, TOWNSHIP 50 SOUTH, RANGE 42 EAST, LYING NORTH OF A LINE WHICH IS 898.96 FEET NORTH OF AND PARALLEL TO THE SOUTH BOUNDARY OF SECTION 16, AND LYING SOUTH OF A LINE THAT IS 1123.70 FEET NORTH OF AND PARALLEL TO THE SAID SOUTH BOUNDS OF SAID SECTION 16, EXCEPTING THEREFROM THE RIGHT OF WAY OF SEABOARD AIR LINE RAILWAY; ALSO EXCEPTING THEREFROM THE WEST 210.00 FEET OF ABOVE PARCEL; ALSO EXCEPTING THEREFROM THE EAST 704.50 FEET OF THE SOUTH 80.00 FEET OF THE ABOVE DESCRIBED PARCEL, SAID LANDS SITUATE, LYING AND BEING IN BROWARD COUNTY, FLORIDA, LYING EAST OF THE EASTERLY RIGHT OF WAY LINE OF INTERSTATE 95.

PARCEL II:

THE EAST 704.50 FEET OF THE SOUTH 80 FEET OF THE PORTION OF THE WEST 1/2 OF THE SOUTHWEST 1/4 OF THE SOUTHWEST 1/4 AND THE WEST 1/2 OF THE EAST 1/2 OF THE SOUTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 16, TOWNSHIP 50 SOUTH, RANGE 42 EAST, LYING NORTH OF A LINE WHICH IS 898.96 FEET NORTH OF AND PARALLEL TO THE SOUTH BOUNDARY OF SECTION 16, AND LYING SOUTH OF A LINE THAT IS 1123.70 FEET NORTH OF AND PARALLEL TO THE SAID SOUTH BOUNDARY OF SAID SECTION 16;

AND ALSO

LESS AND EXCEPT THE LANDS LYING WITHIN THE BOUNDARIES OF INTERSTATE I-95.

SAID LANDS SITUATE, LYING AND BEING IN BROWARD COUNTY, FLORIDA.

PARCEL III:

THE NORTH 90.00 FEET OF THE FOLLOWING TRACT:

THAT PORTION OF THE WEST 1/2 OF THE SOUTHWEST 1/4 AND THE WEST 1/2 OF THE EAST 1/2 OF THE SOUTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 16, TOWNSHIP 50 SOUTH, RANGE 42 EAST, LYING NORTH OF A LINE WHICH IS 674.31 FEET NORTH OF AND PARALLEL TO THE SOUTH BOUNDARY OF SECTION 16, AND LYING SOUTH OF A LINE WHICH IS 898.96 FEET NORTH OF AND PARALLEL TO THE SAID SOUTH BOUNDARY OF SAID SECTION 16, EXCEPTING THEREFROM THAT PART THEREOF LYING WEST OF THE EAST RIGHT OF WAY LINE OF INTERSTATE HIGHWAY 95.

PARCEL IV:

PARCEL "A" OF THE R.B.F. PLAT, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 155, PAGE 35 OF THE PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA.

PARCEL V:

THE EAST 375 FEET OF THE FOLLOWING DESCRIBED PROPERTY:

THE WEST 1/2 OF THE SOUTHWEST 1/4 OF THE SOUTHWEST 1/4 AND THE WEST 1/2 OF THE EAST 1/2 OF THE SOUTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 16, TOWNSHIP 50 SOUTH, RANGE 42 EAST, LYING NORTH OF A LINE WHICH IS 674.31 FEET NORTH OF AND PARALLEL TO THE SOUTH BOUNDARY OF SECTION 16, AND LYING SOUTH OF A LINE WHICH IS 898.96 FEET NORTH OF AND PARALLEL TO THE SOUTH BOUNDARY OF SAID SECTION 16, EXCEPTING THEREFROM THE SOUTH 139 FEET THEREOF.

PARCEL VI:

THE EAST 375 FEET OF THE NORTH 139 FEET OF THE SOUTH 588.54 FEET OF THE WEST 1/2 OF THE SOUTHWEST 1/4 OF THE SOUTHWEST 1/4, LESS THE EAST 200 FEET OF THE SOUTH 75 FEET, SECTION 16, TOWNSHIP 50 SOUTH, RANGE 42 EAST, OF THE PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA.

SAID LANDS LYING AND BEING IN THE CITY OF FORT LAUDERDALE, BROWARD COUNTY, FLORIDA.

SURVEYOR'S CERTIFICATE:

I HEREBY CERTIFY THAT THIS TOPOGRAPHIC SURVEY AND OTHER PERTINENT DATA SHOWN HEREON, CONFORMS TO THE STANDARDS OF PRACTICE FOR LAND SURVEYING IN THE STATE OF FLORIDA, AS OUTLINED IN RULES 5J-17, (FLORIDA ADMINISTRATIVE CODE) AS ADOPTED BY THE DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES, BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS IN SEPTEMBER, 1981, AS AMENDED, PURSUANT TO CHAPTER 472.027, FLORIDA STATUTES AND THAT SAID SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AS PREPARED UNDER MY DIRECTION. LAST DATE OF FIELD WORK: 11/21/2017

RICHARD D. PRYCE, FOR THE FIRM FLORIDA PROFESSIONAL SURVEYOR MAPPER NO 4038 CRAVEN THOMPSON & ASSOCIATES, INC. LICENSED BUSINESS NUMBER NO. 271

THIS SURVEY MAP AND REPORT OR COPIES THEREOF ARE NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL RAISED SEAL OR A UNIQUE ELECTRONIC SIGNATURE OF A FLORIDA LICENSED PROFESSIONAL SURVEYOR AND MAPPER UNDER CHAPTER RULES 5J-17 FLORIDA ADMINISTRATIVE CODE.

SURVEYOR RICHARD D. PRYCE License No. 4038 DATE

DRAWN BY: DATE: DISIGNED BY: SCALE: CHECKED BY: RFP: FIELD BOOK: 2860(14-79) 858(14-79) 39

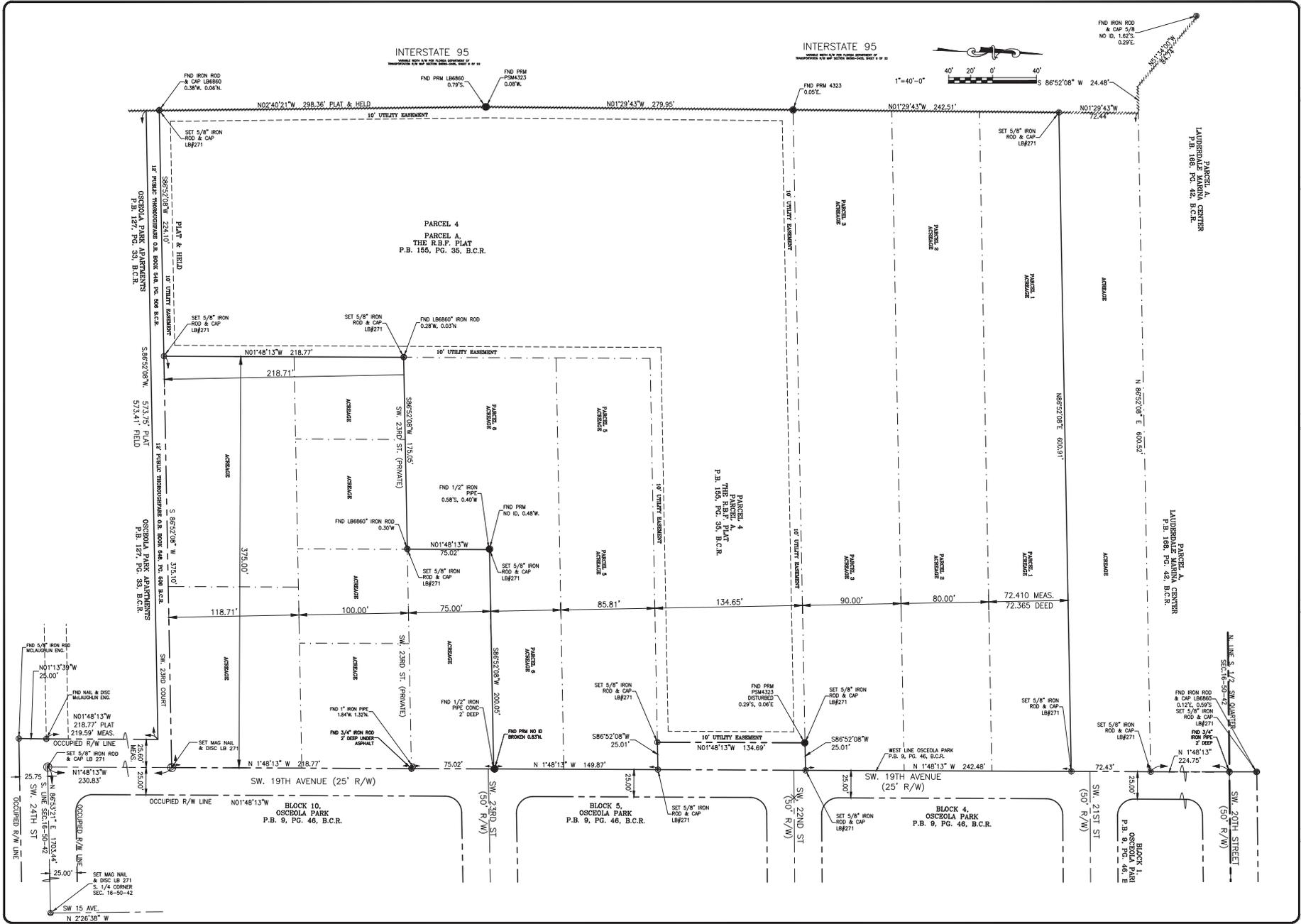
CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE

111419SURV
4-135-81

| NO. | DATE | BY | REVISIONS | DESCRIPTION |
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PROJECT # 11411 #
STORMWATER IMPROVEMENTS
RIVER OAKS PRESERVE SURVEY NOTES
BOUNDARY/TOPOGRAPHIC SURVEY

SHEET NO. 01
TOTAL: 40
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DRAWING FILE NO. 4-135-81



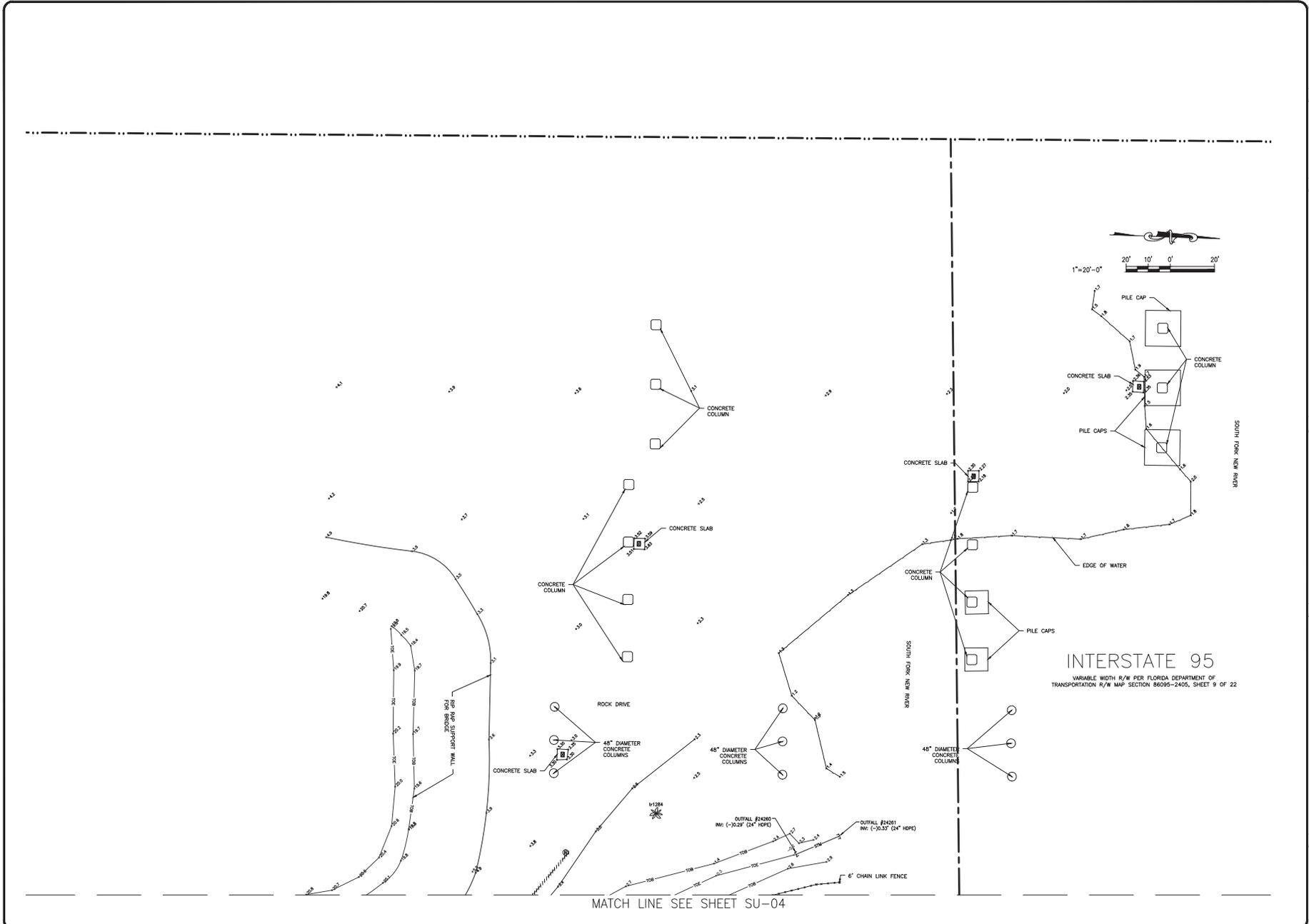
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| PROJECT: | STORMWATER IMPROVEMENT SURVEY |
| DATE: | 12/4/2017 |
| BY: | DR |
| CHECKED BY: | DR |
| SCALE: | AS SHOWN |
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100233 - Fort Lauderdale, Florida
 City of Fort Lauderdale
 PUBLIC WORKS DEPARTMENT
 ENGINEERING & ARCHITECTURE

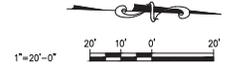
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PROJECT # 14119
 STORMWATER IMPROVEMENT SURVEY
 RIVER OAKS PRESERVE SURVEY PLAN
 BOUNDARY/UTILITY/POPOGRAPHY SURVEY

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| SHEET NO. | 08 |
| TOTAL | 40 |
| CAD FILE: | 11419SURV |
| DRAWING FILE NO.: | 4-135-81 |



MATCH LINE SEE SHEET SU-04



INTERSTATE 95
 VARIABLE WIDTH R/W PER FLORIDA DEPARTMENT OF
 TRANSPORTATION R/W MAP SECTION 86095-2405, SHEET 9 OF 22

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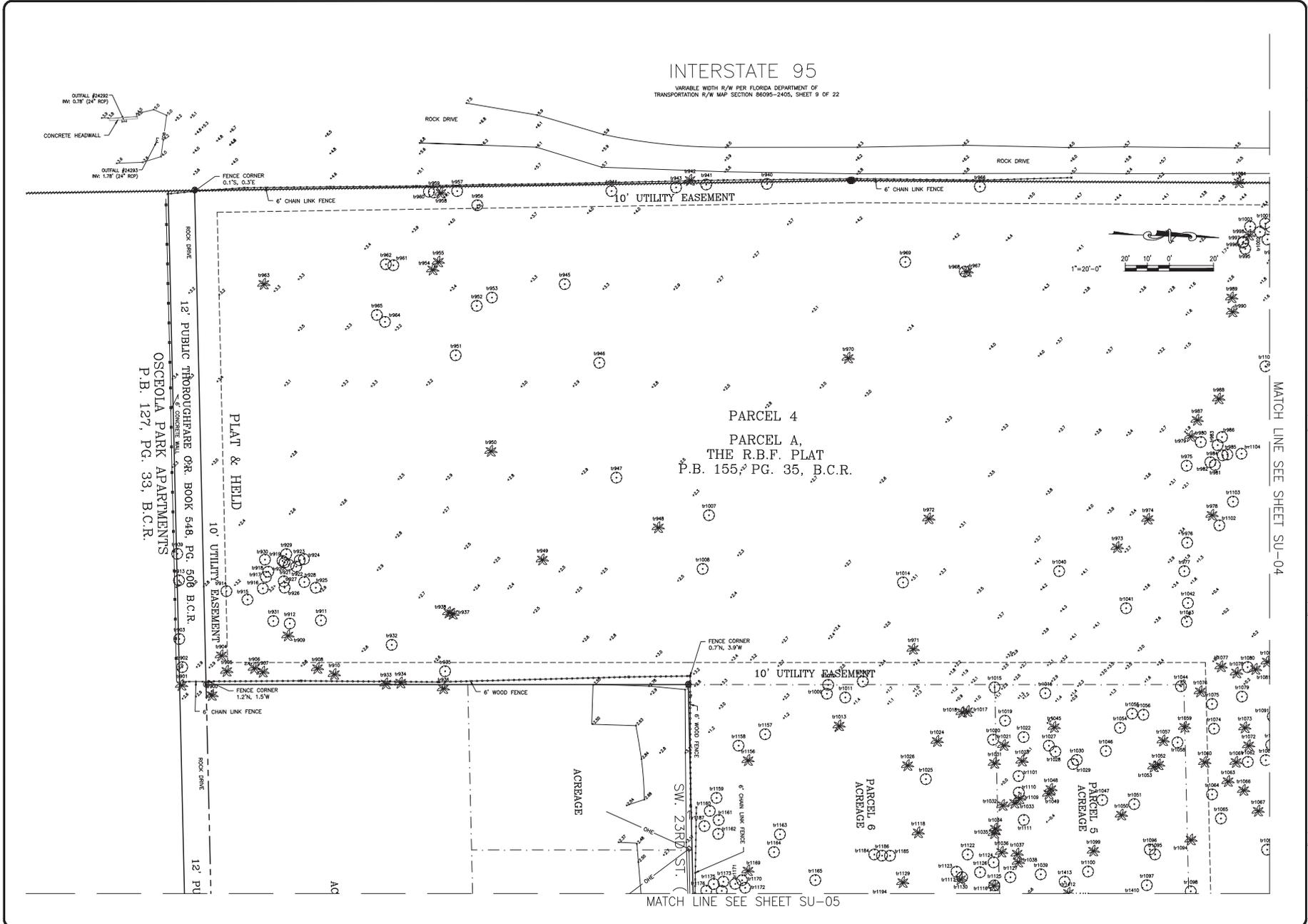
CITY OF FORT LAUDERDALE
 PUBLIC WORKS DEPARTMENT
 ENGINEERING & ARCHITECTURE

Fort Lauderdale, Florida 33301

| NO. | DATE | BY | REVISIONS | DESCRIPTION |
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PROJECT # 11419
 STORMWATER IMPROVEMENTS
 RIVER OAKS PRESERVE SURVEY
 DETAIL SHEET
 BOUNDARY/TOPOGRAPHIC SURVEY

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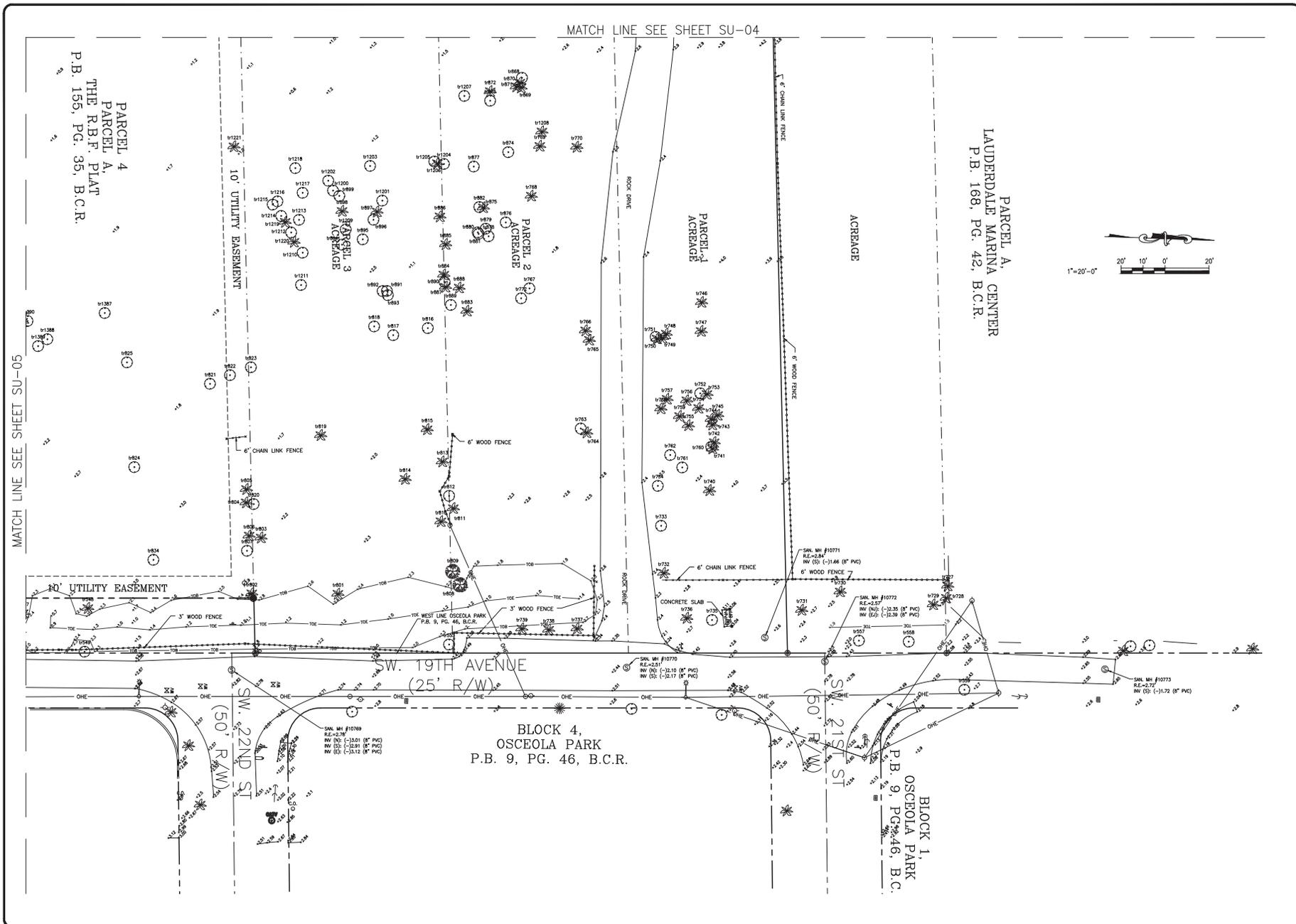
CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE

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PROJECT # 191411
STORMWATER IMPROVEMENTS
RIVER OAKS PRESERVE SURVEY
BOUNDARY/ADJACENT ACREAGE
DETAIL SHEET

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| DRAWING FILE NO. | 4-135-81 |



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| DRAWING NO.: | 4-135-81 |

CITY OF FORT LAUDERDALE
 PUBLIC WORKS DEPARTMENT
 ENGINEERING & ARCHITECTURE

Fort Lauderdale

| NO. | DATE | BY | DESCRIPTION |
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PROJECT # 191411 #
 STORMWATER IMPROVEMENTS
 RIVER OAKS PRESERVE SURVEY
 BOUNDARY/UTILITY DETAIL SHEET

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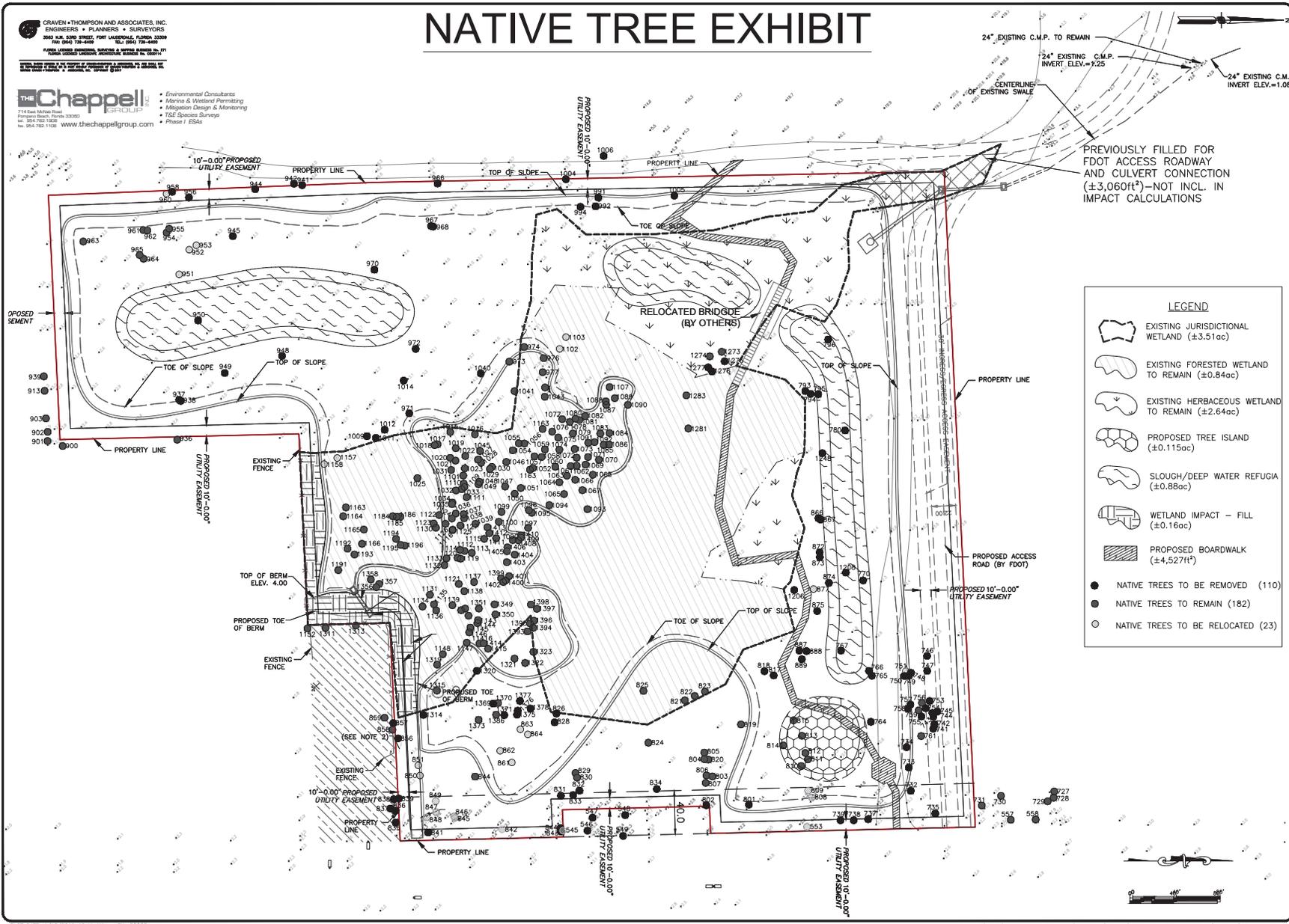
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| 1543 | 30' OK | 1791 | 4' BISHOFFA | 1944 | 20' MHOOGAY | 1973 | 40' STRANGLER FIG | 11247 | 15' ROYAL PALM BH=30' | 11030 | 10' ROYAL PALM BH=20' | 11109 | 12' ROYAL PALM BH=40' | 11188 | 8' BISHOFFA | 11376 | 12' SEA GRPE |
| 1544 | 30' OK | 1792 | 7' BISHOFFA | 1945 | 30' STRANGLER FIG | 1974 | 18' OK | 11248 | 15' ROYAL PALM BH=40' | 11036 | 8' ROYAL PALM BH=20' | 11110 | 8' POND APPLE | 11189 | 8' BISHOFFA | 11377 | 8' ROYAL PALM BH=20' |
| 1545 | 12' OK | 1793 | 15' ROYAL PALM BH=30' | 1946 | 7' ACACIA (EAR LEAF) | 1975 | 18' ROYAL PALM BH=30' | 11249 | 14' BISHOFFA | 11037 | 15' ROYAL PALM BH=30' | 11111 | 12' POND APPLE | 11190 | 8' BISHOFFA | 11378 | 12' ROYAL PALM BH=30' |
| 1546 | 12' SABL PALM BH=20' | 1794 | 11' ROYAL PALM BH=20' | 1947 | 7' ACACIA (EAR LEAF) | 1977 | 5' ROYAL PALM BH=30' | 11250 | 10' BISHOFFA | 11038 | 18' ROYAL PALM BH=30' | 11112 | 8' ROYAL PALM BH=12' | 11191 | 8' POND APPLE | 11379 | 8' CHINESE FAN PALM BH=30' |
| 1547 | 11' SABL PALM BH=20' | 1795 | 14' ROYAL PALM BH=33' | 1948 | 10' SABL PALM BH=22' | 1976 | 7' BISHOFFA | 11251 | 11' BISHOFFA | 11039 | 8' POND APPLE | 11113 | 18' POND APPLE | 11192 | 8' POND APPLE | 11380 | 10' CHINESE FAN PALM BH=30' |
| 1548 | 11' SABL PALM BH=20' | 1796 | 18' ROYAL PALM BH=27' | 1949 | 10' SABL PALM BH=22' | 1978 | 18' BISHOFFA | 11252 | 10' MHOOGAY | 11040 | 30' SEA GRPE | 11114 | 8' POND APPLE | 11193 | 8' POND APPLE | 11381 | 10' CHINESE FAN PALM BH=30' |
| 1549 | 12 1/2' UNKNOWN | 1797 | 7' BISHOFFA | 1950 | 12' SABL PALM BH=15' | 1979 | 11' BISHOFFA | 11253 | 10' MHOOGAY | 11041 | 15' SEA GRPE | 11115 | 8' BALD CYPRESS | 11194 | 10' POND APPLE | 11382 | 10' CHINESE FAN PALM BH=30' |
| 1553 | 7' OK | 1798 | 10' BISHOFFA | 1951 | 5' MHOOGAY | 1980 | 4' BISHOFFA | 11254 | 12' OK | 11042 | 12' OK | 11116 | 15' ROYAL PALM BH=40' | 11195 | 10' POND APPLE | 11383 | 10' CHINESE FAN PALM BH=30' |
| 1557 | 8' PINK TABESUA | 1799 | 7' BISHOFFA | 1952 | 5' MHOOGAY | 1981 | 7' BISHOFFA | 11255 | 12' OK | 11043 | 12' OK | 11117 | 12' BALD CYPRESS | 11196 | 8' POND APPLE | 11384 | 8' CHINESE FAN PALM BH=30' |
| 1558 | 3' PINK TABESUA | 1800 | 14' SABL PALM BH=12' | 1953 | 4' MHOOGAY | 1982 | 7' BISHOFFA | 11256 | 18' OK | 11044 | 18' OK | 11118 | 18' ROYAL PALM BH=40' | 11197 | 12' BISHOFFA | 11385 | 8' CHINESE FAN PALM BH=30' |
| 1727 | 7' ROYAL PALM BH=11' | 1801 | 14' ROYAL PALM BH=30' | 1954 | 20' SAW PALMETTO PALM BH=10' | 1983 | 3' ARCA BAMBDO PALM BH=17' | 11257 | 12' SABL PALM BH=20' | 11045 | 12' ROYAL PALM BH=40' | 11119 | 15' POND APPLE | 11198 | 8' BISHOFFA | 11386 | 12' POND APPLE |
| 1728 | 10' COCONUT PALM BH=8' | 1802 | 18' ROYAL PALM BH=37' | 1955 | 20' SAW PALMETTO PALM BH=10' | 1984 | 3' ARCA BAMBDO PALM BH=17' | 11258 | 12' SABL PALM BH=20' | 11046 | 10' BALD CYPRESS | 11120 | 18' ROYAL PALM BH=30' | 11199 | 10' ROYAL PALM BH=15' | 11387 | 8' CARROTWOOD |
| 1729 | 10' COCONUT PALM BH=18' | 1803 | 10' ROYAL PALM BH=18' | 1956 | 15' OK | 1985 | 3' ARCA BAMBDO PALM BH=17' | 11259 | 18' SABL PALM BH=40' | 11047 | 8' POND APPLE | 11121 | 20' ROYAL PALM BH=40' | 11200 | 18' ROYAL PALM BH=40' | 11388 | 12' BISHOFFA |
| 1730 | 10' SABL PALM BH=15' | 1804 | 18' ROYAL PALM BH=31' | 1957 | 8' CARROTWOOD | 1986 | 3' ARCA BAMBDO PALM BH=17' | 11260 | 18' SABL PALM BH=40' | 11048 | 8' SABL PALM BH=40' | 11122 | 8' POND APPLE | 11201 | 15' ROYAL PALM BH=40' | 11389 | 8' BISHOFFA |
| 1731 | 19' PALM BH=15' | 1805 | 15' SABL PALM BH=6' | 1958 | 18' SAW PALMETTO PALM BH=3' | 1987 | 14' SABL PALM BH=20' | 11261 | 60' STRANGLER FIG | 11049 | 8' SABL PALM BH=40' | 11123 | 8' POND APPLE | 11311 | 8' ALEXANDER PALM BH=30' | 11390 | 24' BISHOFFA |
| 1732 | 19' PALM BH=12' | 1806 | 24' OK | 1959 | 12' MHOOGAY | 1988 | 11' SABL PALM BH=20' | 11262 | 30' STRANGLER FIG | 11050 | 18' ROYAL PALM BH=40' | 11124 | 8' POND APPLE | 11312 | 8' POND APPLE | 11391 | 4' ROYAL PALM BH=8' |
| 1733 | 18' OK | 1808 | 14' SABL PALM BH=9' | 1960 | 8' CARROTWOOD | 1989 | 20' BALD CYPRESS | 11263 | 84' STRANGLER FIG | 11051 | 12' WAPLE | 11125 | 8' POND APPLE | 11313 | 18' ROYAL PALM BH=40' | 11392 | 4' PALM BH=8' |
| 1734 | 10' OK | 1807 | 40' STRANGLER FIG | 1961 | 9' ACACIA (EAR LEAF) | 1990 | 12' BISHOFFA | 11264 | 12' ROYAL PALM BH=30' | 11052 | 12' ROYAL PALM BH=40' | 11126 | 8' POND APPLE | 11314 | 8' POND APPLE | 11393 | 4' ROYAL PALM BH=30' |
| 1735 | 15' OK | 1808 | 12' WANDU | 1962 | 7' ACACIA (EAR LEAF) | 1991 | 8' BISHOFFA | 11265 | 18' SABL PALM BH=40' | 11053 | 12' ROYAL PALM BH=40' | 11127 | 8' POND APPLE | 11315 | 18' ROYAL PALM BH=40' | 11394 | 18' ROYAL PALM BH=40' |
| 1736 | 3' ARCA BAMBDO PALM BH=10' | 1809 | 12' WANDU | 1963 | 18' SABL PALM BH=40' | 1992 | 40' STRANGLER FIG | 11266 | 18' SABL PALM BH=40' | 11054 | 12' POND APPLE | 11128 | 15' BISHOFFA | 11316 | 12' BALD CYPRESS | 11395 | 20' ROYAL PALM BH=40' |
| 1737 | 18' ROYAL PALM BH=40' | 1810 | 11' SABL PALM BH=23' | 1964 | 8' ACACIA (EAR LEAF) | 1993 | 6' BISHOFFA | 11267 | 18' SABL PALM BH=40' | 11055 | 8' POND APPLE | 11129 | 12' ROYAL PALM BH=40' | 11317 | 20' ROYAL PALM BH=40' | 11396 | 8' WILLOW |
| 1738 | 20' ROYAL PALM BH=35' | 1811 | 12' PALM BH=12' | 1965 | 8' ACACIA (EAR LEAF) | 1994 | 22' BISHOFFA | 11268 | 8' BISHOFFA | 11056 | 8' POND APPLE | 11130 | 10' SABL PALM BH=10' | 11318 | 10' SABL PALM BH=30' | 11397 | 8' ALEXANDER PALM BH=20' |
| 1739 | 20' ROYAL PALM BH=33' | 1812 | 42' OK | 1966 | 8' ACACIA (EAR LEAF) | 1995 | 10' BISHOFFA | 11269 | 8' BISHOFFA | 11057 | 12' ROYAL PALM BH=20' | 11131 | 10' SABL PALM BH=15' | 11319 | 12' POND APPLE | 11398 | 8' ALEXANDER PALM BH=30' |
| 1740 | 8' CHINESE FAN PALM BH=11' | 1813 | 14' SABL PALM BH=19' | 1967 | 15' OK | 1996 | 14' CARROTWOOD | 11270 | 24' STRANGLER FIG | 11058 | 8' POND APPLE | 11132 | 12' ROYAL PALM BH=15' | 11320 | 12' ROYAL PALM BH=40' | 11399 | 15' ROYAL PALM BH=40' |
| 1741 | 12' SABL PALM BH=5' | 1814 | 14' SABL PALM BH=18' | 1968 | 24' OK | 1997 | 20' ROYAL PALM BH=30' | 11271 | 10' BISHOFFA | 11059 | 18' ROYAL PALM BH=30' | 11133 | 8' ROYAL PALM BH=12' | 11321 | 20' ROYAL PALM BH=40' | 11400 | 8' ROYAL PALM BH=18' |
| 1742 | 14' SABL PALM BH=30' | 1815 | 12' COCONUT PALM BH=21' | 1969 | 30' OK | 1998 | 17' ROYAL PALM BH=4' | 11272 | 10' BISHOFFA | 11060 | 5' ROYAL PALM BH=4' | 11134 | 18' ROYAL PALM BH=30' | 11322 | 18' ROYAL PALM BH=30' | 11401 | 15' POND APPLE |
| 1743 | 12' SABL PALM BH=28' | 1816 | 5' CARROTWOOD | 1970 | 4' BISHOFFA | 1999 | 14' CARROTWOOD | 11273 | 8' ROYAL PALM BH=18' | 11061 | 12' ROYAL PALM BH=35' | 11135 | 30' POND APPLE | 11323 | 18' ROYAL PALM BH=40' | 11402 | 11' BISHOFFA |
| 1744 | 12' SABL PALM BH=5' | 1817 | 54' UNKNOWN | 1971 | 12' ROYAL PALM BH=30' | 11000 | 14' CARROTWOOD | 11274 | 20' ROYAL PALM BH=40' | 11062 | 20' POND APPLE | 11136 | 30' BISHOFFA | 11324 | 8' ALEXANDER PALM BH=30' | 11403 | 8' BISHOFFA |
| 1745 | 14' SABL PALM BH=30' | 1818 | 54' UNKNOWN | 1972 | 12' CHINESE FAN PALM BH=33' | 11001 | 13' BISHOFFA | 11275 | 40' ARCA BAMBDO PALM BH=10' | 11063 | 15' ROYAL PALM BH=50' | 11137 | 8' POND APPLE | 11325 | 8' ALEXANDER PALM BH=30' | 11404 | 8' BISHOFFA |
| 1746 | 14' ROYAL PALM BH=33' | 1819 | 6' ROYAL PALM BH=2' | 1973 | 12' SABL PALM BH=27' | 11002 | 11' CARROTWOOD | 11276 | 10' SABL PALM BH=25' | 11064 | 15' POND APPLE | 11138 | 12' POND APPLE | 11326 | 15' CARROTWOOD | 11405 | 8' BISHOFFA |
| 1747 | 14' ROYAL PALM BH=30' | 1900 | 6' COCONUT PALM BH=25' | 1974 | 12' SABL PALM BH=20' | 11003 | 6' BISHOFFA | 11277 | 18' SABL PALM BH=18' | 11065 | 15' BISHOFFA | 11139 | 18' ROYAL PALM BH=40' | 11327 | 18' ROYAL PALM BH=30' | 11406 | 7' BISHOFFA |
| 1748 | 15' ROYAL PALM BH=28' | 1901 | 24' SABL PALM BH=45' | 1975 | 12' SABL PALM BH=20' | 11004 | 6' BISHOFFA | 11278 | 10' STRANGLER FIG | 11066 | 12' ROYAL PALM BH=40' | 11140 | 6' POND APPLE | 11328 | 4' UNKNOWN | 11407 | 2' BISHOFFA |
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| 1750 | 16' ROYAL PALM BH=30' | 1903 | 6' CARROTWOOD | 1977 | 30' STRANGLER FIG | 11006 | 18' ROYAL PALM BH=48' | 11280 | 18' SABL PALM BH=12' | 11068 | 18' POND APPLE | 11142 | 20' ROYAL PALM BH=40' | 11330 | 20' ROYAL PALM BH=30' | 11409 | 8' BISHOFFA |
| 1751 | 4' OK | 1904 | 8' COCONUT PALM BH=18' | 1978 | 18' ROYAL PALM BH=37' | 11007 | 8' CARROTWOOD | 11281 | 5' SABL PALM BH=18' | 11069 | 4' BALD CYPRESS | 11143 | 6' POND APPLE | 11331 | 10' ROYAL PALM BH=40' | 11410 | 11' BISHOFFA |
| 1752 | 16' BISHOFFA | 1905 | 9' COCONUT PALM BH=20' | 1979 | 30' OK | 11008 | 15' ROYAL PALM BH=45' | 11282 | 18' SABL PALM BH=12' | 11070 | 15' POND APPLE | 11144 | 8' BALD CYPRESS | 11332 | 8' ROYAL PALM BH=20' | 11411 | 8' BISHOFFA |
| 1753 | 12' SABL PALM BH=23' | 1906 | 5' COCONUT PALM BH=7' | 1980 | 7' ROYAL PALM BH=9' | 11009 | 10' CARROTWOOD | 11283 | 5' SABL PALM BH=18' | 11071 | 12' POND APPLE | 11145 | 15' ROYAL PALM BH=40' | 11333 | 18' ROYAL PALM BH=40' | 11412 | 11' BISHOFFA |
| 1754 | 11' SABL PALM BH=23' | 1907 | 8' COCONUT PALM BH=8' | 1981 | 12' ROYAL PALM BH=18' | 11010 | 10' BISHOFFA | 11284 | 18' SABL PALM BH=12' | 11072 | 5' ROYAL PALM BH=8' | 11146 | 10' BALD CYPRESS | 11334 | 10' BALD CYPRESS | 11413 | 8' BISHOFFA |
| 1755 | 10' SABL PALM BH=23' | 1908 | 5' COCONUT PALM BH=5' | 1982 | 5' ROYAL PALM BH=5' | 11011 | 18' BISHOFFA | 11285 | 5' ROYAL PALM BH=5' | 11073 | 10' ROYAL PALM BH=30' | 11147 | 12' BALD CYPRESS | 11335 | 4' POND APPLE | 11414 | 8' BISHOFFA |
| 1756 | 12' SABL PALM BH=30' | 1909 | 9' COCONUT PALM BH=20' | 1983 | 12' ROYAL PALM BH=21' | 11012 | 8' BISHOFFA | 11286 | 12' SABL PALM BH=21' | 11074 | 18' BALD CYPRESS | 11148 | 15' POND APPLE | 11336 | 18' ROYAL PALM BH=40' | 11415 | 8' BISHOFFA |
| 1757 | 10' SABL PALM BH=23' | 1910 | 8' COCONUT PALM BH=22' | 1984 | 15' ROYAL PALM BH=21' | 11013 | 6' BISHOFFA | 11287 | 15' SABL PALM BH=21' | 11075 | 18' POND APPLE | 11152 | 8' COCONUT PALM BH=8' | 11337 | 18' ROYAL PALM BH=40' | 11416 | 8' BISHOFFA |
| 1758 | 12' SABL PALM BH=25' | 1911 | 6' CARROTWOOD | 1985 | 8' WASHINGTONIA PALM BH=40' | 11014 | 8' BISHOFFA | 11288 | 5' BISHOFFA | 11076 | 5' BISHOFFA | 11153 | 10' COCONUT PALM BH=20' | 11338 | 10' ROYAL PALM BH=40' | 11417 | 4' BISHOFFA |
| 1759 | 12' SABL PALM BH=25' | 1912 | 6' CARROTWOOD | 1986 | 15' SABL PALM BH=22' | 11015 | 6' BISHOFFA | 11289 | 10' BISHOFFA | 11077 | 20' ROYAL PALM BH=50' | 11156 | 8' ROYAL PALM BH=10' | 11339 | 12' POND APPLE | 11418 | 5' BISHOFFA |
| 1760 | 10' CARROTWOOD | 1913 | 7' MHOOGAY | 1987 | 5' OK | 11016 | 8' BISHOFFA | 11290 | 18' ROYAL PALM BH=30' | 11078 | 5' ROYAL PALM BH=8' | 11157 | 8' WILLOW | 11340 | 12' POND APPLE | 11419 | 10' POND APPLE |
| 1761 | 4' CARROTWOOD | 1914 | 6' CARROTWOOD | 1988 | 5' OK | 11017 | 10' BISHOFFA | 11291 | 5' OK | 11079 | 5' BALD CYPRESS | 11158 | 8' WILLOW | 11341 | 15' ROYAL PALM BH=40' | 11420 | 5' POND APPLE |
| 1762 | 8' CARROTWOOD | 1915 | 6' CARROTWOOD | 1989 | 5' OK | 11018 | 12' BISHOFFA | 11292 | 8' ROYAL PALM BH=8' | 11080 | 8' WAPLE | 11159 | 10' BISHOFFA | 11342 | 8' ROYAL PALM BH=10' | 11421 | 8' POND APPLE |
| 1763 | 3' ACACIA (EAR LEAF) | 1916 | 8' CARROTWOOD | 1990 | 4' OK | 11019 | 16' ROYAL PALM BH=38' | 11293 | 8' ACACIA (EAR LEAF) | 11081 | 12' ROYAL PALM BH=30' | 11160 | 30' PIGEON PLUM | 11343 | 15' ROYAL PALM BH=40' | 11422 | 17' ROYAL PALM BH=30' |
| 1764 | 18' ROYAL PALM BH=30' | 1917 | 8' CARROTWOOD | 1991 | 5' OK | 11020 | 16' ROYAL PALM BH=38' | 11294 | 10' ACACIA (EAR LEAF) | 11082 | 20' ROYAL PALM BH=40' | 11161 | 8' BISHOFFA | 11344 | 15' ROYAL PALM BH=40' | 11423 | 10' ROYAL PALM BH=7' |
| 1765 | 18' ROYAL PALM BH=40' | 1918 | 7' CARROTWOOD | 1992 | 5' OK | 11021 | 24' ROYAL PALM BH=45' | 11295 | 12' BLACK OLIVE | 11083 | 12' ROYAL PALM BH=40' | 11162 | 15' CARROTWOOD | 11345 | 15' BALD CYPRESS | 11424 | 11' ROYAL PALM BH=22' |
| 1766 | 13' SABL PALM BH=18' | 1919 | 6' CARROTWOOD | 1993 | 6' OK | 11022 | 14' ROYAL PALM BH=17' | 11296 | 6' OK | 11084 | 20' ROYAL PALM BH=40' | 11163 | 12' POND APPLE | 11346 | 12' POND APPLE | 11425 | 11' ROYAL PALM BH=9' |
| 1767 | 18' OK | 1920 | 8' CARROTWOOD | 1994 | 7' OK | 11023 | 7' ROYAL PALM BH=9' | 11297 | 7' OK | 11085 | 18' ROYAL PALM BH=40' | 11164 | 12' POND APPLE | 11347 | 20' ROYAL PALM BH=50' | 11426 | 8' ROYAL PALM BH=8' |
| 1772 | 20' SCHEFFELERA | 1921 | 8' CARROTWOOD | 1995 | 4' OK | 11024 | 4' ROYAL PALM BH=5' | 11298 | 4' OK | 11086 | 15' ROYAL PALM BH=40' | 11165 | 8' POND APPLE | 11348 | 10' ROYAL PALM BH=50' | 11427 | 8' BISHOFFA |
| 1768 | 3' ARCA BAMBDO PALM BH=14' | 1922 | 8' CARROTWOOD | 1996 | 12' WAPLE | 11025 | 14' ROYAL PALM BH=28' | 11299 | 14' OK | 11087 | 20' ROYAL PALM BH=30' | 11166 | 18' POND APPLE | 11349 | 12' ROYAL PALM BH=25' | 11428 | 12' POND APPLE |
| 1769 | 3' ARCA BAMBDO PALM BH=14' | 1923 | 6' CARROTWOOD | 1997 | 15' UNKY CITRUS TREE | 11026 | 14' ROYAL PALM BH=31' | 11300 | 4' WILD TAMARIND | 11088 | 12' ROYAL PALM BH=30' | 11167 | 18' ROYAL PALM BH=40' | 11350 | 18' ROYAL PALM BH=40' | 11429 | 10' ROYAL PALM BH=20' |
| 1770 | 13' ROYAL PALM BH=28' | 1924 | 6' CARROTWOOD | 1998 | 4' OK | 11027 | 14' ROYAL PALM BH=19' | 11301 | 12' OK | 11089 | 20' ROYAL PALM BH=50' | 11168 | 6' ROYAL PALM BH=8' | 11351 | 15' ROYAL PALM BH=40' | 11430 | 12' POND APPLE |
| 1771 | 3' ARCA BAMBDO PALM BH=14' | 1925 | 6' CARROTWOOD | 1999 | 4' OK | 11028 | 19' PALM BH=20' | 11302 | 12' OK | 11090 | 18' ROYAL PALM BH=50' | 11169 | 18' ROYAL PALM BH=30' | 11352 | 18' ROYAL PALM BH=40' | 11431 | 14' ROYAL PALM BH=22' |
| 1773 | 3' ARCA BAMBDO PALM BH=14' | 1926 | 18' CARROTWOOD | 2000 | 9' OK | 11029 | 15' ROYAL PALM BH=28' | 11303 | 18' ROYAL PALM BH=50' | 11091 | 12' POND APPLE | 11170 | 8' POND APPLE | 11353 | 18' ROYAL PALM BH=50' | 11432 | 15' WAPLE |
| 1774 | 3' ARCA BAMBDO PALM BH=14' | 1927 | 10' CARROTWOOD | 2001 | 5' OK | 11030 | 12' ROYAL PALM BH=25' | 11304 | 5' OK | | | | | | | | |

NATIVE TREE EXHIBIT

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714 East Main Street, Suite 2000
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www.thechappellgroup.com

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- Phase I ESAs



LEGEND

- EXISTING JURISDICTIONAL WETLAND (±3.51ac)
- EXISTING FORESTED WETLAND TO REMAIN (±0.84ac)
- EXISTING HERBACEOUS WETLAND TO REMAIN (±2.64ac)
- PROPOSED TREE ISLAND (±0.115ac)
- SLOUGH/DEEP WATER REFUGIA (±0.86ac)
- WETLAND IMPACT - FILL (±0.16ac)
- PROPOSED BOARDWALK (±4,527ft²)

● NATIVE TREES TO BE REMOVED (110)
● NATIVE TREES TO REMAIN (182)
○ NATIVE TREES TO BE RELOCATED (23)

PREVIOUSLY FILLED FOR FDOT ACCESS ROADWAY AND CULVERT CONNECTION (±3,060ft²)—NOT INCL. IN IMPACT CALCULATIONS

| | |
|--------------|----------------|
| DATE: | 1/18/2019 |
| DESIGNED BY: | PAUL J. GIBNEY |
| DRWING BY: | PAUL J. GIBNEY |
| CHECKED BY: | PAUL J. GIBNEY |
| FIELD BOOK: | |

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE

100 North Andrews Avenue, Fort Lauderdale, Florida 33301

| NO. | DATE | BY (FNU) | DESCRIPTION |
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PROJECT # 11419
RIVER OAKS PRESERVE
ENVIRONMENTAL
SITE PLAN
NATIVE TREE EXHIBIT

| | |
|------------------|----------------|
| SHEET NO. | TD-1 |
| TOTAL: | 40 |
| CAD FILE: | 11419-004-SITE |
| DRAWING FILE NO. | 4-135-81 |

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Chappell GROUP logo and contact information

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Marine & Wetland Permitting
Mitigation Design & Monitoring
T&E Species Surveys
Phase I ESA

Table with 5 columns: TREE #, SCIENTIFIC NAME, COMMON NAME, CONDITION, CALIPER INCHES. Contains tree data from row 543 to 842.

Table with 5 columns: TREE #, SCIENTIFIC NAME, COMMON NAME, CONDITION, CALIPER INCHES. Contains tree data from row 843 to 1031.

Plot Date: 1/16/2019 16:41:00

File = S:\2020\11-2003\001 River Oaks\TCC Plans\08 Sab\Native Tree Disposition Plan (1-16-19). Saved by user\caw Date = 1/16/2019 8:33:59 PM

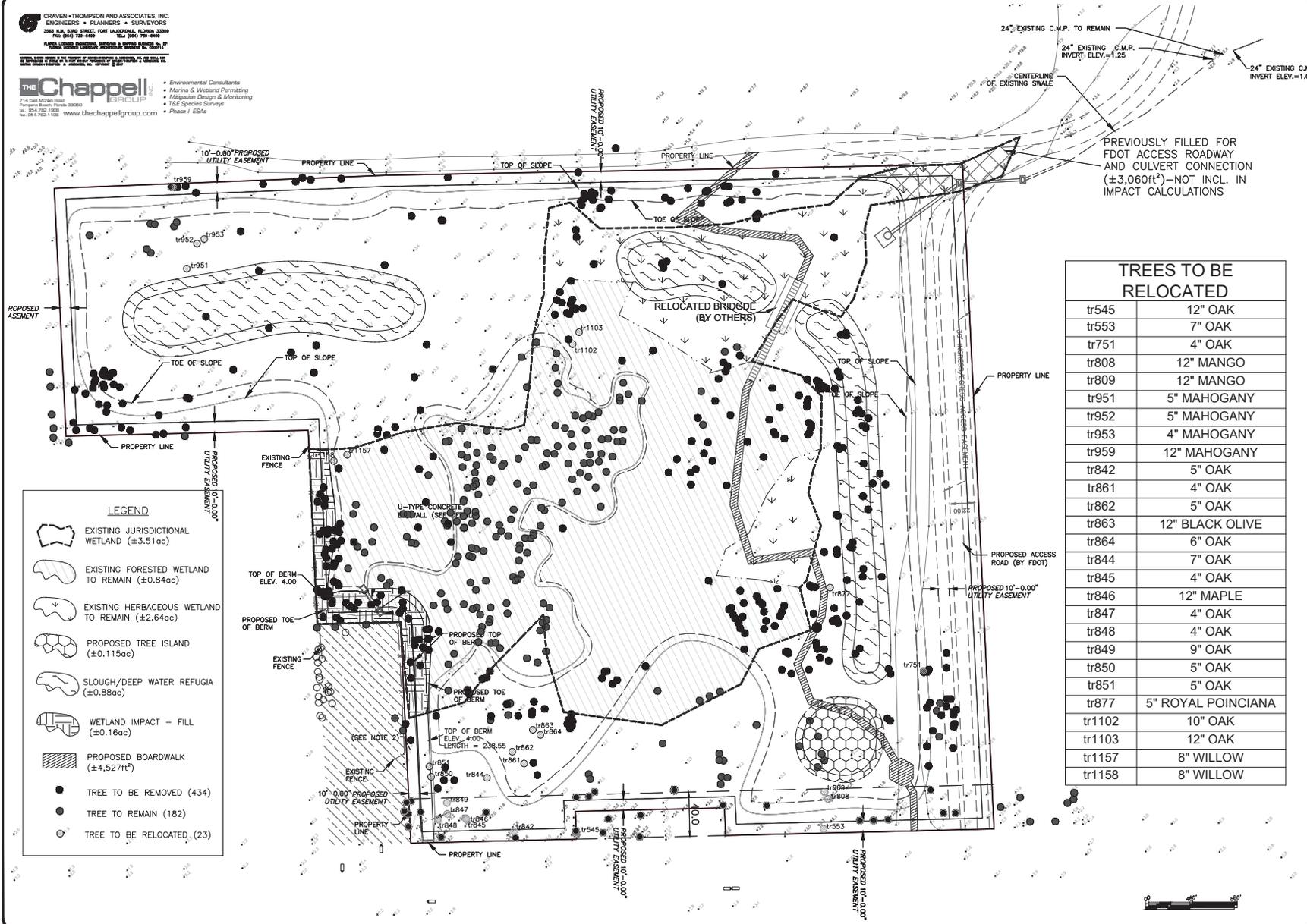
PROJECT # 11419
RIVER OAKS PRESERVE
ENVIRONMENTAL
SITE PLAN
NATIVE TREE DISPOSITION PLAN

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

Table with 2 columns: NO., DATE, BY, CHECKED, DESCRIPTION

REVISIONS
NO. DATE BY CHECKED DESCRIPTION

SHEET NO.
TD-2
TOTAL: 40
CAD FILE: 11419-004-SITE
DRAWING FILE NO: 4-135-81



TREES TO BE RELOCATED

| | |
|--------|--------------------|
| tr545 | 12" OAK |
| tr553 | 7" OAK |
| tr751 | 4" OAK |
| tr808 | 12" MANGO |
| tr809 | 12" MANGO |
| tr911 | 5" MAHOGANY |
| tr952 | 5" MAHOGANY |
| tr953 | 4" MAHOGANY |
| tr959 | 12" MAHOGANY |
| tr842 | 5" OAK |
| tr861 | 4" OAK |
| tr862 | 5" OAK |
| tr863 | 12" BLACK OLIVE |
| tr864 | 6" OAK |
| tr844 | 7" OAK |
| tr845 | 4" OAK |
| tr846 | 12" MAPLE |
| tr847 | 4" OAK |
| tr848 | 4" OAK |
| tr849 | 9" OAK |
| tr850 | 5" OAK |
| tr851 | 5" OAK |
| tr877 | 5" ROYAL POINCIANA |
| tr1102 | 10" OAK |
| tr1103 | 12" OAK |
| tr1157 | 8" WILLOW |
| tr1158 | 8" WILLOW |

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 WWW.CRAVEN-THOMPSON.COM

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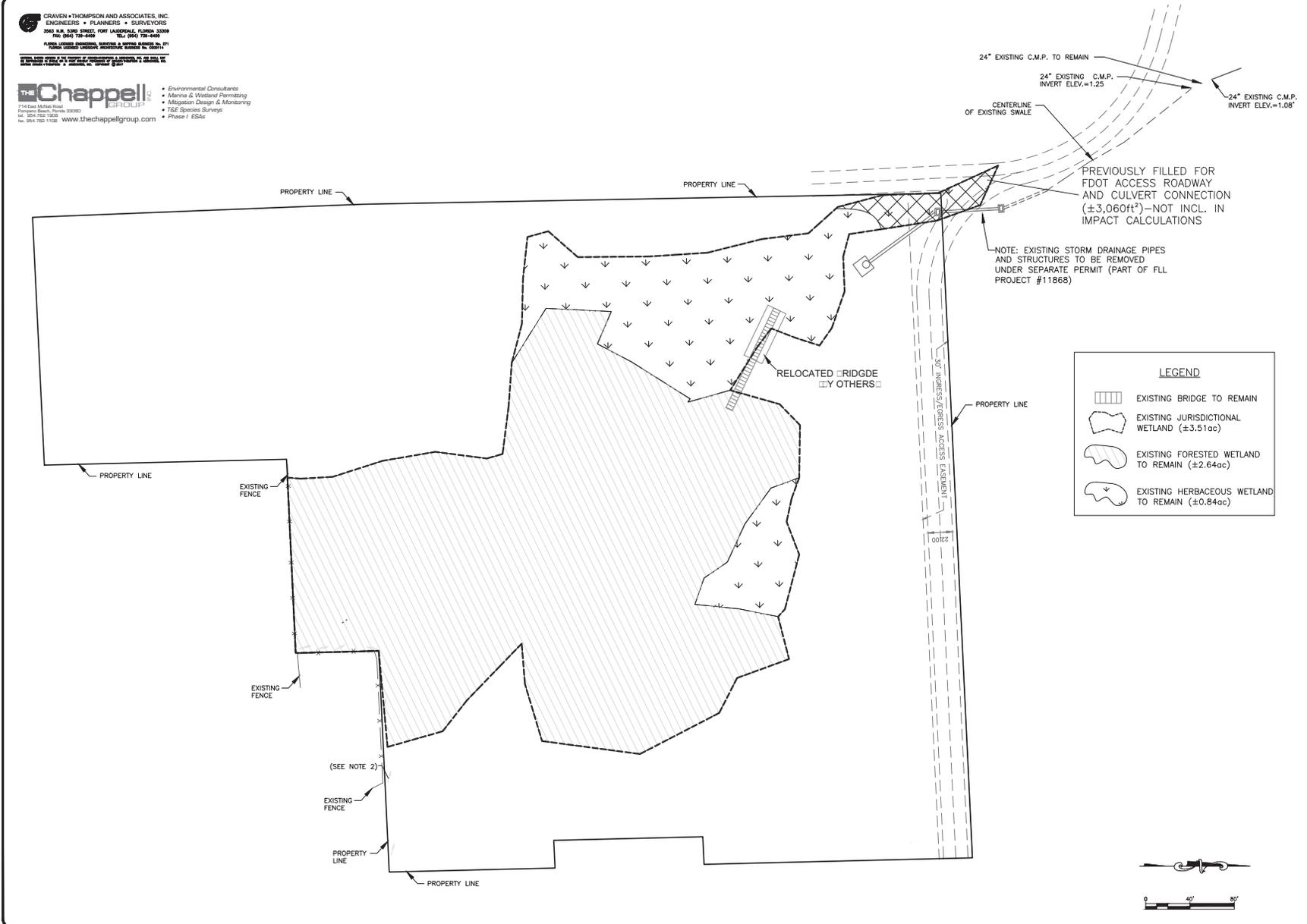
DESIGNED BY: PATRICK J. GIBNEY
 DATE: 10/22/2019
 CHECKED BY: A.G.
 SCALE: HORIZ. 1"=40'
 VERT. 1"=4'

CITY OF FORT LAUDERDALE
 PUBLIC WORKS DEPARTMENT
 ENGINEERING & ARCHITECTURE
 100 North Andrews Avenue, Fort Lauderdale, Florida 33301

| NO. | DATE | BY (FWD) | DESCRIPTION |
|-----|------|----------|-------------|
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PROJECT # 11419
 RIVER OAKS PRESERVE
 ENVIRONMENTAL
 SITE PLAN
 TREE EXHIBIT

SHEET NO. 10
 TOTAL: 40
 CAD FILE: 11419-004-SITE
 DRAWING FILE NO. 4-135-81



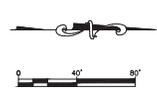
Craven + Thompson and Associates, Inc.
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 3043 N.W. 53RD STREET, FORT LAUDERDALE, FLORIDA 33309
 TEL: (954) 720-4500 FAX: (954) 720-4500
 FLORIDA LICENSE NO. 17111 ENVIRONMENTAL ENGINEERING
 FLORIDA LICENSE NO. 17111 PLANNING
 FLORIDA LICENSE NO. 17111 SURVEYING

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LEGEND

- EXISTING BRIDGE TO REMAIN
- EXISTING JURISDICTIONAL WETLAND (±3.51ac)
- EXISTING FORESTED WETLAND TO REMAIN (±2.64ac)
- EXISTING HERBACEOUS WETLAND TO REMAIN (±0.84ac)



PROJENERS:
 PATRICK J. GIBNEY
 REG. NO. 48498
 DATE: 07/27/2019

DATE: 2/7/2019

DESIGNED BY: SCALE:

W.R./M.N.: VERT. 1"=2'

CHECKED BY: HOR. 1"=40'

A.G.:

FIELD BOOK:

CITY OF FORT LAUDERDALE
 PUBLIC WORKS DEPARTMENT
 ENGINEERING & ARCHITECTURE
 100 North Andrews Avenue, Fort Lauderdale, Florida 33301

| NO. | DATE | BY (FWD) | DESCRIPTION |
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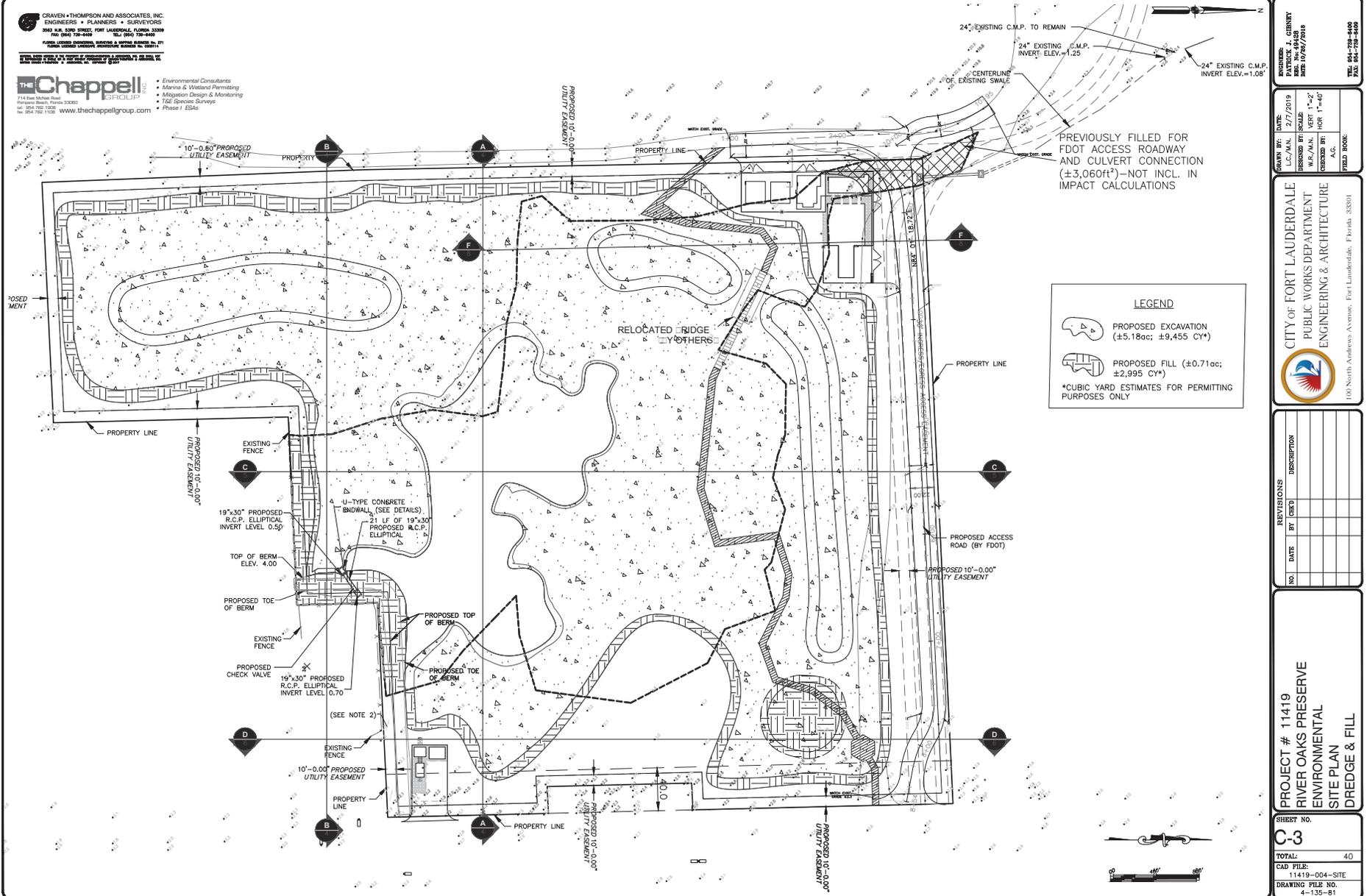
PROJECT # 11419
RIVER OAKS PRESERVE
ENVIRONMENTAL
SITE PLAN
EXISTING CONDITIONS

SHEET NO.
C-1

TOTAL: 40

CAD FILE:
 11419-004-SITE

DRAWING FILE NO.:
 4-135-81



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|---|------------------------|
| DESIGNER: PATRICK J. GIBNEY REG. NO. 48498 | DATE: 2/7/2019 |
| CHECKED BY: A.G. | DESIGNED BY: SCALE: |
| FIELD BOOK: | NO. OF SHEETS: 11 |
| | VERT. 1"=2' |
| | HOR. 1"=40' |

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE

100 North Andrews Avenue, Fort Lauderdale, Florida 33301

| REVISIONS | | DESCRIPTION |
|-----------|------|-------------|
| NO. | DATE | BY (FIELD) |
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PROJECT # 11419
RIVER OAKS PRESERVE
ENVIRONMENTAL
SITE PLAN
DREDGE & FILL

SHEET NO. C-3

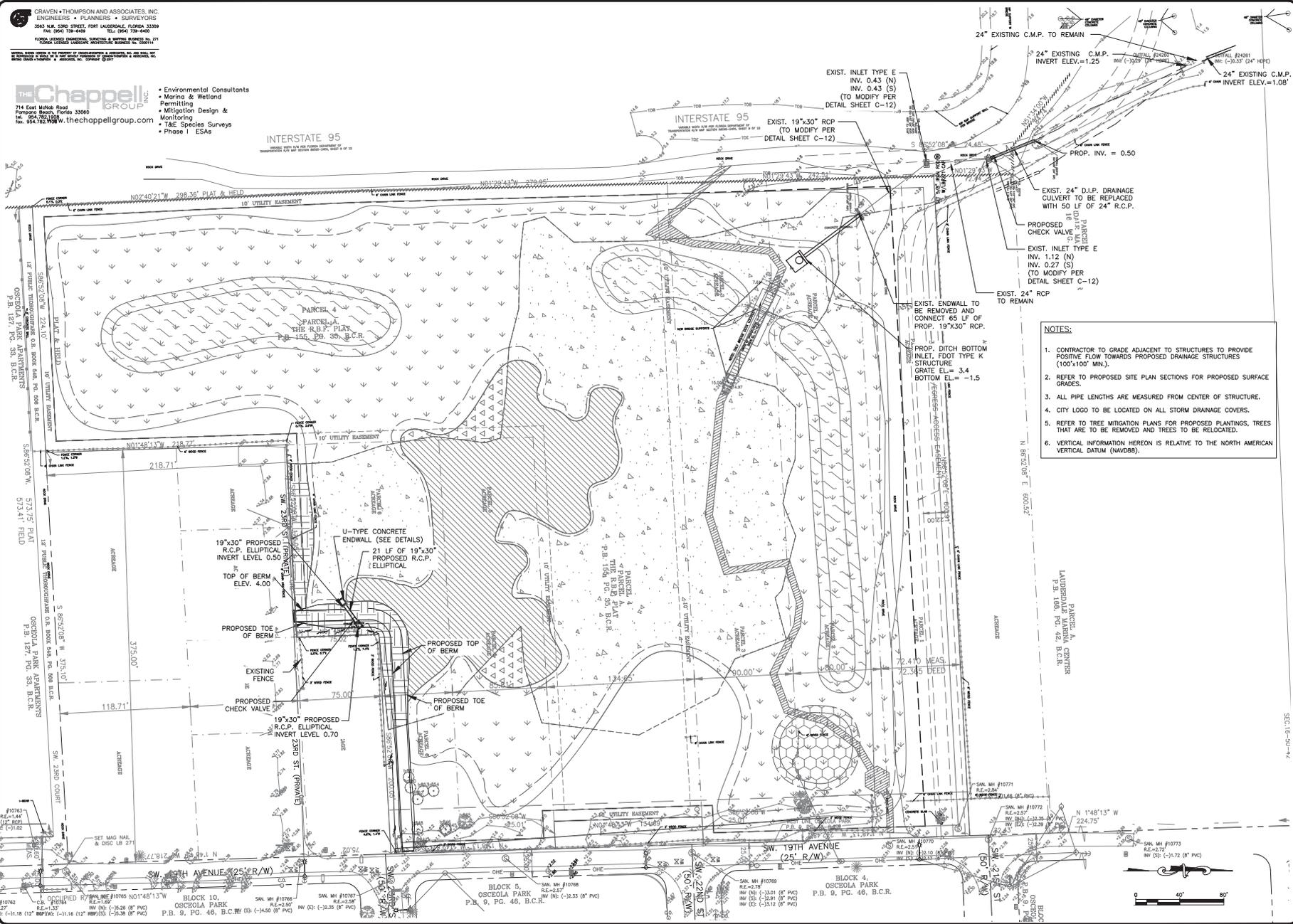
TOTAL: 40
CAD FILE: 11419-004-SITE
DRAWING FILE NO.: 4-135-81

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FLORIDA LICENSED PROFESSIONAL ARCHITECTURE BOARD NO. 0001147

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Fax: (954) 762-1001
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INTERSTATE 95
UNIMULATED SURFACE



- NOTES:**
1. CONTRACTOR TO GRADE ADJUST TO STRUCTURES TO PROVIDE POSITIVE FLOW TOWARDS PROPOSED DRAINAGE STRUCTURES (100'x100' MIN.).
 2. REFER TO PROPOSED SITE PLAN SECTIONS FOR PROPOSED SURFACE GRADES.
 3. ALL PIPE LENGTHS ARE MEASURED FROM CENTER OF STRUCTURE.
 4. CITY LOGO TO BE LOCATED ON ALL STORM DRAINAGE COVERS.
 5. REFER TO TREE MITIGATION PLANS FOR PROPOSED PLANTINGS, TREES THAT ARE TO BE REMOVED AND TREES TO BE RELOCATED.
 6. VERTICAL INFORMATION HEREON IS RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM (NAVD85).

ENGINEER: PATRICK J. CIBNEY
L.C./A.N.
DATE: 07/27/2018

DATE: 10/20/2019

DRAWN BY: L.C./A.N.
DESIGNED BY: SCALE:
W.R./A.N. VEPT 1'-2"
CHECKED BY: MOK 1'-4"
A.C.
FIELD BOOK:

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE

City of Fort Lauderdale
1000 American Avenue, Fort Lauderdale, Florida 33301

| REVISIONS | | DESCRIPTION | |
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| NO. | DATE | BY | FIELD |
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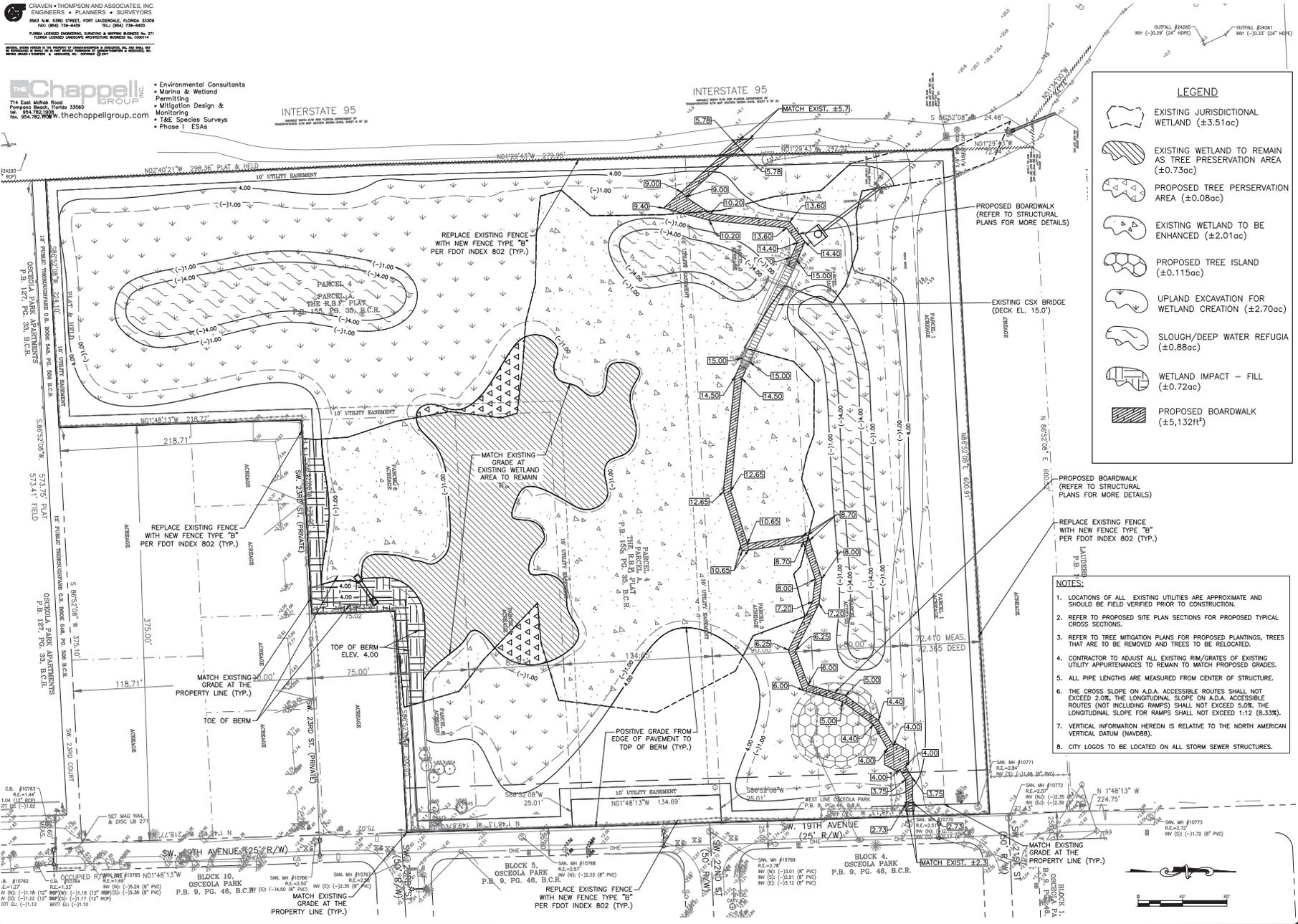
PROJECT # 11419
RIVER OAKS PRESERVE CIVIL PROPOSED DRAINAGE IMPROVEMENTS PLAN

SHEET NO. C-4
TOTAL: 40
CAD FILE: 11419-004-SI
DRAWING FILE NO.: 4-135-81

CRAVEN THOMPSON AND ASSOCIATES, INC. ENGINEERS • PLANNERS • SURVEYORS 3643 N.W. 83RD STREET, FORT LAUDERDALE, FLORIDA 33309 TEL: (954) 738-4400 FAX: (954) 738-4400 FLORIDA LICENSED PROFESSIONAL ENGINEERING & SURVEYING LICENSE NO. 12001-17

Chappell GROUP INC. 714 East Mohr Road Pompano Beach, Florida 33060 Tel: 954.782.9999 Fax: 954.782.9999 www.thechappellgroup.com

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- T&E Species Surveys
- Phase I ESAs



LEGEND

- EXISTING JURISDICTIONAL WETLAND (±3.51ac)
- EXISTING WETLAND TO REMAIN AS TREE PRESERVATION AREA (±0.73ac)
- PROPOSED TREE PRESERVATION AREA (±0.08ac)
- EXISTING WETLAND TO BE ENHANCED (±2.01ac)
- PROPOSED TREE ISLAND (±0.115ac)
- UPLAND EXCAVATION FOR WETLAND CREATION (±2.70ac)
- SLOUGH/DEEP WATER REFUGIA (±0.88ac)
- WETLAND IMPACT - FILL (±0.72ac)
- PROPOSED BOARDWALK (±5.132ft²)

REPLACE EXISTING FENCE WITH NEW FENCE TYPE "B" PER FDOT INDEX 802 (TYP.)

PROPOSED BOARDWALK (REFER TO STRUCTURAL PLANS FOR MORE DETAILS)

- ### NOTES:
1. LOCATIONS OF ALL EXISTING UTILITIES ARE APPROXIMATE AND SHOULD BE FIELD VERIFIED PRIOR TO CONSTRUCTION.
 2. REFER TO PROPOSED SITE PLAN SECTIONS FOR PROPOSED TYPICAL CROSS SECTIONS.
 3. REFER TO TREE MITIGATION PLANS FOR PROPOSED PLANTINGS, TREES THAT ARE TO BE REMOVED AND TREES TO BE RELOCATED.
 4. CONTRACTOR TO ADJUST ALL EXISTING RIM/GRATES OF EXISTING UTILITY APPURTENANCES TO REMAIN TO MATCH PROPOSED GRADES.
 5. ALL PIPE LENGTHS ARE MEASURED FROM CENTER OF STRUCTURE.
 6. THE CROSS SLOPE ON A.D.A. ACCESSIBLE ROUTES SHALL NOT EXCEED 2.0%. THE LONGITUDINAL SLOPE ON A.D.A. ACCESSIBLE ROUTES (NOT INCLUDING RAMPS) SHALL NOT EXCEED 5.0%. THE LONGITUDINAL SLOPE FOR RAMPS SHALL NOT EXCEED 1:12 (8.33%).
 7. VERTICAL INFORMATION HEREON IS RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM (NAVD83).
 8. CITY LOGOS TO BE LOCATED ON ALL STORM SEWER STRUCTURES.

ENGINEER: PATRICK J. GIBNEY
 L.C./N.N. DATE: 10/26/2018
 DESIGNED BY: SCALE: VERT. 1"=2'
 W.R./N.N. CHECKED BY: HOR. 1"=40'
 DATE: 09/28/2018
 PLOTTED BY: A.C.
 SHEET NO.: 40

CITY OF FORT LAUDERDALE
 PUBLIC WORKS DEPARTMENT
 ENGINEERING & ARCHITECTURE

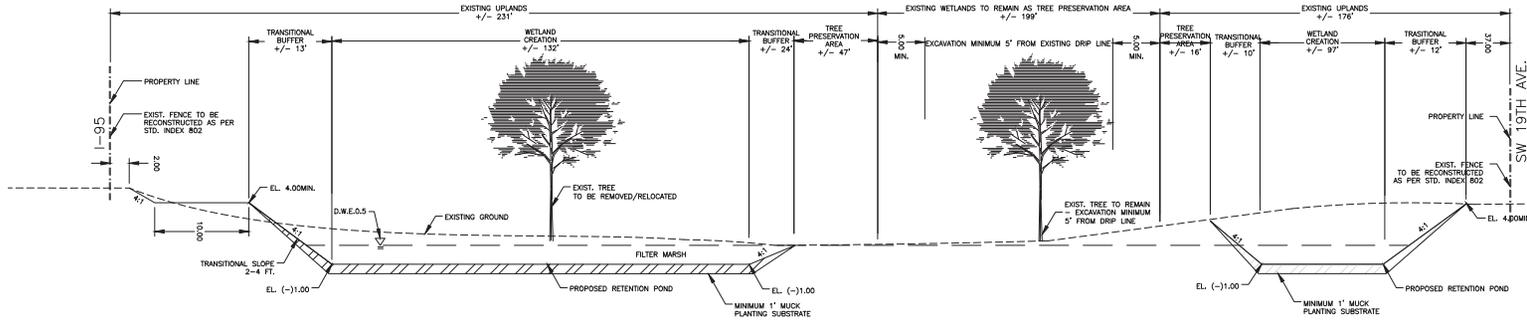
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PROJECT # 14119
 RIVER OAKS PRESERVE
 CIVIL PLAN
 SITE PLAN
 PROPOSED GRADING

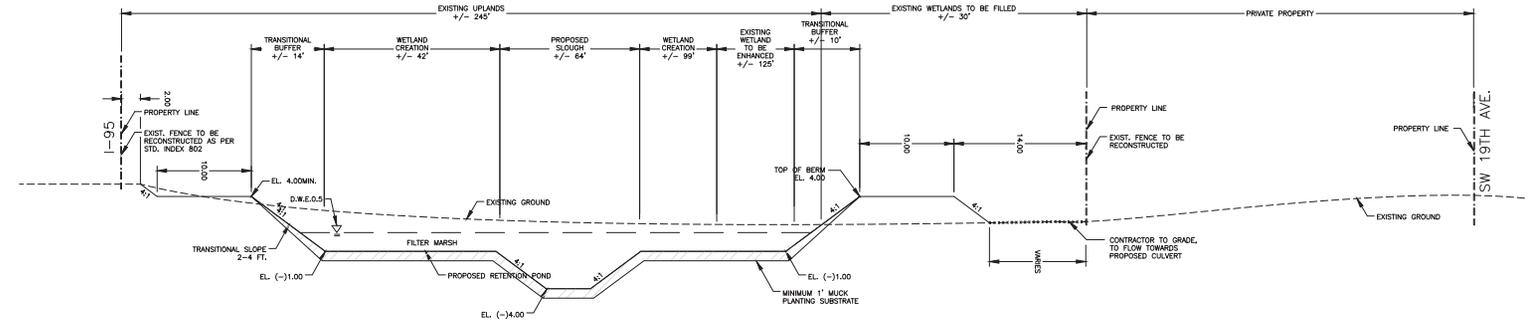
SHEET NO. C-5
 TOTAL: 40
 CAD FILE: 11419-004-SIT
 DRAWING FILE NO: 4-135-81


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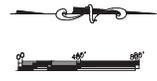


SECTION A-A



SECTION B-B

NOTE: ELEVATIONS SHOWN IN NAVD88



| | |
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| DESIGNER: PATRICK J. GIBNEY REG. NO. 48498 EXP. 07/27/2019 | DATE: 2/7/2019 |
| | DESIGNED BY: M.R./M.N. VERT 1"-2" CHECKED BY: A.G. HOR. 1"=40' FIELD BOOK: |

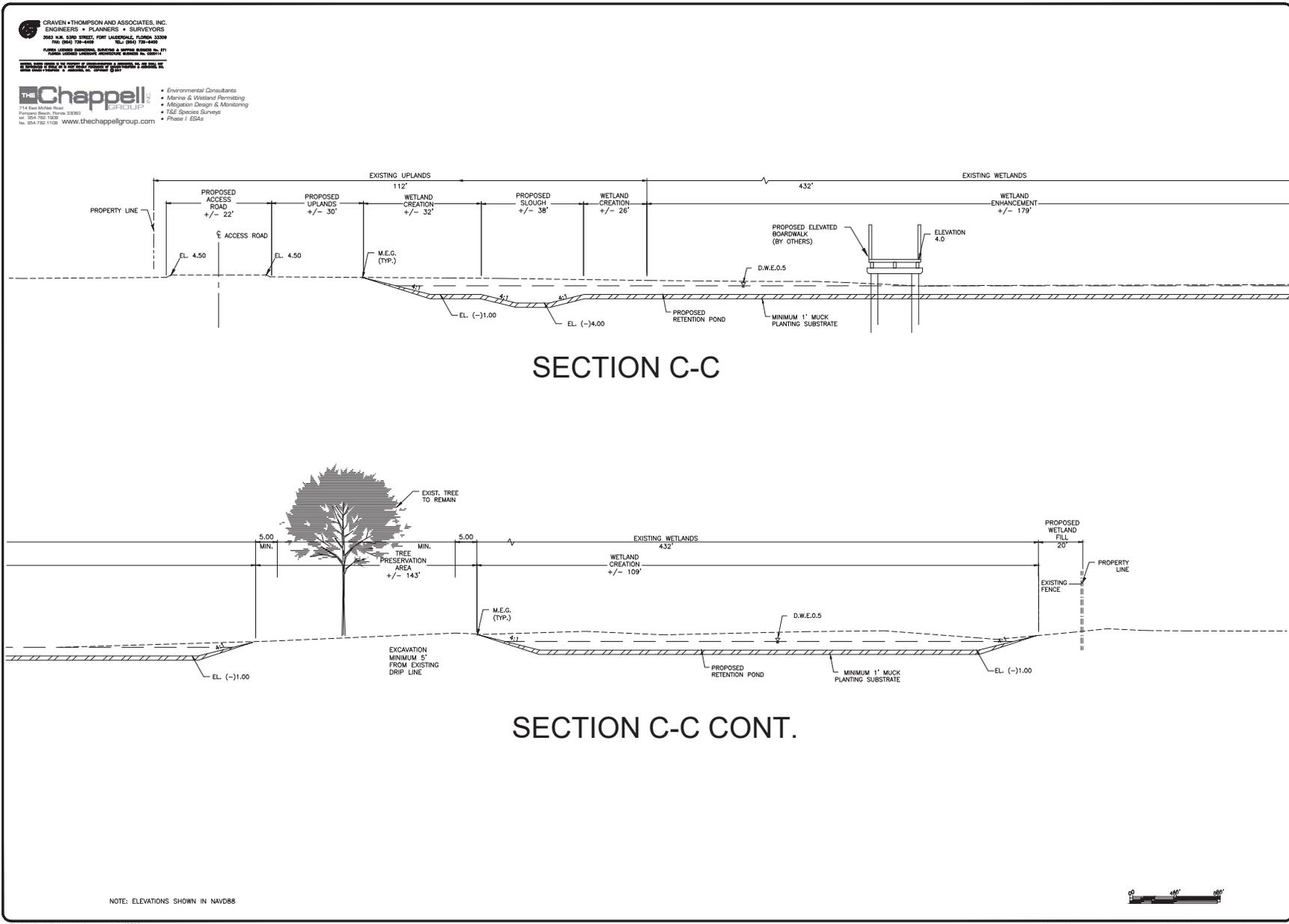
CITY OF FORT LAUDERDALE
 PUBLIC WORKS DEPARTMENT
 ENGINEERING & ARCHITECTURE

 100 North Andrews Avenue, Fort Lauderdale, Florida 33301

| NO. | DATE | BY (FWD) | DESCRIPTION |
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PROJECT # 11419
 RIVER OAKS PRESERVE
 ENVIRONMENTAL
 SITE PLAN
 SECTIONS A & B

| | |
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| SHEET NO. | C-6 |
| TOTAL: | 40 |
| CAD FILE: | 11419-004-SITE |
| DRAWING FILE NO. | 4-135-81 |



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 FLORIDA LICENSED PROFESSIONAL ARCHITECTURE LICENSE NO. 30871
 1000 WEST PALM BLVD., SUITE 100, WEST PALM BEACH, FLORIDA 33411

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 714 East Minkler Road
 Fort Lauderdale, Florida 33303
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 Fax: 954-782-1128 www.thechappellgroup.com

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- Phase I ESAs

| | |
|---|---------------------------|
| DESIGNER: PATRICK J. GIBNEY REG. NO. 49498 ISS. 07/27/2019 | DATE: 2/7/2019 |
| DRAWN BY: L.C./M.N. | DESIGNED BY: M.R./M.N. |
| CHECKED BY: A.G. | FIELD BOOK: |
| SCALE: VERT 1"=2' HOR 1"=40' | |

CITY OF FORT LAUDERDALE
 PUBLIC WORKS DEPARTMENT
 ENGINEERING & ARCHITECTURE

100 North Andrews Avenue, Fort Lauderdale, Florida 33301

| NO. | DATE | BY (FWD) | DESCRIPTION |
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PROJECT # 11419
RIVER OAKS PRESERVE
ENVIRONMENTAL
SITE PLAN
SECTION C

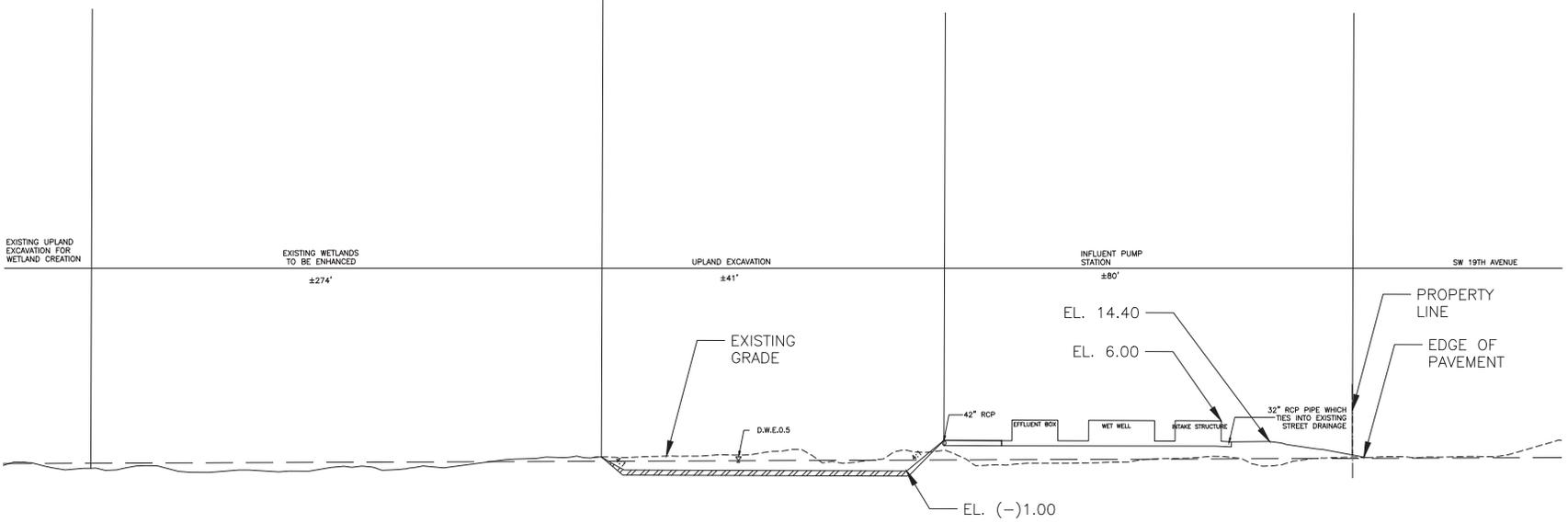
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| SHEET NO. C-7 | TOTAL: 40 |
| CAD FILE: 11419-004-SITE | DRAWING FILE NO. 4-135-81 |

Plot Date: 2/6/2019 9:47 AM PLOT FILE: 4-135-81.dwg PLOT SCALE: 1"=40' PLOT SHEET: 7 of 10 PLOT DATE: 2/6/2019 9:47 AM PLOT FILE: 4-135-81.dwg PLOT SCALE: 1"=40' PLOT SHEET: 7 of 10

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 1100 UNIVERSITY BLVD., SUITE 200, FORT LAUDERDALE, FLORIDA 33304
 TEL: (954) 732-1122 FAX: (954) 732-1122

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- Mitigation Design & Monitoring
- T&E Species Surveys
- Phase I ESA's



SECTION E-E

NOTE: ELEVATIONS SHOWN IN NAVD88



| | |
|--|---------------------------|
| DESIGNER: PATRICK J. GIBNEY REG. NO. 49499 DATE: 07/27/2019 | DATE: 2/7/2019 |
| DRAWN BY: L.C./M.N. | DESIGNED BY: M.R./M.N. |
| CHECKED BY: A.G. | FIELD BOOK: |
| SCALE: VERT 1"=2' | SCALE: HOR 1"=40' |

CITY OF FORT LAUDERDALE
 PUBLIC WORKS DEPARTMENT
 ENGINEERING & ARCHITECTURE

 100 North Andrews Avenue, Fort Lauderdale, Florida 33301

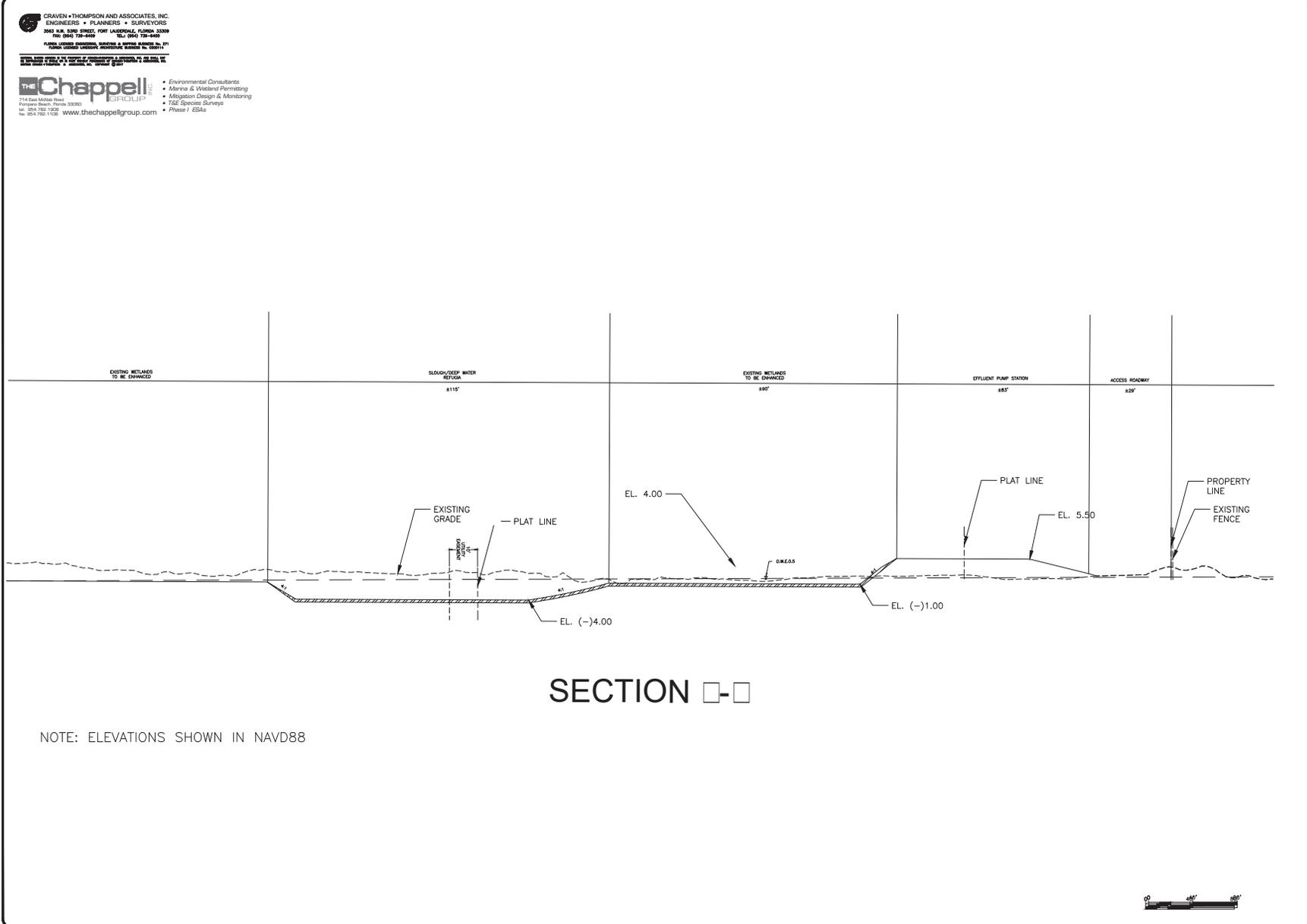
| NO. | DATE | BY (FNU) | DESCRIPTION |
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PROJECT # 11419
 RIVER OAKS PRESERVE
 ENVIRONMENTAL
 SITE PLAN
 SECTION E

| |
|------------------------------|
| SHEET NO. C-9 |
| TOTAL: 40 |
| CAD FILE: 11419-004-SITE |
| DRAWING FILE NO. 4-135-81 |

City of Fort Lauderdale

Bid 12242-493



SECTION □-□

NOTE: ELEVATIONS SHOWN IN NAVD88

| | |
|-------------|---|
| PROJ. NO. | 11419 |
| PROJ. NAME | RIVER OAKS PRESERVE ENVIRONMENTAL SITE PLAN |
| DATE | 2/7/2019 |
| DESIGNED BY | L.C./M.N. |
| CHECKED BY | M.R./M.N. |
| SCALE | HOR. 1"=2' VERT. 1"=4' |
| FIELD BOOK | |

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE

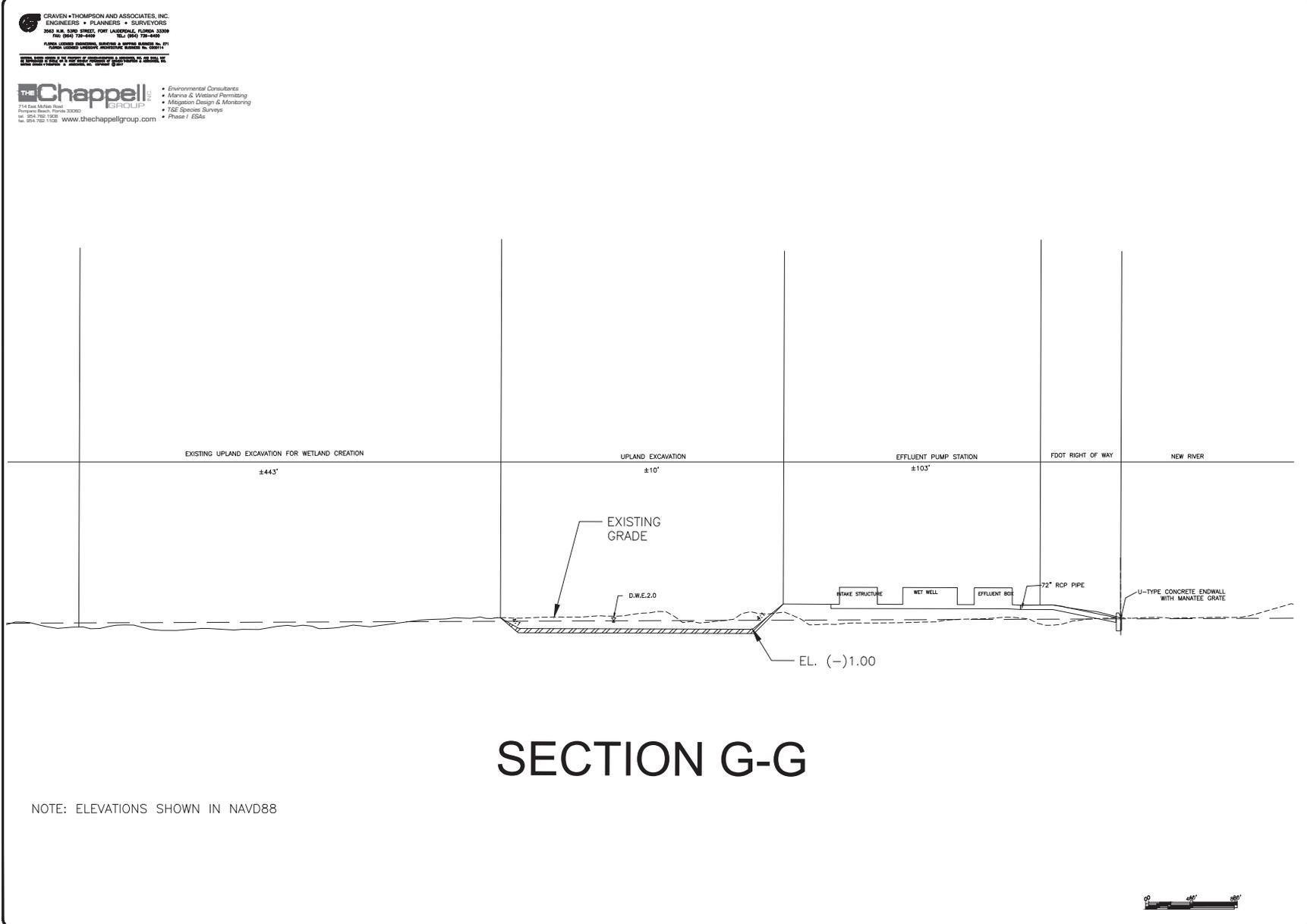
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

| NO. | DATE | BY (FNU) | DESCRIPTION |
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PROJECT # 11419
RIVER OAKS PRESERVE
ENVIRONMENTAL
SITE PLAN
SECTION F

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| SHEET NO. | C-10 |
| TOTAL | 40 |
| CAD FILE | 11419-004-SITE |
| DRAWING FILE NO. | 4-135-81 |

PLT DATE: 2/6/2019 9:48 AM EC: jlllll File = S:\DWG\114-004\001 River Oaks\TO Plans\Bld Site\Bld Site (2-7-19).dwg Saved by: jlllll Date: 2/9/2019 9:13 AM



SECTION G-G

NOTE: ELEVATIONS SHOWN IN NAVD88



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| PROJ. NO. | 11419 |
| PROJ. NAME | RIVER OAKS PRESERVE ENVIRONMENTAL SITE PLAN |
| DATE | 2/7/2019 |
| DESIGNED BY | PAUL J. GIBNEY |
| CHECKED BY | PATRICK J. GIBNEY |
| SCALE | VERT 1"=2' HOR 1"=40' |
| FIELD BOOK | |

CITY OF FORT LAUDERDALE
 PUBLIC WORKS DEPARTMENT
 ENGINEERING & ARCHITECTURE

 100 North Andrews Avenue, Fort Lauderdale, Florida 33301

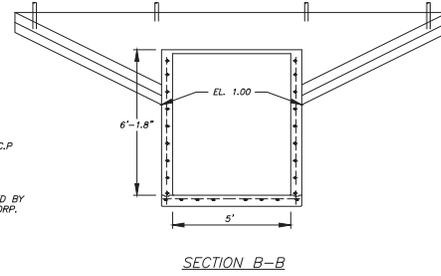
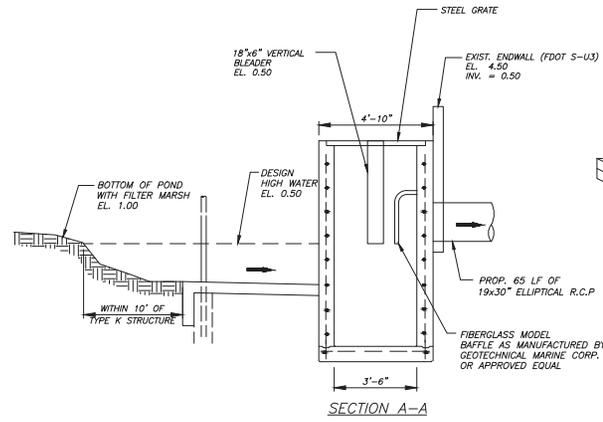
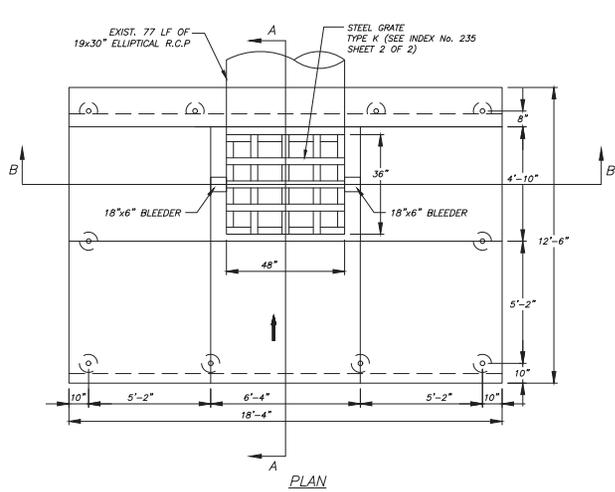
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PROJECT # 11419
RIVER OAKS PRESERVE
ENVIRONMENTAL
SITE PLAN
SECTION G

| | |
|-------------------------|----------------|
| SHEET NO. | C-11 |
| TOTAL | 40 |
| CAD FILE: | 11419-004-SITE |
| DRAWING FILE NO. | 4-135-81 |

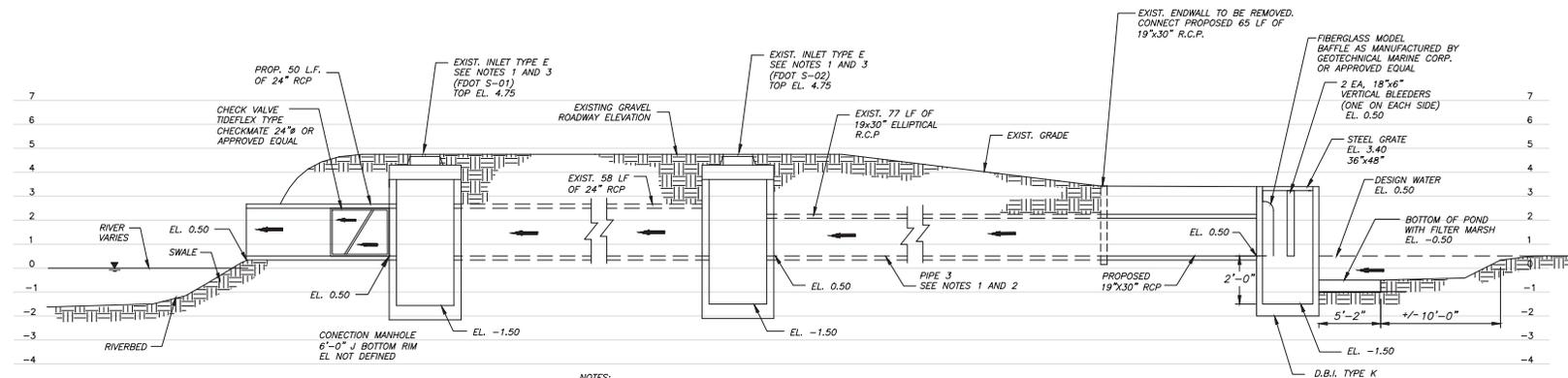
City of Fort Lauderdale

Bid 12242-493



NOTE:
1 ALL ELEVATIONS ON THE PLANS ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988.

**DITCH BOTTOM INLET TYPE K
FDOT INDEX 235**



NOTES:
1. DETAIL SHOWS PROPOSED INVERT ELEVATIONS TO ADJUST EXISTING SYSTEM TO PROPOSED DRAINAGE CONDITIONS IN THE PRESERVE AREA.
2. CONTRACTOR TO MODIFY PIPE AS SHOWN.
3. CONTRACTOR TO MODIFY STRUCTURE TO ACCOMMODATE PROPOSED PIPE INVERTS.
4. ALL EXISTING PIPES SIZES AND DRAINAGE STRUCTURES WERE TAKEN FROM THE SURVEY BY CRAVEN THOMPSON & ASSOCIATES, INC.

POND WITH FILTER AND MARSH - OUTFALL DETAIL

CRAVEN • THOMPSON AND ASSOCIATES, INC.
ENGINEERS • PLANNERS • SURVEYORS
3563 N.W. 53RD STREET, FORT LAUDERDALE, FLORIDA 33309
TEL: (954) 338-4800
FLORIDA LICENSE (ENGINEERING, SURVEYING & SURVEYING) NO. 271
FLORIDA LICENSE (ENGINEERING ARCHITECTURE) NO. 000101

THE Chappell GROUP
714 East McKee Road
Pompano Beach, Florida 33060
Tel: 954-782-1000
Fax: 954-782-1000
www.thechappellgroup.com

- Environmental Consultants
- Marina & Wetland Permitting
- Mitigation Design & Monitoring
- F&E Species Surveys
- Phase I ESAs

DESIGNED BY: PATRICK J. CIBNEY
DATE: 07/26/2018

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

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
City of Fort Lauderdale
100 Andrews Avenue, Fort Lauderdale, Florida 33301

| NO. | DATE | BY | CHKD | DESCRIPTION |
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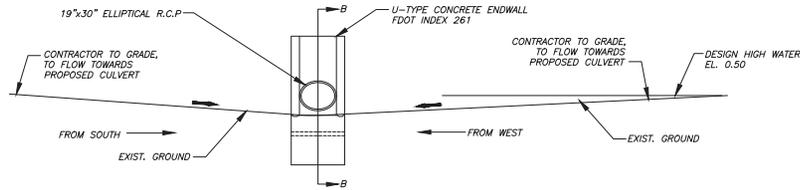
PROJECT # 1419
RIVER OAKS PRESERVE
CIVIL
PROPOSED STORMWATER DRAINAGE DETAILS

SHEET NO. C-12
TOTAL: 40
CAD FILE: 11419-04-S01
DRAWING FILE NO: 4-135-81

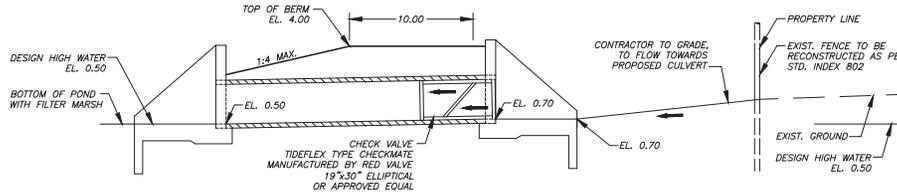
CRAVEN + THOMPSON AND ASSOCIATES, INC.
 ENGINEERS • PLANNERS • SURVEYORS
 2561 N.W. 53RD STREET, FORT LAUDERDALE, FLORIDA 33309
 FAX: (954) 720-4400 TEL: (954) 720-4400
 FLORIDA LICENSE (ENGINEERING, SURVEYING & MARINE SCIENCE) NO. 271
 OTHER LICENSES (ENGINEERING, ARCHITECTURE) SUBJECT TO CHECK
NOTES: DESIGN SUBJECT IS THE PROPERTY OF FORT LAUDERDALE & PRESERVE, INC. THE SEAL AND SIGNATURE OF AN ENGINEER OR ARCHITECT ARE NECESSARY TO AUTHORIZE THE USE OF THIS DRAWING FOR ANY OTHER PROJECT.

Chappell GROUP INC.
 714 East Main Street
 Fort Lauderdale, Florida 33301
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 Fax: 954.782.1500
 www.thechappellgroup.com

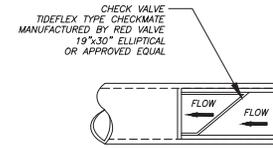
- Environmental Consultants
- Marine & Wetland Permitting
- Mitigation Design & Monitoring
- I&E Species Surveys
- Phase I ESAs



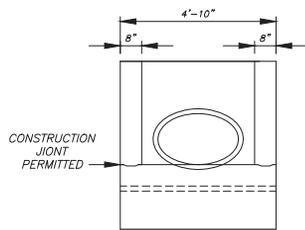
OUTFALL DETAIL - OFFSITE PROPERTY



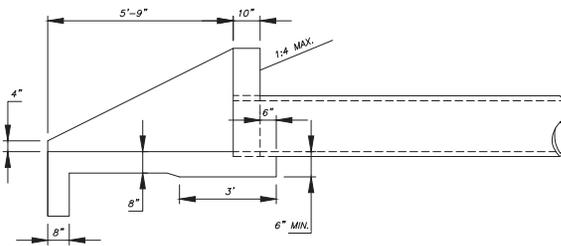
SECTION B-B



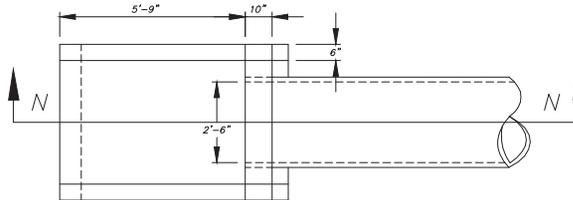
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END VIEW



SECTION N-N



PLAN

NOTE:
 1 ALL ELEVATIONS ON THE PLANS ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988.

PLOT DATE: 1/16/2019 2:34 PM BY: DCHN XREFS=

File = R:\Engineering\2012\12-0047-001-03-River Oaks Preserve\Drawings\11419-DET-10 Saved by DChn Save date = 1/16/2019 11:23 AM

| | |
|---|--|
| ENGINEERS: PATRICK J. GIBNEY DATE: 10/29/2018 | DATE: 10/20/2018 |
| DESIGNED BY: W.R./M.H. VEPT 1'-2" HOR 1'-40" | DRAWN BY: L.C./M.N. A.G. FIELD BOOK |

CITY OF FORT LAUDERDALE
 PUBLIC WORKS DEPARTMENT
 ENGINEERING & ARCHITECTURE
 1000 South Andrews Avenue, Fort Lauderdale, Florida 33301

| NO. | DATE | BY | DESCRIPTION |
|-----|------|----|-------------|
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PROJECT # 11419
 RIVER OAKS PRESERVE
 CIVIL
 PROPOSED STORMWATER DRAINAGE DETAILS

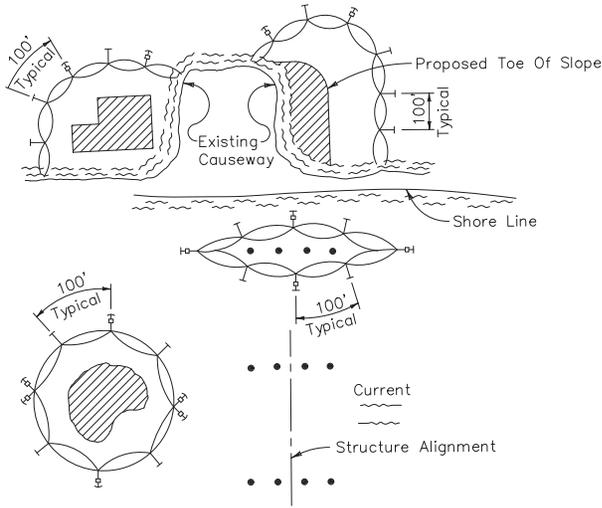
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|------------------------|---------------------------|
| SHEET NO. C-13 | TOTAL: 40 |
| CAD FILE: 11419-004-SI | DRAWING FILE NO. 4-135-81 |

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 ENGINEERS • PLANNERS • SURVEYORS
 3345 N.W. 52ND STREET, FORT LAUDERDALE, FLORIDA 33309
 TEL: (954) 726-4000 FAX: (954) 726-4000
 FORTY EIGHT STATES, SEVERAL COUNTRIES & AFRICA SERVED BY 27
 FORTY EIGHT STATES, SEVERAL COUNTRIES & AFRICA SERVED BY 27

The Chappell GROUP
 714 East Main Road
 Chesapeake Beach, Florida 33500
 TEL: (850) 762-1833 FAX: (850) 762-1834
 WWW.THECHAPPELLGROUP.COM

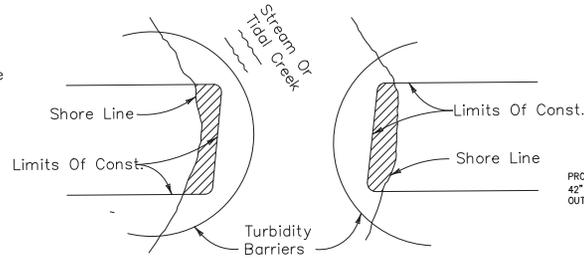
- Environmental Consultants
- Marina & Wetland Permitting
- Mitigation Design & Monitoring
- T&E Species Surveys
- Phase I ES&C

TURBIDITY BARRIER APPLICATIONS



LEGEND

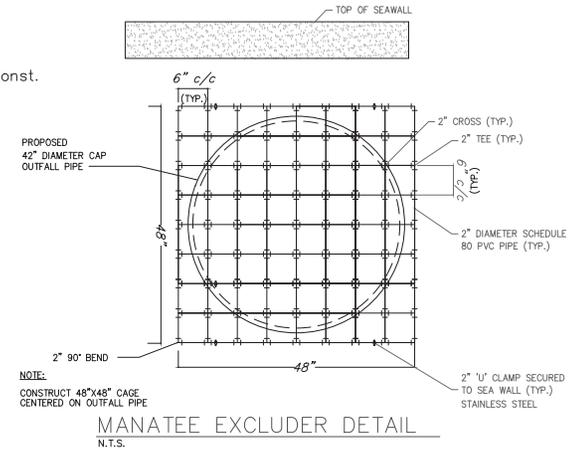
- Pile Locations
- ▨ Dredge Or Fill Area
- Mooring Buoy w/Anchor
- Anchor
- Barrier Movement Due To Current Action



Note:
 Turbidity barriers for flowing streams and tidal creeks may be either floating, or staked types or any combinations of types that will suit site conditions and meet erosion control and water quality requirements. The barrier type(s) will be at the Contractors option unless otherwise specified in the plans, however payment will be under the pay item(s) established in the plans for Floating Turbidity Barrier and/or Staked Turbidity Barrier. Posts in staked turbidity barriers to be installed in vertical position unless otherwise directed by the Engineer.

NOTES:

1. Turbidity barriers are to be used in all permanent bodies of water regardless of water depth.
2. Number and spacing of anchors dependent on current velocities.
3. Deployment of barrier around pile locations may vary to accommodate construction operations.
4. Navigation may require segmenting barrier during construction operations.
5. For additional information see Section 104 of the Standard Specifications.



| | |
|-------------|------------|
| PROJECT NO. | 11419 |
| DATE | 10/20/2018 |
| DESIGNED BY | LC/AN |
| DRAWN BY | LC/AN |
| CHECKED BY | LC/AN |
| DATE | 10/20/2018 |

CITY OF FORT LAUDERDALE
 PUBLIC WORKS DEPARTMENT
 ENGINEERING & ARCHITECTURE
 100 North Andrews Avenue, Fort Lauderdale, Florida 33301

| NO. | DATE | BY | REVISIONS | DISCREPANCY |
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PROJECT # 11419
 RIVER OAKS PRESERVE
 ENVIRONMENTAL
 SITE PLAN
 EROSION CONTROL DETAILS

| | |
|------------------|----------------|
| SHEET NO. | C-14 |
| TOTAL | 40 |
| CAD FILE: | 11419-004-SITE |
| DRAWING FILE NO. | 4-135-81 |

DEMOLITION NOTES:

GENERAL DEMOLITION SPECIFICATIONS:

1. THE LOCATIONS, ELEVATIONS AND DIMENSIONS OF ALL EXISTING UTILITIES SHOWN ON THE DRAWINGS HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY.
2. PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITY, THE CONTRACTOR SHALL VERIFY THE LOCATION, ELEVATIONS, AND DIMENSIONS OF ALL EXISTING UTILITIES AND OTHER FEATURES AFFECTING THE WORK. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY DISCREPANCIES THAT MIGHT AFFECT THE WORK.
3. CHAPTER 553.85(1) OF THE FLORIDA STATUTES REQUIRES THAT AN EXCAVATOR NOTIFY ALL UTILITIES A MINIMUM OF 180 DAYS (2) WORKING DAYS PRIOR TO EXCAVATING.
4. THE CONTRACTOR SHALL LOCATE ALL UNDERGROUND UTILITIES BEFORE EXCAVATION.
5. THE CONTRACTOR SHALL FURNISH ALL MATERIALS, LABOR, SUPERVISION, AND EQUIPMENT REQUIRED FOR THE ORDERLY DEMOLITION AND REMOVAL OF EXISTING STRUCTURES, PAVEMENT AND UTILITIES AS SHOWN ON THE DRAWINGS AND DESCRIBED HEREIN.
6. THE CONTRACTOR IS REQUIRED TO FAMILIARIZE HIMSELF WITH THE STRUCTURES TO BE DEMOLISHED.
7. THE FOLLOWING LIST OF STRUCTURES REQUIRING DEMOLITION IS INCLUDED FOR THE CONTRACTOR'S CONVENIENCE ONLY. THE DRAWINGS INDICATE THE SCOPE OF DEMOLITION WHERE DEMOLITION IS REQUIRED.
 - 7.1. DEMOLITION AND REMOVAL OF A 9" MIN x 18" TRIP OF EXISTING ON-SITE ASPHALT, CONCRETE AND CURBING AROUND THE PERIMETER OF THE EXISTING STRUCTURES AND UTILITIES BEING DEMOLISHED.
 - 7.2. REMOVAL OF EXISTING ON-SITE ABOVEGROUND AND UNDERGROUND UTILITIES, INCLUDING REMOVAL OR PLUGGING OF EXISTING UTILITIES AS SHOWN ON PLANS.
8. PRIOR TO REMOVAL OF ANY UNDERGROUND TANK AND OTHER COMPONENT, CONTRACTOR MUST COMPLETELY DRAIN THE SYSTEMS TO AN APPROVED SANITATION TANK FOR DISPOSAL TO AN APPROVED LOCATION, AS REQUIRED BY DISPOSAL PERMIT.
9. PROTECT ALL UTILITIES, UNLESS OTHERWISE NOTED.
10. ALL THE CONCRETE AND PAVEMENT TO BE REMOVED MUST BE SAW CUT CLEAN PRIOR TO REMOVAL.
11. WET DOWN MASONRY WALLS AND DEBRIS DURING DEMOLITION AND LOADING OPERATIONS TO PREVENT THE SPREAD OF DUST (AS APPLICABLE TO PROJECT).
12. ALL EXISTING STRUCTURES, PAVEMENTS, SLABS, FOUNDATIONS, STEPS AND OTHER ON-SITE EXISTING FEATURES INDICATED ON THE DRAWINGS TO BE REMOVED SHALL BE DEMOLISHED AND REMOVED BY THE CONTRACTOR (AS APPLICABLE TO PROJECT).

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING DETAILS
18 North Andrews Avenue, Fort Lauderdale, Florida 33301

DEMOLITION NOTES
SHEET 1

DATE: 09/20/2019
GNRL 009

DEMOLITION PERMITTING:

13. ALL EXISTING SEWERS, PIPING AND UTILITIES SHOWN ON THE DRAWINGS ARE NOT TO BE INTERPRETED AS THE EXACT LOCATION, OR AS THE ONLY OBSTACLES THAT MAY OCCUR ON THE SITE. THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND PROCEED WITH CAUTION AROUND ANY ANTICIPATED FEATURES. GIVE NOTICE TO ALL UTILITY COMPANIES REGARDING DESTRUCTION AND REMOVAL OF ALL SERVICE LINES AND CAP ALL LINES BEFORE PROCEEDING WITH THE WORK.
14. THE CONTRACTOR SHALL COORDINATE WITH THE APPROPRIATE UTILITY COMPANY PRIOR TO REMOVAL OR RELOCATION OF ANY ELECTRICAL, TELEPHONE, CABLE AND/OR GAS LINES. SUFFICIENT TIME SHALL BE PROVIDED FOR RELOCATION AND CLOSE COORDINATION WITH THE UTILITY COMPANY TO PROVIDE A SMOOTH TRANSITION IN UTILITY SERVICE.
15. CONTRACTOR MUST STOP OPERATION AND NOTIFY THE OWNER/ENGINEER FOR PROPER DIRECTION IF AN ENVIRONMENTAL OR HEALTH RELATED CONTAMINANT IS ENCOUNTERED DURING THE DEMOLITION/EXCAVATION PROCESS.
16. FILL FOR LOWER LEVELS OF DEMOLISHED STRUCTURES MAY INCLUDE CONCRETE OR MASONRY RUBBLE RESULTING FROM DEMOLITION, SUBJECT TO THE ENGINEER'S/ARCHITECT'S APPROVAL. RUBBLE SHALL PASS THROUGH A THREE-INCH RING.
17. REMOVE AND LEGALLY DISPOSE OF ALL OTHER RUBBISH, RUBBLE, AND DEBRIS. COMPLY WITH ALL APPLICABLE LAWS AND REGULATIONS GOVERNING DISPOSAL OF WASTES AND DEBRIS.
18. MAINTAIN ACCESS TO SURROUNDING PROPERTIES AND BUILDINGS.
19. PRIOR TO DEMOLITION OCCURRING ALL EROSION CONTROL DEVICES ARE TO BE INSTALLED.
20. ALL TRAFFIC SIGNS OUTSIDE THE DEMOLITION AREA ARE TO REMAIN UNLESS OTHERWISE SPECIFIED.
21. ANY MUCK ENCOUNTERED UNDER PROPOSED STRUCTURES SHALL BE REMOVED TO FIVE-FEET BEYOND THE FOOTPRINT OF THAT STRUCTURE. BACKFILL WITH APPROVED FILL MATERIAL SATISFYING ALL COMPACTION REQUIREMENTS.
22. ALL EXISTING UTILITIES WITHIN THE DEMOLITION SITE AREA SHALL BE ADJUSTED, REMOVED OR RELOCATED AT THE CONTRACTOR'S EXPENSE. WORK SHALL BE COORDINATED BY THE CONTRACTOR DIRECTLY WITH THE APPROPRIATE UTILITY COMPANY. ALL EXPENSES SHALL BE INCLUDED IN THE CONTRACTOR'S BID.
23. ALL TRASH, DEBRIS AND OTHER MATERIAL REMOVED FROM THE SITE SHALL BE PROPERLY DISPOSED OF BY THE CONTRACTOR IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS.

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING DETAILS
18 North Andrews Avenue, Fort Lauderdale, Florida 33301

DEMOLITION NOTES
SHEET 2

DATE: 09/20/2019
GNRL 009

PRE-DEMOLITION RESPONSIBILITIES:

1. UPON RECEIPT OF NOTICE OF AWARD, THE CONTRACTOR SHALL ARRANGE A PRE-DEMOLITION CONFERENCE TO INCLUDE ALL INVOLVED GOVERNMENTAL AGENCIES, ALL AFFECTED UTILITY OWNERS, THE OWNER, THE ENGINEER AND THE CONTRACTOR.
2. PRIOR TO DEMOLITION, THE CONTRACTOR SHALL BE REQUIRED TO SUBMIT A DEMOLITION SCHEDULE DEPICTING EACH PHASE OF THE WORK.
3. PRIOR TO DEMOLITION, CONTRACTOR TO PROVIDE FOR THE OWNER A LISTING OF THE FACILITIES THE CONTRACTOR SHALL UTILIZE FOR RECYCLING AND DISPOSAL OF SPECIFIC MATERIALS. CONTRACTOR TO INDICATE THE MATERIALS INTENDED FOR RECYCLING AND THE MATERIALS INTENDED FOR DISPOSAL FOR OWNERS APPROVAL.
4. PRIOR TO DEMOLITION, CONTRACTOR TO PROVIDE THE OWNER SKETCHES SHOWING PROPOSED HAULING ROUTES TO RECYCLING AND DISPOSAL FACILITIES FOR APPROVAL.
5. PRIOR TO DEMOLITION, THE CONTRACTOR SHALL VERIFY THE SIZE, LOCATION, ELEVATION, AND MATERIAL OF ALL EXISTING UTILITIES WITHIN THE AREA OF DEMOLITION.
6. EXISTING UTILITY LOCATIONS SHOWN ON THESE PLANS ARE APPROXIMATE. THE CITY AND THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF EXISTING UTILITIES SHOWN OR FOR ANY EXISTING UTILITIES NOT SHOWN.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO ANY EXISTING UTILITIES FOR WHICH IT FAILS TO REQUEST LOCATIONS FROM THE UTILITY OWNER. THE CONTRACTOR IS RESPONSIBLE AS WELL FOR DAMAGE TO ANY EXISTING UTILITIES WHICH ARE PROPERLY LOCATED.
8. THE LOCATIONS OF EXISTING UTILITIES AND STORM DRAINAGE SHOWN ON THE PLANS HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. ENGINEER ASSUMES NO RESPONSIBILITY FOR INACCURACY.
9. PRIOR TO THE START OF ANY DEMOLITION ACTIVITY, THE CONTRACTOR SHALL FIELD LOCATE EXISTING UNDERGROUND UTILITIES WITH THE UTILITY OWNERS.
10. THE CONTRACTOR IS RESPONSIBLE FOR RELOCATIONS OF THE VARIOUS EXISTING UTILITIES WITH THE UTILITY OWNERS, WHICH SHALL BE DONE IN A TIMELY MANNER TO MINIMIZE IMPACT ON DEMOLITION SCHEDULE. ANY DELAY CAUSED BY THE CONTRACTOR BY THE RELOCATION OF UTILITIES SHALL BE INCIDENTAL TO THE CONTRACT AND NO EXTRA COMPENSATION WILL BE ALLOWED.
11. SUNSHINE STATE ONE CALL OF FLORIDA, INC. REQUIRES THE CONTRACTOR TO CALL TWO (2) FULL BUSINESS DAYS (BUT NOT MORE THAN FIVE) PRIOR TO BREAKING GROUND TO FIND OUT WHERE BURIED FACILITIES (ELECTRICAL, GAS, TELEPHONE, CABLE, WATER) ARE LOCATED.

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING DETAILS
18 North Andrews Avenue, Fort Lauderdale, Florida 33301

DEMOLITION NOTES
SHEET 3

DATE: 09/20/2019
GNRL 009

DEMOLITION SAFETY:

1. ALL DEMOLITION SHALL BE DONE IN A SAFE MANNER, SPECIFICALLY, THE RULES AND REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) AND THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) SHALL BE STRICTLY OBSERVED.
2. PROVIDE ADEQUATE PROTECTION FOR PERSONS AND PROPERTY AT ALL TIMES. EXECUTE THE WORK IN A MANNER TO AVOID HAZARDS TO PERSONS AND PROPERTY AND PREVENT INTERFERENCE WITH THE USE OF AND ACCESS TO ADJACENT BUILDINGS, STREETS AND SIDEWALKS SHALL NOT BE UNNECESSARILY BLOCKED BY DEBRIS AND EQUIPMENT.
3. BUILDING MATERIALS TO BE REMOVED SHALL BE TESTED FOR ASBESTOS AND LEAD PAIN.
4. IF PETROLEUM PRODUCTS ARE FOUND WHILE DEMOLISHING, DISPOSE OF PETROLEUM WASTE IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS.

PAVEMENT DEMOLITION:

1. WHERE EXISTING PAVEMENT IS TO BE REMOVED, SAW-CUT THE SURFACING LEAVING A UNIFORM AND STRAIGHT EDGE WITH MINIMUM DISTURBANCE TO THE REMAINING ADJACENT SURFACING. IF DEMOLITION RESULTS IN RAVELING OF SAW CUT SURFACE, RE-CUT BACK FROM THE RAVELED EDGE PRIOR TO RESTORATION.
2. WHERE EXISTING PAVEMENT, CURB, GUTTER, SIDEWALK, DRIVEWAY, OR VALLEY GUTTER IS REMOVED FOR INLETS, MANHOLES, APPURTENANCES, FACILITIES OR STRUCTURES, SAID PAVEMENT, ETC., SHALL BE REPLACED WITH NEW PAVEMENT, ETC. CONTRACTOR SHALL PROVIDE ALL NECESSARY LABOR, MATERIALS, EQUIPMENT, TOOLS, SUPPLIES, AND OTHER EQUIPMENT AS REQUIRED.
3. CONTRACTOR MAY LIMIT SAW-CUT AND PAVEMENT REMOVAL TO ONLY THOSE AREAS WHERE IT IS REQUIRED AS SHOWN ON THE DRAWINGS, HOWEVER, IF ANY DAMAGE IS INCURRED ON ANY OF THE SURROUNDINGS PAVEMENT, SIDEWALK, BUILDINGS, UTILITIES, ETC., THEN THE CONTRACTOR SHALL BE RESPONSIBLE FOR ITS REMOVAL AND REPLACEMENT. REPLACEMENT PAVEMENT, SIDEWALK, ETC., SHALL BE NEW.

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING DETAILS
18 North Andrews Avenue, Fort Lauderdale, Florida 33301

DEMOLITION NOTES
SHEET 4

DATE: 09/20/2019
GNRL 009

DEMOLITION PERMITTING:

1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ANY REQUIRED PERMITS FOR DEMOLITION FROM RESPONSIBLE REGULATORY AGENCIES WHILE FULLY ADOPTING AND COMPLYING WITH ALL REQUIREMENTS PRIOR TO COMMENCING DEMOLITION WORK.
2. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE THE EXTENT OF DEMOLITION, RECYCLING OR REUSE REQUIRED TO PERFORM THE CONTRACT WORK FOR THIS PROJECT. THE CONTRACTOR SHALL CONDUCT SITE VISITS AND SHALL EXAMINE ALL THE INFORMATION WITHIN THESE DOCUMENTS. ALL DISCREPANCIES AND/OR OMISSIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO BID SUBMITTAL.
3. THE CONTRACTOR SHALL COORDINATE WITH OWNER PRIOR TO COMMENCEMENT OF ANY WORK. ACTUAL REMOVAL AND/OR RELOCATION OF ALL EXISTING LANDSCAPING WITHIN DEMOLITION AREAS TO BE CONDUCTED BY A LANDSCAPE CONTRACTOR. IT IS THE RESPONSIBILITY OF THE SITEWORK DEMOLITION CONTRACTOR TO COORDINATE DEMOLITION ACTIVITIES WITH THE LANDSCAPE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING AND PRESERVING TREES AS INDICATED ON THE PLANS. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TREE REMOVAL PERMIT OR ANY OTHER APPLICABLE PERMIT TO REMOVE, RELOCATE, OR PRESERVE EXISTING LANDSCAPE AND TREES.
4. ANY TREES FOR REMOVAL FOUND TO BE GREATER THAN OR EQUAL TO THREE (3) INCHES IN DIAMETER AT BREAST HEIGHT (DBH) SHALL REQUIRE A PERMIT WITH THE BROWARD COUNTY ENVIRONMENTAL PROTECTION AND GROWTH MANAGEMENT DEPARTMENT (BCEPMGD).
5. SHOULD REMOVAL AND/OR RELOCATION ACTIVITIES DAMAGE THE LIGHTING, STORM INLET STRUCTURES, OR OTHER STRUCTURES DESIGNATED TO BE SAVED, THEN THE CONTRACTOR SHALL PROVIDE NEW MATERIALS/STRUCTURES IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING DETAILS
18 North Andrews Avenue, Fort Lauderdale, Florida 33301

DEMOLITION NOTES
SHEET 5

DATE: 09/20/2019
GNRL 009

DEMOLITION EROSION AND SEDIMENT CONTROL NOTES:

1. THE SCHEDULING, SEQUENCING AND CONTROL MEASURES, WHICH ARE OUTLINED HEREIN, ARE SUBJECT TO THE FINAL DEFINITION BY THE CONTRACTOR WHO SHALL BE SELECTED TO PERFORM THE WORK AND SHALL BE RESPONSIBLE FOR IMPLEMENTATION AND COMPLIANCE.
2. PRIOR TO DEMOLITION, THE CONTRACTOR SHALL BE REQUIRED TO SUBMIT A DEMOLITION SCHEDULE DEPICTING EACH PHASE OF THE WORK. THE CONTRACTOR SHALL ALSO BE REQUIRED TO SUBMIT AN EROSION AND SEDIMENT CONTROL PLAN ENCOMPASSING THE PRINCIPALS AND THE REQUIREMENTS DESCRIBED HEREIN AND A SCHEDULE FOR THEIR IMPLEMENTATION AND MAINTENANCE FOR THE PROJECT DURATION.
3. DURING DEMOLITION, THE CONTRACTOR SHALL TAKE ALL REASONABLE MEASURES TO ENSURE AGAINST POLLUTING, SILTATION OR DISTURBANCE TO SUCH AN EXTENT AS TO CAUSE AN INCREASE IN TURBIDITY TO THE EXISTING DRAINAGE SYSTEMS AND ADJACENT WATER BODIES AND WETLANDS, IN COMPLIANCE WITH ALL PERMIT REQUIREMENTS RELATED TO SUCH MEASURES.
4. METHODS MAY INCLUDE TEMPORARY EROSION AND SEDIMENT CONTROLS SUCH AS SEDIMENT BASINS, SEDIMENT CHECKS, SILT BARRIERS, SILT SCREENS, TURBIDITY BARRIERS OR THE BEST MANAGEMENT PRACTICES AVAILABLE TO THE INDUSTRY.
5. EROSION AND SEDIMENT CONTROL INSTALLATIONS SHALL BE MAINTAINED THROUGHOUT THE DEMOLITION PERIOD AND UNTIL NEW VEGETATIVE GROWTH HAS BEEN ESTABLISHED.
6. THROUGHOUT THE DEMOLITION PERIOD, THE CONTRACTOR SHALL INSPECT DAILY THE EROSION AND SEDIMENT CONTROL INSTALLATIONS FOR FAILURE OR SIGNS OF FAILURE OR MALFUNCTION. REPAIR OR REPLACE THE EROSION AND SEDIMENT CONTROL INSTALLATIONS IMMEDIATELY UPON DISCOVERY OF FAILURE OR MALFUNCTION.
7. INLETS AND CATCH BASINS, EXISTING ON-SITE AND OFF-SITE, SHALL BE PROTECTED FROM SEDIMENT STORM RUNOFF.
8. THE CONTRACTOR SHALL PROMPTLY REMOVE ALL MUD, DIRT OR OTHER MATERIALS TRACKED OR SPILLED ONTO EXISTING PUBLIC ROADS AND FACILITIES DUE TO DEMOLITION.
9. DEWATERING ACTIVITIES SHALL NOT RESULT IN ANY DISCHARGE OF TURBID WATER FROM THE PROJECT SITE WITHOUT PROPER EROSION AND SEDIMENT CONTROL AND APPROVAL FROM ENGINEER.
10. PHASING OF EROSION CONTROL DEMOLITION SHALL BE RECOMMENDED AS FOLLOWS:
 - 10.1. PLACEMENT OF PERIMETER PROTECTIVE MEASURES (SILT FENCE, HAY BALES, TURBIDITY BARRIERS, ETC.) AROUND ON-SITE FEATURES TO BE RETAINED, AT POINTS OF OFF-SITE DISCHARGE AND AROUND WORK AREAS TO BE EXCAVATED OR FILLED.
 - 10.2. REROUTE RUNOFF FROM AREAS OUTSIDE OF THE DEMOLITION AREA TO MINIMIZE FLOW THROUGH AREAS TO BE DISTURBED BY DEMOLITION BERMS, SWALES AND OTHER MEANS USED FOR SUCH CONVEYANCE SHALL BE VEGETATED AND MEASURES TAKEN TO PROVIDE PROTECTION UNTIL STABILIZATION OCCURS (AS APPLICABLE TO THE PROJECT).

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DATE: 09/20/2019
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PROJECT: PATRICK J. CHERNEY
DRAWN BY: PATRICK J. CHERNEY
DISIGNED BY: PATRICK J. CHERNEY
DATE: 10/22/2019
W.R./M.A. VERT 1"=2'
CHECKED BY: M.R. 1"=40'
A.G.
FIELD BOOK:

CITY OF FORT LAUDERDALE
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PROJECT # 11419
RIVER OAKS
STORMWATER PRESERVE
CITY STANDARD DETAILS
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10.3. SELECT LOCATIONS FOR PLACEMENT OF EXCAVATED MATERIAL, WHERE SUITABLE FOR FILL OR UNSUITABLE MATERIAL, AND CONSTRUCT CONTAINMENT BERM SURROUNDING THE AREA. THE USE OF STRIPING FOR THIS PURPOSE MAY ACCELERATE BERM REVEGETATION. CONSTRUCT TEMPORARY DRAINAGE DITCHES FOR CONTAINMENT AREAS WITH SCREENS, HAY BALES, SETTLING BASINS OR OTHER MEASURES TO PREVENT SILT TRANSPORT.

10.4. SELECT / DESIGNATE ACCESS ROUTES FOR DEMOLITION EQUIPMENT AND VEHICLES AND PROVIDE PERIMETER PROTECTIVE MEASURES WHERE EXISTING TERRAIN SHALL BE SUBJECT TO DISRUPTION BY SUCH TRAFFIC.

10.5. CONSTRUCT ABOVE GROUND OR OTHER CONTAINMENT AREAS FOR DEMOLITION AREA RUNOFF. PROVIDE SCREENS, HAY BALES, ETC. TO FILTER DISCHARGE FROM THESE AREAS.

10.6. SPOIL MOUNDS SHALL NOT BE LEFT FOR MORE THAN ONE WEEK PRIOR TO REPLACEMENT UNLESS PROTECTIVE CONTAINMENT MEASURES IN THE WORK AREA ARE APPLIED.

10.7. GRASSING, SOODING, ETC. SHALL BE IN PLACE IMMEDIATELY UPON COMPLETION OF REGRADING, SWALE SLOPES AND THE CONSTRUCTED OR DISTURBED AREAS.

11. THE CONTRACTOR IS REQUIRED TO ADHERE TO THE REQUIREMENT OF THE NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES). THE CONTRACTOR SHALL INSTITUTE BEST MANAGEMENT PRACTICES (BMPs) TO ENSURE COMPLIANCE WITH THE NPDES PROGRAM AND TO MINIMIZE THE IMPACT TO PUBLIC STORMWATER FACILITIES. A NOTICE OF INTENT (NOI) SHALL BE FILED BY THE CONTRACTOR PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES.

12. THE CONTRACTOR SHALL PREPARE A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) AND MAINTAIN ALL RECORDS REQUIRED BY ITS NPDES STORMWATER PERMIT FOR ITS CONSTRUCTION ACTIVITIES.

13. PRIOR TO CONSTRUCTION, A SILT FENCE IN ACCORDANCE WITH CITY'S DETAIL SHALL BE ERRECTED AS NOTED ON PLANS. ALL PROPOSED CATCH BASINS SHALL HAVE THEIR INLETS PROTECTED BY THE INSTALLATION OF FILTER INLET INSERTS INTO THE FRAME AND GRATE. SILT FENCES AND FILTER INLET INSERTS SHALL REMAIN IN PLACE DURING THE ENTIRE DURATION OF CONSTRUCTION.

14. CONTRACTOR SHALL BRACE ALL EXISTING LANDSCAPING TO REMAIN PRIOR TO BEGINNING ANY WORK AND SHALL ENSURE ITS STABILIZATION THROUGHOUT THE ENTIRE CONSTRUCTION PROCESS. EXISTING SOIL DISTURBED BY CONSTRUCTION THAT IS NOT AFFECTED BY PROPOSED GRADING SHALL BE RESTORED TO NEW CONDITION UPON COMPLETION OF CONSTRUCTION. SLOPED SLOPES STEEPER THAN FOUR HORIZONTAL TO ONE VERTICAL SHALL BE PEGGED.

15. ALL WASTE GENERATED FROM THE CONSTRUCTION SHALL BE DISCARDED IN ACCORDANCE WITH ALL APPLICABLE STATE, LOCAL AND FEDERAL REGULATIONS. CONTRACTOR SHALL OBTAIN ALL APPLICABLE CODES AND BECOME FAMILIAR WITH STATE, LOCAL AND FEDERAL REGULATIONS PRIOR TO BEGINNING CONSTRUCTION.

16. TO ENSURE THAT OFF-SITE VEHICLE TRACKING OF SEDIMENTS AND THE GENERATION OF DUST IS MINIMIZED, CONTRACTOR SHALL PUT INTO PRACTICE THE METHODS DETAILED IN FLORIDA DEPARTMENT OF TRANSPORTATION INDEX 106 (2010 DESIGN STANDARDS) AND BMPs.

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17. DUST GENERATED FROM CONSTRUCTION SHALL BE MINIMIZED BY DAILY WATERING OF THE SITE.

18. AT ANY TIME DURING CONSTRUCTION THAT THE SILT FENCING IS DISTURBED, THE SILT FENCING SHALL BE RESTORED TO ITS ORIGINAL STATE WITHIN 24 HOURS. AT NO TIME DURING CONSTRUCTION SHALL WORK BE PERFORMED WITHOUT THE INTEGRITY OF THE SILT FENCING SECURED.

19. A QUALIFIED INSPECTOR, PROVIDED BY THE CONTRACTOR, SHALL INSPECT ALL POINTS OF DISCHARGE INTO NEARBY SURFACE WATER. THE INSPECTION SHALL OCCUR AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM THAT IS 0.5 INCHES OR GREATER. INSPECTION INCLUDES THE WRITTEN RECORDING OF THE CONDITION OF ALL DISCHARGE POINTS, INTEGRITY OF SILT FENCING, DAILY DUST CONTROL MEASURES, VEHICULAR TRAFFIC AND CONSTRUCTION MATERIAL STORAGE AND DISPOSAL. WRITTEN RECORD OF ALL INSPECTIONS SHALL BE STORED BY THE CONTRACTOR.

20. THE INSPECTION REPORT SHALL INCLUDE, BUT IS NOT LIMITED TO, THE FOLLOWING INFORMATION: NAME AND QUALIFICATION OF PERSONNEL MAKING THE INSPECTION, DATE OF INSPECTION, RAINFALL DATE, MAJOR OBSERVATIONS RELATING TO THE SWPPP, ACTIONS TAKEN BY CONTRACTOR AND ANY INCIDENT OF NONCOMPLIANCE WITH PERMIT. WHERE AN INSPECTION DOES NOT IDENTIFY ANY INCIDENT OF NONCOMPLIANCE, THE REPORT SHALL CONTAIN A CERTIFICATION THAT THE FACILITY IS IN COMPLIANCE WITH THE SWPPP AND THE PERMIT.

21. THE CONTRACTOR SHALL RETAIN A COPY OF THE SWPPP AND ALL REPORTS, RECORDS AND DOCUMENTATION REQUIRED BY THE PERMIT AT THE CONSTRUCTION SITE, OR AN APPROPRIATE ALTERNATIVE LOCATION AS SPECIFIED IN THE NOTICE OF INTENT, FROM THE DATE OF PROJECT INITIATION TO THE DATE OF FINAL STABILIZATION.

22. THE CONTRACTOR SHALL RETAIN THE SWPPP, NOI AND ALL RECORDS ASSOCIATED THEREWITH FOR A PERIOD OF AT LEAST THREE (3) YEARS FROM THE DATE THAT THE SITE IS FINALLY STABILIZED.

23. SEE LANDSCAPE PLANS FOR TREE REMOVAL AND LANDSCAPE DEMOLITION.

24. CONTRACTOR SHALL COORDINATE THROUGH CITY'S CONSTRUCTION DIVISION AND CITY'S PARKS DEPARTMENT ON HOW TO STOCK AND RE-USE EXCAVATED SOIL FROM SITE (AS APPLICABLE TO THE PROJECT).

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INTERRUPTION OF EXISTING UTILITIES:

1. ANY DEMOLITION WORK THAT REQUIRES INTERRUPTION OF SERVICE TO ANY CUSTOMER SHALL BE DONE SO WITH A MINIMUM OF SEVENTY-TWO (72) HOUR WRITTEN NOTICE TO, AND WRITTEN APPROVAL BY, THE APPROPRIATE UTILITY COMPANY.

2. THE CONTRACTOR SHALL ARRANGE A MEETING WITH THE LOCAL JURISDICTIONAL AGENCIES AND OTHER GOVERNING AGENCIES, AND OTHER APPLICABLE UTILITIES PRIOR TO SCHEDULING THE SHUT DOWN TO ASSESS THE SCOPE OF WORK.

3. ALL SYSTEM SHUT DOWNS SHALL BE SCHEDULED BY THE CONTRACTOR AT SUCH TIME THAT SYSTEM DEMAND IS LOW. THIS GENERALLY REQUIRES NIGHT TIME WORK BY THE CONTRACTOR AND REQUIRES FULL-TIME INSPECTION BY A REPRESENTATIVE OF THE UTILITY. ALL COST FOR OVERTIME WORK BY THE REPRESENTATIVE OF THE UTILITY SHALL BE BORNE BY THE CONTRACTOR.

4. EACH CUSTOMER AFFECTED BY THE SHUT-DOWN SHALL BE PROVIDED, MINIMUM, FORTY-EIGHT (48) HOURS WRITTEN NOTIFICATION BY THE CONTRACTOR.

TEMPORARY DEMOLITION FACILITIES:

1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE OR SUPPLY TEMPORARY WATER SERVICE, SANITARY FACILITIES AND ELECTRICITY TO ITS EMPLOYEES AND SUBCONTRACTORS FOR THEIR USE DURING DEMOLITION.

2. MAINTENANCE OF TRAFFIC (MOT) IN THE PUBLIC RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AND FLORIDA DEPARTMENT OF TRANSPORTATION STANDARDS.

3. ALL OPEN TRENCHES AND HOLES ADJACENT TO ROADWAYS OR WALKWAYS SHALL BE PROPERLY MARKED AND BARRICADED TO ASSURE THE SAFETY OF BOTH VEHICULAR AND PEDESTRIAN TRAFFIC.

4. NO TRENCHES OR HOLES NEAR WALKWAYS OR IN ROADWAYS OR THEIR SHOULDERS ARE TO BE LEFT OPEN DURING NIGHT-TIME HOURS WITHOUT EXPRESS WRITTEN PERMISSION OF THE CITY OR RESPECTIVE GOVERNING AGENCY.

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181 North Andrews Avenue, Fort Lauderdale, Florida 33304

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• Phase I ESA

DATE: 10/20/2019
DRAWN BY: J. GIBNEY
DISIGNED BY: J. GIBNEY
W.R./M.A.: J. GIBNEY
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A.G.:
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CITY OF FORT LAUDERDALE
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Fort Lauderdale, Florida 33301

WASTE MANAGEMENT PLAN:

1. IMPLEMENT A WASTE MANAGEMENT PLAN FOR APPROVAL BY THE OWNER. PROVIDE HANDLING, CONTAINERS, STORAGE, SIGNAGE, TRANSPORTATION AND OTHER ITEMS AS NEEDED TO IMPLEMENT THE WASTE MANAGEMENT PLAN DURING THE ENTIRE DURATION OF THE CONTRACT.

2. DESIGNATE A WASTE MANAGEMENT COORDINATOR TO BE RESPONSIBLE FOR IMPLEMENTING, MONITORING AND REPORTING STATUS OF WASTE MANAGEMENT WORK PLAN. COORDINATOR SHALL BE PRESENT AT PROJECT SITE FULL-TIME FOR DURATION OF PROJECT.

3. TRAIN WORKERS, SUBCONTRACTORS AND SUPPLIERS ON PROPER WASTE MANAGEMENT PROCEDURES, AS APPROPRIATE FOR THE WORK AT THE PROJECT SITE.

4. DISTRIBUTE A WASTE MANAGEMENT PLAN BEFORE WORK BEGINS. REVIEW PLAN PROCEDURES AND LOCATION ESTABLISHED FOR SALVAGE, RECYCLING AND DISPOSAL.

RECYCLING DEMOLITION WASTE:

1. SEPARATE RECYCLABLE WASTE FROM OTHER WASTE MATERIALS, TRASH AND DEBRIS. SEPARATE RECYCLABLE WASTE BY TYPE AT THE PROJECT SITE TO THE MAXIMUM EXTENT PRACTICAL.

2. PROVIDE APPROPRIATELY MARKED CONTAINERS OR BINS FOR CONTROLLING RECYCLABLE WASTE UNTIL THEY ARE REMOVED FROM THE PROJECT SITE. INCLUDE A LIST OF ACCEPTABLE AND UNACCEPTABLE MATERIALS AT EACH CONTAINER AND BIN.

3. INSPECT CONTAINERS AND BINS FOR CONTAMINATION AND REMOVE CONTAMINATED MATERIALS IF FOUND.

4. STOCKPILE PROCESSED MATERIALS ON-SITE WITHOUT INTERMIXING WITH OTHER MATERIALS. PLACE, GRADE AND SHAPE STOCKPILES TO DRAIN SURFACE WATER. COVER TO PREVENT WIND-BLOWN DUST.

5. STOCKPILE MATERIALS AWAY FROM DEMOLITION AREA. DO NOT STORE WITHIN DRIP LINE OF REMAINING TREES.

6. STORE COMPONENTS OFF THE GROUND AND PROTECT FROM THE WEATHER.

7. REMOVE RECYCLABLE WASTE OFF THE OWNER'S PROPERTY AND TRANSPORT TO RECYCLING RECEIVER OR PROCESSOR.

8. ASPHALTIC CONCRETE PAVING: BREAK UP AND TRANSPORT PAVING TO ASPHALT RECYCLING FACILITY.

9. CONCRETE: REMOVE REINFORCEMENT AND OTHER METALS FROM CONCRETE AND SORT WITH OTHER METALS.

10. MASONRY: MASONRY WASTE SHALL INCLUDE WHOLE OR BROKEN BRICK AND CONCRETE MASONRY UNITS. WHOLE MASONRY UNITS SHALL BE CLEANED AND REUSED OR DONATED. BROKEN MASONRY SHALL BE CRUSHED AND USED AS FILL FOR OFFSITE AREAS. REMOVE METAL REINFORCEMENT, ANCHORS AND TIES FROM MASONRY AND SORT WITH OTHER METALS.

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11. METALS: METALS FROM REINFORCED CONCRETE, REINFORCED MASONRY, STRUCTURAL STEEL MEMBERS, FLASHING AND SHEET METAL, CONDUIT PIPE, SIDING, PIPING AND WIRING SHALL BE SEPARATED BY TYPE.

12. STRUCTURAL STEEL: STACK MEMBERS ACCORDING TO THEIR SIZE, TYPE AND LENGTH.

13. NUTS AND BOLTS: REMOVE BOLTS, NUTS, WASHERS AND OTHER ROUGH HARDWARE.

14. SITE-CLEARING WASTE SHALL BE RECYCLED BY CHIPPING BRUSH, BRANCHES AND TREES, THEN HAUL TO WOOD RECYCLING CENTER.

DISPOSAL OF WASTE:

1. GENERAL: EXCEPT FOR ITEMS OR MATERIALS TO BE SALVAGED, RECYCLED OR OTHERWISE REUSED, REMOVE WASTE MATERIALS FROM PROJECT SITE AND LEGALLY DISPOSE OF THEM IN A LANDFILL OR OTHER PERMITTED DISPOSAL FACILITY.

2. EXCEPT AS OTHERWISE SPECIFIED, DO NOT ALLOW WASTE MATERIALS THAT ARE TO BE DISPOSED OF TO ACCUMULATE ON-SITE.

3. REMOVE AND TRANSPORT DEBRIS IN A MANNER THAT SHALL PREVENT SPILLAGE ON ADJACENT SURFACE AND AREAS.

4. BURNING: DO NOT BURN WASTE MATERIALS.

5. DISPOSAL: TRANSPORT WASTE MATERIALS OFF THE OWNER'S PROPERTY AND LEGALLY DISPOSE OF THEM.

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PROJECT # 11419
RIVER OAKS
STORMWATER PRESERVE
CITY STANDARD DETAILS
DEMOLITION NOTES - SHEET 2

SHEET NO.
DT-2

TOTAL: 40
CAD FILE:
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CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE

Fort Lauderdale, Florida 33301

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PROJECT # 11419
RIVER OAKS
STORMWATER PRESERVE
CITY STANDARD DETAILS
DEMOLITION NOTES - SHEET 2

SHEET NO.
DT-2

TOTAL: 40
CAD FILE:
11419-004-SI.dwg
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TRAFFIC CONTROL PLAN NOTES:

- 1. THE TRAFFIC CONTROL PLANS FOR THE PROJECT SHALL COMPLY WITH THE LATEST EDITION OF THE FLORIDA DEPARTMENT OF TRANSPORTATION ROADWAY AND TRAFFIC DESIGN STANDARDS, INDEX NO. 600-660. MUTCD AND THE STANDARD SPECIFICATIONS. THE CONTRACTOR'S RESPONSE TIME TO ALL REPORTED MALFUNCTIONS OF TRAFFIC SIGNALS WITHIN THE PROJECT LIMITS SHALL BE NO MORE THAN TWO (2) HOURS AND SHALL RESTORE ALL MALFUNCTIONING TRAFFIC SIGNAL EQUIPMENT TO ITS LEVEL OF OPERATION PRIOR TO THE MALFUNCTIONING WITHIN TWENTY-FOUR (24) HOURS. DURING THIS TIME THE CONTRACTOR SHALL PROVIDE AT HIS EXPENSE TEMPORARY TRAFFIC CONTROL DEVICES, FLAGGER PERSONNEL, AND LAW ENFORCEMENT PERSONNEL AS NECESSARY TO MAINTAIN A SAFE AND EFFICIENT FLOW OF TRAFFIC AT THE AFFECTED WORK ZONE. THE ENGINEER OR THE CITY OF FORT LAUDERDALE SHALL APPROVE ALL MODIFICATIONS PRIOR TO THEIR IMPLEMENTATION.
2. THE CONTRACTOR SHALL MAINTAIN PROPER OPERATION OF ALL TRAFFIC SIGNAL LOOP ASSEMBLIES AND LOOP DETECTORS WITHIN THE PROJECT LIMITS. THE CONTRACTOR SHALL CORRECT ALL LOOP ASSEMBLY/DETECTOR MALFUNCTIONS WITHIN 24 HOURS OF NOTIFICATION OF SUCH MALFUNCTIONS BY THE ENGINEER.
3. THE AGENCY RESPONSIBLE FOR MAINTENANCE OF THE TRAFFIC SIGNALS AND RELATED EQUIPMENT IS BROWARD COUNTY TRAFFIC ENGINEERING.
4. A REGULATORY SPEED OF 25 MPH SHALL BE POSTED WITHIN THE LIMITS OF THE WORK ZONE.
6. EXISTING SIGNS AND PAVEMENT MARKINGS THAT CONFLICT WITH CONSTRUCTION SIGNS AND MARKINGS SHALL BE REMOVED DURING CONSTRUCTION. ALL EXISTING SIGNS THAT ARE REMOVED SHALL BE STOCKPILED IN A SECURE PLACE AND REINSTALLED AFTER CONSTRUCTION. REMOVE AND REPLACE ANY GROUND MOUNT SIGN BY USE OF INDEX NO. 611.
6. THE CONTRACTOR SHALL MAINTAIN EXISTING DRAINAGE PATTERNS AND PREVENT ADVERSE FLOODING OF THE TRAVEL LANES DURING CONSTRUCTION.
7. THE CONTRACTOR SHALL OBTAIN WRITTEN AUTHORIZATION FROM THE CITY OF FORT LAUDERDALE FOR ANY AND ALL CONSTRUCTION ACTIVITIES TO BE PERFORMED AT NIGHT. NO LANE CLOSURE SHALL BE ALLOWED BETWEEN THE HOURS OF 6:00 AM TO 9:00 AM AND 4:00 PM TO 7:00 PM, MONDAY THROUGH FRIDAY UNLESS APPROVED BY THE ENGINEER.
8. THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE UTILITY COMPANY TWO (2) BUSINESS DAYS IN ADVANCE OF ANY EXCAVATION INVOLVING ITS UTILITIES SO THAT A COMPANY REPRESENTATIVE CAN BE PRESENT. THE LOCATION OF THE UTILITIES SHOWN IN THE PLANS ARE APPROXIMATE ONLY. THE EXACT LOCATION SHALL BE DETERMINED BY THE CONTRACTOR DURING CONSTRUCTION. SEE SPECS FOR LIST OF UTILITY COMPANIES.
9. TRAFFIC CONTROL ON ALL CURBSIDE RIGHTS-OF-WAY SHALL MEET THE ADDITIONAL REQUIREMENTS OF THE BROWARD COUNTY ENGINEERING DEPARTMENT.
10. CONTRACTOR SHALL PREPARE AND SUBMIT MAINTENANCE OF TRAFFIC PLAN (MOT) WHERE REQUIRED BY FEDERAL, STATE, COUNTY, OR LOCAL AGENCIES HAVING JURISDICTION. CONTRACTOR SHALL OBTAIN ALL REQUIRED APPROVALS AND PERMITS ASSOCIATED WITH THE MOT'S. ALL MOT'S TO BE AT CERTIFIED.
11. THE CONTRACTOR SHALL ALSO COORDINATE THE CONSTRUCTION SCHEDULE WITH FDOT, BROWARD COUNTY AND THE CITY OF FORT LAUDERDALE TO AVOID LANE CLOSURES WHICH WOULD ADVERSELY AFFECT TRAFFIC DURING RUSH HOUR.



TRAFFIC CONTROL PLAN NOTES



FDOT GENERAL NOTES:

- 1. ALL MATERIALS AND CONSTRUCTION WITHIN THE FDOT RIGHT-OF-WAY SHALL CONFORM TO FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS (2010 EDITION), STANDARD SPECIFICATIONS (2010 EDITION) AND THE SUPPLEMENTS THERETO.
2. THE APPLICANT'S ENGINEER RESPONSIBLE FOR CONSTRUCTION INSPECTION SHALL INSURE THAT THE MAINTENANCE OF TRAFFIC PLAN (MOT) FOR THE PROJECT IS IN ACCORDANCE WITH THE APPLICABLE FDOT INDEX NUMBER (600 SERIES) AND THIS DOCUMENT, THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS (D.S. DEPARTMENT OF TRANSPORTATION, FHWA).
3. AT THE END OF EACH WORK PERIOD, ANY DROP-OFF IN THE AREA ADJACENT TO THE TRAVEL WAY OF THE STATE ROAD SHALL BE BACKFILLED IN ACCORDANCE WITH STANDARD INDEX 600 OR SHALL BE OTHERWISE PROTECTED WITH TEMPORARY BARRIERS WALL AT THE CONTRACTOR'S EXPENSE.
4. IF THE PERMITTED WORK IS ON A ROADWAY THAT HAS BEEN SELECTED AS A HURRICANE OR DISASTER EVACUATION ROUTE, THE APPLICANT, AT THE PRE-CONSTRUCTION CONFERENCE IS REQUIRED TO PRESENT, AS PART OF THE WORK PLAN, AN EMERGENCY FUNCTIONAL RESTORATION PLAN TO ADDRESS EVENTUALITIES SUCH AS HURRICANES.
5. THE CONTRACTOR MUST CALL THE APPROPRIATE COUNTY TRAFFIC ENGINEERING DIVISION, HAVING JURISDICTION OVER THE PROJECT AT LEAST 48 HOURS, BEFORE ANY EXCAVATION WITHIN THE FDOT RIGHT OF WAY TO DETERMINE THE LOCATION OF THE EXISTING TRAFFIC SIGNAL, INTERCONNECT CABLE.
6. THE LOCATION OF EXISTING UTILITIES SHOWN IS APPROXIMATE ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION DURING CONSTRUCTION. RELOCATION OF UTILITIES SHALL BE COORDINATED WITH UTILITY COMPANIES AFTER IDENTIFICATION OF CONFLICT BY CONTRACTOR. CONTRACTOR WILL NOTIFY ENGINEER IN ADVANCE BEFORE ANY RELOCATION.
7. BEFORE PERMIT APPROVAL AND CONSTRUCTION OF THIS PROJECT, THE APPLICANT MUST CONTACT THE FLORIDA DEPARTMENT OF TRANSPORTATION LOCAL MAINTENANCE OFFICE TO SCHEDULE A PRE-CONSTRUCTION MEETING. THE TELEPHONE NUMBER IS 954-776-4300 OR 1-800-300-5226. THE APPLICANT AT THE EARLIEST CONVENIENT TIME SHALL NOTIFY IN WRITING ALL RIGHT-OF-WAY USERS AFFECTED BY THE CONSTRUCTION OF THIS PROJECT.
8. ALL MOT LANE CLOSURE SIGNS SHALL BE COVERED WHEN LANES ARE NOT CLOSED, NO LANES ARE TO BE CLOSED EXCEPT AT TIMES PRESCRIBED BY THE DEPARTMENT.
9. SODDING SHALL BE IN ACCORDANCE WITH SECTION 575.
10. ALL CURBSIDE MARKINGS MUST BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION MANUAL.
11. SPECIFY THE ALPHANUMERIC IDENTIFICATION FOR THE CURB CUT RAMP'S PER STANDARD INDEX 304. A COPY OF THE APPROPRIATE DETAILS MUST BE SHOWN ON THE PLANS.
12. FLAGGERS MUST BE PRESENT DURING THE PROGRESS AND EGRESS OF CONSTRUCTION VEHICLES TO AND FROM THE PROJECT SITE. WARNING SIGNS MUST BE ERECTED ADVISING MOTORIST OF TRUCKS ENTERING THE HIGHWAY.



FDOT GENERAL NOTES



BROWARD COUNTY COMMUNICATION NOTES:

- 1. THE AGENCY RESPONSIBLE FOR MAINTENANCE OF THE TRAFFIC SIGNALS AND RELATED EQUIPMENT IS BROWARD COUNTY TRAFFIC ENGINEERING DIVISION (BCTED). ALL SYSTEM COMMUNICATIONS EQUIPMENT, CABLEING AND RELATED MATERIAL SHALL COMPLY WITH BROWARD COUNTY'S LATEST EDITION OF THE MINIMUM STANDARDS AS EXPRESSED IN THE STANDARDS AND SPECIFICATIONS - COMMUNICATION INFRASTRUCTURE DOCUMENT. PLEASE REFER TO BCTED'S COMMUNICATIONS POLICIES AND PROCEDURES FOR ADDITIONAL INFORMATION. BROWARD COUNTY TRAFFIC ENGINEERING DIVISION WILL NOT ACCEPT ANY PROJECTS THAT DO NOT MEET THESE STANDARDS AND SPECIFICATIONS. IF FIBER OPTIC PULL BOXES ALREADY EXIST AT AN INTERSECTION, NO ADDITIONAL FIBER OPTIC PULL BOXES WILL NEED TO BE INSTALLED. FOR A COPY OF THESE STANDARDS REFER TO THE BROWARD COUNTY WEB SITE AT WWW.BROWARD.ORG/TRAFFIC UNDER PUBLICATIONS.
2. IF THERE ARE COPPER INTERCONNECT CABLES WITHIN YOUR PROJECT LIMITS OR WITHIN 1,500 FEET OF YOUR PROJECT LIMITS, CONTACT THE COMMUNICATIONS MANAGER AT TECOMMUNICATIONS@BROWARD.ORG OR 954-847-2745.
3. IF THERE ARE FIBER OPTIC CABLES WITHIN YOUR PROJECT LIMITS OR WITHIN 1,500 FEET OF YOUR PROJECT LIMITS, CONTACT THE COMMUNICATIONS MANAGER AT TECOMMUNICATIONS@BROWARD.ORG OR 954-847-2745.
4. IF THERE ARE CELLULAR COMMUNICATIONS WITHIN YOUR PROJECT LIMITS, CONTACT THE COMMUNICATIONS MANAGER AT TECOMMUNICATIONS@BROWARD.ORG OR 954-847-2745.
5. ALL BCTED COMMUNICATIONS CABLES/CONDUIT SHALL BE LOCATED A MINIMUM OF 48 HOURS IN ADVANCE.
BROWARD COUNTY TRAFFIC ENGINEERING DIVISION
PROCEDURE FOR NOTIFICATION OF COMMUNICATION DISRUPTION
COPPER INTERCONNECT CABLE NOTIFICATION CONTACT PERSON:
WHEN COMMUNICATIONS TO AN INTERSECTION MUST BE DISRUPTED BY A CONTRACTOR TO PERFORM WORK, THE CONTRACTOR SHALL PROVIDE TWO DAY ADVANCE NOTICE IN WRITING TO THE BROWARD COUNTY TRAFFIC ENGINEERING DIVISION. THIS NOTIFICATION SHALL BE CONVEYED VIA ELECTRONIC MAIL (EMAIL) TO THE TRAFFIC SIGNAL TECHNICIAN AT TECOMMUNICATIONS@BROWARD.ORG. NOTIFICATION SHALL INCLUDE CONTACT PERSON, TELEPHONE NUMBER, PURPOSE, LOCATION AND DURATION. THE DISRUPTION SHALL LAST FOR NO MORE THAN 3 CONSECUTIVE BUSINESS DAYS. WHERE POSSIBLE, THE DISRUPTION SHALL BE DURING OFF PEAK HOURS BEGINNING AT 9:00 AM AND ENDING AT 3:00 PM.
FIBER OPTIC CABLE NOTIFICATION CONTACT PERSON:
WHEN COMMUNICATIONS TO AN INTERSECTION MUST BE DISRUPTED BY A CONTRACTOR TO PERFORM WORK, THE CONTRACTOR SHALL PROVIDE TWO DAY ADVANCE NOTICE IN WRITING TO THE BROWARD COUNTY TRAFFIC ENGINEERING DIVISION. THIS NOTIFICATION SHALL BE CONVEYED VIA ELECTRONIC MAIL (EMAIL) TO THE COMMUNICATIONS MANAGER AT TECOMMUNICATIONS@BROWARD.ORG. NOTIFICATION SHALL INCLUDE CONTACT PERSON, TELEPHONE NUMBER, PURPOSE, LOCATION AND DURATION. THE DISRUPTION SHALL LAST FOR NO MORE THAN 3 CONSECUTIVE BUSINESS DAYS. WHERE POSSIBLE, THE DISRUPTION SHALL BE DURING OFF PEAK HOURS BEGINNING AT 9:00 AM AND ENDING AT 3:00 PM.
UTILITY OWNER CONTACT PERSON:
INTERSECTION COMMUNICATIONS CABLES - (ROBERT BLOUNT) BROWARD COUNTY TRAFFIC ENGINEERING DIVISION (BCTED) 954-847-2745



BROWARD COUNTY COMMUNICATION NOTES



Craven + Thompson and Associates, Inc. Engineers + Planners + Surveyors
3063 N.W. 1280 Street, Fort Lauderdale, Florida 33309
Tel: (954) 726-0428 Fax: (954) 726-0400
Chappell Group Environmental Consultants
MUEngineers, Inc.
Environmental Consultants
Architect & Interior Planning
Site Investigation
Construction Design & Management
The Survey Service
Phase I ESA

Table with project details: PROJECT: PATRICK J. CHERNEY, DATE: 10/30/2019, DRAWN BY: J. CHERNEY, DISIGNED BY: J. CHERNEY, W.R./M.A.: J. CHERNEY, CHECKED BY: J. CHERNEY, A.G., FIELD BOOK: 10/22/2019

CITY OF FORT LAUDERDALE PUBLIC WORKS DEPARTMENT ENGINEERING & ARCHITECTURE
City of Fort Lauderdale logo
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

Table with columns: NO., DATE, BY, FIELD, REVISIONS, DISCUSSION

PROJECT # 11419
RIVER OAKS
STORMWATER PRESERVE
CITY STANDARD DETAILS
GENERAL NOTES

SHEET NO.
DT-3
TOTAL 40
CAD FILE: 11419-004-SID
DRAWING FILE NO. 4-135-81

DRAINAGE NOTES:

- 1. DRAINAGE PIPE SHALL BE HIGH DENSITY POLYETHYLENE (HDPE) OR REINFORCED CONCRETE (RCP). THE USE OF RCP PIPE FOR PUBLIC ROADWAY CROSSINGS IS PREFERRED.
2. CATCH BASINS, INLETS AND JUNCTION BOXES SHALL NOT BE INSTALLED IN DRIVEWAYS.
3. PRIOR TO BACKFILLING EXFILTRATION TRENCHES, DRAINAGE INLETS OR MANHOLES, THE CONTRACTOR SHALL NOTIFY THE ENGINEERING INSPECTOR FOR AN INSPECTION.
4. DRAINAGE STRUCTURES SHALL BE CLEANED PRIOR TO ACCEPTANCE BY CITY.
5. ALL PIPES SHALL BE LAID IN DRY TRENCH. ALL MUCK OR UNSUITABLE MATERIALS IN TRENCHES, INLETS OR MANHOLES SHALL BE REMOVED AND BACKFILLED WITH SELECTED MATERIAL APPROVED BY THE ENGINEER.
6. MINIMUM COVER FOR HDPE PIPE UNDER ASPHALT SHALL BE 24-INCH COMPACTED LIME ROCK BASE. MINIMUM COVER FOR PIPE UNDER GRASS SHALL BE 18" COMPACTED SUBGRADE.
7. THE CONTRACTOR SHALL MAINTAIN EXISTING DRAINAGE PATTERNS AND PREVENT ADVERSE FLOODING OF THE TRAVEL LANES DURING CONSTRUCTION.
8. MAINTENANCE ACCESS SHALL BE PROVIDED ON BOTH SIDES OF EXFILTRATION TRENCHES IN THE FORM OF MANHOLES OR CATCH BASINS. THE MAXIMUM DISTANCE BETWEEN STORM STRUCTURES SHALL NOT EXCEED THREE HUNDRED (300) FEET.
9. ALL EXFILTRATION SYSTEMS SHALL BE DESIGNED IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION DOCUMENT TITLED "DRAINAGE DESIGN GUIDE", LATEST EDITION.
10. GEOTEXTILE MATERIALS USED IN THE CONSTRUCTION OF EXFILTRATION TRENCHES SHALL BE IN ACCORDANCE WITH THE CRITERIA OF FLORIDA DEPARTMENT OF TRANSPORTATION'S DESIGN STANDARDS LATEST EDITION AND CITY OF FORT LAUDERDALE'S SPECIFICATIONS.



DRAINAGE NOTES



- GENERAL NOTES:
1. THE PROPOSED GREEN INFRASTRUCTURE AND FACILITIES WITH OVERLANDS THAT DIVERT FROM THE STORMWATER AS SHOWN ON CONTRACT PLANS DUE TO FIELD CONDITIONS, REFER TO THE DRAINAGE MANUAL AND SPECIFICATIONS.
2. THE LOCATION OF ANY EXISTING OVERLANDS INCLUDES THEIR BANKS OF THE STORMWATER, HOW THEY TAKE OFF AND THE OVERLANDS SHOULD BE NO LESS THAN 10' ABOVE THE STREET.
3. SEE RELATED 03 SPECIFICATIONS.
REBAR CONCRETE:
1. MINIMUM COVER SHALL BE 4".
2. CONTRACTOR SHALL REINFORCE CONCRETE PANELS TO NO MORE THAN 10' ON ANY PANEL.
3. NO REBAR CONCRETE PANELS SHALL BE LESS THAN 4" IN LENGTH WITHOUT THE ENGINEER'S APPROVAL.
4. ANCHOR BARS TO BE USED TO ANCHOR PANELS INTO EXISTING SLAB.
5. CONTRACTOR SHALL INSTALL #4 BARS IN LIPS OF 12" (MAX) AND SHALL HAVE THE FRAMES OF A PLATE CONNECTION LONG ENOUGH TO OVERLAP EACH LAP JOINT TO INSTALLATION OF THE EXISTING CONCRETE.
6. AT THE DISCRETION OF THE ENGINEER, CONTRACTOR TO REPLACE ANY CURB OR DRIVEWAY WHICH IS DAMAGED DURING CONSTRUCTION.
SLOTTED REBAR GRID:
1. THE LOWER FINISHING SURFACE IN STORMWATER RUN-OFFS SHOULD BE LEVEL ALONG THE ALIGNMENT OF THE STREET. A FELD SLOPE NO GREATER THAN 1% SHALL BE MAINTAINED.
2. THE LOWER FINISHING SURFACE IN STORMWATER RUN-OFFS SHOULD BE LEVEL ALONG THE ALIGNMENT OF THE STREET. A FELD SLOPE NO GREATER THAN 1% SHALL BE MAINTAINED.
3. WITH THE EXCEPT OF TRENCH, MAXIMUM VERTICAL CURVE AT INTERSECTION SHOULD BE NO GREATER THAN 30' ABOVE THE SUBGRADE'S ORIGINAL ELEVATION. UNLESS OTHERWISE APPROVED BY THE ENGINEER, PAVED DETECTOR AND FLAGGER SHOULD BE DONE TO THE FINISH ELEVATION OF PAVED SURFACE OF THE RUN-OFF.
4. ALL PAVED SURFACES, DETECTOR AND FLAGGER SHOULD BE 4" MINIMUM FINISH OF THE SUBGRADE TO BE FINISHED TO BE ABOVE THE ORIGINAL FINISHING SURFACE. UNLESS OTHERWISE APPROVED BY THE ENGINEER.
5. REBAR SHALL BE PLACED WITHIN THE PROJECT AREA AS SHOWN ON THE PLANS. REBAR SHALL BE INSTALLED IN ACCORDANCE WITH BROWARD COUNTY SPECIFICATIONS.



GREEN INFRASTRUCTURE NOTES



EROSION AND SEDIMENT CONTROL:

- CONTRACTOR TO EMPLOY BEST MANAGEMENT PRACTICES THROUGHOUT CONSTRUCTION IN ORDER TO ENSURE POLLUTION PREVENTION. CONTRACTOR TO COMPLY WITH ALL LOCAL, STATE AND OTHER GOVERNMENTAL ENVIRONMENTAL REGULATIONS THROUGHOUT CONSTRUCTION.
- DURING CONSTRUCTION ALL CATCH BASIN INLETS SHALL BE PROTECTED TO PREVENT SEDIMENT AND DEBRIS FROM ENTERING THE CATCH BASIN.
- SILT FENCES SHALL BE INSTALLED AS NECESSARY TO CONTROL OR PREVENT DISCHARGE OF SEDIMENT ONTO ADJACENT UNDISTURBED AREAS, OR OFF-SITE AREAS.
- ALL AREAS DISTURBED DURING CONSTRUCTION SHALL BE STABILIZED WITHIN A REASONABLE PERIOD OF TIME TO ASSURE MINIMUM EROSION OF SOILS.
- NO LAND CLEARING OR GRADING SHALL BEGIN UNTIL ALL EROSION CONTROL MEASURES HAVE BEEN INSTALLED.
- ALL EXPOSED AREAS SHALL BE SOODED AS SPECIFIED WITHIN 30 DAYS OF FINAL GRADING.
- MAINTAIN EROSION CONTROL MEASURES AFTER EACH RAIN AND AT LEAST ONCE A WEEK.
- THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT SOIL SEDIMENT FROM LEAVING THE SITE.
- CONTRACTOR SHALL COMPLY WITH ALL STATE AND LOCAL ORDINANCES THAT APPLY.
- ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED IF DEEMED NECESSARY BY CITY, COUNTY, AND STATE OF FLORIDA ON SITE INSPECTION, AT NO ADDITIONAL COST TO THE OWNER.
- LAND DISTURBING ACTIVITIES SHALL NOT COMMENCE UNTIL APPROVAL TO DO SO HAS BEEN RECEIVED BY GOVERNING AUTHORITIES.
- IF INSTALLATION OF STORM DRAINAGE SYSTEM SHOULD BE INTERRUPTED BY WEATHER OR NIGHTFALL, THE PIPE ENDS SHALL BE COVERED WITH FILTER FABRIC.
- BURNING OF DEBRIS WILL NOT BE ALLOWED.
- CONTRACTOR SHALL BE RESPONSIBLE TO TAKE WHATEVER MEANS NECESSARY TO ESTABLISH PERMANENT SOIL STABILIZATION.
- CONTRACTOR IS TO PROVIDE EROSION CONTROL/SEDIMENTATION BARRIER (HAY BALES OR SILTATION CURTAIN) TO PREVENT SILTATION OF ADJACENT PROPERTY, STREETS, STORM SEWERS AND WATERWAYS. IN ADDITION CONTRACTOR SHALL PLACE STRAW, MULCH OR OTHER SUITABLE MATERIAL ON GROUND IN AREAS WHERE CONSTRUCTION RELATED TRAFFIC IS TO ENTER AND EXIT SITE IF IN THE OPINION OF THE ENGINEER AND/OR LOCAL AUTHORITIES IF EXCESSIVE QUANTITIES OF EARTH ARE TRANSPORTED OFF-SITE EITHER BY NATURAL DRAINAGE OR BY VEHICULAR TRAFFIC. THE CONTRACTOR IS TO REMOVE AND CLEAN SAID EARTH TO THE SATISFACTION OF THE ENGINEER AND/OR AUTHORITIES. EROSION CONTROL BARRIER SHALL BE ESTABLISHED AS THE FIRST ITEM OF WORK.

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING DETAILS

EROSION AND SEDIMENT CONTROL NOTES
SHEET 1

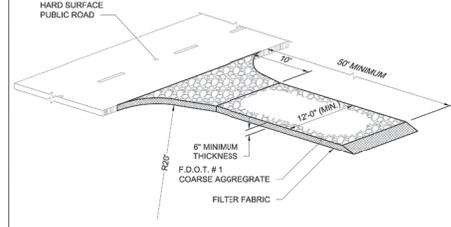
ESC 001

- THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION'S STORMWATER PERMITTING PROGRAM APPLIES TO ALL CONSTRUCTION ACTIVITY THAT: 1) CONTRIBUTE STORMWATER DISCHARGES TO SURFACE WATER OF THE STATE OR INTO A MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4); 2) DISTURBS ONE OR MORE ACRES OF LAND, OR 3) LESS THAN ONE ACRE IS INCLUDED IF THE ACTIVITY IS PART OF A LARGER COMMON PLAN OF DEVELOPMENT THAT WILL MEET OR EXCEED THE ONE-ACRE THRESHOLD; DISTURB INCLUDES CLEARING, GRADING AND EXCAVATING.
- FOR CONSTRUCTION ACTIVITY THAT IS SUBJECT TO THE NPDES FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION'S STORMWATER PERMITTING PROGRAM, THE CONTRACTOR SHALL:
 - OBTAIN A GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION DOCUMENT 62-621.300(A).
 - COMPLY WITH ALL REQUIREMENTS OF THE GENERIC PERMIT.
 - DEVELOP AND IMPLEMENT A STORMWATER POLLUTION PREVENTION PLAN (SWPPP).
 - COMPLETE A NOTICE OF INTENT (NOI) FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION FORM 62-621.300(A)(8) IN ITS ENTIRETY USING THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION'S WEBSITE.
- EXPOSIT COPIES OF THE SWPPP AND THE NOI TO THE ENGINEER AS INFORMATIONAL RECORDS. THESE SUBMITTALS WILL NOT BE REVIEWED BY THE ENGINEER.
- CONTRACTOR TO CLEAN AND REPAIR ALL EXISTING STORMWATER INFRASTRUCTURE THAT IS IMPACTED BY CONSTRUCTION ACTIVITIES, BEFORE LEAVING THE JOBSITE.
- CONTRACTOR TO REMOVE ALL FILTER FABRIC AND POLLUTION PREVENTION ITEMS BEFORE THE FINAL WALK-THROUGH.

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING DETAILS

EROSION AND SEDIMENT CONTROL NOTES
SHEET 2

ESC 001

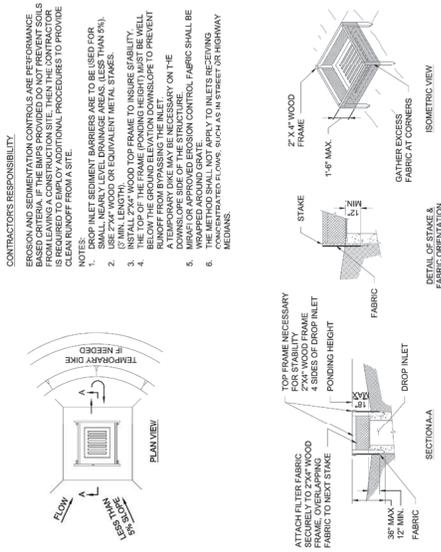


- NOTES:
- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
 - WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
 - WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING DETAILS

GRAVEL CONSTRUCTION ENTRANCE

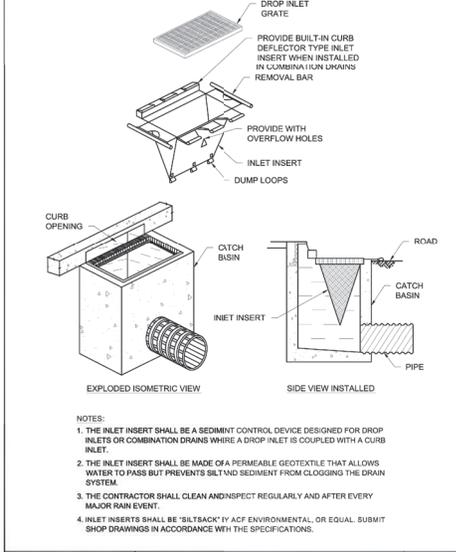
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CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING DETAILS

DROP INLET PROTECTION - SEDIMENT BARRIER

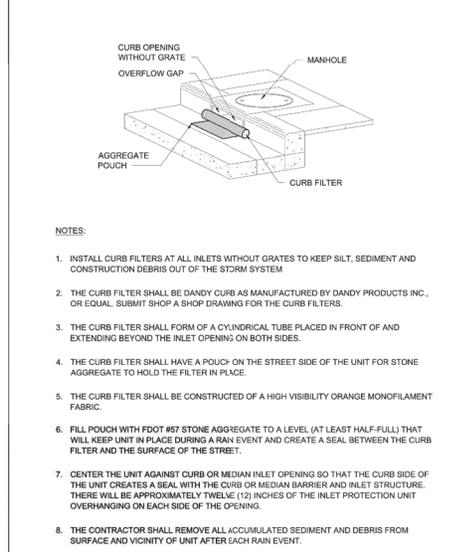
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CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING DETAILS

DROP INLET PROTECTION - INLET INSERT

ESC 005



CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING DETAILS

CURB INLET PROTECTION - CURB FILTER

ESC 006

CRAVEN + THOMPSON AND ASSOCIATES, INC.
ENGINEERS • PLANNERS • SURVEYORS
2063 A.W. 53RD STREET, FORT LAUDERDALE, FLORIDA 33309
TEL: (954) 726-6668

Chappell GROUP
Environmental Consultants
Architecture & Planning
Landscape Design & Construction
Mapping Design & GIS
The Survey Service
Phase I ESA

MUEngineers, Inc.

PROJECT: PATRICK J. GIBNEY
DRAWN BY: J. GIBNEY
CHECKED BY: J. GIBNEY
DATE: 10/22/2019

DATE: 10/20/2019
SCALE: VERT 1"=2'
HOR 1"=40'
A.G.
FIELD BOOK:

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE

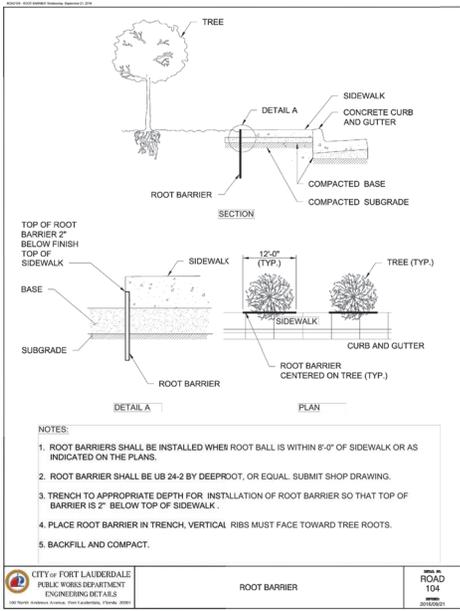
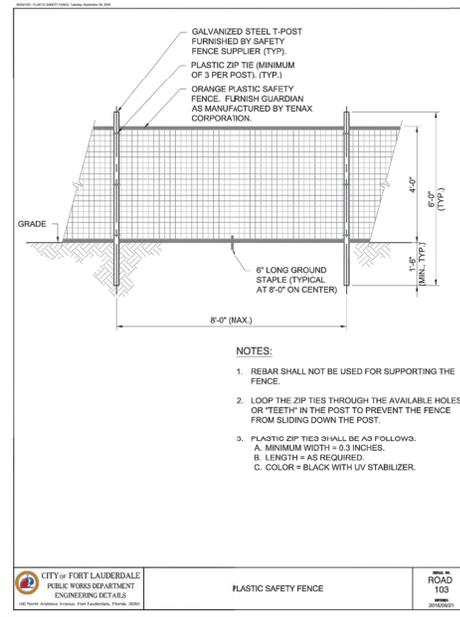
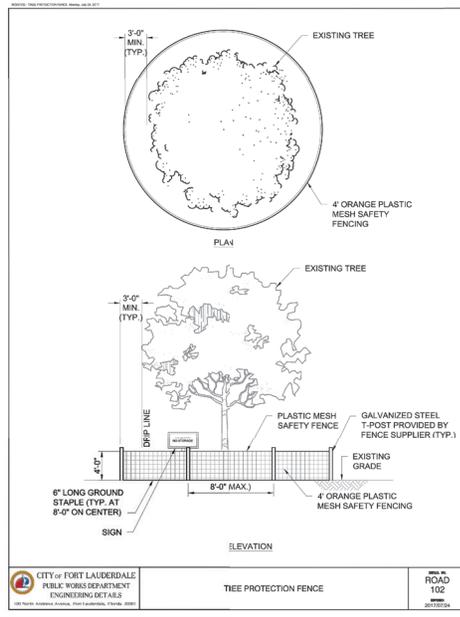
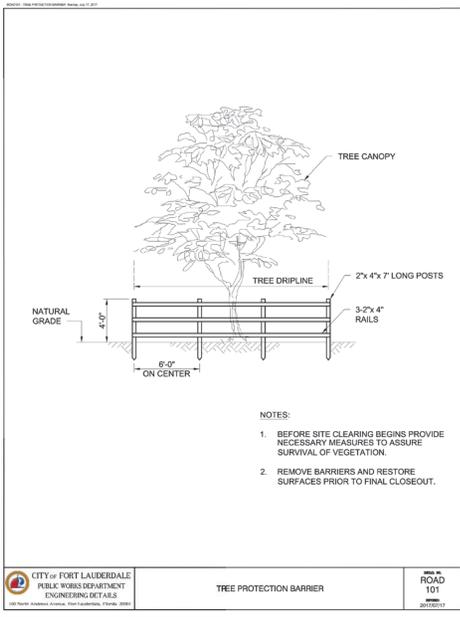
Fort Lauderdale, Florida 33301

| NO. | DATE | BY | REVISIONS | DESCRIPTION |
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PROJECT # 11419
RIVER OAKS PRESERVE
STORMWATER PRESERVE
CITY STANDARD DETAILS
EROSION CONTROL

1 SHEET - TOTAL

SHEET NO. DT-4
TOTAL: 40
CAD FILE: 11419-004-SI
DRAWING FILE NO. 4-135-81



CRAVEN • THOMPSON AND ASSOCIATES, INC.
ENGINEERS • PLANNERS • SURVEYORS
3063 N.W. 32ND STREET, FORT LAUDERDALE, FLORIDA 33309
TEL: (954) 726-8600
FLORES LICENSE: PROFESSIONAL SURVEYOR & SURVEY PLANNER NO. 271
FLORIDA LICENSE: PROFESSIONAL ENGINEER LICENSE NO. 000114

Chappell GROUP
Environmental Consultants
• Marine & Wetland Permitting
• Municipal Design & Manufacturing Design & Construction
• Traffic Studies
• Phase I ESA

MUEngineers, Inc.

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE

PROJECT # 11419
RIVER OAKS
STORMWATER PRESERVE
CITY STANDARD DETAILS
EROSION CONTROL - SHEET 3

DATE: 1/16/2019 8:22 PM
DRAWN BY: J. GIBNEY
DISIGNED BY: J. GIBNEY
CHECKED BY: J. GIBNEY
FIELD BOOK: 20190104

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CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING DETAILS

ROOT BARRIER

DATE: 1/16/2019 8:22 PM
DRAWN BY: J. GIBNEY
DISIGNED BY: J. GIBNEY
CHECKED BY: J. GIBNEY
FIELD BOOK: 20190104

TOTAL: 40
CAD FILE: 11419-004-SI
DRAWING FILE NO.: 4-135-01

08 STRUCTURAL NOTES

- ELECTRONIC VERSIONS OF STRUCTURAL DRAWINGS ARE THE SOLE, COPYRIGHTED PROPERTY OF MUENGIERS, INC. ELECTRONIC VERSIONS OF DRAWINGS ARE NOT TO BE USED OR TRANSFERRED WITHOUT THE EXPRESS, WRITTEN PERMISSION OF MUENGIERS, INC.
- 0100 GENERAL:**
 - STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH JOB SPECIFICATIONS AND ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, AND SITE DRAWINGS.
 - CONSULT THESE DRAWINGS FOR DEPRESSIONS, AND OTHER DETAILS NOT SHOWN ON STRUCTURAL DRAWINGS.
 - DIMENSIONS AND CONDITIONS MUST BE VERIFIED IN THE FIELD. ANY DISCREPANCIES SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE AFFECTED PART OF THE WORK.
 - DO NOT SCALE DRAWINGS TO OBTAIN DIMENSIONAL INFORMATION. NOTES, TYPICAL DETAILS AND SCHEDULES APPLY TO ALL STRUCTURAL WORK UNLESS OTHERWISE NOTED. FOR CONDITIONS NOT SPECIFICALLY SHOWN, PROVIDE DETAILS OF A SIMILAR NATURE. VERIFY APPLICABILITY BY SUBMITTING SHOP DRAWINGS FOR REVIEW.
 - AT ALL TIMES THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE CONDITIONS OF THE JOBSITE INCLUDING SAFETY OF PERSONS AND PROPERTY. MUENGIERS' PRESENCE OR REVIEW OF WORK DOES NOT INCLUDE THE ADEQUACY OF THE CONTRACTORS MEANS OR METHODS OF CONSTRUCTION. THE STRUCTURE IS DESIGNED TO BE SELF-SUPPORTING AND STABLE AFTER THE STRUCTURE IS COMPLETE.
 - IT IS THE CONTRACTORS RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND SEQUENCE TO INSURE SAFETY OF THE BUILDING AND ITS COMPONENTS DURING ERECTION. THIS INCLUDES THE ADOPTION OF NECESSARY SHORING, SHEETING, TEMPORARY BRACING, GUYS OR TIEDOWNS.
 - THE CONTRACTOR IS SOLELY RESPONSIBLE FOR INITIATING, MAINTAINING AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. THE ENGINEER OF RECORD IS NOT RESPONSIBLE FOR ANY MEANS AND METHODS OF CONSTRUCTION OR FOR ANY RELATED SAFETY PRECAUTIONS OR PROGRAMS.

0100 DESIGN LOADS:

- THE STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH THE 2017 FLORIDA BUILDING CODE AND APPLICABLE REFERENCE STANDARDS.
- ALL VERTICAL ELEMENTS LOCATED ALONG ACCESSIBLE FLOOR AREAS AND SEPARATING SLABS PLACED AT DIFFERENT ELEVATIONS WHEN POSITIONED WITHIN 3' FROM FINISHED FLOOR ELEVATION SHALL IN ADDITION TO OTHER APPLICABLE LOADS BE DESIGNED AS A GUARDRAIL (FOLLOWING GUIDELINES OF THE FLORIDA BUILDING CODE). THIS INCLUDES WINDOWS, LOUVERS, CURTAIN WALLS, STOREFRONTS, ETC.
- THE FOLLOWING SUPERIMPOSED LOADINGS HAVE BEEN UTILIZED:
 - DECK AREAS:**
 - LIVE LOAD 100 psf
 - DEAD LOAD 5 psf
 - WIND:**
 - ASCE 7-10
 - EXPOSURE C
 - BROWARD COUNTY: RISK CATEGORY II
 - ULTIMATE DESIGN WIND SPEED V_{ult} = 110 MPH (3-SECOND GUST)
 - NOMINAL DESIGN WIND SPEED V_{ref} = 132 MPH (3-SECOND GUST)

0100A SHOP DRAWING REVIEW:

- SHOP DRAWINGS SHALL BE SUBMITTED IN ELECTRONIC PDF FORMAT ONLY.
- SHOP DRAWINGS SHALL BE SUBMITTED VIA EMAIL TO JOYDE@MUE.com.
- PRINTED PAPER COPIES WILL NOT BE REVIEWED AND RETURNED WITHOUT MUENGIERS' REVIEW.
- SHOP DRAWING SUBMITTALS ARE REQUIRED FOR ALL FRAMING SHOWN ON THESE DRAWINGS INCLUDING, BUT NOT LIMITED TO: CONCRETE MIXES, CONCRETE AND MASONRY REINFORCEMENTS, STRUCTURAL STEEL AND CONNECTIONS, STEEL DECK, LIGHT GAUGE FRAMING, WOOD ROOF TRUSS FRAMING.
- ELECTRONIC VERSIONS OF STRUCTURAL DRAWINGS ARE THE SOLE, COPYRIGHTED PROPERTY OF MUENGIERS, INC. ELECTRONIC VERSIONS OF DRAWINGS ARE NOT TO BE USED OR TRANSFERRED WITHOUT THE EXPRESS, WRITTEN PERMISSION OF MUENGIERS, INC. USERS WILL SIGN A RELEASE.
- SHOP DRAWINGS WILL BE REVIEWED FOR GENERAL COMPLIANCE WITH THE DESIGN INTENT OF THE CONTRACT DOCUMENTS ONLY.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY COMPLIANCE WITH THE CONTRACT DOCUMENTS AS TO QUANTITY, LENGTH, ELEVATIONS, DIMENSIONS, CONSTRUCTION METHODS, DIMENSIONING, OTHER TRADE REQUIREMENTS ETC. PRIOR TO SUBMITTAL TO THE ARCHITECT/ENGINEER. DRAWINGS WITHOUT CONTRACTORS APPROVAL STAMP AND WHICH HAVE NOT BEEN REVIEWED BY THE CONTRACTOR WILL BE RETURNED WITHOUT MUENGIERS' REVIEW.
- MUENGIERS RESERVES A TWO WEEK SHOP DRAWING REVIEW TIME (FROM THE DATE OF RECEIPT).
- IN CASES OF A CONFLICT, INFORMATION PRESENTED ON STRUCTURAL DRAWINGS SHALL TAKE PRECEDENCE OVER THAT WITHIN SHOP DRAWINGS, UNLESS SPECIFICALLY NOTED BY MUENGIERS IN WRITING.
- THROUGH THE PROCESS OF A CURSORY REVIEW, MUENGIERS ASSUMES NO RESPONSIBILITY FOR DIMENSIONS, QUANTITIES, ERRORS OR OMISSIONS. ANY ERRORS OR OMISSIONS IRRESPECTIVE OF MUENGIERS' COMMENTS OR DURATION OF THE REVIEW SHALL BE THE RESPONSIBILITY OF AND MUST BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL SERVICE CHARGE EVEN IF SUCH WORK WAS DONE IN ACCORDANCE WITH THE SHOP DRAWINGS.
- CHANGES AND ADDITIONS MADE ON RE-SUBMITTALS SHALL BE CLEARLY FLAGGED AND NOTED. THE PURPOSE OF THE RE-SUBMITTALS SHALL BE CLEARLY NOTED ON THE LETTERS OF TRANSMITTAL. REVIEW WILL BE LIMITED TO THE FLAGGED AND NOTED ITEMS CAUSING THE RE-SUBMITTAL.

01200 CONTRACTOR PROPOSED CHANGES AND SUBSTITUTIONS:

- PROPOSED CHANGES OR SUBSTITUTIONS TO STRUCTURAL DETAILS OR PLANS SHALL BE SUBMITTED TO MUENGIERS FOR REVIEW AND APPROVAL.
- SUBMITTALS SHALL CONTAIN FULL DOCUMENTATION OF CHANGES OR SUBSTITUTIONS WITH SUPPORTING, SEALED CALCULATIONS (WHERE APPLICABLE).
- THE REVIEW OF CHANGES AND SUBSTITUTIONS, RE-ANALYSIS AND/OR RE-DRAFTING TO INCORPORATE CHANGES OR SUBSTITUTIONS INTO CONTRACT DOCUMENTS ARE ADDITIONAL SERVICES FOR THE EOR.
- CONSTRUCTION COST REVISIONS ARE BETWEEN THE CONTRACTOR AND OWNER AND ARE NOT REVIEWED BY MUENGIERS.

316219 ROUND TIMBER PILES:

- PILES SHALL COMPLY WITH ASTM D25 AND BE TREATED (AWP) STD-MLP (P5-F2) SOUTHERN PINE WITH A MINIMUM BUILT DIAMETER OF 12 INCHES.
- PILES SHALL BE DRIVEN A MINIMUM OF XX FEET INTO BEARING STRATA AND ACHIEVE A MINIMUM SAFE BEARING CAPACITY OF XX TONS AS COMPUTED BY AN APPROPRIATE DRIVING FORMULA.
- PILE DRIVING OPERATIONS SHALL BE PERFORMED UNDER THE SUPERVISION OF A FLORIDA REGISTERED PROFESSIONAL ENGINEER.
- LOCATION OF PILES:
 - AN AS-BUILT SURVEY OF PILE LOCATIONS SHALL BE PERFORMED BY A FLORIDA REGISTERED LAND SURVEYOR.
 - PILES SHALL BE LOCATED ON THE AS-BUILT DRAWINGS HORIZONTALLY AND VERTICALLY FROM THE DESIGN LOCATION.
 - SUBMIT THE AS-BUILT DRAWINGS TO THE STRUCTURAL ENGINEER FOR APPROVAL.
 - CONTRACTOR IS RESPONSIBLE FOR ENGINEERING COSTS ASSOCIATED WITH REDESIGNS CAUSED BY IMPROPER PILE LOCATIONS.

061000 WOOD:

- STRUCTURAL WOOD COMPONENTS (BEAMS, JOISTS, RAFTERS, ETC.) SHALL HAVE THE FOLLOWING MINIMUM ALLOWABLE FIBER STRESSES OF **NO. 1** SOUTHERN PINE CONFORMING TO THE LATEST EDITION OF NDS, AS FOLLOWS:
 - SHEAR F_v 175 psi
 - BENDING 2X4 F_b 1,100 psi
 - BENDING 2X6 F_b 1,000 psi
 - BENDING 2X8 F_b 925 psi
 - BENDING 2X10 F_b 850 psi
 - BENDING 2X12 F_b 750 psi
- WOOD FRAMING CONNECTORS:
 - CONNECTOR MODEL NUMBERS SHOWN ARE CONNECTORS AS MANUFACTURED BY SIMPSON STRONG-TIE CO., 9956 W. LAS POSITAS BOULEVARD, PLEASANTON, CA 94588.
 - SUBSTITUTIONS ARE ACCEPTABLE WITH THE APPROVAL OF THE STRUCTURAL ENGINEER.
 - UNLESS SHOWN OTHERWISE, INSTALL SIZE AND NUMBER OF FASTENERS SHOWN IN LATEST SIMPSON CATALOG.
 - SEE TABLE FOR REQUIRED CONNECTOR MATERIAL AND FINISHES BASED ON APPLICATION.

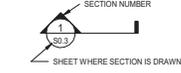
061500-TIMBER DECKING:

- FLOOR DECKING SHALL BE 2X6 #2 SOUTHERN PINE WOOD DECKING CONNECTED TO ALL SUPPORTING ELEMENTS WITH MINIMUM (2) 20 GAUGE STAINLESS STEEL SCREWS AT EVERY CONNECTION. INSTALLATION SHALL BE IN CONTROLLED RANDOM LAYUP PATTERN FASTENED IN ACCORDANCE WITH AISC 112.

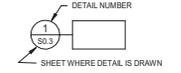
05213 RAILING SHOPS:

- THIS RAILING IS DESIGNED TO MEET SECTIONS OF THE CODE GOVERNING ELEVATED BALCONIES AND STRUCTURAL RAILINGS (SPRIF) ON GROSS AREA. SUPPLY ON POSTS, 200 LB MIN PER FCC 1618.4.8 (WITHIN HVHZ).
- THIS SYSTEM HAS BEEN DESIGNED AND SHALL BE FABRICATED IN ACCORDANCE WITH THE REQUIREMENTS OF THE 2017 FLORIDA BUILDING CODE.

LEGENDS



SECTION MARK



DETAIL MARK

ABBREVIATIONS:

THE FOLLOWING ABBREVIATIONS MAY BE USED IN THE DRAWINGS.

| # | NUMBER |
|--------|---|
| ABV | ABOVE |
| ALUM | ALUMINUM |
| ANSI | AMERICAN NATIONAL STANDARDS INSTITUTE |
| APPROX | APPROXIMATE |
| AS | ANCHOR ROD |
| ARCH | ARCHITECTURAL |
| ASTM | AMERICAN SOCIETY OF TESTING AND MATERIALS |
| BF | BRACED FRAME |
| BRG | BRACING |
| BRG | BEARING |
| BTWN | BETWEEN |
| C | CAMBER |
| CANTIL | CANTILEVER |
| CL | CENTERLINE |
| COL | COLUMN |
| CONC | CONCRETE |
| CONN | CONNECTION |
| CONSTR | CONSTRUCTION |
| CONT | CONTINUOUS |
| COORD | COORDINATE |
| D&E | DRILL AND SPOT |
| DB | BAR DIAMETER |
| DET | DETAIL |
| DIA | DIAMETER |
| DM | DIMENSION |
| DWG | DRAWING |
| EA | EACH |
| EF | EACH FACE |
| ELEV | ELEVATION |
| EMBED | EMBEDMENT, EMBEDDED |
| ENGR | ENGINEER |
| EQ | EQUAL |
| ETR | EXISTING TO REMAIN |
| ETBD | EXISTING TO BE DEMOLISHED |
| ETBR | EXISTING TO BE RESTORED |
| ETRM | EXISTING TO BE MOOIFIED |
| EXIST | EXISTING |
| EXP | EXPANSION |
| EXT | EXTERIOR |
| FBC | FLORIDA BUILDING CODE |
| F+* | 28 DAY CONCRETE STRENGTH+ |
| FLR | FLOOR |
| FY | YIELD STRENGTH+ |
| GA | GAUGE |
| GALV | GALVANIZED |
| GC | GENERAL CONTRACTOR |
| HORIZ | HORIZONTAL |
| IN | INCH |
| INFO | INFORMATION |
| INT | INTERIOR |
| K | KIPS (1000 LBS) |
| KSF | KIPS PER SQUARE FOOT |
| KSI | KIPS PER SQUARE INCH |
| LBS | POUNDS |
| MFR | MANUFACTURER |
| MISC | MISCELLANEOUS |
| MTL | METAL |
| NA | NOT APPLICABLE |
| NTS | NOT TO SCALE |
| Ø | ROUND DIAMETER |
| PAR | PARALLEL |
| PCF | POUNDS PER CUBIC FOOT |
| PCY | POUNDS PER CUBIC YARD |
| PERP | PERPENDICULAR |
| PLT | PLATE |
| PLF | POUNDS PER LINEAR FOOT |
| PLWD | PLYWOOD |
| PSF | POUNDS PER SQUARE FOOT |
| PSI | POUNDS PER SQUARE INCH |
| P.T. | PRESSURE TREATED |
| RC | REINFORCED CONCRETE |
| REF | REFERENCE |
| REQD | REQUIRED |
| SCHED | SCHEDULE(D) |
| SCH | STRUCTURAL CONSTRUCTION DOCUMENTS |
| SDS | SELF-DRILLING SCREW |
| SECT | SECTION |
| SHT | SHEET |
| SPEC | SPECIFICATION |
| SST | STAINLESS STEEL |
| STD | STANDARD |
| STL | STEEL |
| STRUCT | STRUCTURE, STRUCTURAL |
| TEMP | TEMPORARY |
| THD | THREADED |
| TYP | TYPICAL |
| UNO | UNLESS NOTED OTHERWISE |
| VAR | VARIABLE |
| VERT | VERTICAL |
| W/ | WITH |
| WD | WOOD |
| WBL | WOOD BLOCKING |
| WO | WOOD |

SHEET INDEX

| SHT NO. | DESCRIPTION |
|---------|--|
| S-0.00 | STRUCTURAL NOTES |
| S-2.00 | PARTIAL MAIN DECK LAYOUT PLAN - AREA 'A' |
| S-2.01 | PARTIAL MAIN DECK LAYOUT PLAN - AREA 'B' |
| S-3.00 | SECTIONS AND DETAILS |
| S-4.00 | BD VIEWS |



Certificate of Authorization No.29348

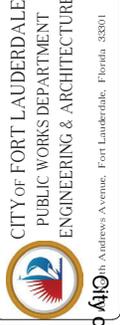
CONSULTING STRUCTURAL ENGINEERS

3440 N.E. 12TH AVENUE
OWLAND PARK FL 33334
PH: 954-324-4730
FAX: 954-653-4170

NOTE: MUE16101902 THESE DRAWINGS, ALONG WITH THE ARCHITECTURAL DRAWINGS, AND PROJECT MANUAL CONSTITUTE A SINGULAR CONTRACT DOCUMENT AND MUST BE USED TOGETHER IN THEIR ENTIRETY IN THE CONSTRUCTION OF THIS PROJECT.

ENGINEER: MARISSA O. HUNTER/REGISTERED PROFESSIONAL ENGINEER # 16101902 DATE: 10/16/2019

CHECK BY: DATE: 01/07/2019
DESIGNED BY: SCALE:
DRAWN BY: AS NOTED
CHECKED BY:
DATE:
TITLE: BIDDING

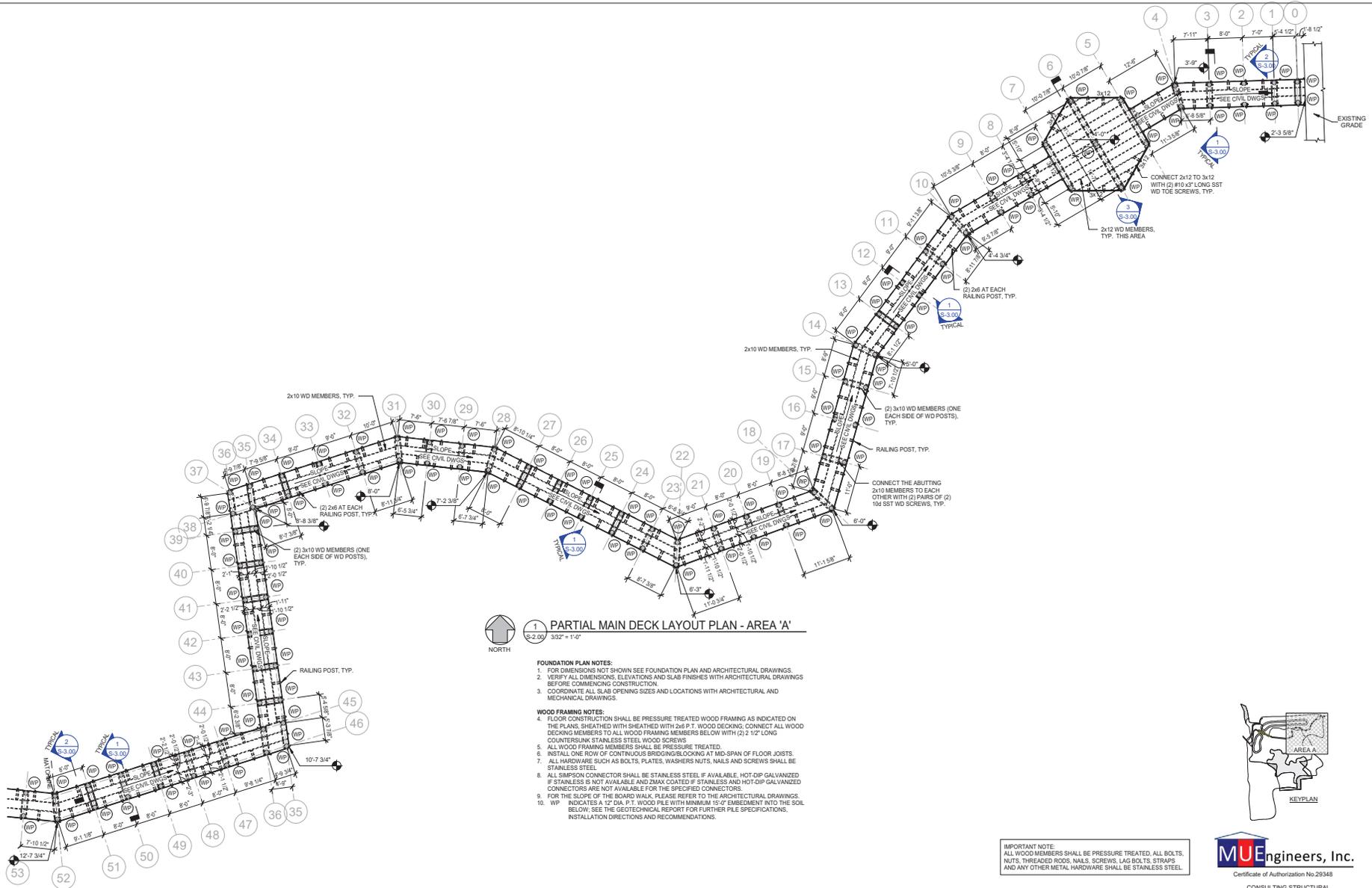


CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
Fort Lauderdale, Florida 33301

PROJECT # 14119
STORMWATER PRESERVE
RIVER OAKS NEIGHBORHOOD
PROPOSED

SHEET NO: S-0.00
TOTAL: 40
CAD FILE:
DRAWING FILE NO: 4-135-81

Bid 12242-493



1 PARTIAL MAIN DECK LAYOUT PLAN - AREA 'A'
 1/8" = 1'-0"

- FOUNDATION PLAN NOTES:**
- FOR DIMENSIONS NOT SHOWN SEE FOUNDATION PLAN AND ARCHITECTURAL DRAWINGS.
 - VERIFY ALL DIMENSIONS, ELEVATIONS AND SLAB FINISHES WITH ARCHITECTURAL DRAWINGS BEFORE COMMENCING CONSTRUCTION.
 - COORDINATE ALL SLAB OPENING SIZES AND LOCATIONS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.
- WOOD FRAMING NOTES:**
- FLOOR CONSTRUCTION SHALL BE PRESSURE TREATED WOOD FRAMING AS INDICATED ON THE PLANS. SHEATHED WITH SHEATHED WITH 2x6 P.T. WOOD DECKING. CONNECT ALL WOOD DECKING MEMBERS TO ALL WOOD FRAMING MEMBERS BELOW WITH (2) 2 1/2" LONG COUNTERSUNK STAINLESS STEEL WOOD SCREWS.
 - ALL WOOD FRAMING MEMBERS SHALL BE PRESSURE TREATED.
 - INSTALL ONE ROW OF CONTINUOUS BRIDGING/BLOCKING AT MID-SPAN OF FLOOR JOISTS.
 - ALL HARDWARE SUCH AS BOLTS, PLATES, WASHERS, NUTS, NAILS AND SCREWS SHALL BE STAINLESS STEEL.
 - ALL SIMPSON CONNECTOR SHALL BE STAINLESS STEEL IF AVAILABLE. HOT-DIP GALVANIZED IF STAINLESS IS NOT AVAILABLE AND ZMAX COATED IF STAINLESS AND HOT-DIP GALVANIZED CONNECTORS ARE NOT AVAILABLE FOR THE SPECIFIED CONNECTORS.
 - FOR THE SLOPE OF THE BOARD WALK, PLEASE REFER TO THE ARCHITECTURAL DRAWINGS.
 - WP INDICATES A 12" DIA. P.T. WOOD PILE WITH MINIMUM 15'-0" EMBEDMENT INTO THE SOIL. BELOW, SEE THE GEOTECHNICAL REPORT FOR FURTHER PILE SPECIFICATIONS, INSTALLATION DIRECTIONS AND RECOMMENDATIONS.

IMPORTANT NOTE:
 ALL WOOD MEMBERS SHALL BE PRESSURE TREATED. ALL BOLTS, NUTS, THREADED RODS, NAILS, SCREWS, LAG BOLTS, STRAPS AND ANY OTHER METAL HARDWARE SHALL BE STAINLESS STEEL.



MUEngineers, Inc.
 Certificate of Authorization No.29348
 CONSULTING STRUCTURAL ENGINEERS
 3440 N.E. 12TH AVENUE
 OAKLAND PARK FL 33334
 PH: 954-324-4730
 FAX: 954-653-4170

NOTE: MU16101902
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| | |
|-----------------------|------------|
| ENGINEER | DATE |
| MARIS O. HINTERBERGER | 01/07/2019 |
| DESIGNED BY | SCALE |
| REV. 01/07/2019 | AS NOTED |
| CHECKED BY | DATE |
| FILED | FILED |

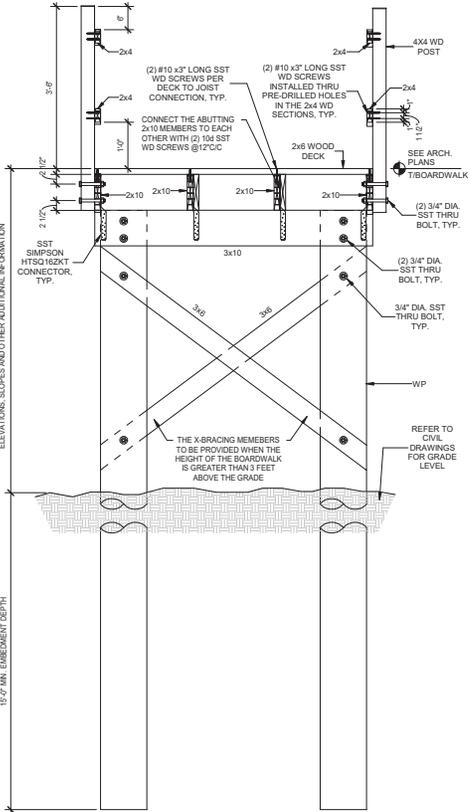
CITY OF FORT LAUDERDALE
 PUBLIC WORKS DEPARTMENT
 ENGINEERING & ARCHITECTURE

City of Fort Lauderdale
 33801
 Florida

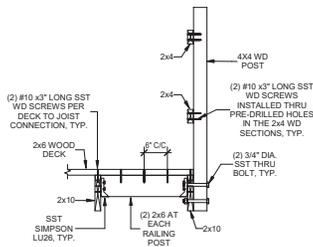
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PROPOSED
RIVER OAKS NEIGHBORHOOD
STORMWATER PRESERVE
PROJECT # 14119

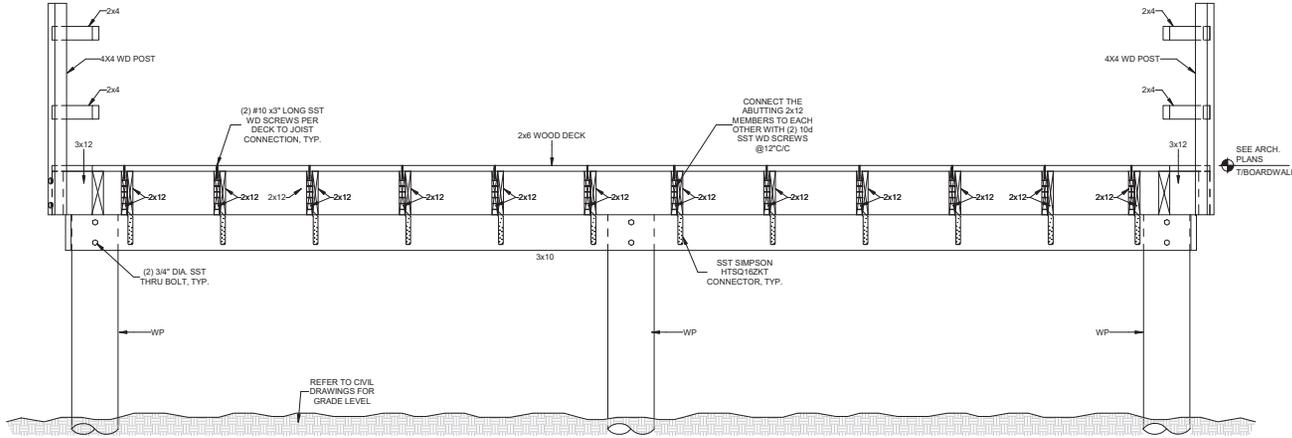
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|------------------|----------|
| SHEET NO. | 40 |
| S-2.00 | |
| TOTAL | 40 |
| CAD FILE | |
| DRAWING FILE NO. | |
| | 4-135-81 |



1 TYPICAL BOARDWALK SECTION
S-3.00 3/4" = 1'-0"



2 TYPICAL RAILING POST CONNECTION
S-3.00 3/4" = 1'-0"



3 3/S-3.00
S-3.00 3/4" = 1'-0"

| STRUCTURAL COLUMN MATERIAL TAKEOFF | | | |
|------------------------------------|------------------------|----------------|---|
| DESCRIPTION | MATERIAL NAME | MATERIAL COUNT | REMARKS |
| 4x4 WD RAILING POST | SEE NOTES AND SECTIONS | 438 | AVERAGE LENGTH OF RAILING POST SHALL BE 52.75' MIN. |
| 12" DIA. WD PILES | SEE NOTES AND SECTIONS | 196 | |

| STRUCTURAL FRAMING MATERIAL TAKEOFF | | | |
|-------------------------------------|------------------------|----------------|---------|
| DESCRIPTION | MATERIAL NAME | MATERIAL COUNT | REMARKS |
| 2x4 WD RAIL FRAMING MEMBER | SEE NOTES AND SECTIONS | 332 | |
| 2x6 WD FRAMING MEMBER | SEE NOTES AND SECTIONS | 484 | |
| 2x10 WD FRAMING MEMBER | SEE NOTES AND SECTIONS | 388 | |
| 2x12 WD FRAMING MEMBER | SEE NOTES AND SECTIONS | 24 | |
| 3x6 WD XBRACING FRAMING MEMBER | SEE NOTES AND SECTIONS | 176 | |
| 3x10 WD FRAMING MEMBER | SEE NOTES AND SECTIONS | 185 | |
| 3x12 WD FRAMING MEMBER | SEE NOTES AND SECTIONS | 6 | |

| FLOOR MATERIAL TAKEOFF | | | |
|-----------------------------|------------------------|---------------|---------|
| DESCRIPTION | MATERIAL NAME | MATERIAL AREA | REMARKS |
| 1 1/2" WD 2x6 FLOOR DECKING | SEE NOTES AND SECTIONS | 5125 SF | |

- NOTES:
- ALL FASTENERS AND HARDWARE SUCH AS BOLTS, WASHERS, NUTS, NAILS, SCREWS, ETC. SHALL BE STAINLESS STEEL.
 - ALL PLATES, ANGLES AND WELDED PLATE ASSEMBLIES SHALL BE HOT DIPPED GALVANIZED.
 - CONNECT THE ABUTTING 2x12 MEMBERS TO EACH OTHER WITH (2) PAIRS OF (2) 10# SST WD SCREWS, TYP.

MUEngineers, Inc.
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 CONSULTING STRUCTURAL ENGINEERS
 3440 N.E. 12TH AVENUE
 OAKLAND PARK FL 33334
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 FAX: 954-653-4170

NOTE: MUJ16101902
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ENGINEER: MARTIN O. LUTHERBERGER
 DATE: 01/07/2019
 DRAWN BY: NAME: AS: NOTED: CHECKED BY: TITLE: ROOM: 1032

DATE: 01/07/2019
 DRAWN BY: NAME: AS: NOTED: CHECKED BY: TITLE: ROOM: 1032

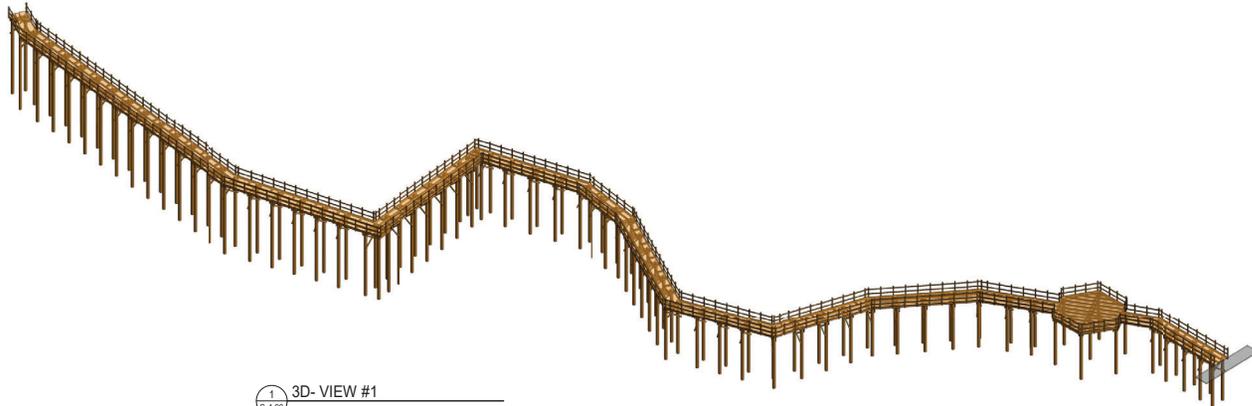
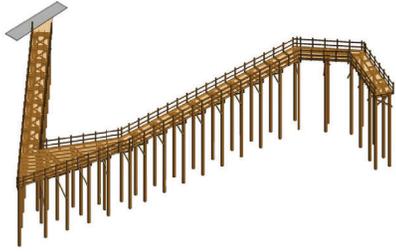
CITY OF FORT LAUDERDALE
 PUBLIC WORKS DEPARTMENT
 ENGINEERING & ARCHITECTURE
 City of Fort Lauderdale
 18305
 Fort Lauderdale, Florida

| NO. | DATE | BY | DESCRIPTION |
|-----|------|----|-------------|
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PROJECT # 11419
 STORMWATER PRESERVE
 RIVER OAKS NEIGHBORHOOD
 PROPOSED

SHEET NO: S-3.00
 TOTAL: 40
 CAD FILE: 4-135-81

Bid 12242-493



1 3D-VIEW #1
S-4.00



Certificate of Authorization No.29348

CONSULTING STRUCTURAL ENGINEERS

3440 N.E. 12TH AVENUE
OAKLAND PARK FL 33334
PH: 954-324-4730
FAX: 954-653-4170

NOTE: MUE16101902
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ENGINEER
MARTIN O. LUTHERBURGER
REGISTERED PROFESSIONAL ENGINEER
DATE: 01/07/2010

DATE: 01/07/2010
DRAWN BY: [blank]
CHECKED BY: [blank]
DATE: [blank]

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE



City of Fort Lauderdale
1985
Fort Lauderdale, Florida 33301

| NO. | DATE | BY | DESCRIPTION |
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PROJECT # 11419
STORMWATER PRESERVE
RIVER OAKS NEIGHBORHOOD
PROPOSED

SHEET NO:
S-4.00

TOTAL: 40
CAD FILE: -

DRAWING FILE NO:
4-135-81

Bid 12242-493

The Contractor shall have previous construction experience in wetlands, wetland construction and restoration, and boardwalks in South Florida within the past five (5) years. Bidder shall submit proof of construction experience for a minimum of three (3) projects of similar scope and scale (or larger) and shall, for each project listed, identify location; dates of construction; project name and overall scope; scope of work that was self-performed by Contractor; and client's name, address, telephone number and e-mail address.

Bidder's are expected to provide information on each project by including these forms in their bid submittals. If these forms are not utilized, the Bidder's must provide identical information to the City for evaluation purposes.

Note: Do not include proposed team members or parent/subsidiary companies as references in your submittals.

A. PRIME BIDDER'S NAME: _____

CLIENT NO.1 - Name of firm to be contacted: _____

Address: _____

Contact Person: _____

Phone No: (____) _____

Contact E-Mail Address: _____

Project Performance Period: _____ to _____
Dates should be in mm/yy format

Project Name : _____

Location of Project: _____

Overall Construction Cost: _____

Description of the overall scope: _____

Description of work that was self-performed by Bidder:

CLIENT NO.2 - Name of firm to be contacted: _____

Address: _____

Contact Person: _____

Phone No: (____) _____

Contact E-Mail Address: _____

Project Performance Period: _____ to _____
Dates should be in mm/yy format

Project Name : _____

Location of Project: _____

Overall Construction Cost: _____

Description of the overall scope: _____

Description of work that was self-performed by Bidder:

CLIENT NO.3 - Name of firm to be contacted: _____

Address: _____

Contact Person: _____

Phone No: (____) _____

Contact E-Mail Address: _____

Project Performance Period: _____ to _____
Dates should be in mm/yy format

Project Name : _____

Location of Project: _____

Overall Construction Cost: _____

Description of the overall scope: _____

Description of work that was self-performed by Bidder:

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT

MINORITY BUSINESS ENTERPRISE (MBE) - WOMEN BUSINESS ENTERPRISE (WBE)

PRIME CONTRACTOR IDENTIFICATION FORM

In order to assist us in identifying the status of those companies doing business with the City of Fort Lauderdale, this form must be completed and returned with your bid package.

Name of Firm:

Address of Firm:

Telephone Number:

Name of Person Completing Form:

Title:

Signature:

Date:

City Project Number:

City Project Description:

Please check the item(s) which properly identify the status of your firm:

- Our firm is not a MBE or WBE.
- Our firm is a MBE, as at least 51 percent is owned and operated by one or more socially and economically disadvantaged individuals.
 - American Indian Asian Black Hispanic
- Our firm is a WBE, as at least 51 percent is owned and operated by one or more women.
 - American Indian Asian Black Hispanic

MBE/WBE CONTRACTOR INFORMATION

The City, in a continuing effort, is encouraging the increased participation of minority and women-owned businesses in Public Works Department related contracts. Along those lines, we are requiring that each firm provide documentation detailing their own programs for utilizing minority and women-owned businesses.

Submit this information as a part of this bid package and refer to the checklist, to ensure that all areas of concern are covered. The low responsive bidder may be contacted to schedule a meeting to discuss these objectives. It is our intention to proceed as quickly as possible with this project, so your cooperation in this matter is appreciated.

CONTRACTOR CHECKLIST

List Previous City of Fort Lauderdale Contracts

| | |
|--|---|
| | 5 |
| | 6 |

Number of Employees in your firm

--Percent () Women

--Percent () Minorities

--Job Classifications of Women and Minorities

| | |
|--|---|
| | 5 |
| | 6 |

Use of minority and/or women subcontractors on past projects.

| | |
|--|---|
| | 5 |
| | 6 |

Nature of the work subcontracted to minority and/or women-owned firms.

| | |
|--|---|
| | 5 |
| | 6 |

How are subcontractors notified of available opportunities with your firm?

| | |
|--|---|
| | 5 |
| | 6 |

Anticipated amount to be subcontracted on this project.

| | |
|--|---|
| | 5 |
| | 6 |

Anticipated amount to be subcontracted to minority and/or women-owned businesses on this project.

| | |
|--|---|
| | 5 |
| | 6 |

NON-COLLUSION STATEMENT:

By signing this offer, the vendor/contractor certifies that this offer is made independently and *free* from collusion. Vendor shall disclose below any City of Fort Lauderdale, FL officer or employee, or any relative of any such officer or employee who is an officer or director of, or has a material interest in, the vendor's business, who is in a position to influence this procurement.

Any City of Fort Lauderdale, FL officer or employee who has any input into the writing of specifications or requirements, solicitation of offers, decision to award, evaluation of offers, or any other activity pertinent to this procurement is presumed, for purposes hereof, to be in a position to influence this procurement.

For purposes hereof, a person has a material interest if they directly or indirectly own more than 5 percent of the total assets or capital stock of any business entity, or if they otherwise stand to personally gain if the contract is awarded to this vendor.

In accordance with City of Fort Lauderdale, FL Policy and Standards Manual, 6.10.8.3,

3.3. City employees may not contract with the City through any corporation or business entity in which they or their immediate family members hold a controlling financial interest (e.g. ownership of five (5) percent or more).

3.4. Immediate family members (spouse, parents and children) are also prohibited from contracting with the City subject to the same general rules.

Failure of a vendor to disclose any relationship described herein shall be reason for debarment in accordance with the provisions of the City Procurement Code.

NAME

RELATIONSHIPS

-

In the event the vendor does not indicate any names, the City shall interpret this to mean that the vendor has indicated that no such relationships exist.

QUESTIONNAIRE SHEET

PLEASE PRINT OR TYPE:

Firm Name:

President

Business Address:

5
 6

Telephone:

Fax:

E-Mail Address:

What was the last project of this nature which you completed? Include the year, description, and contract value.

5
 6

The following are named as three corporations and representatives of those corporations for which you have performed work similar to that required by this contract, and which the City may contact as your references (include addresses, telephone numbers and e-mail addresses). Include the project name, year, description, and contract value.

How many years has your organization been in business?

Have you ever failed to complete work awarded to you; if so, where and why?

The name of the qualifying agent for the firm and his position is:

Certificate of Competency Number of Qualifying Agent:

Effective Date: Expiration Date:

Licensed in: Engineering Contractor's License #

(County/State)

Expiration Date:

NOTE: To be considered for award of this contract, the bidder must submit a financial statement upon request.

NOTE: Contractor must have proper licensing and shall provide copy of same with his proposal.

QUESTIONNAIRE SHEET

1. Have you personally inspected the proposed work and have you a complete plan for its performance?

5
 6

2. Will you sublet any part of this work? If so, list the portions or specialties of the work that you will.

a)

b)

c)

d)

e)

f)

g)

3. What equipment do you own that is available for the work?

5
 6

4. What equipment will you purchase for the proposed work?

5
 6

5. What equipment will you rent for the proposed work?

5
 6

**CONTRACTOR'S CERTIFICATE OF COMPLIANCE WITH
NON-DISCRIMINATION PROVISIONS OF THE CONTRACT**

The completed and signed form should be returned with the Contractor's submittal. If not provided with submittal, the Contractor must submit within three business days of City's request. Contractor may be deemed non-responsive for failure to fully comply within stated timeframes.

Pursuant to City Ordinance Sec. 2-187(c), bidders must certify compliance with the Non-Discrimination provision of the ordinance.

The Contractor shall not, in any of his/her/its activities, including employment, discriminate against any individual on the basis of race, color, national origin, religion, creed, sex, disability, sexual orientation, gender, gender identity, gender expression, or marital status.

1. The Contractor certifies and represents that he/she/it will comply with Section 2-187, Code of Ordinances of the City of Fort Lauderdale, Florida, as amended by Ordinance C-18-33 (collectively, "Section 2-187").
2. The failure of the Contractor to comply with Section 2-187 shall be deemed to be a material breach of this Agreement, entitling the City to pursue any remedy stated below or any remedy provided under applicable law.
3. The City may terminate this Agreement if the Contractor fails to comply with Section 2-187.
4. The City may retain all monies due or to become due until the Contractor complies with Section 2-187.
5. The Contractor may be subject to debarment or suspension proceedings. Such proceedings will be consistent with the procedures in section 2-183 of the Code of Ordinances of the City of Fort Lauderdale, Florida.

Authorized Signature

Print Name and Title

Date

CONSTRUCTION BID CERTIFICATION

Please Note: All fields below must be completed. If the field does not apply to you, please note N/A in that field. If you are a foreign corporation, you may be required to obtain a certificate of authority from the Department of State, in accordance with Florida Statute §607.1501 (visit <http://www.dos.state.fl.us/>).

Company: (Legal Registration)

Address:

City: State: Zip:

Telephone No. FAX No. Email:

Check box if your firm qualifies for MBE / SBE / WBE:

If a corporation, state the name of the President, Secretary and Resident Agent. If a partnership, state the names of all partners. If a trade name, state the names of the individuals who do business under the trade name.

| | | | |
|----------------------|----------------------|----------------------|----------------------|
| <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| Name | Title | Name | Title |
| <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| Name | Title | Name | Title |

ADDENDUM ACKNOWLEDGEMENT - Bidder acknowledges that the following addenda have been received and are included in the bid:

| Addendum No. | Date Received |
|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| <input type="text"/> |

VARIANCES: If you take exception or have variances to any term, condition, specification, or requirement in this bid you must specify such variance in the space provided below or reference in the space provided below all variances contained on other pages within your bid. Additional pages may be attached if necessary. No variances will be deemed to be part of the bid submitted unless such is listed and contained in the space provided below. The City does not, by virtue of submitting a variance, necessarily accept any variances. If no statement is contained in the below space, it is hereby implied that your response is in full compliance with this competitive solicitation. If you do not have variances, simply mark N/A. If submitting your response electronically through BIDSYNC you must also click the "Take Exception" button.

The below signatory affirms that he has or will obtain all required permits and licenses from the appropriate agencies, and that his firm is authorized to do business in the State of Florida. The below signatory agrees to furnish all labor, tools, material, equipment and supplies, and to sustain all the expense incurred in doing the work set forth in strict accordance with the bid plans and contract documents at the unit prices indicated if awarded a contract. The below signatory has not divulged to, discussed, or compared this bid with other bidders, and has not colluded with any other bidder or parties to this bid whatsoever. Furthermore, the undersigned guarantees the truth and accuracy of all statements and answers contained in this bid. The below signatory also hereby agrees, by virtue of submitting or attempting to submit a bid, that in no event shall the City's liability for bid direct, indirect, incidental, consequential, special or exemplary damages, expenses, or lost profits arising out of this competitive solicitation process, including but not limited to public advertisement, bid conferences, site visits, evaluations, oral presentations, or award proceedings exceed the amount of Five Hundred Dollars (\$500.00). This limitation shall not apply to claims arising under any provision of indemnification or the City's protest ordinance contained in this competitive solicitation.

Submitted by:

Name (printed)

Signature

Date

Title

Revised 07/11/2019

CONTRACT PAYMENT METHOD

The City of Fort Lauderdale has implemented a Procurement Card (P-Card) program which changes how payments are remitted to its vendors. The City has transitioned from traditional paper checks to credit card payments via MasterCard or Visa as part of this program.

This allows you as a vendor of the City of Fort Lauderdale to receive your payments fast and safely. No more waiting for checks to be printed and mailed.

In accordance with the contract, payments on this contract will be made utilizing the City's P Card (MasterCard or Visa). Accordingly, bidders must presently have the ability to accept these credit cards or take whatever steps necessary to implement acceptance of a card before the start of the contract term, or contract award by the City.

All costs associated with the Contractor's participation in this purchasing program shall be borne by the Contractor. The City reserves the right to revise this program as necessary.

By signing below you agree with these terms.

Please indicate which credit card payment you prefer:

MasterCard

Visa

Company Name

Name (Printed)

Signature

Date

Title

City of Fort Lauderdale • Procurement Services Division
100 N. Andrews Avenue, 619 • Fort Lauderdale, Florida 33301
954-828-5933 Fax 954-828-5576
purchase@fortlauderdale.gov

ADDENDUM NO. 1

ITB No. 12242-493

TITLE: River Oaks Preserve Project P11419

ISSUED: August 27, 2019

This addendum is being issued to make the following change(s):

- 1. FOR REFERENCE ONLY ADD:
The attached Department of the Army Initial Proffered Permit No. SAJ-2006-06782(SP-PWB).**

All other terms, conditions, and specifications remain unchanged.

(Penelope Burger)
(Procurement Administrator)

Company Name: _____
(please print)

Bidder's Signature: _____

Date: _____

DEPARTMENT OF THE ARMY PERMIT

Permittee: CITY OF FORT LAUDERDALE
Attention: Paul A. Berg
100 N. Andrews Avenue
Fort Lauderdale, Florida 33301

Permit No: SAJ-2006-06782(SP-PWB)

Issuing Office: U.S. Army Engineer District, Jacksonville

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the U.S. Army Corps of Engineers (Corps) having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description: The applicant seeks authorization to discharge 970 cubic yards of fill within 0.28 acres of freshwater wetlands to construct a wetland preserve and surface-water management system to contain pretreated storm water runoff and alleviate flooding in the River Oaks neighborhood. The surface-water management system would require removing the existing outflow structure that flows into the New River Canal and installing a pump station and new outflow structure that would include installing 44.5 cubic yards of riprap with a manatee excluder grate at the northwest corner of the property, installing an inflow structure and pump station at the south east corner of the property and connecting the surface water system to the street drainage system of the River Oaks neighborhood.

The 8.41 acre site contains 3.51 acres of wetlands (2.64 acres of forested wetlands and 0.87 acres of herbaceous.) The project would place 970 cubic yards of fill within 0.28 acres of wetlands. This includes 970 cubic yards of fill placed within 0.28 acres of herbaceous wetlands to create a berm (0.23 acres) and filling in a portion of the northwestern portion of the property (0.05 acres) for the construction of a pump-house. Additionally 2.9 acres of uplands would be excavated for wetland creation and 3.23 acres of existing wetlands are to be enhanced and 0.23 acres of uplands would be created. The project also includes installing a new 4,527 square foot boardwalk for the public to access the area for passive recreation. The work described above is to be completed in accordance with the 14 pages of drawings [and 7 attachments] affixed at the end of this permit instrument.

Project Location: The project site is located within an undeveloped lot in the River Oaks Neighborhood, immediately west of SW 19th Avenue and east of SW 20th Terrace (PCN #'s 504216000170, 504216000160, 504216000141, 504216000200, and 504216460010), Section 16, Township 50 South, Range 42 East, in Fort Lauderdale, Broward County, Florida.

Directions to site: From Southbound I-95 take exit 25 Marina Mile Boulevard/84. Turn east onto State Road 84 and continue to SW 15th Avenue. Turn north onto SW 15th Avenue and continue to SW 24th Street. Turn west onto SW 24th Street and continue, the street curves north and becomes SW 19th Avenue, continue to SW 23rd Court. The street dead ends at the property.

Approximate Central Coordinates:

Latitude: 26.09422° North

Longitude: -80.16719° West

Permit Conditions

General Conditions:

1. The time limit for completing the work authorized ends on _____.
If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.

2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.

3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and State coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

4. If you sell the property associated with this permit, you must obtain the signature and the mailing address of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.

5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.

6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

Special Conditions:

1. **Reporting Address:** The Permittee shall submit all reports, notifications, documentation and correspondence required by the general and special conditions of this permit to the following address:

a. For standard mail: U.S. Army Corps of Engineers, Regulatory Division, Enforcement Section, 4400 PGA Boulevard, Suite 500, Palm Beach Gardens, Florida 33410.

b. For electronic mail (preferred) SAJ-RD-Enforcement@usace.army.mil (not to exceed 10 MB).

The Permittee shall reference this permit number, SAJ-2006-06782(SP-PJB), on all submittals.

2. **Commencement Notification:** Within 10 days from the date of initiating the work authorized by this permit the Permittee shall provide a written notification of the date of commencement of authorized work to the Corps.

3. **Cultural Resources/Historic Properties:**

a. No structure or work shall adversely affect impact or disturb properties listed in the National Register of Historic Places (NRHP) or those eligible for inclusion in the NRHP.

b. If during the ground disturbing activities and construction work within the permit area, there are archaeological/cultural materials encountered which were not the

subject of a previous cultural resources assessment survey (and which shall include, but not be limited to: pottery, modified shell, flora, fauna, human remains, ceramics, stone tools or metal implements, dugout canoes, evidence of structures or any other physical remains that could be associated with Native American cultures or early colonial or American settlement), the Permittee shall immediately stop all work and ground-disturbing activities within a 100-meter diameter of the discovery and notify the Corps within the same business day (8 hours). The Corps shall then notify the Florida State Historic Preservation Officer (SHPO) and the appropriate Tribal Historic Preservation Officer(s) (THPO(s)) to assess the significance of the discovery and devise appropriate actions.

c. Additional cultural resources assessments may be required of the permit area in the case of unanticipated discoveries as referenced in accordance with the above Special Condition; and if deemed necessary by the SHPO, THPO(s), or Corps, in accordance with 36 CFR 800 or 33 CFR 325, Appendix C (5). Based, on the circumstances of the discovery, equity to all parties, and considerations of the public interest, the Corps may modify, suspend or revoke the permit in accordance with 33 CFR Part 325.7. Such activity shall not resume on non-federal lands without written authorization from the SHPO for finds under his or her jurisdiction, and from the Corps.

d. In the unlikely event that unmarked human remains are identified on non-federal lands, they will be treated in accordance with Section 872.05 Florida Statutes. All work and ground disturbing activities within a 100-meter diameter of the unmarked human remains shall immediately cease and the Permittee shall immediately notify the medical examiner, Corps, and State Archeologist within the same business day (8-hours). The Corps shall then notify the appropriate SHPO and THPO(s). Based, on the circumstances of the discovery, equity to all parties, and considerations of the public interest, the Corps may modify, suspend or revoke the permit in accordance with 33 CFR Part 325.7. Such activity shall not resume without written authorization from the State Archeologist and from the Corps.

e. If prehistoric or historic artifacts, such as pottery or ceramics, projectile points, dugout canoes, metal implements, historic building materials, or any other physical remains that could be associated with Native American, early European, or American settlement are encountered at any time within the project site area, the permitted project shall cease all activities involving subsurface disturbance in the vicinity of the discovery. The applicant shall contact the Florida Department of State, Division of Historical Resources, Compliance Review Section at (850)-245-6333. Project activities shall not resume without verbal and/or written authorization. In the event that unmarked human remains are encountered during permitted activities, all work shall stop immediately and the proper authorities notified in accordance with Section 872.05, Florida Statutes.

4. Erosion Control: Prior to the initiation of any work authorized by this permit, the Permittee shall install erosion control measures along the perimeter of all work areas to prevent the displacement of fill material outside the work area into waters of the United States. Immediately after completion of the final grading of the land surface, all slopes, land surfaces, and filled areas shall be stabilized using sod, degradable mats, barriers, or a combination of similar stabilizing materials to prevent erosion. The erosion control measures shall remain in place and be maintained until all authorized work is completed and the work areas are stabilized.

5. Fill Material: The Permittee shall use only clean fill material for this project. The fill material shall be free from items such as trash, debris, automotive parts, asphalt, construction materials, concrete block with exposed reinforcement bars, and soils contaminated with any toxic substance, in toxic amounts in accordance with Section 307 of the Clean Water Act.

6. Eastern Indigo Snake Protection Measures: Permittee shall comply with U.S. Fish and Wildlife Service's "Standard Protection Measures for the Eastern Indigo Snake" dated August 1, 2017, as provided in Attachment C of this permit. All gopher tortoise burrows, active or inactive, shall be evacuated prior to site manipulation in the vicinity of the burrow. If excavating potentially occupied burrows, active or inactive, individuals must first obtain state authorization via a Florida Fish and Wildlife Conservation Commission (FWC) Authorized Gopher Tortoise Agent permit. The excavation method selected shall minimize the potential for injury of an indigo snake. The Permittee shall follow the excavation guidance provided in the most current FWC Gopher Tortoise Permitting Guidelines found at <http://myfwc.com/gophertortoise>. If an indigo snake is encountered, the snake must be allowed to vacate the area prior to additional site manipulation in the vicinity. Holes, cavities, and snake refugia other than gopher tortoise burrows shall be inspected each morning before planned site manipulation of a particular area, and if occupied by an indigo snake, no work shall commence until the snake has vacated the vicinity of the proposed work.

7. Manatee Conditions: The Permittee shall comply with the "Standard Manatee Conditions for In-Water Work – 2011" (Attachment D).

8. Manatee Condition for Culverts: All culverts 8 inches to 8 feet in diameter must be grated to prevent manatee entrapment. Grates must be permanently fixed, spaced a maximum of 8 inches apart (may be less for culverts smaller than 16 inches in diameter) and may be installed diagonally, horizontally or vertically. For new culverts, grates must be attached prior to installation of the culverts. Culverts less than 8 inches or greater than 8 feet in diameter are exempt from this requirement.

9. Project Design Criteria (PDCs) for In-Water Activities: The Permittee shall comply with National Marine Fisheries Service's "PDCs for In-Water Activities" dated November 20, 2017 (Attachment E).

10. Daylight Hours: All activities must be completed during daylight hours.

11. Erosion Control: All outfall discharge shall be designed and implemented to prevent erosion and scour.

12. Agency Changes/Approvals: Should any other agency require and/or approve changes to the work authorized or obligated by this permit, the Permittee is advised a modification to this permit instrument is required prior to initiation of those changes. It is the Permittee's responsibility to request a modification of this permit from the Palm Beach Gardens Permits Section. The Corps reserves the right to fully evaluate, amend, and approve or deny the request for modification of this permit.

13. Wetland Avoidance Areas: The Permittee shall avoid the remaining 3.23 acres of onsite wetlands, as detailed on Drawings 2 through 4 of 14 (Attachment A). These wetland areas were avoided as part of this permit application review process; and, therefore, the remaining wetland areas will not be disturbed by any activities that would degrade the ecological integrity of the site including dredging, filling, land clearing, or other construction work whatsoever except as required or authorized by this permit including the attached mitigation plan. The Corps reserves the right to deny review of any requests for future impacts to these avoided wetland areas.

14. Compensatory Mitigation: Within 6 months from the date of initiating the work authorized by this permit, the Permittee shall complete all construction and implementation mitigation activities in accordance with the approved final compensatory mitigation plan included as Attachment F of this permit. In addition, the Permittee shall complete all additional required mitigation plan components as detailed in Attachment F. The mitigation plan includes the enhancement of 3.23 acres of wetlands and the creation of 2.9 acres of wetlands. However, only the enhancement of 3.23 acres of wetlands is required as compensatory mitigation for the direct impacts to 0.28 acres of wetlands.

15. Monitoring and Reporting Timeframes: To document achievement of the performance standards identified in the approved mitigation plan (Attachment F) the Permittee shall complete the following:

a. Perform a time-zero monitoring event of the wetland mitigation area(s) within 60 days of completion of the compensatory mitigation construction and implementation activities identified in the approved mitigation plan (Attachment F).

b. Submit the time-zero report to the Corps within 60 days of completion of the monitoring event. The report will include at least one paragraph depicting baseline conditions of the mitigation site(s) prior to initiation of the compensatory mitigation objectives and a detailed plan view drawing of all created, enhanced and/or restored mitigation areas.

c. Subsequent to completion of the compensatory mitigation objectives, perform semi-annual monitoring of the wetland mitigation areas for the first 2 years and annual monitoring thereafter for a total of no less than 5 years of monitoring.

d. Submit annual monitoring reports to the Corps within 60 days of completion of the monitoring event. Semi-annual monitoring will be combined into one annual monitoring report.

e. Monitor the mitigation area(s) and submit annual monitoring reports to the Corps until released in accordance with the Mitigation Release Special Condition # 18 of this permit.

16. Reporting Format: The Permittee shall submit all monitoring documentation to the Corps on 8½-inch by 11-inch paper, and include the following:

a. Project Overview:

(1) Department of the Army Permit Number

(2) Name and contact information of Permittee and consultant

(3) Name of party responsible for conducting the monitoring and the date(s) the inspection was conducted

(4) A brief paragraph describing the purpose of the approved project, acreage and type of aquatic resources impacted, and mitigation acreage and type of aquatic resources authorized to compensate for the aquatic impacts.

(5) Written description of the location, any identifiable landmarks of the compensatory mitigation project including information to locate the site perimeter(s),

and coordinates of the mitigation site (expressed as latitude, longitude, UTM, state plane coordinate system, etc.).

(6) Dates compensatory mitigation commenced and/or was complete.

(7) Short statement on whether the performance standards are being met.

(8) Dates of any recent corrective or maintenance activities conducted since the previous report submission

(9) Specific recommendations for any additional corrective or remedial actions.

b. Requirements: List the monitoring requirements and performance standards, as specified in the approved mitigation plan and special conditions of this permit, and evaluate whether the compensatory mitigation project site is successfully achieving the approved performance standards or trending towards success. A table is a recommended option for comparing the performance standards to the conditions and status of the developing mitigation site.

c. Summary Data: Summary data should be provided to substantiate the success and/or potential challenges associated with the compensatory mitigation project. Photo documentation may be provided to support the findings and recommendations referenced in the monitoring report and to assist the PM in assessing whether the compensatory mitigation project is meeting applicable performance standards for that monitoring period. Submitted photos should be formatted to print on a standard 8½-inch x 11-inch piece of paper, dated, and clearly labeled with the direction from which the photo was taken. The photo location points should also be identified on the appropriate maps.

d. Maps and Plans: Maps shall be provided to show the location of the compensatory mitigation site relative to other landscape features, habitat types, locations of photographic reference points, transects, sampling data points, and/or other features pertinent to the mitigation plan. In addition, the submitted maps and plans should clearly delineate the mitigation site perimeter(s). Each map or diagram should be formatted to print on a standard 8½-inch x 11-inch piece of paper and include a legend and the location of any photos submitted for review. As-built plans may be included.

e. Conclusions: A general statement shall be included that describes the conditions of the compensatory mitigation project. If performance standards are not being met, a brief explanation of the difficulties and potential remedial actions

proposed by the Permittee or sponsor, including a timetable, shall be provided. The District Commander will ultimately determine if the mitigation site is successful for a given monitoring period.

17. Remediation: If the compensatory mitigation fails to meet the performance standards 5 years after completion of the compensatory mitigation objectives, the compensatory mitigation will be deemed unsuccessful. Within 60 days of notification by the Corps that the compensatory mitigation is unsuccessful, the Permittee shall submit to the Corps an alternate compensatory mitigation proposal sufficient to create the functional lift required under this permit. The alternate compensatory mitigation proposal may be required to include additional mitigation to compensate for the temporal loss of wetland functions associated with the unsuccessful compensatory mitigation activities. The Corps reserves the right to fully evaluate, amend, and approve or reject the alternate compensatory mitigation proposal. Within 120 days of Corps approval, the Permittee will complete the alternate compensatory mitigation proposal.

18. Mitigation Release: The Permittee's responsibility to complete the required compensatory mitigation, as set forth in the Compensatory Mitigation Special Condition of this permit will not be considered fulfilled until mitigation success has been demonstrated and written verification has been provided by the Corps. A mitigation area which has been released will require no further monitoring or reporting by the Permittee; however the Permittee, Successors and subsequent Transferees remain perpetually responsible to ensure that the mitigation area(s) remain in a condition appropriate to offset the authorized impacts in accordance with General Condition 2 of this permit.

19. Perpetual Conservation: The Permittee shall maintain the mitigation areas in their natural state in perpetuity. The Permittee agrees that the only future utilization of these areas will not be in conflict with the intended ecological function of the site and the following uses and/or activities will be prohibited except as required or authorized by this permit:

a. Construction or placing buildings, roads, signs, billboards or other advertising, utilities or other structures on or above the ground. Elevated boardwalks, hiking trails and camping areas will be permitted as long as they do not involve any of the other prohibited uses listed below:

b. Dumping or placing soil or other substance or material as landfill or dumping or placing of trash, waste or unsightly or offensive material.

c. Removal or destruction of trees, shrubs, or other vegetation.

- d. Excavation, dredging or removal of loam, peat, gravel, soil, rock, or other material substance in such a manner as to affect the surface.
- e. Surface use, except for purposes that permit the land or water area to remain predominantly in its natural condition.
- f. Activities detrimental to drainage, flood control, water conservation, erosion control, soil conservation, or fish and wildlife habitat preservation.
- g. Acts or uses detrimental to such retention of land or water areas.
- h. Acts or uses detrimental to the preservation of the structural integrity or the physical appearance of sites or properties of historical, architectural, or cultural significance.

20. Notice of Permit: The Permittee shall complete and record the Notice of Department of the Army Permit (Attachment G) with the Clerk of the Circuit Court, Registrar of Deeds or other appropriate official charged with the responsibility of maintaining records of title to or interest in real property within the county of the authorized activity. Within 90 days from the effective date of this permit the Permittee shall provide a copy of the recorded Notice of Permit to the Corps clearly showing a stamp from the appropriate official indicating the book and page at which the Notice of Permit is recorded and the date of recording.

21. As-Built Certification: Within 60 days of completion of the work authorized by this permit, the Permittee shall submit as-built drawings of the authorized work and a completed "As-Built Certification By Professional Engineer" form (Attachment H) to the Corps. The as-built drawings shall be signed and sealed by a registered professional engineer and include the following:

- a. A plan view drawing of the location of the authorized work footprint, as shown on the permit drawings, with transparent overlay of the work as constructed in the same scale as the permit drawings on 8½-inch by 11-inch sheets. The plan view drawing should show all "earth disturbance," including wetland impacts and water management structures.
- b. A list of any deviations between the work authorized by this permit and the work as constructed. In the event that the completed work deviates, in any manner, from the authorized work, describe on the attached "As-Built Certification By Professional Engineer" form the deviations between the work authorized by this permit

and the work as constructed. Clearly indicate on the as-built drawings any deviations that have been listed. Please note that the depiction and/or description of any deviations on the drawings and/or "As-Built Certification By Professional Engineer" form does not constitute approval of any deviations by the Corps.

- c. Include the Department of the Army permit number on all sheets submitted.

Further Information:

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:

(X) Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403)

(X) Section 404 of the Clean Water Act (33 U.S.C. 1344)

() Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413)

2. Limits of this authorization.

a. This permit does not obviate the need to obtain other Federal, State, or local authorizations required by law.

b. This permit does not grant any property rights or exclusive privileges.

c. This permit does not authorize any injury to the property or rights of others.

d. This permit does not authorize interference with any existing or proposed Federal projects.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.

b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.

c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

d. Design or construction deficiencies associated with the permitted work.

e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. **Reliance on Applicant's Data:** The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. **Reevaluation of Permit Decision:** This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

a. You fail to comply with the terms and conditions of this permit.

b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (see 4 above).

c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. **Extensions:** General Condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

(PERMITTEE)

(DATE)

(PERMITTEE NAME-PRINTED)

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

(DISTRICT ENGINEER)
ANDREW D. KELLY, JR.
Colonel, U.S. Army
District Commander

(DATE)

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

(TRANSFEREE-SIGNATURE)

(DATE)

(NAME-PRINTED)

(ADDRESS)

(CITY, STATE, AND ZIP CODE)

***Attachments to Department of the Army
Permit Number SAJ-2006-06782(SP-PWB)***

- A. PERMIT DRAWINGS: 14 pages, dated August 6, 2019.
- B. WATER QUALITY CERTIFICATION: Specific Conditions of the water quality permit/certification in accordance with General Condition number 5 on page 2 of this DA permit. 9 pages.
- C EASTERN INDIGO SNAKE CONDITIONS: 6 pages
- D. MANATEE CONDITIONS: 2 pages, *Standard Manatee Conditions for In-Water Work – 2011*
- E. PDCs for In-Water Activities” dated November 20, 2017, 3 pages
- F. MITIGATION PLAN: 3 pages
- G. Notice of permit: 2 pages
- H. AS-BUILT CERTIFICATION FORM: 2 pages