

ST. LUCIE WEST SERVICES DISTRICT

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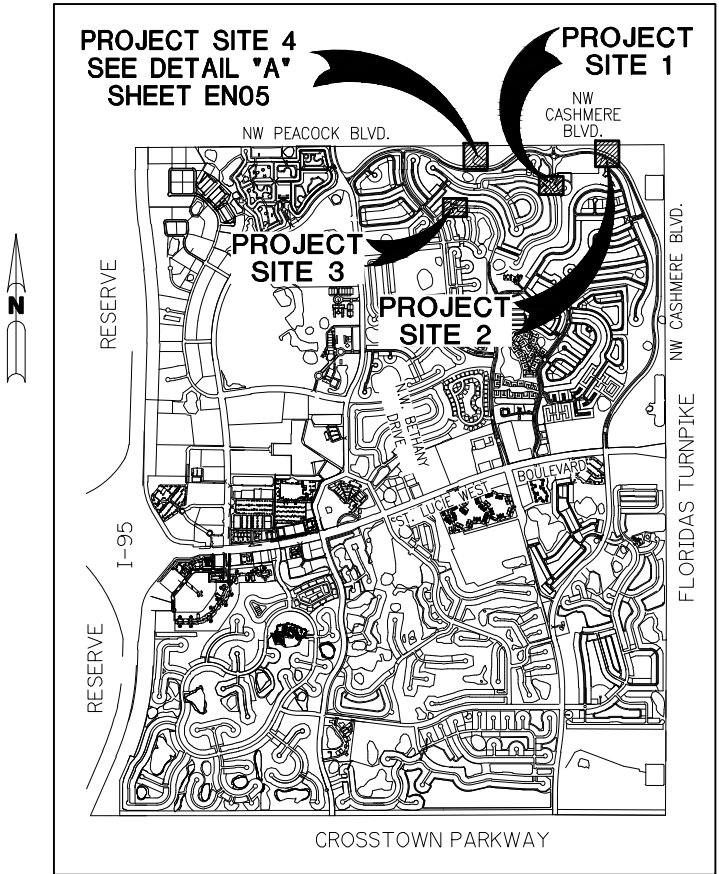
BASIN 6B CONTROL STRUCTURE RELOCATION

OWNER: ST. LUICE WEST SERVICES DISTRICT
450 S.W. UTILITY DRIVE
PORT ST. LUCIE, FL 34986

PHONE: 772 340-0220
FAX: 772-871-5771

NOTES:

ALL ELEVATIONS SHOWN HEREON ARE NGVD
SUBTRACT 1.48' TO CONVERT NGVD TO NAVD



LOCATION MAP

N.T.S.

SEC. 24 TWP 36S RGE. 39E &
SEC. 19 TWP 36S RGE. 40E

PREPARED BY:



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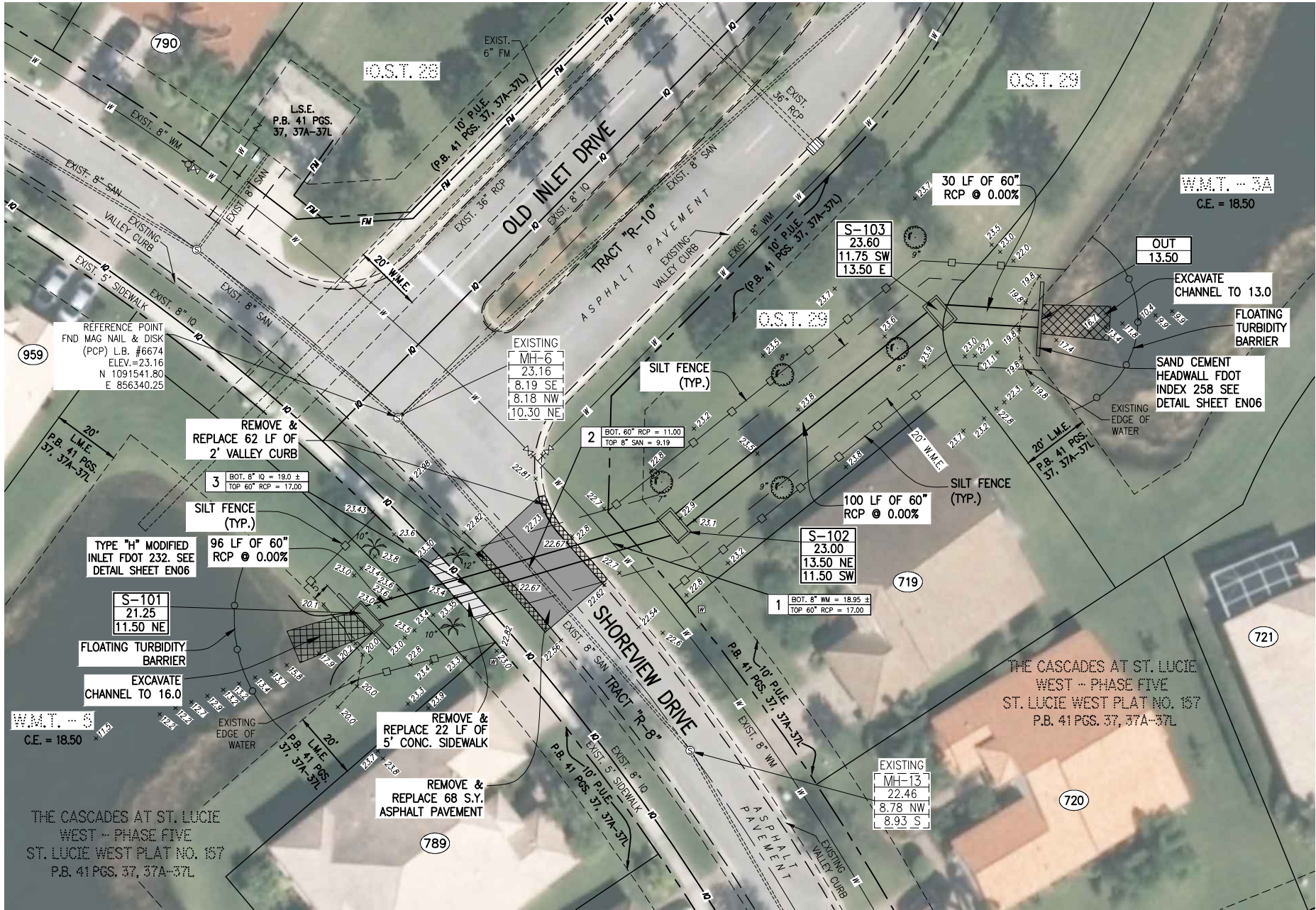
EB 7917 / LB 7062

INDEX OF SHEETS

| SHEET No. | DESCRIPTION |
|-----------|---|
| EN01 | COVER WITH LOCATION MAP |
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| EN04 | SITE 3 IMPROVEMENT PLAN |
| EN05-EN06 | DETAILS |
| EN07 | STORMWATER POLLUTION PREVENTION DETAILS |

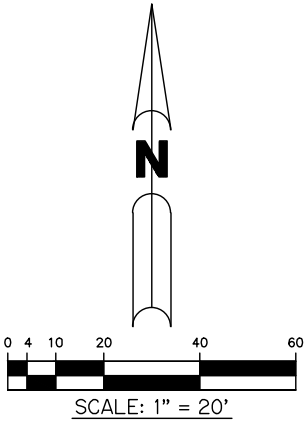
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| DATE JUNE 2018 | SCALE NONE |
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| LEAD DESIGN PROF. RWL | CHECKED BY |
| TASK/PHASE NUMBER 00DES | DRAWN BY JAF |
| PROJECT NUMBER WF003601.0024 | DRAWING NUMBER EN01 |

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Current Plotstyle : BxColor
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NOTES:
CONTRACTOR SHALL REPAIR ALL DAMAGE TO EXISTING SPRINKLER LINES & LANDSCAPE IMPROVEMENTS DISTURBED BY CONSTRUCTION.

SIDEWALK REPAIR SHALL BE 4" THICK CONCRETE (2500 PSI) WITH 12" SUBGRADE COMPACTED TO 95% OF AASHTO T-180.



LEGEND

EXISTING STORM SEWER WITH CATCH BASIN
STORM SEWER LINE WITH JUNCTION BOX
STORM SEWER LINE WITH CATCH BASIN AND NUMBER
EXIST. SANITARY SEWER LINE WITH MANHOLE
WATER MAIN
PROPOSED ELECTRIC CONDUIT
PROPOSED SILT FENCE
PROPOSED SILT FENCE
PROPOSED ELEVATION
DIRECTION OF FLOW
ANTENNA
ELECTRICAL CONTROL BOX
EXISTING ELEVATION
EXISTING ELECTRIC HANDHOLE
EXISTING FIRE HYDRANT
EXISTING GATE VALVE
EXISTING REDUCER
EXISTING DRAINAGE MANHOLE
EXISTING FORCE MAIN
EXISTING IRRIGATION MAIN
EXISTING WATER MAIN
EXISTING FIBER OPTIC
EXISTING OVERHEAD ELECTRIC
EXISTING UNDERGROUND ELECTRIC
EXISTING BENCHMARK
DENOTES PORTION OF PAVEMENT AND SIDEWALK TO BE REPAIRED WITH THESE IMPROVEMENTS
DENOTES PORTION OF SIDEWALK TO BE REPAIRED WITH THESE IMPROVEMENTS
DENOTES PORTION OF CURB TO BE REPAIRED WITH THESE IMPROVEMENTS
LOT NUMBER
CONTROL ELEVATION
CORRUGATED ALUMINUM PIPE
DRAINAGE EASEMENT
FND.
ELEVATION
EXISTING
HIGH POINT
IRRIGATION EASEMENT
LAKE MAINTENANCE EASEMENT
LICENSED SURVEY BUSINESS
PAGES
P.B.
PLAY BOOK
P.C.P.
P.C.
PRIVATE UTILITY EASEMENT
REINFORCED CONCRETE PIPE
RIGHT-OF-WAY
STORM DRAINAGE
TYPICAL
UTILITY EASEMENT
WATER MANAGEMENT EASEMENT
OAK TREE
PALM TREE

STRUCTURE NO. S-1
GRATE/RIM ELEV. 20.00
INVERT ELEV. 15.00

262
C.E.
OAP
D.E.
FOUND
ELEV.
EXIST.
HP
I.E.
L.M.E.
L.B.
P.C.
P.B.
PERMANENT CONTROL POINT
POINT OF CURVATURE
P.U.E.
RCP
R/W
STM
TYP
U.E.
W.M.E.

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| REV. | ISSUED DATE | DESCRIPTION |
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PROJECT TITLE
**BASIN 6B
CONTROL STRUCTURE
RELOCATION**

SHEET TITLE
**PROJECT SITE 1
60" INTERCONNECT PIPE**

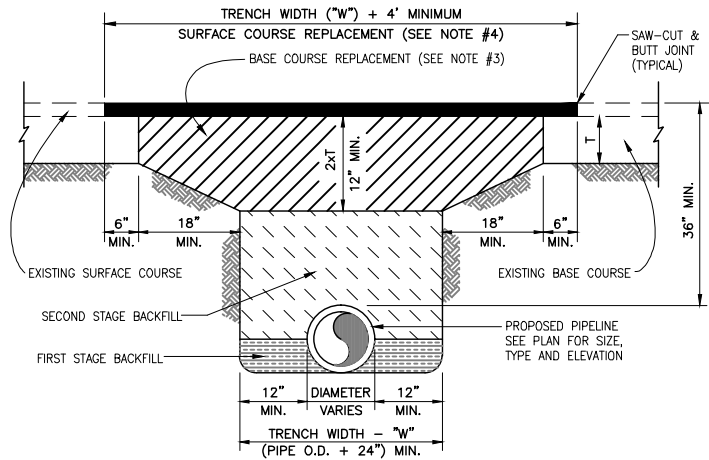
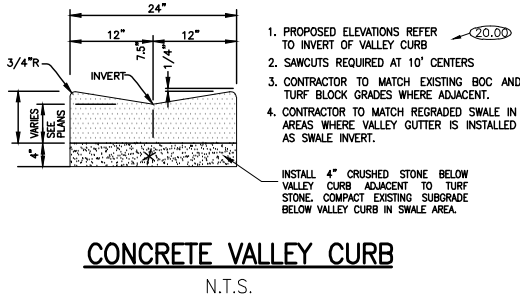
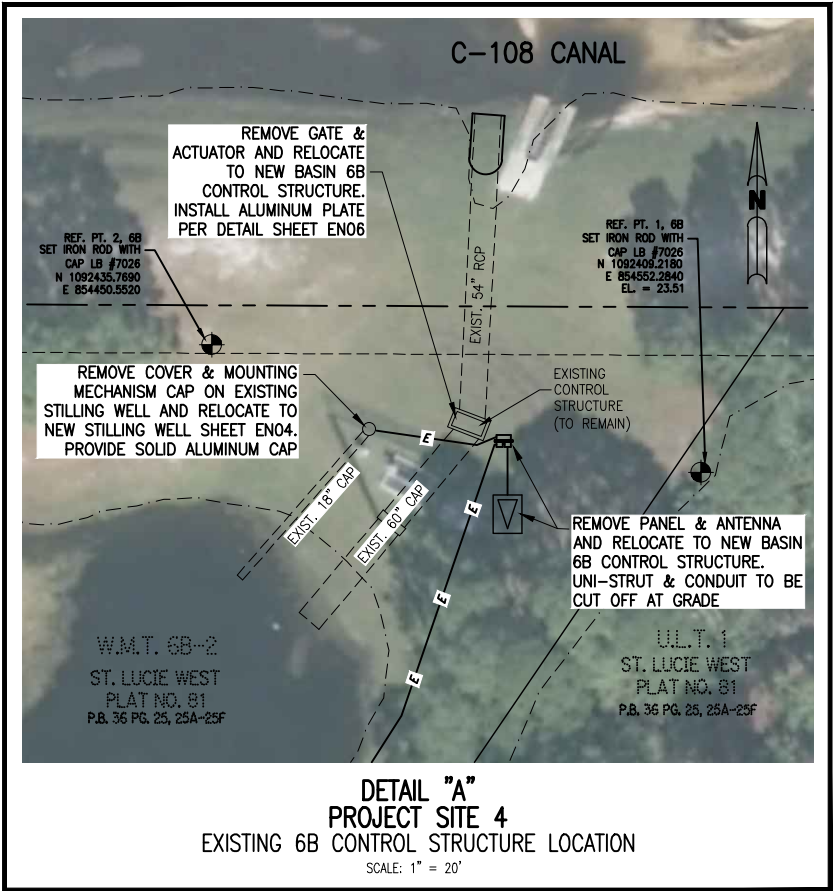
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| TASK/PHASE NUMBER 00DES | DRAWN BY JAF |
| PROJECT NUMBER WF003601.0024 | DRAWING NUMBER EN02 |

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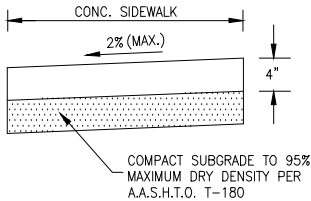
GENERAL NOTES:

- ALL CHANGES SHALL BE APPROVED IN WRITING BY ARCADIS US, INC..
- ALL WORK SHALL BE DONE IN A WORKMANLIKE MANNER AND SHALL CONFORM TO ALL APPLICABLE CITY, COUNTY, STATE, OR FEDERAL REGULATIONS AND/OR CODES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND LICENSES REQUIRED PRIOR TO INITIATING WORK.
- SEQUENCE OF CONSTRUCTION – THE SEQUENCE OF CONSTRUCTION SHALL BE SUCH THAT ALL UNDERGROUND INSTALLATIONS OF EVERY KIND THAT ARE BENEATH THE PAVEMENT, SHALL BE IN PLACE AND HAVE PROPER DENSITY PRIOR TO CONSTRUCTION AND COMPACTION OF THE SUBGRADE.
- THE CONTRACTOR SHALL CALL SUNSHINE 1-800-432-4770 48 HOURS BEFORE DIGGING FOR FIELD LOCATIONS OF UNDERGROUND UTILITIES.
- AS-BUILTS – THE CONTRACTOR SHALL COMPLETE "AS-BUILT" INFORMATION RELATIVE TO LOCATION OF THE INLETS AND MANHOLES AS WELL AS INVERTS, RIM ELEVATION, HIGH AND LOW POINT PAVEMENT ELEVATIONS AND LOCATIONS OF THE WATER AND SEWER SERVICES.
- GUARANTY – ALL MATERIAL AND EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR UNDER THIS CONTRACT SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE THEREOF, AGAINST DEFECTIVE MATERIALS, DESIGN AND WORKMANSHIP. UPON RECEIPT OF NOTICE FROM THE OWNER OF FAILURE OF ANY PART OF THE GUARANTEED EQUIPMENT OR MATERIALS, DURING THE GUARANTY PERIOD, THE AFFECTED PART, PARTS OR MATERIALS SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER. IN THE EVENT THE CONTRACTOR FAILS TO MAKE THE NECESSARY REPLACEMENT OR REPAIRS WITHIN SEVEN DAYS AFTER NOTIFICATION BY THE OWNER, THE OWNER MAY ACCOMPLISH THE WORK AT THE EXPENSE OF THE CONTRACTOR.
- ELEVATIONS – ALL ELEVATIONS REFER TO NATIONAL GEODETIC VERTICAL DATUM 1929.
- GRADES SHOWN ARE FINISHED GRADES.
- CLEARING AND GRUBBING – WITHIN THE LIMITS OF CONSTRUCTION, ALL VEGETATION AND ROOT MATERIAL SHALL BE REMOVED.
- GUMBO – WHERE GUMBO OR OTHER PLASTIC CLAYS ARE ENCOUNTERED, THEY SHALL BE REMOVED WITHIN THE ROADWAY AND PARKING AREAS ONE FOOT BELOW THE SUBGRADE EXTENDING HORIZONTALLY TO THE OUTSIDE EDGE OF THE SHOULDER AREA.
- HARDPAN – IF HARDPAN IS ENCOUNTERED IN THE SWALE AREA, IT WILL BE REMOVED TO A WIDTH OF TWO FEET AT THE SWALE INVERT AND REPLACED WITH GRANULAR MATERIAL.
- MUCK AND PEAT – IF MUCK AND/OR PEAT ARE ENCOUNTERED IN THE ROAD OR PARKING AREA, THEY WILL BE REMOVED COMPLETELY TO A WIDTH OF TEN FEET BEYOND THE EDGE OF PAVEMENT AND SHALL BE BACKFILLED WITH GRANULAR MATERIAL.
- WHERE SOD IS DESIRED, LOWER THE GROUND 2 INCHES BELOW THE FINISHED GRADE TO ALLOW FOR THE THICKNESS OF THE SOD.
- PIPE BACKFILL – REQUIREMENTS FOR PIPE BACKFILL CROSSING ROADS OR PARKING AREAS SHALL BE DEFINED IN THE FLORIDA D.O.T. SPECIFICATIONS, LATEST EDITION. PIPELINE BACKFILL SHALL BE PLACED IN SIX INCH LIFTS AND COMPACTED TO 100% OF THE STANDARD PROCTOR (A.A.S.H.T.O.) T-99 SPECIFICATIONS.
- UTILITIES – IT IS THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN THE EXACT LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES, WHETHER SHOWN OR NOT, PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES PRIOR TO CONSTRUCTION. NOTIFY ENGINEER PRIOR TO CONSTRUCTION OF ANY DEVIATION FROM WHAT IS SHOWN ON THE PLAN.
- CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR, BUT NOT LIMITED TO, ALL PIPE, DRAINAGE STRUCTURE, GRATES, FRAMES AND COVERS.
- STORM SEWER PIPE SHALL BE PAID BASED ON MEASUREMENT FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.
- WHERE CONNECTIONS TO AN EXISTING DRAINAGE SYSTEM ARE PROPOSED, SAID EXISTING DRAINAGE STRUCTURES AND LINES SHALL BE CLEANED OF ALL SILT AND OTHER DEBRIS PRIOR TO SAID CONNECTIONS BEING MADE, AND WHERE THE EXISTING DRAINAGE SYSTEM INCLUDES DITCHES, SAID DITCHES SHALL BE CLEARED AND REWORKED, AS NECESSARY, TO RESTORE THEM TO AN APPROVED DESIGN SECTION. SYSTEMS ARE TO BE CLEARED AND/OR GRADED TO POINT OF LEGAL POSITIVE OUTFALL.
- ALL PIPE LENGTHS AND CENTERLINE SLOPE LENGTHS SHOWN ON THESE DRAWINGS ARE SCALED DISTANCES. THE CONTRACTOR SHALL CONFIRM ALL MEASUREMENTS IN THE FIELD AND NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCY WITH THE DRAWINGS PRIOR TO PERFORMING THE WORK.
- INLETS AND MANHOLES – ALL INLETS AND MANHOLES SHALL BE CONSTRUCTED IN ACCORDANCE WITH FLORIDA D.O.T. STANDARDS SPECIFICATIONS, LATEST EDITION, AND ROADWAY AND TRAFFIC DESIGN STANDARDS, LATEST EDITION, AND INDIAN RIVER COUNTY STANDARDS, LATEST EDITION.
- CORRUGATED ALUMINUM PIPE – THE PIPE SHALL CONFORM WITH THE REQUIREMENTS OF THE A.A.S.H.T.O., M-196, AND WITH THE FLORIDA D.O.T. SPECIFICATIONS, LATEST EDITION, ALUMINUM PIPE TO BE ULTRA FLOW SMOOTH WALL.
- INSTALLATION OF CORRUGATED METAL PIPE – ALL JOINTS ON STORM SEWER PIPE SHALL BE MADE UP WITH ONE-HALF INCH NEOPRENE, ALL BANDS SHALL HAVE THE SAME CORRUGATION DESIGN AS THE PIPE. THE WIDTH OF THE BANDS SHALL BE AS FOLLOWS: 12 INCH WIDE UP TO 48 INCH DIAMETER PIPE AND 24 INCH WIDE OVER 48 INCH DIAMETER PIPE. THE REQUIREMENTS OF D.O.T. DM06036 WILL BE ADHERED TO WITH ANNUAL BANDING OF JOINTS REQUIRED. ALL PIPE JOINTS SHALL BE WRAPPED WITH FILTER FABRIC PER F.D.O.T. SPECIFICATIONS.
- REINFORCED CONCRETE PIPE – THE PIPE SHALL CONFORM WITH THE REQUIREMENTS OF CLASS III A.S.T.M. C-76 AND WITH THE FLORIDA D.O.T. SPECIFICATIONS, LATEST EDITION, ALL PIPE JOINTS SHALL BE WRAPPED WITH FILTER FABRIC PER F.D.O.T. SPECIFICATIONS SHALL BE WRAPPED WITH FILTER FABRIC PER F.D.O.T. SPECIFICATIONS.
- CONCRETE – ALL CONCRETE SHALL DEVELOP 2500 P.S.I. (MINIMUM) 28 DAYS COMPRESSIVE STRENGTH OR GREATER WHEN NOTED ON PLANS. CLASS I CONCRETE SHALL CONFORM WITH FLORIDA D.O.T. SPECIFICATIONS, LATEST EDITION.
- ATTENTION IS DIRECTED TO THE FACT THAT THESE PLANS MAY HAVE BEEN CHANGED IN SIZE REPRODUCTION. THIS MUST BE CONSIDERED WHEN OBTAINING SCALED DATA.
- CONTRACTOR SHALL UTILIZE CONSTRUCTION METHODS AND DEVICES SUCH AS TURBIDITY CURTAINS, SILT BARRIERS AND HAY BALES WHERE NECESSARY IN ORDER TO COMPLY WITH ALL FEDERAL, STATE, AND LOCAL WATER QUALITY STANDARDS.
- THE CONTRACTOR SHALL CONFINE CONSTRUCTION ACTIVITIES TO OWNER-SUPPLIED EASEMENTS AND RIGHTS-OF-WAY. IN ENVIRONMENTALLY SENSITIVE AREAS, CONSTRUCTION ACTIVITIES SHALL BE FURTHER CONFINED AS INDICATED OR REQUIRED BY PERMIT CONDITIONS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING THE SITE PRIOR OR THE BIDDING PROCESS TO DETERMINE EXISTING CONDITIONS, ITEMS DISCOVERED WHICH ATE NOT REFLECTED IN THE DRAWINGS AND AFFECT OR POTENTIALLY AFFECT THE PROPOSED CONSTRUCTION SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE SUBMISSION OF BIDS.
- MAINTENANCE OF TRAFFIC SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE IN ACCORDANCE WITH F.D.O.T. STANDARDS.
- THE CONTRACTOR SHALL REVIEW THE SITE CONDITIONS PRIOR TO THE BID PROCESS TO DETERMINE THE METHODS AND EXTENT DEWATERING IS NECESSARY (IF ANY) AND SHALL INCLUDE METHODS AND COSTS ASSOCIATED WITH DEWATERING IN THE BID.
- CLEAN UP: THE CONTRACTOR SHALL KEEP THE CONSTRUCTION SITE FREE OF RUBBISH AND WASTE MATERIALS AND RESTORE TO THEIR ORIGINAL CONDITION THOSE PORTIONS OF THE SITE NOT DESIGNATED FOR ALTERATION BY THE CONTRACT DOCUMENTS. CLEAN UP AND RESTORATION SHALL BE ACCOMPLISHED ON A CONTINUING BASIS THROUGHOUT THE CONTRACT PERIOD AND IN SUCH A MANNER AS TO MAINTAIN A MINIMUM OF NUISANCE AND INTERFERENCE TO THE GENERAL PUBLIC AND RESIDENTS IN THE VICINITY OF THE WORK. THE CONTRACTOR SHALL ALSO REMOVE, WHEN NO LONGER NEEDED, ALL TEMPORARY STRUCTURES AND EQUIPMENT USED IN HIS OPERATIONS. IT IS THE INTENT OF THIS SPECIFICATION THAT THE CONSTRUCTION AREA AND THOSE AREAS NOT DESIGNATED FOR ALTERATION BY THE CONTRACT DOCUMENTS SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AS NEARLY AS POSSIBLE IMMEDIATELY AFTER COMPLETION OF CONSTRUCTION.
- THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ADEQUATE SIGNS, BARRICADES, FLASHING LIGHTS, FLAGMEN, AND WATCHMEN AND TAKE ALL NECESSARY PRECAUTIONS FOR THE PROTECTION OF THE WORK AND THE SAFETY OF THE PUBLIC. TRAFFIC CONTROL WARNING SIGNS AD BARRICADES SHALL BE IN STRICT ACCORDANCE WITH THE PROVISIONS OF THE FLORIDA DEPARTMENT OF TRANSPORTATION, HIGHWAY CONSTRUCTION, MAINTENANCE AND UTILITY OPERATION (LATEST REVISION). ALL BARRICADES AND OBSTRUCTIONS SHALL BE PROTECTED AT NIGHT BY FLASHING SIGNAL LIGHTS WHICH SHALL BE KEPT BURNING FROM SUNSET TO SUNRISE. BARRICADES SHALL BE OF SUBSTANTIAL CONSTRUCTION AND SUITABLE FOR NIGHT VISIBILITY. SUITABLE WARNING SIGNS SHALL BE SO PLACED AND ILLUMINATED AT NIGHT AS TO SHOW IN ADVANCE WHERE CONSTRUCTION, BARRICADES, OR DETOURS EXIST.
- CONTRACTOR SHALL INCLUDE THE COST OF DENSITY TESTING FOR BACKFILL IN BID FOR OTHER ITEMS OF WORK.
- ANY EXISTING ROADWAY AND/OR UTILITY THAT IS DAMAGED BY THE CONTRACTOR SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE ENGINEER.



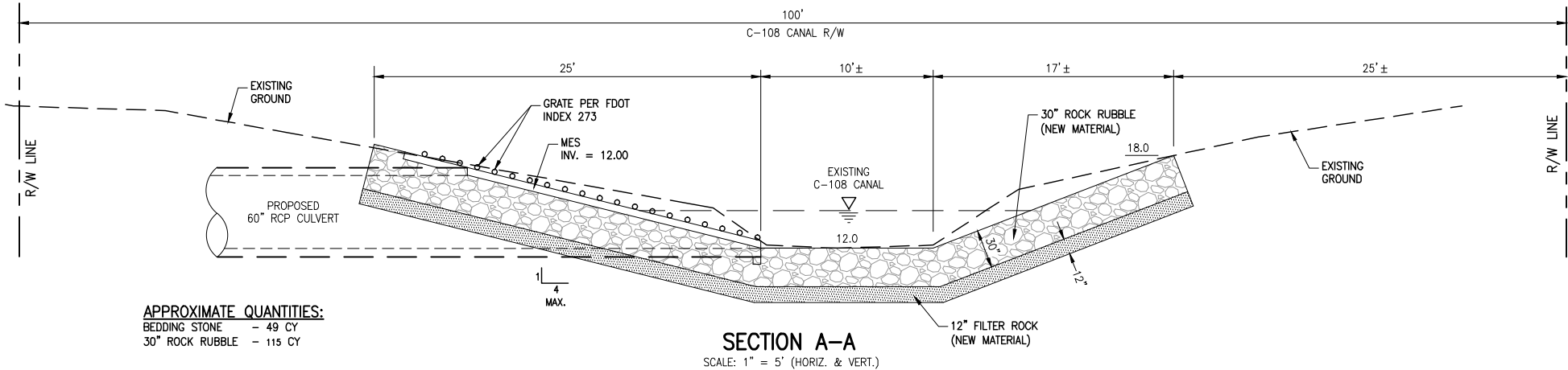
NOTES:

- ALL WORK AND MATERIALS SHALL CONFORM WITH F.D.O.T. STANDARD SPECIFICATIONS, 2010 EDITION, AND ALL CONDITIONS OF THE R/W PERMIT ISSUED BY THE F.D.O.T., COUNTY OR LOCAL ROAD AGENCY.
- FIRST AND SECOND STAGE BACKFILL SHALL BE PLACED IN 6" MAX. LIFTS (COMPACTED THICKNESS) AND SHALL BE COMPACTED TO 100% OF THE AASHTO T-99 MAXIMUM DENSITY.
- BASE REPLACEMENT OVER TRENCH SHALL BE TWICE THE THICKNESS OF THE EXISTING BASE COURSE. BASE COURSE REPLACEMENT MATERIAL SHALL BE LIMEROCK OR COQUINA BASE AND SHALL BE PLACED IN 2 OR 3 EQUAL LIFTS (8" MAX. COMPACTED THICKNESS) AND COMPACTED TO 98%% OF THE AASHTO T-180 MAXIMUM DENSITY. NO EXISTING BASE MATERIAL SHALL BE USED FOR THE BASE COURSE REPLACEMENT. FINISHED BASE COURSE AND VERTICAL SURFACE OF SAW-CUTS SHALL RECEIVE PRIME & TACK COATS.
- SURFACE COURSE REPLACEMENT SHALL MATCH THE THICKNESS AND TYPE OF MATERIAL(S) OF THE EXIST-ING PAVEMENT, AS A %MINIMUM%, PROVIDE 2" OF TYPE S-1 ASPHALTIC CONCRETE.



NOTES:

- PATHWAY TO BE PORTLAND CEMENT CONCRETE, MIN. 3000 P.S.I. @ 28 DAYS WITH FIBERMESH
- BASE TO BE CLEAN SAND OR SANDY LOAM, FULLY COMPACTED, FULL WIDTH.
- CONCRETE TO BE BROOM FINISHED WITH EVEN, DUSTLESS SURFACE.
- SIDEWALK SHALL BE 6" THICK AT DRIVEWAYS.



APPROXIMATE QUANTITIES:
BEDDING STONE - 49 CY
30" ROCK RUBBLE - 115 CY

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REV. ISSUED DATE DESCRIPTION

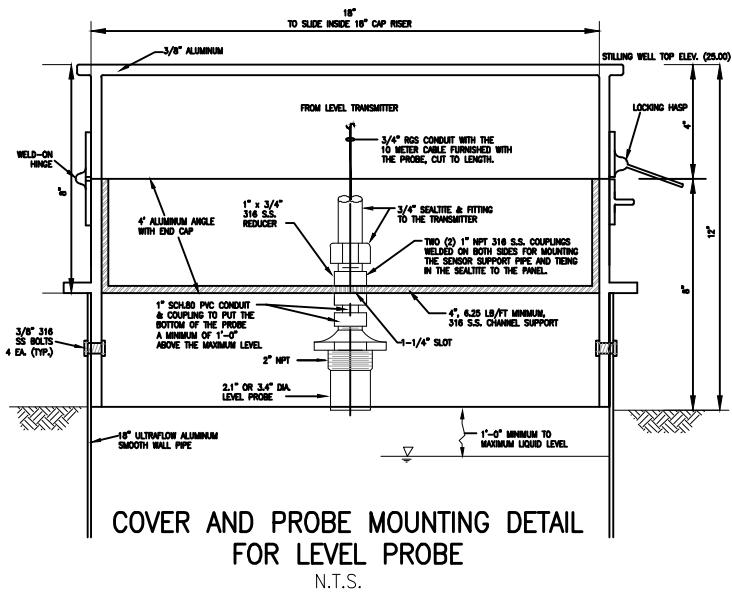
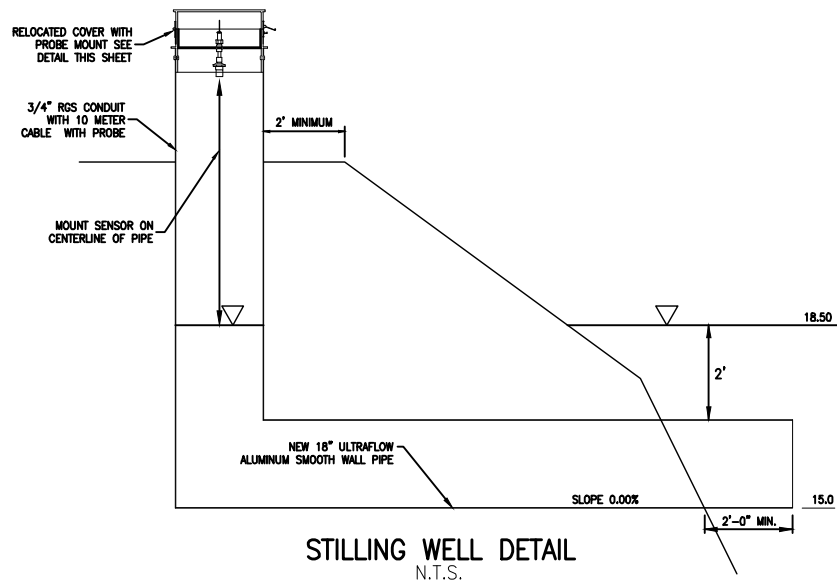
PROJECT TITLE
**BASIN 6B
CONTROL STRUCTURE
RELOCATION**

SHEET TITLE
DETAILS

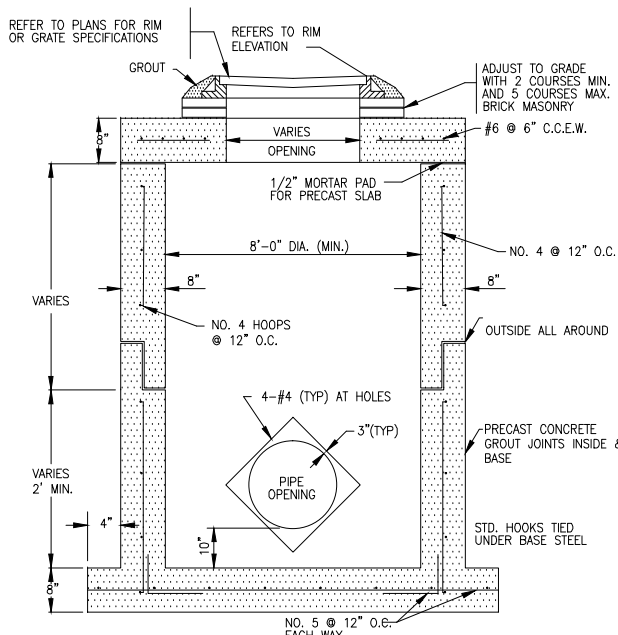
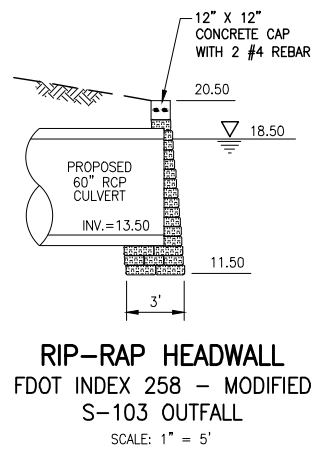
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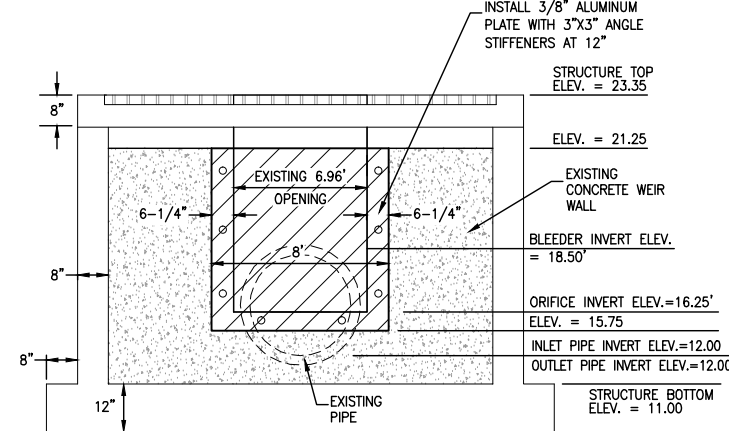
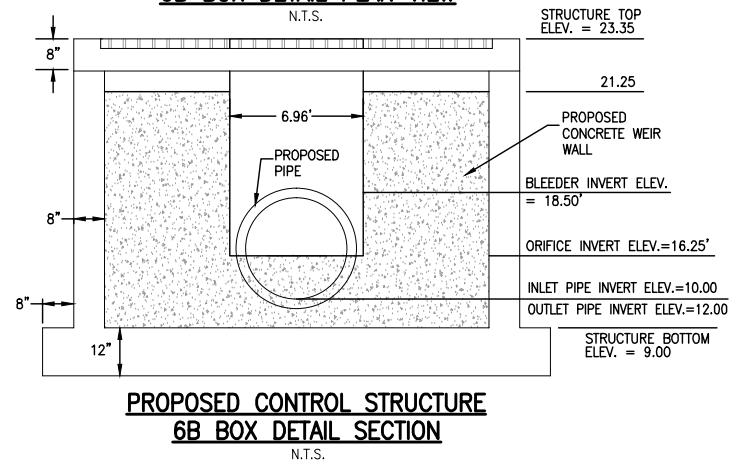
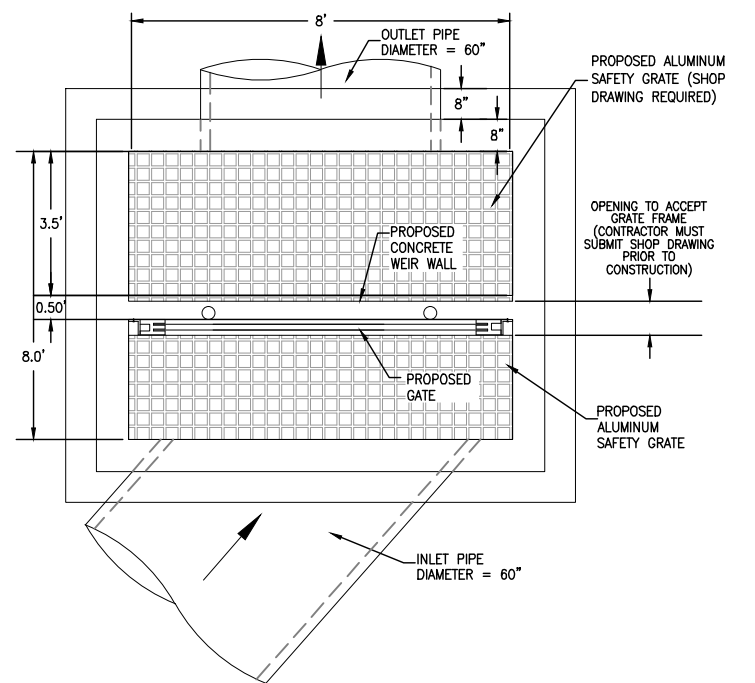
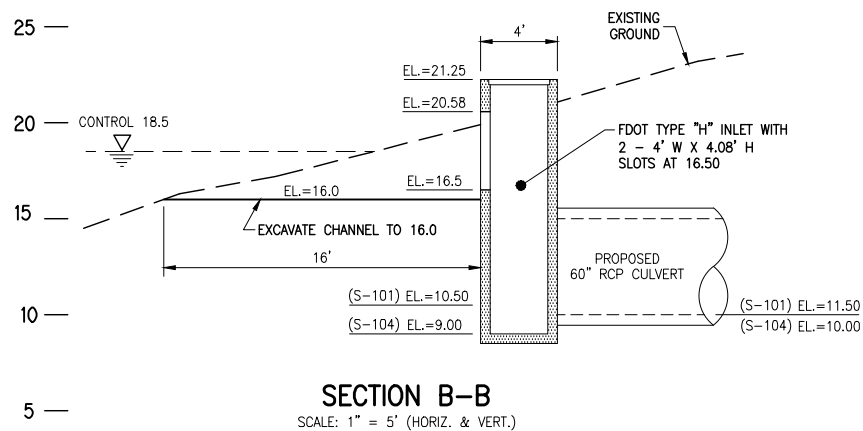
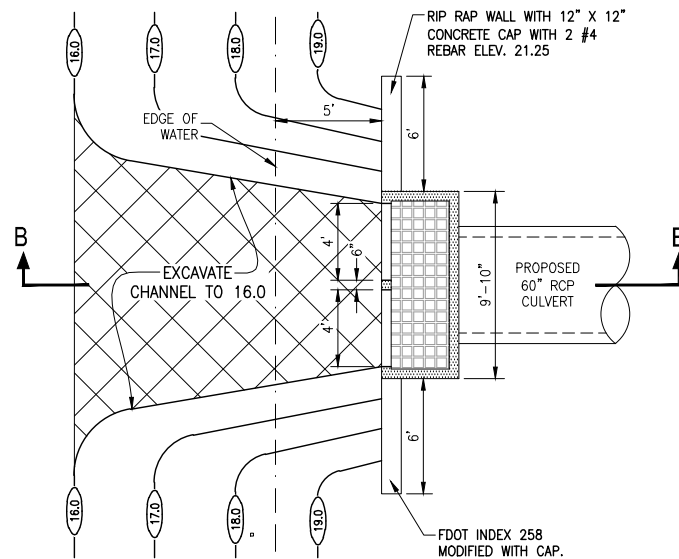
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- NOTES:
- COVER AND PROBE MOUNTING MECHANISM SHALL BE RELOCATED FROM EXISTING BASIN 6B STILLING WELL.
 - EXISTING BASIN 6B STILLING WELL SHALL BE CAPPED ONCE COVER OF MOUNTING MECHANISM HAS BEEN REMOVED.



- NOTES:
- ALL REINFORCING TO MEET CURRENT F.D.O.T. SPECIFICATIONS
 - VALLEY CURB INLETS SHALL HAVE USF 5113-6194 FRAME AND GRATE



- NOTES:
- CONTRACTOR SHALL INSTALL 3/8" ALUMINUM PLATE ON UPSTREAM SIDE OF WALL INSIDE EXISTING BASIN 6B CONTROL TO BLOCK OPENING TO TOP OF CONCRETE WALL ELEVATION.

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CONTROL STRUCTURE
RELOCATION**

SHEET TITLE
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SEAL
ROBERT W. LAWSON, P.E.
FL. CERT. NO. 26640

DATE
JUNE 2018
PROJECT MANAGER
RWL
LEAD DESIGN PROF.
RWL
TASK/PHASE NUMBER
00DES
PROJECT NUMBER
WF003601.0024

SCALE
1" = 20'
DEPARTMENT MANAGER
RWL
CHECKED BY
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DRAWN BY
JAF
DRAWING NUMBER
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Current Plotstyle : BxColor
Layout Tab: EN (7)

I. SITE DESCRIPTION

A. Construction Activity

The project totals approximately 0.30 acres in size and includes water management improvements to be constructed at two locations.

Construction activity will include clearing and grubbing of approximately 0.30 acres and includes the installation of subdivision improvements.

B. Major Soil Disturbing Activities

The major soil disturbing activities will include clearing and grubbing and trenching for the installation of underground facilities. The sequence of construction will generally follow the order of clearing and grubbing, trenching for the installation of underground facilities, excavation of lakes and roadway construction.

C. Total Area to be Disturbed

The total area to be disturbed by excavation, grading and other activities is approximately 0.30 acres.

D. Runoff Coefficients

The project area is presently grasses and wetland plants. The runoff coefficients before, during and after construction are as follows:

| | | |
|----------------------|------------------------------------|-------------|
| Before Construction: | Undisturbed Uplands | C = 0.30 |
| During Construction: | Disturbed Uplands and Construction | C = 0.3–0.7 |
| After Construction: | | C = 0.30 |

E. Site Map

Included with this plan are copies of the Water Management Improvement Plans depicting the following:

1. Project location
2. Clearing Limits
3. Major drainage facilities and control structures

Note that these plans depict the limits of work for the overall project, the points of stormwater discharge and areas to be disturbed during construction.

F. Recieving Waters

The receiving body for stormwater runoff is the Verano Master System leading to the C–24 Canal.

II. CONTROLS

Narrative – The sequence of soil disturbing activities and implementation of controls and measures are as follows for the general construction activities:

Clearing and grubbing: As soon as possible following clearing of the perimeter of the site, will be the installation of a silt fence for control of soil erosion. Based on the existing topography of the project site, certain areas within the limits of work may require additional temporary silt fences and erosion control devices to contain unfinished soils within the construction area. These controls will be temporary and will be removed following the final stabilization of the disturbed areas.

Excavation activities: Excavation for lakes and underground utilities will occur within the limits of the finished project area. The limits of construction and project boundaries will be graded to contain all spoil material from the excavation activities onsite and any dewatering activities will provide the necessary containment berms and dikes to prevent uncontrolled offsite discharges. Temporary controls will be installed as necessary in the area of the excavation to prevent erosion of un–stabilized material and will be maintained until the final stabilization of these areas is completed.

Trenching: Trenching for the installation of underground facilities will be limited to the finished project area. Trenches will be excavated and backfilled on a continuous basis as each underground facility is installed. Spoil material from the trenching activity will be utilized for backfill of the trench. Dewatering activities will be implemented in stages during the installation of the underground facilities and the groundwater will be controlled onsite by the use of excavated retention lakes as well as berming and diking in the area of the work. All berms and dikes subject to erosion will be stabilized or contained to prevent erosion and runoff from the project area. These controls will be removed following the completion of the underground work.

Grading: Grading for the project will be completed in phases as each section of the work progresses. Rough grading will occur following the clearing and grubbing activities. Final grading will be completed following the installation of the underground facilities and prior to the pavement and sidewalk installation. Temporary controls will be installed along the limits of the work as necessary and these controls will be removed following final stabilization.

A. Erosion and Sediment Controls

1. Stabilization practices: The proposed work will be stabilized on an interim and permanent basis as the work progresses. Stabilization practices will initially consist of seeding, mulching with sodding being done in some areas such as lake banks and berms.
2. Structural practices: Structural practices will be implemented during construction as temporary controls. These items will consist of the following:
 - a. Berms and dikes for containment of runoff and for dewatering activities.
 - b. Silt fences for perimeter controls.
 - c. Filter cloth, hay bales, or both for inlet protection.
 - d. Turbidity Barriers within the existing lakes as well as the C–108 Canal.

Temporary erosion control shall be implemented prior to and during construction, and permanent control measures shall be completed within 7 days of the completed construction activities.

B. Stormwater Management

Construction activities will include the installation of underground piping and earthwork.

Upon completion of the project, stormwater runoff will be directed to the water management tracts for water quality treatment and flood protection. Runoff will be directed to the water management tracts by underground drainage lines, control structures, curbing and sheet flow over grass areas.

This project will be fully permitted for earthwork activities by the City of Port St. Lucie, South Florida Water Management District, and the Florida Department of Environmental Protection. No activity will occur onsite until such time as a permits from the City, the District and FDEP are obtained.

1. Waste disposal: The contractor shall provide litter control and collection of materials within the project boundaries during construction. All fertilizer, hydrocarbon, or other chemical containers shall be disposed of by the contractor in accordance with FDEP, the Health Department, and the EPA's standard practices. No solid material including building and construction material shall be disposed of, discharged or buried onsite.

2. Offsite vehicle tracking: Loaded haul trucks shall be covered with a tarpaulin. Excess dirt material on the roads shall be removed immediately. Hauling on unpaved surfaces shall be monitored to minimize dust and control erosion. Haul roads shall be watered or other controls provided as necessary to reduce dust and control sediments.

3. Sanitary waste: The contractor shall provide portable sanitary waste facilities. These facilities shall be collected or emptied by a licensed sanitary waste management contractor as required by state regulations.

4. Fertilizers and pesticides: Fertilizer shall be applied at a rate specified by the FDOT Road and Bridge Specifications, latest edition, or the manufacturer's specifications. The application of fertilizers shall be accomplished in a manner as described by the manufacturer or FDOT to ensure the proper installation and to avoid over fertilizing. Pesticides are not anticipated for this project.

D. Approved Site and Local Plans

This project will not be constructed until approval have been granted by the City of Port St. Lucie, and the South Florida Water Management District. The measures and controls outlined herein will be implemented by the contractor during construction. These measures and controls will provide the necessary pollution prevention and sedimentation control during construction.

Included with this plan is a certification indicating that the pollution prevention plan has been prepared to comply with the requirements of the stormwater management permit for this project.

III. MAINTENANCE

The contractor will be responsible for maintenance and repairs of erosion and sediment control devices and removal of the erosion and sediment control devices after the notice of termination is executed.

The contractor shall review the project and all erosion and sedimentation controls on a daily basis and during and following rainfall events. The following practices will be implemented to maintain and monitor erosion and sedimentation controls.

A. Project review on a daily basis.

B. Provide and maintain rain gauges onsite (if not available in the area) to record rainfall data daily.

C. Review stabilization practices and controls on a daily basis and maintain and repair these measures and controls as necessary. Temporary and permanent seeding, mulching and sodding shall be repaired in bare spots and washouts, and healthy growth established.

D. Review structural practices on a daily basis and maintain and repair these measures and controls as necessary. Built up sediments shall be removed from silt fences, hay bales and filter cloth and shall be replaced as necessary or removed when they have served their usefulness.

E. An inspection and maintenance report shall be completed weekly and within 24 hours of a rainfall event of 0.25 inches or more (see attached form).

F. If the contractor elects to apply for permits for discharge of stormwater from the site during construction, all points of discharge of stormwater runoff from the site shall be inspected on a daily basis and controls and measures repaired as necessary to maintain acceptable water quality and discharge volumes in accordance with the state permits.

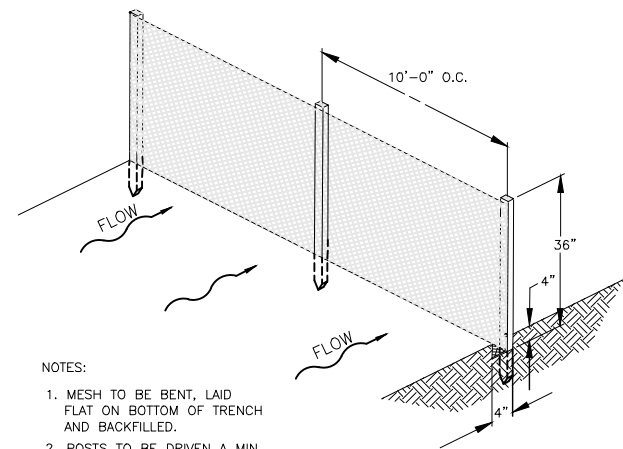
IV. INSPECTIONS

Qualified personnel shall inspect all points of discharge, as applicable, from the project site and all disturbed areas of the construction site that have not been stabilized.

Disturbed areas and areas used for storage of materials exposed to precipitation shall be inspected for evidence of, or potential for pollutants entering the stormwater management system. The stormwater management system and erosion and sedimentation control measures shall be observed to ensure that they are operating correctly. Inspection and maintenance reports shall be completed at least every week and following a rainfall event of 0.25 inches of water or greater (see attached form). These forms shall be retained for a period of at least 3 years following the date the site is finally stabilized.

V. NON–STORMWATER DISCHARGES

Dewatering for underground facilities installation and building foundations, when necessary, will be detained onsite within the lake system or small impoundments and may discharge from the site under extreme conditions. Any discharge from the site will require filtration and treatment prior to entering the offsite conveyance system and shall meet the requirements of the state permits for stormwater discharge and dewatering activities for the site. Spill reporting for items such as oils, fuel, etc. shall meet the requirements of 40 CFR part 117 and 40 CFR part 302. Cleanup and disposal of all spills shall meet the applicable regulatory agency requirements and shall be handled and disposed of as required by law.



FILTER FABRIC SILT FENCE DETAIL
N.T.S.

STORMWATER POLLUTION PREVENTION PLAN

ST. LUCIE WEST SERVICES DISTRICT - BASIN 6B CONTROL STRUCTURE RELOCATION
INSPECTION AND MAINTENANCE REPORT FORM

This form to be completed every 7 days and within 24 hours of a rainfall event of 0.25 inches or greater. Copies of these forms shall be retained for a period of at least 3 years.

CONTRACTOR: _____ DATE: _____
CONTRACTOR'S
REPRESENTATIVE: _____

OWNER'S REPRESENTATIVE: _____

Days since last rainfall: _____

Amount this period: _____

SEDIMENTATION AND EROSION CONTROLS

Temporary Stabilization Controls:

Permanent Stabilization Controls:

Inlet Protection:

Outfall Protection:

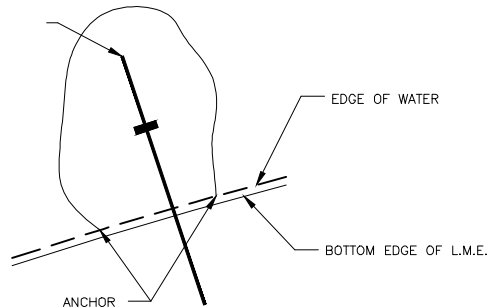
Silt Fences:

Construction Entrances:

Maintenance Required for Sediment Control:

To be performed by: _____ on or before: _____.

MATERIALS MANAGEMENT PRACTICES



TURBIDITY BARRIER
N.T.S.

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| REV. | ISSUED DATE | DESCRIPTION |
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PROJECT TITLE

**BASIN 6B
CONTROL STRUCTURE
RELOCATION**

SHEET TITLE

**STORMWATER POLLUTION
PREVENTION DETAILS**

06310 / LC26000269

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EB7017 / LB7062

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| SEAL | SEAL |
| DATE JUNE 2018 | SCALE |
| PROJECT MANAGER RWL | DEPARTMENT MANAGER RWL |
| LEAD DESIGN PROF. RWL | CHECKED BY RWL |
| TASK/PHASE NUMBER 00DES | DRAWN BY JAF |
| PROJECT NUMBER WF003601.0024 | DRAWING NUMBER EN07 |