# rgy Cove Metal Buildings Mike Reeves\03-CADD\01\_23-627 COVER SHEET - CLAY.dwg Layout: 1

# WAREHOUSE METAL BUILDING

**FOR** 

# MIKE REEVES

# ENERGY COVE COURT, GREEN COVE SPRINGS, FL 32043

**CLAY COUNTY** 

## PROJECT OWNER AND CONSULTANTS

OWNER: Mr. Mike Reeves

80893 Soria Ravines Rd. 170 College Drive Suite 1 Orange Park, FL 32065 Email: Mireeves3@yahoo.com

SURVEYOR: Eiland & Associates, Inc.

615 Blanding Boulevard Orange Park, FL 32065 TEL: (904) 272-1000

ENGINEER: Tocoi Engineering, LLC

John J. Mahoney III, P.E. 714 North Orange Avenue Green Cove Springs, FL 32043

TEL: 904-215-1388

B&W JOB NO: TE JOB NO: CLIENT CODE:

SAFETY IS IN YOUR HANDS. EVERY DIG. EVERY TIME.

CALL BEFORE YOU DIG 800-432-4770 2500020.00 23-627 MCCRI



LOCATION MAP



714 NORTH ORANGE AVENUE, GREEN COVE SPRINGS, FL 32043 TEL: 815-459-1260 E.B. NUMBER: 26383

> PERMIT PLANS May 15, 2025



# INDEX OF DRAWINGS

- COVER SHEET
  GENERAL NOTES
- EXISTING GROUND
- 4 DEMOLITION PLAN
- EXISTING DRAINAGE
- 6 PROPOSED DRAINAGE
- GEOMETRY PLAN
- 8 GRADING & DRAINAGE PLAN
- 9 EROSION CONTROL DETAILS
- 10 UTILITY PLAN
- 11 UTILITY DETAILS
- 12 PHOTOMETRIC PLAN
- 13 MISCELLANEOUS DETAILS
- 14 SWPPP CONTRACTOR REQUIREMENTS
- 5 SWPPP CONTRACTOR CERTIFICATION
- 6 FIRE SUPPRESSION PLAN

LS-1 LS-2 LANDSCAPE PLAN



## **GENERAL NOTES:**

- 1. ALL WORK AND MATERIALS SHALL BE IN COMPLETE ACCORDANCE WITH ALL RELATIVE SECTIONS OF THE CITY OF GREEN COVE SPRINGS (G.C.S.) & GREEN COVE SPRINGS PUBLIC WORKS (G.C.S.P.W.) STANDARDS, (LATEST REVISION) AND ALL CURRENT CITY & G.C.S.P.W. DETAILS AS WELL AS ALL APPLICABLE STATE AND LOCAL REGULATIONS. THE WORK SHALL ALSO BE PERFORMED AND TESTED IN ACCORDANCE WITH THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL INVESTIGATION REPORT PROVIDED BY XXXXXXX XXXXXXX PROJECT NO. XXXXXXXXX IF MORE STRINGENT THAN CITY OF G.C.S. REQUIREMENTS.
- 2. ALL WORK SHALL BE PERFORMED IN A SAFE MANNER. ALL SAFETY RULES AND GUIDELINES OF O.S.H.A. SHALL BE FOLLOWED. THE CONTRACTOR SHALL BE WHOLLY RESPONSIBLE FOR ANY INJURIES OF HIS EMPLOYEES, AND ANY DAMAGE TO PRIVATE PROPERTY OR PERSONS DURING THE COURSE OF THIS PROJECT. ALL COSTS ASSOCIATED WITH COMPLYING WITH O.S.H.A. REGULATIONS AND THE FLORIDA TRENCH SAFETY ACT MUST BE INCLUDED IN THE CONTRACTORS BID.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VISITING THE JOB SITE PRIOR TO PREPARING THE BID FOR THE PURPOSE OF FAMILIARIZING HIMSELF WITH THE NATURE AND THE EXTENT OF THE WORK AND LOCAL CONDITIONS, EITHER SURFACE OR SUBSURFACE, WHICH MAY AFFECT THE WORK TO BE PERFORMED, AND THE EQUIPMENT, LABOR AND MATERIALS REQUIRED. FAILURE TO DO SO WILL NOT RELIEVE THE CONTRACTOR OF COMPLETE PERFORMANCE UNDER THIS CONTRACT. THE CONTRACTOR IS ALSO URGED TO TAKE COLOR PHOTOGRAPHS ALONG THE ROUTE OF THE PROJECT TO RECORD EXISTING CONDITIONS PRIOR TO CONSTRUCTION, AND TO AID IN RESOLVING POSSIBLE FUTURE COMPLAINTS THAT MAY OCCUR DUE TO THE CONSTRUCTION OF THE PROJECT.
- 4. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO EITHER CONDUCT ANY FIELD EXPLORATION OR ACQUIRE ANY GEOTECHNICAL ASSISTANCE REQUIRED TO ESTIMATE THE AMOUNT OF UNSUITABLE MATERIAL THAT WILL REQUIRE REMOVAL AND/OR TO ESTIMATE THE AMOUNT OF OFF SITE BORROW THAT WILL BE REQUIRED.
- 5. ALL IMPROVEMENTS SHOWN ARE TO BE WARRANTED BY THE CONTRACTOR TO THE DEVELOPER AND CITY OF G.C.S. FOR A PERIOD OF ONE YEAR FROM DATE OF ACCEPTANCE BY THE OWNER AND CITY OF G.C.S..
- ELEVATIONS ARE BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1929 (N.G.V.D.) UNITED STATES COASTAL AND GEODETIC SURVEY (U.S.C. & G.S.), AS DETERMINED BY EILAND AND ASSOCIATES, INC.
- 7. FOR BOUNDARY, ROADWAY AND LOT GEOMETRY INFORMATION SEE PLAT.
- 8. THE CONTRACTOR WILL CONTRACT WITH AN INDEPENDENT TESTING LABORATORY TO PERFORM MATERIAL TESTING AND SOIL TESTING IN ACCORDANCE WITH CITY OF G.C.S. AND/OR G.C.S.P.W. REQUIREMENTS. THIS SHALL INCLUDE DENSITY TESTS IN ALL PAVEMENT AREAS AND IN ALL UTILITY TRENCHES LOCATED IN PAVEMENT AREAS CONCRETE TESTING AND ALL OTHER MATERIAL TESTING. PRIOR TO LIMEROCK PLACEMENT, THE PROJECT GEOTECHNICAL ENGINEER SHALL MAKE RECOMMENDATION FOR UNDER DRAIN PLACEMENT.
- D. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND INSURANCE REQUIRED FOR THE PROJECT INCLUDING CITY RIGHT-OF-WAY PERMITS FOR WORK IN CITY OF G.C.S. RIGHT-OF-WAY OR FASEMENT
- 10. THE CONTRACTOR SHALL COORDINATE THE WORK WITHIN CITY OF G.C.S. OR STATE RIGHT-OF-WAY WITH THE PROPER AGENCIES FOR MAINTENANCE OF TRAFFIC AND METHOD OF CONSTRUCTION AND REPAIR
- 11. ALL PUBLIC DRAINAGE EASEMENTS SHALL BE "UNOBSTRUCTED" EASEMENTS. ALL "UNOBSTRUCTED" EASEMENTS TO BE CLEAR AND DRIVEABLE.
- 12. "AS-BUILT" DRAWINGS AS-BUILTS TO CITY OF G.C.S. AND THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT ARE REQUIRED TO BE SIGNED AND SEALED BY A FLORIDA REGISTERED LAND SURVEYOR THEREFORE, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTRACT WITH A LAND SURVEYOR REGISTERED IN THE STATE OF FLORIDA FOR THE PREPARATION, FIELD LOCATIONS, CERTIFICATION AND SUBMITTAL OF "AS-BUILT" DRAWINGS IN ACCORDANCE WITH CURRENT CITY OF G.C.S. & G.C.S.P.W. STANDARDS AND SPECIFICATIONS AND SURWIND REGULATIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROCESS THE "AS-BUILT" DRAWINGS FOR APPROVAL BY CITY OF G.C.S..
- 13. THE CONTRACTOR SHALL COORDINATE THEIR CONSTRUCTION WITH ALL OTHER CONTRACTORS. IN THE EVENT OF ANY CONFLICT WHATSOEVER, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND OWNER PRIOR TO PROCEEDING WITH CONSTRUCTION.
- 14. ALL CLEARING AND GRUBBING REQUIRED FOR ALL ROADWAY, UTILITIES, DITCHES, AND BERMS INCLUDED IN THIS PROJECT AND THE CLEARING AND GRUBBING OF ALL RIGHT-OF-WAY OR EASEMENTS SHALL BE CONSIDERED AS PART OF THE PROJECT.
- 15. ALL AREAS SHOWN TO BE FILLED SHALL BE CLEARED AND GRUBBED IN ACCORDANCE WITH CITY OF G.C.S. STANDARDS AND SHALL BE FILLED WITH CLEAN STRUCTURAL FILL COMPACTED AND TESTED IN ACCORDANCE WITH THE GEOTECHNICAL INVESTIGATION REPORT.
- 16. CONTRACTOR IS RESPONSIBLE FOR PROTECTION OF ALL SURVEY AND PROPERTY MONUMENTS. IF A MONUMENT IS DISTURBED, THE CONTRACTOR SHALL CONTRACT WITH THE SURVEYOR OF RECORD FOR REINSTALLATION OF THE MONUMENT.
- ALL DEBRIS RESULTING FROM ALL ACTIVITIES SHALL BE DISPOSED OF OFF-SITE BY CONTRACTOR.
- 18. ALL EXCESS SUITABLE AND UNSUITABLE MATERIAL SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR UNLESS DIRECTED OTHERWISE BY ENGINEER OR OWNER.
- 19. ALL EXISTING TREES TO REMAIN SHALL BE PRESERVED AND PROTECTED.
- 20. BURNING OF TREES, BRUSH AND OTHER MATERIAL SHALL BE APPROVED, PERMITTED AND COORDINATED WITH CITY OF G.C.S. FIRE MARSHAL.

- 21. ROADWAY UNDER DRAINS SHALL BE AS REQUIRED ON THE PLANS OR AS MAY BE DETERMINED NECESSARY BY THE GEOTECHNICAL ENGINEER DURING CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IF HIGH GROUND WATER CONDITIONS ARE PRESENT DURING THE PREPARATION OF THE ROADWAY SUB—BASE. CITY OF G.C.S. WILL RESERVE THE RIGHT TO REQUEST ADDITIONAL UNDER DRAIN AS DEEMED NECESSARY.
- 22. CONTRACTOR SHALL PROVIDE CONTRACTION JOINTS AT 10' INTERVALS AND EXPANSION JOINTS SHALL BE CONSTRUCTED AT 50' INTERVALS AND AT ALL RADIUS POINTS ON ALL CURBING.
- 23. CONTRACTOR SHALL PROVIDE EXPANSION JOINTS AT 18' INTERVALS AND CONTRACTION JOINTS SHALL BE SPACED AT 6' INTERVALS BETWEEN EXPANSION JOINTS.
- 24. MAINTENANCE OF TRAFFIC SHALL CONFORM TO F.D.O.T. STANDARD INDEX 600, LATEST EDITION.
- ALL SIGNING AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH F.D.O.T. STANDARD INDEXES 11860, 17346, AND 17352.
- 26. WHERE RCP IS CALLED OUT IN THE PLANS CONTRACTOR MAY SPECIFY RCP, OR HDPE FOR APPROVAL BY ENGINEER OF RECORD.
- 27. ALL EXISTING PAVEMENT MARKINGS THAT CONFLICT WITH THE PROPOSED ROADWAY/SITE DEVELOPMENT SHALL BE REMOVED BY THE CONTRACTOR UTILIZING THE HYDRO-BLASTING METHOD.

#### UTILITY NOTES:

- 1. THE LOCATION OF ALL EXISTING UTILITIES, STRUCTURES AND IMPROVEMENTS SHOWN ON THE DRAWINGS IS BASED ON LIMITED INFORMATION AND MAY NOT HAVE BEEN VERIFIED. THE LOCATIONS ARE APPROXIMATE. THE CONTRACTOR SHALL NOTIFY RESPECTIVE UTILITY OWNERS AND FIELD VERIFY LOCATIONS OF EXISTING UTILITIES AND OTHER IMPROVEMENTS PRIOR TO COMMENCING ANY CONSTRUCTION. IF THE LOCATIONS SHOWN ARE CONTRARY TO THE ACTUAL LOCATIONS, THE CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER OF THE DISCREPANCY. THIS DISCREPANCY SHOULD BE RESOLVED PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHEN WORKING IN AREAS NEAR EXISTING UTILITIES AND IMPROVEMENTS AND SHALL BE RESPONSIBLE FOR AND SHALL REPAIR OR PAY FOR ALL DAMAGE MADE TO EXISTING UTILITIES OR OTHER IMPROVEMENTS. PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION, THE CONTRACTOR SHALL VERIFY ALL GRADES, INVERTS AND TYPE OF MATERIAL OF EXISTING UTILITIES TO WHICH HE SHALL CONNECT.
- 2. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS ON ALL MATERIALS, IF REQUIRED, TO THE ENGINEER FOR REVIEW AND APPROVAL, PRIOR TO SUBMITTAL TO CITY OF G.C.S. & G.C.S.P.W., AND PRIOR TO PURCHASE OR CONSTRUCTION OF ANY UTILITY PIPE OR STRUCTURE.
- 3. ALL PIPE LENGTHS ARE SCALED DIMENSIONS. ALL DRAINAGE STRUCTURES SHALL BE CONSTRUCTED TO CONFORM WITH CITY OF G.C.S. REQUIREMENTS AND SHALL BE CONSTRUCTED TO CONFORM WITH CURBING, PROPERTY LINES AND LOW POINTS AS SHOWN ON THE PLANS.
- CONTRACTOR SHALL INSURE THAT ALL DRAINAGE STRUCTURES, PIPES, ETC. ARE CLEAN AND FUNCTIONING PROPERLY AT TIME OF ACCEPTANCE.
- 5. ALL DRAINAGE STRUCTURES TO HAVE TRAFFIC BEARING GRATES.
- ALL DRAINAGE PIPE JOINTS IN CITY OF G.C.S. DRAINAGE EASEMENTS, DRAINAGE EASEMENTS
  BETWEEN PRIVATE LOTS, DRAINAGE RIGHT-OF-WAYS AND UNDER PAVED ROADS ARE TO BE
  FILTER-WRAPPED.
- 7. ALL INVERTS IN DRAINAGE STRUCTURES TO BE PRE CAST OR BRICK WITH LAYER OF MORTAR BETWEEN EACH LAYER OF BRICK, OR REDDI-MIX CONCRETE WITH #57 STONE.
- 8. UNSUITABLE MATERIALS UNDER WATER, SEWER PIPE, STORM PIPE OR STRUCTURES SHALL BE REMOVED AND REPLACED WITH SELECTED BACKFILL, PROPERLY COMPACTED.
- ALL UNDERGROUND UTILITIES MUST BE INSTALLED PRIOR TO PREPARATION OF SUB GRADE FOR PAVEMENT.
- ALL WATER AND SEWER CONSTRUCTION WITHIN CITY OF G.C.S. SHALL BE ACCOMPLISHED BY AN UNDERGROUND UTILITY CONTRACTOR LICENSED UNDER THE PROVISIONS OF CHAPTER 489 ELOPIDA STATUTES
- 11. CONTRACTOR SHALL PROVIDE, TO THE ENGINEER, A SCHEDULE OF INVERT ELEVATIONS OF ALL SANITARY MANHOLES & DRAINAGE STRUCTURES PRIOR TO THE PLACEMENT OF THE LIME ROCK BASE COURSE. THIS SCHEDULE TO BE PROVIDED BY THE REGISTERED LAND SURVEYOR SUBMITTING THE "AS BUILT" DRAWINGS FOR THIS PROJECT.
- 12. WATER AND SEWER LINES ARE DESIGNATED TO FINISHED GRADES AND SHALL BE PROTECTED UNTIL FINISHED WORK IS COMPLETE.
- 13. HORIZONTAL SEPARATION BETWEEN WATER MAINS, VALVES, FITTINGS AND SANITARY OR STORM SEWER SHALL BE A MINIMUM OF 10 FEET OR IN ACCORDANCE WITH THE F.D.E.P. REGULATIONS AND G.C.S.P.W. STANDARD DETAILS.
- 14. ALL WATER LINE CROSSINGS SHALL HAVE A FULL LENGTH OF PIPE CENTERED OVER THE EXISTING UTILITY MAIN TO PROVIDE MAXIMUM JOINT SPACING AT CROSSINGS. WATER MAINS CROSSING SANITARY AND STORM SEWER LINES, AS WELL AS VALVES AND FITTINGS, MUST HAVE A MINIMUM 18" VERTICAL SEPARATION. IF THIS SEPARATION CANNOT BE OBTAINED, THE WATER MAIN MUST BE CONSTRUCTED OF DUCTILE IRON PIPE FOR A DISTANCE OF 10' EITHER SIDE OF THE SANITARY OR STORM SEWER MAIN, OR INSTALL WATER MAIN IN D.I. SLEEVE MIN. LENGTH 20' CENTERED, ENDS OF SLEEVE TO BE GROUT FILLED, IN EITHER CASE, MINIMUM OF 6" OF VERTICAL SEPARATION SHALL BE MAINTAINED.
- 15. MECHANICAL RESTRAINING DEVICES ARE REQUIRED IN ACCORDANCE WITH UTILITY COMPANY STANDARDS WHERE WATER MAINS ARE TERMINATED AND AT ALL BENDS AND TEES.
- ALL ELECTRIC CONDUIT WORK SHALL BE COMPLETED PRIOR TO THE PRESSURE TESTING OF WATER AND SEWAGE FORCE MAINS.

- 17. TELEVISION INSPECTION SHALL BE REQUIRED ON ALL GRAVITY SEWER MAINS. THIS SERVICE SHALL BE PROVIDED BY THE CONTRACTOR AS PART OF THE SANITARY SEWER CONTRACT. A FULL WRITTEN REPORT AS TO THE CONDITION OF THE PIPE WITH PERTINENT DATA SUCH AS DISTANCE BETWEEN MANHOLES, LOCATION OF SERVICES, ETC. SHALL BE SUBMITTED TO THE OWNER AND ENGINEER PRIOR TO ACCEPTANCE, AND ONE COPY OF THE VIDEO TAPE SHALL BE SUBMITTED TO CITY OF G.C.S.. ALL DEFECTIVE AREAS AND ITEMS SHALL BE REPLACED OR REPAIRED PRIOR TO FINAL ACCEPTANCE. ALL REPAIRED SECTIONS MUST BE REINSPECTED PRIOR TO ACCEPTANCE.
- 18. ALL NEW AND/OR RELOCATED WATER MAIN PIPES AND FITTINGS SHALL NOT CONTAIN MORE THAN EIGHT PERCENT LEAD AND ALL PACKING AND JOINT MATERIALS USED IN THE JOINTS SHALL CONFORM WITH ALL APPLICABLE AWWA STANDARDS. ALL NEW AND/OR RELOCATED WATER SERVICES AND PLUMBING SHALL CONTAIN NO MORE THAN EIGHT PERCENT LEAD AND ALL SOLDERS AND FLUX SHALL CONTAIN NO MORE THAN 0.2 PERCENT LEAD.
- 19. IF SOLVENT CONTAMINATION IS FOUND IN THE PIPE TRENCH, WORK SHALL BE STOPPED AND THE PROPER AUTHORITIES NOTIFIED. WITH APPROVAL OF THE PERMITTING AGENCY, DUCTILE FITTINGS AND SOLVENT RESISTANT GASKET MATERIAL SHALL BE USED IN THE CONTAMINATED AREA. THE DUCTILE IRON PIPE SHALL EXTEND AT LEAST 100 FEET BEYOND ANY SOLVENT NOTED.

Engineering, BUILDING REEVE NAREHOUSE MIKE

REVISIONS

PLOT DATE:
DRAWN BY:
DESIGNED BY:
CHECKED BY:
SCALE:
JOB NO.:

SHEET NO.

- 2. CONSTRUCTION WARNING SIGNS ARE TO BE POST MOUNTED AND ERECTED BEFORE CONSTRUCTION CAN COMMENCE. THESE AND ALL TRAFFIC CONTROL DEVICES SHALL FOLLOW THE STANDARDS SET FORTH BY THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AS WELL AS THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD INDEXES.
- 3. ALL SUB BASE SHALL BE FIRM AND UNYIELDING.
- 4. ALL JOINTS OF PIPE, REGARDLESS OF MATERIAL TYPE, SHALL BE WRAPPED WITH FABRIC FILTER CLOTH PER FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD INDEX 280.
- 5. ALL DISTURBED CITY OF G.C.S. RIGHTS-OF-WAY SHALL BE SODDED TO THE DISCRETION AND APPROVAL OF THE CITY OF G.C.S. ENGINEERING DEPARTMENT.
- 6. THE CURB SHALL BE CHECKED FOR FLOW DESIGN AT ANY STAGE OF THE PROJECT. A WATER TRUCK IS TO BE PROVIDED AT THE FINAL INSPECTION IN ORDER TO CHECK FLOW DESIGN.
- 7. ALL UNDER DRAIN LINES SHALL HAVE A FORTY—FIVE DEGREE CLEAN OUT AT TWO HUNDRED FOOT (200') INTERVALS AND AT THE END OF THE RUN. THE CURB SHALL BE MARKED WITH TEAL OR HUNTER GREEN PAINT AS TO THE LOCATION OF THE CLEAN OUT.
- 8. HANDICAP RAMPS SHALL BE INSTALLED WHEREVER THE SIDEWALK MEETS THE CURB.
- 9. ALL INFORMATION REQUESTED BY THE CITY SHALL BE IN HAND AT THE TIME OF THE FINAL INSPECTION. NO CONDITIONAL CERTIFICATES OF OCCUPANCY SHALL BE GIVEN.
- 10. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO EXCAVATION AND TAKE ALL MEASURES NECESSARY TO PROTECT UTILITIES DURING CONSTRUCTION. SHOULD ANY UTILITY LINE OR COMPONENT BECOME DAMAGED OR REQUIRE RELOCATION THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE RESPONSIBLE UTILITY COMPANY, THE ENGINEER, AND THE CITY.
- 11. ALL SWALE SECTIONS ARE TO BE SODDED.
- 12. ALL DEVELOPER OR CONTRACTOR INSTALLED SIDEWALKS SHALL BE INSTALLED PRIOR TO THE FINAL INSPECTION.
- 13. A COPY OF THE CONTRACTORS' GENERAL LICENSE AND OR UNDER GROUND UTILITY LICENSE SHALL BE PROVIDED AT THE TIME OF THE PRE—CONSTRUCTION CONFERENCE.
- 14. ANY APPLICABLE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT (SJRWMD) OR FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) PERMITS SHALL BE PROVIDED TO THE CITY BY THE PRE-CONSTRUCTION CONFERENCE. NO WORK SHALL BEGIN WITHOUT ALL APPLICABLE PERMITS ON FILE.
- 15. THE CONTRACTOR MUST OBTAIN APPROVAL FROM THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT (SJRWMD) BEFORE THE CITY WILL ACCEPT THE PROJECT.
- 16. THERE SHALL BE A MINIMUM THREE (3) DAYS NOTICE GIVEN FOR SCHEDULING THE FINAL INSPECTION.
- 17. AT THE FINAL INSPECTION, A LETTER OF COMPLIANCE, PROVIDED BY THE CITY, WILL NEED TO BE FILLED OUT AND SIGNED THE STATE OF FLORIDA REGISTERED PROFESSIONAL ENGINEER OF RECORD.
- 18. FIVE (5) DAYS PRIOR TO THE FINAL INSPECTION TWO (2) SETS OF BLUE LINE AS-BUILTS AND ONE (1) COPY ON DISK IN AUTOCAD FORMAT SHOWING THE FOLLOWING SHALL BE SUBMITTED:

## CITY EROSION CONTROL NOTES:

- 19. PURSUANT TO COMPREHENSIVE PLAN POLICY 9:1 OF THE CONSERVATION ELEMENT, THE USE OF ONE OR MORE EROSION CONTROL MEASURES, AS REQUESTED BY THE CITY OF G.C.S. ENGINEERING DEPARTMENT, SHALL BE USED DURING CONSTRUCTION. THESE WILL BE, BUT NOT LIMITED TO, ITEMS SUCH AS TEMPORARY GRASS COVER, SEDIMENT BASINS OR PONDS, MULCHING, TEMPORARY FENCES, DIVERSION CHANNELS AND HAY BALES.
- 20. PURSUANT TO COMPREHENSIVE PLAN POLICY 9:1 OF THE CONSERVATION ELEMENT, SCHEDULING OF CONSTRUCTION SHALL BE GIVEN SPECIAL CONSIDERATION TO MINIMIZE EXPOSURE OF BARE SOIL. THE CONTRACTOR WILL FORMULATE A CONSTRUCTION SCHEDULE TO BE GIVEN TO THE CITY REPRESENTATIVE.
- 21. THE CONTRACTOR SHALL CHECK EACH DAY TO INSURE THAT ALL EROSION CONTROL DEVICES ARE IN PLACE AND WORKING PROPERLY.
- 22. ALL EROSION CONTROL MEASURES SHALL BE IN COMPLIANCE WITH THE RULES, REGULATION AND STANDARDS OF THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT (SJRWMD), THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) AND THE UNITED STATES ARMY CORP OF ENGINEERS.

- 23. THE CONTRACTOR SHALL TAKE WHATEVER MEANS NECESSARY TO PREVENT THE EROSION OF SOIL AND DEPOSITION OF SEDIMENT ON ADJACENT AND DOWNSTREAM PROPERTIES.
- 24. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO CONSTRUCTION.

## CITY PUBLIC SAFETY NOTES:

- 25. BLUE, ALL-DIRECTIONAL HIGHWAY-STYLE REFLECTIVE MARKERS SHALL BE PROVIDED ON ALL ROADWAYS, ALLEYS, ACCESS ROADS AND ALL PAVED AREA IN FRONT OF EACH HYDRANT. SAID MARKERS SHALL BE LOCATED IN THE LANE OF TRAVEL ON THE SAME SIDE AS THE HYDRANT. THESE MARKERS SHALL BE IN PLACE AT THE TIME OF FINAL INSPECTION OR APPROVAL.
- 26. A DISK SHALL BE PROVIDED, IN AUTOCAD FORMAT, SHOWING THE LOCATION OF ALL FIRE HYDRANTS BEFORE FINAL APPROVAL.

## PAVING, DRAINAGE AND CONSTRUCTION NOTES:

- 27. ALL UNSUITABLE MATERIAL SHALL BE REMOVED TWO FEET (2') BEYOND THE BACK OF CURB AND TWO FEET (2') BELOW FINISHED GRADE.
- 28. COMPACTION DENSITIES FOR ALL ROADWAY CROSSINGS ARE TO BE TAKEN IN ONE-FOOT (1') LIFTS. STORM SEWER PIPE DENSITIES WILL START AT THE HAUNCHES OF THE PIPE AND BE TAKEN EVERY 6" UNTIL IT HAS REACHED 1' ABOVE THE PIPE.
- 29. IF UNSUITABLE MATERIAL IS FOUND WITHIN THE LIMITS OF THE ROAD OR IF MATERIAL IS HAULED IN FOR ROADWAY FILL AT A DEPTH GREATER THAN ONE—FOOT (1') THEN THE ENTIRE ROADWAY SHALL BE UNDER DRAINED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT AND INSTALLED PER THE APPROVED CITY OF G.C.S. DETAIL.
- 30. ALL STORM SEWER PIPES SHALL BE CUT FLUSH WITH THE INTERIOR WALL OF ANY TYPE MANHOLE OR CURB AND DITCH BOTTOM INLETS.
- 31. COMPACTION DENSITY TESTS FOR ALL WATER AND SEWER CROSSINGS WILL START THREE FEET (3') ABOVE THE PIPE.
- 32. COMPACTION DENSITY TESTS FOR ALL WATER AND SEWER CROSSINGS WILL START AT THE SPRING LINE OF THE PIPE.
- 33. IF THE APPROVED DESIGN REQUIRED THE INLET OR STORM RUN TO BE SURCHARGED, ALL INLETS SHALL BE INSPECTED BEFORE BEING EXPOSED TO THE SYSTEM.
- 34. TEST CYLINDERS SHALL RUN FOR ALL CONCRETE STRUCTURES. THERE WILL BE THREE (3) TESTS PER EACH DAY POUR WITH ONE (1) AT SEVEN (7) DAY BREAK, AND TWO (2) TWENTY-EIGHT (28) DAY BREAKS.
- 35. THE ASPHALT SHALL BE CORED FOR THICKNESS AND WILL BE GIVEN A ONE-QUARTER INCH (1/4") TOLERANCE. IF HOWEVER THE CITY'S REPRESENTATIVE IS PRESENT AT POUR AND FEELS COMFORTABLE WITH THE REQUIREMENTS THEN HE OR SHE MAY WAVE THIS POLICY.
- 36. LBR'S FOR SUBGRADE AT FORTY (40) AND LIME ROCK OR ALTERNATIVE BASE COURSE AT ONE HUNDRED (100). THERE WILL BE NO UNDER TOLERANCE.
- 37. ALL MATERIAL USED FOR BACK FILL SHALL BE SAND (A3) FREE DRAINING.
- 38. THERE ARE TO BE NO OPENED TRENCHES AT DAY'S END.
- 39. ALL DIRT AND DEBRIS TRACKED OUT OF THE PROJECT SHALL BE CLEANED DAILY AND TO THE DISCRETION OF THE CITY OF G.C.S. ENGINEERING DEPARTMENT.

## SIGNING AND PAVEMENT MARKING NOTES:

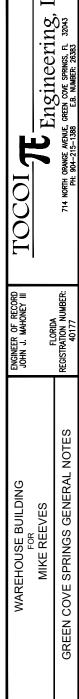
- 40. ALL SIGNS MUST MEET THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARDS FOR ENGINEERING GRADE SIGN FACES IN REFLECTIVITY.
- 41. ALL FINAL PAVEMENT MARKINGS WITHIN THE RIGHTS-OF-WAY SHALL BE THERMOPLASTIC.
- 42. ALL SIGNS SHALL BE ON A TEN-FOOT (10') POLE A MINIMUM OF SEVEN FEET (7') FROM THE GROUND.
- 43. STREET SIGNS SHALL BE MOUNTED WITH TEE CAPS.
- 44. STREET SIGNS SHALL BE SIX INCHES (6") WIDE WITH GREEN BACKINGS AND WHITE LETTERS AND BORDERING.
- 45. STOP SIGNS SHALL BE A MINIMUM TWENTY-FOUR INCH BY TWENTY-FOUR INCH (24" X 24").
- 46. STOP SIGNS ARE TO BE PLACED FOUR FEET (4') FROM BACK OF CURB, FOR FEET (4') BEHIND CROSS WALKS AND ON THE RIGHT HAND SIDE OF THE ROAD.
- 47. STREET SIGNS ARE TO BE LOCATED ON THE LEFT HAND CORNER OF THE INTERSECTION FOUR FEET (4') FROM THE BACK OF CURB.
- 48. STREET  $\!\!\!/$  STOP SIGN COMBINATIONS ARE NOT ALLOWED.
- 49. ALL REGULATORY SIGNS SHALL BE BLACK AND WHITE. ALL CONSTRUCTION WARNING SIGNS SHALL BE ORANGE AND BLACK. ALL WARNING SIGNS SHALL BE YELLOW AND BLACK. ALL NO PARKING AND STOP SIGNS SHALL BE RED AND WHITE.
- 50. STOP BARS SHALL BE TWENTY-FOUR INCHES (24") WIDE AND LANE WIDTH. ALL STOP BARS SHALL BE THERMOPLASTIC.
- 51. ALL SIGNS SHALL BE SIDED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) STANDARDS.
- 52. ALL DETECTABLE WARNING PADS FOR ADA RAMPS ARE TO BE WET-SET MATS.

## **CITY MAINTENANCE OF TRAFFIC:**

- 53. AFTER ISSUANCE OF THE PERMIT, THE PERMITTEE SHALL NOTIFY THE CITY PUBLIC WORKS DEPARTMENT A MINIMUM OF TWO BUSINESS DAYS PRIOR TO COMMENCING CONSTRUCTION. THIS NOTIFICATION WILL ALLOW FOR SCHEDULING OF INSPECTIONS.
- 54. IF A ROAD CLOSURE IS REQUIRED, THE PERMITTEE SHALL SUBMIT WITH THE PERMIT APPLICATION A MAINTENANCE OF TRAFFIC (MOT) PLAN TO INCLUDE ALL PROPOSED ROAD CLOSURES AND AN EXPECTED TIME DURATION FOR EACH CLOSING.
- 55. ROAD CLOSURES SHALL REQUIRE SEPARATE APPROVAL BY THE PUBLIC WORKS DEPARTMENT AND A MINIMUM OF THREE BUSINESS DAYS PRIOR NOTIFICATION BEFORE THE COMMENCEMENT OR CONSTRUCTION.
- 56. ROAD CLOSURES SHALL REQUIRE SEPARATE APPROVAL OF CLAY COUNTY FIRE AND RESCUE.
- 57. ROAD CLOSURES OF FEWER THAN 15 MINUTES SHALL NOT REQUIRE NOTIFICATION.

## CITY AS-BUILT REQUIREMENTS:

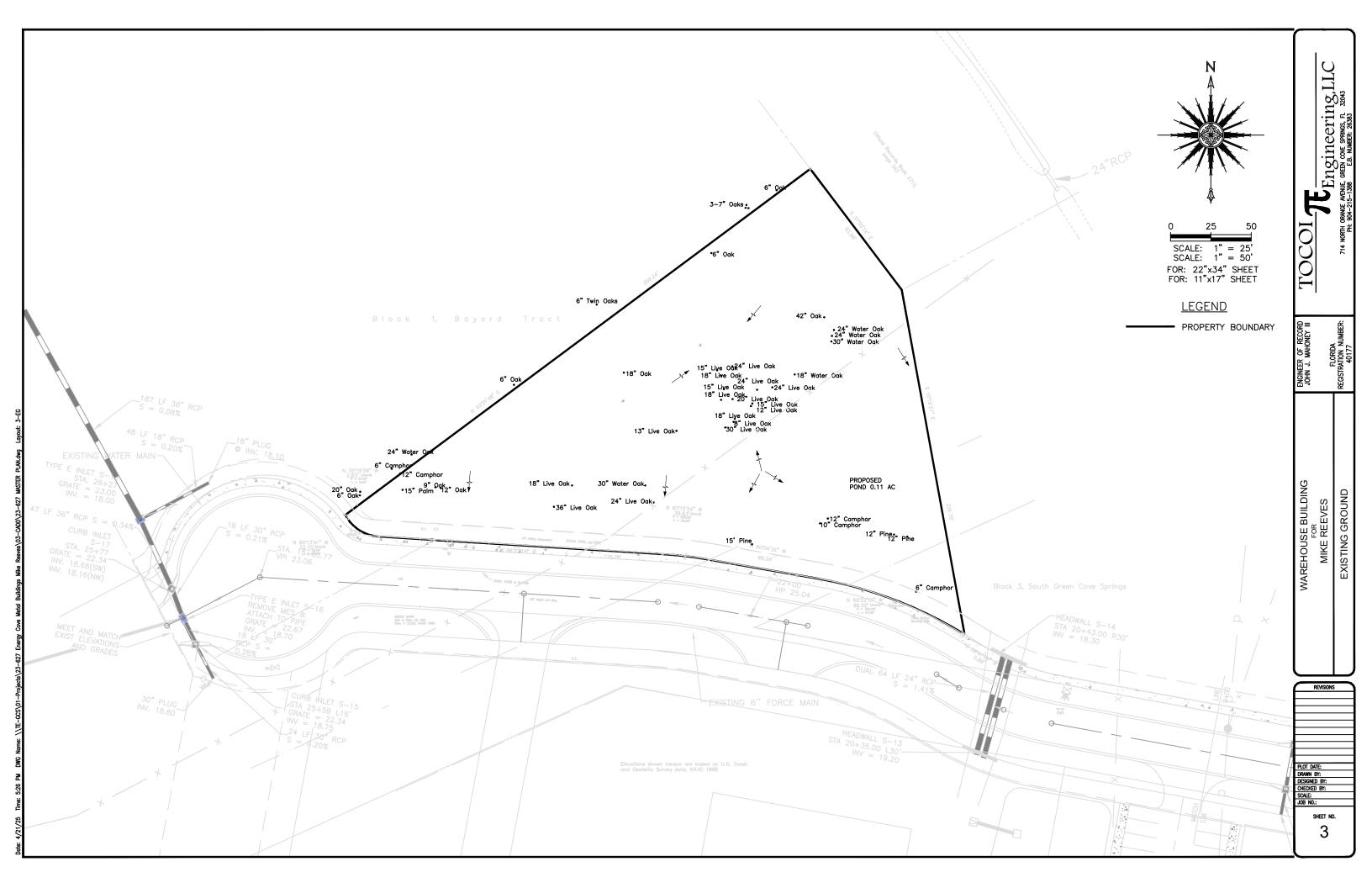
58. AS-BUILTS MUST BE SUBMITTED ON THE APPROVED GRADING.

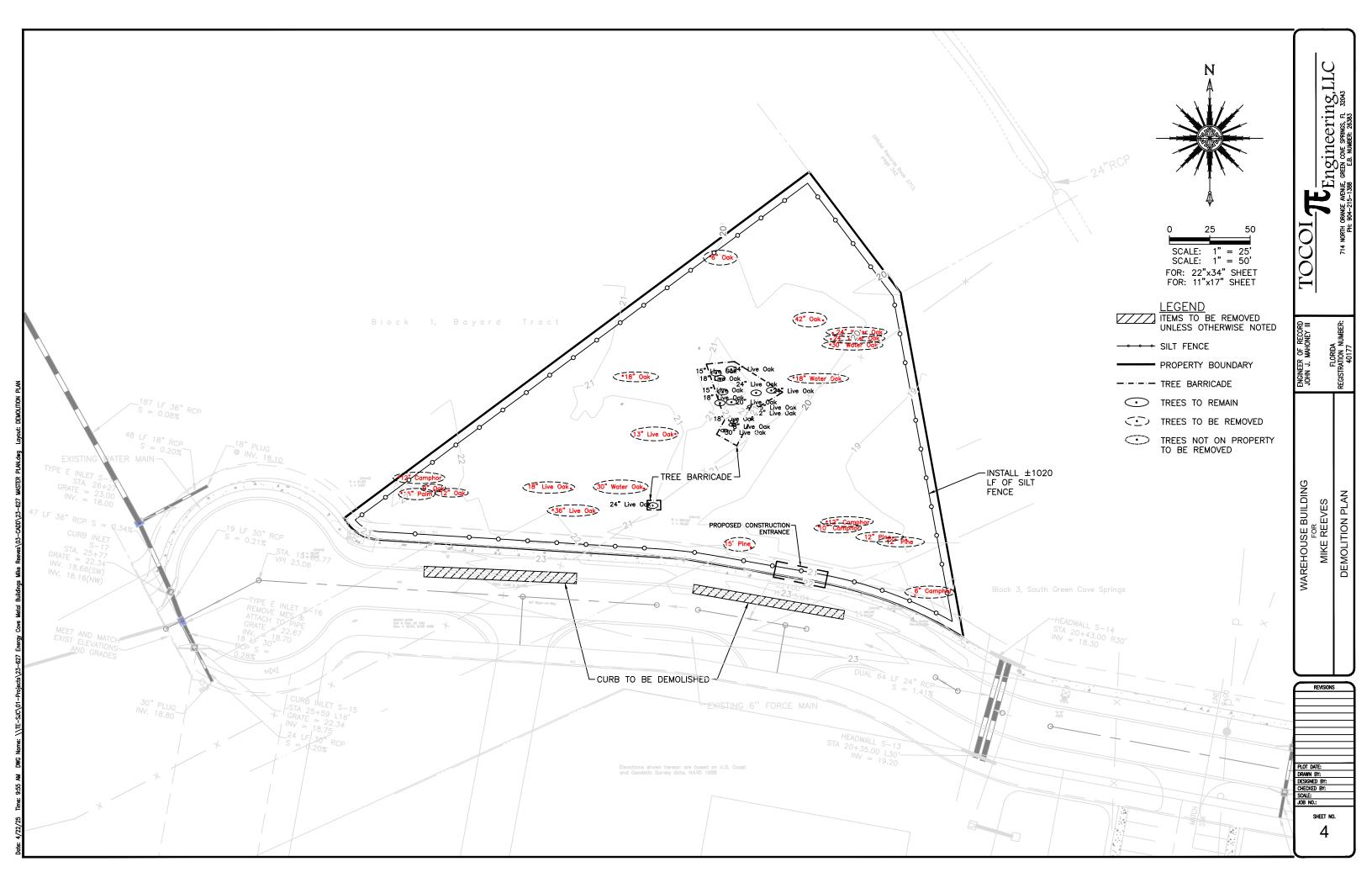


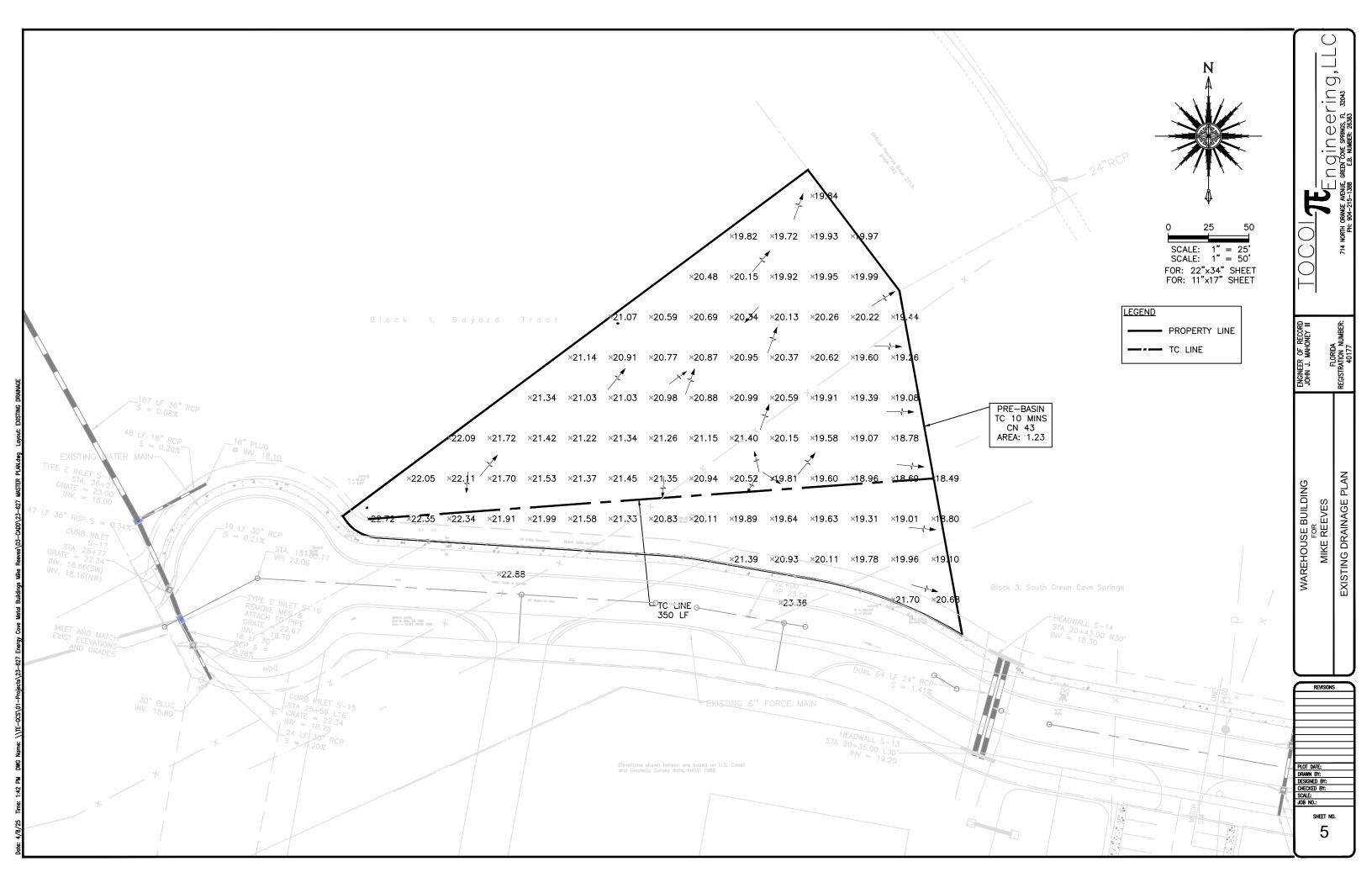


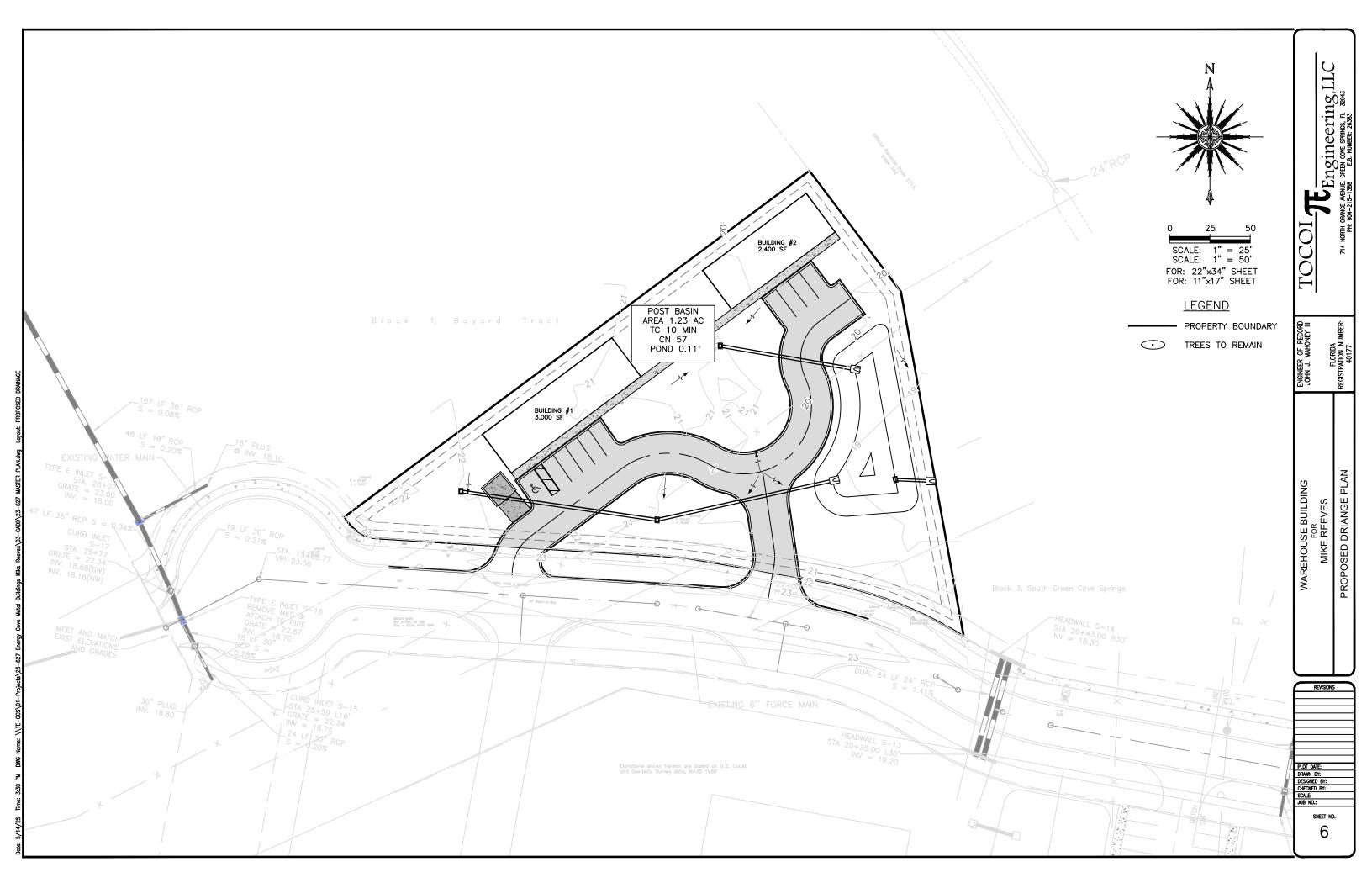
SCALE: IOB NO.:

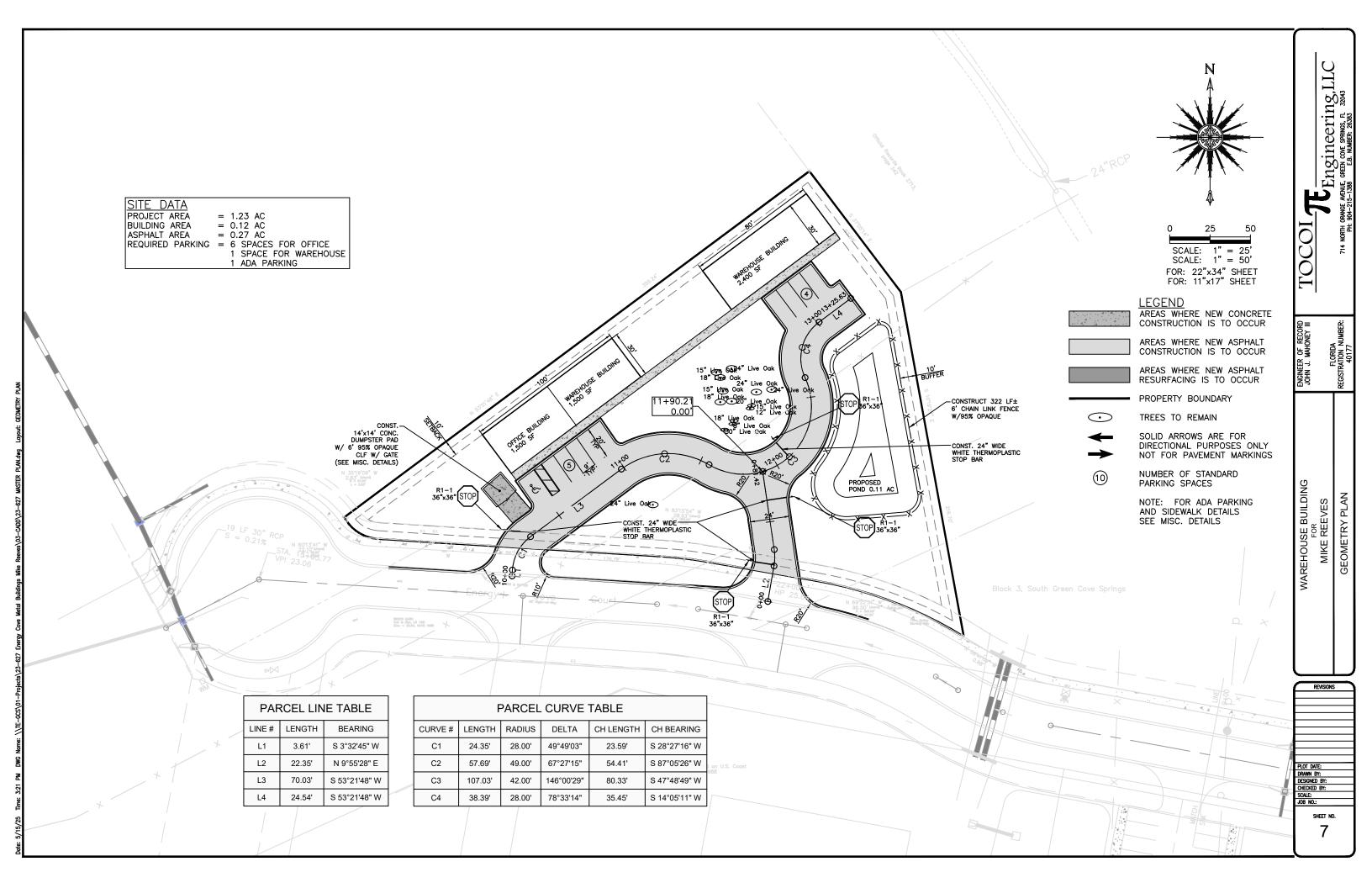
2B

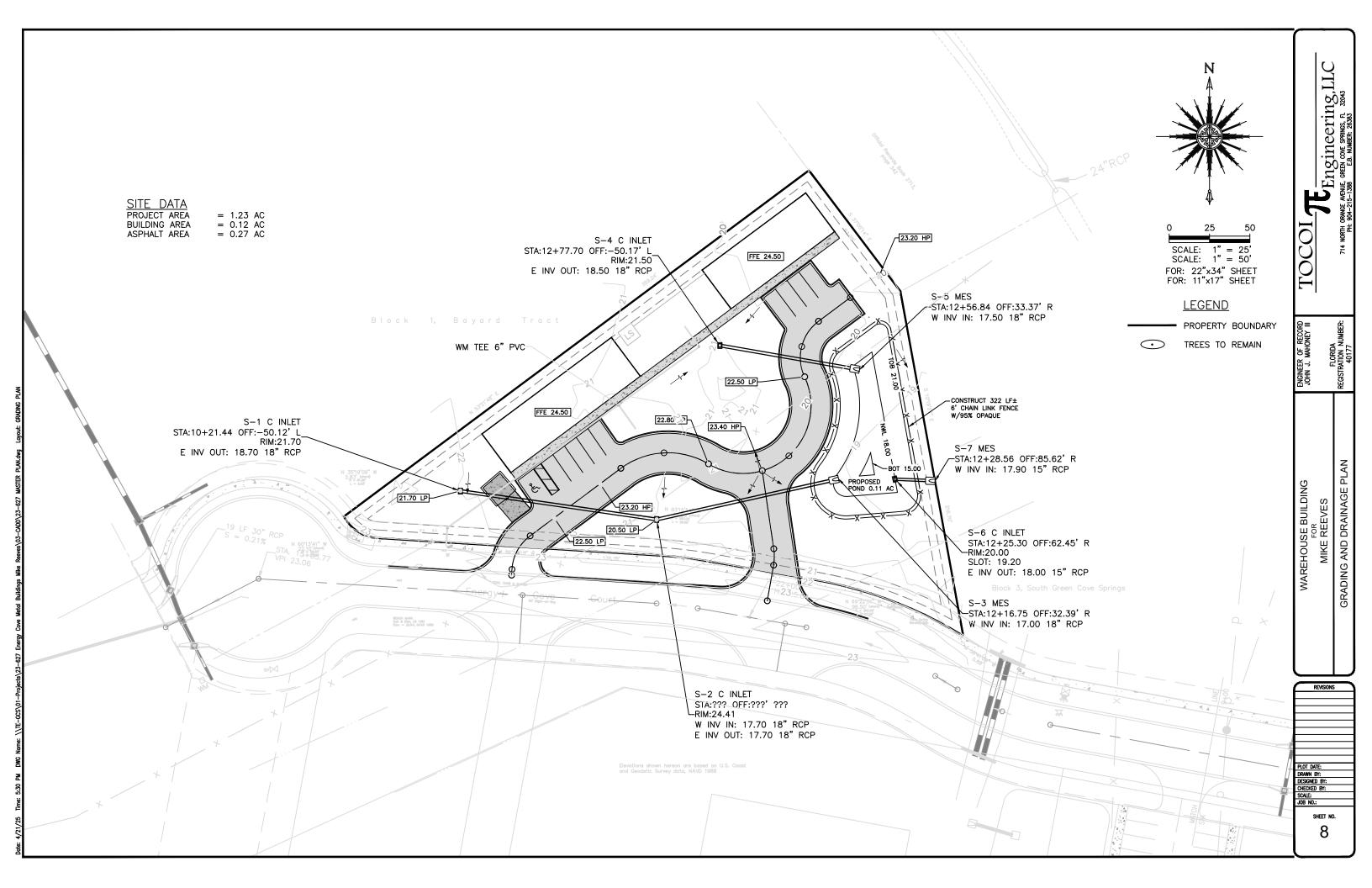








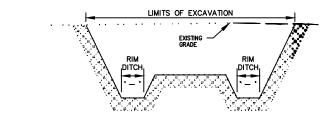




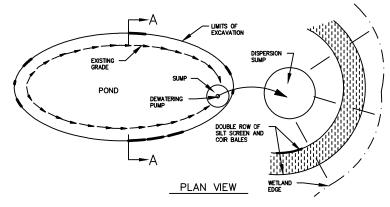
- THE CONTRACTOR IS RESPONSIBLE FOR REMOVING SILT FROM SITE IF NO REUSABLE ON—SITE AND ASSURING PLAN ALIGNMENT AND GRADE IN ALL DITCHES AND SWALES AT COMPLETION OF CONSTRUCTION.
- . THE SITE CONTRACTOR IS RESPONSIBLE FOR REMOVING THE TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES AFTER COMPLETION OF CONSTRUCTION AND ONLY WHEN AREAS HAVE BEEN STABILIZED.
- 3. ADDITIONAL PROTECTION ON—SITE PROTECTION IN ADDITION TO THE ABOVE MUST BE PROVIDED THAT WILL NOT PERMIT SILT TO LEAVE THE PROJECT CONFINES DUE TO UNSEEN CONDITIONS OR ACCIDENTS.
- CONTRACTOR SHALL INSURE THAT ALL DRAINAGE STRUCTURES, PIPES, ETC. ARE CLEANED OUT AND WORKING PROPERLY AT TIME OF ACCEPTANCE.
- 5. WIRE MESH SHALL BE LAID OVER THE DROP INLET SO THAT THE WIRE EXTENDS A MINIMUM OF 1 FOOT BEYOND EACH SIDE OF THE INLET STRUCTURE. HARDWARE CLOTH OR COMPARABLE WIRE MESH WITH 1/2-INCH OPENINGS SHALL BE USED. IF MORE THAN ONE STRIP OF MESH IS REQUIRED, THE STRIPS SHALL BE OVERLAPPED.
- 6. FDOT NO. 1 COARSE AGGREGATE SHALL BE PLACED OVER THE WIRE MESH AS INDICATED ON SEDIMENT FILTER DETAIL (SEE DETAIL THAS SHEET). THE DEP TH OF STONE SHALL BE AT LEAST 12 IN GHES OVER THE ENTIRE INLET OPENING. THE STONE SHALL EXTEND BETOND THE INLET OPENING AT LEAST 18 INCHES
- IF THE STONE FILTER BECONES CO GED WITH SEDIMENT SO THAT IT NO LONGER ADEQUATELY PERFORMS ITS FUNCTION, THE STONES MUST BE PULLED AWAY FROM THE INLET, CLEANED AND REPLACED.
- 8. BALES SHALL BE EITHER WIRE-BOUND OR STRING-TIED WITH THE BINDINGS ORIENTED AROUND THE SIDES RATHER THAN OVER AND UNDER THE BALES.
- 9. BALES SHALL BE PLACED LENGTHWISE IN A SINGLE ROW SURROUNDING THE INLET, WITH THE ENDS OF ADJACENT BALES PRESSED TOGETHER.
- 10. THE FILTER BARRIER SHALL BE ENTRENCHED AND BACKFILLED.A TRENCH SHALL BE EXCAVATED TO A MINIMUM DEPTH OF 4 INCHES. AFTER THE BALES ARE STAKED, THE EXCAVATED SOIL SHALL BE BACKFILLED AND COMPACTED AGAINST THE FILTER BARRIER.
- 11. EACH BALE SHALL BE SECURELY ANCHORED AND HELD IN PLACE BY AT LEAST TWO STAKES OR REBARS DRIVEN THROUGH THE BALE.
- 12. LOOSE COIR SHOULD BE WEDGED BETWEEN BALES TO PREVENT WATER FROM ENTERING BETWEEN BALES.
- 13. COIR BALE BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL.
- 14. CLOSE ATTENTION SHALL BE GIVEN TO THE REPAIR OF DAMAGED BALES, END RUNS AND UNDERCUTTING BENEATH BALES.
- 15. NE ŒSSART REP IRS TO BARRIERS OR REPLACEMENT OF BALES SHALL BE ACCOMPLISHED PROMPTLY.
- 16. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH RAINFALL.IT MUST BE REMOVED WHEN THE LEVEL OF DEPOSITION REACHES APPROXIMATELY ONE—HALF THE HEIGHT OF THE BARRIER.
- 17. ANY SEDIMENT DEPOSITS REMAINING IN PLACE, AFTER THE COIR BALE OR FILTER BARRIERS, AND OR SILT FENCES ARE NO LONGER REQUIRED, SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.
- 18. SILT FENCES AND FILTER BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
- 19. SHOULD THE FABRIC ON A SILT FEMOLE OR FILTER BARRIER DECOMPOSE OR BECOME INFFRE DIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL BE NECESSARY, THE FABRIC SHALL BE REPLACED IMMEDIATELY.
- 20. STRUCTURES SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS REQUIRED.
- 21. SEDIMENT SHALL BE REMOVED AND THE TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 THE DESIGN DEPTH OF THE TRAP. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
- 22. THE CONTRACTOR IS RESPONSIBLE FOR FOLLOWING THE BEST EROSION AND SEDIMENT CONTROL PRACTICES AS OUTLINED IN THE PLANS, SPECIFICATIONS AND ST. JOHNS RIVER WATER MANAGEMENT DISTRICT RULES AND REGULATIONS.
- 23. FOR ADDITIONAL INFORMATION ON SEDIMENT AND EROSION CONTROL REFER TO "THE FLORIDA DEVELOPMENT MANUALL A GUIDE TO SOUND LAND AND WATER MANAGEMENT' FROM THE STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION (F.D.E.P.) CHAPTER 6.
- 24. EROSION AND SEDIMENT CONTROL BARRIERS SHALL BE PLACED ADJACENT TO ALL WETLAND AREAS WHERE THERE IS POTENTIAL FOR DOWNSTREAM WATER QUALITY DEGRADATION. SEE DETAILS (THIS SHEET) FOR TYPICAL CONSTRUCTION.
- SOD SHALL BE PLACED IN AREAS WHICH MAY REQUIRE IMMEDIATE EROSION PROTECTION TO ENSURE WATER QUALITY STANDARDS ARE MAINTAINED.
- 26. ANY DISCHARGE FROM DEWATERING ACTIVITY SHALL BE FILTERED AND CONVEYED TO THE OUTFALL IN A MANNER WHICH PREVENTS EROSION AND TRANSPORTATION OF SUSPENDED SOLIDS TO THE RECEIVING OUTFALL.
- 27. DEWATERING PUMPS SHALL NOT EXCEED THE CAPACITY OF THAT WHICH REQUIRES A CONSUMPTIVE USE PERMIT FROM THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT.
- 28. ALL DISTURBED AREAS SHALL BE GRASSED, FERTILIZED AND MULCHED UNTIL A PERMANENT VEGETATIVE COVER IS ESTABLISHED. CONTRACTOR SHALL USE ADDITIONAL MEASURES TO STABLIZE DISTURBED AREAS THROUGH COMPACTION, SILT SCREENS, CO
- 29. ALL DEWATERING, EROSION, AND SEDIMENT CONTROL SHALL REMAIN IN PLACE UNTIL AFTER COMPLETION OF CONSTRUCTION, AND REMOVED ONLY WHEN AREAS HAVE BEEN STABILIZED.
- 30. THIS PLAN INDICATES THE MINIMUM EROSION AND SEDIMENT MEASURES REQUIRED FOR THIS PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR MEETING ALL APPLICABLE RULES, REGULATIONS AND WATER QUALITY GUIDELINES AND MAY NEED TO INSTALL ADDITIONAL CONTROLS.
- 31. THE CONTRACTOR SHALL BE REQUIRED TO RESPOND TO ALL WATER MANAGEMENT DISTRICT INQUIRIES, RELATIVE TO COMPUANCE OF SARWIND FOR EROSION AND SEDIMENTATION CONTROL. THE COST OF THIS COMPLIANCE SHALL BE PART OF THE CONTRACT.
- 32. EROSION AND SEDIMENT CONTROL BARRIERS SHALL BE PLACED ADJACENT TO ALL WETLAND AREAS AND PRESERVATION EASEMENTS WHERE THERE IS POTENTIAL FOR DOWNSTREAM WATER QUALITY DEGRADATION.
- 33. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING A PERMANENT STAND OF SOD AND/OR GRASS PER THE CONTRACT DOCUMENTS AND MEETING THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT, ST. JOHNS COUNTY, AND NPDES FINAL STABILIZATION REQUIREMENTS.
- 34. THESE PLANS INCLUDING THE POLLUTION PREVENTION PLAN INDICATE THE MINIMUM EROSION & SEDIMENT CONTROL MEASURES REQUIRED FOR THIS PROJECT. FOR ADDITIONAL INFORMATION ON SEDIMENT AND EROSION CONTROL REFER TO "THE FLORIDA DEVELOPMENT MANUAL A GUIDE TO

SOUND LAND AND WATER MANAGEMENT" FROM THE STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (F.D.E.P.) CHAPTER 6. CONTRACTOR SHALL PROVIDE EROSION PROTECTION AND TURBIDITTC ONTROL AS REQUIRED TO INSURE CONFORMANCE TO STATE AND FEDERAL WATER QUALITY STANDARDS AND MAT NEED TO INSTALL ADDITIONAL CONTROLS TO CONFORM TO AGENICES REQUIREMENTS. IF A WATER QUALITY VIOLATION OCCURS, THE CONTRACTOR SHALL BE WHOLLY RESPONSIBLE FOR ALL DAMAGE AND ALL COSTS WHICH MAY RESULT INCLUDING LEGAL FEES, CONSULTANT FEES, CONSTRUCTION COSTS, AND FINES.

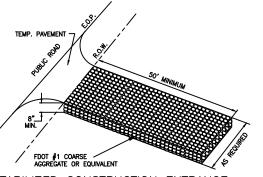
35. 48 HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR WILL SUBMIT A "NOTICE OF INTENT" TO THE EPA IN ACCORDANCE WITH NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM RULES AND REQUEATIONS. (FOR ANY CONSTRUCTION NOT COVERED BY THE OWNER'S "NOTICE OF INTENT" PERMIT)



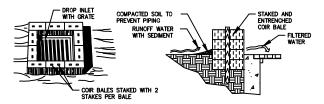
SECTION A-A



## TEMPORARY DEWATERING DETAIL N.T.S.



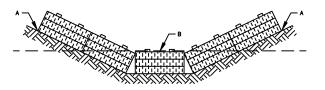
STABILIZED CONSTRUCTION ENTRANCE



## SPECIFIC APPLICATION

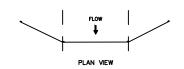
THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE THE INLET DRAINS A RELATIVELY FLAT AREA (SLOPES NO GREATER THAN 5 PERCENT) WHERE SHEET OR OVERLAND FLOWS (NOT EXCEEDING 0.5 cfg) ARE TYPICAL. THE METHOD SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS, SUCH AS IN STREET OR HIGHWAY MEDIANS.

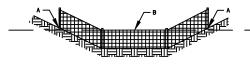
COIR BALE DROP INLET SEDIMENT FILTER



POINTS A SHOULD BE HIGHER THAN POINT B

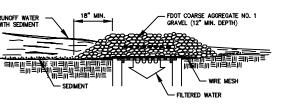
## PROPER PLACEMENT OF COIR BALE IN A DRAINAGE WAY





SECTION VIEW POINTS A SHOULD BE HIGHER THAN POINT B

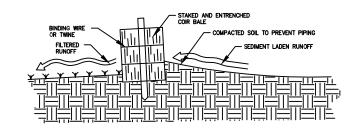
## PROPER PLACEMENT OF A FILTER BARRIER IN DRAINAGE WAY



## SPECIFIC APPLICATION

THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE HEAVY CONCENTRATED FLOWS ARE EXPECTED, BUT NOT WHERE PONDING AROUND THE STRUCTURE MIGHT CAUSE EXCESSIVE INCONVENIENCE OR DAMAGE TO ADJACENT STRUCTURES AND UNPROTECTED AREA

GRAVEL AND WIRE MESH DROP INLET SEDIMENT FILTER

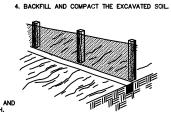


**CROSS-SECTION OF A PROPERLY INSTALLED COIR BALE** 



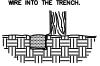
3. ATTACH THE FILTER FABRIC TO THE WIRE FENCE AND EXTEND IT INTO THE TRENCH.





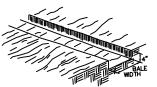
2. STAPLE WIRE FENCING TO THE POSTS.

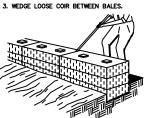
EXTENSION OF FABRIC AND WIRE INTO THE TRENCH.



# CONSTRUCTION OF SILT FENCE

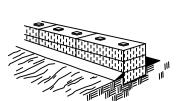
1. EXCAVATE THE TRENCH





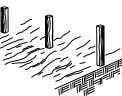
4. BACKFILL AND COMPACT THE EXCAVATED SOIL

2. PLACE AND STAKE COIR GALES.



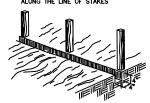
## CONSTRUCTION OF A COIR BALE BARRIER

1. SET THE STAKES.

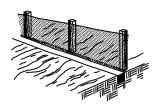


3. STAPLE FILTER MATERIAL TO STAKES AND EXTEND IT INTO THE TRENCH.





4. BACKFILL AND COMPACT THE EXCAVATED SOIL



CONSTRUCTION OF A FILTER BARRIER

Engineering

₽₹

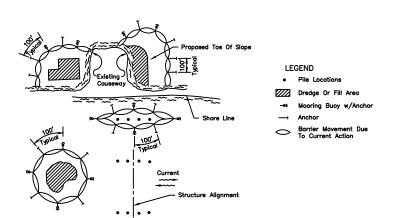
DETAIL WAREHOUSE BUILDING FOR MIKE REEVES

REVISIONS

RAWN BY: ESIGNED BY: HECKED BY:

SHEET NO. 9A

NOTICE: COMPONENTS OF TYPES I & TYPE II MAY BE SIMILAR OR IDENTICAL TO PROPRIETARY DESIGNS. ANY INFRINGEMENT ON THE
PROPRIETARY RIGHTS OF THE DESIGNER
SHALL BE THE SOLE RESPONSIBILITY OF
THE USER. SUBSTITUTIONS FOR TYPES
I AND II SHALL BE AS APPROVED BY

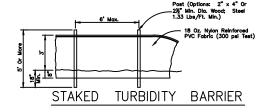


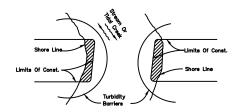
- 1. Turbidity barriers are to be used in all permanent bodies of water regardless of water depth.
- 2. Number and spacing of anchors dependent on current velocities.
- 3. Deployment of barrier around pile locations may vary to accommodate construction operations.
- 4. Navigation may require segmenting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

## TURBIDITY BARRIER APPLICATIONS

## TURBIDITY BARRIERS

(D-907) N.T.S.



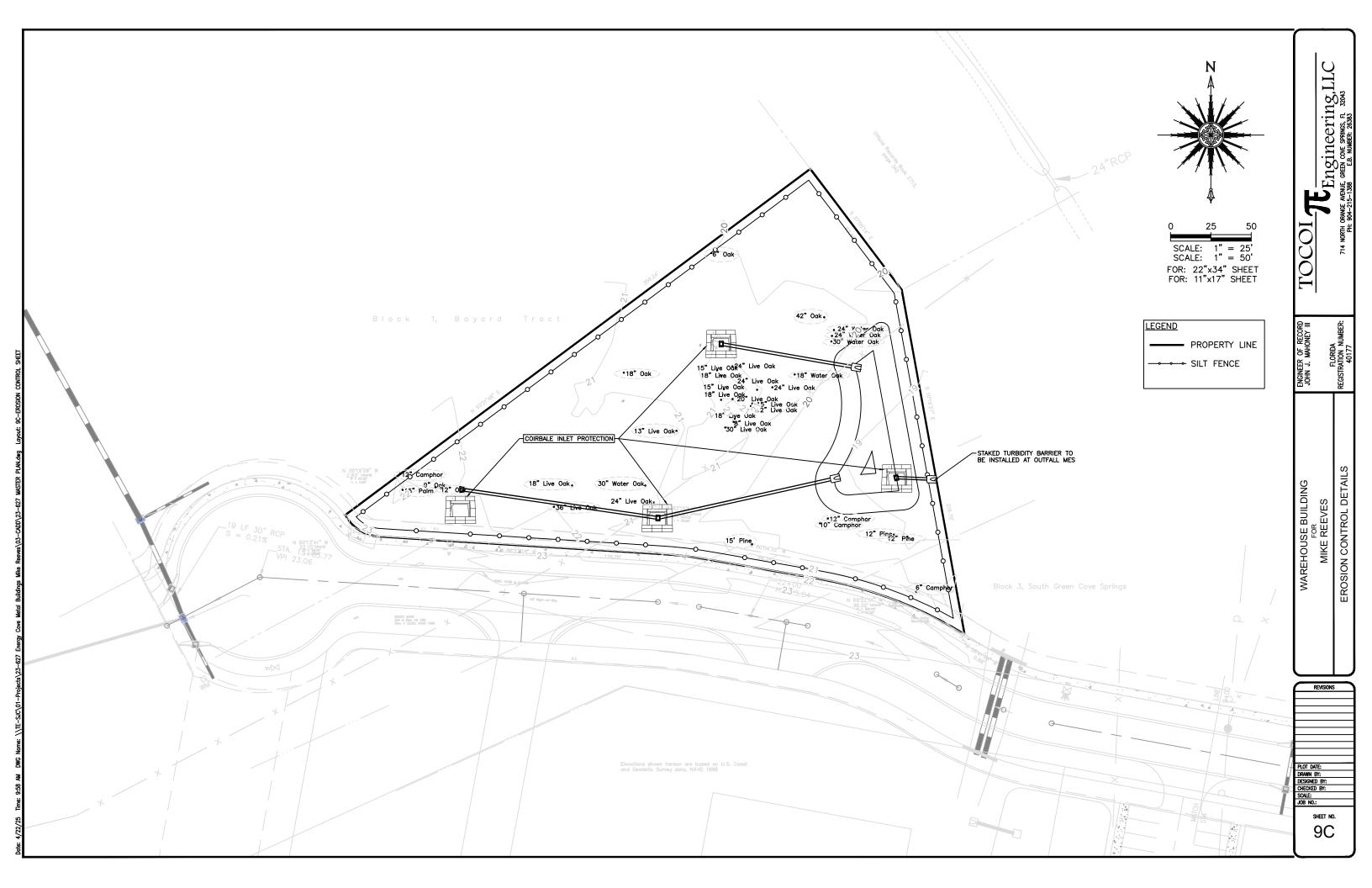


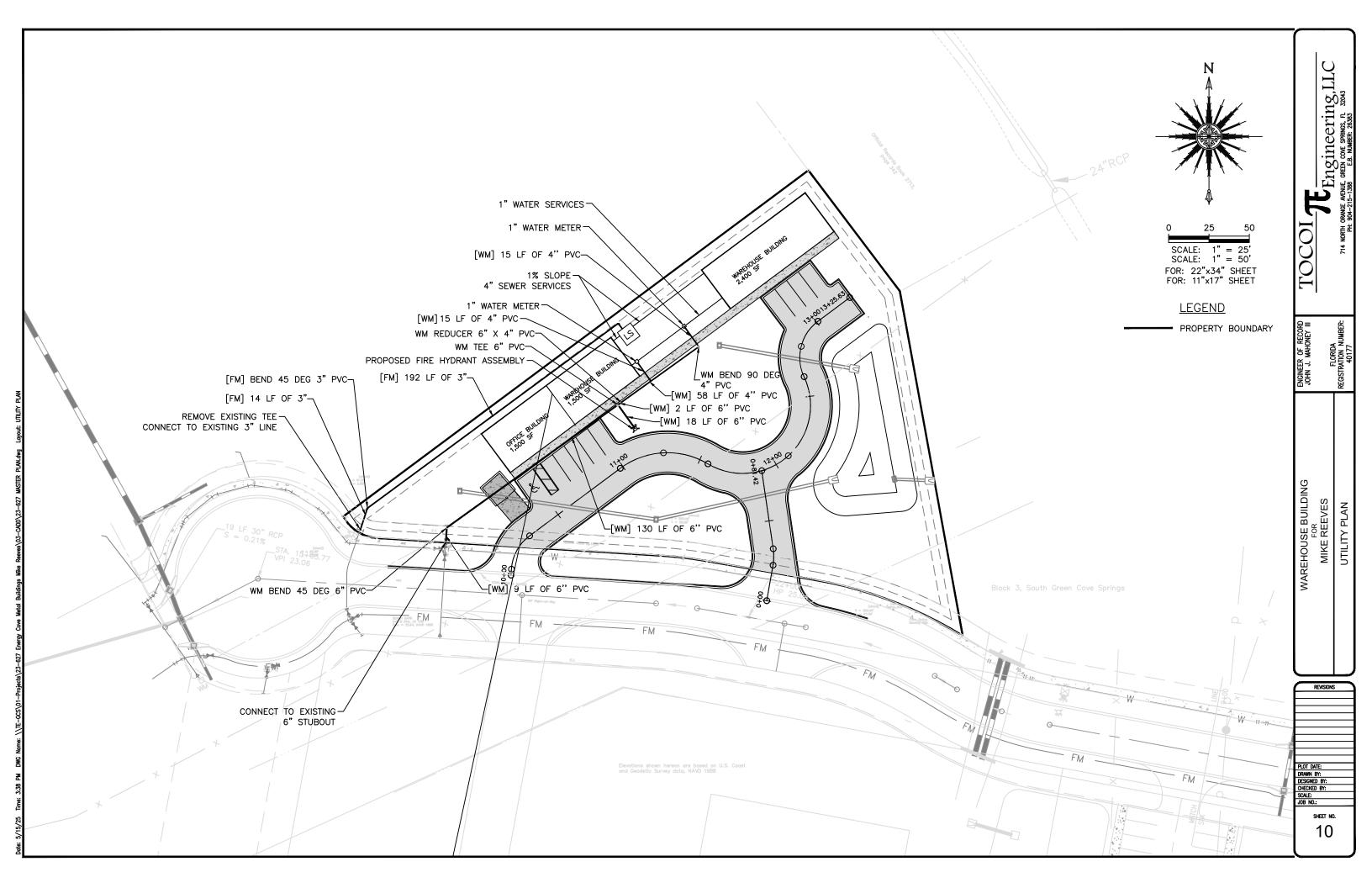
Engineering, Engine ENGINEER OF RECORD JOHN J. MAHONEY III

EROSION CONTROL DETAILS WAREHOUSE BUILDING FOR MIKE REEVES

REVISIONS

SHEET NO. 9B





Oc. GENERAL. All materials shall be of those listed in the C.G.C.S. Approved Materials Manual. The installation shall be warranted by the Contractor as to materials, workmanship and occuracy of the As-built drawings for a period of two years from the date of completion of the work or beneficial use of the facilities. Workmanship shall be of good quality; i.e., sewers shall be laid true to line and grade, fittings shall be properly inscalled and restrained, trenches shall be properly excapated shall be properly accorded on the standard, trenches shall be properly excapated shall be properly accorded on the standard, trenches shall be properly excapated shall be properly accorded on the standard, trenches shall be properly accorded shall be properly accorded to the standard of the standard

designed to withstand an HS20—44 loading defined in the AASHTO Specifications. Frames and covers shall be machined or ground at touching surfaces so as to seat firmly and prevent rocking.

05.2 FLEXIBLE MANHOLE CONNECTOR. All connections between sewer pipe and pre-cast concrete manholes shall be accomplished by a Flexible Connector, "Kor-M-Scal", as manufactured by National Pollution Control Systems, Inc. or approved equal.

5.5. FLOW CHANNELS. Flow channels in manhole base shall be formed of D.0.1. Class I, Type II cement grout with brick or rubble and trowel to a smooth surface finish. Grout surface shall be I "min. thickness over brick or rubble. While the manholes are under construction, out off pipes at inside face of the manhole and construct the invert to the shape and sizes of pipe indicated. All inverts shall provide a constant gradient from influent pipe to effuent pipe through manhole. Changes in direction of the sewer and entering branch or branches shall be fold out in smooth curves of the longest possible radius which is tangent to the center lines of adjaining pipelines.

 $05.4\,$  DROP INLETS. Where shown on the drawings, drop inlets to the manholes shall be constructed as shown on the drawings and specified herein.

06. POLYMYL CHLORIDE PIPE. Polyvinyl Chloride Sewer Pipe shall conform to the requirements of ASTM D-3034, SDR 26. The PVC compound conforming to ASTM D-1734. Pipe shall be clearly of the property of the pr

07. PIPE BETWEEN MANHOLES. All piping installed between manholes shall be the same material and class. No dissimilar pipe material will be allowed anywhere within a single run of pipe.

pipe moterial will be allowed anywhere within a single run of pipe.

8. SANTARY SERNOE LATERALS. Sanitary service lataryale shall be Polyvinyl Chloride Pipe conforming to the requirements of ASTM D-2034, SDR 26 where cover over top of pipe is 36 inches or greater. Where cover over top of pipe is less than 36 inches, specific construction conditions shall be directed by the City of Green Cove Springs. All sanitary service laterals shall be a minimum of 4-0" deep at the right-of-way line to top of pipe. Any sonitary service lateral which must be more than 5'-0" deep shall not be installed prior to obtaining permission from the C.G.C.S. field inspector or installed prior to obtaining permission from the C.G.C.S. field inspector of 0.60% (0.6 feet per hundred feet), in single family residential developments, services shall reduce to 4" in size and terminated at the property line with a cleanout constructed of a PVC we and bend with a maximum ongle of 45 degrees (see Standard Sewer System Cleanout Detail) utilizing the proper fittings for the type of pipe specified.

09. FORCE MAINS. Force mains shall be C900 DR-18 PVC and conform to the requirements of ASTM D-1784, D-2241, D-3139 and F-477. Pipe shall be color coded and marked "FORCE MAIN" on at least two sides and at every 12" along the barrel of the pipe. Ductile iron pipe for force main service shall be polylined. Ductile iron pipe is not to be used without prior approval of the Cycounty Utility Authority. Fittings shall be C110 gray iron and shall be polylined. Force mains less than 3" shall be SCH8.0 PVC. All force mains shall be installed with tracer wire per C.C.C.S. standard location wire details.

09.1 LIFT STATION VALVES. Plug valves shall be Dezurik, Clow or M&H. with full port opening. Check valves shall be M&H, Mueller or American Darling.
09.2 FORCE MAIN VALVE. Cote valve, realisient seated, some as specified in Water Distribution System Specifications Section 12 below. Except valve bodies shall be grey iron. Valve box shall have the word "SEWER" cost into the cover.

90.3 FORCE MAN JOHN RSTRAINT. All fittings shall be properly and adequately restrained against lateral movement at all force main tees, crosses, valves and beads. Restrainers shall be full-flaring Series 1300, 1350, 1390 or approved equal installed per manufacturer's recommendations and C.G.C.S. standard details and specifications.

09.4 FORCE MAIN PIPE FLUSHING. All force main piping shall be flushed clean with water utilizing full pipe diameter flushing for all piping up to and including 8" diameter.

piping up to and including 8 diameter.

10. INSTALIATION. All seeper lines, monholes, and appurtenances shall be constructed to the dimensions and elevations indicated on the drawings. Trenches shall be excavated to a width approximately twelve inches greater than the outside diameter of the pipe. Mochine excavation shall be to a depth one-fourth pipe didmeter object and shaped to give full support to the lower one-fourth of each pipe. Each section of pipe shall be inspected for defects prior to being lowered into the trench. The inside of each bell and the outside of each pipe. Each section of pipe shall be inspected for defects prior to being lowered into the trench. The inside of each bell and the outside of each pipe. The pipe shall be installed with the lapticated with the spipet ends pointing in the direction of the flow. Both the bell and the applot of each joint shall be lubfricated with the labricant recommended by the pipe manufacturer. All sewer lines shall be constructed with the spiper manufacturer. All sewer lines shall be constructed with the same on runs between manholes and / or other structures.

11. INSPECTIONS. Each section of the completed sewer system shall be inspected for proper alignment. Inspection shall consist of "lamping" from manhale. Any section of the sewer system which does not display true, concentric alignment shall be reinstalled at no additional expense to the Owner. A written log of inspection shall be kept indicating location of test, potential problems in sewer, dips and depth of water, service locations, and other irregularities in the pipe lines. A video tape in VCR format shall be made of the television inspection and submitted to the Engineer and the City of CGS. Capies of compaction density test process and the city of CGS. If requested.

reports from a licensed testing agency shall be made available to City of CCS if requested.

11.1 Television inspection will be required on all new gravity sewers constructed. This service shall be provided by the Contractor as a part of this Contract. The newly constructed sewers shall be televised in the presence of the lingsector of the City of CCS. A full report as to the condition of pipe, type, depth, location of services, length, type, joint and distance between the contract of the City of CCS. A full report as to the condition of pipe, type, depth, location of services, length, type, joint and distance between the contract of the City of the contract of the City of City of City of City of the City of the City of the City of City

11.2 TEST, INPLITATION: After completion, the sewers or sections thereof, shall be tested and gauged for infiltration. To check the animum of infiltration, the Contractor, of no added not be added to the contract of the co

of sewer per 24 hour day at any time.

11.3 TEST, EXTLIRATION: In areas where ground water is not encountered in sewer construction, or it is desired to run exfiltration tests, the Contractor shall furnish and install all necessary materials, equipments, shall supply water, etc., and shall run exfiltration tests to determine occeptance of the sewer. The moximum allowable exfiltration shall be 50 gallons per mile per inch of diameter of sewer per 24 hour day at any time based on two foot minimum internal head.

#### **GENERAL NOTES**

1. AS-BUILT DRAWINGS AND ASSOCIATED COSTS. All cost records pertaining to the cost of water, reclaim and sewer facilities donated to the utility shall be provided to the Utility by applicant. Prior to acceptance of any extension to the Utility's system that is completed by a licensed underground utility contractor, the Utility will require that the applicant's contractor provide the Utility, to retain for its permanent records, all field as-built data. During the daily progress of the work, the contractor's job superintendent shall record on his field set of drawings all work installed. All mannholes, growity sewers, force mains, laterias, volves, fittings, fire hydrants, and provided the property lines (preferably both) or existing permanent utility structures are acceptable (i.e. mannholes, catch basins; fire hydrants, head/and walls, etc.). No power/utility poles may be used for reference. Elevations of manhole inverts and center of cover shall be shown to the nearest hundredth of a foot. Size, type, class and slope of sewer main shall be shown (i.e., 8° PVC, SDR-35). The top elevation of econ manhole may be determined by measuring from a surveyed pipe invert to the final adjusted manhole top. Size, type and class of water mains, valves, fittings, fire hydrants, etc. shall be shown (i.e., 8° ID-IP, 6° gade valve), All locations where the top of the water main is less than 36° deep or more than 50° deep shall be noted on the as-builts. Water as-builts, sewer as-builts and reaction water as-builts and be on separate sheets. ASBAILTS SHALL BE IN MAD 1983 FL EAST-FOOT—STATE PLANE COOKDINATES AND REFERENCE THE BM USED FOR THE PROJECT.

cach page of the as-built drawings shall bear the name, date and original signature of the general controctor responsible for the Work and the name, other original signature and seal of the registered land surveyor or registered professional engineer who provided the horizontal and vertical dimensions and elevations on the as-built drawing. The signatures shall certify that the as-built drawings do, in fact, reflect the true as-built conditions as located under the direct supervision of the registered surveyor ana/or professional engineer. The as-builts shall be at the contractor's expense. A copy of the AutoCAD® ASBUILT DATA SHALL BE FURNISHED ON COMPACT DISK (CD) PLUS (2) SIGNED FULL SIZE PRINTED SET PLUS (1) MYLAR SET by either the design engineer or the applicant's contractor.

2. CONSTRUCTION WARRANTY AND WARRANTY SECURITY PERIOD. Developer shall warranty Utility against defects in moterial and workmankin for the portion of the onsite system to be owned by the Utility, will be and remain free from an ill defects, latent or otherwise with respect to workmankin. Functionis, clied will be and remain free from all defects, latent or otherwise with respect to workmankin, moterials, installation, and accuracy of his as-built drawings in accordance with the Utility operation of the system acceptance by the Utility and immediately assign the same and the right to enforce the same to Utility on or before the date of the Utility and complete one of the system is one of the Utility and immediately assign the same and the right to enforce the same to Utility on or before the date of the Utility's acceptance of the system for ownership and maintenance.

CLEAN-UP. All surplus materials of construction shall be removed from the site and disposed of by the Contractor as part of his contract with the owner.

4. RESTORATION. New Sanitary Sewer and Water Main Construction in earthen areas shall be seeded and mulched in accordance with Section 570 of Standard Specifications of the Florido Dept, of Transportation (latest addition). In locations where existing grassed (sadded) areas are disturbed, sad shall be replaced to preconstruction condition and to limits of construction or where directed by the engineer.

PERMITS. The Contractor shall be responsible for obtaining all permits required for performing work under this contract, except that the F.D.E.P. permits, and wetland permits, if required, will be secured by the owner or developer.

6. PIPE BEDDING. In the event unsultable or unstable bedding material is encountered at or below the limits of the excovation required for installation, such material shall be removed and replaced with suitable compacted backfill material specified by the design engineer and approved by the C.G.C.S so as to provide a stable trench bedding surface suitable for proper pipe installation.

6 as yourned a success of earlier occurring surrouse surrouse for proper pipe inscribitions.
6—A. Pipe Bedding (Rock Bedding Moterial) Rock material used for pipe bedding shall be #57 stone or crushed concrete (crush-crete) in a #57 size. Rock bedding material shall be completely engaged in a leavy filter flowler material, overlapped an infiltrium of one foot, rock bedding shall be wrapped in a leavy filter flowler material.
by expectation of the proper shall be proposed by C.G.C.S. inspector, the contractor shall be required to have submitted approved by design engineer and C.G.C.S. prior to use of such rock bedding materials.

notaterial.

7. DEWATERING. The contractor shall at all time during construction provide ample means and equipment with which to promptly remove and dispose of all water entering the trench and structure excovations and shall keep soid excovations acceptably dry until the piping and / or structures to be built therein are completed. All water pumped or drained from the work area shall be disposed of in amonner as to not damage sever, water, electrical or any other piping, structures or properly. No pipe shall be laid in water and no water shall be allowed to rise above the bottom of any pipe while it is being jointed, except as may be approved in writing by the C.G.C.S.

Being jointed, except as may be approved in writing by the U.G.C.S.

8. HYDROSTAIC TESTING. After all pressure pipes (water mains, services, and force mains) are laid, the joints completed, and the trench bockfilled, the newly laid pipe and appurtenances shall be subjected to a hydrostatic test of 150 P-SS. for a period of at least two hours. The engineer and the C.G.C.S. Public Works must be notified 48 hours before a test is to be performed. Test shall be as set forth in AWMA standard CBO. Any lacks detected shall be corrected and the section of pipeline reteated. The two hour test period shall begin when all joints have been determined to be water tight. Lackage shall be limited to that allowerse set forth in Section 4 or AWMA Standard 6800-87. Hydrostatic and leskage test and biom—from (zaroing or gag) must be cour before sampling for bacteriological test. The maximum alloweble pressure loss is \$1.5.1. regardless of the length of pipe.

REPORTS. Reports of hydrostatic and leakage tests and sterilization of the newly completed systems shall be submitted to the C.G.C.S. prior to requesting acceptance of the system.

11. CONCRETE. All Portland Cement concrete shall be of Type II Portland Cement, 2,500 P.S.I. minimum, ready mixed, All concrete shall be placed before the initial set has taken place. Stale or retempered concrete shall not be used.

12. GATE VALVES AND BOXES. Gote volves shall have a 2" operating nut and open left. Gate valves shall have joints suitable for the type main on which installed. Valves 2" and 3" shall be fron body, bronze fitted, Valves 4" and larger shall be fron body, bronze fitted with resilient sect. The word "MATER" on water boxes and "SEMER" on force main boxes shall be cost in the covers.

resilient sect. The word "WATER AND SEWER MAINS. Horizontal and vertical separation toots in the covers.

13. SEPARATION OF WATER AND SEWER MAINS. Horizontal and vertical separation between potable water system mains and or apputreenness and solitary or storm sewers, wastewater or storm water force mains, and reclaimed water mains shall be in accordance with Rule 62-565.314 FAC.

(a) New or relocated, underground water mains shall be laid to provide a horizontal distance of at least three feet between the outside of the water main and the outside of regulated under Port III of Chapter 82-610, FAC, or proposed vocum—type sonitary sewer.

(b) New or relocated, underground water mains shall be laid to provide a horizontal distance of at least six feet, and preferably ten feet, between the outside of the water main and the outside of the water main and the outside of the water main and the custaled of any existing or proposed growty—or pressure-type sanitary sewer, wastewater force main, or pheline conveyling reclaimed water not regulated under Port III of and gravity—type sanitary sewers shall be reduced to three feet where the bottom of the water main is laid at least six inches above the top of the sewer.

(c) New or relocated, underground water mains crossing any existing or proposed grovity—or vacuum—type sanitary sewer or storm sever shall be laid so the outside of the above the outside of the other pipeline. However, it is preferable to lay the water main above the other pipeline.

(d) New or relocated, underground water mains crossing any existing or proposed pressure—type sanitary sewer, wastewater or storm water force main, or pipeline conveying crossing several pressure—type sanitary sewer, wastewater or storm water force main, or pipeline conveying the outside of the other pipeline. However, it is preferable to lay the water main above the other pipeline.

(a) New or relocated, underground water mains crossing any existing or proposed or below the outside of the other pipeline. However, it is preferable

14. NEW CONNECTION TO EXISTING MAIN. New connection to existing main in service shall be accomplished by the "wet tap" method utilizing full circle stainless steel topping sleeve and mechanical joint tapping valve. Tapping sleeve shall be roted to 200 P.S.I., non-shock working pressure conforming to AWWA Standard C110, lotest revision. Stainless steel topping sleeves shall be from those listed in C.G.C.S. approved material manual. Tapping valve shall be mechanical joint one and and standard flanged joint on other end. Valve shall conform to Section 12, of these specifications.

JOBSITE SAFETY. While on the job site, the contractor shall at all times observe all Federal, e and local safety rules, regulations and laws. This includes, but not limited to, confined spaces excavation protection systems as per O.S.H.A. standards.

## **GENERAL NOTES**

- 16. CLOSE OUT / COMPLETION. Minimum items required for Close Out / Completion for submitted to the City of Green Cove Springs will include:
  (a) Construction Warranty from Developer in the form of a Bond, Letter of Credit or Cashier's Check for a two-year period.
  (b) Warranty Certificate for a two-year warranty from the contractor to the Developer and assignment of same to the City of Green Cove Springs (C.G.C.S.).
  (c) Developer's Affidiot certifying there is no outstanding debt agoinst utility assets to be deeded to C.G.C.S.
- be deeded to C.G.C.S.

  (d) Value of Acceptance Report showing value of assets to be deeded to the C.G.C.S.

  (e) Bill of Sale to C.G.C.S.

  (f) Bacteriological Test(s)

  (g.) Pressure Test(s)

  (h) Television Reports and Tapes

  (i,) Density Reports

  (j.) PROPER Find As—Built Drawings and disks

17. C.G.C.S. Shop Drawing and Submittal Process. A signed acknowledgment by the Contractor and the Material Supplier, on the "Shop Drawings and C.G.C.S.'s Approved Materials List Form", that all materials will be in accordance with C.G.S.S.'s Specifications, C.G.C.S.'s betain and C.G.C.S.'s Approved following exception: any oldernate materials requested by the Engineer; any materials not listed in the C.G.C.S. Materials Manual; and materials requested by the Engineer; any materials not listed in the C.G.C.S. Materials Manual; and materials associated with pumping stations and plant installations. Those exceptions shall have an individual shop drawing submitted for C.G.C.S.'s review and approval prior to any installation of said materials.

This is C.G.C.S.'s procedure and it does not preclude the design engineer from requiring additional submittals and shop drawings as he deems necessary for the project.

18. PUMP STATIONS (TEMPORARY OR PERMANENT). All pump stations shall be constructed in occordance with C.G.C.S. standards, rules and regulations and be approved by C.G.C.S. All work and materials shall meet the requirements of C.G.C.S. Standard Pump Station betails and Specifications or the plans, details and specifications for that specific pump station. A driveway shall be provided from the street (roadway) to within 2 feet of the pump station watevel, minimum 10 feet wide x 5 inches thick 3,000 P.S.I. concrete. Submersible pump stations shall be fenced completely about the perimeter of the pump station at 8 (location of the pump station site (accident of the pump station site (accident of the pump station site (accident of the pump station site for the pump station at the pump station. The entire pump station site for make a completely checed installation. The entire pump station site within the fenced area shall be covered with \$57 stone, 6 inch thick minimum, placed over 8 mil visqueen.

19. Information shown on the Drawings as to the location of existing utilities has been prepared from the most reliable data available to the Engineer. The Contractor shall be responsible for requesting underground utility locates and shall assist the utility companies, by every means possible to determine sold locations and the locations of recent additions to the systems not shown. Extreme coulon shall be exercised to eliminate any possibility of any damage to utilities resulting from Contractor's activities. The locations of all overhead utilities shall also be verified by the Contractor. The Engineer shall be notified of any conflict that may occur. The Contractor shall be responsible for determining which poles will need shoring during excrevation and shall provide such shoring and support as required.

20. C.G.C.S. details and specifications (latest available copy) shall be included in all plans submitted for work within the C.G.C.S. utility system. No person shall modify, change, amit, replace ony portion of those details and specifications without the express written consent of C.G.C.S. in any instance where the design engineer has included his written specifications or details in the plans then the more stringent of the two shall govern.

21. All materials to be used for any project within C.G.C.S.'s utility system shall conform to those materials listed in the C.G.C.S. approved material manual in effect at the time final plans for that project are approved by C.G.C.S.

22. Under no circumstance shall any trees be planted within a C.G.C.S. utility easement without; a.) C.G.C.S. paproving landscape and irrigation plans. b.) C.G.C.S. being notified prior to the planting of trees and giving approval. c.) C.G.C.S. inspecting the installation of root barrier material (required at all trees which are closer than 10° to any C.G.C.S. utility line) as shown in C.G.C.S. approved material manual and C.G.C.S. roadway cross section details, whether or not shown on the plans.

23. At all Jack & Bore locations a C.G.C.S. inspector shall inspect the cosing spacers to verify they are the correct size and have been installed correctly on the pipe prior to the pipe the installed into the pipe cosing. The pipe cosing shall be clean and free of all dirt, and shall be cleaned with a Vac-Con if necessary. A C.G.C.S. inspector shall be present at all time during this work.

## FINAL INSPECTION PROCEDURES

PRIOR TO FINAL INSPECTION, THE CONTRACTOR shall PROVIDE THE FOLLOWING:

1. The sewer line T.V. report and tape
2. The pressure test and bacteriological clearance analysis report.

3. The singliner of record certification to D.E.F. This can be done with completed as—builts.

3. In several contraction of the provided s

PRIOR TO FINAL ACCEPTANCE FOR OWNERSHIP, THE FOLLOWING MUST BE COMPLETED:

1. All manhole rings and covers have to be adjusted to finish grade.

2. Water services must be lowered and meter baxes installed, valve boxes must be set on all gote valves.

3. As-built drawings shall have been updated to accommodate the C.G.C.S. comments and the final elevation of the manhole tops must be included.

4. All valves, locate wire boxes, sewer, water and reclaimed services shall be scribed in curb and political the correct coop.

5. As-builts, must be accepted and approved by the City of Green Cove Springs Public Works.

PRIOR TO FINAL ACCEPTANCE FOR OWNERSHIP. THE FOLLOWING MUST BE COMPLETED: 1. A preliminary inspection must be confinited by the underground utility controctor and held a minimum of fifteen (15) working days prior to the final inspection/start—up. The preliminary inspection will compare the approved design drawings to the actual site installation, noting any deficiencies.

stallation, noting any deficiencies.

The following must be represented at the preliminary and final inspection:

a) The C.G.C.S.'s inspection and distribution and collection departments

b) The project's developer and/or general contractor

c) The underground utility contractor

d) All subcontractors associated with the lift station (electrical, pump manufacturer, control panel manufacturer, etc.)

CITY OF

N COVE SPRINGS
21 WALNUT STREET
7E SPRINGS, FLORIDA 32043 GREEN 321 3REEN COVE REEN

ACAD FILE NAME SPECIF\_D.DW SHEET NO.

1 of 1

DRAWN BY: DESIGNED BY: CHECKED BY:

SHEET NO. 11A

REVISIONS

Engineering, u. GREIN COKE SPRINGS, R. 32043

#

RECORD HONEY III

₽₹

ENGINEER JOHN J. 1

BUILDING

WAREHOUSE BUILDII FOR MIKE REEVES

FLORIDA RATION NI 40177

UTILITY

SPRINGS

GREEN

SS

DESG DRWN CHKD APRV DATE

AND SEWER SYSTEM SPECIFICATIONS

STANDARD WATER YECHNICAL S

'Q2.1 CONTRACTOR LICENSE AND APPROVAL. Utility reserves the right to approve or deny approval of contractor prior to construction of oright to approve or deny approval of contractors from Contraction of Of Florida Under Ground Utility contractors license, that named contracting company being the one doing the work on project, and demonstrate acceptable experience in the field of utility construction.

necessary for the layout and construction of the work or insignificant controct.

International control of the property of the control of the

testing opency shall be made evaluable to C.S.C.S. If requested.

O.S. MANHOLES. Manhole bases, sections and cones shall conform to the requirements of ASTM C478, Specifications for Preaast Reinforced Concrete Manhole Sections. Cernent shall meet the requirements of ASTM C150, Specifications for Sections. Cernent shall meet the requirements of ASTM C150, Specifications for Sections. Cernent shall meet the requirements of ASTM C150, Specifications for Sections. Cernent shall meet the requirements of ASTM C150, Specifications for Sections. Cernent shall meet the requirements of ASTM C150, Specifications for Sections. As a section of the section

05.1 CAST IRON MANHOLE FRAMES AND COVERS. Cost iron manhole frames and covers shall be as debiled on drawings. Castings shall costings, closes to the cost of the

01. INTENTION. It is the declared and acknowledged intention to secure a new water distribution system, complete, in accordance with the plans and specifications, and controct documents. All new work shall be in accordance with C.C.C.S. Specifications and Details and Approved Materials Manual and C.G.C.S. Public Works Department Details and Specifications and group of the Covernment Regulatory Agency. All work shall conform the above whether or not specifically called out or noted on the plans.

02.1 CONTRACTOR LICENSE AND APPROVAL. Utility reserves the right to approve or derry approval of contractor prior to construction of any on-site or of fe-sits utility facilities. Contractor must hold of Satte Of Florida Under Ground Utility contractors license, that named contracting company being the one doing the work on project, and demonstrate acceptable experience in the field of utility construction.

Q2. GENERAL. All materials shall be of those listed in the C.G.C.S. Approved Materials Manual. Materials shall be warranted by the Contractor as to materials, workmanship and accuracy of As-built drawings for a period of two years from the date of completion of the work or beneficial use of the Tochilles. Workmanship shall be of good quality; i.e., mains shall be laid in a uniform elignment, fittings shall be properly restroined, trends to the property of the property of the Contract of

03. SURVEYS. The Utility Contractor shall provide all surveys necessary for the layout and construction of the work of his contract.

04. EARTHWORK. Gorthwork shall include all excavation, fill and backfill (hand/machine), compaction and rough grading of materials encountered. No unsuitable materials clay, muck, or peat removed from pipe trenhes are to be used for backfill. All fill or backfill shall be lether sand or sandy clay, free of roots, trash or other debris. All backfill islangise of and to a height twenty-four inches above all pipe shall be free of clay or organic material, compacted by either hand or machine operation carefully operation carefully to 95% (outside of pointing), 98% (under poving) of its optimum maisture content as determined by ASTM D698, latest. Copies of compaction density test reports from a licensed testing agency shall be made available to C.C.C.S. if requested.

05. JOINT RESTRAINT. All fittings shall be properly and adequately restrained against lateral movement at all water main tees, crosses, valves bends and fire hydrants. Restrainers shall be Uni-Flange Series 1300, 1350, 1390 or approved equal installed per monufacturer's recommendations and C.C.S. Details and Specifications.

C.C.C.S. betails and Specifications.

8. BUCTLE IRON PIPE. Ducible iron pipe shall conform to ANSI Specification A21.50 (AWWA C150) latest, "Thickness Design of Ductile iron Pipe", Table 50.5, laying condition Type 2, Internal operating pressure of 250 p.s.i. for an 8-foot depth of cover, Class 51 minimum and shall be ANSI A21.51 (AWWA C151), latest centrifugally cost pipe. Laying lengths shall each length clearly marked with pressure rating, thickness be 20 feet or less, class, height of pipe without lising, length, and manufacturer. Ducible iron class, height of pipe without lising, length, and manufacturer. Ducible iron class, height of pipe without lising, length and manufacturer. Ducible iron lens, the class of the control of pipe without lising, length and manufacturer. Ducible iron lens, the class of the control of pipe without lising, length with pipe shall have design values of 60,000 P.S.I. minimum yield strength, buctile iron pipe for water or service lines shall be used in any assement, right-of-way, between lots, and any instance where a building foundation or other papers and a purchasing the pipe shall have been also provided the control of the water main or a service line larger than 3.

OB. POLYVINYL CHLORIDE PIPE. Polyvinyl chloride pipe for water mains 4 inch in diameter and larger, shall be P.V.C. CSOO, DR-18, conforming to ASTM D-1784, D-2241, D-3139 and F-477, latest, and shall bear the seal of the National Sanitation Foundation. Pipe shall be color coded and marked on at least 2 sides with the word "WAIER" and at every 12" olong the barrel of the pipe. Couplings shall be rubber gasketed, push—on type conforming to ASTM D-2122. DR-18 shall be used for fire mains.

EARTHWORK. Earthwork shall include all excavation, fill and backfill

OUTLINE SPECIFICATIONS FOR CONSTRUCTION OF WATER DISTRIBUTION SYSTEM STEEL CASING PIPE. Steel casing pipe shall be of size cated on the Drawings and shall conform to ASTM A139, with minimum yield strength of 35,000 p.s.i.

10. POLYETHYLENE PIPE shall be SDR 9, AWWA C901, ASTM D2737, PE 3408, colored blue, NSF Seal, with Type 316 stainless steel inserts. Fittings shall be suitable for type of installation required. All piping smaller than 4" shall be Polyethylene.

In GATE VALVES AND BOXES. Sets eviews shall be non-rising stem type and shall be suitable for a 200 p.s.i. non-shock working pressure Gate volves shall be methonical joint, flanged or screwed. Gate volves shall be repeated by the property of the property

12. WATER METER BOXES. Meter boxes for flushing hydronts and 3/4" meters shall be DFW Plastics, Inc., model DFW35C-12-3T. Weter boxes for 1" meters shall be DFW Plastics, Inc., model DFW37C-12-3T. Weter boxes for 1-1/2" and 2" meters shall be DFW Plastics, Inc., model DFW173C-12-3T. Developer shall be responsible for installation of meter boxes on all water services as part of the water main installation. All curb stops shall be adjusted to the proper elevation and shall be accessible for the installation of the water meter. The contractors had be reached to the proper devotion and the state of the proper elevation of the state of the proper elevation and the properties of the properties o

13. CURB STOPS. Curb stops shall be cast bronze, inverted key stop, roundway, with check, lock wing type, for locking in the closed position. Curb stops shall be Ford Ball Valve or Mueller.

14. CORP STOPS. Corp stops shall be cast bronze, inverted key stop, roundway, with check, lock wing type, for locking in the closed position. Corp stops shall be Ford Ball Valve or Mueller.

15. FIRE HYDRANTS. Fire hydrants shall be traffic type, 150 pound working pressure, AWMA Standard CS02, latest revisions, with two 2 1/2\* nozzles, one 4 1/2\* nozzle and 5 1/4\* main valve. Fire hydrant shall be be compression type with breakble coupling and bals. Pipe connection shall be mechanical joint. American Flow Control, ArC B=84–8, pointed red w/white bonnets and with 1 1/2\* pentia nuks, opening left.

16. INSTALLATION. The minimum cover over top of potable water main shall be 36° minimum. All water lines and appurtenances shall be thoroughly classed of all foreign matter before being lowered into the thoroughly classed of all foreign matter before being lowered into the proposed of the control of the c

period of at least two hours. During this period, all joints shall be inspected to determine water tightness of the system. Any leaks detected shall be corrected. Tests shall be in accordance with the C.G.C.S. is requirements and specifications. Any of the control of the cont

and retest the water main.

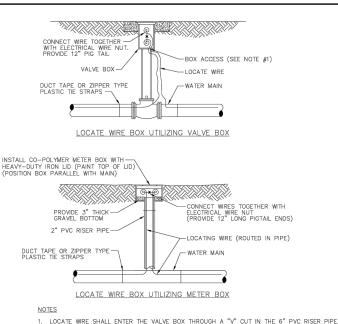
18. STERILZATION. After completion of construction and testing, the water system shall be sterilized with chlorine in accordance with AWMA Standard C651 latest, and State of Florida Department of Environmental Protection requirements before acceptance for domestic operation. The amount of chlorine opplied shall be provided to the state of the control of the solution shall remain in the system for a period of at least 8 hours, during which time every volve in the system for a period of at least 8 hours, during which time every volve in the system shall be flushed using chlorinated water from a domestic water source having a chlorine residual of at least 1 part per the system shall be flushed using chlorinated water from a domestic water source having a chlorine residual of at least 1 part per the Florida Department of Environmental Protection. After bacteriological clearances, the pressure in the main shall not drop below 20 P.S.I. Clearance report to be submitted to the Engineer. The contractor should be aware that there is a timing maximum related to bacteriological clearance of as-built drawings and Engineer / C.G.C.S. completion of Certificate of Completion. In any project where the bacteriological clearances are completed to the contractor of a submitted to the project where the bacteriological clearances are of the contractor of the main, completion of se-built drawings and Engineer / C.G.C.S. completion of the submitted to the contractor of the main, completion for surface waters and the property of the pro

BACTERIOLOGICAL SAMPLING. Contractor shall assure the project construction is completely finished prior to any bacteriological sampling and testing.

# WATER SERVICE INSTALLATIONS 2" AND SMALLER METER

5. GANG WATER SERVICES: FOR 3 OR 4 SERVICES IN ONE AREA, A DUCTICLE IRON PIPE (D.I.P.) WATER MAIN EXTENSION W/LOCATE WIRE MAY BE UTILIZED ON EITHER SHORT—SIDE OR LONG—SIDE SERVICES WHERE SHOWN ON THE DRAWINGS, LOCATE WIRE SHALL EXTEND FROM ONE METER BOX TO CURB STOP AT WATER MAIN, FOR 5 OR MORE SERVICES IN ONE AREA, A WATER MAIN EXTENSION W/LOCATE WIRE MAY BE UTILIZED ON EITHER SHORT—SIDE OR LONG—SIDE SERVICES WHERE SHOWN ON THE DRAWINGS (TAPS STAGGERED AND AT 2 FEET ON CENTER (MIN), FOR WATER SUPPLY HEADERS WHERE 5 OR MORE TAPS ARE CONSTRUCTED, THE HEADER PIPE SHALL BE 4" AT A MINIMUM, EXAMPLE: CONSTRUCT A 4" MAIN JU. CROSSING THE STREET FOR SESIDENTIAL CUSTOMERS, UTILIZING 4" G.V., 4" PIPE, 4"X1" SADDLES AND 1" CURB STOPS (NO GLUED TEE FITTINGS). THE 4" OR LARGER D.I.P. WATER MAIN MUST BE SIZED AND DESIGNED BY THE ENGINEER.

6. ALL COMMERCIAL WATER SERVICES SHALL BE 2" POLYETHYLENE PIPING CONNECTED TO 2" CURB STOP IN METER BOX, UNLESS OTHERWISE APPROVED BY THE CITY



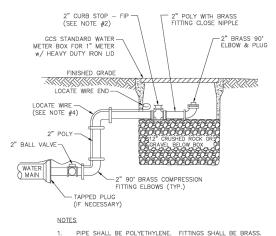
LOCATE WIRE BOX

WATER SERVICE MARKE REQUIRED FOR NEW DEVELOPMENT AREAS METER BOX & COVER--SET AT FINAL GRADE (NOTE #1) (NOTE #6) LOCATE WIRE END-TGCS METER CORPORATION STOP -- METER COUPLINGS SET METER ON UNDISTURBED OR COMPACTED SOIL POLYETHYLENE WATER SET CURB STOP AS CLOSE TO (100LF MAX., NOTE #3) WALL AS POSSIBLE (2" MAX) ACCEPTABLE RANGE FOR TAPS IS 0'-45'

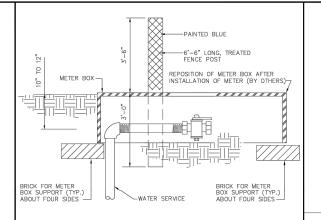
#### NOTES

- SEE CITY OF GREEN COVE SPRINGS APPROVED MATERIALS MANUAL AND SYSTEM DETAILS FOR
- SINGLE BAND SADDLES MAYBE UTILIZED ON NEW 1" WATER SERVICES WHICH ARE INSTALLED ON A DRY 10" SIZE OR SMALLER WATER MAIN (NEW WATER MAIN CONSTRI 12" SIZE AND LARGER, A DOUBLE BAND SADDLE IS REQUIRED.
- 3. NO OPEN CUT LINDER ROADWAY PAVING ALLOWED LINLESS THE ROADWAY IS BEING RECONSTRUCTED OR 9. WO OPEN COLUMER WOUND A PAVING ALLOWED UNLESS HIR KNOWN TO BEING RECONSTRUCTED FOR THE PINCETED OTHERWISE BY CITY OF GREEN COVE SPRINGS. CONSTRUCT POLY LINE WITH 36" (MIN.) COVER UNDER ROADWAYS. THE POLY WATER SERVICE LINE SHALL BE SAME SIZE AS THE METER (3/4" MINIMUM) AND BE INSTALLED PERPENDICULAR TO THE MAIN AND NOT EXCEED 100LF UNLESS OTHERWISE APPROVED BY CITY OF GREEN COVE SPRINGS.
- 4. INSTALL PVC PLUG IN ALL CURB STOPS IF WATER SERVICE IS "NOT IN USE" (I.E.: IF NO METER IS INSTALLED). IN ADDITION, INSTALL A 6', 6" P.T. FENCE POST (TOP PAINTED BLUE) 12" OFF SIDE OF METER BOX. THE REMOVAL OR TRANSFER OF A WATER SERVICE SHALL INCLUDE BRASS METER COUPLINGS (HEX ON
- 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OR REPLACEMENT OF THE BOXES, METERS OR ELECTRONIC DEVICES IF DAMAGED BY THE CONTRACTOR DURING THE CONSTRUCTION PERIOD.
- 6. METER BOX AND TOP SHALL BE CLEAR OF ALL DEBRIS TO ALLOW FULL ACCESS TO BOX (i.e., NO DIRT, TRASH OR OTHER DEBRIS PLACED ON TOP OF BOX).
- 7. LOCATE WIRING REQUIRED ON ALL LONG AND SHORT SERVICES.

## WATER SERVICE DETAIL- 2" AND SMALLER METER



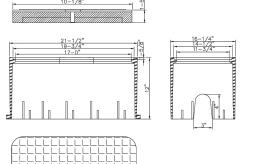
- PIPE SHALL BE POLYETHYLENE. FITTINGS SHALL BE BRASS.
  THE 2" CURB STOP SHALL BE ALL BRONZE. FITTINGS SHALL BE BRASS.
  CANNOT BE PLACED UNDER CONCRETE OR PAVEMENT.
  PLACE 2 FEET PAST LAST WATER MAIN SERVICE CONNECTION.
- FLUSHING VALVE BELOW GRADE



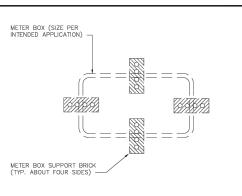
## WATER SERVICE MARKER POST

NOTE:
ALL SERVICES ARE TO BE CLEARLY MARKED BY A TREATED 6'-6' LONG MARKER POST PAINTED BLUE. ALL SERVICES ARE TO BE EXTENDED ABOVE GRADUAL LISTRICES ARE TO BE EXTENDED ABOVE GRADUAL ROAD GRADUAL COMPLETE, LOWER SERVICES BY CUTTING OFF RISER TO' TO 12' BELOW FINAL GRADE AND INSTALL 90' BEND, NIPPLE AND LW BALL VALVE AT THAT ELEVATION. SET METER BOX OVER ENTIRE HORIZONTAL SECTION OF SERVICE LINE FROM LAST 90' BEND TO THE END OF THE CURB STOP. BOX TO BE REPOSITIONED WHEN THE METER IS INSTALLED. MARKER POST TO BE INSTALLED ADJACENT TO AND LOCATED AT THE MID SECTION OF THE METER BOX.

NOTE:
MIN. WALL THIKNESS: .25"
DOUBLE WALL BODY W/STRUCTURAL SUPPORT RIBS
W/MIN. THINCKNESS: "No"
1" BOTTOM FLANGE
BOX IS INJECTED MOLDED STRUCTURAL FOAM RECYCLED
POLYPROPYLEM MATERIAL.



## METER BOX & SOLID BLUE LID



METER BOX SUPPORT DETAIL

STANDARD )F SPRINGS

DESG DRWN CHKD APRV DATE

**DETAIL**\$

CE

SERVI

WATER

COVE WALNUT ST EN 321 cove GRE GREEN



ACAD FILE NAME SERVICES.DWG SHEET NO.

1 OF 1

Engineering creen cove springs, FL 32043

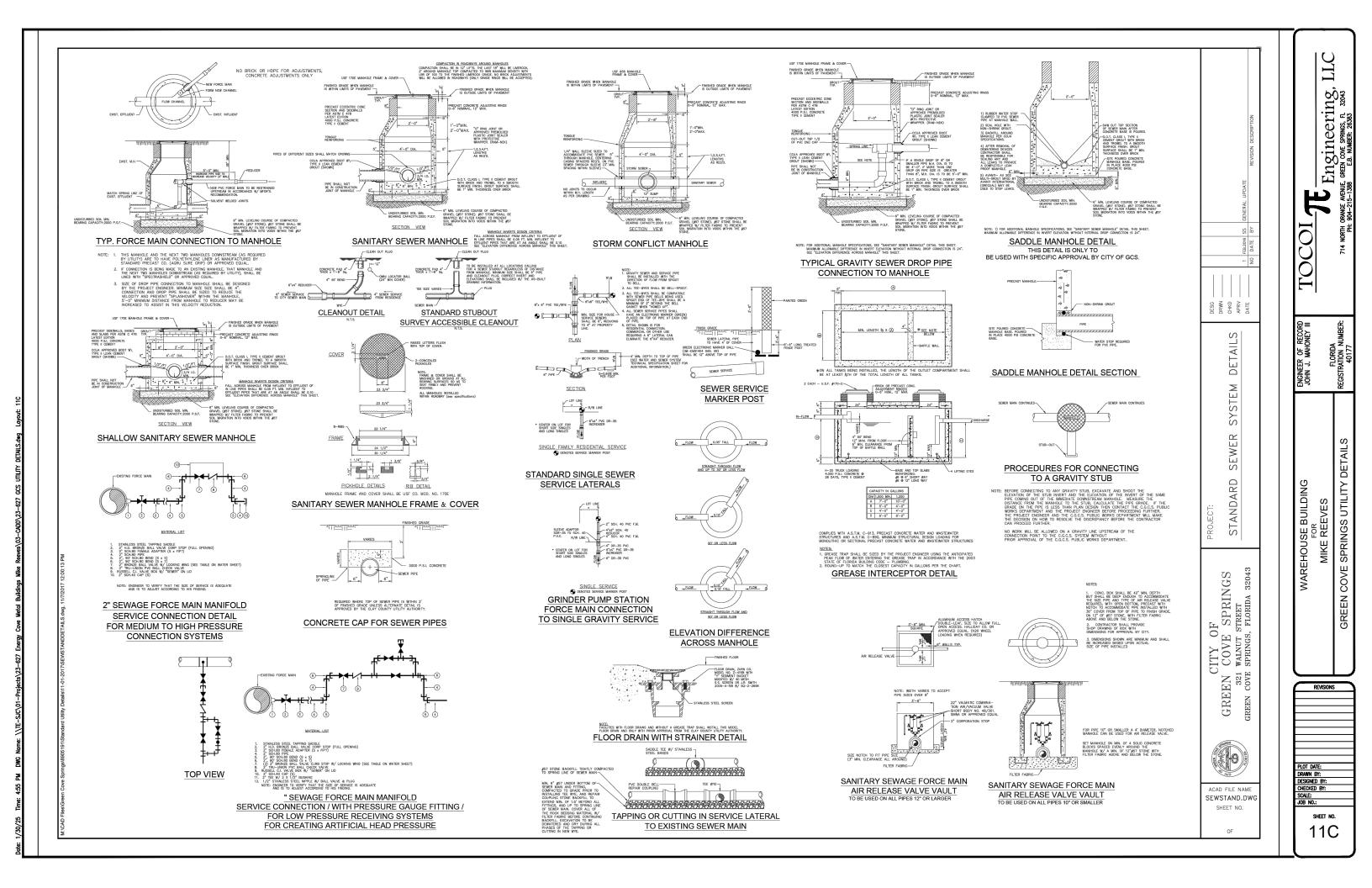
₽₹

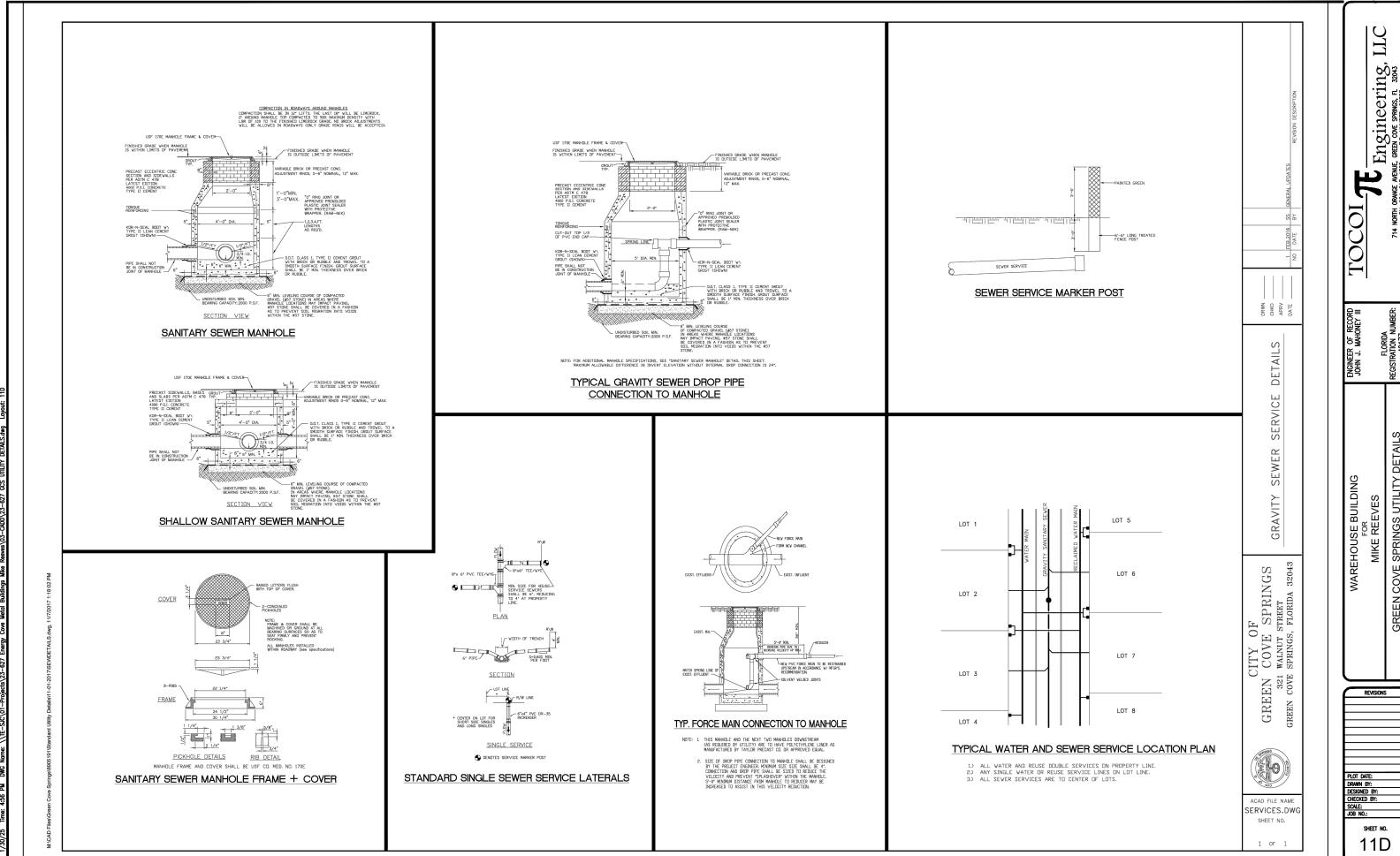
WAREHOUSE BUILDING FOR MIKE REEVES SPRINGS (

REVISIONS

RAWN BY: ESIGNED BY: HECKED BY: SHEET NO.

11B





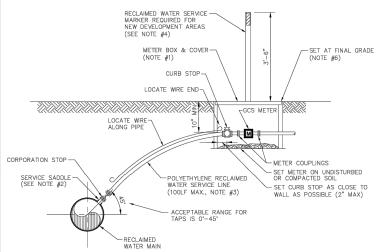
1. THE SKETCHES ABOVE INDICATE TYPICAL RECLAIMED WATER SERVICE AND METER BOX LOCATIONS. ACTUAL LOCATIONS OF BOXES MAY VARY SLIGHTLY ACCORDING TO FIELD CONDITIONS ENCOUNTERED. TYPICALLY, THE METER BOX SHALL BE LOCATED 1.0' OFF OF THE R/W LINE.

2. UNLESS SPECIFIED OTHERWISE BY THE CITY OF GREEN COVE SPRINGS, THE METER BOX SHALL BE LOCATED 1.0' OFF OF THE R/W LINE, AND 1.0' FOOT INSIDE OF THE PROLONGATION OF ONE OF THE SIDE PROPERTY LINES. IF A CONFLICT EXISTS WITH OTHER UTILITIES, THE METER BOX MAY BE ADJUSTED TO FOUR FEET (MAX.) INSIDE PROPERTY LINES (IN LIEU OF 1.0' FEET), LINLESS APPROVED OTHERWISE BY THE CITY, THE RECLAIMED WATER METER BOX SHALL BE LOCATED IN NON-TRAFFIC AREAS (NOT IN SIDEWALKS OR DRIVEWAYS). IF AN UNAPPROVED METER BOX IS IDENTIFIED BY THE CITY, THEN THE CONTRACTOR OR CUSTOMER SHALL BE REPONSIBLE FOR THE COST OF RELOCATING ANY METER BOX WHICH IS LOCATED IN THE SIDEWALK OR DRIVEWAY OR THE COST TO PROVIDE THE CORRECT METER BOX. THE CITY SHALL APPROVE ALL DEVATIONS TO THE ABOVE PRIOR TO CONSTRUCTION.

- 3. IF DRAINAGE OR OTHER EASEMENT IS LOCATED BETWEEN LOTS, METER BOXES SHALL BE LOCATED AT THE EASEMENT LINE BUT OUTSIDE THE EASEMENT AREA.
- 4. FOR SINGLE SERVICES, THE HORIZONTAL DISTANCE (PERPENDICULAR TO THE MAIN) BETWEEN THE SERVICE'S SADDLE AND THE METER BOX SHALL BE 2 FEET MAXIMUM. FOR DOUBLE 3/4"SERVICES, THE 2"POLY MAIN SHALL BE LOCATED CENTERED BETWEEN THE TWO METER BOXES. LOCATE WIRE IS REQUIRED ON ALL SERVICES. THE WIRE SHALL RUN FROM THE METER BOX TO THE MAIN (WITH NO CONNECTION TO MAIN WIRE WITH THE LAST 24 INCHES STRIPPED OF INSULATION/BARE WIRE AS GROUND), ALL EXCEPTIONS TO THIS REQUIREMENT MUST BE APPROVED BY THE CITY OF GREEN COVE SPRINGS. THIS WILL ASSIST IN LOCATING EXISTING
- 5. GANG RECLAIMED WATER SERVICES: FOR 3 OR 4 SERVICES IN ONE AREA, A DUCTILE IRON PIPE (D.I.P.) RECLAIMED WATER MAIN EXTENSION W/LOCATE WIRE MAY BE UTILIZED ON EITHER SHORT—SIDE OR LONG—SIDE SERVICES WHERE SHOWN ON THE DRAWNOS, LOCATE WIRE SHALL EXTEND FROM ONE METER BOX TO CURB STOP AT RECLAIMED WATER MAIN, FOR 5 OR MORE SERVICES IN ONE AREA, A RECLAIMED WATER MAIN EXTENSION W/LOCATE WIRE MAY BE UTILIZED ON EITHER SHORT—SIDE OR LONG—SIDE SERVICES WHERE SHOWN ON THE DRAWNOS (TAPS STAGGERED AND AT 2 FEET ON CENTER (MIN). FOR WATER SUPPLY HEADERS WHERE 5 OR MORE TAPS ARE CONSTRUCTED, THE HEADER PIPE SHALL BE 4" AT A MINIMUM. EXAMPLE: CONSTRUCT A 4" MAIN D.I. CROSSING THE STREET FOR 5 RESIDENTIAL CUSTOMERS, UTILIZING 4" (C.Y., 4" PIPE ("X-Y")" SADDLES AND 1" CURB STOPS (NO GLUED TEE FITTINGS). THE 4" OR LARGER D.I.P. RECLAIMED WATER MAIN MUST BE SIZED AND DESIGNED BY THE ENGINEER.
- 6. ALL COMMERCIAL WATER SERVICES SHALL BE 2" POLYETHYLENE PIPING CONNECTED TO 2" CURB STOP IN METER BOX, UNLESS OTHERWISE APPROVED BY THE CITY.

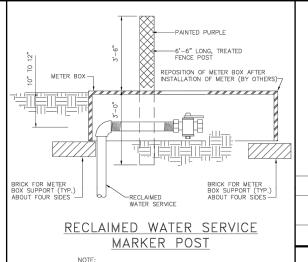
RECLAIMED WATER SERVICE INSTALLATIONS 2" AND SMALLER METER

# 2" AND SMALLER METER



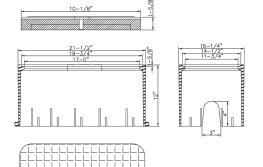
- SEE CITY OF GREEN COVE SPRINGS APPROVED MATERIALS MANUAL AND SYSTEM DETAILS FOR
- ON A DRY 10" SIZE OR SMALLER RECLAIMED WATER MAIN (NEW RECLAIMED WATER MAIN CONSTRUCTION). FOR WET TAPS OR RECLAIMED WATER MAINS 12" SIZE AND LARGER, A DOUBLE BAND SADDLE IS REQUIRED.
- 3. NO OPEN CUT UNDER ROADWAY PAVING ALLOWED UNLESS THE ROADWAY IS BEING RECONSTRUCTED OR IF DIRECTED OTHERWISE BY CITY OF GREEN COVE SPRINGS. CONSTRUCT POLY LINE WITH 36" (MIN.) COVER UNDER ROADWAYS. THE POLY RECLAIMED WATER SERVICE LINE SHALL BE SAME SIZE AS THE METER (3/4" MINIMUM) AND BE INSTALLED PERPENDICULAR TO THE MAIN AND NOT EXCEED 100LF UNLESS OTHERWISE APPROVED BY CITY OF GREEN COVE SPRINGS.
- 4. INSTALL PVC PLUG IN ALL CURB STOPS IF RECLAIMED WATER SERVICE IS "NOT IN USE" (I.E.: IF NO METER IS INSTALLED). IN ADDITION, INSTALL A 6", 6" P.T. FENCE POST (TOP PAINTED PURPLE) 12" OFF SIDE OF METER BOX. THE REMOVAL OR TRANSFER OF A RECLAIMED WATER SERVICE SHALL INCLUDE BRASS METER COUPLINGS (HEX ON BARREL TYPE).
- 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OR REPLACEMENT OF THE BOXES, METERS OR ELECTRONIC DEVICES IF DAMAGED BY THE CONTRACTOR DURING THE CONSTRUCTION PERIOD.
- 6. METER BOX AND TOP SHALL BE CLEAR OF ALL DEBRIS TO ALLOW FULL ACCESS TO BOX (I.E., NO DIRT, TRASH OR OTHER DEBRIS PLACED ON TOP OF BOX).
- 7. LOCATE WIRING REQUIRED ON ALL LONG AND SHORT SERVICES.

# RECLAIMED WATER SERVICE DETAIL

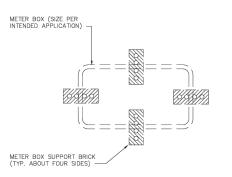


NOTE:
ALL SERVICES ARE TO BE CLEARLY MARKED BY A
TREATED 6'-6" LONG MARKER POST PAINTED PURPLE.
ALL SERVICES ARE TO BE EXTENDED ABOVE GRADE
UNTIL COMPLETION OF ALL GRADING ACTIVITIES.
ONCE FINAL ROAD GRADING IS COMPLETE, LOWER
SERVICES BY CUITING OFF RISER 10" TO 12" BELOW
FINAL GRADE AND INSTALL 90" BEND, NIPPLE
AND LIW BALL VALVE AT THAT ELEVATION. SET
METER BOX OVER ENTIRE HORIZONTAL SECTION OF
SERVICE JUNE FROM LAST 90" BEND TO THE END
OF THE CURB STOP. BOX TO BE REPOSITIONED
WHEN THE METER IS INSTALLED. MARKER POST
TO BE INSTALLED ADJACENT TO AND LOCATED
AT THE MID SECTION OF THE METER BOX. AT THE MID SECTION OF THE METER BOX

NOTE:
MIN. WALL THIKNESS: .25"
DOUBLE WALL BODY w/STRUCTURAL SUPPORT RIBS
w/MIN. THINCKNESS: .4"
1" BOTTOM FLANCE
BOX IS INJECTED MOLDED STRUCTURAL FOAM RECYCLED
POLYPROPYLENE MATERIAL



PURPLE METER BOX & SOLID PURPLE LID



CITY OF

V COVE SPRINGS
21 WALNUT STREET
VE SPRINGS, FLORIDA 32043 GREEN

DESG DRWN CHKD APRV DATE

RECLAIMED

STANDARD

TEM

SYST

ACAD FILE NAM REUSE.DWG SHEET NO.

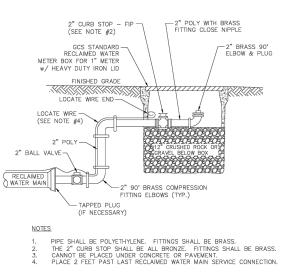
1 of 2

3'-6" MIN. SQUARE H20 WHEEL LOADING WHEN METER FLANGE -MECH. JT. GATE VALVE UNI-FLANGE ADAPTO MECH. JT. √ MECH, JT, TEE -MECH-MECH, JT. 90° BEND 1 ALL PIPE TO BE D.I ALL VALVES & FITTINGS TO BE DUCTILE IRON.
MIMINUM LENGTH OF 8 DIAMETERS OF STRAIGHT PIPE TO BE NSTALLED ON INLET SIDE OF METER. ALL PIPE AND FITTINGS TO BE SAME SIZE AS METER. 4. ALL PIPE. AND FITIINGS TO BE SAME SIZE AS METER.
5. CONC. BOX SHALL BE 42° DEEP WITH OPEN BOTTOM,
PRECAST WITH NOTCH TO ACCOMODATE PIPE INSTALLED
36° DEEP, INSTALLED ON 12° OF #57 STONE
6. CONTRACTOR SHALL PROVIDE SHOP DRAWING OF
BOX WITH DIMENSIONS FOR APPROVAL BY C.C.U.A.
7. DIMENSIONS SHOWN ARE MINIMUM AND SHALL BE INCREA
BASED UPON ACTUAL SIZE OF METER PROVIDED.

METER VAULT 3" AND LARGER METERS

INCREASED

CONNECT WIRE TOGETHER — WITH ELECTRICAL WIRE NUT. PROVIDE 12" PIG TAIL -BOX ACCESS (SEE NOTE #1) VALVE BOX-DUCT TAPE OR ZIPPER TYPE -RECLAIMED WATER MAIN LOCATE WIRE BOX UTILIZING VALVE BOX INSTALL CO-POLYMER METER BOX WITH HEAVY-DUTY IRON LID (PAINT TOP OF L (POSITION BOX PARALLEL WITH MAIN) -CONNECT WIRES TOGETHER WITH ELECTRICAL WIRE NUT (PROVIDE 12" LONG PIGTAIL ENDS) LOCATING WIRE (ROUTED IN PIPE) DUCT TAPE OR ZIPPER TYPE PLASTIC TIE STRAPS RECLAIMED WATER MAIN LOCATE WIRE BOX UTILIZING METER BOX LOCATE WIRE BOX



FLUSHING VALVE BELOW GRADE

METER BOX SUPPORT DETAIL

WAREHOUSE BUILDING FOR MIKE REEVES SPRINGS

₽₹

Engineering,

REVISIONS RAWN BY: ESIGNED BY: HECKED BY: SHEET NO.

11E

- O1. INTENTION. It is the declared and acknowledged intention to secure a new reclaimed water distribution system, complete, in accorda with the plans and specifications, and contract documents. All new work shall be in accordance with Green Cove Springs Details and Specifications and Approved Materials Manual.
- GENERAL All materials shall be new and unused 02. GENERAL All materials shall be new and unused. Materials shall be warranted by the Contractor as to materials, workmanship and accuracy of As-Built drawings for a period of two years from the date of completion of the work or beneficial use of the facilities. Workmanship shall be of good quality; i.e., mains shall be laid in a uniform alignment, fittings shall be properly restrained, trenches shall be properly excavated and backfilled, valve boxes shall be adjusted to finished grade
- 03. SURVEYS. The Utility Contractor shall provide all surveys necessary for the layout and construction of the work of his contract.
- EARTHWORK. Earthwork shall include all excavation, fill 04. EARTHWORK. Earthwork shall include all excavation, fill and backfill (hand/machine), compaction and rough grading of materials encountered. No unsuitable materials clay, muck, or peat removed from pipe trenches are to be used for backfill. All fill or backfill shall be either sand or sandy clay, free of roots, trash or other debris. All backfill alloangside of and to a height twenty—four inches above all pipe shall be free of clay or organic material, compacted by either hand or machine operation carefully to 98%. All other backfill shall be compacted by either hand or machine operation carefully to 95% (outside of powing), 98% (under poving) of its optimum moisture content as determined by ASTM D698, latest.
- O5. JOINT RESTRAINT. All fittings shall be properly and adequately restrained against lateral movement at all reclaimed water main tees, crosses valves, bends and fire hydrants, Restrainers shall be Uni-Flange Series 1300, 1350, 1390 or approved equal installed per manufacturer's recommendations and GCS Details and Specifications.
- and GCS Details and Specifications.

  06. DUCTILE IRON PIPE. Ductile iron pipe shall conform to ANSI Specification A21.50 (AWWA C150) latest, "Thickness Design of Ductile iron Pipe", Table 50.5, laying condition Type 2, internal operating pressure 250 p.s.l. for an 8-foot depth of cover, Class 51 minimum and shall be ANSI A21.51 (AWWA C151), latest centrifugally cast pipe. Laying lengths shall be 20 feet or less, each length clearly marked with pressure rating, thickness class, height of pipe without lining, length, and manufacturer. Ductile iron pipe for reclaimed water service shall be furnished with cement lining per AWWA C110, C115 and C151. The pipe shall have design values of 50,000 PSI minimum tensile strength, and 42,000 P.S.I. minimum yield strength. Ductile iron pipe for reclaimed water service shall be used only with prior approval of the city of GCS. All ductile iron piping shall be wrapped with purple tape and stamped "Reclaimed Water" on at least two sides @ 12" o.c. along pipe barrel.
- 07. DUCTILE IRON FITTINGS shall be C153 cement lined and suitable for the type and class of pipe to which connected. Gaskets shall be water service. Minimum working pressure shall be 150 P.S.I.
- 08. POLYNIMI CHLORIDE PIPE. Polyvinyl chloride pipe for reclaimed water mains 4 inch in diameter and larger, shall be P.V.C. C-900, DR-18, conforming to ASTM D-1784, D-2241, D-3139 and F-477, latest, and shall bear the seal of the National Sonitation Foundation. Pipe shall be purple color and marked on at least 2 sides with the word "RECLAIMED WATER" and at every 12" along the barrel of the pipe. Couplings shall be rubber gasketed, push-on type conforming to ASTM D-2122.
- 09. STEEL CASING PIPE. Steel casing pipe shall be of size indicated on the Drawings and shall conform to ASTM A139, with a minimum yield strength of 35,000 p.s.i.
- 10. POLYVINYL CHLORIDE (PVC 1120, SCHEDULE 40) PIPE shall conform to the requirements of ASTM D 1785. Fittings and threaded nipples shall be Sch. 80 PVC. All piping smaller than 4" shall be Sch. 80 PVC, shall be purple in color and stamped "Reclaimed Water

- 11. GATE VALVES AND BOXES. Gate valves shall be non-rising sterm type and shall be suitable for a 200 p.s.i. non-shock working pressure Gate valves shall be mechanical joint, flanged or screwed. Gate valves shall have a 2" operating nut and open left. Gate valves shall have joints suitable for the type of main on which installed. Valves 2" & 3" shall be bronze (distribution mains only). Gate valves 4" and larger shall be iron body, bronze fitted with resilient seat. Valves shall be of domestic (American) manufacture and shall be A.F.C., M&th, Mueller or approved equal. Valves 16" and larger shall be AWWA C-509, M&th Valve Co. Valve boxes with screw extensions shall be provided for all gate valves. Boxes shall be of cast iron construction, 7'\(\text{S2}\) "minimum wall thickness and shall be nontacky tar enamel coated. The word "RECLAIMED WATER" shall be cost in the cover. Other gate valves 2" and smaller shall be heavy-duty bronze, wheel operated gate valves. Box covers to be primed and painted purple.
- 12. RECLAIMED WATER METER BOXES. Reclaimed water meter boxes for 5/8"x3/4", 3/4" and 1" meters shall be DFW D1200 w/ purple lids. Meter boxes for flushing hydronts and 1" meters shall be Russell D-112, 1 1/2" and 2" meter boxes shall be DFW D1500. Developer shall be responsible for installation of meter boxes on all reclaimed water services as part of the reclaimed water main installation. All curb stops shall be adjusted to the proper elevation and shall be accessible for the installation of the reclaimed water meter. The contractor shall be required to open all boxes for the City's inspector at the final inspection. A treated 6" 6" long treated fence post marker shall be installed at the side of and centered on the meter box and painted purple for identification. The box lid shall be painted number. lid shall be painted purple.
- 13. CURB STOPS. Curb stops shall be cast bronze, no lead, inverted key stop roundway, with check, lock wing type, for locking in the closed position. Curb stops shall be Ford Ball Valve or Mueller, with F.I.P.T.
- 14. CORP STOPS. Corp stops shall be cast bronze, no lead, inverted key stop roundway, with check. Corp stops shall be Ford Ball Valve or Mueller with F.I.P.T.
- 15. PRESSURE REDUCING VALVES (when and where required) The pressure reducing valve shall maintain a constant delivery pressure as part of the service to each residential irrigation system. Pressure reducing valves shall conform with the standard requirements of the ASSE (Std. 1003) and WPOA Uniform Plumbing Code. Approved model: Watts Series USB or equal.
- 16. INSTALLATION. The minimum cover over top of reclaimed water main shall be 36" minimum. All lines and appurtenances shall be thoroughly cleaned of all foreign matter before being lowered into the trench and shall be kept clean during laying operations by means of plugs or other approved methods. All pipe shall be checked for defects before being lowered into the trench. Defective pipe shall not be used. Pipe found to be defective, after installation, shall be removed and replaced with sound pipe at no additional expense to the Owner. The full length of each section of pipe shall rest solidly upon the pipe bed, with recesses excavated to accommodate the bells and joints. All pipe that has the grade or joint disturbed after laying shall be taken up and reinstalled. The pipe shall not be laid in water, or, when trench or weather conditions are unsuitable for the work. All joints shall be cleaned of all foreign matter before making the joint. Fittings at bends in the pipe shall be properly restrained with joint restrainers adequately sized to prevent movement and dislocating or blowing off when the line is under pressure. Service laterals shall terminate at the point noted in the details.
- SEPARATION OF RECLAIMED WATER MAINS. Maximum separation of 17. SEPARATION OF RECLAIMED WATER MAINS. Maximum separation of reclaimed water lines and potable water lines shall be practiced. A minimum horizontal separation of six feet, center-to-center, or five feet, austide-to-outside, shall be maintained between reclaimed water mains and either potable water mains shall be laid to provide a minimum vertical separation of 18 inches between the invert of the upper pipe and the crown of the lower pipe. Where the minimum separation cannot be maintained, the crossing shall be arranged such that the reclaimed water main pipe joints and water main joints are equidistant from the point of crossing with no less than ten feet between joints. Alternatively, the reclaimed water main shall be placed in a sleeve to obtain the equivalent of the required ten feet separation. Where there is no alternative to reclaimed water pipes crossing over a water main, the criteria for minimum separation between lines and joints shall be required.

- 19. TESTS. After the pipe is loid, the joints completed, and the trench backfilled, the newly loid pipe and appurtenances shall be subjected to a hydrostatic and Leokage test of 150 pounds per square inch for a period of at least two hours. During this period, all joints shall be inspected to determine water tightness of the system. Any leoks detected shall be corrected. Tests shall be in accordance with the City of Green Cove Springs requirements and specifications. Curb and limerock may be installed after construction of the reclaimed water mains, however, limerock priming cannot proceed until such time as the C.C.U.A. inspector approves the reclaimed water distribution system pressure test. This will be strictly enforced. If the reclaimed water system is damaged during any of the operations prior to paving, a follow up test may be required by the City of Green Cove Springs.
- 20. CURB MARKING. After Installation, reclaimed water main valves and service lateral locations shall be scribed in the face of the concrete curb with the appropriate marking (RW-reclaimed service, RV-reclaimed main valve, etc.). Markings shall be a minimum of 3" high.

#### FINAL INSPECTION PROCEDURES

PRIOR TO FINAL INSPECTION, THE FOLLOWING MUST BE COMPLETED:

- Pressure test and flushing report.

  The Engineer of Record Certification to FDEP. This can be done w/ preliminary as-builts.

  Water services must be lowered and meter boxes installed, valve boxes must be
- Water services must be lowered and meets because the set on all gate valves.

  As-built drawings shall have been updated to accommodate the C.G.C.S. comments and the find elevation of the manhole tops must be included.

  All valves, locate wire boxes, sewer, water and reclaimed services shall be scribed in curb and pointed the correct color.

  As-builts, must be accepted and approved by the City of Green Cove Springs Public Works.

2" BRONZE LOCKING WING CURB STOP OR EQUAL AIR RELEASE VALVE WITH 3/16" ORIFICE, 150 PSI FINISHED GRADE -1" MIN 2" SCH 80 7 P.V.C. PIPE 7 2" SCH 80 FEMALE ADAPTER (SXFIPT) 2"X4" SS NIPPLE-REUSE MAIN -

AIR RELEASE VALVE DETAIL

DESG DRWN CHKD APRV DATE DETAIL ∞ CLAIMED ICATIONS 딩 SPE( ST ST S

SS

WAREHOUSE BUILDING FOR MIKE REEVES

OF RECORD MAHONEY III

Engineering, u.e. GREN COVE SPRINGS, FL 32043

SPRINGS (

REVISIONS

ACAD FILE NAME REUSE.DWG SHEET NO.

CITY OF

V COVE SPRINGS
21 WALNUT STREET
VE SPRINGS, FLORIDA 32043

REEN 321

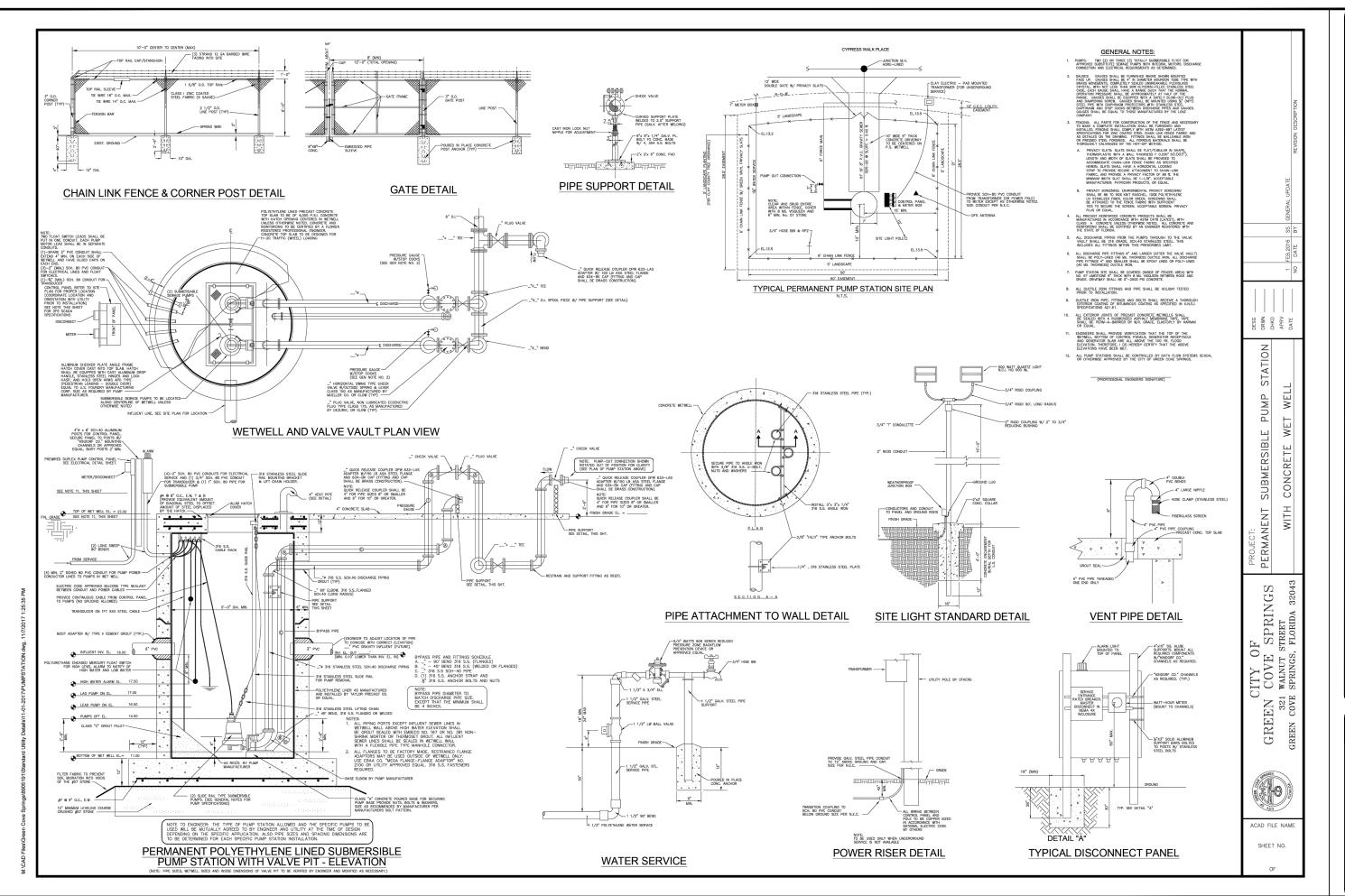
5

STREET, FLORIDA

2 of 2

DRAWN BY: DESIGNED BY: CHECKED BY:

SHEET NO. 11F



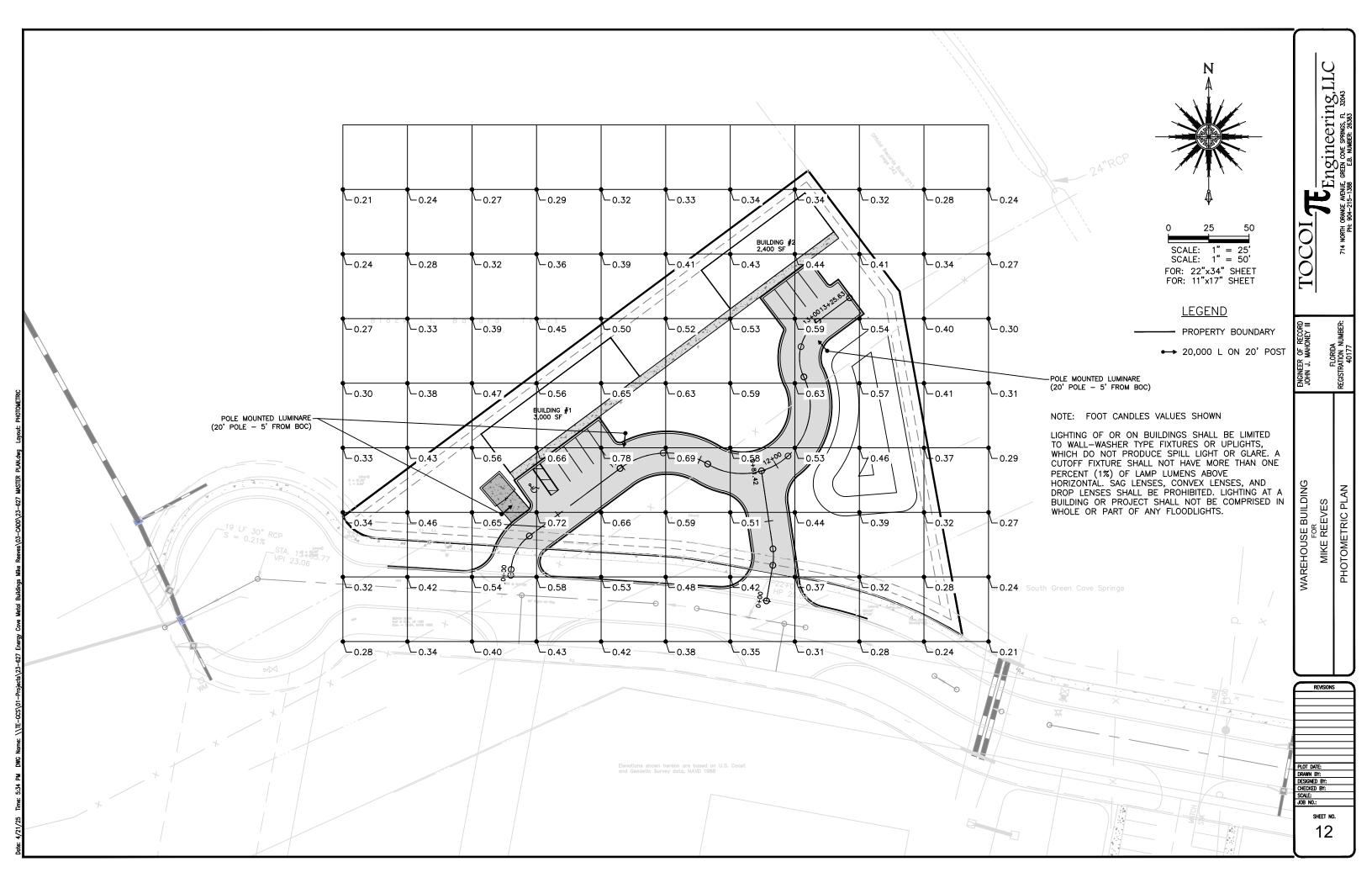
Engineering,

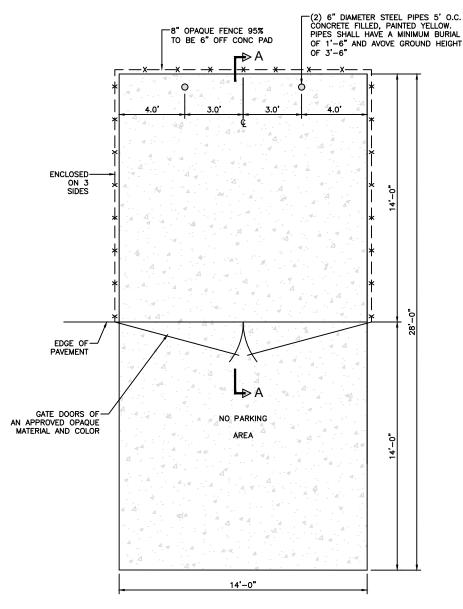
WAREHOUSE BUILDING FOR MIKE REEVES

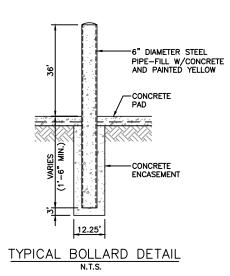
REVISIONS

DRAWN BY: DESIGNED BY: CHECKED BY:

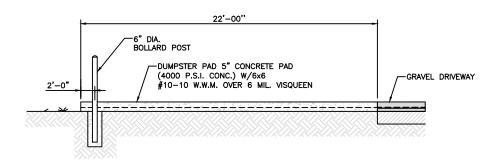
SHEET NO. 11G







# DUMPSTER PAD DETAIL - PLAN



- NOTES:

  1. MAXIMUM ANGLE OF CONTAINER PAD TO DIRECTION OF AISLE TO BE 30°.

  2. AREA TO BE FREE OF OVERHEAD LINES AND WIRES.

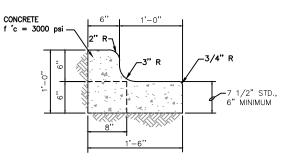
  3. DUMPSTER PAD TO BE A MINIMUM OF 12' WIDE FOR DUMPSTER RECYCLING.

  4. APPLICANT TO PROVIDE A SIDE ELEVATION TO DEMONSTRATE COLOR, MATERIAL AND DESIGN CONSISTANCY WITH THE PRINCIPAL BUILDING.

  5. DRAINAGE PATTERNS AROUND PADS SHALL BE SUBJECT TO CITY REVIEW AND APPROVAL.

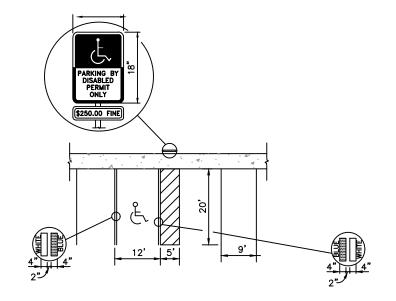
  6. INGRESS AND EGRESS ROUTES TO/FROM DUMPSTER PADS SHALL BE IN ACCORDANCE WITH WASTE HANDLING CONTRACTORS REQUIREMENTS.

DUMPSTER PAD DETAIL - SECTION



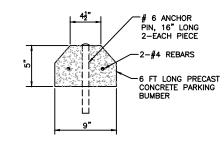
NOTE: WHEN USED ON HIGH SIDE OF ROADWAYS, THE CROSS SLOPE OF THE GUTTER SHALL MATCH THE CROSS SLOPE OF THE ADJACENT PAVEMENT AND THE THICKNESS OF THE LIP SHALL BE 6", UNLESS OTHERWISE SHOWN ON PLANS.

STANDARD TYPE CURB & GUTTER N.T.S.

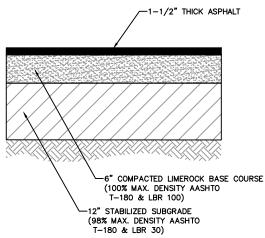


EACH SUCH PARKING SPACE SHALL BE CONSPICUOUSLY OUTLINED IN BLUE PAINT, AND SHALL BE POSTED AND MAINTAINED WITH A PERMANENT, ABOVE—GRADE SIGN BEARING THE INTERNATIONAL SYMBOL OF ACCESSIBILITY OR THE CAPTION "PARKING BY DISABLED PERMIT ONLY", OR BEARING BOTH SUCH SYMBOLS AND CAPTION. SUCH SIGNS SHALL NOT BE OBSCURED BY A VEHICLE PARKED IN THE SPACE. ALL HANDICAPPED PARKING SPACES MUST BE DESIGNED AND MARKED IN ACCORDANCE WITH THE STANDARDS ADOPTED BY THE DEPARTMENT OF TRANSPORTATION.

## HANDICAPPED SPACE DETAIL



CONCRETE PARKING BLOCK



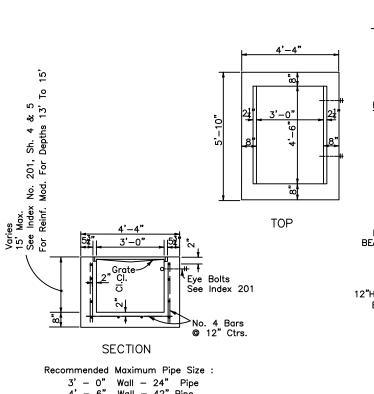
NOTE:
UNDERCUT ALL UNSUITABLE MATERIAL
AND BACKFILL WITH CLEAN FREE-DRAINING
SAND (BOTTOM OF CUT SHALL BE 24" MIN.
BELOW FINISH GRADE)

**NEW ASPHALT PAVEMENT SECTION** 

erin s.r. 32043 ngine( ENGINEER OF RECOR MISCELLANEOUS DETAILS WAREHOUSE BUILDING FOR MIKE REEVES DRAWN BY:
DESIGNED BY:
CHECKED BY:
SCALE:
JOB NO.:

 $\bigcirc$ 

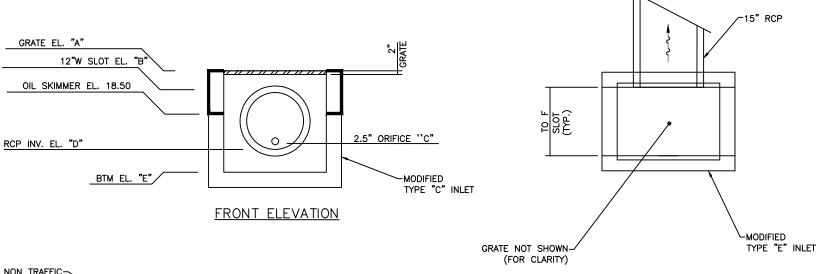
13A

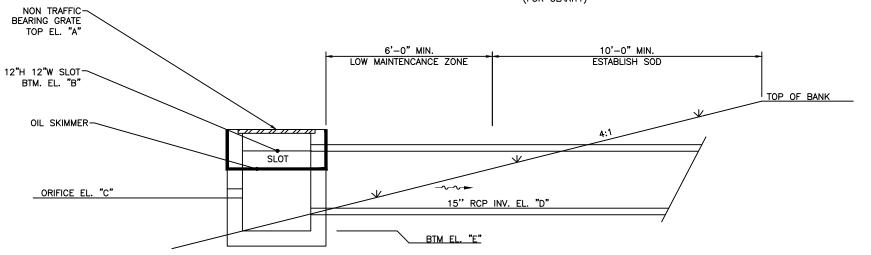


3' - 0" Wall - 24" Pipe 4' - 6" Wall - 42" Pipe

NOTE
INLETS WITH SLOTS GREATER THAN 6" SHALL BE CONSTRUCTED
WITH HORIZONTAL BARS AT THE MAXIMUM VERTICAL SPACING OF
6-INCHES. 1" DIA. GALVANIZED PIPE IMBEDDED 2" IN PRECAST
STRUCTURE OR OTHER APPROVED METHOD.

STORM SEWER TYPE "E" INLET N.T.S.





MODIFIED STORM SEWER TYPE "C" INLET POND OUTFALL-CONTROL STRUCTURE INLETS WITH SLOTS GREATER THAN 6" SHALL BE CONSTRUCTED WITH HORIZONTAL BARS AT THE MAXIMUM VERTICAL SPACING OF 6-INCHES. 1" DIA. GALVANIZED PIPE IMBEDDED 2" IN PRECAST STRUCTURE OR OTHER APPROVED METHOD.

E N G IN E E L'IN C

 $\mathcal{O}$ 

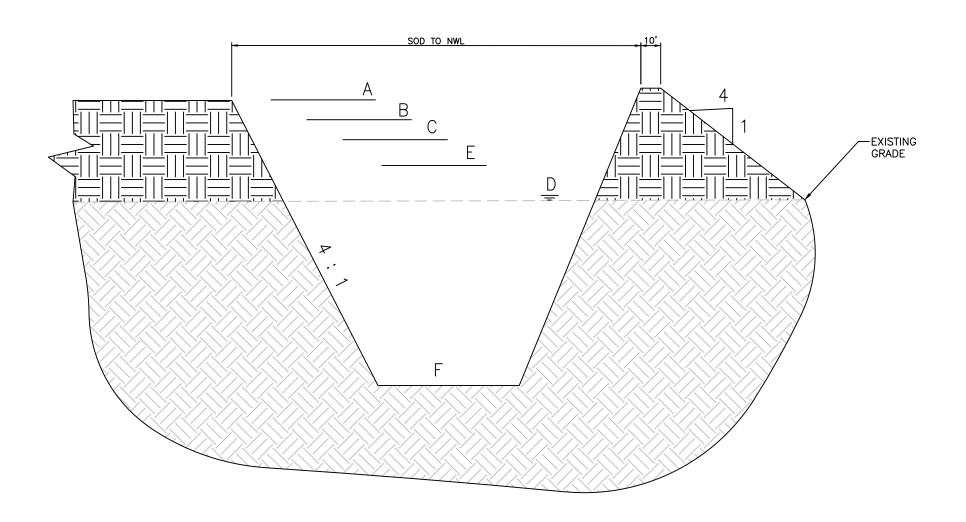
ENGINEER OF RECORD JOHN J. MAHONEY III

WAREHOUSE BUILDING FOR MIKE REEVES

REVISIONS

SHEET NO. 13B

No.	DESCRIPTION	POND-1
А	тов	21.00
В	DESIGN WATER (DHW) 100-YR	19.87
С	DHW 25-YR	19.52
D	NORMAL WATER LEVEL (NWL)	18.00
E	MEAN ANNUAL WATER LEVEL (MAWL)	18.97
F	POND BOTTOM	15.00



POND CROSS SECTION
N.T.S

TOCOITE DE LA MORTH ORANGE ANENUE, GREEN GONE SPRINGS, FL. 32043
714 NORTH ORANGE ANENUE, GREEN CONE SPRINGS, FL. 32043
PH. 904-215-1388
E.B. NUMBER, 26383

FLORIDA REGISTRATION NUMBER: 40177

ENGINEER OF RECORD JOHN J. MAHONEY III

WAREHOUSE BUILDING
FOR
MIKE REEVES
MISCELLANEOUS DETAILS

REVISIONS

PLOT DATE: DRAWN BY: DESIGNED BY: CHECKED BY: SCALE:

> SHEET NO. 13C

AT ONE TIME, THE PROPOSED STORM WATER PONDS (OR TEMPORARY PONDS) WILL BE CONSTRUCTED FOR USE AS SEDIMENT BASINS. THESE

SEDIMENT BASINS MUST PROVIDE A MINIMUM OF 3,600 CURIC FEET OF

LEVEL SPREADER: A LEVEL SPREADER MAY BE LISED WHERE SEDIMENT-

FREE STORM RUNOFF IS INTERCEPTED AND DIVERTED AWAY FROM THE GRADED AREAS ONTO UNDISTURBED STABILIZED AREAS. THIS PRACTICE

APPLIES ONLY IN THOSE SITUATIONS WHERE THE SPREADER CAN BE

WILL BE FOLLOWED.

THE SITE SUPERINTENDENT WILL INSPECT DAILY TO ENSURE MATERIALS

ONSITE RECEIVE PROPER USE AND DISPOSAL.

CITY ENGINEER

 SILT FENCE WILL BE INSPECTED FOR DEPTH OF SEDIMENT, TEARS, TO SEE IF THE FABRIC IS SECURELY ATTACHED TO THE FENCE POSTS, AND TO SEE THAT THE FENCE POSTS ARE FIRMLY IN THE GROUND. \* THE SEDIMENT BASINS WILL BE INSPECTED FOR THE DEPTH OF SEDIMENT, AND BUILT UP SEDIMENT WILL BE REMOVED WHEN IT REACHES 10
PERCENT OF THE DESIGN CAPACITY OR AT THE END OF THE JOB,
WHICHEVER COMES FIRST.

 $\bigcirc$ 

. ≩ ⊇.

U ...

GREEN COVE SPRINGS, E.B. NUMBER: 263

\* TEMPORARY AND PERMANENT SEEDING AND PLANTING WILL BE INSPECTED FOR BARE SPOTS, WASHOUTS, AND HEALTHY GROWTH.

\* A MAINTENANCE INSPECTION REPORT WILL BE MADE AFTER EACH INSPECTION. A COPY OF THE REPORT FORM TO BE COMPLETED BY THE INSPECTION. A CUPY OF THE REPORT FORM TO BE COMPLETED BY THE INSPECTION IS ATTACHED. THE REPORTS WILL BE KEPT ON SITE DURING CONSTRUCTION AND AVAILABLE UPON REQUEST TO THE OWNER, ENGINEER OR ANY FEDERAL, STATE OR LOCAL AGENCY APPROVING SEDIMENT AND AND ERGSION PLANS, OR STORM WATER MANAGEMENT FLANS.

THE REPORTS SHALL BE MADE AND RETAINED AS PART OF THE STORM WATER POLLUTION PREVENTION PLAN FOR AT LEAST THREE YEARS FROM THE DATE THAT THE SITE IS FINALLY STABILIZED AND THE NOTICE OF ERMINATION IS SUBMITTED THE REPORTS SHALL IDENTIFY ANY INCIDENTS OF NON-COMPLIANCE.

\* THE SITE SUPERINTENDENT WILL SELECT UP TO THREE INDIVIDUALS WHO WILL BE RESPONSIBLE FOR INSPECTIONS, MAINTENANCE AND REPAIR ACTIVITIES, AND FILLING OUT THE INSPECTION AND MAINTENANCE REPORT.

PERSONNEL SELECTED FOR INSPECTION AND MAINTENANCE RESPONSIBILITIES WILL RECEIVE TRAINING FROM THE SITE. SUPERINITEDIONT. THEY WILL BE TRAINED IN ALL THE INSPECTION AND MAINTENANCE PRACTICES NECESSARY FOR KEEPING THE EROSION AND SEDIMENT CONTROLS USED ONSTE IN GOOD WORKING ROPER.

\* WATER FROM WATER LINE FLUSHING

\* PAVEMENT WASH WATERS (WHERE NO SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE OCCURRED).

\* UNCONTAMINATED GROUNDWATER (FROM DEWATERING EXCAVATION).

ALL NON-STORM WATER DISCHARGES WILL BE DIRECTED TO THE SEDIMENT BASIN PRIOR TO DISCHARGE.

CONTRACTOR'S CERTIFICATION

RESPONSIBLE FOR/DUTIES	GENERAL CONTRACTOR	SUB-CONTRACTOR	SUB-CONTRACTOR	SuB-CONTRACTOR	SUB-CONTRACTOR
BUSINESS NAME AND ADDRESS OF CONTRACTOR & ALL SHRS					
SIGNATURE					

BUILT UP SEDIMENT WILL BE REMOVED FROM SILT FENCE WHEN IT HAS REACHED ONE—THIRD THE HEIGHT OF THE FENCE.

\* DIVERSION DIKES/SWALES WILL BE INSPECTED AND ANY BREACHES PROMPTLY REPAIRED.

NON-STORM WATER DISCHARGES

IT IS EXPECTED THAT THE FOLLOWING NON-STORM WATER DISCHARGES WILL OCCUR FROM THE SITE DURING THE CONSTRUCTION PERIOD:

CONDITIONS OF THE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT THAT AUTHORIZES THE STORM WATER CONSTRUCTION SITE IDENTIFIED AS PART OF THIS CERTIFICATION

responsible for/duties	GENERAL CONTRACTOR	SUB-CONTRACTOR	SUB-CONTRACTOR	SUB-CONTRACTOR	SUB-CONTRACTOR
BUSINESS NAME AND ADDRESS OF CONTRACTOR & ALL SUBS					
SIGNATURE					

DRAWN BY: DESIGNED BY: CHECKED BY:

REVISIONS

BUILDING

WAREHOUSE BUILDIN FOR MIKE REEVES

REQUI

SHEET NO.

14

QUECT:	PROJECT:
STORM WATER POLLUTION PREVENTION PLAN INSPECTION AND MAINTENANCE REPORT FORM TO BE COMPLETED EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL EVENT OF 0.25 INCHES OR MORE	STORM WATER POLLUTION PREVENTION PLAN INSPECTION AND MAINTENANCE REPORT FORM  STRUCTURAL CONTROLS  DATE:
SPECTOR:	i
AYS SINCE LAST RAINFALL: AMOUNT OF LAST RAINFALL	MAINTENANCE REQUIRED FOR EARTH DIKE/SWALE:
М	TO BE PERFORMED BY:  CATCH BASIN/CURB INLET/OUTFALL TURBIDITY CONTROLS
	ANY EVIDENCE OF CLOGING/WASHOUT OR BYPASSING ?
ABILIZATION REQUIRED:	MAINTENANCE REQUIRED FOR CATCH BASIN/CURB INLETS/OUTFALLS TURBIDITY CONTROLS:
) BE PERFORMED BY:	TO BE PERFORMED BY:
ROJECT:	PROJECT:
STORM WATER POLLUTION PREVENTION PLAN INSPECTION AND MAINTENANCE REPORT FORM SEDIMENT BASIN	STORM WATER POLLUTION PREVENTION PLAN INSPECTION AND MAINTENANCE REPORT FORM
DEPTH OF SEDIMENT SIDE  OVERTOPPING OF THE  BASIN  EMBANKMENT ?  SEDIMENT BASIN	CHANGES REQUIRED TO THE POLLUTION PREVENTION PLAN:
AINTENANCE REQUIRED FOR SEDIMENT BASIN:	REASONS FOR CHANGES:
-ORE:	
DOES MUCH IS THE GRAVEL DOES ALL TRAFFIC IS THE CULVERT SEDIMENT GET CLEAN OR IS IT STABILIZED ENTRANCE TRACKED ON TO FILLED WITH ENTRANCE TO WORKING?  ROAD? SEDIMENT? LEAVE THE SITE? (IF APPLICABLE)	I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION. THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.
DABE PERFORMED BY:  DAGE 3 OF 4	SIGNATURE:

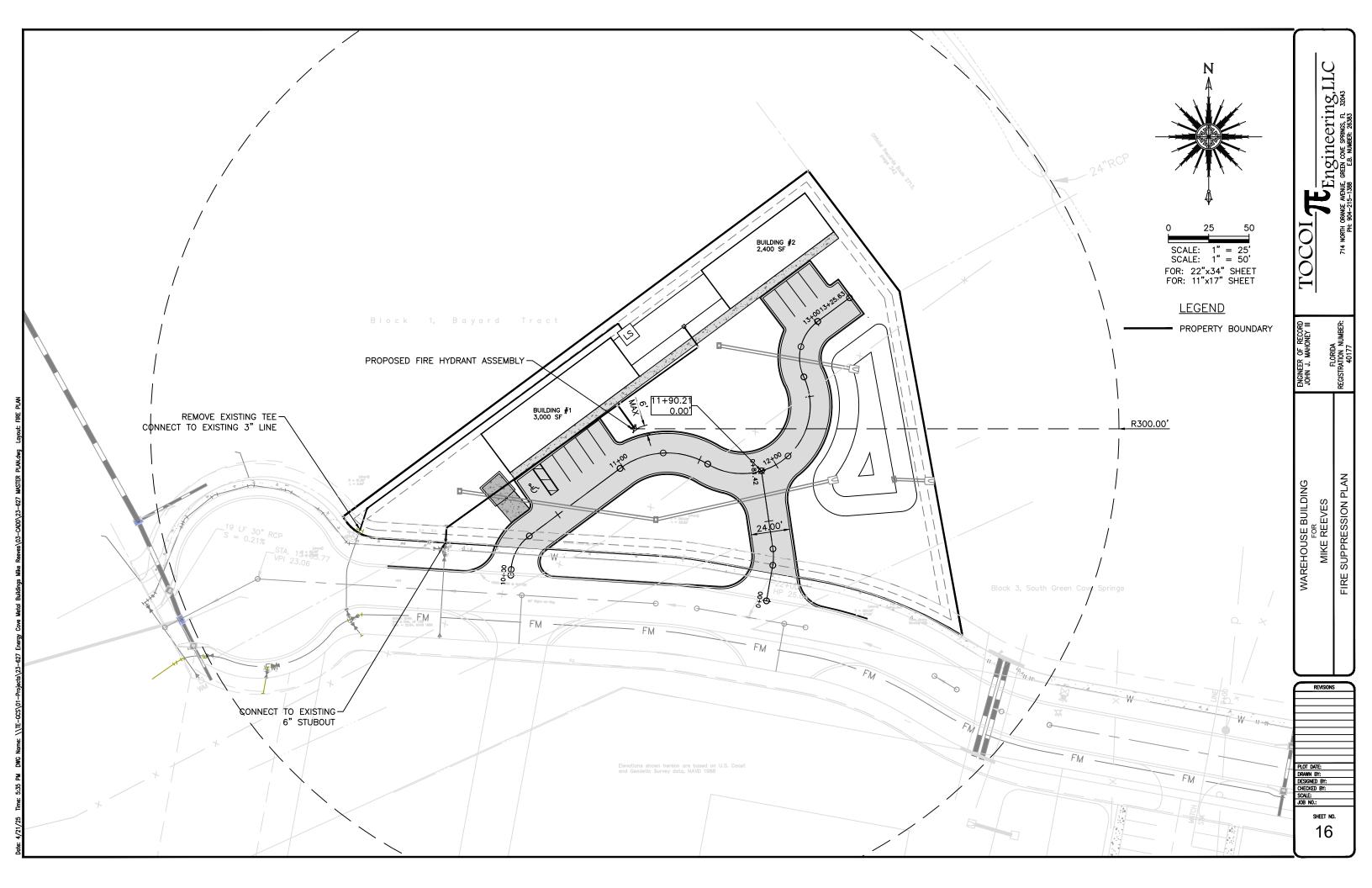
PLOT DATE:
DRAWN BY:
DESIGNED BY:
CHECKED BY:
SCALE:
JOB NO.: SHEET NO.

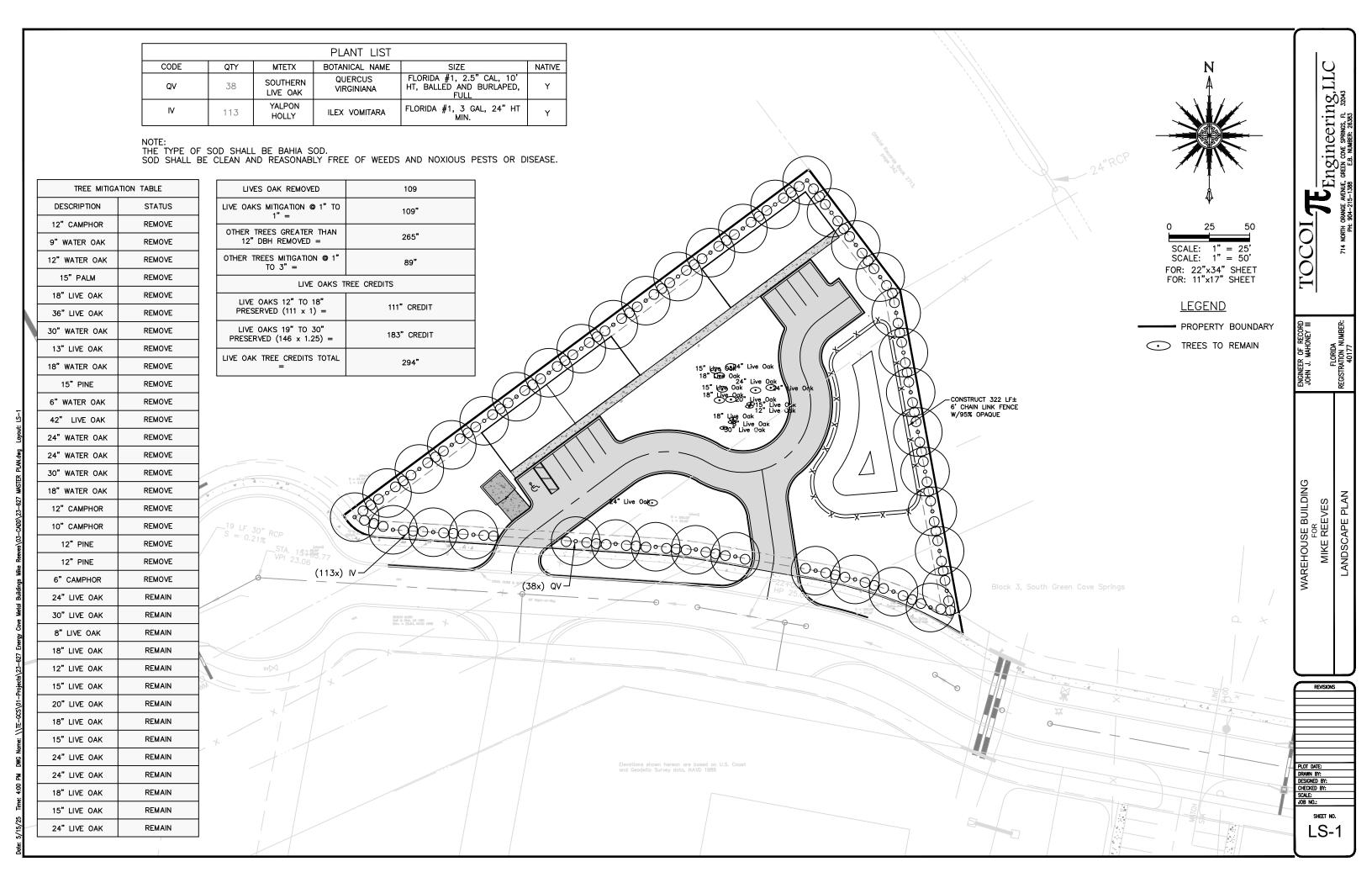
REVISIONS

SWPPP CONTRACTOR CERTIFICATION WAREHOUSE BUILDING FOR MIKE REEVES

NOTE TO CONTRACTOR:
THIS IS THE CONTRACTORS CERTIFICATION REQUIRED BY THE EPA'S NATIONAL POLLUTION DISCHARGE ELIMINATION
SYSTEM (NPDES), STORM WATER POLLUTION PREVENTION PLAN FOR CONSTRUCTION SITES OVER 5 ACRES. THIS
CERTIFICATION MUST BE COMPLETED WEEKLY AND AFTER EVERY RAINFALL EVENT OVER 0.25 INCHES. IT IS
SUGGESTED THAT THIS SHEET BE REMOVED FROM THE PLAN SET AND DUPLICATED AS NEEDED BY THE CONTRACTOR.

Engineering, LLC





## GREEN COVE SPRINGS LANDSCAPE NOTES

- 1. THESE PLANS ARE FOR LANDSCAPE PERMITTING PURPOSES ONLY. CONTRACTOR IS RESPONSIBLE FOR FOLLOWING ALL APPROPRIATE RULES AND REGULATIONS.
- 2. TREE PROTECTION BARRIERS ARE TO REMAIN IN PLACE UNTIL ALL SITE DEVELOPMENT IS COMPLETED.
- 3. EXISTING TREES SHOWN ON THIS PLAN ARE THOSE LOCATED BY SURVEYOR. ENGINEER TAKES NO RESPONSIBILITY FOR THEIR LOCATION AND SIZE.
- 4. ENGINEER CAN NOT GUARANTEE EXISTING TREE SURVIVAL FROM CONSTRUCTION IMPACT.
- 5. PLANT SIZE TAKES PRECEDENCE OVER CONTAINER SIZE.
- 6. PLANT QUANTITIES AND SQUARE FOOTAGE TABULATIONS ARE FOR THE CONTRACTORS CONVENIENCE ONLY. THE CONTRACTOR IS TO VERIFY ALL PLANT QUANTITIES AND SQUARE FOOTAGES.
- 7. ALL TREES LOCATED IN LAWN AREAS ARE TO HAVE A 2' RADIUS MULCHED CIRCLE AROUND BASE OF TREE.
- 8. ALL TREES TO BE FLORIDA GRADE #1
- 9. ALL PLANTING AREAS AND MULCHED RADII AROUND TREES ARE TO BE A MIN. 2" OF ORGANIC MULCH.
- 10. ALL SHADE TREES TO BE 15 FT MIN. FROM ALL OVER HEAD POWER LINES.
- 11. ALL SHADE TREES TO BE 5 FT MIN. AND UNDERSTORY TREES ARE TO BE A 2 1/2' FT MIN. FROM ALL SIDEWALKS, CURBS AND HARDSURFACES.
- 12. CONTRACTOR RESPONSIBLE TO PROVIDE ON SITE, TOTAL CALIPER INCHES SHOWN ON PLANTING SCHEDULE.
- 13. FINAL ACCEPTANCE OF LANDSCAPE IS NOT TO BE ASSUMED UNTIL:
- 13.1. CITY FINAL LANDSCAPE INSPECTION IS COMPLETE AND APPROVED.
- 13.2. A FORMAL LETTER FROM GENERAL CONTRACTOR TO ENGINEER STATING FINAL APPROVAL.
- 14. CONTRACTOR RESPONSIBLE FOR LANDSCAPE MAINTENANCE UNTIL FINAL APPROVAL LETTER RELEASES LANDSCAPE TO OWNER.
- 15. ALL DISTURBED AREAS ON THE SITE AND THE RIGHT-OF-WAY SHALL BE SODDED WITH TURF GRASS.
- 16. CONTRACTOR IS RESPONSIBLE FOR ACQUIRING ALL REQUIRED PERMITS AND ASSOCIATED FEES TO COMPLETE THE WORK.
- 17. CONTRACTOR SHALL LOCATE AND VISIBLY MARK ALL BURIED UTILITIES PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER OF ANY CONFLICTS.
- 18. SUBSTITUTIONS SHALL BE REJECTED UNLESS APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.

## WATERING SCHEDULE

ALL REQUIRED LANDSCAPING SHOWN ON THESE PLANS WILL BE WATERED MANUALLY USING HOSE BIBS DISPERSED THROUGHOUT THE DEVELOPMENT SO THAT EVERY REQUIRED LANDSCAPE AREA IS WITHIN 75' OF A HOSE BIB. TREES SHALL BE WATERED AS NEEDED TO PREVENT DECLINE, AND AT MINIMUM, THREE TIMES WEEKLY DURING NO-RAIN PERIODS FOR THE FIRST 60 DAYS. WATER THEREAFTER ACCORDING TO THE FOLLOWING 180-DAY SCHEDULE:

LARGE TREES/PALMS: 30GAL/APPLICATION SMALL TREES: 20GAL/APPLICATION

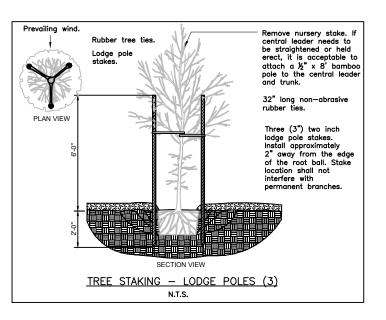
SHRUBS AND SOD: AS NEEDED TO PREVENT WILTING

1ST 8 WEEKS: 3 WATERINGS PER WEEK (24 TOTAL) 2ND 8 WEEKS: 2 WATERINGS PER WEEK (16 TOTAL) FINAL 10 WEEKS: 1 WATERING PER WEEK (10 TOTAL)

ALL WATERING MUST COMPLY WITH ST. JOHN'S RIVER WATER MANAGEMENT DISTRICT LAWN

AND IRRIGATION RULES AND REGULATIONS.

- 1. HOSE BIBS ARE TO BE PROVIDED EVERY 75' WITHIN ALL LANDSCAPED AREAS WITHIN THE PROJECT AREA.
- 2. UPON COMPLETION, CONTRACTOR SHALL SUBMIT AN AS-BUILT PLAN OF THE INSTALLED IRRIGATION SYSTEM, LOCATION OF ALL COMPONENTS AND SLEEVES TO THE OWNER (AND MUNICIPAL AUTHORITY IF REQUIRED).
- 3. ALL PIPE AND WIRE UNDER PAVING SHALL BE PLACED IN SCHEDULE 40 PVC SLEEVES FOR THE FULL PAVEMENT COVERAGE LENGTH AND SHALL BE AT LEAST 24" BELOW FINISHED GRADE
- 4. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL APPLICABLE PERMITS AND FEES.

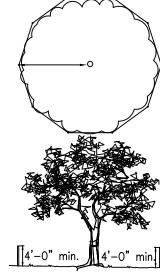


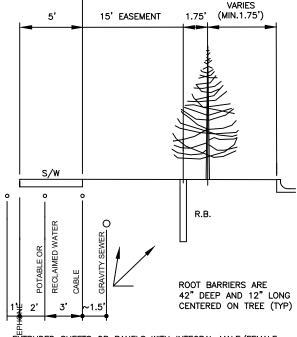
TEMPORARY TREE PROTECTION BARRIER SHALL BE LOCATED AS INDICATED ON PLAN BUT SHALL ALWAYS BE AT 1'-0" OF RADIUS FOR EVERY 1" OF D.B.H. IF NO CONSTRUCTION ACTIVITIES ARE TO TAKE PLACE WITHIN THE DRIP LINE. IN NO CASE SHALL THE PROTECTED AREA BE LESS THEN ONE—HALF THE AVERAGE RADIUS OF THE DRIP LINE OR LESS THAN 10 FEET.

> THE BARRIER SHALL BE CONSTRUCTED OF: 4'-0" SAFETY DRAINAGE COPOLYMER BARRIER FENCING RETAINED TAUGHT BY WIRE TIES TO POSTS. POSTS SHALL BE #3 REBAR 6'-0" LONG DRIVEN 2'-0" INTO GROUND NO MORE THEN 6'-0" APART. REBAR POST SHALL HAVE A SAFETY CAP ON EACH POST'S EXPOSED END.

NO MATERIALS OR EQUIPMENT SHALL BE STORED, OPERATED, DUMPED, OR BURNED WITHIN THE PROTECTED AREA. -NO ATTACHMENT (WIRES, SIGNS, ETC.), SHALL BE ATTACHED TO A PROTECTED TREE.

-PRIOR TO ANY LAND CLEARING OPERATIONS, TREE LIMBS WHICH INTERFERE WITH CONSTRUCTION SHALL BE REMOVED IN ACCORDANCE WITH NAT. ARBORIST ASSOC. PRUNING STANDARDS.





EXTRUDED SHEETS OR PANELS WITH INTEGRAL MALE/FEMALE STIDING LOCK CONNECTION ENDS. MATERIAL SHALL BE HDPE WITH A MINIMUM THICKNESS OF 60 MIL, AND SHALL BE RIBBED. ROOT BARRIER SHALL EXTEND TO A MINIMUM DEPTH OF 42" BELOW FINISH GRADE, THE ROOT BARRIER SHALL BE A MINIMUM OF 12' LONG, CENTERED ON THE TREE AND PARALLEL WITH THE UTILITY MAIN OR SERVICE LINE BEING PROTECTED, UNLESS SHOWN OTHERWISE ON THE PLANS. ROOT BARRIER SHALL BE INSTALLED AT ANY TREE PLANTED IN A CCUA UTILITY EASEMENT, OR ANY TREE PLANTED WITHIN 10' OF ALL CCUA UTILITY MAINS OR SERVICES. NO TREES SHALL BE PLANTED IN A CCUA UTILITY EASEMENT EASEMENT WITHOUT THE APPROVAL OF CCUA. NO TREES SHALL BE CLOSER THAN 5' TO ANY CCUA UTILITY LINE OR SERVICES.

SCALE: N.T.S

Engineering

VAREHOUSE BUILDING FOR MIKE REEVES

REVISIONS ESIGNED BY: HECKED BY:

> SHEET NO. LS-2