

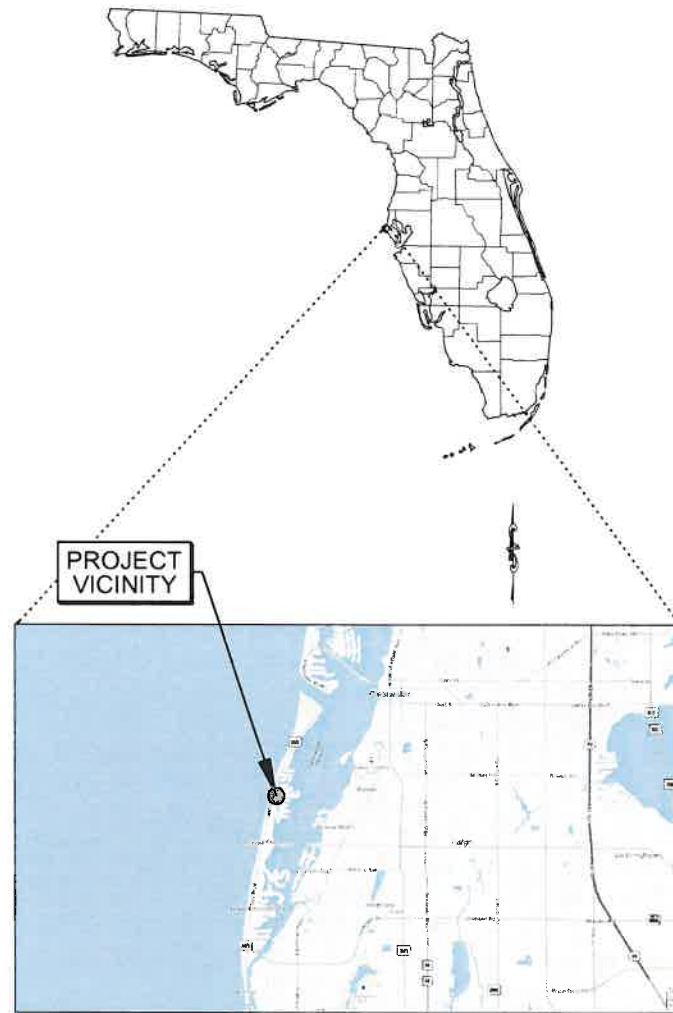
CONTRACT DOCUMENTS

BELLE ISLE AVE. DRAINAGE IMPROVEMENTS

PLANS PREPARED FOR:



444 CAUSEWAY BLVD.
BELLEAIR BEACH, FL 33786
PHONE NO: (727) 595-4646



VICINITY MAP

NOT TO SCALE



LOCATION MAP

NOT TO SCALE

PLANS PREPARED BY:

ENGINEERING SCIENCES GROUP

ESG 12331 STRINGER RD
BROOKSVILLE, FLORIDA 34601
PHONE 352-410-1498

LARRY L. FLUTY _____ DATE
LIC. NO. 38628

SHEET LIST TABLE

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ATTENTION IS DIRECTED TO THE FACT THAT THESE PLANS MAY HAVE BEEN REDUCED IN SIZE BY REPRODUCTION. THIS MUST BE CONSIDERED WHEN OBTAINING SCALED DATA.

UTILITY WARNING NOTE

ABOVE GROUND AND / OR UNDERGROUND UTILITIES MAY BE IN THE AREA OF THIS PROJECT - PROCEED WITH CAUTION - THE CONTRACTOR SHALL CALL SUNSHINE STATE "ONE CALL" AT 1-800-432-4770 AND THE UTILITY OWNERS IN ADVANCE OF BEGINNING WORK, IN ACCORDANCE WITH CHAPTER 555, FLORIDA STATUTES.

NO.	DESCRIPTION	BY	DATE

PROJECT NO:	002018002.00
DATE:	MARCH 2018
SHEET NO:	G-1

GENERAL NOTES

1. ALL WORKMANSHIP AND MATERIALS USED IN THE CONSTRUCTION OF THIS PROJECT SHALL CONFORM TO FDOT "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" 2015 EDITION AND THE LATEST LOCAL GOVERNMENT AGENCY UTILITIES AND FOOT STANDARDS, DETAILS AND SPECIFICATIONS UNLESS OTHERWISE INDICATED.
2. THE ELEVATIONS SHOWN HEREON ARE IN REFERENCE TO FLORIDA STATE PLANE COORDINATE GRID NORTH AMERICAN DATUM OF 1983 (2011 READJUSTMENT), AS ESTABLISHED BY THE NATIONAL GEODETIC SURVEY. DATUM, REFER TO SURVEY PREPARED BY GEORGE A. SHIMP II & ASSOCIATES INC. DATED 12/11/2017.
3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO USE WHATEVER MEANS NECESSARY TO CONTROL AND PREVENT EROSION AND TRANSPORT OF SEDIMENT TO SURFACE DRAINS AND DURING CONSTRUCTION. SEE EROSION CONTROL NOTES AND STORMWATER POLLUTION PREVENTION PLAN FOR ADDITIONAL INFORMATION.
4. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION SAFETY. SPECIAL PRECAUTIONS MAY BE REQUIRED IN THE VICINITY OF POWER LINES AND OTHER UTILITIES.
5. THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR MEANS AND METHODS FOR CONSTRUCTION SAFETY.
6. ALL WORK PERFORMED SHALL COMPLY WITH THE REGULATIONS AND ORDINANCES OF THE VARIOUS GOVERNMENTAL AGENCIES HAVING JURISDICTION OVER THE WORK.
7. ALL CONCRETE SHALL HAVE A MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF 4,000 PSI (28 DAY STRENGTH), UNLESS OTHERWISE NOTED.
8. ALL DISTURBED GRASSED AREAS SHALL BE RESODDED WITHIN 72 HOURS UNLESS OTHERWISE INDICATED.
9. CONTRACTOR TO RESTORE ALL AREAS DISTURBED BY HIS OPERATION TO THEIR ORIGINAL OR BETTER CONDITION.
10. THE CONTRACTOR WILL BE RESPONSIBLE FOR MAKING A VISUAL INSPECTION OF THE SITE AND WILL BE RESPONSIBLE FOR THE DEMOLITION AND REMOVAL OF ALL UNDERGROUND AND ABOVE GROUND IMPROVEMENTS THAT WILL NOT BE INCORPORATED WITH THE NEW FACILITIES TO THE PROPERTY LINE AT A MINIMUM. SHOULD ANY DISCREPANCIES EXIST WITH THE PLANS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING THE ENGINEER AND REQUESTING A CLARIFICATION OF PLANS PRIOR TO DEMOLITION.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY AND ALL REQUIRED ROAD CROSSING PERMITS, AND OTHER CONSTRUCTION PERMITS NOT FURNISHED BY THE OWNER, PRIOR TO THE START OF ANY CONSTRUCTION OR DEMOLITION.
12. SPECIAL CARE IS TO BE TAKEN SO THAT PROTECTED TREES REMAIN UNHARMED DURING CONSTRUCTION. IN ANY EVENT, NO TREE(S) SHALL BE REMOVED UNLESS DESIGNATED FOR REMOVAL ON THE PLANS.
13. REFERENCED INDEX NUMBERS REFER TO FLORIDA DEPARTMENT OF TRANSPORTATION ROAD DESIGN STANDARDS, LATEST EDITION.
14. ALL SOODING, SEEDING AND MULCHING SHALL INCLUDE WATERING AND FERTILIZATION AND SHALL BE IN ACCORDANCE WITH LOCAL GOVERNMENT AGENCY LAND DEVELOPMENT CODE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THESE AREAS UP TO AND INCLUDING THE INITIAL MOWING.
15. CONTRACTOR IS ADVISED TO BECOME FAMILIAR WITH THE OVERALL SCOPE OF WORK TO BE PERFORMED PRIOR TO CONSTRUCTION.
16. THE CONTRACTOR SHALL PROVIDE CERTIFIED STORMWATER RECORD DRAWINGS (AS-BUILTS), SIGNED AND SEALED BY A PROFESSIONAL LAND SURVEYOR LICENSED IN THE STATE OF FLORIDA PRIOR TO CERTIFICATION BY THE ENGINEER OF RECORD. THE RECORD DRAWINGS SHALL SHOW FINAL GRADES AND LOCATIONS ON ALL STORMWATER FACILITIES, DRAINAGE STRUCTURES, BERMS & SWALES. THE RECORD DRAWINGS MUST COMPLY WITH THE SOUTH FLORIDA WATER MANAGEMENT DISTRICTS (SWFWM) "AS-BUILT" DRAWINGS AND INFORMATION CHECKLIST, FORM 547.27/SOC (4/09) PER SWERP RULE 40D-4.351(2)(b), F.A.C. THE CONTRACTOR SHALL PROVIDE TEN (10) COPIES OF THE CERTIFIED RECORD DRAWINGS TO THE ENGINEER OF RECORD FOR THE PURPOSE OF CERTIFYING THE STORMWATER MANAGEMENT SYSTEM.
17. THE CONTRACTOR SHALL LOCATE AND STAKE ALL PROPERTY CORNERS PRIOR TO FINAL ENGINEERING INSPECTION AND CERTIFICATION. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO RE-ESTABLISH THE PROPERTY CORNERS WHICH HAVE BEEN LOST DURING CONSTRUCTION BY A PROFESSIONAL LAND SURVEYOR.
18. WORK SHALL NOT COMMENCE UNTIL ALL PERMITS REQUIRED FOR THE SUBJECT PORTION OF THE PROJECT ARE OBTAINED. IT IS THE CONTRACTORS RESPONSIBILITY TO HAVE ALL REQUIRED PERMITS AND/OR EVIDENCE OF COMPLIANCE WITH APPLICABLE REGULATIONS ON SITE AT ALL TIMES DURING THE EXECUTION OF WORK. SPECIFIC PERMITS MAY BE REQUIRED FOR THE INSTALLATION OF POTABLE WATER LINES, SANITARY SEWER LINES, STORMWATER PIPES, ETC. TREE BARRICADES AND EROSION SILTATION CONTROL MUST BE INSTALLED AND MAINTAINED PRIOR TO COMMENCING CONSTRUCTION.
19. CONSTRUCTION SHALL PROCEED SUCH THAT ALL STORMWATER FACILITIES WITHIN A WATERSHED AREA ARE IN PLACE AND OPERATIONAL PRIOR TO DEMOLITION AND/OR CONSTRUCTION OF IMPERVIOUS SURFACES WITHIN THAT AREA (IF APPLICABLE).
20. NO STOCKPILING OF MATERIALS IN ROADWAY ROW OR ON SIDEWALK. ROW, ROADS AND SIDEWALKS TO BE SWEEP DAILY AS PART OF DAILY CLEAN UP.
21. CONTRACTOR IS TO EXERCISE CAUTION IN THE VICINITY OF TREES TO REMAIN AND IS RESPONSIBLE FOR ANY DAMAGE RESULTING FROM HIS WORK.
22. GENERAL CONTRACTOR SHALL COORDINATE LOCATION AND INSTALLATION OF ELECTRICAL SERVICE EQUIPMENT IN ACCORDANCE WITH THE LOCAL AUTHORITY HAVING JURISDICTION.
23. CONTRACTOR TO FAMILIARIZE THEMSELVES WITH THE PROJECT GEOTECHNICAL REPORT AND ADHERE TO THE RECOMMENDATIONS FOR PAVEMENT SECTIONS AND ANY OTHER RECOMMENDATIONS RELATED TO CONSTRUCTION OF THIS PROJECT.
24. CONTRACTOR SHALL BECOME FAMILIAR WITH WATER MANAGEMENT DISTRICT PERMIT, FDEP NOTICE OF INTENT, FDEP GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES, PROJECT STORMWATER POLLUTION PREVENTION PLAN (ATTACHED), RIGHT-OF-WAY, UTILITY, AND ALL PERMITS ASSOCIATED WITH THE PROJECT.
25. ALL NOTES APPLY TO ALL SHEETS WHERE APPLICABLE.

GENERAL UTILITY NOTES

1. EXCEPT WHERE THE PLANS AND SPECIFICATIONS PROVIDE THAT SUCH WORK SHALL BE PERFORMED UNDER THE CONTRACT FOR THIS PROJECT, ALL UTILITIES "INTERFERING" WITH CONSTRUCTION SHALL BE REMOVED, RELOCATED OR ADJUSTED BY THEIR OWNERS, AT THEIR EXPENSE. THE CONTRACTOR SHALL ARRANGE HIS SCHEDULE TO ALLOW UTILITY OWNERS TIME FOR THE NECESSARY RELOCATION AND ADJUSTMENT OF UTILITIES AND RELATED STRUCTURES.
2. ABOVE GROUND AND/OR UNDERGROUND UTILITIES MAY BE IN THE AREA OF THIS PROJECT - PROCEED WITH CAUTION - THE CONTRACTOR SHALL CALL "SUNSHINE STATE ONE CALL" AND THE UTILITY OWNERS IN ADVANCE OF BEGINNING WORK, IN ACCORDANCE WITH CHAPTER 566, FLORIDA STATUTES, UNDERGROUND FACILITY DAMAGE PREVENTION & SAFETY. ALL UTILITY OWNERS MAY NOT BE A MEMBER, REQUIRING DIRECT CONTACT. THE CONTRACTOR SHALL FURTHER COORDINATE WITH UTILITY OWNERS TO RESOLVE CONFLICTS THAT MAY ARISE IN THE FIELD DURING CONSTRUCTION. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY UTILITIES DAMAGED AS A RESULT OF THE CONTRACTORS FAILURE TO CALL "SUNSHINE STATE ONE CALL" AND THE UTILITY OWNERS.
3. THE CONTRACTOR IS REQUIRED TO COORDINATE AND/OR PROVIDE FOR THE BRACING/SUPPORT OF EXISTING UTILITY POLES WITH THE UTILITY OWNERS, PRIOR TO THE COMMENCEMENT OF EXCAVATION/CONSTRUCTION ACTIVITIES.
4. THE CONTRACTOR SHALL PROVIDE TEMPORARY FACILITIES AS REQUIRED TO ISOLATE PIPELINES INSTALLED UNDER THIS CONTRACT FOR THE PERFORMANCE OF TESTING UNDER THIS CONTRACT. LIKEWISE PROVIDE TEMPORARY FACILITIES AS REQUIRED TO MAINTAIN WASTEWATER SERVICE THROUGHOUT THE CONSTRUCTION PERIOD.
5. ALL EXISTING WATER MAINS, SANITARY SEWER LINES, WATERSEWER PUMP STATIONS AND OTHER UTILITIES SHALL REMAIN IN SERVICE UNTIL THE RELOCATED UTILITIES ARE PLACED IN SERVICE. COORDINATE ALL UTILITY RELATED CONSTRUCTION ACTIVITIES WITH THE OWNER OF THESE UTILITIES.
6. ALL CONSTRUCTION WITHIN THE RIGHT-OF-WAY WILL BE IN ACCORDANCE WITH THE PRACTICES REQUIRED BY FDOT AND LOCAL GOVERNMENT AGENCY LAND DEVELOPMENT CODE ALONG WITH THE FDOT UTILITY ACCOMMODATION MANUAL.
7. CONTRACTOR WILL NOTIFY THE RESPONSIBLE UTILITY FOR RELOCATION OF METER BOXES FOR POTABLE WATER AND NON-POTABLE WATER SERVICES.
8. THE LOCATIONS AND SIZE OF THE EXISTING UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE ONLY. FURTHER, THERE IS NO GUARANTEE THAT ALL EXISTING FACILITIES HAVE BEEN FOUND OR SHOWN. THE CONTRACTOR IS FOREWARNED TO ASCERTAIN AND DETERMINE PRECISE LOCATIONS PRIOR TO EXCAVATING. THE CONTRACTOR SHALL BECOME FAMILIAR WITH ALL VOLTAGES CARRIED IN OVERHEAD OR UNDERGROUND UTILITY SERVICES. NO CLAIM FOR EXTRA COST SHALL BE MADE AGAINST THE OWNER OR ENGINEER AS A RESULT OF THE AFOREMENTIONED APPROXIMATIONS. THE CONTRACTOR SHALL LOCATE EXACTLY ALL UTILITIES THAT CROSS THE PROPOSED PROJECT LIMITS PRIOR TO CONSTRUCTION.
9. THE CONTRACTOR SHALL NOTIFY THE ENGINEER, OWNER, CITY AND COUNTY INCLUDING ALL UTILITY COMPANIES AT LEAST 48 HOURS BEFORE BEGINNING CONSTRUCTION. CONTRACTOR SHALL CALL "SUNSHINE STATE ONE CALL" (811) A MINIMUM OF 2-DAYS AND A MAXIMUM OF 5-DAYS PRIOR TO START OF CONSTRUCTION. CONTRACTOR SHALL NOTIFY AND COORDINATE WATER AND SEWER SERVICES WITH LOCAL GOVERNMENT AGENCY.
10. ALL UNDERGROUND UTILITIES MUST BE INSTALLED BEFORE ROADWAY BASE AND SURFACE ARE CONSTRUCTED.
11. ALL PIPE LENGTHS ARE PLUS OR MINUS.
12. PIPE MEASUREMENTS ARE TO CENTER OF STRUCTURES OR FITTINGS. PIPE MEASUREMENTS FOR MITERED END SECTIONS ARE TO END OF PIPE.
13. CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF ALL UTILITY CONNECTION POINTS PRIOR TO STARTING CONSTRUCTION AND SHALL IMMEDIATELY NOTIFY THE ENGINEER AND OWNER OF ANY DISCREPANCIES FOUND.
14. ADJUSTMENT OF INLETS, JUNCTION BOXES, MAN-HOLE TOPS, WATER VALVES, WATER METERS, ETC. SHALL BE INCLUDED AND NO CLAIM SHALL BE MADE AGAINST THE OWNER OR ENGINEER FOR THESE ADJUSTMENTS, IF REQUIRED.
15. ALL BACKFILL OVER ANY PIPE (STORM SEWER, SANITARY SEWER, OR WATERLINES) THAT IS INSTALLED UNDER ROADWAYS OR WITHIN THE EMBANKMENT OF THE ROADWAY, SHALL BE COMPACTED IN ACCORDANCE WITH FLORIDA DOT STANDARD SPECIFICATIONS, SECTION 129-6 (BACKFILLING), LATEST EDITION OR LOCAL GOVERNMENT AGENCY REQUIREMENTS.
16. ALL EXISTING UTILITIES (INCLUDING STORMWATER FACILITIES) SHALL BE KEPT IN OPERATION EXCEPT WITH THE EXPRESS WRITTEN CONSENT OF THE UTILITY OWNER. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO PRESERVE EXISTING UTILITIES AND ANY AND ALL DAMAGE TO EXISTING UTILITIES AS A RESULT OF THE CONTRACTORS ACTIONS SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE.
17. CONTRACTOR TO REPAIR IN KIND ANY DISTURBED AREAS DUE TO UTILITY INSTALLATIONS. CONTRACTOR TO ROOT PRUNE ANY TREES IN VICINITY OF PROPOSED UTILITY INSTALLATIONS.
18. DUCTILE IRON PIPE MUST BE INSTALLED BETWEEN ANY TAP AND BACKFLOW PREVENTORS DEVICE. AT LEAST ONE JOINT OF DUCTILE IRON PIPE TO BE INSTALLED ON THE SERVICE SIDE OF ANY BACKFLOW PREVENTORS DEVICE.

ELECTRICAL AND TELEPHONE NOTES

1. ALL ELECTRICAL SERVICE SHALL BE INSTALLED UNDERGROUND.
2. ELECTRIC SERVICE TO POINTS OF CONNECTION TO BE PROVIDED BY UTILITY OWNER. CONTRACTOR TO COORDINATE.
3. CONTRACTOR TO INSTALL PVC CONDUITS FOR ELECTRICAL AND TELEPHONE SERVICE (TO PROPERTY LINE) AND COORDINATE INSTALLATION OF SERVICES AND LIGHTING DESIGN WITH UTILITY AGENCY.
4. CONTRACTOR TO COORDINATE WITH UTILITY COMPANY FOR RELOCATION OF ANY POWER POLES WITHIN PROJECT AREA AND RIGHT-OF-WAYS.
5. CONTRACTOR TO EXERCISE EXTREME CARE IN NEW CONSTRUCTION AREAS TO AVOID IMPACTS TO HIGHLY SENSITIVE UTILITIES.

EROSION CONTROL MEASURES NOTE:

REQUIRED EROSION CONTROL MEASURES MUST REMAIN INTACT THROUGHOUT CONSTRUCTION. FAILURE TO INSTALL OR PROPERLY MAINTAIN THESE BARRICADES WILL RESULT IN ENFORCEMENT ACTION WHICH MAY INCLUDE CITATIONS, AS PROVIDED BY CHAPTERS 40D-4 AND 40D-40, F.A.C. INITIATION OF CIVIL PENALTY PROCEDURES PURSUANT TO SECTION 378.129, F.A.C. CAN RESULT IN A PENALTY NOT TO EXCEED \$10,000 PER OFFENSE WITH EACH DATE DURING WHICH SUCH VIOLATION OCCURS CONSTITUTING A SEPARATE OFFENSE. CONTRACTOR TO ADHERE TO GENERAL DUST CONTROL NOTES, EROSION, SILTATION, AND SEDIMENT CONTROL NOTES, AND SILT FENCE, TURBIDITY BARRIER, AND TREE BARRICADE DETAILS INCLUDED IN THESE DOCUMENTS.

FUGITIVE DUST CONTROL NOTE

THE CONTRACTOR SHALL TAKE ALL REASONABLE MEANS TO ELIMINATE THE TRANSPORT OF DUST FROM THE PROJECT SITE. SPECIAL MEASURES, SUCH AS PERIODICALLY APPLYING WATER TO THE WORK SITE TO PREVENT DUST SHALL BE INCORPORATED INTO THE CONTRACTORS WORK PLAN. CONTRACTOR TO ADHERE TO DUST CONTROL NOTES INCLUDED IN THESE DOCUMENTS.

TRAFFIC CONTROL/MOT NOTES

1. THE CONTRACTOR IS REQUIRED TO PREPARE AND SUBMIT A TRAFFIC CONTROL PLAN TO LOCAL GOVERNMENT AGENCY FOR REVIEW AND APPROVAL.
2. THE CONTRACTOR SHALL INSTALL ALL APPROVED TRAFFIC CONTROL DEVICES PRIOR TO COMMENCING CONSTRUCTION.
3. THE CONTRACTOR IS RESPONSIBLE FOR THE LOCATION, INSTALLATION, AND COORDINATION OF ALL TRAFFIC SIGNS AND BARRICADES WITH LOCAL GOVERNMENT AGENCY.
4. THE CONTRACTOR SHALL NOTIFY THE LOCAL GOVERNMENT AGENCY PUBLIC WORKS OFFICE, RIGHT-OF-WAY, THE FIRE DEPARTMENT, THE POLICE DEPARTMENT, ALL GOVERNMENTAL TRAFFIC DEPARTMENTS, AND ANY ADJACENT BUSINESSES PRIOR TO ANY STREET BEING CLOSED OR MADE IMPASSABLE.
5. THE CONTRACTOR SHALL PROVIDE TEMPORARY GRADE TRANSITIONS DURING CONSTRUCTION TO ALLOW VEHICULAR ACCESS TO ADJACENT RESIDENTS, AS NECESSARY TO PROVIDE ACCESS.
6. SIGNS & BARRICADES SHALL BE IN ACCORDANCE WITH THE U.S. DEPARTMENT OF TRANSPORTATION'S "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" AND THE FDOT "ROADWAY AND TRAFFIC DESIGN STANDARDS" INDEXES 600 THRU 670 (LATEST EDITION).
7. MAINTENANCE OF TRAFFIC FOR THE WORK TO BE PERFORMED WITHIN THE RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH FDOT STANDARD INDEX NUMBERS 800, 822, 833, AND 860. NO LANE CLOSURES ARE PERMITTED WITHOUT PRIOR APPROVAL HAVING BEEN OBTAINED FROM LOCAL GOVERNMENT AGENCY INSPECTOR.
8. CONTRACTOR TO REFER TO FDOT INDEX NO. 860 FOR ALL MAINTENANCE OF PEDESTRIAN TRAFFIC AND CONTROL FOR SIDEWALK CLOSURES.
9. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN A SAFE AND EASILY ACCESSIBLE PAVED OR UNPAVED PATHWAY FOR PEDESTRIAN TRAFFIC THROUGH THE WORK ZONE FOR THE DURATION OF THE PROJECT. IF THE PATHWAY LIES ALONG A DESIGNATED SCHOOL ROUTE, THEN THE CONTRACTOR MUST PROVIDE ADEQUATE SUPERVISION AND/OR GUIDANCE TO THE SCHOOLAGED STUDENTS AS THEY TRAVERSE THRU THE WORK ZONE.
10. THE CONTRACTOR SHALL BE REQUIRED TO NOTIFY ALL APPROPRIATE AGENCIES (PARTIAL LIST BELOW) PRIOR TO ANY LANE CLOSURES ON AN ARTERIAL OR COLLECTOR ROADWAY THAT WOULD EXCEED ONE HOUR IN LENGTH:
A) PUBLIC WORKS B) SHERIFFS OFFICE, C) TRANSIT AUTHORITY, D) SCHOOL TRANSPORTATION E) EMS & FIRE ADMINISTRATION
11. FOR WORK WITHIN FDOT RIGHT-OF-WAY, THE FDOT REQUIRES DOCUMENTATION FOR SUCCESSFUL COMPLETION OF AN APPROVED WORK ZONE TRAFFIC CONTROL TRAINING COURSE FOR THE AGENCY, UTILITY, OR CONTRACTOR EMPLOYEES) DESIGNING, INSTALLING, AND/OR MAINTAINING THE APPROVED MAINTENANCE OF TRAFFIC PLAN IN ACCORDANCE WITH DEPARTMENT PROCEDURE, TOP-C/O: 625-010-010.

GENERAL DUST CONTROL NOTES

1. CONTRACTOR TO USE BEST MANAGEMENT PRACTICES (BMP) TO REDUCE SURFACE AND AIR MOVEMENT OF DUST DURING LAND DISTURBING, DEMOLITION AND CONSTRUCTION ACTIVITIES. CONTRACTOR TO BECOME FAMILIAR WITH THE CONTENTS OF THE STORMWATER POLLUTION PREVENTION PLAN AND KEEP A COPY ON SITE AT ALL TIMES DURING CONSTRUCTION.
2. CONTRACTOR TO PREVENT SURFACE AND AIR MOVEMENT OF DUST FROM EXPOSED SOIL SURFACES AND REDUCE THE PRESENCE OF AIRBORNE SUBSTANCES WHICH MAY BE HARMFUL OR INJURIOUS TO HUMAN HEALTH, WELFARE, OR SAFETY, OR TO ANIMAL OR PLANT LIFE, AND IN AREAS SUBJECT TO SURFACE AND AIR MOVEMENT OF DUST WHERE ON-SITE AND OFF-SITE DAMAGE IS LIKELY TO OCCUR IF PREVENTIVE MEASURES ARE NOT TAKEN.
3. CONSTRUCTION ACTIVITIES INEVITABLY RESULT IN THE EXPOSURE AND DISTURBANCE OF SOIL. FUGITIVE DUST IS EMITTED BOTH DURING THE ACTIVITIES (I.E. EXCAVATION, DEMOLITION, VEHICLE TRAFFIC, HUMAN ACTIVITY) AND AS A RESULT OF WIND EROSION OVER THE EXPOSED EARTH SURFACES. LARGE QUANTITIES OF DUST ARE TYPICALLY GENERATED IN "HEAVY" CONSTRUCTION ACTIVITIES, SUCH AS ROAD AND STREET CONSTRUCTION AND SUBDIVISION, COMMERCIAL AND INDUSTRIAL DEVELOPMENT, WHICH INVOLVE DISTURBANCE OF SIGNIFICANT AREAS OF SOIL SURFACE. RESEARCH AT CONSTRUCTION SITES HAS ESTABLISHED AN AVERAGE DUST EMISSION RATE OF 1.2 TONS/ACRE/MONTH FOR ACTIVE CONSTRUCTION. EARTH-MOVING ACTIVITIES COMPRISE THE MAJOR SOURCES OF CONSTRUCTION DUST EMISSIONS, BUT TRAFFIC AND GENERAL DISTURBANCE OF THE SOIL ALSO GENERATE SIGNIFICANT DUST EMISSION. IN PLANNING FOR DUST CONTROL, IT SHOULD BE OBVIOUS THAT THE LESS SOIL IS EXPOSED AT ANY ONE TIME, THE LESS POTENTIAL THERE WILL BE FOR DUST GENERATION. PHASING A PROJECT AND UTILIZING TEMPORARY STABILIZATION PRACTICES UPON THE COMPLETION OF GRADING CAN SIGNIFICANTLY REDUCE DUST EMISSION.

TEMPORARY MEASURES:

1. MULCHES- A NATURAL OR ARTIFICIAL LAYER OF PLANT MATERIALS OR OTHER MATERIALS THAT WILL NOT FLOAT OR WASH AWAY.
2. VEGETATIVE- TEMPORARY SEEDING OR GROUND COVERS.
3. TILLAGE- THIS PRACTICE IS DESIGNED TO ROUGHEN AND BRING CLODS TO THE SURFACE. IT IS AN EMERGENCY MEASURE WHICH SHOULD BE USED BEFORE WIND EROSION STARTS. BEGIN PLOWING ON WINDWARD SIDE OF SITE. CHISEL -TYPE PLOWS (WITH 12-INCH SPACING), SPRING -TOOTHED HARROWS, AND SIMILAR PLOWS ARE EXAMPLES OF EQUIPMENT WHICH MAY PRODUCE THE DESIRED EFFECT.
4. IRRIGATION- THIS IS GENERALLY DONE AS AN EMERGENCY TREATMENT. SITE IS SPRINKLED WITH WATER UNTIL THE SURFACE IS WET. REPEAT AS NEEDED, TO PREVENT CARRYOUT OF MUD ONTO STREETS, REFER TO TEMPORARY GRAVEL CONSTRUCTION ENTRANCE.
5. BARRIERS- SOLID BOARD FENCE, BUR LAY FENCE, CREATE WALLS, BALES OF HAY AND SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CURRENTS AND AT INTERVALS OF ABOUT 15 TIMES THE BARRIER HEIGHT ARE EFFECTIVE IN CONTROLLING WIND EROSION.
6. PERMANENT VEGETATION- PERMANENT SEEDING AND PERMANENT STABILIZATION WITH SOD.
7. TOP SOILING- THIS ENTAILS COVERING THE SURFACE WITH LESS EROSION SOIL MATERIAL.
8. STONE- COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL.

NO.	DESCRIPTION	BY	DATE

CITY OF BELLEAIR BEACH
 444 CAUSEWAY BOULEVARD
 BELLEAIR BEACH, FLORIDA 33786
 PHONE: 727-595-4646

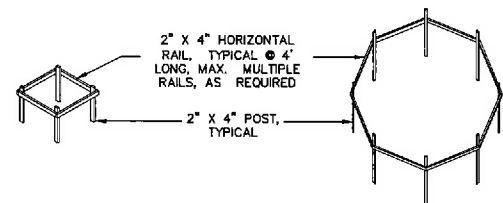
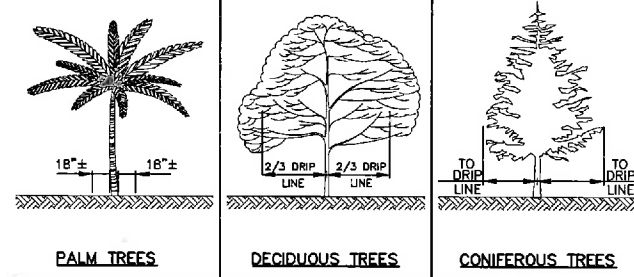
LARRY L FLUTY, PE DATE
 PE# 38628

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**BELLE ISLE AVE.
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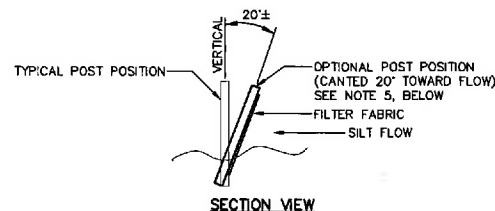
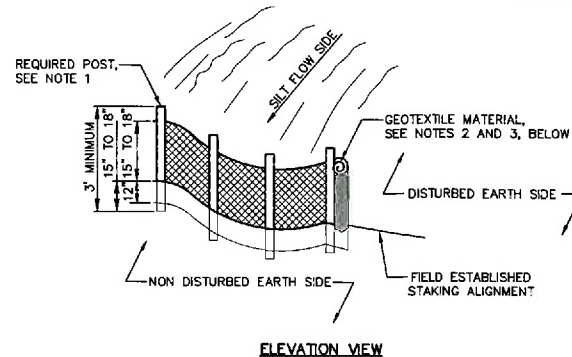
GENERAL NOTES

PROJECT NO: 002018002.00
DATE: MARCH 2018
SHEET NO: G-2



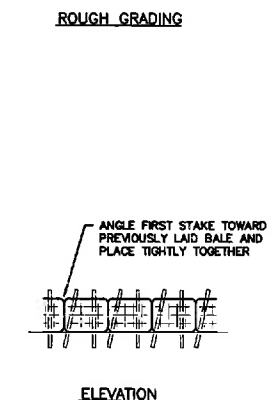
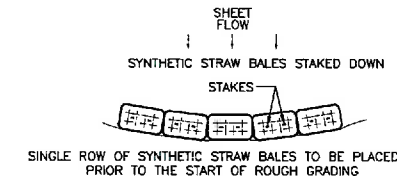
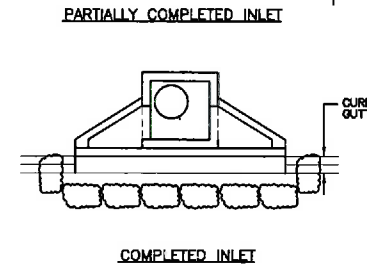
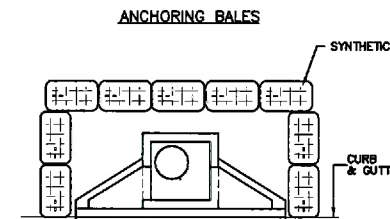
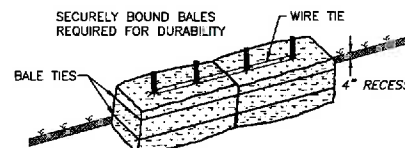
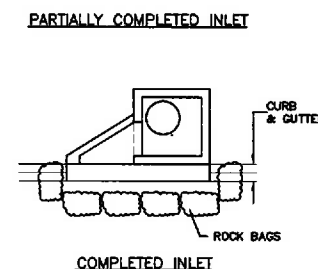
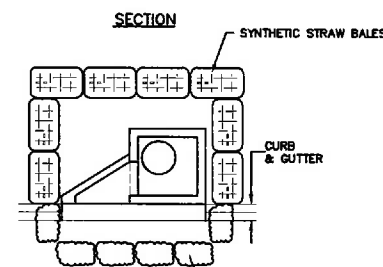
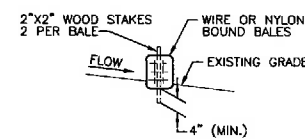
- NOTES:**
- NO TRUCKS OR HEAVY EQUIPMENT ALLOWED WITHIN BARRIERS, ONLY HAND LABOR ALLOWED.
 - NO CONSTRUCTION MATERIALS, SOILS DEPOSITS, OR SOLVENTS SHALL BE ALLOWED WITHIN BARRIERS.
 - BARRIERS ARE TO BE IN PLACE PRIOR TO ANY CONSTRUCTION ACTIVITIES WITHIN TREE AREA.
 - BARRIERS ARE TO STAY IN PLACE UNTIL ALL PAVING, CONSTRUCTION, AND HEAVY EQUIPMENT IS REMOVED FROM THE AREA.

TREE PROTECTION BARRIERS DETAIL
NTS

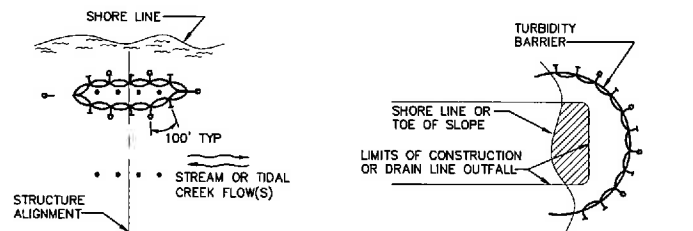


- NOTES:**
- POST; 2" X 2" WOOD, P.T. OR 2-1/2" Ø STEEL AT 6'-0" CENTERS MAXIMUM.
 - GEOTEXTILE; GRAB TENSILE AT 90 LBS, TRAPEZOIDAL TEAR AT 35 LBS., MULLEN BURST AT 180 PSI.
 - GEOTEXTILE MATERIAL SHALL BE BURIED IN THE GROUND A MINIMUM OF 12" AND BACK FILLED.
 - ALSO SEE FDOT INDEX 199, "GEOTEXTILE CRITERIA", EROSION CLASS.
 - OPTIONAL POST POSITION REQUIRED WHEN SLOPE IS GREATER THAN 1:2.

STAKED SILT BARRIER DETAIL
NTS



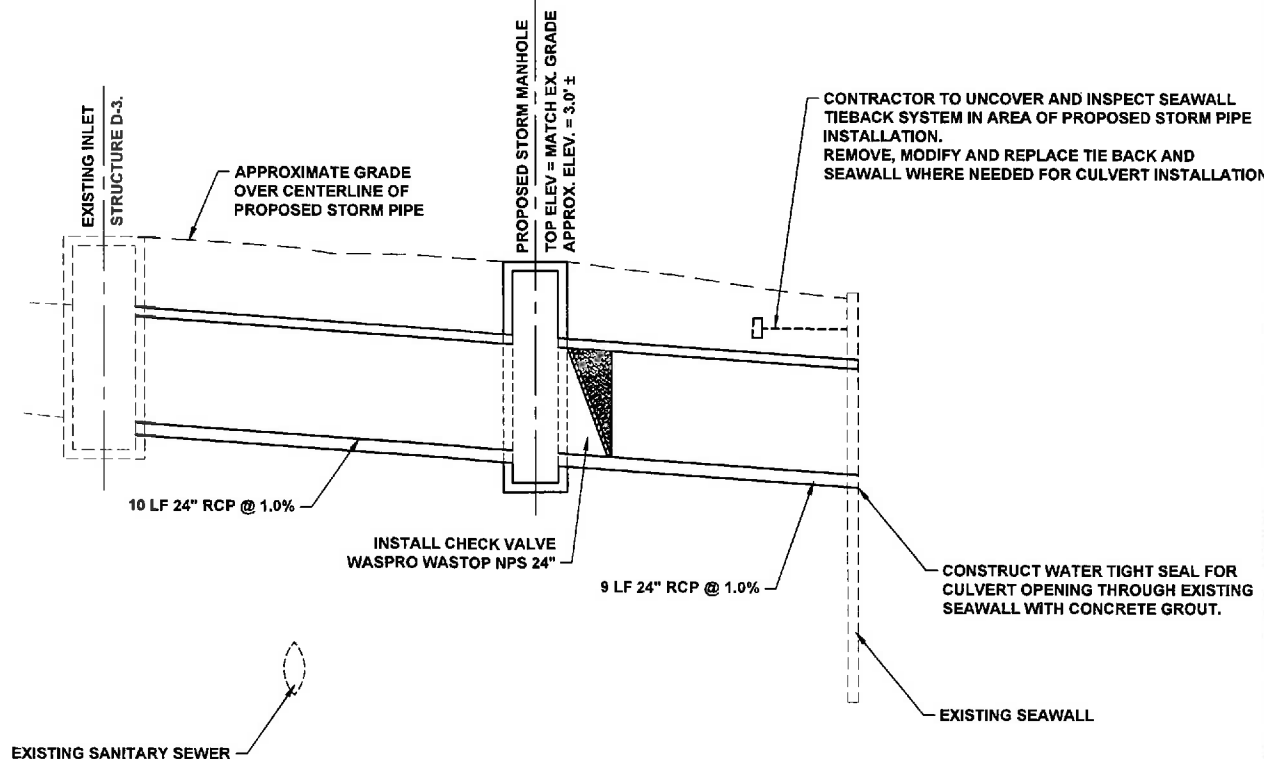
ROCK BAGS, SYNTHETIC STRAW OR SILT BARRIERS
NTS



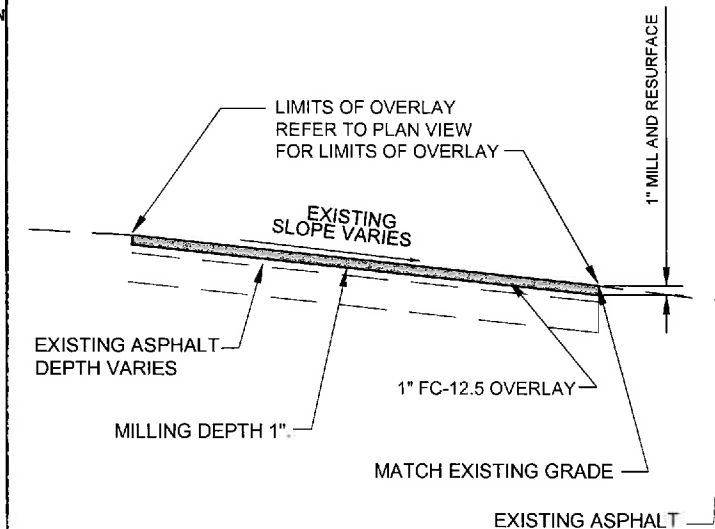
- LEGEND**
- DREDGE OR FILL AREA
 - MOORING BODY W/ ANCHOR
 - BARRIER MOVEMENT DUE TO CURRENT ACTION
 - PILE LOCATIONS
 - WAVE ACTION

- NOTES:**
- CURTAIN TO REACH THE BOTTOM UP TO DEPTHS OF 10', 2 PANELS ARE TO BE USED FOR DEPTHS GREATER THAN 10' UNLESS SPECIAL DEPTH CURTAINS SPECIFICALLY ARE CALLED FOR IN THE PLANS OR AS DIRECTED BY THE ENGINEER.
 - COMPONENTS OF TYPES I AND TYPES II MAY BE SIMILAR OR IDENTICAL TO PROPRIETARY DESIGNS. ANY INFRINGEMENT OF THE DESIGNER SHALL BE THE SOLE RESPONSIBILITY OF THE USER. SUBSTITUTIONS FOR TYPES I AND/OR TYPE II SHALL BE AS APPROVED BY THE ENGINEER.
 - TURBIDITY BARRIERS SHALL BE USED IN ALL PERMANENT BODIES OF WATER REGARDLESS OF WATER DEPTH.
 - NUMBER AND SPACING OF ANCHORS DEPENDENT ON CURRENT VELOCITIES.
 - DEPLOYMENT OF BARRIER AROUND PILE LOCATIONS MAY VARY TO ACCOMMODATE CONSTRUCTION OPERATIONS.
 - NAVIGATION MAY REQUIRE SEGMENTING BARRIER DURING CONSTRUCTION ACTIVITIES.
 - FOR ADDITIONAL INFORMATION, SEE SECTION 104 OF THE STANDARD FDOT SPECIFICATIONS.

FLOATING TURBIDITY BARRIER DETAIL
NTS



STORMWATER PIPE PROFILE
NTS



MILLING AND RESURFACING DETAIL
NTS

NO.	DESCRIPTION	BY	DATE

CITY OF BELLEAIR BEACH
444 CAUSEWAY BOULEVARD
BELLEAIR BEACH, FLORIDA 33786
PHONE: 727-595-4646

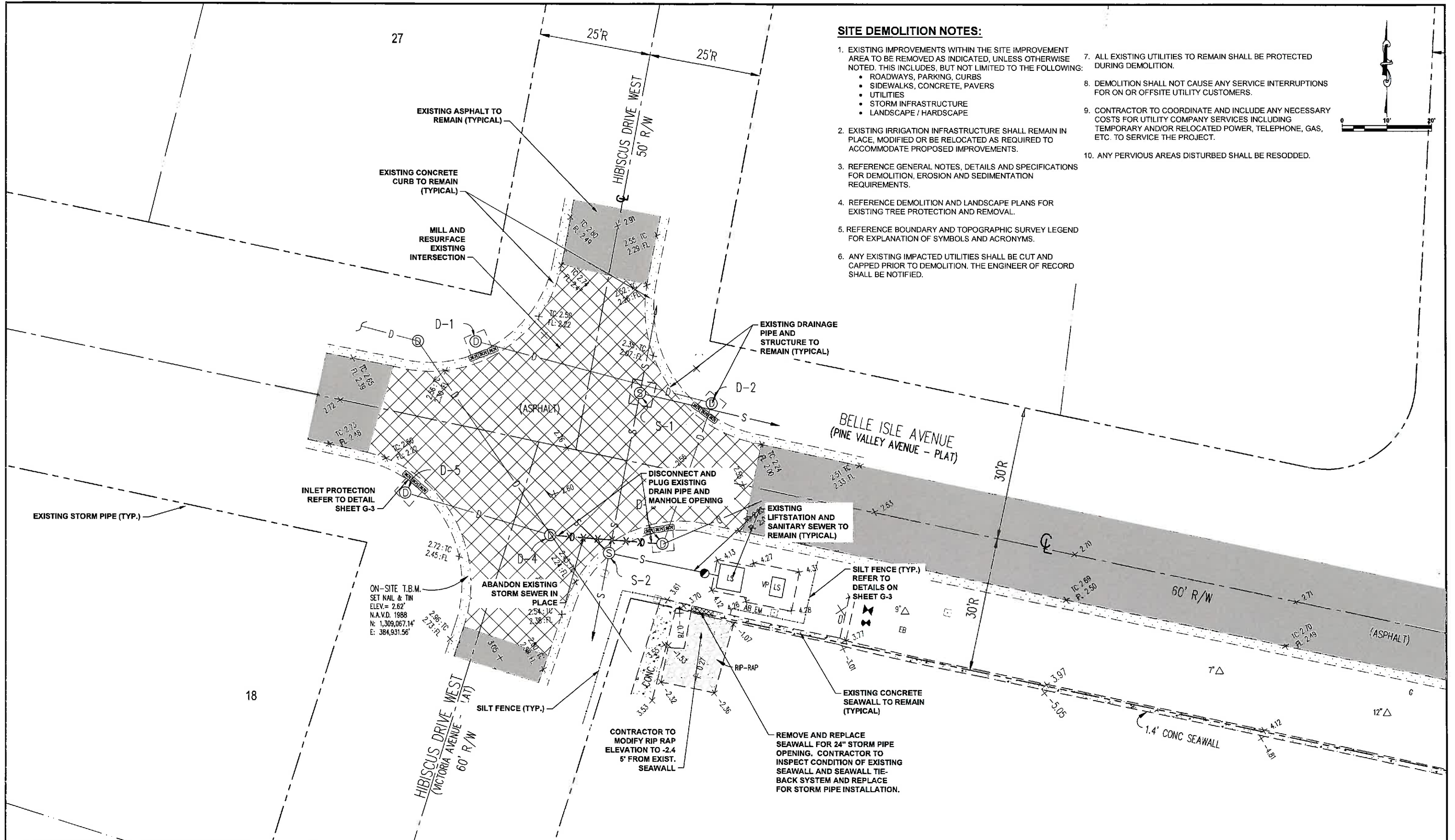
LARRY L. FLUTY, PE DATE
PE# 38628

ENGINEERING SCIENCES GROUP
ESG 12331 STRINGER RD
BROOKSVILLE, FLORIDA 34601
PHONE 352-410-1498

BELLE ISLE AVE.
DRAINAGE
IMPROVEMENTS

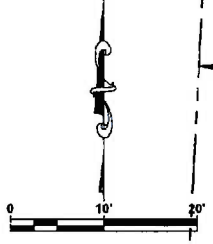
DETAILS AND STORMWATER
PIPE PROFILE

PROJECT NO: 002018002.00
DATE: MARCH 2018
SHEET NO: G-3



SITE DEMOLITION NOTES:

1. EXISTING IMPROVEMENTS WITHIN THE SITE IMPROVEMENT AREA TO BE REMOVED AS INDICATED, UNLESS OTHERWISE NOTED. THIS INCLUDES, BUT NOT LIMITED TO THE FOLLOWING:
 - ROADWAYS, PARKING, CURBS
 - SIDEWALKS, CONCRETE, PAVERS
 - UTILITIES
 - STORM INFRASTRUCTURE
 - LANDSCAPE / HARDSCAPE
2. EXISTING IRRIGATION INFRASTRUCTURE SHALL REMAIN IN PLACE, MODIFIED OR BE RELOCATED AS REQUIRED TO ACCOMMODATE PROPOSED IMPROVEMENTS.
3. REFERENCE GENERAL NOTES, DETAILS AND SPECIFICATIONS FOR DEMOLITION, EROSION AND SEDIMENTATION REQUIREMENTS.
4. REFERENCE DEMOLITION AND LANDSCAPE PLANS FOR EXISTING TREE PROTECTION AND REMOVAL.
5. REFERENCE BOUNDARY AND TOPOGRAPHIC SURVEY LEGEND FOR EXPLANATION OF SYMBOLS AND ACRONYMS.
6. ANY EXISTING IMPACTED UTILITIES SHALL BE CUT AND CAPPED PRIOR TO DEMOLITION. THE ENGINEER OF RECORD SHALL BE NOTIFIED.
7. ALL EXISTING UTILITIES TO REMAIN SHALL BE PROTECTED DURING DEMOLITION.
8. DEMOLITION SHALL NOT CAUSE ANY SERVICE INTERRUPTIONS FOR ON OR OFFSITE UTILITY CUSTOMERS.
9. CONTRACTOR TO COORDINATE AND INCLUDE ANY NECESSARY COSTS FOR UTILITY COMPANY SERVICES INCLUDING TEMPORARY AND/OR RELOCATED POWER, TELEPHONE, GAS, ETC. TO SERVICE THE PROJECT.
10. ANY PERVIOUS AREAS DISTURBED SHALL BE RESODDED.



NO.	DESCRIPTION	BY	DATE

CITY OF BELLEAIR BEACH
 444 CAUSEWAY BOULEVARD
 BELLEAIR BEACH, FLORIDA 33786
 PHONE: 727-595-4646

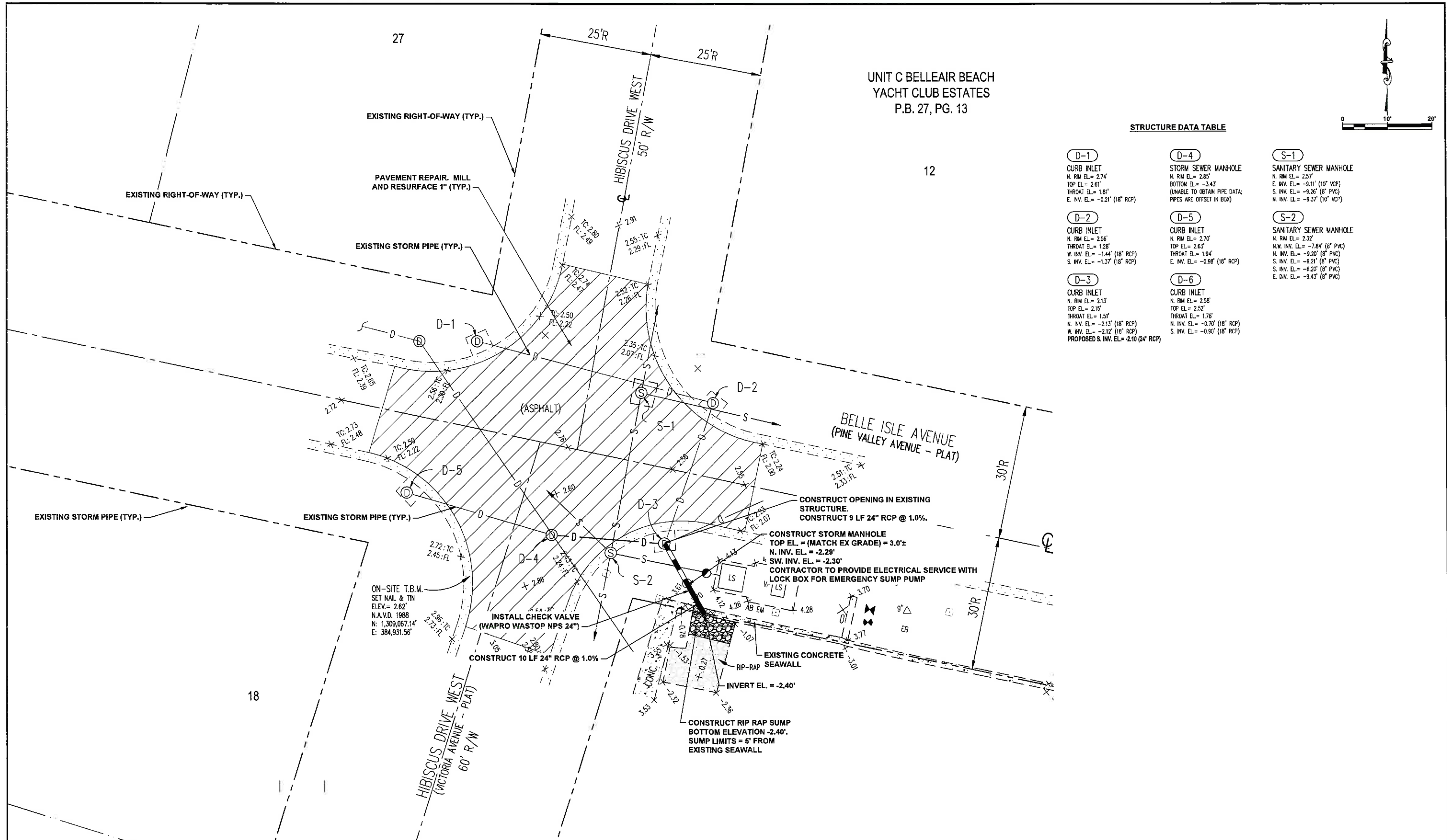
LARRY L FLUTY, PE DATE
 PE# 38628

ENGINEERING SCIENCES GROUP
 12331 STRINGER RD
 BROOKSVILLE, FLORIDA 34601
 PHONE 352-410-1498

**BELLE ISLE AVE.
 DRAINAGE
 IMPROVEMENTS**

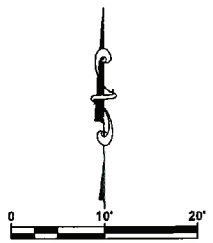
DEMO PLAN

PROJECT NO:
002018002.00
 DATE:
MARCH 2018
 SHEET NO:
C-1



STRUCTURE DATA TABLE

<p>D-1 CURB INLET N. RIM EL. = 2.74' TOP EL. = 2.61' THROAT EL. = 1.81' E. INV. EL. = -0.21' (18" RCP)</p>	<p>D-4 STORM SEWER MANHOLE N. RIM EL. = 2.85' BOTTOM EL. = -3.43' (UNABLE TO OBTAIN PIPE DATA; PIPES ARE OFFSET IN BOX)</p>	<p>S-1 SANITARY SEWER MANHOLE N. RIM EL. = 2.57' E. INV. EL. = -5.11' (10" VCP) S. INV. EL. = -9.26' (8" PVC) N. INV. EL. = -9.37' (10" VCP)</p>
<p>D-2 CURB INLET N. RIM EL. = 2.56' THROAT EL. = 1.28' W. INV. EL. = -1.44' (18" RCP) S. INV. EL. = -1.37' (18" RCP)</p>	<p>D-5 CURB INLET N. RIM EL. = 2.70' TOP EL. = 2.63' THROAT EL. = 1.94' E. INV. EL. = -0.96' (18" RCP)</p>	<p>S-2 SANITARY SEWER MANHOLE N. RIM EL. = 2.32' N.W. INV. EL. = -7.84' (8" PVC) N. INV. EL. = -9.20' (8" PVC) S. INV. EL. = -9.21' (8" PVC) S. INV. EL. = -6.20' (8" PVC) E. INV. EL. = -9.43' (8" PVC)</p>
<p>D-3 CURB INLET N. RIM EL. = 2.13' TOP EL. = 2.15' THROAT EL. = 1.51' N. INV. EL. = -2.13' (18" RCP) W. INV. EL. = -2.12' (18" RCP) PROPOSED S. INV. EL. = -2.10' (24" RCP)</p>	<p>D-6 CURB INLET N. RIM EL. = 2.58' TOP EL. = 2.52' THROAT EL. = 1.78' N. INV. EL. = -0.70' (18" RCP) S. INV. EL. = -0.90' (18" RCP)</p>	



<p>CITY OF BELLEAIR BEACH 444 CAUSEWAY BOULEVARD BELLEAIR BEACH, FLORIDA 33786 PHONE: 727-595-4646</p>		<p>ENGINEERING SCIENCES GROUP 12331 STRINGER RD BROOKSVILLE, FLORIDA 34601 PHONE 352-410-1498</p>		<p>BELLE ISLE AVE. DRAINAGE IMPROVEMENTS</p>		<p>DRAINAGE PLAN</p>		<p>PROJECT NO: 002018002.00 DATE: MARCH 2018 SHEET NO: C-2</p>	
NO.	DESCRIPTION	BY	DATE	LARRY L. FLUTY, PE	DATE				
				PE# 38628					