

CONSTRUCTION PLANS FOR

DATE	ISSUE	BY
***	///	---



CITY OF FRUITLAND PARK WEST MIRROR LAKE ROAD BAFFLE BOX

SECTION 9, TOWNSHIP 19 S , RANGE 24 E

CHRIS CHESHIRE
MAYOR
SEAT 5, DISTRICT 3

JOHN MOBILIAN
CITY COMMISSIONER-
SEAT 1, DISTRICT 2

CHRIS BELL
CITY COMMISSIONER
SEAT 3, DISTRICT 5

GARY LA VENIA
CITY MANAGER

ROBB DICUS
PUBLIC WORKS
DIRECTOR

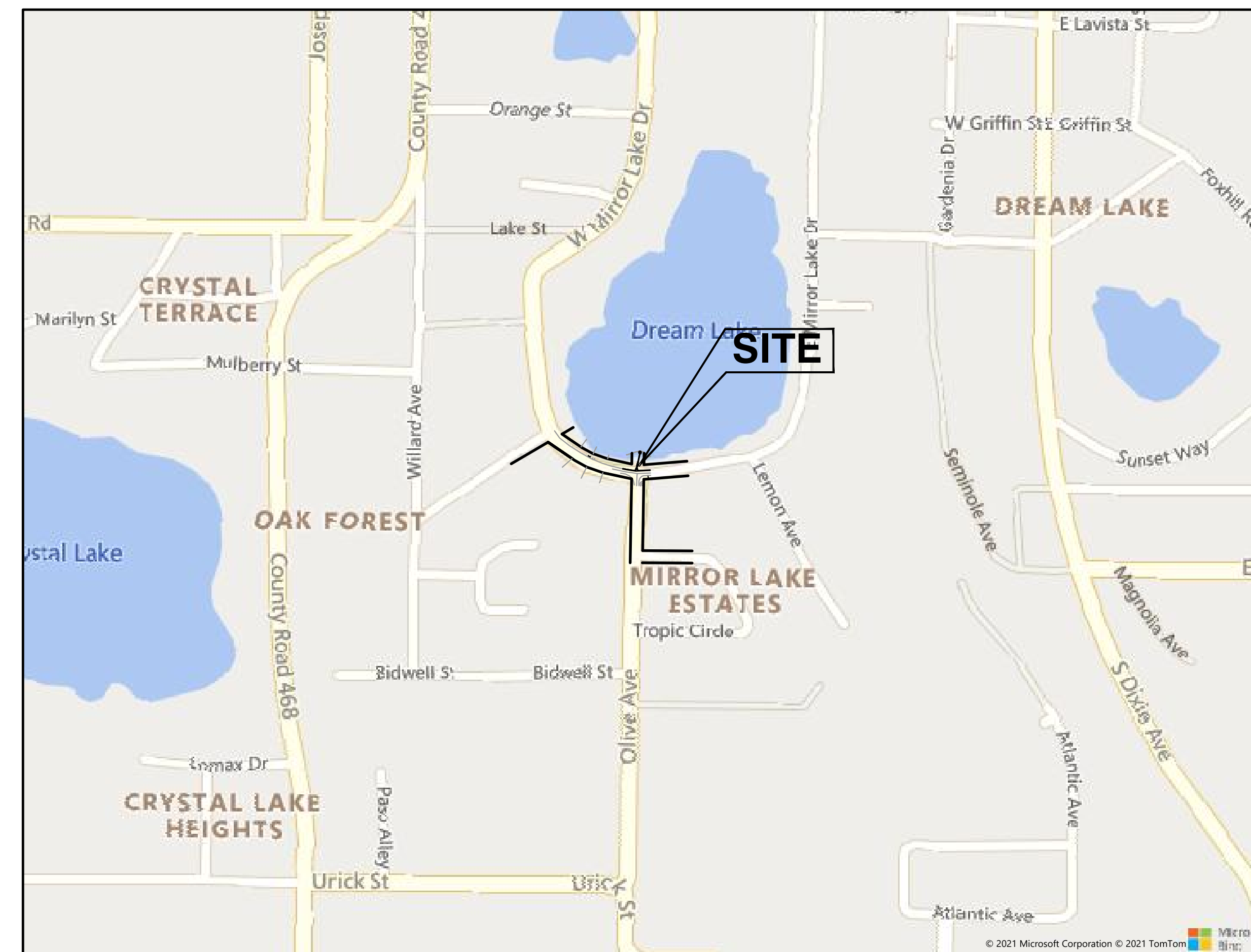
OWNER/DEVELOPER:
CITY OF FRUITLAND PARK, FLORIDA
506 W. BERKMAN ST.
FRUITLAND PARK, FL. 34731
GARY LA VENIA, CITY MANAGER
(352) 360-6727

ENGINEER/SURVEYOR:
HALFF, INC.
902 SINCLAIR AVENUE
TAVARES, FL. 32778
BRETT J TOBIAS, TEAM LEADER
(352) 343-8481

JOHN L. GUNTER
VICE MAYOR
SEAT 2, DISTRICT 4

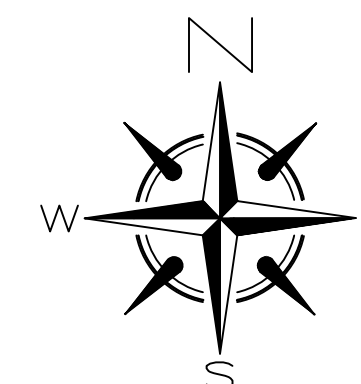
PATRICK DEGRAVE
CITY COMMISSIONER
SEAT 4, DISTRICT 1

ANITA GERACI-CARVER
CITY ATTORNEY
SERVICES DIRECTOR



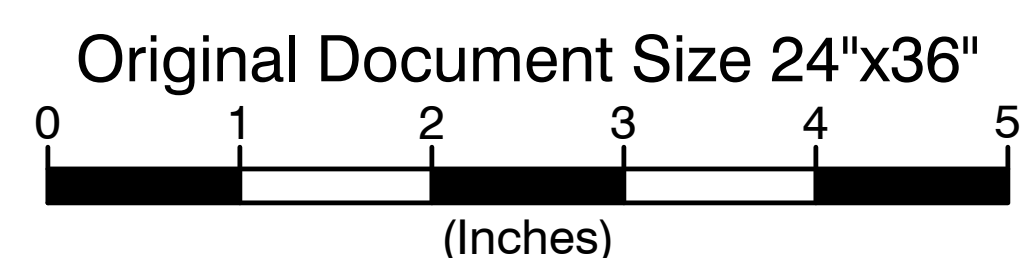
VICINITY MAP

SCALE
1" = 400'



INDEX OF SHEETS

- 1 COVER SHEET
- 2 AERIAL VIEW
- 3 DEMOLITION / EROSION CONTROL PLAN
- 4 SITE / GRADING PLAN
- 5 BAFFLE BOX DETAIL





DATE	REVISION
***	1
	2
	3
	4
	5
	6
	7
	8

Fruitland Park, Florida
W. MIRROR LAKE ROAD
 STORMWATER IMPROVEMENTS
AERIAL
VIEW

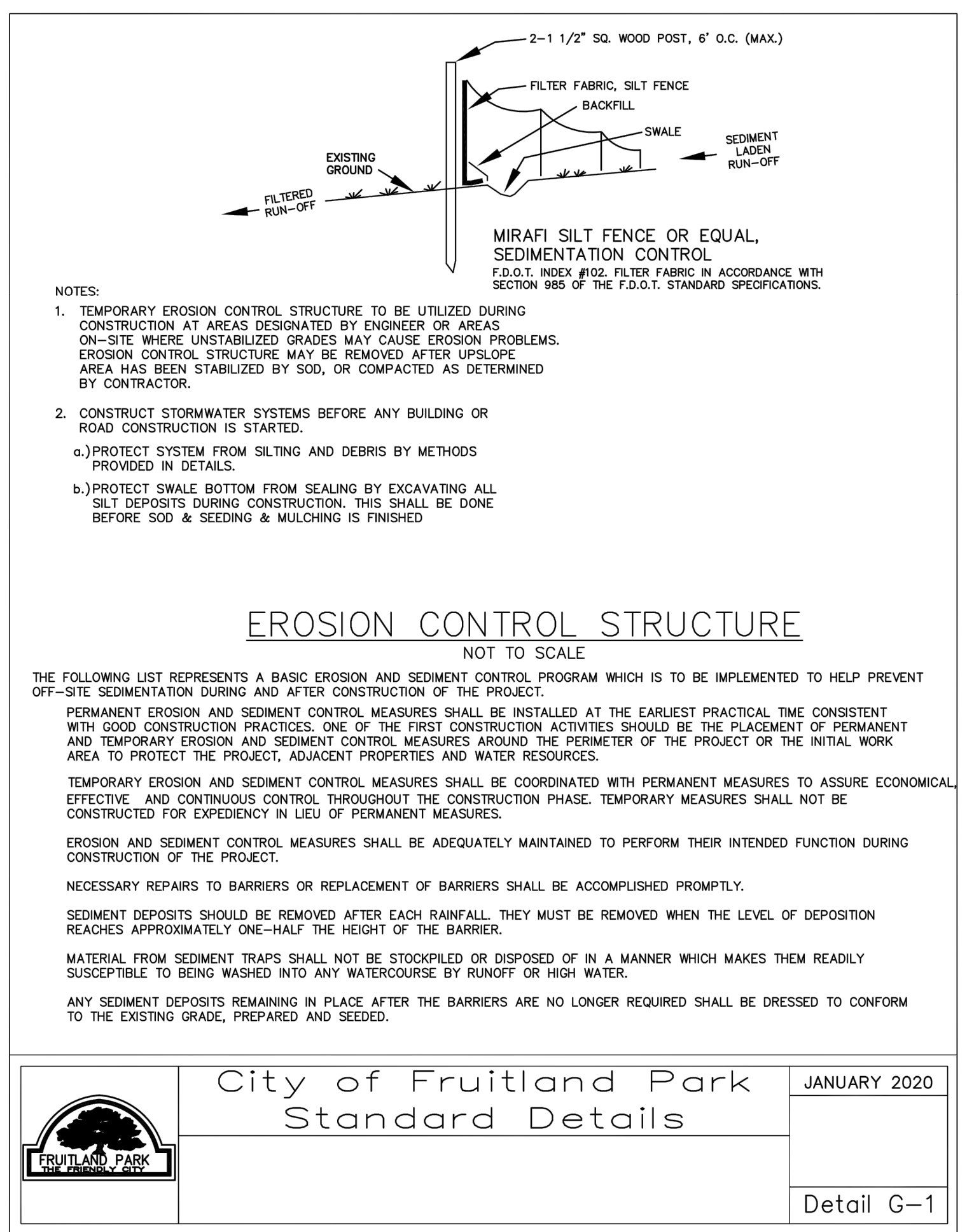
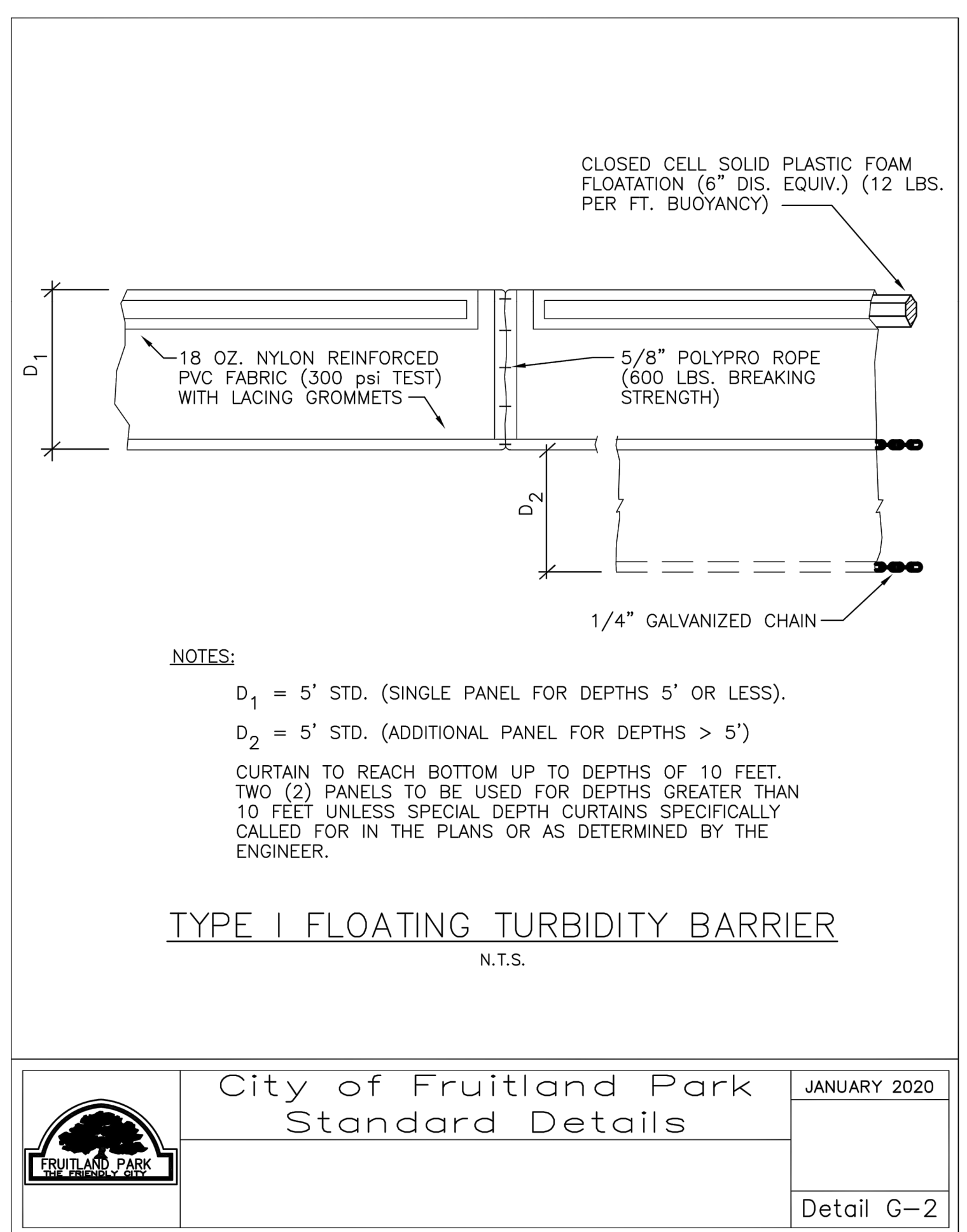
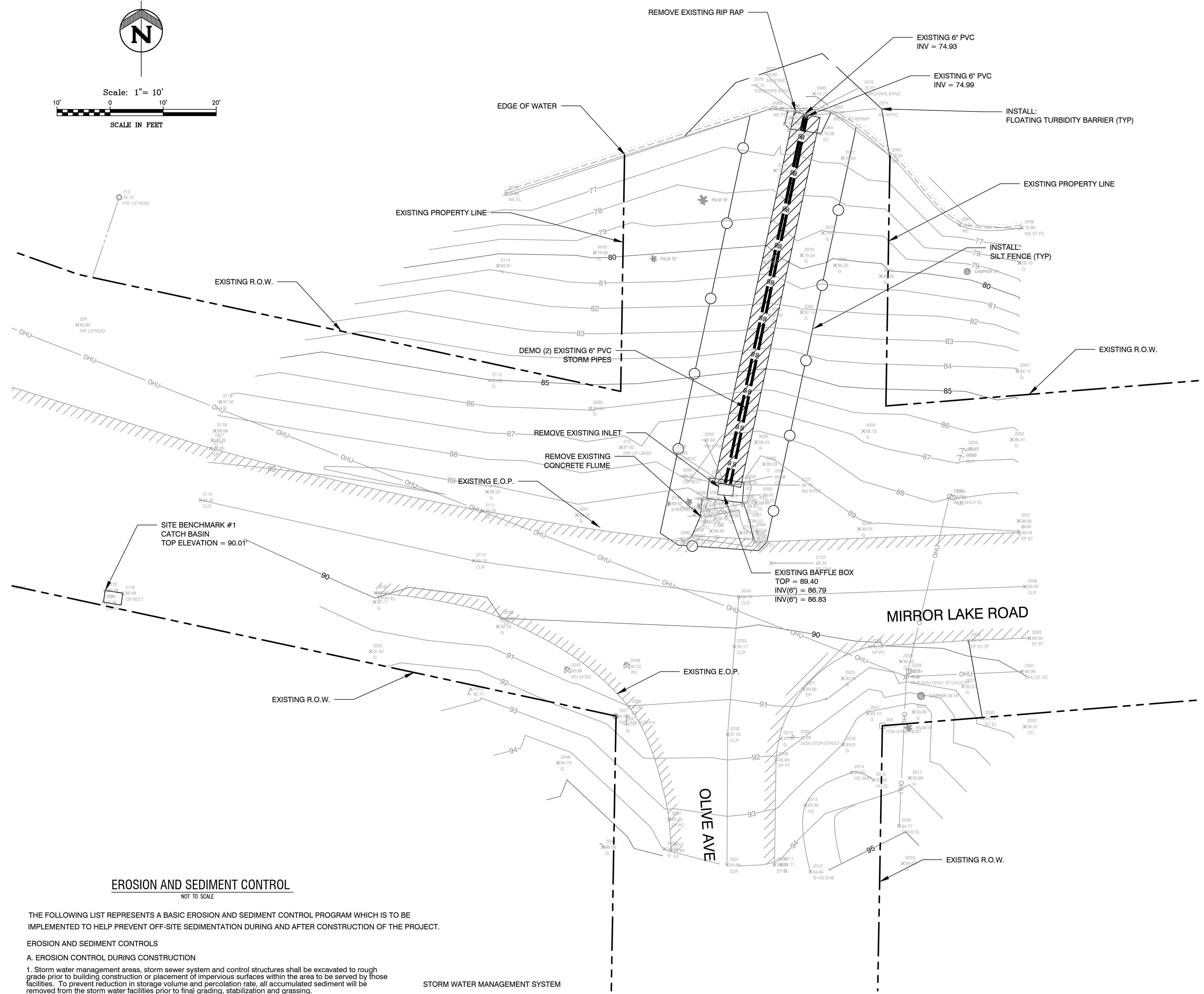
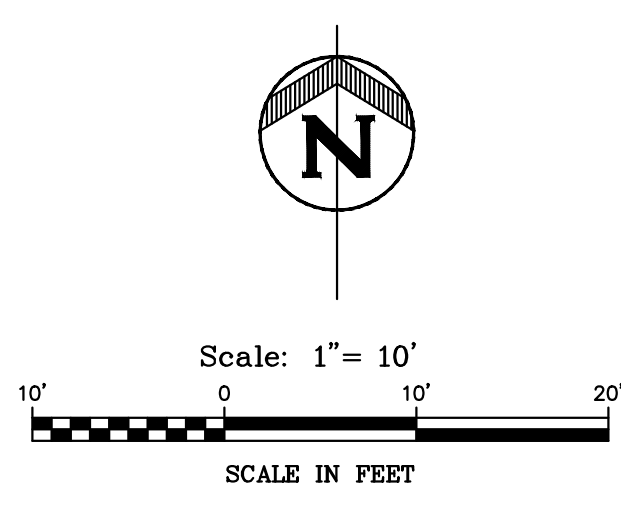


HALFF
 802 North Sinclair Ave
 Tallahassee, Florida 32378
 Office: 352.343.8881
 Fax: 352.343.8895
 Certificate of Authorization Number: 33380

DATE:	JUNE 2021
DESIGNED BY:	BJT
DRAWN BY:	RON
CHECKED BY:	BJT
JOB NO.:	43866.075
FILE NAME:	

Sheet 2

BRETT J. TOBIAS, PE
 Registered Eng 69017



EROSION AND SEDIMENT CONTROL
NOT TO SCALE

THE FOLLOWING LIST REPRESENTS A BASIC EROSION AND SEDIMENT CONTROL PROGRAM WHICH IS TO BE IMPLEMENTED TO HELP PREVENT OFF-SITE SEDIMENTATION DURING AND AFTER CONSTRUCTION OF THE PROJECT.

EROSION AND SEDIMENT CONTROLS

A. EROSION CONTROL DURING CONSTRUCTION

- Storm water management areas, storm sewer system and control structures shall be excavated to rough grade prior to building construction or placement of impervious surfaces within the area to be served by those facilities. To prevent reduction in storage volume and percolation rate, all accumulated sediment will be removed from the storm water facilities prior to final grading, stabilization and grassing.
- Erosion control structures, such as silt fence and berms, shall be installed around inlets and in swales to trap eroded material, prevent sedimentation in down stream areas and keep runoff velocities low.
- The contractor shall minimize the extent of area exposed at any one time and the duration of exposure.
- Stabilization measures shall be initiated for erosion and sediment control on disturbed areas no more than fourteen (14) days after the construction activity in any portion of the site that has ceased.
- The contractor will install a permanent protective vegetative cover for erosion and sediment control on all land surfaces disturbed by construction. This protective cover must be installed within fourteen (14) days after final grading of the effected land surfaces. A permanent vegetative cover must be established within sixty (60) days after planting or installation.
- To provide dust control, a contractor shall provide a water truck or irrigation system as needed, to maintain soil moisture.

B. PERMANENT STABILIZATION

Where construction is complete, permanent vegetation shall be installed as specified on the construction plans and in accordance with the construction specification documents. Permanent vegetation will include sod or seed and mulch.

STORM WATER MANAGEMENT SYSTEM

The stormwater retention ponds shall be excavated to rough grade prior to building construction or placement of impervious surfaces within the drainage area served by this facility. All accumulated sediment must be removed from the retention pond prior to final grading, stabilizing and grassing.

OTHER CONTROLS

A. OFFSITE VEHICLE TRACKING

Paved streets adjacent to the construction site entrance will be swept as needed to prevent excess mud, dirt or rock from leaving the construction site. All dump trucks hauling material to and from the construction site will be covered with a tarp. Temporary stabilized or rock construction entrance may be required to remove excess dirt and mud from tires before construction vehicles enter adjacent paved streets.

TIMING OF SEDIMENT AND EROSION CONTROL MEASURES

A silt fence shall be installed prior to any construction activity. A retention ponds and the storm water conveyance system shall be constructed prior to the placement of any impervious area. Areas where construction activity temporarily ceases for more than 14-days shall be stabilized with temporary seed and mulch. Once construction activity ceases permanently in any area, that area will be stabilized with permanent seed and mulch or sod. After the entire site is stabilized, the accumulated sediment within any catch basin, storm pipes or retention ponds will be removed.

NOTE:
THE CONTRACTOR SHALL NOTIFY UTILITY OWNERS THROUGH SUNSHINE STATE ONE CALL OF FLORIDA, INC. @ 1-800-432-4770 TO CONFIRM UTILITY LOCATIONS, AS REQUIRED BY CHAPTER 556 OF THE FLORIDA STATUTES, TWO BUSINESS DAYS IN ADVANCE OF BEGINNING CONSTRUCTION ON THE JOB SITE

REVISION	1	2	3	4	5	6	7	8
DATE	***							

Fruitland Park, Florida
**W. MIRROR LAKE ROAD
STORMWATER IMPROVEMENTS**

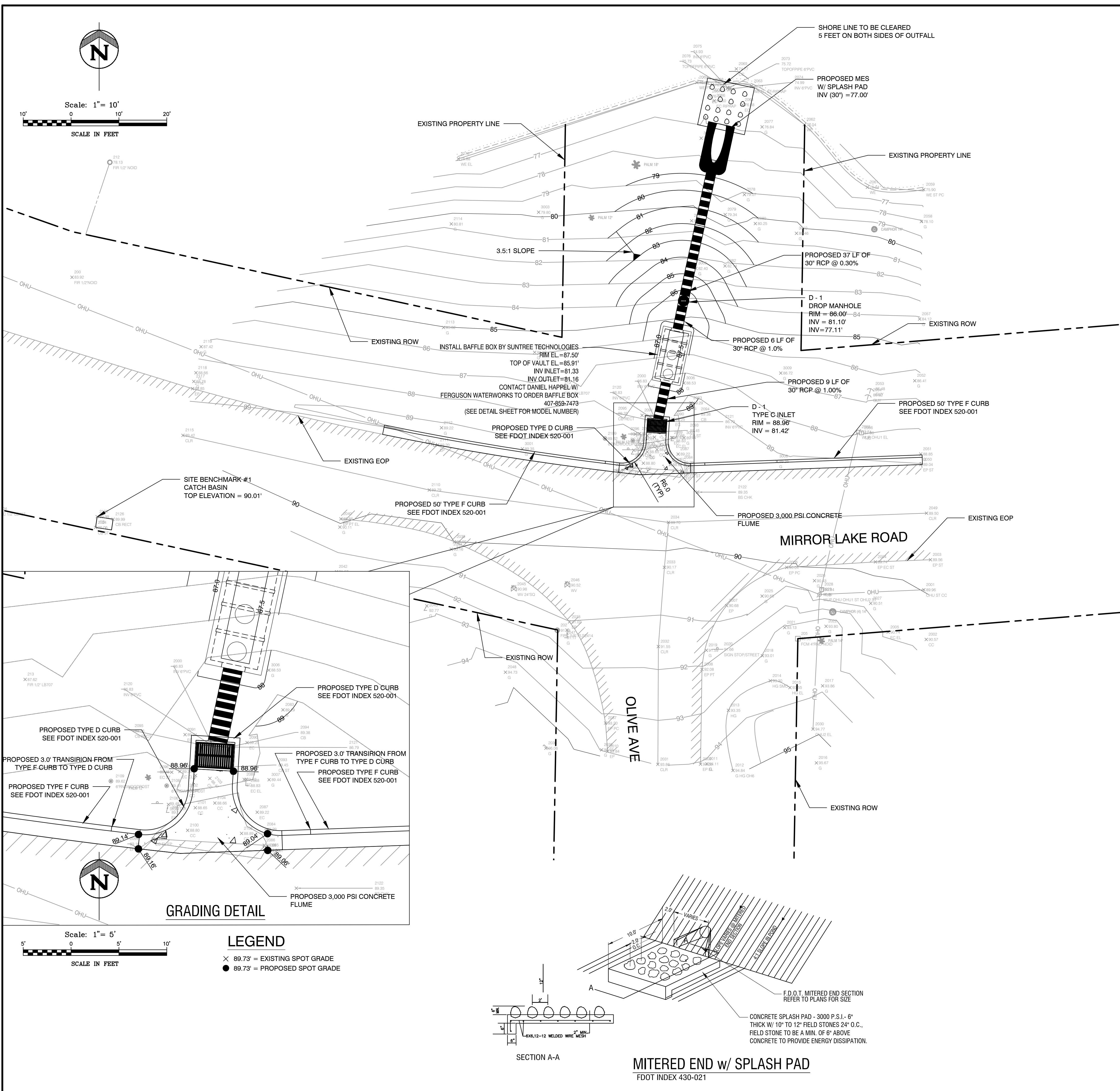
**DEMOLITION &
EROSION CONTROL**



HALFF
802 North Simeclair Ave
Tallahassee, Florida 32378
Office: 352.343.8881
Fax: 352.343.8895
Certificate of Authorization Number: 35380

DATE:	JUNE 2021
DESIGNED BY:	BJT
DRAWN BY:	RON
CHECKED BY:	BJT
JOB NO.:	43866.075
FILE NAME:	
Sheet 3	

BRETT J. TOBIAS, PE
Registered Eng 69017



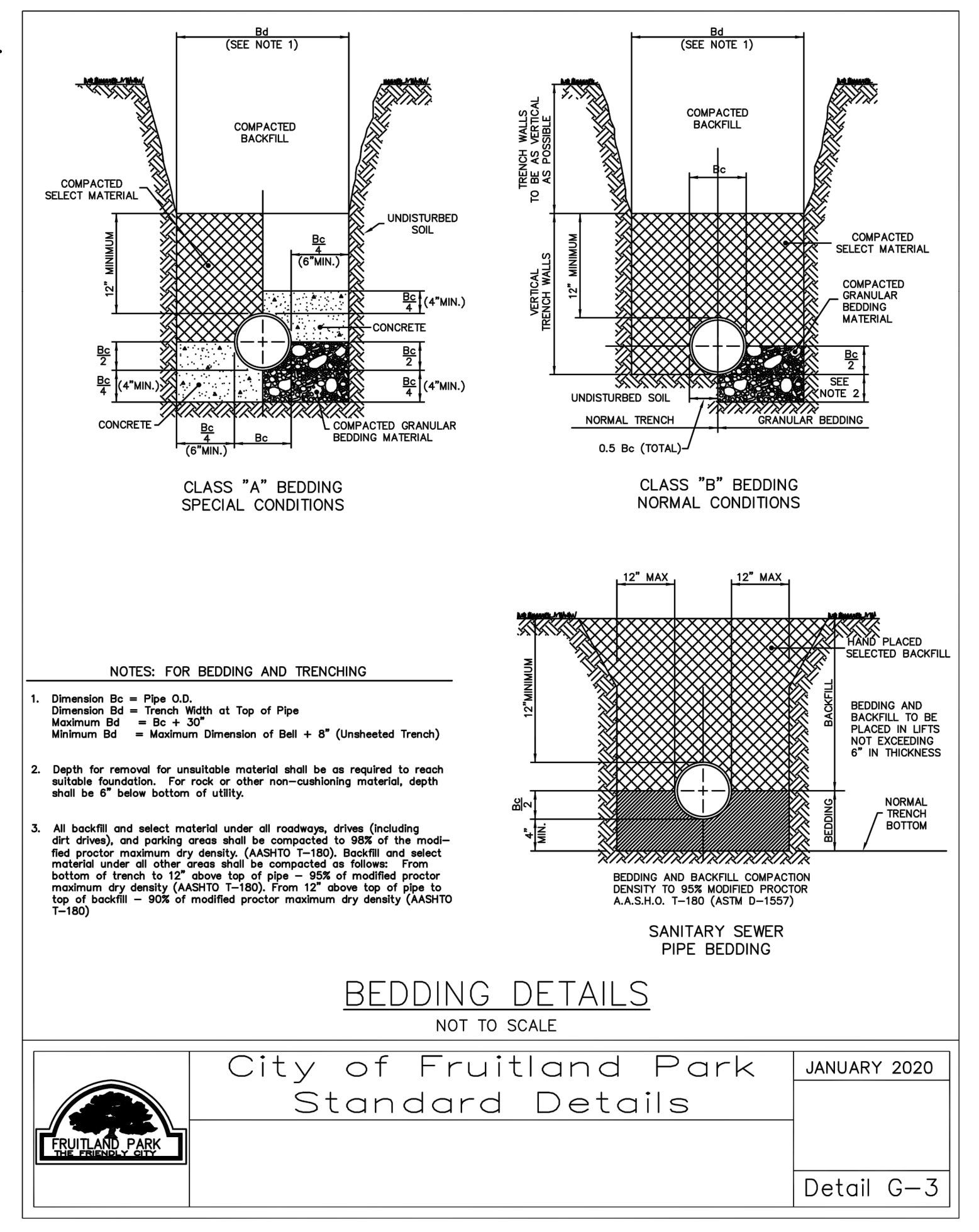
GENERAL NOTES

- ALL CONSTRUCTION SHALL CONFORM TO FDOT AND THE CITY OF FRUITLAND PARK STANDARDS.
- THE CONTRACTOR PRIOR TO EXCAVATING IN THE VICINITY OF A GAS PIPELINE SHALL NOTIFY THE GAS UTILITY OWNER IN ACCORDANCE WITH THE REQUIREMENTS OF FLORIDA STATUTES, PROTECTION OF UNDERGROUND PIPELINES, F.S. 563.851, CH. 77-143.
- THE CONTRACTOR SHALL INSURE ALL NECESSARY PERMITS ARE IN HAND BEFORE COMMENCEMENT OF CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR SATISFYING ALL REQUIREMENTS OF REGULATORY AGENCY PERMITS WITH REGARDS TO CONSTRUCTION ACTIVITIES AND CONDITIONS STATED THEREIN. ALL WORK WITHIN THE CITY OF FRUITLAND PARK & F.D.O.T. RIGHT-OF-WAYS SHALL CONFORM WITH ALL REQUIREMENTS AND SPECIAL CONDITIONS OF THE APPROVED CITY OF FRUITLAND PARK AND F.D.O.T. UTILITY PERMITS.
- APPARENT ERRORS, DISCREPANCIES OR OMISSIONS SHALL BE BROUGHT TO THE ENGINEER OF RECORD'S ATTENTION WITHIN A REASONABLE TIME FRAME, LESS THAN 48 HOURS AFTER DISCOVERED. ADVANTAGE WILL NOT BE TAKEN OF APPARENT ERROR OR OMISSION IN THE DRAWINGS OR SPECIFICATIONS, AND THE ENGINEER SHALL BE PERMITTED TO MAKE CORRECTIONS AND INTERPRETATIONS AS MAY BE DEEMED NECESSARY FOR FULLFILLMENT OF THE INTENT OF THE DESIGN.
- THE CONTRACTOR SHALL REPLACE ALL PAVING, SODDING, STABILIZED EARTH, LANDSCAPING, DRIVEWAYS, SIDEWALKS, IRRIGATION SYSTEMS, UNDERGROUND PIPING, ETC., DISTURBED OR DAMAGED BY THE CONSTRUCTION. THE CONTRACTOR SHALL REPLACE WITH EQUAL MATERIAL OR AS DIRECTED BY THE ENGINEER.
- ALL EXISTING PROPERTY, FENCING, DRIVEWAYS, PIPING, SIDEWALKS, SIGNS AND OTHER ITEMS SHALL BE RESTORED TO ORIGINAL LINE AND GRADE UNLESS APPROVED BY THE ENGINEER. ACCESS TO ADJOINING PROPERTY ALONG THE PROPOSED ROUTE SHALL BE MAINTAINED AT ALL TIMES.
- WHEN CONSTRUCTION ACTIVITIES DISTURB AREAS WITHIN 10 FEET OF A TOP OF BANK FOR ANY WATERWAY OR WATER SURFACE, THE CONTRACTOR SHALL PROVIDE CROSSING AND SEDIMENTATION CONTROL MEASURES AS DETAILED, SPECIFIED OR AS REQUIRED BY THE JURISDICTIONAL REGULATORY AGENCIES; WHICHEVER REQUIREMENT IS MORE STRINGENT.
- THE SHOWN LOCATIONS OF UTILITIES ARE APPROXIMATE AND NOT FULLY INCLUSIVE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO EXACTLY LOCATE ALL RIGHTS-OF-WAY AND UTILITY LINES IN THE CONSTRUCTION AREA PRIOR TO EXCAVATION. ANY DAMAGE TO ANY EXISTING UTILITY, STRUCTURE OR SERVICE SHALL BE REPAIRED, AT THE CONTRACTOR'S EXPENSE, IN A MANNER APPROVED BY THE RESPECTIVE UTILITY OWNER.
- TRAFFIC SHALL BE MAINTAINED AT ALL TIMES AS PER FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, ROADWAY AND TRAFFIC DESIGN STANDARDS AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITIONS.
- REMOVAL OF TREES GREATER THEN 4-INCH BASAL DIAMETER SHALL BE ONLY AS DIRECTED BY THE OWNER/ENGINEER. CONTRACTOR SHALL LIMIT TO A MINIMUM THE AMOUNT OF TREE REMOVAL, CLEARING AND GRUBBING REQUIRED BY TRIMMING TREES WHEREVER POSSIBLE.
- CONTRACTOR SHALL NOTIFY AND COORDINATE WITH AFFECTED PROPERTY OWNERS AND OWNER/ENGINEER ONE WEEK IN ADVANCE OF TREE CLEARING AND GRUBBING. ALL DEBRIS FROM TREE CLEARING AND GRUBBING SHALL BE REMOVED, AT THE CONTRACTOR'S EXPENSE.
- ALL ELEVATIONS SHOWN ON THESE DRAWINGS REFER TO NATIONAL GEODETIC VERTICAL DATUM (NGVD); 88 DATUM.

DATE	REVISION
***	///
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

Fruitland Park, Florida
W. MIRROR LAKE ROAD
STORMWATER IMPROVEMENTS

SITE & GRADING PLAN



HALFF

Office: 352.343.8881
 Fax: 352.343.8495

902 North Siskiwit Ave
 Tallahassee, Florida 32378
 Certificate of Authorization Number: 35360

DATE:	JUNE 2021
DESIGNED BY:	BJT
DRAWN BY:	RON
CHECKED BY:	BJT
JOB NO.:	43866.075
FILE NAME:	

Sheet 4

BRETT J. TOBIAS, PE
 Registered Eng 69017

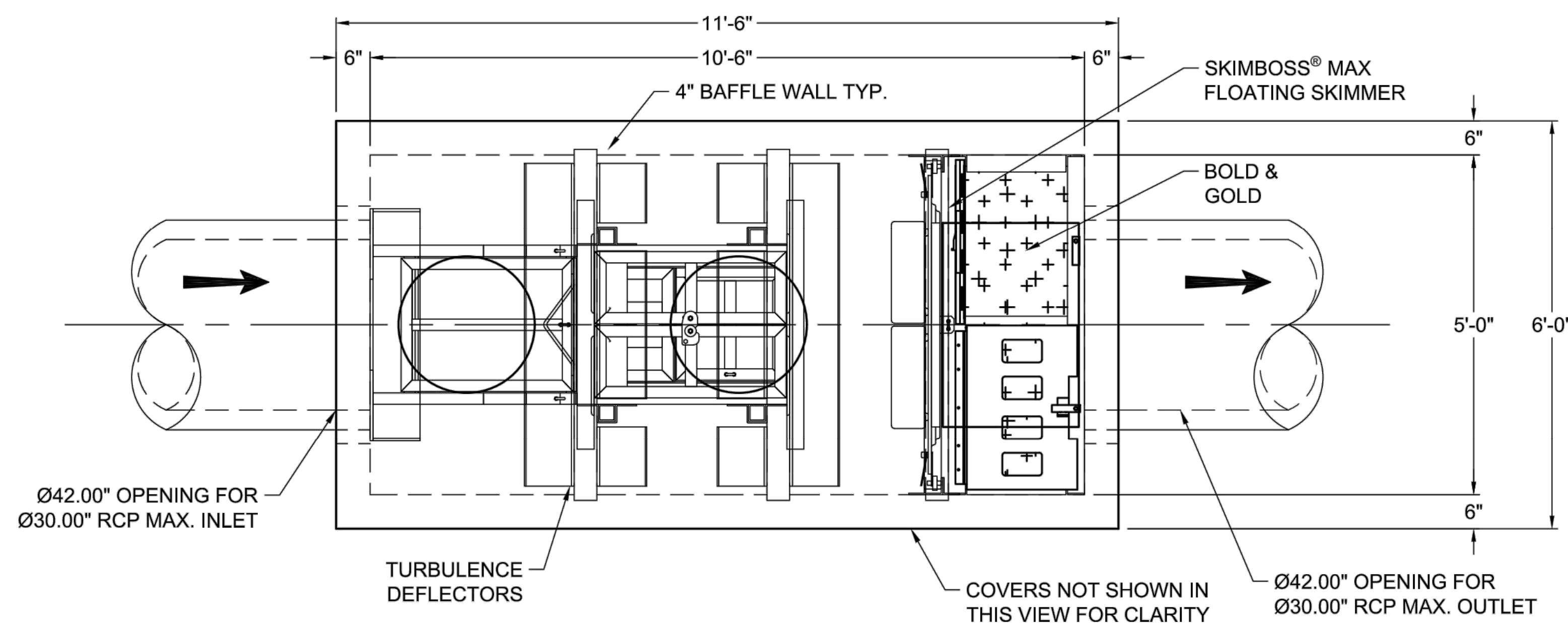
City of Fruitland Park
 Standard Details

JANUARY 2020

Detail G-3

SITE SPECIFIC DATA			
Structure ID		ID	
Water Quality Flow Rate (cfs)		STANDARD	
Peak Flow Rate (cfs)		23.25	
Rim Elevation		87.50'	
Top of Vault Elevation		85.91"	
Pipe Data	Pipe Size	Pipe Type	Invert Elevation
Inlet	30"	RCP	81.33' **
Outlet	30"	RCP	81.33' **
Notes:			
PERFORMANCE SPECIFICATIONS			
Screen System Storage Volume	25.66 cf		
Total Sump Volume	190.55 cf		
Treatment Flow Capacity	1 gal/min/sf		
*Contact Oldcastle for alternative treatment flow capacities.			

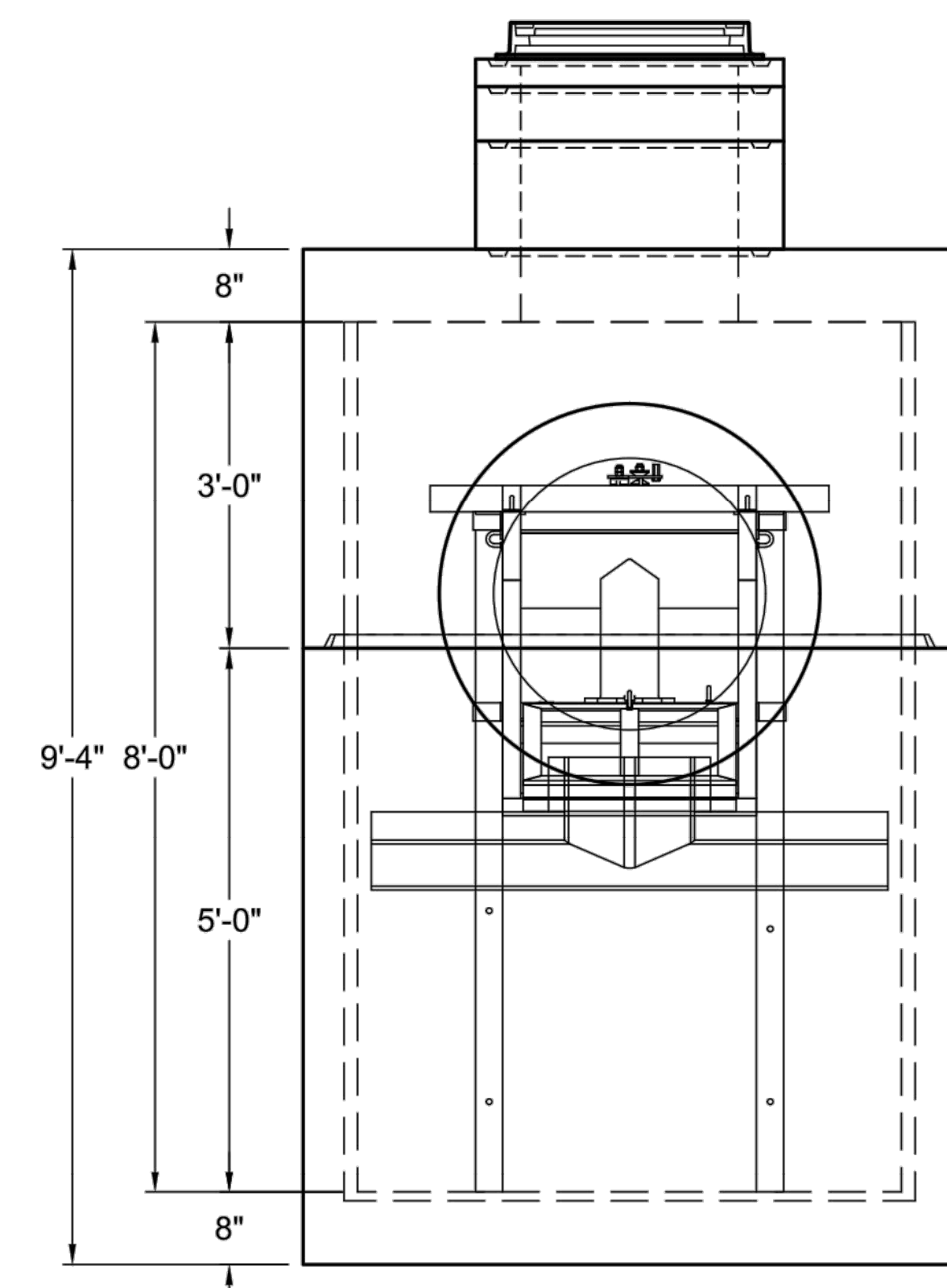
** = INVERTS TO BE VERIFIED WITH DANIEL HAPPEL W/ FERGUSON WATERWORKS - 407-859-7473



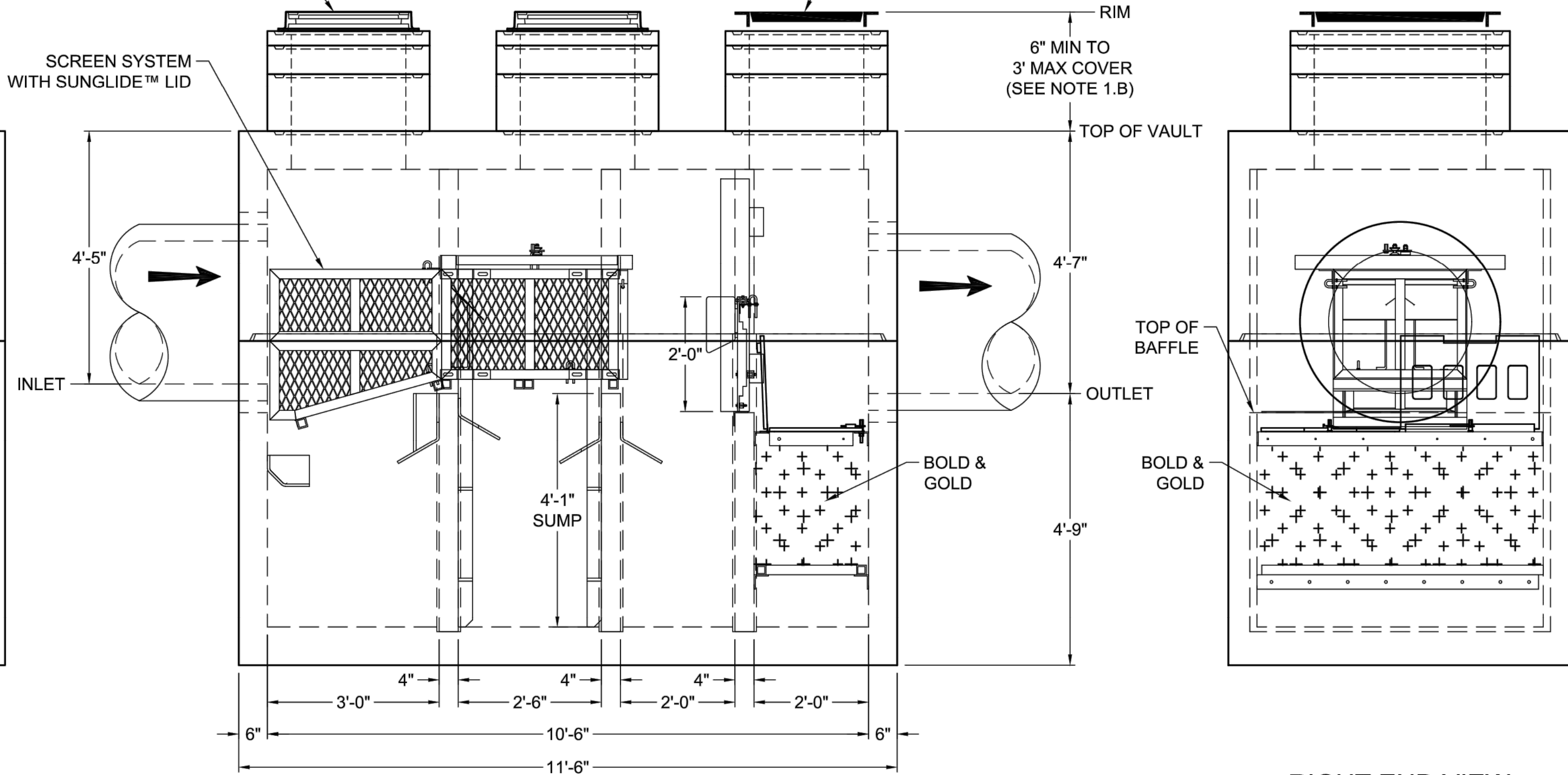
PLAN VIEW

2X Ø24" ACCESS COVERS. FIELD POURED CONCRETE COLLAR REQUIRED, BY OTHERS.

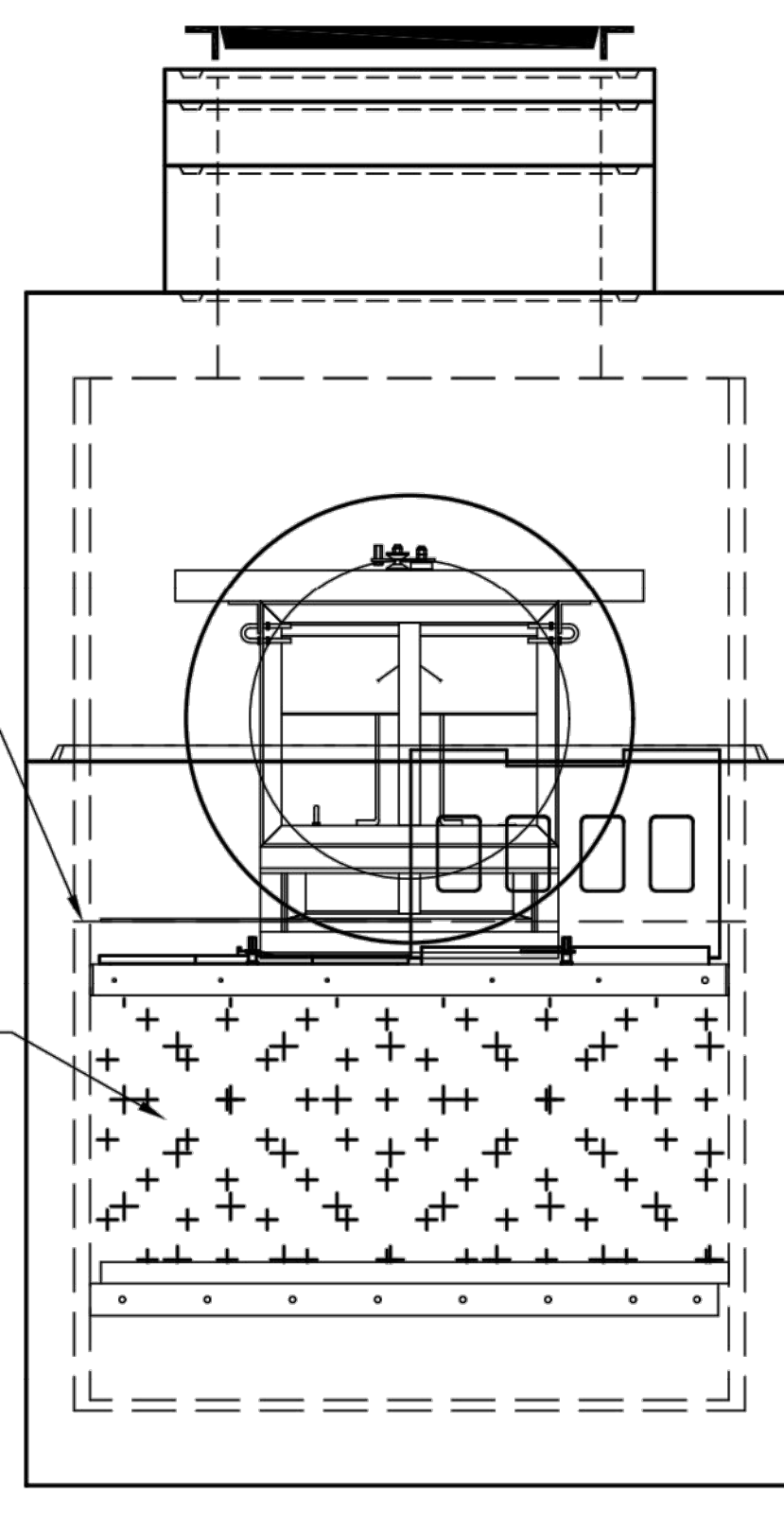
24"x36" ACCESS HATCH. FIELD POURED CONCRETE COLLAR REQUIRED, BY OTHERS.



LEFT END VIEW



ELEVATION VIEW



RIGHT END VIEW

NOTES:

- DESIGN LOADINGS:
 - AASHTO HS-20-44 W/ IMPACT.
 - DESIGN FILL: 3' MAXIMUM.
 - ASSUMED WATER TABLE: AT TOP OF STRUCTURE.
 - DRY LATERAL EARTH PRESSURE (EFP) = 45 PCF.
 - LATERAL LIVE LOAD SURCHARGE = 80 PSF (APPLIED TO 8' BELOW GRADE).
 - NO LATERAL SURCHARGE FROM ADJACENT BUILDINGS, WALLS, PIERS, OR FOUNDATIONS.
- CONCRETE 28 DAY COMPRESSIVE STRENGTH SHALL BE 5,000 PSI MINIMUM.
- STEEL REINFORCEMENT: REBAR, ASTM A-615 OR A-706, GRADE 60.
- CEMENT: ASTM C-150 SPECIFICATION.
- REQUIRED ALLOWABLE SOIL BEARING PRESSURE = 2,500 PSF. CONTRACTOR RESPONSIBLE TO ENSURE ADEQUATE BEARING SURFACE IS PROVIDED (I.E. COMPACTED AND LEVEL PER PROJECT SPECIFICATIONS).
- REFERENCE STANDARD:
 - ASTM C 890
 - ASTM C 913
 - ACI 318-14
- INTERNALS SHALL CONSIST OF A FLOATING SKIMMER, FLOW DEFLECTORS, ELEVATED CENTRAL SCREEN SYSTEM, SLIDING LIDS, BOLD AND GOLD MEDIA AND MEDIA FILTER CHAMBER. THESE COMPONENTS EFFECTIVELY REDUCE HEAD LOSS, INCREASE POLLUTANT REMOVAL AND SIMPLIFY MAINTENANCE.
- MAXIMUM PICK WEIGHT (COMBINED WEIGHT OF BASE, BAFFLE WALLS AND INTERNAL SCREEN SYSTEM) = XX.XXX LBS. SECTION HEIGHTS, SLAB/WALL THICKNESSES AND KEYWAYS ARE SUBJECT TO CHANGE DUE TO AVAILABILITY AND PRODUCTION PLANT CAPACITY..
- FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHTS, PLEASE CONTACT OLDCASTLE INFRASTRUCTURE.

- PRELIMINARY -
NOT FOR CONSTRUCTION



Ph: 800.579.8819 | www.oldcastleinfrastructure.com/stormwater
THIS DOCUMENT IS THE PROPERTY OF OLDCASTLE INFRASTRUCTURE, INC. IT IS CONFIDENTIAL, SUBMITTED FOR REFERENCE PURPOSES ONLY AND SHALL NOT BE USED IN ANY WAY INJURIOUS TO THE INTERESTS OF, OR WITHOUT THE WRITTEN PERMISSION OF OLDCASTLE INFRASTRUCTURE, INC. COPYRIGHT © 2021 OLDCASTLE INFRASTRUCTURE, INC. ALL RIGHTS RESERVED.

Nutrient Separating Baffle Box® NSBB+UFF-510.5				
CUSTOMER				
JOB NAME: Fruitland Park Mirror Lake Baffle Box - Intersection of Mirror Lake Drive and Olive Ave.				
DATE	MFG	DRAWN	ENGINEER	CHECKED
7/8/21	-	PPS	LDH	LDH
INTERNAL DRAWING ID		REVISION		SHEET
NSBB+UFF-510.5		REV DATE		1 OF 1

CONTACT DANIEL HAPPEL W/ FERGUSON WATERWORKS 407-859-7473

THIS PRODUCT IS PROTECTED BY ONE OR MORE OF THE FOLLOWING US PATENT(S): 6,428,692; 7,270,747; 7,981,283; 8,142,666; 8,366,923; 8,491,797; 7,846,327; 8,034,236; RELATED FOREIGN PATENTS, OR OTHER PATENTS PENDING.

REVISION
DATE

Fruitland Park, Florida
W. MIRROR LAKE ROAD
STORMWATER IMPROVEMENTS
BAFFLE BOX
DETAIL



HALFF
Office: 352.343.8881
Fax: 352.343.8895
902 North Sinclair Ave.
Tallahassee, Florida 32378
Certificate of Authorization Number: 35380

DATE:	JUNE 2021
DESIGNED BY:	BJT
DRAWN BY:	RON
CHECKED BY:	BJT
JOB NO.:	43866.075
FILE NAME:	Sheet 5

BRETT J. TOBIAS, PE
Registered Eng 69017