



MISC. SIDEWALK AND DRAINAGE PROJECTS (MC WA No. 024) - DRAINAGE GT BRAY PARK

FEBRUARY 2020

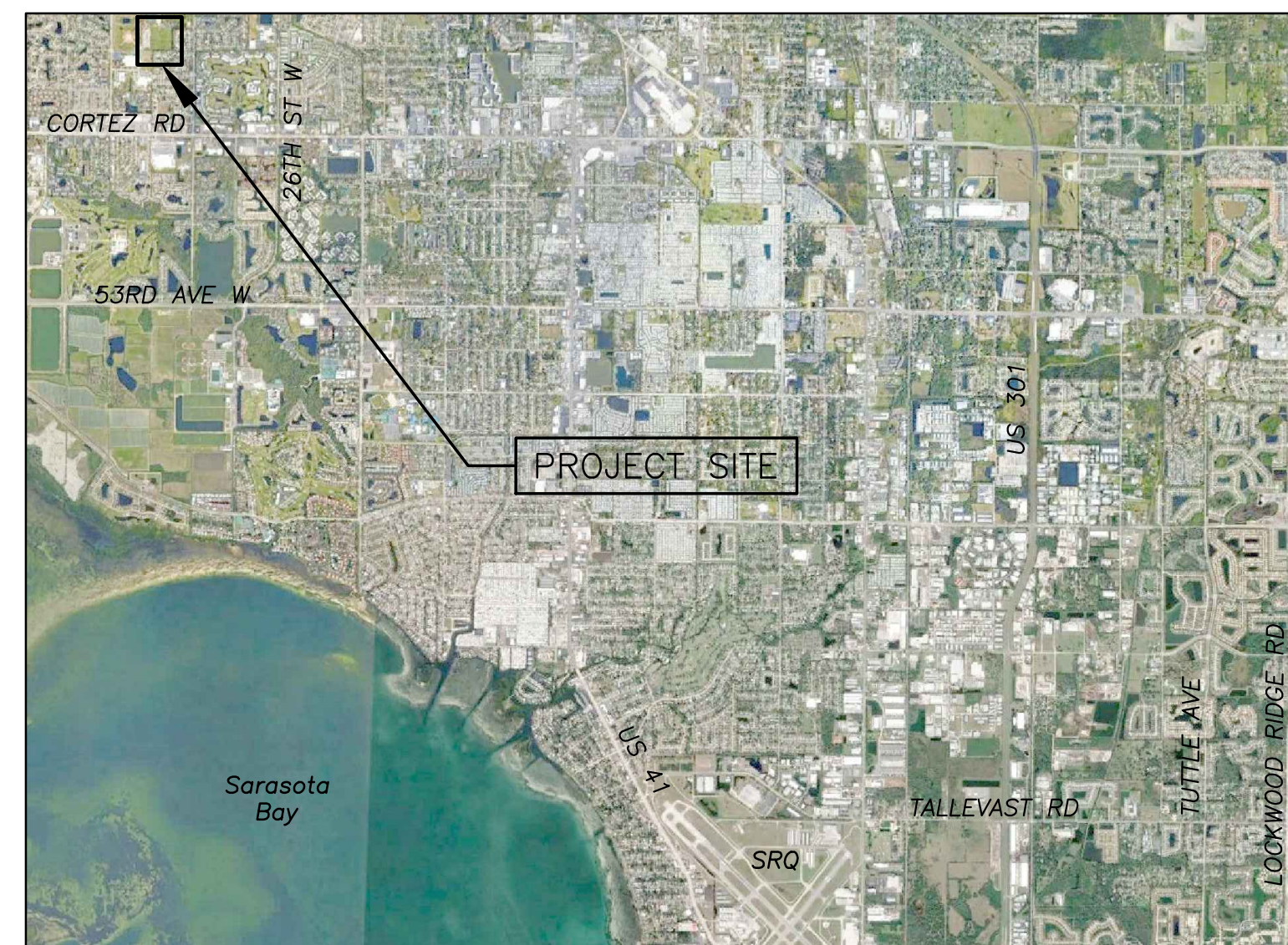


PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

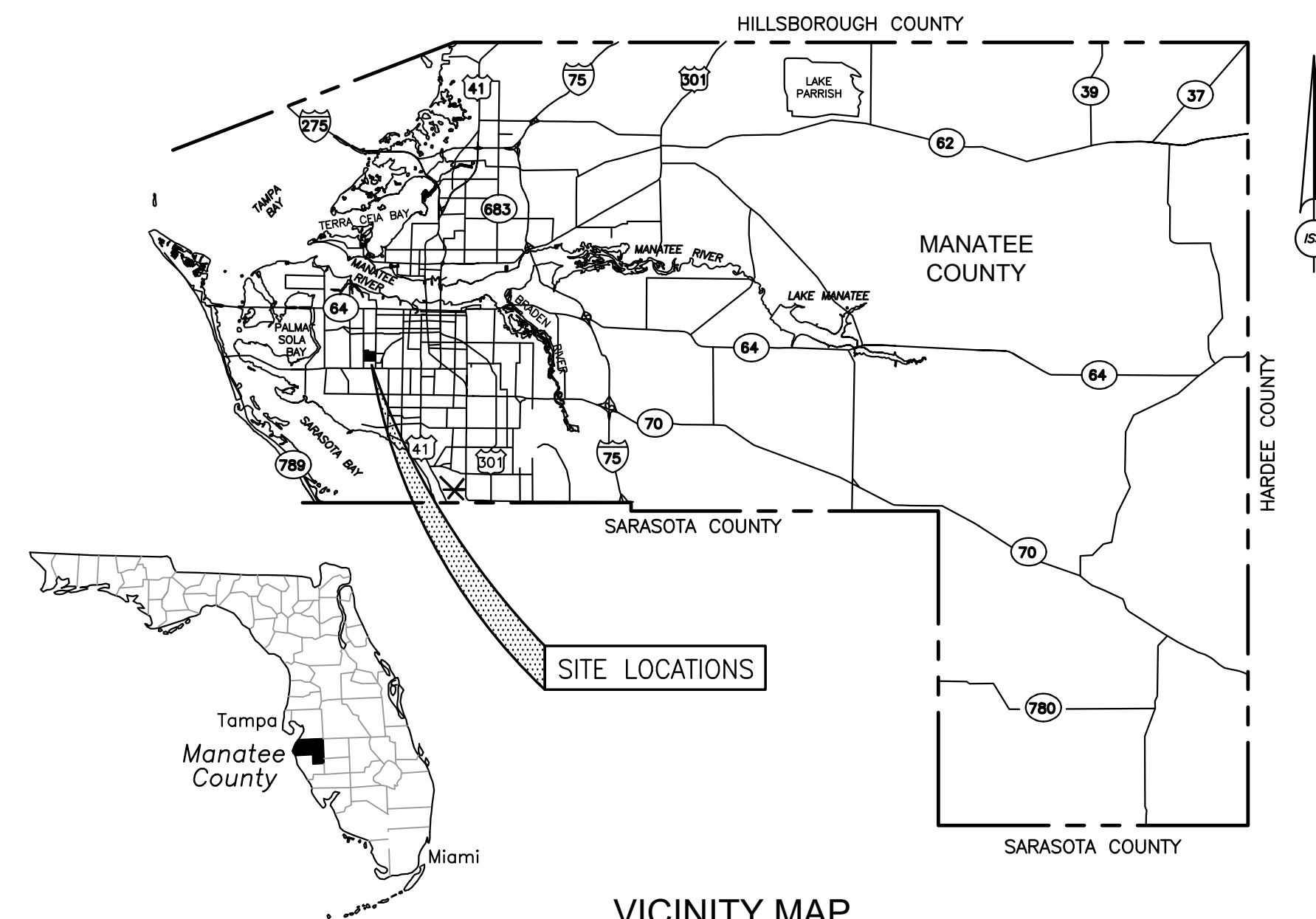
MISC. SIDEWALK AND DRAINAGE PROJECTS
(MC WA No. 024) - DRAINAGE
GT BRAY PARK
COVER SHEET

100% PLANS

Index of Drawings	
Sheet No.	Description
CS-001	COVER SHEET
CS-101	EXISTING CONDITIONS PLAN - GT BRAY PARK
CG-001	CONSTRUCTION NOTES
CG-101	DRAINAGE PLAN - GT BRAY PARK
CG-301	BEST MANAGEMENT PRACTICES PLAN
CG-302	BEST MANAGEMENT PRACTICES PLAN
CG-303	BEST MANAGEMENT PRACTICES DETAILS



LOCATION MAP
N.T.S.



VICINITY MAP
N.T.S.

PROJECT DESCRIPTION

THE PROJECT IS DESCRIBED AS THE WA #024 FOR MISCELLANEOUS SIDEWALK AND DRAINAGE PROJECTS TO ASSIST WITH THE SURVEY, DESIGN, PERMITTING, AND SUPPLEMENTAL SUPPORT FOR THE FOLLOWING ASSIGNMENT:

- DRAINAGE (6007506) LOCATION 4 - GT BRAY PARK

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



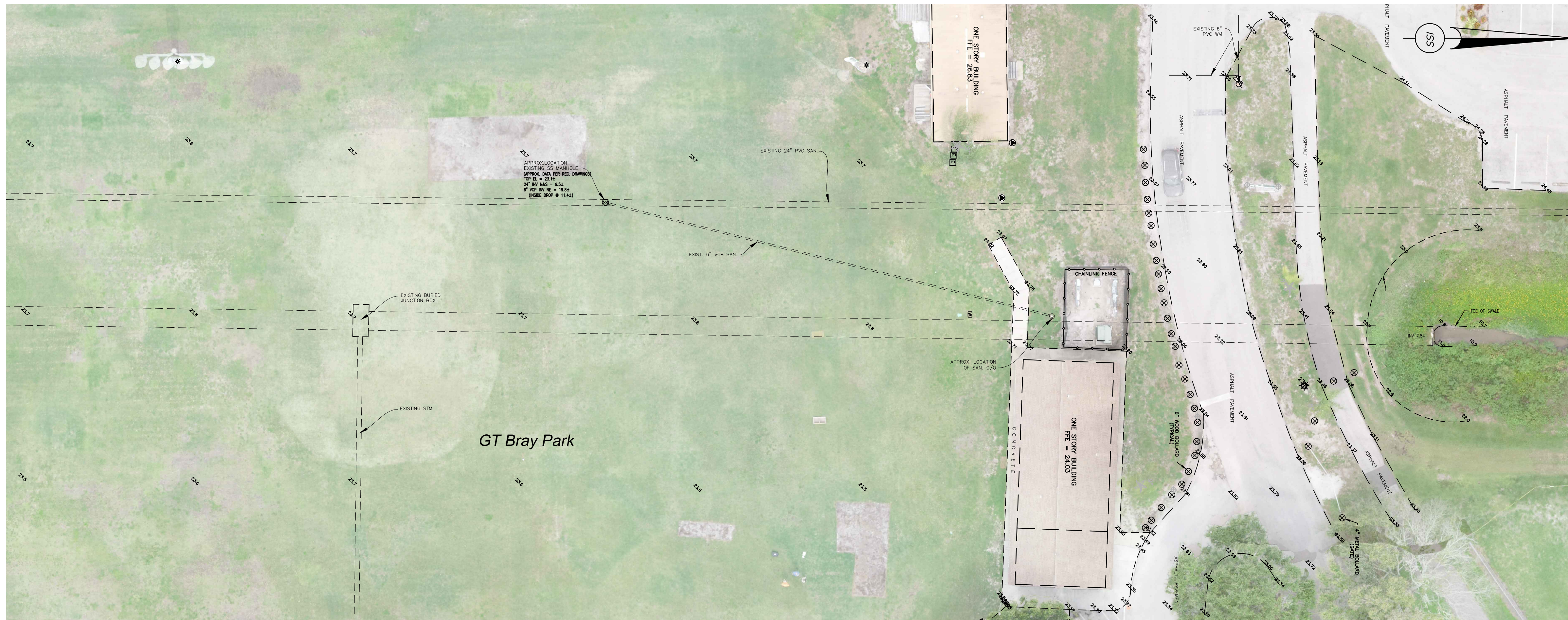
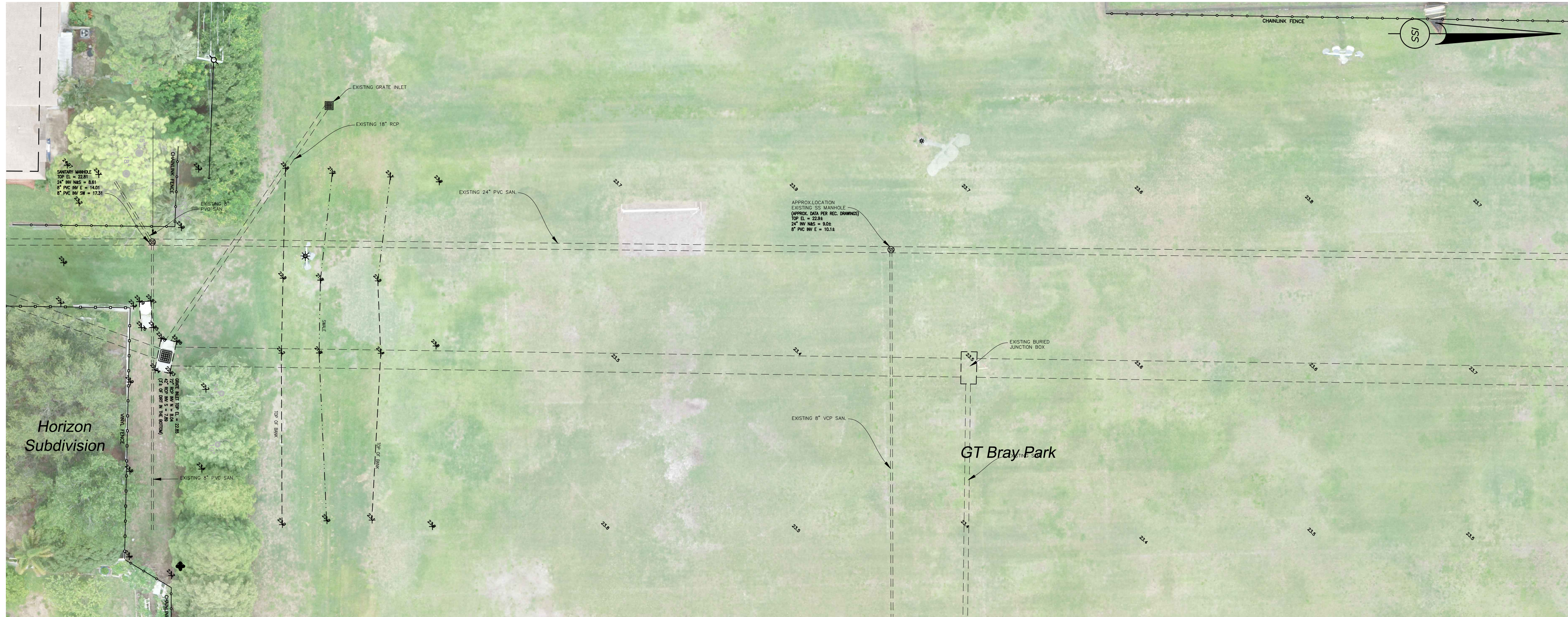
Know what's below
Call before you dig

THOMAS M. VILL, PROFESSIONAL ENGINEER, STATE OF FLORIDA, LICENSE NO. 71186. THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY THOMAS M. VILL, P.E., ON 04-20-21; PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

SHEET: **CS-001**

Z:\PROJECTS\Sarasota Region\Manatee County\MC0002 MC Misc Projects\Drawings\SS DWG\1. COVER\MC0002.dwg\Cover_Broy_4/20/2021 1:22:22 PM Mark Mueller, 1:1 ARCH full bleed D (24.00 x 36.00 inches)

I:\PROJECTS\Sarasota Region\Manatee County\Projects\Drawings\ISS\DMCV\Eng\Final\Drawg (2) Tittle & Bray\02_CS-101_EX_COND_MC0002.dwg,CS-101_Bray_4/20/2021 12:23 PM Mark Mueller, 1:1 ARCH D (24.00 x 36.00 Inches)



EXISTING LEGEND:

- EXISTING APPARENT R/W
- - - - EXISTING TOE OF SLOPE
- - - - EXISTING FEATURES
- EXISTING SPOT ELEVATION
- EXISTING FENCE
- ⊕ BM#1 PROJECT BENCHMARK

EXISTING CONDITIONS NOTES:

1. TOPOGRAPHIC INFORMATION ACQUIRED BY INFRASTRUCTURE SOLUTION SERVICES FOR SUPPLEMENTAL DESIGN PURPOSES. (DATED 06/17/2019).
2. THE AERIAL SITE BACKGROUND IS PROVIDED FOR INFORMATIONAL PURPOSES. THE AERIAL IMAGE WAS FLOWN ON 07/30/2019 AND GENERALLY REPRESENTS THE EXISTING CONDITIONS PRIOR TO DESIGN AND CONSTRUCTION.

PROJECT CONTROL NOTES:

1. THE PROJECT CONTROL (NORTHING, EASTING, AND ELEVATION) WERE DERIVED FROM STATE PLAN FL WEST COORDINATE BASE WITH NAVD88 ELEVATIONS.

SURVEY NOTES:

TOPOGRAPHIC SURVEY FOR MANATEE COUNTY MISCELLANEOUS SIDEWALK AND DRAINAGE PROJECT PREPARED BY DARRELL E. GERKEN, PSM, JOB NO. 19-06-01M, ORIGINAL DATE OF FIELD SURVEY AUGUST 02, 2019

THE MINIMUM RELATIVE DISTANCE ACCURACY FOR THE HORIZONTAL LOCATION OF FEATURES SHOWN ON THE DIGITAL MAP OF SURVEY IS 1 FOOT IN 10,000 FEET. THE ACCURACY WAS OBTAINED BY MEASUREMENT AND CALCULATION OF A CLOSED GEOMETRIC FIGURE AND WAS FOUND TO EXCEED AN ACCURACY OF 1 FOOT IN 10,000 FEET.

THE FIELD-MEASURED VERTICAL CONTROL FOR THE ELEVATION INFORMATION SHOWN ON THE DIGITAL SURVEY IS BASED ON A CLOSED LEVEL LOOP EXCEEDING PLUS OR MINUS 0.05 OF A FOOT TIMES THE SQUARE ROOT OF THE DISTANCE IN MILES.

ELEVATIONS ARE RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988, (NAVD-88). BASED ON THE FOLLOWING RECORD BENCHMARKS FOR EACH TASK AREA:

GT Bray Park: CITY OF BRADENTON BENCHMARK COB 1043 BEING A MANATEE COUNTY DISK STAMPED 'CITY OF BRADENTON COB 1043 GEODETIC CONTROL POINT' LOCATED APPROXIMATELY 120 FEET SOUTH OF THE CENTERLINE OF 29TH AVENUE WEST AND APPROXIMATELY 125 FEET WEST OF THE CENTERLINE OF 59TH STREET WEST, WITH A PUBLISHED ELEVATION OF 23.091 FEET, NAVD-88.

APPARENT RIGHTS OF WAY LINES SHOWN ON THE DIGITAL MAP ARE APPROXIMATE AND BASED ON FOUND FIELD MONUMENTATION, SUBDIVISION AND CONDOMINIUM PLATS OF RECORD AND OTHER INFORMATION RECORDED IN THE PUBLIC RECORDS OF MANATEE COUNTY, FLORIDA. THE APPARENT RIGHT OF WAY LINES ARE NOT INTENDED TO REPRESENT PROPERTY BOUNDARY LINES OR TITLE LINES.

THE COORDINATE BASE FOR THIS DRAWING IS ON STATE PLANE COORDINATES, BASED ON THE NORTH AMERICAN DATUM, 1983 (1990) ADJUSTMENT, FLORIDA WEST ZONE.



PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

**MISC. SIDEWALK AND DRAINAGE PROJECTS
(MC WA No. 024) - DRAINAGE
GT BRAY PARK
EXISTING CONDITIONS PLAN - GT BRAY PARK**

NO.	REVISION DESCRIPTION	BY	DATE

PROJECT # MC0002-1/4

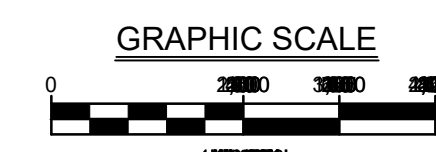
SEC./TWN./RGE 05/35S/17E

32/35S/18E

SCALE AS SHOWN

	BY	DATE
SURVEYED	ISS	07/19/19
DESIGNED	MWM	08/01/19
DRAWN	SRN	08/14/19
CHECKED	MWM	02/04/20

THOMAS M. VILL, PROFESSIONAL ENGINEER, STATE OF FLORIDA, LICENSE NO. 71186. THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY THOMAS M. VILL, P.E., ON 04-20-21. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.



MANATEE COUNTY GENERAL NOTES

- ALL CONSTRUCTION ACTIVITIES SHALL BE COORDINATED WITH THE PROJECT MANAGEMENT DIVISION. THE PROJECT MANAGER IS: ANTHONY RUSSO, P.E. AND CAN BE REACHED AT (941) 708-7450; EXT. 7349.
- SITE VISITS ARE MANDATORY FOR ALL BIDDERS. THESE SITE VISITS CAN BE ARRANGED THROUGH THE PROJECT MANAGER.
- ALL CONSTRUCTION ON THIS PROJECT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF MANATEE COUNTY UTILITY AND TRANSPORTATION STANDARDS AND/OR FDOT "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" UNLESS OTHERWISE INDICATED ON THE PLANS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING ALL CONDITIONS AND REQUIREMENTS OF ALL PERMITS AND ALL GOVERNING FEDERAL, STATE, AND LOCAL AGENCIES. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL REQUIRED PERMITS THAT ARE NOT PROVIDED IN THE BID DOCUMENTS, AT NO ADDITIONAL COST TO THE OWNER.
- THE INFORMATION PROVIDED IN THESE PLANS IS SOLELY TO ASSIST THE CONTRACTOR IN ASSESSING THE NATURE AND EXTENT OF THE CONDITIONS WHICH MAY BE ENCOUNTERED DURING THE COURSE OF WORK. ALL CONTRACTORS ARE DIRECTED, PRIOR TO BIDDING, TO CONDUCT WHATEVER INVESTIGATION THEY MAY DEEM NECESSARY TO ARRIVE AT THEIR OWN CONCLUSIONS REGARDING THE ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED, AND UPON WHICH THEIR BIDS WILL BE BASED.
- THE CONTRACTOR SHALL REVIEW AND VERIFY ALL DIMENSIONS ON THE PLANS AND REVIEW ALL FIELD CONDITIONS THAT MAY AFFECT CONSTRUCTION. SHOULD DISCREPANCIES OCCUR, THE CONTRACTOR SHALL NOTIFY THE ENGINEER TO OBTAIN THE ENGINEER'S CLARIFICATION BEFORE COMMENCING WITH CONSTRUCTION.
- AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION, THE CONTRACTOR SHALL CONTACT SUNSHINE STATE ONE CALL OF FLORIDA AT 1-800-432-4770 OR THE NATIONAL 811 ONE CALL NUMBER WHEN APPLICABLE FOR UTILITY LOCATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH ALL UTILITIES FOR THE POSSIBLE RELOCATION OR THE TEMPORARY MOVEMENT OF ANY EXISTING UTILITIES WITHIN THE RIGHTS-OF-WAY.
- THE CONSTRUCTION LENGTHS IN THESE PLANS ARE APPROXIMATE. ACTUAL LIMITS MAY BE SET IN THE FIELD AS DIRECTED BY THE ENGINEER.
- SEPARATE PAYMENT SHALL BE MADE ONLY FOR THE ITEMS OF WORK LISTED AND IDENTIFIED BY APPROPRIATE BID ITEM. THE COST OF ANY RELATED WORK NOT SPECIFICALLY IDENTIFIED, BUT WHICH IS REQUIRED FOR SATISFACTORY COMPLETION OF THE WORK, SHALL BE CONSIDERED TO BE INCLUDED IN THE CONTRACT PRICE FOR THE APPROPRIATE BID ITEM.
- THE CONTRACTOR SHALL HAVE A FOREMAN, OR RESPONSIBLE PARTY, ON SITE AT ALL TIMES WHEN WORK IS BEING PERFORMED. ALL WORKERS ON THE JOB SITE WILL BE COURTEOUS TO THE PUBLIC AT ALL TIMES, AND SHALL REFER ANY QUESTIONS OR CONCERNS TO THE CONTRACTOR'S FOREMAN OR THE COUNTY INSPECTOR. THE FOREMAN SHALL SPEAK AND UNDERSTAND ENGLISH AND SHALL BE AVAILABLE AT ALL TIMES FOR TIMELY RESOLUTION OF PROJECT-RELATED ISSUES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE COORDINATION OF CONSTRUCTION SCHEDULING BETWEEN CONTRACTOR AND ALL UTILITY AGENCIES.
- ANY DAMAGE TO STATE, COUNTY, OR LOCAL ROADS CAUSED BY THE CONTRACTOR'S HAULING OR EXCAVATION EQUIPMENT SHALL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTORY OF THE COUNTY PROJECT MANAGER. PAYMENT SHALL NOT BE MADE FOR THIS WORK.
- ALL SIGNING, STRIPING AND RPM PLACEMENT WITHIN THE RIGHT-OF-WAY IS TO BE IN ACCORDANCE WITH FDOT STANDARD INDEX 17346.

SAFETY

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH THE FLORIDA TRENCH SAFETY ACT, 90-96, LAWS OF FLORIDA EFFECTIVE OCTOBER 1, 1990 AND THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION EXCAVATION SAFETY STANDARDS, 29 CFR 1926.650, SUBPART P, AS AMENDED. THE CONTRACTOR SHALL INCLUDE IN THE TOTAL BID PRICE ALL COSTS FOR COMPLIANCE WITH THESE REGULATIONS.
- THE CONTRACTOR SHALL USE SHEET PILING, SHEETING, BRACING, ETC., AS REQUIRED IN ALL EXCAVATION AREAS AND CONFORM TO ALL OSHA REQUIREMENTS.
- THE CONTRACTOR SHALL USE ALL NECESSARY SAFETY PRECAUTIONS TO AVOID CONTACT WITH OVERHEAD AND UNDERGROUND UTILITIES, POWER LINES, ETC.
- THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. THIS EXCLUSION DOES NOT ALLEVIATE THE CONTRACTOR FOR PROVIDING A CONTINUOUS SAFE WORKSPACE.

ENVIRONMENTAL

- CONTRACTOR IS RESPONSIBLE FOR INSTALLATION ALL SEDIMENT AND EROSION CONTROL (SEC) DEVICES (E.G., BARRIERS, SEDIMENT TRAPS/BASINS, VEGETATIVE BUFFERS, ETC.) AS SPECIFIED IN THE FINAL APPROVED PLANS FOR THE PROJECT. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL SEC DEVICES UTILIZED DURING THE PROJECT, AS WELL AS INSTALLATION & MAINTENANCE OF ANY ADDITIONAL MEASURES DEEMED NECESSARY DURING PROJECT IMPLEMENTATION, TO PREVENT EROSION AND OFF-SITE SEDIMENT MIGRATION. CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR REMOVAL AND PROPER DISPOSAL OF ALL SEC DEVICES UPON COMPLETION OF THE PROJECT, AND UPON ADEQUATE STABILIZATION OF DISTURBED SOILS.
- THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL NECESSARY STORM WATER, EROSION, AND SEDIMENTATION CONTROL MEASURES IN ACCORDANCE WITH THE FDP "FLORIDA STORM WATER, EROSION AND SEDIMENTATION CONTROL INSPECTOR'S MANUAL". IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTROL AND PREVENT EROSION AND TRANSPORT OF SEDIMENT TO SURFACE DRAINS AND TO DITCHES DURING CONSTRUCTION.
- STOCKPILES SHALL BE PROTECTED AT ALL TIMES BY ON-SITE DRAINAGE CONTROLS WHICH PREVENT EROSION OF THE STOCKPILED MATERIAL. CONTROL OF DUST FROM SUCH STOCKPILES IS REQUIRED, DEPENDING UPON THEIR LOCATION AND THE EXPECTED LENGTH OF TIME THE STOCKPILES WILL BE PRESENT. IN NO CASE SHALL ANY STOCKPILED MATERIAL REMAIN AFTER THIRTY (30) CALENDAR DAYS.
- STORM WATER INLETS IN THE VICINITY OF THE PROJECT SHALL BE PROTECTED BY SEDIMENT TRAPS SUCH AS SECURED HAY BALES, SOD, STONE, ETC., WHICH SHALL BE MAINTAINED AND MODIFIED AS REQUIRED BY CONSTRUCTION PROGRESS, AND WHICH MUST BE APPROVED BY THE ENGINEER BEFORE INSTALLATION. THIS WILL BE MAINTAINED TO PREVENT DEGRADATION OF THE WATERS OF THE COUNTY AND STATE.
- SEDIMENT BASINS AND TRAPS, PERIMETER BERMS, SEDIMENT BARRIERS, VEGETATIVE BUFFERS, AND OTHER MEASURES INTENDED TO TRAP SEDIMENT AND/OR PREVENT THE TRANSPORT OF SEDIMENT INTO ADJACENT PROPERTIES, OR INTO EXISTING BODIES OF WATER, MUST BE INSTALLED, CONSTRUCTED, OR IN THE CASE OF VEGETATIVE BUFFERS, PROTECTED FROM DISTURBANCE, AS A FIRST STEP IN THE LAND ALTERATION PROCESS. SUCH SYSTEMS SHALL BE FULLY OPERATIVE BEFORE ANY OTHER DISTURBANCE OF THE SITE BEGINS. EARTHEN STRUCTURES INCLUDING BUT NOT LIMITED TO BERMS, EARTH FILTERS, DAMS OR DIKES SHALL BE STABILIZED AND PROTECTED FROM DRAINAGE DAMAGE OR EROSION WITHIN ONE (1) WEEK OF INSTALLATION.
- ALL SWALES, DITCHES, AND CHANNELS LEADING FROM THE SITE SHALL BE PROTECTED FROM SILTATION AND EROSION DURING CONSTRUCTION AND BE SODDED WITHIN THREE (3) DAYS OF EXCAVATION.
- SOIL DISPLACED BY CONSTRUCTION WILL BE REMOVED. EROSION CONTROL SHALL BE IMPLEMENTED IN AREAS WHICH ARE CONSIDERED ENVIRONMENTALLY SENSITIVE. EROSION CONTROL SYSTEMS SHALL BE REQUIRED FOR ALL WORK WITHIN JURISDICTIONAL AREAS. THESE SYSTEMS MAY INCLUDE STAKED HAY BALES, SILT SCREENS, FILTER FABRIC, AND TURBIDITY SCREENS.
- ALL EROSION AND POLLUTION CONTROL DEVICES SHALL BE CHECKED REGULARLY, ESPECIALLY AFTER EACH RAINFALL AND SHALL BE CLEANED OUT AND/OR REPAIRED AS REQUIRED.
- FOR MORE INFORMATION, SEE THE EROSION CONTROL DETAIL SHEET INCLUDED IN THE PLANS.

RIGHT-OF-WAY NOTES

- ALL CONSTRUCTION ACTIVITIES SHALL BE LIMITED TO WITHIN THE MANATEE COUNTY/FDOT RIGHT-OF-WAY AND/OR EASEMENTS SHOWN ON THE DRAWINGS.
- THE CONTRACTOR SHALL EMPLOY A LAND SURVEYOR REGISTERED IN THE STATE OF FLORIDA TO REFERENCE AND RESTORE PROPERTY CORNER MONUMENTS, PINS, AND LANDMARKS THAT MAY BE DISTURBED BY CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER.
- THE CONTRACTOR, PRIOR TO CONSTRUCTION AND RESTRICTING ANY TRAFFIC, MUST OBTAIN A RIGHT-OF-WAY USE PERMIT AND A TRAFFIC CONTROL PLAN. THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS FROM OTHER GOVERNMENTAL AGENCIES HAVING RELEVANT JURISDICTION. ALL MAINTENANCE AND PROTECTION OF TRAFFIC SHALL BE IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF THE CURRENT FLORIDA DEPARTMENT OF TRANSPORTATION "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD). A TRAFFIC CONTROL PLAN SHALL BE SUPPLIED BY THE

CONTRACTOR AT THE PRE-CONSTRUCTION MEETING.

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING ALL DAMAGED STORM WATER STRUCTURES, PIPING, ENTRANCE PIPE AND HEADWALLS, THAT ARE TO REMAIN, WHETHER SHOWN ON THE PLANS OR NOT.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH IN THE FIELD THE APPARENT RIGHT-OF-WAY LINES, BASE LINES, BENCH MARKS (ELEV.), AND CONTROL REQUIRED TO CONSTRUCT THIS PROJECT. THE PLANS AND PROPOSED DESIGN ARE BASED ON TOPOGRAPHIC DATA COLLECTION AS NOTED ON CS-01.
- THE CONTRACTOR SHALL COORDINATE WORK WITHIN THE LIMITS OF DRIVEWAYS WITH THE PROPERTY OWNER PRIOR TO WORK. ALL DRIVEWAYS WILL BE IN PASSABLE CONDITION AT THE END OF THE WORK DAY AND FULLY RESTORED PER PLAN. THE CONTRACTOR SHALL COORDINATE WITH THE AFFECTED UTILITY COMPANY FOR THE ADJUSTMENT OF ANY EXISTING UTILITIES AND STRUCTURES IN ORDER TO MATCH THE PROPOSED ELEVATIONS AND ALIGNMENTS.

UTILITIES NOTES

- LOCATIONS, ELEVATIONS AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES ARE SHOWN TO THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS BUT DO NOT PURPORT TO BE ABSOLUTELY CORRECT. THERE MAY BE OTHER IMPROVEMENTS, UTILITIES, ETC. WHICH ARE WITHIN THE PROJECT AREA AND WHICH HAVE NOT BEEN LOCATED OR IDENTIFIED, MAY NOT BE IN THE EXACT LOCATION SHOWN OR RELOCATED SINCE THE PREPARATION OF THESE PLANS. THE CONTRACTOR SHALL VERIFY, PRIOR TO CONSTRUCTION, THE LOCATIONS, ELEVATIONS AND DIMENSIONS OF ALL EXISTING UTILITIES STRUCTURES AND OTHER FEATURES (WHETHER OR NOT SHOWN ON THE PLANS) THAT MAY AFFECT HIS WORK. ALL EXISTING UTILITIES TO BE EXTENDED, CROSSED OR CONNECTION POINTS SHALL BE EXPOSED PRIOR TO CONSTRUCTION TO VERIFY LOCATION AND ELEVATION. ANY DISCREPANCIES OR CONFLICTS FOUND SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR RESOLUTION. UTILITIES DESIGNATED VV, VH, AND VU ARE BASED ON LIMITED INVESTIGATION TECHNIQUES AND SHOULD BE CONSIDERED APPROXIMATE ONLY. THE VERIFIED LOCATIONS/ELEVATIONS APPLY ONLY AT THE POINTS SHOWN. INTERPOLATIONS BETWEEN THESE POINTS HAVE NOT BEEN VERIFIED. EXTREME CAUTION SHALL BE EXERCISED WHEN WORKING NEAR THE 24" WATERLINE.
- THE CONTRACTOR SHALL PROTECT ALL EXISTING STRUCTURES, WATER AND SEWER LINES, STORM DRAINS, UTILITIES, DRIVEWAYS, SIDEWALKS, SIGNS, MAIL BOXES, FENCES, TREES, LANDSCAPING, AND ANY OTHER IMPROVEMENT OR FACILITY IN THE CONSTRUCTION AREA. THE CONTRACTOR SHALL REPAIR AND/OR REPLACE ANY DAMAGED ITEM DUE TO HIS CONSTRUCTION ACTIVITIES TO EQUAL OR BETTER THAN PRE-CONSTRUCTION CONDITIONS AT NO ADDITIONAL COST TO THE OWNER.
- THE CONTRACTOR SHALL USE APPROPRIATE TECHNIQUES, AS APPROVED, RECOMMENDED OR OFFERED BY FLORIDA POWER AND LIGHT TO PREVENT UNDERMINING OF POWER POLES DURING CONSTRUCTION. IF HOLDING OF POWER POLES IS RECOMMENDED OR REQUIRED BY THE UTILITY, THE CONTRACTOR SHALL COORDINATE THIS ACTIVITY WITH THE UTILITY AND BEAR ALL RELATED COSTS.
- EXCEPT WHERE THE PLANS AND SPECIFICATIONS PROVIDE THAT SUCH WORK SHALL BE PERFORMED UNDER THE CONTRACT FOR THIS PROJECT, ALL UTILITIES WITH CONSTRUCTION LIMITS SHALL REMAIN, BE RELOCATED OR BE 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.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH ALL UTILITY COMPANIES FOR THE RELOCATION AND ADJUSTMENT OF ALL UTILITIES, INCLUDING, ANY EXISTING POWER POLES AND/OR UTILITY CONDUITS WITHIN RIGHT-OF-WAY.

DRAINAGE AND GRADING

- ALL CONSTRUCTION IS TO BE STAKED IN THE FIELD BY OR UNDER THE SUPERVISION OF A FLORIDA REGISTERED LAND SURVEYOR.
- THE CONTRACTOR IS TO PROVIDE THE ENGINEER OF RECORD WITH REPRODUCIBLE RECORD DRAWINGS SHOWING ALL IMPROVEMENT LOCATIONS AND ELEVATIONS IN ACCORDANCE WITH LATEST MANATEE COUNTY TRANSPORTATION DEPARTMENT STANDARDS AND SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT (SWFWMD) STANDARDS. THE CONTRACTOR SHALL ALSO PROVIDE FIVE SETS OF PRINTS, SIGNED AND SEALED BY A PROFESSIONAL LAND SURVEYOR, OF THE RECORD DRAWINGS TO THE ENGINEER OF RECORD. THESE RECORD DRAWINGS SHALL BE CERTIFIED TO THE OWNER, APPROPRIATE GOVERNMENTAL AGENCIES. RECORD DRAWINGS SHALL SPECIFICALLY INCLUDE STORMWATER FACILITY LOCATIONS, INCLUDING TOP OF BANK, UNDERDRAIN AND CONTROL STRUCTURES, SHALL BE PERFORMED BY A REGISTERED LAND SURVEYOR AND REVIEWED BY THE ENGINEER OF RECORD PRIOR TO ACCEPTANCE AND PAYMENT.
- TO PREVENT SEDIMENTARY RUNOFF DURING CONSTRUCTION, STAKED HAY BALES, STAKED SILT SCREENS OR INLET DEBRIS CONTROL SCREENS ARE TO BE PLACED AT STORM INLETS, OUTFALL LOCATIONS AND ADJACENT PROPERTY LINES AS REQUIRED PRIOR TO ANY CONSTRUCTION ACTIVITIES. SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSTALLED AND THEN VERIFIED/INSPECTED BY MANATEE COUNTY INFRASTRUCTURE INSPECTIONS RESOURCES DIVISION (708-7450) PRIOR TO COMMENCEMENT OF CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE SEDIMENTATION BARRIERS IN A WORKING MANNER FOR THE DURATION OF CONSTRUCTION AND SHOULD BE CHECKED DAILY. SILTATION ACCUMULATIONS GREATER THAN THE LESSER OF 12 INCHES OR ONE-HALF OF THE DEPTH OF THE SEDIMENTATION BARRIER SHALL BE IMMEDIATELY REMOVED AND REPLACED IN UPLAND AREAS. IN ADDITION TO SPECIFIED EROSION CONTROL LOCATIONS, THE CONTRACTOR SHALL PERFORM DAILY SITE INSPECTIONS FOR POTENTIAL EROSION PROBLEMS. IF PROBLEMS OCCUR, THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING APPROPRIATE EROSION CONTROL IMMEDIATELY. AN INSPECTION LOG SHALL BE MAINTAINED AND AVAILABLE ONSITE AT ALL TIMES. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING TEMPORARY EROSION CONTROL DEVICES FOLLOWING COMPLETION OF ALL CONSTRUCTION AND FINAL STABILIZATION.
- ALL PIPE LENGTHS SHOWN ON PLAN VIEW ARE TO THE END OF THE MITERED END SECTION. REFER TO MITERED END SECTION DETAIL FOR LENGTH OF PIPE TO BE INCLUDED IN PRICE FOR MITERED END SECTION.
- THE CONTRACTOR SHALL VERIFY TOPOGRAPHY AND SATISFY HIMSELF AS TO THE EXTENT OF FILL NECESSARY TO ACHIEVE FINISHED GRADE PRIOR TO AWARD OF CONTRACT. THERE SHALL BE NO CLAIM FOR EXTRAS NOTWITHSTANDING SITE PLAN REVISIONS PROMULGATED SUBSEQUENT TO AWARD OF CONTRACT.
- SUITABLE FILL MATERIAL FROM EXCAVATION SHALL BE UTILIZED FOR PROJECT FILL PER GRADING SPECIFICATIONS. UNSUITABLE MATERIAL SHALL BE PLACED IN OPEN AREAS ONLY AS DIRECTED BY THE PROJECT ENGINEER AND SOILS ENGINEER IN ACCORDANCE WITH FDOT INDEX 505.
- THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ALL STRUCTURES PRIOR TO INSTALLATIONS.
- REFER TO CONSTRUCTION TECHNICAL SPECIFICATIONS FOR COMPACTION REQUIREMENTS, GRASSING/SODDING REQUIREMENTS, AND PAVING CONSTRUCTION MATERIAL SPECIFICATIONS.
- ALL FILL AREAS ARE TO BE CONSTRUCTED IN 12" MAXIMUM LIFTS.
- THE CONTRACTOR SHALL REVIEW SOILS TESTS AS PERFORMED BY THE SOIL CONSULTANT AND IS ENCOURAGED TO CONDUCT ON-SITE TESTING TO SATISFY HIMSELF AS TO ACTUAL LIMITS OF REMOVAL AND REPLACEMENT OF UNSUITABLE MATERIALS PRIOR TO BIDDING.
- ON SLOPES GREATER THAN 3:1 PEGGING OR PINNING OF SOD MAY BE REQUIRED.
- STATION LOCATIONS AND OFFSETS FOR STORM DRAIN INLETS AND MANHOLES REFERENCE THE CENTER OF THE SPECIFIED STRUCTURE BOTTOM. STATION LOCATION IS CENTER OF STRUCTURE BOTTOM FOR JUNCTION BOXES, CENTER OF RISER FOR CURB INLETS. FOR PIPES WITH MITERED END SECTIONS, THE PROPOSED LENGTHS SHOWN ON THE PLANS INCLUDE THE LENGTH OF THE MITERED END SECTION. PAYMENT FOR PIPE SHALL NOT INCLUDE THE LENGTH OF THE MITERED END SECTION. AS SPECIFIED BY DIMENSION "F" AS SHOWN IN FDOT INDEX 272 AND 273. PAYMENT SHALL BE FROM INSIDE STRUCTURE WALL TO INSIDE STRUCTURE WALL. ANY EXTRA PIPE LENGTH LISTED SHALL BE CONSIDERED CONTINGENT.
- ALL CURB INLET AND JUNCTION BOX STORMWATER STRUCTURES SHALL HAVE HEAVY DUTY RING AND COVER MANHOLE ACCESS. ALL DRAINAGE BOX DETAIL SHALL FOLLOW MANATEE COUNTY CURRENT STANDARD 202 UNLESS IT IS DESIGNATED IN THE PLAN. ALL DRAINAGE BOXES SHALL HAVE A WALL THICKNESS OF 6" MINIMUM.
- DURING DEWATERING OPERATIONS, THE CONTRACTOR SHALL NOT DISCHARGE DIRECTLY TO RECEIVING WATERS, EXISTING CONVEYANCES TO RECEIVING WATERS, OR WETLAND SYSTEMS. TEMPORARY SEDIMENT BASINS, TRAPS, OR SILTATION REDUCTION DEVICES SHALL BE UTILIZED TO COLLECT THE DISCHARGE FROM DEWATERING ACTIVITIES TO ELIMINATE THE POTENTIAL FOR OFFSITE SEDIMENT TRANSPORT AND TO ENSURE THAT DIRECT DISCHARGE DOES NOT OCCUR.

RESTORATION

- ALL RESTORATION WORK PERFORMED THROUGHOUT THE PROJECT SHALL CONFORM TO EXISTING LINES AND GRADES UNLESS SHOWN OTHERWISE.
- ALL DISTURBED GRASSED AREAS SHALL BE SODDED. THE TYPE OF SOD USED TO REPLACE OWNER MAINTAINED AREAS IN RIGHT-OF-WAY SHALL BE COORDINATED WITH THE PROPERTY OWNER. ALL EXISTING SHRUBS, TREES, PLANTINGS AND OTHER VEGETATION, OUTSIDE OF RIGHT-OF-WAY SHALL BE PRESERVED; SHOULD THEY BE DISTURBED DURING CONSTRUCTION THEY SHALL BE REPLACED WITH EQUIVALENT MATERIAL BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- CONCRETE DRIVEWAYS OR SIDEWALKS THAT ARE CUT SHALL BE RESTORED TO MATCH EXISTING ACCORDING TO THE CURRENT EDITIONS OF THE F.D.O.T. SPECIFICATIONS FOR ROAD AND BRIDGE DESIGN, SECTION 522, AND SECTION 310 OF THE F.D.O.T. DESIGN STANDARDS LATEST REVISION.

CONSTRUCTION

- THE EXHAUST SYSTEM OF ALL GASOLINE AND DIESEL ENGINES SHALL BE EQUIPPED WITH MUFFLERS THAT MEET THE EQUIPMENT MANUFACTURER'S REQUIREMENTS FOR NOISE SUPPRESSION. THE CONTRACTOR SHALL INSTALL NOISE ABATEMENT BAFFLES POSITIONED TO BREAK LINE-OF-SITE FROM THE NOISE SOURCE TO AFFECTED RESIDENCES, AS APPROVED BY THE ENGINEER.
- NO MATERIAL SHALL BE STOCKPILED IN ROADWAYS. ALL DIRT AND DEBRIS SHALL BE REMOVED FROM THE JOB SITE DAILY. ROADS SHALL BE SWEEP DAILY AS PART OF DAILY CLEAN UP.
- THE CONTRACTOR IS TO CONTROL ALL FUGITIVE DUST ORIGINATING ON THIS PROJECT BY WATERING OR OTHER METHODS AS REQUIRED.
- INGRESS AND EGRESS TO ALL THE PROPERTIES IN THE CONSTRUCTION AREA SHALL BE MAINTAINED AT ALL TIMES.
- PRIOR APPROVAL WILL BE REQUIRED FOR REMOVAL OF ANY TREE WITHIN THE CONSTRUCTION AREA, UNLESS OTHERWISE NOTED ON THE PLANS.
- THE CONTRACTOR SHALL PROVIDE ALL DEWATERING EQUIPMENT NECESSARY TO KEEP ALL EXCAVATIONS DRY. DEWATERING IS REQUIRED TO 18" BELOW TRENCH BOTTOM. THE CONTRACTOR SHALL SUBMIT DEWATERING PLAN TO DISTRICT FOR APPROVAL PRIOR TO CONSTRUCTION.
- ALL PIPING AND MATERIALS USED ON THIS PROJECT SHALL BE AS NOTED ON THE PLANS AND IN THE CONTRACT DOCUMENTS AND SHALL BE INSTALLED TO THE LINES AND GRADES SHOWN ON THE PLANS AND PROFILES, UNLESS OTHERWISE COORDINATED.
- ALL PIPE LENGTHS ARE PLUS OR MINUS AND MAY BE ADJUSTED IN THE FIELD AS REQUIRED. PIPE MEASUREMENTS AND STATION OFFSETS ARE TO CENTER OF STRUCTURES OR FITTINGS. REFER TO DETAIL SHEET FOR ALL REFERENCE POINTS.
- ALL ROCKS OR STONES LARGER THAN SIX INCH DIAMETER SHALL BE REMOVED FROM THE BACKFILL MATERIAL. BACKFILL MATERIAL PLACED WITHIN ONE FOOT OF PIPING AND APPURTENANCES SHALL NOT CONTAIN ANY STONES LARGER THAN TWO INCH DIAMETER.
- ALL PENETRATION OF EXISTING STRUCTURES SHALL BE BY THE MECHANICAL ROTARY CORE BORING METHOD.
- ALL CONCRETE AND REBAR PENETRATED OR DISTURBED SHALL BE COATED WITH TWO COATS OF EPOXY.
- CONTRACTOR IS RESPONSIBLE FOR ALL UNSUITABLE MATERIAL REMOVAL WITHIN PROJECT LIMITS. EXCAVATION, EMBANKMENT, INCLUDING UTILIZATION, AND UNSUITABLE MATERIAL REMOVAL SHALL BE IN ACCORDANCE WITH FDOT DESIGN STANDARDS, LATEST VERSION.
- WHERE EXCAVATION IS REQUIRED FOR CONSTRUCTION OF SIDEWALK, ALL STUMPS, ROOTS, ETC. SHALL BE REMOVED COMPLETELY FROM THE SIDEWALK AREA. ALL STUMPS WITHIN THE PROJECT LIMITS SHALL BE REMOVED COMPLETELY AND REPLACED WITH COMPACTED BACKFILL BEFORE THE AREA IS FILLED. TREE ROOTS IN AREA OF PROPOSED SIDEWALK, RAMP, OR DRIVEWAY REPLACEMENT SHALL BE GROUND OUT TO A DEPTH OF 6" BELOW BOTTOM OF NEW SIDEWALK OR DRIVEWAY. ALL PRUNED ROOT DEBRIS SHALL BE REMOVED FROM THE SUB-BASE MATERIAL PRIOR TO POURING CONCRETE, ASPHALT, OR APPLICATION OF OTHER SPECIFIED MATERIALS. THIS WORK SHALL BE INCLUDED IN AND PAID FOR UNDER THE PAY ITEM FOR CLEARING AND GRUBBING.
- ALL STUMPS, ROOTS, AND OTHER DEBRIS PROJECTING THROUGH OR APPEARING ON THE SURFACE OF THE GROUND SHALL BE REMOVED TO A DEPTH OF 1-FOOT BELOW THE COMPLETED SURFACE. THIS WORK SHALL BE INCLUDED IN AND PAID FOR UNDER THE PAY ITEM FOR CLEARING AND GRUBBING.
- ALL MATERIALS NOT CLAIMED BY THE COUNTY SHALL BECOME PROPERTY OF THE CONTRACTOR, AND SHALL BE DISPOSED OF BY THE CONTRACTOR IN AREAS PROVIDED BY THE CONTRACTOR. THIS WORK SHALL BE INCLUDED IN AND PAID UNDER THE PAY ITEM CLEARING AND GRUBBING.
- THE CONTRACTOR SHALL PROVIDE ALL SHEETING, SHORING, AND BRACING REQUIRED TO PROTECT ADJACENT STRUCTURES OR TO MINIMIZE TRENCH WIDTH. WHERE A SEPARATE PAY ITEM IS NOT PROVIDED, THE COST OF ALL SHEETING, SHORING, AND BRACING REQUIRED SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE ITEM OF WORK FOR WHICH SHEETING, SHORING, AND BRACING IS REQUIRED.
- THE CONTRACTOR SHALL DISTURB NO MORE GROUND THAN WHAT IS NECESSARY FOR CONSTRUCTION. NO OPEN EXCAVATED TRENCH, OR OTHER UNSAFE CONDITION WILL BE LEFT OVERNIGHT; ALL WORK SITES WILL BE COMPLETELY RESTORED WITHIN SEVEN (7) CALENDAR DAYS OF THE CONCRETE POUR FOR SIDEWALK. THE INTENT OF THIS PROVISION IS TO "SAFE-UP" THE PROJECT SITE AS WORK PROGRESSES, AND SHALL INCLUDE REMOVING FORMS, FILLING HOLES, GRADING, AND REMOVAL OF DEBRIS.
- ALL EXISTING SIGNS WITHIN THE PROJECT LIMITS SHALL REMAIN UNLESS OTHERWISE NOTED IN THE PLANS, OR AS DIRECTED BY THE ENGINEER.
- ANY EXISTING SIGN TO REMAIN THAT IS DISTURBED OR RELOCATED DURING CONSTRUCTION SHALL BE RESET TO CURRENT STANDARDS FOR HEIGHT, OFFSET, AND METHOD OF INSTALLATION AT NO ADDITIONAL COST TO THE COUNTY.
- ALL EXISTING SWALES NOT DESIGNATED FOR RECONSTRUCTION SHALL BE REGRADED TO PROMOTE POSITIVE DRAINAGE AND MATCH PROPOSED CENTERLINE SWALE ELEVATION AND ALIGNMENT.
- ALL STORM DRAINS AND STRUCTURES TO REMAIN SHALL BE CLEANED OF DEBRIS, DIRT, VEGETATION AND OTHER MATERIAL. STORM SEWER INLETS SHALL BE MODIFIED (RAISED/LOWERED) TO MATCH PROPOSED FINISHED GRADE.
- ALL EXISTING FENCES DISTURBED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED AND REINSTALLED BY THE CONTRACTOR AT NO ADDITIONAL COST. (EXISTING FENCES WITHIN R/W TAKING LIMITS SHALL BE RECONSTRUCTED TO THE NEW R/W LINE AND ARE TO BE REIMBURSED UNDER THE MISCELLANEOUS BID ITEM).
- ALL EXISTING TREES LOCATED WITHIN R/W LIMITS SHALL REMAIN UNLESS OTHERWISE NOTED.
- ALL EXISTING STORM DRAINAGE STRUCTURES SHALL BE REMOVED UNLESS OTHERWISE NOTED.
- ALL EXISTING BUILDINGS SHALL REMAIN UNLESS OTHERWISE NOTED.
- REMOVE AND REPLACE BASE AND SUB-BASE ACCORDING TO FDOT STANDARDS



PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

**MISC. SIDEWALK AND DRAINAGE PROJECTS
(MC WA No. 024) - DRAINAGE
GT BRAY PARK
CONSTRUCTION NOTES**

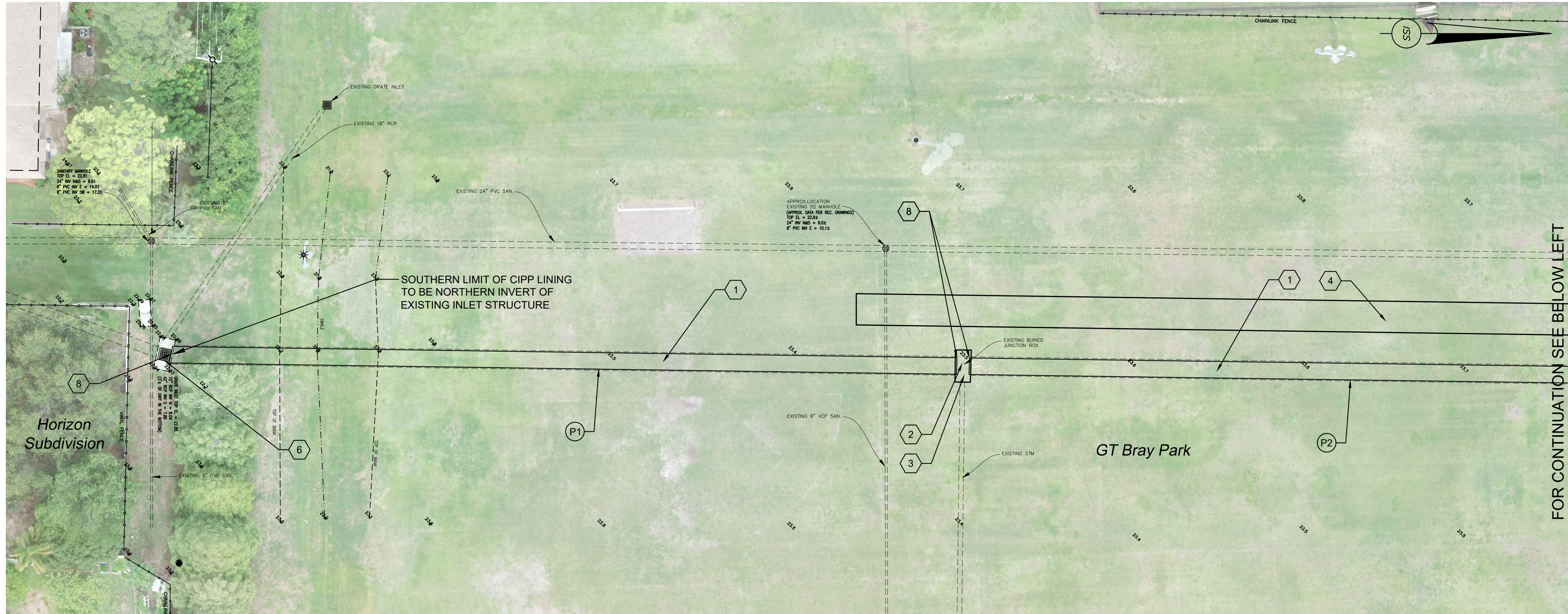
NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	MC002-1/4
SEC./TWN./RGE	05/35S/17E
SCALE	32/35S/18E AS SHOWN
	BY DATE
SURVEYED	ISS 07/19/19
DESIGNED	MWM 08/01/19
DRAWN	SRN 08/14/19
CHECKED	MWM 02/04/20

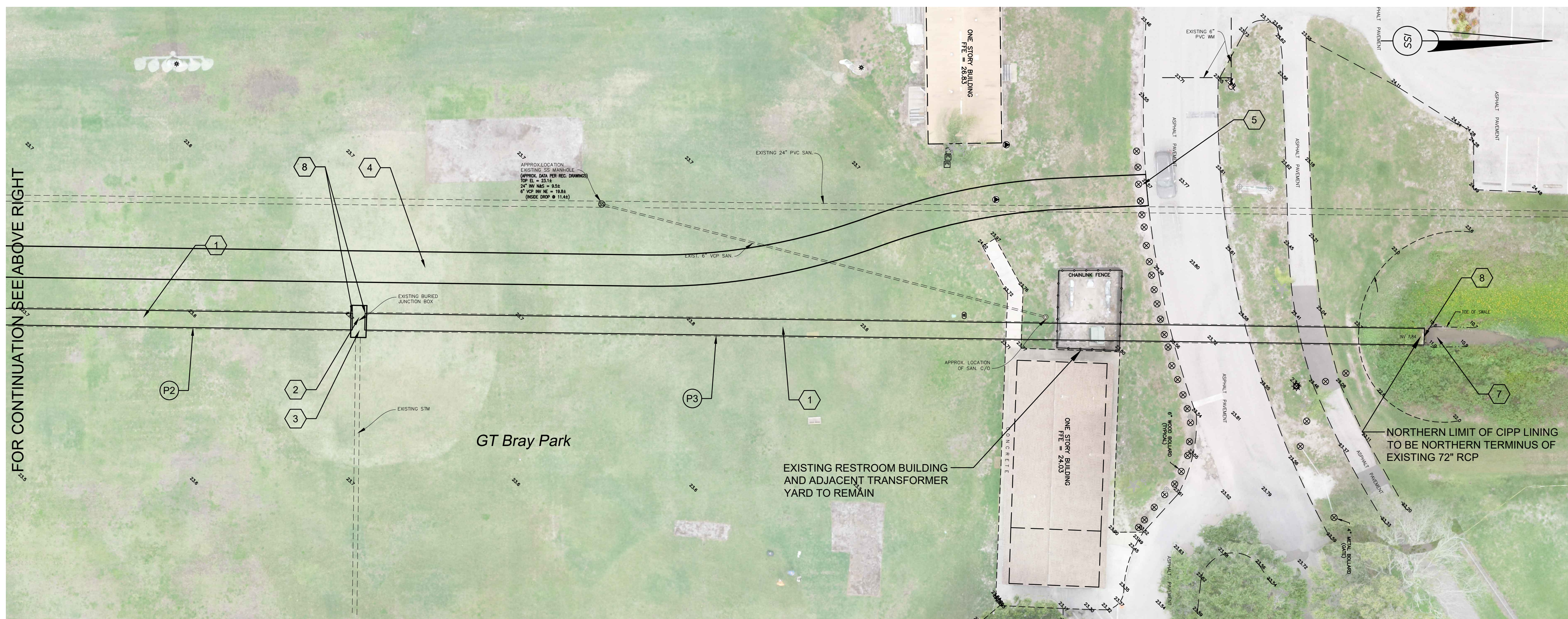
THOMAS M. VILL, PROFESSIONAL ENGINEER, STATE OF FLORIDA, LICENSE NO. 71186. THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY THOMAS M. VILL, P.E. ON 04-20-21. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

Z:\PROJECTS\2020\024\024-001\Drawings\ISS\DWG\19-DRAINAGE\19-DRAINAGE-01.dwg (2) Title & Block (2) 4/20/2021 12:24 PM Mark Mueller, T.I. ARCH D (24.00 x 36.00 inches)

Z:\PROJECTS\Sarasota Region\Manatee County\Projects\Drawings\ISS\DWG\V_Eng\Final\Drawg (2) Tottle & Bray\04 CG-101 DRAINAGE PLANS\MCO002.dwg, CG-101.dwg, 4/20/2021 12:26 PM Mark Mueller, 1:1 ARCH D (24.00 x 36.00 Inches)



FOR CONTINUATION SEE BELOW LEFT



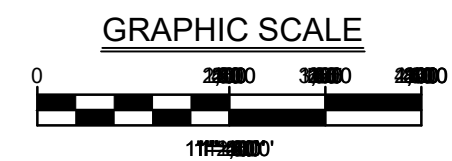
FOR CONTINUATION SEE ABOVE RIGHT

- EXISTING LEGEND:**
- EXISTING APPARENT R/W
 - - - EXISTING TOE OF SLOPE
 - - - EXISTING FEATURES
 - EXISTING SPOT ELEVATION
 - EXISTING FENCE

- PROPOSED LEGEND:**
- [] PROPOSED ACCESS RESTORATION LIMITS
 - [] PROPOSED STORMWATER PIPE LINING
 - (42.7) PROPOSED SPOT ELEVATION

- KEYNOTE LEGEND:**
- 1 EXISTING 72" RCP TO BE CIPP LINED TO CORRECT PIPE AND JOINT FAILURES.
 - 2 EXISTING BURIED JUNCTION BOX TO BE UNCOVERED FOR CONSTRUCTION ACCESS. THE INTEGRITY OF THE EXISTING SOCCER FIELDS SHALL BE MAINTAINED AND ALL NECESSARY RESTORATION SHALL BE PROVIDED FOR CONSTRUCTION ACTIVITIES. (THE CENTRAL ACCESS LOCATION IS REQUIRED TO ACCOMMODATE THE MAXIMUM PRE-WETTED LINER LENGTH).
 - 3 REMOVE AND RETAIN EXISTING JUNCTION BOX LID IN ORDER TO PROVIDE INVERSION ACCESS TO BOTH NORTHERN AND SOUTHERN CIPP SEGMENTS. A TEMPORARY RISER MAY BE REQUIRED TO STABILIZED ADJACENT GRADE, AND SHALL BE PROVIDED AS PART OF COST FOR STRUCTURE ACCESS.
 - 4 PROPOSED ACCESS FOR CONSTRUCTION VEHICLES. CONTRACTOR SHALL USE DUE CARE TO LIMIT EXTENT OF ACCESS IN ORDER TO MINIMIZE IMPACTS TO PLAYING FIELD SURFACE. ALL IMPACTS SHALL BE RESTORED TO PRE-CONSTRUCTION CONDITIONS OR BETTER. NO ADDITIONAL COST SHALL BE PROVIDED FOR RESTORATION BEYOND PLAN DEPICTION.
 - 5 REMOVE AND REPLACE EXISTING WOODEN BOLLARDS AS REQUIRED TO PROVIDED ADEQUATE EQUIPMENT ACCESS. RESTORATION SHALL BE PROVIDED EQUAL TO PRE-CONSTRUCTION CONDITIONS OR BETTER AT NO ADDITIONAL COST TO THE OWNER.
 - 6 CONSTRUCT A COFFERDAM WITHIN THE INLET TO ALLOW DRAWDOWN NORTHWARD OF EXISTING WATER WITHIN THE FULL LENGTH OF THE EXISTING 72" CULVERT SEGMENTS.
 - 7 CONSTRUCT A COFFERDAM WITHIN THE EXISTING CANAL TO ALLOW DRAWDOWN SOUTHWARD OF EXISTING WATER WITHIN THE FULL LENGTH OF THE EXISTING 72" CULVERT SEGMENTS
 - 8 CIPP LINER TERMINATION TO BE FINISHED AND SEALED IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS

- DRAINAGE STRUCTURE LEGEND:**
- P1 CONSTRUCT 250± LF CIPP (APPROX. 25 mm WALL THICKNESS) WITHIN EXISTING 72" RCP
 - P2 CONSTRUCT 260± LF CIPP (APPROX. 25 mm WALL THICKNESS) WITHIN EXISTING 72" RCP
 - P3 CONSTRUCT 340± LF CIPP (APPROX. 25 mm WALL THICKNESS) WITHIN EXISTING 72" RCP
- CIPP NOTES:**
1. DEWATERING/PUMPING SHALL BE PROVIDED TO REMOVE STANDING WATER FROM WITHIN THE FULL LENGTH OF THE EXISTING 72" CULVERT.
 2. PROPOSED LINER SHALL BE INSTIFORM CIPP OR APPROVED EQUIVALENT AND SHALL MEET THE REQUIREMENTS OF ASTM F1216 STANDARDS FOR CIPP.
 3. THE PROPOSED CIPP TUBE SHALL HAVE A UNIFORM THICKNESS THAT WHEN COMPRESSED AT INSTALLATION PRESSURES SHALL MEET OR EXCEED THE DESIGN THICKNESS, PER MANUFACTURER'S REQUIREMENTS.
 4. MATERIALS AND INSTALLATION SHALL BE CONDUCTED IN ACCORDANCE WITH MANUFACTURER'S STANDARD SPECIFICATIONS AND REQUIREMENTS.



MISC. SIDEWALK AND DRAINAGE PROJECTS
(MC WA No. 024) - DRAINAGE
GT BRAY PARK
DRAINAGE PLAN - GT BRAY

NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	MCO002-1/4
SEC./TWN./RGE	05/35S/17E
SCALE	32/35S/18E
SCALE	AS SHOWN

	BY	DATE
SURVEYED	ISS	07/19/19
DESIGNED	MWM	08/01/19
DRAWN	SRN	10/05/20
CHECKED	MWM	10/07/20

THOMAS M. VILL, PROFESSIONAL ENGINEER, STATE OF FLORIDA, LICENSE NO. 71186. THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY THOMAS M. VILL, P.E. ON 04-20-21. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

Z:\PROJECTS\ Sarasota Region\ Manatee County\ MCC002 MC Misc Projects\ Drawings\ ES DWG\ V. Eng\ Final\ DWG (2) Tittle & Bray\ US CG-301 BMP MCC002.dwg, CG-301 Bray, 4/20/2021 12:36 PM Mark Mueller, 1:1 ARCH D (24.00 x 36.00 inches)

EROSION AND SEDIMENT CONTROL PLAN (MANATEE COUNTY LDC 519, APPENDIX A-19)

1. REFER TO THE FOLLOWING FOR DETAILS OF CONSTRUCTION SEQUENCING, DEWATERING ACTIVITIES AND SUMP LOCATIONS, STOCKPILE AREAS AND/OR DEPOSITION AREAS FOR EXCAVATED MATERIALS:
 - a. DESCRIPTION OF LAND CLEARING/DISTURBING ACTIVITIES, EXISTING SITE CONDITIONS AND ADJACENT LAND USES/AREAS THAT MIGHT BE AFFECTED BY LAND CLEARING/DISTURBANCES: WITH SPARSE TREES. PLEASE REFER TO THE LANDSCAPE PLANS FOR THE TREE REMOVAL PLAN FOR THE LAND CLEARING ACTIVITIES THAT ARE PROPOSED. THE EXISTING PROJECT SITE IS UNDEVELOPED WITH SPARSE TREES. A STORMWATER POND EXISTS TO THE NORTH OF THE SITE AND THERE ARE NO PROPOSED IMPACTS WITH THIS CONSTRUCTION.
 - b. IDENTIFICATION OF STOCKPILE AREAS AND/OR DEPOSITION AREAS FOR EXCAVATED MATERIALS: STOCKPILE AND/OR DEPOSITION AREAS WILL REMAIN WITHIN THE LIMITS OF THE SILT FENCE AND OUTSIDE OF ANY BUILDING ENVELOPE. MORE DETAILED STOCKPILE/DEPOSITION/LAYDOWN AREAS SHALL BE IDENTIFIED BY THE SITE CONTRACTOR BEFORE CONSTRUCTION COMMENCES.
 - c. DESCRIPTION OF POTENTIAL ON-SITE PROBLEM AREAS SUCH AS STEEP GRADE CHANGES, HIGHLY ERODIBLE SOILS, AREAS ADJACENT TO WETLANDS, SURFACE WATERS, OR UPLAND PRESERVATION AREAS: THE PROPOSED SITE DOES NOT CONTAIN ANY UNUSUAL OR PROBLEMATIC AREAS. REFER TO DRAINAGE PLANS FOR DETAILS OF TRANSITION GRADING.
 - d. CONSTRUCTION SCHEDULING, INCLUDING THE EXPECTED STARTING AND STABILIZATION DATES: THE ANTICIPATED STARTING AND STABILIZATION DATES ARE UNKNOWN AT THIS TIME. IT IS ANTICIPATED THAT THE CONSTRUCTION START DATE WILL BE IMMEDIATELY UPON APPROVAL OF THE FINAL SITE PLAN, CONSTRUCTION PLANS, AND BUILDING PERMIT.
 - e. IDENTIFICATION OF DISTURBED AREAS WHERE CONSTRUCTION WILL NOT BE ONGOING, AND FINAL GRADE WILL NOT BE ACHIEVED WITHIN FOURTEEN (14) DAYS, AND AN INDICATION OF TEMPORARY STABILIZATION MEASURES: THESE SITES ARE UNKNOWN AT THIS TIME, BUT WITHIN 14 DAYS AFTER CONSTRUCTION ACTIVITY CEASES ON ANY PARTICULAR AREA, ALL DISTURBED GROUND WHERE THERE WILL NOT BE CONSTRUCTION FOR LONGER THAN 21 DAYS MUST BE PROTECTED WITH A TEMPORARY STABILIZATION MEASURE ACCEPTABLE TO AGENCY REQUIREMENTS.
2. REFER TO THE FOLLOWING FOR DETAILS OF BEST MANAGEMENT PRACTICES AND FUGITIVE PARTICULATE ABATEMENT METHODS:
 - a. DETAILS, DRAWINGS AND CROSS-SECTIONS OF EROSION AND SEDIMENT CONTROL DEVICES, IF DIFFERENT FROM THE APPROVED FINAL SITE PLAN/CONSTRUCTION PLANS, AND WHEN THEY WILL BE INSTALLED: PLEASE REFER TO SHEETS CG-300 SERIES PLANS FOR THE DETAILS, DRAWINGS, AND CROSS-SECTION, IF APPLICABLE, OF THE EROSION AND SEDIMENT CONTROL DEVICES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE BMP DEVICES IN ACCORDANCE WITH THE BMP GUIDELINES AND GOVERNING AGENCY REQUIREMENTS FOR THE DURATION OF CONSTRUCTION.
 - b. MAINTENANCE PROGRAM FOR EROSION AND SEDIMENT CONTROL DEVICES INCLUDING INSPECTION FREQUENCY AND MAINTENANCE ACTIVITIES: BETWEEN THE TIME THIS IS IMPLEMENTED AND FINAL SITE STABILIZATION IS ACHIEVED, ALL DISTURBED AREAS AND POLLUTANT CONTROLS MUST BE INSPECTED AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS FOLLOWING A RAINFALL OF 0.5-INCHES OR GREATER. THE PURPOSE OF SITE INSPECTIONS IS TO ASSESS PERFORMANCE OF POLLUTANT CONTROLS. THE INSPECTIONS WILL BE CONDUCTED BY THE GENERAL CONTRACTOR'S DESIGNATED REPRESENTATIVE. BASED ON THESE INSPECTIONS, THE GENERAL CONTRACTOR WILL DECIDE WHETHER IT IS NECESSARY TO MODIFY THIS ESCP/SWPPP, ADD OR RELOCATE SEDIMENT BARRIERS, OR WHATEVER ELSE MAY BE NEEDED IN ORDER TO PREVENT POLLUTANTS FROM LEAVING THE SITE VIA STORM WATER RUNOFF. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR THE POLLUTANT CONTROL MEASURES TO BE REPAIRED, MODIFIED, MAINTAINED, SUPPLEMENTED, OR WHATEVER ELSE IS NECESSARY IN ORDER TO ACHIEVE EFFECTIVE POLLUTANT CONTROL.
 - c. HAUL ROUTES AND DETAILS OF APRON STABILIZATION AT INGRESS/EGRESS POINTS TO RIGHTS-OF-WAY: CONSTRUCTION TRAFFIC MUST ENTER AND EXIT THE SITE AT THE STABILIZED CONSTRUCTION ENTRANCE. THE PURPOSE IS TO TRAP DUST AND MUD THAT WOULD OTHERWISE BE CARRIED OFF-SITE BY CONSTRUCTION TRAFFIC. WATER TRUCKS WILL BE USED, AS NEEDED DURING CONSTRUCTION, TO REDUCE DUST GENERATED ON THE SITE. DUST CONTROL MUST BE PROVIDED BY THE GENERAL CONTRACTOR TO A DEGREE THAT IS IN COMPLIANCE WITH APPLICABLE LOCAL AND STATE DUST CONTROL REGULATIONS. UPON COMPLETION OF CONSTRUCTION, THE SITE WILL BE PERMANENTLY STABILIZED IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS.
 - d. DETAILS/LOCATION OF EQUIPMENT WASHING AREA: THE GENERAL CONTRACTOR WILL DESIGNATE AREAS FOR EQUIPMENT CLEANING, MAINTENANCE, AND REPAIR. THE GENERAL CONTRACTOR AND SUBCONTRACTORS WILL UTILIZE THOSE AREAS. THE AREAS WILL BE PROTECTED BY A TEMPORARY PERIMETER BERM. USE OF DETERGENTS FOR LARGE SCALE WASHING IS PROHIBITED (I.E., VEHICLES, BUILDINGS, PAVEMENT SURFACES, ETC.) CHEMICALS, PAINTS, SOLVENTS, FERTILIZERS, AND OTHER TOXIC MATERIAL MUST BE STORED IN WATERPROOF CONTAINERS. EXCEPT DURING APPLICATION, THE CONTENTS MUST BE KEPT IN TRUCKS OR WITHIN STORAGE FACILITIES. RUNOFF CONTAINING SUCH MATERIAL MUST BE COLLECTED, REMOVED FROM THE SITE, TREATED, AND DISPOSED AT AN APPROVED SOLID WASTE OR CHEMICAL DISPOSAL FACILITY.
 - e. DETAILS OF FUGITIVE PARTICULATE ABATEMENT METHODS: BARE EARTH AREAS SHALL BE WATERED DURING CONSTRUCTION AS NECESSARY TO MINIMIZE THE TRANSPORT OF FUGITIVE DUST. IT MAY BE NECESSARY TO LIMIT CONSTRUCTION VEHICLE SPEED IF BARE EARTH HAS NOT BEEN EFFECTIVELY WATERED. IN NO CASE SHALL FUGITIVE DUST BE ALLOWED TO LEAVE THE SITE UNDER CONSTRUCTION.

AS SOON AS PRACTICAL AFTER COMPLETION OF CONSTRUCTION, BARE EARTH AREAS SHALL BE VEGETATED. AT ANY TIME, BOTH DURING AND AFTER SITE CONSTRUCTION, THAT WATERING AND/OR VEGETATION ARE NOT EFFECTIVE IN CONTROLLING WIND EROSION AND/OR TRANSPORT OF FUGITIVE DUST, OTHER METHODS SHALL BE EMPLOYED AS NECESSARY FOR SUCH CONTROL. THESE METHODS MAY INCLUDE ERECTION OF DUST CONTROL FENCES. IF REQUIRED, DUST CONTROL FENCES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DETAIL FOR A SILT FENCE SHOWN IN BMP DEVICE #1 ON SHEET CG-303, EXCEPT THE MINIMUM HEIGHT SHALL BE 4- FEET.
 - f. CONTRACTOR INFORMATION, INCLUDING A 24-HOUR, SEVEN (7) DAY CONTACT AND PHONE NUMBERS: THE CONTRACTOR IS UNKNOWN AT THIS TIME AND WILL BE PROVIDED AS SOON AS PRACTICAL.
3. DETAILS OF DEWATERING ACTIVITIES AND LOCATIONS, DRAWINGS AND CROSS-SECTIONS OF DEWATERING SUMPS: SHOULD DEWATERING BE NECESSARY, THE CONTRACTOR WILL PROVIDED AN APPROPRIATE DEWATERING PLAN AND SUBMIT FOR REVIEW.
4. WATER QUALITY MONITORING PLAN AND MONITORING STATIONS (IF APPLICABLE): THE FOLLOWING ITEMS ARE ACKNOWLEDGED AND SHALL BE COMPLETED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF CONSTRUCTION.

THE DEVELOPER SHALL BE RESPONSIBLE FOR SCHEDULING AN ON-SITE MEETING WITH STAFF FROM THE MANATEE COUNTY NATURAL RESOURCES AND PROJECT MANAGEMENT DEPARTMENTS, THE ENGINEER OF RECORD AND THE CONTRACTOR. FINAL APPROVAL OF THE ESCP AND AUTHORIZATION OF CONSTRUCTION WILL BE GRANTED ONLY AFTER AN ON-SITE MEETING HAS BEEN CONDUCTED. NECESSARY REVISIONS, AS DETERMINED BY NRD STAFF, SHALL BE MADE PRIOR TO FINAL APPROVAL OF THE ESCP.

ANY CHANGES TO THE APPROVED ESCP MUST BE SUBMITTED TO THE NRD BY THE ENGINEER OF RECORD FOR REVIEW AND APPROVAL PRIOR TO IMPLEMENTATION. CHANGES THAT QUALIFY AS AN AMENDMENT TO THE FINAL SITE PLAN AND/OR CONSTRUCTION PLANS MUST BE APPROVED BY THE PLANNING DEPARTMENT PRIOR TO IMPLEMENTATION.

PRIOR TO SCHEDULING THE ON-SITE MEETING THE DEVELOPER SHALL:

 1. OBTAIN ALL APPLICABLE APPROVALS (FINAL SITE PLAN, CONSTRUCTION PLANS, ENVIRONMENTAL RESOURCE PERMIT AND NPDES PERMIT).
 2. STAKE ALL SILT SCREEN LOCATIONS EVERY ONE HUNDRED (100) FEET, AS INDICATED ON THE APPROVED FINAL SITE PLAN/CONSTRUCTION PLANS.

K. SUCH ADDITIONAL MATERIAL AND INFORMATION AS THE DIRECTOR MAY REASONABLY REQUIRE: NO ADDITIONAL INFORMATION IS PROPOSED AT THIS TIME.



PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

**MISC. SIDEWALK AND DRAINAGE PROJECTS
(MC WA No. 024) - DRAINAGE
GT BRAY PARK
BEST MANAGEMENT PRACTICES PLAN**

NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	MCO002-1/4
SEC./TWN./RGE	05/35S/17E
	32/35S/18E
SCALE	AS SHOWN
	BY DATE
SURVEYED	ISS 07/19/19
DESIGNED	MWM 08/01/19
DRAWN	SRN 08/14/19
CHECKED	MWM 02/04/20

THOMAS M. VILL, PROFESSIONAL ENGINEER, STATE OF FLORIDA, LICENSE NO. 71186. THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY THOMAS M. VILL, P.E., ON 04-20-21. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

