CONSTRUCTION DOCUMENTS **FOR**

TIDAL WAVE AUTO SPA - LAKE CITY, FL

DESCRIPTION: (per Old Republic Title Insurance Title Commitment 21129801)

The land referred to herein below is situated in the County of Columbia, State of Florida, and is described as follows: Parcel 1:

Parcel 6 of "a Subdivision of Block C, Brookside", as recorded in Plat Book 3, Page 101 of the Public Records of Columbia County, Florida

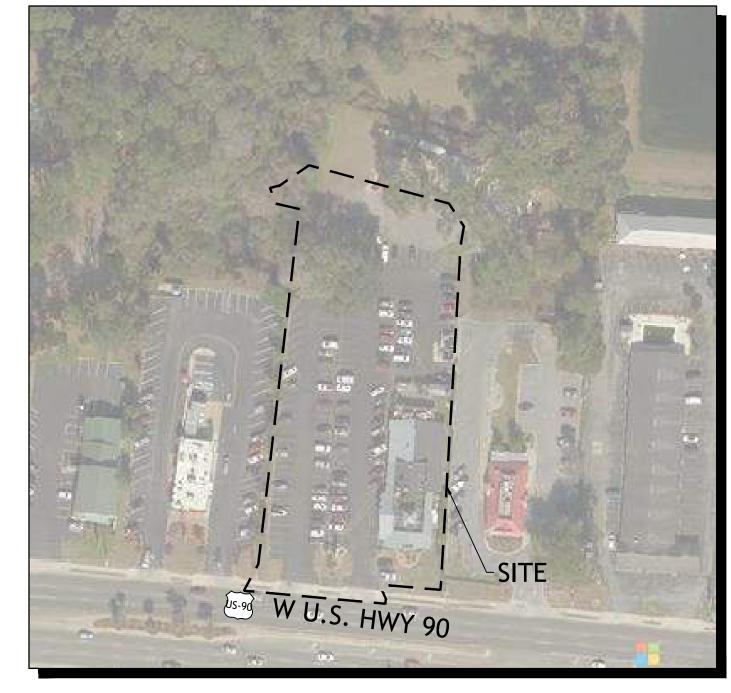
A Parcel of land lying immediately South of and adjacent to Parcel 6, as shown in Subdivision of Block C, Brookside, according to the Plat thereof recorded in Plat Book 3, Page 101, Public Records of Columbia County, Florida, more particularly described as follows: Beginning at the NE Corner of Lot B of "Brookside" a Subdivision as recorded in Plat Book 3, Page 45, Public Records, Columbia County, Florida, and run N75°20'W along the Northerly line of said Lot B , a distance of 423.8 feet, more or less to the NW Corner of said Lot B, said point lying on the Easterly right-of-way line of NW Streamside Court (formerly Eastside Drive); thence Northeasterly along said Easterly right-of-way line 20.76 feet to the SW Corner of Parcel No. 6 of "a Subdivision of Block C, Brookside", a subdivision as recorded in Plat Book 3, Page 101, Public Records, Columbia County, Florida; thence S75°20'E along the Southerly line of Parcel 6, a distance of 415.20 feet, more or less to the SE Corner of said Parcel 6: thence Southerly 20.23 feet to the POINT OF BEGINNING

Commence at the point where the East line of Lot "B" BROOKSIDE SUBDIVISION a subdivision according to the plat thereof, as recorded in Plat Book 3, Page 45, of the Public Records of Columbia County, Florida intersects the Northerly right-of-way line of State Road No. 10 (U.S. Highway 90) as now exists, and run N 81deg. 45' 40" W still along the said Northerly right-of-way line, 137.11 feet to the POINT OF BEGINNING; thence Continue N 81 deg. 45' 40" W still along said right-of-way line, 191.00 feet to a concrete monument; thence N 9 deg. 27' 00" E, 371.97 feet to a concrete monument and to the South line of a 20 foot ditch easement; thence S 74 deg. 29' 14 E 171.86 feet along said South line: thence S 6 deg. 09' 59" W 350.36 feet to the point of beginning, Columbia County, Florida.

Commence at the point where the East line of Lot "B" BROOKSIDE SUBDIVISION a subdivision according to the plat thereof, as recorded in Plat Book 3, Page 45, of the Public Records of Columbia County, Florida intersects the Northerly right-of-way line of State Road No. 10 (U.S. Highway 90) as now exists, and run North 84°40'20" West still along the said Northerly right-of-way line, 137.11 feet to the POINT OF BEGINNING; thence Continue North 84°40'20" West, a distance of 191.22 feet; thence North 06°35'59" East, a distance of 371.98 feet; thence North 77°24'58" West, a distance of 113.43 feet; thence North 24°25'13" East, a distance of 20.00 feet; thence North 33°50'07" East, a distance of 100.67 feet; thence North 55°02'22" West, a distance of 8.07 feet; thence North 33°41'58" East, a distance of 90.21 feet; thence South 78°24'49" East, a distance of 324.69 feet; thence South 03°16'34" West, a distance of 209.03 feet; thence North 77°24'58" West, a distance of 138.76 feet; thence South 03°17'26" West, a distance of 350.40 feet to the POINT OF BEGINNING.

Containing 3.25 acres, more or less.

	Sheet List Table	
Sheet Number	Sheet Title	
C0.00	COVER	
C0.01	ABBREVIATIONS AND LEGEND	
C0.02	GENERAL NOTES AND REFERENCES	
C0.03	EROSION CONTROL AND STORMWATER POLLUTION PREVENTION NOTES	
C0.04	EXISTING CONDITIONS PLAN	
C1.01	DEMOLITION PLAN	
C2.01	SITE PLAN	
C3.01	GRADING AND DRAINAGE PLAN	
C4.01	DRAINAGE MAP	
C5.01	UTILITY PLAN	
C6.01	PROFILES - STORM PIPE	
C6.02	PROFILES - SANITARY PIPE	
C7.01	EROSION CONTROL AND STORMWATER POLLUTION PREVENTION PLAN	
C8.01	DETAILS - SITE	
C8.02	DETAILS - SITE	
C8.03	DETAILS - SITE	
C8.04	DETAILS - SITE	
C9.01	DETAILS - UTILITY	
C10.01	DETAILS - GRADING & DRAINAGE	
C10.02	DETAILS - GRADING & DRAINAGE	
C11.01	DETAILS - EROSION	
C11.02	DETAILS - EROSION	
C11.03	DETAILS - EROSION	



LOCATION MAP

STREET ADDRESS: 3039 W US HWY 90 SECTION 35, RANGE 16, TOWNSHIP CITY OF LAKE CITY, COLUMBIA COUNTY, FLORIDA TAX PARCEL #35-3S-16-02573-004

CIVIL ENGINEER





LEI PROJECT NO. 0940-0130

ISSUE DATE: 03/04/2022

PROPERTY AREA: 3.25 LIMITS OF DISTURBANCE: 1.79

ZONING: CI

PROJECT DESCRIPTION: DEMOLITION OF EXISTING ASPHALT AND CONCRETE PAVEMENT, REMOVAL OF EXISTING UTILITIES, CONSTRUCTION OF A COMMERCIAL CAR WASH FACILITY AND RELATED UTILITY WORK INCLUDING DOMESTIC AND FIRE LINES, SANITARY LINES, OIL AND GRIT SEPARATORS, AND STORM INFRASTRUCTURE.

COLORIZED PLANS DISCLAIMER: THIS SET OF PLANS HAS BEEN FORMATTED TO BE PRINTED IN FULL COLOR. GRAY-SCALE PHOTO COPIES MAY NOT APPEAR AS INTENDED. CONTACT LONG ENGINEERING FOR ACCESS TO AN OFFICIAL GRAY-SCALE VERSION OF THE PLANS.

LOCAL MUNICIPALITY LAKE CITY, FLORIDA 205 N MARION AVENUE LAKE CITY, FL 32055 386-719-5750

DEPT. OF TRANSPORTATION FLORIDA DEPARTMENT OF TRANSPORTATION - DISTRICT 2

WATER/ SEWER PROVIDER LAKE CITY PUBLIC WORKS 180 NE GUM SWAMP RD LAKE CITY, FL 32055 386-758-5400

OWNER TWAS PROPERTIES LLC 115 E MAIN ST THOMASTON, GA 30286

DEVELOPER

OLSON LAND PARTNERS, INC 4300 LEGENDARY DRIVE, SUITE 234 DESTIN, FL 32541 (850) 650-4353

WATER MANAGEMENT DISTRICT SUWANEE RIVER MANAGEMENT DISTRICT 9225 CR 49

LIVE OAK, FL 32060 386-362-1001



TIDAL WAVE AUTO SPA Highway 90 Lake City, FL

PROTOTYPE DATE:

ISSUED FOR CONSTRUCTION

SET NAME:

PROFESSIONAL OF RECORD:

DESIGNER'S INFORMATION:



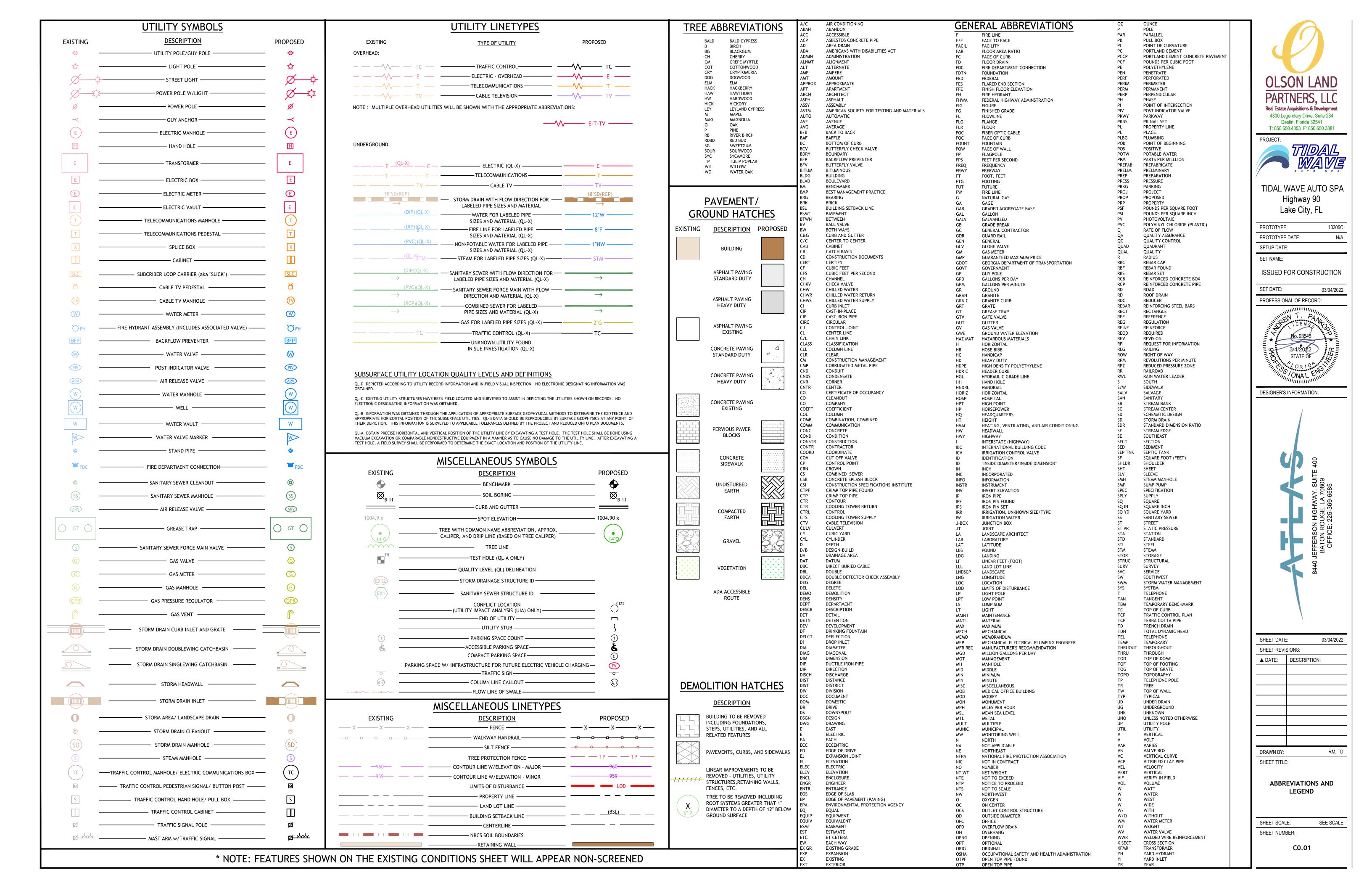
SHEET DATE	<u>:</u>	03/04/2022	
SHEET REVI	SHEET REVISIONS:		
▲ DATE:	DESCRIPTION:		
DRAWN BY:		RM, TD	
SHEET TITLE	<u>:</u>		

COVER

SHEET SCALE:

C0.00

SHEET NUMBER:



CONSTRUCTION NOTES

- 1. DIRT FOR FILL SHALL BE CLEAN, COHESIVE CLAY OR SANDY CLAY FREE OF DEBRIS, ORGANICS, DELETERIOUS MATERIAL AND ROCKS GREATER THAN 3" DIA.
- 2. MAX CUT OR FILL SLOPES SHALL BE AS SHOWN ON THE PLANS BUT IN NO CASE SHALL EXCEED 2:1 (H:V) UNLESS APPROVED BY THE PROJECT GEOTECHNICAL ENGINEER FOR TEMPORARY SLOPES.
- 3. EQUIPMENT AND MATERIALS SHALL BE STORED IN AREAS DESIGNATED BY THE OWNER. CONSTRUCTION AND STORAGE AREAS SHALL BE KEPT NEAT AND CLEAN. TREE SAVE AREAS SHALL NOT BE USED FOR STORAGE OR PARKING.
- 4. ALL REINFORCED CONCRETE PIPE (RCP) SHALL BE CLASS III UNLESS OTHERWISE NOTED. CORRUGATED METAL PIPE SHALL BE 16 GA. MIN.
- AND ASPHALT OR ALUMINUM COATED.

 5. ALL CATCH BASINS SHALL BE FLUSH WITH THE NEW CURB.
- 6. ALL MANHOLE TOPS SHALL BE SET FLUSH WITH FINISHED GRADE IN LANDSCAPED AND PAVED AREAS.
- 7. CONTRACTOR TO VERIFY THE ELEVATIONS OF ALL TIE-IN POINTS FOR INSTALLATION OF UTILITIES, CURB & GUTTER, SIDEWALK AND PAVING.
- 8. ALL BACKFILL MATERIAL SHALL BE COMPACTED TO NOT LESS THAN 95% OF THE OPTIMUM COMPACTION OR AS REQUIRED IN EARTHWORK SPECIFICATION FOR ANY SOIL CLASSIFICATION AS DETERMINED BY THE STANDARD PROCTOR TEST AASHTO T-180 METHOD "A". BACKFILL MATERIAL SHALL BE CLEAN AND FREE OF ROOTS, ROCK OR DELETERIOUS MATTER. CONTRACTOR SHALL CORRECT ANY DAMAGE TO CURBING OR PAVING CAUSED BY TRENCH SETTLEMENT WHICH OCCURS WITHIN 12 MONTHS OF PROJECT ACCEPTANCE. REFER TO GEOTECHNICAL REPORT.
- 9. MANHOLES & DROP INLETS ARE DIMENSIONED TO THE CENTER OF THE RISER. CATCH BASINS ARE DIMENSIONED TO THE CENTER OF THE CATCH BASIN AT THE FACE OF CURB. LAYOUT DIMENSIONS ARE TO FACE OF CURB. FACE OF WALL, CENTERLINE OF PIPE, UNLESS OTHERWISE NOTED.
- 10. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES BETWEEN PLAN AND FIELD CONDITIONS PROMPTLY UPON DISCOVERY. ANY CONFLICT OR DISCREPANCIES DISCOVERED WITHIN THE CONSTRUCTION PLANS SHALL BE REPORTED IMMEDIATELY TO THE OWNER'S REP AND ENGINEER OF RECORD FOR CLARIFICATION. FAILURE TO DO SO SHALL RESULT IN CONTRACTOR'S LIABILITY FOR ISSUES ARISING FROM SUCH CONFLICTS OR DISCREPANCIES.
- 11. ALL EXISTING ELECTRICAL BOXES, WATER METER BOXES, AND VALVE BOXES, WHICH ARE TO REMAIN SHALL BE SET FLUSH WITH THE TOP OF THE PROPOSED GRADE.
- 12. AREAS INTENDED TO SUPPORT PAVEMENT OR NEW FILL SHALL BE PROOFROLLED WITH A 20 TO 30 TON LOADED TRUCK OR OTHER PNEUMATIC-TIRED VEHICLE OF SIMILAR SIZE AND WEIGHT IN THE PRESENCE OF THE GEOTECHNICAL ENGINEER TO LOCATE WEAK, SOFT OR EXCESSIVELY WET MATERIALS. AREAS WHICH PUMP WHILE PROOFROLLED SHALL BE UNDERCUT AND BACK-FILLED IN ACCORDANCE WITH THE PROJECT EARTHWORK SPECIFICATIONS.
- 13. CRUSHED STONE AGGREGATE IN ROADWAY/PARKING AREA PAVEMENT BASE SHALL CONFORM WITH CURRENT STATE OF FLORIDA, DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. ALL ASPHALT MATERIAL AND PAVING OPERATIONS SHALL MEET APPLICABLE SPECIFICATIONS OF THE ASPHALT INSTITUTE AND FLORIDA DEPARTMENT OF TRANSPORTATION.
- 14. UPON COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL REMOVE ALL SEDIMENT FROM THE DETENTION PONDS AND RESTORE THE PONDS TO THEIR PROPOSED FINISHED GRADE. ALL STORM DRAIN PIPES ARE ALSO TO BE COMPLETELY CLEANED OF ALL SILT AND
- DEBRIS AT THE COMPLETION OF CONSTRUCTION.

 15. CONDUITS FOR SITE LIGHTING AND IRRIGATION SHALL BE INSTALLED, BACKFILLED AND PROPERLY COMPACTED PRIOR TO THE PLACEMENT OF BASE, PAVEMENT, AND CURB & GUTTER.
- 16. SIGNING AND STRIPING TO BE PROVIDED BY THE CONTRACTOR ACCORDING TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION WITH ALL REVISIONS INCLUDED.
- 17. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING AN AS-BUILT DRAWING OF THE DETENTION FACILITY(S) SIGNED AND SEALED BY A REGISTERED LAND SURVEYOR LICENSED IN THE STATE OF FLORIDA DETAILING THE VOLUME AND OUTLET CONTROL STRUCTURE CHARACTERISTICS AND FOR A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF FLORIDA FOR DETERMINATION OF THE COMPLIANCE OF THE FACILITY WITH THE APPROVED HYDROLOGY STUDY AND CONSTRUCTION DOCUMENTS. SHOULD THE AS- BUILT CONDITION BE IN NON-COMPLIANCE WITH THESE DOCUMENTS THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS REQUIRED FOR MODIFICATIONS AND RE-ANALYSIS BY THE ENGINEER.

DEMOLITION NOTES

- 1. PRIOR TO CLEARING, THE CONTRACTOR SHALL OBTAIN WRITTEN VERIFICATION FROM ALL UTILITY COMPANIES THAT ALL UTILITIES HAVE BEEN REMOVED. IF UTILITIES HAVE NOT BEEN REMOVED BUT HAVE BEEN ABANDONED, THE VERIFICATION LETTER SHALL STATE THAT THEIR FACILITIES LEFT ON-SITE HAVE BEEN ISOLATED FROM THEIR SOURCE AND MAY BE REMOVED BY THE CONTRACTOR. IF UTILITIES ARE TO REMAIN AND HAVE BEEN LEFT ACTIVE, THE CONTRACTOR SHALL CAREFULLY PROTECT THEM AND IS RESPONSIBLE FOR RESTORING THEM TO THEIR PREVIOUS CONDITION OR BETTER IF DAMAGED.
- 2. DISCONNECT AND SEAL OFF ABANDONED UTILITIES AND UTILITIES TO BE REMOVED PRIOR TO START OF DEMOLITION. UTILITIES SHALL BE DISCONNECTED BELOW EXISTING GRADE OR OUTSIDE OF CONTRACT LIMITS BY THE APPLICABLE PUBLIC UTILITY. ALL COSTS FOR THIS WORK SHALL BE BORNE BY THE CONTRACTOR.
- 3. ALL MATERIALS GENERATED BY DEMOLITION, INCLUDING BUT NOT LIMITED TO: VEGETATION, PAVEMENTS, SLABS, RETAINING WALLS, FENCES, ORGANICS AND UNSUITABLE BEARING SOILS SHALL BE STRIPPED FROM THE SURFACE WITHIN THE CONSTRUCTION LIMITS AND DISPOSED OF LEGALLY OFFSITE. ALL WASTE FROM DEMOLITION OPERATIONS SHALL BE HAULED OFFSITE TO DISPOSAL AREA APPROVED BY THE STATE OF FLORIDA FOR THE HANDLING OF DEMOLITION MATERIAL AND DEBRIS.
- 4. CONTRACTOR SHALL HAVE THE LIMITS OF CLEARING AND ALL BUFFERS STAKED WITH FLAGGING STRUNG AT CLEARING LIMITS TO ENSURE THE PROPER LOCATION OF TREE SAVE FENCE AND PROPOSED IMPROVEMENTS.
- 5. ALL VEGETATION, ROOT SYSTEMS, TOPSOIL, REFUSE AND OTHER DELETERIOUS, NON-SOIL MATERIAL SHALL BE STRIPPED FROM THE PROPOSED CONSTRUCTION AREAS, REMOVED AND DISPOSED OF ACCORDING TO THE PROJECT SPECIFICATIONS. CLEAN TOPSOIL MAY BE STOCKPILED AND REUSED LATER IN LANDSCAPED AREAS.
- 6. ALL STRUCTURES TO BE DEMOLISHED SHALL BE COMPLETELY REMOVED ABOVE AND BELOW GRADE. ABANDONED SERVICE LINES TO THE STRUCTURES SHALL ALSO BE REMOVED.
- 7. ALL NECESSARY PERMITS AND INSPECTIONS FOR DEMOLITION SHALL BE OBTAINED BY THE CONTRACTOR PRIOR TO BEGINNING WORK.
- 8. CONTRACTOR SHALL PROTECT ALL ADJACENT LANDS FROM DAMAGE DURING DEMOLITION WORK. ANY OFF-SITE AREAS DISTURBED SHALL BE RETURNED TO A CONDITION EQUAL TO OR BETTER THAN THE EXISTING CONDITION.
- 9. THE CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION SCHEDULES AND ACTIVITIES WITH THE APPROPRIATE UTILITY COMPANY AND THE OWNER/PROPERTY MANAGER OF ALL OPERATIONAL BUILDINGS ONSITE TO MINIMIZE DISRUPTIONS TO OVERALL PROPERTY FUNCTIONS.
- 10. THE CONTRACTOR SHALL MAINTAIN EXISTING UTILITY SERVICE TO ALL IMPACTED PROPERTIES/BUILDINGS UNTIL THE RELOCATED
- UTILITIES ARE INSPECTED AND APPROVED.

 11. ALL STRUCTURES NOT LABELED FOR DEMOLITION SHALL B
- 11. ALL STRUCTURES NOT LABELED FOR DEMOLITION SHALL BE PROTECTED FROM DAMAGE DURING ALL PHASES OF CONSTRUCTION. ANY STRUCTURES THAT ARE TO REMAIN THAT ARE DAMAGED SHALL BE REPAIRED BY THE CONTRACTOR TO A CONDITION EQUAL TO OR BETTER THAN THE EXISTING CONDITION AT NO ADDITIONAL COST.
- 12. AT A MINIMUM, INITIAL EROSION & SEDIMENT CONTROL BMP'S SHALL BE INSTALLED AND DRAINAGE INLET PROTECTION SHALL BE IN PLACE PRIOR TO DEMOLITION OPERATIONS.
- 13. CONTRACTOR SHALL INSTALL NECESSARY BARRICADES, SUFFICIENT LIGHTS, SIGNS AND OTHER TRAFFIC CONTROL METHODS AS MAY BE NECESSARY FOR THE PROTECTION AND SAFETY OF THE PUBLIC. TRAFFIC CONTROL DEVICES AND MEASURES SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION DURATION AND CONFORM TO LOCAL AND STATE DEPARTMENT OF TRANSPORTATION STANDARDS & SPECIFICATIONS. INTERRUPTION TO TRAFFIC FLOW IS TO BE MINIMIZED DURING PEAK TRAFFIC HOURS.
- 14. ALL STRUCTURES TO BE DEMOLISHED SHALL BE COMPLETELY REMOVED ABOVE AND BELOW GRADE. ABANDONED SERVICE LINES TO THE STRUCTURES SHALL ALSO BE REMOVED.
- 15. CONTRACTOR IS RESPONSIBLE FOR ALL DEMOLITION NECESSARY TO CONSTRUCT THE IMPROVEMENTS CONTEMPLATED IN THE
- CONTRACT DOCUMENTS WHETHER OR NOT SHOWN ON THIS PLAN.

 16. CONTRACTOR IS TO PROVIDE TEMPORARY SHORING, BRACING, AND/OR SUPPORT SYSTEMS AS REQUIRED TO PROVIDE STABILITY AND
- PREVENT COLLAPSE OR FAILURE OF EXISTING IMPROVEMENTS TO REMAIN.

 17. CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING ALL EXISTING UTILITIES ON SITE, DETERMINING THEIR LOCATION AND ELEVATION AND
- PROTECTING THOSE TO REMAIN.

 18. CONTRACTOR TO PROVIDE SUFFICIENT TEMPORARY FENCING TO PREVENT THE PUBLIC FROM ENTERING THE AREA IN WHICH
- DEMOLITION IS PLANNED OR IN PROGRESS. ALL GATES SHALL BE SECURED AND LOCKED DURING NON-WAKING HOURS.

 19. THE EXISTING BUILDINGS ARE TO UNDERGO PEST EXTERMINATION PRIOR TO DEMOLITION.
- 20. STORM AND/OR SANITARY SEWER PIPES TO BE ABANDONED ARE TO BE REMOVED, GROUT FILLED OR CRUSHED IN PLACE. GROUT FILLING
- IS ONLY ALLOWED WHEN SPECIFICALLY INDICATED ON THE DEMOLITION PLAN.
- 21. REMOVAL OF UTILITIES WITHIN THE PUBLIC RIGHT OF WAY OR THAT MAY IMPACT ADJACENT PROPERTIES ARE TO BE COORDINATED WITH THE APPLICABLE UTILITY COMPANY.
- 22. TREES SHOWN TO BE REMOVED INCLUDE ONLY THOSE SHOWN ON THE EXISTING CONDITIONS PLAN. OTHER TREES MAY EXIST THAT REQUIRE REMOVAL TO ENABLE THE IMPROVEMENTS TO BE CONSTRUCTED.

A.D.A. NOTES

- 1. ALL HANDICAP ACCESSIBLE ROUTES SHALL NOT EXCEED A MAXIMUM LONGITUDINAL-SLOPE OF 5% AND A MAXIMUM CROSS-SLOPE OF 2%.
- 2. ALL HANDICAP PARKING SPACES AND ACCESS AISLES SHALL NOT EXCEED A SLOPE OF 2% IN ANY DIRECTION.
- 3. THE CONTRACTOR SHALL VERIFY ALL ELEVATIONS SHOWN ON THESE PLANS AND FIELD-STAKED ELEVATIONS WITHIN ALL A.D.A. AREAS PRIOR TO INSTALLATION OF APPLICABLE PAVING. SHOULD ANY AREAS WITHIN THE ACCESSIBLE ROUTE EXCEED MAXIMUM GRADE, THE CONTRACTOR SHALL CONTACT THE CIVIL ENGINEER FOR FURTHER DIRECTION.

JURISDICTIONAL NOTES (CITY OF LAKE CITY)

- 1. LANDINGS ON ADA ROUTE SHALL MEASURE 5'X5' (MINIMUM) WITH SLOPES NOT EXCEEDING 2% IN ANY DIRECTION. ACCESSIBILITY TO BUILDINGS AND USES SHALL BE PROVIDED FROM RIGHTS-OF-WAY AND PARKING AREAS BY MEANS OF A PATHWAY LEADING TO AT LEAST ONE (1) ENTRANCE GENERALLY USED BY THE PUBLIC. SUCH PATHWAY SHALL HAVE BEEN CLEARED OF ALL OBSTRUCTIONS RELATED TO CONSTRUCTION ACTIVITY, PRIOR TO THE OPENING OF THE BUILDING TO THE GENERAL PUBLIC. WHERE CURBS EXIST ALONG SUCH PATHWAY, AS BETWEEN A PARKING LOT SURFACE AND A SIDEWALK SURFACE, INCLINED CURB APPROACHES OR CURB CUTS HAVING A GRADIENT OF NOT MORE THAN ONE (1) FOOT IN TWELVE (12) FEET AND A WIDTH OF NOT LESS THAN FOUR (4) FEET SHALL BE PROVIDED FOR ACCESS BY WHEELCHAIRS.
- SEPARATE SIGN(S) PERMIT REQUIRED PRIOR TO ERECTING SIGNAGE ON SITE. COMMERCIAL BUILDING PERMIT DOES NOT INCLUDE PERMITTING OF SIGNAGE.

APPROXIMATE EARTHWORK QUANTITIES

CUT: 553.70 CY FILL: 884.06 CY

NOTE: THESE QUANTITIES ARE APPROXIMATE AND SHOWN FOR PERMIT PURPOSES ONLY AND SHOULD NOT BE USED FOR BIDDING PURPOSES.

PROJECT DESCRIPTION

PROJECT NAME:

CITY/COUNTY/STATE:

TIDAL WAVE AUTO SPA - LAKE CITY, FL

LAKE CITY, FL 32055

PERMIT DOCUMENTS

LOCATION: 3039 W US HWY 90

SITE AREA: 3.25 AC

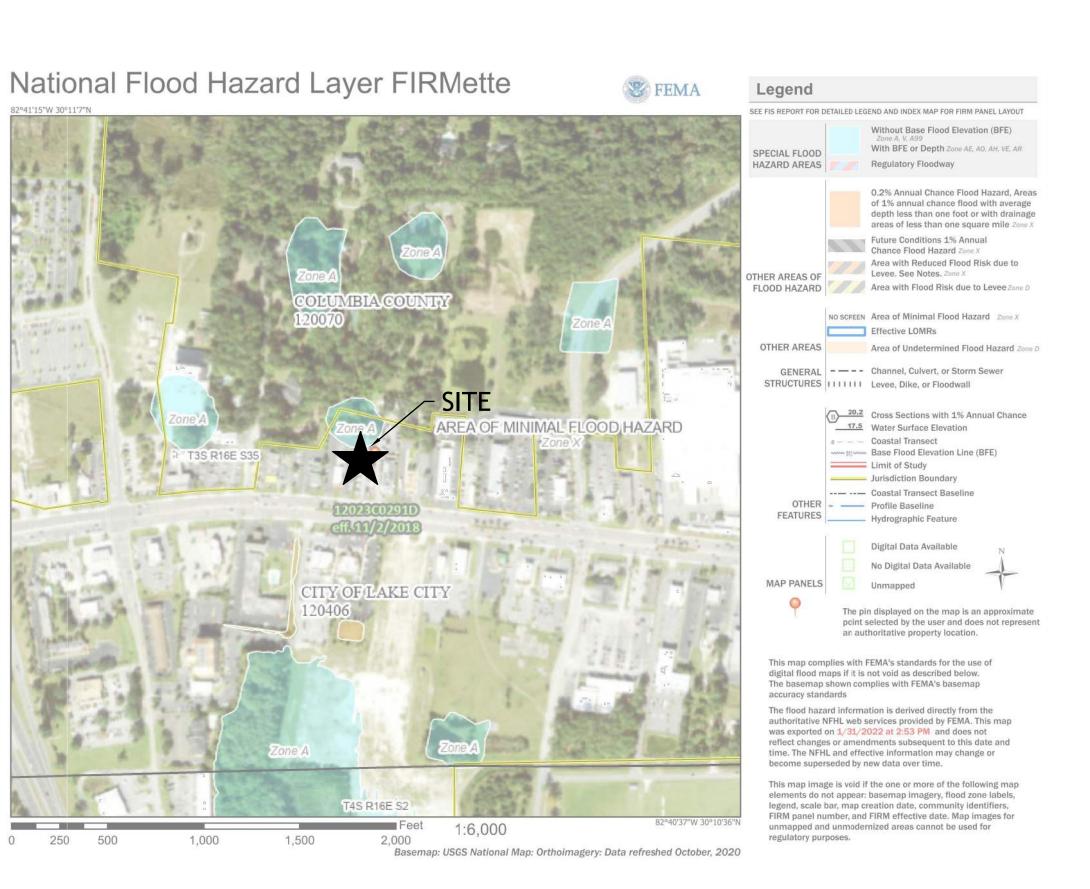
DESCRIPTION: DEMOL

DEMOLITION OF EXISTING ASPHALT AND CONCRETE PAVEMENT, REMOVAL OF EXISTING UTILITIES, CONSTRUCTION OF A COMMERCIAL CAR WASH FACILITY AND RELATED UTILITY WORK INCLUDING DOMESTIC AND FIRE LINES, SANITARY LINES, OIL AND GRIT SEPARATORS,

AND STORM INFRASTRUCTURE.

SERVICES:

FEMA FLOOD INSURANCE RATE MAP



PORTIONS OF THIS PROPERTY <u>ARE</u> WITHIN THE 100-YEAR FLOOD PLAIN ACCORDING TO F.E.M.A F.I.R.M. PANELS 291 OF 552, DATED NOVEMBER 2, 2018.

GENERAL NOTES

1. PROJECT TIDAL WAVE AUTO SPA - LAKE CITY, FL 3039 W US HWY 90, LAKE CITY, FL 32055, COLUMBIA COUNTY, FL

OWNER: TWAS PROPERTIES LLC 115 E MAIN ST

ARCHITECT: KERN ARCHITECTS

11822 JUSTICE AVE. BATON ROUGE, LA 70816

PHILIP.KERN@KERNACRHITECTS.COM

ENGINEER: LONG ENGINEERING, INC.

THOMASTON, GA 30286

2550 HERITAGE COURT, SUITE 250 ATLANTA, FLORIDA 30339

770-951-2495

2. ZONING: CI

3. BUILDING SETBACKS: 20' FT. FRONT YARD (US HWY 90) 0' FT. SIDE YARD

- 15' FT. REAR YARD
 4. THE PROPERTY IS LOCATED WITHIN SECTION 35, RANGE 16, AND TOWNSHIP 03, CITY OF
- LAKE CITY, COLUMBIA COUNTY, FLORIDA.

 5. THE PROPOSED PROJECT TOTAL SITE AREA IS 3.25 ACRES. THE APPROXIMATE DISTURBED AREA IS 1.79 ACRES.
- 6. UPON DISCOVERING ANY DISCREPANCIES BETWEEN THE ARCHITECTURAL AND THE ENGINEERING PLANS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT
- 7. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING DIMENSIONS SHOWN HEREON WITH THE ARCHITECTURAL DRAWINGS AND EXISTING BUILDINGS PRIOR TO ANY CONSTRUCTION AND SHALL PROMPTLY NOTIFY THE ARCHITECT AND ENGINEER OF ANY
- DISCREPANCIES.

 8. PROPOSED ELEVATIONS ALONG CURB LINES ARE TO THE BOTTOM OF CURB UNLESS OTHERWISE NOTED BY A TC (TOP OF CURB).
- 9. ALL CONSTRUCTION MUST CONFORM TO THE LOCAL JURISDICTIONAL STANDARDS, SPECIFICATIONS AND DETAILS. THE CONTRACTOR SHALL OBTAIN THESE DOCUMENTS, BECOME FAMILIAR WITH THEM AND HAVE THEM ON THE JOB SITE AT ALL TIMES.
- 10. PROPOSED CAR WASH TUNNEL DIMENSIONS ARE PROVIDED FOR GENERAL INFORMATION ONLY BASED ON PLANS REFERENCED (C2.01). CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS SHOWN ON THE PLANS FOR ALL STRUCTURES AS WELL AS ALL UTILITY LOCATIONS WITH CURRENT ARCHITECTURAL, STRUCTURAL, AND PLUMBING PLANS AND ENSURING THERE ARE NO CONFLICTS.
- 11. CONTRACTOR'S VEHICLES SHALL ONLY USE THE LOCAL ROADWAYS IN ACCORDANCE WITH JURISDICTIONAL REQUIREMENTS.
- 12. NOTIFY LOCAL JURISDICTIONAL INSPECTOR 24 HOURS PRIOR TO BEGINNING OF
- CONSTRUCTION.

 13. ALL CONSTRUCTION VEHICLES SHALL PARK IN AREAS DESIGNATED BY THE OWNER.
- 13. ALL CONSTRUCTION VEHICLES SHALL PARK IN AREAS DESIGNATED BY THE OV

 14. OFF-STREET PARKING SHALL BE PROVIDED AND MAINTAINED THROUGHOUT

 CONSTRUCTION.
- 15. NECESSARY BARRICADES, SUFFICIENT LIGHTS, SIGNS AND OTHER TRAFFIC CONTROL DEVICES AS MAY BE NECESSARY FOR THE PROTECTION AND SAFETY OF THE PUBLIC SHALL BE PROVIDED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION AND MAINTAINED WHEN WORKING IN CLOSE PROXIMITY TO PUBLIC ROADS. INTERRUPTION TO TRAFFIC FLOW IS TO BE MINIMIZED DURING PEAK TRAFFIC HOURS.
- 16. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHEN ENTERING MANHOLES, PIPES OR OTHER STRUCTURES SHOWN ON THE PLANS. AT A MINIMUM, THESE PIPES AND STRUCTURES SHALL BE PROPERLY VENTILATED AND ENTRY SHALL CONFORM TO OSHA REQUIREMENTS.
- 17. CONTRACTOR SHALL CLEARLY MARK AND MAINTAIN PROPERTY CORNER MONUMENTATION AND BENCHMARKS WHENEVER POSSIBLE AND WILL BE RESPONSIBLE FOR THE COST OF REPLACING THEM IF DISTURBED OR DESTROYED.
- 18. THE CONTRACTOR SHALL LEAVE THE SITE IN A CLEAN AND NEAT CONDITION. ALL DEBRIS, VEGETATION WHICH HAS BEEN REMOVED, LUMBER, CONCRETE, ETC., SHALL BE REMOVED FROM THE SITE AND PROPERLY DISPOSED OF.
- 19. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION, ELEVATION AND PRESENCE OF UTILITIES SHOWN ON THE PLANS IS NOT TO BE RELIED ON TO BE ACCURATE, OR COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL UTILITY COMPANIES HAVING UTILITIES WITHIN OR ADJACENT TO THE WORK AREA. THE CONTRACTOR SHALL HAVE THE UTILITIES FIELD LOCATED AND COORDINATED WITH UTILITY COMPANIES 72 HOURS PRIOR TO CONSTRUCTION TO HAVE THEM RELOCATED AND/OR ADAPTED FOR THE TIE-INS.

BENCHMARK

NAME: "SITE BENCHMARK #1"

DESCRIPTION: SET NAIL AND DISK

ELEVATION: 152.73'

NAME: "SITE BENCHMARK #2"

DESCRIPTION: SET NAIL AND DISK

ELEVATION: 157.10'

REFERENCES

SURVEY:

PRELIMINARY ALTA/ANSPS LAND TITLE SURVEY FOR TEXAS ROADHOUSE HOLDINGS, LLC. PREPARED BY SOUTHEASTERN SURVEYING AND MAPPING CORPORATION DATED 11/16/2021.

ARCHITECTURAL DRAWINGS:

KERN ARCHITECTS 11822 JUSTICE AVE. SUITE B7 BATON ROUGE, LA 70816



T: 850.650.4353 F: 850.650.3881

PROJECT:

TIDAL

WA VE

TIDAL WAVE AUTO SPA Highway 90

Lake City, FL

PROTOTYPE: 13305C

SETUP DATE:
SET NAME:

PROTOTYPE DATE:

ISSUED FOR CONSTRUCTION

SET DATE: 03/04/2022

PROFESSIONAL OF RECORD:

T. PANTILLIAM T. PA

DESIGNER'S INFORMATION:



SHEET DATE: 03/04/2022

SHEET REVISIONS:

A DATE: DESCRIPTION:

GENERAL NOTES AND REFERENCES

RM, TD

SEE SCALE

SHEET NUMBER:

SHEET SCALE:

DRAWN BY:

SHEET TITLE:

C0.02

DELINEATION OF ALL SAMPLING LOCATIONS, PERENNIAL AND INTERMITTENT STREAMS AND OTHER WATER BODIES INTO



APPROXIMATE ACTIVITY SCHEDULE ANTICIPATED START DATE: 08/2022 ANTICIPATED COMPLETION DATE: 12/2022 MONTH DESCRIPTION INITIAL PHASE E&SC INSTALLATION 7-DAY VISIT CERTIFICATION SEDIMENT CONTROL-TREE PROTECTION CLEARING & GRUBBING MAINT. OF EROSION CONTROL DEVICES FINAL LANDSCAPING, CLEANING OF STORM DRAINS CAR WASH TUNNEL CONSTRUCTION

THE FOLLOWING NARRATIVE OF THE STORMWATER POLLUTION PREVENTION PLAN CONTAINS REFERENCES TO THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, THE DESIGN STANDARDS, AND OTHER SHEETS OF THESE CONSTRUCTION PLANS. THE FIRST SHEET OF THE CONSTRUCTION PLANS (CALLED THE KEY SHEET) CONTAINS AN INDEX TO THE OTHER SHEETS. THE COMPLETE STORMWATER POLLUTION PREVENTION PLAN INCLUDES SEVERAL ITEMS: THIS NARRATIVE DESCRIPTION, THE DOCUMENTS REFERENCED IN THIS NARRATIVE, THE CONTRACTOR'S APPROVED EROSION CONTROL PLAN REQUIRED BY SPECIFICATION SECTION 104, AND REPORTS OF INSPECTIONS MADE DURING CONSTRUCTION.

1.0 SITE DESCRIPTION:

- A. NATURE OF CONSTRUCTION ACTIVITY: DEMOLITION OF EXISTING ASPHALT AND CONCRETE PAVEMENT, REMOVAL OF EXISTING UTILITIES, CONSTRUCTION OF A COMMERCIAL CAR WASH FACILITY AND RELATED UTILITY WORK INCLUDING DOMESTIC AND FIRE LINES, SANITARY LINES, OIL AND GRIT SEPARATORS, AND STORM INFRASTRUCTURE.
- B. <u>SEQUENCE OF MAJOR SOIL DISTURBING ACTIVITIES:</u> IN THE SEDIMENT AND EROSION CONTROL PLAN, THE CONTRACTOR SHALL PROVIDE A DETAILED SEQUENCE OF CONSTRUCTION FOR ALL CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL FOLLOW THE SEQUENCE OF MAJOR ACTIVITIES DESCRIBED BELOW, UNLESS THE CONTRACTOR PROPOSES A DIFFERENT SEQUENCE THAT IS EQUAL OR BETTER AT CONTROLLING EROSION AND TRAPPING SEDIMENT AND IS APPROVED BY THE ENGINEER.

FOR EACH CONSTRUCTION PHASE, INSTALL PERIMETER CONTROLS AFTER CLEARING AND GRUBBING NECESSARY FOR INSTALLATION OF CONTROLS BUT BEFORE BEGINNING OTHER WORK FOR THE CONSTRUCTION PHASE. REMOVE PERIMETER CONTROLS ONLY AFTER ALL UPSTREAM AREAS ARE STABILIZED. SEDIMENT CONTAINMENT SYSTEMS SHOULD BE INSTALLED AFTER AN INLET IS INSTALLED. VELOCITY DAMPERING BMPs SHOULD BE INSTALLED AFTER OUTFALLS ARE CONSTRUCTED.

- a. CLEARING AND GRUBBING, EARTHWORK, AND STORM DRAIN CONSTRUCTION FOR THE OUTFALL FROM
- b. CLEARING AND GRUBBING, EARTHWORK FOR POND CONSTRUCTION
- c. STORM DRAIN, OUTFALL CONSTRUCTION AND UTILITY INFRASTRUCTURE INSTALLATION
- d. CARWASH TUNNEL CONSTRUCTION AND EQUIPMENT INSTALLATION

C. <u>AREA ESTIMATES:</u>

TOTAL SITE AREA: 3.25 AC DISTURBED AREA: 1.79 AC

D. RUNOFF DATA:

RUNOFF COEFFECIENTS (C):

EXISTING:

FDOT AREA = 0.57 EASEMENT AREA = 0.82

PROPOSED:

FDOT AREA = 0.54 EASEMENT AREA = 0.69

AREA TO POND = 0.84

OUTFALL INFORMATION:

THERE AREA TWO OUTFALLS.

- #1 DESCRIPTION: EXISTING POND AT STORM EASEMENT NW OF SITE
- LOCATION: LATITUDE N 30° 10' 53.61", LONGITUDE W 82° 40' 56.67"
- RECEIVING WATER NAME: LAKE LONA DRAINAGE BASIN (PER FDEP GIS)
- #2 DESCRIPTION: US-90 R/W STRUCTURE ADJACENT TO WENDY'S RESTAURANT LOCATION: LATITUDE N 30° 10' 49.68", LONGITUDE W 82° 40' 58.13

RECEIVING WATER NAME: CITY OF LAKE CITY MS4 SYSTEM

E. SITE MAP:

SEE SHEET CX101 FOR EXISTING SITE MAP CONDITIONS.

DRAINAGE PATTERNS: THE DRAINAGE BASIN DIVIDES AND FLOW DIRECTIONS ARE SHOWN ON THE DRAINAGE MAPS, SHEET C4.01.

APPROXIMATE SLOPES: THE APPROXIMATE SLOPES OF THE SITE CAN BE SEEN ON THE EROSION CONTROL AND STORMWATER POLLUTION PREVENTION PLAN, SHEET NUMBER C7.01 AND THE PROFILE SHEETS, SHEET NUMBERS C6.01 - C6.02.

AREAS NOT TO BE DISTURBED: A LIMITS OF DISTURBANCE LINE SHOWS THE APPROXIMATE LIMITS OF DEMOLITION AND GRADING. THIS LINE CAN BE SEEN ON THE DEMOLITION PLAN AND THE GRADING AND DRAINAGE PLAN, SHEETS C1.01 & C3.01.

LOCATIONS OF TEMPORARY CONTROLS: THESE ARE SHOWN ON THE EROSION CONTROL AND STORMWATER POLLUTION PREVENTION PLAN, SHEET C7.01.

LOCATIONS OF PERMANENT CONTROLS: THE STORMWATER RETENTION POND AND OUTLET CONTROL STRUCTURE ARE THE PRIMARY PERMANENT STORMWATER MANAGEMENT CONTROLS. THESE ARE SHOWN ON THE GRADING AND DRAINAGE PLAN, SHEET C3.01.

AREAS TO BE STABILIZED: TEMPORARY STABILIZATION PRACTICES ARE SHOWN IN THE SAME LOCATION AS THE TEMPORARY CONTROLS MENTIONED ABOVE.

SURFACE WATERS: THERE ARE NO SURFACE WATERS ON SITE.

DISCHARGE POINTS TO SURFACE WATERS: OUTFALL #1 DISCHARGES INTO THE LAKE LONA DRAINAGE BASIN PER FDEP GIS. THIS CAN BE SEEN ON THE EROSION CONTROL AND STORMWATER POLLUTION PREVENTION PLAN, SHEET C7.01.

F. RECEIVING WATERS: SEE ITEM D FOR THE OUTFALL LOCATIONS AND RECEIVING WATER NAMES. THERE ARE WETLAND AREAS ON THE SITE AND CAN BE SEEN ON EROSION CONTROL AND STORMWATER POLLUTION PREVENTION PLAN, SHEET C7.01.

2.0 CONTROLS:

EROSION AND SEDIMENT CONTROL: IN THE EROSION CONTROL AND STORMWATER POLLUTION PREVENTION PLAN, THE CONTRACTOR SHALL DESCRIBE THE PROPOSED STABILIZATION AND STRUCTURAL PRACTICES BASED ON THE CONTRACTOR'S PROPOSED TEMPORARY TRAFFIC CONTROL (TTC) PLAN. THE FOLLOWING RECOMMENDED GUIDELINES ARE BASED ON THE TEMPORARY TRAFFIC CONTROL PLAN OUTLINED IN THE CONSTRUCTION PLANS. WHERE FOLLOWING THE TEMPORARY TRAFFIC CONTROL PLAN OUTLINED IN THESE CONSTRUCTION PLANS, THE CONTRACTOR MAY CHOOSE TO ACCEPT THE FOLLOWING GUIDELINES OR MODIFY THEM IN THE SEDIMENT AND EROSION CONTROL PLAN, SUBJECT TO APPROVAL BY THE ENGINEER. AS WORK PROGRESSES, THE CONTRACTOR SHALL MODIFY THE PLAN TO ADAPT TO SEASONAL VARIATIONS, CHANGES IN CONSTRUCTION ACTIVITIES, AND THE NEED FOR BETTER PRACTICES.

FOR EACH CONSTRUCTION PHASE, INSTALL PERIMETER CONTROLS AFTER CLEARING AND GRUBBING NECESSARY FOR INSTALLATION OF CONTROLS BUT BEFORE BEGINNING OTHER WORK FOR THE CONSTRUCTION PHASE. REMOVE PERIMETER CONTROLS ONLY AFTER ALL UPSTREAM AREAS ARE

PHASE I OF EROSION CONTROL AND STORMWATER POLLUTION PREVENTION PLAN:

DEMOLISH DRIVEWAY AND IMMEDIATELY STABILIZE THE AREA WITH SEDIMENT TRACKING PREVENTION ENTRANCE (CO). INSTALL ALL PERIMETER SILT FENCE AND MULCH FILTER BERM.

CONSTRUCT THE OUTFALL PIPE FROM B1 TOWARDS THE OCS (B3) IN THE POND. THE CONTRACTOR SHALL HAVE INLET PROTECTION AVAILABLE AT ALL TIMES DURING THE PIPE CONSTRUCTION TO SUBSTANTIALLY BLOCK RUNOFF IN THE TRENCH FROM ENTERING THE PIPE. CONSTRUCT PIPE TO THE POND AND CONSTRUCT THE OUTLET STRUCTURE OF THE POND.

CLEAR AND GRUB THE POND SITE. EXCAVATE THE POND TO APPROXIMATE PROPOSED DIMENSIONS. TURF ALL DISTURBED AREAS OF THE POND SITE ABOVE ELEVATION 150.0.

STABILIZATION PRACTICES

IN THE SEDIMENT AND EROSION CONTROL PLAN, THE CONTRACTOR SHALL DESCRIBE THE STABILIZATION PRACTICES PROPOSED TO CONTROL EROSION. THE CONTRACTOR SHALL INITIATE ALL STABILIZATION MEASURES AS SOON AS PRACTICAL, BUT IN NO CASE MORE THAN 7 DAYS AFTER CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED. THE STABILIZATION PRACTICES SHALL INCLUDE AT LEAST THE FOLLOWING, UNLESS OTHERWISE APPROVED BY THE ENGINEER

- ARTIFICIAL COVERINGS IN ACCORDANCE WITH SPECIFICATION SECTION 104
- TURF AND SOD IN ACCORDANCE WITH SPECIFICATION SECTION 104

PERMANENT:

ASPHALT OR CONCRETE SURFACE

- SOD IN ACCORDANCE WITH SPECIFICATION 570

2. STRUCTURAL PRACTICES

IN THE SEDIMENT AND EROSION CONTROL PLAN, THE CONTRACTOR SHALL DESCRIBE THE PROPOSED STRUCTURAL PRACTICES TO CONTROL OR TRAP SEDIMENT AND OTHERWISE PREVENT THE DISCHARGE OF POLLUTANTS FROM EXPOSED AREAS OF THE SITE. SEDIMENT CONTROLS SHALL BE IN PLACE BEFORE DISTURBING SOIL UPSTREAM OF THE CONTROL. THE STRUCTURAL PRACTICES SHALL INCLUDE AT LEAST THE FOLLOWING, UNLESS OTHERWISE APPROVED BY THE

TEMPORARY:

- SEDIMENT BARRIERS IN ACCORDANCE WITH DESIGN SPECIFICATION SECTION 104, AND FDEP EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL.
- INLET PROTECTION IN ACCORDANCE WITH FDEP EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL AND SPECIAL DETAILS PROVIDED.
- SEDIMENT CONTAINMENT SYSTEM: IN ACCORDANCE WITH FDEP EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL AND SPECIAL DETAILS PROVIDED.

PERMANENT:

- STORMWATER PONDS

- SOD

STORMWATER MANAGEMENT:

SEVERAL STORM DRAIN SYSTEMS WILL BE CONSTRUCTED TO CONVEY RUNOFF TO ONE (1) STORMWATER RETENTION / DETENTION POND. THE FACILITIES HAVE BEEN PERMITTED BY THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) AND THE CITY OF LAKE CITY AND COMPLY WITH APPLICABLE DESIGN STANDARDS.

C. OTHER CONTROLS:

WASTE DISPOSAL:

IN THE SEDIMENT AND EROSION CONTROL PLAN, THE CONTRACTOR SHALL DESCRIBE THE PROPOSED METHODS TO PREVENT THE DISCHARGE OF SOLID MATERIALS, INCLUDING BUILDING MATERIALS, TO WATERS OF THE UNITED STATES. THE PROPOSED METHODS SHALL INCLUDE AT LEAST THE FOLLOWING, UNLESS OTHERWISE APPROVED BY THE ENGINEER:

- PROVIDING LITTER CONTROL AND COLLECTION WITHIN THE PROJECT DURING CONSTRUCTION ACTIVITIES.
- DISPOSING OF ALL FERTILIZER OR OTHER CHEMICAL CONTAINERS ACCORDING TO EPA'S STANDARD PRACTICES AS DETAILED BY THE MANUFACTURER.
- DISPOSING OF SOLID MATERIALS INCLUDING BUILDING AND CONSTRUCTION MATERIALS OFF THE PROJECT SITE BUT NOT IN SURFACE WATERS, OR WETLANDS.

2. OFF-SITE VEHICLE TRACKING & DUST CONTROL:

IN THE SEDIMENT AND EROSION CONTROL PLAN, THE CONTRACTOR SHALL DESCRIBE THE PROPOSED METHODS FOR MINIMIZING OFFSITE VEHICLE TRACKING OF SEDIMENTS AND GENERATING DUST. THE PROPOSED METHODS SHALL INCLUDE AT LEAST THE FOLLOWING, UNLESS OTHERWISE APPROVED BY THE ENGINEER:

- COVERING LOADED HAUL TRUCKS WITH TARPAULINS.
- REMOVING EXCESS DIRT FROM ROADS DAILY.
- STABILIZING CONSTRUCTION ENTRANCES ACCORDING TO THE FDEP EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL.
- USING ROADWAY SWEEPERS DURING DUST GENERATING ACTIVITIES SUCH AS EXCAVATION AND MILLING OPERATIONS.
- 3. STATE AND LOCAL REGULATIONS FOR WASTE DISPOSAL, SANITARY SEWER, OR SEPTIC TANK

IN THE SPECIFICATION SECTION 104, EROSION CONTROL PLAN, THE CONTRACTOR SHALL DESCRIBE THE PROPOSED PROCEDURES TO COMPLY WITH APPLICABLE STATE AND LOCAL REGULATIONS FOR WASTE DISPOSAL, AND SANITARY SEWER OR SEPTIC SYSTEMS.

4. FERTILIZERS AND PESTICIDES:

IN THE SEDIMENT AND EROSION CONTROL PLAN, THE CONTRACTOR SHALL DESCRIBE THE PROCEDURES FOR APPLYING FERTILIZERS AND PESTICIDES. THE PROPOSED PROCEDURES SHALL COMPLY WITH APPLICABLE SUBSECTIONS OF SECTION 982 OF THE SPECIFICATIONS.

TOXIC SUBSTANCES:

IN THE SEDIMENT AND EROSION CONTROL PLAN, THE CONTRACTOR SHALL PROVIDE A LIST OF TOXIC SUBSTANCES THAT ARE LIKELY TO BE USED ON THE JOB AND PROVIDE A PLAN ADDRESSING THE GENERATION, APPLICATION, MIGRATION, STORAGE, AND DISPOSAL OF THESE SUBSTANCES.

3.0 MAINTENANCE:

IN THE SEDIMENT AND EROSION CONTROL PLAN, THE CONTRACTOR SHALL PROVIDE A PLAN FOR MAINTAINING ALL EROSION AND SEDIMENT CONTROLS THROUGHOUT CONSTRUCTION. THE MAINTENANCE PLAN SHALL AT A MINIMUM, COMPLY WITH THE FOLLOWING:

- A. SILT FENCE: MAINTAIN PER SPECIFICATION SECTION 104. THE CONTRACTOR SHOULD ANTICIPATE REPLACING SILT FENCE ON 12 MONTH INTERVALS.
- B. SEDIMENT BARRIERS: REMOVE SEDIMENT AS PER MANUFACTURER'S RECOMMENDATIONS OR WHEN WATER PONDS IN UNACCEPTABLE AMOUNTS OR AREAS.
- C. POND: THE POND IS A TEMPORARY SEDIMENT BASIN UNTIL THE AREAS THAT DRAIN TO THEM ARE STABILIZED, SO UNTIL THEN, REMOVE SEDIMENT FROM THE POND WHEN IT BECOMES 1.5' DEEP AT ANY

QUALIFIED PERSONNEL SHALL INSPECT THE FOLLOWING ITEMS AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM THAT IS 0.50 INCHES OR GREATER. TO COMPLY, THE CONTRACTOR SHALL INSTALL AND MAINTAIN RAIN GAUGES AND RECORD THE DAILY RAINFALL. WHERE SITES HAVE BEEN PERMANENTLY STABILIZED, INSPECTION SHALL BE CONDUCTED AT LEAST ONCE EVERY MONTH. THE CONTRACTOR SHALL ALSO INSPECT THAT CONTROLS INSTALLED IN THE FIELD AGREE WITH THE LATEST STORMWATER POLLUTION PREVENTION PLAN.

A. POINTS OF DISCHARGE TO WATERS OF THE UNITED STATES

- B. POINTS OF DISCHARGE TO MUNICIPAL SEPARATE STORM DRAIN SYSTEMS
- C. <u>DISTURBED AREAS OF THE SITE THAT HAVE NOT BEEN FINALLY STABILIZED</u>
- D. AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION.
- E. <u>STRUCTURAL CONTROLS.</u>
- F. STORMWATER MANAGEMENT SYSTEMS.
- G. LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE

THE CONTRACTOR SHALL INITIATE REPAIRS WITHIN 24 HOURS OF INSPECTIONS THAT INDICATE ITEMS ARE NOT IN GOOD WORKING ORDER. IF INSPECTIONS INDICATE THAT THE INSTALLED STABILIZATION AND STRUCTURAL PRACTICES ARE NOT SUFFICIENT TO MINIMIZE EROSION, RETAIN SEDIMENT, AND PREVENT DISCHARGING POLLUTANTS, THE CONTRACTOR SHALL PROVIDE ADDITIONAL MEASURES, AS APPROVED BY THE ENGINEER.

5.0 NON-STORMWATER DISCHARGES

IN THE SPECIFICATION SECTION 104 EROSION CONTROL PLAN, THE CONTRACTOR SHALL IDENTIFY ALL ANTICIPATED NON-STORMWATER DISCHARGES (EXCEPT FLOWS FROM FIRE FIGHTING ACTIVITIES). THE CONTRACTOR SHALL DESCRIBE THE PROPOSED MEASURES TO PREVENT POLLUTION OF THESE NON-STORMWATER DISCHARGES.

TBD



Destin, Florida 32541

T: 850.650.4353 F: 850.650.3881

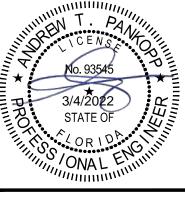
TIDAL WAVE AUTO SPA Highway 90 Lake City, FL

13305C PROTOTYPE DATE:

SET NAME:

ISSUED FOR CONSTRUCTION

03/04/2022 PROFESSIONAL OF RECORD:



DESIGNER'S INFORMATION:



03/04/2022 SHEET DATE: SHEET REVISIONS: ▲ DATE: DESCRIPTION:

SHEET TITLE: **EROSION CONTROL** AND STORMWATER POLLUTION

RM, TD

SEE SCALE

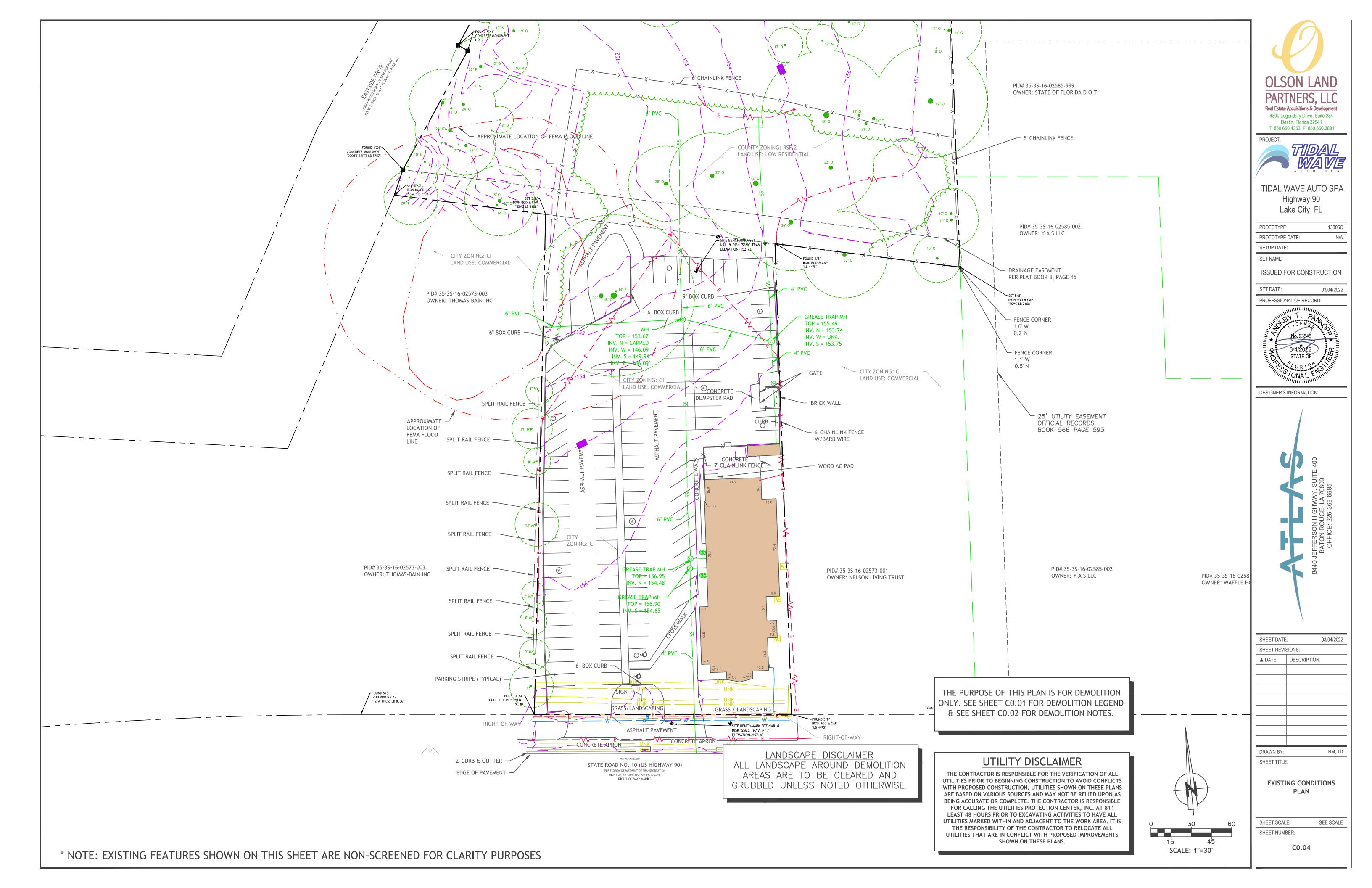
SHEET SCALE: SHEET NUMBER:

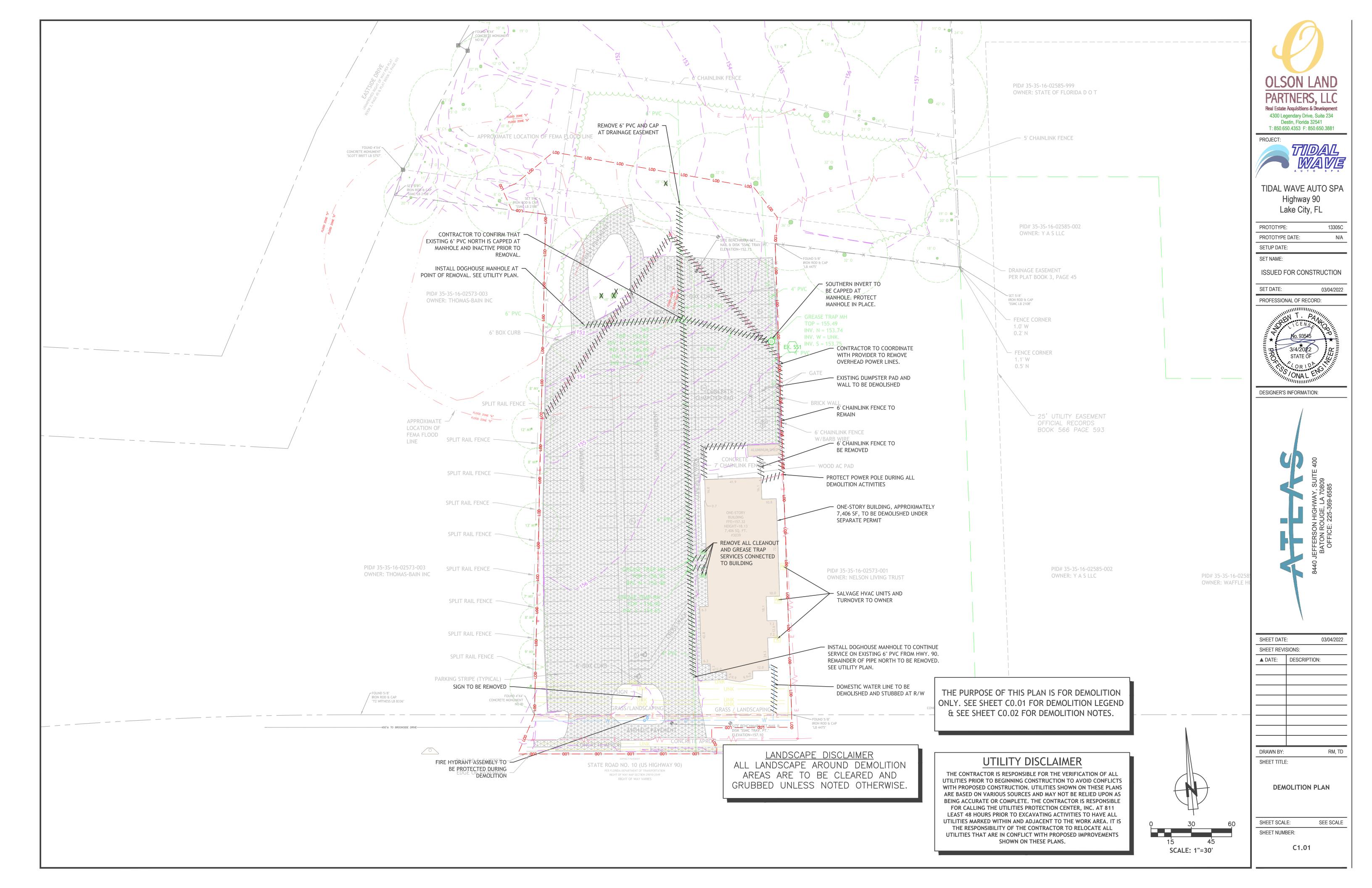
DRAWN BY:

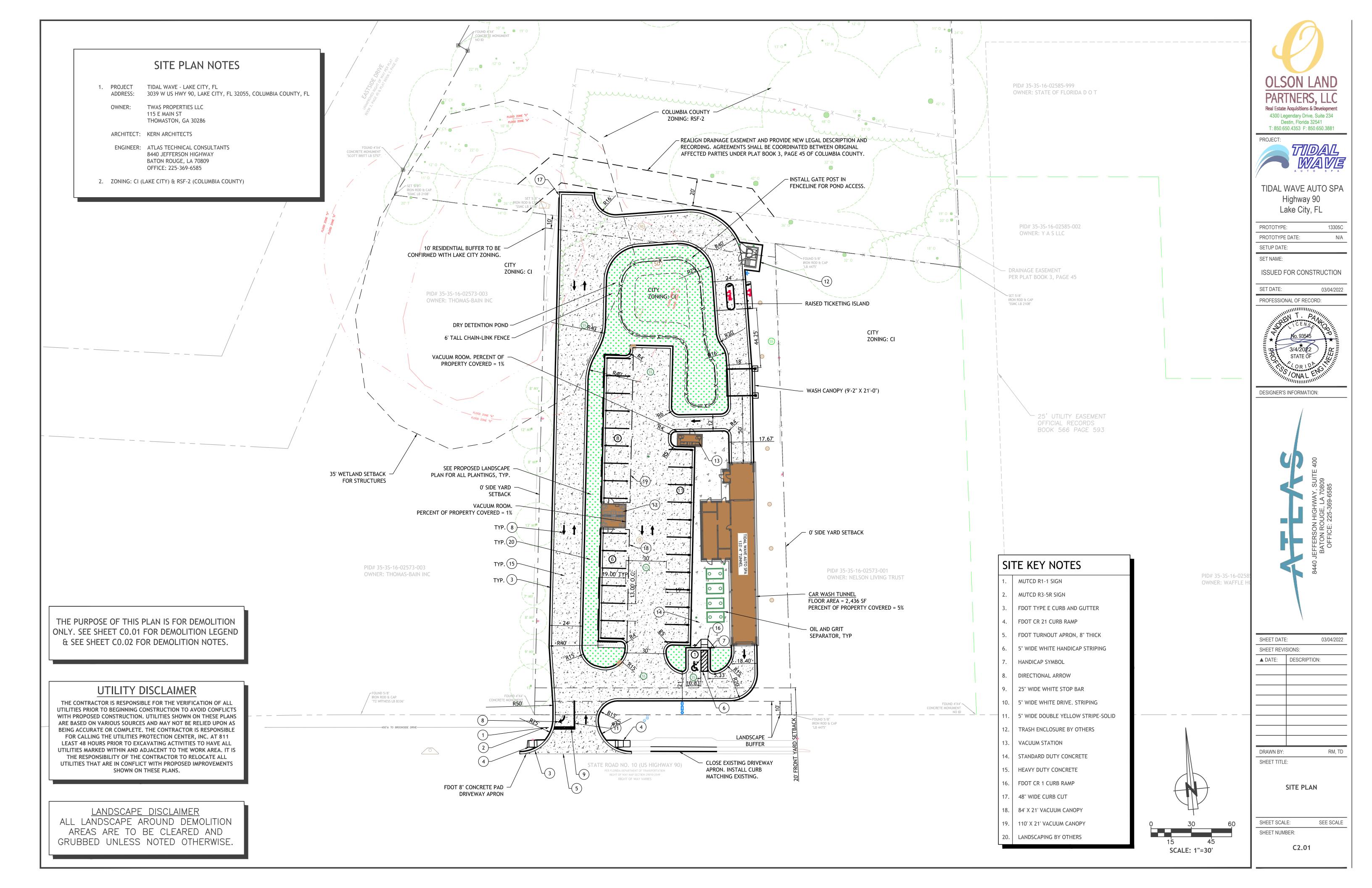
C0.03

PREVENTION NOTES

24-HOUR EMERGENCY CONTACT:









Real Estate Acquisitions & Development 4300 Legendary Drive, Suite 234



TIDAL WAVE AUTO SPA Highway 90 Lake City, FL

PROTOTYPE:	13305C
PROTOTYPE DATE:	N/A

ISSUED FOR CONSTRUCTION

03/04/2022 PROFESSIONAL OF RECORD:

DESIGNER'S INFORMATION:



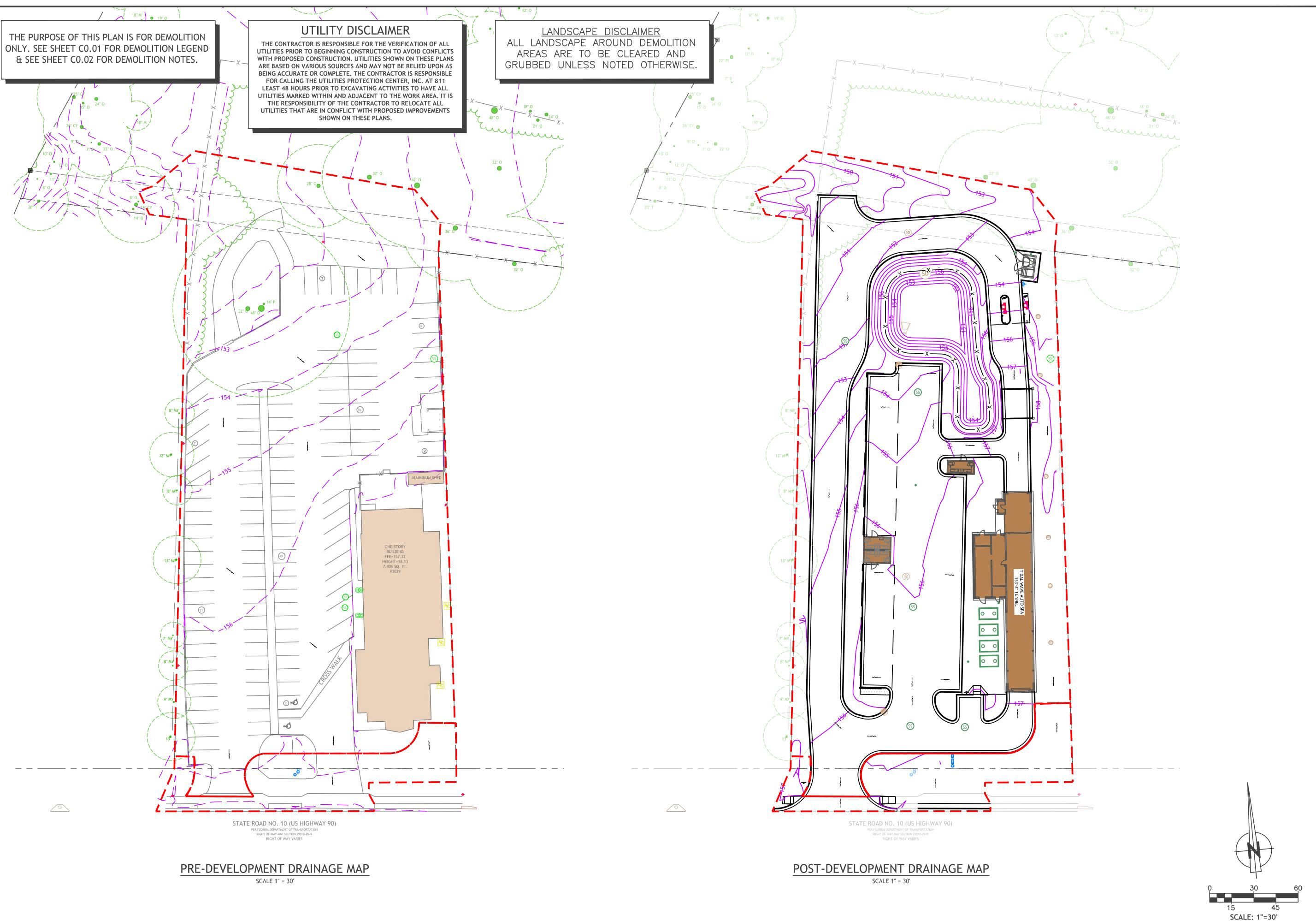
SHEET DATE	: 03/04/2022
SHEET REVIS	SIONS:
▲ DATE:	DESCRIPTION:
DRAWN BY:	RM, TD
SHEET TITLE	:

GRADING AND

DRAINAGE PLAN

SEE SCALE

C3.01







TIDAL WAVE AUTO SPA Highway 90 Lake City, FL

_		
	PROTOTYPE:	13305C
	PROTOTYPE DATE:	N/A
	SETUP DATE:	

SET NAME:

ISSUED FOR CONSTRUCTION

DESIGNER'S INFORMATION:



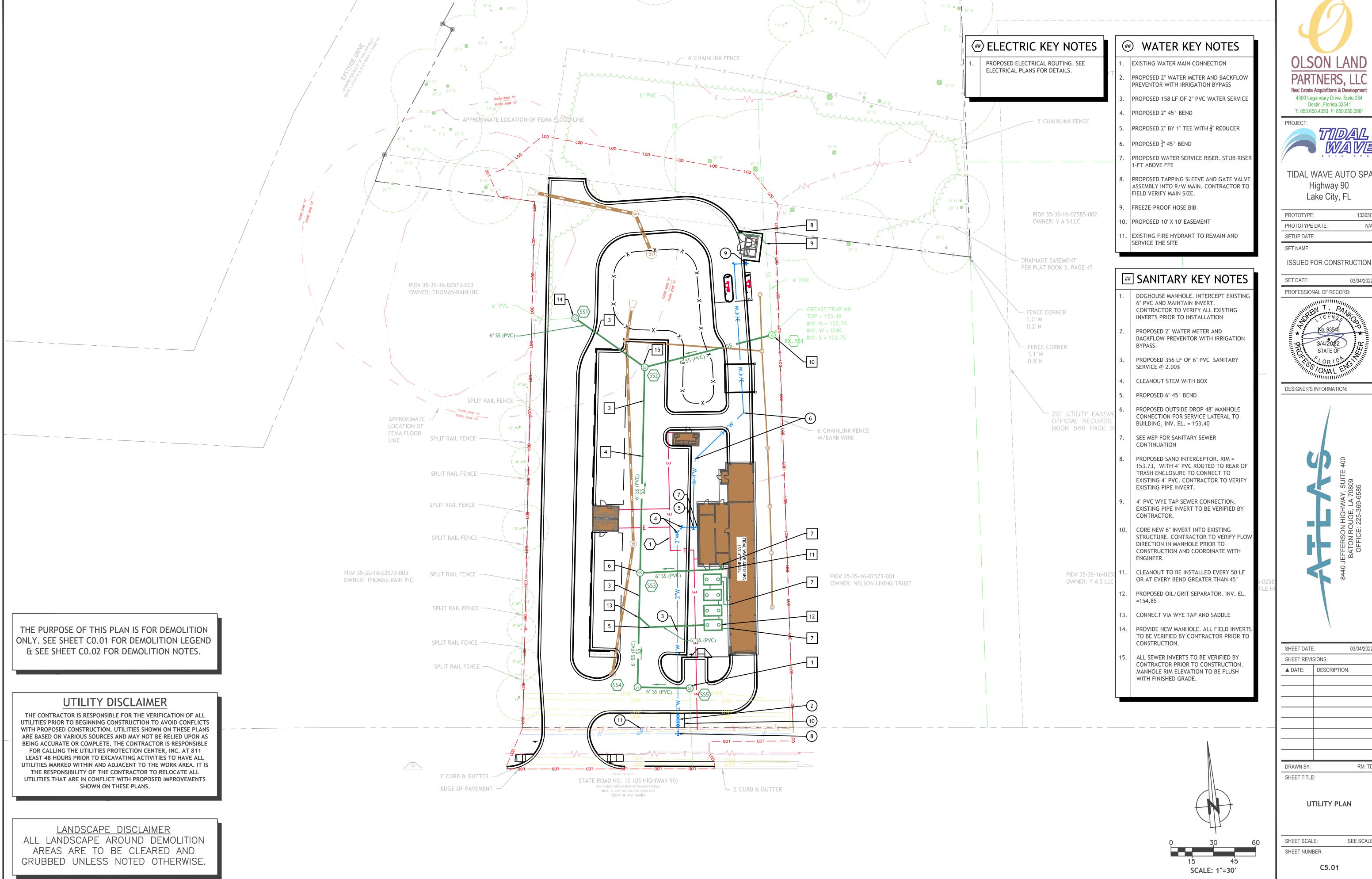
SHEET DATE:		3/04/2022	
SHEET REVI	SIONS:		
▲ DATE:	DESCRIPTION:		
DRAWN BY:		RM, TD	

SHEET TITLE:

DRAINAGE MAP

SHEET SCALE: SEE SCALE
SHEET NUMBER:

C4.01



4300 Legendary Drive, Suite 234 Destin, Florida 32541 T: 850.650.4353 F: 850.650.3881



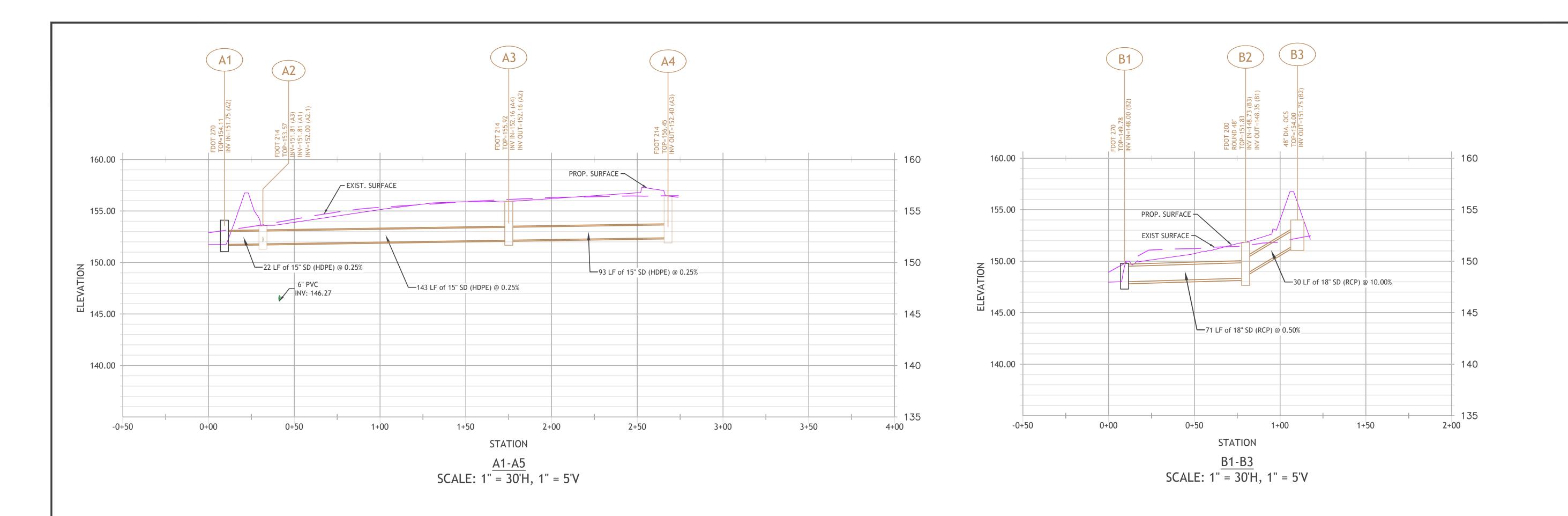
TIDAL WAVE AUTO SPA Highway 90

ROTOTYPE:	13305C
ROTOTYPE DATE:	N/A

03/04/2022



03/04/2022 ▲ DATE: DESCRIPTION: RM, TD





PROJECT:

TIDAL WAVE AUTO SPA

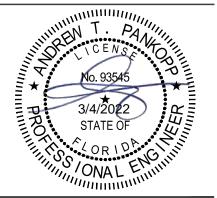
	Highway 90 Lake City, FL	
1	PROTOTYPE:	13305C
1	PROTOTYPE DATE:	N/A

SETUP DATE:

SET NAME:

ISSUED FOR CONSTRUCTION

PROFESSIONAL OF RECORD:



DESIGNER'S INFORMATION:



SHEET DATE	: 03/04/2022
SHEET REVIS	SIONS:
▲ DATE:	DESCRIPTION:
DRAWN BY:	RM, TD

SHEET TITLE:

PROFILES - STORM PIPE

SHEET SCALE: SEE SCALE SHEET NUMBER:

C6.01

STORM DRAINAGE NOTES

- 1. ALL MANHOLE AND STRUCTURE TOP ELEVATIONS ARE TO MATCH PROPOSED GRADE OR WHERE GRADING IS NOT PERFORMED, MATCH EXISTING ELEVATIONS
- 2. ALL MINIMUM & MAXIMUM COVER OVER PIPE SHALL CONFORM TO FDOT 205 SHEET 1, 2, 3, 4, & 5 OF 5 FOR MINIMUM COVER & MAXIMUM COVER FOR CLASS OF CONCRETE OR MINIMUM THICKNESS OF STEEL &
- 3. UTILITY CROSSINGS ARE SHOWN IN AN APPROXIMATE MANNER ONLY. DEPTHS ARE UNKNOWN UNLESS LOCATED BY QL-A (POTHOLING). CONTRACTOR TO VERIFY ACTUAL DEPTHS PRIOR TO BEGINNING STORM DRAINAGE PIPE INSTALLATION. IN CASE OF A CONFLICT OF THE UTILITY AND THE PROPOSED STORM DRAIN PIPE, THE CONTRACTOR SHALL ADJUST THE UTILITY ELEVATION AT CONTRACTOR'S COST. 4. REFERENCE SHEET C9.01 FOR COLUMBIA COUNTY'S DETAIL FOR TYPE A BEDDING AND TRENCHING

UTILITY DISCLAIMER

THE CONTRACTOR IS RESPONSIBLE FOR THE VERIFICATION OF ALL UTILITIES PRIOR TO BEGINNING CONSTRUCTION TO AVOID CONFLICTS WITH PROPOSED CONSTRUCTION. UTILITIES SHOWN ON THESE PLANS ARE BASED ON VARIOUS SOURCES AND MAY NOT BE RELIED UPON AS BEING ACCURATE OR COMPLETE. THE CONTRACTOR IS RESPONSIBLE FOR CALLING THE UTILITIES PROTECTION CENTER, INC. AT 811 LEAST 48 HOURS PRIOR TO EXCAVATING ACTIVITIES TO HAVE ALL UTILITIES MARKED WITHIN AND ADJACENT TO THE WORK AREA. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL UTILITIES THAT ARE IN CONFLICT WITH PROPOSED IMPROVEMENTS

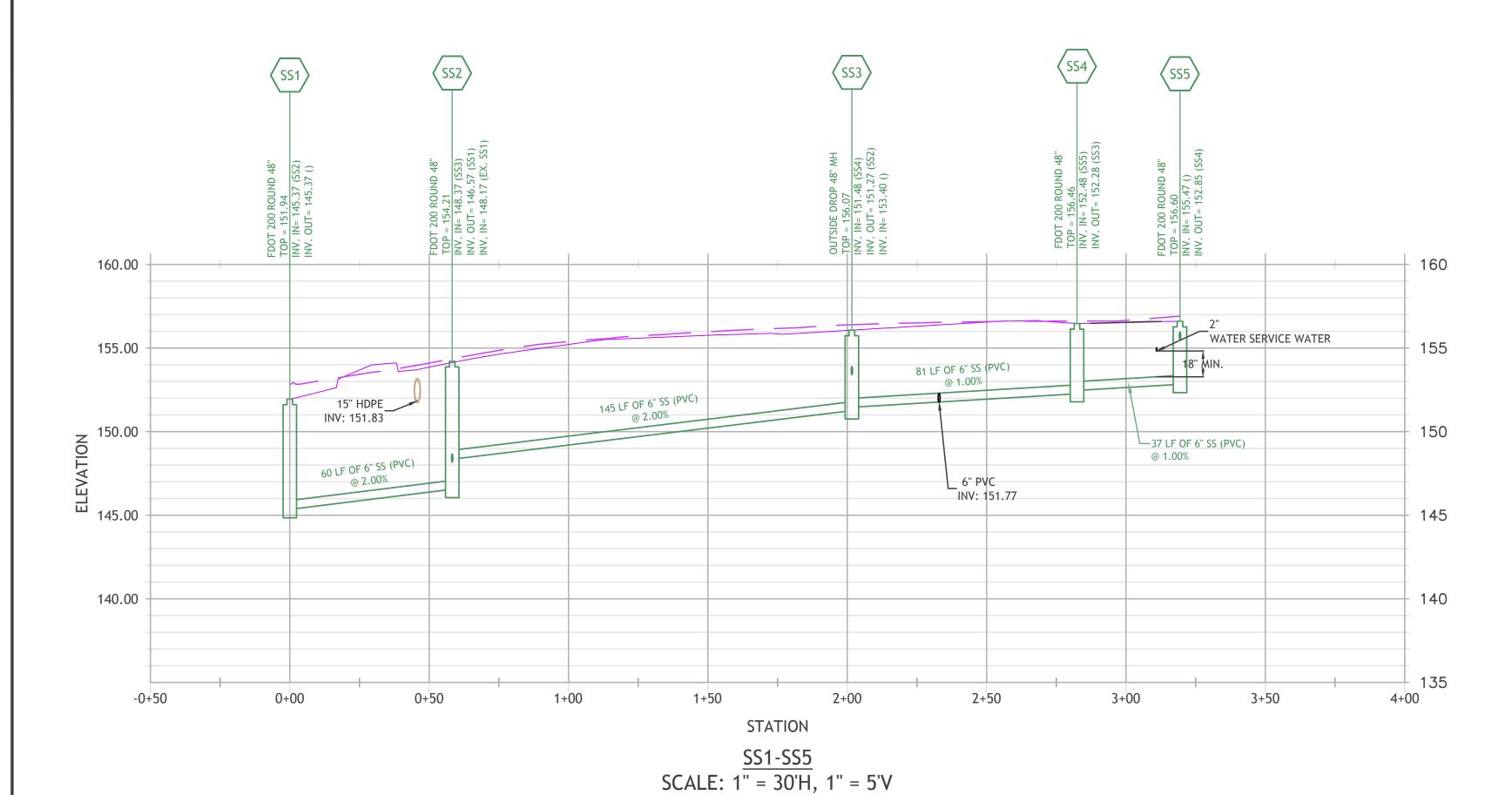
SHOWN ON THESE PLANS.

SDMH: MANHOLE, FDOT STD. 200, ROUND OCS: MH WITH INTERNAL OUTLET CONTROL WALL DB: NYLOPLAST (OR EQUAL) DRAIN BASIN

STORM STRUCTURE LEGEND

HGI: HOODED GRATE INLET, FDOT STD. 214

SEE DETAILS



SANITARY SEWER NOTES

- 1. ALL MANHOLE AND STRUCTURE TOP ELEVATIONS ARE TO MATCH PROPOSED GRADE OR WHERE GRADING IS NOT PERFORMED, MATCH EXISTING ELEVATIONS
- 2. ALL MINIMUM & MAXIMUM COVER OVER PIPE SHALL CONFORM TO GDOT 1030D SHEET 1, 2 & 3 OF 3 FOR MINIMUM COVER & MAXIMUM COVER FOR CLASS OF CONCRETE OR MINIMUM THICKNESS OF STEEL &
- 3. UTILITY CROSSINGS ARE SHOWN IN AN APPROXIMATE MANNER ONLY. DEPTHS ARE UNKNOWN UNLESS LOCATED BY QL-A (POTHOLING). CONTRACTOR TO VERIFY ACTUAL DEPTHS PRIOR TO BEGINNING SANITARY SEWER PIPE INSTALLATION. IN CASE OF A CONFLICT OF THE UTILITY AND THE PROPOSED SANITARY SEWER PIPE, THE CONTRACTOR SHALL ADJUST THE UTILITY ELEVATION AT CONTRACTOR'S COST. 4. REFERENCE SHEET C9.01 FOR COLUMBIA COUNTY'S DETAIL FOR TYPE A BEDDING AND TRENCHING DETAIL.

UTILITY DISCLAIMER

THE CONTRACTOR IS RESPONSIBLE FOR THE VERIFICATION OF ALL UTILITIES PRIOR TO BEGINNING CONSTRUCTION TO AVOID CONFLICTS WITH PROPOSED CONSTRUCTION. UTILITIES SHOWN ON THESE PLANS ARE BASED ON VARIOUS SOURCES AND MAY NOT BE RELIED UPON AS BEING ACCURATE OR COMPLETE. THE CONTRACTOR IS RESPONSIBLE FOR CALLING THE UTILITIES PROTECTION CENTER, INC. AT 811 LEAST 48 HOURS PRIOR TO EXCAVATING ACTIVITIES TO HAVE ALL UTILITIES MARKED WITHIN AND ADJACENT TO THE WORK AREA. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL UTILITIES THAT ARE IN CONFLICT WITH PROPOSED IMPROVEMENTS SHOWN ON THESE PLANS.





TIDAL WAVE AUTO SPA Highway 90 Lake City, FL

1 -		
l_	PROTOTYPE:	13305C
	PROTOTYPE DATE:	N/A

SETUP DATE: SET NAME:

ISSUED FOR CONSTRUCTION



DESIGNER'S INFORMATION:



SHEET DATE	: 03/04/2022
SHEET REVIS	SIONS:
▲ DATE:	DESCRIPTION:
DRAWN BY:	RM, TD

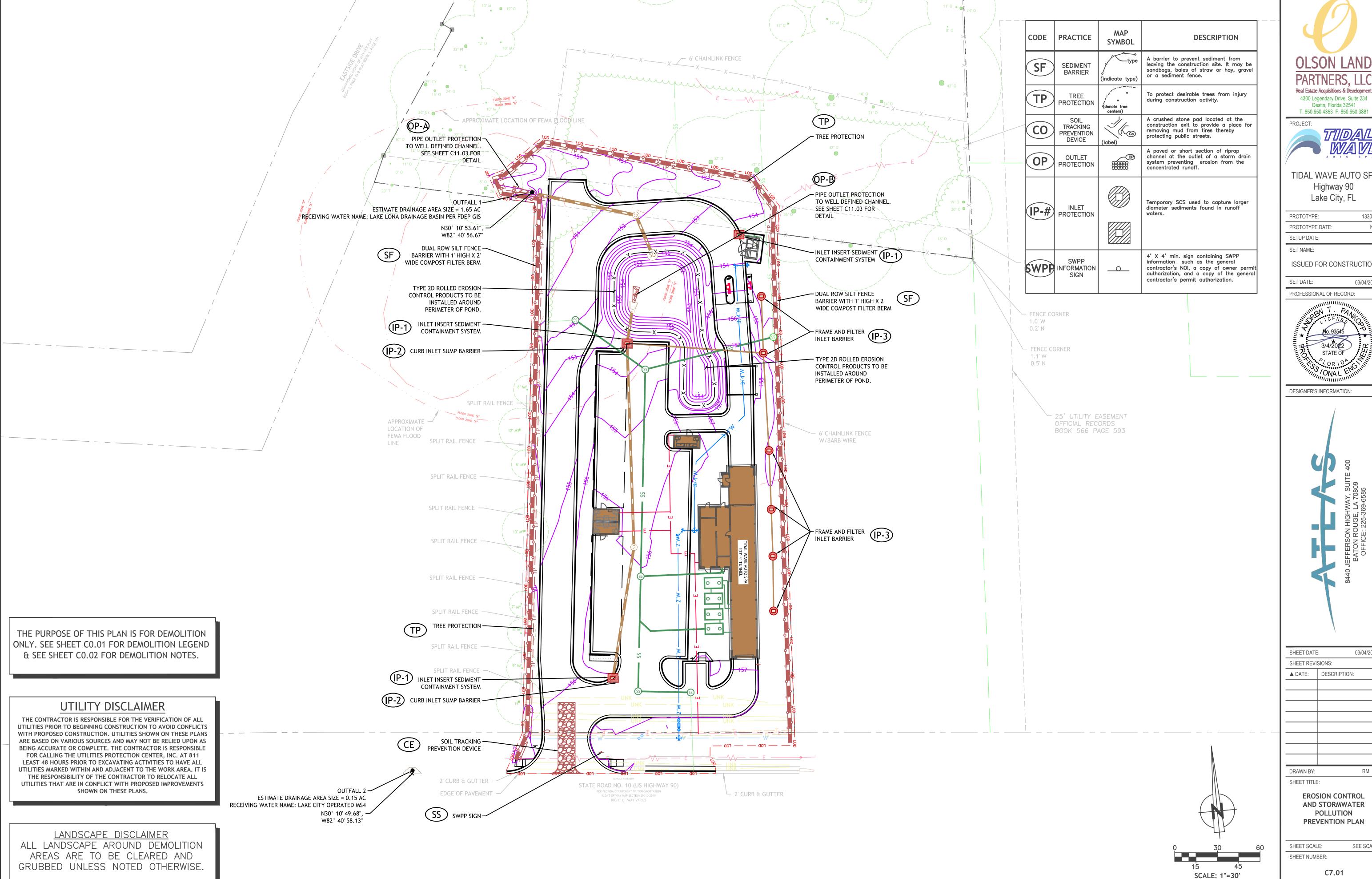
SHEET TITLE:

PROFILES - SANITARY PIPE

SHEET SCALE:

SHEET NUMBER:

C6.02



Real Estate Acquisitions & Development 4300 Legendary Drive, Suite 234 Destin, Florida 32541



TIDAL WAVE AUTO SPA Highway 90 Lake City, FL

13305C
N/A

ISSUED FOR CONSTRUCTION

03/04/2022 PROFESSIONAL OF RECORD:



DESIGNER'S INFORMATION:



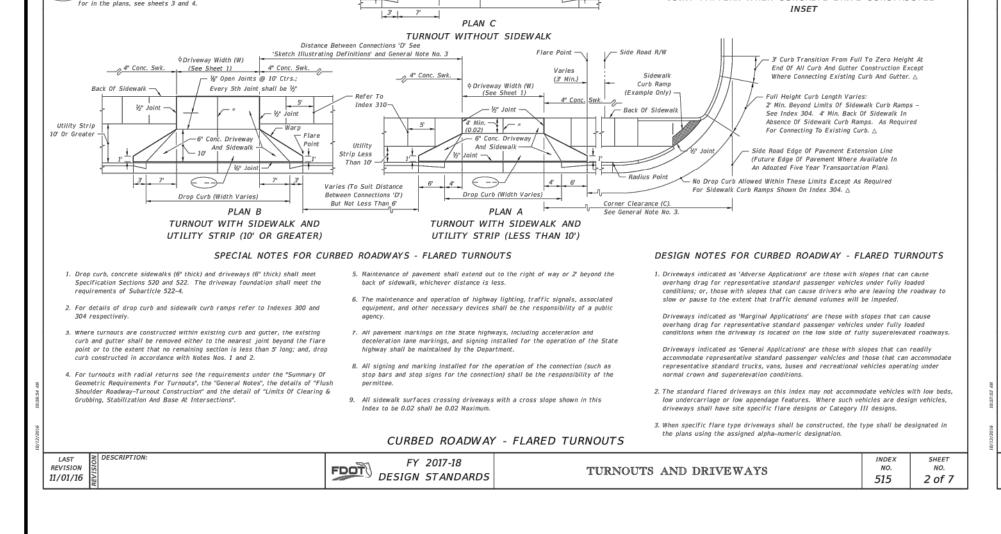
03/04/2022
RM, TD

SHEET TITLE:

EROSION CONTROL AND STORMWATER POLLUTION PREVENTION PLAN

SHEET SCALE: SHEET NUMBER:

C7.01



Constructed As Called For In The Plans Or As Directed By The Engineer

All 1/2" joints shall be constructed with preformed joint filler.

wide. Joints in curb and gutter to match joints in driveways.

* 1/8" Open joints placed at equal (20' max.) intervals for driveways over 20"

 Δ When connecting to side road curb and gutter sections, the no drop curb limits should extend back to the side road radius point. With or without curb and gutter, no driveway should encroach on the corner radius.

Q Driveways (6" concrete) shall be of a uniform width (W) to the right of way

Alpha-numeric identification of a flared driveway type specifically called for in the plans, see sheets 3 and 4.

♦ Driveway Width (W) (See Sheet 1)

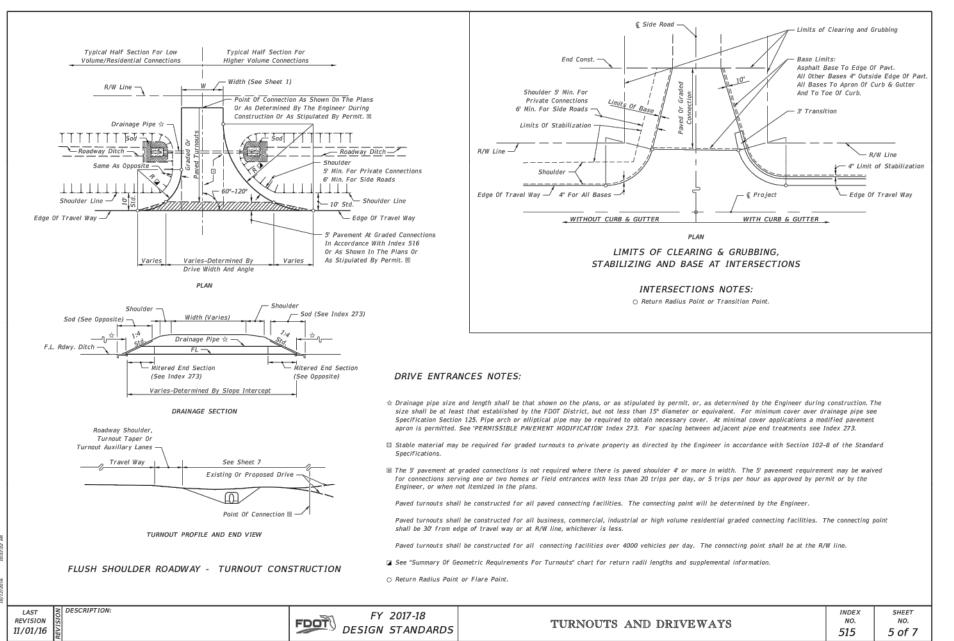
JOINT PATTERN WHEN CONCRETE DRIVE CONSTRUCTED

INSET

Driveway To Be Constructed

As Called For In The Plans Or As Directed By The Engineer —

— ½" Open Joints @ 10' Ctrs.;







TIDAL WAVE AUTO SPA Highway 90 Lake City, FL

ı	PROTOTYPE:	13305C
	PROTOTYPE DATE:	N/A
	SETUP DATE:	

SET NAME:

ISSUED FOR CONSTRUCTION

SET DATE:	03/04/2022
PROFESSIONAL OF RECOR	D:
Mo. 93545 ** No. 93545 ** STATE OF ONA LEI	DE A GOLDINA DE LA CONTRACTION DEL CONTRACTION DE LA CONTRACTION DEL CONTRACTION DE LA CONTRACTION DE

DESIGNER'S INFORMATION:



SHEET DATE	E: 03/04/2022
SHEET REVI	SIONS:
▲ DATE:	DESCRIPTION:
DRAWN BY:	RM, TD

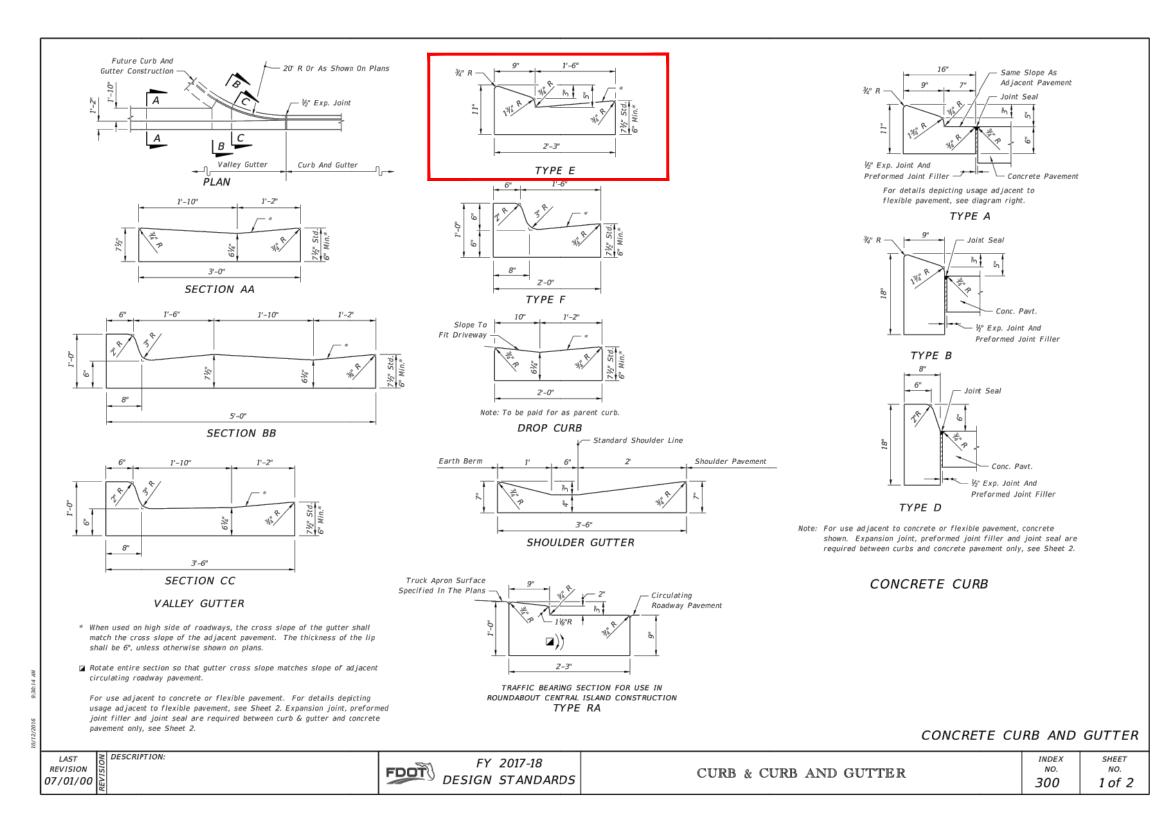
SHEET TITLE:

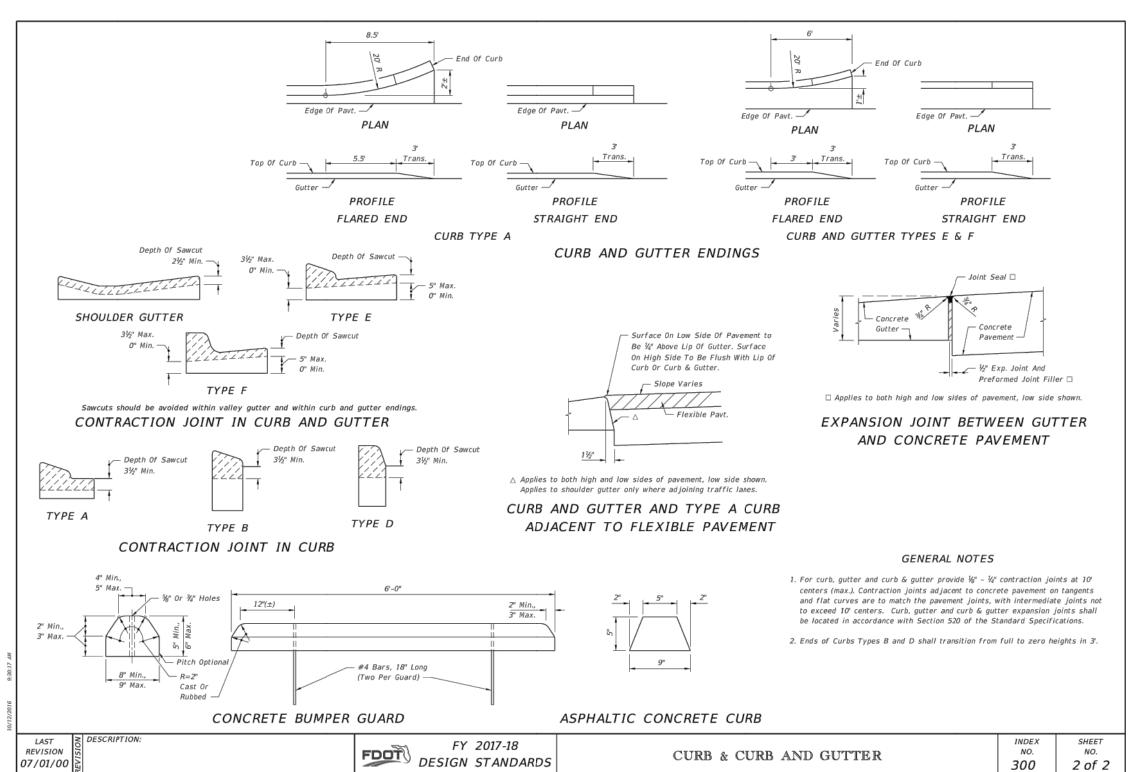
DETAILS - SITE

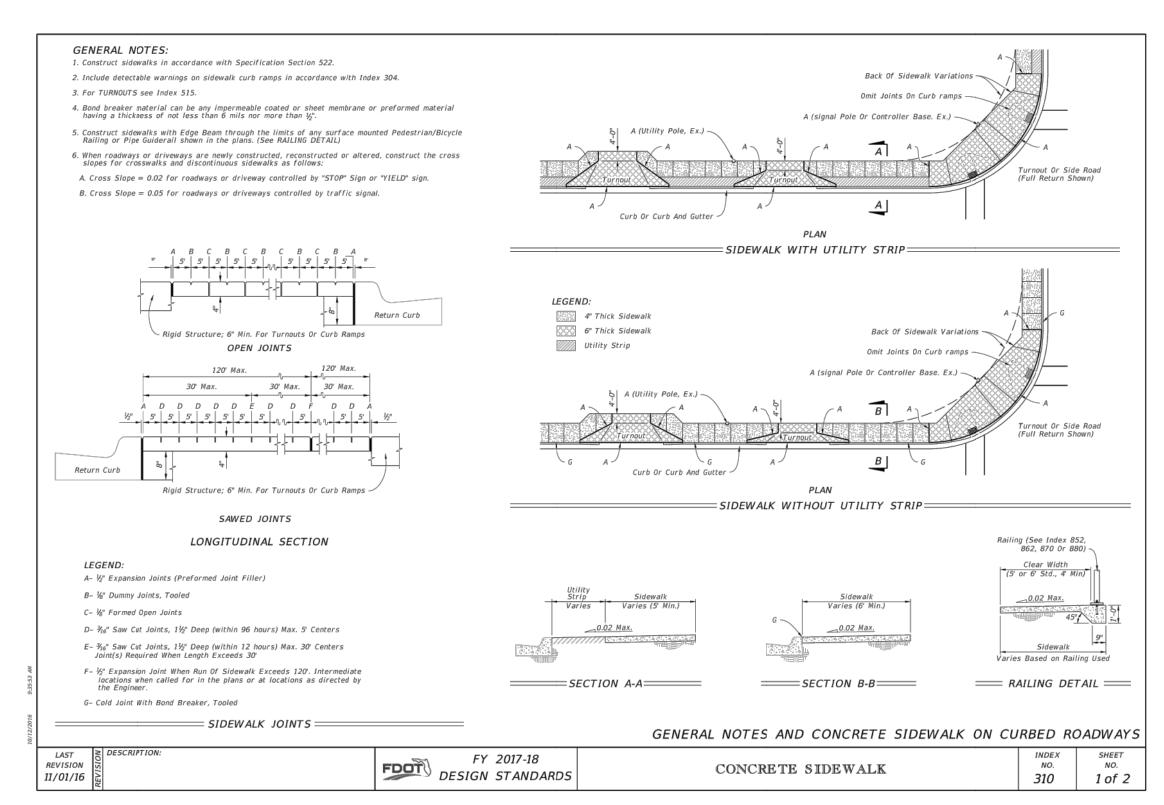
SHEET SCALE:

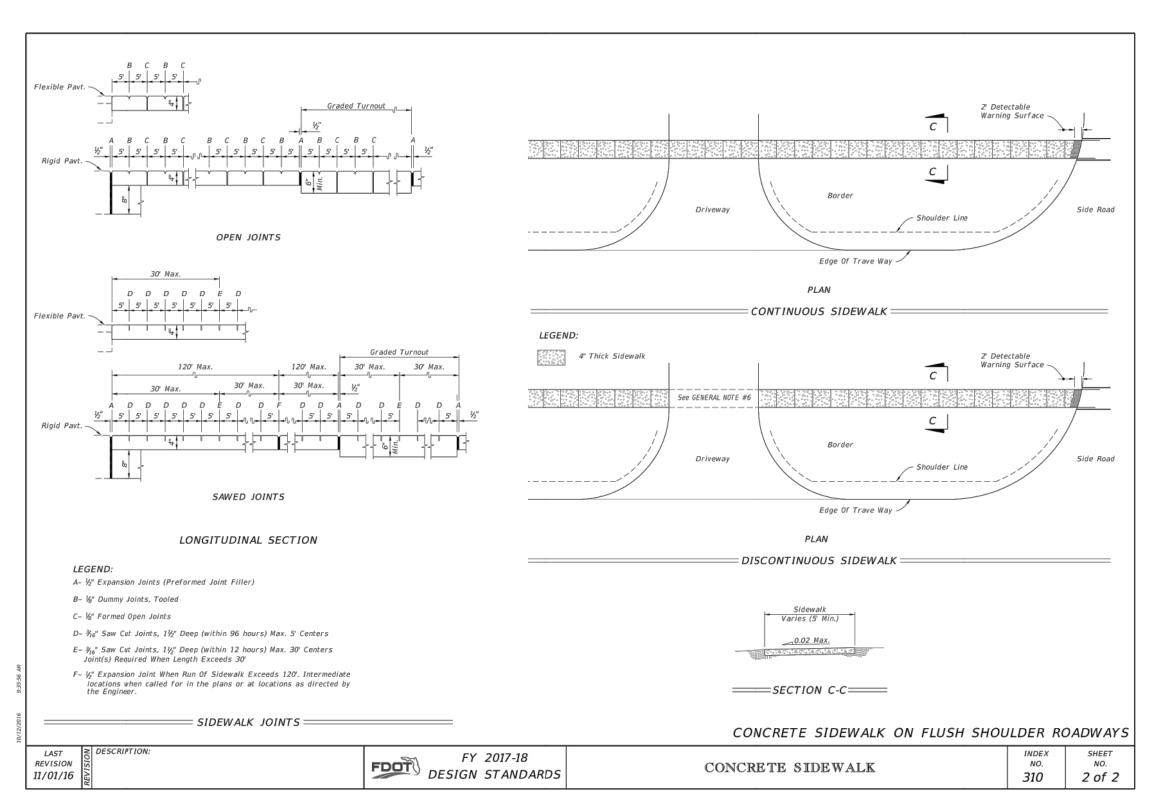
SHEET NUMBER:

C8.01













TIDAL WAVE AUTO SPA Highway 90 Lake City, FL

PROTOTYPE: 13305C
PROTOTYPE DATE: N/A

SET NAME:

ISSUED FOR CONSTRUCTION

PROFESSIONAL OF RECORD:

PROFESSIONAL OF RECORD:

No. 93545

No. 93545

STATE OF

ONA L

MILITARY

ONA L

MI

DESIGNER'S INFORMATION:



	,	
SHEET DATE	i:	03/04/2022
SHEET REVI	SIONS:	
▲ DATE:	DESCRIPTION	:
DDAWN DV		DM TD
DRAWN BY:		RM, TD

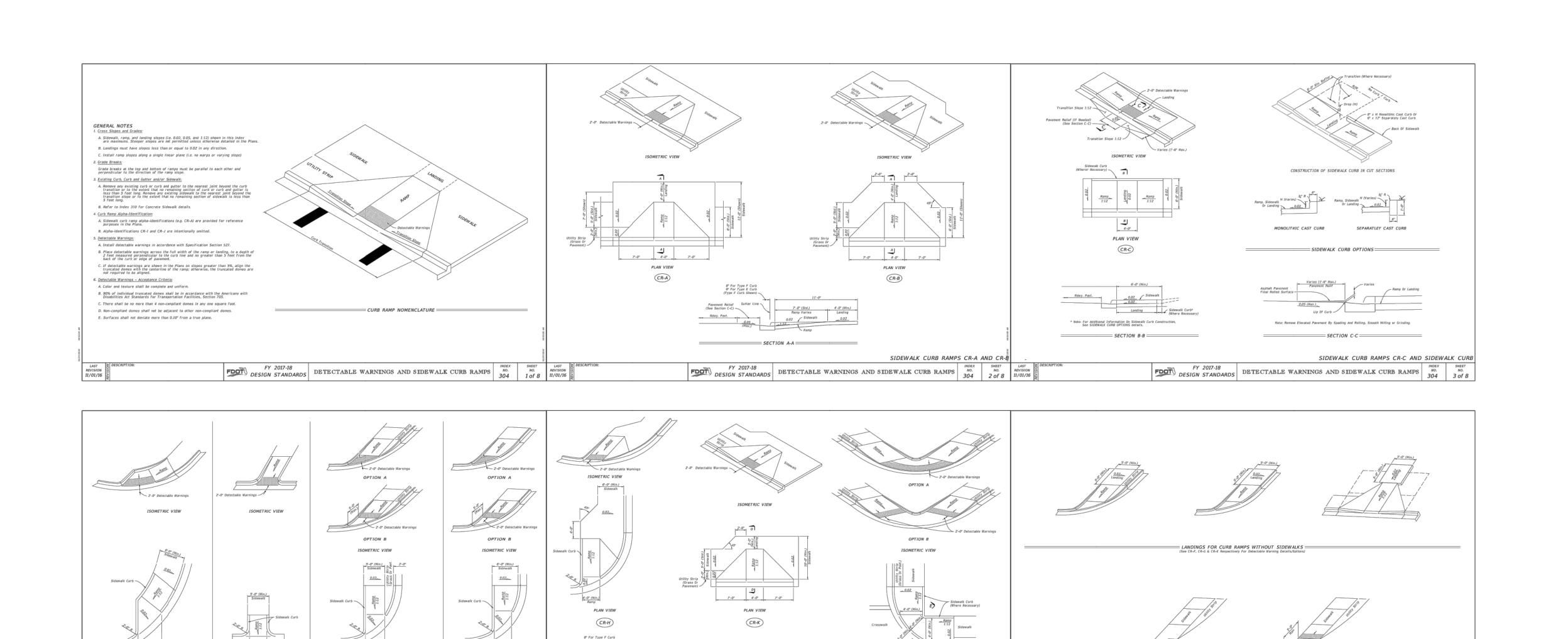
DETAILS - SITE

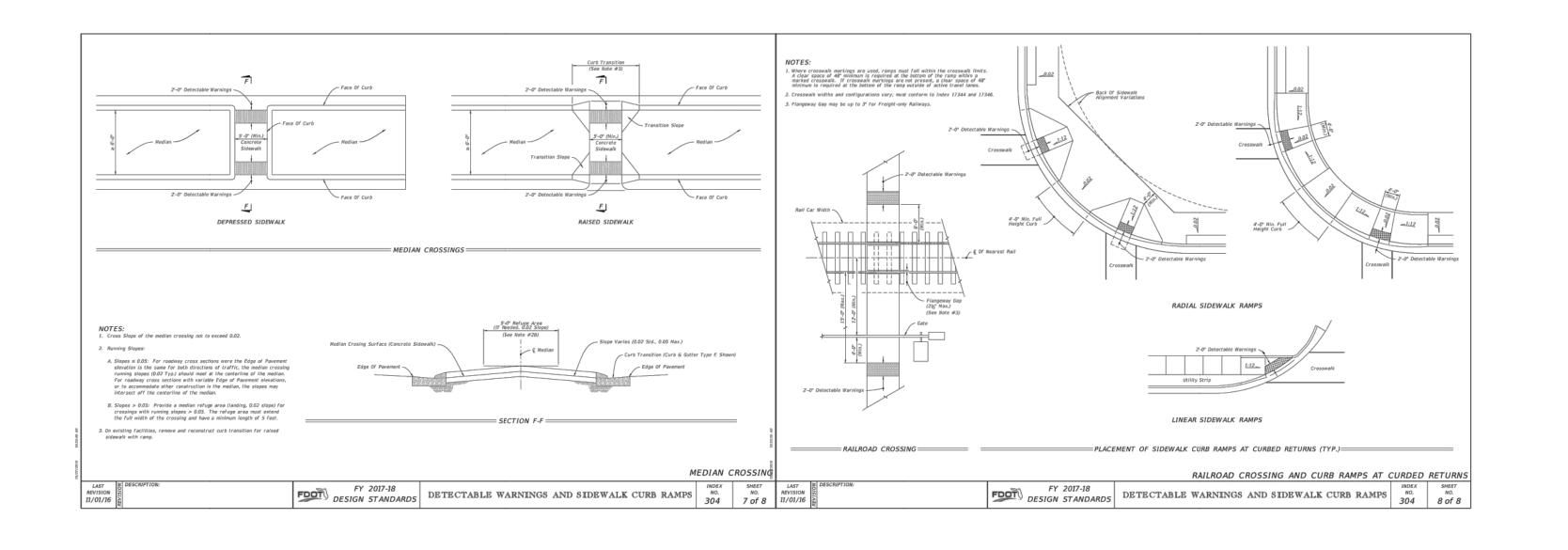
SHEET SCALE:

SHEET TITLE:

SHEET NUMBER:

C8.02





4'-0" (Min.) Sidewalk Curb" (Where Necessary)

FDOT FY 2017-18
DESIGN STANDARDS DETECTABLE WARNINGS AND SIDEWALK CURB RAMPS NO. 11/01/16
DESIGN STANDARDS DETECTABLE WARNINGS AND SIDEWALK CURB RAMPS NO. 11/01/16

PLAN VIEW

CR-D

CR-E

CR-F

FY 2017-18
DESIGN STANDARDS
DETECTABLE WARNINGS AND SIDEWALK CURB RAMPS
DETECTABLE WARNINGS AND SIDEWALK CURB RAMPS
NO. 304
4 of 8

SIDEWALK CURB RAMPS CR-D, CR-E, CR-F & CR-

NOTE: Crosswalk Width and Configuration Vary: Must Conform to Index PLAN VIEW 17344 and 17346.

SIDEWALK CURB RAMPS CR-H, CR-K & CR-

(CR-L)

15' Radius Curve Shown for CR-L.

2-0" Detectable Warnings

— DETECTABLE WARNING ON FLUSH SHOULDER SIDEWALKS —

OPTION B

FOOT DESIGN STANDARDS DETECTABLE WARNINGS AND SIDEWALK CURB RAMPS NO. NO. 304 6 of 8

CURB RAMPS WITHOUT SIDEWALKS AND FLUSH SHOULDER SIDEWALK.

OPTION A





TIDAL WAVE AUTO SPA Highway 90 Lake City, FL

i <u></u>	
PROTOTYPE:	13305C
PROTOTYPE DATE:	N/A

SET NAME:

SETUP DATE:

ISSUED FOR CONSTRUCTION

SET DATE:	03/04/2022
PROFESSIONAL OF RECORD	D:
No. 93545 No. 93545 No. 93545 All John Control of the control o	MINIMER * ABOUTTE

DESIGNER'S INFORMATION:



SHEET DATE	i:	03/04/2022
SHEET REVIS	SIONS:	
▲ DATE:	DESCRIPTION:	
DRAWN BY:		RM, TD

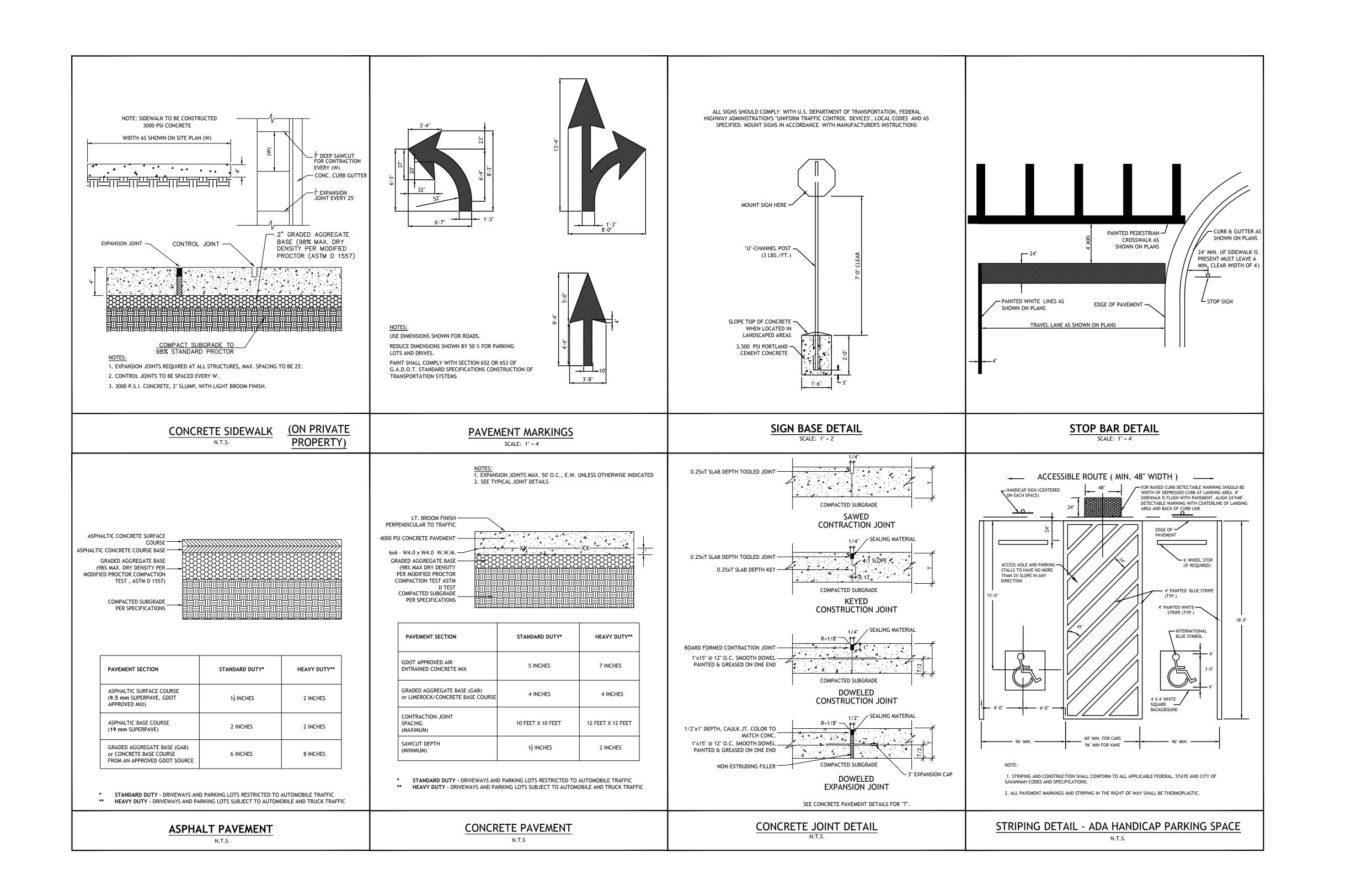
SHEET TITLE:

DETAILS - SITE

SHEET SCALE:

SHEET NUMBER:

C8.03







TIDAL WAVE AUTO SPA Highway 90 Lake City, FL

PROTOTYPE:	13305C
PROTOTYPE DATE:	N/A

SETUP DATE: SET NAME:

ISSUED FOR CONSTRUCTION

SET DATE:		03/04/2022
PROFESSION	NAL OF RECOR	D:
HILL A PROFITS	N T PA N C E N S E NO. 93545 3/4/2022 STATE OF COR I DE	OHINIA KER & Adolum

DESIGNER'S INFORMATION:



ii 03/04/2022
SIONS:
DESCRIPTION:

RM, TD

SEE SCALE

SHEET TITLE:

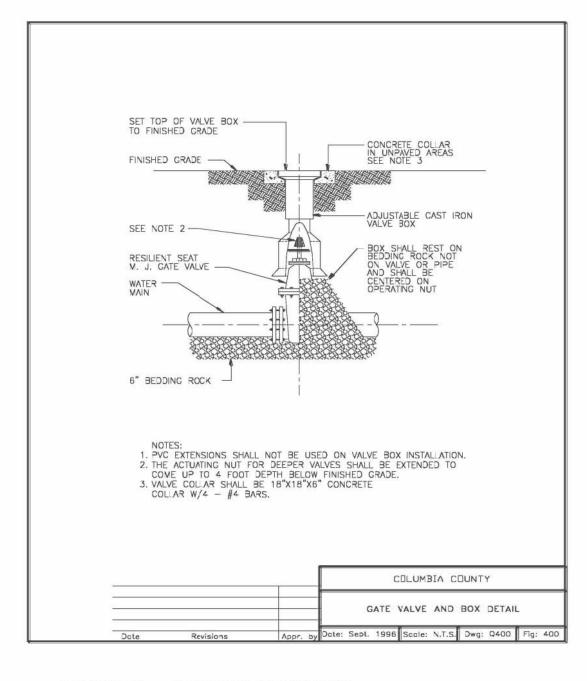
DRAWN BY:

SHEET SCALE:

SHEET NUMBER:

C8.04

DETAILS - SITE



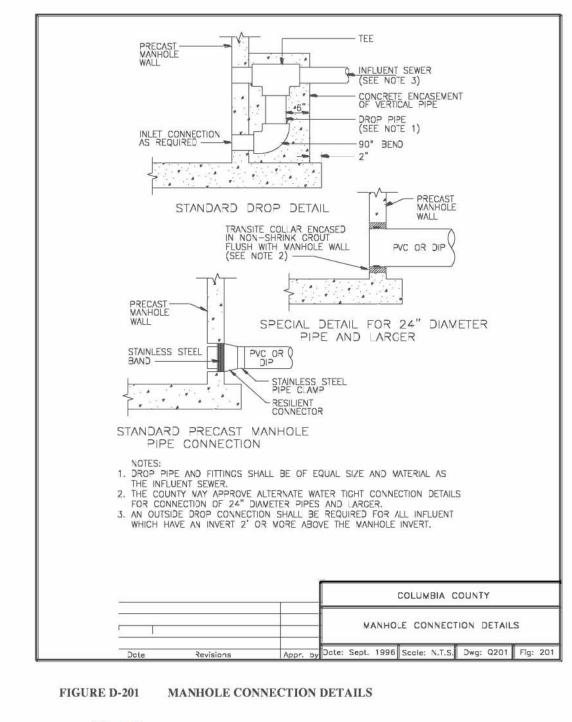




APPENDIX D – DRAWINGS WATER AND WASTEWATER SYSTEMS HANDBOOK

D-28

D-16





APPENDIX D – DRAWINGS WATER AND WASTEWATER SYSTEMS HANDBOOK

D-15

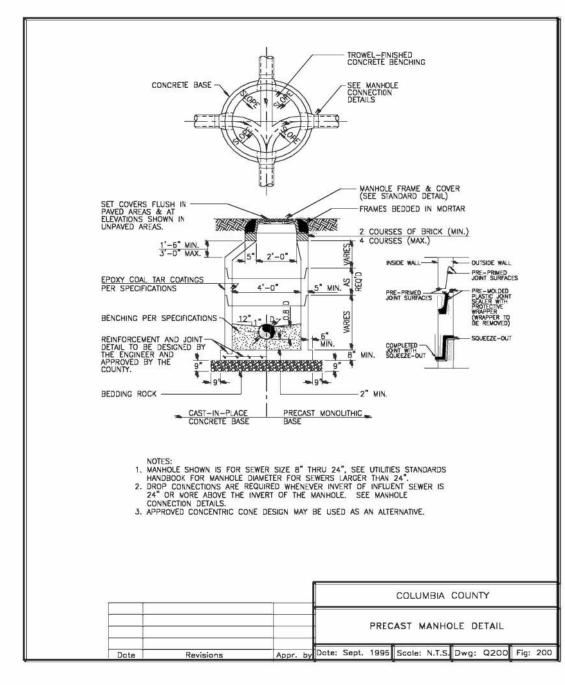


FIGURE D-200 PRECAST MANHOLE DETAIL



APPENDIX D – DRAWINGS D-14
WATER AND WASTEWATER SYSTEMS HANDBOOK

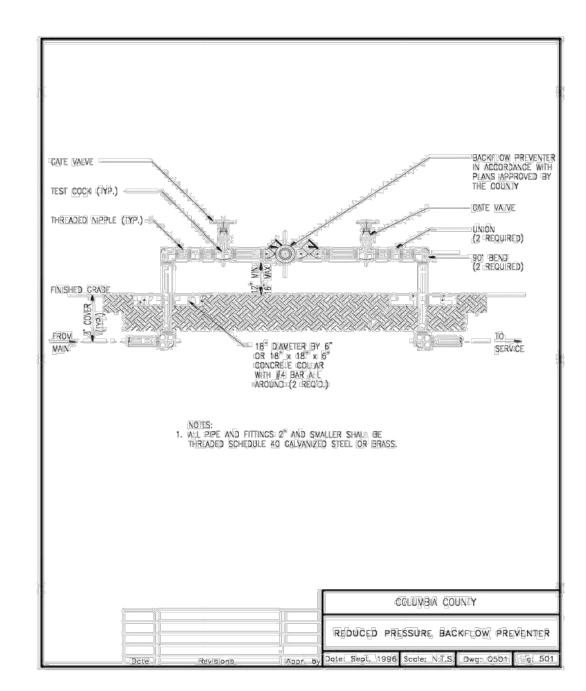


FIGURE D-501 REDUCED PRESSURE BACKFLOW PREVENTER



APPENDIX D – DRAWINGS WATER AND WASTEWATER SYSTEMS HANDBOOK D-34

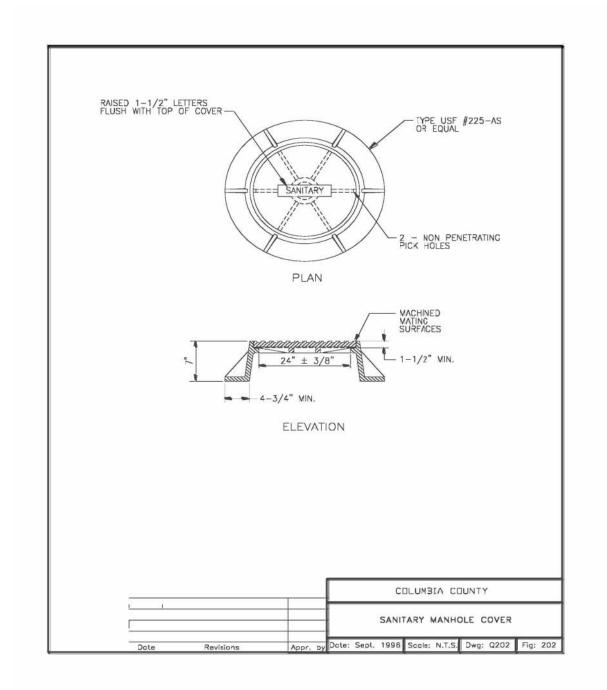


FIGURE D-202 SANITARY MANHOLE COVER

APPENDIX D – DRAWINGS WATER AND WASTEWATER SYSTEMS HANDBOOK LOT LINE WYE WITH
6 BRANCH
6 BRANCH
SEWER WAIN
SIZE VARIES

CLEAN-OUT
(YE WITH
SEE NOTE 1

CLEAN-OUT
(THE WYE WITH
SEE NOTE 1

CLEAN-OUT
(THE WITH
SEE NOT

FIGURE D-204 SANITARY SERVICE DETAIL



APPENDIX D – DRAWINGS D-18 WATER AND WASTEWATER SYSTEMS HANDBOOK

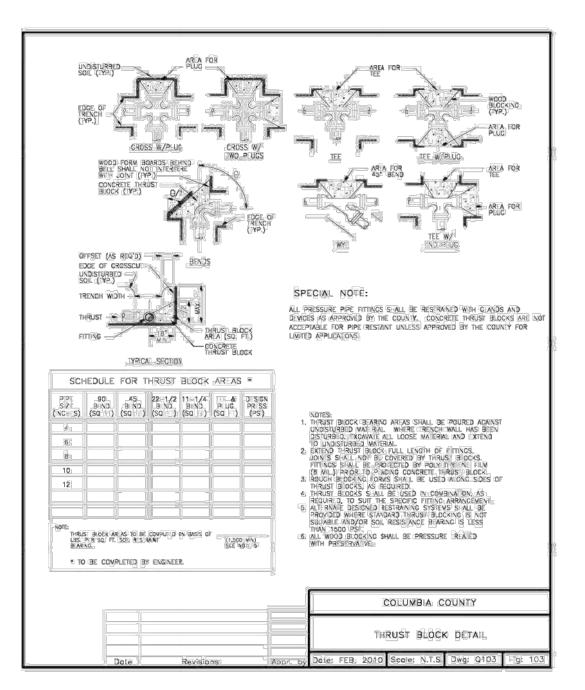


FIGURE D-103 THRUST-BLOCK DETAIL

APPENDIX D – DRAWINGS WATER AND WASTEWATER SYSTEMS HANDBOOK

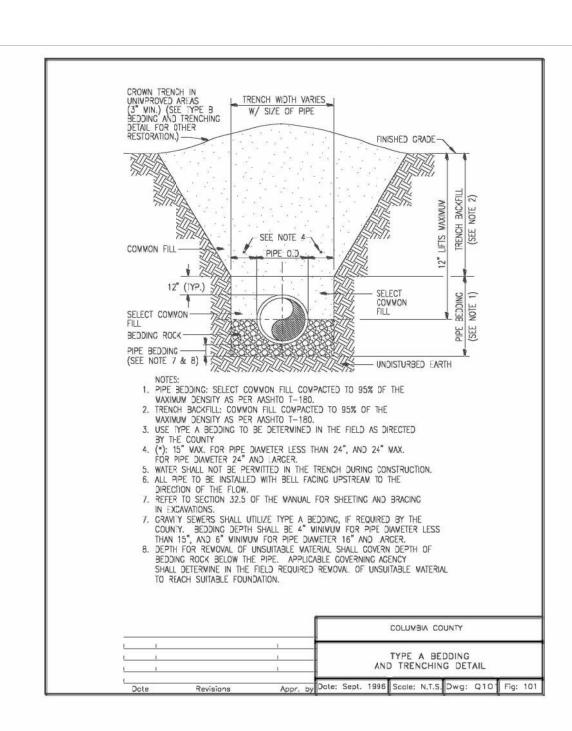


FIGURE D-101 TYPE A BEDDING AND TRENCHING DETAIL

APPENDIX D – DRAWINGS WATER AND WASTEWATER SYSTEMS HANDBOOK OLSON LAND
PARTNERS, LLC
Real Estate Acquisitions & Development
4300 Legendary Drive, Suite 234
Destin, Florida 32541
T: 850.650.4353 F: 850.650.3881



TIDAL WAVE AUTO SPA Highway 90 Lake City, FL

PROTOTYPE: 13305C
PROTOTYPE DATE: N/A
SETUP DATE:

SET NAME:

ISSUED FOR CONSTRUCTION

PROFESSIONAL OF RECORD:

PROFESSIONAL OF RECORD:

OR 1 DA CHILING ON A LEMBER 11 ON A LEMBER 11

DESIGNER'S INFORMATION:



SHEET DATE: 03/04/2022
SHEET REVISIONS:

A DATE: DESCRIPTION:

RM, TD

SEE SCALE

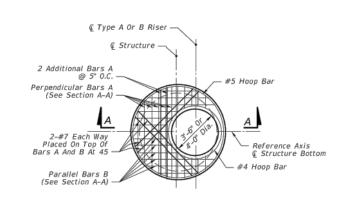
SHEET TITLE:

DRAWN BY:

DETAILS - UTILITY

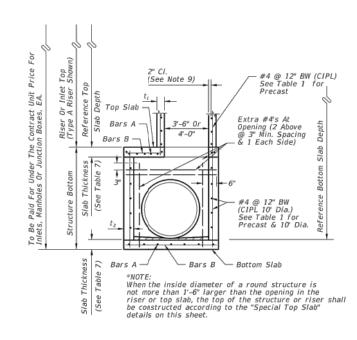
SHEET SCALE:
SHEET NUMBER:

C9.01

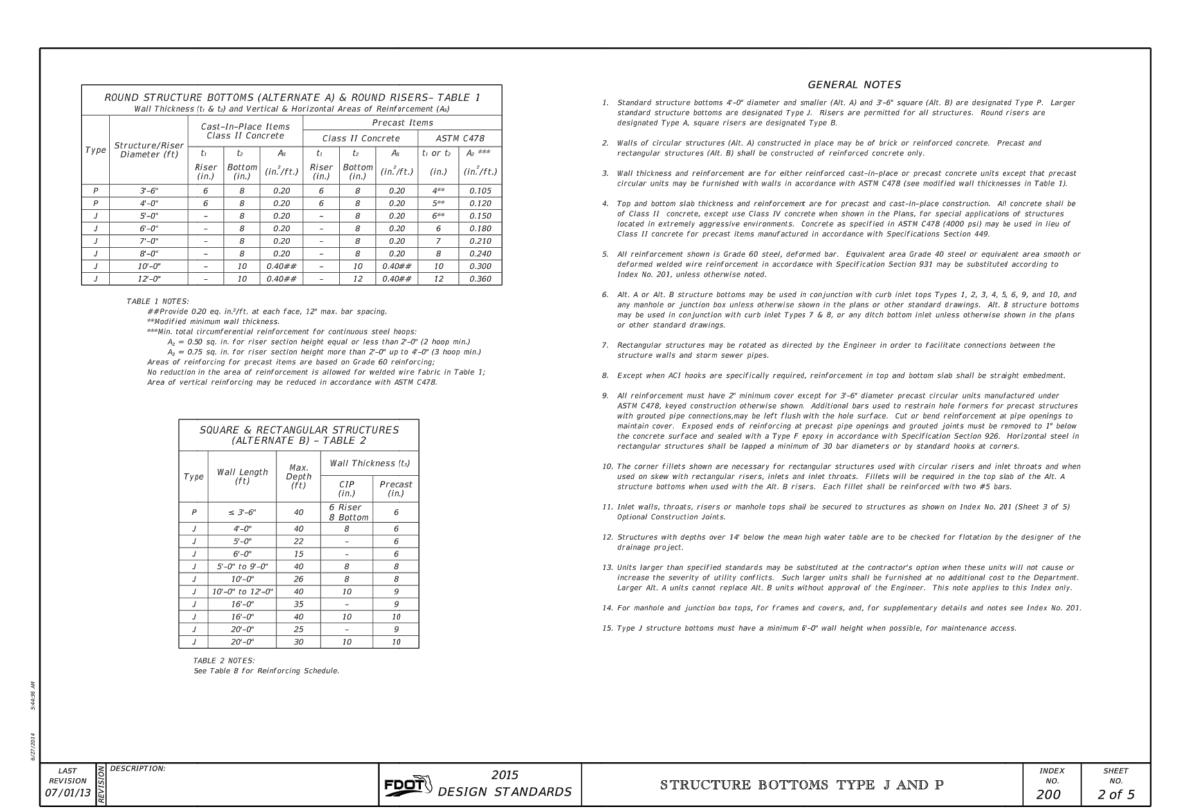


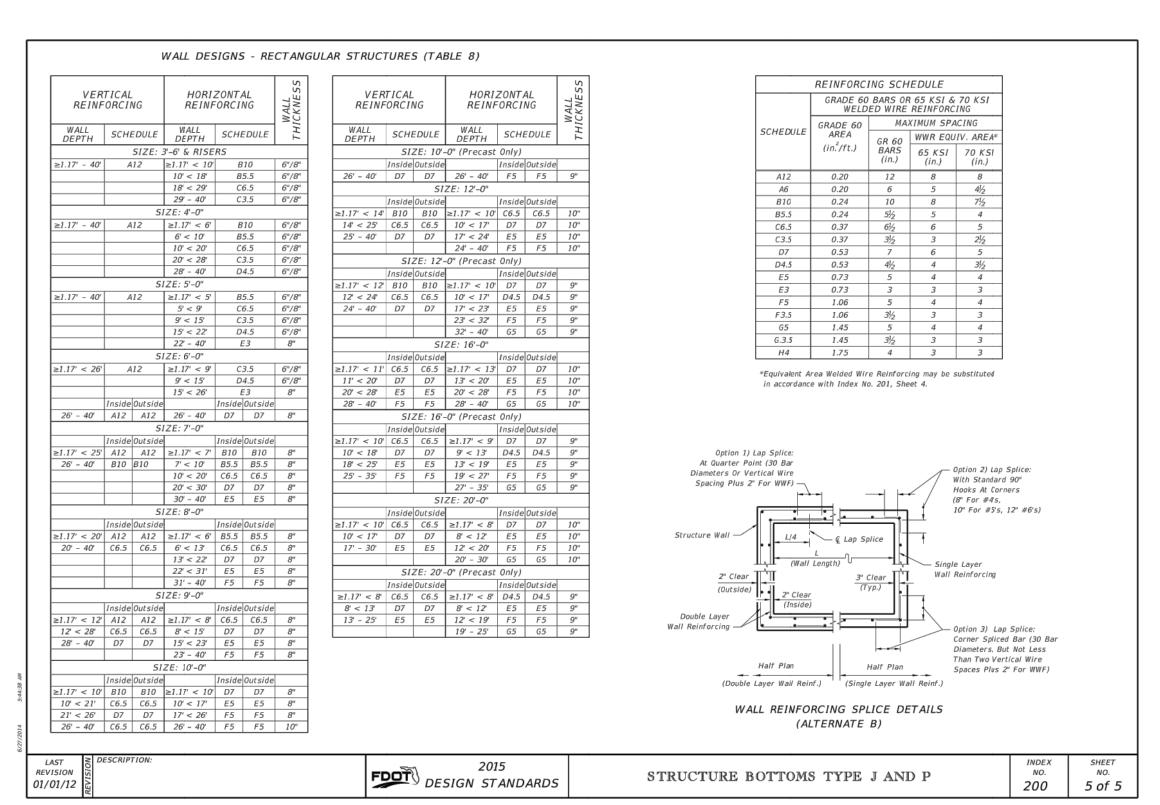
NOTE:
Not Applicable For Type A, B, C, D & E Ditch
Bottom Inlets Or Type S & V Gutter Inlets.
See Index Nos. 220, 221, 230, 231 & 232.

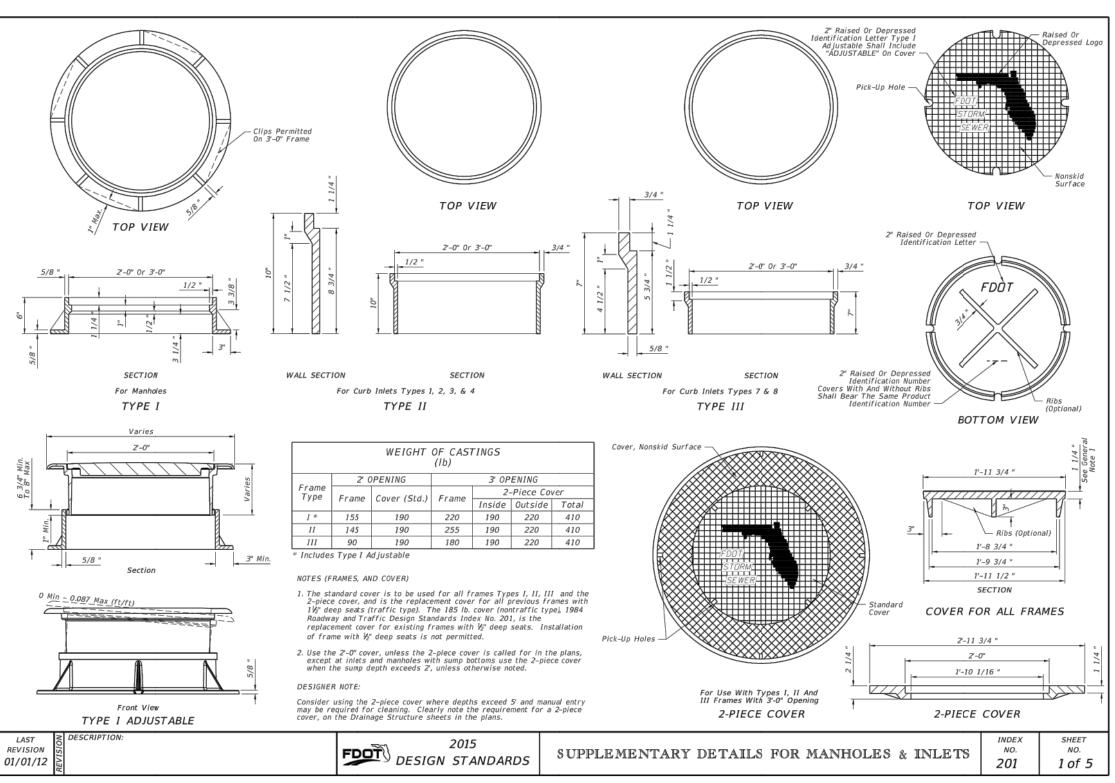
TOP SLAB REINFORCING STEEL DIAGRAM
(ALTERNATE A)

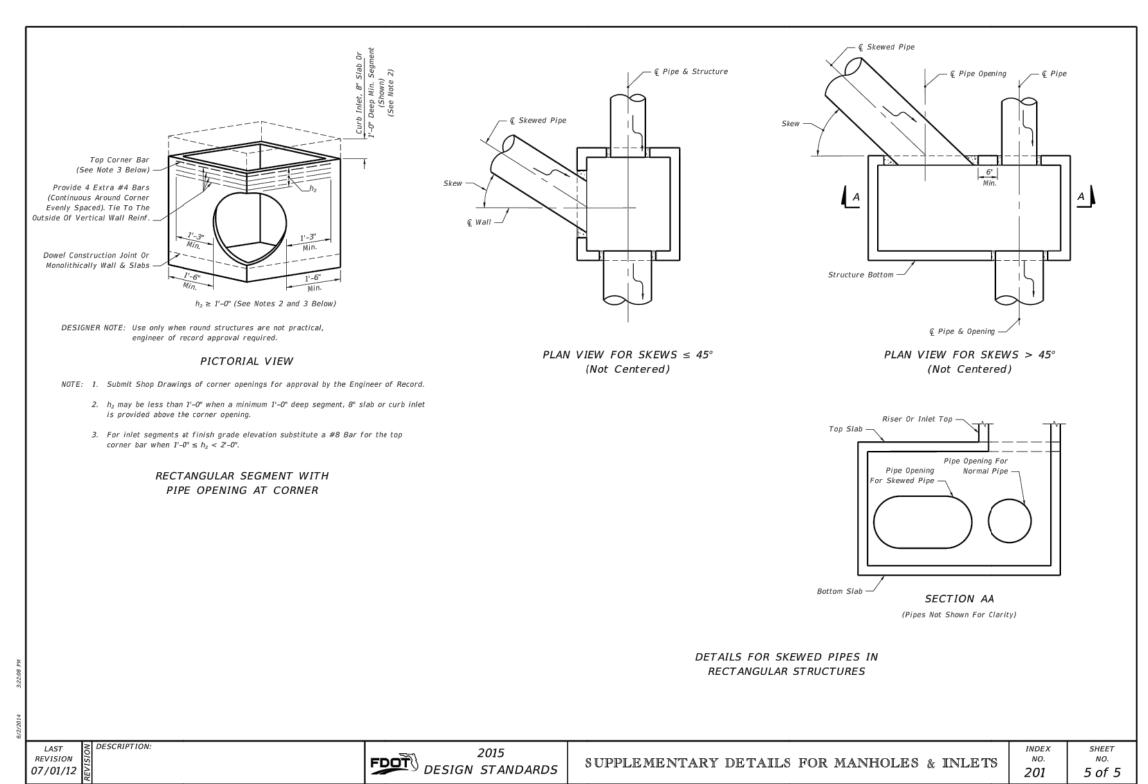


SECTION A-A
(ALTERNATE A)













TIDAL WAVE AUTO SPA Highway 90

PROTOTYPE: 13305C
PROTOTYPE DATE: N/A

Lake City, FL

SET NAME:

SETUP DATE:

ISSUED FOR CONSTRUCTION

PROFESSIONAL OF RECORD:

PROFESSIONAL OF RECORD:

T. PANNING NO. 93545

NO. 93545

STATE OF

ONA L

MILLIAN ONA

DESIGNER'S INFORMATION:



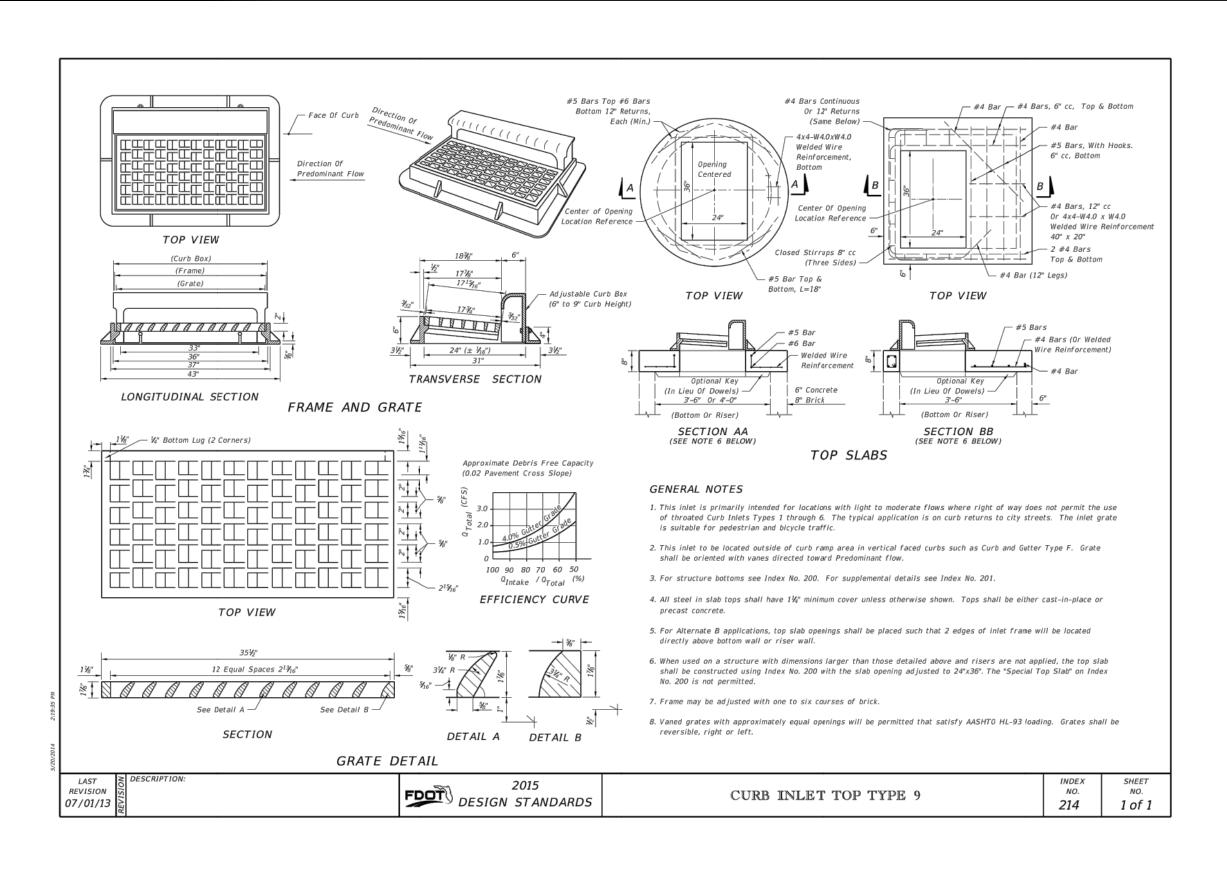
SHEET DATE	: 03/04/2022
SHEET REVISIONS:	
▲ DATE:	DESCRIPTION:
DRAWN BY:	RM, TD

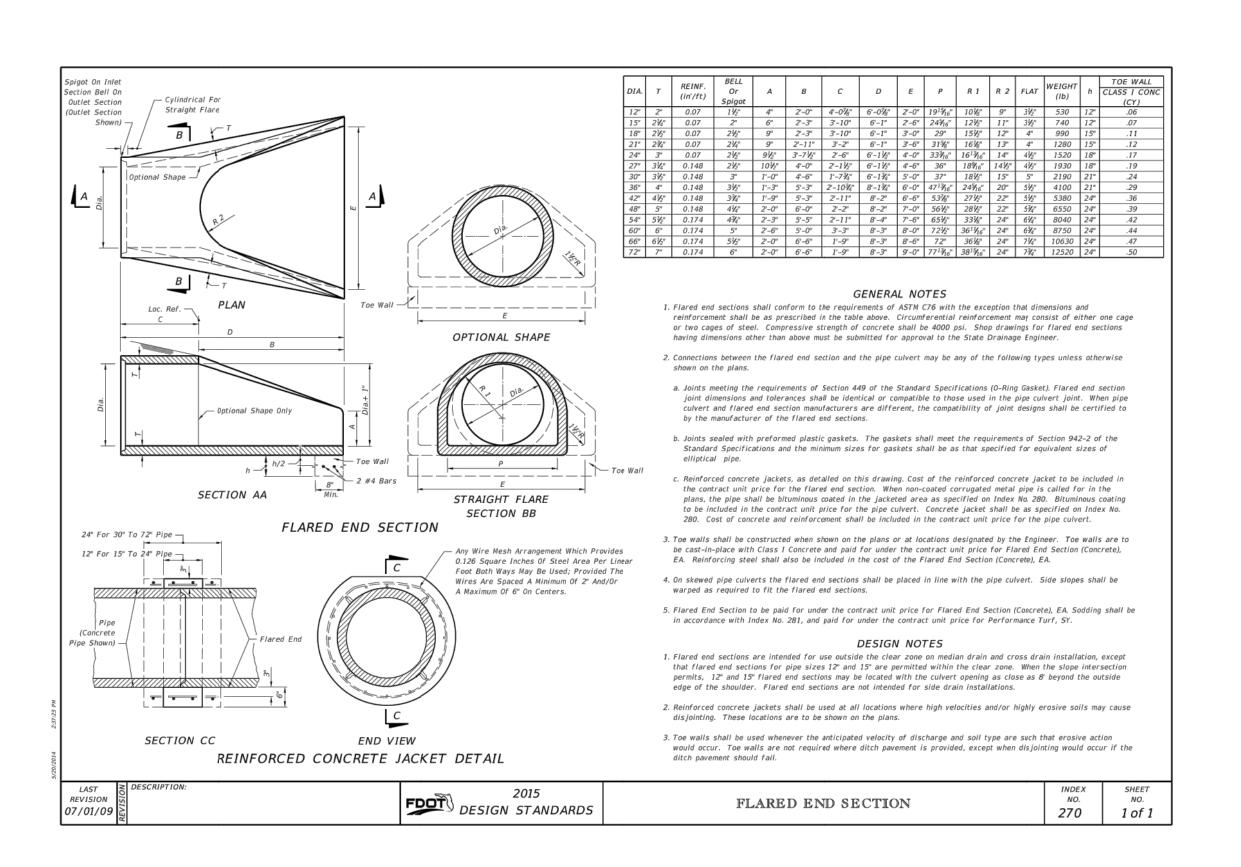
DETAILS - GRADING & DRAINAGE

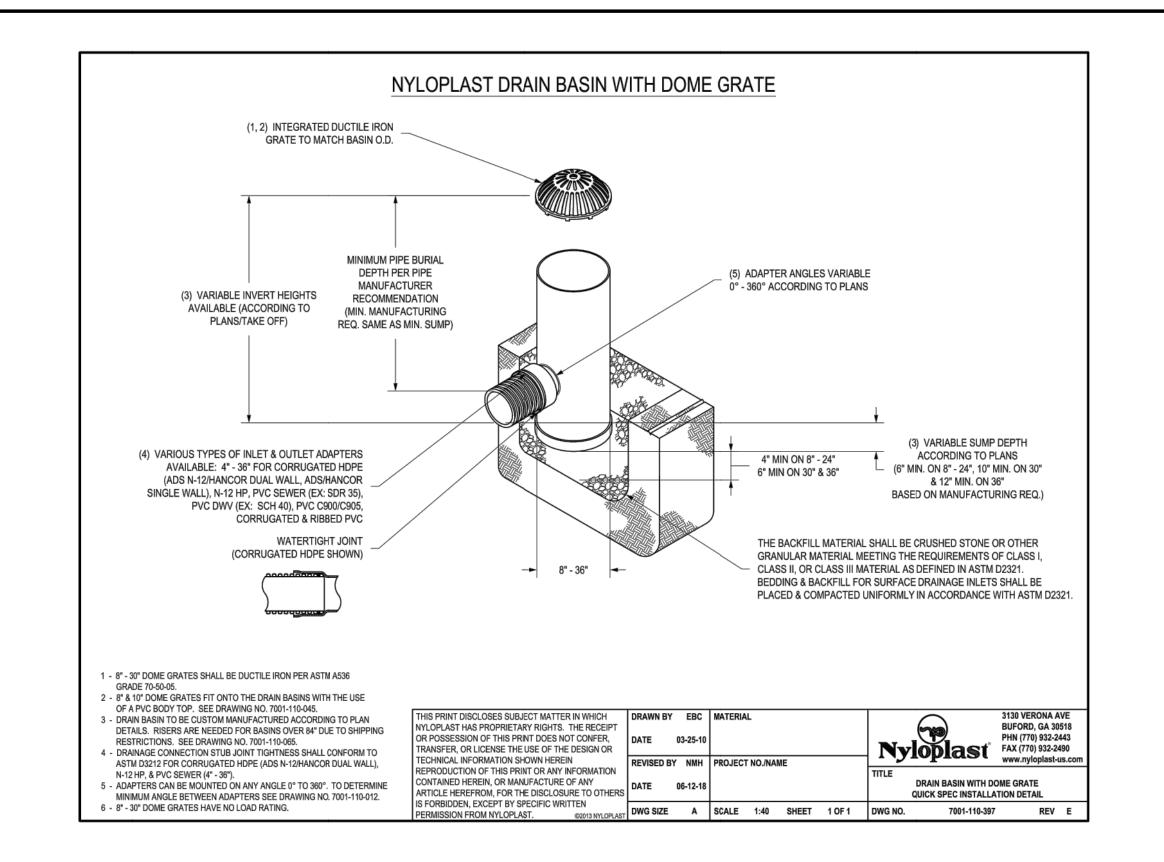
SHEET SCALE:

SHEET TITLE:

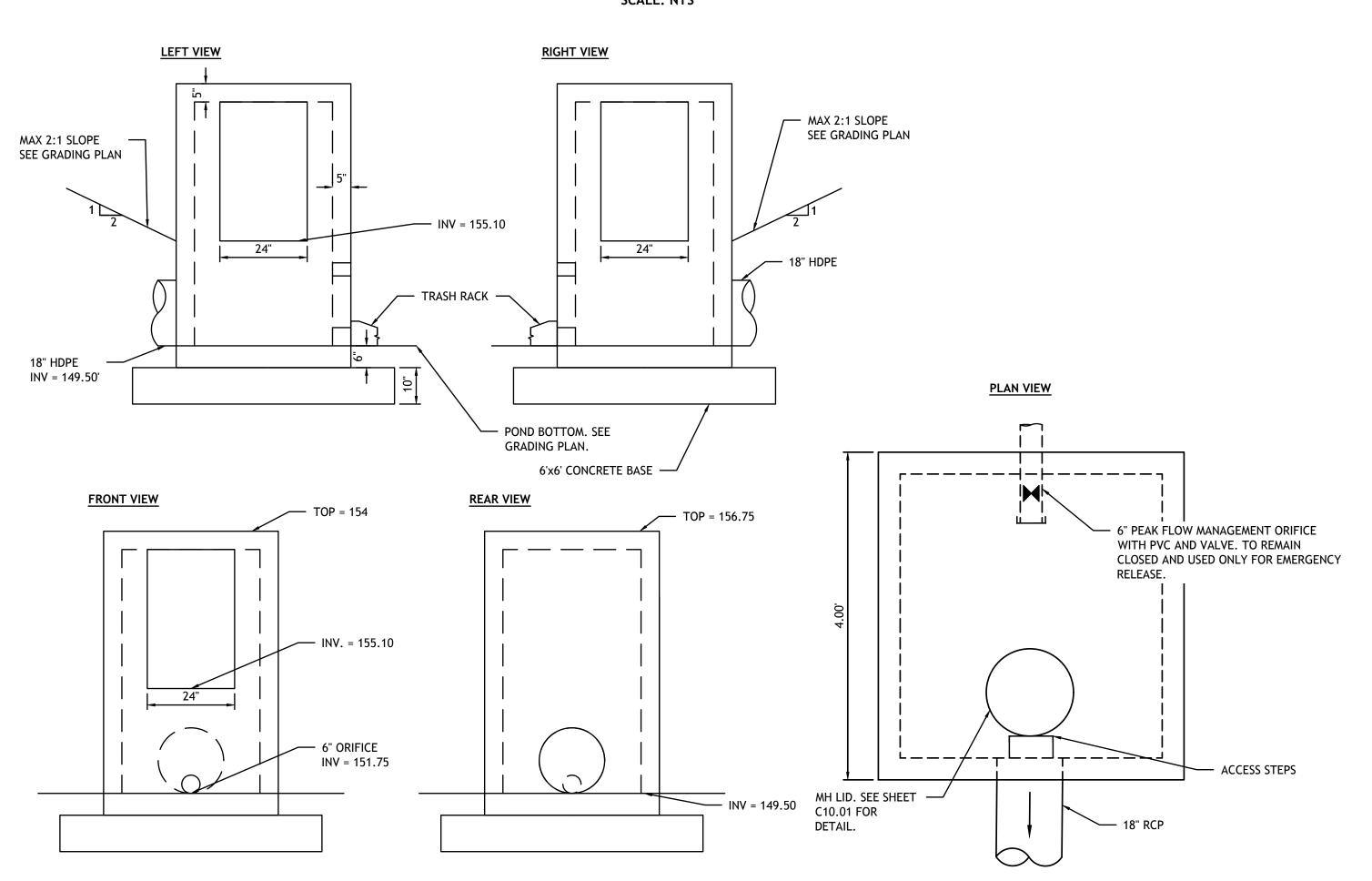
SHEET NUMBER:
C10.01







B3 SURFACE POND OUTLET CONTROL STRUCTURE SCALE: NTS







TIDAL WAVE AUTO SPA Highway 90 Lake City, FL

ı	PROTOTYPE:	13305C
ı	PROTOTYPE DATE:	N/A

SET NAME:

ISSUED FOR CONSTRUCTION

PROFESSIONAL OF RECORD:

PROFESSIONAL OF RECORD:

T. PANNUMUM
T. PANNUMUM
No. 93545

No. 93545

STATE OF
ONA L. MINIMUM
ONA L.

DESIGNER'S INFORMATION:



SHEET DATE	: 03/04/2022	
SHEET REVI	SIONS:	
▲ DATE:	DESCRIPTION:	
_		
DRAWN BY:	RM, TD	
SHEET TITLE:		

DETAILS - GRADING & DRAINAGE

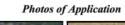
SHEET SCALE: SEE SCALE
SHEET NUMBER:

C10.02

STATE OF FLORIDA E&SC DESIGNER & REVIEWER MANUAL; LATEST EDITION: JULY 2013

- During larger storm events, temporary flooding can occur on the upstream side of the silt fence.
- Design life of silt fence is short (5–8 months if properly installed).

Design Examples





(Source: Florida Dept. of Envr. Protection, 1988)

Design Example

See Appendix III: Polymer and Alum for design specifications on SRBs.

Compost Filter Berms

-- A temporary or permanent ridge of erosion-resistant material at the base of a slope of exposed soil or in any location where runoff of eroded soil should be restricted. Typical berm materials include shredded wood (wood chips, wood bark, wood cellulose fiber, and wood excelsior) and organic material (vegetative trimmings such as grass, shredded shrubs, and trees). Examples of compost filter berms that have been implemented in the eastern U.S. are as follows:

- Mesh sock stuffed with coarse bark, wood chips, fine-shredded wood or vegetal fiber suited for seed germination.
- o Berm constructed of fine, shredded wood and other recycled organic material and installed by a patented pneumatic machine which forms, compacts, and automatically stabilizes the berm with a soil binder. --

What is its Purpose?

- To retain eroded soil on-site.
- To restrict movement of runoff and any eroded soil.
- To channelize runoff to a desired location, perhaps directing it away from the most disturbed areas. AI-33

STATE OF FLORIDA E&SC DESIGNER & REVIEWER MANUAL; LATEST EDITION: JULY 2013

- o pH between 5.0 and 8.0
- o Particle size between ½" and 2" (99% passing through a 2" sieve and a minimum of 70% not passing through a 3/8" sieve)
- Moisture content less than 60%
- Must comply with local, state, and federal regulations.
- If on-site vegetation is used as material for the berm, ensure that invasive species such as melaleuca and Brazilian pepper are removed from the site prior to grinding or shredding of existing vegetation.
- · Application of a soil binder on the berm surface may be necessary in areas with high wind and rain exposure. Follow guidelines for selection and application rates of binders under "Soil Binders" in this Appendix.

When Should it be Installed?

- Before construction activities begin.
- While construction activities are occurring.
- Where and When Should it not be Installed? Cannot be placed below high tide elevations.
- Should not be used in areas with high wind exposure unless a soil/compost binder is applied to maintain placement of berm.

What needs to be Inspected?

- Inspect berm after precipitation events or heavy wave action for erosion.
- Inspect berm to ensure vegetation is becoming established.
- What Maintenance Activities can be Expected? Eroded areas must be re-filled, compacted, and re-covered with mulch immediately.
- · The contractor should remove collected sediment when it reaches one-half of the exposed height of

STATE OF FLORIDA E&SC DESIGNER & REVIEWER MANUAL; LATEST EDITION: JULY 2013

Where and How is it Commonly Used in Coastal Areas?

- The filter berm should be constructed near the soil/water interface in coastal areas, but care should be taken to keep the berm above the expected high tide elevations.
- Berms can be constructed above and below the areas of construction, to restrict clean water from moving over any areas of exposed soil and to restrict runoff from entering the nearby water body.
- If berm is designed to re-direct runoff, water can be channelized to a sedimentation pond or other treatment feature. Protect outlets to treatment features with riprap or vegetation, depending on the volume of runoff re-directed. See Sections I through V for additional guidance.
- Compaction of the soil/compost material is necessary.
- Minimum recommended grade of slope where berm is to be installed is 1%.
- The berm should be constructed with an ideal 1V:2H ratio to maintain stability of berm. Common berm sizes and specifications are listed in Table 3.
- Berms shall be installed on level contours at zero slope to ensure perpendicular sheet flow.
- If concentrated flows are expected, encase compost in a stabilizing material such as a mesh sock and
- The ends of the berm must be constructed to point upslope (ends at higher elevation than remainder of berm) to prevent water from circumventing the berm.
- If possible, berms should be installed on a level surface at a distance of 5 ft or greater from the toe of the slope to maximize the area available for sediment deposit behind the berm. It may be necessary to install a second berm behind the initial berm to restrict flow and allow for adequate space for sediment deposit.
- Berm should be immediately seeded with salt-tolerant vegetation to reduce erosion of the berm. Follow guidelines presented under "Establishing Permanent, Salt-Tolerant Vegetation" in this

Table 3. Compost Berm Specifications (Source: Filtrexx, 2006)

S	lope	Maximum slope length	Berm size required	Approx. berm length per cubic yard of material	
(percent)	(ratio, V:H)	(linear feet)	(height × width)	(linear ft)	
0%-2%	flatter than 1:50	250	1 ft. x 2 ft.	19	
2%-10%	1:50-1:10	125	1 ft. x 2 ft.	19	
10%-20%	1:10-1:5	100	1 ft. x 2 ft.	19	
20%-33%	1:5-1:3	50	1.3 ft. x 2.6 ft.	10	
>50%	>1:2	25	1.5 ft. x 3 ft.	7.6	

NOTE: To obtain a copy of this information, go to www.filtrexx.com; on the left side of the screen, click on Specs & Designs; then click on Compost Filter Berms-Silt Fence Alternative; then click Open when prompted; and open the Word file titled, "Filtrexx Berm SpecMaster 1-15-03.doc." Web site and documentation are subject to change.

- Compost used for berms should have the following characteristics:
 - o Free of weeds, refuse, contaminants, or other materials toxic to plant growth
 - o Derived from a well-decomposed source of organic matter

AI -34

STATE OF FLORIDA E&SC DESIGNER & REVIEWER MANUAL; LATEST EDITION: JULY 2013

Photos of Application







AI -35 AI -36

STATE OF FLORIDA E&SC DESIGNER & REVIEWER MANUAL; LATEST EDITION: JULY 2013

Curb and Gutter Sediment Containment System Detail

WHAT IS ITS PURPOSE?

Temporary barriers to cause waters to pond and drain so that sediment can settle out of runoff waters while construction activities occur.

WHERE AND HOW IS IT COMMONLY USED?

 In gutters and upstream of inlets. Reduce sediment entering a storm sewer

While construction activities are occurring.

- WHEN SHOULD IT BE INSTALLED?
- Where street grades exist.

WHEN SHOULD IT NOT BE INSTALLED?

After construction activities are completed.

Where "sump" conditions exist.

- WHAT NEEDS TO BE INSPECTED?
- Is collected sediment being removed? Are the bags about 2/3 full?

Is the spacing correct (see table)? Have vehicles destroyed the bags?

WHAT MAINTENANCE ACTIVITIES CAN BE EXPECTED?

- Repair and replacement of bags. Removal of sediment.
- Removal of bags.

V-39

Temporary SCS inserted into an inlet to capture larger diameter sediments found in runoff

Is the containment bag over ½ full?
 Does the fabric appear around the grate?

NOTES

Do not rely on these units to be the only sediment control devices on a construction site.

Within a catch basin.

Will water flow into the material?

- Vehicles will destroy the bags. Warning signs should be used to alert drivers of the structures.
- Sediment must be removed after every runoff event.
- Water should not be allowed to remain behind the bags.

Curb Inlet Insert

WHERE AND HOW ARE THEY COMMONLY USED?

While construction activities are occurring.

Within inlets that are on a grade or in a sump.

WHAT MAINTENANCE ACTIVITIES CAN BE EXPECTED?

At a location to serve as the only sediment containment system.

Repair and replacement of material.
 Removal of sediment.

Be sure to empty the units before winter conditions occur.

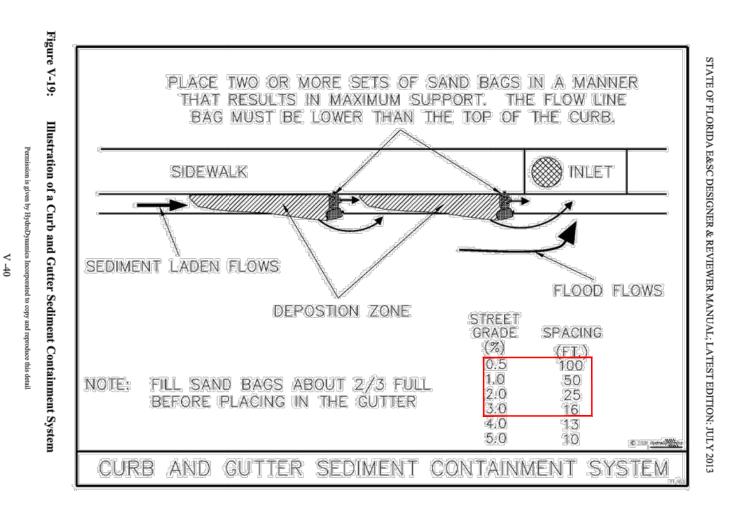
WHAT IS ITS PURPOSE?

Within curb inlets.

WHEN SHOULD IT BE INSTALLED?

WHEN SHOULD IT NOT BE INSTALLED?

WHAT NEEDS TO BE INSPECTED? Is the fabric material torn?



STATE OF FLORIDA E&SC DESIGNER & REVIEWER MANUAL; LATEST EDITION: JULY 2013 STATE OF FLORIDA E&SC DESIGNER & REVIEWER MANUAL; LATEST EDITION: JULY 2013

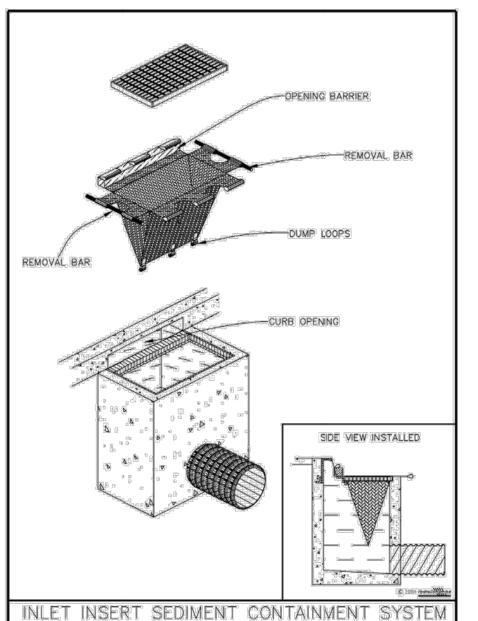


Figure V-18: Illustration of an Inlet Insert Sediment Containment System

Permission is given by HydroDynamics Incorporated to copy and reproduce this detail

4300 Legendary Drive, Suite 234 Destin, Florida 32541

PROJECT:

T: 850.650.4353 F: 850.650.3881

TIDAL WAVE AUTO SPA Highway 90 Lake City, FL

PROTOTYPE: 13305C PROTOTYPE DATE: N/A

SET NAME:

SETUP DATE:

ISSUED FOR CONSTRUCTION

03/04/2022 PROFESSIONAL OF RECORD:

DESIGNER'S INFORMATION:



SHEET DATE: 03/04/2022 SHEET REVISIONS: ▲ DATE: DESCRIPTION: RM, TD DRAWN BY:

DETAILS - EROSION

SHEET SCALE: SEE SCALE

SHEET TITLE:

SHEET NUMBER:

C11.01

STATE OF FLORIDA E&SC DESIGNER & REVIEWER MANUAL; LATEST EDITION; JULY 2013

Curb Inlet "Sump" Barrier

WHAT IS ITS PURPOSE?

Temporary barriers to cause waters to pond and drain so that sediment can settle out of runoff waters while construction activities occur.

WHERE AND HOW ARE THEY COMMONLY USED?

 In front of curb inlets. Reduce sediment entering a storm sewer

WHEN SHOULD IT BE INSTALLED?

While construction activities are occurring.

Only where "sump" conditions exist.

WHEN SHOULD IT NOT BE INSTALLED? After construction activities are completed.

Where "sump" conditions do not exist.

- WHAT NEEDS TO BE INSPECTED?
- Is at least 1.0-in. diameter rock used? Does water flow through the rock? Has wire mesh been used? Does the rock need "raking?" Will water be diverted downstream? Can water flow over the rock?

Should the rock be replaced?

WHAT MAINTENANCE ACTIVITIES CAN BE EXPECTED? Repair and replacement of rock. Removal of sediment.

Removal of rock.

Have vehicles destroyed the structure?

- Rock barriers are to be installed in "sump" conditions only.
- Wire mesh should be used instead of more open materials such as chicken wire.
- Rock barriers in front of inlets provide little filtering effect and capture little sediment from runoff waters.
- Warning signs should be used to alert drivers of the structures.
- Rock barriers in front of inlets may cause destruction of the pavement due to excess seepage of water or freezing conditions.
- If placed on a grade, the structure will divert runoff downstream and may cause flooding.

Soil Tracking Prevention Device

WHAT IS ITS PURPOSE?

Temporary structures to assist with removal of soil material captured on vehicle tires entering and leaving a construction site.

STATE OF FLORIDA E&SC DESIGNER & REVIEWER MANUAL; LATEST EDITION; JULY 2013

WHERE AND HOW IS IT COMMONLY USED? Major entrances into construction sites.

WHEN SHOULD IT BE INSTALLED? Before construction activities begin. During construction activities.

WHEN SHOULD IT NOT BE INSTALLED? After construction activities are completed.

WHAT NEEDS TO BE INSPECTED?

 Are the correct rock diameters used?
 Is there a depression for runoff? Is rock being carried out into a street?
 Does rock need to be replaced?

V-43

WHAT MAINTENANCE ACTIVITIES CAN BE EXPECTED?

 Replacement of rock. Removal of sediment on adjacent STATE OF FLORIDA E&SC DESIGNER & REVIEWER MANUAL; LATEST EDITION: JULY 2013

STATE OF FLORIDA E&SC DESIGNER & REVIEWER MANUAL; LATEST EDITION: JULY 2013

PLAN VIEW

SECTION A-A

RIGID BARRIER MUST HAVE OPENINGS TO ALLOW FOR PERCOLATION OF

PLACE BARRIERS IN FRONT OF INLETS ONLY WHERE SUMP CONDITIONS

CURB INLET SUMP BARRIER

V-36

THESE STRUCTURES MAY CAUSE ASPHALT DAMAGE DUE TO WATER SEEPAGE INTO JOINTS.

Permission is given by HydroDynamics Incorporated to copy and reproduce this detail

Figure V-15: Illustration of a Curb Inlet "Sump" Barrier

THE GAP WIDTH MUST BE AT LEAST EQUAL TO THE CURB THROAT OPENING.

MANHOLE COVER

RIGID BARRIER TO PREVENT MOVEMENT OF ROCK OR OTHER POROUS MATERIAL

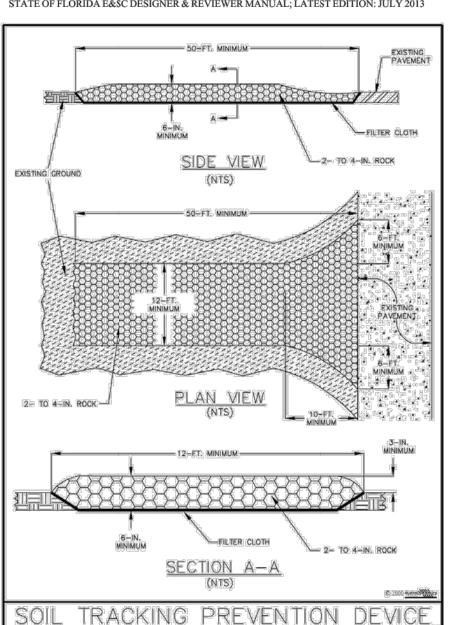


Figure V-19: Illustration of a Soil Tracking Prevention Device

Permission is given by HydroDynamics Incorporated to copy and reproduce this detail

V-44

STATE OF FLORIDA E&SC DESIGNER & REVIEWER MANUAL; LATEST EDITION; JULY 2013

Frame & Filter Barrier for Area Drain (a.k.a. Drop, Catch Basin, or Ditch Bottom) Inlets

WHAT IS ITS PURPOSE? Temporary barriers to cause waters to pond and drain so that sediment can settle out of runoff

waters while construction activities occur.

WHERE AND HOW IS IT COMMONLY USED?

 Around inlets to which runoff flows. Around median inlets.

WHEN SHOULD IT BE INSTALLED?

While construction activities are occurring.

Only where "sump" conditions exist.

- WHEN SHOULD IT NOT BE INSTALLED?
- After construction activities are completed.
- Where "sump" conditions do not exist.
- In locations that could lead to potential flooding such as encroachment on travel lanes of a roadway.

WHAT NEEDS TO BE INSPECTED?

- Has the unit been placed over the grate?
 Do "sump" conditions exist?
- Is there sufficient soil or gravel to seal the
 Is the fabric material torn?
- Does accumulated sediment cover 2/3 of Is the frame still supporting the fabric the filter barrier height?
- Does it appear that runoff is flowing under
 Does runoff drain through the fabric the fabric material? material?

WHAT MAINTENANCE ACTIVITIES CAN BE EXPECTED?

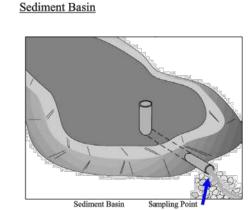
- Repair and replacement of gravel in the
 Removal of sediment around the unit.
- Replacement of fabric material.

- These barriers are to be installed in "sump" conditions only. If placed in front of inlets on a grade, runoff will be diverted to downstream locations and could cause flooding.
- It is critical that a good seal exist between the ground and fabric material using adequate amounts of soil or gravel.
- Multiple types of filter media are available for this system. The correct type of filter fabric

should be chosen that considers both safety and environmental concerns.

V-33

STATE OF FLORIDA E&\$C DESIGNER & REVIEWER MANUAL; LATEST EDITION: JULY 2013





-- A sediment basin is a temporary basin with a controlled release structure that is formed by excavation or construction of an embankment to detain sediment-laden runoff and allow sediment to settle out before discharging. Sediment basins are generally larger than sediment traps. --

What is its Purpose?

• Effective for the settling of sediments such as sand, silt, and some metals that settle out with the

Where and How is it commonly Used?

- Excavation and construction of related facilities is required.
- Temporary sediment basins must be fenced if safety is a concern. Outlet protection is required to prevent erosion at the outfall location.
- If off-site discharge is proposed, the turbidity sampling location should be at the discharge point of

AII-7

What Maintenance Activities can be Expected?

- Daily inspections of sediment basin embankments and discharge point should be performed to
- prevent washout, scouring, and embankment blow-outs.
- Removal of sediment is required when the storage volume is reduced by one-half.

STATE OF FLORIDA E&SC DESIGNER & REVIEWER MANUAL; LATEST EDITION: JULY 2013

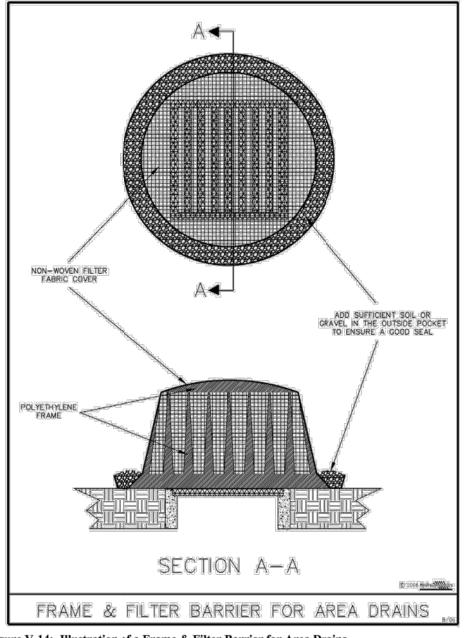


Figure V-14: Illustration of a Frame & Filter Barrier for Area Drains Permission is given by HydroDynamics Incorporated to copy and reproduce this detail

V-34

4300 Legendary Drive, Suite 234 Destin, Florida 32541 T: 850.650.4353 F: 850.650.3881



TIDAL WAVE AUTO SPA Highway 90 Lake City, FL

PROTOTYPE: 13305C PROTOTYPE DATE: N/A

SET NAME:

SETUP DATE:

ISSUED FOR CONSTRUCTION

SET DATE: 03/04/2022 PROFESSIONAL OF RECORD:

DESIGNER'S INFORMATION:



SHEET DATE: 03/04/2022 SHEET REVISIONS: ▲ DATE: DESCRIPTION:

DETAILS - EROSION

RM, TD

SHEET SCALE: SEE SCALE

DRAWN BY:

SHEET TITLE:

SHEET NUMBER:

C11.02

STATE OF FLORIDA E&SC DESIGNER & REVIEWER MANUAL; LATEST EDITION: JULY 2013

Silt Fence Priority 2 (Black Band)

WHAT IS ITS PURPOSE?

The Priority 2 Silt Fence shall be used as a vertical interceptor of sediment transported by overland sheet flow on construction sites. This silt fence is a 36-inch wide, non-woven, spunbond polyester fabric. The system encompasses wood stakes and a specific method of attachment (see Installation Specifications in Notes below).

WHERE AND HOW IS IT COMMONLY USED?

- At the toe of cut and fills slopes
- To protect water bodies. As a small sediment containment system
- To provide filtering capabilities in slurry conditions

WHEN SHOULD IT BE INSTALLED?

Before construction activities begin.

It is designed for control of sheet flow.

WHEN SHOULD IT NOT BE INSTALLED?

 Shall not be installed across streams, ditches,
 Shall not be placed around storm water waterways, or anywhere there is concentrated inlets, which receive concentrate flow.

WHAT NEEDS TO BE INSPECTED?

- Are stakes on the downstream side? Is the fabric secured correctly in the Does water flow under the fabric?
- Is the fabric attached to the posts? Has water flattened the structure? Will water flow around the fence? Has wind destroyed the fence? Is the fabric torn?

WHAT MAINTENANCE ACTIVITIES CAN BE EXPECTED?

- Accumulated sediment should be Regular inspection at the end of each workday and after each rainfall event. removed when it reaches half the height
- Remove the fence and accumulated sediment and stabilize the exposed area at completion of the project.

V-8

of the fence to prevent failures.

• The life of the product is determined at the point in which it is no longer effective or needed to do the job for which it is designed (Approximately one year).

STATE OF FLORIDA E&SC DESIGNER & REVIEWER MANUAL; LATEST EDITION: JULY 2013

- Installation Specifications: The method of installation for the Priority 2 Silt Fence is an integral part of the system and is unlike other installation practices. The specifically designed process includes wood (oak) stakes and wood bonding strips placed at six (6') foot intervals. The silt fence shall be installed in a trench 4" wide and 8" deep. Installation of trenches over 4" wide are not recommended. Stakes are driven to a depth, which allows 24" of fabric to be above ground. The bonding strips (typically 1" x 3/8" x 24") are attached to the stake with 1" x 1 1/4" staples. Four staples are used to secure the fabric in place against the 1 1/8" x 1 1/8" oak posts. This installation bonds the fabric to the vertical support post. The remaining fabric is now tucked into the trench forming a "J" and when filled with dirt creates a "ground bite". With its firm attachment to each post, the load is now spread to the total linear strength of all the posts within the system.
- Any variance from the material specifications installation requirements may alter the performance of this product. The product is available pre-staked to these specifications.

STATE OF FLORIDA E&SC DESIGNER & REVIEWER MANUAL; LATEST EDITION: JULY 2013

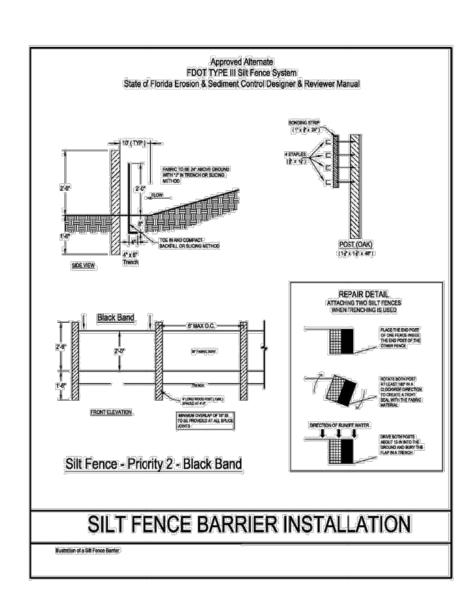


Figure V-3: Illustration of Silt Fence Priority 2 – Black Band

Chapter 5 - Best Management Practices for Stormwater Management

5.15 OUTLET PROTECTION (ES BMP 1.36)

Definition

Structurally lined aprons or other acceptable energy dissipating devices placed at the outlets of pipes (See Plate 5.15a) or paved channel sections (see Plate 5.15c). The most common types are riprap aprons or concrete aprons with energy dissipator blocks or walls.

<u>Purpose</u>

To prevent scour at stormwater outlets and to minimize the potential for downstream erosion by reducing the velocity of concentrated stormwater flows.

Conditions Where Practice Applies

Applicable to the outlets of all pipes and paved channel sections where the velocity of flow at design capacity of the outlet will exceed the permissible velocity of the receiving channel or area.

Chapter 5 - Best Management Practices for Stormwater Management

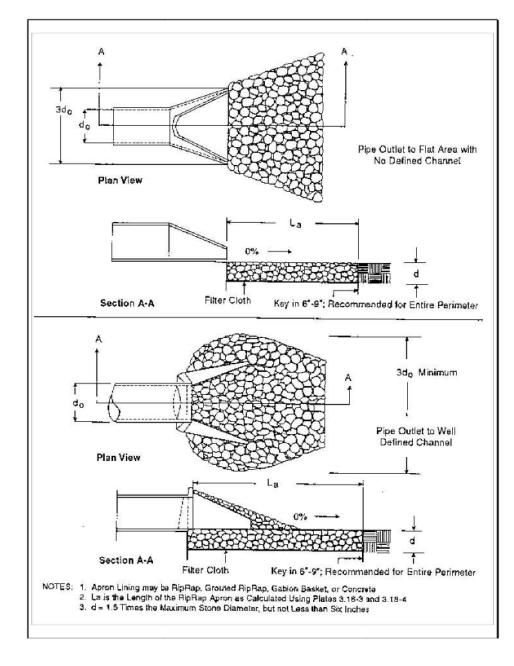
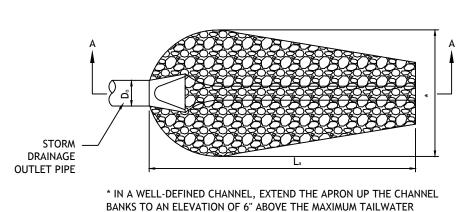
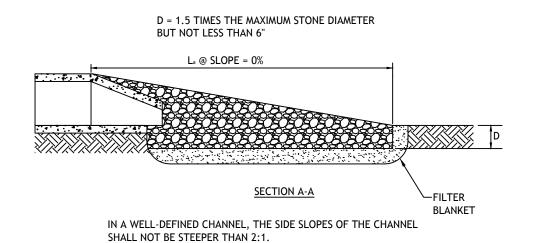


Plate 5.15c Pipe Outlet Conditions Source: Virginia DSWC

PIPE OUTLET TO FLAT AREA- NO WELL-DEFINED CHANNEL



DEPTH OR TO THE TOP OF THE BANK, WHICHEVER IS LESS.



PIPE OUTLET TO WELL-DEFINED CHANNEL

DESIGN IS BASED ON 25 YEAR, 24 HOUR FREQUENCY STORM

STORM STRUCTURE	D₀ (in)	Q (cfs)	V (fps)	La (ft)	W ₁ (ft)	W ₂ (ft)	D (ft)	d50 (ft)	
OP-A	18	10	5.65	11	1.5	4.5	1.5	0.675	
OP-B	18	12	6.78	11	1.5	4.5	1.5	0.675	

STORM DRAIN OUTLET PROTECTION CONSTRUCTION SPECIFICATIONS AND MAINTENANCE

- 1. ENSURE THAT THE SUBGRADE FOR THE FILTER AND RIPRAP FOLLOWS THE REQUIRED LINES AND GRADES SHOWN 6. CONSTRUCT THE APRON ON ZERO GRADE WITH NO OVERFALL AT THE END. MAKE THE TOP OF RIPRAP AT IN THE PLAN. COMPACT ANY FILL REQUIRED IN THE SUBGRADE TO THE DENSITY OF THE SURROUNDING UNDISTURBED MATERIAL. LOW AREAS IN THE SUBGRADE ON UNDISTURBED SOIL MAY ALSO BE FILLED BY INCREASING THE RIPRAP THICKNESS.
- 2. THE RIPRAP AND GRAVEL FILTER MUST CONFORM TO THE SPECIFIED GRADING LIMITS SHOWN ON THE PLANS.
- 3. GEOTEXTILE FILTER FABRIC MUST MEET DESIGN REQUIREMENTS AND BE PROPERLY PROTECTED FROM PUNCHING OR TEARING DURING INSTALLATION. REPAIR ANY DAMAGE BY REMOVING THE RIPRAP AND PLACING ANOTHER PIECE OF FILTER FABRIC OVER THE DAMAGED AREA. ALL CONNECTING JOINTS SHOULD OVERLAP A MINIMUM OF 1 FT. IF THE DAMAGE IS EXTENSIVE, REPLACE THE ENTIRE GEOTEXTILE FILTER FABRIC.

MAINTENANCE REQUIREMENTS:

- 4. RIPRAP MAY BE PLACED BY EQUIPMENT, BUT TAKE CARE TO AVOID DAMAGING THE FILTER.
- 5. THE MINIMUM THICKNESS OF THE RIPRAP SHOULD BE 1.5 TIMES THE MAXIMUM STONE DIAMETER.
- THE DOWNSTREAM END LEVEL WITH THE RECEIVING AREA OR SLIGHTLY BELOW IT.
- 7. ENSURE THAT THE APRON IS PROPERLY ALIGNED WITH THE RECEIVING STREAM AND PREFERABLY STRAIGHT THROUGHOUT ITS LENGTH. IF A CURVE IS NEEDED TO FIT SITE CONDITIONS, PLACE IT IN THE UPPER SECTION OF THE APRON.
- 8. IMMEDIATELY AFTER CONSTRUCTION, STABILIZE ALL DISTURBED AREAS WITH VEGETATION.
- 9. STONE QUALITY SELECT STONE FOR RIPRAP FROM FIELD STONE OR QUARRY STONE. THE STONE SHOULD BE HARD, ANGULAR, AND HIGHLY WEATHER-RESISTANT. THE SPECIFIC GRAVITY OF THE INDIVIDUAL STONES SHOULD BE AT LEAST 2.5.
- 10. FILTER INSTALL A FILTER TO PREVENT SOIL MOVEMENT THROUGH THE OPENINGS IN THE RIPRAP. THE FILTER SHOULD CONSIST OF A GRADED GRAVEL LAYER OR A SYNTHETIC FILTER CLOTH.

MAKE ALL NEEDED REPAIRS TO PREVENT FURTHER DAMAGE.

INSPECT RIPRAP OUTLET STRUCTURES AFTER HEAVY RAINS TO SEE IF ANY EROSION AROUND OR BELOW THE RIPRAP HAS TAKEN PLACE OR IF STONES HAVE BEEN DISLODGED. IMMEDIATELY

STORM DRAIN OUTLET PROTECTION



T: 850.650.4353 F: 850.650.3881 PROJECT:

TIDAL WAVE AUTO SPA Highway 90

Lake City, FL

PROTOTYPE:	13305C
PROTOTYPE DATE:	N/A

SETUP DATE: SET NAME:

ISSUED FOR CONSTRUCTION

ET DATE:	03/04/202
ROFESSIONAL OF RECORD):
Mo. 93545 No. 93545 No. 93545 OR 1 DA	WIND A GOLD OF THE WAR A GOLD OF THE WAY A GOLD

DESIGNER'S INFORMATION:



SHEET DATE: 03/04/2022 SHEET REVISIONS: ▲ DATE: DESCRIPTION:

DRAWN BY: SHEET TITLE:

DETAILS - EROSION

RM, TD

SHEET SCALE: SEE SCALE SHEET NUMBER:

C11.03