

LEON COUNTY DEPARTMENT OF PUBLIC WORKS

JACKSON VIEW LANDING BOAT RAMP AND PARK AMENITIES PROJECT

SUMMARY OF GENERAL SCOPE OF WORK

SITE IMPROVEMENTS

- NEW ASPHALT ENTRANCE WITH U.S. HIGHWAY 27 DECELERATION LANE AT PARK ENTRANCE
- PRE-FABRICATED CONCRETE BOAT RAMP ASSEMBLY
- CONCRETE APRON AT RAMP APPROACH
- FIXED AND FLOATING ALUMINUM DOCK
- INTERLOCKING PAVER VEHICLE ACCESS, BOAT TRAILER PARKING AND VEHICLE OVERFLOW PARKING INCLUDING 2 ADA COMPLIANT SPACES
- RECREATION AREA WITH GREEN SPACE, TREX DECKING, OBSERVATION DECK, PICNIC TABLES, BBQ GRILLS AND FAMILY RESTROOM
- NEW PARK SIGN, INFORMATION KIOSK AND DECORATIVE FENCING (AT RIGHT-OF-WAY, ENTERING PROPERTY)

ESTIMATED QUANTITIES

- 4,945 SQ. FT. ASPHALT PAVING (ENTRANCE AND DECELERATION LANE)
- 7,264 SQ. FT. INTERLOCKING PAVERS (INTERNAL ROADWAY)
- 2,073 SQ. FT. INTERLOCKING PAVERS (BOAT TRAILER PARKING)
- 996 SQ. FT. INTERLOCKING PAVERS (OVERFLOW PARKING)
- 526 SQ. FT. CONCRETE WALK AND RAMP (AT FAMILY RESTROOM)
- 332 SQ. FT. CONCRETE APRON AT RAMP APPROACH
- 960 SQ. FT. PRE-FABRICATED CONCRETE BOAT RAMP (4 EA, 8' X 30' SECTIONS)
- 1,200 SQ. FT. FIXED ALUMINUM DOCK (2 EA. 6' X 100')
- 180 SQ. FT. FLOATING ALUMINUM DOCK (2 EA. 6' X 15')
- 3,251 SQ. FT. TREX DECKING
- 3 BENCHES (ON DECKING)
- 327 LINEAL FEET OF HANDRAIL (ALONG ELEVATED EDGE OF DECKING AND BETWEEN DECKING, RAMP AND VEHICLE PAVERS)
- 7 ADA COMPLIANT PICNIC TABLES (5 EA. IN GREEN SPACE, 2 EA. ON DECKING, BY OWNER)
- 400 SQ. FT. 8'X10' PICNIC TABLE BASE (5 EA. BY OWNER)
- 4 GRILLS IN GREEN SPACE (BY OWNER)
- 1 FAMILY RESTROOM (BY OWNER)
- 1 INFORMATIONAL KIOSK
- 1 PARK SIGN (BY OWNER)

COMMISSIONERS:

WILLIAM C. PROCTOR, JR.
DISTRICT 1

JANE G. SAULS
DISTRICT 2

JOHN DAILEY
DISTRICT 3

BRYAN DESLOGE
DISTRICT 4

KRISTIN DOZIER
DISTRICT 5

MARY ANN LINDLEY
AT-LARGE

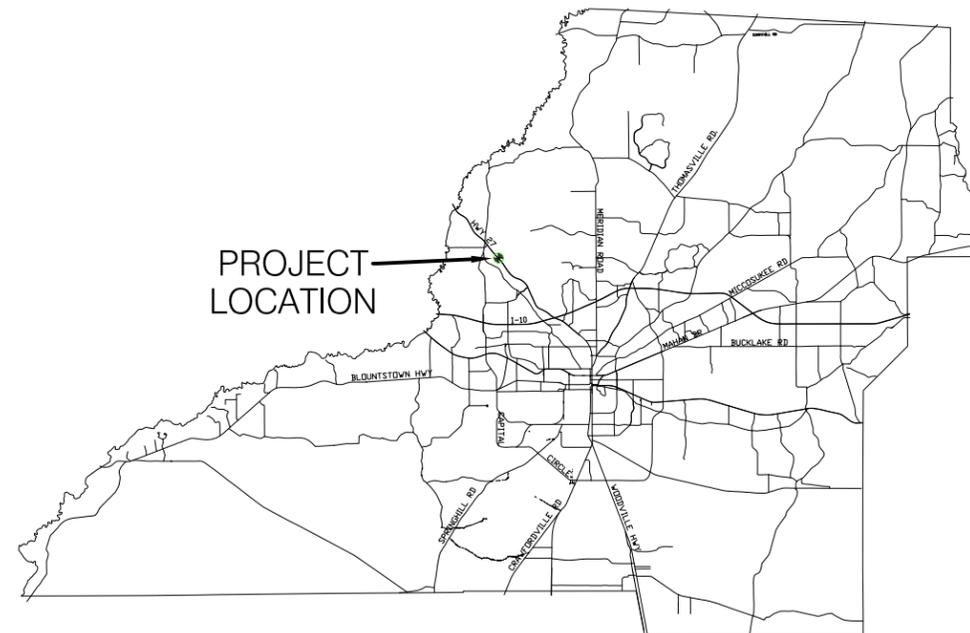
NICK MADDOX
AT-LARGE



VINCENT S. LONG
COUNTY ADMINISTRATOR

HERBERT W. A. THIELE
COUNTY ATTORNEY

TONY PARK, P.E.
PUBLIC WORKS DIRECTOR



INDEX OF PLANS

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DIVISION OF ENGINEERING SERVICES

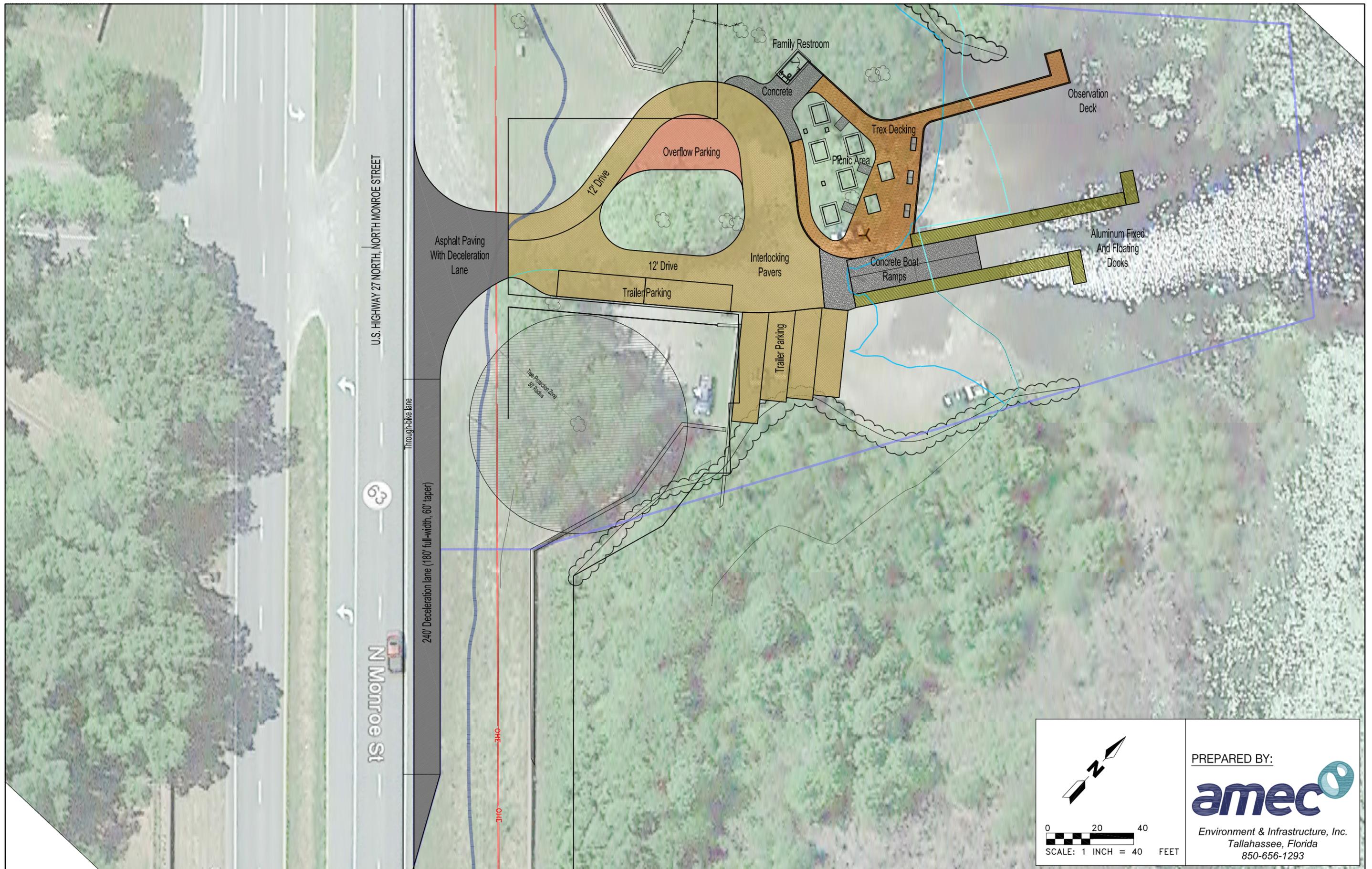
PUBLIC WORKS CENTER
2280 MICCOSUKEE ROAD (850)606-1500

PREPARED BY:



Environment & Infrastructure, Inc.
Tallahassee, Florida
850-656-1293

ENGINEER OF RECORD	1 OF 12
GEOFFREY D. SCHAEFER P.E. NO. 64914	
DATE _____	

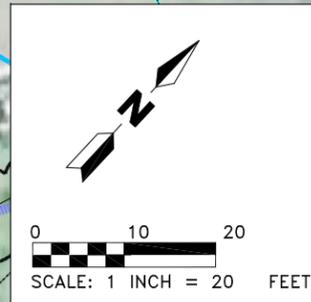
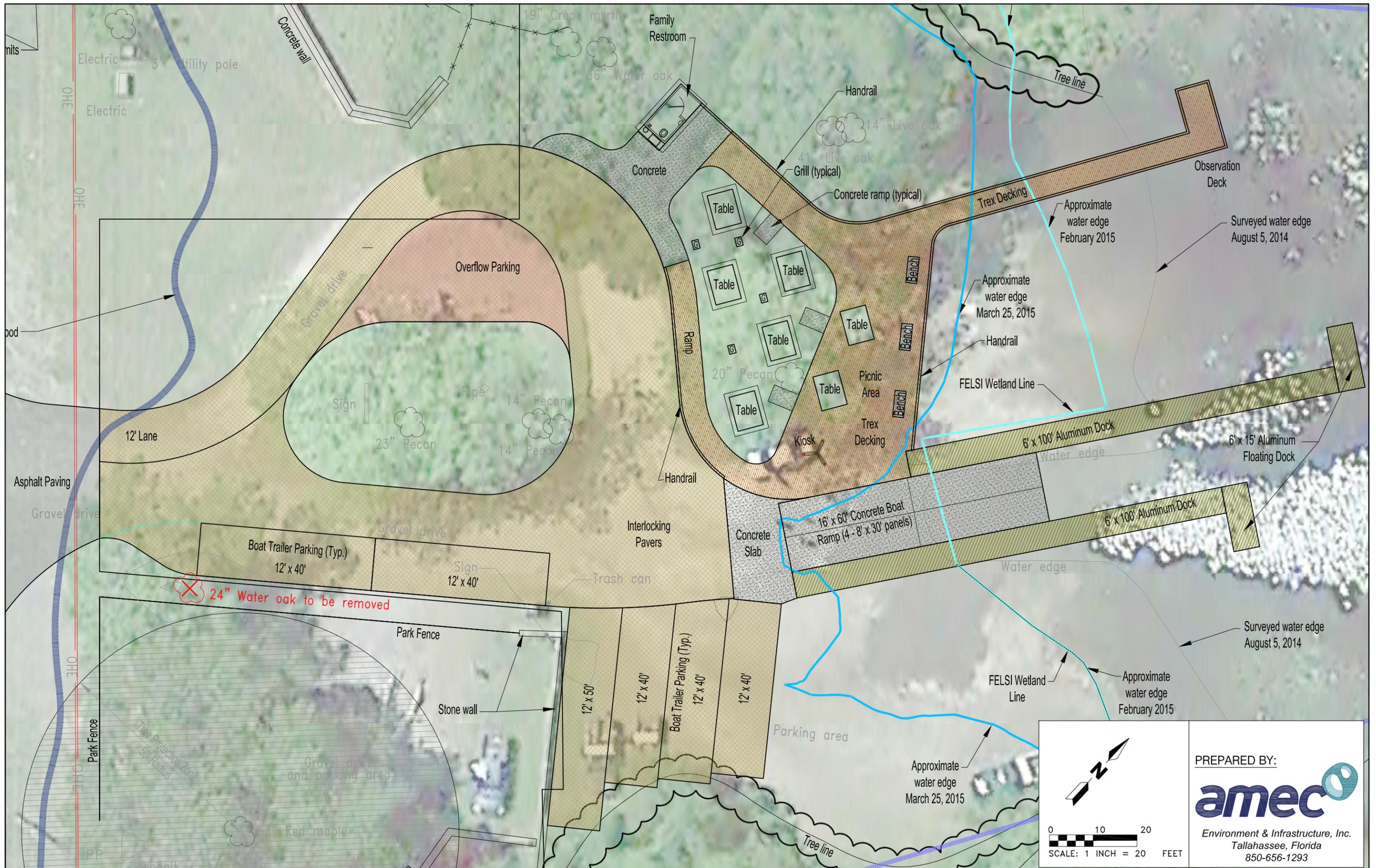


0 20 40
SCALE: 1 INCH = 40 FEET

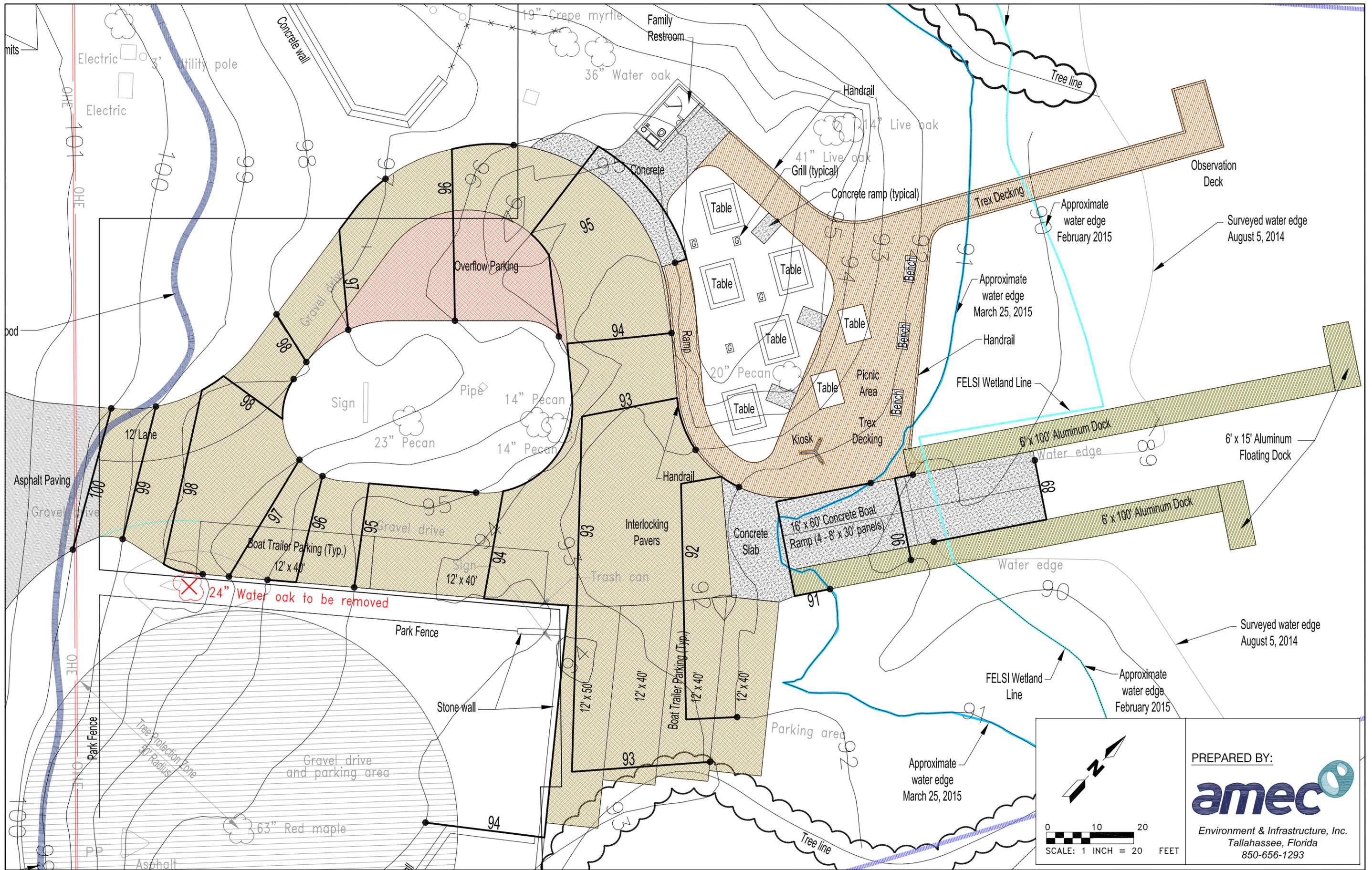
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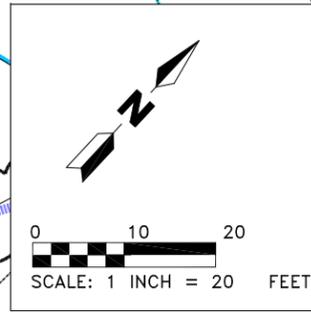
NOTES	



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X 24" Water oak to be removed



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GENERAL NOTES:

GENERAL NOTES

1. A SUFFICIENT LABOR FORCE SHALL BE PROVIDED AND MAINTAINED BY THE CONTRACTOR TO UNDERTAKE THE SCOPE OF WORK THAT IS TO BE PERFORMED. PRIOR TO THE START OF EACH DAYS WORK, THE ON-SITE INSPECTOR SHALL APPROVE THE PERSONNEL PROVIDED BY THE CONTRACTOR TO INSURE THAT AN ADEQUATE NUMBER OF WORKERS ARE AVAILABLE AS WELL AS CAPABLE OF PROVIDING THE SKILLS NECESSARY TO PERFORM THE NECESSARY TASK. IF AT ANY TIME, DURING THE WORKING DAY, THE INSPECTOR FEELS THAT ADEQUATE PERSONNEL ARE NOT BEING PROVIDED, HE MAY STOP ALL WORK ACTIVITIES UNTIL THE CONTRACTOR CORRECTS THE SITUATION. THE CONTRACTOR'S SUPERINTENDENT SHALL BE FREE AT ALL TIMES TO SUPERVISE AND COORDINATE THE WORK IN PROGRESS WITH THE ON-SITE INSPECTOR WITHOUT BEING REQUIRED TO PERSONALLY OPERATE THE EQUIPMENT OF THE PROJECT.
2. LEON COUNTY SHALL RESERVE THE RIGHT TO SAMPLE ANY OR ALL MATERIALS TO DETERMINE THAT MATERIALS MEET DESIGN SPECIFICATIONS. FAILURE TO MEET SPECIFICATIONS SHALL BE CAUSE FOR CANCELLATION OF DELIVERY, REJECTION OF MATERIALS PROVIDED FOR PARTIAL OR FULL PAYMENT DEDUCTION AS DETERMINED BY THE COUNTY REPRESENTATIVE.
3. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL EXISTING STREETS AND PRIVATE ENTRANCES THROUGHOUT PROJECT CONSTRUCTION, AS APPLICABLE.
4. THE CONTRACTOR SHALL REMOVE ALL EQUIPMENT FROM THE ROADWAY AND THE SHOULDER DURING NON-WORKING HOURS TO ENSURE THE LEAST PRACTICABLE INTERFERENCE WITH TRAFFIC AND PEDESTRIANS, AS APPLICABLE.
5. WORKING HOURS WILL NORMALLY BE FROM 8:30 A.M. TO 4:30 P.M., MONDAY THROUGH FRIDAY, HOWEVER, UPON REQUEST OF THE CONTRACTOR, THE ENGINEER OR HIS DESIGNEE, MAY CONSIDER AN ALTERNATIVE TO THESE WORKING HOURS BASED ON THE TIME OF THE YEAR, SITE, WEATHER, AND TRAFFIC CONDITIONS.
6. NO NIGHT WORK SHALL BE PERFORMED UNLESS ADEQUATE LIGHTING IS PROVIDED AND APPROVAL GIVEN BY THE ENGINEER OR HIS DESIGNEE. IF THE EXISTING LIGHTING IS NOT ADEQUATE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ARTIFICIAL LIGHTING THAT SHALL BE APPROVED BY THE ENGINEER OR HIS DESIGNEE.
7. OBSTRUCTIONS AND BARRICADES SHALL BE LIGHTED AT NIGHT AND SUCH LIGHTS SHALL BE KEPT BURNING FROM SUNSET TO SUNRISE. ALL SUCH SIGNING AND TRAFFIC CONTROL WITHIN THE LIMITS OF THE PROJECT SHALL BE DONE IN ACCORDANCE WITH THE ENGINEER OR HIS DESIGNEE, APPLICABLE OSHA REGULATIONS AND MUTCD, PART VI.
8. THE EXACT LOCATION OF ALL UTILITIES IN THE VICINITY OF CONSTRUCTION ACTIVITIES SHALL BE DETERMINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES PRIOR TO BEGINNING OF CONSTRUCTION AND COORDINATE SCHEDULES WITH UTILITY OWNERS DURING CONSTRUCTION. .
9. COUNTY STAFF WILL DESIGNATE SITES ADJACENT TO THE PROJECT FOR THE STORAGE OF EQUIPMENT AND MATERIALS. CONTRACTOR SHALL PROVIDE SEDIMENT AND EROSION CONTROL AROUND ALL STOCK PILE AREAS TO CONTROL SEDIMENTATION AND TURBIDITY. SEE MAP FOR DESIGNATED LOCATIONS.
10. THE CONTRACTOR SHALL GRADE SMOOTH AND STABILIZE ALL DISTURBED AREAS UTILIZED FOR MATERIALS AND EQUIPMENT STORAGE AND ANY OTHER AREAS DISTURBED AS PART OF THE CONSTRUCTION PROCESS.
11. ANY DAMAGE TO PARK PROPERTY CAUSED BY THE CONTRACTOR SHALL BE REPORTED PROMPTLY TO COUNTY STAFF AND REPAIRED AT CONTRACTOR'S EXPENSE.
12. PROJECT AREA WILL BE CLOSED TO PUBLIC DURING CONSTRUCTION.
13. POST ALL APPLICABLE PERMITS AS REQUIRED.
14. THE CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE OF ALL CONSTRUCTION DEBRIS, IF ANY.
15. THE CONTRACTOR SHALL BE REQUIRED TO CONSTRUCT AND MAINTAIN CONSTRUCTION ENTRANCES IF THE TRACKING OF MATERIAL OFF SITE OCCURS. THE CONTRACTOR SHALL KEEP LAKE JACKSON CLEAR OF SEDIMENT AND DEBRIS AT ALL TIMES. CONSTRUCTION ENTRANCES SHALL BE REMOVED AND THE AREA RESTORED BY THE CONTRACTOR
16. PLACEMENT OF RAMP, DOCKS, CONCRETE APRON AND DECK WILL BE FIELD ADJUSTED TO CORRESPOND TO LAKE WATER SURFACE ELEVATION AT TIME OF CONSTRUCTION START.

GENERAL NOTES CONTINUED

17. CONCRETE SURFACE GRADES BETWEEN FAMILY RESTROOM, DECKING AND INTERLOCKING PAVERS TO BE ADA COMPLIANT. CONCRETE TO MATCH DECK AND PAVER SURFACES.
18. ALL STAGING AND WORK AREAS SHALL BY RESTORED BY THE CONTRACTOR TO PRE-CONSTRUCTION CONDITIONS.
19. THE PLANS WERE DEVELOPED UTILIZING A "LIMITED BOUNDARY RESURVEY AND TOPOGRAPHIC SURVEY OF THE LEON COUNTY BOAT LANDING" PERFORMED BY DOUGLAS W. NUNAMAKER, PSM ON AUGUST 5, 2014. ELEVATIONS ARE ASSUMED, AS NOTED ON THE SURVEY.
20. CONTRACTOR SHALL DEVELOP AND OBTAIN APPROVAL OF A MAINTENANCE OF TRAFFIC (MOT) PLAN FROM LEON COUNTY/FDOT TO ADDRESS ALL CONSTRUCTION RELATED ACTIVITIES IN AND AROUND U.S. HIGHWAY 27 NORTH. THE CONTRACTOR SHALL ALSO PROVIDE ALL REQUIRED SIGNAGE AND FLAGGERS NECESSARY TO IMPLEMENT THE APPROVED MOT.
21. THE CONTRACTOR SHALL ENSURE THAT A FOREMAN OR SUPERVISOR WHO HAS BEEN CERTIFIED UNDER FLORIDA STORMWATER, EROSION AND SEDIMENTATION CONTROL INSPECTOR TRAINING PROGRAM IS AVAILABLE IN PERSON OR BY PHONE AT ALL TIMES DURING CONSTRUCTION ACTIVITIES, PER TLDC5-56(c)(1)a 5. IN ADDITION, LIST THE NAME AND PHONE NUMBER OF THE AFOREMENTIONED INSPECTOR (OR THAT ONE MUST BE DESIGNATED AND BE AVAILABLE AT THE PRECONSTRUCTION MEETING).
22. ADDITIONAL SEDIMENT AND EROSION CONTROL MEASURES MAY BE REQUIRED, DURING ANY PHASE OF DEVELOPMENT, AT THE DISCRETION OF THE LEON COUNTY ENVIRONMENTAL INSPECTOR.
23. ALL DISTURBED AREAS TO BE LEFT IDLE LONGER THAN 30 DAYS MUST BE STABILIZED WITH QUICK GROW ANNUAL GRASS SEED AND MULCH.
24. CONTRACTOR SHALL CLEAN CONSTRUCTION AREAS OF ALL DEBRIS AND LEAF LITTER PRIOR TO PLACEMENT OF ANY MATERIALS.
25. CONTRACTOR SHALL FILL ALL EXISTING RUTS, HOLES, WASHOUTS WITH A-3 SAND OR A-2-4 SAND/CLAY AND HAND GRADE PRIOR TO STATIC COMPACTION TO THE SPECIFIED REQUIREMENT.
26. CONTRACTOR SHALL PROVIDE AND INSTALL THREE CONCRETE RAMPS FROM EDGE OF TREX DECK TO FLUSH WITH GRASS PICNIC AREA. LOCATIONS TO BE DETERMINED DURING CONSTRUCTION. CONCRETE TO BE SAME AS DETAIL ON SHEET 9 OF 11.
27. DECELERATION LANE TO BE CONSTRUCTED IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2015.

COMPACTION NOTES

- A-3 SAND 100% STANDARD PROCTOR
- SAND/CLAY 98% MODIFIED PROCTOR
- #57 GRADE LIMESTONE (WITH FINES) FOR ROADS AND PULL-THROUGHS 6" COMPACTED TO 98% MODIFIED PROCTOR
- EXISTING SOIL (ROADS) STATIC ROLL AFTER GRADE AND WATER (20 PASSES)
- CONTRACTOR SHALL PROVIDE CURRENT (<30 DAYS) PROCTOR TEST RESULTS FOR ALL PROVIDED MATERIALS
- CONTRACTOR SHALL PROVIDE COMPACTION TESTING FOR SUB-BASE, BASE, AND CAP LIFTS AS REQUESTED BY THE COUNTY REPRESENTATIVE

MATERIALS NOTES

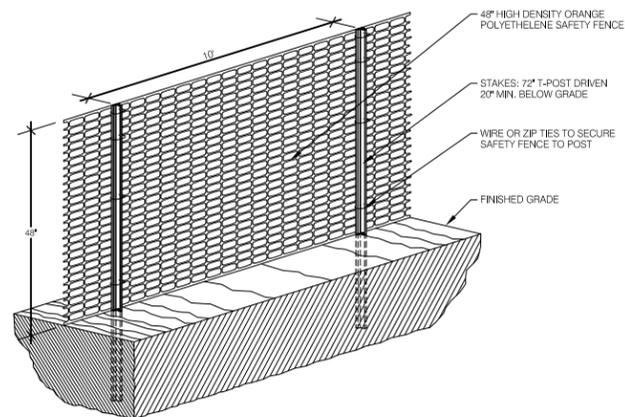
- MATERIALS SUPPLIED BY CONTRACTOR MUST MATCH THE SPECIFIED MATERIALS LIST OR AN APPROVED EQUIVALENT.
- SOURCE FOR POLE FENCE - PRIDE INDUSTRIES.
- SOURCE FOR GRILLS - PILOT ROCK.
- SOURCE FOR BOAT RAMP - DURA-STRESS
- SOURCE FOR FIXED AND FLOATING DOCKS - GATOR DOCK
- SOURCE FOR FAMILY VAULT RESTROOM - CXT
- SOURCE FOR INTERLOCKING PAVERS - PAVESTONE
- SOURCE FOR VINYL COATED FENCE MATERIAL FOR DECK AREAS - CONTRACTOR
- SOURCE FOR DECK SURFACING - TREX

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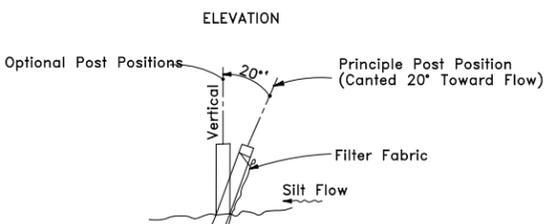
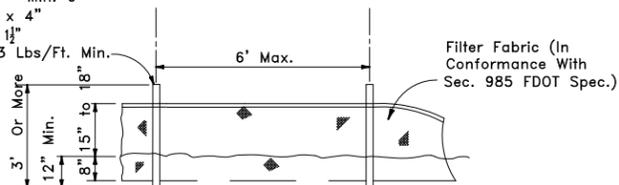
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TEMPORARY FENCING DETAIL

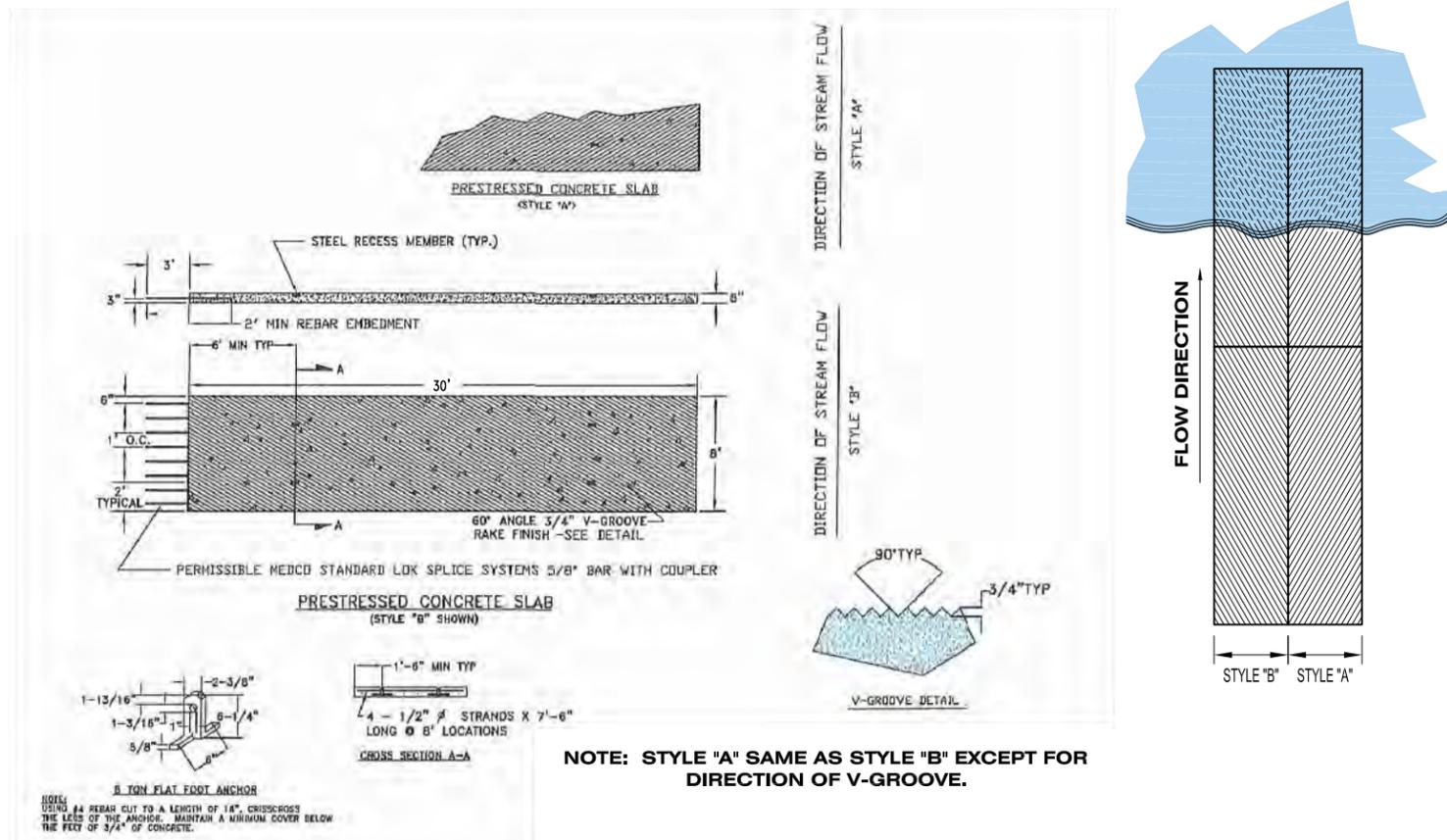


ORANGE CONSTRUCTION FENCING
(FOR ACCESS POINTS)

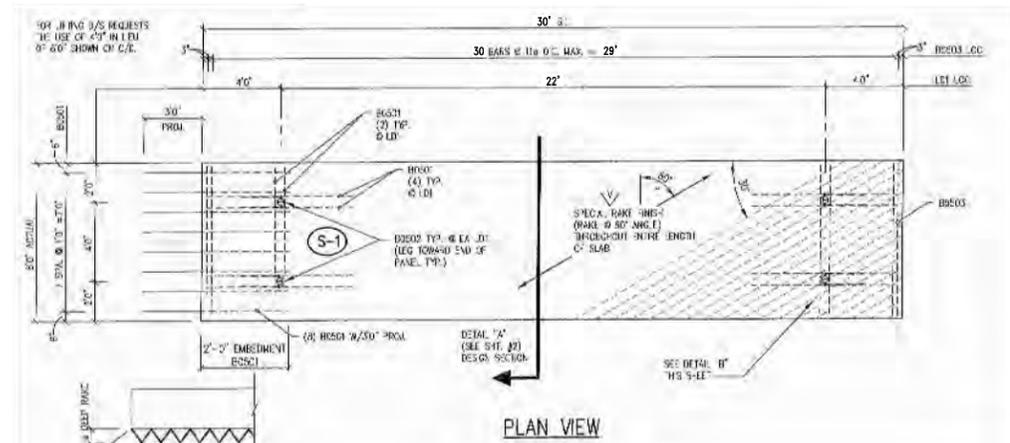
Post Options: Wood 2 1/2\"/>



SILT FENCE DETAIL
Not To Scale



NOTE: STYLE "A" SAME AS STYLE "B" EXCEPT FOR DIRECTION OF V-GROOVE.



BOAT RAMP DETAIL
Not To Scale

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COMPONENTS / SPECIFICATIONS FOR FIXED PIERS, FLOATING DOCKS AND GANGWAYS

Scope

The work covered under this section shall consist of manufacturing and/or supplying of the prefabricated fixed piers, floating docks, gangways, pile guides, cleats, fendering, utility routing/anchorage system and other marine hardware and accessories as may be shown or enumerated on the plans. All materials shall be as manufactured by the Gator Dock & Marine, LLC, Sanford, Florida, (407) 323-0190 or engineer approved equal.

General

The deck and frame structural components of the floating docks and gangways shall be designed with minimum safety factors on working stress which conform to those set forth in the latest issue of the Aluminum Association "SPECIFICATIONS FOR ALUMINUM STRUCTURES" for buildings and similar type structures. The installing contractor shall be a qualified Marine Contractor or General Contractor licensed by the appropriate governing agency and shall be capable of securing building or construction permits. The manufacturer/supplier shall have a minimum of 5 years continuous experience in commercial pier, dock or gangway fabrication and may be required to submit a list of previous experience on similar projects. If required, the previous record will be submitted to the owner or owner's designated representative 10 working days prior to the bid opening. To ensure that all specified criteria have been met when supplying other than the specified items the following items may be required with the contractor's bid:

1. Dimensional layout of piers, docks, gangways and piles or anchorage systems to be furnished under this contract.
2. Engineering calculations showing compliance with the design criteria specified herein. All calculations will be stamped with the seal of a qualified licensed, professional engineer. Computations shall include as a minimum the following.
 - 2.1. Compliance with combined live and dead load requirements considering both bending and deflection.
 - 2.2. Compliance with freeboard requirements under normal load conditions.
3. Typical sections or details of the following:
 - 3.1. Fixed piers, including pile connectors.
 - 3.2. Floating docks, including flotation.
 - 3.3. Finger dock or pier, including connection to main walkway.
 - 3.4. Gangways, including connections to bulkhead or fixed pier, handrails and handicap ramps.
 - 3.5. Anchorage system.
 - 3.6. Utility hangar and access system.
 - 3.7. Decking material and connection details.

Technical

The following requirements are a minimum and must be met by each dock fabricator in accordance with the requirements of the section entitled GENERAL.

Materials

Frame

Aluminum extrusions for dock, pier, and gangway structures shall be aluminum alloy 6061-T6 "E" channels extruded in accordance with the requirements of applicable sections of Federal Specifications QQ-A-200. Miscellaneous aluminum may be 6063-T5 or 5052-H32.

Flotation

Flotation shall consist of expanded polystyrene foam with a nominal density of 1lb/Cu.ft. Loose or exposed beads will not be accepted.

Polystyrene floats shall consist of seamless rotationally molded polyethylene casings with an integrated mounting flange minimum 1" thick. Polyethylene shell shall have a nominal wall thickness of 0.15". Casings shall contain ultraviolet light inhibitors. Individual flotation modules shall conform to the following requirements: ASTM D1238, D1505, D1693, D746, D648, D638, D790 C303, & C272.

Accessories

Decking

Aluminum decking shall be symmetrically extruded slats with integrated ribs and mechanical knurling to provide a non skid surface. Decking to be aluminum alloy 6061-T6.

Cleats shall be cast aluminum alloy meeting the requirements for the Federal Specifications QQ-A-571F and QQ-A-601E.

All hardware shall be stainless steel type 304.

Fenders

Wood side fenders shall be Southern Pine No. 1 Structural (1200# extreme fiber bending) Stress Grade with a minimum CCA content equal to 0.40 pounds per cubic foot or equal. All wood shall comply with American Softwood Lumber Standard PS 20-70. Each piece of lumber shall be identified by the grade and treatment mark of recognized organization or independent agency certified by the American Lumber Standards Committee, Washington, DC to grade the species. All lumber specified for treatment shall be treated to the requirements of American Wood Preservers Bureau AWPB LP-22.

When specified by the owner, vinyl bumpers shall be of non-marring marine grade extruded vinyl with minimum 3" vertical face. Standard black vinyl bumper shall be UV stabilized. Optional white vinyl shall be non-yellowing.

Rollers

Rollers for either pile guides or gangways shall be UHMW polyethylene with black ultra-violet light inhibitor added.

Handrails

Handrails on gangways and piers when specified shall be 6061-T6 aluminum alloy, minimum, 1" NPS.

When required, additional grab rails, toe curbs, and fishing rails shall be in accordance with applicable sections of the Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities.

Design

Frame

For fixed piers, gangways, and the structural frame design of floating docks, the aluminum frame and decking shall be designed to withstand the full calculated dead load of all framing & accessories combined with a live load of 50 pounds per square foot. Allowable deflection shall be L/80 where "L" in inches is the freespan between supports for fixed piers & gangways, or the freespan between cross members for floating docks.

Flotation

All floating docks shall be designed for a minimum freeboard of 8 inches under full dead plus live load, and 10 inches under a dead load plus concentrated load of 400 pounds applied at any location on the dock walking surface. Additional flotation shall be added to support the gangway dead loads without creating undue distortion in the dock.

Poly floats shall be designed for a minimum of 20psf live load providing a minimum of 16" unloaded freeboard.

Accessories

Cleats shall be designed to withstand a mooring line load of 1500 pounds in any direction.

Handrails shall be a minimum of 42 inches in height above the finished walking surface and shall withstand a uniform horizontal load of 20 pounds per linear foot applied at the top of the rail.

Hinged or bolted floating dock module connectors shall be able to withstand a load of 3000 pounds applied to the full connector.

Anchoring devices for floating docks shall allow free movement of the dock, while minimizing damage due to normal dock movement caused by tides, boat wakes, water fluctuation and seasonal winds. Anchoring devices shall be of sufficient number to restrain a uniform lateral force of 150 pounds per linear foot applied along the entire length of the dock.

Utility lines shall meet all governing construction and fire codes. All electrical lines, junction boxes and accessories shall be installed with the strict adherence to the latest edition of the "National Electrical Code".

Fabrication

Frame

All aluminum structural members shall be welded in accordance with the American Welding Society Structural Welding Code D1.2.

Individual dock and pier sections shall be sequentially numbered, matched, and pre-drilled in the shop prior to shipment.

Flotation

All flotation shall be fully installed in the shop. Selected floats may be removed to facilitate shipping.

Poly floats shall be through-bolted with a minimum of four bolts per float. Screws or lag-screws shall be prohibited.

Accessories

Aluminum decking shall be spaced with not more than 3/8 inch air space between the slats. Asymmetric/interlocking decking slats shall be prohibited to prevent water pooling on dock surface. The legs of each decking slat shall be welded to the side members and to any longitudinal with a minimum of 1-1/4 inches of weld per leg. The decking slats shall be placed transversely on the gangway, pier or dock.

Cleats on aluminum decked docks shall be welded with a continuous fillet weld. All cleats shall be installed in locations shown on plans.

Where wood fendering is used the minimum size member shall be 2 x 8, secured at minimum spacing of 4' on center with 3/8" type 304 stainless steel bolts countersunk below the wearing surface of the exposed side.

Handrails shall be installed in locations shown in the plans. Handrails shall be secured in place with two 3/8" stainless steel bolts through the extruded handrail pockets welded to the side rail if a detachable type handrail system is used. Handrails will be welded to the side rails if a truss type system is requested. The type of handrail system shall be the option of the engineer.

Hinge mount extrusions shall be welded to the frame of the dock with a continuous fillet weld unless otherwise shown on the plans. Non-hinged dock module connectors shall be shown on the plans.

Anchoring devices, including the pile guides, shall be bolted or welded to the piers and docks in locations and according to the details shown in the plans. Framing shall be braced at pile guides.

Installation

Docks and piers shall be anchored with pile guides or other anchoring devices bolted to the aluminum frame. Floating docks must move freely during the entire cycle of water level extremes with the normal expected wind condition. Utility lines must not be installed on top of the deck or in a location subject to damage during normal use and must be installed to function properly during normal expected water level and weather extremes.

Gangways shall be securely fastened to the wall or fixed structure as shown on plans. Utilities running on the gangway shall be installed so as not to interfere with the access area of the gangway or to be damaged during normal operation.

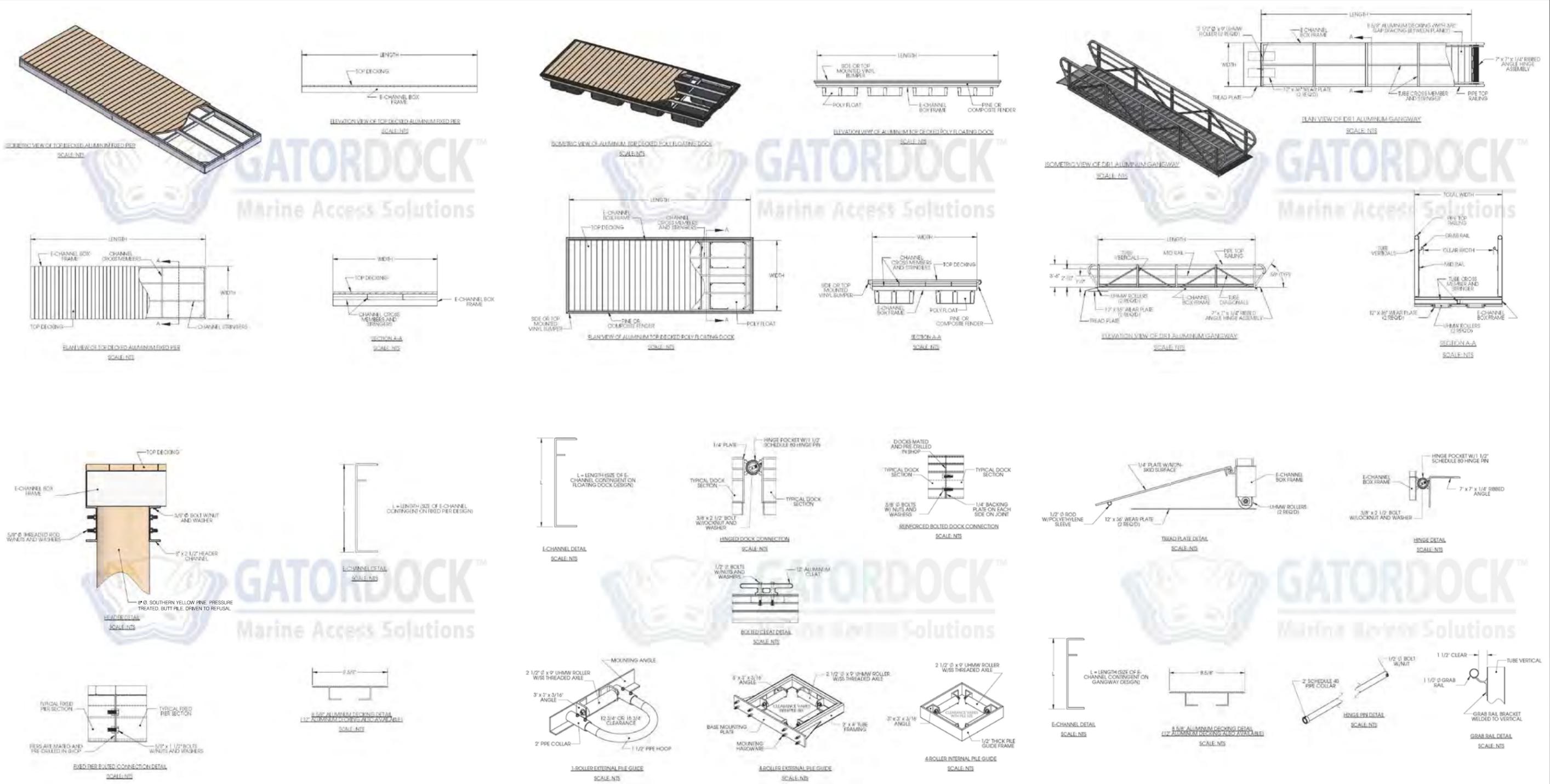
Utility hangars and access panels shall be mounted and located as shown in plans.

Any potentially corrosive installation of dissimilar metals shall be properly insulated to minimize or eliminate corrosion in a marine environment.

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FIXED DOCK DETAILS
NOT TO SCALE

FLOATING DOCK DETAILS
NOT TO SCALE

GANGWAY DETAILS
NOT TO SCALE

PREPARED BY:
amec

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DESIGN CRITERIA
 -ANSI / AF&PA NDS-2001 ASD MANUAL FOR ENGINEERING WOOD CONSTRUCTION
 -ASCE 7-10 "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES" PUBLISHED BY THE AMERICAN SOCIETY OF CIVIL ENGINEERS
 -2010 FLORIDA BUILDING CODE

DESIGN LOADS
 BUILDING LOADS PER FIGURE 4-1 ASCE 7-10 "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES"
 DECK: LIVE LOAD - 90 PSF
 DEAD LOAD - 7.5 PSF

WIND LOAD CRITERIA
 WIND LOAD PER SECTION 6.5.10 ASCE 7-10 "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES"

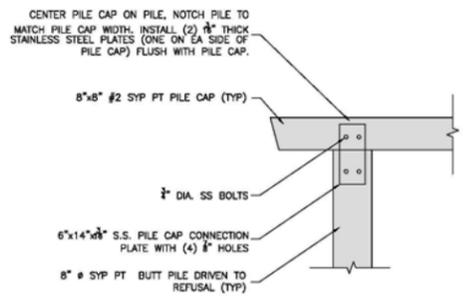
BUILDING CATEGORY - I
 EXPOSURE CATEGORY - C
 BUILDING TYPE - OPEN

VELOCITY PRESSURE EXPOSURE COEFFICIENT (Kz) - 0.85
 TOPOGRAPHIC FACTOR (Kzt) - 1.0
 DIRECTIONALITY FACTOR (Kd) - 0.85
 BASIC WIND SPEED (V) - 140 MPH
 IMPORTANCE FACTOR (I) - 0.77
 VELOCITY PRESSURE (qr) = 18.19 PSF

GENERAL NOTES
 1. ALL FRAMING LUMBER TO BE #2 SYP PT WITH 19% MOISTURE CONTENT BEFORE TREATMENT. DECKBOARDS HANDRAILS AND HANDRAIL POSTS TO BE #1 SYP PT WITH 19% MC BEFORE TREATMENT.
 2. ALL DECK AND HANDRAIL SCREW FASTENERS, HANDRAIL BOLTS, NUTS AND WASHERS, FRAMING BOLTS, THREADED RODS, NUTS, WASHERS, CLIPS AND STRAPS TO BE STAINLESS STEEL.
 3. ALL WORK TO BE COMPLETED IN ACCORDANCE WITH THE AFPA (AMERICAN FOREST PRODUCTS ASSOCIATION) AND THE 2010 FLORIDA BUILDING CODE.
 4. ALL PILING SHALL MEET THE REQUIREMENTS AS SET FORTH BY THE AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM) UNDER THE PROVISIONS OF D25 (LATEST EDITION), STANDARD SPECIFICATIONS FOR ROUND TIMBER PILES. TOLERANCE IN DIAMETER OF PILING SHALL BE 1" TAPER IN 10 LINEAR FEET.
 5. ALL PILES ARE TO BE DRIVEN TO REFUSAL AND MUST ACHIEVE A MINIMUM DEPTH OF 8' BLS. JETTED PILE WILL NOT BE PERMITTED. SPlicing OF PILES WILL NOT BE PERMITTED. PILES TO HAVE AN UPLIFT CAPACITY OF 3,100 POUNDS. DUE TO SOILS VARIABILITY ONE REPRESENTATIVE PILE IN EACH SOIL PROFILE TO BE TESTED TO CONFIRM UPLIFT CAPACITY. A PILE CAPACITY REPORT SEALED BY A FLORIDA PROFESSIONAL ENGINEER TO BE PROVIDED AT THE COMPLETION OF CONSTRUCTION.
 6. THE PILE DRIVING SPECIFICATIONS FOR DEFINING REFUSAL ARE AS FOLLOWS: TO ACHIEVE A MINIMUM 16" SOIL PENETRATION USING A BOBCAT 442 COMPACT EXCAVATOR (OR EQUIVALENT), IDLING AT 800 RPM'S, WITH ATTACHED C4D "NPK" HAMMER (OR EQUIVALENT) UTILIZING 3,500 LB-FT OF IMPULSE FORCE OPERATING AT A CYCLE RATE OF 2,400 PER MINUTE AND USING A FLOW OF 11-13 GALLONS OF HYDRAULIC FLUID PER MINUTE. IF THE PILING DOES NOT CONTINUE TO MOVE AFTER 1-MINUTE, THEN REFUSAL HAS BEEN MET.

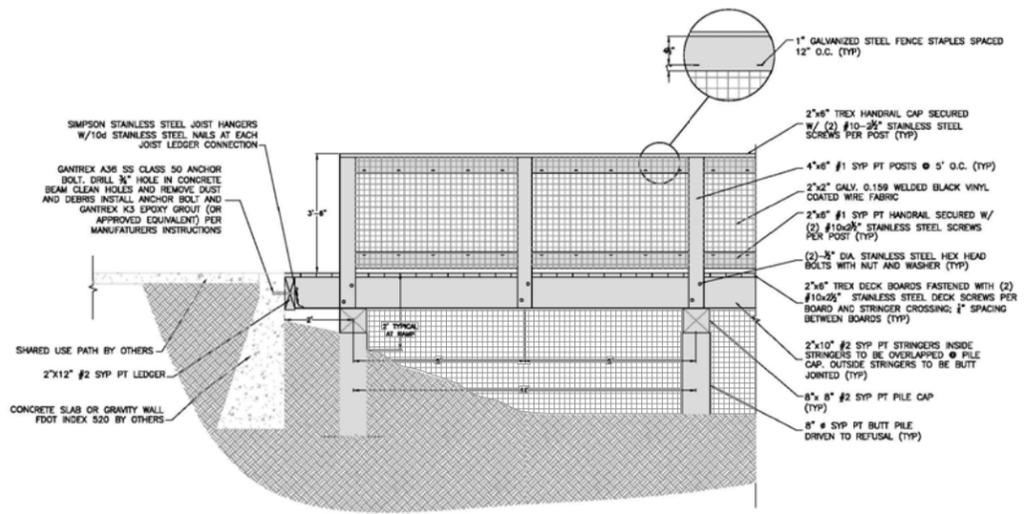
Dimension	Location	Species	Grade	Treatment
2" x 6"	Handrail Cap	TREX		
2" x 6"	Decking	TREX		
2" x 6"	Handrail Overlay	SYP	# 1	0.40 ACQ
4" x 6"	Handrail Post	SYP	# 1	0.40 ACQ
4" x 4"	Handrail Post Blocking	SYP	# 1	0.40 ACQ
2" x 10"	Stringer	SYP	# 2 & BTR	0.60 ACQ
2" x 10"	Stringer Blocking	SYP	# 2 & BTR	0.60 ACQ
8" x 8"	Pile Cap	SYP	# 2 & BTR	0.60 ACQ
2" x 10"	Cross Bracing	SYP	# 2 & BTR	0.60 ACQ
8"	Pile	SYP	# 2 & BTR	0.80 CCA
6"	Pile Blocking	SYP	# 2 & BTR	0.60 ACQ

SYP (Southern Yellow Pine)
 * Modified in the field to 3"



POST CAP CONNECTION DETAIL
 NOT TO SCALE

Varies



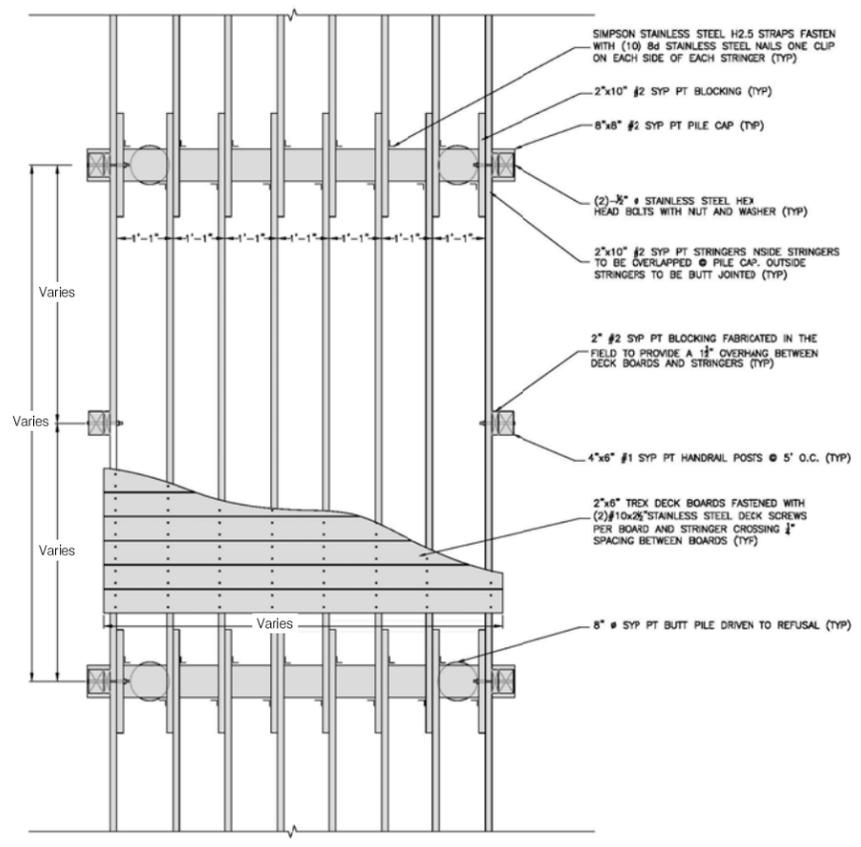
TYPICAL ELEVATION
 NOT TO SCALE



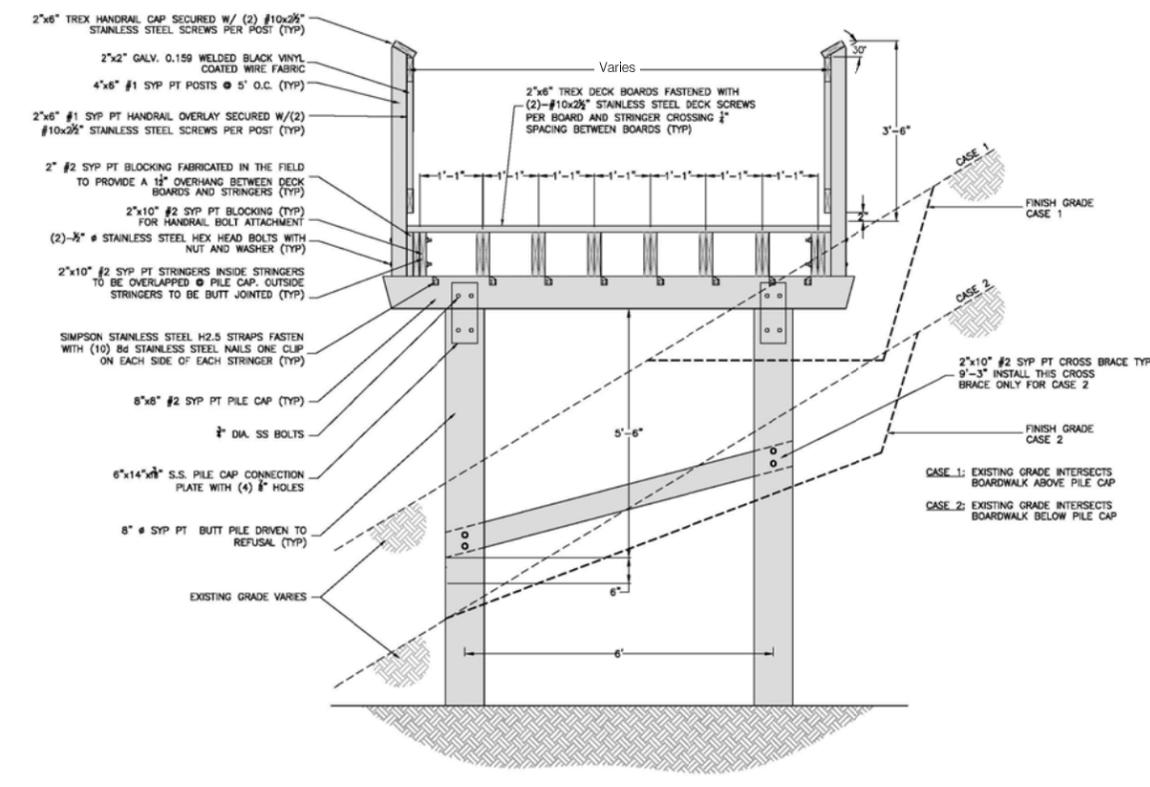
INFORMATION KIOSK
 NOT TO SCALE

INFORMATION KIOSK INSTALLATION NOTES:

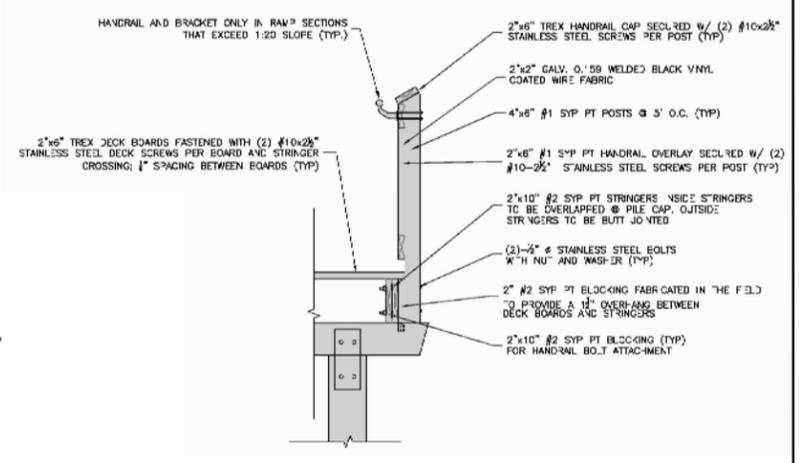
1. Posts for kiosk to be installed at same time as posts for deck with same footer specifications. Kiosk will consist of four vertica posts (one in center and three exterior panel posts). Exterior posts to be 50 inches apart in a "V" shape with 120° angle between posts.
2. Kiosk panels will be 48" x 48" x 3/4" pressure treated plywood, framed with 2" x 4" pressure treated lumber providing 6 faces for display, signage and map.



TYPICAL FRAMING PLAN DECK DETAIL ELEVATION
 NOT TO SCALE



TYPICAL OBSERVATION DOCK SECTION
 NOT TO SCALE



TYPICAL DECK AND RAMP HANDRAIL SECTION
 NOT TO SCALE

PREPARED BY:
amec
 Environment & Infrastructure, Inc.
 Tallahassee, Florida
 850-656-1293



Conlock®

The Conlock® product is a precast positive interlocking articulating concrete block used for erosion control protection in various hydrological applications. The Conlock® product is available in multiple thicknesses and both open- and closed-cell configurations. The Conlock® product offers the ultimate hydraulic stability and/or ecological benefit on critical or environmentally sensitive projects. In addition, the small block size provides superior articulation capacity along channel bends, drops and outfall structures.

HydroPave's Conlock® I system provides an economical and high performance mattress system due to its single cable design. The individual units interlocked within the mattress give unequalled structural integrity. The Conlock® I product is principally a cabled mattress system for submerged water placements and slope applications. However, several Conlock® I projects have been hand placed and then "post cabled" to minimize piecework & grouting of non interlocked seams associated with cabled systems. The Conlock® I cabled system is a cost effective and proven ACB mattress product in the marketplace.

HydroPave's Conlock® II offers high hydraulic permissible shear resistance, significant savings in installation cost due to its expanded unit coverage, high vegetative open area and omni-directional flexibility. With the Conlock® II, each individual grid exhibits two interlocking ears and two interlocking sockets shaped as to allow for positive interlocking of all grids within the matrix. This slideable interlocking design provides for omnidirectional terrain surface contouring and a continuous uninterrupted interlocked field matrix. Unlike other ACB systems, the Conlock® II system exhibits a continuous interlock and co-planar surfaces when encountering most all grade contours (such as: domes, depressions or channel constrictions).

COMPOSITION AND MANUFACTURE

Conlock® is made from a "no slump" concrete mix. Made under extreme pressure and high frequency vibrations, Conlock® has a compressive strength greater than 4000psi, a water absorption maximum of 7% and will meet or exceed ASTM D6684.

INSTALLATION

Locate area to be protected with Conlock® and mark limits of block installation. Contact local authorities for locating and identifying existing utilities and check for new or proposed utility locations. Remove any brush, rock or otherwise unacceptable materials interfering with final grading prior to placement of fabric and block. The subgrade shall be raked, screeded, or rolled by hand or machine to achieve a smooth compacted surface that is free of loose material.

Cover area to be paved with appropriate geotextile fabric. The geotextile shall be placed so that upstream and upslope strips overlap downstream and downslope strips. Overlaps shall be in the direction of flow wherever possible. The longitudinal and transverse joints shall be overlapped at least 3 feet (91cm) for below water installations and at least 1.5 feet (46 cm) for dry installations. The geotextile shall extend beyond the top, toe and side termination points of the reatment.

Placement of the Conlock® system shall be performed to ensure that the individual blocks lie in intimate contact with the geotextile and subgrade. The joint spacing between adjacent blocks is to be maintained so that binding of blocks does not occur and so that block to block interconnection is achieved. In areas of curvature or grade change, alignment of an individual block with adjacent blocks shall be oriented such that intimate contact between the block, geotextile, and subgrade is maintained and block to block interconnection is achieved.

Avoid damage to the geotextile or subgrade during installation. The Conlock placement shall begin at the upstream section and proceed downstream. On sloped sections, placement shall begin at the toe of the slope and proceed upslope. Individual blocks within the plane of the finished system shall not exceed a 0.5 inch (13mm) or greater protrusion than the tolerance referenced in related contract documents.

The open area of the articulating concrete block system is typically either backfilled with suitable soil for revegetation, or with 3/8 to 3/4 inch (10mm to 20 mm) diameter crushed stone. Backfilling with soil or granular fill within the cells of the system shall be completed as soon as practical after the reatment has been installed. When topsoil is used as a fill material above the normal waterline, overfill by 1 to 2 inches (25 to 50mm) to account for backfill material consolidation.

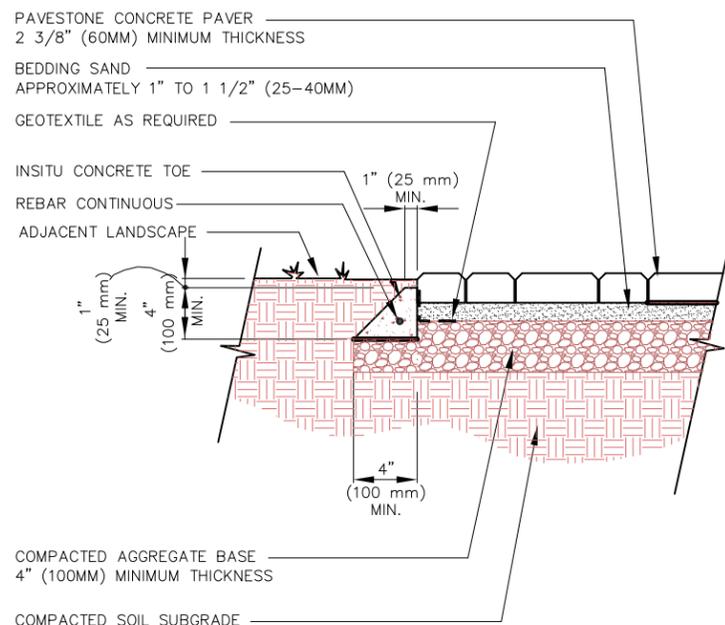
* Product selection shall be under the direction of a licensed engineer familiar with site specific conditions and local state/municipal requirements. Engineering is typically required and is recommended.

Complete installation & specification details are available by contacting your Pavestone Sales Representative.



- Atlanta, GA (770) 306-9591
- Austin/San Antonio, TX (512) 658-7283
- Boston, MA (508) 947-6001
- Charlottesville, VA (770) 607-3545
- Charlotte, NC (704) 589-4747
- Cincinnati, OH (513) 474-3783
- Colorado Springs, CO (719) 522-0101
- Dallas/Ft. Worth, TX (817) 481-8902
- Denver, CO (303) 283-3100
- Hagerstown, MD (240) 420-3780
- Houston, TX (281) 393-7283
- Kansas City, MO (816) 624-9800
- Las Vegas, NV (702) 221-2700
- New Orleans, LA (800) 882-8111
- Phoenix, AZ (602) 251-4588
- Sacramento/Winters, CA (916) 796-4400
- St. Louis, MO (630) 332-8312
- Cape Girardeau, MO (573) 332-8312

Member of ASIA & NEMA KPI Charter Member Anchor Retaining Wall Systems

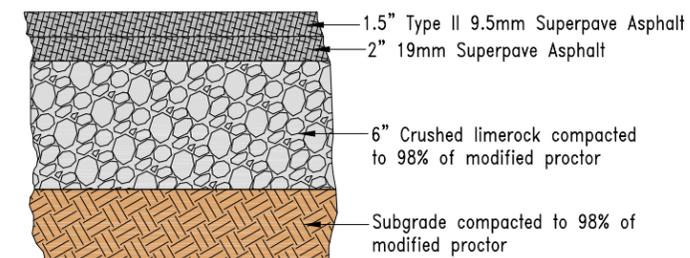


NOTE: DETAIL DESIGN SHALL BE APPROVED BY A LICENSED CIVIL ENGINEER FAMILIAR WITH SITE CONDITIONS AND LOCAL BUILDING CODES.

CONCRETE TOE EDGE RESTRAINT PAVERS ON COMPACTED BASE DETAIL

Not to scale

PAVESTONE CONLOCK II 4" OPEN WEB INTERLOCKING PAVERS



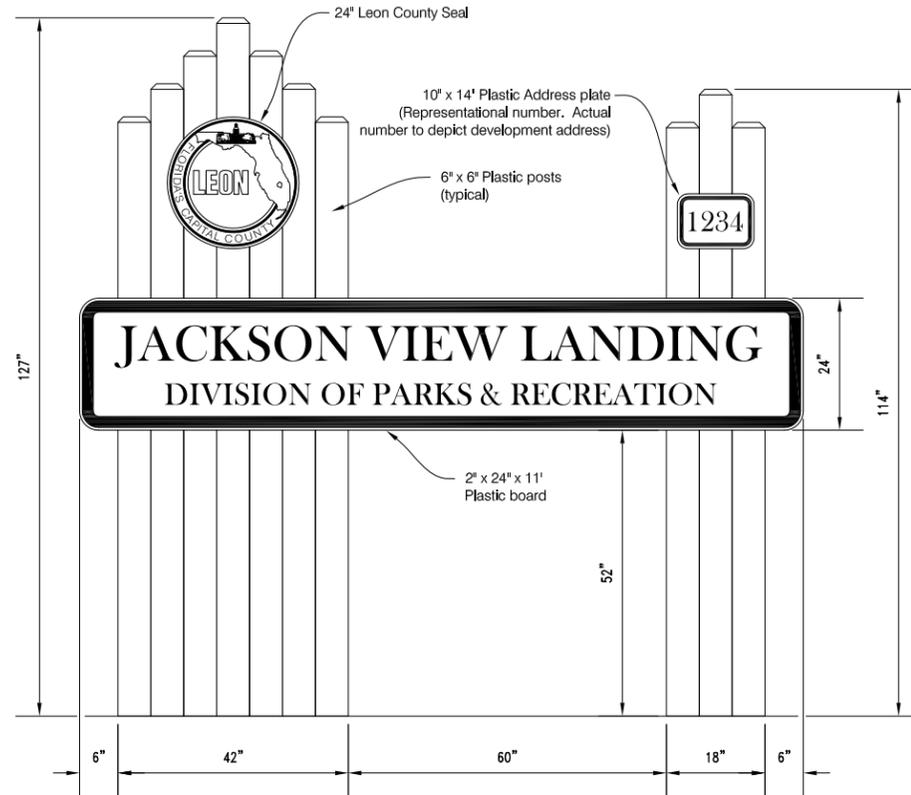
U.S. HIGHWAY 27 DECELERATION LANE ASPHALT PAVEMENT DETAIL

Not to scale

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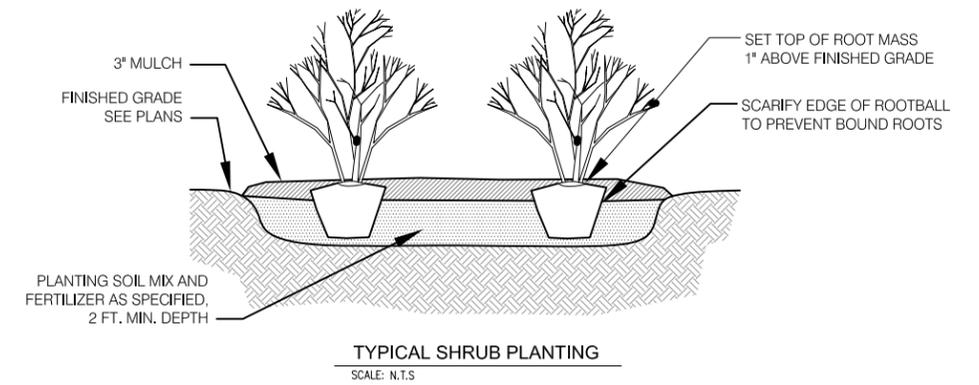
REPRESENTATIVE SIGN



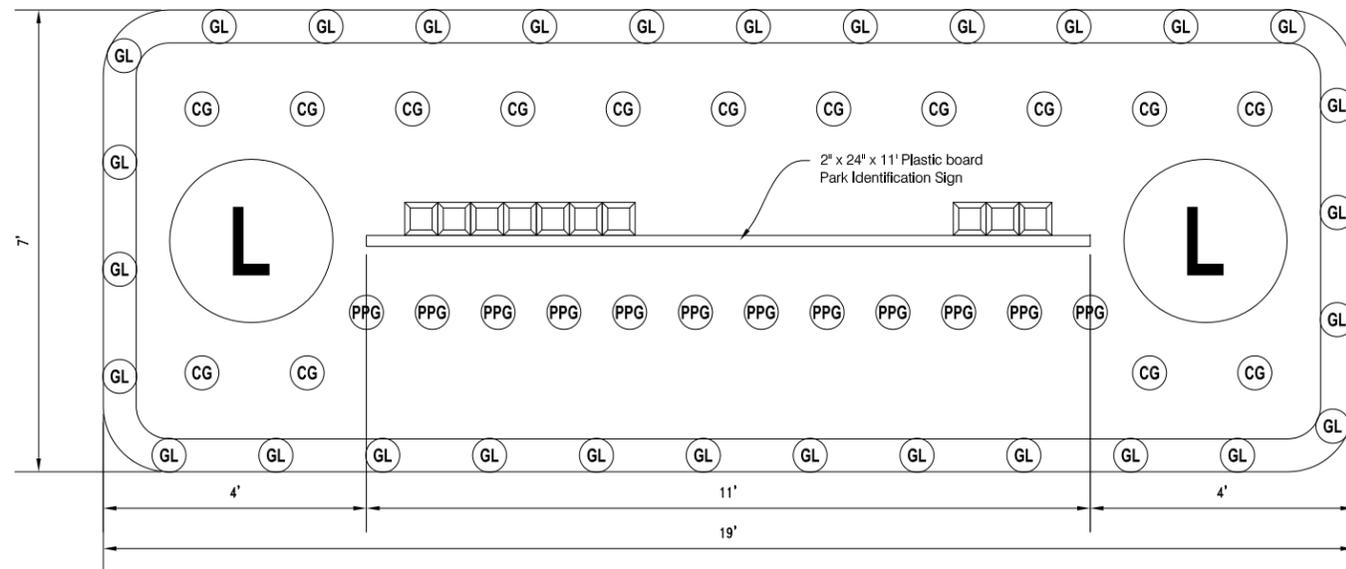
PARK IDENTIFICATION SIGN DETAIL
NOT TO SCALE

SIGN NOTES:

1. SIGN BOARDS AND POSTS TO BE ALL RECYCLED PLASTIC.
2. SIGN LUMBER COLOR TO BE BUTTERSCOTCH (TYPICAL, LEON COUNTY)
3. SIGN LETTERING AND TRIM COLOR TO BE DARK AQUA (TYPICAL, LEON COUNTY)



TYPICAL SHRUB PLANTING
SCALE: N.T.S



SIGN LANDSCAPING BED DETAIL
NOT TO SCALE

LANDSCAPING PLANT SCHEDULE

LABEL	QTY.	PLANT NAME	BOTANICAL NAME	SIZE	SPACING	NOTES
L	2	DWARF LOROPETALUM	LOROPETALUM CHINENSE	5 GAL.	AS SHOWN	1 AT EACH END OF SIGN
CG	15	CORD GRASS	PARTINA ALTERNIFLORA	1 GAL.	2' O.C.	PLANT LAST, FILL VOIDS, AS NEEDED
PPG	12	PURPLE PLUME GRASS	PENNISETUM SETACEUM 'RUBRUM'	2 OR 3 GAL.	AS SHOWN	PLANT IN FRONT OF SIGN
GL	30	GIANT BLUE LIRIOPE	LIRIOPE MUSCARI	1 GAL.	AS SHOWN	EVENLY SPACED AROUND PERIMETER

PLANTING NOTES:

1. MIX IN 1/2 NEW POTTING SOIL FOR EACH PLANT (ESTIMATED 2 CY.
2. PLACE WEED CLOTH OVER SOIL IN ENTIRE BED.
3. PUT SOIL RING AROUND EACH PLANT JUST OUTSIDE ROOT BALL.
4. AFTER PLANTING, MULCH BED WITH PINE BARK (3" DEEP).
5. AFTER MULCHING, WATER ENTIRE BED DEEPLY.

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