## LEE COUNTY DEPARTMENT OF TRANSPORTATION

# CONSTRUCTION PLANS

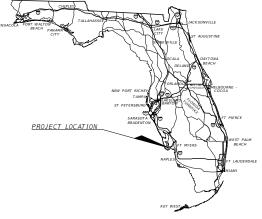
SANIBEL BRIDGE TOLL PLAZA SOUTH STAIR TOWER RECONSTRUCTION

> 18700 McGREGOR BOULEVARD LEE COUNTY

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1 Cove Bird Island PROJECT LOCATION





LEE COUNTY, FLORIDA BOARD OF COUNTY COMMISSIONERS Kevin Ruane, District One Cecil L. Pendergrass, District Two Ray Sandelli, District Three Brian Hamman, District Four Mike GReenwell, District Five

David Harner, County Manager Richard Wm. Wesch, County Attorney

Ehab B. Guirguis, P.E., CPM, Director of Facilities Construction & Management Joshua D. Hudson, P.E., Project Manager



This item has been digitally signed and sealed by Wade Brown P.E.

Printed copies of this document are not considered signed and sealed. The signature must be verified on any electronic copies.

Weston & Sampson Engineers, Inc. 1520 Royal Palm Square Blvd., Suite 260 Fort Myers, Florida 33919 Certificate of Authorization: No 26190 Wade Brown, P.E. No. 87545

on the date adjacent to the seal



Weston & Sampson Engineers. Inc. 1520 Royal Palm Square Boulevard, Suite 260 Fort Myers, FL 33919

CONSTRUCTION	FISCAL	SHEET
CONTRACT NO.	YEAR	NO.
T-0000	24	

DETAILS AND SECTIONS SHOWN ON THE DRAWINGS ARE TYPICAL AND APPLY TO SIMILAR SITUATIONS ELSEWHERE, EXCEPT AS OTHERWISE INDICATED, ADAPT REQUIREMENTS OF DETAILS, SECTIONS, PLANS, AND NOTES AT LOCATIONS WHERE CONDITIONS ARE SIMILAR

CONTRACTOR SHALL LOCATE ALL CONCEALED UTILITIES PRIOR TO EXCAVATION OR SELECTIVE DEMOLITION WORKS. THE STRUCTURAL ENGINEER SHALL BE NOTIFIED OF POTENTIAL CONFLICTS BETWEEN FOUNDATIONS AND BURIED UTILITIES.

## CODE REQUIREMENTS:

THE BUILDING STRUCTURE IS DESIGNED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE 8TH/ EDITION (2023). FOLLOW ALL APPLICABLE PROVISIONS FOR ALL PHASES OF CONSTRUCTION.

#### TEMPORARY CONDITIONS:

THE STRUCTURAL INTEGRITY OF THE COMPLETED STRUCTURE DEPENDS ON INTERACTION OF VARIOUS CONNECTED COMPONENTS. PROVIDE ADEQUATE BRACING, SHORING, AND OTHER TEMPORARY SUPPORTS AS REQUIRED TO SAFELY COMPLETE THE WORK. THE STRUCTURE SHOWN ON THE DRAWINGS HAS BEEN DESIGNED FOR STABILITY UNDER FINAL CONFIGURATION ONLY.

## EXISTING CONDITIONS:

ALL EXISTING CONDITIONS, DIMENSIONS AND ELEVATIONS SHALL BE FIELD VERIFIED. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY SIGNIFICANT DISCREPANCIES FROM CONDITIONS SHOWN ON THE DRAWINGS.

### **EXISTING STRUCTURE:**

INFORMATION SHOWN FOR THE EXISTING STRUCTURE ON THIS PLAN SET WAS TAKEN FROM THE ORIGINAL CONSTRUCTION DRAWINGS ENTITLED: SANIBEL BRIDGE TOLL PLAZA, DATED: 1/31/2006 (STAMPED AS RECEIVED BY JACOBS). IT'S UNDERSTOOD THE ELEVATIONS GIVEN ON THE ORIGINAL CONSTRUCTION DRAWINGS WERE BASED ON VERTICAL DATUM NGVD 29.

EXERCISE EXTREME CARE AND CAUTION WHEN EXCAVATING AND FILLING ADJACENT TO EXISTING STRUCTURES. UNDER NO CIRCUMSTANCES SHALL THE STRUCTURAL INTEGRITY OF THE EXISTING STRUCTURES BE IMPAIRED IN ANY WAY BY CONSTRUCTION OPERATIONS AND PROCEDURES. DO NOT EXCAVATE OR DISTURB SOIL ADJACENT TO OR BENEATH EXISTING FOOTINGS

DIMENSIONS VERIFICATION: UNLESS OTHERWISE NOTED, THE DIMENSIONS, ELEVATIONS, AND INTERSECTING ANGLES SHOWN ARE BASED ON THE INFORMATION AS DETAILED IN THE ORIGINAL CONSTRUCTION PLANS OF THE EXISTING STRUCTURE AND MAY NOT REPRESENT AS-BUILT CONDITIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THIS DATA BEFORE BEGINNING CONSTRUCTION AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES.

## STRUCTURE LAYOUT:

THE CONTRACTOR SHALL BE SOLFLY RESPONSIBLE FOR THE FIELD LAYOUT OF THE STRUCTURE. AT LEAST THREE WORKING DAYS (72 HOURS) PRIOR TO MOBILIZING THE EQUIPMENT FOR DRILLED SHAFT INSTALLATION, THE CONTRACTOR SHALL SUBMIT FOR THE RECORD WRITTEN DOCUMENTATION, WHICH INCLUDES A SKETCH DRAWING, TO THE ENGINEER SPECIFYING THE PROPOSED FIELD MEASURED AND PHYSICALLY STAKED LOCATIONS FOR EACH OF THE FOUR CORNER POINTS OF THE FOOTING AND CENTERLINES OF THE THREE DRILLED SHAFTS. THESE LOCATIONS SHALL BE BASED ON HORIZONTAL AND VERTICAL DIMENSIONS REFERENCED TO THE EXISTING STAIR STRUCTURE (TWO CONCRETE COLUMNS AND LANDINGS) WHICH ARE TO REMAIN IN PLACE. THE FIELD MEASURED TOP ELEVATION AT THE LANDINGS SHALL BE INCLUDED IN THE SKETCH. THE STAKED LAYOUT SHALL REMAIN INTACT THROUGHOUT CONSTRUCTION OF THE FOUNDATION. COST OF THIS WORK SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR "MOBILIZATION".

## GOVERNING STANDARDS AND CONSTRUCTION SPECIFICATIONS:

FLORIDA DEPARTMENT OF TRANSPORTATION, FY 2024-25 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AS AMENDED BY CONTRACT DOCUMENTS.

#### VERTICAL DATUM:

NGVD 29

### DESIGN CRITERIA:

DESIGN WAS BASED ON STRENGTH AND DEFLECTION CRITERIA OF THE FLORIDA BUILDING CODE. IN ADDITION TO THE DEAD LOADS, THE FOLLOWING LOADS WERE USED FOR DESIGN.

100 PSF LL

### FLOORS: STAIRS

WIND RISK CATEGORY ULTIMATE DESIGN WIND SPEED 159 MPH NOMINAL DESIGN WIND SPEED 123 MPH WIND DIRECTIONALITY FACTOR 0.85 EXPOSURE CATEGORY TOPOGRAPHIC FACTOR 1.0 GUST EFFECT FACTOR 0.85 ENCLOSURE CLASSIFICATION OPEN INTERNAL PRESSURE COEFFICIENT 0.0

## FL00D

FLOOD AREA CLASSIFICATION COASTAL A ZONE FLOOD DESIGN CLASS BASE FLOOD ELEVATION 10 FT (NAVD 88) ELEVATION LOWEST STRUCTURAL MEMBER +/- 8.28 FT (NGVD 29) +/- 7.11 FT (NAVD 88)

## SUBMITTALS:

IN ACCORDANCE WITH CONTRACT DOCUMENTS, THE CONTRACTOR SHALL MAKE SUBMITTALS TO THE ENGINEER, SUBMITTAL TYPES INCLUDE SHOP AND WORKING DRAWINGS, PRODUCT SPECIFICATIONS AND CERTIFICATIONS, MIX DESIGNS, FIELD AND LAB TEST RESULTS, ETC., FOR WORK TYPES RELATED TO AND INCLUDING DRILLED SHAFTS, CONCRETE, REBAR, METAL RAILING, CMU, STONE VENEER, PAINT, AND EARTHWORK.

SHOP DRAWINGS WILL BE REVIEWED FOR GENERAL COMPLIANCE WITH THE DESIGN INTENT OF THE CONTRACT DOCUMENTS ONLY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY COMPLIANCE WITH THE CONTRACT DOCUMENTS AS TO QUANTITY, LENGTH, ELEVATIONS, DIMENSIONS, ETC. CONTRACTOR SHALL NOT BE RELIEVED FROM RESPONSIBILITY FOR ERRORS OR OMISSIONS IN SHOP DRAWINGS, OR OTHER DOCUMENT TYPES, BY THE FNGINFFR'S REVIEW

## CONCRETE:

CONCRETE SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 400 OF THE SPECIFICATIONS

CONCRETE CLASS	MIN. 28-DAY COMPRESSIVE STRENGTH (psi)	LOCATION OF CONCRETE IN STRUCTURE
IV - WITH HIGHLY REACTIVE POZZOLANS	5500	ALL C.I.P. CONCRETE (STAIRS, FOOTING, AND DRILLED SHAFTS)

#### CONCRETE COVER.

CAST-IN-PLACE STAIRS	2"
CAST-IN-PLACE FOOTING	4"
DRILLED SHAFTS	6"

CONCRETE COVER DIMENSIONS SHOWN IN THE PLANS DO NOT INCLUDE PLACEMENT AND FABRICATION TOLERANCES UNLESS SHOWN AS "MINIMUM COVER". SEE SPECIFICATIONS SECTION 415 FOR ALLOWABLE TOLERANCES. ALL DIMENSIONS PERTAINING TO THE LOCATION OF REINFORCING STEEL ARE TO CENTERLINE OF BAR EXCEPT WHERE CLEAR DIMENSION IS NOTED TO FACE OF CONCRETE.

SLEEVES, OPENINGS, CONDUIT, AND OTHER EMBEDDED ITEMS NOT SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE APPROVED BY THE STRUCTURAL ENGINEER BEFORE POURING, NO SLEEVE, OPENING, OR INSERT MAY BE PLACED IN BEAMS, JOISTS, OR COLUMNS UNLESS APPROVED BY THE ENGINEER, CONDUITS EMBEDDED IN SLABS SHALL NOT BE LARGER IN OUTSIDE DIMENSION THAN ONE THIRD OF THE THICKNESS OF THE SLAB AND SHALL NOT BE SPACED CLOSER THAN THREE DIAMETERS ON CENTER.

PROVIDE 3" CHAMFERS ON ALL EXPOSED CONCRETE EDGES. UNLESS NOTED OTHERWISE

## CONCRETE REPAIR:

GENERAL - WORK SHALL CONSIST OF REPAIRING SPALLED OR OTHERWISE DEFICIENT CONCRETE BY FORM AND POUR METHODS AT LOCATIONS INDICATED IN THE PLANS OR AS DIRECTED BY THE ENGINEER, USE A PREPACKAGED MATERIAL FROM THE DEPARTMENT'S (FDOT) APPROVED PRODUCT LIST (APL) THAT MEET THE REQUIREMENTS OF SECTION 930. COST SHALL BE INCLUDED UNDER ITEM "RESTORE SPALLED OR DEFICIENT CONCRETE".

PROVIDE THE ENGINEER WITH A CERTIFIED TEST REPORT FOR THE REPAIR MATERIAL(S) PROPOSED FOR USE INDICATING THAT THE MATERIAL MEETS ALL REQUIREMENTS SPECIFIED FOR THE WORK, INCLUDE INTENDED USE FOR EACH MATERIAL SUBMITTED.

SAW CUT THE PERIMETER OF THE SPALLS TO A MINIMUM DEPTH OF 3/4 INCH TO SOUND CONCRETE OR AS SPECIFIED BY THE REPAIR PRODUCT MANUFACTURER TO PREVENT FEATHERING, ADJUST THE DEPTH OF SAWCUT IF SHALLOW STEEL IS ENCOUNTERED. PROVIDE HORIZONTAL AND VERTICAL STRAIGHT CUTS THAT FOLLOW THE GENERAL PATTERN OF THE SPALL AND COMPLETELY ENCLOSES THE SPALL OR SPALL PATTERN.

PROVIDE SURFACE PREPARATION BY HYDRO DEMOLITION OR MECHANICALLY REMOVING ALL UNSOUND CONCRETE WITHIN THE REPAIR AREA TO SOUND CONCRETE. PROVIDE SURFACES SOUND, CLEAN, AND FREE OF ANY CONTAMINATES TO ALL AREAS TO BE REPAIRED PRIOR TO PLACING THE SPALL REPAIR MATERIAL. USE BONDING AGENT COMPOUNDS MEETING THE REQUIREMENTS OF SECTION 926. PLACE CONCRETE BY FORM AND POUR UNLESS OTHERWISE APPROVED BY THE ENGINEER. CURE THE REPAIR MATERIAL TO THE MANUFACTURER'S RECOMMENDATIONS

DURABILITY OF SPALL REPAIR - PERFORM REPAIRS ON NEW CONCRETE TO LAST AS MUCH AS THE NATIVE CONCRETE. REPAIRS ON TEN-YEAR-OLD OR OLDER CONCRETE SHALL HAVE A MAINTENANCE-FREE SERVICE LIFE OF TWO YEARS.

	REVISIONS					DRAWN BY:			LEE COUNTY - FACILITIES			SHEET TITLE:		
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION		SFD CHECKED BY:		CONSTRUCTION & MANAGEMENT		I			
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			l				DESIGNED BY:	ROAD NO.	COUNTY	FINANCIAL PROJECT ID.	PROJECT NAME:		SHEET NO.	
			l				MAA	1			I	SOUTH STAIR TOWER RECONSTRUCTION	SHEET NO.	
							CHECKED BY:				1	JOUTH STAIR TOWER RECONSTRUCTION	5-1	
							NJV			1	<u> </u>			

REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60, FOR DEFORMED BAR AND ASTM A185 FOR SMOOTH WELDED WIRE FABRIC (WWF).

## MASONRY WALLS:

MASONRY UNITS SHALL MEET ASTM C90, TYPE 2. ASSEMBLIES SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF f'm= 2000. MORTAR SHALL BE TYPE "M" OR "S" AND MEET ASTM C270. PROPORTION GROUT IN ACCORDANCE WITH ASTM C 476, TABLE 1 OR PARAGRAPH 4.2.2 FOR SPECIFIED 28-DAY COMPRESSIVE STRENGTH INDICATED, BUT NOT LESS THAN 2000 PSI. PROVIDE GROUT WITH A SLUMP OF 8 TO 11 INCHES AS MEASURED ACCORDING TO ASTM C 143/C 143M. ALL CELLS CONTAINING VERTICAL BARS, BOND BEAMS, AND ALL CELLS BELOW GRADE SHALL BE FILLED WITH GROUT. MAXIMUM HEIGHT OF GROUT POUR ALLOWED IS 4-0" UNLESS CLEAN-OUT OPENING IS PROVIDED AT BOTTOM OF CELLS TO BE FILLED. LOCATE CLEAN-OUT OPENINGS IN AREAS NOT EXPOSED TO VIEW

UNLESS NOTED OTHERWISE MASONRY WALLS SHALL BE FULLY GROUTED REINFORCED MASONRY WALL CONSTRUCTION WITH #4 AT 24 INCH O.C. IN GROUT FILLED CFLIS.

PROVIDE (1) #5 REINFORCING BARS AT CORNERS, INTERSECTIONS, AND EACH SIDE OF OPENINGS. PROVIDE (2) #5 REINFORCING BARS EACH SIDE OF OPENINGS AND AS SHOWN ON THE PLANS. PROVIDE HOOKED DOWELS INTO FOOTINGS AND STRUCTURE ABOVE AND/OR BELOW TO PROVIDE CONTINUITY. PROVIDE & DATE OF BOOKED BOOKED STAINLESS STEEL TYPE 316 HORIZONTAL JOINT REINFORCING (DUR-O-WAL OR ENGINEER-APPROVED EQUAL) AT 16" O.C. UNLESS NOTED OTHERWISE.

## PRECAST CONCRETE LINTELS:

UNLESS INDICATED OTHERWISE, ALL LINTELS TO BE "U" TYPE PRECAST CONCRETE UNITS EQUAL TO UNITS MANUFACTURED BY CAST-CRETE CORP. AND PRESTRESSED (AND ADDITIONALLY REINFORCED AS REQUIRED) IN ACCORDANCE WITH CAST-CRETE CORP. "DESIGN MANUAL", LATEST EDITION, FOR THE SPAN AND LOADING CONDITION RELATIVE TO LINTEL LOCATION.

LINTEL SIZE IF NOT SHOWN ON THE PLANS SHALL BE 8F8-1B FOR OPENINGS LESS THAN 10 FEET AND 8F16-1B/1T FOR OPENINGS 10 FEET TO 20 FEET. PROVIDE 8" MINIMUM BEARING FOR LINTELS UNLESS NOTED OTHERWISE.

## EXTERIOR PAINTING:

ALL CONCRETE AND MASONRY SURFACES SHALL BE PAINTED TO MATCH ORIGINAL PAINT COLOR AND GLOSS. THIS INCLUDES EXISTING AREAS OF THE STAIR STRUCTURE THAT ARE NOT BEING REPLACED BUT REQUIRE PAINTING TO MATCH THE NEWLY PAINTED AREAS. PAINTING SHALL BE PERFORMED BY A QUALIFIED PAINTEN LICENSED IN FLORIDA.

FINAL APPROVAL OF COLOR SELECTIONS WILL BE BASED ON MOCKUPS. IF PRELIMINARY COLOR SELECTIONS ARE NOT APPROVED, APPLY ADDITIONAL MOCKUPS OF ADDITIONAL COLORS SELECTED BY ENGINEER AT NO ADDED COST TO OWNER.

MATERIALS FOR USE WITHIN EACH PAINT SYSTEM SHALL BE COMPATIBLE WITH ONE ANOTHER AND SUBSTRATES INDICATED, UNDER CONDITIONS OF SERVICE AND APPLICATION AS DEMONSTRATED BY MANUFACTURER, BASED ON TESTING AND FIELD EXPERIENCE.

FOR EACH COAT IN A PAINT SYSTEM, PRODUCTS SHALL BE RECOMMENDED IN WRITING BY TOPCOAT MANUFACTURERS FOR USE IN PAINT SYSTEM AND ON SUBSTRATE INDICATED.

APPLY PAINTS ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS AND RECOMMENDATIONS IN "MPI MANUAL."

APPLY PAINTS TO PRODUCE SURFACE FILMS WITHOUT CLOUDINESS, SPOTTING, HOLIDAYS, LAPS, BRUSH MARKS, ROLLER TRACKING, RUNS, SAGS, ROPINESS, OR OTHER SURFACE IMPERFECTIONS. CUT IN SHARP LINES AND COLOR BREAKS.

PROTECT WORK OF OTHER TRADES AGAINST DAMAGE FROM PAINT APPLICATION. CORRECT DAMAGE TO WORK OF OTHER TRADES BY CLEANING, REPAIRING, REPLACING, AND REFINISHING, AS APPROVED BY ARCHITECT, AND LEAVE IN AN UNDAMAGED CONDITION.

AT COMPLETION OF CONSTRUCTION ACTIVITIES OF OTHER TRADES, TOUCH UP AND RESTORE DAMAGED OR DEFACED PAINTED SURFACES

#### PAINT COATING SCHEDULE

- A. PRIME COAT: PRIMER, ALKALI RESISTANT, WATER BASED
- B. INTERMEDIATE COAT: EXTERIOR, MATCHING TOPCOAT
- C. TOPCOAT: EXTERIOR, MATCHING EXISTING PAINT GLOSS AND COLOR.

## STONE VENEER AND COPING:

NEW STONE VENEER. MATCH EXISTING STONE MATERIAL STANDARD, CHARACTERISTICS AND FINISH.

THE CONTRACTOR SHALL SUBMIT STONE SAMPLES OF EACH KIND FOR ENGINEERS REVIEW AND OWNER'S APPROVAL AT LEAST THREE WEEKS PRIOR TO CONSTRUCTING

THE CONTRACTOR SHALL SUBMIT SIGNED AND SEALED SHOP DRAWINGS.

USE STAINLESS STEEL TYPE 316 ANCHORS AND FASTENERS.

USE LOW ALKALI PORTLAND CEMENT TYPE I PIGMENTED AS NECESSARY TO MATCH EXISTING COLOR. CEMENT SHALL NOT CONTAIN MORE THAN 0.6 PERCENT TOTAL ALKALI WHEN TESTED IN ACCORDANCE WITH ASTM C 114

CONTROL DEPTH OF STONE AND BACK CHECK TO MAINTAIN MINIMUM CLEARANCE OF 1 INCH (25 MM) BETWEEN BACKS OF STONE UNITS AND SURFACES OR PROJECTIONS OF STRUCTURAL MEMBERS, FIREPROOFING (IF ANY), BACKUP WALLS, AND OTHER WORK BEHIND STONE.

BEFORE SETTING STONE, CLEAN SURFACES THAT ARE DIRTY OR STAINED BY REMOVING SOIL, STAINS, AND FOREIGN MATERIALS. CLEAN STONE BY THOROUGHLY SCRUBBING WITH FIBER BRUSHES AND THEN DRENCHING WITH CLEAR WATER. USE ONLY MILD CLEANING COMPOUNDS THAT CONTAIN NO CAUSTIC OR HARSH MATERIALS OR ABRASIVES.

SET STONE IN FULL BED OF MORTAR WITH HEAD JOINTS FILLED UNLESS OTHERWISE SHOWN IN EXISTING STONE VENEER OR CLADDING.

EMBED ENDS OF SILLS IN MORTAR; LEAVE REMAINDER OF JOINT OPEN UNTIL FINAL POINTING.

RAKE OUT JOINTS FOR POINTING WITH MORTAR TO DEPTHS OF NOT LESS THAN 1/2 INCH (12 MM). RAKE JOINTS TO UNIFORM DEPTHS WITH SQUARE BOTTOMS AND CLEAN SIDES.

POINT STONE JOINTS BY PLACING POINTING MORTAR IN LAYERS NOT MORE THAN 3/8 INCH (10 MM), COMPACT EACH LAYER THOROUGHLY AND ALLOW TO BECOME THUMBERINT HARD BEFORE APPLYING NEXT LAYER.

TOOL JOINTS TO MATCH EXISTING JOINTS, WHEN POINTING MORTAR IS THUMBPRINT HARD.

#### RAILINGS:

RAILING SHALL BE REPLACED IN KIND BASED ON THE LIMITS INDICATED ON THE PLANS. REPLACEMENT SHALL CONSIST OF EITHER NEW FABRICATED RAILINGS OR REMOVAL AND REUSE OF EXISTING RAILING, INCLUDING NEW PAINT, WHEN ACCEPTED BY THE OWNER OR ENGINEER.

NEW PIPE AND TUBE ALUMINUM RAILINGS SHALL MATCH EXISTING RAILINGS SIZES, SPACINGS, FASTENERS/ANCHORS AND FINISHES.

THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS.

PROVIDE ALLOY AND TEMPER RECOMMENDED BY ALUMINUM PRODUCER AND FINISHER TO MATCH EXISTING USE AND FINISH, AND WITH NOT LESS THAN THE STRENGTH AND DURABILITY PROPERTIES OF ALLOY AND TEMPER DESIGNATED BELOW FOR EACH ALUMINUM FORM REQUIRED.

- A. EXTRUDED BARS AND TUBING: ASTM B 221 (ASTM B 221M), ALLOY 6063-T5/T52.
- B. EXTRUDED STRUCTURAL PIPE AND ROUND TUBING: ASTM B 429/B 429M, ALLOY 6063-T6.
- C. DRAWN SEAMLESS TUBING: ASTM B 210 (ASTM B 210M), ALLOY 6063-T832. D. PLATE AND SHEET: ASTM B 209 (ASTM B 209M), ALLOY 6061-T6.
- E. DIE AND HAND FORGINGS: ASTM B 247 (ASTM B 247M), ALLOY 6061-T6.
- F. CASTINGS: ASTM B 26/B 26M, ALLOY A356.0-T6.

#### ALL FASTENERS SHALL BE STAINLESS STEEL TYPE 316.

POST-INSTALLED ANCHORS: TORQUE-CONTROLLED EXPANSION ANCHORS OR CHEMICAL ANCHORS CAPABLE OF SUSTAINING, WITHOUT FAILURE, A LOAD EQUAL TO 6 TIMES THE LOAD IMPOSED WHEN INSTALLED IN UNIT MASONRY AND 4 TIMES THE LOAD IMPOSED WHEN INSTALLED IN CONCRETE, AS DETERMINED BY TESTING ACCORDING TO ASTM E 488/E 488M, CONDUCTED BY A QUALIFIED INDEPENDENT TESTING AGENCY. ALLOY GROUP 1 (A1) STAINLESS-STEEL BOLTS, ASTM F 593 (ASTM F 738M), AND NUTS, ASTM F 594 (ASTM F 836M).

SET RAILINGS ACCURATELY IN LOCATION, ALIGNMENT, AND ELEVATION; MEASURED FROM ESTABLISHED LINES AND LEVELS AND FREE OF RACK.

- A. DO NOT WELD, CUT, OR ABRADE SURFACES OF RAILING COMPONENTS THAT ARE COATED OR FINISHED AFTER FABRICATION AND THAT ARE INTENDED FOR FIELD CONNECTION BY MECHANICAL OR OTHER MEANS WITHOUT FURTHER CUTTING OR FITTING
- B. SET POSTS PLUMB WITHIN A TOLERANCE OF 1/16 INCH IN 3 FEET (2 MM IN 1 M).
- C. ALION RAILS SO VARIATIONS FROM LEVEL FOR HORIZONTAL MEMBERS AND VARIATIONS FROM PARALLEL WITH RAKE OF STEPS AND RAMPS FOR SLOPING MEMBERS DO NOT EXCEED 1/4 INCH IN 12 FEET (6 MM IN 3.5 M).

PREVENT GALVANIC ACTION AND OTHER FORMS OF CORROSION BY INSULATING METALS AND OTHER MATERIALS FROM DIRECT CONTACT WITH INCOMPATIBLE MATERIALS

COAT, WITH A HEAVY COAT OF BITUMINOUS PAINT, CONCEALED SURFACES OF ALUMINUM THAT ARE IN CONTACT WITH GROUT, CONCRETE, MASONRY, WOOD, OR DISSIMILAR METALS.

## STRUCTURAL STEEL:

STRUCTURAL STEEL SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 460 OF THE SPECIFICATIONS.

ALL STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH ASTM A709, GRADE 50 UNLESS OTHERWISE NOTED.

## DRILLED SHAFTS:

DRILLED SHAFTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 455 C. "DRILLED SHAFTS" OF THE FDOT SPECIFICATIONS, ALONG WITH RELATED SECTION 108 "MONITOR EXISTING STRUCTURES".

FOR DRILLED SHAFT DATA TABLE, SEE SHEET S-3.

	REVISIONS					DRAWN BY:				ACII ITIES	SHEET TITLE:		
DAT	E BY	DESCRIPTION	DATE	BY	DESCRIPTION		CHECKED BY:	LEE COUNTY - FACILITIES CONSTRUCTION & MANAGEMENT			GENERAL NOTES - SHEET 2 OF 2	-	
						l'	WRB						1 '
						1	DESIGNED BY:	ROAD NO.	COUNTY	FINANCIAL PROJECT ID.	PROJECT NAME:		SHEET NO.
						L	MAA					SOUTH STAIR TOWER RECONSTRUCTION	
						l ·	CHECKED BY:					SOUTH STAIN TOWER RECONSTRUCTION	5-2

HE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004.

BORING:

B-01

11/22/2023 DATE: LATITUDE: N26°29'04.06" LONGITUDE: W82\*00'30.16" ALITO HAMMER: -200=8.9 -200=7.6 SP® SP-SM® SP® SE -200=13.4 MC=31.4 LL=NP PI=NP SM® SP-SM® -200=11.4 SP-SM® -200=9.9 SP-SM© Boring Terminated CASING TO 30' BORING LOG B-01

SCALE: 1/8" = 1'-0"

## LEGEND

SAND: Sand with ≤ 12% fines

Silty SAND: Sand with 12% to 50% Silt

- SPT STANDARD PENETRATION TEST
- UNIFIED SOIL CLASSIFICATION SYSTEM (USCS) GROUP SYMBOL
- SUBSCRIPT INDICATING ADDITIONAL COMPONENTS OF SOIL SAMPLE
- SPT N-VALUE IN BLOWS PER FOOT
- $\nabla$ GROUNDWATER LEVEL MEASURED ON DATE DRILLED
- % PASSING #200 SIEVE
- NATURAL MOISTURE CONTENT (%)
- LIQUID LIMIT (%)
- PLASTICITY INDEX (%)
- SAMPLER ADVANCED BY STATIC WEIGHT OF HAMMER AND RODS ONLY
- CASING USED

## ADDITIONAL SOIL COMPONENTS

- (A) Trace of Rock
- B Trace of Shell
- (C) Some Rock
- D Some Shell
- (E) Gravelly
- (F) Organic
- Slightly Organic
- (H) Tree Roots

## BORING NOTES:

- 1. BORINGS MADE BY ARDAMAN & ASSOCIATES, INC. IN NOVEMBER 2023.
- BORINGS ARE FOR DESIGN PURPOSES SHOWING CONDITIONS AT BORING POINTS ONLY AND DO NOT NECESSARILY INDICATE MATERIAL TO BE ENCOUNTERED DURING CONSTRUCTION.
- WATER LEVELS WERE MEASURED AT THE TIME OF EXPLORATION. WATER LEVELS ENCOUNTERED DURING CONSTRUCTION MAY VARY CONSIDERABLY DUE TO THE PREVAILING CLIMATE, RAINFALL, OR OTHER FACTORS.
- 4. TOP OF BORING (DEPTH = 0.0) CORRESPONDS TO A GROUND ELEVATION OF 7.2 ± FEET.
- 5. GEOTECHNICAL INFORMATION WAS INCLUDED IN REPORT DATED 2/14/2024 BY ARDAMAN & ASSOCIATES, INC.

	DRILLED SHAFT DATA TABLE													
INSTALLATION CRITERIA DESIGN CRITERIA											TESTING	TOP OF		
PIER OR BENT	SHAFT SIZE	TIP ELEV.	MIN. TIP ELEV.	MIN. ROCK SOCKET LENGTH	MIN. TOP OF ROCK SOCKET ELEVATION	FACTORED DESIGN LOAD	FACTORED DESIGN UPLIFT LOAD	DOWN DRAG	LONG TERM SCOUR ELEV.	100-YEAR SCOUR ELEV.	Ø COMPRESSION	Ø UPLIFT	CONSIDER NONREDUNDANT	ELEVATION
NO.	(In.)	(Ft.)	(Ft.)	(Ft.)	(Ft.)	(tons)	(tons)	(tons)	(Ft.)	(Ft.)				(Ft.)
N/A	36	-34.4	-	N/A	N/A	60	0		1	2.6	0.55	N/A	NO	5.6

- (1) THE TIP ELEVATION IS THE HIGHEST ELEVATION THE SHAFT TIP SHALL BE CONSTRUCTED UNLESS LOAD TEST DATA, ROCK CORE TESTS, OR OTHER GEOTECHNICAL TEST DATA OBTAINED DURING PILOT HOLES ALLOWS THE ENGINEER TO AUTHORIZE A DIFFERENT TIP ELEVATION.
- (2) INSPECT ALL SHAFTS CONSIDERED NON-REDUNDANT USING THE SID OR AN APPROVED ALTERNATE DOWN-HOLE CAMERA TO VERIFY SHAFT BOTTOM CLEANLINESS AT THE TIME OF CONCRETING. TEST ALL NON-REDUNDANT DRILLED SHAFTS USING NON-DESTRUCTIVE INTEGRITY TESTING.
- (3) ELEVATIONS ARE BASED ON VERTICAL DATUM NGVD 29.
- (4) FOR ADDITIONAL DRILLED SHAFT NOTES, SEE SHEET S-2.

REVISIONS				DRAWN BY: SFD		LEE COUNTY - FA	CILITIES		REF. DWG. NO.	
DATE BY	DESCRIPTION	DATE	BY	DESCRIPTION		CONSTRUCTION & MANAGEMENT			BORING LOGS	
					CHECKED BY: WRB		CONSTRUCTION & MELVICEMENT			1 !
					DESIGNED BY:	ROAD NO.	COUNTY	FINANCIAL PROJECT ID.	PROJECT NAME:	<del> </del>
					MAA				COUTU CTAIR TOWER RECONCERUCTION	SHEET NO.
					CHECKED BY:				SOUTH STAIR TOWER RECONSTRUCTION	5_3
					RJV					3=3

