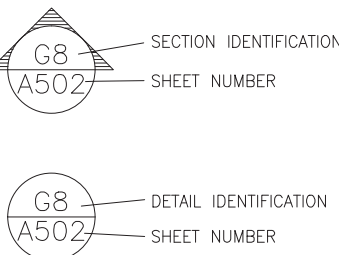


P:\Projects\414-0210.038\_(TA38)\_Ichetucknee\_Restroom\CADD\14-0210.038\_(TA38)\_COVER.dwg

ABBREVIATIONS

A.F.F.	ABOVE FINISHED FLOOR
A.H.U.	AIR HANDLING UNIT
ALUM.	ALUMINUM
ALT.	ALTERNATE
APPROX.	APPROXIMATE
BD.	BOARD
BLDG.	BUILDING
BLK.	BLOCK
BLKG.	BLOCKING
BLT.	BUILT
BRCK.	BRICK
BRKR.	BREAKER
BSMT.	BASEMENT
C.J.	CONTROL JOINT
CLG.	CEILING
CLR.	CLEAR
CMU	CONCRETE MASONRY UNIT
C.O.	CLEAN OUT
CONC.	CONCRETE
CO.	COPPER
CU. FT.	CUBIC FOOT
CU. IN.	CUBIC INCH
CU. YD.	CUBIC YARD
DA./#	DIAMETER
DBL	DOUBLE
DBT.	DRY-BULB TEMPERATURE
DEG.	DEGREE
DEPT.	DEPARTMENT
DF.	DRINKING FOUNTAIN
DISC.	DISCONNECT
DL	DEAD LOAD
DN.	DOWN
D.S.	DOWN SPOUT
DWG.	DRAWING
E.F.	EXHAUST FAN
EKH	EXHAUST
EXT.	EXPANSION JOINT
EXT.	EXTERIOR
FIN.	FINISH
FL.	FLOOR
FLOR.	FLUORESCENT
FR	FIRE RATING
FR	FIRE RATING
FT.	FOOT/FEET
FTG.	FOOTING
GALV.	GALVANIZED
GFI	GROUND FAULT
GFI	CIRCUIT INTERRUPT
GOVT.	GOVERNMENT
GR.TL.	GROUND FLOOR
GYP.	GYPSUM
H.C.	HOLLOW CORE
H.D.G.	HOT DIPPED GALVANIZED
HDR.	HEADER
HDWR.	HARDWARE
H.P.	HORSEPOWER
HT.	HEIGHT
HTR.	HEATER
HVAC	HIGH VOLTAGE
HVAC	HEATING, VENTILATING
HVAC	AND AIR CONDITIONING
Hwy.	HIGHWAY
ID.	INSIDE DIAMETER
IN.	INCH
INCAND.	INCANDESCENT
INCL.	INCLUDED
INSUL.	INSULATION
INT.	INTERIOR
INV. EL.	INVERT ELEVATION
JST.	JOIST
KD.	KILN DRIED
KW	KILOWATT
KWH	KILOWATT HOUR
LAM.	LAMINATED
LAV.	LAVATORY
LB.	POUND
LTC.	LIGHTING
LGTH.	LENGTH
LIN.	LINER
LL	LIVE LOAD
MANUF.	MANUFACTURE
MAX.	MAXIMUM
MF.	MILL FINISH
MIN.	MINIMUM
MLDG.	MOLDING
MHW.	MEAN HIGH WATER
MHHW	MEAN HIGHER HIGH WATER
MHW	MEAN HIGH WATER
MLW	MEAN LOWER LOW WATER
MLW	MEAN LOWER LOW WATER
MOD.	MODIFICATION
MOD.	MODIFICATION
NTS	NOT TO SCALE
NO./#	NUMBER
O.C.	OVERALL
O.C.	ON CENTER
O.D.	OUTSIDE DIAMETER
OFC.	OFFICE
O/H	OVER HEAD
OPP.	OPPOSITE
PARTN.	PARTITION
PC	PORTLAND CEMENT
PCF	POUNDS PER CUBIC FOOT
P.E.	PROFESSIONAL ENGINEER
PERF.	PERFORATE
PERP.	PERPENDICULAR
PLG.	PLATE
PLG.	PLUG
PLYWD.	PLYWOOD
PNL	PANEL
PREFAB.	PREFABRICATED
PRELIM.	PRELIMINARY
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
P.T.	PRESSURE TREATED
Q.S.	QUARTER SAWN
R	RADIUS
R.F.P.T.	REINFORCING BAR
REBAR	REINFORCING BAR
REFRIG.	REFRIGERATION
REIN.	REINFORCING
RFG.	ROOFING
RSH	ROUGH
RM	ROOM
R.O.	ROUGH OPENING
RS	ROUGH SAWN
S.C.	SOLID CORE
SCH.	SCHEDULE
SCH.	SCHED
SECT.	SECTION
SECT.	SECTION
SLDNG	SLIDING GLASS DOOR
SH.	SHINGLES
SPEC.	SPECIFICATION
SPR.	SPIRZE
SQ.	SQUARE
SQ. FT.	SQUARE FOOT
SQ. IN.	SQUARE INCH
SQ. YD.	SQUARE YARD
SS	STAINLESS STEEL
SUB. FL.	SUBFLOOR
SUP.	SUPPLY
SW.	SWITCH
SYM.	SYMMETRICAL
S.Y.P.	SOUTHERN YELLOW PINE
SYS.	SYSTEM
SURF.	SURFACED FOUR SIDES
TEL.	TELEPHONE
T&G	TONGUE-AND-GROOVE
TYP.	TYPICAL
U.C.	UNDERGROUND ELECTRIC
U.C.	UNDER GROUND
UL	UNDERWRITERS
LABORATORIES, INC.	LABORATORIES, INC.
V.	VOLT
VENT.	VENTILATOR
VERT.	VERTICAL
VF.	VERIFY IN FIELD
VOL.	VOLUME
VP	VENT PIPE
VTR.	VENT THRU ROOF
W.	WATER
WBT.	WET BULB TEMPERATURE
WC	WATER CLOSET
WD.	WOOD
WP	WATERPROOF
WWT.	WELDED WIRE FABRIC
YD.	YARD

REFERENCE LEGEND



ICHETUCKNEE SPRINGS STATE PARK

DISTRICT 2  
COLUMBIA COUNTY

REPLACE RESTROOM  
FDEP PROJECT # 61363C

SITE ADDRESS: 12087 SOUTHWEST U.S. 27  
FORT WHITE, FL 32038

APPLICABLE CODES AND DESIGN DATA

CODE LIST

FLORIDA BUILDING CODE, BUILDING (FBC-B).....	2020 Edition
FLORIDA BUILDING CODE, FUEL GAS (FBC-FG).....	2020 Edition
FLORIDA BUILDING CODE, MECHANICAL (FBC-M).....	2020 Edition
FLORIDA BUILDING CODE, PLUMBING (FBC-P).....	2020 Edition
FLORIDA BUILDING CODE, EXISTING BUILDING (FBC-EB).....	2020 Edition
FLORIDA BUILDING CODE, RESIDENTIAL (FBC-R).....	2020 Edition
FLORIDA FIRE PREVENTION CODE (FFPC).....	2020 Edition
NATIONAL ELECTRICAL CODE NFPA-70.....	2017 Edition
FDOT STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONST. ....	Latest Edition
FDOT DESIGN STANDARDS.....	Latest Edition
FLORIDA ACCESSIBILITY CODE.....	2020 Edition

DESIGN DATA

CONSTRUCTION TYPE: TYPE II-B NON SPRINKLERED	TOTAL BUILDING AREA PER FLOOR: 1,115 GSF
OCCUPANCY CLASS: FBC GROUP B BUSINESS	BUILDING HEIGHT/NUMBER OF STORIES: 1
OCCUPANT LOAD: 10 PERSONS	REQUIRED SPRINKLER OR ALARM SYSTEM: No
TOTAL EXITS: N/A	NUMBER OF BEDROOMS: N/A
SQ FT ALTERED AREA N/A	LEVEL OF ALTERATION: N/A

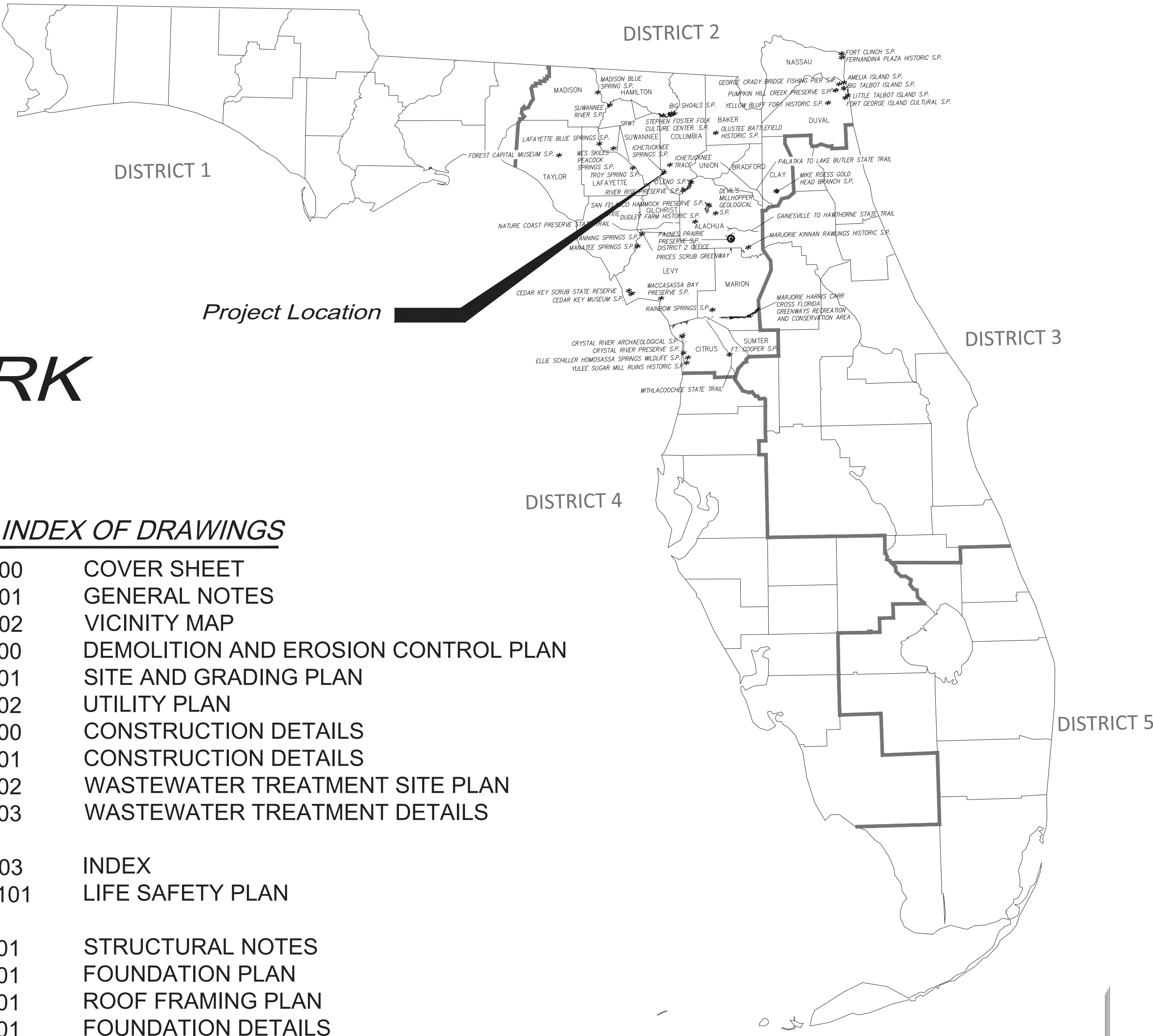
DESIGN LOADS (FBC-B CHAPTER 16):  
20 PSF

WIND LOADS (FBC-B SECTION 1609):  
120 MPH

DRMP  
DESIGNER

CN225  
CONSULTANT CONTRACT NO.

8/7/2023  
INITIAL ISSUE DATE



INDEX OF DRAWINGS

G100	COVER SHEET
G101	GENERAL NOTES
G102	VICINITY MAP
C100	DEMOLITION AND EROSION CONTROL PLAN
C101	SITE AND GRADING PLAN
C102	UTILITY PLAN
C200	CONSTRUCTION DETAILS
C201	CONSTRUCTION DETAILS
C202	WASTEWATER TREATMENT SITE PLAN
C203	WASTEWATER TREATMENT DETAILS

G103	INDEX
LS101	LIFE SAFETY PLAN

S001	STRUCTURAL NOTES
S101	FOUNDATION PLAN
S201	ROOF FRAMING PLAN
S301	FOUNDATION DETAILS
S302	TYPICAL BUILDING SECTION
S401	TYPICAL MASONRY DETAILS

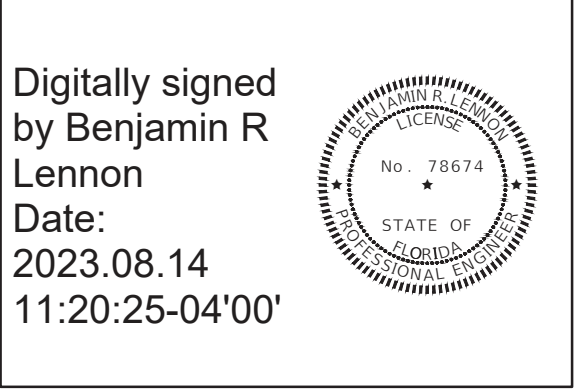
A100	ARCHITECTURAL SPECIFICATIONS
A101	RESTROOM BUILDING - FLOOR PLAN
A102	RESTROOM BUILDING - FLOOR PLAN - PLUMBING
A201	RESTROOM BUILDING - REFLECTED CEILING PLAN
A301	RESTROOM BUILDING - BUILDING ELEVATIONS
A401	RESTROOM BUILDING - BUILDING & WALL SECTIONS
A501	RESTROOM BUILDING - ROOF PLAN

M001	LEGEND, NOTES & SCHEDULES - HVAC
M101	FLOOR PLANS - MECHANICAL
M501	DETAILS - MECHANICAL

P001	LEGEND, NOTES, DETAILS & SCHEDULES - PLUMBING
P101	FLOOR PLANS - PLUMBING
P501	DETAILS & SCHEDULES - PLUMBING
P601	ISOMETRICS - PLUMBING

E001	LEGEND & NOTES - ELECTRICAL
E100	SITE PLAN - ELECTRICAL
E101	FLOOR PLANS - ELECTRICAL
E701	PANEL SCHEDULES - ELECTRICAL

THIS ITEM HAS BEEN DIGITALLY SIGNED  
AND SEALED BY:



ON THE DATE ADJACENT TO THE SEAL.  
PRINTED COPIES OF THIS DOCUMENT  
ARE NOT CONSIDERED SIGNED AND  
SEALED AND THE SIGNATURE MUST BE  
VERIFIED ON ANY ELECTRONIC COPIES.  
THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE  
RESPONSIBLE FOR THE FOLLOWING SHEETS IN  
ACCORDANCE WITH RULE 61G15-23.004, F.A.C.:

G100	COVER SHEET
G101	GENERAL NOTES
G102	VICINITY MAP
C100	DEMOLITION AND EROSION CONTROL PLAN
C101	SITE AND GRADING PLAN
C102	UTILITY PLAN
C200	CONSTRUCTION DETAILS
C201	CONSTRUCTION DETAILS



100% DESIGN











P:\Projects\14-0210.038 (TA38)\_Ichetucknee\_Restroom\CADD\14-0210.038 (TA38)\_DEMO PLAN.dwg Plotted: Aug 14, 2023 -- 11:13am by Elennon

## EROSION CONTROL NOTES:

- CONTRACTOR IS RESPONSIBLE FOR OBTAINING A NPDES PERMIT OR EXEMPTION PRIOR TO CONSTRUCTION.
- EROSION CONTROL MEASURES ARE TO BE ACCOMPLISHED PRIOR TO ANY CONSTRUCTION ON THE SITE AND MAINTAINED UNTIL PERMANENT GROUND COVER IS ESTABLISHED.
- ADDITIONAL EROSION CONTROL MEASURES WILL BE EMPLOYED WHERE DETERMINED NECESSARY BY ACTUAL SITE CONDITIONS.
- ALL DEVICES ARE TO BE MAINTAINED AND REPAIRED ON A REGULAR BASIS.
- EXCESS SEDIMENT TO BE REMOVED WHEN SILT REACHES ONE-HALF (1/2) THE HEIGHT OF THE FENCE.
- TEMPORARY GRASSING IS NOT TO BE LESS THAN TWO (2) DAYS AFTER COMPLETION OF ANY GRADING ACTIVITIES.
- SILT FENCE MUST MEET THE REQUIREMENTS OF FDOT, STANDARD SPECIFICATIONS, LATEST EDITION.
- PERMANENT VEGETATION SHALL BE INSTALLED AS SOON AS PRACTICAL FOLLOWING FINAL GRADING.
- NOTIFY OWNER'S REPRESENTATIVE 48 HOURS PRIOR TO CONSTRUCTION.
- EROSION CONTROL MEASURES WILL BE INSPECTED AT LEAST WEEKLY AND AFTER EACH RAIN, AND REPAIRED BY THE GENERAL CONTRACTOR AS NEEDED.
- CONTRACTOR TO COMPLETELY SECURE FROM EROSION ANY STOCK PILE OF EARTHEN MATERIALS. THE CONTRACTOR SHALL DETERMINE THE LOCATION OF ANY MATERIAL STOCKPILE LOCATIONS PRIOR TO COMMENCING WORK. THE LOCATIONS WILL BE CONFIRMED WITH THE DESIGN ENGINEER AND CONTRACTING OFFICER, AND THE ESPC PLANS WILL BE "REDLINED" WITH APPROPRIATE BMP'S TO REFLECT THE LOCATIONS.
- EROSION AND SEDIMENTATION CONTROL MEASURES AND PRACTICES SHALL BE MAINTAINED AT ALL TIMES. ADDITIONAL EROSION AND SEDIMENTATION CONTROL MEASURES AND PRACTICES SHALL BE INSTALLED IF DEEMED NECESSARY BY ON-SITE INSPECTION.
- ALL DESIGN WILL CONFORM TO AND ALL WORK WILL BE PERFORMED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF FDOT.
- ADDITIONAL EROSION CONTROL DEVICES SHALL BE INSTALLED AS REQUIRED BY THE PROJECT ENGINEER, COUNTY REPRESENTATIVE OR AS CONDITIONS MAY DICTATE.
- MAXIMUM CUT OR FILL SLOPES IS 3H:1V.
- MAINTENANCE OF ALL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES AND PRACTICES, WHETHER TEMPORARY OR PERMANENT, SHALL BE AT ALL TIMES THE RESPONSIBILITY OF THE CONTRACTOR.
- DETENTION POND, DETENTION OUTLET STRUCTURES AND TEMPORARY SEDIMENT POND FEATURES AND ALL EROSION CONTROL MEASURES ARE TO BE CONSTRUCTED AND FULLY OPERATIONAL PRIOR TO ANY OTHER CONSTRUCTION OR GRADING.
- DISTURBED AREAS SHALL BE STABILIZED WITH TEMPORARY VEGETATION OR MULCH IF LAND-DISTURBING ACTIVITIES CEASE FOR MORE THAN 14 CALENDAR DAYS.
- ALL FILL SLOPES SHALL HAVE SILT FENCE PLACED AT THE SLOPE'S TOE.
- THE PROFESSIONAL WHO SEALS THIS PLAN CERTIFIES UNDER PENALTY OF LAW THAT THIS PLAN WAS PREPARED AFTER A SITE VISIT TO THE LOCATIONS DESCRIBED HEREIN BY THE PROFESSIONAL OR THE PROFESSIONAL'S AUTHORIZED AGENT, UNDER THE PROFESSIONAL'S DIRECT SUPERVISION.
- NO WASTE WILL BE DISPOSED INTO STORM WATER INLET OR WATER OF THE STATE.
- IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.
- ADEQUATE ROOM HAS BEEN PROVIDED WITHIN THE PROJECT LIMITS FOR REMOVAL OF BMP'S. THE CONTRACTOR SHALL NOT DISTURB AREAS OUTSIDE/BEYOND THE LIMITS OF CONSTRUCTION/DISTURBANCE TO REMOVE BMP'S.

## SITE ACCESS

- THE CONTRACTOR SHALL CONTROL ACCESS TO THE PROJECT SITE. TEMPORARY 6-FT HIGH(MIN.) CHAINLINK FENCE WITH SCREENING IS REQUIRED AROUND THE ENTIRE PERIMETER OF THE WORK ZONE TO PROHIBIT THE PUBLIC FROM ENTERING. COORDINATE ACCESS WITH PARK STAFF. OTHER PARTS OF THE PARK WILL BE IN-USE DURING CONSTRUCTION. ALL SECURITY AND ACCESS MANAGEMENT IS INCIDENTAL TO THE PROJECT - NO SEPARATE PAYMENT.
- STAGING AND STORAGE SHALL BE COORDINATED WITH PARK STAFF.

## MAINTENANCE OF TRAFFIC

- CONTRACTOR IS RESPONSIBLE FOR ALL VEHICULAR AND PEDESTRIAN MAINTENANCE OF TRAFFIC ADJACENT TO THE PROJECT AREA. THIS MAY INCLUDE BUT NOT LIMITED TO SIGNS, BARRICADES, AND FLAGGERS. SIGNAGE AND PROCEDURES SHALL BE IN ACCORDANCE TO FDOT STANDARD PLANS 102-600.
- COORDINATE ALL LANE CLOSURES WITH FDEP

## DEMOLITION NOTES

- CALL SUNSHINE 811 BEFORE DIGGING.
- ALL EXISTING FACILITIES, CONCRETE, STRUCTURES, AND VEGETATION SHOWN TO REMAIN SHALL BE PROTECTED. CONTRACTOR IS RESPONSIBLE FOR REPLACING ANY DAMAGED ITEMS TO EQUAL OR BETTER CONDITION.

## EXISTING LEGEND:

### SYMBOL LEGEND

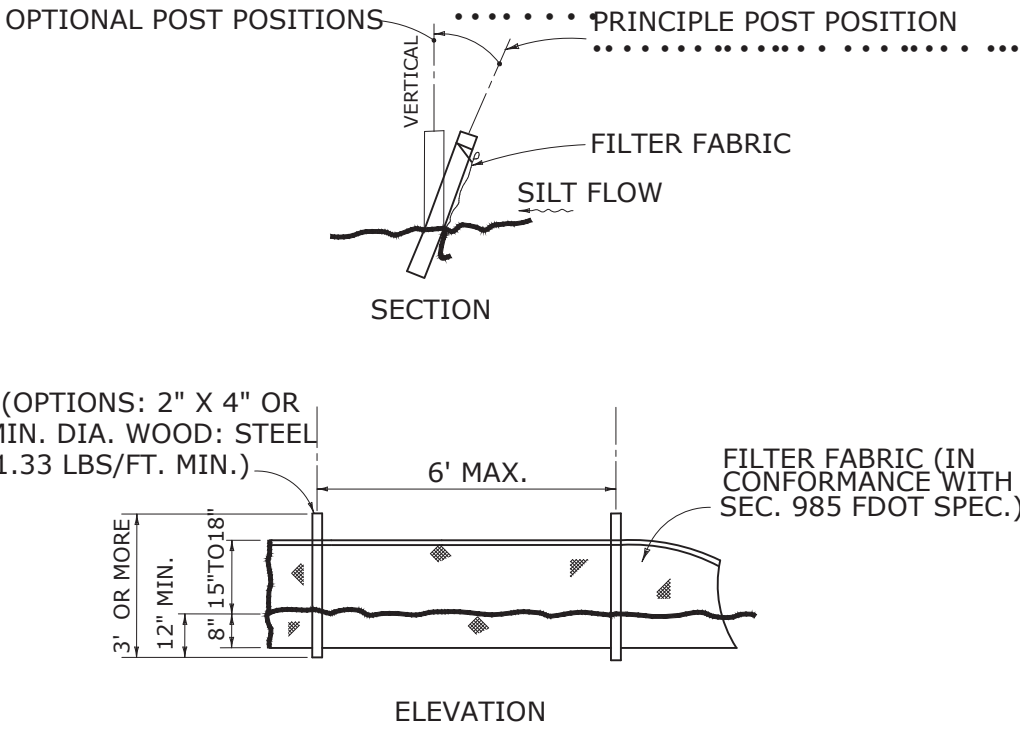
- 9 SYC BENCHMARK  
× 132.2 TREE-SIZE(INCHES) AND SPECIES  
× 132.21 SPOT ELEVATION - SOFT SURFACE  
- - - 150 SPOT ELEVATION - HARD SURFACE  
- - - CONTOUR LINES

### ABBREVIATIONS

EP = EDGE OF PAVEMENT  
BC = BACK OF CURB  
JBPRO = JBROWN PROFESSIONAL GROUP  
LB = LICENSED BUSINESS  
LS = LICENSED SURVEYOR  
NAD83(2011) = NORTH AMERICAN DATUM OF 1983, 2011 ADJUSTMENT  
NAVD88 = NORTH AMERICAN VERTICAL DATUM OF 1988

#### TREES:

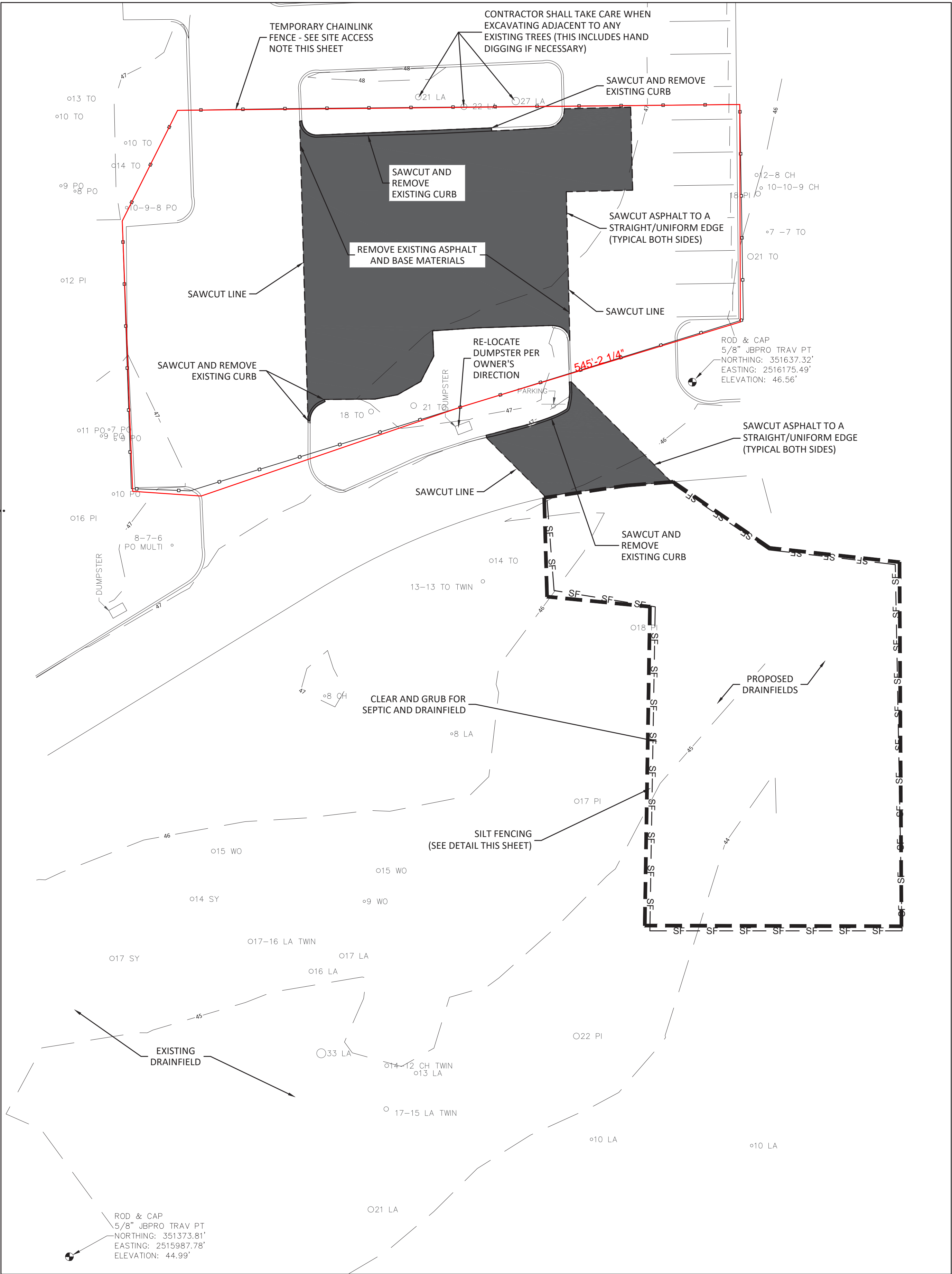
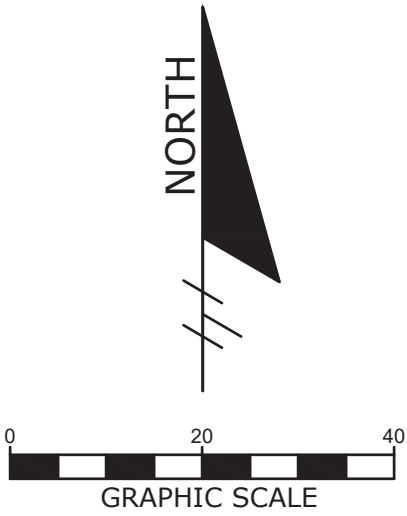
CH = CHERRY LAUREL  
LA = LAUREL OAK  
MULTI = MULTIPLE TRUNK  
PI = PINE  
PO = POST OAK  
SY = SYCAMORE  
TO = TURKEY OAK  
TWIN = TWIN TRUNK  
WO = WATER OAK



NOTE: SILT FENCE TO BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR STAKED SILT FENCE (LF).


### TYPE III SILT FENCE

N.T.S.



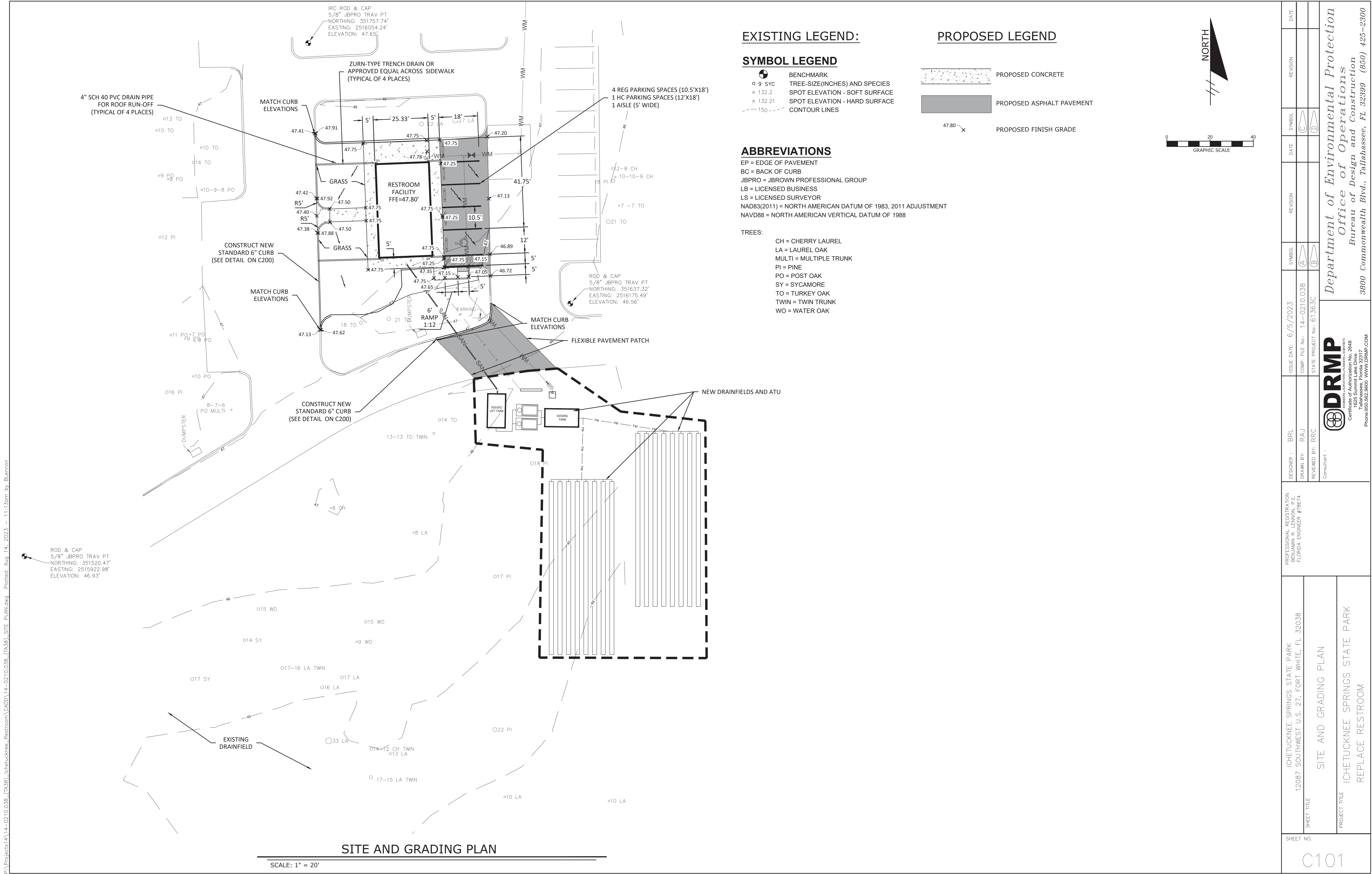
## DEMOLITION SITE PLAN

SCALE: 1" = 20'

DATE	REVISION	SYMBOL	DATE	REVISION	SYMBOL
		U			U
		A			B
ISSUE DATE: 6/5/2023	COMP. FILE NO.: 14-0210.038	STATE PROJECT NO.: 61363C	DESIGNER: BRL	DRAWN BY: RAJ	REVIEWED BY: RRC
PROFESSIONAL REGISTRATION BENJAMIN R. LENNON, P.E. FLORIDA ENGINEER #78674			Consultant: 		
ICHETUCKNEE SPRINGS STATE PARK 12087 SOUTHWEST U.S. 27, FORT WHITE, FL 32038			DEMOLITION AND EROSION CONTROL PLAN		
PROJECT TITLE ICHETUCKNEE SPRINGS STATE PARK REPLACE RESTROOM			SHEET NO. C100		
Department of Environmental Protection Office of Operations Bureau of Design and Construction 3800 Commonwealth Blvd., Tallahassee, FL 32399 (850) 425-2300			DRMP DESIGNERS & ARCHITECTS & PLANNERS & ENGINEERS Certified Summit Lake Drive Tallahassee, Florida 32317 Phone: 850.622.9600 WWW.DRMP.COM		



P:\Projects\14-0210.038 (TA38)\_Ichetucknee\_Restroom\CADD\14-0210.038 (TA38)\_SITE PLAN.dwg Plotted: Aug 14, 2023 - 11:13am by Blennon



SHEET NO.		PROJECT TITLE		SHEET TITLE		PROFESSIONAL REGISTRATION		DESIGNER :		ISSUE DATE:		SYMBOL		REVISION		DATE		REVISION		DATE	
12087 SOUTHWEST U.S. 27, FORT WHITE, FL 32038		SITE AND GRADING PLAN		ICHETUCKNEE SPRINGS STATE PARK		BENJAMIN R. LENNON, P.E. FLORIDA ENGINEER #75674		BRL		6/5/2023		A									
12087 SOUTHWEST U.S. 27, FORT WHITE, FL 32038		SITE AND GRADING PLAN		ICHETUCKNEE SPRINGS STATE PARK		BENJAMIN R. LENNON, P.E. FLORIDA ENGINEER #75674		RAJ		14-0210.038		B									
12087 SOUTHWEST U.S. 27, FORT WHITE, FL 32038		SITE AND GRADING PLAN		ICHETUCKNEE SPRINGS STATE PARK		BENJAMIN R. LENNON, P.E. FLORIDA ENGINEER #75674		RRC		6/13/23											
12087 SOUTHWEST U.S. 27, FORT WHITE, FL 32038		SITE AND GRADING PLAN		ICHETUCKNEE SPRINGS STATE PARK		BENJAMIN R. LENNON, P.E. FLORIDA ENGINEER #75674															

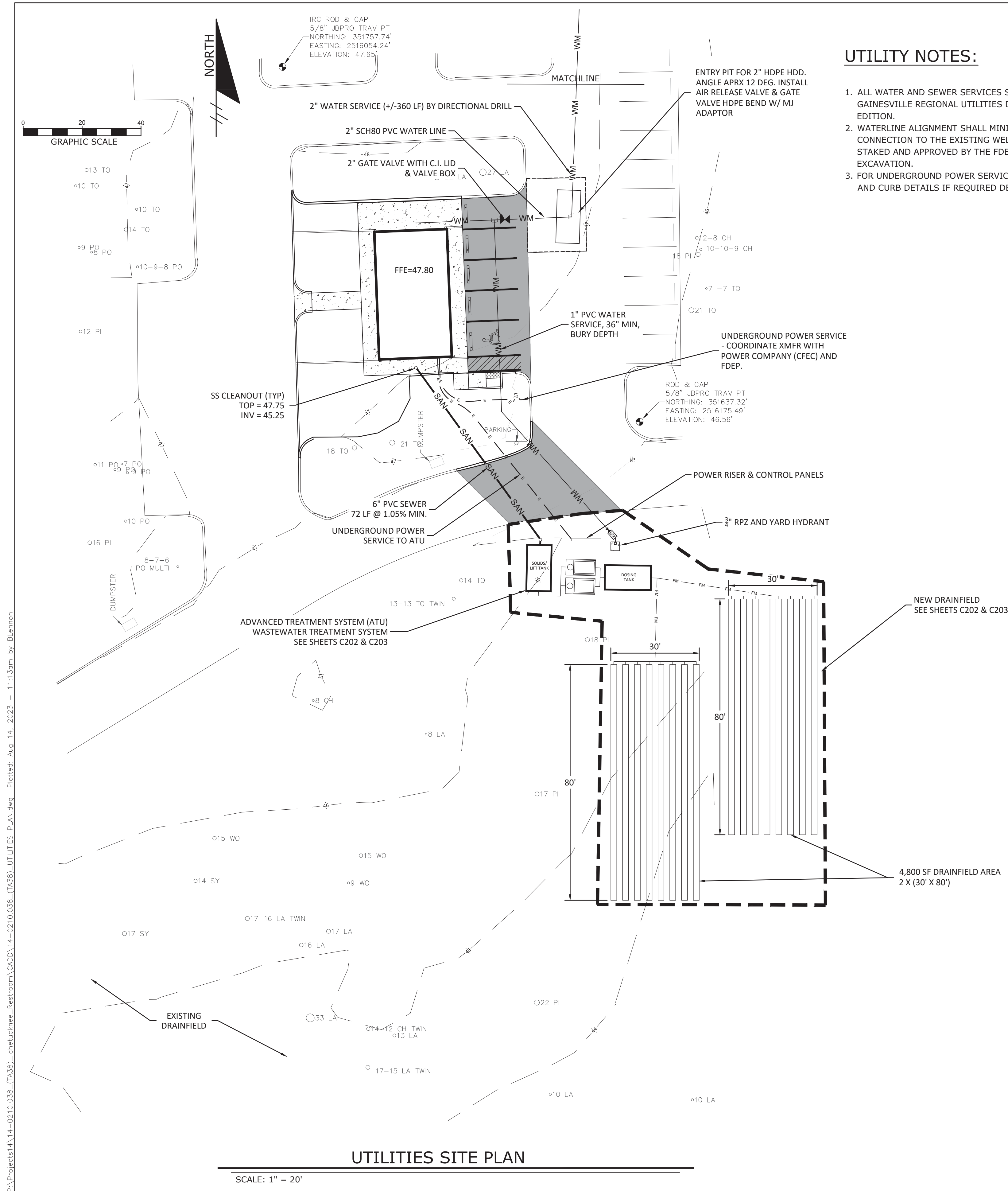
**Department of Environmental Protection**  
**Office of Operations**  
**Bureau of Design and Construction**  
3800 Commonwealth Blvd., Tallahassee, FL 32399 (850) 425-2300

**DRMP**  
DESIGNERS & ARCHITECTS & PLANNERS & ENGINEERS  
Certified Summit Lake Drive  
Tallahassee, Florida 32317  
Phone: 850.622.9600 WWW.DRMP.COM

**PROJECT TITLE**  
ICHETUCKNEE SPRINGS STATE PARK  
REPLACE RESTROOM

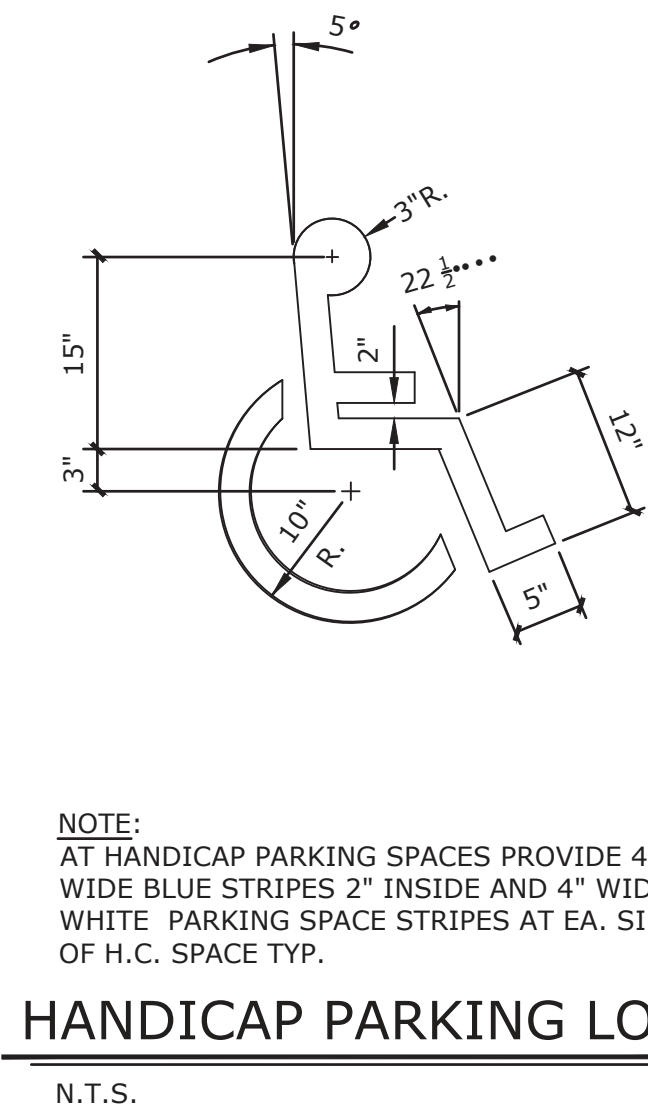
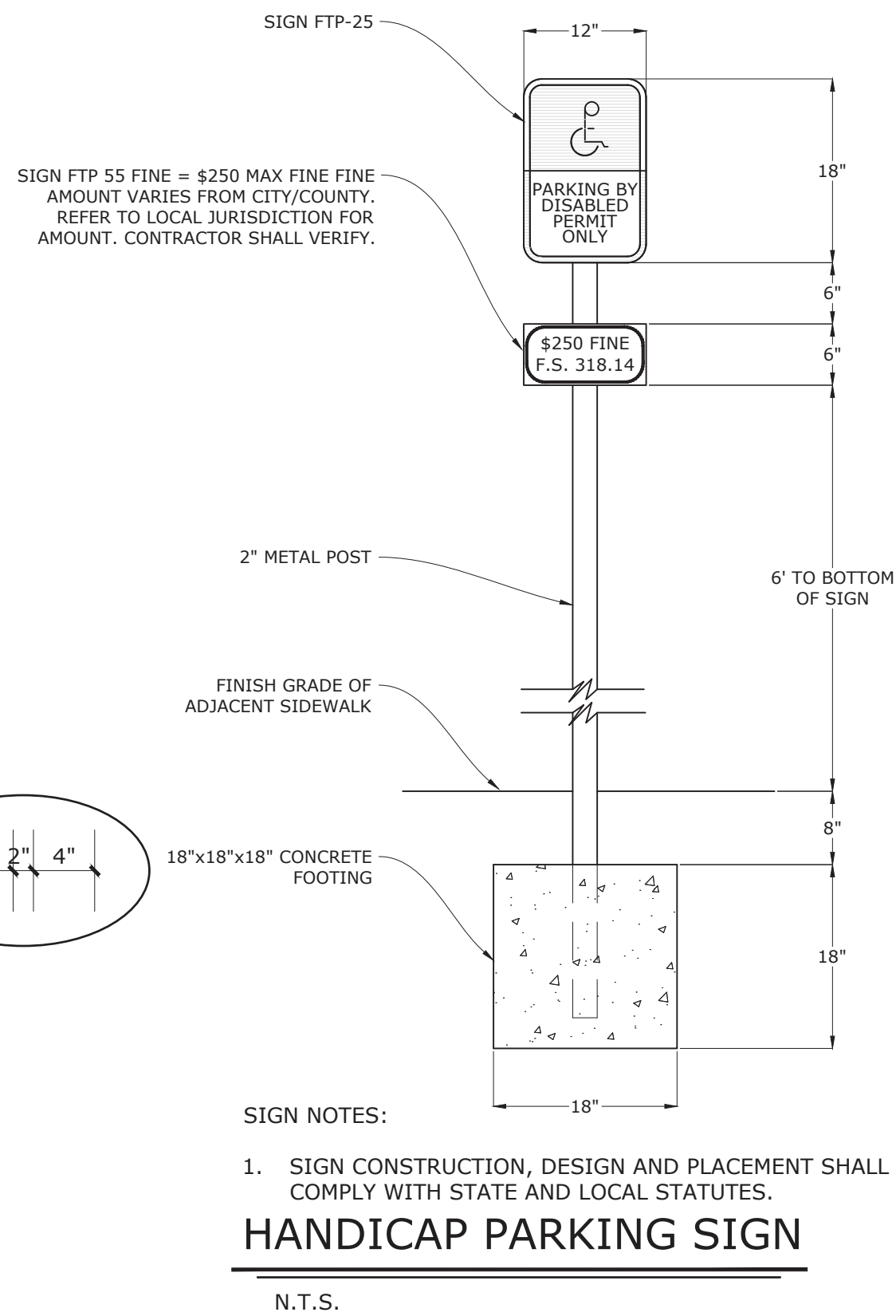
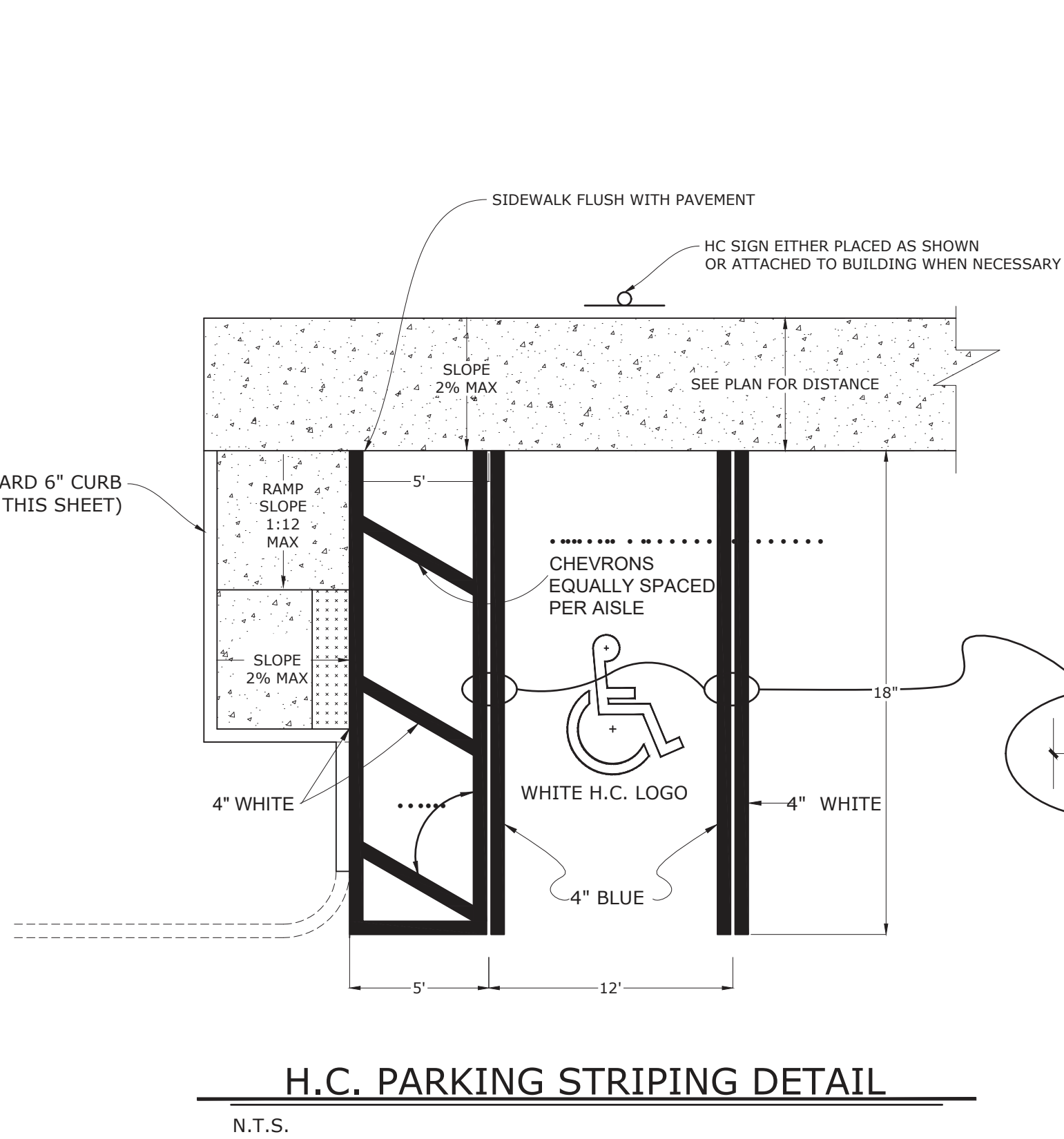
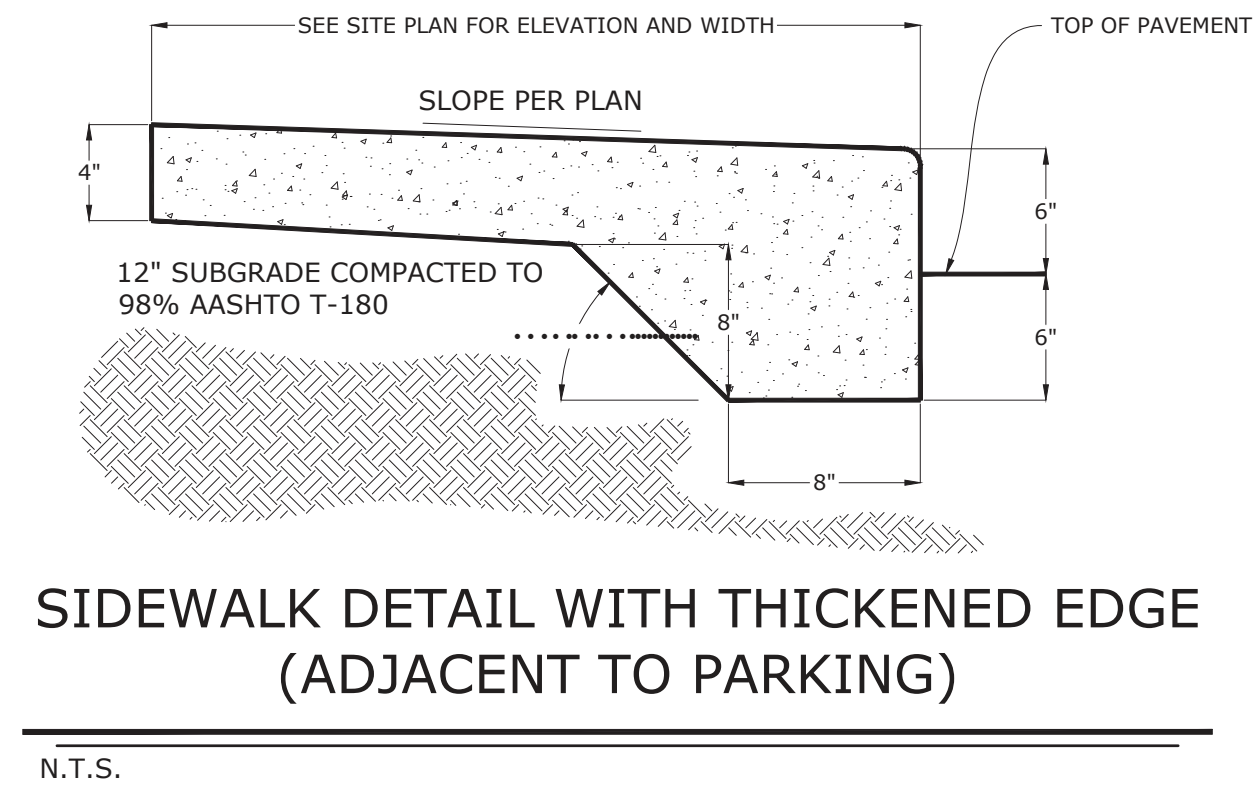
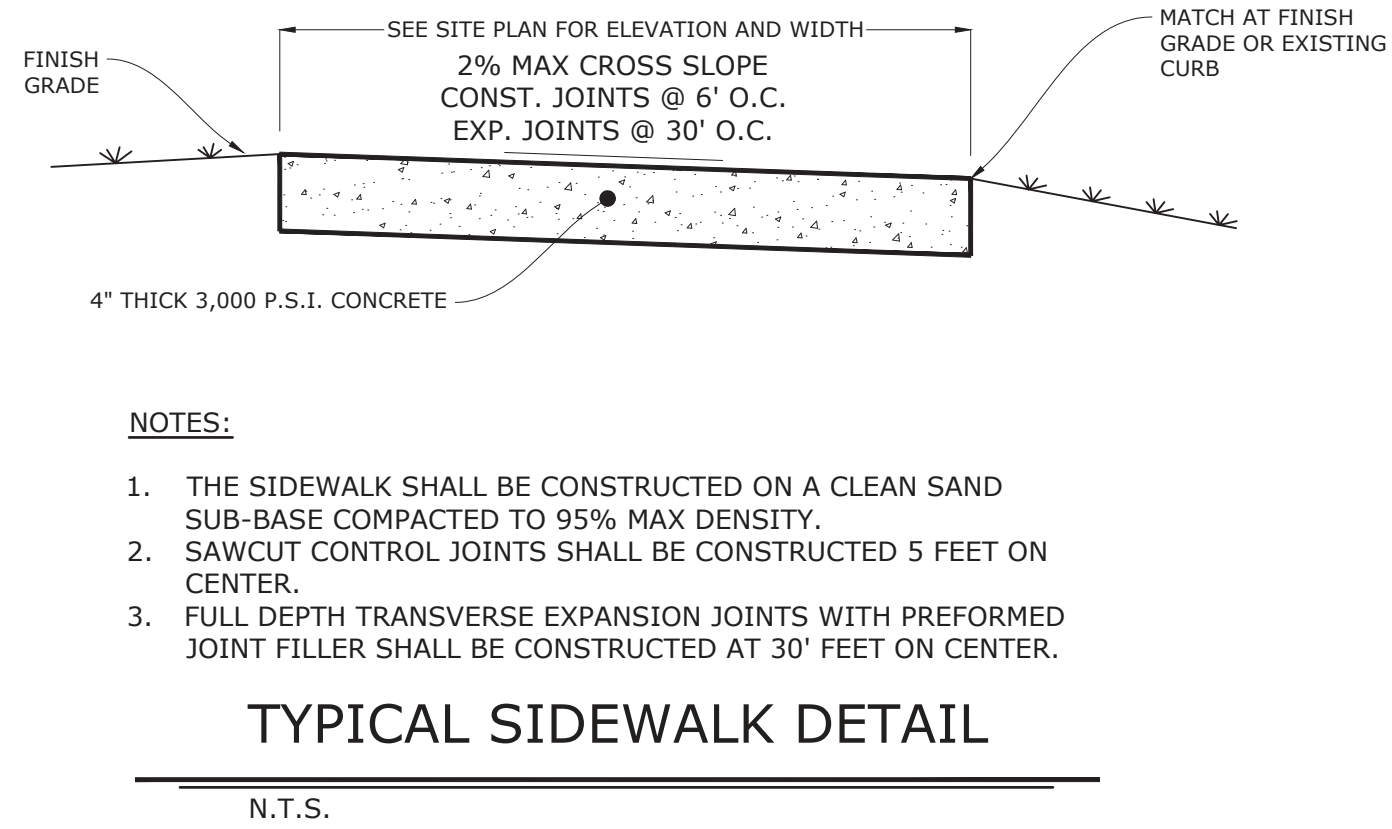
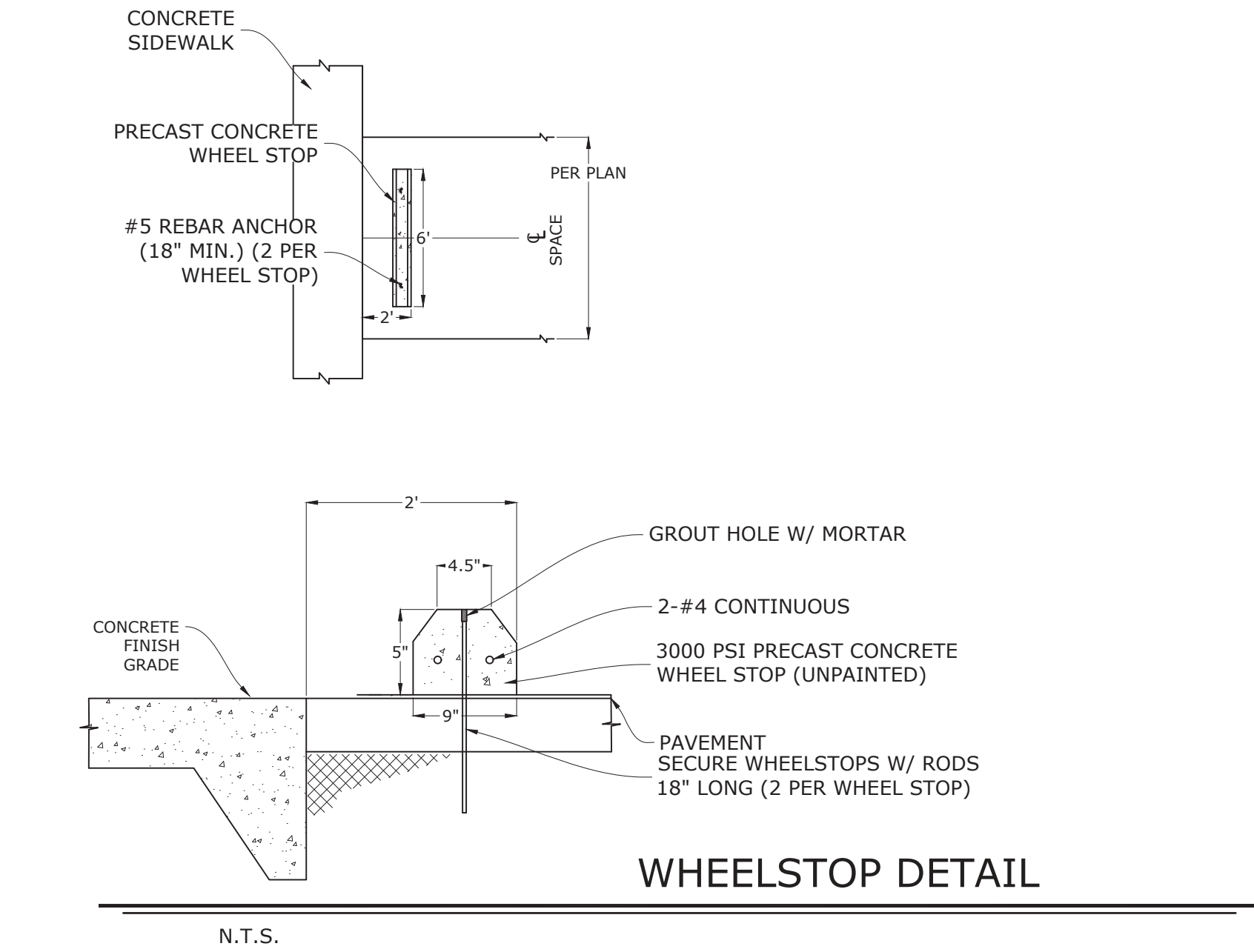
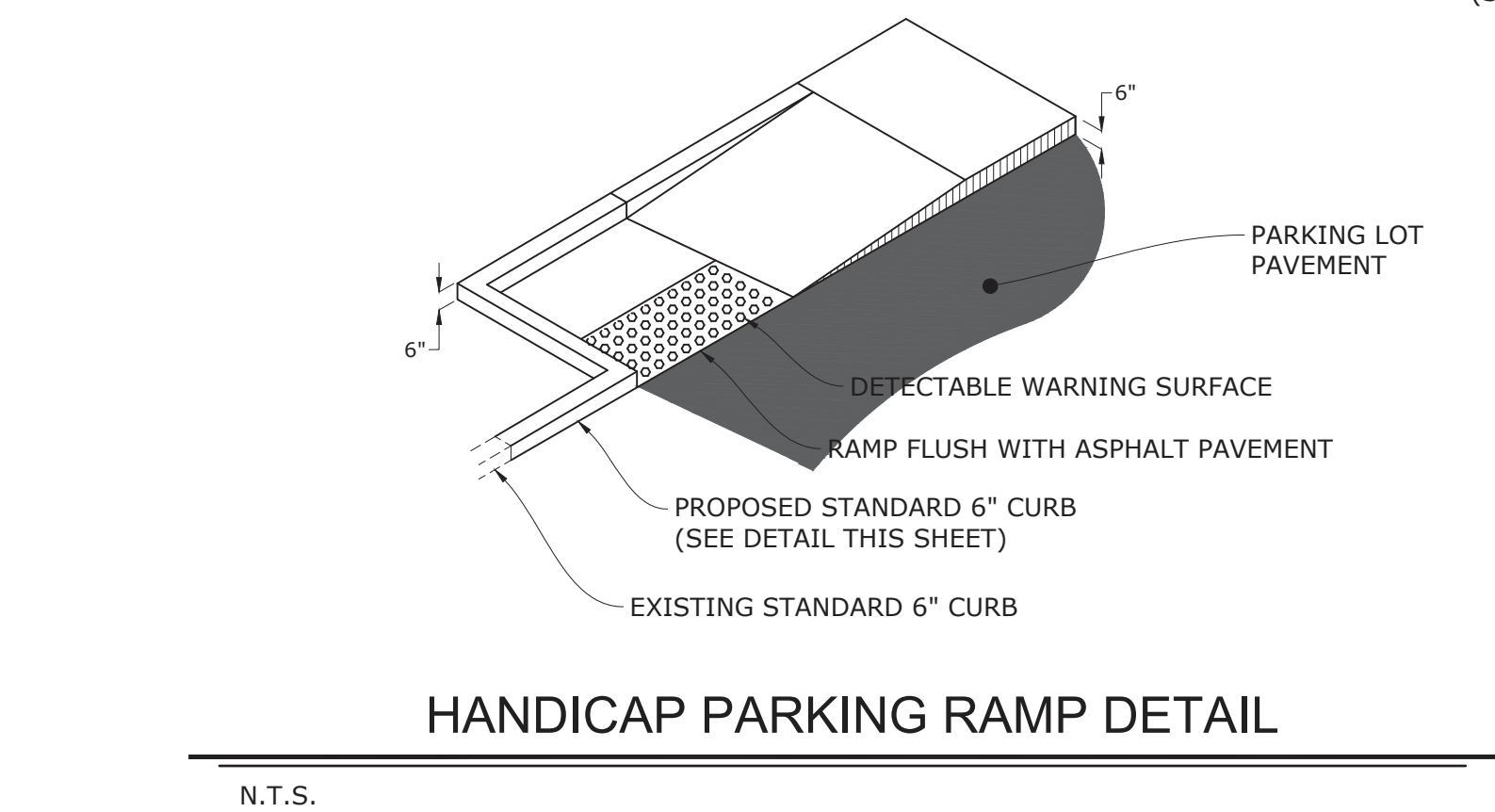
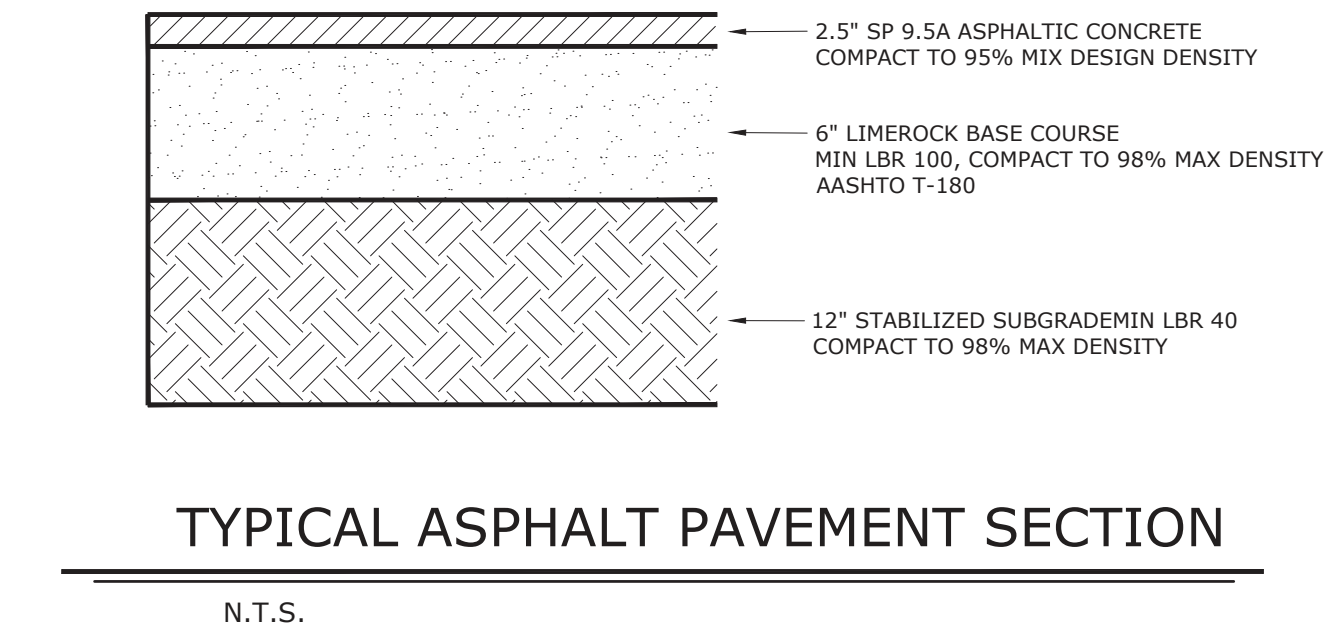
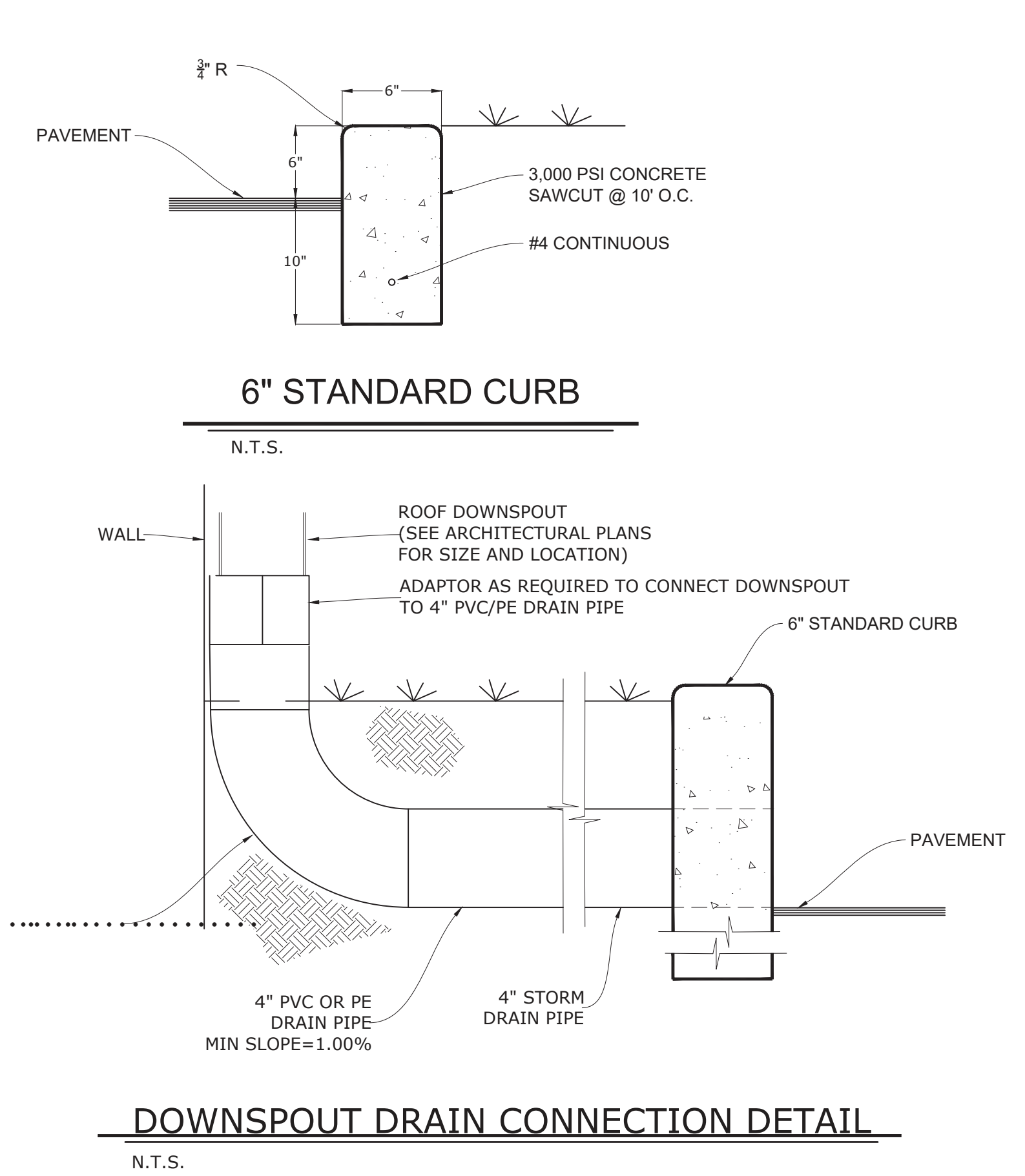


P:\Projects\14\14-0210.038 (TA38)\_Ichetucknee\_Restroom\CADD\14-0210.038 (TA38)\_UTILITIES PLAN.dwg Plotted: Aug. 14, 2023 -- 11:13am by Blennon





P:\Projects\14-0210.038\_(TA38)\_Ichetucknee\_Restroom\CADD\14-0210.038\_(TA38)\_CONSTRUCTION\_DETAILS.dwg Plotted: Aug. 14, 2023 -- 11:13am by Blennon



REVISION	DATE	SYMBOL	REVISION	DATE	SYMBOL
		A			B

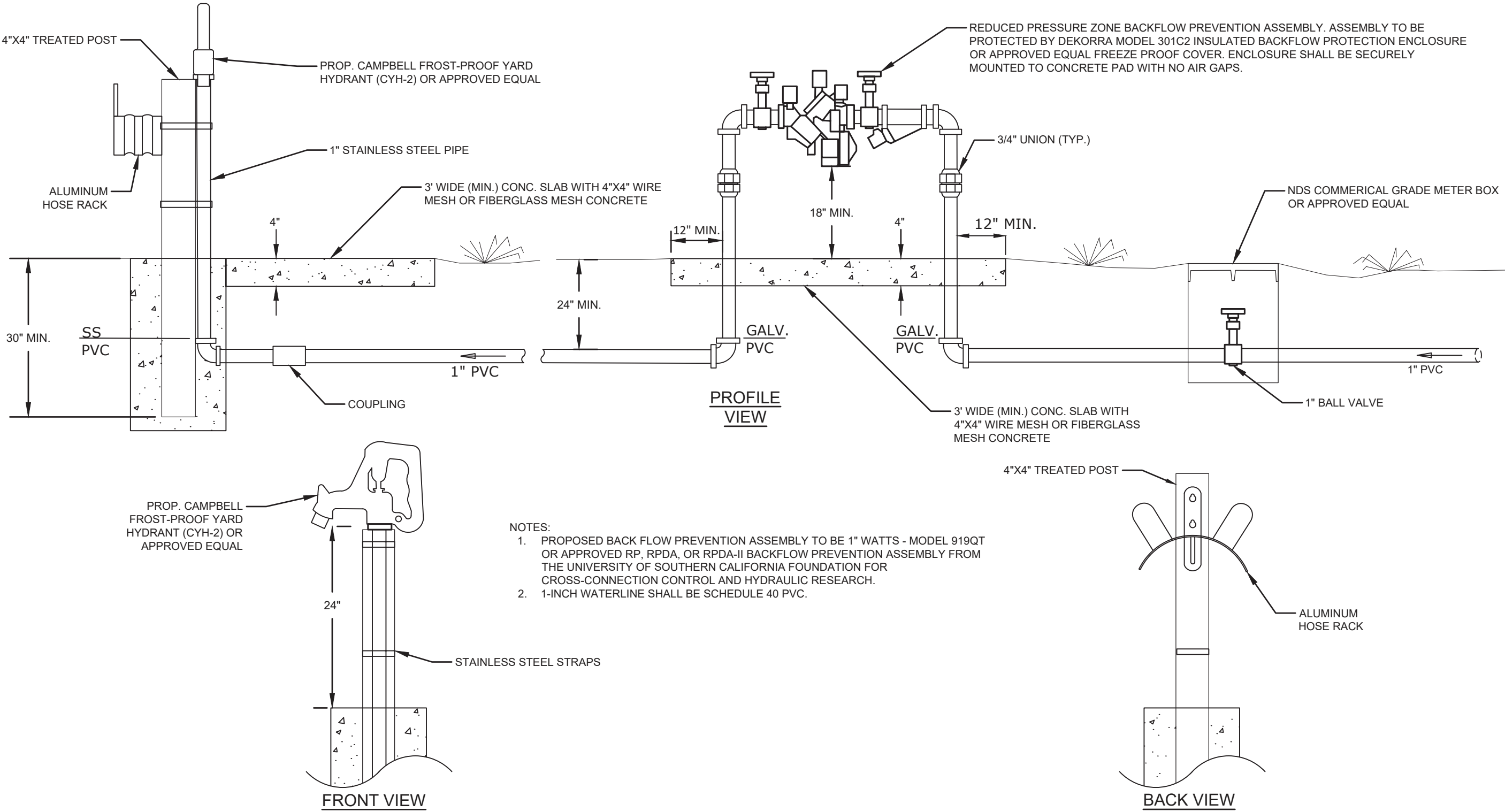
ISSUE DATE: 6/5/2023	DESIGNER : BRL	PROFESSIONAL REGISTRATION BENJAMIN R. LENNON, P.E. FLORIDA ENGINEER #78674
COMP. FILE NO.: 14-0210.038	DRAWN BY: RAJ	
STATE PROJECT NO.: 61363C	REVIEWED BY: RRC	
	Consultant :	

<b>DRMP</b> DESIGNERS & ARCHITECTS PLANNERS & ENGINEERS Certified Summit Lake Drive Tallahassee, Florida 32317 Phone: 850.822.9600 WWW.DRMP.COM	<b>Department of Environmental Protection</b> <b>Office of Operations</b> <b>Bureau of Design and Construction</b> 3800 Commonwealth Blvd., Tallahassee, FL 32399 (850) 425-2300
---	---

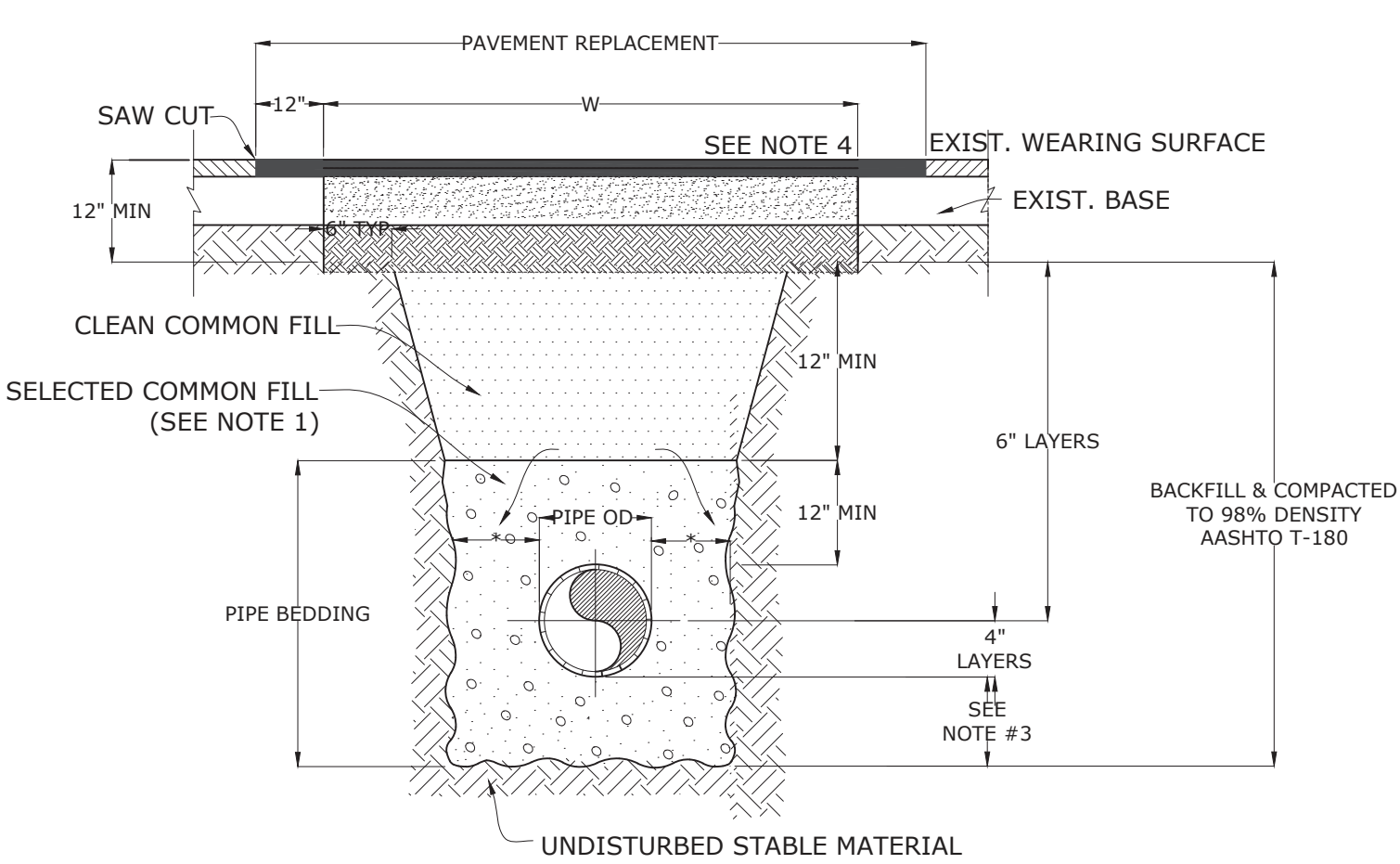
ICHETUCKNEE SPRINGS STATE PARK 12087 SOUTHWEST U.S. 27, FORT WHITE, FL 32038	CONSTRUCTION DETAILS	SHEET NO.
PROJECT TITLE ICHETUCKNEE SPRINGS STATE PARK REPLACE RESTROOM		C200



P:\Projects\14-0210.038\_ (TA38)\_Ichetucknee\_Restroom\CADD\14-0210.038\_ (TA38)\_CONSTRUCTION DETAILS.dwg Plotted: Aug. 14, 2023 -- 11:14am by Blennon



YARD HYDRANT & RPZ DETAILS  
N.T.S.



PAVEMENT REPLACEMENT	
DEPTH OF CUT	LIMIT OF PAVEMENT MAXIMUM WIDTH "W"
0'-8"	13'
8'-12'	21'
12'-16'	29'
16'-20'	32'

THIS TABLE IS FOR PAYMENT PURPOSES ONLY. SAFETY REQUIREMENTS MAY DICTATE INCREASED WIDTHS.

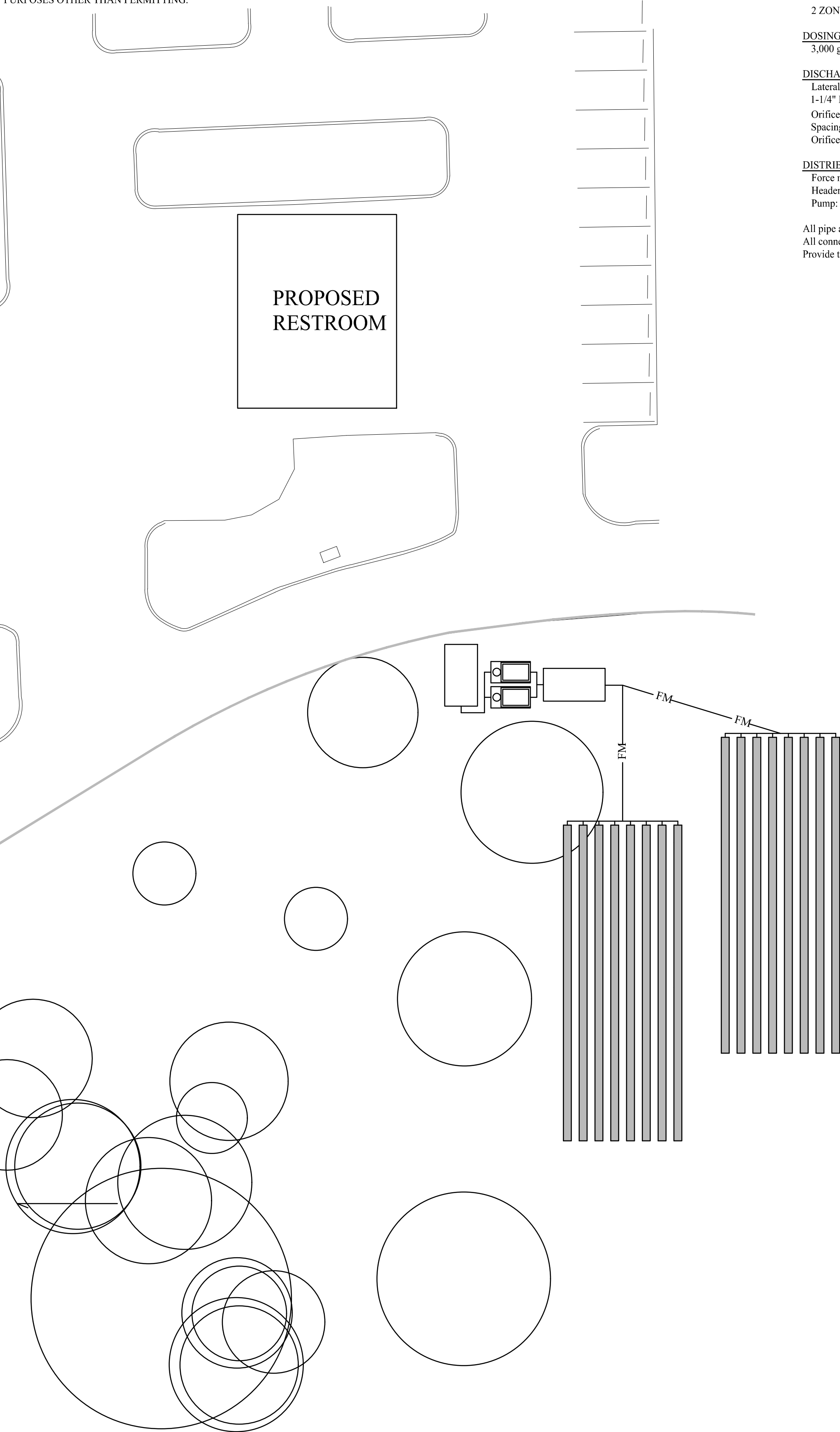
- NOTES:
- USE OF TYPE A-2 AND A-3 PIPE BEDDING TO BE DETERMINED IN THE FIELD BY THE ENGINEER.
  - 10" MAX. FOR PIPE DIAMETER LESS THAN 24"
  - 4" MAX. FOR PIPE 15" DIAMETER AND LESS
  - SEE TYPICAL ASPHALT SECTIONS SHEET C200.
  - BASE MATERIAL SHALL BE D.O.T. NO. 57, LIMEROCK, SHELL OR APPROVED EQUAL.
  - BACKFILL AASHTO M-145 SHALL BE PLACED IN LAYERS NOT TO EXCEED 6 INCHES. EACH LAYER SHALL BE THOROUGHLY TAMPED AND/OR ROLLED TO 98% AASHTO T-180 DENSITY.
  - TEMPORARY PATCHES WILL BE MAINTAINED SO AS TO PROVIDE A SMOOTH ALL WEATHER SURFACE AT ALL TIME. PERMANENT PATCH TO BE MADE AS SOON AS POSSIBLE.

OPEN CUT PAVEMENT REPAIR DETAIL  
N.T.S.

SHEET NO.	12087 SOUTHWEST U.S. 27, FORT WHITE, FL 32038	CONSTRUCTION DETAILS	DESIGNER : BRL DRAWN BY: RAJ REVIEWED BY: RRC	ISSUE DATE: 6/5/2023 COMP. FILE NO.: 14-0210.038 STATE PROJECT NO.: 61363C	SYMBOL A B	REVISION	DATE	SYMBOL C D	REVISION	DATE	Department of Environmental Protection Office of Operations Bureau of Design and Construction 3800 Commonwealth Blvd., Tallahassee, FL 32399 (850) 425-2300
PROJECT TITLE ICHETUCKNEE SPRINGS STATE PARK REPLACE RESTROOM											



DIMENSIONS ON THIS SITE PLAN ARE AS PROVIDED TO ENGINEER. ALL DIMENSIONS SHOULD BE CONFIRMED PRIOR TO CONSTRUCTION. ENGINEER ASSUMES NO LIABILITY FOR USE OF THESE DRAWINGS FOR PURPOSES OTHER THAN PERMITTING.



SCALE: 1" = 20'

Low Pressure Dosed CONSTRUCTION SPECIFICATIONS

DRAINFIELD SIZING 3000 gpd / 0.8 LTAR TRENCH = 3,750 s.f.

2 ZONES x 8 laterals @ 80' ea x 3' PT1 eq = 3,840 s.f.

DOSING Network Volume x 4 = 210 gallons/dose minimum  
3,000 gpd / 5 doses/day 600 gallons/dose OKAY

DISCHARGE SPECIFICATIONS

Lateral length and quantity 80 feet each lateral 8 laterals per DOSE  
1-1/4" Lateral Feed END  
Orifice size 1/2" facing up last hole faces down  
Spacing 8' apart; begin 6' from end  
Orifices per lateral 10 80 orifices per DOSE

DISTRIBUTION NETWORK

Force main 2" PVC  
Header, center feed 2" PVC  
Pump: Use Goulds WS07B

All pipe and fittings shall be Sch 40 PVC  
All connections shall be deburred, primed, and solvent welded per industry standard  
Provide threaded cleanouts at ends of laterals, extend access to surface. (See Detail)

OSTDS GENERAL INFORMATION:

NEW RESTROOM BUILDING 3000 gpd design

(2) TREATMENT UNIT: MicroFAST 1.5, no equals

DRAINFIELD SIZING: 3750 s.f. MIN

DRAINFIELD REDUCTION: NONE

SETBACK REDUCTIONS: NONE

LOT LOADING INCREASE: NONE

CERTIFICATION FOR MULTIPLE ATUs TREATING FLOW OVER 1500 gpd

I, Mark D Repasky, PE0036872, do hereby certify that the unit(s) used in this system design is capable of consistently meeting, at minimum, secondary treatment standards established by for CBOD<sub>5</sub> and TSS established in Rule 62-6.025(12)(a), FAC.

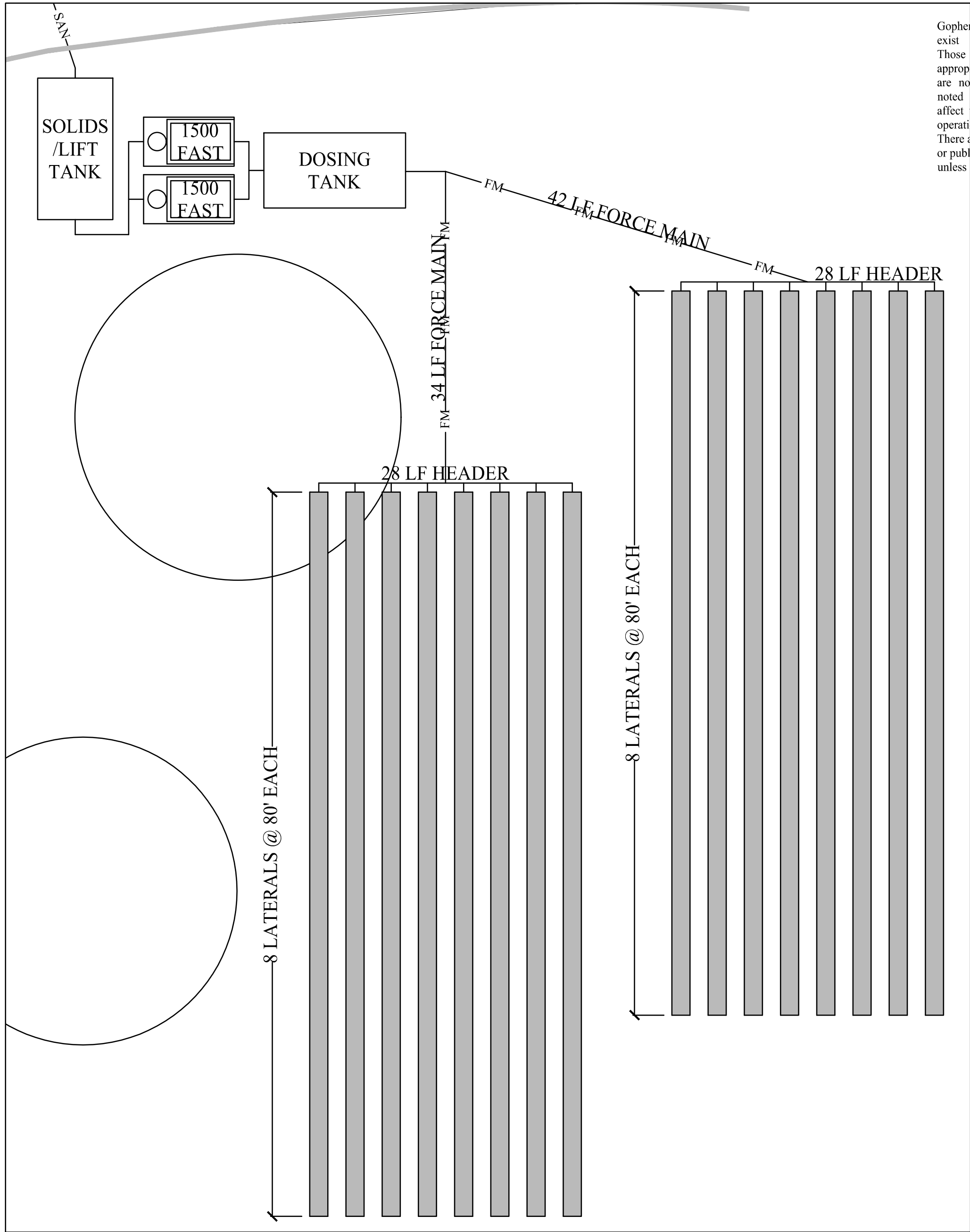
In addition, the following requirements shall also be met:

The system installation shall be inspected and approved by the design Engineer (62-6.003(2)(c)1., FAC) prior to use of the system.

The owner or lessee of a system shall continuously comply with the applicable safety, maintenance and operational requirements of 62-6.025(2). FAC as well as manufacturer and design engineer recommendations.

This system requires a maintenance agreement with a permitted aerobic unit maintenance entity which has at least a Class D state certified operator who has been certified under the provisions of Chapter 62-602, FAC.

Sampling for effluent quality reports for CBOD<sub>5</sub> and suspended solids shall be collected at least semi-annually and such samples shall be analyzed by a department-approved laboratory.

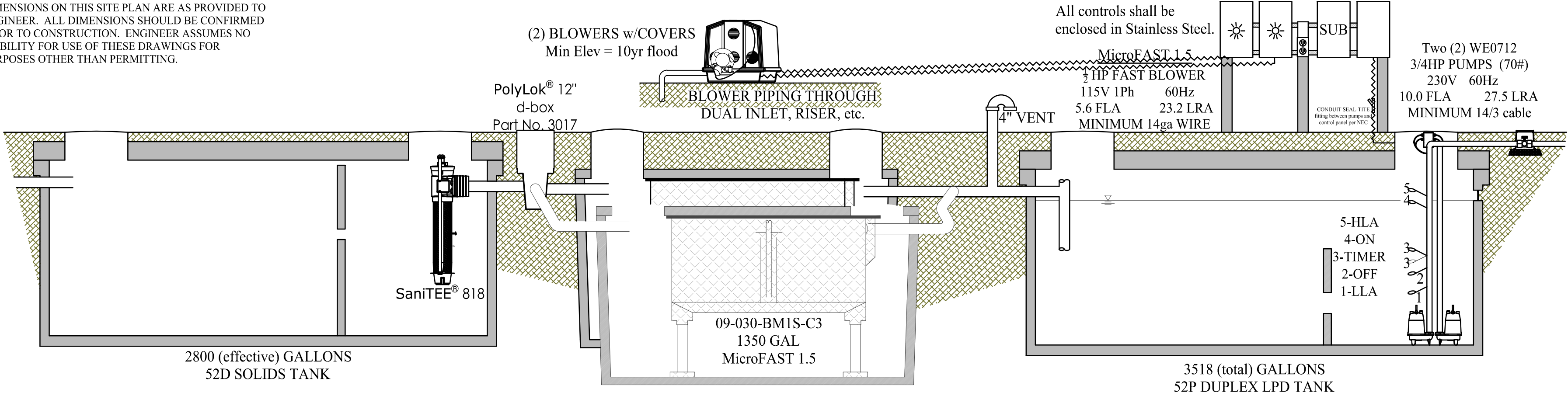


Gopher tortoise burrows likely exist in the drainfield area. Those will need to be appropriately relocated. There are no other pertinent features noted near the site that would affect the system installation or operation. There are no known onsite wells or public wells within 200 feet unless shown.

DESIGNER :	ISSUE DATE: 9/28/2022	SYMBOL	REVISION	DATE
DRAWN BY:	COMP. FILE No: 14-0210.038	A		
REVIEWED BY:	STATE PROJECT No: 61363C	B		
Consultant :				
19 OCTOBER 2022				
12087 SOUTHWEST U.S. 27, FORT WHITE, FL 32038		MARK D. REPASKY, PE0036872, 88011699 WASTEWATER TECHNOLOGIES, INC. 1625 SUMMIT LAKE DRIVE TALLAHASSEE, FL 32301 850-5611111 850-585-1832 fax		
SHEET TITLE WASTEWATER TREATMENT SYSTEM SITE PLAN		PROJECT TITLE ICHETUCKNEE SPRINGS STATE PARK ADD RESTROOM		
SHEET NO. C202		Department of Environmental Protection Office of Operations Bureau of Design and Construction 3800 Commonwealth Blvd., Tallahassee, FL 32399 (850) 425-2300		

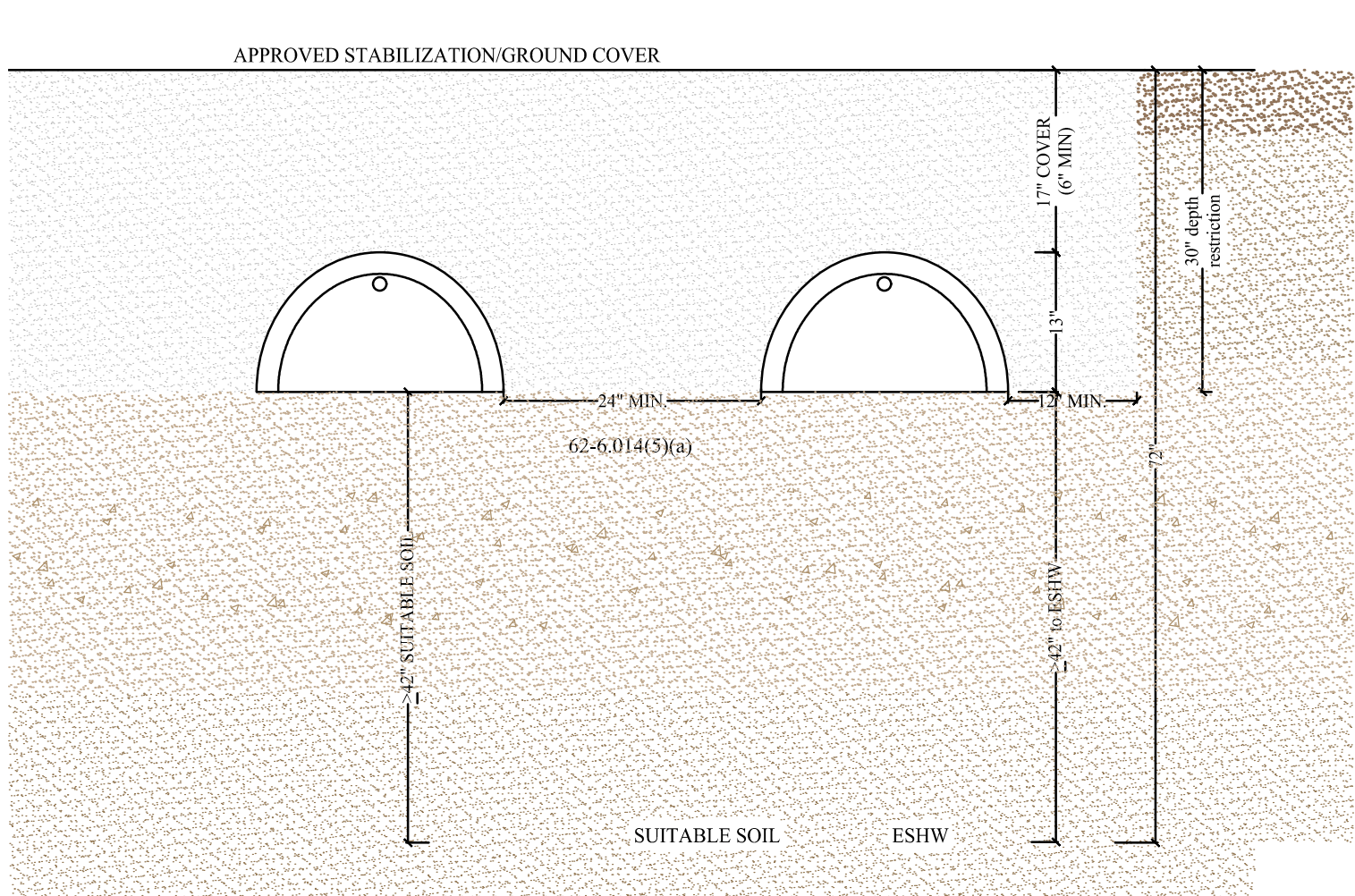


DIMENSIONS ON THIS SITE PLAN ARE AS PROVIDED TO ENGINEER. ALL DIMENSIONS SHOULD BE CONFIRMED PRIOR TO CONSTRUCTION. ENGINEER ASSUMES NO LIABILITY FOR USE OF THESE DRAWINGS FOR PURPOSES OTHER THAN PERMITTING.



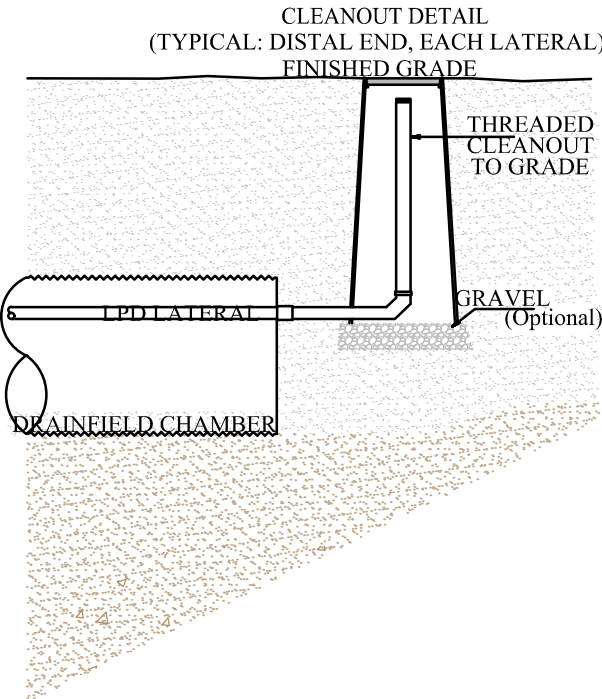
### TANK PROFILES

$\frac{3}{8}" = 1'$



### DRAINFIELD SECTION

$\frac{3}{8}" = 1'$



### CERTIFICATION FOR MULTIPLE ATUs TREATING FLOW OVER 1500 gpd

I, Mark D Repasky, PE0036872, do hereby certify that the unit(s) used in this system design is capable of consistently meeting, at minimum, secondary treatment standards established by for CBOD<sub>5</sub> and TSS established in Rule 62-6.025(12)(a), FAC.

In addition, the following requirements shall also be met:

The system installation shall be inspected and approved by the design Engineer (62-6.003(2)(c)1., FAC) prior to use of the system.

The owner or lessee of a system shall continuously comply with the applicable safety, maintenance and operational requirements of 62-6.025(2). FAC as well as manufacturer and design engineer recommendations.

This system requires a maintenance agreement with a permitted aerobic unit maintenance entity which has at least a Class D state certified operator who has been certified under the provisions of Chapter 62-602, FAC.

Sampling for effluent quality reports for CBOD<sub>5</sub> and suspended solids shall be collected at least semi-annually and such samples shall be analyzed by a department-approved laboratory.

### CONTROLS

Electrical conduit and effluent dosing pipe is water tight and exits the tank through the tank outlet with a water-tight seal, or through the riser wall, above ESHW, with a soil-tight seal, or through an access port in the tank lid installed by manuf. with a water-tight seal per 62-6.013(9)(c), FAC.

TIMER is allowed as part of this design submitted by this Engineer,

per 62-6.013(9)(d)1., FAC

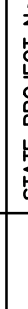
Control panels shall be as close as practicable to equipment served.

Alarm shall be located in a conspicuous location. When outdoors, alarm shall be waterproof and specified by manufacturer for outdoor use per 62-6.013(9)(d)2, FAC

\*\*\*Controls enclosures shall be STAINLESS STEEL\*\*\*

19 OCTOBER 2022		MARK D. REPASKY, PE00036872, SS011099 WASTEWATER TECHNOLOGIES, Inc. CUT504 SN0081554 3096 S ADAMS STREET, TALLAHASSEE, FL 32301 850-566-1111 850-565-1832 fax	
12087 SOUTHWEST U.S. 27, FORT WHITE, FL 32038		PROJECT TITLE	
SHEET TITLE		PROJECT TITLE	
WASTEWATER TREATMENT SYSTEM DETAILS		ICHETUCKNEE SPRINGS STATE PARK ADD RESTROOM	
SHEET NO.		C203	

DESIGNER :	ISSUE DATE: 9/28/2022	SYMBOL	REVISION	DATE
DRAWN BY:	COMP. FILE No.: 14-0210.038	A		
REVIEWED BY:	STATE PROJECT No.: 61363C	B		
Consultant :				

**DRMP**  
DESIGNER & ENGINEER  
1625 Summit Lake Drive  
Tallahassee, FL 32301  
Phone: 850.562.9600 WWW.DRMP.COM

**Department of Environmental Protection**  
**Office of Operations**  
**Bureau of Design and Construction**  
3800 Commonwealth Blvd., Tallahassee, FL 32399 (850) 425-2300

Department of Environmental Protection  
Office of Operations  
Bureau of Design and Construction  
3800 Commonwealth Blvd., Tallahassee, FL 32399 (850) 425-2300



# INDEX OF DRAWINGS

A.C.	AIR CONDITIONED	JCT.	JUNCTION
ACP	ACOUSTICAL PANEL	JT.	JOINT
A.C.T.	ACOUSTICAL TILE	M.	MOTOR
A.F.F.	ABOVE FINISH FLOOR	MAINT.	MAINTENANCE
A.H.U.	AIR HANDLING UNIT	M.A.X.	MAXIMUM
AJ	ACOUSTICAL JOINT	M.D.P.	MAIN DISTRIBUTION PANEL
ALT.	ALTERNATE	MECH.	MECHANICAL
ALUM.	ALUMINUM	MTL.	METAL
AMP. A	AMPERES	MIN.	MINIMUM
AN	ANODIZED	MISC.	MISCELLANEOUS
APPROX.	APPROXIMATELY	MO	MASONRY OPENING
	ARCHITECTURAL	MOD.BIT.	MODIFIED BITUMEN
		MR	MOISTURE RESISTANT
B	BOTTOM	M.T.	METAL THRESHOLD
BD.	BOARD	MTD.	MOUNTED
BLDG.	BUILDING	MTG.	MOUNTING
BLK	BLOCK		
BM.	BEAM	N	NORTH
BAL.	BALANCE	N.A.	NOT APPLICABLE
BRG.	BEARING	N.I.C.	NOT IN CONTRACT
B.T.U.	BRITISH THERMAL UNIT	NO	NUMBER
		NTS	NOT TO SCALE
C	CONDUIT		
CAB.	CABINET	O.C.	ON CENTER
CAP.	CAPACITY	O.C.E.W.	ON CENTER EACH WAY
C/B	CIRCUIT BREAKER	O.D.	OUTSIDE DIAMETER
C.D.	CEILING DIFFUSER	O.H.	OVERHEAD
CL	CENTER LINE	OPNG.	OPENING
CER.	CERAMIC	OPPOSITE	OPPOSITE
C.F.M.	CUBIC FEET PER MINUTE		
CIRC.	CIRCULATING	P. LAM	PLASTIC LAMINATE
C.I.	CAST IRON	PART.	PARTITION
CKT.	CIRCUIT	PC	PRECAST CONCRETE
CL	CLEAR	PER.	PERIMETER
CLG.	CEILING	PL	PLATE
C.M.U.	CONCRETE MASONRY UNIT	PLBG.	PLUMBING
C.O.	CLEAN OUT	PLYWD	PLYWOOD
CPT	CARPET	PNL.	PANEL
COL.	COLUMN	PSF	POUNDS/SQUARE FOOT
COMP.	COMPRESSOR	PSI	POUNDS/SQUARE INCH
CONC.	CONCRETE	PSGT.	POUNDS/SQUARE INCH GAGE
COND.	CONDENSATE	P.T.	PRESSURE TREATED
CONN.	CONNECTION	PT	PAINT
CONT.	CONTINUOUS	PTD	PAINTED
CJ	CONTROL JOINT		
CT	CERAMIC TILE	QT	QUARRY TILE
C.T.B.	CERAMIC TILE BASE	QTR.	QUARTER
CJ	CONDENSING UNIT	QUAN.	QUANTITY
DET	DETAIL	R	RADIUS
DIA. D.	DIAMETER	R.A.	RETURN AIR
DIFF.	DIFFUSER	RAD.	RADIUS
DIM.	DIMENSION	R.A.G.	RETURN AIR GRILLE
DISC.	DISCONNECT	R.A.R.	RETURN AIR REGISTER
DIST.	DISTRIBUTION	R.	ROUND
D.J.	DUMMY JOINT	R.D.	ROOF DRAIN
DN.	DOWN	RDY.	READY
DR.	DRAIN	RECIRC.	RECIRCULATING
D.S.	DOWNSPOUT	RECP.	RECEPTACLE
DWG(S)	DRAWING(S)	REG.	REGISTER
		REINF.	REINFORCING
E	EAST	REQ.	REQUIRED
EA.	EACH	RET.	RETURN
E.C.	EMPTY CONDUIT	R.G.	RETURN GRILLE
E.F.	EXHAUST FAN	RM.	ROOM
EL	FLOOR ELEVATION	R.O.	ROUGH OPENING
ELEV	ELEVATION	R.P.M.	REVOLUTION/MINUTE
EQ	EQUAL	RWL	RAIN/WATER /FAPDR

# GENERAL NOTES

THE PLANS ARE FOR INFORMATIONAL PURPOSES ONLY. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND ALL CONDITIONS. IF THE CONTRACTOR IS UNABLE TO INTERPRET THE CONSTRUCTION DOCUMENTS, HE/SHE IS RESPONSIBLE FOR REQUESTING CLARIFICATION IN WRITING TO THE ARCHITECT. IF THE CONTRACTOR PROCEEDS WITH ANY WORK BEFORE OBTAINING CLARIFICATION, HE/SHE SHALL BE HELD RESPONSIBLE FOR ALL DEFICIENCIES ASSOCIATED THERE.

DIMENSIONS ARE TAKEN FROM THE FACE OF EXISTING NON AND LOAD BEARING INTERIOR WALLS AND FROM THE FACE OF STUD FOR NEW WALLS.

BEFORE SUBMITTING FOR WORK OR BEGINNING WORK, THE CONTRACTOR WILL BE HELD TO HAVE EXAMINED THE PREMISES AND SATISFIED HIMSELF/HERSELF AS TO THE EXISTING CONDITIONS UNDER WHICH HE/SHE WILL BE OBLIGATED AND COMPLETE THE WORK UNDER THE CONTRACT. NO ALLOWANCE WILL BE MADE SUBSEQUENTLY IN THIS CONNECTION ON BEHALF OF THE CONTRACTOR FOR ANY ERRORS OR NEGLIGENCE ON HIS/HER PART.

CONTRACTOR SHALL ERECT AND MAINTAIN ALL REASONABLE SAFEGUARDS FOR SAFETY AND HEALTH INCLUDING POSTING DANGER SIGNS, AND OTHER WARNING AGAINST HAZARDS, AS WELL AS PROMULGATING SAFETY REGULATIONS. CONTRACTOR SHALL PROVIDE SAFETY PRECAUTIONS AND BARRICADES FOR PEDESTRIANS AT CONSTRUCTION, VEHICLE ACCESS AND EGRESS LOCATIONS.

THE CONTRACTOR SHALL SUBMIT A COMPLETE DETAILED CONSTRUCTION SCHEDULE AND PLAN PRIOR TO THE PRE-CONSTRUCTION CONFERENCE.

CONTRACTOR SHALL BE RESTRICTED TO AREAS SPECIFIED BY OWNER FOR ON SITE STORAGE OF CONSTRUCTION MATERIALS. COMPARTMENT TRAILERS OR SIMILAR PROTECTIVE STORAGE FACILITIES MAY BE UTILIZED ON SITE TO SECURE ALL EQUIPMENT AND ITEMS REMOVED DURING PROJECT WORK. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION AND SECURITY OF ALL EQUIPMENT AND ITEMS REMOVED.

CONTRACTOR SHALL COORDINATE WITH LOCAL ELECTRICAL POWER AND WATER UTILITY PROVIDERS TO INSTALL NEW SERVICE TO THE SITE PRIOR TO THE START OF CONSTRUCTION.

ALL WORK SHALL COMPLY WITH APPLICABLE OSHA AND EPA REGULATIONS AND GUIDELINES.

INSTALL WORK IN ACCORDANCE WITH THE CODES LISTED ON THE INDEX SHEET. IMMEDIATELY NOTIFY THE ARCHITECT WHEN CONFLICTS OCCUR BETWEEN CODES AND BETWEEN THE CONSTRUCTION DOCUMENTS.

CONTRACTOR SHALL FURNISH AS-BUILT DRAWINGS TO THE ARCHITECT AT COMPLETION OF THE CONSTRUCTION. CHANGES SHALL BE INDICATED CLEARLY BY MECHANICAL DRAFTING METHODS.

CONTRACTOR SHALL MAINTAIN A CLEAN WORK PREMISES AT ALL TIMES AND SHALL CLEAN CONSTRUCTION SITE OF ALL DEBRIS DAILY.

CONTRACTOR SHALL TAKE CARE NOT TO DAMAGE EXISTING SURFACES OUTSIDE THE SCOPE OF WORK AND SHALL BE RESPONSIBLE FOR RETURNING DAMAGED AREAS (MATERIALS, FINISHES, LANDSCAPE, ETC.) TO THEIR ORIGINAL CONDITION. ALL DISTURBED AREAS OF SOIL TO BE SODDED. ALL PLANTING REPLACEMENT TO BE GUARANTEED FOR ONE YEAR.

CONTRACTOR SHALL ERECT ALL SAFE GUARDS TO PROTECT ADJACENT AREAS. REMOVE DEBRIS FROM JOB SITE DAILY AND ADHERE TO ENVIRONMENTAL REGULATIONS.

WHERE A NOTE IS SHOWN FOR ONE CONDITION IT SHALL APPLY TO ALL SIMILAR AND LIKE CONDITIONS.

CONTRACTOR SHALL PATCH ALL SPALLED AND ROUGH CONCRETE FLOOR SURFACES TO PROVIDE A CONTINUOUS LEVEL CONCRETE SURFACE.

A DISCOVERY OF ASBESTOS: ALL MATERIAL KNOWN TO CONTAIN ASBESTOS & THAT WILL BE IMPACTED BY DEMOLITION & CONSTRUCTION ACTIVITIES INCLUDED IN THE PROJECT SCOPE OF WORK HAVE BEEN REMOVED. IN THE EVENT CONCEALED CONDITIONS ARE ENCOUNTERED, NOTIFY THE ARCHITECT PRIOR TO PROCEEDING FURTHER WITH WORK.

A KNOX BOX SHALL BE INSTALLED ON THE EXTERIOR OF THE BUILDING WITHIN 5' OF THE MAIN ENTRANCE DOOR. MOUNTING HEIGHT TO BE NOT GREATER THAN 5' AFF. KEYS TO BUILDING, PHASE I AND PHASE II ELEVATOR RECALL SHALL BE PROVIDED FOR PLACEMENT IN KNOX BOX. REQUIRED DUE TO SPRINKLER CONTROL VALVES AND/OR FIRE ALARM CONTROL PANEL LOCATED IN THIS SPACE OR THE BUILDING IS PROVIDED WITH ELEVATOR RECALL. **NFPA 1, 16.2.2.1, FLORIDA 2016 EDITION.**

A MINIMUM 6" ADDRESS NUMBERS SHALL BE LOCATED ON THE EXTERIOR OF THE BUILDING. NUMBERS TO BE PLAINLY VISIBLE FROM THE STREET OR OTHER ELEVATIONS AND CONTRAST WITH BACKGROUND. THIS MAY BE WAIVED IF ADDRESS NUMERIC IS ILLUMINATED ON A SIGN SEPARATE FROM THE BUILDING THAT IS VISIBLE FROM THE STREET. **NFPA 1, 10.1.1.1, 10.1.1.2 & 10.1.1.7, 10.1.1.8, FLORIDA 2016 EDITION**

THE ELEVATION OF THE FLOOR SURFACE ON BOTH SIDES OF ANY DOOR SHALL NOT VARY BY MORE THAN 1/2" INCH FOR A DISTANCE NOT LESS THAN THE WIDTH OF THE WIDEST LEAF. PLEASE SHOW ON PLANS. **NFPA 101, SECTION 7.2.1.3.1, FLORIDA 2018 EDITION**

CONTRACTOR SHALL MAKE AVAILABLE TO THE BUILDING INSPECTOR DOCUMENTATION NECESSARY TO VERIFY THAT ALL EXTERIOR ENVELOPE COMPONENTS REQUIRING PRODUCT APPROVAL PER FS 553.842 ARE IN COMPLIANCE WITH PRODUCT APPROVAL INSTALLATION REQUIREMENTS

THE FIRE ALARM CONTRACTOR SHALL SUBMIT PLANS FOR EVALUATION AND APPROVAL PRIOR TO COMMENCEMENT OF NEW WORK\*. FIRE PROTECTION IS NOT PART OF THE BUILDING PERMIT EVALUATION.

ALL GUARDRAILS SHALL RESIST A CONCENTRATED LOAD OF 250 POUNDS; **2020 FBC-B, SECTION 1607.8.1 & 1607.8.1.1**

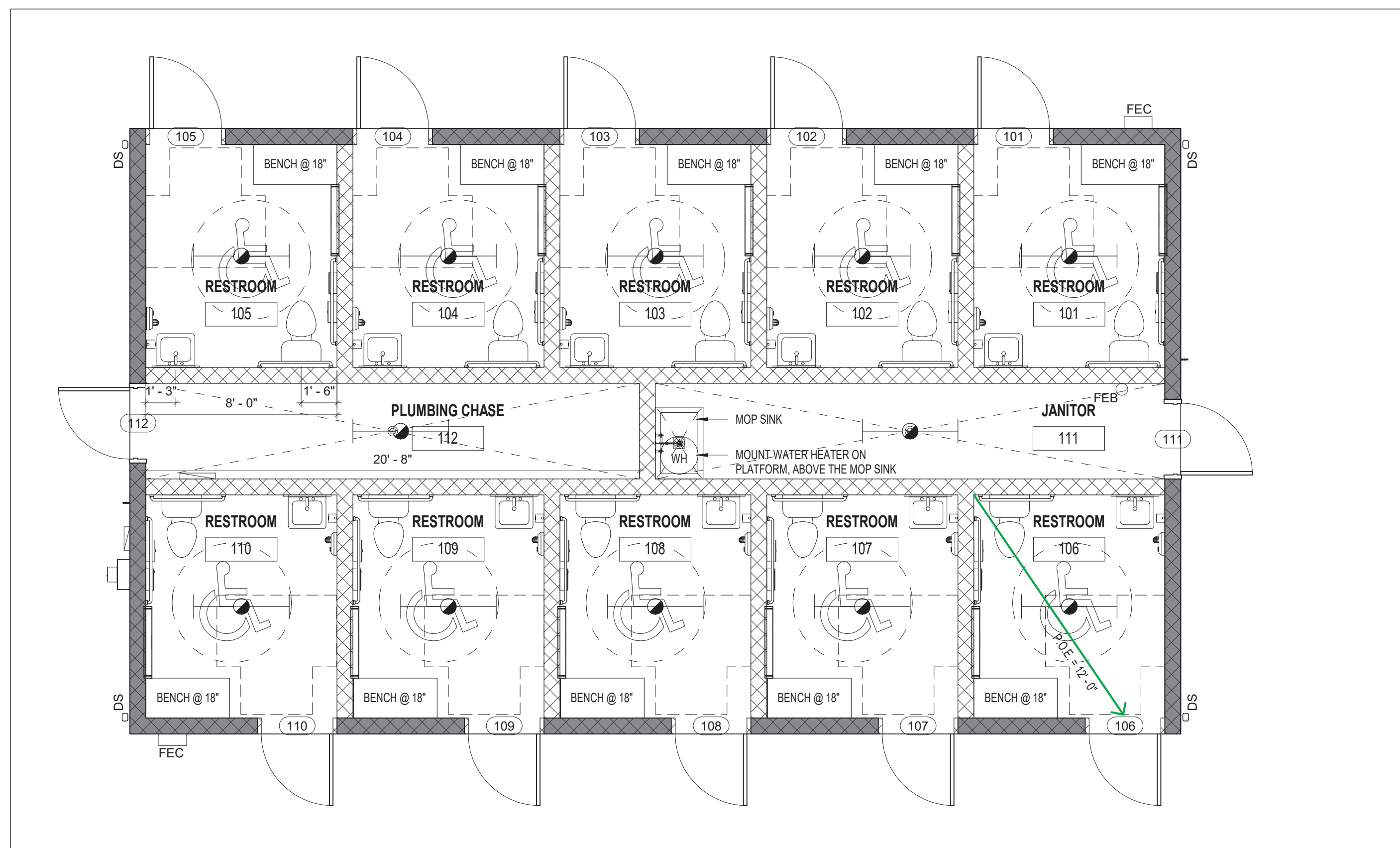
E.W.C.	ELECTRIC WATER COOLER	S.A.T.	SUPPLY AIR
EX.H.	EXHAUST	S.A.T.	SUSPENDED ACOUSTICAL TILE
EXP.	EXPANSION	SCH.	SCHEDULE
E.J.	EXPANSION JOINT (EJ)	SECT.	SECTION
E.W.	EACH WAY	SERV.	SERVICE
EXT.	EXTERIOR	S.G.	SUPPLY GRILLE
EXIST.	EXISTING	SHT.	SHEET
		SP	STAND PIPE
F.A.	FIRE ALARM	SPEC.	SPECIFICATIONS
F.B.C.	FLORIDA BUILDING CODE	SQ. FT.	SQUARE FEET
F.C.	FLEXIBLE CONNECTION	SRB	STRAIGHT RESILIENT BASE
F.D.	FLOOR DRAIN	SS	STAINLESS STEEL
F.E.	FIRE EXTINGUISHER & BRACKET	STL	STEEL
F.E.C.	FIRE EXTINGUISHER & CABINET	STOR.	STORAGE
F.H.C.	FIRE HOSE CABINET W/ EXTINGUISHER	STRUC.	STRUCTURAL
FIN.	FINISH	SUSP.	SUSPENDED
FL.	FLOOR	SW.	SWITCH
FP	FIRE PROOFING		
FT.	FOOT-FEET		
FTG.	FOOTING		
FVC	FIRE VALVE CABINET	TEL.	TELEPHONE
		TEMP.	TEMPERATURE
GA.	GAUGE	THK.	THICK
GAL.	GALLON	THD.	THRESHOLD (THRESH)
GALV.	GALVANIZED	T.O.W.(B)	TOP OF WALL (BEAM)
G.F.E.	GOVERNMENT FURNISHED EQUIPMENT	TOIL.	TOILET
GL.	GLASS	TYP.	TYPICAL
GND.	GROUND		
G.P.M.	GALLONS PER MINUTE	UNO.	UNLESS NOTED OTHERWISE
GR.	GRILLE	URINAL	URINAL
GWB	GYPSUM WALLBOARD	V.	VOLT

PROVIDE SIGNAGE  
MEETING F.A.C.  
69A-60.0081  
REQUIREMENTS.

SIGNAGE SHALL  
INDICATE LIGHT-FRAME  
TRUSS-TYPE ROOF  
FRAMING WITH 8"x8"  
REFLECTIVE RED  
MALTESE CROSS -  
VERIFY SPECIFIC  
LOCATIONS WITH STATE  
FIRE MARSHAL  
INSPECTOR - SIGN  
TYPICALLY SHALL BE  
LOCATED WITHIN 24" TO  
THE LEFT OF THE MAIN  
ENTRY AND BETWEEN  
4'-0" AND 6'-0" A.F.F.

## 100% CONTRACT DOCUMENTS









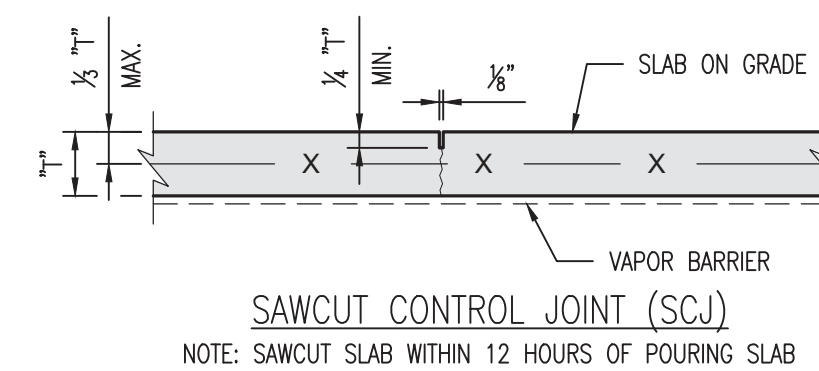
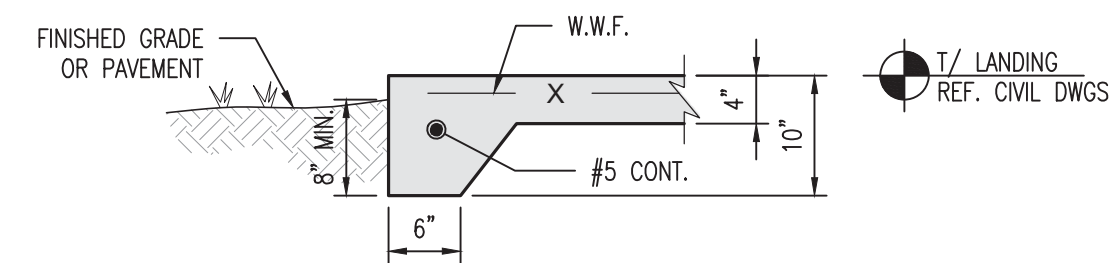
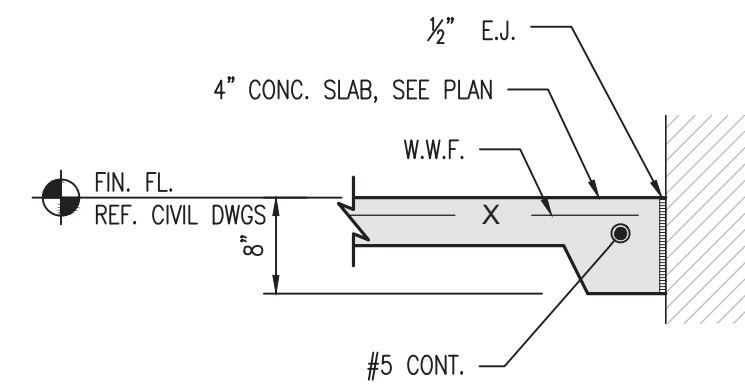
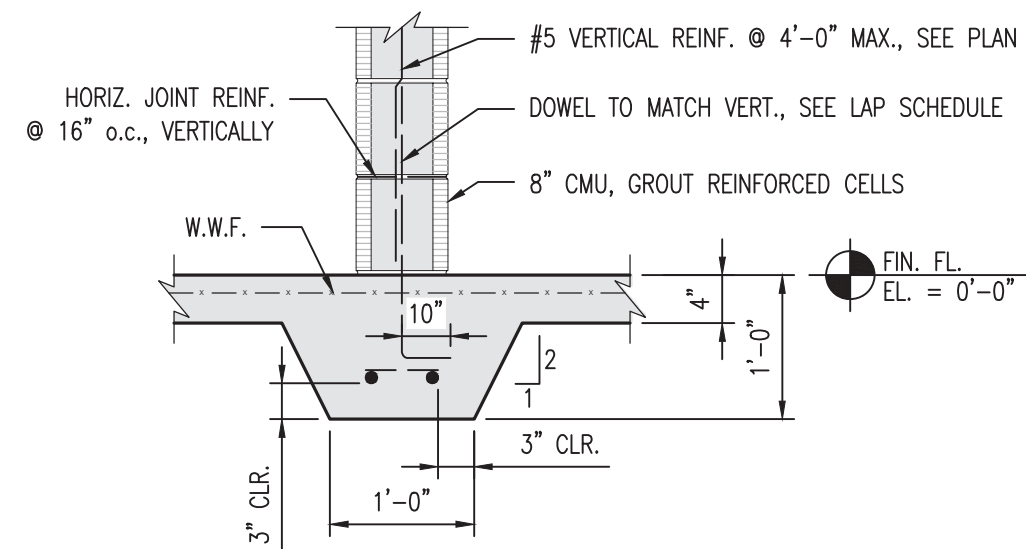
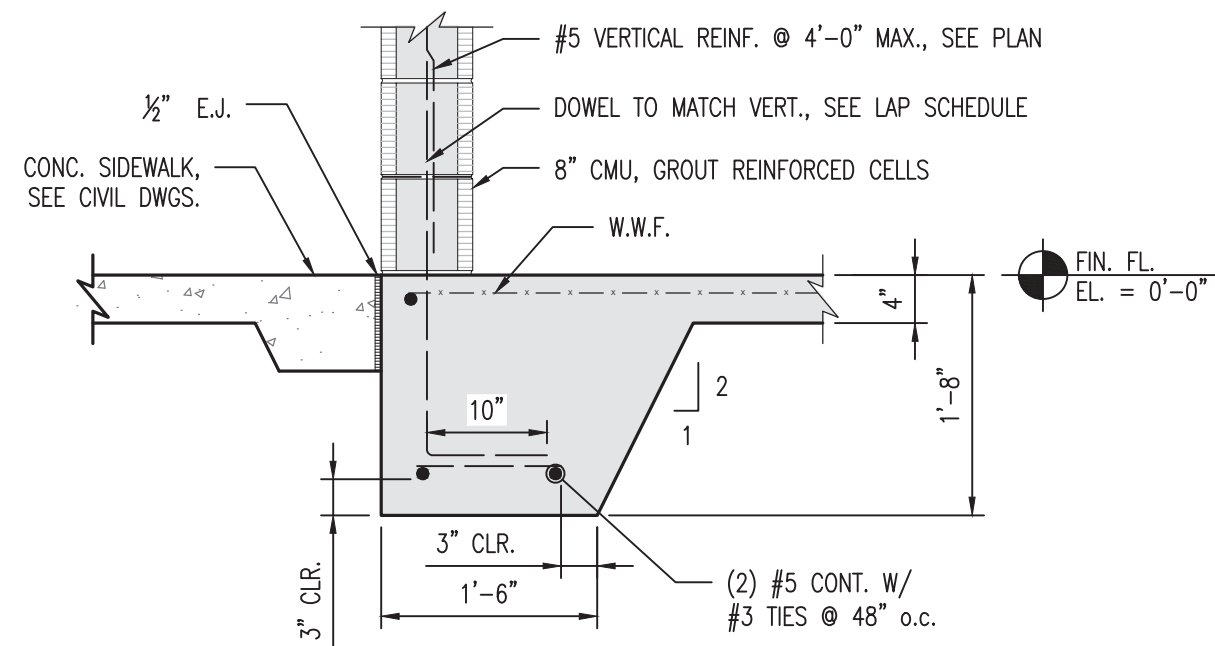




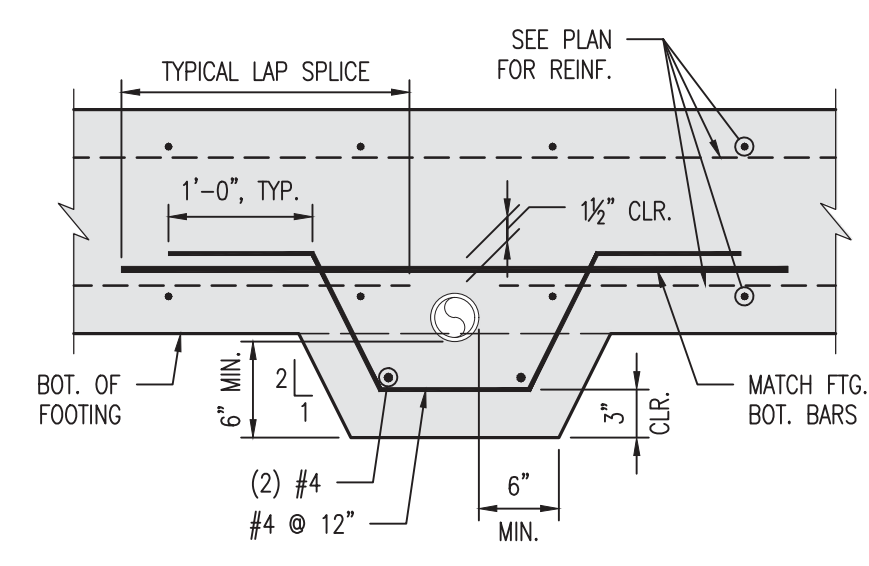
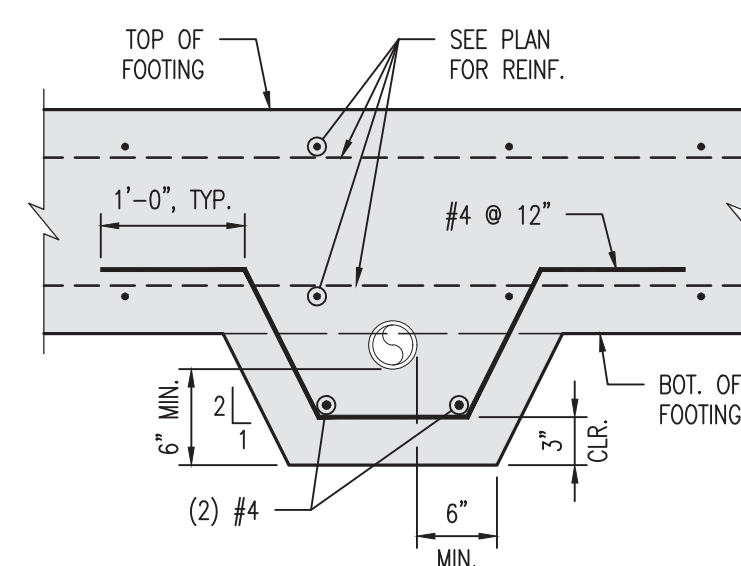
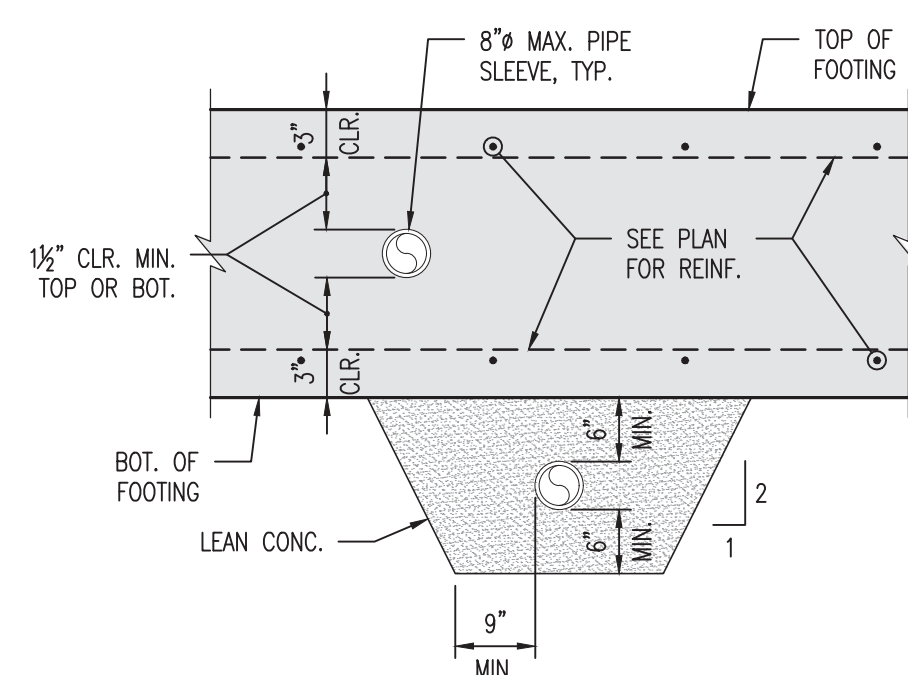
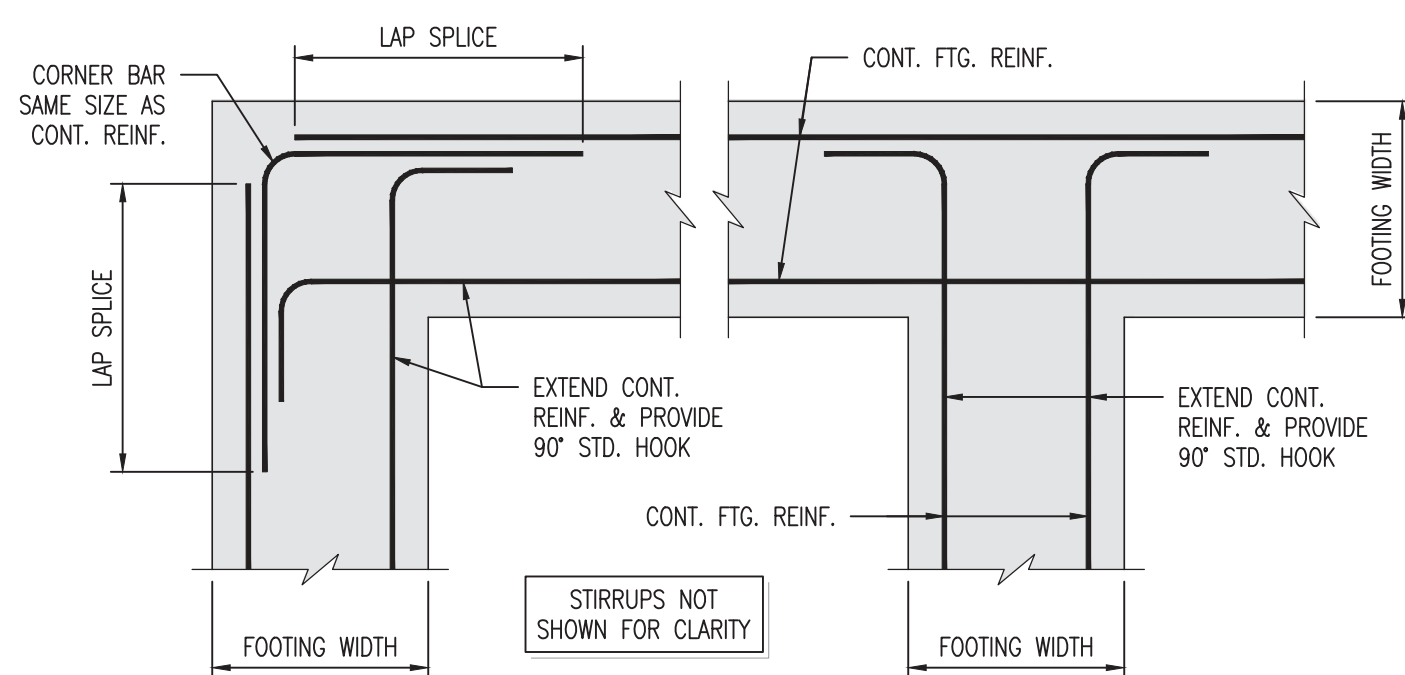






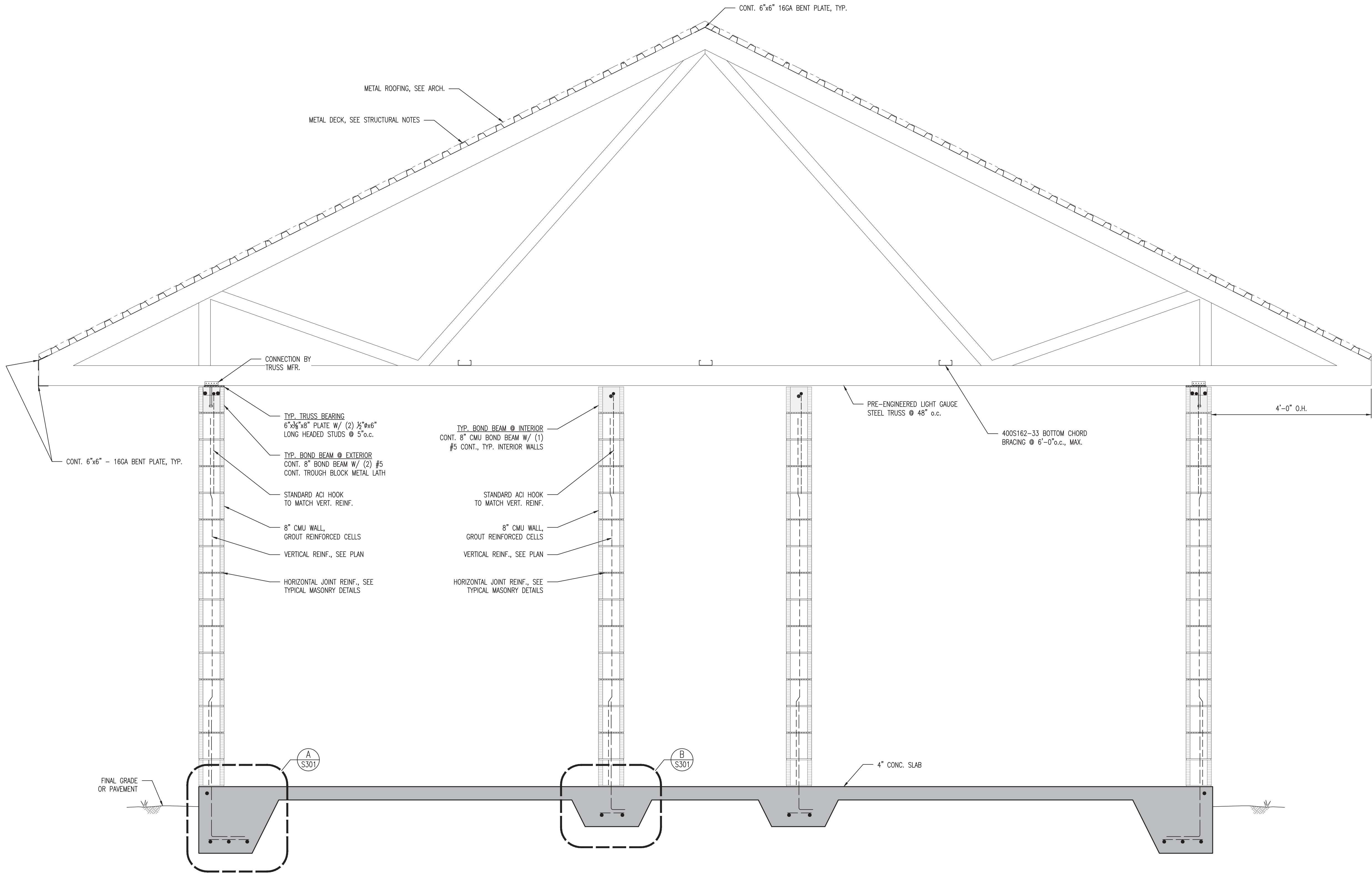


- NOTES:
1. REFER TO ARCHITECTURAL FLOOR PLANS FOR JOINT LAYOUT AT EXPOSED FLOORS. AT ALL OTHER LOCATIONS, LAY OUT JOINTS WITH MAXIMUM SPACING OF 12'-0" ON CENTER AND A MAXIMUM LENGTH TO WIDTH RATIO FOR JOINT SPACING OF 2:1.
  2. RIPS, TEARS, AND HOLES IN VAPOR BARRIERS SHALL BE REPAIRED PRIOR TO PLACING CONCRETE.
  3. ALL SLABS SHALL BE CURED WITH A MOISTURE RETAINING COVER FOR A MINIMUM OF SEVEN DAYS.
  4. ALL JOINTS SHOWN IN PLANS ARE SCHEMATIC. CONTRACTOR SHALL SUBMIT JOINT LOCATION PLAN FOR ARCHITECTURAL APPROVAL.



SHEET NO.	ICHTUCKNEE SPRINGS STATE PARK 12087 SOUTHWEST U.S. 27, FORT WHITE, FL 32038	PROFESSIONAL REGISTRATION PATRICK M. MCKEE FL PE 63122	 PATRICK M. MCKEE, P.E. KEVER MCKEE ENGINEERING FLORIDA PE No. 63122	<table><tr><td>DESIGNER:</td><td>KSUMNER</td><td>ISSUE DATE:</td><td>28 MARCH 2023</td><td>S Y M B O L</td><td>REVISION</td><td>DATE</td><td>DATE</td></tr><tr><td>DRAWN BY:</td><td>KSUMNER</td><td>COMP FILE NO.:</td><td>18880</td><td></td><td></td><td></td><td></td></tr><tr><td>REVIEWED BY:</td><td>PMCKEE</td><td>STATE PROJECT NO.:</td><td>61980C</td><td></td><td></td><td></td><td></td></tr></table>								DESIGNER:	KSUMNER	ISSUE DATE:	28 MARCH 2023	S Y M B O L	REVISION	DATE	DATE	DRAWN BY:	KSUMNER	COMP FILE NO.:	18880					REVIEWED BY:	PMCKEE	STATE PROJECT NO.:	61980C				
				DESIGNER:	KSUMNER	ISSUE DATE:	28 MARCH 2023	S Y M B O L	REVISION	DATE	DATE																								
DRAWN BY:	KSUMNER	COMP FILE NO.:	18880																																
REVIEWED BY:	PMCKEE	STATE PROJECT NO.:	61980C																																
FOUNDATION DETAILS		<div>CONSULTANT: KEVER MCKEE ENGINEERING 1624 METROPOLITAN BLVD SUITE A TALLAHASSEE, FLORIDA 32308 p: 890/727-5367</div> 																																	
PROJECT TITLE		<div>Department of Environmental Protection Office of Operations Bureau of Design and Construction 3000 Commonwealth Blvd., Tallahassee, FL 32309 (850) 424-2300</div>																																	
ICHTUCKNEE SPRINGS STATE PARK REPLACE RESTROOM																																			

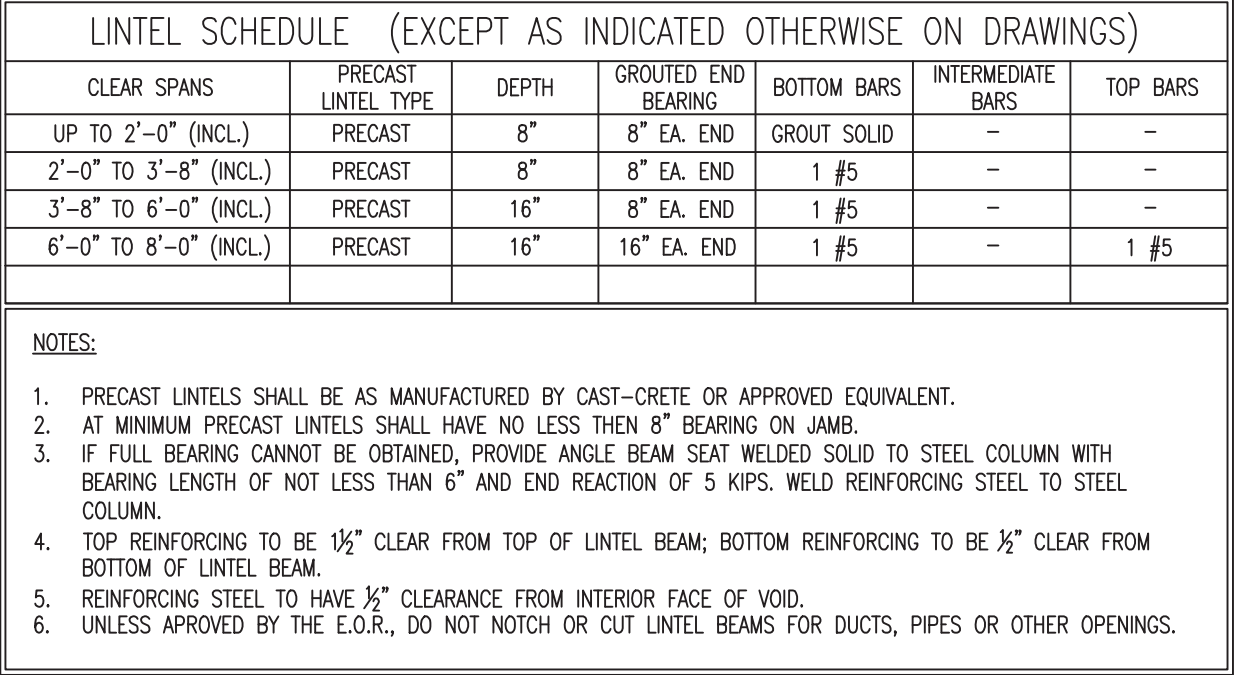




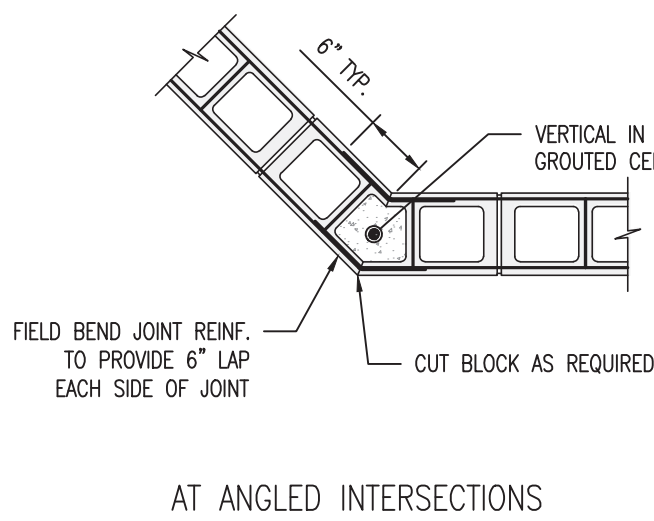
TYPICAL BUILDING SECTION  
SCALE: 3/4" = 1'-0"

SHEET NO.		ICHTLUCKNEE SPRINGS STATE PARK 12087 SOUTHWEST U.S. 27, FORT WHITE, FL 32038		PROFESSIONAL REGISTRATION PATRICK M. MAKEE FL PE 63122		 PATRICK M. MAKEE, P.E. KEVER MCKEE ENGINEERING FLORIDA PE NO. 63122		DESIGNER: KSLUNNER		ISSUE DATE: 28 MARCH 2023		SYMBOL		REVISION		DATE	
SHEET TITLE		TYPICAL BUILDING SECTION						DRAWN BY: KSLUNNER		COMP. FILE NO.: 1880		1					
PROJECT TITLE		ICHTLUCKNEE SPRINGS STATE PARK REPLACE RESTROOM						REVIEWED BY: PMCKEE		STATE PROJECT NO.: 6185C		2					
								CONSULTANT:  KEVER MCKEE ENGINEERING 1624 METROPOLITAN BLVD SUITE A TALLAHASSEE, FLORIDA 32308 p.: 850.727.5367									

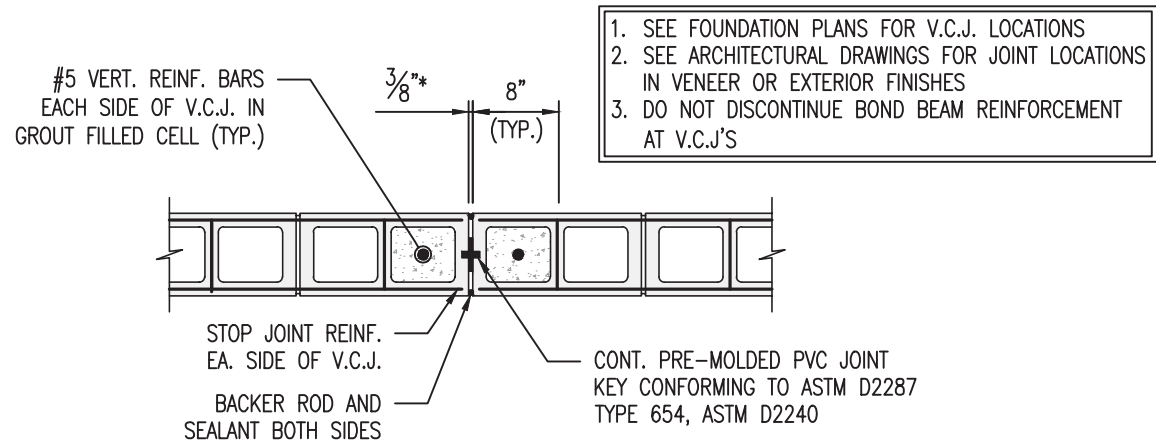




NO SCALE



NO SCALE



NO SCALE

NO SCALE

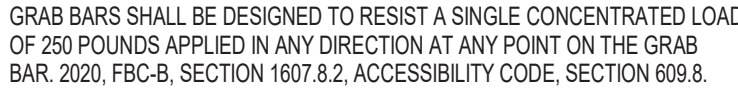


<div>GENERAL NOTES</div> <div><div><div><div><div>1.</div><div>THE CONTRACTOR IS RESPONSIBLE FOR INSPECTING AND ACCEPTING THE EXISTING CONDITIONS OF THE SITE PRIOR TO BIDDING.</div></div><div><div>2.</div><div>ALL DISTURBED AREAS WITHIN THE LIMITS OF RESTORATION SHALL BE REVEGETATED AS SPECIFIED BY THE PARK SERVICE BIOLOGIST.</div></div><div><div>3.</div><div>EXISTING UNDERGROUND UTILITIES SHOWN ARE BASED ON THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL ENSURE THAT THE UTILITY SYSTEMS DO NOT CONFLICT WITH THE PROPOSED PROJECT. CONFLICTS SHALL BE REPORTED TO THE PROJECT MANAGER IMMEDIATELY.</div></div><div><div>4.</div><div>THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES. REMOVAL AND/OR RELOCATION OF EXISTING UTILITIES IN CONFLICT WITH THE WORK, CONSTRUCTION OF TEMPORARY UTILITIES IN THE EVENT THAT EXISTING UTILITY SERVICE MUST BE INTERRUPTED AND ANY OTHER CONSTRUCTION RELATED ACTIVITIES THAT MAY AFFECT EXISTING OR PROPOSED UTILITIES. THE INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF UNDERGROUND AND OTHER UTILITIES IS BASED ON INFORMATION PROVIDED BY THE UTILITY OWNERS, AVAILABLE RECORDS, AND SURVEYED FIELD INFORMATION. THE INFORMATION MAY NOT REFLECT ACTUAL CONDITIONS. INCLUDE ALL UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. OR SHOW THE UTILITIES IN THE CORRECT HORIZONTAL OR VERTICAL LOCATIONS. THE CONTRACTOR WILL MAKE IS OWN DETERMINATION AS TO THE TYPE AND LOCATION OF UTILITIES AS NECESSARY TO ESTABLISH THEIR LOCATIONS AND AVOID DAMAGE.</div></div><div><div>5.</div><div>THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING ALL GRADE STAKES, LINES AND LEVELS.</div></div><div><div>6.</div><div>THE CONTRACTOR SHALL SOLID SOD ALL DISTURBED AREAS UNLESS OTHERWISE SPECIFIED OR SHOWN.</div></div><div><div>7.</div><div>NO SEPARATE PAYMENT WILL BE MADE FOR DEWATERING. THE COSTS FOR DEWATERING ARE INCLUDED IN THE UNIT PRICES FOR CONSTRUCTING THIS PROJECT.</div></div><div><div>8.</div><div>ALL AREAS, STREETS, DRIVEWAYS, PARKING LOTS, ETC. DISTURBED BY CONSTRUCTION SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL OR BETTER CONDITION.</div></div><div><div>9.</div><div>THE CONTRACTOR WILL HAVE ALL REQUIRED PERMITS IN-HAND PRIOR TO BEGINNING CONSTRUCTION, AND WILL PERFORM ALL WORK IN ACCORDANCE WITH THE REQUIREMENTS OF THE PERMITS OBTAINED BY THE OWNER AND THOSE PERMITS OBTAINED BY THE CONTRACTOR.</div></div><div><div>10.</div><div>PRIOR TO COMMENCING CONSTRUCTION, THE CONTRACTOR WILL SUBMIT TO THE OWNER'S PROJECT MANAGER A SCHEDULE OF VALUES, A CONSTRUCTION SCHEDULE, AND A SAFETY PLAN.</div></div><div><div>11.</div><div>THE CONSTRUCTION SCHEDULE WILL DESCRIBE IN DETAIL HOW THE CONSTRUCTION IS TO BE PHASED, ESTABLISH START AND FINISH DATES FOR ALL SIGNIFICANT CONSTRUCTION ACTIVITIES, AND IDENTIFY ALL CONTROLLING ITEMS OF WORK. THE SCHEDULE IS TO BE APPROVED BY THE OWNER'S PROJECT MANAGER, AND WILL BE UPDATED ON A MONTHLY BASIS TO REFLECT ACTUAL WORK PROGRESS. PAYMENT FOR PREPARING, UPDATING AND SUBMITTING THE SCHEDULE WILL BE INCLUDED IN THE PAY ITEM FOR MOBILIZATION OR OTHER PAY ITEMS AS APPROPRIATE.</div></div><div><div>12.</div><div>THE CONTRACTOR SHALL SUBMIT AN EROSION CONTROL PLAN FOR APPROVAL BY THE OWNER'S PROJECT MANAGER AND WILL ADDRESS THE INSTALLATION AND MAINTENANCE OF ALL TEMPORARY AND PERMANENT SEDIMENT AND EROSION CONTROL DEVICES TO BE USED DURING EACH PHASE OF CONSTRUCTION, INCLUDING TREE REMOVAL, CLEARING AND GRUBBING, EXCAVATION, HAULING OF EXCAVATED MATERIALS, AND PLACEMENT OF EMBANKMENT AND BACKFILL. THE PLAN ALSO WILL DETAIL THE EROSION CONTROL MEASURES TO BE EMPLOYED AT ALL STOCKPILE AND CONSTRUCTION STAGING AREAS AND WILL DEFINE THE MAXIMUM LIMITS OF ALL ACTIVE CONSTRUCTION ZONES.</div></div><div><div>13.</div><div>ANY NATIONAL GEODETIC SURVEY MONUMENT WITHIN THE LIMITS OF CONSTRUCTION MUST BE PROTECTED. IF IN DANGER OF DAMAGE, THE CONTRACTOR WILL IMMEDIATELY NOTIFY THE PROJECT MANAGER AND:<div><div>FDEP, BUREAU OF SURVEY AND MAPPING, MS 105 3900 COMMONWEALTH BLVD. TALLAHASSEE, FLORIDA 32399 (850) 245-2606 (OFFICE) (850) 245-2645 (FAX)</div></div></div></div><div><div>14.</div><div>PRIOR TO ANY SCHEDULED INTERRUPTION OF UTILITY SERVICE, THE CONTRACTOR WILL COORDINATE SUCH INTERRUPTION WITH THE UTILITY PROVIDER AND WILL PROVIDE A MINIMUM 24-HOUR NOTICE TO THE AFFECTED PARTIES. THE CONTRACTOR WILL NOTIFY THE ELECTRIC UTILITY A MINIMUM OF TWO WEEKS PRIOR TO CONSTRUCTION IN THE VICINITY OF THEIR FACILITIES.</div></div><div><div>15.</div><div>NO TRENCHES WILL BE ALLOWED TO REMAIN OPEN OVERNIGHT.</div></div><div><div>16.</div><div>THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF VEGETATION ON AND ADJACENT TO THE PROJECT SITE, AND WILL BE SOLELY Liable FOR DAMAGE TO VEGETATION ON PROPERTIES ADJACENT TO CONSTRUCTION WORK ZONES. ALL TREES WITHIN THE LIMITS OF CONSTRUCTION ARE TO BE PROTECTED EXCEPT THOSE TREES IDENTIFIED ON THE PLANS TO BE REMOVED. ALL TREES OUTSIDE THE CONSTRUCTION WORK ZONE ARE TO BE PROTECTED TO THE MAXIMUM EXTENT PRACTICABLE. TREE BARRICADES WILL BE INSTALLED AND MAINTAINED AROUND ALL TREES TO BE PROTECTED AS SHOWN ON THE DRAWINGS OR AS DIRECTED BY THE PROJECT MANAGER.</div></div><div><div>17.</div><div>THE CONTRACTOR IS RESPONSIBLE TO PLACE AND MAINTAIN ROADSIDE WARNING SIGNS WHEN WORK IS BEING CONDUCTED IN THE PROPERTY RIGHT OF WAY OR WHEN MACHINERY IS ENTERING AND LEAVING THE PROJECT SITE.</div></div><div><div>18.</div><div>THE CONTRACTOR IS RESPONSIBLE FOR DISPOSAL OF EXCAVATED MATERIAL OFF-SITE UNLESS OTHERWISE DIRECTED BY THE PROJECT MANAGER.</div></div></div><div><div>EROSION CONTROL NOTES:</div><div><div><div>1.</div><div>ALL EROSION AND SEDIMENTATION CONTROLS SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.</div></div><div><div>2.</div><div>ALL EROSION AND SEDIMENTATION CONTROLS SHALL BE INSPECTED DAILY AND REPAIRS MADE AS NECESSARY TO ENSURE THE PROPER AND CONTINUED FUNCTION OF THE CONTROL(S).</div></div><div><div>3.</div><div>ALL EROSION AND SEDIMENTATION CONTROL SHALL REMAIN IN PLACE UNTIL A PERMANENT VEGETATIVE COVER HAS BEEN ESTABLISHED.</div></div><div><div>4.</div><div>UNDER NO CIRCUMSTANCES SHALL SEDIMENTS BE PERMITTED TO EXIT THE PROJECT LIMITS, INCLUDING TRACKING BY VEHICLES ONTO PAVED ROADWAYS. THE CONTRACTOR SHALL MAKE IMMEDIATE REPAIRS OR ENHANCEMENTS TO ANY EROSION CONTROL SYSTEM THAT ALLOWS THE RELEASE OF SEDIMENTS.</div></div></div></div><div><div>01</div><div><div>GENERAL REQUIREMENTS</div><div>Comply with the requirements of the Agreement between the Department of Environmental Protection and the Contractor for the ICHETUCKNEE SPRINGS STATE PARK.</div><div>Summary of work:<div>This Work consists of all work necessary to construct Day Use Restroom at Gilchrist Blue Springs State Park as shown on the 100% Construction Documents titled Department of Environmental Protection Day Use Restroom by Barnett Fronczak Barlowe &amp; Shuler Architects. The Work includes, but is not limited to, sitework, site utilities, cast-in-place concrete, masonry walls, light gauge metal trusses, plywood sheathing, standing seam metal roofing, tubular skylights, fiber-cement soffits and trim, aluminum louvers, abuse resistant fiber cement panels, hollow metal doors and frames, finish hardware, toilet partitions, toilet accessories, sealants and caulking, painting, signage, new plumbing fixtures and accessories, exhaust systems, lighting and electrical work.</div></div><div>Comply with requirements of applicable product or trade standards, except when more rigid requirements are specified or are required by applicable codes. Substitutions are allowed for all products and materials specified below, unless otherwise noted.</div><div>Substitutions: Adhere to the substitution requirements of FDEP.</div><div>The following specifications are general in nature and apply only where applicable, as shown on the Drawings.</div></div></div><div><div>02</div><div><div>DEMOLITION AND SITE WORK</div><div>Protection of Existing: Provide protection for all existing elements in the Project and in the Work Area. Provide dust and debris containment barriers protecting existing areas as needed. Coordinate location and type of protection with Architect and Site Manager.</div><div>Coordinate access and time of work with the Site Manager.</div></div></div><div><div>03</div><div><div>CONCRETE</div><div>See Structural Drawings</div></div></div></div><div><div>04</div><div><div>MASONRY</div><div>See Structural Drawings for design loads, foundation notes, design details and general conditions.</div><div>Echelon Coastal Oldcastle (813) 255-4737 - 325 North Street - Longwood Florida 32750</div><div>Exterior Walls: Basis of Design for masonry wall shall be Echelon Masonry Split Face - Standard Split Face Colors. NOTE: All block sides connected to the door and lower jambs, etc.; will be required to have a smooth face solid color. Interior Walls: Basis of Design for masonry wall shall be Echelon Masonry Smooth Face Finish Solid Color - Standard Smooth Face Solid Colors.</div><div>Submit color samples for selection from manufacturer's product line. Submit product literature, certifications, test reports and full size sample(s) of each color specified. Certifications: Concrete blocks for grinding shall conform to ASTM C90. Colored matching or contrasting mortar is available from manufacturer.</div><div>Units shall be delivered to the jobsite on wooden pallets. Store pallets on level ground and cover with waterproof covering (e.g., tarpaulins) to protect the blocks from inclement weather. Handle blocks carefully to avoid breakage and damage to the finished surfaces. Protection of Work: Cover walls each day after installation to keep open walls protected and dry. After units are installed they should be protected from damage by other trades performing operations that can stain or damage.</div><div>Carefully following manufacturer's instructions, use Custom Masonry Cleaner and Burnished Custom Masonry Cleaner by PROSOCO (dilute 1 part to 3 parts clean water). Available from manufacturer. DO NOT POWERWASH. CAUTION! Never use Muriatic Acid solution or any cleaner with an acid base on units.</div><div>Draw blocks from more than one pallet at a time during installation. All exterior mortar shall include manufacturer approved matching water repellent additive added to each batch in the appropriate dosage rates for mortar type (M, S or N) per manufacturer's instructions. See MFG instructions for hot and cold weather construction practices.</div><div>Lay units using the best concrete masonry practices. Install only quality units; reject all defective units as defined by ASTM C90. Lay blocks with the faces level, plumb and true to the line strung horizontally at the ground or filled and polished face. Units shall have uniform, 3/8"-wide joints both horizontally and vertically on the finished side of the wall. Tool joints neatly after they are finger-hard to make them straight and uniform. Size and place out pieces appropriately to maintain consistency and bond. Complete masonry construction using procedures and workmanship consistent with the best masonry practices.</div><div>Cutting: Make all unit cuts, including those for bonding, holes, boxes, etc., with motor-driven masonry saws, using either an abrasive or diamond blade. Cut neatly and locate for best appearance. Lay units with full mortar coverage on head and bed joints taking care not to block cores to be grouted or filled with masonry insulation. Tool all mortar joints when thumbprint hard into a concave configuration. Care should be taken to remove mortar from the face of masonry units before it sets. Tuck-point the joints of scored units for proper appearance. All exterior scored units must be tuck-pointed to prevent water penetration. NO RAKE JOINTS.</div><div>The faces shall conform to the requirements of ASTM C90 when viewed from a distance of twenty (20) feet at right angles to the wall with normal lighting. Install flashing at locations shown in the plans and in strict accordance with the details and the best masonry flashing practices.</div><div>Keep walls clean daily during installation using brushes, rags and the burlap squares supplied on the pallets. Do not allow excess mortar lumps or smears to harden on the finished surfaces. Harsh cleaning methods after walls have been erected will mar the surface of the blocks.</div></div></div><div><div>05</div><div><div>METALS</div><div>See Structural Drawings for design loads, foundation notes, design details and general conditions.</div><div>Pipe and Tube Railings: Provide aluminum pipe and tube railings as shown on the Drawings. Bend members at changes in direction and weld all connections. Finish shall be Class I clear anodic finish.</div><div>Provide 2 inch square aluminum infill panels with 0.2500" wire, square weave and weighing 0.6 lbs. Per SF. Basis of Design product shall be McNichols Item No. 3793920041 or comparable product acceptable to FDEP.</div><div>Contractor is provide shop drawings to architect for approval.</div></div></div><div><div>06</div><div><div>WOOD AND PLASTICS</div><div>Rough Carpentry: Provide all wood roof sheathing, grounds, nailers and blocking. Comply with PS 20 "American Softwood Lumber Standard" and PS 1 "U.S. Product Standard for Construction and Industrial Plywood," dressed S4S, 19% max. moisture content. No. 2 grade or better. Install wood grounds, nailers and blocking where required for attaching of other work. Form to shapes required for true level and line of attached work. Coordinate locations with other work involved.</div><div>Nails, Wire Brads and staples shall comply with FS FF-N-105 and wood screws shall comply with ASME B18.6.1</div><div>Plywood backing panels for electrical panels shall be screwed to supports.</div><div>Interior Finish Carpentry: Provide Architectural wood benches and solid surface material countertops as shown on the Drawings.</div><div>Provide finish carpentry that complies with AWI premium grade construction. Provide product data, details and shop drawings consisting of dimensioned plans and elevations, large scale details, attachment devices and other components. Provide samples of solid surfacing materials and lumber products stained to match Architects sample.</div><div>For countertops, provide homogeneous solid surfacing sheets by Avonite, Formica, or Wilsonart, 3/4" thick bonded to plywood with manufacturer's recommended adhesive. Provide 3/4" solid surfacing backsplashes (Architect to select color).</div></div></div><div><div>07</div><div><div>THERMAL AND MOISTURE PROTECTION</div><div>Building Insulation: Closed-Cell Spray Polyurethane Foam: ASTM C1029, Type II, minimum density of 2.0 lb/cu ft (32kg/cu m)</div><div>Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:<div><div>1.</div><div>Icynene (Basis of Design), BASF Corporation, Certain Teed Corporation, Dow Chemical Company or other Architect approved product.</div></div><div><div>2.</div><div>Surface-Burning Characteristics: Comply with ASTM E84; testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.<div><div>a.</div><div>Flame-Spread Index: 25.</div></div><div><div>b.</div><div>Smoke-Developed Index: 450 or less.</div></div></div><div><div>3.</div><div>Fire Propagation Characteristics: Passes NFPA 285 testing as part of an approved assembly.<div><div>a.</div><div>Provide a 6" average thickness (R=38) of foam.</div></div></div></div><div>Masonry Insulation: Vermiculite loose insulation - Basis of Design: Zonolite Masonry insulation.</div><div>Weather Barriers: Provide Butyl Rubber, flexible underlayment and flashing under all surfaces of Standing Seam Sheet Metal Roofing panels. Material shall be composite, self adhesive product such as Grace Ice and Water Shield-HT, Polyglass Polystick TU Plus, Tamko TW Metal and Tile Underlayment, Atlas Weathermaster Polyseal, Carlisle WIP 300HT, Dewitt Products Lite N Smooth, Owens Corning Weatherlock, MFM Ultra HT Wind &amp; Water, Mid-States Asphalt Quick Stick HT, Resisto/Soprema Lastobond Shield HT, TARCO Leak Barrier PS200HT, Titanium PSU-3</div></div></div></div></div></div>	
--	--



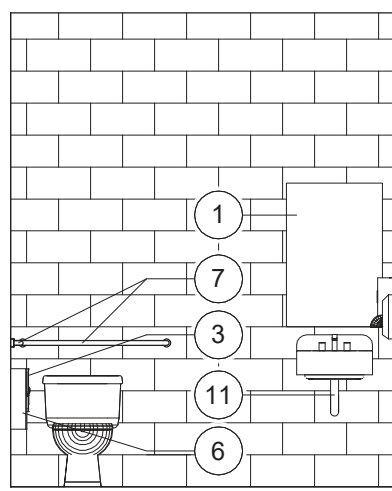
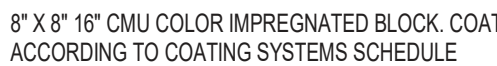
[illegible]





TOILET AND BATH ACCESSORIES ARE FROM "A AND J WASHROOM ACCESSORIES" (845-562-3332) TO INDICATE TYPE, MATERIAL, AND QUALITY OF ACCESSORY, UNLESS OTHERWISE NOTED. OTHER MANUFACTURERS ARE ACCEPTABLE IF EQUAL AND APPROVED.

*Department of Environmental Protection  
Office of Operations  
Bureau of Design and Construction*

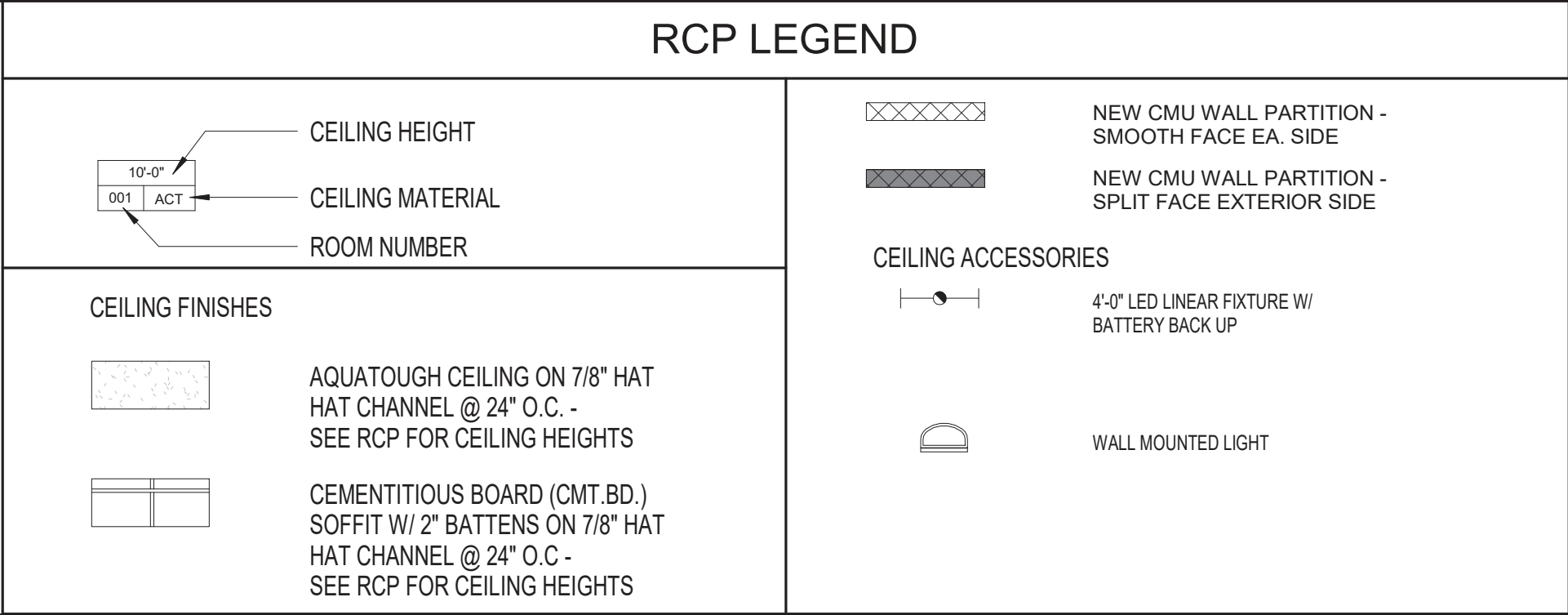


---

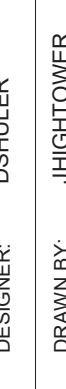



02	1
----	---





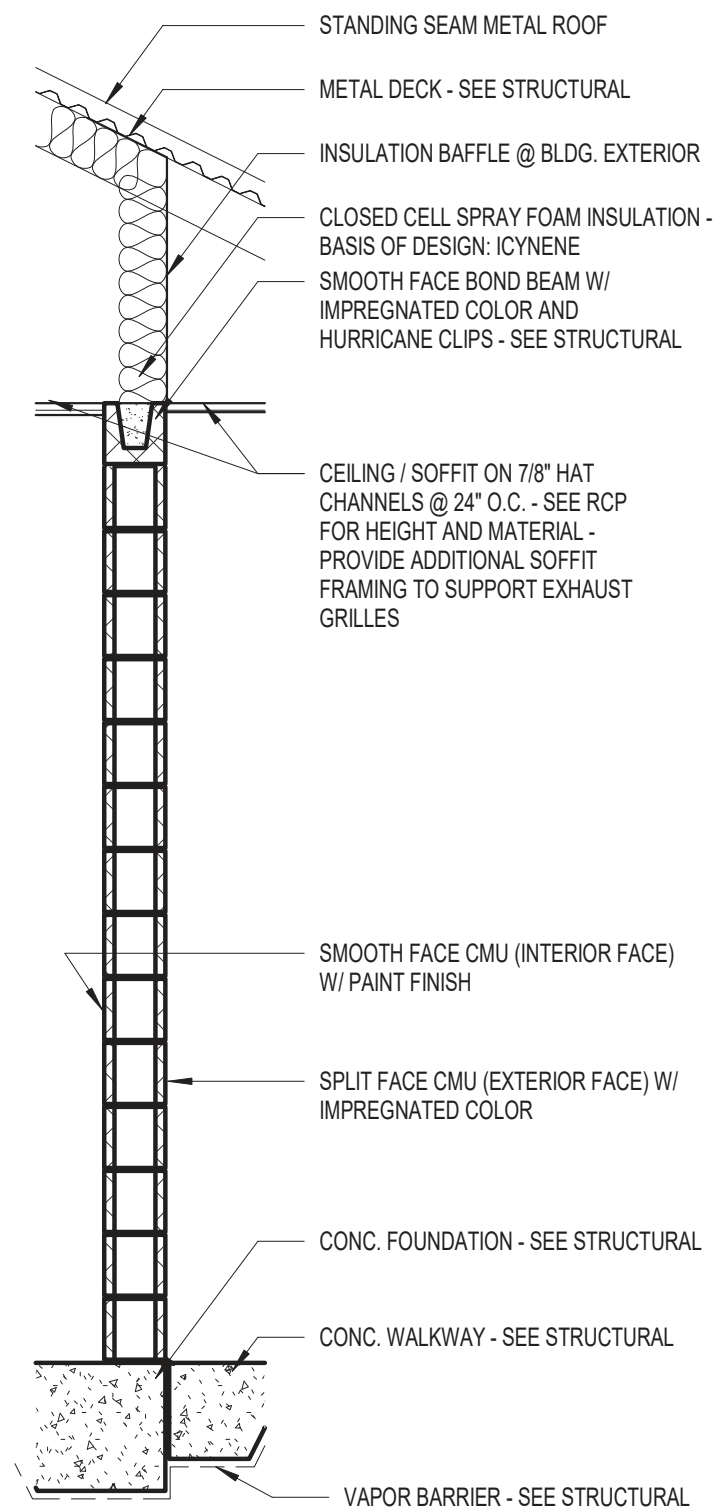
ROOM FINISH SCHEDULE							FINISH SAMPLES SHALL BE PROVIDED TO THE ARCHITECT FOR APPROVAL		
ROOM NO	ROOM NAME	FLOOR	WALLS				CEILING		NOTES
			N	S	E	W	MATERIAL	HEIGHT	
100	COVERED AREA	BROOM FINISHED CONCRETE	-	-	-	-	HARDIE PANEL	SEE A201	SLOPE FLOOR AWAY FROM BUILDING
101	RESTROOM	EPOXY PAINT	PAINT	PAINT	PAINT	PAINT	PAINTED AQUA-TOUGH BOARD	SEE A201	SLOPE FLOOR TO DRAIN
102	RESTROOM	EPOXY PAINT	PAINT	PAINT	PAINT	PAINT	PAINTED AQUA-TOUGH BOARD	SEE A201	SLOPE FLOOR TO DRAIN
103	RESTROOM	EPOXY PAINT	PAINT	PAINT	PAINT	PAINT	PAINTED AQUA-TOUGH BOARD	SEE A201	SLOPE FLOOR TO DRAIN
104	RESTROOM	EPOXY PAINT	PAINT	PAINT	PAINT	PAINT	PAINTED AQUA-TOUGH BOARD	SEE A201	SLOPE FLOOR TO DRAIN
105	RESTROOM	EPOXY PAINT	PAINT	PAINT	PAINT	PAINT	PAINTED AQUA-TOUGH BOARD	SEE A201	SLOPE FLOOR TO DRAIN
106	RESTROOM	EPOXY PAINT	PAINT	PAINT	PAINT	PAINT	PAINTED AQUA-TOUGH BOARD	SEE A201	SLOPE FLOOR TO DRAIN
107	RESTROOM	EPOXY PAINT	PAINT	PAINT	PAINT	PAINT	PAINTED AQUA-TOUGH BOARD	SEE A201	SLOPE FLOOR TO DRAIN
108	RESTROOM	EPOXY PAINT	PAINT	PAINT	PAINT	PAINT	PAINTED AQUA-TOUGH BOARD	SEE A201	SLOPE FLOOR TO DRAIN
109	RESTROOM	EPOXY PAINT	PAINT	PAINT	PAINT	PAINT	PAINTED AQUA-TOUGH BOARD	SEE A201	SLOPE FLOOR TO DRAIN
110	RESTROOM	EPOXY PAINT	PAINT	PAINT	PAINT	PAINT	PAINTED AQUA-TOUGH BOARD	SEE A201	SLOPE FLOOR TO DRAIN
111	JANITOR	EPOXY PAINT	PAINT	PAINT	PAINT	PAINT	PAINTED AQUA-TOUGH BOARD	SEE A201	SLOPE FLOOR TO DRAIN
112	PLUMBING CHASE	EPOXY PAINT	PAINT	PAINT	PAINT	PAINT	PAINTED AQUA-TOUGH BOARD	SEE A201	SLOPE FLOOR TO DRAIN

A201	SHEET NO.	ICHELUCKNEE SPRINGS STATE PARK 12087 SOUTHWEST U.S. 27, FORT WHITE, FL 32038		DESIGNER: JHIGHTOWER	DSHULER	ISSUE DATE: 28 MARCH 2023	SYMBOL	REVISION	DATE
	SHEET TITLE RESTROOM BUILDING - REFLECTED CEILING PLAN	DRAWN BY: JHIGHTOWER		DSHULER	COMP. FILE NO.: 18880	1	3		
	PROJECT TITLE ICHELUCKNEE SPRINGS STATE PARK REPLACE RESTROOM			REVIEWED BY:	FBFS ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p. 850.224-6301	STATE PROJECT NO.: R1363C	2	4	
				CONSULTANT:	Department of Environmental Protection Office of Operations Bureau of Design and Construction 3800 Commonwealth Blvd., Tallahassee, FL 32399 (850) 424-2300				

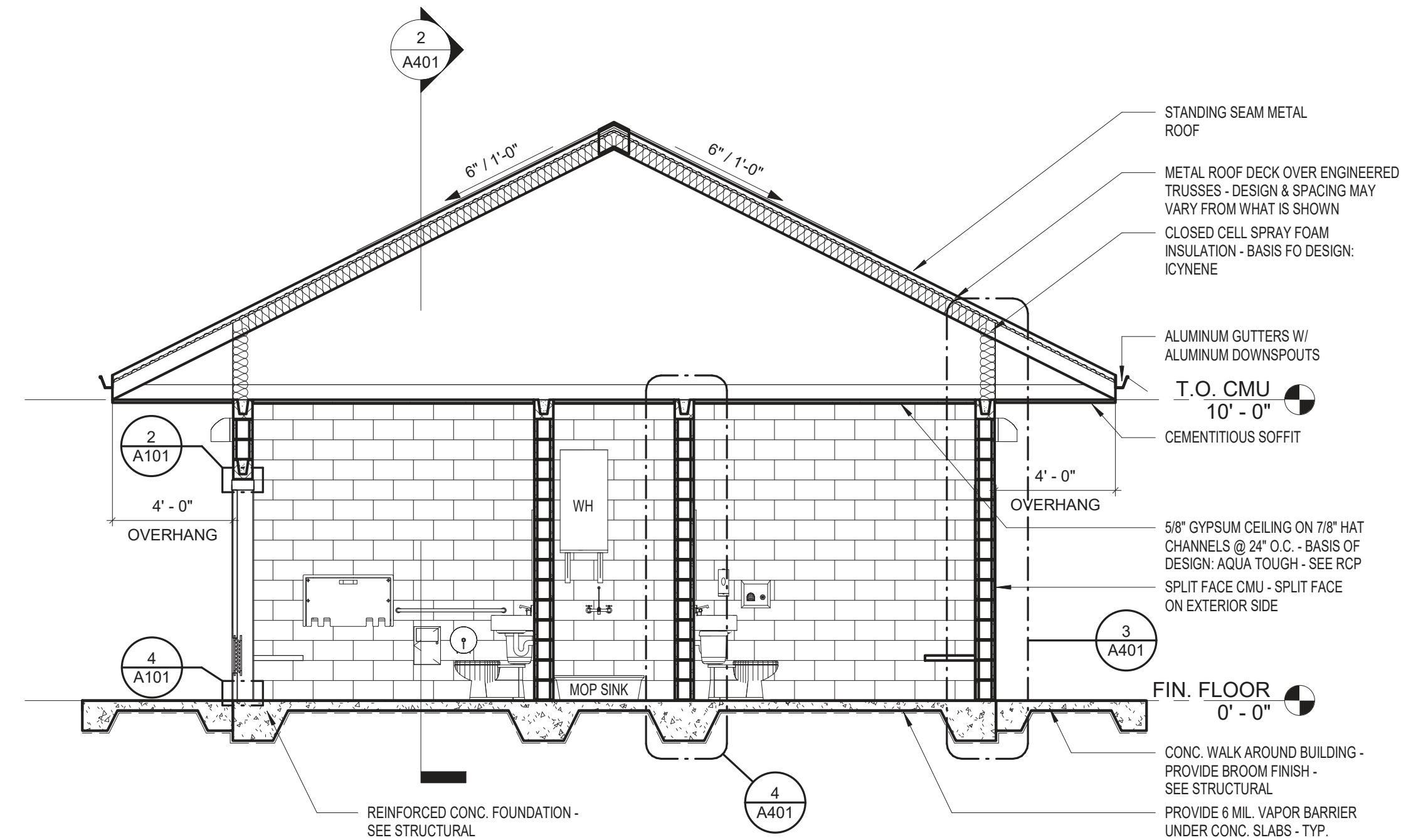




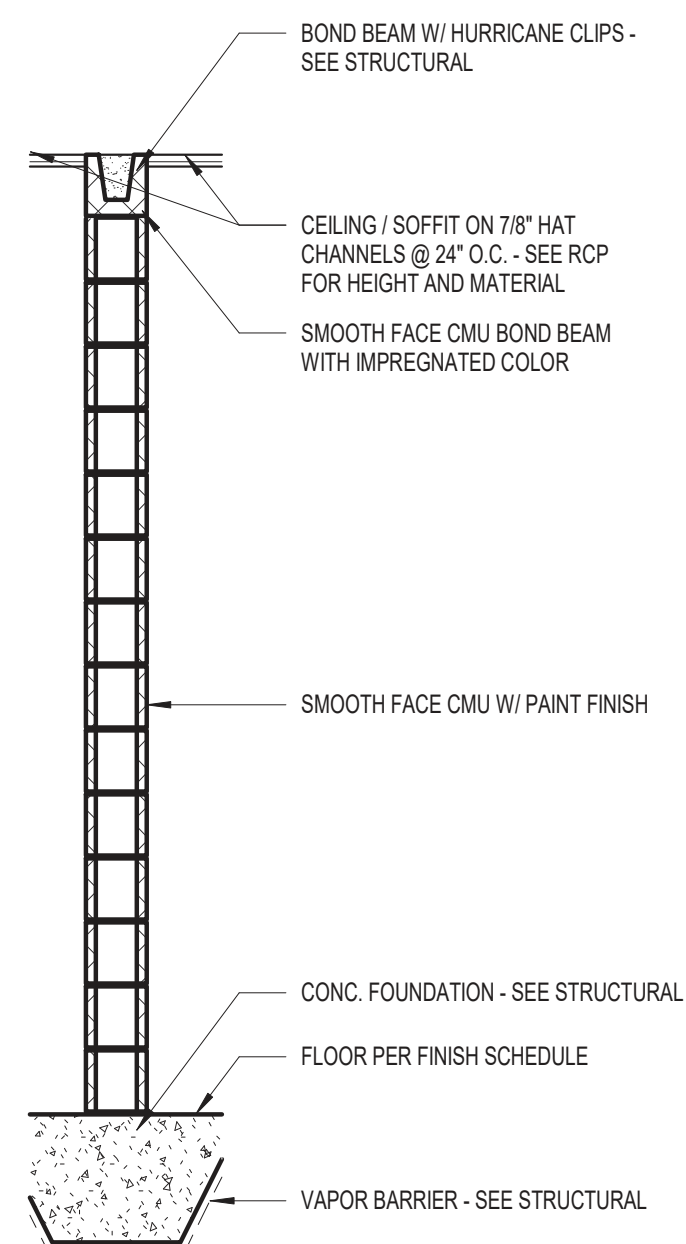




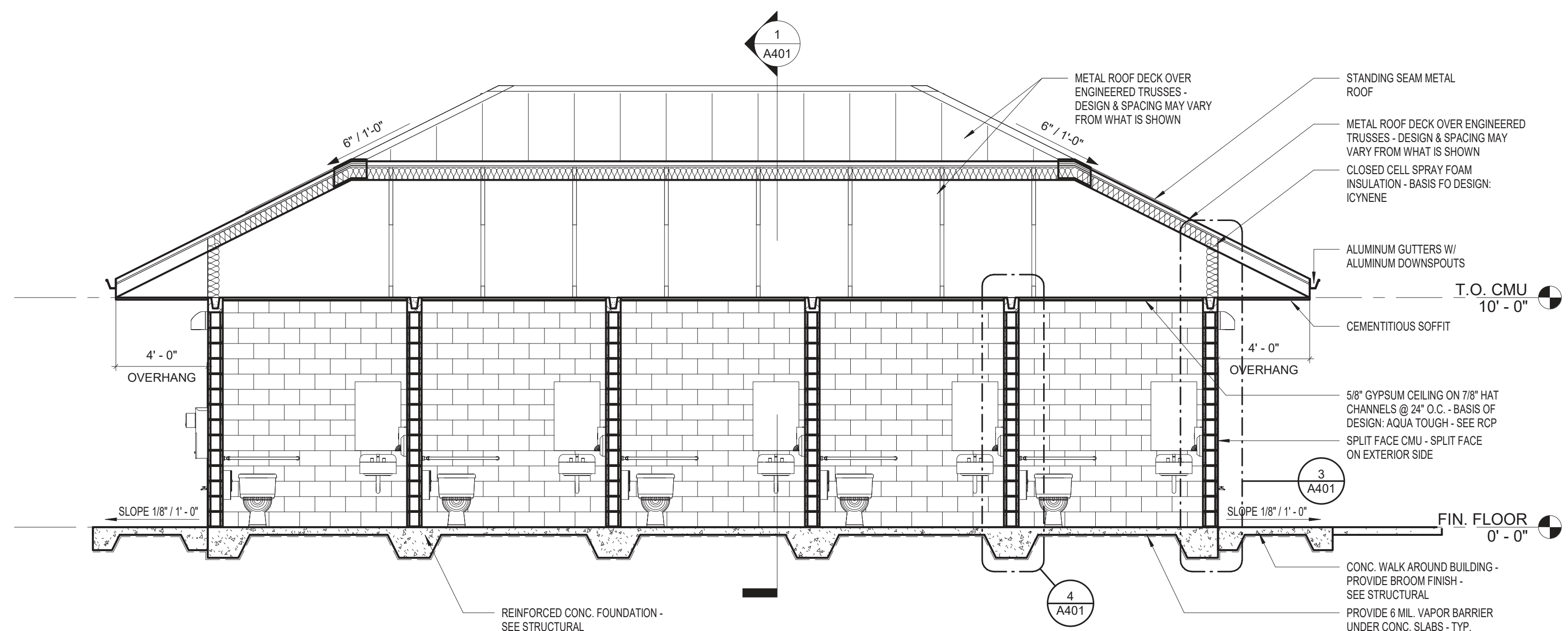
3	EXTERIOR CMU WALL SECTION
A401	1/2" = 1'-0"





1	BUILDING SECTION
A401	1/4" = 1'-0"



4	INTERIOR CMU WALL SECTION
A401	1/2" = 1'-0"



2	BUILDING SECTION
A401	1/4" = 1'-0"

SHEET NO.		A401		PROFESSIONAL REGISTRATION RAY DOUGLAS SHULER FL AR 8069		DESIGNER: DSHULER		ISSUE DATE: 28 MARCH 2023		SYMBOL		REVISION		DATE	
SHEET TITLE RESTROOM BUILDING - BUILDING & WALL SECTIONS						DRAWN BY: DSHULER		COMP. FILE No.: 18880		SYMBOL 					
PROJECT TITLE ICHETUCKNEE SPRINGS STATE PARK REPLACE RESTROOM						REMOVED BY: CONSULTANT: RAY DOUGLAS SHULER FL AR 8069		STATE PROJECT NO: 61360C		SYMBOL 					
						BFBS ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLORIDA 32308 p.: 850.224-6301									
						RAY DOUGLAS SHULER ARCHITECTS 2074 CENTRE POINTE BLVD SUITE 200 TALLAHASSEE, FLOR									







HVAC SPECIFICATIONS	
1	SUPPLY, RETURN, EXHAUST, AND OUTSIDE AIR DUCTWORK: ALL DUCTWORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST EDITION OF SMACNA GUIDELINES AND SHALL BE CONSTRUCTED FROM G90 GALVANIZED SHEET STEEL. ALL SEAMS SHALL BE SEALED TO A MINIMUM OF 2" PRESSURE CLASS WITH WATER BASED MASTIC.
2	FLEXIBLE DUCT CONNECTORS: FLEXIBLE CONNECTORS SHALL BE LISTED FOR USE. EXTERIOR DUCT CONNECTORS SHALL BE CHEMICAL, UV, AND WEATHER RESISTANT. PROVIDE HEAVY DUTY CONNECTIONS WHERE USED FOR CONNECTIONS TO EXHAUST FANS.
3	AIR CONDITIONING SYSTEMS SHALL BE TESTED AND BALANCED UPON INSTALLATION COMPLETION BY A NEBB OR AABC CERTIFIED TEST AND BALANCE AGENT. AGENT SHALL PROVIDE A SIGNED AND SEALED TEST AND BALANCE REPORT TO THE ENGINEER OF RECORD UPON COMPLETION OF TAB ACTIVITIES.
4	DIFFUSERS AND GRILLES SHALL BE FROM A SINGLE MANUFACTURER. DIFFUSERS AND GRILLES SHALL BE ALL ALUMINUM CONSTRUCTION AND BE WHITE IN COLOR, UNLESS NOTED OTHERWISE.

CODE REFERENCES	
FBC, BUILDING	FLORIDA BUILDING CODE, 2020 SEVENTH EDITION
FBC, MECHANICAL	FLORIDA BUILDING CODE, 2020 SEVENTH EDITION
FBC, TEST PROTOCOL	FLORIDA BUILDING CODE, 2020 SEVENTH EDITION
FBC, EXISTING BUILDING	FLORIDA BUILDING CODE, 2020 SEVENTH EDITION
FBC, ENERGY	FLORIDA BUILDING CODE, 2020 SEVENTH EDITION
FFPC	FLORIDA FIRE PREVENTION CODE, 2020 SEVENTH EDITION
NFPA 51B	STANDARD FOR FIRE PREVENTION DURING WELDING, CUTTING, AND OTHER HOT WORK, 2014 EDITION
NFPA 70	NATIONAL ELECTRIC CODE, 2017 EDITION
NFPA 90A	STANDARD FOR THE INSTALLATION OF AIR CONDITIONING AND VENTILATING SYSTEMS, 2018 EDITION
NFPA 101	LIFE SAFETY CODE, 2018 EDITION
NFPA 101A	GUIDE ON ALTERNATIVE APPROACHES TO LIFE SAFETY, 2016 EDITION

DESIGN CRITERIA	
BUILDING TYPE	GROUP U - UTILITY
CLIMATE ZONE	2A, COLUMBIA COUNTY, FLORIDA
OUTDOOR DESIGN CONDITIONS (SUMMER)	95°F DB, 78°F WB
OUTDOOR DESIGN CONDITIONS (WINTER)	25°F DB
INTERIOR DESIGN TEMPERATURES	72°F HEATING, 75°F COOLING
ENERGY COMPLIANCE METHOD	PERSCRIPTIVE METHOD (TRADE OFF METHOD)
COMMISSIONING	COMMISSIONING IS NOT REQUIRED PER EXCEPTION #1 OF C408.2 OF FLORIDA BUILDING CODE - ENERGY, 2020 (SEVENTH EDITION).
SCOPE OF WORK	THE PROJECT CONSISTS OF A BATHROOM BUILDING. VENTILATION WILL BE PROVIDED BY CEILING MOUNTED EXHAUST FANS AND A ROOF MOUNTED EXHAUST FAN WITH OUTSIDE AIR PROVIDED THROUGH LOUVERS.

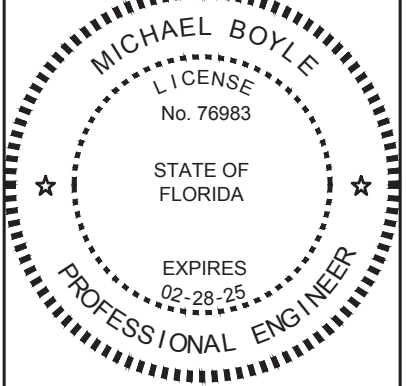
CONTROLS SYMBOLS	
FAN OR PUMP	
PREMIUM EFFICIENT MOTOR, UNO	
THERMOSTAT/ TEMPERATURE SENSOR WITH CONTROL WIRING	

ABBREVIATIONS	
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AFR	ABOVE FINISHED ROOF
AHJ	AUTHORITY HAVING JURISDICTION
AHU	AIR HANDLING UNIT
BHP	BRAKE HORSE POWER
CD	CONDENSATE
CFM	CUBIC FEET PER MINUTE
CU	CONDENSING UNIT
DN	DOWN
EA	EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE
ESP	EXTERNAL STATIC PRESSURE
FLA	FULL LOAD AMPS
GFI	GROUND FAULT CIRCUIT INTERRUPTER
GPM	GALLONS PER MINUTE
KW	KILLOWATT
LAT	LEAVING AIR TEMPERATURE
MBH	THOUSANDS OF BTU'S PER HOUR
MCA	MINIMUM CIRCUIT AMPS
MOCP	MAXIMUM OVER CURRENT PROTECTION
NTS	NOT TO SCALE
OA	OUTDOOR AIR
PSI	POUNDS PER SQUARE INCH
PSIG	PSI GAUGE
PVC	POLYVINYL CHLORIDE
RA	RETURN AIR
SA	SUPPLY AIR
TSP	TOTAL STATIC PRESSURE
UNO	UNLESS NOTED OTHERWISE
WP	WEATHER PROOF
SIM	SIMILAR

DUCT SYMBOLS	
FLEXIBLE CANVAS CONNECTION	
EXHAUST AIR DUCTWORK UP	
EXHAUST AIR DUCTWORK DOWN	
SUPPLY AIR DUCTWORK DOWN	
SUPPLY AIR DUCTWORK UP	
RETURN AIR DUCTWORK UP	
RETURN AIR DUCTWORK DOWN	
MANUAL BALANCE DAMPER	
EXHAUST AIR GRILLE	
FLEXIBLE DUCTWORK	
SUPPLY AIR DIFFUSER	
RETURN AIR GRILLE	
DIFFUSER TAG, NEW	

GENERAL HVAC NOTES	
1	TOMAHAWK ENGINEERING AND CONSULTING, INC. SHALL NOT BE HELD RESPONSIBLE FOR ANY MISUSE AND/OR MISREPRESENTATION OF THIS SET OF DOCUMENTS.
2	THE CONTRACTOR ASSUMES RESPONSIBILITY FOR USE OF THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL MAKE HIMSELF AWARE OF PROJECT CONDITIONS AND OWNER REQUIREMENTS PRIOR TO PROCUREMENT OF EQUIPMENT AND SERVICES. CHANGES IN PROJECT COST WILL NOT BE GRANTED DUE TO FIELD CONFLICTS AND/OR PROJECT CONDITIONS.
3	THIS SET OF DRAWINGS AND SPECIFICATIONS SHALL NOT BE CONSIDERED A SET OF CONSTRUCTION DOCUMENTS UNLESS A SIGNATURE AND DATE ARE AFFIXED TO THE DRAWINGS AND SPECIFICATIONS BY THE ENGINEER IN RESPONSIBLE CHARGE FOR THE GIVEN DISCIPLINE.
4	CONFLICTS BETWEEN THIS SET OF DRAWINGS AND THE CONTRACT SPECIFICATIONS SHALL BE RESOLVED BY THE ENGINEER OF RECORD. THE CONTRACTOR DOES NOT HAVE THE AUTHORITY TO INTERPRET CONFLICTS AND RESOLVE ISSUES WITHOUT WRITTEN DIRECTION FROM THE ENGINEER OF RECORD.
5	ANY CONFLICTS IN THE FIELD OR WITHIN THESE DOCUMENTS SHALL BE RECORDED AND PROVIDED TO THE ENGINEER OF RECORD ON THE CONTRACTOR'S STANDARD LETTERHEAD. WRITTEN DIRECTION RESOLVING CONFLICT WILL BE ISSUED BY THE ENGINEER OF RECORD.
6	WHERE THE CONTRACTOR DEVIATES FROM THIS SET OF CONSTRUCTION DOCUMENTS AND RESUBMISSION OF REVISED DRAWINGS IS REQUIRED BY THE PERMITTING OFFICE/OFFICIAL, A MINIMUM CHARGE OF \$750.00 PER AFFECTED DRAWING SHEET WILL BE BILLED TO THE CONTRACTOR. THE REVISED DRAWINGS WILL NOT BE PROVIDED AND/OR SUBMITTED TO THE PERMIT OFFICE UNTIL A PURCHASE ORDER OR SIGNED AGREEMENT IS ISSUED BY THE CONTRACTOR TO THE DESIGN PROFESSIONAL FOR WORK REQUIRED. THIS SHALL NOT APPLY TO UNFORESEEN CONDITIONS OR CHANGES REQUIRED FOR THE PROJECT THAT ARE NOT INITIATED BY THE CONTRACTOR.
7	DRAWINGS ARE SCHEMATIC IN NATURE. THE CONTRACTOR SHALL COORDINATE WITH OTHER TRADES AND EXISTING EQUIPMENT (WHERE APPLICABLE) TO ENSURE EQUIPMENT FURNISHED WILL WORK FOR SPACES PROVIDED. FINAL DIMENSIONS OF DUCTWORK AND PIPING SHALL BE COORDINATED IN FIELD. THE CONTRACTOR ASSUMES ALL RESPONSIBILITY FOR PROVIDING OFFSETS AND TRANSITIONS IN DUCTWORK AND PIPING TO FIT IN SPACES PROVIDED AND THESE ADDITIONAL OFFSETS AND TRANSITIONS SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.
8	DUCTWORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST EDITION OF SMACNA GUIDELINES AT TIME OF PROJECT PERMIT.
9	THERMOSTATS, HUMIDISTATS, TEMPERATURE SENSORS, HUMIDITY SENSORS, AND/OR OTHER DEVICES REQUIRING OCCUPANT ADJUSTMENT BUT LOCATED ON WALL SHALL BE MOUNTED 48" AFF, UNLESS NOTED OTHERWISE.
10	WHERE APPLICABLE AND AVAILABLE, ACTUAL EQUIPMENT DRAWINGS ARE USED FOR SYMBOLS ON PLAN VIEWS AND IN DETAILS. HOWEVER, SIMPLE BLOCK DIAGRAMS WITH ESTIMATED DIMENSIONS ARE ALSO USED FOR PLAN VIEWS. WHERE EQUIPMENT OR DEVICES ARE NOT LABELED, INDUSTRY STANDARD TERMINOLOGY AND SYMBOLOGY SHALL APPLY.
11	THESE GENERAL NOTES WORK IN CONJUNCTION WITH NOTES SHOWN ON PLAN VIEWS. THESE NOTES DO NOT SUPERCEDE NOTES SHOWN ON PLAN VIEW DRAWINGS. CONVERSELY, NOTES SHOWN ON PLAN VIEW DRAWINGS DO NOT SUPERCEDE THESE GENERAL NOTES.
12	REFER TO EQUIPMENT SCHEDULES FOR AIR AND WATER PRESSURE DROPS ASSOCIATED WITH COOLING AND HEATING COILS.
13	PROVIDE ACCESS PANELS IN DUCTWORK AND/OR BUILDING CONSTRUCTION WHERE REQUIRED FOR EQUIPMENT ACCESS AND SERVICE. PANELS SHALL BE SIZED TO SUIT EQUIPMENT SERVICED. WHERE PANELS WILL BE LOCATED IN FIRE RATED WALLS AND/OR PARTITIONS, THE ACCESS PANEL SHALL MEET THE RATING OF THE WALL. REFER TO ARCHITECTURAL DRAWINGS FOR RATINGS OF WALLS AND PARTITIONS.
14	UNLESS NOTED OTHERWISE, DUCTWORK, PIPING, VALVES, DAMPERS, AND ALL ASSOCIATED ANCILLARY HVAC DEVICES SHALL BE CONSTRUCTED IN ACCORDANCE WITH MECHANICAL SPECIFICATIONS. ALL EQUIPMENT INSTALLED AS PART OF THIS PROJECT SHALL BE NEW, UNLESS NOTED OTHERWISE, NO EXCEPTIONS.
15	PAINT DUCTWORK AND DAMPERS VISIBLE THRU REGISTERS FLAT BLACK PRIOR TO OWNER OCCUPANCY.
16	HVAC EQUIPMENT PROVIDED FROM THIRD PARTY MANUFACTURER SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS. WHERE CONFLICTS BETWEEN CONTRACT DOCUMENTS AND MANUFACTURER'S INSTRUCTION ARISE, THE MANUFACTURER'S INSTALLATION INSTRUCTIONS SHALL PREVAIL.
17	THE CONTRACTOR SHALL MAKE HIS OR HERSELF AWARE OF THE OWNER'S SCHEDULE AND BE PREPARED TO WORK AT NIGHT OR ON WEEKENDS TO COMPLETE WORK SHOWN IN THESE DOCUMENTS. INTERRUPTIONS TO OWNER'S NORMAL WORK SCHEDULE SHALL NOT BE MADE WITHOUT WRITTEN INSTRUCTION TO DO SO FROM OWNER'S REPRESENTATIVE.
18	WHERE THERE ARE CONFLICTS BETWEEN LIGHT SWITCHES AND THERMOSTAT/HUMIDISTAT LOCATIONS, THE LIGHT SWITCHES SHALL PREVAIL. MOUNT THERMOSTAT/HUMIDISTATS ADJACENT TO LIGHT SWITCHES.
19	AS REQUIRED BY BUILDING CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE TRANSITIONS AND EQUIVALENT SQUARE DUCT SIZES NEEDED TO FIT THRU JOISTS AND/OR WALL 2x4 SPACING WHERE ROUND IS SHOWN ON PLANS. THE CONTRACTOR SHALL PROVIDE THESE TRANSITIONS AND SQUARE DUCTS AT NO ADDITIONAL COST TO THE OWNER. COORDINATE WITH THE GC IN FIELD FOR JOIST AND WALL 2x4 REQUIREMENTS.
20	WHERE REQUIRED BY BUILDING CONSTRUCTION AND HEIGHT TO EQUIPMENT SERVED, THE CONTRACTOR SHALL PROVIDE HOISTING MECHANISMS AS WELL AS SCAFFOLDING WHERE REQUIRED TO INSTALL EQUIPMENT SHOWN WITHIN THESE CONTRACT DOCUMENTS. EQUIPMENT USED FOR THE INSTALLATION OF EQUIPMENT SHALL MEET ALL OSHA REQUIREMENTS.
21	PROVIDE MANUAL BALANCE DAMPERS FOR SUPPLY, RETURN, AND EXHAUST TAKE-OFFS TO REGISTERS WHETHER INDICATED OR NOT. WHERE DAMPERS WILL BE LOCATED ABOVE INACCESSIBLE CEILINGS, PROVIDE OPPOSED BLADE MANUAL BALANCE DAMPERS FROM REGISTER MANUFACTURER.

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY THE ENGINEER INDICATED HEREIN WITH THE DATE AND INDICATED IN THE STAMP. URBAN ARMA CODE PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGN AUTHENTICATION CODE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

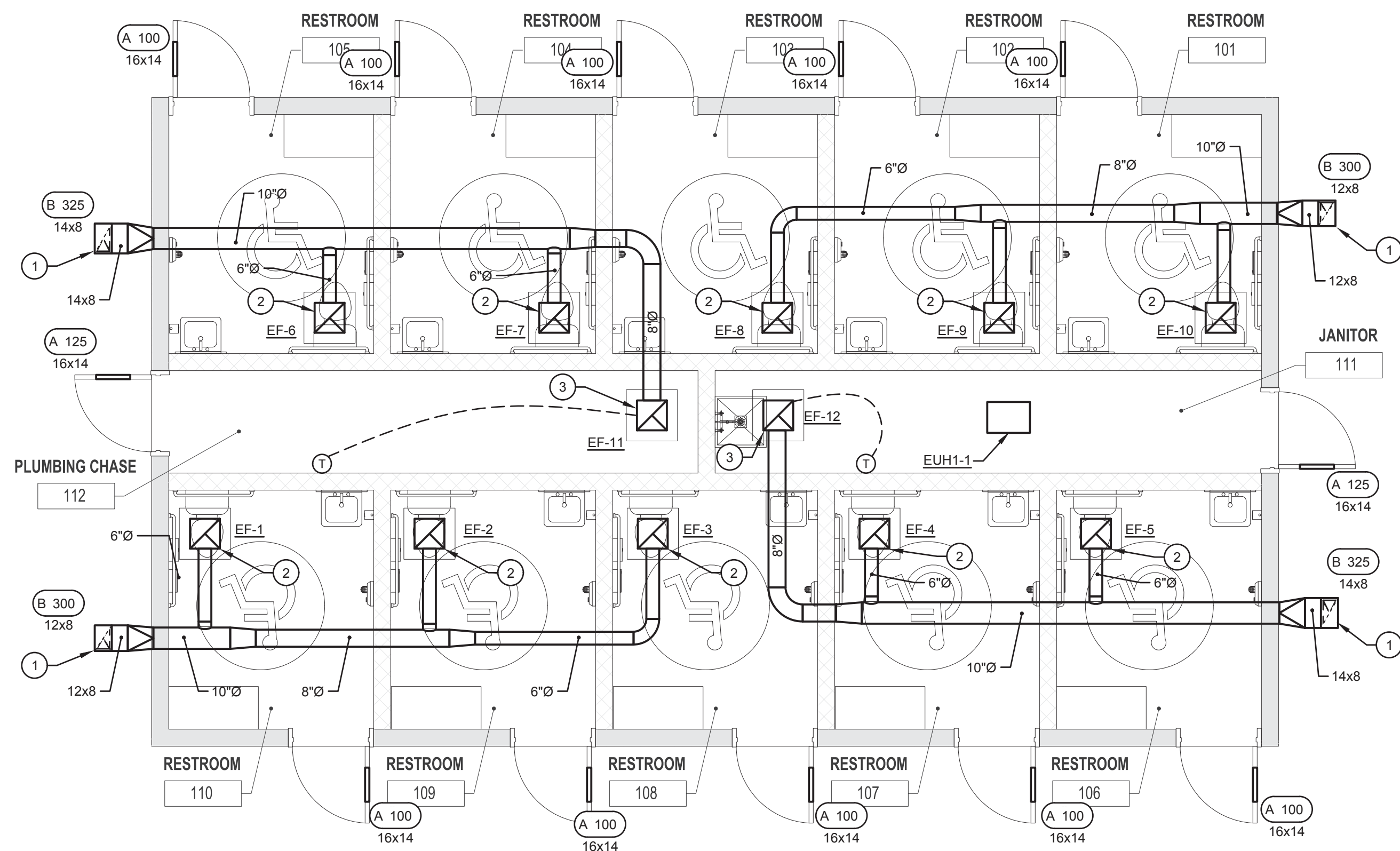


DESIGNER : DMM	ISSUE DATE: 28 MARCH 2023	CONSULTANT : TOMAHAWK ENGINEERING & CONSULTING, INC.
DRAWN BY: DMM	COMP. FILE NO.: 18980	1940 Buford Blvd. - Tallahassee, FL 32302
REVIEWED BY: WHT	STATE PROJECT NO.: 61383C	Phone: 850-402-3040, Fax: 850-402-9699
		Certificate of Authorization #: 29709
		Permit #: 76983
		Tallahawki Project #: 22033

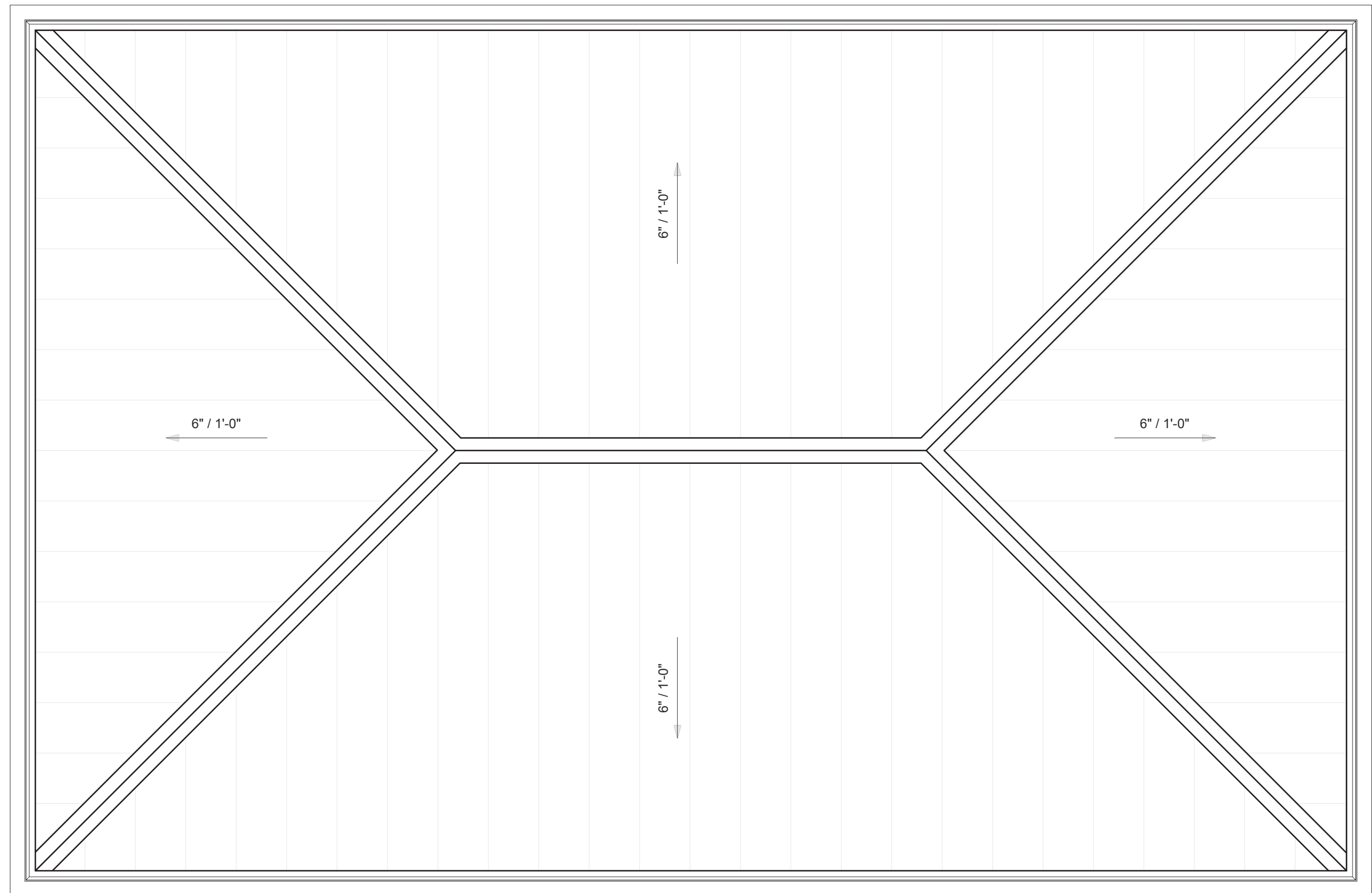
SHEET NO.	PROJECT TITLE
M001	ICHETUCKNEE SPRINGS STATE PARK REPLACE RESTROOM

12087 SOUTHWEST U.S. 27, FORT WHITE, FL 32038	LEGEND, NOTES & SCHEDULES - HVAC
---	----------------------------------





1	FLOOR PLAN - MECHANICAL
M101	1/4" = 1'-0"



2	ROOF PLAN - MECHANICAL
M101	1/4" = 1'-0"

SHEET RENOVATION KEY NOTES:	
1	PROVIDE A BIRDSCREEN ON THE EXHAUST GRILLE.
2	TIE EXHAUST FAN INTO LIGHTING CIRCUIT SUCH THAT WHEN THE LIGHT IS ON, THE EXHAUST FAN SHALL BE ENERGIZED. REFER TO ELECTRICAL PLANS FOR FURTHER INFORMATION.
3	PROVIDE LINE VOLTAGE THERMOSTAT TO ENERGIZE/DE-ENERGIZE EXHAUST FAN. INITIAL SETPOINT FOR EXHAUST FAN TO BE 80°F.

SHEET NO. <div>M101</div>	ICHTUCKNEE SPRINGS STATE PARK 12087 SOUTHWEST U.S. 27, FORT WHITE, FL 32038		<div><div><div>★</div><div>MICHAEL BOYLE</div><div>LICENSE</div><div>NO. 76963</div><div>STATE OF FLORIDA</div><div>EXPIRES</div><div>02-28-25</div><div>PROFESSIONAL ENGINEER</div><div>★</div></div></div>	DESIGNER : DIMM	ISSUE DATE: 28 MARCH 2023	SYMBOL	REVISION	DATE
	SHEET TITLE			DRAWN BY: DIMM	COMP. FILE No.: 18800	1	1	
	PROJECT TITLE	FLOOR PLANS - MECHANICAL		REVIEWED BY: WHI	STATE PROJECT NO.: 61383C	2	2	
	ICHTUCKNEE SPRINGS STATE PARK REPLACE RESTROOM	CONSULTANT : TOMAHAWK ENGINEERING & CONSULTING, INC. 1940 Buford Blvd., Tallahassee, FL 32302 P.E.#: 62829 MICHAEL BOYLE P.E.#: 76963 Certificate of Authorization #: 29709 Tomahawk Project #: 22033			<div>Department of Environmental Protection</div> <div>Office of Operations</div> <div>Bureau of Design and Construction</div> <div>3800 Commonwealth Blvd., Tallahassee, FL 32399 (850) 425-2300</div>			

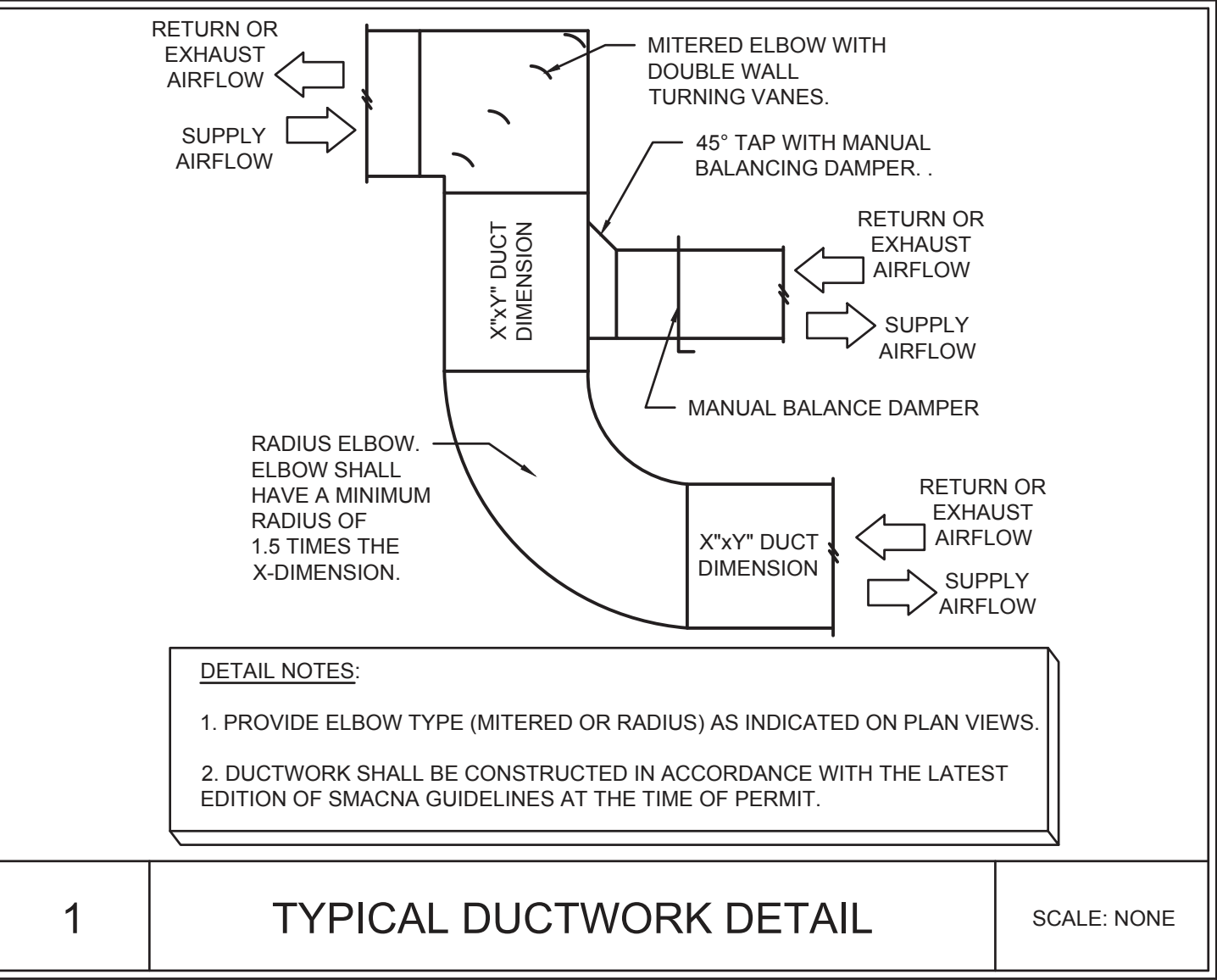
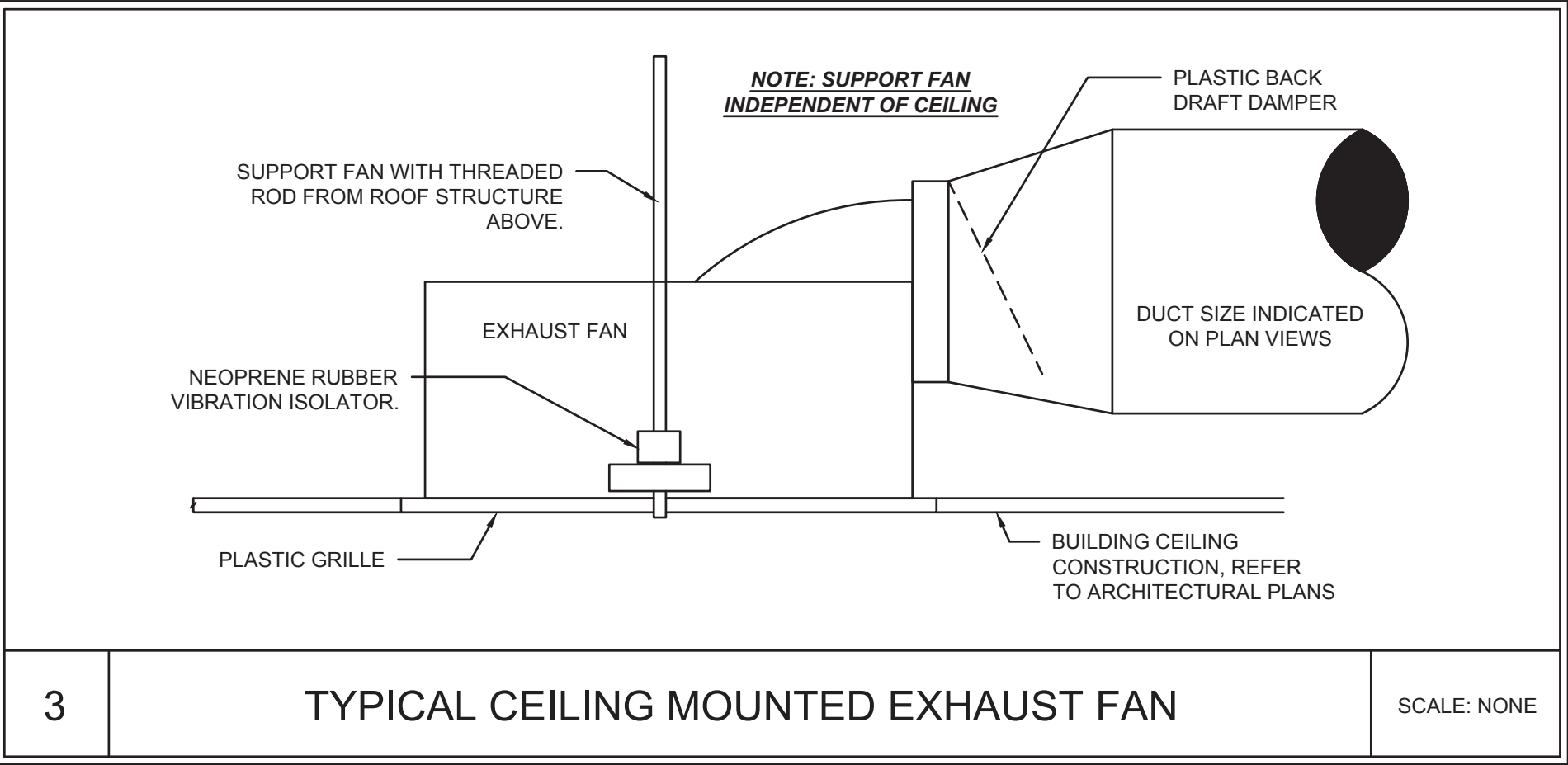
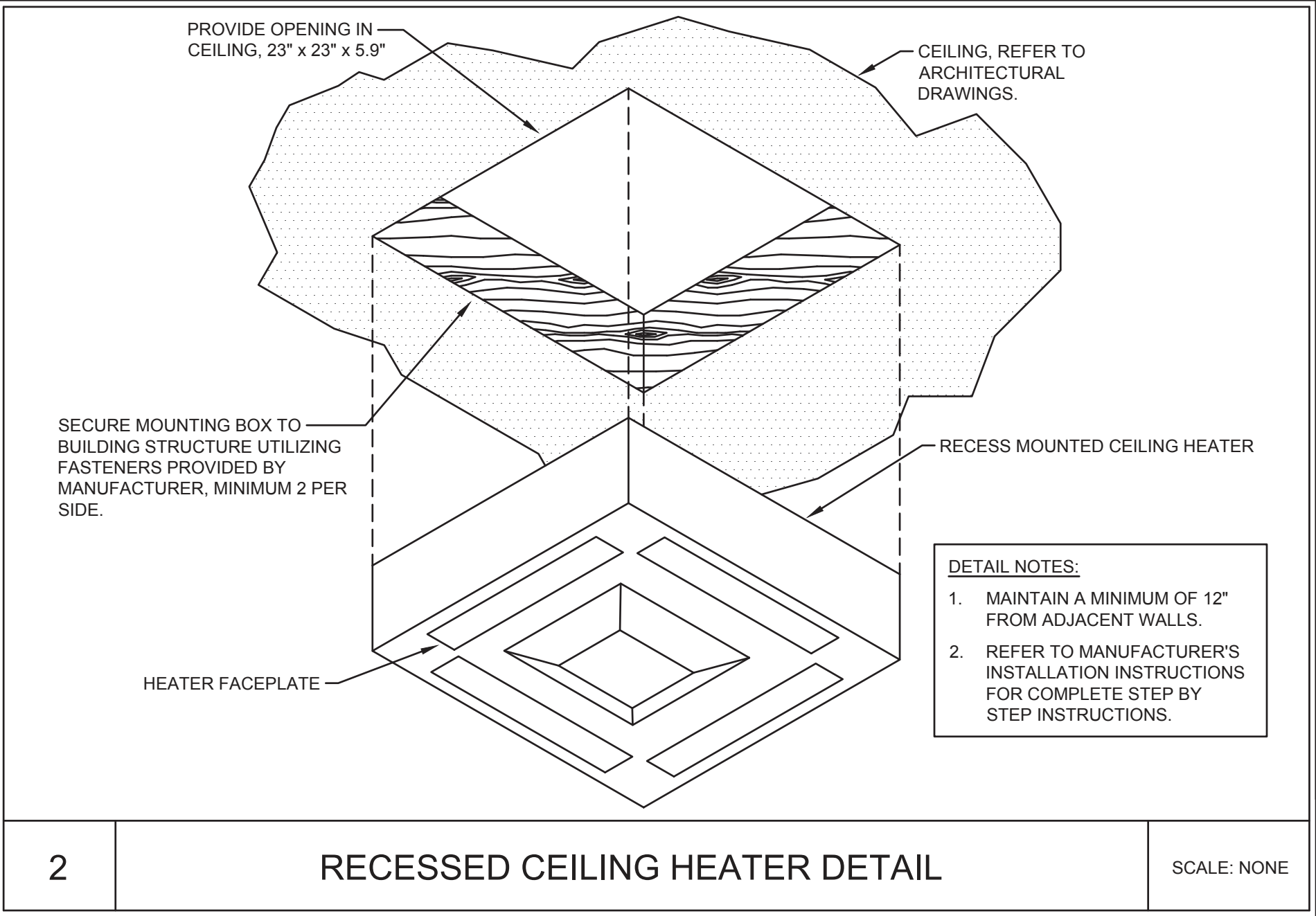
# 100% CONTRACT DOCUMENTS



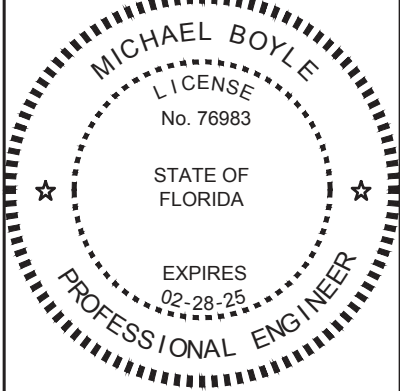
FAN SCHEDULE										
EQUIPMENT NO.	MODEL NO.	FAN TYPE	CFM	EXT. STATIC	FAN RPM	DRIVE TYPE	SONES	MOTOR RPM	MOTOR HP (W)	VOLTAGE/ PHASE
EF1-1	GC-148	CEILING MOUNTED	100	0.35"	951	DIRECT	2.0	1100	(40 W)	115/1Ø
EF1-2	GC-148	CEILING MOUNTED	100	0.35"	951	DIRECT	2.0	1100	(40 W)	115/1Ø
EF1-3	GC-148	CEILING MOUNTED	100	0.35"	951	DIRECT	2.0	1100	(40 W)	115/1Ø
EF1-4	GC-148	CEILING MOUNTED	100	0.35"	951	DIRECT	2.0	1100	(40 W)	115/1Ø
EF1-5	GC-148	CEILING MOUNTED	100	0.35"	951	DIRECT	2.0	1100	(40 W)	115/1Ø
EF1-6	GC-148	CEILING MOUNTED	100	0.35"	951	DIRECT	2.0	1100	(40 W)	115/1Ø
EF1-7	GC-148	CEILING MOUNTED	100	0.35"	951	DIRECT	2.0	1100	(40 W)	115/1Ø
EF1-8	GC-148	CEILING MOUNTED	100	0.35"	951	DIRECT	2.0	1100	(40 W)	115/1Ø
EF1-9	GC-148	CEILING MOUNTED	100	0.35"	951	DIRECT	2.0	1100	(40 W)	115/1Ø
EF1-10	GC-148	CEILING MOUNTED	100	0.35"	951	DIRECT	2.0	1100	(40 W)	115/1Ø
EF1-11	GC-166	CEILING MOUNTED	125	0.35"	1045	DIRECT	2.5	1100	(46 W)	115/1Ø
EF1-12	GC-166	CEILING MOUNTED	125	0.35"	1045	DIRECT	2.5	1100	(46 W)	115/1Ø
NOTES:										
1.	BASIS OF DESIGN: LOREN COOK, OR EQUAL.									
2.	PROVIDE EXHAUST FANS, EF1-1 THRU EF1-10 WITH THE FOLLOWING: DISCONNECT SWITCH (REFER TO ELEC.), HANGING SUPPORT KIT, BACK DRAFT DAMPER, WHITE PLASTIC GRILLE, SPEED CONTROLLER, VIBRATION ISOLATORS. TIE EXHAUST FANS INTO LIGHTING CIRCUIT, REFER TO ELEC. DRAWINGS.									
3.	PROVIDE EXHAUST FAN, EF1-11 & EF1-12 WITH THE FOLLOWING: DISCONNECT SWITCH (REFER TO ELEC.), HANGING SUPPORT KIT, BACK DRAFT DAMPER, WHITE PLASTIC GRILLE, SPEED CONTROLLER, VIBRATION ISOLATORS AND LINE VOLTAGE THERMOSTAT. INITIALLY SET THERMOSTAT TO 80°F.									

DIFFUSER SCHEDULE			
PLAN MARK	CFM	NECK SIZE	DESCRIPTION
A	GRILLES TO BE 16x14		ALL ALUMINUM HEAVY DUTY CONSTRUCTION SIGHT PROOF TRANSFER GRILLE. GRILLE TO BE EXTRUDED ALUMINUM, MANDREL TUBE CONSTRUCTION AND ANGLED LOUVERED BLADES. PROVIDE GRILLE WITH MOUNTING KIT FOR DOOR. COORDINATE WITH ARCHITECTURAL DRAWINGS FOR DOOR SCHEDULE. GRILLE SHALL BE EQUAL TO PRICE MODEL ATGH.
B	REFER TO PLAN VIEWS FOR CFM AND SIZES		ALL ALUMINUM CONSTRUCTION RETURN/EXHAUST AIR , WITH LOUVERED FACE AND 3/4" BLADE SPACING ON 45° ANGLE. PROVIDE LAY-IN TYPE BORDER WHERE LOCATED IN LAY-IN TYPE CEILINGS. PROVIDE WITH SURFACE MOUNTED BORDER WHERE LOCATED IN GYPSUM CEILINGS OR ON WALLS. GRILLE SHALL BE EQUAL TO PRICE MODEL 630.
NOTES:			
1. LAY-IN AND WALL MOUNTED DIFFUSERS AND GRILLES SHALL BE WHITE.			
2. WHERE REQUIRED BY GYPSUM CEILINGS, PROVIDE WITH PLASTER RINGS OR OTHER APPURTENANCES AS REQUIRED.			
3. INTERIORS OF DIFFUSERS AND GRILLES VISIBLE FROM THE FINISHED SPACE SHALL BE PAINTED FLAT BLACK.			

ELECTRIC UNIT HEATER SCHEDULE							
EQUIPMENT NO.	QUANTITY	MODEL NO. (CDIR SERIES)	KILOWATTS	TOTAL AMPS	CFM	APPROXIMATE AIR TEMP. RISE (°F)	VOLTAGE/PHASE
EUH1-1	1	937U03000J	3	13.2	310	60	240/1Ø
NOTES:							
1.	BASIS OF DESIGN: INDEECO OR EQUAL.						
2.	PROVIDE UNIT HEATERS WITH FAN ON/AUTO SWITCH, FACTORY BUILT-IN DISCONNECT SWITCH RATED FOR UNIT HEATER, STEEL FINNED TUBULAR ELEMENTS, AND CEILING MOUNTED KIT. COLOR TO BE SELECTED BY ARCHITECT.						
3.	TRIM KITS SHALL BE TAMPER PROOF AND PROVIDED WITH ANTI LIGATURE COMPONENTS. THERMOSTATS SHALL BE INTERNALLY MOUNTED AND NOT ADJUSTABLE FROM EXTERIOR OF UNIT. INITIALLY SET THERMOSTATS TO 70°F.						



THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY THE ENGINEER INDICATED HEREIN WITH THE DATE AND INDICATED IN THE TIME STAMP USING AN RSA CODE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGN AUTHENTICATION CODE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.



ICHECKNEE SPRINGS STATE PARK  
12087 SOUTHWEST U.S. 27, FORT WHITE, FL 32038  
SHEET TITLE

DETAILS - MECHANICAL

PROJECT TITLE  
ICHECKNEE SPRINGS STATE PARK  
REPLACE RESTROOM

SHEET NO.  
M501

Department of Environmental Protection  
Office of Operations  
Bureau of Design and Construction  
3800 Commonwealth Blvd., Tallahassee, FL 32399 (850) 425-2300

DESIGNER : DMM  
DRAWN BY: DMM  
REVIEWED BY: WHT  
Consultant : TOMAHAWK ENGINEERING & CONSULTING, INC.  
1940 Buford Blvd. - Tallahassee, FL 32302  
Phone: 850-402-3040, Fax: 850-402-9699  
Certificate of Authorization #: 29709  
PER 62829  
MICHAEL BOYLE  
PER 76983

ISSUE DATE: 28 MARCH 2023  
COMP. FILE NO.: 16880  
STATE PROJECT NO.: 61853C



PLUMBING FIXTURE SCHEDULE:	
WC-1	PROVIDE A KOHLER MODEL K-3999-UT VITREOUS CHINA TANK TYPE, FLOOR MOUNTED, WATER CLOSET WITH ELONGATED BOWL. OR EQUAL. WATER CLOSET SHALL BE A (2) PIECE TYPE WATER CLOSET WITH A MAXIMUM WATER USAGE OF 1.28 GALLONS PER FLUSH AND 16-1/2" HIGH BOWL. TANK TO BE INSULATED AND COME COMPLETE WITH TANK COVER LOCKS. PROVIDE WITH A EXTRA HEAVY SOLID PLASTIC SEAT WITH AN OPEN FRONT AND SELF-SUSTAINING STAINLESS STEEL CHECK HINGES EQUAL TO BEMIS 1655SSCT. PROVIDE COLD INLET WITH 1/4 TURN ANGLE BALL STOP WITH 1/2" IPS SWEAT INLET AND 3/8" IPS COMPRESSION OUTLET EQUAL TO BRASSCRAFT MODEL KTR19X. STOP TO BE ALL BRASS WITH REMOVABLE HANDLE RATED FOR TEMPERATURES GREATER THAN 115 DEG F. PROVIDE STOP WITH CHROME WALL ESCUTCHEON AND STAINLESS STEEL FLEXIBLE SUPPLY FROM STOP TO WATER CLOSET. PROVIDE WATER CLOSET WITH HEAVY DUTY CLOSET FLANGE MATCHING PIPING MATERIAL AND WAX RING. WATER CLOSET AND ASSOCIATED APPURTENANCES SHALL BE ADA COMPLIANT WITH FLUSH HANDLE ON WIDE SIDE OF ROOM.
L-1	PROVIDE A KOHLER MODEL K-2031 VITREOUS CHINA WALL HUNG LAVATORY WITH FLOOR MOUNTED CONCEALED ARM CARRIER, OVERFLOW AND SINGLE FAUCET HOLE OR EQUAL. PROVIDE CHROME PLATED 17 GAUGE 1-1/4 X 1-1/2 BRASS P-TRAP WITH CLEANOUT EQUAL TO PROFLOW MODEL PFPTB104. PROVIDE OFFSET LAVATORY GRID DRAIN EQUAL TO PROFLO MODEL PFGD101. PROVIDE A CHICAGO FAUCETS MODEL 3510-E2805AB SINGLE HOLE AND SINGLE SUPPLY FAUCET. FAUCET TO HAVE SINGLE LEVER HANDLE, STAINLESS STEEL HOSE AND 0.5 GPM VANDAL PROOF NON-AERATING LAMINAR FLOW OUTLET. PROVIDE COLD INLET WITH 1/4 TURN ANGLE BALL STOP WITH 1/2" IPS SWEAT INLET AND 3/8" IPS COMPRESSION OUTLET EQUAL TO BRASSCRAFT MODEL KTR19X. STOP TO BE ALL BRASS WITH REMOVABLE HANDLE RATED FOR TEMPERATURES GREATER THAN 115 DEG F. PROVIDE STOP WITH CHROME WALL ESCUTCHEON AND STAINLESS STEEL FLEXIBLE SUPPLY FROM STOP TO FAUCET INLET. PROVIDE FULLY ADJUSTABLE CONCEALED ARM, FLOOR MOUNTED LAVATORY CARRIER, ADJUSTED TO ADA HEIGHT EQUAL TO ZURN Z1231. PROVIDE HANDICAP INSULATION. LAVATORY AND ASSOCIATED APPURTENANCES SHALL BE ADA COMPLIANT.
MS-1	PROVIDE A MUSTEE MODEL 63M 24"x 24"x10" FIBERGLASS MOP SINK OR EQUAL. MOP SINK TO BE COMPLETE WITH INTEGRAL STAINLESS STEEL DRAIN BODY AND STAINLESS STEEL CAPS ON ALL CURBS. PROVIDE MOP HANGER CONSISTING OF 24"x3" WIDE STAINLESS STEEL PLATE WITH 3 RUBBER TOOL GRIPS, HOSE AND HOSE BRACKET, AND MUSTEE MODEL 67.2424 24"x24" STAINLESS STEEL WALL GUARD ON 2 SIDES. PROVIDE A T&S BRASS MODEL B-0665-BSTC-R CHROME PLATED BRASS FAUCET OR EQUAL. FAUCET TO BE COMPLETE WITH VACUUM BREAKER, INTEGRAL CHECK STOPS, ADJUSTABLE WALL BRACE, PAIL HOOK, AND 3/4 INCH HOSE THREAD ON SPOUT.
WH-1	PROVIDE A WOODFORD MODEL 67 FREEZELESS WALL HYDRANT. HYDRANT TO BE FREEZELESS, AUTOMATIC DRAINING WITH BACKFLOW PREVENTER, 3/4" INLET AND OUTLET, LOOSE KEY OPERATION AND CHROME PLATED FINISH. COORDINATE WITH WALL THICKNESS PRIOR TO ORDERING.
FD-1	PROVIDE A ZURN MODEL Z415B-VP FLOOR DRAIN OR EQUAL. FLOOR DRAIN SHALL HAVE A COATED CAST IRON BODY, BOTTOM OUTLET, COMBINATION REVERSIBLE CLAMP COLLAR AND ADJUSTABLE ROUND HEEL PROOF NICKEL BRONZE STRAINER, 3" OUTLET, 6" ROUND TOP, AND VANDAL PROOF. PROVIDE WITH DEEP SEAL TRAP AND TRAP PRIMER CONNECTION.
TP-1	PROVIDE A PRECISION PLUMBING PRODUCTS MODEL PRO1-500 OR EQUAL. TRAP PRIMER TO BE INLINE, FLOW ACTIVATED AND ALL BRASS CONSTRUCTION. PROVIDE A PRECISION PLUMBING PRODUCTS DISTRIBUTION UNIT MODEL DU-U FOR PRIMING 2 TO 4 TRAPS.
WHA	PROVIDE A WATTS MODEL 15M2 WATER HAMMER ARRESTOR OR EQUAL. ARRESTOR TO BE PISTON OR BELLOWS TYPE, SUITABLE FOR DOMESTIC POTABLE WATER, PDI LISTED AND SIZED PER PDI RECOMMENDATIONS.

ABBREVIATIONS	
AFF	ABOVE FINISHED FLOOR
AHAP	AS HIGH AS POSSIBLE
BF	BELOW FLOOR
BG	BELOW GRADE
CO	CLEANOUT
DCW	DOMESTIC COLD WATER
DF	DRINKING FOUNTAIN
DHW	DOMESTIC HOT WATER (120°F)
DN	DOWN
ET	EXPANSION TANK
EWC	ELECTRIC WATER COOLER
EWB	ELECTRIC WATER HEATER
FD	FLOOR DRAIN
HB	HOSE BIBB
IE	INVERT ELEVATION
IW	INDIRECT WASTE
L	LAVATORY
MS	MOP SINK
NTS	NOT TO SCALE
SAN	SANITARY WASTE (OUTSIDE OF BUILDING)
SV	SHUTOFF VALVE
U	URINAL
V	VENT
W	SANITARY WASTE (INSIDE OF BUILDING)
WC	WATER CLOSET
WCO	WALL CLEANOUT
WHA	WATER HAMMER ARRESTOR

SYMBOLS LEGEND	
XX-1	PLUMBING FIXTURE TAG
-----	DCW PIPING
-----	DHW OR DTW PIPING
-----	DTWR PIPING
-----	WASTE PIPING
-----	VENT PIPING
-----	
-----	ROUND FLOOR DRAIN/SINK
-----	PIPE BREAK
-----	PIPE TURNED UP
-----	PIPE TURNED DOWN
-----	BOTTOM PIPE TAP
-----	PIPE CAP
-----	FLOOR OR GRADE CLEANOUT
-----	DIRECTION OF FLOW
-----	BALL VALVE
-----	CHECK VALVE
-----	
-----	WATER HAMMER ARRESTOR

PLUMBING SPECIFICATIONS	
1	ALL PLUMBING WORK SHALL BE PERFORMED BY A LICENSED PLUMBING CONTRACTOR. ALL WORK SHALL CONFORM TO THE 2020 FBC-PLUMBING, AND ALL APPLICABLE LOCAL, STATE, AND FEDERAL CODES.
2	ABOVE & BELOW GROUND DOMESTIC VENT PIPING AND SANITARY PIPING SHALL BE SCHEDULE 40 CPVC OF SIZE INDICATED ON PLAN VIEWS. PIPING SHALL BE SLOPED IN ACCORDANCE WITH FLORIDA BUILDING CODE, PLUMBING AND PROVIDED WITH SOLVENT WELDED FITTINGS. PROVIDE TRANSITION FITTINGS AND METAL TO PLASTIC FITTINGS AND APPURTENANCES WHERE REQUIRED TO CONNECT TO PLUMBING FIXTURES AS INDICATED ON PLAN VIEWS.
3	DOMESTIC HOT, TEMPERED AND COLD WATER PIPING SHALL BE ONE OF THE FOLLOWING: SCHEDULE 80 CPVC PIPING & SOLVENT WELDED SCHEDULE 80 CPVC FITTINGS OR ASTM B88 TYPE "L" COPPER PIPING OF SIZE INDICATED ON PLAN VIEWS. PIPING CONNECTIONS FOR COPPER SHALL BE WROUGHT COPPER AND SOLDERED WITH SOLDER MATERIALS SUITABLE FOR USE IN POTABLE WATER SYSTEMS AND APPROVED FOR USE BY THE FLORIDA BUILDING CODE, PLUMBING. PROVIDE TRANSITION FITTINGS AND METAL TO PLASTIC FITTINGS AND APPURTENANCES WHERE REQUIRED. ADDITIONALLY, PROVIDE SOLDERED AND THREADED NIPPLES, COUPLINGS, OR OTHER PIPING COMPONENTS REQUIRED TO CONNECT TO PLUMBING FIXTURES AS INDICATED ON PLAN VIEWS. ALL PIPING AND MATERIALS SHALL BE SUITABLE FOR USE IN POTABLE WATER SYSTEMS. CLEAN WATER PIPING AS IT IS INSTALLED AND KEEP CAPPED TO ENSURE DEBRIS AND DIRT DO NOT CONTAMINATE PIPING PRIOR TO PLACING IN SERVICE.
4	CLEAN AND DISINFECT PIPING PRIOR TO PLACING IN SERVICE ACCORDING TO THE FOLLOWING:
4.1	COMPLETELY FLUSH SYSTEM WITH CLEAN WATER UNTIL ALL DIRT AND DEBRIS ARE REMOVED AND CLEAN WATER FLOWS FREELY.
4.2	ISOLATE AND FILL SYSTEM WITH A LEAST 50 PPM CHLORINE AND LET STAND FOR A MINIMUM OF 24-HOURS.
4.3	REMOVE WATER AND ISOLATE AND FILL SYSTEM WITH 200 PPM CHLORINE AND LET STAND FOR A MINIMUM OF 3-HOURS.
4.4	FLUSH SYSTEM WITH CLEAN POTABLE WATER UNTIL CHLORINE IS NO LONGER IN SYSTEM.
4.5	SUBMIT WATER SAMPLES TO THE AUTHORITY HAVING JURISDICTION. WHERE WATER IS FOUND TO BE UNACCEPTABLE, REPEAT PROCEDURES UNTIL WATER MEETS REQUIREMENTS.
4.6	PROVIDE AND SUBMIT REPORTS OF DISINFECTION PROCEDURES.
5	PROVIDE DIELECTRIC UNIONS AND FLANGE KITS FOR CONNECTIONS OF DISSIMILAR METALS.
6	DOMESTIC COLD WATER, HOT WATER AND TEMPERED WATER PIPING SHALL BE INSULATED WITH A MINIMUM 1" THICK CLOSED-CELL FOAM INSULATION EQUAL TO ARMACELL TYPE AP ARMAFLEX TUBE INSULATION. EXTERIOR PIPING INSULATION TO BE COVERED WITH A 54 MIL THICKNESS ALUMINUM ALL SERVICE WRAP TAPED SEAMS EQUAL TO ALUMAGUARD ALL-WEATHER CLADDING. PROVIDE PREFORMED ALUMINUM COVERS ON FITTINGS AND ELBOWS. INSULATION SHALL HAVE AN INSTALLED MINIMUM CONDUCTIVITY OF 0.24 BTU"IN/(H*SF*°F).
7	ISOLATION VALVES FOR DOMESTIC WATER PIPING SHALL BE BRONZE, SINGLE PIECE, FULL PORT VALVES SUITABLE FOR USE IN POTABLE DOMESTIC WATER LINES AND COPPER PIPING. PROVIDE WITH STAINLESS STEEL TRIM.
8	PIPING SHALL BE SUPPORTED WITH TRAPEZE HANGERS SUPPORTED WITH THREADED ROD FROM STRUCTURE, OR FROM CLEVIS HANGERS. ALL SHALL MEET UL REQUIREMENTS AND MSS PIPING STANDARDS. ALL HANGER MATERIALS TO BE STAINLESS STEEL.
9	FLOOR CLEANOUTS SHALL MEET THE FOLLOWING REQUIREMENTS:
9.1	FLOOR: HEAVY DUTY ROUND SCORIATED NICKEL BRONZE TOP.
9.2	CARPETED FLOOR: HEAVY DUTY ROUND NICKEL BRONZE TOP RECESSED FOR CARPET.
9.3	TILE FLOOR: HEAVY DUTY ROUND SCORIATED NICKEL BRONZE TOP. PROVIDE WITH 18" SQUARE, 4" THICK COLLAR.
9.4	WOOD FLOOR: LACQUERED CAST IRON WITH 1-1/2" SECURING FLANGE AND A SATIN FINISHED NICKEL BRONZE COMBINED GASKETED ACCESS COVER AND PLUG.
10	CHECK VALVES SHALL BE SWING CHECK SUITABLE FOR USE IN DOMESTIC WATER LINES AND COPPER PIPING.

CLEANOUT SCHEDULE	
	GENERAL (ALL FLOOR & EXTERIOR CLEANOUTS): DURO-COATED CAST IRON CLEANOUT WITH MEMBRANE FLANGE WITH BRONZE COUNTERSUNK PLUG. CLEANOUT CAN BE ADJUSTED TO FINISH FLOOR LEVEL AFTER CONCRETE HAS SET. COORDINATE FLOOR TYPES WITH ARCHITECTURAL PLANS.
ECQ	FLOOR: HEAVY DUTY ROUND SCORIATED NICKEL BRONZE TOP. <u>ZURN - ZN1400-BP</u>
FCQ	CARPETED FLOOR: HEAVY DUTY ROUND NICKEL BRONZE TOP RECESSED FOR CARPET. <u>ZURN - ZN1400-BP-CM</u>
FCQ	TILE FLOOR: HEAVY DUTY ROUND NICKEL BRONZE TOP RECESSED FOR TILE. <u>ZURN - ZN1400-BP-HD-X</u>
FCQ	TERRAZZO FLOOR: HEAVY DUTY ROUND NICKEL BRONZE TOP RECESSED FOR TERRAZZO. <u>ZURN - ZN1400-BP-HD-Z</u>
GCO	EXTERIOR: HEAVY DUTY ROUND SCORIATED NICKEL BRONZE TOP. PROVIDE WITH 18" SQUARE X 4" THICK CONCRETE COLLAR. <u>ZURN - ZN1406-BP-HD</u>
WCO	WALL: DURA-COATED CAST IRON CLEANOUT TEE, BRONZE COUNTERSUNK PLUG, WITH ROUND POLISHED STAINLESS STEEL COVER. <u>ZURN - Z1446-BP</u>

GENERAL PLUMBING NOTES	
THESE GENERAL CONDITIONS APPLY TO THE CONTRACTOR HOLDING THE GENERAL CONTRACT AS WELL AS ALL OTHER SUB CONTRACTORS AND AGENTS REQUIRED TO PERFORM WORK ON THIS PROJECT.	
1	THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIAL, AND EQUIPMENT REQUIRED TO PROVIDE THE OWNER WITH A COMPLETE, FULLY OPERATIONAL SYSTEM. WORK AND COMPONENTS NOT INDICATED BUT IMPLIED SHALL BE PROVIDED AND BE PART OF THE CONTRACT.
2	THE CONTRACTOR SHALL PROVIDE ALL CORES AND SAW CUTS FOR WALLS AND FLOORS AS REQUIRED TO INSTALL PIPING AND SERVICES AS INDICATED ON THESE DOCUMENTS. THE CONTRACTOR SHALL MAKE THEMSELVES FAMILIAR WITH THE BUILDING SITE PRIOR TO PROVIDING A BID. EXTRAS FOR NOT FULLY UNDERSTANDING THE EXISTING CONDITIONS OR THIS SET OF DOCUMENTS WILL NOT BE GIVEN. WHERE BUILDING SERVICES PENETRATE EXTERIOR WALL, SLEEVE AND SEAL WATER AND WEATHER TIGHT.
3	WORK SHALL CONFORM TO THE FLORIDA BUILDING CODE, 2020 AND ANY OTHER APPLICABLE STATE, LOCAL, AND/OR FEDERAL CODES AND LAWS.
4	THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS AND INSPECTIONS AND IS ALSO RESPONSIBLE FOR ALL ASSOCIATED FEES FOR SAID PERMITS AND INSPECTIONS.
5	DRAWINGS ARE DIAGRAMMATIC IN NATURE. PIPING SIZES, PIPING INVERTS, EQUIPMENT DIMENSIONS, MOUNTING HEIGHTS AND GENERAL ARRANGEMENT SHALL BE FIELD MEASURED AND VERIFIED PRIOR TO PROCUREMENT. ALL FITTINGS MAY NOT BE SHOWN. THE PLUMBING CONTRACTOR SHALL PROVIDE ALL REQUIRED FITTINGS, TAPS FOR EXISTING SANITARY AND DOMESTIC PRESSURE PIPING, TRANSITIONS, FLEXIBLE CONNECTORS, VALVES, LABOR, OR ANY OTHER WORK INDICATED OR IMPLIED FOR A FULLY FUNCTIONAL SYSTEM.
6	WHERE THE CONTRACTOR DEVIATES FROM THIS SET OF CONSTRUCTION DOCUMENTS AND RESUBMISSION OF REVISED DRAWINGS IS REQUIRED BY THE PERMITTING OFFICE/OFFICIAL, A MINIMUM CHARGE OF \$750.00 PER AFFECTED DRAWING SHEET WILL BE BILLED TO THE CONTRACTOR. THE REVISED DRAWINGS WILL NOT BE PROVIDED AND/OR SUBMITTED TO THE PERMIT OFFICE UNTIL A PURCHASE ORDER OR SIGNED AGREEMENT IS ISSUED BY THE CONTRACTOR TO THE DESIGN PROFESSIONAL FOR WORK REQUIRED. THIS SHALL NOT APPLY TO UNFORESEEN CONDITIONS OR CHANGES REQUIRED FOR THE PROJECT THAT ARE NOT INITIATED BY THE CONTRACTOR.
7	SOME PIPING MAY BE LOCATED IN WALLS THAT ARE NOT ACCESSIBLE. THE CONTRACTOR SHALL INCLUDE IN THEIR COSTS, THE CUTTING AND PATCHING OF WALLS TO ACCESS PIPING AS REQUIRED TO MAKE TIE-INS AS INDICATED HEREIN.
8	THE CONTRACTOR IS RESPONSIBLE FOR THE ENTIRE SITE DURING CONSTRUCTION ACTIVITIES. AS SUCH, THE CONTRACTOR SHALL PROVIDE ALL NECESSARY PROTECTIONS AS REQUIRED BY LAW OR OWNER REQUIREMENTS. ANY DAMAGE DONE BY THE CONTRACTOR OR SUB OF SAID CONTRACTOR SHALL BE REPAIRED AT NO COST TO THE OWNER. THIS INCLUDES, BUT IS NOT LIMITED TO, ALL BUILDING CONSTRUCTION AND ALL EQUIPMENT LOCATED WITHIN THE BUILDING OR ON SITE PREMISES.
9	WORK SHALL BE CARRIED OUT IN A NEAT WORKMAN LIKE MANNER. ALL CONSTRUCTION DEBRIS SHALL BE CLEANED UP AT THE END OF EVERY WORK DAY AND ALL CONSTRUCTION DUST SHALL BE VACUUMED UP AT THE END OF EVERY WORK DAY.
10	UNLESS NOTED OTHERWISE, ALL MATERIALS, EQUIPMENT, PIPING, FIXTURES, WIRING, CABLING, AND OTHER DEVICES REQUIRED FOR COMPLETION OF PROJECT SHALL BE NEW.
11	IN GENERAL, ITEMS SHOWN ON DRAWINGS LIGHTLY COMPARED TO OTHER COMPONENTS ARE EXISTING. WHERE ITEMS ARE NOT INDICATED EXPLICITLY TO BE DEMOLISHED, IT SHALL BE ASSUMED THAT THEY ARE TO REMAIN.
12	THE CONTRACTOR SHALL GUARANTY ALL LABOR AND EQUIPMENT ASSOCIATED WITH PROJECT FOR A MINIMUM OF 1-YEAR.
13	(2) COPIES OF OPERATION AND MAINTENANCE MANUALS FOR MATERIALS AND EQUIPMENT SHALL BE PROVIDED TO THE OWNER AT PROJECT COMPLETION.
14	THE CONTRACTOR AND ALL SUBCONTRACTORS ARE RESPONSIBLE FOR EXAMINING DRAWINGS (ARCHITECTURAL, MECHANICAL, PLUMBING, ELECTRICAL, STRUCTURAL AND CIVIL) AND ACTUAL SITE CONDITIONS PRIOR TO SUBMITTING BIDS. EXTRAS WILL NOT BE GIVEN DUE TO FAILURE TO UNDERSTAND ALL CONDITIONS INVOLVED OR DISCREPANCIES BETWEEN ACTUAL DIMENSIONS AND CONDITIONS AND DIMENSIONS AND CONDITIONS INDICATED ON PLANS. WORK SHALL BE MODIFIED AND PROVIDED AS REQUIRED BY FIELD CONDITIONS AND THIS ADDITIONAL WORK SHALL BE CARRIED OUT AT NO COST TO THE OWNER.
15	EQUIPMENT AND FIXTURES SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS AND STANDARD INDUSTRY PRACTICES. WHERE DISCREPANCIES BETWEEN CONTRACT DRAWINGS AND MANUFACTURER'S REQUIREMENTS ARISE, REQUEST CLARIFICATION FROM ENGINEER.
16	PRIOR TO START-UP, PERFORM MANUFACTURER'S START-UP AND CHECKOUT PROCEDURES AND ATTACH FORMS TO OPERATION AND MAINTENANCE MANUALS.
17	PROVIDE ACCESS DOORS FOR EQUIPMENT, DAMPERS, ETC. LOCATED ABOVE GYPSUM CEILINGS OR WITHIN WALLS REQUIRING ACCESS. DOOR SIZES SHALL SUIT EQUIPMENT SERVED.
18	TRAP PRIMERS TO BE PROVIDED ON ALL FLOOR DRAINS AND WHERE INDICATED ON FLOOR SINKS.
	REFER TO MECHANICAL DETAILS AND VENDOR DRAWINGS FOR FURTHER INFORMATION REGARDING INSTALLATION AND CONNECTION OF VENDOR PROVIDED EQUIPMENT. CONTRACTOR SHALL PROVIDE ALL COMPONENTS REQUIRED FOR A FULLY FUNCTIONAL, LEAK FREE INSTALLATION.

CODE REFERENCES	
FBC, BUILDING	FLORIDA BUILDING CODE, 2020 SEVENTH EDITION
FBC, MECHANICAL	FLORIDA BUILDING CODE, 2020 SEVENTH EDITION
FBC, PLUMBING	FLORIDA BUILDING CODE, 2020 SEVENTH EDITION
FBC, TEST PROTOCOL	FLORIDA BUILDING CODE, 2020 SEVENTH EDITION
FBC, ENERGY	FLORIDA BUILDING CODE, 2020 SEVENTH EDITION
FFPC	FLORIDA FIRE PREVENTION CODE, 2020 SEVENTH EDITION
NFPA 51B	STANDARD FOR FIRE PREVENTION DURING WELDING, CUTTING, AND OTHER HOT WORK, 2014
NFPA 70	NATIONAL ELECTRIC CODE, 2017 EDITION
NFPA 101	LIFE SAFETY CODE, 2018 EDITION
NFPA 101A	GUIDE ON ALTERNATIVE APPROACHES TO LIFE SAFETY

WATER HEATER SCHEDULE											
EQUIPMENT NO.	MODEL NO.	FUEL SUPPLY (GAS OR ELEC)	STORAGE CAPACITY (GALLONS)	ELECTRIC ELEMENTS (#) KW	TOTAL OPERATING KW	RECOVERY @ 60°F RISE (GALLONS)	SET TEMP. °F	MIN. EFF.	VOLTS-PHASE	FLA	NOTES
EWB-1	DEL-30	ELEC	30	(1) 4.5	4.5	31	120	99%	240V-1Ø	18.8	1,2,3,4,5,6
NOTES:											
1.	BASIS OF DESIGN: A.O. SMITH (EQUAL MANUFACTURERS: BRADFORD WHITE, LOCHINVAR, STATE)										
2.	PROVIDE HEATER WITH A TEMPERATURE AND PRESSURE RELIEF VALVE SIZED BY THE UNIT MANUFACTURER.										
3.	PROVIDE UNIT WITH EXPANSION TANK (ET). SEE EXPANSION TANK SCHEDULE.										
4.	PROVIDE UNIT WITH WALL MOUNTING BRACKET AND DRAIN PAN. SEE DETAIL #3/P501.										
5.	PROVIDE HEATER WITH A VACUUM BREAKER SIZED BY THE UNIT MANUFACTURER AS REQUIRED.										
6.	PROVIDE UNIT WITH DRAIN PAN.										

EXPANSION TANK SCHEDULE									
EQUIPMENT NO.	SYSTEM SERVED	MODEL NO.	TANK VOLUME (GALLONS)	ACCEPTANCE FACTOR (%)	SYSTEM TEMP. MAX./MIN.	INITIAL FILL PRESSURE	ASME RATED	MAXIMUM SYSTEM PRESSURE	NOTES
ET-1	DOMESTIC HOT WATER	ST-5C	2.0	45%	60°F/120°F	40 PSI	NO	150 PSI	1
NOTES:									
1.	BASIS OF DESIGN: AMTROL								

CHETLUCKNEE SPRINGS STATE PARK  
12087 SOUTHWEST U.S. 27, FORT WHITE, FL 32038  
SHEET TITLE

LEGEND, NOTES, DETAILS &  
SCHEDULES - PLUMBING

CHETLUCKNEE SPRINGS STATE PARK  
REPLACE RESTROOM

SHEET NO.  
**P001**

ISSUE DATE: 28-MARCH-2023  
COMP. FILE NO.: 16980  
STATE PROJECT NO.: 61983C

DESIGNER: TKE  
DRAWN BY: TKE  
REVIEWED BY: WHT  
Consultant: TOMAHAWK ENGINEERING & CONSULTING, INC.  
1940 Buford Blvd. - Tallahassee, FL 32302  
Phone: 850-402-3040, Fax: 850-402-9689  
Certificate of Authorization #: 29709  
Tallahawki Project #: 22053

MICHAEL BOYLE  
L. 67983  
No. 76983  
STATE OF FLORIDA  
EXPIRES 12-28-25  
PROFESSIONAL ENGINEER

2016

2016

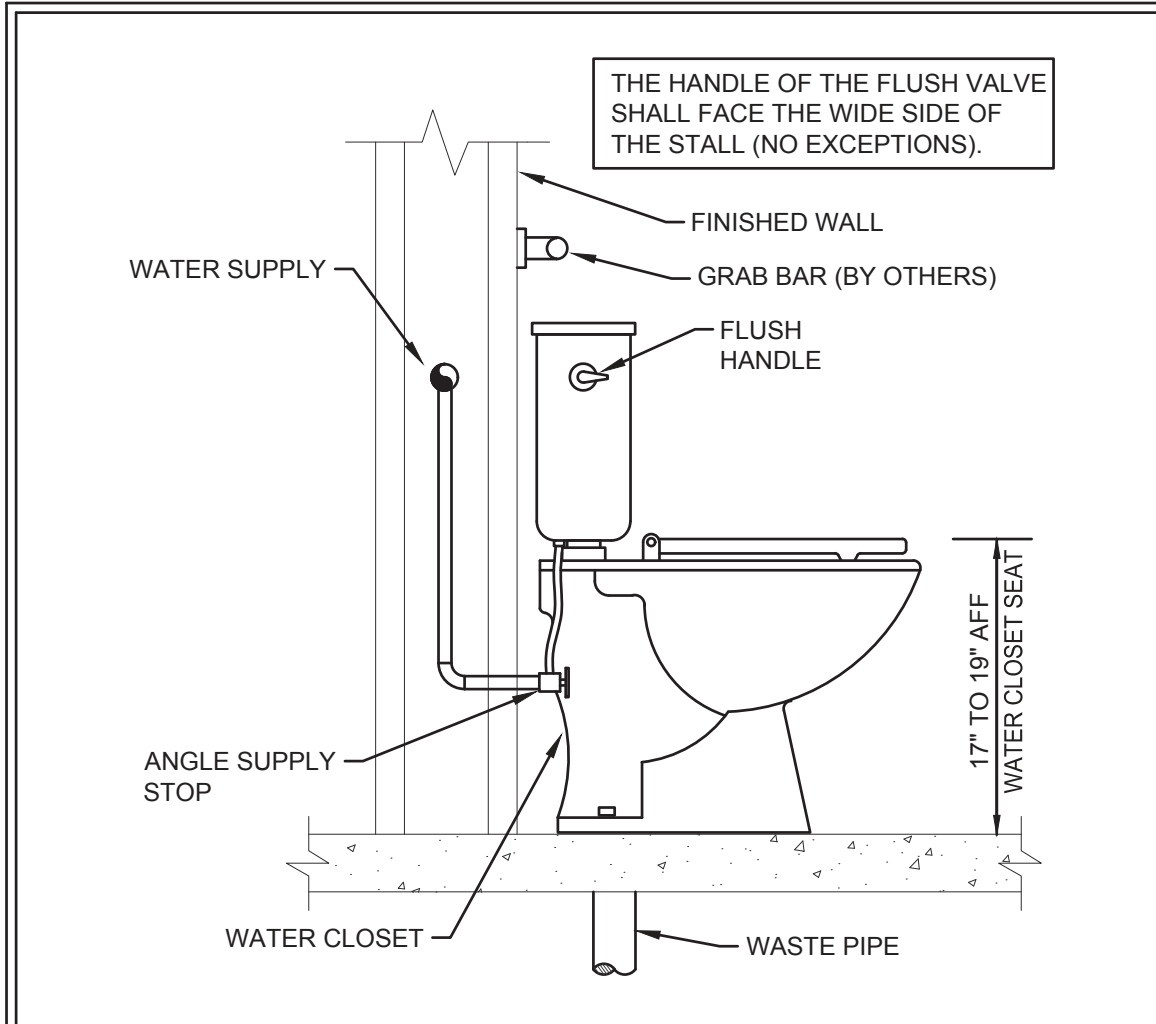
Department of Environmental Protection  
Office of Operations  
Bureau of Design and Construction  
3800 Commonwealth Blvd., Tallahassee, FL 32399 (850) 425-2300

100% CONTRACT DOCUMENTS

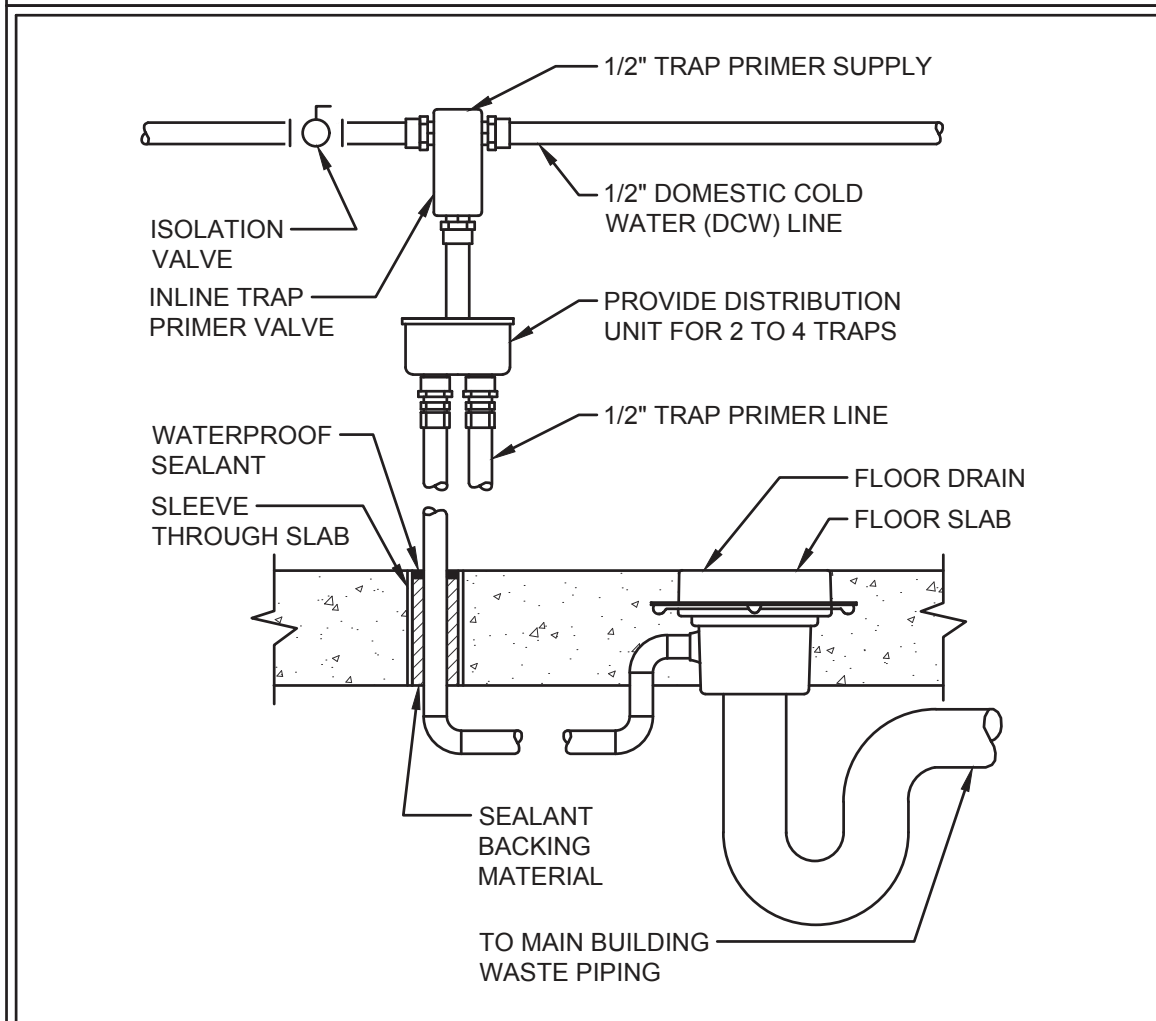




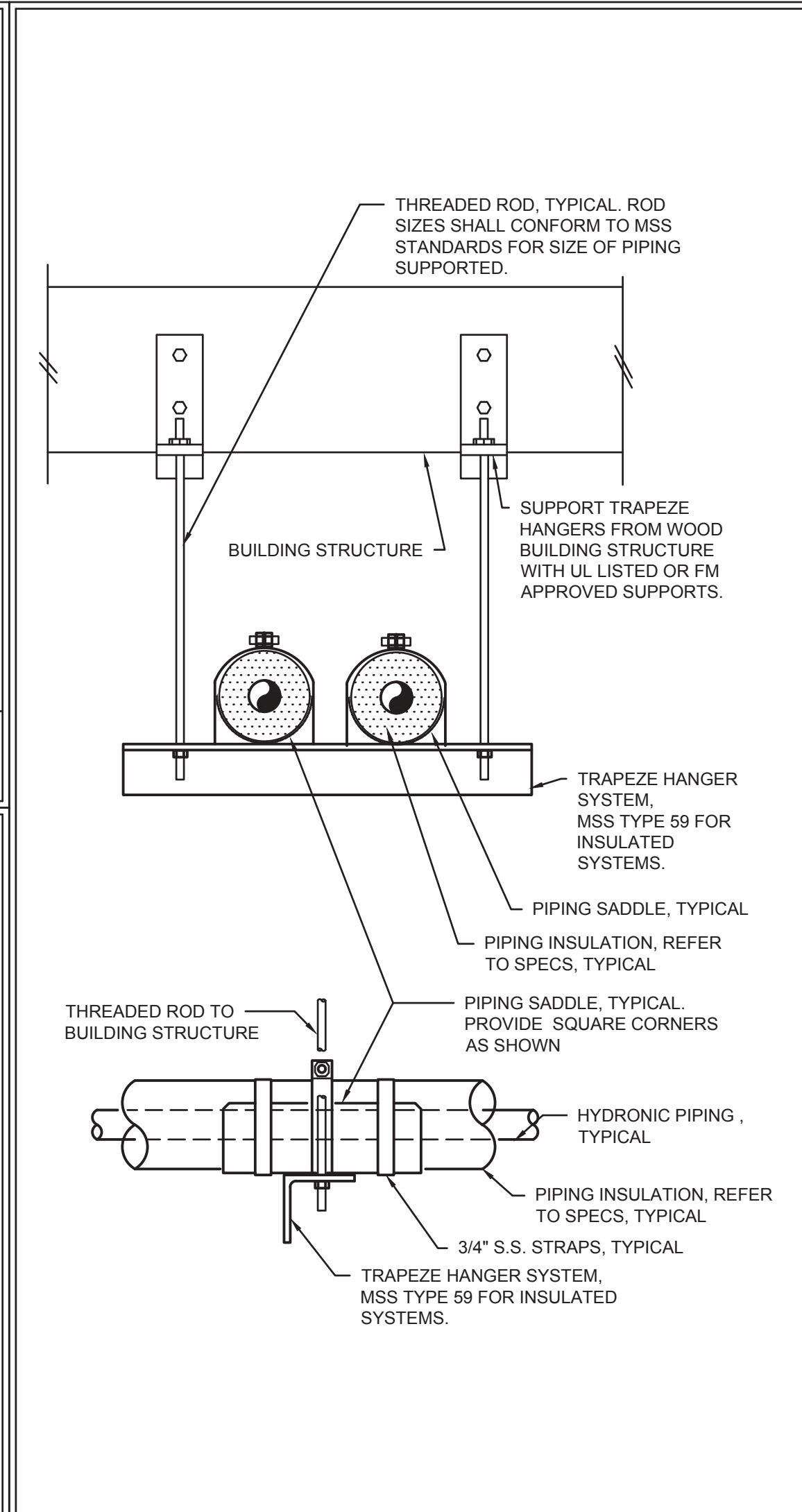




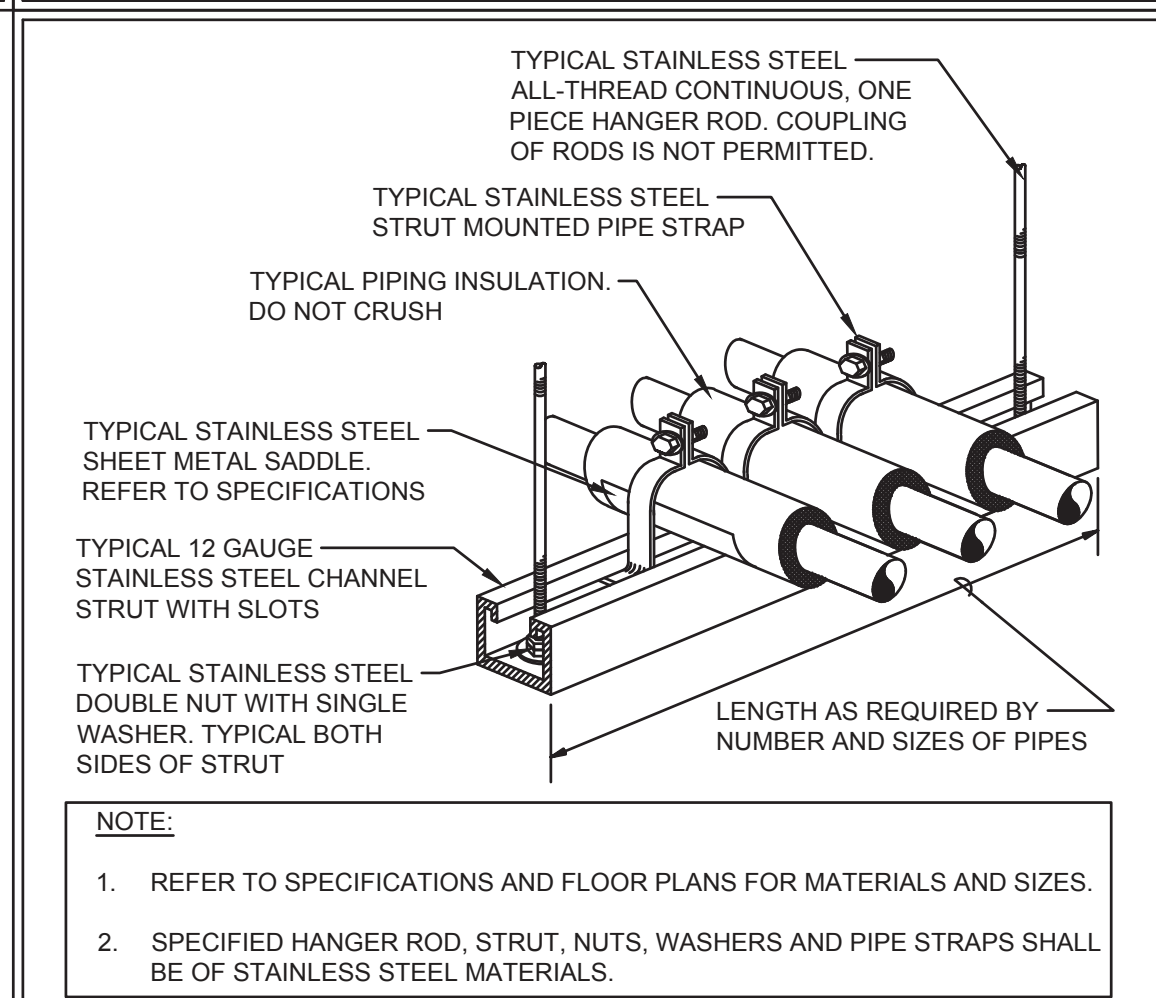
5 WATER CLOSET DETAIL SCALE: NONE



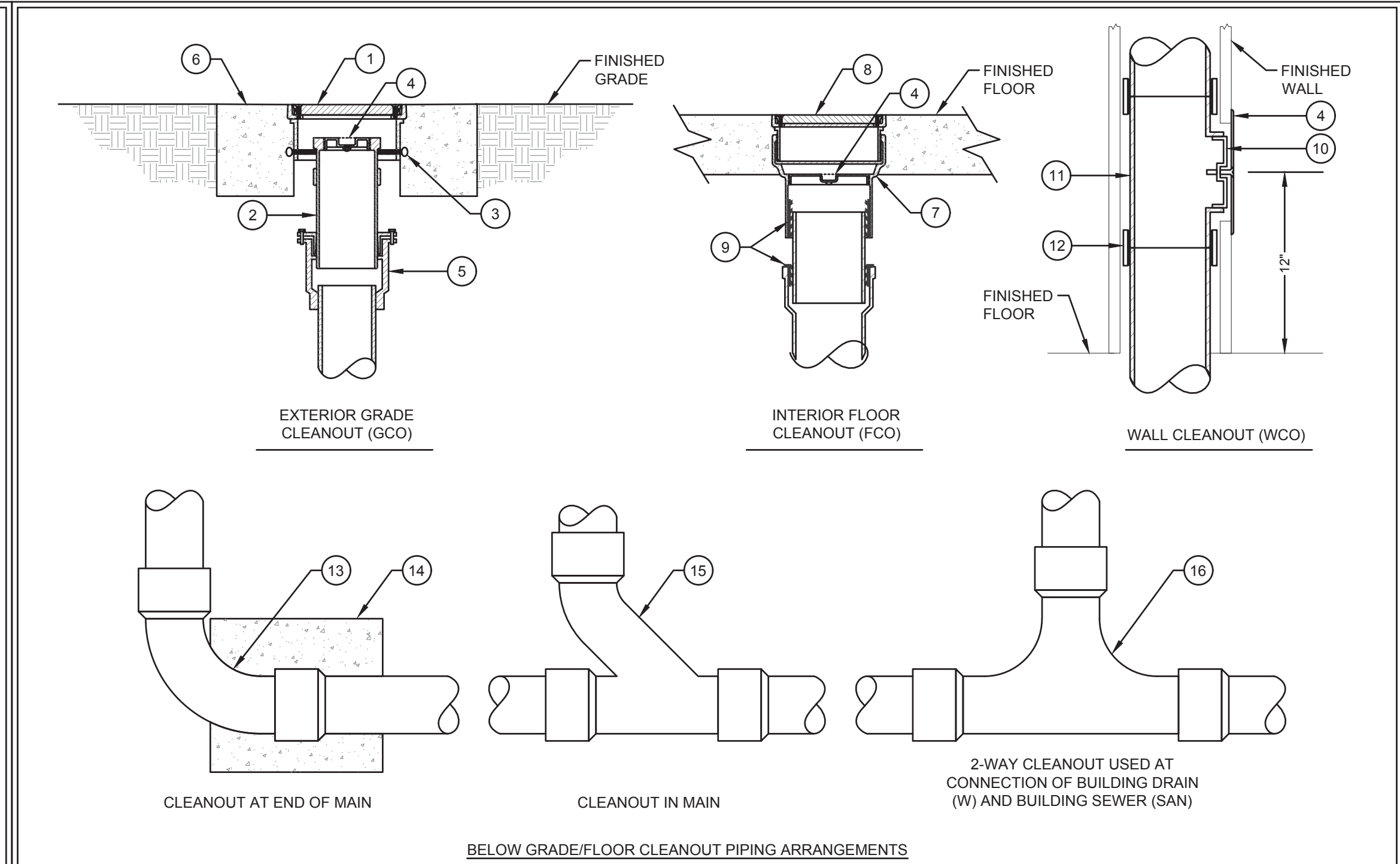
6 TRAP PRIMER DETAIL SCALE: NONE



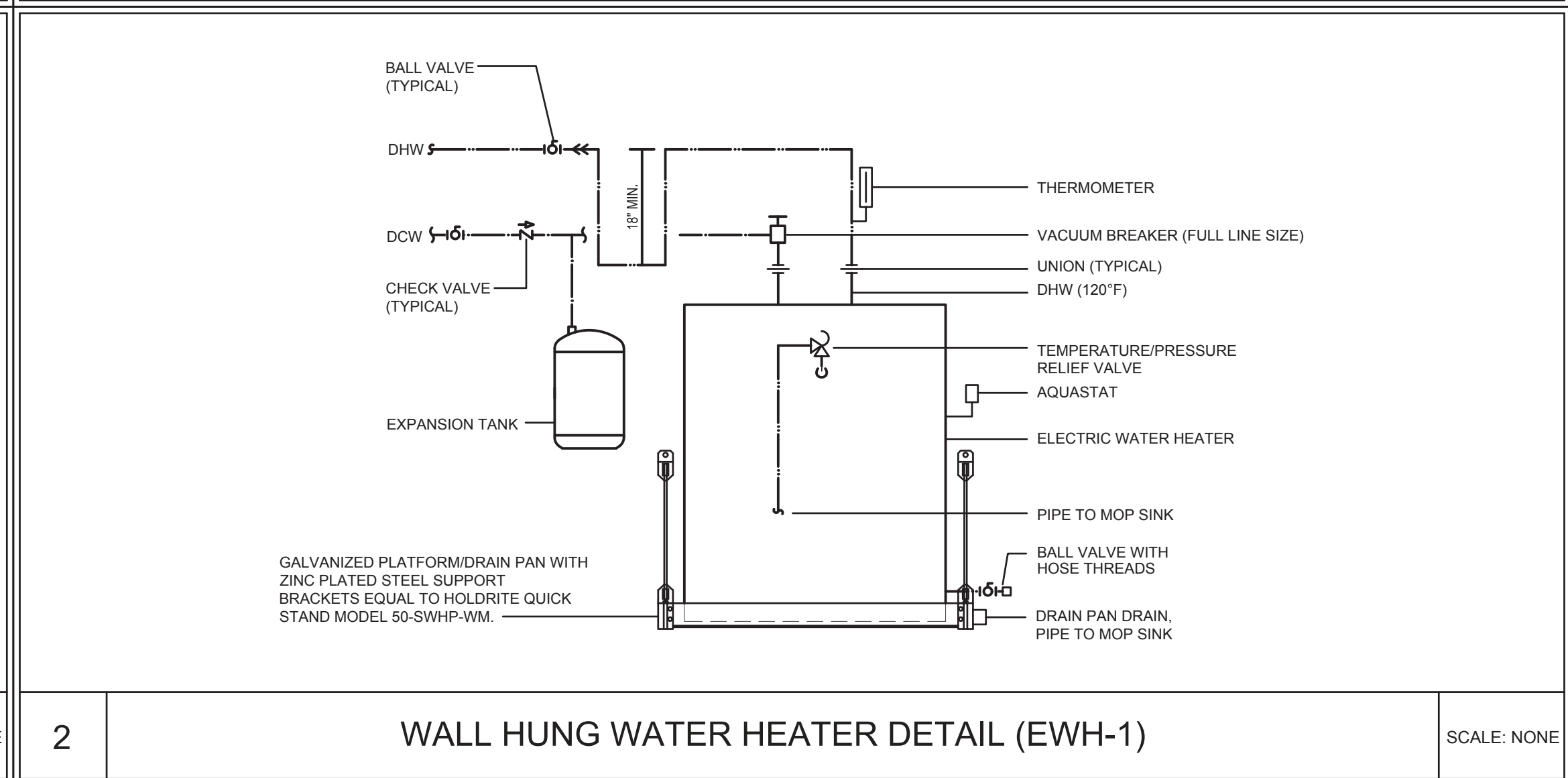
3 HORIZONTAL PIPING SUPPORT FROM WOOD DETAIL SCALE: NONE



4 TRAPEZE HANGER DETAIL SCALE: NONE



1 CLEANOUT DETAILS SCALE: NONE



2 WALL HUNG WATER HEATER DETAIL (EWH-1) SCALE: NONE

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY THE ENGINEER INDICATED HEREIN WITH THE DATE AND INDICATED IN THE TIME STAMP USING AN RSA CODE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGN AUTHENTICATION CODE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

DESIGNER : TKE  
DRAWN BY: TKE  
REVIEWED BY: WHT

ISSUE DATE: 28 MARCH 2023  
COMP. FILE NO.: 18080  
STATE PROJECT NO.: 6183C3

DATE  
REVISION  
SYMBOL  
DATE  
REVISION  
SYMBOL

PROJECT TITLE  
SHEET TITLE

PROJECT TITLE  
SHEET TITLE

ICHELUCKNEE SPRINGS STATE PARK  
12087 SOUTHWEST U.S. 27, FORT WHITE, FL 32038

ICHELUCKNEE SPRINGS STATE PARK  
REPLACE RESTROOM

DETAILS & SCHEDULES - PLUMBING

Department of Environmental Protection  
Office of Operations  
Bureau of Design and Construction  
3800 Commonwealth Blvd., Tallahassee, FL 32399 (850) 425-2300

SHEET NO.  
P501












100% CONTRACT DOCUMENTS







## ELECTRICAL SYMBOL LEGEND

SYMBOL	DESCRIPTION
<u>GENERAL</u>	
	CONCEALED RACEWAY AND BRANCH CIRCUIT WIRING SYSTEM.
 CKT	HOMERUN. LETTER INDICATES PANEL, NUMBER INDICATES CIRCUIT. 2-12 AWG, 12 G, 1/2" C UNLESS OTHERWISE NOTED.
<u>POWER &amp; DEVICE</u>	
	LIGHTING PANEL BOARD. 72" ABOVE FLOOR TO TOP OF PANEL.
	DISCONNECT SWITCH, TYPE AS INDICATED. MOUNT WITHIN SITE OF UNIT. 42" ABOVE FLOOR TO TOP.
	EQUIPMENT CONNECTION TYPE AS INDICATED OR INDICATED BY EQUIPMENT MANUFACTURER.
	MOTOR CONNECTION, TYPE AS INDICATED.
	NORMAL BRANCH DUPLEX CONVENIENCE OUTLET. 18" AF TO BOTTOM UNLESS OTHERWISE NOTED.
 GFI	NORMAL BRANCH DUPLEX CONVENIENCE OUTLETS IN COMMON BOX ABOVE COUNTER 4" ABOVE BACK SPLASH TO CENTERLINE UNLESS OTHERWISE NOTED. GFI
 GFI	SURFACE MOUNTED NORMAL BRANCH GFI AND WETHER PROOF DUPLEX CONVENIENCE OUTLET. 18" AF TO BOTTOM UNLESS OTHERWISE NOTED.
<u>LIGHTING</u>	
	4ft. NORMAL BRANCH SURFACE LED FIXTURE WITH BATTERY BACKUP INDICATED TO SCALE LOWER CASE LETTER INDICATES SWITCH LEG
	WALL MOUNTED LIGHTING FIXTURE. HEIGHT AS INDICATED.

## ABBREVIATIONS

ABBREVIATION	DESCRIPTION
A	AMPERES
AF	ABOVE FINISHED FLOOR
AF	AMP FRAME
AFC	AVAILABLE FAULT CURRENT
AG	ABOVE GRADE
AIC	AMP INTERRUPTING CAPACITY
AWG	AMERICAN WIRE GAGE
BKR	BREAKER
C	CONDUIT
DCO	DUPLEX CONVENIENCE OUTLET
EF	EXHAUST FAN
FLA	FULL LOAD AMPERES
GROUND OR G	GROUND
GFI	GROUND FAULT CIRCUIT INTERRUPTER
HP	HORSE POWER
IN	INCHES
LTS	LIGHTS
MLO	MAIN LUGS ONLY
MOCB	MAXIMUM OVER CURRENT PROTECTION
PH OR Ø	PHASE
PNL	PANEL
TR	TAMPER RESISTANT
V	VOLTS
VA	VOLT AMPS
W	WATTS
W	WIRE
(X)	EXISTING TO REMAIN
XFMR	TRANSFORMER

## ELECTRICAL SPECIFICATIONS

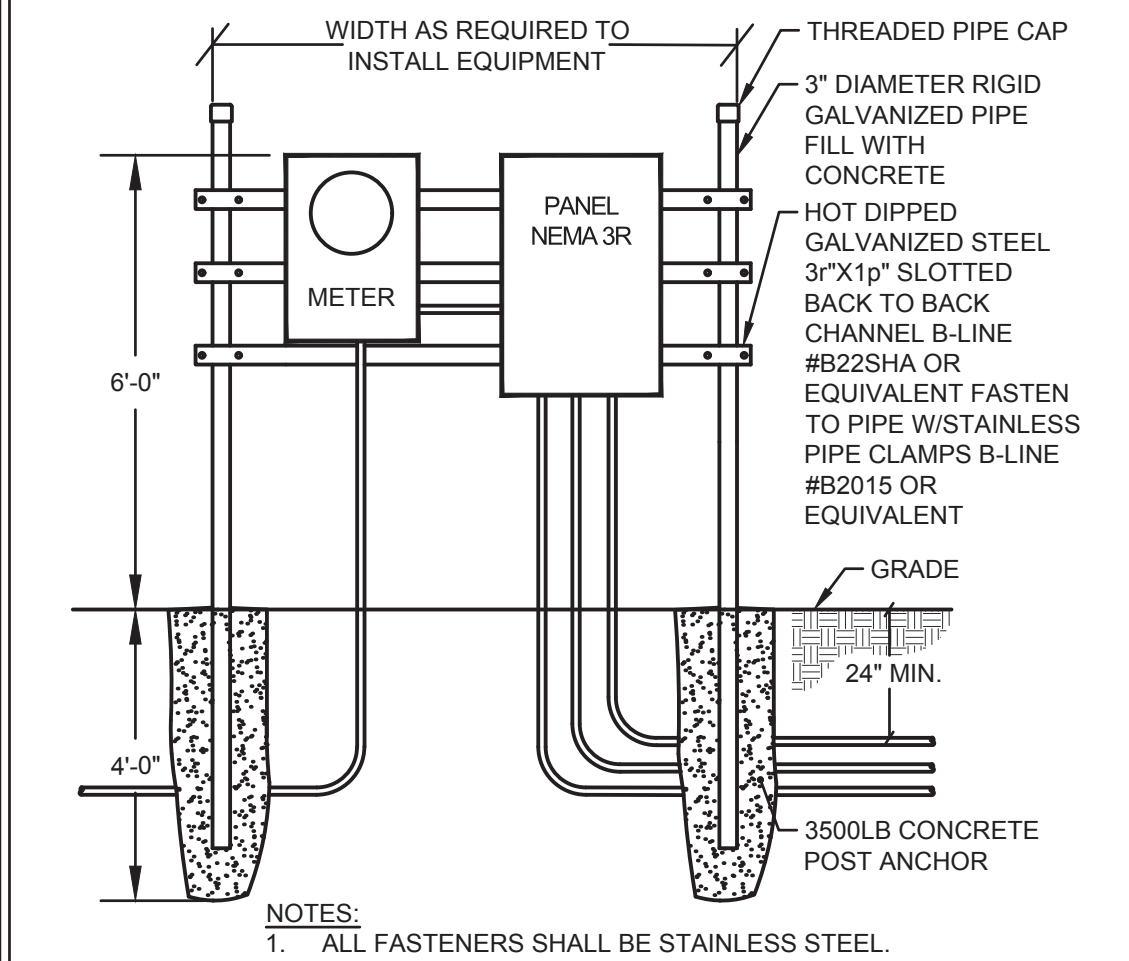
	DIVISION 16 - ELECTRICAL
	<u>16010 BASIC ELECTRICAL REQUIREMENTS</u>
A	ALL WORK AND EQUIPMENT UNDER THIS DIVISION SHALL BE IN STRICT COMPLIANCE WITH THE CODES, STANDARDS AND PRACTICES LISTED HEREIN, AND THEIR RESPECTIVE DATES ARE FURNISHED AS THE MINIMUM LATEST REQUIREMENTS.
1	STATE OF FLORIDA
2	LIFE SAFETY CODE - NFPA 101 (2018)
3	UNDERWRITERS LABORATORIES, INC. PUBLICATIONS
4	NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)
5	AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)
6	NATIONAL ELECTRICAL CODE - NFPA 70 (2017)
7	NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION (NEMA)
8	NATIONAL FIRE PROTECTION ASSOCIATION 72 (2016)
9	THE STATE FIRE PREVENTION CODE, 4A60.
10	BUILDING CODE: FLORIDA BUILDING CODE (2020), 7TH EDITION
B	SCOPE OF WORK: THE WORK PROVIDED UNDER THIS DIVISION SHALL INCLUDE ALL LABOR, MATERIALS, PERMITS, INSPECTIONS AND REINSPECTION FEES, TOOLS, EQUIPMENT, TRANSPORTATION, SUBMITTALS, TEMPORARY PROTECTION, TEMPORARY LIGHTING, SUPERVISION AND INCIDENTAL ITEMS ESSENTIAL FOR PROPER INSTALLATION AND OPERATION, EVEN THOUGH NOT SPECIFICALLY MENTIONED OR INDICATED BUT WHICH ARE USUALLY PROVIDED OR ARE ESSENTIAL FOR PROPER INSTALLATION AND OPERATION OF ALL ELECTRICAL SYSTEMS AS INDICATED IN CONTRACT DOCUMENTS.
C	NOTICES: GIVE ALL NOTICES, FILE ALL PLANS, PAY ALL FEES, OBTAIN ALL PERMITS AND APPROVALS FROM AUTHORITIES HAVING JURISDICTION. INCLUDE ALL FEES IN THE BID PRICE.
D	INTERPRETATION OF DRAWINGS:
1	THE DRAWINGS ARE DIAGRAMMATIC AND ARE NOT INTENDED TO SHOW EXACT LOCATIONS OF CONDUIT RUNS, OUTLET BOXES, JUNCTION BOXES, PULL BOXES, ETC. THE LOCATIONS OF EQUIPMENT, APPLIANCES, FIXTURES, CONDUITS, OUTLETS, BOXES AND SIMILAR DEVICES SHOWN ON THE DRAWINGS ARE APPROXIMATE ONLY. EXACT LOCATIONS SHALL BE AS ACCEPTED BY THE ENGINEER DURING CONSTRUCTION. OBTAIN IN THE FIELD ALL INFORMATION RELEVANT TO THE PLACING OF ELECTRICAL WORK AND IN CASE OF INTERFERENCE WITH OTHER WORK, PROCEED AS DIRECTED BY THE ENGINEER AND PROVIDE ALL LABOR AND MATERIALS NECESSARY TO COMPLETE THE WORK IN AN ACCEPTABLE MANNER.
2	DISCREPANCIES: NOTIFY ARCHITECT/ENGINEER OF ANY DISCREPANCIES FOUND DURING CONSTRUCTION OF THE PROJECT AND DO NOT PROCEED WITH THAT PORTION OF THE PROJECT, UNTIL A WRITTEN DEFINITIVE STATEMENT IS RECEIVED PROVIDING CLEAR DIRECTION. IF A CONFLICT EXISTS BETWEEN THE CONTRACT DOCUMENTS AND ANY APPLICABLE CODE OR STANDARD, THE MOST STRINGENT REQUIREMENT SHALL BE INCLUDED FOR THIS PROJECT. THE ENGINEER SHALL MAKE THE DECISION REGARDING QUESTIONABLE AREAS OF CONFLICT.
E	INVESTIGATION ON SITE:
1	GENERAL: BEFORE COMMENCING THE WORK, VERIFY EXISTING CONDITIONS AT THE PREMISES INCLUDING, BUT NOT LIMITED TO, EXISTING STRUCTURAL FRAME, LOCATION AND ALL DIMENSIONS; EXISTING OPENINGS AND CHARACTERISTICS; EXISTING WALL AND PARTITION LOCATIONS, CHARACTERISTICS AND RELATIONSHIP TO EACH OTHER; EXISTING MECHANICAL AND ELECTRICAL WORK, EQUIPMENT TYPE, AND SHALL EXAMINE ALL ADJOINING WORK ON WHICH HIS WORK IF ANYWAY DEPENDENT FOR ITS PERFECT EFFICIENCY ACCORDING TO THE INTENT OF THE CONTRACT DOCUMENTS.
2	POWER OUTAGE: SPECIAL ATTENTION IS CALLED TO THE FACT THAT WORK INVOLVED IS IN CONNECTION WITH EXISTING BUILDINGS WHICH REMAIN IN OPERATION WHILE WORK IS BEING PERFORMED. WORK MUST BE DONE IN ACCORDANCE WITH THE PRIORITY SCHEDULE. SCHEDULE WORK FOR A MINIMUM OUTAGE TO OWNER. REQUEST WRITTEN PERMISSION AND RECEIVE WRITTEN ACCEPTANCE FROM THE OWNER NO LATER THAN 24 HOURS IN ADVANCE OF ALL POWER AND COMMUNICATION SHUT-DOWNS. PERFORM WORK REQUIRED AT OTHER THAN STANDARD WORKING HOURS WHERE OUTAGES CANNOT BE ACCEPTED BY OWNER DURING REGULAR WORKING HOURS. PROTECT EXISTING BUILDINGS AND EQUIPMENT DURING CONSTRUCTION.
3	SPECIAL CONSIDERATIONS: SPECIAL ATTENTION IS CALLED TO THE FACT THAT THERE WILL BE PIPING, FIXTURES AND OTHER ITEMS IN THE EXISTING BUILDING WHICH MUST BE REMOVED OR RELOCATED IN ORDER TO PERFORM THE ALTERATION WORK. BID SHALL INCLUDE ALL REMOVAL AND RELOCATION REQUIRED FOR COMPLETION OF THE ALTERATIONS AND THE NEW CONSTRUCTION.
4	OWNER'S SALVAGE: THE OWNER RESERVES THE RIGHT TO INSPECT THE MATERIAL SCHEDULED FOR REMOVAL AND SALVAGE ANY ITEMS HE DEEMS USABLE AS SPARE PARTS.
F	EXISTING CONDITIONS:
1	SUPPORT: ALL EXISTING CONDUIT AND CABLES WITHIN THE AREA OF RENOVATION SHALL BE PROVIDED WITH PROPER SUPPORTS AS SPECIFIED FOR NEW WORK IN OTHER SECTIONS OF THIS SPECIFICATION.

## ELECTRICAL SPECIFICATIONS

	2	INSTALLATION: ALL EXISTING ELECTRICAL WHICH IS DESIGNATED FOR REWORKING OR REQUIRES RELOCATION, REPAIR OR ADJUSTMENT SHALL CONFORM TO ALL APPLICABLE CODES AND SHALL BE TREATED AS NEW WORK COMPLYING TO ALL SECTIONS OF THIS SPECIFICATION.
	3	VIOLATIONS: WHERE EXISTING CONDITIONS ARE DISCOVERED WHICH ARE NOT IN COMPLIANCE WITH THE CODES AND STANDARDS, THE CONTRACTOR SHALL SUBMIT PROPER DOCUMENTATION TO THE ARCHITECT FOR CLARIFICATION AND CORRECTIVE WORK DIRECTION. EXISTING CONDITIONS SHALL NOT REMAIN WHICH WILL CREATE A DISAPPROVAL OF THE RENOVATED AREA.
	4	PATCHING: ALL EXISTING CONDUIT AND CABLE PENETRATIONS SHALL BE PROPERLY FIRE TREATED PER CODE AND SPECIFICATION REQUIREMENTS. THE CONTRACTOR SHALL THOROUGHLY INSPECT ALL EXISTING LOCATIONS AND INCLUDE THE COST OF PATCHING AND REPAIR IN HIS PROPOSED CONSTRUCTION COST.
G		ALL MATERIALS SHALL BE NEW, FREE FROM DEFECTS AND SHALL BE EITHER U.L. LABELED, U.L. LISTED OR BEAR THE SEAL OF A NATIONALLY RECOGNIZED ELECTRICAL TESTING LABORATORY.
H		SHOP DRAWINGS ARE REQUIRED FOR ALL MATERIALS AND EQUIPMENT EXCLUDING CONDUIT, WIRE, AND WIRING DEVICES.
I		ALL EQUIPMENT SHALL BE FIRMLY MOUNTED USING APPROVED HANGERS ATTACHED TO STRUCTURAL PORTIONS OF THE BUILDING. SUPPORTING WITH TIE WIRE IS PROHIBITED. LIGHT FIXTURES RECESSED IN CEILINGS SHALL BE SUPPORTED FROM THE BUILDING STRUCTURE INDEPENDENT OF THE CEILING SYSTEM.
J		TEMPORARY LIGHT AND POWER SHALL BE PROVIDED AS REQUIRED.
		<u>16030 ELECTRICAL IDENTIFICATION</u>
A		LANGUAGE ALL IDENTIFICATION SHALL BE IN ENGLISH.
B		EQUIPMENT SYSTEM MARKERS SHALL BE ENGRAVED PLASTIC, LAMINATE NAMEPLATES AND SHALL BE ADHESIVE OR PRE-TENSIONED SNAP ON COLOR CODED, SYSTEM MARKING MATERIALS.
C		CONDUIT, RACEWAYS, BOXES, ETC. SHALL BE SPOT PAINTED. CONDUIT SHALL BE IDENTIFIED WITHIN 6 INCHES OF THE BOX OR ENCLOSURE. THE ENTIRE BOX COVER PLATE SHALL BE PAINTED.
D		USE FOLLOWING COLORS FOR COLOR BANDS AND FOR COLOR CODING; SYSTEM - COLOR
	1	NORMAL POWER - BLUE
E		CABLE AND CONDUCTOR IDENTIFICATION WILL BE AS PER NFPA 70. <u>16110 BASIC MATERIALS AND METHODS</u>
A		RACEWAYS AND FITTINGS:
	1	ALL WIRING SHALL BE INSTALLED IN APPROPRIATE RACEWAY SYSTEMS OF PVC SCHEDULE 80.
	2	FLEXIBLE CONDUIT SHALL BE USE ONLY FOR FIXTURE WHIPS AND SHALL NOT EXCEED 72".
	3	ALL CONDUIT SHALL HAVE AN INSULATED COPPER EQUIPMENT GROUNDING CONDUCTOR THROUGHOUT THE ENTIRE LENGTH OF THE CIRCUIT WITHIN THE CONDUIT. <u>16120 WIRES AND CABLES</u>
A		ALL BRANCH CIRCUITS AND FEEDERS SHALL BE COPPER WITH THHN OR THWN INSULATION. MINIMUM SIZE #12 AWG. SIZES #10 AWG AND SMALLER SHALL BE SOLID.
B		COLOR CODING SHALL COMPLY WITH THE NATIONAL ELECTRIC CODE, 2014 EDITION SPECIFICALLY. PHASE CONDUCTORS OF EACH VOLTAGE SYSTEM MUST BE OF A DIFFERENT COLOR. NEUTRALS SHALL BE WHITE FOR 120/208 AND GRAY FOR 277/480. EQUIPMENT GROUNDING CONDUCTORS SHALL BE GREEN INSULATED.
C		ALL SINGLE PHASE CIRCUITS SHALL HAVE DEDICATED NEUTRAL CONDUCTORS. NO NEUTRAL CONDUCTORS SHALL BE SHARED. <u>16130 OUTLET BOXES</u>
A		OUTLET BOXES SHALL BE THERMOPLASTIC. SECTIONAL BOXES ARE NOT ACCEPTABLE. BOXES SHALL BE 4" SQUARE AND 1-1/2" DEEP GENERALLY. LARGER BOXES SHALL BE USED AS REQUIRED BY CODE. <u>16140 WIRING DEVICES</u>
A		ALL RECEPTACLES SHALL BE 20 AMP, 125 VOLT GROUNDING TYPE, (SPECIFICATION GRADE) AND MOUNTED AT 18" AFF.
B		SWITCHES SHALL BE 20 AMP, 125V SILENT TYPE, SPECIFICATION GRADE, AND MOUNTED AT 48" AFF.
C		DEVICE PLATES SHALL BE THERMOPLASTIC COLOR MATCHING DEVICE. DEVICE COLORS SHALL BE SELECTED BY ARCHITECT.
D		APPROVED MANUFACTURERS: HUBBEL, PASS & SEYMOR, LEVITON. <u>16500 LIGHTING</u>
	1	LIGHTING SHALL BE DESIGNED FOR TYPE OF TASK INVOLVED AND IN GENERAL SHALL UTILIZE 4000-DEGREE K. LED.

## LIGHTING FIXTURE SCHEDULE

TYPE	LAMPS #	LAMPS DESCRIPTION	LUMINAIRE DESCRIPTION	MANUFACTURER	CATALOG #
S1E	NA	LED 2775 LUMENS 25W 4000K >= 80CRI	4'-0" LED VANDAL RESISTANT LIGHT WITH POLYCARBONATE LENS AND UNIVERSAL POWER SUPPLY. PROVIDED WITH 90 MINUTE BATTERY BACKUP.	LUMINAIRE OR EQUIVALENT	VPF4-4FT-NODIM-25W-40K-MVOLT-OP-WHT-EMB310
W1	NA	LED 1970 LUMENS 20W 4000K >= 80CRI	LED WALL MOUNTED VANDAL RESISTANT LIGHT WITH POLYCARBONATE LENS AND UNIVERSAL POWER SUPPLY. *ARCHITECT TO DETERMINE FINISH.	LITHONIA OR EQUIVALENT	DSXW1 LED 10C 530 40K T4M MVOLT VG *



## UNISTRUT FRAMING DETAIL

SCALE: NONE

4 PANFI A ←

### TABLE A

BRANCH: NORMAL  
100/200V / 20A 1W

120/208V-3Ø-4W ←  
FED FROM MCB 1 OKT

NOTE:

1. PROVIDE ENGRAVED TAGS FOR PANELS, STARTERS, DISCONNECTS, TRANSFORMERS, CONTROL AND FIRE ALARM, NAC PANELS AND AS INDICATED IN THE SPECIFICATIONS.

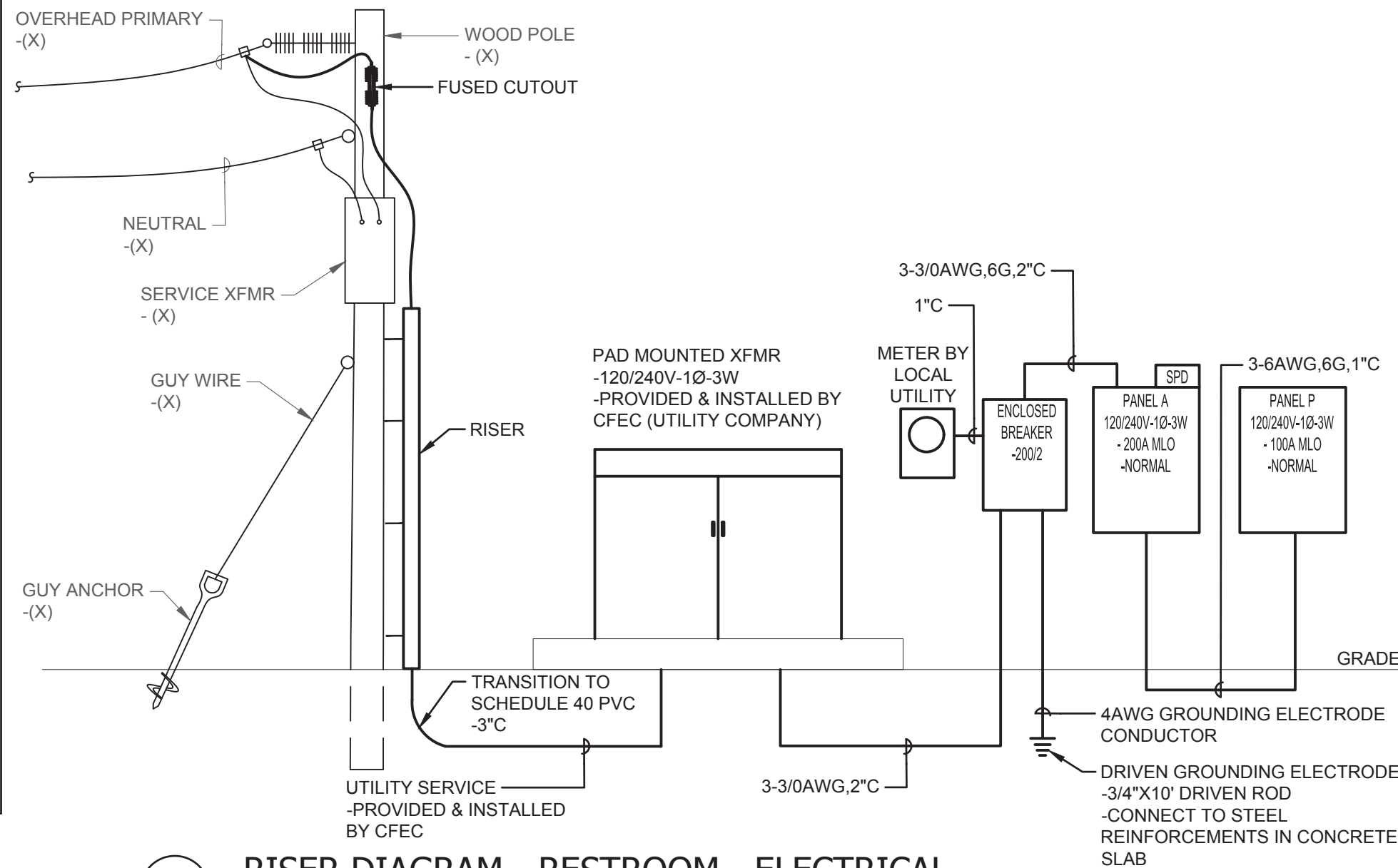
2. TAG SHALL BE MINIMUM 1/16" THICK WITH THE FOLLOWING COLOR CODE:

BRANCH	BACKGROUND	LETTERS
NORMAL	BLUE	WHITE

3. SERVICE EQUIPMENT LABEL SHALL ALSO INCLUDE THE CALCULATED AVAILABLE FAULT CURRENT AND DATA CALCULATED PRE NEC 110.24 (2011)

## NAME PLATE DETAIL


SCALE: NONE



## RISER DIAGRAM - RESTROOM - ELECTRICAL

SCALE: NONE

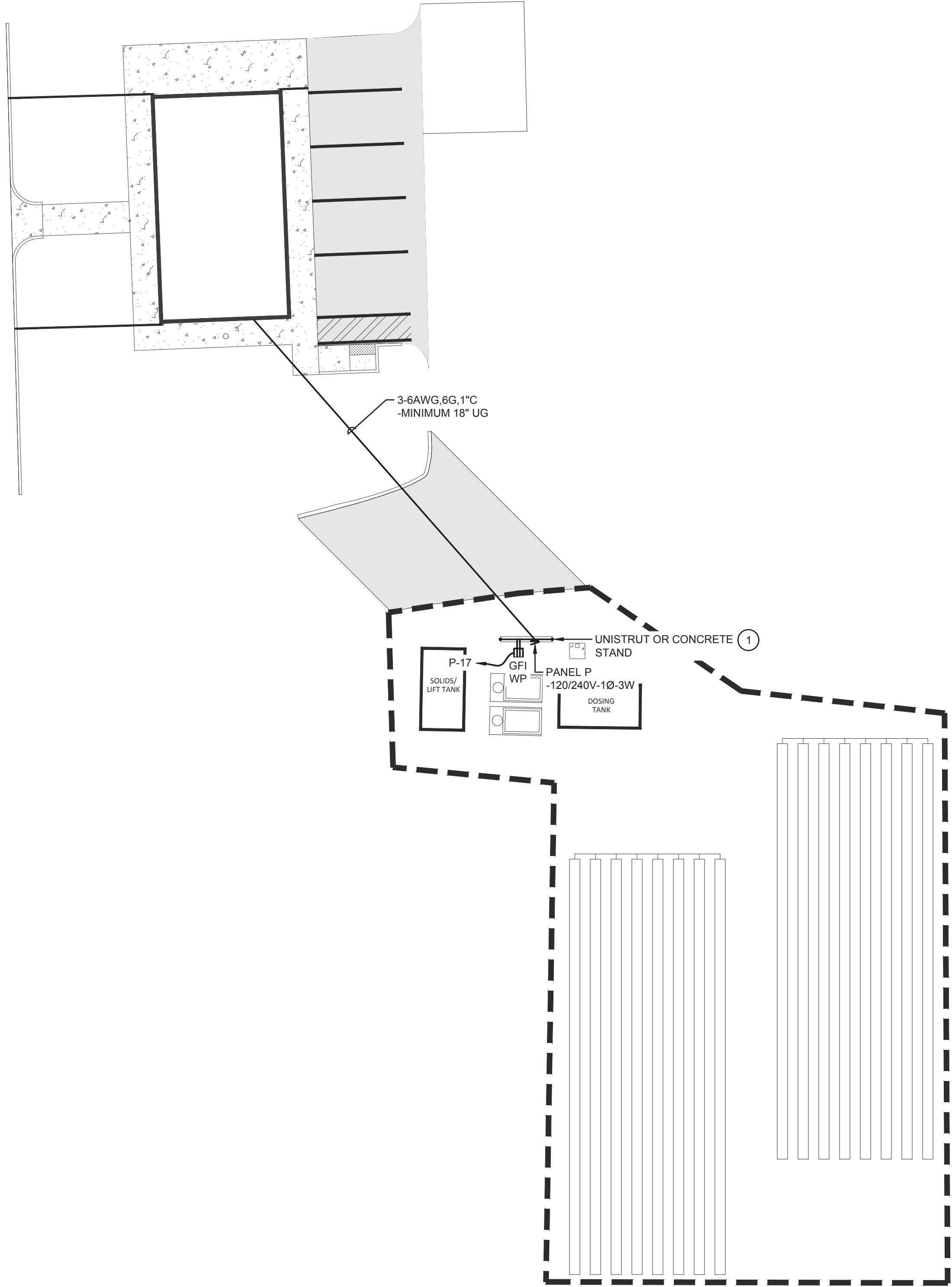
THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY THE ENGINEER INDICATED HEREIN WITH THE DATE AS INDICATED IN THE TIME STAMP USING AN SHA CODE  
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SHA AUTHENTICATION CODE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

ICHTUCKNEE SPRINGS STATE PARK 12087 SOUTHWEST U.S. 27, FORT WHITE, FL 32038				DESIGNER : BCP DRAWN BY: BCP REVIEWED BY: RJL		ISSUE DATE: 28 MARCH 2023 COMP. FILE No.: 16860 STATE PROJECT No.: 61363C		SYMBOL REVISION DATE		SYMBOL REVISION DATE	
SHEET TITLE		LEGEND & NOTES - ELECTRICAL						1		3	
PROJECT TITLE		ICHTUCKNEE SPRINGS STATE PARK REPLACE RESTROOM		CONSULTANT : TOMAHAWK ENGINEERING & CONSULTING, INC. 1940 Buford Blvd. - Tallahassee, FL 32302 PE# 62829 Phone: 850-402-3040, Fax: 850-402-9659 MICHAEL BOYLE Certificate of Authorization #: 29709 Tomahawk Project #: 22033				2		4	
SHEET NO.		E001									

100% CONTRACT DOCUMENTS

E001





- GENERAL SHEET NOTES:

1

THE ELECTRICAL CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH THE EXISTING CONDITIONS, ALL OTHER CONTRACT DOCUMENTS, AND SHALL BE RESPONSIBLE FOR THE ELECTRICAL WORK REQUIRED BY THESE DOCUMENTS.

2

OUTLET BOXES SHALL NOT BE MOUNTED BACK TO BACK. OFFSET OUTLET BOXES TO MINIMIZE SOUND TRANSMISSION BETWEEN ROOMS.

3

COORDINATE THE LOCATION OF LIGHTS, ETC. WITH OTHER TRADES. IN GENERAL, LIGHTS, ETC. SHALL BE MOUNTED IN THE CENTER OF A CEILING TILE. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN.

4

CONTRACTOR SHALL PROVIDE STRUCTURAL SUPPORT AS REQUIRED TO INSTALL LIGHTING FIXTURES.

3

COORDINATE OUTLET BOX LOCATIONS WITH FURNITURE, CABINETS, AND EQUIPMENT. REFER TO ARCHITECTURAL ELEVATIONS.

4

COORDINATE SWITCH BOX LOCATIONS WITH FURNITURE, CABINETS, DOORS, SIDE LITES, ETC.. IN GENERAL, SWITCHES SHALL BE ADJACENT TO LATCH SIDE OF DOOR. REFER TO ARCHITECTURAL ELEVATIONS.

5

COORDINATE ROUTING OF CONDUITS WITH OTHER TRADES. CONDUITS SHALL BE RUN PARALLEL AND PERPENDICULAR TO WALLS, CEILINGS, AND FLOORS. PROVIDE JUNCTION AND/OR PULL BOXES AS REQUIRED BY FIELD CONDITIONS.

6

PROVIDE IDENTIFICATION FOR EQUIPMENT, DEVICES & BRANCH CIRCUIT CONDUCTORS AS CALLED FOR IN THE SPECIFICATIONS.

7

REFER TO THE SYMBOLS LIST AND SPECIFICATIONS FOR MOUNTING HEIGHTS OF DEVICES.

8

REFER TO PROJECT SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS, EQUIPMENT SCHEDULES AND DETAILS.

9

NEUTRAL CONDUCTORS SHALL NOT BE SHARED.

10

WHERE THE CONTRACTOR DEVIATES FROM THIS SET OF CONSTRUCTION DOCUMENTS AND RESUBMISSION OF REVISED DRAWINGS IS REQUIRED BY THE PERMITTING OFFICE/OFFICIAL, A MINIMUM CHARGE OF \$750.00 PER AFFECTED DRAWING SHEET WILL BE BILLED TO THE CONTRACTOR. THE REVISED DRAWINGS WILL NOT BE PROVIDED AND/OR SUBMITTED TO THE PERMIT OFFICE UNTIL A PURCHASE ORDER OR SIGNED AGREEMENT IS ISSUED BY THE CONTRACTOR TO THE DESIGN PROFESSIONAL FOR WORK REQUIRED. THIS SHALL NOT APPLY TO UNFORESEEN CONDITIONS OR CHANGES REQUIRED FOR THE PROJECT THAT ARE NOT INITIATED BY THE CONTRACTOR.
- SHEET RENOVATION KEY NOTES:

①

CONTRACTOR SHALL COORDINATE WITH THE CIVIL PLANS AND WASTEWATER SYSTEM DRAWINGS PRIOR TO PURCHASE OR INSTALLATION. ENSURE PROPER DISCONNECTING MEANS ARE PROVIDED FOR EACH MOTOR AND ALL ENCLOSURES SHALL BE NEMA 4X RATED.

ICHTUCKNEE SPRINGS STATE PARK  
12087 SOUTHWEST U.S. 27, FORT WHITE, FL 32038

SHEET TITLE

SITE PLAN - ELECTRICAL

PROJECT TITLE  
ICHTUCKNEE SPRINGS STATE PARK  
REPLACE RESTROOM

DESIGNER : BCP  
DRAWN BY: BCP  
REVIEWED BY: RUL

CONSULTANT : TOMAHAWK ENGINEERING & CONSULTING, INC.  
RICHARD LINDBURG  
P.E.# 62829  
MICHAEL BOYLE  
P.E.# 76963

28 MARCH 2023  
COM# FILE NO.: 18980  
STATE PROJECT NO.: 61853C

ISSUE DATE:  
COM# FILE NO.: 18980  
STATE PROJECT NO.: 61853C

SYMBOL  
1  
2

REVISION  
1  
2

DATE  
3  
4

REVISION  
DATE

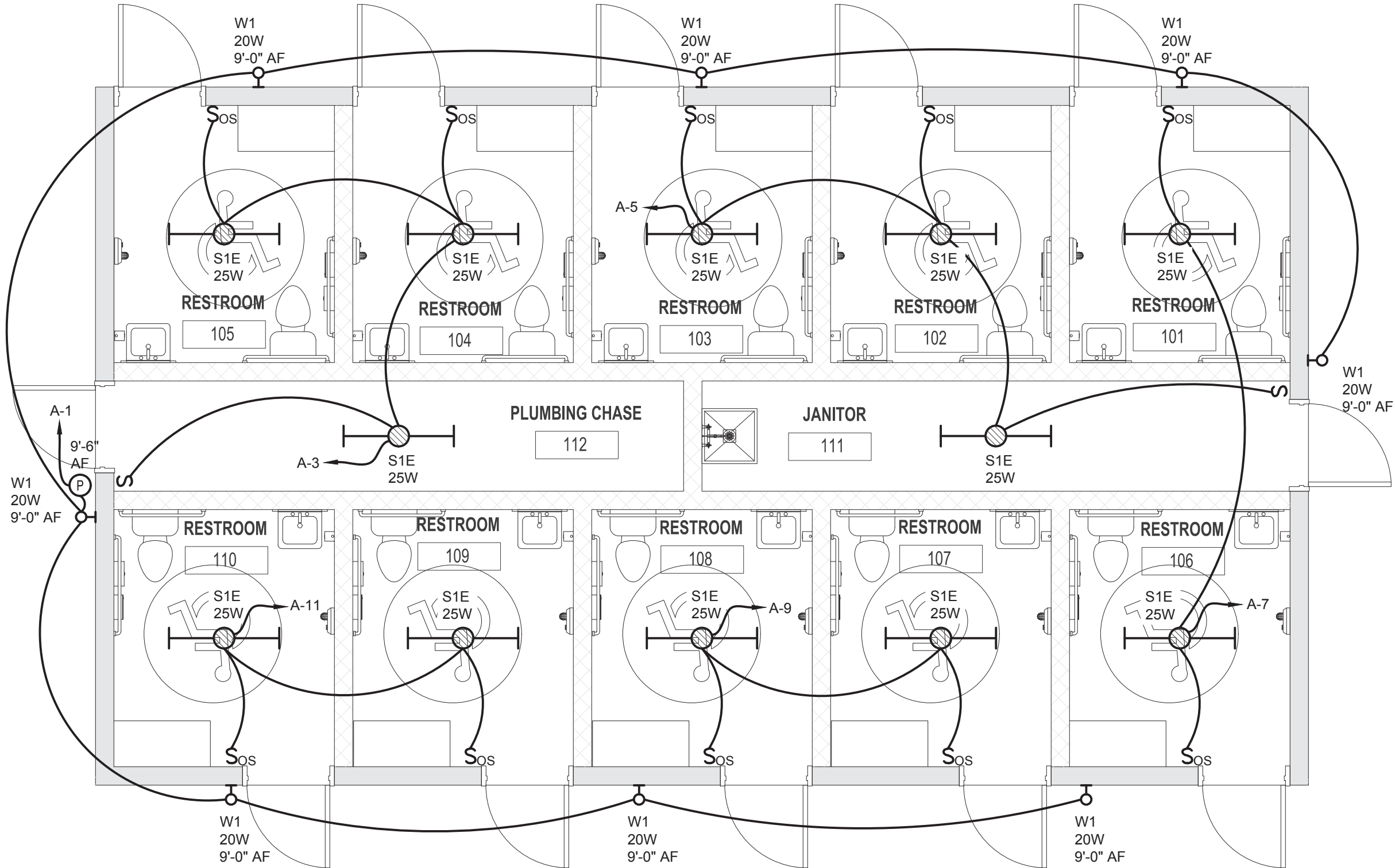
THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY THE ENGINEER INDICATED HEREIN WITH THE DATE AS INDICATED IN THE TIME STAMP USING AN RSA CODE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGN AUTHENTICATION CODE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

RICHARD J. L. LINDBURG  
L. LICENSE  
No. 62829  
STATE OF  
FLORIDA  
EXPIRES  
02-28-25  
PROFESSIONAL ENGINEER

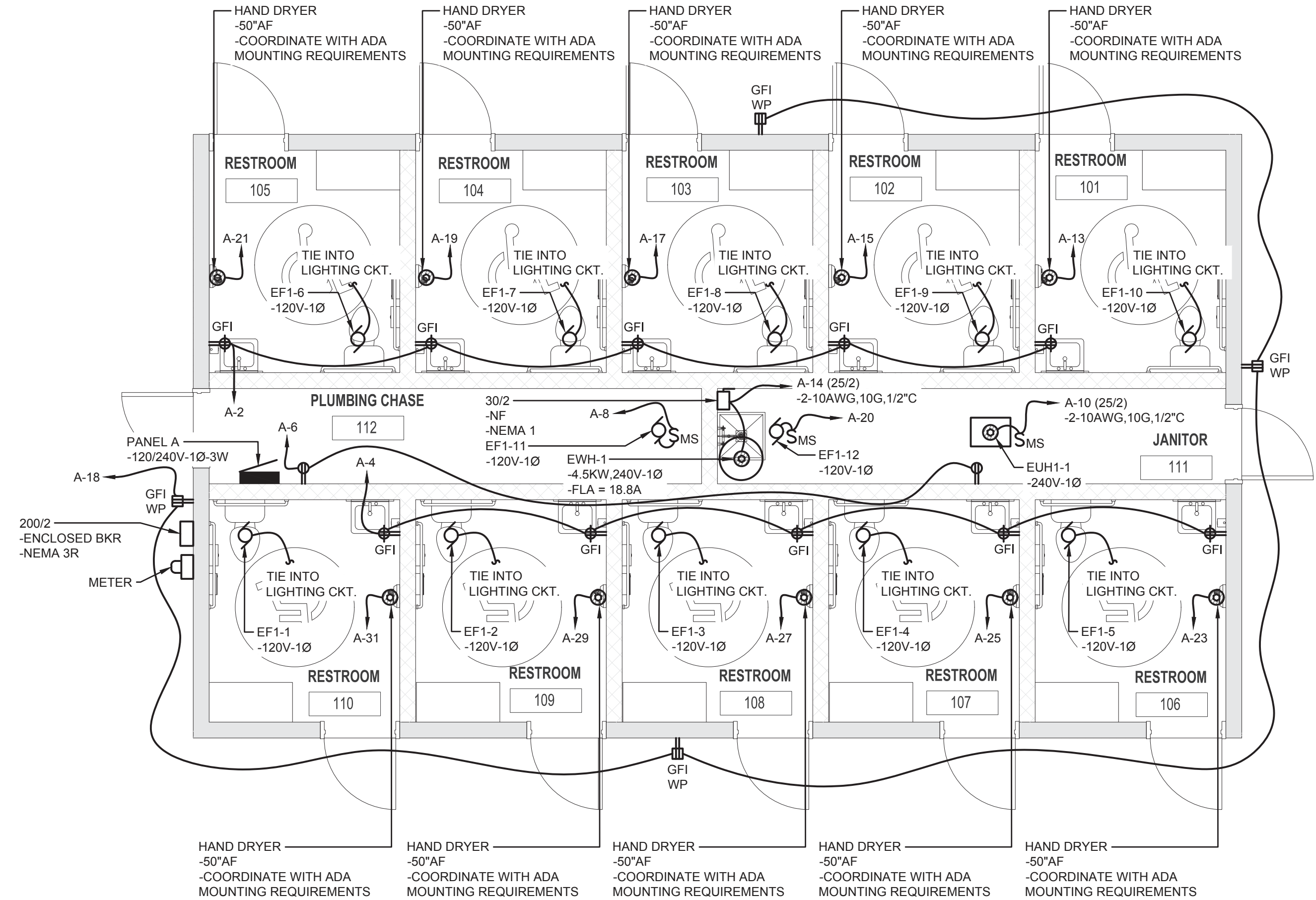
100% CONTRACT DOCUMENTS

Department of Environmental Protection  
Office of Operations  
Bureau of Design and Construction  
3800 Commonwealth Blvd., Tallahassee, FL 32399 (850) 425-2300





GENERAL SHEET NOTES:	
1	THE ELECTRICAL CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH THE EXISTING CONDITIONS, ALL OTHER CONTRACT DOCUMENTS, AND SHALL BE RESPONSIBLE FOR THE ELECTRICAL WORK REQUIRED BY THESE DOCUMENTS.
2	OUTLET BOXES SHALL NOT BE MOUNTED BACK TO BACK. OFFSET OUTLET BOXES TO MINIMIZE SOUND TRANSMISSION BETWEEN ROOMS.
3	COORDINATE THE LOCATION OF LIGHTS, ETC. WITH OTHER TRADES. IN GENERAL, LIGHTS, ETC. SHALL BE MOUNTED IN THE CENTER OF A CEILING TILE. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN.
4	CONTRACTOR SHALL PROVIDE STRUCTURAL SUPPORT AS REQUIRED TO INSTALL LIGHTING FIXTURES.
3	COORDINATE OUTLET BOX LOCATIONS WITH FURNITURE, CABINETS, AND EQUIPMENT. REFER TO ARCHITECTURAL ELEVATIONS.
4	COORDINATE SWITCH BOX LOCATIONS WITH FURNITURE, CABINETS, DOORS, SIDE LITES, ETC.. IN GENERAL, SWITCHES SHALL BE ADJACENT TO LATCH SIDE OF DOOR. REFER TO ARCHITECTURAL ELEVATIONS.
5	COORDINATE ROUTING OF CONDUITS WITH OTHER TRADES. CONDUITS SHALL BE RUN PARALLEL AND PERPENDICULAR TO WALLS, CEILINGS, AND FLOORS. PROVIDE JUNCTION AND/OR PULL BOXES AS REQUIRED BY FIELD CONDITIONS.
6	PROVIDE IDENTIFICATION FOR EQUIPMENT, DEVICES & BRANCH CIRCUIT CONDUCTORS AS CALLED FOR IN THE SPECIFICATIONS.
7	REFER TO THE SYMBOLS LIST AND SPECIFICATIONS FOR MOUNTING HEIGHTS OF DEVICES.
8	REFER TO PROJECT SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS, EQUIPMENT SCHEDULES AND DETAILS.
9	NEUTRAL CONDUCTORS SHALL NOT BE SHARED.
10	WHERE THE CONTRACTOR DEVIATES FROM THIS SET OF CONSTRUCTION DOCUMENTS AND RESUBMISSION OF REVISED DRAWINGS IS REQUIRED BY THE PERMITTING OFFICE/OFFICIAL, A MINIMUM CHARGE OF \$750.00 PER AFFECTED DRAWING SHEET WILL BE BILLED TO THE CONTRACTOR. THE REVISED DRAWINGS WILL NOT BE PROVIDED AND/OR SUBMITTED TO THE PERMIT OFFICE UNTIL A PURCHASE ORDER OR SIGNED AGREEMENT IS ISSUED BY THE CONTRACTOR TO THE DESIGN PROFESSIONAL FOR WORK REQUIRED. THIS SHALL NOT APPLY TO UNFORESEEN CONDITIONS OR CHANGES REQUIRED FOR THE PROJECT THAT ARE NOT INITIATED BY THE CONTRACTOR.



LIGHTING GENERAL NOTES:	
1	THE ELECTRICAL CONTRACTOR SHALL BECOME FAMILIAR WITH ALL OTHER CONTRACT DOCUMENTS, AND SHALL BE RESPONSIBLE FOR THE ELECTRICAL WORK REQUIRED BY THESE DOCUMENTS.
2	COORDINATE SWITCH BOX LOCATIONS WITH FURNITURE, CABINETS, DOORS, SIDE LITES, ETC.. IN GENERAL, SWITCHES SHALL BE ADJACENT TO LATCH SIDE OF DOOR. REFER TO ARCHITECTURAL ELEVATIONS.
3	COORDINATE ROUTING OF CONDUITS WITH OTHER TRADES. CONDUITS SHALL BE RUN PARALLEL AND PERPENDICULAR TO WALLS, CEILINGS, AND FLOORS. PROVIDE JUNCTION AND/OR PULL BOXES AS REQUIRED BY FIELD CONDITIONS.
4	PROVIDE IDENTIFICATION FOR EQUIPMENT, DEVICES & BRANCH CIRCUIT CONDUCTORS AS CALLED FOR IN THE SPECIFICATIONS.
5	REFER TO THE SYMBOLS LIST AND SPECIFICATIONS FOR MOUNTING HEIGHTS OF DEVICES.
6	REFER TO PROJECT SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS, EQUIPMENT SCHEDULES AND DETAILS.
7	COORDINATE THE LOCATION OF LIGHTS, ETC. WITH OTHER TRADES. IN GENERAL, LIGHTS, ETC. SHALL BE MOUNTED IN THE CENTER OF A CEILING TILE. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN.
8	CONTRACTOR SHALL PROVIDE STRUCTURAL SUPPORT AS REQUIRED TO INSTALL LIGHTING FIXTURES.
9	EMERGENCY AND NORMAL POWERED LIGHTING BRANCH CIRCUITS SHALL BE INSTALLED IN SEPARATE RACEWAY SYSTEMS PER NEC 700
10	WHERE THE CONTRACTOR DEVIATES FROM THIS SET OF CONSTRUCTION DOCUMENTS AND RESUBMISSION OF REVISED DRAWINGS IS REQUIRED BY THE PERMITTING OFFICE/OFFICIAL, A MINIMUM CHARGE OF \$750.00 PER AFFECTED DRAWING SHEET WILL BE BILLED TO THE CONTRACTOR. THE REVISED DRAWINGS WILL NOT BE PROVIDED AND/OR SUBMITTED TO THE PERMIT OFFICE UNTIL A PURCHASE ORDER OR SIGNED AGREEMENT IS ISSUED BY THE CONTRACTOR TO THE DESIGN PROFESSIONAL FOR WORK REQUIRED. THIS SHALL NOT APPLY TO UNFORESEEN CONDITIONS OR CHANGES REQUIRED FOR THE PROJECT THAT ARE NOT INITIATED BY THE CONTRACTOR.

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY THE ENGINEER INDICATED HEREIN WITH THE DATE AND INDICATED IN THE TIME STAMP USING AN RSA CODE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGN AUTHENTICATION CODE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

DESIGNER :	BCP	ISSUE DATE:	28 MARCH 2023	SYMBOL	REVISION	DATE
DRAWN BY:	BCP	COMP. FILE No.:	18180	SYMBOL	REVISION	DATE
REVIEWED BY:	RJL	STATE PROJECT No.:	61383C	SYMBOL	REVISION	DATE
Consultant : TOMAHAWK ENGINEERING & CONSULTING, INC.						
1940 Buford Blvd. - Tallahassee, FL 32302 Phone: 850-402-3040, Fax: 850-402-9699 Certificate of Authorization #: 29709 Tallahassee Project #: 22033						
Department of Environmental Protection Office of Operations Bureau of Design and Construction 3800 Commonwealth Blvd., Tallahassee, FL 32399 (850) 425-2300						
FLOOR PLANS - ELECTRICAL						
PROJECT TITLE ICHETUCKNEE SPRINGS STATE PARK REPLACE RESTROOM						
SHEET NO. E101						

100% CONTRACT DOCUMENTS



PANEL: A

FED FROM: UTILITY SERVICE E.B.

MOUNTING: SURFACE

ENCLOSURE: NEMA 1

VOLTAGE: 120/240V-1PH-3W

BRANCH: NORMAL

A/C RATING: 10,000A

MAINS: 200A MLO

CKT. NO.	BKR.	DESCRIPTION	LEG A	LEG B	DESCRIPTION	BKR.	CKT. NO.
1	20/1	LTS. EXTERIOR	160 900		REC. RR. 101-105	20/1	2
3	20/1	LTS. INTERIOR/EX. FAN RR 104,105,112		1131 900	REC. RR. 106-110	20/1	4
5	20/1	LTS. INTERIOR/EX. FAN RR 102,103,111	1131 360		REC. JAN. 111,CHASE 112	20/1	6
7	20/1	LTS. INTERIOR/EX. FAN RR 101,106		1106 250	EF1-11 CHASE 112	15/1	8
9	20/1	LTS. INTERIOR/EX. FAN RR 107,108	1106 1500		EUH1-1	25/2	10
11	20/1	LTS. INTERIOR/EX. FAN RR 109,110		1106 1500	----	---	12
13	*20/1	HAND DRYER RR 101	1100 2250		EW-H-1	25/2	14
15	*20/1	HAND DRYER RR 102		1100 2250	----	---	16
17	*20/1	HAND DRYER RR 103	1100 720		REC. EXTERIOR	20/1	18
19	*20/1	HAND DRYER RR 104		1100 250	EF1-12 JAN. 111	15/1	20
21	*20/1	HAND DRYER RR 105	1100		SPARE	20/1	22
23	*20/1	HAND DRYER RR 106		1100	SPARE	20/1	24
25	*20/1	HAND DRYER RR 107	1100		SPARE	20/1	26
27	*20/1	HAND DRYER RR 108		1100	SPARE	20/1	28
29	*20/1	HAND DRYER RR 109	1100		SPARE	20/1	30
31	*20/1	HAND DRYER RR 110		1100	SPARE	20/1	32
33	20/1	SPARE			SPARE	20/1	34
35	20/1	SPARE			SPARE	20/1	36
37	15/2	SPD	5356		PANEL P	60/2	38
39	---	---		5176	----	---	40
			18983	19169			

NOTES:

1. BASIS OF DESIGN IS A SQUARE D NQOD WITH BOLT ON QO BREAKERS.

2. \*PROVIDE GFCI TYPE BREAKER.

2. PROVIDE TYPE 1 EXTERNALLY MOUNTED SPD.

	CONNECTED LOADS		DEMAND LOADS	
	VA	AMPS	VA	AMPS
LIGHTING	5740	24	5740	24
RECEPTACLES	3060	13	3060	13
MOTORS	22852	95	22852	95
MISCELLANEOUS	6500	27	6500	27
TOTAL (AVERAGE PER PHASE)	38152	159	38152	159
MINIMUM OVERCURRENT PROTECTION (125% OF TOTAL DEMAND LOAD) =				

199

PANEL: P

FED FROM: PANEL A

MOUNTING: SURFACE

ENCLOSURE: NEMA 3R

VOLTAGE: 120/240V-1PH-3W

BRANCH: NORMAL

AIC RATING: 10,000A

MAINS: 100A MLO

CKT. NO.	BKR.	DESCRIPTION	LEG A		LEG B		DESCRIPTION	BKR.	CKT. NO.
1	15/2	LIFT STATION PUMP #1	876	336			TREATMENT PLANT BLOWER #1	15/2	2
3	---	---			876	336	---	---	4
5	15/2	LIFT STATION PUMP #2	876	336			TREATMENT PLANT BLOWER #2	15/2	6
7	---	---			876	336	---	---	8
9	15/2	LIFT STATION CONTROLS & ALARM	500	876			DRAINFIELD DOSING PUMP #1	15/2	10
11	---	---			500	876	---	---	12
13	15/2	TREATMENT PLANT CONTROLS & ALARM	500	876			DRAINFIELD DOSING PUMP #2	15/2	14
15	---	---			500	876	---	---	16
17	20/1	REC. EXTERIOR	180				SPACE		18
19		SPACE					SPACE		20
21		SPACE					SPACE		22
23		SPACE					SPACE		24
25		SPACE					SPACE		26
27		SPACE					SPACE		28
29		SPACE					SPACE		30
			5356		5176				

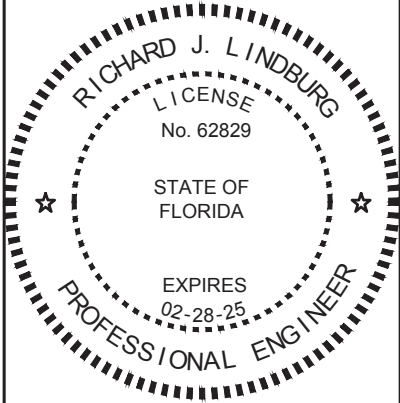
NOTES:

1. BASIS OF DESIGN IS A SQUARE D NQOD WITH BOLT ON QO BREAKERS.

	CONNECTED LOADS		DEMAND LOADS	
	VA	AMPS	VA	AMPS
LIGHTING	0	0	0	0
RECEPTACLES	180	1	180	1
MOTORS	8352	35	8352	35
MISCELLANEOUS	2000	8	2000	8
TOTAL (AVERAGE PER PHASE)	10532	44	10532	44
MINIMUM OVERCURRENT PROTECTION (125% OF TOTAL DEMAND LOAD) =				

55

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY THE ENGINEER INDICATED HEREIN WITH THE DATE AS INDICATED IN THE TIME STAMP USING AN RSA CODE.  
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGN AUTHENTICATION CODE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.



ICHELUCKNEE SPRINGS STATE PARK  
12087 SOUTHWEST U.S. 27, FORT WHITE, FL 32038

PANEL SCHEDULES - ELECTRICAL

ICHELUCKNEE SPRINGS STATE PARK  
REPLACE RESTROOM

SHEET NO.

E701

Department of Environmental Protection  
Office of Operations  
Bureau of Design and Construction  
3800 Commonwealth Blvd., Tallahassee, FL 32399 (850) 425-2300

ISSUE DATE: 28 MARCH 2023  
COMP. FILE No.: 18980  
STATE PROJECT No.: 61893C  
DESIGNER: BCP  
DRAWN BY: BCP  
REVIEWED BY: RJL  
Consultant: TOMAHAWK ENGINEERING & CONSULTING, INC.  
1940 Buford Blvd. - Tallahassee, FL 32302  
Phone: 850-402-3040, Fax: 850-402-9689  
Certificate of Authorization #: 29709  
Tallahaw Project #: 22033