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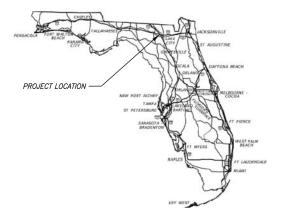
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STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

CONTRACT PLANS

FINANCIAL PROJECT ID 438609-1-52-01 SR 8 (I-10) REST AREA COLUMBIA COUNTY (29170) STATE ROAD NO. 8 (I-10)



GOVERNING STANDARD PLANS:

Florida Department of Transportation, FY 2019-20 Standard Plans for Roads and

Standard Plans for Road Construction and associated IRs are available at the following website: http://www.fdot.gov/StandardPlans

APPLICABLE IRS IR536-001-01, IR521-001-01

GOVERNING STANDARD SPECIFICATIONS:

Florida Department of Transportation, JULY 2019 Standard Specifications for Road and Bridge Construction at the following website: http://www.fdot.gov/programmanagement/Implemented/SpecBooks

FDOT

DESIGN PROJECT MANAGER:

CRAIG ANTHONY TEAL

P.E. NO. : 35641

ARCHITECTURAL PLANS

ARCHITECT OF RECORD: R.A. NO. :

DAN-MICHAEL JAY TRBOVICH

STRUCTURAL PLANS

ENGINEER OF RECORD:

ROBERT RAY BEE

P.E. NO. : 88791

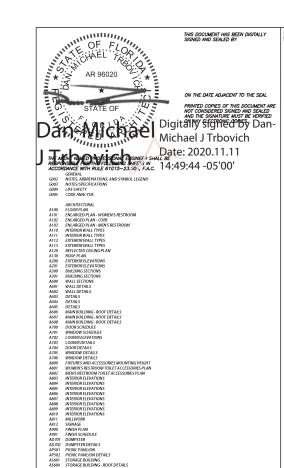
MECHANICAL AND FLECTRICAL PLANS ENGINEER OF RECORD:

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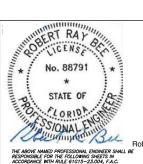
AUGUSTO E. BOBES, JR

100% CONSTRUCTION DOCUMENTS

	REVISIONS			GAI CONSULTANTS, INC. STATE OF FLORIDA		DIDA					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	600 CRANBERRY WOODS DRIVE. SUITE 400.	DEPARTMENT OF TRANSPORTATION			SR-8 (I-10) WESTBOUND (COLUMBIA COUNTY) REST AREAS	CS-001
						CRANBERRY TOWNSHIP, PA 16066	1 *	ELAKTMENT OF TRAIN	SIGNIATION		0000
							ROAD NO.	COUNTY	FINANCIAL PROJECT ID		SHEET NO.
							SR 8	COLUMBIA	438609-1-52-01	COVER SHEET/DRAWING INDEX	1 OF 2



STORAGE BUILDING - ROOF DETAILS



CS-001 COVER SHEET/DRAWING INDEX CS-002 SIGNATURE SHEET

TRUSS LOAD DIAGRAMS
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GENERAL STRUCTURAL NOTES 2
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DUMPSTER PLAN, SECTIONS AND DETAILS TRUSS LOAD DIAGRAMS

ON THE DATE ADJACENT TO THE SEAL

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THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61615-23.004. F.A.C.

MECHANICAL

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PLUMBING LEGEND AND GENERAL NOTES

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ELECTRICAL E-607 ELECTRICAL DISTRIBUTION OVERVIEW PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

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ESTBOUND (COLUMBIA COUNTY) REST AREAS	CS-002	
	SHEET NO.	
SIGNATURE SHEET	2 OF 2	

100% CONSTRUCTION DOCUMENTS DRAWING NO REVISIONS GAI CONSULTANTS, INC. STATE OF FLORIDA SR-8 (I-10) WE DATE BY DATE BY DESCRIPTION 600 CRANBERRY WOODS DRIVE, SUITE 400, DEPARTMENT OF TRANSPORTATION FINANCIAL PROJECT ID SR 8 COLUMBIA 438609-1-52-01

SYMBOL LEGEND

DRAWING NAME

DRAWING NUMBER

ABBREVIATIONS

A.C.T. A.F.F. A/C AL ACOUSTIC CEILING TILE ABOVE FINISH FLOOR AIR CONDITIONING ALUMINUM BD. BOARD CORR. C.J. CLG. CONT. CU CORRIDOR CONTROL JOINT CEILING CONTINUOUS CONDENSING UNIT DIA. DIAMETER EA. E.D. E.G. E.J. EL. ELEC. EXISTING DOOR EXISTING GLAZING EXPANSION JOINT ELEVATION ELECTRICAL EXIST. FE FEC F.F. F.V. FIRE EXTINGUISHER
FIRE EXTINGUISHER CABINET FINISH FLOOR GA. GYP. GAUGE GYPSUM HT. H.M. HEIGHT HOLLOW METAL HR. HWR. HOUR HARDWARE INCHES INSTALLATION JT. JOINT MFG. MANUFACTURER MAX. MIN. MTL. MP. MAXIMUM MINIMUM METAL MILE POST NATIONAL FIRE PROTECTION ASSOCIATION NONE APPLICABLE NFPA N/A N.I.C. No. NOT IN CONTRACT NUMBER O.C. O.D. ON CENTER OUTSIDE DIAMETER P.E. PROFESSIONAL ENGINEER PNL. PR. P/S R PANEL PAIR PRESTRESSED RADIOUS R.A. REGISTERED ARCHITECT SCHED. S.C.W. SEC. SIM. S.F. SPECS. STRUCT. SCHEDULE SOLID CORE WOOD SECTION SIMILAR SQUARE FEET SPECIFICATIONS STRUCTURE TB. TD. TYP. TRAVEL DISTANCE

VIEW NAME DRAWING TITLE REFERENCE SHEET ON WHICH IS DRAWING SCALE DRAWN DRAWING DETAIL REFERENCE SHEET ON WHICH SECTION DESIGNATION SECTION CUT SHEET ON WHICH IS DRAWN ELEVATION DESIGNATION Á-XXX INTERIOR ELEVATION MARK SHEET ON WHICH IS DRAWN ⟨P4⟩ WALL TYPE (101) DOOR NUMBER W1 WINDOW TYPE ROOM ROOM NAME AND NUMBER [101 COLUMN LINE GRID DESIGNATION EXISTING TO BE REMOVED NEW WALL EXISTING 24" X 24" ACCESS FLOORING WITH CARPET OF FLOWING OF PLOWING APPROPRIES OF PLOWING BREAK LINE PROJECT NOBTH AFABW96020 ELEVATION MARK STATE OF T.O. SLAB
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STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION						
ROAD NO.	COUNTY	FINANCIAL PROJECT ID				
SR 8	COLUMBIA	438609-1-52-01				

	DRAWING NO.
SR 8 (I-10) WESTBOUND - (COLUMBIA COUNTY) REST AREA	G002
	SHEET NO.
NOTES, ABBREVIATIONS AND SYMBOL LEGEND	

100% CONSTRUCTION DOCUMENTS

(T) PROJECT NORTH

GENERAL NOTES

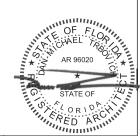
DIVISION 1: GENERAL REQUIREMENTS

PROJECT INCLUDES BUILDINGS AT THE SITE INDICATED ON THE PLANS TO REPLACE EXISTING FACILITIES. THE CONSTRUCTION DOCUMENTS FOR THE NEW FACILITIES DESCRIBE RUILDINGS THAT FOLLOW PROGRAMMING ESTABLISHED BY FDOT DISTRICT 2 STAFF, AND DESIGN GUIDELINES FOLIND IN THE FDOT FACILITES DESIGN MANUAL, AND FPID 438608-1-52, ETC., APPENDIX B,C,G,H, AND J TO THE DESIGN-BUILD SPECIFICATIONS FOR THE PROJECT, DATED (3-1-16) (7-19) HEREIN AFTER REFERED TO AS THE SPECIFICATIONS

- . GENERAL REQUIREMENTS AND COVENANTS ARE CONTAINED IN DIVISION 1 OF THE SPECIFICATIONS AND INCLUDED AND MADE PART OF THE CONSTRUCTION DOCUMENTS BY REFERENCE HEREIN.
- 2. BUILDING PLANS SHOW PROJECT NORTH FOR INDENTIFICATION OF FINISHES AND SYSTEMS. TRUE NORTH IS SHOWN ON SITE PLANS FOR BUILDING LOCATION AND ORIENTATION ONLY
- 3. PROVIDE BOND(S), WARRANTY, COMMENCING AT THE DATE OF FINAL ACCEPTANCE, AGAINST FAILURE OF THE INSTALLED PRODUCTS, MATERIALS AND WORKMANSHIP. PER THE SPECIFICATIONS.
- 4 REFER TO SPECIFICATIONS FOR SUBMISSION OF PRODUCT DATA. SHOP DRAWINGS AND MANUFACTURER'S CERTIFICATIONS THAT THE PROPOSED PRODUCTS
- 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MISCELLANEOUS WORK IMPACTED BY THIS PROJECT WHICH IS NOT IDENTIFIED BY THESE DOCUMENTS, BUT IS AFFECTED BY THE WORK, INCLUDING BUT NOT LIMITED TO, CUTTING, FITTING, PATCHING AND DAMAGE TO EXISTING FINISHES. THE CONTRACTOR SHALL FAMILIARIZE HIMSELE WITH THE EXISTING JOR SITE CONDITIONS AND WITH THE SCOPE OF WORK TO DETERMINE WHAT AD JACENT SURFACES, MATERIALS FINISHES AND EQUIPMENT SHALL BE IMPACTED BY THIS WORK. CONTRACTOR SHALL RESTORE ALL DAMAGED AND/OR DISTURBED SURFACES TO THEIR PRE-CONSTRUCTION CONDITIONS AT THE END OF THE WORK AND MATCH ADJACENT FINISHES TO THE BEST OF HIS ABILITY AS APPROVED AND ACCEPTED BY THE
- 6. DURING THE COURSE OF THIS CONTRACT THE PROJECT SITE SHALL BE REGULARLY CLEANED. TRASH SHALL BE REMOVED FROM THE WORK AREA DAILY AS PART OF THE CLEANING PROCESS THROUGH OUT THE DURATION OF THE PROJECT. UPON COMPLETION OF ALL WORK, A FINAL CLEANING SHALL BE PERFORMED AND THE CONSTRUCTION SITE AND PREMISES SHALL BE RESTORED TO ITS PRE-CONSTRUCTION CONDITIONS EXCEPT THE NEW WORK
- 7. PROPOSED CONTRACTOR'S STAGING AREA FOR MATERIAL AND EQUIPMENT STORAGE, AND CONTRACTOR PERSONNEL PARKING AREA TO BE PRESENTED BY G.C. FOR DEPARTMENT APPROVAL. ONCE APPROVED THEY SHALL BE CONTAINED WITHIN THE DESIGNATED STAGING AREA AT ALL TIMES.
- 8. ALL DRIVEWAYS SURROUNDING THE BUILDING PROJECT SITE AND ASSOCIATED PARKING SPACES SHALL REMAIN OPEN TO TRAFFIC AND UNOBSTRUCTED AT ALL TIMES THROUGHTOUT THE CONTRACT DURATION UNLESS OTHERWISE DIRECTED IN THE SPECIFICATIONS.
- 9. ANY AND ALL EXPENSES INCLUDING LABOR AND MATERIAL INCURRED BY THE CONTRACTOR FOR THE DELIVERY OF SALVAGED MATERIAL TO THE OWNER, THE COST WILL BE DEEMED AS INCIDENTAL TO THE CONSTRUCTION WORK
- 10. THE DRAWINGS AND THE SPECIFICATIONS ARE INSTRUCTIONS DIRECTED TO THE CONTRACTOR NORMALLY OMITTING THE WORDS, "CONTRACTOR SHALL" AND THE INCLUSION OF ANY WORK BY MENTION, NOTE, OR ITEMIZATION, HOWEVER BRIEF, IMPLIES THE RESPONSIBILITY OF THE CONTRACTOR TO FURNISH AND INSTALL COMPLETE IN OPERATING DETAIL.
- 11. DRAWINGS BEING COMPLIMENTARY, ANYTHING SHOWN IS INTERORETED TO BE IMPIED ON ALL OTHERS, REGARDLESS OF TRADE OR SUB-CONTRACT DIVISION OF WORK.
- 12. MECHANICAL AND ELECTRICAL DRAWINGS ARE DIAGRAMMATICAL, NOT NECESSARILY TO SCALE.
- 13. THE WORD PROVIDE IS INTERPRETED TO MEAN FURNISH AND INSTALL.
- 14. THE MANUFACTURER'S STANDARD DETAILS SHALL APPLY UNLESS OTHERWISE DETAILED IN CONSTRUCTION DOCUMENTS.
- 15. REFER TO STRUCTURAL / MECHANICAL / ELETRICAL / PLUMBING PLANS FOR ADDITIONAL PROJECT GENERAL NOTES.

DIVISION 2: EXISTING CONDITIONS

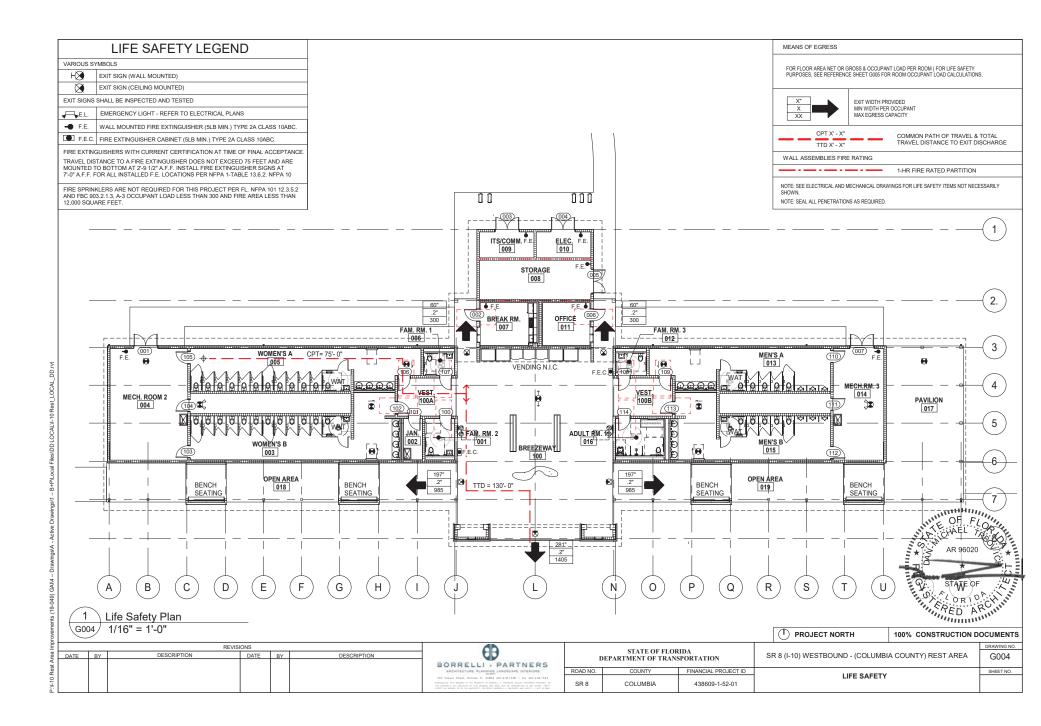
- 1. COORDINTATE THESE NOTES WITH PROJECT DEMOLITION PLANS PACKAGE, AND EXISTING CONDITIONS, AS RELATED TO NEW BUILDING UTILITIES.
- 2. PROPOSED PROTECTION MEASURES: SUBMIT REPORT FOR APPROVAL, INCLUDING DRAWINGS, THAT INDICATES THE MEASURES PROPOSED FOR PROTECTING INDIVIDUALS AND PROPERTY, FOR DUST AND NOISE CONTROL. INDICATE PROPOSED LOCATIONS AND CONSTRUCTION OF BARRIERS, SCHEDULE OF SELECTIVE DEMOLITION ACTIVITIES WITH STARTING AND ENDING DATES FOR EACH ACTIVITY. OWNER TO BE NOTIFIED OF ANY
- 3. NOTIFY ARCHITECT OF DISCREPANCIES BETWEEN EXISTING CONDITIONS AND DRAWINGS BEFORE PROCEEDING WITH SELECTIVE DEMOLITION. . STORAGE OR SALE OF REMOVED ITEMS OR MATERIALS ON-SITE IS NOT PERMITTED.
- UTILITY SERVICE: MAINTAIN EXISTING UTILITIES INDICATED TO REMAIN IN SERVICE AND PROTECT THEM AGAINST DAMAGE DURING SELECTIVE
- MAINTAIN FIRE-PROTECTION FACILITIES IN SERVICE DURING SELECTIVE DEMOLITION OPERATIONS.
- 4. EXAMINATION: VERIFY THAT IF UTILITIES ARE REQUIRED TO BE DISCONNECTED OR CAPPED TO COORDINATE WITH THE DEPARTMENT BEFORE STARTING SELECTIVE DEMOLITION OPERATIONS
- 5. LITH ITY SERVICES AND MECHANICAL /FI ECTRICAL SYSTEMS
- . EXISTING SERVICES/SYSTEMS TO REMAIN: MAINTAIN SERVICES/SYSTEMS INDICATED TO REMAIN AND PROTECT THEM AGAINST DAMAGE.
 . EXISTING SERVICES/SYSTEMS TO BE REMOVED, RELOCATED, OR ABANDONED: LOCATE, IDENTIFY, DISCONNECT, AND SEAL OR CAP OFF UTILITY
- SERVICES AND MECHANICAL/FLECTRICAL SYSTEMS SERVING AREAS TO BE SELECTIVELY DEMOLISHED.
- a. OWNER WILL ARRANGE TO SHUT OFF INDICATED SERVICES/SYSTEMS WHEN REQUESTED BY CONTRACTOR.
- b. ARRANGE TO SHUT OFF UTILITIES WITH UTILITY COMPANIES IF REQUIRED.
- 2. IT SERVICES/SYSTEMS ARE REGULIRED TO BE REMOVED, RELOCATED, OR ABANDONED, PROVIDE TEMPORARY SERVICES/SYSTEMS THAT BYPASS d. If Services it less that explained to be removed, necessary and analysis of the removed the removed it is not a service of the removed that is a service of the re
- INDICATED ON DRAWINGS TO BE REMOVED FROM BUILDING (IF EXISTING)
- 6. SITE ACCESS AND TEMPORARY CONTROLS: CONDUCT SELECTIVE DEMOLITION AND DEBRIS-REMOVAL OPERATIONS TO ENSURE MINIMUM NTERFERENCE WITH ROADS, STREETS, WALKS, WALKWAYS, AND OTHER ADJACENT OCCUPIED AND USED FACILITIES.
- 7 CLEANING
- REMOVE DEMOLITION WASTE MATERIALS FROM PROJECT SITE AND DISPOSE OF THEM IN AN EPA-APPROVED CONSTRUCTION AND DEMOLITION WASTE LANDFILL ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION.
- DO NOT ALLOW DEMOLISHED MATERIALS TO ACCUMULATE ON-SITE.
 B. REMOVE AND TRANSPORT DEBRIS IN A MANNER THAT WILL PREVENT SPILLAGE ON ADJACENT SURFACES AND AREAS.
- c. REMOVE DEBRIS FROM ELEVATED PORTIONS OF BUILDING BY CHUTE, HOIST, OR OTHER DEVICE THAT WILL CONVEY DEBRIS TO GRADE LEVEL IN
- BURNING: DO NOT BURN DEMOLISHED MATERIALS.
- . OLEAN ADJACENT STRUCTURES AND IMPROVEMENTS OF DUST, DIRT, AND DEBRIS CAUSED BY SELECTIVE DEMOLITION OPERATIONS. RETURN ADJACENT AREAS TO CONDITION EXISTING BEFORE SELECTIVE DEMOLITION OPERATIONS BEGAN.



				PROJECT NORTH	100% CONSTRUCTION D	OCUMENTS
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION				R 8 (I-10) WESTBOUND - (COLUMBI	A COUNTY) REST AREA	G003
ROAD NO. COUNTY FINANCIAL PROJECT ID SR 8 COLUMBIA 438609-1-52-01			NOTES / SPECIFICA	TIONS	SHEET NO.	

REVISIONS DATE BY DESCRIPTION DATE BY DESCRIPTION

BORRELLI + PARTNERS



OCCUPANCY CLASSIFICATION	' '	(A-3) ASSEMBLY - TRANSPORTATION FACILITY, TRUCK AND VEHICLE REST AREA			
TYPE OF CONSTRUCTION	TYPE II	FBC BUILDING (TABLE 601)			
SPRINKLERED OR NON-SPRINKLERED	NOT SPRINI	NOT SPRINKLERED			
BUILDING HEIGHT	ALLOWABLE: 55'-0"	ACTUAL: 33'-9"	FBC BUILDING (SECTION 501.3)		
ALLOWABLE AREA	ALLOWABLE: 9,500.00 SF	ACTUAL: 8,375.00 SF	FBC BUILDING (TABLE 506.2)		

	APPLICABLE CODES						
DEPARTMENT	CODE	EDITION					
BUILDING	FLORIDA BUILDING CODE (FBC)	2017, 6th EDITION					
FIRE	FLORIDA FIRE PREVENTION CODE (FFPC)	2017, 6th EDITION					
ACCESSIBILITY	FLORIDA BUILDING CODE - ACCESSIBILITY (FBC)	2017, 6th EDITION					
MECHANICAL	FLORIDA BUILDING CODE - MECHANICAL (FBC)	2017, 6th EDITION					
PLUMBING	FLORIDA BUILDING CODE - PLUMBING (FBC)	2017, 6th EDITION					
FUEL GAS	FLORIDA BUILDING CODE - FUEL GAS	2017, 6th EDITION					
LIFE SAFETY	NFPA IOI	2015, FLORIDA SPECIFIC 2018 AMENDMENTS					
ACCESSIBILITY	AMERICANS WITH DISABILITIES ACT (ADA)						
ELECTRICAL	NATIONAL ELECTRICAL CODE (NEC), NFPA 70	2014					

EGRESS REQUIREMENTS							
SECTION 3	FBC REQ'D	FBC - CODE SECTION	NFPA REQ'D				
MAXIMUM DEAD END CORRIDOR	20 FT	SECTION 1020.4	20 FT				
MAXIMUM TRAVEL DISTANCE	200 FT		200 FT				
MAXIMUM COMMON PATH OF EGRESS TRAVEL DISTANCE	75 FT	SECTION 1006.2.1	75 FT				
MINIMUM CORRIDOR WIDTH	44"	SECTION 1020.2	44"				
MINIMUM CLEAR OPENING OF EXIT DOOR	32"	SECTION 1008.1.1	32"				
MINIMUM NUMBER OF EXITS PER FLOOR	2 EACH	SECTION 1006.3.1	2 EACH				

FEES, PERMITS AND INSPECTIONS

A. CONTRACTOR SHALL COMPLETE ALL ADDITIONAL APPLICATION NEEDED TO PULL/OBTAIN PERMIT FOR WORK UNDER THIS CONTRACT AS REQUIRED BY THE AUTHORITIES HAVING JURISDICTION. PROCURE AND DELIVER TO THE ENGINEER ALL CERTIFICATES ISSED BY THE AUTHORITIES HAVING JURISDICTION.

B. THE CONTRACTOR SHALL PAY FOR ALL PERMIT INSPECTIONS AND ASSOCIATED REVIEWS FOR WORK UNDER THIS CONTRACT.

C. THE WORK WILL BE OBSERVED BY THE DEPARTMENT DURING THE COURSE OF CONSTRUCTION. PROVIDE FOR INSPECTION BY OTHERS HAVING JURISDICTION DURING THE PROPER PHASES.

	OCCUP	ANT LOAD	- FBC (SECTION	1 1004.1	.2)	
Number	Name	Area	Use	Load Factor ¹	Unit	Occupant Load (OL)
001	FAM. RM. 2	73 SF	UNOCCUPIED	0 SF	net	C
002	JAN.	53 SF	UNOCCUPIED	0 SF	net	C
003	WOMEN'S B	669 SF	UNOCCUPIED	0 SF	net	С
004	MECH. ROOM 2	575 SF	UNOCCUPIED	0 SF	net	С
005	WOMEN'S A	619 SF	UNOCCUPIED	0 SF	net	С
006	FAM. RM. I	47 SF	UNOCCUPIED	0 SF	net	0
007	BREAK RM.	159 SF	ASSEMBLY	15 SF	net	11
008	STORAGE 2	288 SF	STORAGE	300 SF	net	1
009	ITS/COMM.	94 SF	UNOCCUPIED	0 SF	net	0
010	ELEC.	94 SF	UNOCCUPIED	0 SF	net	С
011	OFFICE	134 SF	BUSINESS	100 SF	gross	2
012	FAM. RM. 3	47 SF	UNOCCUPIED	0 SF	net	0
013	MEN'S A	479 SF	UNOCCUPIED	0 SF	net	С
014	MECH.RM. 3	375 SF	UNOCCUPIED	0 SF	net	0
015	MEN'S B	526 SF	UNOCCUPIED	0 SF	net	С
016	ADULT RM. I	120 SF	UNOCCUPIED	0 SF	net	С
017	PAVILION	800 SF	ASSEMBLY	15 SF	net	54
018	OPEN AREA					0
018A	BENCH SEATING	100 SF				0
019	OPEN AREA					0
019A	BENCH SEATING	100 SF				0
020	CHASE	208 SF				С
021	CHASE	144 SF				С
100	BREEZEWAY	2072 SF	ASSEMBLY	15 SF	net	139
100A	VEST.	146 SF	ASSEMBLY	15 SF	net	10
100B	VEST.	149 SF	ASSEMBLY	15 SF	net	10
Grand total:			1			227

NOTES:

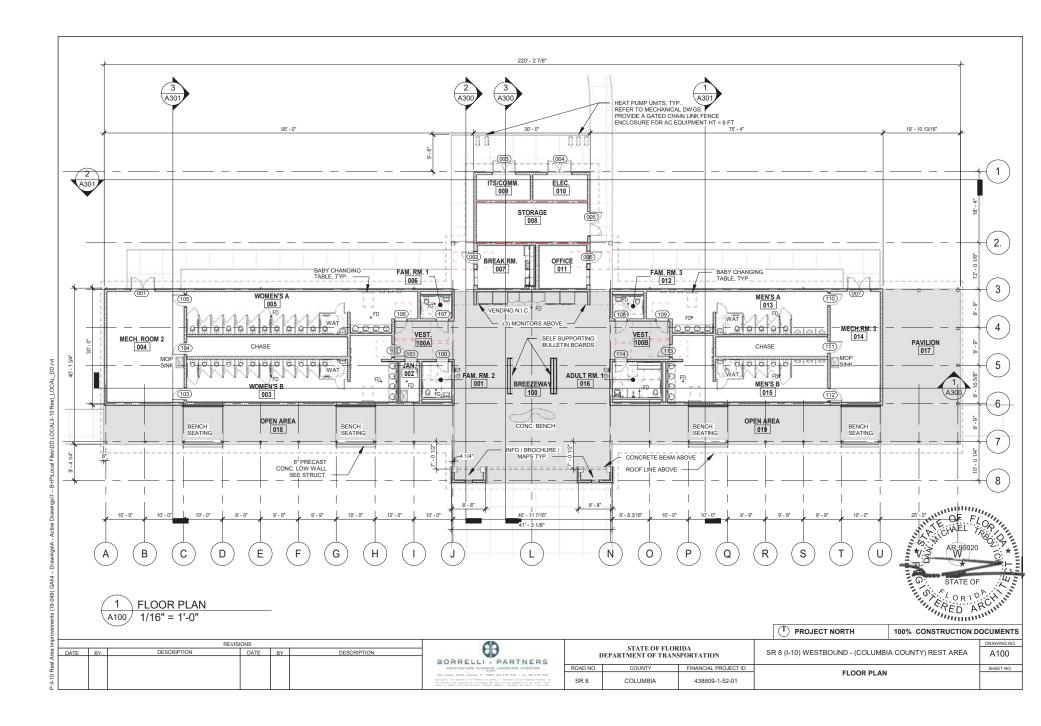
- LOAD FACTORS ARE SHOWN AS # SF NET PER PERSON UNLESS NOTED "GROSS"
- STORAGE IS INCIDENTAL TO THE PRINCIPAL ASSEMBLY OCCUPANCY AND IS NOT THE BASIS FOR OVERALL OCCUPANCY CLASSIFICATION AS A NON-SEPARATED MIXED OCCUPANCY. THE CONTENTS OF THIS STORAGE IS ORDINARY AS FROM THE REMAINDER OF THE OCCUPANCY COMPLIANCE WITH NFPA 101, 12.3.2(2) AND 8.7.1.1(1).

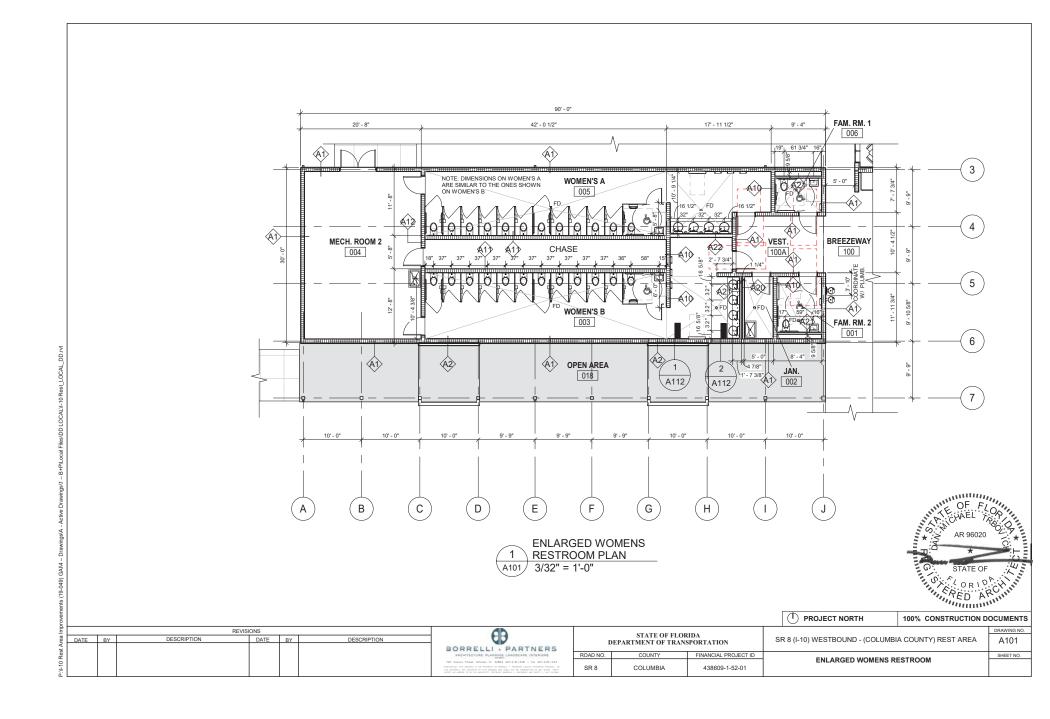
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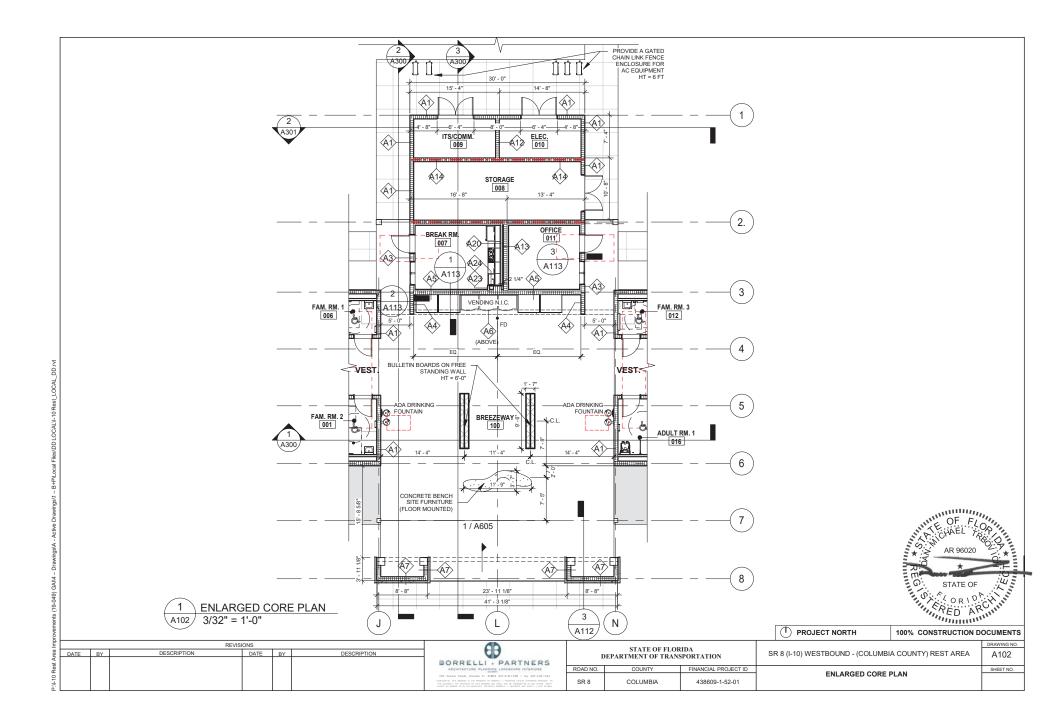
		PROJECT NORTH	100% CONSTRUCTION D	OCUMENTS
AP.				DRAWING NO.
AB.	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION	SR 8 (I-10) WESTBOUND - (COLUMBI	A COUNTY) REST AREA	G005

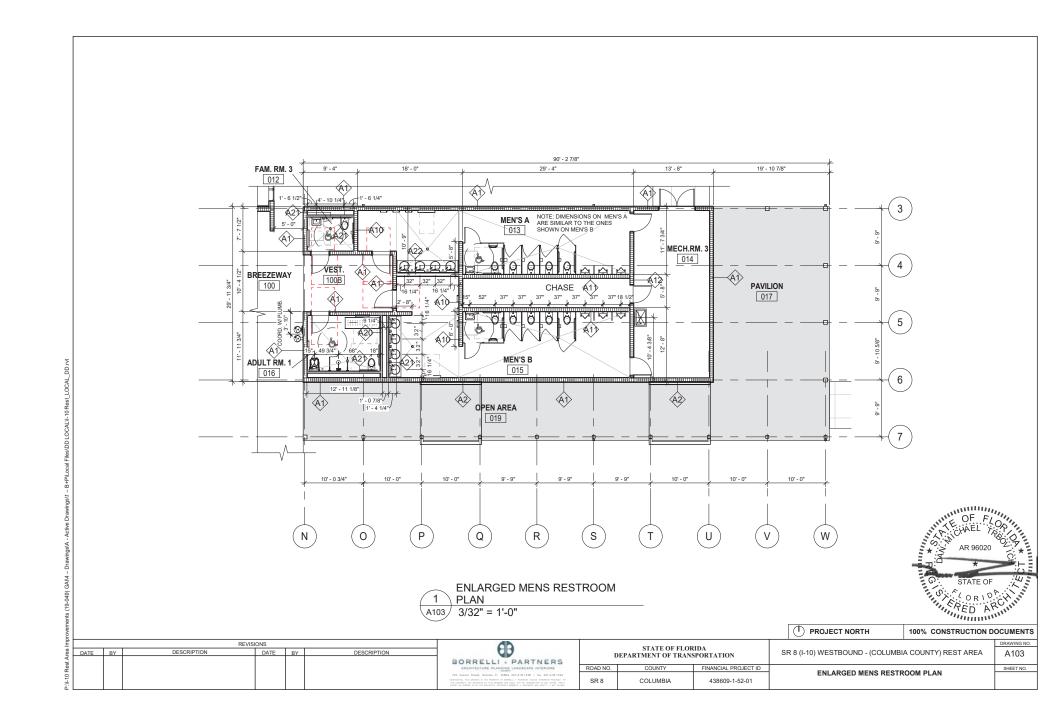
REVISIONS /ING NO. DATE BY DESCRIPTION DATE BY DESCRIPTION 005 BORRELLI + PARTNERS ARCHITECTURE PLANDING LANCELARS DISEMBLE.

720 Vossor Street, Orlondo D. 32804 407.418.1338 :: fox 407.418.1342
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DEEP 41 AUDIT DE 19 14 MANDETEL ("Ormosol Sensitia", "AFAMENE ACCUSING") / 420 CHINA ROAD NO. COUNTY SHEET NO. **CODE ANALYSIS** SR 8 COLUMBIA 438609-1-52-01









TYPE	HEIGHT	INDICATION	DESCRIPTION	RATING	REMARKS
A10>	12'-0" HT.	2000000000	8" CMU TO INDICATED HEIGHT	NON-RATED	SEE STRUCT FOR REINFORCING STEEL REQIREMENTS
A11	12'-0" HT.	WALL TILE UP TO CEILING HT. @ RR'S WET WALL	8" CMU TO INDICATED HEIGHT WALL TILE (THIN SET)	NON-RATED	SEE STRUCT FOR REINFORCING STEEL REQIREMENTS
A12>	FULL SIZE (TO STRUCTURE)	200000000000000000000000000000000000000	8" CMU FULL SIZE TO STRUCTURE	NON-RATED	SEE STRUCT FOR REINFORCING STEEL REQIREMENTS
Á13>	FULL SIZE (TO STRUCTURE)	5/8" 7 5/8"	8" CMU FULL SIZE TO STRUCTURE 2-1/2" "Z" FURRING CHANNELS 16 GA. @16" 5/8" GYPSUM WALL BOARD	NON-RATED	SEE STRUCT FOR REINFORCING STEEL REQIREMENTS
A14	FULL SIZE (TO STRUCTURE)	PATED	8" <u>RATED</u> CMU FULL SIZE TO STRUCTURE	1 HR RATED	SEE STRUCT FOR REINFORCING STEEL REQIREMENTS OF FI
A15	FULL SIZE (TO STRUCTURE)	2 1/2" 2	8" <u>RATED</u> CMU FULL SIZE TO STRUCTURE 2-1/2" "Z" FURRING CHANNELS 16 GA. @16" 5/8" GYPSUM WALL BOARD	1 HR RATED	SEE STRUCT FOR REINFORCING STEEL REQIREMENTS STATE OF ST

										PROJECT NORTH	100% CONSTRUCTION D	OCUMENTS	ı
		REVISI	ONS			dh		CT ATE OF FLOR	DID 4			DRAWING NO.	i
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	GB .	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SR 8 (I-10) WESTBOUND - (COLUMB	IA COUNTY) REST AREA	A110	ı
						BORRELLI + PARTNERS	"	ELAKTMENT OF TRAN	SIGNIATION				i
						ARCHITECTURE PLANNING LANCECAPE INTERIORS	ROAD NO.	COUNTY	FINANCIAL PROJECT ID	INITEDIOD WALL T	VDEO	SHEET NO.	i
						720 Vossor Street, Orlando FL 32804 407.418.1338 :: fox 407.418.1342 covinistas his Dalando il her recentro discressi - puercies successi company del company or company and company of the company of th	SR 8	COLUMBIA	438609-1-52-01	INTERIOR WALL T	TPES		ı

Interior Wall Type Schedule - Mtl. Framing

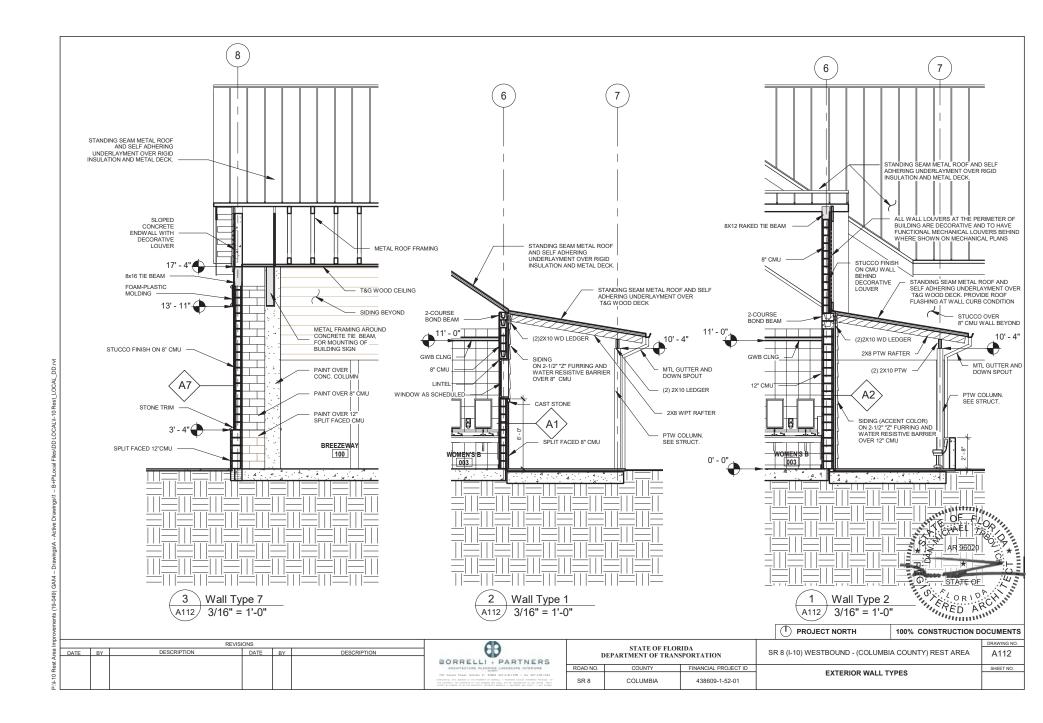
TYPE	HEIGHT	INDICATION	DESCRIPTION	RATING	REMARKS
A20	12'-0" HT.	4 t t t t t t t t t t t t t t t t t t t	3-5/8" METAL STUDS 16 GA. @16" 5/8" GREEN BOARD (WATER RESISTANT)	NON-RATED	
(A21)	12'-0" HT.	WALL TILE UP TO CEILING HT. @ RR'S WET WALL	3-5/8" MTL STUDS 16 GA. @16" WITH ACOUSTICAL INSULATION 5/8" WATER RESISTANT WALL BOARD 1/2" CEMENT BOARD WALL TILE THIN SET	NON-RATED	
A22	12'-0" HT.	WALL TILE UP TO CEILING HT. @ RR'S WET WALL	5/8" WATER RESISTANT GYPSUM BOARD 6" METAL STUDS 16 GA. @16" WITH ACOUSTICAL INSULATION 5/8" WATER RESISTANT WALL BOARD 1/2" CEMENT BOARD WALL TILE THIN SET (ONE SIDE)	NON-RATED	
Á23>	6" ABOVE CLNG HEIGHT	USED AROUND CONC. COL @ BREAKROOM	3-5/8" METAL STUDS 16 GA. @16" 5/8" GREEN BOARD (WATER RESISTANT)	NON-RATED	
A24	6" ABOVE CLNG HEIGHT	FURRING AROUND CONC. COL @ BREAKROOM	7/8" FURRING HAT CHANNELS 16 GA. @16" 5/8" GREEN BOARD (WATER RESISTANT)	NON-RATED	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,

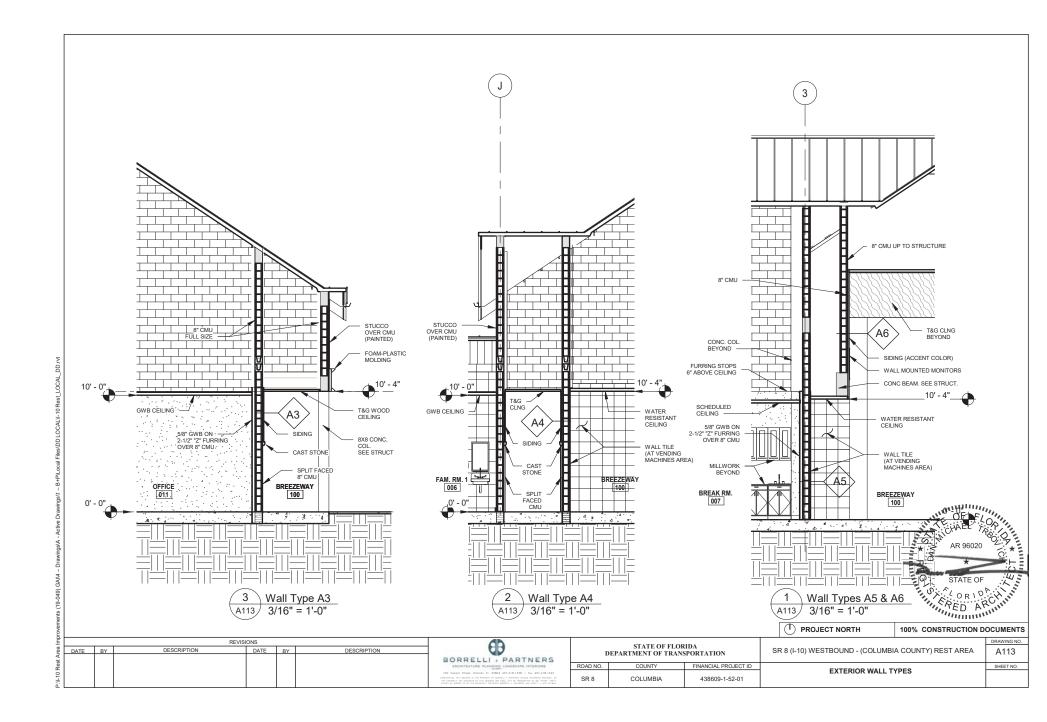
NOTE: WALL TYPES FOR EXTERIOR WALLS ARE SHOWN ON THE WALL SECTIONS SHEETS A112 AND A113

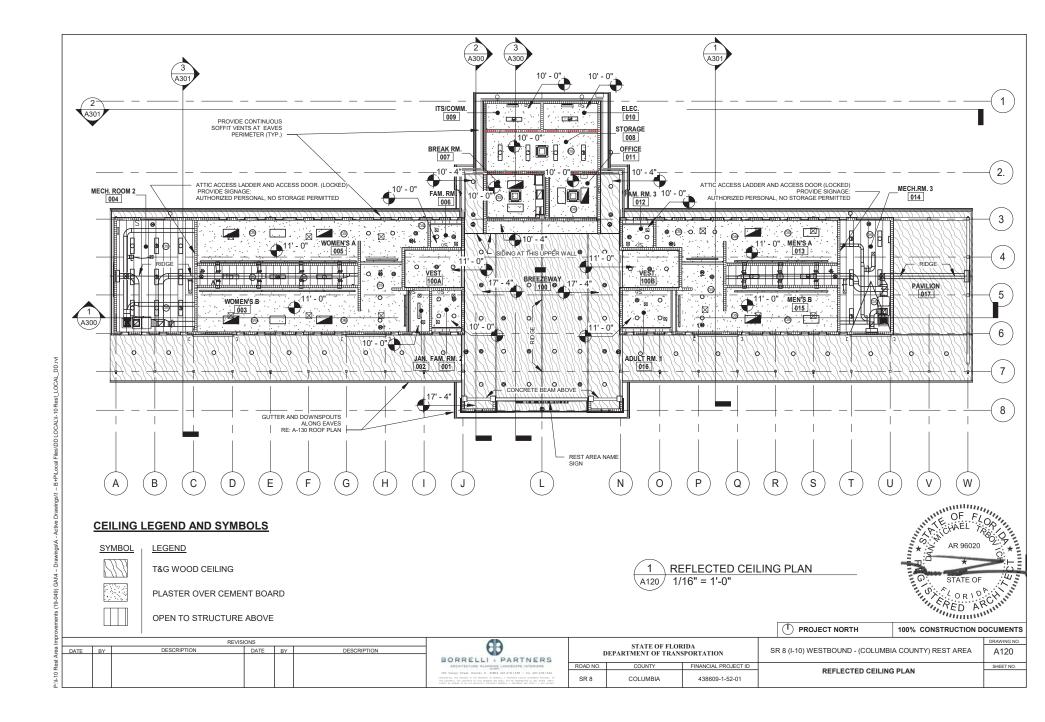
ORIONAL ARCHINE (T) PROJECT NORTH 100% CONSTRUCTION DOCUMENTS

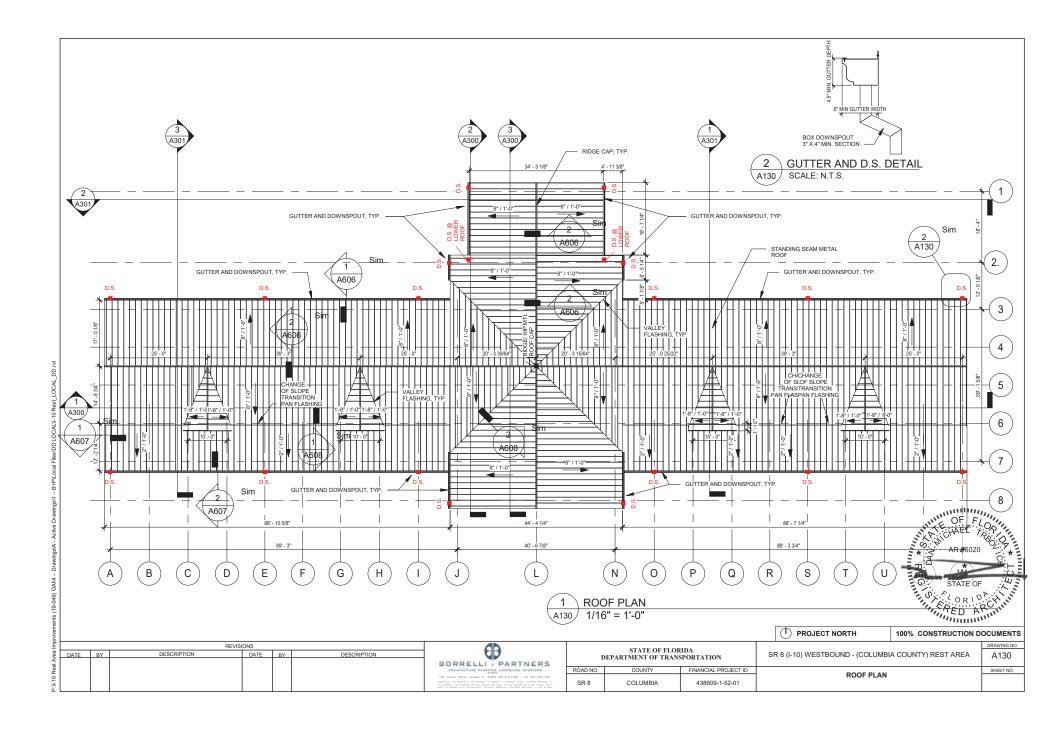
A111 SHEET NO.

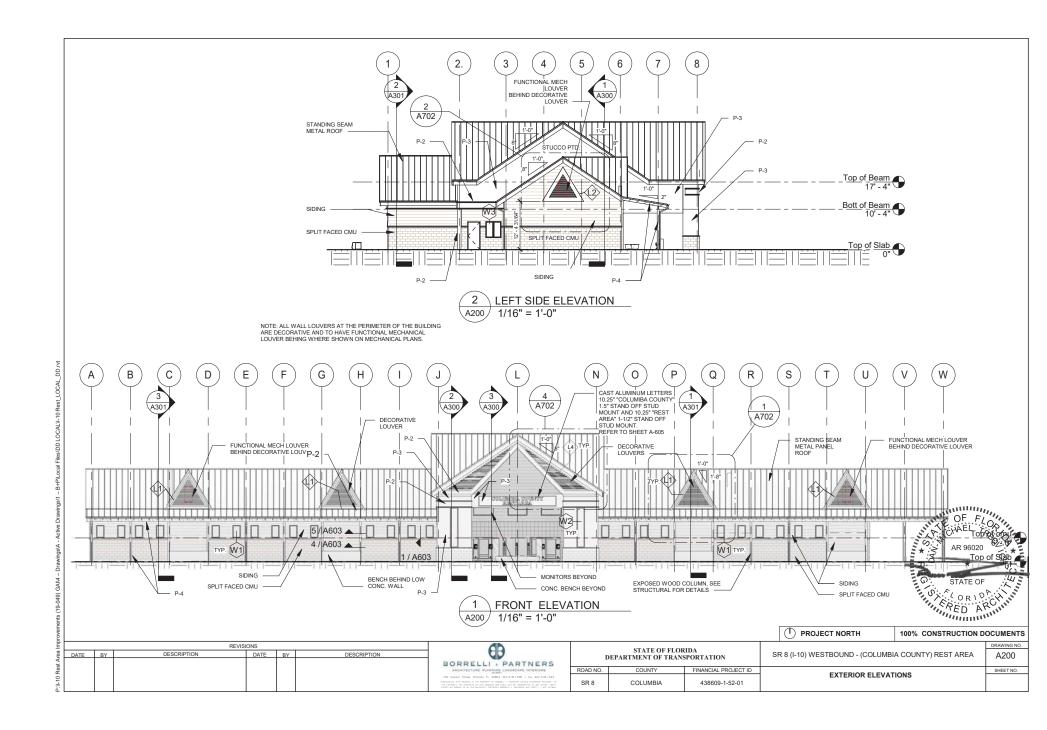
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rea	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	QD .	n	DEPARTMENT OF TRANS		SR 8 (I-10) WESTBOUND - (COLUMBIA COUNTY) REST AREA
¥							BORRELLI + PARTNERS		ELAKTMENT OF TRANS	SIGNIATION	
ě				1			ARCHITECTURE PLANNING LANCISCAPE INTERIORS	ROAD NO.	COUNTY	FINANCIAL PROJECT ID	INTERIOR WALL TYPES
9				1			720 Vassar Street, Orlando FL 32804 407.418.1338 :: fax 407.418.1342 Companya, had desired in the Profesty of Bosess + Pathods united Orlandos Profest By				INTERIOR WALL TYPES
÷				1			THE CONTRACT, THE CHARMAN IN THE PROPERTY OF MARKING STATES STATES AND ANY OTHER PARTY EXCEPT AS ACREED TO BY THE AMOUNTEET, COPYRIGHT BORROLL OF PARTY EXCEPT AS ACREED TO BY THE AMOUNTEET, COPYRIGHT BORROLL PARTYERS, ALC 0003711 / ACC 001843	SR 8	COLUMBIA	438609-1-52-01	
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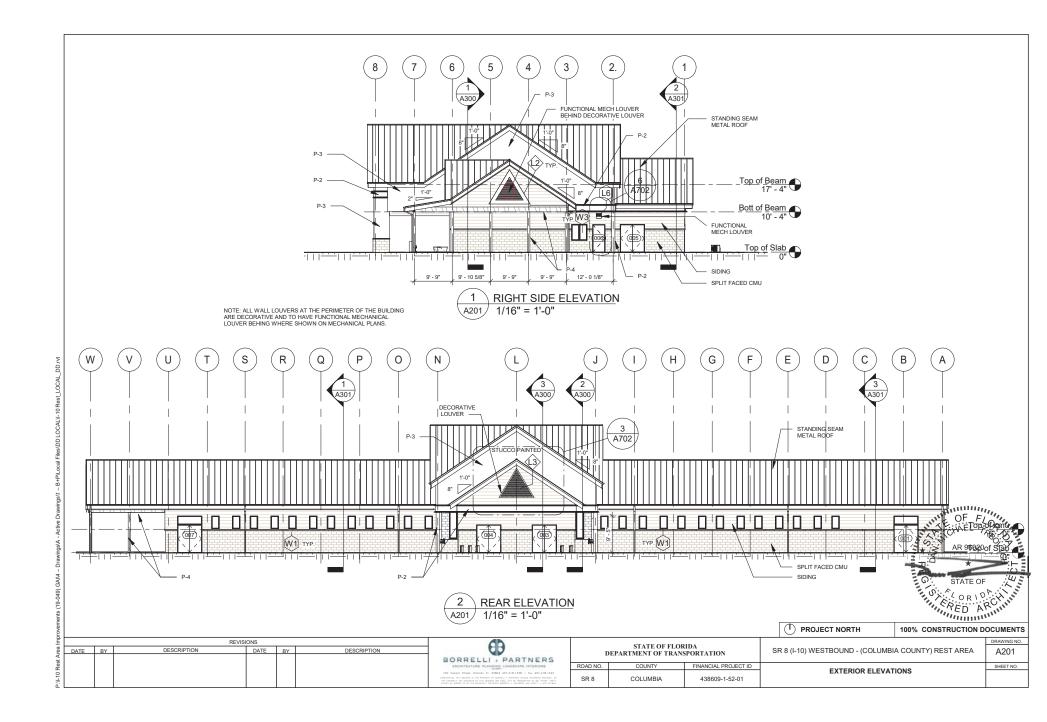


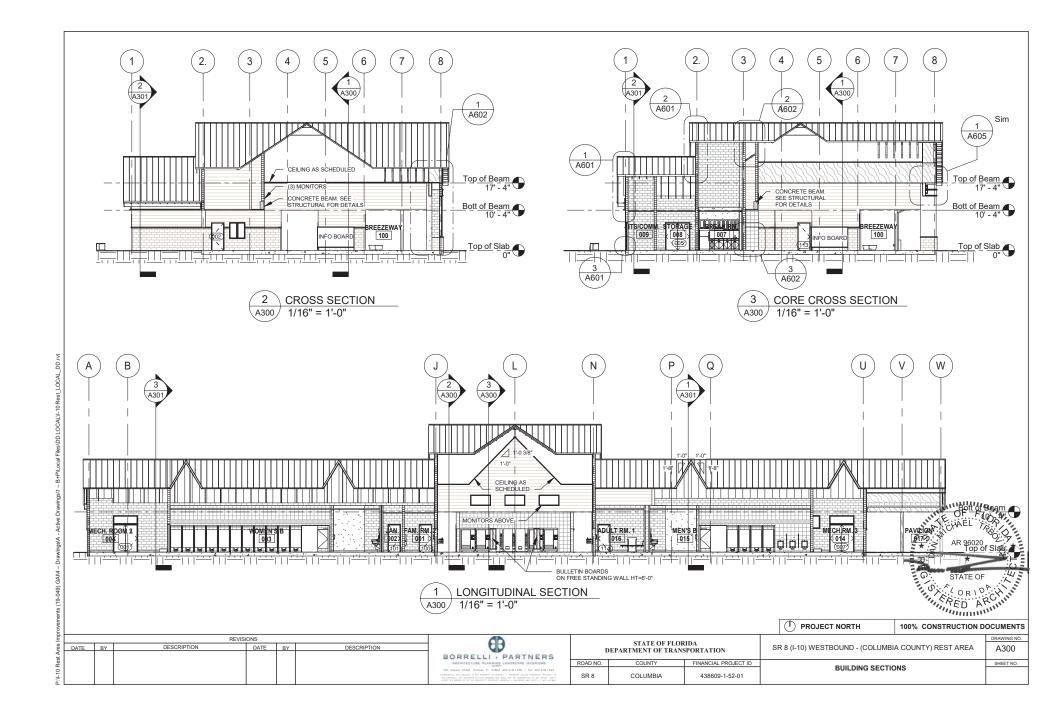


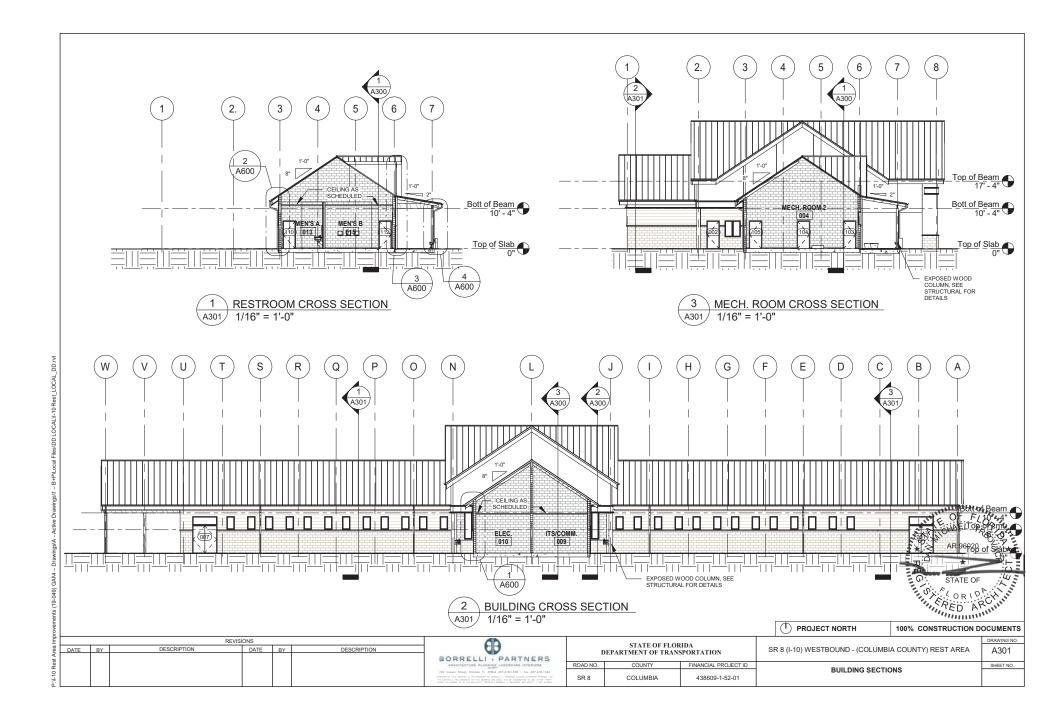


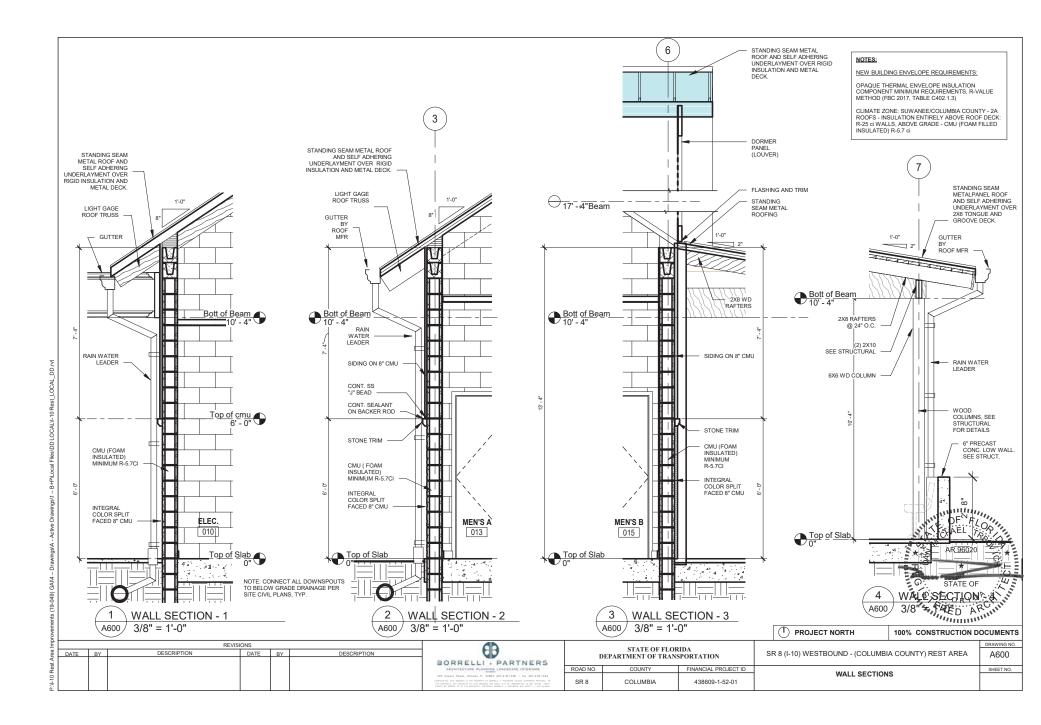


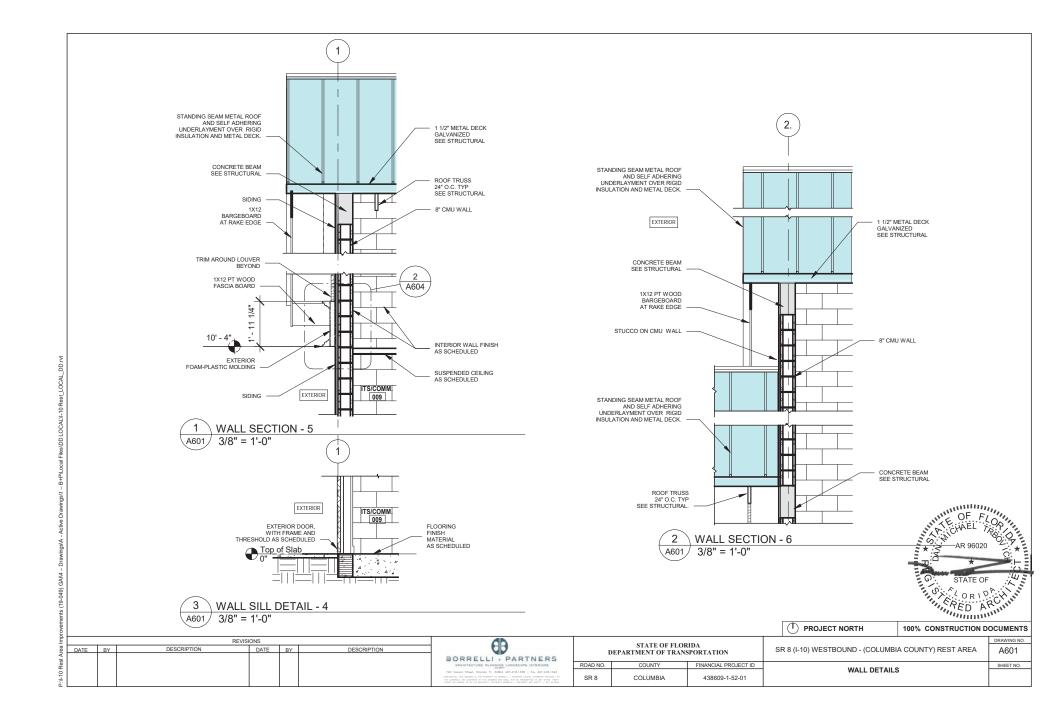


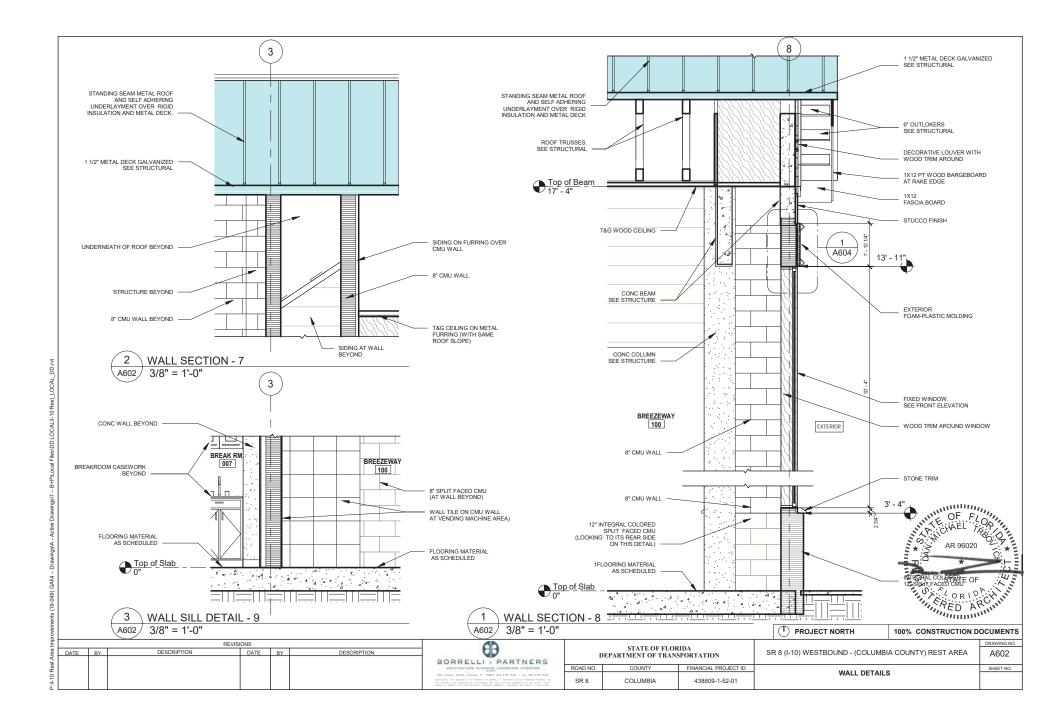


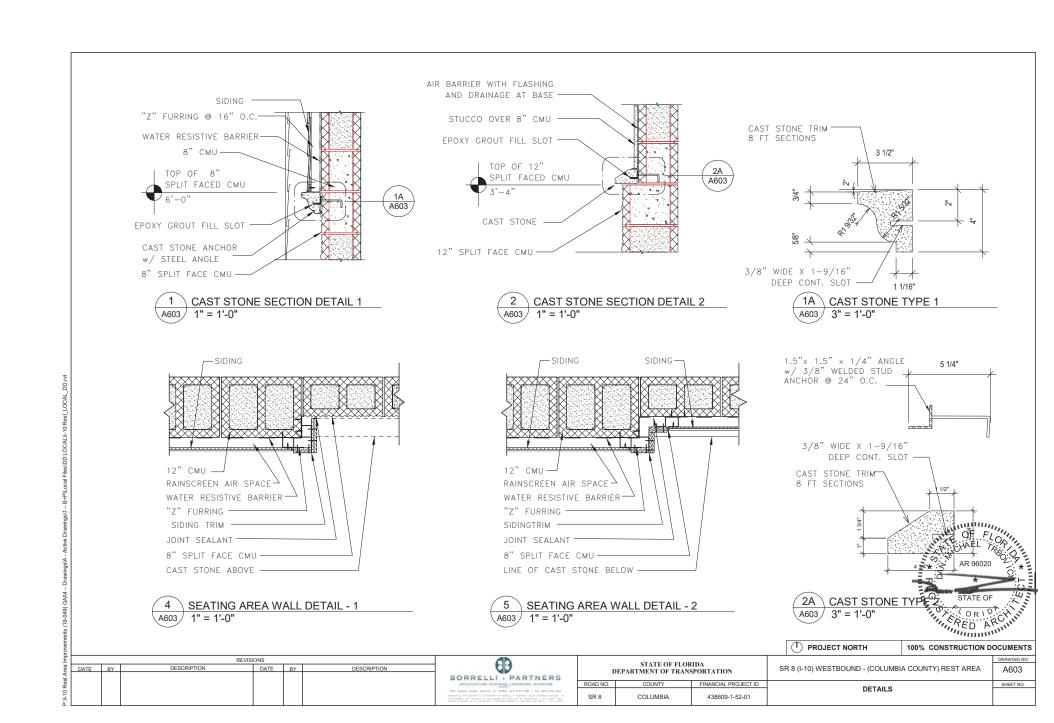


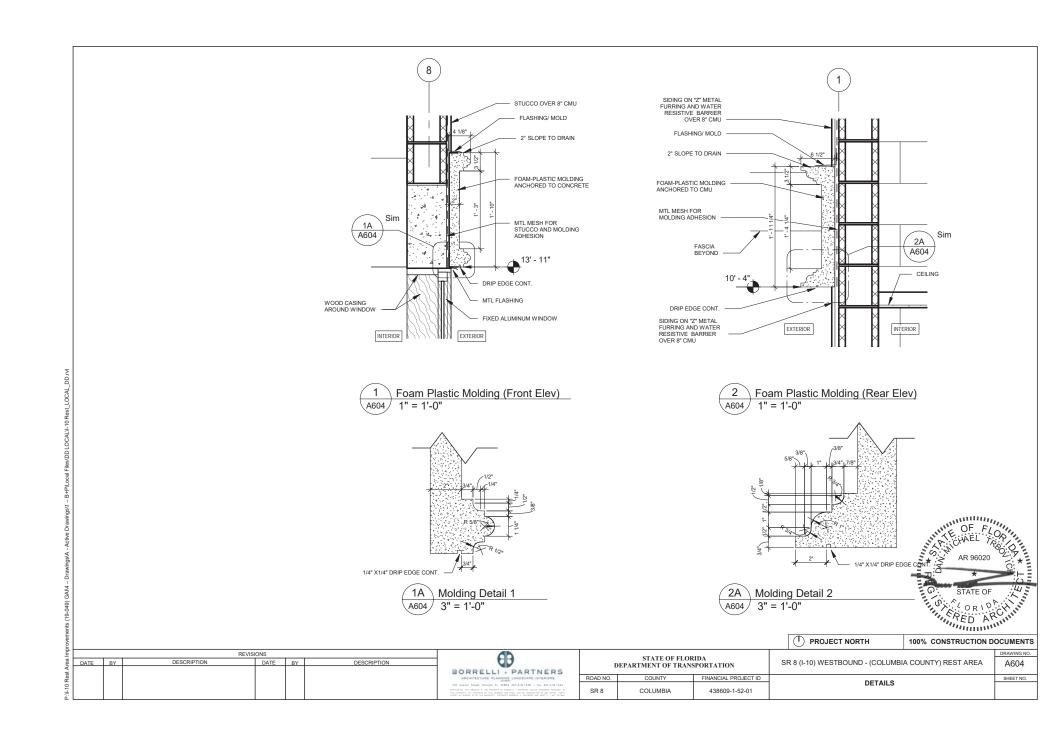


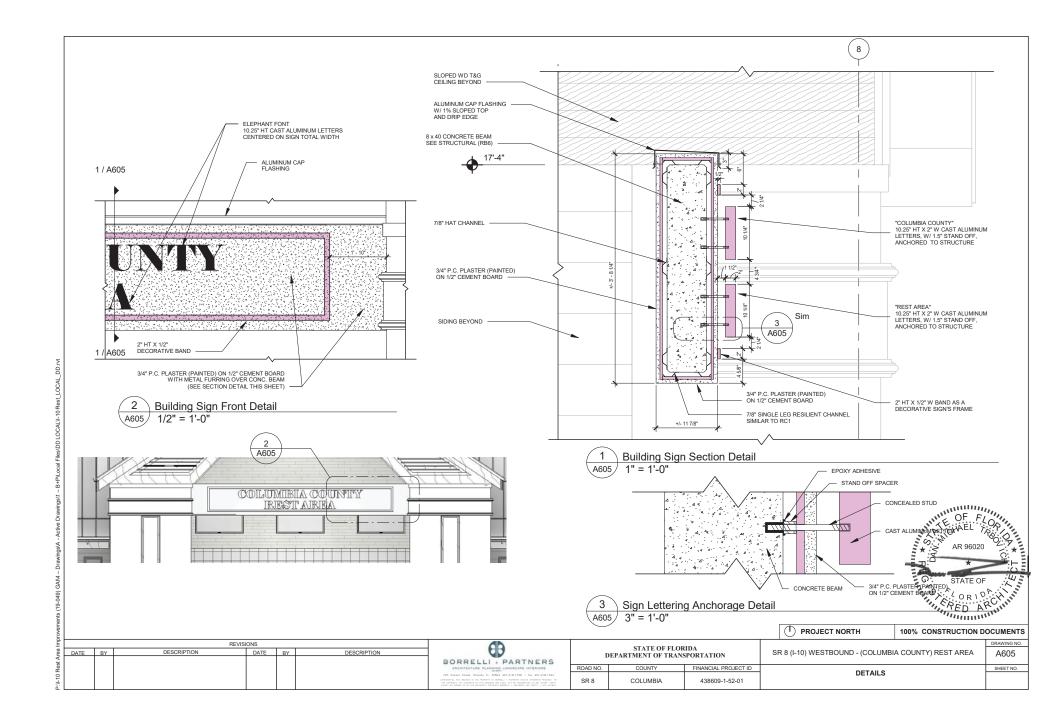


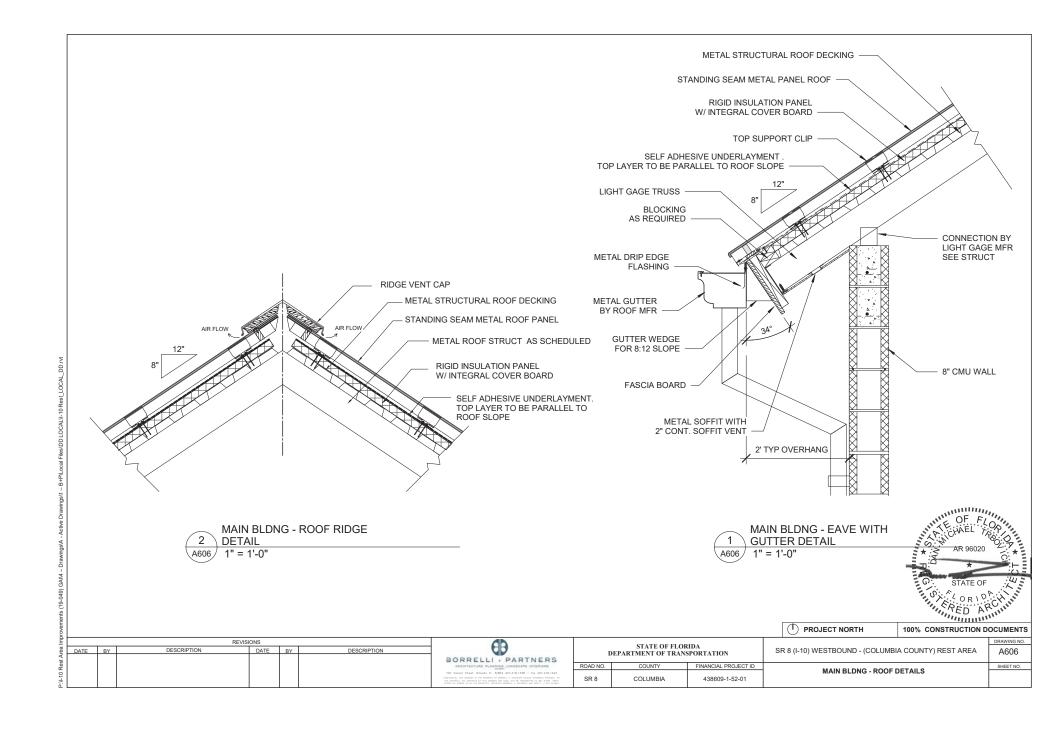


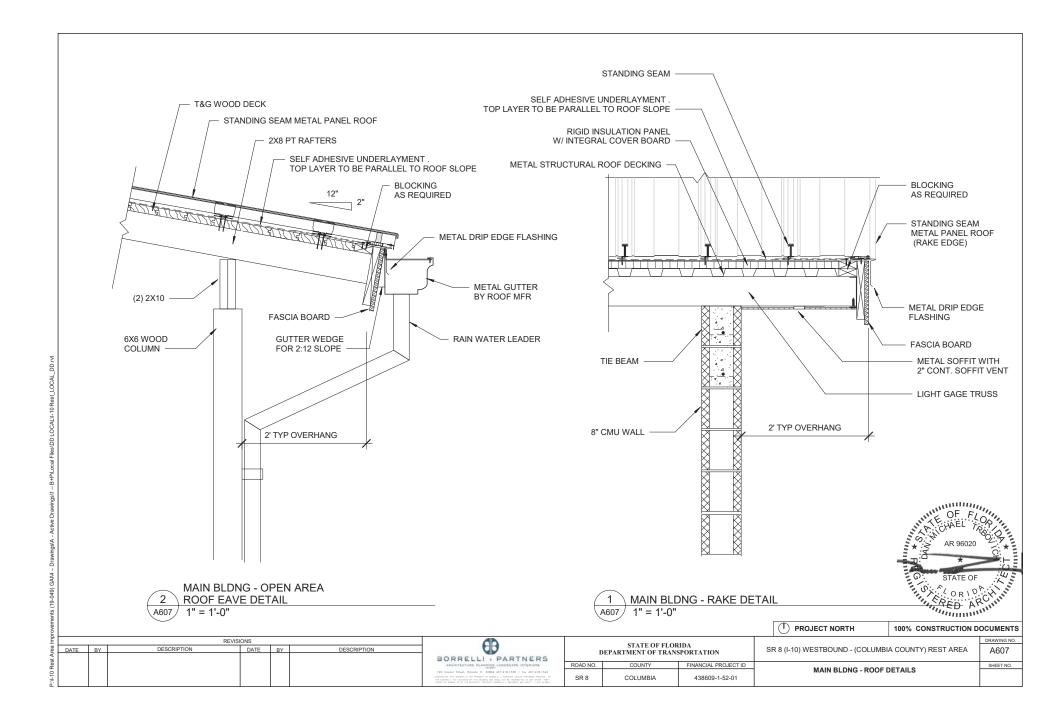


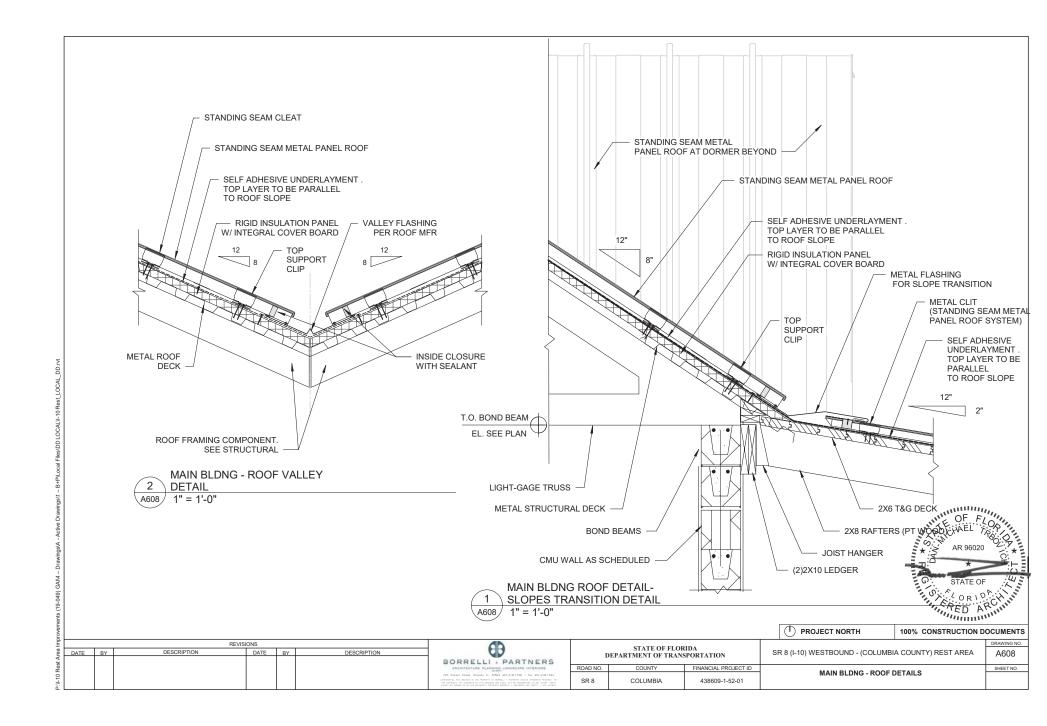


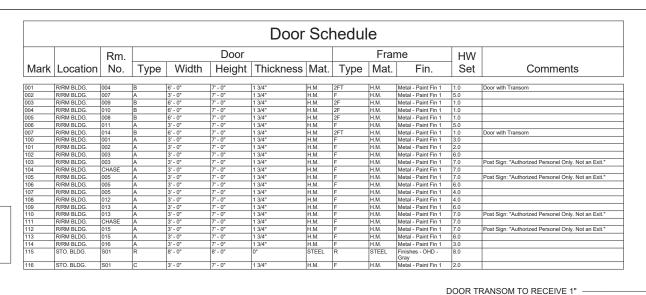








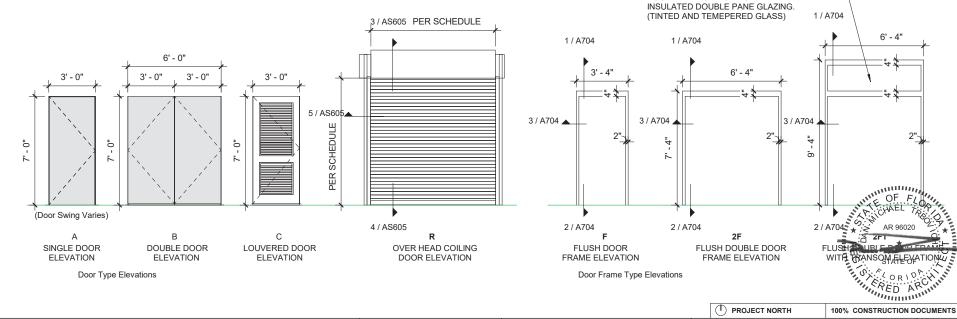




SEE SPECS SECTION 08 71 00 FOR HDWR SETS SCHEDULE.

NOTES:

Active Drawings\1 - B+P\Local Files\DD LOCAL\1-10 Rest_LOCAL_DD.rxt



REVISIONS

DATE BY DESCRIPTION DATE BY DESCRIPTION

COLUMN COLUMN

 SR 8 (I-10) WESTBOUND - (COLUMBIA COUNTY) REST AREA

DOOR SCHEDULE

DOOR SCHEDULE

GLAZING NOTES:

ALL EXTERIOR GLAZING SHALL BE INSULATED DOUBLE-PANE (CENTERED GLAZED SYSTEM) THE 1" THICK GLAZING SYSTEM COMPONENTS ARE: - OUTER PANE: 1/4" TINTED, TEMEPERED GLASS

- 1/2" AIR SPACE

- INNER PANE 1/4" CLEAR, TEMPERED GLASS

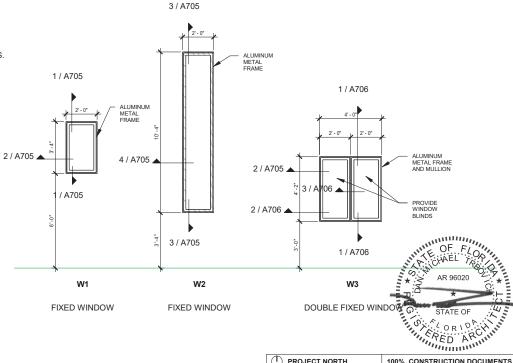
WINDOW FINISHES NOTE:

POWDER COATED FINISH IN RED COLOR IS ASSIGNED FOR COLUMBIA COUNTY REST AREA WINDOWS. THE SPECIFIC COLOR T.B.D. BY THE ARCHITECT FROM THE MFR. COLOR CHART.

REFER TO COLOR BOARD DOCUMENT PROVIDED WITH 100% CDs SUBMITTAL.

		\	Window Schedule	2		
Mark	Count	Туре	Height	Width	Sill Height	Comments

WI	59	24" x 40"	3' - 4"	2' - 0"	6' - 1"	
W2	2	24" x 124"	10' - 4"	2' - 0"	3' - 6 3/4"	
W3	2	48" x 50"	4' - 2"	2' - 0"	3' - 0"	Provide
						horizontal
						window blinds



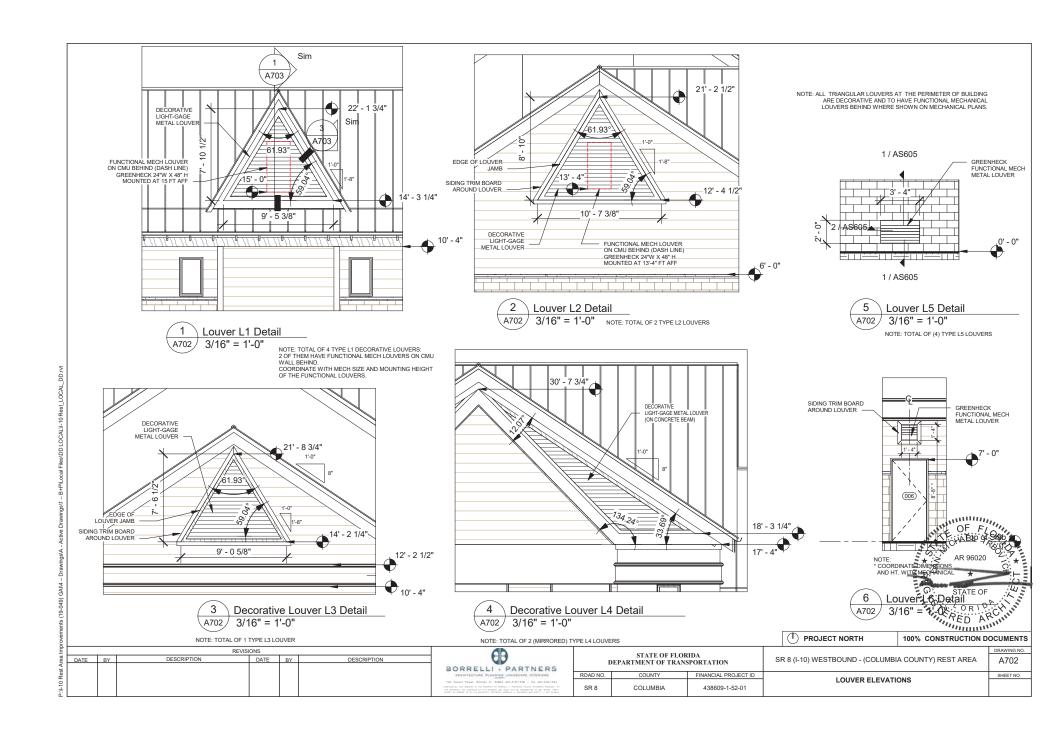
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ea [DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION					
P:\l-10 Rest A											

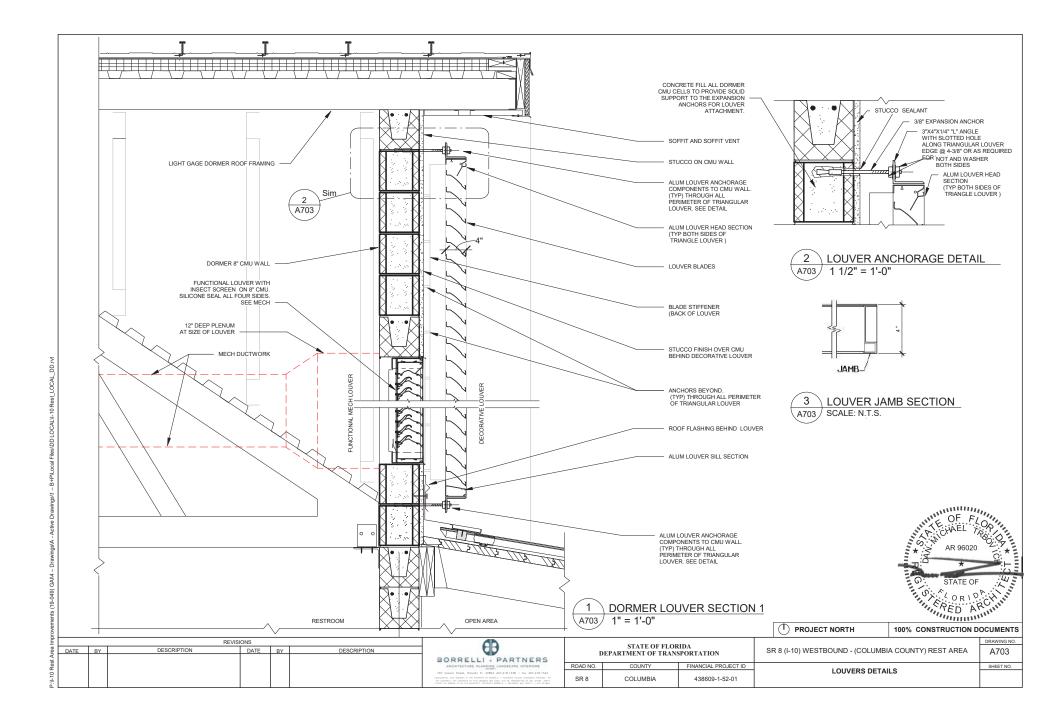
€B
BORRELLI + PARTNERS
720 Vassar Street, Orlando Ft. 32804 407.418.1338 :: fax 407.418.1342
CONTRIBUTAL THIS DESIRED IS THE PROPERTY OF BORNELL! A PARTICLES UNLIES CHARMES PROVIDED BY THE CONTRIBUTED, THE CONTRIBUTED OF THIS DAMPED HER DISALL DOES HE TRANSCHAFFEED OF ANY OTHER EXCEPT AS AGREED TO BY THE ARCHITECT, COPYRIGHT ROMBELL! PRATISERS, AAC 000711 / ACC 001842

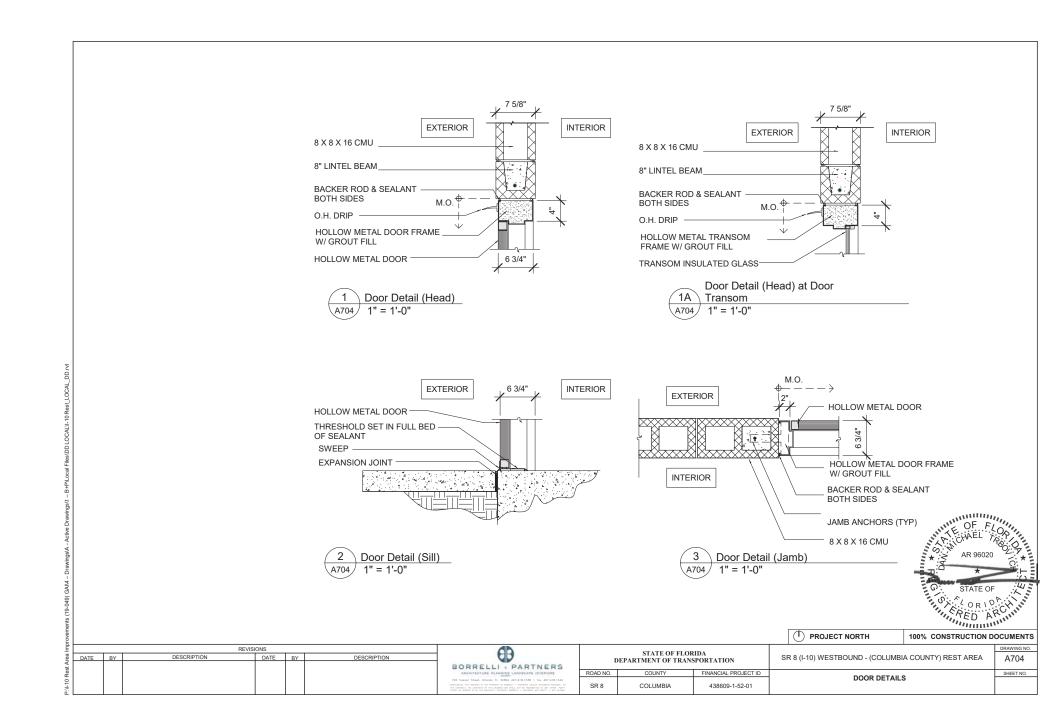
Г	STATE OF FLOR DEPARTMENT OF TRANS		SR 8 (I-10) WESTBOUND - (COLUMBIA COUNTY) REST AREA	A701
ROAD NO.	COUNTY	FINANCIAL PROJECT ID		SHEET NO.
SR 8	COLUMBIA	438609-1-52-01	WINDOW SCHEDULE	

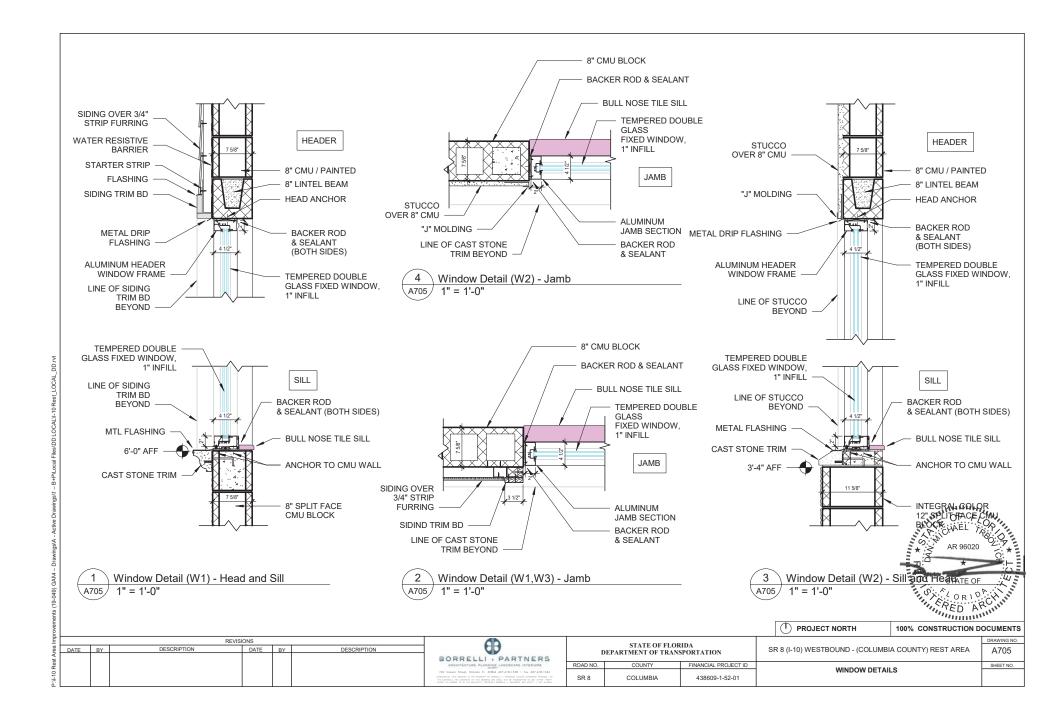
(T) PROJECT NORTH

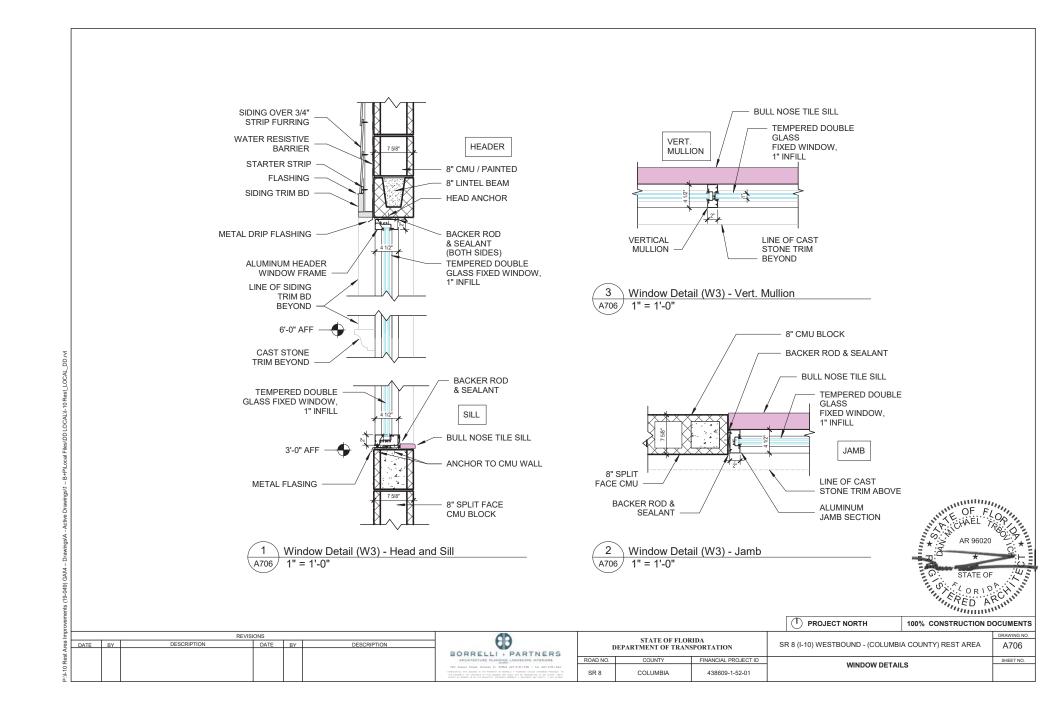
100% CONSTRUCTION DOCUMENTS

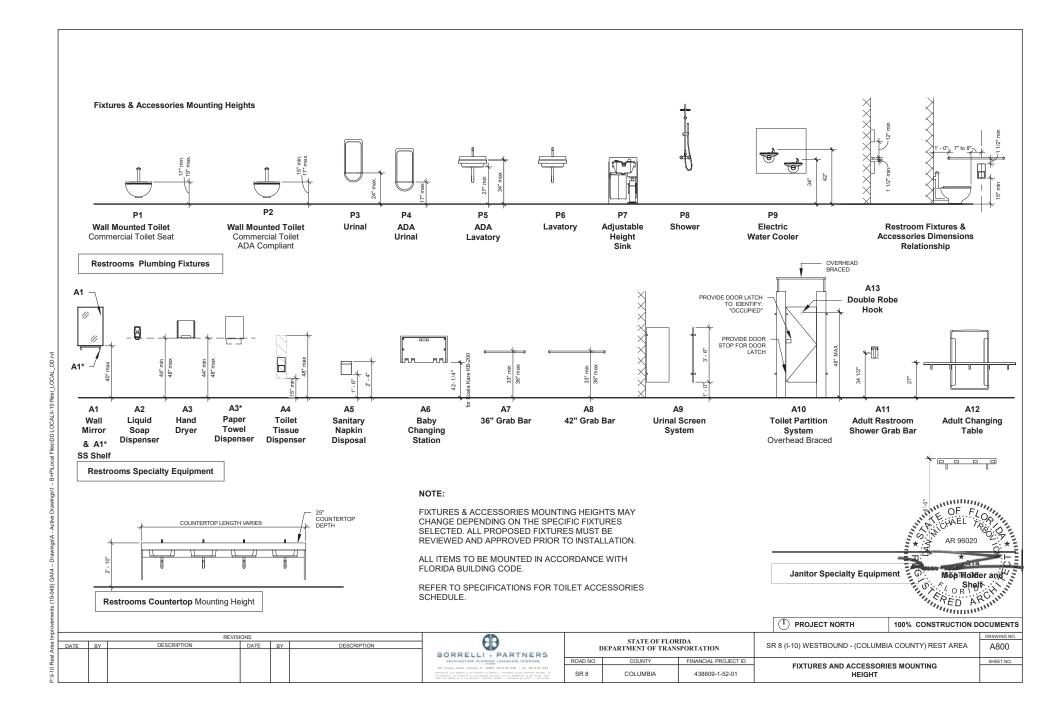


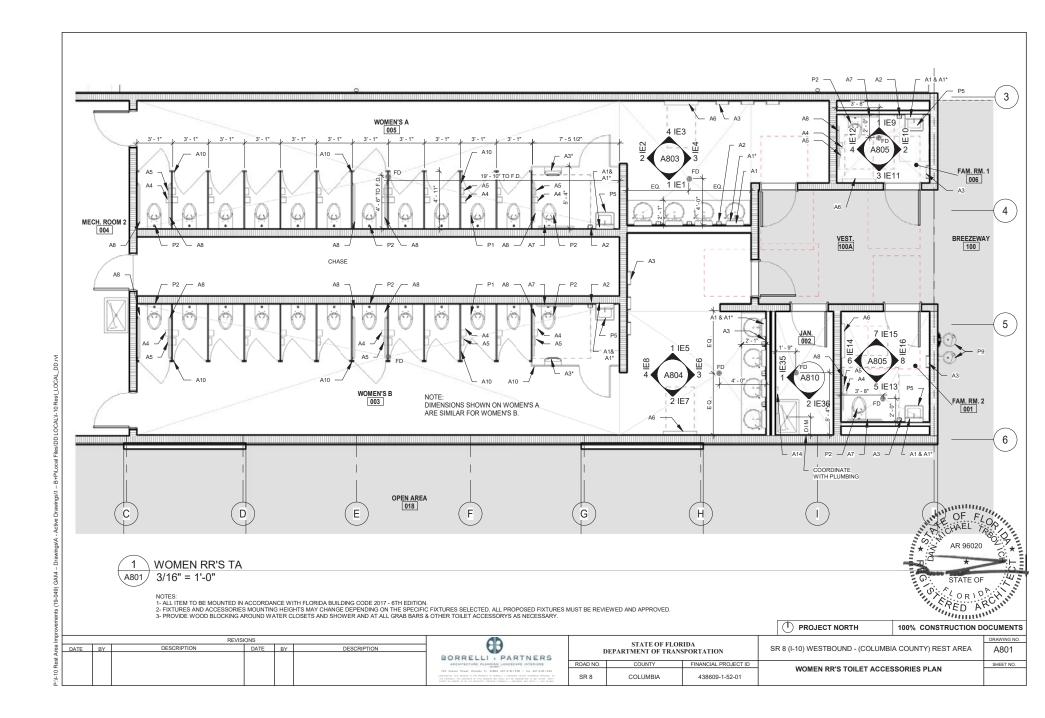


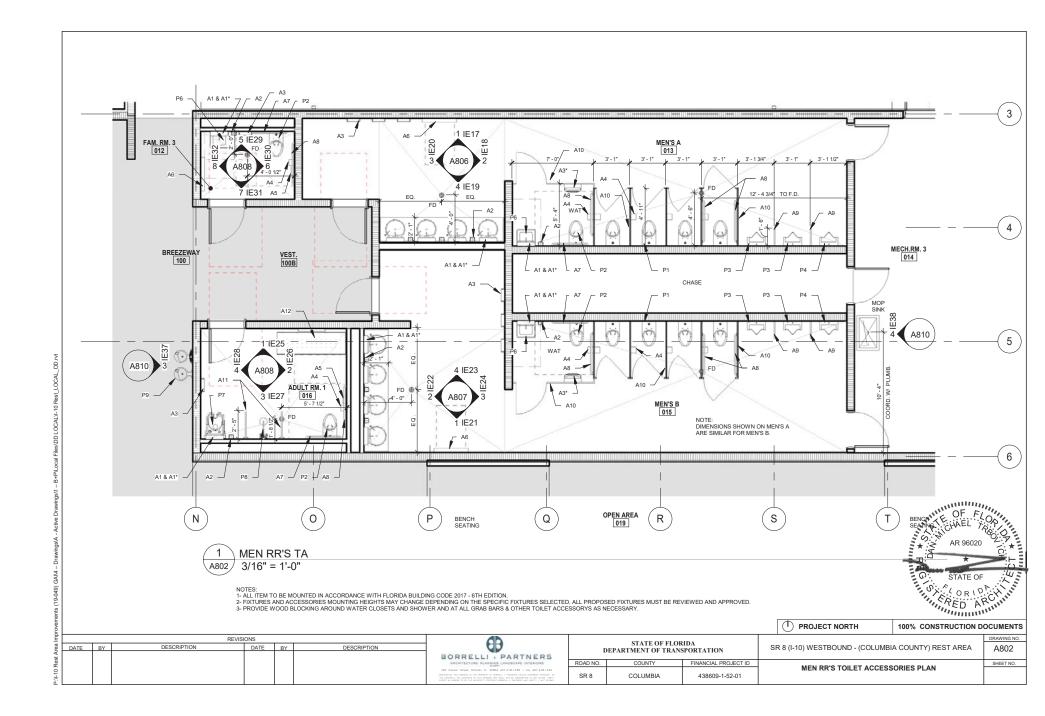


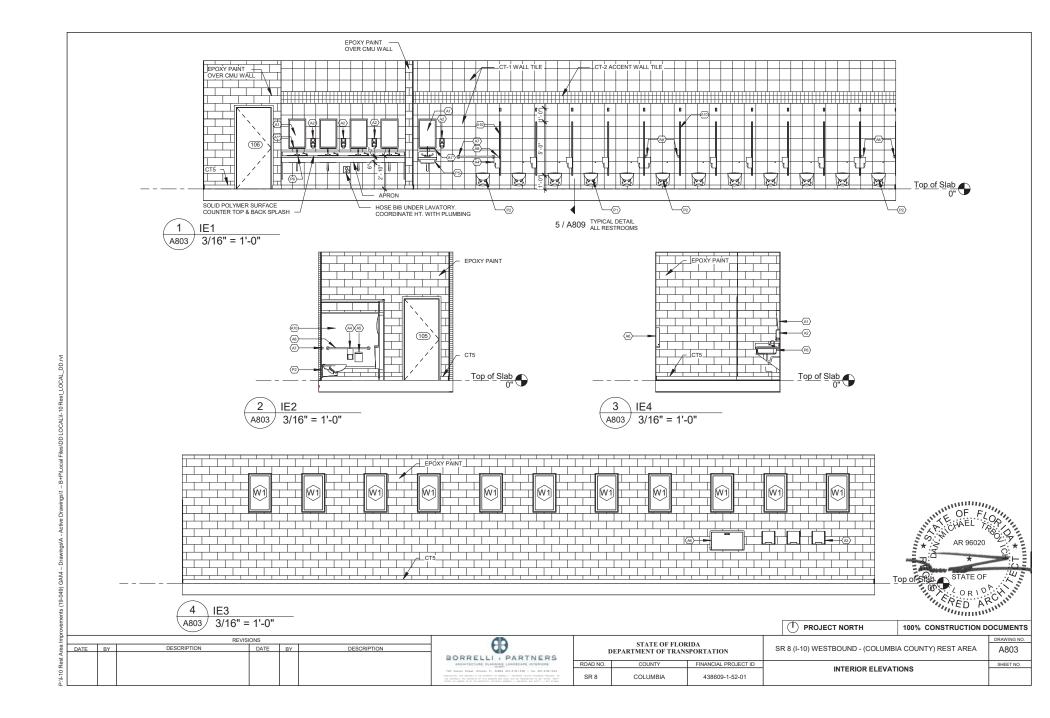


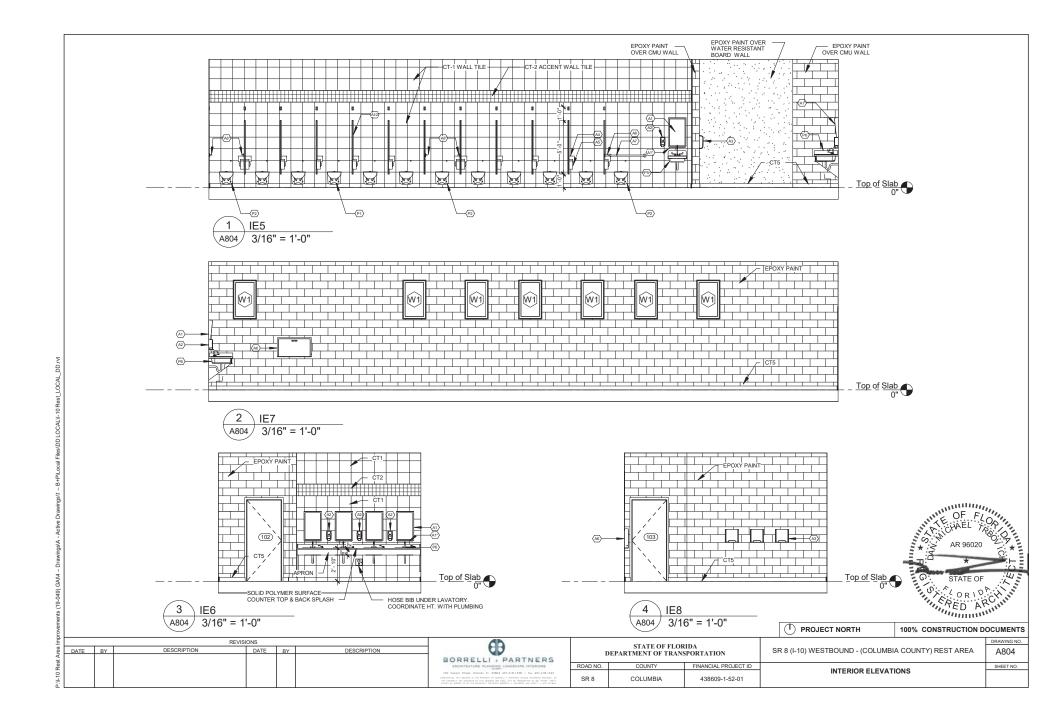


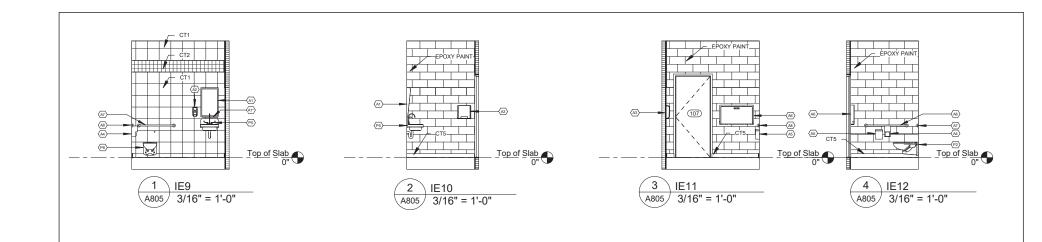


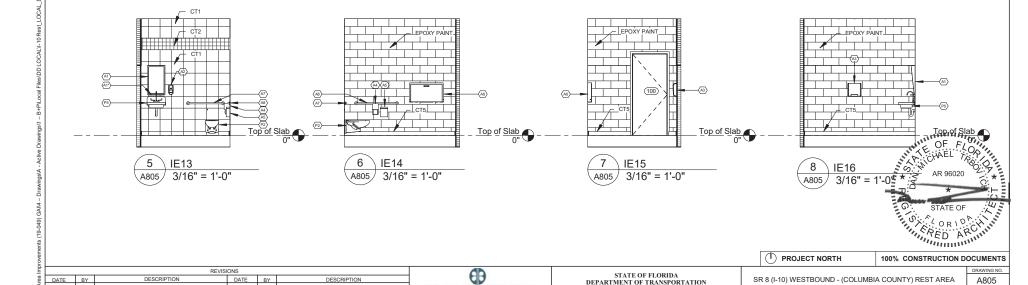












BORRELLI + PARTNERS

DESCRIPTION

DATE BY

DESCRIPTION

DATE BY

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

438609-1-52-01

COLUMBIA

ROAD NO.

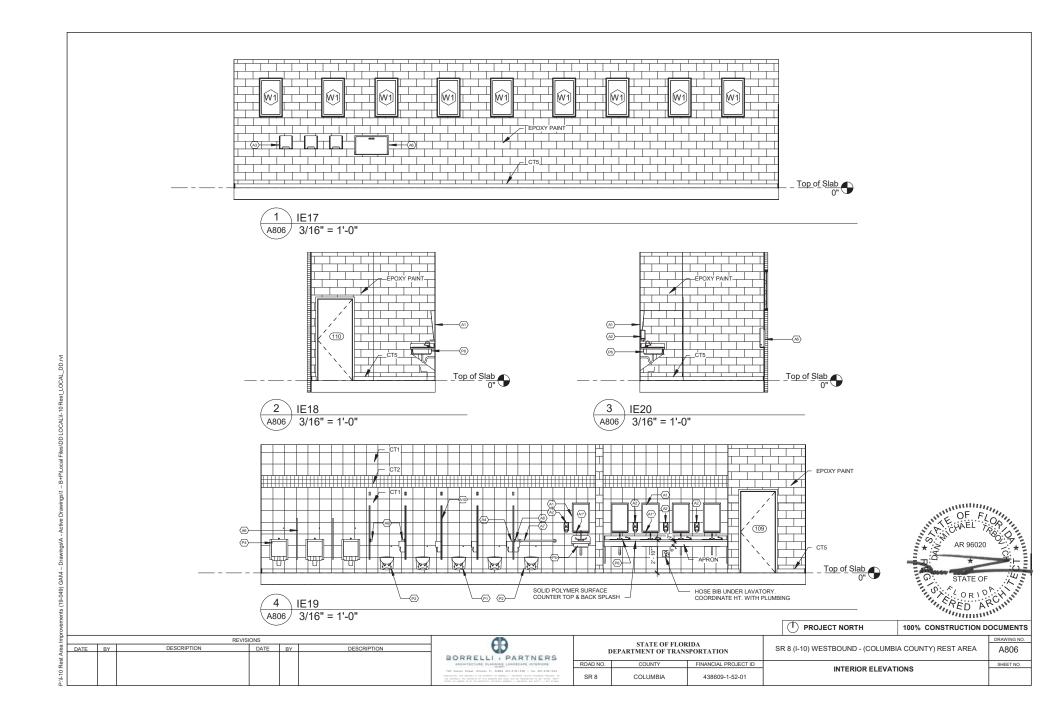
SR 8

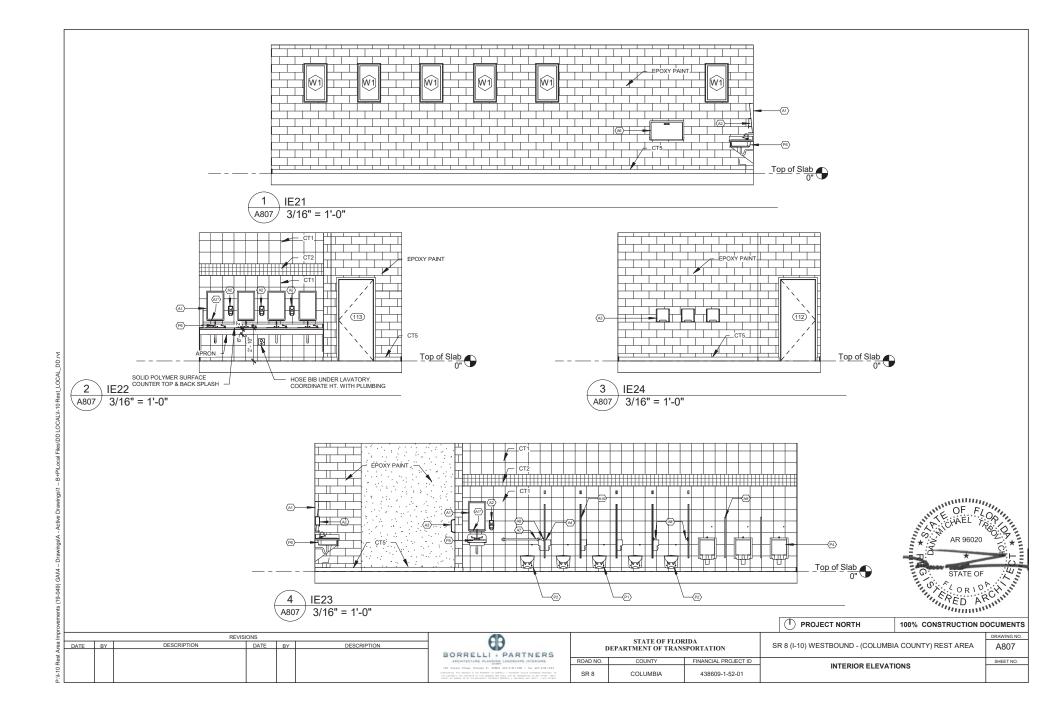
SR 8 (I-10) WESTBOUND - (COLUMBIA COUNTY) REST AREA

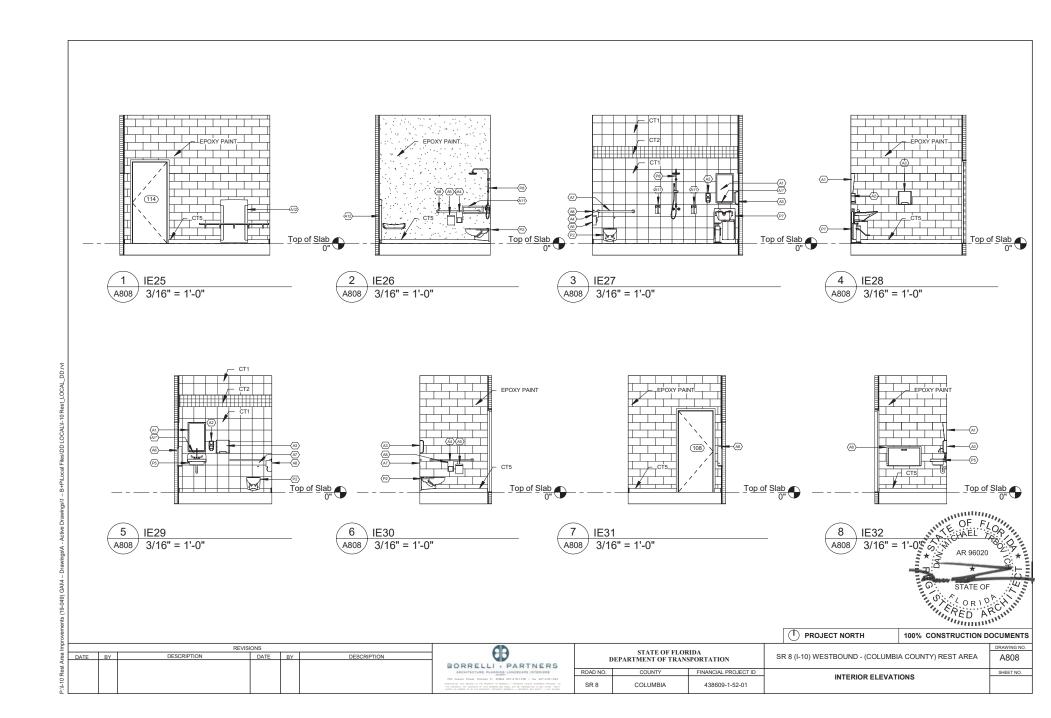
INTERIOR ELEVATIONS

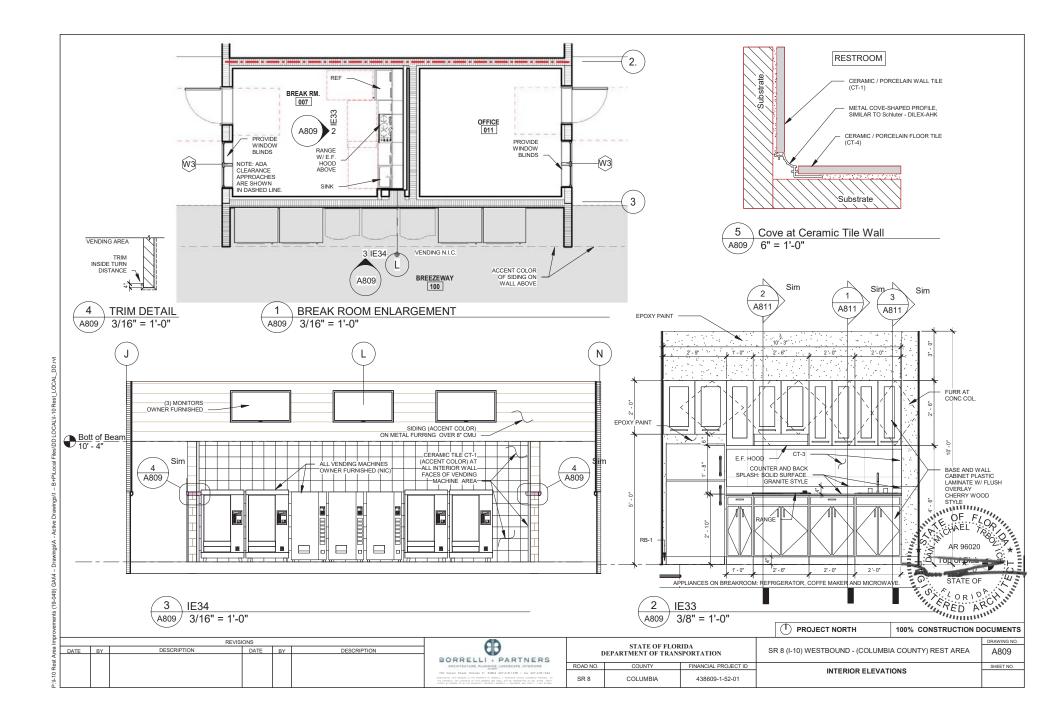
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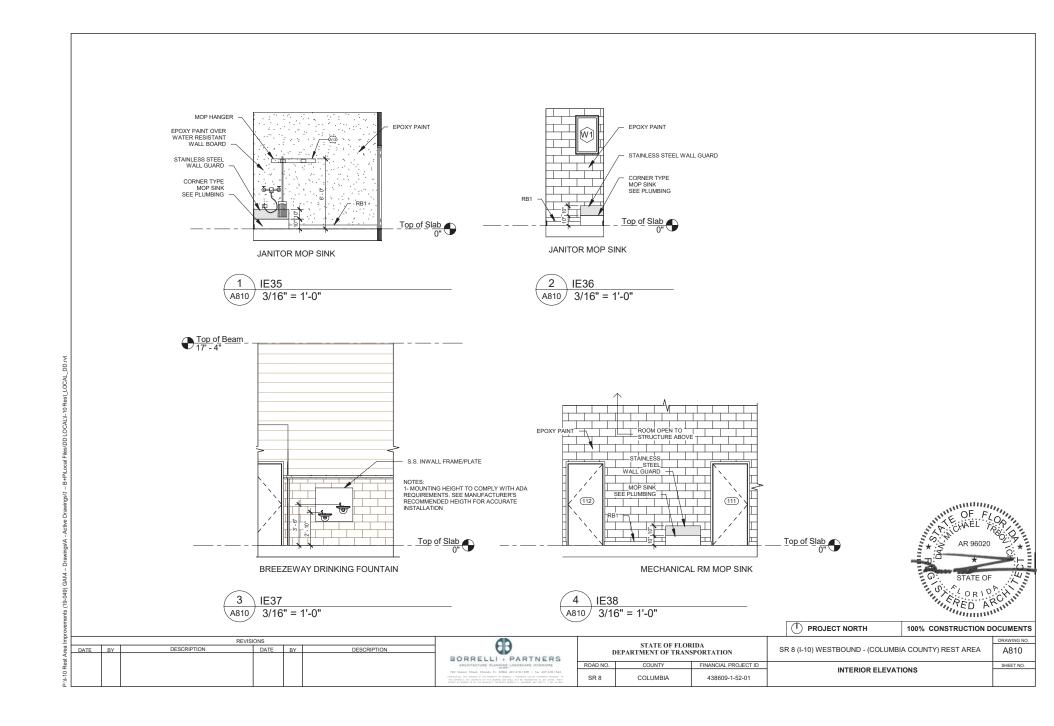
SHEET NO.

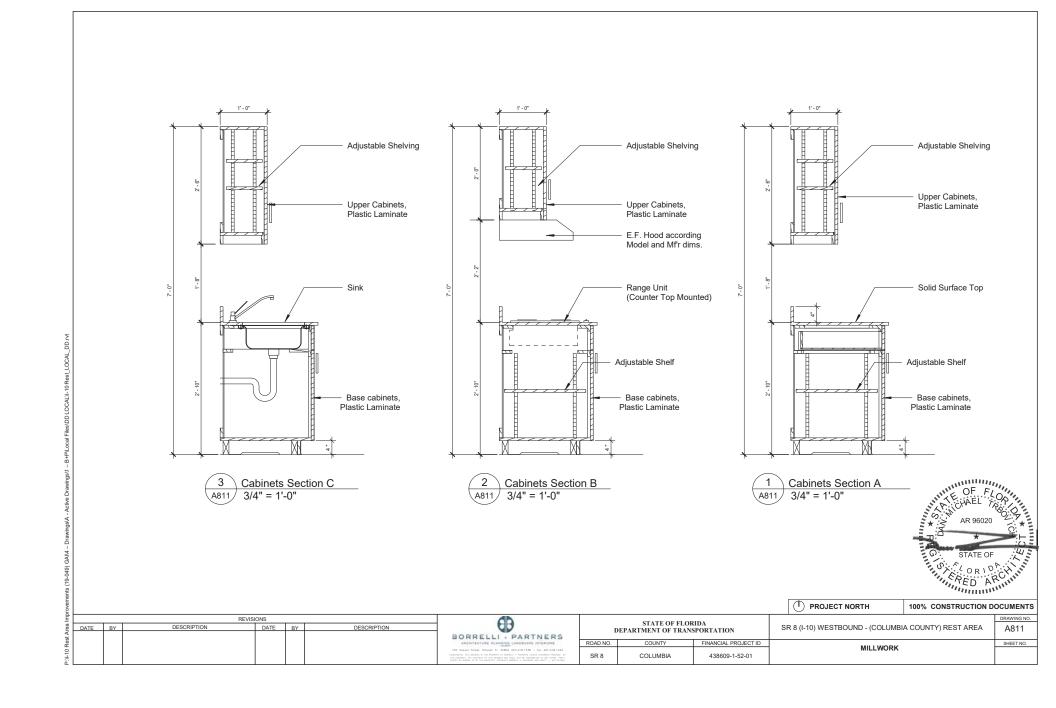


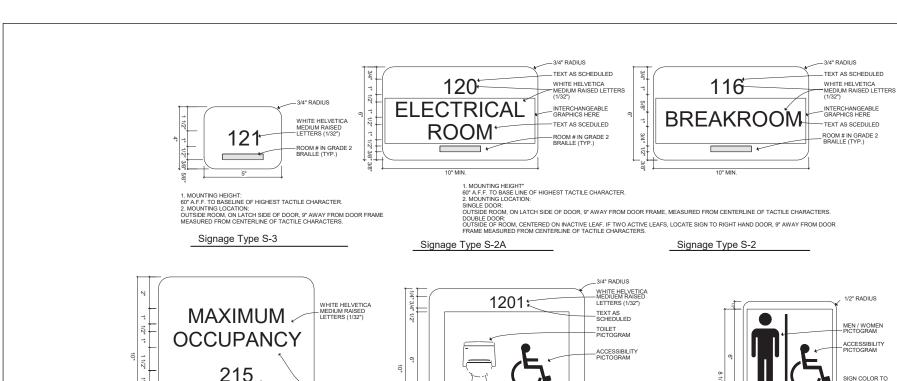


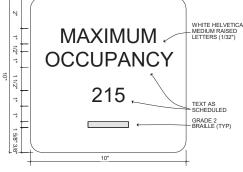












1. MOUNTING HEIGHT: 60" A.F.F. TO BASELINE OF HIGHEST TACTILE CHARACTER.

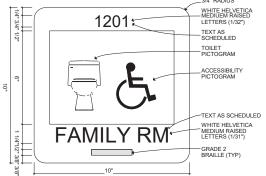
Signage Type S-4

ADA ACCESSIBLE SIGNAGE TO COMPLY WITH FBC 2017 6TH EDITION ACCESSIBILITY PROVIDE (1) SIGN PER TOILET ROOM.

COLOR: NAVY BLUE WITH WHITE CHARACTERS.

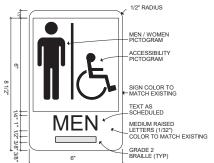
SIGNS TO BE RAISED AND BRAILLE CHARACTERS AND PICTORIAL SYMBOL OF

TYP. SIGNAGES TYPES 6" = 1'-0"



1. MOUNTING HEIGHT: 60" A.F.F. TO BASELINE OF HIGHEST TACTILE CHARACTER. 2. MOUNTING LOCATION:
OUTSIDE ROOM, ON LATCH SIDE OF DOOR, 9" AWAY FROM DOOR FRAME MEASURED FROM CENTERLINE OF TACTILE CHARACTERS

Signage Type S-1A



1. MOUNTING HEIGHT: 1. MOUNTING HEIGHT. 60" A.F.F. TO BASELINE OF HIGHEST TACTILE CHARACTER.

60" A.F.F. TO BASELINE OF HIGHEST TAXABLE OF THE TOTAL OUTSIDE ROOM, ON LATCH SIDE OF DOOR, 9" AWAY FROM DOOR FRAME OUTSIDE ROOM, ON LATCH SIDE OF TACTILE CHARACTERS OF MEASURED FROM CENTERLINE OF TACTILE CHARACTERS OF OF FLOOR

(T) PROJECT NORTH



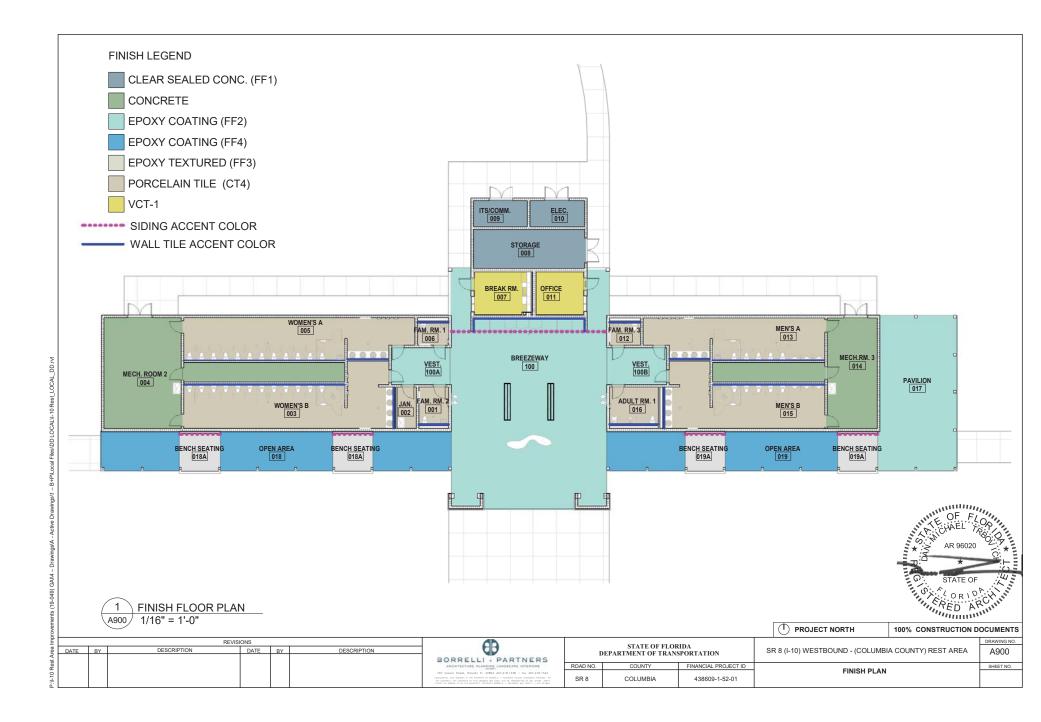
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P:\l-10 Rest A												

(D)
BORRELLI + PARTNERS
720 Vassar Street, Orlando FL 32804 407.418.1338 :: fax 407.418.1342
CONVERTIGE THE CRAINED IS THE PROPERTY OF RESIDELLY PARTNERS UNLIRE CHARMET PROVIDED IN THE CONVERGE, THE CONTENTS OF THIS DRAINED AND DALL AND RE TRANSMITTED TO ANY OTHER PARTY EXCOP AT ADMITTO TO BY THE ARCHITCH, COPYRIGHT ROTHERS PARTNERS, ARC 002711, 7 acc 001865

Г	STATE OF FLOR DEPARTMENT OF TRANS	SI	R 8 (I-10) WESTBOUI	
ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
SR 8	COLUMBIA	438609-1-52-01		

	DRAWING NO.
SR 8 (I-10) WESTBOUND - (COLUMBIA COUNTY) REST AREA	A812
010114.05	SHEET NO.
SIGNAGE	



	ROOM FINISH SCHEDULE												
Rm.			Base		WALLS			CEILING					
No.	Name	Floor Finish	Finish	South	West	North	East	Finish	Comments				
001	FAM. RM. 2	PORCELAIN TILE (CT4)	CT5	CT1, CT2	EPOXY PAINT	EPOXY PAINT	EPOXY PAINT	SEMI-GLOSS LATEX PAINT					
002	JAN.	PORCELAIN TILE (CT4)	RB1	EPOXY PAINT	EPOXY PAINT	EPOXY PAINT	EPOXY PAINT	SEMI-GLOSS LATEX PAINT					
003	WOMEN'S B	PORCELAIN TILE (CT4)	CT5	EPOXY PAINT	EPOXY PAINT	CT1, CT2	CT1, CT2	SEMI-GLOSS LATEX PAINT					
004	MECH. ROOM 2	CONCRETE	RB1	PAINT	PAINT	PAINT	PAINT	EXPOSED					
005	WOMEN'S A	PORCELAIN TILE (CT4)	CT5	CT1, CT2	EPOXY PAINT	EPOXY PAINT	EPOXY PAINT	SEMI-GLOSS LATEX PAINT					
006	FAM. RM. 1	PORCELAIN TILE (CT4)	CT5	EPOXY PAINT	EPOXY PAINT	CT1, CT2	EPOXY PAINT	SEMI-GLOSS LATEX PAINT					
007	BREAK RM.	VCT-1	RB1	EPOXY PAINT	EPOXY PAINT	EPOXY PAINT	EPOXY PAINT	SEMI-GLOSS LATEX PAINT					
800	STORAGE	CLEAR SEALED CONC. (FF1)	RB1	PAINT	PAINT	PAINT	PAINT	PAINT					
009	ITS/COMM.	CLEAR SEALED CONC. (FF1)	RB1	PLYWOOD	PLYWOOD	PLYWOOD	PLYWOOD	PAINT	WALLS COVERED W/ 3/4" FIRE RETARDANT PLYWOOD				
010	ELEC.	CLEAR SEALED CONC. (FF1)	RB1	PAINT	PAINT	PAINT	PAINT	PAINT					
011	OFFICE	VCT-1	RB1	PAINT	PAINT	PAINT	PAINT	PAINT					
012	FAM. RM. 3	PORCELAIN TILE (CT4)	CT5	EPOXY PAINT	EPOXY PAINT	CT1, CT2	EPOXY PAINT	SEMI-GLOSS LATEX PAINT					
013	MEN'S A	PORCELAIN TILE (CT4)	CT5	CT1, CT2	EPOXY PAINT	EPOXY PAINT	EPOXY PAINT	SEMI-GLOSS LATEX PAINT					
014	MECH.RM. 3	CONCRETE	RB1	PAINT	PAINT	PAINT	PAINT	EXPOSED					
015	MEN'S B	PORCELAIN TILE (CT4)	CT5	EPOXY PAINT	CT1, CT2	CT1, CT2	EPOXY PAINT	SEMI-GLOSS LATEX PAINT					
016	ADULT RM. 1	PORCELAIN TILE (CT4)	CT5	CT1, CT2	EPOXY PAINT	EPOXY PAINT	EPOXY PAINT	SEMI-GLOSS LATEX PAINT					
017	PAVILION	EPOXY COATING (FF2)	-	-	-	-	-	T&G WOOD STAIN	WOOD STAIN COLS & BEAMS. WHITE BIRCH. EXTERIOR SEMITRANSPARENT STAIN				
018	OPEN AREA	EPOXY COATING (FF4)	-	-	-	-	-	T&G WOOD STAIN	WOOD STAIN COLS & BEAMS. WHITE BIRCH. EXTERIOR SEMITRANSPARENT STAIN				
018A	BENCH SEATING	EPOXY TEXTURED (FF3)	-	-	-	-	-	T&G WOOD STAIN	WOOD STAIN COLS & BEAMS. WHITE BIRCH. EXTERIOR SEMITRANSPARENT STAIN				
019	OPEN AREA	EPOXY COATING (FF4)	-	-	-	-	-	T&G WOOD STAIN	WOOD STAIN COLS & BEAMS. WHITE BIRCH. EXTERIOR SEMITRANSPARENT STAIN				
019A	BENCH SEATING	EPOXY TEXTURED (FF3)	-	-	-	-	-	T&G WOOD STAIN	WOOD STAIN COLS & BEAMS. WHITE BIRCH. EXTERIOR SEMITRANSPARENT STAIN				
020	CHASE	CONCRETE	-	-	-	-	-	EXPOSED					
021	CHASE	CONCRETE	-	-	-	-	-	EXPOSED					
100	BREEZEWAY	EPOXY COATING (FF2)	-	PTD CONC COLS.	-	-	-	T&G WOOD STAIN	EXTERIOR PAINT ON CONC. COLUMNS & BEAM AT BUILDING ENTRANCE				
100A	VEST.	EPOXY COATING (FF2)	-	-	-	-	-	PAINT					
100B	VEST.	EPOXY COATING (FF2)	-	-	-	-	-	PAINT					
E003	PICNIC SHELTER	CONCRETE	-	-	-	-	-	PAINT	PAINT PREFAB SHELTER STRUCTURE				
E004	DUMPSTER AREA	CONCRETE	-	PTD STUCCO	PTD STUCCO	PTD STUCCO	PTD STUCCO	-	EXTERIOR PAINT BOTH SIDES OF WALLS				
E005	STORAGE ROOM	CONCRETE	RB1	PTD CMU	PTD CMU	PTD CMU	PTD CMU	EXPOSED	PAINT INTERIOR AND EXTERIOR OF BUILDING (CMU)				

FINISH LEGEND:

FF1: CLEAR SEALED CONCRETE (AT STORAGE, ITS/COMM. AND ELECT RM.)

FF2: EPOXY COATING, MIXED APPLICATION OF FEDERAL COLOR: 33617 AND 33690 SAND (AT BREEZEWAY, VESTIBULES AND PAVILION FLOORING)

FF3: EPOXY TEXTURED, FEDERAL COLOR: 36555 TAN (AT BENCH SEATING SECTIONS OF THE OPEN AREAS, AS AN ACCENT FLOORING FINISH)

FF4: EPOXY COATING, FEDERAL COLOR: 33690 SAND (AT OPEN AREAS -NOT INCLUDING THE BENCH SEATING SECTIONS)

VCT-1: 12" X 24" VINYL COMPOSITION TILES MFR: T.B.D. COLOR: T.B.D. (LIGHT AND NEUTRAL) FINISH: HIGH GLOSS

WALL BASE:

RB1: 4" RUBBER BASE, FEDERAL COLOR: 36373 LIGHT GRAY (AT INTERIOR ROOMS AS SCHEDULED)

CERAMIC TILE:

CT1: (8" X 8" MIN.) CERAMIC / PORCELAIN TILE - ACCENT COLOR - REFLECTIVE TILE AND SATURATED BRIGHT COLOR. REFER TO COLOR BOARD. (AT RESTROOMS WET WALLS AND VENDING MACHINES AREA)

CT2: 12" X 12" TOP BAND TRIM - CERAMIC / PORCELAIN TILE - MINIBRICK PATTERN DESIGN OR SIMILAR.

CT3: (8" X 8" MIN.) CERAMIC TILE, LIGHT BEIGE COLOR, MFR AND MODEL T.B.D. (AT BREAKROOM BAKSPLASH)

CT4: (8" X 8" MIN.) PORCELAIN FLOOR TILE (NEUTRAL COLOR)
(AT RESTROOMS, FAMILY ROOMS, ADULT ROOM AND JANITOR FLOORING)

CT5: 6" PORCELAIN TILE BASE (BULL NOSE, COVED BASE) NEUTRAL COLOR SIMILAR TO CT4

CERAMIC FLOORING GROUT COLOR: COLOR TO BE SUBMITTED FOR REVIEW AND APPROVAL. (NO WHITE OR LIGHT COLOR)

MILLWORK FINISHES: (USED AT BREAKROOM)

CABINET SURFACE: PLASTIC LAMINATE FINISH WITH FLUSH OVERLAY CHERRY WOOD STYLE

COUNTER TOPS: (USED AT RESTROOMS AND BREAKROOM)

COUNTER TOP AND 4" BACK SPLASH: SOLID SURFACE GRANITE STYLE

TOILET PARTITIONS:

3/4" SOLID PLASTIC/ PHENOLIC SURFACE, METALIC GRAY, TEXTURED, MFR: T.B.D.

EXTERIOR WALL SIDING COLORS/ PROFILES:

BASE COLOR: HORIZONTAL CLAPBOARD, NEUTRAL LIGHT COLOR T.B.D. (8" EXPOSURE) ACCENT COLOR: HORIZONTAL CLAPBOARD, ACCENT COLOR T.B.D. (5" EXPOSURE)

CMU COLOR:

SPLIT FACED CMU: 8" X 16" COLOR: BRICK/ CLAY TONE

PAINT COLORS:

P-1 INTERIOR WALL PAINT (EPOXY PAINT), HIGH REFLECTIVE, COLOR: 37925, INSIGNIA WHITE USED AT INTERIOR ROOMS
(TO BE EPOXY PAINT WHERE INDICATED ON SCHEDULE)

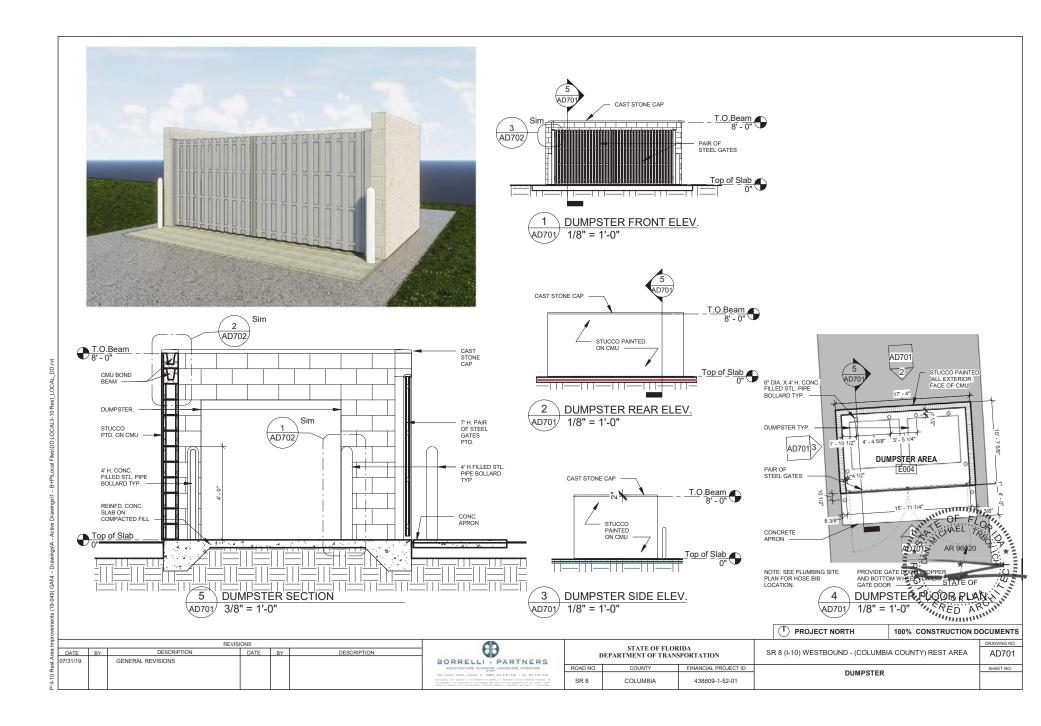
P-2 :EXTERIOR PAINT HIGH REFLECTIVE WHITE SW 7757

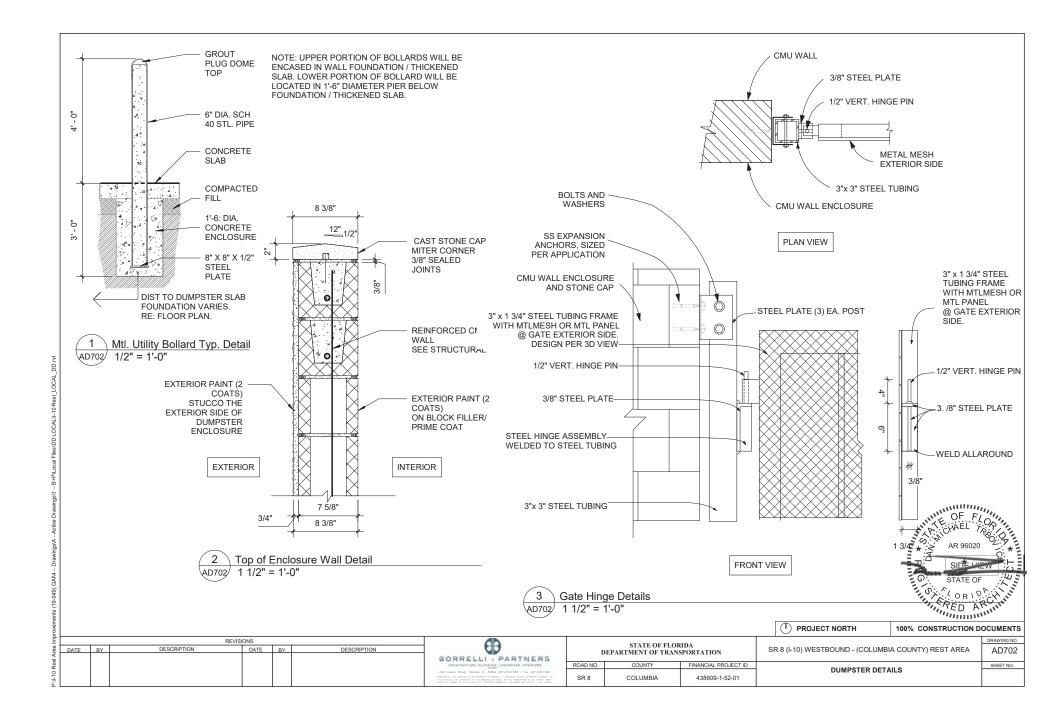
P-3 EXTERIOR PAINT SHOJI WHITE SW 7042

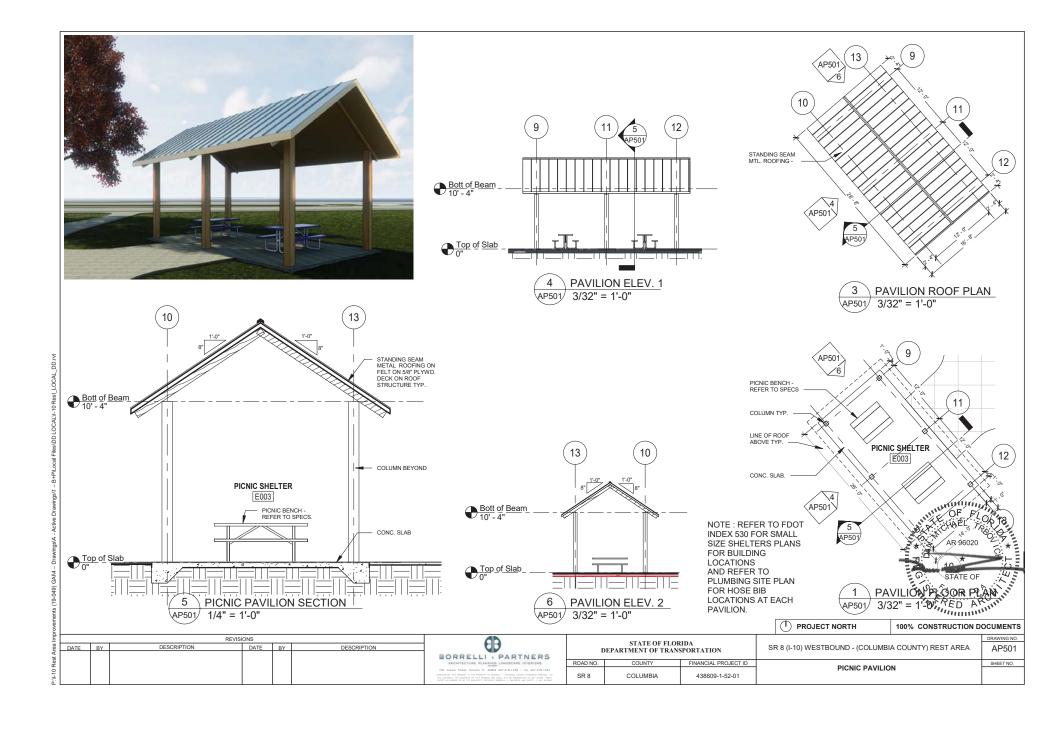
P-4 WHITE BIRCH, EXTERIOR SEMI- TRANSPARENT STAIN. USED ON WOOD COLUMNS, BEAMS AND T&G CEILING.

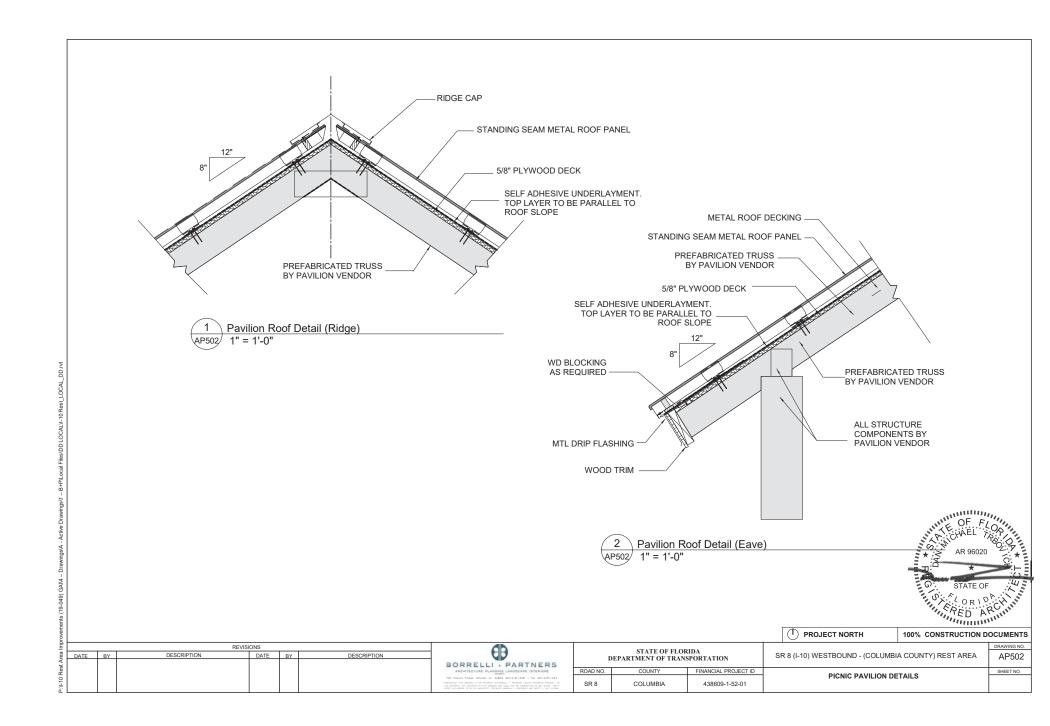
	THE OF FLOOR
NOTE:	AR 96020
COLUMBIA COUNTY REST AREA SELO SPECIFIC COLOR NAME T.B.D. BY THE MANUFACTURER COLOR CHART.	STATE OF CHARTA
REFER TO COLOR BOARD DOCUMENT	PROVIDED WITH 100% CDS SUBMIT W
	RED ARCHINE
	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,

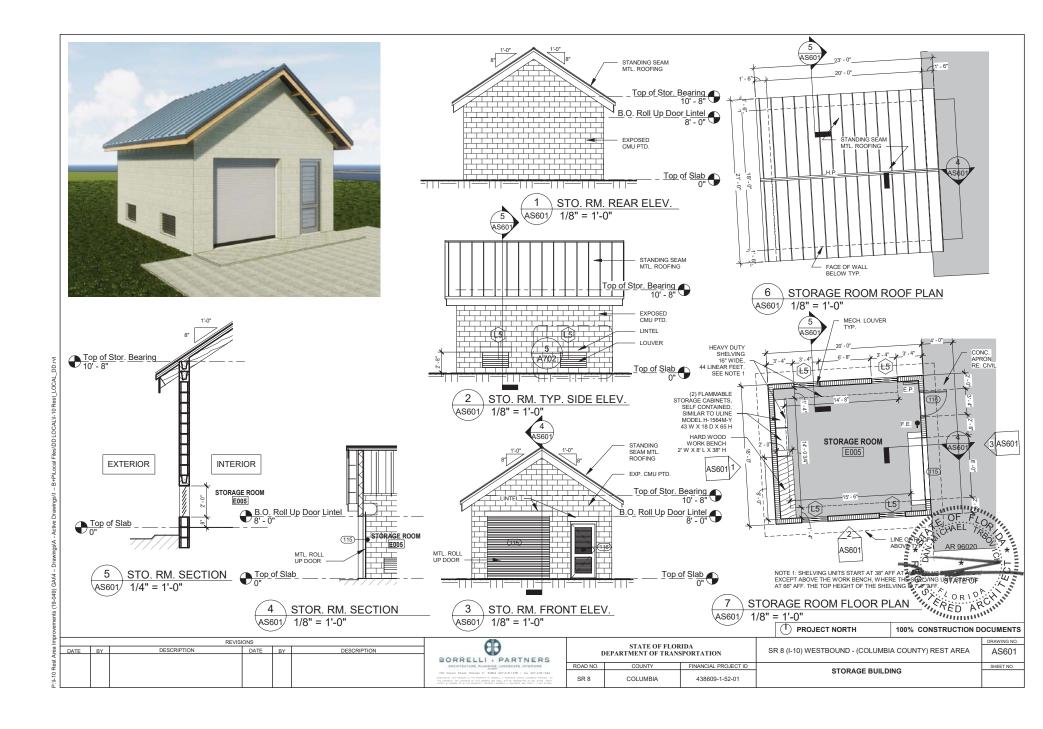
										PROJECT NORTH	100% CONSTRUCTION D	OCUMENTS
		REVIS	ONS			(ID)		CTATE OF ELOP	ALD 4			DRAWING NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	GB .	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION				A COUNTY) REST AREA	A901
						BORRELLI + PARTNERS						
						ARCHITECTURE PLANNING LANCECAPE INTER-DRE	ROAD NO.	COUNTY	FINANCIAL PROJECT ID	FINIOU COUEDI		SHEET NO.
						720. Vession Street, Orlando IT. 32804 407.418.1358 :: fox 407.418.1542 coronatus, test planed is not Apparel or Description Surface Control of Surface (Surface Control of Surface Cont	SR 8	COLUMBIA	438609-1-52-01	FINISH SCHEDU	LE	

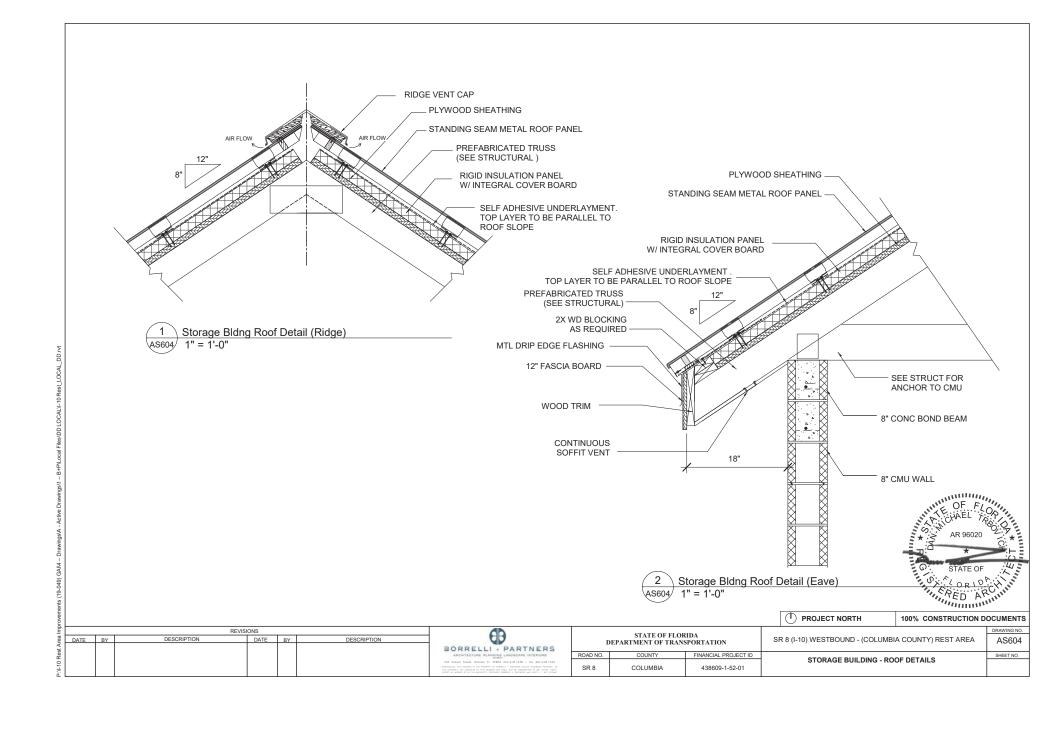


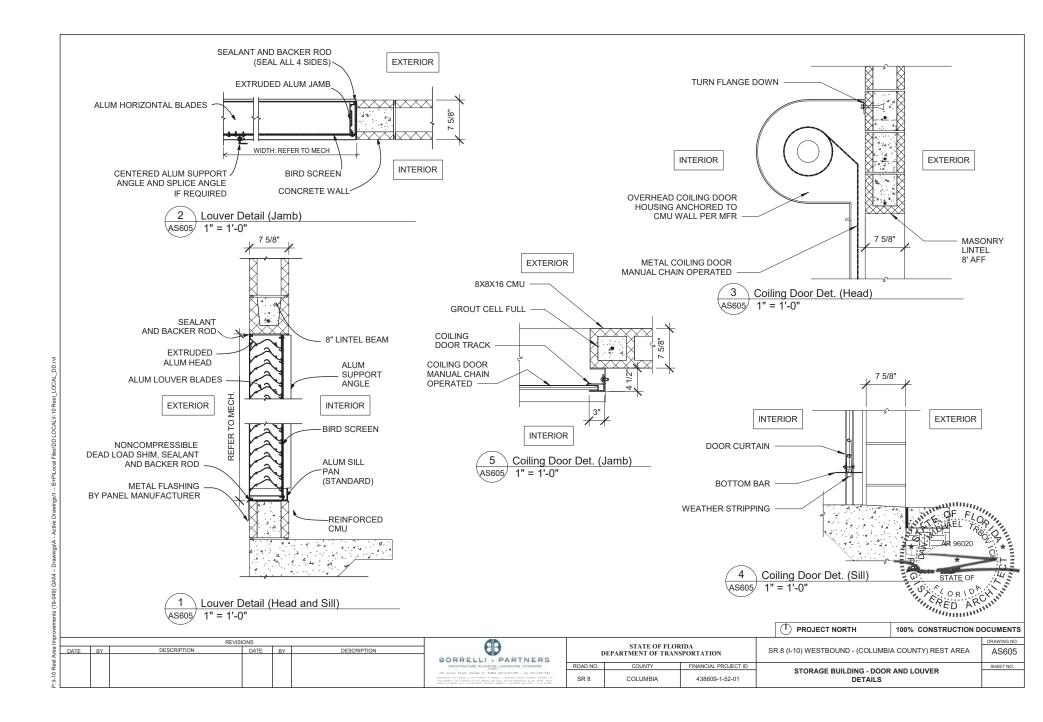












- ALL WORK SHALL COMPLY WITH FLORIDA BUILDING CODE (FBC) 2017, AISC MANUAL OF STEEL CONSTRUCTION, ACI BUILDING CODE, AWS CODE, ASTM STANDARDS AND ANY OTHER APPLICABLE CODES, RULES AND REGULATIONS BY AGENCIES HAVING JURISDICTIONS. WHERE CODES OVERLAP, COMPLY WITH THE MORE STRINGENT REQUIREMENTS.
 THERE WILL BE NO SUBSTITUTION OF MATERIALS UNLESS APPROVED IN
- WRITING BY THE ARCHITECT/ENGINEER.
- CONTRACTOR IS TO DISPOSE OF ALL DEMOLITION MATERIALS AND LEAVE THE WORK IN A READY TO USE CONDITION.
- THE WORK IN A READY TO USE CONDITION.

 CONTRACTOR IS RESPONSIBLE FOR ALL MEANS, METHODS, LABOR PROCEDURES AND SAFETY PRECAUTIONS FOR COMPLETING THE WORK.

 CONTRACTOR IS RESPONSIBLE FOR ALL WORK DURING CONSTRUCTION
- UNTIL FINAL APPROVAL BY ARCHITECT, OWNER AND LOCAL OFFICIALS.
 CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING ANY
 EXISTING UTILITIES ON OR ADJACENT TO PROPERTY.
- WHERE SPECIFIC MANUFACTURER'S PRODUCT IS CALLED OUT, ALL MATERIALS AND WORK MUST COMPLY WITH THE MANUFACTURER'S STRICT RECOMMENDATIONS FOR INSTALLATION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN INSTRUCTIONS AND TO THEN FOLLOW THEM.
- FOLLOW THEM.
 WHERE A NAME BRAND IS NOT CALLED OUT, THE CONTRACTOR MUST SUBMIT SHOP DRAWINGS AND/OR PRODUCT INFORMATION FOR ARCHITECT/ENGINEER REVIEW AND APPROVAL. MINOR ITEMS IN THE WORK ARE NOT SPECIFIED. CONTRACTOR IS TO USE QUALITY AND QUANTITY THAT IS STANDARD TO THE TRADE.
- SEE ARCHITECTURAL MECHANICAL ELECTRICAL AND PLUMBING DRAWINGS FOR ANCHORED, SUPPORTED AND EMBEDDED ITEMS WHICH AFFECT THE STRUCTURAL WORK, VERIFY DETAILS AND DIMENSIONS WITH EQUIPMENT PURCHASED.
- COORDINATE SIZES AND LOCATIONS OF OPENINGS IN FLOORS, WALLS AND ROOF WITH, ARCHITECTURAL, MECHANICAL, ELECTRICAL AND PLUMBING REQUIREMENTS
- NO STRUCTURAL MEMBER SHALL BE CUT, NOTCHED OR OTHERWISE ALTERED UNLESS APPROVED IN WRITING BY THE ENGINEER OF RECORD.
- COMPONENTS AND SYSTEMS DELEGATED TO A SPECIALTY ENGINEER SHALL CONFORM TO THE DESIGNER OF RECORD'S DESIGN INTENT AND SHALL NOT DEVIATE IN REQUIREMENTS WITHOUT PRIOR WRITTEN ACCEPTANCE FROM THE DESIGNER OF RECORD.

- DESIGN CRITERIA

 1. FLORIDA BUILDING CODE 2017.
- DESIGN LOADS:
 - DEAD LOAD (ROOF): 20 PSF LIVE LOAD (ROOF): 20 PSF
- STRUCTURAL STEEL IS DESIGNED PER THE ALLOWABLE STRESS DESIGN
- REINFORCED CONCRETE IS DESIGNED PER THE STRENGTH DESIGN
- METHOD.
 REINFORCED CONCRETE MASONRY IS DESIGNED PER THE WORKING STRESS METHOD.
- STRUCTURAL LUMBER IS DESIGNED PER THE ALLOWABLE STRESS DESIGN
- (ASD) METHOD.
- BUILDING IS NOT DESIGNED FOR ADDITIONAL HORIZONTAL OR VERTICAL
- SEISMIC DESIGN CRITERIA:
 - IMPORTANCE FACTOR = 1.0
 - SS = 8.6%SI - 5 1%
 - SITE CLASS = D (ASSUMED) SDS = 9.2%

 - SDI = 8.2% SEISMIC DESIGN CATEGORY = B

WIND LOADS	
ULTIMATE DESIGN WIND SPEED:	120 MPH
RISK CATEGORY	II
WIND EXPOSURE	С
INTERNAL PRESSURE COEFFICIENT: ENCLOSED (TYPICAL) PARTIALLY ENCLOSED (LOBBY) OPEN (PAVILIONS)	±0.18 ±0.55 0.00
SEE WIND LOAD TABLES ON S-301 FOR ADDITIONAL INFORMATION.	

- SHOP DRAWING SUBMITTALS

 1. SHOP DRAWING SUBMITTALS ARE REQUIRED FOR ALL STRUCTURAL FRAMING, ELEMENTS, COMPONENTS, AND SYSTEMS INDICATED ON THE STRUCTURAL DRAWINGS. SHOP DRAWING SUBMITTALS INCLUDE BUT ARE NOT LIMITED TO THE FOLLOWING:
- CONCRETE MIX DESIGNS
 CONCRETE FOUNDATION REINFORCING SUBMITTALS
- CONCRETE AND MASONRY REINFORCIMES SUBMITTALS W/
 ELEVATION DRAWINGS CLEARLY INDICATING REINFORCING, SPLICING,
 AND LOCATION OF ALL CONCRETE AND MASONRY REINFORCEMENT
- STRUCTURAL STEEL SUBMITTALS
- LIGHT GAGE STEEL ROOF TRUSSES (*)
- TIMBER ROOF TRUSSES (*)
 PRE-FABRICATED CANOPY AND AWNING STRUCTURES, DECORATIVE BRACKETS. AND OTHER ARCHITECTURAL COMPONENTS (*)
- ITEMS MARKED (1) SHALL HAVE SHOP DRAWINGS SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF FLORIDA SHOP DRAWINGS SHALL BE REVIEWED BY THE STRUCTURAL ENGINEER FOR COMPLIANCE WITH DESIGN INTENT AND FOR GENERAL CONFORMANCE
 WITH THE CONSTRUCTION DOCUMENTS. CORRECTIONS OR COMMENTS
- MADE ON THE SHOP DRAWINGS SHALL NOT RELIEVE THE CONTRACTOR FROM COMPLIANCE WITH THE STRUCTURAL DRAWINGS AND SPECIFICATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONFORMING AND CORRELATING QUANTITIES, DIMENSIONS, ELEVATIONS, AND LENGTHS, FOR SELECTING FABRICATION PROCESSES, FOR SELECTING METHODS OF CONSTRUCTION, FOR COORDINATING SUB TRADES AND FOR
- PERFORMING WORK IN A SAFE MANNER.
 SHOP DRAWINGS SHALL BE REVIEWED BY THE CONTRACTOR AND MARKED "APPROVED" PRIOR TO SUBMITTING THE DRAWINGS TO THE ARCHITECT ENGINEER FOR REVIEW. SHOP DRAWINGS SHALL BE MARKED WITH A REVIEW STAMP FROM THE CONTRACTOR INDICATING REVIEW DISPOSITION AND SHALL BE DATED AND INITIALED. SHOP DRAWINGS THAT HAVE NOT BEEN REVIEWED, STAMPED, DATED AND INITIALED WILL BE CONSIDERED NOT REVIEWED BY THE CONTRACTOR AND SHALL BE RETURNED NOT
- REVIEWED AND UNCHECKED BY THE STRUCTURAL ENGINEER.
 STRUCTURAL ENGINEER SHALL NOT BE RESPONSIBLE FOR DELAYS CAUSED DUE TO THE REJECTION OF INCOMPLETE SUBMITTALS, SUBMITTALS RETURNED DUE TO THE CONTRACTOR'S FAILURE TO REVIEW DOCUMENTS PRIOR TO RECEIPT BY THE STRUCTURAL ENGINEER, AND FOR THE ADDITIONAL TIME REQUIRED BY THE CONTRACTOR'S SUB TRADES TO REVISE AND RE-SUBMIT THE DRAWINGS AND FOR THE STRUCTURAL ENGINEER TO PERFORM ADDITIONAL REVIEWS OF NON-CONFORMING
- UPON RECEIPT OF SHOP DRAWING SUBMITTALS FROM THE CONTRACTOR THAT HAVE BEEN REVIEWED, STAMPED, DATED, AND INITIALED BY THE CONTRACTOR, THE ENGINEER SHALL BEGIN REVIEW OF THE RECEIVED SUBMITTALS. THE CONTRACTOR SHALL ALLOW FOURTEEN (14) WORKING DAYS FOR SUBMITTAL REVIEW BY THE STRUCTURAL ENGINEER FROM RECEIPT OF SHOP DRAWINGS. THE CONTRACTOR SHALL FURTHER ALLOW TEN (10) WORKING DAYS FROM RECEIPT OF SHOP DRAWING
- RE-SUBMITTALS FOR REVIEW BY THE STRUCTURAL ENGINEER.
 THE STRUCTURAL ENGINEER'S OBLIGATIONS TO REVIEW SHOP DRAWINGS
 AND OTHER SUBMITTALS AND TO RETURN THEM IN A TIMELY MANNER ARE CONDITIONED UPON THE PRIOR REVIEW AND APPROVAL OF THE SHOP DRAWINGS OR SUBMITTALS BY THE CONTRACTOR AS REQUIRED IN THE CONSTRUCTION CONTRACT AND THE CONTRACTOR'S SUBMITTAL OF THE SHOP DRAWINGS AND OTHER SUBMITTALS IN ACCORDANCE WITH A WRITTEN SCHEDULE DISTRIBUTED IN ADVANCE TO THE ENGINEER IDENTIFYING THE DATES FOR THE SUBMITTAL OF THE VARIOUS SHOP
- DRAWINGS AND SUBMITTALS.

 THE STRUCTURAL ENGINEER SHALL NOT BE RESPONSIBLE FOR MATERIALS. THAT ARE FABRICATED, DELIVERED, AND INSTALLED AT THE SITE WITHOUT A SET OF SHOP SUBMITTALS THAT HAVE BEEN REVIEWED AND APPROVED BY THE STRUCTURAL ENGINEER. COSTS ASSOCIATED WITH THE REMOVAL OF UNAPPROVED MATERIALS AND THE DELAYS ASSOCIATED WITH THE REPAIR, RECONFIGURATION, AND/OR REMOVAL OF SUCH MATERIALS SHALL
- NOT BE THE RESPONSIBILITY OF THE STRUCTURAL ENGINEER.
 SHOP DRAWINGS REVIEWED BY THE STRUCTURAL ENGINEER AND
 RETURNED WITH A MARK OF 'REJECTED' OR 'REVISE AND RESUBMIT' SHALL BE RE-SUBMITTED FOR REVIEW BY THE STRUCTURAL ENGINEER, REVISIONS MADE TO SHOP DRAWINGS SHALL BE CLEARLY MARKED AND THE PURPOSE FOR THE RE-SUBMISSION SHALL BE CLEARLY NOTED ON THE SHOP DRAWING TRANSMITTAL. REVISIONS SHALL BE ASSIGNED A SEQUENTIAL
- REVISION NUMBER.
 THE CONTRACT DOCUMENTS SHALL GOVERN OVER THE SHOP DRAWINGS UNLESS OTHERWISE SPECIFIED IN WRITING BY THE ENGINEER

STRUCTURAL ENGINEERING ABBREVIATIONS

I.D. I.F.

INSIDE DIAMETER

INSIDE FACE

INCHES

STRUCTU	RAL ENGINEERING ABBREVIATIONS		
A.B	ANCHOR BOLT	INT.	INTERIOR
ABV.	ABOVE	JST.	JOIST
ADD'L	ADDITIONAL	JT.	JOINT
ADJ.	ADJACENT	K	KIPS
ALT.	ALTERNATE	KLF	KIPS PER LINEAR FOOT
APPROX.	APPROXIMATE	KSI	KIPS PER SQUARE INCH
ARCH.	ARCHITECT /-URAL	KSF	KIPS PER SQUARE FOOT
B/-BOT.	BOTTOM	LB.	POUND
BLDG.	BUILDING	L.E.	LEFT END
BLW.	BELOW	LL	LIVE LOAD
BM	BEAM	LLBB	LONG LEG BACK TO BACK
B.P.	BASE PLATE	LLH	LONG LEG HORIZONTAL
BRG. BRIDG	BEARING BRIDGING	LLV L.P.	LONG LEG VERTICAL LOW POINT
BTWN	BETWEEN	L.P.	LONG WAY /LIGHT WEIGHT
CANT.	CANTILEVER	MATL.	MATERIAL
CAP.	CAPACITY	MAX.	MAXIMUM
C.I.F.	CAST IN PLACE	M.B.S.	METAL BUILDING SYSTEM
C.J.	CONTROL /CONSTRUCTION JOINT	MECH.	MECHANICAL
CLG.	CEILING	MEZZ.	MEZZANINE
CLR.	CLEAR	MFR.	MANUFACTURER
CMU	CONCRETE MASONRY UNIT	MIN.	MINIMUM
COL.	COLUMN	MISC.	MISCELLANEOUS
COMP.	COMPOSITE	N.F.	NEAR FACE
CONC.	CONCRETE	N.I.C.	NOT IN CONTRACT
CONN. CONST.	CONNECT -ED/-ION	NO. N.T.S	NUMBER NOT TO SCALE
CONST.	CONSTRUCT /-ION CONTINUE /-OUS /-ATION	0.C.	ON CENTER
CONTR.	CONTRACTOR	O.D.	OUTSIDE DIAMETER
COORD.	COORDINATE	O.F.	OUTSIDE FACE
CTR.	CENTER	OPNG.	OPENING
DBL.	DOUBLE	OPP.	OPPOSITE
DEP.	DEPRESSION	PAR.	PARALLEL
DIA.	DIAMETER	PERP.	PERPENDICULAR
DIAG.	DIAGONAL	PL.	PLATE
DIM. DN.	DIMENSION DOWN	PLF PSF	POUNDS PER LINEAR FOOT POUNDS PER SQUARE FOOT
DN. DL	DEAD LOAD	PSI	POUNDS PER SQUARE FOOT POUNDS PER SQUARE INCH
D.P.	DRILLED PIER	R.E.	RIGHT END
DWG	DRAWING	REINF.	REINFORCE /-ED/-ING/-MENT
DTL.	DETAIL	REM.	REMAINDER
DWL.	DOWEL	REQ'D	REQUIRED
EA.	EACH	RET.	RETAINING
E.E.	EACH END	REV.	REVERSE
E.F.	EACH FACE	SCHED. SECT.	SCHEDULE SECTION
E.J. EL.	EXPANSION JOINT ELEVATION	SECT.	SQUARE FOOT
ELEC.	ELECTRICAL	SIM.	SIMII AR
ELEV.	ELEVATION /ELEVATOR	SP.	SPACES
EMBED.	EMBEDMENT	SPEC.	SPECIFICATIONS
ENGR.	ENGINEER	SQ.	SQUARE
E.O.D.	EDGE OF DECK	STD.	STANDARD
E.O.S.	EDGE OF SLAB	STIFF.	STIFFENERS
EQ.	EQUAL	STIR.	STIRRUPS
EQUIP. E.W.	EQUIPMENT EACH WAY	STL. STRUCT.	STEEL STRUCTURAL
EXIST.	EXISTING	S.W.	SHORT WAY
EXP.	EXPANSION	SYM.	SYMMETRICAL
FDN.	FOUNDATION	T/ -T	TOP OF - TOP
FIN.	FINISH	TE	TURNED DOWN SLAB EDGE
F.F.	FAR FACE	TEMP.	TEMPERATURE
FLR.	FLOOR	T.O.S.	TOP OF SLAB
F.O.M.	FACE OF MASONRY	TYP.	TYPICAL
FRMG.	FRAMING	T&B	TOP AND BOTTOM
FT. FTG.	FEET FOOTING	U.N.O. VERT.	UNLESS NOTED OTHERWISE VERTICAL
GA.	GAGE	VERT.	VERIFY IN FIELD
GALV.	GALVANIZED	W.F.	WIDE FLANGE
GB	GRADE BEAM	W.P.	WORK POINT
H.P.	HIGH POINT	WT.	WEIGHT
HORIZ.	HORIZONTAL	W.W.R.	WELDED WIRE REINFORCEMENT
H.S.	HIGH STRENGTH	W/	WITH

W/O

WITHOUT

NUMBER

		REVIS	IONS			0.11.0.0110111 TABITO 1110				· ·	DRAWING NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	GAI CONSULTANTS, INC.	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION				
						600 CRANBERRY WOODS DRIVE, SUITE 400, CRANBERRY TOWNSHIP, PA 16066	DEPARTMENT OF TRANSPORTATION		SPORTATION	(
						ROAD NO. COUNTY FINANCIAL PROJECT ID		SHEET NO.			
							SR 8 COLUMBIA 438609-1-52-01		438609-1-52-01	STRUCTURAL GENERAL NOTES 1	1 OF 26

- REQUIRED STRUCTURAL INSPECTIONS

 1. INSPECTIONS TO BE PERFORMED BY THE BUILDING OFFICIAL
 - FOLINDATION INSPECTION AFTER EXCAVATION AND SOIL PREPARATION, BUT PRIOR TO PLACING REINFORCEMENT. AGAIN, AFTER REINFORCEMENT IS PLACED AND PRIOR TO CONCRETE
 - CONCRETE SLAB-ON-GRADE/UNDERFLOOR INSPECTION SHALL BE MADE AFTER ALL UNDERFLOOR EQUIPMENT IS IN PLACE BUT PRIOR TO CONCRETE PLACEMENT.
 - FRAMING INSPECTION SHALL BE MADE AFTER ALL ROUGH MECHANICAL ELECTRICAL AND PLUMBING FOUIPMENT IS IN PLACE BUT PRIOR TO FIREPROOFING OR WALL COVERING IS INSTALLED.
 FINAL INSPECTION SHALL BE MADE WHEN THE CONTRACTOR HAD
- COMPLETED THE BUILDING AND IT IS READY FOR OCCUPANCY.

 THE OWNER WILL PROVIDE QUALIFIED PERSONNEL TO PERFORM THE REQUIRED SPECIAL INSPECTIONS. THIS DOES NOT RELIEVE THE CONTRACTOR OF ANY RESPONSIBILITY TO PERFORM THE WORK IN ACCORDANCE WITH THE DESIGN DRAWINGS. THE ACCEPTANCE OF MATERIALS, INSTALLATION, FABRICATION, ERECTION OR PLACEMENT OF COMPONENTS AND CONNECTIONS FOR SPECIAL INSPECTION AND FOR QUALITY ASSURANCE SHALL BE IN ACCORDANCE WITH CHAPTER 17 OF THE INTERNATIONAL BUILDING CODE (IBC), CHAPTER 17 OF THE FLORIDA BUILDING CODE (FBC), AND LOCAL ENFORCEMENT AGENCY. THE CONTRACTOR SHALL NOTIFY THE INSPECTOR 24 IN ADVANCE OF ALL INSPECTIONS AND ALL CONTRACTORS ARE REQUIRED TO ACCOMMODATE AND COOPERATE WITH TESTING AND INSPECTION PERSONNEL.
- 3. THE SPECIAL INSPECTION PROGRAM WILL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING ITEMS. REPORTS OF THE FINDINGS SHALL BE PROVIDED TO THE ENGINEER.

 A. EXCAVATIONS, GRADING, AND EARTH FILL SHALL BE INSPECTED IN

 - ACCORDANCE WITH THE CODE.
 FOUNDATION INSPECTION DURING THE PLACEMENT OF FOUNDATIONS
 - AND SLABS-ON-GRADE. ALL EMBEDDED BOLTS SHALL BE INSPECTED. ALL CONCRETE AND MASONRY REINFORCING STEEL SHALL BE INSPECTED PRIOR TO CONCRETE/GROUT PLACEMENT

 - VERIFY USE OF REQUIRED CONCRETE DESIGN MIXES.
 FABRICATE CONCRETE SPECIMENS FOR STRENGTH TESTS, PERFORM
 SLUMP AND AIR CONTENT TESTS, AND DETERMINE TEMPERATURE OF CONCRETE PRIOR TO PLACEMENT.
 VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURES AND
 - TECHNIQUES.
 - INSPECT FORMWORK FOR SHAPE, LOCATION, AND DIMENSIONS OF THE CONCRETE MEMBERS BEING FORMED.
- FRAMING INSPECTIONS DURING THE ERECTION OF ALL STEEL FRAMING MEMBERS, INSPECTION OF ALL DECKING PLACEMENT, AND ATTACHMENTS.
- HIGH STRENGTH BOLTS SHALL BE INSPECTED DURING INSTALLATION AND TIGHTENED IN ACCORDANCE WITH THE CODE.
- SPRAY-APPLIED FIRE PROOFING INSPECTIONS SHALL BE MADE IN ACCORDANCE WITH THE CODE.
 ALL EPOXY CONNECTION HOLES SHALL BE INSPECTED AND BE DUST
- ALL WELDS SHALL BE INSPECTED BY A CERTIFIED WELD INSPECTOR AT THE OWNER'S EXPENSE.

 PREFABRICATED WOOD STRUCTURAL ELEMENTS AND FASTENING OF WOOD DIAPHRAGMS SHALL BE INSPECTED IN ACCORDANCE WITH THE
- COLD-FORMED STEEL TRUSS FRAMING BRACING CONNECTIONS ANCHORING TO SHEAR WALLS, AND FASTENING, CONNECTIONS, ANCHORING TO SHEAR WALLS, AND FASTENING OF METAL DECK DIAPHRAGMS SHALL BE INSPECTED IN ACCORDANCE WITH THE CODE

- SOIL PREPARATION AND FOUNDATIONS

 1. THE FOUNDATIONS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE RECOMMENDATIONS IN THE PHASE II GEOTECHNICAL REPORT PREPARED BY ENVIRONMENTAL AND GEOTECHNICAL SPECIALISTS, INC. DATED. JANUARY 2019. THE PRESUMPTIVE ALLOWABLE BEARING PRESSURES ARE 2000 PSF (BUILDINGS) AND 1300 PSF (PAVILIONS).
- SOIL, DEWATERING, AND SITE PREPARATION SHALL BE IN ACCORDANCE WITH THE AFOREMENTIONED REPORT.
- SOIL SUPPORTED FOUNDATIONS:
 - THE ALLOWABLE BEARING PRESSURE FOR FOUNDATIONS BEARING ON UNDISTURBED SOIL OR APPROVED ENGINEERED FILL MATERIAL SHALL BE VERIFIED BY A LICENSED SOIL ENGINEER.
 - ALL FOUNDATIONS ARE DESIGNED WITH FORMED SIDES. IF EARTH FORMED SIDES ARE APPROVED BY THE ENGINEER, THE TOP 7 1/4" SHALL BE FORMED TO THE DESIGN DIMENSION AND ONE INCH SHALL BE ADDED TO EACH SIDE OF THE EARTH FORMED AREA TO PROVIDE ADEQUATE COVER OVER THE REINFORCING AT THE CONTRACTOR'S **EXPENSE**
- REINFORCING SHALL BE SUPPORTED FROM ABOVE OR WITH 3" SBP (WITH BOTTOM PLATE) AT 4'-0" O.C. MAXIMUM FOR ALL FOUNDATION
- REMOVE FREE WATER FROM EXCAVATIONS BEFORE PLACING CONCRETE.
- ALL FOOTING EXCAVATIONS ARE TO BE FINISHED BY HAND
- REMOVE EXISTING TOP SOIL, FILL, PAVEMENT OR FOUNDATIONS FROM THE
- BACKELL RELOW STRUCTURAL ELEMENTS TO BE A GRANULAR MATERIAL HAVING MAXIMUM SIZE OF 3" AND LESS THAN 12% PASSING THE #200 SIEVE SIZE. FILL TO BE PLACED IN LIFTS OF ONE-FOOT OR LESS COMPACTED TO A MINIMUM OF 100% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR (ASTM:D698).
- DO NOT BACKELL FOUNDATION WALLS UNTIL THE RESTRAINING SLABS OF ADEQUATE BRACING ARE IN PLACE, ALL BACKFILL SHALL BE PLACED AND COMPACTED IN ACCORDANCE WITH THE SPECIFICATION.
- EXTERIOR SLABS SHALL SLOPE AWAY FROM THE STRUCTURE A MINIMUM OF 1/4" PER FOOT UNLESS NOTED OTHERWISE.
 SLABS-ON-GRADE TO BE PLACED ON COMPACTED SOIL TO 100% OF
- STANDARD PROCTOR DENSITY AT OPTIMUM MOISTURE CONTENT
- PROVIDE SOIL POISONING UNDER BUILDINGS FOR TERMITE PROTECTION

- SPECIALITY ENGINEER REQUIREMENTS AND SUBMITTALS

 1. THE TERM "DELEGATE ENGINEER" SHALL REFER TO A REGISTERED PROFESSIONAL ENGINEER RETAINED BY THE CONTRACTOR TO PROVIDE DESIGN AND FABRICATION SUBMITTALS AND CALCULATIONS FOR THE COMPONENTS DELEGATED BY THE STRUCTURAL ENGINEER OF RECORD
- WHERE NOTED ON THIS SET OF CONSTRUCTION DOCUMENTS AND AS INDICATED BELOW THE CONTRACTOR SHALL ENGAGE THE SERVICES OF A DELEGATED ENGINEER TO PROVIDE SPECIALTY ENGINEERING SERVICES FOR STRUCTURAL BUILDING COMPONENTS THESE COMPONENTS SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING:

 A. LIGHT GAGE STEEL ROOF TRUSSES AND CONNECTION TO SUPPORT
 - STRUCTURE

 - TIMBER ROOF TRUSSES
 PRE-FABRICATED PAVILION, CANOPY AND AWNING STRUCTURES, DECORATIVE BRACKETS, AND OTHER ARCHITECTURAL
- COMPONENTS
 THE DELEGATE ENGINEER FOR EACH COMPONENT SHALL BE A REGISTERED PROFESSIONAL ENGINEER CURRENT AND IN GOOD STANDING WITH THE STATE OF FLORIDA WITH A MINIMUM OF FIVE (5) YEARS OF EXPERIENCE IN DESIGN FOR EACH SPECIFIC COMPONENT
- THE DELEGATE ENGINEER SHALL BE THE ENGINEER OF RECORD FOR THE AFOREMENTIONED COMPONENTS AND SHALL SUBMIT SIGNED AND SEALED CALCULATIONS AND DRAWINGS FOR REVIEW BY THE
- STRUCTURAL ENGINEER.
 THE DELEGATE ENGINEER SHALL COMPLY WITH THE RESPONSIBILITIES
- OUTLINED IN THE FLORIDA ADMINISTRATIVE CODE SECTION 61G15-30.006. CALCULATIONS AND DRAWINGS SUBMITTED BY THE DELEGATE ENGINEER FOR REVIEW BY THE ENGINEER SHALL INCLUDE CLEARLY DEFINED. FOR REVIEW BY THE ENGINEER SHALL INCLUDE CLEARLY DEFINED DESIGN CRITERIA, DESIGN PROCEDURES, STRUCTURAL LOADS, CODE COMPLIANCE, REQUIRED DETAILS, AND LAYOUTS. DOCUMENTS SHALL BE IN CONFORMANCE WITH PARAGRAPH 5 OF THIS SECTION.
- THE DELEGATE ENGINEER SHALL ALSO BE RESPONSIBLE FOR GENERATING ERECTION DRAWINGS AND FABRICATION PROCEDURES FOR THE SPECIALTY ENGINEERED COMPONENTS
- REVIEW OF CALCULATIONS AND DRAWINGS SUBMITTED BY THE DELEGATE ENGINEER TO THE STRUCTURAL ENGINEER SHALL BE LIMITED TO THE VERIFICATION THAT THE DELEGATE ENGINEER HAS UTILIZED THE DESIGN CRITERIA SPECIFIED AND HAS UNDERSTOOD THE INTENT OF THE DESIGN. THE STRUCTURAL ENGINEER WILL NOT MAKE A DETAILED CHECK OF THE CALCULATIONS AND DESIGN PROCESSES UTILIZED BY THE DELEGATE ENGINEER. THE DELEGATE ENGINEER SHALL BE RESPONSIBLE FOR THE STRUCTURAL INTEGRITY OF THE SPECIALTY COMPONENTS.

- MISCELLANEOUS

 1. CONTRACTOR SHALL SUPPLY ALL ITEMS FOR ATTACHING MECHANICAL AND ELECTRICAL EQUIPMENT TO THE BUILDING STRUCTURE TO RESIST ALL LOADS INCLUDING WIND FORCES, ATTACHMENT SHALL BE MADE SO AS NOT TO OVERSTRESS STRUCTURAL MEMBERS, COORDINATE THE ATTACHMENTS AND LOCATIONS OF THE EQUIPMENT WITH THE STRUCTURAL SHOP DRAWINGS REFER TO THE MECHANICAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL
- REQUIREMENTS.
 SUBSTITUTION OF EXPANSION ANCHORS FOR ADHESIVE ANCHORS OR SUBSTITUTION OF EAR HISTORY INTO THE DRAWINGS WILL NOT BE PERMITTED UNLESS APPROVED BY THE STRUCTURAL ENGINEER IN ADVANCE. THE CONTRACTOR SHALL PROVIDE THE FOLLOWING SERVICES AS PART OF THE
- CONSTRUCTION SCOPE OF WORK:

 A. PROVIDE TEMPORARY BRACING AND SHORING TO PREVENT EXCESSIVE DEFLECTIONS AND DAMAGE DURING CONSTRUCTION. DESIGN OF TEMPORARY BRACING AND SHORING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AS INDICATED IN SECTION 010100.
- SUPPORT OF CEILING SYSTEMS, FOLDING PARTITIONS, TOILET PARTITIONS, COUNTERS, MISCELLANEOUS EQUIPMENT, AND WINDOW SYSTEMS AS DEFINED IN THE ARCHITECTURAL PLANS.

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	REVISIONS						GAI CONSULTANTS, INC.		STATE OF ELOI	DIDA		DRAWING NO.
	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	600 CRANBERRY WOODS DRIVE. SUITE 400.	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SR-8 (I-10) WESTBOUND (COLUMBIA COUNTY) REST AREAS	S-002
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- MASONRY

 1. CONFORM TO ACI BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES ACI 530/ASCE 5 AND TO ACI SPECIFICATIONS FOR MASONRY ACI 530.1/ ASCE 6. LATEST EDITION REFERENCED IN BUILDING CODE. CONCRETE MASONRY UNITS (CMU) MATERIALS SHALL BE
 - ALL CONCRETE MASONRY UNITS (CMU) SHALL BE TWO CELL LIGHTWEIGHT AGGREGATE UNITS WITH A SPECIFIED MINIMUM COMPRESSIVE STRENGTH OF 1900 PSI ON NET AREA AT 28 DAYS CONFORMING TO ASTM C90. CMU LOCATED BELOW GRADE, SHALL BE NORMAL WEIGHT AGGREGATE UNITS.
 - ALL MORTAR SHALL BE TYPE "S" OR "M" WITH A MINIMUM MORTAR COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS CONFORMING TO ASTM C270. THE MINIMUM COMPRESSIVE STRENGTH (fM) OF A PRISM ASSEMBLED OF CMU AND MORTAR SHALL BE 1500 PSI AT 28 DAYS ON
 - CMU GROUT SHALL CONFORM TO ASTM C476 WITH 3/8" AGGREGATE WITH THE FOLLOWING REQUIREMENTS: MIN F'C=3000 PSI, MIN CEMENT=611 PCY, MAX W/C RATIO=0.65 AND SHALL HAVE A SLUMP OF BETWEEN 8" AND 10". PROVIDE CLEAN OUTS AS SHOWN ON DWGS PUMP 4'-0" MAXIMUM GROUT LIFTS WITH 60 MINUTE DELAY BETWEEN
 - REINE STEEL SHALL MEET THE REQUIREMENTS OF ASTM A615, GR 60
 - JOINT REINF STEEL SHALL MEET THE REQUIREMENTS OF ASTM A82 WIRE WITH A MINIMUM YIELD GREATER THAN 70 KSI. LONGITUDINAL WIRES SHALL BE 9 GA (0.1483" DIA) WITH LADDER TYPE WIRES CONNECTED AT 16" CENTERS. REINF SHALL BE MILL GALVANIZED PER ASTM A641 CLASS 3
 - WHERE CONCRETE BEAMS ARE INSTALLED IN CONCRETE BLOCK WALL, SUPPORT CONCRETE WITH 6" WIDE CONTINUOUS STRIPS OF 1/8 SQUARE MESH SOFFIT SCREENING OF PUR-O-STOP OR EQUAL CENTERED OVER BLOCK WORK. USE OF ROOFING FELT STRIPS WILL NOT BE PERMITTED.
- HORIZONTAL WALL REINFORCEMENT
 A. PROVIDE BOND BEAM COURSES IN ALL WALLS AT THE TOP OF WALL OR PARAPET AND AT REARING LOCATIONS. BOND BEAMS SHALL BE REINFORCED AS SHOWN IN PLANS AND DETAILS. ALL INTERIOR STRUCTURAL WALLS (SHEAR AND/OR BEARING) SHALL HAVE INTERMEDIATE BOND BEAMS LOCATED AT THE SAME LEVELS AS EXTERIOR BOND BEAMS.
- B. PROVIDE BOND BEAMS AT INTERMEDIATE LOCATIONS IN EVERY
- SIXTH COURSE (IE: 4'-0"OC).
 VERTICAL WALL REINFORCEMENT
 - PROVIDE VERTICAL REINFORCEMENT (NORMAL REINF) IN GROUT
 - FILLED CELLS IN ALL WALLS AS SHOWN ON PLANS AND SCHEDULES.
 PROVIDE AN ADDITIONAL VERTICAL REINFORCEMENT BAR WITH DOWELS INTO SUPPORTING MEMBERS, WITH SAME SIZE AND LENGTH AS THE NORMAL REINF BAR, AT THE FOLLOWING LOCATIONS UNO:
 - ON EACH SIDE OF A CONTROL OR ISOLATION JOINT
 - 2. AT INTERSECTION OF WALLS
 - 3. EACH SIDE OF A WALL OPENINGS PER MASONRY DETAILS
 - 4. AT EACH END OF WALL 5. AT EACH BEAM BEARING
 - VERTICAL REINFORCEMENT SHALL EXTEND CONTINUOUSLY FROM THE TOP OF THE SUPPORTING MEMBER TO EMBED AT LEAST 6" INTO THE TOP BOND BEAM. THERE SHALL BE A DOWEL, CAST INTEGRAL WITH THE SUPPORTING MEMBER, FOR EACH VERTICAL REINFORCEMENT BAR EXCEPT AS NOTED.
- REINFORCEMENT SHALL MEET THE FOLLOWING LAP, SPLICE AND

	LAP OR	FOUNDATION	DOWELS
REINF	SPLICE	EMBEDMENT	STRAIGHT
BAR	LENGTH	WITH HOOK	EMBEDMENT
SIZE	IN WALL	INTO FOUND.	INTO FOUND.
JOINT	16"	N/A	N/A
4	24"	8"	15"
5	30"	10"	19"
6	36"	12"	23"
7	42"	14"	27"
8	48"	16"	30"

HOOKS IF USED SHALL BE ACI STANDARD HOOKS.

- CELLS WHICH CONTAIN REINF STEEL (VERT CELLS, BOND BEAMS, LINTELS AND PILASTERS) SHALL BE FILLED SOLIDLY WITH GROUT AND UNITS SHALL BE LAID WITH FULL BED JOINTS AROUND CELLS.
 VERT CELLS TO BE FILLED SHALL HAVE VERT ALIGNMENT SUFFICIENT TO
- MAINTAIN A CLEAR UNOBSTRUCTED CONTINUOUS VERT CELL.
- BOND BEAM AND JOINT REINF FOR INTERIOR AND EXTERIOR WALLS SHALL BE CONTINUOUS THROUGHOUT, EXCEPT AT CONTROL AND ISOLATION JOINTS IT SHALL BE AS FOLLOWS:
 - INTERMEDIATE (LADDER) REINF SHALL BE DISCONTINUOUS AT CONTROL JOINTS. REINFORCEMENT IN BOND BEAMS AT FLOOR AND
- CONTROL SIMIS. REINFORCEMENT IN BOND BEAMS AT FLOOR AND ROOF DIAPHRAGM LEVELS SHALL BE CONTINUOUS.

 B. AT ISOLATION JOINTS, ALL REINF SHALL BE DISCONTINUOUS.

 BARS AROUND PERIMETER OF OPINGS SHALL EXTEND NOT LESS THAN 40 BAR DIA OR 24", WHICHEVER IS LARGER, BEYOND THE CORNER OF THE OPNG VERT JAMB BARS SHALL BE THE SAME SIZE AND NUMBER AS THE NORMAL VERT REINE
- SEE PLANS AND SCHED FOR LINTELS OVER OPNGS.

- LOCATION AND DETAILS OF CONTROL JOINTS AND ISOLATION JOINTS IN 11. REINFORCED MASONRY SHALL BE AS SHOWN ON THE ARCH DWGS. THE MAXIMUM SPACING OF CONTROL JOINTS SHALL BE 25'-4" AND ISOLATION JOINTS SHALL BE AT A LENGTH TO HEIGHT RATIO OF 4:1 OR 100'-0" OC WHICHEVER IS LESS. CONTRACTOR SHALL SUBMIT A JOINT LAYOUT PLAN FOR APPROVAL PRIOR TO CONSTRUCTION.
- ALL MASONRY IN CONTACT WITH SOIL SHALL BE NORMAL WEIGHT UNITS AND HAVE ALL VOIDS FILLED WITH GROUT.

 MASONRY WALL TO INTERLOCK (50% MASONRY BOND) AT ALL
- INTERSECTING WALLS
- PROVIDE ADEQUATE TEMPORARY BRACING DURING CONSTRUCTION FOR ALL MASONRY WALLS AS REQUIRED TO WITHSTAND ALL LATERAL LOADS AND THE PRESSURES OF FLUID GROUT. TEMPORARY BRACING SHALL REMAIN IN PLACE UNTIL PERMANENT SUPPORT SYSTEMS ARE INSTALLED AND HAVE BECOME FULLY EFFECTIVE.
- SPECIAL INSPECTION IN ALL CMU WORK IS REQUIRED BY A QUALIFIED INSPECTOR AT CONTRACTOR'S EXPENSE.

CAST-IN-PLACE CONCRETE

- CONCRETE WORK SHALL CONFORM TO THE REQUIREMENTS OF THE FOLLOWING CODES AND STANDARDS (LATEST EDITIONS):
- ACI 318 "BUILDING CODE REQUIREMENTS FOR REINFORCED
- ACI 117 "STANDARD TOLERANCES FOR CONCRETE CONSTRUCTION AND MATERIALS"
- ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS".
- ACI 304 "RECOMMENDED PRACTICE FOR MEASURING, MIXING TRANSPORTING AND PLACING CONCRETE®
- ACI 305 "RECOMMENDED PRACTICE FOR HOT WEATHER
- ACI 311 "RECOMMENDED PRACTICE FOR CONCRETE INSPECTION".
- ACI 347 "RECOMMENDED PRACTICE FOR CONCRETE FORMWORK"
- ACI 315 "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES" ACI MANUAL OF CONCRETE PRACTICE-PARTS 1 THRU 5 AS APPROPRIATE TO TYPE OF CONSTRUCTION.
- CRSI "MANUAL OF STANDARD PRACTICE CONCRETE SHALL BE NORMAL WEIGHT UNO AND SHALL CONFORM TO
- ASTM C-94 IN ADDITION TO THE FOLLOWING: PORTLAND CEMENT SHALL MEET ASTM C-150 TYPEI/II
- AGGREGATES FOR SLAB ON GRADE SHALL MEET ASTM C-33 (1 1/2" MAX).
- AGGREGATES ELSEWHERE SHALL MEET ASTM C-33 (1" MAX)
- AIR ENTRAINING AGENT SHALL MEET ASTM C-260.
 WATER REDUCING AGENT SHALL MEET ASTM C-494.
- CALCIUM CHI ORIDE SHALL NOT BE USED IN THE MIX
- CURING COMPOUND SHALL MEET ASTM C309 TYPE 1 UNO. CONCRETE SHALL HAVE THE MINIMUM ULTIMATE COMPRESSIVE STRENGTH AT 28 DAYS AS INDICATED BELOW. MIX DESIGNS SHALL BE APPROVED BY
- THE ENGINEER BEFORE USE.
 FLY ASH, SUBSTITUTING FOR CEMENT, SHALL NOT EXCEED 25% BY WEIGHT.
- FOR MASS CONCRETE PLACEMENT AS DEFINED BY ACI 207 FLY ASH SUBSTITUTING FOR CEMENT, SHALL NOT EXCEED 30% BY WEIGHT.
- REINE BARS LISED IN CONCRETE SHALL BE GRADE 60 KSLDEFORMED BAR CONFORMING TO ASTM SPECIFICATION A-615. REINFORCEMENT SHALL BE RUST,OIL, AND SCALE FREE AND SHALL BE PLACED AND BENT IN ACCORDANCE WITH THE REFERENCED STANDARDS INDICATED IN NOTE 1 OF THIS SECTION. SHOP DWGS FOR REINFORCEMENT LAYOUT, DETAILING, AND PLACING SHALL BE APPROVED BY THE STRUCT ENGINEER PRIOR TO
- FABRICATION, SITE DELIVERY, AND INSTALLATION.
 WELDED WIRE FABRIC TO BE USED FOR CONCRETE REINFORCEMENT WHERE INDICATED SHALL CONFORM TO ASTM A-185 AND SHALL BE FURNISHED IN FLAT SHEETS (RATHER THAN ROLLS). FABRIC SHALL BE SUPPORTED ON CHAIRS TO MAINTAIN THE PROPER LOCATION WITHIN THE CONCRETE AND SHALL BE PLACED IN ACCORDANCE WITH THE REFERENCED STANDARDS INDICATED IN NOTE 1 OF THIS SECTION. MINIMUM LAP SHALL BE TWO PANELS.
- MINIMUM LAP SHALL BE I WO PANELS.
 CONCRETE SHALL BE CURED IN ACCORDANCE WITH ACI STANDARDS AND
 SPECIFICATIONS UTILIZING A CURING COMPOUND WITH FUGITIVE DYE. THE
 CONTRACTOR SHALL BEGIN CONCRETE CURING IMMEDIATELY AFTER FINISHING OPERATIONS ARE COMPLETED.
 CONCRETE ADMIXTURES SHALL BE UTILIZED ONLY WITH PRIOR APPROVAL
- CONCRETE ADDITIVES SHALL BE CONDINATED BY THE CONTRACTOR TO INSURE COMPATIBILITY WITH FLOOR COVERINGS, EXPOSED, POLISHED, AND STAINED FINISHES AS SPECIFIED BY THE ARCH.
- CONCRETE TESTING SHALL BE REQUIRED FOR CIP CONCRETE ELEMENTS AND SHALL BE PERFORMED BY A QUALIFIED. INDEPENDENT TESTING LAB AND SHALL BE PERFORMED BY A QUALIFIED, INDEPENDENT 1 ESTING LAB.
 MINIMUM TESTING SHALL BE FOR SLUMP IN ACCORDANCE WITH ASTM C143
 AND FOR COMPRESSIVE STRENGTH IN ACCORDANCE WITH ASTM C39.
 COMPRESSIVE STRENGTH TESTING SHALL BE CONDUCTED FOR EACH
- CLASS, FOR EVERY FIFTY CUBIC YARDS OF CONCRETE PLACED PER DAY.
 PLACEMENTS LESS THAN FIFTY CUBIC YARDS SHALL ALSO BE TESTED PER DAY FOR EACH CLASS, A MINIMUM OF FOUR LAR-CURED AND SIX FIELD-CURED CYLINDERS SHALL BE COLLECTED. TWO CYLINDERS SHALL BE KEPT IN RESERVE AND TESTED, IF NECESSARY, WITH PRIOR APPROVAL FROM THE STRUCT ENGINEER.
- MIX DESIGN SUBMITTALS SHALL BE SENT TO THE STRUCT ENGINEER FOR REVIEW AND APPROVAL PRIOR TO CONCRETE PLACEMENT AND SHALL BE UNIQUELY IDENTIFIED WITH MIX NUMBER AND EXACT LOCATION WHERE MIX WILL BE PLACED ON THE STRUCTURE. SUBMITTALS SHALL INCLUDE DATA FROM RECENT FIELD AND LAB CYLINDER TESTS AND STATISTICAL TESTED.

- CONCRETE TICKETS FOR CONCRETE MIXES DELIVERED TO THE SITE SHALL IDENTIFY THE EXACT TIME THAT THE MIX IS BATCHED. CONCRETE PLACEMENT SHALL OCCUR WITHIN ONE AND A HALF HOURS FROM THE TIME THE PROPORTIONED MIXING WATER IS ADDED TO THE MIX FOR PLACEMENT, MIXES SHALL BE DISCARDED IF THIS TIMEFRAME IS EXCEED, IT SHALL BE THE RESPONSIBILITY OF THE INDEPENDENT TESTING LAB TO ASSURE COMPLIANCE WITH PLACING TIME AND TO NOTIFY THE CONTRACTOR AND OWNER OF NON-COMPLIANCE.
- CONCRETE FORMS SHALL NOT BE STRIPPED UNTIL CONCRETE HAS ATTAINED A MINIMUM 70% OF THE SPECIFIED 28-DAY COMPRESSIVE STRENGTH AS INDICATED BY TESTING SAMPLES.
- LAP SPLICE LENGTHS SHALL BE A MINIMUM OF 48 BAR DIA UNO.
 CONCRETE CLEAR COVER OVER REINF SHALL BE IN ACCORDANCE WITH
- ACI 318 AS LISTED BELOW, UNLESS NOTED OTHERWISE

LOCATION	CLEAR COVER
CAST AGAINST EARTH	3"
EXPOSED TO EARTH OR WEATHER #6 AND LARGER	2"
EXPOSED TO EARTH OR WEATHER #5 AND SMALLER	
SLABS AND WALLS NOT EXPOSED TO WEATHER	3/4"
BEAMS AND COLUMNS NOT EXPOSED TO WEATHER	1 1/2"
SLABS ON GRADE (COVER FROM TOP OF SLAB)	1 1/2"

- VERT AND HORIZ REINF INDICATED ON THE DWGS SHALL BE DOWELED OUT OF THE FOUNDATION OR THE ELEMENT WHERE THE REINF ORIGINATES, (SLAB BEAM, THE BEAM, WALL, ETC.) UTILIZING AN ACI STANDARD HOOK EMBEDDED TO DEVELOP THE FULL ULTIMATE TENSILE STRENGTH OF THE
- FORMWORK REMOVAL IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. REMOVE FORMS IN SUCH A MANNER AS TO INSURE JOB SAFETY AND TO
- PREVENT DAMAGE TO, AND CREEP DEFLECTION OF THE STRUCTURE.

 IMMEDIATELY AFTER REMOVAL OF FORMS, REPAIR HONEYCOMBED OR DEFECTIVE AREAS WITH HIGH STRENGTH CEMENT GROUT GROUT SHALL DEFECTIVE AREA, CONTACT THE STRUCT ENGINEER, WHEN REINF IS VISIBLE IN DEFECTIVE AREA, CONTACT THE STRUCT ENGINEER IMMEDIATELY.
- PLACE CONCRETE FOR SLARS-ON-GRADE IN ACCORDANCE WITH JOINT PATTERNS INDICATED ON PLAN. PLACE IN LINEAR STRIPS NOT TO EXCEED 30 FEET. PLACEMENTS AREA SHALL NOT EXCEED "FORMED JOINTS" AS INDICATED ON PLAN WITHOUT PRIOR ACCEPTANCE BY THE ENGINEER.
 BEGIN SAWCUTTING OF THE SLAB AS SOON AS THE SAW DOES NOT CAUSE THE SURFACE TO BE TORN OR DAMAGED, BUT IN NO CASE MORE THAN 12 HOURS AFTER SLAB FINISHING OPERATIONS.
- MINIMUM ELAPSED TIME BETWEEN ADJACENT CONCRETE PLACEMENTS SHALL BE 48 HOURS.
- WIRE BRUSH CLEAN AND MOISTEN ALL CONSTRUCTION JOINTS IMMEDIATELY PRIOR TO PLACING NEW CONCRETE.

0	ONCRETE MIX	REQUIREMEN	NTS		
COMPONENT	28-DAY STRENGTH				
SLAB-ON-GRADE	4,000 PSI	0.50	UP TO 2%	4 TO 6 IN	
FOOTINGS	4,000 PSI	0.50	UP TO 2%	4 TO 6 IN	
CONCRETE CAST ABOVE GRADE	4,000 PSI	0.45	5%	4 TO 6 IN	

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- TRUCTURAL STEEL FRAMING
 A QUALITY CONTROL PROGRAM OF SHOP AND FIELD TESTING AND INSPECTION WILL BE PERFORMED ON ALL STRUCTURAL STEEL FABRICATION, ERECTION AND CONNECTIONS IN ACCORDANCE WITH THE SPECIFICATIONS.
- 2. STRUCTURAL STEEL SHALL MEET THE FOLLOWING REQUIREMENTS UNO ON

TYPE WIDE-FLANGE TYPE SHAPES (W, S & M) ANGLES, CHANNELS AND PLATES PIPE STRUCT TUBING ANCHOR BOLTS STRUCT BOLTS	ASTM A992 A36 A53 A500 ASTM F1554 A325N	GRADI 50 B B
ERECTION BOLTS	A325N A307	

- DETAIL FARRICATE AND ERECT STRUCTURAL STEEL IN CONFORMANCE WITH THE AISC SPECIFICATIONS AND CODES, LATEST EDITIONS.
- PERFORM ALL WELDING USING QUALIFIED WELDERS AND IN ACCORDANCE WITH THE AWS "STRUCTURAL WELDING CODE - STEEL", LATEST EDITION COMPLY WITH AISC SPECIFICATION SECTION 1.17 FOR MINIMUM FILLET WELD SIZE, BUT DO NOT USE LESS THAN ¼ INCH UNLESS SPECIFICALLY NOTED ON THE DRAWINGS. ALL WELDING SHALL USE F70XX ELECTRODES ALL WELD SHALL BE TOUCHED UP WITH ZINC-RICH PROTECTIVE PAINT FOR CORROSION RESISTANCE.
- PROVIDE 3/4" MINIMUM DIAMETER HIGH STRENGTH BOLTS WHICH CONFORM TO THE REQUIREMENTS OF ASTM A325N FOR ALL BOLTED CONNECTIONS WITH DIRECT TENSION INDICATOR (DTI) WASHERS TO INSURE PROPER TENSIONING.
- SUBMIT CHECKED SHOP DRAWINGS TO THE ENGINEER FOR REVIEW SHOW SHOP FABRICATION DETAILS, FIELD ASSEMBLY DETAILS AND ERECTION DIAGRAMS FOR ALL STRUCTURAL STEEL.
- ANCHOR BOLTS AND REARING PLATES SHALL BE LOCATED AND BUILT INTO CONNECTING WORK, PRE-SET BY TEMPLATES OR SIMILAR METHODS. ALL PLATES SHALL BE SET IN FULL BEDS OF NON-SHRINK GROUT.
- TEMPORARY ERECTION BRACING SHALL BE PROVIDED AS REQUIRED FOR THE SAFETY, STABILITY AND ALIGNMENT OF THE STRUCTURE. IT SHALL NOT BE REMOVED UNTIL PERMANENT BRACING HAS BEEN INSTALLED. THE BUILDING SHALL BE TRUE AND PLUMB BEFORE CONNECTIONS MAY BE FINALLY BOLTED OR WELDED.
- DO NOT FIELD CUT ANY STRUCTURAL STEEL WITHOUT THE REVIEW AND ACCEPTANCE OF THE ARCHITECT/ENGINEER

- METAL DECKING
 METAL DECK SHALL CONFORM TO STEEL DECK INSTITUTE (SDI) SPECIFICATIONS, PER EDITION REFERENCED IN BUILDING CODE, AND BE DETAILED, FABRICATED AND ERECTED ACCORDING TO THE SAME. SUBMIT SHOP DRAWINGS AND SIGNED AND SEALED CALCULATIONS BY A REGISTERED STRUCTURAL ENGINEER IN THE STATE OF FLORIDA FOR APPROVAL BY THE ENGINEER OF RECORD SHOWING COMPLIANCE WITH DIAPHRAGM AND NET UPLIFT LOADS REQUIREMENTS AS INDICATED ON THE
- STEEL ROOF DECK SHALL BE TYPE1.5B OR APPROVED EQUAL. 1 1/2" DEEP 20 GA, WIDE RIB METAL DECKING.
 FABRICATE METAL DECKING FROM STEEL WHICH CONFORMS TO ASTM
- A446, GRADE A, HAVING A MINIMUM YIELD STRENGTH OF 33,000 PSI, HOT DIP GALVANIZE ROOF DECK TO G90 REQUIREMENTS AND ALL OTHER METAL DECK TO G60 REQUIREMENTS.
- DECKING SHALL BE CONTINUOUS OVER A MINIMUM OF THREE SUPPORTS USE SINGLE SPANS ONLY WHERE REQUIRED BY FRAMING GEOMETRY AND IDENTIFY LOCATIONS ON METAL DECK SHOP DRAWINGS.
- EACH DECK UNIT SHALL BE ATTACHED TO SUPPORTING MEMBERS AND ADJACENT PANELS PER DIAPHRAGM ATTACHMENT REQUIREMENTS SPECIFIED ON DRAWINGS.
- 6. SUBMIT CHECKED SHOP DRAWINGS TO THE ENGINEER FOR REVIEW INDICATING LOCATION, GAGE AND SIZE OF EACH PIECE OF DECKING. SHOW FASTENING DETAILS TO FRAMING AND SIDE LAP CONNECTION DETAILS.
- DO NOT HANG LOADS EXCEEDING 50 LBS. FROM ANY METAL DECKING.
 HANG ALL DUCTWORK, PIPING, ETC. DIRECTLY FROM FRAMING MEMBERS OR SLIPPLEMENTARY MEMBERS

- LUMBER FRAMING
 1. ALL LUMBER SHALL BE SOUTHERN PINE NO. 2 WITH AN ALLOWABLE MINIMUM EXTREME FIBER IN BENDING (FB) OF 1250 PSI FOR SINGLE
- LUMBER SHALL COMPLY WITH PS20 "AMERICAN SOFTWOOD LUMBER STANDARD* WITH APPLICABLE GRADING RULES.
 ALL PLYWOOD SHEATHING SHALL BE APA RATED, 5/8* PANELS. SEE DETAILS
- FOR LIMITS & LOCATIONS OF PLYWOOD DECKING.
 PLYWOOD SHALL CONFORM TO REQUIREMENTS OF PS 1 "U.S. PRODUCT
- STANDARD FOR CONSTRUCTION AND INDUSTRIAL PLYWOOD" AND AMERICAN PLYWOOD ASSOCIATION (APA) "PERFORMANCE STANDARD AND QUALIFICATION POLICY FOR STRUCTURAL USE PANELS", FORM NO. PRP-108.
- FACTORY MARK EACH CONSTRUCTION PANEL WITH APA TRADEMARK NDICATING COMPLIANCE WITH GRADE REQUIREMENTS. ROOF SHEATHING: EXPOSURE DURABILITY CLASSIFICATION - EXTERIOR EXPOSURE 1.
- PROVIDE FASTENERS AND ANCHORAGE AS INDICATED AND AS RECOMMENDED BY APPLICABLE STANDARDS, COMPLYING WITH FEDERAL STANDARDS FOR NAILS, STAPLES, SCREWS, BOLTS, NUTS, WASHERS AND ANCHORING DEVICES
- WHERE ROUGH CARPENTRY WORK IS EXPOSED TO GROUND OR WEATHER, USE FASTENERS WITH A HOT-DIP ZINC COATING (ASTM A153).
- PRESSURE TREATED LUMBER WITH WATER BORNE PRESERVATIVES TO COMPLY WITH AWPB LP-2 FOR ALL LUMBER EXPOSED TO MOISTURE INCLUDING BUT NOT LIMITED TO WOOD CANTS, NAILERS, BLOCKING STRIPPING, MEMBERS IN CONNECTION WITH ROOFING, FLASHING, VAPOR BARRIERS AND WATERPROOFING, SILLS, SLEEPERS, MEMBERS IN CONTACT WITH MASONRY OR CONCRETE, AND MEMBERS LESS THAN 18" ABOVE

- PREFABRICATED WOOD TRUSSES

 1. SUBMIT ENGINEERED AND CHECKED TRUSS SHOP DRAWINGS TO THE ENGINEER FOR REVIEW. SHOW SHOP FABRICATION DETAILS, FIELD ASSEMBLY DETAILS AND ERECTION PLANS FOR ALL PREFABRICATED WOOD
- SUBMIT TRUSS MEMBER, BRACING, AND CONNECTION DESIGN CALCULATIONS, PREPARED AND SEALED BY A QUALIFIED STRUCTURAL ENGINEER REGISTERED IN THE STATE OF FLORIDA. TO THE ENGINEER FOR
- DESIGN ALL TRUSS MEMBERS AND CONNECTIONS IN ACCORDANCE WITH THE LATEST EDITIONS OF TP1 "DESIGN SPECIFICATION FOR METAL PLATE CONNECTED WOOD TRUSSES* AND AND NFPA "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" TO SUPPORT ALL LOAD
- CONFIGURATIONS INDICATED.
 ALL TIMBER SHALL BE NEW TIMBER WITH THE FOLLOWING MINIMUM MATERIAL PROPERTIES:

EXTREME FIBER BENDING STRESS HORIZONTAL SHEAR STRESS COMPRESSION PARALLEL TO GRAIN 1000 PSI MODULES OF ELASTICITY 1,700,000 PSI
TRUSS CONNECTOR PLATES SHALL BE FORMED FROM NEW SHEET STEEL

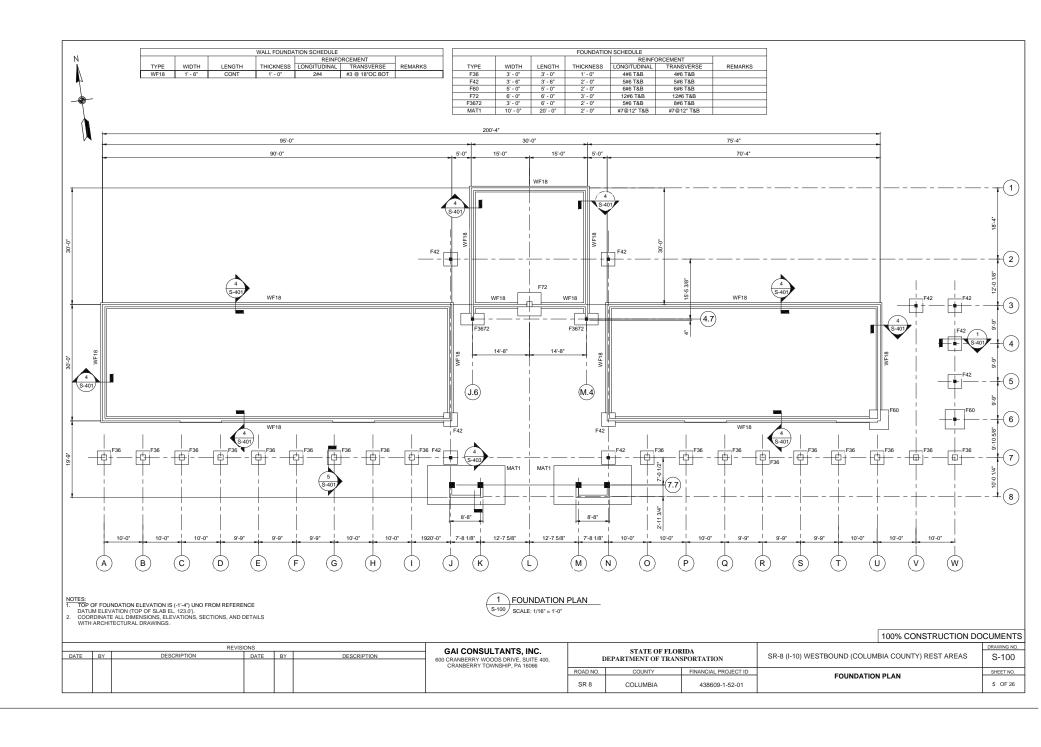
- 20 GAGE MINIMUM, CONFORMING TO ASTM A446 WITH A MINIMUM YIELD STRENGTH OF 33,000 PSI. CONNECTOR PLATES SHALL BE HOT-DIPPED GALVANIZED, COATING DESIGNATION G60.
- PROVIDE TRUSSES WITH AN LIPWARD CAMBER WHICH OFFSETS TRUSS DEFLECTIONS CAUSED BY MEMBER SELF-WEIGHT, ROOF SHEATHING, HUNG CEILING AND MECHANICAL UNITS.
- THE TRUSS MANUFACTURER SHALL DESIGN AND PROVIDE ALL TEMPORARY TRUSS BRACING, BRIDGING AND SHORING AS REQUIRED FOR THE SAFETY, STABILITY AND ALIGNMENT OF THE ROOF AND/OR FLOOR TRUSS SYSTEM TEMPORARY BRACING SHALL REMAIN IN PLACE UNTIL THE PERMANENT LATERAL LOAD RESISTING SYSTEM IS FULLY OPERATIONAL.
- HANDLE AND ERECT ALL TRUSSES IN SUCH A MANNER AS TO AVOID PERMANENT STRUCTURAL DAMAGE TO TRUSS MEMBERS OR CONNECTIONS. HOIST TRUSSES INTO POSITION ONLY AT POINTS SPECIFICALLY DESIGNED AND DESIGNATED BY THE TRUSS
- DO NOT FIELD CUT OR MODIEY TRUSS MEMBERS OR CONNECTIONS WITHOUT THE PRIOR REVIEW OR ACCEPTANCE OF THE ENGINEER OF TRUSS MANUFACTURER.

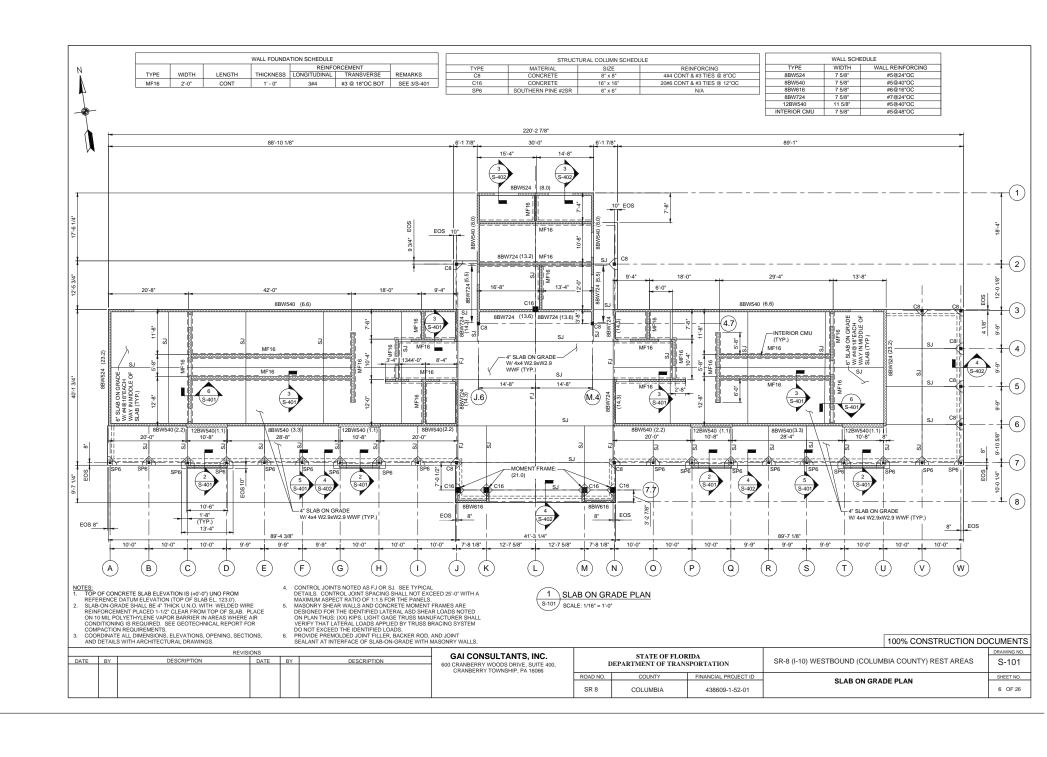
- COLD-FORMED METAL TRUSSES

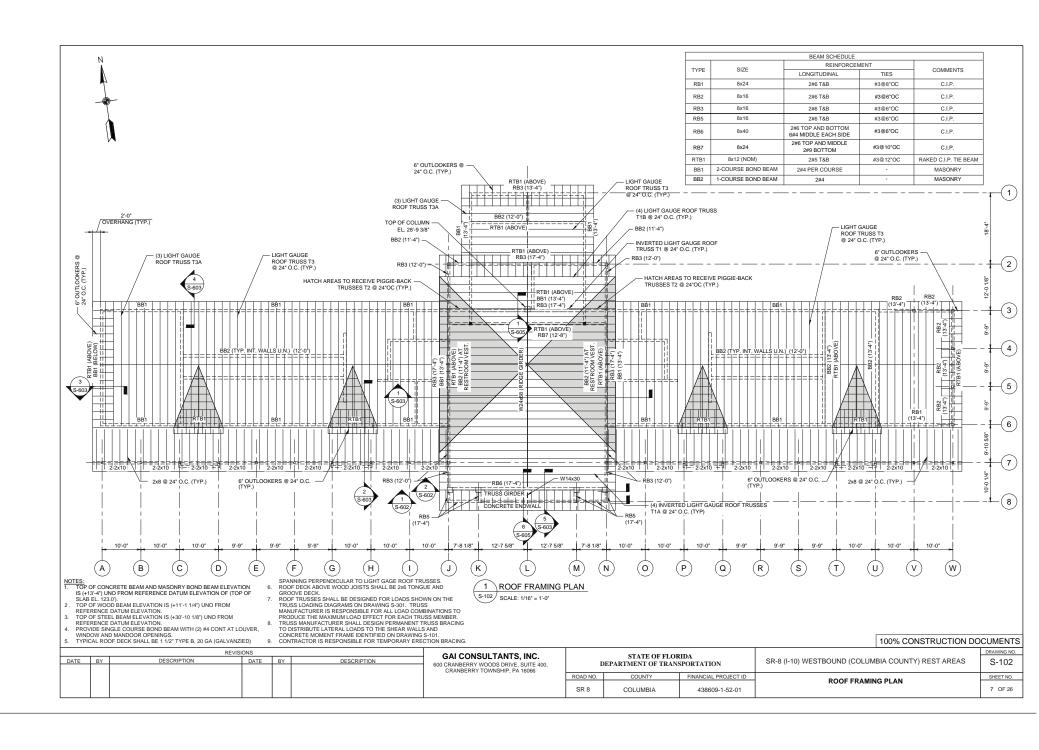
 1. DESIGN, FABRICATE AND ERECT LIGHT GAGE TRUSSES IN ACCORDANCE WITH AISI SG-971 SPECIFICATION FOR DESIGN OF COLD-FORMED STEEL STRUCT MEMBERS: 1996, WITH 2000 SUPPLEMENT, ERECTION PLANS TRUSS AND CONNECTION CALCULATIONS, DESIGNED BY THE CONTRACTOR, SHALL BE SUBMITTED FOR THE FILES OF THE STRUCT ENGINEER. CALCULATIONS SHALL BEAR THE SEAL OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF FLORIDA.

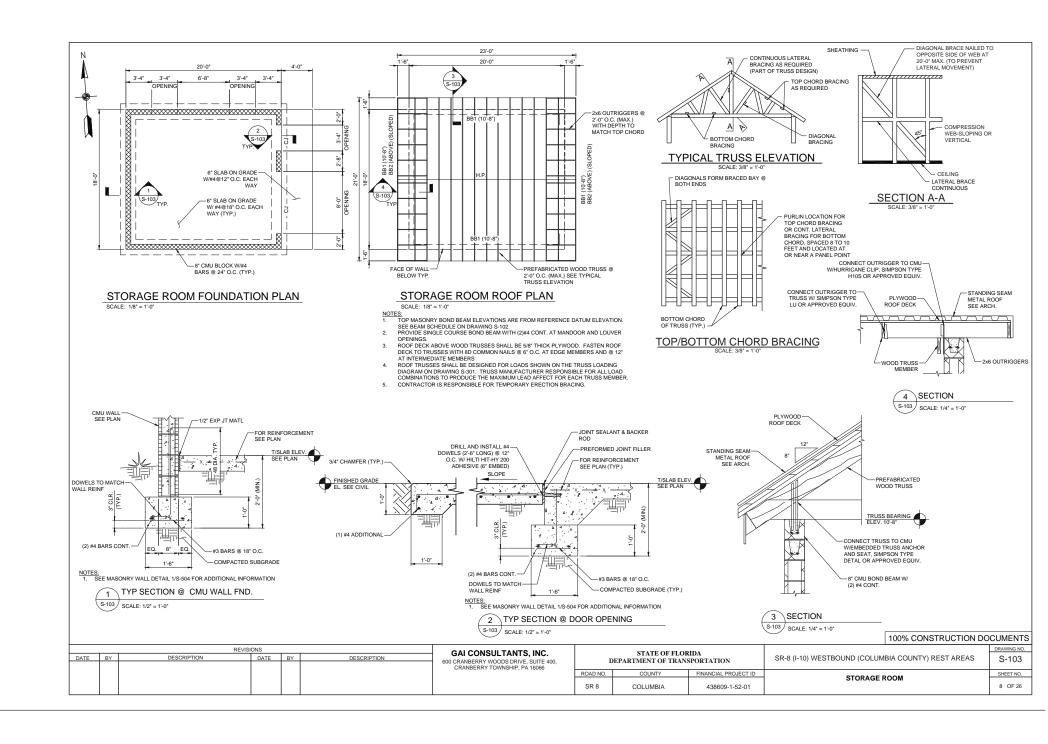
 TRUSS MANUFACTURER SHALL DESIGN FOR THE SUPERIMPOSED DEAD
- AND LIVE LOADS INDICATED ON DRAWING S.301
- DESIGN ROOF TRUSSES TO RESIST A WIND UPLIFT PRESSURE APPLIED NORMAL TO THE ROOF PLANE SEE NET UPLIFT PLAN.
- IN ADDITION TO THE ABOVE LOADS, LIGHT GAGE TRUSSES SHALL BE DESIGNED FOR CONCENTRATED LOADS HUNG FROM OR SUPPORTED ON TRUSSES. SEE STRUCTURAL ROOF FRAMING PLAN AS WELL AS MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS AND SPECIFICATIONS FOR LOADING INFORMATION AND LOCATION. LOADING AS REQUIRED BY OTHER SUBCONTRACTORS SHALL BE COORDINATED BY THE GENERAL CONTRACTOR
- INDICATE ALL LIGHT GAGE TRUSS CONNECTIONS AND BRACING, TEMPORARY AND PERMANENT, ON THE SHOP DRAWINGS. CONNECTORS AND BRACING MEMBERS SHALL BE FURNISHED BY THE TRUSS
 MANUFACTURER AND INSTALLED BY THE CONTRACTOR. SHOP DRAWINGS THAT DO NOT INCLUDE THESE DETAILS WILL RESULT IN SHOP DRAWINGS BEING RETURNED UNCHECKED AS AN INCOMPLETE SUBMITTAL.
- TEMPORARY BRACING SHALL NOT IMPOSE ANY FORCE ON THE SUPPORTING STRUCTURE PERMANENT BRACING FORCES SHALL BE TRANSFERRED TO THE ROOF DIAPHRAGM BY THE BRACING DESIGN PROVIDED BY THE TRUSS MANUFACTURER.
- COMPLY WITH AWS D1.1 AND AWS D1.3, AS APPLICABLE, FOR WELDING BASE METALS LESS THAN 1/8 INCH THICK. QUALIFY WELDING PROCESSES AND WELDING OPERATORS IN ACCORDANCE WITH AWS B2.1
- VERTICAL LIVE LOAD DEFLECTION ON ROOF TRUSSES SHALL BE LESS THAN OR EQUAL TO 1/240 OF SPAN.
- DESIGN FRAMING SYSTEMS TO PROVIDE FOR MOVEMENT OF FRAMING MEMBERS WITHOUT DAMAGE OR OVER STRESSING, SHEATHING FAILURE, CONNECTION FAILURE, UNDUE STRAIN ON FASTENERS AND ANCHORS, OR OTHER DETRIMENTAL EFFECTS WHEN SUBJECT TO MAXIMUM AMBIENT TEMPERATURE RANGE OF 120 DEGREES F (67 DEGREES C).
- 10. STORE TRUSSES ON BLOCKING, PALLETS, PLATFORMS OR OTHER SUPPORTS OF THE GROUND AND IN AN UPRIGHT POSITION SUFFICIENTLY BRACED TO AVOID DAMAGE FROM EXCESSIVE BENDING.
- PROTECT TRUSSES AND ACCESSORIES FROM CORROSION DEFORMATION DAMAGE AND DETERIORATION WHEN STORED AT JOB SITE. KEEP TRUSSES FREE OF DIRT AND OTHER FOREIGN MATTER.
- DURING CONSTRUCTION, ADEQUATELY DISTRIBUTE ALL LOADS APPLIED TO TRUSSES SO AS NOT TO EXCEED THE CARRYING CAPACITY OF ANY ONE JOIST, TRUSS OR OTHER COMPONENT
- JOIST, TRUSS OR OTHER COMPONENT.
 PROVIDE MANUFACTURER'S STANDARD STEEL TRUSS MEMBERS, BRACING,
 BRIDGING, BLOCKING, REINFORCEMENTS, FASTENERS AND ACCESSORIES WITH EACH TYPE OF STEEL FRAMING REQUIRED, AS RECOMMENDED BY THE MANUFACTURER FOR THE APPLICATION INDICATED AND AS NEEDED TO PROVIDE A COMPLETE LIGHT GAUGE COLD-FORMED STEEL TRUSS SYSTEM.
- 14 PROVIDE HOT-DIPPED GALVANIZED COATING FINISH MINIMUM G90/7275 BRACING, BRIDGING AND BLOCKING MEMBERS: FABRICATE COMPONENTS OF ASTM A 653/A 653M CS TYPE B STEEL SHEET WITH A MINIMUM YIELD STRENGTH OF 33 KSI
- FASTENERS: MANUFACTURER RECOMMENDED SELF-DRILLING, SELF TAPPING SCREWS WITH CORROSION-RESISTANT PLATED FINISH OF SUFFICIENT SIZE AND NUMBER TO ENSURE THE STRENGTH OF THE
- 17. TRUSSES SHALL BE FASTENED TO CONCRETE BEAMS AND MASONRY BOND BEAMS USING CLIPS AND FASTENERS INDICATED ON PLANS

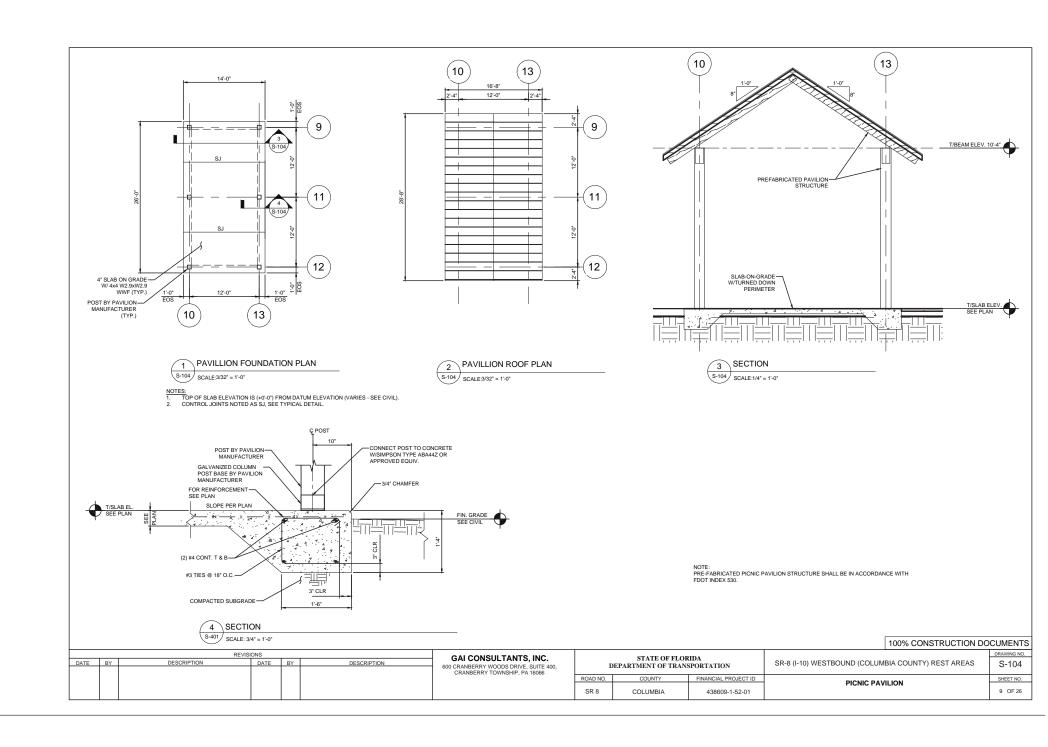
		REVIS	SIONS			GAI CONSULTANTS, INC. STATE OF FLORIDA 600 CRANBERRY WOODS DRIVE. SUITE 400. DEPARTMENT OF TRANSPORTATION SR-8 (I-10) WESTBOUND (COLUMBIA COUNTY) REST		STATE OF ELOI	otto a		DRAWING NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION			DEPARTMENT OF TRANSPORTATION		SR-8 (I-10) WESTBOUND (COLUMBIA COUNTY) REST AREAS	S-004
						CRANBERRY TOWNSHIP, PA 16066	DEFARIMENT OF TRANSFORTATION		GORTATION		
						,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	ROAD NO.	COUNTY	FINANCIAL PROJECT ID		SHEET NO.
							SR 8	COLUMBIA	438609-1-52-01	STRUCTURAL GENERAL NOTES 4	4 OF 26

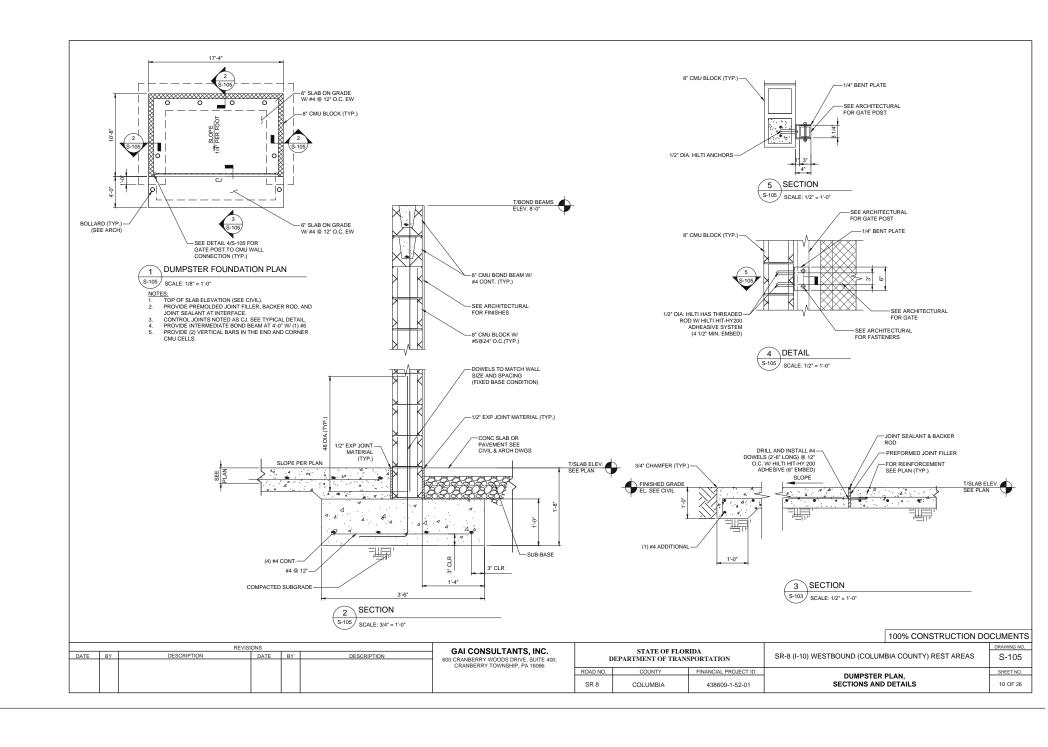


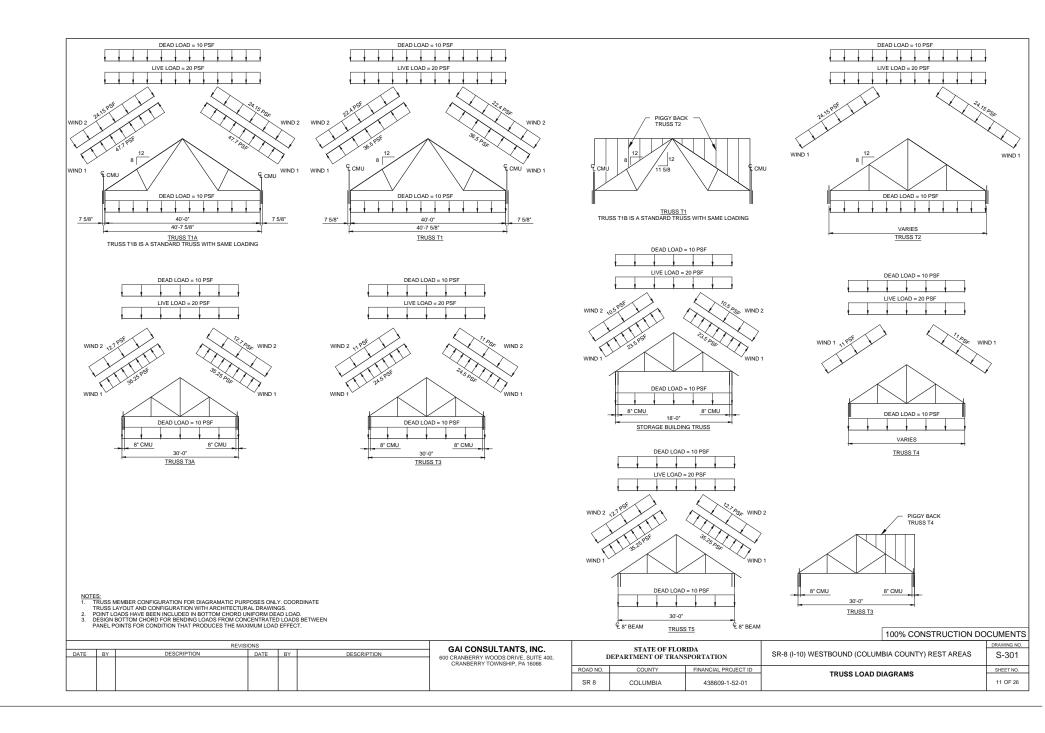


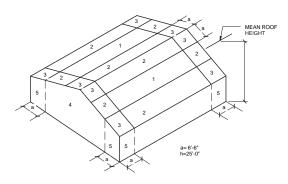














NOMINAL C&C WIND PRESSURE PLAN NOTES:

- PRESSURES INDICATED ARE NOMINAL COMPONENTS AND CLADDING GROSS PRESSURES, CONVERTED FROM ULTIMATE PRESSURES USING A 0.6 MULTIPLIER FACTOR. NO FURTHER REDUCTION IS ALLOWED.

 a INDICATE END ZONE WIDDIT IN FT.

 Vuit AND Vasd INDICATE ULTIMATE AND NOMINAL DESIGN WIND SPEED IN MPH RESPECTIVELY.
 GROSS PRESSURES SHALL BE LINEARLY INTERPOLATED FOR (A) NOT SHOWN IN TABLE.
 GROSS PRESSURES SHALE BE LINEARLY INTERPOLATED FOR (A) NOT SHOWN IN TABLE.
 GROSS PRESSURES ARE FOR JOISTS, WINDOWS, DOORS, VENEER, LIGHT GAGE METAL FRAMING, METAL DECK ATTACHMENTS,
 ROOFING, ROOFING ACCESSORIES AND CHER BUILDING COMPONENTS AND CLADDING.
 POSITIVE PRESSURES INDICATE PRESSURES ACTING TOWARD A PROJECTED SURFACE. NEGATIVE PRESSURES INDICATE PRESSURES ACTING TOWARD A PROJECTED SURFACE.
 ROOF ZONES INCLUDING END CONDITIONS ARE DENOTED AS 1 THRU 3
- 6.
- WALL ZONES INCLUDING END CONDITIONS ARE DENOTED AS (4) AND (5)
- 9. OVERHANG ZONES (2H) AND (3H) APPLY ONLY TO ROOF OVERHANGS WHERE THE
- COMPONENT OR CLADDING RECEIVES PRESSURE SIMULTANEOUSLY ON BOTH SIDES (UPWARD SUCTION ON TOP AND UPWARD PRESSURE ON BOTTOM, SUCH AS AT OPEN SOFFITS), AND IS CONTINUOUS WITH FIELD OF ROOF.

 NET DESIGN ROOF PRESSURES SHALL BE CALCULATED USING THE SELEVICIENT (DEAD LOAD) OF THE MATERIALS. THE MAXIMUM REDUCTION OF GROSS WIND UPLIFT PRESSURES SHALL BE LIMITED TO THE SELF WEIGHT OF THE ROOF SYSTEM PLUS 5 PSF MAXIMUM FOR SUPERIMPOSED DEAD LOADS.
- AT ALCOVES AND CANOPIES, THE TOTAL UPLIFT PRESSURE ON THE ALCOVE SOFFIT ORCANOPY SHALL EQUAL THE WALL PRESSURE IN THAT AREA.

WINDOWS/DOORS PERFORMANCE REQUIREMENTS:

PROVIDE WINDOW, DOOR AND FRAME SYSTEMS THAT COMPLY WITH PERFORMANCE REQUIREMENTS INDICATED AS DEMONSTRATED BY TESTING MANUFACTURER'S ASSEMBLIES IN ACCORDANCE WITH FLORIDA BUILDING CODE TEST PROTOCOLS TAS 201, TAS 202 AND TAS 203.



NC	MINA	L C&C	WIND I	PRESS	SURE	(ASCE	7-10)		
BUILDING	a (FT)	Vult (MPH)	GCpi	Area (SF)	ZONE 1 (PSF)	ZONE 2 (PSF)	ZONE (PSF)	ZONE 4 (PSF)	ZONE 5 (PSF)
				<10	+32.0 -34.9	+32.0 -40.9	+32.0 -40.9	+34.9 -37.9	+34.9 -46.8
			+/- 0.18	20	+31.1	+31.1 -39.1	+31.1 -39.1	+33.4	+33.4 -43.6
REST AREA (MAIN BUILDING)	4.6	120		50	+29.9	+29.9 -36.7	+29.9 -36.7	+31.3 -34.3	+31.3 -39.5
				100	+29.0 -29.0	+29.0 -34.9	+29.0 -34.9	+29.7 -32.7	+29.7 -36.3
				500+				+26.1 -29.0	+26.1 -29.0
				<10	+28.8 -31.4	+28.8 -36.8	+28.8 -36.8	+31.4 -34.1	+31.4 -42.1
				20	+28.0 -29.8	+28.0 -35.2	+28.0 -35.2	+30.0 -32.7	+30.0
REST AREA (STORAGE BUILDING)	3.0	120	+/- 0.18	50	+26.9 -27.7	+26.9 -33.0	+26.9 -33.0	+28.1	+28.1 -35.5
				100	+26.1 -26.1	+26.1 -31.4	+26.1 -31.4	+26.7 -29.4	+26.7 -32.7
				500+				+23.4 -26.1	+23.4 -26.1

		REVIS	IONS			CALCONSULTANTS INC	CONSULTANTS, INC. STATE OF FLORIDA			'	DRAWING NO.		
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	600 CRANBERRY WOODS DRIVE, SUITE 400, DEPARTMENT OF TRANSPORTATION						SR-8 (I-10) WESTBOUND (COLUMBIA COUNTY) REST AREAS	S-302
						CRANBERRY TOWNSHIP, PA 16066							
							ROAD NO.	COUNTY	FINANCIAL PROJECT ID	SCHEDULES	SHEET NO.		
							SR 8	COLUMBIA	438609-1-52-01	SCHEDULES	12 OF 26		

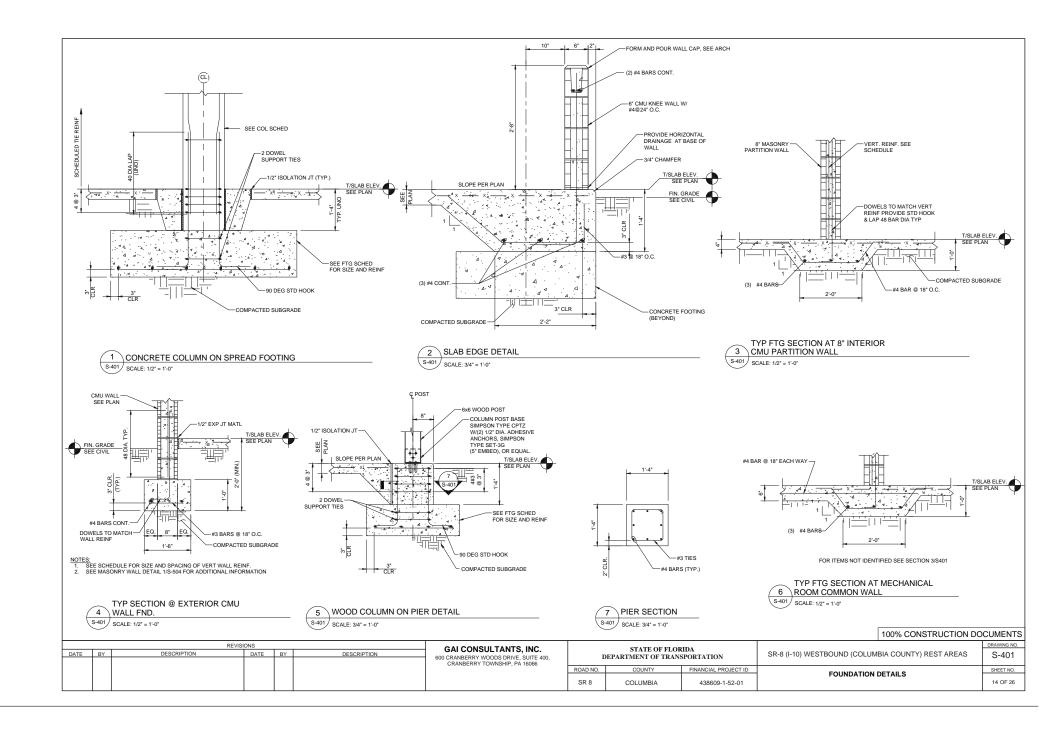
MASONRY LAP SPLICE SCHEDULE									
BAR SIZE	MINIMUM LAP LENGTH								
#4	24"								
#5	30"								
#6	36"								
#7	48"								
#8	60*								

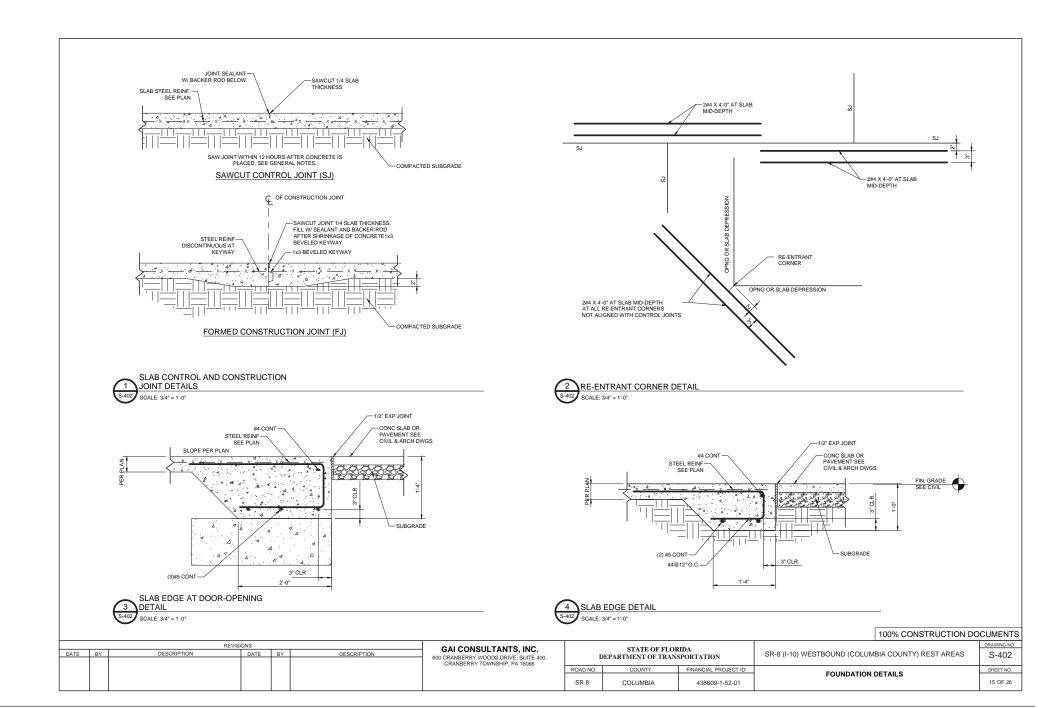
NOTE: STAGGER LAPS BETWEEN ADJACENT BARS MINIMUM 3'-0" FOR ALL HORIZ REINF

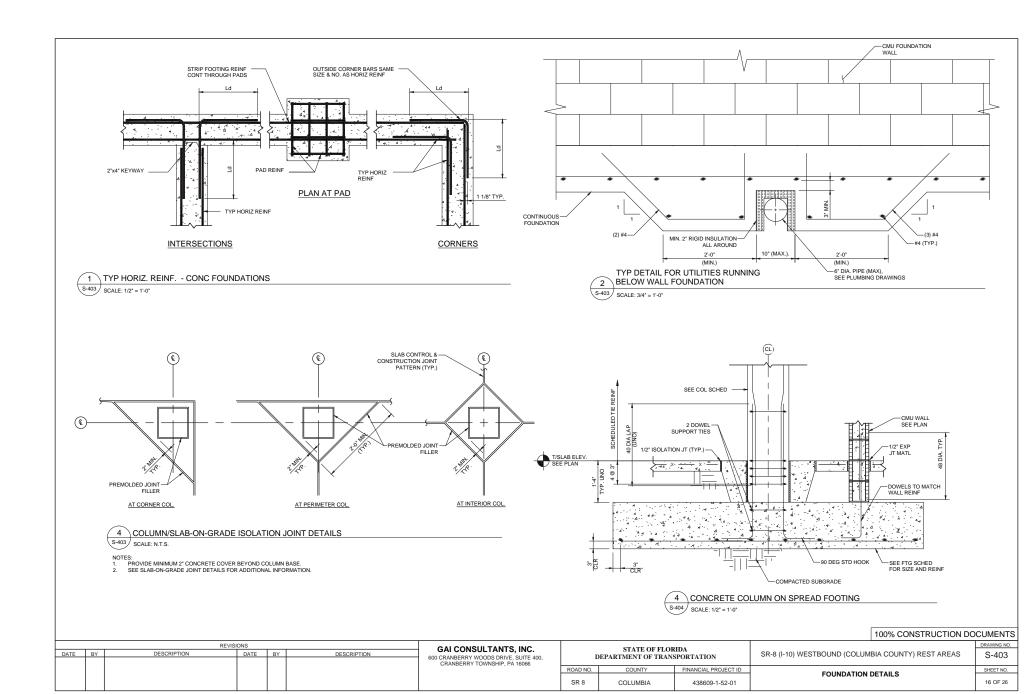
	REINF BAR DEVELOPMENT LENGTH(Ld) AND LAP SPLICE SCHED.								
BAR SIZE	LAP SPLICE		ND SLABS COVER = 3/4"	BEAMS, COLS, WALLS, SLABS MIN CONC COVER = 1-1/2"					
		TOP (IN)	OTHER (IN)	TOP (IN)	OTHER (IN)				
#3	А	13	12	12	12				
	В	16	13	15	12				
#4	A	22	17	15	12				
	В	29	22	20	15				
#5	А	35	27	19	15				
	В	45	35	24	19				
#6	А	50	38	27	21				
	В	65	50	35	27				
#7	А	85	65	46	35				
	В	110	85	59	46				
#8	А	110	85	60	46				
	В	143	110	77	60				
#9	A	140	108	76	58				
	В	182	140	98	76				
#10	А	178	137	96	74				
#10	В	231	178	125	96				

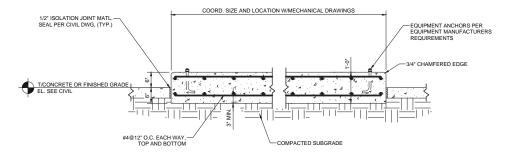
NOTES
1. TABILATED VALUES ARE BASED ON 4000 PSI NORMAL WEIGHT CONCRETE, FOR LIGHTWEIGHT CONCRETE, MULTIPLY THE TABULATED VALUES BY 1.3, FOR CONCRETE STRENGTHS OTHER THAN FC = 4000 PSI, MULTIPLY VALUES BY 63.25 DIVIDED BY THE SQ. ROOT Fc.
2. TOP BARS ARE HORIZ BARS WITH MORE THAN 12° OF CONCRETE CAST BELOW THE BAR.
3. THIS SCHED IS VALID ONLY FOR BARS WITH SPECIFIED COVER AND SPACED GREATER THAN TWO TIMES (2X) THE INDICATED COVER DIMENSIONS PLUS ONE BAR DIA.
4. FOR EPOXY COATED BARS, MULTIPLY THE TABULATED VALUES BY 1.5
5. USE CLASS 'B'L LAP SPLICE UND.
6. DEVELOPMENT LENGTH Ld EQUALS THE 'A' CLASS LAP DIMENSION.

		REVISI	ONS			GAI CONSULTANTS, INC.		STATE OF FLOR	NTD 4	'	DRAWING NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION			DEPARTMENT OF TRANSPORTATION		SR-8 (I-10) WESTBOUND (COLUMBIA COUNTY) REST AREAS	S-303
						CRANBERRY TOWNSHIP, PA 16066					SHEET NO.
							ROAD NO.	COUNTY	FINANCIAL PROJECT ID	OCHEDIN FO	
							SR 8	COLUMBIA	438609-1-52-01	SCHEDULES	13 OF 26





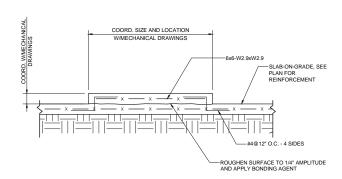




SEE MECH OR ELEC PLANS & SPECIFICATIONS FOR EQUIPMENT REQUIREMENTS, PAD SIZE, ACCESSORIES, AND LOCATIONS.

1 TYP EQUIPMENT PAD - EXTERIOR

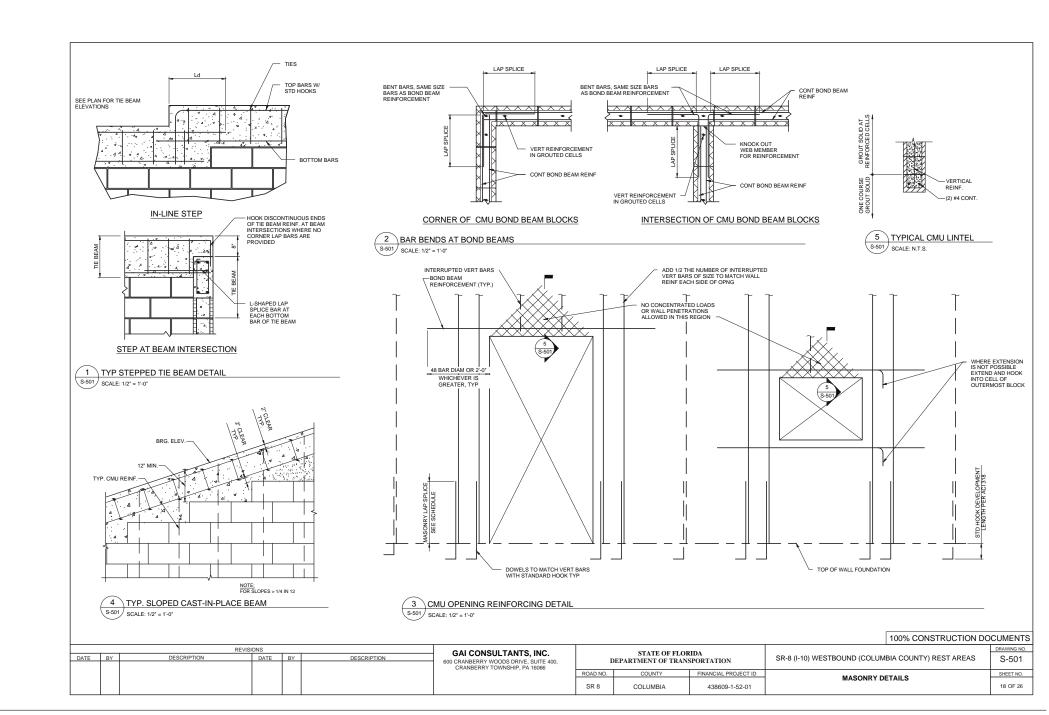
S-404 SCALE: 1/2" = 1'-0"

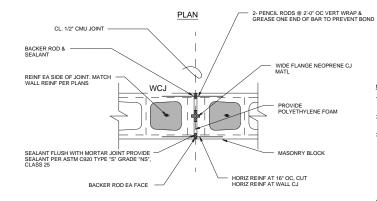


SEE MECH OR ELEC PLANS & SPECIFICATIONS FOR EQUIPMENT REQUIREMENTS, PAD SIZE, ACCESSORIES, AND LOCATIONS.

2 TYP HOUSEKEEPING PAD - INTERIOR SCALE: 1/2" = 1'-0"

	REVISIONS				GAI CONSULTANTS, INC.		STATE OF FLOR	NID A		DRAWING NO.	
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	600 CRANBERRY WOODS DRIVE, SUITE 400.	DEPARTMENT OF TRANSPORTATION			SR-8 (I-10) WESTBOUND (COLUMBIA COUNTY) REST AREAS	
						CRANBERRY TOWNSHIP, PA 16066			SIOKIATION		
				1 1			ROAD NO.	ROAD NO. COUNTY FINANCIAL PROJECT ID		FOUNDATION DETAILS	
							SR 8 COLUMBIA 438609-1-52-01		438609-1-52-01		

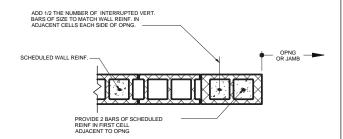




NOTES:

- MASONRY CONTROL JOINTS TO BE COORDINATED WITH ARCH ELEVATIONS, PLANS AND SPECIFICATIONS.
- WALL CONTROL JOINTS SHOULD MATCH LOCATION OF SLAB CONTROL JOINTS. ONLY AS NOTED IN PLAN.
- CONTROL JOINTS @ MASONRY WALLS SHOULD BE PLACED @ SPACING NOT EXCEEDING 25-4" OR 3 TIMES THE WALL HEIGHT WHICHEVER IS LESS. MORE SPECIFICALLY WHEN SELECTING A LOCATION IT SHOULD INCLUDE

 - A. CHANGES IN WALL HT. OR THICKNESS.
 B. OVER OPNGS @ ONE SIDE PAST THE LINTEL,
 C. AT INTERSECTING WALL.
 D. AT CONSTRUCTION JOINTS IN SLAB.
 E. NOT LESS THAN 2'-0" FROM A BEARING PLATE.
- G. C. TO PROVIDE SHOP DWG. W/ LOCATIONS OF CONTROL JOINTS & ALL VERT REINF FOR REVIEW BY A/E.



2 DETAIL AT JAMB OR OPENING

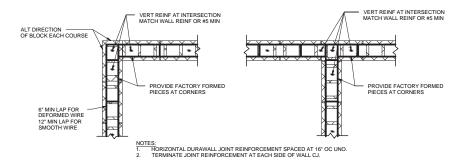
S-502 SCALE: 3/4" = 1'-0"

4'-6" CONT VERT CJ MATL PER PLAN IN THIS DETAIL. CONT HORIZ BOND BEAM REINF THRU JOINT. WRAP BARS WITH MASTIC FOR BOND BREAK WITHIN 1'-6" OF JOINT. DO NOT LAP HORIZ REINF WITHIN 4'-0" OF CJ. **ELEVATION**

1 MASONRY CONTROL JOINT (MCJ)

S-502 SCALE: 3/4" = 1'-0"

	REVISIONS						GAI CONSULTANTS, INC.		STATE OF FLOR	oth 4		
DA	TE E	BY	DESCRIPTION	DATE	BY	DESCRIPTION	600 CRANBERRY WOODS DRIVE. SUITE 400.	DEPARTMENT OF TRANSPORTATION			SR-8 (I-10) WESTBOUND (COLUMBIA COUNTY) REST AREAS	S-502
							CRANBERRY TOWNSHIP, PA 16066			or or allow	' '	
							· ·	ROAD NO.	COUNTY	FINANCIAL PROJECT ID	MACONDY DETAIL O	SHEET NO.
								SR 8 COLUMBIA	438609-1-52-01	MASONRY DETAILS	19 OF 26	

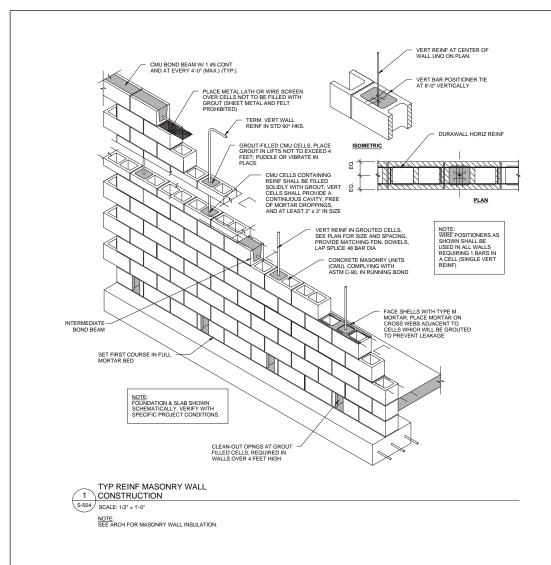


CORNER OF MASONRY WALLS

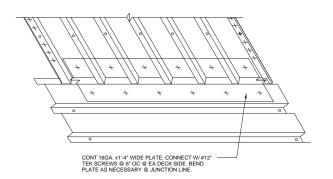
INTERSECTION OF MASONRY WALLS

1 HORIZONTAL JOINT REINFORCEMENT DETAIL
S-503 SCALE: 1/2" = 1'-0"

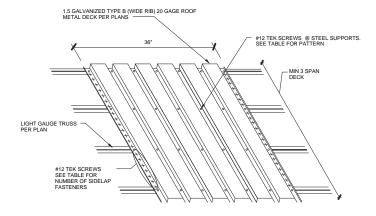
	REVISIONS				GAI CONSULTANTS, INC.	STATE OF FLORIDA					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	600 CRANBERRY WOODS DRIVE. SUITE 400.	DEPARTMENT OF TRANSPORTATION			SR-8 (I-10) WESTBOUND (COLUMBIA COUNTY) REST AREAS	S-503
						CRANBERRY TOWNSHIP, PA 16066				'	
						·	ROAD NO.	COUNTY	FINANCIAL PROJECT ID	MASONRY DETAILS	SHEET NO.
							SR 8 COLUMBIA 438609-1-52-01		438609-1-52-01	MASONRT DETAILS	20 OF 26



		REV	SIONS			GAI CONSULTANTS, INC.	STATE OF FLORIDA				DRAWING NO.
DAT	E BY	DESCRIPTION	DATE	BY	DESCRIPTION	600 CRANBERRY WOODS DRIVE. SUITE 400.	DEPARTMENT OF TRANSPORTATION			SR-8 (I-10) WESTBOUND (COLUMBIA COUNTY) REST AREAS	S-504
						CRANBERRY TOWNSHIP, PA 16066			SIGRIATION		
						, , , , , , , , , , , , , , , , , , , ,	ROAD NO.	COUNTY	FINANCIAL PROJECT ID	MACCHEV DETAIL O	SHEET NO.
							SR 8 COLUMBIA 438609	438609-1-52-01	MASONRY DETAILS	21 OF 26	







ROOF LOCATION	FASTENING PATTERN	NO. OF SIDELAP FASTENERS		
CNTER BREEZEWAY	36/7	6		
LOWER ROOFS	36/5	4		

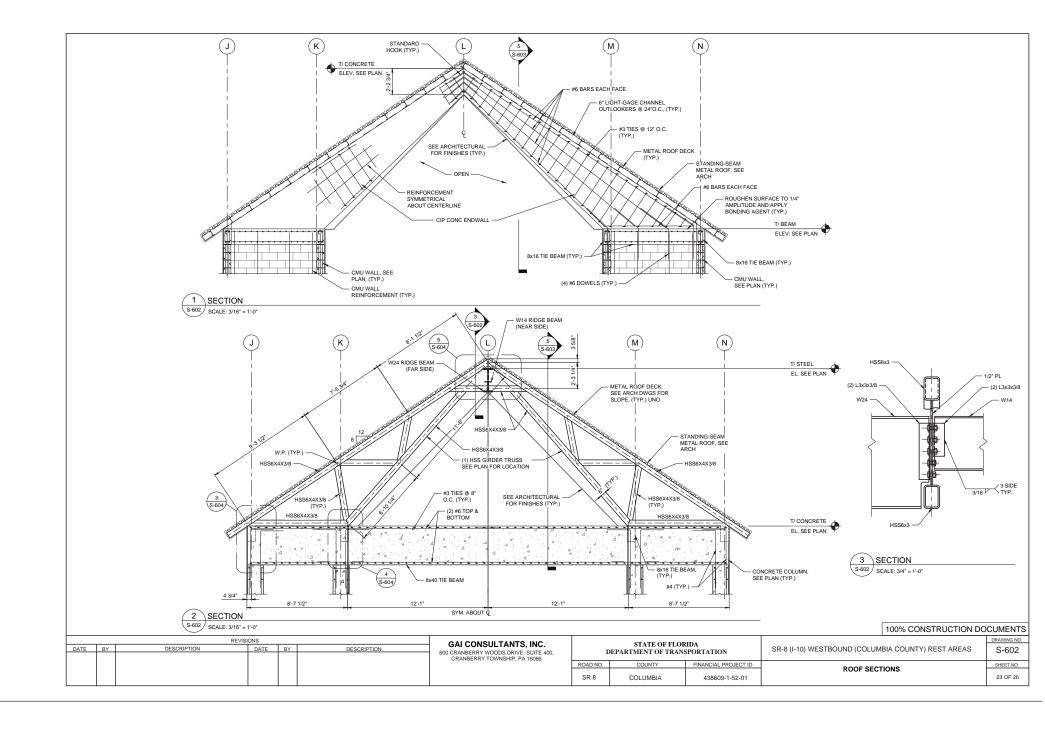
TYP ROOF DECK ATTACHMENT DETAIL

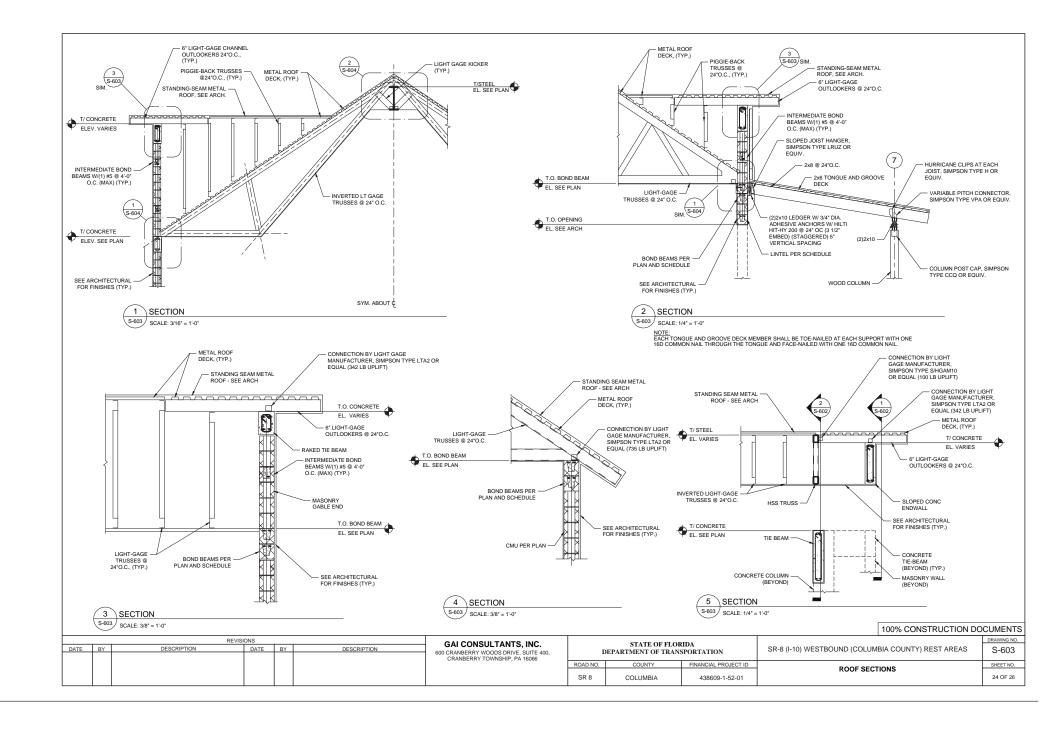
S-601 SCALE: 1/2" = 1'-0"

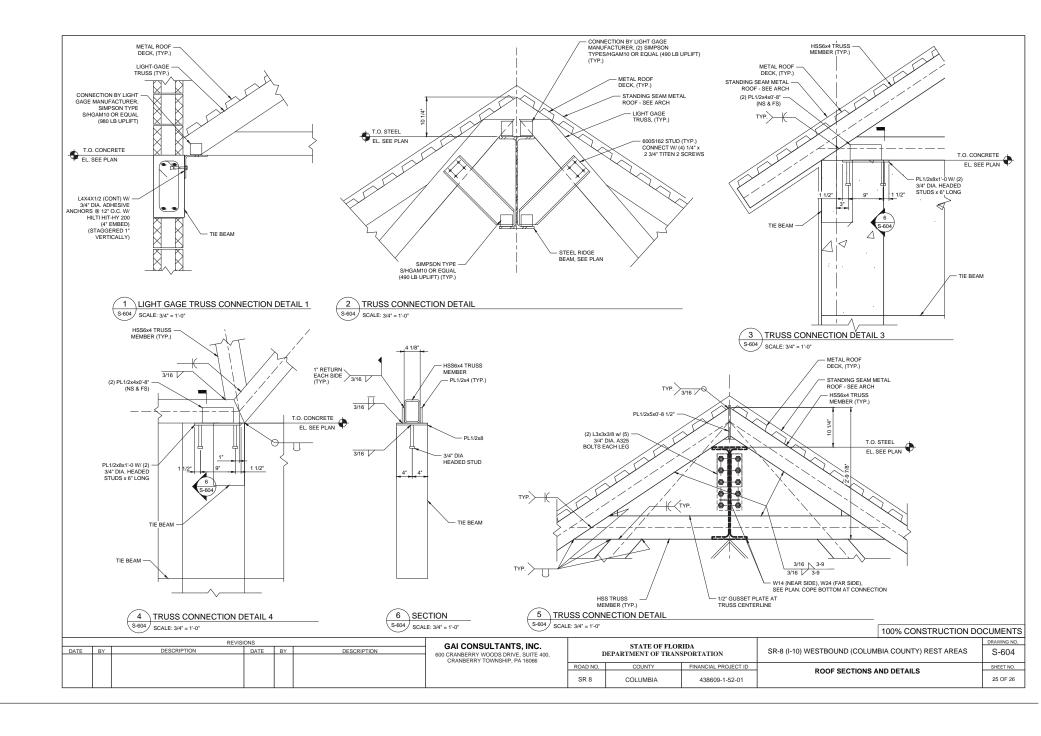
	PRE-ENGINEERED ROOF TRUSSES AT 24" OC MAX
SIMPSON VTCR (TYP AT VALLEY TRUSSES) SPACE AT 24" OC MAX W/(2) MIN PER VALLEY TRUSS	ROOF SHEATHING, SEE PLAN
VALLEY TRUSS FRAMING TYP	TOP CHORD OF TRUSS

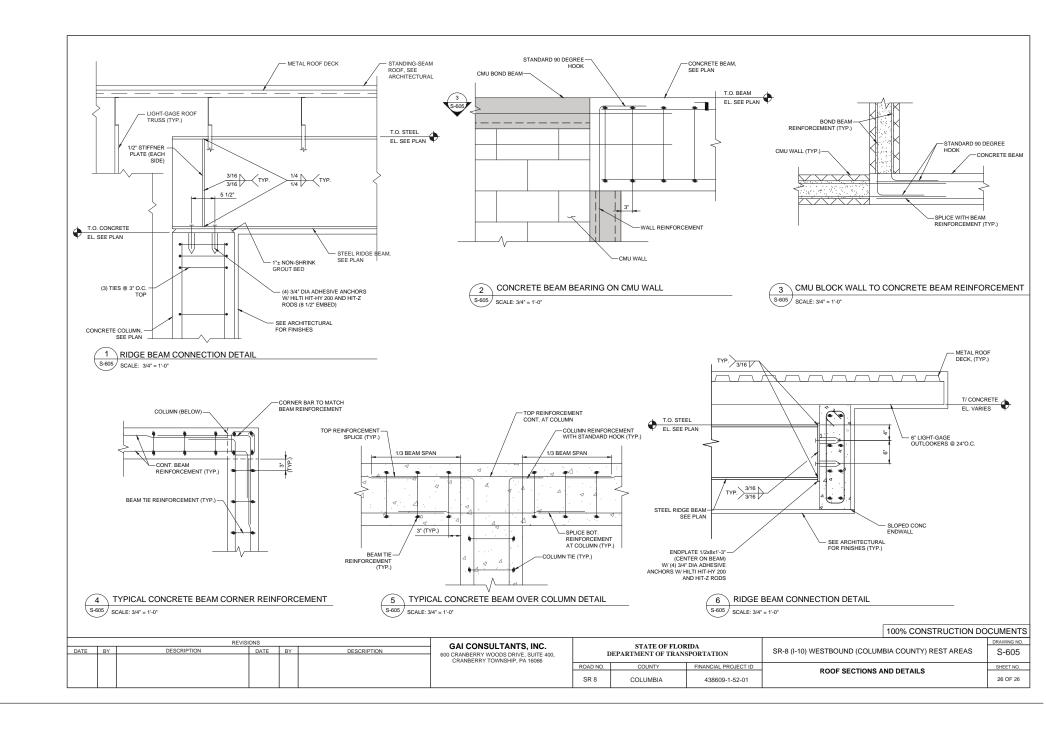


											DRAWING NO.
REVISIONS						GAI CONSULTANTS, INC.		STATE OF FLOR	OTD 4		
ATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION		DEPARTMENT OF TRANSPORTATION ROAD NO. COUNTY FINANCIAL PROJECT ID			SR-8 (I-10) WESTBOUND (COLUMBIA COUNTY) REST AREAS	S-601
						600 CRANBERRY WOODS DRIVE, SUITE 400, CRANBERRY TOWNSHIP, PA 16066			SPORTATION		
						Old Machine Townson II, 177 10000			FINANCIAL PROJECT ID		
										DECK DETAILS	SHEET NO.
							SR 8	COLUMBIA	438609-1-52-01		22 OF 26









HVAC SYMBOL LEGEND DUCT-FIRST DIM. IS WIDTH DUCT-SECOND DIM. IS HEIGH POINT OF CONNECTION NEW TO EXISTING WORK DUCT ELBOW DOWN POINT OF EXTENT OF REMOVAL OF EXISTING HVAC DUCT ELBOW UP DUCT RISE THERMOMETER Ø DUCT DOWN PRESSURE GAUGE DUCT UNDER POSITIVE SA UNION OR FLANGE RA DUCT UNDER NEGATIVE EA OA PRESSURE BALL OR BUTTERFLY VALVE **-**₩-ELBOW W/TURNING VANES CHECK VALVE **承** TAKE-OFF W/EXTRACTOR MODULATING CONTROL VALVE -₩-FLEXIBLE DUCT TWO POSITION CONTROL VALVE ************ FLEXIBLE CONNECTION -\$-PLUG VALVE W/ MEMORY SUPPLY AIR TERMINAL ARROW INDICATES THROW -🗆 ----883-FLEXIBLE PIPE **□**---RETURN OR EXHAUST AIR STRAINER LINEAR DIFFUSERS MANUAL AIR VENT SIDE MOUNTED EDH AUTOMATIC AIR VENT _____ BOTTOM MOUNTED EDH -Бп 3/4" HOSE END DRAIN PIPE FIRE DAMPER CHILLED WATER SUPPLY - CHWS-SMOKE DAMPER - CHWR-CHILLED WATER SUPPLY F/S === FIRE/SMOKE DAMPER - HWS-HOT WATER SUPPLY VOLUME DAMPER - HWR-HOT WATER RETURN RVD REMOTE VOLUME DAMPER — RHG— REFRIGERANT HOT GAS MOTORIZED DAMPER — RL — REFRIGERANT LIQUID BDD 🕇 BACKDRAFT DAMPER REFRIGERANT SUCTION S-CONDENSATE DRAIN ☐ AD CEILING ACCESS DOOR **—**∍ PIPE ELBOW DOWN ☐ AD DUCT ACCESS DOOR — PIPE ELBOW UP HUMIDITY SENSOR PIPE ELBOW ROOM TEMPERATURE SENSOR <u>S</u> PIPE TEE DOWN THERMOSTAT -0-PIPE TEE UP (S) SMOKE DETECTOR Ø ROUND

DESIG	N CONDITIC	N SCHEDULE	
	SUMMER	WINTER	
OUTDOOR	94 °F db/78 °F wb	35 °F db	
INDOOR	75 °F db/60%RH MAX	70 °F db	

	HVAC ABBR	REVIATI	ONS
AC	AIR CONDITIONING	HD	HUB DRAIN
AHU	AIR HANDLING UNIT	HOA	HAND/OFF/AUTOMATIC
AFF	ABOVE FINISHED FLOOR	HP	HORSEPOWER
BDD	BACKDRAFT DAMPER	HVAC	HEATING, VENTILATING & AIR CONDITIONING
BHP	BRAKE HORSEPOWER	H20	WATER
BMS	BUILDING MANAGEMENT SYS	TEM INIT	INITIAL
BTU	BRITISH THERMAL UNIT	KH	KITCHEN HOOD
CF	CHEMICAL FEEDER	LAT	LVG. AIR TEMPERATURE
CFM	CUBIC FEET PER MINUTE	LD	LINEAR DIFFUSER
CLG	CEILING	LR	LINEAR RETURN
CYC	CYCLES	LVG	LEAVING
COND	CONDENSATE	LWT	LVG. WATER TEMPERATURE
CC	COOLING COIL	MUA	MAKE UP AIR UNIT (KITCHEN HOOD)
CD	CEILING DIFFUSER	MBH	MEGA BTU PER HOUR
CG	CEILING GRILLE	MD	MOTORIZED DAMPER
DIM	DIMENSION	NC	NOISE CRITERIA
DB	DRY BULB	NIC	NOT IN CONTRACT
°F	DEGREES FAHRENHEIT	OA	OUTSIDE AIR
DWG	DRAWING	OPER	OPERATING
EA	EXHAUST AIR	ov	OUTLET VELOCITY
EAT	ENTERING AIR TEMPERATUR	E PCF	PUMP, CHEMICAL FEED
EG	EXHAUST AIR GRILLE	PCH	PUMP, CHILLED WATER
EHC	ELECTRIC HEATING COIL	PD	PRESSURE DROP
EDH	ELECTRIC DUCT HEATER	PH	PHASE
EHU	ELECTRIC UNIT HEATER	RG	RETURN AIR GRILLE
EWH	ELECTRIC WALL HEATER	ROT	ROTATION
ENT	ENTERING	RPM	REVOLUTION PER MINUTE
ER	EXHAUST AIR REGISTER	RVD	REMOTE VOLUME DAMPER
EWT	ENT. WATER TEMPERATURE	SA	SUPPLY AIR
F	FILTER	SENS	SENSIBLE
FCU	FAN COIL UNIT	SD	SPLITTER DAMPER
EF	EXHAUST FAN	SP	STATIC PRESSURE
EFG	EXHAUST FAN, GREASE	SR	SUPPLY AIR REGISTER
FF	FLY FAN	TG	TRANSFER AIR GRILLE
FPI	FINS PER INCH	TEMP	TEMPERATURE
FPM	FEET PER MINUTE	UD	UNDERCUT DOOR
FR	FAN, RETURN	VG	VENT, GRAVITY
SF	SUPPLY FAN	w	WATTS
GPM	GALLONS PER MINUTE	WB	WET BULB
FD	FIRE DAMPER	W/	WITH

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SR 8	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION							
	FINANCIAL PROJECT ID	COUNTY	ROAD NO.					
	438609-1-52-01	COLUMBIA	SR 8					

1	
	DRAWING NO.
SR 8 (I-10) WESTBOUND (COLUMBIA COUNTY) REST AREA	M-001
	SHEET NO.
MECHANICAL LEGEND	

100% CONSTRUCTION DOCUMENTS

PROJECT NORTH

HVAC CONSTRUCTION NOTES

DUCT ACCESSORIES

PART 1 GENERAL

REFERENCES

- A. NFPA 90A STANDARD FOR THE INSTALLATION OF AIR CONDITIONING AND VENTILATING SYSTEMS; NATIONAL FIRE PROTECTION ASSOCIATION; CURRENT ADOPTED EDITION.
- B. SMACNA (DCS) HVAC DUCT CONSTRUCTION STANDARDS METAL AND FLEXIBLE; SHEET METAL AND AIR CONDITIONING CONTRACTORS' NATIONAL ASSOCIATION: 2005

PART 2 PRODUCTS

AIR TURNING DEVICES/EXTRACTORS

A. MULTI-BLADE DEVICE WITH BLADES ALIGNED IN SHORT DIMENSION; STEEL CONSTRUCTION; WITH INDIVIDUALLY ADJUSTABLE BLADES, MOUNTING STRAPS

FLEXIBLE DUCT CONNECTIONS

- B. FABRICATE IN ACCORDANCE WITH SMACNA HVAC DUCT CONSTRUCTION STANDARDS METAL AND FLEXIBLE, AND AS INDICATED.
- C. FLEXIBLE CANVAS DUCT CONNECTIONS: FABRIC CRIMPED INTO METAL

PART 3 EXECUTION

INSTALLATION

- A. INSTALL ACCESSORIES IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS, NFPA 90A, AND FOLLOW SMACNA HVAC DUCT CONSTRUCTION STANDARDS METAL AND FLEXIBLE.
- B. AT FANS AND MOTORIZED EQUIPMENT ASSOCIATED WITH DUCTS, PROVIDE FLEXIBLE CANVAS DUCT CONNECTIONS IMMEDIATELY ADJACENT TO THE EQUIPMENT
- C. AT EQUIPMENT SUPPORTED BY VIBRATION ISOLATORS, PROVIDE FLEXIBLE CANVAS DUCT CONNECTIONS IMMEDIATELY ADJACENT TO THE EQUIPMENT

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PART 1 GENERAL

QUALITY ASSURANCE

A. MANUFACTURER QUALIFICATIONS: COMPANY SPECIALIZING IN MANUFACTURING THE TYPE OF PRODUCTS SPECIFIED IN THIS SECTION, WITH MINIMUM THREE YEARS OF DOCUMENTED EXPERIENCE.

REGULATORY REQUIREMENTS

A. CONSTRUCT DUCTWORK TO NFPA 90A STANDARDS.

PART 2 PRODUCTS

MATERIALS - LOW AND MEDIUM VELOCITY

- A. GALVANIZED STEEL DUCTS: HOT-DIPPED GALVANIZED STEEL SHEET, ASTM A 653/A 653M FS TYPE B, WITH G60/Z180 COATING.
- B. STEEL DUCTS: ASTM A 1008/A 1008M, DESIGNATION CS, COLD-ROLLED COMMERCIAL STEEL.

DUCTWORK FABRICATION - LOW AND MEDIUM VELOCITY

- A. FABRICATE AND SUPPORT IN ACCORDANCE WITH SMACNA HVAC DUCT CONSTRUCTION STANDARDS METAL AND FLEXIBLE, AND AS INDICATED. PROVIDE DUCT MATERIAL, GAGES, REINFORCING, AND SEALING FOR OPERATING PRESSURES INDICATED.
- B. CONSTRUCT T'S, BENDS, AND ELBOWS WITH RADIUS OF NOT LESS THAN 1-1/2 TIMES WIDTH OF DUCT ON CENTERLINE. WHERE NOT POSSIBLE AND WHERE RECTANGULAR ELBOWS MUST BE USED, PROVIDE AIR FOIL TURNING VANES. WHERE ACOUSTICAL LINING IS INDICATED, PROVIDE TURNING VANES OF PERFORATED METAL WITH GLASS FIBER INSULATION.
- C. INCREASE DUCT SIZES GRADUALLY, NOT EXCEEDING 15 DEGREES DIVERGENCE WHEREVER POSSIBLE; MAXIMUM 30 DEGREES DIVERGENCE UPSTREAM OF EQUIPMENT AND 45 DEGREES CONVERGENCE DOWNSTREAM
- D. ALL DUCTWORK, REGARDLESS OF SERVICE OR PRESSURE CLASS, SHALL BE SEALED AND CHECKED FOR AIR TIGHTNESS; ALL TRANSVERSE AND LONGITUDINAL SEAMS, GAPS, OPENINGS, ETC. SHALL BE SEALED BLANKET WITH MASTIC.
- E. PROVIDE TWO SEPARATE LAYERS/APPLICATIONS OF DUCT MASTIC TO THE METAL DUCTWORK PRIOR TO INSTALLATION OF DUCT INSULATION.

- F. ALL DUCTWORK OUTSIDE OF THE MECHANICAL ROOM SHALL BE EXTERNALLY WRAPPED WITH 2.2" THICK R-6.0 VAPOR SEALED DUCT INSULATION WRAP.
- G. ALL DUCTWORK INSIDE OF THE MECHANICAL ROOM SHALL BE EXTERNALLY INSULATED WITH 1 1/2" R-6 RIGID FIBERGLASS DUCTBOARD.
- ALL FIBROUS GLASS INSULATION JOINTS, SEAMS AND CONNECTIONS SHALL BE SEALED WITH FIBERGLASS FABRIC AND 2 COATS OF MASTIC WITH FAB, STAINLESS STEEL STAPLES.
- ALL DUCTWORK SHALL BE SUPPORTED PER CODE. PROVIDE HANGER STRAPS FOR ALL DUCTS MADE OF 2" WIDE, 22 GAGE GALVANIZED STEEL. SPACED ACCORDING TO SMACNA STANDARDS AND ALL OTHER APPLICABLE GOVERNING CODES AND STANDARDS.
- . ALL RIGID AND FLEXIBLE DUCT BRANCH TAKE OFFS FROM MAIN DUCT FOR INDIVIDUAL AIR OUTLETS, INLETS AND BOXES SHALL HAVE BALANCING DAMPERS
- X. ALL DUCTWORK STORED ON SITE OR ALREADY INSTALLED SHALL HAVE ALL OPEN ENDS SEALED WITH VISQUINE TO PREVENT DUST AND DEBRIS FROM ACCUMULATING INSIDE OF THE DUCTWORK DURING CONSTRUCTION. INTERIORS OF ALL DUCTWORK SHALL BE THOROUGHLY CLEANED PRIOR TO INSTALLATION.
- L. ALL DAMPERS AND EXTRACTORS SHALL HAVE LOCKING QUADRANTS AND SHALL
- M. PROVIDE REMOTE VOLUME DAMPER (RVD) OPERATORS IN ALL NON-ACCESSIBLE CELINGS. EQUAL TO YOUNG REGULATOR COMPANY MODEL 270-896C BOWDEN CABLE CONTROL UNIT OR METROPOLITAN AIR. CONTROL FOR EACH REMOTE VOLUME DAMPER SHALL BE LOCATED WITHIN THE DIFFUSER OR REGISTER BEING SERVED OR IN THE HARD CELING NEAR THE REGISTER OF DIFFUSER.
- N. BEVELED TAKE OFFS AND DAMPERS SHALL BE INSTALLED IN ALL BRANCH DUCTWORK LEADING FROM MAIN TRUNK LINES
- ALL SPLITTER DAMPERS SHALL BE BALANCED AND SET PRIOR TO THE INSTALLATION OF THE CEILING.
- ALL FANS AND AIR HANDLING UNITS SHALL BE PROPERLY SUPPORTED AND ISOLATED TO PREVENT NOISE AND VIBRATION TRANSMISSION. ALL AIR HANDLING EQUIPMENT SHALL BE SUPPORTED OR SUSPENDED WITH SPRING ISOLATORS. ALL CONNECTIONS BETWEEN FANS OR AIR HANDLING UNITS AND DUCTWORK SHALL BE CANNAS FLEXIBLE CONNECTORS.
- Q. ALL CONDENSING UNITS SHALL BE MOUNTED ON 4" THICK REINFORCED CONCRETE PADS AND SHALL BE SECURED 10 THE CONCRETE PAD WITH 2" WIDE 10 GAUGE GALVANIZED STEEL STRAPS EVERY 24" ON CENTER. INSTALLATION SHALL MEET THE WINDLOAD REQUIREMENTS OF THE 2017 FLORIDA BUILDING CODE (6TH EDITION).
- R. REFER TO MECHANICAL AND ARCHITECTURAL DRAWINGS FOR LOCATIONS OF ALL FIRE AND SMOKE RATED PARTITIONS ALL PENERTATIONS THROUGH FIRE RATEDISMOKE RATED PARTITIONS OF FLOORS AND CELLINGS SHALL HAVE FIRE/SMOKE DAMPERS ALL FIRE WALL PENETRATIONS SHALL HAVE FIRE DAMPERS, PROVIDE ACCESS DOORS IN WALL OR HARD CEILING FOR THESE DAMPERS.
- S. PROVIDE ACCESS PANELS IN DRYWALL CELLINGS AS REQUIRED FOR ACCESS TO MECHANICAL EQUIPMENT. COORDINATE WITH GENERAL CONTRACTOR TO PROVIDE WORK PLATFORMS AS REQUIRED FOR ALL EQUIPMENT LOCATED WITHIN THE CELLING SPACE.
- FURNISH AND INSTALL INSULATED PVC CONDENSATE DRAINS WITH TRAPS FOR ALL COOLING COILS. DRAIN LINE SIZE SHALL MATCH THE OPENING OF THE CONDENSATE PRAIN PAN
- U. ALL REFRIGERANT PIPING AND CONDENSATE DRAIN PIPING SHALL BE FULLY SUPPORTED IT'S ENTIRE LENGTH AND SHALL BE ANCHORED TO PREVENT SWAY AND VIBRATION. PROVIDE SUPPORT EVERY 4-0" ON CENTER.
- V. CONTRACTOR SHALL SUPPLY AND WIRE SMOKE DETECTORS IN THE SUPPLY AIR DUCTWORK AND RETURN AIR DUCTWORK OF ALL AIR HANDLING UNITS TO SHUT DOWN THE FANS IN THE EVENT OF A FIRE. DUCT SMOKE DETECTOR SHALL BE OF PHOTOELECTRIC TYPE AND SHALL BE LOW VOLTAGE. DIVISION 23 CONTRACTOR SHALL INSTALL ALL SMOKE DETECTORS. INSTALLATION OF DUCT SMOKE DETECTORS SHALL MEET ALL OF THE REQUIREMENTS PRESCRIBED IN NFPA 304 AND NFPA 12.
- W. ALL WALL SENSORS, VARIABLE SPEED CONTROL SWITCHES, ON-OFF SWITCHES AND MOTOR STARTERS SHALL BE INDIVIDUALLY LABELED. LABELS SHALL INDICATED THE UNIT CONTROLLED. TYPE OF CONTROL AND AREA SERVED. THE LABELS SHALL BE PLASTIC LAMINATE PERMANENT TYPE. WHITE WITH BLACK LETTERING, AND SHALL BE MOUNTED INSIDE OF THE COVER PLATE, OF THE CONTROL DEVICE.

- X. COORDINATE ALL CONTROL DEVICES WITH THE ELECTRICAL CONTRACTOR.
- Y. ALL CONTROL WIRING, CONDUIT AND HARDWARE TO COMPLETE THE HVAC CONTROL SYSTEM SHALL BE FURNISHED AND INSTALLED UNDER DIVISION 23 -MFCHANICAL
- Z. ALL CONTROL WIRING AND INTERLOCK WIRING LOCATED IN MECHANICAL ROOMS AND IN NON ACCESIBLE CEILINGS SHALL BE IN CONDUIT.
- AA. THERMOSTATS SHALL BE LOCATED 48"-54" ABOVE THE FINISHED FLOOR IN ACCORDANCE WITH ADA REQUIREMENTS AND THE 2017 FLORIDA ACCESSIBILITY CODE
- AB. AIR FILTERS SHALL BE 2" PLEATED 30% EFFICIENT (MIN.) OR EQUIAL IN AIR HANDLING EQUIPMENT. FILTERS SHALL BE INSTALLED PRIOR TO UNIT START UP. REPLACED A MINIMUM OF ONCE PER MONTH DURING THE CONSTRUCTION PERIOD. REPLACED PRIOR TO TEST AND BALANCE, AND REPLACED MONTHLY UNTIL FINAL COMPLETION.
- AC. ALL DUCTWORK, REGARDLESS OF SERVICE OR PRESSURE CLASS, SHALL BE SEALED AND CHECKED FOR AIR TIGHTNESS; ALL TRANSVERSE AND LONGITUDINAL SEAMS, GAPS, OPENINGS, ETC. SHALL BE SEALED WITH MASTIC.

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- A ALL REFRIGERANT LINES FOR SPLIT SYSTEM DX UNITS SHALL HAVE FILTER DRYFERS AND SIGHT (LASSES. ALL REFRIGERANT PIPING BELOW SLAB SHALL BE WITHOUT JOINTS AND SHALL BE RUN IN A PVC PIPING CHASE OR CONDUIT OF SUFFICIENT SIZE TO ALLOW REPLACEMENT OF THE PIPING IN THE FUTURE. UTILIZE LONG SWEEP ELBOWS. EACH END OF THE PVC CHASE SHALL BE SEALED ART TIGHT AND WATERTIGHT.
- ALL REFRIGERANT PIPING EXPOSED TO THE EXTERIOR SHALL BE INSULATED
 WITH 1" THICK CLOSED CELL FOAM INSULATION (ARMAFLEX) AND SHALL BE
 WRAPPED WITH ALLUMINUM JACKETING.
- C. ALL REFRIGERANT PIPING IN CONCEALED CHASES FOR SPLIT SYSTEM DX UNITS SHALL BE SOFT DRAWN TYPE K COPPER. SERVICE FITTINGS FOR REFRIGERANT LINES SHALL BE LOCATED IN A MANNER TO BE INACCESSIBLE TO THE PUBLIC.

PART 3 EXECUTION

INSTALLATION

- A. DUCT SIZES INDICATED ARE INSIDE CLEAR DIMENSIONS.
- B. INSTALL AND SEAL METAL AND FLEXIBLE DUCTS IN ACCORDANCE WITH SMACNA HVAC DUCT CONSTRUCTION STANDARDS METAL AND FLEXIBLE.
- C. LOCATE DUCTS WITH SUFFICIENT SPACE AROUND EQUIPMENT TO ALLOW NORMAL OPERATING AND MAINTENANCE ACTIVITIES
- D. PROVIDE RESIDUE TRAPS IN KITCHEN HOOD EXHAUST DUCTS AT BASE OF VERTICAL RISERS WITH PROVISIONS FOR CLEAN OUT. PROVIDE TWO SEPERATE LAYERS/APPLICATIONS OF DUCT MASTIC ON THE METAL DUCTWORK
- E. DURING CONSTRUCTION PROVIDE TEMPORARY CLOSURES OF METAL OR TAPED POLYETHYLENE ON OPEN DUCTWORK TO PREVENT CONSTRUCTION DUST FROM ENTERING DUCTWORK SYSTEM.

EQUIPMENT IDENTIFICATION

A IDENTIFY EACH UNIT BY ITS SYSTEM NUMBER AND OTHER APPROPRIATE DESIGNATION BY STENCHLING IN LETTERS OF APPROVED SIZE AND WORDING. EQUIPMENT REQUIRING IDENTIFICATION SHALL INCLUDE PACKAGED AND SPLIT SYSTEM AIR CONDITIONING UNITS, VAV BOXES AND HEATING UNIT. FIELD COORDINATE BEFORE ORDERING SO THAT EQUIPMENT NAME PLATES MATCH EXISTING.

PROJECT NORTH 100% CONSTRUCTION DOCUMENTS REVISIONS STATE OF FLORIDA DATE DESCRIPTION SR 8 (I-10) WESTBOUND (COLUMBIA COUNTY) REST AREA DATE DESCRIPTION M-002 DEPARTMENT OF TRANSPORTATION SHEET NO. **HVAC CONSTRUCTION NOTES** SR 8 COLUMBIA 438609-1-52-01 Augusto F Robes Jr P F No 39410

HVAC GENERAL NOTES

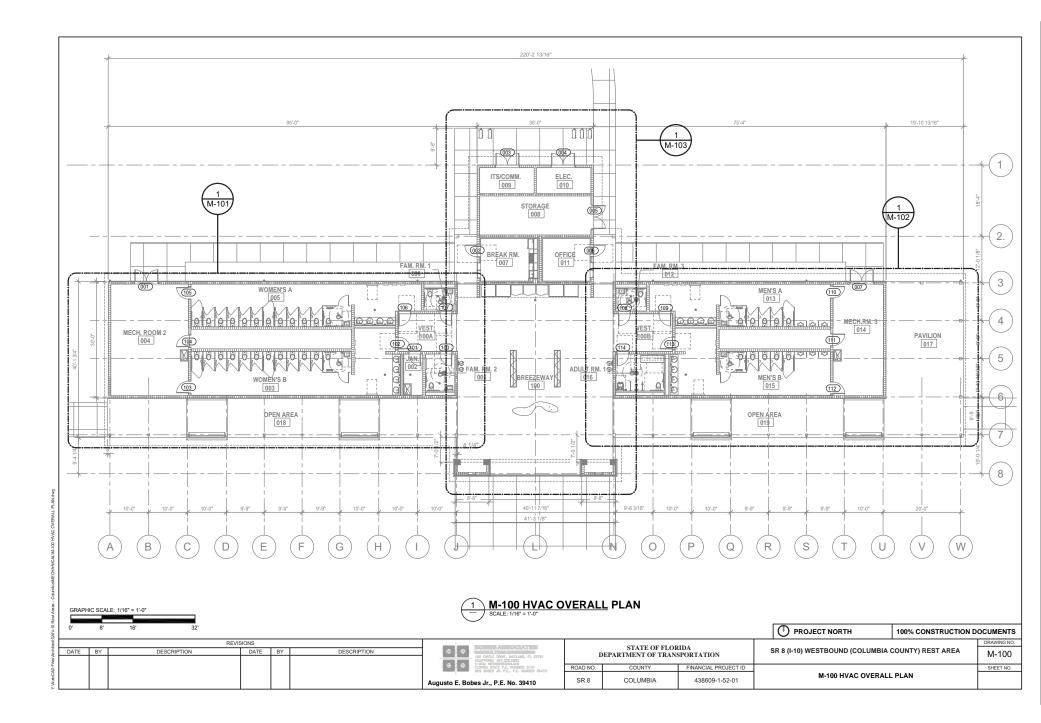
- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE 2017 FLORIDA BUILDING CODE (6TH EDITION), THE 2017 FLORIDA MECHANICAL CODE (6TH EDITION), THE 2017 FLORIDA ENERGY EFFICIENCY CODE (6TH EDITION) AND THE FDOT REQUIREMENTS AND ALL OTHER APPLICABLE CODES AND STANDARDS.
- CONTRAÇTOR SHALL PROVIDE ALL LABOR, MATERIALS, AND EQUIPMENT FOR A COMPLETE AIR CONDITIONS SYSTEM INCLUDING, CONTROLS, CONTROL PROGRAMING, CONTROL WIRING, GALVANIZED SHEET METAL PLENLINS AND ALL FITTINGS, SPECIALTIES, AND-CHRINGSUPPORTRING OF FQUIPMENT, AUXIL LIARY MATERIALS AND ACCESSORIES AS SHOWN ON THE DRAWINGS AND SPECIFIED HEPEIN.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VISIT THE SITE OF THE WORK AND BECOME FAMILIAR WITH ALX VAILABLE. INFORMATION REGARDING THE LOCATION OF EXISTING FACILITIES. FAILURE OF THE CONTRACTOR TO FULLY INFORM HIMSELF OF ALL. EXISTING CONDITIONS WILL MOT BE CAUSE FOR ADDITIONAL COMPENSATION.
- 4. ALL EQUIPMENT AND MATERIALS USED IN THIS INSTALLATION SHALL BE NEW, OF APPROVED QUALITY AND MANUFACTURE AND, UNLESS OTHERWISE NOTS SHALL BE STANDARD CATALOG ITEMS OF THE VARIOUS MANUFACTURERS. EACH COMPONENT OF THE WORK SHALL BE COMPLETE, CONNECTED AND CAPABLE OF SATISFACTORY FUNCTIONAL OPERATION.
- FOLLOW REQUIREMENTS OF THE FLORIDA BUILDING CODES, REGULATIONS, ORDINANCES, ETC., OF THE STATE, COUNTY, AND/OR MUNICIPALITY, IN WHICH THE CONSTRUCTION IS LOCATED, AND ANY GOVERNMENT ENTITY HAVING JURISDICTION OVER THIS WORK.
- ALL EQUIPMENT SHALL FIT THE ALLOTTED SPACE AND SHALL PROVIDE
 ADEQUATE ACCESSROOM FOR SERVICING AND REPAIRS. GREATER SPACE
 AND ROOM REQUIRED BY SUBSTITUTED EQUIPMENT SHALL BE PROVIDED BY
 THE CONTRACTOR AND AT HIS EXPENSE AND MEETING THE APPROVAL OF THE
 DESIGN FROINFER
- CONTRACTOR SHALL VERIFY AND COORDINATE ALL DIMENSIONS IN THE FIELD FOR EQUIPMENT, DUCTWORK AND ROOF PENETRATIONS. PRIOR TO FABRICATION OF ANY DUCTWORK THE CONTRACTOR SHALL PREPARE AND SUBMIT A 1/4" SCALE COORDINATED SHOP DRAWING ON AUTOCAD OF ALL DICTWORK PIPING AND HAVAC FOLIPMENT FOR THE PRIJEE FULLI DING
- 8. PRIOR TO ORDERING HYAC EQUIPMENT AND FABRICATION OF ANY DUCTWORK THE CONTRACTOR SHALL PREPARE AND SUBMIT A 14" SCALE COORDINATED SHOP DRAWING OF EACH MECHANICAL ROOM. THESE DRAWINGS SHALL INCLUDE THE DIMENSIONS AND REQUIRED MAINTENANCE CLEARANCES OF THE ACTUAL EQUIPMENT PROPOSED FOR THE PROJECT. THESE DRAWINGS SHALL ALSO INCLUDE ALL DUCTWORK, EQUIPMENT, HEATERS, DISCONNECTS, PIPING, AND THEIR REQUIRED ACCESS CLEARANCES. FAILURE TO SUBMIT THESE DRAWINGS RELUEST THE ENGINEER OF ALL RESPONSIBILITY FOR THE MECHANICAL ROOM LAYOUT.
- REFER TO ARCHITECTURAL DRAWINGS FOR CLEARANCES WITHIN THE CEILING SPACE, MECHANICAL ROOMS, LOCATIONS AND SIZES OF BEAMS AND CEILING AND SOFFIT HEIGHTS.
- 10. DRAWINGS ARE DIAGRAMMATIC IN NATURE. COORDINATE EXACT LOCATION OF ALL EQUIPMENT MOUNTED IN CEILING CAVITY SO ALL SERVICEABLE COMPONENTS CAN BE EASILY ACCESSED BY REMOVING CEILING TILES ONLY. REMOVAL OR RELOCATION OF LIGHTING FIXTURES FOR SERVICE ACCESS IS NOT ACCEPTABLE. THE CONTRACTOR SHALL REINSTALL EQUIPMENT THAT HAS INADEQUATE OR UNSAFE ACCESSIBILITY. LOCATE ALL EQUIPMENT WITH MANUFACTURER RECOMMENDED ACCESS FOR OPERATION AND MAINTENANCE.
- 11. PRIOR TO BID, CHECK LEAD TIMES OF ALL EQUIPMENT IN THE PROJECT. IF NECESSARY TO MEET THE PROJECT SCHEDULE, BID SHALL INCLUDE THE COST TO ACCELERATE DELIVERY OF CRITICAL MATERIALS AND EQUIPMENT. ALLOW TIME FOR NORMAL SHOP DRAWING PREPARATION AND REVIEW.
- 12. IF THE CONTRACTOR DISCOVERS ANY DISCREPANCIES BETWEEN EQUIPMENT DIMENSIONS AND SPACE ALLOTMENTS, THEY SHALL NOTIFY THE ARCHITECTENGINEER IN WRITING AND SHALL NOT PROCEED WITH THE WORK UNTIL HE HAS RECEIVED WRITTEN INSTRUCTIONS FROM THE ARCHITECTENGINEER.

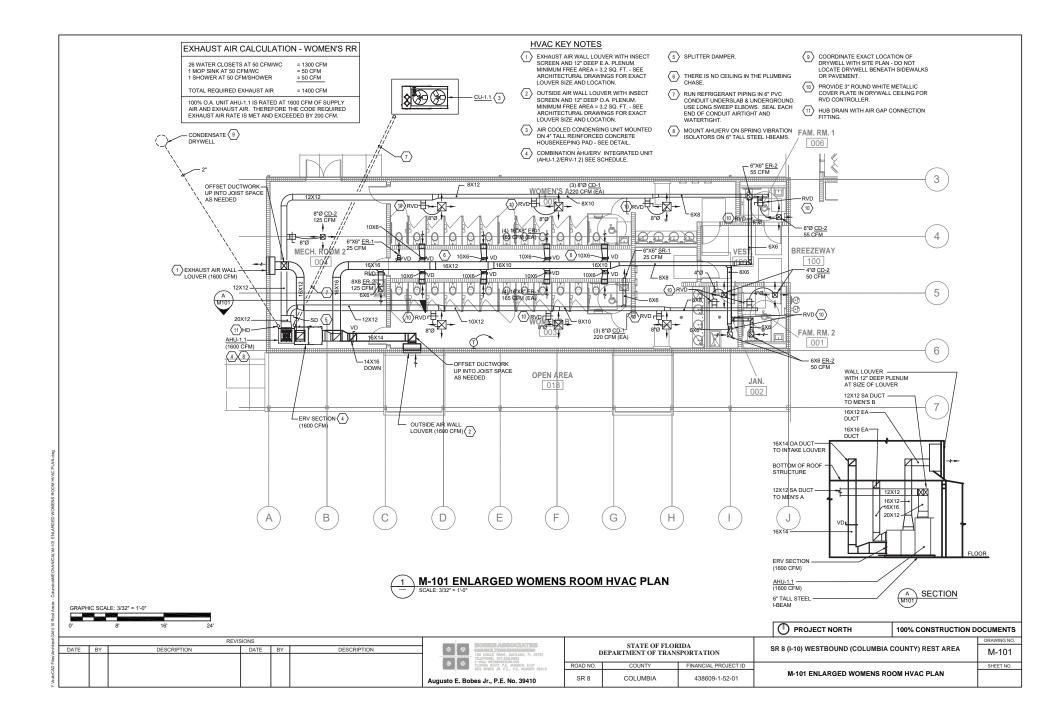
- 13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS INCURRED BY OTHER TRADES DUE TO SUBSTITUTION OF OTHER THAN SCHEDULED COUPMENT. WHEN EQUIPMENT FURNISHED IS DIFFERENT THAN INDICATED ON THE PLANS, THE COST OF ADDITIONAL ELECTRICAL SERVICE, STRUCTURAL AND DELITED MAD SEN SETS BE DUE BY THE CONTRACTOR.
- 14. DUCTWORK AND EQUIPMENT LOCATIONS AND CLEARANCES SHALL BE COORDINATED WITH GENERAL, PLUMBING, FIRE PROTECTION AND ELECTRICAL CONTRACTORS. REFER TO ARCHITECTURAL AND STRUCTURAL PLANS FOR BUILDING SECTIONS AND DETAILS
- 15. CONNECTION TO ALL EQUIPMENT SHALL BE VERIFIED WITH MANUFACTURERS CERTIFIED DRAWINGS. DUCT TRANSITIONS TO ALL EQUIPMENT SHALL BE VERIFIED AND PROVIDED FOR ALL AIR HANDLIING FOULPMENT
- 16. COORDINATE DIFFUSER, REGISTER AND GRILLE LOCATION WITH LIGHTING, SPRINKLER AND ARCHITECTURAL CEILING PLANS. COORDINATE THE TYPE OF DIFFLISTE FRAME WITH THE CEILING TYPE
- 17. IF THE CONTRACTOR DISCOVERS ANY DISCREPANCIES BETWEEN EQUIPMENT DIMENSIONS AND SPACE ALLOWINGENTS THEREFORE; HE SHALL NOTIFY THE CONSTRUCTION MANAGER IN WRITING AND SHALL NOT PROCEED WITH THE WORK LUTIL HE HAS RECEIVED WRITTEN INSTRUCTIONS FROM THE CONSTRUCTION MANAGER
- 18. THE CONTRACTOR SHALL DO NO CUTTING THAT MAY IMPAIR STRENGTH OF BUILDING CONSTRUCTION. NO HOLES, EXCEPT FOR SMALL SCREWS, MAY BE DRILLED IN BEAMS, DOUBLE-TEES OR OTHER STRUCTURAL MEMBERS WITHOUT OBTAINING PRIOR APPROVAL OF THE CONSTRUCTION. MANAGER.
- 19. CUTTING AND PATCHING UNLESS OTHERWISE INDICATED, PERFORM ALL CUTTING AND PATCHING INCESSARY FOR THE WORK PATCH AND PAINT AFFECTED AREAS TO MATCH EXISTING CONDITIONS INCLUDING MATERIAL OF CONSTRUCTION WHERE INTERFERENCES OCCUE, AND DEPARTURES FROM INDICATED ARRANGEMENTS ARE REQUIRED, COORDINATE THE MECHANICAL/ELECTRICAL/STRUCTURAL WORK WITH THE OTHER TRADES INVOLVED AND MAKE A DETERMINATION AS TO CHANGES AND SHALL OBTAIN APPROVAL FROM IT PEPARTMENT FOR THE PROPOSED CHANGES.
- ALL ROTATING EQUIPMENT SHALL BE STATICALLY AND DYNAMICALLY BALANCED. UNLESS OTHERWISE SPECIFIED, THE VIBRATION ALLOWANCE IN THE UNITS SHALL NOT EXCEED THE UPPER LIMITS AS ESTABLISHED BY THE
- 21. THE CONTRACTOR SHALL FURNISH ALL ELECTRICAL WORK ASSOCIATED WITH MECHANICAL EQUIPMENT, INCLUDING ELECTRICAL CONTROLS, SWITCHES, CONTACTORS AND STARTERS FOR ALL EQUIPMENT ITEMS REQUIRING SAME. ALL ELECTRICAL WORK SHALL CONFORM IN ALL RESPECTS TO THE REQUIREMENTS OF THE CULRENT NATIONAL ELECTRICAL CODE.
- 22. UNLESS OTHERWISE INDICATED, METAL FASTENERS AND RELATED PARTS SHALL BE OF ALUMINUM OR STAINLESS STEEL AND SHALL BE OF ADEQUATE STRENGTH FOR THE PURPOSE INTENDED.
- 23. LEAVE CONCEALED WORK UNCOVERED UNTIL REQUIRED TESTS HAVE BEEN COMPLETED, BUT IF NECESSARY TO MAKE TESTS ON PORTIONS OF THE WORK, THOSE PORTIONS OF THE WORK MAY BE CONCEALED AFTER BEING INSPECTED AND APPROVED. REPAIR DEFECTS THAT ARE DISCOVERED AS A RESULT OF INSPECTIONS OR TESTS WITH NEW MATERIALS. CAULKING, PEELING OR SOLDERING OF SOREWED JOINTS, CRACKS, OR HOLES WILL NOT BE ACCEPTED. REPEAT TESTS AFTER DEFECTS HAVE BEEN CORRECTED.
- 24. VERIFY ALL SPACE CONDITIONS AT JOB SITE PRIOR TO FABRICATION OF DUCTWORK AND PURCHASE OF EQUIPMENT. NOTIFY ENGINEER OF ANY SPATIAL CONFLICTS THAT COULD AFFECT THE PROJECT. DD NO WORK UNTIL ALL CONFLICTS ARE RESOLVED. BEGINNING OF INSTALLATION WILL BE CONSTRUED AS ACCEPTANCE OF SPATIAL CONDITIONS.
- 25. VERIFY ALL CONNECTION TO EQUIPMENT WITH MANUFACTURER'S CERTIFIED DRAWINGS. DO NOT SCALE DRAWINGS. PROVIDE TRANSITIONS TO ALL EQUIPMENT AS REQUIRED.

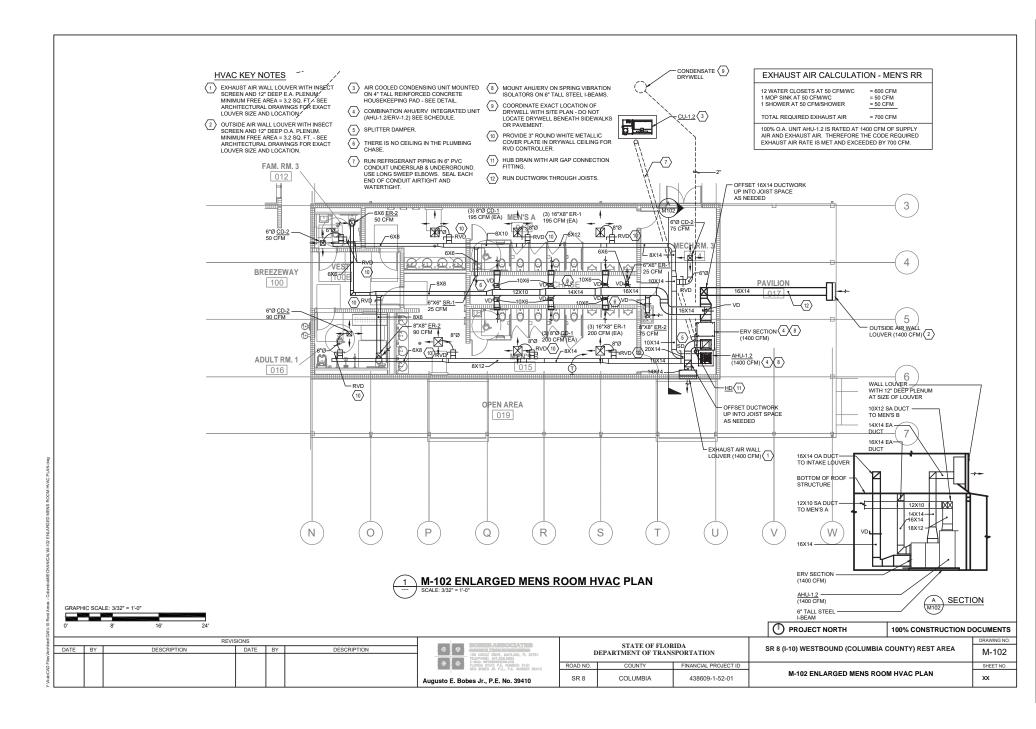
- 26. COORDINATE DUCTWORK WITH OTHER DISCIPLINES PRIOR TO FABRICATION AND INSTALLATION. PROVIDE ANY OFFSETS AND TRANSITIONS TO COORDINATE WITH OTHER TRADES AS REQUIRED. PIPING IS SHOWN DIAGRAMMATICALLY AND SHALL BE ADJUSTED AS REQUIRED TO SUIT EXISTING OF BEILD COMPUTANCE.
- 27. COORDINATE AVAILABLE ELECTRICAL CHARACTERISTICS AT JOB SITE WITH MECHANICAL EQUIPMENTS ELECTRICAL REQUIREMENTS INDICATED IN MECHANICAL SCHEDULES PRIOR TO SUBMITTING SHOP DRAWINGS AND ORDERING EQUIPMENT.
- 28. ALL EQUIPMENT, DUCTWORK AND PIPING, ETC., SHALL BE PROPERLY SUPPORTED AS DETAILED AND/OR SPECIFIED. PROVIDE ADDITIONAL SUPPORTS AS REQUIRED TO PROVIDE A VIBRATION-FREE, RIGID INSTALLATION.
- 29. COMBUSTIBLE MATERIAL
- A. ALL PROJECT MATERIALS SHALL HAVE A FLAME SPREAD INDEX OF NO MORE THAN 25 AND A SMOKE-DEVELOED INDEX OF NOT MORE THAN 50.
- 30. THE AIRFLOW OF ALL HVAC SYSTEMS SHALL BE BALANCED BASED ON THE ACTUAL INSTALLED STATIC PRESSURE OF THE AIR DISTRIBUTION SYSTEM. CONTRACTOR SHALL PROVIDE POSITIVE MEANS FOR BALANCING EACH INDIVIDIAL AIR QUIT ET AND IN
- 31. THE CONTRACTOR SHALL HIRE AN INDEPENDANT TEST AND BALANCE FIRM TO TEST AND BALANCE ALL AIR CONDITIONING SYSTEM-SEE SPECIFICATIONS. THE TEST & BALANCE CONTRACTOR SHALL BE CERTIFIED BY NEBB OR ABAA.
- 32. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR COORDINATING THEIR WORK WITH THE TEST AND BALANCE FIRM. PRIOR TO TEST AND BALANCE, THE CONTRACTOR SHALL START-UP PRE-BALANCE THE SYSTEM, AND REPLACE ALL AIR FILTERS FOR EVERY AND BEIGH STEED. ALL DISCREPANCIES. DRIVE CHANGES, ETC. REPORTED BY ENGINEER OR THE TEST AND BALANCE FIRM SHALL BE CORRECTED BY THE CONTRACTOR WITHIN FIVE CALENDAR DAYS AT NO ADDITIONAL COST. THE TEST & BALANCE REPORT SHALL BE APPROVED PRIOR TO SUBSTANTIAL COMPLETION.
- 33. THE CONTRACTOR SHALL PROVIDE A WRITTEN GUARANTEE THAT SHALL WARRANT ALL WORKMANSHIP AND MATERIALS FOR ONE (1) YEAR. DURING THE FIRST YEAR ALL SYSTEM MALFUNCTIONS SHALL BE REPRIRED AND ALL DEFECTIVE EQUIPMENT SHALL BE REPLACED AT NO EXPENSE TO THE COWNER. THE COMPRESSORS SHALL HAVE A 5 YEAR WARRANTY (JARDA R MATERIAL S).
- 34. OPERATION AND MAINTENANCE MANUALS SHALL INCLUDE AS A SEPARATE SUBMITTAL ITEM. PREVENTATIVE MAINTENANCE REQUIREMENTS ALONG WITH TIME SCHEDULE(S) FOR EACH ITEM. THE SEQUENCE OF OPERATION SHALL ALSO INCLUDE A DEFINITY SEQUENCE OF OPERATION OF THE MECHANICAL SYSTEM AND COMPONENTS AS THEY FUNCTION INTEGRALLY AND INDEPENDENTLY WITH THE SYSTEM.
- 35. THE CONTRACTOR SHALL PROVIDE ALL REQUIRED PERMITS.
- 38. ALL CHANGES MADE IN THE FIELD SHALL BE RECORDED BY THE CONTRACTOR ON THE AS BUILT DRAWINGS. THE CONTRACTOR SHALL PREPARE REDUINED AS-BUILT DRAWINGS OF THE INSTALLED HAVE SYSTEMS AT THE COMPLETION OF THE PROJECT CONSTRUCTION AND SHALL INCLUDE THOSE AS-BUILT DRAWINGS AT PROJECT CLOSEOUT ALONG WITH THE O&M MANUAL AND EQUIPMENT AND PROJECT WARRANTES.
- 37. PRIOR TO ORDERING ANY HVAC EQUIPMENT, DUCTWORK, DIFFUSERS, GRILLES, PIPING ETC. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR REVIEW AND SHALL OBTAIN APPROVAL FROM THE ENSINEER.
- 38. THE CONTRACTOR SHALL PROVIDE A COMPLETE HVAC SHOP DRAWING SUBMITTAL TO THE ENGINEER FOR REVIEW AND APPROVAL THE HVAC SUBMITTAL SHALL INCLUDE ALL AIR CONDITIONING EQUIPMENT, FANS, HEATERS, PUMP, PIPING DUCTWORK, INSULATION, DIFFUSERS, REGISTERS & GRILLES, CONTROLS, DAMPERS, HANGERS ETC. CONTRACTOR SHALL NOT ORDER ANY HVAC EQUIPMENT UNTIL THIS SUBMITTAL IS REVIEWED AND ACCEPTED BY THE ENGINEER OF RECORD. CONTRACTOR SHALL SUBMIT THE SHOP DRAWING AS ONE COMPLETE SUBMITTAL AND SHALL NOT PIECE MEAL THE SUBMITTAL SPREAD OUT OVER THE COURSE OF DAYS AND WEEKS. FAILURE TO SUBMIT A COMPLETE HVAC SHOP DRAWING SUBMITTAL SHALL RESULT IN ANI MIMEDIATE REJECTION OF THE SHOP DRAWING SUBMITTAL.

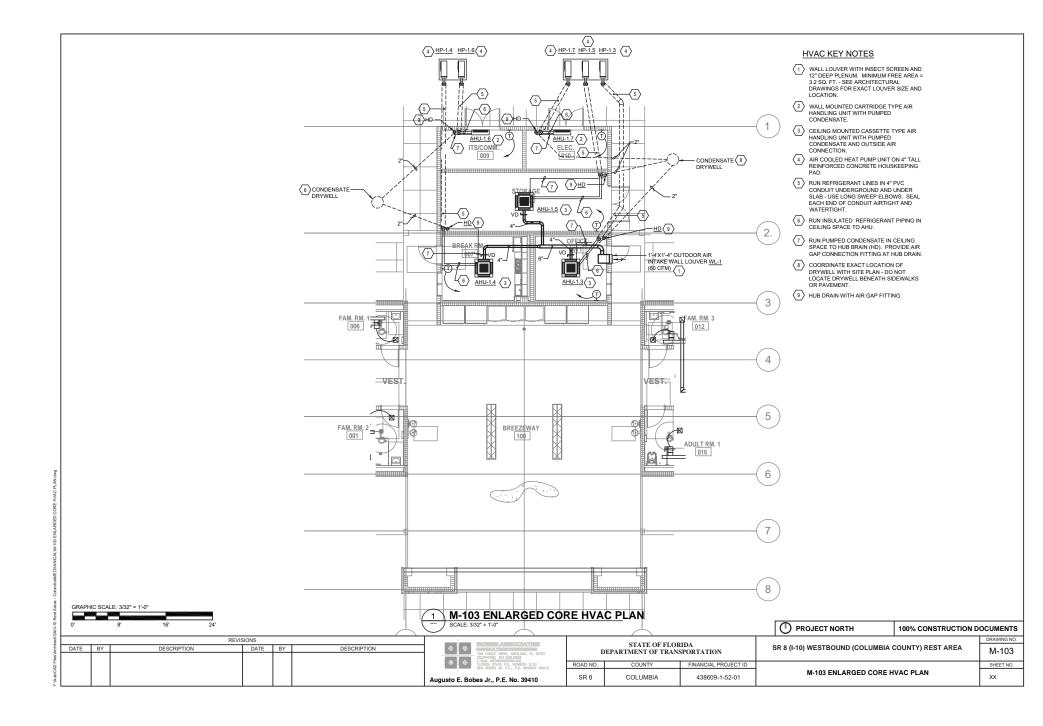
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lles							180 CIRCLE DRIVE, MATLAND, FL 32781 TELEPHONE: 407.628.0882		ETAKTMENT OF TRANS	31 OKTATION			W 000
9							PLORIDA STATE P.E. NUMBER: 5131 GUS BORES JR. P.E., P.E. NUMBER 38410	ROAD NO.	COUNTY	FINANCIAL PROJECT ID			SHEET NO.
/:AutoC							Augusto E. Bobes Jr., P.E. No. 39410	SR 8	COLUMBIA	438609-1-52-01	GENERAL HVAC NO	OTES	

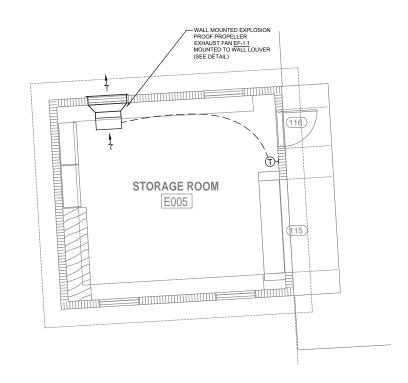
chitectiGalli-10 Rest Areas - Columbia/MECHANICAL/M-003 GENERAL HVAC NOTES.dwg











M-104 ENLARGED STORAGE BUILDING HVAC PLAN

SCALE: 3/16" = 1'-0"

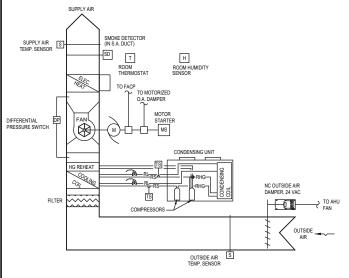
GRAPHIC SCALE: 3/32" = 1'-0"

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150 CIRCLE DRIVE, MATILADO, FL 52751 TELEPHONE: 607-548.0082 F-MAI corrections. TELEPHONE: 607-548.0082 F-MAI corrections. TORIGIN STATE F-E. INVARER- 6151 OUS BORGES 36. F-E., F-E. WOMER- 98410
Augusto E. Bobes Jr., P.E. No. 39410

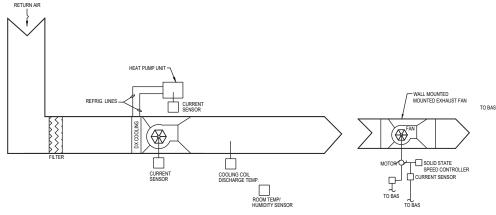
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ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
SR 8	COLUMBIA	438609-1-52-01	

PROJECT NORTH	100% CONSTRUCTION D	OCUMENTS
		DRAWING NO.
SR 8 (I-10) WESTBOUND (COLUMBIA (COUNTY) REST AREA	M-104
		SHEET NO.
M-104 ENLARGED STORAGE BUIL	DING HVAC PLAN	xx



				POINTS SCHEDULE																										
			INPUTS										OUTPUTS				SOFTWARE								Т					
			ANALOG				DIGITAL			ANALOG		DIGITAL				APPLICATIONS					Г			Т						
	* *	X X OA TEMP	ROOM TEMP	ROOM HUMIDITY	X X SUPPLY AIR TEMP	RETURN AIR TEMPERATURE	RAHUMIDITY	STATIC PRESSURE ("WC)	X X COMPRESSOR CONNECT SENSOR	X X FILTER STATUS	X X FANSTATUS, CURRENT SENSOR	HUMIDITY HILIMIT	OVERRIDE	XX ELEC. HEAT STAGING	OUTSIDE AIR DAMPER POSITION	X X FANSTART/STOP	O.A DAMPER (OPEN/CLOSE)	(BY STAGES)	O.A SUPPLY AND EXHAUST FAN (START/STOP)	NIGHT SETBACK (NA)	OCCUP/UNOCCUP (NA)	OPTIMAL START/STOP	DEMANDLIMITING	DUTY CYCLING	X X DYNAMIC COLOR GRAPHIC	X X SOFTWARE INTERLOCK				
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AHU-1.3/HP-1.3 🛆		Ш	Ϋ́	X	X	X	_		X	X	X	_		L		X			_	⊢		_	L		X	X	╄	_	Н	_
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EXHAUST FANS EF-1.1 *											Χ	F				Χ				F					Χ	Х	F			
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100% O.A. SPLIT SYSTEM - (AHU-1.1/CU-1.1 & AHU-1.2/CU-1.2)



CONTROLS INTEGRATION NOTES

- THE BASIS OF DESIGN CONTROL SYSTEM IS AUTOMATED LOGIC CONTROLS (ALC). THE CONTRACTOR SHALL FURNISH AND INSTALL A COMPLETE BUILDING AUTOMATION SYSTEM DDC CONTROL SYSTEM FOR THE ENTIRE BUILDING. THE ALC SYSTEM SHALL OVERLAY AND MONITOR THE CONTROLS SYSTEM FOR THE LG (VRF) CONTROL SYSTEM.
- 2. A GRAPHICS SUITE SHALL BE PROVIDED. ALL EQUIPMENT NAMEPLATE INFORMATION AND FACTORY SERVICE MANUALS SHALL BE EMBEDDED INTO THE CONTROL SYSTEMS'S
- 3. THERE ARE TWO DIFFERENT HVAC EQUIPMENT MANUFACTURER'S/SUPPLIERS, LG CORPORATION AND AAON ON THIS PROJECT WHICH SHALL HAVE TO FURNISH CONTROLLERS THAT ARE BACNET MSTP COMPATIBLE SO THAT THE ALC SYSTEM CAN COMMUNICATE WITH THEM.
- 4. THE VARIABLE REFRIGERANT FLOW (VRF) LG SYSTEM SHALL COME WITH IT'S OWN COMPLETE CONTROL SYSTEM TO MONITOR AND CONTROL THE VRF SYSTEM.
- 5. THE ALC CONTROL SYSTEM FRONT END SHALL CONNECT TO THE FIRE ALARM SYSTEM AND SHALL ALLOW REMOTE USERS TO BE ALARMEDINOTIFIED OF SMOKE ALARMS, HIGH CO LEVEL ALARMS, KITCHEN HOOD FIRE SUPPRESSION ACTIVATION ALARM ETC.

SEQUENCE OF OPERATION

- CONTRACTOR SHALL FURNISH AND INSTALL A COMPLETE BUILDING AUTOMATION. SYSTEM EQUAL TO AUTOMATED LOGIC CONTROLS (ALC) WEB CONTROL 6.0 WITH BACNET COMPATIBILITY
- 2. THE BUILDING AUTOMATION SYSTEM (BAS) SHALL HAVE ALL SYSTEM CONTROLLERS RELAYS TIME OLOCK AND CONTROL POWER TRANSFORMER (200/24V) IN A NEMA 1 ENCLOUSURE WITH DOOR LOCK. SEE SHEET M1.101 FOR LOCATION OF CONTROLS. CONTRACTOR SHALL PROVIDE ALL LOW VOLTAGE WIRING TO REMOTE CONTROLLERS, ZONE DAMPERS, EXHAUST FANS AND SENSORS FOR A COMPLETE AND WORKING HVAC CONTROL SYSTEM.
- 3. THE BAS SYSTEM SHALL BE A STAND ALONE SYSTEM SERVING ONLY THIS BUILDING. HOWEVER THE BAS SYSTEM SHALL HAVE A WEB FRIENDLY USER INTERFACE BASED ON MICROSOFT INTERNET EXPLORER. PROPRIETARY SOFTWARE IS NOT ALLOWED ON THIS PROJECT.

- 1 100% O.A. SPLIT SYSTEMS SHALL OPERATE CONTINUOUSLY 24 HOURS A DAY 7 DAYS A WEEK TO PROVIDE CODE REQUIRED VENTILATION AIR TO ALL AREAS OF THE BUILDING. THE AIR HANDLER SHALL SUPPLY TREATED OUTSIDE AIR TO THE
- 2. 100% O.A. CONDENSING UNIT SHALL CYCLE ON AND OFF TO MAINTAIN SUPPLY AIR SET POINT TEMPERATURE AND HUMIDITY. HOT GAS REHEAT SHALL ACTIVATE TO MAINTAIN SET POINT HUMIDITY
- 3. ELECTRIC HEATERS LOCATED IN 100% O.A. AIR HANDLING UNITS SHALL CYCLE ON AND OFF TO MAINTAIN SUPPLY AIR SET POINT TEMPERATURE DURING WINTER MONTHS WHEN THE OUTDOOR AIR TEMPERATURE IS SIGNIFICANTLY LOWER THAN THE INDOOR DESIGN SETPOINT

MINI SPLIT HEAT PUMPS (AHU-1.3/HP-1.3, AHU-1.4/HP-1.4,AHU-1.5/HP-1.5,AHU-1.6/HP-1.6,AHU-1.7/HP-1.7)

FAN COIL UNITS SHALL ENERGIZE AND CYCLE ON AND OFF TO ENSURE THAT THE SET POINT TEMPERATURE IS MET. THE FAN COIL UNIT SHALL MODULATE REFRIGERANT FLOW AND FAN SPEED AS NECESSARY TO MAINTAIN SETPOINT TEMPERATURE AND HUMIDITY IN EACH SPACE

THE VRE CONDENSING/HEAT PLIMP LINIT SHALL MODULATE REFRIGERANT FLOW AND SHALL MODULATE COMPRESSOR OUTPUT TO MATCH THE LOAD IMPOSED BY IT'S ASSOCIATED AIR HANDLING UNIT.

THERE IS NO UNOCCUPIED MODE FOR THIS BUILDING.

NIGHT SET BACK:

THERE IS NO NIGHT SET BACK MODE FOR THIS BUILDING

EXHAUST FAN:

ALL EXHAUST FANS SHALL BE MONITORED BY THE BAS SYSTEM.

EXHAUST FAN EF-1.1 SHALL BE CONTROLLED BY A WALL MOUNTED THERMOSTAT WITH MANUAL OVERRIDE

PROJECT NORTH 100% CONSTRUCTION DOCUMENTS

REVISIONS DATE DATE DESCRIPTION

HEAT PUMP UNITS (AHU-1.3/HP-1.3 THRU AHU-1.7/HP-1.7)

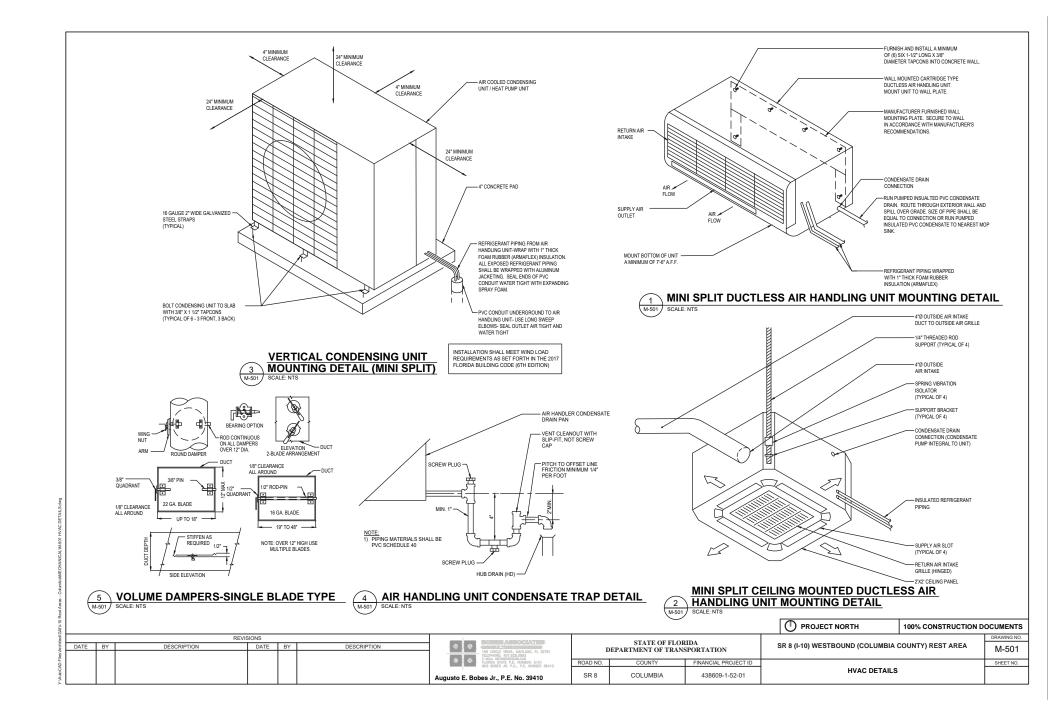
Augusto E. Bobes Jr., P.E. No. 39410

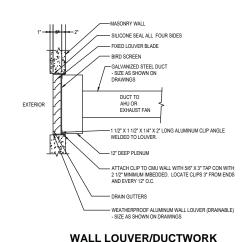
EXHAUST FANS (EF-1.1)

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION SR 8 438609-1-52-01 COLUMBIA

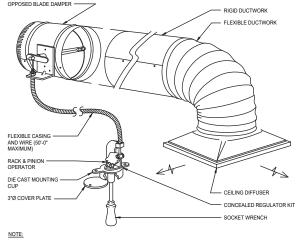
SR 8 (I-10) WESTBOUND (COLUMBIA COUNTY) REST AREA SHEET NO. **HVAC CONTROLS**

M-401





MOUNTING DETAIL



- 1) COORDINATE EXACT LOCATION OF CEILING MOUNTED CONCEALED REGULATOR WITH ARCHITECT
- 2) THE 270-301 BOWDEN CABLE CONTROL SYSTEM IS DESIGNED TO BE IMBEDDED IN THE CEILING FLUSH WITH THE FINISHED SURFACE.

5020CC ROUND DAMPER OR

830ACC RECTANGULAR

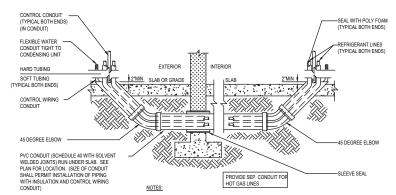
- CABLE SHALL CONSIST OF BOWDEN CABLE 0.054" STAINLESS STEEL CONTROL WIRE ENCAPSULATED IN 1/16" FLEXIBLE GALVANIZED SPIRAL WIRE SHEATH.
- LOCKING RACK AND PINION GEAR DRIVE SHALL BE CONSTRUCTED OF 14 GAUGE STEEL AND SHALL BE USED TO CONVERT ROTARY MOTION INTO PUSH-PULL MOTION.
- 5) CONTROL SHAFT SHALL BE "D"-STYLE FLATTENED 1/4" DIAMETER WITH 265° ROTATION PROVIDING 1-1/2" LINEAR TRAVEL CAPABILITY.

REMOTE VOLUME DAMPER MOUNTING DETAIL (SQUARE DIFFUSER)

AIR COOLED CONDENSING UNIT - MAINTAIN MINIMUM 3'-0" CLEARANCE ON ALL SIDES 4" CONCRETE PAD TO BE REINFORCED WITH WIRE MESH - 6 X 6 4" CONCRETE PAD - MINIMUM 4" LARGER THAN CONDENSING UNIT/HEAT PUMP UNIT ON ALL INSTALLATION SHALL MEET WIND LOAD REQUIREMENTS AS SET FORTH IN THE 201 FLORIDA BUILDING CODE (6TH EDITION) 2" WIDE, 10 GAGE GALVANIZED

METAL STRAP ATTACHED TO CONCRETE
PAD WITH 3/8" X 1 1/2" TAPCONS AND TO CONDENSING UNIT SUPPORT BASE WITH REFRIGERANT PIPING FROM AIR HANDLING (2) 1/4" SHEETMETAL SCREWS. PROVIDE ONE UNIT-WRAP WITH 1" THICK FOAM RUBBER STRAP EVERY 24" O.C. (MIN OF 2 PER SIDE) (ARMAFLEX) INSULATION. ALL EXPOSED PIPING ABOVE SLAB SHALL BE WRAPPED WITH ALUMINUM

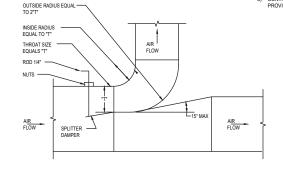
CONDENSING UNIT/HEAT PUMP UNIT MOUNTING DETAIL



PIPE CH.	ASE SIZES
SUCTION PIPE SIZE	PVC REFRIGERANT PIPE CHASE SIZE
5/8" TO 1 5/8"	4*
1 7/8" TO 2 5/8"	6"
3 1/8" TO 4 1/8"	8"

- SLEEVES FOR CONDUITS SHALL BE CAST INTO FOUNDATION WALL. POUR COORDINATE SIZES REQUIRED AND LOCATIONS WITH CONTRACTORS OF OTHER DIVISIONS PRIOR TO INSTALLATION.
- CONDUITS WHICH MUST PASS BELOW STRUCTURAL FOUNDATIONS SHALL HAVE MINIMUM 6° FINE GRAVEL AROUND PERIMETER 2-0° TO EITHER SIDE OF STRUCTURE - FIRMLY TAMPED.
- ALL BACKFILLING SHALL BE FIRMLY TAMPED. PRIOR TO LANDSCAPE WORK EXCAVATION AND BACKFILL SHALL BE IN ACCORDANCE WITH DIVISION 15 SPECIFICATIONS.
- 4. ALL EXPOSED PIPING (INTERIOR AND EXTERIOR) SHALL BE WRAPPED WITH AN ALLIMINUM JACKET

REFRIGERANT PIPING CONDUIT DETAIL



DAMPER TO BE NOT LESS THAN 1 1/2" X "T", MINIMUM LENGTH 12".

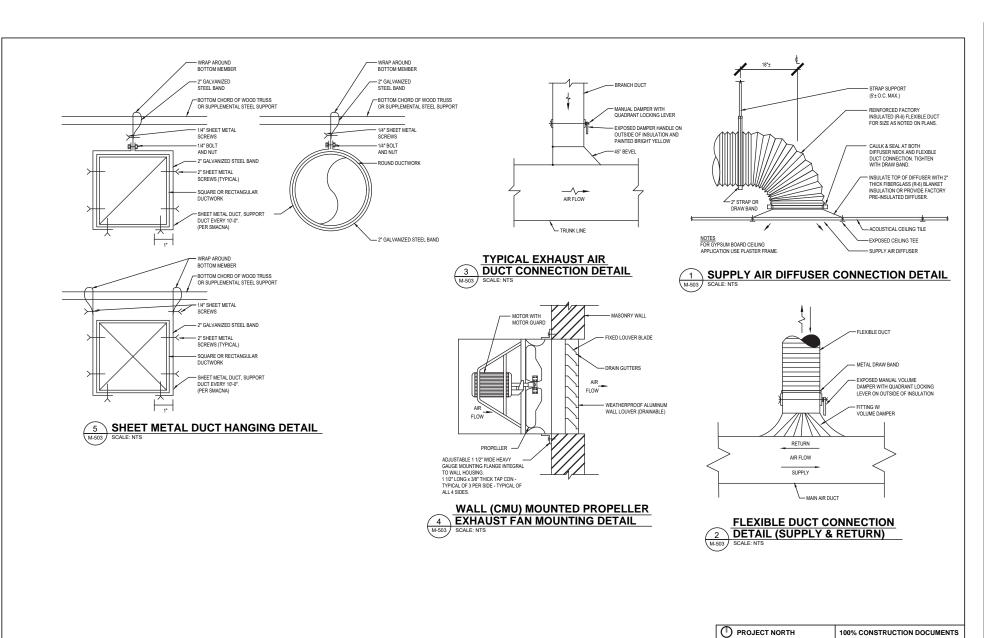
SPLITTER DAMPER DETAIL

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ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
SR 8	COLUMBIA	438609-1-52-01	

PROJECT NORTH	OCUMENTS				
•	DRAWING NO.				
SR 8 (I-10) WESTBOUND (COLUMBIA (M-502				
		SHEET NO.			
HVAC DETAILS					



STATE OF FLORIDA

DEPARTMENT OF TRANSPORTATION

438609-1-52-01

COLUMBIA

SR 8

Augusto E. Bobes Jr., P.E. No. 39410

SR 8 (I-10) WESTBOUND (COLUMBIA COUNTY) REST AREA

HVAC DETAILS

M-503 SHEET NO.

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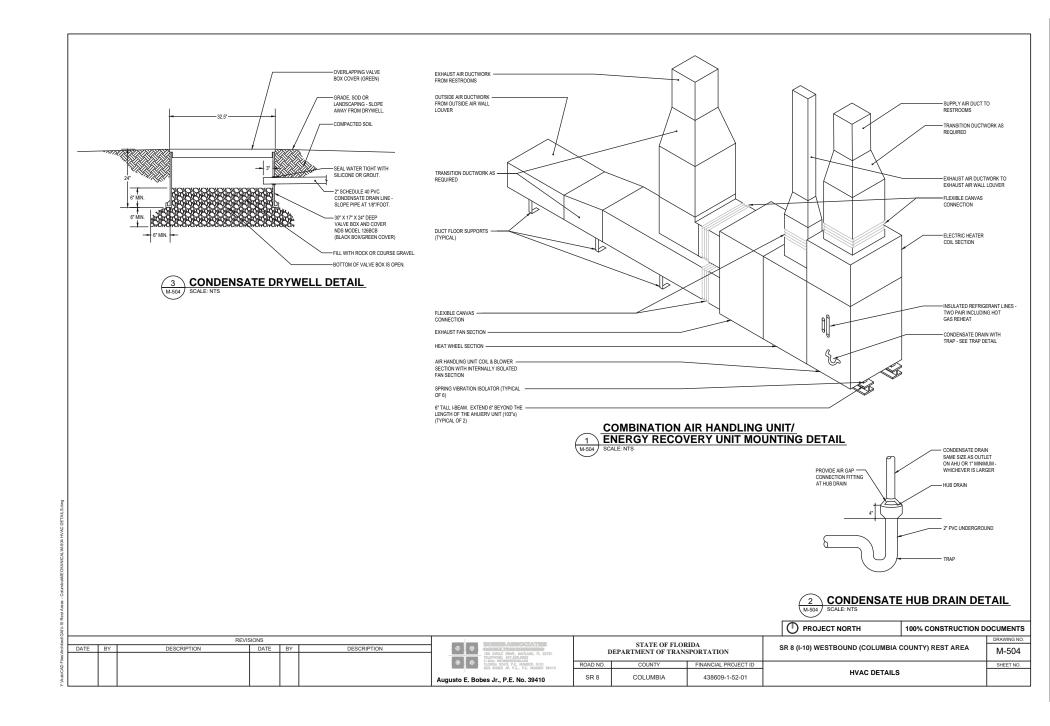
DATE BY

REVISIONS

DATE

DESCRIPTION

DESCRIPTION



EXTERNAL STATIC PRESSURE (IN H ₂ 0)	1.5"	1.5"
OUTSIDE AIR (CFM)	1600	1400
ENTERING AIR (DB/WB)	80.7/68.4	80,2/68,0
LEAVING AIR (COIL) (DB/WB)	49.45/49.24	54.8/53.2
HOT GAS REHEAT		
	YES/34.0 MBH	YES/27.0 MBH
ELECTRIC HEATER (MIN) (KW)	15.0 KW11.3KW	15.0 KW/11.3KW
FAN MOTOR (HP)	2.3	2.3
FAN MOTOR BRAKE (HP)		2.0
ELECTRICAL CHARACTERISTICS		
FLA	208/3/60	208/3/60
	42.1	39.9
MCA	53	50
FUSE	60	50
COIL (ROWS/FPI)	6/12	6/12
FILTER	2"/PLEATED	2"/PLEATED
WEIGHT	1701	1701
MANUFACTURER	AAON	AAON
MODEL	V3-BRB-8-0-162C-5Q2	V3-BRB-8-0-162C-5Q2
	NDENSING UNIT	V3-BKB-0-0-102C-3Q2
MARK	CU-1.1	CU-1.2
NO. OF COMPRESSORS / CIRCUITS	2/2	1/
ELECTRICAL SERVICE	208/3/60	208/3/60
SYSTEM EER	11.9/	12.1/
FLA	35	23
MCA	39	28
FUSE (MOCP)	50	45
		1069
WEIGHT (lbs)		
WEIGHT (lbs) MANUFACTURER	1069 AAON	
MANUFACTURER	AAON	AAON
MANUFACTURER MODEL		AAON
MANUFACTURER MODEL	AAON CFA-009-B-A-8-DCOOH	AAON
MANUFACTURER MODEL ENERGY RE	AAON CFA-009-B-A-8-DCOOH ECOVERY VENTILATOR	AAON CFA-007-B-A-8-DCOO
MANUFACTÜRER MODEL ENERGYRE MARK TYPE EXHAUST FAN	AAON CFA-009-B-A-8-DCOOH ECOVERY VENTILATOR ERV-1	AAON CFA-007-B-A-8-DCOO ERV-2
MANUFACTURER MODEL ENERGYRI MARK TYPE EXHAUST FAN EXHAUST VOLUME (CFM)	AAON CFA-009-B-A-8-DCOOH ECOVERY VENTILATOR ERV-1 1600	AAON CFA-007-B-A-8-DCOO ERV-2
MANUFACTURER MODEL ENERGY RI TYPE EXHAUST FAN EXHAUST VOLUME (CFM) EXTERNAL S.P. (N. H ₂ O)	AAON CFA-009-B-A-8-DCOOH ECOVERY VENTILATOR ERV-1 1600 1.5	AAON CFA-007-B-A-8-DCOO ERV-2 1400 1.5
MANUFACTURER MODEL MARK TYPE EXHAUST FAN EXHAUST VOLUME (CFM) EXTERNAL S.P. (N H ₂ C) MOTOR (HP)	AAON CFA-009-B-A-8-DCOOH ECOVERY VENTILATOR ERV-1 1600	AAON CFA-007-B-A-8-DCOO ERV-2
MANUFACTURER MODEL MARK TYPE EXHAUST FAN EXHAUST FON EXHAUST VOLUME (OFM) EXTERNAL SP, (M H ₂ O) MOTOR (HP) SUPPLYFAN	AAON CFA-009-B-A-8-DCOOH CFA-009-B-A-8-DCOOH ECOVERY VENTILATOR ERV-1 1600 1.5 2.3	AAON CFA-007-B-A-8-DCOO ERV-2 1400 1.5 2.3
MANUFACTURER MODEL ENERGY RI MARK TYPE EXHAUST FAN EXHAUST FOLIME (CFM) EXTERNAL S.P. (N. H-/C) MOTOR (HP) SUPPLY FAN SUPPLY FAN SUPPLY FAN SUPPLY VALUE (CFM)	AAON CFA-009-B-A-8-DCOOH ECOVERY VENTILATOR ERV-1 1600 1.5 2.3	AAON CFA-007-B-A-8-DCOO ERV-2 1400 1.5 2.3
MANUFACTURER MODEL ENERGY RI MARK TYPE EXHAUST FAN EXHAUST FAN EXHAUST FAN EXHAUST FON EXTERNAL S. P. (M. H.C.) MOTOR (HP) SUPPLY YOU, UME (CFM) MOTOR (HP) MOTOR (HP)	AAON CFA-009-B-A-8-DCOOH CFA-009-B-A-8-DCOOH ECOVERY VENTILATOR ERV-1 1600 1.5 2.3	AAON CFA-007-B-A-8-DCOO ERV-2 1400 1.5 2.3
MANUFACTURER MODEL ENERGY RI MARK TIPE EXHAUST FAN EXHAUST FAN EXHAUST FOR EXHAUST FAN SUPPLY FAN SUPPLY FAN MOTOR GUME (CFM) MOTOR GUME LECTIVALAL LECTIVALAL	AAON CFA-009-B-A-8-DCOCH ECOVERY VENTILATOR ERV-1 1600 1.5 2.3 1600 0.05	AAON CFA-007-B-A-8-DCOO ERV-2 1400 1.5 2.3 1400 0.05
MANUFACTURER MODEL ENERGY RI MARK TYPE EXHAUST FAN EXHAUST FAN EXHAUST FAN EXTERNAL S. P. (M. H.C) MOTOR (HP) SUPPLY YOL UME (CFM) MOTOR (HP) ELECTRICAL (VIPPHIZ)	AAON CFA-009-B-A-8-DCOOH ECOVERY VENTILATOR ERV-1 1600 1.5 2.3	AAON CFA-007-B-A-8-DCOO ERV-2 1400 1.5 2.3
MANUFACTURER MODEL ENERGY RI MARK TIPPE EXHAUST FAN EXHAUST FAN EXHAUST FAN SUPPLY YOU, UME (CFM) SUPPLY YOU ME (CFM) MOTOR (UMP ELECTRICAL (VIPPHIC) SUMMER CONDITIONS	AAON OFA-008-A-DCOCH ECOVERY VENTILATOR ERV-1 1600 1.5 2.3 1600 0.05 208/3/60	AAON CFA-007-B-A-8-DCOO ERV-2 1400 1.5 2.3 1400 0.05
MANUFACTURER MODEL ENERGY RI MARK TYPE EXHAUST FAN EXHAUST FAN EXHAUST FAN EXHAUST FAN EXHAUST FAN MOTOR (HP) SUPPLY YOLUME (CFM) MOTOR (HP) ELECTRICAL (VIPHIC) SUMMER CONDITIONS EAT. (FP) (G. BW/B.)	AAON CFA009-B-4-DCOCH CFA009-B-4-DCOCH ERV-1	AAON CFA-007-B-A-8-DCOO ERV-2 1400 1.5 2.3 1400 0.05 2083/60 94.0/78.0
MANUFACTURER MODEL ENERGYRI MARK TYPE EXHAUST FAN EXHAUST FAN EXHAUST FAN EXHAUST FAN BOTOR (PF) SUPPLY FAN MOTOR (PF) MOTOR (PF) MOTOR (PF) ELECTRICAL (VPPHZ) EAT. (PF) (D. B.W.B.) EAT. (PF) (D. B.W.B.)	AAON OFA-009-B-A-D-COOH CF0-009-B-A-D-COOH CF0-009-B-A-D-COOH ERV-1 1600 1.5 2.3 1600 0.05 2083-90 94.078.0 50.480.1	AAON CFA-007-B-A-8-DCOO ERV-2 1400 1.5 2.3 1400 0.05 208/3/80 94.0/78.0 50.4/50.1
MANUFACTURER MODEL ENERGY RI MARK TYPE EXHAUST FAN EXHAUST FAN EXHAUST FAN EXHAUST FON MOTOR (HP) SUPPLY YOLUME (CFM) MOTOR (HP) SUPPLY YOLUME (CFM) SUPPLY YOLUME (CFM) MOTOR (HP) SUPPLY YOLUME (CFM) SUPPLY FAN SUPPLY YOLUME (CFM) MOTOR (HP) SUPPLY FAN SUPPLY YOLUME (CFM) MOTOR (HP) SUPPLY YOLUME (CFM) SUPPLY YOLUME (CFM) MOTOR (HP) SUPPLY YOLUME (CFM) SUPPLY YOLUME (CFM) LECTRICAL (V)PHIZ) SUMMER CONDITIONS EAT. (FP) (D. B.W.B.) LAT. (FP) (D. B.W.B.) LAT. (FP) (D. B.W.B.)	AAON CFA009-B-4-DCOCH CFA009-B-4-DCOCH ERV-1	AAON CFA-007-B-A-8-DCOO ERV-2 1400 1.5 2.3 1400 0.05 2083/60 94.0/78.0
MANUFACTURER MODEL ENERGYRI MARK TYPE EXHAUST FAN EXHAUST FAN EXHAUST FAN EXHAUST FAN EXHAUST FAN SUPPLY YAU MOTOR (RP) SUPPLY YAU SUPPLY YAU SUPPLY YAU SUPPLY YAU SUPPLY FAN SUPPLY F	AAON CFA009-B-A-D-COOH CFA009-B-A-D-COOH ERVY-INTILATOR ERV-1 1600 1.5 2.3 1600 0.05 208:360 940/78 0 50.480 1 660%	AAON CFA-007-8-A-8-DCOC ERV-2 1400 1.5 2.3 1400 0.05 208/3/60 94.078.0 50.4/50.1 68%
MANUFACTURER MODCL ENERGY RI MARK TYPE EXHAUST FAN EXHAUST FAN EXHAUST FAN EXHAUST FAN EXHAUST FAN EXHAUST FAN MOTOR (HP) SUPPLY YAL UME (CFM) MOTOR (HP) ELECTRICAL (VIPHICA) SUMMER CONDITIONS ELAT. (FP) (D. B.W.B.) EAT. (FP) (D. B.W.B.) EFF. (N) MINTER CONDITIONS MINTER CONDITIONS EAT. (FP) (D. B.W.B.) EAT. (FP) (D. B.W.B.) EAT. (FP) (D. B.W.B.) EAT. (FP) (D. B.W.B.)	AAON CFA-009-B-A-9-DCOCH CFA-009-B-A-9-DCOCH ERV-1 1600 1.5 2.3 1600 0.05 286/3/80 94.0/78.0 50.450.1 68% 38.0/94.0	AAON CFA-07-B-A-8-DCOO ERV-2 1400 145 2-3 1400 0.05 203/360 94.07/8.0 50.450.1 50.45
MANUFACTURER MODEL ENERGY RI MARK TYPE EXHAUST FAN EXHAUST FAN EXHAUST FOLUME (CFM) EXTERNAL 5, (M H/2) MOTOR (HP) SUPPLY YOULUME (CFM) MOTOR (HP) ELECTRICAL ELECTRICAL ELT (F) (D B/MB) LAT (F) (D B/MB) EAT (F) (D B/MB) EAT (F) (D B/MB) EAT (F) (D B/MB) EAT (F) (D B/MB)	AAON CFA009-B-A-D-COOH CFA009-B-A-D-COOH ERVY-INTILATOR ERV-1 1600 1.5 2.3 1600 0.05 208:360 940/78 0 50.480 1 660%	AAON CFA-007-B-A-8-DCOO ERV-2 1400 15 23 1400 0.05 2083/60 94.076.0 50.4/50.1 68%
MANUFACTURER MODEL ENERGY RI MARK TYPE EXHAUST FAN EXHAUST FAN EXHAUST FAN EXHAUST FAN EXHAUST FAN SUPPLY VALUME (CFM) MOTOR (JIP) ELECTRICAL (VIPPHUZ) SUMMER CONDITIONS E.A.T. (P.) (D. B.W.B.) E.A.T. (P.) (D. B.W.B.) E.F. (J. B. B.W.B.) E.F. (J. B.W.B.) LAT. (P.) (D. B.W.B.)	AAON CFA-009-B-A-D-COOH COVERY VENTILATOR FRV-1 1600 1.5 2.3 1600 0.05 208:380 94.078.0 50.450.1 65% 33.034.0 85.663.1	AAON CFA-07-8-8-0COQ EFRV-2 EFRV-2 1400 15 15 23 23 1400 0.05 2093/60 94.07/6.0 60% 88.8642
MANUFACTURER MODEL ENERGY RI MARK TYPE EXHAUST FAN EXHAUST FAN EXHAUST FAN EXTERNAL S. P. (M. H.C) MOTOR (HP) SUPPLY YOL UME (CFM) MOTOR (HP) ELECTRICAL (VIPPHIZ)	AAON CFA-009-B-A-9-DCOCH CFA-009-B-A-9-DCOCH ERV-1 1600 1.5 2.3 1600 0.05 286/3/80 94.0/78.0 50.450.1 68% 38.0/94.0	AAON CFA-07-B-A-8-DCOO ERV-2 1400 145 2-3 1400 0.05 203/360 94.07/8.0 50.450.1 50.45

SPLIT SYSTEM AIR CONDITIONING UNIT WITH ENERGY RECOVERY VENTILATOR UNIT/SECTION SCHEDULE AIR HANDLING UNIT

AHU-1.1

83.79

52.18

1600

AHU-1.2

64.73

41.02

1400

MARK TOTAL CAPACITY (MBH)

SENSIBLE CAPACITY (MBH)

TOTAL SUPPLY AIR (CFM)

				M	INI SPLIT SP	LIT SYSTEM HE	AT PUMP AIR	CONDITIC	NING UN	IIT SCHEE	ULE						
						AIR HANDL	ING UNIT/EVAPO	RATOR									
MARK	LOCATION	MANUF.	UNIT TYPE	MODEL NO.	NOM. COOLING CAP.(BTUH)	NOM. HEATING CAP.(BTUH) @47	FAN CFM MIN/MAX	FAN WATTS/FLA	POWER V/PH/Hz	LIQUID INCH	GAS INCH	MCA/MOCP	WEIGHT LBS		COMMENTS	NOTES	
AHU-1.3	OFFICE 011	LG	CEILING MOUNTED CASSETTE TYPE UNIT	AM012NNNDCH	MAX 12000 MIN 3400	MAX 13500 MIN 3000	283/335/371	65/.33	208/1/60	1/4	1/2	.26/15	32	PROVI	DE UNIT WITH 15 CFM OF OUTSIDE AIR	1-7	
AHU-1.4	BREAK RM 007	LG	CEILING MOUNTED CASSETTE TYPE UNIT	AM012NNNDCH	MAX 12000 MIN 3400	MAX 13500 MIN 3000	283/335/371	65/.33	208/1/60	1/4	1/2	.26/15	32	PROVI	PROVIDE UNIT WITH 15 CFM OF OUTSIDE AIR		
AHU-1.5	STORAGE RM 008	LG	CEILING MOUNTED CASSETTE TYPE UNIT	AM012NNNDCH	MAX 12000 MIN 3400	MAX 13500 MIN 3000	283/335/371	65/.36	208/1/60	1/4	1/2	.26/15	32	PROVI	1-7		
AHU-1.6	ITS / COMM. RM 099	LG	WALL MOUNTED	AC012MNADCH/A	MAX 12000 MIN 3400	MAX 14000 MIN 3000	194/247/300	-/.33	208/1/60	1/4	1/2	1.0/	17	NO OUTSIDE AIR		1-6	
AHU-1.7	ELECTRICAL ROOM 010	LG	WALL MOUNTED	AC012MNADCH/A	MAX 12000 MIN 3400	MAX 14000 MIN 3000	194/247/300	-/.33	208/1/60	1/4	1/2	1.0/	17		1-6		
						HEAT	PUMP - CONDEN	SING UNIT									
MARK	LOCATION	MANUF.	UNIT TYPE	MODEL NO.	NOM. COOLING	SEER/EER	HSPF/COP @47°	FAN MTR	POWER V/PH/Hz	LIQUID	GAS INCH	WEIGHT LBS	MCA / MOCP	REFR.	COMMENTS	NOTES	
HP-1.3	GROUND	LG	AIR COOLED HEAT PUMP	AC012KX ADCH/AA	MAX 12000 MIN 5800	20.8/12.0	10.2/4.31		208/1/60	1/4	1/2	104	11/28	R-410A	PROVIDE VARIABLE SPEED INVERTER- DRIVEN COMPRESSOR	1-7	
HP-1.4	GROUND	LG	AIR COOLED HEAT PUMP	AC012KX ADCH/AA	MAX 12000 MIN 5800	20.8/12.0	10.2/4.31		208/1/60	1/4	1/2	104	11/28	R-410A	PROVIDE VARIABLE SPEED INVERTER- DRIVEN COMPRESSOR	1-7	
HP-1.5	GROUND	LG	AIR COOLED HEAT PUMP	AC012KX ADCH/AA	MAX 12000 MIN 8000	24.6/14.4	11.0/4.28		208/1/60	1/4	1/2	100	11/28	R-410A	PROVIDE VARIABLE SPEED INVERTER- DRIVEN COMPRESSOR	1-7	
HP-1.6	GROUND	LG	AIR COOLED HEAT PUMP	AC012KX ADCH/AA	MAX 12000 MIN 3400	18.0/9.84	9.5/2.44	-	208/1/60	1/4	1/2	80	10.7/15	R-410A	PROVIDE VARIABLE SPEED INVERTER- DRIVEN COMPRESSOR	1-6	
HP-1.7	GROUND	LG	AIR COOLED HEAT PUMP	AC012KX ADCH/AA	MAX 12000 MIN 3400	18.0/9.84	9.5/2.44		208/1/60	1/4	1/2	80	10.7/15	R-410A	PROVIDE VARIABLE SPEED INVERTER- DRIVEN COMPRESSOR	1-6	

MINISPLIT SYSTEM NOTES

- POWER FOR INDOOR UNIT IS FED FROM OUTDOOR UNIT.
 HEAT PUMP UNIT SHALL UTILIZE R-410A REFRISERANT.
 PROVIDE FACTORY FABRICATED HAIL GUARD ON OUTDOOR HEAT PUMP UNIT COIL.
 PROVIDE FACTORY FABRICATED HAIL GUARD ON OUTDOOR HEAT PUMP UNIT COIL.
 PROVIDE VANDAL PROOF CAPS ON ALL REFRISERANT PIPING SERVICE VALVES TO PREVENT UNAUTHORIZED RELEASE OF REFRISERANT.
 CONTRACTOR SHALL SECURE THE HEAT PUMP UNIT TO THE 4"TALL CONCRETE SERVICE PAD TO MEET THE WIND LOAD REQUIREMENTS AS SET FORTH IN THE 2017 FLORIDA BUILDING CODE (6TH EDITION).
 FURNISH SYSTEM WITH WIRED REMOTE CONTROLLER WITH TIME CLOCK.
 FURNISH WITH 4 WAY CASSETTE FASCIA PANEL.

			AIR DI	STRIBL	JTION SC	HEDULE			
SYMBOL	DESCRIPTION	MODULE SIZE	MATIRIAL	FINSH	NECK SIZE	DAMPER	BORDER FRAME TYPE	MANUFACTURER	MODEL NUMBER
	SQUARE SUPPLY AIR DIFFUSER WITH THREE CONE ONE PICE CONSTRUCTION, ROUND NECK, VERTICAL-TO-HORIZONTAL DISCHARGE PATTERN, NO CORNER JOINTS REMOVABLE INNER CONES		ALUMINUM	WHITE	SEE DWG	NO	SURFACE CEILING	METALAIRE	5700
	SQUARE SUPPLY AIR DIFFUSER WITH THREE CONE ONE PICE CONSTRUCTION, ROUND NECK, VERTICAL-TO-HORIZONTAL DISCHARGE PATTERN, NO CORNER JOINTS REMOVABLE INNER CONES		ALUMINUM	WHITE	SEE DWG	NO	SURFACE CEILING	METALAIRE	5700
ER-1	EXHAUST AIR REGISTER - SIDEWALL, SURFACE MOUNTED, EGG CRATE	SEE DWG	ALUMINUM	WHITE	SEE DWG	NO	SURFACE WALL	METALAIRE	CC5
ER-2	EXHAUST AIR REGISTER - CEILING, SURFACE MOUNTED, EGG CRATE	SEE DWG	ALUMINUM	WHITE	SEE DWG	NO	SURFACE CEILING	METALAIRE	CC5
SR-1	SUPPLY AIR REGISTER - CEILING MOUNTED, EGG CRATE	SEE DWG	ALUMINUM	WHITE	SEE DWG	NO	SURFACE WALL	METALAIRE	CC5

	FAN SCHEDULE																		
UNIT AREA		PERFORMANCE DATA		CONSTRUCTION DATA			MOTOR DATA			ELECTRICAL					NOTES				
NUMBER	SERVED	CFM	SP	RPM	SONE	BHP	FAN TYPE	DRIVE	DISCH	RPM	HP	WATTS	START	VOLTS	PHASE	CYCLES	MANUFACTURE R/MODEL	(LBS)	
EF-1.1	STORAGE BUILDING	300	.375"	1160	11.6		WALL MOUNTED PROPELLER	DRECT	HORIZ	1160	1/6	20	++-	115	1	60	GREENHECK AER-E20C-406-86	169	1-7

- NOIES

 1. FURSISH FAN WITH EC MOTOR

 2. ATTACH FAN TO WALL

 3. FURSISH FAN WITH NITEGRAL ELECTRICAL DISCONNECT.

 4. FURRISH FAN WITH WALL HOUSING

 5. FURRISH FAN WITH WALL FOUNDING

 6. FURRISH FAN WITH WALL MOUNTED THERMOSTAT.

 7. FAN AND FAN MOTOR SHALL BE EIPLOSION PROOF.

OAD-1
OUTSIDE AIR DAMPER: SIZE AS REQUIRED FOR DUCTWORK IT IS SERVING. RATED FOR HIGH HUMDITY. ALUMINUM CONSTRUCTION (FRAME AND BLADES), LOW LEAKAGE WITH LINKAGE, AXLE AND BEARINGS MANUFACTURED FORM TYPE 30 STAINLESS STEEL. GREENHECK MODEL VCD-40 OR EQUAL RUSKIN DAMPER.

DESIGN CONDITIONS SCHEDULE											
GAINSVILLE	SUM	MER	WINTER								
FLORIDA	DB(*F)	WB(*F)	DB(*F)								
INDOOR	75	62.5	70								
OUTDOOR*	94.0	77.0	30.0								

*PER ASHRAE FUNDAMENTALS HANDBOOK

										PROJECT NORTH	100% CONSTRUCTION D	OCUMENTS
REVISIONS								STATE OF FLORIDA				DRAWING NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION		DEPARTMENT OF TRANSPORTATION			SR 8 (I-10) WESTBOUND (COLUMBIA	M-601	
						180 CIRCLE DRIVE, MATLAND, FL 32751 TELEPHONE: 407.628.0882	DEFARIMENT OF TRANSFORTATION			1001		
				1		FLORIDA STATE P.E. NUMBER: 5131 QUS BORES JR. P.E., P.E. NUMBER 38410	ROAD NO.	ROAD NO. COUNTY FINANCIAL PROJECT ID				SHEET NO.
						Augusto E. Bobes Jr., P.E. No. 39410	SR 8	COLUMBIA	438609-1-52-01	HVAC SCHEDULES		

PLUMBING GENERAL NOTES

- ALL WORK SHALL CONFORM WITH THE 2017 FLORIDA PLUMBING CODE (6TH EDITION) THE 2017 FLORIDA BUILDING CODE (6TH EDITION), THE 2017 FLORIDA ACCESSIBILITY CODE (6TH EDITION), 2017 FLORIDA GAS CODE (6TH EDITION), THE FDOT REQUIREMENTS AND ALL OTHER APPLICABLE CODES AND STANDARDS
- 2 ALL HANDICAP FIXTURES SHALL BE MOUNTED IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT (ADA) AND THE 2017 FLORIDA ACCESSIBILITY CODE CHAPTER
 11 - FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION.
- CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, AND EQUIPMENT FOR PLUMBING PIPING SYSTEMS, DOMESTIC WATER SYSTEMS, PLUMBING CONNECTIONS AND ALL FITTINGS, SPECIALTIES, ANCHORING/SUPPORTING OF EQUIPMENT, AUXILIARY MATERIALS AND ACCESSORIES AS SHOWN ON THE DRAWINGS AND SPECIFIED HEREIN FOR A COMPLETE AND OPERATIONAL PLUMBING SYSTEM
- 4. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VISIT THE SITE OF THE WORK AND BECOME FAMILIAR WITH ALL AVAILABLE INFORMATION REGARDING THE LOCATION OF EXISTING FACILITIES. FAILURE OF THE CONTRACTOR TO FULLY INFORM HIMSELF OF ALL EXISTING CONDITIONS WILL NOT BE CAUSE FOR ADDITIONAL
- ALL EQUIPMENT AND MATERIALS USED IN THIS INSTALLATION SHALL BE NEW, OF APPROVED QUALITY AND MANUFACTURE AND, UNLESS OTHERWISE NOTED, SHALL BE STANDARD CATALOG ITEMS OF THE VARIOUS MANUFACTURERS. EACH COMPONENT OF THE WORK SHALL BE COMPLETE, CONNECTED AND CAPABLE OF SATISFACTORY FUNCTIONAL OPERATION.
- PIPING SYSTEMS SHALL BE COMPLETE WITH PIPE, PIPE FITTINGS, VALVES, STRAINERS, EXPANSION JOINTS, FLEXIBLE PIPE CONNECTIONS, HANGERS, SUPPORTS, ANCHORS, GUIDES, SLEEVES, AND ACCESSORIES REQUIRED TO ENSURE PROPER OPERATION FOR THE PURPOSE INTENDED, AS SHOWN AND SPECIFIED, PIPING. VALVES AND ACCESSORIES SHALL BE SUITABLE FOR THE SYSTEM PRESSURE, TEMPERATURE AND CIRCULATING LIQUID.
- FOLLOW REQUIREMENTS OF THE FLORIDA BUILDING CODE, REGULATIONS ORDINANCES, ETC., OF THE STATE, COUNTY, AND/OR MUNICIPALITY. IN WHICH THE CONSTRUCTION IS LOCATED, AND ANY GOVERNMENT ENTITY HAVING JURISDICTION
- ALL EQUIPMENT SHALL FIT THE ALLOTTED SPACE AND SHALL LEAVE REASONABLE ACCESS ROOM FOR SERVICING AND REPAIRS. GREATER SPACE AND ROOM REQUIRED BY SUBSTITUTED EQUIPMENT SHALL BE PROVIDED BY THE CONTRACTOR AND AT HIS EXPENSE AND MEETING THE APPROVAL OF THE CONSTRUCTION MANAGER.
- IF THE CONTRACTOR DISCOVERS ANY DISCREPANCIES BETWEEN EQUIPMENT DIMENSIONS AND SPACE ALLOTMENTS THEREFORE: HE SHALL NOTIFY THE CONSTRUCTION MANAGER IN WRITING AND SHALL NOT PROCEED WITH THE WORK UNTIL HE HAS RECEIVED WRITTEN INSTRUCTIONS FROM THE CONSTRUCTION
- 10. THE CONTRACTOR SHALL DO NO CUTTING THAT MAY IMPAIR STRENGTH OF BUILDING CONSTRUCTION. NO HOLES, EXCEPT FOR SMALL SCREWS, MAY BE DRILLED IN BEAMS OR OTHER STRUCTURAL MEMBERS WITHOUT OBTAINING PRIOR APPROVAL OF THE CONSTRUCTION MANAGER
- 11. THE CONTRACTOR SHALL FURNISH ALL ELECTRICAL WORK ASSOCIATED WITH PLUMBING EQUIPMENT, INCLUDING ELECTRICAL CONTROLS, SWITCHES, CONTACTORS AND STARTERS FOR ALL EQUIPMENT ITEMS REQUIRING SAME. ALL ELECTRICAL WORK SHALL CONFORM IN ALL RESPECTS TO THE REQUIREMENTS OF THE CURRENT

- 12. UNLESS OTHERWISE INDICATED, METAL FASTENERS AND RELATED PARTS SHALL BE OF ALUMINUM OR STAINLESS STEEL AND SHALL BE OF ADEQUATE STRENGTH FOR THE PURPOSE INTENDED
- 13. LEAVE CONCEALED WORK UNCOVERED UNTIL REQUIRED TESTS HAVE BEEN COMPLETED BUT IF NECESSARY TO MAKE TESTS ON PORTIONS OF THE WORK THOSE PORTIONS OF THE WORK MAY BE CONCEALED AFTER BEING INSPECTED AND APPROVED. REPAIR DEFECTS THAT ARE DISCOVERED AS A RESULT OF INSPECTIONS OR TESTS WITH NEW MATERIALS, CALIFICING, WELDING OR SOLDERING OF SCREWED POINTS, CRACKS, OR HOLES WILL NOT BE ACCEPTED. REPEAT TESTS AFTER DEFECTS HAVE BEEN CORRECTED.
- 14. CLEANING / STERILIZATION: AS SOON AS THE WATER PIPING HAS BEEN THOROUGHLY FLUSHED OUT, STERILIZE THE LINES BY INTRODUCING INTO THEM A SOLUTION OF CALCIUM HYPOCHLORITE OR CHLORIDE OF LIME. OPEN AND CLOSE ALL VALVES WHILE SYSTEM IS BEING CHI ORINATED AFTER THE STERILIZING AGENT HAS BEEN APPLIED FOR 24 HOURS, TEST FOR RESIDUAL CHLORINE AT THE ENDS OF THE LINES.
 REPEAT THE PROCESS IF LESS THAN 10 PARTS PER MILLION IS INDICATED. WHEN THE TESTS SHOW AT LEAST 10 PARTS, PER MILLION OF RESIDUAL CHI ORINE. FLUSH OUT. THE SYSTEM UNTIL ALL TRACES OF THE CHEMICAL USED ARE REMOVED. MAKE NECESSARY CONNECTIONS TO STERILIZE PIPING
- 15. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF HIS STORED MATERIALS AND EQUIPMENT FOR THE DURATION OF THE PROJECT. PROVIDE PROTECTIVE COVER OVER EQUIPMENT TO ENSURE AGAINST WATER AND DUST DAMAGE AND PROVIDE SUITABLE PALLETS BETWEEN EQUIPMENT AND MATERIALS STORED ON GROUND.
- 16. THE CONTRACTOR SHALL PAY FOR AND PROVIDE ALL REQUIRED PERMITS.
- 17 THE CONTRACTOR SHALL FURNISH A WRITTEN GUARANTEE THAT THE PLUMBING WORK IS FREE FROM DEFECTS IN MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF ACCEPTANCE BY OWNER. DURING THE FIRST YEAR, ALL SYSTEM MALFUNCTIONS SHALL BE REPAIRED AND ALL DEFECTIVE EQUIPMENT SHALL BE REPLACED AT NO EXPENSE TO THE OWNER.
- 18. THE CONTRACTOR SHALL PROVIDE OPERATION AND MAINTENANCE (0&M) MANUALS INCLUDING PREVENTATIVE MAINTENANCE REQUIREMENTS FOR ALL PLUMBING FOUIPMENT
- 19. THE CONTRACTOR SHALL PREPARE RED LINED AS BUILT DRAWINGS OF THE INSTALLED PLUMBING SYSTEMS AT THE COMPLETION OF THE PROJECT CONSTRUCTION AND SHALL INCLUDE THOSE AS-BUILT DRAWINGS AT PROJECT CLOSEOUT ALONG WITH THE O&M MANUAL.
- 20 THE CONTRACTOR SHALL PROVIDE A COMPLETE PLUMBING SHOP DRAWING SUBMITTAL TO THE ENGINEER FOR REVIEW AND APPROVAL. THE PLUMBING SUBMITTAL SHALL INCLUDE ALL PLUMBING FIXTURES, WATER HEATERS, PIPING, PIPING INSULATION, PIPE HANGERS, PUMPS, VALVES, MIXING VALVES, EXPANSION TANKS, INTERCEPTORS ETC. CONTRACTOR SHALL NOT ORDER ANY PLUMBING EQUIPMENT UNTIL THIS SUBMITTAL IS REVIEWED AND ACCEPTED BY THE ENGINEER OF RECORD. CONTRACTOR SHALL SUBMITTHE SHOP DRAWING AS ONE COMPLETE SUBMITTAL AND SHALL NOT PIECE MEAL THE SUBMITTAL SPREAD OUT OVER THE COURSE OF DAYS AND WEEKS. FAILURE TO SUBMIT A COMPLETE PLUMBING SHOP DRAWING SUBMITTAL SHALL RESULT IN AN IMMEDIATE REJECTION OF THE SHOP DRAWING SURMITTAL

PLUMBING SYMBOL LEGEND										
	SANITARY WASTE LINE- BELOW FLOOR	o	PIPE ELBOW UP		WALL MOUNTED LAVATORY					
	SANITARY WASTE LINE- ABOVE FLOOR	<u> </u>	PIPE ELBOW DOWN	١ ٥	COUNTER TOP LAVATORY					
	SANITARY VENT LINE	WCO ⊪	WALL CLEANOUT	\ \ \	BALL VALVE					
—-—	DOMESTIC COLD WATER	FCO ()===	FLOOR CLEANOUT	$\overline{}$	BALL/BUTTERFLY VALVE					
	DOM. HOT WATER 140° F	GCO O===	GROUND CLEANOUT	<u>_</u>	BACKWATER VALVE					
	DOMESTIC HOT WATER RECIRCULATED	VTR0	VENT THRU ROOF	—	INLINE PUMP					
— — — т–	TEMPERED WATER 110° F	RL O	ROOF LEADER	\dashv	UNION					
—F-	FILTERED WATER	RD 🔘	ROOF DRAIN	Ą	TEMP. & PRESSURE RELIEF VALVE					
s-	SOFT WATER	FD 🖸	FLOOR DRAIN	—δ—	соск					
== ST ==	STORM DRAIN - BELOW FLOOR	HD O	HUB DRAIN	—- ₹ w-	GAS COCK					
— ST —	STORM DRAIN - ABOVE FLOOR	₩-	POINT OF CONNECTION NEW TO EXISTING	_=	WATER ARRESTOR					
== GR==	GREASE WASTE LINE- BELOW FLOOR	—	LIMIT OF DEMOLITION	₹	BALANCING VALVE					
— с—	CONDENSATE DRAIN	нв 🔶	HOSE BIBB	1	DRAWING HEX NOTE					
— G—	GAS LINE	wc]o ∷	WATER CLOSET	Λ	REVISION DELTA AND NUMBER					
— A —	AIR LINE	2	URINAL							

	PLUMB	ING	ABBREVIAT	TIONS	5
1	AIR ADMITTANCE VALVE	ESE	EMERGENCY SHOWER/	PW	POWER WASH

AD	AREA DRAIN	EWH	ELECTRIC WATER HEATER	RP	RECIRCULATING PUMP	
ADR	AIR DRIER (COMPRESSED AIR)	EWC	ELECTRIC WATER COOLER	RWL	RAIN WATER LEADER	
AF	AIR FILTER (COMPRESSED AIR)	FD	FLOOR DRAIN	SAN	SANITARY	
AFF	ABOVE FINISHED FLOOR	FL	FLOOR	s	SINK	
AR	AIR RISER DIAGRAM	FS	FLOOR SINK	SR	SANITARY RISER DIAGRAM	
BF	BARRIER FREE	GPH	GALLON PER HOUR	SD	STORM DRAIN	
BTU	BRITISH THERMAL UNIT	GR	GAS RISER DIAGRAM	SE	SEWAGE EJECTOR	
B/S	BELOW SLAB	GWH	GAS WATER HEATER	SH	SHOWER	
CA	COMPRESSOR (COMPRESSED AIR)	НВ	HOSE BIBB	SS	SERVICE SINK	
CLG	CEILING	HD	HUB DRAIN	ST	STORM	
CHDW	CHILLER, DRINKING WATER	HW	HOT WATER	TEMP	TEMPERATURE	
CP	CONDENSATE PUMP	HWR	HOT WATER RECIRCULATING	TW	TEMPERED WATER	
CS	COUNTER SINK	IEWH	INSTANTANEOUS ELECTRIC WATER HEATER	TMW	TEMPERING/MIXING VALVE	
CW	COLD WATER	IM	ICE MAKER	UR	URINAL	
°F	DEGREES FARENHEIT	KS	KITCHEN SINK	UG	UNDERGROUND	
C.O.	CLEAN OUT	KW	KILOWATT	VTR	VENT THRU ROOF	
DISP	DISPOSER	LAV, L	LAVATORY	WC	WATER CLOSET	
DN	DOWN	MBH	MEGA BTU PER HOUR	W/	WITH	
DF	DRINKING FOUNTAIN	MS	MOP SINK	WH	WATER HEATER	
ΔT	TEMP. DIFFERENCE IN °F	NIC	NOT IN CONTRACT	WHA	WATER HAMMER ARRESTOR	
DWG	DRAWING	OD	OVER FLOW DRAIN	WF	WATER FILTER	
EDF	ELECTRIC DRINKING FOUNTAIN	PC	PUMP, CIRCULATING (DOMESTIC HOT WATER)	WR	WATER RISER DIAGRAM	
EFF	EFFICIENCY	PD	PLANTER DRAIN	ws	WATER SOFTENER	
		PS	PUMP, SUMP	V	VACUUM	

		PROJECT NORTH	PROJECT NORTH 100% CONSTRUCTION D							
				DRAWING NO.						
STATE OF FLOR DEPARTMENT OF TRANS		SR 8 (I-10) WESTBOUND (COLUMBIA	COUNTY) REST AREA	P-001						
COUNTY	FINANCIAL PROJECT ID			SHEET NO.						

DATE DATE DESCRIPTION



FINANCIAL PROJECT ID SR 8 COLUMBIA 438609-1-52-01

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PLUMBING SYMBOL LEGEND & GENERAL NOTES

PLUMBING CONSTRUCTION NOTES

- NOTE: IN GENERAL, PLANS AND DIAGRAMS OF UTILITY RUNS ARE SCHEMATIC ONLY AND SHOULD NOT BE SCALED. CONTRACTOR SHALL COORDINATE AT SITE ALL PLUMBING, HVAC AND ELECTRICAL WORK SO AS NOT TO CONFLICT IN LOCATION WITH OTHER WORK UNDER THE CONTRACT.
- COORDINATE ALL PIPING ROUTING WITH ALL OTHER TRADES PRIOR TO INSTALLATION. ROUTE ALL PIPING TO AVOID DUCTWORK, ELECTRICAL RACEWAYS, AND BUILDING STRUCTURE. IF PENETRATIONS THROUGH STRUCTURAL MEMBERS ARE REQUIRED FOR PLUMBING INSTALLATION, NOTIFY ARCHITECT AND STRUCTURAL ENGINEER PRIOR TO INSTALLATION TO ENSURE THAT STRUCTURAL INTEGRITY IS MAINTAINED.
- THIS CONTRACTOR SHALL BASE HIS PROPOSAL UPON THE EQUIPMENT AS SCHEDULED OR SPECIFIED, USING THE MANUFACTURERS AND MODEL NUMBERS AS CALLED FOR IN THE SPECIFICATIONS AND SCHEDULED ON THE
- 4 THE CONTRACTOR IS EXPECTED TO ORDER ALL MATERIALS IN SUFFICIENT TIME TO AVOID DELAYING THE COMPLETION OF THE PROJECT. DELAY IN DELIVERIES WILL NOT BE CONSIDERED A JUSTIFIABLE REASON FOR SUBMISSION OF SUBSTITUTE MATERIALS.
- ROUTE ALL PIPING CONCEALED ABOVE CEILINGS, WITHIN WALLS, OR IN CHASES EXPECT AS SPECIFICALLY NOTED, OR IN MECHANICAL ROOMS. PIPING SHALL NOT BE RUN THRU ELECTRICAL ROOMS OR CLOSETS.
- SLEEVE AND FIRE STOP ALL PENETRATIONS OF RATED WALLS, CEILINGS, FLOORS, ETC. IN ACCORDANCE WITH APPLICABLE UL STANDARDS AND LOCAL CODES TO MAINTAIN RATINGS. SEE ARCHITECTURAL DRAWINGS FOR RATED WALLS AND FLOORS.
- PIPING ROUTING SHOWN IS SCHEMATIC AND IS INTENDED TO INDICATE GENERAL ROUTING. PLUMBING CONTRACTOR SHALL PROVIDE ANY ADDITIONAL OFFSETS AND FITTINGS REQUIRED FOR PROPER INSTALLATION AND TO MAINTAIN CLEARANCES AS ENCOUNTER IN FIELD.
- PROVIDE ACCESS PANELS TO ALL VALVES WITHIN CHASES, WALLS, OR ABOVE NON-ACCESSIBLE CEILINGS REFER TO ARCHITECTURAL DRAWING FOR CEILING AND WALL TYPES.
- 9 DRAINAGE PIPING SHALL SLOPE NO LESS THAN 1/8" FALL PER FOOT SEE SPECIFICATIONS
- 10. FURNISH AND INSTALL HOSE BIBBS AND WALL HYDRANTS 24" ABOVE FINISHED GRADE/FLOOR AND PROVIDE
- 11. SEE ARCHITECTURAL DRAWINGS FOR EXACT PLUMBING FIXTURE LOCATIONS. MOUNTING HEIGHTS DIMENSIONS AND HANDICAPPED REQUIREMENTS
- CONTRACTOR SHALL VERIFY INVERT ELEVATIONS AND EXACT LOCATIONS OF EXISTING SEWER AND DOMESTIC WATER PIPING/MAINS BEFORE INSTALLATION/SUBMITTAL OF SHOP DRAWINGS.
- 13. ALL VENTS THROUGH ROOF SHALL BE LOCATED A MINIMUM OF 10'-0" FROM ANY AIR INTAKES
- 14. PLUMBING CONTRACTOR SHALL INSTALL DIELECTRIC UNIONS AT ALL CONNECTIONS OF DISSIMILAR METALS.
- 15 ROLIGHJIN ALL WASTES AND SUPPLIES TO SPECIAL FOLIPMENT IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND MAKE FINAL CONNECTIONS. ALL SUPPLIES SHALL BE VALVED. INSTALL VACUUM BREAKERS WHERE REQUIRED BY CODE.
- 16. ANY PIPING IN UNCONDITIONED SPACES SHALL BE FULLY INSULATED.
- 17. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF HIS STORED MATERIALS AND EQUIPMENT FOR THE DURATION OF THE PROJECT. PROVIDE PROTECTIVE COVER OVER FOUIPMENT TO ENSURE AGAINST WATER AND DUST DAMAGE AND PROVIDE SUITABLE PALLETS BETWEEN EQUIPMENT AND MATERIALS STORED ON
- 18. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS AND MOUNTING HEIGHTS OF ALL PLUMBING FIXTURES
- 19. ALL PIPING SHALL BE CONCEALED WITHIN THE CEILING SPACE, WALLS AND CHASES AS SHOWN ON PLANS
- 20. ALL EXPOSED PIPING AT PLUMBING FIXTURES SHALL BE CHROME PLATED BRASS WITH ESCUTCHEON PLATES AT THE WALL, FLOOR OR CEILING PENETRATIONS.
- 21. INSULATE ALL EXPOSED PIPES AND SURFACES UNDER ACCESSIBLE LAVATORIES PER ADA 4.19.4 AND ANSIA117.1, PROVIDE ONE PIECE PROTECTOR WITH FULL ROTATION OPTION CONSISTING OF INTERNAL GROOVE LOCKING RING FOR NON SEPARATION AND EXTERNAL LOCKING RING WITH STAILESS STEEL SECURITY SCHEW TO INSURE EXTRA LONG TERM TAMPER RESISTANCE ANTIMICROBIAL U.V. INHIBITED UNIVERSAL FIT, 3-M DUAL LOCK (TM) FASTENERS SECURED WITH SELF LOCKING APPROVED NYLON STRAPS. FURNISH ONE PIECE VALVE/ANGLE STEP PROTECTOR. ONE PIECE OFFSET PROTECTOR AND ONE PIECE P-TRAP PROTECTOR PRO-XTREME BY PLUMBEREX
- 22. ALL PIPING SHALL BE FIRMLY ANCHORED AND SUPPORTED IT'S ENTIRE LENGTH TO PREVENT SWAY AND
- 23 ALL EXPOSED PIPE HANGERS SUPPORTS CLAMPS THREADED RODS ETC. SHALL BE GALVANIZED STEEL

REVISIONS

DESCRIPTION

DATE

24. CONTRACTOR SHALL FURNISH AND INSTALL WATER SHOCK ARRESTERS EQUAL TO ZURN SHOKTROL AS SHOWN ON PLANS AND AS PER MANUFACTURER'S RECOMMENDATIONS. AIR CHAMBERS SHALL NOT BE SUBSTITUTED FOR FACTORY FABRICATED WATER SHOCK ARRESTORS.

- 25. ALL FLOOR DRAINS SHALL HAVE TRAP PRIMER. TRAP PRIMER SHALL BE OF THE WATER SAVER TYPE EQUAL TO ZURN Z 1021 MOUNTED TO THE 1 1/4" SINK OUTLET AND CONNECTED VIA FLEXIBLE COPPER TO THE TRAF PRIMER CONNECTION AT THE FLOOR DRAIN.
- 26. FURNISH SUPPLIES WITH STOP VALVES FOR ALL PLUMBING FIXTURES.
- 27. ALL SHUT-OFF VALVES SHALL BE 1/4 TURN. FULL PORT BRONZE BODY BALL VALVES. STEEL HANDLE MAINLINE NIBBCO OR EQUAL
- 28. ALL PLUMBING ROOF VENTS SHALL BE COORDINATED TO PENETRATE THE STANDING SEAM METAL ROOF IN THE CENTER OF THE ROOF PANEL AND NOT ON A SEAM
- 29 ALL WATER PIPING SHALL BE SLOPED TO DRAIN
- 30. ALL SOIL, WASTE, AND VENT PIPING SHALL BE SLOPED 1/4" PER FOOT (2%) FOR PIPES 2 1/2" AND SMALLER AND 1/8" PER FOOT (1%) FOR PIPES 3" AND LARGER.
- 31. PROVIDE DIELECTRIC UNIONS AT ALL CONNECTIONS OF DISSIMILAR METALS
- 32. SEAL ALL PENETRATIONS OF FIRE RATED PARTITIONS WITH FIRE RATED STOPPING MATERIAL
- 33. ALL WATER CLOSETS, LIRINALS AND LAVATORIES ARE INFRARED FLECTRONIC HARD WIRED. CONTRACTOR SHALL PROVIDE ALL TRANSFORMERS, WIRING AND WIREWAY NECESSARY FOR A COMPLETE AND OPERATIONAL SYSTEM. CONTRACTOR SHALL INSTALL AND WIRE ALL ELECTRONIC FLUSH VALVES AND LAVATORY FAUCETS POWERED FROM TRANSFORMER LOCATED ABOVE THE CEILING, UNDER COUNTER OR IN ADJACENT ROOM. ALL WIRING SHALL BE CONCEALED ABOVE THE CEILING AND INSIDE OF THE WALLS. USE #14 WIRE AND CONCEAL WIRING IN RIGID METALLIC CHROME WIREWAY WHERE EXPOSED AT A PLUMBING FIXTURE. SEE PLUMBING PLANS AND ELECTRICAL PLANS FOR LOCATION OF 120V POWER AND FOR SPECIFIC REQUIREMENTS
- 34. CONTRACTOR SHALL INSTALL AND WIRE ALL ELECTRONIC FLUSH VALVES AND LAVATORY FAUCETS POWERED FROM TRANSFORMER LOCATED ABOVE THE CEILING, UNDER COUNTER OR IN ADJACENT ROOM. ALL WIRING SHALL BE CONCEALED ABOVE THE CEILING AND INSIDE OF THE WALLS. LISE #14 WIRE AND CONCEAL WIRING IN RIGID METALLIC CHROME WIREWAY WHERE EXPOSED AT A PLUMBING FIXTURE. SEE PLUMBING PLANS AND ELECTRICAL PLANS FOR LOCATION OF 120V POWER AND FOR SPECIFIC REQUIREMENTS.
- 36. ALL PIPE HANGERS, SUPPORTS, CLAMPS, THREADED RODS, HARDWARE ETC. EXPOSED TO THE EXTEIOR SHALL
- 37. REFER TO DOMESTIC WATER RISER DIAGRAM FOR LOCATIONS OF ALL VALVES AND ACCESSORIES TO BE
- 38 DOMESTIC WATER PIPING LOCATED WITHIN 5 FEET OF THE BUILDING SEWER/DRAIN PIPING IS TO BE A MINIMUM OF 12 INCHES ABOVE THE HIGHEST POINT OF THE BUILDING SEWER/DRAIN PIPING AND THE PIPE MATERIALS MUST CONFORM TO SECTION 703.1 OF THE FLORIDA BUILDING CODE 2017 - PLUMBING
- 39. WHERE PIPING PENETRATES FOOTING, REFER TO STRUCTURAL DRAWINGS FOR SLEEVING METHODS.
- 40. PROVIDE 12"x12" ACCESS DOORS ON ALL NON-ACCESSIBLE CEILINGS AND WALLS FOR ACCESS TO ALL VALVES
- 41. PROVIDE CLEANOUTS FOR STORM, SOIL, WASTE AND VENT PIPING EVERY 100 FT., AT CHANGES OF DIRECTION AT THE BASE OF DOWNSPOUTS AND AT BASE OF SOIL AND WASTE STACKS. IN ADDITION TO CLEANOUTS INDICATED ON THE PLANS, CLEANOUTS SHALL BE LOCATED IN ACCORDANCE WITH THE REQUIREMENTS OF ALL APPLICABLE CODES AND AUTHORITIES HAVING JURISDICTION.
- 42. DRAINAGE WASTE AND VENT PIPING LOCATED WITHIN FIRE RATED WALL ASSEMBLIES SHALL BE SERVICE WEIGHT CAST IRON WITH NO-HUB OR BELL AND SPIGOT FITTINGS. CONTRACTOR SHALL PROVIDE FIRESTOPPING MATERIAL AT ALL PENETRATIONS OF FIRE RATED ASSEMBLIES CONSISTANT WITH THE FIRE RATING AND T RATING OF THE ASSEMBLY.
- 43. PLUMBING PIPING SHALL NOT BE RUN THROUGH OR INTO ELECTRICAL ROOMS, COMPUTER ROOMS. IT ROOMS. IDF OR MDF ROOMS OR ABOVE ELECTRICAL PANELS OR TRANSFORMERS. PLUMBING PIPING SHALL NOT BE RUN ABOVE ELECTRICAL PANELS
- 44. ALL EXTERIOR WALL CLEAN OUTS SHALL BE FURNISHED WITH A COATED CAST IRON SQUARE HINGED ACCESS PANEL WITH VANDAL PROOF SCREWS EQUAL TO ZURN MODEL Z-1461-VP. SIZE SHALL BE 10"X10" OR LARGER AS
- 45. ALL INTERIOR WALL CLEAN OUTS SHALL BE FURNISHED WITH TYPE 304 STAINLESS STEEL ROUND ACCESS COVER FOUAL TO ZURN ZS-1469-VP WITH A VANDAL PROOF SCREW

SR 8

46. ALL DOMESTIC WATER SHUT OFF VALVES LOCATED IN THE CEILING SPACE SHALL BE ACCESSIBLE AND SHALL BE LOCATED WITHIN 18" OF THE CEILING

STATE OF FLORIDA

DEPARTMENT OF TRANSPORTATION

438609-1-52-01

COLUMBIA

PLUMBING MATERIALS NOTES

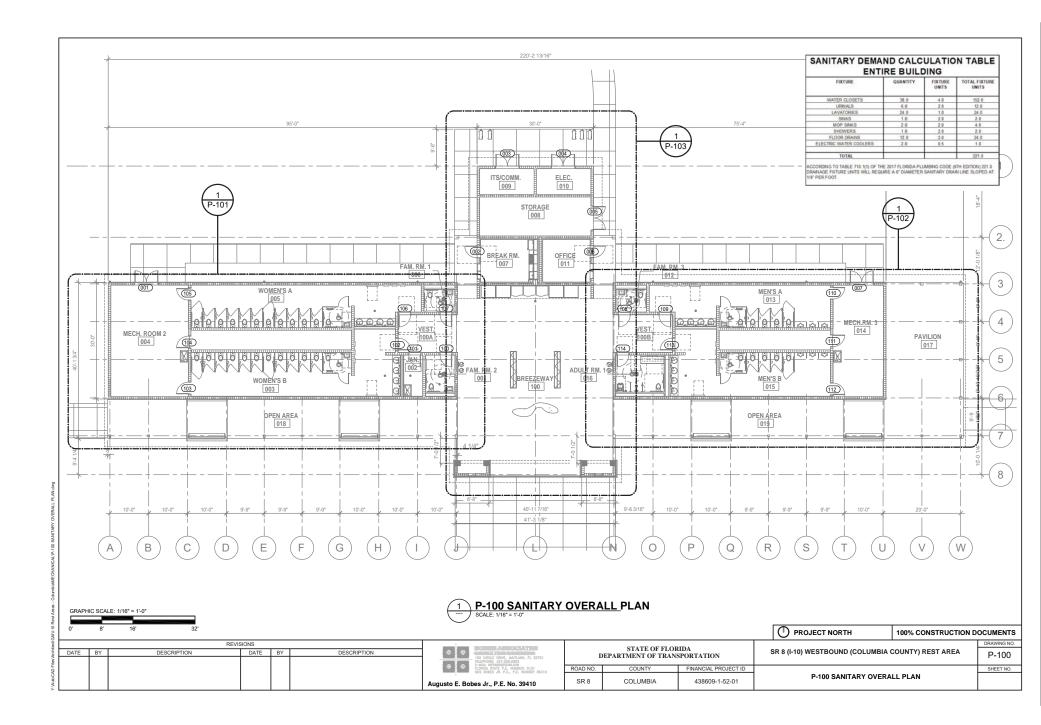
- ALL ABOVE SLAB DOMESTIC COLD WATER, HOT WATER AND TEMPERED WATER PIPING SHALL BE TYPE "L" COPPER TUBING IN ACCORDANCE WITH ASTM B 88 PIPE FITTINGS SHALL BE COPPER OR COPPER ALLOY IN ACCORDANCE WITH ASME 16.22.. JOINTS SHALL BE SOLDER ACCORDANCE WITH ASTM B 828 USING "LEAD FREE" SOLDER IN COMPLIANCE WITH ASTM B 32.
- 2 ALL BELOW SLAB DOMESTIC COLD WATER HOT WATER AND TEMPERED WATER PIPING SHALL BE TYPE "K" SOFT COPPER
- ALL COPPER WATER LINE PENETRATIONS THROUGH WALLS AND FOOTERS SHALL BE SLEEVED.
- PIPING MATERIAL : DOMESTIC COLD WATER PIPING COPPER TYPE K BELOW GRADE, L ABOVE GROUND.
- PIPE FITTINGS: WROUGHT COPPER: ELBOWS, TEES, REDUCERS. COUPLINGS, ETC., SOLDER ENDS 150 PSIG WSP, FITTINGS MANUFACTURED BY MUELLER BRASS CO., CHASE BRASS, AND COPPER CO. USE 95-5 SOLDER FOR WATER SERVICE AND, 50-50. FOR WASTE SERVICE. DO NOT USE SOLDER CONTAINING LEAD
 FOR POTABLE WATER SERVICE. BRONZE UNIONS FOR 2 1/2" PIPE AND SMALLER
- 6. SANITARY PIPING: PIPE SHALL BE SERVICE WEIGHT CAST IRON. ASPHALT COATED AND SHALL CONFORM TO ASTM A-74 FOR BELL AND SPIGOT TYPE (BELOW GROUND), OR TO CISPI 301 FOR NO HUB TYPE (ABOVE GROUND)
- SANITARY COPPER (DRAINAGE): PIPE SHALL BE HARD TEMPERED SEAMLESS COPPER DWY TUBING, CONFORMING TO ASTM SPECIFICATION B-306. FITTINGS SHALL BE CAST BRONZE. DWV SWEAT TYPE CONFORMING TO ANSI B16.23.
- 8. CONDENSATE DRAIN; SAME AS SANITARY DWV ABOVE/BELOW
- PIPE INSULATION: HOT WATER AND REFRIGERANT PIPING: 3/4" CLOSED CELL ELASTOMERIC ARMSTRONG ARMAFLEX OR EQUAL, SUITABLE FOR OPERATING TEMPERATURES FROM 40 F TO 200 F FLAME SPREAD RATING TEMPERATURES FROM #40 FT OZOF.
 FLAME SPREAD RATING OF LESS THAN 25 AND A SMOKE DENSITY
 RATING OF LESS THAN 50 RATED FOR RETURN AIR PLENUM USE. OUTDOOR APPLICATIONS REQUIRE ALUMINUM JACKET COVERING.
- 10. DIELECTRIC UNIONS: DISSIMILAR PIPE METALS SHALL BE ELECTRICALLY INSULATED FROM EACH OTHER BY COUPLINGS, UNIONS, OR FLANGES COMMERCIALLY MANUFACTURED FOR THAT PURPOSE AND RATED FOR THE SERVICE PRESSURE AND TEMPERATURE. USE OF STEEL OR CAST-IRON FITTINGS IN A COPPER PIPING SYSTEM IS PROHIBITED. EXCEPT WHERE SPECIFICALLY NOTED. THREADED UNIONS SHALL BE AS MANUFACTURED BY EPCO.
- 11. ESCUTCHEONS: PROVIDE STAINLESS STEEL ESCUTCHEONS SECURELY IN PLACE ON EXPOSED PIPES WHERE THEY PASS. THROUGH WALLS, PARTITIONS FLOORS AND CEILINGS OR FINISHED AREAS.
- 12. VALVES: PROVIDE BALL VALVES TO ISOLATE EACH COLD WATER RISER, BRANCH LINE, HOSE BIBBS, AND WHERE INDICATED ON
- 13. PIPE SLEEVES: PROVIDE GALVANIZED SHEET METAL 22 GALIGE SLEEVES FOR PIPES PASSING THROUGH WALLS OR FLOORS BEFORE POURING CONCRETE. PLASTIC SLEEVES AS MANUFACTURED BY PROSET OR EQUAL ARE PERMITTED. ALL SLEEVES SHALL BE LARGE ENOUGH TO ALLOW FULL THICKNESS OF INSULATION THROUGH SLEEVES FOR INSULATED PIPING AND FOR TWO LAYERS OF 30 LB. FELT WRAPPING AROUND LIN-INSULATED PIPING

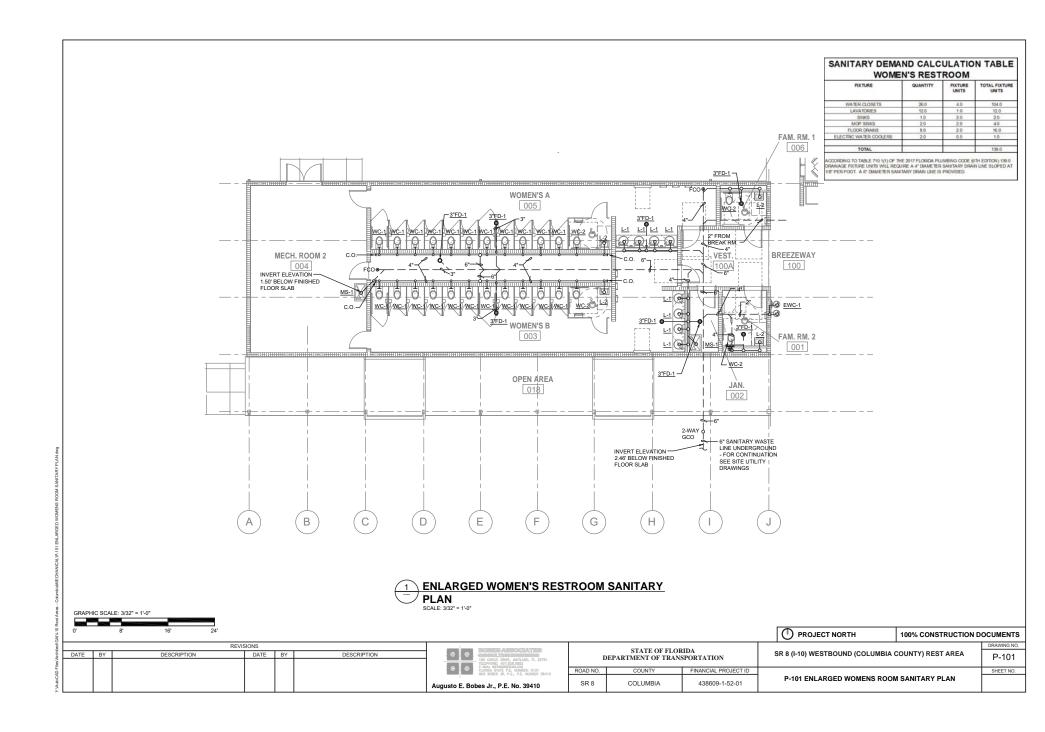
PROJECT NORTH 100% CONSTRUCTION DOCUMENTS SR 8 (I-10) WESTBOUND (COLUMBIA COUNTY) REST AREA P-002

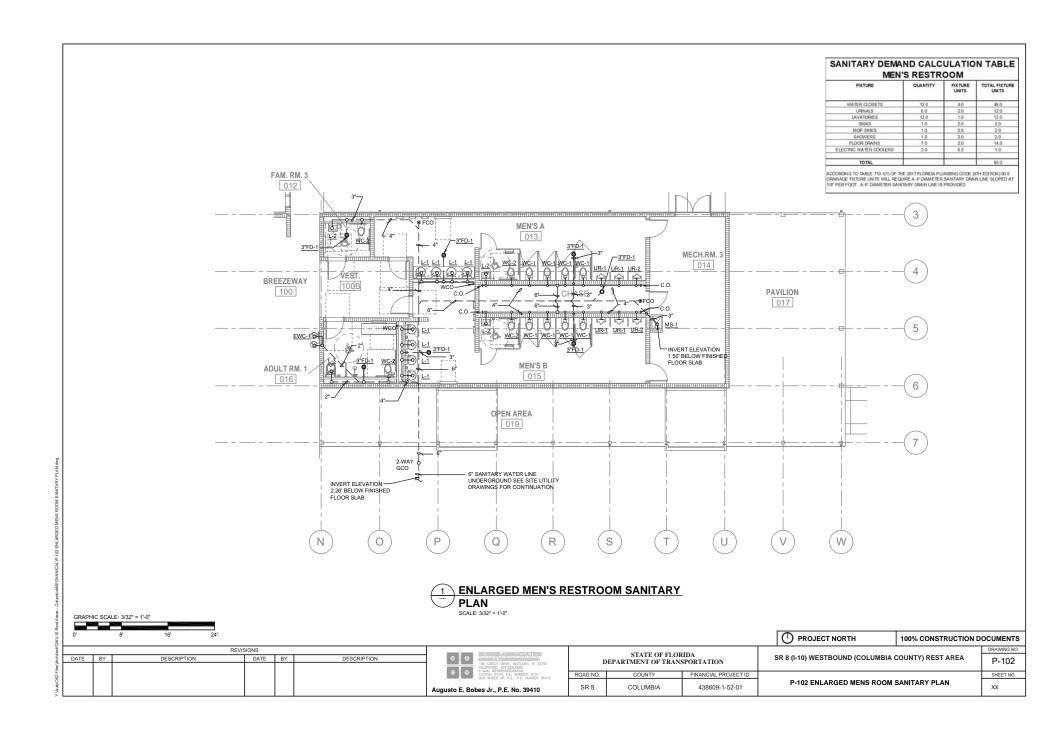
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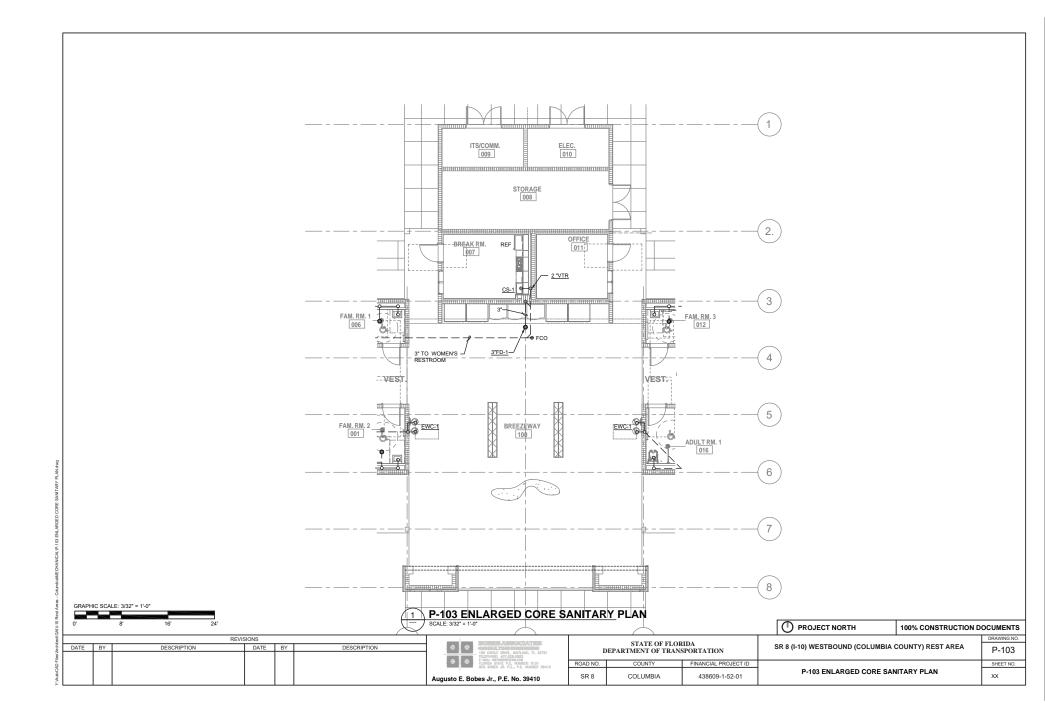
PLUMBING CONSTRUCTION & MATERIAL NOTES

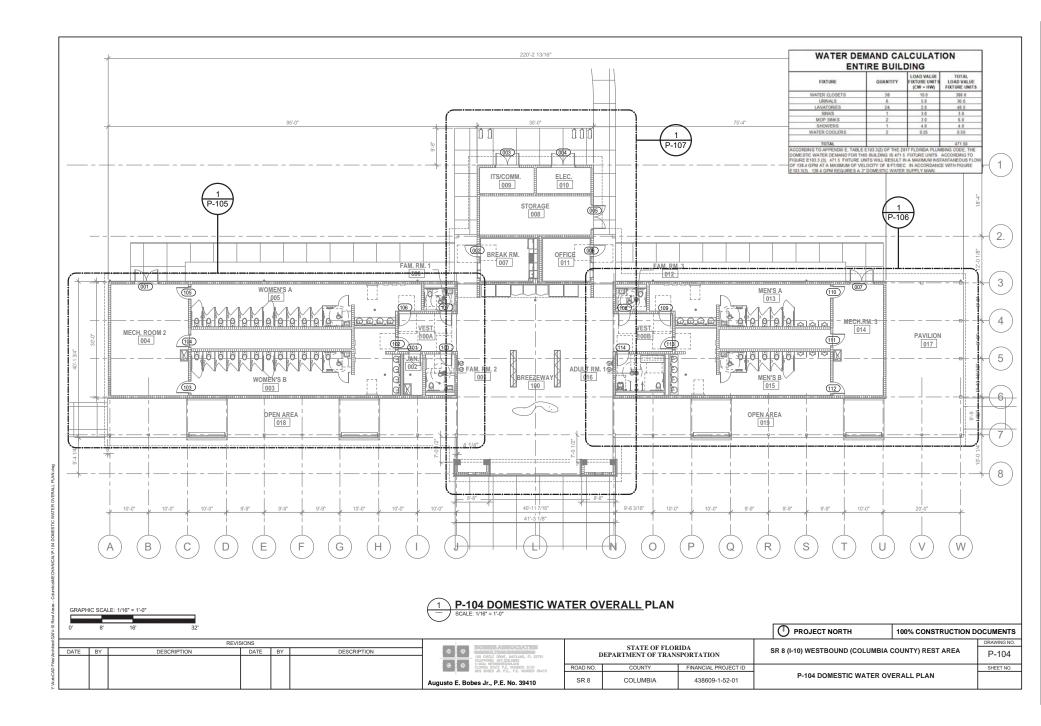
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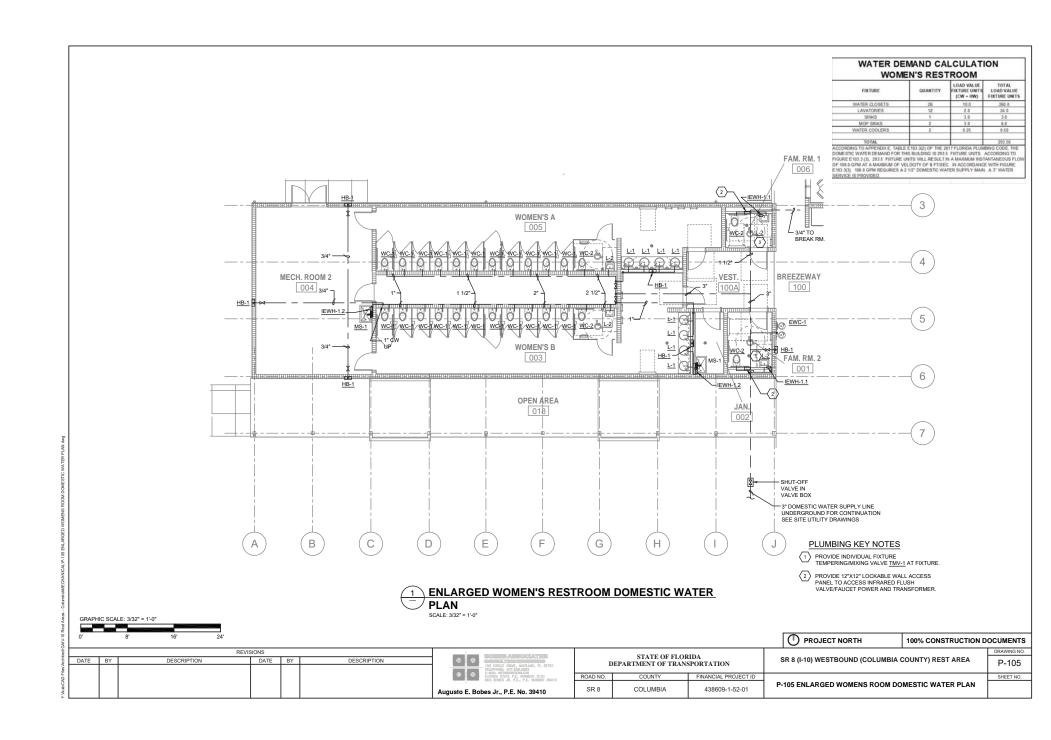


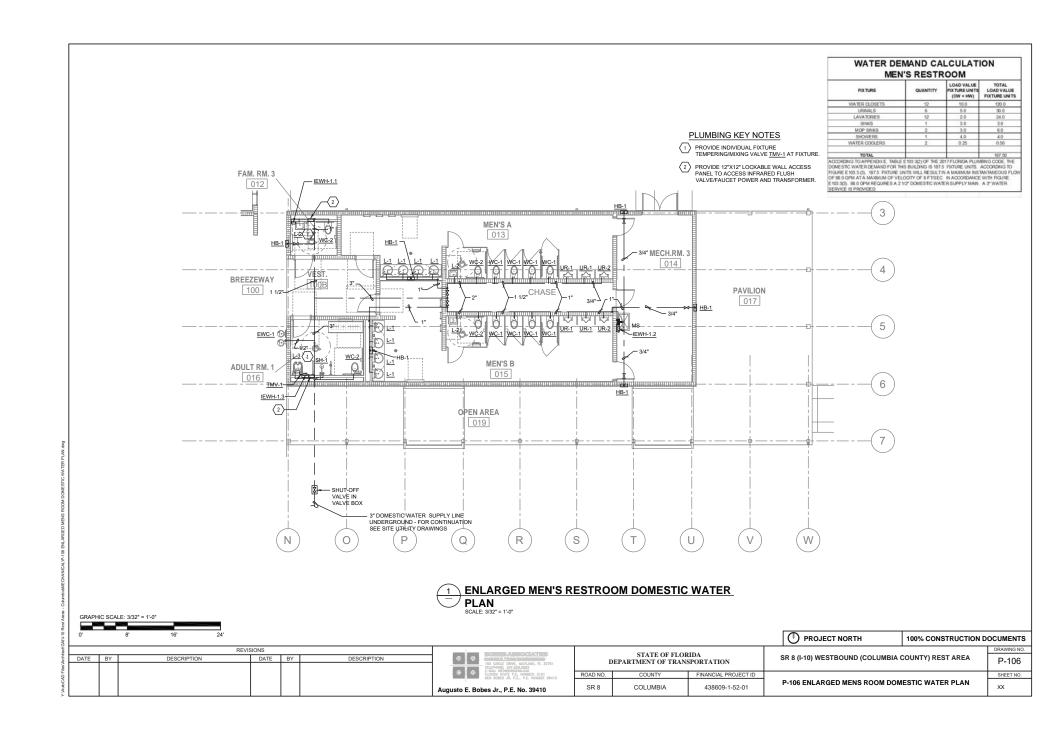


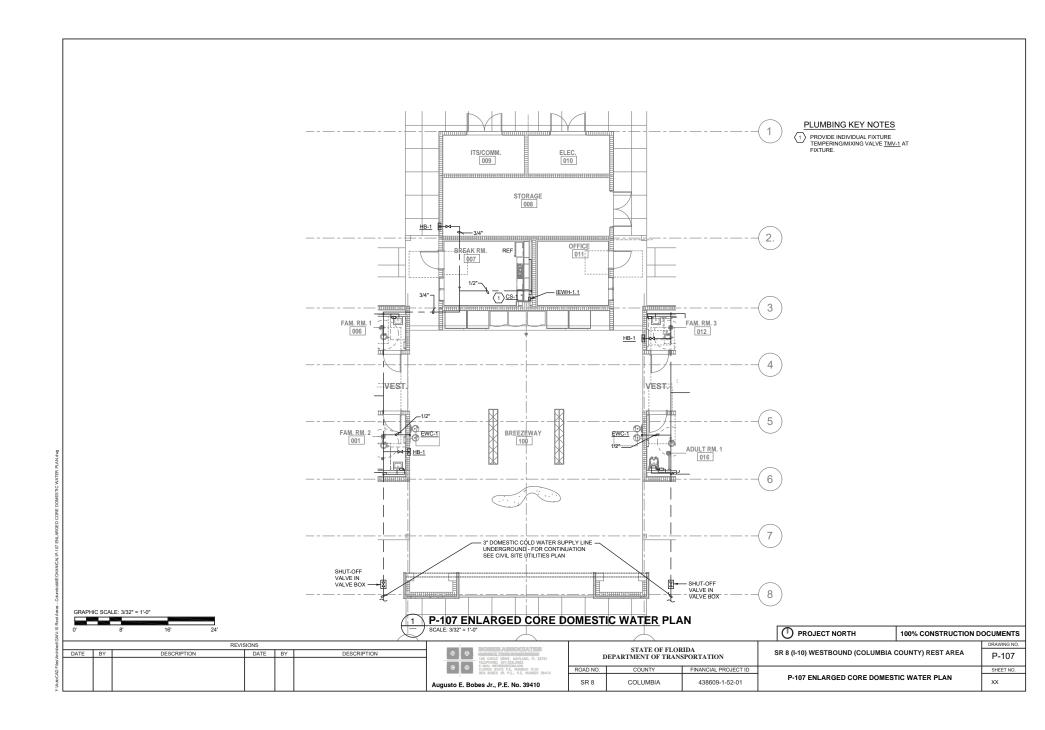


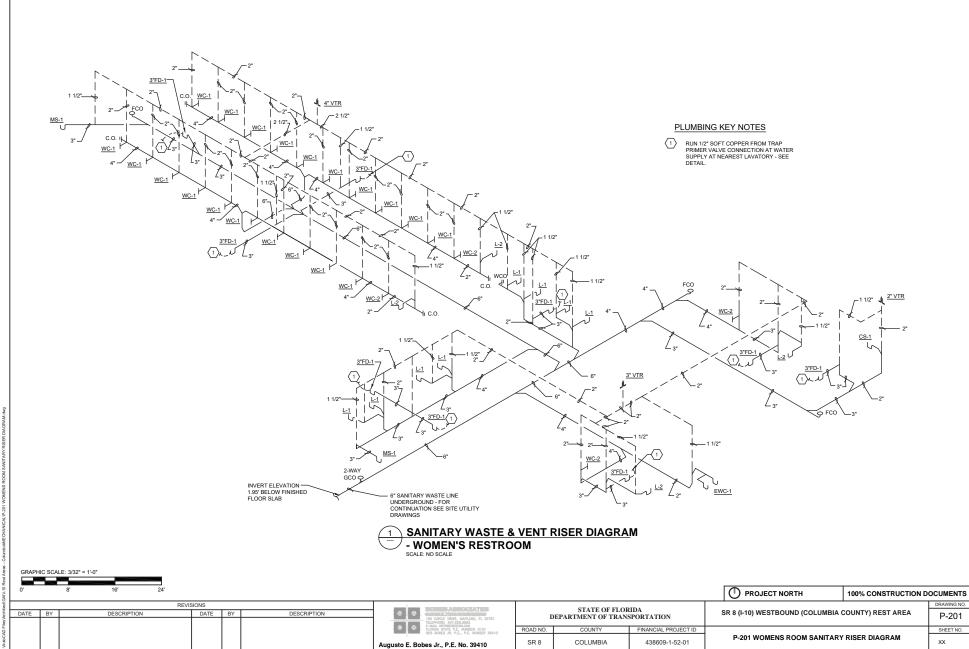


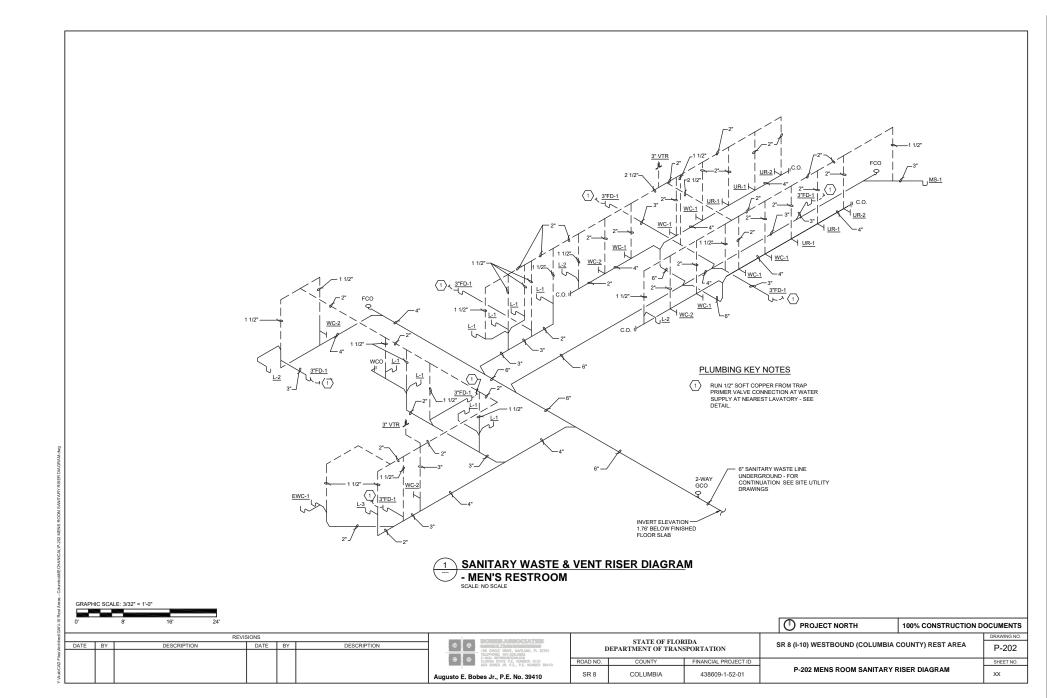


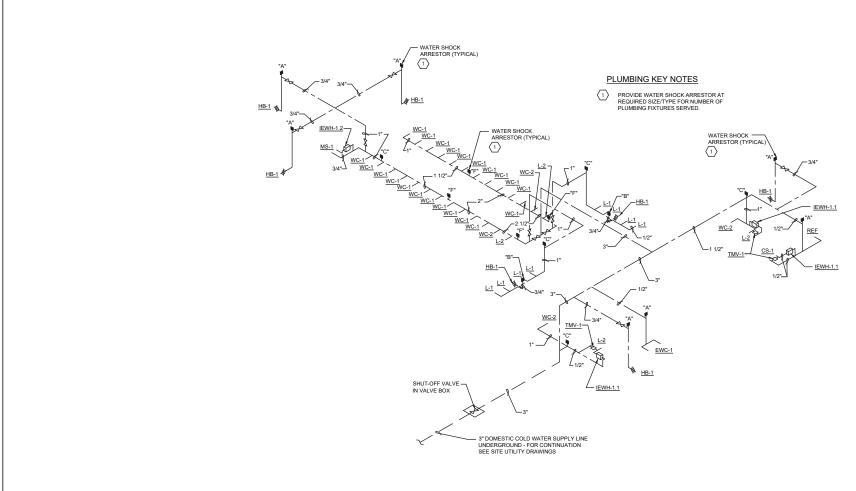












DOMESTIC WATER RISER DIAGRAM WOMEN'S RESTROOM
SCALE: NO SCALE

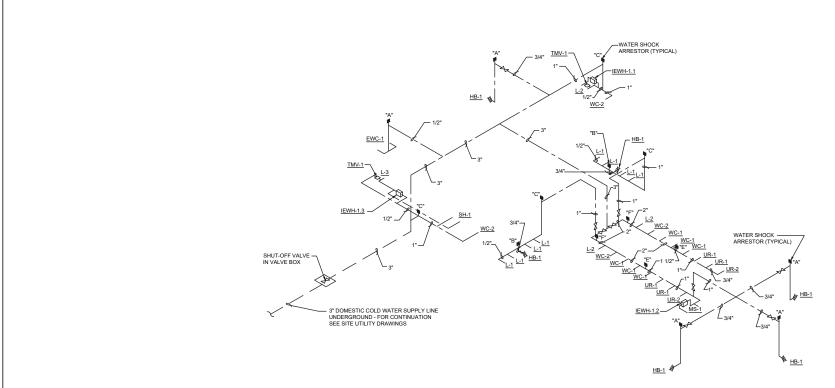
GRAPHIC SCALE: 3/32" = 1'-0"

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0.0	DOMES ASSOCIATES
0 0	180 CIRCLE DRIVE, MAITLAND, FL 32781 TELEPHONE: 407.828.0882 E-MML: 80708000EXDM.COM FLORIDA STATE P.E. NUMBER: 8131 GUS BORES JR. P.E. P.E. NUMBER 39410
Augusto E. Bo	bes Jr., P.E. No. 39410

	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION										
ı	ROAD NO.	COUNTY	FINANCIAL PROJECT ID								
	SR 8	COLUMBIA	438609-1-52-01								

PROJECT NORTH	100% CONSTRUCTION D	OCUMENTS					
SR 8 (I-10) WESTBOUND (COLUMBIA (COUNTY) REST AREA	P-205					
		SHEET NO.					
P-205 WOMENS ROOM DOMESTIC WA	xx						



1 DOMESTIC WATER RISER DIAGRAM MEN'S RESTROOM
SCALE: NO SCALE

GRAPHIC SCALE: 3/32" = 1'-0"

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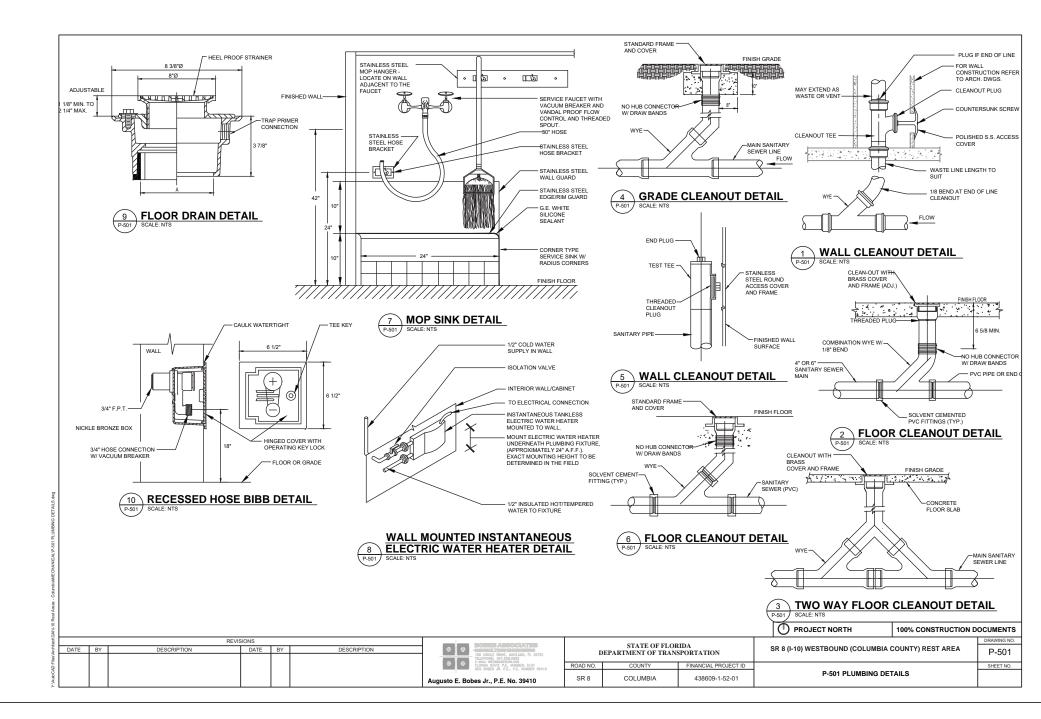
 150 CIRCLE DRIVE, MATULAIO, FL. 32781 TELEPHONE: 607 ASSLORES F-MAIL SERVICE MOVEMENT STST OUS BOSES JA. F.E., J. K. HAWREN SH410 OUS BOSES JA. F.E., J. K. HAWREN SH410
Augusto E. Bobes Jr., P.E. No. 39410

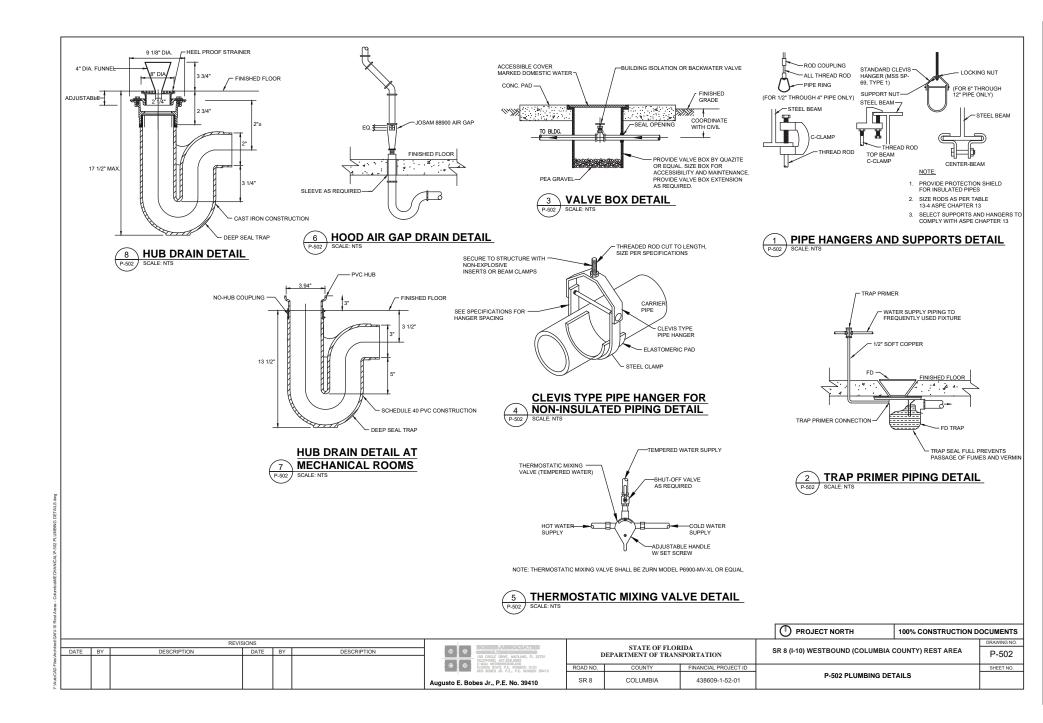
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ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
SR 8	COLUMBIA	438609-1-52-01	

PROJECT NORTH	100% CONSTRUCTION D	OCUMENTS
		DRAWING NO.
SR 8 (I-10) WESTBOUND (COLUMBIA	COUNTY) REST AREA	P-206
		SHEET NO.
P-206 MENS ROOM DOMESTIC WAT	ER RISER DIAGRAM	xx

- Columbia/MECHANICAL/P-208 MENS ROOM DOMESTIC WATER RISER DIAGRAM.

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ITEM	EIVT IDE	PLUMBING FIXTURE	
ПЕМ	FIXTURE	MANUFACTURER & MODEL #	DESCRIPTION
WC-1	WATER CLOSET - FLUSH VAVE WALL HUNG	AMERICAN STANDARD 2634101.020 WATER CLOSET AMERICAN STANDARD 606B222.007 FLUSH VALVE AMERICAN STANDARD PKO0.HAC HARD WIRE KIT AMERICAN STANDARD 5091100.020 SEAT WATTS 15CA-101-L/R CARRIER	HARD WIRED ELECTRONIC, INFRARED SENSOR FLUSH VALVE; WHITI VITREOUS CHINA CONSTRUCTION, ELONGATED BOWL, 1.28 GPF, REA SPUD, CONCEALED FLUSH VALVE, MANUAL OVERRIDE, HEAVY DUTY OPEN FRONT SEAT WITH S.S. CHECK HINGE. 500 Ib RATED FLOOR MOUNTED CARRIER.
WC-2	WATER CLOSET - FLUSH VAVE WALL HUNG - HANDICAPPED	AMERICAN STANDARD 2634101.020 WATER CLOSET AMERICAN STANDARD 6068222 007 FLUSH VALIVE AMERICAN STANDARD PK00.HAC HARD WIRE KIT AMERICAN STANDARD 5901100.020 SEAT WATTS 15CA-101-L/R CARRIER	HANDICAPPED / ADA WATER CLOSET, HARD WIRED ELECTRONIC, INFRARED SENSOR FLUSH VALVE; WHITE VITREOUS CHINA CONSTRUCTION, ELONGATED BOWL, 1.28 GPF, REAR SPUD, CONCEAFLUSH VALVE, MANUAL OVERRIDE, HEAVY DUTY OPEN FRONT SEAT S.S. CHECK HINGE. 500 Ib RATED FLOOR MOUNTED CARRIER.
UR-1	URINAL -FLUSH VAVE WALL HUNG -	AMERICAN STANDARD 6515001.020 URINAL AMERICAN STANDARD 606B301.007 FLUSH VALVE AMERICAN STANDARD PK00.HAC HARD WIRE KIT WATTS CA-321 CARRIER	HARD WIRED ELECTRONIC, INFARED SENSOR FLUSH VALVE; VITREC CHINA CONSTRUCTION, 1/8 GPF, REAR SPUD, CONCEALED FLUSH VALVE, MANUAL OVERRIDE, FLOOR MOUNTED PLATE TYPE CARRIER
UR-2	URINAL -FLUSH VAVE WALL HUNG - HANDICAPPED	AMERICAN STANDARD 6515001.020 URINAL AMERICAN STANDARD 6068301.007 FLUSH VALVE AMERICAN STANDARD PK00.HAC HARD WIRE KIT WATTIS CA-321 CARRIER	HANDICAPPED / ADA WATER URINAL, HARD WIRED ELECTRONIC, INFRARED SENSOR FLUSH VALVE, VITREOUS CHINA CONSTRUCTION GPF, REAR SPUD, CONCEALED FLUSH VALVE, MANUAL OVERRIDE, FLOOR MOUNTED PLATE TYPE CARRIER.
L-1	LAVATORY - COUNTER TOP	AMERICAN STANDARD 0476028.020 LAVATORY (AQUAL'YN) AMERICAN STANDARD 605B204.002 FAUCETI(INNSBROOK) AMERICAN STANDARD PK00.HAC HARD WIRE KIT	20"X17" COUNTER TOP MOUNTING TYPE, ELECTRONIC INFRARED SENSOR FAUCET, WHITE VITREOUS CHINA CONSTRUCTION, 0.35 GPM FLOW RESTRICTOR, 4" CENTERSET FAUCET HOLES.
L-2	LAVATORY - WALL MOUNT - HANDICAPPED	AMERICAN STANDARD 0355012.020 LAVATORY (LUCERNE) AMERICAN STANDARD 605B204.002 FAUCET(INNSBROOK) AMERICAN STANDARD PK00.HAC HARD WIRE KIT WATTS TOA 411-WC CARREER	20"X18" HANDICAPPED / ADA , WALL MOUNTED TYPE, ELECTRONIC INFRARED SENSOR FAUCET, WHITE VITREOUS CHINA CONSTRUCTIO 0.35 GPM FLOW RESTRICTOR. 4" CENTERSET FAUCET HOLES, FLOOR MOUNTED CONCEALED ARM CARRIER.
L-3	LAVATORY - WALL MOUNT - HANDICAPPED	AMERICAN STANDARD 9140047.020 LAVATORY (INNSBROOK) AMERICAN STANDARD 605B164.002 FAUCET(INNSBROOK) AMERICAN STANDARD PK00.HAC HARD WIRE KIT WATTS TCA-411-WC CARRIER	20°X27" HANDICAPPED / ADA FOR ADULT CHANGING, WALL MOUNTE TYPE, ELECTRONIC INFRARED SENSOR FAUCET, WHITE VITREOUS C CONSTRUCTION, 0.35 GPM FLOW RESTRICTOR, 4" CENTERSET FAUC HOLES, FLOOR MOUNTED CONCEALED ARM CARRIER.
SH-1	SHOWER - HANDICAPPED	SPEAKMAN SENTINEL MARK II SM-3090-ADA SHOWERWALVE SPEAKMAN VS-100-PC SHOWER HEAD	HANDICAPPED / ADA, WALL MOUNTED TYPE, SHOWER VALVE AND H ASSEMBLY, ANTI-SCALD PRESSURE BALANCED VALVE, CHROME PLATED CAST IRON BODY, SINGLE HANDLE, INTEGRAL SUPPLY STOF
CS-1	COUNTERSINK	ELKAYLRAD2219-6.5" SINK (LUSTERTONE) ELKAYLK406GN08T4 FAUCET	ADA SINK: SINGLE COMPARTMENT, 18 GAUGE TYPE 304 STAINLESS STEEL CONSTRUCTION, 6.5" DEEP BOWL, SELF-RIMMING DESIGN, UNDERCOATED FOR SOUND DAMPENING, SINGLE LEVER POST MOUNTED FAUCET WITH 10" SWING SPOUT, SPRAY AERATOR AND H
MS-1	MOP SINK	FIAT TSB3013 TERAZZO SINK BASIN T&S BRASS B665-BSTR FAUCET	36"X24"X12" HIGH BASIN WITH 6" DROP FRONT, PRECAST TERRAZZO WITH STAINLESS STEEL THRESHOLD, FITTINGS: ROUGH CHROME MIX VALVEFAUCET WITH VACUUM BREAKER, INTEGRAL STOP, ADJUSTA WALL BRACE, PAIL HOOK, 3/4" HOSE THREAD, HOSE AND HOSE BRACKET, MOP HANGER, S.S. EDGE GUARD, S.S. WALL GUARD.
EWC-1	ELECTRIC WATER COOLER - HANDICAPPED	ELKAY LVRCGRWIL8WSK ELECTRIC WATER COOLER ELKAY EZH20 BOTTLE FILLING STATION	TWO LEVEL ELECTRIC - HANDICAPPED, STAINLESS STEEL CONSTRUCTION, 8.0 GPH OF 50F WATER CAPACITY, BOTTLE FILLER O LOW COOLER, HANDS FREE, INFRARED SENSOR ACTIVATED, VAND/RESISTANT.
HB-1	WALL HYDRANT	WOODFORD B24 HOSE BIBB ZURN Z1335 HOSE BIBB WATTS HY330 HOSE BIBB	SELF DRAINING FROSTPROOF IN LOCKABLE ENCLOSURE, ANTI CONTAMINATION, 3/4" SIZE, ALL BRASS CONSTRUCTION, NICKEL PLA' FINISH, TEFLON IMPREGNATED PACKING, WITH INTEGRAL VACUUM BREAKER CONFORNING TO ASSE STANDARD 1011 AND U.S. HEALTH DEPARTMENT STANDARDS
TP-1	TPAP PRIMER VALVE	ZURN Z1022-XL	TRAP PRIMER VALVE: AUTOMATIC MACHINED OF CORROSION RESIS' BRASS - CONTAINS NO SPRINGS OR DIAPHRAGMS. ADJUST TO HIGH! LOW PRESSURES, LEAD FREE, VACUUM BREAKER, INLET 12" HEMALE NPT. PROVIDE DISTRIBUTION CENTER REQUIRED.

	PLUMBING FIXTURE CONNECTION SCHEDULE									
SYMBOL	DESCRIPTION	CW	TW	HW	WASTE	VENT	REMARKS			
WC-1	WATER CLOSET	1"			3"	2"				
WC-2	WATER CLOSET	1"			3"	2"	ADA/HANDICAP			
UR-1	URINAL	3/4"			2"	1 1/2"				
UR-2	URINAL	3/4"			2"	1 1/2"	ADA/HANDICAP			
L-1	LAVATORY	1/2"	1/2"		1 1/2"	1 1/4"	COUNTER			
L-2	LAVATORY	1/2"	1/2"		1 1/2"	1 1/4"	ADA/HANDICAP			
L-3	LAVATORY	1/2"	1/2"		1 1/2"	1 1/4"	ADULT			
SH-1	HANDICAP SHOWER	1/2"	1/2"		3"	1 1/2"	ADA/HANDICAP			
CS-1	COUNTER SINK	1/2"	1/2"		1 1/2"	1 1/4"	ADA/HANDICAP			
MS-1	MOP SINK	1/2"	1/2"	1/2"	3"	1 1/2"				
EWC-1	ELECTRIC WATER COOLER	1/2"			1 1/4"	1 1/4"	ADA/HANDICAP			
HB-1	HOSE BIBB	3/4"					RECESSED			

WATER HAMMER ARRESTOR SCHEDULE							
PD1	FIXTURE UNITS	PIPE SIZE					
(A)	1-11	1/2"					
®	12-32	3/4"					
O	33-60	1"					
0	61-113	1 1/4"					
⑤	114-154	1 1/2"					
(F)	155-330	2"					

	INSTANTANEOUS ELECTRIC WATER HEATER SCHEDULE													
UNIT	UNIT KW FLOW TEMP DISCHARGE WATER WATER POWER REQUIRED									BREAKER	MANUFACTURER/MODEL	NOTES		
NUMBER		(GPM)	RISE -F	TEMP. •F	CONNECTION (INLET)	(OUTLET)	VOLTS	PHASE	CYCLES	AMPS	90°C WIRE	AMPS		
IEWH-1.1	2.50	0.5	-34	104	1/2"	1/2"	208	1	60	12	14 AWG	20	CHRONOMITE CM-12L/208	1-6
IEWH-1.2	6.24	1.0	43	113	1/2"	1/2*	208	- 1	60	30	10 AWG	30	CHRONOMITE CM-30L/208	1-6
IEWH-1.3	8.32	1.5	38	108	1/2"	1/2"	208	- 1	60	40	8 AWG	30	CHRONOMITE CM40/208	1-6
				_			- 100	- 11						-
				_								-		

- NOTES

 1. WATER HEATER SHALL HAVE A PRESET MAXMUM TEMPERATURE.

 2. WATER HEATER SHALL MEET ADA REQUIREMENTS.

 3. WATER HEATER SHALL BE 69% EFFICIENT.

 4. CONTRACTOR SHALL INSTALL BE AMAXIMO VALVE ON THE 1/2" COLD WATER SUPPLY LINE FEEDING THIS WATER HEATER TO CONTROL WATER FLOW AND DISCHARGE TEMPERATURE.

 5. URIT SHALL ACTIVATE AT 20 OPPLETON WATER.

 6. FURRISH WITH A STAIRLESS STEEL HOUSING.

5.	UNIT	SHA	LL AC	П	VATE	AT	.20	GPM	FLOW RA
8	FLIRE	USH	WITH	٨	STAIL	UL F	222	STEE	HOUSIN

	REVISIONS							
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				PROJECT NORTH	100% CONSTRUCTION D	UCTION DOCUMENTS	
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Г	STATE OF FLOR DEPARTMENT OF TRANS		8	SR 8 (I-10) WESTBOUND (COLUMBIA COUNTY) REST AREA			
ROAD NO.	COUNTY	FINANCIAL PROJECT ID				SHEET NO.	
SR 8	COLUMBIA	438609-1-52-01					

PROJECT NORTH

A			
_	FIXTURE TYPE DESIGNATION. SEE FIXTURE SCHEDULE. A: DENOTES FIXTURE TYPE.	A.F.F.	ABOVE FINISH FLOOR
	2' x 4' INDIRECT LED	A/C	AIR CONDITION
	2' x 4' INDIRECT LED ON EMERGENCY CIRCUIT	B.C.	BELOW COUNTER
	4' SURFACE MOUNTED LED FIXTURE	C., COND.	CONDUIT
		CKT.	CIRCUIT
	4' SURFACE MOUNTED LED FIXTURE ON EMERGENCY CIRCUIT	CONT.	CONTROLLER
0	LED DOWNLIGHT	DISC.	DISCONNECT
•	LED DOWNLIGHT ON EMERGENCY CIRCUIT	E, EXIST.	EXISTING TO REMAIN
0	EXIT LIGHT	E.C.	EMPTY CONDUIT
€	20 AMP. DUPLEX RECEPTACLE, MOUNTED 18" A.F.F. U.O.N.	EQUIP.	EQUIPMENT
⊖ =	20 AMP. DUPLEX RECEPTACLE, MOUNTED 48" A.F.F. U.O.N. (GFI)	ER	EXISTING TO BE RELOCATED
-	20 AMP. QUADRUPLEX RECEPTACLE, MOUNTED 18" A.F.F. U.O.N.	EWC	ELECTRIC WATER COOLER
	SPECIAL PURPOSE RECEPTACLE	FA	FIRE ALARM
0	OUTLET OR JUNCTION BOX	FAAP	FIRE ALARM ANNUCIATOR PANEL
4	DATA OUTLET	FACP	FIRE ALARM CONTROL PANEL
-	20 AMP OCCUPANCY SENSOR 48" AFF U.O.N.	F/N GFCI	FULL NEUTRAL GROUND FAULT CIRCUIT INTERRUPTEI
os O		GND., G.	GROUND GROUND
<u>©</u>	CEILING MOUNTED OCCUPANCY SENSOR 20 AMP	UTG.	LIGHTING
S	20 AMP 120/277V LIGHT SWITCH, COLOR TO MATCH EXISTING, 48" A.F.F.	MACH.	MACHINE
S _M	MOTOR RATED TOGGLE SWITCH	MCB	MAIN CIRCUIT BREAKER
\Rightarrow	EMERGENCY POWER OFF SWITCH	MLO	MAIN LUGS ONLY
3P <u>30A</u> 3R	DISCONNECT SWITCH 3P INDICATES NO. OF POLES, 30A. INDICATES SWITCH RATING SIZE, 20A. INDICATES FUSE RATING, 3R INDICATES NEMA 3R AND * INDICATES FUSED PER MANUFACTURE RECOMMENDATION.	N.E.C.	NATIONAL ELECTRICAL CODE
///	TELEPHONE TERMINAL BOARD (TTB)	N.T.S. Ø, PH	NOT TO SCALE PHASE
<u> </u>	FIRE ALARM HORN/STROBE	Ø, PH R	RELOCATED
30)	FIRE ALARM SMOKE DETECTOR	RECEPT.,	RECEPTACLE
Ð	HEAT DETECTOR	REC.	NEGET PROCE
DC	DOOR CONTACT CONCEALED TYPE	SW.	SWITCH
TS	TAMPER SWITCH	T.T.B.	TELEPHONE TERMINAL BOARD
FS	FLOW SWITCH	TYP.	TYPICAL
ES	ELECTROMAGNETIC DOOR LOCK	U.O.N.	UNLESS OTHERWISE NOTED
•	PUSH BUTTON RELEASE	V	VOLT
	TV MONITOR OUTLET	W	WIRE
_	GROUND BUS BAR	WP	WEATHERPROOF
1,5 —	HOMERUN TO PANEL "A", 1, 3, 5 ARE CIRCUIT NUMBERS, SLASHES = NO. OF CONDUCTORS IN 34" CONDUIT UNLESS OTHERWISE NOTED. INSTALL A GROUND WIRE SIZED AS PER N.E.C. ART. 250 IN ALL CONDUIT RUNS. NO SLASHES INDICATES TWO CONDUCTORS, PLUS GROUND WIRE.	WR	WEATHER - RESISTANT TYPE
	INDICATES A CONDUIT RUN CONCEALED IN A CEILING OR WALL.		
	INDICATES A CONDUIT RUN EXPOSE		
	INDICATES A NEW CONDUIT RUN UNDERGROUND		
ത്ത	FLEXIBLE CONDUIT		
	ROOF LIGHTNING CONDUCTOR		
	GROUND LOOP CONDUCTOR		
_	AIR TERMINAL		
_	SPLITTER		
-			
	ROOF DOWN CONDUCTOR		
⊙	GROUND ROD		

ELECTRICAL GENERAL NOTES:

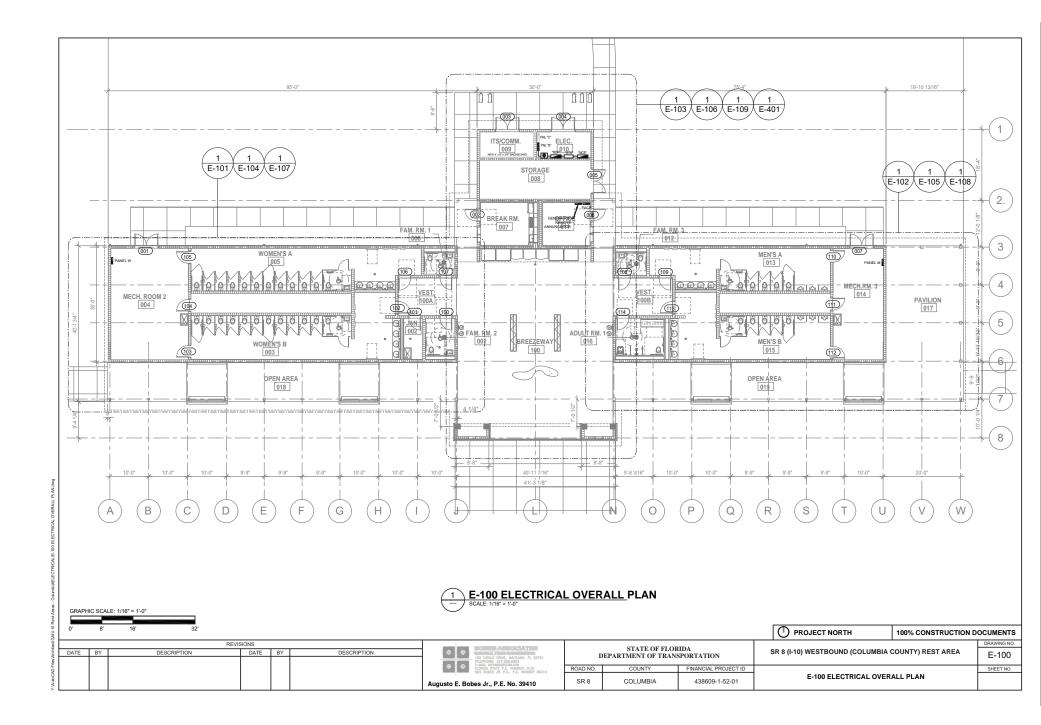
- 1. PRIOR TO BID, VISIT JOB SITE AND BECOME FAMILIAR WITH THE EXISTING CONDITIONS. SPECIAL ATTENTION SHALL BE GIVEN TO CONDITIONS OF PANELS AND SWITCHING EQUIPMENT WHERE NEW WORK IS REQUIRED. MODIFY EXISTING PANELS AND EQUIPMENT BY THE ADDITION OF CIRCUIT BREAKERS, WIRING, ETC. AS REQUIRED IN ORDER TO PROVIDE A COMPLETE AND OPERATING SYSTEM. NO EXTRA COMPENSATION WILL BE ALLOWED FOR FAILURE TO COMPLY WITH THIS REQUIPMENT.
- 2. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH FLORIDA BUILDING CODE 6th EDITION (2017 FBG.) THE 2014 NATIONAL ELECTRICAL CODE (NEC), ALL APPLICABLE LOCAL, COUNTY, AND STATE CODES AND STANDARDS, ALL REQUIREMENTS OF THE SERVICING ELECTRIC UTILITY AND THE AMERICANS WITH DISABILITIES ACT (ADA.
- 3. CONTRACTOR SHALL GUARANTEE THE ENTIRE ELECTRICAL WORK, INCLUDING PARTS AND LABOR FOR A PERIOD OF ONE (1) YEAR AFTER FINAL WRITTEN ACCEPTANCE OF OWNER.
- 4. ALL WORK SHALL BE PERFORMED BY A LICENSED ELECTRICAL CONTRACTOR IN A GOOD WORKMANSHIP AND SHALL BE COMPLETED AND FULLY OPERATIVE TO THE ACCEPTANCE OF OWNER.
- MAINTAIN A COMPLETE SET OF ELECTRICAL PRINTS FOR INDICATING ALL CHANGES. USE COLORED PENCILS TO MARK CHANGES AT THE TIME OF EXECUTION AND DELIVER THE SET TO ARCHITECT / ENGINEER UPON COMPLETION.
- ALL MATERIALS SHALL BE NEW, OF AMERICAN MANUFACTURE, AND BEAR THE UNDERWRITER'S LABORATORY AND UNION LABELS AS APPLICABLE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE DELIVERY SCHEDILLES OF MATERIALS.
- CIRCUIT BREAKERS SHALL BE MOLDED CASE, BOLT-ON TYPE, OF QUICK-MAKE ACTION, RATED AT 10,000 (120V), 14,000 (277/480V) AIC RMS. SYMMETRICAL. EACH MOLDED CASE CIRCUIT BREAKER SHALL HAVE THERMAL MAGNETIC TRIP DEVICE.
- LIGHTING FIXTURES SHALL BE COMPLETE WITH ALL NECESSARY WIRING LAMP HOLDERS, REFLECTORS, GLASSWARE AND MOUNTING ACCESSORIES AS REQUIRED AND POLES.
- 9. CONTRACTOR SHALL MAKE ALL NECESSARY EXCAVATIONS, CUTTING AND DO ALL REATTACHING AS NECESSARY FOR THE PROPER EXECUTION OF THIS WORK.
- AFTER COMPLETION OF THE INSTALLATION, THE SYSTEM SHALL TEST FREE FROM SHORT CIRCUITS AND GROUNDS.
- 11. ALL ELECTRICAL CONDUCTORS SHALL BE INSTALLED IN CONDUIT. CONDUITS SHALL COMPLY WITH N.E.C. PVC CONDUIT SHALL BE SCHEDULE 40 AND SHALL BE USED WHERE CONDUIT IS RUN IN CONCRETE SLABS, OR UNDERGROUND. ELECTRICAL METALLIC TUBING CONDUIT SHALL BE USED ON ALL INTERIOR WIRING. GRS CONDUIT SHALL BE USED ON ALL ENTERIOR WIRING.
- 12. ALL CONDUCTORS SHALL BE COPPER. NO CONDUCTOR SHALL BE SMALLER THAN No. 12 AWG. INSTALL A GROUNDING CONDUCTOR IN ALL CONDUITS SIZED PER N.E.C. INSULATION SHALL BE 600V. RATED AND SHALL BE THIWN.
- 13. VERIFY SERVICE VOLTAGE BEFORE ORDERING ANY ELECTRICAL
- 14. SPLICES FOR No. 6 AWG OR SMALLER SHALL BE MADE WITH UL LISTED MECHANICAL PRESSURE CONNECTORS. SPLICES FOR No. 4 AWG OR LARGER SHALL BE MADE WITH MECHANICAL PRESSURE, SOLDERLESS

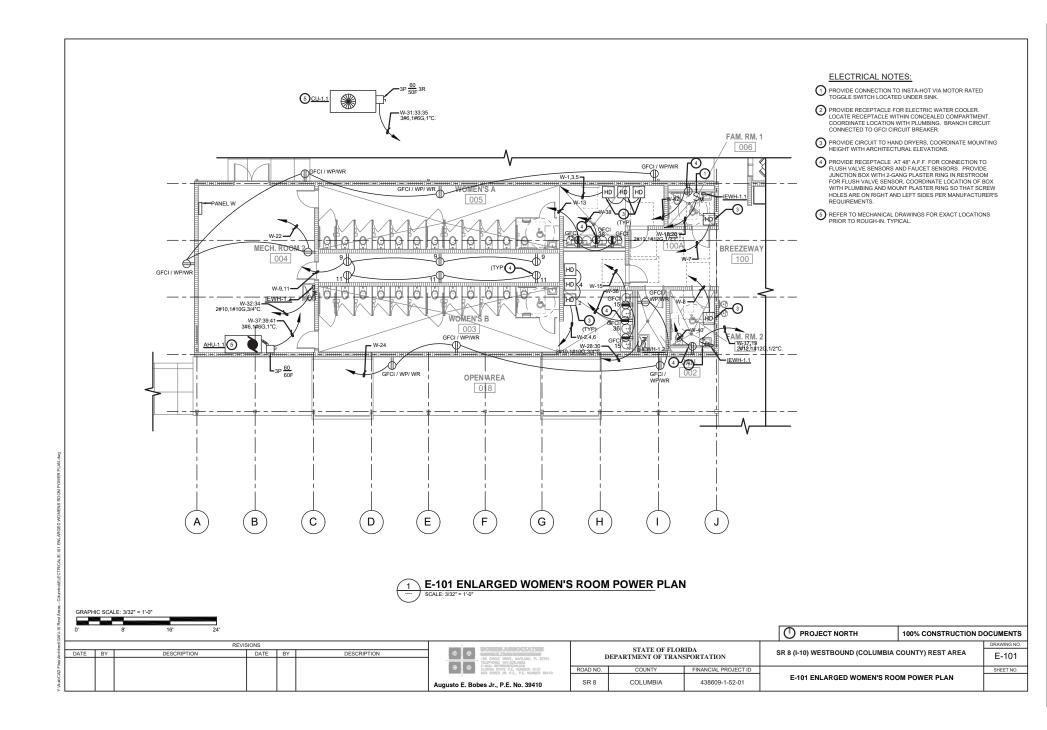
- CONNECTORS, AND SHALL BE BURNDY SERVITS OR APPROVED EQUAL.
- 15. ANY EXISTING EQUIPMENT OR DEVICES INADVERTENTLY DE-ENERGIZED OR DISCONNECTED SHALL BE RE-ENERGIZED AT NO COST TO THE OWNER.
- 16. EXISTING EQUIPMENT REMOVED SHALL BECOME THE PROPERTY OF THE OWNER AND SHALL BE REMOVED FROM THE JOB SITE.
- 17. COVER PLATES USED ON ALL WIRING DEVICES SHALL MATCH
- 18. OUTLET BOXES SHALL BE GALVANIZED, WITH SUITABLE PLASTER RINGS OR TRIMS TO CONFORN TO FINISM SUBFACE AS REQUIRED. EXTRA LARGE BOXES SHALL BE USED IN ACCORDANCE WITH N.E.C. IN PLACE OF SIZE INDICATED WHERE NECESSARY TO PREVENT UNDUE CROWDING OF WIRES. GANG BOXES SHALL BE USED FOR GANG
- SAFETY SWITCHES SHALL BE HEAVY DUTY, FUSED OR NON-FUSED AND SIZES AS INDICATED.
- 20. GROUNDING SHALL BE IN ACCORDANCE WITH ARTICLE 250 OF THE N.E.C.
- 21. LOADS IN GUTTERS SHALL BE PROPERLY BALANCED BETWEEN PHASES.
- 22. EQUIPMENT SUPPLY BY OTHERS TO BE CONNECTED BY ELECTRICAL CONTRACTOR.
- 23. ELECTRICAL CONTRACTOR TO COORDINATE HIS WORK WITH ALL
- 24. ANY DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER BEFORE PROCEEDING WITH THE WORK.
- 25. PRIOR TO INSTALLATION OF ROUGH ELECTRICAL WIRING, CHECK NAMEPLATE DATA ON A/C EQUIPMENT TO OBTAIN CORRECT WIRE SIZES AND OVERCURENT PROTECTION.
- 26. REFER TO MECHANICAL DRAWINGS FOR EXACT LOCATION OF MECHANICAL EQUIPMENT.
- 27. ELECTRICAL DESIGN COMPLIES WITH THE FLORIDA ENERGY CODE ENERGY CONSERVATION, 5TH EDITION.
- 28. CIRCUIT BREAKERS SERVING HVAC EQUIPMENT WITH A REQUIREMENT FOR HACR BREAKERS, IN THE RANGE OF 15 - 60 AMPS, UL APPROVED HACR BREAKERS SHALL BE USED.
- 29. ALL CONTACTORS TO BE ELECTRICALLY OR MECHANICALLY HELD AS INDICATED ON THE DRAWINGS.
- 30. NEW WIRING DEVICES TO MATCH TYPE AND COLOR OF THE EXISTING
- 31. PROVIDE PULLWIRE IN EMPTY RACEWAYS.
- 32. PROVIDE NEW TYPED DIRECTORIES FOR PANELBOARDS.
- 33. MINIMUM CONDUIT SIZE FOR ELECTRICAL WORK SHALL BE 3/4" AND FOR DATA/VOICE SHALL BE 1" CONDUIT.

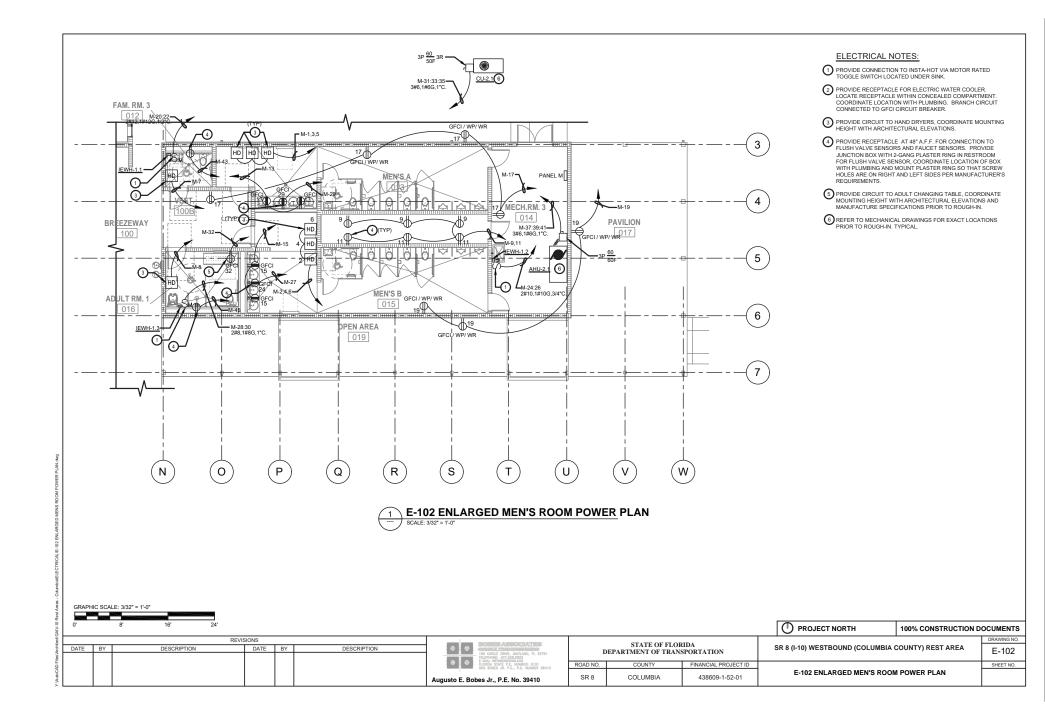
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						FLORIDA STATE P.E. NUMBER: 5131 GUS BORES JR. P.E. P.E. NUMBER 38410	ROAD NO.	COUNTY	FINANCIAL PROJECT ID			SHEET NO.		
						Augusto E. Bobes Jr., P.E. No. 39410	SR 8	COLUMBIA	438609-1-52-01	E-001 ELECTRICAL SYMBOL LEGEND AND GENERAL NOTES				

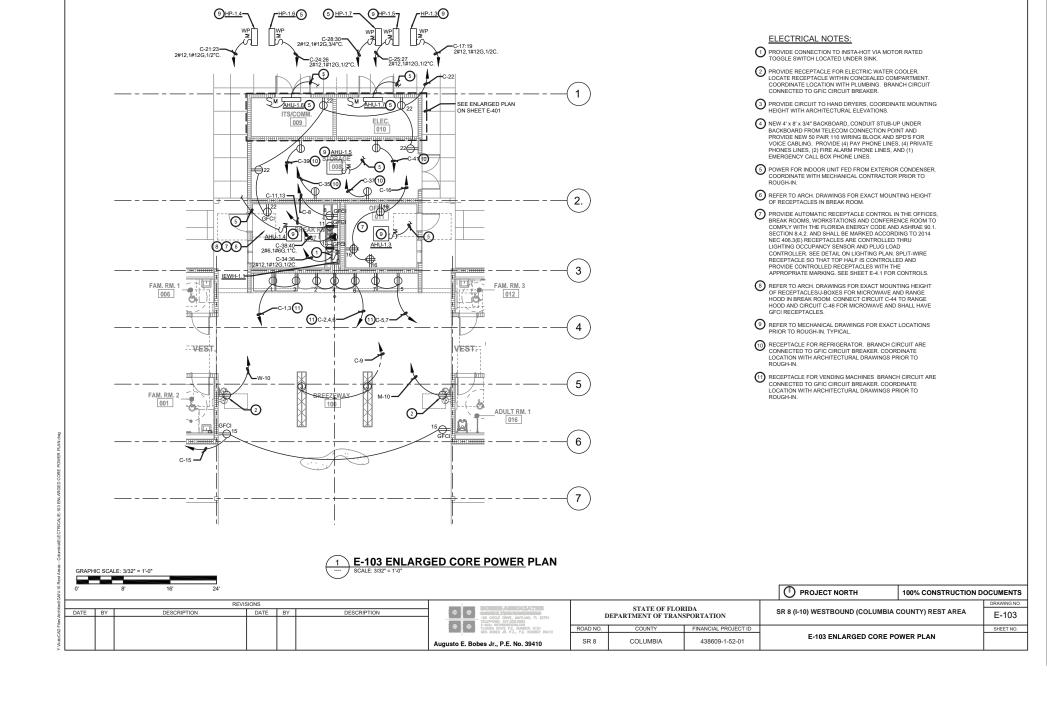
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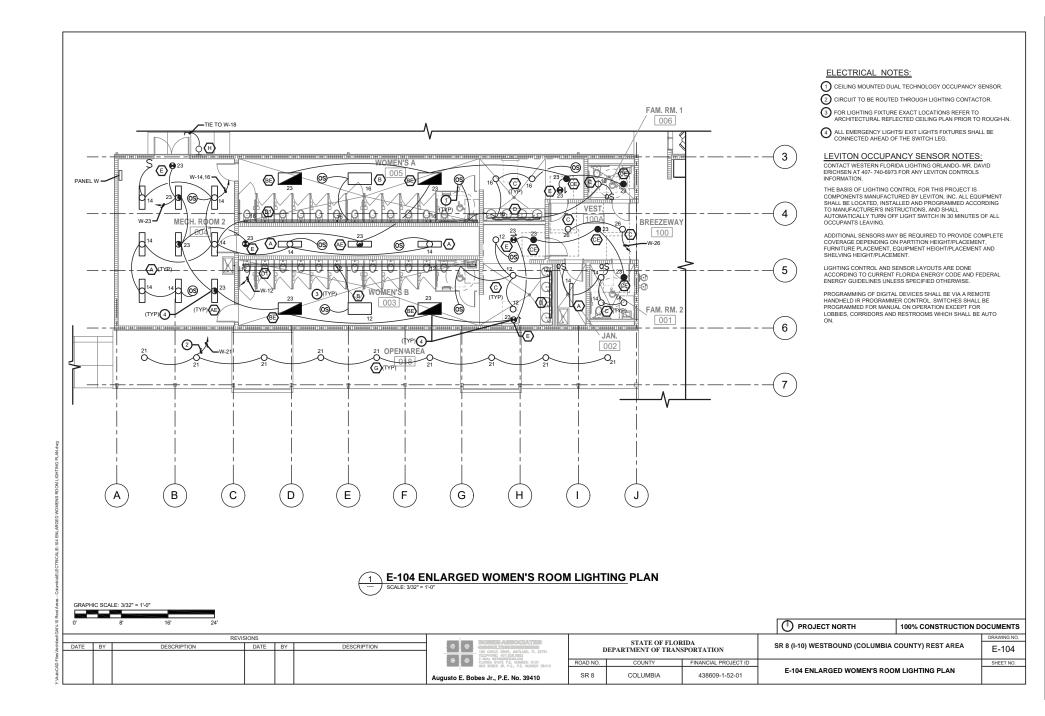
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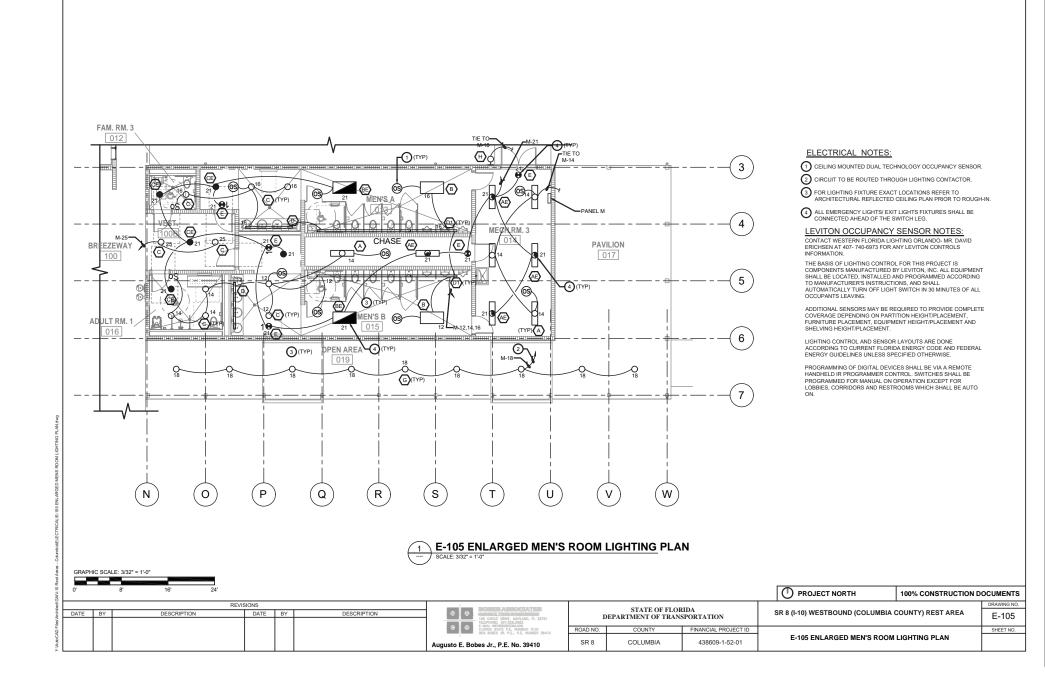


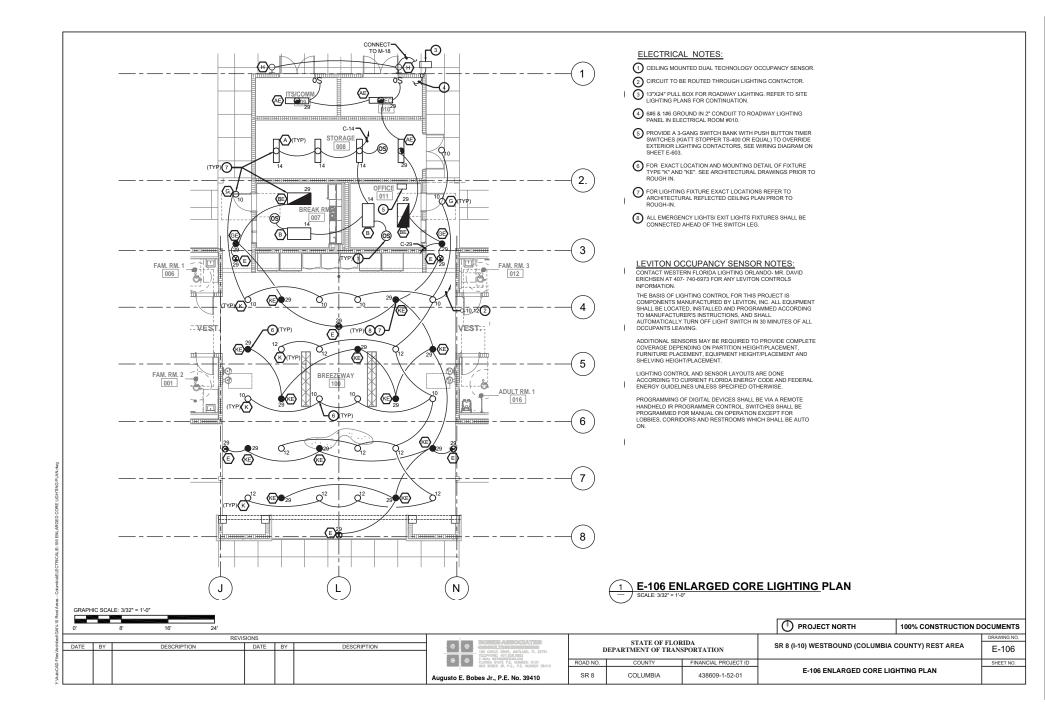


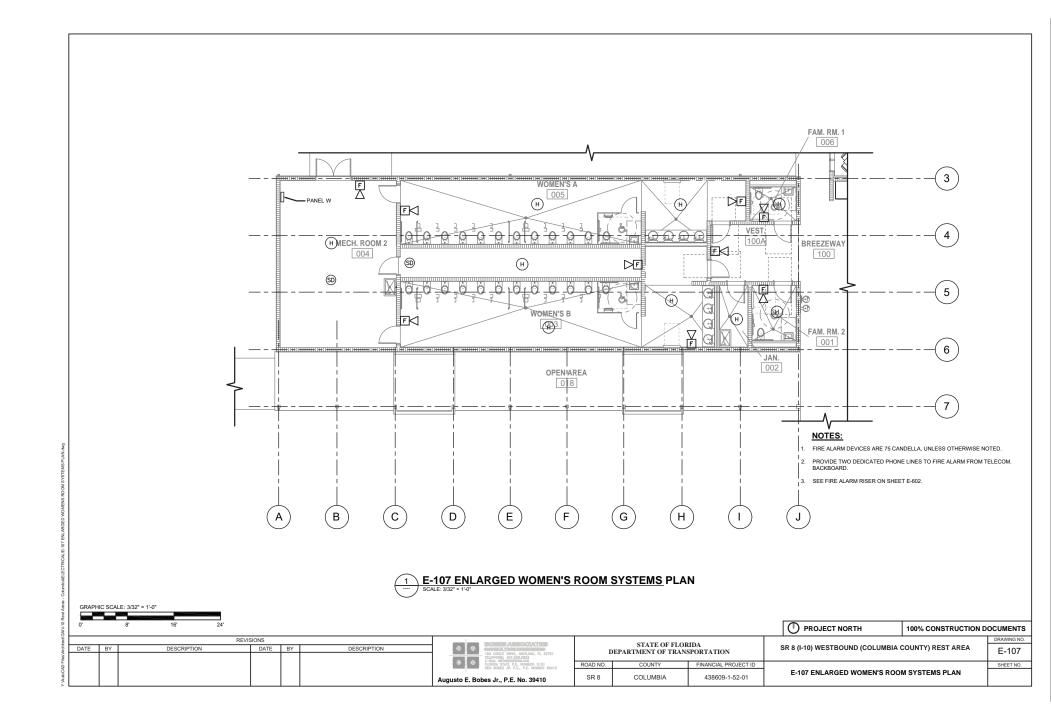


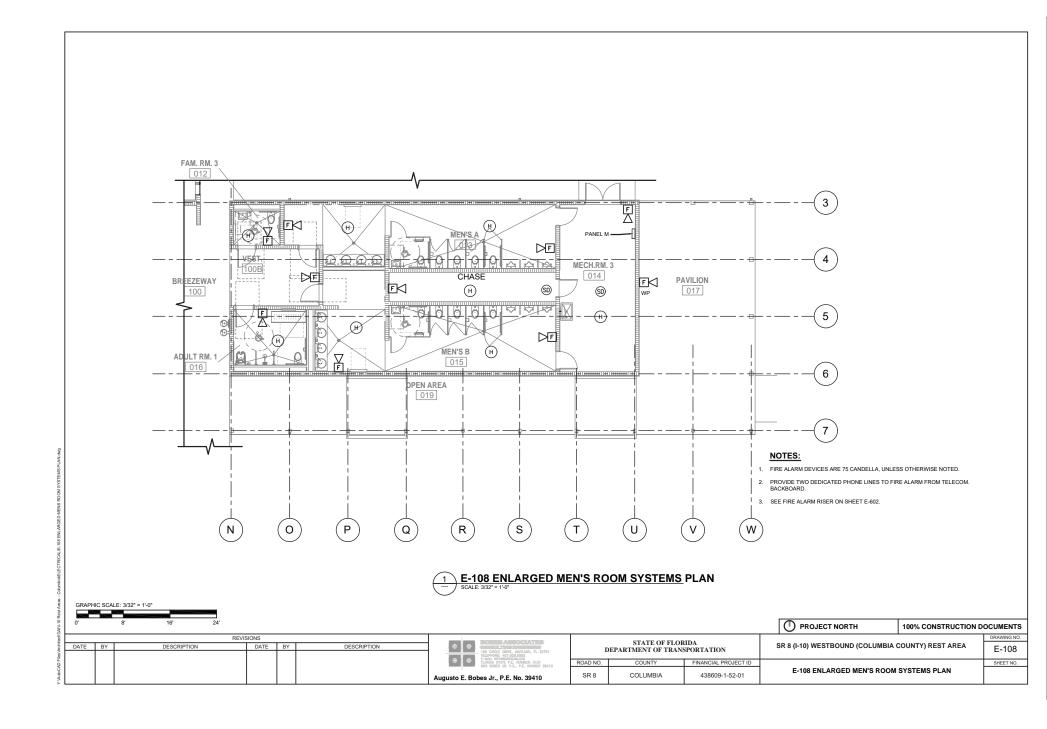


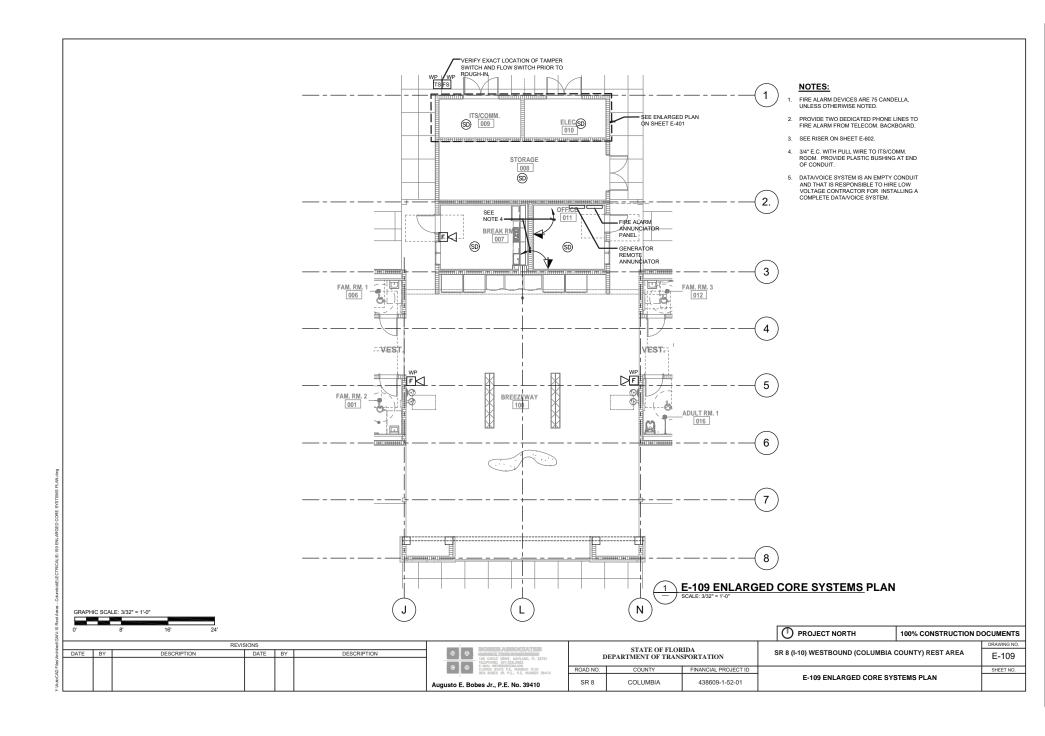


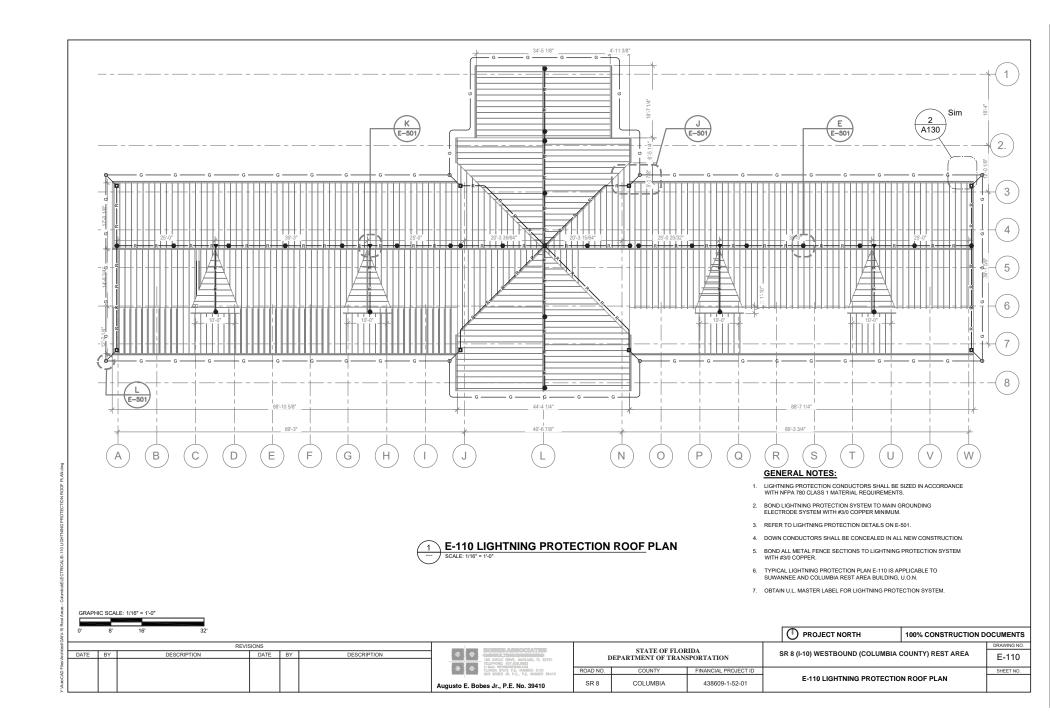


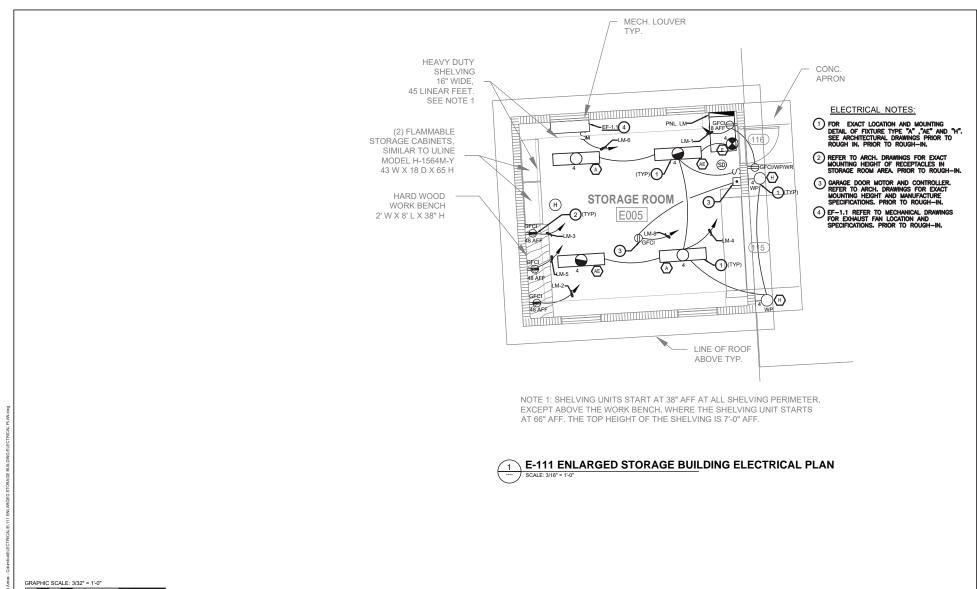












PROJECT NORTH

SR 8 (I-10) WESTBOUND (COLUMBIA COUNTY) REST AREA

E-111 ENLARGED STORAGE BUILDING ELECTRICAL PLAN

STATE OF FLORIDA

DEPARTMENT OF TRANSPORTATION

COLUMBIA

438609-1-52-01

ROAD NO

Augusto E. Bobes Jr., P.E. No. 39410

SR 8

100% CONSTRUCTION DOCUMENTS

E-111

SHEET NO.

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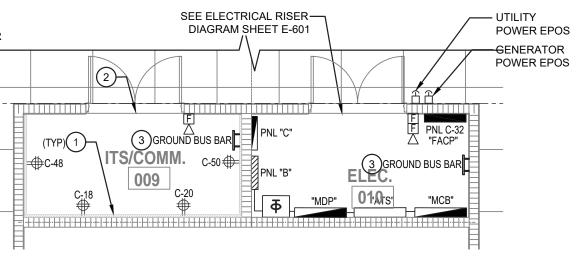
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DESCRIPTION

DESCRIPTION

ELECTRICAL NOTES:

- 1 NEW 4' x 8' x 3/4" BACKBOARD, CONDUIT STUB-UP UNDER BACKBOARD FROM TELECOM CONNECTION POINT AND PROVIDE NEW 50 PAIR 110 WIRING BLOCK AND SPD'S FOR VOICE CABLING. PROVIDE (4) PAY PHONE LINES, (4) PRIVATE PHONES LINES, (2) FIRE ALARM PHONE LINES, AND (1) EMERGENCY CALL BOX PHONE LINES.
- 2 REFER TO LOW VOLTAGE DRAWINGS FOR EXACT LOCATION/QUANTITY/SIZES OF EMPTY CONDUITS AND MOUNTING HEIGHT OF LOW VOLTAGE DATA/VOICE SYSTEM EQUIPMENT. THAT IS AN RESPONSIBLE TO HIRE LOW VOLTAGE CONTRACTOR FOR INSTALLING A COMPLETE DATA/VOICE SYSTEM PRIOR TO ROUGH-IN.
- 3 REFER TO ELECTRICAL SHEET E-502 FOR TYPICAL GROUND BUS BAR DETAIL.



E-401 ENLARGED ELECTRICAL ROOM POWER PLAN

SCALE: 1/4" = 1'-0"

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0	0	180 CIRCLE DRIVE, INATLAND, FL 32781 TELEPHONE: 407.638.0882 E-MAIL BEFOREOGENIACON FLORIDA STATE P.E. NUMBER: 5131 GUS BOSES JR. P.E., P.E. NUMBER 38410
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E-401 ENLARGED ELECTRICAL RO	OOM POWER PLAN	SHEET NO.

100% CONSTRUCTION DOCUMENTS

PROJECT NORTH



AIR TERMINAL

A DETAIL

N.T.S.



TYPICAL ADHESIVE

B CABLE HOLDER

E-501 N.T.S.



TYPICAL ADHESIVE

C BASE AIR TERMINAL

E-501 N.T.S.



TYPICAL OFFSET

BASE AIR TERMINAL

N.T.S.



TYPICAL ROOF

EQUIPMENT AIR TERMINAL

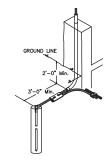
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TYPICAL
F V.T.R. BOND















GROUND ROD

CADWELD CONNECTION



TYPICAL ROOF

AIR TERMINAL

N.T.S.



TYPICAL

N HALF & HALF CLAMP

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	TOO CIRCLE DRIVE, INMITARILY FL 32/51 TELEPHONE: 407-328-0282 E-MAIL SETORIOGERIA.COM FLORIDA STATE P.E. NUMBER: 5131 GUS BOBES JR. P.E., P.E. NUMBER 38410
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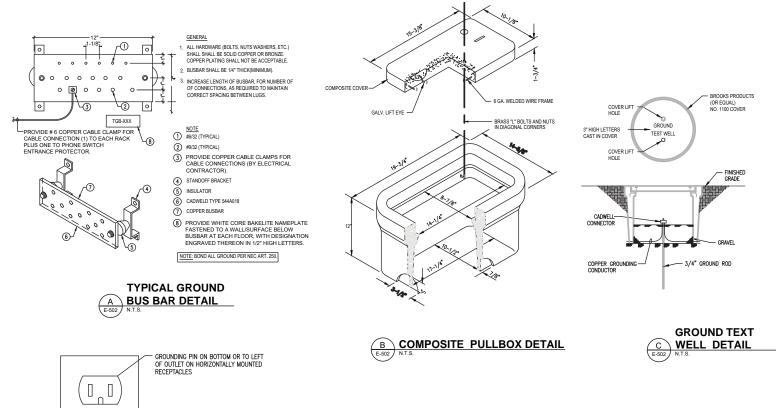
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 SR 8 (I-10) WESTBOUND (COLUMBIA COUNTY) REST AREA
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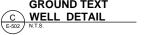


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- DYMO LABEL, VERIFY COLOR WITH OWNER, ADHERE TO BACK SIDE OF COVERPLATE USING CONTACT CEMENT. FACTORY ADNESIVE WILL NOT BE SUFFICIENT. ACTUAL CIRCUIT INFORMATION SHALL BE AS INSTALLED AND NOT NECESSARILY THE SAME CIRCUIT NUMBER AS SHOWN ON THE PLANS.

- 1. PROVIDE GREEN GROUND WIRE IN ALL RECEPTACLE CIRCUITS. CONNECT TO GROUND BUS IN PANEL.
- 2. DO NOT INSTALL RECEPTACLES, COMPUTER OR TELEPHONE OUTLETS BACK TO BACK. INSTALL IN ADJACENT STUD CAVITIES, TO REDUCE SOUND TRANSMISSION.

TYPICAL RECEPTACLE D IDENTIFICATION DETAIL



SNAP LOCK" TABS

1100 BODY

100% CONSTRUCTION DOCUMENTS

-21/4"x31/4" PIPE SLOT (TYPICAL OF 2)

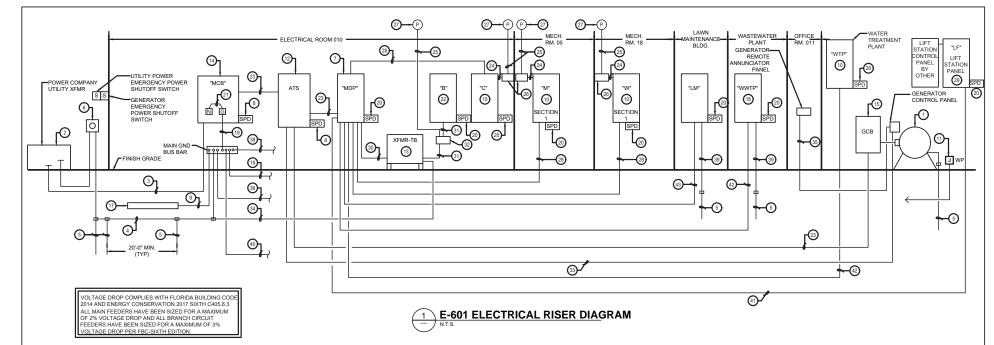
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SR 8	COLUMBIA	438609-1-52-01	ELECTRICAL DETA	ILS	

PROJECT NORTH

DATE BY



RISER NOTES:

- PROVIDE 360 KW / 450 VA, 0.8 POWER FACTOR STANDBY 9 GROUNDING ELECTRODE CONDUCTOR 3/0 BARE, GENERATOR SET, 208/120V, 3Ø, 4W WITH
 WEATHERPROOF ENCLOSURE AND SKID BASE FUEL
- 500 KVA PAD MOUNTED, UTILITY TRANSFORMER. 208/120V, 3Ø, 4W, 60 HZ SECONDARY. CT LOCATED ON SECONDARY SIDE OF UTILITY TRANSFORMER, COORDINATE REQUIREMENTS WITH LOCAL POWER COMPANY. REFER TO SITE PLAN FOR ADDITIONAL DETAILS
- SECONDARY CONDUIT AND CONDUCTORS PARALLEL RUNS OF (3) 600 KCMIL COPPER, IN 4"CONDUIT. EACH
- 3/0 BARE, STRANDED COPPER, GROUNDING ELECTRODE CONDUCTOR.
- 20' LONG x 3/4" DIAMETER COPPER CLAD STEEL SECTIONAL GROUND ROD. PROVIDE GROUND TEST. WELL AT EACH GROUND ROD.
- WALL MOUNTED METER SOCKET, GROUNDING PER POWER CO. REQUIREMENTS. FURNISHED & INSTALLED. BY CONTRACTOR. CONTRACTOR SHALL COORDINATE AND PROVIDE A UTILITY COMPANY APPROVED METER SOCKET. PROVIDE 1 1/2" CONDUIT FROM METER TO TRANSFORMER FOR CT CONDUCTORS. METER TO BE PROVIDED BY UTILITY COMPANY.
- PANELBOARD "MDP" 3 POLE, 1200A. MLO, 208/120V, 3Ø,
- PROVIDE TYPE 1 PRIMARY SERVICE ENTRANCE SPD WITH INTEGRAL DISCONNECTING MEANS. PROVIDE #6 AWG LEADS IN 3/4" CONDUIT, NIPPLE

- STRANDED COPPER 36" MIN. BELOW GRADE.
- PANELBOARD, 208/120V, 3Ø, 4W, REFER TO PANELBOARD SCHEDULE.
- ENGINE JACKET HEATER AND BATTERY CHARGER, EXTEND (4) #10, 1#10 GND. IN 1" C. TO PANEL "M".
- AUTOMATIC TRANSFER SWITCH, 3 POLE, 1200A, 250 VOLT. WITH SOLID NEUTRAL IN NEMA TYPE 1 ENCLOSURE.
- 13 DRY TYPE STEP-UP XFMR, 15 KVA, 208/120 VOLT, DELTA PRIMARY TO 480/277 VOLT WYE SECONDARY
- MAIN SERVICE DISCONNECT 1200A, 208V, 3 POLE, SOLID NEUTRAL CIRCUIT BREAKER, WITH SHUNT TRIP COIL. PROVIDE NAMEDI ATE "GENERATOR MAIN DISCONNECT IS LOCATED INSIDE GENERATOR ENCLOSURE" MUST BE LISTED AS SUITABLE FOR USE AS SERVICE ENTRANCE
- GENERATOR CIRCUIT BREAKER "GCB"1200A, 3 POLE, 208V, SOLID NEUTRAL, GROUND BUS IN NEMA 3R ENCLOSURE
- (6) 3/0 BARE STRANDED COPPER GROUNDING CONDUCTOR BETWEEN GROUND ROD AND LIGHTNING PROTECTION SYSTEM. INSTALL CONDUCTOR IN 1" SCH. 80 PVC C. WHERE EXPOSED. CONNECTION SHALL BE IRREVERSIBLE COMPRESSION TYPE.
- (17) BOND A 3/0 BARE CU CONDUCTOR TO REBAR IN THE BUILDING FOOTER TO ACT AS A CONCRETE ENCASED ELECTRODE IN ACCORDANCE WITH NEC ARTICLE 250.

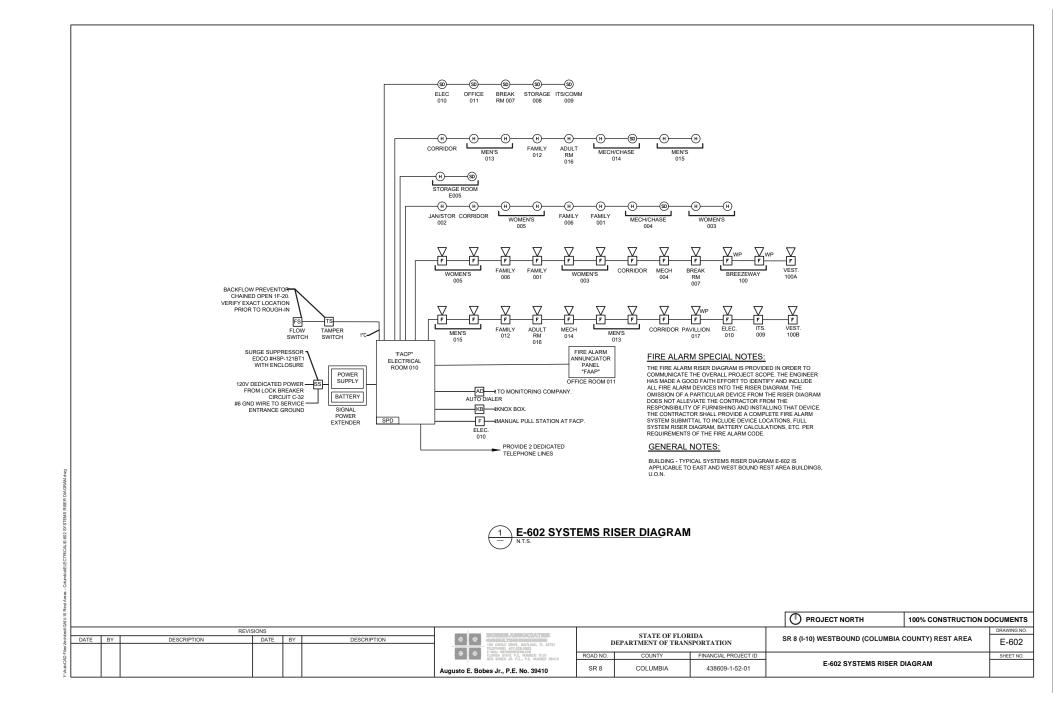
- (8) PANEL FOR WASTEWATER PLANT IS REQUIRED. PROVIDE 150. MCB, 120/208V, 3Ø, 4W, NEMA 3R
 PANELBOARD WITH 42 SPACES. COORDINATE BRANCH CIRCUIT BREAKER REQUIREMENTS WITH WASTE WATER DESIGN DRAWINGS SUBMITTED SEPARATELY. MOUNT PANELBOARD TO 4"x4"x10" CONCRETE POST BURIED 3'-0" INTO GROUND.
- GROUNDING CONDUCTOR FROM CIRCUIT BREAKER "MCB" GROUND BUS TO MAIN GND. BUS BAR, #3/0 BARE STRANDED COPPER
- (20) PROVIDE TYPE 2 SECONDARY SERVICE SPD.
- MAIN BONDING JUMPER #3/0 BARE STRANDED COPPER.
- PANELROARD 480/277V 3Ø 4W REFER TO PANELBOARD SCHEDULE FOR ROADWAY LIGHTING CIRCUITS BY OTHERS.
- (3) PARALLEL RUNS OF 4#600KCMIL. #3/0G IN 4" CONDUITS.
- LIGHTING CIRCUIT(S) AND CONTACTOR CIRCUIT FROM PANEL TO LIGHTING CONTACTOR PER DETAIL E-603.
- PHOTOCELL CIRCUIT, THRU ROOF CONDUIT, REFER TO DETAIL E-603 FOR CIRCUIT.
- LIGHTING CONTACTOR CABINET IN NEMA 1 ENCLOSURE WITH HINGED COVER, UL 50 LABELED. CABINET SHALL BE SIZED TO HOUSE CONTACTORS INDICATED IN
- 120 VOLT PHOTOCELL MOUNTED ON 3/4" GALVANIZED RIGID STEEL CONDUIT 6" ABOVE ROOF.

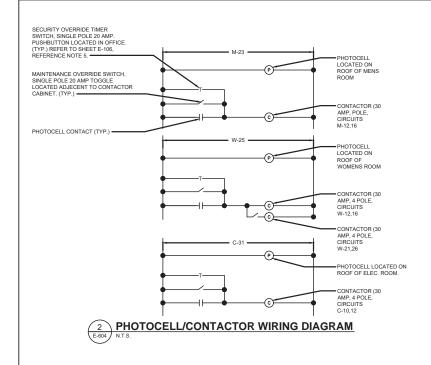
- 28) 4 # 4/0 ,1#4G,2-1/2" C.
- (29) LIFT STATION.
- 30 (3) #6 CU, (1) #10 CU GND. IN 1" FLEXIBLE CONDUIT
- (4) #10 CU, (1) #10 CU GND. IN 3/4" FLEXIBLE CONDUIT TRANSFORMER SECONDARY)
- ROUTE FEEDER THROUGH 30 AMP, 3 POLE CONTACTOR LOCATED IN NEMA 1 ENCLOSURE. CONTACTOR TO CONTROL PANEL "B"
- (1) 1-1/4" CONDUIT FROM GENERATOR TO ATS FOR CONTROLS. PROVIDE CONTROL CABLES PER MANUFACTURER'S REQUIREMENTS.
- #8 COPPER, BOND IN TRANSFORMER CONNECTED TO (34)
- 35) 1 1/4" CONDUIT WITH CARLES PER MANUFACTURER'S REQUIREMENTS EXTENDED FROM GENERATOR TO GENERATOR REMOTE ANNUNCIATOR PANEL LOCATED N SECURITY OFFICE ROOM 011, REFER TO E-109
- EXTEND #6 COPPER GROUND CONDUCTOR TO TELEPHONE TERMINAL BOARD.
- PROVIDE ARC-FAULT HAZARD WARNING LABEL ON ALL EQUIPMENT AS PER NEC 110.16.
- #3/0 BARE STRANDED COPPER GROUNDING CONDUCTOR BETWEEN GROUND BAR AND COLD WATER PIPE WITHIN 5 FEET OF ENTERING BUILDING

39 #2/0 BARE, STRANDED COPPER, GROUNDING CONDUCTOR TERMINATED ON GROUND BAR IN PANEL, DO NOT MAKE NEUTRAL GROUND BOND. EXTEND #2/0 BARE CIT CONDUCTOR LINBROKEN FROM GROUND ROD TO COLD WATER PIPE WITHIN 5' OF ENTERING BUILDING AND CONTINUE UNBROKEN CONDUCTOR TO GROUNDING/LIGHTNING PROTECTION SYSTEM.

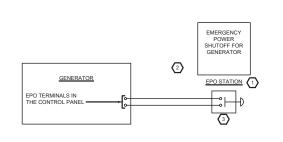
- 40 #2/0 COPPER GROUND TO TELECOMM MAIN GROUND BUS BAR (TMGB).
- 4 # 3/0 ,1#6G,3" CONDUIT.
- 4 # 3/0 ,1#6G,3" CONDUIT.
- (43) 4 # 3 ,1#8G,2" CONDUIT.

3AW-10 R		AWO EEADO IN 314 CONDOIT. NII 1 EE.			EEEO NOBE IN ACCORDANCE WITH NEC ANTICE	2200. TROID OFFEE GORDON O FROME NO.				PROJECT NORTH	100% CONSTRUCTION D	OCUMENTS	
je of		REVI	SIONS					STATE OF FLOR	TD.			DRAWING NO.	
Ē 🔲	ATE BY	DESCRIPTION	DATE	BY	DESCRIPTION	O O CONTRACTOR	l ,			SR 8 (I-10) WESTBOUND (COLUMBIA	E-601		
los						180 CIRCLE DRIVE, MATLAND, FL 32781 TELEPHONE: 407.628.0882	DEPARTMENT OF TRANSPORTATION						
9						PLORIDA STATE P.E. NUMBER: 5131 GUS ROBES JR. P.E. P.E. HUMBER 38410	ROAD NO.	COUNTY	FINANCIAL PROJECT ID			SHEET NO.	
Y:\AutoC						Augusto E. Bobes Jr., P.E. No. 39410	SR 8	COLUMBIA	438609-1-52-01	E-601 ELECTRICAL RISER	DIAGRAM		





TYPE	DESCRIPTION	MOUNTING	LAMPS	MANUFACTURER & CATALOG NO.	REMARKS
\bigcirc	4' LED STRIP	SURFACE	35W-LED 80+CRI,3500K	COLUMBIA - HUBBELL LIGHTING MPS4-35LW-CW-EU/CM48SCF4-KIT	(5' Suspension Cable As required)
Æ	4' LED STRIP	SURFACE	35W-LED 80+CRI,3500K	COLUMBIA - HUBBELL LIGHTING MPS4-35LW-CW-EU-ELL14/CM48SCF4-KIT	(5' Suspension Cable As required)
₿	2' x 4' LED TROFFER	RECESSED	39W-LED 80+CRI,3500K	COLUMBIA - HUBBELL LIGHTING LCAT-35MLG-EDU / FK24	(Flange Kit As Required For Drywall Hard Ceilings)
⑱	2' x 4' LED TROFFER	RECESSED	44W-LED 80+CRI,3500K	COLUMBIA - HUBBELL LIGHTING LCAT-35MLG-EDU-ELL14 / FK24	(Flange Kit As Required For Drywall Hard Ceillings)
◎	4" RD-DOWNLIGHT	RECESSED	22W LED 80+CRI,3500K	PRESCOLITE - HUBBELL LIGHTING LTR-4RDH-ML20L-DM1120-277V / LTR-4RD-T-ML35K8WDSS	
➅	4" RD-DOWNLIGHT	RECESSED	22W-LED 80+CRI,3500K	PRESCOLITE - HUBBELL LIGHTING LTR-4RDH-ML20L-DM1120-277VEM / LTR-4RD-T-ML35K8WDSSEM	
◐	RECESSED LINEAR	RECESSED	8W/FT-LED 80+CRI,4000K	PRUDENTIAL - HUBBELL LIGHTING BPRO4-REC-FLSH-LED4-SO-8'- TMW-SC-UNV-X3-DM01/ETS-DR	
ⓓ	RECESSED LINEAR	RECESSED	8W/FT-LED 80+CRI,4000K	PRUDENTIAL - HUBBELL LIGHTING BPRO4-REC-FLSH-LED4-SO-24'- TMW-SC-LINV-X3-DM01/FTS-DR	-
€	EXIT LIGHT WITH BATTERY PACK	UNIVERSAL	2W-LED	DUAL LITE - HUBBELL LIGHTING #EVE-URWEI	-
₽	EXIT / EMERGENCY LIGHT COMBO	UNIVERSAL	2W-LED	DUAL LITE - HUBBELL LIGHTING EVCURW-D-I	-
(4" RD-EXTERIOR DOWNLIGHT	RECESSED	22W-LED 80+CRI,3500K	PRESCOLITE - HUBBELL LIGHTING LTR-4RDH-ML20L-DM1120-277V/LTR- 4RD-T-ML35K8WDSS	WET LOCATIONS
▣	4" RD- EXTERIOR DOWNLIGHT	RECESSED	22W-LED 80+CRI,3500K	PRESCOLITE - HUBBELL LIGHTING LTR-4RDH-ML20L-DM1120-277V/LTR- 4RD-T-ML35K8WDSS	
⊕	WALL PACK	SURFACE	30W-LED 80+CRI,4000K	HUBBELL LIGHTING LNC2-12L-4K-070-3-U-DBT	WET LOCATIONS
K	PENDANT MOUNT 6" CYLINDER	PENDANT	23W-LED 80+CRI,4000K	PRESCOLITE - HUBBELL LIGHTING LCC6LED-P-18L-40K-8-WF45-BL	SEE ARCHITECT DRAWINGS FOR EXACT LOCATION AND MOUNTING DETAILS. CONFIRM STEM LENGTH.
(E)	PENDANT MOUNT 6" CYLINDER	PENDANT	23W-LED 80+CRI,4000K	PRESCOLITE - HUBBELL LIGHTING LCC6LED-P-18L-40K-8-WF45-BL. PROVIDE REMOTE INVERTER.	SEE ARCHITECT DRAWINGS FOR EXACT LOCATION AND MOUNTING DETAILS. CONFIRM STEM LENGTH.



SHUNT TRIP BUTTON WIRING DIAGRAM

DATE

REFERENCE NOTES:

EPO STATION MOUNTED 6 FT. ABOVE GRADE ON THE OUTSIDE WALL EPO, 30mm NON-LUMINATED, TURN-TO-RELEASE, MUSHROOM PUSH BUTTON OPERATOR (COLOR RED), TRIGGER ACTION, WITH ONE FORM C CONTACT. CLASS 9001, CORROSION RESISTANT, LI, TYPE AND NEMA 4 RATED. INSTALLED WITH UL TYPE 4, NEMA 8 RATED, GUARDED ENCLOSURE (COLOR GRAY), TO PROTECT GAINST INADVERTENT OPERATION OF MUSHROOM PUSH BUTTON. ENCLOSURE MATERIAL TO BE DIE CAST ZINC.

MUSHROOM PUSH BUTTON (SQ-D CAT #9001SKR9RH13), WITH ONE N.O.JONE N.C. CONTACT (SQ-D CAT #KA1), GUARDED ENCLOSURE (SQ-D CAT #9001KYG1) OR EQUAL.

WHEN THE MUSHROOM PUSH BUTTON IS DEPRESSED, TO THE "OFF" POSITION, THE GENERATOR WILL SHUT DOWN IF IT IS RUNNING. ENSURE THE GENERATOR WILL NOT START UNTIL THE EPO SWITCH IS RETURNED TO THE "ON" POSITION, TWIST-TO-RELEASE, AND THE SHUTDOWN ALARMS ARE CLEARED FROM THE OPERATOR CONTROL

(2) INSTALL A 10" x 10" ALUMINUM SIGN WITH RED FIELD AND 1/2" HIGH LETTERS DIRECTLY ABOVE THE EPO STATION.

PROVIDE 120 VOLT CIRCUIT FROM PANEL "C" CIRCUIT 33.

	REVIS	SIONS		
BY	DESCRIPTION	DATE	BY	DESCRIPTION

0 0	150 CIRCLE DRIVE, IMATLAND, FL 52751 TILEPHONE: 407-535.0882 F-MAI: BROONDENBERGED FL FLORIDA STATE P.E. MONBER: 5131 QUS BORSS M. P.E., P.E. MUNIER 39410
Augusta E B	hee Ir DE No 20410

			PROJECT NORTH	100% CONSTRUCTION D	OCUMENTS
	CTATE OF FLOR	NID 4			DRAWING NO.
	STATE OF FLOI DEPARTMENT OF TRAN		SR 8 (I-10) WESTBOUND (COLUMBIA	COUNTY) REST AREA	E-603
ROAD NO	COUNTY	FINANCIAL PROJECT ID			SHEET NO.
SR 8	COLUMBIA	438609-1-52-01	E-603 LIGHTING FIXTURE SCHEDU	LE AND DIAGRAMS	

	PANEL FED FROM: MECHANICAL RN PANEL FED FROM: MPD	1014		PANEL DE PANELBO MAINS: 2	ARD RATI		AMP			CTURER	08V, 3PH-4V E SQUARE			AIC BATING: 42KA MOUNTING: SURFACE NEMA TYPE: NEMA-1	
LOAD	LOAD DESCRIPTION	PHA	VA PER PHA PH B	SE PH C	BKR	POLE	скт	скт	POLE	BKR	PH A	PH B	SE PHC	LOAD DESCRIPTION	LOAD
M	HAND DRYER M-A	1.8			20	1	1	2	1	20	1.6			HAND DRYER M-8	M
M	HAND DRYER M-A		1.6		20	1	3	4	1	20		1.6		HAND DRYER M-B	M
848	HAND DRYER M-A			1.8	20	1	5	6	1	20			1.8	HAND DRYER M-B	M
	HAND DRYER FAM.3	1.8			20	1	7	8	1	20	1.8			HAND DRYER ADULTRM	1.0
	FLUSH VALVE		0.4		20	1	9	10	1	20		1		FWC NOTE #1	M
2.0	FLUSH VALVE			0.4	20	1	11	12	1	20			0.5	MEN'S B LIGHTING	1
R	RECEPTACLES GFO	0.36			20	1	13	14	1	20	0.6			MECH RM/TOLT LTG	L
R	RECEPTACLES GFO		0.36		20	1	15	16	1	20		0.6		MEN'S A LIGHTING	L
R	RECEPTACLES EXT. TOILET			0.72	20	1	17	18	1	20			0.3	MEN'S PORCH LIGHTING	T.
	RECEPTACLES EXT. TOILET	0.72			20	1	19	20	2	20	0.6			EWH-1.1	W
L	EMERGENCY LIGHTING		0.3		20	1	21	22	-	-		0.6		+	W
M	PHOTOELLICONT			0.4	20	1	23	24	2	30		-	1.25	IEWH-1.2	W
L	VESTUGHTING	0.1	-		20	1	25	26	-		1.25		7.84		W
M	FAUCET VALVES	-	0.4		20	1	27	28	2	40	-20	4.16		EWH-1.3	W
	FAUCET VALVES			0.4	20	1	29	30		-90		4.15	4.16	-	W
M	CU-2.1	4.19	-	0.4	50	3	31	32	1	20	0.6		4.10	ADULT CHANGING TABLE	1.4
M	OUR I	7.17	4.19		-	-	33	34	1	20	0.0	1		GEN BATTERY CHARGER	54
M		-		419	1	-	35	36	2	20			1	BEN WATER HEATER JACKET	5.0
M	AHU-2 1 ROOM 614	4.7		-	60	3	37	38	-	4,0	1			DENTIFICATION OF THE PERSONNEL	M
M	PRIOR FROM UT		4.7		- 00	-	39	40	-1	20				SPARE	741
M		-	7.7	4.7	1	-	41	42	1	20				SPARE	_
M	FLUSH AND FAUCET VALVE	0.8		4.7	20	1	43	44	1	20				SPARE	-
	FLUSH AND FAUCET VALVE	0.0	0.6		20	1	45	46		20			-	SPARE	_
- PH	SPARE		0.0		20	1	47	48	1	20				SPARE	_
_	SPARE	-			20	1	49	50	+	20				SPARE	-
_	SPARE	-			20	1	51	52	1	20				SPARE	_
_	SPARE				20	1	53	54	4	20				SPARE	-
_	SPARE				20	1	55	54	-	20				SPARE	+
-	SPARE	_			20	1	57	58	- 1	20				SPARE	-
_					20	1		60	1	20				SPARE	-
_	SPACE	-			20	1	61	62	-1:	20				SPACE	-
_	SPACE	-			-	-	63	64						SPACE	_
	SPACE				-	_								SPACE	_
_					-	-	65	66	-	-					-
_	SPACE	-			-	_	67	68		_	-			SPACE	_
_	SPACE	-			4	-	69		-	_				SPACE	_
	SPACE				-		71	72					_	SPACE	-
_	SPACE	-				-	73	76	_	_				SPACE	-
					4	-	75								-
	SPACE				_	-	77	78	-					SPACE	_
	SPACE	_				-	79	80	3	30				SPD	_
	SPACE				-	_	81	82		+			-	-	_
	SPACE	-		-	-		83	84		-		-		-	_
	PANELBOARD SUB-TOTALS	14.5	13.0	12.6							7.9	9.2	9.0	PANELBOARD SUB-TOTALS	
	LOAD CALCULATIONS:	CONN	ECTED LOA	D (KW)	- 0	EMAND		2		ES TIMA	TED DEMA	ND LOAD (K	W)	NOTES:	
	(L) LIGHTING	2.1		-	1.2					2.6			1. PROVIDE GFO BREAKERS AS		
					1.0					2.2			REQUIRED		
	(R) RECEPTACLES (REMAINDER)				0.6					0.0			1		
	(H) HVAC (WORST CASE)		0.0			1.0	0		0.0						
	(W) WATER HEATING		12.0			1.0	0		12.0						
	(K) KITCHEN		0.0			0.6	5		0.0						
	(M) MISCELLANEOUS		49.5			1.0	0				49.5			7	
	PANELBOARD TOTALS:		49.5 65.8 (183A)			1,00 49.5 66.3 (154A)									

	ANEL FED FROM: XFMR "TB"	d 010		PANEL DE PANEL BOX MAINS; 20	ARD RATI					CTURER	80V, 3PH-4 E SQUARE			MOUNTING: 40KA MOUNTING: SURFACE NEMA TYPE: NEMA-1	
D	LOAD DESCRIPTION	ю	VA PER PHA	SE							KVA PER PHASE			LOAD DESCRIPTION	LOAD
E		PHA	PHB	PHC	BKR	POLE	CKT	CKT	POLE	BKR	PHA	PHB	PHC		TYPE
+		-					1	2							-
+					_		3	4				_	-		_
+								-							_
$^{-}$							7	8							_
							9	10							
		1000					11	12							
							13	14							
							15	16					100		
+					_		17	18							-
_							19	20							_
+					-	-	21	22		_					-
+			-		-	_	23	24					_		-
-				-	-	_	27	28	_						-
-			_	_	-	_	29	30				-			-
+					_	_	31	32							-
+							33	34						-	_
+							35	36							_
_							37	38	3	30				SPD	_
$^{+}$							39	40		-					_
	70.00 mm						41	42						Company of the Compan	
	PANELBOARD SUB-TOTALS	0.0	0.0	0.0				10000			0.0	0.0	0.0	PANELBOARD SUB-TOTALS	
	LOAD CALCULATIONS:	CONN	MECTED LOA	D (KW)	D	EMAND F	FACTO	R		ESTIMA	ATED DEMA	ND LOAD (K	W)	NOTES:	
) LIGHTING		0.0		-	1.20	5				0.0			1. PROVIDE GFCI BREAKERS AS	
(F	R) RECEPTACLES (FIRST 10 KW)		0.0			1.00	0				0.0			REQUIRED.	
(5	R) RECEPTACLES (REMAINDER)		0.0			0.60	0				.0.0			Contractor to a	
	H) HVAC (WORST CASE)		0.0			1.00	0				0.0				
	V) WATER HEATING		0.0			1.00					0.0				
	() KITCHEN		0.0			0.60	5				0.0				
(2	I) MISCELLANEOUS		0.0			1.00	0				0.0	0			
P	ANELBOARD TOTAL S:	0.0	(DA)								0.0	(GA)		7	

	PANEL LOCATION: ELECTRICAL ROO PANEL FED FROM: POWER COMPAN			PANEL DE PANELBO MAINS: 12	ARD RAT	NG: 120			MANUFA	CTURER	06V, 3PH-6 SQUARE P PANEL			AIC RATING: 65KA MOUNTING: SURFACE NEMA TYPE: NEMA-1	
LOAD	LOAD DESCRIPTION	К	VA PER PHA	SE.	T						ю	VA PER PHA	SE	LOAD DESCRIPTION	LOAD
TYPE		PHA	PH B	PHC	BKR	POLE	CKT	CKT	POLE	BKR	PHA	PHB	PHC		TYPE
M	PANEL M	16.8			225	3	1	2	3	50	5			XFMR "TB"- FOR ROAD WAY LTG.	1
M			16.8			-	3	4	-	-		5		-	L
M	+			16.8		+	5	6		+			5	-	L
74	PANELW	16.8			225	3	7	8	3	150	12			PANEL WTP	M
M	•		16.8	200	-		9	10		i.e.		12	DOM:		M
M	+0			16.8	+	-	11	12	-	+			12	-	M
	PANELC	17			225	3	13	14	3	200	11.1			PANEL LS - LIFT STATION	M
M	4770000		17		-	-	15	16	-			11.1			M
M	* Contraction (Contraction Contraction Con		100000000000000000000000000000000000000	17		Ψ.	17	18	-				11.1		M
	PANEL LM	9	ALC: UNKNOWN		100	3	19	20			200	-			
M	* .		9				21	22							
.M	*(1); (10);			9			23	24				No.			
M	PANEL WWTP	12			150	3	25	26							
M			12				27	28							
M	*			12		-	29	30	-						
							31	32							
							33	34							
							35	36							
							37	38	3	30	1			SPD	
							39	40		+					
							41	42	-	-					
	PANELBOARD SUB-TOTALS	71.6	71.6	71.6				1			28.1	26.1	28.1	PANELBOARD SUB-TOTALS	_
	LOAD CALCULATIONS:	CONN	CONNECTED LOAD (KW)				ACTO	R		ES TIM/	TED DEMA	ND LOAD (K	W)	NOTES:	
	(L) LIGHTING		15.0			1.25	5				18.8				
	(R) RECEPTACLES (FIRST 10 KW)		0.0			1.00					0.0			1	
	(R) RECEPTACLES (REMAINDER)		0.0			0.50)				0.0				
	(H) HVAC (WORST CASE)		00			1.00					0.0			1	
	(W) WATER HEATING	0.0				1.00)				0.0			7	
	(K) KITCHEN	00				0.60					0.0				
	(M) MISCELLANEOUS		284.1			1.00			294.1					1	
	PANELBOARD TOTALS:	299.1									302.9	(842A)		7	

			REVIS	SIONS			Γ
	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	
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				PROJECT NORTH	100% CONSTRUCTION D	OCUMENTS			
	CTATE OF ELOP	TD.			-	DRAWING NO.			
D	STATE OF FLOR EPARTMENT OF TRANS		:	E-604					
ROAD NO.	COUNTY	FINANCIAL PROJECT ID				SHEET NO.			
SR 8	COLUMBIA	438609-1-52-01		E-604 ELECTRICAL PANEL SCHEDULES					

	PANEL LOCATION: WASTE WATER PL PANEL FED FROM: MOP	ANT		PANEL DE PANELBO MAINS: 22	ARD RATI					CTURER	SOUARE			AIC RATING: 42KA MOUNTING: SURFACE NEMA TYPE: NEMA-1		
MD	LOAD DESCRIPTION	10	A PER PHA	SE		$\overline{}$					К	VA PER PHA	SE	LOAD DESCRIPTION	LOA	
PE		PHA	PH B	PHC	BKR	POLE	CKT	CKT	POLE	BKR	PHA	PHB	PHC		TYP	
-					20	1	1	2	-1	20					+	
\rightarrow					20	1.	3	4	1	20		1		-	_	
\neg					20	1	. 6	6	1	20					_	
					20	1	7	8	1	20						
\neg					20	1.	9	10	1	20						
		100000000000000000000000000000000000000			20	1	11	12	1	20						
					20	1	13	14	1	20						
					20	1	15	16	1	20						
					20	1	17	18	1	20						
					20	1	19	20	1	20	200					
_					20	1	21	22	1	20						
_					20	- 1	23	24	- 1	20				-	_	
_					20	1	25	26	- 1	20					_	
-		-			20	1	27	28	-1	20					-	
-					20	1	29	30	1	20					-	
\rightarrow					20	1	31	32	1	20			-		-	
-					20	3	35	36	1	20					-	
\rightarrow					20	1.	37	38	3	30		_		SPD	-	
\rightarrow					20	1	39	40		30			-	570	-	
\rightarrow					20	1	41	42	-	-					_	
	PANELBOARD SUB-TOTALS	0.0	0.0	0.0							0.0	0.0	0.0	PANELBOARD SUB-TOTALS		
	LOAD CALCULATIONS:	CONN	ECTED LOA	D (KW)	0	EMAND I	FACTO			ESTIMA	TED DEMA	ND LOAD (K	W)	NOTES:		
	(L) LIGHTING		0.0			1.2	5				0.0			1. PROVIDE GFO BREAKERS AS		
	(R) RECEPTACLES (FIRST 10 KW)		0.0			1.0					0.0			REQUIRED.		
	(R) RECEPTACLES (REMAINDER)		0.0			0.5	0				0.0	1%				
	(H) HVAC (WORST CASE)		0.0			1.0	0				0.0	10				
	(W) WATER HEATING		0.0			1.0	0				0.0	i i				
	(K) KITCHEN		0.0			0.6	6				0.0					
	(M) MISCELLANEOUS		0.0			1.0	0				0.0					
	PANELBOARD TOTAL S:	0.0	(OA)		-						0.0	(SA)				

	PANEL LOCATION: MECHANICAL RM PANEL FED FROM: MPD	1 05		PANEL DE PANELBO MAINS: Z	RD RATI	NG: 225	WP			CTURER	06V, 3PH-4N SQUARE			AIC RATING: 43KA MOUNTING: SURFACE NEMA TYPE: NEMA-1		
LOAD	LOAD DESCRIPTION	K	A PER PHA	SE	Page 1	Seed			1000	2000	K	VA PER PHA	SE	LOAD DESCRIPTION	LOA	
TYPE		PHA	PH B	PHC	BKR	POLE	CKT	CKT	POLE	BKR	PHA	PHB	PH C	1 0.5107.500350.7450.0	TYP	
M	HAND DRYER WA	1.8			20	1	1	2	1	20	18			HAND DRYER W-8	M	
M	HAND DRYER W.A.		1.8		20	1	3	4	1	20	11/1	1.8		HAND DRYER W-8	M.	
141	HAND DRYER W-A			1.0	20	1	5	6	1	20			1.6	HAND DRYER W-8	M	
M	HAND DRYER FAM. 1	1.8		B 100 100 100 100 100 100 100 100 100 10	20	1	7	8	1	20	1.8			HAND DRYER FAM 2	1.0	
M	FLUSH VALVE		0.4		20	1	9	10	1	20		1	00000000	EWCNOTE #1	M	
M	FLUSH VALVE	10000		0.4	20	1	11	12	1	20			0.5	WOMENS'S B LIGHTING	L	
R	RECEPTACLES GFG	0.36			20	- 1	13	14	1	20	0.6			MECH RM/TOILT LTG	L	
R	RECEPTACLES GFCI		0.36		20	1	15	16	1	20		0.6		WOMEN'S A LIGHTING	L	
W	EWH-1.1 RM 001			0.6	20	2	17	18	2	20			0.6	IEWH-1.1 RM 107	W	
W		0.6					19	20			0.6			-	W	
L	EXT LIGHTING		0.3		.20	1	21	22	. 1	20		0.72		RECPTACLES EXT. TOILLET	R	
L	EMERGENCY LIGHTING			0.3	20	1	23	24	1	20			0.72	RECPTACLES EXT. TOILLET	R	
M	PHOTSELL/CONT	0.4			20	1.	25	26	1	20	0.1			VEST. UGHTING	L	
	SPARE				20	1	27	28	2	30		1.25		IEWH-1.2 RM 002	W	
	SPARE				20	1	29	30	. + .	.+			1.25	*	W	
M	CU-1.1	4.6			50	3	31	32	2	30	1.25	-		EWH-1.2 RM 004	W	
M	_		4.6				33	34		14		125		-	W	
M				4.6	-	-	35	36	1	20			0.4	FAUCETVALVE	M	
M	AHU-1:1	5			60	3	37	38	1	20	0.4			FAUCETVALVE	M	
M			5				39	40	1	20		0.8		FLUSH AND FAUCET VALVE	M	
M				5		-	41	42	1	20			0.8	FLUSH AND FAUCET VALVE	M	
_	SPARE				20	1	43	44	-1	20	-			SPARE		
	SPARE				20	1	45	46	1	20				SPARE	_	
	SPARE				20	1	47	48	- 1	20				SPARE		
	SPARE				20	1	49	50	1	20				SPARE	_	
	SPARE				20	1	51	52	1	20				SPARE	_	
	SPARE				20	1	53	54	1	20				SPARE	-	
	SPARE				20	1	55	56	1	20	-			SPARE	_	
	SPARE	-			20	1	57	58	1	20				SPARE		
	SPARE				20	1	59	60	- 1	20				SPARE		
	SPACE						61	62		- 10				SPACE		
	SPACE						63	64						SPACE	_	
	SPACE				-		65	66						SPACE		
	SPACE						67	68						SPACE		
	SPACE			1	_		69	70						SPACE		
_	SPACE	-					71	72						SPACE	_	
	SPACE	_					73	74			-			SPACE	_	
	SPACE						75	76						SPACE	_	
	SPACE				_		77	78						SPACE	_	
_	SPACE	-			_		79	80	3	30				SPO	_	
	SPACE			1	_		81	82	-	-					_	
	SPACE				_		83	84	-	-					-	
	PANELBOARD SUB-TOTALS	14.6	12.5	12.7			-				6.6	7.4	6.1	PANELBOARD SUB-TOTALS		
	LOAD CALCULATIONS:	CONN	ECTED LOA	D (KW)	D	EMAND I	ACTO	2		ESTIMA	TED DEMA	ND LOAD (K	W)	NOTES:		
	(L) LIGHTING		2.4			1.2	5				3.0			1 PROVIDE GFO BREAKERS AS		
	(R) RECEPTACLES (FIRST 10 KW)	+	2.2		_	1.0					22			REQUIRED.		
	(R) RECEPTACLES (REMAINDER)	1	0.0		_	0.5					0.0			THE SECTION .		
	(H) HVAC (WORST CASE)	+			_									+		
		+	0.0		-	1.0					0.0					
	(W) WATER HEATING	+	7.4		_	1.0					7.4					
	(K) KI TCHEN	_	0.0			0.6			0.0							
	(M) MISCELLANEOUS		47.6		-	1.0)				47.8	1				
	PANELBOARD TOTAL S:	59.8	(166A)								60.4	(168A)		7		

	PANEL LOCATION: LAWN MAINTENAN PANEL FED FRONT MOP	ICE BLDG,		PANEL DE PANEL BOX MAINS: 10	ARD RATI	NG: 100/	٨			CTURER	08V, 3PH-46 SQUARE			AIG RATING; 43KA MOUNTING: SURFACE NEMA TYPE: NEMA 3R		
OAD	LOAD DESCRIPTION	К	A PER PHA	SE	T						ю	A PER PHA	SE	LOAD DESCRIPTION	LOA	
YPE		PHA	PHB	PHC	BKR	POLE	CKT	CKT	POLE	BKR	PHA	PHB	PHC	F/W-2000/-0000	TYP	
	RECEPTACLES	0.36			20	1	1	2	1	20	1.08			RECEPTACLES	R	
	RECEPTACLES		1.06		20	1	3	4	1	20		0.36		LIGHTS	L	
R	RECEPTACLES			1.06	20	1	5	6	1	20			0.7	EF-1.1	M	
	SPARE				20	1	7	8	1	20	1.2			GARAGE DOOR MOTOR	M	
	SPARE				20	1	9	10	1	20				SPARE		
	SPARE				20	1	11	12	1	20				SPARE		
	SPARE				20	1	13	14	1	20				SPARE		
	SPARE				20	1	15	16	1	20				SPARE		
	SPARE				20	1	17	18	1	20				SPARE		
	SPARE				20	1	19	20		1777				SPACE		
	SPARE				20	1	21	22						SPACE		
\neg	SPARE				20	1	23	24						SPACE		
	SPACE						25	26						SPACE		
	SPACE						27	28						SPACE		
	SPACE						29	30						SPACE		
	SPACE						31	32						SPACE		
	SPACE						33	34	-					SPACE		
	SPACE						35	36						SPACE		
	SPACE						37	38	3	30				SPD		
	SPACE	-					39	40	-	+				-		
	SPACE						41	42								
	PANELBOARD SUB-TOTALS	0.4	1.1	1.1	All Street						23	0.4	0.7	PANELBOARD SUB-TOTALS		
	LOAD CALCULATIONS:	CONN	ECTED LOA	D (KW)	0	EMAND F	ACTO	2		ESTIM	TED DEMA	ND LOAD (K	W) .	NOTES:		
	(L) LIGHTING		0.4			1.25	5				0.5			1. PROVIDE GFO BREAKERS AS		
	(R) RECEPTACLES (FIRST 10 KW)		3.6			1.00	3				3.6			REQUIRED		
	(R) RECEPTACLES (REMAINDER)		0.0			0.50	9				0.0			200000000000000000000000000000000000000		
	(H) HVAC (WORST CASE)		0.0			1.00					0.0			1		
	(W) WATER HEATING		0.0			1.00					0.0			1		
	(K) KITCHEN	_	0.0		_	0.65					0.0			-		
	(M) MISCELLANEOUS		1.0			1.00					1.9			-		
	PANELBOARD TOTALS:	5.9	(16A)								6.0	(17A)		=		

	REVISIONS											
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION							



I	STATE OF FLOR DEPARTMENT OF TRANS		SR 8 (I-10) WESTBOUND (COLUMBIA COUNTY) REST AREA	E-605
ROAD NO.	COUNTY	FINANCIAL PROJECT ID		SHEET NO.
SR 8	COLUMBIA	438609-1-52-01	E-605 ELECTRICAL PANEL SCHEDULES	

WIRE SIZE REQUIRED FOR BRANCH CIRCUITS AT LESS THAN 3% VOLTAGE DROP

		1 FT TO	5 1 FT TO	76 FT TO	101 FT TO	126FT TO	151 FT TO
		50 FT	75 FT				
	20A	#12	#10	#8	#8	#6	#6
120 V	30A	#10	#8	#6	#6	#6	#4
120 V	40A	#8	#6	#6	#4	#4	#3
	50A	#6	#6	#4	#4	#3	#2
	20A	#12	#12	#12	#10	#10	#8
	30A	#10	#10	#10	#8	#8	#6
	40A	#8	#8	#8	#8	#6	#6
208 V	50A	#8	#8	#8	#6	#6	#4
1	60A	#6	#6	#6	#6	#4	#4
	70A	#4	#4	#4	#4	#4	#3
	80A	#4	#4	#4	#4	#4	#3
	90A	#3	#3	#3	#3	#3	#2
	100A	#3	#3	#3	#3	#3	#2
	20A	#12	#12	#12	#10	#10	#8
	30A	#10	#10	#10	#8	#8	#6
	40A	#8	#8	#8	#8	#6	#6
208 V	50A	#8	#8	#8	#6	#6	#4
3	60A	#6	#6	#6	#6	#6	#4
	70A	#4	#4	#4	#4	#4	#4
	80A	#4	#4	#4	#4	#4	#3
	90A	#3	#3	#3	#3	#3	#3
	100A	#3	#3	#3	#3	#3	#2

CALCULATED USING COPPER WIRE AT 75 C.

BRANCH CIRCUITS HAVE BEEN CALCULATED FOR SINGLE PHASE VOLTAGE DROP BASED ON SINGLE PHASE CIRCUIT

	NEL LOCATION; WATER TREATME NEL FED FROM: MOP	NT PLANT		PANEL DE PANEL BOX MAINS: 22	ARD RATI	NG: 225				CTURER	SQUARE			MOUNTING: 42KA MOUNTING: SURFACE NEMA TYPE: NEMA-1	
D	LOAD DESCRIPTION	100	A PER PHA	4F	T						ie	VA PER PHA	SE	LOAD DESCRIPTION	LOA
E	COND DESCRIPTION	PHA	PHB	PHC	BKR	POLE	CKT	CKT	POLE	BKR	PHA	PHB	PHC	Tono berailo man	TYP
+					20	-	1	2	1	20					-
+				-	20	1	3	4	1	20					-
+					20	1	5	6	1	20					-
+					20	1	7	8	1	20					-
+				-	20	1	9	10	-	20					-
+					20	1	11	12	-	20			-	-	-
+					20	1	13	14	1	20					_
+				1	20	1	15	16	1	20				-	_
+					20	1	17	18	1	20				1	_
+					20	1	19	20	1	20		-			_
+					20	1	21	22	1	20					
_					20	- 1	23	24	-1	20					_
-					20	1	25	26	1	20					
-					20	1	27	28	1	20					_
-					20	1	29	30	1	20					
					20	1	31	32	1	20					
\top					20	1	33	34	1	20					
					20	1.	35	36	1	20	Marie San				
					20	1.	37	38	3	30				SPD	
					20	1	39	40	+	(+)			100	-	
					20	. 1	41	42	-	-		Marie San		4	
	PANELBOARD SUB-TOTALS	0.0	0.0	0.0	III.						0.0	0.0	0.0	PANELBOARD SUB-TOTALS	
	LOAD CALCULATIONS:	CONN	ECTED LOA	D (KW)	D	EMAND F	ACTO	2		ESTIM	TED DEMA	ND LOAD (K	W)	NOTES:	
(L)	LIGHTING		0.0			1.2	3				0.0			1. PROVIDE GFO BREAKERS AS	
(R	RECEPTACLES (FIRST 10 KW)		0.0			1.00					0.0			REQUIRED	
(R	RECEPTACLES (REMAINDER)		0.0			0.50)				0.0			STATE OF THE STATE	
	HVAC (WORST CASE)		0.0			1.00)				0.0			1	
OW	WATER HEATING		0.0		1.00)				0.0					
(K	KITCHEN		0.0			0.60					0.0			1	
(M	MISCELLANEOUS		0.0			1.00)				0.0				
D/	NELBOARD TOTALS:	0.0	(GA)								0.0	(GA)		7	

	PANEL LOCATION: LIFT STATION PANEL FED FROM: MOP	PANEL DE PANELBO MAINS: 2	ARD RATI	NG: 2254				CTURER	08V, 3PH-4 E SQUARE			AIC RATING; 42KA MOUNTING; SURFACE NEMA TYPE; NEMA-1			
OAD	LOAD DESCRIPTION	ю	VA PER PHA	SE	1						к	VA PER PHA	SE	LOAD DESCRIPTION	LOAD
TYPE	1502-1002-100	PHA	PH B	PHC	BKR	POLE	CKT	CKT	POLE	BKR	PHA	PHB	PHC		TYPE
M	LIFT STATION S PUMP #	5.5			100	3	1	2	3	100	5.5			LIFT STATIONS PUMP #2	M
M			5.5		-	-	3	4		-		5.5		-	M
M	-			5.5	-	-	5	6		-			5.5	-	7.6
R	CONVENENT RECEPTACLES	0.2			20	1	7	8	1	20				SPARE	
	SPARE				20	1	9	10	1	20				SPARE	
	SPARE				20	1	11	12	1	20				SPARE	
	SPARE				20	1	13	14	1	20				SPARE	
	SPARE				20	1	15	16	1	20				SPARE	
	SPARE				20	1	17	18	1	20				SPARE	
	SPARE				20	1	19	20	1	20				SPARE	
	SPARE				20	1	21	22	.1	20				SPARE	
	SPARE				20	1	23	24	1	20				SPARE	
	SPACE						25	26						SPACE	
	SPACE						27	28						SPACE	
	SPACE						29	30						SPACE	
	SPACE						31	32						SPACE	
	SPACE						33	34						SPACE	
	SPACE						35	36						SPACE	
	SPACE			l lies and the second			37	38	3	30				SPD	
	SPACE	100000000000000000000000000000000000000					39	40						-	
	SPACE						41	42		-				+	
	PANELBOARD SUB-TOTALS	5.7	5.5	5.5							5.5	5.5	5.5	PANELBOARD SUB-TOTALS	
	LOAD CALCULATIONS:	CONN	ECTED LOA	D (KW)		EMAND	FACTOR			ESTIM	ATED DEMA	ND LOAD (K	W)	NOTES:	
	(L) LIGHTING		0.0			1.2	5				0.0			1. PROVIDE GFO BREAKERS AS	
	(R) RECEPTACLES (FIRST 10 KW)		0.2			1.0	0				0.2	8		REQUIRED	
	(R) RECEPTACLES (REMAINDER)		0.0			0.6	0				0.0			- 1000000000000000000000000000000000000	
	(H) HVAC (WORST CASE)	_	0.0		1	1.0					0.0			1	
	(W) WATER HEATING		0.0			1.0	0				0.0			7	
	(K) KITCHEN		0.0		_	0.6	5				0.0			1	
	(M) MISCELLANEOUS		33.0			1.0					33.0			+	
	PANELBOARD TOTALS:	33.2	(92A)								33.2	(92A)		7	

- 1							_						
		REVISIONS											
1	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	Ĺ						
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			PROJECT NORTH	100% CONSTRUCTION D	OCUMENTS
	amamp on trop	TT.		-	DRAWING NO.
D	STATE OF FLOR EPARTMENT OF TRANS		SR 8 (I-10) WESTBOUND (COLUMBIA	E-606	
ROAD NO.	COUNTY	FINANCIAL PROJECT ID			SHEET NO.
SR 8	COLUMBIA	438609-1-52-01	E-606 ELECTRICAL PANEL	SCHEDULES	

