IRONDALE PUBLIC LIBRARY

IRONDALE, ALABAMA

MAYOR: LIBRARY DIRECTOR: CITY ENGINEER: JAMES STEWART DEL WILSON DARREN HAMRICK

DESIGN TEAM:

ARCHITECT: INTERIOR DESIGNER: STRUCTURAL ENGINEER: CIVIL ENGINEER: MECHANICAL/PLUMBING: ELECTRICAL ENGINEER: LANDSCAPE ARCHITECT: CHARLES WILLIAMS & ASSOCIATES, INC. JILL HICKS DESIGN, LLC MBA STRUCTURAL ENGINEERS SARCOR, LLC DEWBERRY ENGINEERS CCE ENGINEERS RENTA URBAN LAND DESIGN

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	DRAW	/ING INDEX
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RAM	M0.01 M0.02 M0.03 M0.04 M0.05 M0.06 M1.01 M1.02	MECHANICAL - NOTES AND LEGENDS MECHANICAL - SCHEDULES MECHANICAL - DETAILS AND CONTROLS MECHANICAL - DETAILS MECHANICAL - OSA CALCULATIONS MECHANICAL - OSA CALCULATIONS MECHANICAL - FLOOR PLAN MECHANICAL - ROOF PLAN
	FP0.01 FP1.01	FIRE PROTECTION - SCHEDULES, LEGENDS, NOTES, & DETAILS FIRE PROTECTION - FLOOR PLAN
	P0.01 P1.01 P1.02 P2.01	PLUMBING - SCHEDULES, LEGENDS, NOTES & DETAILS NON-PRESSURE - FLOOR PLAN PLUMBING - ROOF PLAN PRESSURE - FLOOR PLAN
	E001 E002 E003 E004 E005 E101 E201 E202 E203 E301	ELECTRICAL LEGEND & FIXTURE SCHEDULE ELECTRICAL DETAILS ELECTRICAL DETAILS ELECTRICAL DETAILS ELECTRICAL DETAILS SITE PLAN - ELECTRICAL FLOOR PLAN - LIGHTING FLOOR PLAN - POWER & AUXILIARY ROOF PLAN - EQUIPMENT CONNECTIONS ELECTRICAL RISER DIAGRAM & PANEL SCHEDULES
TS, PLANS &		

NG INDEX

HEET NAME RIGATION DETAILS OMPOSITE FLOOR PLAN OOR PLAN - BLOCK A OOR PLAN - BLOCK B LERESTORY PLAN- BLOCK A **_ERESTORY PLAN- BLOCK B** OMPOSITE ROOF PLAN OOF DETAILS ANOPY PLANS & DETAILS NISH NOTES & SCHEDULE NISH LEGEND NISH PLAN- BLOCK A NISH PLAN- BLOCK B OOR PATTERN INSTALLATION DIAGRA OOR TYPES & DETAILS GNAGE DETAILS & PLAN OOR DETAILS INDOW TYPES (EXTERIOR) INDOW TYPES (INTERIOR) INDOW DETAILS ALL TYPES **KTERIOR ELEVATIONS - OVERALL** JILDING SECTIONS JILDING SECTIONS ALL SECTIONS ALL SECTIONS ALL SECTIONS ALL DETAILS ALL DETAILS ALL DETAILS ALL DETAILS LAN DETAILS LAN DETAILS LAN DETAILS LAN DETAILS ET AREA TYPICAL MOUNTING HEIGHT EVATIONS TERIOR ELEVATIONS

ILLWORK SECTIONS & DETAILS





PLUMBING FIXTURE REQUIREMENTS NOTE: REFERENCES NOTED ARE BASED ON THE 2021 INTERNATIONAL PLUMBING CODE <u>B GROUP (BUSINESS)</u> OCCUPANT LOAD = 260.76 (130.4 MEN/ 130.4 WOMEN) A. WATER CLOSETS (Female): 1/50 80.4/50 = 1.61 2.00 1.61 1/25 FOR FIRST 50 B. WATER CLOSETS (Male): 1/50 80.4/50= 1.61 1/25 FOR FIRST 50 2.00 C. LAVATORIES (Female): 1/80 50.4/80= 0.63 1/40 FOR FIRST 80 2.00 D. LAVATORIES (Male): 1/80 50.4/80= 0.63 1/40 FOR FIRST 80 2.00 E. WATER FOUNTAINS: 1/100 260.8/100= 2.60 F. SERVICE SINKS: 1 REQUIRED REQUIRED PROVIDED TOTAL FIXTURES A.WATER CLOSETS (Female):3.63B.WATER CLOSETS (Male):3.63 C. WATER CLOSETS (Unisex): NR 2 D. LAVATORIES (Female): 2.63 2 E. LAVATORIES (Male): 2.63 2 LAVATORIES (Unisex): NR F. 2 F. WATER FOUNTAINS: 2.6 3 G. SERVICE SINKS: 1 1

GRAPH	HIC SYMBOLS				Re	evisions
1 A101	SIM WALL SECTION INDICATOR	3	t₩t	EXIT LIGHT W/ DIRECTIONAL	. Date	Description
	1 BUILDING SECTION INDICA	ATOR	' ↔ ' M8AA.1—			
A101	SINGLE ELEVATION INDIC	ATOR	(1t)	WALL TIFE TAG		
	MULTI-ELEVATION INDICA	TOR	A Room name	REVISION TAG (REVISION NUMBER BY SHEET) ROOM TAG	R R R	OF ALAS ES E. WILL FR
1 A101 SIM	I DETAIL INDICATOR		101 150 SF	DOOR TYPE TAG	Rec All	REAL OF SEAL
	NORTH ARROWS		0	STRUCTURAL GRID IDENTIFIER	100	% CD'S
1 Vi A101 1/	iew Name DRAWING VIEW NAME 8" = 1'-0" W/ SCALE					
TYPIC	AL ABBREVIATIONS I	LEGENI	<u>D</u>			
ABV ACT	ABOVE ACOUSTIC CEILING TILE	MACH MATL	MACHINE	= L		
بں DJ AFF	AREA DRAIN ADJUSTABLE ABOVE FINISHED FLOOR	MAX MB MDF	MAXIMUI MARKER MEDIUM	vi BOARD DENSITY FIBERBOARD		
ALUM APPRX		MECH MEMB	MECHAN	IICAL		
AKCH AWP	ARCHITECTURAL ACOUSTIC WALL PANELS	MIN MTL MFR	MINIMUN METAL MANIJEA	n CTURER		
BD BLDG	BOARD BUILDING	MH MIRR	MANHOL MIRROR	E		
BLKG BTM	BLOCKING BOTTOM BEYOND	MS MTD	METAL S MOUNTE	TUD :D		
СJ		MUL MW MWP	MULLION MILLWOF MFTAL M	N RK /ALL PANEL		<u>- 1</u> 11 П
CMU CPT	CONCRETE MASONRY UNIT CARPET	N	NORTH		¥	MIL . 35 35
CONC CT	CONCRETE CARPET TILE	N/A NIC	NOT APP NOT IN C	LICABLE	3L	AL
DBL DF	DOUBLE DRINKING FOUNTAIN	NOM NTS	NOMINAI NOT TO S	L SCALE	Б	Ц Ч П П
DIA DIM	DIAMETER DIMENSION	OC OCH	ON CENT ON CENT	fer Fer Horizontally		AC AC
DISP DN	DISPENSER DOWN	OCV OD	ON CENT OUTSIDE	FER VERTICALLY DIAMETER	ш	32 (0N
UP DR DS	DEEP DOOR DOWNSPOLIT	OF OH				бщс
DTL DWG	DETAIL DRAWING	OKD PL	OVERFL(PLATF		∀	
EA	EACH	PLAM PLBG	PLASTIC	LAMINATE IG		
EF EJ	EXHAUST FAN EXPANSION JOINT	PLYWD PNL(S)	PLYWOO PANEL(S	D)		
el ElEC FI FV	ELEVATION ELECTRICAL FLEVATOR	PNT PRTN pt	PAINT PARTITIC DRESSU			
ENCL EQ	ENCLOSURE EQUAL	PTD	PAINTED		=	
EQUIP EWC	EQUIPMENT ELECTRIC WATER COOLER	RAD RCP	RADIUS REFLECT	ED CEILING PLAN		
EX EX EXP	EXISTING EXTERIOR EXPANSION			KAIN NCE RCED		
EXT	EXTERIOR	REINF REQD REQS	REINFOF REQUIRE REQUIRF	ED ED EMENTS		
=A =.A.	FIRE ALARM FLUID APPLIED	RH RND	RIGHT H			
=B =LR =D	FLOOR BOX FLOOR FLOOR DRAIN	RO	ROUGH		<u> </u>	s c l'
FDN FE	FLOOR DRAIN FOUNDATION FIRE EXTINGUISHER	SAB SC SHT	SOUND A SOLID CO SHFFT	ORE	LIAM	C T (0700
FEC FFE	FIRE EXTINGUISHER CABINET FINISH FLOOR ELEVATION	SIM	SIMILAR SEALANT		S WIL	11 E 250-
FIN FLR	FINISH FLOOR EACE OF CONCRETE	SOG SPEC	SLAB ON SPECIFIC	I GRADE CATION	ARLE	205-205-
FOM FOS	FACE OF MASONRY FACE OF STUDS	SS SSTL STC	SOLID SU STAINLES SOLIND T	SS STEEL FRANSMISSION CLASS	CH/ & A	A F PH:
FS FTG	FLOOR SINK FOOTING	STD STL	STANDAR	AD		
	FURRING	STOR STRL	STORAG STRUCTU	E JRAL		DEDU
GA GALV GB	GAUGE GALVANIZED GYPSUM BOARD	SUSP	SUSPENI TACK BC	JEU JARD		Ξ
GLS GYP	GLASS GYPSUM	TC TEL	TOP OF (TELEPHO	CURB DNE		
HC	HANDICAP	TEMP TFF	TEMPOR TOP OF F	ARY FINISH FLOOR		л. К. С.
ноуур HGT HM	HARDWOOD HEIGHT HOLLOW METAI	I&G THK Three	וOUNGU THICK א דאפרפטי	е & GRUUVE DLD		H AV
HR HW	HOUR HOT WATER	TLT TOBM	TOILET TOP OF E	BEAM		1 8T
HWP HWR	HOT WATER PUMP HOT WATER RETURN	TS TSTAT	TUBE ST THERMO	EEL STAT		360
HWVS ID		TOS TOW TVP	TOP OF S TOP OF N TVDICAL	dlab WALL	SHEET TITLE:	
IF INCL	INSIDE FACE INCLUDE	UNO	UNLESS	NOTED OTHERWISE	CALCS., SY ABBREVIAT	MBOLS & IONS
INSUL INT	INSULATION INTERIOR	US	UNDERS		PROJECT NU	MBER:
IT		VCT VERT	VINYL CO VERTICA	DMPOSITION TILE	2022-08	
JAN JST .IT	JANITOR JOIST JOINT	VSTR VTR	VENT ST/ VENT TH	ACK THROUGH ROOF ROUGH ROOF	DATE: NOVEMBER	16, 2023
LA	LAYER	W/ WC	WITH WATER (CLOSET	DRAWN BY:	CHECKED BY:
LAV LOC	LAVATORY LOCATION	WCO WD	WALL CL WOOD	EAN OUT		
LP LT		WDW WF	WINDOW WATER F		SHEET NUN	
_VT	LUXURY VINYL TILE	WH W/O WP WR	WALL HY WITHOU ⁻ WATERPI WATER F	URANT (EXTERIOR) T ROOF RESISTANT	C	S.2
			WATER F			

BU	ILDING (CODE SUMMA	ARY			
NOTE	: REFERENCES	NOTED ARE BASED ON THE	INTERNATIONAL BUILDING COL	DE UNLESS NOTED OT	THERWISE.	
1.	<u>APPLICABLE C</u> A. BUILDING C IRONDALE, ST	<u>CODES:</u> COMPRISING THIS PROJECT ATE AND FEDERAL REGULA	HAS BEEN DESIGNED ACCORDI TIONS:	NG TO THE FOLLOWIN	NG ADOPTED REGULATIONS BY	THE CITY OF
	2021 INTER 2010 ADA S 2023 NATIO	NATIONAL BUILDING CODE NATIONAL MECHANICAL CO NATIONAL PLUMBING CODE NATIONAL FUEL GAS CODE NATIONAL FIRE CODE STANDARDS FOR ACCESSIBII	DE E			
2.	PROJECT DES A. THIS PROJE CONSTRUCTIC VENEER.	<u>CRIPTION:</u> ECT CONSISTS OF A NEW LIE DN WITH METAL STUD FRAM	BRARY BUILDING FOR THE CITY (ING AND METAL ROOF FRAMING	OF IRONDALE. THE BU G. EXTERIOR MATERIA	JILDING IS ONE-STORY OF STEEL LS INCLUDE METAL SIDING, STO	- FRAMED NE AND BRICK
	BUILDING	BUILDING		CONS	STRUCTION TYPE	
	<u>TYPE</u> 1	DESCRIPTION BUSINESS	OCCUPANCY (IBC 310,31 B BUSINESS	<u>1) (IBC -</u> II-B	<u>FABLE 503, 504 &508.7)</u> 55' max height - 35'-0" actual	SPRINKLERED YES, NFPA 13
	B. BUILDING C <u>AREA BUILD</u> 1 B OCC *AREA PROVIE	CALCULATIONS: (Areas listed DING AREA ALL CUPANCY 38,000 SF DED IS BASED ON 502.1 AND	are per Floor Allowable Area, bas OWED (TABLE 506.2)	ed on more stringent in <u>AREA PROVIDED*</u> 16,345 SF 9 BY THE INSIDE FACE	Mixed Use Facility) OF THE EXTERIOR WALLS	



3. FIRE F	RESISTANCE REQUIREMENTS:			4.	<u>egre</u> A.	ESS REQUIREMEN OCCUPANT LC
	A. FIRE RESISTANCE RATINGS PER IBC TABLE 601:					OCCUPANCY -
	1. FIRE SEPARATION REQUIREMENTS AS FOLLO	WS:				BUSINESS
						STORAGE
	STRUCTURAL ELEMENT	RATIN	NG (IN HOURS)			GYM/LOCKERS
	STRUCTURAL FRAME, COLUMNS, GIRDERS					ASSEMBLY- Ur
	IRUSSES	0	IABLE 601			ASSEMBLY- Co
	EXTERIOR BEARING WALLS	0	TABLE 601			
	INTERIOR BEARING WALLS		0 TABLE 601			
	EXTERIOR NON BEARING PARTITIONS	0	TABLE 602 - WITH FIRE SEPARATION \geq 30', CONSTRUCTION TYPE II-B, GROUP A-3			
	INTERIOR NON BEARING PARTITIONS	0	TABLE 601		В.	EGRESS CALC
	FLOOR CONSTRUCTION INCLUDING					BUILDING TYPE
	SUPPORTING BEAMS/JOISTS	0	TABLE 601			
	ROOF CONSTRUCTION INCLUDING					В
	SUPPORTING BEAMS/JOISTS	0	TABLE 601			
	UNPROTECTED EXTERIOR WALL OPENINGS		NR TABLE 602 BUILDING IS ONE-STORY, AND FIRE SEPARATION \geq 30' OPENINGS			
NOT						BUILDING TYPE
			REQUIRED TO BE PROTECTED			
	VERTICAL FLAME BARRIERS	NR	PAR 705.8.5, NOT REQUIRED FOR 1-STORY BUILDINGS			
	FIRE WALLS	2	REQ'D AT STORM SHELTER SEPARATION			
	FIRE BARRIERS (at area separation)		NA			В
	FIRE RESISTANCE (at ext. bearing walls)	NA				
	FIRE RESISTANCE (at shafts)	NA				
	DRAFTSTOPPING		NR PAR. 717.4.3. NOT REQUIRED WHEN PROTECTED BY SPRINKLER SYSTEM THAT IS		C.	EMERGENCY E
			ACCOBDANCE WITH SECTION 903 3.1.1	SYSTE	ΞM	
	CONCEALED SPACES	NA		OTOTE		
	SMOKE BABBIERS	NΔ		5		ESSIBILITY REALIE
	HOBIZONITAL ASSEMBLIES		ΝΔ	0.	Δ	
			SECTION 712 DATING OF NOT LESS THAN THE DEC'D FIDE DESISTANCE DATING OF		Λ.	
	I ENETTATIONS	INIT			R	
					D.	
	OPENING PROTECTIVES	חאו	TADLE / 15.4	6	OTOI	
						<u>INNI SHELIER.</u> A S
	FINEDLUGNING	-	AS NEQUINED FON VEILINGS AND NOUFS	AREA	REQU	JINED FOR SHELL
		10101 0				
		1018.1, R/	ATTING NOT REQUIRED IN BUILDINGS WITH SPRINKLER STSTENT THAT IS IN ACCORDANCE WITH			
	3EUTIUN 903.3.1.1					



JIREMENTS:

VILL MEET ALL ACCESSIBILITY REQUIREMENTS DING ENTRIES ARE ACCESSIBLE.

STORM SHELTER WILL BE PROVIDED IN THE MAIN CORRIDOR OF THIS FACILITY. CAPACITY TO HOLD APPROX. 130 PEOPLE. TER 654 SF, AREA PROVIDED = 948.3 SF



 \succ LIBRAR С Н П П С Н Ц П 1032 GRANTS MILL F IRONDALE, AL 3521 CITY OF IRONDALE PUBLIC ALE IROND, CHARLES WILLIAMS & ASSOCIATES A R C H I T E C T S 250-0700 -250-0515 205-2 PH: FAX: 3601 8TH AVE. SOUTH BIRMINGHAM, ALABAMA 35222 SHEET TITLE: LIFE SAFETY PLAN PROJECT NUMBER: 2022-08 DATE NOVEMBER 16, 2023 DRAWN BY: CHECKED BY: Author Checker

Revisions

TE OF ALA

N0. 2925

SRED/AR

100% CD'S

Description

Date



GENERAL NOTES

1. SITE SURVEY WAS PROVIDED BY THE FOLLOWING COMPANY:

SAIN ASSOCIATES, INC. TWO PERIMETER PARK SOUTH, SUITE 500 EAST **BIRMINGHAM, AL 35243**

- 2. ALL PHASES OF SITE WORK FOR THIS PROJECT SHALL MEET OR EXCEED THE OWNER/DEVELOPER SPECIFICATIONS. THE ENGINEER HAS MADE EVERY EFFORT TO SET FORTH IN THE CONSTRUCTION AND CONTRACT DOCUMENTS THE COMPLETE SCOPE OF WORK. THE CONTRACTOR BIDDING THE JOB IS NEVERTHELESS CAUTIONED THAT MINOR OMISSIONS IN THE DRAWINGS AND/OR SPECIFICATIONS SHALL NOT EXCUSE THE CONTRACTOR FROM COMPLETING THE PROJECT AND IMPROVEMENTS IN ACCORDANCE WITH THE INTENT OF THESE DOCUMENTS. ALL WORK SHALL BE AS INDICATED AND STIPULATED ON THE DRAWINGS AND IN THE SPECIFICATIONS.
- 3. THE CONTRACTOR SHALL VISIT THE JOB SITE PRIOR TO THE SUBMISSION OF BIDS TO BECOME FAMILIARIZED WITH THE FIELD CONDITIONS AND TO VERIFY THAT THE PROJECT CAN BE CONSTRUCTED IN ACCORDANCE WITH THE INTENT OF THESE DOCUMENTS
- 4. THE CONTRACTOR SHALL OBTAIN AUTHORIZATION TO PROCEED WITH CONSTRUCTION PRIOR TO STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED BY THE CONSTRUCTION DRAWINGS AND/OR CONTRACT DOCUMENTS.
- THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES, AND FOR COORDINATING ALL PORTIONS OF WORK UNDER THE CONTRACT. EACH CONTRACTOR SHALL COOPERATE WITH THE OWNER'S REPRESENTATIVE, AND COORDINATE HIS WORK WITH THE WORK OF OTHERS
- 6. THESE DRAWINGS ARE FORMATTED FOR 24" X 36". OTHER SIZE VERSIONS ARE NOT PRINTED TO THE SCALE CALLED OUT OR SHOWN.
- 7. CONTRACTOR IS RESPONSIBLE FOR THE COST AND FEES ASSOCIATED WITH THE EXECUTION OF THE WORK. THIS INCLUDES ANY AND ALL PERMITS AND IMPACT FEES INCLUDING, BUT NOT LIMITED TO, DEMOLITION PERMITS, ADEM PERMIT FEES, BUILDING PERMITS, SANITARY SEWER CONNECTION AND AND IMPACT FEES, WATER TAP FEES, ETC.
- 8. IN THE CASE OF UNFORESEEN CONSTRUCTION COMPLICATIONS OR DISCREPANCIES, THE CONTRACTOR IS TO IMMEDIATELY NOTIFY THE ENGINEER OF RECORD IN WRITING.
- 9. IF THE CONTRACTOR DAMAGES ANY SITE FEATURES DURING CONSTRUCTION, HE SHALL AT HIS OWN EXPENSE REPLACE OR REPAIR THE FEATURES IMMEDIATELY TO ORIGINAL CONDITION AND QUALITY AS APPROVED BY THE OWNER OR DESIGNATED REPRESENTATIVE.
- 10. IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO FOLLOW ALL SAFETY CODES OF THE GOVERNING MUNICIPALITIES.
- 11. DEVIATIONS FROM THESE PLANS AND ANY ASSOCIATED SPECIFICATIONS WITHOUT PRIOR WRITTEN CONSENT OF THE ENGINEER OF RECORD MAY CAUSE WORK TO BE UNACCEPTABLE.
- 12. WHEN APPLICABLE, FIRE DEPARTMENT ACCESS SHALL ALWAYS BE MAINTAINED.
- 13. WHEN APPLICABLE, SUFFICIENT BARRICADES, LIGHTS, SIGNS, AND OTHER TRAFFIC CONTROL DEVICES AND METHODS WHICH MAY BE NECESSARY FOR THE PUBLIC SAFETY AND PROTECTION SHALL BE IN ACCORDANCE WITH GOVERNING ORDINANCES AND M.U.T.C.D. (CURRENT EDITION) AND SHALL BE PROVIDED AND MAINTAINED THROUGHOUT CONSTRUCTION.

SHEET INDEX

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- C0.02 PLANS LEGEND AND ABBREVIATION SHEET
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- C6.01 EROSION CONTROL PLAN (INITIAL)
- C6.02 EROSION CONTROL PLAN (FINAL)
- C7.01 ROADWAY PLAN / PROFILE
- C7.02 ROADWAY PLAN / PROFILE
- C8.01 ROADWAY CROSS SECTIONS
- C9.01 DETAILS





FEMA FIRM DATED 9/24/2021 (N.T.S.) SITE IS NOT LOCATED IN A FLOOD HAZARD ZONE

SITE LOCATION MAP (N.T.S.)



ARCO

SITE

PROPERTY LINE	
ADJACENT / OFF-SITE PROPERTY LINE	PL PL
RIGHT-OF-WAY LINE	RO V
ROADWAY CENTERLINE	
FENCE	XX
TREE LINE	
HANDRAIL	
TREES (TYPICAL)	
BENCHMARK	$igodoldsymbol{\Phi}$
SIGN (SINGLE POLE)	<u>o</u>
BOLLARD	$\textcircled{\bullet}$
SURVEY MONUMENT FOUND	\bigcirc
SURVEY MONUMENT SET	\bigcirc

EROSION CONTROL

SILT FENCE	SF
LIMITS OF DISTURBANCE	· · · · · · · · ·
TREE PROTECTION	TP
INLET PROTECTION	
TEMPORARY SEEDING	TS
MULCHING	MU
PERMANENT SEEDING	PS
TEMPORARY CONSTRUCTION ENTRANCE	TCE
OUTLET PROTECTION	
EROSION CONTROL BLANKET	ECB

	UTILITIES		ACRE	AC
	FXISTING	PROPOSED	ALABAMA DEPARTMENT OF TRANSPORTATION	
			ASPHALT	ASPH
SANITARY SEWER LINE	S	SS	BARBED WIRE	B/W
			BEARING	BRNG
OVERHEAD ELECTRIC LINE	OE	OE	BENCH MARK	BM
			BOUNDARY	BDY
UNDERGROUND ELECTRIC LINE	IJF	F	BUILDING	BLDG
			CAST-IN-PLACE	CIP
OVERHEAD TELECOM LINE	OT	TO		CB
			CHAINTINK	۲ C/I
UNDERGROUND TELCOM LINE		117	CONCRETE	CONC
UNDERGROUND TELECOM LINE	01		CONSTRUCTION LIMITS	CONST LIM
	040		CORNER	COR
GAS LINE	GAS	GAS	CORRUGATED METAL PIPE	CMP
			COUNTY	CO
WATER LINE	W	W	COUNTY ROAD	CO-RD
SANITARY SEWER MANHOLE	(\mathbf{S})	(55)	CUBIC	CU
			CUBIC FEET PER SECOND	CFS
SANITARY SEWER CLEANOUT	(CO)	(CO)	CUBIC YARDS	CU YD
			CULVERT	CULV
POWER POLE			CURB AND GUTTER	C&G
			DEED BOOK	DB
GUY ANCHOR))	DIAMETER	DIA
			DIRECTION	DIR
LIGHT POLE	$\bigcirc \bigcirc$	— ———————————————————————————————————	DOUBLE	DBL
	_	_	DRAINAGE AREA	DA
POWER MANHOLE	(\overline{P})	(P)	DRIVE	DR
	\bigcirc	\bigcirc	DROP INLET	DI
TELCOM PEDESTAL	$\langle \top \rangle$	$\langle T \rangle$	EACH	EA
TLEGOW TEDESTAL			EASEMENT	ESMT
TELCOM MANULOLE	$\overline{(T)}$	(\overline{T})		E
TELCOM MANHOLE				
	GV	GV	EXCAVATION	EXCAV
GAS VALVE		\mathbf{M}	EXISTING	EX
			FEET	FT
FIRE HYDRANT	\mathbf{O}	∽ _Y o	FINISHED GRADE	FG
	WV	WV	FIRE HYDRANT	FH
WATER VALVE		\mathbf{H}		FL
			GUARDRAII	GRV
WATER METER			GUY WIRE	GUY
			HEADWALL	HDWL
			HIGHWAY	HWY
			HORIZONTAL	HOR
			IN PLACE	IN-PL
	GRADING AND DRAI	NAGE		IN
	EXISTING	PROPOSED	JUNCTION BOX	JB
MINOR (1') CONTOUR LINE	571	571	LANE	LN
	5/4		LEFT	LT
NATOR (E') CONTOUR LINE			LIGHT POLE	LP
MAJOR (3) CONTOUR LINE	— —	5/5		LIM
				LIN

MINOR (1') CONTOUR LII
MAJOR (5') CONTOUR LI
STORM DRAIN LINE
STORM DRAIN MANHOLE
CATCH BASIN
SLOPE ARROW
STORM WATER FLOW ARF

EXISTING PAVEMENT (RETAIN)

EXISTING PAVEMENT (REMOVE)

EXISTING PAVEMENT (RETAIN & OVERLAY)

CONCRETE (EXISTING OR REQUIRED)

EXISTING CONCRETE (REMOVE)

DEMOLISION





PLANS LEGEND AND ABBREVIATION





LINEAR MANHOLE MAP BOOK MARKER MAXIMUM MEASUREMENT MEDIAN MILE POST MILES MILES PER HOUR MINIMUM MONUMENT MULTIPLE NORTH NORTHING-EASTING NOT IN CONTRACT NOT TO SCALE NUMBER ON CENTER OVERHEAD ELECTRIC OVERHEAD TELEPHONE/TELCOM PAGE PAVED PAVEMENT PEDESTAL PIPE END TREATMENT POINT OF BEGINNING POINT OF CURVATURE POINT OF INTERSECTION POINT OF TANGENCY POLYVINYL CHLORIDE PIPE PVC

MH

MB MKR

MAX

MEAS

MED

MP

MI MPH

MIN

MON

MULT

Ν

N-E

NIC

NTS

NO

OC

OE

ОТ

PG

PVD

PVMT PED

PET

POB

PC

ΡI

ΡT

ABBREVIATIONS

	POUND
	POWER POLE
	PRESENT
	PROJECT
	PROPERTY LINE
	PROPOSED
	QUANTITY
	RADIUS
	RAILROAD
	REINFORCED CONCRETE
	RELOCATE
	REMOVE
	REQUIRED
	RETAIN(ING)
	REVISION
	RIGHT
	RIGHT OF WAY
	RIVER
	ROAD
	ROADWAY
	SANITARY SEWER
	SECTION
	SERVICE
	SHOULDER
	SIDEWALK
	SOUTH
	SPECIAL
	SQUARE
	SQUARE FEET
	SQUARE YARD
	STANDARD
	STATION
	STORM DRAIN
	STREET
	STRUCTURE
	SUB-GRADE
	SURVEY
	TANGENT
/	TELEPHONE/TELECOM
	TEMPORARY
	TOWNSHIP
	TYPE
	UNDERGROUND
	UNDERGROUND TELEPHONE/TELCOM
	UNKNOWN
	VARD

LB

PP

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R

RR

RC

RELC REM

REQ

RET

REV

ROW

RIV

RD

SS

SEC

SERV

SHLD

SW

SP

SQ

SQ FT

SQ YD

STD STA STRM ST STR

> SG SURV TAN

TEL

TEMP

TSHP ΤY U/G

UE UT

UNK UNPVD

VG

VAR VERT

VCP

VOL W

YD

SARCOR

RDWY

RT

PRES

PROJ

PROP

QUANT

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SHEET TITLE: LEGENDS AND ABBREVIATIONS PROJECT NUMBER: 2022-08 DATE: 11/16/23 DRAWN BY: CHECKED BY:		CHARLES WILLIAMS & ASSOCIATES	ARCHITECTS	PH: 205-250-0700
SHEET TITLE: LEGENDS AND ABBREVIATIONS PROJECT NUMBER: 2022-08 DATE: 11/16/23 DRAWN BY: CHECKED BY:				3601 8TH AVE. SOUTH BIRMINGHAM, ALABAMA 3522
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DEMOLITION NOTES

- 1. THE CONTRACTOR SHALL VERIFY LOCATION OF ALL UTILITIES AND PIPING WHICH MIGHT INTERFERE WITH DEMOLITION. ANY DAMAGES TO UTILITIES SHALL BE REPAIRED BY THE CONTRACTOR AT NO COST TO THE OWNER.
- 2. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF ALL DEBRIS.
- 3. ALL EXISTING PUBLIC SIDEWALKS ARE TO REMAIN IN PLACE AND TO REMAIN ACCESSIBLE FOR PEDESTRIAN TRAFFIC DURING DEMOLITION.
- 4. CONTRACTOR IS RESPONSIBLE FOR NOTIFYING ALL UTILITY COMPANIES BEFORE CONSTRUCTION AND VERIFYING LOCATION OF ALL UTILITIES SHOWN OR NOT SHOWN.
- 5. TREES TO BE DEMOLISHED SHALL BE CLEARED AND GRUBBED. NO BURNING SHALL BE ALLOWED ON OWNERS PROPERTY. ALL TREE AND VEGETATION LOCATIONS ARE APPROXIMATE.
- 6. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION AND COST OF THE RELOCATION OF ALL UTILITIES ALONG THE RIGHT OF WAY AND ON THE SITE ASSOCIATED WITH THE CONSTRUCTION OF THIS PROJECT, SUCH AS, BUT NOT LIMITED TO, SIGNAL POLES, SIGNAL CONTROLS, DRAINAGE STRUCTURES, TRAFFIC SIGNS, UTILITY POLES, GUY WIRES, ETC.
- 7. CONTRACTOR SHALL MAINTAIN SITE SECURITY BY CONTRACTOR'S OWN MEANS AND METHODS. ALL WORK, INCLUDING MATERIAL STORAGE, SHALL BE KEPT WITHIN THE SECURED AREA. CONTRACTOR SHALL RESTORE THE CONSTRUCTION AREA TO A CONDITION ACCEPTABLE TO THE OWNER.
- 8. ALL UTILITY WORK & MATERIALS SHALL MEET THE STANDARDS AND SPECIFICATIONS OF THE PERTINENT UTILITY.
- 9. ALL MANHOLE AND VALVE BOXES THAT ARE TO REMAIN ARE NOT TO BE BURIED AND FINAL GRADING SHALL BE ADJUSTED TO MATCH THOSE ELEVATIONS.
- 10. DEMOLITION OF ANY/ALL CONCRETE AND/OR ASPHALT SIDEWALKS, DRIVEWAYS, ETC. SHALL INCLUDE CLEAN CUTS AT LOCATIONS ABUTTING PUBLIC, OR OTHERWISE, SIDEWALKS AND/OR DRIVEWAYS, WHICH ARE TO REMAIN IN PLACE.
- 11. CONTRACTOR SHALL BE REQUIRED TO OBTAIN AND PAY FOR ALL PERMITS NECESSARY TO PERFORM THE WORK.
- 12. CONTRACTOR IS RESPONSIBLE FOR ALL TRAFFIC CONTROL, WHICH SHALL BE IN ACCORDANCE WITH THE CITY OF BIRMINGHAM AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION.
- 13. CONTRACTOR IS RESPONSIBLE FOR CONTROLLING DUST FROM THE PROJECT SO THAT IT DOES NOT POSE A HAZARD TO PEDESTRIAN AND VEHICLE TRAFFIC OR TO THE SURROUNDING BUILDING ENVIRONMENT. CONTRACTOR SHOULD CONTROL DUST SO THAT THESE AREAS ARE NOT AFFECTED BY DUST FROM THE DEMOLITION.
- 14. UNLESS OTHERWISE NOTED, ALL UTILITIES OUTSIDE THE PROPERTY LINE ARE TO REMAIN AND FUNCTION THROUGHOUT THE DEMOLITION PROCESS. THE CONTRACTOR IS RESPONSIBLE FOR FIELD LOCATING SAID UTILITIES PRIOR TO THE DEMOLITION PROCESS.







SITE NOTES

1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PLANS AND SITE WORK SPECIFICATIONS AND SHALL COMPLY WITH APPLICABLE FEDERAL, STATE AND LOCAL CODES.

2. REFERENCE ARCHITECTURAL PLANS FOR BUILDING DIMENSIONS, STEPS, TRANSFORMER PADS, ADDITIONAL SITEWORK, ALTERNATE INFORMATION, etc.

TOPOGRAPHIC BOUNDARY SURVEY, PROPERTY LINES, LEGAL DESCRIPTION, EXISTING UTILITIES, SITE TOPOGRAPHY WITH SPOT ELEVATIONS, OUTSTANDING PHYSICAL FEATURES, AND EXISTING STRUCTURE LOCATIONS WAS PROVIDED BY SAIN ASSOCIATES. SARCOR, LLC. IS NOT RESPONSIBLE FOR THE ACCURACY.

ALL DIMENSIONS AND RADII ARE TO THE FACE OF THE CURB UNLESS OTHERWISE NOTED. ALL DIMENSIONS SHOWN TO THE BUILDINGS ARE TO THE OUTSIDE FACE OF BUILDING.

5. ALL HANDICAP ACCESSIBLE PARKING SIGNS AND STRIPING SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE AMERICANS WITH DISABILITY ACT (ADA).

6. ALL TRAFFIC SIGNS SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND ALABAMA DEPARTMENT OF TRANSPORTATION STANDARD AND SPECIAL DRAWINGS.

7. ALL STRIPED AND CURBED RADII SHALL BE 5' UNLESS OTHERWISE NOTED.

8. THE CONTRACTOR IS RESPONSIBLE FOR REPAIR OF ANY DAMAGE TO ANY EXISTING IMPROVEMENTS, ONSITE OR OFF SITE, SUCH AS PAVEMENT, UTILITIES, STORM DRAINAGE, etc. THE REPAIR MUST BE APPROVED BY THE ENGINEER AND BE EQUAL OR BETTER THAN EXISTING CONDITIONS.

9. CONTRACTOR SHALL OBTAIN ALL PERMITS BEFORE CONSTRUCTION BEGINS.

10. SITE CONTRACTOR SHALL SUPPLY AS-BUILT PLANS INDICATING ALL CHANGES AND DEVIATIONS.

11. ANY DEVIATION FROM THESE PLANS MAY CAUSE THE WORK TO BE UNACCEPTABLE.

12. ANY UNANTICIPATED CONDITIONS ENCOUNTERED DURING THE CONSTRUCTION PROCESS SHALL BE IDENTIFIED AND THE ENGINEER NOTIFIED IMMEDIATELY.

13. CONCRETE USED FOR SIDEWALK AND CONCRETE PADS SHALL BE 3,000 PSI 28 DAY COMPRESSIVE STRENGTH. CONCRETE USED FOR CONCRETE APRONS/DRIVEWAYS SHALL BE 4,000 PSI 28 DAY COMPRESSIVE STRENGTH.

14. PROJECT SIGNAGE SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.

15. ALL CURB AND GUTTER WITHIN THE DEVELOPMENT SHALL BE 24".

16. PARKING LOT STRIPING SHALL BE INCLUDED IN THE PAVING CONTRACTOR'S SCOPE OF WORK. STRIPING WILL BE ACCORDING TO OWNER'S SPECIFICATION UNLESS NOTED OTHERWISE. ALL STRIPING IS TO HAVE TWO (2) COATS OF PAINT (MIN).

17. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY AND ALL OFF SITE EASEMENTS NOT DELINEATED ON THE PLANS OR KNOWN OF AT TIME OF PLAN ISSUANCE.

18. THE SITE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL WORK AND APPURTENANCE TO WITHIN 5' OF THE BUILDING. THIS INCLUDES TRANSFORMER AND DUMPSTER PADS AS WELL AS UTILITY CONDUITS.







UTILITY NOTES

UTILITY PROVIDERS' STANDARD SPECIFICATIONS AND DETAILS SHALL GOVERN ALL WATER AND SANITARY SEWER CONSTRUCTION.

2. THE BUILDING CONTRACTOR IS RESPONSIBLE FOR COORDINATING LOCATION, SIZE AND SPECIFICATIONS OF ALL ELECTRICAL TRANSFORMER PADS WITH THE LOCAL POWER COMPANY AND PROVIDING SERVICE FROM THE TRANSFORMER TO THE BUILDING.

CONTRACTOR SHALL COORDINATE ANY DISRUPTIONS TO EXISTING UTILITY SERVICES WITH ADJACENT PROPERTY OWNERS AND IS RESPONSIBLE FOR REPAIRS OF DAMAGE TO ANY EXISTING UTILITIES DURING CONSTRUCTION AT NO COST TO THE OWNER.

4. CONTRACTOR SHALL COMPLY TO THE FULLEST EXTENT WITH THE LATEST STANDARDS AND/OR OSHA DIRECTIVES OR ANY OTHER AGENCY HAVING JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURES. THE CONTRACTOR SHALL PROVIDE SUPPORT SYSTEMS, SLOPING, BENCHING, AND OTHER MEANS OF PROTECTION. THIS IS TO INCLUDE, BUT NOT LIMITED TO ACCESS AND EGRESS FROM ALL EXCAVATION AND TRENCHING. CONTRACTOR IS RESPONSIBLE TO COMPLY WITH PERFORMANCE CRITERIA FOR OSHA.

SEWER SERVICE LATERALS SHALL BE COORDINATED WITH BUILDING PLANS. ANY DISCREPANCIES SHOULD BE CLARIFIED BEFORE INSTALLATION. SEWER SERVICE LATERALS ARE TO BE PERMANENTLY MARKED ON THE CURB.

6. ALL WATER PIPE 4" DIAMETER AND LARGER SHALL BE C900 CLASS 150 PVC WATER PIPE WITH 150 PSI PRESSURE RATING CONFORMING TO AWWA, AND UNIBELL PLASTIC PIPE STANDARD SPECIFICATIONS. FITTINGS 4" AND LARGER SHALL BE CAST IRON OR DUCTILE IRON AND CONFORM WITH WWA STANDARD SPECIFICATIONS.

7. ALL WATER PIPE 3" AND SMALLER SHALL BE TYPE K COPPER OF SDR 21 PER ANSI 16.22.

8. CONTRACTOR SHALL MAINTAIN A MINIMUM OF 4' COVER OVER ALL WATER LINES.

9. CONTRACTOR SHALL COORDINATE INSTALLATION OF WATER SERVICE WITH THE BIRMINGHAM WATER WORKS BOARD (BWWB). CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION, PURCHASE AND/OR FEES AND PERMITS ASSOCIATED WITH ALL APPARATUS INCLUDING; WATER METERS, BACK FLOW PREVENTERS, POST INDICATOR VALVES, AND ENCLOSURES.

10. EXISTING UTILITIES ARE APPROXIMATE AND SHOULD BE VERIFIED FOR LOCATION AND NUMBERED BY THE CONTRACTOR.

11. ALL ELECTRIC, TELEPHONE, AND GAS LINES, INCLUDING SERVICE LINES ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE APPROPRIATE UTILITY COMPANIES SPECIFICATIONS.

12. CONTRACTOR TO COORDINATE INSTALLATION OF ALL UTILITIES BY OTHERS WITH HIS WORK.

13. PRIMARY ELECTRIC SERVICE IS PROVIDED BY ALABAMA POWER. THIS INCLUDES THE TRANSFORMER AND PAD, TRENCHING, BACKFILL, AND COMPACTION. CONTRACTOR IS RESPONSIBLE FOR COORDINATION AND FEES ASSOCIATED WITH POWER SERVICE AS WELL AS SECONDARY SERVICE.

14. PRIMARY ELECTRIC LINES SHOWN ARE FOR COORDINATION ONLY. EXACT LOCATION WILL BE FIELD DETERMINED DURING CONSTRUCTION.

15. ALL SANITARY MANHOLES AND PIPE ARE TO BE FLUSHED CLEAN OF DEBRIS PRIOR TO TURN OVER OF SYSTEM TO OWNER.

16. ALL EASEMENTS TO BE PLATTED BY THE CONTRACTOR (UNLESS OTHERWISE NOTED).

17. ANY UTILITIES NOT SHOWN THAT REQUIRE RELOCATION OR REMOVAL IS THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR IS TO REPORT ALL DISCREPANCIES TO THE ENGINEER IMMEDIATELY UPON DISCOVERY.

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GRADING NOTES

- 1. ALL SPOT ELEVATIONS ARE TOP OF PAVEMENT UNLESS OTHERWISE NOTED.
- 2. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF ALL DEBRIS NOT ACCEPTABLE TO THE OWNER AND ENGINEER.
- 3. IF CONTRACTOR DOES NOT ACCEPT EXISTING TOPOGRAPHY AS SHOWN ON THE PLANS, WITHOUT EXCEPTION, THE CONTRACTOR SHALL MAKE A TOPOGRAPHIC SURVEY AT THEIR OWN EXPENSE AND SUBMIT IT TO THE OWNER FOR REVIEW.
- 4. CONTRACTOR IS RESPONSIBLE FOR NOTIFYING ALL UTILITIES BEFORE CONSTRUCTION AND VERIFYING LOCATION OF ALL UTILITIES SHOWN OR NOT SHOWN.
- 5. CONTRACTOR SHALL PROVIDE DRAINAGE AWAY FROM THE BUILDINGS.
- 6. PRECAST STRUCTURES MAY BE USED AT THE CONTRACTORS OPTION.
- 7. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION AND COST OF THE RELOCATION OF ALL UTILITIES ALONG THE RIGHT OF WAY AND ON THE SITE ASSOCIATED WITH THE CONSTRUCTION OF THIS PROJECT, SUCH AS, BUT NOT LIMITED TO SIGNAL POLES, SIGNAL CONTROLS, DRAINAGE STRUCTURES, TRAFFIC SIGNS, UTILITY POLES, GUY WIRES, AND ETC.
- 8. THE EARTHWORK FOR ALL BUILDING FOUNDATIONS AND SLABS SHALL BE IN ACCORDANCE WITH ARCHITECTURAL PLANS AND SPECIFICATIONS.
- 9. CONTRACTOR IS RESPONSIBLE FOR REPAIRS OF DAMAGE TO ANY EXISTING IMPROVEMENTS DURING CONSTRUCTION, SUCH AS BUT NOT LIMITED TO, DRAINAGE, UTILITIES, PAVEMENT, STRIPING, CURBS, ETC. REPAIRS SHALL BE EQUAL TO OR BETTER THAN EXISTING CONDITIONS.
- 10. ALL SLOPES AND DISTURBED AREAS NOT COVERED BY BUILDING OR PAVEMENT SHALL BE GRADED SMOOTH AND RECEIVE 4" OF TOPSOIL. CONTRACTOR TO PROVIDE TOPSOIL IF NOT AVAILABLE ON SITE. THE AREAS SHALL BE SEEDED, MULCHED, FERTILIZED, AND WATERED TO PROVIDE A HEARTY MOWABLE STAND OF GRASS. SMALL ROCKS MUST BE REMOVED. ANY AREA DISTURBED FOR ANY REASON PRIOR TO FINAL ACCEPTANCE OF THE PROJECT SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- 11. SPOIL FROM THE FOOTINGS IS THE SITE CONTRACTOR'S RESPONSIBILITY. CONTRACTOR IS TO USE THE SOIL ON SITE OR REMOVE IT FROM THE SITE.
- 12. EARTHWORK SHALL BE ON AN UNCLASSIFIED BASIS.
- 13. THIS GRADING PLAN WAS PRODUCED WITH REFERENCE TO THE JUNE 14, 2017 AND DECEMBER 20, 2022 GEOTECHNICAL REPORTS BY BECC, INC.



PROJECT NUMBER: 2022-08 DATE: 11/16/23 DRAWN BY: CHECKED BY: JH/GP JH SHEET NUMBER C4.01





			STRUCTURES					
					Reference			Connected
Name	Description	Туре	Inner Length	Inner Width	Alignment	Station	Offset	Pipes
CB-2.1	BRC AREA INLET	Junction Structure	48"	48"	STORM 2	0+30.45'	0.000'	2
OCS-1	OUTLET CONTROL STRUCTURE	Junction Structure	48"	48"	STORM OUTFALL	1+45.28'	0.000'	1
CB-1.2	BRC AREA INLET	Junction Structure	48"	48"	STORM 1	1+12.46'	0.000'	1
CB-1.1	BRC AREA INLET	Junction Structure	48"	48"	STORM 1	0+30.12'	0.000'	2
CB-2.2	BRC AREA INLET	Junction Structure	48"	48"	STORM 2	1+11.10'	0.000'	1
CB-3.1	BRC AREA INLET	Junction Structure	48"	48"	STORM 3	0+90.00'	0.000'	1
STORM 3 TO UGD	CONNECTION TO UGD	Inlet-Outlet Structure	Inlet-Outlet Structure	Inlet-Outlet Structure	STORM 3	0+00.00'	0.000'	1
STORM 1 TO UGD	CONNECTION TO UGD	Inlet-Outlet Structure	Inlet-Outlet Structure	Inlet-Outlet Structure	STORM 1	0+00.00'	0.000'	1
STORM 2 TO UGD	CONNECTION TO UGD	Inlet-Outlet Structure	Inlet-Outlet Structure	Inlet-Outlet Structure	STORM 2	0+00.00'	0.000'	1
HW-1	Concrete Rectangular Winged Headwall	Inlet-Outlet Structure	Inlet-Outlet Structure	Inlet-Outlet Structure	STORM OUTFALL	0+00.00'	0.000'	1

			Inner	Inner	Inner	Reference					Start Invert		End Invert		
Name	Description	Shape	Diameter	Width	Height	Alignment	Start Station	End Station	Slope	Start Structure	Elevation	End Structure	Elevation	2D Length	Bearing
D_1	Concrete Horizontal	Horizontal Elliptical	Horizontal	30"	19"	STORM OUTFALL	0+00.00'	1+44.98'	0.69%	HW-1	904.000'	OCS-1	905.000'	144.980'	S81° 57' 12.57"W
1 - T		Linpuca	Linpucai												
P-1.1	Concrete Pipe	Circular	18"	18"	18"	STORM 1	0+30.12'	0+00.00'	1.66%	CB-1.1	906.000'	STORM 1 TO UGD	905.500'	30.123'	N72° 16' 05.41"E
P-1.2	Concrete Pipe	Circular	18"	18"	18"	STORM 1	0+30.12'	1+12.46'	0.73%	CB-1.1	907.900'	CB-1.2	908.500'	82.337'	S36° 51' 15.55"W
P-2.1	Concrete Pipe	Circular	18"	18"	18"	STORM 2	0+00.00'	0+30.45'	1.31%	STORM 2 TO UGD	905.230'	CB-2.1	905.630'	30.447'	N72° 16' 05.41"E
P-2.2	Concrete Pipe	Circular	18"	18"	18"	STORM 2	0+30.45'	1+11.10'	1.08%	CB-2.1	905.630'	CB-2.2	906.500'	80.653'	S63° 45' 43.77"E
P-3.1	Concrete Pipe	Circular	18"	18"	18"	STORM 3	0+90.00'	0+00.00'	0.56%	CB-3.1	906.500'	STORM 3 TO UGD	906.000'	90.000'	S17° 43' 54.59"E

DRAINAGE NOTES

1. RCP STORM PIPE IN CITY ROW SHALL BE CLASS III PER ASTM C-76. ALL PIPE AND CONNECTIONS AT MANHOLES SHALL BE WATER TIGHT.

2. ANY FILL USED TO INCREASE THE ELEVATION OF THE FLOOR SLAB OR ANY FILL USED AS BACKFILL, SHALL BE CLEAN, GRANULAR MATERIAL. PRIOR TO THE USE OF ANY GRANULAR FILL, GRADATION ANALYSIS SHALL BE PERFORMED ON REPRESENTATIVE SAMPLES OF THE FILL MATERIAL TO DETERMINE WHETHER THE MATERIAL IS SUITABLE AS FILL. COMPACTED FILL SHALL BE PLACED IN LAYERS OF NOT MORE THAN EIGHT INCHES THICKNESS, AT MOISTURE CONTENTS WITHIN TWO PERCENT OPTIMUM, AND COMPACTED TO MINIMUM DENSITY OF 98 PERCENT OF ITS STANDARD PROCTOR (ASTM D 698) MAX DRY DENSITY.

3. CONTRACTOR IS REQUIRED TO DO OWN TESTING ON MATERIAL AND COMPACTION.

4. ALL SYSTEM MANHOLES AND PIPES ARE TO BE FLUSHED CLEAN PRIOR TO TURNING OVER TO THE OWNER.

5. ALL PIPE LENGTHS LISTED ARE BASED ON THE HORIZONTAL DISTANCE FROM CENTER OF STRUCTURE AND USED FOR DESIGN.

6. STORM PIPE WITHIN DEVELOPMENT SHALL BE CLASS III RCP FOR STORM MAINS.

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DRAINAGE NOTES

			STRUCTURES							
	Reference Conne									
Name	Description	Туре	Inner Length	Inner Width	Alignment	Station	Offset	Pipes		
CB-2.1	BRC AREA INLET	Junction Structure	48"	48"	STORM 2	0+30.45'	0.000'	2		
OCS-1	OUTLET CONTROL STRUCTURE	Junction Structure	48"	48"	STORM OUTFALL	1+45.28'	0.000'	1		
CB-1.2	BRC AREA INLET	Junction Structure	48"	48"	STORM 1	1+12.46'	0.000'	1		
CB-1.1	BRC AREA INLET	Junction Structure	48"	48"	STORM 1	0+30.12'	0.000'	2		
CB-2.2	BRC AREA INLET	Junction Structure	48"	48"	STORM 2	1+11.10'	0.000'	1		
CB-3.1	BRC AREA INLET	Junction Structure	48"	48"	STORM 3	0+90.00'	0.000'	1		
STORM 3 TO UGD	CONNECTION TO UGD	Inlet-Outlet Structure	Inlet-Outlet Structure	Inlet-Outlet Structure	STORM 3	0+00.00'	0.000'	1		
STORM 1 TO UGD	CONNECTION TO UGD	Inlet-Outlet Structure	Inlet-Outlet Structure	Inlet-Outlet Structure	STORM 1	0+00.00'	0.000'	1		
STORM 2 TO UGD	CONNECTION TO UGD	Inlet-Outlet Structure	Inlet-Outlet Structure	Inlet-Outlet Structure	STORM 2	0+00.00'	0.000'	1		
HW-1	Concrete Rectangular Winged Headwall	Inlet-Outlet Structure	Inlet-Outlet Structure	Inlet-Outlet Structure	STORM OUTFALL	0+00.00'	0.000'	1		

								PIPES							
			Inner	Inner	Inner	Reference					Start Invert		End Invert		
Name	Description	Shape	Diameter	Width	Height	Alignment	Start Station	End Station	Slope	Start Structure	Elevation	End Structure	Elevation	2D Length	Bearing
	Concrete Horizontal	Horizontal	Horizontal	20"	10 ¹¹				0 60%	LI\\\/ 1	004 000	005 1		144 0001	
P-1	Elliptical Culvert	Elliptical	Elliptical	50	19	STORIVIOUTFALL	0+00.00	1+44.98	0.09%		904.000	003-1	905.000	144.980	381 57 12.57 W
P-1.1	Concrete Pipe	Circular	18"	18"	18"	STORM 1	0+30.12'	0+00.00'	1.66%	CB-1.1	906.000'	STORM 1 TO UGD	905.500'	30.123'	N72° 16' 05.41"E
P-1.2	Concrete Pipe	Circular	18"	18"	18"	STORM 1	0+30.12'	1+12.46'	0.73%	CB-1.1	907.900'	CB-1.2	908.500'	82.337'	S36° 51' 15.55"W
P-2.1	Concrete Pipe	Circular	18"	18"	18"	STORM 2	0+00.00'	0+30.45'	1.31%	STORM 2 TO UGD	905.230'	CB-2.1	905.630'	30.447'	N72° 16' 05.41"E
P-2.2	Concrete Pipe	Circular	18"	18"	18"	STORM 2	0+30.45'	1+11.10'	1.08%	CB-2.1	905.630'	CB-2.2	906.500'	80.653'	S63° 45' 43.77"E
P-3.1	Concrete Pipe	Circular	18"	18"	18"	STORM 3	0+90.00'	0+00.00'	0.56%	CB-3.1	906.500'	STORM 3 TO UGD	906.000'	90.000'	S17° 43' 54.59"E

1. RCP STORM PIPE IN CITY ROW SHALL BE CLASS III PER ASTM C-76. ALL PIPE AND CONNECTIONS AT MANHOLES SHALL BE WATER TIGHT.

2. ANY FILL USED TO INCREASE THE ELEVATION OF THE FLOOR SLAB OR ANY FILL USED AS BACKFILL, SHALL BE CLEAN, GRANULAR MATERIAL. PRIOR TO THE USE OF ANY GRANULAR FILL, GRADATION ANALYSIS SHALL BE PERFORMED ON REPRESENTATIVE SAMPLES OF THE FILL MATERIAL TO DETERMINE WHETHER THE MATERIAL IS SUITABLE AS FILL. COMPACTED FILL SHALL BE PLACED IN LAYERS OF NOT MORE THAN EIGHT INCHES THICKNESS, AT MOISTURE CONTENTS WITHIN TWO PERCENT OPTIMUM, AND COMPACTED TO MINIMUM DENSITY OF 98 PERCENT OF ITS STANDARD PROCTOR (ASTM D 698) MAX DRY DENSITY.

3. CONTRACTOR IS REQUIRED TO DO OWN TESTING ON MATERIAL AND COMPACTION.

4. ALL SYSTEM MANHOLES AND PIPES ARE TO BE FLUSHED CLEAN PRIOR TO TURNING OVER TO THE OWNER.

5. ALL PIPE LENGTHS LISTED ARE BASED ON THE HORIZONTAL DISTANCE FROM CENTER OF STRUCTURE AND USED FOR DESIGN.

6. STORM PIPE WITHIN DEVELOPMENT SHALL BE CLASS III RCP FOR STORM MAINS.

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EROSION AND SEDIMENTATION CONTROL NOTES

TEMPORARY SEEDING SHALL BE APPLIED AS SOON AS ANY AREAS OF THE PROPERTY ARE DISTURBED. THE TOP 6" OF SOIL SHALL BE LOOSENED TO ENHANCE THE ROOTING OF SEEDLINGS. ONCE TEMPORARY SEEDING HAS BEEN APPLIED, THE CONTRACTOR SHALL COVER THE SEEDED AREA WITH MULCH MATERIALS. SEE TEMPORARY SEEDING SCHEDULE AND MULCH MATERIALS LISTED BELOW.

ONCE CLEARING AND GRUBBING IS COMPLETE, AND THE TEMPORARY SEEDING HAS BEGUN TO GERMINATE, THE CONTRACTOR SHALL BEGIN INSTALLING THE PERMANENT SEEDING. SEE PERMANENT SEEDING SCHEDULE.

ONCE THE PERMANENT SEEDING HAS BEGUN TO SEED, COVER 70% OF THE SURFACE WITH THE SPECIFIED MULCH MATERIALS LISTED ON THIS SHEET.

4. THE COMBINATION OF TEMPORARY SEEDING, FOLLOWED BY PERMANENT SEEDING AND MULCH, WILL COMPLETELY STABILIZE THE SITE. THE CONTRACTOR IS RESPONSIBLE FOR COMPLETE STABILIZATION WITHIN 14 DAYS OF STOPPING WORK IN ANY AREA. THEREFORE, THE SEEDING PROCESS SHALL BEGIN AS SOON AS AN AREA HAS BEEN DISTURBED.

TYPE A SILT FENCE SHALL BE INSTALLED ON DAY 1 AROUND THE LIMITS OF DISTURBANCE AND REMAIN UNTIL SUBSTANTIAL COMPLETION. THE INTERIOR SILT FENCING SHALL BE INSTALLED AFTER SLOPE CLEARING AND MULCHING ARE COMPLETE.

THE EROSION AND SEDIMENT BMPs ARE TO BE INSPECTED BY THE QCP/ OR A QUALIFIED REPRESENTATIVE OF THE OWNER MONTHLY, OR AFTER 0.75" RAIN (WITHIN 24 HRS).

7. ADEM GENERAL PERMIT HAS NOT BEEN OBTAINED BY THE OWNER. PRIOR TO THE NOTICE TO PROCEED, THE CONTRACTOR SHALL FILE A GENERAL PERMIT WITH ADEM AS THE RESPONSIBLE OFFICIAL. THE CONTRACTOR IS RESPONSIBLE FOR ALL PERMIT FEES AND INSPECTION SERVICE REQUESTED BY ADEM.

8. SILT FENCING, TREE PROTECTION FENCING, AND INLET PROTECTION SHALL BE REMOVED AFTER SITE STABILIZATION AND PRIOR TO SUBSTANTIAL COMPLETION.



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EROSION AND SEDIMENTATION CONTROL NOTES

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- 1. THE TOP OF THE REQUIRED GEOTEXTILE FABRIC SHALL BE 6" LOWER THAN THE SHOULDER ELEVATION IN ANY AREA CRITICALLY SUSCEPTIBLE TO FLOODING.
- 2. DEWATERING HOLES SHALL BE 1"-1.5"IN DIAMETER AND SPACED 2"-3" APART TO ALLOW FOR DEWATERING IN NO MORE THAN 48 HOURS.

- 4. STAPLE GEOTEXTILE FABRIC TO DEWATERING DEVICE AND CUT CROSS SLITS IN THE FILTER FABRIC AT THE HOLE LOCATIONS TO ALLOW WATER TO FLOW THROUGH.









ALL PAVEMENT MARKINGS SHALL BE WHITE IN COLOR. REF. ALDOT STANDARD DRAWING TCM-703 ACCESIBLE PARKING PAVEMENT MARKINGS NOT TO SCALE



- GEOTEXTILE FABRIC MUST MEET DESIGN REQUIREMENTS AND BE PROPERLY PROTECTED FROM PUNCTURING OR TEARING DURING INSTALLATION. REPAIR ANY DAMAGE BY REMOVING THE RIP RAP AND PLACING ANOTHER PIECE OF FILTER CLOTH OVER THE DAMAGED AREA. ALL CONNECTING JOINTS SHOULD OVERLAP A MINIMUM OF 1.5 FEET WITH THE UPSTREAM EDGE OVER THE DOWNSTREAM EDGE. IF THE DAMAGE IS EXTENSIVE, REPLACE THE ENTIRE GEOTEXTILE FABRIC.
- 3. RIP RAP MAY BE PLACED BY EQUIPMENT. CARE SHOULD BE TAKE TO AVOID DAMAGING THE FILTER.
- 4. CONSTRUCT THE APRON ON ZERO GRADE WITH NO OVERFALL AT THE END. MAKE THE TOP OF THE RIP RAP AT THE DOWNSTREAM END LEVEL WITH THE RECEIVING AREA OR SLIGHTLY BELOW IT..

OUTLET PROTECTION NOT TO SCALE



NOT TO SCALE



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CONCRETE CURB & GUTTER ALDOT TYPE C (MOD) NOT TO SCALE

2. CONTRACTION JOINTS REQUIRED MINIMUM OF 8 LF IN TANGENTS, INLETS, AND AS DIRECTED BY ENGINEER.

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GENERAL NOTES

- CONTRACTOR SHALL COORDINATE BETWEEN ARCHITECTURAL, STRUCTURAL, MECHANICAL, ELECTRICAL, PLUMBING, AND OTHER DRAWINGS:
 - A. ANY DISCREPANCIES OR CONFLICTS BETWEEN DRAWINGS OF DIFFERENT DISCIPLINES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT. CONTRACTOR SHALL NOT PROCEED WITH SHOP DRAWING PREPARATION OR ANY CONSTRUCTION UNTIL THE ARCHITECT HAS GIVEN DIRECTION OF RESOLUTION FOR THE DISCREPANCY OR CONFLICT.
 - B. NOT ALL OPENINGS AND OTHER COMPONENTS THAT ARE REQUIRED HAVE BEEN SHOWN ON THE STRUCTURAL DRAWINGS. COORDINATE AND VERIFY THE LOCATIONS AND SIZES OF CHASES, INSERTS, OPENINGS, SLEEVES, FINISHES, DEPRESSIONS AND OTHER PROJECT REQUIREMENTS AT FLOORS, WALLS, AND ROOFS BETWEEN DRAWINGS OF DIFFERENT DISCIPLINES.
- IN THE CASE OF INCONSISTENCIES BETWEEN DRAWINGS AND SPECIFICATIONS OR WITHIN EITHER DOCUMENT, A BIDDER WILL BE DEEMED TO HAVE INCLUDED IN ITS BID THE BETTER QUALITY OR GREATER QUANTITY OF THE WORK INVOLVED UNLESS THE BIDDER ASKED FOR AND OBTAINED THE ARCHITECT'S WRITTEN CLARIFICATION OF THE REQUIREMENTS BEFORE SUBMISSION OF BID.
- ALL DIMENSIONS SHOWN TAKE PRECEDENCE OVER SCALE SHOWN ON PLANS, SECTIONS, AND DETAILS. DO NOT SCALE THE DRAWINGS.
- THE DETAILS PROVIDED ON SHEETS LABELED AS "TYPICAL DETAILS" APPLY GENERALLY TO THE DRAWINGS IN AREAS WHERE CONDITIONS ARE SIMILAR TO THOSE DESCRIBED IN THE DETAILS, UNLESS NOTED OTHERWISE
- ALL OF THE CONTRACTOR'S PROPOSED SUBSTITUTIONS ARE CONSIDERED CHANGE ORDERS AND SHALL BE SUBMITTED TO THE ARCHITECT/ENGINEER FOR REVIEW AND/OR APPROVAL PRIOR TO ANY PERTINENT WORK OR FABRICATION.
- CONSTRUCTION METHODS, PROCEDURES AND SEQUENCES ARE THE CONTRACTOR'S RESPONSIBILITY. THE CONTRACTOR SHALL TAKE ALL THE NECESSARY MEANS TO MAINTAIN AND PROTECT THE STRUCTURAL INTEGRITY OF ALL CONSTRUCTION, NEW AND EXISTING, AT ALL STAGES INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING:
 - A. BRACE ALL BASEMENT-TYPE WALLS RETAINING EARTH UNTIL RESTRAINING SLABS/FLOORS HAVE BEEN INSTALLED AND SLABS HAVE REACHED REQUIRED DESIGN STRENGTH.
 - B. BRACE/SHORE ALL WALLS AS REQUIRED TO MAINTAIN STABILITY DURING CONSTRUCTION. C. SHORE EXISTING FLOORS, WALLS, AND/OR ROOFS AS REQUIRED DURING DEMOLITION OF ANY
- PORTION OF EXISTING STRUCTURE UNTIL NEW SUPPORT FRAMING HAS BEEN INSTALLED. ALL STRUCTURAL MEMBERS, AS SHOWN, HAVE BEEN DESIGNED TO CARRY IN PLACE DESIGN LOADS ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SUPPORT OF ANY LOADS AND FORCES IMPOSED DURING CONSTRUCTION, TRANSPORTATION, ERECTION, AND HANDLING. THE CONTRACTOR SHALL INSURE THAT CONSTRUCTION LOADS DO NOT EXCEED THE DESIGN LIVE LOADS INDICATED ON THE STRUCTURAL DRAWINGS AND THAT THESE LOADS ARE NOT IMPOSED ON THE STRUCTURAL MEMBERS PRIOR TO THE TIME THAT CONCRETE REACHES THE FULL SPECIFIED DESIGN STRENGTH, STEEL MEMBERS AND THEIR CONNECTIONS ARE FULLY BOLTED AND / OR WELDED AND ALL OTHER FRAMING MEMBERS AND THEIR CONNECTIONS ARE IN PLACE.
- CONTRACTOR SHALL FIELD VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO ANY PERTINENT WORK OR FABRICATION. ALL EXISTING CONDITIONS AND DIMENSIONS SHALL BE NOTED ON THE SHOP DRAWINGS
- ALL CONSTRUCTION JOINTS SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE INCORPORATED INTO THE STRUCTURE. ADDITIONAL CONSTRUCTION JOINTS TO FACILITATE CONSTRUCTION SHALL BE LOCATED AND DETAILED ON THE SHOP DRAWINGS FOR REVIEW.
- 10. ALL EXPOSED CONCRETE EDGES SHALL BE CHAMFERED.

CONSTRUCTION CRANES

DESIGN OF CONSTRUCTION CRANE FOUNDATIONS AND ASSOCIATED OPENINGS IN THE STRUCTURE ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE DESIGN DOCUMENTS SUBMITTED FOR APPROVAL OF ANY OPENINGS & FOUNDATIONS MUST BEAR THE SEAL OF A REGISTERED PROFESSIONAL ENGINEER LICENSED IN THE STATE WHERE THE PROJECT IS LOCATED. THE PLANS AND DETAILS SHALL BE SUBMITTED TO THE ARCHITECT AND STRUCTURAL ENGINEER OF RECORD FOR REVIEW WITH ALL NECESSARY SUPPORTING CALCULATIONS BASED ON THE APPLICABLE DESIGN CODES. THE REVIEW IS ONLY FOR VERIFICATION THAT THE WORK HAS BEEN DONE AND IS NOT TO IMPLY ACCEPTANCE OF RESPONSIBLY FOR DESIGN ADEQUACY. RESPONSIBILITY IS SOLELY THE CONTRACTORS.

SHOP DRAWINGS/SUBMITTALS

- SHOP DRAWING SUBMITTAL REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE PROJECT CONTRACT DOCUMENTS (DRAWINGS AND SPECIFICATIONS) AND SHALL FOLLOW INDUSTRY GUIDELINES AND STANDARDS.
- ALL OUESTIONS, CLARIFICATIONS, OR MODIFICATIONS OF THE CONTRACT DOCUMENTS SHALL BE CLEARLY DOCUMENTED AND INDICATED ON THE SHOP DRAWING TRANSMITTAL OR COVER SHEET. ITEMS SHALL NOT BE CONSIDERED APPROVED UNLESS SPECIFICALLY ADDRESSED BY MBA IN THE REVIEW COMMENTS.
- ALL SHOP DRAWINGS ARE TO BE NEWLY PREPARED. REPRODUCTIONS OF CONTRACT STRUCTURAL DRAWINGS FOR USE AS ERECTION DRAWINGS WILL NOT BE PERMITTED. SHOULD SHOP DRAWING SUBMITTALS CONTAIN ANY REPRODUCTIONS OF CONTRACT STRUCTURAL DRAWINGS, THEY WILL BE REJECTED AND RETURNED WITHOUT ENGINEER REVIEW.
- A. MBA MAY CONSIDER TRANSFERRING COMPUTER FILES, IN THE FORMAT CREATED, OF THE PLAN SHEETS TO PROJECT SUBCONTRACTORS TO ASSIST IN DEVELOPING SHOP DRAWINGS ON A CASE BY CASE BASIS. A SIGNED FILE TRANSFER AGREEMENT WILL BE REQUIRED PRIOR TO RELEASE OF MBA FILES.
- CONTRACTOR TO REVIEW ALL SHOP DRAWING SUBMITTALS AND STAMP WITH APPROVAL PRIOR TO SUBMISSION TO ARCHITECT/ ENGINEER. SHOP DRAWINGS RECEIVED BY ARCHITECT/ENGINEER THAT HAVE NOT BEEN REVIEWED AND COORDINATED BY THE CONTRACTOR WILL BE RETURNED WITHOUT ARCHITECT/ENGINEER'S REVIEW. THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING AND CORRECTING DIMENSIONS WHICH PERTAIN TO FABRICATION PROCESSES OR CONSTRUCTION TECHNIQUES PRIOR TO SUBMITTAL AND FOR COORDINATION OF WORK OF ALL TRADES.
- CONTRACTOR MAY PROVIDE REVIEWED AND APPROVED SUBMITTALS IN AN ELECTRONIC .PDF FORMAT FOR ENGINEER REVIEW AND APPROVAL. IN LIEU OF ELECTRONIC SUBMITTALS, CONTRACTOR MAY PROVIDE NO MORE THAN FOUR PAPER COPIES OF EACH STRUCTURAL SHOP DRAWING SUBMITTAL TO THE ENGINEER. THE STRUCTURAL ENGINEER WILL REVIEW AND RETURN TWO OF THE COPIES TO THE ARCHITECT. ADDITIONAL COPIES REQUIRED BY THE CONTRACTOR SHALL BE MADE BY THE CONTRACTOR AFTER THE REVIEW PROCESS.
- MBA REVIEW OF SHOP DRAWING SUBMITTALS IS FOR GENERAL CONFORMANCE WITH THE DESIGN CONCEPT OF THE PROJECT AND FOR GENERAL COMPLIANCE WITH THE CONTRACT DOCUMENTS. REVIEW AND/OR APPROVAL OF SHOP DRAWINGS SHALL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY FOR DEVIATIONS FROM THE REQUIREMENTS OF THE CONTRACT DOCUMENTS OR FOR ERRORS/ OMISSIONS IN THE SHOP DRAWINGS
- RESUBMITTED SHOP DRAWINGS SHALL HAVE CHANGES AND/OR ADDITIONS CLEARLY INDICATED. REVIEW OF RESUBMITTED SHOP DRAWINGS IS LIMITED TO THE ITEMS REQUIRING CORRECTION ON THE PREVIOUS SUBMITTAL.

EQUIPMENT NOTES

- CONTRACTOR SHALL COORDINATE BETWEEN DRAWINGS TO VERIFY ALL EQUIPMENT WEIGHTS, LOCATIONS, AND/OR PENETRATIONS. THIS INFORMATION SHALL BE PROVIDED TO SUBCONTRACTORS PERFORMING DELEGATED DESIGN AND SHALL BE IDENTIFIED ON THE CORRESPONDING SUBMITTAL.
- EQUIPMENT LOADS CONSIDERED IN THIS DESIGN ARE SHOWN ON PLANS THUSLY (1400#). THE STRUCTURAL ENGINEER SHALL BE NOTIFIED AND ALLOWED TO MODIFY THE DESIGN AS REQUIRED IF FINAL EQUIPMENT WEIGHTS ARE HEAVIER OR THE EQUIPMENT LAYOUT DIFFERS FROM THE APPROXIMATE LAYOUT SHOWN ON THE PLAN.
- CONTRACTOR SHALL FOLLOW THE MANUFACTURER'S CERTIFIED DRAWINGS, SPECIFICATIONS AND/OR OTHER REQUIREMENTS FOR ATTACHING THE EQUIPMENT TO THE STRUCTURE. IF STRUCTURAL MEMBERS CONFLICT WITH ATTACHMENT, THE STRUCTURAL ENGINEER SHALL BE NOTIFIED AND ALLOWED TO MODIFY THE DESIGN AS REQUIRED TO ACCOMMODATE THE MANUFACTURER'S REQUIREMENTS.

SITE AND FOUNDATION

- SED ON THE GEOTECHNICAL ENGINEERING REPORT PREPARED BY BECC, PROJECT NO 222119, DATED 12/20/22. THE GENERAL CONTRACTOR SHALL ADHERE TO ALL REQUIREMENTS AND RECOMMENDATIONS IN THE REPORT.
- ALLOWABLE SOIL BEARING PRESSURES (PSF): 2500
- ISOLATED FOOTINGS CONTINUOUS FOOTINGS
- EXCAVATE, WHERE REQUIRED, TO BUILDING AND STRUCTURE SUBGRADE.

2500

- 4. PROOF-ROLL THE AREA UNDER THE BUILDING, PLUS 5'-0" ON ALL SIDES, WITH A LOADED DUMP TRUCK TO LOCATE ANY SOFT AREAS. A GEOTECHNICAL ENGINEER IS TO BE PRESENT DURING THIS OPERATION. ANY SOFT AREAS DETECTED ARE TO BE UNDERCUT AND REPLACED WITH ENGINEERED FILL.
- ACCEPTABLE FILL MATERIAL SHALL BE FREE OF ORGANICS, AND HAVE A P.I. OF LESS THAN 30, L.L. OF LESS THAN 50 AND A MAXIMUM DRY DENSITY OF GREATER THAN 100 PCF. CRUSHED STONE BACKFILL TO MEET REQUIREMENTS OF A.H.D. No. 57 STONE. DRAINAGE FILL SUPPORTING SLABS SHALL MEET THE REQUIREMENTS OF THE GEOTECHNICAL ENGINEER.
- FILL, WHERE REQUIRED, IS TO BE PLACED IN 8" LOOSE LIFTS AND COMPACTED TO 98% STANDARD
- PROCTOR (ASTM D-698), WITHIN ±2% OF OPTIMUM MOISTURE CONTENT. THE GEOTECHNICAL ENGINEER SHALL REVIEW THE FINAL FOUNDATION DESIGN TO VERIFY THAT ALL FOUNDATION SYSTEMS, INCLUDING SLAB ON GRADE DESIGN AND DETAILING, COMPLIES WITH THE GEOTECHNICAL PARAMETERS INCLUDED IN THE GEOTECHNICAL REPORT. WRITTEN VERIFICATION OF

THIS REVIEW SHALL BE SUBMITTED TO THE ARCHITECT TWO WEEKS BEFORE FINAL PRICING/BID DATE

- 1. STANDARDS
- 2. CONCRETE SCHEDULES
 - ITEM A. CONCRETE IN CMU CELLS
- B. ALL OTHER CONCRETE CONCRETE COVER OVER REINFOR
- A. UNFORMED SURFACE IN CON
- B. UNFORMED SURFACE OVER C. FORMED SURFACES EXPOSE
 - #6 AND LARGER #5 AND SMALLER

D. FORMED SURFACES NOT EXF

- WALLS. SLABS: COLUMNS, BEAMS: 1 1/2 IN. TO TIES
- FACTOR OF 60 TO 75%
- DRAWINGS
- FACE
- FOR WALLS.
- BE THE SAME AS MAIN REINFORCING
- JOINTS TO BE KEYED
- STRUCTURAL DRAWINGS.
- WEATHER AND 3/4 INCH FOR CONCRETE NOT EXPOSED TO EARTH OR WEATHER.

TENSION LAP SPLICE LENGTH									
		f'c = 30	00 PSI		f'c = 4000 PSI				
	TOP	BARS	OTH BA	ERS RS	TOP	BARS	OTHERS BARS		
BAR SIZE		BAILO	Δ	B		BAILO	Δ	B	
	~ ~				10				
#3	22	28	1/	22	19	24	15	19	
#4	29	37	22	29	25	32	19	25	
#5	36	47	28	36	31	40	24	31	
#6	43	56	33	43	37	48	29	37	
#7	63	81	48	63	54	70	42	54	
#8	72	93	55	72	62	80	48	62	
#9	81	105	62	81	70	91	54	70	
#10	91	118	70	91	79	102	61	79	
#11	101	131	78	101	87	113	67	87	

CONCRETE

CONCRETE CONSTRUCTION AND QUALITY ASSURANCE SHALL BE IN ACCORDANCE WITH CURRENT ACI

28 DAY COMPRESSIVE STRENGTH	
3000 PSI GROUT	
3000 PSI NORMAL WEIGHT	
RCING (UNO)	
NTACT WITH EARTH: 3 IN.	
VAPOR BARRIER: 2 IN.	
ED TO EARTH OR WEATHER:	
2 IN.	
1 1/2 IN.	
POSED TO EARTH OR WEATHER:	
3/4 IN.	

4. CONCRETE AT SLABS ON GRADE SHALL HAVE A NOMINAL MAXIMUM COARSE AGGREGATE SIZE OF 3/4 INCH. ADJUST PORTIONS OF COMBINED COARSE, INTERMEDIATE AND FINE AGGREGATES TO PROVIDE A COARSENESS

ALL REINFORCING SHALL CONFORM TO THE LATEST REVISION OF ASTM SPECIFICATION A615, GRADE 60 AND BE DETAILED IN ACCORDANCE WITH THE LATEST REVISION OF ACI STANDARD 315. NO REINFORCING BAR SHALL BE WELDED IN ANY MANNER, UNLESS SPECIFICALLY SHOWN OR NOTED ON THE

CONTINUOUS FOOTING REINFORCING BARS SHALL BE LAPPED 30 BAR DIAMETERS, BUT NOT LESS THAN 1'-0". GRADE BEAM, ELEVATED BEAM, AND ELEVATED SLAB REINFORCING BARS SHALL BE SPLICED ONLY AS SHOWN ON THE DRAWINGS, EXCEPT THE REINFORCING DESIGNATED AS "CONTINUOUS" SHALL HAVE A CLASS "B" LAP SPLICE (PER ACI 318). LAP SPLICES OF CONTINUOUS REINFORCING SHALL BE MADE OVER SUPPORTS FOR BOTTOM BARS AND FOR INTERMEDIATE BARS AND AT MID-SPAN FOR TOP BARS. AT EXTERIOR SUPPORTS, TOP AND BOTTOM BARS SHALL BE HOOKED AND INTERMEDIATE BARS SHALL EXTEND TO WITHIN 2" OF EXTERIOR

COLUMN AND WALL VERTICAL REINFORCING BARS SHALL BE LAPPED WITH A CLASS "B" SPLICE. WALL HORIZONTAL REINFORCING BARS SHALL BE LAPPED 30 DIAMETERS AT SPLICE POINTS. PROVIDE CORNER BARS

10. PROVIDE FULL EMBEDMENT FOR ALL DOWELS. IF NOT OTHERWISE SPECIFIED, DOWEL SIZE AND SPACING SHALL

11. CONSTRUCTION JOINTS IN CONCRETE BEAMS AND SLABS SHALL BE AT OR NEAR MIDSPAN. ALL CONSTRUCTION

12. HORIZONTAL CONSTRUCTION JOINTS SHALL NOT BE PERMITTED IN WALLS AND BEAMS, UNLESS SHOWN ON THE

13. CONDUIT, PIPES, AND SLEEVES SHALL NOT BE SPACED CLOSER THAN 3 DIAMETERS ON CENTER, NOT HAVE AN OUTSIDE DIAMETER GREATER THAN 1/3 THE OVERALL THICKNESS OF THE SLAB, WALL OR BEAM IN WHICH THEY ARE EMBEDDED, AND SHALL HAVE A MINIMUM COVER OF 1 1/2 INCH FOR CONCRETE EXPOSED TO EARTH OR

14. PIPING AND CONDUIT SHALL BE SO FABRICATED AND INSTALLED THAT CUTTING, BENDING, OR DISPLACEMENT OF REINFORCEMENT FROM ITS PROPER LOCATION WILL NOT BE REQUIRED.

15. THE CONTRACTOR SHALL SUBMIT, FOR REVIEW, SHOP DRAWINGS FOR ALL REINFORCING BARS INCLUDING DETAILS AT ALL OPENINGS AND ASSOCIATED ADDED REINFORCEMENT AS SHOWN ON TYPICAL DETAILS.

POST-INSTALLED ANCHORS

- ANCHOR CAPACITY USED IN DESIGN IS BASED UPON THE TECHNICAL DATA PUBLISHED BY THE MANUFACTURER. SUBSTITUTION REQUESTS FOR ALTERNATE PRODUCTS MUST BE APPROVED IN WRITING BY THE STRUCTURAL ENGINEER OF RECORD PRIOR TO USE. CONTRACTOR SHALL PROVIDE CALCULATIONS DEMONSTRATING THAT THE SUBSTITUTED PRODUCT IS CAPABLE OF ACHIEVING THE PERFORMANCE VALUES OF THE SPECIFIED PRODUCT. SUBSTITUTIONS WILL BE EVALUATED ON THE FOLLOWING; HAVING AN ICC-ES ESR OR IAPMO UES ER SHOWING COMPLIANCE WITH THE RELEVANT BUILDING CODE FOR SEISMIC USES, LOAD RESISTANCE, INSTALLATION CATEGORY, AND AVAILABILITY OF COMPREHENSIVE INSTALLATION INSTRUCTIONS. ADHESIVE ANCHOR EVALUATION WILL ALSO CONSIDER CREEP, IN-SERVICE TEMPERATURE, AND INSTALLATION TEMPERATURE.
- ANCHOR CAPACITY IS DEPENDANT UPON SPACING BETWEEN ADJACENT ANCHORS AND PROXIMITY OF ANCHORS TO EDGE OF CONCRETE. INSTALL ANCHORS IN ACCORDANCE WITH SPACING AND EDGE CLEARANCES INDICATED ON THE DRAWINGS.
- 3. EXISTING REINFORCING BARS IN THE CONCRETE STRUCTURE MAY CONFLICT WITH SPECIFIC ANCHOR LOCATIONS. UNLESS NOTED ON THE DRAWINGS THAT THE BARS CAN BE CUT, THE CONTRACTOR SHALL REVIEW THE EXISTING STRUCTURAL DRAWINGS AND SHALL UNDERTAKE TO LOCATE THE POSITION OF THE REINFORCING BARS AT THE LOCATIONS OF THE CONCRETE ANCHORS, BY USE OF HILTI FERROSCAN, GPR, X-RAY, CHIPPING OR OTHER MEANS APPROVED BY THE ENGINEER OF RECORD. DO NOT CUT PRESTRESSED OR POST TENSIONED TENDONS WITHOUT PRIOR APPROVAL FROM THE STRUCTURAL ENGINEER OF RECORD.

INSTALL ANCHORS PER THE MANUFACTURER PRINTED INSTALLATION INSTRUCTIONS UNLESS NOTED OTHERWISE, ALL ANCHORS TO BE INSTALLED WITH AN EMBEDMENT DEPTH EQUAL TO OR GREATER THAN MANUFACTURER STANDARD EMBEDMENT. OVERHEAD ADHESIVE ANCHORS MUST BE INSTALLED USING A SYSTEM THAT IS APPROVED FOR SUCH INSTALLATIONS IN THE PRODUCT CODE REPORT

THE CONTRACTOR SHOULD ARRANGE AN ANCHOR MANUFACTURER'S REPRESENTATIVE TO PROVIDE ONSITE INSTALLATION TRAINING FOR ALL OF THEIR ANCHORING PRODUCTS SPECIFIED. UNLESS SPECIFICALLY NOTED ON THE DRAWINGS, APPROVED ANCHORS ARE AS FOLLOWS:

A. ANCHORAGE TO CONCRETE

- 1. ADHESIVE ANCHORS FOR CONCRETE USE:
- a. SIMPSON STRONG-TIE AT-XP ADHESIVE ANCHORING SYSTEM WITH THREADED RODS (IAPMO UES ER-263).
- b. SIMPSON STRONG-TIE SET-XP ADHESIVE ANCHORING SYSTEM WITH THREADED RODS (ICC-ES ESR-2508) FOR SLOW CURE APPLICATIONS.
- c. HILTI HIT-HY 200 SAFE SET SYSTEM WITH HILTI HOLLOW DRILL BIT SYSTEM WITH THREADED ROD (ICC-ES ESR-3187).
- d. HILTI HIT-RE 500-SD EPOXY ADHESIVE ANCHORING SYSTEM WITH HAS-E THREADED ROD (ICC-ES ESR-2322) FOR SLOW CURE APPLICATIONS.
- 2. MECHANICAL ANCHORS FOR CONCRETE USE: a. SIMPSON STRONG-TIE TITEN-HD (ICC-ES ESR-2713).
- b. SIMPSON STRONG-TIE STRONG-BOLT 2 (ICC-ES ESR-3037).
- c. HILTI KWIK HUS-EZ AND KWIK HUS EZ-I SCREW ANCHORS (ICC-ES ESR-3027). d. HILTI KWIK BOLT-TZ EXPANSION ANCHORS (ICC-ES ESR-1917).
- B. REBAR DOWELING INTO CONCRETE
- 1. ADHESIVE ANCHORS FOR CONCRETE USE: a. SIMPSON STRONG-TIE SET-XP ADHESIVE ANCHORING SYSTEM WITH CONTINUOUSLY
- DEFORMED REBAR (ICC-ES ESR-2508).
- b. HILTI HIT-HY 200 SAFE SET SYSTEM WITH HILTI HOLLOW DRILL BIT SYSTEM WITH CONTINUOUSLY DEFORMED REBAR (ICC-ES ESR-3187).
- c. HILTI HIT-RE 500-SD EPOXY ADHESIVE ANCHORING SYSTEM WITH CONTINUOUSLY DEFORMED REBAR (ICC-ES ESR-2322).
- C. ANCHORAGE TO SOLID GROUTED MASONRY 1. ADHESIVE ANCHORS USE:
 - a. SIMPSON STRONG-TIE AT-XP ADHESIVE ANCHORING SYSTEM WITH THREADED ROD OR REBAR (IAMPMO UES ER-281).
- b. SIMPSON STRONG-TIE SET-XP ADHESIVE ANCHORING SYSTEM WITH THREADED ROD OR REBAR (IAMPMO UES ER-265).
- c. HILTI HIT-HY 70 MASONRY ADHESIVE ANCHORING SYSTEM PER ICC ESR-2682. STEEL ANCHOR ELEMENT SHALL BE HILTI HAS-E CONTINUOUSLY THREADED ROD OR CONTINUOUSLY DEFORMED STEEL REBAR.
- 2. MECHANICAL ANCHORS USE:
- a. SIMPSON STRONG-TIE TITEN-HD (ICC-ES ESR-1056).
- b. SIMPSON STRONG-TIE AT (ICC-ES ESR-1958).
- c. HILTI KWIK HUS-EZ SCREW ANCHOR (ICC-ES ESR-3056). d. HILTI KWIK BOLT-3 EXPANSION ANCHORS (ICC-ES ESR-1385)

STRUCTURAL STEEL

- DESIGN, CONSTRUCTION, QUALITY ASSURANCE, AND ERECTION OF STRUCTURAL STEEL SHALL BE IN
- ACCORDANCE WITH CURRENT AISC STANDARDS. 2. ALL STRUCTURAL STEEL WIDE FLANGE SHAPES SHALL CONFORM TO ASTM A992.
- ALL STRUCTURAL STEEL PLATES, ANGLES AND CHANNELS SHALL CONFORM TO ASTM A36.
- 4. ALL STRUCTURAL STEEL SQUARE, RECTANGULAR AND ROUND HSS SECTIONS SHALL CONFORM TO ASTM
- A500, GRADE B.
- 5. ALL STRUCTURAL STEEL PIPE SHALL CONFORM TO ASTM A53, TYPE E OR S, GRADE B. FABRICATION AND ERECTION SHALL CONFORM TO AISC CODE OF STANDARD PRACTICE.
- 7. ALL WELDING SHALL CONFORM TO AWS STANDARDS. THICKNESS OF WELDS ARE AS SHOWN, SPECIFIED OR REQUIRED
- 8. ALL BOLTED CONNECTIONS SHALL BE MINIMUM 3/4" DIAMETER, A325 HIGH STRENGTH BOLTS, UNLESS NOTED OTHERWISE
- THE STRUCTURAL STEEL FABRICATOR SHALL PROVIDE CERTIFICATIONS BY A PROFESSIONAL STRUCTURAL ENGINEER (P.E.) REGISTERED IN THE STATE OF ALABAMA THAT THE CONNECTION DESIGN IS IN ACCORDANCE WITH ALL APPLICABLE CODES AND SPECIFICATIONS. CONNECTION DESIGN CALCULATIONS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER OF RECORD FOR REVIEW.
- 10. ALL BEAM CONNECTIONS SHALL BE "SIMPLE SHEAR CONNECTIONS" UNLESS NOTED OTHERWISE. WHERE BEAM REACTIONS AND/OR DESIGN FORCES ARE NOT SHOWN ON THE STRUCTURAL DRAWINGS, THE CONNECTIONS SHALL BE DESIGNED TO SUPPORT A REACTION EQUAL TO ONE-HALF THE TOTAL UNIFORM LOAD CAPACITY FROM THE MAXIMUM UNIFORM LOAD TABLE (LATEST AISC MANUAL OF STEEL PRACTICE) MULTIPLIED BY A FACTOR OF 1.2 (NON-COMPOSITE BEAMS) OR 1.45 (COMPOSITE BEAMS) FOR GIVEN SHAPE, SPAN, AND GRADE OF STEEL.

STEEL JOIST

- 1. STEEL JOIST DESIGN, MANUFACTURE, AND QUALITY CONTROL SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF SPECIFICATIONS BY THE STEEL JOIST INSTITUTE.
- 2. STEEL JOIST ERECTION. INSTALLATION. BRIDGING. ETC. SHALL BE IN ACCORDANCE WITH THE LATEST
- EDITION OF SPECIFICATIONS BY THE STEEL JOIST INSTITUTE 3. A STEEL JOIST DESIGN PACKAGE SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER OF RECORD FOR REVIEW PRIOR TO FABRICATION AND ERECTION. THIS PACKAGE SHALL INCLUDE A PLACEMENT PLAN AND DESIGN CALCULATIONS BEARING THE SEAL AND SIGNATURE OF THE JOIST DESIGNER WHO SHALL BE
- REGISTERED IN THE STATE OF ALABAMA. 4. ALL JOISTS SHALL BE WELDED TO SUPPORTING MEMBER AT EACH END PER ENGINEERS AND/OR
- MANUFACTURER'S REQUIREMENTS. JOISTS DESIGNATED AS "SP" ON THE DRAWINGS ARE TO BE DESIGNED FOR A SUPERIMPOSED DEAD LOAD OF 30 PSF AND A SUPERIMPOSED LIVE LOAD OF 20 PSF IN ADDITION TO THE CONCENTRATED LOADS
- SHOWN ON THE PLANS.
- ROOF JOISTS SHALL BE DESIGNED FOR 20 PSF NET UPLIFT. JOIST DESIGNER SHALL COORDINATE ALL EQUIPMENT WEIGHTS, CONCENTRATED LOADS AND LOCATIONS WITH THE GENERAL CONTRACTOR. GENERAL CONTRACTOR SHALL PROVIDE THIS INFORMATION TO THE JOIST DESIGNER. THE LOADS AND CORRESPONDING LOCATIONS SHALL BE IDENTIFIED IN THE STEEL JOIST DESIGN PACKAGE.

STEEL DECK

- STEEL DECK CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF SDI STANDARDS. ATTACH ROOF DECK TO SUPPORTS AT 12" OC. W/ 5/8" PUDDLE WELD. ATTACH TO PERIMETER SUPPORTS AT 6" OC. PROVIDE #10 TEK SCREW SIDELAP FASTENERS AT 12" OC. (MIN. 5 PER SPAN). DECK SUPPORTS AROUND STEEL COLUMNS AND CLOSURE ANGLES SHALL BE SUPPLIED BY THE DECK
- MANUFACTURER, IF REQUIRED. REINFORCING IN ALL FLOOR SLABS LOCATED 1" FROM THE TOP. SUPPORT AS REQUIRED. 10 DECK SHALL BE CONTINUOUS OVER THREE OR MORE SPANS.

LOAD-BEARING METAL STUDS

- COLD-FORMED STEEL FRAMING, FABRICATION, AND ERECTION SHALL CONFORM TO CURRENT AISI STANDARDS FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS.
- MINIMUM YIELD STRENGTH (Fy) FOR FRAMING IS 33,000 PSI FOR 33 MIL (20 GA.) AND 43 MIL (18 GA.) MATERIALS, AND 50,000 PSI FOR 54 MIL (16 GA.) AND THICKER MATERIALS. ALL STUDS, TRACK, BRIDGING, AND ACCESSORIES SHALL BE FORMED FROM STEEL HAVING A MINIMUM
- G60 GALVANIZED COATING MEETING THE REQUIREMENTS OF ASTM A653.
- ALL WELDS SHALL BE TOUCHED UP WITH ZINC RICH PAINT. LOAD-BEARING WALLS SHALL BE PRE-FABRICATED OFFSITE IN A PRE-PANELIZATION SHOP, IN A CONTROLLED ENVIRONMENT, WITH A CERTIFIED QUALITY CONTROL PROGRAM. THE FACILITY MUST HAVE
- A MINIMUM OF 2 YEARS OF OPERATION EXPERIENCE. THE PANELIZER SHALL SUBMIT FULLY DIMENSIONED WALL PANEL SHOP DRAWINGS OF EACH INDIVIDUAL 6. WALL PANEL INCLUDING WALL OPENINGS AND THE SIZE, THICKNESS AND SPACING OF EACH STUD. THE PANELIZER SHALL ALSO SUBMIT A FULLY DIMENSIONED PANEL LAYOUT DRAWING LOCATING EACH PANEL ON THE BUILDING PLAN. THESE DRAWINGS MUST BE SUBMITTED FOR APPROVAL PRIOR TO FABRICATION AND ERECTION
- PANELS MAY BE FABRICATED WITH WELDS OR SCREWS. FIELD WELDING OF MATERIAL LESS THAN 43 MIL 7. (18 GA.) SHALL NOT BE PERMITTED. WELDS SHALL BE PERFORMED BY OPERATORS QUALIFIED IN ACCORDANCE WITH SECTION 6.0 OF THE AMERICAN WELDING SOCIETY'S "STRUCTURAL WELDING CODE-SHEET METAL" (AWS D1.3).
- STUDS SHALL HAVE FULL BEARING AGAINST THE INSIDE TRACK WEB AT EACH END. STUDS MUST BE CUT SQUARE. THE PANELIZATION FACILITY MUST UTILIZE A COMPRESSION MECHANISM IN THEIR JIGS (i.e.: HYDRAULIC RAMS) TO FULLY SEAT THE STUDS IN THE TRACK PRIOR TO FASTENING. TRACK SPLICES WITHIN A PANEL MUST BE SECURELY ANCHORED TO A COMMON ELEMENT (i.e.: STUD OR
- HEADER); OR BUTT-WELDED TOGETHER. 10. UNLESS NOTED OTHERWISE, ALL STUDS SHALL BE EQUAL TO A MINIMUM OF 54 MIL (16 GA.) SPACED AT 16" ON CENTER WITH A 54 MIL (16 GA.) TRACK, TOP AND BOTTOM.
- 11. SPLICING OF WALL STUDS IS NOT ALLOWED WITHOUT SPECIFIC APPROVAL FROM THE ENGINEER OF RECORD
- 12. BOTH STUD FLANGES MUST BE ATTACHED TO TRACK AT TOP & BOTTOM WITH MINIMUM #12 SCREWS OR 13. A MINIMUM OF 10" OF UN-PUNCHED STEEL IS REQUIRED AT BOTH ENDS OF STUDS (NO PUNCHING HOLES
- OF ANY SIZE IS PERMITTED IN THESE 10 INCHES). LATERAL BRIDGING SHALL BE USED TO RESIST TORSIONAL FORCES ON THE LOAD-BEARING STUDS. BRIDGING SHALL BE 1 1/2" CRC CHANNEL IN 3 5/8" OR 4" STUDS AND 2 1/2" CRC CHANNEL IN 6" STUDS. FULL DEPTH BRIDGING SHALL BE USED IN 8" OR LARGER STUDS. BRIDGING IS TO BE SPACED AT NO MORE
- THAN 4'-0" O.C. VERTICALLY (APPROXIMATELY ONE-THIRD POINTS). 15. HEADERS FOR WALL OPENINGS SHALL BE AS SPECIFIED ON THE DRAWINGS. WHERE HEADER SIZE IS NOT SPECIFIED ON DRAWINGS, HEADER SHALL BE DESIGNED TO TRANSFER ALL UNIFORM AND/OR CONCENTRATED LOADS. SHEAR SHALL BE TRANSFERRED BY FULL BEARING ON JACK STUDS OR BY SHEAR PLATES/CLIP ANGLES. SHEAR PLATES/CLIP ANGLES SHALL BE 54 MIL (16 GA.) MINIMUM. AT A MINIMUM, CONTINUOUS STUDS LOCATED AT EACH SIDE OF HEADERS SHALL BE EQUAL TO 1/2 OF THE
- INTERRUPTED STUDS PLUS ONE STUD EACH SIDE. 16. ALL HEADERS/BUILT-UP BEAMS SHALL BE CONSTRUCTED WITH UNPUNCHED MATERIAL ONLY. 17.
- SPLICING OF HEADERS/BUILT-UP BEAMS IS NOT ALLOWED WITHOUT SPECIFIC APPROVAL FROM THE ENGINEER OF RECORD. VOIDS BENEATH TRACK SHALL NOT BE PERMITTED. CONTRACTOR SHALL PROVIDE A REASONABLY LEVEL
- SLAB WITH TOLERANCE OF 1/8" IN 10 FEET. WHERE UNEVENNESS OF SUPPORTING FLOOR PREVENTS CONTINUOUS SOLID BEARING, PANEL OR TRACK SHALL BE LEVELED BY A METHOD APPROVED BY THE ENGINEER OF RECORD.
- 19. MINIMUM TRACK FASTENING SHALL BE .177" DIAMETER POWDER ACTUATED FASTENERS SPACED AT 16" ON CENTER (UNO.), WITH 1" MINIMUM PENETRATION INTO CONCRETE. NOTCHING, COPING OR CUTTING OF COLD-FORMED STEEL FRAMING OR PREFABRICATED PANELS IS NOT
- PERMITTED WITHOUT SPECIFIC APPROVAL FROM THE ENGINEER OF RECORD. 21. MULTIPLE "STUD" COLUMNS SHALL BE WELDED TOGETHER IN GROUPS OF AT LEAST 2 STUDS WITH 2" TOP & BOTTOM AND 1" @ 24" OC. BOTH SIDES IN BETWEEN.

Description No 19873 PROFESSIONAL VGINEE 100% CD Ω Ŷ m 0 ſ 50 $\square \square$ コフ ₹Ō m SШ Δ G Q 0 Ľ CHARLES WILLIAMS & ASSOCIATES A R C H I T E C T S PH: FAX: SHEET TITLE: **GENERAL NOTES** PROJECT NUMBER: 2022-08 11/16/2023 CHECKED BY: DRAWN BY: ATK KLO SHEET NUMBER ENGINEERS, INC. **S1.**

Revisions



GEOTECHNICAL

CIVIL

	DESIGN CRITERIA				
1.				PARAF	PET a
2	A. INTERNATIONAL BUILDING CODE, I.B.C. 2021				3
Ζ.	GRAVITE DESIGN LOADS.			\rightarrow \searrow	
	A. DEAD:			\land	
	THE ARCHITECTURAL AND STRUCTURAL DRAWINGS. ANY ALTERNATE MATERIALS SHOWN IN SUBMITTED TO THE STRUCTURAL ENGINEER TO REVIEW	5			
	B. LIVE:			<u> </u>	
	1. READING ROOM 60 PSE				
	2 STACK ROOM 150 PSF				(2)
	3 COBRIDORS 100 PSE				
	$\begin{array}{c} \mathbf{C} \mathbf{R} = \mathbf{A} \mathbf{E} \mathbf{E} \mathbf{E} \mathbf{E} \mathbf{A} \mathbf{A} \mathbf{A} \mathbf{A} \mathbf{A} \mathbf{A} \mathbf{A} A$	\sim			
	1. $R = 23 PSP WAA.$				3
	2. $I = 7.2 \text{ IN/RR} (100-YR, 15-WIN.)$	WALL ZONES	,		U U
	D. SNUW:		WALL ZONES		
	1. GROUND SNOW LOAD (PG) = 5 PSF				
	2. FLAT ROOF SNOW LOAD (Pt) = 5 PSF				
	3. SNOW EXPOSURE FACTOR (Ce) = 1.0				
	4. SNOW LOAD IMPORTANCE FACTOR (IS) = 1.0				
	5. THERMAL FACTOR (Ct) = 1.0			\mathcal{N}	•
3.	LATERAL DESIGN LOADS:			LING	20AD
	A. WIND:				NOT OR
	1. DESIGNED PER ASCE 7-16		DR (+4)OR		
	2. ULTIMATE WIND SPEED = 110 MPH	(5)	(+5) $()$ $()$ $()$		[[[[
	3. NOMINAL WIND SPEED = 82 MPH		╶──┤д┤╾╾┥╶	BLDG.	
	4. RISK CATEGORY = II				>
	5. BUILDING CATEGORY = ENCLOSED		$\langle \cdot \rangle$		\sim
	6. EXPOSURE CATEGORY = C				
	 INTERNAL PRESSURE COEFFICIENT (GCpi) = ±0.18 	BLDG.	BLDG.		- ROOF OVERHAI
	8. COMPONENTS & CLADDING WIND PRESSURES SEE CHART				
	B. EARTHQUAKE:	\land			
	1. SEISMIC RISK CATEGORY = II			а	
	2 SEISMIC IMPORTANCE FACTOR ($ _{P}$) = 1.0			<hr/>	
	3. MAPPED SPECTRAL RESPONSE ACCELERATIONS	<u>@</u>	PARAPET		HANG
	 MAPPED SPECTRAL RESPONSE ACCELERATIONS A. Ss = 0.289 	<u>@</u>	PARAPET	@ ROOF OVER	HANG
	 3. MAPPED SPECTRAL RESPONSE ACCELERATIONS A. Ss = 0.289 B. S1 = 0.1 	<u>@</u>	PARAPET	@ ROOF OVER	HANG
	 3. MAPPED SPECTRAL RESPONSE ACCELERATIONS A. Ss = 0.289 B. S1 = 0.1 4. SOIL SITE CLASS = C 	<u>@</u>] 70			<u>HANG</u>
	 3. MAPPED SPECTRAL RESPONSE ACCELERATIONS A. Ss = 0.289 B. S1 = 0.1 4. SOIL SITE CLASS = C 5. DESIGN SPECTRAL RESPONSE ACCELERATIONS 	<u>@</u>] <u>ZO</u>	<u>NE LAYOUT DIA</u>	@ ROOF OVER	<u>HANG</u>
	 3. MAPPED SPECTRAL RESPONSE ACCELERATIONS A. Ss = 0.289 B. S1 = 0.1 4. SOIL SITE CLASS = C 5. DESIGN SPECTRAL RESPONSE ACCELERATIONS A. Sds = 0.25 	<u>@</u> <u>ZO</u>	<u>PARAPET</u>	@ ROOF OVER	<u>HANG</u>
	 3. MAPPED SPECTRAL RESPONSE ACCELERATIONS A. Ss = 0.289 B. S1 = 0.1 4. SOIL SITE CLASS = C 5. DESIGN SPECTRAL RESPONSE ACCELERATIONS A. Sds = 0.25 B. Sd1 = 0.1 	<u>@</u> <u>ZO</u>	NE LAYOUT DIA	@ ROOF OVER	<u>HANG</u>
	 3. MAPPED SPECTRAL RESPONSE ACCELERATIONS A. Ss = 0.289 B. S1 = 0.1 4. SOIL SITE CLASS = C 5. DESIGN SPECTRAL RESPONSE ACCELERATIONS A. Sds = 0.25 B. Sd1 = 0.1 6. SEISMIC DESIGN CATEGORY = B 	@ ZO COMPONENTS ANI	DISTRICT DIAS DE LAYOUT DIAS	@ ROOF OVER GRAMS SSURES ASCE 7-16	<u>HANG</u>
	 3. MAPPED SPECTRAL RESPONSE ACCELERATIONS A. Ss = 0.289 B. S1 = 0.1 4. SOIL SITE CLASS = C 5. DESIGN SPECTRAL RESPONSE ACCELERATIONS A. Sds = 0.25 B. Sd1 = 0.1 6. SEISMIC DESIGN CATEGORY = B 7. BASIC SEISMIC-FORCE-RESISTING SYSTEM 	@ I ZO COMPONENTS ANI	D CLADDING DESIGN WIND PRES	@ ROOF OVER	HANG
	 3. MAPPED SPECTRAL RESPONSE ACCELERATIONS A. Ss = 0.289 B. S1 = 0.1 4. SOIL SITE CLASS = C 5. DESIGN SPECTRAL RESPONSE ACCELERATIONS A. Sds = 0.25 B. Sd1 = 0.1 6. SEISMIC DESIGN CATEGORY = B 7. BASIC SEISMIC-FORCE-RESISTING SYSTEM LIGHT FRAME (COLD-FORMED STEEL) WALL 	© ZO ZO COMPONENTS ANI	D CLADDING DESIGN WIND PRES	@ ROOF OVER GRAMS SSURES ASCE 7-16	HANG
	 3. MAPPED SPECTRAL RESPONSE ACCELERATIONS A. Ss = 0.289 B. S1 = 0.1 4. SOIL SITE CLASS = C 5. DESIGN SPECTRAL RESPONSE ACCELERATIONS A. Sds = 0.25 B. Sd1 = 0.1 6. SEISMIC DESIGN CATEGORY = B 7. BASIC SEISMIC-FORCE-RESISTING SYSTEM LIGHT FRAME (COLD-FORMED STEEL) WALL SYSTEM USING FLAY STRAP BRACING. 	© ZO ZO COMPONENTS ANI ZONE 10 SF	PARAPET NELAYOUT DIA D CLADDING DESIGN WIND PRES EFFECTIVE WIND AF 20 SF 50 SF	© ROOF OVER GRAMS SSURES ASCE 7-16 REA	HANG 6 (PSF) 200 SF
	 3. MAPPED SPECTRAL RESPONSE ACCELERATIONS A. Ss = 0.289 B. S1 = 0.1 4. SOIL SITE CLASS = C 5. DESIGN SPECTRAL RESPONSE ACCELERATIONS A. Sds = 0.25 B. Sd1 = 0.1 6. SEISMIC DESIGN CATEGORY = B 7. BASIC SEISMIC-FORCE-RESISTING SYSTEM LIGHT FRAME (COLD-FORMED STEEL) WALL SYSTEM USING FLAY STRAP BRACING. 8. DESIGN BASE SHEAR = 30 KIPS 	© ZO ZO COMPONENTS ANI ZONE 10 SF XXX -XXX	PARAPET ONE LAYOUT DIA ONE LAYOUT DIA D CLADDING DESIGN WIND PRES EFFECTIVE WIND AF 20 SF 50 SF XXX -XXX XXX	@ ROOF OVER @ ROOF OVER GRAMS SSURES ASCE 7-16 REA 100 SF XXX -XXX	HANG 6 (PSF) 200 SF XXX
	 3. MAPPED SPECTRAL RESPONSE ACCELERATIONS A. Ss = 0.289 B. S1 = 0.1 4. SOIL SITE CLASS = C 5. DESIGN SPECTRAL RESPONSE ACCELERATIONS A. Sds = 0.25 B. Sd1 = 0.1 6. SEISMIC DESIGN CATEGORY = B 7. BASIC SEISMIC-FORCE-RESISTING SYSTEM LIGHT FRAME (COLD-FORMED STEEL) WALL SYSTEM USING FLAY STRAP BRACING. 8. DESIGN BASE SHEAR = 30 KIPS 9. SEISMIC RESPONSE COEFFICIENT (Cs) = 0.0625 	© ZO COMPONENTS ANI ZONE 10 SF XXX -XXX 1 16 -40	PARAPET ONE LAYOUT DIA ONE LAYOUT DIA D CLADDING DESIGN WIND PRES EFFECTIVE WIND AF 20 SF 50 SF XXX -XXX -XXX 16 -37 16 -34	© ROOF OVER CRAMS SSURES ASCE 7-16 REA 100 SF XXX -XXX 16 -31	HANG 6 (PSF) 200 SF XXX -XXX 16
	 3. MAPPED SPECTRAL RESPONSE ACCELERATIONS A. Ss = 0.289 B. S1 = 0.1 4. SOIL SITE CLASS = C 5. DESIGN SPECTRAL RESPONSE ACCELERATIONS A. Sds = 0.25 B. Sd1 = 0.1 6. SEISMIC DESIGN CATEGORY = B 7. BASIC SEISMIC-FORCE-RESISTING SYSTEM LIGHT FRAME (COLD-FORMED STEEL) WALL SYSTEM USING FLAY STRAP BRACING. 8. DESIGN BASE SHEAR = 30 KIPS 9. SEISMIC RESPONSE COEFFICIENT (Cs) = 0.0625 10. RESPONSE MODIFICATION FACTOR (R) = 4 	© ZO COMPONENTS ANI ZONE 10 SF XXX -XXX 1 16 -40 1' 16 -23	PARAPET ONE LAYOUT DIA ONE LAYOUT DIA D CLADDING DESIGN WIND PRES EFFECTIVE WIND AF 20 SF 50 SF XXX -XXX -XXX 16 -37 16 -34 16 -23 16 -23	@ ROOF OVER @ ROOF OVER GRAMS SSURES ASCE 7-16 REA 100 SF XXX -XXX 16 -31 16 -23	HANG 6 (PSF) 200 SF XXX -XXX 16 -31 16 -23
	 3. MAPPED SPECTRAL RESPONSE ACCELERATIONS A. Ss = 0.289 B. S1 = 0.1 4. SOIL SITE CLASS = C 5. DESIGN SPECTRAL RESPONSE ACCELERATIONS A. Sds = 0.25 B. Sd1 = 0.1 6. SEISMIC DESIGN CATEGORY = B 7. BASIC SEISMIC-FORCE-RESISTING SYSTEM LIGHT FRAME (COLD-FORMED STEEL) WALL SYSTEM USING FLAY STRAP BRACING. 8. DESIGN BASE SHEAR = 30 KIPS 9. SEISMIC RESPONSE COEFFICIENT (Cs) = 0.0625 10. RESPONSE MODIFICATION FACTOR (R) = 4 11. ANALYSIS PROCEDURE: 	© ZO COMPONENTS ANI ZONE 10 SF XXX -XXX 1 16 -40 1' 16 -23 2 16 -52	PARAPET ONE LAYOUT DIA ONE LAYOUT DIA D CLADDING DESIGN WIND PRES EFFECTIVE WIND AF 20 SF 50 SF XXX -XXX XXX -XXX 16 -37 16 -34 16 -49 16 -41	@ ROOF OVER @ ROOF OVER GRAMS SSURES ASCE 7-16 REA 100 SF XXX -XXX 16 -31 16 -23 16 -41	HANG 6 (PSF) 200 SF XXX -XXX 16 -31 16 -23 16 -41
	 MAPPED SPECTRAL RESPONSE ACCELERATIONS A. Ss = 0.289 B. S1 = 0.1 SOIL SITE CLASS = C DESIGN SPECTRAL RESPONSE ACCELERATIONS A. Sds = 0.25 B. Sd1 = 0.1 SEISMIC DESIGN CATEGORY = B BASIC SEISMIC-FORCE-RESISTING SYSTEM LIGHT FRAME (COLD-FORMED STEEL) WALL SYSTEM USING FLAY STRAP BRACING. DESIGN BASE SHEAR = 30 KIPS SEISMIC RESPONSE COEFFICIENT (Cs) = 0.0625 RESPONSE MODIFICATION FACTOR (R) = 4 ANALYSIS PROCEDURE: FOLIVAL ENT LATERAL FORCE 	© ZO COMPONENTS ANI ZONE 10 SF XXX -XXX 1 16 -40 1' 16 -23 2 16 -52 3 16 -71	PARAPET ONE LAYOUT DIA ONE LAYOUT DIA D CLADDING DESIGN WIND PRES EFFECTIVE WIND AF 20 SF 50 SF XXX -XXX XXX -XXX 16 -37 16 -34 16 -49 16 -41 16 -64 16 -56	@ ROOF OVER @ ROOF OVER GRAMS SSURES ASCE 7-16 REA 100 SF XXX -XXX 16 -31 16 -31 16 -23 16 -41 16 -49	HANG 5 (PSF) 200 SF XXX -XXX 16 -31 16 -23 16 -41 16 -49
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1.	 2. OLIGINIO III TOTOL RESPONSE ACCELERATIONS 3. MAPPED SPECTRAL RESPONSE ACCELERATIONS A. Ss = 0.289 B. S1 = 0.1 4. SOIL SITE CLASS = C 5. DESIGN SPECTRAL RESPONSE ACCELERATIONS A. Sds = 0.25 B. Sd1 = 0.1 6. SEISMIC DESIGN CATEGORY = B 7. BASIC SEISMIC-FORCE-RESISTING SYSTEM LIGHT FRAME (COLD-FORMED STEEL) WALL SYSTEM USING FLAY STRAP BRACING. 8. DESIGN BASE SHEAR = 30 KIPS 9. SEISMIC RESPONSE COEFFICIENT (Cs) = 0.0625 10. RESPONSE MODIFICATION FACTOR (R) = 4 11. ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE THE OWNER SHALL EMPLOY A QUALIFIED TESTING AGENT/ENGINEER TO PROVIDE SPECIAL INSPECTIONS. SPECIAL INSPECTORS SHALL SUBMIT RESUME OF EXPERIENCE AND QUALIFICATIONS OF ALL INDIVIDUALS PERFORMING WORK TO THE ARCHITECT/STRUCTURAL ENGINEER OF RECORD FOR APPROVAL PRIOR TO ANY WORK BEING PERFORMED. SPECIAL INSPECTIONS SHOLL DE IN ACCORDANCE WITH THE	ZO COMPONENTS ANI ZONE 10 SF XXX -XXX 1 16 40 1' 16 -23 2 16 -52 3 16 -71 20H 25 -82 30H 16 -33 4 25 -27 5 25 -33 NOTES: 1 PLUS AND MINUS SIG 2 PRESSURE ZONE LO 3 PRESSURE ZONE LO	PARAPET ONE LAYOUT DIA D CLADDING DESIGN WIND PRES EFFECTIVE WIND AF 20 SF 50 SF XXX -XXX XXX -XXX 16 -37 16 -34 16 -23 16 -23 16 -49 16 -41 16 -64 16 -56 24 -74 23 -64 16 -31 16 -28 24 -74 23 -64 16 -31 16 -28 24 -74 23 -25	@ ROOF OVER @ ROOF OVER GRAMS SSURES ASCE 7-16 REA 100 SF XXX 16 -31 16 -23 16 23 -56 16 21 21 21 23 21 23 21 23 21 23 21 23 21 23 21 23 21 23 21 23 21 23 21 23 21 23 24 25 26 21 23 24 25 26 27 28 29 21 23	EXX -XXX 200 SF -XXX 16 -31 16 -23 16 -41 16 -49 23 -56 16 -23 21 -23 21 -23 DING SURFACES. CONVERT PRESSU
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COLUMN SCHEDULE								
MARK	SIZE	BASE PLATE	BASE PLATE DETAIL	ANCHOR BOLTS	ANCHOR BOLT DETAIL	REMARKS		
C1	HSS5X5X3/8	12X3/4X1'-0"	BP-1	(4) 3/4"Ø	AB-1			
C2	HSS5X5X3/8	12X3/4X1'-0"	BP-1	(4) 3/4"Ø	AB-2			
C3	HSS6X4X3/8	12X3/4X1'-0"	BP-1	(4) 3/4"Ø	AB-2			

COLUMN FOUNDATION SCHEDULE

		FOOTING S	SIZE	
MARK	WIDTH	LENGTH	THICKNESS	REINFORCING
F3.0	3'-0"	3'-0"	1'-0"	4#5 EW. BOTT.
F4.0	4'-0"	4'-0"	1'-0"	4#5 EW. TOP & BOTT.
F5.0	5'-0"	5'-0"	1'-0"	5#5 EW, TOP & BOTT.

FOUNDATION & FIRST FLOOR PLAN

3/32" = 1'-0"

FIN. FLR. ELEV. 0'-0" TOP OF FTG. ELEV. -2'-0" U.N.O.

<u>FLOOR CONSTRUCTION:</u> 4" CONCRETE SLAB ON MIN. 6" DRAINAGE FILL. REINF. W/ 6X6 -W1.4XW1.4 WWR.

NOTES: 1. DIMENSIONS ARE TO OUTSIDE FACE OF STUD OR CENTERLINE OF STRUCTRUAL FRAMING, UNLESS NOTED OTHERWISE.

2. EXTERIOR STUDS: 600S162-54 (50KSI) @ 16" OC.

INTERIOR STUDS: 600S162-54 (50KSI) @ 16" OC.
 DENOTES 5"X68 MIL. STRAP BRACING. SEE TYPICAL DETAIL.
 T. T. DENOTES RECESSED SLAB. COORD. W/ ARCH. FOR DEPTH & LOCATION.





















3 TYPICAL TRUSS CONNECTION DETAIL 3/4" = 1'-0"

<u>BRACING NOTES:</u>
 MEMBER DESIGN FORCES SHOWN () ARE SERVICE LEVEL (UNFACTORED) PER IBC 2015 ALLOWABLE STRESS DESIGN LOAD COMBINATIONS. + DENOTES TENSION
 DENOTES COMPRESSION
 ALL FIELD CONNECTIONS SHALL BE WELDED. FIELD BOLTING W/ 3/4" DIA. A-325 BOLTS SHALL BE ALLOWED FOR ERECTION PURPOSES ONLY.
 ALL SHOP CONNECTIONS SHALL BE WELDED.
 TRUSS CONNECTIONS SHALL BE DESIGNED FOR THE FULL DESIGN AXIAL FORCE AS SHOWN.

FORCE AS SHOWN.
 LAY OUT MEMBERS SO THAT NEUTRAL AXIS OR GAGE LINES OF MEMBERS INTERSECT AT PANEL POINTS AND WORKING POINTS.



BRACED BAY A

1/4" = 1'-0"















	1" MIN. STUCCO FACING. 3-COAT METHOD. TOP COAT COLOR TO MATCH BUILDING
	- #4 REBAR W/ 24" L @ 16" O.C. ALTERNATE L DIRECTION. FILL AL CELLS W/ 3000 PSI CONCRETE
	- TOOLED SCORE JOINT MATCH DETAIL FROM BUILDING
	- 1" MIN. STUCCO FACING. TOP COA COLOR TO MATCH BUILDING
/ /	ARCH. PRECAST CAP
_ / _	- CONT. S.S. FLASHING WITH HEMMED EDGE
///~	- 2" AIR GAP - ADJUSTABLE METAL
	MASONRY TIES
/// _	- SEMI-COURSED STONE VENEER TO MATCH BUILDING
///	- CELLULAR WEEP INSERT @ MAX. 3" ABOVE GRADE. CUT OFF FLUSH WITH FACE OF STONE VENEER
///	- CONC. MASONRY UNITS AS REQ'D. FILL ALL CELLS SOLID WITH 3000 PSI CONCRETE
	- FLUID-APPLIED DAMPPROOFING
/ // _	PLANTING SOIL
///	- #4 REBAR @ 12" O.C. BOTH DIRECTIONS, TOP AND BOTTOM
_ / // _	- 3000 PSI CONCRETE
/ ///г	- SLOPE FINISH GRADE AWAY FROM SIGN 1% MIN.
	COMPACTED SUBGRADE

RBAN • LAND • DESIGN 205.545.7639

PO Box 305 / Birmingham, AL 35201 renta-uld.com RULD PROJ. NO. CWAI-2301

GENERAL NOTES

- 1. INTERPRETATION, ERRORS AND OMISSIONS: SHOULD ANY OMISSION, DISCREPANCY AMBIGUITY OR ERROR IN THE CONTRACT DOCUMENT DRAWINGS BE DISCOVERED OR SHOULD THERE BE ANY DOUBT AS TO THE MEANING OR INTENT THEREOF, REPORT SUCH FINDINGS TO THE LANDSCAPE ARCHITECT IN WRITING WITHIN A REASONABLE TIME OF RECOVERY.
- 2. IF DURING THE COURSE OF CONSTRUCTION, CONFLICTS ARE FOUND IN THE DRAWINGS OR EXISTING SITE CONDITIONS, THE LANDSCAPE ARCHITECT WILL INTERPRET THE DRAWING(S) AND / OR EXISTING SITE CONDITIONS SO AS TO SECURE THE MOST SUBSTANTIAL AND COMPLETE PERFORMANCE OF THE
- 3. DIMENSIONS ON PLANS ARE TO FINISH FACE OF SURFACES AND FACE OF CONCRETE MASONRY UNIT WALLS UNLESS NOTED OTHERWISE.
- THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO BEGINNING DEMOLITION AND/OR CONSTRUCTION. ANY DISCREPANCIES BETWEEN ACTUAL CONDITIONS AND THOSE REPRESENTED IN THE CONSTRUCTION DOCUMENTS SHALL BE BROUGHT TO THE LANDSCAPE ARCHITECT'S ATTENTION IMMEDIATELY.
- 5. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. SHOULD THE ASSISTANCE OF THE OWNER, ARCHITECT, LANDSCAPE ARCHITECT, OR ENGINEER BE REQUIRED THE CONTRACTOR SHALL ALLOW FOR THE REQUIRED NOTIFICATION PERIOD IN THE CONSTRUCTION SCHEDULE
- 6. CONTRACTOR SHALL VERIFY AND COORDINATE SPECIFIC REQUIREMENTS FOR OWNER-PROVIDED AND/OR INSTALLED EQUIPMENT. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL WORK INCLUDED IN THE CONTRACT DOCUMENTS. ALL CORRESPONDENCE FROM SUBCONTRACTORS SHALL BE ROUTED THROUGH THE GENERAL CONTRACTOR.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING STRUCTURES AND UTILITIES FROM DAMAGE AS REQUIRED DURING CONSTRUCTION. ADJACENT WORK, INCLUDED UNDER OTHER CONSTRUCTION CONTRACTS, WHICH IS DAMAGED DURING EXECUTION OF THIS CONTRACT WORK, SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO REPAIR PRIOR TO FINAL ACCEPTANCE OF THE WORK.
- 8. GENERAL CONTRACTOR SHALL REPLY WITH ALL REQUIREMENTS OF CURRENT SOILS REPORT.
- 9. GENERAL CONTRACTOR TO PROVIDE ALL GOVERNMENT-REQUIRED SIGNAGE NECESSARY FOR CERTIFICATE OF OCCUPANCY (FIRE LANE SIGNAGE, "DO NOT BLOCK DOOR", ETC.)
- 10. THE PROVISIONS OF THE INTERNATIONAL BUILDING CODE ADOPTED BY THE JURISDICTION HAVING AUTHORITY AND ITS REFERENCED STANDARDS APPLY TO THE DESIGN AND CONSTRUCTION OF THESE INSTALLATIONS.
- 11. CONTRACTOR TO INCLUDE IN BID, ALL MISCELLANEOUS MATERIAL REQUIRED FOR A COMPLETE INSTALLATION PER THE DESIGN INTENT AS DEFINED BY THE CONTRACT DOCUMENTS. MISCELLANEOUS MATERIAL INCLUDES, BUT IS NOT LIMITED TO FASTENERS, HANGERS, FURRING STRIPS, BLOCKING, TRIM AND OTHER MATERIALS NOT SPECIFICALLY INDICATED BUT REQUIRED FOR A COMPLETE INSTALLATION.

SITEWORK NOTES:

- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING INSPECTION OF SOIL CONDITIONS AFTER EXCAVATION WITH OWNER'S TESTING SERVICE TO DETERMINE IF BEARING CAPACITY IS SUFFICIENT AND MAINTAINING EXCAVATION IN SUCH AS A WAY THAT THE BEARING CAPACITY IS MAINTAINED UNTIL PLACEMENT OF FOOTING
- 2. OVER-EXCAVATION OF FOUNDATIONS SHALL BE FILLED ONLY AS DIRECTED BY THE STRUCTURAL ENGINEER.
- 3. ALL CIVIL WORK IS DEFINED UNDER SEPARATE CIVIL DOCUMENTATION PROVIDED BY THE CIVIL ENGINEER
- 4. UNLESS NOTED OTHERWISE PROVIDE 18" x 24" CONCRETE SPLASH BLOCKS AT ALL DOWNSPOUTS WHERE DOWNSPOUTS SPILL ONTO PAVING
- 5. ALL SIDEWALKS ARE TO BE LIGHT BROOM FINISHED UNLESS NOTED OTHERWISE. ALL SIDEWALK COLORS ARE TO MATCH COLOR SELECTED BY LANDSCAPE ARCHITECT UNLESS OTHERWISE NOTED. SEE DETAILS FOR PSI AND REINFORCING REQUIREMENTS.
- THE CONTRACTORS AND SUBCONTRACTORS SHALL COORDINATE THE WORK AND PHASING OF WORK DESCRIBED HEREIN WITH THE CIVIL ENGINEERING AND LANDSCAPE PLANS.

CONCRETE NOTES:

- 1. DESIGN LOADS ARE AS SPECIFIED BY THE STRUCTURAL DRAWINGS. 2. ALL EXTERIOR SIDEWALK EXPANSION JOINTS TO RECEIVE TRAFFIC BEARING, POURABLE SEALANT. PROVIDE 1/2" JOINT, MINIMUM.
- 3. ALL CONCRETE DRAWN IS BROOM FINISH UNLESS NOTED OTHERWISE.

LAYOUT NOTES:

THE LOCATION OF ALL SURFACE AND UNDERGROUND STRUCTURES AND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR AT GROUND BREAK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING STRUCTURES AND UTILITIES FROM DAMAGE AS REQUIRED DURING CONSTRUCTION AND TO REPAIR ANY DAMAGE WHICH SHOULD OCCUR TO THE SATISFACTION OF THE OWNER/OR DAMAGED PARTY.

THE FINISHED GRADES SHALL BE FREELY DRAINING. 2.

- ALL SITE ELEMENT LOCATIONS SHALL BE APPROVED BY LANDSCAPE ARCHITECT PRIOR TO EXCAVATION/INSTALLATION.
- 4. THE LOCATION OF ALL FOOTINGS SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO EXCAVATION. FOOTINGS SHALL BE LOCATED WHERE SHOWN ON THE DRAWINGS OR WHERE FIELD LOCATED BY LANDSCAPE ARCHITECT.
- 5. THE LOCATION OF ALL PAVED AREAS SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO EXCAVATION. PAVED AREAS SHALL BE LOCATED WHERE SHOWN ON THE DRAWINGS OR WHERE FIELD LOCATED BY LANDSCAPE ARCHITECT.
- 6. MINIMIZE ALL ROOT DISTURBANCE WITHIN THE DRIP LINE OF ALL EXISTING TREES.
- 7. COORDINATE SLEEVE LOCATION/INSTALLATION WITH LANDSCAPE CONTRACTOR. INSTALLATION IS THE RESPONSIBILITY OF GENERAL CONTRACTOR.
- 8. IRRIGATION SLEEVES ARE TO BE SCHEDULE 40 PVC PIPE, PER SPECIFICATIONS, EXTENDED 18" MINIMUM BEYOND CURB OR PAVEMENT EDGE.
- 9. IRRIGATION SLEEVES ARE TO BE MARKED (EACH END) WITH A 2" X 4" STAKE FOR EASE OF LOCATION BY THE LANDSCAPE CONTRACTOR. SECURE OR CAP EACH END OF SLEEVE DURING INSTALLATION TO PREVENT CLOGGING.
- 10. GRADE ALL AREAS FOR APPROVAL BY LANDSCAPE ARCHITECT BEFORE SODDING
- 11. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING 3% POSITIVE DRAINAGE IN ALL PLANT AREAS.
- 12. LANDSCAPE CONTRACTOR SHALL PROVIDE APPROVED TOPSOIL TO PERFORM INCIDENTAL GRADING WORK.
- 13. TOPSOIL AND BACKFILL MIX SHALL BE APPROVED BY LANDSCAPE ARCHITECT PRIOR TO DELIVERY.



SHEET NUMBER







GENERAL NOTES:

1. CONTRACTOR SHALL BE RESPONSIBLE FOR THE SITE INSPECTION PRIOR TO LANDSCAPE CONSTRUCTION AND INSTALLATION IN ORDER TO ACQUAINT HIMSELF WITH EXISTING CONDITIONS.

- 2. THE LOCATION OF ALL SURFACE AND UNDERGROUND STRUCTURES AND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR AT GROUND BREAK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING STRUCTURES AND UTILITIES TO REMAIN FROM DAMAGE AS REQUIRED DURING CONSTRUCTION AND TO REPAIR ANY DAMAGE WHICH SHOULD OCCUR TO THE SATISFACTION OF THE OWNER/OR DAMAGED PARTY.
- 3. CONTRACTOR SHALL VERIFY PLANT COUNT FROM PLAN AND REPORT DIFFERENCES PRIOR TO CONSTRUCTION.
- 4. ALL PLANTING AREAS SHALL BE FREE OF OBSTRUCTIONS LARGER THAN 1 1/2" IN SIZE.
- 5. ALL TREES AND SPECIMEN PLANT MATERIAL SHALL BE LOCATED BY THE CONTRACTOR AT APPROVED NURSERIES OR THEIR APPROVED EQUAL PRIOR TO BIDDING.
- 6. ALL PLANT MATERIALS ARE SUBJECT TO APPROVAL OR REFUSAL BY THE LANDSCAPE ARCHITECT AT THE JOB SITE. ALL TREES AND SHRUBS SHALL BE REMOVED FROM THE TRUCK AND PLACED UPRIGHT PRIOR TO LANDSCAPE ARCHITECT'S REVIEW. CONTRACTOR SHALL TAKE CARE NOT TO DAMAGE PLANTS IN THE PROCESS
- 7. THE LOCATION OF ALL TREES SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT BEFORE THE DIGGING OF PITS. PLANTING SHALL BE LOCATED WHERE SHOWN ON THE DRAWINGS OR WHERE FIELD LOCATED BY LANDSCAPE ARCHITECT.
- 8. THE LOCATION OF ALL PLANTING BEDS SHALL BE APPROVED BY LANDSCAPE ARCHITECT BEFORE THE PREPARATION OF BEDS PLANTING SHALL BE LOCATED WHERE SHOWN ON THE DRAWINGS OR WHERE FIELD LOCATED BY LANDSCAPE ARCHITECT. A MINIMUM 72 BUSINESS HOURS (WEEKENDS NOT INCLUDED) NOTICE SHOULD BE GIVEN AND ANTICIPATED BY THE CONTRACTOR FOR THIS REVIEW. 9. MINIMIZE ALL ROOT DISTURBANCE WITHIN THE DRIP LINE OF ALL EXISTING TREES.
- 10. CONTRACTOR SHALL SUPPLY AND SPREAD 6" TOP-SOIL IN SHRUB BEDS AND ALL AREAS TO BE SEEDED UNLESS OTHERWISE NOTED IN SPECIFICATIONS.
- 11. THE LANDSCAPE CONTRACTOR SHALL PROVIDE APPROVED TOPSOIL TO PERFORM INCIDENTAL GRADING WORK. 12. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING POSITIVE DRAINAGE IN ALL PLANT AREAS.
- 13. PLANTS SHALL BE WELL-FORMED, VIGOROUS, GROWING SPECIMENS WITH GROWTH TYPICAL OF VARIETIES SPECIFIED AND SHALL BE FREE FROM INJURY, INSECTS AND DISEASES. PLANTS SHALL EQUAL OR SURPASS QUALITY AS DEFINED IN THE CURRENT ISSUE OF NURSERY "AMERICAN STANDARDS FOR NURSERY STOCK" AS PUBLISHED BY THE AMERICAN NURSERYMEN, INC.
- 14. ALL PLANT MATERIAL SHALL BE BALLED AND BURLAPPED OR CONTAINER GROWN.
- 15. ALL SHRUBS, TREES AND GROUND COVERS SHALL BE PLANTED WITH A SOIL MIXTURE CONSISTING OF 50% TOPSOIL AND ORGANIC MATERIAL AND PER SPECIFICATIONS. 16. FRONT ROW OF SHRUBS SHALL BE PLANTED MINIMUM 24" BEHIND BED LINE @ LAWNS OR WALKS AND
- MINIMUM 36" BACK OF CURB @ PARKING SPACES. 17. BACK ROW OF SHRUB PLANTING SHALL BE PLANTED @ 36" OFF FACE OF BUILDING WALL, GROUND COVERS SHALL BE 12" OUT FROM BUILDING AS REQUIRED BY PLANT SPECIFICATIONS.
- 18. EXCAVATE EDGE OF ALL PLANTING BEDS TO 4" DEPTH TO FORM A NEAT CRISP DEFINITION.
- 19. ALL PLANTING BEDS AND TREE PITS SHALL BE MULCHED WITH A 3" SETTLED LAYER OF PINESTRAW. 20. MULCH ALL AREAS OF ANNUALS AND SPREADING GROUND COVER MASS PLANTING WITH 3 INCHES OF DOUBLE HAMMERED BROWN MULCH.
- 21. GRASS: ALL AREAS TO BE GRASSED SHALL BE TILLED AND GRADED TO A DEPTH OF 6". SLAG OF LIME SHALL BE APPLIED AT A RATE OF 100 POUNDS PER 1000 SQ. FT. ADD TURF GREEN OR EQUAL (12-5-8 SLOW RATE) AT A RATE OF 50 POUNDS PER 1000 SQ. FT. SEEDED AREAS SHALL BE COVERED WITH A THIN LAYER OF WHEAT STRAW.
- 22. ALL DISTURBED AREAS NOT PLANTED WITH SHRUBS, TREES, OR SOD SHALL BE SEEDED.
- 23. GRADE ALL AREAS FOR APPROVAL BY LANDSCAPE ARCHITECT BEFORE SODDING.
- 24. SEASONAL COLOR SHALL BE PLANTED IN FLOWERING STATE. 25. CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIAL, INCLUDING GRASS FOR ONE FULL YEAR FROM DATE OF SUBSTANTIAL COMPLETION.
- 26. REMOVE ALL GUY WIRES AND STAKES AT END OF GUARANTEE PERIOD. 27. WHEN TREES ARE PLANTED THE MONTHS OF MARCH THRU OCTOBER, THE LANDSCAPE CONTRACTOR SHALL AMEND THE SOIL MIX WITH A MOISTURE RETENTION AGENT AS 'TERRA-SORB' OR EQUAL FOR EACH TREE INSTALLATION.
- NOTE: ALL TREES AND SHRUBS NOT COVERED BY IRRIGATION TO BE AMENDED WITH TERRA SORB WATER RETAINING AGENT AS PER MANUFACTURERS RECOMMENDATIONS. (OR APPROVED EQUAL)

LAYOUT NOTES:

- 1. THE LOCATION OF ALL SURFACE AND UNDERGROUND STRUCTURES AND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR AT GROUND BREAK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING STRUCTURES AND UTILITIES TO REMAIN FROM DAMAGE AS REQUIRED DURING CONSTRUCTION AND TO REPAIR ANY DAMAGE WHICH SHOULD OCCUR TO THE SATISFACTION OF THE OWNER/OR DAMAGED PARTY.
- 2. THE FINISHED GRADES SHALL BE FREELY DRAINING.
- 3. ALL SITE ELEMENT LOCATIONS SHALL BE APPROVED BY LANDSCAPE ARCHITECT PRIOR TO EXCAVATION/INSTALLATION.
- 4 IF APPLICABLE. THE LOCATION OF ALL FOOTINGS SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO EXCAVATION. FOOTINGS SHALL BE LOCATED WHERE SHOWN ON THE DRAWINGS OR WHERE FIELD LOCATED BY LANDSCAPE ARCHITECT.
- 5. THE LOCATION OF ALL PAVED AREAS SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO EXCAVATION. PAVED AREAS SHALL BE LOCATED WHERE SHOWN ON THE DRAWINGS OR WHERE FIELD LOCATED BY LANDSCAPE ARCHITECT.
- 6. MINIMIZE ALL ROOT DISTURBANCE WITHIN THE DRIP LINE OF ALL EXISTING TREES. 7. COORDINATE SLEEVE LOCATION/INSTALLATION WITH LANDSCAPE CONTRACTOR. INSTALLATION IS THE
- RESPONSIBILITY OF GENERAL CONTRACTOR. 8. IRRIGATION SLEEVES ARE TO BE SCHEDULE 40 PVC PIPE, PER SPECIFICATIONS, EXTENDED 18"
- MINIMUM BEYOND CURB OR PAVEMENT EDGE.
- 9. IRRIGATION SLEEVES ARE TO BE MARKED (EACH END) WITH A 2" X 4" STAKE FOR EASE OF LOCATION BY THE LANDSCAPE CONTRACTOR. SECURE OR CAP EACH END OF SLEEVE DURING INSTALLATION TO PREVENT CLOGGING.

Terra-Sorb[®] (OR APPROVED EQUAL) Medium or Coarse Hydrogel

Terra-Sorb Hydrogel is a high-quality, long-lasting acrylamide copolymer gel that absorbs up to 200 times its weight in water and slowly releases it into the root zone for use by plant roots. Terra-Sorb is used as horticultural soil amendment for planting, seeding, sodding, flower INERT INGREDIENTS: Water* bed preparation and potted plants. Terra-Sorb significantly increases

the water-holding capacity of soil and can prevent plant loss due to drought stress in non-irrigated areas and where water-holding capaci-

- ty is low. Terra-Sorb :
- Prevents sod and plant loss due to heat and drought Improves water retention in porous (sandy) soils
- Aerates soil as it shrinks and swells
- Easy to use

DIRECTIONS FOR USE (MEDIUM OR COARSE GRADES) TREE AND SHRUB PLANTINGS Mix Terra-Sorb evenly with the backfill soil at a rate of 2 ounces (by weight) per inch caliper for Balled & Burlaped trees and shrubs, or 1 ounce (by weight) per 5 gallons for containerized trees and shrubs. Volume rates are shown in adjacent chart.

FLOWER BEDS AND GARDENS Terra-Sorb is mixed into the top 4 inches of soil at a rate of 1 pound per 100 square feet prior to planting or seeding. It can be broadcast by shaker, spreader or hand, then raked or rototilled into soil. Not recommended for topdressing on already established beds.

SODDING, SEEDING OR SPRIGGING Terra-Sorb is mixed into the top 4 inches of soil at a rate of 3 pounds per 1,000 square feet or 150 pounds per acre prior to seeding, sodding or sprigging. Apply by shaker, drop spreader or hand, then rake or rototill into the top 4 inches of soil. Not recommended as a topdressing on already established turf. POTTING MIX AMENDMENT FOR CONTAINERIZED PLANTS AND HANGING BASKETS For machine or hand mixing, add 2 pounds of Terra-Sorb per cubic yard of potting mix. Blend thoroughly throughout mix. For small batches, add 1 ounce Terra-Sorb to each cubic foot of growing or potting mix.

ROOT DIPPING, SEEDLING PACKAGING OR HYDROSEEDING: Use Terra-Sorb Fine Grade. Call PHC Customer Service for informa- Coarse: 2 to 4 mm diameter tion about Terra-Sorb Fine (1-800-421-9051). COMPATIBILITY Terra-Sorb can be used on all plants including grasses. Fine: 0.1 to 0.75 mm diameter

Water pH: Soil or water pH of 6 to 8 is ideal. Water absorbtion capaci- PACKAGING ty is significantly reduced outside this range. Terra-Sorb must be mixed into soil. It is not designed for surface applications.

STORAGE/SHELF LIFE

- This product is stable in dry storage conditions.
- HEALTH AND SAFETY INFORMATION In case of allergic reaction(s), treat symptoms and contact
- physician.
- Avoid breathing dust or spray mist. Wash hands after handling.

• Keep out of reach of children.

SUPER-ABSORBENT PLANTING GEL

GUARANTEED ANYLSIS OF SOIL AMENDING INGREDIENTS ACTIVE INGREDIENTS % by Weight

Potassium Polyacrylamide Acrylate Copolymer......

TREE CALIPER	TERRA-SORB VOLUME
1 inch	2-1/2 ounces
2 inch	4 ounces
3 inch	1 cup
4 inch	11 ounces
5 inch	1 pint
6 inch	21 ounces
7 inch	27 ounces
8 inch	1 quart
CONTAINER SIZE	TERRA-SORB VOLUME
1 gallons	1/Z ounce
3 gallons	1 ounce
5 gallons	1-1/3 ounces
7 gallons	2 ounces
10 gallons	2-1/2 ounces
15 gallons	4 ounces
20 gallons	4-1/2 ounces
35 gallons	6-1/2 ounces
50 gallons	1 cup
100 gallons	12 ounces
200 gallons	24 ounces
400 gallons	1-1/2 quarts
90 inch spade	24 ounces
BOX TREES	TERRA-SORB VOLUME
24 inch	1 cup
30 inch	12 ounces
36 inch	1 pint

Terra-Sorb comes in three particle sizes: Medium: 0.75 to 2 mm diameter

30 x 3-oz handy paks (medium grade only), 10-Lb Bag and 50-Lb bag (medium or coarse grades) TECHNICAL ASSISTANCE dia te For technical assistance, call 1-800-421-9051

Plant Health Care, Inc. 440 William Pitt Way

Pittsburgh, PA 15238 PLANT Tel: (800) 421-9051 • Fax: (412) 826-5445 www.planthealthcare.com HEALTH

© 2005 Plant Health Care, Inc CARE, IN LIMITED WARRANTY Plant Health Care, Inc. offers for sale the product Terra-Soub[®] Hydrogel. THERE ARE NO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE which extend beyond the description of the product in this specification sheet or other product literature, and liability of Plant Health Care, Inc. is limited to replacement of any product which does not meet these specifications. Suggestions for use and information on results obtained with its use are assumed by the manufacturer to be reliable. Since conditions of use are outside the control of Plant Health Care, Inc. the buyer is responsible for all results, including injury and damage stemming from the use of this product alone or in combination with other materials.















- *Water content is derived from atmospheric humidity absorbed during storage.

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PLANT SCHEDI	ШЕ								STATL STATLON
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REES									NUMBER
	ACER BUERGERIANUM 'RUSTYALLEN' TM	BLOOD MOON TRIDENT MAPLE	2.5" CAL. / B&B			AS SHOWN		STRONG CENTRAL LEADER	615 1/16/2023 S
	AMELANCHIER X GRANDIFLORA `AUTUMN BRILLIANCE	AUTUMN BRILLANCE SERVICEBERRY	B & B	14` - 16` MIN.	5` - 6` MIN.	AS SHOWN		MIN. 3 TRUNKS	CO LANDSCAPE P
the second secon									
	BETULA NIGRA 'BNMTF' DURA-HEAT	RIVER BIRCH	B & B	12`-14`	5`-7`	AS SHOWN		3 TRUNKS, 1 TRUNK TO BE 2" CALIPER	100% CD'S
	CHIONANTHUS VIRGINICUS	WHITE FRINGETREE	B & B	7` - 8` MIN.	5` - 6` MIN.	AS SHOWN		FULL HEAD, MULTI-TRUNK	
× ····									_
	ILEX OPACA 'JERSEY KNIGHT'	JERSEY KNIGHT AMERICAN HOLLY	B & B	8` - 9` MIN.	4` - 5` MIN.	AS SHOWN		HEALTHY, FULL TO GROUND (MALE)	
• \$ 1	ILEX OPACA 'JERSEY PRINCESS'	JERSEY PRINCESS AMERICAN HOLLY	B & B	8' - 9' MIN.	4` - 5` MIN.	AS SHOWN		HEALTHY, FULL TO GROUND (FEMALE)	
			B&B	8` - 10` HT MIN	4` - 5` MIN	AS SHOWN			_
					4 - 5 Milly.	ASSHOWN			- 🛌
	ILEX X 'MAGLAND'	OAKLAND RED HOLLY	15 GAL	5` - 6` MIN.	2` - 3` MIN.	6` O.C.		FULL TO GROUND, HEALTHY	
د. ۲۰۰۰ کی ا در ب	MAGNOLIA GRANDIFLORA `CLAUDIA WANNAMAKER`	CLAUDIA W. MAGNOLIA	B & B	10` - 12` MIN.	6` - 7` MIN.	AS SHOWN		FULL TO GROUND	A
	MAGNOLIA VIRGINIANA 'MVMTF' TM	KELTYK SWEETBAY MAGNOI IA	2.5" CAI / B&B			AS SHOWN		STRONG CENTRAL LEADER	
									
	MAGNOLIA X SOULANGIANA	SAUCER MAGNOLIA	B & B	10` - 12` MIN.	6` - 8` MIN.	AS SHOWN		FULL, HEALTHY PLANT. MINIMUM 3 STEMS, MULTI-TRUNK	
	MALUS 'ROYAL RAINDROPS'	ROYAL RAINDROPS CRABAPPLE STD	B & B	8` - 10` HT. MIN.	3` - 4` MIN.	AS SHOWN		FULL, HEALTHY PLANT	ALE A
+ 3 5	NYSSA SYLVATICA 'WILDFIRE'	BLACK GUM	2.5" CAL. / B&B	12`-14`	6`-7`	AS SHOWN		STRONG CENTRAL LEADER	
ante of the other of the other of the other other of the other oth									
30000000000000000000000000000000000000			2.5" CAL. MIN./B&B	12 - 14 MIN.	5 - 6 MIN.	AS SHOWN		FULL HEAD, SPECIMEN QUALITY, HEALTHY	DALE OFIC
+ 5 5	QUERCUS LYRATA	OVERCUP OAK	2.5" CAL. MIN./B&B	12` - 14` MIN.	5` - 6` MIN.	AS SHOWN		FULL HEAD, SPECIMEN QUALITY, HEALTHY	
9 m 9	QUERCUS NUTTALLII	NUTTALL OAK	2.5" CAL. MIN./B&B	12` - 14` MIN.	5` - 6` MIN.	AS SHOWN		FULL HEAD, SPECIMEN QUALITY, HEALTHY	
	BOTANICAL NAME	COMMON NAME	SIZE	HT.	SPREAD	SPACING	SPACING	REMARKS	
	ABELIA X GRANDIFLORA `EDWARD GOUCHER`	GLOSSY ABELIA	3 GAL	18" - 24" MIN.	15" - 24" MIN.	36" O.C.	42" o.c.	FULL, HEALTHY PLANT	
67 • 31	CALLICARPA AMERICANA	AMERICAN BEAUTYBERRY APHRODITE SWEETSHRUB	3 GAL	18" - 24" MIN.	15" - 24" MIN. 15" - 18" MIN.	6` O.C. MIN. 5` O.C.	72" o.c. 60" o.c.	FULL, HEALTHY PLANT	
<u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u>	CLETHRA ALNIFOLIA 'HUMMINGBIRD'	HUMMINGBIRD CLETHRA	3 GAL	15" - 24" MIN.	15" - 18" MIN.	36" O.C.	36" o.c.	FULL, HEALTHY PLANT	
23	COTONEASTER FRANCHETII	COTONEASTER FRANCHETII	3 GAL	18"-24" MIN.	15" - 18" MIN.	5` O.C.	60" o.c.	FULL, HEALTHY PLANT	
52	DISTYLIUM X `VINTAGE JADE`	VINTAGE JADE DISTYLIUM	3 GAL	12"-15" MIN.	12"-16" MIN.	4` O.C.	48" o.c.	FULL, HEALTHY PLANT	_
48	FOTHERGILLA GARDENII 'MT. AIRY'	MT. AIRY FOTHERGILLA	3 GAL.	15" - 24" MIN.	15" - 18" MIN.	48" O.C.	48" o.c.		_
			3 GAL	18" - 24" MIN.	15" - 18" MIN.	6 O.C.	72" o.c.		_
			3 GAL	18 -24 MIN.	18 -24 MIN	4 0.0.	48 0.0.		
		SHAMBOCK INKBERRY HOLLY	7 GAL	15` - 18` MIN	10"-14" MIN	36" O C	36" 0.0	FULL, HEALTHY PLANT	-
27	ILEX VERTICILLATA	WINTERBERRY	3 GAL	12" - 24" MIN.	12" - 24" MIN.	5` O.C.	60" o.c.	FULL, HEALTHY PLANT	-
44	ITEA VIRGINICA 'HENRY'S GARNET'	SWEETSPIRE	3 GAL	18" - 24" MIN.	15" - 18" MIN.	5` O.C.	60" o.c.	FULL, HEALTHY PLANT	- L
13	ITEA VIRGINICA 'SPRICH'	LITTLE HENRY® SWEETSPIRE	3 GAL	15" - 24" MIN.	12" - 24" MIN.	36" O.C.	36" o.c.	FULL, HEALTHY PLANT	5 S S
12	JUNIPERUS VIRGINIANA 'GREY OWL'	GREY OWL JUNIPER	3 GAL	10" - 14" MIN	10"-14" MIN.	4` O.C.	48" o.c.	FULL, HEALTHY PLANT	□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□
5	KALMIA LATIFOLIA	MOUNTAIN LAUREL	3 GAL	18" - 24" MIN.	15" - 18" MIN.	6` O.C.	60" o.c.	FULL, HEALTHY PLANT	
24	SPIRAEA X BUMALDA 'ANTHONY WATERER'	ANTHONY WATERER SPIRAEA	3 GAL	18" - 24" MIN.	15" - 18" MIN.	36" O.C.	42" o.c.	FULL TO GROUND, HEALTHY	IT 11 11 11 11 11 11 11 11 11 11 11 11 11
41	TRACHELOSPERMUM JASMINOIDES	CHINESE STAR JASMINE	1 GAL			8` O.C.	24" o.c.	PULL, HEALTHY PLANT PLANT AT BASE OF GABEON WALL	C H C H
MBOL QTY	BOTANICAL NAME	COMMON NAME	CONT	HT.	SPREAD	SPACING	SPACING	REMARKS	AR AR AX: 2
IRUB AREAS	MISCANTHUS SINENSIS 'ADAGIO'	ADAGIO MISCANTHUS GRASS	1 GAL	12" - 15" MIN.		36" O.C.	36" o.c.	FULL, HEALTHY PLANT	
689	NASSELLA TENUISSIMA 'PONY TAILS'	FEATHERGRASS	1 GAL	12" - 15" MIN.		24" O.C.	24" o.c.	FULL, HEALTHY PLANT	
- - - - - - - - - - - - - - - - - - -	PANICUM VIRGATUM 'NORTHWIND'	SWITCH GRASS	1 GAL	12" - 15" MIN.		24" O.C.	24" o.c.	FULL, HEALTHY PLANT	A 35
TENTION POND MIX			2" PLUC			18" 0 0	19" 0.0		
288	LIATRIS SPICATA	DENSE BLAZING STAR	2" LINER			12" O.C.	12" o.c.	FULL, HEALTHY PLANT	
777777777777777777777777777777777777777		CARDINAL FLOWER	2" PLUG			16" O.C.	16" o.c.	FULL, HEALTHY PLANT	
718	SAGITTARIA LATIFOLIA	BROADLEAF ARROWHEAD	2" LINER			12" O.C.	12" o.c.	LIVE, WEED-FREE SEED	⊣ ш ,
MBOL OTV	BOTANICAL NAME	COMMON NAME	CONT	HT.	SPREAD	SPACING		REMARKS	TAN AN
	,			<u>, ····</u>			,	,	기 📕 🖌 돈호
26	AGAPANTHUS AFRICANUS 'BLUE'	BLUE LILY OF THE NILE	1 GAL	MIN. 6" HT.		18" O.C.	0.5/sq.ft.	FULL, HEALTHY PLANT	
	DRYOPTERIS ERYTHROSORA	AUTUMN FERN	1 GAL	MIN. 6" HT.		18" O.C.	0.5/sq.ft.	FULL, HEALTHY PLANT	
1,970	PERENNIALS	PERENNIALS	1 GAL			12" O.C.	1/sq.ft.	PURPLE CONEFLOWER / BLACKEYED SUSAN MIX	<u>© </u>
D/SEED									SHEET_TITLE:
2,159 SF	CYNODON DACTYLON	BERMUDA GRASS-SEED	SEED						LANDSCAPE NOTES &
33,997 SF	CYNODON DACTYLON	BERMUDA GRASS	SOD					HEALTHY, NO YELLOWING OR PESTS. CUT NO MORE THAN 24 HRS. BEFORE LAYING.	
8,794 SF	WETLAND NATIVE FLOWER/GRASS MIX	WETLAND MIX	SEED					WETLAND MEADOW MIX; 4.2-6 POUNDS/ACRE; OR APPROVED EQUAL	PROJECT NUMBER:
17,547 SF	WILDFLOWER NATIVE FLOWER/GRASS MIX	WILDFLOWER MIX	SEED					ROUNDSTONE NATIVE SEED MIX 111 - SOUTHERN SHORT GRASS MEADOW MIX; 8-9 POUNDS/ACRE; OR APPROVED FOLIAL	
								ROUNDSTONESEED.COM	DATE:
									DRAWN BY: CHECKED BY:

SHEET NUMBER

ALR

Revisions



THESE NOTES ARE PRESENTED AS A "SUMMARY" OF THE WRITTEN SPECIFICATIONS ISSUED FOR THE PROJECT. REFER TO THE WRITTEN SPECIFICATIONS, IF INCLUDED, FOR ADDITIONAL DETAIL AND FULL PROJECT REQUIREMENTS.

- 1. THE IRRIGATION CONTRACTOR SHALL VERIFY THE PRESSURE AND FLOW PRIOR TO COMMENCEMENT OF CONSTRUCTION. REPORT TO THE OWNER OR OWNER'S REPRESENTATIVE ANY DIFFERENCES BETWEEN THE PRESSURE INDICATED AND THE ACTUAL PRESSURE READING AT THE POINT OF CONNECTION. ACTUAL LAYOUT OF PIPING, SPRINKLER HEADS, VALVES, CONTROLLERS AND OTHER RELATED EQUIPMENT SHALL BE DETERMINED ON SITE. MINOR FIELD CHANGES SHALL BE MADE AT NO ADDITIONAL COST TO THE OWNER.
- 2. THE PIPE ROUTING SHOWN IS DIAGRAMMATIC ONLY. ALL PIPING, VALVES, HEADS, ETC SHOWN OUTSIDE TRENCH AREAS ARE FOR DESIGN CLARIFICATION/GRAPHIC CLARITY ONLY AND SHALL BE LOCATED INSIDE OF THE PLANTED AREA OR TURF AREA APPROXIMATELY 1' FROM ANY HARDSCAPE. PRESSURE LOSS CALCULATIONS ARE BASED ON THE PIPE ROUTING AS SHOWN. SIGNIFICANT DEVIATIONS FROM THE ROUTING SHOWN SHOULD BE AVOIDED
- 3. DO NOT WILLINGLY INSTALL THE SPRINKLER SYSTEM AS SHOWN ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT OBSTRUCTIONS, GRADE DIFFERENCES, OR DIFFERENCES IN THE DIMENSIONS OF THE CONSTRUCTED AREAS EXIST THAT MIGHT NOT HAVE BEEN CONSIDERED IN THE IRRIGATION DESIGN OR CHANGES HAVE OCCURRED IN THE SITE PLAN. SUCH OBSTRUCTIONS OR DIFFERENCES SHOULD BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT AND THE GENERAL CONTRACTOR IMMEDIATELY. SHOULD THE IRRIGATION CONTRACTOR PROCEED WITH THE INSTALLATION WITHOUT NOTIFYING THE IRRIGATION DESIGNER AND THE GENERAL CONTRACTOR, THE IRRIGATION CONTRACTOR ASSUMES FULL RESPONSIBILITY FOR ANY AND ALL REVISIONS / RECONSTRUCTION NECESSARY
- 4. IT IS THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO FAMILIARIZE HIMSELF / HERSELF WITH THE SITE, ALL GRADE DIFFERENCES, LOCATIONS OF WALLS, AND INSTALLED UTILITIES. COORDINATE WORK WITH THE OWNER OR GENERAL CONTRACTOR AND OTHER SUBCONTRACTORS FOR THE LOCATION AND INSTALLATION OF PIPE SLEEVES UNDERNEATH PAVEMENT AND THROUGH WALLS.
- 5. DUE TO THE SCALE OF THE DRAWING, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS, JOINTS, ETC. WHICH MAY BE REQUIRED. THE IRRIGATION CONTRACTOR SHALL CAREFULLY INVESTIGATE THE STRUCTURAL AND FINISHED CONDITIONS AFFECTING ALL OF HIS/HER WORK AND PLAN HIS/HER WORK ACCORDINGLY, FURNISHING SUCH FITTINGS, ETC. AS MAY BE REQUIRED TO MEET SUCH CONDITIONS. ALL WORK SHALL BE INSTALLED IN SUCH A MANNER AS TO AVOID CONFLICTS BETWEEN IRRIGATION SYSTEM COMPONENTS, LANDSCAPE PLANTING, AND ARCHITECTURAL FEATURES.
- 6. THIS SYSTEM SHALL BE INSTALLED USING ACCEPTED AND QUALITY INSTALLATION STANDARDS AS USED IN THE INDUSTRY. ALL MANUFACTURERS SPECIFICATIONS WILL BE FOLLOWED.
- 7. MAINLINE SHALL BE BURIED A MINIMUM OF 18" OF COVER. LATERAL LINE PIPING A MINIMUM OF 12" OF COVER. ALL BACKFILL SURROUNDING THE PIPE SHALL BE CLEANED OF ALL MATERIALS LARGER THAN 1" IN SIZE. BACKFILL SHALL BE ADDED IN 6" INCREMENTS AND MECHANICALLY TAMPED TO ELIMINATE SETTLEMENT.
- 8. FLUSH ALL LINES AND HEADS PRIOR TO INSTALLING NOZZLES. ADJUST NOZZLE SPRAY ARC AND RADIUS FOR OPTIMUM PERFORMANCE TO PREVENT OVERSPRAY ONTO PAVED SURFACES OR FACE OF BUILDING AS MUCH AS POSSIBLE TO FIT THE SITE CONDITIONS. THROTTLE FLOW CONTROL AT EACH VALVE FOR OPTIMUM OPERATING PRESSURE FOR EACH ZONE.
- 9. ALL SPRINKLER HEADS SHALL BE SET PERPENDICULAR TO FINISHED GRADE OF THE AREA TO BE IRRIGATED UNLESS OTHERWISE NOTED. 10. WHEN VERTICAL OBSTRUCTIONS (POLES, SIGNS, TREES, HYDRANTS, ETC) INTERFERE WITH
- THE SPRAY PATTERN OF THE HEADS SO AS TO PREVENT PROPER COVERAGE, THE CONTRACTOR SHALL FIELD ADJUST THE SPRINKLER SYSTEM BY INSTALLING A QUARTER, THIRD, OR HALF CIRCLE HEAD AT THE SIDES OF THE OBSTRUCTION SO AS TO PROVIDE PROPER COVERAGE. ALL ADJUSTMENTS SHALL BE MADE AT NO ADDITIONAL COST.
- 11. USE TEFLON TAPE ON ALL MALE PIPE THREADS ON PVC PIPE, SWING JOINTS, AND VALVE ASSEMBLIES. 12. INSTALL VALVE BOXES 18-INCHES FROM AND PERPENDICULAR TO WALKS, CURBS, BUILDING,
- OR LANDSCAPE FEATURES. AT MULTIPLE VALVE BOX GROUPS, EACH BOX SHALL BE INSTALLED A MINIMUM OF 12-INCHES APART. IRRIGATION CONTRACTOR SHALL UTILIZE VALVE I.D. TAGS ON ALL REMOTE CONTROL VALVES. 13. ALL VALVES SHALL BE PLACED IN VALVE BOXES AS SHOWN IN THE DETAILS AND ALL
- ELECTRICAL CONNECTIONS SHALL BE SEALED WITH WATERPROOF CONNECTORS. ALL CONTROL WIRE SHALL BE BURIED AT A MINIMUM 6" AND A 12" LOOP IS TO BE PROVIDED AT FACH VALVE FOR SERVICING
- 14. 120-VOLT ELECTRICAL POWER AT THE CONTROLLER SHALL BE PROVIDED BY OTHERS. IT IS THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO MAKE THE FINAL HOOK-UP FROM THE POWER PROVIDED TO THE CONTROLLER CONTROLLER RAIN SENSOR METER TAP AND BACKFLOW LOCATIONS ARE AS SHOWN ON THE PLAN OR AS STATED IN THE DETAILS AND LEGEND. EXACT LOCATION OF CONTROLLER TO BE VERIFIED BY GENERAL CONTRACTOR AND/OR OWNER. ALL INFORMATION IS TO BE VERIFIED PRIOR TO ANY INSTALLATION OF THE PROJECT.
- 15. THE IRRIGATION CONTRACTOR IS RESPONSIBLE FOR ALL CLEAN UP ASSOCIATED WITH HIS WORK.
- 16. IRRIGATION CONTRACTOR SHALL PROVIDE THE OWNER AND LANDSCAPE ARCHITECT WITH A REPRODUCIBLE AS-BUILT DRAWING WITHIN 21 DAYS UPON COMPLETION OF THE IRRIGATION INSTALLATION. CONTRACTOR SHALL ALSO PROVIDE OWNER: a) 2 WRENCHES FOR DISASSEMBLING AND ADJUSTING EACH TYPE OF SPRINKLER HEADS AND VALVE SUPPLIED & b) 2 KEYS FOR EACH OF THE AUTOMATIC CONTROLLERS.
- 17. THERE SHALL BE NO SUBSTITUTIONS OR CHANGES TO THE IRRIGATION DESIGN ALLOWED LANDSCAPE ARCHITECT. ALL SPRINKLERS, VALVES AND VALVE BOXES SHALL BE PLACED 5' AWAY FROM ANY RADIUS OF CURB AS SHOWN IN DETAILS.
- 18. IRRIGATION CONTRACTOR SHALL PROVIDE THE FIRST WINTERIZATION BLOW OUT. IN ADDITION, HE SHALL PROVIDE THE SPRING TURN ON . ALL NECESSARY HEAD ADJUSTMENTS SHALL BE MADE AT THAT TIME AND REPLACE OR REPAIR ANY WARRANTY ITEMS. THESE ITEMS SHALL BE INCLUDED WITH BID.
- 19. SLEEVING BY GENERAL CONTRACTOR.
- 20. ALL AREAS OUTSIDE OWNER PROPERTY WITH NEW PLANT MATERIAL BUT NO PROPOSED IRRIGATION IS TO BE HAND WATERED BY CONTRACTOR UNTIL ESTABLISHED. 21. *INITIAL WATERING NOTES: ALL IRRIGATION ZONES ARE TO RUN DAILY SUPPLYING 1" OF WATER
- FOR 3-4 WEEKS. FOR GREATER EFFICIENCY ALL SYSTEMS SHOULD BE OPERATED AT NIGHT OR DURING EARLY MORNING HOURS. DO NOT SET TIMERS TO WATER JUST PRIOR TO SUN DOWN. ONCE PLANTS ARE ESTABLISHED, WATERING CAN BE DECREASED TO 3-4 DAYS A WEEK. IN WINTER MONTHS, WATERING CAN BE SPREAD OUT TO EVERY 10-14 DAYS.



- A. COMPLETE INSTALLATION IN ACCORDANCE WITH HUNTER'S SPECIFICATIONS. REFER TO PRODUCT INSTALLATION GUIDE PRIOR TO INSTALLATION.
- B. CONTROLLER ACCEPTS 120 VOLTS A.C. OR 230 VOLTS A.C. (INTERNATIONAL MODEL). HARD WIRE OR PLUG INTO A GROUNDED POWER SOURCE.
- C. MODEL NUMBER AND SPECIFICATIONS PER PLAN.
- D. MOUNT CONTROLLER LCD SCREEN AT EYE LEVEL WHEN FEASIBLE.

OP VIEW (9)(8) (7)(5)(7)FLOW

SIDE VIEW

OUTLET PIPE LEAVING METER: LENGTH MUST BE MIN. OF 5 X PIPE DIA. INLET AND OUTLET PIPE MUST BE STRAIGHT PIPE WITH NO FITTINGS OR SCH 80 PVC SOLVENT WELD, THREADED SCH 80 PVC OR BRASS, AS REQUIRED FOR PROJECT.

√ 3 FLOW SENSOR L3.02 Scale: NTS

QCV RAINBIRD MODEL # 5-RC,

KEY# 55-K, HOSE SWIVEL # SH-2





- > PVC LATERAL (NON-PRESSURE 🕐 PIPE). SIZE PER PLAN.



INSTALL POPUP ROTOR SPRINKLER 4" FROM PAVED EDGE, BUILDINGS AND FENCE AREAS, AND INSTALL FLUSH TO GRADE, ADJUST COVERAGE TO AVOID OVERSPRAY ONTO PAVED SURFACES, FENCES, BUILDINGS AND PARKING LOTS. USE ONLY TEFLON TAPE OR SEALANT ON ALL THREADED CONNECTIONS.

6 POP UP ROTOR L3.02 Scale: NTS

7 QUICK COUPLER VALVE



SIZE AS REQUIRED (5) 120 VAC CABLE FOR CONNECTION TO

GROUNDED 120 VAC POWER SOURCE (230 VAC FOR INTERNATIONAL MODELS)

(6) TWO (2) WIRES TO SENSOR TERMINALS IN CONTROLLER - WHITE

(7) TWO (2) WIRES TO 24 VAC TERMINALS IN CONTROLLER - YELLOW

(8) TWO (2) WIRES TO FLOW-CLIK SENSOR BLACK, RED

(9) SURFACE TO MOUNT CONTROLLER PER





HUNTER CONTROLLER WITH FLOW-CLIK SENSOR OR EQUAL L3.02 Scale: NTS

- (1) HUNTER HC FLOW METER HC-075 WITH UNION CONNECTIONS (2) SCH 80 PVC FEMALE ADAPTER (S X T) (3) RECTANGULAR VALVE BOX PER SPECIFICATIONS (4) SCH 80 PVC 45 DEGREE ELBOW (S X S)
 - TO LOWER MAIN LINE TO PROPER DEPTH (SIZE FOR LARGER MAIN LINE AS NEEDED)
 - (5) SCH 80 PVC 45 DEGREE ELBOW (S X S) TO LOWER MAIN LINE TO PROPER DEDTH
 - (6)1" DIA. (25 mm) MAIN LINE AT INLET & OUTLET
 - (7) MAIN LINE TO SYSTEM (SEE LEGEND - AND PLANS FOR TYPE AND SIZE)
 - (8) TWO WIRES TO FLOW SENSOR TERMINALS AT CONTROLLER. MIN. 18
 - AWG-UF (2.08 mmsHIELDED WIRE WITH DIFFERENT COLOR FROM CONTROL/COMMON WIRE.
 - (9) WEATHERPROOF WIRE CONNECTOR (10) FINISH GRADE
 - 1) SPECIFIED SOIL COVER (SEE LEGEND)
 - (12) COMMON BRICK
 - (13) GRAVEL BASE, 6" (15 cm) DEEP

NOTE: INLET PIPE ENTERING METER: LENGTH MUST BE A MIN. OF 10 X PIPE

TURNS UNTIL AFTER THESE SPECIFIED LENGTHS. PIPE AND FITTINGS MAY BE



$\overline{4}$	ELECTRIC SOLENOID VALVE AND DECODE
L3.02	







- 2 PLANT MATERIAL OR TURF
- (3) VALVE BOX, 10" RND
- (4) CLEAN SOIL, AMENDED/NATIVE
- FREE OF ROCK AND DEBRIS) QUICK COUPLER KEY, #55-K.
- 6 Q.C. HOSE SWIVEL, # SH-2.
- (7) QUICK COUPLER VALVE 5-RC.
- 8) 3/4" CRUSHED ROCK (9) BRICK SUPPORTS 1 OF 4
- 10 NO NOTE
- (1) MAINLINE, CL200 PVC PRESSURE PIPE, SIZE PER
- PLAN. (12) SWING JOINT 1", SIZE PER QUICK COUPLER VALVE INLET.
- DURA MODEL# 1-A101-11-18. (13) TEE OR ELBOW, PVC SCH 40, SIZE PER PLAN.
- (4) REBAR, 1/2"×30".








(1) FINISH GRADE/TOP OF MULCH (2) VALVE BOX WITH COVER: RAIN BIRD VB-STD (3) 30–INCH LINEAR LENGTH OF WIRE, COILED (4) WATERPROOF CONNECTION: 5 1-INCH BALL VALVE 6 ID TAG (7) REMOTE CONTROL VALVE: RAIN BIRD PESB (INCLUCED IN XCZPGA-100-PRF KIT) (8) PRESSURE REGULATING QUICK CHECK BASKET FILTER: RAIN BIRD PRB-QKCHK-100 (INCLUDED IN XCZPGA-100-PRF KIT)

9 PVC SCH 40 FEMALE ADAPTOR

(10) LATERAL PIPE

(11) MAINLINE PIPE

(12) 3-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL

	MULCH
2	FLUSH CAP FOR EASY FI COMPRESSION FITTINGS
3	EASY FIT COUPLING:
4	SUBTERRANEAN EMITTER E
5	BLANK TUBING
6	FINISH GRADE
7	EXHAUST HEADER
8	XFF-TEE
9	BARB X MALE FITTING:
10	ON-SURFACE DRIPLINE:
(11)	3-INCH MINIMUM DEPTH C

L3.03 Scale: NTS

CRITICAL /	ANALYSIS
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Generated:	2023-11-21 12:49
P.O.C. NUMBER: 01 Water Source Information:	
FLOW AVAILABLE Water Meter Size	1-1/2"
Flow Available	75 GPM
PRESSURE AVAILABLE	
Static Pressure at POC:	75 PSI
Elevation Change:	5.00 ft
Service Line Size:	2"
Length of Service Line:	<u>20 ft</u>
Pressure Available:	72 PSI
DESIGN ANALYSIS	
Maximum Station Flow:	46.99 GPM
Flow Available at POC:	75 GPM
Residual Flow Available:	28.01 GPM
Design Pressure:	30 PSI
Friction Loss:	1.05 PSI
Fittings Loss:	0.1 PSI
Elevation Loss:	0 PSI
Loss through Valve:	15.5 PSI
Pressure Req. at Critical Station:	46.7 PSI
Loss for Fittings:	0.07 PSI
Loss for Main Line:	0.74 PSI
Loss for POC to Valve Elevation:	0 PSI
Loss for Backflow:	12.7 PSI
Loss for Water Meter:	0.96 PSI
Critical Station Pressure at POC:	61.1 PSI
Pressure Available:	<u> /2 PSI</u>
Residual Pressure Available:	10.9 PSI

THE IRRIGATION CONTRACTOR SHALL VERIFY THE PRESSURE AND FLOW PRIOR TO COMMENCEMENT OF CONSTRUCTION. REPORT TO THE OWNER OR OWNER'S REPRESENTATIVE ANY DIFFERENCES BETWEEN THE PRESSURE INDICATED AND THE ACTUAL PRESSURE READING AT THE POINT OF CONNECTION. ACTUAL LAYOUT OF PIPING, SPRINKLER HEADS, VALVES, CONTROLLERS AND OTHER RELATED EQUIPMENT SHALL BE DETERMINED ON SITE. MINOR FIELD CHANGES SHALL BE MADE AT NO ADDITIONAL COST TO THE OWNER.

WATERING SCHEDULE

••••	
NUMBER	MODEL
1	Rain Bird XCZPGA
2	Rain Bird XCZPGA
3	Rain Bird XCZPGA
4	Rain Bird XCZPGA
5	Rain Bird XCZPGA
6	Rain Bird PGA Glob
7	Rain Bird XCZPGA
8	Rain Bird PGA Glob
9	Rain Bird PGA Glob
10	Rain Bird PGA Glob
11	Rain Bird XCZPGA
12	Rain Bird PGA Glob
13	Rain Bird PGA Glob
14	Rain Bird PGA Glob
15	Rain Bird PGA Glob
16	Rain Bird PGA Glob
17	Rain Bird PGA Glob
18	Rain Bird PGA Glob
19	Rain Bird PGA Glob
20	Rain Bird PGA Glob
21	Rain Bird PGA Glob
22	Rain Bird PGA Glob
23	Rain Bird PGA Glob
24	Rain Bird XCZPGA
25	Rain Bird PGA Glob





























NOTES: 1. FLOOR TRANSITIONS WHICH OCCUR AT DOORS SHALL BE CENTERED BENEATH THE DOOR WHILE IN THE CLOSED POSITION 2. COORDINATE LOCATIONS OF FLOORING TRANSITIONS WITH FINISH PLANS AND SCHEDULE

SCHLUTER RONDEC-E PROVIDE @ TOP OF TILE AT LOCATIONS WHERE TILE DOESN'T EXTEND TO CEILING

SCHEDULED WALL/BASE SCHLUTER DILEX-AHK —— SCHEDULED TILE FLR -

CONCRETE SLAB —



	FINISH SCHEDULE										
ROOM NO.	ROOM NAME	FLOOR	BASE		WA	LLS		CEILING	COMMENTS		
				NORTH	SOUTH	EAST	WEST				
C1-1	ENTRY CORRIDOR	LVT-2/CPT-3	RB-1	PNT-	PNT-	VWC-3	PNT-	EXP/WD/GYP			
C1-3	CORRIDOR	LVT-2	RB-1	PNT-	PNT-	PNT-	PNT-	ACT-1			
100	ENTRY	CPT-4	WD-1	PNT-	PNT-	PNT-	PNT-/WD-1	EXP/WD			
101	VENDING	LVT-2	RB-1	PNT-	PNT-	PNT-	VWC-1	ACT-1/GYP			
102	MEETING ROOM	LVT-3/LVT-4/LVT-5	RB-1	VWC-3	VWC-3	VWC-3	VWC-3	ACP-1	SEE REFLECTED CEILING PLAN		
103	CONFERENCE	CPT-3	RB-1	PNT-	PNT-	VWC-2	PNT-	ACT-1/GYP			
104	SHARED WORK AREA	CPT-1	RB-1	PNT-	PNT-	PNT-	PNT-	ACT-1			
105	JAN	SC	RB-1	FRP-1	FRP-1	FRP-1	FRP-1	ACT-1			
106	ASST DIR OFFICE	LVT-2	RB-1	PNT-	PNT-	PNT-	PNT-	ACT-1			
107	OPEN WORKROOM	LVT-2	RB-1	PNT-	PNT-	PNT-	PNT-	ACT-1			
108	OFFICE/STOR	LVT-2	RB-1	PNT-	PNT-	PNT-	PNT-	ACT-1			
109	SERVING KITCHEN	LVT-1	RB-1	PNT-	PNT-	PNT-	PNT-	ACT-2			
110	TLT	PT-1	PT-1	PNT-	PNT-	PNT-	PNT-	ACT-2			
111	ELECTRICAL	SC	RB-1	PNT-	PNT-	PNT-	PNT-	ACT-1			
112	BREAKROOM	LVT-2	RB-1	PNT-	PNT-	PNT-	PNT- / CT-4	ACT-1	PROVIDE CT-4 BETWEEN COUNTER AND UPPPER CABINETS		
113	AV/STORAGE	LVT-1	RB-1	PNT-	PNT-	PNT-	PNT-	ACT-1			
114	DIR OFFICE	LVT-2	RB-1	PNT-	PNT-	PNT-	PNT-	ACT-1			
115	MECHANICAL	SC	RB-1	PNT-	PNT-	PNT-	PNT-	ACT-1			
201	CIRCULATION DESK	RF-1	RB-1	PNT-	PNT-	PNT-	PNT-	ACT-1/GYP			
202A	W TLT	PT-1	PT-1	VWC-4	CT-1/CT-2	CT-1/CT-2	CT-1/CT-2	ACT-1	EXTEND WALL TILE TO FLOOR USE SCHLUTER TRANSITION; SEE ELEVATIONS-		
202B	W TLT	PT-1	PT-1	CT-1/CT-2	CT-1/CT-2	CT-1/CT-2	VWC-4	ACT-1	EXTEND WALL TILE TO FLOOR USE SCHLUTER TRANSITION; SEE ELEVATIONS-		
203	NEW BOOKS	CPT-1/CPT-2/CPT-3	RB-1	PNT-	PNT-	PNT-	PNT-	EXP/WD			
204	COPY/PRINT	CPT-3	RB-1	PNT-	PNT-	PNT-	PNT-	ACT-1			
205	POP MATERIALS	CPT-1/CPT-2/CPT-3	RB-1	PNT-	PNT-	PNT-	PNT-	EXP/WD			
206A	STUDY	CPT-1	RB-1	PNT-	PNT-	PNT-	PNT-	ACT-1			
206B	STUDY	CPT-1	RB-1	PNT-	PNT-	PNT-	PNT-	ACT-1			
206C	STUDY	CPT-1	RB-1	PNT-	PNT-	PNT-	PNT-	ACT-1			
207	ADULT	CPT-1/CPT-2/CPT-3	RB-1	PNT-	PNT-	PNT-	PNT-	EXP/WD			
208	COMPUTER STATIONS	CPT-3	RB-1	PNT-	PNT-	PNT-	PNT-	ACT-1			
209	READING ROOM	LVT-1	RB-1	PNT-	PNT-	PNT-	PNT-	ACT-1/GYP			
210	STORE	LVT-1	RB-1	PNT-	PNT-	PNT-	PNT-	ACT-1			
210A	STORAGE	LVT-1	RB-1	PNT-	PNT-	PNT-	PNT-	ACT-1			
211	TEENS/YOUNG ADULT	CPT-1/CPT-2/CPT-3	RB-1	PNT-	PNT-	PNT-	PNT-	ACT-1/GYP			
212	IRONDALE HISTORY	LVT-1	RB-1	PNT-	PNT-	PNT-	PNT-	ACT-1			
212A	STORAGE	LVT-1	RB-1	PNT-	PNT-	PNT-	PNT-	ACT-1			
213	CHILDRENS	CPT-1/CPT-2/CPT-3	RB-1	PNT-	PNT-	PNT-	PNT-	EXP/WD			
214	FAMILY TLT	PT-1	PT-1	VWC-5	VWC-5	VWC-5	VWC-5	ACT-1			
216	MULTIPURPOSE	LVT-2	RB-1	PNT-	PNT-	PNT-	PNT-	ACT-1			
216A	STORAGE	LVT-2	RB-1	PNT-	PNT-	PNT-	PNT-	ACT-1			
218	CHILDRENS	CPT-1/CPT-2/CPT-3	RB-1	PNT-	PNT-	PNT-	PNT-	ACP-2	SEE REFLECTED CEILING PLAN		







BASIS (DF DESIGN: FINISH S		ND	1	1
TAG	ITEM	LOCATION	MANUFACTURER	DESCRIPTION & COMMENTS	ATTIC STOCK
CPT-1	CARPET TILE	SEE PLANS AND SCHEDULES	INTERFACE	STYLE: VELVET BARK #141700AK00 COLOR: POPLAR #106127 INSTALLATION METHOD: SEE INSTALLATION DIAGRAM TILE SIZE: 25CM X 1M	5% OF INSTALLED AMOUNT
CPT-2	CARPET TILE	SEE PLANS AND SCHEDULED	INTERFACE	STYLE: UPROOTED #141710AK00 COLOR: POPLAR #106135 INSTALLATION METHOD: SEE INSTALLATION DIAGRAM TILE SIZE: 25CM X 1M	5% OF INSTALLED AMOUNT
CPT-3	CARPET TILE	SEE PLANS AND SCHEDULED	INTERFACE	STYLE: DEEPLY UPROOTED #141720AK00 COLOR: POPLAR FERN #106143 INSTALLATION METHOD: SEE INSTALLATION DIAGRAM TILE SIZE: 25CM X 1M	5% OF INSTALLED AMOUNT
CPT-4	CARPET TILE	ENTRY	MILLIKEN	STYLE: CUT / CROSS #CSC118 COLOR: #119 DARK GREY INSTALLATION METHOD: ASHLAR TILE SIZE: 50CM X 50CM	5% OF INSTALLED AMOUNT
PT-1	PORCELAIN TILE	RESTROOM FLOORS	DAL TILE	STYLE: DIPLOMACY COLOR: LIGHT GREY #DP01 INSTALLATION METHOD: RUNNING BOND TILE SIZE: 12" X 24" GROUT: LATICRETE # 78 STERLING SILVER	5% OF INSTALLED AMOUNT
LVT-1	LUXURY VINYL TILE	SEE PLANS AND SCHEDULES	INTERFACE	STYLE: NORTHERN GRAIN #A026 COLOR: DARK WASH #A02607 INSTALLATION METHOD: HERRINGBONE TILE SIZE: 25CM X 1M	5% OF INSTALLED AMOUNT
LVT-2	LUXURY VINYL TILE	SEE PLANS AND SCHEDULES	INTERFACE	STYLE: LEVEL SET #A003 COLOR: WARM POLISHED CEMENT #A00303 INSTALLATION METHOD: MONOLITHIC TILE SIZE: 50CM X 50CM	5% OF INSTALLED AMOUNT
LVT-3	LUXURY VINYL TILE	MEETING #102	INTERFACE	STYLE: STUDIO SET #A007 COLOR: A00705 TITANIUM INSTALLATION METHOD: STAGGER; SEE INSTALLATION PLAN TILE SIZE: 25CM X 1M	5% OF INSTALLED AMOUNT
LVT-4	LUXURY VINYL TILE	MEETING #102	INTERFACE	STYLE: STUDIO SET #A007 COLOR: A00713 SLATE INSTALLATION METHOD: STAGGER; SEE INSTALLATION PLAN TILE SIZE: 25CM X 1M	5% OF INSTALLED AMOUNT
LVT-5	LUXURY VINYL TILE	MEETING #102	INTERFACE	STYLE: STUDIO SET #A007 COLOR: A00726 PEBBLE INSTALLATION METHOD: STAGGER; SEE INSTALLATION PLAN TILE SIZE: 25CM X 1M	5% OF INSTALLED AMOUNT
RF-1	RUBBER FLOORING	BEHIND CIRCULATION DESK	NORA	STYLE: NORA PLAN SENTICA ARTILE 2701 COLOR: SUNDAY PAPER #6521 INSTALLATION METHOD: ASHLAR TILE SIZE: 610MM X 610MM X 3.0MM	5% OF INSTALLED AMOUNT
SC	SEALED CONCRETE				
WALL			Ī		
PNT-1	GENERAL WALL PAINT	SEE PLANS AND SCHEDULE	SHERWIN WILLIAMS	FINISH: EGGSHELL; 100% ACRYLIC LATEX	1 GALLON. INDICATE STORE LOCATION AND COLOR FORMULA ON CAN.
PNT-3	WET AREA PAINT	SEE PLANS AND SCHEDULE	SHERWIN WILLIAMS	COLOR: TO BE DETERMINED EPOXY BASED PAINT; EGGSHELL FINISH	1 GALLON. INDICATE STORE LOCATION AND COLOR FORMULA ON CAN.
CT-1	WALL TILE (CERAMIC)	SEE PLANS AND SCHEDULE	TILE BAR	STYLE: ARTBLOCK / STACY GARCIA COLOR: GRIGIO / GLOSSY INSTALLATION METHOD: VERTICAL STACK BOND TILE SIZE: 4" X 16" GROUT: LATICRETE TO BE DETERMINED	5% OF INSTALLED AMOUNT
CT-2	WALL TILE (CERAMIC)	SEE PLANS AND SCHEDULE	TILE BAR	STYLE: ARTBLOCK / STACY GARCIA COLOR: BLANCO / GLOSSY INSTALLATION METHOD: VERTICAL STACK BOND TILE SIZE: 4" X 16" GROUT: LATICRETE TO BE DETERMINED	5% OF INSTALLED AMOUNT
CT-3	WALL TILE (CERAMIC)	BEHIND EWC OUTSIDE ROOM 214	TILE BAR	COLOR: DENIM BLUE / GLOSSY INSTALLATION METHOD: VERTICAL STACK BOND TILE SIZE: 4" X 16" GROUT: LATICRETE TO BE DETERMINED	5% OF INSTALLED AMOUNT
CT-4	WALL TILE (CERAMIC)	BREAK 112	DAL TILE	COLOR: BISCUIT MATTE FINISH INSTALLATION METHOD: HORIZONTAL STACK BOND TILE SIZE: 4" X 12" GROUT: LATICRETE TO BE DETERMINED STYLE: TRADITIONAL VINYL TYPE 1	5% OF INSTALLED AMOUNT
VWC-1	VINYL WALLCOVERING	VENDING 101	OLIVIA & POPPY	FINISH: MATTE PATTERN: COLLIDE-O-SCOPE COLOR: FALL WIDTH: 25"	5% OF INSTALLED AMOUNT
VWC-2	VINYL WALLCOVERING	CONFERENCE 103	MOMENTUM TEXTILES	PRODUCT #: LLN-KL-05 WIDTH: 52"	5% OF INSTALLED AMOUNT
VWC-3	VINYL WALLCOVERING	MEETING 102 CORRIDOR C1-1	MOMENTUM TEXTILES	NAME: WALLCOVERING PARALLEL WC PRODUCT #: A195-537 WIDTH: 52"	5% OF INSTALLED AMOUNT
VWC-4	VINYL WALLCOVERING	RESTROOMS 202A/202B	MDC WALLCOVERING	STYLE: DCG1000 COLOR: SERENA ASH WIDTH: 52"	5% OF INSTALLED AMOUNT
VWC-5	VINYL WALLCOVERING	FAMILY TLT 214	THE NEW DOMETICS	COLLECTION: ARTIST SERIES STYLE: FOREST PAPER.01 CUSTOM SCALE	5% OF INSTALLED AMOUNT
WD-1	WOOD PANELING	ENTRY 100 ACROSS FROM CIRC DESK	PLYBOO	PATTERN: LINEAR LINE COLLECTION STYLE: #BP-V4896A/LL7NB	N/A
AWP-1	ACOUSTICAL WALL PANELS	ACROSS FROM CIRC DESK	MOMENTUM	COLLECTION: PIN DROP PATTERN: CROSSCUT COLOR: IRON	N/A
FRP-1	STANDARD FIBERGLASS REINFORCED PLASTIC PANELS	JANITOR #105	MARLITE	COLLECTION: PEBBLED FRP COLOR: #P100 WHITE	

1 FINISH LEGE A4.11 NTS

TAG	ITEM	LOCATION	MANUFACTURER	DESCRIPTION & COMMENTS
BASE				
EXIST RB-1	EXISTING BASE RESILIENT BASE	N/A SEE PLANS AND SCHEDULE	ROPPE	PROTECT DURING CONSTRUCTION STYLE: PINNACLE STANDARD TOE COLOR: TO BE DETERMINED 4" HIGH X COIL INSTALL IN ROLLS, NOT 6'-0" PIECES MITER INSIDE AND OUTSIDE CORNER
WD-1	STAINED WOOD BASE	SEE PLANS AND SCHEDULE		STYLE: SQUARE PROFILE 1X12 COLOR: TO MATCH DESIGNER'S CON ⁻ HEIGHT: 12"
		TRANSITION STRIP - NO	DTE: FLOOR FINISH CHAN	GE
CEILING				
EXIST	EXISTING CEILING	N/A		PROTECT DURING CONSTRUCTION
ACT-1	ACOUSTICAL CEILING GRID AND TILE	SEE RCP AND SCHEDULE	ARMSTRONG	STYLE: 1911 ULTIMA BEVELED TEGUL SIZE: 24" X 24" X 3/4" GRID: 15/16" PRELUDE EXPOSED TEE CO
ACT-1	ACOUSTICAL CEILING GRID AND TILE	SEE RCP AND SCHEDULE	ARMSTRONG	STYLE: 673 KITCHEN ZONE SQUARE I SIZE: 24" X 24" X $\frac{5}{8}$ " GRID: $\frac{15}{16}$ " PRELUDE EXPOSED TEE CO
ACP-1	ACOUSTICAL CEILING PANELS	SEE RCP AND SCHEDULE	SEE RCP	
GYP-1	PAINTED GYP BOARD	SEE RCP AND SCHEDULE		PAINTED GYP BOARD: PAINT CEILING
	FOUS			
PLAM-1	PLASTIC LAMINATE	KITCHEN 109 BREAK 112	WILSONART	PATTERN: SHADOW #D96-60 FINISH: MATTE
PLAM-2	PLASTIC LAMINATE	COPY 204 COUNTER	WILSONART	PATTERN: FASHION GREY #D381-60 FINISH: MATTE
PLAM-3	PLASTIC LAMINATE	OPEN WORKROOM 107 COPY 204 CABINET FACE	WILSONART	PATTERN: MUSHROOM #5013K FINISH: MATTE
PLAM-4	PLASTIC LAMINATE	VENDING 101 MULTI-PURPOSE 216 CABINET FACE	ARBORTITE	PATTERN: SILVER TWILL #P381 CS FINISH: MATTE
PLAM-5	PLASTIC LAMINATE	CIRC DESK CABINETS	ARBORTITE	PATTERN: NATURAL CROSSFIRE PEA
SS-1	QUARTZ	RESTROOM 202A/202B COUNTERS	CAMBRIA	PATTERN: BRITTANNICA THICKNESS: 3CM
SS-2	QUARTZ	VENDING 101 OPEN WORKROOM 107 (WET COUNTER) MULTI-PURPOSE 216	CORIAN	PATTERN: COARSE PEPPERED LEATI THICKNESS: 3CM
SS-3	SOLID SURFACE	CIRC DESK WORKSURFACE	CORIAN	PATTERN: ASH CONCRETE THICKNESS: 3CM
SS-4	QUARTZ	KITCHEN 109 BREAK 112	CORIAN	PATTERN: IRON STONE THICKNESS: 3CM
SS-5	SOLID SURFACE	CIRCULATION DESK ACCENT PANEL	CORIAN	STYLE: ENDURA COLOR: SMOKY MARBLE PANEL SIZE: 63" X 126" THICKNESS: 12MM FINISH: MATTE/SATIN
SS-6	SOLID SURFACE	OPEN WORKROOM 107 WET COUNTER	WILSONART	GREY BELOLA #9128CM THICKNESS: 3CM
TS-1	TRANSITION STRIP	SAME HEIGHT TRANSITION: PORCELAIN TILE TO LVT SEE FINISH NOTE #2	SCHLUTER	STYLE: SCHIENE COLOR: ALUMINUM
TS-2	TRANSITION STRIP	BETWEEN LVT AND CARPET	SCHLUTER	STYLE: RENO-T FINISH: SATIN ALUMINUM THICKNESS: 14 MM
TS-3	TRANSITION STRIP	BETWEEN LVT AND SEALED CONCRETE	EQUAL TO ROPPE	STYLE: 174 COLOR: TO BE DETERMINED
RS-1	MANUAL ROLLER SHADES	SEE PLANS	DRAPER, INC	DUAL LAYER ROLLER SHADES INSIDE MOUNT BASE LAYER: SHEERWEAVE STYLE S OUTSIDE LAYER: SHEERWEAVE STYL COLOR: P14 OYSTER/PERAL GRAY

	ATTIC STOCK
	N/A
	5% OVERAGE OR 20 LINEAL FEET MINIMUM; 1 BOX OF CORNERS
RS; NO PRE-FAB PIECES	
NTROL SAMPLE	N/A
	N/A
JLAR	
OLOR: WHITE ALUMINUM (WA)	3% OF INSTALLED AMOUNT
LAY IN	3% OF INSTALLED AMOUNT
OLOR: WHITE ALUMINUM (WA)	
IG WHITE	
AR #VV454 EV	
THER	
SW7500 - COLOR: 7500 R13 ICE ′LE SW2600 10% OPEN	





CORNER GUARD SEE FINISH SCHEDULE

FINISH PLAN GENERAL NOTES:

- 1. SHADED AREAS ARE CONSIDERED NOT IN SCOPE. IN REFERRING TO THE FLOOR PLAN AND ROOM FINISH SCHEDULE, CLARIFICATION OF PROJECT NORTH IS AS INDICATED ON DRAWINGS.
- 3. CONTRACTOR IS TO PROVIDE "ATTIC/ SURPLUS" STOCK AS NOTED IN THE SPECIFICATIONS. SURPLUS STOCK SHALL BE PROVIDED ON EACH DIFFERENT PRODUCT MANUFACTURER, STYLE, COLOR AND FINISH SPECIFIED.
- 4. CONTRACTOR SHALL PROVIDE (1) SET OF PHYSICAL SAMPLE SUBMITTALS IN ADDITION TO DIGITAL SAMPLES TO DESIGNER FOR APPROVAL PRIOR TO FABRICATING OR PURCHASING MATERIALS. ALL SUBMITTALS SHALL BE CLEARLY MARKED WITH MANUFACTURER, STYLE, COLOR AND CODE.
- FLOORING: 1. WHERE NEW FLOORCOVERING AND/OR BASE IS SPECIFIED, THE SAME FLOORCOVERING AND/OR BASE SHALL EXTEND INTO ANY CLOSETS, STORAGE AREAS, UNDER MILLWORK/CASEWORK, ETC. ADJACENT TO THAT SPACE UNLESS OTHERWISE NOTED.
- 2. LEVELING COMPOUNDS, AS RECOMMENDED BY THE FLOORING MANUFACTURER, SHALL BE USED PRIOR TO INSTALLATION TO INSURE A LEVEL FLOOR. PROVIDE WALL AND/OR FLOOR PATCH WHERE EXISTING CONSTRUCTION IS DEMO'D. SURFACE TO BE SMOOTH AND LEVEL WITH ADJACENT SURFACES. PROVIDE FLOOR PATCH REPAIRS WHERE LARGE DIFFERENCES BETWEEN THE EXISTING FLOOR FINISHES. FINISH TO MATCH ADJACENT FINISH. ANY HIGH SPOTS ON FLOORING THAT REMAIN AFTER DEMOLITION TO BE GROUND DOWN TO THE LEVEL OF THE ADJACENT FLOOR FINISH. INSURE FLOOR IS PREPPED SO ANY DEFECTS OR BLEMISHES DO NOT TELESCOPE THROUGH NEW FLOOR COVERING.
- 3. CARPET INSTALLATION SHALL BE TAC-TILE OR SIMILAR METHOD, USING MANUFACTURER'S RECOMMENDED ADHESIVE & INSTALLATION INSTRUCTIONS.
- 4. AT DOORWAYS, CENTER SEAMS UNDER THE DOOR IN THE CLOSED POSITION. BEVEL ADJOINING BORDER EDGES AT SEAMS WITH HAND SHEARS. LEVEL ADJOINING BORDER EDGES. DO NOT BRIDGE BUILDING EXPANSION JOINTS WITH CARPET. PROVIDE TS (TRANSITION STRIPS) AS SPECIFIED WHEN FLOORING MATERIAL CHANGES. LOCATE AT CENTER OF DOOR WHEN IN CLOSED POSITION.
- 5. CUT AND FIT CARPET TO BUTT TIGHTLY TO VERTICAL SURFACES, PERMANENT FIXTURES, AND BUILT-IN FURNITURE INCLUDING CABINETS, PIPES, OUTLETS, EDGINGS, THRESHOLDS & NOSINGS. BIND OR SEAL EDGES AS RECOMMENDED BY CARPET MANUFACTURER.
- 6. EXTEND CARPET INTO TOE SPACES, DOOR REVEALS, CLOSETS, OPEN BOTTOMED OBSTRUCTIONS, REMOVABLE FLANGES, ALCOVES & SIMILAR OPENINGS.
- 7. DO NOT INSTALL CUT CARPET PIECES SMALLER THAN 16 SQUARE INCHES OR CUT CARPET STRIPS LESS THAN 2" WIDE.

PAINTING:

- 1. PRIOR TO THE APPLICATION OF PAINT, THE CONTRACTOR SHALL REPAIR NEW OR EXISTING SURFACES BY PATCHING, SMOOTHING AND SANDING AS NEEDED TO ACHIEVE A SURFACE ACCEPTABLE FOR AS NEEDED TO ACHIEVE A SURFACE ACCEPTABLE FOR THE APPLICATION OF NEW FINISH. REMOVE ALL SCREWS, FASTENERS, HOOKS ADHESIVES, AND UNUSED WIRE MOLD FROM WALLS, DOORS, AND DOOR FRAMES.PREPARE DOOR FRAMES OR METAL SURFACES BY SANDING CHIPS/BURRS, FILLING DENTS WITH BONDO STANDARD SMOOTH PREPPED/PRIMED BEFORE PAINTING AND CAULKING CRACKS AT CORNERS AS REQUIRED.
- 2. MISCELLANEOUS METAL (RETURN AND AIR SUPPLY GRILLES, EXPANSION JOINTS, ACCESS PANELS, ETC.) LOCATED ON WALL SURFACES SHALL BE PAINTED TO MATCH ADJACENT WALL COLOR.
- 3. PAINT SOFFITS TO MATCH ADJACENT WALL COLOR UNLESS OTHERWISE SPECIFIED.
- 4. PAINT ALL EXISTING DOORS ON "PROJECT SIDE" OF SEPARATION OF NIC / PROJECT BARRIERS TO PER FINISH SCHEDULE. DO NOT PAINT CLEAR ANNODIZED STOREFRONT FRAMING.
- 5. TOUCH UP DOOR FRAMES AS REQUIRED AFTER FLOORING INSTALLATION.
- RESILIENT BASE: 1. ALL COVED TOE RESILIENT BASE IS TO BE AS INDICATED IN THE FINISH SCHEDULE, COVED AND FROM CONTINUOUS ROLLS. 6'-0" LENGTHS ARE NOT PERMITTED. INSIDE AND OUTSIDE CORNERS SHALL BE FORMED USING PREFORMED CORNERS. CUTS MIDWAY DOWN A WALL WILL NOT BE PERMITTED.
- 2. APPLY TO BASE OF WALLS, COLUMNS, PILASTERS, CASEWORK & CABINETS IN TOE SPACES & OTHER PERMANENT FIXTURES IN ROOMS & AREAS WHERE BASE IS REQUIRED.
- 3. INSTALL BASE IN LENGTHS AS LONG AS PRACTICAL WITHOUT GAPS AT SEAMS & WITH TOP OF ADJACENT PIECES ALIGNED.
- 4. TIGHTLY ADHERE TO SUBSTRATES THROUGHOUT LENGTH OF EACH PIECE, WITH BASE IN CONTINUOUS CONTACT WITH HORIZONTAL & VERTICAL SUBSTRATES. DO NOT STRETCH MATERIAL DURING INSTALLATION.
- ON IRREGULAR SURFACES, SUCH AS CONCRETE OR MASONRY, FILL VOIDS ALONG TOP EDGE WITH MANUFACTURER'S RECOMMENDED ADHESIVE FILLER MATERIAL.
- MISCELLANEOUS: 1. CAULK BETWEEN MILLWORK AND WALL, COLOR TO MATCH ADJACENT WALL COLOR. CAULK JOINTS AT COUNTERTOP AND BACKSPLASH, COLOR TO MATCH COUNTERTOP PLASTIC LAMINATE.
- 2. CAULK ALL DOOR FRAMES TO RESILIENT FLOORING; CAULK COLOR TO MATCH DOOR FRAME PAINT.
- 3. PAINT ALL EXPOSED FIRE ALARM CONDUIT; FIRE PROTECTION, MECHANICAL AND PLUMPING PIPING, AND MECHANICAL DUCTWORK TO MATCH EXISTING ADJACENT CEILING.
- 4. ALL FIRE ALARM JUNCTION BOXES TO BE PAINTED RED.

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INTERIOR DESIG

- FLOORING
- →P-3 ACCENT W NOTED OT
- LVT-1 CPT-1 FLOOR MA APPROPRI SEE FINISH
- CG CORNER G



SHEET NUMBER A4.1″

ABBREVIATIONS

AL.	ALUMINUM
AO	AUTOMATIC SWING OPERATOR
CR	CARD READER
DPS	DOOR POSITION SWITCH
ΞX	EXTERIOR
НM	HOLLOW METAL
Г	INTERIOR
(P	KEYPAD
ЛНD	MECHANICAL HOLD OPEN
РВ	PUSH BUTTON RELEASE
	DURLEDUTTON OF ACCESCAL

PBC PUSH BUTTON-CLASSROOM

PH PANIC HARDWARE ΤZ TIME ZONE CONTROLLED ENTRY

WD SOLID CORE WOOD DOOR

DOOR SCHEDULE COMMENTS:

- GC TO COORDINATE POWER REQUIREMENTS 1.
- FOR CARD READERS PROVIDE (2) TWO WIKK BOLLARDS FOR ADA/SENSOR 2.
- CONTROL FOR AUTOMATIC SWING OPERATOR.
- PROVIDE SWEEPS ON ALL EXTERIOR DOORS З.

										DC	OR SCHEDULE				
	Door Di	mensions			Door		(st								
DOOR #	WIDTH	HEIGHT	THICKNESS	ТҮРЕ	MATERIAL	FRAME	FIRE RATING (mir	WEATHERPROOF	HDW SET	THRESHOLD	ROOM NAME	SIGNAGE NAME	SIGNAGE NO.	COMMENTS	
100	6' - 0"	7' - 0"	1 3/4"	N	AL	AL		Х	1.0	EX	ENTRY	-	-	TZ, AO, DPS	ļ
100A	6' - 0"	7' - 0"	1 3/4"	N	AL	AL		X	1.0	EX	ENTRY	-	-	TZ, AO, DPS	ľ
100B	6' - 0"	7' - 0"	1 3/4"	В	WD	AL			5.0		ENTRY CORRIDOR	-	-	AO	1
101	3' - 0"	7' - 0"	1 3/4"	B1	WD	AL			11.0		VENDING	VENDING	4		
102	6' - 0"	7' - 0"	1 3/4"	В	WD	HM			7.0		MEETING ROOM	MEETING ROOM	1,11		
102A	3' - 0"	7' - 0"	1 3/4"	0	HM	HM		X	4.0	EX	MEETING ROOM	NO RE-ENTRY	5	DPS, No Re-entry	
103	3' - 0"	7' - 0"	1 3/4"	B1	WD	AL			8.0		CONFERENCE	CONFERENCE	2	CR	
104	3' - 0"	7' - 0"	1 3/4"	B1	WD	HM			14.0		SHARED WORK AREA	SHARED WORK AREA	4		
105	3' - 0"	7' - 0"	1 3/4"	F1	WD	HM			19.0		JAN	JANITOR, APO	3, 5	KP	
106	3' - 0"	7' - 0"	1 3/4"	B1	WD	HM			20.0		ASST DIR. OFC	OFFICE	4		
107	3' - 0"	7' - 0"	1 3/4"	F1	WD	HM			17.0		OPEN WORK ROOM	WORK ROOM, STAFF ONLY	4, 5		1
108	3' - 0"	7' - 0"	1 3/4"	B1	WD	HM			20.0		OFFICE/STOR.	OFFICE	4		I
109	3' - 0"	7' - 0"	1 3/4"	B1	WD	HM			14.0		SERVING KITCHEN	KITCHEN	4	KP	(
109A	3' - 0"	7' - 0"	1 3/4"	F1	WD	HM			14.0		SERVING KITCHEN	KITCHEN	4		(
110	3' - 0"	7' - 0"	1 3/4"	F1	WD	HM			21.0		TLT	RESTROOM	9		
111	3' - 0"	7' - 0"	1 3/4"	F1	WD	HM			16.0		ELEC	ELECTRICAL, APO	3, 5		l
112	3' - 0"	7' - 0"	1 3/4"	B1	WD	HM			14.0		BREAKROOM	BREAKROOM	4		1
113	6' - 0"	7' - 0"	1 3/4"	F	WD	HM			15.0		A/V &STORAGE	STORAGE, APO	4, 5		1
114	3' - 0"	7' - 0"	1 3/4"	B1	WD	HM			20.0		DIR. OFFICE	OFFICE	4		I
115	3' - 0"	7' - 0"	1 3/4"	F1	WD	HM			18.0		MECH	UTILITY	3	KP	,
202A	3' - 0"	7' - 0"	1 3/4"	F1	WD	HM			22.0		W TLT	WOMENS	8		
202B	3' - 0"	7' - 0"	1 3/4"	F1	WD	HM			22.0		M TLT	MENS	7		
206A	3' - 0"	7' - 0"	1 3/4"	B1	WD	AL			8.0		STUDY	STUDY ROOM A	4	CR	
206B	3' - 0"	7' - 0"	1 3/4"	B1	WD	AL			8.0		STUDY	STUDY ROOM B	4	CR	
206C	3' - 0"	7' - 0"	1 3/4"	B1	WD	AL			8.0		STUDY	STUDY ROOM C	4	CR	
209	6' - 0"	7' - 0"	1 3/4"	В	WD	AL			6.0		READING ROOM	READING ROOM	4		
210	3' - 0"	7' - 0"	1 3/4"	B1	WD	AL			12.0		STORE	STORE	1	KP	
210A	3' - 0"	7' - 0"	1 3/4"	F1	WD	HM			18.0		STORAGE	STORAGE, STAFF ONLY	3, 5	KP	(
212	3' - 0"	7' - 0"	1 3/4"	B1	WD	AL			8.0		IRONDALE HISTORY/ISO	IRONDALE HISTORY	4	CR	i
212A	3' - 0"	7' - 0"	1 3/4"	F1	WD	HM		<u> </u>	18.0		STORAGE	STORAGE, STAFF ONLY	3, 5	KP	1
214	3' - 0"	7' - 0"	1 3/4"	F1	WD	HM			21.0		FAM TLT/LACTATION	RESTROOM / MOTHER'S ROOM	6, 9		I
216	3' - 0"	7' - 0"	1 3/4"	B1	WD	AL		1	9.0		MULTI-PURPOSE	MULTI-PURPOSE	4	CR	ť
216A	3' - 0"	7' - 0"	1 3/4"	F1	WD	HM		<u> </u>	16.0		STOR	STORAGE	4		(
C1-1	6' - 0"	7' - 0"	1 3/4"	N	AL	AL		X	2.0	EX	ENTRY CORRIDOR	-	-	TZ, DPS	ſ
C1-3	3' - 0"	7' - 0"	1 3/4"	F1	WD	HM		<u> </u>	10.0		CORRIDOR	STAFF ONLY	5	CR	
C1-3A	3' - 0"	7' - 0"	1 3/4"	0	HM	HM		X	3.0	EX	CORRIDOR	-	-	CR	
C1 I	6' - 0"	7' - 0"	1 3/4"	N	AI	AI		X	20	FX		_		TZ DPS	-







MTL. STUD WALL - SEE

GYP. BD. EA SIDE - SEE

WALL TYPE SECTION

FRAMING AS REQ'D

BOTH SIDES - TYP.

SEALANT, TYP. -

FOR LAYERS AND TYPE

PLAN FOR TYPES

- MTL. STUD

Ϋ́,

7 JAMB (H.M. FRAME) A4.22 1 1/2" = 1'-0"



- SEALANT, TYP.

3 ALUM. DOOR JAMB DETAIL @ STONE WALL A4.22 1 1/2" = 1'-0"



4 ALUM. DOOR HEAD DETAIL @ STONE WALL A4.22 1 1/2" = 1'-0"

— FRAME AS SCHED. - DOOR AS SCHED.





1 JAMB (H.M. FRAME) A4.22 1 1/2" = 1'-0"

A4.22









































	METAL STUD WALL	TYPES - TYPE "S"
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WALL TYPE DESIGNATION	WALL DETAIL	THICKNESS	DESCRIPTION
S3A UL STC U420 50-54	07 21 00.D 09 21 16.A 05 40 00.M3	4-1/4"	1 LAYER OF 5/8" HIGH IMPACT GYPSUM BOARD, SCREW ATTACHED TO ONE SIDE OF 3-5/8" METAL STUD FRAMING AT 16" O.C. TYPICAL AT CHASE WALLS OR WHERE FINISH REQUIRED ONLY ON ONE FACE. SOUND ATTENUATION BLANKETS ONLY REQUIRED ON ONE SIDE OF CHASE WALL CONSTRUCTION
S3AA UL STC - 45-49	09 21 16.A 07 21 00.D 05 40 00.M3 09 21 16.A	4-7/8"	1 LAYER OF 5/8" HIGH IMPACT GYPSUM BOARD, SCREW ATTACHED TO BOTH SIDES OF 3-5/8" METAL STUD FRAMING AT 16" O.C SOUND ATTENUATION BLANKETS BETWEEN CLASSROOMS, OFFICES, ADMINISTRATION SUITE, AND RESTROOMS. (STC RATING WITH SAB) PROVIDE 5/8" MOISTURE RESISTANT GYP BD IN ALL RESTROOM WALLS.
S3AT	07 21 00.D 09 21 16.A 09 30 13 09 30 13 05 40 00.M3	5-1/8"	1 LAYER OF 5/8" HIGH IMPACT GYPSUM BOARD, SCREW ATTACHED TO BOTH SIDES OF 3-5/8" METAL STUD FRAMING AT 16" O.C SOUND ATTENUATION BLANKETS BETWEEN CLASSROOMS, OFFICES, ADMINISTRATION SUITE, AND RESTROOMS. PROVIDE 5/8" MOISTURE RESISTANT GYP BD IN ALL RESTROOM WALLS. PROVIDE 5/8" TILE BACKER BOARD AS SPECIFIED IN LIEU OF GYP BD BEHIND WALL TILE, TYPICAL.
S3TT UL STC 	07 21 00.D 09 30 13.A 09 30 13.A 09 30 13 05 40 00.M3	5-1/8"	1 LAYER OF 5/8" HIGH IMPACT GYPSUM BOARD, SCREW ATTACHED TO BOTH SIDES OF 3-5/8" METAL STUD FRAMING AT 16" O.C SOUND ATTENUATION BLANKETS BETWEEN CLASSROOMS, OFFICES, ADMINISTRATION SUITE, AND RESTROOMS. PROVIDE 5/8" MOISTURE RESISTANT GYP BD IN ALL RESTROOM WALLS. PROVIDE 5/8" TILE BACKER BOARD AS SPECIFIED IN LIEU OF GYP BD BEHIND WALL TILE, TYPICAL.
S6AA UL STC	09 21 16.A	7-1/4"	1 LAYER OF 5/8" HIGH IMPACT GYPSUM BOARD, SCREW ATTACHED TO BOTH SIDES OF 6" METAL STUD FRAMING AT 16" O.C SOUND ATTENUATION BLANKETS BETWEEN CLASSROOMS, OFFICES, ADMINISTRATION SUITE, AND RESTROOMS. PROVIDE 5/8" MOISTURE RESISTANT GYP BD IN ALL RESTROOM WALLS.
S6AT	09 21 16.A 09 21 16.A 09 30 13 09 30 13.A	7-1/2"	1 LAYER OF 5/8" HIGH IMPACT GYPSUM BOARD, SCREW ATTACHED TO BOTH SIDES OF 6" METAL STUD FRAMING AT 16" O.C SOUND ATTENUATION BLANKETS BETWEEN CLASSROOMS, OFFICES, ADMINISTRATION SUITE, AND RESTROOMS. PROVIDE 5/8" MOISTURE RESISTANT GYP BD IN ALL RESTROOM WALLS. PROVIDE 5/8" TILE BACKER BOARD AS SPECIFIED IN LIEU OF GYP BD BEHIND WALL TILE, TYPICAL.

PARTITION TYPE GENERAL NOTES

- ALL WALL TYPES ARE DRAWN @ 1 1/2" = 1'-0" SCALE. FINISHES SHOWN ON WALL TYPES ARE NOT NECESSARILY THE FINISHES REQUIRED AT INDICATED LOCATIONS ON PLANS. THESE DETAILS ARE FOR THE BASIC CONSTRUCTION ONLY. CONTRACTOR SHALL USE FINISHES AS INDICATED ON THE FINISH SCHEDULE FOR VARIED CONDITIONS.
- ALL ONE AND TWO HOUR FIRE WALLS SHALL EXTEND TO THE UNDERSIDE OF STRUCTURAL SYSTEM/ROOF DECK ABOVE AND ANCHORED AS INDICATED. CAULK AND SEAL PROPERLY AROUND ALL DUCTS, PIPES, ETC. PENETRATING WALLS TO MAINTAIN INTEGRITY OF INDICATED RATING.
- EXIT ENCLOSURES AND FIRE WALLS SHALL BE EFFECTIVELY 4 AND PERMANENTLY IDENTIFIED WITH STENCILING IN TWO INCH LETTERS APPROVED BY THE ARCHITECT. IDENTIFICATION SHALL BE ABOVE THE FINISHED CIELING IN SPACES VISIBLE TO THE EYE. SUGGESTED WORDING:
- "[2 HR. FIRE WALL] or [1 HR. FIRE WALL] " (CHOOSE ONE) -"PROTECT ALL OPENINGS". SPACING AT 6'-0" O.C. OR AS DIRECTED BY ARCHITECT.
- REFER TO STRUCTURAL DRAWINGS TO CONFIRM BEARING 5 WALL LOCATIONS AND CONDITIONS.









CORNER GUARD DETAIL

PARTITION TYPES LEGEND

PARTITION TYPE SYMBOL

CORE MATERIAL - SIZE APPLIED LAYERS (SIDE 1) APPLIED LAYERS (SIDE 2)

- M8AA.1

CONCRETE MASONRY (CMU)

- STUD (METAL) STAGGERED STUD (METAL) STUD (WOOD) DIRECT APPLIED (NO CORE)
- 7/8" FURRING CHANNEL
- 1 5/8" STUD 2 1/2" STUD
- 3 5/8" STUD
- 4" CONCRETE, MASONRY OR STUD (WOOD OR METAL) 6" CONCRETE, MASONRY OR STUD (WOOD OR METAL)
- 8" CONCRETE, MASONRY OR STUD
- 10" CONCRETE OR MASONRY 12 12" CONCRETE OR MASONRY

<u>APPLIED LAYERS:</u>

1 LAYER 5/8" DRYWALL

- 2 LAYERS 5/8" DRYWALL
- 2 LAYERS 5/8" DRYWALL W/ CONTINUOUS HORZ. RESILIENT CHANNELS @ 16" O.C. 1 LAYER 5/8" DRYWALL W/ CONTINUOUS HORZ. FURRING CHANNELS @ 16" O.C. 1 LAYER 1" SHAFT LINER
- CERAMIC TILE ON 5/8" TILE BACKER BOARD OR DIRECT APPLIED TO MASONRY

MODIFYING CONDITIONS: 1 HOUR FIRE RATING

2 HOUR FIRE RATING

- 3 HOUR FIRE RATING
- 2 HOUR FIRE RATING & STORM SHELTER SMOKE PARTITION

COMPLETE WALL ASSEMBLY EXTENDS TO 6" ABOVE ADJOINING CEILING. ONE APPLIED LAYER EXTENDS TO UNDERSIDE OF STRUCTURE ABOVE ON ONE SIDE ONLY.

GYPSUM BOARD/TILE BACKER BOARD EXTENDS TO 6" ABOVE ADJOINING CEILING. CORE MATERIAL EXTENDS TO

UNDERSIDE OF STRUCTURE ABOVE. PARTIAL HEIGHT WALL, <u>6'-4"</u> ACOUSTIC WALL: PROVIDE 3 1/2" ACOUSTIC BATT INSULATION IN METAL STUDS. FULL HEIGHT OF WALL. PROVIDE ACOUSTIC SEALANT AT PERIMETER AND PENETRATIONS.

GENERAL NOTES:

COMPLETE WALL ASSEMBLY IS CONTINUOUS TO UNDERSIDE OF STRUCTURE ABOVE UNLESS NOTED OTHERWISE. METAL STUDS SPACED AT 16" O.C. TYPICAL UNLESS NOTED OTHERWISE. PROVIDE JOINT FIRESTOPPING AT PERIMETER AND PENETRATION FIRESTOPPING AT FIRE OR SMOKE PARTITIONS. WHERE TILE OCCURS (SEE FINISH SCHEDULE), REPLACE 1 LAYER OF 5/8" GYPSUM BOARD WITH 1 LAYER OF 5/8" TILE BACKER BOARD (MATCH FIRE RATING).

WHEN WALL DOES NOT EXTEND TO STRUCTURE, BRACE WALL TO STRUCTURE ABOVE MINIMUM 4'-0" O.C.





1 T.O STUD PARTITION @ STRUCTURE ABOVE

A5.01/ 3" = 1'-0"

CONCRETE SLAB OR METAL DECK, DEPTH AND PROFILE VARIES, RE: STRUCTURE

COMPRESSIBLE FILLER, TYP. BOTH SIDES OF WALL @ METAL DECK. OMIT IF SPRAYED ON FIREPROOFING IS PROVIDED

DEEP LEG CEILING RUNNER, CONTINUOUS

METAL STUDS CUT 1 1/2" SHORT WITH NO FASTENERS INTO CEILING RUNNER WIDTH VARIES. RE: WALL TYPES

GYPSUM WALLBOARD THICKNESS AND NUMBER OF LAYERS VARIES. RE: WALL TYPES

SHEET NUMBER

A5.0







































5 WALL DETAIL A7.23 1 1/2" = 1'-0"













3 PLAN DETAIL A7.31 1 1/2" = 1'-0"

4 PLAN DETAIL A7.31 1 1/2" = 1'-0"



5/8" GYP. BD, TYP. -







3 PLAN DETAIL A7.32 1 1/2" = 1'-0"









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NOVEMBER 16, 2023

2022-08

DATE:

A7.32







3 CLEARSTORY PLAN DETAIL A7.33 1 1/2" = 1'-0"





A7.33












15 INT. ELEV. - CIRCULATION DESK #201 A11.01 1/4" = 1'-0"











2 INT. ELEV. - RM 101 A11.01 1/4" = 1'-0"





13 SECTION A11.02 3/4" = 1'-0"

³ 4" MDF w. Plam on all Exposed Surfaces - Typ @ Cabinet Door & Exposed Sides ———		
³ / ₄ " MDF Shelf w/ Melamine (typ) on Adj Stnds		
¹ / ₂ " MDF Back w/ Melamine @ Cabinet Interior		
Melamine @ Cabinet Interior ————		
Specified Pulls; See Project Manual ————————————————————————————————————		
³ ₄" Plywd Substrate w/ PLAM @ Counter & 4"h Backsplash	់ ភ្ ភ	Ţ
Drawer Assembly: Single Extension Drawer Blum Metabox Heavy Duty w/ Full Extension Slides, Typ. —		
³ / ₄ " MDF w. Plam on all Exposed Surfaces - Typ @ Cabinet Door & Exposed Sides		
¹ / ₂ " Plywd Back		
Interior Surfaces to be Melamine	-γ·	
Concealed Hinges, Spring Loaded (typ)		
Blocking as Req'd - Typ		
PLAM Base; Scribe PLAM Base to Floor		`

9 SECTION A11.02 3/4" = 1'-0"

Schedule'd Wall Finish See Plans – 3 CM Quartz or Solid Surface Top and 4" Backsplash See Elevations for Material Spec – \bigcirc 1-Quartz or Solid Surface Apron See Elevations for Material Spec Blocking as Req'd – Undercounter Mount Sink; See Plumbing Trap Protector; See Plumbing Resilient Flooring; See Schedule

³/₄" MDF w. Plam on all Exposed Surfaces -Typ @ Cabinet Door & Exposed Sides —

 ³/₄" MDF Shelf w/ Melamine (typ) on Adj Stnds
 ¹/₂" MDF Back w/ Melamine @ Cabinet Interior
 Melamine @ Cabinet Interior

Undercounter Mount Sink & Faucet; See Plumbing ______ 3 CM Quartz Top and Backsplash See Elevations for Material Spec Provide CT-4 Tile @ Break 112 _____

Scheduled Pull; See Specs

¹/₂" Plywd Back —

³ MDF w. Plam on all Exposed
 Surfaces - Typ @ Cabinet
 Door & Exposed Sides ______
 Insulate Plumbing ______
 Concealed Hinges, Spring
 Loaded (typ) ______

Melamine @ Cabinet Interior — Blocking as Req'd - Typ _____

Integral PLAM ToeKick; Undercut as Req'd for FIr Finish



³/₄" MDF w. Plam on all Exposed Surfaces -Typ @ Cabinet Door & Exposed Sides —

$\frac{3}{4}$ " MDF Shelf w/ Melamine (typ)
¹ / ₂ " MDF Back w/ Melamine @ Cabin
Melamine @ Cabinet Interior ——
Specified Pulls; See Project Manual ——————

³/₄" Plywd Substrate w/ PLAM @ Counter & 4"h Backsplash _____

FRT Blocking as Req'd ————

PLAM Counter Supports as Req'd

Scheduled Flr & Base –



Gyp Bd Partition; See Finish Schedule for Finish —

3 CM Quartz Top and 4" Backsplash See Elevations for Material Spec _____

12" Ø Opening with Brushed Stainless Steel Trim Ring _____ Specified Pulls;

See Project Manual
¹/₂" Plywd Back ——

³" MDF w. Plam on all Exposed Surfaces - Typ @ Cabinet Door & Exposed Sides _____ Melamine @ Cabinet Interior ____ Concealed Hinges, Spring Loaded (typ) _____

Blocking as Req'd - Typ Integral PLAM ToeKick; Undercut as Req'd for Flr Finish ——









11 SECTION A11.02 3/4" = 1'-0"



Finish: Black Powder Coa

Z Clips as Req'd -

FRT Blocking as Req'd_







7 SECTION A11.02 3/4" = 1'-0"









1 SECTION A11.02 3/4" = 1'-0"





Anchor New Low Partitions to Existing Structure (typ)



Specified Pulls; See Project Manual -

Provide 2" x 12" Slot Cut Out

In Counter for Paper Disposal ³/₄" Plywd Substrate w/ PLAM @

Counter & 4"h Backsplash – ¹/₂" Plywd Back

 $\frac{3}{4}$ " MDF w. Plam on all Exposed Surfaces - Typ @ Cabinet Door & Exposed Sides _ Melamine @ Cabinet Interior Concealed Hinges, Spring Loaded (typ)

Blocking as Req'd - Typ -Integral PLAM ToeKick; Undercut as Req'd for Flr Finish -





12mm SS-5 Accent Panel - CFLAT Bracket with 1100lb Load Limit ¹/₂" Plywd Backer typ @ Location of Solid Surface Panel Drawer Assembly: Single Extension Drawer Blum Metabox Heavy Duty w/ Full Extension Slides, Typ.

- Drawer Assembly: Single Extension Drawer Blum Metabox Heavy Duty w/ Full Extension Slides, Typ.

- 3 cm Solid Surface (SS-3) on Counter

with Laminated Edge



- 3 cm Solid Surface (SS-3) on Counter with Laminated Edge Drawer Assembly: Single Extension Drawer Blum Metabox Heavy Duty w/ Full Extension Slides, Typ. CFLAT Bracket with 1100lb Load Limit ¹/₂" Plywd Backer typ @ Location of Solid Surface Panel PLAM-5 All Exposed Surfaces $\frac{3}{4}$ " MDF Shelves w/ PLAM-5 (typ) on Adj Stnds





2 SECTION A11.03 3/4" = 1'-0"

6 SECTION

A11.03 3/4" = 1'-0"



A11.03 1-1/2" = 1'-0"













8 CEILING DETAIL A12.20 1 1/2" = 1'-0"





6 CEILING DETAIL A12.20 1 1/2" = 1'-0"





ATTACH TO STRL. ABV. - 5/8" GYP. BD-FIN. AS SCHED.



- FIN. AS SCHED. 5/8" GYP. BD-FIN. AS SCHED. MTL STUD FRAMING, TYP. ATTACH TO STRL. ABV.







3 CEILING DETAIL A12.21 1 1/2" = 1'-0"



2 CEILING DETAIL A12.21 1 1/2" = 1'-0"

PERFORMED.

2. FOLLOW THE DRAWINGS CLOSELY, COORDINATE DIMENSIONS WITH ARCHITECTURAL DRAWINGS AND FIELD CONDITIONS. DO NOT SCALE MECHANICAL DRAWINGS FOR LOCATIONS OF SYSTEM COMPONENTS.

4. MAKE NO CHANGES WITHOUT THE ARCHITECT'S WRITTEN PERMISSION. IN CASE OF DOUBT, OBTAIN ARCHITECT'S DECISION BEFORE PROCEEDING WITH WORK. FAILURE TO FOLLOW THIS INSTRUCTION SHALL MAKE THE CONTRACTOR LIABLE FOR DAMAGE TO OTHER WORK AND RESPONSIBLE FOR REMOVING AND REPAIRING DEFECTIVE OR MISLOCATED WORK IN PROPER MANNER.

5. DO NOT SCALE DRAWINGS TO LOCATE DIFFUSERS AND EQUIPMENT. COORDINATE WITH NEW AND EXISTING LIGHTING, ELECTRICAL CONDUIT, AND ALL EXISTING FIELD CONDITIONS.

VOLTAGE.

PROCEEDING.

10. ALL WORK SHALL COMPLY WITH ALL APPLICABLE CODES AND STANDARDS (SEE SPECIFICATIONS).

THE TOP OF THE DEVICE.

HVAC GENERAL NOTES

1. MECHANICAL DRAWINGS ARE DIAGRAMMATIC AND SUBJECT TO REQUIREMENTS OF ARCHITECTURAL DRAWINGS. MECHANICAL DRAWINGS INDICATE GENERALLY THE LOCATION OF COMPONENTS AND ARE NOT INTENDED TO SHOW ALL FITTINGS OR ALL DETAILS OF THE WORK TO BE

3. COORDINATE CONSTRUCTION OF ALL MECHANICAL WORK WITH ARCHITECTURAL, STRUCTURAL, CIVIL, ELECTRICAL WORK, ETC., SHOWN ON OTHER CONTRACT DOCUMENT DRAWINGS.

6. PRIOR TO PREPARING SUBMITTALS, VERIFY ALL EQUIPMENT VOLTAGES WITH ELECTRICAL DRAWINGS AND ELECTRICAL CONTRACTOR AND REPORT ANY INCONSISTENCIES TO THE ARCHITECT PRIOR TO ORDERING EQUIPMENT. ANY FAILURE TO DO SO WILL MAKE THE MECHANICAL CONTRACTOR RESPONSIBLE FOR ANY EQUIPMENT ORDERED WITH THE INCORRECT

7. PROTECT MECHANICAL EQUIPMENT FROM DAMAGE DURING CONSTRUCTION. WHEN INSTALLATION IS COMPLETE, CLEAN EQUIPMENT AS REQUIRED AND PROVIDE ALL NEW FILTERS.

8. INSTALL ALL EQUIPMENT TO PROVIDE NORMAL SERVICE ACCESS TO ALL COMPONENTS. INSTALL IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. IF MANUFACTURER'S RECOMMENDATIONS CONFLICT WITH CONTRACT DOCUMENTS, OBTAIN ARCHITECT'S DECISION BEFORE

9. FURNISH ACCESS DOORS FOR VALVES, FIRE DAMPERS, DAMPERS, CONTROLS, AIR VENTS, TRAP CLEAN OUTS, AND OTHER ITEMS LOCATED ABOVE NON-LIFTOUT CEILINGS OR BEHIND PARTITIONS OR WALLS. PROVIDE FIRE DAMPERS IN DUCTWORK, GRILLES, AND REGISTERS WITH FIRE RATING EQUAL TO RATING OF WALL OR CEILING. ALL FIRE DAMPERS MAY OR MAY NOT BE SHOWN ON MECHANICAL DRAWINGS. CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE ALL FIRE RATED WALL AND CEILING LOCATIONS AND RATINGS WITH ARCHITECTURAL DRAWINGS.

11. COORDINATE EXACT LOCATION OF ALL WALL MOUNTED DEVICES (THERMOSTATS, HUMIDITY SENSORS, ETC.) WITH ARCHITECT PRIOR TO ROUGH IN. ALL WALL MOUNTED DEVICES SHALL BE INSTALLED 48"A.F.F. TO

12. COORDINATE EXACT LOCATION ON WALL OF ALL WALL MOUNTED SUPPLY AND RETURN GRILLES/REGISTERS WITH ARCHITECT. WALL MOUNTED SUPPLY AND RETURN GRILLES/REGISTERS SHALL BE PAINTED BY OTHERS.

13. COORDINATE ALL DUCT DETECTORS, LOW VOLTAGE WIRING TO ASSOCIATED PROGRAMMING WITH FIRE ALARM CONTRACTOR TO PROVIDE A FULLY FUNCTIONING SYSTEM. VERIFY PROPER OPERATION OF ALL EXISTING DUST SMOKE DETECTORS. REPLACE AS REQUIRED. UPON SENSING SMOKE THE DUCT DETECTOR SHALL SHUT DOWN THE RESPECTIVE UNIT.

DUCTWORK LEGEND

 \bigcirc

CO2 MONITOR

HVAC ABBREVIATIONS

AMPS

AMBIENT

DRY BULB DOWN

DIAMETER

ENTERING

EXISTING

EXTERNAL

GALLONS

HORSEPOWER

1000 WATTS

HEIGHT

INCHES

LENGTH

POUNDS

LEAVING

MAXIMUM

1000 BTUH

MINIMUM

OUTSIDE AIR

PSI GAUGE **RETURN AIR**

SUPPLY AIR

TOP OF DUCT

WATER GAGE

VOLUME

WIDTH

WET BULB

FEET

EXHAUST AIR

(CFM) S	SUPPLY DIFFUSER	A
(CFM) R	RETURN GRILLE	AFF AHU
(CFM) E	EXHAUST GRILLE	AMB.
(CFM) T	TRANSFER AIR GRILLE	ARCH.
(CFM) SR	SIDEWALL REGISTER	BOD
Ø	ROUND DUCT SYMBOL	BTUH
WXH	RECTANGULAR DUCT (WIDTH X HEIGHT)	CFM DB
	RECTANGULAR SUPPLY DUCT TURNING UP	DN. °F ΔP ΔT
	RECTANGULAR SUPPLY AIR DUCT TURNING DOWN	DIA. EA ENT. EAT
	RECTANGULAR RETURN AIR OR EXHAUST DUCT TURNING UP	EMG EWT E.S.P.
	RECTANGULAR RETURN AIR OR EXHAUST DUCT TURNING DOWN	EX. EXT. FPM ET
	ROUND DUCT TURNING DOWN	F.V. GAL. GPM
	ROUND DUCT TURNING UP	HP IN. I.D.
	MAXIMUM 5' FLEXIBLE DUCT ALL BRANCH DUCTS	KW L LBS.
	RECTANGULAR 90° ELBOW WITH TURNING VANES FOR SUPPLY.	LRA LVG. LAT
	RISE OR DROP IN DUCT	MAX. MAT MBH
	RECTANGULAR BRANCH OFF OF RECTANGULAR DUCT WITH MANUAL DAMPER	MCA MFR MIN. MOCP NO
	CONICAL SPIN-IN WITH MANUAL DAMPER	NC NPLV OSA O.D.
MD	MANUAL DAMPER	PSIA PSIA PSIG RA
FD	FIRE DAMPER (PROVIDE ACCESS DOOR)	RAT RH RLA RPM
AD	AUTOMATIC DAMPER	SA SAT T.S.P.
SFD	COMBINATION SMOKE/FIRE DAMPER (PROVIDE ACCESS DOOR)	TOD U.N.O. V
T	TEMPERATURE SENSOR	v/ø/Hz W.G.
Ĥ	HUMIDITY SENSOR	W WB

MARKEXAMPLE"S"200S 200S CFMPLAC WITH DIFF PANI 12X1 HAVI"R", "E", "T"200R 200R CFMCEIL EGG LAY- CEIL 200R CFM"R", "E", "T"200R CFM CFM CFMCEIL EGG LAY- CEIL"SR"-SR12X6 200 / CFM CFM WXG"SIDE 200 / CFM"WRG" / "WTG"-SR12X6 200 / CFM CFM WXHSIDE 200 / WAL CFM"WRG" / "WTG"-SR12X6 200 / CFM CFM WXHWAL 48" L"URG" / "WTG"-WRG12X6 200 / CFM CFM CFMWAL 48" L"URG" / "UTG"-SR12X6 200 / CFM CFMWAL H"URG" / "UTG"-WRG12X6 200 / CFM CFMWAL H"NOTES:1.SEE SPECIFICATIONS FOR FIN 2.1.SEE SPECIFICATIONS FOR FIN 2.COORDINATE WITH ARCHITED CATIONS OF MOUNTED DEVICES. DO NOT			
"S" Image: CFM200S PLAC "R", "E", "T" Image: CFM200R CEIL "R", "E", "T" Image: CFM200R CEIL "R", "E", "T" Image: CFM200R CEIL "SR" Image: CFM200 / CFM	MARK	EXAMPLE	
"R", "E", "T" CEIL 200R CFM CFM CFM R24 SQUARE NECK SIZE SIDE "SR" SR12X6 200 SIDE CFM WAL "WRG" / WRG12X6 200 KAL "WRG" / WRG12X6 200 KAL "UTG" WAL CFM WAL "LSD" 48" L 48" II 200 CFM 200 CFM 48" II 200 CFM 48" II SQUO CFM 48" II 200 CFM 48" II SQUO CFM 500 CFM COORD	"S"	200S CFM	Plac With Diff Pani 12X1 Havi
"SR" SIDE "WRG" / CFM-W x H "WTG" WRG12X6 200 WAL WRG" / WRG12X6 "WTG" CFM-W x H "LSD" 48" L 48" L 48" L 200 CFM 48" L 200 CFM 48" L 48" II 200 CFM 48" II 48" II 200 CFM 48" II 3. COORDINATE VITH ARCHITEC 3. COORDINATE LOCATIONS OF MOUNTED DEVICES. DO NOT	"R", "E", "T"	CFM CFM R24 SQUARE NECK SIZE	CEIL EXH/ EGG LAY- CEIL
"WRG" / WRG12X6 WAL "WTG" 200 WAL "UTG" CFM-W x H WAL "LSD" 48" L 200 CFM 48" L 200 CFM 48" II 200 CFM 48" II 200 CFM 48" II 200 CFM CFM 48" II CFM 200 CFM 48" II 0F 1" SLOTS II SEE SPECIFICATIONS FOR FIN 2. 1. SEE SPECIFICATIONS FOR FIN 2. COORDINATE WITH ARCHITEC 3. COORDINATE LOCATIONS OF MOUNTED DEVICES. DO NOT	"SR"	[] SR12X6 200 ↓ CFM- ⁻ W x H	SIDE
"LSD" 48" L LSD(3) 200 CFM 200 CFM 48" II 48" II 48" II NOTES: 1. SEE SPECIFICATIONS FOR FIN 2. COORDINATE WITH ARCHITEG 3. COORDINATE LOCATIONS OF MOUNTED DEVICES. DO NOT	"WRG" / "WTG"	[] - WRG12X6 200 ∕ CFM - W x H	WAL WAL
NOTES:1.SEE SPECIFICATIONS FOR FIN2.COORDINATE WITH ARCHITED3.COORDINATE LOCATIONS OF MOUNTED DEVICES. DO NOT	"LSD"	LSD(3) 200 CFM CFM # OF 1" SLOTS	48" L 48" II
 SEE SPECIFICATIONS FOR FIN COORDINATE WITH ARCHITEC COORDINATE LOCATIONS OF MOUNTED DEVICES. DO NOT 	NOTES:		
	1. SEE 2. COO 3. COO MOU	SPECIFICATIONS FOR RDINATE WITH ARC RDINATE LOCATION NTED DEVICES. DO	OR FIN CHITEC NS OF D NOT



CEILING MOUNTED AIR DEVICES WITH LIGHT FIXTURES, SPRINKLER HEADS, AND OTHER CEILING SCALE MECHANICAL DRAWINGS FOR LOCATIONS.

SHEET NUMBER

M0.01

NOVEMBER 16, 2023

CHECKED BY:

WAC

2022-08

DRAWN BY:

ELB

ELE

HEATER TYPE:		A	ACCESSORIES:			
1. ELECTRIC WA	ALL HEATER.	1	I. SURFACE MOUN	ITING.		
BASIS OF DESIC	GN: MARKEL 345	50 2	2. WALL MOUNTED	THERMOSTAT		
		3	3. UNIT MOUNTED	THERMOSTAT.		
		4	4. DISCONNECT SV	VITCH PROVIDE	ED AND INSTAL	LED BY DIV. 26.
		5	5. HIGH LIMIT CON	TROL.S.		
		6	6. RADIAL DIFFUSE	R.		
		7	7. CONCEALED ON	/OFF SWITCH.		
		8	3. BUILT-IN CIRCUI	T BREAKER.		
MARK	TVDE	SIZE		ELECTRICAL		ACCESSORI
	TIPE	SIZE	VOLTAGE	PH	HZ	ACCESSORI
EWH-1	1	3 kW	208	1	60	1,3,5,7,8
	1	3 kW	208	1	60	13578

<u>TYPE:</u>			
1. PACKAGED A	C UNIT, VERTICA	AL DISCHARGE.	
MARK	TYPE		SUPPLY FAN
		AIRFLOW (CFM)	"W.G. E.S.
RTU-1	1	2450	1
	1	2760	1
RTU-2		2700	1
RTU-2 RTU-3	1	3010	1
RTU-2 RTU-3 RTU-4	1	3010 1760	1 1 1
RTU-2 RTU-3 RTU-4 RTU-5	1 1 1 1	3010 1760 1410	1 1 1 1
RTU-2 RTU-3 RTU-4 RTU-5 RTU-6	1 1 1 1 1	2700 3010 1760 1410 2690	1 1 1 1 1 1
RTU-2 RTU-3 RTU-4 RTU-5 RTU-6 RTU-7	1 1 1 1 1 1 1	2760 3010 1760 1410 2690 2390	1 1 1 1 1 1 1

							Dewberry	Revisions
							2 Riverchase Office Plaza Suite 205 Hoover AL 35244	. Date Description
<page-header></page-header>							(205) 988-2069 www.dewberry.com	
							Project Number : 50161021	
						3)a/	NOTES	A B A MARA
		ALL NEW PACKAGED UNITS	GPS-FC-48		UNIT SA FAN INI ET	0 VV		A LE CONSTRUCTION
<form></form>		UP TO 4800 CFM TOTAL AIRFLOV	W Grovo	•				N6. 29121 PROFESSIONAL
<text><text><text><text> Product of the link of the distance of</text></text></text></text>		1. BASIS OF DESIGN: GLOBAL PLASMA SO	OLUTIONS. APPROVED EQUALS	S BY AIRGENICS	AND BIOXGEN SUBJECT TO S	SPECIFICATION COM	IPLIANCE.	ENGINEER ON
		3. IF CONTRACTOR SUBSTITUTES BASIS	OF DESIGN WITH ANOTHER MI	.E. FG, CONTRACTOF	R SHALL COORDINATE ALL E	LECTRICAL AND ME	CHANICAL CHANGES.	
<form></form>		4. BI-POLAR IONIZATION SYSTEMS REQU	JIRING PERISHABLE GLASS TU	BES ARE NOT AC	CEPTABLE.			100% CD'S
<text></text>		6. PROVIDE MANUFACTURER'S 208V POV	VER SUPPLY FOR INSTALLATIC	THER OL OR ETL. N BY DIV. 23.				
<text></text>		7. PROVIDE TRANSFORMER AS REQUIRE		RICAL.				
<section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><text><text><text></text></text></text></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header>		8. PROVIDE FACTORY INSTALLED DISCO	NNECT SWITCH.					
NAME		FAN						
Description Description <th< td=""><td>1. CEILING MOUNTED EXHAUST FAN. 2. ROOF EXHAUST FAN, DIRECT DRIVE.</td><td></td><td>1. BACKDRAFT DAMPER 2. DISCONNECT SWITCH</td><td>I PROVIDED AND</td><td>INSTALLED BY DIV. 26.</td><td></td><td></td><td></td></th<>	1. CEILING MOUNTED EXHAUST FAN. 2. ROOF EXHAUST FAN, DIRECT DRIVE.		1. BACKDRAFT DAMPER 2. DISCONNECT SWITCH	I PROVIDED AND	INSTALLED BY DIV. 26.			
Notice and a state of the s	, <u> </u>		3. ALUMINUM CEILING G 4. 5A-120V FAN SPEED C 5. WEATHERPROOF MO	RILLE. ONTROLLER.	_			
			6. INSULATED ROOF CU	RB				
	MARK FAN TYPE AIRFLOW E.S.P. (in-wg	(INCHES) SOUND CRITERIA (INCHES) (SONES/dBA) RPM	MOTOR ELECTRIC (HP / W) V PH	CAL IN HZ	ITERLOCK WITH WEIGHT (LBS)	ACCESSORIES	BASIS OF DESIGN	
	CEF-1 1 70 0.5 CEF-2 1 70 0.5	8 3/46 1075 8 3/46 1075	44 W 120 V 1 44 W 120 V 1	60 60	LIGHTS 15 LIGHTS 15	1,2,3,4 1,2,3,4	COOK GC COOK GC	
<section-header><section-header><section-header><section-header><section-header><section-header></section-header></section-header></section-header></section-header></section-header></section-header>	CEF-3 1 70 0.5 EF-4 2 450 0.5	8 3/46 1075 10 9.6/59 1550	44 W 120 V 1 1/8 HP 120 V 1	60 60	LIGHTS 15 RTU-3 25	1,2,3,4 1,2,4,5,6	COOK GC COOK ACE-D	
<section-header><section-header><section-header><section-header></section-header></section-header></section-header></section-header>								
<section-header><section-header><section-header><section-header></section-header></section-header></section-header></section-header>								ROL TS
<section-header></section-header>								
		INDOOR HEAT PUMP (M	IINI-SPLIT SYST	EM) SCH	EDULE			
	TYPE:	-	ACCESSORI	ES:			26	CIT 332 H
	2. INDOOR, CEILING CASSETE		1. 3-POLE DI 2. HARD WIF 3. FULL POR	RED UNIT CONTRO T BALL VALVES &	SCHRADER VALVES WITH F	LARED CONNECTIO	NS.	
	NOTES:		4. INTEGRAL 5. FIELD-INS	. CONDENSATE P TALLED CONDEN	UMP. ISATE PUMP (120/1/60) - 1 GP	H @ 33 FT. HD.		
	 POWER FOR INDOOR UNIT IS FED FROM OUTDOOR COOLING CAPACITY RATED AT 95°F. 	R UNIT.						Z
$\frac{\text{Mark}}{1 \text{ free} 0 \text{ free} 0 \text{ free} 0 \text{ free} 0 \text{ free} 1 \text{ free} 1 \text{ free} 0 \text{ free} 1 \text{ free} 1 \text{ free} 0 free$				ECTRICAL				
	MARK TYPE AIRFLOW TONS	CAPACITY (MBH) CAPACITY (WXLx	H) V PH	HZ	MCA WEIGHT	ACCESSORIES	BASIS OF DESIGN	
	IHP-1 2 810 2 IHP-2 1 775 2 IHP-3 2 530 1	24 MBH 29 MBH 33"X3/") 24 MBH 28 MBH 46"X12" 12 MBH 14 MBH 33"X37")	X33" 208 1 '14" 208 1 X33" 208 1	60 60	1 A 50 1 A 50 1 A 50	1,2,3,4 1,2,3,5 1,2,3,4		
<section-header><section-header><section-header><section-header><section-header><section-header></section-header></section-header></section-header></section-header></section-header></section-header>	INF-3 2 530 I		A33 200 I	60	TA 50	1,2,3,4		
OUTDOOR HEAT PUMP (MINI-SPLIT SYSTEM) SCHEDULE Distance Distance Dist								
Integration of the property of the		OUTDOOR HEA	AT PUMP (MINI-	SPLIT SY	STEM) SCHED	ULE		
1. Outcook Hurd Fueld Provide And INSTALLED BY DUX 28. Provide An	<u>TYPE:</u>				-			MS 0 15
1. useconvector switch motoped wile weraulded and weraulded and weraulded wile weraulded weraul	1. OUTDOOR HE. NOTES:	AT PUMP						E C T 11LLIA 11LLIA 0-05
 a. Reprice watch of course operation of the course operation of t	1. DISCONNECT 2. POWER TO IN	SWITCH PROVIDED AND INSTALLED BY DIV. 26. DOOR UNITS IS PROVIDED THRU OUTDOOR UNITS	5					ES W CIAT DCIAT H I T I 5-25
+ HEATING CAPACITY MATER AT 477: MARK <u>TYPE CAPACITY X <u>PI H </u></u>	3. REFRIGERANT 4. UNIT SHALL B 5. COOLING CAP	I CIRCUIT ACCESS PORTS LOCATED OUTDOORS S E CAPABLE OF MINIMUM LINE LENGTH OF 65FT. PACITY RATED AT 95°F.	SHALL BE FITTED WITH LOCKIN	IG-TYPE TAMPER	-RESISTANT CAPS.			HARL ASS(R C I R C I X: 20
Mark TYPE Construing Techning Techning State of page of pa	6. HEATING CAP	ACITY RATED AT 47°F.	EI EA	TRICAL		EFFICIENCY		PH RAC
DATE DATE <thdate< th=""> DATE DATE</thdate<>	MARK	TYPE COOLING CAPACITY HEATING CAPACITY 1 24 MRH 20 MRH	V PH HZ 208 1 60		МОСР SEE 30 А 24 /	Image: Instant of the second	MITSURISHI	.522
PACKAGED AC UNIT - GAS Decressories Second State 2 'THICK THROWAWAY FLITER, MERY 8. 8. PROVIDE ELECTRICAL CONNECTIONS THRU ROOF CUR8. 2 'CONDENSER COL GURD. 9. STAINLESS STELL DAMP RAN. 3 STAINLESS STELL HART PX CHANGER 0. HOT GAS REFEAT COL MINIMUM ISF RISE. WITH HUMDISTAT. 4. STAINLESS STELL HART PX CHANGER 0. HOT GAS REFEAT COL MINIMUM ISF RISE. WITH HUMDISTAT. 5. STAINLESS STELL HART PX CHANGER 0. HOT GAS REFEAT COL MINIMUM ISF RISE. WITH HUMDISTAT. 1. MICROPROCESSOR CONTROLS WITH 247 PROCRAMMABLE THERMOSTAT. 1. MICROPROCESSOR CONTROLS WITH 247 PROCRAMABLE THERMOSTAT. 1. MICROPROCESS DOORS. 1. MICROPROCESSOR CONTROLS WITH 247 PROCRAMABLE THERMOSTAT. 1. MICROPROCESSOR CONTROLS WITH 247 PROCRAMABLE THERMOSTAT. 1. MICROPROCESSOR CONTROLS WITH 247 PROCRAMABLE THERMOSTAT. 1. MICROPROCESSOR CONTROLS WITH AUT PROCRAMABLE THERMOSTAT. 1. MICROPROCESSOR CONTROLS WITH 247 PROCRAMABLE THERMOSTAT. 1. MICROPROCESSOR CONTROLS WITH AUT PROCRAMABLE THERMOSTAT. 1. MICROPROCESSOR CONTROLS WITH AUT PROCRAMABLE THERMOSTAT. 1. MICROPROCESSOR CONTROLS WITH AUT PROCRAMABLE THERMOSTAT. 1. MICROPROCESSOR CONTROLS WITH AUT PROCRAMABLE THERMOSTAT. 1. MICROPROCESSOR CONTROLS WITH AUT PROCRAMABLE THERMOSTAT. 1. MICROPROCESSOR CONTROLS WITH AUT PROCRAMABLE THERMOSTAT. 1. MICROPROCESSOR CONTROLS WITH AUT PROCRAMABLE THERMOSTAT. 1. MICR	OHP-1 OHP-2 OHP-3	1 24 MBH 23 MBH 1 24 MBH 28 MBH 1 12 MBH 14 MBH	208 1 60 208 1 60 208 1 60	19 A 19 A 11 A	30 A 24.2 30 A 21.4 30 A 21.4	4 11 16 4	MITSUBISHI	IA 35
PACKAGED AC UNIT - GAS Decession: 1: THICK THROWAWAY FILTER, MERY 8. 2: THICK THROWAWAY FILTER, MERY 8. 2: THICK THROWAWAY FILTER, MERY 8. 3: THICK THROWAWAY FILTER, MERY 8. 4: DAD DENSER CONTROL TO TO TA AMBIENT. 1: HAD PRESUBLE CONTROL TO TO TA AMBIENT. 1: MICROPROCESSOR CONTROL WITH AJP PROGRAMMABLE THERMOSTAT. 1: MICROPROCESSOR CONTROL WITH AJPR PROGRAMMABLE THERMOSTAT. 1: MICROPROCESSOR CONTROL VENTILATION 1: MICROPROCESSOR CONTROL VENTILATION 1: MICROPROCESSOR CONTROL VENTILATION 1: MICROPROCESSOR CONTROL VENTILATION 1: DENSER 1: DI COLAS ASS. 1: DI COLAS ASS. 1: DI COLAS ASS. 1: DI COLAS ASS. 1: DI COLAS ASS. DI COLAS ASS.								BAN BAN
PACKAGED AC UNIT - GAS 12 THICK TROWAWY FLIEFE, MERY 8. 12 THICK TROWAWY FLIEFE, MERY 8. 12 THICK TROWAWY FLIEFE, MERY 8. 14 FAD PERSURE CONTROL TO 10'F AMBIENT. 15 HEAD PERSURE CONTROL TO 10'F AMBIENT. 15 HEAD PERSURE CONTROL TO 10'F AMBIENT. 16 SA INTAK FOOD WITH AND DAMPER, ECONOMIZER, AND BAROMETRIC RELIEF. 17 HINGE ACCESS DOCO. 11 HINGE ACCESS TOTOL TO 10'F AMBIENT. 12 HINGE ACCESS TOTOL TO 10'F AMBIENT. 13 HINDLESS STEEL LATE TO NUMULATED RADOP CLUBS WITH SPRING VIBRATION ISOLATORS. 14 HINGE ACCESS DOCON. 15 HOAD PERSON. 15 HOAD PERSON. 16 TOTOL TO MERSON. 17 TOTOL TOTOL MERK HOAD WITH AND DAMPER. 17 TOTOL TOL MERK HOAD WITH AND TOLTOL WITH AND TO DAMPER. 17 TOTOL TOL MERK HOAD WITH AND TOLTOL WITH AND TO DAMPER. 16 TOTOL TOL MERK HOAD WITH AND TOLTOL WITH AND TO DAMPER. 17 TOTOL TOL MERK HOAD WITH AND TOLTOL WITH AND T								ALA
PACKAGED AC UNIT - GAS DESCRIPTION 1.2* THICK THROWAWAY FLIER, MERY 8. 2.0* THICK THROWAWAY FLIER, MERY 8. 3.1* CAD PRESSURE CONTROL SUPPORT 3.1* CAD PRESSURE CONTO 10 0°F AMBIENT. 3.1* CAD PRESSURE CONTO 10 0°F AMBIENT. 3.1* CAD PRESSURE CONTOC 10 0°F AMBIENT. 1.1* CAD PRESSURE CONTOC 10 0°F AMBIENT. 1.1* CATOR FABRICATED INSULATED ROOF CURB WITH SPRING VIBRATION ISOLATORS. 1.1* DIAGO ROCESSOR CONTROLS WITH 247 PROGRAMMABLE THERMOSTAT. 1.2* DISCONFTINGUENT MULTICAL PROVIDED AMPLICATION. 1.3* DISCONFTINGUENT MULTICAL PROVIDED AMPLICATION. 1.4* DEC MENT 1.5* TEXT 1.5* T								AVE
Accession Accession Basis of Design (Market Pool With AUTO DAMPER, EconoMIZER, AND BAROMETRIC RELIEF. 6. FACTORY FABRICATED INSULATED ROOF CURB WITH SPRING VIBRATION ISOLATORS 7. Thinged Access DOORS. 8. PROVIDE ELECTRICAL CONNECTIONS THRU ROOF CURB. 9. STAINLESS STEEL DRAIN PAN. 10. HOT GAS REHEAT COLL MINIMUM 15° RISE. WITH HUMIDISTAT. 11. MICROPROCESSOR CONTROL TO 10° AMBIENT. 4. STAINLESS STEEL HEAT EXCHANGER. 6. FACTORY FABRICATED INSULATED ROOF CURB WITH SPRING VIBRATION ISOLATORS 7. HINGED ACCESS DOORS. 8. PROVIDE ELECTRICAL CONNECTIONS THRU ROOF CURB. 9. STAINLESS STEEL DRAIN PAN. 10. HOT GAS REHEAT COLL MINIMUM 15° RISE. WITH HUMIDISTAT. 11. MICROPROCESSOR CONTROLS WITH 3477 PROGRAMMABLE THERMOSTAT. 12. DISCONNECT SWITH 3477 PROGRAMMABLE THERMOSTAT. 13. BIPOLAR IONIZATION. 15. OSA INTAKE HOOD WITH AUTO DAMPER. SHEET TITLE WEICHANICAL - SCHEDULES 10. BIPOLAR IONIZATION. 15. OSA INTAKE HOOD WITH AUTO DAMPER. YMOM. TONS MINPUT (MBH) VOLTAGE PH HZ MCA MOOP SERVEER WEIGHT (LBS) ACCESSORIES BASIS OF DESIGN YT.5 120 97.2 208 3 60 44. 60. A 14.6/11 1300 1.2.3.4.5.6.7.8.9.10.11.12.13 TRAME YSJ YT.5 120 97.2 208 3 60 30. A 44. A 1300 1.2.3.4.5.6.7.8.9.10.11.12.13 TRAME YSJ YT.5 120 97.2 208 3 60 30. A 44. A 14.6/11<	PACKAGED AC UNIT - (GAS						BTH 81H
1.2° THICK THROWAWAY FLIER, MERV 8. 8. PCOVIDE ELECTRICAL CONNECTIONS THRUROOF CURB. 2. CONDENSER COLOLGUARD. 9. STANLESS STEEL PAAN PAN. 3. HEAD PRESSURE CONTROL TO 10° F AMBIENT. 9. STANLESS STEEL PAAN PAN. 4. STAINLESS STEEL PAAT EXCHANGER. 9. STANLESS STEEL PAAN PAN. 5. OSA INTAKE HOOD WITH AUTO DAMPER, ECONOMIZER, AND BAROMETRIC RELIEF. 10. HOT GAS REHAT COLL MINIUM 15°F RISE. WITH HUMIDISTAT. 1. MICROPROCESSOR CONTROLS WITH AUTO DAMPER. ECONOMIZER, AND BAROMETRIC RELIEF. 1. MICROPROCESSOR CONTROL VENTILATION. 12. DISCONNECT SWITCH PROVIDED AND INSTALLED BY DIV. 26. 1. DEMAN DOWNTON. 12. DISCONNECT SWITCH PROVIDED AND INSTALLED BY DIV. 26. 1. DEMAN DOWNTON. 12. DISCONNECT SWITCH PROVIDED AND INSTALLED BY DIV. 26. 1. DEMAN DOWNTON. 12. DISCONNECT SWITCH PROVIDED AND INSTALLED BY DIV. 26. 1. DEMAN DOWNTON. 12. DISCONNECT SWITCH PROVIDED AND INSTALLED BY DIV. 26. 1. DEMAN DOWNTON. 12. DISCONNECT SWITCH PROVIDED AND INSTALLED BY DIV. 26. 1. DEMAN DOWNTON. 12. DISCONNECT SWITCH PROVIDED AND INSTALLED BY DIV. 26. 1. DISCONNECT SWITCH PROVIDED AND INSTALLED BY DIV. 26. 13. BAROMERTIC RELIEF. 1. DISCONNECT SWITCH PROVIDED AND INSTALLED BY DIV. 26. 13. BAROMERTIC RELIEF. 1. THORE YSU 12. DISCONNECT SWITCH PROVIDED AND INSTALLED BY DIV. 26.	ACCESSORIES:							3601 31RM
9. TELEVISION CONTROL TO FUNCTION 0. TELEVISION CONTROL TO FUNCTION 9. STAINLESS STEEL HEAT EXCHANGER 0. STAINLESS STEEL HEAT EXCHANGER 5. OSA INTAKE HOOD WITH AUTO DAMPER, ECONOMIZER, AND BAROMETRIC RELEF, 6. PACTORY FABRICATED INSULATED ROOF CURB WITH SPRING VIBRATION ISOLATOR. 10. END GAS REFLAT LOOL, MINIMUM IS F RISE, WITH PROVIDED AND INSTALLED BY DIV. 26. 10. DEMAND CONTROL VENTILATION. 12. DISCONNECT SWITCH PROVIDED AND INSTALLED BY DIV. 26. 13. BPOCAR IONIZATION. 10. DEMAND CONTROL VENTILATION. 12. DISCONNECT SWITCH PROVIDED AND INSTALLED BY DIV. 26. 13. BPOCAR IONIZATION. 10. DEMAND CONTROL VENTILATION. 12. DISCONNECT SWITCH PROVIDED AND INSTALLED BY DIV. 26. 13. BPOCAR IONIZATION. 10. DEMAND CONTROL VENTILATION. 13. DISCON CONTROL VENTILATION. 13. DISCON CONTROL VENTILATION. 13. DISCON CONTROL VENTILATION. 10. TOM SINTAKE HOOD WITH AUTO DAMPER. 10. TON SINTAKE HOOD WITH AUTO DAMPER. 10. DISCON CONTROL VENTILATION. 12.34,56,7,89,10,11,12,13 TRANE YSJ 17.5 120 97.2 208 3 60 48.A 60.A 14.6/11 1300 1.2.34,56,7,89,10,11,12,13 TRANE YSJ 15. 80 64 208 3 60 48.A 60.A 14.6/11 1300 1.2.34,56,7,89,10,11,12,13 TRANE YSJ </td <td>IT. 1. 2" THICK THROW 2. CONDENSER CC</td> <td>VAWAY FILTER, MERV 8. DIL GUARD. E CONTROL TO 10°E AMBIENT</td> <td>8. P 9. S</td> <td>ROVIDE ELECTRI TAINLESS STEEL</td> <td>CAL CONNECTIONS THRU RO DRAIN PAN.</td> <td></td> <td></td> <td></td>	IT. 1. 2" THICK THROW 2. CONDENSER CC	VAWAY FILTER, MERV 8. DIL GUARD. E CONTROL TO 10°E AMBIENT	8. P 9. S	ROVIDE ELECTRI TAINLESS STEEL	CAL CONNECTIONS THRU RO DRAIN PAN.			
6. FACTORY FABRICATED INSULATED ROOF CURB WITH SPRING VIBRATION ISOLATORS. 13. BIPOLAR IONIZATION. 7. HINGED ACCESS DOORS. 14. DEMAND CONTROL VENTILATION. 16. DEXING VIETA AUTO DAMPER. 15. BIPOLAR IONIZATION. 16. DEXING VIETA AUTO DAMPER. 15. BIPOLAR IONIZATION. 17.5 150 121.5 208 3 60 48.A 60.A 14.6/11 1300 1.2.3.4.5.6.7.8.9.10.11.12.13 TRANE YSJ 7.5 120 97.2 208 3 60 48.A 60.A 14.6/11 1300 1.2.3.4.5.6.7.8.9.10.11.12.13 TRANE YSJ 5 80 64 208 3 60 48.A 60.A 14.6/11 1300 1.2.3.4.5.6.7.8.9.10.11.12.13 TRANE YSJ 5 80 64 208 3 60 33.A 45.A 17.2/13 1100 1.2.3.4.5.6.7.8.9.10.11.12.13 TRANE YSJ 5 80 64 208 3 60 33.A 45.A 17.2/13 1100 1.2.3.4.5.6.7.8.9.10.11.12.13 TRANE YSJ 6 120 97.2 208 3 60 43.A 50.A <td< td=""><td>3. HEAD PRESSUR 4. STAINLESS STEE 5. OSA INTAKE HO</td><td>EL HEAT EXCHANGER. OD WITH AUTO DAMPER, ECONOMIZER, AND BAR(</td><td>OMETRIC RELIEF. 12.</td><td>MICROPROCESS DISCONNECT SW</td><td>OR CONTROLS WITH 24/7 PR</td><td>OGRAMMABLE THEF</td><td>RMOSTAT.</td><td>MECHANICAL - SCHEDULES</td></td<>	3. HEAD PRESSUR 4. STAINLESS STEE 5. OSA INTAKE HO	EL HEAT EXCHANGER. OD WITH AUTO DAMPER, ECONOMIZER, AND BAR(OMETRIC RELIEF. 12.	MICROPROCESS DISCONNECT SW	OR CONTROLS WITH 24/7 PR	OGRAMMABLE THEF	RMOSTAT.	MECHANICAL - SCHEDULES
VACITY GAS HEAT ELECTRICAL NCA MOCP SEER/ER WEIGHT (LBS) ACCESSORIES BASIS OF DESIGN 7.5 150 121.5 208 3 60 48 A 60 A 14.6/11 1300 1.2,3,4,5,6,7,8,9,10,11,12,13 TRANE YSJ 7.5 120 97.2 208 3 60 48 A 60 A 14.6/11 1300 1,2,3,4,5,6,7,8,9,10,11,12,13 TRANE YSJ 7.5 120 97.2 208 3 60 48 A 60 A 14.6/11 1300 1,2,3,4,5,6,7,8,9,10,11,12,13 TRANE YSJ 7.5 120 97.2 208 3 60 48 A 60 A 14.6/11 1300 1,2,3,4,5,6,7,8,9,10,11,12,13 TRANE YSJ 5 80 64 208 3 60 30 A 40 A 17.5/13 1100 1,2,3,4,5,6,7,8,9,10,11,12,13 TRANE YSJ 4 60 49 208 3 60 43 A 50 A 14.6/11 1300 1,2,3,4,5,6,7,8,9,10	6. FACTORY FABRI 7. HINGED ACCESS	ICATED INSULATED ROOF CURB WITH SPRING VIB S DOORS.	BRATION ISOLATORS. 13. 14.	BIPOLAR IONIZAT DEMAND CONTRO	ION. DL VENTILATION. D WITH AUTO DAMPER			PROJECT NUMBER:
NOM. TONS INPUT (MBH) OUTPUT (MBH) VOLTAGE PH HZ MCA MOCP SERVER Weight (LBS) Accessories BASIS OF DESIGN 7.5 150 121.5 208 3 60 48 A 60 A 14.6/11 1300 1,2,3,4,5,6,7,8,9,10,11,12,13 TRANE YSJ 7.5 120 97.2 208 3 60 48 A 60 A 14.6/11 1300 1,2,3,4,5,6,7,8,9,10,11,12,13 TRANE YSJ 7.5 120 97.2 208 3 60 48 A 60 A 14.6/11 1300 1,2,3,4,5,6,7,8,9,10,11,12,13 TRANE YSJ 7.5 120 97.2 208 3 60 33 A 45 A 17.2/13 1100 1,2,3,4,5,6,7,8,9,10,11,12,13 TRANE YSJ 4 60 49 208 3 60 30 A 40 A 17.5/13 1100 1,2,3,4,5,6,7,8,9,10,11,12,13 TRANE YHC 7.5 120 97.2 208 3 60 43 A 50 A	APACITY GAS HEAT	ELECTRICAL	15.			ESSORIES		2022-08
7.5 120 97.2 208 3 60 48 A 60 A 14.6/11 1300 1,2,3,4,5,6,7,8,9,10,11,12,13,14 TRANE YSJ 7.5 120 97.2 208 3 60 48 A 60 A 14.6/11 1300 1,2,3,4,5,6,7,8,9,10,11,12,13 TRANE YSJ 5 80 64 208 3 60 33 A 45 A 17.2/13 1100 1,2,3,4,5,6,7,8,9,10,11,12,13 TRANE YSJ 4 60 49 208 3 60 33 A 45 A 17.2/13 1100 1,2,3,4,5,6,7,8,9,10,11,12,13 TRANE YSJ 7.5 120 97.2 208 3 60 30 A 40 A 17.5/13 1100 1,2,3,4,5,6,7,8,9,10,11,12,13 TRANE YSJ 6 120 97.2 208 3 60 43 A 50 A 14.6/11 1300 1,2,3,4,5,6,7,8,9,10,11,12,13 TRANE YSJ 6 120 97.2 208 3 60 43 A 50 A 14.6/11 1300 1,2,3,4,5,6,7,8,9,10,11,12,13 TRANE YSJ 6 120 97	NOM. TONS INPUT (MBH) OUTPUT (MBH) 7.5 150 121.5	VOLTAGE PH HZ 208 3 60	MCA MOCP 48 A 60 A	14.6/11	1300 1,2,3,4,5,6,	7,8,9,10,11,12,13	TRANE YSJ	DATE: NOVEMBER 16, 2023
5 80 64 208 3 60 33 A 45 A 17.2/13 1100 1,2,3,4,5,6,7,8,9,10,11,12,13 TRANE YHC 4 60 49 208 3 60 30 A 40 A 17.5/13 1100 1,2,3,4,5,6,7,8,9,10,11,12,13 TRANE YHC 7.5 120 97.2 208 3 60 48 A 60 A 14.6/11 1300 1,2,3,4,5,6,7,8,9,10,11,12,13 TRANE YSJ 6 120 97.2 208 3 60 43 A 50 A 14.6/11 1300 1,2,3,4,5,6,7,8,9,10,11,12,13 TRANE YSJ 6 120 97.2 208 3 60 43 A 50 A 14.6/11 1300 1,2,3,4,5,6,7,8,9,10,11,12,13 TRANE YSJ 6 120 97.2 208 3 60 43 A 50 A 14.6/11 1300 1,2,3,4,5,6,7,8,9,10,11,12,13 TRANE YSJ 6 120 97.2 208 3 60 43 A 50 A 14.6/11 1300 1,2,3,4,5,6,7,8,9,10,11,12,13 TRANE YSJ	7.5 120 97.2 7.5 120 97.2	208 3 60 208 3 60	48 A 60 A 48 A 60 A	14.6/11 14.6/11	1300 1,2,3,4,5,6,7 1300 1,2,3,4,5,6,7	,8,9,10,11,12,13,14 7,8,9,10,11,12,13	TRANE YSJ TRANE YSJ	DRAWN BY: CHECKED BY: ELB WAC
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Production Producti	NG 29121 PROFESSIONAL 11-16-2023 MGINEER ON ADAN MADAN 100% CD'S	
	NG. 29121 PROFESSIONAL 11-16-2023 MM ADAM IN THE 100% CD'S	
Implementation Implementatintentintention Implementation	No. 29121 PROFESSIONAL 11-16-2023 MANADAN MADAN	
NOTE:: NUMBER OF DESCRIPTION OF APPROVED DUALS BY ANDERIOS AND DOVICED TO SECURD ON OUPLIANCE. 2. ADDITUDENTS AND THE REAL OF DESCRIPTION OF DESCRIPTIO		
 		
A. B. POLAN DRIVETING SYSTEMS REQUIRING FEMBLAGE GARGE TIGEDS AND ACCEPTRAGE. A. B. POLAN DRIVETING SYSTEMS REQUIRING SEMBLAGE GARGE TERMS BY CITIE TO. DET. A. B. MONDER MANTANSE L. BAR JOI GONDE COMMENT TERMS BY CITIE TO. DET. B. PONDE TERMSTRAGE GARGE GARGE TERMS BY CITIE TERMS BY CITIE TO. DET. B. PONDE TERMSTRAGE GARGE GARGE TERMS BY CITIE TERMSTRAGE TERMSTRAGE GARGE GARGE TERMSTRAGE GARGE GARGE TERMSTRAGE GARGE GARGE TERMSTRAGE GARGE GARGE GARGE TERMSTRAGE GARGE GARGE TERMSTRAGE GARGE GARGE GARGE TERMSTRAGE GARGE GARG	100% CD'S	
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P. ALLING GRILLE I. SA-240 YEAN SPEED CONTROLLER S. WEINFLEPROOF MOTOR FUNCTIONER MARK FAN TYP MIPLOW (NO.05 (LIBRAR E	
INSULATED ROOF CURB. MARK FAN TYPE AIRFLOW (CFM) E.S.P. (in-wg) WithCHESS SOUND CRITERIAL (SORES/GRAPA (SORES/GR	LIBR.	
Image: Name Instruction Construction Lead of block Lead of block CEF-1 1 70 0.5 8 3/46 1075 44 W 120 V 1 60 LIGHTS 15 1.23.4 COOK 6C CEF-2 1 70 0.5 8 3/46 1075 44 W 120 V 1 60 LIGHTS 15 1.23.4 COOK 6C CEF-3 1 70 0.5 8 3/46 1075 44 W 120 V 1 60 LIGHTS 15 1.23.4 COOK 6C CEF-3 1 70 0.5 10 9.6/59 1550 1/8 HP 120 V 1 60 RTU-3 25 12.4.5.6 COOK ACE-D INDOOR (MELT 2 Advector of the set of th		
CEF3 1 70 0.5 8 3/46 1075 44/W 120/V 1 60 LIGHTS 15 12.3.4 COOR GC EF-4 2 450 0.5 10 9.6/59 1550 1/8 HP 120/V 1 60 RTU3 25 1.2,3.4 COOR GC INDOOR HEAT PUMP (MINI-SPLIT SYSTEM) SCHEDULE ISSUE 1: 0.000 Wall MOUNT 1. INDOOR, CELING CASSETE		
INDOOR HEAT PUMP (MINI-SPLIT SYSTEM) SCHEDULE INPOOR, WALL MOUNT 2: INDOOR, CELING CASSETE 1. AIRFLOW RATED AT HIGH FAN SPEED. 2. OVER FOR INDOOR UNIT IS FED FROM OUTDOOR UNIT. 3. COOLING CAPACITY RATED AT HIGH FAN SPEED. 2. OVER FOR INDOOR UNIT IS FED FROM OUTDOOR UNIT. 3. COOLING CAPACITY RATED AT HIGH FAN SPEED. 3. COOLING CAPACITY RATED AT HIGH FAN SPEED. 3. COOLING CAPACITY RATED AT HIGH FAN SPEED. 4. HEATING CAPACITY RATED AT HIGH FAN SPEED. 5. FIELD-INSTALLED CONDENSATE PUMP (120/1/60) - 1 GPH @ 33 FT. HD. 5. FIELD-INSTALLED CONDENSATE PUMP (120/1/60) - 1 GPH @ 33 FT. HD. MARK TYPE AIRFLOW NOMINAL CAPACITY (MBH) CAPACITY (MBH) MARK TYPE 1HP-1 2 24 MBH 33'X37'X33' 208 1 60 1.A 50 1.2.3.4 MITSUBISHI MITSUBISHI	「 C 」 ご 4	
INDOOR HEAT PUMP (MINI-SPLIT SYSTEM) SCHEDULE DYPE: 1. INDOOR, WALL MOUNT 1. SPOLE DISCONDECT SWITCH PROVIDED BY MFR AND INSTALLED BY DIV. 26. I. ANDOR, CELLING CASSETE NOTES: 1. ARFLOW RATED AT HIGH FAN SPEED. 2. FUEL PORT BALL VALVES & SCHRADER VALVES WITH FLARED CONNECTIONS. 2. FUEL PORT BALL VALVES & SCHRADER VALVES WITH FLARED CONNECTIONS. 2. FUEL PORT BALL VALVES & SCHRADER VALVES WITH FLARED CONNECTIONS. 2. FUEL PORT BALL VALVES & SCHRADER VALVES WITH FLARED CONNECTIONS. 2. FUEL ONDENSATE PUMP. 2. FUEL ONDENSATE PUMP. <		
INDOOR HEAT PUMP (MINI-SPLIT SYSTEM) SCHEDULE DYPE 1. NDOOR, WALL MOUNT 2. NDOOR, CEILING CASSETE DI STATUS CASSETE 1. AIRFLOW RATED AT HIGH FAN SPEED. 2. POWER FOR INDOOR UNIT IS FED FROM OUTDOOR UNIT. 3. COLING CAPACITY RATED AT ATYF. 1. HART WIRE ARATING CAPACITY RATED AT ATYF. 1. HART WIRE ARATING CAPACITY RUBH TO TONS 1. HP-1 2 810 2 24 MBH 29 MBH 33"X37"X33" 208 1 60 1.A 50 1.2.3.4 MITSUBISHI 1HP-2 1 775 2 24 MBH 28 MBH 46"X12"14" 208 1 60 1.A 50 1.2.3.4 MITSUBISHI 1HP-3 2 530 1 12 MBH 28 'MBH 46"X12"14" 208 1 60 1.A 50 1.2.3.4 MITSUBISHI		
Imperiation ACCESSORIES ACCESSORIES 1. 3-POLE DISCONNECT SWITCH PROVIDED BY MFR AND INSTALLED BY DIV. 26. 2. INDOOR, CEILING CASSETE 1. 3-POLE DISCONNECT SWITCH PROVIDED BY MFR AND INSTALLED BY DIV. 26. 2. HARD WIRED UNIT CONTROLLER. 3. FOLL PORT BALL VALVES & SCHRADER VALVES WITH FLARED CONNECTIONS. 4. AIRFLOW RATED AT HIGH FAN SPEED. 5. FIELD-INSTALLED CONDENSATE PUMP. 5. COOLING CAPACITY RATED AT 59°E. 5. FIELD-INSTALLED CONDENSATE PUMP (12011/60) - 1 GPH @ 33 FT. HD. MARK TYPE AIRFLOW COOLING CAPACITY (MBH) CAPACITY (MBH) (MBH) CONDENSITY V PH HZ MCA WEIGHT ACCESSORIES BASIS OF DESIGN IHP-1 2 810 2 24 MBH 29 MBH 33"X37"X33" 208 1 60 1 A 50 1,2,3,4 MITSUBISHI IHP-3 2 530 1 12 MBH 14 MBH 33"X37"X33" 208 1 60 1 A 50 1,2,3,4 MITSUBISHI IHP-3 2 530 1 12 MBH 33"X37"X33" 208 1 60 1 A 50 1,2,3,4 MITSUBISHI <td>CBA CBA V OF</td>	CBA CBA V OF	
2. INDOOR, CEILING CASSETE 2. HARD WIRED UNIT CONTROLLER. NOTES: 3. FULL PORT BALL VALVES & SCHRADER VALVES WITH FLARED CONNECTIONS. 1. AIRFLOW RATED AT HIGH FAN SPEED. 2. POWER FOR INDOOR UNIT IS FED FROM OUTDOOR UNIT. 3. COOLING CAPACITY RATED AT 95°F. 5. FIELD-INSTALLED CONDENSATE PUMP. 4. HEATING CAPACITY RATED AT 47°F. 5. FIELD-INSTALLED CONDENSATE PUMP. MARK TYPE AIRFLOW COOLING CAPACITY (MBH) CAPACITY (MBH) (MBH) 01MENSIONS V PH HZ MCA WEIGHT ACCESSORIES BASIS OF DESIGN IHP-1 2 810 2 24 MBH 29 MBH 33''X37''X33'' 208 1 60 1 A 50 1,2,3,4 MITSUBISHI IHP-3 2 530 1 12 MBH 14 MBH 33''X37''X33'' 208 1 60 1 A 50 1,2,3,4 MITSUBISHI	032 IRON CIT	
1. AIRFLOW RATED AT HIGH FAN SPEED. 2. POWER FOR INDOOR UNIT IS FED FROM OUTDOOR UNIT. 5. FIELD-INSTALLED CONDENSATE PUMP (120/1/60) - 1 GPH @ 33 FT. HD. 3. COOLING CAPACITY RATED AT 95°F. 4. HEATING CAPACITY RATED AT 47°F. MARK TYPE AIRFLOW NOMINAL TONS COOLING CAPACITY (MBH) HEATING CAPACITY (MBH) DIMENSIONS (WXLXH) ELECTRICAL WEIGHT ACCESSORIES BASIS OF DESIGN IHP-1 2 810 2 24 MBH 29 MBH 33"X37"X33" 208 1 60 1 A 50 1,2,3,4 MITSUBISHI IHP-3 2 530 1 12 MBH 14 MBH 33"X37"X33" 208 1 60 1 A 50 1,2,3,4 MITSUBISHI	Image: A line with the second	
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IHP-2 1 775 2 24 MBH 28 MBH 46"X12"14" 208 1 60 1 A 50 1,2,3,5 MITSUBISHI IHP-3 2 530 1 12 MBH 14 MBH 33"X37"X33" 208 1 60 1 A 50 1,2,3,5 MITSUBISHI		
OUTDOOR HEAT PUMP (MINI-SPLIT SYSTEM) SCHEDULE		
TYPE: 1. OUTDOOR HEAT PUMP	AMS T S 700	
NOTES: 1. DISCONNECT SWITCH PROVIDED AND INSTALLED BY DIV. 26.	S WILL S WILL I T E C 250-0	
2. POWER TO INDOOR UNITS IS PROVIDED THRU OUTDOOR UNITS 3. REFRIGERANT CIRCUIT ACCESS PORTS LOCATED OUTDOORS SHALL BE FITTED WITH LOCKING-TYPE TAMPER-RESISTANT CAPS. 4. UNIT SHALL BE CAPABLE OF MINIMUM LINE LENGTH OF 65FT. 5. COOLING CAPACITY PATED AT 95°E	HARLE ASSOC R C H : 205- X · 205-	
6. HEATING CAPACITY RATED AT 47°F. ELECTRICAL		
MARK ITPE CAPACITY CAPACITY V PH HZ MCA MOCP SEER HSPF BASIS OF DESIGN OHP-1 1 24 MBH 29 MBH 208 1 60 19 A 30 A 24.2 11.2 MITSUBISHI OHP-2 1 24 MBH 28 MBH 208 1 60 19 A 30 A 21.4 11 MITSUBISHI	35225	
OH 2 1 24 MBH 20 MBH 200 1 30 A 21.4 11 Millouisin OHP-3 1 12 MBH 14 MBH 208 1 60 11 A 30 A 27 16.4 MITSUBISHI	TH AMA	
	SOU	
	HAWE	
PACKAGED AC UNIT - GAS	1 UNING	
ACCESSORIES: T. 1. 2" THICK THROWAWAY FILTER, MERV 8. 8. PROVIDE ELECTRICAL CONNECTIONS THRU ROOF CURB. 2. CONDENSER COIL GUARD. 9. STAINLESS STEEL DRAIN PAN.	36 BIF	
 HEAD PRESSURE CONTROL TO 10°F AMBIENT. STAINLESS STEEL HEAT EXCHANGER. STAINLESS STEEL HEAT EXCHANGER. MICROPROCESSOR CONTROLS WITH 24/7 PROGRAMMABLE THERMOSTAT. OSA INTAKE HOOD WITH AUTO DAMPER, ECONOMIZER, AND BAROMETRIC RELIEF. DISCONNECT SWITCH PROVIDED AND INSTALLED BY DIV. 26. 	SHEET TITLE: MECHANICAL - SCHEDULES	
 6. FACTORY FABRICATED INSULATED ROOF CURB WITH SPRING VIBRATION ISOLATORS. 7. HINGED ACCESS DOORS. 7. HINGED ACCESS DOOR		
APACITY GAS HEAT ELECTRICAL SER/ER APACITY OUTPUT (MBH) VOLTAGE PH HZ MCA MOCP BASIS OF DESIGN	PROJECT NUMBER:	
7.5 150 121.5 208 3 60 48 A 60 A 14.6/11 1300 1,2,3,4,5,6,7,8,9,10,11,12,13 TRANE YSJ 7.5 120 97.2 208 3 60 48 A 60 A 14.6/11 1300 1,2,3,4,5,6,7,8,9,10,11,12,13 TRANE YSJ 7.5 120 97.2 208 3 60 48 A 60 A 14.6/11 1300 1,2,3,4,5,6,7,8,9,10,11,12,13,14 TRANE YSJ 7.5 120 97.2 208 3 60 48 A 60 A 14.6/11 1300 1,2,3,4,5,6,7,8,9,10,11,12,13,14 TRANE YSJ	PROJECT NUMBER: 2022-08 DATE:	
120 57.2 200 5 60 40 A 60 A 14.0/11 1300 1,2,3,4,5,0,7,8,9,10,11,12,13 TRANE YSJ 5 80 64 208 3 60 33 A 45 A 17.2/13 1100 1,2,3,4,5,6,7,8,9,10,11,12,13 TRANE YSJ 4 60 49 208 3 60 30 A 40 A 17.5/13 1100 1,2,3,4,6,7,8,9,10,11,12,13,15 TRANE YHC	PROJECT NUMBER: 2022-08 DATE: NOVEMBER 16, 2023 DRAWN BY: CHECKED BY: EL P	
7.5 120 97.2 208 3 60 48 A 60 A 14.6/11 1300 1,2,3,4,5,6,7,8,9,10,11,12,13 TRANE YSJ 6 120 97.2 208 3 60 43 A 50 A 14.6/11 1300 1,2,3,4,5,6,7,8,9,10,11,12,13 TRANE YSJ 6 120 97.2 208 3 60 43 A 50 A 14.6/11 1300 1,2,3,4,5,6,7,8,9,10,11,12,13 TRANE YSJ	PROJECT NUMBER: 2022-08 DATE: NOVEMBER 16, 2023 DRAWN BY: CHECKED BY: ELB WAC SHEET NUMBER	

ECTRIC WALL	HEATER SCHEDULE
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										Suite 20 Hoover, AL 3 (205) 988-2	5 35244 2069 rv.com		
										Project Nun 5016102	nber : 21		
				Α	IR PURI	FICATIO	N SCHED	ULE					BA
		ALL NEW PACK	AGED UNITS	W	GPS-FC-48	10. QUANTITY	UNIT SA FAN	NLET208/1	W 10	1 THRU 8			NSF0
	<u>NOTES</u> 1. BASI 2. MOU 3. IF CC 4. BI-PC	S OF DESIGN: GLOB NT BI-POLAR ION GE NTRACTOR SUBSTI DLAR IONIZATION SY	AL PLASMA S ENERATOR W TUTES BASIS 'STEMS REQL	OLUTIONS. A HERE INDICA OF DESIGN JIRING PERIS	APPROVED EQU ATED ON SCHEI WITH ANOTHER SHABLE GLASS	JALS BY AIRGEN DULE. R MFG, CONTRAG TUBES ARE NOT	ICS AND BIOXGEN CTOR SHALL COOF FACCEPTABLE.	SUBJECT TO SPE	CIFICATION CC	OMPLIANCE. IECHANICAL CHANGES.		PROFE	SSIONAL
	5. ALL N 6. PROV 7. PROV 8. PROV	MFGS MUST PASS U VIDE MANUFACTURE VIDE TRANSFORMEE VIDE FACTORY INST	L-867-2007 OZ ER'S 208V PO' R AS REQUIRE ALLED DISCC	ZONE CHAMB WER SUPPLY ED. COORDIN INNECT SWIT	BER TESTING B 7 FOR INSTALL IATE WITH ELE TCH.	Y EITHER UL OR ATION BY DIV. 23 CTRICAL.	ETL.					100%	0 CD'S
			FAN	SCHE FAN A	DULE								
				1. BAC 2. DIS 3. ALL 4. 5A- 5. WE 6. INS	CKDRAFT DAMF CONNECT SWI JMINUM CEILIN 120V FAN SPEE ATHERPROOF ULATED ROOF	PER. TCH PROVIDED / G GRILLE. D CONTROLLER MOTOR ENCLOS CURB.	AND INSTALLED BY URE.	DIV. 26.				RARY	
P. (in-wg)	WHEEL SIZE (INCHES)	SOUND CRITERI (SONES/dBA)	A RPM	MOTOR (HP / W)	ELEC V	TRICAL PH HZ		VEIGHT (LBS)	ACCESSORIES	BASIS OF DESIG	N	B	
0.5 0.5 0.5	8 8 8	3/46 3/46 3/46	1075 1075 1075	44 W 44 W 44 W	120 V 120 V 120 V	1 60 1 60 1 60	LIGHTS	15 15 15	1,2,3,4 1,2,3,4 1,2,3,4	COOK GC COOK GC			С Ч С С Г П
					ACCESS 1. 3-POLE 2. HARD 3. FULL F 4. INTEG 5. FIEL D	ORIES: E DISCONNECT S WIRED UNIT COI PORT BALL VALV RAL CONDENSA INSTALLED CON	SWITCH PROVIDED NTROLLER. ES & SCHRADER V TE PUMP. IDENSATE PLIMP (1	BY MFR AND INS ALVES WITH FLAF 20/1/60) - 1 GPH @	TALLED BY DIV RED CONNECTI	. 26. ONS.		DALE	1032 IROI
UTDOOR DMINAL TONS	UNIT. COOLING CAPACITY (M	B HEATING CAPACITY (MBH) 29 MBH	DIMENS (WxLx 33"X37"	IONS (H)	V	ORIES: E DISCONNECT S WIRED UNIT COID PORT BALL VALV PORT BALL VALV RAL CONDENSA INSTALLED COND ELECTRICAL PH HZ 1 60	SWITCH PROVIDED NTROLLER. ES & SCHRADER V TE PUMP. DENSATE PUMP (1	BY MFR AND INS ALVES WITH FLAF 20/1/60) - 1 GPH @ WEIGHT	TALLED BY DIV RED CONNECTI 33 FT. HD. ACCESSORIES	. 26. ONS. BASIS OF DESIG	;N	IRONDALE	1032 IROI
UTDOOR OMINAL TONS 2 2 1	UNIT. COOLING CAPACITY (M 24 MBH 24 MBH 12 MBH	HEATING CAPACITY (MBH) 29 MBH 28 MBH 28 MBH 14 MBH	DIMENS (WxLx 33"X37" 46"X12 33"X37"	IONS (H) X33" "14" X33"	ACCESS 1. 3-POLI 2. HARD 3. FULL F 4. INTEG 5. FIELD-	ORIES:E DISCONNECT SWIRED UNIT COIPPORT BALL VALVPAL CONDENSAINSTALLED CONPHHZ160160160	SWITCH PROVIDED NTROLLER. ES & SCHRADER V TE PUMP. IDENSATE PUMP (1 MCA 1 A 1 A 1 A	BY MFR AND INS ALVES WITH FLAF 20/1/60) - 1 GPH @ WEIGHT 50 50 50	TALLED BY DIV RED CONNECTI 33 FT. HD. ACCESSORIES 1,2,3,4 1,2,3,5 1,2,3,4	. 26. ONS. BASIS OF DESIG MITSUBISHI MITSUBISHI MITSUBISHI	5N	IRONDALE	1032 IROI
OMINAL TONS	UNIT. COOLING CAPACITY (M 24 MBH 24 MBH 12 MBH 12 MBH 12 MBH SWITCH PROVID DOOR UNITS IS F CIRCUIT ACCES CAPABLE OF M ACITY RATED AT ACITY RATED AT ACITY RATED AT	DED AND INSTALLED PROVIDED THRU OU SS PORTS LOCATED MINIMUM LINE LENG T 95°F. 147°F. COOLING HE CAPACITY	DIMENS (WxLx 33"X37" 46"X12 33"X37" OR HEA DOR HEA DOR UNITS OUTDOORS TH OF 65FT.	IONS (H) X33" "14" X33" X33" SHALL BE FIT SHALL BE FIT	ACCESS 1. 3-POLE 2. HARD 3. FULL F 4. INTEG 5. FIELD- 208 208 208 208 208 208 208 208 208 208 208 208 208 EI PH	ORIES: E DISCONNECT S WIRED UNIT COI PORT BALL VALV PAL CONDENSATINSTALLED CON INSTALLED CON PH HZ 1 60 1 60 1 60 1 60 SPELIT S	SWITCH PROVIDED NTROLLER. ES & SCHRADER V TE PUMP. IDENSATE PUMP (1 1 A 1 A 1 A 1 A 1 A SYSTEM)	BY MFR AND INS ALVES WITH FLAF 20/1/60) - 1 GPH @ WEIGHT 50 50 50 50 SCHEDU APS.	TALLED BY DIV. RED CONNECTI 2) 33 FT. HD. ACCESSORIES 1,2,3,4 1,2,3,5 1,2,3,4	. 26. ONS. BASIS OF DESIG MITSUBISHI MITSUBISHI MITSUBISHI	5N	CHARLES WILLIAMS & ASSOCIATES	PH: 205-250-0700
UTDOOR DMINAL TONS 2 2 2 1 OOR HEA NNECT S R TO INE GERANT SHALL BE NG CAPA NG CAPA NG CAPA VALL BE NG CAPA VALL BE NG CAPA VALL BE NG CAPA VALL BE NG CAPA VALL BE VALL BE VAL	UNIT. COOLING CAPACITY (M 24 MBH 24 MBH 24 MBH 12 MBH 12 MBH SWITCH PROVID OOR UNITS IS F CIRCUIT ACCES CAPABLE OF M ACITY RATED AT ACITY RATED AT ACITY RATED AT CITYPE 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	HEATING CAPACITY (MBH) 29 MBH 28 MBH 14 MBH 14 MBH DED AND INSTALLED PROVIDED THRU OU SPORTS LOCATED MINIMUM LINE LENGT 195°F. 147°F. COOLING HE CAPACITY CA 24 MBH 28 12 MBH 14	DIMENS (WxLx 33"X37" 46"X12 33"X37" OR HEA DOR HEA TDOOR UNITS OUTDOORS TH OF 65FT.	IONS (H) X33" "14" X33" X33" X33" X33" X33" X33" X33" X3	ACCESS 1. 3-POLE 2. HARD 3. FULL F 4. INTEG 5. FIELD- 208 208 208 208 208 208 208 208 208 208 208 208 208 208 208 208 208 208 208 EI PH 1 1 1 1 1 1 1	ORIES: E DISCONNECT S WIRED UNIT COMPORT BALL VALVERAL CONDENSATIONSTALLED CONTRACTOR PH HZ 1 60 1 60 1 60 1 60 1 60 1 60 1 60 1 60 1 60 1 60 1 60 1 60 1 60 1 60 1 60 1 60 1 60	SWITCH PROVIDED NTROLLER. ES & SCHRADER V TE PUMP. IDENSATE PUMP (1 1 A 1 A 1 A 1 A 5YSTEM) IPER-RESISTANT C	BY MFR AND INS ALVES WITH FLAF 20/1/60) - 1 GPH @ 50 50 50 SCHEDU APS.	TALLED BY DIV. RED CONNECTI 2) 33 FT. HD. ACCESSORIES 1,2,3,4 1,2,3,5 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4	. 26. ONS. BASIS OF DESIG MITSUBISHI MITSUBISHI MITSUBISHI BASIS OF DESIG MITSUBISHI MITSUBISHI MITSUBISHI	5N	CHARLES WILLIAMS & ASSOCIATES & ASSOCIATES	IARCHILECIS 1032 PH: 205-250-0700 IROI
UTDOOR DMINAL TONS 2 2 2 1 0OR HEA OOR HEA NNECT S IR TO INE IGERANT SHALL BE ING CAPA NG CAPA K 2 -1 -2 -3 IT - C R IT - C	UNIT. COOLING CAPACITY (M 24 MBH 24 MBH 24 MBH 12 MBH 12 MBH XT PUMP SWITCH PROVID OOR UNITS IS F CIRCUIT ACCES CAPABLE OF M ACITY RATED AT CITY RATED AT TYPE 1 1 1 1 C ACITY RATED AT CITY RATED AT C	HEATING CAPACITY (MBH) 29 MBH 28 MBH 14 MBH 000000000000000000000000000000000000	DIMENS (WxLx 33"X37" 46"X12 33"X37" OR HEA BY DIV. 26. TDOOR UNITS OUTDOORS TH OF 65FT.	IONS (H) X33" "14" X33" AT PUI AT PUI S SHALL BE FI 208 208 208 208 208	ACCESS 1. 3-POLE 2. HARD 3. FULL F 4. INTEG 5. FIELD- V 208 208 208 208 208 208 208 208 208 208 208 208 208 208 208 208 208 208 208 1 1 1 1 1 1 1 1 1 1 1 1	ORIES: E DISCONNECT S WIRED UNIT CON PORT BALL VALV PAL CONDENSATINSTALLED CON INSTALLED CON	SWITCH PROVIDED NTROLLER. ES & SCHRADER V TE PUMP. DENSATE PUMP (1 MCA 1 A 1 A 1 A 1 A 1 A 5YSTEM) IPER-RESISTANT C CA MOCE 0 A 30 A 0 A 30 A 0 A 30 A A 30 A	BY MFR AND INS ALVES WITH FLAF 20/1/60) - 1 GPH @ 50 50 50 50 SCHEDU APS. APS. EF 24.2 21.4 21.4 27	TALLED BY DIV. RED CONNECTI 33 FT. HD. ACCESSORIES 1,2,3,4 1,2,3,5 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1 1,2,3,4 1 1,2,3,4	. 26. ONS. BASIS OF DESIG MITSUBISHI MITSUBISHI MITSUBISHI MITSUBISHI MITSUBISHI MITSUBISHI MITSUBISHI		CHARLES WILLIAMS & ASSOCIATES B & ASSOCIATES	3601 8TH AVE. SOUTH PH: 205-250-0700 IRO
UTDOOR DMINAL TONS 2 2 2 1 0 0 0 0 0 0 0 0 0 0 0 0 0	UNIT. COOLING CAPACITY (M 24 MBH 24 MBH 24 MBH 12 MBH 12 MBH 12 MBH XT PUMP SWITCH PROVID OOR UNITS IS F CIRCUIT ACCES CAPABLE OF M ACITY RATED AT CITY RATED AT TYPE CI 1 1 1 CU CU CU CU CU CU CU C	HEATING CAPACITY (MBH) 29 MBH 28 MBH 14 MBH 000000000000000000000000000000000000	DIMENS (WxLx 33"X37" 46"X12 33"X37" A6"X12 33"X37" OR HEA DIMENS 46"X12 33"X37" A6"X12 A6"X12 33"X37" A6"X12 A6"X12 A6"X12 A7" A6"X12 A6"X12 A7" A6"X12 A7" A6"X12 A7" A6"X12 A7" A6"X12 A7" A6"X12 A7" A6"X12 A7" A6"X12 A7" A6"X12 A7" A7" A7" A6"X12 A7" A7" A7" A7" A7" A7" A7" A7" A7" A7"	IONS	ACCESS 1. 3-POLE 2. HARD 3. FULL F 4. INTEG 5. FIELD- V 208 209 201 202 203 203 204 205 206 207	ORIES: E DISCONNECT S WIRED UNIT COND PORT BALL VALV PAL CONDENSA INSTALLED COND ELECTRICAL PH HZ 1 60 1 60 1 60 1 60 1 60 Standard Frank KING-TYPE TAM MICROPROC All Control 1 StainLESS ST MICROPROC 10. HOT GAS REI 11 MICROPROC 12 StainLESS ST 10. HOT GAS REI 11. MICROPROC 12 12. DISCONNECT 13. BIPOLAR ION 14. DEMAND COI 15. OSA INTAKE	SWITCH PROVIDED NTROLLER. ES & SCHRADER V TE PUMP. DENSATE PUMP (1 MCA 1 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A 2 A 3	BY MFR AND INS ALVES WITH FLAF 20/1/60) - 1 GPH @ WEIGHT 50 50 50 50 50 50 50 50 50 50 50 50 50	TALLED BY DIV. RED CONNECTI 33 FT. HD. ACCESSORIES 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 11,2 11,2 11,1 16,4 FICIENCY HAPF 11,2 11 16,4	. 26. ONS. BASIS OF DESIG MITSUBISHI MITSUBISHI MITSUBISHI BASIS OF DESIG MITSUBISHI MITSUBISHI MITSUBISHI		CHARLES WILLIAMS & ASSOCIATES BHEET TITLE: BECHANICAL PROJECT NUMB 2022-08	3601 8TH AVE. SOUTH PH: 205-250-0700 1032 BIRDI 1032 1032 ABCHTLECTS 1032 IROI 1032 IROI 1032 IROI 1032 IROI 1032
UTDOOR DMINAL TONS 2 2 2 1 OOR HEA OOR HEA OOR HEA NNECT S IR TO INE GERANT SHALL BE ING CAPA NG CAPA XK 2 -1 -2 -3 V T HROW, SS STEE ACCESS T (MBH) 1.5 V	UNIT. COOLING CAPACITY (M 24 MBH 24 MBH 24 MBH 12 MBH 12 MBH XT PUMP SWITCH PROVID DOOR UNITS IS F CIRCUIT ACCES CAPABLE OF M ACITY RATED AT CIRCUIT ACCES CAPABLE OF M ACITY RATED AT TYPE CIRCUIT ACCES CAPABLE OF M CIRCUIT ACC	HEATING CAPACITY (MBH) 29 MBH 29 MBH 28 MBH 14 MBH 000000000000000000000000000000000000	DIMENS (WxLx 33"X37" 46"X12 33"X37" 46"X12 33"X37" OR HEA BY DIV. 26. TDOOR UNITS OUTDOORS TH OF 65FT.	IONS	ACCESS 1. 3-POLE 2. HARD 3. FULL F 4. INTEG 5. FIELD- V 208 209 201 202 203 203 204 205 206 207	ORIES: E DISCONNECT S VIRED UNIT CON PORT BALL VALV RAL CONDENSA INSTALLED CON ELECTRICAL PH HZ 1 60 1 60 1 60 1 60 1 60 1 60 1 60 1 60 1 60 1 60 1 60 1 60 1 1 60 19 60 19 60 19 60 19 60 19 60 19 60 19 60 11 10. HOT GAS RE 11 11. MICROPROC 13 12. DISCOLARION 14 13. DEMAND CON 15 14. EXER 14.6/11	SWITCH PROVIDED NTROLLER. ES & SCHRADER V TE PUMP. DENSATE PUMP (1 MCA 1 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A 1	BY MFR AND INS ALVES WITH FLAF 20/1/60) - 1 GPH (a WEIGHT 50 50 50 50 50 50 50 50 50 50	TALLED BY DIV. RED CONNECTI 2) 33 FT. HD. ACCESSORIES 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 11,2 11,2 11,2 11 16,4	. 26. ONS. BASIS OF DESIG MITSUBISHI MITSUBISHI MITSUBISHI MITSUBISHI MITSUBISHI MITSUBISHI MITSUBISHI MITSUBISHI MITSUBISHI		SHEET TITLE: MECHANICAL PROJECT NUMB 2022-08 DATE: NOVEMBER 1	1032 3601 8TH AVE, SOUTH PH: 205-250-0700 BEL: 205250-0700 FM: 205-250-0700
UTDOOR DMINAL TONS 2 2 2 1 OOR HEA OOR HEA OOR HEA NNECT S ER TO INE IGERANT SHALL BE ING CAPA ING CA	UNIT. COOLING CAPACITY (M 24 MBH 24 MBH 24 MBH 24 MBH 12 MBH 24 MBH 12 MBH SWITCH PROVID OOR UNITS IS F CIRCUIT ACCES CAPABLE OF M ACITY RATED AT CITY RATED AT CITY RATED AT TYPE CI 1 1 1 1 C CATED INSULAT DOORS. VOLTAGE 208 208 208 208 208 208 208 20	HEATING CAPACITY (MBH) 29 MBH 28 MBH 14 MBH 14 MBH DED AND INSTALLED PROVIDED THRU OU SPORTS LOCATED MINIMUM LINE LENGT 7 95°F. 147°F. COOLING HE 24 MBH 28 24 MBH 28 12 MBH 14 MERV 8. 10°F AMBIENT. NGER. CAMPER, ECONOMIZ CAMPER, ECONOMIZ ED All 3 3 3 3 3 3 3 3	DIMENS (WxLx 33"X37" 46"X12 33"X37" 46"X12 33"X37" 00R HE/ BY DIV. 26. TDOOR UNITS 0UTDOORS 0UTDOORS ATING PACITY 0MBH 3MBH 4 MBH 3MBH 4 MBH	IONS	ACCESS 1. 3-POLE 2. HARD 3. FULL F 4. INTEG 5. FIELD- V 208 209 201 202 203 203 204 205 2060 A 600 A <td>ORIES: E DISCONNECT S VIRED UNIT CONDORT BALL VALVE PAL CONDENSATINSTALLED CONDONSATINSTALLED CONDONSATINSTALLED CONDOL PH HZ 1 60 1 60 1 60 1 60 1 60 1 60 1 60 1 60 1 60 1 60 1 60 1 60 1 1 60 19 60 19 60 19 60 11 1 NICROPROC 1 NICROPROC</td> <td>SWITCH PROVIDED NTROLLER. ES & SCHRADER V TE PUMP. DENSATE PUMP (1 MCA 1 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A 1</td> <td>BY MFR AND INS ALVES WITH FLAF 20/1/60) - 1 GPH (2 WEIGHT 50 50 50 50 50 50 50 50 50 50</td> <td>TALLED BY DIV. RED CONNECTI 33 FT. HD. ACCESSORIES 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 11 11.2 11 16.4 SORIES 9,10,11,12,13 9,10,11,12,13 9,10,11,12,13 9,10,11,12,13 9,10,11,12,13</td> <td>. 26. ONS. BASIS OF DESIG MITSUBISHI MITSUBISHI MITSUBISHI MITSUBISHI MITSUBISHI MITSUBISHI MITSUBISHI MITSUBISHI MITSUBISHI MITSUBISHI MITSUBISHI MITSUBISHI MITSUBISHI</td> <td></td> <td>SHEET TITLE: MECHANICAL PROJECT NUMB 2022-08 DATE: NOVEMBER 11 DRAWN BY: ELB</td> <td>1032 10 10 10 10 10 10 10 10 10 10 10 10 10 1</td>	ORIES: E DISCONNECT S VIRED UNIT CONDORT BALL VALVE PAL CONDENSATINSTALLED CONDONSATINSTALLED CONDONSATINSTALLED CONDOL PH HZ 1 60 1 60 1 60 1 60 1 60 1 60 1 60 1 60 1 60 1 60 1 60 1 60 1 1 60 19 60 19 60 19 60 11 1 NICROPROC	SWITCH PROVIDED NTROLLER. ES & SCHRADER V TE PUMP. DENSATE PUMP (1 MCA 1 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A 1	BY MFR AND INS ALVES WITH FLAF 20/1/60) - 1 GPH (2 WEIGHT 50 50 50 50 50 50 50 50 50 50	TALLED BY DIV. RED CONNECTI 33 FT. HD. ACCESSORIES 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 11 11.2 11 16.4 SORIES 9,10,11,12,13 9,10,11,12,13 9,10,11,12,13 9,10,11,12,13 9,10,11,12,13	. 26. ONS. BASIS OF DESIG MITSUBISHI MITSUBISHI MITSUBISHI MITSUBISHI MITSUBISHI MITSUBISHI MITSUBISHI MITSUBISHI MITSUBISHI MITSUBISHI MITSUBISHI MITSUBISHI MITSUBISHI		SHEET TITLE: MECHANICAL PROJECT NUMB 2022-08 DATE: NOVEMBER 11 DRAWN BY: ELB	1032 10 10 10 10 10 10 10 10 10 10 10 10 10 1

		2 Riverchare Office Plaza Statistics A: 35244 (2003) 098-2003 www.dewbdry.com/ Project Number: 50161021 Image: Statistic Control of C	
	FAN TYPE: 1. CEILING MOUNTED EXHAUST FAN. 2. ROOF EXHAUST FAN, DIRECT DRIVE. MARK FAN TYPE AIRFLOW (CFM) E.S.P. (in-wg) CEF-1 1 70 0.5 CEF-2 1 70 0.5 CEF-3 1 70 0.5 EF-4 2 450 0.5	FAR SCHEDULESIN ACCESSORIES:9. BACKDRAFT DAMPER.9. DISCONNECT SWITCH PROVIDED AND INSTALLED BY DIV. 26.3. ALUMINUM CEILING GRILLE.9. DISCONNECT SWITCH PROVIDED AND INSTALLED BY DIV. 26.3. ALUMINUM CEILING GRILLE.9. SANDOC MOTOR ENCOLER.5. WEATHERPROOF CUTRO LER.6. INSULATED ROOF CURB.WHEEL SIZENOTOR ENCOLSURE.0. INSULATED ROOF CURB.WHEEL SIZESOUND CRITERIA (SONES/dBA)MOTOR (HP /W)INTERLOCK VWEIGHT (LBS WTHACCESSORIES BASIS OF DESIGN83/46107544 W120 V160LIGHTS151,2,3,4COOK GC83/46107544 W120 V160LIGHTS151,2,3,4COOK GC109.6/5915501/8 HP120 V160RTU-3251,2,4,5,6COOK ACE-D	LIC LIBRARY MILL RD MDALE
	TYPE:1. INDOOR, WALL MOUNT2. INDOOR, CEILING CASSETENOTES:1. AIRFLOW RATED AT HIGH FAN SPEED.2. POWER FOR INDOOR UNIT IS FED FROM OUTDOOR UI3. COOLING CAPACITY RATED AT 95°F.4. HEATING CAPACITY RATED AT 47°F.MARKTYPEAIRFLOWNOMINAL TONSIHP-1228102IHP-217752IHP-325301	INDOOR HEAT PUMP (MINI-SPLIT SYSTEM) SCHEDULE Accessonies 1.3-POLE DISCONNECT SWITCH PROVIDED BY MFR AND INSTALLED BY DIV. 26. 1.3-POLE DISCONNECT SWITCH PROVIDED BY MFR AND INSTALLED BY DIV. 26. 2.1.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2	IRONDALE PUE 1032 GRANT IRONDALE,
ECTRIC WALL HEATER SCHEDULE ACCESSORIES: TER. 1. SURFACE MOUNTING. KEL 3450 2. WALL MOUNTED THERMOSTAT. 3. UNIT MOUNTED THERMOSTAT. 3. UNIT MOUNTED THERMOSTAT. 4. DISCONNECT SWITCH PROVIDED AND INSTALLED BY DIV. 26. 5. HIGH LIMIT CONTROL.S. 6. RADIAL DIFFUSER. 7. CONCEALED ON/OFF SWITCH. 8. BUILT-IN CIRCUIT BREAKER. PE <u>VOLTAGE PH HZ</u> ACCESSORI 3 KW 208 208 1 60 1,3,5,7,8	TYPE: 1. OUTDOOR HEAT NOTES: 1. DISCONNECT SW 2. POWER TO INDC 3. REFRIGERANT C 4. UNIT SHALL BE C 5. COOLING CAPAC 6. HEATING CAPAC MARK OHP-1 OHP-2 OHP-3	OUTDOOR HEAT PUMP (MINI-SPLIT SYSTEM) SCHEDULE PUMP VITCH PROVIDED AND INSTALLED BY DIV. 26. SOR UNITS IS PROVIDED THRU OUTDOOR UNITS URCUIT ACCESS PORTS LOCATED OUTDOOR SHALL BE FITTED WITH LOCKING-TYPE TAMPER-RESISTANT CAPS. SAPABLE OF MINIMUM LINE LEDGTH OF 65FT. ZITY RATED AT 95'F. ITY RATED AT 95'F. TYPE COPACITY CAPACITY V PH HZ MICA MOCP SEERT HSPF BASIS OF DESIGN 1 24 MBH 29 MBH 208 1 60 19 A 30 A 24.2 11.2 MITSUBISHI 1 12 MBH 14 MBH 208 1 60 19 A 30 A 21.4 11 MITSUBISHI	DUTH PH: 205-250-0700
<u>NOTES:</u> 1. COOLING CAPACITY IS NET CAPACITY @ 95°F AMBI 2. GAS HEATING OUTPUT BASED ON 80% AFUE.	PACKAGED AC UNIT - GA ENT. 1. 2" THICK THROWAN 2. CONDENSER COIL 3. HEAD PRESSURE COIL 3. HEAD PRESSURE COIL 3. HEAD PRESSURE COIL 5. OSA INTAKE HOOD	AS WAY FILTER, MERV 8. GUARD. CONTROL TO 10°F AMBIENT. HEAT EXCHANGER. WITH AUTO DAMPER, ECONOMIZER, AND BAROMETRIC RELIEF. WITH AUTO DAMPER AUTO DAMPER IN SPINIC VIEPATION ISOLATORS WITH AUTO DAMPER AUTO DAMPER IN SPINIC VIEPATION ISOLATORS WITH AUTO DAMPER IN SPINIC VIEPATION ISOLATORS MITH AUTO DAMPER IN SPINIC VIEPATION ISOLATORS MI	SHEET TITLE: MECHANICAL - SCHEDULE



FLEXIBLE DUCT SUPPORT DETAIL

NO SCALE







1. VERIFY DIMENSIONS FROM ACTUAL GRILLE SIZES. SEE SCHEDULE 3. PROVIDE SOUND TRAPS FOR ALL UNDUCTED RETURN GRILLES.



|
 |
 |
 |
 | Zone
 | Table 6.1 | Table 6 1
 | Pz * Rn
 | Az * Ra | Table 6.2
Ventilation | Zone (CEM) with |

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--|--|--|
| Zone Tag
 | Facility Type
 | e Zone Use
 | Zone Floor Area (squa
 | re ft) Occupancy
Pz
 | Occupant
Rp | cfm/ft2
Ra
 | Pz * Rp
 | Az * Ra | Effectiveness | Ez correction
(Vbz/Ez) |
| ASST DIR. OFC 106 / OFFICE/STOR.
 | R. 108 Public Assembly
 | Spaces Office Spa
 | ce 152.0
 | 1.0
 | 5.0 | 0.06
 | 5
 | 9 | 0.8 | 18
OA required per VRP |
| ne Height (feet)
sired Outside Air (Vo) IAQP
 | 10
5
160
 | (<u>1</u> -R)V,
 |
 |
 | Air Changes Per Hour | 6.6
 | S CEM
 | VRP OA CFM | per person | 17.7 |
| ppiy Air (VS)
turn Air (Vr)
circ. Flow Factor (R)
 | 155
 | E.
 |] ^
ev.
 | ×.
 | Outside Air Per VRP
Outside Air Per IAQ
Outside Air Savings | 5
 | 5 CFM
5 CFM
3 CFM
 | IAQ OA CEM | Winter Heating S | avings |
| ntilation Effectiveness (Ez)
 | 0.8
Standing (desk v
 | vork)
 | $\begin{bmatrix} \mathbf{E}_{r} \\ \mathbf{F}_{r} \end{bmatrix} \mathbf{B}$
 |
 | OA Summer Drybulb | 95.
 | .0
 | OA Winter Design [
Supply Air DB Seto | DB (F) | 15 |
| er Location
AC Flow Type
 | B
 |
 | Occupied Zone
e, N, C,
 |
 | Coil Leaving Air Drybulb (F)
Coil Leaving Air Wetbulb (F) | 56.
 | .0
 | MBH Saved Winter | oun (r) | 0.8 |
| tdoor Air Flow Type
 | Constant
 |
 |
 |
 | OA MBH Saved Summer*
OA Tons Saved Summer* | 1.
 | 1
 | *OA = Outside Air | | 0.2 |
| Indoor Contaminants
 | Ĩ
 | Steady Sta
Using the V
 | te Steady State
RP* Using the IAQ Meth
 | Is Steady State Level
od Acceptable at Reduce
 | d Contaminant
Generation | Filtration
 | Cognizant
 | ***OSHA, NIOSH &
http://www.cdc.ge | WHO most cons | ervative values used
<u>yn-a.html</u> |
| Generated By People
& From Outdoors
 | Maximum Thresho
(PPM)
 | ld Value (Prescribed
Plasma O
 | OA) (Reduced OA)
ff Plasma On
 | OA Levels?
 | Rate
(PPM) | Effectiveness
 | Authority***
 | | Carbon dia | vido** |
| etaldehyde
etone
 | 100.0
250.0
 | 0.01112
0.00173
 | 0.00034
 | Yes
Yes
 | 0.00048
0.00654 | 50%
50%
 | OSHA
NIOSH
 | 6000 | | xide |
| monia
nzene
Rutanono (MEK)
 | 25.00
 | 0.01692
 | 0.00330
 | Yes
Yes
 | 0.21460 | 50%
50%
 | OSHA
 | 5000 | | |
| rbon dioxide**
 | 5000
 | 1080
 | 2802
 | Yes
 | 441 | 0%
 | NIOSH
 | 4000 | 2802 | |
| xane
drogen Sulfide
 | 100.0
 | 0.00000
 | 0.00000
 | Yes
 | 0.00000 | 50%
 | OSHA
NIOSH
 | 3000 | 2802 | |
| thane
thanol
 | NA
200.0
 | 1.68094
0.00000
 | 1.68094
0.00000
 | Yes
Yes
 | 0.00000 0.00000 | 0%
 | NA
NIOSH
 | 1000 | 1080 | ■ Carbon
dioxide** |
| thylene Chloride
pane
 | 25.0
1000.0
 | 0.00078
 | 0.00004
0.00998
 | Yes
Yes
 | 0.00121 | 50%
0%
 | OSHA
NIOSH
 | 0 | 1 | |
| rachloroethane
rachloroethylene
 | 5.0000 100.0000 100.0000
 | 0.00000
 | 0.00000
 | Yes
Yes
 | 0.00000 | 50%
50%
 | OSHA
OSHA
 | 1 | 2 3 | |
| 1 - Trichloroethane
 | 350.000
 | 0.00533
 | 0.00017
 | Yes
 | 0.00032 | 50%
 | NIOSH
 | 2 = C02 Level at Ve
3 = C02 Level at IA | entilation Rate OA | Flow Rate |
| ding materials and furnishings assumed t
 | to have no VOCs and off-gassing is
 | complete
 | Is IAQ acceptable at redu
 | iced
 | | **Carbon dioxide ha
ventilation (DCV) se
 | as been provided f
etpoints. The Nati
 | or reference only for onal Research Cour | r gathering deman | d control
oned by |
| All yellow shaded boxes
 | s require user input or review
 |
 | outside air levels?
 | Yes
 | | the US Navy to pro
to control the other
 | ove C02 is not a co
contaminants of c
 | ntaminant of concer
oncern, as found on | n when using air p
submarines. | urification |
|
 | 1
 |
 | [
 | Zone
 | Table 6.1 |
 | 28
 | | Table 6.2 | Outdoor A |
|
 |
 | 3 - 000/0001
 | Zone Floor Area (square ft)
 | Max
Occupancy
 | OA per
Occupant | Table 6.1
cfm/ft2
 | Pz * Rp
 | Az * Ra | Ventilation
Effectivenes | Zone (CFM)
Ez correct |
| Zone Tag
BREAKROOM 112
 | Facility Type
Public Assembly Spaces
 | Zone Use
Office Space
 | Az
312.0
 | Pz
6.0
 | Rp
5.0 | Ra
0.06
 | Pz * Rp
30
 | Az * Ra
19 | Ez
0.8 | (Vbz/Ez
61 |
| ne Height (feet)
 | 10
 |
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 |
 | |
 |
 | | | OA required p |
| sired Outside Air (Vo) IAQP
pply Air (Vs)
 | 30
380
 | (1-R)V,
 |
 |
 | Air Changes Per Hour
Outside Air Per VRP | 7.7
 | 7
1 CFM
 | VRP OA C | FM per person | 10.2 |
| turn Air (Vr)
circ. Flow Factor (R)
 | 350
0.92
 |
 |
 | ↓ √ .
 | Outside Air Per IAQ
Outside Air Savings | 30
 | 0 CFM
1 CFM
 | | Winter Heat | ng Savinos |
| ntilation Effectiveness (Ez)
 | 0.8
 | V.C.
 |]B
, (∨, + ∨₀)
 |
 | OA Summer Drybulb | 95.
 | .0
 | OA Winter Desig | gn DB (F) | 15 |
| er Location
 | Standing (desk work)
B
 | •
 | Occupied Zone
 |
 | OA Summer Wetbulb
Coil Leaving Air Drybulb (F) | 78.
 | .0
 | Supply Air DB S
MBH Saved Wir | etpoint (F)
nter | 70 |
| AC Flow Type
tdoor Air Flow Type
 | Constant
Constant
 |
 | e, N, C.
 |
 | Coil Leaving Air Wetbulb (F)
DA MBH Saved Summer* | 54.
 | .0
6
 | KW Saved Wint | er | 0.5 |
|
 |
 | Steady State
 | Steady State
 | Is Steady State Level
 | OA Tons Saved Summer*
Contaminant | 0.:
 | 2
 | *OA = Outside A
***OSHA, NIOS | Air
H & WHO most | conservative values |
| Indoor Contaminants
Generated By People
 | Maximum Threshold Value
 | Using the VRP*
(Prescribed OA)
 | Using the IAQ Method
(Reduced OA)
 | Acceptable at Reduced
OA Levels?
 | Generation
Rate | Filtration
Effectiveness
 | Cognizant
Authority***
 | http://www.cd | c.gov/niosh/npg | /npgsyn-a.html |
| & From Outdoors
 | (PPM)
 | Plasma Off
 | Plasma On
0.00083
 | Yes
 | (PPM)
0.00048 | 50%
 | OSHA
 | 4 | Carbon | dioxide** |
| etone
 | 250.0
 | 0.00207
 | 0.00033
 | Yes
 | 0.00654 | 50%
50%
 | NIOSH
 | 6000 | 000 | |
| nzene
Butanone (MEK)
 | 1.0000 200.0
 | 0.00253
 | 0.00019
 | Yes
Yes
 | 0.00022 | 50%
50%
 | OSHA
NIOSH
 | 5000 | | |
| rbon dioxide**
 | 5000
2.0000
 | 1582
0.00011
 | 2802
0.00001
 | Yes
 | 441
0.00004 | 0%
 | NIOSH
 | 4000 | | 2802 |
| oxane drogen Sulfide
 | 100.0
 | 0.00000
 | 0.00000
 | Yes
 | 0.00000 | 50%
50%
 | OSHA
NIOSH
 | 3000 | Na Maria | 2002 |
| ethane
 | NA 200.0
 | 1.68094
 | 1.68094
 | Yes
 | 0.00000 | 0%
 | NA
NIOSH
 | 2000 | 1582 | ■ Carl |
| othylene Chloride
 | 25.0
1000.0
 | 0.00084
0.00998
 | 0.00009
0.00998
 | Yes
 | 0.00121 | 50%
0%
 | OSHA
NIOSH
 | 1000 | | |
|
 | 5.0000
 | 0.00000
 | 0.00000
 | Yes
 | 0.00000 | 50%
50%
 | OSHA
 |] | 1 2 | 3 |
| trachloroethane trachloroethylene
 | 100.0000
 | 0.00037
 | 0.00003
 | 103
 | 0.00001 |
 | USHA
 | | | |
| trachloroethane trachloroethylene luene l,1 - Trichloroethane
 | 100.0000
100.0000
350.0000
 | 0.00037
0.00535
0.00080
 | 0.00040
 | Yes
 | 0.00032 | 50%
50%
 | NIOSH
NIOSH
 | 1 = ASHRAE &
2 = C02 Level a | NIOSH C02 Lim
t Ventilation Rate | it
e OA Flow Rate |
| trachloroethane
trachloroethylene
luene
I,1 - Trichloroethane
lene
ilding materials and furnishings assu
All yellow shaded boxes requir
 | 100.0000
100.0000
350.0000
100.0000
umed to have no VOCs and off-c
ire user input or review
 | 0.00037
0.00535
0.00080
0.00230
gassing is complete
 | 0.00040
0.00007
0.00017
Is IAQ acceptable at reduced
outside air levels?
 | Yes
Yes
Yes
Yes
 | 0.00032
0.00058
0.00000 | 50%
50%
**Carbon dioxide h
ventilation (DCV) s
the US Navy to pro
to control the other
 | NIOSHA
NIOSH
OSHA
nas been provide
setpoints. The N
ove C02 is not a
r contaminants of
 | 1 = ASHRAE &
2 = C02 Level a
3 = C02 Level a
d for reference on
ational Research (
contaminant of co
f concern, as foun | NIOSH C02 Lim
t Ventilation Rat
t IAQ Procedure
ly for gathering of
Council was con
ncern when usin
d on submarines
Table 6.2 | it
e OA Flow Rate
OA Flow Rate
demand control
nmissioned by
g air purification
s. |
| Zone Tag
 | 100.0000
100.0000
350.0000
100.0000
umed to have no VOCs and off-c
ire user input or review
Facility Type
 | 0.00037
0.00535
0.00080
0.00230
gassing is complete
 | Is IAQ acceptable at reduced
outside air levels?
 | Yes
Yes
Yes
Yes
Yes
Yes
 | 0.00032
0.00058
0.00000
0.00000
Table 6.1
OA per
Occupant
Rp | 50%
50%
50%
**Carbon dioxide h
ventilation (DCV) s
the US Navy to pro
to control the other
Table 6.1
cfm/ft2
Ra
 | Pz * Rp
 | 1 = ASHRAE &
2 = C02 Level a
3 = C02 Level a
d for reference on
ational Research (
contaminant of co
f concern, as foun | NIOSH C02 Lim
t Ventilation Ratt
t IAQ Procedure
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Council was con
ncern when usin
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Table 6.2
Ventilation
Effectiveness
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e OA Flow Rate
OA Flow Rate
demand control
missioned by
g air purification
s.
Outdoor Air to
Zone (CFM) with
Ez correction
(Vbz/Ez) |
| Exachloroethane Exachloroethylene Exachloroethylene Exactloroethylene Exactloroethylene Exactloroethane Exact
 | 100.0000 100.0000 350.0000 100.0000 umed to have no VOCs and off-c ire user input or review Facility Type V5 208 Public Assembly
 | a Zone Use
Spaces Office Spa
 | 0.00003 0.00007 0.00017 Is IAQ acceptable at reduced outside air levels? Zone Floor Area (squa Az ce 518.0
 | Yes
Yes
Yes
Yes
Yes
Yes
re ft)
Zone
Max
Occupancy
Pz
8.0 | 0.00032
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Table 6.1
OA per
Occupant
Rp
5.0
 | 50%
50%
50%
**Carbon dioxide h
ventilation (DCV) s
the US Navy to pro
to control the other
Table 6.1
cfm/ft2
Ra
0.06
 | OSHA NIOSH OSHA OSHA as been provide setpoints. The N ove C02 is not a r contaminants of Pz * Rp Pz * Rp 40 | 1 = ASHRAE &
2 = C02 Level a
3 = C02 Level a
d for reference on
ational Research (
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f concern, as foun
Az * Ra
Az * Ra
31
 | NIOSH C02 Lim
t Ventilation Rati
t IAQ Procedure
ly for gathering of
Council was con
ncern when usin
d on submarines
Table 6.2
Ventilation
Effectiveness
Ez
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e OA Flow Rate
OA Flow Rate
demand control
missioned by
g air purification
s.
Outdoor Air to
Zone (CFM) with
Ez correction
(Vbz/Ez)
89
OA required per VRF |
| Zone Tag COPY/PRINT 204 / COMP. STATION The Height (feet) Sired Outside Air (Vo) IAQP Oply Air (Vs)
 | 100.0000 100.0000 350.0000 100.0000 umed to have no VOCs and off-gire user input or review Facility Type VS 208 Public Assembly 10 40 720
 | o.00037
0.00535
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gassing is complete
Spaces Office Spa
 | 0.00003 0.00040 0.00007 0.00017 Is IAQ acceptable at reduced outside air levels? Zone Floor Area (squa Az ce 518.0
 | Yes
Yes
Yes
Yes
Yes
Yes
 | 0.00032
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Air Changes Per Hour
Outside Air Per VRP | 50%
50%
50%
**Carbon dioxide h
ventilation (DCV) s
the US Navy to pro
to control the other
Table 6.1
cfm/ft2
Ra
0.06
 | NIOSHA NIOSH OSHA as been provide setpoints. The N ove C02 is not a r contaminants of Pz * Rp Pz * Rp 40
 | 1 = ASHRAE &
2 = C02 Level a
3 = C02 Level a
d for reference on
ational Research (
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f concern, as foun
Az * Ra
Az * Ra
31
VRP OA CFM
IAQ OA CFM | NIOSH C02 Lim
t Ventilation Ratit
t IAQ Procedure
ly for gathering of
Council was com
ncern when usin
d on submarines
Table 6.2
Ventilation
Effectiveness
Ez
0.8 | it
e OA Flow Rate
OA Flow Rate
demand control
nmissioned by
g air purification
s.
Outdoor Air to
Zone (CFM) with
Ez correction
(Vbz/Ez)
89
OA required per VRF
11.1
5.0 |
| Zone Tag
Zone Tag
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re Height (feet)
sired Outside Air (Vo) IAQP
oply Air (Vs)
um Air (Vr)
circ. Flow Factor (R)
 | 100.0000 100.0000 350.0000 100.0000 umed to have no VOCs and off-gire user input or review Facility Type V5 208 Public Assembly 10 40 720 680 0.94
 | e Zone Use
 | 0.00003 0.00040 0.00007 0.00017 Is IAQ acceptable at reduced outside air levels? Zone Floor Area (squa Az ce 518.0
 | Yes
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**Carbon dioxide h
ventilation (DCV) s
the US Navy to pro
to control the other
Table 6.1
cfm/ft2
Ra
0.06
 | Pz * Rp
Pz * Rp
40
CFM
0 CFM
0 CFM
0 CFM
 | 1 = ASHRAE & 2 = C02 Level a 3 = C02 Level a d for reference on ational Research (contaminant of co f concern, as foun Az * Ra Az * Ra 31 VRP OA CFM IAQ OA CFM | NIOSH C02 Lim
t Ventilation Ratu
t IAQ Procedure
ly for gathering of
Council was con
ncern when usin
d on submarines
Table 6.2
Ventilation
Effectiveness
Ez
0.8
per person
per person
Winter Heating S | it
e OA Flow Rate
OA Flow Rate
demand control
nmissioned by
g air purification
s.
Outdoor Air to
Zone (CFM) with
Ez correction
(Vbz/Ez)
89
OA required per VRF
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avings |
| trachloroethane
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I,1 - Trichloroethane
lene
ilding materials and furnishings assu
All yellow shaded boxes requir
All yellow shaded boxes requir
COPY/PRINT 204 / COMP. STATION
e Height (feet)
ired Outside Air (Vo) IAQP
ply Air (Vs)
um Air (Vr)
irc. Flow Factor (R)
tillation Effectiveness (Ez)
el of Ehveiral Activity
 | 100.0000 100.0000 350.0000 100.0000 umed to have no VOCs and off-gire user input or review Facility Type NS 208 Public Assembly 10 40 720 680 0.94 0.8
 | Bassing is complete
 | 0.00003 0.00007 0.00017 Is IAQ acceptable at reduced outside air levels? Zone Floor Area (squa Az ce 518.0 .
 | Yes
Yes
Yes
Yes
Yes
Yes
 | 0.000032 0.00032 0.00058 0.00000 0.00000 Air Changes Per Hour Occupant Rp 5.0 | 50%
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**Carbon dioxide h
ventilation (DCV) s
the US Navy to pro
to control the other
to control the other
Table 6.1
cfm/ft2
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0.06
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 | OSHA NIOSH NIOSH OSHA as been provide setpoints. The N ove C02 is not a r contaminants of Pz * Rp Pz * Rp 40 3 0 CFM 0 CFM 0 CFM 0 CFM 0 CFM 0 0
 | 1 = ASHRAE &
2 = C02 Level a
3 = C02 Level a
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ational Research (
contaminant of co
f concern, as foun
Az * Ra
Az * Ra
Az * Ra
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VRP OA CFM
IAQ OA CFM
IAQ OA CFM
Supply Air DB Setto | NIOSH C02 Lim
t Ventilation Ratu
t IAQ Procedure
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Council was con
ncern when usin
d on submarines
Table 6.2
Ventilation
Effectiveness
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0.8
per person
per person
per person
Winter Heating S
DB (F)
oint (E) | it
e OA Flow Rate
OA Flow Rate
demand control
missioned by
ig air purification
s.
Outdoor Air to
Zone (CFM) with
Ez correction
(Vbz/Ez)
89
OA required per VRF
11.1
5.0
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70 |
| trachloroethane trachloroethylene luene I,1 - Trichloroethane lene Zone Tag COPY/PRINT 204 / COMP. STATION e Height (feet) ired Outside Air (Vo) IAQP ply Air (Vs) um Air (Vr) irc. Flow Factor (R) tillation Effectiveness (Ez) el of Physical Activity or Location AC Flow Type
 | 100.0000 100.0000 350.0000 100.0000 umed to have no VOCs and off-gire user input or review Image: series of the series of
 | o.00037
0.00035
0.00080
0.00230
gassing is complete
Spaces Office Spa
Voice Complete
 | 0.00003 0.00007 0.00007 0.00017 Is IAQ acceptable at reduced outside air levels? Is IAQ acceptable at reduced outside air levels? Zone Floor Area (squa Az ce 518.0 Image: Ce To the second content of the se
 | Yes
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**Carbon dioxide h
ventilation (DCV) s
the US Navy to pro
to control the other
Table 6.1
cfm/ft2
Ra
0.06
8.8
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40
49
95.
78.
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56.
 | OSHA NIOSH NIOSH OSHA as been provide setpoints. The N ove C02 is not a r contaminants of Pz * Rp Pz * Rp 40 3 0 CFM 0 0.0 | 1 = ASHRAE &
2 = C02 Level a
3 = C02 Level a
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Az * Ra
Az * Ra
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VRP OA CFM
IAQ OA CFM
 | NIOSH C02 Lim
t Ventilation Ratit
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Council was con
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d on submarines
Table 6.2
Ventilation
Effectiveness
Ez
0.8
per person
per person
per person
Winter Heating S
DB (F)
oint (F) | it
e OA Flow Rate
OA Flow Rate
demand control
missioned by
ig air purification
s.
Outdoor Air to
Zone (CFM) with
Ez correction
(Vbz/Ez)
89
OA required per VRI
11.1
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avings
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| trachloroethane trachloroethane trachloroethylene luene linene linene lene Zone Tag Zone Tag All yellow shaded boxes require All yellow shaded boxes require dutside Air (Vo) IAQP pipy Air (Vr) sirce. Flow Factor (R) tilation Effectiveness (Ez) el of Physical Activity r Location AC Flow Type door Air Flow Type door Air Flow Type
 | 100.0000 100.0000 350.0000 100.0000 umed to have no VOCs and off-grime ire user input or review VS 208 Public Assembly 10 40 720 680 0.94 0.8 Standing (desk v B Constant Constant
 | 0.00037 0.00035 0.00080 0.00230 gassing is complete Spaces Office Spa Vork)
 | 0.00003 0.00007 0.00017 Is IAQ acceptable at reduced outside air levels? Zone Floor Area (squa Az ce 518.0 Fr. (V, + V.a) Fr. (V, + V.a) Occupied Zone e. N - C.
 | Yes
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 | 1 = ASHRAE & 2 = C02 Level a 3 = C02 Level a d for reference on ational Research (contaminant of coff concern, as found) Az * Ra Az * Ra 31 VRP OA CFM IAQ OA CFM IAQ OA CFM IAQ OA CFM OA Winter Design ID Supply Air DB Setp MBH Saved Winter *OA = Outside Air ***OSHA, NIOSH & http://www.cdc.ge 6000 5000 4000 3000 2000 1 1 = ASHRAE & NIC 2 = C02 Level at IA or reference only foo 3000 2000 1000 0 11 Az * Ra | NIOSH C02 Limit
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Table 6.2
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Zone Max Zone Floor Area (square ft) Occupancy Pz Zone Tag DIR. OFFICE 114 Facility Type Az Public Assembly Spaces Office Space 190.0 esired Outside Air (Vo) IAQF (1-R)V. ply Air (Vs) ErA Recirc. Flow Factor (R) 0.98 0.8 entilation Effectiveness (E $\vec{\mathbf{F}}_r (\mathbf{v}_r + \mathbf{v}_n)$ Standing (desk work) B Constant Level of Physical Activity Occupied Zone e, N, C, C Flow Type oor Air Flow Ty Steady State Steady State Is Steady State Leve Indoor Contaminants Using the VRP* Using the IAQ Method Acceptable at Reduced Maximum Threshold Value Generated By People (Prescribed OA) (Reduced OA) OA Levels? & From Outdoors (PPM) Plasma Off Plasma On 2- Butanone (ME Carbon dioxide** lydrogen Sulfide Nethylene Chloride opane trachloroethane trachloroethylene Trichloroethane Is IAQ acceptable at reduced

Yes

outside air levels?

outside air levels?

Building materials and furnishings assumed to have no VOCs and off-gassing is complete All yellow shaded boxes require user input or review

				Zone	
			1	Max	I
			Zone Floor Area (square ft)	Occupancy	I
Zone Tag	Facility Type	Zone Use	Az	Pz	
RONDALE HISTORY/ISO 212	Public Assembly Spaces	Libraries	196.0	2.0	
NONDALL HISTORY/ISO 212	Fublic Assembly spaces	Libraries	150.0	2.0	
ne Height (feet)	15				
sired Outside Air (Vo) IAOP	10				Air Cha
uply Air (Ve)	200	(I-R)V,			Outeide
aturo Air (Vr)	190		~		Outside
circ Flow Factor (P)	0.80	BY	277 	v	Outside
	0.00				Outside
ntilation Effectiveness (Ez)	0.8	Va Ca	'B		OA Sun
vel of Physical Activity	Sedentary		$F_r (V_r + V_o)$		OA Sun
ter Location	В	,			Coil Lea
/AC Flow Type	Constant		occupied Zone c. N. C.		Coil Lea
Itdoor Air Flow Type	Constant				OA MB
					OA Ton
		Steady State	Steady State	Is Steady State Level	
Indoor Contaminants		Using the VRP*	Using the IAQ Method	Acceptable at Reduced	I
Generated By People	Maximum Threshold Value	(Prescribed OA)	(Reduced OA)	OA Levels?	1
& From Outdoors	(PPM)	Plasma Off	Plasma On		
etaldehyde	100.0	0.01111	0.00062	Yes	
etone	250.0	0.00149	0.00019	Yes	
nmonia	25.00	0.00910	0.00404	Yes	
nzene	1.0000	0.00251	0.00014	Yes	
Butanone (MEK)	200.0	0.00015	0.00003	Yes	
rbon dioxide**	5000	829	2469	Yes	
loroform	2.0000	0.00011	0.00001	Yes	1
oxane	100.0	0.00000	0.00000	Yes	
drogen Sulfide	10.0	0.00000	0.00000	Yes	
ethane	NA	1.68094	1.68094	Yes	
ethanol	200.0	0.00000	0.00000	Yes	
ethylene Chloride	25.0	0.00073	0.00006	Yes	
opane	1000.0	0.00998	0.00998	Yes	
trachloroethane	5.0000	0.00000	0.00000	Yes	
trachloroethylene	100.0000	0.00037	0.00002	Yes	
luene	100.0000	0.00532	0.00030	Yes	1
1,1 - Trichloroethane	350.0000	0.00075	0.00005	Yes	
lene	100.0000	0.00230	0.00013	Yes	
ilding materials and furnishings	assumed to have no VOCs and off-	gassing is complete	Is IAQ acceptable at reduced	Yes	1

Iding materials and furnishings assumed to have no VOCs and off-gassing is complete All yellow shaded boxes require user input or review

				Zone	
				Max	
			Zone Floor Area (square ft)	Occupancy	
Zone Tag	Facility Type	Zone Use	Az	Pz	
LIBRARIES	Public Assembly Spaces	Libraries	707.0	8.0	
Zone Height (feet)	15				
Desired Outside Air (Vo) IAQP	40	(1-R)V,			Air Char
Supply Air (Vs)	1,190				Outside
Return Air (Vr)	1150	Er	^		Outside
Recirc. Flow Factor (R)	0.80	RV.	e T	v.	Outside
/entilation Effectiveness (Ez)	0.8	Va,Ca	<u>, </u> , , , , , , , , , , , , , , , , , ,	1	OA Sum
evel of Physical Activity	Sedentary		$\mathbf{F}_r (\mathbf{V}_r + \mathbf{V}_o)$		OA Sum
Filter Location	В				Coil Lea
IVAC Flow Type	Constant		Occupied Zone		Coil Lea
Dutdoor Air Flow Type	Constant		e. N. C.		OA MBH
					OA Tons
	Г	Steady State	Steady State	Is Steady State Level	
Indoor Contaminants		Using the VRP*	Using the IAQ Method	Acceptable at Reduced	
Generated By People	Maximum Threshold Value	(Prescribed OA)	(Reduced OA)	OA Levels?	
& From Outdoors	(PPM)	Plasma Off	Plasma On		
Acetaldehyde	100.0	0.01111	0.00044	Yes	
Acetone	250.0	0.00150	0.00013	Yes	
Ammonia	25.00	0.00957	0.00282	Yes	
Benzene	1.0000	0.00251	0.00010	Yes	
2- Butanone (MEK)	200.0	0.00015	0.00002	Yes	
Carbon dioxide**	5000	857	2469	Yes	
Chloroform	2.0000	0.00011	0.00000	Yes	l.
Dioxane	100.0	0.00000	0.00000	Yes	
Hydrogen Sulfide	10.0	0.00000	0.00000	Yes	
Methane	NA	1.68094	1.68094	Yes	
Methanol	200.0	0.00000	0.00000	Yes	
Methylene Chloride	25.0	0.00074	0.00004	Yes	
Propane	1000.0	0.00998	0.00998	Yes	1
letrachloroethane	5.0000	0.00000	0.00000	Yes	
Tetrachloroethylene	100.0000	0.00037	0.00001	Yes	
[oluene	100.0000	0.00532	0.00021	Yes	Ĵ.
1,1,1 - Trichloroethane	350.0000	0.00075	0.00004	Yes	
Kylene	100.0000	0.00230	0.00009	Yes	
Building materials and furnishings	assumed to have no VOCs and off-g	assing is complete	Is IAQ acceptable at reduced	Ves	
All yellow shaded boxes	require user input or review		outside air levels?	163	

All yellow shaded boxes require user input or review *TYPICAL FOR ALL LIBRARIES IN BUILDING

Zone Tag	Facility Type	Zone Use	Zone Floor Area (square ft) Az	Zone Max Occupancy Pz	
MEETING ROOM 102	Public Assembly Spaces	Multi-use Assembly	1,823.0	60.0	
Zone Height (feet)	15]			
Desired Outside Air (Vo) IAQP	300	(1-R)V,			Air
Supply Air (Vs)	2,740				Out
Return Air (Vr)	2440	ErA	.		Out
Recirc. Flow Factor (R)	0.80	RV.		v.	Out
Ventilation Effectiveness (Ez)	0.8	Va Ca	⊐в	+	OA
Level of Physical Activity	Sedentary		$\vec{r}_r (\mathbf{V}_r + \mathbf{V}_o)$		OA
Filter Location	В	•			Coi
HVAC Flow Type	Constant	· ·	Occupied Zone		Coi
Outdoor Air Flow Type	Constant		e. N. C.		OA
Culdoor Air Flow Type	Constant	1			OA
		Steady State	Steady State	Is Steady State Level	
Indoor Contaminants		Using the VRP*	Using the IAQ Method	Acceptable at Reduced	
Generated By People	Maximum Threshold Value	(Prescribed OA)	(Reduced OA)	OA Levels?	
& From Outdoors	(PPM)	Plasma Off	Plasma On		
Acetaldehyde	100.0	0.01112	0.00121	Yes	
Acetone	250.0	0.00173	0.00037	Yes	
Ammonia	25.00	0.01697	0.00782	Yes	
Benzene	1.0000	0.00252	0.00028	Yes	
2- Butanone (MEK)	200.0	0.00020	0.00006	Yes	
Carbon dioxide**	5000	1287	2469	Yes	
Chloroform	2.0000	0.00011	0.00001	Yes	lî -
Dioxane	100.0	0.00000	0.00000	Yes	
Hydrogen Sulfide	10.0	0.00000	0.00000	Yes	1
Methane	NA	1.68094	1.68094	Yes	0
Methanol	200.0	0.00000	0.00000	Yes	
Methylene Chloride	25.0	0.00078	0.00012	Yes	
Propane	1000.0	0.00998	0.00998	Yes	1
Tetrachloroethane	5.0000	0.00000	0.00000	Yes	
Tetrachloroethylene	100.0000	0.00037	0.00004	Yes	
Toluene	100.0000	0.00533	0.00058	Yes	
1,1,1 - Trichloroethane	350.0000	0.00077	0.00010	Yes	

Building materials and furnishings assumed to have no VOCs and off-gas All yellow shaded boxes require user input or review ssing is complete

IAQ acceptable at reduced Yes outside air levels?



				Zone Max	Table 6.1 OA per	Table 6.1	Pz * Rp	Az * Ra	Table 6.2 Ventilation	Outdoor Air to Zone (CFM) with
Zone Tag	Facility Type	Zone Use	Zone Floor Area (square ft) Az	Occupancy Pz	Occupant Rp	cfm/ft2 Ra	Pz * Rp	Az * Ra	Effectiveness	s Ez correction (Vbz/Ez)
MULTI-PURPOSE ROOM 216	Public Assembly Spaces	Multi-use Assembly	333.0	24.0	7.5	0.06	180	20	0.8	250 OA required per VRF
esired Outside Air (Vo) IAQP upply Air (Vs)	120 650	(1-R)Vr			Air Changes Per Hour Outside Air Per VRP	11.7	CFM	VRP OA C	FM per person FM per person	10.4 5.0
eturn Air (Vr) ecirc. Flow Factor (R)	530 0.80		×	v.	Outside Air Per IAQ Outside Air Savings	120 130	CFM		Winter Heatin	ng Savings
entilation Effectiveness (Ez) evel of Physical Activity ilter Location	0.8 Sedentary B		$\mathbf{F}_{r} \left(\mathbf{V}_{r} + \mathbf{V}_{o} \right)$		OA Summer Drybulb OA Summer Wetbulb Coil Leaving Air Drybulb (F)	95. 78. 56.	0	Supply Air DB S MBH Saved Wit	gn DB (F) Setpoint (F)	70
VAC Flow Type utdoor Air Flow Type	Constant Constant		occupied Zone c, N, C,		Coil Leaving Air Wetbulb (F) OA MBH Saved Summer*	54. 11.	0	KW Saved Wint	ter	2.3
Indoor Contaminants	ſ	Steady State Using the VRP*	Steady State Using the IAQ Method	Is Steady State Level Acceptable at Reduced	Contaminant Generation	Filtration	Cognizant	***OSHA, NIOS http://www.co	Air H & WHO most c dc.gov/niosh/npg/i	onservative values used
Generated By People & From Outdoors	Maximum Threshold Value (PPM)	(Prescribed OA) Plasma Off	(Reduced OA) Plasma On	OA Levels?	Rate (PPM)	Effectiveness	Authority***		Carbon d	dioxide**
Acetone	250.0 25.00	0.01113 0.00178 0.01878	0.00054	Yes Yes	0.00433 0.14210	50% 50% 50%	NIOSH NIOSH	6000	000	
enzene - Butanone (MEK) Carbon dioxide**	1.0000 200.0 5000	0.00252 0.00021 1392	0.00041 0.00009 2469	Yes Yes Yes	0.00015 0.00088 292	50% 50% 0%	OSHA NIOSH NIOSH	4000		
Chloroform Dioxane	2.0000 100.0	0.00011 0.00000	0.00002	Yes Yes	0.00003 0.00000	50% 50%	NIOSH	3000	2	2469
Aydrogen Sulfide Methane Methanol	10.0 NA 200.0	1.68094 0.00000	1.68094 0.00000	Yes Yes Yes	0.00000 0.00000 0.00000	0% 0%	NIOSH NA NIOSH	2000	1392	■ Carbon dioxide**
Methylene Chloride Propane Extrachloroethane	25.0 1000.0 5.0000	0.00079 0.00998 0.00000	0.00017 0.00998 0.00000	Yes Yes	0.00080	50% 0%	OSHA NIOSH OSHA	0	1 1	
Tetrachloroethylene	100.0000 100.0000	0.00037 0.00533	0.00006 0.00085	Yes Yes	0.00001 0.00021	50% 50%	OSHA NIOSH	1 = ASHRAE &	NIOSH C02 Limit	t t
(,1,1 - Trichloroethane (ylene	100.0000	0.00230	0.00036	Yes	0.00038	50% 50% **Carbon dioxide h	OSHA as been provide	2 = C02 Level a 3 = C02 Level a ed for reference or	It Ventilation Rate It IAQ Procedure C hly for gathering de	OA Flow Rate OA Flow Rate iemand control
All yellow shaded boxes requ	ire user input or review		outside air levels?	Yes]	the US Navy to pro to control the other	ve C02 is not a contaminants c	contaminant of co	incern when using id on submarines.	air purification
			Zone Floor Area (squa	Zone Max are ft) Occupancy	Table 6.1 OA per Occupant	Table 6.1 cfm/ft2	Pz * Rp	Az * Ra	Ventilation	Zone (CFM) with Ez correction
Zone Tag OPEN WORK ROOM 107	Facility Type Public Assembly S	Zone Us paces Office Spa	ace Az 257.0	Pz 4.0	Rp 5.0	Ra 0.06	Pz * Rp 20	Az * Ra 15	Ez 0.8	(Vbz/Ez) 44 OA required per VRP
one Height (feet) esired Outside Air (Vo) IAQP	10 20	(1-R)V,			Air Changes Per Hour	7.1	CEM	VRP OA CFM	1 per person	11.1
eturn Air (Vr) ecirc. Flow Factor (R)	290 270 0.93	Ē	RV,	v.	Outside Air Per VRP Outside Air Per IAQ Outside Air Savings	44 20 24	CFM CFM	IAQ UA CFM	Winter Heating Sa	avings
entilation Effectiveness (Ez) evel of Physical Activity	0.8 Standing (desk we	ork)	$\begin{bmatrix} \mathbf{E}_{r} \\ \mathbf{F}_{r} \end{bmatrix} \mathbf{B}$		OA Summer Drybulb OA Summer Wetbulb Coll Leaving Air Do bulb (E)	95. 78.	0	OA Winter Design I Supply Air DB Setp MBH Saved Winter	DB (F) point (F)	15 70
VAC Flow Type utdoor Air Flow Type	Constant Constant		Occupied Zone e, N , C ,		Coil Leaving Air Drybub (F) Coil Leaving Air Wetbulb (F) OA MBH Saved Summer*	54.	0	KW Saved Winter		0.4
Indoor Contaminants	Maximum Threehald	Steady St Using the V	Ate Steady State /RP* Using the IAQ Meth	Is Steady State Lev Acceptable at Reduc	rel Contaminant ced Generation	Filtration	Cognizant	***OSHA, NIOSH & http://www.cdc.g	& WHO most conser jov/niosh/npg/npgsyr	rvative values used <u>n-a.html</u>
& From Outdoors	(PPM) 100.0	Plasma C 0.01114	Off Plasma On 4 0.00073	Yes	(PPM) 0.00048	50%	OSHA		Carbon diox	kide**
enzene	250.0 25.00 1.0000	0.02596	5 0.0029 6 0.00703 3 0.00017 5 0.0005	Yes Yes	0.21460 0.00022	50% 50% 50%	NIOSH NIOSH OSHA	6000 5000		
arbon dioxide**	200.0 5000 2.0000	0.00025 1484 0.00011	2802 1 0.00001	Yes Yes	441 0.00004	0% 50%	NIOSH NIOSH NIOSH	4000	2802	
ydrogen Sulfide ethane	100.0 10.0 NA	0.00000	0 0.00000 0 0.00000 4 1.68094	Yes Yes	0.00000 0.00000 0.00000	50% 50% 0%	NIOSH NA	2000	1484	■ Carbon
ethaloi lethylene Chloride ropane	25.0	0.00000	0.00000 0.00008 0.00998 0.00998	Yes Yes Yes	0.00000	0% 50% 0%	OSHA NIOSH	0	1	uloxide
	5 0000	1 1 1 1 1 1 1 1 1 1 1 1 1					115-110		2 2	
etrachloroethylene oluene 11 - Trichloroethane	5.0000 100.0000 100.0000 350.0000	0.00000	0 0.00000 7 0.00002 5 0.00035 0 0.00007	Yes Yes Yes	0.00000 0.00001 0.00032 0.00058	50% 50% 50%	OSHA OSHA NIOSH	1 1 = ASHRAE & NIC 2 = C02 evel at Ve	2 3 OSH C02 Limit	Now Rate
For a choroethane Foluene (1,1,1 - Trichloroethane (ylene Building materials and furnishings assumed All yellow shaded boxes	5.0000 100.0000 100.0000 350.0000 100.0000 d to have no VOCs and off-gassing is c is require user input or review	0.00000 0.00037 0.00535 0.00080 0.00230 complete	0 0.00000 7 0.00002 5 0.00035 0 0.00007 0 0.00015 Is IAQ acceptable at redioutside air levels?	Yes Yes Yes Yes Yes Yes	0.00000 0.00001 0.00032 0.00058 0.00000	50% 50% 50% **Carbon dioxide ha ventilation (DCV) se the US Navy to pro	OSHA OSHA NIOSH NIOSH OSHA as been provided appoints. The Nati ve C02 is not a co	1 1 = ASHRAE & NIC 2 = C02 Level at Ve 3 = C02 Level at IA for reference only fo ional Research Cour intaminant of concer	2 3 OSH C02 Limit entilation Rate OA F Q Procedure OA Fk vr gathering demand ncil was commission m when using air pub	Flow Rate low Rate I control ned by infication
Jurachioroethane strachloroethylene 1,1 - Trichloroethane /lene .ilding materials and furnishings assumed All yellow shaded boxes	5.0000 100.0000 100.0000 350.0000 100.0000 d to have no VOCs and off-gassing is c is require user input or review	0.00000 0.00037 0.00535 0.00080 0.00230	0 0.00000 7 0.00002 5 0.00035 0 0.00007 0 0.00015 Is IAQ acceptable at reduottside air levels? Zone Floor Area (square ft)	Yes Yes Yes Yes Yes Yes Yes Jone Max Occupancy	Table 6.1 Occupant	50% 50% 50% **Carbon dioxide ha ventilation (DCV) se the US Navy to pro- to control the other Table 6.1 cfm/ft2	OSHA OSHA NIOSH NIOSH OSHA as been provided tipoints. The Native CO2 is not a cc contaminants of contaminants	1 1 = ASHRAE & NIC 2 = C02 Level at Ve 3 = C02 Level at IA for reference only for ional Research Cour pontaminant of concert concern, as found on Az * Ra	2 3 DSH C02 Limit entilation Rate OA F VQ Procedure OA FI rr gathering demand ncil was commission rn when using air pu submarines. Table 6.2 Ventilation Effectiveness	Flow Rate low Rate d control ned by unification Outdoor Air to Zone (CFM) with Ez correction
Zone Tag SERVING KITCHEN 109	5.000 100.0000 100.0000 350.0000 100.0000 to have no VOCs and off-gassing is c is require user input or review Facility Type Public Assembly Spaces	2010000 0.00037 0.00035 0.00036 0.000230 0.00230 complete Zone Use Office Space	0 0.00000 7 0.00002 5 0.00035 0 0.00007 0 0.00015 Is IAQ acceptable at redioutside air levels? Zone Floor Area (square ft) Az 235.0	Zone Max Occupancy Pz 2.0	0.00000 0.00001 0.00032 0.00058 0.00000	50% 50% 50% 50% 50% **Carbon dioxide haventilation (DCV) set the US Navy to provide the US Navy to provide control the other Table 6.1 cfm/ft2 Ra 0.06	OSHA OSHA NIOSH NIOSH OSHA ss been provided etpoints. The Nat ve C02 is not a co contaminants of o Pz * Rp Pz * Rp 10	1 1 = ASHRAE & NIC 2 = CO2 Level at Ve 3 = CO2 Level at IA for reference only for ional Research Cour ontaminant of concer concern, as found on Az * Ra Az * Ra 14	2 3 OSH C02 Limit entilation Rate OA F Q Procedure OA Fl or gathering demand ncil was commission m when using air pu n submarines. Table 6.2 Ventilation Effectiveness Ez 0.8	Flow Rate low Rate d control ned by unification Outdoor Air to Zone (CFM) with s Ez correction (Vbz/Ez) 30 OA required per VRP
Zone Tag SERVING KITCHEN 109 Zone Height (feet)	5.0000 100.0000 100.0000 350.0000 100.0000 4 to have no VOCs and off-gassing is c is require user input or review Facility Type Public Assembly Spaces 10 10 50	Zone Use	0 0.00000 7 0.00002 5 0.00035 0 0.00007 0 0.00015 Is IAQ acceptable at reduced air levels? Zone Floor Area (square ft) Az 235.0	Yes Yes Yes Yes Yes Yes Jone Max Occupancy Pz 2.0	Table 6.1 0.00000 0.00032 0.00058 0.00000	50% 50% 50% 50% 50% **Carbon dioxide haventilation (DCV) set the US Navy to provoto control the other of the US Navy to provoto control the other of the US Navy to provoto to control the other othe	OSHA OSHA NIOSH NIOSH OSHA as been provided typoints. The Nati ve CO2 is not a cc contaminants of c Pz * Rp Pz * Rp 10	1 1 = ASHRAE & NIC 2 = C02 Level at Ve 3 = C02 Level at IA for reference only fo ional Research Cour ontaminant of concer concern, as found on Az * Ra Az * Ra 14 VRP OA C	2 3 OSH C02 Limit entilation Rate OA F VQ Procedure OA Fi yr gathering demand ncil was commissior in when using air pu to submarines. Table 6.2 Ventilation Effectiveness Ez 0.8	Flow Rate low Rate d control ned by urification Outdoor Air to Zone (CFM) with Ez correction (Vbz/Ez) 30 OA required per VRF
Zone Tag SERVING KITCHEN 109 Zone Height (feet) Desired Outside Air (Vo) IAQP Supply Air (Vs) Return Air (Vr) Recirc. Flow Factor (R)	5.0000 100.0000 100.0000 350.0000 100.0000 d to have no VOCs and off-gassing is c is require user input or review Facility Type Public Assembly Spaces 10 10 50 40 0.80	Zone Use	0 0.00000 7 0.00002 5 0.00035 0 0.00007 0 0.00015 Is IAQ acceptable at redioutside air levels? Zone Floor Area (square ft) Az 235.0	Yes Yes Yes Yes Yes Yes Jone Max Occupancy Pz 2.0	0.00000 0.00032 0.00058 0.00000	50% 50% 50% 50% 50% **Carbon dioxide have triation (DCV) set the US Navy to provide the US Navy to provide control the other of the other other of the other other of the other othe	OSHA OSHA NIOSH NIOSH OSHA as been provided typoints. The Nati ve CO2 is not a cc contaminants of c Pz * Rp Pz * Rp 10 CFM CFM	1 1 = ASHRAE & NIC 2 = CO2 Level at Ve 3 = CO2 Level at IA for reference only for ional Research Cour ontaminant of concer concern, as found on Az * Ra Az * Ra 14 VRP OA C IAQ OA C	2 3 OSH C02 Limit entilation Rate OA F Q Procedure OA Flyr gathering demand ncil was commissior m when using air pu submarines. Table 6.2 Ventilation Effectiveness Ez 0.8 FM per person FM per person Winter Heating	Flow Rate low Rate d control ned by urification Outdoor Air to Zone (CFM) with Ez correction (Vbz/Ez) 0A required per VRF 15.1 5.0 g Savings
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Steady State Using the IAQ Method (Reduced OA) Plasma On 0.00189 0.00013 2802 0.00002 0.00002 0.00000 0.000013 2802 0.00000 0.00000 0.00000 0.00000 0.000013 2802 0.00000 0.000013 2802 0.00000 0.00001 0.00001 0.00000 0.00001 0.00001 0.00001 0.00002 0.00003 0.00004 0.000051 0.00006 0.000017 0.000017 <td>Yes Yes Y</td><td>0.0000 0.00032 0.0000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 Air Changes Per Hour Outside Air Per VRP Outside Air Per IAQ Outside Air Per IAQ Outside Air Per IAQ Outside Air Per IAQ Coil Leaving Air Drybulb OA Summer Drybulb OA Summer Drybulb (F) OA MBH Saved Summer* OA Tons Saved Summer* OA Tons Saved Summer* OA Tons Saved Summer* O.00022 0.00048 0.00022 0.000133 441 0.00000 0.00000 0.00001 0.00002 0.00011 0.00002 0.000032 0.00001 0.00002 0.000032 0.000032 0.000032 0.00004 0.000058 0.0000</td><td>50% 50% 50% 50% 50% 50% 50% 50% **Carbon dioxide ha ventilation (DCV) set the US Navy to prov to control the other of the US Navy to prov Table 6.1 cfm/ft2 Ra 0.06 1.3 300 100 200 95. 78. 56. 50%</td><td>OSHA OSHA NIOSH NIOSH NIOSH NIOSH Seeen provided stpoints. 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Steady State Using the IAQ Method (Reduced OA) Plasma On 0.00189 0.00013 2802 0.00002 0.00002 0.00000 0.000013 2802 0.00000 0.00000 0.00000 0.00000 0.000013 2802 0.00000 0.000013 2802 0.00000 0.00001 0.00001 0.00000 0.00001 0.00001 0.00001 0.00002 0.00003 0.00004 0.000051 0.00006 0.000017 0.000017 <td>Yes Yes Y</td> <td>0.0000 0.00032 0.0000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 Air Changes Per Hour Outside Air Per VRP Outside Air Per IAQ Outside Air Per IAQ Outside Air Per IAQ Outside Air Per IAQ Coil Leaving Air Drybulb OA Summer Drybulb OA Summer Drybulb (F) OA MBH Saved Summer* OA Tons Saved Summer* OA Tons Saved Summer* OA Tons Saved Summer* O.00022 0.00048 0.00022 0.000133 441 0.00000 0.00000 0.00001 0.00002 0.00011 0.00002 0.000032 0.00001 0.00002 0.000032 0.000032 0.000032 0.00004 0.000058 0.0000</td> <td>50% 50% 50% 50% 50% 50% 50% 50% **Carbon dioxide ha ventilation (DCV) set the US Navy to prov to control the other of the US Navy to prov Table 6.1 cfm/ft2 Ra 0.06 1.3 300 100 200 95. 78. 56. 50%</td> <td>OSHA OSHA NIOSH NIOSH NIOSH NIOSH Seeen provided stpoints. 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			Zone Floor Area (square ft)	Zone Max Occupancy	OA per Occupar
Zone Tag	Facility Type	Zone Use	Az	Pz	Rp
STUDY 206A,B,C	Public Assembly Spaces	Office Space	115.0	4.0	5.0
Zone Height (feet)	10				
Desired Outside Air (Vo) IAQP	20				Air Changes Per Ho
Supply Air (Vs)	250	(1-R)V,			Outside Air Per VRF
Return Air (Vr)	230	Er			Outside Air Per IAQ
Recirc. Flow Factor (R)	0.92	RV.		v.,	Outside Air Savings
Ventilation Effectiveness (Ez)	0.8	Vo,Co F	'n †		OA Summer Drybul
evel of Physical Activity	Standing (desk work)	Fre	$(\mathbf{v}_r + \mathbf{v}_o)$		OA Summer Wethu
Filter Location	B	+			Coil Leaving Air Dry
HVAC Flow Type	Constant		Occupied Zone		Coil Leaving Air Dry
Outdoor Air Flow Type	Constant				OA MBH Saved Su
Suldoor Air Flow Type	Constant				OA Tons Saved Sur
	r	Steady State	Steady State	Is Steady State Level	Contamina
Indoor Contaminants		Using the VPP*	Using the IAO Method	Accentable at Peduced	Generatic
Generated By People	Maximum Threshold Value	(Prescribed OA)	(Reduced OA)		Pate
& From Outdoors	(PPM)	Plasma Off	Plasma On	OA Levels?	(PPM)
Acetaldehyde	100.0	0.01116	0.00084	Ves	0.00048
Acetone	250.0	0.00224	0.00034	Yes	0.00040
Ammonia	25.00	0.03364	0.00808	Yes	0.21460
Benzene	1.0000	0.00254	0.00019	Yes	0.00022
2- Butanone (MEK)	200.0	0.00030	0.00006	Yes	0.00133
Carbon dioxide**	5000	1828	2802	Yes	441
Chloroform	2.0000	0.00011	0.00001	Yes	0.00004
Dioxane	100.0	0.00000	0.00000	Yes	0.00000
Hydrogen Sulfide	10.0	0.00000	0.00000	Yes	0.00000
Methane	NA	1.68094	1.68094	Yes	0.00000
Methanol	200.0	0.00000	0.00000	Yes	0.00000
Methylene Chloride	25.0	0.00087	0.00010	Yes	0.00121
Propane	1000.0	0.00998	0.00998	Yes	0.00000
Tetrachloroethane	5.0000	0.00000	0.00000	Yes	0.00000
Tetrachloroethylene	100.0000	0.00037	0.00003	Yes	0.00001
Toluene	100.0000	0.00536	0.00041	Yes	0.00032
a la la martin a la l	350.0000	0.00082	0.00008	Yes	0.00058
1,1,1 - Trichloroethane	100 0000	0.00230	0.00017	Vac	0.00000
1,1,1 - Trichloroethane Xylene	100.0000	0.00230	0.00011	163	0.00000
1,1,1 - Trichloroethane Xylene Building materials and furnishings assumed to have	no VOCs and off-gassing is complete	0.00230	Is IAQ acceptable at reduced	163	<u> </u>

				Zone	Table 6.1
			Zana Floor Area (aguara fi)	Occurrence	Occupent
Zono Tog	Equility Type	Zono Lloo		Decupancy	Bo
	Pacifity Type	Zone Ose	A2	F2	Кр Г.О
VENDING 101	Public Assembly Spaces	Office Space	298.0	4.0	5.0
Zone Height (feet)	10				
Desired Outside Air (Vo) IAQP	20	(I-B)V-			Air Changes Per Hour
Supply Air (Vs)	420	<u>.</u>			Outside Air Per VRP
Return Air (Vr)	400	Er	A		Outside Air Per IAQ
Recirc. Flow Factor (R)	0.95	RV	-	v.	Outside Air Savings
Ventilation Effectiveness (Ez)	0.8	Vo,Co	<u>с</u>]в	-	OA Summer Drybulb
Level of Physical Activity	Standing (desk work)		$F_r (V_r + V_o)$		OA Summer Wetbulb
Filter Location	В		Occupied Zone		Coil Leaving Air Drybul
HVAC Flow Type	Constant		e.N.C.		Coil Leaving Air Wetbu
Outdoor Air Flow Type	Constant				OA MBH Saved Summ
and a second france of a second of the second s Second second					OA Tons Saved Summ
		Steady State	Steady State	Is Steady State Level	Contaminant
Indoor Contaminants		Using the VRP*	Using the IAQ Method	Acceptable at Reduced	Generation
Generated By People	Maximum Threshold Value	(Prescribed OA)	(Reduced OA)	OA Levels?	Rate
& From Outdoors	(PPM)	Plasma Off	Plasma On	25.400 (0.000 (0.000))	(PPM)
Acetaldehyde	100.0	0.01114	0.00051	Yes	0.00048
Acetone	250.0	0.00195	0.00021	Yes	0.00654
Ammonia	25.00	0.02439	0.00496	Yes	0.21460
Benzene	1.0000	0.00253	0.00012	Yes	0.00022
2- Butanone (MEK)	200.0	0.00024	0.00003	Yes	0.00133
Carbon dioxide**	5000	1414	2802	Yes	441
Chloroform	2.0000	0.00011	0.00001	Yes	0.00004
Dioxane	100.0	0.00000	0.00000	Yes	0.00000
Hydrogen Sulfide	10.0	0.00000	0.00000	Yes	0.00000
Methane	NA	1.68094	1.68094	Yes	0.00000
Methanol	200.0	0.00000	0.00000	Yes	0.00000
Methylene Chloride	25.0	0.00082	0.00006	Yes	0.00121
Propane	1000.0	0.00998	0.00998	Yes	0.00000
Tetrachloroethane	5.0000	0.00000	0.00000	Yes	0.00000
Tetrachloroethylene	100.0000	0.00037	0.00002	Yes	0.00001
Toluene	100.0000	0.00534	0.00025	Yes	0.00032
1,1,1 - Trichloroethane	350.0000	0.00079	0.00005	Yes	0.00058
Xylene	100.0000	0.00230	0.00010	Yes	0.00000
					-
Building materials and furnishings	assumed to have no VOCs and off-	gassing is complete	Is IAQ acceptable at reduced	Yes	
All yellow shaded boxes	require user input or review		outside air levels?		J

			Rp	Pz	Ra	Az	Vbz	Ez	IAQP Method 5cfm/person	Voz
Room	Room Type	UNIT	cfm / P	People	cfm/ft ²	ft²	cfm		cfm	cfm
104 - SHARED WORK AREA	Office	RTU-1	5	4	0.06	355	41	0.80	20	20
105 - JAN	Default	RTU-1	0	0	0.00	27	0	0.80	0	0
106 - ASST DIR. OFC	Office	RTU-1	5	1	0.06	152	14	0.80	5	5
107 - OPEN WORK ROOM	Office	RTU-1	5	4	0.06	257	35	0.80	20	20
108 - OFFICE/STOR.	Office	RTU-1	5	1	0.06	152	14	0.80	5	5
109 - SERVING KITCHEN	Break rooms	RTU-1	5	2	0.06	235	24	0.80	10	10
110 - TLT	Default	RTU-1	0	0	0.00	49	0	0.80	0	0
112 - BREAKROOM	Break rooms	RTU-1	5	6	0.06	312	49	0.80	30	30
114 - DIR OFFICE	Office	RTU-1	5	1	0.06	190	16	0.80	5	5
C1-1 ENTRY CORRIDOR EXT.	Corridors	RTU-1	0	0	0.00	138	0	0.80	0	0
C1-3 CORRIDOR	Corridors	RTU-1	0	0	0.00	504	0	0.80	0	0
					-			Require	ed OSA to <u>RTU-1</u> :	95
								Provide	ed OSA to <u>RTU-1</u> :	140
102 - MEETING ROOM	Multi-use Assembly	RTU-2	7.5	60	0.06	1,823	559	0.80	300	300
								Require	ed OSA to <u>RTU-2</u> :	300
								Provide	ed OSA to <u>RTU-2</u> :	300
202A - W ILI	Default	RTU-3	0	0	0.00	243	0	0.80	0	0
	Default	RIU-3	0	0	0.00	238	0	0.80	0	0
	Office	RIU-3	5	0	0.06	101	6	0.80	0	0
208 - COMP. STATIONS	Office	RTU-3	5	8	0.06	41/	65	0.80	40	40
C1-1 - ENTRY CORRIDOR INT.	Corridors	RTU-3	0	0	0.06	679	41	0.80	0	0
	Corridors	RTU-3	0	0	0.06	560	34	0.80	0	0
C1-4 - CORRIDOR A	Corridors	RIU-3	0	0	0.06	646	39	0.80		0
							-	Require	ed USA to RTU-3:	40
100 ENTRY	Main Entry	DTU 4	5	0	0.00	207	20	Provide	0 05A to <u>RTU-3</u> :	190
	Reak rooms		5		0.06	327	20	0.00	20	20
	Conference	DTILA	5	10	0.00	290	70	0.80	50	50
103 - CONFERENCE	Conference	K10-4	- 5	10	0.00	521	10	0.00	d OSA to RTU-4	70
								Provide	ed OSA to RTU-4:	100
201 - CIRCULATION DESK	Office Space	RTU-5	5	2	0.06	275	27	0.80	10	10
203 - NEW BOOKS	Libraries	RTU-5	5	2	0.06	172	20	0.80	10	10
205 - POP MATERIALS	Libraries	RTU-5	5	3	0.06	271	31	0.80	15	15
207 - ADULT EXT.	Libraries	RTU-5	5	6	0.06	530	62	0.80	30	30
								Require	ed OSA to RTU-5:	65
								Provide	ed OSA to RTU-5:	70
207 - ADULT INT.	Libraries	RTU-6	5	7	0.06	693	77	0.80	35	35
209 - READING ROOM	Libraries	RTU-6	5	14	0.06	556	103	0.80	70	70
211 - TEEN/YOUNG ADULTS	Libraries	RTU-6	5	7	0.06	645	74	0.80	35	35
C1-4 CORRIDOR B	Corridors	RTU-6	0	0	0.06	457	27	0.80	0	0
								Require	ed OSA to RTU-6:	140
								Provide	ed OSA to <u>RTU-6</u> :	140
213 - CHILDRENS	Libraries	RTU-7	5	8	0.06	707	82	0.80	40	40
218 - CHILDRENS	Libraries	RTU-7	5	10	0.06	985	109	0.80	50	50
C1-4 CORRIDOR EXT.	Corridors	RTU-7	0	0	0.06	457	27	0.80	0	0
								Require	ed OSA to <u>RTU-7</u> :	90
								Provide	ed OSA to <u>RTU-7</u> :	100
206A - STUDY	Office	RTU-8	5	4	0.06	115	27	0.80	20	20
206B - STUDY	Office	RTU-8	5	4	0.06	103	26	0.80	20	20
206C - STUDY	Office	RTU-8	5	4	0.06	103	26	0.80	20	20
210 - STORE	Office	RTU-8	5	4	0.06	262	36	0.80	20	20
210A - STORAGE	Storage	RTU-8	0	0	0.12	68	8	0.80	0	0
212 - IRONDALE HISTORY/ISO	Libraries	RTU-8	5	2	0.06	196	22	0.80	10	10
212A - STORAGE	Storage	RTU-8	0	0	0.12	70	8	0.80	0	0
	Default	RTU-8	0	0	0.00	79	0	0.80	0	0
216 - MULTI-PURPOSE	Multi-use Assembly	RTU-8	7.5	24	0.06	333	200	0.80	120	120
216A - STOR	Storage	RTU-8	0	0	0.12	116	14	0.80	0	0
								Require	a USA to RIU-8:	210
	1		1	1			1	I FIOVIDE	U USA 10 KIU-0:	210











SHEET NUMBER



FIRE PROTECTION GENERAL NOTES

- 1. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO BID. CONTRACTOR SHALL VERIFY EXACT SIZE, LOCATION, ELEVATION OF EXISTING STRUCTURE, CEILINGS, MECHANICAL, AND ELECTRICAL PRIOR TO INSTALLING ANY NEW PIPE.
- CONTRACTOR SHALL COORDINATE ALL PIPE ROUTING TO AVOID CONFLICTS WITH ALL 2 STRUCTURAL, ELECTRICAL, AND MECHANICAL FEATURES OF THE BUILDING.
- 3. ALL HORIZONTAL PIPING IS RUN ABOVE THE CEILING OR IN JOIST SPACE. ALL PIPING SHALL DRAIN DOWN AS REQUIRED BY NFPA 13. PIPING TO BE INSTALLED TO CONCEAL AS MUCH AS POSSIBLE.
- 4. INSTALL ALL FIRE PROTECTION MATERIALS IN AREAS WITH EXPOSED CEILINGS IN A NEAT FIRST CLASS MANNER. ALL WORKMANSHIP SHALL BE IN ACCORDANCE WITH INDUSTRY BEST PRACTICES. PIPING SHALL BE INSTALLED PARALLEL AND/OR PERPENDICULAR TO BUILDING STRUCTURE UNLESS INDICATED OTHERWISE.
- 5. CONTRACTOR IS RESPONSIBLE FOR NOTIFYING PROJECT ENGINEERS FOR INSPECTION AND TESTING. PROVIDE A MINIMUM OF A WEEK.
- CONTRACTOR TO REFER TO ARCHITECTURAL DRAWINGS FOR NEW WORK AREAS, 6 CEILING HEIGHTS, SECTIONS, AND RATED WALLS.
- CONTRACTOR RESPONSIBLE FOR COORDINATION OF PIPING WEIGHT AND LOCATION PRIOR TO INSTALLATION OF ANY PIPE.
- 8. PIPING LAYOUT AND SIZING SHOWN ON PLANS IS DIAGRAMMATIC AND SHOWN FOR SPACE REQUIREMENTS. CONTRACTOR IS RESPONSIBLE FOR LAYOUT SHOP DRAWINGS, CALCULATIONS, SUBMITTAL DATA, TESTING, OWNER TRAINING AND CERTIFYING SYSTEM MEETS NFPA 13 AND CONTRACT DOCUMENTS.
- 9. CONTRACTOR SHALL OBTAIN APPROVAL FROM ARCHITECT PRIOR TO INSTALLING ANY SPRINKLER HEADS DIFFERENT FROM THE SPECIFIED SPRINKLERS HEADS.
- 10. CONTRACTOR SHALL OBTAIN APPROVAL OF "SPRINKLER HEAD TYPE" FROM ARCHITECT PRIOR TO INSTALLING ANY SPRINKLER HEADS.
- 11. CONTRACTOR SHALL PAINT ALL EXPOSED PIPING TO MATCH STRUCTURE. COORDINATE EXACT COLOR WITH ARCHITECT.
- 12. ALL HEADS SHALL BE QUICK RESPONSE.

FIRE PROTECTION SHOP DRAWINGS AND SUBMITTALS

- 1. PROVIDE A NFPA 13 COMPLIANT SYSTEM TO PROVIDE COVERAGE TO NEW WORK AREA. CONTRACTOR RESPONSIBLE TO PROVIDE DETAILED SHOP DRAWINGS AND CALCULATIONS COMPLETE.
- 2. SHOP DRAWINGS SHALL INCLUDE:
- A. A REFLECTED CEILING PLAN INDICATING LOCATION OF SPRINKLER HEADS, LIGHTS, CEILING DEVICES, GRILLES, AUDIO VISUAL, AND ANY DEVICES ATTACHED TO LIFT OUT CEILINGS. ALL SPRINKLER HEADS IN LAY-IN CEILINGS TO BE CENTERED IN TILES. COORDINATE EXACT LOCATION OF SPRINKLER HEADS IN HARD CEILINGS WITH ARCHITECT AND ENGINEER. B. PREPARE A WORKING PIPE SHOP DRAWING BASED ON HYDRAULIC CALCULATIONS.
- THE PIPING DRAWINGS SHALL INDICATE THE ELEVATION OF THE PIPE, THE CONFIGURATION OF THE PIPING AND HANGERS, SIZE OF THE PIPE AND COOR OF PIPING WITH OTHER DISCIPLINES, STRUCTURE AND DUCTWORK. C. HYDRAULIC CALCULATIONS ARE TO BE PREPARED USING A FLOW TEST WITHIN 90
- DAYS
- D. THE CONTRACTOR IS RESPONSIBLE FOR INCORPORATING LOCAL AUTHORITY HAVING JURISDICTION COMMENTS FOR COMPLIANCE.
- E. ALL ADDITIONAL MATERIALS TO BE INDICATED ON SHOP DRAWINGS.
- F. ALL LOW-POINT DRAIN DOWN LOCATION AND PENETRATIONS OF BUILDING STRUCTURE TO BE INDICATED ON SHOP DRAWINGS.
- CONTRACTOR SHALL BE LICENSED IN THE STATE IN WHICH THE WORK IS PREFORMED THE CONTRACTOR SHALL BE A NICET LEVEL III OR LEVEL IV OR SPECIAL HAZARD SUPPRESSION SYSTEMS. THE NICET LEVEL III DESIGNER SHALL BE AN EMPLOYEE OF FIRE PROTECTION CONTRACTOR.
- 4. ALL ELECTRICAL FIRE ALARM REQUIREMENTS TO BE COORDINATED WITH THE ELECTRICAL THE FLOW AND TAMPER SWITCHES TO BE PROVIDED UNDER FIRE PROTECTION CONTRACT CONDUIT, ALARM WIRING AND PROGRAMMING THE RESPONSIBILITY OF THE FIRE ALARM CONTRACT AND SHALL BE COORDINATED WITH ELECTRICAL. NICET LEVEL III DESIGNER SHALL INSPECT PROJECT.
- 5. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS WITHIN 45 DAYS PRIOR TO THE START OF THE SPRINKLER SYSTEM INSTALLATION.
- 6. HYDRAULIC CALCULATIONS AND SPRINKLER SHOP DRAWINGS SHALL BE PREPARED UNDER THE SUPERVISION OF AN ENGINEER LICENSED IN THE STATE AND BEAR HIS OR HER SEAL WITH SIGNATURE AND DATE.
- 7. MAXIMUM DESIGN VELOCITY SHALL BE 30 FEET PER SECOND.





FIRE PROTECTION HYDRAULIC DEMANDS

1. SPRINKLER PROTECTION

- A. ALL OFFICES, WORKROOMS, LOBBIES, VESTIBULES, TOILETS, COMMON AREAS, CORRIDORS: LIGHT HAZARD 0.10 GPM OVER HYDRAULICALLY MOST REMOTE 1500 SQ. FT.
- B. MECHANICAL EQUIPMENT ROOMS, TRANSFORMER ROOMS, GENERAL PURPOSE STORAGE LESS THAN 100 SQ. FT.: ORDINARY HAZARD, GROUP 2, 0,20 GPM OVER HYDRAULICALLY MOST REMOTE 2000 SQ. FT.
- C. GENERAL STORAGE, STORAGE HEIGHT LIMIT LESS THAN 12FT, LIMITED COMBUSTIBLES LESS THAN 25 GALLONS: ORDINARY GROUP 1 PER NFPA 13, 0.15 GPM PER 1500 SQ. FT.

- 3. FLOW DATA TO BE RESPONSIBILITY OF CONTRACTOR.









- HYDRAULIC CALCULATION SHALL BE CALCULATED WITH 10% SAFETY FACTOR OF SUPPLY CURVE.



REFERENCE DRAWINGS FOR

- CONCEALED HEADS IN FINISHED SPACES

CENTER OF TILE FABRICATION AND INSTALLATION NO SCALE

FIRE PROTECTION DESIGN ANALYSIS

REFER TO ARCHITECTURAL PLANS FOR COMPLIANCE NFPA 101 TYPE OF CONSTRUCTION: REFER TO ARCHITECTURAL

OCCUPANCY: REFERENCE ARCHITECTURAL LIFE SAFETY PLAN LIGHT HAZARD, ORDINARY HAZARD GROUP (PER NFPA)

COMMODITY: GENERAL STORAGE. STORAGE LESS THAN 12FT CLASS 1-4 COMMODITIES, LIMITED COMBUSTIBLES

FIRE PROTECTION FLOW DATA

HYDRANT NUMBER: 675 STATIC PRESSURE: 60 PSI RESIDUAL PRESSURE: 52 PSI

OUTLET COEFFICIENT: UNKNOWN OUTLET SIZE: UNKNOWN HYDRANT FLOW: 1210 GPM

AVAILABLE GPM@ 20 PSI: 6,050 GPM

DATE OF TEST: UNKNOWN LOCATION: IRONDALE, AL

CONTRACTOR RESPONSIBLE FOR WATER FLOW TEST

- FIRE MAIN (F)
- FIRE DRAIN LINE
- BALL VALVE
- OS&Y VALVE (WITH TAMPER SWITCH)

FLOW SWITCH

_____ _____O

GPM

NO SCALE

PSI

Sc

Su















LIGHTING	RECEPTACLES
RECESSED OR SURFACE MOUNTED LIGHT FIXTURE	\ominus DUPLEX RECEPTACLE, 20A, 125V., 3 WIRE, GROUNDING TYPE.
RECESSED OR SURFACE MOUNTED LIGHT FIXTURE CONNECTED TO EMERGENCY	\rightarrow DUPLEX RECEPTACLE, MOUNTED ABOVE COUNTER. 20A, 125V., 3
	\oplus DOUBLE DUPLEX RECEPTACLE, 20A, 125V., 3 WIRE, GROUNDING
SUSPENDED OR SURFACE MOUNTED LIGHT FIXTURE CONNECTED TO EMERGENCY	GROUNDING TYPE.
○ RECESSED OR SURFACE MOUNTED LIGHT FIXTURE	DUPLEX RECEPTACLE WITH GROUND FAULT INTERRUPTER AND WE
RECESSED OR SURFACE MOUNTED LIGHT FIXTURE CONNECTED TO EMERGENCY	WP DUPLEX RECEPTACLE, WITH GROUND FAULT INTERRUPTER, MOUN 20A, 125V., 3 WIRE, GROUNDING TYPE,
POWER SOURCE OR WITH BATTERY BACK-UP	- SINGLE RECEPTACLE, 20A, 125V., 3 WIRE, GROUNDING TYPE.
WALL MOUNTED LIGHT FIXTURE	SPECIAL PURPOSE RECEPTACLE. CHARACTERISTICS AS INDICATE EQUIPMENT SERVED.
WALL MOUNTED LIGHT FIXTURE CONNECTED TO EMERGENCY POWER SOURCE OR WITH BATTERY BACK-UP	RANGE RECEPTACLE, 250V., 3 OR 4 WIRE, GROUNDING TYPE. N
WALL MOUNTED LIGHT FIXTURE	DUPLEX RECEPTACLE, 20A, 125V., 3 WIRE, GROUNDING TYPE -
WALL MOUNTED LIGHT FIXTURE CONNECTED TO EMERGENCY POWER SOURCE OR WITH BATTERY BACK-UP	DUPLEX RECEPTACLE, SPLIT WIRED, 20A, 125V., 3 WIRE, GROUNE RECEPTACLE TO BE SWITCHED UNLESS NOTED OTHERWISE.
WALL MOUNTED SINGLE FACE EXIT SIGN WITH DIRECTIONAL CHEVRONS AS INDICATED BY ARROWS	FLOOR BOXES AND POKE-TH
HIN WALL MOUNTED DOUBLE FACE EXIT SIGN WITH DIRECTIONAL ARROWS AS INDICATED	FLOOR OUTLET – DUPLEX RECEPTACLE, 20A, 125V., 3 WIRE (GR WIREMOLD #880 SERIES WITH BRASS COVER AND GASKET. UL SC
OR REQUIRED	FLOOR OUTLET WITH POWER CONNECTION TO PRE-WIRED FURNIT SERIES WITH BRASS COVER AND GASKET. UL SCRUB-WATER LIS
CEILING MOUNTED SINGLE FACE EXIT SIGN WITH DIRECTIONAL ARROWS AS INDICATED OR REQUIRED	F FLOOR OUTLET WITH AUXILIARY CONNECTIONS TO PRE-WIRED FU #880 SERIES WITH BRASS COVER AND GASKET. UL SCRUB-WATE
€ CEILING MOUNTED DOUBLE FACE EXIT SIGN WITH DIRECTIONAL ARROWS AS INDICATED OR REQUIRED.	FLOOR OUTLET – WIREMOLD #RFB6E–OG SERIES WITH DOUBLE D 20A, 125V., 3 WIRE AND PROVISIONS FOR VOICE/DATA JACKS. U
POLE MOUNTED SITE LIGHTING FIXTURE (2 HEAD SHOWN) - 1, 2, 3, OR 4 HEAD AS SHOWN ON PLANS.	POKE-THRU OUTLET - WIREMOLD #6ATC SERIES WITH DOUBLE D 200A, 125V., 3 WIRE (GROUNDING TYPE) AND PROVISIONS FOR VC
SWITCHES AND LIGHTING CONTROL	POKE-THRU OUTLET - WIREMOLD #6ATC SERIES WITH FLEX CONI FURNITURE. UL SCRUB-WATER LISTED.
S SINGLE POLE SWITCH, 20A, 125/277V, A.C. TYPE.	
S2 TWO POLE SWITCH, 20A, 125/277V., A.C. TYPE	
S3 THREE-WAY SWITCH, 20A, 125/277V, A.C. TYPE.	- JUNCTION BOX, WALL MOUNTED.
SO SUBSCRIPT LISTOR IDENTIFIES LIGHTING FIXTURES CONTROLLED. SWITCH TO BE SINGLE, TWO POLE OR THREE, FOUR WAY AS MARKED.	- JUNCTION BOX, WALL MOUNTED WITH FLEX CONNECTION TO EQU
SD DIMMER SWITCH OUTLET - A.C. TYPE, SINGLE POLE, 20A, 125/277V. PRESET SLIDE BAR WITH ON-OFF TOGGLE SWITCH	-① THERMOSTAT ROUGH-IN. COORDINATE LOCATION, MOUNTING HEI WITH THE MECHANICAL CONTRACTOR. PROVIDE 3/4" CONDUIT ST
SP SWITCH WITH PILOT LIGHT - A.C. TYPE, SINGLE POLE, 20A, 125/277V.	NEAREST ACCESSIBLE CEILING, TERMINATED WITH SMOOTH BUSHI
SR/L RAISE-STOP-LOWER SWITCH	 RISER - DOWN
ST DIGITAL TIMER WALL SWITCH	AUXILIARY
OCCUPANCY SENSOR/WALL SWITCH - DUAL TECHNOLOGY, PASSIVE INFRARED & ULTASONIC, 120/277VAC	VOICE/DATA OUTLET - SEE DETAILS
Sos3 THREE-WAY OCCUPANCY SENSOR/WALL SWITCH - DUAL TECHNOLOGY, PASSIVE INFRARED & ULTASONIC, 120/277VAC	 VOICE/DATA MOUNTED ABOVE COUNTER: SEE DETAILS TELEPHONE OUTLET – SEE DETAILS
(PP) POWER PACK FOR OCCUPANCY SENSOR LIGHTING CONTROL.	TELEPHONE OUTLET ROUGH-IN AT 54" A.F.F. SINGLE GANG OU W GANG MUD RING AND A 3/4" CONDUIT STUBBED UP TO ABOVE
OS OCCUPANCY SENSOR - CEILING MOUNTED, DUAL TECHNOLOGY, PASSIVE INFRARED AND ULTRASONIC.	CEILING AND TERMINATED WITH SMOOTH BUSHING. PROVIDE PUL
OCCUPANCY SENSOR – WALL MOUNTED, DUAL TECHNOLOGY, PASSIVE INFRARED AND ULTRASONIC.	TERMINATED WITH SMOOTH BUSHING, AND PROVIDE PULLWIRE.
NOTE: LIGHT SWITCHES ARE TO BE INSTALLED ON STRIKE SIDE OF DOOR UNLESS SPECIFICALLY NOTED OTHERWISE. VERIFY ALL DOOR SWINGS WITH ARCHITECTURAL DRAWINGS PRIOR TO ROUGH-IN.	 GANG OUTLET BOX WITH SINGLE GANG MUD RING AND A 3/4" O TO ABOVE NEAREST ACCESSIBLE CEILING, TERMINATED WITH SMO PULLWIRE. OUTLET HEIGHT AS INDICATED.
POWER DISTRIBUTION	S SPEAKER – CEILING MOUNTED.
RECEPTACLE PANEL - SURFACE MOUNTED.	SPEAKER - WALL MOUNTED.
	-O CALL IN SWITCH FOR INTERCOM SYSTEM.
	BD BELL
LIGHTING FAINEL - SURFACE MOUNTED.	WALL OR CEILING MOUNTED CAMERA. PROVIDE A SINGLE GANG J 1" CONDUIT STUBBED TO NEAREST ACCESSIBLE CEILING AREA T
LIGHTING PANEL - FLUSH MOUNTED.	BUSHING AND PROVIDE PULLWIRE.
V//// DISTRIBUTION OR FOWER PANEL - SURFACE MOUNTED.	-CT-CABLE TRAY - WIDTH AND DEPTH AS SHOWN ON PLANS
LE FUSED DISCONNECT SWITCH.	BB-* TELECOMMUNICATIONS EQUIPMENT BACKBOARD
NON-FUSED DISCONNECT SWITCH.	
EINULUSED UIKUUTI BREAKER.	
SHE NOTOR RATER SWITCH WITH THERMAL OVER CAR HINTS	
SM MUTUR RATED SWITCH WITH THERMAL OVERLOAD UNITS.	

	FIRE ALARM	OUTLET LOCAT	ON
	FACP FIRE ALARM CONTORL PANEL	 E☆ E√	
WIRE, GROUNDING TYPE	FAA FIRE ALARM ANNUNCIATOR PANEL		
TYPE.	NAC REMOTE FIRE ALARM NOTIFICATION APPLIANCE CONTROL PANEL		
, 125V., 3 WIRE,	F FIRE ALARM MANUAL PULL STATION.		
25V., 3 WIRE,	E灯 FIRE ALARM HORN/STROBE, WALL MOUNTED.		
EATHERPROOF COVER,	FIX FIRE ALARM STROBE, WALL MOUNTED.		
TED ABOVE COUNTER,	SMOKE DETECTOR		
	HS COMBINATION HEAT AND SMOKE DETECTOR		
D OR REQUIRED BY	B BEAM DETECTOR.		
EMA CONFIGURATION TO	ADDRESSABLE DUCT DETECTOR (SA=SUPPLY AIR – RA=RETURN AIR) WITH SAMPLING SA TUBE (LENGTH AS REQUIRED) AND CONTROL MODULE (ZAM) FOR AIR HANDLER RA SHUTDOWN.		SEE
TAMPER RESISTANT.	RT REMOTE TEST STATION (KEY OPERATED) FOR DUCT MOUNTED DETECTOR.		
JING TIPE. BUTTOM	FLOW SWITCH. DEVICE FURNISHED AND INSTALLED BY FIRE PROTECTION CONTRACTOR. ELECTRICAL CONTRACTOR TO PROVIDE MONITORING ZAM AND MAKE CONNECTIONS FOR FIRE ALARM SYSTEM.	NOTES:	
RU	TAMPER SWITCH. DEVICE FURNISHED AND INSTALLED BY FIRE PROTECTION CONTRACTOR. ELECTRICAL CONTRACTOR TO PROVIDE MONITORING ZAM AND MAKE CONNECTIONS FOR FIRE ALARM SYSTEM.	 A. ALL DIMENSIONS ARE TO THE BOTTOM OF OUTLET E B. WHERE OUTLETS ARE SHOWN TO BE MOUNTED ABO' ARCHITECTURAL AND/OR CASEWORK DRAWINGS 	BOX. VE A AND
OUNDING TYPE), CRUB-WATER LISTED.	D MAGNETIC DOOR HOLD OPEN DEVICE	ABOVE BACKSPLASH OR 6" ABOVE THE COUNTERT WHICHEVER IS HIGHEST.	ΓΟΡ Τ
URE. WIREMOLD #880 TED.	ZM MONITORING ZAM	C. SYMBOLS ON DRAWINGS AND MOUNTING HEIGHTS THE JOB. IT IS THE CONTRACTOR'S RESPONSI TRADES. VERIEY ALL SPECIFIC CONSTRUCTION FEA	INDIC/ BILITY
RNITURE. WIREMOLD ER LISTED.	ZC CONTROL ZAM	PROVIDE CORRECT INSTALLATION IN ALL LOCATIONS.	HE TO
UPLEX RECEPTACLE, JL SCRUB-WATER	WIRING		
UPLEX RECEPTACLE,	BRANCH CIRCUIT – ROUTED ABOVE CEILING OR IN WALL.	3R NEMA 3R ENCLOSURE EX E	
NCE/DATA JACKS. UL	BRANCH CIRCUIT - ROUTED BELOW FLOOR OR GRADE.	RT RAINTIGHT ENCLOSURE XR E	XISTIN
NECTION TO PRE-WIRED	BRANCH CIRCUIT - ANY CIRCUIT WITHOUT FURTHER DESIGNATION IS	WP WEATHERPROOF XRR EX UON UNLESS OTHERWISE NOTED XRR EX	XISTIN ELOCA
	BRANCH CIRCUIT - SHORT HASH MARK INDICATES 'HOT' WIRE(S), LONG HASH	EM EMERGENCY XRL E	XISTIN
	INDICATES NEUTRAL CONDUCTOR. GROUND WIRE IS NOT INDICATED BUT IS REQUIRED IN ALL CIRCUITS.	AFF ABOVE FINISHED FLOOR R	XISTIN EPLAC
	BRANCH CIRCUIT - EXPOSED	AFG ABOVE FINISHED GRADE XRT EX	XISTIN
IPMENT.	FEEDER – OVERHEAD	NIC NOT IN CONTRACT	
GHT, AND ORIENTATION UBBED UP TO ABOVE		PIR PASSIVE INFRARED IR INFRARED	
NG. PROVIDE PULLWIRE.	BRANCH CIRCUIT WIRING FOR LIGHTING AND POWER IS SHOWN SCHEMATICALLY. EACH ELECTRICAL DEVICE IS TO BE INSTALLED WITH AN INDIVIDUAL CONDUIT CONNECTION. FOR EXAMPLE:	DT DUAL TECHNOLOGY EP EXPLOSION PROOF	
	JUNCTION BOX ABOVE CEILING	EPO EMERGENCY POWER OFF	
	SCHEMATIC REQUIRED INSTALLATION		
TLET BOX WITH SINGLE NEAREST ACCESSIBLE			
LWIRE.	B IMC ABOVE SLAB. CONCEAL IN WALL		
SSIBLE CEILING,	TYPICAL) FINISHED FLOOR		
BOVE COUNTER: SINGLE CONDUIT STUBBED UP DOTH BUSHING. PROVIDE	PVC BELOW OR TO NEXT DEVICE SLAB (TYP.) SCHEMATIC REQUIRED INSTALLATION		
	NOTE: MINIMUM CONDUIT SIZE SHALL BE 1/2"C.		
		J	
UNCTION BOX WITH A			
ERMINATE WITH SMOOTH			

0		11	GHTI							
		MOUN			TORE SCHEDOLL		LED			
TYPE	DESCRIPTION	TYPE	HEIGHT	MANUFACTURER	CATALOG NUMBER	LUMENS	COLOR	DRIVER QTY / TYPE	VOLTS	TOTAL WATTS
W1	WALL MOUNTED VANITY LIGHT	WALL	VERIFY WITH ARCH DRAWINGS	VISUAL COMFORT	700BCBND-12-MB-LED930	350	3000K	N/A	120	15
X1	SINGLE FACE EDGE LIT EXIT SIGHN WITH MIRRORED BACK AND DIRECTIONAL CHEVRONS AS SHOWN	UNIVERSAL	CEILING / 8'-0" AFF	LITHONIA	EDG-1-RMR-EL	FURN WITH	ISHED I UNIT	N/A	120	10
XD	WALL MOUNTED EXIT DISCHARGE LIGHT WITH INTEGRAL HEATER AND BATTERY	WALL	8'-0" AFF	LITHONIA	AFB-OLE-DDBTXD-UVOLT-LTP-SDRT-WT-CW	FURN WITH	ISHED I UNIT	N/A	120	15
PL2	TWIN HEAD SITE LIGHTING FIXTURE, WITH TYPE II SHORT DISTRIBUTION, MOUNTED ON A 27'-0" POLE WITH INTEGRAL DRIVER. COLOR TO BE SELECTED BY THE ARCHITECT AND/OR OWNER	POLE	30'-0" AFG	NLS LIGHTING	NV-2-T2-112-7-40K7-UNV-ASA-**	21,000	4000K	1	208	200 EA
PL44	TWIN HEAD SITE LIGHTING FIXTURE, WITH TYPE IV DISTRIBUTION, MOUNTED ON A 27'-0" POLE WITH INTEGRAL DRIVER. COLOR TO BE SELECTED BY THE ARCHITECT AND/OR OWNER	POLE	30'-0" AFG	NLS LIGHTING	NV-2-T4/T4-112-7-40K7-UNV-ASA-**	20,160	4000K	1	208	200 EA
PL5	SINGLE HEAD SITE LIGHTING FIXTURE, WITH TYPE V DISTRIBUTION, MOUNTED ON A 27'-0" POLE WITH INTEGRAL DRIVER. COLOR TO BE SELECTED BY THE ARCHITECT AND/OR OWNER	POLE	30'-0" AFG	NLS LIGHTING	NV-2-T5-112-7-40K7-UNV-ASA-**	21,168	4000K	1	208	200 EA
GF1	IN-GRADE 60'-0" LINEAR FLOOD LIGHT WITH INTEGRAL DRIVER. U.L. LISTED FOR WET LOCATION. COLOR TO BE SELECTED BY THE ARCHITECT	IN-GRADE	GRADE	INSIGHT LUMENPULSE LUMASCAPE LIGMAN / TARGETTI	MIG-HO-40K-760-(AS REQUIRED)-UNV-NO-** APPROVED EQUAL APPROVED EQUAL APPROVED EQUAL	55 LUMENS PER WATT	4000K	1	120	20 WATTS PER FT
FL1	L.E.D. STNACHION MOUNTED FLOOD LIGHT. U.L. LISTED FOR WET LOCATION.	GROUND STANCHION	GRADE	LITHONIA NLS LIGHTING	DSXF1-P1-40K-FL-MVOLT-THK APPROVED EQUAL	2,965	4000K	1	120	25
GENERA										-
A.	MANUFACTURER CATALOG NUMBERS ARE SHOWN FO APPROVAL OF ANY PRODUCT BY THE LISTED MANUFAC CONSTRUCTION. REQUESTS FOR PRIOR APPROVAL OF ARCHITECT/ENGINEER. MANUFACTURERS APPROVAL 1	R GENERAL D CTURER. FOR FIXTURES NO THROUGH THIS	APPROVAL, T LISTED IN PROCESS \	FURPOSES AND TO ES FIXTURES MUST PROVI THIS SCHEDULE <u>MUST</u> MILL BE LISTED IN AN A	IABLISH A STANDARD OF QUALITY. MANUFACTURERS LISTED / IDE EQUAL PERFORMANCE RELATIVE TO DELIVERY OF LIGHTIN BE RECEIVED BY THE ENGINEER A MINIMUM OF 10 DAYS PRIO .DDENDUM PRIOR TO BID. FIXTURES NOT LISTED IN AN ADDEND	AS "EQUAL" DO G, ENERGY US R TO BID (SEE S UM ARE NOT AF	ES NOTENS E, AND BE C PECIFICATIO PROVED.	DRE NOR G DF SIMILAR E DNS) FOR RE	UARANIE DESIGNAN EVIEW BY	E ND THE
В.	CONTRACTOR SHALL PROVIDE LUMINAIRES COMPLETE	WITH ALL OF	TIONS AND A	CCESSORIES REQUIRE	ED FOR A COMLPETE INSTALLATION. ALL PRODUCTS SHALL BE	U.L. LISTED.				
C.	PROVIDE PROPER LAMP FOR REFLECTOR ASSEMBLY	SPECIFIED AN	ND AS RECON	MENDED BY LUMINAIR	RE MANUFACTURER.					
D.	VERIFY CONSTRUCTION AND TYPE CEILINGS TO BE INSINSTALLATION.	TALLED AND	PROVIDE LUN	MINAIRES IN APPROPRI	ATE CONFIGURATION WITH ALL HARDWARE AND ACCESSORIES	REQUIRED FO	R A COMPLE	ETE AND PR	OPER	

E. PROVIDE LUMINAIRES WITH JOINING PLATES, END CAPS, CANOPIES, MOUNTING HARDWARE, ETC., AS REQUIRED FOR COMPLETE INSTALLATION.

F. EXIT LIGHTS SHALL BE PROVIDED WITH RED LETTERS REQUIRED BY LOCAL CODE AUTHORITY. FURNISH WITH CHEVRON DIRECTIONAL INDICATORS AS INDICATED AND/OR AS REQUIRED.

G. PROVIDE DEVICES FOR SECURING LAY-IN TYPE LUMINAIRES TO CEILING GRID TO COMPLY WITH ARTICLE 410 OF THE NATIONAL ELECTRICAL CODE. H. FURNISH LINEAR LUMINAIRES IN CONTINUOUS ROWS OR PATTERNS AS INDICATED ON DRAWINGS. PROVIDE WITH CORNER, ANGLE, AND END PIECES AS REQUIRED FOR A COMPLETE FINISHED INSTALLATION.

SCHEDULE NOTES:

3. FOUNDATION EXCAVATION SHALL BE BY 24" AUGAR IN UNDISTURBED OR PROPERLY

COMPACTED FILL. 4. MINIMUM ALLOWABLE SOIL BEARING PRESSURE 3000 PSF. NOTIFY ENGINEER IF BEARING

PRESSURE IS LESS. 5. AIR ENTRAINMENT: 4 TO 6%.

SITE LIGHTING POLE BASE DETAILS TYPICAL FOR: 'PL2', 'PL4', & 'PL44' SCALE: NONE

<u>SECTION 'B-B'</u>

SECTION 'A-A'

- GROUND ROD 3/4 DIA X 10'-0" COPPER CLAD ŚTEEL - POLE-TO-BASE PLATE WELD SHALL COMPLY WITH AWS SPECS. AT TOP & BOTTOM OF BASE PLATE.

-POLE BASE PLATE AND BOLT PATTERN PER MANUFACTURER'S RECOMMENDATIONS.

-BASE PLATE BOLT HOLE -24" DIAMETER CONCRETE FOUNDATION.

-LIGHT FIXTURE ORIENTATION. (SEE SITE PLAN FOR ORIENTATION TO BUILDING.)

- HORIZONTAL REINFORCING BARS.

- VERTICAL REINFORCING BARS.

-INSTALLATION IN CONCRETE REQUIRES CONTINUOUS 1/2" EXPANSION JOINT MATERIAL ALL AROUND. SEAL WITH HOT TAR.

- 60 DEG. APART (TYPICAL)

				NG FIX	TURE SCHEDULE		L.E.D.			
TYPE	DESCRIPTION	TION	UFICUT	MANUFACTURER	CATALOG NUMBER		C.L.D.	DRIVER	VOLTS	TOTAL
		IYPE	HEIGHT	LUMINIS		LUMENS	COLOR	QIY / TYPE		Intro
P1	16" ROUND PENDANT MOUNTED FIXIORE WITH ACRYLIC LENS, DECORATIVE STRUTS, 0-10 VOLT DIMMABLE DRIVER. COLOR TO BE SELECTED BY THE ARCHITECT	PENDANT	VERIFY WITH ARCH DRAWINGS	LOWING		5,995	4000K	1 / 0-10V DIMMABLE	120	50
P1E	SAME AS FIXTURE P1 EXCEPT WITH AN EMERGENCY BATTERY TO OPERATE FIXTURE FOR 90 MINUTES UPON LOSS OF POWER	PENDANT	VERIFY WITH ARCH DRAWINGS	LUMINIS	PR1682-LIL60-80-4000K-**-FS-STM-EMLC2	5,995	4000K	1 / 0-10V DIMMABLE	120	50
P2 (**)	2" WIDE PENDANT MOUNTED FIXTURE WITH 0-10 VOLT INTEGRAL DRIVER. FIXTURE LENGTH SHOWN (**) IS IN INCHES. COLOR TO BE SELECTED BY THE ARCHITECT.	PENDANT	VERIFY WITH ARCH DRAWINGS	axis lighting	B2SQDLED-1000-80-40-SO-(**)-120-1-CTS	1000 PER FT	4000K	1 / 0-10V DIMMABLE	120	10 WATTS PER FT
P2E (**)	SAME AS FIXTURE P2 EXCEPT WITH AN EMERGENCY BATTERY TO OPERATE FIXTURE FOR 90 MINUTES UPON LOSS OF POWER	PENDANT	VERIFY WITH ARCH DRAWINGS	AXIS LIGHTING	B2SQDLED-1000-80-40-SO-(**)-120-1-CTS-B2	1000 PER FT	4000K	1 / 0-10V DIMMABLE	120	10 WATTS PER FT
P3	24" ROUND PENDANT MOUNTED FIXTURE WITH HARD EDGE AND 0-10 VOLT DIMMABLE DRIVER. COLOR TO BE SELECTED BY THE ARCHITECT	PENDANT	VERIFY WITH ARCH DRAWINGS	PRUDENTIAL	RDSP-24-LED4-SO-**-D1-SC-UNV-RPM-**-DM01	4,525	4000K	1 / 0-10V DIMMABLE	120	45
P4	36" ROUND PENDANT MOUNTED FIXTURE WITH HARD EDGE AND 0-10 VOLT DIMMABLE DRIVER. COLOR TO BE SELECTED BY THE ARCHITECT	PENDANT	VERIFY WITH ARCH DRAWINGS	PRUDENTIAL	RDSP-36-LED4-SO-**-D1-SC-UNV-RPM-**-DM01	10,625	4000K	1 / 0-10V DIMMABLE	120	100
P5	PENDANT MOUNTED RECTANGULAR SUSPENDED FIXTURE WITH CONCAVE APPEARANCE AND 0-10 VOLT DIMMABLE DRIVER. COLOR TO BE SELECTED BY THE ARCHITECT	PENDANT	VERIFY WITH ARCH DRAWINGS	PEERLESS	VNU4-RECT-CCV-40IN-80CRI-40K-I1500LM-7800LM- MIN1-120-SCT-**	1500 UP / 7800 DN	4000K	1 / 0-10V DIMMABLE	120	85
P6	PENDANT MOUNTED RECTANGULAR SUSPENDED FIXTURE WITH CONVEX APPEARANCE AND 0-10 VOLT DIMMABLE DRIVER. COLOR TO BE SELECTED BY THE ARCHITECT	PENDANT	VERIFY WITH ARCH DRAWINGS	PEERLESS	VNU4-RECT-CVX-40IN-80CRI-40K-I1500LM-7800LM- M IN1-120-SCT-**	1500 UP / 7800 DN	4000K	1 / 0-10V DIMMABLE	120	85
P7	PENDANT MOUNTED SQUARE SUSPENDED FIXTURE WITH CONCAVE APPEARANCE AND 0-10 VOLT DIMMABLE DRIVER. COLOR TO BE SELECTED BY THE ARCHITECT	PENDANT	VERIFY WITH ARCH DRAWINGS	PEERLESS	VNU4-SQ-CCV-40IN-80CRI-40K-I1500LM-4500LM- MIN1-120-SCT-**	1500 UP / 4500 DN	4000K	1 / 0-10V DIMMABLE	120	55
P8	PENDANT MOUNTED SQUARE SUSPENDED FIXTURE WITH CONVEX APPEARANCE AND 0-10 VOLT DIMMABLE DRIVER. COLOR TO BE SELECTED BY THE ARCHITECT	PENDANT	VERIFY WITH ARCH DRAWINGS	PEERLESS	VNU4-SQ-CVX-40IN-80CRI-40K-I1500LM-7800LM- MIN1-120-SCT-**	1500 UP / 4500 DN	4000K	1 / 0-10V DIMMABLE	120	55
P9	PENDANT MOUNTED 48" EURO-STYLE BODY WITH 0-10 VOLT DIMMABEL DRIVER. COLOR TO BE SELECTED BY THE ARCHITECT	PENDANT	VERIFY WITH ARCH DRAWINGS	PRUDENTIAL	OLV-40-LED4-SO-FWA-**-D1-SC-UNV-MPCA-X6-DM01	8,850	4000K	1 / 0-10V DIMMABLE	120	135
P10	PENDANT MOUNTED 33" ROUND SPHERE WITH ACOUSTIC FINS AND 0-10 VOLT DIMMABLE DRIVER. COLOR TO BE SELECTED BY THE ARCHITECT	PENDANT	VERIFY WITH ARCH DRAWINGS	OCL LIGHTING	KW4-P1FK-33-MW-**-LED2-40K-ND-UNV-DM1	1,765	4000K	1 / 0-10V DIMMABLE	120	20
P11	4" WIDE x 6'-0" PENDANT MOUNTED FIXTURE WITH 0-10 VOLT INTEGRAL DRIVER. COLOR TO BE SELECTED BY THE ARCHITECT.	PENDANT	VERIFY WITH ARCH DRAWINGS	AXIS LIGHTING	TB4DLED-1000-80-40-SO-S(6)-**-120-DP-1**	1000 PER FT	4000K	1 / 0-10V DIMMABLE	120	10 WATTS PER FT
P11E	SAME AS FIXTURE P11 EXCEPT WITH AN EMERGENCY BATTERY TO OPERATE FIXTURE FOR 90 MINUTES UPON LOSS OF POWER	PENDANT	VERIFY WITH ARCH DRAWINGS	AXIS LIGHTING	TB4DLED-1000-80-40-SO-S(6)-**-120-DP-1**-B1	1000 PER FT	4000K	1 / 0-10V DIMMABLE	120	10 WATTS PER FT
P12	4" WIDE x 14'-0" PENDANT MOUNTED FIXTURE WITH 0- 10 VOLT INTEGRAL DRIVER. COLOR TO BE SELECTED BY THE ARCHITECT.	PENDANT	VERIFY WITH ARCH DRAWINGS	NULITE	QUB-11-20-L40-U-D-1-**_**-14-B10	1100 PER FT	4000K	1 / 0-10V DIMMABLE	120	10 WATTS PER FT
P13	4" WIDE x 14'-0" PENDANT MOUNTED FIXTURE WITH 0- 10 VOLT INTEGRAL DRIVER. COLOR TO BE SELECTED BY THE ARCHITECT.	PENDANT	VERIFY WITH ARCH DRAWINGS	NULITE	QUB-11-20-L40-U-D-1-**-4	1100 PER FT	4000K	1 / 0-10V DIMMABLE	120	10 WATTS PER FT
PW	2" WIDE PENDANT MOUNTED WALL WASH FIXTURE WITH 0-10 VOLT INTEGRAL DRIVER. COLOR TO BE SELECTED BY THE ARCHITECT.	PENDANT	VERIFY WITH ARCH DRAWINGS	AXIS LIGHTING	GPDLED-EX-1200-80-40-FL-L26-**-120-DP-1-CTS	1000 PER FT	4000K	1 / 0-10V DIMMABLE	120	10 WATTS PER FT
R1	6" ROUND DOWNLIGHT WITH CLEAR SEMI-DIFFUSE REFLECTOR AND 0-10 VOLT DIMMABLE DRIVER.	RECESSED	CEILING	LITHONIA	LDN6-40/15-LO6-AR-LSS-**-MVOLT-GZ1	1,500	4000K	1 / 0-10V DIMMABLE	120	20
R1E	SAME AS FIXTURE R1 EXCEPT WITH AN EMERGENCY BATTERY TO OPERATE FIXTURE FOR 90 MINUTES UPON LOSS OF POWER	RECESSED	CEILING	LITHONIA	LDN6-40/15-LO6-AR-LSS-**-MVOLT-GZ1-E10WCP	1,500	4000K	1 / 0-10V DIMMABLE	120	20
R2	RECESSED 2x 4 FLAT PANEL WITH SWITCHABLE LIGHT OUTPUT AND 0-10 VOLT DIMMABLE DRIVER	RECESSED	CEILING	LITHONIA	CPANL-2X4-AL06-SWW7-M2	5,000	4000K	1 / 0-10V DIMMABLE	120	55
R2E	SAME AS FIXTURE R2 EXCEPT WITH AN EMERGENCY BATTERY TO OPERATE FIXTURE FOR 90 MINUTES UPON LOSS OF POWER	RECESSED	CEILING	LITHONIA	CPANL-2X4-AL06-SWW7-M2-ELA PSDMT	5,000	4000K	1 / 0-10V DIMMABLE	120	55
R3	RECESSED 4" WIDE x 8'-0" LONG LINEAR FIXTURE WITH 0-10 VOLT DIMMABLE DRIVER. COLOR TO BE SELECTED BY THE ARCHITECT	RECESSED	CEILING	AXIS LIGHTING	BBRLED-1000-80-40-FL-8-**-120-DP-1-TB*	1000 PER FT	4000K	1 / 0-10V DIMMABLE	120	10 WATTS PER FT
R3E	SAME AS FIXTURE R3 EXCEPT WITH AN EMERGENCY BATTERY TO OPERATE FIXTURE FOR 90 MINUTES UPON LOSS OF POWER	RECESSED	CEILING	AXIS LIGHTING	BBRLED-1000-80-40-FL-8-**-120-DP-1-TB*-B1	1000 PER FT	4000K	1 / 0-10V DIMMABLE	120	10 WATTS PER FT
S1	4'-0" SURFACE MOUNTED STRIP WITH INTEGRAL DRIVER	SURFACE	CEILING	LITHONIA	CLX-L48-5000LM-SEF-WD-MVOLT-GZ10-40K-80CRI	5,000	4000K	1 / 0-10V DIMMABLE	120	35
S1E	SAME AS FIXTURE S1 EXCEPT WITH AN EMERGENCY BATTERY TO OPERATE FIXTURE FOR 90 MINUTES UPON LOSS OF POWER	SURFACE	CEILING	LITHONIA	CLX-L48-5000LM-SEF-WD-MVOLT-GZ10-40K-80CRI-E10WLCP	5,000	4000K	<mark>1</mark> / 0-10V DIMMABLE	120	35

C/

1028 23rd Street South

RELAY SCHEDULE									
RELAY NUMBER POLES AMPS		COIL VOLTAGE	LOAD VOLTAGE	LOAD DESCRIPTION / LOCATION	REMARKS				
RS	8	20	120V	2087V.	PARKING LOT LIGHTING	1, 2			
R1	8	20	120V	120V.	BUILDING MOUNTED LIGHTING	1, 2			
REMARKS:	_								

1. RELAY(S) TO BE MOUNTED IN A SINGLE NEMA 1 ENCLOSURE ADJACENT TO PANEL LP1.

2. ALL RELAYS SHALL BE ELECTRICALLY HELD.

BUILDING MOUNTED LIGHTS AND SITE LIGHTING CONTROL WIRING DIAGRAM NOT TO SCALE

DOOR SECURITY ROUGH-IN DETAIL NOT TO SCALE

- 3. DOUBLE GANG BOX WITH SINGLE GANG MUD RING. MOUNT AT 48" AFF TO TOP (VERIFY). 4. 1" CONDUIT STUBBED OUT 12" FROM JUNCTION BOX ABOVE ACCESSIBLE CEILING. PROVIDE BUSHING.
- 2. 3/4"C. WITH PULLWIRE FROM OUTLET BOX OR DOOR FRAME STUBBED INTO JUNCTION BOX. PROVIDE BUSHING AND PULLWIRE.
- 1. 8"x8"x4" SURFACE JUNCTION BOX WITH COVER FOR SECURITY WIRING. MOUNT ABOVE ACCESSIBLE CEILING.

GROUND SLOT UP **RECEPTACLE INSTALLATION DETAIL**

NOT TO SCALE

ELECTRICAL EQUIPMENT NAMEPLATE DETAILS NOT TO SCALE

- 3. ALL NAMEPLATES TO BE SECURED TO THE EQUIPMENT WITH SCREWS OR HIGH STRENGTH WATERPROOF EPOXY ADHESIVE.
- STARTERS, CONTACTOR AND RELAY ENCLOSURES, ETC. 2. ALL NAMEPLATES SHALL BE WHITE WITH 1/4" HIGH ENGRAVED LETTERING, BLACK FOR NORMAL POWER AND RED FOR EMERGENCY POWER UNLESS NOTED OTHERWISE.
- 1. PROVIDE NAMEPLATES FOR MAIN PANEL, ALL BREAKERS IN TYPE 'CCB' PANELS, TRANSFER SWITCH(ES), PANELBOARDS, ALL SAFETY SWITCHES, MOTOR

 \bigcirc

INDICATE PANEL NAME IN 1/4" LETTERS

CHARACTERISTICS IN 3/16" LETTERS ON

MAIN PANEL 'MP'

THE 2ND AND SUBSEQUENT LINES

ON 1ST LINE. INDICATE PANEL

 \bigcirc

 \bigcirc

INDICATE PANEL ----

NAME

PANEL NOTES:

- 1. ALL PANELS TO HAVE DOOR-IN-DOOR (HINGED TRIM) CONSTRUCTION.
- 2. INSTALL NAMEPLATE (PER DETAIL) USING MACHINE SCREWS OR 2 PART EPOXY (12HR)
- 3. PANEL TO HAVE WELDED METAL DIRECTORY CARD HOLDER.
- 4. ALL MULTI-POLE BREAKERS SHALL HAVE A COMMON TRIP MECHANISM FOR SIMULTANEOUS OPERATION.
- 5. PROVIDE HANDLE TIE FOR MULTIPLE BREAKERS WITH CIRCUITS THAT SHARE A COMMON NEUTRAL.

DETAIL: PANELBOARD

TYPICAL CONNECTION AND NUMBERING SEQUENCE - NO SCALE NOT TO SCALE

- JACK AS INDICATED. FURNISH AND INSTALL CAT6 RATED CABLES (# AS INDICATED FOR DATA) FROM OUTLET TO BACKBOARD BB-* VIA CONDUIT, CABLE TRAY, J-HOOKS, AND SLEËVES. ALL CABLES SHALL BE TERMINATED, BOTH ENDS, AS DIRECTED BY OWNER.
- B. PROVIDE 10'-O" GREEN PATCH CORD PER DROP AT EACH PATCH PANEL PORT.
- C. PROVIDE 10'-0" GREEN PATCH CORD PER DROP AT EACH WIRELESS ACCESS POINT.
- D. PROVIDE A GREEN DOT STICKER ON CEILING GRID UNDER THE BISCUIT JACK TO IDENTIFY THE LOCATION OF THE DEVICE.

WIRELESS ACCESS POINT DETAIL SCALE: NONE

TYPICAL DATA RACK LAYOUT SCALE: NONE

INTERMIX CABLING BETWEEN PATCH PANELS.

CABINET.

C. PROVIDE UNINTERRUPTIBLE POWER SUPPLY AT EACH RACK AS CALLED FOR IN SPECIFICATIONS AT BOTTOM OF EACH

B. ALL PATCH PANELS SHALL BE DEDICATED FOR DATA, WIRELESS ACCESS POINT (WAP), OR CAMERAS. DO NOT

 $\langle c \rangle$

CX

CONSULTING

CONSTRUCTION

ENGINEERING. LLC

1028 23rd Street South Birmingham, Alabama 35205 Phone: (205) 352-2500 A Web: www.cce-eng.com

Job No. 23CWA02 File: 23CWA02 ELECTRICAL

CHARLES WILLIAMS CHARLES WILLIAMS A SSOCIATES A SSOCIA		Date	Description
CITY OF IRONDALE OLDARE SHEEL CITIC SHEEL CITIC CITY OF IRONDALE CITY OF IRONDALE			
100% CD'S 200% STH AVE SOUTH 200% STH AVE SOUTH 2000 STH AVE SOUTH 200 STH AVE SOUTH <th></th> <th>A PRO</th> <th>A B A STOCKER No. 31921 DFESSIONAL C I NECTORIAL</th>		A PRO	A B A STOCKER No. 31921 DFESSIONAL C I NECTORIAL
CITY OF IRONDALE, AL. 35210 3601 8TH AVE. SOUTH BIRMINGHAM, ALABAMA 35222 FAX: 205-250-0515 SHEET NUMBER SHEET MILE SHEET SOUTH BIRMINGHAM, ALABAMA 35222 FAX: 205-250-0515 SHEET MILE SHEET SOUTH SHEET SOUTH SHEET MILE SHEET SOUTH SHEET SO		100%	% CD'S
SHEET NUMBER PROJECT NUMBER PROJECT NUMBER PROJECT NUMBER PROJECT NUMBER PROJECT NUMBER SHEET NUMBER DATE: PROJECT NUMBER SHEET NUMBER DATE: PROJECT NUMBER SHEET NUMBER DATE: PROJECT NUMBER SHEET NUMBER DATE: PROJECT NUMBER SHEET NUMBER		IRONDALE PUBLIC LIBRARY	1032 GRANTS MILL RD IRONDALE, AL. 35210 CITY OF IRONDALE
	SHE ELL PRC 202 DAT NO DR/ JLE	& ASSOCIATES WILLE: CHARLES WILLIAMS CHARLES WILLIAMS CHARLES CHARLES MINER: ANN BY: SCEB	ARCHITECTS ARCHIT
	S		

Revisions

 $\frac{1}{3/32"} = 1'-0"$

- $\langle 2 \rangle$ FLOOR BOX WITH (2) DUPLEX RECEPTACLES AND DATA OUTLETS AS SHOWN. FURNISH WITH (2) 1^{1/4}"C. STUBBED TO BACKBOARD BB-1 WITH PULLWIRE. WIREMOLD #EFB6 SERIES OR APPROVED EQUAL.
- $\fbox{3} CEILING MOUNTED DATA OUTLET FOR COUNTER DEVICE PROVIDED BY OWNER. VERIFY LOCATION PRIOR TO ROUGH-IN. }$
- $\langle 4 \rangle$ VERIFY EXACT LOCATION OF CARD READER WITH OWNERS SECURITY CONTRACTOR PRIOR TO ROUGH-IN. TYPICAL FOR ALL CARD READERS.
- 5 JUNCTION BOX FOR DOOR SECURITY AT STUDY ROOM, STORE, AND MULTIPURPOSE ROOM. VERIFY EXACT LOCATION WITH OWNERS SECURITY PRIOR TO ROUGH-IN.

PANEL:				PANEL AMPS.	100		VOLTA GE					MOUNTING	SURFACE						
	1	D4		MAIN TYPE	M.L.O.			120 / 208,	3 PHA SE, 4	WIRE, 60 HZ		NEMA RATING		NEMA 1					
	LP1			MA IN BREAKE	N/A 100% 100%		AIC RATING	J		22,	,000	LOCATION			CTRICAL ROOM				
TYP	TYPE:		SOLID NEUTRAL				CALC FAUL	T CURRENT				FED FROM	PANEL M	MP-100/3 BREAKER					
	DOL			GROUND BUS			BREAKER F	EATURES:	GFI = GRO	UND FAULT C	CIRCUIT INTE	ERRUPTER; ST = SHUNT TRIP, TH = TIE HANDLE							
BQL								AF - ARC FAULT CIRCUIT INTERRUPTER; LO = LOCK-ON DEVICE											
	CKT				DESCRIPTION		OUTLOAD	PHASE			OUT LOAD W		DECODICTION		DDEAVED		CKT		
	NO	NO BREAKER		LOAD TIPE	DESCRIPTION	VVIRE SIZE	CATLOAD	A	В	С		VIRESIZE	DESCRIPTION	LOAD IT PE	BREA		NO		
	1	20/1			SPARE			800		1	800	#12	CHILDRENS LIGHTS	LTG	20/1		2		
	3	20/1		MISC	MONUMENTAL SIGN	#8	500		720		220	#12	REA DING ROOM LIGHTS	LTG	20/1		4		
JEL	5	20/1		LTG	OFFICE, BREAK RM, STOR LIGHTS	#12	1210			2710	1500	#9		LTG	20/2		6		
	7	20/1		LTG	CORR., WORK RM LIGHTS	#12	715	2215			1500] #0		LTG	20/2		8		
AV	9	20/1		LTG	A/V STOR, KIT, ELEC. LIGHTS	#12	635		2135		1500	#8	PARKING LOT LIGHTS	LTG	20/2		10		
ш	11	20/1		LTG	MEETNG ROOM LIGHTS	#12	1260			2760	1500			LTG	20/2		12		
NO	13	20/1		LTG	CONFERENCE, VENDING LIGHTS	#12	425	425					SPACE				14		
Ē	15	20/1		LTG	LOBBY, ENTRY CORR, RR LIGHTS	#12	1055		1055				SPACE				16		
Ш	17	20/1		LTG	CIRCULATION, COMP. DESK LIGHTS	#12	840			840			SPACE				18		
S	19	20/1		LTG	EXTERIOR LIGHTS	#12	680	680					SPACE				20		
NE	21	20/1		LTG	POP. MATERIALS LIGHTS	#12	750		750				SPACE				22		
ō	23	20/1		LTG	A DULT, TEEN LIGHTS	#12	750			750			SPACE				24		
	25	20/1		LTG	RESTROOM LIGHTS	#12	540	540					SPACE				26		
	27	20/1		LTG	STUDY, STOR, M.PURP LIGHTS	#12	990		990				SPACE				28		
	29	20/1		LTG	CHILDRENS LIGHTS	#12	790			790			SPACE				30		
î î		- C.C.	0.00 i	92.		PH/	ASETOTALS	4660	5650	7850		2		2	a				

PAN	EL:			PANEL AMPS.		8	00	VOLTAGE:					MOUNTING		SURFAC	E	
	MAIN TYPE			MA IN BREAKER			120 / 208,	3 PHA SE, 4 V	WIRE, 60 HZ		NEMA RATING	NEMA 1					
MA IN BREA				MAIN BREAKER RATING		800 A MPS		AIC RATING			42,	000	LOCA TION	ELEC			
TYPE:		SOLID NEUTRAL		100%		CALC FAUL	T CURRENT.				FED FROM	SERVIC	ETRANS	FORMER	٦		
ССВ				GROUND BUS	100%		BREAKERF	EATURES:	GFI = GROU	JND FAULT C	IRCUIT INTER	RRUPTER; ST = SHUNT TRIP; TH :	ST = SHUNT TRIP; TH = TIE HANDLE				
								AF - ARC FAULT CIRCUIT INTERRUPTER; LO = LOCK-ON DEVICE									
	СКТ		WED.		E DESCRIPTION	WIRE SIZE		PHASE					DECODITION		DDEALVED		CKT
	NO	BREAKER		LOAD TYPE			CKTLOAD	A	В	С	CKILOAD	WIRESIZE	DESCRIPTION	LOADTYPE	BREAKER		NO
		200/3		PANEL	PANEL RP1	4#3/0.	17886	20766			2880			A/C			
	1			PANEL		1#6G-	18162		21042		2880	#10	RTU-5	A/C	40/3		2
				PANEL		2"C.	16136			19016	2880			A/C			
		20/3		WTRHTR		#12	1500	6108			4608	4#6, 1#10G 1"C.		A/C	60/3		
	3			WTRHTR	WH-1		1500		6108		4608		RTU-6	A/C			4
				WTRHTR	1		1500			6108	4608			A/C			
EL	5	20/3		WTRHTR		#12	1500	5628			4128	4#6, 1#10G		A/C	50/3		
AN				WTRHTR	WH-2		1500		5628		4128		RTU-7	A/C			6
Δ.				WTRHTR			1500			5628	4128	1"C.		A/C			
Z O				A/C	RTU-1	4#6, 1#10G 1"C.	4608	8736	1		4128	4#6, 1#10G 1"C.	RTU-8	A/C	50/3		
Ē	7	60/3		A/C			4608		8736		4128			A/C			8
С				A/C			4608			8736	4128			A/C			
S		60/3	A/C	4#6	4#6.	4608	9268			4660	4#8.		PANEL				
ш Z	9			A/C	RTU-2	1#10G 1"C.	4608		10258		5650	1#2G 1 1/2"C.	PANEL LP1	PANEL	100/3		10
0				A/C			4608			12458	7850			PANEL			
		60/3		A/C	RTU-3	4#6,	4608	4608									
	11			A/C		1#10G 1"C.	4608		4608				SPACE		1		12
				A/C			4608			4608		8			1		
				A/C	2 RTU-4	#10	3168	3168									
	13	45/3		A/C			3168		3168			1	SPACE		-		14
				A/C			3168			3168							
					PHA	SE TOTALS	58282	59548	59722		<i>a</i> .						

SERVICE ENTRANCE GROUND DETAIL

PANEL:					250							MOUNTING	SURFACE				
FAIN					250		VOLINGE	120 / 208						NEMA 1			
	R	P1		MAIN IT PE		M.L.O.			1207208,	3 PHASE, 4	WIRE, OU HZ						
					N	/A	AIC RATING	j				LOCATION	ELEC	ELECTRICAL ROOM			
TYP	Ξ:			SOLID NEUTRA	10	0%	CALC FAUL	T CURRENT				FED FROM	PANEL MP - 200/3 BREAP				
	BQL			GROUND BUS		100%		BREAKER	EATURES:	GFI = GRO	UND FAULT C	CIRCUIT INTER	RRUPTER; ST = SHUNT TRIP; TH	= TIE HANDLE			
	DQL								AF - ARC F	AULT CIRCUI	T INTERRUPT	ER; LO = LOCK-ON DEVICE					
	CKT	BREA	KER		DESCRIPTION	WIRE SIZE	CKTLOAD		PHASE		CKTLOAD	WRESIZE	DESCRIPTION		BRE	KER	CKT
	NO							A	B	С							NO
	1	20/1	LO	MISC	FIRE A LA RM CONTROL PA NEL	#12	250	750			500	#12	BREAK RM A PPLIA NCE RCPT	RCPT	20/1		2
	3	20/1		RCPT	ROOF TOP RECEPTACLES	#12	900		1620		720	#12	BREAK RM CONV. RCPTS	RCPT	20/1		4
	5	20/1			SPARE					360	360	#12	RESTROOM, CORR RCPTS	RCPT	20/1		6
	7	20/1			SPARE			900			900	#12	OFFICE, STOR. RCPTS	RCPT	20/1		8
	9	20/1			SPARE				900		900	#12	A SST. DIR. OFFICE RCPTS	RCPT	20/1		10
	11	20/1			SPARE					720	720	#12	SHA RED WORK RCPTS	RCPT	20/1		12
	13	20/1			SPARE			540			540	#12	SHA RED WORK RCPTS	RCPT	20/1		14
ш	15	20/1			SPARE				720		720	#12	SHA RED WORK RCPTS	RCPT	20/1		16
0	17	20/1			SPARE					540	540	#12	CORR., MECH, EXT. RCPTS	RCPT	20/1		18
z	19	20/1			SPARE			900			900	#12	A/V STOR., ELEC, KIT RCPTS	RCPT	20/1		20
0	21	20/1			SPARE				360		360	#12	TBB RCPT	RCPT	20/1		22
SECT	23	20/1			SPARE					360	360	#12	TBB RCPT	RCPT	20/1		24
	25	20/1			SPARE			1000			1000	#12	KITCHEN REFIRGERATOR	RCPT	20/1		26
	27	20/1			SPARE				500		500	#12	KITCHEN APPLIANCE RCPT	RCPT	20/1		28
	29	20/1			SPARE					500	500	#12	KITCHEN APPLIANCE RCPT	RCPT	20/1		30
	31	20/2		HTG		#10	1500	2000			500	#12	KITCHEN APPLIANCE RCPT	RCPT	20/1		32
	33	20/2		HTG	- EVVN-2	#12	1500		2000		500	#12	KITCHEN APPLIANCE RCPT	RCPT	20/1		34
	35	20/1		RCPT	DIR. OFFICE RCPTS	#12	900			1400	500	#12	KITCHEN APPLIANCE RCPT	RCPT	20/1		36
	37	20/1		RCPT	BREAK RM APPLIANCE RCPT	#12	500	860			360	#12	OPEN WORK RCPT	RCPT	20/1		38
	39	20/1	0	RCPT	BREAK RM APPLIANCE RCPT	#12	500		680		180	#12	OPEN WORK RCPT	RCPT	20/1		40
	41	20/1		RCPT	BREAK RM APPLIANCE RCPT	#12	500			1220	720	#12	OPEN WK, JAN, ENTRY RCPTS	RCPT	20/1		42
	43	20/1	č	RCPT	MEETING ROOM RCPTS	#12	900	1440			540	#12	STORAGE RCPTS	RCPT	20/1		44
	45	20/1		RCPT	MEETING ROOM RCPTS	#12	720		1440	9	720	#12	HISTORY/ISO RCPTS	RCPT	20/1		46
	47	20/1		RCPT	MEETING CEILING RCPT	#12	180			1180	1000	#12	ELECTRIC WATER COOLER	RCPT	20/1	GFI	48
	49	20/1		RCPT	MEETING ROOM RCPTS	#12	540	1080			540	#12	STOR., TOIL., M.PURP RCPTS	RCPT	20/1		50
	51	20/1		RCPT	MEETING ROOM RCPTS	#12	360		720		360	#12	MULTI-PURPOSE RCPTS	RCPT	20/1		52
	53	20/1		RCPT	CONFERENCE RCPTS	#12	900			1440	540	#12	MULTI-PURPOSE RCPTS	RCPT	20/1		54
	55	20/1	GFI	RCPT	VENDING 101 RCPT	#12	1000	1540			540	#12	CHILDRENS RCPTS	RCPT	20/1		56
0	57	20/1	GFI	RCPT	VENDING 101 RCPT	#12	1000		1540		540	#12	CHILDRENS RCPTS	RCPT	20/1		58
N	59	20/1	GFI	RCPT	VENDING 101 RCPT	#12	1000			1360	360	#12	TEENS/YOUNG A DULT RCPTS	RCPT	20/1		60
F	61	20/1		RCPT	VENDING 101 CONV. RCPTS	#12	540	1260			720	#12	TEENS/YOUNG A DULT RCPTS	RCPT	20/1		62
N O	63	20/1		RCPT	MOTORIZED DOORS	#12	1000		1540		540	#12	REA DING ROOM RCPTS	RCPT	20/1		64
Ē	65	20/1		RCPT	WORK DESK RCPTS	#12	1080			2580	1500			HTG			66
ОШ	67	20/1		RCPT	TOILET RCPTS	#12	720	2220			1500	#12	EVVH-1	HTG	20/2		68
S	69	20/1	GFI	RCPT	ELECTRIC WATER COOLER	#12	1000		2581		1581	0.000		A/C			70
	71	20/1		RCPT	COPY PRINT RCPTS	#12	540			2121	1581	#10	OHP-1	A/C	30/2		72
	73	20/1	-	RCPT	COMP. STATION RCPTS	#12	360	1941			1581		#10 OHP-2	A/C	30/2		74
	75	20/1		RCPT	POP. MATERIALS RCPTS	#12	1080		2661		1581	#10		A/C			76
	77	20/1		RCPT	STUDY ROOM RCPTS	#12	540			1455	915			A/C			78
	79	20/1		RCPT	STUDY ROOM RCPTS	#12	540	1455			915	#10	OHP-3	A/C	30/2		80
	81	20/1		RCPT	STUDY ROOM RCPTS	#12	540		900		360	#12	EF-4	MTR	20/1		82
	83	20/1		RCPT	STOR. 210 RCPTS	#12	900			900		, constailt	SPA RE	an ann an Albert	20/1		84
			2		1	PHA	SETOTALS	17886	18162	16136	-	<u>l</u>	1	1			1

CONSULTING CONSTRUCTION ENGINEERING, LLC 1028 23rd Street South

Birmingham, Alabama 35205 Phone: (205) 352-2500 △ Web: www.cce-eng.com Job No. 23CWA02 File: 23CWA02 ELECTRICAL

GENERAL NOTES THIS SHEET:

- A. PROVIDE REQUIRED NEUTRAL-GROUND BOND AT MAIN BREAKER/DISCONNECT PER NEC 250-30 (SIZED PER TABLE 250.66). FURNISH AND INSTALL CONNECTION TO GROUNDING ELECTRODE USING COPPER CONDUCTOR SIZED PER TABLE 250.66
- B. COORDINATE ALL ASPECTS OF THE REQUIRED ELECTRICAL SERVICE IN WRITING WITH THE LOCAL POWER COMPANY PRIOR TO BIDDING AND/OR ROUGHING. PROVIDE ALL AID TO CONSTRUCTION COSTS IN BID PRICE.
- C. FURNISH & INSTALL ENGRAVED JOB NAMEPLATE (PER DETAILS) ON MSB.
- D. FURNISH & INSTALL ENGRAVED NAMEPLATE ON EACH BREAKER IN SWITCHBOARD.
- E. ALL SWITCHBOARDS AND PANELBOARDS SHALL BE FIELD MARKED TO WARN QUALIFIED PERSONS OF POTENTIAL ELECTRIC ARC FLASH HAZARDS PER NEC 110.16.
 F. ELECTRIC METER TO BE MOUNTED AS DIRECTED BY LOCAL POWER COMPANY. GROUND METER PER LOCAL UTILITY COMPANY WRITTEN SPECIFICATIONS.
- G. PROVIDE DETECTABLE LINE WARNING TAPE (LWT) 18" ABOVE <u>ALL</u> PRIMARY AND SECONDARY ELECTRIC CONDUITS. SEE SPECIFICATIONS.

Revisions Date Description No. 31921 PROFESSIONAL 100% CD'S LIBRARY 1032 GRANTS MILL RD IRONDALE, AL. 35210 CITY OF IRONDALE PUBLIC **NDALE** IRON CHARLES WILLIAMS & ASSOCIATES A R C H I T E C T S -250-0700 205-205-PH: FAX: H AVE. SOUTH HAM, ALABAMA (3601 8TH BIRMINGH SHEET TITLE: ELECTRICAL RISER DIAGRAM & PANEL SCHEDULES PROJECT NUMBER: 2022-08 DATE: **NOVEMBER 16, 2023** DRAWN BY: CHECKED BY: JLB/CEB JLB SHEET NUMBER E301