# **ADDITION AND RENOVATION FOR** FLOMATON ELEMENTARY SCHOOL PACKAGE A: MEDIA CENTER AND CLASSROOM ADDITION 1634 POPLAR STREET, FLOMATON, ALABAMA 36441 **ESCAMBIA COUNTY BOARD OF EDUCATION**

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## DRAWING INDEX

(SET - 77 TOTAL SHEETS)

GENI	ERAL	(4 SHEETS)
T1.0 SV1.0 LS1.1 LS1.2	- TITLE AND INDEX - SURVEY (FOR REFERENCE O - BASE BID LIFE SAFETY PLAN - ALTERNATE LIFE SAFETY PLA	NLY) N
CIVIL	. DRAWINGS	(12 SHEETS)
$\begin{array}{c} \text{C0.1} \\ \text{C1.0} \\ \text{C1.1} \\ \text{C2.0} \\ \text{C2.1} \\ \text{C3.0} \\ \text{C3.1} \\ \text{C4.0} \\ \text{C4.1} \\ \text{C5.0} \\ \text{C5.1} \\ \text{C6.0} \end{array}$	<ul> <li>CIVIL NOTES</li> <li>DEMOLITION PLAN - BASE</li> <li>DEMOLITION PLAN - ALTERNA</li> <li>LAYOUT PLAN - BASE</li> <li>LAYOUT PLAN - ALTERNATE</li> <li>GRADING &amp; DRAINAGE PLAN</li> <li>GRADING &amp; DRAINAGE PLAN</li> <li>GRADING &amp; DRAINAGE PLAN - B</li> <li>EROSION CONTROL PLAN - B</li> <li>EROSION CONTROL PLAN - A</li> <li>UTILITY PLAN - BASE</li> <li>UTILITY PLAN - ALTERNATE</li> <li>CIVIL DETAILS</li> </ul>	ATE - BASE - ALTERNATE ASE LTERNATE
ARC	HITECTURAL DRA	WINGS (29 SHEETS)
A1.0 A1.1 A1.2 A2.1 A2.2 A2.3 A2.4 A2.5 A2.6 A2.7 A3.1.1 A3.22 A3.3.1 A3.2.2 A3.3.1 A3.2.2 A3.3.1 A3.2.2 A3.3.1 A3.2.2 A3.3.1 A3.2.2 A3.3.1 A3.2.2 A3.3.1 A3.2.2 A3.3.1 A3.3.2 A3.3.4 A3.4.1 A4.1 A4.1 A4.2 A5.1 A5.2 A6.1 A5.2 A6.1 A5.2 A6.3 A7.1 A8.1 A8.2	<ul> <li>OVERALL BASE BID SITE PLA</li> <li>OVERALL ALTERNATE SITE P</li> <li>DEMOLITION PLAN</li> <li>BASE BID FLOOR PLAN</li> <li>ALTERNATE FLOOR PLAN</li> <li>ATTIC FLOOR PLAN</li> <li>ATTIC FLOOR PLAN AND T</li> <li>BASE BID ROOF PLAN AND T</li> <li>ALTERNATE ROOF PLAN AND T</li> <li>ALTERNATE ROOF PLAN AND T</li> <li>BASE BID ELEVATIONS</li> <li>BASE BID ELEVATIONS</li> <li>BASE BID SECTIONS</li> <li>BASE BID AND ALTERNATE S</li> <li>WALL SECTIONS</li> <li>WALL SECTIONS</li> <li>WALL SECTIONS</li> <li>WALL SECTIONS</li> <li>WALL SECTIONS</li> <li>WALL SECTIONS</li> <li>ENLARGED ENTRY PLAN, SEC</li> <li>ENLARGED RAMP AND STAIR</li> <li>SHIP LADDER PLAN AND DET</li> <li>ENLARGED TOILET PLANS, E</li> <li>INTERIOR ELEVATIONS</li> <li>INTERIOR ELEVATIONS</li> <li>REFLECTED CEILING PLANS</li> <li>FINISH FLOOR PLANS</li> <li>FINISH FLOOR PLANS</li> </ul>	N LAN YPICAL DETAILS TYPICAL DETAILS JLE AND DETAILS ECTIONS CTIONS, AND DETAILS PLANS AND DETAILS AILS LEVATIONS, AND DETAILS
STRI	JCTURAL DRAWIN	IGS (17 SHEETS)
S1.0 S1.1 S1.2 S1.3 S1.4 S1.5 S1.6 S2.1 S2.2 S2.3 S2.4	<ul> <li>GENERAL NOTES</li> <li>GENERAL NOTES CONTINUEI</li> <li>TYPICAL DETAILS</li> <li>TYPICAL DETAILS</li> <li>TYPICAL DETAILS</li> <li>SPECIAL INSPECTIONS</li> <li>SPECIAL INSPECTIONS</li> <li>FOUNDATION AND FLOOR PL</li> <li>ATTIC FLOOR FRAMING PLAN</li> <li>ROOF FRAMING PLAN - CLAS</li> <li>ALTERNATE ROOF/FLOOR PL</li> </ul>	D AN - CLASSROOM ADDITION BASE BID I SROOM ADDITION BASE BID ANS

- ENLARGED PLANS S2.5 S3.10 - SECTIONS

IBIA COUNTY BOARD OF EDUCATION BELLEVILLE AVENUE ON, ALABAMA 36426

ARCHITECT

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S3.11	- SECTIONS		
S3.20 S3.30	- SECTIONS - SECTIONS		
S3.31	- SECTIONS		
PLUN	<b>IBING DRAWINGS</b>	(3 SHEETS)	
P1.1 - SA P2.1 - DC P3.1 - PL	NITARY WASTE PLANS MESTIC WATER PLAN UMBING SCHEDULES, LEGEND, DETAILS, A	ND RISERS	
MEC	HANICAL DRAWINGS	(4 SHEETS)	
M1.1 M1.2 M2.1	- MECHANICAL PLANS - MECHANICAL ATTIC PLAN - MECHANICAL LEGEND SCHEDULES AN	ID DETAILS	
M2.2	- MECHANICAL OUTDOOR AIR CALCULA	TIONS	
ELEC	TRICAL DRAWINGS	(8 SHEETS)	
E0.0 E0.1 E1.1 E2.1 E3.1 E4.0 E4.1 E4.2	<ul> <li>ELECTRICAL DETAILS</li> <li>ELECTRICAL SITE PLAN</li> <li>LIGHTING &amp; POWER PLAN</li> <li>LIGHTING &amp; POWER PLAN</li> <li>SYSTEMS PLAN</li> <li>ELECTRICAL PANEL AND EQUIPMENT</li> <li>ELECTRICAL DETAILS</li> <li>ELECTRICAL DETAILS</li> </ul>	SCHEDULES	

STRUCTURAL





ALABAMA NO. 18664

It's the Law!





SV - SURVEY (FOR REFERENCE ONLY) 2 OF 4



	OCCU	OCCUPANCY WATERCLOSETS		LAVATORIES			DRINKING FOUNTAINS		SERVICE SINKS				
	USE	LOAD	RATIO	MALE	RATIO	FEMALE	RATIO	MALE	RATIO	FEMALE	RATIO	ALL	ALL
	A3	52.56	1/125	0.21	1/65	0.40	1/200	0.13	1/200	0.13	1/500	0.11	1.00
	В	3.63	1/25 FIRST 50 1/50 REMAINDER EXCEEDING 50.	0.07	1/25 FIRST 50 1/50 REMAINDER EXCEEDING 50.	0.07	1/40 FIRST 80 1/80 EXCEED 80.	0.05	1/40 FIRST 80 1/80 EXCEED 80.	0.05	1/100	0.04	
	E	266.45	1/50	2.66	1/50	2.66	1/50	2.66	1/50	2.66	1/100	2.66	
	S1,S2	2.55	1/100	0.01	1/100	0.01	1/100	0.01	1/100	0.01	1/1000	0.00	
	REQU TOTA	IRED LS		2.96		3.15		2.85		2.85		2.81	1.00
	PROV TOTA	IDED LS		7		8		6		7		4	1.00
<ul> <li>AND FRAME</li> <li>45 MINUTE DOOR AND FRAME</li> <li>45 MINUTE DOOR AND FRAME</li> <li>60 MINUTE DOOR AND FRAME</li> <li>60 MINUTE DOOR AND FRAME</li> <li>90 MINUTE DOOR</li> </ul>		2	2015 II	NTE	RNAT	IONA	L BUI	LDIN		DDE F	RESE	٩RC	H
In AND FRAME				ATION:							GRO		
	TYPE OF CONSTRUCTION :												
WALL ITPE LEGEND	EXIST	EXISTING BUILDING : 13,881 SQ.FT.								-			
				ASE DIL	).						2 380	SO FT	•
S-S-S-S-S-S-S-S-S-S-S-S-S-S-S-S-S-S-S-													
	TABLE	- 504.4 A	LLOWABL		ER OF ST	URIES:			ALL	2 2	STORIES:	ACT	2
	TABLE	506.2 A	LLOWABL	E AREA	:				AR	EA FACTO	R: NS		14,500 S.F.
LIFE SAFETY NOTES		SECTION 506.3.3 FRONTAGE INCREASE : FRO BAS						FRONTAGE INCREASE NOT NEEDED FOR BASE BID CONDITION.					
FEC FIRE EXTINGUISHER AND CABINET (PROVIDE FIRE RATED CABINETS IN RATED WALLS.)	TABLE	601 AN	D 602						CC	ONSTRUCT	ΓΙΟΝ ΤΥΡΕ	:	TYPE IIIB (NS
									ST	RUCTURA	L FRAME:		0
									BE	ARING WA	ALLS:		0
<b>K</b> -TYPE FIRE EXTINGUISHER       (320)       EXIT CAPACITY         EXTEND AND KEY ALL RATED WALLS TO SHAFT WALL SYSTEM,       AND/OR BOTTOM OF ROOF ASSEMBLY									Т. 6	602	EXTERI	OR:	< 5' 1 <u>&gt;</u> 5'< 10' 1 <u>&gt;</u> 10'< 30' >30'
STENCIL LABEL ALL RATED WALLS & DRAFT STOPS												INTE	RIOR:
ALL RATED DOORS AND FRAMES TO BE LABELED WITH									N	ONBEARIN	G WALLS:		
EMBOSSED LABELS INDICATING RATING IN MINUTES PROVIDE FOAM FILL INSULATION AS SPECIFIED IN ALL WALLS BETWEEN TOILETS AND CLASSROOMS.									T. 6	602	EXTERI	OR:	< 5' 1 <u>&gt;</u> 5'< 10' 1 <u>&gt;</u> 10'< 30'
COORDINATE W/ ELECTRICAL & MECHANICAL AND PROVIDE CONCRETE EQUIPMENT PAD AS REQUIRED													<u>&gt;30'</u>
HE - HORIZONTAL EXIT									FI	OOR CON		N:	0
FB - FIRE BARRIER									R	DOF CONS	TRUCTION	N:	0
FP - FIRE PARTITION	TABLE	E 1020.1	CORRIDO	R FIRE-I	RESISTAN	CE RATIN	G			GR	OUP E		-
FW - FIRE WALL	PARTI	TIONS A	ND OPEN	NG PRO	DTECTIVES	3				UNSPF		D	1









LIFE SAF	ETY NOTES						
FIRE EXTINGUISHER AND           (PROVIDE FIRE RATED C)	FIRE EXTINGUISHER AND CABINET (PROVIDE FIRE RATED CABINETS IN RATED WALLS.)						
	ACCESSIBLE						
$\stackrel{\leftarrow}{\underset{FE(K)}{\mapsto}}$ K-TYPE FIRE EXTINGUISHER	EXIT—EXIT (320)—EXIT CAPACITY						
EXTEND AND KEY ALL RATED WA AND/OR BOTTOM OF ROOF ASSE	LLS TO SHAFT WALL SYSTEM, MBLY						
STENCIL LABEL ALL RATED WALLS & DRAFT STOPS ABOVE CEILING EACH SIDE @ 20'-0" O.C. MAX.							
ALL RATED DOORS AND FRAMES TO BE LABELED WITH EMBOSSED LABELS INDICATING RATING IN MINUTES							
PROVIDE FOAM FILL INSULATION AS SPECIFIED IN ALL WALLS BETWEEN TOILETS AND CLASSROOMS.							
COORDINATE W/ ELECTRICAL & MECHANICAL AND PROVIDE CONCRETE EQUIPMENT PAD AS REQUIRED							
HE - HORIZONTAL EXIT							
FB - FIRE BARRIER							
FP - FIRE PARTITION							

## 15,612 SQ.FT 2,380 SQ.FT. ALLOWABLE STORIES: ACTUAL STORIES: AREA FACTOR: NS 14,500 S.F. TYPE IIIB (NS) GROUP E - 14,500 S.F. lf=(15,523 / 15,608-.25)30 /30 14,500X.74 = 10,730 S.F. 10,730 + 14,500 = 25,230 S.F. ALLOWED ACTUAL - 11,285 S.F. TO FIRE WALL CONSTRUCTION TYPE: STRUCTURAL FRAME: EXTERIOR: | < 5' INTERIOR: NONBEARING WALLS: EXTERIOR: < 5' INTERIOR: FLOOR CONSTRUCTION:





3.48

4

1" 

## GENERAL NOTES:

- 1. LBYD, INC. SHALL NOT HAVE AUTHORITY OVER THE SITE OR BUILDING CONTRACTOR'S WORK OR RESPONSIBILITIES. LBYD IS NOT RESPONSIBLE FOR SITE SAFETY PROCEDURES OR METHODS OF CONSTRUCTION. 2. ALL EXISTING UTILITIES SHOWN ON THESE DRAWINGS ARE APPROXIMATE AND OTHER UTILITIES MAY EXIST. CONTRACTOR MUST HAVE EXISTING UTILITIES LOCATED BY UNDERGROUND LINE LOCATORS AS WELL AS FIELD VERIFIED BY ONSITE PERSONNEL PRIOR TO ORDERING MATERIALS OR BEGINNING CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED
- TO LBYD IMMEDIATELY. 3. EXISTING UTILITIES TO REMAIN MAY BE LOCATED WITHIN PROPOSED DEMOLITION AREAS. CONTRACTOR SHALL USE EXTREME CAUTION WHILE WORKING IN THESE AREAS TO ENSURE NO UTILITY SERVICE INTERRUPTIONS TO FACILITIES THAT REMAIN OR TO ADJACENT PROPERTIES.
- 4. ALL EXISTING IMPROVEMENTS WITHIN THE LIMITS OF CONSTRUCTION ARE TO BE REMOVED UNLESS SPECIFICALLY NOTED,"TO REMAIN".
- 5. THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO PROTECT ADJACENT PROPERTIES AND IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING IMPROVEMENTS ON OR OFF SITE DUE TO THE CONSTRUCTION OF THIS PROJECT. ANY DAMAGE WILL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- 6. CONTRACTOR SHALL VERIFY SITE BOUNDARY AND EXISTING TOPOGRAPHY. NOTIFY LBYD OF ANY DISCREPANCIES PRIOR TO SUBMITTING PRICES OR ORDERING MATERIALS 7. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROTECT ALL BENCHMARKS AND PROPERTY CORNERS. ANY REPLACEMENT
- WILL BE AT THE CONTRACTOR'S EXPENSE.
- 8. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL NECESSARY PERMITS REQUIRED TO CONSTRUCT THIS PROJECT AND PAY ALL PERMIT FEES. ALL PERMITS MUST BE IN-HAND PRIOR TO CONSTRUCTION.
- BOUNDARY AND TOPOGRAPHIC INFORMATION PERFORMED BY ARRINGTON ENGINEERING DATED 05/12/2021.

10. TOPOGRAPHIC INFORMATION WAS PERFORMED VIA GROUND RUN AND FORMAT.

## SITE DEMOLITION NOTES:

- 1. CONTRACTOR TO COORDINATE WITH OWNER PRIOR TO ANY DEMOLITION REGARDING ITEMS TO BE SALVAGED, RECYCLED, AND REUSED. CONTRACTOR SHALL REMOVE ITEMS TO BE SALVAGED WITH EXTREME CAUTION TO PREVENT DAMAGE. CONTRACTOR SHALL TURN ALL SALVAGED ITEMS OVER TO OWNER.
- 2. CONTRACTOR SHALL COORDINATE WITH OWNER AND THE UTILITY PROVIDER PRIOR TO THE DISCONNECTING OR REMOVAL OF ANY UTILITY SERVICE TO THE EXISTING BUILDINGS. ALL UTILITIES TO BE REMOVED ARE TO BE CAPPED OR PLUGGED OR TERMINATED ACCORDING TO THE UTILITY OWNERS REQUIREMENTS.
- 3. REFER TO SITE GRADING AND UTILITY PLANS FOR PROPOSED UTILITY AND DRAINAGE INSTALLATION AND REMOVAL. 4. REFER TO LAYOUT AND LANDSCAPE PLANS FOR ADDITIONAL INFORMATION RELATING TO PAVING, CURB, SIDEWALKS,
- HARDSCAPES, ETC. REMOVE EXISTING CURBS AS NEEDED TO INSTALL PROPOSED IMPROVEMENTS. 5. CONTRACTOR SHALL COORDINATE WITH OWNER, ARCHITECT, LBYD AND THE UTILITY PROVIDER PRIOR TO THE
- DISCONNECTING OF ANY UTILITY SERVICE TO THE EXISTING BUILDINGS. 6. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL, RELOCATION OR PROTECTION OF ALL ABOVE AND BELOW
- GROUND EXISTING IMPROVEMENTS THAT ARE IN CONFLICT WITH THE PROPOSED IMPROVEMENTS UNLESS NOTED. 7. ALL DEMOLITION AND CONSTRUCTION DEBRIS SHALL BE TRANSPORTED AND DISPOSED OF AT LEAST WEEKLY IN A LEGAL
- AND APPROVED MANNER. 8. ALL EXISTING PAVING, CURBS, HARDSCAPE, ETC. SHALL BE SAW CUT AT THE LIMITS OF REMOVAL IN ORDER TO PROVIDE A CLEAN EDGE. EXISTING PAVING AT EDGE SHALL BE MILLED BACK A MINIMUM OF 1.5' TO ENSURE SMOOTH TRANSITION.

## SITE LAYOUT NOTES:

- 1. ALL ACCESSIBLE RAMPS, SIGNS, SYMBOLS, AND PAINTED ISLANDS AND ACCESS ROUTES MUST CONFORM TO THE LATEST ADA REQUIREMENTS.
- 2. ALL DIMENSIONS AND COORDINATES SHOWN ARE TO THE OUTSIDE FACE OF BUILDING TO THE BACK OF CURB, OR TO THE EDGE OF SURFACING UNLESS OTHERWISE NOTED. REFER TO ARCHITECTURAL PLANS FOR SPECIFIC BUILDING INFORMATION.
- ALL STRIPING TO BE PER THE LATEST EDITION OF THE MUTCD UNLESS NOTED OTHERWISE.
- 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARING A SITE CONSTRUCTION TRAFFIC CONTROL PLAN AND OBTAINING ANY REQUIRED APPROVALS FROM THE LOCAL JURISDICTIONAL AUTHORITY. THE SITE CONSTRUCTION TRAFFIC CONTROL PLAN SHALL TAKE INTO ACCOUNT THE ENTERING AND EXITING OF CONSTRUCTION TRAFFIC ONTO THE ROADWAY AND THE IMPACT TO THE FLOW OF TRAFFIC. THIS PLAN SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MUTCD. THIS SITE CONSTRUCTION TRAFFIC CONTROL PLAN SHALL BE IN ADDITION TO ANY TRAFFIC CONTROL PLAN PROVIDED IN THE PLAN SET FOR ROADWAY IMPROVEMENTS.
- 5. CONTRACTOR IS RESPONSIBLE FOR ADJUSTING ELEVATIONS OF ALL AT-GRADE STRUCTURES AND UTILITIES TO REMAIN (VALVE BOXES, MANHOLES, INLETS, VAULTS, ETC) TO MATCH PROPOSED FINISHED GRADES.

## **GRADING NOTES:**

- 1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING COMPACTION TESTING.
- 2. ALL TOPSOIL SHALL BE STRIPPED WITHIN THE PROPOSED LIMITS OF GRADING AND SHALL BE STOCKPILED ON-SITE IN AN APPROVED LOCATION FOR LATER USE WITH ANY EXCESS TO BE DISPOSED OF OFF-SITE ONCE ALL LANDSCAPED AREAS HAVE BEEN BROUGHT TO FINISH GRADE UNLESS OTHERWISE NOTED ON THE PLANS.
- 3. SUBGRADE SHALL BE PROOF ROLLED WITH A HEAVILY LOADED DUMP TRUCK AND APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACING FILL. ANY AREAS SHOWING SIGNS OF PUMPING, RUTTING, OR ANY UNSUITABLE (ORGANIC, SOFT, WET, LOOSE) MATERIAL FOUND IN PLACE SHALL BE UNDERCUT AND REPLACED, OR MOISTURE CONDITIONED AND COMPACTED TO THE SPECIFIED DENSITY AND MOISTURE CONTENT LISTED BELOW.
- 4. ALL EXPOSED SUBGRADE SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 12", MOISTURE CONDITIONED, AND RECOMPACTED, AS NEEDED TO ACHIEVE THE SPECIFIED DENSITY AND MOISTURE CONTENT LISTED BELOW, UNLESS OTHERWISE DETERMINED BY A GEOTECHNICAL ENGINEER.
- 5. CONTRACTOR SHALL BE RESPONSIBLE TO PROTECT PREPARED SUBGRADE AND RESTORE TO PROJECT SPECIFICATIONS IF DAMAGED OR COMPROMISED DUE TO INCLEMENT WEATHER AND/OR CONSTRUCTION TRAFFIC. 6. FILL MATERIAL SHALL HAVE THE FOLLOWING PROPERTIES: VIRTUALLY FREE OF ORGANICS, NO ROCK FRAGMENTS GREATER
- THAN 4" WITHIN 4' OF FINISH GRADE, LIQUID LIMIT NOT EXCEEDING 50, PLASTICITY INDEX NOT EXCEEDING 30, AND A MAXIMUM DRY DENSITY OF NO LESS THAN 100PCF AS DETERMINED BY ASTM D-698, STANDARD PROCTOR. 7. PLACE FILL MATERIAL IN 8" MAXIMUM LOOSE LIFTS AND COMPACT TO REQUIREMENTS LISTED BELOW.
- 8. COMPACTION TESTS SHALL BE TAKEN AT THE RECOMMENDATION OF THE ON-SITE GEOTECHNICAL ENGINEER, BUT AT A MINIMUM EVERY 2,500 SQUARE FEET OF AREA PER 8" LIFT.
- 9. FILL MATERIAL TO BE WITHIN ±2.0% OF OPTIMUM MOISTURE CONTENT AT THE TIME OF COMPACTION, UNLESS OTHERWISE
- DETERMINED BY A GEOTECHNICAL ENGINEER. 10. MINIMUM COMPACTION REQUIREMENTS ARE EXPRESSED BELOW AS A PERCENTAGE OF THE MATERIAL'S MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D-698, STANDARD PROCTOR.

AREA	STRUCTURAL*	VEHICULAR	SIDEWALKS	LANDSCAPE	
		PAVEMENT			
% MAXIMUM DRY DENSITY	98%	98%	98%	85% IN UPPER 2'	
*STRUCTURAL AREAS INCLUDE ZONES OF INFLUENCE AROUND THE BUILDING, PAVEMENT AREAS, FILL SLOPES, ETC					

11. COMPACTION WITHIN LIMITED SPACES (I.E. MANHOLES, INLETS, UTILITY TRENCHES) SHOULD BE BACKFILLED AND COMPACTED SYSTEMATICALLY, AT THE DIRECTION OF THE ON-SITE GEOTECHNICAL ENGINEER. STONE BACKFILL SHALL BE INSTALLED IN 12" MAXIMUM LOOSE LIFTS AND COMPACTED WITH 6-8 PASSES OF A VIBRATORY COMPACTOR.

- 12. CLEARING LIMITS SHALL BE 5' OUTSIDE OF ALL PROPOSED GRADED AREAS OR NOT BEYOND THE PROPERTY LINES WHICHEVER IS LESS.
- 13. NO GRADING OFF-SITE OR IN ANY ROAD RIGHT-OF-WAY WITHOUT PROPER APPROVALS AND PRIOR NOTIFICATION.
- 14. COORDINATE THE SEQUENCING OF ALL GRADING OPERATIONS WITH THE EROSION CONTROL PLAN.
- 15. ALL GRADING ADJACENT TO EXISTING OR PROPOSED BUILDINGS SHALL BE SLOPED AWAY FROM THE STRUCTURES AT A MINIMUM OF 1.0% GRADE. THE CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE AWAY FROM THE STRUCTURES. NOTIFY LBYD OF ANY DISCREPANCIES.
- 16. PROPOSED GRADES INDICATED ON THIS PLAN ARE TO FINISH GRADE. THE CONTRACTOR SHALL MAKE SUBGRADE ADJUSTMENTS FOR TOPSOIL, PAVING, BUILDING PAD, ETC.
- 17. FILL SLOPES SHOULD BE BENCHED INTO THE EXISTING SLOPES AND SHOULD BE COORDINATED WITH THE ONSITE GEOTECHNICAL ENGINEER FOR BENCH DETAILS (HEIGHT AND DEPTH OF BENCH INTO THE SLOPE.)
- 18. RETAINING WALL GRADES: GTW INDICATES FINISHED GRADE AT TOP OF WALL, GBW INDICATES FINISHED GRADE AT BOTTOM OF WALL. SEE DETAIL FOR FOOTING ELEVATIONS RELATIVE TO FINISHED GRADE AT BOTTOM OF WALL.
- 19. A GEOTECHNICAL REPORT HAS BEEN PREPARED BY TERRACON CONSULTANTS, INC. AND IS AVAILABLE FOR INFORMATION

- DISCREPANCIES.

## STORM DRAINAGE NOTES:

- AND/OR FABRICATION.

- SPECIAL DRAWING # MH-621-2.
- DRAINAGE INLET OR DAYLIGHT AT GRADE. EROSION CONTROL NOTES:
- REGULATIONS.
- RESPONSIBILITY OF THE CONTRACTOR.

- DRESSED.

- AREAS AT ANY ONE TIME.
- ALDOT SPECIFICATIONS SECTION 652 AND 656.
- INDICATED.
- INSTALLED.
- BRUSH BERMS, ETC.

PURPOSES. THE CONTRACTOR SHALL REVIEW THIS REPORT, VISIT THE SITE AND COMPLETE ANY ADDITIONAL EXPLORATIONS THAT IT FEELS NECESSARY IN ORDER TO PROVIDE A SATISFACTORY BID.

20. DEWATERING SHALL BE SOLELY THE RESPONSIBILITY OF THE CONTRACTOR. PREVENT SURFACE WATER AND GROUND WATER FROM ENTERING EXCAVATIONS. FROM PONDING ON PREPARED SUBGRADES, AND FROM FLOODING PROJECT SITE AND SURROUNDING AREA. PROTECT SUBGRADES FROM SOFTENING, UNDERMINING, WASHOUT, AND DAMAGE BY RAIN OR WATER ACCUMULATION. REROUTE SURFACE WATER RUNOFF AWAY FROM EXCAVATED AREAS. DO NOT ALLOW WATER TO ACCUMULATE IN EXCAVATIONS. DO NOT USE EXCAVATED TRENCHES AS TEMPORARY DRAINAGE DITCHES. INSTALL A DEWATERING SYSTEM TO KEEP SUBGRADES DRY AND CONVEY GROUND WATER AWAY FROM EXCAVATIONS. MAINTAIN UNTIL DEWATERING IS NO LONGER REQUIRED. IF GROUNDWATER DEWATERING IS REQUIRED, CONTRACTOR IS TO OBTAIN ANY PERMITS AS MAY BE REQUIRED PRIOR TO DISCHARGE OF EFFLUENT FROM DEWATERING. 21. GRADING ADJACENT TO THE BUILDING SHALL BE COORDINATED WITH ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR

FOUNDATION WALLS, STEM WALLS, DRAINS, AND OTHER CONDITIONS. THE CONTRACTOR SHALL NOTIFY LBYD INC. OF ANY

1. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS ON ALL STORM PIPE MATERIALS TO LBYD PRIOR TO INSTALLATION

2. ALL PROPOSED STORM INLETS (GRATES, CURB, YARD, AREA DRAINS) ARE TO BE LOCATED AT THE LOWPOINTS. GRADING SHALL BE TO DIRECT RUNOFF TO THESE INLETS. NOTIFY LBYD OF ANY DISCREPANCIES.

3. STORM DRAINAGE SYSTEMS SHALL BE CONSTRUCTED FROM DOWNSTREAM TO UPSTREAM. VERIFY ALL PIPE SLOPES, INVERTS, AND POINTS OF CONNECTION PRIOR TO CONSTRUCTION. NOTIFY LBYD OF ANY DISCREPANCIES. 4. THE CONTRACTOR SHALL VERIFY ALL EXISTING AND PROPOSED STORM PIPE GRADES AND POINTS OF CONNECTION PRIOR TO INSTALLATION. LBYD SHALL BE NOTIFIED OF ANY DEVIATIONS PRIOR TO CONSTRUCTION.

5. PROPOSED STORM PIPES 30" AND LESS SHALL BE BEDDED IN 4" OF CRUSHED AGGREGATE AND STORM PIPES 36" AND GREATER SHALL BE BEDDED IN A 6" OF CRUSHED AGGREGATE.

6. ALL RIP RAP SHALL BE CLASS 2 PER THE ALABAMA DEPT. OF TRANSPORTATION (ALDOT) STANDARD SPECIFICATIONS UNLESS OTHERWISE NOTED.

7. ALL STORM PIPES 15" AND LESS SHALL BE SMOOTH LINED HIGH DENSITY POLYETHYLENE (HDPE) OR SCHEDULE 40 POLYVINYL CHLORIDE (PVC) WITH WATER-TIGHT JOINTS UNLESS OTHERWISE NOTED, INSTALLED PER MANUFACTURERS RECOMMENDATIONS. ALL STORM PIPES 18" AND GREATER SHALL BE CLASS 3 REINFORCED CONCRETE PIPE (RCP) BELL AND SPIGOT INSTALLED WITH WATERTIGHT JOINTS UNLESS OTHERWISE NOTED. 8. ALL STORM MANHOLES SHALL BE PRECAST CONE, RISER, AND BASE SECTIONS WITH GASKETED JOINTS MEETING ALDOT

 ALL YARD INLETS SHALL BE PRECAST INLET BOXES 3-1" x 3-1" OR 4'2 x 4'-2" DEPENDING ON MAXIMUM PIPE DEFLECTIONS. YARD INLET TOP TO BE PRECAST WITH A RING AND COVER ACCESS PROVIDED THROUGH THE TOP. 10. PROVIDE 4" PVC SCHEDULE 40 GRAVITY DRAIN LINE FROM ALL BELOW GRADE UTILITY VAULTS TO THE NEAREST STORM

1. SITE EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL LAWS, CODES, AND

THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A "NOTICE OF INTENT"(NOI) FROM ADEM. THE OWNER SHALL BE RESPONSIBLE FOR ALL MONITORING, INSPECTIONS, ETC. TO ENSURE THE SITE IS AT ALL TIMES IN ACCORDANCE WITH ADEM RULES & REGULATIONS. DOCUMENTATION OF INSPECTIONS BY A Q.C.I. OR Q.C.P. SHALL BE MAINTAINED BY THE CONTRACTOR AND PROVIDED TO THE OWNER AT HIS/HER REQUEST. ANY AND ALL FEES, FINES, ETC., SHALL BE THE

ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING THE CONSTRUCTION PROCESS AND UNTIL ALL DISTURBED AREAS HAVE BEEN PERMANENTLY STABILIZED. ALL EROSION CONTROL INSTALLATION AND MAINTENANCE SHALL BE SOLELY THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE AT NO ADDITIONAL COST TO THE OWNER.

4. EROSION CONTROL DEVICES SHOWN ON THESE PLANS ARE A MINIMUM AND ARE DEPENDENT ON THE CONTRACTOR'S CONSTRUCTION PHASING OF THE PROJECT. ADDITIONAL DEVICES SHALL BE INSTALLED AS REQUIRED TO PREVENT SILTATION, EROSION AND OTHER DEGRADATION OR POLLUTION TO THE SITE OR ADJACENT PROPERTIES, STREAMS, DITCHES, AND PUBLIC ROADWAYS. ADDITIONAL MEASURES MAY INCLUDE, AS MINIMUM, TEMPORARY SEDIMENT BASINS, CONSTRUCTION EXITS PAD, VEHICLE WASH RACKS, SILT FENCING, STRAW AND RIP RAP CHECK DAMS, DIVERSION DITCHES, ETC. THESE ADDITIONAL MEASURES SHALL BE AT NO ADDITIONAL COST TO THE OWNER.

5. EROSION CONTROL DEVICES SHALL INCLUDE, BUT NOT LIMITED. TO THE FOLLOWING DEVICES: SILT FENCING, BRUSH BERMS, SEDIMENT BASINS, DETENTION PONDS, STRAW WATTLES, CHECK DAMS, FILTER BERMS, JUTE MATTING, VEGETATIVE FILTER STRIPS, TURF REINFORCEMENT MAT, DIVERSION BERMS, ETC.

6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL EROSION CONTROL DEVICES IN GOOD OPERATING CONDITION DURING ALL LAND DISTURBING ACTIVITIES. THIS RESPONSIBILITY SHALL INCLUDE THE CLEANUP AND/OR REPAIRS TO THE DEVICES AT NO ADDITIONAL COST TO THE OWNER.

7. EROSION CONTROL DEVICES SHALL BE MONITORED AND MAINTAINED UNTIL THE SITE HAS BEEN PERMANENTLY STABILIZED AND AFTER EACH RAINFALL GREATER THAN 0.75 INCHES IN A 24 HOUR PERIOD, ANY WIND GUSTS GREATER THAN 25 MPH, AND ANY SUSTAINED WINDS GREATER THAN 20 MPH IN A 24 HOUR PERIOD.

8. AFTER ALL LAND DISTURBANCE ACTIVITIES HAVE CEASED AND AFTER ALL DISTURBED AREAS HAVE BEEN PERMANENTLY STABILIZED, THE EROSION CONTROL DEVICES SHALL BE REMOVED BY THE CONTRACTOR AND THE AREA CLEANED AND

9. DEWATERING OPERATIONS MAY NOT BE DISCHARGED IN A MANNER THAT CAUSES EROSION OF THE SITE OR POLLUTION TO ADJACENT PROPERTIES, STREAMS, DITCHES, OR PUBLIC ROADWAYS. 10. A GRAVELED ACCESS DRIVE OF SUFFICIENT SIZE SHALL BE AT EACH SITE ENTRANCE/EXIT TO PREVENT TRACKING OF DIRT

AND SEDIMENT ONTO PUBLIC OR PRIVATE ROADWAYS. IF SEDIMENT REACHES THE ROADWAY, THEN IT MUST BE CLEANED AT THE END OF EACH WORKDAY. 11. ALL LAND DISTURBANCE ACTIVITIES SHALL BE CONDUCTED IN A LOGICAL SEQUENCE TO MINIMIZE THE EXPOSURE OF BARE

12. ALL DISTURBED AREAS LEFT INACTIVE FOR MORE THAN 13 DAYS SHALL BE SEEDED AND MULCHED IN ACCORDANCE WITH

13. ALL PREVIOUSLY GRADED AREAS SHALL RECEIVE 4 INCHES OF TOPSOIL AND PERMANENT GRASSING UNLESS OTHERWISE

14. PRIOR TO SITE CLEARING, ALL PERIMETER SILT FENCING, BRUSH BERMS, ETC. AND GRAVELED ACCESS DRIVES SHALL BE

15. ALL EXISTING STREAMS, DITCHES, ETC. SHALL BE PROTECTED FROM SEDIMENTS AND SILTS BY SILT FENCING, WATTLES,

16. WATTLES OR SILT FENCING SHALL BE INSTALLED AT ALL INLETS UPON THE COMPLETION OF EACH INLET AS INSTALLED. 17. RIP RAP SHALL BE PLACED AT EACH HEADWALL IMMEDIATELY FOLLOWING CONSTRUCTION OF EACH HEADWALL. 18. GEOTEXTILE SHALL BE PLACED ON ALL 3:1 SIDE SLOPES. GEOTEXTILE SHALL BE NORTH AMERICAN GREEN S150 OR APPROVED EQUAL UNLESS OTHERWISE NOTED ON PLANS. ALL GEOTEXTILES SHALL BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS.

19. GEOTEXTILE SHALL BE PLACED ON ALL DITCH BOTTOMS & 1' UP EACH SIDE. GEOTEXTILE SHALL BE NORTH AMERICAN GREEN SC150 OR APPROVED EQUAL UNLESS OTHERWISE NOTED ON PLANS. ALL GEOTEXTILES SHALL BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS.

## UTILITY NOTES:

- 1. THE SITE CONTRACTOR IS RESPONSIBLE FOR COMPLETING ALL UTILITY SERVICES (WATER, SEWER, GAS, ELECTRICAL, TELEPHONE, CABLE TV) FROM THE POINT THE RESPECTIVE UTILITY COMPANY COMPLETES THEIR WORK TO THE POINT OF CONNECTION AT THE BUILDING.
- REFER TO ARCHITECTURAL, MECHANICAL, PLUMBING, ELECTRICAL, ETC. PLANS FOR ALL PROPOSED UTILITY POINTS OF CONNECTION AT THE BUILDING. NOTIFY ARCHITECT, LBYD OF ANY DISCREPANCIES.
- 3. GRAVITY SEWER SYSTEMS SHALL BE CONSTRUCTED FROM DOWNSTREAM TO UPSTREAM. VERIFY ALL PIPE SLOPES, INVERTS, AND POINTS OF CONNECTION PRIOR TO CONSTRUCTION. NOTIFY LBYD OF ANY DISCREPANCIES.
- 4. THE CONTRACTOR SHALL VERIFY ALL EXISTING AND PROPOSED GRAVITY SEWER PIPE GRADES AND POINTS OF CONNECTION PRIOR TO INSTALLATION. LBYD SHALL BE NOTIFIED OF ANY DEVIATIONS PRIOR TO CONSTRUCTION
- 5. BACKFLOW PREVENTION AND METERING SHALL BE PROVIDED ON THE FIRE AND DOMESTIC SERVICES IN ACCORDANCE WITH THE LOCAL UTILITY COMPANY AND FIRE DEPARTMENT'S REQUIREMENTS. 6. WATER MAINS 4 INCHES IN DIAMETER AND GREATER SHALL BE DIP(CL.350) AND WATER MAINS LESS THAN 3 INCHES IN
- DIAMETER SHALL BE PVC (SCHD.40) UNLESS OTHERWISE INDICATED ON THE PLANS. WATER SERVICES SHALL BE A MINIMUM OF 5 FEET HORIZONTAL AND 2 FEET VERTICAL FROM ALL SANITARY SEWER MAINS AND LATERALS.
- WATER MAINS AND SERVICES SHALL BE INSTALLED IN ACCORDANCE WITH THE LOCAL UTILITY COMPANY'S REQUIREMENTS. ALL MAINS AND SERVICES SHALL BE INSTALLED WITH A MINIMUM OF 36" COVER UNLESS OTHERWISE INDICATED ON PLANS.
- 9. ALL SANITARY SEWER MAINS AND LATERALS SHALL BE PVC (SCHD. 40) UNLESS OTHERWISE REQUIRED BY THE LOCAL UTILITY COMPANY.
- 10. ALL UNDERGROUND ELECTRICAL, TELEPHONE, AND CABLE TV SHALL BE INSTALLED IN PVC CONDUIT OR CONCRETE ENCASED DUCT BANK WITH PULL WIRE MEETING THE LOCAL UTILITY COMPANY'S REQUIREMENTS. INFORMATION SHOWN ON CIVIL DRAWINGS FOR REFERENCE ONLY. REFER TO ELECTRICAL PLANS FOR SPECIFIC INFORMATION. 11. GAS SERVICE SHALL BE PER THE LOCAL UTILITY COMPANY'S REQUIREMENTS. INFORMATION SHOWN ON CIVIL DRAWINGS
- FOR REFERENCE ONLY. COORDINATE WITH MECHANICAL ENGINEER AND UTILITY COMPANY. 12. UTILITY TRENCHES SHALL BE BACKFILLED WITH COMPACTED FILL PLACED IN 6 INCH LOOSE LIFTS. FILL SHALL BE
- COMPACTED TO 98% STANDARD PROCTOR AND OPTIMUM MOISTURE CONTENT WITHIN ±2.0%.
- 13. WHEN INSTALLING UTILITIES IN EXISTING PAVED AREAS OR IN AREAS WHERE SOILS ARE CONSIDERED UNSUITABLE FOR BEDDING OR BACKFILLING, UTILITY TRENCHES SHALL BE BACKFILLED FULL DEPTH WITH CRUSHED AGGREGATE.
- 14. WHERE UTILITIES ARE TO BE INSTALLED IN AREAS OF EXISTING PAVING, HARDSCAPE, SIDEWALKS, ETC. CONTRACTOR SHALL SAWCUT AND REMOVE EXISTING PAVING, HARDSCAPE, SIDEWALK ETC. AND REPLACE IN LIKE KIND AND RESTRIPE AS NECESSARY. BACKFILL TRENCH FULL DEPTH WITH STONE.
- 15. CONTRACTOR IS RESPONSIBLE FOR ADJUSTING ELEVATIONS OF ALL AT-GRADE STRUCTURES AND UTILITIES TO REMAIN (VALVE BOXES, MANHOLES, INLETS, VAULTS, ETC) TO MATCH PROPOSED FINISHED GRADES. 6. CONTRACTOR IS RESPONSIBLE FOR PROVIDING TAMPER SWITCHES AND ASSOCIATED CONDUIT, WIRING, ETC ON FIRE
- SERVICE POST INDICATOR VALVES AND VALVES IN PIT MOUNTED FIRE BACKFLOW PREVENTOR ASSEMBLIES. COORDINATE WITH FIRE PROTECTION AND ELECTRICAL PLANS.
- 17. PROVIDE 4" PVC SCHEDULE 4" GRAVITY DRAIN LINE FROM ALL BELOW GRADE UTILITY VAULTS TO THE NEAREST STORM DRAINAGE INLET OR DAYLIGHT AT GRADE.











## SPECIAL NOTES:

SEE SHEET C0.1 FOR ALL APPLICABLE DEMOLITION NOTES.
 SEE SHEET C1.1 FOR BID ALTERNATE.













SHEET TITLE: DEMOLITION PLAN - BASE





















SHEET TITLE: DEMOLITION PLAN - ALTERNATE













## SPECIAL NOTES: SEE SHEET C0.1 FOR ALL APPLICABLE LAYOUT NOTES. SEE SHEET C2.1 FOR BID ALTERNATE.





SCALE: 1"=20'



















## <u>SPECIAL NOTES:</u> 1. SEE SHEET C0.1 FOR ALL APPLICABLE LAYOUT NOTES. 2. SEE SHEET C2.0 FOR BASE BID.





10 SCALE: 1"=20'











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## SPECIAL NOTES:

 SEE SHEET C0.1 FOR ALL APPLICABLE GRADING AND DRAINAGE NOTES.
 SEE SHEET C3.1 FOR BID ALTERNATE. ADS INLETS SHALL BE 18" DRAIN BASINS WITH H-10 PEDESTRIAN GRATE 4. PROVIDE PRECAST SPLASH BLOCKS AT ALL DOWNSPOUT LOCATIONS. ENSURE POSITIVE DRAINAGE AWAY FROM THE BUILDING.











SHEET TITLE: GRADING & DRAINAGE PLAN - BASE











## SPECIAL NOTES:

1. SEE SHEET C0.1 FOR ALL APPLICABLE GRADING AND DRAINAGE NOTES. SEE SHEET C3.0 FOR BASE BID. ADS INLETS SHALL BE 18" DRAIN BASINS WITH H-10 PEDESTRIAN GRATE 4. PROVIDE PRECAST SPLASH BLOCKS AT ALL DOWNSPOUT LOCATIONS. ENSURE POSITIVE DRAINAGE AWAY FROM THE BUILDING.





NFOR U MO 





SHEET TITLE: GRADING & DRAINAGE PLAN - ALTERNATE

















SHEET TITLE: EROSION CONTROL PLAN - BASE











(SB) SILT FENCING

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SEE SHEET C0.1 FOR ALL APPLICABLE EROSION CONTROL NOTES.
 SEE C4.0 FOR BASE BID.

EROSION CONTROL LEGEND

TSG TOPSOIL

SPECIAL NOTES:

\_ GAS \_\_\_\_ GAS \_\_\_\_ GAS \_\_\_\_ GAS \_\_\_\_ / up/ / w- transformer yi top 73.87 throat: 72.80 cant access gi grate 73.76 fl 70.62 SB



 $\frown$ 









SHEET TITLE: EROSION CONTROL PLAN - ALTERNATE









## SPECIAL NOTES:

- 1. SEE SHEET C0.1 FOR ALL APPLICABLE UTILITY NOTES. 2. SEE SHEET C5.1 FOR BID ALTERNATE. 3. SLOPES AND SIZES OF EXISTING SANITARY LATERAL IS BASED ON ASSUMPTIONS AND NOT FIELD VERIFIED. CONTRACTOR TO VERIFY CONNECTION POINTS, SLOPE, SIZE AND MATERIAL PRIOR TO BEGINNING CONSTRUCTION AND ORDERING MATERIALS.
- 4. SIZE AND MATERIAL OF RELOCATED WATER LINE IS BASED ON ASSUMPTIONS AND NOT FIELD VERIFIED. CONTRACTOR TO VERIFY SIZE AND MATERIAL PRIOR TO BEGINNING CONSTRUCTION AND ORDERING MATERIALS. 5. FLOMATON UTILITIES SHALL BE RESPONSIBLE FOR NEW WATER TAP AND SETTING THE METER BOX AND MAKING CONNECTION. CONTRACTOR'S RESPONSIBILITY SHALL BEGIN ON THE PRIVATE SIDE OF THE METER. CONTRACTOR SHALL COORDINATE MAIN TAP AND METER SETTING WITH FLOMATON UTILITIES AND SHALL BE RESPONSIBLE FOR ANY AND ALL FEES RELATED TO











SHEET TITLE:

UTILITY PLAN - BASE









## SPECIAL NOTES:

- 1. SEE SHEET C0.1 FOR ALL APPLICABLE UTILITY NOTES. 2. SEE SHEET C5.0 FOR BASE BID INFORMATION INCLUDING SANITARY SEWER SERVICE & PLUMBING PLANS FOR ALTERNATE.
- 3. SLOPES AND SIZES OF EXISTING SANITARY LATERAL IS BASED ON ASSUMPTIONS AND NOT FIELD VERIFIED. CONTRACTOR TO VERIFY CONNECTION POINTS, SLOPE, SIZE AND MATERIAL PRIOR TO BEGINNING CONSTRUCTION AND ORDERING
- MATERIALS. 4. SIZE AND MATERIAL OF RELOCATED WATER LINE IS BASED ON ASSUMPTIONS AND NOT FIELD VERIFIED. CONTRACTOR TO VERIFY SIZE AND MATERIAL PRIOR TO BEGINNING CONSTRUCTION AND ORDERING MATERIALS.





SCALE: 1"=20'

























GENERAL S	SITE PLAN LEGEN
	EXISTING STORM WATER DITCH TO REMAIN, SEE CIVIL
	NEW CONCRETE PAVING SYSTEM SEE CIVIL
* * * * * * * * * * *	NEW SOD
	NEW SEED AND STRAW AT ALL DISTURBED AREAS





ARCHITECTS

LATHAN = BRYANT = CALMA





SHEET TITLE: OVERALL BASE BID SITE PLAN

PROJ. MGR.: R. LATHAN DRAWN: S. WILSON DATE: FEBRUARY 15, 2022 REVISIONS

JOB NO. 21-04A SHEET NO: A1.0 1 OF 29

1/128" = 1'-0"



GENERAL S	SITE PLAN LEG
	EXISTING STORM WATER D TO REMAIN, SEE CIVIL
	NEW CONCRETE PAVING SY SEE CIVIL
	NEW SOD
	NEW SEED AND STRAW AT DISTURBED AREAS



SYSTEM,

ALL









ITION	I NC	DTI	ΞS			
NOT BE ASSOCIA	LIMI <sup>-</sup> ATED	red Do	TO	THE AS	FOLLOWIN	١G

	DEMOL	ITION LEGEND	_				
	— — EXISTING TO — — BE REMOVED EXISTING TO BE REMOVED		EXISTING SLAB OR RAMP TO I				
	EXISTING EXISTING TO REMAIN						
(1	) KEY NOTE	KEY NOTE SYMBOL (REFER TO CORRESPONDING NOTES)					
	GENERAL DEMOLITION KEY NOTES						
1	) SEE CIVIL FOR EXTENTS OF DEMOLITION THIS AREA.						
2	) REMOVE EXISTING DOOR, FRAME, HARDWARE AND ASSOCIATED CONSTRUCTION AS REQUIRED.						
3	SELECTIVELY REMOVE PORTIONS OF THE EXISTING WINDOW AND ASSOCIATED CONSTRUCTION AS INDICATED. PAREAR ADJACENT SURFACES AS REQUIRED TO ACCEPT NEW CONSTRUCTION.						
	SELECTIVELY REMOVE PORTIONS OF THE EXISTING WALL AND ASSOCIATED CONSTRUCTION AS INDICATED. WHE						









WALL TYPE LEGEND					
EXTERIOR	NEW 4" BRICK VENEER W/ AIR SPACE AND RIGID INSULATION ON REINFORCED FOAM FILLED CMU WITH DAMPPROOFING, PROVIDE BRICK WALL TIES @ 16" O.C.				
CMU WALL	8" OR 12" CONCRETE MASONRY WALL. SEE PLAN FOR WALL WIDTH CHANGES SEE LIFE SAFETY PLAN FOR FIRE RATING				
SOUND ATTENUATION PARTITION	8" OR 12" CONCRETE MASONRY WALL WITH SOUND ATTENUATION FOAM FILL				
EXISTING	EXISTING TO REMAIN				
GENERAL NOTES					
EXTEND AND KEY RATED WALLS TO BOTTOM OF FLOOR STRUCTURE OR ROOF DECK ABOVE. SEE LIFE SAFETY DRAWINGS FOR RATED WALL LOCATIONS.					
COORDINATE W/ ELECTRICAL AND MECHANICAL AND PROVIDE CONCRETE EQUIPMENT PAD AS REQUIRED					
SEE CIVIL DRAWINGS FOR CONTINUATION OF SIDEWALKS					
ALL PLAN DIMENSIONS ARE TO FACE OF CMU WALL UNLESS NOTED OTHERWISE					
WINDOWS ARE DIMENSIONED TO THE CENTER LINE					
SLOPE ALL SIDEWALKS AWAY FROM THE BUILDING 1/4 : 12					
SLOPE FINISH FLOOR TO FLOOR DRAINS. SEE PLUMBING FOR LOCATIONS OF FLOOR DRAINS.					
SEE ARCHITECTURAL FINISH PLANS AND SPECIFICATIONS FOR AREAS REQUIRING THICKSET OR DEPRESSED FLOORING INSTALLATION. COORDINATE WITH SUBCONTRACTOR AND DROP CONCRETE FLOOR SLAB IN SUCH AREAS AS REQUIRED; PROVIDE SLOPE FOR POSITIVE DRAINAGE IN AREAS WITH FLOOR DRAINAGE SYSTEM.					

SEE ELEVATIONS AND ROOF PLAN FOR DOWNSPOUT LOCATIONS

DOOR TYPE DOOR RATING A HARDWARE SYMBOL ROUGH-IN FOR FUTURE ACCESS CONTROL DOOR TYPE A ELEV. MARK A1.1 SHEET NUMBER New door and swing EWC ELECTRIC WATER ▲10 — ELEV. MARK TB 4' TACK BOARD (A5.1) SHEET NUMBER INT. ELEVATION MB MARKER BOARD  $\langle A \rangle$  EXTERIOR WINDOW FEC RECESSED FIRE EXTINGUISHER CABINET WITH EXTINGUISHER 1 STOREFRONT A200 ROOM NUMBER AEJ EXPANSION JOINT F.D. FLOOR DRAIN FE SURFACE MOUNT FIRE EXTINGUISHER CJ CONTROL JOINT INTERIOR FLOOR N.I.C NOT IN CONTRACT ELEVATION DOOR PLACEMENT LEGEND FLUSH FRAME OFFSET FRAME EQ EQ CENTERED FRAME DOOR FIRE RATING LEGEND DOOR TYPE NO RATING (2) DOOR TYPE + A (2A) 20 MINUTE RATING DOOR TYPE + B (2B) 45 MINUTE RATING DOOR TYPE + C (2C) 60 MINUTE RATING DOOR TYPE + D (2D) 90 MINUTE RATING

DOOR TYPE + E (2E)









1"





ATTIC FLOOR LEGEND	
	8" HOLLOW CORE WITHOUT TOPPING SLAB - (NON RATED TOP OF HOLLOW CORE 14'-0"
	LOW SLOPE ROOFING SYSTE SPECIFIED. SEE ROOF PLAN.
	SHINGLE ROOFING SYSTEM A SPECIFIED. SEE ROOF PLAN.
	PROVIDE A UL RATED SMOKE CAP @ THE BOTTOM OF TRUS ALL PENETRATIONS AS REQU
GR	2X4 WOOD GUARDRAIL SYSTI MECHANICALLY ATTACHED TO







1"





1" 









SHEET TITLE: ROOF DETAILS

PROJ. MGR.: **R. LATHAN** DRAWN: S. WILSON DATE: FEBRUARY 15, 2022 REVISIONS

1 JOB NO. 21-04A SHEET NO: A2.6 9 OF 29 1"







GENERAL ELEVATION NOTES COORDINATE DOWNSPOUT LOCATIONS BETWEEN ELEVATIONS AND ROOF PLANS. PROVIDE AN ACCENT BRICK AND ACCENT MORTAR COLOR FOR THE SOLDIER COURSE WATERTABLE. PROVIDE AN ACCENT BRICK AND ACCENT MORTAR COLOR FOR THE SOLDIER COURSE AT THE FRIEZE BOARD. PROVIDE AN ACCENT BRICK AND ACCENT MORTAR COLOR FOR THE ARCHED TRIPLE ROWLOCK HEAD. PROVIDE AN ACCENT BRICK AND ACCENT MORTAR COLOR FOR THE ROWLOCK WINDOW SILLS. PROVIDE AN ACCENT BRICK AND ACCENT MORTAR COLOR FOR THE HERRIBONE PATTERN. TYPICAL BRICK VENEER SHALL MATCH EXISTING SIZE, COLOR AND TEXTURE. SEE ALLOWANCES. TYPICAL BRICK MORTAR SHALL MATCH EXISTING COLOR. SEE ALLOWANCES.



FROM FACE OF BRICK - ACCENT BRICK HERRIBONE PATTERN

RECESSED 1" FROM FACE OF BRICK - ACCENT BRICK ROWLOCK PROUD 1" FROM FACE OF BRICK

## ▲ BRICK ACCENT PANEL DETAIL 1/4" = 1'-0"



ACCENT ARCHED TRIPLE ROWLOCK BRICK COURSE PROUD 1"

ARCHITECTS LATHAN • BRYANT • CALMA  $\frown$ C Т  $\bigcirc$ S M Ζ Т Ш Ш Ζ ✓ — LOM, KE ז **⊥** OF ALAR SE. No. 3365 RICK N. LATHAN SHEET TITLE: BASE BID ELEVATIONS PROJ. MGR.: R. LATHAN DRAWN: S. WILSON DATE: FEBRUARY 15, 2022 REVISIONS JOB NO. 21-04A SHEET NO:

LATHAN



A3.1.1 11 OF 29 1" 



ALTERNATE

GENERAL ELEVATION NOTES
COORDINATE DOWNSPOUT LOCATIONS BETWEEN ELEVATIONS AND ROOF PLANS.
PROVIDE AN ACCENT BRICK AND ACCENT MORTAR COLOR FOR THE SOLDIER COURSE WATERTABLE.
PROVIDE AN ACCENT BRICK AND ACCENT MORTAR COLOR FOR THE SOLDIER COURSE AT THE FRIEZE BOARD.
PROVIDE AN ACCENT BRICK AND ACCENT MORTAR COLOR FOR THE ARCHED TRIPLE ROWLOCK HEAD.
PROVIDE AN ACCENT BRICK AND ACCENT MORTAR COLOR FOR THE ROWLOCK WINDOW SILLS.
PROVIDE AN ACCENT BRICK AND ACCENT MORTAR COLOR FOR THE HERRIBONE PATTERN.
TYPICAL BRICK VENEER SHALL MATCH EXISTING SIZE, COLOR AND TEXTURE. SEE ALLOWANCES.
TYPICAL BRICK MORTAR SHALL MATCH EXISTING COLOR. SEE

EXISTING CAFETERIA BASE BID EX. BLDG. KEY PLAN 1/128" = 1'-0"





**7** SECTION

1/8" = 1'-0"

\_\_\_\_

BRICK SOLDIER COURSE – WATERTABLE

DOOR AS SCHEDULED BEYOND

\_\_\_ · \_\_\_\_

A3.3.1

A3.3.2

<u>F.F.E.75.03</u>

- 8" CONCRETE BRICK, SOLDIER COURSE







. . F<u>.F.E</u>.75<u>.03'</u> . 🕁



## M M M M M M M Ш Ш Ζ LONAU KENUV РА 163 <sup>-</sup>S( TE OF ALAB



SHEET TITLE: BASE BID SECTIONS

PROJ. MGR.: R. LATHAN DRAWN: S. WILSON DATE: FEBRUARY 15, 2022 REVISIONS















- ATHAN

ARCHITECTS

LATHAN = BRYANT = CALMA

SPECIFIED OVER WELDED WIRE MESH SUPPORT

- 8" REINFORCED CONCRETE U-BLOCK BOND BEAM SYSTEM, SEE STRUCTURAL

- FINISHED CEILING SYSTEM





SHEET TITLE:

WALL SECTIONS

PROJ. MGR.: **R. LATHAN** DRAWN: S. WILSON DATE: FEBRUARY 15, 2022 REVISIONS

JOB NO. **21-04A** SHEET NO: A3.3.1 15 OF 29 1"











1" 





- PREFINISHED METAL GUTTER AND DOWNSPOUT SYSTEM

> - PREFINISHED METAL SOFFIT SYSTEM

-1X4 WRAPPED FRIEZE BOARD

- BRICK SOLDIER COURSE 1/2" PROUD



1" 

18 OF 29







REINFORCED CONCRETE SLAB SYSTEM, SEE STRUCTURAL **GUARDRAIL/ HANDRAIL DETAIL**  $\frown$ 1

 $1 \cup \frac{1}{1 \cdot 1/2^{"}} = 1' - 0"$ 



1" 

20 OF 29




2 SHIP LADDER DETAIL

 $-\frac{1}{3/4}$  = 1'-0"

- 4" PERFORATED FOUNDATION DRAINAGE SYSTEM WITH SOCK WRAP EXTEND TO BREAK GRADE

- REINFORCED CONCRETE FOUNDATION SYSTEM, SEE STRUCTURAL











) 1" 2"









ATTIC LEVEL

















![](_page_41_Picture_5.jpeg)

![](_page_42_Figure_0.jpeg)

NG HEIGHTS
MAINTAIN EXIST. CEILING HEIGHT
= 8'-0" AFF
= 8'-6" AFF
= 9'-0" AFF
= 9'-6" AFF
= 10'-0" AFF
= 10'-8" AFF
= 11'-0" AFF
= 11'-4" AFF
= 12'-0" AFF
= 13'-0" AFF
RAWINGS DDATE
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PES.
OLITION OF
SS

![](_page_42_Picture_4.jpeg)

ATTIC LEVEL

![](_page_42_Picture_6.jpeg)

![](_page_42_Picture_7.jpeg)

![](_page_43_Figure_0.jpeg)

![](_page_43_Picture_1.jpeg)

FINISH PATTERN LEGEND

-ATTIC LEVEL

![](_page_43_Picture_4.jpeg)

![](_page_43_Picture_5.jpeg)

![](_page_43_Picture_6.jpeg)

SHEET TITLE: FINISH FLOOR PLANS

PROJ. MGR.: R. LATHAN DRAWN: S. WILSON DATE: FEBRUARY 15, 2022 REVISIONS

JOB NO. 21-04A SHEET NO: A8.1 28 OF 29 1" 

![](_page_44_Picture_0.jpeg)

ROOM NO.	R
I OWFR	I F
1	ST
2	SI
100	С
101	R/
102	С
103	С
104	С
104A	S
105	С
106	С
107	СІ
107A	т
108	СІ
108A	т
109	СІ
109A	т
110	СІ
110A	т
111	ID
112	EL
113	т
114	т
115	JA
116	СІ
116A	т
117	т
118	н
119	СІ
119A	т
120	н
121	El
122	М
122A	R
123	D
124	S
125	0
126	М
126A	т
126B	LA
127	CI
127A	т
128	AL
129	Al

			FINIS	SH SO	CHEDL	JLE					
OOM NAME	FLOOR	BASE	MILLV FACE	VORK TOP	WALL PA NORTH	INT (PR	DJECT N EAST	NORTH) WEST	DOOR FRAME	CEILING/SOFFIT PAINT	NOTES
VEL - AREA "B"											
AIR	RST-1	RB-1								PNT-3	CAB WALLS TO BE STAINLESS STEEL
AIR	RST-1	RB-1			PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
RRIDOR	LVT-1	RB-1			PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
MP	RST-1	RB-1			PNT-1	PNT-1	PNT-1	PNT-1	PNT-2	PNT-3	
RRIDOR	LVT-1,2,3,4	RB-1			PNT-1	PNT-4	PNT-1	PNT-1	PNT-2	PNT-3	SEE 3/A8.1 FOR WATERJET LOGO LVT COLORS
RRIDOR	LVT-1,2,3,4	RB-1			PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
RRIDOR	LVT-1,2,3,4	RB-1			PNT-1	PNT-1	PNT-1	PNT-1	PNT-2	PNT-3	
DRAGE	LVT-1	RB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
RRIDOR	LVT-1,2,3,4	RB-1			PNT-1	PNT-1	PNT-1	PNT-1	PNT-2	PNT-3	CWT-1,2,3,4 AT EWC WALL W/ EPOXY PAINT ON ALL WET WALLS
RRIDOR	LVT-1,2,3,4	RB-1			PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
ASSROOM	LVT-1	RB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
LET	CFT-1	CTB-1			PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		EPOXY PAINT ON ALL WET WALLS
ASSROOM	LVT-1	RB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
LET	CFT-1	CTB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		EPOXY PAINT ON ALL WET WALLS
ASSROOM	LVT-1	RB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
LET	CFT-1	CTB-1			PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		EPOXY PAINT ON ALL WET WALLS
ASSROOM	LVT-1	RB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
LET	CFT-1	CTB-1			PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		EPOXY PAINT ON ALL WET WALLS
					PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
ECTRICAL					PNT-1	PNT-4	PNT-1	PNT-1	PNT-2		
LET	CFT-1	CTB-1			PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		CWT-1,2,3,4 AND EPOXY PAINT ON ALL WET WALLS
LET	CFT-1	CTB-1			PNT-1	PNT-1	PNT-1	PNT-1	PNT-2	PNT-3	CWT-2,3,4 AT EWC
NITOR	CC				PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
ASSROOM	LVT-1	RB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
LET	CFT-1	CTB-1			PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		EPOXY PAINT ON ALL WET WALLS
LET	CFT-1	CTB-1			PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		CWT-1,2,3,4 AND EPOXY PAINT ON ALL WET WALLS
_F CLASSROOM	LVT-1	RB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
ASSROOM	LVT-1	RB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2	PNT-3	
LET	CFT-1	CTB-1			PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
_F CLASSROOM	LVT-1	RB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
CTRICAL	СС				PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
DIA CENTER	LVT-10,11,12,13,14	RB-1			PNT-1	PNT-1	PNT-1	PNT-1	PNT-2	PNT-3, 4	PNT-3 @ BEAM SOFFIT. PNT-4 @ DESK SOFFIT
ADING WELL	LVT-11 / CPT-1	RB-1			PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
SK	LVT-10,11,12,13,14	RB-1	PL-2,3	SS-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
DRAGE	LVT-1	RB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
FICE	LVT-1	RB-1			PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
LTI-NEEDS CLASSROOM	LVT-1	RB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
LET	CFT-1	CTB-1			PNT-1	PNT-1	PNT-1	PNT-1	PNT-2	PNT-3	EPOXY PAINT ON ALL WET WALLS
JNDRY	CFT-1	CTB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		EPOXY PAINT ON ALL WET WALLS
ASSROOM	LVT-1	RB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
LET	CFT-1	CTB-1			PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		EPOXY PAINT ON ALL WET WALLS
ERNATE CLASSROOM	LVT-1	RB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
ERNATE CLASSROOM	LVT-1	RB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		

	FINISH LEGEND				
ITEM	MANUFACTURER	ITEM NAME / NUMBER	NOTES		
PAIN	IT				
PNT-1	SHERWIN WILLIAMS	SPARE WHITE SW 6203	WALL PAINT		
PNT-2	SHERWIN WILLIAMS	GAUNTLET GRAY SW 7019	TRIM PAINT		
PNT-3	SHERWIN WILLIAMS	CEILING BRIGHT WHITE SW 7007	TYPICAL SOFFIT		
PNT-4	SHERWIN WILLIAMS	тво	ACCENT SOFFIT		
TAC	KABLE SURFACE				
TS-1	KOROSEAL	WALLTALKERS; 08 EARTHEN			
WAL	L TILE				
PT-1	DALTILE	COLOR WHEEL CLASSIC - ARCTIC WHITE 0190; 4x4	SEE TOILET ELEVATIONS FOR PATTERN AND INSTALL HEIGHTS		
PT-2	DALTILE	COLOR WHEEL CLASSIC - NAVY K189; 4x4	SEE TOILET ELEVATIONS FOR PATTERN AND INSTALL HEIGHTS		
PT-3	DALTILE	COLOR WHEEL CLASSIC - KEY LIME 1098; 4x4	SEE TOILET ELEVATIONS FOR PATTERN AND INSTALL HEIGHTS		
PT-4	DALTILE	COLOR WHEEL CLASSIC - SUEDE GRAY 0182; 4x4	SEE TOILET ELEVATIONS FOR PATTERN AND INSTALL HEIGHTS		
TILE	FLOORING				
CFT-1	DALTILE	NATURAL HUES - QH35 PEPPER; 12x24	W/ LATICRETE 45 RAVEN GROUT - PROVIDE MARBLE TRANSITION		
CFT-2	DALTILE	KEYSTONES - SUEDE GRAY SPECKLE (2) D208; 2x2 MOSAIC	SHOWER FLOOR - W/ LATICRETE 89 SMOKE GREY GROUT - PROVIDE MARBLE TRANSITION		
CAR	PET	-			
CPT-1	J+J FLOORING	CATALYST - CHEMISTRY;24x24	INSTALL IN ASHLAR PATTERN		
IRES	ILIENT FLOORIN	G			
LVT-1	MANNINGTON COMMERCIAL	PRIMARY ELEMENTS; BOND. COLOR: POINT PE117; 12x12	FIELD TILE - INSTALLED AS SHOWN ON FINISH PLAN		
LVT-2	MANNINGTON COMMERCIAL	PRIMARY ELEMENTS; BOND. COLOR: IRON PE120; 12x12	ACCENT TILE - INSTALLED AS SHOWN ON FINISH PLAN		
LVT-3	MANNINGTON COMMERCIAL	PRIMARY ELEMENTS; BOND. COLOR: SELENE PE108; 12x12	ACCENT TILE - INSTALLED AS SHOWN ON FINISH PLAN		
LVT-4	MANNINGTON COMMERCIAL	PRIMARY ELEMENTS; BOND. COLOR: NEOS PE106; 12x12	ACCENT TILE - INSTALLED AS SHOWN ON FINISH PLAN		
LVT-5	MANNINGTON COMMERCIAL	PRIMARY ELEMENTS; BOND. COLOR: THULE PE111; 12x12	WATERJET LOGO		
LVT-6	MANNINGTON COMMERCIAL	PRIMARY ELEMENTS; BOND. COLOR: ALUMINA PE119; 12x12	WATERJET LOGO		
LVT-7	MANNINGTON COMMERCIAL	PRIMARY ELEMENTS; BOND. COLOR: CADIMA PE103; 12x12	WATERJET LOGO		
LVT-8	MANNINGTON COMMERCIAL	PRIMARY ELEMENTS; BOND. COLOR: AURA PE104; 12x12	WATERJET LOGO		
LVT-9	MANNINGTON COMMERCIAL	NATURE'S PATH; RAINFALL. COLOR: STORM 12308; 18x18	WATERJET LOGO		
LVT-10	PATCRAFT	WOOD PLANX; AGED MAPLE 00540; 9x36	MEDIA CENTER FIELD TILE - INSTALLED AS SHOWN ON FINISH PLAN		
LVT-11	PATCRAFT	METALLIX; TUNGSTEN 00590; 9x36	MEDIA CENTER BORDER - INSTALLED AS SHOWN ON FINISH PLAN		
LVT-12	PATCRAFT	METALLIX; ALUMINUM 00530; 9x36	MEDIA CENTER ACCENT TILE - INSTALLED AS SHOWN ON FINISH PLAN		
LVT-13	PATCRAFT	METALIX; IONIC GREEN 00330; 9x36	MEDIA CENTER ACCENT TILE - INSTALLED AS SHOWN ON FINISH PLAN		
LVT-14	PATCRAFT	METALIX; STEEL BLUE 00450; 9x36	MEDIA CENTER ACCENT TILE - INSTALLED AS SHOWN ON FINISH PLAN		
IRUB	BER STAIR TRE	ADS			
RST-1	TARKETT	RESILIENT RUBBER FLOOR TILES; RAISED ROUND; GREY WG			
ICOA	IED CONCRETE		1		
СС	SHERWIN WILLIAMS	SEE SPECIFICATION			
WAL	L BASE				
RB-1	TARKETT	48 GREY WG	4" HIGH		
CTB-1	DALTILE	MATCH COLOR TO PT-1	SCHLUTER TRENDLINE PROFILE - JOLLY		
<b>IPLA</b>	STIC LAMINATE				
PL-1	WILSONART	PARK ELM 7967K-12; SOFT GRAIN FINISH			
PL-2	WILSONART	WAREHOUSE OAK 7969K-12; SOFT GRAIN FINISH			
PL-3	WILSONART	BLACK 1595-60; MATTE FINISH	REVEALS @ MEDIA CENTER DESK		
RUB	BER WALL BASE	-	1		
RST-1		RESILIENT RUBBER FLOOR TILES; RAISED ROUND; GREY WG			
SOL	ID SURFACE CO	UNTERTOPS			
SS-1		4120 RAVEN; 3cm			
DOC	RSTAIN				
DS-1	MASONITE ARCHITECTURAL	WHITE BIRCH (PLAIN SLICED); COCOA BEAN			

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GN. GENERAL	GN.5 SUBMITTALS:	CN.6 REINFORCING BAR PLACING ACCESSORIES TO BE INSTALLED IN ACCORDANCE WITH ACI MANUAL OF STANDARD PRACTICE. WHERE CONCRETE IS EXPOSED IN FINISHED	SD. STEEL DECK These drawings and design intent are the so LBYD, Inc. which may not be reproduced witho SD. 1 DECK DROBEDTIES AND ATTACHMENTS SHALL BE IN ACCORDANCE WITH THE
CONSTRUCTION DOCUMENTS. THE CONTRACTOR AND SUBCONTRACTORS SHALL REFERENCE AND COORDINATE WITH ALL OTHER DISCIPLINES' DRAWINGS.	ENGINEER DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY TO REVIEW AND CHECK SHOP DRAWINGS BEFORE SUBMITTING TO THE STRUCTURAL	CN.7 DETAIL REINFORCEMENT IN ACCORDANCE WITH ACI SP-066. REINFORCEMENT	SD.1 DECK PROPERTIES AND ATTACHMENTS SHALL BE IN ACCORDANCE WITH THE STEEL DECK INSTITUTE.
ANY DISCREPANCIES OR OMISSIONS SHALL BE REPORTED TO THE STRUCTURAL ENGINEER AND ARCHITECT.	ENGINEER. THE CONTRACTOR REMAINS SOLELY RESPONSIBLE FOR ERRORS AND OMISSIONS ASSOCIATED WITH THE PREPARATION OF SHOP DRAWINGS AS THEY	SHALL NOT BE WELDED UNLESS NOTED OR APPROVED BY THE STRUCTURAL ENGINEER.	SD.2 DECK SHALL BE CONTINUOUS OVER THREE OR MORE SPANS.
GN.2 DESIGN CRITERIA:	PERTAIN TO MEMBER SIZES, DETAILS, AND DIMENSIONS SPECIFIED IN THE CONTRACT DOCUMENTS. ALL SHOP DRAWINGS MUST BE REVIEWED AND	CN.8 SPLICES SHALL BE CLASS "B" TENSION LAP SPLICE, UNLESS NOTED.	SD.3 DO NOT SHORE DECK.
A. CODES AND SPECIFICATIONS:	"APPROVED" BY THE CONTRACTOR PRIOR TO SUBMITTAL.	CN.9 REINFORCING MARKED "CONTINUOUS" SHALL BE SPLICED WITH CLASS	SD.4 SIDELAP AND PERIMETER DECK EDGE FASTENERS ARE TO BE INSTALLED BETWEEN SUPPORTS.
1. GENERAL BUILDING CODE: INTERNATIONAL BUILDING CODE, 2015 EDITION	SHOP DRAWINGS IN .PDF FORMAT. REVIEWED SHOP DRAWINGS WILL BE RETURNED IN .PDF FORMAT. ALL PRINTS REQUIRED BY THE CONTRACTOR ARE	CN.10 CONCRETE COVERAGE OF REINFORCEMENT, UNLESS NOTED:	SD.5 ROOF DECK: WIDE RIB TYPE "WR", STEEL ROOF DECK, 22 GAGE, 1-1/2" DEEP, GALVANIZED. SHEET STEEL FOR DECK SHALL HAVE A MINIMUM YIELD STRENGTH
2. DESIGN LOAD CRITERIA:	THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE MADE AFTER APPROVED SHOP DRAWINGS ARE RETURNED.	FOOTINGS2" TOP & 3" BOTTOM & SIDES	OF 33 KSI.
MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES, AMERICAN SOCIETY OF CIVIL ENGINEERS, ASCE 7.	C. RESUBMITTED SHOP DRAWINGS: RESUBMITTED SHOP DRAWINGS SHALL HAVE	FOUNDATION RETAINING WALLS2" BOTH FACES	SD.6 COLD-FORMED STEEL, SUSPENDED CEILINGS, LIGHT FIXTURES AND DUCTS OR OTHER UTILITIES SHALL NOT BE SUPPORTED BY THE METAL ROOF
3. CONCRETE: BUILDING CODE REQUIREMENTS FOR STRUCTURAL	OR OTHER CLEAR COMMUNICATION. RE-REVIEWED SHOP DRAWINGS WILL ONLY BE REVIEWED FOR IDENTIFIED CHANGES.	SIZE AND SPACING AS VERTICAL REINFORCING.	SD.7 PROVIDE 6" CLOSURE STRIP OF SAME GAGE AS DECK WHERE CHANGES IN DECK
CONCRETE, AMERICAN CONCRETE INSTITUTE, ACI 318.	D. SHOP DRAWINGS: THE CONTRACTOR SHALL SUBMIT FOR STRUCTURAL ENGINEER	CN.12 FOR CONCRETE WALLS WITH A SINGLE LAYER OF REINFORCING, CENTER THE VERTICAL REINFORCING IN THE WALL WITH THE HORIZONTAL BARS DIRECTLY ADJACENT AND	DIRECTION OCCUR.
4. STRUCTURAL PRECAST CONCRETE: MANUAL FOR QUALITY CONTROL FOR PLANTS AND PRODUCTION OF STRUCTURAL PRECAST CONCRETE PRODUCTS	REVIEW SHOP DRAWINGS FOR THE FOLLOWING ITEMS. ITEMS MARKED (*) SHALL HAVE SHOP DRAWINGS SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE IN WHICH THE PROJECT IS LOCATED	CONTINUOUS, UNLESS NOTED.	SD.8 DO NOT ALLOW EXTRANEOUS MATERIALS AND SYSTEMS TO BE INCORPORATED INTO REFERENCED TESTED FIRE-RATED DESIGN ASSEMBLIES (TYPICALLY U.L. DESIGNS). THIS INCLUDES CASTING EMBEDDED CONDUITS AND PIPING IN CONCRETE SLABS ON
PRECAST/PRESTRESSED CONCRETE INSTITUTE, PCI, MNL 116.	1. CONCRETE MIX DESIGNS	WWR AT MID-DEPTH OF SLAB, UNLESS NOTED.	METAL DECK. REFER TO THE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR ASSEMBLY DESCRIPTIONS.
5. STRUCTURAL STEEL: SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS,	<ol> <li>CONCRETE REINFORCING</li> <li>STRUCTURAL PRECAST (*)</li> </ol>	SP. STRUCTURAL PRECAST CONCRETE	
AMERICAN INSTITUTE OF STEEL CONSTRUCTION, AISC 360.	4. STRUCTURAL STEEL 5. STEEL STAIRS (*) 6. STEEL DECK	SP.1 PRECAST MANUFACTURER IS TO BE RESPONSIBLE FOR THE DESIGN OF ALL	MA. MASONRY
STEEL DECK INSTITUTE DESIGN MANUAL FOR COMPOSITE DECKS, FORM DECKS, ROOF DECKS AND CELLULAR METAL FLOOR DECK WITH	<ul> <li>7. SHOP FABRICATED WOOD TRUSSES (*)</li> <li>8. MASONRY MORTAR MIX DESIGNS</li> </ul>	CALCULATIONS AND SHOP DRAWINGS SHALL BE SUBMITTED BEARING THE SEAL OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE	602/ACI 530.1/ASCE 6 SPECIFICATIONS.
ELECTRICAL DISTRIBUTION.	9. MASONRY GROUT MIX DESIGNS 10. MASONRY REINFORCING	PROJECT IS LOCATED.	MA.2 CONCRETE MASONRY UNITS (CMU) SHALL BE LIGHTWEIGHT (DENSITY = 105 PCF), CONFORMING TO ASTM C90, UNLESS NOTED.
7. MASONRY: BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES, TMS 402/ACT 530/ASCE 5. SPECIFICATION FOR MASONRY STRUCTURES.	E. DESIGN CALCULATIONS: THE CONTRACTOR SHALL SUBMIT FOR STRUCTURAL ENGINEER'S RECORD DESIGN CALCULATIONS SEALED BY A PROFESSIONAL	SP.2 ANY CONNECTIONS SHOWN ON CONTRACT DRAWINGS ARE SHOWN FOR GENERAL ARRANGEMENT ONLY. THE CONTRACTOR SHALL COORDINATE ALL PRECAST CONNECTIONS AND EMBEDDED ITEMS WITH THE PRECAST MANUFACTURER	MA.3 COMPRESSIVE STRENGTH OF MASONRY (F'm): 2000 PSI AT 28 DAYS.
TMS 602/ACI 530.1/ASCE 6.	ENGINEER REGISTERED IN THE STATE IN WHICH THE PROJECT IS LOCATED FOR THE FOLLOWING ITEMS.	SP.3 ERECTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL TEMPORARY BRACING	MA.4 GROUT SHALL CONFORM TO ASTM C476 WITH COMPRESSIVE STRENGTH (F'g) OF 2500 PSI AT 28 DAYS. GROUT SHALL BE PLACED ACCORDING TO TMS 602/ACI
8. TIMBER: NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION,	1. STRUCTURAL PRECAST	UNTIL ALL CONNECTIONS HAVE BEEN MADE AND TOPPING HAS BEEN CAST.	530.1/ASCE 6 SECTION 3.5.
AMERICAN FOREST & PAPER ASSOCIATION/AMERICAN WOOD COUNCIL.	2. STRUCTURAL PRECAST CONNECTIONS 3. STEEL STAIRS 4. SHOP FABRICATED WOOD TRUSSES	SP.4 PRECAST MANUFACTURER SHALL PROVIDE STABILIZING ANGLES, AS REQUIRED, IN ALL PRECAST WORK.	MA.5 MORTAR SHALL CONFORM TO ASTM C270, TYPE S OR M FOR TYPICAL CONDITIONS, TYPE M FOR BASEMENT AND RETAINING WALLS.
1. DEAD LOADS:	GN.6 ALL DETAILS SHOWN ARE TYPICAL. SIMILAR DETAILS APPLY TO SIMILAR	SP.5 PRECAST MANUFACTURER SHALL LIMIT CAMBER FOR THE STRUCTURAL PRECAST MEMBERS TO 1".	MA.6 ALL MASONRY SHALL BE STACK BOND, UNLESS NOTED.
ANY CHANGES IN CONSTRUCTION MATERIALS FROM THOSE SHOWN ON THE ARCHITECTURAL OR STRUCTURAL DRAWINGS SHALL BE	CONDITIONS, UNLESS NOTED.	SP.6 ALL EXPOSED STEEL CONNECTIONS AND SUPPORT ANGLES, PLATES, BARS	MA.7 ALL BLOCK CELLS AND CAVITIES BELOW GRADE SHALL BE FILLED WITH CONCRETE OR GROUT.
FOR VERIFICATION OF LOAD-CARRYING CAPACITY OF THE STRUCTURE.	AND PROCEDURES OF CONSTRUCTION.	DIP GALVANIZED AFTER FABRICATION AND FIELD TOUCHED UP WITH ZINC RICH PAINT.	MA.8 SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS OF MASONRY CONTROL JOINTS AND OPENINGS.
2. LIVE LOADS:	GN.8 CONSTRUCTION MATERIALS SHALL BE SPREAD OUT IF PLACED ON FRAMED FLOORS/ROOFS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT LOADS	SP.7 TOOLED JOINTS IN CONCRETE TOPPING OVER PRECAST TEES ARE TO BE	MA.9 REINFORCING BARS: ASTM A615 GRADE 60. LAP REINFORCING BARS ACCORDING
ROOF (REDUCIBLE)20 ATTIC100 OTAIDO EXITWAXO	DO NOT EXCEED THE DESIGN LIVE LOAD.	LOCATED WHERE TEES ABUT, ABOVE THE END OF EVERY TEE, AND AT THE ENDS OF BEAMS.	TO TYPICAL DETAILS.
LIVE LOAD REDUCTIONS HAVE BEEN APPLIED IN ACCORDANCE	FD. FOUNDATION	SP.8 CONTRACTOR TO COORDINATE OPENINGS IN FRAMED FLOORS (MECHANICAL, ELECTRICAL. PLUMBING. ETC.) WITH PRECAST SUPPLIER.	MA.TO HORIZONTAL JOINT REINFORCING: LADDER TYPE, 9 GAGE SPACED VERTICALLY AT 16", UNLESS NOTED. PLACE REINFORCING ACCORDING TO MANUFACTURER'S RECOMMENDATIONS. LAP REINFORCING A MINIMUM OF 6".
WITH THE BUILDING CODE, UNLESS NOTED.	FD.1 A GEOTECHNICAL ENGINEER, EMPLOYED BY THE CONTRACTOR, SHALL PROVIDE COMPACTED FILL REQUIREMENTS FOR THE BUILDING PAD AND REVIEW THE FOUNDATION	SP.9 CONDUIT AND PIPING SHALL NOT BE PLACED IN THE TOPPING SLAB.	MA.11 WHEN REINFORCING BARS ARE SPECIFIED, PROVIDE AT EACH SIDE OF CONTROL
3. SNOW LOAD: GROUND SNOW LOAD (Pg)0.0	BEARING SURFACE TO VERIFY THE BASIS OF DESIGN BEARING PRESSURE NOTED. DO NOT PLACE CONCRETE PRIOR TO GEOTECHNICAL ENGINEER'S APPROVAL.	SP.10 PRECAST MANUFACTURER SHALL DESIGN PRECAST TO RESIST SELF-WEIGHT,	JOINTS, OPENINGS AND WALL ENDS ACCORDING TO TYPICAL DETAILS. REINFORCING BARS TO BE CENTERED IN WALL, UNLESS NOTED.
4. WIND LOADS: ULTIMATE DESIGN WIND SPEED, Vult149 MPH	FD.2 ASSUMED DESIGN BEARING PRESSURES (PSF):2000	SECTION OF THESE NOTES. PRECAST TO ALSO BE DESIGNED FOR HOUSEKEEPING PADS UNDER MECHANICAL UNITS. COORDINATE SIZE AND LOCATION OF	MA.12 CONDUIT, PIPING, AND SLEEVES OF ANY MATERIAL TO BE EMBEDDED IN MASONRY SHALL COMPLY WITH THE FOLLOWING REQUIREMENTS:
(3 — SECOND GUST) NOMINAL DESIGN WIND SPEED, Vasd115 MPH	FD.3 ALL FOUNDATION BEARING SURFACES SHALL BE INSPECTED AND APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACING CONCRETE TO ENSURE	HOUSEKEEPING PADS WITH MECHANICAL DRAWINGS.	A. CONDUIT, PIPING, AND SLEEVES OF ALUMINUM SHALL NOT BE EMBEDDED
(3 – SECOND GUST) RISK CATEGORYIII WIND EXPOSURE CATEGORYB	COMPLIANCE WITH PRESSURES NOTED. THE FINAL BEARING ELEVATIONS MAY VARY AS REQUIRED TO PROVIDE PROPER BEARING CAPACITY IN AN APPROVED BEARING STRATUM AS DETERMINED BY THE GEOTECHNICAL ENGINEER.	SS. SIRUCIURAL SIEEL	IN MASONRY. B. CONDUIT. PIPING. AND SLEEVES SHALL NOT PASS THROUGH JAMBS. LINTELS.
INTERNAL PRESSURE COEFFICIENT±0.18	FD.4 FOOTINGS SHALL BE PLACED THE SAME DAY AS INSPECTION BY THE GEOTECHNICAL	"CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES".	BOND BEAMS, OR SHEAR WALLS WITHOUT APPROVAL BY THE STRUCTURAL ENGINEER.
WALL COMPONENT AND CLADDING WIND PRESSURE-SEE DRAWINGS	ENGINEER UNLESS EXTENDED TIME IS APPROVED BY THE GEOTECHNICAL ENGINEER.	SS.2 LATERAL FORCE RESISTING SYSTEM AND STABILITY OF THE BUILDING IN THE COMPLETED STRUCTURE IS PROVIDED AS FOLLOWS:	C. REINFORCING SHALL NOT BE CUT, BENT, OR DISPLACED FOR PLACEMENT OF
SEISMIC LOADS: SEISMIC IMPORTANCE FACTOR (Ie)1.25	FREE OF LOOSE OR WET MATERIALS. WHERE NEAT EXCAVATION IS NOT POSSIBLE, FOOTING EXCAVATION SHALL BE FILLED WITH CONCRETE TO THE TOP OF FOOTING.	A. ROOF DIAPHRAGM: PLYWOOD SHEATHING AND STEEL ROOF DECKING B. ATTIC FLOOR DIAPHRAGM: GROUTED PRECAST PLANK.	D. CONDUIT, PIPING, AND SLEEVES.
MAPPED SPECTRAL RESPONSE ACCELERATIONS: Ss0.094	THE BOTTOM EXCAVATION SHALL BE CLEAN AND DRY WITH ALL LOOSE MATERIAL REMOVED FOR AN ESSENTIALLY FLAT BEARING SURFACE. WHERE SOFT OR UNSUITABLE	C. COLLECTOR ELEMENTS/DRAG STRUTS: NONE D. LATERAL FORCE RESISTING SYSTEM: MASONRY SHEAR WALLS	CENTER. MINIMUM SPACING OF DIFFERENT DIAMETERS SHALL BE DETERMINED USING THE LARGER DIAMETER.
S1D ASSUMED SITE CLASSD DESIGN SPECTRAL RESPONSE ACCELERATION PARAMETERS:	AND REPLACED WITH LEAN CONCRETE OR COMPACTED DENSE GRADED CRUSHED STONE AS DIRECTED BY THE GEOTECHNICAL ENGINEER.	SS.3 STRUCTURAL STEEL AND STRUCTURAL STEEL CONNECTIONS SHALL CONFORM TO THE	MA.13 TEMPORARY BRACING OF CMU WALLS IS THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL REMAIN IN PLACE UNTIL PERMANENT RESTRAINT IS PROVIDED.
SDs0.101 SD10.099	FD.6 COMPACTED FILL SHALL MEET THE REQUIREMENTS NOTED IN THE GEOTECHNICAL	W SHAPES ASTM A992	
SEISMIC DESIGN CATEGORYB BASIC SEISMIC-FORCE-RESISTING SYSTEM:	REPORT. EXCAVATED MATERIAL MAY BE USED AS BACKFILL MATERIAL WITH WRITTEN APPROVAL FROM THE GEOTECHNICAL ENGINEER STATING THAT SUCH MATERIAL IS	CHANNELS ASTM A572, GRADE 50	
RESPONSE MODIFICATION FACTOR(R)2	CONTENT AND COMPACTION.	STIFFENER PLATES, BASE PLATES, ASTM A36 CAP PLATES, CONNECTION PLATES, AND	
ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE METHOD	FD.7 BACKFILL FOR FOUNDATION AND RETAINING WALLS SHALL BE A FREE DRAINING GRANULAR MATERIAL. BACKFILL SHALL BE COMPACTED SUFFICIENTLY TO PREVENT	ANGLES	
REFER TO MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR SEISMIC SUPPORT AND ATTACHMENT REQUIREMENTS FOR UTILITIES.	SUBSIDENCE OF SURFACE ADJACENT TO WALL. THE GRANULAR MATERIAL SHALL BE PLACED IN A 45 DEGREE WEDGE EXTENDING FROM THE BASE OF WALL.	WELDED CONNECTIONS E70XX ELECTRODES, MINIMUM SIZE FILLET WELD 3/16"	
GN.3 CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND SITE CONDITIONS PRIOR TO FABRICATION/CONSTRUCTION. NOTIFY STRUCTURAL ENGINEER AND	FD.9 FOUNDATION AND RETAINING WALLS SHALL NOT BE BACKFILLED UNTIL CONCRETE HAS ATTAINED THE REQUIRED 28 DAY COMPRESSIVE STRENGTH.	HEADED ANCHOR RODS ASTM F1554 GRADE 36 ANCHOR AND HEAVY HEX NUT,	
ARCHITECT OF ANY DISCREPANCIES PRIOR TO FABRICATION/CONSTRUCTION.	FD.10 WHERE FOUNDATION WALLS HAVE EARTH PLACED ON EACH SIDE, PLACE FILL TO KEEP	UNLESS INDICATED.	
GN.4 SPECIAL INSPECTIONS/STRUCTURAL ENGINEER'S SITE VISITS:	FD.11 PROVIDE 4" OF COMPACTED GRANULAR FILL BENEATH ALL SLABS ON GRADE. PROVIDE	SHEAR CONNECTORS ASIM ATO8, GRADE TOTS THROUGH 1020, HEADED-STUD TYPE, COLD FINISHED CARBON STEEL: AWS D1.1.	
WITH INTERNATIONAL BUILDING CODE. REFER TO DRAWINGS.	15 MIL VAPOR RETARDER BETWEEN BOTTOM OF SLAB AND TOP OF GRANULAR FILL.	TYPE B.	
B. SITE VISITS BY STRUCTURAL ENGINEER:	FD.12 FOUNDATIONS SHALL BE CENTERED ABOUT COLUMN LINES, UNLESS NOTED.	BOLTS ASTM 4563	
OF THE IN-PLACE STRUCTURE FOR GENERAL CONFORMANCE TO THE APPROVED CONSTRUCTION DOCUMENTS AT THE TIME OF THE	ENGINEERING DESIGNS AND MEANS AND METHODS OF CONSTRUCTION RELATED TO UNDERPINNING ARE THE SOLE RESPONSIBILTY OF THE CONTRACTOR.	WASHERS ASTM F436	
OBSERVATION.	CN. CONCRETE	SS.4 FABRICATE BRACING MEMBERS WITH SUFFICIENT DRAW TO PREVENT SAGGING.	
2. CONTRACTOR SHALL NOTIFY STRUCTURAL ENGINEER AND ARCHITECT, PER THE SCHEDULE STATED BELOW, WHEN SUCH ITEMS HAVE PROGRESSED TO THE POINT WHERE THEY WILL BE IN PLACE AND	CN.1 CONCRETING OPERATIONS SHALL COMPLY WITH ACI STANDARDS.	SS.5 WHERE NO CAMBER IS INDICATED, BEAMS SHOULD BE ERECTED WITH NATURAL CAMBER ORIENTED UPWARD.	
READY FOR REVIEW. FAILURE TO NOTIFY MAY REQUIRE REMOVAL OF COMPLETED CONSTRUCTION.	CN.2 MINIMUM CONCRETE COMPRESSIVE STRENGTH AT 28 DAYS (PSI), TYPE OF CONCRETE, MAXIMUM W/C (WATER/CEMENTITIOUS MATERIALS RATIO), TOTAL AIR	SS.6 BEAMS SHALL BE EQUALLY SPACED IN BAYS, UNLESS NOTED.	
NOTIFY PRIOR TO THE REQUIRED DAYS	CONTENT, SLUMP AND CONCRETE USE:	SS.7 GROUT UNDER BEARING PLATES SHALL BE NON-SHRINK, NON-METALLIC TYPE. GROUT	
		SUPPORTING CONCRETE.	
FIRST FOUNDATION POUR2 DAYS GROUTING MASONRY WALL CONSTRUCTION2 DAYS	4500       NORMAL WT.       0.45       ***       3" TO 5"       SLAB ON GRADE         3000       NORMAL WT.       0.57        3" TO 5"       FOOTINGS         2000       NORMAL WT.       0.57       4.60       0" TO 5"       W14440	SS.8 STRUCTURAL STEEL MEMBERS SHALL NOT BE CUT, SPLICED, OR MODIFIED IN THE FIELD UNLESS NOTED ON THE STRUCTURAL DRAWINGS OR APPROVED BY THE	
C. SITE VISITS BY THE STRUCTURAL ENGINEER'S OFFICE DO NOT REPLACE	***DO NOT USE AIR ENTRAINING ADMIXTURES IN INTERIOR CONCRETE SLABS TO	STRUCTURAL ENGINEER. SS.9 STRUCTURAL STEEL NOT EXPOSED TO VIEW SHALL BE PRIMED WITH MANUFACTURER'S	
INSPECTIONS AND TESTING BY THE TESTING AGENCY OR SPECIAL INSPECTOR.	RECEIVE A HARD TROWEL FINISH.	STANDARD SHOP PRIMER. STRUCTURAL STEEL EXPOSED TO WEATHER IN ITS FINAL POSITION SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH ASTM A123. FOR	
	UN.3 REINFURGING BARS: ASIM A615 GRADE 60. CN.4 WELDED WIRE REINFORCEMENT (WWR): ASTM A1064 MINIMUM LAP AND EMBEDMENT	STRUCTURAL STEEL EXPOSED TO VIEW, REFER TO PROJECT SPECIFICATIONS FOR FINISHED COATING SYSTEM.	
	TO BE THE GREATER OF ONE CROSS WIRE SPACING PLUS 2" OR 6".	SS.10 SHOP PRIMER OR OTHER COATINGS SHALL NOT BE APPLIED TO THE FACE OF STRUCTURAL STEEL FRAMING SUBJECT TO HEADED STUD WELDING.	
	CN.5 REINFORCING STEEL SHOWN IN SECTIONS AND DETAILS IS A SCHEMATIC		

# **General Notes**

INDICATION THAT REINFORCING EXISTS. SEE SCHEDULES, SECTION NOTES AND GENERAL NOTES FOR ACTUAL REINFORCING REQUIRED.

![](_page_45_Picture_14.jpeg)

![](_page_45_Picture_15.jpeg)

![](_page_45_Picture_16.jpeg)

# General Notes Continued

WD. V WD.1	WOOD CONSTRUCTION WOOD FRAMING MEMBERS: VISUALLY GRADED DIMENSIONAL #2 GRADE SOUTHERN PINE.	WT.11	FOR TRUSSES SPA MEMBER BRACING LATERAL BRACING
WD.2	SILL PLATES, SOLE PLATES AND TOP PLATES SHALL BE OF THE SAME SIZE AND SPECIES AS THE STUDS TO WHICH THEY ARE CONNECTED. GRADE AND SPECIES SHALL BE AS SPECIFIED ABOVE.	WT.12	FOR TRUSSES SPA MEMBER BRACING SPECIFIC PERMAN
WD.3	ALL LUMBER TO HAVE A MAXIMUM MOISTURE CONTENT OF 19% AT TIME OF CONSTRUCTION.	WT.13	SPECIFIED BY TH
WD.4	ALL PRESSURE TREATED SOUTHERN PINE LUMBER SHALL BE PRESSURE TREATED WITH ALKALINE COPPER QUATERNARY (ACQ) IN ACCORDANCE WITH AMERICAN WOOD PROTECTION ASSOCIATION (AWPA) STANDARD U1, COMMODITY SPECIFICATION A.	WT 14	STABILITY BRACI
	<ul> <li>A. USE CATEGORIES:</li> <li>1. UC2/INTERIOR DRY - SILL PLATES</li> </ul>		REQUIREMENTS" S HOLD-DOWN HARDV EQUAL. ALL CON REQUIRED NUMBER SPECIFIED BY TH
	B. ALL FASTENERS, NAILS AND OTHER METAL PRODUCTS USED WITH LUMBER PRESSURE TREATED WITH ACQ SHALL BE HOT-DIP GALVANIZED, STAINLESS STEEL OR AS RECOMMENDED BY THE ACQ MANUFACTURER. PRESSURE TREATED LUMBER SHALL NOT BE IN DIRECT CONTACT WITH ALUMINUM PRODUCTS.	WT.15	TRUSS DESIGNER ELECTRICAL AND INSTALLATION OF
WD.5	DIMENSIONED LUMBER FLOOR JOISTS SHALL BE LATERALLY BRACED AT ENDS, POINTS OF BEARING AND MAXIMUM INTERVALS OF 8'-0" BY SOLID BLOCKING, BRIDGING OR TRANSVERSE BEAMS IN ORDER TO PREVENT ROTATION.	WT.16	TRUSS MANUFACTU RESPONSIBILITY DIAPHRAGMS AND TRUSS OR SHEAR THAT MATCH OR F
WD.6	ALL MANUFACTURED WOOD FRAMING CONNECTORS TO BE BY SIMPSON STRONG-TIE COMPANY, INC. OR APPROVED EQUAL. ALL CONNECTORS SHALL BE FASTENED TO FRAMING MEMBERS FILLING THE REQUIRED NUMBER OF CONNECTOR HOLES WITH THE TYPE AND SIZE FASTENERS SPECIFIED BY THE MANUFACTURER. HARDWARE TO BE FASTENED FOR MAXIMUM CAPACITY WHERE MANUFACTURER PROVIDES OPTION.	WT.17	SEE STRUCTURAL TRUSSES MUST BE MANUFACTURER'S TRUSSES IS THE
WD.7	ROOF SHEATHING: 3/4" PLYWOOD, APA RATED SHEATHING, EXPOSURE I, WITH PANEL IDENTIFICATION INDEX 48/24. PROVIDE ONE H-CLIP AT ALL ADJOINING PANEL JOINTS MIDWAY BETWEEN SUPPORTS. LONG DIMENSION OF PANEL PERPENDICULAR TO SUPPORTS WITH JOINTS STAGGERED.	WT.18	A QUALIFIED DES BUILDING DESIGN RESPONSIBLE FOR ALL DAMAGED TRU
WD.8	ROOF SHEATHING NAILING, UNLESS NOTED: 10D HOT-DIPPED GALVANIZED COMMON NAILS AT 6 INCHES AT DIAPHRAGM BOUNDARIES, 6 INCHES AT PANEL ENDS AND 12 INCHES AT INTERMEDIATE SUPPORTS.		FOR EACH DAMAGE ENGINEER AND SU
WD.9	REFER TO IBC TABLE 2304.10.1 FOR FASTENING REQUIREMENTS NOT SPECIFICALLY STATED IN DRAWINGS.	PA. PO PA.1	POST INSTALLED AND
WD.10	NAILS, WIRE BRADS, STAPLES: SHALL CONFORM TO ASTM F1667. ALL NAILS SPECIFIED IN DOCUMENTS ARE COMMON NAILS, UNLESS NOTED.	PA.2	ACCEPTABLE MANU HILTI, INC. AND
WD.11	POWER DRIVEN FASTENERS: SHALL CONFORM TO NER-272.	PA.3	CARE SHALL BE 1 CONFLICTS WITH
WD.12 WD.13 WT. V	WOOD SCREWS: SHALL CONFORM TO ASME B18.6.1. LAG BOLTS: SHALL CONFORM TO ASME B18.2.1. WOOD TRUSSES	PA.4	HOLES SHALL BE MANUFACTURER'S PRODUCTS OTHER CONTRACTOR ALON PRODUCT IS CAPA
WT.1	TRUSS LAYOUTS SHOWN ON FRAMING PLANS ARE SCHEMATIC ONLY AND SHOWN FOR GENERAL ARRANGEMENT, UNLESS SPECIFICALLY DIMENSIONED. ACTUAL LAYOUT		STANDARD(S) AS
	SHALL BE DETERMINED BY THE TRUSS ENGINEER, BUT SHALL NOT CHANGE SPAN DIRECTIONS, SUPPORT LOCATIONS SHOWN, NOR GO ABOVE THE MAXIMUM SPACING INDICATED. DO NOT BEAR GIRDER TRUSSES ON DOOR OR WINDOW OPENINGS	PA.5	THE CONTRACTOR GUIDELINES, SPE
	REQUIREMENTS, PLUMBING DRAINS, MECHANICAL DUCTS AND EQUIPMENT. COORDINATE WITH ARCHITECTURAL DRAWINGS FOR SHAPES, SIZES, AND STYLES	PA.6 PA.7	A REPRESENTATI
WT.2	OF TRUSSES REQUIRED. DESIGN, FABRICATE AND ERECT WOOD TRUSSES IN ACCORDANCE WITH THE "DESIGN SPECIFICATION FOR LIGHT METAL PLATE CONNECTED WOOD TRUSSES" OF THE TRUSS PLATE INSTITUTE. RESPONSIBILITIES SPECIFICALLY ASSIGNED IN THESE CONSTRUCTION DOCUMENTS SHALL TAKE PRECEDENCE OVER ANSI/TPI CHAPTER 2.		PRESENT FOR THE TO DEMONSTRATE AND PERSONNEL T CONTRACTOR CHAN ANCHOR, THE MAN CONTRACTOR TO F INSTALLER(S).
WT.3	THE WOOD TRUSS SYSTEM ENGINEER SHALL DESIGN THE COMPLETE TRUSS SYSTEM. THE TRUSS SYSTEM IS AN ASSEMBLAGE OF TRUSSES AND TRUSS GIRDERS, TOGETHER WITH ALL PERMANENT INDIVIDUAL TRUSS MEMBER BRACING, TRUSS-TO-TRUSS CONNECTIONS, BRACING CONNECTIONS, AND OTHER STRUCTURAL ELEMENTS AND ALL SPACING AND LOCATIONAL CRITERIA THAT, IN COMBINATION, FUNCTION TO SUPPORT THE LOADS APPLICABLE TO THE STRUCTURE.	PA.8	CONCRETE ANCHOF 1. MECHANICAL CONCRETE S IN ACCORDA
WT.4	SUBMIT ENGINEERED DRAWINGS AND CALCULATIONS FOR ALL WOOD TRUSS ROOF FRAMING SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF ALABAMA. SUBMITTALS THAT DO NOT BEAR THE ENGINEER'S SEAL WILL BE REJECTED WITHOUT REVIEW.		<ol> <li>ADHESIVE A CONCRETE S IN ACCORDA</li> <li>MECHANICAL</li> </ol>
WT.5	THE TRUSS SUBMITTAL MUST CONTAIN THE FOLLOWING INFORMATION, AS A MINIMUM:		HOLLOW COF EXCEED 3/4
	A. SEALED SHOP DRAWINGS INDICATING TRUSS CONFIGURATIONS, DIMENSIONS, BEARING DETAILS, WOOD MEMBER SIZES, SPECIES & GRADES AND METAL CONNECTOR PLATE SIZES, ORIENTATIONS & DETAILS.	PA.9	MASONRY ANCHORS
	B. SEALED CALCULATIONS INDICATING GRAVITY & LATERAL LOADING, APPLICABLE BUILDING CODE, SUPPORT REACTIONS, DEFLECTIONS, MEMBER FORCES, AND LOCATIONS WHERE PERMANENT MEMBER BRACING IS REQUIRED.		A. ME SC AN IC
	C. SEALED ERECTION PLANS INDICATING TRUSS LOCATIONS, TRUSS-TO-TRUSS CONNECTIONS, AND PERMANENT INDIVIDUAL TRUSS MEMBER BRACING DETAILS (CONNECTIONS AND SIZES). INCLUDE DETAILS FOR CONNECTING MULTI-PLY TRUSSES TOGETHER, FOR ATTACHING OVERBUILDS, AND FOR ANY FIELD MODIFICATIONS REQUIRED.		B. AD MA AC
WT.6	TRUSS MANUFACTURER SHALL DESIGN FOR THE FOLLOWING SUPERIMPOSED LOADS:		2. ANCHORAGE MASONRY:
	A. ROOF: 1. TOP CHORD DEAD LOAD10 PSF 2. BOTTOM CHORD DEAD LOAD10 PSF		A. SC HA IC
WT.7	3. TOP CHORD LIVE LOADSEE SECTION GN.2.B.2 IN ADDITION TO THE ABOVE LOADS, WOOD TRUSSES SHALL BE DESIGNED FOR CONCENTRATED LOADS HUNG FROM OR SUPPORTED ON TRUSSES. REFER TO MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS AND SPECIFICATIONS FOR LOADING INFORMATION AND LOCATION. LOADING AS REQUIRED BY OTHER SUBCONTRACTORS. SUCH AS FIRE PROTECTION. SHALL BE COORDINATED BY		B. AL QL AF AS
WT.8	THE CONTRACTOR. TRUSS ENGINEER TO DESIGN ROOF TRUSSES WITH WIND PRESSURERS CALCULATED		
WT.9	PER ASCE 7, CHAPTER 30 WIND LOADS - COMPONENTS AND CLADDING. MAXIMUM ALLOWABLE LIVE LOAD DEFLECTIONS ARE AS FOLLOWS:		
·	ROOF TRUSSESL/240		
WT.10	PERMANENT INDIVIDUAL TRUSS MEMBER BRACING: A. ALL LOCATIONS OF REQUIRED PERMANENT INDIVIDUAL TRUSS MEMBER BRACING SHALL BE IDENTIFIED IN THE TRUSS SUBMITTAL.		
	B. STRUCTURAL SHEATHING MAY BE UTILIZED TO PROVIDE OUT-OF-PLANE BRACING FOR TOP CHORD MEMBERS TO WHICH THE SHEATHING IS DIRECTLY ATTACHED. AT PIGGYBACK BASE TRUSSES AND OTHER TRUSSES WHERE THE TOP CHORD IS NOT DIRECTLY ATTACHED TO STRUCTURAL SHEATHING, THE TRUSS ENGINEER SHALL SPECIFY REQUIRED TOP CHORD BRACING, INCLUDING BRACING SIZES AND CONNECTIONS.		
	C. PROVIDE PERMANENT BOTTOM CHORD BRACING AT ALL TRUSSES AT SPACING NOT TO EXCEED 10'-0" O.C. THE TRUSS ENGINEER SHALL SPECIFY ANY ADDITIONAL PERMANENT MEMBER BRACING REQUIRED.		
	D. BRACING DESIGN MUST TRANSFER ALL BRACING FORCES INTO THE BUILDING DIAPHRAGMS.		

WT.11 FOR TRUSSES SPANNING LESS THAN 60 FEET, WHERE PERMANENT INDIVIDUAL TRUSS IS REQUIRED IN THE TRUSS SUBMITTAL. INDUSTRY STANDARD IG DETAILS PROVIDED BY THE TRUSS ENGINEER OR A SEALED PROJECT IN PROVIDED BY THE TRUSS ENGINEER MAY BE UTILIZED.

> ANNING 60 FEET OR MORE, WHERE PERMANENT INDIVIDUAL TRUSS IS REQUIRED IN THE TRUSS SUBMITTAL, A SEALED PROJECT NENT INDIVIDUAL TRUSS MEMBER BRACING DESIGN SHALL BE HE TRUSS ENGINEER.

VIDUAL TRUSS MEMBER BRACING SHALL NOT BE CONSIDERED BUILDING ING NOR TEMPORARY ERECTION BRACING.

ED TRUSS HOLD-DOWNS ARE SPECIFIED IN THE "ROOF UPLIFT SCHEDULE THAT IS LOCATED IN THE TYPICAL DETAILS. ALL WARE TO BE BY SIMPSON STRONG-TIE COMPANY, INC. OR APPROVED NNECTORS SHALL BE FASTENED TO FRAMING MEMBERS FILLING THE R OF CONNECTOR HOLES WITH THE TYPE AND SIZE FASTENERS HE MANUFACTURER.

SHALL COORDINATE LAYOUT AND WEB OPENINGS WITH MECHANICAL, PLUMBING DRAWINGS TO PROVIDE ADEQUATE SPACE FOR DUCTS AND PIPES.

URER TO COORDINATE WITH ALL SHEAR WALLS ON PLANS. IT IS THE OF THE TRUSS ENGINEER TO TRANSFER ALL SHEAR LOADS FROM ) SHEAR WALLS ABOVE INTO THE SHEAR WALL BELOW. PLACE DRAG PANELS ABOVE ALL SHEAR WALLS, WITH CAPACITIES EXCEED THE TOTAL SHEAR CAPACITY OF THE SHEAR WALL BELOW. DRAWINGS FOR SHEAR WALL CAPACITIES.

TRANSPORTED, UNLOADED, STORED AND HANDLED PER THE TRUSS WRITTEN INSTRUCTIONS. TEMPORARY ERECTION BRACING OF THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. WHO SHALL ENGAGE SIGN PROFESSIONAL FOR ASSISTANCE. THE PROJECT OWNER, NER, ARCHITECT AND STRUCTURAL ENGINEER OF RECORD ARE NOT R TEMPORARY ERECTION BRACING.

USSES MUST BE REPAIRED BY THE CONTRACTOR. REPAIR TECHNIQUE ED TRUSS MUST BE PROVIDED IN WRITING BY THE TRUSS UBMITTED FOR REVIEW BY THE STRUCTURAL ENGINEER.

### CHORS

ANCHORS SHALL COMPLY WITH ACI-318 CHAPTER 17.

UFACTURERS SHALL INCLUDE BUT ARE NOT LIMITED TO D SIMPSON STRONG-TIE COMPANY, INC. AND DEWALT ANCHORS.

TAKEN IN PLACING POST INSTALLED ANCHORS TO AVOID EXISTING REBAR.

DRILLED AND CLEANED IN ACCORDANCE WITH THE WRITTEN INSTRUCTIONS. SUBSTITUTION REQUESTS, FOR THAN THOSE SHOWN SHALL BE SUBMITTED BY THE NG WITH PREPARED DOCUMENTATION DEMONSTRATING THAT THE ABLE OF ACHIEVING EQUIVALENT PERFORMANCE VALUES (MINIMUM) OF PRODUCT USING THE APPROPRIATE DESIGN PROCEDURE AND/OR REQUIRED BY THE BUILDING CODE.

SHALL FOLLOW ALL MANUFACTURER'S INSTALLATION ECIFICATIONS, AND RECOMMENDATIONS.

RS MUST BE INSTALLED IN CONCRETE AGED A MINIMUM OF 21 DAYS.

IVE OF THE POST-INSTALLED ANCHOR MANUFACTURER SHALL BE E FIRST INSTALLATION OF EACH TYPE OF ANCHOR USED AND INSTRUCT TO THE CONTRACTOR'S INSTALLATION CREW THE PROPER METHOD OF INSTALLATION. SHOULD THE NGE INSTALLATION CREW OR INDIVIDUALS INSTALLING THE NUFACTURER'S REPRESENTATIVE SHALL BE NOTIFIED BY THE RETURN AND PROVIDE INSTRUCTION TO THE NEW

RS:

ANCHORS FOR USE IN CRACKED AND UNCRACKED SHALL HAVE BEEN TESTED AND QUALIFIED FOR USE ANCE WITH ACI-355.2 AND ICC-ES AC193.

ANCHORS FOR USE IN CRACKED AND UNCRACKED SHALL HAVE BEEN TESTED AND QUALIFIED FOR USE ANCE WITH ACI355.4 AND ICC-ES AC308.

ANCHORS FOR USE IN THE UNDER SIDE OF NORMAL WEIGHT RE AND POST TENSION SLABS WHERE EMBEDMENT DEPTH SHALL NOT INCHES, APPROVED PRODUCTS INCLUDE: DEWALT MINI-UNDERCUT+.

S:

TO SOLID-GROUTED CONCRETE MASONRY:

ECHANICAL AND CONCRETE SCREW ANCHORS FOR USE IN OLID-GROUTED CONCRETE MASONRY SHALL HAVE BEEN TESTED ND QUALIFIED FOR USE IN ACCORDANCE WITH ICC-ES ACO1 OR CC-ES AC106, RESPECTIVELY.

DHESIVE ANCHORS FOR USE IN SOLID-GROUTED CONCRETE ASONRY SHALL HAVE BEEN TESTED AND QUALIFIED FOR USE IN CCORDANCE WITH ICC-ES AC58 OR AC60.

TO HOLLOW CONCRETE MASONRY/UNREINFORCED CLAY BRICK

CREW ANCHORS FOR USE IN HOLLOW CONCRETE MASONRY SHALL AVE BEEN TESTED AND QUALIFIED IN ACCORDANCE WITH CC-ES AC106.

DHESIVE ANCHORS WITH SCREEN TUBES SHALL BE TESTED AND UALIFIED IN ACCORDANCE WITH ICC-ES AC58 OR AC60, AS PPROPRIATE. THE APPROPRIATE SCREEN TUBE SHALL BE USED S RECOMMENDED BY THE ADHESIVE MANUFACTURER.

A/C ADDNL ADJ AESS AFF AHU ALT ANC APPROX APPRV ARCH ASD В То В BCX BFF BLDG BLK BLKG вот BRDG BRG BRK BSMT BSPL BTWN С ТО С CIP CJP CLR CMU COL COMP CONC CONN (S) CONST CONT CONTR COORD COR COV PL CTR DBL DEG OR DET DIA or Ø DIAG DIM (s) DWG (s) DWL (s) ELEC ELEV EMBED ENGR EOD EOS EQ EQUIP. EW EXIST EXP EXP ANC EXT EXTN F.O.G. F TO F F° FABR

AR

BAL

BM

С°

CJ

CL

СТ

DL

DN

DP

EA

FF

EJ

EL

![](_page_46_Picture_30.jpeg)

## **Abbreviations**

FAS

FD

FDN

FIN.

FLG

FLR

FOS

FRT

FS

FT

FV

GA

GB

GC

GEN

GOVT

GRD

HD RK

HORZ

I.F.

INFO

INT

INTM

INV

JG

JT

K

KLF

KSF

KSI

LBS

LL

LLH

LLV

LONG.

LRFD

MAS

MATL

MAX

MECH

MEZZ

MFR

MID

MIN

MISC

MO

NF

NIC

NOM

NTS

0.F.

0C

OD

OPP

0SL

PAR.

PC

PCI

PCY

PEMB

OPNG (S)

NS

NO. OR #

MC

LWT CONC

JST (S)

GR

GT

ΗK

HS

HT

ID

GALV

FTG

FRMG

FF

And At (when idicating spacing only) Air Conditioner Additional Adjacent Architecturally Exposed Structural Steel Above Finish Floor Air Handling Unit Alternate Anchor Approximate Approved Anchor Rod Architectural Allowable Stress Design Back To Back Balance Bottom Chord Extension Below Floor Finish Building Block Blocking Beam Bottom Bridging Bearing Brick Basement Baseplate Between Channel Center To Center Degree Celsius Cast In Place Control Joint Complete Joint Penetration Centerline Clear Or Clearance Concrete Masonry Unit Column Compression Concrete Connection (s) Construction Continuous Contractor Coordinate Corner Cover Plate Corridor Truss Center Double Degree Detail Diameter Diagonal Dimension (s) Dead Load Down Drilled Pier Drawing (s) Dowel (s) Each Each Face Expansion Joint Elevation Electrical Elevator Embedment Engineer Edge of Deck Edge of Slab Equal Equipment Each Way Existing Expansion Expansion Anchor Exterior Extension Face of Girt

Face To Face Degree Fahrenheit Fabricator

Fastener Floor Drain Foundation Finished Floor Finish (ed) Flange Floor Face To Stud Framing Fire Retardant Treated Far Side Foot Footing Field Verify Gage or Gauge Galvanized Grade Beam General Contractor General Government Grade Ground Girder Truss H STUD (S) Headed Stud (s) Hard Rock Hook Horizontal High Strength Height Inside Face Inside Diameter Information Interior Intermediate Inverted Joist Girder Joist (s) Joint Kips (1000 lbs) Kips per lineal foot Kips per square foot Kips per square inch Angle Pounds Live Load Long Leg Horizontal Long Leg Vertical Longitudinal Load and Resistance Factor Design Lightweight Concrete Moment Masonry Material Maximum Moment Connections (S) Mechanical Mezzanine Manufacture (r) Middle Minimum Miscellaneous Masonry Opening Near Face Not In Contract Number Nominal Near Side Not To Scale Open Face On Center Outside Diameter Opening (s) Opposite Outstanding Leg Parallel PARTN (S) Partition (s) Precast Concrete Pounds Per Cubic Inch Pounds Per Cubic Yard Preengineered Metal Building

PEN PERM PERP PIF PL PLBG PLF PNEU PREFAB PRELIM PROJ PSF PSI PΤ PTL RCP RD REF REINF REQD RF RIS RM RND RT RTU SCHED SECT SHT SIM SP SPEC (S) SPECD SQ ST STD STIFF STIR. STL STR STRUCT SUPT (S) SYM T&B T&G T.O.P. T.O.W. тсх TEMP THK тов TOC TODP TOF TOGB TOJ TOPC TOS TR TYP U.N. UT V VERT W/ W/O WC WD WDW WF WL WP WPFG WS WΤ WWR XS XXS

Penetration Permanent Perpendicular Pressure Injected Footing Plate Plumbing Pounds Per Lineal Foot Pneumatic Prefabricated Preliminary Projection Pounds Per Square Foot Pounds Per Square Inch Post-Tension Pressure Treated Lumber Radius Reinforced Conc Pipe Roof Drain Reference Reinforcing Required Roof Riser Room Round Roof Truss Roof Top Unit Schedule Section Sheet Similar Space Specification (s) Specified Square Storage Truss Standard Stiffener Stirrups Steel Straight Structure or Struct'L Support (s) Symmetrical Tension Top and Bottom Tongue & Groove Top of Pier or Pedestal Top of Wall Top Chord extension Temperature Thick Top of Beam Top of Concrete Top of Drilled Pier Top of Footing Top of Grade Beam Top of Joist Top of Pile Cap Top of Steel Tread Typical Unless Noted Unit Truss Shear Vertical With Without Wind Moment Connection Wood Window Wide Flange Wind Load Work Point Waterproofing Waterstop Weight Welded Wire Reinforcement Extra Strong

Double Extra Strong

![](_page_46_Picture_38.jpeg)

![](_page_46_Picture_39.jpeg)

![](_page_47_Figure_0.jpeg)

![](_page_47_Picture_3.jpeg)

# Concrete Tension Lap Splice Lengths

BAR	f <sub>C</sub> =3	3000	f <sub>C</sub> = 4500		
SIZE	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS	
#3	28"	22"	23"	18"	
#4	37"	29"	31"	24"	
#5	47"	36"	38"	29"	
#6	56"	43"	46"	35"	
#7	81"	63"	67"	51"	

1. TOP BARS ARE HORIZONTAL REINFORCEMENT WITH MORE THAN 12" OF CONCRETE CAST

Com	Components and Cladding					
Ultimate	<b>Ultimate Gross Wind Pressures</b>					
ZONE	EFFECTIVE WIND AREA (SQ FT)	MAX +VE PRESSURE (PSF)	MAX -VE PRESSURE (PSF)			
ZONE 1	10	20.3	-32.3			
ROOF	20	18.2	-31.1			
INTERIOR	50	16.7	-29.9			
ZONE	<u>&gt;</u> 100	16.0	-29.3			
ZONE 2	10	20.3	-56.2			
ROOF	20	18.2	-51.7			
EDGE	50	16.7	-46.3			
ZONE	<u>&gt;</u> 100	16.0	-41.2			
ZONE 3	10	20.3	-83.1			
ROOF	20	18.2	-77.1			
CORNER ZONE	50	16.7	-71.1			
	<u>&gt;</u> 100	16.0	-65.1			
ZONE 4	10	35.3	-38.2			
WALL	20	33.8	-36.8			
INTERIOR	50	31.7	-34.7			
ZONE	100	29.9	-34.1			
	<u>&gt;</u> 500	26.3	-29.3			
ZONE 5	10	35.3	-47.2			
WALL	20	33.8	-44.2			
EDGE	50	31.7	-40.3			
ZONE	100	29.9	-36.8			
	<u>&gt;</u> 500	26.3	-29.3			

WIDTH OF EDGE STRIP, a=7'-3" INTERNAL PRESSURE COEFFICIENT = ±0.18

NOTE: FOR CALCULATION OF NET PRESSURES, USE DL=10 PSF. THIS LOAD SHOULD BE USED IN CONJUNCTION WITH ASCE 7-10 LOAD COMBINATIONS.

![](_page_47_Picture_13.jpeg)

![](_page_47_Picture_14.jpeg)

![](_page_48_Figure_0.jpeg)

				1
Masonry Lintel Schedule				
PLAN DESIG-	MAXIMUM	M BRICK LINTEL AND REIN		LINTEL DIMENSIONS ND REINFORCING
NATION SPAN LENGTH	ANGLE (LLH) AS REQUIRED	DEPTH	8" WALL	
L1	9'-0"	L5x5x3/8	16	2#5 BOT & 2#4 TOP
L2	15'-6"	L5x5x3/8	24	2#5 BOT & 2#4 TOP
. DO NOT USE THIS SCHEDULE IF CONCENTRATED LOAD IS APPLIED TO THE LINTEL AT A HEIGHT LESS THAN HALF THE SPAN ABOVE				

Masonry Tension Lap Splice Lengths			
BAR SIZE	f'm = 2	000	
	8" CMU	2" COVER	
#3	18"	18"	
#4	18"	22"	
#5	20"	35"	
#6	38"	64"	
#7	52"	87"	
#8	79"	131"	

		SEE TYPICAL DETAILS
Z	-BARS MATCHING	
NUM	BER AND SIZE OF	FOR LAP LENGTH
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	2' - 0"	

![](_page_48_Picture_15.jpeg)

![](_page_48_Picture_16.jpeg)

![](_page_48_Picture_17.jpeg)

![](_page_49_Figure_0.jpeg)

![](_page_49_Figure_1.jpeg)

![](_page_49_Figure_2.jpeg)

![](_page_49_Figure_3.jpeg)

![](_page_49_Picture_6.jpeg)

SPECIAL	INSPECTIONS
SI.1	ALL SPECIAL INSPECTIONS SHALL BE PERFORMED IN CONFORMANCE WITH THE APPLICABLE INTERNATIONAL BUILDING CODE AND ITS REFERENCED SPECIFICATIONS.
SI.2	THE SPECIAL INSPECTOR SHALL BE EMPLOYED BY THE OWNER OR THE OWNER'S AGENT AND NOT BY THE CONTRACTOR OR SUBCONTRACTOR WHOSE WORK IS TO BE INSPECTED OR TESTED. ANY CONFLICT OF INTEREST MUST BE DISCLOSED TO THE BUILDING OFFICIAL PRIOR TO COMMENCING WORK.
SI.3	THE SPECIAL INSPECTOR SHALL BE QUALIFIED PER THE INTERNATIONAL BUILDING CODE AND SHALL BE EDUCATED IN THE TASKS REQUIRED TO CONDUCT, SUPERVISE, AND EVALUATE THE INSPECTIONS. THE SPECIAL INSPECTOR MUST ALSO BE OBJECTIVE, COMPETENT, AND HAVE ACCESS TO THE APPROPRIATE TESTING EQUIPMENT WHICH SHALL BE MAINTAINED AND PERIODICALLY CALIBRATED. THE QUALIFICATIONS OF THE SPECIAL INSPECTOR MAY BE SUBJECT TO THE APPROVAL OF THE BUILDING OFFICIAL.
SI.4	SPECIAL INSPECTION AGENTS:
	1. APPROVED TESTING AGENCY
	2. GEOTECHNICAL ENGINEER OF RECORD: TBD
	EOR: ENGINEER OF RECORD: LBYD INC. 880 MONTCLAIR ROAD, SUITE 600 BIRMINGHAM, AL 35213
SI.5	THE SPECIAL INSPECTIONS SHALL BE PERFORMED IN ADDITION TO ANY OBSERVATIONS PERFORMED BY THE ENGINEER OF RECORD AND ANY INSPECTIONS PERFORMED BY THE BUILDING OFFICIAL.
SI.6	THE SPECIAL INSPECTOR SHALL MAINTAIN RECORDS AND PROVIDE THE REQUIRED DOCUMENTATION AS PRESCRIBED IN THE INTERNATIONAL BUILDING CODE, INCLUDING THE SUBMITTAL OF REPORTS TO THE BUILDING OFFICIAL AND THE DESIGNER OF RECORD.
SI.7	THE CONTRACTOR SHALL COORDINATE THE CONSTRUCTION SCHEDULE WITH THE SPECIAL INSPECTOR TO ALLOW FOR SPECIAL INSPECTIONS.
SI.8	CONSTRUCTION WHICH REQUIRES SPECIAL INSPECTIONS SHALL BE MAINTAINED IN SUCH A STATE AS TO ALLOW ACCESS FOR THE SPECIAL INSPECTOR UNTIL THE REQUIRED INSPECTIONS OR TESTS HAVE BEEN COMPLETED.
SI.9	ANY DEVIATIONS FOUND DURING THE SPECIAL INSPECTION PROCESS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE DESIGNER OF RECORD. ALL DEVIATIONS MUST BE ADDRESSED PRIOR TO COMPLETION OF THE WORK.
SI.10	INSPECTION FREQUENCY:
	A. CONTINUOUS — SPECIAL INSPECTION BY THE SPECIAL INSPECTOR WHO IS PRESENT WHEN AND WHERE THE WORK TO BE INSPECTED IS BEING PERFORMED.
	B. PERIODIC — SPECIAL INSPECTION BY THE SPECIAL INSPECTOR WHO IS INTERMITTENTLY PRESENT WHERE THE WORK TO BE INSPECTED HAS BEEN OR IS BEING PERFORMED.
	C. OBSERVE — OBSERVE ITEMS ON A RANDOM BASIS. OPERATIONS NEED NOT BE DELAYED PENDING THESE INSPECTIONS.
	D. PERFORM — PERFORM TASKS FOR EACH JOINT, MEMBER, AND CONNECTION.
SI.11	SPECIAL INSPECTIONS FOR STRUCTURAL, LOAD-BEARING, OR LATERAL LOAD BEARING FABRICATED ITEMS SHALL BE PERFORMED FOR THE FABRICATED ITEMS AT THE FABRICATOR'S SHOP. SPECIAL INSPECTIONS FOR FABRICATED ITEMS MAY BE WAIVED WHEN THE FABRICATOR IS REGISTERED AND HAS APPROVAL TO PERFORM THE WORK WITHOUT SPECIAL INSPECTIONS. IF THE INSPECTIONS ARE WAIVED, THE FABRICATOR MUST SUBMIT A CERTIFICATE OF COMPLIANCE TO THE BUILDING OFFICIAL SHOWING COMPLIANCE WITH THE APPROVED STRUCTURAL DRAWINGS.
SI.12	LATERAL SYSTEM NOTES FOR TORNADO STORM SHELTER
	A. THE STORM SHELTER MAIN WIND FORCE RESISTING SYSTEM SUBJECT TO SPECIAL INSPECTIONS IS COMPRISED OF:
	1. ROOF DIAPHRAGM: CONCRETE ON METAL DECK
	2. COLLECTOR ELEMENTS/DRAG STRUTS: STEEL JOISTS

- 3. LATERAL FORCE RESISTING SYSTEM: REINFORCED MASONRY SHEAR WALLS
- B. THE CONTRACTOR RESPONSIBLE FOR CONSTRUCTION OF THE LATERAL SYSTEM SHALL SUBMIT A STATEMENT TO THE BUILDING OFFICIAL AND TO THE OWNER CONVEYING ACKNOWLEDGEMENT OF THE REQUIRED SPECIAL INSPECTIONS TO BE PERFORMED SPECIFICALLY FOR THE LATERAL SYSTEM.

	Soils													
NO.	INSPECTION TASK	FREQUENCY	REFERENCE FOR CRITERIA	AGENT										
1.00	VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.	PERIODIC		GEOR										
2.00	VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.	PERIODIC		GEOR										
3.00	PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS.	PERIODIC		GEOR										
4.00	VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT, AND COMPACTION OF COMPACTED FILL.	CONTINUOUS		GEOR										
5.00	PRIOR TO PLACEMENT OF COMPACTED FILL, INSPECT SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.	PERIODIC		GEOR										

NO.	INSPECTION TASK	FREQUENCY	REFERENCE STANDARD	AGENT										
1.00	INSPECT REINFORCEMENT AND VERIFY PLACEMENT.	PERIODIC	ACI 318 CH 20, 25.2, 25.3; IBC 1908.4	ATA										
2.00	INSPECT ANCHORS CAST IN CONCRETE.	PERIODIC	ACI 318: 17.8.2	ATA										
3.00	INSPECT ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS.			ATA										
3.01	INSPECT ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS.	CONTINUOUS	ACI 318: 17.8.2.4	ΑΤΑ										
3.02	INSPECT MECHANICAL ANCHORS AND ADHESIVE ANCHORS NOT DEFINED IN 4.01.	PERIODIC	ACI 318: 17.8.2	ATA										
4.00	VERIFY USE OF REQUIRED DESIGN MIX.	PERIODIC	ACI 318: CH 19, 26.4.3, 26.4.4; IBC 1904.1, 1904.2, 1908.2, 1908.3	ATA										
5.00	PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE. DETERMINE UNIT WEIGHT OF LIGHTWEIGHT CONCRETE.	CONTINUOUS	ASTM C 172; ASTM C 31; ACI 318:26.4.5, 26.12; IBC 1908.10	ΑΤΑ										
6.00	INSPECT CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.	CONTINUOUS	ACI 318: 26.4.5; IBC 1908.6, 1908.7, 1908.8	ATA										
7.00	VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.	PERIODIC	ACI 318: 26.4.7-26.4.9; IBC 1908.9	ATA										
8.00	INSPECT ERECTION OF PRECAST CONCRETE MEMBERS.	PERIODIC	ACI 318: CH 26.8	ATA										
9.00	ISOLATED CONCRETE FOOTINGS OF BUILDINGS THREE STORIES OR LESS ARE EXCEPTED FROM INSPECTIONS BUT NOT FROM MATERIALS TESTING.		IBC 1705.3 (1)	ΑΤΑ										
10.00	CONTINUOUS CONCRETE FOOTINGS SUPPORTING WALLS OF LIGHT-FRAME CONSTRUCTION OR THOSE THAT ARE DESIGNED IN ACCORDANCE WITH IBC 2015 TABLE 1809.7 ARE EXCEPTED FROM INSPECTIONS BUT NOT FROM MATERIALS TESTING.		IBC 1705.3 (2)	ΑΤΑ										
11.00	SLABS ON GRADE ARE EXCEPTED FROM INSPECTIONS BUT NOT FROM MATERIALS TESTING.		IBC 1705.3 (3)	ATA										
12.00	CONCRETE FOUNDATION WALLS CONSTRUCTED IN ACCORDANCE WITH IBC 2015 TABLE 1807.1.6.2 ARE EXCEPTED FROM INSPECTIONS BUT NOT FROM MATERIALS TESTING.		IBC 1705.3 (4)	ΑΤΑ										

1 1 2.0

NO 1.00 2.00

![](_page_50_Picture_8.jpeg)

	Non-Structural C	omponents		
NO.	INSPECTION TASK	FREQUENCY	REFERENCE FOR CRITERIA	AGENT
1.00	SPRAYED FIRE-RESISTANT MATERIALS:		IBC 1705.14	
1.01	PRIOR TO APPLICATION OF SPRAYED FIREPROOFING, SURFACES HAVE BEEN PREPARED IN ACCORDANCE WITH APPROVED FIRE-RESISTANCE DESIGN AND WRITTEN INSTRUCTIONS PROVIDED BY APPROVED MANUFACTURERS.	PERIODIC	IBC 1705.14.2	ATA
1.02	SUBSTRATE AMBIENT TEMPERATURE AS SPECIFIED IN THE APPROVED MANUFACTURER'S WRITTEN INSTRUCTIONS BOTH BEFORE AND AFTER APPLICATION	PERIODIC	IBC 1705.14.3	ATA
1.03	AREA VENTILATED DURING AND AFTER APPLICATION ACCORDING TO THE WRITTEN INSTRUCTIONS OF THE APPROVED MANUFACTURER	PERIODIC	IBC 1705.14.3	ATA
1.04	SPRAYED FIRE-RESISTANT MATERIAL MEETS MINIMUM THICKNESS REQUIREMENTS	PERIODIC	IBC 1705.14.4.1	ATA
1.05	90% OF SPRAYED FIRE-RESISTANT MATERIAL MEETS REQUIRED THICKNESS	PERIODIC	IBC 1705.14.4	ATA
1.06	SPRAYED FIRE-RESISTANT MATERIAL DENSITY NOT LESS THAN THAT SPECIFIED BY THE APPROVED FIRE-RESISTANCE DESIGN.	PERIODIC	IBC 1705.14.5	ATA
1.07	SPRAYED FIRE-RESISTANT MATERIAL BOND STRENGTH NOT LESS THAN 150 PSF	PERIODIC	IBC 1705.14.6	ATA
2.00	MASTIC AND INTUMESCENT FIRE-RESISTANT COATINGS PER THE APPROVED CONSTRUCTION DOCUMENTS AND AWCI 12-B	PERIODIC	IBC 1705.15	ATA
3.00	INSPECT ALL EIFS APPLICATIONS THAT ARE NOT OVER CONCRETE, MASONRY, OR A WATER-RESISTIVE BARRIER	PERIODIC	IBC 1705.16	ATA
3.01	INSPECT WATER RESISTIVE BARRIER UNDER EIFS APPLICATIONS	PERIODIC	IBC 1705.16	ATA
4.00	INSPECT PENETRATION FIRESTOP SYSTEMS	CONTINUOUS	IBC 1705.17	ATA
4.01	INSPECT FIRE-RESISTANT JOINT SYSTEMS	CONTINUOUS	IBC 1705.17	ATA
5.00	TESTING OF SMOKE CONTROL SYSTEM	PERIODIC	IBC 1705.18	ATA

	Masonry - L	evel B		
NO.	INSPECTION TASK	FREQUENCY	REFERENCE FOR CRITERIA TMS 402/ACI 530/ASCE 5 TMS 602/ACI 530.1/ASCE 6	AGENT
1.00	VERIFICATION OF SLUMP FLOW AND VISUAL STABILITY INDEX (VSI) AS DELIVERED TO THE PROJECT SITE FOR SELF-CONSOLIDATING GROUT.	PERIODIC	TMS 602 ART. 1.5 B.1.B.3	ΑΤΑ
2.00	VERIFICATION OF F'M AND F'AAC PRIOR TO CONSTRUCTION, EXCEPT WHERE SPECIFICALLY EXEMPTED BY TMS 402/ACI 530/ASCE 5.	PERIODIC	TMS 602 ART. 1.4 B	ATA
3.00	VERIFY COMPLIANCE WITH THE APPROVED SUBMITTALS.	PERIODIC	TMS 602 ART. 1.5	ATA
4.00	AS MASONRY CONSTRUCTION BEGINS, VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE:			
4.01	PROPORTIONS OF SITE-PREPARED MORTAR	PERIODIC	TMS 602 ART. 2.1, 2.6 A	ATA
4.02	PROPERTIES OF THIN-BED MORTAR FOR AAC MASONRY	CONTINUOUS AND PERIODIC(a)	TMS 602 ART. 2.1 C	ATA
5.00	PRIOR TO GROUTING, VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE:			
5.01	GROUT SPACE	PERIODIC	TMS 602 ART. 3.2 D, 3.2 F	ATA
5.02	GRADE, TYPE, AND SIZE OF REINFORCEMENT AND ANCHOR BOLTS	PERIODIC	TMS 402 SEC. 6.1; TMS 602 ART. 2.4, 3.4	ΑΤΑ
5.03	PLACEMENT OF REINFORCEMENT	PERIODIC	TMS 402 SEC. 6.1, 6.2.1, 6.2.6, 6.2.7; TMS 602 ART. 3.2 E, 3.4, 3.6 A	ΑΤΑ
5.04	CONSTRUCTION OF MORTAR JOINTS	PERIODIC	TMS 602 ART. 3.3 B	ATA
6.00	VERIFY DURING CONSTRUCTION:			
6.01	SIZE AND LOCATION OF STRUCTURAL ELEMENTS	PERIODIC	TMS 602 ART. 3.3 F	ATA
6.02	TYPE, SIZE, AND LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES, OR OTHER CONSTRUCTION	PERIODIC	TMS 402 SEC. 1.2.1(e), 6.1.4.3, 6.2.1	ΑΤΑ
6.03	PREPARATION, CONSTRUCTION, AND PROTECTION OF MASONRY DURING COLD WEATHER (TEMPERATURE BELOW 40°F) OR HOT WEATHER (TEMPERATURE ABOVE 90°F)	PERIODIC	TMS 602 ART. 1.8 C, 1.8 D	ΑΤΑ
7.00	OBSERVE PREPARATION OF GROUT SPECIMENS, MORTAR SPECIMENS, AND/OR PRISMS.	PERIODIC	TMS 602 ART. 1.4 B.2.a.3, 1.4 B.2.b.3, 1.4 B.2.c.3, 1.4 B.3, 1.4 B.4	ΑΤΑ
NOTES:	(a) CONTINUOUS REQUIRED FOR THE FIRST 5,000 SQUARE FEET OF AAC MASONRY. PERIODIC REQUIRED AFTER THE FIRST 5,000 SQUARE FEET OF AAC MASONRY.			

	Wood			
0.	INSPECTION TASK	FREQUENCY	REFERENCE FOR CRITERIA	AGENT
00	INSPECT PREFABRICATED WOOD STRUCTURAL ELEMENTS AND ASSEMBLIES	PERIODIC	IBC 1704.2.5, 1705.5	ATA
00	METAL-PLATE-CONNECTED WOOD TRUSSES SPANNING 60 FEET OR GREATER	PERIODIC	IBC 1705.5.2	ATA

![](_page_50_Picture_12.jpeg)

![](_page_50_Picture_13.jpeg)

	NO INSPECTION TASK FREQUENCY REFERENCE FOR CRITERIA AGENT											
NO.	INSPECTION TASK	FREQUENCY	REFERENCE FOR CRITERIA	AGENT								
1.00	INSPECTION OR EXECUTION TASKS PRIOR TO DECK PLACEMENT:		SDI STD QA/QC TABLE 1.1									
1.01	VERIFY COMPLIANCE OF MATERIALS (DECK AND ALL DECK ACCESSORIES) WITH CONSTRUCTION DOCUMENTS, INCLUDING PROFILES, MATERIAL PROPERTIES, AND BASE METAL THICKNESS.	PERFORM		ATA								
1.02	DOCUMENT ACCEPTANCE OR REJECTION OF DECK AND DECK ACCESSORIES.	PERFORM		ATA								
2.00	INSPECTION OR EXECUTION TASKS AFTER DECK PLACEMENT:		SDI STD QA/QC TABLE 1.2									
2.01	VERIFY COMPLIANCE OF DECK AND ALL DECK ACCESSORIES INSTALLATION WITH CONSTRUCTION DOCUMENTS.	PERFORM		ATA								
2.02	VERIFY DECK MATERIALS ARE REPRESENTED BY THE MILL CERTIFICATIONS THAT COMPLY WITH THE CONSTRUCTION DOCUMENTS.	PERFORM		ATA								
2.03	DOCUMENT ACCEPTANCE OR REJECTION OF INSTALLATION OF DECK AND DECK ACCESSORIES.	PERFORM		ATA								
3.00	INSPECTION OR EXECUTION TASKS PRIOR TO WELDING:		SDI STD QA/QC TABLE 1.3									
3.01	WELDING PROCEDURE SPECIFICATIONS (WPS) AVAILABLE.	OBSERVE		ATA								
3.02	MANUFACTURER CERTIFICATIONS FOR WELDING CONSUMABLES AVAILABLE.	OBSERVE		ATA								
3.03	MATERIAL INDENTIFICATION (TYPE/GRADE).	OBSERVE		ATA								
3.04	CHECK WELDING EQUIPMENT.	OBSERVE		ATA								
4.00	INSPECTION OR EXECUTION TASKS DURING WELDING:		SDI STD QA/QC TABLE 1.4									
4.01	USE QUALIFIED WELDERS.	OBSERVE		ATA								
4.02	CONTROL AND HANDLING OF WELDING CONSUMABLES.	OBSERVE		ATA								
4.03	ENVIRONMENTAL CONDITIONS (WIND SPEED, MOISTURE, TEMPERATURE).	OBSERVE		ATA								
4.04	WPS FOLLOWED.	OBSERVE		ATA								
5.00	INSPECTION OR EXECUTION TASKS AFTER WELDING:		SDI STD QA/QC TABLE 1.5									
5.01	VERIFY SIZE AND LOCATION OF WELDS, INCLUDING SUPPORT, SIDELAP, AND PERIMETER WELDS.	PERFORM		ATA								
5.02	WELDS MEET VISUAL ACCEPTANCE CRITERIA.	PERFORM		ATA								
5.03	VERIFY REPAIR ACTIVITIES.	PERFORM		ATA								
5.04	DOCUMENT ACCEPTANCE OR REJECTION OF WELDS.	PERFORM		ATA								
6.00	INSPECTION OR EXECUTION TASKS PRIOR TO MECHANICAL FASTENING:		SDI STD QA/QC TABLE 1.6									
6.01	MANUFACTURER INSTALLATION INSTRUCTIONS AVAILABLE FOR MECHANICAL FASTENERS.	OBSERVE		ATA								
6.02	PROPER TOOLS AVAILABLE FOR FASTENER INSTALLATION.	OBSERVE		ATA								
6.03	PROPER STORAGE FOR MECHANICAL FASTENERS.	OBSERVE		ATA								
7.00	INSPECTION OR EXECUTION TASKS DURING MECHANICAL FASTENING:		SDI STD QA/QC TABLE 1.7									
7.01	FASTENERS ARE POSITIONED AS REQUIRED.	OBSERVE		ATA								
7.02	FASTENERS ARE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.	OBSERVE		ATA								
8.00	INSPECTION OR EXECUTION TASKS AFTER MECHANICAL FASTENING:		SDI STD QA/QC TABLE 1.8									
8.01	CHECK SPACING, TYPE, AND INSTALLATION OF SUPPORT FASTENERS.	PERFORM		ATA								
8.02	CHECK SPACING, TYPE, AND INSTALLATION OF SIDELAP FASTENERS.	PERFORM		ATA								
8.03	CHECK SPACING, TYPE, AND INSTALLATION OF PERIMETER FASTENERS.	PERFORM		ATA								
8.04	VERIFY REPAIR ACTIVITIES.	PERFORM		ATA								
8.05	DOCUMENT ACCEPTANCE OR REJECTION OF MECHANICAL FASTENERS.	PERFORM		ATA								

	Structural	Steel		
NO.	INSPECTION TASK	FREQUENCY	REFERENCE FOR CRITERIA	AGENT
1.00	INSPECTOR SHALL BE ON THE PREMISES FOR INSPECTION DURING THE PLACEMENT OF ANCHOR RODS AND OTHER EMBEDMENTS SUPPORTING STRUCTURAL STEEL		AISC 360 SEC. N5.7	ATA
1.01	DIAMETER, GRADE, TYPE, LENGTH, AND EMBEDMENT DEPTH OF ANCHOR RODS AND OTHER EMBEDDED ITEMS	PERFORM		ATA
1.02	INSPECT THE FABRICATED STEEL OR ERECTED STEEL FRAME, AS APPROPRIATE, TO VERIFY COMPLIANCE WITH THE DETAILS SHOWN, SUCH AS BRACES, STIFFENERS, MEMBER LOCATIONS AND PROPER APPLICATION OF JOINT DETAILS AT EACH CONNECTION.	PERFORM		ATA
2.00	INSPECTION TASKS PRIOR TO WELDING:		AISC 360 SEC. N5.4	
2.01 2.02	WELDING PROCEDURE SPECIFICATIONS (WPS) AVAILABLE MANUFACTURER CERTIFICATIONS FOR WELDING CONSUMABLES AVAILABLE	PERFORM		ATA ATA
2.03	MATERIAL IDENTIFICATION (TYPE/GRADE)	OBSERVE		ATA
2.04	WELDER IDENTIFICATION SYSTEM (a)	OBSERVE		ATA
2.05	FIT-UP OF GROOVE WELDS (INCLUDING JOINT GEOMETRY), JOINT PREPARATION, DIMENSIONS (ALIGNMENT, ROOT OPENING, ROOT FACE, BEVEL), CLEANLINESS (CONDITION OF STEEL SURFACES), TACKING (TACK WELD QUALITY AND LOCATION), AND BACKING TYPE AND FIT (IF APPLICABLE)	OBSERVE		ATA
2.06	CONFIGURATION AND FINISH OF ACCESS HOLES	OBSERVE		ATA
2.07		OBSERVE		ATA
3.00	USE OF OUALIFIED WELDERS		AISC 360 SEC. N5.4	ΔΤΔ
3.02	CONTROL AND HANDLING OF WELDING CONSUMABLE PACKAGING	OBSERVE		ATA
	AND EXPOSURE CONTROL			
3.03	NO WELDING OVER CRACKED TACK WELDS	OBSERVE		ATA
3.04	ENVIRONMENTAL CONDITIONS INCLUDING WIND SPEED WITHIN	OBSERVE		ATA
3.05	WPS FOLLOWED INCLUDING SETTINGS ON WELDING EQUIPMENT, TRAVEL SPEED, SELECTED WELDING MATERIALS, SHIELDING GAS TYPE/FLOW RATE, PREHEAT APPLIED, INTERPASS TEMPERATURE MAINTAINED (MIN/MAX), AND PROPER POSITION (F, V, H, OH)	OBSERVE		ATA
3.06	WELDING TECHNIQUES INCLUDING: INTERPASS AND FINAL CLEANING, EACH PASS WITHIN PROFILE LIMITATIONS, EACH PASS MEETS QUALITY REQUIREMENTS	OBSERVE		ATA
4.00	INSPECTION TASKS AFTER WELDING:		AISC 360 SEC. N5.4	
4.01	WELDS CLEANED	OBSERVE		
4.03	WELDS MEET VISUAL ACCEPTANCE CRITERIA FOR: CRACK PROHIBITION, WELD/BASE-METAL FUSION, CRATER CROSS SECTION, WELD PROFILES, WELD SIZE, UNDERCUT, AND POROSITY	PERFORM		ATA
4.04	ARC STRIKES	PERFORM		ATA
4.05		PERFORM		
4.00	REPAIR ACTIVITIES	PERFORM		
5.00	INSPECTION TASKS PRIOR TO BOLTING:		AISC 360 SEC. N5.6	
5.01	MANUFACTURER'S CERTIFICATIONS AVAILABLE FOR FASTENER	PERFORM		ATA
5.02	FASTENERS MARKED IN ACCORDANCE WITH ASTM REQUIREMENTS	OBSERVE		ΔΤΔ
5.03	PROPER FASTENERS SELECTED FOR THE JOINT DETAIL (GRADE,	OBSERVE		ATA
5.04	TYPE, BOLT LENGTH IF THREADS ARE TO BE EXCLUDED FROM SHEAR PLANE)			
5.04	CONNECTING FLEMENTS, INCLUDING THE APPROPRIATE FAVING	OBSERVE		ΔΤΔ
0.00	SURFACE CONDITION AND HOLE PREPARATION, IF SPECIFIED, MEET APPLICABLE REQUIREMENTS	OBSERVE		
5.06	PRE-INSTALLATION VERIFICATION TESTING BY INSTALLATION PERSONNEL OBSERVED AND DOCUMENTED FOR FASTENER ASSEMBLIES AND METHODS USED	OBSERVE		ATA
5.07	PROPER STORAGE PROVIDED FOR BOLTS, NUTS, WASHERS AND OTHER FASTENER COMPONENTS	OBSERVE		ΑΤΑ
6.00	INSPECTION TASKS DURING BOLTING:		AISC 360 SEC. N5.6	
6.01	FASTENER ASSEMBLIES, OF SUITABLE CONDITION, PLACED IN ALL HOLES AND WASHERS (IF REQUIRED) ARE POSITIONED AS REQUIRED	OBSERVE		
6.02				
0.03	FROM ROTATING			
6.04	FASTENERS ARE PRETENSIONED IN ACCORDANCE WITH THE RCSC SPECIFICATION, PROGRESSING SYSTEMATICALLY FROM THE MOST RIGID POINT TOWARD THE FREE EDGES	OBSERVE		ATA
7.00 7.01	INSPECTION TASKS AFTER BOLTING: DOCUMENT ACCEPTANCE OR REJECTION OF BOLTED CONNECTIONS	PERFORM	AISC 360 SEC. N5.6	ATA
NOTES:	(a) THE FABRICATOR OR ERECTOR, AS APPLICABLE, SHALL MAINTAIN A SYSTEM BY WHICH A WELDER WHO HAS WELDED A JOINT OR MEMBER CAN BE IDENTIFIED. STAMPS, IF USED, SHALL BE THE LOW-STRESS TYPE.			
	STIFFENERS HAS BEEN PERFORMED IN THE K-AREA, VISUALLY INSPECT THE WEB K-AREA FOR CRACKS WITHIN 3 IN. (75MM) OF THE WELD.			

![](_page_51_Picture_2.jpeg)

![](_page_51_Picture_3.jpeg)

![](_page_51_Picture_4.jpeg)

![](_page_52_Figure_0.jpeg)

![](_page_52_Picture_1.jpeg)

![](_page_52_Picture_2.jpeg)

### Foundation and Floor Plan - Classroom Addition Base Bid 1/8" = 1'-0"

- FINISH FLOOR (TOP OF SLAB) ELEVATION 0'-0", (REF. 75.03'), UNLESS NOTED.
   TOP OF INTERIOR FOOTING: -0'-8", UNLESS NOTED.
- 3. TOP OF EXTERIOR FOOTING: -2'-0", BELOW FINISH FLOOR, UNLESS NOTED.
- 4. FOR SLAB ON GRADE CONSTRUCTION, SEE GENERAL NOTES AND TYPICAL DETAILS
- 5. FOR SLAB RECESS AND RAMP LOCATION, SEE ARCHITECTURAL DRAWINGS.
- 6. GENERAL CONTRACTOR SHALL COORDINATE TILE JOINT LOCATIONS WITH CONTROL JOINTS. 7. FOOTING STEP ELEVATIONS AND LOCATION ARE APPROXIMATE. GENERAL
- CONTRACTOR SHALL COORDINATE ALL FOOTING STEPS WITH CIVIL, PLUMBING AND
- UTILITY DRAWINGS. INDICATES INTERIOR SHEAR WALL - SEE SECTION.
- 9. GENERAL CONTRACTOR SHALL COORDINATE LOCATIONS OF WALL MOUNTED EQUIPMENT TO DETERMINE IF ADDITIONAL GROUTED CELLS ARE NECESSARY TO SUPPORT THE EQUIPMENT. 10. EXISTING BUILDING SYSTEMS ARE INDICATED BY HALFTONE EXISTING LINES. THERE ARE AREAS OF THE EXISTING BUILDING THAT ARE UNKNOWN. GENERAL CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS - SEE GENERAL NOTES. CONTRACTOR TO NOTIFY
- STRUCTURAL ENGINEER OF ANY DISCREPANCIES PRIOR TO PERFORMING ANY WORK IN THAT AREA. 11. PROVIDE 2#4X5'-0" IN SLAB AT DISCONTINUOUS CONTROL JOINTS AND REENTRANT CORNERS.

![](_page_52_Figure_13.jpeg)

![](_page_52_Picture_15.jpeg)

![](_page_52_Picture_16.jpeg)

SHEET NO: S2.1 8 OF 17

![](_page_53_Figure_0.jpeg)

![](_page_53_Picture_1.jpeg)

![](_page_53_Picture_2.jpeg)

1/8" = 1'-0"

# Attic Floor Framing Plan

- 1. FINISH FLOOR ELEVATION 14'-0", UNLESS NOTED.
- 2. FLOOR SYSTEM: 8" HOLLOWCORE SLAB, UNLESS NOTED. 3. HOLLOWCORE LAYOUT IS FOR SCHEMATIC PURPOSES ONLY. MANUFACTURER TO VERIFY ACTUAL LAYOUT.
- 4. CUT OR BREAK CORES ONLY AS REQUIRED TO PLACE REINFORCEMENT.
- 5. LX INDICATES LINTEL ABOVE OPENING SEE SCHEDULE ON SHEET S1.3. 6. EXISTING BUILDING SYSTEMS ARE INDICATED BY HALFTONE EXISTING LINES. THERE ARE AREAS OF THE EXISTING BUILDING THAT ARE UNKNOWN. GENERAL CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS - SEE GENERAL NOTES. CONTRACTOR TO NOTIFY STRUCTURAL ENGINEER OF ANY DISCREPANCIES PRIOR TO PERFORMING ANY WORK IN THAT AREA.

![](_page_53_Figure_8.jpeg)

![](_page_53_Picture_10.jpeg)

![](_page_53_Picture_11.jpeg)

SHEET TITLE: ATTIC FLOOR FRAMING PLAN

![](_page_53_Picture_13.jpeg)

JOB NO. 21-04A SHEET NO: SARET NO: **9 OF 17** 1"

![](_page_54_Figure_0.jpeg)

![](_page_54_Picture_1.jpeg)

![](_page_54_Picture_2.jpeg)

## Roof Framing Plan - Classroom Addition Base Bid 1/8" = 1'-0"

- 1. TRUSS BEARING ELEVATION: 14'-3", UNLESS NOTED.
- 2. ROOF SYSTEM: BUILDING: 3/4" PLYWOOD SHEATHING ON WOOD TRUSSES (AT 2'-0" MAXIMUM) ON LOAD-BEARING CMU WALLS, UNLESS NOTED OTHERWISE. SEE GENÉRAL NOTES.
- 3. TRUSS LAYOUT SHOWN FOR GENERAL INTENT. EXACT LAYOUT OF WOOD TRUSSES TO BE DETERMINDED BY THE TRUSS MANUFACTURER AND SUBMITTED TO THE STRUCTURAL ENGINEER.
- 4. CONTRACTOR COORDINATE SIZE, LOCATION, AND WEIGHT OF ANY MECHANICAL, ELECTRICAL, PLUMBING, OR MISCELLANEOUS LOADS SUPPORTED BY THE WOOD TRUSSES BY EQUIPMENT SUPPLIERS.
- 5. TEMPORARY AND PERMANENT LATERAL BRACING MUST BE DESIGNED BY TRUSS MANUFACTURER.
- 6. SEE GENERAL NOTES AND TYPICAL DETAILS FOR DEAD LOAD, LIVE LOAD, AND WIND LOAD ON TRUSSES.
- 7. WALLS NOT SHOWN ON THIS PLAN ARE NOT TO BE USED AS BEARING WALLS. 8. EXISTING BUILDING SYSTEMS ARE INDICATED BY HALFTONE EXISTING LINES. THERE ARE AREAS OF THE EXISTING BUILDING THAT ARE UNKNOWN. GENERAL CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS - SEE GENERAL NOTES. CONTRACTOR TO NOTIFY STRUCTURAL ENGINEER OF ANY DISCREPANCIES PRIOR TO PERFORMING ANY WORK IN THAT AREA.

![](_page_54_Figure_11.jpeg)

![](_page_54_Picture_13.jpeg)

![](_page_54_Picture_14.jpeg)

![](_page_54_Picture_15.jpeg)

![](_page_54_Picture_16.jpeg)

![](_page_55_Figure_0.jpeg)

![](_page_55_Picture_1.jpeg)

# Foundation and Floor Plan - Classroom Addition Alternate

- 1/8" = 1'-0" 1. FINISH FLOOR (TOP OF SLAB)ELEVATION 0'-0", (REF. 75.03',) UNLESS NOTED.
- 2. TOP OF INTERIOR FOOTING -0'-8" UNLESS NOTED. 3. TOP OF EXTERIOR FOOTING -2'-0", UNLESS NOTED.
- 5. FOR SLAB RECESS AND RAMP LOCATION, SEE ARCHITECTURAL DRAWINGS.
- 6. GENERAL CONTRACTOR SHALL COORDINATE TILE JOINT LOCATIONS WITH CONTROL JOINTS. 7. FOOTING STEP ELEVATIONS AND LOCATION ARE APPROXIMATE. GENERAL CONTRACTOR SHALL COORDINATE ALL FOOTING STEPS WITH CIVIL, PLUMBING AND
- UTILITY DRAWINGS. 8. PROVIDE 2#4x5'-0" IN SLAB AT DISCONTINUOUS CONTROL JOINTS AND REENTRANT CORNERS.

4. FOR SLAB ON GRADE CONSTRUCTION, SEE GENERAL NOTES AND TYPICAL DETAILS

![](_page_55_Picture_11.jpeg)

![](_page_55_Figure_12.jpeg)

![](_page_55_Picture_13.jpeg)

### Roof Framing Plan - Classroom Addition Alternate 1/8" = 1'-0"

1. TRUSS BEARING ELEVATION: 14'-3", UNLESS NOTED.

- 2. ROOF SYSTEM: BUILDING: 3/4" PLYWOOD SHEATHING ON WOOD TRUSSES (AT 2'-0" MAXIMUM) ON LOAD-BEARING CMU WALLS, UNLESS NOTED OTHERWISE.
- SEE GENERAL NOTES. 3. TRUSS LAYOUT SHOWN FOR GENERAL INTENT. EXACT LAYOUT OF WOOD TRUSSES TO BE DETERMINDED BY THE TRUSS MANUFACTURER AND SUBMITTED TO THE
- STRUCTURAL ENGINEER.
- 4. CONTRACTOR COORDINATE SIZE, LOCATION, AND WEIGHT OF ANY MECHANICAL, ELECTRICAL, PLUMBING, OR MISCELLANEOUS LOADS SUPPORTED BY THE WOOD TRUSSES BY EQUIPMENT SUPPLIERS.
- 5. TEMPORARY AND PERMANENT LATERAL BRACING MUST BE DESIGNED BY TRUSS MANUFACTURER.
- 6. SEE GENERAL NOTES AND TYPICAL DETAILS FOR DEAD LOAD, LIVE LOAD, AND WIND LOAD ON TRUSSES.

![](_page_55_Figure_22.jpeg)

![](_page_55_Picture_24.jpeg)

![](_page_55_Picture_25.jpeg)

![](_page_55_Picture_26.jpeg)

![](_page_55_Picture_27.jpeg)

![](_page_55_Picture_28.jpeg)

![](_page_56_Figure_0.jpeg)

![](_page_56_Picture_3.jpeg)

![](_page_56_Figure_4.jpeg)

![](_page_56_Picture_5.jpeg)

# Enlarged Stair Roof Plan

ROOF SYSTEM: STEEL ROOF DECK ON STEEL BEAMS. TOP OF STEEL (DECK BEARING) 12'-8".
 FOR ADDITIONAL PLAN NOTES, SEE SHEET S2.3.

![](_page_56_Picture_9.jpeg)

![](_page_56_Picture_10.jpeg)

![](_page_57_Figure_0.jpeg)

![](_page_57_Picture_2.jpeg)

![](_page_57_Figure_3.jpeg)

![](_page_57_Picture_4.jpeg)

![](_page_57_Picture_5.jpeg)

![](_page_57_Picture_6.jpeg)

![](_page_58_Figure_0.jpeg)

![](_page_58_Picture_1.jpeg)

![](_page_58_Figure_2.jpeg)

3.11 <u>Section</u> 3/4" = 1'-0"

![](_page_58_Picture_4.jpeg)

![](_page_58_Picture_5.jpeg)

![](_page_59_Figure_0.jpeg)

![](_page_59_Figure_1.jpeg)

6 Section 3/4" = 1'-0"

![](_page_59_Picture_4.jpeg)

![](_page_59_Picture_5.jpeg)

![](_page_60_Figure_0.jpeg)

![](_page_60_Figure_1.jpeg)

![](_page_60_Picture_2.jpeg)

![](_page_60_Picture_3.jpeg)

![](_page_60_Picture_4.jpeg)

![](_page_61_Figure_0.jpeg)

![](_page_61_Picture_4.jpeg)

![](_page_61_Picture_5.jpeg)

![](_page_61_Picture_6.jpeg)

![](_page_62_Picture_0.jpeg)

2"VTR •

2"VTR •

TGHD C R3 3"VTR TGHD 2"VTR 🖣 <u>4</u>2" 

TGHD 🕅 2"VTR \_2" (R7 (R5)

2"**V**TR

2**"**VTR

![](_page_62_Figure_17.jpeg)

![](_page_63_Picture_0.jpeg)

![](_page_63_Figure_1.jpeg)

![](_page_64_Figure_0.jpeg)

PLUMBI	NG LEGEND
AFF	ABOVE FINISHED FLOOR
CW	COLD WATER
ECO	EXTERIOR CLEANOUT
FPHB	FREEZE PROOF HOSE BIBB
HW	HOT WATER
HWR	HOT WATER RETURN
TGFD	TRAP GUARD FLOOR DRAIN
TGHD	TRAP GUARD HUB DRAIN
WH	WATER HEATER
VTR	VENT THRU ROOF
	COLD WATER PIPING
140 140	140° HOT WATER PIPING
	HOT WATER RETURN PIPING
	WASTE PIPING
	VENT PIPING
	GATE VALVE
	P-TRAP
	VENT THRU ROOF

	EIVTUDE	CON	NECTION	S	
MAKK	FIXTURE	WASTE	CW	НW	DESCRIPTION
P-1	WATER CLOSET	4"	1"		15" HIGH ELONGATED BOWL, FLOOR MOUNTED, FLOOR OUTLET, FLUSH VALVE TYPE. PR WHITE OPEN FRONT SEAT LESS COVER, FLUSH VALVE, AND FLEXIBLE SUPPLY WITH ST
P-1A	WATER CLOSET (HANDICAPPED)	4"	1"		17" HIGH ELONGATED BOWL, FLOOR MOUNTED, FLOOR OUTLET, FLUSH VALVE TYPE. PR WHITE OPEN FRONT SEAT LESS COVER, FLUSH VALVE, AND FLEXIBLE SUPPLY WITH ST INSTALL PER ADA REQUIREMENTS.
P-2	URINAL	2"	3/4"		WALL HUNG TYPE WITH FLUSH VALVE AND FLOOR MOUNTED CARRIER.
P-2A	URINAL (HANDICAPPED)	2"	3/4"		WALL HUNG TYPE WITH FLUSH VALVE AND FLOOR MOUNTED CARRIER. INSTALL PER AUREQUIREMENTS.
P-3	LAVATORY	1 1/2"	1/2"	1/2"	WALL HUNG TYPE. PROVIDE WITH SINGLE FAUCET, GRID WASTE, 17 GA P-TRAP, FLEXIN WITH STOPS, TRAP INSULATION KIT, FLOOR MOUNTED CONCEALED ARM CARRIER, AND COUNTER POINT OF USE THERMAL MIXING VALVE.
P-3A	LAVATORY (HANDICAPPED)	1 1/2"	1/2"	1/2"	WALL HUNG TYPE. PROVIDE WITH SINGLE FAUCET, GRID WASTE, 17 GA P-TRAP, FLEXII WITH STOPS, TRAP INSULATION KIT, FLOOR MOUNTED CONCEALED ARM CARRIER, AND COUNTER POINT OF USE THERMAL MIXING VALVE. INSTALL PER ADA REQUIREMENTS.
P-4	WATER COOLER (HANDICAPPED)	1 1/2"	1/2"		DUAL HEIGHT WITH BOTTLE FILLING STATION, BARRIER FREE, WALL MOUNTED TYPE WIT BRASS STOPS, 17 GA. P-TRAP, AND WALL HANGER. INSTALL PER ADA REQUIREMENTS
P-4A	WATER COOLER (HANDICAPPED)	1 1/2"	1/2"		ADA HEIGHT WITH BOTTLE FILLING STATION, BARRIER FREE, WALL MOUNTED TYPE WITH BRASS STOPS, 17 GA. P-TRAP, AND WALL HANGER. INSTALL PER ADA REQUIREMENTS
P-5	MOP SINK	3"	1/2"	1/2"	24"x24" TERRAZZO CORNER TYPE SERVICE BASIN WITH WALL MOUNTED SERVICE SINK VACUUM BREAKER, WALL BRACE, 3" STAINLESS STEEL DRAIN, AND STAINLESS STEEL I
P-6	SHOWER (HANDICAPPED)	2"	1/2"	1/2"	FIELD CONSTRUCTED TILE ENCLOSURE WITH PRESSURE BALANCED ANTI-SCALD SHOWED HAND HELD SHOWER HEAD, GRAB BARS, SEAT, COMMERCIAL GRADE CURTAIN AND CU AND 2" STAINLESS STEEL DRAIN WITH 4"x4" SQUARE STRAINER. INSTALL PER ADA RE
P-7	CLASSROOM SINK	1 1/2"	1/2"	1/2"	21"x19"x7-1/2" DEEP, SINGLE COMPARTMENT STAINLESS STEEL SINK. PROVIDE WITH G FAUCET, WRIST BLADES, GRID STRAINER, 1 1/2" P-TRAP, FLEXIBLE SUPPLIES WITH ST UNDER COUNTER POINT OF USE THERMAL MIXING VALVE.
P-8	WASHING MACHINE BOX	2"	3/4"	3/4"	GALVANIZED STEEL, WALL RECESSED BOX WITH 1/2" HOT AND COLD WATER VALVES A CENTER DRAIN.
P-9	LAUNDRY SINK	2"	1/2"	1/2"	FREE STANDING LAUNDRY TUB WITH DECK MOUNTED SWIVEL FAUCET, GRID WASTE, 17 FLEXIBLE SUPPLIES WITH STOPS, AND UNDER COUNTER POINT OF USE THERMAL MIXIN

NOT BE INSTALLED IN A MANNER IN WHICH CONTACT WITH MASONRY PRODUCTS IS ALLOWED.

					W	VATE	r he	ATEF	R SCHEDULE
MARK	CAPACITY	WATER	TEMP.	RECOVERY		ELECTRIC	CAL DATA		DEMADIZS
WH#	(GALLONS)	ENT •F	LVG °F	100° RISE	VOLTS	Hz	PHASE	KW	REMARKS
1	50	40	140	61	208	60	3	15.0	GLASS-LINED, FOAM INSULATED, ENERGY MISER TYPE WITH TANK, T&P RELIEF VALVE, AUXILIARY DRAIN PAN AND HEA

	HOT WATER CIRCULATING PUMP SCHEDULE														
MARK	CONTROL	CAPACITY	T.D.H.	MAX	PUMP	FLANGE	MOTOR	ELEC	CTRICAL	DATA					
CP#	WITH	GPM	FEET	RPM	CONSTRUCTION	CONN.	HP	VOLTS	Hz	PHASE					
1	STRAP ON AQUASTAT	10	15	1800	BRONZE	3/4"	1/8	120	60	1	FOR				

![](_page_64_Figure_9.jpeg)

J 2"VTR

3" J 3"TGFD P−8 ≪≪≪

SANITARY WASTE RISER

![](_page_64_Picture_14.jpeg)

# PLUMBING FIXTURE CONNECTION SCHEDULE

![](_page_65_Figure_0.jpeg)

HVAC KEY NOTES

- POSITION ON FLOOR OF EQUIPMENT AREA. INCLUDE A FIBERGLASS AUXILIARY DRAIN PAN BENEATH UNIT. DRAIN PAN IS TO BE 2 INCHES LARGER THAN UNIT IN ALL DIRECTIONS. EXTEND CONDENSATE DRAIN LINE FROM FULL SIZE OF UNIT OPENING TO NEAREST DRAIN. DRAIN LINE SHALL BE COMPLETELY INSULATED AND SUPPORTED EVERY 48 INCHES. INSTALL FLOAT SWITCH IN P-TRAP OF DRAIN LINE TO AUTOMATICALLY SHUT DOWN UNIT AS DRAINAGE SYSTEM FLOODS. ADDITIONALLY, A FLOAT SWITCH SHALL BE INSTALLED IN THE DRAIN PAN TO AUTOMATICALLY SHUT DOWN UNIT AS DRAIN PAN FLOODS. ELEVATE UNIT IN DRAIN PAN TO ACCOMMODATE INSTALLATION OF CONDENSATE P-TRAP.
- (2) SUPPLY AND RETURN AIR DUCTWORK SHALL BE EXTENDED FROM FULL SIZE OF UNIT OPENING WITH TRANSITION TO INDICATED DUCT SIZE. ROUTE DUCT SYSTEMS GENERALLY AS INDICATED WITH OFFSETS TO AVOID OBSTRUCTIONS. IT IS INTENDED THE DUCTWORK SHALL BE INSTALLED BETWEEN AND/OR THROUGH THE ROOF JOISTS. RETURN AIR DUCTWORK SHALL BE ROUTED GENERALLY AS INDICATED, UNLESS OTHERWISE NOTED. BRANCH DUCTWORK SHALL BE EXTENDED FROM THE TRUNK DUCT SYSTEMS FOR CONNECTION OF DESIGNATED AIR DEVICES. INCLUDE A MANUAL VOLUME DAMPER IN EACH BRANCH DUCT. BALANCE AIR DEVICE TO INDICATED AIR FLOW QUANTITIES. FIRE DAMPERS SHALL BE INCLUDED WHERE DUCTWORK PASSES THROUGH FIRE RATED WALLS.
- (3) SUPPLY OR RETURN AIR BRANCH DUCT TO BE EXTENDED FROM TRUNK DUCT AND TURNED DOWN BETWEEN ATTIC FLOOR AND THE ABOVE CEILING OF THE SPACE BELOW. ROUTE DUCT BELOW ATTIC FLOOR GENERALLY AS INDICATED WITH MANUAL VOLUME DAMPERS IN EACH BRANCH DUCT. BALANCE AIR DEVICE TO INDICATED AIR FLOW.
- AND OVER FOR CONNECTION TO OUTDOOR AIR INTAKE MANIFOLD. INCLUDE IN VERTICAL RISE OF BRANCH DUCTS A MANUAL VOLUME DAMPER AND MOTORIZED DAMPER. BALANCE MANUAL VOLUME DAMPER TO INDICATED AIR FLOW. THE MOTORIZED DAMPER SHALL BE INTERLOCKED WITH TEMPERATURE CONTROLLER SUCH THAT DAMPER SHALL BE OPEN DURING OCCUPIED HOURS AND CLOSED DURING UNOCCUPIED HOURS.
- (5) WALL MOUNTED OUTDOOR AIR INTAKE LOUVER SHALL BE WEATHERPROOF AND HURRICANE RATED. POSITION LOUVER IN WALL AS INDICATED ON ARCHITECTURAL PLANS. LOUVER SIZE SHALL BE AS INDICATED ON PLANS. INCLUDE WITH LOUVER INSTALLATION A FULL SIZE PLENUM EXTENDING FOR CONNECTION TO THE OUTDOOR AIR INTAKE MANIFOLD DUCTWORK. ROUTE MANIFOLD GENERALLY AS INDICATED HIGH ABOVE OTHER DUCT SYSTEMS THROUGH AND BETWEEN ROOF JOISTS. COORDINATE CONNECTION OF BRANCH DUCTS TO RETURN AIR SYSTEMS.
- (6) CEILING MOUNTED EXHAUST FAN WITH DISCHARGE DUCTWORK ROUTED FOR TERMINATION ON EXTERIOR WALL WITH FULL SIZE VENT CAP. EXHAUST FAN IS TO HAVE INTEGRAL BACKDRAFT DAMPER. OPERATION OF FAN SHALL BE AS INDICATED ON SCHEDULE.
- (7) OUTDOOR HEAT PUMP UNIT MOUNTED ON 4 INCH THICK CONCRETE HOUSEKEEPING PAD. PAD SHALL BE 4 INCHES LARGER THAN UNIT IN ALL DIRECTIONS. BOTTOM OF UNIT SUPPORTS SHALL BE 3 INCHES MINIMUM ABOVE GRADE. SECURE UNIT TO PAD AT EACH CORNER.
- (8) WALL MOUNTED TEMPERATURE CONTROLLER SHALL BE ELECTRONIC TYPE, SEVEN DAY PROGRAMMABLE WITH OCCUPIED/UNOCCUPIED MODES, AUXILIARY EQUIPMENT CONTACTS, MODE SELECTION, AUTOMATIC CHANGE OVER AND BATTERY BACK-UP.
- (9) CLOTHES DRYER EXHAUST VENT TO EXTEND UP FROM DRYER UP AND OVER FOR TERMINATION ON EXTERIOR WALL.
- (1) EXISTING OUTDOOR HEAT PUMP UNIT SERVING THE EXISTING CLASSROOM SHALL BE REMOVED AND RELOCATED IN NEW LOCATION. CONTRACTOR TO VERIFY SUPPLY AND RETURN DUCTWORK SIZE AND TO EXTEND NEW DUCTWORK FROM THE NEW LOCATION OF THE UNIT OVER FOR CONNECTION TO THE EXISTING REMAINING DUCTWORK SERVING THE SAME CLASSROOM AREA. INCLUDE IN DUCTWORK NEW FIRE DAMPERS WHERE DUCT PASSES THROUGH NEW FIRE RATED WALL.
- (1) DUCT MOUNTED SMOKE DETECTOR IN SUPPLY AND RETURN AIR DUCTS. DETECTOR SHALL BE INTERLOCKED WITH FIRE ALARM SYSTEM AND AIR HANDLING UNIT. UPON ACTIVATION OF THE SMOKE DAMPER THE AIR HANDLING UNIT SHALL AUTOMATICALLY SHUT DOWN AND A SIGNAL SENT TO THE FIRE ALARM PANEL.
- (12) REFRIGERANT PIPING SHALL BE ROUTED BELOW GRADE UNDER SIDEWALK OVER TO TURN UP IN ATTIC STAIRWELL CLOSET. REFRIGERANT PIPING SHALL TURN UP TO ABOVE CEILING ELEVATION AND OVER FOR CONNECTION TO RESPECTIVE AIR HANDLING UNITS MOUNTED ON ATTIC FLOOR. TURN PIPING DOWN FOR CONNECTION TO UNIT. SUPPORT PIPING IN VERTICAL AND HORIZONTAL DIRECTION EVERY 48 INCHES WITH UNISTRUT TYPE SUPPORT SYSTEM.
- (13) EXISTING PACKAGED HEAT PUMP UNIT SHALL REMAIN. DUCTWORK SHALL BE DISCONNECTED FROM UNIT UP TO POINT OF DESIGNATION SHOWN ON PLANS TO ALLOW FOR NEW FIRE RATED WALL AND WINDOWS TO BE INSTALLED. CONTRACTOR TO VERIFY EXISTING DUCTWORK SIZE AND ROUTING TO REROUTE NEW DUCTWORK OF SAME SIZE THROUGH THE NEW FIRE RATED WALL WITH NEW FIRE DAMPERS.

![](_page_65_Figure_16.jpeg)

![](_page_65_Figure_17.jpeg)

![](_page_66_Figure_0.jpeg)

![](_page_66_Figure_3.jpeg)

![](_page_67_Figure_0.jpeg)

	SPLIT SYSTEM AIR TO AIR HEAT PUMP UNIT SCHEDULE																														
MARK	AREA	AHU DATA									ELECTRIC HEAT DATA						COOLING CAPACITY @ ARL STANDARD CONDITIONS			HEATING CAPACITY @ ARI STANDARD CONDITIONS			MIN	COMPR	OUTDOOR	н					
AHU/ HPU#	SERVED	UNIT TONNAGE	TOTAL CFM	OA CFM	ESF	- MO	)TOR HP	VOLTS	Hz	PHASE	HEAT STAGES	KW	MCA	MOCP	EDB °F	EWB °F	AMBIEN °F	TOTAL BTU/HR	SENSIBLE BTU/HR	EDB °F	AMBIENT °F	TOTAL BTU/HR	SEER	RLA	FAN FLA	VOLTS	Hz	PHASE	МСА	MOCP	REMARKS
1	MEDIA CENTER	7.5	2850	300	0.5	" 2	2.0	208	60	3	2	18.7	72	80	80	67	95	88400	68600	70	47	78600	11.3	28.6	2.2	208	60	3	38	60	12346
2	CLASSROOM	3.5	1275	150	0.5	" 3,	/4	208	60	3	1	10.8	44	45	80	67	95	42,000	31,000	70	47	26,500	14.0	13.5	1.1	208	60	3	18	30	12345
3	CLASSROOM	4.0	1450	150	0.5	" 3,	/4	208	60	3	1	10.8	45	45	80	67	95	48,000	34,000	70	47	29,000	14.0	13.7	1.1	208	60	3	18	30	12345
4	CLASSROOM	4.0	1500	150	0.5	" 3,	/4	208	60	3	1	14.2	45	45	80	67	95	48,000	34,000	70	47	29,000	14.0	13.7	1.1	208	60	3	18	30	12345
5	CLASSROOM	5.0	1600	175	0.5	" 3,	/4	208	60	3	1	14.2	45	45	80	67	95	53,900	44,000	70	47	35,600	14.0	15.9	1.1	208	60	3	21	35	12345
6	CLASSROOM	3.0	1100	140	0.5	" 1,	/2	208	60	3	1	7.2	30	30	80	67	95	36,000	27,000	70	47	21,000	14.0	9.9	0.8	208	60	3	13	20	12345
7	CLASSROOM	4.0	1400	150	0.5	" 3,	/4	208	60	3	1	14.2	45	45	80	67	95	48,000	34,000	70	47	29,000	14.0	13.7	1.1	208	60	3	18	30	12345
8	CLASSROOM	3.0	1150	140	0.5	" 1,	/2	208	60	3	1	7.2	30	30	80	67	95	36,000	27,000	70	47	21,000	14.0	9.9	0.8	208	60	3	13	20	12345
9	CLASSROOM	3.0	1125	140	0.5	" 1,	/2	208	60	3	1	7.2	30	30	80	67	95	36,000	27,000	70	47	21,000	14.0	9.9	0.8	208	60	3	13	20	12345
10	CLASSROOM	5.0	1605	175	0.5	" 3,	/4	208	60	3	1	14.2	45	45	80	67	95	53,900	44,000	70	47	35,600	14.0	15.9	1.1	208	60	3	21	35	12345
11	ALTERNATE CLASSROOM	3.5	1200	140	0.5	" 3,	/4	208	60	3	1	10.8	44	45	80	67	95	42,000	31,000	70	47	26,500	14.0	13.5	1.1	208	60	3	18	30	12345
12	ALTERNATE CLASSROOM	3.5	1350	150	0.5	" 3,	/4	208	60	3	1	10.8	44	45	80	67	95	42,000	31,000	70	47	26,500	14.0	13.5	1.1	208	60	3	18	30	12345

NOTES:

(1) THE HEAT PUMP SHALL OPERATE AS STAGE 1 HEATING. THE ELECTRIC STRIP HEAT SHALL OPERATE AS STAGE 2 HEATING AND DEFROST CYCLE. DURING STAGE 2 HEATING, THE COMPRESSOR AND THE ELECTRIC STRIP HEAT SHALL OPERATE SIMULTANEOUSLY. (2) PROVIDE SINGLE POINT POWER CONNECTION FOR AIR HANDLING UNIT BLOWER AND STRIP HEAT.

(3) provide air handling unit with bo-polar ionization device for air purification.

④ DUCT MOUNTED SMOKE DETECTORS TO BE INCLUDED IN SUPPLY AND RETURN AIR DUCTWORK. INSTALLATION SHALL BE PER MANUFACTURER'S WRITTEN INSTRUCTIONS.

5 BASIS OF DESIGN: TRANE MODELS – 4TWA AND TEM4 SERIES.

6 BASIS OF DESIGN: TRANE MODELS – TWA AND TWE SERIES.

	AIR	DEVICE	SCHED	ULE	
MARK	CFM	MAX. NC	AIR DEVICE SIZE	DUCT CONNECTION SIZE	REMARKS (TYPE)
0-75	0-75	25	6"x6"	6"ø	CD
76–150	76–150	25	9"x6"	7"ø	CD
151-200	151-200	25	9"×9"	8"ø	CD
201-300	201-300	25	9"X9"	10"ø	CD
101-200	101-200	25	12"x6"	SEE PLANS	SWR
201-400	201-400	25	14"x6"	SEE PLANS	SWR
1-300	1-300	25	8"x8"	SEE PLANS	RAR
301-550	301-550	25	12"x12"	SEE PLANS	RAR
550-999	550-999	25	18"x18"	SEE PLANS	RAR
1000-2000	1000-2000	25	24"x24"	SEE PLANS	RAR

1. PROVIDE 24"x24" PANEL FOR ALL AIR DEVICES IN LAY-IN CEILING. 2. PROVIDE DUCT CONNECTION SIZE SHOWN UNLESS OTHERWISE NOTED ON PLANS.

DUTS	IDE	AIR	VENT	ILA	TION	RATES
IAQ	PR(	DCED	URE		2015	5 IMC

				LDUNL	2013						
	FACILITY TYPE	ZONE USE	ZONE FLOOR AREA (SF) Az	ZONE MAX OCCUPANCY Rp	TABLE 6.1 OA/person (Rp)	TABLE cfm/ (Ra	6.1 ′ft2 ı)	Pz*Rp	Az*Ra	TABLE 6.2 VENTILATION EFF. (Ez)	ZONE OA (CFM)
NTER	EDUCATIONAL	MEDIA CENTER	2750	60	10.0	0.1	2	600	330	0.8	1163 (3)
-)	10			AIR CHANGES/	HOUR	6.2	2				
٨Q	300			OA PER VRP (	3)	1163	CFM	VRP 0	A CFM/F	PERSON	19.4
_ (Vs)	2850			OA PER IAQ (	1)	300	CFM	IAQ OA	CFM/PI	ERSON	5.0
	2550			OA SAVINGS		863	CFM				
CTOR(R)	0.89										
	0.8			OA DRY BULB		95	•F				
Y	STANDING (DESK WORK)			OA WET BULB		78	•F				
	В			COIL LVG. DRY	BULB	55.0	۰F				
	CONSTANT			COIL LVG. WET	BULB	53.0	۰F				
	CONSTANT										

IT 'N	CONTAMINANT SOURCE	MAXIMUM THRESHOLD VALUE (PPM)	STEADY STATE USING VRP	STEADY STATE USING IAQ	STEADY STATE LEVEL OK @ REDUCED OA?
	PEOPLE	100	0.01112	0.00108	YES
	PEOPLE	250	0.00168	0.00043	YES
	PEOPLE	25	0.01557	0.01038	YES
	PEOPLE	1.0	0.00252	0.00025	YES
EK)	PEOPLE	200	0.00019	0.00007	YES
	PEOPLE	5000	1019	2802	YES
	PEOPLE	2.0	0.00011	0.00001	YES
	PEOPLE	100	0	0	YES
DE	PEOPLE	10	0	0	YES
	PEOPLE	N/A	1.68094	1.68094	YES
	PEOPLE	200	0	0	YES
ORIDE	PEOPLE	25	0.00077	0.00012	YES
	PEOPLE	1000	0.00998	0.00998	YES
IANE	PEOPLE	5	0	0	YES
IYLENE	PEOPLE	100	0.00037	0.00004	YES
	PEOPLE	100	0.00533	0.00052	YES
E	PEOPLE	350	0.00077	0.00010	YES
	PEOPLE	100	0.00230	0.00022	YES
			IS IAQ ACCEPT. REDUCED OA L	ABLE AT _EVELS?	YES

1 IAQ PROCEDURE IN ACCORDANCE WITH THE ENGINEERED EXCEPTION FOUND IN 2015 IMC, SECTION 403.2 AND IN ACCORDANCE WITH ASHRAE 62.1-2013, SECTION 6.1.2 & 6.3 BY UTILIZING BIPOLAR IONIZATION TECHNOLOGY. (2) ALL VALUES LISTED IN PARTS PER MILLION (PPM), UNLESS OTHERWISE NOTED. (3) outside air required per ventilation rate procedure (vrp).

						FAN	N SCHE	EDUL	E				
	TOTAL	TSP	MAX	TYPE	TYPE	INTERLOCK	MOTOR	MAX	ELEC	CTRICAL	DATA	FAN	
MARK	CFM	IN WC	RPM	DRIVE	FAN	WITH	HP/WATTS	SONES	VOLTS	Hz	PHASE	SERVICE	REMARKS
EF#1	70	0.5	777	DIRECT	CEILING MOUNTED	LIGHT SWITCH	80 W	2.0	115	60	1	TOILET	12345
EF#2	210	0.5	980	DIRECT	CEILING MOUNTED	LIGHT SWITCH	172 W	4.5	115	60	1	GIRLS RR	12345
EF#3	210	0.5	980	DIRECT	CEILING MOUNTED	LIGHT SWITCH	172 W	4.5	115	60	1	BOYS RR	12345
EF#4	70	0.5	777	DIRECT	CEILING MOUNTED	LIGHT SWITCH	80 W	2.0	115	60	1	TOILET	12345
EF <b>#</b> 5	70	0.5	777	DIRECT	CEILING MOUNTED	LIGHT SWITCH	80 W	2.0	115	60	1	STAFF	12345
EF#6	70	0.5	777	DIRECT	CEILING MOUNTED	LIGHT SWITCH	80 W	2.0	115	60	1	TOILET	12345
EF#7	70	0.5	777	DIRECT	CEILING MOUNTED	LIGHT SWITCH	80 W	2.0	115	60	1	TOILET	12345
EF#8	70	0.5	777	DIRECT	CEILING MOUNTED	LIGHT SWITCH	80 W	2.0	115	60	1	TOILET	12345
EF <b>#</b> 9	70	0.5	777	DIRECT	CEILING MOUNTED	LIGHT SWITCH	80 W	2.0	115	60	1	TOILET	12345
EF#10	70	0.5	777	DIRECT	CEILING MOUNTED	LIGHT SWITCH	80 W	2.0	115	60	1	TOILET	12345
EF#11	70	0.5	777	DIRECT	CEILING MOUNTED	LIGHT SWITCH	80 W	2.0	115	60	1	TOILET	12345
EF#12	70	0.5	777	DIRECT	CEILING MOUNTED	LIGHT SWITCH	80 W	2.0	115	60	1	LAUNDRY	12345
EF <b>#</b> 13	70	0.5	777	DIRECT	CEILING MOUNTED	LIGHT SWITCH	80 W	2.0	115	60	1	JANITORS	12345

<u>NOTES:</u> PROVIDE WITH FAN SPEED CONTROLLER, CONTROLLER SHALL BE MOUNTED TO FAN. (2) PROVIDE WITH ALUMINUM GRILLE. PLASTIC GRILLES SHALL NOT BE ACCEPTABLE (3) PROVIDE WITH INTEGRAL BACKDRAFT DAMPER. 4 PROVIDE WITH INTEGRAL DISCONNECT.

5 provide with thermal overload.

![](_page_67_Figure_17.jpeg)

o OUTDOOR

r RETURN

s SPACE

	MECHANIC	CAL LEGEND
AF	F	ABOVE FINISHED FLOOR
AH	IU	AIR HANDLING UNIT
CE	)	CEILING DIFFUSER
CF	М	CUBIC FEET PER MINUTE
EF	-	EXHAUST FAN
FD	)	FIRE DAMPER
M	/D	MANUAL VOLUME DAMPER
04	4	OUTDOOR AIR
R/	4	RETURN AIR
R/	AR	RETURN AIR REGISTER
SA		SUPPLY AIR
SV	VR	SIDEWALL REGISTER
10	; 	TRANSFER GRILLE
TY	Ϋ́Ρ	TYPICAL
	<u> 1</u> –	CEILING DIFFUSER WITH THROW INDICA
		EXHAUST/RETURN AIR DEVICE
<u>ک</u>	× W X H ×	DUCTWORK (DIMENSIONS: WIDTH X HEI
W X H	××××××××××××××××××××××××××××××××××××××	FLEX DUCT TAKE-OFF WITH AIR-SCOO SPIN-IN TAP AND BALANCING DAMPER
J.		ELBOW WITH TURNING VANES
کــــــــــــــــــــــــــــــــــــ		BULLHEAD TEE WITH TURNING VANES AND SPLITTER DAMPER
<u>کے ج</u>		45° SHOE-FITTING TAKE-OFF
		DUCT CONNECTION OVER AIR DEVICE
		RETURN AIR DUCT IN SECTION
		SUPPLY AIR DUCT IN SECTION
<u> </u>		DUCT MOUNTED SMOKE DETECTOR
M-		MOTORIZED DAMPER
(	D <sub>#</sub>	THERMOSTAT WITH EQUIPMENT # SERV MOUNT 48" A.F.F.
L		MANUAL VOLUME DAMPER
•	▶	5/8" DOOR UNDERCUT
Ø		SPIRAL (ROUND) DUCT
e	<del>)</del>	FLAT OVAL DUCT

		0U	tside a	IR VENTI	LATION	RATF	S				
		IA	Q PROC	EDURE	- 2015	IMC	-				
ZONE TAG	FACILITY TYPE	ZONE USE	ZONE FLOOR AREA (SF) Az	ZONE MAX OCCUPANCY Rp	TABLE 6.1 OA/person (Rp)	TABLE cfm/ (Ro	6.1 ft2	Pz*Rp	Az*Ra	TABLE 6.2 VENTILATION EFF. (Ez)	ZONE OA (CFM)
CLASSROOMS	EDUCATIONAL	CLASSROOMS (9+)	700	30	10.0	0.1	2	300	84	0.8	480 <b>(</b>
ZONE HEIGHT (FT)	9			AIR CHANGES/	HOUR	10.	5				
DESIRED OA - IAQ	140			OA PER VRP (	3)	480	CFM	VRP 0	A CFM/F	PERSON	16.0
SUPPLY AIR FULL (Vs)	1100			OA PER IAQ (	1)	140	CFM	IAQ OA	CFM/P	ERSON	4.7
RETURN AIR (Vr)	960			OA SAVINGS	<u> </u>	340	CFM				
RECIRC. FLOW FACTOR(R)	0.88										
VENT. EFF. (Ez)	0.8			OA DRY BULB		95	۴F				
PHYSICAL ACTIVITY	STANDING (DESK WORK)			OA WET BULB		78	۴F				
FILTER LOCATION	B			COIL LVG. DRY	' BULB	55.0	•F				
HVAC FLOW TYPE	CONSTANT			COIL LVG. WET	BULB	53.0	•F				
OA FLOW TYPE	CONSTANT										
OF CONCERN	SOURCE	THRESHOLD VALUE (PPM)	USING VRP	USING IAQ	LEVEL OK @ REDUCED OA?						
ΔΩΕΤΔΙ DEHYDE	ΡΕΩΡΙ Ε	100	0.01113	0.00123	YES						
ACETONE	PEOPLE	250	0.00177	0.00052	YES						
AMMONIA	PEOPLE	25	0.01844	0.01266	YES						
BENZENE	PEOPLE	1.0	0.00252	0.00028	YES						
2-BUTANONE (MEK)	PEOPLE	200	0.00021	0.00009	YES						
CARBON DIOXIDE	PEOPLE	5000	1148	2973	YES						
CHLOROFORM	PEOPLE	2.0	0.00011	0.00001	YES						
DIOXANE	PEOPLE	100	0	0	YES						
HYDROGEN SULFIDE	PEOPLE	10	0	0	YES						
METHANE	PEOPLE	N/A	1.68094	1.68094	YES						
METHANOL	PEOPLE	200	0	0	YES						
METHYLENE CHLORIDE	PEOPLE	25	0.00079	0.00015	YES						
PROPANE	PEOPLE	1000	0.00998	0.00998	YES						
TETRACHLOROETHANE	PEOPLE	5	0	0	YES						
TETRACHLOROETHYLENE	PEOPLE	100	0.00037	0.00004	YES						
TOLUENE	PEOPLE	100	0.00533	0.00059	YES						
TRICHLOROETHANE	PEOPLE	350	0.00078	0.00011	YES						
XYLENE	PEOPLE	100	0.00230	0.00025	YES						

1 IAQ PROCEDURE IN ACCORDANCE WITH THE ENGINEERED EXCEPTION FOUND IN 2015 IMC, SECTION 403.2 AND IN ACCORDANCE WITH ASHRAE 62.1-2013, SECTION 6.1.2 & 6.3 BY UTILIZING BIPOLAR IONIZATION TECHNOLOGY.

IS IAQ ACCEPTABLE AT

REDUCED OA LEVELS?

YES

(2) ALL VALUES LISTED IN PARTS PER MILLION (PPM), UNLESS OTHERWISE NOTED.

(3) outside air required per ventilation rate procedure (vrp).

NOTES:

![](_page_67_Picture_23.jpeg)

![](_page_67_Figure_25.jpeg)

![](_page_67_Picture_26.jpeg)

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		0U IA	ISIDE AI Q PROC	IR VENT EDURE	LATION - 2015	RATE: IMC	S				
ZONE TAG	FACILITY TYPE	ZONE USE	ZONE FLOOR AREA (SF) Az	ZONE MAX OCCUPANCY Rp	TABLE 6.1 OA/person (Rp)	TABLE cfm/f (Ra)	6.1 t2	Pz*Rp	Az*Ra	TABLE 6.2 VENTILATION EFF. (Ez)	ZONE OA (CFM)
AHU#2 CORRIDOR	EDUCATIONAL	CORRIDORS	315	0	0	0.06	5	0	19	0.8	24 3
		1		1				1			1
ZONE HEIGHT (FT)	9			AIR CHANGES/	HOUR	2.7					
DESIRED OA – IAQ	10			OA PER VRP (	3)	24	CFM	VRP 0	A CFM/F	PERSON	-
SUPPLY AIR FULL (Vs)	125			OA PER IAQ <b>(</b>	1)	10	CFM	IAQ OA	CFM/P	ERSON	_
RETURN AIR (Vr)	115			OA SAVINGS		14	CFM				
RECIRC. FLOW FACTOR(R)	0.92										
VENT. EFF. (Ez)	0.8			OA DRY BULB		95 <b>'</b>	F				
PHYSICAL ACTIVITY	STANDING (DESK WORK)			OA WET BULB		78 <b>·</b>	F				
FILTER LOCATION	В			COIL LVG. DRY	′ BULB	55.0	۴F				
HVAC FLOW TYPE	CONSTANT			COIL LVG. WET	BULB	53.0	۴F				
OA FLOW TYPE	CONSTANT										
CONTAMINANT OF CONCERN	CONTAMINANT SOURCE	MAXIMUM THRESHOLD VALUE (PPM)	STEADY STATE USING VRP	STEADY STATE USING IAQ	STEADY STATE LEVEL OK @ REDUCED OA?	(1	– R)	Vr			
ACETALDEHYDE	PEOPLE	100	0.01109	0.00082	YES						
ACETONE	PEOPLE	250	0.00126	0.00009	YES			Ef	A		
AMMONIA	PEOPLE	25	0.00173	0.00013	YES			<b>L</b>	j		
BENZENE	PEOPLE	1.0	0.00250	0.00019	YES		_	V	RVr		
2-BUTANONE (MEK)	PEOPLE	200	0.00010	0.00001	YES	Vo	, Co				
CARBON DIOXIDE	PEOPLE	5000	0	0	YES				<b>-</b>		
CHLOROFORM	PEOPLE	2.0	0.00010	0.00001	YES					Ef B	
DIOXANE	PEOPLE	100	0	0	YES				L	/	
HYDROGEN SULFIDE	PEOPLE	10	0	0	YES					Fr (Vr + V	′o)
METHANE	PEOPLE	N/A	1.68094	0	YES						
METHANOL	PEOPLE	200	0	0	YES					V	
METHYLENE CHLORIDE	PEOPLE	25	0.00069	0.00005	YES						
PROPANE	PEOPLE	1000	0.00998	0	YES						OCCUPIFD
TETRACHLOROETHANE	PEOPLE	5	0	0	YES						ZONE
TETRACHLOROETHYLENE	PEOPLE	100	0.00037	0.00003	YES						e, N, Cs
TOLUENE	PEOPLE	100	0.00531	0.00039	YES						
TRICHLOROFTHANF	PFOPI F	350	0.0007.3	0.00005	YFS						
XYI FNF	PFOPI F	100	0.00230	0.00017	YES				<u>N(</u>	<u>UIES:</u>	
			IS IAQ ACCEPT REDUCED OA I	ABLE AT LEVELS?	YES				AS SY FC	STEM SCHEMAT STEM SCHEMAT OR USE WITH TH	IS (APPENDIX IC FOR MASS E HE IAQ PROCED

1 IAQ PROCEDURE IN ACCORDANCE WITH THE ENGINEERED EXCEPTION FOUND IN 2015 IMC, SECTION 403.2 AND IN ACCORDANCE WITH ASHRAE 62.1-2013, SECTION 6.1.2 & 6.3 BY UTILIZING BIPOLAR IONIZATION TECHNOLOGY.

(2) ALL VALUES LISTED IN PARTS PER MILLION (PPM), UNLESS OTHERWISE NOTED. (3) outside air required per ventilation rate procedure (vrp).

UA	<u>NTITIES</u>
В	FILTER LOCATION
	VOLUMETRIC FLOW
	CONTAMINANT CONCENT

- CONTAMINANT CONCENTRATION AIR CHANGE EFFECTIVENESS
- FILTER EFFICIENCY FLOW REDUCTION FACTOR
- CONTAMINANT GENERATION RATE Ν RECIRCULATION FLOW FACTOR R

SUBSCRIPTS

OUTDOOR 0 RETURN

r	RETURI
S	SPACE

		OU IA	TSIDE AI Q PROC	r venti Edure	ILATION — 2015	RATES IMC				
ZONE TAG	FACILITY TYPE	ZONE USE	ZONE FLOOR AREA (SF) Az	ZONE MAX OCCUPANCY Rp	TABLE 6.1 OA/person (Rp)	TABLE 6.1 cfm/ft2 (Ra)	Pz*Rp	Az*Ra	TABLE 6.2 VENTILATION EFF. (Ez)	ZONE OA (CFM)
AHU#7 CORRIDORS	EDUCATIONAL	CORRIDORS	425	0	0	0.06	0	26	0.8	32 (3)
	0					47				
	9 10			AIL CHANGES	3	4.7				
SUPPLY AIR FULL (Vs)	300			OA PER IAO (	$\frac{3}{1}$	10 CFM			FRSON	
RETURN AIR (Vr)	200					22 CEM				
RECIRC FLOW FACTOR(R)	230			UA SAVINOS						
VENT FFF (Fz)	0.37					95 °F				
				OA WET BUILB		78 °F				
	(DESK WORK) B					55.0 °F				
HVAC FLOW TYPE	CONSTANT			COIL LVG. WET		530 °F				
OA FLOW TYPE	CONSTANT				DOLD	00.0 1				
					1					
CONTAMINANT OF CONCERN	CONTAMINANT SOURCE	MAXIMUM THRESHOLD VALUE (PPM)	STEADY STATE USING VRP	STEADY STATE USING IAQ	STEADY STATE LEVEL OK @ REDUCED OA?					
ACETALDEHYDE	PEOPLE	100	0.01109	0.00036	YES					
ACETONE	PEOPLE	250	0.00126	0.00004	YES					
AMMONIA	PEOPLE	25	0.00173	0.00006	YES					
BENZENE	PEOPLE	1.0	0.00250	0.00008	YES					
2–BUTANONE (MEK)	PEOPLE	200	0.00010	0.00000	YES					
CARBON DIOXIDE	PEOPLE	5000	0	0	YES					
CHLOROFORM	PEOPLE	2.0	0.00010	0.00000	YES					
DIOXANE	PEOPLE	100	0	0	YES					
HYDROGEN SULFIDE	PEOPLE	10	0	0	YES					
METHANE	PEOPLE	N/A	1.68094	0	YES					
METHANOL	PEOPLE	200	0	0	YES					
METHYLENE CHLORIDE	PEOPLE	25	0.00069	0.00002	YES					
PROPANE	PEOPLE	1000	0.00998	0	YES					
TETRACHLOROETHANE	PEOPLE	5	0	0	YES					
TETRACHLOROETHYLENE	PEOPLE	100	0.00037	0.00001	YES					
TOLUENE	PEOPLE	100	0.00531	0.00017	YES					
TRICHLOROETHANE	PEOPLE	350	0.00073	0.00002	YES					
XYI FNF	PEOPLE	100	0.00230	0.00007	YES					

<u>NOTES:</u>  $\overline{(1)}$  IAQ PROCEDURE IN ACCORDANCE WITH THE ENGINEERED EXCEPTION FOUND IN 2015 IMC, SECTION 403.2 AND IN ACCORDANCE WITH ASHRAE 62.1–2013, SECTION 6.1.2 & 6.3 BY UTILIZING BIPOLAR IONIZATION TECHNOLOGY.

IS IAQ ACCEPTABLE AT

REDUCED OA LEVELS?

YES

 $\bigcirc$  ALL VALUES LISTED IN PARTS PER MILLION (PPM), UNLESS OTHERWISE NOTED.

 $\bigcirc$  OUTSIDE AIR REQUIRED PER VENTILATION RATE PROCEDURE (VRP).

		UU AI	ISIDE A	ir venti Edure	ilation — 2015	RATES IMC				
ZONE TAG	FACILITY TYPE	ZONE USE	ZONE FLOOR AREA (SF) Az	ZONE MAX OCCUPANCY Rp	TABLE 6.1 OA/person (Rp)	TABLE 6.1 cfm/ft2 (Ra)	Pz*Rp	Az*Ra	TABLE 6.2 VENTILATION EFF. (Ez)	ZO (
AHU#3,4 CORRIDORS	EDUCATIONAL	CORRIDORS	180	0	0	0.06	0	19	0.8	
	0					0.7				
	9			AIR CHANGES/						
DESIRED UA - IAQ	10			OA PER VRP (	<u>್ರ</u>	24 CFM			PERSUN	
SUPPLY AIR FULL (VS)	150			OA PER IAQ (	$\cup$	10 CFM	IAQ OA	CFM/P	ERSUN	
RETURN AIR (Vr)	140			OA SAVINGS		14 CFM				
RECIRC. FLOW FACTOR(R)	0.92									
VENT. EFF. (Ez)	0.8			OA DRY BULB		95 °F				
PHYSICAL ACTIVITY	(DESK WORK)			OA WET BULB		78 °F				
FILTER LOCATION	В			COIL LVG. DRY	/ BULB	55.0 °F				
HVAC FLOW TYPE	CONSTANT			COIL LVG. WET	BULB	53.0 °F				
OA FLOW TYPE	CONSTANT									
CONTAMINANT OF CONCERN	CONTAMINANT SOURCE	MAXIMUM THRESHOLD VALUE (PPM)	STEADY STATE USING VRP	STEADY STATE USING IAQ	STEADY STATE LEVEL OK @ REDUCED OA?					
ACETALDEHYDE	PEOPLE	100	0.01109	0.00082	YES					
ACETONE	PEOPLE	250	0.00126	0.00009	YES					
AMMONIA	PEOPLE	25	0.00173	0.00013	YES					
BENZENE	PEOPLE	1.0	0.00250	0.00019	YES					
2-BUTANONE (MEK)	PEOPLE	200	0.00010	0.00001	YES					
CARBON DIOXIDE	PEOPLE	5000	0	0	YES					
CHLOROFORM	PEOPLE	2.0	0.00010	0.00001	YES					
DIOXANE	PEOPLE	100	0	0	YES					
HYDROGEN SULFIDE	PEOPLE	10	0	0	YES					
METHANE	PEOPLE	N/A	1.68094	0	YES					
METHANOL	PEOPLE	200	0	0	YES					
METHYLENE CHLORIDE	PEOPLE	25	0.00069	0.00005	YES					
PROPANE	PEOPLE	1000	0.00998	0	YES					
TETRACHLOROETHANF	PEOPI F	5	0	0	YES					
TETRACHI OROFTHYI ENF	PFOPI F	100	0.000.37	0.00003	YES					
	PFOPI F	100	0.00531	0.000.39	YES					
		350	0.00073	0.00005	YES					
XYI FNF		100	0.00230	0.00017	YES					
		100	1 0.00200	1 0.00017		1				

1 IAQ PROCEDURE IN ACCORDANCE WITH THE ENGINEERED EXCEPTION FOUND IN 2015 IMC, SECTION 403.2 AND IN ACCORDANCE WITH ASHRAE 62.1-2013, SECTION 6.1.2 & 6.3 BY UTILIZING BIPOLAR IONIZATION TECHNOLOGY.

(2) ALL VALUES LISTED IN PARTS PER MILLION (PPM), UNLESS OTHERWISE NOTED.

(3) outside air required per ventilation rate procedure (vrp).

		0U IA	TSIDE A Q PROC	R VENTI EDURE	ILATION – 2015	RATES IMC				
ZONE TAG	FACILITY TYPE	ZONE USE	ZONE FLOOR AREA (SF) Az	ZONE MAX OCCUPANCY Rp	TABLE 6.1 OA/person (Rp)	TABLE 6.1 cfm/ft2 (Ra)	Pz*Rp	Az*Ra	TABLE 6.2 VENTILATION EFF. (Ez)	ZONE OA (CFM)
AHU#10 CORRIDOR	EDUCATIONAL	CORRIDORS	550	0	0	0.06	0	33	0.8	41 (3)
	1	1								
ZONE HEIGHT (FT)	9			AIR CHANGES/	HOUR	5.5				
DESIRED OA – IAQ	35			OA PER VRP (	3)	41 CFM	VRP 0	A CFM/F	PERSON	-
SUPPLY AIR FULL (Vs)	450			OA PER IAQ <b>(</b>	1)	35 CFM	IAQ OA	CFM/P	ERSON	-
RETURN AIR (Vr)	415			OA SAVINGS		6 CFM				
RECIRC. FLOW FACTOR(R)	) 0.92									
VENT. EFF. (Ez)	0.8			OA DRY BULB		95 °F				
PHYSICAL ACTIVITY	STANDING (DESK WORK)			OA WET BULB		78 <b>°</b> F				
FILTER LOCATION	В			COIL LVG. DRY	′ BULB	55.0 °F				
HVAC FLOW TYPE	CONSTANT			COIL LVG. WET	BULB	53.0 °F				
OA FLOW TYPE	CONSTANT									
CONTAMINANT OF CONCERN	CONTAMINANT SOURCE	MAXIMUM THRESHOLD VALUE (PPM)	STEADY STATE USING VRP	STEADY STATE USING IAQ	STEADY STATE LEVEL OK @ REDUCED OA?					
ACETALDEHYDE	PEOPLE	100	0.01109	0.00080	YES					
ACETONE	PEOPLE	250	0.00126	0.00009	YES					
AMMONIA	PEOPLE	25	0.00173	0.00012	YES					
BENZENE	PEOPLE	1.0	0.00250	0.00018	YES					
2-BUTANONE (MEK)	PEOPLE	200	0.00010	0.00001	YES					
CARBON DIOXIDE	PEOPLE	5000	0	0	YES					
CHLOROFORM	PEOPLE	2.0	0.00010	0.00001	YES					
DIOXANE	PEOPLE	100	0	0	YES					
HYDROGEN SULFIDE	PEOPLE	10	0	0	YES					
METHANE	PEOPLE	N/A	1.68094	0	YES					
METHANOL	PEOPLE	200	0	0	YES					
METHYLENE CHLORIDE	PEOPLE	25	0.00069	0.00005	YES					
PROPANE	PEOPLE	1000	0.00998	0	YES					
TETRACHLOROETHANE	PEOPLE	5	0	0	YES					
TETRACHLOROETHYLENE	PEOPLE	100	0.00037	0.00003	YES					
TOLUENE	PEOPLE	100	0.00531	0.00038	YES					
TRICHLOROETHANE	PEOPLE	350	0.00073	0.00005	YES					
XYLENE	PEOPLE	100	0.00230	0.00017	YES					
	·	·	IS IAQ ACCEPT REDUCED OA I	ABLE AT _EVELS?	YES					

(1) IAQ PROCEDURE IN ACCORDANCE WITH THE ENGINEERED EXCEPTION FOUND IN 2015 IMC, SECTION 403.2 AND IN ACCORDANCE WITH ASHRAE 62.1–2013, SECTION 6.1.2 & 6.3 BY UTILIZING BIPOLAR IONIZATION TECHNOLOGY.

(2) ALL VALUES LISTED IN PARTS PER MILLION (PPM), UNLESS OTHERWISE NOTED.

 $\bigcirc$  OUTSIDE AIR REQUIRED PER VENTILATION RATE PROCEDURE (VRP).

![](_page_68_Figure_23.jpeg)

D) VENTILATION BALANCE EQUATIONS

		$\cap \square$	TSIDE AI	R VENTI		RATES				
	UUISIDE AIR VENTILATION RATES									
		IA	Y FRUC	EDURE	- 2013					
ZONE TAG	FACILITY TYPE	ZONE USE	ZONE FLOOR AREA (SF) Az	ZONE MAX OCCUPANCY Rp	TABLE 6.1 OA/person (Rp)	TABLE 6.1 cfm/ft2 (Ra)	Pz*Rp	Az*Ra	TABLE 6.2 VENTILATION EFF. (Ez)	ZONE OA (CFM)
AHU#5 CORRIDOR	EDUCATIONAL	CORRIDORS	700	0	0	0.06	0	42	0.8	53 3
							1			
ZONE HEIGHT (FT)	9			AIR CHANGES/	HOUR	4.3				
DESIRED OA – IAQ	35			OA PER VRP (	3	53 CFM	VRP 0	A CFM/F	PERSON	-
SUPPLY AIR FULL (Vs)	450			oa per iaq <b>(</b>	1)	35 CFM	IAQ OA	CFM/P	ERSON	_
RETURN AIR (Vr)	415			OA SAVINGS		18 CFM				
RECIRC. FLOW FACTOR(R)	0.92									
VENT. EFF. (Ez)	0.8			OA DRY BULB		95 °F				
PHYSICAL ACTIVITY	STANDING (DESK WORK)			OA WET BULB		78 <b>°</b> F				
FILTER LOCATION	В			COIL LVG. DRY	BULB	55.0 °F				
HVAC FLOW TYPE	CONSTANT			COIL LVG. WET	BULB	53.0 °F				
OA FLOW TYPE	CONSTANT									
							1			
CONTAMINANT OF CONCERN	CONTAMINANT SOURCE	THRESHOLD VALUE (PPM)	STEADY STATE USING VRP	STEADY STATE USING IAQ	LEVEL OK @ REDUCED OA?					
ACETALDEHYDE	PEOPLE	100	0.01109	0.00080	YES					
ACETONE	PEOPLE	250	0.00126	0.00009	YES					
AMMONIA	PEOPLE	25	0.00173	0.00012	YES					
BENZENE	PEOPLE	1.0	0.00250	0.00018	YES					
2–BUTANONE (MEK)	PEOPLE	200	0.00010	0.00001	YES					
CARBON DIOXIDE	PEOPLE	5000	0	0	YES					
CHLOROFORM	PEOPLE	2.0	0.00010	0.00001	YES					
DIOXANE	PEOPLE	100	0	0	YES					
HYDROGEN SULFIDE	PEOPLE	10	0	0	YES					
METHANE	PEOPLE	N/A	1.68094	0	YES					
METHANOL	PEOPLE	200	0	0	YES					
METHYLENE CHLORIDE	PEOPLE	25	0.00069	0.00005	YES					
PROPANE	PEOPLE	1000	0.00998	0	YES					
TETRACHLOROETHANE	PEOPLE	5	0	0	YES					
TETRACHLOROETHYLENE	PEOPLE	100	0.00037	0.00003	YES					
TOLUENE	PEOPLE	100	0.00531	0.00038	YES					
TRICHLOROETHANE	PEOPLE	350	0.00073	0.00005	YES					
XYLENE	PEOPLE	100	0.00230	0.00017	YES					
	1		IS IAQ ACCEPT. REDUCED OA L	ABLE AT _EVELS?	YES					

<u>101ES</u>  $\overline{1}$  IAQ PROCEDURE IN ACCORDANCE WITH THE ENGINEERED EXCEPTION FOUND IN 2015 IMC, SECTION 403.2 AND IN ACCORDANCE WITH ASHRAE 62.1-2013, SECTION 6.1.2 & 6.3 BY UTILIZING BIPOLAR IONIZATION TECHNOLOGY.

 $\bigcirc$  ALL VALUES LISTED IN PARTS PER MILLION (PPM), UNLESS OTHERWISE NOTED.

 $\overline{3}$  outside air required per ventilation rate procedure (VRP).

		OU	TSIDE AI	R VENT	ILATION	RATES				
		IA	Q PROC	EDURE	- 2015	IMC				
ZONE TAG	FACILITY TYPE	ZONE USE	ZONE FLOOR AREA (SF) Az	ZONE MAX OCCUPANCY Rp	TABLE 6.1 OA/person (Rp)	TABLE 6.1 cfm/ft2 (Ra)	Pz*Rp	Az*Ra	TABLE 6.2 VENTILATION EFF. (Ez)	ZONE OA (CFM)
AHU#12 CORRIDOR	EDUCATIONAL	CORRIDORS	300	0	0	0.06	0	18	0.8	23 3
	0					7 7				
	9			AIR CHANGES/		J.J 07 0FM				
SUDDLY AIR FULL (Va)	150			OA PER VRP (	$\frac{3}{1}$					_
DETUDN AIR FULL (VS)	100			UA PER IAQ (		10 CFM		CFM/P	ERSUN	_
RECIRC FLOW FACTOR(R)	0.93			UA SAVINGS		IS CFM				
VENT_FEF_(F7)	0.35					95 °F				
	STANDING					78 °F				
	(DESK WORK)					55.0 °C				
HVAC FLOW TYPE	CONSTANT			COIL LVG. WET		53.0 °F				
OA FLOW TYPE	CONSTANT			COIL LVG. WLI	DOLD	55.0 1				
	CONSTAINT									
CONTAMINANT OF CONCERN	CONTAMINANT SOURCE	THRESHOLD VALUE (PPM)	STEADY STATE USING VRP	STEADY STATE USING IAQ	LEVEL OK @ REDUCED OA?					
ACETALDEHYDE	PEOPLE	100	0.01109	0.00069	YES					
ACETONE	PEOPLE	250	0.00126	0.00008	YES					
AMMONIA	PEOPLE	25	0.00173	0.00011	YES					
BENZENE	PEOPLE	1.0	0.00250	0.00016	YES					
2–BUTANONE (MEK)	PEOPLE	200	0.00010	0.00001	YES					
CARBON DIOXIDE	PEOPLE	5000	0	0	YES					
CHLOROFORM	PEOPLE	2.0	0.00010	0.00001	YES					
DIOXANE	PEOPLE	100	0	0	YES					
HYDROGEN SULFIDE	PEOPLE	10	0	0	YES					
METHANE	PEOPLE	N/A	1.68094	0	YES					
METHANOL	PEOPLE	200	0	0	YES					
METHYLENE CHLORIDE	PEOPLE	25	0.00069	0.00004	YES					
PROPANE	PEOPLE	1000	0.00998	0	YES					
TETRACHLOROETHANE	PEOPLE	5	0	0	YES					
TETRACHLOROETHYLENE	PEOPLE	100	0.00037	0.00004	YES					
TOLUENE	PEOPLE	100	0.00531	0.00033	YES					
TRICHLOROETHANE	PEOPLE	350	0.00073	0.00005	YES					
XYLENE	PEOPLE	100	0.00230	0.00014	YES					
			IS IAQ ACCEPT. REDUCED OA L	ABLE AT _EVELS?	YES					

(2) ALL VALUES LISTED IN PARTS PER MILLION (PPM), UNLESS OTHERWISE NOTED.

 $\bigcirc$  OUTSIDE AIR REQUIRED PER VENTILATION RATE PROCEDURE (VRP).

![](_page_68_Picture_35.jpeg)

![](_page_68_Picture_37.jpeg)

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SYMBOL	DESCRIPTION	
7772	PANELBOARD – SEE RESPECTIVE PANELBOARD SCHEDULE.	
A/1	BRANCH CIRCUIT CONDUIT RUN CONCEALED IN WALL OR ABOVE CEILING. ARROWS INDICATE CIRCUIT HOMERUN, HASHMARKS INDICATE NUMBER OF CONDUCTORS, ABSENCE OF HASHMARKS INDICATES TWO CONDUCTORS PLUS GROUND. "A" DENOTES PANELBOARD SERVING CIRCUIT, "1" INDICATES CIRCUIT BREAKER SPACE IN PANELBOARD. SEE RESPECTIVE PANEL CIRCUIT SCHEDULE. MINIMUM CONDUCTOR SIZE = $\#12$ AWG.	OH     O
	INDICATES CONDUIT RUN UNDERGROUND.	
	NON-FUSED DISCONNECT, HEAVY DUTY (SAFETY) SWITCH – SIZE AND TYPE AS NOTED. TOP OF SWITCH 6'-6" A.F.F. PROVIDE MECHANICALLY FASTENED PHENOLIC LABEL.	
$\mathcal{N}$	ELECTRIC MOTOR - SEE RESPECTIVE EQUIPMENT SCHEDULE.	
#	20A, 125 VAC 2P., 3W., GROUNDING TYPE, DOUBLE DUPLEX RECEPTACLE. FLUSH WALL MOUNTED 18" A.F.F. WITH GROUND PIN FACING UP UNLESS NOTED OTHERWISE.	\$
-0	20A, 125 VAC 2P., 3W., GROUNDING TYPE, DUPLEX RECEPTACLE. FLUSH WALL MOUNTED 18" A.F.F. WITH GROUND PIN FACING UP UNLESS NOTED OTHERWISE.	
⇒ ⇒	INDICATES GROUND FAULT CIRCUIT INTERRUPTING RECEPTACLE. FLUSH WALL MOUNTED 18" A.F.F. WITH GROUND PIN FACING UP UNLESS NOTED OTHERWISE.	
νΦ	(2) 20A, 125 VAC 2P., 3W., GROUNDING TYPE, DUPLEX RECEPTACLES FLUSH MOUNTED IN FLOOR BOX WITH FLUSH FACEPLATE AND (2) TYPE "D2" DATA OUTLETS AS INDICATED ON TELECOM LEGEND. PROVIDE DEVICE MOUNTING BRACKETS FOR EACH DEVICE. ONE OF THE TWO DUPLEX RECEPTACLES SHALL BE SWITCHED ENTIRELY. FLOOR BOX EQUAL TO WIREMOLD CAT# RFB4 SERIES WITH COVER EQUAL TO	<b></b>
	WIREMOLD CAT# FPCTC(FINISH BY ARCHITECT). PROVIDE A MINIMUM 1" CONDUIT FOR CAT-5e CABLES ROUTED UNDERGROUND OVER TO NEAREST FULL WALL AND UP TO 6" ABOVE ACCESSIBLE CEILING.	. ↓
J	JUNCTION BOX LOCATION. SIZE AND TYPE AS REQUIRED.	
	INSTALL OUTLET TO MATCH PLUG ON EQUIPMENT.	<u></u>
Р	POWER RELAY TO INTERLOCK WITH 277V LIGHTS OR MECHANICAL CONTROLS EQUIPMENT. COORDINATE	P
C	INDICATES DEVICE FLUSH MOUNTED HORIZONTALLY 6" ABOVE COUNTERTOP OR IN BACKSPLASH.	DDC
EWC	COORDINATE DEVICE LOCATION WITH ELECTRIC WATER COOLER. MOUNT IN AN ACCESSIBLE LOCATION.	
	INDICATES WEATHER RESISTANT WIRING DEVICE WITH WEATHER PROOF IN-USE COVER PLATE.	
GFI	INDICATES GROUND FAULT CIRCUIT INTERRUPTER TYPE DEVICE.	ERC
R	INDICATES RED DEVICE WITH RED FACE PLATE	
		1 1

3. ALL SINGLE GANG AND TWO GANG DEVICES SHALL USE A 4 SQ. BOX WITH EXTENSION RING.

4. ALL MULTI – GANG DEVICES SHALL USE A COMMON COVER PLATE 5. ALL DEVICES (i.e. SWITCHES, RECEPTACLES, TELEPHONE OUTLETS, ETC.) SHALL BE GRAY WITH STAINLESS STEEL COVER PLATES. 6. A.F.F. INDICATES MOUNTING HEIGHT ABOVE FINISHED FLOOR.

7. ALL WIRING SHALL BE COPPER. 8. DO NO INSTALL OUTLETS BACK TO BACK.

- 9. PROVIDE INDICATES THE ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL.
- 10. WHERE MORE THAN 3 CURRENT CARRYING CONDUCTORS MAY BE RUN IN A SINGLE CONDUIT, NEC SECTION 310.15 SHALL APPLY.

ANY PENETRATIONS THROUGH RATED WALLS SHALL BE SEALED PER THE NEC WITH UL LISTED FIRE STOPPING COMPOUND.

ALL RECEPTACLES SHALL BE TAMPER RESISTANT.

CONTRACTOR SHALL PROVIDE THE OWNER WITH RECORD DRAWINGS AND MANUALS THAT PROVIDE INSTRUCTION ABOUT THE OPERATION AND MAINTENANCE OF THE BUILDING'S ELECTRICAL DISTRIBUTION SYSTEM. REFER TO ASHRAE 90.1 2013 8.7.

## OVERALL ELECTRICAL GENERAL NOTES:

- a. THE CONTRACTOR SHALL VISIT THE JOB SITE AND BECOME FAMILIAR WITH THE EXTENT OF WORK REQUIRED TO COMPLETE THE JOB PRIOR TO BIDDING.
- b. THE CONTRACTOR SHALL COORDINATE THE LOCATION OF ALL MECHANICAL EQUIPMENT WITH THE MECHANICAL CONTRACTOR PRIOR TO ROUGH IN AND INSTALLATION.
- c. ALL PRIMARY CONDUIT SHALL BE RUN AT 48" BELOW FINISHED GRADE. ALL SECONDARY AND EXTERIOR UNDERGROUND BRANCH CIRCUIT CONDUIT(S) SHALL BE RUN 36" BELOW FINISHED GRADE.
- d. IN ALL MECHANICAL ROOMS, ALL CONDUIT AND BOXES ARE TO BE SURFACE MOUNTED.
- e. THE CONTRACTOR SHALL PROVIDE WEATHER PROOF / FIRE SEAL AS REQUIRED ON ALL EXTERIOR WALL PENETRATIONS.
- f. ALL PENETRATIONS THROUGH RATED WALLS SHALL BE SEALED WITH UL APPROVED METHODS.

WIDE SYSTEM.

- g. IT IS THE RESPONSIBILITY OF THE FIRE ALARM CONTRACTOR TO PROVIDE ANY NECESSARY COMPONENTS (i.e. BOOSTER PANELS) AND MAKE ALL THE NECESSARY CONNECTIONS FROM THE NEW FIRE ALARM DEVICES AND JUNCTION BOX TO THE EXISTING FIRE ALARM CONTROL PANEL IN THE EXISTING ADMIN BUILDING AND THE TO ENSURE A FULLY FUNCTIONAL CAMPUS
- h. ALL PHASING OF WORK SHALL BE SCHEDULED WITH THE OWNER AND ARCHITECT PRIOR TO COMMENCEMENT OF WORK. THE CONTRACTOR SHALL SCHEDULE ALL OUTAGES WITH THE OWNER AT LEAST (14) DAYS IN ADVANCE AND ANY GIVEN OUTAGE SHALL NOT BE A DURATION IN EXCESS OF (8) HOURS.
- i. CONTRACTOR SHALL COORDINATE ALL UNDERGROUND WORK WITH OTHER EXISTING/NEW UTILITIES TO AVOID CONFLICT.

![](_page_69_Picture_20.jpeg)

<u>MBOLS LEGEN</u> ALL DEVICE MOUNTING 3. ALL SINGLE ETC.) SHALL BE GRAY WITH STAINLESS STEEL COVER PLATES.

RESULT IN DISAPPROVAL OF THE ENTIRE SUBSTITUTE PACKAGE. MARK R1 R1EM R2 R2EM R3 R3EM R4 R5 R5EM R6 R7 R7EM R8 \_\_\_\_\_ C1 C1EM S1 S1EM W1 W2 W3

W4EM 

WS

ΕX

LIGHTING SYMBOL LI	EGEND
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	DESCRIPTION
+	"LED" LIGHTING FIXTURE. LETTER(S) DENOTE TYPE – SEE LIGHTING FIXTURE SCHEDULE.
	"LED" LIGHTING FIXTURE WITH INTEGRAL BATTERY BACKUP.
	"LED" LIGHTING FIXTURE CONNECTED TO INVERTER SYSTEM, SEE PLANS FOR REQUIREMENTS.
	LED LIGHTING FIXTURE. LETTER(S) DENOTE TYPE – SEE LIGHTING FIXTURE SCHEDULE.
	"LED" EXIT LIGHT. DARKENED QUADRANTS INDICATE ILLUMINATED FACES, ARROWS AS INDICATED. LETTER(S) DENOTE TYPE – SEE LIGHTING FIXTURE SCHEDULE.
	EMERGENCY INVERTER CIRCUIT
	20 AMP, 120/277 VAC SINGLE POLE TOGGLE SWITCH – FLUSH WALL MOUNTED 48" A.F.F. UNLESS NOTED OTHERWISE. SUBSCRIPT INDICATES AS FOLLOWS:
	3 – 20 AMP, 120/277 VAC THREE WAY TOGGLE SWITCH
	4 – 20 AMP, 120/277 VAC FOUR WAY TOGGLE SWITCH
	DT – DUAL TECHNOLOGY MOTION SENSOR WALL SWITCH. WATTSTOPPER DW–100. TIME DELAY DURATION SHALL BE 20 MINUTES MAXIMUM. PROGRAM FOR "MANUAL ON".
	M – 30 AMP SWITCH EQUAL TO HUBBELL HBL7832D OR HBL7810D, AS REQUIRED. PROVIDE PHENOLIC LABEL.
	MO – LOW VOLTAGE MOMENTARY TOGGLE SWITCH EQUAL TO WATTSOPPER LVS-1 FOR "MANUAL ON" CONTROL OF CEILING MOUNTED OCCUPANCY SENSOR.
	DUAL TECHNOLOGY CEILING-MOUNTED 360° OCCUPANCY SENSOR, WATTSTOPPER DT-300. SEE LIGHTING CONTROL WIRING DIAGRAM FOR ADDITIONAL INFORMATION. MOUNT AT LOCATION AS INDICATED ON PLANS. DEVICE SHALL BE PROGRAMMED FOR "AUTOMATIC ON" (UNLESS INDICATED OTHERWISE ON PLANS). PROGRAM SUCH THAT BOTH TECHNOLOGIES ARE REQUIRED TO TRIGGER LIGHTS "ON" AND EITHER TECHNOLOGY SHALL "HOLD" LIGHTS "ON". SEE PLANS FOR SENSOR LOCATIONS THAT ARE "MANUAL ON" ONLY \$MO. TIME DELAY DURATION SHALL BE 20 MINUTES MAXIMUM. SEE MANUFACTURERS INSTRUCTIONS FOR APPROPRIATE DIP SWITCH SETTINGS.
	DUAL TECHNOLOGY CORNER MOUNTED OCCUPANCY SENSOR, WATTSTOPPER DT-200. SEE LIGHTING CONTROL WIRING DIAGRAM FOR ADDITIONAL INFORMATION. MOUNT AT LOCATION AS INDICTED ON PLANS. PROGRAM SUCH THAT BOTH TECHNOLOGIES ARE REQUIRED TO TRIGGER LIGHTS "ON" AND EITHER TECHNOLOGY SHALL "HOLD" LIGHTS "ON" TIME DELAY DURATION SHALL BE 20 MINUTES MAXIMUM. SEE MANUFACTURERS INSTRUCTIONS FOR APPROPRIATE DIP SWITCH SETTINGS. DEVICE SHALL BE AIMED AS NECESSARY TO OPTIMIZE MOTION DETECTION AT DOOR THRESHOLD. SEE PLANS FOR SENSOR LOCATIONS THAT ARE "MANUAL ON" ONLY \$MO.
	POWER PACK RELAY FOR CONTROL OF LIGHTING CONTROLS, EQUAL TO WATTSTOPPER CAT# BZ-150. MOUNT DEVICE IN AN ACCESSIBLE LOCATION.
	POWER PACK RELAY FOR CONTROL OF RECEPTACLES, EQUAL TO WATTSTOPPER CAT# BZ-200. MOUNT DEVICE IN AN ACCESSIBLE LOCATION.
	DIGITAL ROOM CONTROLLER WITH ONE ZONE ON/OFF/DIMMING EQUAL TO WATTSTOPPER LMRC-211. SEE LIGHTING PLANS AND DETAIL SHEETS FOR ADDITIONAL INFORMATION. MOUNT DEVICE IN AN ACCESSIBLE LOCATION. PROVIDE ALL 0-10V WIRING FROM CONTROLLER TO FIXTURES, AS REQUIRED. ALL ROOM CONTROLLERS SHALL BE INTERCONNECTED WITH CAT5E CABLING. ALL CAT5E SHALL BE PRE-ATERMINATED.
	OUTDOOR PIR MOTION SENSOR WITH DAYLIGHT PHOTO CONTROL AND DIMMING EQUAL TO WATTSTOPPER FSP-201. SEE LIGHTING PLANS AND CONTROL DETAILS FOR ADDITIONAL INFORMATION.
	EMERGENCY AUTOMATIC LOAD CONTROL RELAY EQUAL TO WATTSTOPPER ELCU-200 FOR NON-DIMMING FIXTURES. RELAY SHALL BYPASS NORMAL POWER TO ALLOW INVERTER SUPPLIED LIGHTING LOADS TO ENERGIZE WHEN NORMAL POWER IS LOST. RELAY SHALL SENSE LOSS OF NORMAL POWER AND AUTOMATICALLY CONTROL LUMINAIRE TO FULL BRIGHTNESS REGARDLESS OF OCCUPANCY SENSOR STATUS. SEE LIGHTING PLANS AND CONTROL DETAILS FOR ADDITIONAL INFORMATION.
	EMERGENCY AUTOMATIC LOAD CONTROL RELAY EQUAL TO NINE24 ELCR-Z10 FOR DIMMING FIXTURES. RELAY SHALL BYPASS NORMAL POWER TO ALLOW INVERTER SUPPLIED LIGHTING LOADS TO ENERGIZE WHEN NORMAL POWER IS LOST. RELAY SHALL SENSE LOSS OF NORMAL POWER AND AUTOMATICALLY CONTROL LUMINAIRE TO FULL BRIGHTNESS REGARDLESS OF DIMMING STATE OR OCCUPANCY SENSOR STATUS. SEE LIGHTING PLANS AND CONTROL DETAILS FOR ADDITIONAL INFORMATION.
N	) GENERAL NOTES:
E	S ARE TO BE FLUSH MOUNTED.
E	GANG AND TWO GANG DEVICES SHALL USE A 4" SQ. BOX WITH EXTENSION RING.

4. ALL MULTI - GANG DEVICES SHALL USE A COMMON COVER PLATE COLORS FOR ALL DEVICES (i.e. SWITCHES, RECEPTACLES, TELEPHONE OUTLETS,

. LIGHTING CONTROL SYSTEM SHALL BE PROGRAMMED BY A CERTIFIED LIGHTING CONTROLS COMMISSIONING INSTALLER. . CONTRACTOR SHALL REFERENCE DETAIL SHEETS E700.1 – E700.3 FOR LOW VOLTAGE LIGHTING SWITCH WIRING REQUIREMENTS.

. CONTRACTOR SHALL REFERENCE DETAIL SHEETS E700.1 - E700.3 FOR LIGHTING CONTROL WIRING REQUIREMENTS.

## LIGHTING FIXTURE SCHEDULE

THE LIGHTING PACKAGE SHALL BE PROVIDED PER THE LIGHTING FIXTURE SCHEDULE AND ELECTRICAL SPECIFICATIONS. <u>ANY</u> LIGHTING FIXTURE SUBSTITUTIONS SHALL BE SUBMITTED <u>NO</u> <u>LESS THAN 10 DAYS PRIOR TO BID</u>. ACCEPTANCE OF LIGHT FIXTURE SUBSTITUTIONS SHALL BE AT THE SOLE DISCRETION OF THE ARCHITECT/ENGINEER. SUBSTITUTIONS WILL <u>NOT</u> BE CONSIDERED IF SUBMITTED AFTER THE 10 DAY PRIOR APPROVAL DEADLINE. <u>NO</u> LIGHT FIXTURE SUBSTITUTIONS WILL BE APPROVED AFTER BIDDING. SUBSTITUTE PACKAGES MAY BE RESUBMITTED ONE TIME FOLLOWING THE INITIAL ENGINEER'S REVIEW. FAILURE TO PROVIDE AN APPROVED EQUIVALENT PACKAGE WILL

LAMPS	MOUNTING	MANUFACTURER	CATALOG NUMBER
31 LED	RECESSED	LITHONIA	2BLT4 40L ADP LP835 2BLT4 40L ADP LP835 EL14L
37W LED	RECESSED	LITHONIA	2BLT4 48L ADP LP835 2BLT4 48L ADP LP835 EL14L
43W LED	RECESSED	LITHONIA	2BLT2 48L ADP LP835 2BLT2 48L ADP LP835 EL14L
40W LED'S	RECESSED	LITHONIA	CPX 2x4 4000LM 80CRI 35K SWL
31W LED	RECESSED	LITHONIA	CPX 2X2 3200LM 80CRI 35K SWL CPX 2X2 3200LM 80CRI 35K SWL E10WLCP
8.8W LED	RECESSED	GOTHAM	EVO4SH 35_10 DFR SOL
13.7W LED	RECESSED	GOTHAM	EVO4SH 35_15 AR MWD LSS EVO4SH 35_15 AR MWD LSS E10WCPR
8.8W LED	RECESSED	GOTHAM	PRUDENTIAL LIGHTING BPR03-FLSH-LED35-LO-4-SAL
30W LED 30W LED	CEILING/WALL CEILING/WALL	LITHONIA LITHONIA	ZL1D L48 3000LM FST MVOLT 35K 80CRI ZL1D L48 3000LM FST MVOLT 35K 80CRI E10WLCP
32.2W LED	CEILING	LITHONIA	GRD ID1000LMF 80_20 277 80 35K GRD ID1000LMF 80_20 277 80 35K E10WLCP
33.6W LED	CEILING/WALL	LITHONIA	FMVTSL 48IN 30K
17.7W LED'S	CEILING/WALL	LITHONIA	FMVTSL 24IN 30K
35W LED	WALL	LITHONIA	WDGE2 LED P4 35K 80CRI VF
40W LED	WALL	LUMINAIRE LED	TSL9 34IN 40W FAM7 35K CLP
31W LED	WALL	SYRIOS	SY602 L2L15 R55 120 BZT
2W LED'S	CEILING/WALL	EMERGI-LITE	WPREMSNXR

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SYMBOL	
\$T>	WIRELESS SMART TV POWER AND DATA, COORDINATE ELEVATION WITH ARCHITECT PRIOR TO ANY ROUGH-IN. LOCATIONS SHOWN ON PLAN ARE APPROXIMATIONS ONLY AND SHALL NOT BE USED FOR SPECIFIC ROUGH-IN LOCATIONS. ALL ROUGH-IN LOCATIONS SHALL BE COORDINATED WITH THE ARCHITECT PRIOR TO BEGINNING ANY WORK. SMART TV IS PROVIDED BY OTHERS, 120V POWER AND DATA IS TO BE CONNECTED BY THE ELECTRICAL CONTRACTOR. PROVIDE AND INSTALL 120V 20A RECEPTACLE AS RECOMMENDED BY THE TV MANUFACTURER. PROVIDE POWER CONNECTION TO LOCAL RECEPTACLE CIRCUIT. FIELD COORDINATE RECEPTACLE MOUNTING HEIGHT WITH ARCHITECT PRIOR TO ROUGH-IN, RECEPTACLE SHALL BE CONCEALED BEHIND TV. CONTRACTOR SHALL INSTALL D2 DATA OUTLET CONCEALED BEHIND SMART TV. FIELD COORDINATE DATA OUTLET MOUNTING HEIGHT WITH ARCHITECT PRIOR TO ROUGH-IN. PROVIDE ARLINGTON DVFR2 RECESSED WALL BOX.
<sup>I</sup> C	INTERCOM SYSTEM WALL MOUNTED CALL STATION. MOUNT 48" AFF.
S	WEATHER PROOFED, WALL MOUNTED, INTERCOM SYSTEM SPEAKER. MOUNT 9'-0" AFF.
S	INTERCOM SYSTEM CEILING MOUNTED SPEAKER.
C	WIRELESS WALL ANALOG CLOCK, MOUNTED 1' ABOVE MARKER BOARD. COORDINATE EXACT LOCATION WITH ARCHITECT. PROVIDE ALL POWER CONNECTIONS AS REQUIRED. COORDINATE WITH CLOCK MANUFACTURER FOR RECEPTACLE REQUIREMENTS PRIOR TO ANY ROUGH-IN.
<b>◄</b> D1	DATA OUTLET IN A 4" SQUARE BOX WITH 1 GANG EXTENSION RING. DEVICE MOUNTED 18" AFF UNLESS NOTED OTHERWISE. STUB 3/4"C FROM BACKBOX TO 6" ABOVE ACCESSIBLE CEILING, PROVIDE CONDUIT BUSHINGS. PROVIDE 1-CAT5E DATA CABLE BACK TO COMMUNICATIONS BACKBOARD. PROVIDE 1-PORT COVER PLATE. COVER PLATE SHALL BE LABELED WITH DATA CLOSET ROOM NUMBER, DATA DROP NUMBER, AND LOCATION OF SERVING DATA CLOSET. ALL CABLES SHALL BE TESTED AND TERMINATED AT OUTLET AND COMMUNICATION BACKBOARD. INSTALLER SHALL HAVE RCDD ON STAFF. SEE SHEET E700.5.
<b>⊲</b> D2	VOICE/DATA OUTLET IN A 4" SQUARE BOX WITH 1 GANG EXTENSION RING. DEVICE MOUNTED 18" AFF UNLESS NOTED OTHERWISE. STUB 3/4"C FROM BACKBOX TO 6" ABOVE ACCESSIBLE CEILING, PROVIDE CONDUIT BUSHINGS. PROVIDE 2-CAT5E VOICE/DATA CABLES BACK TO COMMUNICATIONS BACKBOARD. PROVIDE 2-PORT COVER PLATE. COVER PLATE SHALL BE LABELED WITH DATA CLOSET ROOM NUMBER, DATA DROP NUMBER, AND LOCATION OF SERVING DATA CLOSET. ALL CABLES SHALL BE TESTED AND TERMINATED AT OUTLET AND COMMUNICATION BACKBOARD. INSTALLER SHALL HAVE RCDD ON STAFF. SEE SHEET E700.5. "2C" INDICATES DEVICE SHALL BE PROVIDED WITH (2) 3/4"C CONDUITS TO ABOVE ACCESSIBLE CEILING.
d WAP	CEILING MOUNTED WIRELESS ACCESS POINT COMMUNICATIONS OUTLET. TYPE 'D1, PROVIDE AT LOCATIONS INDICATED.
	INTERCOM SYSTEM WIRING
	INTERCOM SYSTEM HOMERUN
CT	SECURITY SYSTEM DOOR CONTACT
	REQUIREMENTS WITH SECURITY VENDOR.
FAC	ADDRESSABLE INTELLIGENT FIRE ALARM SYSTEM CONTROL PANEL – WITH CELLULAR AUTO–DIAL OUT. VOICE EVACUATION CAPABLE.
ERRC	EMERGENCY RADIO RESPONDER COVERAGE HEAD END EQUIPMENT.
F	FIRE ALARM SYSTEM ADDRESSABLE PULL STATION – SEMI FLUSH MOUNTED 48" A.F.F. TO TOP UNLESS NOTED OTHERWISE.
©	CARBON MONOXIDE SENSOR
𝖾 <sub>SD</sub>	ADDRESSABLE INTELLIGENT CEILING MOUNTED FIRE ALARM SYSTEM PHOTOELECTRIC TYPE SMOKE DETECTOR WITH BASE.
HD	ADDRESSABLE INTELLIGENT FIRE ALARM SYSTEM HEAT DETECTOR RATE OF RISE TYPE.
<u>ک</u>	FIRE ALARM SYSTEM SPEAKER / STROBE DEVICE CEILING MOUNTED, UNLESS NOTED OTHERWISE. ALL STROBES IN COMMON SPACES OR CORRIDORS SHALL BE SYNCHRONIZED. STROBE SHALL BE 75 CANDELLA MINIMUM UNLESS NOTED OTHERWISE.
Ø	FIRE ALARM SYSTEM VISUAL DEVICE CEILING MOUNTED, UNLESS NOTED OTHERWISE. ALL STROBES IN COMMON SPACES OR CORRIDORS SHALL BE SYNCHRONIZED. STROBE SHALL BE 75 CANDELLA MINIMUM UNLESS NOTED OTHERWISE.
FK	EXTERIOR FIRE ALARM SYSTEM AUDIO ALARM (WEATHERPROOF DEVICE WITH WEATHERPROOF CAST BOX). FLUSH MOUNT. COORDINATE MOUNTING LOCATION WITH OBSTACLES AND MOUNT AS REQUIRED.
	ADDRESSABLE INTELLIGENT FIRE ALARM SYSTEM DUCT MOUNTED PHOTOELECTRIC SMOKE DETECTOR COMPLETE WITH HOUSING AND AIR SAMPLING TUBES. "S" DENOTES DETECTOR IN RETURN DUCT.
R	FIRE ALARM SYSTEM INTERFACE MODULE – MOUNTED AT EQUIPMENT.
Fs	SPRINKLER SYSTEM FLOW SWITCH. FURNISHED BY FIRE ALARM SYSTEM SUPPLIER, INSTALLED BY FIRE PROTECTION (SPRINKLER) SYSTEM CONTRACTOR, AND CONNECTED TO FIRE ALARM SYSTEM CONTRACTOR.
Τ <sub>S</sub>	SPRINKLER SYSTEM TAMPER SWITCH. FURNISHED BY FIRE ALARM SYSTEM SUPPLIER, INSTALLED BY FIRE PROTECTION (SPRINKLER) SYSTEM CONTRACTOR, AND CONNECTED TO FIRE ALARM SYSTEM CONTROL PANEL BY FIRE ALARM SYSTEM CONTRACTOR.
VCC	ADDRESSABLE INTELLIGENT FIRE ALARM VOICE COMMAND CENTER.
MIC	ADDRESSABLE INTELLIGENT FIRE ALARM FIRE FIGHTERS MICROPHONE FLUSH MOUNTED IN WALL. COORDINATE FINAL LOCATION WITH THE AHJ PRIOR TO ROUGH-IN.
DH	FIRE ALARM SYSTEM DOOR HOLDER; WALL, FLOOR, OR CEILING MOUNTED AS REQUIRED. PROVIDE ANY EXTENSIONS RODS AS REQUIRED. COORDINATE WITH FIRE ALARM INSTALLER PRIOR TO ROUGH—IN FOR LOCATIONS AND REQUIREMENTS.
SYSTEMS LEG 1. LOW VOL CEILING, WRAPS S OTHER C MOUNTIN 2. PROVIDE 3. ALL CON 4. ALL LOW 5. ALL OUT 6. MOUNTIN 7. ALL SINC 8. ALL MUL 9. ALL DEV 10. A.F.F. IN	END GENERAL NOTES: TAGE CABLES SHALL BE SUPPORTED VIA J-HOOKS ON 4'0" TO 6'0" CENTERS BASED ON BUILDING STRUCTURE. SECURE J-HOOKS (ERICO CADDY CABLECAT OR EQUAL) TO SLAB, OR ROOF BAR JOISTS. PROVIDE VELCRO TIE WRAPS ON 5'0" CENTERS TO ADEQUATELY BUNDLE AND SUPPORT CABLES, NO MORE THAN 24 CABLES PER BUNDLE. TIE SHALL BE PROVIDED LOOSELY AROUND CABLES AS TO NO DISTORT THE ORIGINAL SHAPE OF ANY INDIVIDUAL CABLE. DO NOT TIE WRAP COMMUNICATIONS CABLING TO ANY ABLING (I.E. HVAC CONTROL, ELECTRICAL CONDUIT, ETC.). CLIP OFF ALL EXCESS TIE WRAP AFTER INSTALLATION. REFERENCE "TYPICAL COMMUNICATIONS OUTLET ROUGH-IN G DETAIL" ON SHEET E300.2 CONDUIT SLEEVES FOR CABLE ACCESS THROUGH FIRE WALLS, PROVIDE UL LISTED FIRE STOPPING. IDUIT RACEWAYS FOR LOW VOLTAGE CABLING SHALL BE PROVIDED WITH PLASTIC CONDUIT BUSHINGS. ' VOLTAGE CABLING SHALL BE TESTED AND TERMINATED BY OWNER. LETS ARE TO BE FLUSH MOUNTED. G HEIGHTS ARE FROM THE CENTER LINE OF THE DEVICE. SLE GANG AND TWO GANG DEVICES SHALL USE A 4" SQ. BOX WITH EXTENSION RING. TI - GANG DEVICES SHALL USE A 4" SQ. BOX WITH EXTENSION RING. TI - GANG DEVICES SHALL USE A 4" SQ. BOX WITH FOR KEYSTONE COLOR REQUIREMENTS. DICATES MOUNTING HEIGHT ABOVE FINISHED FLOOR.

11. LABELED TERMINATIONS ARE TO BE PROVIDED AT ALL CABLE ENDS. ALL CONNECTORS ARE TO BE PROVIDED, INSTALLED AND TESTED BY COMMUNICATIONS CONTRACTOR.

![](_page_69_Picture_36.jpeg)

![](_page_69_Picture_38.jpeg)

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![](_page_70_Figure_0.jpeg)

- REQUIREMENTS WITH LOCAL UTILITY PRIOR TO ANY ROUGH-IN. SEE ELECTRICAL SINGLE LINE DIAGRAM. ALL UTILITY FEES SHALL BE INCLUDED

- 5 PROVIDE ONE 4" CONDUIT FOR NEW COMMUNICATIONS/DATA CONNECTION. ROUTE CONDUIT UNDERGROUND FROM IDF CLOSET TO MAIN COMMUNICATIONS ROOM. STUB CONDUIT UP 6" BELOW BOTTOM OF BACKBOARD; AT BOTH ENDS. PROVIDE FIBER OPTIC CABLE AS INDICATED IN THE SPECIFICATIONS. LEAVE A MINIMUM OF 24" SLACK FIBER AT EACH TERMINATION POINT. RUN FIBER CONTINUOUS FROM SOURCE TO DESTINATION WITH NO SPLICES OR TERMINATIONS. TERMINATE CABLE AT
- ROUTE CONDUIT BELOW GRADE FROM IDF CLOSET TO INTERCOM SYSTEM MASTER CONSOLE LOCATED IN THE MAIN COMMUNICATIONS ROOM. STUB CONDUIT UP 6" BELOW BOTTOM OF BACKBOARD; AT BOTH ENDS. SEE
- CONDUIT BELOW GRADE FROM ELEC RM TO FACP MASTER PANEL LOCATED IN THE EXISTING ADMIN SPACE. STUB CONDUIT UP 6" BELOW BOTTOM OF BACKBOARD; AT BOTH ENDS. SEE SPECIFICATIONS FOR FIRE

![](_page_70_Picture_8.jpeg)

![](_page_70_Picture_10.jpeg)

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![](_page_71_Figure_0.jpeg)

![](_page_71_Picture_1.jpeg)

# LIGHTING KEYNOTES:

- 2 POWER RELAY SHALL BE INSTALLED ABOVE CLOSEST ACCESSIBLE CEILING.

![](_page_71_Picture_8.jpeg)

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AIR	HANDLING UNIT E	QUIPI	MEN	T ELECTRICAI	_ SCHEDUL	Ē
MARK	TYPE OF EQUIPMENT	VOLTAGE	MCA	FEEDER	DISCONNECT	NOTES
AHU#1	AIR HANDLING UNIT	208/3	72	4#3, 1#8G, 1-1/4"C	100/3 NEMA 1	1
AHU#2	AIR HANDLING UNIT	208/3	44	4#6, 1#10G, 1"C	60/3 NEMA 1	1
AHU#3	AIR HANDLING UNIT	208/3	45	4#6, 1#10G, 1"C	60/3 NEMA 1	1
AHU#4	AIR HANDLING UNIT	208/3	45	4#6, 1#10G, 1"C	60/3 NEMA 1	1
AHU#5	AIR HANDLING UNIT	208/3	45	4#6, 1#10G, 1"C	60/3 NEMA 1	1
AHU#6	AIR HANDLING UNIT	208/3	30	4#10 1#10G, 1/2"C	60/3 NEMA 1	1
AHU#7	AIR HANDLING UNIT	208/3	45	4#6, 1#10G, 1"C	60/3 NEMA 1	1
AHU#8	AIR HANDLING UNIT	208/3	30	4#10 1#10G, 1/2"C	60/3 NEMA 1	1
AHU#9	AIR HANDLING UNIT	208/3	30	4#10 1#10G, 1/2"C	60/3 NEMA 1	1
AHU#10	AIR HANDLING UNIT	208/3	45	4#6, 1#10G, 1"C	60/3 NEMA 1	1
AHU#11	AIR HANDLING UNIT	208/3	44	4#6, 1#10G, 1"C	60/3 NEMA 1	1
AHU#12	AIR HANDLING UNIT	208/3	44	4#6, 1#10G, 1"C	60/3 NEMA 1	1

HE	EAT PUMP UNIT EQI	JIPM	ENT	ELECTRICAL	SCHEDULE	-
MARK	TYPE OF EQUIPMENT	VOLTAGE	MCA	FEEDER	DISCONNECT	NOTES
HPU#1	HEAT PUMP UNIT	208/3	38	4#8, 1#10G, 3/4"C	60/3 NEMA 3R	1
HPU#2	HEAT PUMP UNIT	208/3	18	4#12, 1#12G, 1/2"C	30/3 NEMA 3R	1
HPU#3	HEAT PUMP UNIT	208/3	18	4#12, 1#12G, 1/2"C	30/3 NEMA 3R	1
HPU#4	HEAT PUMP UNIT	208/3	18	4#12, 1#12G, 1/2"C	30/3 NEMA 3R	1
HPU#5	HEAT PUMP UNIT	208/3	21	4#12, 1#12G, 1/2"C	30/3 NEMA 3R	1
HPU#6	HEAT PUMP UNIT	208/3	13	4#12, 1#12G, 1/2"C	30/3 NEMA 3R	1
HPU#7	HEAT PUMP UNIT	208/3	18	4#12, 1#12G, 1/2"C	30/3 NEMA 3R	1
HPU#8	HEAT PUMP UNIT	208/3	13	4#12, 1#12G, 1/2"C	30/3 NEMA 3R	1
HPU#9	HEAT PUMP UNIT	208/3	13	4#12, 1#12G, 1/2"C	30/3 NEMA 3R	1
HPU#10	HEAT PUMP UNIT	208/3	21	4#12, 1#12G, 1/2"C	30/3 NEMA 3R	1
HPU#11	HEAT PUMP UNIT	208/3	18	4#12, 1#12G, 1/2"C	30/3 NEMA 3R	1
HPU#12	HEAT PUMP UNIT	208/3	18	4#12, 1#12G, 1/2"C	30/3 NEMA 3R	1

EQUIPMENT SCHEDULE NOTES:

1. COORDINATE WITH THE MECHANICAL CONTRACTOR TO ENSURE ALL DISCONNECTS AND/OR VFD'S ARE PROVIDED AS REQUIRED.

### EQUIPMENT COORDINATION GENERAL NOTES:

1. COORDINATE WITH THE MECHANICAL CONTRACTOR TO ENSURE ALL DISCONNECTS AND/OR VFD'S ARE PROVIDED AS REQUIRED.

2. THE ELECTRICAL CONTRACTOR SHALL PROVIDE INTERLOCKING CONNECTIONS FOR ALL HVAC EQUIPMENT AS REQUIRED. REFER TO THE MECHANICAL SCHEDULES FOR EXACT INTERLOCKING INFORMATION.

3. ALL EXHAUST FAN INTERLOCKS SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR. REFER TO THE EXHAUST FAN SCHEDULE FOR INTERLOCKING REQUIREMENTS.

4. THE ELECTRICAL CONTRACTOR SHALL COORDINATE THE EXACT LOCATION, WIRING AND CONNECTION OF ALL EQUIPMENT WITH THE EQUIPMENT INSTALLER PRIOR TO INSTALLATION. 5. THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL A 4" SQUARE OUTLET BOX WITH SINGLE GANG PLASTER RING FOR EACH THERMOSTAT. PLASTER RING SHALL BE MOUNTED IN A VERTICAL ORIENTATION. 56" A.F.F. TO CENTER UNLESS NOTED OTHERWISE. THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL A 3/4" CONDUIT FROM THERMOSTAT OUTLET BOX UP IN WALL TO 6" ABOVE CEILING HEIGHT AND OUT OF WALL. EXTEND CONDUIT TO AREA WITH ACCESSIBLE CEILING. LABEL CONDUIT ABOVE ACCESSIBLE CEILING WITH SERVED THERMOSTAT LOCATION. CONDUIT SHALL HAVE NYLON INSULATING BUSHING ON EACH END. PROVIDE PULL STRING IN CONDUIT. REFER TO MECHANICAL DRAWINGS FOR THERMOSTAT LOCATIONS. MOUNT UNIT HEATER THERMOSTATS AS REQUIRED.

6. THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL A DEDICATED, 20 AMP, 120 VOLT CIRCUIT FOR EACH HVAC CONTROL PANEL. REFER TO MECHANICAL DRAWINGS FOR HVAC CONTROL PANEL LOCATIONS.

7. THE ELECTRICAL CONTRACTOR SHALL COORDINATE THE EXACT LOCATION OF ALL EQUIPMENT SITE SWITCHES PRIOR TO INSTALLATION.

8. ALL DISCONNECTS FOR EQUIPMENT SHALL BE MOUNTED SECURELY TO THE FLOOR OR STRUCTURE. THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL UNISTRUT AND MOUNTING HARDWARE AS REQUIRED TO MOUNT THE DISCONNECTS. ALL EXTERIOR DISCONNECTS SHALL BE NEMA-3R.

9. CIRCUIT BREAKERS SERVING EQUIPMENT ARE BASIS OF DESIGN ONLY. EXACT CIRCUIT BREAKER AND CONDUCTOR SIZES SHALL BE COORDINATED WITH ACTUAL EQUIPMENT BEING INSTALLED PRIOR TO ORDERING OF PANELBOARD. ANY COST INCREASE ASSOCIATED WITH INCREASED CIRCUIT REQUIREMENTS SHALL BE THE RESPONSIBILITY OF THE EQUIPMENT INSTALLER. ELECTRICIAN SHALL SIZE CIRCUIT BREAKERS, CONDUCTORS, CONDUITS, AND DISCONNECTS IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE AND INDICATE THE APPROPRIATE CHANGES ON AS-BUILT DOCUMENTS.

10. IN ALL MECHANICAL ROOMS, COORDINATE WITH THE MECHANICAL CONTRACTOR TO ENSURE CODE REQUIRED CLEARANCES AND WORKING SPACES ARE MAINTAINED AT ALL ELECTRICAL EQUIPMENT.

> REFERENCE TYPICAL EXTERIOR AC/HP ELECTRICAL CONNECTION DETAIL FOR EXTERIOR DISCONNECT MOUNTING AND CONNECTION REQUIREMENTS FOR ALL EXTERIOR HVAC EQUIPMENT.

CKT NO.	LOAD DESCRIPTION	BRE/ POLE	AKER AMP	K١	/A	BRE/	AKER POLE	LOAD DESCRIPTION	CK NO
1									2
3	PANEL MP1	3	700	186.2	82	350	3	PANEL MP2	4
5									6
7									8
9	PANEL 2P1	3	200	55.2			3	PREPARED SPACE	10
11									12
13									14
15	PREPARED SPACE	3					3	PREPARED SPACE	16
17									18
19									20
21	PREPARED SPACE	3					3	PREPARED SPACE	22
23									24
25									26
27	PREPARED SPACE	3					3	PREPARED SPACE	28
29									30
* F ** F N	CONNECTED LOAD 323.4 KVA * PROVIDE PHENOLIC LABEL AFFIXED TO PANEL INDICATING THIS VALUE ALONG WITH THE DATE OF THE INSTALLATION. ** PROVIDE ELECTRONIC TRIP CIRCUIT BREAKER WITH MANUAL OFF INSTANTANEOUS SETTING AND ENERGY REDUCING MAINTENANCE SWITCH.								

	R M.L.O. 2081/1200 50 4W					005			
NO.	LOAD DESCRIPTION	POLE	AKER AMP	K	VA	AMP	AKER POLE	LOAD DESCRIPTION	
1									2
3	AHU #1	3	80	25.9	15.8	45	3	AHU #2	4
5									6
7									8
9	AHU #3	3	45	16.1	16.1	45	3	AHU #4	10
11									12
13									14
15	AHU #5	3	45	16.1	10.8	30	3	AHU #6	16
17									18
19									20
21	AHU #7	3	45	16.1	10.8	30	3	AHU #8	22
23									24
25									26
27	AHU #9	3	30	10.8	16.1	45	3	AHU #10	28
29									30
31									32
33	AHU #11	3	45	15.8	15.8	45	3	AHU #12	34
35									36
37									38
39	PREPARED SPACE	3					3	PREPARED SPACE	40
41									42

דאר	,	BRE	<b>KEB</b>						
NO.	LOAD DESCRIPTION	POLE	AMP	K\	/A	AMP	POLE	LOAD DESCRIPTION	NO
1									2
3	HPU #1	3	60	137	6.5	30	3	HPU #2	4
5									6
7									8
9	HPU #3	3	30	6.5	6.5	30	3	HPU #4	10
11									12
13									14
15	HPU <b>#</b> 5	3	35	7.6	4.7	20	3	HPU #6	16
17									18
19									20
21	HPU #7	3	30	6.5	4.7	20	3	HPU #8	22
23									24
25									26
27	HPU <b>#</b> 9	3	20	4.7	7.6	35	3	HPU #10	28
29									30
31									32
33	HPU #11	3	30	6.5	6.5	30	3	HPU #12	34
35									36
37									38
39	PREPARED SPACE	3					3	PREPARED SPACE	40
41									42

NEW UTILITY METER ENCLOSURE



# SINGLE LINE DIAGRAM KEYNOTES:

INDICATE ORIGIN OF POWER SUPPLY.

1 1/4" CONDUIT WITH PULL STRING. THE ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE UTILITY AND FURNISH METERING COMPONENTS AS REQUIRED. (2) GROUNDING ELECTRODE SYSTEM SHALL BE IN ACCORDANCE WITH NEC 2014 ARTICLE 250.

- (3) PRIMARY CONDUIT AND CONDUCTORS BY LOCAL UTILITY.
- GROUNDING ELECTRODE SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH NEC ARTICLE #250.50. BOND TO BUILDING STEEL, GAS PIPING, WATER PIPING, AND REBAR SYSTEMS.
- (5) 1200A SERVICE. PROVIDE 4 RUNS OF 4-#350 COPPER CONDUCTORS IN 3" SCHEDULE 40 PVC CONDUIT (EACH).
- 6 PROVIDE 2 RUNS OF 4-#500, 1#1/0G, IN 3-1/2" CONDUIT (EACH).
- 7 PROVIDE 4-#500, 1#3/0G, IN 3-1/2" CONDUIT.
- 8 PROVIDE 4-#3/0, 1#6/0G, IN 2-1/2"C.
- 9 PROVIDE EXTERNAL, SERVICE ENTRANCE RATED, CATEGORY-C SURGE PROTECTION DEVICE, 10-MODE, 240kA PER PHASE.

NEMA 1, SURFACE MOUNT PANEL 2P1 SCHEDULE											
225A M.B. 208Y/120V 3Ø 4W 10,000 AIC RATING											
CKT NO.	LOAD DESCRIPTION	BRE/ POLE	AKER AMP	K١	/A	BRE/	AKER POLE	LOAD DESCRIPTION	CKT NO.		
1	LIGHTS MEDIA CENTER, RM 124,125	1	20	1.7	1.8	20	1	CORRIDOR LIGHTS	2		
3	LIGHTS ROOMS 112-117, 127	1	20	1.8	1.6	20	1	LIGHTS ROOMS 107-110, 126	4		
5	ATTIC LIGHTS	1	20	1.0	0.25	20	1	EXTERIOR LIGHTS	6		
7	MEDIA CENTER RECEPTS	1	20	1.2	1.2	20	1	MEDIA CENTER FLOORBOXES	8		
9	MEDIA CENTER FLOORBOXES	1	20	1.2	1.2	20	1	MEDIA CENTER FLOORBOXES	10		
11	MEDIA CENTER WATER COOLER	1	20	1.0	1.0	20	1	MEDIA CENTER WATER COOLER	12		
13	OFFICE 125 RECEPTS	1	20	0.8	0.6	20	1	MEDIA CENTER DESK	14		
15	CLASSROOM 118 RECEPTS	1	20	1.4	1.2	20	1	CLASSROOM 118 RECEPTS	16		
17	CLASSROOM 120 RECEPTS	1	20	1.2	1.2	20	1	CLASSROOM 120 RECEPTS	18		
19	ATTIC RECEPTACLES	1	20	0.8	1.6	20	1	CLASSROOM 119 RECEPTS	20		
21	CLASSROOM 119 RECEPTS	1	20	1.4	1.4	20	1	CLASSROOM 116 RECEPTS	22		
23	CLASSROOM 116 RECEPTS	1	20	1.4	1.4	20	1	CLASSROOM 127 RECEPTS	24		
25	CLASSROOM 127 RECEPTS	1	20	1.2	1.0	20	1	CORRIDOR 105 WATER COOLER	26		
27	CORRIDOR 105 WATER COOLER	1	20	1.0	1.8	20	1	CLASSROOM 107 RECEPTS	28		
29	CLASSROOM 107 RECEPTS	1	20	1.4	1.6	20	1	CLASSROOM 109 RECEPTS	30		
31	CLASSROOM 109 RECEPTS	1	20	1.2	1.2	20	1	CLASSROOM 108 RECEPTS	32		
33	CLASSROOM 108 RECEPTS	1	20	1.6	1.4	20	1	CLASSROOM 126 RECEPTS	34		
35	CLASSROOM 126 RECEPTS	1	20	1.4					36		
37			7.0		5.0	30	2	LAUNDRY RM 126 RECEPTACLE	38		
39	LAUNDRY RM 126 RECEPTACLE	2	30	5.0	0.5	20	1	FANS ROOMS 113,114,115,117	40		
41	IDF RECEPTACLES	1	20	0.6	0.6	20	1	ALTERNATE CLASSROOM RECEPTS 129	42		
43	ALTERNATE CLASSROOM RECEPTS 128	1	20	1.4	1.4	20	1	ALTERNATE CLASSROOM RECEPTS 129	44		
45	ALTERNATE CLASSROOM RECEPTS 128	1	20	0.6		20	1	SPARE	46		
47	SPARE	1	20			20	1	SPARE	48		
49	SPARE	1	20			20	1	SPARE	50		
51	SPARE	1	20			20	1	SPARE	52		
53	SPARE	1	20			20	1	SPARE	54		
		CON	INECTI	ED LOA	.D t	55.2	KVA				

THE LABEL SHOULD BE OF SUFFICIENT DURABILITY TO WITHSTAND THE ENVIRONMENT INVOLVED. THE ELECTRICAL CONTRACTOR SHALL FIELD MARK ALL PANEL BOARDS IN AREA OF WORK THAT ARE TO REMAIN TO NOTE: ALL EQUIPMENT THAT IS LIKELY TO REQUIRE EXAMINATION, ADJUSTMENT, SERVICING, OR MAINTENANCE WHILE ENERGIZED SHALL BE PROVIDED WITH A LABEL IN ACCORDANCE WITH NEC 110.16. THE EQUIPMENT MANUFACTURER SHALL PROVIDE AN ARC FLASH HAZARD ANALYSIS TO DETERMINE THE LEVEL OF PERSONAL PROTECTIVE EQUIPMENT (PPE) REQUIRED FOR EACH

A. AVAILABLE INCIDENT ENERGY AND THE CORRESPONDING WORKING DISTANCE B. MINIMUM ARC RATING OF CLOTHING

C. REQUIRED LEVEL OF PPE D. HIGHEST HAZARD/RISK CATEGORY (HRC) FOR THE EQUIPMENT

2. NOMINAL SYSTEM VOLTAGE 3. ARC FLASH BOUNDARY

ELECTRICAL CONTRACTOR SHALL COORDINATE WITH MECHANICAL CONTRACTOR TO ENSURE THE OVER CURRENT PROTECTION FOR THE SPECIFIC HVAC EQUIPMENT MEETS THE MANUFACTURER AND THE NATIONAL ELECTRICAL CODE REQUIREMENTS. THE ELECTRICAL CONTRACTOR SHALL FIELD MARK ALL PANEL BOARDS WITH ORIGIN OF POWER SUPPLY. VIA MECHANICALLY FASTENED PHENOLIC LABEL.

(4) PROVIDE 1#3/0 BARE COPPER CONDUCTOR TO THE GROUNDING ELECTRODE SYSTEM. PROVIDE TWO COPPER GLAD 3/4"X10' GROUND RODS SPACED 10FT APART. PROVIDE HIGH COMPRESSION DIRECT BURIAL HYGROUND CONNECTORS. THE

10 DISTRIBUTION SECTIONS OF SWITCHBOARD TO BE PROVIDED WITH FACTORY INSTALLED METERING, EQUAL TO EATON POWER XPERT MULTI-POINT METER. ALL BRANCH CIRCUIT BREAKERS AND MAIN SERVICE CIRCUIT BREAKER (SWITCHBOARD MDP) SHALL BE METERED INDIVIDUALLY. METERING SHALL RECORD ENERGY USAGE A MINIMUM OF EVERY 15 MINUTES AND BE REPORTED AT LEAST HOURLY, DAILY, MONTHLY, AND ANNUALLY. THIS DATA SHALL BE STORED FOR A MINIMUM OF 36 MONTHS. ALL METERING INFORMATION TO BE COLLECTED AND STORED BY OWNER VIA OWNER'S BUILDING MANAGEMENT SYSTEM COORDINATE REQUIREMENTS WITH OWNER. METER TO BE PROVIDED WITH NETWORK CAPABILITY. CONTRACTOR TO PROVIDE ONE CAT6 CABLE FROM METER TO TELECOM ROOM 116A WITH 10FT OF SLACK COILED AT EACH END, CABLE SHALL BE TERMINATED BY PROVIDED BY CONTRACTOR. METER MANUFACTURER TO PROVIDE OWNER COMMISSIONING AND TRAINING.





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TYPICAL OCCUPANCY SENSOR WIRING DIAGRAM - CLASSROOMS NOT TO SCALE



### TYPICAL 3-WAY OCCUPANCY SENSOR WIRING DIAGRAM - CORRIDORS NOT TO SCALE



**TYPICAL RECESSED FIXTURE INSTALLATION DETAIL** SCALE: NONE







NOT TO SCALE



NOT TO SCALE

### **TYPICAL OCCUPANCY SENSOR WIRING DIAGRAM - MEDIA CENTER**

## EXTERIOR FIXTURE CONTROL DIAGRAM





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### DUAL TECHNOLOGY MOUNTING DETAIL - CEILING MOUNT

NOT TO SCALE

3/4"C 6"AFF FOR MECHANICAL CONTROL WIRING. COORDINATE CONDUIT STUB WITH MECHANICAL CONTRACTOR PRIOR TO ANY ROUGH—IN

NOT TO SCALE

TYPICAL EXTERIOR AC/HP ELECTRICAL CONNECTION DETAIL

D,a D,b 『\$\$



# TYPICAL CLASS ROOM ELEVATION

NOT TO SCALE

ELECTRICIAN SHALL COORDINATE ALL DISTANCES AND ELEVATIONS FOR ALL ELECTRICAL DEVICES WITH THE ARCHITECT **PRIOR TO ANY ROUGH-IN.** 



### TYPICAL CLASS ROOM ELEVATION

NOT TO SCALE





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