

ABI	BREVIATIONS	AL ADDI		NI DIC	OIDLINE DDAMINOC		
STA	ANDARD ABBRE	AL ABBI	REVIATION LISTS IN EAC IONS	'H DI20	JIPLINE'S DRAWINGS		
SYMBOLS	S USED AS ABBREVIATIONS	DL DEM	DEAD LOAD DEMOLISH, DEMOLITION	JT JF	JOINT JOINT FILLER	RH ROW	RIGHT HAND RIGHT OF WAY
&	AND ANGLE	DMT DTL DIAG	DEMOUNTABLE DETAIL DIAGONAL	J KPL KIT	JOIST KICKPLATE KITCHEN	R RVT R&S	RISER RIVET ROD AND SHELF
@	AT SPACING OF	DIA DIA DIM	DIAMETER DIMENSION	KO LBL	KNOCKOUT LABEL	RD RFH	ROOF DRAIN ROOF HATCH
B.M.	BENCH MARK	DSP DIV	DISPENSER DIVISION	LAB LAD	LABORATORY LADDER	RFG RM	ROOFING ROOM
Ģ	CENTER LINE	DR DTA	DOOR DOVETAIL ANCHOR	LB LAM	LAG BOLT LAMINATE, (ED)	RO RCP	ROUGH OPENING ROUND CONCRETE PIPE
Ē.	CHANNEL	DTS DN	DOVETAIL ANCHOR SLOT DOWN	LGL LAV	LAMINATED GLÁSS LAVATORY	ROK RB	ROWLOCK RUBBER BASE
#	NUMBER	DS DT	DOWNSPOUT DRAIN TILE	LO LH	LAYOUT LEFT HAND	RBT RBL	RUBBER TILE RUBBLE STONE
d	PENNY	DWR DWG DF	DRAWER DRAWING DRINKING FOUNTAIN	L LT LW	LENGTH LIGHT LIGHTWEIGHT	SFGL SCH SCN	SAFETY GLASS SCHEDULE SCREEN
1	PERPENDICULAR	DW EA	DUMBWAITER EACH	LW LMS LTL	LIMESTONE LINTEL	SCUP SNT	SCUPPER SEALANT
2	PLATE	EF EW	EACH FACE EACH WAY	LL LOC	LIVE LOAD LOCATE	STG SEC	SEATING SECTION
þ	ROUND	ESMNT E	EASEMENT EAST	LLD LVR	LOOSE LAID LOUVER	SVYD SSK	SERVICE YARD SERVICE SINK
ф	SQUARE	ELEC	ELASTIC ELECTRIC, (AL)	LPT MB	LOW POINT MACHINE BOLT	SHTH SHT	SHEATH, (ING) SHEET
X	WIDTH X HEIGHT	EP EWC	ELECTRICAL PANELBOARD ELECTRIC WATER COOLER	MH MFR	MANHOLE MANUFACTURE, (ER)	SG SH	SHEET GLASS SHELF, SHELVING
W/	WITH	EL ELE	ELEVATION (VERTICAL HEIGHT) ELEVATION (VIEW)	MRB MAS	MARBLE MASONRY	SHNG SHU	SHINGLE, (S) SHUTTER, (S)
ABBREVIA ABV	ATIONS ABOVE	ELEV EMER ENC	ELEVATOR EMERGENCY ENCLOSE (LIBE)	MTL MAX MECH	MATERIAL MAXIMUM MECHANIC, (AL)	SIDG SIM SKL	SIDING SIMILAR SKYLIGHT
AFF ACC	ABOVE ABOVE FINISHED FLOOR ACCESS	EQ EQP	ENCLOSE, (URE) EQUAL EQUIPMENT	MC MED	MECHANIC, (AL) MEDICINE CABINET MEDIUM	SL SLO	SKYLIGHT SLEEVE SLOPE
ACFL AP	ACCESS FLOOR ACCESS PANEL	ESC EST	ESCALATOR ESTIMATE	MDO MBB	MEDIUM DENSITY OVERLAY MAKE BELIEVE BOULEVARD	SOL SC	SOLDIER SOLID CORE
AC ACPL	ACOUSTICAL ACOUSTICAL PLASTER	EXH EXG	EXHAUST EXISTING	MBR MMB	MEMBER MEMBRANE	SP S	SOUNDPROOF SOUTH
ACT ACR	ACOUSTICAL TILE ACRYLIC PLASTIC	EXMP EB	EXPANDED METAL PLATE EXPANSION BOLT	MET MO	METAL MASONRY OPENING	SPC SGL	SPACE, (R) SPANDREL GLASS
ADH ADJ	ADHESIVE ADJACENT	EJT EXP	EXPANSION JOINT EXPOSED	MW MM	MICROWAVE MILLIMETER, (S)	SPK SPL	SPEAKER SPECIAL
ADJT AGG	ADJUSTABLE AGGREGATE	EXT FOC	EXTERIOR FACE OF CONCRETE	MIN MIR	MINIMUM MIRROR	SPEC SPH	SPECIFICATION SPLASH
A/C ALT AL	AIR CONDITIONING ALTERNATE ALUMINUM	FOF FOM FOS	FACE OF FINISH FACE OF MASONRY FACE OF STUDS	MGL MISC	MIRROR GLASS (FRAMED) MISCELLANEOUS	SQ SST STGL	SQUARE STAINLESS STEEL STAINED GLASS
ANC AB	ALUMINUM ANCHOR, ANCHORAGE ANCHORBOLT	FAS FN	FASTEN, FASTENER FENCE	MOD MLD MR	MODULAR MOLDING, MOULDING MOP RECEPTOR	STD STA	STAINED GLASS STANDARD STATION
ANOD ARCH	ANODIZED ARCHITECT, ARCHITECTURAL	FBD FGL	FIBERBOARD FIBERGLASS	MT MOV	MOUNT, (ED), (ING) MOVABLE	ST STO	STEEL STORAGE
AD ASPH	AREA DRAIN ASPHALT	FIN FF	FINISH, (ED) FINISHED FLOOR ELEVATION	MULL NL	MULLION NAILABLE	SF SD	STOREFRONT STORM DRAIN
AT AUTO	ASPHALT TILE AUTOMATIC	FFL FA	FINISHED FLOOR LINE FIRE ALARM	NAT NI	NATURAL NICKEL	STR STCO	STRUCTURAL STUCCO
AWN BSMT	AWNING BASEMENT	FE FEC	FIRE EXTINGUISHER FIRE EXTINGUISHER CABINET	NR NOM	NOISE REDUCTION NOMINAL	SFLR SA	SUBFLOOR SUPPLY AIR
BL BM	BASE LINE BEAM	FHS FPL	FIRE HOSE STATION FIREPLACE	N NIC	NORTH NOT IN CONTRACT	SUS SYD	SUSPENDED SIDE YARD
BRG BPL	BEARING BEARING PLATE	FP FRT	FIREPROOF FIRE-RETARDANT	NTS NO	NOT TO SCALE NUMBER	SYM SYN	SYMMETRY, (ETRICAL) SYNTHETIC
BEL BM BET	BELOW BENCH MARK BETWEEN	FIXT FLG FLX	FIXTURE FLASHING FLEXIBLE	OC OP OPG	ON CENTER, (S) OPAQUE OPENING	<u>SYS</u> TKBD TEL	SYSTEM TACKBOARD TELEPHONE
BVL BEY	BEVELED BEYOND	FG FLR	FLOAT GLASS FLOOR, (ING)	OPG OPH ORN	OPENING OPPOSITE HAND ORNAMENTAL	TV TG	TELEPHONE TELEVISION TEMPERED GLASS
BLK BLKG	BLOCK BLOCKING	FD FL	FLOOR DRAIN FLOOW LINE	OD OA	OUTSIDE DIAMETER OVERALL	TIG TZ	TEMPERED, INSULATED GLAS TERRAZZO
BD BS	BOARD BOTH SIDES	FLUR FJT	FLOURESCENT FLUSH JOINT	OH PNT	OVERHEAD PAINT, (ED)	THK THR	THICK, (NESS) THRESHOLD
BOT BRKT	BOTTOM BRACKET	FTG FND	FOOTING FOUNDATION	PNL PB	PANEL, (ING) PANIC BAR	TBRL TOBR	TO BE RELOCATED TO BE REMOVED
BRS BRK	BRASS BRICK	FR FS	FRAME, (D), (ING) FULL SIZE	PTD PTR	PAPER TOWEL DISPENSER PAPER TOWEL RECEPTOR	TPD TPTN	TOILET PAPER DISPENSER TOILET PARTITION
BRZ BLDG	BRONZE BUILDING	FUR FUT	FURRED, (ING) FUTURE	PAR PRPT	PARALLEL PARAPET	TOL T&G	TOLERANCE TONGUE AND GROOVE
BUR BRGL	BUILT UP ROOFING BULLET RESISTANT GLASS	GA GV	GAGE, GAUGE GALVANIZED	PK PBD	PARKING PARTICLE BOARD	TSL TC	TOP OF CONCRETE SLAB TOP OF CURB
BO CAB	BY OWNER CABINET	GKT GC	GASKET, (ED) GENERAL CONTRACT, (OR)	PTN PV	PARTITION PAVE, (D), (ING)	TJ TP	TOP OF JOIST TOP OF PLATE
CAN CPT CSMT	CANVAS CARPET CASEMENT	GL GLB GCMU	GLASS, GLAZING GLASS BLOCK GLAZED CONCRETE MASONRY UNITS	PVMT PERF PER	PAVEMENT PERFORATE, (ED) PERIMETER	TST TSF TW	TOP OF STEEL TOP OF SUBFLOOR TOP OF WALL
CI CST	CAST IRON CAST STONE	GLAM GB	GLUED LAMINATE GRAB BAR	PTR PLTG	PLANTER PLANTING	TPG TOR	TOP OF WALL TOPPING TO REMAIN
CB CLG	CATCH BASIN CEILING	GD GRN	GRADE, GRADING GRANITE	PLAS PLA	PLASTER PLASTIC	TB TR	TOWEL BAR TRANSOM
CHT CEM	CEILING HEIGHT CEMENT	GRT GVL	GRATE, (ING) GRAVEL	PLAM PL	PLASTIC LAMINATE PLATE	T TRNB	TREAD TURNBUCKLE
CM CER	CENTIMETER (S) CERAMIC	GRHS GT	GREENHOUSE GROUT	PG PWD	PLATE GLASS PLYWOOD	TYP UC	TYPICAL UNDERCUT
CT CHBD	CERAMIC TILE CHALKBOARD	GRD GUT	GUARD GUTTER CYDSUM A ATH	PT PVC	POINT POLYVINYL CHLORIDE	UNF UNO	UNFINISHED UNLESS NOTED OTHERWISE
CHAM CHIM	CHAMFER CHIMNEY CHROMILIM	GPL GPPL GPT	GYPSUM LATH GYPSUM PLASTER GYPSUM TILE	PE PCPL	PORCELAIN ENAMEL PORTLAND CEMENT PLASTER	UR <u>UTL</u>	URINAL UTILITY V. IOINT
CR CIR CIRC	CHROMIUM CIRCLE CIRCUMFERENCE	GPT GWB HC	GYPSUM TILE GYPSUM WALLBOARD HANDICAP	PD PCF PLF	POUND,(S) POUNDS PER CUBIC FOOT POUNDS PER LINEAR FOOT	VJ VB VAR	V-JOINT VAPOR BARRIER VARNISH
CLR CLS	CIRCUMFERENCE CLEAR, CLEARANCE CLOSURE	HC HRL HBD	HANDICAP HANDRAIL HARDBOARD	PSF PSI	POUNDS PER LINEAR FOOT POUNDS PER SQUARE FOOT POUNDS PER SQUARE INCH	VAR VNR VERT	VARNISH VENEER VERTICAL
CGL COL	COATED GLASS COLUMN	HMD HDM	HARDWARE HARDWOOD	PCC PFB	PRECAST CONCRETE PREFABRICATE, (ED)	VG VIN	VERTICAL VERTICAL GRAIN VINYL
COMB COM	COMBINATION COMMON	HDR HTG	HEADER HEATING	PFN PRF	PREFINISHED PREFORMED	VB VCT	VINYL BASE VINYL COMPOSITION TILE
COMPT COMPO	COMPARTMENT COMPOSITION, COMPOSITE	HVAC HD	HEATING/VENTILATING/AIR CONDITIONING HEAVY DUTY	PREM PT	PREMOULDED PRESSURE TREATED	VF VT	VINYL FABRIC VINYL TILE
COMP	COMPRESS, (ED), (ION), (IBLE) CONCRETE	HT HPT	HEIGHT HIGH POINT	PL QT	PROPERTY LINE  QUARRY TILE	VICP VICT	VITREOUS CLAY PIPE VITREOUS CLAY TILE
CMU CONN	CONCRETE MASONRY UNIT CONNECTION	HCR HOR	HOLLOW CORE HORIZONTAL	RBT RAD	RABBET, REBATE RADIUS	WSCT WH	WAINSCOT WALL HUNG
CONST	CONSTRUCTION CONTINUE, CONTINUOUS	HB INCAN	HOSE BIBB INCANDESCENT	RFT RL	RAFTER RAIL, (ING)	WC WHTR	WATER CLOSET WATER HEATER
CONTR CJ CPR	CONTRACT, CONTRACTOR CONTROL JOINT COPPER	INCIN INCL	INCINERATOR INCLUDE, (ED), (ING)	REC REF RFL	RECESS. (ED) REFER, (ENCE) REFLECT, (ED), (IVE), (OR)	WP WR WS	WATERPROOFING WATER RESISTANT WATERSTOP
CPR CG CORR	COPPER CORNER GUARD CORRUGATED	ID INS INSC	INSIDE DIAMÉTÈR INSULATE, (ED), (ING) INSULATING CONCRETE	RFL REFR REG	REFLECT, (ED), (IVE), (OR) REFRIGERATOR REGISTER	WS WST WWF	WEATHERSTOP WEATHERSTRIP, (ING) WELDED WIRE FABRIC
CTR CS	COUNTER COUNTERSINK	IGL INT	INSULATING CONCRETE INSULATING GLASS INTERIOR	REIN RECP	REINFORCE, (ED), (ING) REINFORCED CONCRETE PIPE	W WHS	WEST WHEEL STOP
CRS CFT	COURSE CUBIC FOOT	INTM INV	INTERMEDIATE INVERT	REM REQ'D	REMOVE REQUIRED	WID WIN	WIDTH, WIDE WINDOW
CYD DPR	CUBIC YARD DAMPER	JC	JANITOR'S CLOSET	RES RET	RESILIENT RETURN	WG WM	WIRED GLASS WIRE MESH
DP	DAMPPROOFING			RA	RETURN AIR	WO	WITHOUT

## THE LEARNING EXPERIENCE

## ACADEMY OF EARLY EDUCATION

## **ARBORWALK WEST** LEE'S SUMMIT, MISSOURI 64082

Learning Experience, Lee's Summit, Missouri								
ROOM	STATE REQUIRED S.F.( 35 S.F. PER CHILD)	NET* S.F.	ACTUAL S.F.	RATIO CHILD PER S.F.	# OF CHILDREN	# OF TEACHERS	TEACHER RATIO	AGE GROUP
INFANT A	360	442	496	1/45	8	2	1/4	6 WK-12 MO
INFANT B	360	420	474	1/45	8	2	1/4	6 WK-12 MO.
TODDLERS A	360	360	414	1/45	8	2	1/4	12-23 MO.
TODDLERS B	315	334	388	1/45	7	2	1/4	12-23 MO.
TWADDLERS	560	563	612	1/35	16	2	1/8	24-30 MO.
PREPPERS	560	564	612	1/35	16	2	1/8	30-36 MO.
PRE-SCHOOL #1	700	706	718	1/35	20	2	1/10	3-5 YRS.
PRE-SCHOOL #2	700	703	715	1/35	20	2	1/10	3-5 YRS.
PRE-SCHOOL #3	630	642	654	1/35	18	2	1/10	3-5 YRS.
MBB/PRE-SCHOOL	700	700	712	1/35	20	2	1/10	3-5 YRS.
PRE K-K	560	562	582	1/35	16	1	1/16	5-6 YRS.
TOTALS		5,996			157	21		
* CALCULATED LESS BU	CALCULATED LESS BUILT-IN ITEMS							•

#### SUBMITTALS:

IT IS THE GENERAL CONTRACTOR'S (GC) RESPONSIBILITY TO SECURE AND REVIEW ALL SHOP DRAWINGS INDICATED FOR REVIEW BY THE CONSTRUCTION DOCUMENTS. IT IS EXPECTED THAT THE GC IS TO PROVIDE THEIR STAMP OF APPROVAL CERTIFYING THAT THEY HAVE COORDINATED AND VERIFIED ALL DIMENSIONS AND MATERIALS ALONG WITH THE COORDINATION OF ANY ADDITIONAL INFORMATION AFFECTING THE INSTALLATION, INCLUDING THE ACTUAL FIELD CONDITIONS. SHOP DRAWINGS NOT COMPLYING WILL NOT BE REVIEWED AND WILL BE SENT BACK TO THE GC FOR RESUBMITTAL IN ACCORDANCE WITH THIS REQUIREMENT. SHOP DRAWING RESUBMITTALS ARE TO INCLUDE ANY AND ALL CHANGES REQUESTED IN PREVIOUS REVIEWS, CLOUDING SAME AND PROVIDING A REVISION NUMBER. THE GC IS NOT TO PROCEED WITH ANY WORK OR FABRICATION UNTIL THE SHOP DRAWINGS HAVE BEEN REVIEWED AND APPROVED BY THE ARCHITECT. THE ARCHITECT WILL NOT ACCEPT ANY CHARGES FROM THE GC OR THEIR SUB-CONTRACTORS BASED ON THE REQUIRED RESUBMITTAL REQUESTED, AND MUST CLEARLY EXPLAIN THIS TO THEIR SELECTED SUB-CONTRACTOR BEFORE ENGAGING THEM AS PART OF THEIR TEAM.

CONTACTS
----------

OWNER/DEVELOPER:	<b>CIVIL ENGINEE</b>
JOHN MARTIN, CONSULTANT JMM CONSULTING, LLC, CONS.	SAM MALINOWSKY SM ENGINEERING
TO: CHRISTIE DEVELOPMENT	5507 HIGH MEADOW
ASSOCIATES, LLC	MANHATTAN KANSA
913.649.4500, 816.365.7111	785.341.9747
IOHN@CHRISTIEDEV COM	SMCIVII ENGR@GM

ARCHITECT/ENGINEER: CHERYL SCHWEIKER, AIA JARMEL KIZEL ARCHITECTS AND ENGINEERS INC. 42 OKNER PARKWAY LIVINGSTON, NEW JERSEY 07039 CSCHWEIKER@JKARCH.COM

THE LEARNING EXPERIENCE (TLE) 210 HILLSBORO TECHNOLOGY DR. DEERFIELD BEACH, FL 33441

561-886-6400

### DEFERRED SUBMITTALS (PREPARED BY OTHERS)

SPRINKLER SHOP DRAWINGS FIRE ALARM SHOP DRAWINGS TRUSS SHOP DRAWINGS

#### SCHEDULE OF DRAWINGS

TITLE SHEET

SPECIFICATIONS

SPECIFICATIONS

T-202	SPECIFICATIONS
T-203	SPECIFICATIONS
T-204	SPECIFICATIONS
T-205	SPECIFICATIONS
T-206	SPECIFICATIONS
T-207	SPECIFICATIONS
T-208	SPECIFICATIONS
T-209	SPECIFICATIONS
T-300	LIFE SAFETY DATA AND EGRESS PLAN
T-400	ACCESSIBILITY & TACTILE SIGNAGE DETAI
T-500	ENERGY COMPLIANCE REPORT
T-501	ENERGY COMPLIANCE REPORT

**ENERGY COMPLIANCE REPORT** ENERGY COMPLIANCE REPORT ENERGY COMPLIANCE REPORT ENERGY COMPLIANCE REPORT

ARCHITECTURAL SITE PLAN

CIVIL (BY OTHERS)

SP-102 SITE DETAILS

#### **ARCHITECTURAL** CONSTRUCTION PLAN DIMENSION PLAN

REFLECTED CEILING PLAN ROOF PLAN ROOF DETAILS ROOF DETAILS FLOOR FINISH PLAN WALL FINISH PLAN EXTERIOR ELEVATIONS BUILDING SECTION

WALL SECTIONS

WALL SECTIONS

WALL SECTIONS

DETAILS

DETAILS

A-082

PARTITION TYPES AND DETAILS TOILET ROOM PLANS AND DETAILS DOOR SCHEDULE AND DETAILS DOOR HARDWARE SCHEDULE WINDOW SCHEDULES **CUBBIES ELEVATIONS AND DETAILS** 

A-132 MILLWORK ELEVATIONS AND DETAILS MILLWORK ELEVATIONS AND DETAILS PANTRY ELEVATIONS AND DETAILS RECEPTION AREA ELEVATIONS AND MAIN ENTRY DETAILS PLAYGROUND AREA DETAILS A-152 PLAYGROUND AREA DETAILS A-161 SIGNAGE DETAILS

STRUCTURAL

S-300

FOUNDATION PLAN ROOF FRAMING PLAN WALL ELEVATIONS FOUNDATION SECTIONS

MEPFP GENERAL NOTES MECHANICAL, ELECTRICAL, PLUMBING, &

FP-001 FIRE PROTECTION GENERAL NOTES

FRAMING SECTIONS

FRAMING SECTIONS

**MECHANICAL** 

M-100 HVAC GENERAL NOTES HVAC ABBREVIATIONS, SPECIFICATIONS AND SYMBOL LIST

HVAC ROOF PLAN M-300 HVAC SCHEDULES AND RISER DIAGRAM HVAC DETAILS/DIAGRAMS HVAC VENTILATION CALCULATIONS

### **ELECTRICAL**

ELECTRICAL NOTES, LEGEND, SYMBOLS, & ABBREVIATIONS

ELECTRICAL NOTES ELECTRICAL PANEL SCHEDULES ELECTRICAL SERVICE RISER DIAGRAM ELECTRICAL POWER PLAN MECHANICAL ROOM LAYOUT

MECHANICAL POWER PLAN ELECTRICAL ROOF POWER PLAN ELECTRICAL LIGHTING PLAN E-400 ELECTRICAL INCOMING SERVICE RISER

PLUMBING GENERAL NOTES PLUMBING ABBREVIATIONS, SCHEDULES, SPECIFICATIONS AND LEGEND COLD AND HOT WATER PLUMBING RISER

SANITARY PLUMBING RISER DIAGRAM COLD AND HOT WATER PLUMBING PLAN P-400 SANITARY PLUMBING PLAN GAS AND STORM PLUMBING PLAN

#### FIRE PROTECTION

FP-100 FIRE PROTECTION GENERAL NOTES & SCHEDULES FP-200 FIRE PROTECTION PLAN FP-300 FIRE PROTECTION DIAGRAMS

PLUMBING DIAGRAMS

& LEGEND

FA-100 FIRE ALARM RISER, NOTES, SPECIFICATIONS FA-200 FIRE ALARM PLAN, NOTES & SYSTEM MATRIX

## CODE DATA

APPLICABLE CODES:

2018 INTERNATIONAL BUILDING CODE WITH AMENDMENTS 2018 INTERNATIONAL MECHANICAL CODE

2018 INTERNATIONAL PLUMBING CODE 2018 INTERNATIONAL FUEL GAS CODE 2018 INTERNATIONAL FIRE CODE 2017 NATIONAL ELECTRICAL CODE

ICC/ANSI A117.1-2009, ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES

LOT: #3 ARBOR WALK WEST, LEE'S SUMMIT, MO SITE DATA:

GENERAL DESCRIPTION: CHILD CARE USE, 1 STORY BUILDING BUILDING USE GROUPS: I-4 (CHILD DAY CARE) (I-4/E FOR 2 STORY)

CONSTRUCTION CLASSIFICATION:

VB (UNPROTECTED, UNRESTRICTED)

FIRE SPRINKLERS FULL AUTOMATIC SPRINKLER SYSTEM

**BUILDING AREA** ALLOWABLE 36,000 S.F. (FOR I-4) 10,000 SQ. FT BUILDING HEIGHTS: ALLOWABLE PROVIDED 2 (SECTION 504.4) STORIES 1 STORIES

2 PER ROOM WITH MORE THAN 10 OCCUPANTS

60 FEET (SECTION 504.3) NUMBER OF EXITS: PROVIDED REQUIRED 2 EXITS 2 PER STORY (TABLE 1006.3.2)

**OCCUPANCY** ALLOWABLE PROVIDED TABLE 1004.5 DAY CARE: MIN. OF 1 OCC: 35 SQ. FT. 180 TOTAL OCCUPANTS

5,996 / 35 NET SQ. FT. = 171 OCC.

SEC. 1005.3 3 EXIT DOORS X 34" = 102 170 x 0.2" = OCC. 180x0.2 = 36", 102" provided

PER STATE LICENSING 180 OCC. (ACTUAL; REFER TO LICENSING CALCS THIS PAGE)

EGRESS WIDTH: REQUIRED PROVIDED 72" TYP. CORRIDOR WIDTH 180 OCC. (SEE ABOVE) X 0.2 = 36" 44" MIN. CORRIDOR WIDTH (TABLE 1020.2) FIRE RATINGS: BUILDING ELEMENT REQUIRED PROVIDED 0 HOURS STRUCTURAL FRAMING 0 HOURS

BEARING WALLS 0 HOURS 0 HOURS 0 HOURS NON-BEARING WALLS FLOOR CONST. 0 HOURS 0 HOURS 0 HOURS 0 HOURS EXTERIOR WALLS 0 HOURS 0 HOURS CORRIDOR 0 HOURS

MAX. COMMON PATH REQUIRED PROVIDED OF EGRESS TRAVEL: 75 FT. (TABLE 1006.2.1) LESS THAN 75 FT.

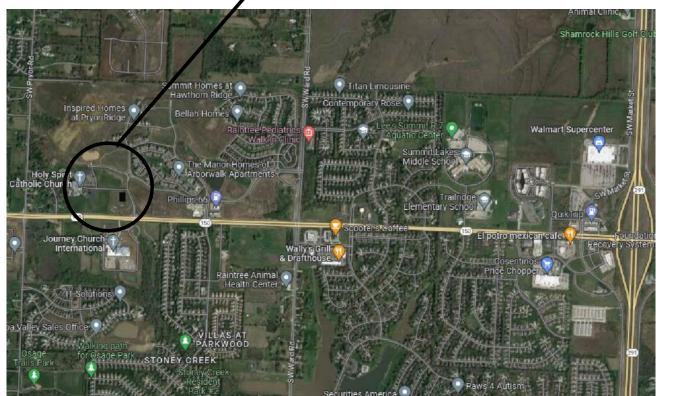
EXIT ACCESS REQUIRED MAXIMUM: I-4 OCCUPANCY (TABLE 1017.2) = 200 FT LESS THAN 200 FT TRAVEL DISTANCE:

PLUMBING **ELEMENT** REQUIRED (I-4) PROVIDED WATER CLOSET 12 (GENDER NEUTRAL) FIXTURE COUNT: 1 PER 15 = 12 LAVATORY 1 PER 15 = 12 12 (GENDER NEUTRAL) 1 PER 100 = 2 2 INTERIOR DRINKING FOUNTAIN 2 EXTERIOR





PROJECT SITE ARBORWALK WEST, LEE'S SUMMIT, MO





CONTRACTOR SHALL SUPERVISE AND DIRECT THE VORK USING THE CONTRACTOR'S BEST SKILL AND

RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCTI MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB

2. GC MUST PROVIDE & INSTALL ALL PRODUCTS PER

PLANS. ONLY SUBSTITUTED PRODUCTS NEED TO B SUBMITTED TO THE ARCHITECT FOR APPROVAL.

UNAPPROVED SUBSTITUTIONS WILL BE REPLACED A

3. VERBAL REPRESENTATION HAS NO VALUE AND AL

SPECIFICATIONS PER PLANS, MUST BE SUBMITTED IN WRITING TO THE ARCHITECT & TLE FOR APPROVAL.

REQUESTS TO CHANGE ANY PRODUCTS OR

21'-8"

2 EXITS PER ROOM

ATTENTION. THE CONTRACTOR SHALL BE SOLELY

www.jarmelkizel.com Architecture Engineering

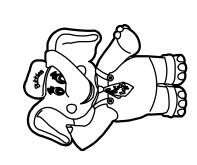
**42 OKNER PARKWAY** 

LIVINGSTON, NEW JERSEY 07039

TEL: 973-994-9669

Interior Design Implementation Services





NO. DATE DESCRIPTION FOR PERMIT 3 08-14-23 PER TLE AND CODE COMMENTS REVISION O. DATE DESCRIPTION 1 08-14-23 PER TLE AND CODE COMMENTS

> PROFESSIONAL CERTIFICATION MATTHEW B. JARMEL, AIA, MBA

LICENSE NUMBER: A2017014316

-	
Project Number:	Scale:
TLEMO22-164	AS NOTED
Drawn By:	Approved By:
·	MBJ

TITLE SHEET

Drawing Name:



#### **CONDITIONS OF CONTRACT**

The following Conditions of Contract are included as if bound with this document: AIA A101, Standard Form of Agreement Between Owner and Contractor, Stipulated Sum, and AIA A201. General Conditions of the Contract.

#### **SPECIFICATIONS**

Technical and administrative requirements for the Project are divided into 16 Divisions as follows. Division 1 General Requirements apply to all work for the Project

Division 1 – General Requirements

Division 2 – Sitework

Division 3 – Concrete

Division 4 – Masonry

Division 5 – Metals

Division 6 – Wood and Plastics

Division 7 – Thermal and Moisture Control

Division 8 – Doors and Windows

Division 9 – Finishes

Division 10 – Specialties

Division 11 – Equipment Division 12 – Furnishings

Division 13 – Special Construction

Division 14 – Conveying Systems

Division 15 - Mechanical

Division 16 – Electrical

#### SECTION 010000 - PROJECT REQUIREMENTS

#### <u>SUMMARY</u>

1. The Project consists of a commercial daycare center facility.

#### PROJECT REQUIREMENTS

- 1. Requirements for Sequence of Work, Phasing, and
- 2. Prior or Concurrent Work by Owner or Others 3. Existing Site Conditions and Restrictions
- 4. Contractor's Use of Premises and Adjacent Facilities
- 5. Pre-purchased and Pre-ordered Items
- 6. Owner-Furnished and Owner-Installed Items 7. Owner-Furnished and Contractor-Installed Items
- 8. Special Mock-Ups
- 9. Related Future Work
- 10. Reference Drawings and Reports
- 11. Owner's Building Standards

#### **PERMITS**

1. Apply for, obtain, and pay for building permits, health department permits, any additional permits required by the AHJ, and utility company back-charges required to perform the work. Submit copies to Architect and TLE.

### **INTENT**

- 1. Drawings and specifications are intended to provide the basis for the proper completion of the Project suitable for the intended use of the Owner.
- 2. Items not expressly set forth but which are reasonably implied or necessary for the proper performance of this work shall be included.

#### COORDINATION

- 1. Coordinate the work of all trades.
- 2. Prepare coordination drawings for areas above ceilings where close tolerances are required between building elements and mechanical and electrical work.
- 3. Verify location of utilities and existing conditions. Notify Architect of conditions differing from those indicated on the Drawings.
- 4. Verify dimensions on Drawings with dimensions at the Project. Do not scale drawings.

#### CUTTING AND PATCHING

- 1. Provide cutting and patching work to properly complete the
- 2. Do not remove or alter structural components without
- 3. Cut with tools appropriate for materials to be cut. 4. Patch with materials and methods to produce patch which is not visible from a distance of five feet.
- 5. Do not cut and patch in a manner that would result in a failure of the work to perform as intended, decrease fire performance, decrease acoustical performance, decrease energy performance, decrease operational life, or decrease safety factors.

#### FIELD ENGINEERING:

1. Verify and locate utilities, existing facilities, and equipment 2. Survey and lay out improvements, utilities, structures, and components.

#### **PROJECT MEETINGS:**

- 1. Arrange for a pre-construction conference prior to start of construction. Meeting shall be attended by TLE, Owner, Architect, Contractor, and major subcontractors.
- 2. Arrange for progress meetings once a month during construction, prior to application for payment. Record minutes and distribute promptly.

#### SUBMITTALS:

1. The work shall be in accordance with approved submittals except that the contractor shall not be relieved of responsibility for deviations from the requirements of the Construction Drawings by the Architect's approval of shop drawings, product data, samples or similar submittals, unless the contractor has specifically notified the Architect of such deviation at the time of the submittal and the Architect has given written approval to the specific deviation as a minor change in the work or a change order or construction change directive has been issued authorizing the deviation. The contractor shall not be relieved of responsibility for errors or omissions in shop drawings, product data, samples or similar submittals by the Architects approval thereof.

#### Submittals 1.1

**1.1.a.** The Contractor shall submit to the Architect & Owner for review and approval all shop drawings, samples, diagrams, schedules, product data, and similar submittals required by the Contract Documents. The Contractor shall review and stamp the submittals, confirming its' accuracy and conformity to the code and licensing regulations. The Contractor shall prepare and deliver its submittals to the Architect & Owner in a manner consistent with the Project Schedule and in such time and sequence so as not to delay the performance of the construction work.

**1.1.b**. The review and approval of any Contractor submittal shall not be deemed to authorize deviations, substitutions or changes in the requirements of the Contract Documents unless express written approval is obtained from the Architect, specifically authorizing such deviation, substitution or change. In the event that the Contract Documents do not contain submittal requirements pertaining to the work, the Contractor agrees upon request to submit in a timely fashion to the Architect & Owner for review and approval by the Architect any shop drawings, samples, product data, manufacturers' literature or similar submittals as may reasonably be required by the Owner.

**1.1.c.** Product Data submitted to include standard printed information on manufactured products and systems, including manufacturer's product specifications and installation instructions, catalog guts, standard wiring diagrams, printed performance curves.

**1.1.d.** The Architect shall review the Contractor's submittal schedule and shall not unreasonably delay or withhold approval of the schedule. The Architect's action in reviewing submittals shall be taken in accordance with the approved submittal schedule or, in the absence of an approved submittal schedule, with reasonable promptness white allowing sufficient time, in the Architect's professional judgement, to permit adequate

**1.1.e.** Resubmittal of documents are to comply with the requirements of the original submission; in addition:

- Identify on transmittal form that submittal is a resubmission
- Make any corrections or changes in submittals required by Architect/Engineer's notations on returned submittal
- Respond to Architect/Engineer's notations on the transmittal or on a separate page attached to contractor's resubmission transmittal, answer or acknowledge in writing all notations or questions indicated

#### Submittals 1.2

**1.2.a.** All documents, shop drawings, and "As-Built" drawings shall be prepared such that the drawings meet all the requirements of Local, State, and Federal regulations, codes and directives.

**1.2.b.** Shop drawings, data and samples to be checked before submitting to the Architect/Engineer for review. Each copy of the drawings and data shall bear Contractor's stamp, showing that they have been so checked.

**1.2.c.** The Contractor agrees to also provide as necessary, the forms, studies, and other documentation required by applicable codes and agencies. The Contractor agrees to ensure that all engineering solutions conform strictly to the guides and criteria outlined in Contract specifications. In case of uncertainty of detail or procedure, the Contractor agrees to request additional instruction from the County. The Contractor is responsible for producing complete, competent,

properly coordinated, and thoroughly checked documents. At the Contractor's expense, as part of their Adjustment Factors, the documentation noted above, shall be prepared and reviewed as necessary to ensure its compliance with all applicable laws and regulations.

- 2. Submit a project schedule and update at least bimonthly.
- 3. Submit for approval all submittals:
  - Structural Steel
  - Roof Trusses
  - Roofing Materials
  - Rebar

- HVAC equipment and controls
- Fire Sprinkler
- Fire Alarm
- Signage
- Doors & Hardware
- Storefront Doors & Hardware
- Windows
- Lighting and Controls
- Plumbing Fixtures
- Fencing & Gate Hardware Access Controls/CCTV/Security System
- Toilet Accessories
- 4. Include details of construction and adjacent construction in shop drawings. Clearly indicate any deviations from requirements of the contract documents. Fabricate materials from approved shop drawings only.

#### <u>QUALITY ASSURANCE:</u>

- 1. Comply with applicable codes, regulations, ordinances and requirements of authorities having jurisdiction, including accessibility guidelines where applicable. Submit copies of inspection reports, notices and similar documents to Architect.
- 2. Provide products of acceptable manufacturers which have been in satisfactory use in similar service for three years.
- 3. Use experienced installers. Furnish evidence of experience if requested.
- with manufacturer's instructions. 5. Use of any supplier or subcontractor is subject to Owner's approval and TLE.

4. Deliver, handle, and store materials in strict accordance

6. Engage and pay for testing agencies as required. Refer to individual sections for additional requirements.

#### TEMPORARY FACILITIES:

- 1. Provide temporary facilities and connections as required for the proper completion of the project.
- 2. Provide and maintain temporary utility services.
- 3. Owner will pay for utility service consumed. Do not waste. 4. Provide temporary protection for adjacent areas to prevent contamination by construction dust and debris.
- 5. Provide temporary barricades as necessary to ensure protection of the public.
- 6. Provide suitable waste disposal units and empty regularly. Do not permit accumulation of trash and waste materials. 7. Provide temporary sanitary facilities.
- 8. Maintain egress within and around construction areas. 9. Maintain fire alarm systems in operation during
- construction. 10. Provide fire extinguishers in work areas during construction.
- 11. Provide temporary protection for adjacent construction. Promptly repair any damage at no additional cost/expense to the Owner.

#### PRODUCTS AND SUBSTITUTIONS:

- 1. Provide products and materials specified. Request Architect's selection of colors and accessories with minimum 10 business days' notice to avoid delaying progress of the work.
- a. TLE PROVIDES:
- TLE branded classroom signage
- Toys
- Kitchen supplies
- Computers
- Office supplies (including trash cans for rooms)
- Mop, Broom, Vacuum and holders
- Tables and chairs
- Finger safes Cribs

- Printed materials
- Voice on hold for phones
- Paper products Smart Boards (Franchisee purchases)
- Laminator Lost & Found toy chest
- Soap, sanitizer and bleach Sleep mats

- b. <u>DEVELOPER PROVIDES:</u>
- All appliances: washer, dryer, microwaves,
- 55" Lobby board TV provided through <u>CDW</u>
- Wire for shelving in closets
- Cores & keys (installed by TLE)
- networking switch, wireless access points, ports
- paper dispensers, restroom mirrors
- Exterior trash cans
- Playground equipment
- Water feature (if specified)
- Alarms on fence gates
- Access Controls
- Millwork; cubbies, cabinets, bookcases, changing tables, office furniture
- Phones lines & internet
- Night security lock
- Exterior Signage
- 2. Requests for substitutions shall be submitted to the Submit sufficient information for Architect to evaluate
- proposed substitution. 3. Remove and replace work which does not conform to the contract documents at no additional expense to the Owner.

- 2. Do not proceed until unsatisfactory conditions have been
- practical. Form to required shapes and sizes with true edges, lines and angles. Provide inserts and templates as needed for work of other trades.
- 4. Install materials in exact accordance with manufacturer's instructions and approved submittals.
- 6. Restore units damaged during installation. Replace units which cannot be restored at no additional expense to the
- Owner. 7. Refer to additional installation requirements and tolerances
- 8. Provide thorough final cleaning inclusive of cleaning glass, waxing and polishing floors, dusting, and vacuuming of

- **CLOSEOUT:** 1. Prepare punch list for remaining work for review by the
- 2. Complete punch list items promptly at no additional expense to the Owner.
- warranty information.
- 5. Obtain and submit copy of occupancy permits. 6. Developer/GC to provide Franchisee/Operators with a facility walk through and training onsite at the end of the project. This should include but not be limited to all building systems, HVAC, water heaters, phone systems, Access Controls systems, etc. Developer/GC will also provide electronic copies of all O&M and Warranties
- including a contact list of all subcontractors. 7. Remove temporary facilities and provide final cleaning and
- touch-up. 8. Restore portions of building, site improvements, landscaping and other items damaged by construction operations to the satisfaction of the Architect at no
- 9. Developer is responsible for the Access Controls System until full operation/function is confirmed by center staff. If any part is failing to function, developer will have subcontractor on site at their expense to deliver functioning system including but not limited to: communication from TLE computer to the Access control board, operation of electric latches and release buttons, programming key fobs, training of TLE staff with sub technician.

- refrigerators, freezer, three basin sinks, grease trap
- Security mirrors
- All internet components router/gateway, modems,
- Soap dispensers, paper towel dispensers, toilet
- Picnic tables
- - including soccer nets, basketball hoop & ball (if specified)
- Door chime alarms on exterior doors

- TLE branded graphics
- Emergency Lockdown Device from Nightlock
- Security system
- Test and Balance HVAC Report
- Architect in writing, including reasons for the substitution.

- **INSTALLATION:** 1. Inspect substrates and report unsatisfactory conditions in
- 3. Take field measurements prior to fabrication where
- 5. Install materials in proper relation with adjacent construction and with proper appearance.
- specified under individual specification sections.

Architect and TLE.

- 3. Submit accurate record documents of building and site.
- 4. Submit operating manuals, maintenance manuals, and

additional expense to the Owner.

CONTRACTOR SHALL SUPERVISE AND DIRECT THE ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUC MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB

2. GC MUST PROVIDE & INSTALL ALL PRODUCTS PE PLANS. ONLY SUBSTITUTED PRODUCTS NEED TO I SUBMITTED TO THE ARCHITECT FOR APPROVAL. UNAPPROVED SUBSTITUTIONS WILL BE REPLACED

3. VERBAL REPRESENTATION HAS NO VALUE AND A REQUESTS TO CHANGE ANY PRODUCTS OR SPECIFICATIONS PER PLANS, MUST BE SUBMITTED IN WRITING TO THE ARCHITECT & TLE FOR APPROVAL.

THE EXPENSE OF THE GC.

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LIVINGSTON, NEW JERSEY 07039 TEL: 973-994-9669 FAX: 973-994-4069 www.jarmelkizel.com Architecture Engineering Interior Design Implementation Services

**42 OKNER PARKWAY** 



**ISSUE** NO. DATE DESCRIPTION FOR TLE REVIEW FOR PERMIT 3 08-14-23 PER TLE AND CODE COMMENTS MBJ

REVISION

1 08-14-23 PER TLE AND CODE COMMENTS

NO DATE DESCRIPTION

PROFESSIONAL CERTIFICATION

MATTHEW B. JARMEL, AIA, MBA

LICENSE NUMBER: A2017014316

**AS NOTED** TLEMO22-164 Approved By: Drawn By:

**SPECIFICATIONS** 

Drawing Number:

Γ-200

Drawing Name:

## <u>SECTION 012200 – VENDORS (Required and/or</u> Recommended)

Following are the approved and/or recommended vendors for TLE that are to be utilized for this project. These vendors are familiar and experienced with requirements for daycare / childcare centers in general as well as TLE's operational requirements for its centers. The General Contractor must provide each contractor listed with plans and specifications to ensure that the price quoted is all-inclusive.

If the General Contractor wishes to utilize a non-approved vendor, he must first receive written permission from TLE to do so

#### FLOORING -MBB RACETRACK (required)

Artwork is part of the graphics package (developer to confirm details with TLE construction manager)

#### FLOORING - CARPET and LVT (required)

Attn: William Sanchez
Ph: 754-243-3729
William.Sanchez@interface.com
Stock Hold #: 3141

For orders reach out to TLE@interface.com

Allow 4 weeks from time of deposit.

#### SIGNAGE (required)

Interface

Identiti Resources, LTD. Attn: Lauren Raiman Ph: 847-805-6685

Email: thelearningexperience@identiti.net

Allow 6 weeks from time of deposit.

#### LOCKSMITH (required)

ND Security 134 E. Shore Road Denville, NJ Attn: Nick DeSalvo Ph: 973-625-5602

Some locks must accommodate Arrow 7 pin, small format, figure 8, interchangeable cores. Doors and locks are specified on A-121. Cores are to be purchased from ND Security. Cores are shipped to TLE corporate after completion of building. TLE personnel will install cores after CO is received. Contractor must ensure that hardware accommodates these cores.

#### ALL WALL GRAPHICS (Required)

WM Printing
Attn: Kelsey Hout
Ph: 561-305-7027
tle@wmprinting.com

Note: Developer to contact TLE CM for the NDA and artwork.

Allow approx. 6 weeks from time of deposit. Final payment required prior to shipping. Typically installed within last month of construction.

THE IDENTITY GROUP Attn: Brett Wolfgram Ph: 207-831-3766 tle@theidentitygroup.com

Allow approx. 6 weeks from time of deposit. Final payment required prior to shipping. Typically installed within last month of construction.

Note: No devices (outlet, thermostats etc.) on any walls receiving graphics.

#### **CABINETS & SHELVES** (Required)

Rodgers Wade 1401 SW 3rd Street Paris, TX 75460 Ph: 903-783-3680 Fax:903-739-2505 Attn: Cate Smith

teamtle@rodgerswade.com

Allow 10 weeks from deposit/measured at frame

#### SECURITY, FIRE, CCTV, ACCESS CONTROL

Required for NJ, PA, NY, CT only Contractors permitted to use local subs when not in NJ, PA, NY, or CT.

Dynamic Protection Systems, Inc. 275 Lincoln Blvd., Suite 2 Middlesex, NJ 08846 Attn: Gary Ascolese Ph: 732-805-3000

IC REALTIME contact: Louis A. DiGioia National Sales Manager (954) 990-2951 louis@icrealtime.com

Provide approximately one month notice for rough wiring installation.

#### FIBER / PHONE LINES (REQUIRED)

Attn: Patrick Ammirati
Ph (Office): 732-335-5510
Ph (Direct): 732-391-6071
Fax: 732-335-5523
Email: pammirati@dmenterprise.net

#### DATA, COMMUNICATIONS, AND LOW VOLTAGE (Required)

American Business Communications, Inc. Attn: Bill Gollub 141 South State Street Hackensack, NJ 07601 Ph: 201-488-3500 x 202 Fax: 201-488-5588 Fax

Email: billg@abcnj.com / www.abcnj.com

Provide approximately one month notice for rough wiring installation.

TRANE HVAC (or approved equal, refer to HVAC drawings)

National Account
Chris St. John LEED AP
2301 Lucien Way Ste 430
Maitland, FL 32751
csstjohn@trane.com
407-325-7123 (mobile)

### LIGHTING (Required)

CED National Attn: Ray Sefcik, Jr Ph: 817-929-8191 Email: ray.sefcik@CED.com

#### **PAINT**

SHERWIN WILLIAMS
Attn: Glenn Remler
Architectural Account Executive
Ph: 954-547-1217
Glenn.J.Remler@Sherwin.com
The Sherwin-Williams Company

#### RECEPTION TV (Required)

CDW Attn: David Wright Ph: 813-462-4042

Email: thelearningexperience@cdw.com

#### **EMERGENCY LOCKDOWN DEVICE**

NIGHTLOCK – Nightlock Lockdown 1 – Door Barricade, low profile

www.nightlock.com
Attn: Shane Burr
Ph: 855-644-4856
Email: shane@nightlock.com

Note: Architect to verify if allowed by local jurisdiction.

#### BATHROOM ACCESSORIES

Contact: Anthony "Tony" Mince Key account representative Anthony.mince@staples.com Ph: 734-452-4743

### **SECTION 033000 - CAST-IN-PLACE CONCRETE**

REFER TO STRUCTURAL DRAWINGS FOR NOTES AND SPECIFICATIONS.

#### **SECTION 042000 - UNIT MASONRY**

#### SUMMARY

- 1. Provide Unit Masonry Construction:
- a. Brick veneer on wood studs.
- b. Concrete block bearing walls and non-bearing partitions.
- c. Freestanding site masonry walls.

#### CLIDMITTAL

1. Submit product data, samples, shop drawings.

#### PRODUCTS

- 1. As selected by Architect complying with the following:2. Face Brick:
- a. Standard size, 3-5/8 inches thick by 2-1/4 inches high by 8 inches long.
- b. Grade: ASTM C 216, Grade SW, severe weathering type areas subject to freeze-thaw and ASTM C 216, Grade MW, moderate weathering type elsewhere.
- c. Bond Pattern: Running bond pattern, unless otherwise specified. Refer to A-051.

#### 3. Thin Brick Veneer:

- a. Size: refer to A-051 for types and size.
- b. Grade: ASTM C 216, Grade SW, severe weathering type areas subject to freeze-thaw and ASTM C 216, Grade MW, moderate weathering type elsewhere.
- c. Bond Pattern: Running bond pattern, unless otherwise specified. Refer to A-051.
- 4. Concrete Masonry Units:
- a. Concrete Masonry Units: ASTM C 90, 1500 f'm compressive strength, normal weight.
- b. Size: Face dimension of 7-5/8 inches high by 15-5/8 inches long by width required for application.
- c. Bond Pattern: Running Bond.
- Fire Brick and Clay Flue Linings: ASTM C 27, medium duty fire brick, and ASTM C 315 clay flue linings; ASTM C 199 refractory mortar.

#### 6. Mortar and Grout:

- a. Mortar Mix: ASTM C 270, Type S, for reinforced masonry, masonry below grade and masonry in contact with earth and ASTM C 270, Type N, for above-grade loadbearing and nonloadbearing walls and parapet walls and for interior loadbearing and nonloadbearing partitions.
- b. Mortar Materials: Portland cement, ASTM C 150, Type I or II
- c. Mortar Aggregate: Natural color, ASTM C 144.
- d. Grout Aggregate: ASTM C 404.
- e. Hydrated Lime: ASTM C 207, Type S.f. Color: Natural color.
- 7. Reinforcing Steel:
- a. Reinforcing Bars: ASTM A 615, Grade 60.
- b. Deformed Reinforcing Wire: ASTM A 496.
- c. Plain Welded Wire Fabric: ASTM A 185.8. Joint Reinforcing: Welded wire with deformed side rods.
- a. Steel Wire: 9 gage (.1875 inch) stainless steel wire.
- b. Type: Ladder type.
- 9. Ties and Anchors:
- a. Bent Wire Ties: Galvanized steel.
- b. Rigid Anchors: Galvanized steel straps.
- 10. Masonry Accessories:
- a. Nonmetallic expansion joint strips.
- b. Preformed control joint gaskets.
- c. Bond breaker strips.
- d. Weep sash and tubes.

### <u>INSTALLATION</u>

- 1. Comply with requirements of Section 010000 Project Requirements.
- Comply with PCA Recommended Practices for Laying Concrete Block, Brick Institute of America Tech Notes, and NCMA TEK Bulletins.
- 3. Comply with cold weather and warm weather protection procedures as recommended in BIA Tech Notes.
- 4. Provide fire-rated assemblies complying with ASTM E 119.5. Sawcut units when required. Maintain uniform joint width.Provide full bed, head and collar joints except at
- weepholes.
  6. Install lintels and accessories in masonry construction.
- 7. Coordinate installation of flashings.8. Comply with applicable codes and regulations for spacing of ties and horizontal reinforcing.

- 9. Provide expansion and control joints in accordance with referenced publications.
- 10. Remove and replace damaged units.
- 11. Clean brick using bucket and brush method, BIA Tech Note 20.
- Clean concrete masonry by dry brushing, NCMA TEK No. 28.

#### SECTION 04720 - CAST STONE

#### SUMMARY

- 1. Provide Masonry Veneer Construction:
  - a. Thin Stone on studs
  - b. Cast stone on studs

#### SUBMITTALS

1. Submit product data, samples, shop drawings.

#### **PRODUCTS**

- 1. Thin Stone
  - a. Size: refer to A-051 Material Schedule
  - b. Grade: ASTM C 1364

#### 2. Full depth stone

- a. Size: refer to A-051 Material Schedule
- b. Grade: ASTM C1364

#### 3. Mortar and Grout:

- a. Mortar Mix: ASTM C 270, Type S, for reinforced masonry, masonry below grade and masonry in contact with earth and ASTM C 270, Type N, for above-grade loadbearing and nonloadbearing walls and parapet walls and for interior loadbearing and nonloadbearing partitions.
- b. Mortar Materials: Portland cement, ASTM C 150, Type I or II
- c. Mortar Aggregate: Natural color, ASTM C 144.
- d. Grout Aggregate: ASTM C 404.
- e. Hydrated Lime: ASTM C 207, Type S.f. Color: Natural color.
- 4. Ties and Anchors: per manufacturer's requirements
- a. Galvanized steel.5. Masonry Accessories:
  - a. Nonmetallic expansion joint strips
  - b. Preformed control joint gaskets.
  - c. Bond breaker strips.
- d. Weep sash and tubes.6. Sealant; as specified in section 07900

## INSTALLATION

- 1. Comply with requirements of Section 010000 Project Requirements.
- 2. Comply with Concrete Masonry Veneers
- NCMA TEK Bulletins.
- 3. Comply with cold weather and warm weather protection procedures as recommended in BIA Tech Notes.
- 4. Sawcut units when required. Maintain uniform joint width. Provide full bed of mortar, and vertical joints except at weep holes.
- a. Do not use pry bars or other equipment in a manner that could damage units
- 5. Leave head joints in copings and similar components open for sealant6. Use Type N mortar (ASTM C 270), unless specified
- otherwise
- 7. Install lintels and accessories in masonry construction. 8. Coordinate installation of flashings.
- 9. Sealant Joints
  - alant Joints
  - a. As specified in Section 07900.b. Prime ends of units, insert properly sized backing rod, and install sealant.
  - c. Provide sealant joints at following locations:

    i. Copings and cast stone units with exposed
  - tops.
  - ii. Joints at relieving angles.iii. Control and expansion joints.
  - iv. As indicated on the drawings.
- 10. Provide expansion and control joints in accordance with referenced publications.
- NCMA TEK Bulletin 10-1A & 10-2C
- 11. Remove and replace damaged units.12. Clean stone per manufacturer's specifications

#### **SECTION 055000 - METAL FABRICATIONS**

#### SUMMARY

- 1. Provide metal fabrications:
- a. Rough hardwareb. Steel ladder to roof access hatch

d. Loose bearing and leveling plates

- c. Handrails and railings.
- e. Loose steel lintels2. Tolerances:

1. CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING THE CONTRACTOR'S BEST SKILL AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCTION MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB

2. GC MUST PROVIDE & INSTALL ALL PRODUCTS PER PLANS. ONLY SUBSTITUTED PRODUCTS NEED TO BE SUBMITTED TO THE ARCHITECT FOR APPROVAL. UNAPPROVED SUBSTITUTIONS WILL BE REPLACED AT

THE EXPENSE OF THE GC.

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3. VERBAL REPRESENTATION HAS NO VALUE AND ALL REQUESTS TO CHANGE ANY PRODUCTS OR SPECIFICATIONS PER PLANS, <u>MUST</u> BE SUBMITTED IN WRITING TO THE ARCHITECT & TLE FOR APPROVAL.



ARCHITECTS AND ENGINEERS INC.
42 OKNER PARKWAY
LIVINGSTON, NEW JERSEY 07039
TEL: 973-994-9669
FAX: 973-994-4069

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		ISSUE	
NO.	DATE	DESCRIPTION	I
1	06-02-23	FOR TLE REVIEW	ı
2	06-14-23	FOR PERMIT	
3	08-14-23	PER TLE AND CODE COMMENTS	
		REVISION	

1 08-14-23 PER TLE AND CODE COMMENTS

NO. DATE DESCRIPTION

PROFESSIONAL CERTIFICATION

MATTHEW B. JARMEL, AIA, MBA

LICENSE NUMBER: A2017014316

Project Number: Scale:
TLEMO22-164 AS NOTED

Drawn By: Approved By:

SPECIFICATIONS

Drawing Name:

Drawing Number:

Γ-201

MATTHEW 9.

NUMBER
A-2017014316

- a. Fabrication tolerance: 1/8 inch in 10 feet
- b. Erection tolerance: 1/16 inch

### **SUBMITTALS**

1. Submit product data & shop drawings.

#### **PRODUCTS**

- 1. Steel plates, shapes, and bars: ASTM A 36
- 2. Steel tubing: ASTM A 500 or A 501
- 3. Steel pipe, black finish: ASTM A 53
- 4. Stainless steel bar stock: ASTM A 276, Type 302 or 304 5. Stainless steel plate: ASTM A 167, Type 302 or 304
- 6. Stainless steel tubing: ASTM A 554, Grade TP 304 or TP
- 7. Aluminum extruded bars and shapes: ASTM B 221 aluminum alloy
- 8. Steel finish: primed finish
- 9. Fasteners: non-corrosive, suitable for service intended
- 10. Zinc coating: hot-dip galvanized coating for materials in exterior assemblies or exterior walls
- 11. Aluminum finish color: anodized finish
- 12. Stainless steel finish: number 6 satin directional polish

#### INSTALLATION

- 1. Comply with requirements of Section 010000 Project
- 2. Comply with ASTM E 985 for handrail and railing structural
- 3. Comply with AISC codes and specifications and with AWS Structural Welding Code.

#### SECTION 061000 - ROUGH CARPENTRY

#### SUMMARY

- 1. Provide rough carpentry:
- a. Framing with dimensional lumber
- b. Framing with engineered wood products
- c. Framing with timbers
- d. Wood grounds, nailers, and blocking
- e. Wood furring
- f. Backing panels g. Sheathing
- h. Subflooring
- . Underlayment
- Remodel existing rough carpentry

#### SUBMITTALS

1. Submit product data

#### **PRODUCTS**

- 1. Lumber Standards and Grade Stamps: PS 20, American Softwood Lumber Standard and inspection agency grade
- 2. Construction Panel Standards: PS 1, U.S. Product Standard for Construction and Industrial Plywood; APA
- 3. Wood Framing Standards: NFPA House Framing Manual. a. Exterior Wall Framing: refer to Structural drawings for
- notes and specifications b. Interior Wall Framing: 2 inch by 4 inch studs, 16 inches
- on center. c. Interior Wall Framing: 2 inch by 6 inch studs, 16 inches
- 4. Preservative Treatment: AWPA C2 for lumber and AWPA C9 for plywood; waterborne pressure treatment,
- preservative retention [0.25] [0.40] [2.5] pcf. 5. Fire-Retardant Treatment: AWPA C20 for lumber and
- AWPA C27 for plywood; noncorrosive type.

#### 6. Dimension Lumber:

- a. Light Framing: Stud, No. 3 or Standard grade. b. Structural Framing: refer to Structural drawings for
- notes and specifications c. Species: Any species of grade indicated.
- d. Exposed Framing: Appearance grade.
- 7. Boards:
- a. Exposed Boards: 15 percent moisture content.
- b. Concealed Boards: 19 percent moisture content. 8. Miscellaneous Lumber, Blocking and Nailers:
- a. Moisture Content: 19 percent.
- b. Grade: Standard grade light framing.
- 9. Engineered Wood Products:

a. Refer to Structural drawings for notes and specifications.

#### 10. Construction Panels:

- a. Combination Subfloor-Underlayment: APA Sturd-I-Floor,
- b. Subflooring: APA Sheathing, Exterior.
- c. Wall Sheathing: APA Sheathing, Exterior sheathing.
- d. Roof Sheathing: APA Sheathing, Exterior sheathing. e. Plywood Backing Panels: APA C-D Plugged Exposure
- 1 with exterior glue, fire-retardant treated.

- f. Plywood Underlayment for Resilient Flooring: APA Underlayment Exterior.
- g. Construction Panel Underlayment for Resilient Flooring:
- APA Sturd-I-Floor, Exterior. h. Construction Panel Underlayment for Ceramic Tile:
- APA Sturd-I-Floor, Exposure 1. i. Plywood Underlayment for Carpet: APA Underlayment
- Exposure 1.
- 11. Auxiliary Materials:
- a. Felt Air Infiltration Barrier: Asphalt-saturated organic
- felt, ASTM D 226, Type I, No. 15 felt, unperforated.
- b. Polyethylene Air Infiltration Barrier: High density polyethylene.
- c. Polyolefin Air Infiltration Barrier: Woven polyolefin
- d. Sill Sealer Gaskets: Glass fiber strip resilient insulation.
- e. Framing Anchors and Fasteners: Non-corrosive, suitable for load and exposure.

#### INSTALLATION

- 1. Comply with requirements of Section 010000 Project Requirements
- 2. Comply with NFPA Manual for House Framing, NFPA Recommended Nailing Schedule, and NFPA National Design Specifications for Wood Construction
- 3. Comply with APA Design and Construction Guide,
- Residential and Commercial Construction 4. Provide nailers, blocking, and grounds where required. Set
- work plumb, level, and accurately cut 5. Comply with manufacturer's requirements for treated materials

#### **SECTION 061753 - WOOD TRUSSES**

REFER TO STRUCTURAL DRAWINGS FOR NOTES AND SPECIFICATIONS.

#### **SECTION 064013 - EXTERIOR ARCHITECTURAL** WOODWORK

#### **SUMMARY**

- 1. Provide exterior architectural woodwork:
- a. Standing and running trim and rails
- b. Ornamental items

#### <u>SUBMITTALS</u>

1. Submit product data, samples, & mockup of each type

#### **PRODUCTS**

- 1. AWI Standards: Architectural Woodwork Institute (AWI) "Architectural Woodwork Quality Standards"
- 2.WIC Standards: Woodwork Institute of California (WIC) "Manual of Millwork"
- 3. Preservative Treatment: nonpressure method, exterior type, NWWDA I.S. 4 4. Fire-Retardant Treatment: AWPA C20 for lumber and
- AWPA C27 for plywood; noncorrosive exterior type 5. Exterior Standing and Running Trim and Rails:
- a. Species for opaque finish: white pine or sugar pine
- b. Grade: Premium
- c. Texture: Surfaced all sides
- d. Finish: Paint
- 6. Exterior Ornamental Items:
- a. Species for opaque finish: white pine or sugar pine
- b. Grade: premium c. Finish: paint
- 7. Auxiliary materials:
- a. Nails: stainless steel, aluminum, or hot-dip galvanized
- b. Screws and Anchors: noncorrosive, type required for secure anchorage

### INSTALLATION

- 1. Comply with requirements of Section 010000 Project Requirements
- 2. Comply with standards referenced
- 3. Backprime work before installation
- 4. Provide trim for scribing and site cutting
- 5. Install work plumb, level and in proper alignment 6. Provide work free from tool marks and blemishes
- 7. Securely fasten to substrates
- 8. Install in lengths to minimize joints and seams 9. Color match wood for transparent finish at joints for uniform
- appearance 10. Touch-up damaged or abraded finishes.

#### **SECTION 064023 - INTERIOR ARCHITECTURAL** WOODWORK

MUST USE REQUIRED VENDOR: NO SUBSTITUTIONS

Rodgers Wade 1401 SW 3rd Street

Paris, TX 75460 Attn: Cate Smith, Project Coordinator

Ph: 903-783-3680

Fax:903-739-2505

teamtle@rodgerswade.com

Allow 10 weeks from deposit/measured at frame.

#### SUMMARY

- 1. Provide interior architectural woodwork:
- a. Casework and countertops
- b. Cubbies c. Shelving

### SUBMITTALS

1. Submit product data, samples, & mockup of each type

### **PRODUCTS**

- 1. AWI Standards: Architectural Woodwork Institute (AWI) "Architectural Woodwork Quality Standards"
- 2. WIC Standards: Woodwork Institute of California (WIC) "Manual of Millwork"
- 3. Millwork Vendor See Required/Approved Vendors list 4. Cabinetry & Shelving:
- a. Melamine construction with PVC edge band. Sample to

be approved by architect.

- b. Grade: Custom
- c. Shelf Supports: surface-mounted slotted standards d. Closet coat hangers: chrome-plated steel; hook and broom hangers.
- 5. Auxiliary materials:
- a. Screws: FS FF-S-111, countersunk
- b. Nails: FS FF-N-105, countersunk
- c. Anchors: type required for secure anchorage

#### <u>INSTALLATION</u>

- 1. Comply with requirements of Section 010000 Project
- 2. Comply with standards referenced
- 3. Backprime work before installation 4. Provide trim for scribing and site cutting
- 5. Install work plumb, level, and in proper alignment
- 6. Provide work free from tool marks and blemishes 7. Securely fasten to substrates
- 8. Install in lengths to minimize joints and seams 9. Color match wood for transparent finish at joints for uniform
- appearance 10. Touch-up damaged or abraded finishes

## SECTION 071113 - BITUMINOUS DAMPPROOFING

- SUMMARY 1. Provide Bituminous Dampproofing where specified in
- drawings: a. Exterior surfaces of foundation walls.
- b. Exterior of interior wythe at cavity walls. c. Interior surfaces.

<u>SUBMITTALS</u>

## 1. Submit product data

- **PRODUCTS**
- 1. Hot-Applied Asphalt Dampproofing: a. Materials and Application: Dampproofing asphalt,
- ASTM D 449, Type I. b. Protection Course: Compatible with dampproofing.
- 2. Cold-Applied Cut-Back Asphalt Dampproofing:
- a. Trowel grade, ASTM D 4586, Type I b. Semimastic grade, ASTM D 4479, Type I.
- c. Spray grade, ASTM D 4479, Type I.
- d. Protection Course: Compatible with dampproofing. 3. Cold-Applied Asphalt Emulsion Dampproofing:
- Type III or IV.

d. Protection Course: Compatible with dampproofing.

a. Trowel grade, ASTM D 1187, Type I, or ASTM D 1227,

b. Semimastic grade, ASTM D 1227, Type III or IV. c. Spray grade, ASTM D 1227, Type III or IV.

INSTALLATION 1. Comply with requirements of Section 010000 - Project Requirements.

#### **SECTION 071353 – ELASTOMERIC SHEET WATERPROOFING**

#### SUMMARY

- 1. Provide elastomeric sheet waterproofing systems where specified in drawings:
- a. Ice & water shield underlayment.

#### SUBMITTALS

1. Must provide 20 yr. warranty. Submit product data and warrantv.

#### **PRODUCTS**

- 1. EPDM Sheet Waterproofing: Ethylene propylene diene monomer sheets, 0.060 inch thick, tensile strength 1400 psi, ASTM D 412, ASTM D 6134
- 2. Alternates (submit product data to Architect for review and
- a. Rubberized Asphalt Sheet Waterproofing: Self-adhering rubberized asphalt and polyethylene sheet membrane, 60 mils thick, tensile strength 250 psi.
- b. Butyl Sheet Waterproofing: Synthetic butyl rubber sheets, 60 mils thick, tensile strength 1200 psi, ASTM D c. Butyl Rubber Sheet Waterproofing: Self-adhering butyl
- rubber and polyethylene sheet membrane, 60 mils thick, tensile strength 400 psi) d. Bituminous Sheet Waterproofing: Premolded 7-ply
- bituminous sheet waterproofing, 60 mils thick. 3. Flashing Materials and Protection Board: Compatible with membrane waterproofing.

Requirements.

INSTALLATION 1. Comply with requirements of Section 010000 - Project

## **SECTION 072100 - BUILDING INSULATION**

- 1. Provide Building Insulation and Vapor Retarders: a. Under slabs-on-grade, board type
- b. Foundation walls, board type
- c. Thermal insulation in exterior cavity walls, board type d. Thermal insulation in masonry cells, loose fill type
- e. Thermal insulation in exterior walls, blanket type f. Thermal insulation at underside of roofs, over heated
- spaces and over soffits, blanket type g. Thermal insulation over unheated areas, blanket type
- h. Acoustic insulation at interior partitions, blanket type i. Firesafing insulation, board or blanket type

### Sheet vapor retarders

**SUBMITTALS** 

1. Submit product data

- **PRODUCTS** 1. Board Insulation:
- a. Extruded polystyrene, rigid, ASTM C 578.
- b. Molded expanded polystyrene, rigid, ASTM C 578. c. Phenolic board, rigid.
- d. Polyisocyanurate board, rigid, FS HH-I-1972/1, Class 2.
- e. Cellular glass, rigid, ASTM C 552, Type I f. Glass fiber board, semi-rigid, ASTM C 553, Class B-4. g. Glass fiber board, foil-faced, semi-rigid or rigid, ASTM C
- h. Semi-refractory fiber board, semi-rigid or rigid, ASTM C i. Firesafing semi-refractory fiber board, semi-rigid, ASTM
- C 612, Class 1 and 2. 2. Vapor Retarder: Integral vapor retarder as required for
- application. 3. Blanket/Batt Insulation: a. Glass fiber or mineral slag fiber, ASTM C 665, Type I
- b. Glass fiber or mineral slag fiber, ASTM C 665, Type III
- foil-faced vapor-retarder membrane. 4. Loose Fill Insulation:
- a. Loose granular perlite, ASTM C 549, Type II. b. Loose granular vermiculite, ASTM C 516, Type II.

c. Loose glass fiber insulation, ASTM C 764.

- 5. Vapor Retarder (Not Integral with Insulation): a. Polyethylene, ASTM D 4397, 6 mils, 0.13 perm vapor
- transmission rating. b. Reinforced 2-ply polyethylene, 6 to 8 mils. c. Reinforced 3-ply polyethylene, 10 to 12 mils.
- to 1.0 mil aluminum foil. 6. Accessories:
- a. Adhesives and mechanical anchors.
- b. Protection board.
- c. Crack sealers and tapes. 7. Sheet Radiant Barrier: ASTM C 1313, foil on one side, flame spread index of 25 or less, and water-vapor

d. Metal foil/polyester film, 0.5 mil polyester film laminated

transmission of 1 perm, maximum. 8. Eave Ventilation Troughs: Provide Raft-R-Mate by Owens Corning or approved equal applied to underside of roof sheathing between truss/roof rafters, to maintain airway

CONTRACTOR SHALL SUPERVISE AND DIRECT THE ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUC MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB

2. GC MUST PROVIDE & INSTALL ALL PRODUCTS PE PLANS. ONLY SUBSTITUTED PRODUCTS NEED TO I SUBMITTED TO THE ARCHITECT FOR APPROVAL. UNAPPROVED SUBSTITUTIONS WILL BE REPLACED THE EXPENSE OF THE GC.

3. VERBAL REPRESENTATION HAS NO VALUE AND A REQUESTS TO CHANGE ANY PRODUCTS OR SPECIFICATIONS PER PLANS, MUST BE SUBMITTED IN WRITING TO THE ARCHITECT & TLE FOR APPROVAL.

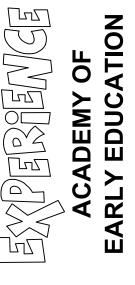


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FAX: 973-994-4069

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**ISSUE** NO. DATE DESCRIPTION FOR TLE REVIEW FOR PERMIT 3 08-14-23 PER TLE AND CODE COMMENTS MBJ REVISION NO. DATE DESCRIPTION 1 08-14-23 PER TLE AND CODE COMMENTS

PROFESSIONAL CERTIFICATION

**AS NOTED** TLEMO22-164 Approved By: Drawn By:

**SPECIFICATIONS** 

MATTHEW B. JARMEL, AIA, MBA

LICENSE NUMBER: A2017014316

Drawing Number:

Drawing Name:



from eave to ridge. Install per manufacturer's specifications.

9. Impaling pins to secure roof insulation to underside of roof sheathing as shown on drawings. Pins to be by Gemco, by Thomas Welding Systems or approved equal, 2" x 2" perforated base with impaling pin as required up to 16" in length. Insulation to be held in place using 2 ½" X 2 ½" self-locking washers. Install per manufacturer's specifications.

#### INSTALLATION

- 1. Comply with requirements of Section 010000 Project Requirements.
- 2. Install insulation and vapor barriers with continuous coverage to provide optimum performance.

#### **SECTION 072400 - EXTERIOR INSULATION AND FINISH SYSTEMS**

#### <u>SUMMARY</u>

- 1. Provide Exterior Insulation and Finish Systems (EIFS):
- a. Applications over concrete surfaces
- b. Applications over masonry surfaces
- c. Applications over gypsum sheathing

#### <u>SUBMITTALS</u>

1. Submit product data, samples, shop drawings, 4 foot by 4 foot mockup, & warranty

#### **PRODUCTS**

- 1. As selected by Architect, complying with the following: 2. Finish Coating over Molded Polystyrene Board:
- a. Type: EIMA Class PB.
- b. Base Coat: Portland cement and polymer adhesive.
- c. Finish Coat: Polymer emulsion.
- d. Thermal Insulation: Molded rigid cellular polystyrene.
- e. Adhesive Attachment: Adhesive.
- f. Mechanical Attachment: Mechanical fasteners.
- corrosion-resistant. g. Reinforcing Fabric: Standard weight with high-impact
- type at areas subject to damage. 3. Finish Coating over Extruded Polystyrene Board:
- a. Type: EIMA Class PM.
- b. Base Coat: Portland cement, glass fibers, and polymer
- c. Polymer Topcoat: Polymer-modified Portland cement. d. Acrylic Topcoat: Acrylic emulsion. e. Thermal
- Insulation: Extruded rigid cellular polystyrene
- e. Attachment: Mechanical fasteners, corrosion-resistant
- f. Reinforcing Fabric: Standard weight.

### **INSTALLATION**

- 1. Comply with requirements of Section 010000 Project
- 2. Provide impact-resistant reinforcing at areas subject to
- 3. Wrap edges of insulation board with fabric and finish coating at reveals and sealant joints

#### SECTION 073113 - ASPHALT SHINGLES (if specified)

#### SUMMARY

1. Provide shingles for roofing applications 2. Provide shingles for siding applications

### **SUBMITTALS**

1. Submit product data, samples, & 30 year warranty

### **PRODUCTS**

- 1. Products: GAF Timberline HD 30-Year Architectural dimensional shingles
- a. Shingle color: refer to drawing A-051
- b. Square tab, fiberglass strip shingles c. Square tab, organic-felt strip shingles
- d. Heavyweight, laminated, organic felt strip shingles
- e. Staggered-butt-edge, fiberglass strip shingles with tabs
- f. Staggered edge, fiberglass shingles g. Accessories: hip and ridge shingles; felt, ASTM D 226;
- rubberized asphalt perimeter underlayment; metal flashing and drip edge h. Accessories: hip and ridge tiles; felt, ASTM D 226;
- rubberized asphalt perimeter underlayment; metal flashing and drip edge 2. Fasteners: noncorrosive and non-staining
- 3. Accessories: snow guards

#### SECTION 074646 - FIBER CEMENT SIDING (if specified)

#### **SUMMARY**

1. Provide siding for exterior walls

#### SUBMITTALS

1. Submit product data, samples, & warranty

#### **PRODUCTS**

- 1. Products: HardiePlank, HardiePanel, HardieTrim fascia and
- 2. HardiePlank siding: non-asbestos fiber cement siding to comply with ASTM Standard Specification C1186 Grade II,
  - a. Color: as specified in exterior finish schedule on drawing A-051

#### 3. Siding Auxiliary Materials:

- a. For metal construction: exposed fasteners: 1 1/4" No. 8 x 0.375" head corrosion-resistant S-12 ribbed buglehead
- b. For wood construction: 0.089" shank x 0.221" head x 1 1/2" corrosion-resistant siding nails
- 4. Solid soffit panels: a. Color: as specified in exterior finish schedule on drawing
- A-051
- b. Ventilating soffit panels
- c. Corner posts and trim
- d. Door and window casings
- e. Closure trim

#### INSTALLATION

- 1. Comply with requirements of Section 010000 Project
- 2. Coordinate siding installation with flashings to shed water properly
- 3. Backprime work before installation
- 4. Install work plumb, level, and in proper alignment
- 5. Provide work free from tool marks and blemishes
- 6. Securely fasten to substrates
- 7. Install in lengths to minimize joints and seams
- 8. Store and install material according to manufacturer's specifications

#### **SECTION 075400 - THERMOPLASTIC POLYOLEFIN MEMBRANE ROOFING SYSTEM (TPO)**

1. Manufacturer: Firestone (or approved equal)

2. Basis of Design: 60 Mil., Singly-Ply Thermoplastic Polyolefin Membrane Roofing System, Mechanically Fastened. Color: White

#### SUBMITTALS:

1. Must provide 20 yr. warranty. Submit product data & warranty

### PRODUCTS:

- 1. Firestone Rubbergard (or approved equal)
- 2. Membrane roofing: 60 Mil. TPO roofing system
- 3. Tapered insulation: ASTM C 1289, provide factory-tapered insulation boards fabricated to slope of 1/2" PER 12".
- 4. Flexible walkway pads: Factory-formed, nonporous, heavy-duty, slip-resisting, surface-textured walkway pads sourced from membrane roofing system manufacturer.
- 5. Fasteners and accessories: Manufacturer's standard fasteners and accessories for proposed insulation depth and roof slope.

### **SECTION 076200 - FLASHING AND SHEET METAL**

#### SUMMARY

- 1. Provide flashing and sheet metal:
- a. Metal counterflashing and base flashing
- b. Exterior wall flashing and expansion joints c. Built-in metal valleys, gutters, and scuppers
- d. Gutters and downspouts
- e. Exposed metal trim and fascia units
- f. Elastic flashing
- g. Elastic roof and wall expansion joint systems
- h. Laminated composition flashing i. Sheet metal accessories
- Ridge vents

### k. Soffit vents

#### **SUBMITTALS**

1. Submit product data, samples, & shop drawings

#### **PRODUCTS**

- 1. Sheet metal flashing and trim:
- a. Zinc-coated steel: ASTM A 526, G90 hot-dip galvanized, 20 gage (0.0359 inch)
- b. Stainless steel: AISI Type 302/304, ASTM A 167, 2D annealed finish, 28 gage (0.0156 inch)
- c. Copper: ASTM B 370, 16 ounces per square foot

- d. Lead-coated copper: ASTM B 370, copper, 16 ounces per square foot and 0.06 pounds per square foot lead coating (both sides)
- e. Sheet aluminum: ASTM B 209, alloy 3003, clear anodized, 20 gage (0.0359 inch)
- f. Extruded aluminum: 6063-T52, clear anodized, 0.080 inches for primary legs of extrusion
- 2. Flexible sheet membrane flashing: non-reinforced flexible black elastic sheet, 50 to 65 mils thick, butyl synthetic rubber sheet
- 3. Laminated composition sheet flashing: 3 ounce copper sheet laminated between 2 layers of bituminous impregnated Kraft paper or saturated fabric
- 4. Fabricated units: compliance with SMACNA Architectural Sheet Metal Manual 5. Elastic expansion joints: factory-fabricated metal-flanged
- edges to fit curbs and curb substrate 6. Ridge vents: baffled aluminum ridge vent, suitable for direct application of shingles
- 7. Soffit vents: continuous aluminum strip vents
- 8. Auxiliary materials:
- a. Solder compatible with metal
- b. Bituminous isolation coating
- c. Mastic and elastomeric sealants d. Epoxy seam sealer
- e. Rosin-sized building paper slip sheet
- f. Polyethylene underlayment g. Reglets and metal accessories
- h. Gutter and conductor head guards

i. Asphaltic roofing cement

### <u>INSTALLATION</u>

- 1. Comply with requirements of Section 010000 Project
- 2. Install flashing and sheet metal with provision for expansion and contraction
- 3. Install flashing and sheet metal to shed water properly
- 4. Install gutters and downspouts to drain water properly

5. Isolate dissimilar metals with bituminous coating

## SECTION 077200 - ROOF ACCESSORIES

- <u>SUMMARY</u> 1. Provide roof curbs and equipment supports
- 2. Provide roof hatches
- 3. Provide low profile gravity ventilators
- 4. Provide ridge vents

**SUBMITTALS** 1. Submit product data, samples, & shop drawings

- **MATERIALS** 1. Aluminum sheet: ASTM B 209 (ASTM B 209M), alclad alloy 3005H25, or alloy and temper required to suit forming
- operations, with mill finish unless otherwise indicated 2. Extruded Aluminum: ASTM B 221 (ASTM B 221M), Alloy 6063-T52, or alloy and temper required to suit structural and finish requirements, with mill finish unless otherwise
- 3. Galvanized sheet steel: ASTM A 653/A 653 M, G90 (Z275)

ROOF CURBS AND EQUIPMENT SUPPORTS 1. Fabricate from 0.0747 inch (1.9) galvanized structural steel; factory primed and prepared for painting with welded or sealed mechanical corner joints 0.063 inch (1.6 mm) thick, sheet aluminum with welded corner joints.

- **PRODUCTS**
- 1. As noted on drawings 2. Provide units with cant strips and base profile coordinated
- with roof insulation thickness and roof deck slope 3. Provide preservative-treated wood nailers at tops of curbs
- 4. Provide manufacturer's standard rigid or semi-rigid insulation

#### **ROOF HATCHES**

1. Fabricated from galvanized structural-steel sheet with 9 inch (225 mm) high, integral-curb, double-wall construction with 1 1/2" (38 mm) insulation, formed cants and cap flashing, with welded or sealed mechanical corner joints. Provide double-wall cover (lid) construction with 1 inch (25 mm) thick insulation core. Provide gasketing and corrosion-resistant hardware including pintle hinges, hold open devices, interior padlock hasps, and both interior and exterior latch handles

#### **PRODUCTS** 1. Bilco

a. Single leaf roof scuttle Type E-20 - Size 3'-0" x 3'-0"

#### LOW-PROFILE GRAVITY VENTILATORS

1. Fabricated from galvanized steel sheet with baked-enamel finish. Provide units with integral double-wall aluminum curb, with minimum 1 inch (25 mm) thick, glass-fiber board insulation, and with minimum 3 inch (75 mm) roof flanges. Provide bird screens fabricated from 1/2 inch (13 mm) square mesh, 0.062 (1.6 mm) diameter, stainless-steel

#### **RIDGE VENTS**

1. Provide aluminum, set on type ridge vents

2. Finish: high performance organic coating

#### SECTION 078100 - FIREPROOFING (if required)

1. Provide fireproofing for new building structure

2. Patch fireproofing disturbed by remodeling operations

**SUBMITTALS** 1. Submit product data & test reports

#### **PRODUCTS**

1. Fire performance: ASTM E 119 and local regulations

4. Exposed sprayed-on fireproofing: medium density type,

- 2. Cementitious type for concealed use: 15 pounds per cubic foot dry density, ASTM E 605
- 3. Mineral fiber type for concealed use: 15 pounds per cubic foot dry density, ASTM E 605

cementitious type

having jurisdiction

- INSTALLATION 1. Comply with requirements of Sction 010000 - Project
- Requirements 2. Inspect existing and new structural members for proper
- fireproofing prior to close-in of ceilings and walls 3. Provide material thicknesses necessary to provide fire resistance ratings indicated or required by authorities

## **SECTION 079200 - JOINT SEALANTS**

### SUMMARY

horizontal joints <u>SUBMITTALS</u>

1. Submit product data, mockup of each joint type, &

1. Provide joint sealers at interior and exterior vertical and

## adhesion test results for each joint type

**PRODUCTS** 

- 1. Urethane Elastomeric Joint Sealants: a. Non-Sag Type and Application: Multi-part non-sag urethane sealant, compliant with ASTM C 920, for vertical and horizontal joints, exterior and interior
  - b. Pourable Type and Application: One-part pourable urethane sealant, compliant with ASTM C 920, for

#### horizontal joints, exterior and interior use.

- 2. Silicone Elastomeric Joint Sealants: a. Type and Application: One-part non-acid-curing silicone sealant, compliant with ASTM C 920, for vertical and horizontal joints, modulus as required
  - for application, exterior and interior use. b. Type and Application: One-part acid-curing silicone sealant, compliant with ASTM C 920, for vertical joints, exterior and interior use.
- c. Type and Application: One-part mildew-resistant silicone sealant, compliant with ASTM C 920, for

#### sanitary applications, interior use.

3. Polysulfide Elastomeric Joint Sealants: a. Non-Sag Type and Application: Two-part non-sag polysulfide sealant, compliant with ASTM C 920, for vertical joints, exterior and interior use.

b. Pourable Type and Application: Two-part pourable

polysulfide sealant, compliant with ASTM C 920, for horizontal joints, exterior and interior use. c. Immersion Type and Application: Two-part

polysulfide sealant, compliant with ASTM C 920, for

### water immersion.

- 4. Latex Joint Sealants: a. Acrylic Type: Acrylic emulsion, compliant with ASTM C 834.
- ASTM C 834 and ASTM C 920. c. Application: Interior joints in vertical and overhead surfaces with limited movement.

b. Silicone Type: Silicone emulsion, compliant with

### 5. Solvent-Release-Curing Joint Sealants:

movement.

a. Acrylic Type: Acrylic, compliant with ASTM C 920. b. Butyl Type: Butyl, compliant with FS TT-S-001657.

c. Application: Exterior vertical surfaces with limited

CONTRACTOR SHALL SUPERVISE AND DIRECT THE ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUC MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB

2. GC MUST PROVIDE & INSTALL ALL PRODUCTS PE PLANS. ONLY SUBSTITUTED PRODUCTS NEED TO I SUBMITTED TO THE ARCHITECT FOR APPROVAL. UNAPPROVED SUBSTITUTIONS WILL BE REPLACED THE EXPENSE OF THE GC.

3. VERBAL REPRESENTATION HAS NO VALUE AND A REQUESTS TO CHANGE ANY PRODUCTS OR SPECIFICATIONS PER PLANS, MUST BE SUBMITTED IN WRITING TO THE ARCHITECT & TLE FOR APPROVAL.



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**ISSUE** NO. DATE DESCRIPTION FOR TLE REVIEW FOR PERMIT 3 08-14-23 PER TLE AND CODE COMMENTS MBJ REVISION IO. DATE DESCRIPTION 1 08-14-23 PER TLE AND CODE COMMENTS

PROFESSIONAL CERTIFICATION

**AS NOTED** TLEMO22-164

Approved By:

MATTHEW B. JARMEL, AIA, MBA

LICENSE NUMBER: A2017014316

**SPECIFICATIONS** 

Drawing Number:

Drawn By:

Drawing Name:

6. Compression Seals:

a. Type: Preformed foam sealant.

b. Application: Wide exterior joints in vertical surfaces. 7. Fire-Resistive Joint Sealers:

a. Type: One-part fire-stopping sealant.

b. Application: Penetrations in fire-rated floor and wall assemblies.

8. Specialty Sealants:

a. Type and Application: Synthetic rubber for acoustical sealant for concealed joints.

b. Type and Application: Butyl-polyisobutylene sealant and tape sealant for concealed joints.

9. Paving Joint Fillers:

a. Expanding Type: self-expanding cork.

b. Cork Type: cork.

c. Rubber Type: Sponge rubber.

d. Bituminous Type: Bituminous fiber.

e. Application: Filler for exterior paving joints.

10. Auxiliary Materials:

a. Plastic foam joint fillers.

b. Elastomeric tubing backer rods.

c. Bond breaker tape.

INSTALLATION

1. Comply with requirements of Section 010000 - Project Requirements

2. Test sealant adhesion for each substrate required.

3. Install in proper relation with adjacent work.

4. Clean adjacent surfaces soiled with sealant immediately.

SECTION 081113 - STEEL DOORS AND FRAMES

SUMMARY

1. Hollow metal doors and frames.

<u>SUBMITTALS</u>

1. Product data and door schedule.

2. Comply with ANSI A 250.8.

3. Fire-rated door assemblies: NFPA 80, tested per NFPA 252, and labeled and listed by UL, ITS, another testing and inspecting agency acceptable to the authority having jurisdiction.

1. Acme Steel Doors: Complying with ANSI 250.8 for level and model, and ANSI A 250.4 for physical endurance level indicated, 1-3/4 inch (44 mm) thick (unless noted otherwise)

a. Interior Doors: Level 1 and Physical Performance Level C (Standard Duty), Model 1 (Full Flush)

b. Interior Doors: Level 2 and Physical Performance Level B (Heavy Duty), Model 1 (Full Flush)

c. Exterior Doors: Level 2 and Physical Performance Level B (Heavy Duty), Model 1 (Full Flush), galvanized steel sheet faces

d. Exterior Doors: Level 3 and Physical Performance Level A (Extra Heavy Duty), Model 1 (Full Flush), galvanized steel sheet faces

2. Door Louvers: Sight-proof per SDI 111C.

3. Frames: compliant with ANSI A 250.8; concealed fastenings (unless noted otherwise).

a. Steel Sheet Thickness for Interior Doors: 0.053 inch (1.3

b. Steel Sheet Thickness for Exterior Doors: 0.042 inch (1.0 mm)

c. Fabricate with interior frames with mitered or coped corners knocked down for field assembly

d. Fabricate with exterior frames from galvanized steel sheet, with mitered or coped and continuously welded corners

4. Glazing Stops: Non-removable stops on outside of exterior doors and on secure side of interior doors; screw-applied, removable glazing stops on inside.

5. Door Silencers: Three on strike jambs of single-door frames and two on heads of double-door frames.

6. Plaster Guards: Provide where mortar might obstruct hardware operation.

7. Supports and Anchors: Not less than 0.042 inch (1.0 mm)

thick galvanized steel sheet. 8. Prepare doors and frames to receive mortised and concealed hardware according to ANSI A 250.6 and ANSI

A 115 Series standards. 9. Reinforce doors and frames to receive surface-applied

10. Prime Finish: Manufacturer's standard, factory-applied coat of rust-inhibiting primer complying with ANSI A 250.10 for acceptance criteria.

**MATERIALS** 

1. Hot-Rolled Steel Sheets: ASTM A 1011/A 1011M.

2. Cold-Rolled Steel Sheets: ASTM A 1008/A 1008M or ASTM A 620/A 620M.

3. Galvanized Steel Sheets: ASTM A 653/A 653M, A40 or G40 (ZF120 or Z120) coating.

**INSTALLATION** 

1. Place steel frames to comply with SDI 105.

a. Fire-Rated Frames: Install according to NFPA 80. 2. Install doors to comply with ANSI A 250.8. Shim as necessary to comply with SDI 122 and ANSI/DHI A

115.1G. a. Fire-Rated Doors: Install with clearances specified in NFPA 80.

b. Smoke-Control Doors: comply with NFPA 105.

3. After installation, remove protective wrappings from doors and frames and touch up prime coat with compatible airdrying primer.

#### **SECTION 084113 - ALUMINUM ENTRANCES AND STOREFRONTS**

**SUMMARY** 

1. Provide aluminum entrances and storefront:

a. Exterior entrance doors.

b. Frames for entrances.

SUBMITTALS

1. Submit product data and shop drawings.

**PRODUCTS** 

1. Products: Kawneer Company, Inc. or approved equal.

2. Door Style: refer to door schedule.

3. Storefront Frames: Thermal break type.

4. Aluminum Members: ASTM B 221, 6036-T6 alloy and

5. Steel Reinforcement: ASTM A 36, ASTM A 611, and ASTM

6. Glass and Glazing: Insulating tempered glazing.

7. Glazing Color: Clear glass.

8. Door Hanging Devices: Refer to hardware schedule.

9. Closers: Surface mounted.

10. Closer Operation: Single-acting closers.

11. Hardware: Push/pulls, door stops, overhead holders, and deadlocks, weatherstripping and thresholds, exit devices.

12. Factory Finish: Kawneer Fluoropon (70% PVDF), AAMA 2605, Fluoropolymer Coating

INSTALLATION

1. Comply with requirements of Section 010000 - Project Requirements

2. Anchor securely in place; install plumb, level, and in true alignment.

3. Isolate dissimilar metals.

4. Coordinate with glazing work and hardware requirements.

#### **SECTION 085313 - VINYL WINDOWS**

<u>SUMMARY</u>

1. Provide vinyl windows.

**SUBMITTALS** 

1. Submit product data, samples, shop drawings, mockup, test reports, warranty, and maintenance data.

1. Products: refer to drawing A-123 Window Options: **PLYGEM WINDOWS: 1500 SERIES** 

**ANDERSON WINDOWS: 100 SERIES ANDERSON WINDOWS:** 400 SERIES **SILVERLINE WINDOWS:** V1 SERIES

2. Window Type: vinyl 3. Operation: Fixed

4. Size: refer to drawing A-123

5. Glazing: Low 'E', tempered, 5/8 inch thick insulated glass 6. Glazing Color: Clear glass

7. Anchors, Clips, and Window Accessories: Aluminum, nonmagnetic stainless steel, or galvanized steel

<u>INSTALLATION</u>

1. Comply with requirements of Section 010000 - Project Requirements.

#### **SECTION 087100 - DOOR HARDWARE**

MUST USE REQUIRED VENDOR FOR THE PURCHASE OF THE ARROW 7-PIN INTERCHANGEABLE CORES. NO SUBSTITUTIONS.

ND SECURITY

134 E. Shore Road Denville, NJ 07834 Attn: Nick DeSalvo Ph: 973-625-5602

NOTE: Certain locks must accommodate Arrow 7-pin, small format, figure eight, interchangeable cores. Cores are to be purchased from ND Security. Cores are shipped to TLE corporate until completion of the building. TLE personnel will install cores after CO is received. The contractor must ensure that hardware accommodates these cores.

SUMMARY

1. Provide hardware for swinging doors.

2. Comply with code and accessibility requirements.

3. All exterior doors shall receive panic hardware and closers.

4. All doors in smoke partitions to have self-closer in accordance with NFPA 80, tested in accordance with UL

5. All hardware for doors in smoke partitions to comply with UL 1784 and additional requirements of the AHJ.

6. Door vendor shall coordinate all electrified door hardware with low voltage/security systems vendor prior to ordering or installation. Electrified door hardware shall be provided, installed, and wired to power supply by door vendor/installer. Power supply shall be incorporated into low voltage systems by security vendor.

<u>SUBMITTALS</u>

1. Submit product data, samples, proposed hardware schedule, and maintenance data.

PRODUCTS

1. Latch and cylindrical locksets for interior doors - refer to drawing A-121 and A-122

2. For all new and existing hollow metal doors:

a. Trim shall receive Arrow 7-pin, small format, figure eight I/C core, mortise cylinders or rim cylinders (whichever is required).

b. For all other manufacturers used on flush steel doors, lever trims must accommodate Arrow 7-pin small format, figure eight I/C cores.

c. Arrow Sierra latch and cylindrical locksets (or equal) in US26D finish on exterior side of specified exterior doors. d. Existing HM door without panic bar must have panic bar

installed or door replaced for HM door with panic bar. 3. Silent Electrification option is mandatory and must be present on any proposed hardware substitutions for double storefront interior Vestibule/Reception doors.

4. All panic bars shall have manual dogging capability. 5. Product Requirements:

a. Hardware for Fire-Rated Openings: compliant with NFPA 80 and local requirements.

b. Handicapped Accessibility: compliant with ANSI A117.1, ADAAG, and local requirements.

c. Materials Application: compliant with ANSI A 156 series standards

d. Quality Level: Commercial Type

6. Locksets and Latchsets: Cylinder Type 7. Lock Cylinders need to accommodate the Arrow

Interchangeable, figure 8, 7 pin core. a. Cores to be purchased from ND Security, cylinders

provided by GC. 8. Keying: Per owner's requirements, keying and key control system (refer to drawing A-121 and A-122)

9. Hinges and Butts: Full mortise type with non-removable pins at exterior, entrance, and security doors.

11. Exit Devices: Low frequency type

12. Pivots: No pivot hinges allowed.

10. Closers: refer to drawing A-121 and A-122

13. Push/Pull Units: Through-bolted type

14. Hardware Finish: US26D 15. Door Trim Units: Kickplates, armor plates, edge trim, and

related trim 16. Flush bolts with dustproof strikes

17. Coordinators

18. Automatic Door Bottoms

19. Wall Mounted Door Stops 20. Silencers

21. Weatherstripping

22. Thresholds 23. Emergency Lockdown Device: refer to vendor list on sheet T-201

INSTALLATION

1. Comply with requirements of Section 010000 - Project

SECTION 092216 - GYPSUM BOARD ASSEMBLIES

2. Refer to the door schedule for hardware sets.

SUMMARY

1. Provide Gypsum Board Assemblies:

a. Interior walls, partitions, and ceilings for tape and joint compound finish

b. Insulation and vapor barrier systems in gypsum drywall

2. Gypsum Board Attachment:

a. Gypsum board screw-attached to steel framing and

b. Gypsum board nail-attached to wood framing and

SUBMITTALS

furring.

1. Submit product data.

**PRODUCTS** 

1. Products: As selected by Architect, complying with the

2. Gypsum Board:

3. Gypsum Wall Board: compliant with ASTM C 36, regular, foil-backed, and fire-rated types, 5/8 inch typical thickness 4. Water-Resistant Gypsum Backing Board: compliant with

ASTM c 630, regular and fire-rated types, 1/2 inch and 5/8 inch typical thicknesses 5. Joint Treatment: compliant with ASTM C 475 and ASTM C

840, 3-coat system 6. Installation Standard: compliant with ASTM C 840

7. Trim Accessories:

8. Material: Metal trim, PVC

9. Types: Cornerbead, edge trim, and control joints 10. Radius corners: Pittcon 1", 6", and 12" SO-LRT soft forms

11. Auxiliary Materials: 12. Gypsum Board Screws: compliant with ASTM C 1002

13. Gypsum Board Nails: compliant with ASTM C 514 14. Fastening Adhesive

15. Concealed Acoustical Sealant 16. Mineral Fiber Sound Attenuation Blankets

17. Mineral Fiber Thermal Insulation

18. Polyethylene Vapor Retarder, 6 mils

INSTALLATION 1. Comply with requirements of Section 010000 - Project

2. Comply with standards referenced above and ASTM C 840 and GA 216. 3. Install joints only over framing members. Do not allow butt-

to-butt joints.

4. Provide blocking for items such as railings, grab bars, casework, toilet accessories, and similar items. 5. Provide acoustical sealant at runner tracks, wall

6. Install gypsum board assemblies in true alignment, plumb, level, and in proper relation to adjacent surfaces.

perimeters, openings, expansion, and control joints.

7. Provide 3-coat joint treatment such that, after finishing, joints are not visible. 8. All gypsum board assemblies are to be finished to a USG

level 4. 9. Leave ready for finish painting and wall treatment

## SECTION 093000 - TILE

**SUMMARY** 1. Provide tile for the following applications:

a. Quarry tile floor and coved base over concrete slab in

**PRODUCTS** 

1. Products: As selected by Architect, compliant with the

2. Tile Materials: ANSI A 118 series standard specifications

3. Quarry floor tile: refer to A-041 4. Quarry wall base: coved tile to match floor tile spec

5. Tile Accessories: a. Matching trim units

6. Setting Materials:

a. Portland cement mortar, compliant with ANSI A 108.1 b. Dry-set Portland cement mortar, ANSI A 118.1

b. Marble thresholds

7. Grout: refer to A-041 a. Sand-Portland cement grout, ANSI A 108.10

b. Commercial Portland cement grout, ANSI A 118.6 c. Dry-set grout, ANSI A 118.6 d. Latex-Portland cement grout, ANSI A 118.6

8. Setting Accessories: a. Membrane waterproofing under tile

9. Elastomeric Sealants: a. One-part mildew-resistant silicone sealant for non-traffic

b. Multi-part pourable urethane sealant for traffic areas

CONTRACTOR SHALL SUPERVISE AND DIRECT THE ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUC MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB

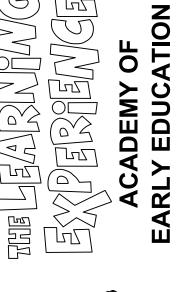
2. GC MUST PROVIDE & INSTALL ALL PRODUCTS PE PLANS. ONLY SUBSTITUTED PRODUCTS NEED TO I SUBMITTED TO THE ARCHITECT FOR APPROVAL. UNAPPROVED SUBSTITUTIONS WILL BE REPLACED THE EXPENSE OF THE GC.

3. VERBAL REPRESENTATION HAS NO VALUE AND A REQUESTS TO CHANGE ANY PRODUCTS OR SPECIFICATIONS PER PLANS, MUST BE SUBMITTED IN WRITING TO THE ARCHITECT & TLE FOR APPROVAL.

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42 OKNER PARKWAY LIVINGSTON, NEW JERSEY 07039 TEL: 973-994-9669 FAX: 973-994-4069 www.jarmelkizel.com Architecture Engineering Interior Design Implementation Services



**ISSUE** NO. DATE DESCRIPTION FOR TLE REVIEW FOR PERMIT 3 08-14-23 PER TLE AND CODE COMMENTS MBJ REVISION

IO. DATE DESCRIPTION

1 08-14-23 PER TLE AND CODE COMMENTS

PROFESSIONAL CERTIFICATION

MATTHEW B. JARMEL, AIA, MBA

LICENSE NUMBER: A2017014316

Project Number:	Scale:
TLEMO22-164	AS NOTED
Drawn By:	Approved By:
	MBJ

**SPECIFICATIONS** 

Drawing Name:

Drawing Number:



#### **INSTALLATION**

- 1. Comply with requirements of Section 010000 Project Requirements
- 2. Comply with ANSI 108 series standard specifications and Tile Council of America Handbook for Ceramic Tile Installation.
- 3. Layout tile in grid pattern with alignment of grids to provide uniform joint width and to minimize cutting.
- 4. Grout, cure, clean, and protect tile surfaces
- 5. All flooring must be thoroughly cleaned upon completion of installation, inclusive of waxing and polishing (where applicable).

#### SECTION 095123 - ACOUSTICAL CEILINGS

#### ARMSTRONG

Attn: Cheryl B. Smith

Ph: 800-442-4212 cbsmith@armstrongceilings.com

The Learning Experience is an Armstrong Ceilings national account partner. To ensure proper pricing is quoted, contact 800-442-4212, Armstrong national account customer service or your local Armstrong ceiling distributor and ask for The Learning Experience national account pricing. If you have any questions, contact Cheryl B. Smith, Armstrong national account manager, cbsmith@armstrongceilings.com.

1. Provide acoustical lay-in ceilings, trim, and metal suspension system.

#### SUBMITTALS

1. Submit product data and samples.

#### **PRODUCTS**

- 1. Acoustical Tile Ceilings: refer to drawing A-021
- 2. Suspension Systems:
- a. Exposed grid suspension system, compliant with ASTM C 635 intermediate duty classification
- b. Suspension System Accessories: Attachment devices and hangers, compliant with ASTM C 635
- c. Cap Material: Painted steel finish
- d. Edge molding and trim

#### <u>INSTALLATION</u>

- 1. Comply with requirements of Section 0100000 Project
- 2. Measure and lay out acoustical ceilings to avoid less than 1/2 panel units whenever practical.
- 3. Install suspension systems in accordance with ASTM C
- 4. Install panels with pattern or grain running one way.

#### **SECTION 096513 - RESILIENT WALL BASE AND ACCESSORIES**

## **SUMMARY**

1. Provide 4 inch coved vinyl wall base.

### <u>SUBMITTALS</u>

1. Submit product data and samples.

#### **PRODUCTS**

- 1. Vinyl Wall Base: refer to A-041
- 2. Adhesives: Water-resistant type recommended by manufacturer to suit products and substrate conditions
- 3. Trowelable Leveling and Patching Compounds: Latexmodified Portland cement or blended hydraulic cementbased formulation provided or approved by flooring manufacturer for applications indicated.

## **INSTALLATION**

1. Comply with requirements of Section 010000 - Project Requirements.

#### **SECTION 096516 - SHEET VINYL FLOOR COVERING**

#### SUMMARY

1. Provide sheet vinyl floor covering in all toilet rooms and laundry room

#### SUBMITTALS

1. Submit product data and samples.

#### **PRODUCTS**

- 1. Sheet Vinyl Floor Covering w/ Integral Cove Base: refer to
- 2. Trowelable Leveling and Patching Compounds: Latexmodified Portland cement or blended hydraulic cementbased formulation provided or approved by flooring manufacturer for applications indicated.
- 3. Heat-Welding Bead: Solid-strand product of floor covering manufacturer

#### INSTALLATION

- 1. Comply with requirements of Section 010000 Project
- 2. Prepare concrete substrates according to ASTM F 710. Verify that substrates are dry and free of curing compounds, sealers, and hardeners.
- 3. Maintain uniformity of sheet vinyl floor covering direction and match edges for color shading at seams.
- 4. Seams shall be installed with matching weld rod and located beneath fixtures to minimize visibility.

#### **SECTION 096519 - RESILIENT FLOOR TILE**

Contact TLE for MBB racetrack design.

#### SUMMARY

1. Provide resilient floor tile in corridors and classrooms as noted on the drawings.

#### SUBMITTALS

1. Submit product data and samples.

- **PRODUCTS** 1.LVT Flooring: refer to A-041
- 2. Adhesives: Water-resistant type recommended by manufacturer to suit products and substrate conditions.
- 3. Trowelable Leveling and Patching Compounds: Latexmodified Portland cement or blended hydraulic cementbased formulation provided or approved by flooring manufacturer for applications indicated.

#### **INSTALLATION**

- 1. Comply with Section 010000 Project Requirements
- 2. Prepare concrete substrates according to ASTM F 710. Verify that substrates are dry and free of curing compounds, sealers, and hardeners.
- 3. Lay tiles with grain running in one direction (monolithic) in

#### **SECTION 096816 - CARPET**

MUST USE REQUIRED VENDOR FOR THE PURCHASE OF THE CARPET. NO SUBSTITUTIONS ALLOWED.

#### **INTERFACE**

- Attn: William Sanchez Ph: 754-243-3729
- tle@interface.com Stock Hold #: 3141

Allow 4 weeks from time of deposit.

NOTE: It is required to purchase the carpet from this vendor. Interface provides full installation services.

### **SUMMARY**:

- 1. Provide carpet and floor preparation.
- 2. All flooring must be thoroughly cleaned upon completion of installation.

### **SUBMITTALS:**

1. Submit product data, samples, seaming diagram, mockup, warranty, and maintenance data.

#### PRODUCTS:

- 1. Floor Carpet Material: refer to A-041
- a. Carpet all freestanding columns to a height of 3'-6"
- 2. Carpet Padding Material (only if broadloom is used):
- a. Type: Polyurethane Foam Cushion, 8 lbs. density pad
- 3. Walk-Off Mat: refer to A-041
- 4. Auxiliary Materials

cushion installation

- a. Edge Guards. Color to be Navy Blue.
- b. Adhesives, cements, and fasteners 5. Carpet Installation Method: Tackless mounting with carpet

## INSTALLATION:

1. Comply with requirements of Section 010000 - Project Requirements

- 2. Maintain uniformity of carpet direction and lay of pile. At doorways, center seams under door in closed position. Bind or seal cut edges as recommended by carpet manufacturer.
- 3. Provide cut-outs for floor outlets and similar penetrations.
- 4. Provide edge guards at change of flooring materials. 5. Comply with CRI 104, Section 8, "Direct Glue-Down"
- 6. Comply with CRI 104, Section 12, "Carpet on Stairs"
- 7. Extra materials: Deliver to owner full-width carpet equal to 5 percent of each type and color of carpet installed,
- packaged with protective covering for storage. 8. Do not install carpet over concrete slabs until slabs have cured and are sufficiently dry to bond with adhesive and concrete slabs have pH range recommended by manufacturer.
- 9. Any changes in carpeting due to compliance with local Fire Marshall are to be verified with The Learning Experience prior to implementation.
- 10. Carpet to be installed towards very end of construction process to avoid debris embedding into carpet.
- 11. All carpeting must be thoroughly cleaned and vacuumed prior to tenant move-in.

#### **SECTION 097700 - FIBERGLASS REINFORCED** PLASTIC PANELS

#### <u>SUMMARY</u>

- 1. Provide glass-fiber-reinforced paneling for backsplash in
- a. Standing and running trim and rails
- 2. Provide glass-fiber-reinforced paneling behind and 36 inches to each side of the Laundry and Janitor Closet
- 3. Provide glass-fiber-reinforced paneling on bathroom walls (wall behind toilet and lavatory and both adjacent side walls).

1. Submit product data, samples, and mock-up of each type.

#### **PRODUCTS**

1.FRP wall panels: refer to A-042

#### INSTALLATION

- 1. Comply with requirements of Section 010000 Project
- 2. Comply with standards referenced.
- 3. Backprime work before installation.
- 4. Provide trim for scribing and site cutting.
- 5. Install work plumb, level, and in proper alignment.
- 6. Provide work free from tool marks and blemishes.
- 7. Securely fasten to substrates. 8. Install in lengths to minimize joints and seams.
- 9. Touch up damaged or abraded finishes.
- 10. Cut and drill panels with carbide tipped saw blased or drill bits, or cut with snips.
- 11. Install panels with manufacturer's recommended gap for panel field and corner joints.
- 12. Pre-drill fastener holes in panels with 1/8 inch (3.2 mm)
- 13. For trowel type and application of adhesive, follow adhesive manufacturer's recommendations.
- 14. Use products acceptable to panel manufacturer and install FRP system in accordance with panel manufacturer's printed instructions.

#### SECTION 099100 - PAINTING

### **BENJAMIN MOORE**

SHERWIN WILLIAMS Color Match – Refer to Wall Finish Plan drawing

## SUMMARY

- 1. Provide painting and surface preparation for interior and exterior unfinished surfaces.
- 2. Provide painting and surface preparation of exposed mechanical and electrical piping, conduit, ductwork, and equipment.

#### SUBMITTALS

1. Submit product data, samples, 4 ft. x 4 ft. mock-up of each color, extra stock consisting of one unopened gallon of each type of paint used.

### **PRODUCTS**

- 1. All paints: refer to Wall Finish Plan drawing
- 2. Regulations: Compliance with VOC and environmental regulations

3. First-line commercial-quality products for all coating systems

### <u>INSTALLATION</u>

- 1. Comply with requirements of Section 010000 Project Requirements
- 2. Provide field-applied mock-ups of each color and finish selected on actual surfaces to be painted. 3. Test sample area for adhesion for each type of paint.
- 4. Remove cover plates and protect hardware and adjacent surfaces.
- 5. Before painting and between coats, sand surface until smooth and flat. 6. All surfaces shall be prepared according to manufacturer's
- recommendations prior to painting. 7. Apply paint to achieve manufacturer's recommended dry film thicknesses.
- 8. Paint entire surface where patch painting is required.
- 9. Re-coat areas which show bleed-through or defects.
- 10. Clean paint spatter from adjacent surfaces and glass. 11. Touch up damaged surfaces at completion of construction.
- 12. All painted surfaces to receive minimum one coat of primer and two coats of paint unless factory primed by manufacturer.

### **SCHEDULE**

1. Provide paint systems complying with paint schedule as noted on drawings.

#### 1. Refer to drawing A-042

**INTERIOR PAINT** 

EXTERIOR PAINT

1.EIFS and Wood: Refer to drawing A-141

## **SECTION 101400 - SIGNAGE**

MUST USE REQUIRED VENDOR.

Identiti Resources, LTD.

Attn: Lauren Raiman Ph: 847-805-6685

Email: thelearningexperience@identiti.net

## Allow 12 weeks from time of deposit.

Developer/GC to engage Identiti at the onset of the project to ensure prices are locked in and that the install date is secured in Identiti's database.

## SUMMARY

1. Provide building identification signage

#### **SUBMITTALS**

1. Submit product data and samples

- 1. Products: As selected by Architect, complying with the
- 2. Signage Types:
- a. "TLE" Logo LED signage (2) signs one at building entrance and secondary building sign b. "TLE" Logo Raceway signage (internally illuminated)
- c. Monument signage (one sign per face; externally illuminated) d. Acrylic letters for entry canopy columns "A,B,C,D" and
- "1.2.3.4" 3. Color: White

- **INSTALLATION** 1. Comply with requirements of Section 010000 - Project
- Requirements 2. Contractor to construct monument for sign installation. 3. Contractor to install monument and (2) building signs as
- soon as possible in the construction process. 4. Contractor shall coordinate with signage vendor to apply for permit and to locate required sign components within reach of specified maintenance access panel in entry canopy soffit.

secured in Identiti database. **SECTION 102800 - TOILET AND BATH** 

Note: Developer/GC to engage Identiti at the onset of the

project to ensure prices are locked in and that the install date is

**SUMMARY** 

**ACCESSORIES** 

CONTRACTOR SHALL SUPERVISE AND DIRECT THE ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUC MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB

2. GC MUST PROVIDE & INSTALL ALL PRODUCTS PE PLANS. ONLY SUBSTITUTED PRODUCTS NEED TO I SUBMITTED TO THE ARCHITECT FOR APPROVAL. UNAPPROVED SUBSTITUTIONS WILL BE REPLACED THE EXPENSE OF THE GC.

3. VERBAL REPRESENTATION HAS NO VALUE AND A REQUESTS TO CHANGE ANY PRODUCTS OR SPECIFICATIONS PER PLANS, MUST BE SUBMITTED IN WRITING TO THE ARCHITECT & TLE FOR APPROVAL.

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42 OKNER PARKWAY

TEL: 973-994-9669

FAX: 973-994-4069

www.jarmelkizel.com

Architecture

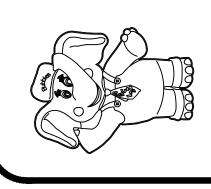
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## **ISSUE** NO. DATE DESCRIPTION FOR TLE REVIEW FOR PERMIT 3 08-14-23 PER TLE AND CODE COMMENTS MBJ

REVISION

1 08-14-23 PER TLE AND CODE COMMENTS

NO DATE DESCRIPTION

PROFESSIONAL CERTIFICATION

MATTHEW B. JARMEL, AIA, MBA

LICENSE NUMBER: A2017014316

Project Number:	Scale:
TLEMO22-164	AS NOTED
Drawn By:	Approved By:
	MBJ

**SPECIFICATIONS** 

Drawing Number:

Drawing Name:



1. Provide toilet and bath accessories and metal framed mirrors.

#### SUBMITTALS

1. Submit product data and samples.

#### **PRODUCTS**

1. Products as selected by TLE (or equal submitted to Architect for approval), complying with the following:

- 2. Toilet Accessories:
- a. Paper towel dispensers
- b. Toilet tissue dispensers c. Soap dispensers, wall mounted
- d. Mirrors, mounted above lavatories
- 3. Grab bars from Bobrick accessories.
- 4. Mirrors and Frames:
- a. Glazing: Mirrored glass, 1/4 inch thick (6 mm), compliant with ASTM C 1036
- b. Type: 18" Convex Mirror
- i. Install 6" from ceiling (1" from ceiling in Make Believe Boulevard)
- ii. Refer to drawing A-011 for approx. locations.
- Contractor shall coordinate final locations with "TLE".
- iii. Classrooms and Corridors: refer to drawing A-011 iv. Make Believe Boulevard: refer to drawing A-101
- v. Materials and Finishes:
- vi. Stainless Steel: AISI Type 302 or 304, No. 4 polished

#### INSTALLATION

1. Comply with requirements of Section 010000 - Project Requirements.

#### **SECTION 104400 - FIRE EXTINGUISHERS AND CABINETS**

#### SUMMARY

1. Provide fire extinguishers, cabinets, and wall brackets.

#### SUBMITTALS

1. Submit product data

### **PRODUCTS**

- 1. Fire Extinguishers
- a. Standards: UL and FM listed products
- b. Type: 10lb A:B:C (1 per 3,000 Sq.Ft.) c. Type: 5lb B:C (1 per 3,000 Sq.Ft.)
- 2. Fully or Semi-Recessed Cabinets only (if semi-recessed,
- they must have rounded corners) a. Manufacturer and Product: refer to drawing A-011
- 3. Metal Wall Brackets
- a. Manufacturer and Product: refer to drawing A-011 4. Inspection Tags required for all fire extinguishers.

### **INSTALLATION**

1. Comply with requirements of Section 010000 - Project Requirements.

#### **SECTION 107313 - AWNINGS**

RECOMMENDED VENDOR/INSTALLER:

HUDSON AWNINGS & SIGN CO.

27 Cottage Street

Bayonne, NJ 07002 Attn: Diana Wetchkus

Ph: 800-624-1012 ext. 206

Email: dwetchkus@hudsonawning.com

NOTE: Allow 4 weeks from confirmed measurements/approved shop drawings. Deposit required.

#### SUMMARY

1. Provide attached/freestanding (as specified in drawings) awnings in playground area.

#### SUBMITTALS

1. Submit product data

#### **PRODUCTS**

- 1. Size, Location, and Type: Refer to playground area details 2. Manufacturer/Installer: See above
- 3. Awning Material: refer to drawing A-152

#### INSTALLATION

1. Comply with requirements of Section 010000 - Project Requirements.

#### **SECTION 113100 - APPLIANCES**

#### SUMMARY

- 1. Provide main pantry, classroom pantry areas, laundry, & staff lounge appliances.
- a. Commercial refrigerators and freezers
- b. Standard refrigerators
- c. Microwave ovens
- d. Washer and Dryer

## SUBMITTALS

1. Submit product data, shop drawings, warranty, and maintenance data.

#### **PRODUCTS**

### 1. Staff lounge

- a. Refrigerator: GE GTE18GTNRWW with IM4D ice maker b. Microwave: GE PEM31DFWW
- c. NSF refrigerator: Everest model ESR1
- d. ETL Sanitation Listed microwave: Waring model WMO120

#### 2. Infant

- a. Refrigerator (Energy Star): GE GTE18GTNRWW
- b. Microwave: GE PEM31DFWW
- c. NSF refrigerator: Everest model ESR1
- d. ETL Sanitation Listed microwave: Waring model WMO120
- 3. Toddler (A&B rooms) a. Refrigerator (Energy Star): GE GTE18GTNRWW
- b. NSF refrigerator: Everest model ESR1
- 4. Pantry
- a. NSF refrigerator: Everest model ESR1
- b. NSF freezer: Everest model ESF1
- c. ETL Sanitation Listed microwave: Waring model WMO120
- 5. Laundry Appliances (side-by-side; typical)
- a. Washer model: GE GTW500ASNWS (Energy Star) b. Dryer model: GE GFD55ESSNWW (Energy Star)
- 6. Laundry Appliances (stackable; only if shown on plan)
- a. Washer model: GE GFW550SSNWW (Energy Star)
- b. Dryer model: GE GFD55ESSNWW (Energy Star)
- c. Stacking kit per manufacturer's recommendation 6. Laundry Appliances (ductless dryer; only if shown on plan)
- a. Dryer model: GE GFT14ESSMWW

- 1.NSF refrigerator & freezer, and ETL Sanitation Listed microwaves are always provided in Pantry.
- 2. Other NSF/ETL appliances are only provided when required by the local authority having jurisdiction (typically the Health Department). If required, NSF/ETL appliances are provided instead of the non-NSF/ETL equivalent model for that room.

#### **SECTION 115200 - AUDIO-VISUAL EQUIPMENT**

#### TLE LOBBY BOARD PRODUCTS - MUST USE CDW AS REQUIRED VENDOR

- 1. Install 55" TV in Reception area.
- a. Manufacturer: Samsung b. Model No.: QB55R-B QBR-B Series – 55" LED-
- backlit LCD display 4K
- c. Mfg. Part #: QB55R-B
- d. Contract: Standard Pricing
- e. CDW #: 6757822 f. Type: 55" Class TV, 4K UHD Resolution, Piano Black, or
- equal approved by "TLE" prior to purchase. . 3840x2160 resolution
- ii. High Brightness (350cd/m2)
- iii. Input Types: DVI-D RGB, (2) HDMI Video, HDCP2.2, Stereo Mini-Jack, and (2) USB2.0
- iv. Output Types: Stereo Mini-Jack
- v. Dimensions: 48.6" x 27.9" x 1.8"
- vi. VESA: 200x200
- 2. Reception TV shall be installed vertically with flush-mount, non-tilt bracket approved for vertical mount orientation.
  - a. Model: TRIPP LITE DISPLAY TV SECURITY wall mount fixed flat portrait mode 45-70 in

#### 3. Utilitize TLE software and licensing.

- a. MagicInfo Player (v.7.1) unified license 1 client
- b. MagicInfo-I Premium Data Link Server (v.4.0) license 1 server
- c. Samsung Procare Technology Protection Fast Track with white glove – extended

#### **SECTION 116800 - PLAYFIELD EQUIPMENT AND STRUCTURES**

#### SUMMARY

1. Provide interior and exterior playfield equipment, structures, and fencing.

#### SUBMITTALS

1. Submit product data and samples.

#### EXTERIOR PLAYGROUND -

BCI Burke Co. (REQUIRED EQUIPMENT VENDOR) Attn: Luke Tautges Ph: 920-921-9220

Itautges@bciburke.com Horizon Concepts. Inc (REQUIRED INSTALLER)

231 Broadway Huntington, NY 11743 Ph: 631-271-1963 Attn: James Hines Cell: 516-864-1522

ihines@horizonconceptsinc.net

Attn: Cesar Alejandro Cell: 631-796-7860

calejandro@horizonconceptsinc.net

SUBSTITUTIONS MUST BE APPROVED BY TLE

NOTE: Allow 8 weeks from deposit.

Burke Equipment 143-150192-2 North Option 143-150193-2

- 1.BCI Burke Preschool Play Unit a. 580-1312 Novo Arc Benches
- b. 370-0016 Grab Bar Assembly
- c. 370-00835 Trigon Arch, GL
- d. 370-1608 Ovistep Launch Pad
- e. 270-0112 Unitary Enclosure
- f. 270-0130 Square Platform
- g. 270-0136 Split Square Platform h. 370-0176 Centipede Climber 48"-56"
- i. 370-0313 Single Step
- 370-0467 24" Transition Stair w/ Barrier Free Transfer k. 470-0676 12'x12' ShadePlay Canopy
- I. 570-0842 ABC 2-Sided Play Panel
- m. 600-0104 NPPS Supervision Safety Kit
- n. 670-0001 Post Assembly 5" OD x 91" o. 670-0002 Post Assembly 5" OD x 107"
- p. 670-0099 Installation Kit. Intensity
- q. 670-0103 Maintenance Kit, Intensity r. 670-0165 Post Assembly 5" OD x 123"
- s. 670-0172 Post. Swagged Roof 5" OD x 147"
- t. 560-0540 Rocklt End Panel u. 560-0137 RockIt Attachment Post 55 1/2"
- 2.BCI Burke Preschool Activity Panels a. 570-0860 3-In-A-Row Ring Panel
- b. 570-0861 Charade Ring Panel c. 670-0001 Post Assembly 5" OD x 91"
- 3.BCI Burke Verve Climber a. 560-2593 Verve Climber IV XS
- 4.BCO Burke Infant/Toddler Play Unit
- a. 240-0216 Square Platform Assembly
- b. 240-0217 Triangle Platform Assembly c. 440-0562 12'x12' ShadePlay Canopy
- d. 540-0023 Up-Down Tunnel
- e. 540-0558 Spiral Spinner
- f. 540-0767 Bubble Window Panel g. 540-0771 Propeller Panel, Above Platform
- h. 540-1275 Chimes Panel, Above Platform
- i. 540-1687 Sprocket Panel, Above Platform 540-1804 Rain Wheel Panel
- k. 540-1805 Gear Panel, Above Platform
- I. 640-0146 Post, Std., 81 13/16, GL-8 m. 640-0147 Post, Std., 97 3/16, 16-24
- n. 640-0161 Swagged Roof Post 2 3/8" OD
- p. 350-1175 Custom Support Panel 5.BCI Burke Infant/Toddler Play House

o. 350-0616 6" Closure Plate

a. 560-2576 Bench, Bean b. 560-2578 Play House

6. Synthetic Turf Surfacing

- c. 660-0101 Install Kit. Burke Basics
- a. 8641 Turf Green b. Yarn Polymer: Nylon
- c. Provide with 1" padding for full turf area

#### a. Play-land interlocking tiles

- 8. Soccer goal
- a. 3" Classic Alumagoal, 6'X4' goal- Provide two per soccer field (only if soccer field is specified)
- 9. Basketball hoop/backboard
- a. Provide two per basketball court (only if basketball court
- b. Provide pole cover/padding on all basketball hoop poles
- 10. Joy Carpets Hop Scotch Carpet (24"x79")
- a. Item #1468484
- 11. Little Tikes TotSports Easy Score Basketball Hoop a. SKU: SD64AB3F
- a. 580-1010 6' PVC Tot Table
- 13. BCI Burke Trash Receptacle a. 580-0183 PVC Plastic Dome

## **WATER PLAY** (Only if Specified)

12. BCI Burke Picnic Table

Horizon Concepts, Inc (REQUIRED INSTALLER) 231 Broadway Huntington, NY 11743 Ph: 631-271-1963 Attn: James Hines

Cell: 516-864-1522 jhines@horizonconceptsinc.net

area is specified)

Attn: Cesar Alejandro Cell: 631-796-7860

- calejandro@horizonconceptsinc.net 1. Rain-Drop Products Aqua/Froggy Hoop (only if water play
- area is specified) a. 5' green without eyes 2. Rain-Drop Products Mini Popcorn Jet (only if water play

1. Comply with requirements of Section 010000 - Project

## **INSTALLATION**

Requirements.

#### FENCING 1. Refer to drawing A-151

- INSTALLATION 1. Comply with requirements of Section 010000 - Project
- Requirements. 2. Provide PVC or concrete stop at bottom of fence to allow for a maximum 2" opening.

**DRAINAGE** 1. Civil Engineer to ensure proper drainage for playground

2. Refer to drawing A-153.

**INDOOR PLAY AREAS** (Only if Specified) All indoor playground equipment shall have ballasted bases or

an equivalent provision to ensure complete stability during use.

Horizon Concepts, Inc (REQUIRED INSTALLER)

231 Broadway Huntington, NY 11743 Ph: 631-271-1963

Attn: James Hines Cell: 516-864-1522 jhines@horizonconceptsinc.net

Attn: Cesar Alejandro Cell: 631-796-7860 calejandro@horizonconceptsinc.net

NOTE: Allow 8 weeks from deposit.

c. 670-0001 Post Assembly 5" OD x 91"

- 1.BCI Burke Preschool Activity Panels
- a. 570-0860 3-In-A-Row Ring Panel b. 570-0861 Memory Ring Panel
- FOR SOFT PLAY EQUIPMENT. REGIONAL CONTACTS: Mr. Brock Hodge (eastern US)

Mr. Brian Sonney (western US) 704-948-3443

704-948-3430

a. model PR-0357 2. Soft Play indoor Preschool play unit

1. Soft Play indoor Infant/Toddler play unit

- CONTRACTOR SHALL SUPERVISE AND DIRECT THE ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCT MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB
- 2. GC MUST PROVIDE & INSTALL ALL PRODUCTS PE PLANS. ONLY SUBSTITUTED PRODUCTS NEED TO I SUBMITTED TO THE ARCHITECT FOR APPROVAL. UNAPPROVED SUBSTITUTIONS WILL BE REPLACED
- 3. VERBAL REPRESENTATION HAS NO VALUE AND A REQUESTS TO CHANGE ANY PRODUCTS OR SPECIFICATIONS PER PLANS, MUST BE SUBMITTED IN WRITING TO THE ARCHITECT & TLE FOR APPROVAL.

THE EXPENSE OF THE GC.

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**42 OKNER PARKWAY** LIVINGSTON, NEW JERSEY 07039 TEL: 973-994-9669 FAX: 973-994-4069 www.jarmelkizel.com Architecture Engineering

Interior Design

Implementation Services



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		ISSUE	
NO.	DATE	DESCRIPTION	I
1	06-02-23	FOR TLE REVIEW	1
2	06-14-23	FOR PERMIT	ı
3	08-14-23	PER TLE AND CODE COMMENTS	ľ
		REVISION	
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1 08-14-23 PER TLE AND CODE COMMENTS

NO DATE DESCRIPTION

PROFESSIONAL CERTIFICATION

MATTHEW B. JARMEL, AIA, MBA

LICENSE NUMBER: A2017014316

**AS NOTED** TLEMO22-164 Approved By: Drawn By:

**SPECIFICATIONS** 

Drawing Number:

a. model PR-0450

3. Soft Play indoor Preschool play unit (alternate)

a. model PR-0391

#### PRODUCTS (provide only items specified on playground plan)

1. Playtime 'Bubbles' play panel

a. Model: custom 2. Little Tikes Commercial: Harry the Hippo

a. Product #200200177

3. Little Tikes Commercial: Dinosaur

a. Product #200023370

4. Little Tikes Commercial: Triceratops

a. Product #200042281

5. Little Tikes Commercial: Gator Walk

a. Product #200072664

6. Little Tikes Commercial: Tot Tree

a. Product #200089060

7. Little Tikes TotSports Easy Score Basketball Hoop

a. SKU: SD64AB3F

8. Joy Carpets Hop Scotch Carpet (24"x79")

a. Item #1468484

#### **FINISHES**

1. Painted concrete

a. Full floor area of Unity Surfacing

b. Refer to drawing A-041 c. Provided and installed by GC

2. Unity Surfacing pads and sloped transition

 a. Indoor playground floor as shown b. Refer to drawing A-154 (only included if applicable)

c. Provided and installed by playground vendor

3. Resilient wall base

a. Full perimeter and all columns within indoor playground

b. Refer to drawing A-042

c. Provided and installed by GC 4. Resilite wall padding

a. Full perimeter and all columns within indoor playground

b. Standard panel size 24"wx60"h. custom sizes to be coordinated by playground vendor as required for proposed layout.

c. Bottom edge shall be at a consistent height throughout

(min. 2" and max. 4" AFF) d. Refer to drawing A-042

e. Provided and installed by playground vendor

5. Ceiling

a. Refer to drawing A-021

b. Provided and installed by GC

#### **INSTALLATION**

1. Comply with requirements of Section 010000 - Project

2. Contractor to install facades per manufacturer's installation manual including associated coordination among affected

### SECTION 122113 - HORIZONTAL LOUVER BLINDS

#### SUMMARY

1. Provide vinyl horizontal blinds at exterior windows and vestibule windows and on interior side of all office windows.

#### <u>SUBMITTALS</u>

1. Submit product data, shop drawings, warranty, and maintenance data.

#### **PRODUCTS**

1.1" extruded PVC (vinyl). Refer to drawing A-123.

2. Mounting:

a. Classrooms: Within frame on Classroom side (exterior

b. Office: On interior side of all office windows within frame.

3. Valance: Manufacturer's standard

4. Fabricate concealed components from non-corrodible or corrosion-resistant coated materials

5. Provide lifting and tilting mechanisms with permanently lubricated moving parts

6. All blinds shall be cordless.

#### **NSTALLATION**

1. Comply with requirements of Section 010000 - Project

2. Install blinds level, plumb, and located not closer than 1 inch (25 mm).

NOTE: Provide horizontal vinvl blinds at all exterior classroom windows and all office windows.

## **SECTION 210500 - FIRE PROTECTION**

1. Provide fire protection systems for the following:

a. Sprinkler system

b. Fire and smoke detection system

2. Coordinate with "TLE" room uses to provide adequate system(s) for all contract areas.

3. Coordinate location of fire protection system components to avoid interference with location of designated lighting fixtures, HVAC ducts, domestic and sanitary plumbing piping, and other trades.

4. Modify, relocate, and extend existing service to accommodate new work (as applicable).

5. Do not cut structural members/elements without prior written consent from the Architect and/or Structural Engineer.

#### SUBMITTALS

1. Submit product data, warranties, operating and maintenance data.

2. Submit signed and sealed shop drawings for Architect's review and as required for building permit.

#### PRODUCTS PRODUCTS

1. Provide new materials/components suitable for service intended and complying with approved submittals

2. Sprinkler heads: concealed and upright type as required.

#### <u>INSTALLATION</u>

1. Comply with requirements of section 010000 - Project

2. Comply with applicable codes, regulations, ordinances, and requirements of authorities having jurisdiction, and NFPA 13, 13D, 13R, 26, 70, and 96 as applicable.

3. Conceal piping to the greatest extent practical.

4. Center ceiling-mounted elements in ceiling tiles as applicable.

5. Maintain indicated fire ratings of walls, partitions, ceilings, and floors at penetrations. Seal with firestopping material(s) to maintain fire rating.

6. Test all systems for proper operation.

7. Instruct owner and tenant personnel in proper operation of systems.

#### **SECTION 220500 - PLUMBING**

#### SUMMARY

1. Provide plumbing, waste, and vent systems for the following:

a. Toilets and bathrooms

b. Kitchens

c. Laundries

d. Water heaters

e. Meters

f. Indoor and outdoor water fountains (each type) - DF1 – EXTERIOR water fountain (see plumbing sheets

for more details) - DF2 – INTERIOR water fountain (see plumbing sheets for more details)

2. Provide water supply and distribution system(s) sized for domestic irrigation and sprinkler system(s). 3. Provide natural gas distribution system piping, specialties,

and accessories. 4. Provide sewage and drainage systems, specialties, and

accessories. 5. Coordinate with "TLE" room uses to provide adequate system(s) for all contract areas.

6. Modify, relocate, and extend existing service to accommodate new work (as applicable).

7. Do not cut structural members/elements without prior written consent from the Architect.

#### <u>SUBMITTALS</u>

1. Submit product data, piping types by application, warranties, operating and maintenance data.

2. Submit signed and sealed shop drawings for review and as required for building permit.

#### **PRODUCTS**

1. Provide new materials suitable for service intended and complying with approved submittals.

2. Provide accessory materials (including, but not limited to, hangers and pipe insulation).

3. Provide fixtures complying with water consumption requirements and accessibility requirements.

a. Refer to plumbing fixture schedule on P-100 for manufacturer and model information.

4. Drinking fountains

 b. DF-1 EXTERIOR water fountain c. DF-2 INTERIOR water fountain

#### <u>INSTALLATION</u>

1. Comply with requirements of Section 010000 - Project requirements.

2. Comply with applicable codes, regulations, ordinances and requirements of authorities having jurisdiction.

3. Vent all fixtures.

4. Conceal piping to the greatest extent practical.

5. Maintain indicated fire ratings of walls, partitions, ceilings, and floors at penetrations, seal with firestopping material(s) to maintain the fire rating.

6. Test all systems for proper operation.

7. Instruct owner and tenant personnel in proper operation of systems.

#### **SECTION 230500 - HEATING, VENTILATING, AND AIR CONDITIONING**

### SUMMARY

1. Provide Trane equipment (substitutions allowed only with architect review and approval).

2. Provide equipment, systems, and controls for heating, ventilation, and central air conditioning.

3. Coordinate with "TLE" room uses to provide adequate system for all contract areas. 4. Coordinate location of thermostats and controls with "TLE"

requirements. 5. Coordinate location of ductwork and components to avoid interference with location of designated lighting fixtures,

fire protection systems, domestic and sanitary plumbing

piping, and other trades. 6. Modify, relocate, and extend existing service to

accommodate new work (as applicable). 7. Do not cut structural members/elements without prior written consent from the architect.

#### DESIGN CONDITIONS

1. Provide heating and cooling systems for use with gas or electric utility service for hot air ducted system as specified in HVAC contract documents.

2. Provide systems designed to ASHRAE weather data using 97.5 percent winter dry bulb and the 5 percent summer dry-bulb and mean coincident wet-bulb climatic conditions.

## SUBMITTALS

1. Submit product data, warranties, operating and maintenance data, and certified balancing reports.

2. Submit signed and sealed shop drawings for review and as required for building permit.

#### **PRODUCTS**

1. Provide new materials suitable for service intended and

complying with approved shop drawings. 2. Provide accessory materials (including, but not limited to, controls, anchors, and insulation).

**INSTALLATION** 1. Comply with requirements of Section 010000 - Project

2. Comply with applicable codes, regulations, ordinances and requirements of authorities having jurisdiction, and

SMACNA recommendations. 3. Conceal piping and ductwork to the greatest extent practical.

4. Center ceiling-mounted elements in center of ceiling tiles as applicable. 5. Maintain indicated fire ratings of walls, partitions, ceilings,

and floors at penetrations. Seal with firestopping material(s) to maintain fire rating. 6. Insulate piping and ductwork. Provide vapor barrier on

insulated piping operating below 60 degrees F.

7. Test all systems for proper operation.

8. Commission and balance systems. 9. Instruct owner and "TLE" personnel in proper operation of systems.

## **SECTION 260500 - ELECTRICAL**

## **SUMMARY**

1. Provide electrical systems for the following:

a. Power

b. Lighting (interior and exterior) c. Exit lighting

d. Emergency lighting e. Power, telephone, cable TV, and data outlets and wiring 2. Coordinate with "TLE" room uses to provide adequate

system(s) for all contract areas. 3. Coordinate routing of wiring to avoid interference with location of ductwork, fire protection systems, domestic and sanitary plumbing piping, and other trades.

4. Coordinate schedule of telephone and data outlet completion with owner and "TLE" communications requirements and installer (as applicable)

5. Modify, relocate, and extend existing service to accommodate new work (as applicable).

6. Do not cut structural members/elements without prior written consent from the Architect.

#### SUBMITTALS

Substitutions for interior light fixtures are not allowed.

2. Substitutions for exterior light fixtures (site lights, wall packs, etc.) are only allowed if required by the municipality or due to the specific design of the building exterior.

3. Submit product data, warranties, operating and

compliant with approved submittals.

maintenance data, and circuit diagrams. 4. Submit signed and sealed shop drawings for architect's review and as required for building permit.

#### PRODUCTS

2. Provide accessories (including, but not limited to, controls, cover plates (not selected by TLE), equipment

1. Provide new materials suitable for service intended and

connections) color to be white.

INSTALLATION 1. Comply with requirements of Section 010000 - Project

Requirements. 2. Comply with applicable codes, regulations, ordinances and requirements of authorities having jurisdiction, and the national electrical code.

3. Conceal conduit to the greatest extent practical. 4. Center ceiling-mounted elements in the ceiling tiles as

applicable. 5. Install light switches at uniform height above finished floor. locate switches within rooms at strike side of door (unless

noted otherwise). 6. Install thermostats centered above light switches where

applicable. 7. Gang-mount multiple switching locations. Mount multiple types of controls as close together as possible and in-line with each other at uniform height above finished floor (unless noted otherwise).

8. Group multiple junction boxes, telephone and electrical outlets together on walls. avoid back-to-back box locations.

uniform height above finished floor (unless noted otherwise). 10. Maintain indicated fire ratings of walls, partitions, ceilings, and floors at penetrations, seal with firestopping

9. Mount electrical, data, and telephone outlets vertically, at

material(s) to maintain fire rating. 11. Test all systems for proper operation.

12. Label circuits in electrical panels 13. Instruct owner and "TLE" personnel in proper operation of

## **SECTION 270500 - PHONE SYSTEMS/INTERNET**

MUST USE REQUIRED VENDOR. NO SUBSTITUTIONS ALLOWED.

D&M Enterprise Group FOR INTERNET, PHONE LINES TO SITE AND BUILDING 88 West Front Street

systems.

Keyport, NJ 07735 Attn: Patrick Ammirati Ph: 732-335-5510

Ph (direct): 732-391-6071

Fax: 732-335-5523 Email: pammirati@dmenterprise.net

## AND

AMERICAN BUSINESS COMMUNICATIONS, INC. FOR PHONE AND DATA EQUIPMENT

Hackensack, NJ 07601 Attn: Bill Gollub Ph: 201-488-3500 Ext. 208

Fax: 201-488-5588

141 South State Street

NOTE: provide 4 weeks notice for wiring installation.

1. Provide phone system inclusive of voicemail and cabling. a. Includes wiring, cabling, connecting devices, installation,

and testing for wiring systems to be used as signal

pathways for voice and high-speed data transmission. 2.D&M to use cellular lines vs. vector

CONTRACTOR SHALL SUPERVISE AND DIRECT THE ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUC MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB

2. GC MUST PROVIDE & INSTALL ALL PRODUCTS PE PLANS. ONLY SUBSTITUTED PRODUCTS NEED TO I SUBMITTED TO THE ARCHITECT FOR APPROVAL. UNAPPROVED SUBSTITUTIONS WILL BE REPLACED THE EXPENSE OF THE GC.

3. VERBAL REPRESENTATION HAS NO VALUE AND A REQUESTS TO CHANGE ANY PRODUCTS OR SPECIFICATIONS PER PLANS, MUST BE SUBMITTED IN WRITING TO THE ARCHITECT & TLE FOR APPROVAL.



42 OKNER PARKWAY LIVINGSTON, NEW JERSEY 07039 TEL: 973-994-9669 FAX: 973-994-4069

> www.jarmelkizel.com Architecture Engineering Interior Design Implementation Services



**ISSUE** NO. DATE DESCRIPTION INT. FOR TLE REVIEW FOR PERMIT 3 08-14-23 PER TLE AND CODE COMMENTS MBJ

REVISION

1 08-14-23 PER TLE AND CODE COMMENTS

NO. DATE DESCRIPTION

PROFESSIONAL CERTIFICATION

MATTHEW B. JARMEL, AIA, MBA

LICENSE NUMBER: A2017014316

**AS NOTED** TLEMO22-164 Approved By: Drawn By:

**SPECIFICATIONS** 

Drawing Number:



3. Provide TLE Required Internet Components (provided & networked by American Business Communications (ABC)) including but not limited to router/gateway, modem, networking switch, wireless access points, and ports.

#### <u>SUBMITTALS</u>

1. Submit product data and cable administration drawings.

#### **PRODUCTS**

1. Phone system to be manufactured by Mitel.

### 2. Equipment list:

MITEL 250 Hybrid Telephone System

- Mitel 250 Phone System with CPU & Power
- Mitel Central Office Line Card 4-port
- Mitel Analog Station Line Card 4-Port
- Mitel Digital Station Line Card 16-port
- Mitel Door phone controller Viking door boxes
- Mitel Voice Processor
- Mitel Administrator 8568 Phones
- Mitel General 8568 Phones (Class rooms may vary)
- Mitel SIP / Dect. Cordless Phone
- Mitel Twinning Smart Phone App

#### MAS/voicemail system

#### Part NO.

• LVMU1A4PORT 2-8-port voice mail card with 4ports for CIX100, 200, 670

#### 3. Cable and wiring components:

- a. Twisted-pair cables, connectors, and terminal equipment:
- i. Cables: listed as complying with category 5 of TIA/EIA-568-A
- ii. Conductors: solid copper
- iii. UTP cable: compliant with TIA/EIA-568-A. four, thermoplastic-insulated, individually twisted pairs of conductors; No. 24 AWG, color-coded; enclosed in PVC jacket
- iv. STP workstation cable: compliant with TIA/EIA-568-A. two thermoplastic-insulated, individually twisted pairs of conductors; No. 22 AWG, tinned copper drain wire; enclosed in PVC jacket
- v. UTP and STP plenum cable: listed for use in airhandling spaces. Features are as specified for cables, conductors, UTP cables, and STP workstation cable except materials are modified as required for listing

#### 4. Cross-connect panel:

- a. Modular array of IDC terminal blocks arranged to terminate building cables and permit interconnection between cables.
- i. Number of terminals per field: one for each conductor in assigned cables

#### ii. Mounting: backboard

#### 5. Patch panel:

- a. Modular panels housing multiple-numbered jack units with IDC-type connectors at each jack for permanent termination of pair groups of installed cables.
- i. Number of jacks per field: one for each four-pair conductor group of indicated cables, plus spares and blank positions adequate to satisfy specified expansion criteria.

### ii. Mounting: backboard

#### 6. Jack assemblies:

- a. Four-position modular RJ11C jacks in flush-mounting wall plate (unless noted otherwise).
- b. Dual, category 5, 6-position modular RJ455 jacks in flush-mounting wall plate (unless noted otherwise) 7. Wall plates:
- a. Designed for telephone service. Match those indicated for power receptacle outlets in same spaces for materials and finish. For wall telephone units, include provision for support of unit.

#### 8. Terminal strip:

a. 25-pair industry standard "66 connecting block" with vinchdown terminals.

### 9. Terminal unit:

a. Category 5 patch block assembly with 12 category 5 RJ45-type jack ports and industry standard "110 connecting block" with vinchdown terminals.

#### INSTALLATION

- 1. Telephone service: comply with telephone exchange carrier's requirements.
- 2. All voice and data cables must be home run from end point to mechanical room.

- 3. All lines (existing and new, as applicable) shall be marked and tagged by the contractor.
- 4. Existing telephone outlets and wiring (as applicable): maintain fully operational until new system has been tested and is properly operational.
- 5. Install wiring in compliance with TIA/EIA 568, category 5 requirements
- 6. Wiring method: conceal wiring (unless noted otherwise). Install flush outlet boxes with jack assemblies at outlets. Connect to cable fished in walls and ceilings, unless walls are solid or filled with insulation or ceilings are not accessible for wiring. Install cable in raceway where fished wiring paths are not available. Terminate raceway with a bushing in ceiling space above outlet (unless noted otherwise).
- 7. Exposed cable: install parallel or perpendicular to surfaces or exposed structural members and follow surface contours where possible.
- 8. Cable support: secure cable to independent supports at intervals as required to prevent sagging between supports. Use metallic supports designed for this purpose with corrosion-resistant finish.
- 9. Splices: do not splice cable between the normal terminations of runs.
- 10. Ground equipment: install ground terminal at local exchange carrier service location.
- 11. Tighten electrical connectors and terminals according to manufacturers' published torque-tightening values. If manufacturers' torque values are not indicated, use those specified in UL 486A and UL 486B.
- 12. Identify telephone system backboards and cabinets with the legend "telephone." Identify terminals of terminal strip and jack outlets and pull and junction boxes with approved
- 13. All installations to comply with NFPA 70
- 14. Coordinate premises wiring with telecommunications and LAN equipment suppliers.

- 1.D&M Enterprises is to be used to supply the correct phone and internet services for the building.
- 2.(4) VOIP lines (1 main, 2 hunts and 1 fax)
- 3. Developer responsibilities:
- a. Order and install all exterior lines.
- b. Provide telephone service from the provider to the facility to the mechanical room.
- i. (1) POTS line, if required for Fire Alarm by the Fire Marshal; yet TLE prefers Radio or Cell Service (must be approved by the Fire Marshal)
- ii.Only if facility has an elevator: developer shall provide an additional POTS telephone line.
- iii.Installation, activation, and payment for above-noted POTS lines.
- iv.Ensure all voice and data cables shall be home run from end point to mechanical room.
- v.Submit security monitoring contract to franchisee for execution prior to contracting with security company.
- vi.If applicable, activate the POTS lines for fire alarm and provide TLE corporate and franchisee with the associated phone numbers.
- vii. Ensure that all lines are marked and tagged.
- viii. The contract for service shall be transferred to the franchisee upon occupancy.
- c. Provide internet service from the provider to the facility to the mechanical room.
- i. Provide capacity for high-speed internet defined as minimum 100mbps upload and download speeds. If not available, the fastest service available should be selected with a minimum of 30mbps upload and download speed. If 30mbps is not available, contractor must consult with TLE IT department. If necessary, contractor must pay for lines to be brought into the building.
- ii. Developer/contractor shall notify franchisee when internet installation is ready for actual lines.
- iii. Ensure that all lines are marked and tagged
- 4. Security alarm to use cell service.
- 5. Add a low voltage line in an exterior low voltage box somewhere under the cover. Roughly 12' off the ground. This way an exterior access point can easily be installed.
- 6. Franchisee responsibilities: Transfer at CO.

NOTE: Provide 4 weeks' notice for wiring installation.

#### SECTION 280500 - FIRE/SECURITY ALARM, CCTV, **ACCESS CONTROL, AND Access Controls (NO** SUBSTITUTIONS)

The specified equipment for Fire Alarm, Security, CCTV, and Access Controls are required. No substitutions are

NOTE: Provide 4 weeks' notice for rough wiring installation.

#### SUMMARY

- 1. Provide the following building systems:
- a. Fire alarm
- b. Security
- c. Closed circuit television
- d. Access control

#### <u>SUBMITTALS</u>

- 1. Submit product data for each alarm system and components.
- 2. Submit shop drawings for architect's review and as required for building permit submission.

#### FIRE ALARM PRODUCTS

- 1. This system utilizes a combination security and fire alarm system, as permitted by the local authorities.
- 2. Provide the system as described below or approved equal. This system is subject to approval by the local fire official. 3. The following specification is meant to be used in
- conjunction with the construction drawings. Quantities of required components to be coordinated between architect's fire alarm drawings, contractor's shop drawings, and the local inspector/code official.

#### 4. Equipment List

- a. Kidde Intelligent Fire Alarm Systems VS4 or approved
- b. Kidde RZI16-2 expansion module or approved equal
- c. Kidde R-Series Remote Annunciators or approved equal
- d. Kidde Intelligent CO detector and Kidde Intelligent Heat Detectors or approved equal
- i. Provide one at center of each classroom up to 625 sq. ft. (15' o.c. if >625 sq. ft.)
- ii. Provide at 15' O.C. in vestibules and hallways
- iii. Provide one in mechanical room
- iv. Provide at additional locations as required by local code or authority having jurisdiction
- e. Kidde detector base GSA-SB or approved equal Provide as required at all detector heads
- Bosch D7044 multiplex single input module or approved
- i. Provide as required at all pull stations g. Bosch D7044M multiplex mini single input module or
- approved equal i. Provide as required at all co detectors Bosch D7053 multiplex input/output module or approved

detector or approved equal

- i. Provide as required at all RTUs i. Kidde Intelligent Manual Pull Stations FX-270 or approved equal
- i. Provide one pull station at each egress door.
- ii. Provide one pull station at every exterior door, including main entrance and mechanical room.
- iii. Pull station shall not have glass components and shall have ability to be reset.
- iv. STI Stopper II manual pull station security cover or approved equal v. Provide one security cover at every manual pull
- station no horn j. System sensor CO1224T/CO1224TR carbon monoxide
- k. Altronix AL602ULADA NAC power extender or approved

I. Fire alarm system to be fully monitored by central station

- using an auto-dialer via phone line. Provide (2) telephone lines for fire systems. m. System sensor SpectrAlert Advance outdoor selectableoutput horns, strobes, and horn strobes or approved
- . Provide one to left of main entrance, outside. n. System sensor SpectrAlert Advance indoor selectable-
- output horns, strobes, and horn strobes or approved i. Provide one strobe unit with horn every 45' maximum
- in corridors. ii. Provide one strobe unit with horn in every classroom with children over 3 years old.
- iii. Provide one strobe unit with horn in mechanical iv. Provide one strobe unit without horn in every
- classroom with children under 3 years old. v. Provide one strobe unit without horn in every toilet
- o. System sensor InnovAirFlex D4120 4-wire photoelectric duct smoke detector or approved equal

- i. Provide w/ relay to visual indicating station and key
- ii. Provide one detector in return location (subject to local enforcement) of each HVAC unit. Tie into fire panel to shut down all units.
- iii. System sensor InnovAirFlex D4120W shall be used in applications where water resistance is required
- p. System sensor InnovAirFlex 4-wire photoelectric low-
- flow duct smoke detector or approved equal i. Provide w/ relay to visual indicating station and key
- q. GE 56789 battery-operated annunciator or approved equal-for exterior doors-except mechanical room and main entrance.
- i. Provide at every exterior door except the main
- r. Honeywell Genesis Series 16 AWG 4/C SOL FPL-CL2 power limited fire alarm cable (Part No. 4111) or approved equal

s. Honeywell Genesis Series 18 AWG 4/C SOL FPL-CL2

- power limited fire alarm cable (Part No. 4107) or approved equal
- t. Knox Box 3200 Series with hinged door or type as required by local jurisdiction
- i. Recessed mount with face flange
- ii. Provide with tamper switch wired to alarm system
- iii. Fire alarm vendor to coordinate wiring with security
- iv. Install on outside of building, to left of front door, at 5'-0" above grade (or as required by local jurisdiction)

### FIRE ALARM INSTALLATION

1. Fire alarm vendor shall coordinate with fire sprinkler vendor to incorporate deluge pre-action control panel wiring with fire alarm system for monitoring.

- SECURITY SYSTEM PRODUCTS 1. Honeywell Vista-20PUL control panel (separate from fire systems) or approved equal
- 2. Honeywell 6160 alpha display keypad or approved equal (located at the main front entry)
- 3. Honeywell 4219 wired zone expander or approved equal 4. Honeywell 7939WG surface mount magnetic contacts or
- approved equal 5. Honeywell Genesis Series 22 AWG 4/C SOL CM-CL2 low
- voltage cable (part no. 1103) or approved equal 6. Honeywell WAVE2 siren(s) or approved equal
- 7. Required: Honeywell 269R hard wired, wall mounted personal panic transmitter family (see electrical drawings for locations ie, reception desk, office desk & classroom bathrooms)

- SECURITY SYSTEM INSTALLATION 1. Security vendor shall coordinate with fire alarm vendor to incorporate Knox Box tamper switch wiring with security
- system for monitoring. 2. Coordinate installation of alarms, closed circuit television systems, and access control devices with other trades including but not limited to electrical, telephone

## **CLOSED CIRCUIT TELEVISION PRODUCTS**

installations, and hardware.

IC REALTIME contact: Louis A. DiGioia National Sales Manager (954) 990-2951

louis@icrealtime.com

- REQUIRED CCTV EQUIPMENT CLOSED CIRCUIT TELEVISION (PRODUCTS ONLY)
- 1.IC Realtime NVR-FX24POE-15U4K1-NO-HDD 24 Channel 1U NVR - Rack-Mountable, integrated 24 Port POE Switch - Supports 12MP Resolution - 320Mbps Throughout -H.265 no storage. Dual HDMI monitor outputs for unique
- camera layout (or approved equal) 2.W Box 0E-32LEDMON2 32" Full HD Pro-Grade Color
- Monitors to be installed in office (or approved equal) a. Mount monitors using video product mount products (VMP) fully
- i. Adjustable model # DWM1742MA
- b. Provide (2) monitors per (16) cameras i. Monitor 1 - All cameras
- ii. Monitor 2 Sequencing (full screen tour)
- 3.IC Realtime IPMX-W40F-IRW2 4MP IP Indoor/Outdoor Small Size Vandal Dome. Fixed 2.8mm Lens (103°). 164 Feet IR. PoE Capable. Advanced Intelligence (or
  - approved equal) a. Cameras to be installed in every classroom, reception, MBB, and corridors. Quantity as specified

ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUC MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB

2. GC MUST PROVIDE & INSTALL ALL PRODUCTS PE PLANS. ONLY SUBSTITUTED PRODUCTS NEED TO I SUBMITTED TO THE ARCHITECT FOR APPROVAL. UNAPPROVED SUBSTITUTIONS WILL BE REPLACED THE EXPENSE OF THE GC.

3. VERBAL REPRESENTATION HAS NO VALUE AND A REQUESTS TO CHANGE ANY PRODUCTS OR SPECIFICATIONS PER PLANS, MUST BE SUBMITTED IN WRITING TO THE ARCHITECT & TLE FOR APPROVAL.

**∕1**∖

42 OKNER PARKWAY

TEL: 973-994-9669

FAX: 973-994-4069

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Architecture

Engineering

Interior Design

Implementation Services

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**ISSUE** NO. DATE DESCRIPTION FOR TLE REVIEW FOR PERMIT 3 08-14-23 PER TLE AND CODE COMMENTS MBJ

REVISION NO. DATE DESCRIPTION 1 08-14-23 PER TLE AND CODE COMMENTS

MATTHEW B. JARMEL, AIA, MBA LICENSE NUMBER: A2017014316

PROFESSIONAL CERTIFICATION

**AS NOTED** TLEMO22-164 Approved By: Drawn By: Drawing Name:

**SPECIFICATIONS** 

Drawing Number:



in the construction drawings and as required for adequate coverage.

b. All wiring to be home run

c. Coordinate camera view and location with TLE 4. All the cameras will be powered from the built in PoE switch of the NVR. The NVR will have a power cable to plus into a power source. All cameras to run from the NVR's built-in switch

5.IC Realtime IPMX-W40F-IRW2 4MP IP Indoor/Outdoor Small Size Vandal Dome. Fixed 2.8mm Lens (103°). 164 Feet IR. PoE Capable. Advanced Intelligence (or approved equal)

a. Install in each playground area and parking areas. Quantity as specified in the construction drawings and as required for adequate coverage.

6. Genesis 50781106 4-Pair CAT5e Riser, 1000' (304.8m) Pull Box, Blue Part # 50781106 (or approved equal)

#### CLOSED CIRCUIT TV INSTALLATION

1. Install closed circuit television surveillance system in areas indicated on drawings

2. Include all closed circuit television system components for a fully functional system, including, but not limited to those listed above.

- DVR/NVR recording devices should be ordered as stated above with no internal hard disk drive.
- Cameras cannot record.

#### ACCESS CONTROL SYSTEM PRODUCTS

Access Controls Systems access required, no substitutions

- 1.TLE Door Access Kit supplied by IC Realtime
- Axis 1601 Network Door Controllers (each controls two
- WaveLynx ET20-7WS Mullion Readers
- Trend Net 5 port POE network switch
- CanaKit Raspberry Pi 4
- 2. Altronix AL300ULM(R) multi-output access control power supply/charger or approved equal
- 3. Weigand cards and FOBs
- 4. Honeywell IS310/IS320 request-to-exit or approved equal 5. Securitron EEB manual release emergency exit buttons or approved equal
  - a. Release button to be installed below lower main counter at reception desk
- 6. Honeywell Genesis TSP-18/8 (32171012) Twisted,
- Shielded, Plenum-rated wire
- 7. Refer to A-122 for details for loss of power to access control system. Only reception and vestibule latches should be fail and safe open; corridor should be fail secure and be opened from panic bar side only. Doors shall always unlock by manual push bar activation.

### ACCESS CONTROL SYSTEM INSTALLATION

- 1. Install access control system on doors as indicated on the drawings.
- 2. Provide all components necessary for a complete installation including but not limited to those listed above.
- 3. System to comply with the applicable state building code (latest edition)
- 4. Overriding locking mechanism is to be provided. This will be used to avoid card holders from entering the site if no personnel are present.

#### ACCESS CONTROL NOTES

- 1. Refer to A-122 for details for loss of power to access control system. Only reception and vestibule latches should be fail and safe open; corridor should be fail secure and be opened from panic bar side only. Doors shall always unlock by manual pushbar activation.
- 2. Upon activation of building fire alarm system, sprinkler system, and/or fire detection system, all egress doors shall be automatically unlocked and shall remain unlocked until fire alarm system is reset.
- 3. Entrance doors shall not be secured from egress side during business hours.
- 4. External penetrations, conduit, and back box must be completed by GC/EC for all exterior doors requiring lockset function of electric exit device(s), electric strike(s), and access devices. Please refer to the door and hardware schedule to confirm requirements and door placement.

#### **INSTALLATION (ALL LOW VOLTAGE SYSTEMS)**

1. Comply with requirements of Section 010000 - Project Requirements.

NOTE: Developer is responsible for the Access Controls System until full operation/function is confirmed by center staff. If any part is failing to function, developer will have sub-contractor on site at their expense to deliver functioning system including but not limited to: communication from TLE computer to Access Controls control board, operation of electric latches and release buttons, programming key fobs, training of TLE staff with sub technician.

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. CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING THE CONTRACTOR'S BEST SKILL AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCT MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB

2. GC MUST PROVIDE & INSTALL ALL PRODUCTS PER PLANS. ONLY SUBSTITUTED PRODUCTS NEED TO B SUBMITTED TO THE ARCHITECT FOR APPROVAL. UNAPPROVED SUBSTITUTIONS WILL BE REPLACED A THE EXPENSE OF THE GC.

3. VERBAL REPRESENTATION HAS NO VALUE AND AL REQUESTS TO CHANGE ANY PRODUCTS OR SPECIFICATIONS PER PLANS, MUST BE SUBMITTED IN WRITING TO THE ARCHITECT & TLE FOR APPROVAL.

PROVIDED

PROVIDED

#### **RESPONSIBILITY MATRIX**

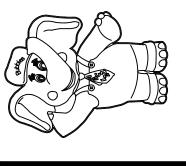
HEW	BY G.C.	BY T.L.E.
TLE BRANDED CLASSROOM SIGNAGE (IF REQUIRED FOR C.O. ITS THE RESPONSIBILITY OF THE G.C./DEVELOPER)		x
TOYS		Х
KITCHEN SUPPLIES		Х
COMPUTERS		Х
OFFICE SUPPLIES (INCL. TRASH CANS FOR ROOMS)		Х
MOP, BROOM, VACUUM, & HOLDERS		Х
TABLES AND CHAIRS		Х
FINGER SAFES		Х
CRIBS		X
PRINTED MATERIALS		Х
VOICE ON HOLD FOR PHONES		Х
PAPER PRODUCTS		X
SMART BOARDS (FRANCHISEE PURCHASES)		X
LOST & FOUND TOY CHEST		X
SOAP, SANITIZER, & BLEACH		X
SLEEP MATS		X
ALL APPLIANCES	X	
SECURITY MIRRORS	X	
WIRE SHELVING IN CLOSETS	X	
CORES & KEYS (TLE INSTALLS)	X	
ALL INTERNET COMPONENTS - ROUTER/GATEWAY, MODEMS, NETWORKING SWITCH, WIRELESS ACCESS POINTS, PORTS	Х	
SOAP DISPENSERS, PAPER TOWEL DISPENSERS, TOILET PAPER DISPENSERS, RESTROOM MIRRORS	X	
PICNIC TABLES (1 PER PLAYGROUND)	X	
EXTERIOR TRASH CANS	Х	
PLAYGROUND EQUIPMENT (INCL. SOCCER NETS, BASKETBALL HOOPS, & BALLS)	Х	
WATER FEATURE (IF SPECIFIED)	X	
DOOR CHIME ALARMS ON EXTERIOR DOORS	X	
ALARMS ON FENCE GATES	Х	
ACCESS CONTROLS NXT ON DOORS (WITH 100 KEY FOB TAGS)	X	
MILLWORK, CUBBIES, CABINETS, BOOKCASES, CHANGING TABLES, OFFICE FURNITURE	X	
PHONE LINES & INTERNET	X	
SECURITY SYSTEM	X	
55" RECEPTION TV/ LOBBY BOARD	Х	
TEST AND BALANCE HVAC REPORT	X	
EMERGENCY PANIC BUTTONS	X	
EMERGENCY LOCKDOWN DEVICE FROM NIGHTLOCK	X	
EXTERIOR SIGNAGE	X	
FEE FOR FFE	Х	
LAMINATOR		X
TLE BRANDED GRAPHICS	Х	
		<u> </u>



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> PROFESSIONAL CERTIFICATION MATTHEW B. JARMEL, AIA, MBA

LICENSE NUMBER: A2017014316

**AS NOTED** TLEMO22-164 Approved By: Drawn By:

**SPECIFICATIONS** 

Drawing Number:



## LEGEND:

PRIMARY EGRESS PATH (PEP)

SECONDARY EGRESS PATH (SEP)

START POINT (PEP)

START POINT (SEP)

BUILDING STANDARD CEILING MOUNTED ILLUMINATED EXIT SIGN WITH BATTERY BACKUP. SHADING INDICATES ILLUMINATED FACE AND ARROW INDICATES DIRECTION OF EGRESS. MOUNT ON UNDERSIDE OF SOFFIT WHERE REQUIRED FOR INTENDED VISIBILITY

• FE-X FIRE EXTINGUISHER; WALL HUNG, BRACKET FE-1 = 5lb B:C, FE-2 = 10lb A:B:C (1 PER 3,000 SQ.FT.) MANUFACTURER: JL COSMIC BRACKET COLOR: WHITE INSPECTION TAGS REQUIRED FOR ALL FIRE EXTINGUISHERS

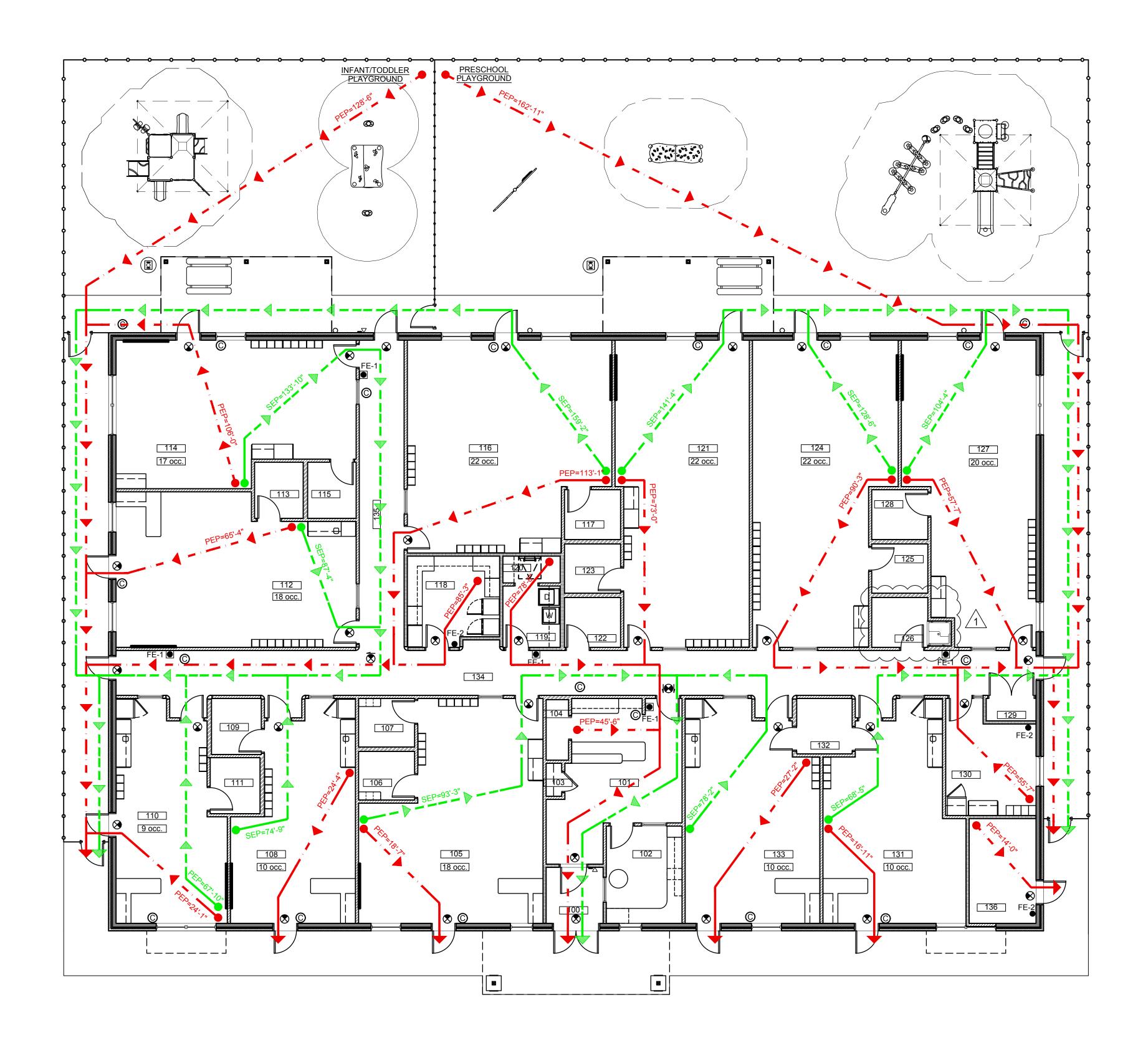
● FE-X FIRE EXTINGUISHER, WALL HUNG, SEMI-RECESSED CABINET FE-1 = 5lb B:C, FE-2 = 10lb A:B:C (1 PER 3,000 SQ.FT.) MANUFACTURER: JL COSMIC MODEL: 1017F10 WITH ROUNDED CORNERS

CABINET COLOR: WHITE INSPECTION TAGS REQUIRED FOR ALL FIRE EXTINGUISHERS

### **EGRESS DOOR WIDTH CHART**

EXIT ACCESS TRAVEL DISTANCE

ROOM NAME	ROOM NUMBER	REQUIRED EXIT WIDTH	PROVIDED EXIT WIDTH
RECEPTION	101	38	38
OFFICE	102	34	34
PRE-SCHOOL #1	116	34	68
PRE-SCHOOL #2	124	34	68
PRE-SCHOOL #3	127	34	68
PANTRY	118	34	34
LOUNGE	130	34	34
PRE-K-K	114	34	68
PREPPERS	105	34	68
MBB/PRE-SCHOOL	121	34	68
TWADDLERS	112	34	68
TODDLER A	108	34	68
TODDLER B	110	34	68
INFANT A	133	34	68
INFANT B	131	34	68
LAUNDRY	119	34	34
MECH.	136	34	34





1. CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING THE CONTRACTOR'S BEST SKILL AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCTIO MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB SITE SAFETY

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3. VERBAL REPRESENTATION HAS NO VALUE AND ALL REQUESTS TO CHANGE ANY PRODUCTS OR SPECIFICATIONS PER PLANS, <u>MUST</u> BE SUBMITTED IN WRITING TO THE ARCHITECT & TLE FOR APPROVAL.

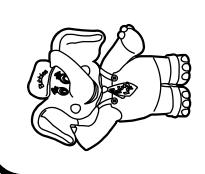
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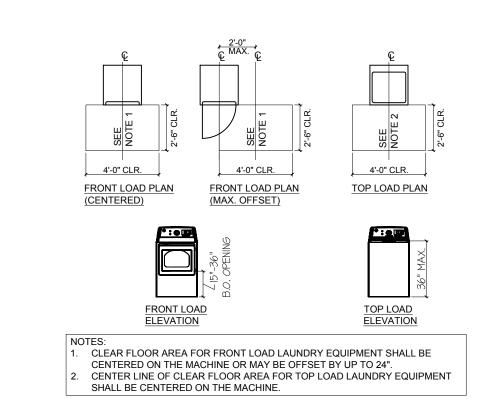
PROFESSIONAL CERTIFICATION MATTHEW B. JARMEL, AIA, MBA LICENSE NUMBER: A2017014316

Project Number: TLEMO22-164	Scale: AS NOTED
Drawn By:	Approved By:
OK	MBJ

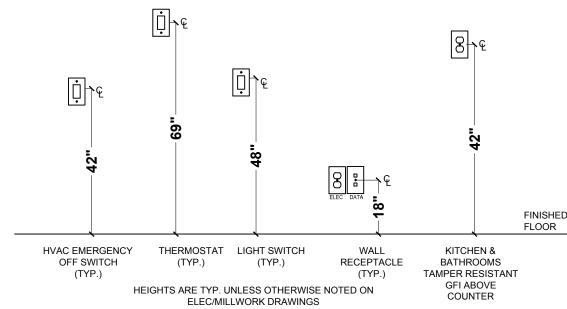
LIFE SAFETY DATA **AND EGRESS PLAN** 

Г-300

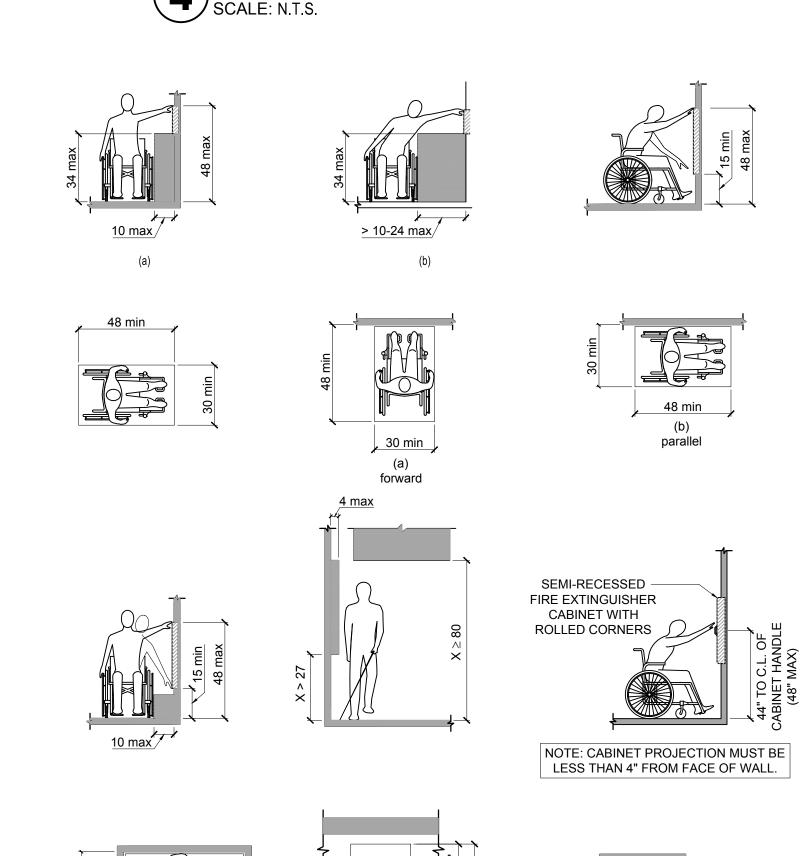




## **CLEARANCES AT** 5 LAUNDRY EQUIPMENT SCALE: N.T.S.



## ADA SWITCH AND RECEPTACLE **MOUNTING HEIGHTS**



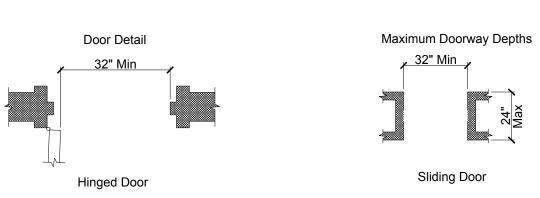
**MANEUVERING CLEARANCES** AND REACH RANGE

, 36 min

30"

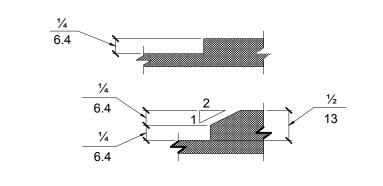
CLEAR FLOOR SPACE

UNDER WORK SURFACE

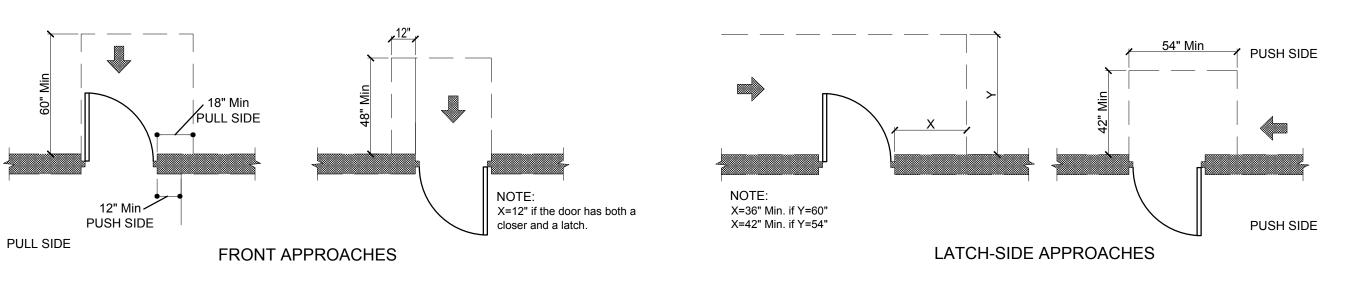


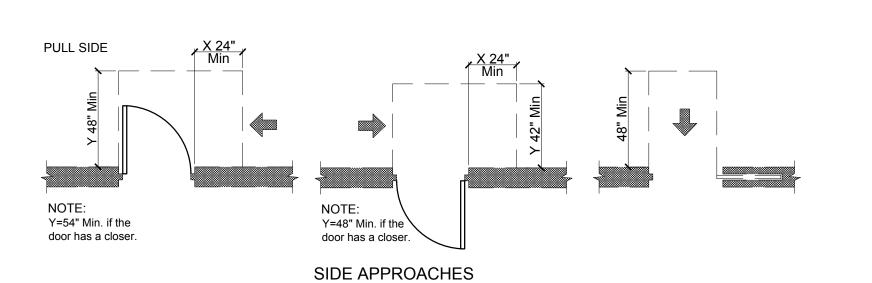
CLEAR DOORWAY WIDTH & DEPTH

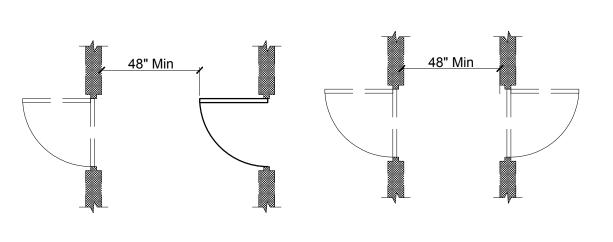




#### THRESHOLD DETAIL

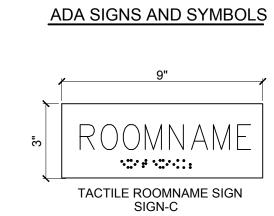


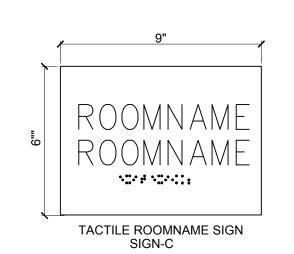


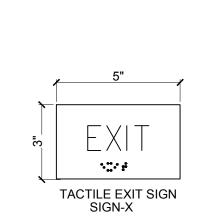


TWO HINGED DOORS IN SERIES

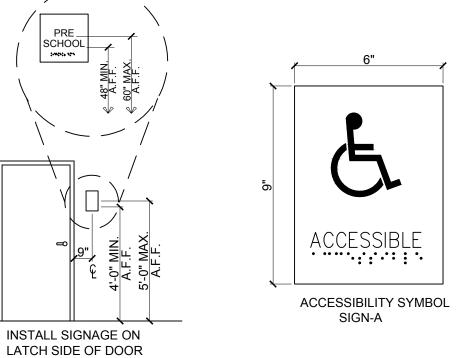
## MANEUVERING CLEARANCES AT DOORS AND OPENINGS







NOTE: PROVIDE TACTILE ROOM NAME SIGNS FOR EACH ROOM. VERIFY NAMES WITH T.L.E. PRIOR TO FABRICATION AS REQUIRED BY AHJ: REFER TO TACTILE SIGNAGE NOTES #1.





SIGN-U

EXIT \*\*\*: \*\*\*

EXIT ROUTE SIGN SIGN-XR

#### TACTILE SIGNAGE NOTES

- 1. THE GENERAL CONTRACTOR (GC) SHALL VERIFY SIGNAGE REQUIRED BY AUTHORITY HAVING JURISDICTION (AHJ).
- 2. THE GC SHALL CONFIRM MOUNTING METHOD WITH THE LEARNING EXPERIENCE CONSTRUCTION TEAM PRIOR TO INSTALLATION.
- 3. ALL SIGNAGE SHALL CONFORM WITH ADA ACCESSIBILITY GUIDELINES, INCLUDING BUT NOT LIMITED TO PROPORTION, COLOR CONTRAST AND RELIEF AND GRADE 2 BRAILLE REQUIREMENTS.
- 4. SIGNAGE: AFFIX AN INTERNATIONAL ACCESSIBILITY SYMBOL ON ALL ACCESSIBLE ENTRANCES PER APPLICABLE BUILDING
- 5. TACTILE EXIT SIGNAGE:
- 5.1. A TACTILE EXIT SIGN WITH THE WORD "EXIT" SHALL IDENTIFY EACH GRADE LEVEL EXTERIOR EXIT DOOR. 5.2. A TACTILE EXIT SIGN WITH THE WORDS "EXIT ROUTE" SHALL IDENTIFY EACH EXIT ACCESS DOOR FROM AN INTERIOR ROOM OR AREA TO A CORRIDOR OR HALLWAY
- 6. CHARACTERS, SYMBOLS AND BACKGROUND SHALL HAVE A NON-GLARE FINISH. CHARACTERS AND SYMBOLS SHALL CONTRAST WITH THE BACKGROUND, EITHER LIGHT ON DARK BACKGROUND OR DARK ON LIGHT BACKGROUND.

THAT IS REQUIRED TO HAVE A VISUAL EXIT SIGN.

- 7. SIGNS TO INCLUDE BRAILLE AND CHARACTERS AS DEFINED BY CODE.
- 8. MOUNT SIGNAGE AT 60" A.F.F. TO THE CENTER OF THE SIGN. MOUNTING LOCATION SHALL BE SO THAT A PERSON APPROACHING WITHIN 3" OF SIGN DOES NOT ENCOUNTER PROTRUDING OBJECTS AND LOCATION SHALL NOT BE WITHIN THE SWING OF A DOOR.
- 9. TACTILE RESTROOM SIGNAGE: A TACTILE RESTROOM SIGN WITH THE WORD "RESTROOM" SHALL IDENTIFY EACH ACCESSIBLE UNISEX RESTROOM.

42 OKNER PARKWAY LIVINGSTON, NEW JERSEY 07039

WORK USING THE CONTRACTOR'S BEST SKILL AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCT MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB

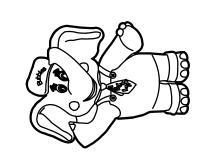
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THE EXPENSE OF THE GC.

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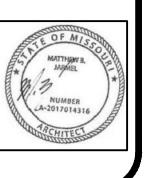
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MATTHEW B. JARMEL, AIA, MBA

LICENSE NUMBER: A2017014316

Project Number:	Scale:
TLEMO22-164	AS NOTED
Drawn By:	Approved By:
ОК	MBJ

**ACCESSIBILITY AND TACTILE SIGNAGE DETAILS** 







#### **COMcheck Software Version 4.1.5.5**

## **Envelope Compliance Certificate**

#### **Project Information**

2018 IECC Energy Code: Project Title: THE LEARNING EXPERIENCE Lees Summit, Missouri Location: Climate Zone: Project Type: **New Construction** 

Vertical Glazing / Wall Area:

Construction Site:

Owner/Agent:

8%

ARBOR WALK WEST LEE'S SUMMIT, MO 64082 Additional Efficiency Package(s)

Designer/Contractor: MATTHEW JARMEL JARMEL KIZEL ARCHITECTS AND ENGINEERS INC. **42 OKNER PARKWAY** LIVINGSTON, NJ 07039 973-994-9669 CSCHWEIKER@JKARCH.COM

Credits: 1.0 Required 1.0 Proposed Enhanced Interior Lighting Controls, 1.0 credit

**Building Area** Floor Area 10000 1-School/University : Nonresidential

#### **Envelope Assemblies**

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U- Factor <sub>(a)</sub>
Roof 1: Insulation Entirely Above Deck, [Bldg. Use 1 - School/University]	9864	<b>39</b> 53	30.0	0.032	0.032
Floor 1: Slab-On-Grade:Unheated, Vertical 2 ft., [Bldg. Use 1 - School/University] (c)	410		10.0	0.540	0.540
NORTH Exterior Wall 3: Wood-Framed, 16" o.c., [Bldg. Use 1 - School/University]	1096	21.0	0.0	0.062	0.064
Window 3: Vinyl/Fiberglass Frame:Fixed, Perf. Specs.: Product ID SIMONTON STORMBREAKER PLUS VINYL FIXED WINDOWS, SHGC 0.48, [Bldg. Use 1 - School/University] (b)	67		(****	0.380	0.380
Door 4: Insulated Metal, Swinging, [Bldg. Use 1 - School/University]	48			0.610	0.610
EAST Exterior Wall 1: Wood-Framed, 16" o.c., [Bldg. Use 1 - School/University]	1818	21.0	0.0	0.062	0.064
Window 1: Vinyl/Fiberglass Frame:Fixed, Perf. Specs.: Product ID SIMONTON STORMBREAKER PLUS VINYL FIXED WINDOWS, SHGC 0.36, [Bldq. Use 1 - School/University] (b)	154			0.380	0.380
Door 1: Glass (> 50% glazing):Metal Frame, Entrance Door, Perf. Specs.: Product ID KAWNEER COMPANY, INC. 350 SWING DOOR, SHGC 0.36, [Bldg. Use 1 - School/University] (b)	52		-	0.770	0.770
Door 2: Insulated Metal, Swinging, [Bldg. Use 1 - School/University]	109			0.610	0.610

Project Title: THE LEARNING EXPERIENCE Report date: 05/22/23 Data filename: H:\Drawings\TLE- The Learning Experience\TLE- MISSOURI\TLEMO22-164 - TLE Lees SummitMO Page 1 of 10
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Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U- Factor <sub>(a)</sub>
SOUTH					
Exterior Wall 4: Wood-Framed, 16" o.c., [Bldg. Use 1 - School/University]	1096	21.0	0.0	0.062	0.064
Window 4: Vinyl/Fiberglass Frame:Fixed, Perf. Specs.: Product ID SIMONTON STORMBREAKER PLUS VINYL FIXED WINDOWS, SHGC 0.36, [Bldg. Use 1 - School/University] (b)	67			0.380	0.380
Door 5: Insulated Metal, Swinging, [Bldg. Use 1 - School/University]	72		1575	0.610	0.610
VEST					
Exterior Wall 2: Wood-Framed, 16" o.c., [Bldg. Use 1 - School/University]	1616	21.0	0.0	0.062	0.064
Window 2: Vinyl/Fiberglass Frame:Fixed, Perf. Specs.: Product ID SIMONTON STORMBREAKER PLUS VINYL FIXED WINDOWS, SHGC 0.36, [Bldg. Use 1 - School/University] (b)	100			0.380	0.380
Door 3: Insulated Metal, Swinging, [Bldg. Use 1 - School/University]	143			0.610	0.610
(a) Budget U-factors are used for software baseline calculations ONL (b) Fenestration product performance must be certified in accordance (c) Slab-On-Grade proposed and budget U-factors shown in table are Envelope PASSES: Design 1% better than code	with NFRC and re			entation.	

Compliance Statement: The proposed envelope design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed envelope systems have been designed to meet the 2018 IECC requirements in COMcheck Version 4.1.5.5 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

MATTHEW B. JARMEL, AIA, MBA

06-02-2023

Project Title: THE LEARNING EXPERIENCE Report date: 05/22/23 Data filename: H:\Drawings\TLE- The Learning Experience\TLE- MISSOURI\TLEMO22-164 - TLE Lees SummitMO Page 2 of 10

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	COMcheck Software Version 4.1.5.5
4	COMcheck Software Version 4.1.5.5 Inspection Checklist
	Energy Code: 2018 IECC
monto	on 00% were addressed directly in the COMchack software

Requirements: 0.0% were addressed directly in the COMcheck software

Text in the "Comments/Assumptions" column is provided by the user in the COMcheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req.ID	Plan Review	Complies?	Comments/Assumptions
C103.2 [PR1] <sup>1</sup>	Plans and/or specifications provide all information with which compliance can be determined for the building envelope and document where exceptions to the standard are claimed.	□Complies □Does Not □Not Observable □Not Applicable	
C402.4.1 [PR10] <sup>1</sup>	The vertical fenestration area <= 30 percent of the gross above-grade wall area.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C402.4.1 [PR11] <sup>1</sup>	The skylight area <= 3 percent of the gross roof area.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C402.4.2 [PR14] <sup>1</sup>	In enclosed spaces > 2,500 ft2 directly under a roof with ceiling heights >15 ft. and used as an office, lobby, atrium, concourse, corridor, storage, gymnasium/exercise center, convention center, automotive service, manufacturing, non-refrigerated warehouse, retail store, distribution/sorting area, transportation, or workshop, the following requirements apply: (a) the daylight zone under skylights is >= half the floor area; (b) the skylight area to daylight zone is >= 3 percent with a skylight VT >= 0.40; or a minimum skylight effective aperture >= 1 percent.	□Complies □Does Not □Not Observable □Not Applicable	
C406 [PR9] <sup>1</sup>	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the additional energy efficiency package options.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Project Title: THE LEARNING EXPERIENCE

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

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Report date: 05/22/23

Section # & Req.ID	Footing / Foundation Inspection	Complies?	Comments/Assumptions
C303.2 [FO4] <sup>2</sup>	Slab edge insulation installed per manufacturer's instructions.	□Complies □Does Not	
		□Not Observable □Not Applicable	
C303.2.1 [FO6] <sup>1</sup>	Exterior insulation protected against damage, sunlight, moisture, wind,	□Complies □Does Not	
	landscaping and equipment maintenance activities.	□Not Observable □Not Applicable	
C105 [FO3] <sup>2</sup>		□Complies □Does Not	See the Envelope Assemblies table for values.
	specifications reported in plans and COMcheck reports.	□Not Observable □Not Applicable	
C402.2.4 [FO7] <sup>2</sup>	Slab edge insulation depth/length. Slab insulation extending away from	□Complies □Does Not	See the Envelope Assemblies table for values.
	building is covered by pavement or >= 10 inches of soil.	□Not Observable □Not Applicable	

Additional Comments/Assumptions:

Section # & Req.ID	Framing / Rough-In Inspection	Complies?	Comments/Assumptions
C303.1.3 [FR12] <sup>2</sup>	Fenestration products rated in accordance with NFRC.	□Complies □Does Not	
		□Not Observable □Not Applicable	
C303.1.3 [FR13] <sup>1</sup>	Fenestration products are certified as to performance labels or certificates	□Complies □Does Not	
	provided.	□Not Observable □Not Applicable	
C402.4.3 [FR10] <sup>1</sup>	Vertical fenestration SHGC value.	□Complies □Does Not	See the Envelope Assemblies table for values.
		□Not Observable □Not Applicable	
C402.4.3, C402.4.3.	and SHGC consistent with label	□Complies □Does Not	See the Envelope Assemblies table for values.
4 [FR8] <sup>1</sup>	specifications and as reported in plans and COMcheck reports.	□Not Observable □Not Applicable	
C402.5.1. 2.1	The building envelope contains a continuous air barrier that is sealed in	□Complies □Does Not	
[FR19] <sup>1</sup>	an approved manner and material permeability <= 0.004 dfm/ft2. Air barrier penetrations are sealed in an approved manner.	□Not Observable □Not Applicable	
C402.5.2, C402.5.4	Factory-built fenestration and doors are labeled as meeting air leakage	□Complies □Does Not	
[FR18] <sup>3</sup>	requirements.	□Not Observable □Not Applicable	
C402.5.7 [FR17] <sup>3</sup>	Vestibules are installed on all building entrances. Doors have self-closing	Complies	
[LKI1]	devices.	□Does Not □Not Observable	
		□Not Observable □Not Applicable	

**Additional Comments/Assumptions:** 

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Project Title: THE LEARNING EXPERIENCE Report date: 05/22/23 Data filename: H:\Drawings\TLE- The Learning Experience\TLE- MISSOURI\TLEMO22-164 - TLE Lees SummitMO Page 5 of 10 Arboridge Drive\ComCheck\COMcheck TLEMO22-164 Lees Summit.cck

Section # & Req.ID	Mechanical Rough-In Inspection	Complies?	Comments/Assumptions
	Stair and elevator shaft vents have motorized dampers that automatically close. Refernece section C403.7.7 for operational details.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
[ME58] <sup>3</sup>	Outdoor air and exhaust systems have motorized dampers that automatically shut when not in use and meet maximum leakage rates. Check gravity dampers where allowed. Reference section language for operational details.	□Complies □Does Not □Not Observable □Not Applicable	

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. 1. CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING THE CONTRACTOR'S BEST SKILL AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCTION MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB SITE SAFETY

2. GC MUST PROVIDE & INSTALL ALL PRODUCTS PER PLANS. ONLY SUBSTITUTED PRODUCTS NEED TO BE SUBMITTED TO THE ARCHITECT FOR APPROVAL. UNAPPROVED SUBSTITUTIONS WILL BE REPLACED A THE EXPENSE OF THE GC.

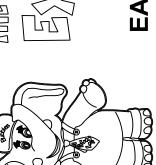
3. VERBAL REPRESENTATION HAS NO VALUE AND ALL REQUESTS TO CHANGE ANY PRODUCTS OR SPECIFICATIONS PER PLANS, <u>MUST</u> BE SUBMITTED IN WRITING TO THE ARCHITECT & TLE FOR APPROVAL.



ARCHITECTS AND ENGINEERS INC. 42 OKNER PARKWAY LIVINGSTON, NEW JERSEY 07039 TEL: 973-994-9669 FAX: 973-994-4069 www.jarmelkizel.com Architecture

Engineering Interior Design Implementation Services

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NO.	DATE	DESCRIPTION	INT
1	06-02-23	FOR TLE REVIEW	МВ
2	06-14-23	FOR PERMIT	МВ
		REVISION	
NO.	DATE	DESCRIPTION	INT

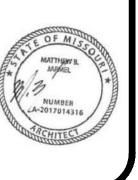
PROFESSIONAL CERTIFICATION MATTHEW B. JARMEL, AIA, MBA

LICENSE NUMBER: A2017014316

Project Number: TLEMO22-164	Scale: AS NOTED
Drawn By:	Approved By:
JE	MBJ

**ENERGY** 

COMPLIANCE **REPORT** 



1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

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Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.6 [EL26] <sup>2</sup>	Low-voltage dry-type distribution electric transformers meet the minimum efficiency requirements of Table C405.6.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.7 [EL27] <sup>2</sup>	Electric motors meet the minimum efficiency requirements of Tables C405.7(1) through C405.7(4). Efficiency verified through certification under an approved certification program or the equipment efficiency ratings shall be provided by motor manufacturer (where certification programs do not exist).	□Complies □Does Not □Not Observable □Not Applicable	
C405.8.2, C405.8.2. 1 [EL28] <sup>2</sup>	Escalators and moving walks comply with ASME A17.1/CSA B44 and have automatic controls configured to reduce speed to the minimum permitted speed in accordance with ASME A17.1/CSA B44 or applicable local code when not conveying passengers.	□Complies □Does Not □Not Observable □Not Applicable	
C405.9 [EL29] <sup>2</sup>	Total voltage drop across the combination of feeders and branch circuits <= 5%.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

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Section # & Req.ID	Insulation Inspection	Complies?	Comments/Assumptions
C303.1 [IN3] <sup>1</sup>	Roof insulation installed per manufacturer's instructions. Blown or poured loose-fill insulation is installed only where the roof slope is <=3 in 12.	□Complies □Does Not □Not Observable □Not Applicable	
C402.2.1 [IN20] <sup>1</sup>	Insulation installed on a suspended ceiling having ceiling tiles is not being specified for roor/ceiling assemblies. Continuous insulation board installed in 2 or more layers with edge joints offset between layers.	□Complies □Does Not □Not Observable □Not Applicable	
C303.1 [IN10] <sup>2</sup>	Building envelope insulation is labeled with R-value or insulation certificate providing R-value and other relevant data.	□Complies □Does Not □Not Observable □Not Applicable	
C303.2 [IN7] <sup>1</sup>	Above-grade wall insulation installed per manufacturer's instructions.	□Complies □Does Not □Not Observable □Not Applicable	
C303.2.1 [IN14] <sup>2</sup>		□Complies □Does Not □Not Observable □Not Applicable	
C105 [IN6] <sup>1</sup>	type and R-value consistent with insulation specifications reported in plans and COMcheck reports.	□Complies □Does Not □Not Observable □Not Applicable	See the Envelope Assemblies table for values.
C402.2.3 [IN8] <sup>2</sup>	value consistent with insulation specifications reported in plans and COMcheck reports.	□Complies □Does Not □Not Observable □Not Applicable	See the Envelope Assemblies table for values.
C402.2.6 [IN18] <sup>3</sup>		□Complies □Does Not □Not Observable □Not Applicable	
C105 [IN2] <sup>1</sup>	Installed roof insulation type and R- value consistent with insulation specifications reported in plans and COMcheck reports. For some ceiling systems, verification may need to occur during Framing Inspection.	□Complies □Does Not □Not Observable □Not Applicable	See the Envelope Assemblies table for values.
C402.5.1. 1 [IN1] <sup>1</sup>		□Complies □Does Not □Not Observable □Not Applicable	

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3) Project Title: THE LEARNING EXPERIENCE

**△ COM***check* Software Version 4.1.5.5

2018 IECC

Energy Code:

Project Title: THE LEARNING EXPERIENCE

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Comments/Assumptions Final Inspection Complies? & Req.ID C402.5.6 Weatherseals installed on all loading Complies  $[FI37]^1$  dock cargo door openings and provide  $\square_{Does\ Not}$ direct contact along the top and sides Not Observable of vehicles parked in the doorway. ☐Not Applicable C402.5.8 Recessed luminaires in thermal [FI26]<sup>3</sup> envelope to limit infiltration and be IC Does Not rated and labeled. Seal between □Not Observable interior finish and luminaire housing. C406.4 Enhanced digital lighting controls ☐ Complies [FI54]<sup>1</sup> efficiency package: Interior lighting has following enhanced lighting ☐Not Observable controls in accordance with Section ☐Not Applicable C405.2.2: Luminaires capable of continuous dimming and being addressed individually, <= 8 luminaires controlled in combination in a daylight zone, digital control system for fixtures, "Sequence of Operations" documentation, and functional testing per Section C408. documents will be provided to the Does Not owner. Documents will cover ☐Not Observable manufacturers' information, ☐Not Applicable specifications, programming procedures and means of illustrating to owner how building, equipment and systems are intended to be installed, maintained, and operated. Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

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Interior Lighting Compliance Certificate

Report date: 06/14/23

## **▲ COM***check* Software Version 4.1.5.5

## **Exterior Lighting Compliance Certificate**

Energy Code: Project Title: Project Type: Exterior Lighting Zone

2018 IECC THE LEARNING EXPERIENCE New Construction

Construction Site: ARBOR WALK WEST LEE'S SUMMIT, MO 64082 2 (Residential mixed use area (LZ2))

Owner/Agent: Designer/Contractor: MATTHEW JARMEL JARMEL KIZEL ARCHITECTS AND ENGINEERS INC. **42 OKNER PARKWAY** LIVINGSTON, NJ 07039 973-994-9669

#### Allowed Exterior Lighting Power

A Area/Surface Category  ENTRANCE CANOPY (Entry canopy) EGRESS DOORS (Illuminated area of facade wall or surface)	B Quantity	C Allowed Watts / Unit	D Tradable Wattage	E Allowed Watts (B X C)	
ENTRANCE CANOPY (Entry canopy)	212 ft2	0.25	Yes	53	
	409 ft2	0.07	No	31	
		Total Tradab	ole Watts (a) =	53	
		Total All	owed Watts =	84	
	Total All	lowed Supplement	tal Watts (b) =	400	

CSCHWEIKER@JKARCH.COM

С

Lamps/ # of Fixture (C X D)

D

(a) Wattage tradeoffs are only allowed between tradable areas/surfaces. (b) A supplemental allowance equal to 400 watts may be applied toward compliance of both non-tradable and tradable areas/surfaces.

#### Proposed Exterior Lighting Power

	Fixture	Fixtures	Watt.	21 8
ENTRANCE CANOPY ( Entry canopy 212 ft2): Tradable Wattage				
LED 1: G: CANOPY DOWNLIGHT: Other:	1	3	12	36
EGRESS DOORS ( Illuminated area of facade wall or surface 409 ft2): Non-tradable W	/attage			
LED 2: HE: WALLPACK: Other:	1	16	24	384
	Total Tra	dable Propos	ed Watts =	36

#### Exterior Lighting PASSES: Design 64% better than code

#### Exterior Lighting Compliance Statement

Compliance Statement: The proposed exterior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed exterior lighting systems have been designed to meet the 2018 IECC requirements in COMcheck Version 4.1.5.5 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Name - Title

Fixture ID: Description / Lamp / Wattage Per Lamp / Ballast

Project Title: THE LEARNING EXPERIENCE Report date: 06/14/23 Data filename: H:\Drawings\TLE- The Learning Experience\TLE- MISSOURI\TLEMO22-164 - TLE Lees SummitMO Page 2 of 22 Arboridge Drive\ComCheck\COMcheck TLEMO22-164 Lees Summit.cck

. CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING THE CONTRACTOR'S BEST SKILL AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCTION MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB

2. GC MUST PROVIDE & INSTALL ALL PRODUCTS PER PLANS. ONLY SUBSTITUTED PRODUCTS NEED TO BE SUBMITTED TO THE ARCHITECT FOR APPROVAL. UNAPPROVED SUBSTITUTIONS WILL BE REPLACED A THE EXPENSE OF THE GC.

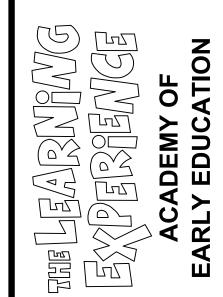
SITE SAFETY

3. VERBAL REPRESENTATION HAS NO VALUE AND ALL REQUESTS TO CHANGE ANY PRODUCTS OR SPECIFICATIONS PER PLANS, MUST BE SUBMITTED IN WRITING TO THE ARCHITECT & TLE FOR APPROVAL.



ARCHITECTS AND ENGINEERS INC 42 OKNER PARKWAY LIVINGSTON, NEW JERSEY 07039 TEL: 973-994-9669 FAX: 973-994-4069 www.jarmelkizel.com

> Architecture Engineering Interior Design Implementation Services





NO.	DATE	DESCRIPTION	INT.
1	06-02-23	FOR TLE REVIEW	MBJ
2	06-14-23	FOR PERMIT	MBJ
		REVISION	
NO.	DATE	DESCRIPTION	INT.
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PROFESSIONAL CERTIFICATION

MATTHEW B. JARMEL, AIA, MBA

**LICENSE NUMBER: A2017014316** 

Project Number:	Scale:
TLEMO22-164	AS NOTED
Drawn By:	Approved By:
	MBJ

Drawing Name: **ENERGY** COMPLIANCE

REPORT



Project Title: THE LEARNING EXPERIENCE Report date: 05/22/23 Data filename: H:\Drawings\TLE- The Learning Experience\TLE- MISSOURI\TLEMO22-164 - TLE Lees SummitMO Page 10 of 10

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Project Title: THE LEARNING EXPERIENCE **New Construction** Project Type: Construction Site: Owner/Agent: Designer/Contractor: ARBOR WALK WEST MATTHEW JARMEL LEE'S SUMMIT, MO 64082 JARMEL KIZEL ARCHITECTS AND ENGINEERS INC. Additional Efficiency Package(s) **42 OKNER PARKWAY** LIVINGSTON, NJ 07039 973-994-9669 CSCHWEIKER@JKARCH.COM Credits: 1.0 Required 1.0 Proposed Enhanced Interior Lighting Controls, 1.0 credit Allowed Interior Lighting Power Area Category Floor Area Allowed Allowed Watts (B X C) Watts / ft2 1-School/University 8100 0.81 Total Allowed Watts = Proposed Interior Lighting Power C D Lamps/ # of Fixture (C X D) Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast Fixture Fixtures Watt. 1-School/University LED 1: A: LED 2X4 RECESSED: Other: 105 3780 LED 2: B: LED 2X2 RECESSED: Other: 27 32 864 LED 3: K: LED 48IN BOH: Other: Total Proposed Watts = 4728 nterior Lighting PASSES: Design 42% better than code Interior Lighting Compliance Statement Compliance Statement: The proposed interior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed interior lighting systems have been designed to meet the 2018 IECC requirements in COMcheck Version 4.1.5.5 and to comply with any applicable mandatory requirements listed in the Inspection Checklist. Name - Title

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## COMcheck Software Version 4.1.5.5 **Mechanical Compliance Certificate**

Project Information

2018 IECC Energy Code: THE LEARNING EXPERIENCE Project Title: Lees Summit, Missouri Location: Climate Zone:

Project Type: **New Construction** 

Construction Site: Owner/Agent: ARBOR WALK WEST LEE'S SUMMIT, MO 64082

Designer/Contractor: MATTHEW JARMEL JARMEL KIZEL ARCHITECTS AND ENGINEERS INC. **42 OKNER PARKWAY** LIVINGSTON, NJ 07039 CSCHWEIKER@JKARCH.COM

Credits: 1.0 Required 1.0 Proposed Enhanced Interior Lighting Controls, 1.0 credit Mechanical Systems List

Quantity System Type & Description 1 RTU-1 (Single Zone):

Additional Efficiency Package(s)

Heating: 1 each - Central Furnace, Gas, Capacity = 150 kBtu/h Proposed Efficiency = 80.00% Et, Required Efficiency: 80.00 % Et or 80% AFUE Cooling: 1 each - Single Package DX Unit, Capacity = 67 kBtu/h, Air-Cooled Condenser, Air Economizer Proposed Efficiency = 12.10 EER, Required Efficiency: 11.00 EER + 12.6 IEER Fan System: FAN SYSTEM 1 | SEE PLANS -- Compliance (Motor nameplate HP method) : Passes

FAN 1 Supply, Constant Volume, 2400 CFM, 3.0 motor nameplate hp, 0.0 fan efficiency grade

RTU-2, RTU-3 (Single Zone):

Heating: 1 each - Central Furnace, Gas, Capacity = 150 kBtu/h Proposed Efficiency = 80.00% Et, Required Efficiency: 80.00 % Et or 80% AFUE Cooling: 1 each - Single Package DX Unit, Capacity = 67 kBtu/h, Air-Cooled Condenser, Air Economizer Proposed Efficiency = 12.10 EER, Required Efficiency: 11.00 EER + 12.6 IEER Fan System: FAN SYSTEM 2, 3 | SEE PLANS -- Compliance (Motor nameplate HP method): Passes

FAN 2,3 Supply, Constant Volume, 2200 CFM, 3.0 motor nameplate hp, 0.0 fan efficiency grade

RTU-4 (Single Zone):

Heating: 1 each - Central Furnace, Gas, Capacity = 130 kBtu/h Proposed Efficiency = 80.00% Et, Required Efficiency: 80.00 % Et or 80% AFUE Cooling: 1 each - Single Package DX Unit, Capacity = 58 kBtu/h, Air-Cooled Condenser, Air Economizer Proposed Efficiency = 14.20 SEER, Required Efficiency: 14.00 SEER Fan System: FAN SYSTEM 4 | SEE PLANS -- Compliance (Motor nameplate HP method): Passes

FAN 4 Supply, Constant Volume, 2000 CFM, 1.0 motor nameplate hp, 0.0 fan efficiency grade

RTU-5 (Single Zone):

Project Title: THE LEARNING EXPERIENCE

Heating: 1 each - Central Furnace, Gas, Capacity = 150 kBtu/h Proposed Efficiency = 80.00% Et, Required Efficiency: 80.00 % Et or 80% AFUE

Cooling: 1 each - Single Package DX Unit, Capacity = 67 kBtu/h, Air-Cooled Condenser, Air Economizer

Project Title: THE LEARNING EXPERIENCE Report date: 06/14/23 Data filename: H:\Drawings\TLE- The Learning Experience\TLE- MISSOURI\TLEMO22-164 - TLE Lees SummitMO Page 3 of 22 Arboridge Drive\ComCheck\COMcheck TLEMO22-164 Lees Summit.cck

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

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Report date: 06/14/23

Quantity System Type & Description

Proposed Efficiency = 12.10 EER, Required Efficiency: 11.00 EER + 12.6 IEER Fan System: FAN SYSTEM 5 | SEE PLANS -- Compliance (Motor nameplate HP method): Passes

FAN 5 Supply, Constant Volume, 2200 CFM, 3.0 motor nameplate hp, 0.0 fan efficiency grade EF 1 Exhaust, Constant Volume, 610 CFM, 0.2 motor nameplate hp, 0.0 fan efficiency grade

Electric Storage Water Heater, Capacity: 120 gallons w/ Circulation Pump

Electric Storage Water Heater, Capacity: 50 gallons

Compliance Statement: The proposed mechanical design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed mechanical systems have been designed to meet the 2018 IECC requirements in COMcheck Version 4.1.5.5 and to comply with any applicable mandatory

Name - Title

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EF 2 Exhaust, Constant Volume, 490 CFM, 0.2 motor nameplate hp, 0.0 fan efficiency grade Proposed Efficiency: 0.53 SL, %/h (if > 12 kW), Required Efficiency: 0.53 SL, %/h (if > 12 kW) Proposed Efficiency: 0.84 SL, %/h (if > 12 kW), Required Efficiency: 0.84 SL, %/h (if > 12 kW) Mechanical Compliance Statement requirements listed in the Inspection Checklist.

> Report date: 06/14/23 Arboridge Drive\ComCheck\COMcheck TLEMO22-164 Lees Summit.cck

# Footing / Foundation Inspection Complies? Comments/Assumptions & Req.ID protection systems have sensors and Does Not C403.12.3 | Controls configured to limit service for pavement temperature and outdoor temperature. future connection to

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Project Title: THE LEARNING EXPERIENCE Report date: 06/14/23 Data filename: H:\Drawings\TLE- The Learning Experience\TLE- MISSOURI\TLEMO22-164 - TLE Lees SummitMO Page 7 of 22 Arboridge Drive\ComCheck\COMcheck TLEMO22-164 Lees Summit.cck

C404.5, Heated water supply piping conforms Complies Exception: Requirement does not apply. C404.5.1, to pipe length and volume □Does Not C404.5.1, to pipe length and volume requirements. Refer to section details. ☐Not Applicable C404.5, Heated water supply piping conforms Complies **Exception:** Requirement does not apply. C404.5.1, to pipe length and volume C404.5.2 requirements. Refer to section details. C404.5, Heated water supply piping conforms Complies **Exception:** Requirement does not apply. C404.5.1, to pipe length and volume □Does Not C404.5.1, to pipe length and volume requirements. Refer to section details. ☐Not Applicable **C404.5,** Heated water supply piping conforms Complies Exception: Requirement does not apply. C404.5.1, to pipe length and volume C404.5.1, to pipe length and volume.

C404.5.2 requirements. Refer to section details. 

Not Observable □Does Not ☐Not Applicable C404.5, Heated water supply piping conforms Complies Requirement will be met. C404.5.1, to pipe length and volume □Does Not C404.5.2 requirements. Refer to section details. ☐Not Applicable C404.5, Heated water supply piping conforms Complies Requirement will be met. C404.5.1, to pipe length and volume □Does Not C404.5.1, to pipe length and volume requirements. Refer to section details. 

Not Observable ☐Not Applicable C404.6.1, Automatic time switches installed to Complies Requirement will be met. C404.6.2 automatically switch off the [PL3]<sup>1</sup> recirculating hot-water system or heat Not Observable □Does Not trace. ☐Not Applicable 2404.6.3 Pumps that circulate water between a Complies **Exception:** Requirement does not apply. [PL7]<sup>3</sup> heater and storage tank have controls Does Not that limit operation from startup to □Not Observable <= 5 minutes after end of heating ☐Not Applicable C404.6.3 Pumps that circulate water between a Complies **Exception:** Requirement does not apply. heater and storage tank have controls \quad \textstyle Does Not that limit operation from startup to <= 5 minutes after end of heating □Not Applicable C404.6.3 Pumps that circulate water between a Complies **Exception:** Requirement does not apply. [PL7]<sup>3</sup> heater and storage tank have controls Does Not that limit operation from startup to <= 5 minutes after end of heating ☐Not Applicable C404.6.3 Pumps that circulate water between a Complies Exception: Requirement does not apply. heater and storage tank have controls Does Not that limit operation from startup to <= 5 minutes after end of heating ☐Not Applicable C404.6.3 Pumps that circulate water between a Complies heater and storage tank have controls Does Not that limit operation from startup to <= 5 minutes after end of heating □Not Applicable

COMcheck Software Version 4.1.5.5

Text in the "Comments/Assumptions" column is provided by the user in the COMcheck Requirements screen. For each

requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception

Requirement will be met.

Report date: 06/14/23

Comments/Assumptions

is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Complies?

☐Not Observable

□Not Applicable

□Does Not

□Does Not

☐Not Observable

☐Not Applicable

Complies

☐Not Observable

□Does Not

□Complies

□Does Not

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1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

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# Plumbing Rough-In Inspection Complies? Comments/Assumptions

☐Not Observable

Requirements: 84.0% were addressed directly in the COMcheck software

Energy Code: 2018 IECC

Plan Review

calculations provide all information

document where exceptions to the

calculations provide all information

heating systems and equipment and document where exceptions to the

with which compliance can be

systems and equipment and

standard are claimed. Load

calculations per acceptable

engineering standards and

Plans, specifications, and/or

with which compliance can be

determined for the service water

standard are claimed. Hot water

system sized per manufacturer's

calculations provide all information

determined for the interior lighting

and document where exceptions to the standard are claimed. Information provided should include interior

lighting power calculations, wattage of bulbs and ballasts, transformers and

and electrical systems and equipment Not Applicable

calculations provide all information 
Does Not

and electrical systems and equipment Not Applicable

with which compliance can be determined for the additional energy Not Applicable

with which compliance can be

with which compliance can be

determined for the exterior lighting

and document where exceptions to

the standard are claimed. Information provided should include exterior

lighting power calculations, wattage of

bulbs and ballasts, transformers and

calculations provide all information

Plans, specifications, and/or

efficiency package options.

Additional Comments/Assumptions:

Project Title: THE LEARNING EXPERIENCE

determined for the mechanical

C103.2 Plans, specifications, and/or

sizing guide.

C103.2 Plans, specifications, and/or

control devices.

C103.2 Plans, specifications, and/or

control devices.

& Req.ID

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3) Project Title: THE LEARNING EXPERIENCE Report date: 06/14/23 Data filename: H:\Drawings\TLE- The Learning Experience\TLE- MISSOURI\TLEMO22-164 - TLE Lees SummitMO Page 8 of 22 Arboridge Drive\ComCheck\COMcheck TLEMO22-164 Lees Summit.cck

. CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING THE CONTRACTOR'S BEST SKILL AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCTION MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB SITE SAFETY

2. GC MUST PROVIDE & INSTALL ALL PRODUCTS PER PLANS. ONLY SUBSTITUTED PRODUCTS NEED TO BE SUBMITTED TO THE ARCHITECT FOR APPROVAL. UNAPPROVED SUBSTITUTIONS WILL BE REPLACED A THE EXPENSE OF THE GC.

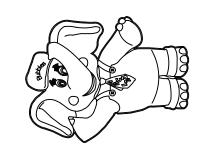
3. VERBAL REPRESENTATION HAS NO VALUE AND ALL REQUESTS TO CHANGE ANY PRODUCTS OR SPECIFICATIONS PER PLANS, MUST BE SUBMITTED IN WRITING TO THE ARCHITECT & TLE FOR APPROVAL.



42 OKNER PARKWAY LIVINGSTON, NEW JERSEY 07039 TEL: 973-994-9669 FAX: 973-994-4069 www.jarmelkizel.com

Architecture Engineering Interior Design Implementation Services

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NO. DATE DESCRIPTION

**ISSUE** 

FOR TLE REVIEW

2	06-14-23	FOR PERMIT	MBJ
		REVISION	
NO.	DATE	DESCRIPTION	INT.
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PROFESSIONAL CERTIFICATION

MATTHEW B. JARMEL, AIA, MBA

LICENSE NUMBER: A2017014316

TLEMO22-164 **AS NOTED** Approved By: Drawn By:

**ENERGY** COMPLIANCE REPORT



Section #	Plumbing Rough-In Inspection	Complies?	Comments/Assumptions
& Req.ID C404.6.3 [PL7] <sup>3</sup>	Pumps that circulate water between a heater and storage tank have controls that limit operation from startup to <= 5 minutes after end of heating cycle.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Exception: Requirement does not apply.
C404.7 [PL8] <sup>3</sup>	Demand recirculation water systems have controls that start the pump upon receiving a signal from the action of a user of a fixture or appliance and limits the temperature of the water entering the cold-water piping to 104°F.	□Complies □Does Not □Not Observable □Not Applicable	Exception: Requirement does not apply.
C404.7 [PL8] <sup>3</sup>	Demand recirculation water systems have controls that start the pump upon receiving a signal from the action of a user of a fixture or appliance and limits the temperature of the water entering the cold-water piping to 104°F.	□Complies □Does Not □Not Observable □Not Applicable	Exception: Requirement does not apply.
C404.7 [PL8] <sup>3</sup>	Demand recirculation water systems have controls that start the pump upon receiving a signal from the action of a user of a fixture or appliance and limits the temperature of the water entering the cold-water piping to 104°F.	□Complies □Does Not □Not Observable □Not Applicable	Exception: Requirement does not apply.
C404.7 [PL8] <sup>3</sup>	Demand recirculation water systems have controls that start the pump upon receiving a signal from the action of a user of a fixture or appliance and limits the temperature of the water entering the cold-water piping to 104°F.	□Complies □Does Not □Not Observable □Not Applicable	Exception: Requirement does not apply.
C404.7 [PL8] <sup>3</sup>	Demand recirculation water systems have controls that start the pump upon receiving a signal from the action of a user of a fixture or appliance and limits the temperature of the water entering the cold-water piping to 104°F.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C404.7 [PL8] <sup>3</sup>	Demand recirculation water systems have controls that start the pump upon receiving a signal from the action of a user of a fixture or appliance and limits the temperature of the water entering the cold-water piping to 104°F.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.

	1 High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier	3)			
Project Title:	THE LEARNING EXPERIENCE					Repo	rt date:	06/14	1/23
	name: H:\Drawings\TLE- The Learning Experience\TLE- MISSOURI\TLEMO22-164 - TLE Lees Arboridge Drive\ComCheck\COMcheck TLEMO22-164 Lees Summit.cck				- TLE Lees Summ	itMO	Page	9 of	22

Section # & Req.ID	Mechanical Rough-In Inspection	Complies?	Comments/Assumptions
C402.2.6 [ME41] <sup>3</sup>	Thermally ineffective panel surfaces of sensible heating panels have insulation >= R-3.5.	□Complies □Does Not □Not Observable □Not Applicable	Exception: Requirement does not apply.
C403.8.4 [ME142] <sup>2</sup>		□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C403.8.4 [ME142] <sup>2</sup>	Motors for fans that are not less than 1/12 hp and less than 1 hp are electronically commutated motors or have a minimum motor efficiency of 70 percent. These motors have the means to adjust motor speed.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C403.8.4 [ME142] <sup>2</sup>	1/12 hp and less than 1 hp are	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C403.8.4 [ME142] <sup>2</sup>	Motors for fans that are not less than 1/12 hp and less than 1 hp are electronically commutated motors or have a minimum motor efficiency of 70 percent. These motors have the means to adjust motor speed.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C403.8.5 [ME143] <sup>2</sup>	Each DX cooling system > 65 kBtu and chiller water/evaporative cooling system with fans > 1/4 hp are designed to vary the indoor fan airflow as a function of load and comply with detailed requirements of this section.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C403.8.5 [ME143] <sup>2</sup>	Each DX cooling system > 65 kBtu and chiller water/evaporative cooling system with fans > 1/4 hp are designed to vary the indoor fan airflow as a function of load and comply with detailed requirements of this section.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C403.8.5 [ME143] <sup>2</sup>	Each DX cooling system > 65 kBtu and chiller water/evaporative cooling system with fans > 1/4 hp are designed to vary the indoor fan airflow as a function of load and comply with detailed requirements of this section.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C403.8.5 [ME143] <sup>2</sup>	Each DX cooling system > 65 kBtu and chiller water/evaporative cooling system with fans > 1/4 hp are designed to vary the indoor fan airflow as a function of load and comply with detailed requirements of this section.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C403.12.1 [ME71] <sup>2</sup>	controlled by an occupancy sensing device or timer switch.	□Does Not □Not Observable □Not Applicable	Exception: Requirement does not apply.
C403.2.3 [ME55] <sup>2</sup>	HVAC equipment efficiency verified.	□Complies □Does Not □Not Observable □Not Applicable	See the Mechanical Systems list for values.

1 High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

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	installed with air-cooled unitary DX	Does Not	Requirement will be met.
	units having economizers.	□Not Observable □Not Applicable	
C403.5.5 [ME113] <sup>2</sup>	Fault detection and diagnostics installed with air-cooled unitary DX units having economizers.	□Complies □Does Not	Requirement will be met.
	units having economizers.	□Not Observable □Not Applicable	
C403.5.5 [ME113] <sup>2</sup>	Fault detection and diagnostics installed with air-cooled unitary DX	□Complies □Does Not	Requirement will be met.
	units having economizers.	□Not Observable □Not Applicable	
C403.5.5 [ME113] <sup>2</sup>	Fault detection and diagnostics installed with air-cooled unitary DX	☐Complies ☐Does Not	Requirement will be met.
	units having economizers.	□Not Observable □Not Applicable	
C403.2.2 [ME59] <sup>1</sup>	Natural or mechanical ventilation is provided in accordance with	□Complies □Does Not	Requirement will be met.
	International Mechanical Code Chapter 4. Mechanical ventilation has capability to reduce outdoor air supply to minimum per IMC Chapter 4.	□Not Observable □Not Applicable	
C403.7.1 [ME59] <sup>1</sup>	Demand control ventilation provided for spaces >500 ft2 and >25	☐Complies ☐Does Not	Exception: Requirement does not apply.
	people/1000 ft2 occupant density and served by systems with air side economizer, auto modulating outside air damper control, or design airflow >3,000 cfm.	□Not Observable □Not Applicable	
C403.7.2 [ME115] <sup>3</sup>	Enclosed parking garage ventilation has automatic contaminant detection	□Complies □Does Not	Exception: Requirement does not apply.
	and capacity to stage or modulate fans to 50% or less of design capacity.	□Not Observable □Not Applicable	
C403.7.6 [ME141] <sup>3</sup>	HVAC systems serving guestrooms in Group R-1 buildings with > 50	□Complies □Does Not	Exception: Requirement does not apply.
	guestrooms: Each guestroom is provided with controls that automatically manage temperature setpoint and ventilation (see sections C403.7.6.1 and C403.7.6.2).	□Not Observable □Not Applicable	
C403.7.4 [ME57] <sup>1</sup>	Exhaust air energy recovery on systems meeting Table C403.7.4(1)	□Complies □Does Not	Exception: Requirement does not apply.
	and C403.7.4(2).	□Not Observable □Not Applicable	
C403.7.5 [ME116] <sup>3</sup>	replacement air and conditioned	□Complies □Does Not	Exception: Requirement does not apply.
	supply air limitations, and satisfy hood rating requirements and maximum exhaust rate criteria.	□Not Observable □Not Applicable	
	HVAC ducts and plenums insulated in accordance with C403.11.1 and	□Complies □Does Not	Requirement will be met.
	constructed in accordance with	☐Not Observable	

Mechanical Rough-In Inspection Complies?

☐ Complies

& Req.ID

C403.5.5 Fault detection and diagnostics

Comments/Assumptions

Requirement will be met.

Section # & Req.ID	Mechanical Rough-In Inspection	Complies?	Comments/Assumptions
C403.5, C403.5.1, C403.5.2 [ME62] <sup>1</sup>		□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C403.5, C403.5.1, C403.5.2 [ME62] <sup>1</sup>	Air economizers provided where required, meet the requirements for design capacity, control signal, ventilation controls, high-limit shut-off, integrated economizer control, and provide a means to relieve excess outside air during operation.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C403.5, C403.5.1, C403.5.2 [ME62] <sup>1</sup>	Air economizers provided where required, meet the requirements for design capacity, control signal, ventilation controls, high-limit shut-off, integrated economizer control, and provide a means to relieve excess outside air during operation.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.5, C403.5.1, C403.5.2 [ME62] <sup>1</sup>	Air economizers provided where required, meet the requirements for design capacity, control signal, ventilation controls, high-limit shut-off, integrated economizer control, and provide a means to relieve excess outside air during operation.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C403.5.3. 3 [ME124] <sup>1</sup>	Air economizers automatically reduce outdoor air intake to the design minimum outdoor air quantity when outdoor air intake will not reduce cooling energy usage. See Table C403.5.3.3 for applicable device types and climate zones.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C403.5.3. 3 [ME124] <sup>1</sup>	Air economizers automatically reduce outdoor air intake to the design minimum outdoor air quantity when outdoor air intake will not reduce cooling energy usage. See Table C403.5.3.3 for applicable device types and climate zones.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C403.5.3. 3 [ME124] <sup>1</sup>	Air economizers automatically reduce outdoor air intake to the design minimum outdoor air quantity when outdoor air intake will not reduce cooling energy usage. See Table C403.5.3.3 for applicable device types and climate zones.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C403.5.3. 3 [ME124] <sup>1</sup>	outdoor air intake to the design minimum outdoor air quantity when outdoor air intake will not reduce cooling energy usage. See Table C403.5.3.3 for applicable device types and climate zones.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C403.5.3. 4 [ME125] <sup>1</sup>	System capable of relieving excess outdoor air during air economizer operation to prevent overpressurizing the building. The relief air outlet located to avoid recirculation into the building.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.

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Project Title: THE LEARNING EXPERIENCE

Section # & Req.ID	Mechanical Rough-In Inspection	Complies?	Comments/Assumptions
C403.5.3. 4 [ME125] <sup>1</sup>		□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C403.5.3. 4 [ME125] <sup>1</sup>	System capable of relieving excess outdoor air during air economizer operation to prevent overpressurizing the building. The relief air outlet located to avoid recirculation into the building.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C403.5.3. 4 [ME125] <sup>1</sup>	System capable of relieving excess outdoor air during air economizer operation to prevent overpressurizing the building. The relief air outlet located to avoid recirculation into the building.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C403.5.3. 5 [ME126] <sup>1</sup>	Return, exhaust/relief and outdoor air dampers used in economizers have motorized dampers that automatically shut when not in use and meet maximum leakage rates. Reference section C403.7.7 for details.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.5.3. 5 [ME126] <sup>1</sup>	Return, exhaust/relief and outdoor air dampers used in economizers have motorized dampers that automatically shut when not in use and meet maximum leakage rates. Reference section C403.7.7 for details.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C403.5.3. 5 [ME126] <sup>1</sup>	Return, exhaust/relief and outdoor air dampers used in economizers have motorized dampers that automatically shut when not in use and meet maximum leakage rates. Reference section C403.7.7 for details.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.5.3. 5 [ME126] <sup>1</sup>	Return, exhaust/relief and outdoor air dampers used in economizers have motorized dampers that automatically shut when not in use and meet maximum leakage rates. Reference section C403.7.7 for details.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C403.4.1. 4 [ME63] <sup>2</sup>	Heating for vestibules and air curtains with integral heating include automatic controls that shut off the heating system when outdoor air temperatures > 45F. Vestibule heating and cooling systems controlled by a thermostat in the vestibule with heating setpoint <= 60F and cooling setpoint >= 80F.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C403.3.3 [ME35] <sup>1</sup>	Hot gas bypass limited to: <=240 kBtu/h - 50% >240 kBtu/h - 25%	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.3.3 [ME35] <sup>1</sup>	Hot gas bypass limited to: <=240 kBtu/h - 50% >240 kBtu/h - 25%	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.

	1 High Impact (Tier 1)	2 Medium Impact (Tier 2)	3 Low Impact (Tier	- 3)
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# & Req.ID	Mechanical Rough-In Inspection	Complies?	Comments/Assumptions
C403.3.3 [ME35] <sup>1</sup>	Hot gas bypass limited to: <=240 kBtu/h - 50% >240 kBtu/h - 25%	□Complies □Does Not	Requirement will be met.
		□Not Observable □Not Applicable	
C403.3.3 [ME35] <sup>1</sup>	Hot gas bypass limited to: <=240 kBtu/h - 50% >240 kBtu/h - 25%	□Complies □Does Not	Requirement will be met.
		□Not Observable □Not Applicable	
C408.2.2. 1 [ME53] <sup>3</sup>	Air outlets and zone terminal devices have means for air balancing.	□Complies □Does Not	Requirement will be met.
40 000		□Not Observable □Not Applicable	
C403.5, C403.5.1, C403.5.2 [ME123] <sup>3</sup>	Refrigerated display cases, walk-in coolers or walk-in freezers served by remote compressors and remote condensers not located in a condensing unit, have fan-powered condensers that comply with Sections C403.5.1 and refrigeration compressor systems that comply with C403.5.2	□Complies □Does Not □Not Observable □Not Applicable	Exception: Requirement does not apply.

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Project Title: THE LEARNING EXPERIENCE

1. CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING THE CONTRACTOR'S BEST SKILL AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCTION MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB

SITE SAFETY

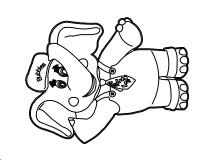
2. GC MUST PROVIDE & INSTALL ALL PRODUCTS PER PLANS. <u>ONLY</u> SUBSTITUTED PRODUCTS NEED TO BE SUBMITTED TO THE ARCHITECT FOR APPROVAL. UNAPPROVED SUBSTITUTIONS WILL BE REPLACED A THE EXPENSE OF THE GC.

3. VERBAL REPRESENTATION HAS NO VALUE AND ALL REQUESTS TO CHANGE ANY PRODUCTS OR SPECIFICATIONS PER PLANS, MUST BE SUBMITTED IN WRITING TO THE ARCHITECT & TLE FOR APPROVAL.



42 OKNER PARKWAY LIVINGSTON, NEW JERSEY 07039 TEL: 973-994-9669 FAX: 973-994-4069 www.jarmelkizel.com Architecture Engineering Interior Design Implementation Services

ACADEMY OF EARLY EDUCATION



NO.	DATE	DESCRIPTION	INT.
1	06-02-23	FOR TLE REVIEW	MBJ
2	06-14-23	FOR PERMIT	MBJ
		REVISION	
NO.	DATE	DESCRIPTION	INT.
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ISSUE

PROFESSIONAL CERTIFICATION MATTHEW B. JARMEL, AIA, MBA

LICENSE NUMBER: A2017014316

Drawn By:	Approved By:
TLEMO22-164	AS NOTED
Project Number:	Scale:

**ENERGY** COMPLIANCE

**REPORT** 



Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.2.2. 2 [EL22] <sup>1</sup>	Spaces required to have light-reduction controls have a manual control that allows the occupant to reduce the connected lighting load in a reasonably uniform illumination pattern >= 50 percent.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C405.2.1, C405.2.1. 1 [EL18] <sup>1</sup>	Occupancy sensors installed in classrooms/lecture/training rooms, conference/meeting/multipurpose rooms, copy/print rooms, lounges/breakrooms, enclosed offices, open plan office areas, restrooms, storage rooms, locker rooms, warehouse storage areas, and other spaces <= 300 sqft that are enclosed by floor-to-ceiling height partitions. Reference section language C405.2.1.2 for control function in warehouses and section C405.2.1.3 for open plan office spaces.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C405.2.1. 2 [EL19] <sup>1</sup>	Occupancy sensors control function in warehouses: In warehouses, the lighting in aisleways and open areas is controlled with occupant sensors that automatically reduce lighting power by 50% or more when the areas are unoccupied. The occupant sensors control lighting in each aisleway independently and do not control lighting beyond the aisleway being controlled by the sensor.	□Complies □Does Not □Not Observable □Not Applicable	Exception: Requirement does not apply.
C405.2.1. 3 [EL20] <sup>1</sup>	Occupant sensor control function in open plan office areas: Occupant sensor controls in open office spaces >= 300 sq.ft. have controls 1) configured so that general lighting can be controlled separately in control zones with floor areas <= 600 sq.ft. within the space, 2) automatically turn off general lighting in all control zones within 20 minutes after all occupants have left the space, 3) are configured so that general lighting power in each control zone is reduced by >= 80% of the full zone general lighting power within 20 minutes of all occupants leaving that control zone, and 4) are configured such that any daylight responsive control will activate space general lighting or control zone general lighting only when occupancy for the same area is detected.	□Complies □Does Not □Not Observable □Not Applicable	Exception: Requirement does not apply.
C405.2.2, C405.2.2. 1, C405.2.2. 2 [EL21] <sup>2</sup>	Each area not served by occupancy sensors (per C405.2.1) have timeswitch controls and functions detailed in sections C405.2.2.1 and C405.2.2.2.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.

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Report date: 06/14/23

Report date: 06/14/23

Project Title: THE LEARNING EXPERIENCE

Project Title: THE LEARNING EXPERIENCE

Section # & Reg.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.2.3, C405.2.3. 1,	Daylight zones provided with individual controls that control the lights independent of general area lighting. See code section C405.2.3 Daylight-responsive controls for applicable spaces, C405.2.3.1 Daylight responsive control function and section C405.2.3.2 Sidelit zone.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C405.2.4 [EL26] <sup>1</sup>	Separate lighting control devices for specific uses installed per approved lighting plans.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.2.4 [EL27] <sup>1</sup>	Additional interior lighting power allowed for special functions per the approved lighting plans and is automatically controlled and separated from general lighting.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C405.2.5 [EL28] <sup>null</sup>	Manual controls required by the energy code are in a location with ready access to occupants and located where the controlled lights are visible, or identify the area served and their status.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C405.2.6 [EL30] <sup>null</sup>	Automatic lighting controls for exterior lighting installed. Controls will be daylight controlled, set based on business operation time-of-day, or reduce connected lighting > 30%.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C405.3 [EL6] <sup>1</sup>	face.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.6 [EL26] <sup>2</sup>	electric transformers meet the minimum efficiency requirements of Table C405.6.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Exception: Requirement does not apply.
C405.7 [EL27] <sup>2</sup>	efficiency requirements of Tables	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
	Escalators and moving walks comply with ASME A17.1/CSA B44 and have automatic controls configured to reduce speed to the minimum permitted speed in accordance with ASME A17.1/CSA B44 or applicable local code when not conveying passengers.	□Complies □Does Not □Not Observable □Not Applicable	<b>Exception:</b> Requirement does not apply.
C405.9 [EL29] <sup>2</sup>	Total voltage drop across the combination of feeders and branch circuits <= 5%.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Data filename: H:\Drawings\TLE- The Learning Experience\TLE- MISSOURI\TLEMO22-164 - TLE Lees SummitMO Page 16 of 22

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Complies?

Report date: 06/14/23

Comments/Assumptions

Project Title: THE LEARNING EXPERIENCE

Final Inspection

# & Req.ID 1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Project Title: THE LEARNING EXPERIENCE Report date: 06/14/23

Data filename: H:\Drawings\TLE- The Learning Experience\TLE- MISSOURI\TLEMO22-164 - TLE Lees SummitMO Page 17 of 22

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Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
C303.3, C408.2.5. 2 [FI17] <sup>3</sup>	Furnished O&M instructions for systems and equipment to the building owner or designated representative.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C303.3, C408.2.5. 3 [FI8] <sup>3</sup>	Furnished O&M manuals for HVAC systems within 90 days of system acceptance.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C403.2.2 [FI27] <sup>3</sup>	HVAC systems and equipment capacity does not exceed calculated loads.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C403.2.4. 1 [FI47] <sup>3</sup>	Heating and cooling to each zone is controlled by a thermostat control. Minimum one humidity control device per installed humidification/dehumidification system.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.2.4. 1 [FI47] <sup>3</sup>	Heating and cooling to each zone is controlled by a thermostat control. Minimum one humidity control device per installed humidification/dehumidification system.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.2.4. 1 [FI47] <sup>3</sup>	Heating and cooling to each zone is controlled by a thermostat control. Minimum one humidity control device per installed humidification/dehumidification system.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C403.2.4. 1 [FI47] <sup>3</sup>	Heating and cooling to each zone is controlled by a thermostat control. Minimum one humidity control device per installed humidification/dehumidification system.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C403.4.1. 2 [FI38] <sup>3</sup>	Thermostatic controls have a 5 °F deadband.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.2.4. 1.3 [FI20] <sup>3</sup>	Temperature controls have setpoint overlap restrictions.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.2.4. 2 [FI39] <sup>3</sup>	Each zone equipped with setback controls using automatic time clock or programmable control system.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
2.1,	Automatic Controls: Setback to 55°F (heat) and 85°F (cool); 7-day clock, 2-hour occupant override, 10-hour backup	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

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C403.2.4. 2.3	Systems include optimum start controls.	□Complies □Does Not	Requirement will be met.
[FI41] <sup>3</sup>		□Not Observable □Not Applicable	
C403.2.4. 2.3 [FI41] <sup>3</sup>	Systems include optimum start controls.	□Complies □Does Not	Requirement will be met.
[F141]		□Not Observable □Not Applicable	
C403.2.4. 2.3 [FI41] <sup>3</sup>	Systems include optimum start controls.	□Complies □Does Not	Requirement will be met.
[[]41]		□Not Observable □Not Applicable	
2.3	Systems include optimum start controls.	□Complies □Does Not	Requirement will be met.
[FI41] <sup>3</sup>		□Not Observable □Not Applicable	
C404.3 [FI11] <sup>3</sup>	Heat traps installed on supply and discharge piping of non-circulating	□Complies □Does Not	Requirement will be met.
	systems.	□Not Observable □Not Applicable	
C404.3 [FI11] <sup>3</sup>	Heat traps installed on supply and discharge piping of non-circulating systems.	□Complies □Does Not	Requirement will be met.
		□Not Observable □Not Applicable	
C404.4 [FI25] <sup>2</sup>	All piping insulated in accordance with section details and Table C403.11.3.	□Complies □Does Not	Requirement will be met.
		□Not Observable □Not Applicable	
C404.4 [FI25] <sup>2</sup>	All piping insulated in accordance with section details and Table C403.11.3.	□Complies □Does Not	Requirement will be met.
		□Not Observable □Not Applicable	
C404.6.1 [FI12] <sup>3</sup>	Controls are installed that limit the operation of a recirculation pump	□Complies □Does Not	Requirement will be met.
	installed to maintain temperature of a storage tank. System return pipe is a dedicated return pipe or a cold water supply pipe.	□Not Observable □Not Applicable	
C405.4.1 [FI18] <sup>1</sup>	Interior installed lamp and fixture lighting power is consistent with what	□Complies □Does Not	See the Interior Lighting fixture schedule for values.
	is shown on the approved lighting plans, demonstrating proposed watts are less than or equal to allowed watts.	□Not Observable □Not Applicable	
C405.5.1 [FI19] <sup>1</sup>	Exterior lighting power is consistent with what is shown on the approved lighting plans, demonstrating	□Complies □Does Not □Not Observable	See the Exterior Lighting fixture schedule for values.
	proposed watts are less than or equal to allowed watts.	□Not Observable □Not Applicable	

Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
C406.4 [FI54] <sup>1</sup>	Enhanced digital lighting controls efficiency package: Interior lighting has following enhanced lighting controls in accordance with Section C405.2.2: Luminaires capable of continuous dimming and being addressed individually, <= 8 luminaires controlled in combination in a daylight zone, digital control system for fixtures, "Sequence of Operations" documentation, and functional testing per Section C408.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C408.1.1 [FI57] <sup>1</sup>	Building operations and maintenance documents will be provided to the owner. Documents will cover manufacturers' information, specifications, programming procedures and means of illustrating to owner how building, equipment and systems are intended to be installed, maintained, and operated.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C408.2.1 [FI28] <sup>1</sup>	Commissioning plan developed by registered design professional or approved agency.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C408.2.3. 1 [FI31] <sup>1</sup>	HVAC equipment has been tested to ensure proper operation.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C408.2.3. 2 [FI10] <sup>1</sup>	HVAC control systems have been tested to ensure proper operation, calibration and adjustment of controls.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C408.2.3. 3 [FI32] <sup>1</sup>	Economizers have been tested to ensure proper operation.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C408.2.4 [FI29] <sup>1</sup>	Preliminary commissioning report completed and certified by registered design professional or approved agency.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C408.2.5. 1 [FI7] <sup>3</sup>	Furnished HVAC as-built drawings submitted within 90 days of system acceptance.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C408.2.5. 1 [FI16] <sup>3</sup>	Furnished as-built drawings for electric power systems within 90 days of system acceptance.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C408.2.5. 3 [FI43] <sup>1</sup>	An air and/or hydronic system balancing report is provided for HVAC systems.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.

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Project Title: THE LEARNING EXPERIENCE

1. CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING THE CONTRACTOR'S BEST SKILL AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCTION MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB

SITE SAFETY

2. GC MUST PROVIDE & INSTALL ALL PRODUCTS PER PLANS. ONLY SUBSTITUTED PRODUCTS NEED TO BE SUBMITTED TO THE ARCHITECT FOR APPROVAL. UNAPPROVED SUBSTITUTIONS WILL BE REPLACED AT THE EXPENSE OF THE GC.

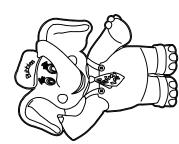
3. VERBAL REPRESENTATION HAS NO VALUE AND ALL REQUESTS TO CHANGE ANY PRODUCTS OR SPECIFICATIONS PER PLANS, <u>MUST</u> BE SUBMITTED IN WRITING TO THE ARCHITECT & TLE FOR APPROVAL.



42 OKNER PARKWAY
LIVINGSTON, NEW JERSEY 07039
TEL: 973-994-9669
FAX: 973-994-4069
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1	06-02-23	FOR TLE REVIEW	MBJ
2	06-14-23	FOR PERMIT	MBJ
		REVISION	
NO.	DATE	DESCRIPTION	INT.

ISSUE

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PROFESSIONAL CERTIFICATION

MATTHEW B. JARMEL, AIA, MBA

LICENSE NUMBER: A2017014316

Project Number:	Scale:
TLEMO22-164	AS NOTED
Drawn By:	Approved By: MBJ
Drawing Name:	<u></u>

ENERGY COMPLIANCE

**REPORT** 

Drawing Numb

T-504



Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
C408.2.5. 4 [FI30] <sup>1</sup>	Final commissioning report due to building owner within 90 days of receipt of certificate of occupancy.	□Complies □Does Not □Not Observable	Requirement will be met.
C408.3 [FI33] <sup>1</sup>	Lighting systems have been tested to ensure proper calibration, adjustment, programming, and operation.		Requirement will be met.
	programming, and operation.	□Not Observable □Not Applicable	
Additiona	al Comments/Assumptions:	, Livot Applicable	
	γ		

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

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Report date: 06/14/23

Project Title: THE LEARNING EXPERIENCE

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42 OKNER PARKWAY
LIVINGSTON, NEW JERSEY 07039
TEL: 973-994-9669
FAX: 973-994-4069

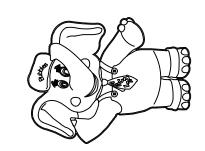
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2	06-14-23	FOR PERMIT	MBJ
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PROFESSIONAL CERTIFICATION

MATTHEW B. JARMEL, AIA, MBA
LICENSE NUMBER: A2017014316

Project Number:	Scale:
TLEMO22-164	AS NOTED
Drawn By:	Approved By:
	MBJ

awing Name:

ENERGY COMPLIANCE REPORT

Drawing Number

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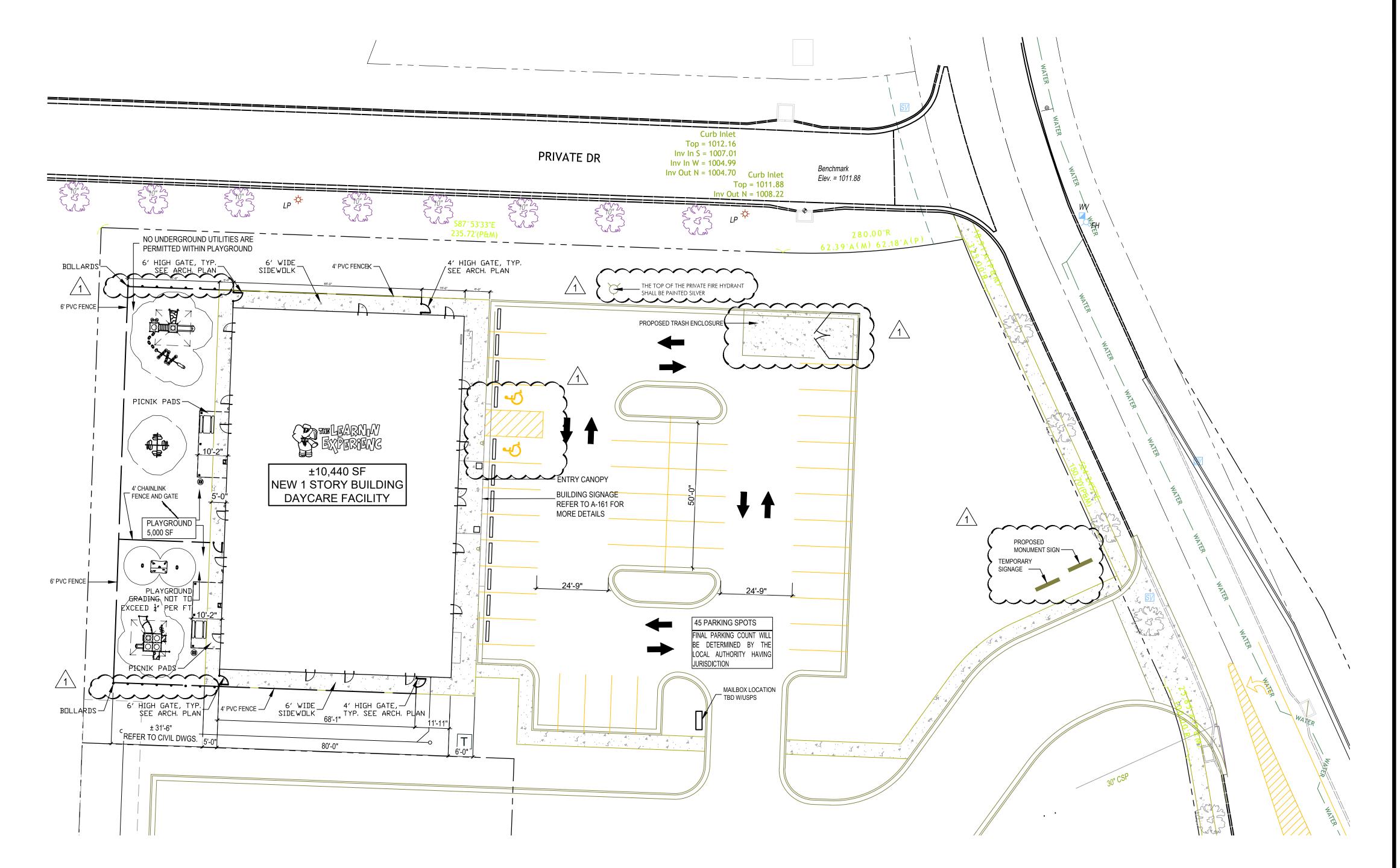


### ARCHITECTURAL SITE PLAN GENERAL NOTES:

1. THIS ARCHITECTURAL SITE PLAN IS NOT INTENDED FOR PLANNING OR ZONING REVIEW, AND IS PROVIDED FOR COORDINATION PURPOSES ONLY. ALL SITE DESIGN SHALL BE CONFIRMED WITH AND COMPLETED PER THE APPROVED CIVIL SITE DRAWINGS AS PREPARED BY:

> SAM MALINOWSKY SM ENGINEERING 5507 HIGH MEADOW CIRCLE MANHATTAN KANSAS, 66503 785.341.9747 SMCIVILENGR@GMAIL.COM

- 2. THE G.C. SHALL BE SOLELY RESPONSIBLE FOR AND HAVE CONTROL OVER CONSTRUCTION MEANS, METHODS, TECHNIQUES, PROCEDURES, COMPLIANCE WITH APPLICABLE ORDINANCES AND JURISDICTIONAL JOB SITE REQUIREMENTS, AND FOR COORDINATING ALL PORTIONS OF THE PHASED WORK UNDER THE CONTRACT UNLESS OTHER SPECIFIC INSTRUCTIONS CONCERNING THESE MATTERS HAVE BEEN PROVIDED THROUGH THE DEVELOPER.
- 3. REFER TO THE CIVIL DRAWINGS FOR ALL SITE DIMENSIONS, GRADING AND EROSION CONTROL, UTILITY INFORMATION, LANDSCAPE AND IRRIGATION DESIGN AND ALL OTHER REQUIRED SITE RELATED IMPROVEMENTS.
- 4. PRIOR TO PROCEEDING WITH ROUGH GRADING, THE G.C. SHALL COORDINATE CIVIL GRADES WITH ELEVATIONS SPECIFIED AS PART OF THE ARCHITECTURAL SCOPE OF WORK (INCLUDING, BUT NOT LIMITED TO COMPARISON OF TOP OF FINISH GRADES AT PERIMETER OF BUILDING, FLAT WORK AND ADJOINING SITE AREAS). ALL QUESTIONS SHALL BE SUBMITTED IN WRITING TO THE CIVIL ENGINEER AND ARCHITECT PRIOR TO START OF WORK.
- 5. THE G.C. SHALL ROUGH GRADE AND RE-COMPACT BUILDING PADS PER THE SOILS REPORT AS PART OF THE SITE SCOPE OF
- 6. ALL GRADING AND CONCRETE PAVING SHALL SLOPE AWAY FROM THE BUILDING. CONTACT THE DEVELOPER, ARCHITECT AND CIVIL ENGINEER IN WRITING REGARDING ANY AREAS THAT CANNOT SLOPE AWAY DUE TO EXISTING CONDITIONS.
- 7. THE G.C. SHALL VERIFY ALL SITE DIMENSIONS TO APPLICABLE BOUNDARIES AND SETBACK INFORMATION WITH PARCEL MAP ALTA SURVEY OF RECORD AND NOTIFY OWNER, ARCHITECT, AND CIVIL ENGINEER IN WRITING OF ANY QUESTIONS IN THIS REGARD.
- 8. THE G.C. SHALL COORDINATE ALL SITE UTILITY RUNS WITH THE APPROPRIATE UTILITY COMPANIES AND PER THE APPROVED SITE PLANS. UTILITY RUNS SHALL BE STUBBED 5'-0" FROM THE BUILDING PERIMETER AT THE LOCATION INDICATED IN THE APPROVED M.E.P. DRAWINGS.
- 9. THE G.C. SHALL PROTECT EXISTING CONDITIONS TO REMAIN FROM DAMAGE. DAMAGED ITEMS SHALL BE REPLACED, REPAIRED, OR RESTORED BY THE G.C. IF, IN THE OPINION OF THE G.C., EXISTING CONDITIONS TO REMAIN WILL BE DAMAGED OR REQUIRE REMOVAL, THE GENERAL CONTRACTOR SHALL IDENTIFY THESE TO THE DEVELOPER PRIOR TO PROCEEDING WITH REMOVAL.
- 10. REFER TO CIVIL SITE PLANS FOR SITE LIGHTING TO BE COMPLETED IN DESIGN PHASE.
- 11. BOLLARDS SHALL BE PROVIDED AS VEHICLE PROTECTION TO PLAYGROUND WHERE PARKING IS ADJACENT TO PLAY AREA. BOLLARDS SHALL BE ARRANGED AT 5' O.C.; WHEN BOLLARDS ARE PLACED AS PROTECTION AT HEAD ON PARKING LOT, THEY ARE TO BE CENTERED AT EACH SPOT.



ARCHITECTURAL SITE PLAN

SCALE: 1' = 20'-0"

WORK USING THE CONTRACTOR'S BEST SKILL AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCTIO MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB

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SITE SAFETY

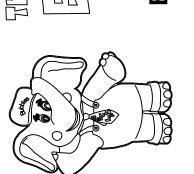
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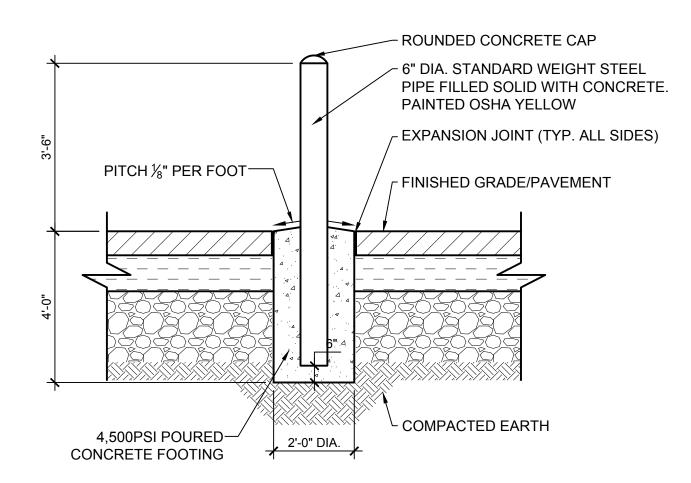
PROFESSIONAL CERTIFICATION

MATTHEW B. JARMEL, AIA, MBA LICENSE NUMBER: A2017014316

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ОК	MBJ		
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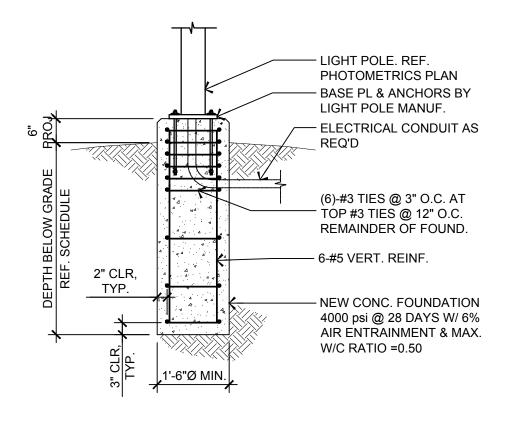
ARCHITECTURAL SITE PLAN





**ALTERNATE COLORS:** YELLOW, SW6787 FOUNTAIN, SW9031 PRIMAVERA, SW6890 OSAGE ORANGE

# TYP. BOLLARD DETAIL SCALE: 1/2" = 1'-0"



	LIGHT POLE FO PER WIN	OUNDATION DE ID ANALYSIS	:PTH
WIND SPEED (ASCE 7-16)	WIND SPEED (ASCE 7-10)	FND. DEPTH	NOTES:  1. REFER TO STRUCT. DRAWINGS FOR
<110 MPH	<110	4'-9"	APPLICABLE WIND SPEED.
110 TO 135 MPH	110 TO 140 MPH	5'-6"	2. THIS DETAIL ASSUMES A 30'
135 TO 180 MPH	140 TO 180 MPH	7'-0"	MAX. LIGHT POLE.

# TYP. LIGHT POLE FOUNDATION DETAIL SCALE: 1/2" = 1'-0"

– PRE CAST CONCRETE CAP WITH SLOPED TOP SURFACE 8" BOND BEAM -AND DRIP EDGES GROUTED SOLID W/ (2) #5 BAR HORIZ. - THIN STONE VENEER TO MATCH MAIN BUILDING KNEEWALL (REF. A-051) 8" CMU W/ #5 @ 48" O.C. & W1.7 WIRE TRUSS -TYPE HORIZ. REINF. @ 8" O.C. FILL VERT. CELLS SOLID AT REINF. -- #5 x 5'-0" LONG VERTICAL DOWELS AT REBAR 4000psi 6" CONC. SLAB -W/ 6x6 10/10 W.W.M. ON - CONC. SIDEWALK/PAD AS COMPACTED FILL SPECIFIED IN SITE DWGS. (2 LAYERS OF MESH) - 8" CMU W/ #5 @ 48" O.C. & W1.7 WIRE TRUSS TYPE HORIZ. REINF. @ 8" O.C. FILL VERT. CELLS SOLID AT REINF. 5-#4 BOTT. CONT. - #4 @12" O.C. CLR. PROOF-COMPACT SUBGRADE W/ HEAVY VIBRATORY COMPACTOR PRIOR TO

## TRASH ENCLOSURE **TYPICAL WALL SECTION**

ALL SITE DETAILS SHOWN ON THIS PAGE ARE

ASSOCIATED DIMENSIONS AND NOTES WITH

PROTOTYPICAL IN NATURE. THE G.C. IS

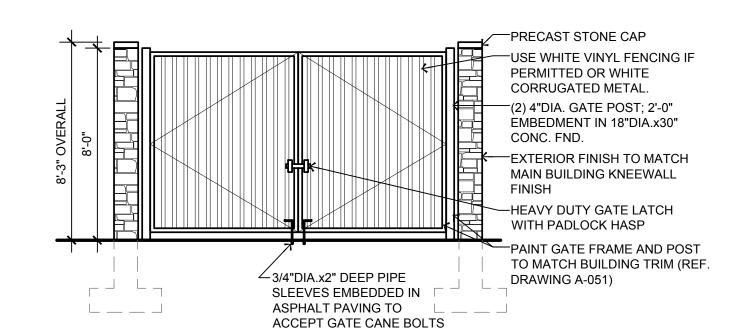
**DETAILS, THEIR APPLICABILITY, AND ANY** 

THE MOST CURRENT SITE-SPECIFIC CIVIL

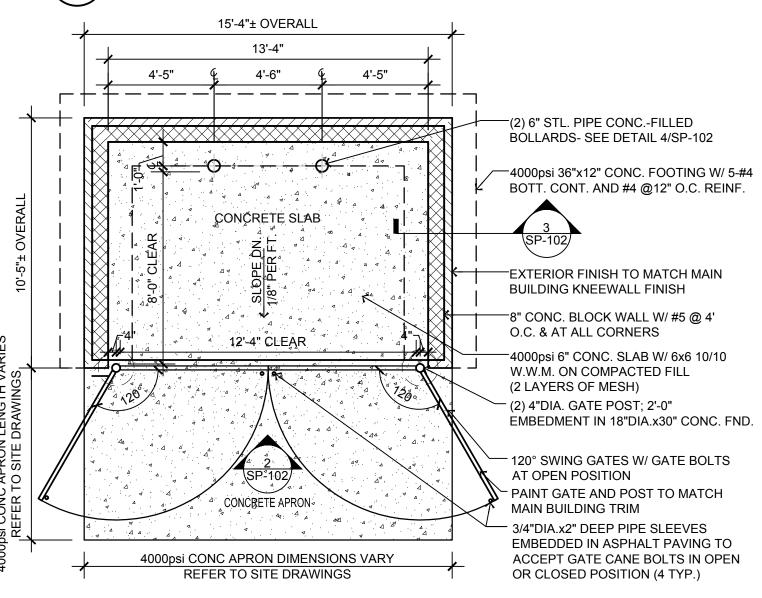
DRAWINGS APPROVED BY THE AUTHORITY

**RESPONSIBLE FOR VERIFYING THESE** 

HAVING JURISDICTION.



## TRASH ENCLOSURE ELEVATION 2 TRASH E SCALE: 1/4" = 1'-0"



TRASH ENCLOSURE PLAN



WORK USING THE CONTRACTOR'S BEST SKILL AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY

RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCTIO

2. GC MUST PROVIDE & INSTALL ALL PRODUCTS PER

PLANS. <u>ONLY</u> SUBSTITUTED PRODUCTS NEED TO BE SUBMITTED TO THE ARCHITECT FOR APPROVAL.

UNAPPROVED SUBSTITUTIONS WILL BE REPLACED A

3. VERBAL REPRESENTATION HAS NO VALUE AND ALL

SPECIFICATIONS PER PLANS, MUST BE SUBMITTED IN WRITING TO THE ARCHITECT & TLE FOR APPROVAL.

REQUESTS TO CHANGE ANY PRODUCTS OR

MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB

SITE SAFETY

PLACING CONCRETE

THE EXPENSE OF THE GC.

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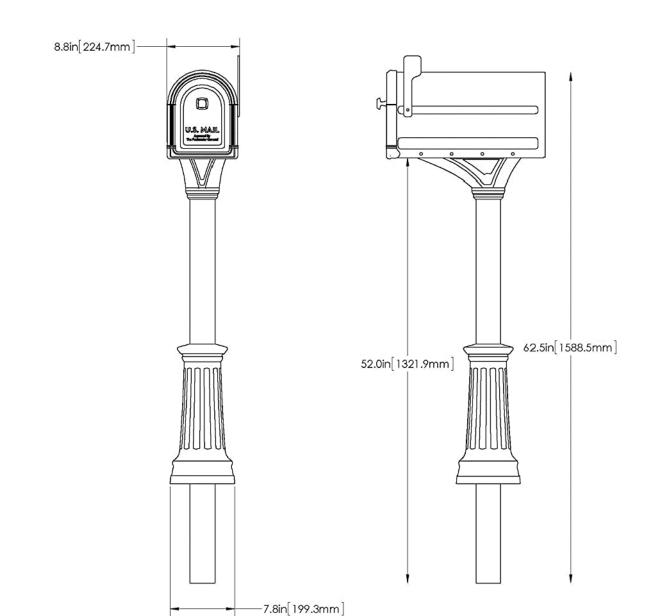
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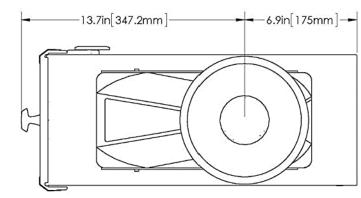
PROFESSIONAL CERTIFICATION MATTHEW B. JARMEL, AIA, MBA

LICENSE NUMBER: A2017014316

Project Number: TLEMO22-164	Scale: AS NOTED
Drawn By:	Approved By: MBJ
Drawing Name:	

SITE DETAILS





6 MAILBOX SPECS

ARCHITECTURAL MAILBOXES ROXBURY RUBBED BRONZE, LARGE, STEEL POST MOUNT MAILBOX AND PREMIUM STEEL POST COMBO MODEL #7980RZ STORE SKU #1003276108 INTERNET #305719554 (AVAILABLE AT HOME DEPOT)

#### LICENSING CALCULATIONS Learning Experience Lee's Summit Missouri

Learning Experience, Lee's Summit, Missouri								
ROOM	STATE REQUIRED S.F.( 35 S.F. PER CHILD)	NET* S.F.	ACTUAL S.F.	RATIO CHILD PER S.F.	# OF CHILDREN	# OF TEACHERS	TEACHER RATIO	AGE GROUP
INFANT A	360	442	496	1/45	8	2	1/4	6 WK-12 MO.
INFANT B	360	420	474	1/45	8	2	1/4	6 WK-12 MO.
TODDLERS A	360	360	414	1/45	8	2	1/4	12-23 MO.
TODDLERS B	315	334	388	1/45	7	2	1/4	12-23 MO.
TWADDLERS	560	563	612	1/35	16	2	1/8	24-30 MO.
PREPPERS	560	564	612	1/35	16	2	1/8	30-36 MO.
PRE-SCHOOL #1	700	706	718	1/35	20	2	1/10	3-5 YRS.
PRE-SCHOOL #2	700	703	715	1/35	20	2	1/10	3-5 YRS.
PRE-SCHOOL #3	630	642	654	1/35	18	2	1/10	3-5 YRS.
MBB/PRE-SCHOOL	700	700	712	1/35	20	2	1/10	3-5 YRS.
PRE K-K	560	562	582	1/35	16	1	1/16	5-6 YRS.
TOTALS		5,996			157	21		
					NI OTAFF			

\* CALCULATED LESS BUILT-IN ITEMS FIRST FLOOR 10,000 S.F.

PLAY AREA 5,000 S.F.

#### CONSTRUCTION PLAN GENERAL NOTES:

- 1. REFER TO STRUCTURAL DRAWINGS FOR ALL STRUCTURAL
- 2. TLE LOGO ARTWORK PROVIDED BY TLE (CONTACT TLE).
- 3. ALL ANGLED PARTITIONS, IF SHOWN ON FLOOR PLAN, SHALL BE 45° UNLESS NOTED OTHERWISE.
- 4. ALL OUTSIDE CORNERS WITHIN ALL ROOMS SHALL HAVE \( \frac{3}{4} \)" RADIUS PVC CORNER BEADS AT ALL CORNERS, GYPSUM BOARD WINDOW RETURNS AND COLUMNS - SEE DETAILS 2 & 3 /A-091
- 5. FOR PARTITION DESIGNATIONS REFER TO DRAWING A-012 AND DRAWING A-091 FOR PARTITION TYPE DETAILS.  $\sim\sim\sim\sim\sim\sim\sim$ MAKE BELIEVE BLVD. VINYL GRAPHIC PACKAGE TO BE PROVIDED BY WM PRINTING OR THE IDENTITY GROUP (REQUIRED). DEVELOPER/GC TO COORDINATE VINYL GRAPHIC DETAILS WITH TLE CONSTRUCTION MANAGER MBB GRAPHICS ARE PART OF A TLE BRANDED GRAPHICS PACKAGE, WHICH INCLUDES GRAPHICS IN MBB, RECEPTION, CLASSROOMS, LOUNGE, & HALLWAYS, ALL OF WHICH ARE THE RESPONSIBILITY OF THE DEVELOPER. REFER TO DRAWING A-111 FOR ENLARGED TOILET ROOM PLANS AND DRINKING FOUNTAIN DETAILS. REFER TO DRAWING P-100 FOR SPECIFICATIONS.
- 8. THE FURNITURE AND MILLWORK PLAN WILL BE PROVIDED SEPARATELY FROM THE PERMIT DRAWING SET.
- 9. ALL MILLWORK ELEVATIONS & DETAILS SEE DRAWINGS A-131, A-132, A-133, A-134, AND A-135.
- 10. FOR PANTRY SEE DRAWING A-134
- 11. FOR RECEPTION AREA ENLARGED PLANS SEE DRAWING
- 12. OUTSIDE PLAYGROUND PLANS AND DETAILS SEE DRAWINGS A-151 AND A-152
- 13. REFER TO DRAWING T-200 FOR LIST OF REQUIRED AND APPROVED VENDORS.
- 14. REFER TO SPECIFICATION DRAWINGS FOR INSTALLATION INFORMATION.
- 15. REFER TO SPECIFICATION DRAWINGS FOR ALL APPLIANCE, LOW VOLTAGE COMPONENT, AND PLAYGROUND EQUIPMENT SPECIFICATIONS.
- 16. DRYWALL CONTROL JOINTS TO BE FAS-093X BY CLARK DIETRICH (OR APPROVED EQUAL) AND SHALL BE ALIGNED WITH DOOR OR WINDOW JAMB (LEFT OR RIGHT) AT MAXIMUM INTERVALS OF 30'-0". ALSO REFER TO DETAIL 2 ON DRAWING A-042.
- 17. THE ENTIRE BUILDING SHALL BE THOROUGHLY CLEANED AT THE COMPLETION OF CONSTRUCTION.
- 18. PROVIDE EMERGENCY LOCKDOWN DEVICE AS SPECIFIED ON SHEET A-122 AND T-201.
- 19. SECURITY ALARM CONTACTS TO BE INSTALLED AT ALL EXTERIOR DOORS.
- 20. GENERAL CONTRACTOR TO REFER MILLWORK DRAWINGS AND TO CROSS REFERENCE WITH PLUMBING, ELECTRICAL AND STRUCTURAL.
- 21. FIRE EXTINGUISHERS NOT TO BE PLACED ON RECEPTION WALL DUE TO WALL GRAPHICS. VINYL GRAPHICS TO BE PROVIDED BY FAST SIGNS (REQUIRED)

## +2 ADMIN. STAFF

**CONSTRUCTION PLAN KEY NOTES:** 

- (1) CONCRETE SIDEWALK. REFER TO APPROVED SITE PLANS FOR FINISHES AND DETAILS. ENSURE SIDEWALKS ARE CLEAR OF OBSTRUCTIONS. PROVIDE FENCING AROUND ANY POTENTIAL SAFETY HAZARDS TO PREVENT ACCESS BY CHILDREN
- PROVIDE CONCRETE PAD AND CANVAS AWNING. PROVIDE PICNIC TABLES AS SHOWN. REFER TO DRAWINGS A-151 & A-152 FOR ADDITIONAL INFORMATION
- (3) 4 FT. TALL SOLID VINYL PRIVACY FENCE AND GATE. SEE DRAWING A-151 FOR MORE INFORMATION
- 6 FT. TALL SOLID VINYL PRIVACY FENCE AND GATE. SEE DRAWING A-151 FOR MORE INFORMATION
- PITTCON 6" RADIUS SO-LRT OUTSIDE CORNER WITH TANGENT FINS BY SOFTFORMS. REFER TO DETAIL 4 ON DRAWING A-091
- (6) 55" TV TO BE MOUNTED VERTICALLY AT 60" AFF TO C.L. (39" AFF TO BOTTOM, 88" AFF TO TOP) WITH FLUSH-MOUNT, NON-TILT BRACKET APPROVED FOR MOUNTING IN VERTICAL ORIENTATION. PROVIDE (1) DUPLEX RECEPTACLE AND (1) DATA RECEPTACLE AT 72" AFF TO C.L. PROVIDE 2x10 BLOCKING (32" WIDE) BEHIND TV, FLUSH WITH BOTTOM OF OUTLET, AND CENTERED ON OUTLET. REFER TO DRAWING SPECIFICATIONS FOR FURTHER
- 7 PROVIDE DVR SHELF AND (2) MONITORS; TO BE MOUNTED ON (2) WALL-MOUNTED BRACKETS WITH 2X10" BLOCKING (32" WIDE FLUSH WITH BOTTOM OF OUTLET AND CENTERED ON OUTLET. REFER TO DETAILS 1 & 2 ON DRAWING A-134. **DVR SHOULD HAVE** NO HARD DRIVE AND CANNOT RECORD
- 8 SMART BOARD PROVIDED BY FRANCHISEE AND TO BE INSTALLED BY OTHERS - REFER TO DETAILS ON DRAWING A-082
- 9 G.C. TO PROVIDE AND INSTALL (1) WIRE SHELF 16" DEEP MOUNTED AT 6'-0" A.F.F.; FASTENED DIRECTLY TO STUDS. PROVIDE 2x10 BLOCKING. REFER TO DETAIL 7 ON SHEET A-131. LAUNDRY: WALL TO WALL SHELF, ABOVE WASHER/DRYER
  - JAN. CL.: 3'-0" WIDE, ABOVE UTILITY SINK
- PROVIDE (5) 16" DEEP WIRE SHELVES IN THE CLOSET, WALL TO WALL. FIRST SHELF AT 20" A.F.F., THEN 34", 48", 62", & 76" A.F.F. (5 SHELVES TOTAL). PROVIDE 2x10" BLOCKING. REFER TO DETAIL 7 ON DRAWING A-131.
- 36"x36" ROOF ACCESS HATCH AND LADDER SHALL BE KEPT CLEAR OF ALL DUCTS, WIRE, CONDUITS, OR OTHER FIXED ITEMS. SEE DETAILS ON DRAWING A-032
- GUTTER DOWNSPOUT TO GRADE. CONNECT TO UNDERGROUND STORM SYSTEM. (TYP.) REFER TO DRAWING A-031, A-032 AND PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.
- (13) WATER HEATER; REFER TO PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION
- (14) INSTALL 1/2" THICK (MIN.), 2 1/2" TALL PRIMED WOOD CHAIR RAIL (EXAMPLE: DYKES LUMBER PROFILE #552) AT 36" A.F.F. OVER CARPETED SECTION OF ROOM IN INFANT ROOM(S) ONLY. PAINTED "W" PER DRAWING A-042.
- 15 REFER TO TYPICAL MECHANICAL ROOM LAYOUT ON DRAWING
- (16) NOT USED
- (17) STAFF LOCKERS. REFER TO DETAIL 1 ON A-131.
- (18) KEY FOB. REFER TO ELECTRICAL DRAWINGS.
- 19 CALL BOX. REFER TO ELECTRICAL DRAWINGS.
- 20) BURGLAR ALARM KEYPAD. REFER TO ELECTRICAL DRAWINGS.
- (21) FIRE ALARM CONTROL PANEL. REFER TO ELECTRICAL DRAWINGS.
- 22) DOOR RELEASE BUTTONS BY SECURITY VENDOR. REFER TO A-134 FOR DETAILS.
- (23) PROVIDE OPAQUE FILM ON INTERIOR FACE OF GLASS 3M DUSTED AND FROSTED CRYSTAL GLASS FINISH OR APPROVED EQUAL.
- (24) SECURITY ALARM CONTRACTS TO BE INSTALLED AT ALL EXTERIOR CLASSROOM DOOR & 6' PLAYGROUND GATES (REFER TO ELECTRICAL AS WELL FOR MORE DETAILS).
- 25 DF-2 (REFER TO SPEC ON PLUMBING SHEETS)

#### **CONSTRUCTION PLAN LEGEND:**

X KEYNOTE NUMBER:

ROOM NAME & NUMBER

DOOR NUMBER; REFER TO DRAWINGS A-121 AND A-122 FOR DOOR SCHEDULE, DOOR HARDWARE SCHEDULE, AND DETAILS

WINDOW STYLE; REFER TO DRAWING A-123 FOR WINDOW SCHEDULE, ELEVATIONS

DF-1 - EXTERIOR DRINKING FOUNTAIN;

DF-2 - INTERIOR DRINKING FOUNTAIN;

DRAWING P-100 FOR SPECIFICATIONS

NUMBER OF BIN CUBBIES; REFER TO DRAWING A-131; BIN CUBBIES SHOWN FOR AREA CALCULATIONS ONLY, AND TO BE PROVIDED BY GC. EXACT LOCATIONS TO BE COORDINATED WITH TLE.

REFER TO DRAWING A-111 FOR INSTALLATION DETAILS AND DRAWING P-100 FOR SPECIFICATIONS

BLIND SPOT MIRROR, KLEAR-VU BY BROSSARD #P-180; 18" DIAMETER CONVEX MIRRORS FOR BLIND SPOTS IN ROOMS TO BE MOUNTED @ 6" BELOW FINISH CEILING. EXACT NUMBER AND LOCATIONS TO BE COORDINATED WITH TLE.

REFER TO DRAWING A-111 FOR INSTALLATION DETAILS AND

**CONSTRUCTION PLAN** 

CEILING MOUNTED CAMERA; WITHOUT RECORDING FUNCTION. MOUNTED CAMERAS TO BE INSTALLED TO ENSURE ADEQUATE COVERAGE THROUGHOUT, INCLUDING AT THE EXTERIOR FOR THE PLAYGROUND. EXACT QUANTITY AND LOCATIONS TO BE COORDINATED WITH TLE. REFER TO SPECIFICATIONS FOR FURTHER INFORMATION.

● FE-X FIRE EXTINGUISHER; WALL HUNG, BRACKET FE-1 = 5lb B:C, FE-2 = 10lb A:B:C (1 PER 3,000 SQ.FT.) MANUFACTURER: JL COSMIC BRACKET COLOR: WHITE

INSPECTION TAGS REQUIRED FOR ALL FIRE EXTINGUISHERS MOUNT BRACKET WITH EXTINGUISHER HANDLE AT 48" AFF LOCATION: PANTRY, LOUNGE AND MECH ROOM

FE-X FIRE EXTINGUISHER; WALL HUNG, SEMI-RECESSED CABINET FE-1 = 5lb B:C, FE-2 = 10lb A:B:C (1 PER 3,000 SQ.FT.) MANUFACTURER: JL COSMIC MODEL: 1017F10 WITH ROUNDED CORNERS CABINET COLOR: WHITE

INSPECTION TAGS REQUIRED FOR ALL FIRE EXTINGUISHERS MOUNT CABINET WITH TOP OF DOOR AT 48" AFF LOCATION: RECEPTION (NOT LOBBY BOARD WALL) & CORRIDORS

LAUNDRY APPLIANCES (SIDE-BY-SIDE; TYPICAL) REFER TO APPLIANCE SPECIFICATIONS

LAUNDRY APPLIANCES (STACKABLE; ONLY IF SHOWN ON PLAN) REFER TO APPLIANCE SPECIFICATIONS STACKING KIT PER MANUFACTURER'S RECOMMENDATION

DUCTLESS DRYER (ONLY IF SHOWN ON PLAN) REFER TO APPLIANCE SPECIFICATIONS

CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING THE CONTRACTOR'S BEST SKILL AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCTION MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB

2. GC MUST PROVIDE & INSTALL ALL PRODUCTS PEF PLANS. <u>ONLY</u> SUBSTITUTED PRODUCTS NEED TO BE SUBMITTED TO THE ARCHITECT FOR APPROVAL. UNAPPROVED SUBSTITUTIONS WILL BE REPLACED A THE EXPENSE OF THE GC.

3. VERBAL REPRESENTATION HAS NO VALUE AND AL REQUESTS TO CHANGE ANY PRODUCTS OR SPECIFICATIONS PER PLANS, MUST BE SUBMITTED IN WRITING TO THE ARCHITECT & TLE FOR APPROVAL.

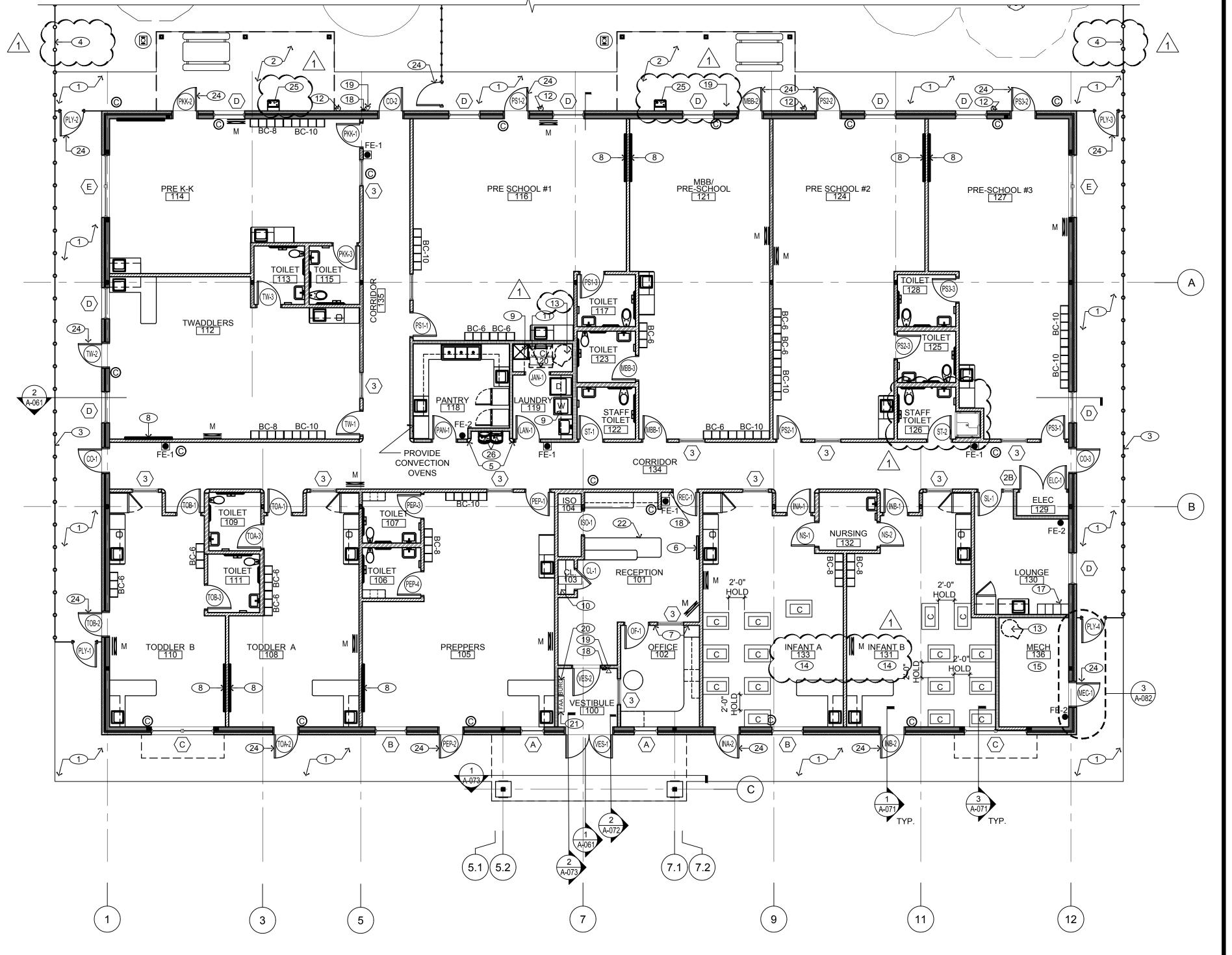


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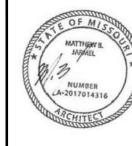
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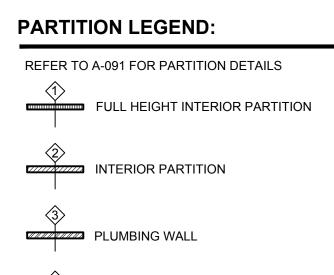
> PROFESSIONAL CERTIFICATION MATTHEW B. JARMEL, AIA, MBA

> LICENSE NUMBER: A2017014316

Project Number:	Scale:
TLEMO22-164	AS NOTED
Drawn By:	Approved By:
ОК	MBJ
awing Name:	

CONSTRUCTION **PLAN** 





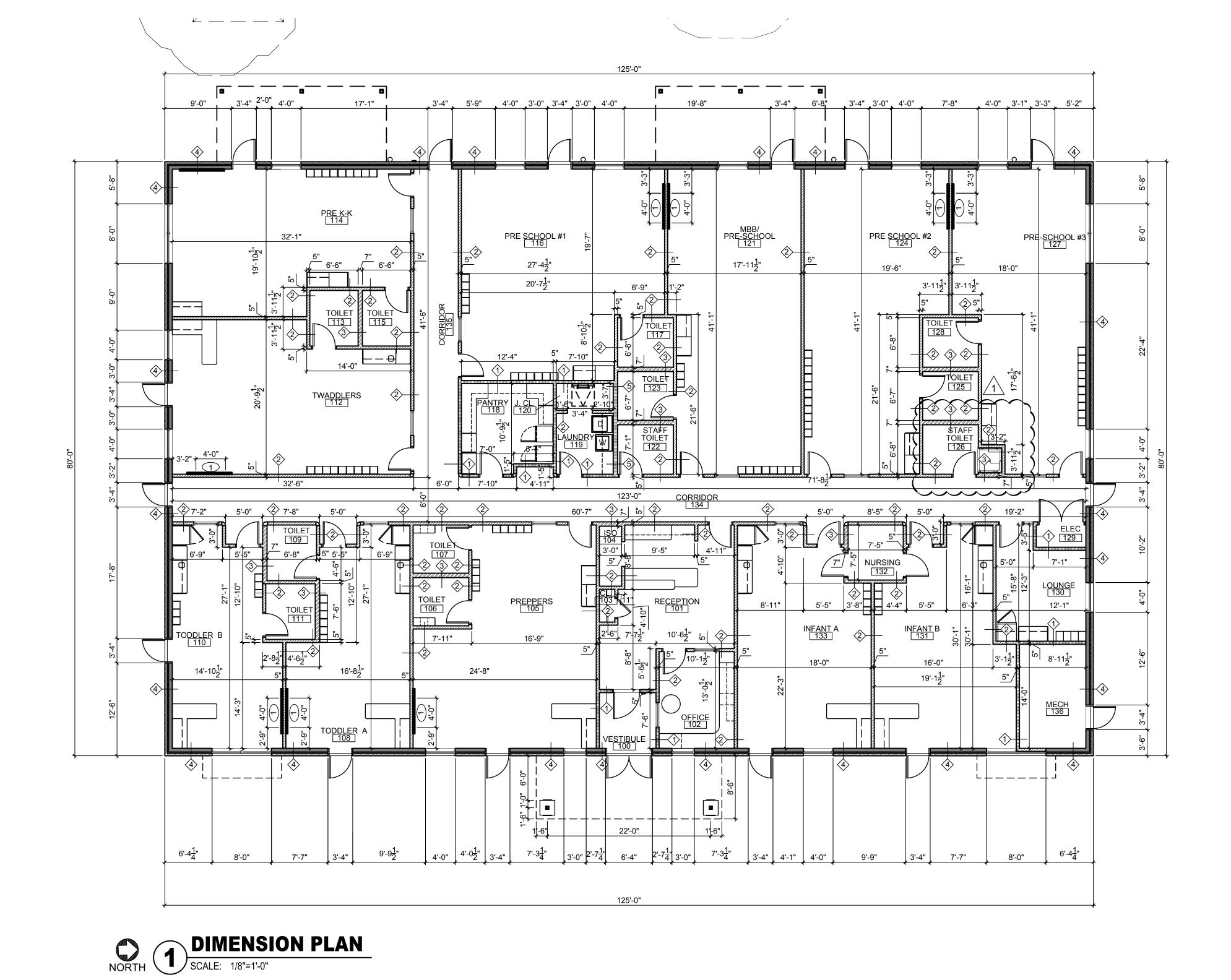


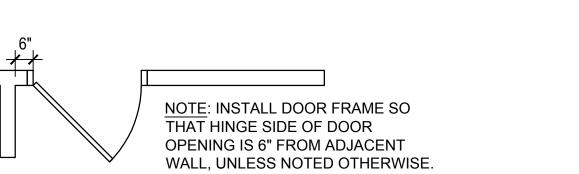
- EXTERIOR WALL ASSEMBLY (REF. WALL SECTIONS)

### **GENERAL NOTES:**

- 1. ALL DIMENSIONS SHOWN ARE MEASURED FINISH FACE TO FINISH FACE OF INTERIOR OR EXTERIOR WALL UNLESS NOTED OTHERWISE.
- 2. ALL INTERIOR WALLS ARE 5" THICK NOMINAL UNLESS OTHERWISE NOTED.
- 3. REFER TO DRAWING A-091 FOR ADDITIONAL PARTITION TYPE INFORMATION.
- 4. REFER TO DRAWING A-011 FOR ADDITIONAL GENERAL NOTES, KEY NOTES, AND SYMBOL LEGEND.
- 5. COORDINATE LOCATION OF ALL PLUMBING, ELECTRICAL WITH WALL BLOCKING FOR ALL MILLWORK

1 DIMENSION OF BLOCKING AT SMART BOARD. REFER TO DETAIL 1 ON





NOTE: INSTALL DOOR FRAME SO THAT HINGE SIDE OF DOOR OPENING IS 4" FROM ADJACENT WALL, UNLESS

NOTE: INTERIOR WINDOWS ADJACENT

TO DOORS SHALL BE INSTALLED SUCH THAT A MINIMUM OF 1'-6" WALL SPACE IS MAINTAINED BETWEEN THE DOOR FRAME AND THE WINDOW FRAME, UNLESS OTHERWISE NOTED ON THE PLAN. INSTALLATION OF LIGHT SWITCH **BOX & TELEPHONE BOX REQUIRED.** 



**CONSTRUCTION BETWEEN** 

DOOR & INTERIOR WINDOW

LOCATIONS:

 ALL TOILET ROOMS
 RECEPTION

JANITOR'S CLOSET

3 ALT. HINGE SIDE DOOR TO WALL SCALE: N.T.S.

• OFFICE • LAUNDRY

WORK USING THE CONTRACTOR'S BEST SKILL AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCTION MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB

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PROFESSIONAL CERTIFICATION MATTHEW B. JARMEL, AIA, MBA LICENSE NUMBER: A2017014316

Project Number: TLEMO22-164	Scale: AS NOTED
Drawn By:	Approved By:
ОК	MBJ
Drawing Name:	

**DIMENSION PLAN** 

A-012



#### **KEY NOTES:**

DRAWING A-082.

#### **REFLECTED CEILING - LEGEND:**

2'X4' ARMSTRONG 1729 FINE FISSURED, WHITE LAY IN ACOUSTIC TILE WITH SQUARE LAY-IN JOINTS. PRELUDE 15/16" EXPOSED TEE GRID OR EQUAL

2'X4' ARMSTRONG 672 KITCHEN ZONE, WHITE LAY-IN ACOUSTIC TILE WITH MYLAR FINISH AND SQUARE LAY-IN JOINTS. PRELUDE 15/16" EXPOSED TEE GRID OR EQUAL

2'X2' ARMSTRONG 584 CIRRUS, WHITE LAY-IN ACOUSTIC TILE WITH REVEAL EDGE JOINTS. PRELUDE 15/16" EXPOSED TEE GRID OR **EQUAL** 

GYPSUM BD. SOFFIT

STRUCTURE ABOVE

THREE TIGHT TURNS

HANGER WIRES TO BE

SOFT-ANNEALED, MILD

STEEL WIRE PER ASTM

C 636 SECTION 2.1.6. WIRE TO BE SPACED AT 4' O.C. MAX. OR 10 GA. AT 5' O.C. MAX (TYP.)

CEILING GRID AND -TILE AS SPECIFIED

12 GA. GALVANIZED

AROUND ITSELF

WITHIN 3" (TYP.)

CONNECT TO STRUCTURE ABOVE USING 'HILTI X-CC' OR-APPROVED EQUAL. ALL WIRE TIES TO BE

SHOWER CEILING TO BE CONSTRUCTED WITH WATER RESISTANT

2X4 LIGHT - 2'X4' RECESSED LED LIGHT FIXTURE. REFER TO ELECTRICAL DRAWINGS FOR LIGHT FIXTURE SCHEDULE.

2X4 LIGHT - 2'X4' RECESSED LED EMERGENCY NIGHT LIGHT

FIXTURE WITH BATTERY BACK-UP. REFER TO ELECTRICAL DRAWINGS FOR LIGHT FIXTURE SCHEDULE. 2X2 LIGHT - 2'X2' RECESSED LED LIGHT FIXTURE (REFER TO

> ELECTRICAL DRAWINGS - LIGHT FIXTURE SCHEDULE). 2X2 LIGHT - 2'X2' RECESSED LED EMERGENCY NIGHT LIGHT FIXTURE WITH BATTERY BACK-UP (REFER TO ELECTRICAL DRAWINGS - LIGHT FIXTURE SCHEDULE).

LOGO SIGN - "THE LEARNING EXPERIENCE" ILLUMINATED SIGNAGE MOUNTED ON CANOPY - SEE DRAWING A-161.

WB - WALL BRACKET - LED LIGHT FIXTURE (REFER TO ELECTRICAL DRAWINGS - LIGHT FIXTURE SCHEDULE) MOUNTED @ +8'-6" AFF. PROVIDE FIXTURE WITH PROTECTIVE WIRE CAGE.

WB - WALL BRACKET - LED LIGHT FIXTURE WITH BATTERY BACK-UP (REFER TO ELECTRICAL DRAWINGS - LIGHT FIXTURE SCHEDULE) MOUNTED @ +8'-6" AFF. PROVIDE FIXTURE WITH PROTECTIVE WIRE CAGE.

RECESSED EXTERIOR DOWN LIGHT (REFER TO ELECTRICAL DRAWINGS - LIGHT FIXTURE SCHEDULE) EXTERIOR WALL MOUNTED LED EXIT LIGHT FIXTURE WITH DUAL EMERGENCY LAMPS. TO BE MOUNTED OVER THE MAIN ENTRANCE

@ 9'-6" A.F.F. AND ALL OTHER EXTERIOR DOORS @ 9'-0" A.F.F. (REFER TO ELECTRICAL DRAWINGS - LIGHT FIXTURE SCHEDULE)

FIXTURE FINISH TO BE WHITE. CEILING MOUNTED ILLUMINATED EXIT SIGN WITH BATTERY BACK-UP. SHADING INDICATES ILLUMINATED FACE AND ARROW INDICATES DIRECTION OF EGRESS. MOUNT ON UNDERSIDE OF

SOFFIT AS REQUIRED FOR INTENDED VISIBILITY

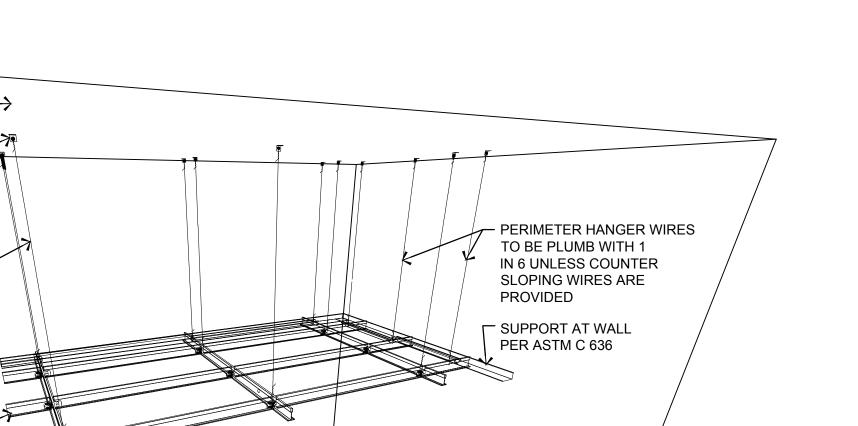
#### **REFLECTED CEILING - GENERAL NOTES:**

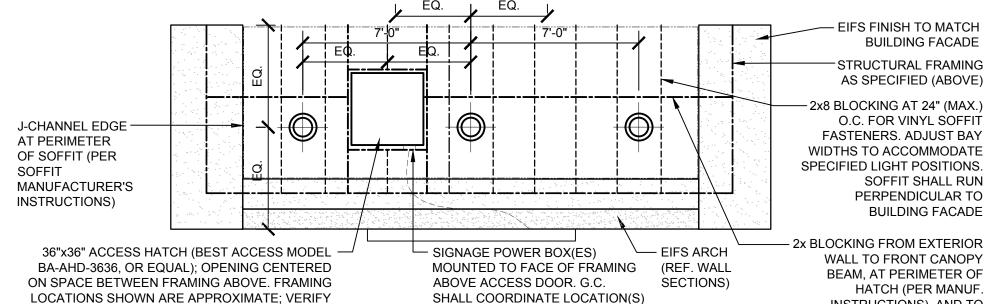
- 1. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL WORK ABOVE CEILING AND SHALL NOTIFY ARCHITECT OF ANY CONFLICTS PRIOR TO INSTALLATION OF CEILING GRID, GYPSUM BOARD CEILINGS
- 2. ALL GWB CEILINGS AND SOFFITS SHALL BE PAINTED WHITE (COLOR 'W' PER PAINT SCHEDULE ON A-042).
- 3. MAKE BELIEVE BOULEVARD CEILING HEIGHT SHALL BE 9'-10" AFF UNLESS NOTED OTHERWISE. ALL OTHER CEILING HEIGHTS SHALL BE 9'-0" AFF UNLESS NOTED OTHERWISE
- 4. ALL SUSPENDED CEILING GRIDS SHALL BE DESIGNED TO RESIST SEISMIC FORCE (FP) AS PER INTERNATIONAL BUILDING CODE, LATEST EDITION. REFER TO DETAIL 3 DRAWING A-022 FOR CEILING GRID HANGER DETAIL.
- 5. REFER TO ENGINEERING DRAWINGS FOR MECHANICAL, ELECTRICAL, PLUMBING AND FIRE ALARM/SPRINKLER LAYOUTS, DETAILS AND SCHEDULES
- 6. REFER TO SPECIFICATIONS FOR ALL SWITCHES, LIGHTING FIXTURES AND EXIT SIGNS - REVISIT THIS COMMENT AFTER REVIEW OF DRAWINGS T-200 TO T-208 SPEC PAGES
- 7. CONTRACTOR SHALL VERIFY AND CONFIRM ALL LIGHT FIXTURES ARE IN WORKING CONDITION WITH OPERABLE LAMPS AT SUBSTANTIAL COMPLETION OF THE PROJECT.
- 8. UPON COMPLETION OF CONSTRUCTION, GC SHALL PROVIDE TENANT WITH MINIMUM 1 BOX OF EACH TYPE OF CEILING TILE.
- 9. ARCHITECT TO CONFIRM BASED ON INDIVIDUAL STATE REGULATION WHETHER THE BATHROOM CEILING TILES ARE REQUIRED TO BE VINYL

#### REFLECTED CEILING - KEY NOTES:

- 1) CEILING TILES TO BE INSTALLED W/ RETAINING CLIPS AT VESTIBULE
- 2 BUILDING SIGNAGE. REFER TO DETAILS ON DRAWING A-161.
- 3 36"x36" ROOF ACCESS HATCH AND LADDER SHALL BE KEPT CLEAR OF ALL DUCTS, WIRE, CONDUITS, OR OTHER FIXED ITEMS. SEE DETAILS ON DRAWING A-032
- 4 JANITOR'S CLOSET TO RECEIVE (1) LAYER OF GYP FASTENED TO UNDERSIDE OF TRUSSES AND (1) LAYER OF GYP FASTENED TO VERTICAL FACES OF ROOF ACCESS SHAFT. SEE DETAILS ON DRAWING A-032
- (5) 36" X 36" ACCESS/MAINTENANCE HATCH FOR ACCESS TO BUILDING SIGNAGE POWER BOXES. CENTER OPENING ON SPACE BETWEEN TRUSSES ABOVE, G.C. TO COORDINATE WITH SIGNAGE VENDOR.

THE LEARNING EXPERIENCE IS AN ARMSTRONG CEILINGS NATIONAL ACCOUNT PARTNER. TO ENSURE PROPER PRICING IS QUOTED, CONTACT 800-442-4212, ARMSTRONG NATIONAL ACCOUNT CUSTOMER SERVICE OR YOUR LOCAL ARMSTRONG CEILING DISTRIBUTOR AND ASK FOR THE LEARNING EXPERIENCE NATIONAL ACCOUNT PRICING. IF YOU HAVE ANY QUESTIONS, CONTACT CHERYL B. SMITH, ARMSTRONG NATIONAL ACCOUNT MANAGER, CBSMITH@ARMSTRONGCEILINGS.COM





WITH SIGNAGE VENDOR.

WITH STRUCTURAL DRAWINGS.

INSTALLED PARALLEL TO SOFFIT ALONG BUILDING PERIMETER.

VINYL SOFFIT SHALL BE FASTENED TO UNDERSIDE OF SOFFIT FRAMING ABOVE AND SHALL BE LEVEL. SOFFIT SHALL NOT FOLLOW THE EIFS ARCH CURVE. REFER TO WALL SECTIONS FOR ADDITIONAL INFORMATION. VINYL SOFFIT AT UNDERSIDE OF CANOPY TO BE

SIGNAGE ACCESS HATCH DETAIL

I. CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING THE CONTRACTOR'S BEST SKILL AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCTI MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB

2. GC MUST PROVIDE & INSTALL ALL PRODUCTS PER PLANS. ONLY SUBSTITUTED PRODUCTS NEED TO B SUBMITTED TO THE ARCHITECT FOR APPROVAL. UNAPPROVED SUBSTITUTIONS WILL BE REPLACED THE EXPENSE OF THE GC.

3. VERBAL REPRESENTATION HAS NO VALUE AND AL REQUESTS TO CHANGE ANY PRODUCTS OR SPECIFICATIONS PER PLANS, MUST BE SUBMITTED IN WRITING TO THE ARCHITECT & TLE FOR APPROVAL.

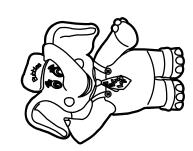


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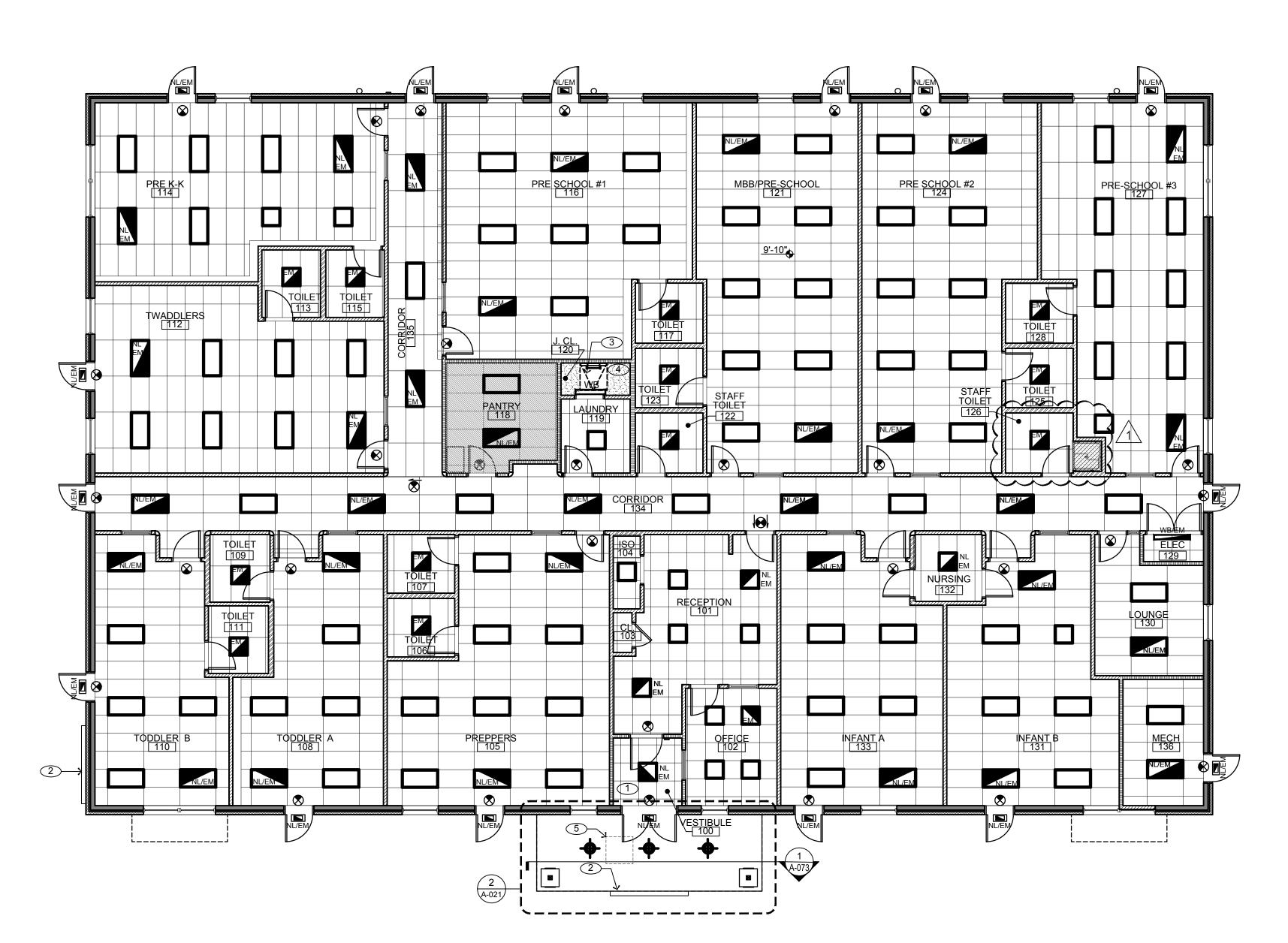
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FOR TLE REVIEW

PROFESSIONAL CERTIFICATION MATTHEW B. JARMEL, AIA, MBA LICENSE NUMBER: A2017014316

Project Number: TLEMO22-164	Scale: AS NOTED
Drawn By: <b>OK</b>	Approved By: <b>MBJ</b>
Drawing Name:	

**REFLECTED CEILING PLAN** 



INSTRUCTIONS), AND TO

CROSS-BRACE 1x BLOCKING

CEILING GRID HANGERS DETAIL

CEILING GRID AND TILE TO BE INSTALLED PER ASTM C 636.

REFLECTED CEILING PLAN
SCALE: 1/8"=1'-0"

### LEGEND:

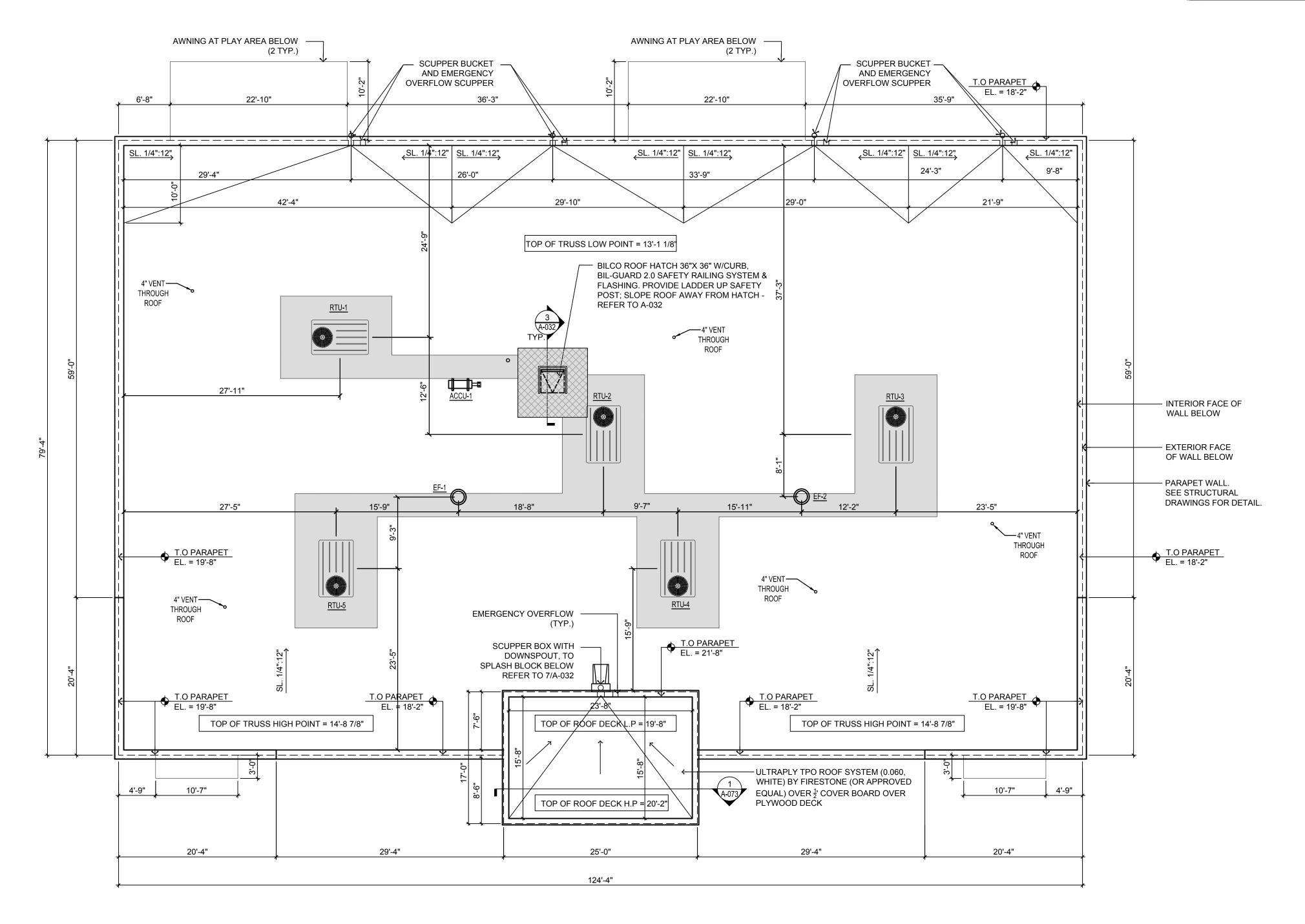


AREA TO RECEIVE ICE AND WATER LEAK BARRIER MEMBRANE

AREA TO RECEIVE WALKWAY PADS

#### **GENERAL NOTES:**

- GENERAL CONTRACTOR (GC) SHALL FIELD VERIFY CONDITIONS AND NOTIFY ARCHITECT IN WRITING OF ANY QUESTIONS.
- 2. REFER TO SPECIFICATIONS DRAWINGS FOR ADDITIONAL INFORMATION FOR ROOFING, FLASHING REQUIREMENTS, AND MATERIALS.
- 3. ALL ROOF PENETRATIONS SHALL BE LOCATED 3'-0" OR MORE FROM DRAINAGE FLOW LINES.
- 4. VERIFY & COORDINATE DUCT CURB AND ROOF PENETRATION LOCATIONS; REFER TO THE MECHANICAL, ELECTRICAL, PLUMBING AND STRUCTURAL DRAWINGS FOR ADDITIONAL REQUIREMENTS AND COORDINATION.
- 5. PLUMBING VENTS OR EXHAUST UNITS ARE NOT ALLOWED WITHIN 10'-0" OF AIR INTAKES OR 5'-0" OF EXTERIOR WALLS REFER TO MECHANICAL DWGS.
- 6. ALL SHEET METAL FLASHING TO COMPLY WITH THE "ARCHITECTURAL SHEET METAL MANUAL", LATEST EDITION AS PUBLISHED BY THE SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION (SMACNA).
- 7. ALL SHEET METAL FLASHING EXPOSED TO THE PUBLIC SHALL BE PAINTED OR PREFINISHED TO MATCH ROOFING COLOR. SEE BUILDING ELEVATIONS FOR COLOR SPECIFICATIONS. ALL OTHER NON-EXPOSED FLASHING TO BE GALVANIZED.
- 8. UPON COMPLETION OF CONSTRUCTION AND PRIOR TO TENANT OCCUPANCY, G.C. SHALL ENSURE THAT THE ENTIRE ROOF, ROOF SCUPPERS/ DOWNSPOUTS, AND OVERFLOW SCUPPERS ARE COMPLETELY CLEAR OF ANY AND ALL DEBRIS (CONSTRUCTION, NATURAL, OR OTHERWISE).
- 9. PRIMARY ROOF DRAIN LEADERS AND GUTTER DOWNSPOUTS MUST CONNECT TO UNDERGROUND STORM SYSTEM. REFER TO KN 12 ON A-011 AND DETAIL 3 ON P-500. GUTTER DOWNSPOUTS SHALL DROP THROUGH SIDEWALK TO CONNECT TO UNDERGROUND SYSTEM (REFER TO DETAIL 7/A-032). OVERFLOW DRAINS TO BE INSTALLED AS REQUIRED BY CODE.





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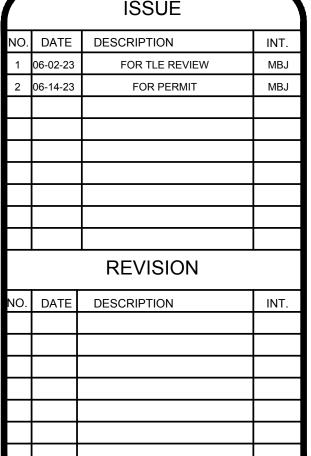
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ARCHITECTS AND ENGINEERS INC.
42 OKNER PARKWAY

TEL: 973-994-9669
FAX: 973-994-4069
www.jarmelkizel.com
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PROFESSIONAL CERTIFICATION

MATTHEW B. JARMEL, AIA, MBA LICENSE NUMBER: A2017014316

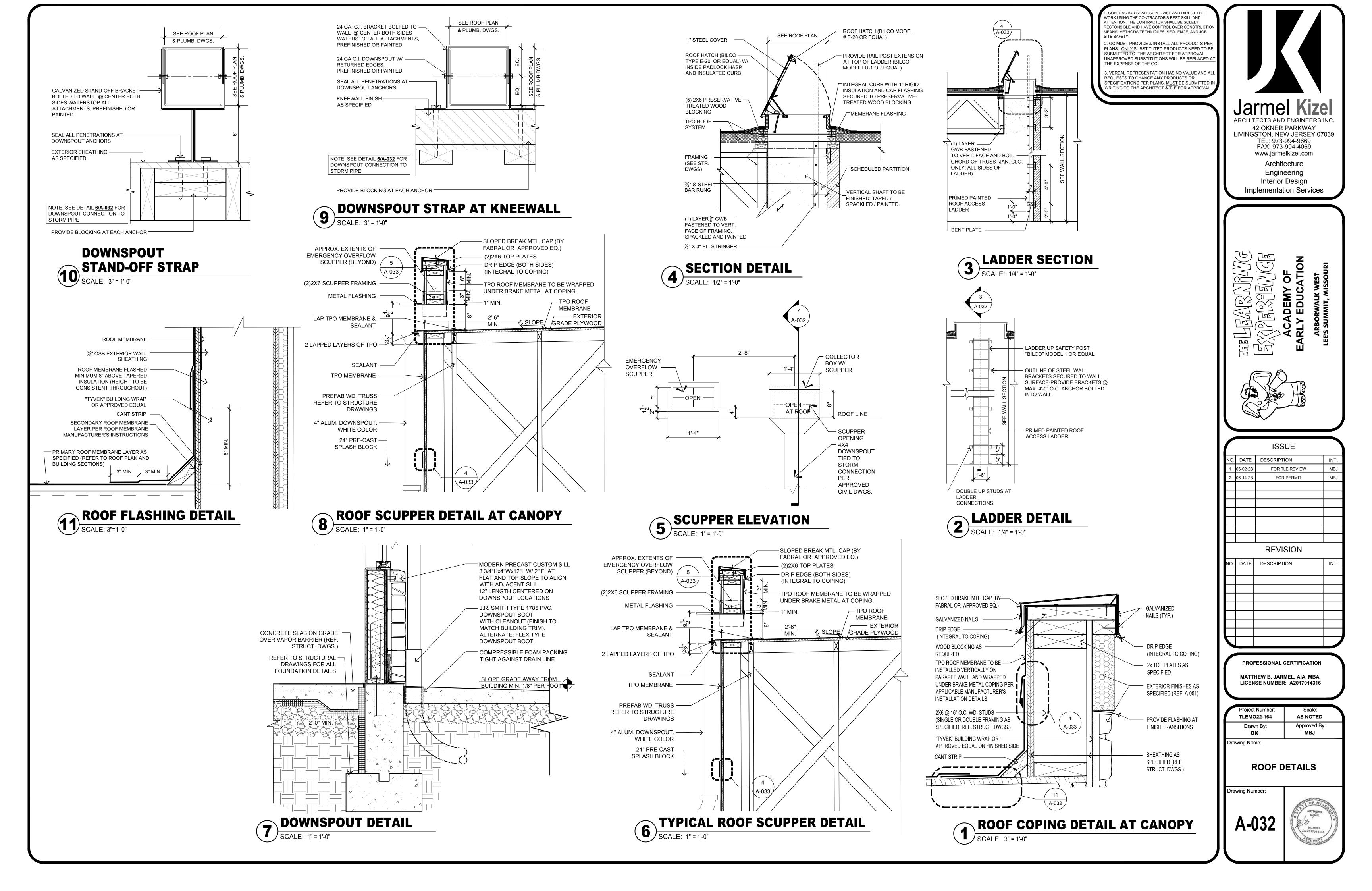
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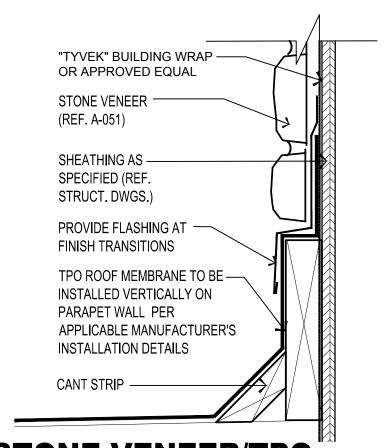
**ROOF PLAN** 

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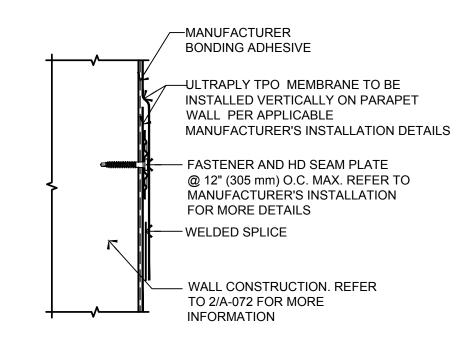
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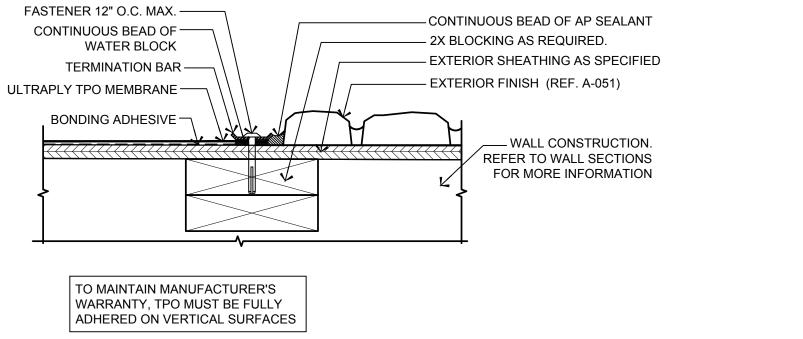




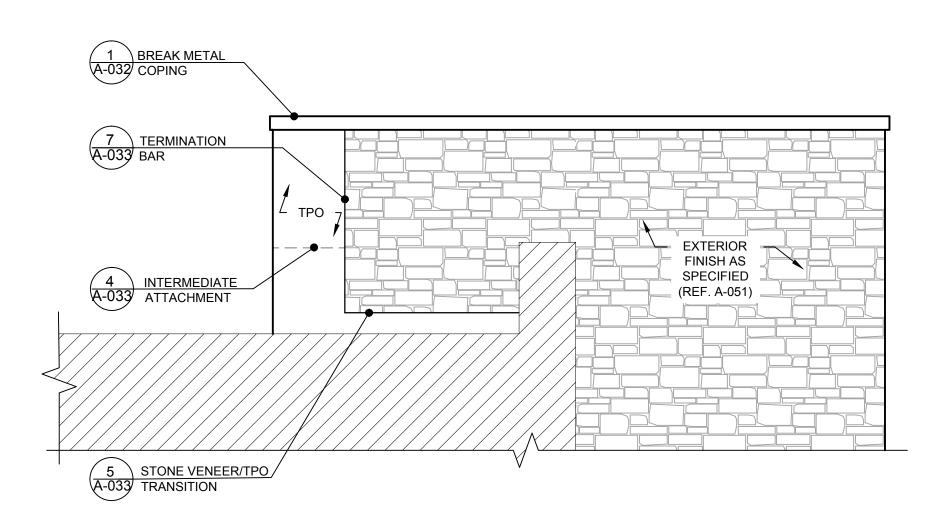
STONE VENEER/TPO TRANSITION DETAIL AT CANOPY



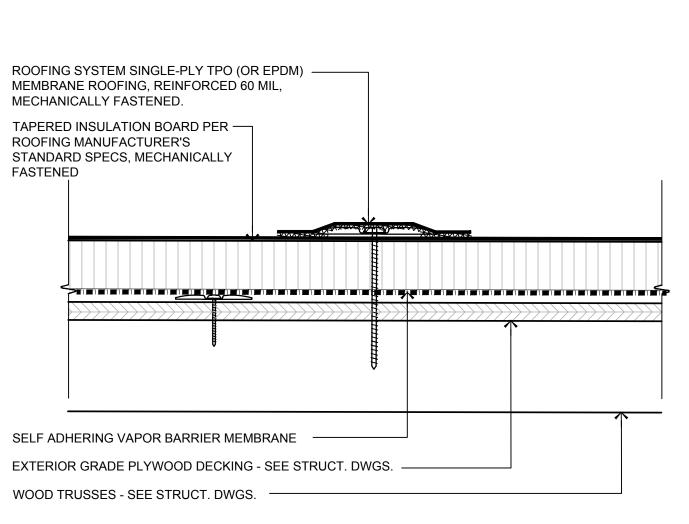
INTERMEDIATE **ATTACHMENT DETAIL** 



TERMINATION BAR DETAIL



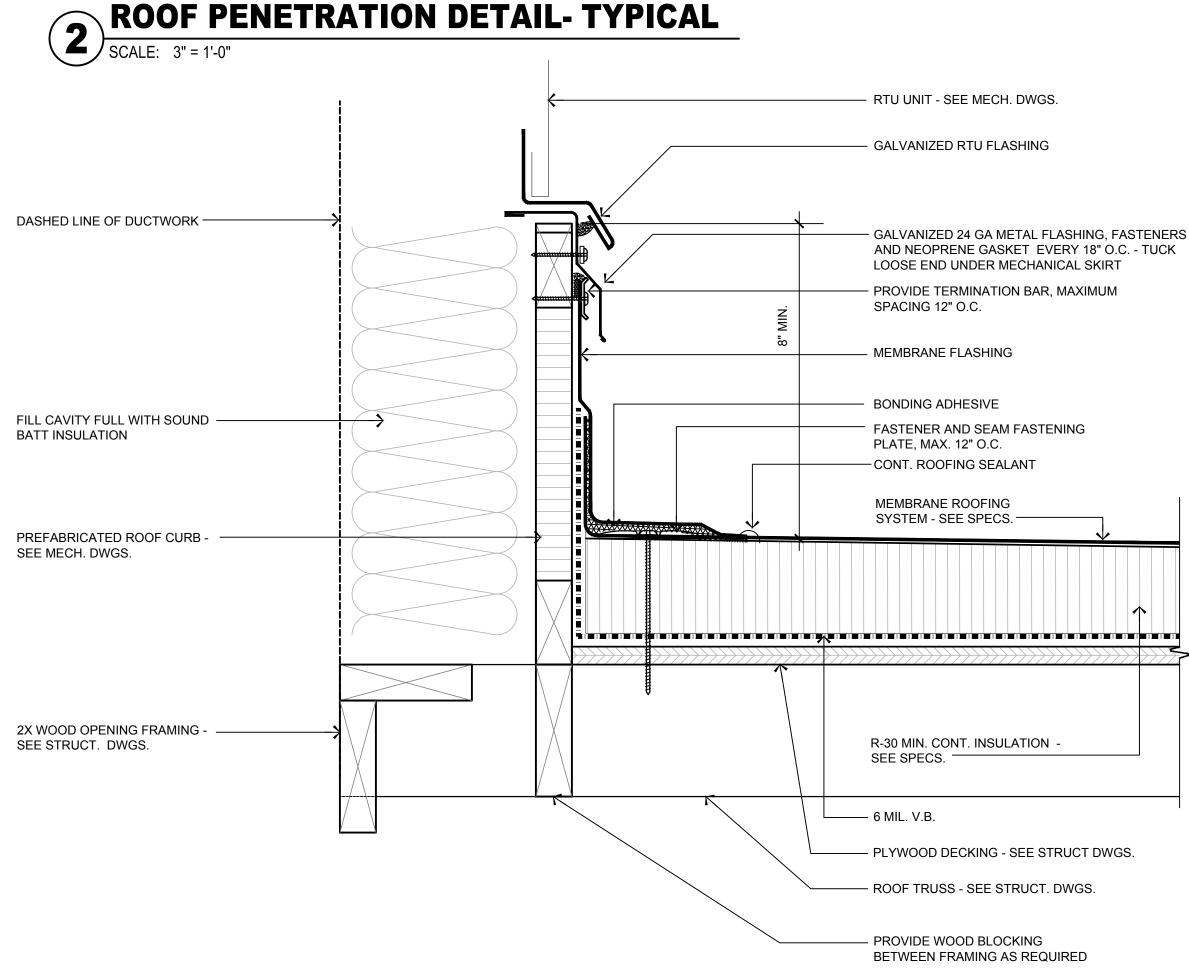
**MAIN ENTRY CANOPY** SIDE ELEVATION DIAGRAM



TYPICAL ROOFING SYSTEM DETAIL

SCALE: 3" = 1'-0"

MFR'S STANDARD SINGLE PLY CAULK PIPE OR VENT PIPE PENETRATION (AT TOP OF CLAMP - SLOPED TO SHED WATER) STAINLESS STEEL CLAMP AND SCREW - MFR.'S STANDARD WATER-CUT / SEALING MASTIC PRE-MOLDED TPO PIPE BOOT (BETWEEN PIPE AND NECK OF BOOT) SELF ADHERING MFR'S. VAPOR BARRIER MEMBRANE - EXTEND UP THRU PENETRATION MFR.'S APPROVED FASTENER AND PLATE MIN. 4 AROUND PIPE PENETRATION MEMBRANE ROOFING DEPENDENT ON DECK MATERIAL(S). SYSTEM - SEE SPECS. SEE MFR'S. SPECIFICATIONS R-30 MIN. CONT. INSULATION -TAPERED TO ROOF DRAIN LOCATIONS - SEE SPECS. **ROOF TRUSS - SEE** STRUCT. DWGS.



ROOF EQUIPMENT CURB DETAIL

PROVIDE SEALANT AT PERIMETER. ALLOW SMALL OPENINGS TO ACT

AS A WEEP HOLES.

WORK USING THE CONTRACTOR'S BEST SKILL AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCTIO MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB

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UNAPPROVED SUBSTITUTIONS WILL BE REPLACED A

3. VERBAL REPRESENTATION HAS NO VALUE AND ALL REQUESTS TO CHANGE ANY PRODUCTS OR SPECIFICATIONS PER PLANS, MUST BE SUBMITTED IN WRITING TO THE ARCHITECT & TLE FOR APPROVAL.

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**ROOF DETAILS** 



#### FLOOR FINISH SCHEDULE

#### LUXURY VINLY TILE (LVT) LEVEL SET LVT:

MANUFACTURER: INTERFACE LVT-NATURAL WOODGRAINS

25cm X 1cm

COLOR AND PATTERN: A00208 SAND DUNE - ASHLAR ADHESIVE: XL BRANDS 2000 PLUS - GRID SET DOUBLESTICK

PRESSURE SENSITIVE ADHESIVE, WATER-RESISTANT TYPE PER MANUF. RECOMMENDATION FOR

PRODUCTS AND SUBSTRATE ASTM E 662 SMOKE DEVELOPMENT 450 OR LESS FIRE DEST DATA:

#### SHEET VINYL FLOOR COVERING:

MANUFACTURER: SHAW COLLECTION: VITALITY SHEET BENEFIT 73415 COLOR:

PRODUCT #: 0873V SHEET WIDTH: AS STANDARD WITH MANUFACTURER; 6.5 FT. WALL BASE: TURN UP SHEET VINYL 6" AT ALL WALLS TO CREATE

INTEGRAL COVE BASE ACCESSORIES: CONTINUOUS STAINLESS STEEL COVE CAP TRIM

(FULL ROOM PERIMETER) CONTINUOUS BONDED PUNCTURE-PROOF ALUMINUM REINFORCEMENT STRIP (FULL ROOM PERIMETER)

FIRE TESTING: RADIANT FLUX - NFPA CLASS I (ASTM E648)

SMOKE DENSITY - <450 (ASTM E662)

#### NOTES:

1. HOMOGENOUS SHEET.

2. COMMERCIAL GRADE. 3. A SEAMLESS INSTALLATION SHALL BE PROVIDED WHERE POSSIBLE. IF REQUIRED, SEAMS SHALL BE INSTALLED WITH MATCHING WELD ROD

AND LOCATED BENEATH FIXTURES TO MINIMIZE VISIBILITY. 4. INTEGRAL COVE BASE RADIUS SHALL NOT EXCEED 1/2" WHERE THE WALL MEETS THE FLOOR.

TO BE INSTALLED - TOILETS AND LAUNDRY ROOM

#### QUARRY FLOOR TILE:

MANUFACTURER: DALTILE INTERIOR TYPE BODY, FLAT TILE COVED, COLOR TO MATCH FLOOR TILE BASE:

COLOR: ARID GREY LATICRETE GROUT: GROUT COLOR: #57 HOT COCOA

CATALOG #: 6"x6" PATTERNED FACE WITH STANDARD EDGE FACE:

THICKNESS: 5/16" TO BE INSTALLED - PANTRY

### RESILIENT WALL BASE AND ACCESSORIES:

MANUFACTURER: JOHNSONITE TA4 TYPE:

4" TRADITIONAL VINYL (WITH TOE) COLORS: 48 GREY MIN. THICKNESS: 0.080" (2.0 mm), 0.125" (3.2 mm) LENGTHS: MANUFACTURER'S STANDARD COILS

CLASS B

FIRE RATING:

TO BE INSTALLED: 48, GREY - ALL WALLS UNLESS OTHERWISE NOTED

#### CONCRETE FLOOR:

COROTECH (BENJAMIN MOORE) WATERBORNE AMINE EPOXY V440 COLORS: BATTLESHIP GRAY (75)

PINK RASPBERRY (2075-40) INSTALLATION: FULL COVERAGE; APPLY MIN. TWO (2) COATS

### TO BE INSTALLED:

BATTLESHIP GRAY (75) - JANITOR'S CLOSET, AND MECHANICAL PINK RASPBERRY (2075-40) - INDOOR PLAY AREA (IF APPLICABLE)

FULL EXTENTS OF UNITY SURFACING

#### WALK-OFF MAT:

MANUFACTURER: AMARCO GRAND-BERBER TILE PRODUCT:

INDIVIDUAL 20" TILES, 7/16" THICK HOBNAIL STYLE:

INSTALLATION: 1/4 TURN COLOR: SLATE BLUE

ASTM D2859- PILL TEST (SURFACE FLAMMABILITY) FIRE TEST DATA:

## **TRANSITION STRIPS:**

MANUFACTURER: JOHNSONITE

PRODUCT: T-MOULDING CTA-48-M COLOR: 48, GREY LOCATION: CARPET TO VCT FLOOR

VCT TO CONCRETE FLOOR (WHERE SPECIFIED)

PRODUCT: **ALUMINUM STRIP** ALL EXTERIOR DOORS LOCATION: INTERIOR VESTIBULE DOOR

(WHERE SPECIFIED)

PRODUCT: MARBLE SADDLE LOCATION: PANTRY/CORRIDOR DOOR

OTHERWISE AS NOTED ON FINISH PLAN NOTES: REFER TO SHEET A-121 FOR MORE INFORMATION.

#### STAIR TREADS

MANUFACTURER: JOHNSONITE

"ROUNDEL" RAISED ROUND WITH PRODUCT:

INTEGRAL RISER COLOR: 48, GREY

ALL STAIRS ON EACH STEP (2 STORY BUILDINGS ONLY)

ADD NOSING ON EACH STEP

#### FLOOR FINISH GENERAL NOTES:

- 1. GENERAL CONTRACTOR (GC) SHALL FIELD VERIFY CONDITIONS AND NOTIFY ARCHITECT OF ANY DISCREPANCIES.
- 2. ALL FLOORS SHALL BE PROPERLY PREPARED AND SKIM COATED AS NECESSARY TO ACHIEVE CLEAN SURFACES SO THAT BLEMISHES DO NOT TELEGRAPH THROUGH FINISH MATERIAL.
- 3. GC SHALL SUBMIT SAMPLES OF ANY ALTERNATE FINISHES TO ARCHITECT FOR APPROVAL PRIOR TO ORDERING MATERIALS. SEE SPECIFICATIONS DRAWINGS FOR SUBMITTAL PROCEDURE.
- 4. ALL FLOOR FINISH CHANGES AT DOORWAYS SHALL BE CENTERED UNDER DOOR. PATTERN TO BE CENTERED UNDER DOOR.
- 5. CARPET TO BE INSTALLED AT END OF CONSTRUCTION AND PROTECTED FROM ANY DEBRIS. CARPETS TO BE THOROUGHLY VACUUMED AT THE COMPLETION OF CONSTRUCTION.
- 6. REFER TO A-121 FOR TRANSITION DETAILS.
- 7. UPON COMPLETION OF CONSTRUCTION, GC SHALL PROVIDE TENANT WITH MINIMUM 1 BOX OF LVT, CARPET TILE, WALK-OFF MAT, EACH TYPE OF CEILING TILE, AND QUARRY
- 8. FLOOR GRAPHICS IN MBB AND RECEPTION TO BE CONFIRMED WITH TLE CONSTRUCTION MANAGER.
- 9. FOR (2) STORY TLE'S, THE FOLLOWING LVT UNDERLAYMENT SHOULD BE USED:

SCI ACOUSTIC UNDERLAYMENT - dBARRIER LUXURY

UNDERLAYMENT PRODUCT CODE: BV0340 COLOR: RED SUPPLIER: INTERFACE

#### FLOOR FINISH KEY NOTES

1 PROVIDE WALK-OFF MAT - SEE FLOOR FINISH SCHEDULE FOR SPECIFICATIONS

2 NOT USED

3 VINYL FLOOR GRAPHIC: CONTACT TLE CONSTRUCTION MANAGER FOR ARTWORK AND LOCATION DETAILS.

4 TRANSITION STRIP

- INTERIOR FINISH TESTING REQUIREMENTS: PADDING, WALK-OFF MAT, AND ANY OTHER FIBER-BASED FLOOR FINISHES SHALL BE CLASS 1 OR CLASS II AS TESTED PER NFPA 253.
- 2. WALL BASE FINISHES (6"H OR LESS) SHALL BE CLASS I OR CLASS II AS TESTED PER NFPA 253.
- 3. FLAME SPREAD INDEX AND SMOKE DEVELOPED RATING: WALL AND CEILING FINISH MATERIALS SHALL BE MINIMUM CLASS B: FLAME SPREAD:
- SMOKE DEVELOPED INDEX: < 450 • INTERIOR TRIM MATERIALS SHALL BE MINIMUM CLASS C: FLAME SPREAD: < 200 SMOKE DEVELOPED INDEX: < 450

#### FLOOR FINISH LEGEND

INDICATE TRANSITION STRIP AT CHANGE IN FLOOR FINISH

LUXURY VINTYL TILE (LVT) -LUXURY VINYL FLOOR TILE (LVT) REFER TO FLOOR FINISH SCHEDULE AND SPECIFICATIONS

QUARRY TILE: 6"X6" PATTERNED FACE REFER TO FLOOR FINISH SCHEDULE AND SPECIFICATIONS

SHEET VINYL FLOORING SOLID SHEET WITH WELDED SEAMS AT WET WALLS, 6" INTEGRAL COVE BASE. REFER TO FLOOR FINISH SCHEDULE AND SPECIFICATIONS

CONCRETE FLOOR PAINTED GRAY WITH VINYL BASE

NOTE - SEE FLOOR FINISH SCHEDULE ON THIS PAGE FOR TILE SPECIFICATIONS, INCLUDING LIST OF COLORS.

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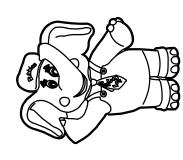
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OK	MBJ
, ,,	

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**FLOOR FINISH PLAN** 







#### WALL FINISH SCHEDULE:

#### WALL PADDING:

MANUFACTURER: RESILITE SPORTS PRODUCTS, INC. STYLE: SAFEGUARD PLUS CONVENTIONAL WAINSCOT PANEL W/ 14 OZ VINYL FABRIC

CATALOG #: RZC25XXX

FIRE RATING:

PANEL SIZE: STANDARD PANEL SIZE 24"Wx60"H. CUSTOM SIZES TO BE COORDINATED BY PLAYGROUND VENDOR AS REQUIRED FOR

COLOR: PURPLE OR RED LOCATION: INDOOR PLAYGROUND (IF APPLICABLE)

PROPOSED LAYOUT.

A. FULL PERIMETER B. FREESTANDING COLUMNS

FIBERGLASS REINFORCED PLASTIC PANELS (FRP):

MANUFACTURER: CRANE COMPOSITES PRODUCT: GLASBORD EMBOSSED PANEL PRODUCT CODE: FΧ FINISH: WHITE, EMBOSSED

FIRE RATING: CLASS A

FRP JOINT TRIMS, CAPS AND OTHER ACCESSORIES TO BE WHITE.

#### INTERIOR PAINT: (NO OTHER MANUFACTURERS ALLOWED)

**BENJAMIN MOORE** MANUFACTURER: PRODUCTS:

 TYPICAL PRIMER: **ULTRA SPEC INTERIOR PRIMER 534**  TYPICAL PAINT: ULTRA SPEC INTERIOR EGGSHELL 538

WOOD: N319 REGAL SATIN/ EGGSHELL • H.M. DOORS/FRAMES: SUPER SPEC HP P29 DTM ACRYLIC (SEMI-GLOSS)

MANUFACTURER: SHERWIN WILLIAMS

PRODUCTS: TYPICAL PRIMER: PROMAR 200 ZERO V.O.C. PRIMER

PROMAR 200 ZERO V.O.C. INTERIOR LOW GLOSS EG-SHEL TYPICAL PAINT: WOOD: PROMAR 200 ZERO V.O.C. INTERIOR LOW GLOSS EG-SHEL

H.M. DOORS/FRAMES: PRO INDUSTRIAL DTM ACRYLIC (SEMI-GLOSS)

#### THE LEARNING EXPERIENCE - SHERWIN WILLIAMS NATIONAL ACCOUNT (CV71)

ARCHITECTURAL ACCOUNT EXECUTIVE (954)547-1217 Glenn.J.Remler@Sherwin.com

#### THE SHERWIN-WILLIAMS COMPANY CARPET COLUMN WRAP

MANUFACTURER:

MONOCHROME CARPET, ROLLED GOODS STYLE: COLOR: 101834 FELT

CARPET REQUIRED AT ALL FREESTANDING COLUMNS

 TO A HEIGHT OF 3'-6" ONLY APPLIES IF FREESTANDING COLUMNS SHOWN ON PLAN

EXCLUDES MBB AND INDOOR PLAY AREAS

PAINT FINISH SCHEDULE					
FINISH	COLOR	BENJAMIN MOORE		SHERWIN WILLIAMS	
CODE	COLOR	COLOR NAME	STOCK NO.	COLOR NAME	STOCK NO
W	WHITE	WHITE DOVE	OC 17	GREEK VILLA	7551
М	ORANGE	MANGO PUNCH	154	OSAGE ORANGE	6890
Н	PURPLE	HYDRANGEA	1390	BERRY FRAPPE	9068
D	YELLOW	DALILA	319	DAFFODIL	6901
С	GREEN	CANDY GREEN	403	PRIMAVERA	9031
Α	BLUE	ATLANTIS BLUE	768	FOUNTAIN	6787

#### PAINT FINISH SCHEDULE NOTES:

- a. H.M. DOOR AND WINDOW FRAMES SHALL BE SEMI-GLOSS FINISH.
- b. ALL OTHER PAINT SHALL BE EGGSHELL FINISH. ALL PAINTED SURFACES SHALL RECEIVE MINIMUM ONE COAT OF PRIMER AND TWO COATS OF PAINT (UNLESS FACTORY PRIMED BY THE MANUFACTURER). REFER TO SPECIFICATIONS DRAWINGS FOR
- ADDITIONAL INFORMATION. SELECTED COLOR PALETTE SHALL BE FROM <u>ONE</u> OF THE ABOVE MANUFACTURERS.
- 4. NO SUBSTITUTIONS WILL BE ALLOWED.

#### WALL FINISH KEY NOTES

- 1) CHAIR RAIL TO BE PAINTED "W" PER PAINT FINISH SCHEDULE. REFER TO CONSTRUCTION PLAN FOR ADDITIONAL INFORMATION.
- 2 IN PANTRY, ALL WALLS INCLUDING SPLASH AREAS ABOVE COUNTER, TO RECEIVE F.R.P. TO 7'-6" A.F.F., REFER TO WALL FINISH SCHEDULE (THIS PAGE) AND PANTRY DETAILS A-133 FOR ADDITIONAL INFORMATION.
- 3 FRP TO BE INSTALLED IN LAUNDRY ROOM AND JANITOR'S CLOSET ON WALL BEHIND SINK AND 3' EACH SIDE OF SINK TO 7'-6" A.F.F. REFER TO WALL FINISH SCHEDULE (THIS PAGE).
- 4 FRP TO BE INSTALLED IN TOILET ROOMS ON WET WALL(S) AND ADJACENT WALL(S) TO A MINIMUM HEIGHT OF 4'-4" A.F.F. REFER TO WALL FINISH SCHEDULE (THIS PAGE).

#### PAINT FINISH LEGEND:

DOOR AND FRAME

EXTERIOR DOOR: INTERIOR SIDE ONLY; REF. A-051 FOR EXTERIOR COLOR INTERIOR DOOR: BOTH SIDES

INTERIOR WINDOW AND FRAME- BOTH SIDES

WALL AND GWB SOFFIT

#### WALL FINISH GENERAL NOTES:

- 1. PRIOR TO COMMENCEMENT OF PAINTING, THE GC. SHALL BE RESPONSIBLE FOR THE
  - a. FIELD VERIFY THAT ALL SURFACES ARE READY TO ACCEPT PAINTS- NOTIFY ARCHITECT OF ANY DISCREPANCIES
  - b. REMOVE OR PROTECT ALL ELECTRIC SWITCHES, OUTLETS, PLATES, SURFACE HARDWARE, ETC.
- c. GC. TO PROTECT ALL ADJACENT SURFACES AS REQUIRED DURING PAINTING.
- 2. CONTRACTOR SHALL SUPPLY ALL PAINT AND MATERIALS AS PER PAINT FINISH SCHEDULE AND PAINT FINISH LEGEND. ALL PAINT AND MATERIAL MUST BE DELIVERED TO THE JOB SITE IN THE MANUFACTURER'S ORIGINAL PACKAGING- NO SUBSTITUTIONS ALLOWED.
- 3. ALL HOLLOW METAL DOORS, DOOR FRAMES, AND INTERIOR WINDOW FRAMES ARE TO BE FACTORY PRIMED AND FIELD PAINTED ON BOTH SIDES. a. INTERIOR DOORS, DOOR FRAMES, AND INTERIOR WINDOW FRAMES SHALL BE
  - PAINTED THE SAME COLOR ON BOTH SIDES UNLESS OTHERWISE INDICATED ON FINISH PLAN. b. SIDELIGHT FRAMES (IF SPECIFIED ON PLAN) SHALL MATCH THE ADJOINING DOOR
  - FRAME COLOR. c. EXTERIOR DOORS SHALL BE PAINTED TWO COLORS (INTERIOR SIDE COLOR AS SPECIFIED ON THE FINISH PLAN, AND THE EXTERIOR SIDE COLOR TO MATCH
- 4. AREAS LISTED BELOW TO BE PAINTED WITH ONE PRIMER COAT AND TWO FINISH COATS
- OF "W" ON PAINT FINISH LEGEND AND SCHEDULE a. CLOSET INTERIOR WALLS

BUILDING TRIM.

- b. TOILET INTERIOR WALLS c. CORRIDOR WALLS
- d. MECHANICAL ROOM INTERIOR WALLS
- e. ALL SURFACES, UNLESS NOTED OTHERWISE. f. GYPSUM SOFFIT (ALL SIDES) UNLESS NOTED OTHERWISE
- 5. ALL WALLS TO BE PAINTED AS PER PAINT FINISH SCHEDULE UNLESS NOTED OTHERWISE.
- 6. ALL FINISH WORK SHALL BE APPLIED FREE OF SAGS, RUNS, STREAKS, BRUSH OR ROLLER MARKS ETC.
- 7. UPON COMPLETION, THE GENERAL CONTRACTOR SHALL
  - a. REMOVE ALL PAINT FROM WHERE IT HAS SPILLED, SPLASHED, OR SPLATTERED ON SURFACES, INCLUDING LIGHT FIXTURES, DIFFUSERS, SLAB FITTINGS, ETC.,
  - b. REINSTALL AND/OR REPLACE ANY DAMAGED ELECTRIC SWITCHES, OUTLETS,
  - PLATES, SURFACE HARDWARE, ETC. AFTER PAINT COMPLETION. c. PROVIDE (1) GALLON OF EACH COLOR.
- 8. GC TO INSTALL VINYL GRAPHICS TO THE SPECIFIC WALLS BEFORE INSTALLING VINYL COVE BASE. TRIMMING THE GRAPHICS IS NOT PERMITTED.

#### WALL GRAPHICS LEGEND:

RECEPTION: TREE OF HAPPINESS FULL WALL GRAPHICS

RECEPTION (ABOVE CABINETS): POSITIONING STATEMENT (84"W X 5"H)

RECEPTION: MEET OUR FAMILY (45"W X 22"H)

VESTIBULE: MISSION STATEMENT (50"W X 45"H)

MBB HALLWAY: FULL GRAPHIC WALL MBB: 2 FULL WALL GRAPHICS INSIDE MBB

STAFF LOUNGE: PENNY'S PLACE (FULL WALL)

CORRIDOR WATER FOUNTAINS: SURROUNDING (3) WALLS AROUND WATER FOUNTAINS OF SONAR'S GRAPHICS

- TLE CONSTRUCTION MANAGER.
- NO DEVICES TO BE ADHERED TO A WALL WITH GRAPHICS, (SUCH AS MILLWORK, FIRE EXTINGUISHERS, ETC) IF CLARITY IS REQUIRED ON A PROJECT, GC IS TO CONFIRM ALL DETAILS WITH
- ALL HALLWAYS TO BE WHITE AND RECEIVE THE HALLWAY

#### WALL GRAPHICS VENDOR: WM PRINTING

PHONE: 561-305-7027

WALL GRAPHICS NOTES:

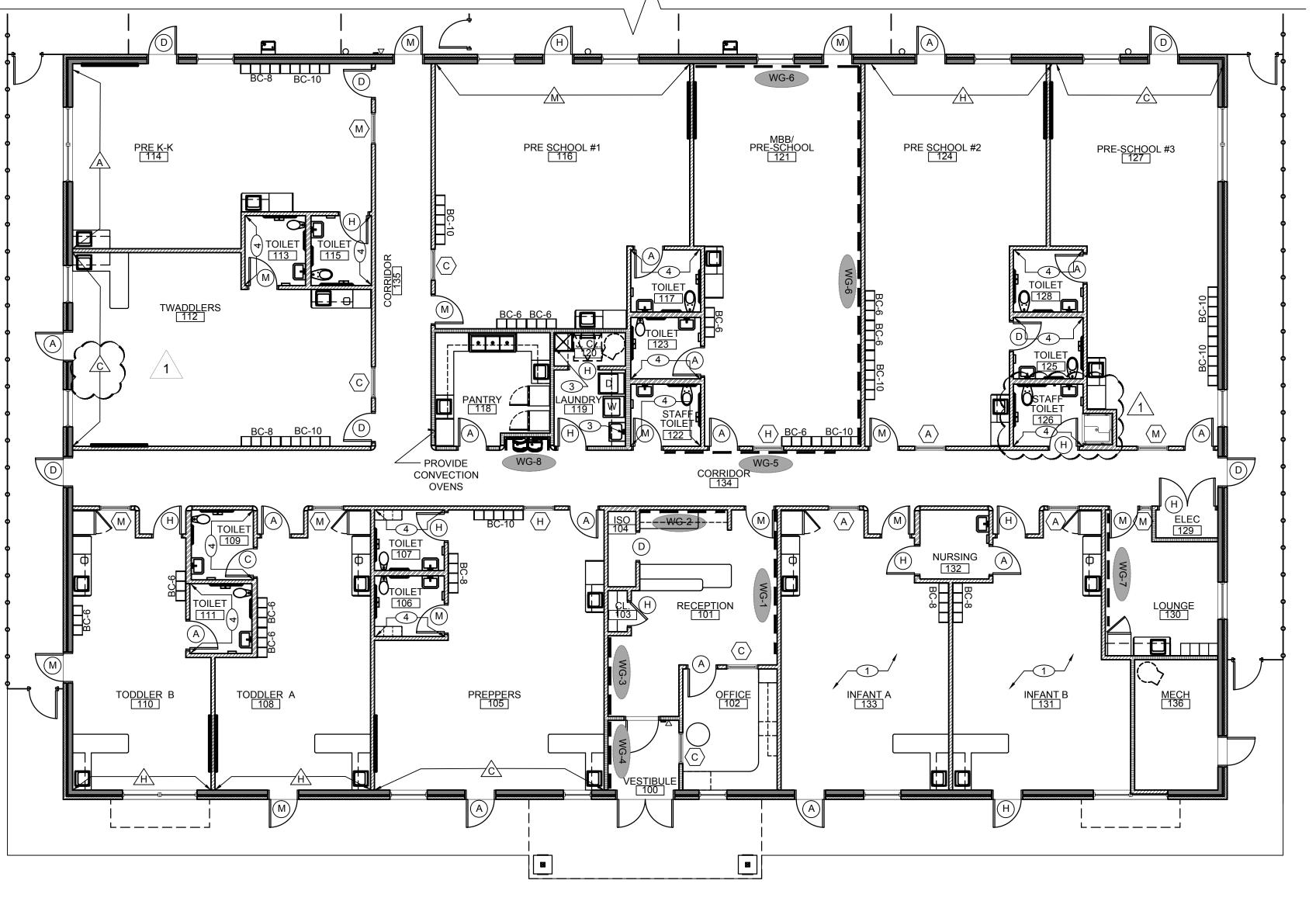
VINYL GRAPHICS TO BE PROVIDED BY FAST SIGNS (REQUIRED) GC TO COORDINATE TLE BRANDED GRAPHICS PACKAGE WITH

TLE RESERVES THE RIGHT TO ADD ADDITIONAL GRAPHIC BRANDING TO THIS PACKAGE AT THE RESPONSIBILITY OF THE

GRAPHICS INDICATED IN THE BRANDING GRAPHICS PACKAGE.

KELSEY HOUT tle@wmprinting.com

THE IDENTITY GROUP BRETT WOLFGRAM CELL: 207-831-3766 tle@theidentitygroup.com





WORK USING THE CONTRACTOR'S BEST SKILL AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCTION MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB

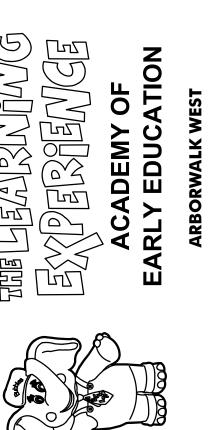
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MATTHEW B. JARMEL, AIA, MBA

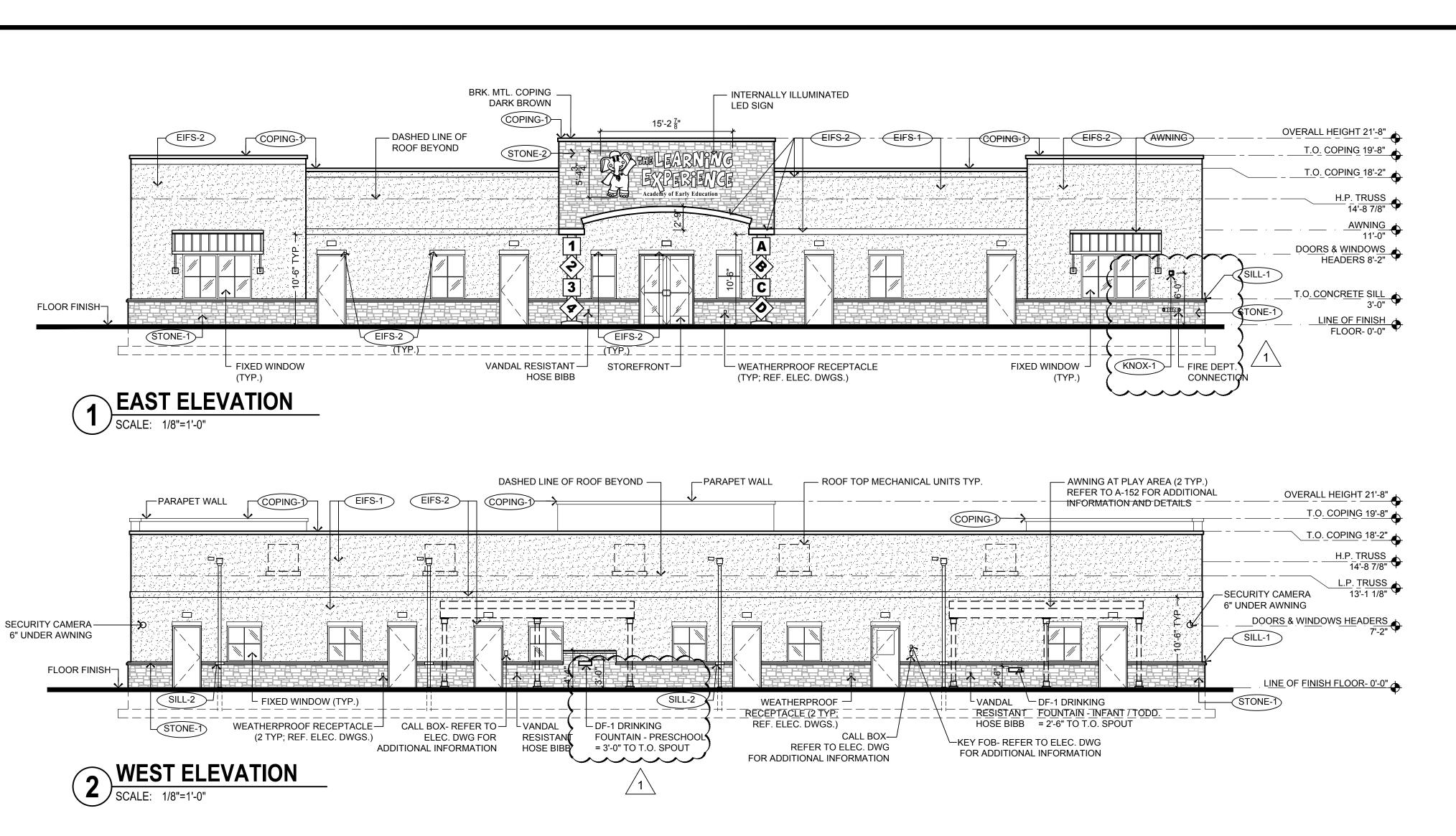
LICENSE NUMBER: A2017014316

TLEMO22-164 **AS NOTED** Approved By: Drawn By:

> **WALL FINISH** PLAN

Drawing Name:





BRK. MTL. COPING DARK BROWN (AWNING)-COPING-1 ROOF TOP MECHANICAL UNITS TYP. - DASHED LINE OF ROOF BEYOND OVERALL HEIGHT 21'-8" EIFS-2 T.O. COPING 18'-2" STONE-2 H.P. TRUSS 14'-8 7/8" VINYL-1)-DOORS & WINDOWS HEADERS 7'-2" T.O. CONCRETE SILL 3'-0" FLOOR FINISH-LINE OF FINISH FLOOR-└(STONE-1) └ FIXED WINDOW (TYP.) \_\_\_\_\_\_\_ LELEC. SWITCHGEAR LKEY FOB- REFER TO ELEC. DWG LOCATION TBD BY FOR ADDITIONAL INFORMATION UTILITY COMPANY

NORTH E ELEVATION
SCALE: 4/0"-41.0" BRK. MTL. COPING INTERNALLY ILLUMINATED -DARK BROWN LED SIGN DASHED LINE OF ROOF BEYOND — COPING-1 OVERALL HEIGHT 21'-8" EIFS-1 EIFS-2 T.O. COPING 19'-8" T.O. COPING18'-2" ─(STONE-2) H.P. TRUSS 14'-8 7/8" 10'-0" (VINYL-1) DOORS & WINDOWS HEADERS 7'-2" SILL-1 T.O. CONCRETE SILL 3'-0" FINISHED — FLOOR LINE OF FINISH FLOOR-0'-0" L(STONE-1) 

SOUTH ELEVATION

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

GENERAL NOTES:

GC TO VERIFY THAT AWNING LOCATIONS ARE CORRECT PER PLANS.
 GC TO ENSURE PROPER DRINKING FOUNTAIN HEIGHTS FOR BOTH PLAYGROUNDS:

INFANTS/TODDLERS - 2'-6" TO TOP OF SPOUT

WARRANTY REQUIREMENTS.

PRESCHOOL = 3'-0" TO TOP OF SPOUT

GC TO VERIFY THAT DOOR TYPES ARE CORRECT PER DOOR SCHEDULE.
 GC TO VERIFY CORRECT FOB AND CALL BOX LOCATIONS.

5. GC TO VERIFY HOSE BIBBS AT ENTRANCE AND PLAYGROUND AREAS.6. GC TO VERIFY WATERPROOF RECEPTACLES AT ENTRANCE AND PLAYGROUND AREAS.

LADEL	MANUEACTURER	CIZE / TVDE	FINISH / COLOR
LABEL	MANUFACTURER	SIZE / TYPE	FINISH / COLOR
STOREFRONT	KAWNEER	TRIFAB 451T / 350 PER DOOR SCHEDULE	BONE WHITE
DOOR	-	PER DOOR SCHEDULE	FACTORY PRIMED
FIXED WINDOW	PLY GEM	SILVER LINE V1 SERIES PER WINDOW SCHEDULE	WHITE
STONE-1	BUECHEL STONE CORP.	5" FULL DEPTH STONE	CHILTON TAILORED BLEND
STONE-2	BUECHEL STONE CORP.	STONE VENEER	CHILTON TAILORED BLEND
SILL-1	MODERN PRECAST	3 3/4"Hx6"W W/ 2" FLAT W/ 1/4" DRIP EDGE	REGULAR (LIGHT GREY)
SILL-2	MODERN PRECAST	CUSTOM SILL 3 3/4"Hx4"W W/ 2" FLAT REF. DTL. 6/A-032	REGULAR (LIGHT GREY)
EIFS-1	DRYVIT	-	SAND PEBBLE FINISH COLOR: OYSTER SHELL
EIFS-2	DRYVIT	-	SAND PEBBLE FINISH COLOR: SANDLEWOOD BEIG
GUTTER-1	-	6" ALUMINUM TYPE 'K' W/ LEAF SCREEN AND 6" LEADERS	MATCH FRIEZE BOARD
VINYL-1	ROYAL BUILDING PRODUCTS	COLORSCAPES TRIPLE 4 PERFORATED SOFFIT NOM. THICKNESS 0.042"	WHITE (REF. NOTE 2 BELOW)
AWNING	-	CUSTOM ALUMINUM	AWARD BLUE (PAC-CLAD)
COPING-1	FABRAL (OR EQUAL)	BREAK METAL	DARK BRONZE
KNOX-1	KNOX BOX	3200 SERIES W/ RECESSED MOUNT FLANGE, HINGE DOOR, & TAMPER SWITCH	DARK BRONZE (REF. NOTE 2 BELOW)

FINISH SCHEDULE NOTES:

1. G.C. SHALL VERIFY KNOX BOX MODEL(S) AND LOCATION(S) WITH AUTHORITY HAVING JURISDICTION PRIOR TO ORDERING AND INSTALLATION.

2. G.C. SHALL ENSURE ALL EXTERIOR FINISHES ARE INSTALLED AND FINISHED IN COMPLIANCE WITH MANUFACTURERS'

1. CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING THE CONTRACTOR'S BEST SKILL AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCTION MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB SITE SAFETY

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UNAPPROVED SUBSTITUTIONS WILL BE REPLACED AT THE EXPENSE OF THE GC.

3. VERBAL REPRESENTATION HAS NO VALUE AND ALL REQUESTS TO CHANGE ANY PRODUCTS OR

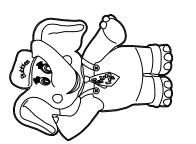
SPECIFICATIONS PER PLANS, <u>MUST</u> BE SUBMITTED IN WRITING TO THE ARCHITECT & TLE FOR APPROVAL.



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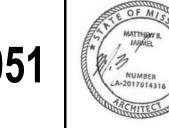
MATTHEW B. JARMEL, AIA, MBA

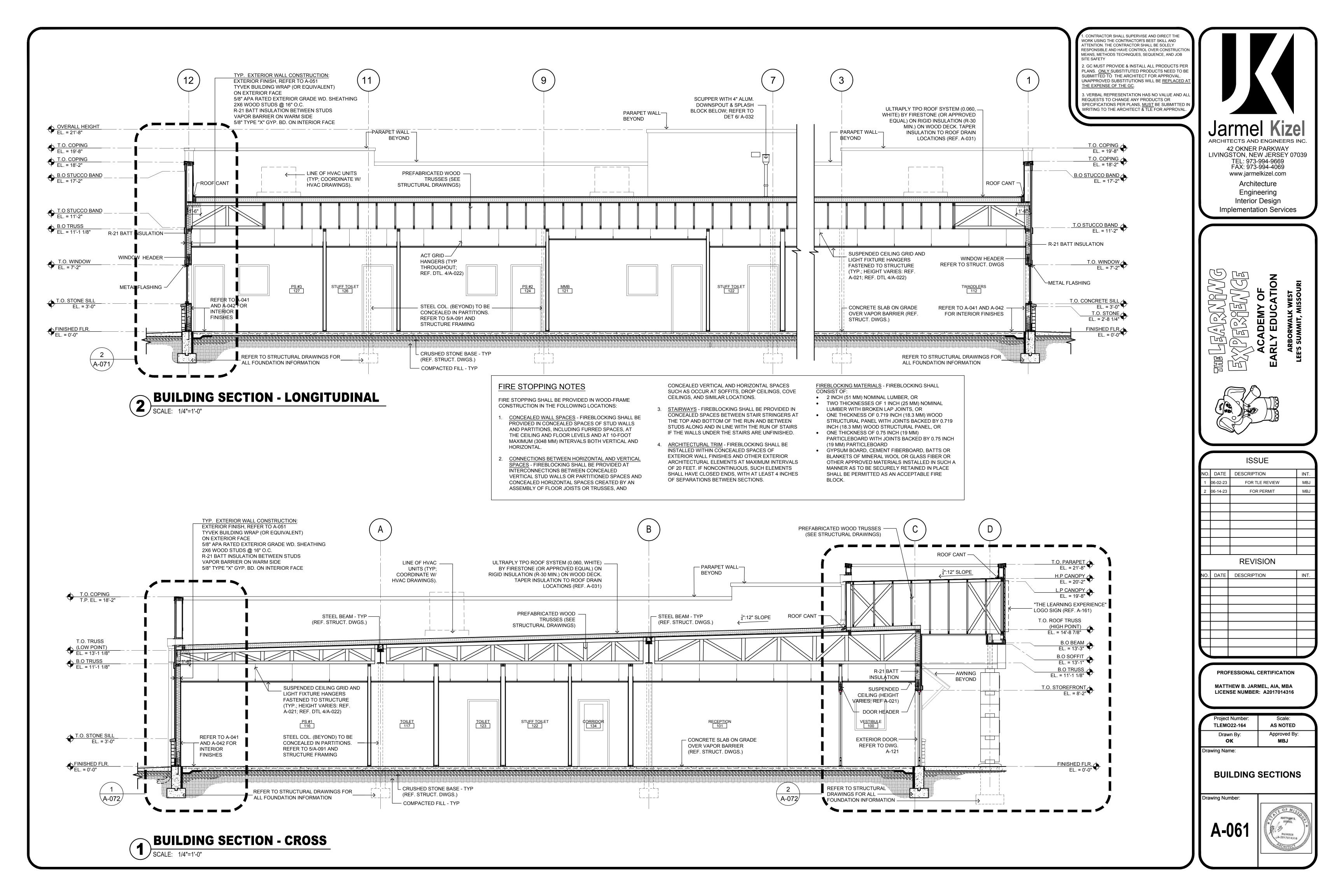
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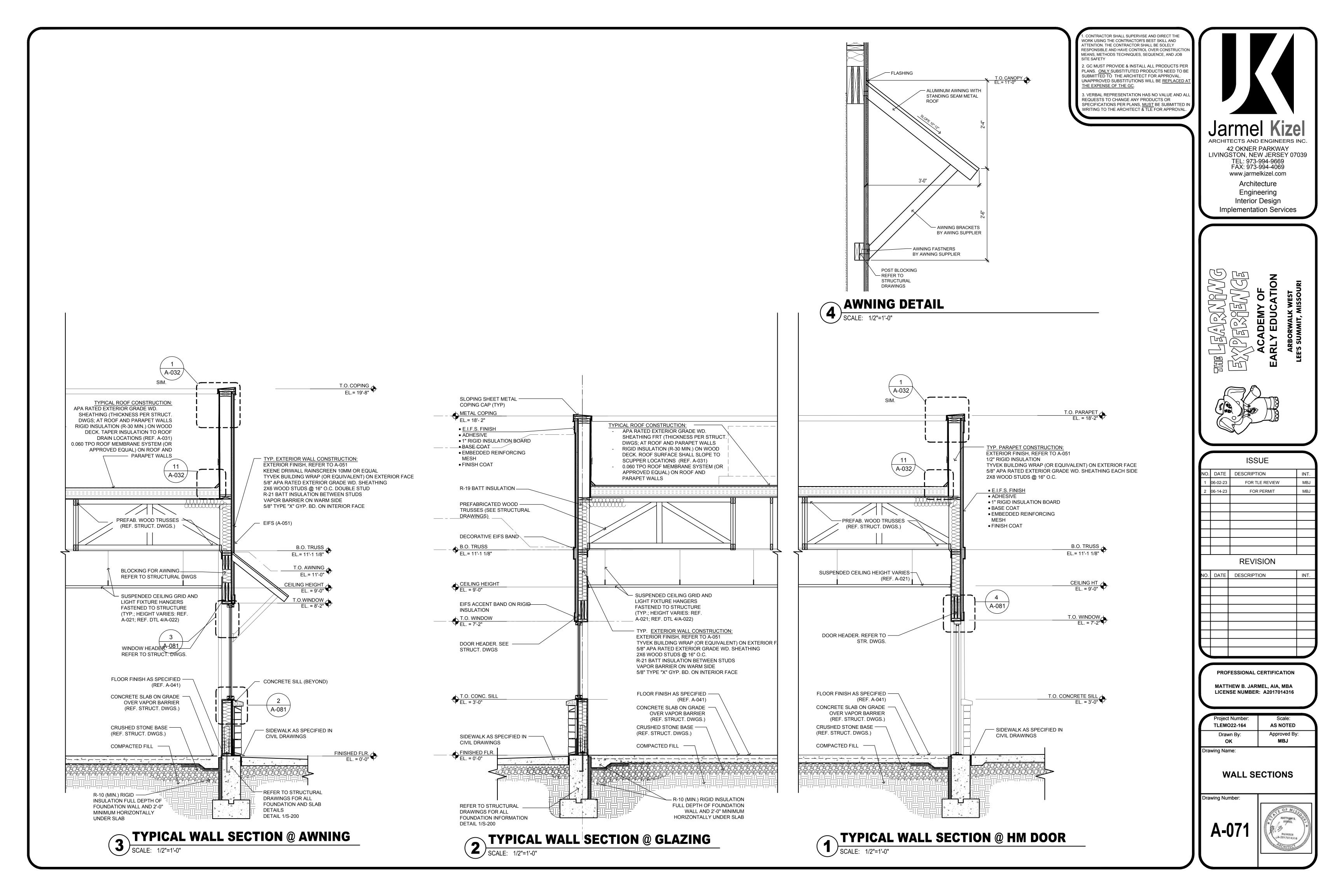
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·	MBJ	
Drawing Name:		

EXTERIOR ELEVATIONS

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#### FIRE STOPPING NOTES

SLOPING SHEET METAL

**ROOF CONSTRUCTION:** 

- FIRE STOPPING SHALL BE PROVIDED IN WOOD-FRAME CONSTRUCTION IN THE FOLLOWING LOCATIONS:
- CONCEALED WALL SPACES FIREBLOCKING SHALL BE PROVIDED IN CONCEALED SPACES OF STUD WALLS AND PARTITIONS, INCLUDING FURRED SPACES, AT THE CEILING AND FLOOR LEVELS AND AT 10-FOOT MAXIMUM (3048 MM) INTERVALS BOTH VERTICAL AND HORIZONTAL.
- CONNECTIONS BETWEEN HORIZONTAL AND VERTICAL SPACES - FIREBLOCKING SHALL BE PROVIDED AT INTERCONNECTIONS BETWEEN CONCEALED VERTICAL STUD WALLS OR PARTITIONED SPACES AND CONCEALED HORIZONTAL SPACES CREATED BY AN ASSEMBLY OF FLOOR JOISTS OR TRUSSES, AND CONCEALED VERTICAL AND HORIZONTAL SPACES SUCH AS OCCUR AT SOFFITS, DROP CEILINGS, COVE CEILINGS, AND SIMILAR

#### LOCATIONS.

- 3. <u>STAIRWAYS</u> FIREBLOCKING SHALL BE PROVIDED IN CONCEALED SPACES BETWEEN STAIR STRINGERS AT THE TOP AND BOTTOM OF THE RUN AND BETWEEN STUDS ALONG AND IN LINE WITH THE RUN OF STAIRS IF THE WALLS UNDER THE STAIRS ARE UNFINISHED.
- 4. <u>ARCHITECTURAL TRIM</u> FIREBLOCKING SHALL BE INSTALLED WITHIN CONCEALED SPACES OF EXTERIOR WALL FINISHES AND OTHER EXTERIOR ARCHITECTURAL ELEMENTS AT MAXIMUM INTERVALS OF 20 FEET. IF NONCONTINUOUS SUCH ELEMENTS SHALL HAVE CLOSED ENDS, WITH AT LEAST 4 INCHES OF SEPARATIONS BETWEEN SECTIONS.

#### FIREBLOCKING MATERIALS - FIREBLOCKING SHALL

- 2 INCH (51 MM) NOMINAL LUMBER, OR
- TWO THICKNESSES OF 1 INCH (25 MM) NOMINAL LUMBER WITH BROKEN LAP JOINTS, OR

- ONE THICKNESS OF 0.719 INCH (18.3 MM) WOOD STRUCTURAL PANEL WITH JOINTS BACKED BY 0.719 INCH (18.3 MM) WOOD STRUCTURAL PANEL,
- ONE THICKNESS OF 0.75 INCH (19 MM) PARTICLEBOARD WITH JOINTS BACKED BY 0.75 INCH (19 MM) PARTICLEBOARD
- GYPSUM BOARD, CEMENT FIBERBOARD, BATTS OR BLANKETS OF MINERAL WOOL OR GLASS FIBER OR OTHER APPROVED MATERIALS INSTALLED IN SUCH A MANNER AS TO BE SECURELY RETAINED IN PLACE SHALL BE PERMITTED AS AN ACCEPTABLE FIRE BLOCK.

. CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING THE CONTRACTOR'S BEST SKILL AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCTION MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB

SITE SAFETY

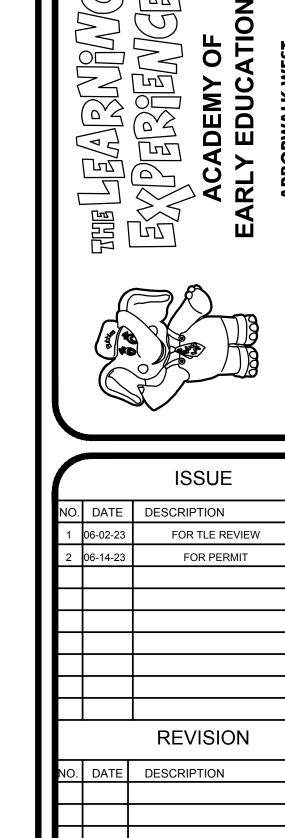
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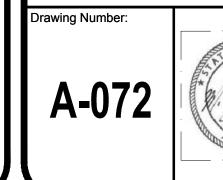
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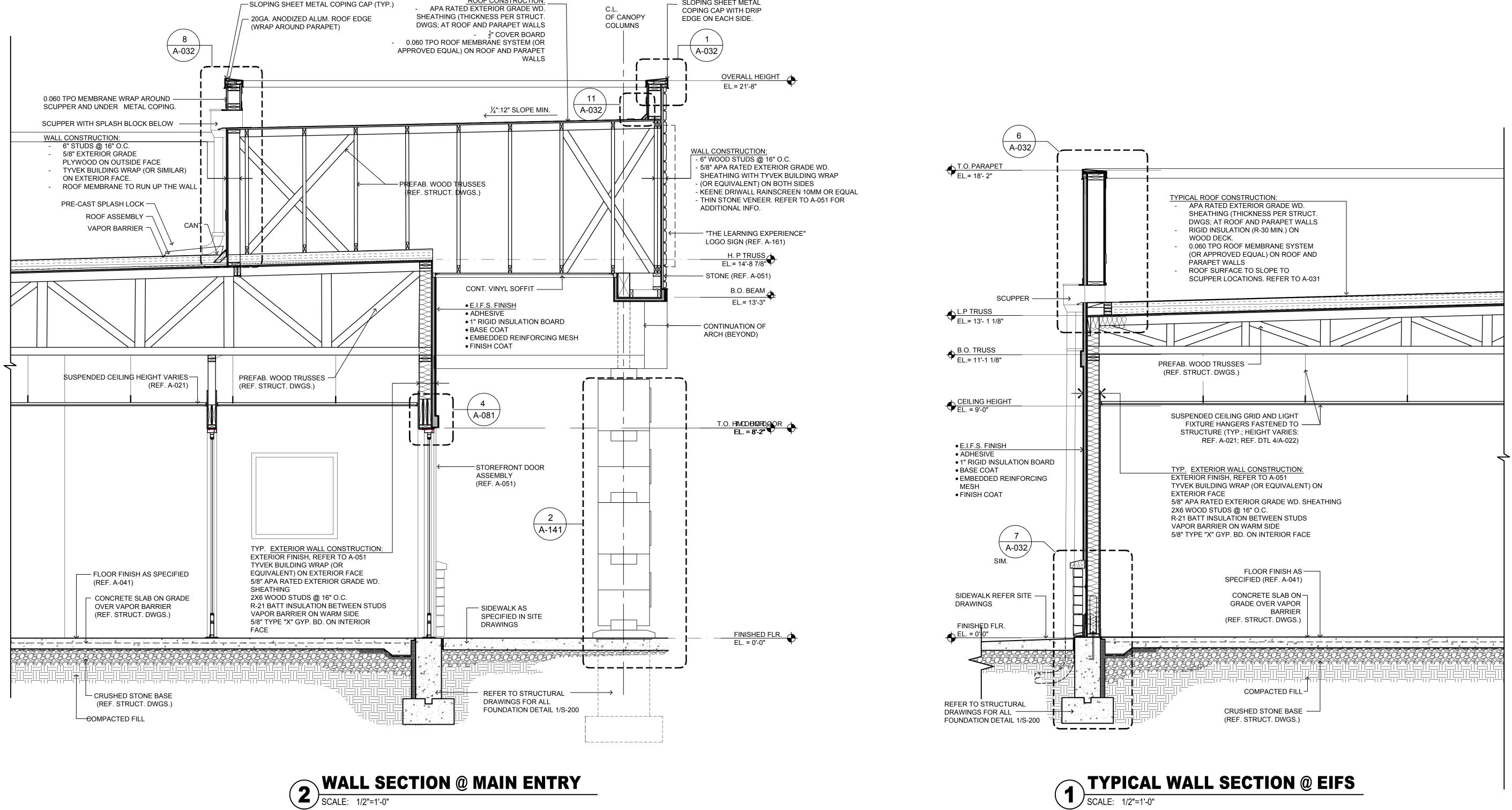
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**WALL SECTIONS** 





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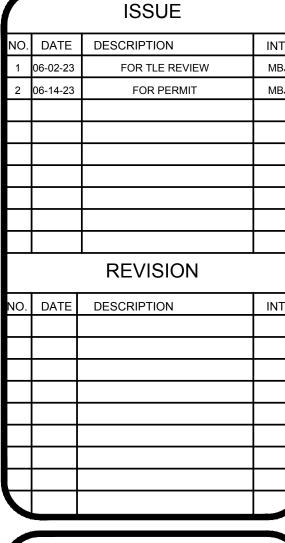
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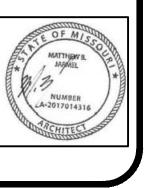


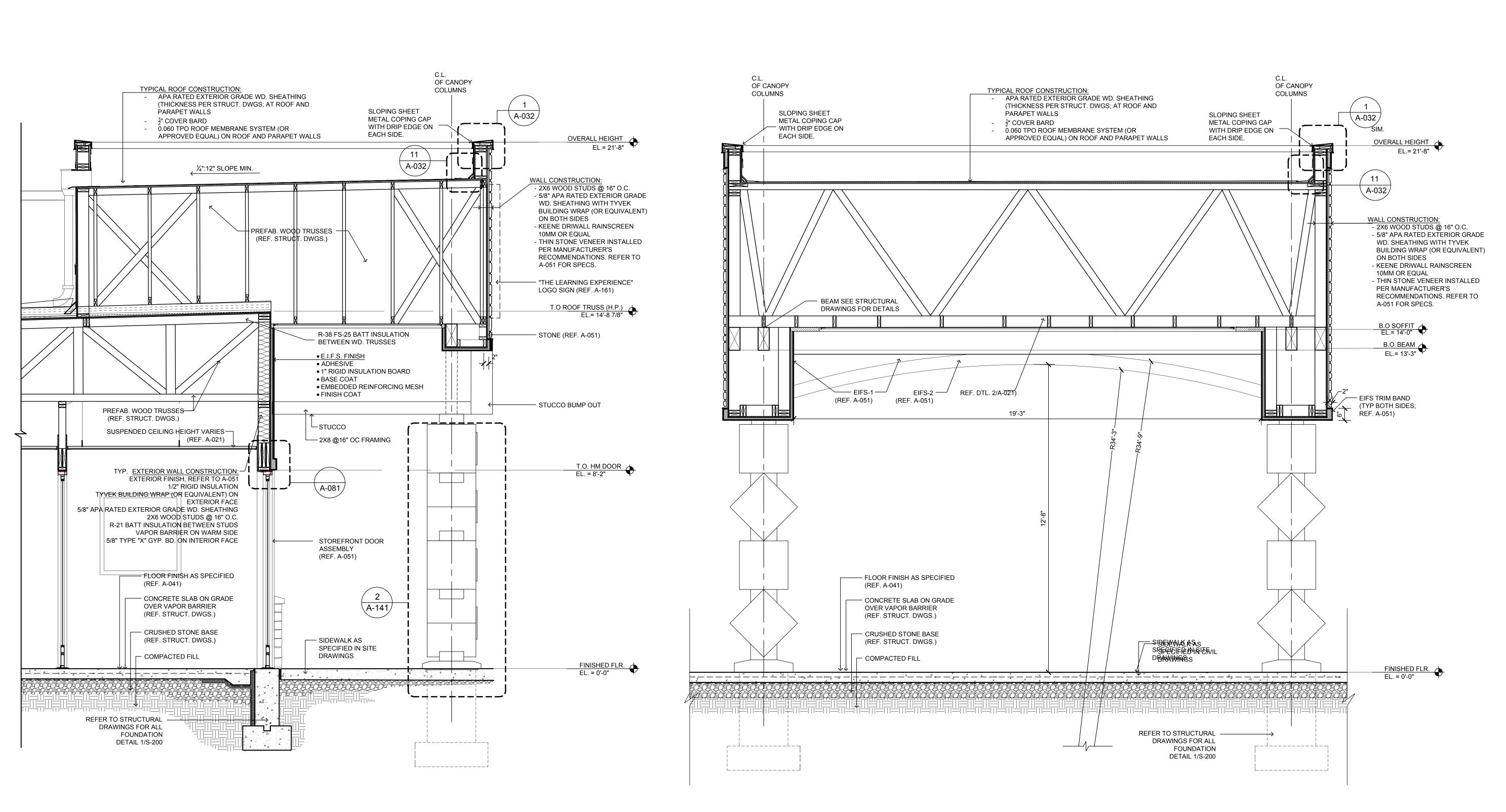


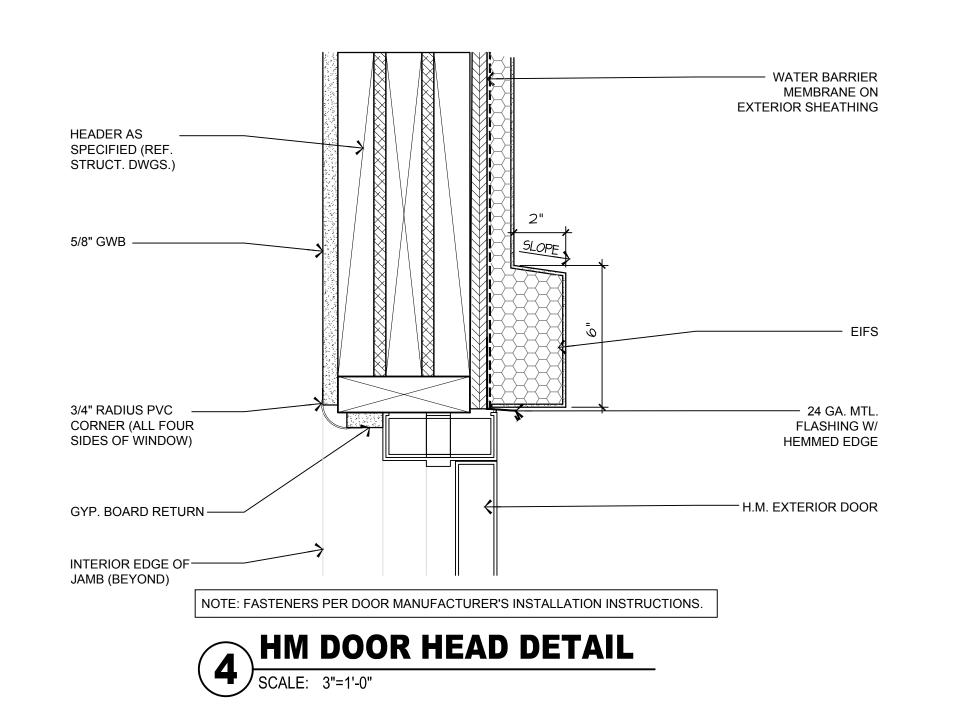
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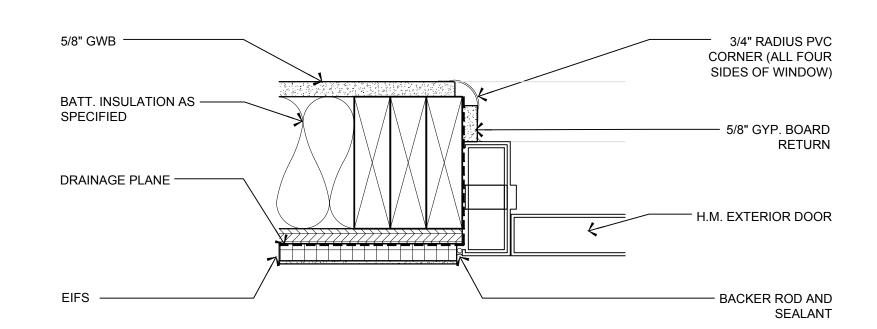
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**WALL SECTIONS** 



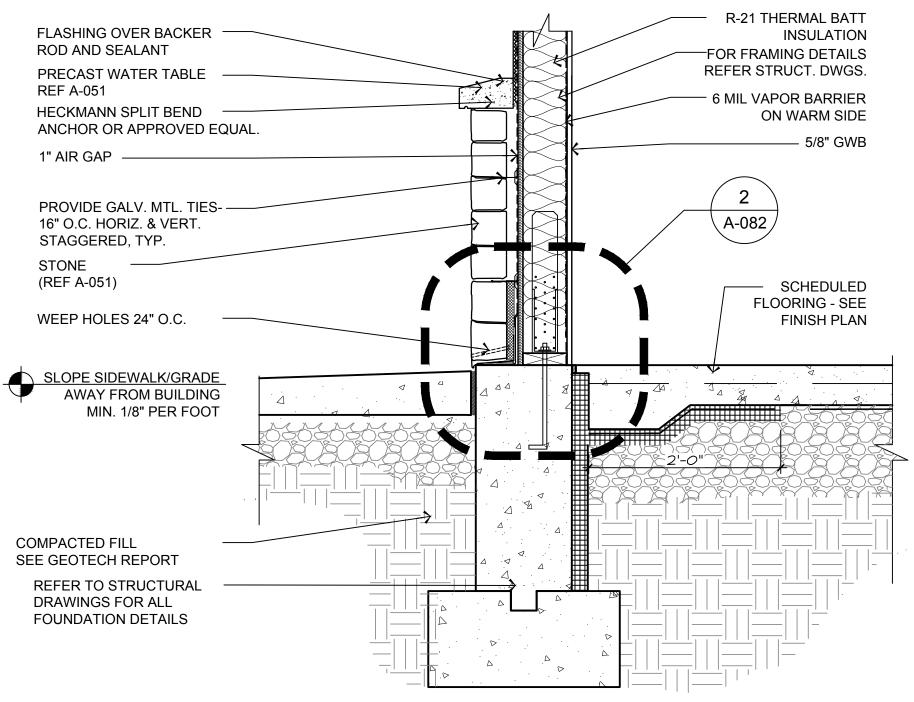






NOTE: FASTENERS PER DOOR MANUFACTURER'S INSTALLATION INSTRUCTIONS.





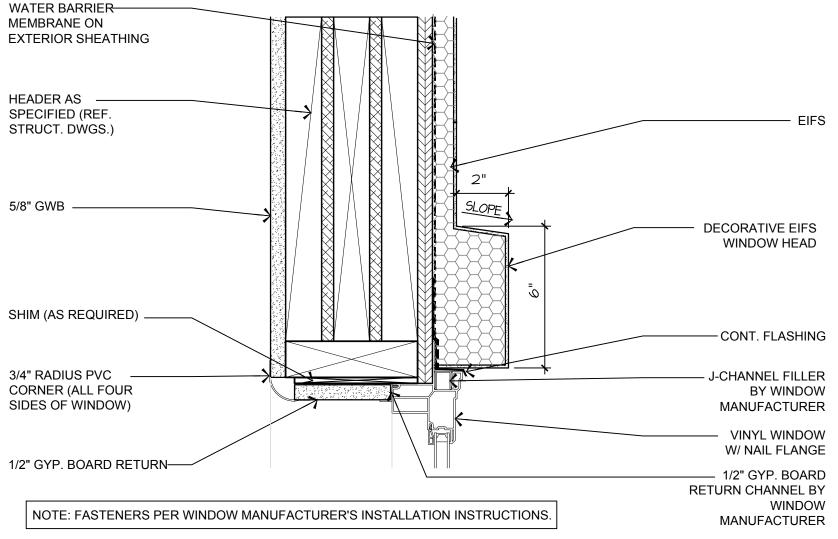
TYPICAL DETAIL @ KNEE WALL

SCALE: 1"=1'-0"

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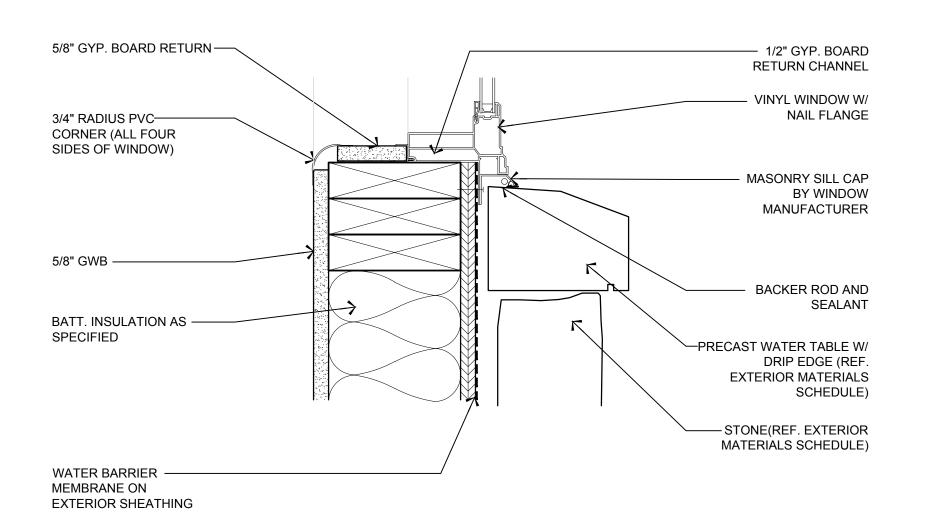
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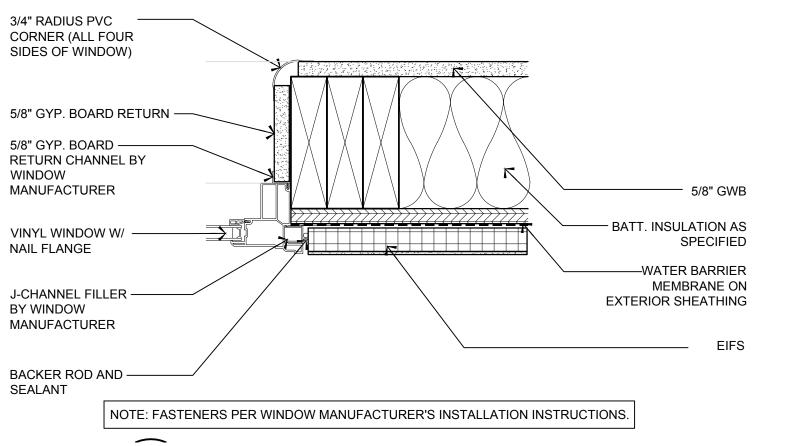
WINDOW HEAD DETAIL

SCALE: 3"=1'-0"



NOTE: FASTENERS PER WINDOW MANUFACTURER'S INSTALLATION INSTRUCTIONS.





WINDOW JAMB DETAIL

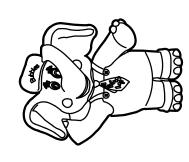
SCALE: 3"=1'-0"



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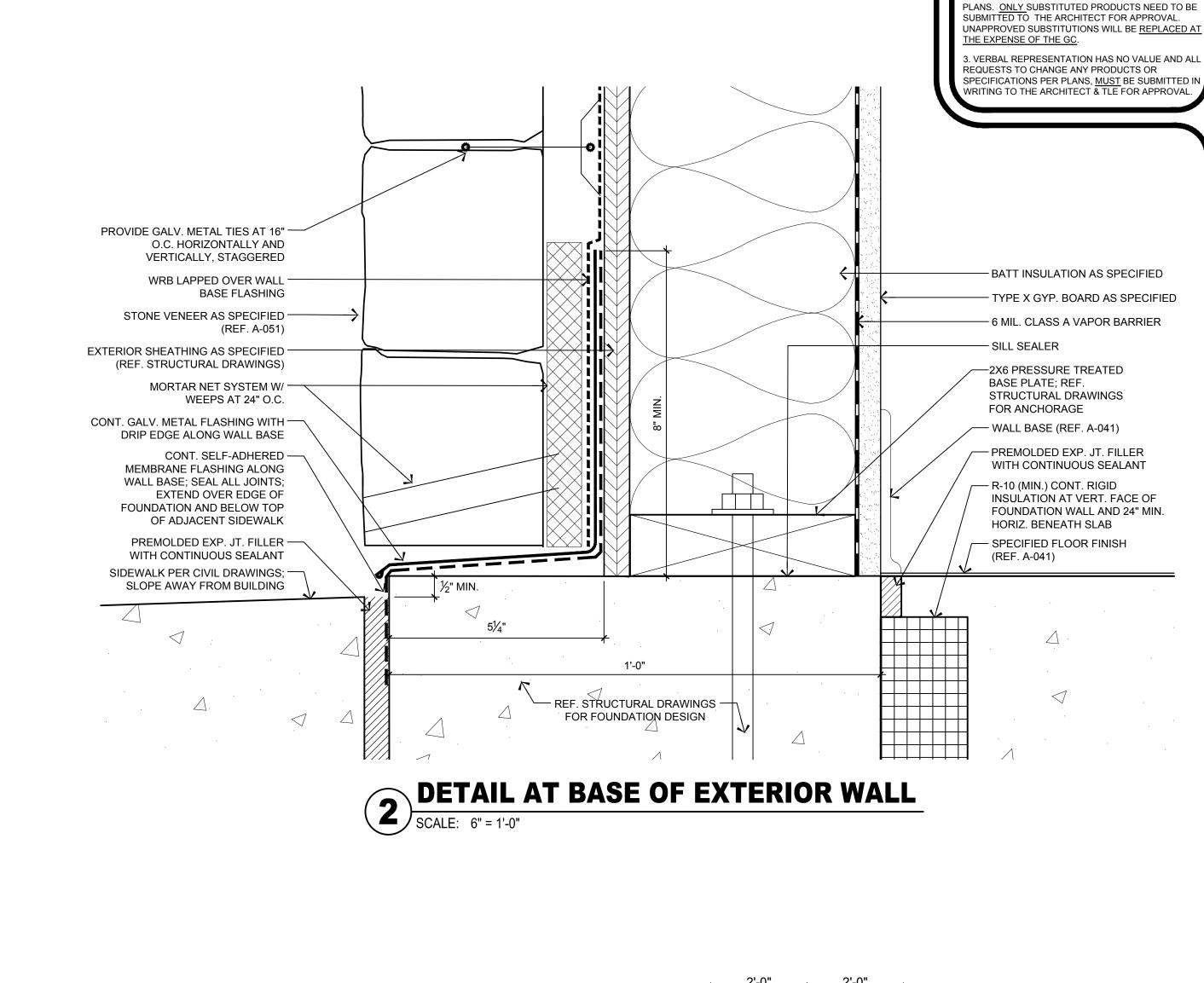
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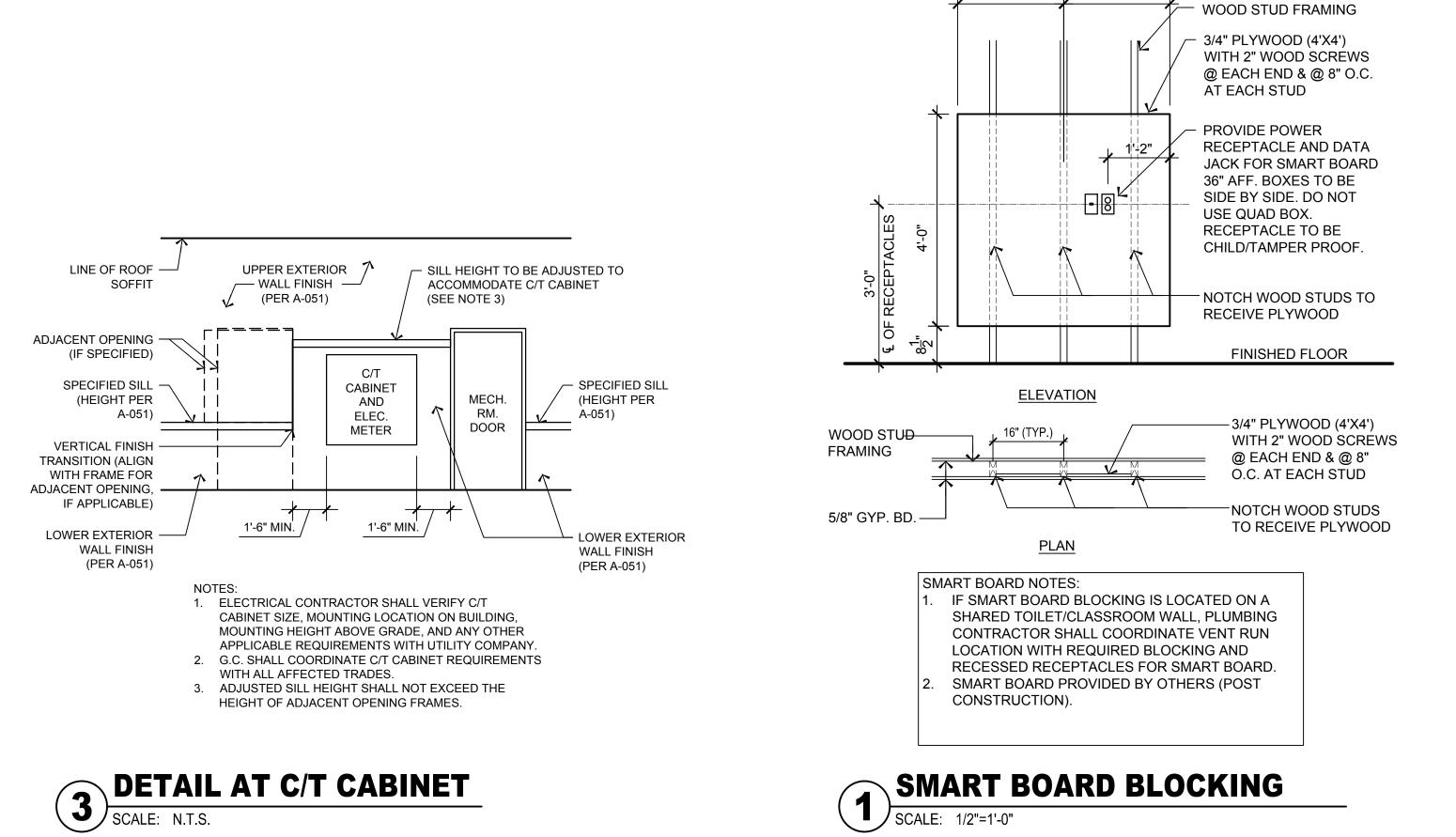
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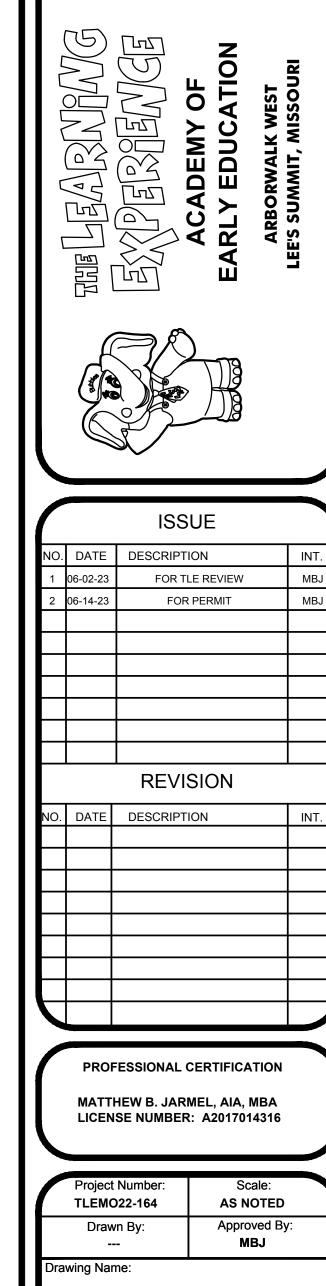
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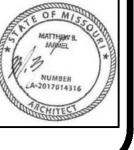
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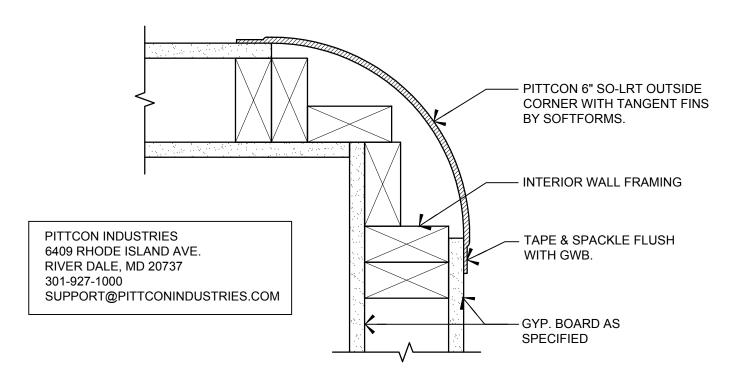
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Drawn By:	Approved By:	
	MBJ	
Drawing Names		

**DETAILS** 

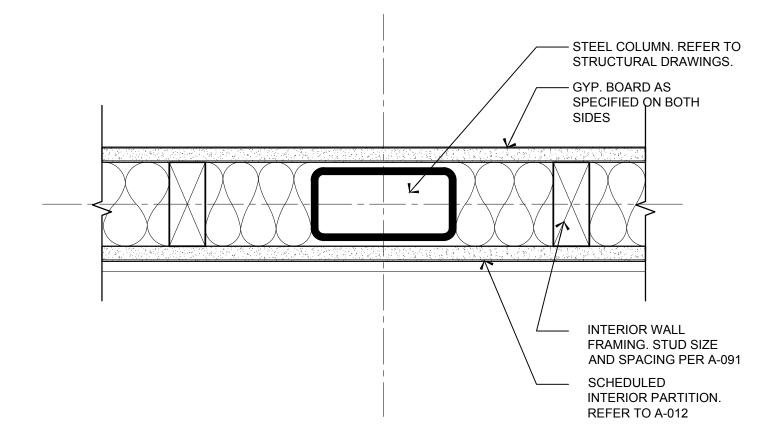
Drawing Number:

A-082

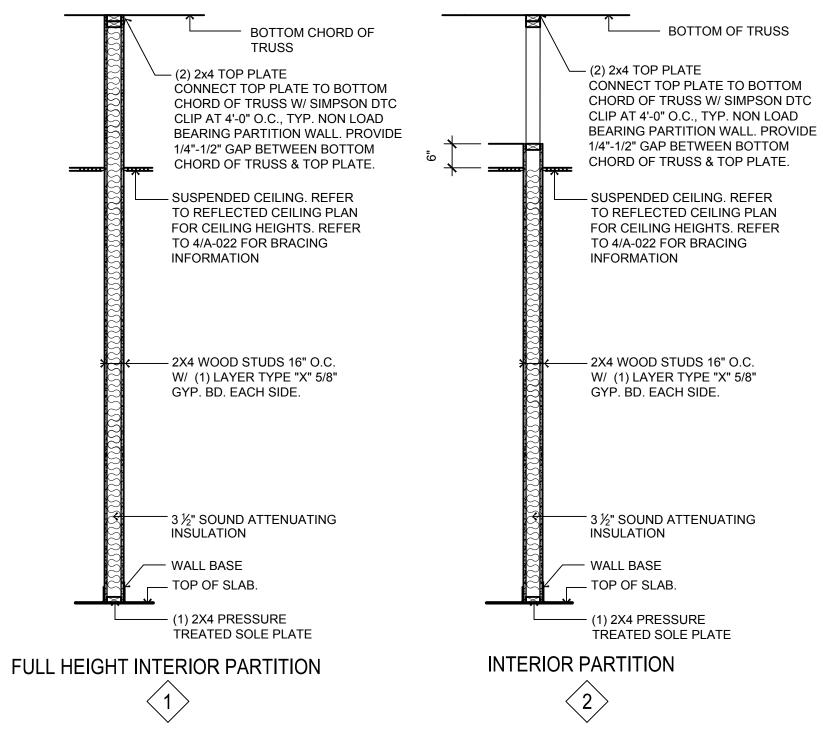


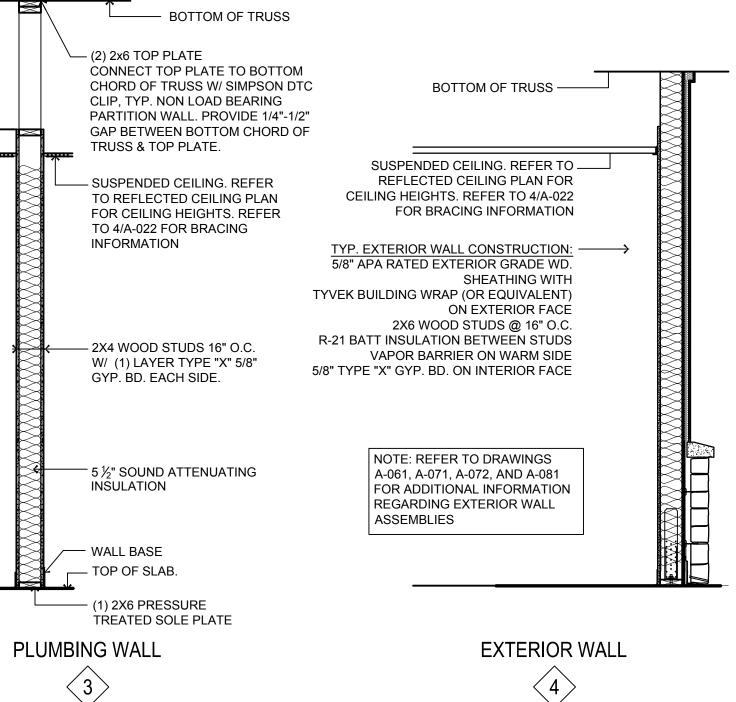


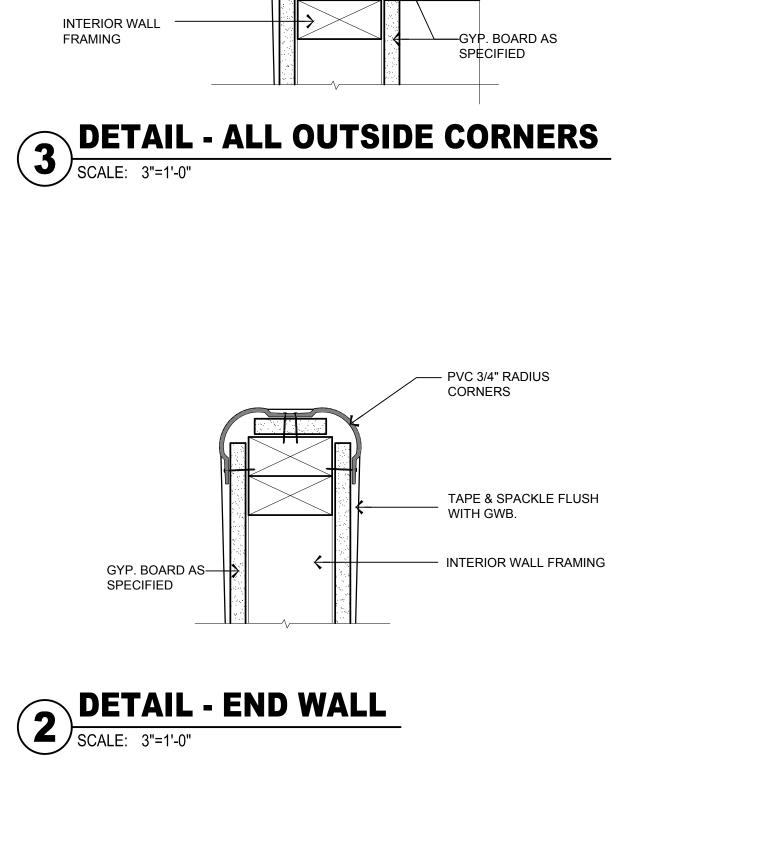
### DETAIL - 6" SOFTFORM



## 5 DETAIL - COLUMN CONCEALED IN WALL SCALE: 3"=1'-0"





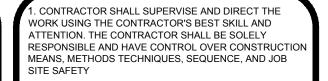


TAPE & SPACKLE FLUSH

WITH GWB.

PVC 3/4" RADIUS ——

CORNERS



2. GC MUST PROVIDE & INSTALL ALL PRODUCTS PER PLANS. <u>ONLY</u> SUBSTITUTED PRODUCTS NEED TO BE SUBMITTED TO THE ARCHITECT FOR APPROVAL. UNAPPROVED SUBSTITUTIONS WILL BE REPLACED THE EXPENSE OF THE GC.

3. VERBAL REPRESENTATION HAS NO VALUE AND ALL REQUESTS TO CHANGE ANY PRODUCTS OR SPECIFICATIONS PER PLANS, <u>MUST</u> BE SUBMITTED IN WRITING TO THE ARCHITECT & TLE FOR APPROVAL.

BOTTOM OF TRUSS

CONNECT TOP PLATE TO BOTTOM

CHORD OF TRUSS W/ SIMPSON DTC

PARTITION WALL. PROVIDE 1/4"-1/2"

GAP BETWEEN BOTTOM CHORD OF

CLIP, TYP. NON LOAD BEARING

– SUSPENDED CEILING. REFER

TO 4/A-022 FOR BRACING

– 2X4 WOOD STUDS 16" O.C.

W/ (1) LAYER TYPE "X" 5/8"

<sup>—</sup> 5 ½" SOUND ATTENUATING

INSULATION

/ WALL BASE

FULL HEIGHT PLUMBING WALL

\_\_\_ TOP OF SLAB.

—— (1) 2X6 PRESSURE

TREATED SOLE PLATE

GYP. BD. EACH SIDE.

TO REFLECTED CEILING PLAN

FOR CEILING HEIGHTS. REFER

— (2) 2x6 TOP PLATE

TRUSS & TOP PLATE.

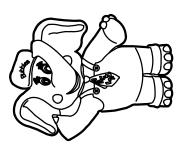
INFORMATION

ARCHITECTS AND ENGINEERS INC

42 OKNER PARKWAY LIVINGSTON, NEW JERSEY 07039 TEL: 973-994-9669 FAX: 973-994-4069

www.jarmelkizel.com Architecture Engineering Interior Design Implementation Services

ACADEMY OF ARLY EDUCATION 



ISSUE

NO.	DATE	DESCRIPTION	INT.
1	06-02-23	FOR TLE REVIEW	MBJ
2	06-14-23	FOR PERMIT	MBJ
		REVISION	
NO.	DATE	DESCRIPTION	INT.
$\vdash$			

PROFESSIONAL CERTIFICATION MATTHEW B. JARMEL, AIA, MBA

LICENSE NUMBER: A2017014316

Project Number: TLEMO22-164	Scale: AS NOTED
Drawn By: <b>OK</b>	Approved By: MBJ
Drawing Name:	

**PARTITION TYPES AND DETAILS** 



**PARTITION TYPES** 

#### PLUMBING FIXTURE MOUNTING HEIGHT SCHEDULE: TOILET AGE TOILET LAVATORY TOILET © (NUMBER OF EACH TYPE VARIES BY SITE; GROUP HEIGHT HEIGHT OFF SIDE WALL REFER TO CONSTRUCTION FLOOR PLAN) TODDLER ROOMS 18-24 MONTHS 30" 12" TWADDLER ROOMS 24-36 MONTHS 30" 12" 30-36 MONTHS PREPPERS ROOMS 30" 3 - 5 YEARS 32" PRE-SCHOOL ROOMS 14" PRE-K/K ROOMS 5 - 6 YEARS 14" 32" 14" MAKE BELIEVE BOULEVARD VARIES 10"" 30" 12" STAFF TOILET ADULT 16.5" 34" 18"

#### ACCESSORY SCHEDULE

- A DOUBLE-ROLL TOILET TISSUE DISPENSER BOBRICK #B-265
- B SURFACE-MOUNTED PAPER TOWEL DISPENSER BOBRICK #B-262 © SOAP DISPENSER - BOBRICK #B-2111 SUPPLY SOAP FOR ALL DISPENSERS
- D GRAB BAR BOBRICK #B-5806.99x36 PEENED GRIPPING E GRAB BAR - BOBRICK #B-5806.99x42 PEENED GRIPPING
- F MIRRORS BOBRICK #B-165 -18"x30" TEMPERED GLASS MIRROR.
- G ALL EXPOSED PIPING TO BE WRAPPED WITH SOFT ADA UNDER-LAVATORY PROTECTOR.
- H GRAB BAR BOBRICK #B-5806.99x18 PEENED GRIPPING
- GRAB BAR BOBRICK #B-5806.99x24 PEENED GRIPPING J USE PRE-FORMED INSULATION ON H.W. PIPING & DRAIN
- (K) SHOWER STALL FREEDOM APFQ3838BF1PRRFR (WHITE) WITH ADA ACCESSORIES
- L SHOWER DRAIN KOHLER K-9132
- M SHOWER LIGHT KOHLER K-1665 N SHOWER FAUCET - DELTA T13H152

#### 

#### ADA CLEARANCE KEY NOTES

- 1) 60" DIAMETER CLEAR WHEELCHAIR TURNING AREA
- 2 56"x60" FLOOR CLEARANCE AT TOILET
- 3 58"x60" DOOR CLEARANCE (FRONT APPROACH TO PULL SIDE)
- 4 30"x48" FLOOR CLEARANCE AT LAVATORY 5 30"x48" FLOOR CLEARANCE OUTSIDE DOOR SWING
- 6 48"x52" DOOR CLEARANCE (FRONT APPROACH TO PUSH SIDE)

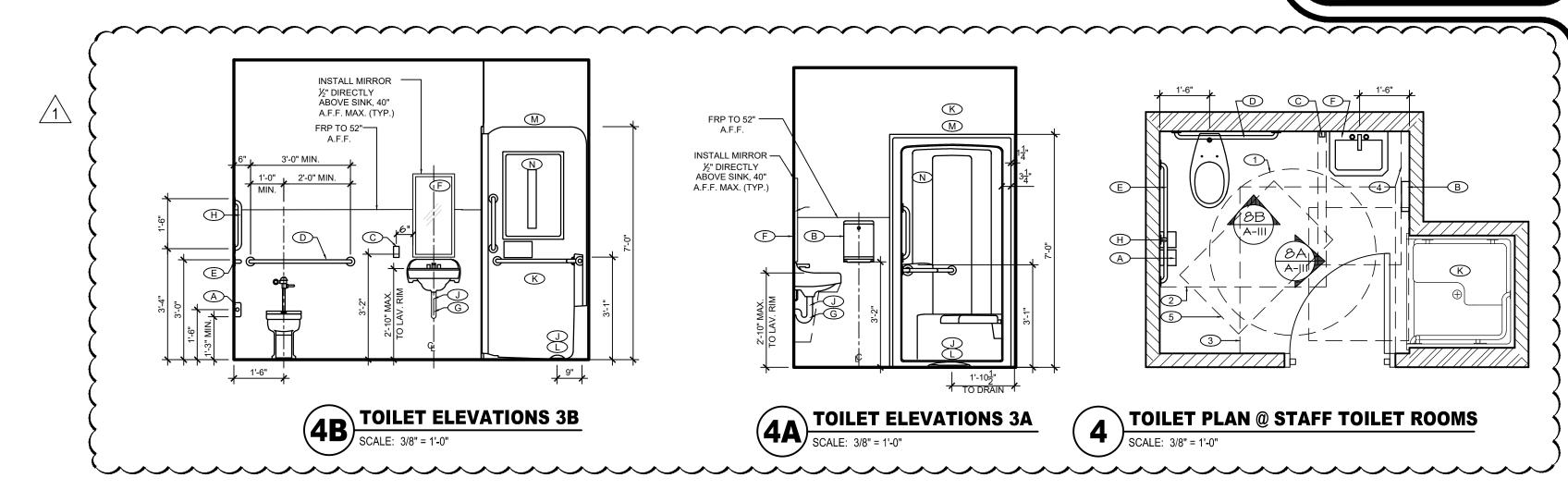
- DIMENSIONS ARE FROM/TO FACE OF FINISH (U.N.O.) WALL-MOUNTED ACCESSORY FIXTURES MAY ONLY PROJECT INTO
- REQUIRED FLOOR CLEARANCES BY LESS THAN 4".

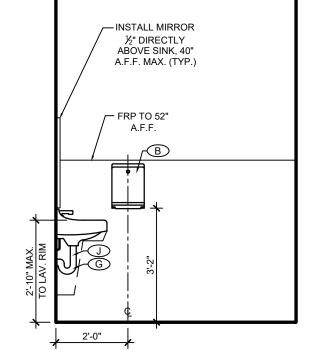
#### **GENERAL NOTES:**

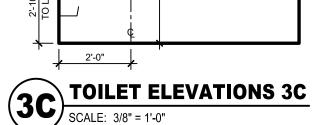
TOILETS AND LAVATORIES.

- 1. REFER TO SHEET A-012 CONSTRUCTION PLAN FOR SPECIFIC TOILET ROOM LAYOUTS NOT DEPICTED ON THIS SHEET. ELEVATIONS SHOWN REFLECT TYPICAL TOILET ROOM LAYOUTS PER THIS SET OF DRAWINGS.
- 2. TOILET ROOM ACCESSORIES (PURCHASED & INSTALL BY G.C. IN EACH
- TOILET ROOM). 3. REFER TO PLUMBING FIXTURE MOUNTING HEIGHT SCHEDULE FOR ALL
- 4. SEE PLUMBING DRAWINGS FOR PLUMBING FIXTURE SPECIFICATIONS.
- 5. CHILDREN TOILET DESIGN SHALL COMPLY BY RECOMMENDATION OF MODIFICATIONS TO ACCESSIBILITY STANDARDS FOR CHILDREN ENVIRONMENTS ICC/ANSI A117.1-98.
- 6. TOILET FLUSH HANDLE TO BE LOCATED ON THE OPEN/ WIDE SIDE OF THE
  - WHERE AN ADMINISTRATIVE AUTHORITY REQUIRES FLUSH CONTROLS FOR FLUSH VALVES TO BE LOCATED IN A POSITION THAT CONFLICTS WITH THE LOCATION OF THE REAR GRAB BAR, THAT GRAB BAR SHALL BE PERMITTED TO BE SPLIT OR SHIFTED TO THE OPEN SIDE OF THE TOILET AREA. (ICC/ANSI A117.1-604.5.2)
  - 8. ADULT RIM HEIGHT SHOWN. REFER TO DETAILS THIS PAGE FOR ALTERNATE CHILD SINK RIM HEIGHTS
  - 9. BATHROOM ACCESSORIES CONTACT: ANTHONY "TONY" MINCE KEY ACCOUNT REPRESENTATIVE ANTHONY.MINCE@STAPLES.COM

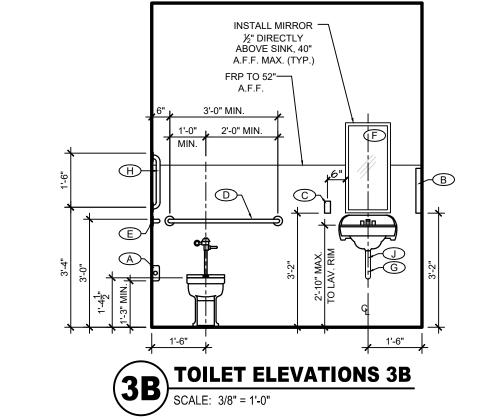
(734) 452.4743

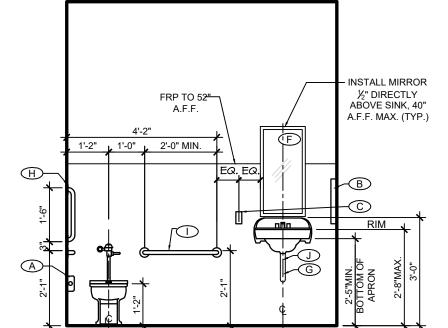


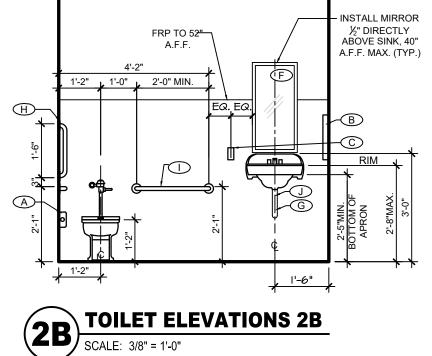


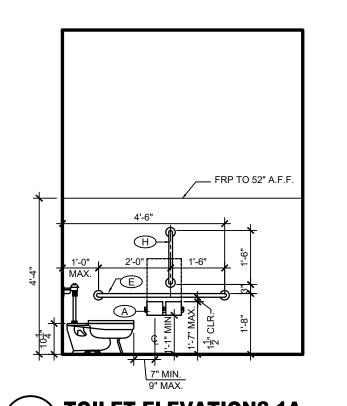


ABOVE SINK, 40" A.F.F. MAX. (TYP.)









TOILET ELEVATIONS 2A

SCALE: 3/8" = 1'-0"

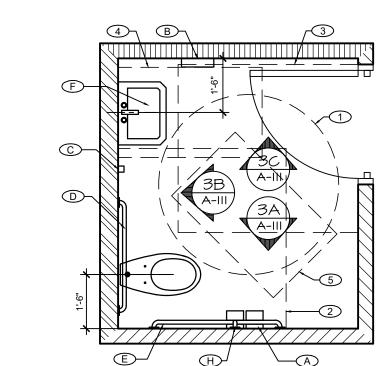
3'-6" MIN.

E

RP TO 52" ¬

TOILET ELEVATIONS 1A

SCALE: 3/8" = 1'-0"



. CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING THE CONTRACTOR'S BEST SKILL AND

2. GC MUST PROVIDE & INSTALL ALL PRODUCTS PER

PLANS. ONLY SUBSTITUTED PRODUCTS NEED TO BE SUBMITTED TO THE ARCHITECT FOR APPROVAL.

UNAPPROVED SUBSTITUTIONS WILL BE REPLACED A

3. VERBAL REPRESENTATION HAS NO VALUE AND ALL

SPECIFICATIONS PER PLANS, MUST BE SUBMITTED IN

WRITING TO THE ARCHITECT & TLE FOR APPROVAL

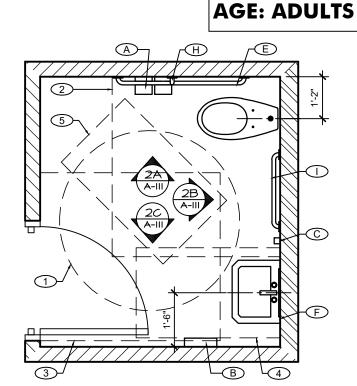
REQUESTS TO CHANGE ANY PRODUCTS OR

ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCTIO MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB

SITE SAFETY

THE EXPENSE OF THE GC.





TOILET PLAN @ PRE-SCHOOL & PRE-K/K ROOMS

SCALE: 3/8" = 1'-0"

AGE: 3-6 YEARS PROFESSIONAL CERTIFICATION

	Project Number: TLEMO22-164	Scale: AS NOTED
	Drawn By: <b>OK</b>	Approved By MBJ
(IB) A-III	Drawing Name:	

**TOILET ROOM PLANS & DETAILS** 

MATTHEW B. JARMEL, AIA, MBA LICENSE NUMBER: A2017014316

ARCHITECTS AND ENGINEERS INC

42 OKNER PARKWAY

LIVINGSTON, NEW JERSEY 07039

TEL: 973-994-9669

FAX: 973-994-4069

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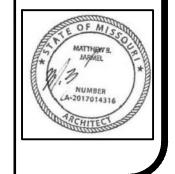
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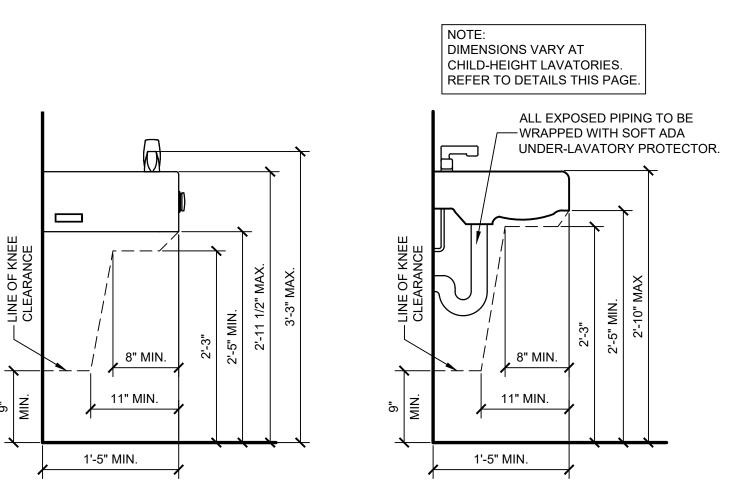
FOR TLE REVIEW

3 08-14-23 PER TLE AND CODE COMMENTS MBJ

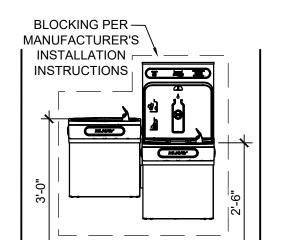
REVISION

08-14-23 PER TLE AND CODE COMMENTS









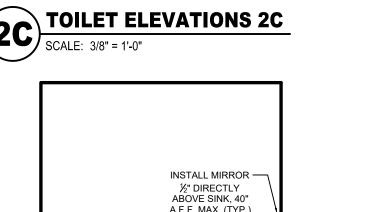
- 30" x 48" **FLOOR** CLEARANCE

TYPICAL ADA SINK

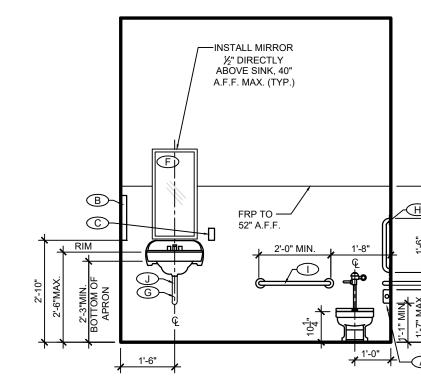
**SECTION** 

**TYPICAL INTERIOR** 



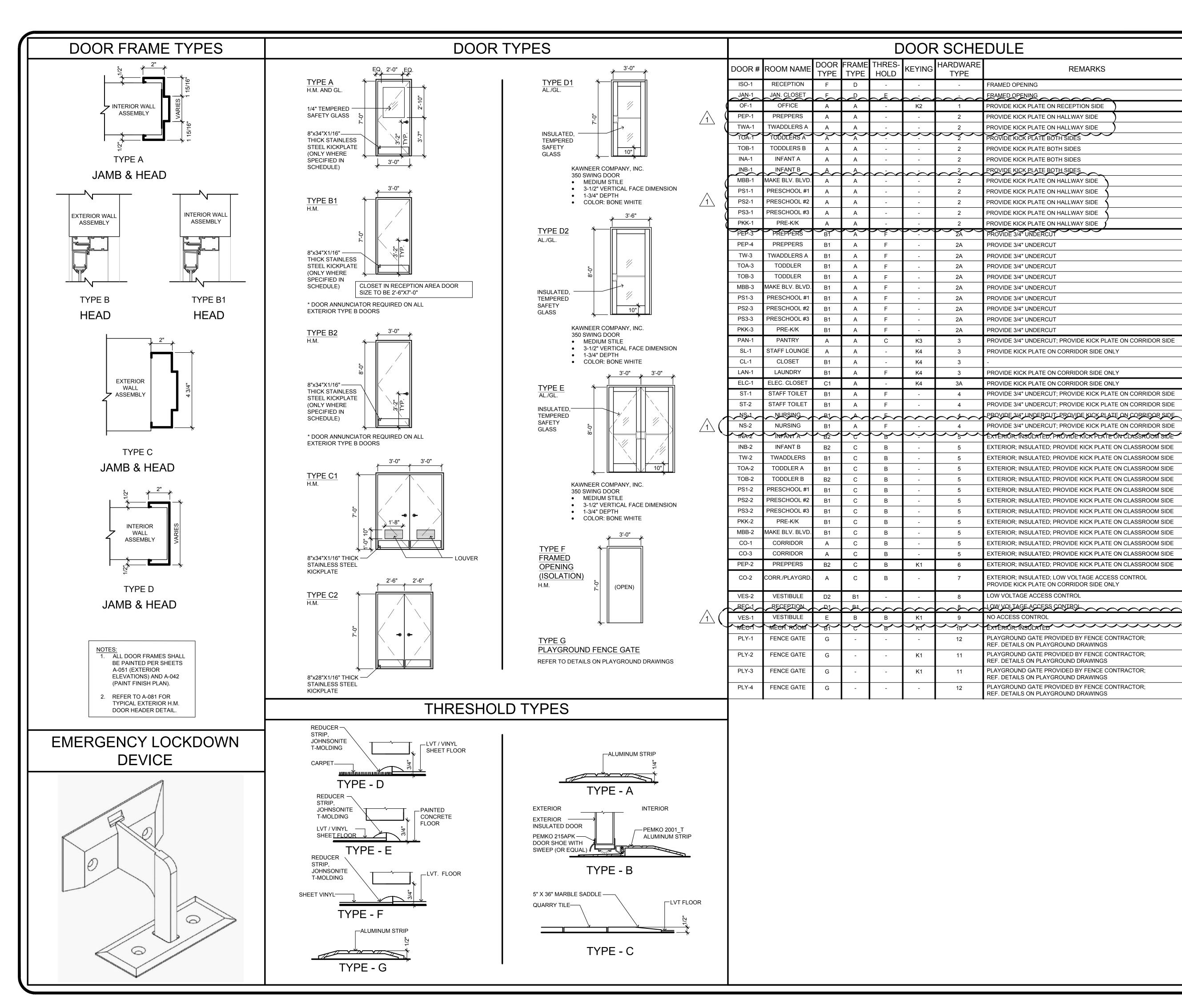


TOILET ELEVATIONS 1C





**TOILET PLAN @ TODDLER, TWADDLER AGE: 18-36 MONTHS** 



WORK USING THE CONTRACTOR'S BEST SKILL AND

PROVIDE KICK PLATE ON RECEPTION SIDE

PROVIDE KICK PLATE ON HALLWAY SIDE

PROVIDE KICK PLATE ON HALLWAY SIDE

PROVIDE KICK PLATE BOTH SIDES

PROVIDE KICK PLATE BOTH SIDES

PROVIDE KICK PLATE BOTH SIDES

PROVIDE KICK PLATE ON HALLWAY SIDE

PROVIDE 3/4" UNDERCUT

PROVIDE 3/4" UNDERCUT; PROVIDE KICK PLATE ON CORRIDOR SIDE

PROVIDE 3/4" UNDERCUT; PROVIDE KICK PLATE ON CORRIDOR SIDE

PROVIDE 3/4" UNDERCUT; PROVIDE KICK PLATE ON CORRIDOR SIDE

PROVIDE 3/4" UNDERCUT; PROVIDE KICK PLATE ON CORRIDOR SIDE

EXTERIOR; INSULATED; PROVIDE KICK PLATE ON CLASSROOM SIDE

EXTERIOR: INSULATED: PROVIDE KICK PLATE ON CLASSROOM SIDE

EXTERIOR; INSULATED; PROVIDE KICK PLATE ON CLASSROOM SIDE

LOW VOLTAGE ACCESS CONTROL

EXTERIOR, INSULATED

EXTERIOR; INSULATED; LOW VOLTAGE ACCESS CONTROL

PLAYGROUND GATE PROVIDED BY FENCE CONTRACTOR;

PLAYGROUND GATE PROVIDED BY FENCE CONTRACTOR;

PLAYGROUND GATE PROVIDED BY FENCE CONTRACTOR:

PLAYGROUND GATE PROVIDED BY FENCE CONTRACTOR;

PROVIDE KICK PLATE ON CORRIDOR SIDE ONLY

REF. DETAILS ON PLAYGROUND DRAWINGS

LOW VOLTAGE ACCESS CONTROL

NO ACCESS CONTROL

PROVIDE KICK PLATE ON CORRIDOR SIDE ONLY

PROVIDE KICK PLATE ON CORRIDOR SIDE ONLY

PROVIDE KICK PLATE ON CORRIDOR SIDE ONLY

PROVIDE 3/4" UNDERCUT

PROVIDE KICK PLATE BOTH SIDES

ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCTIO MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB **REMARKS** SITE SAFETY 2. GC MUST PROVIDE & INSTALL ALL PRODUCTS PER FRAMED OPENING

PLANS. ONLY SUBSTITUTED PRODUCTS NEED TO BE SUBMITTED TO THE ARCHITECT FOR APPROVAL. UNAPPROVED SUBSTITUTIONS WILL BE REPLACED A THE EXPENSE OF THE GC.

3. VERBAL REPRESENTATION HAS NO VALUE AND ALL REQUESTS TO CHANGE ANY PRODUCTS OR SPECIFICATIONS PER PLANS, MUST BE SUBMITTED IN WRITING TO THE ARCHITECT & TLE FOR APPROVAL

#### **GENERAL NOTES**

ALL DOORS AND HARDWARE SHALL COMPLY WITH ALL APPLICABLE BUILDING CODES AND ALL REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION.

REFER TO SPECIFICATIONS SECTION 087100 FOR ADDITIONAL DOOR HARDWARE INFORMATION.

CONTRACTOR TO FIELD VERIFY ALL ROUGH OPENINGS AND REPORT ANY DIFFERENCES FROM DRAWINGS IN WRITING TO THE ARCHITECT PRIOR TO ORDERING. CONTRACTOR TO PROVIDE SUBMITTALS TO ARCHITECT FOR APPROVALS PRIOR TO

GC. TO COORDINATE THROAT WIDTH ON FRAME WITH SPECIFIED WALL THICKNESS. REFER TO DRAWINGS A-012 AND A-091. DOOR THICKNESS TO BE 1 3/4" UNLESS OTHERWISE NOTED AND TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS. ALL STEEL DOORS AND FRAMES TO BE ORDERED WITH MANUFACTURER'S STANDARD. FACTORY-APPLIED COAT OF RUST-INHIBITING PRIMER COMPLYING WITH ANSI A250.10 FOR ACCEPTANCE CRITERIA. ALL EXTERIOR DOORS AND FRAMES TO COMPLY WITH THE FOLLOWING: a. NO DAYLIGHT SHALL BE VISIBLE ALONG

THE PERIMETER OF THE DOOR ONCE WEATHERSTRIPPING SEALS AND DOOR SWEEPS ARE INSTALLED AND DOOR IS FULLY CLOSED. o. REFER TO COMCHECK COMPLIANCE

MISCELLANEOUS HARDWARE REQUIRED FOR

REPORT FOR REQUIRED ENERGY VALUES. CONTRACTOR SHALL PROVIDE ALL

COMPLETE OPERATION OF EACH DOOR. REFER TO DRAWING A-122 FOR DOOR HARDWARE SCHEDULE. TEMPORARY CONSTRUCTION CORES TO BE PROVIDED BY DOOR VENDOR. G.C. SHALL ORDER FINAL CORES FROM REQUIRED LOCKSMITH (REFER TO REQUIRED VENDOR LIST ON DRAWING T-200). INSTALLATION OF

FINAL CORES AND FINAL KEYING TO BE

COORDINATED WITH "TLE". DOOR ANNUNCIATOR REQUIRED ON ALL DOOR & MECHANICAL ROOM. CONSTRUCTION FLOOR PLAN. 14. CHILD PROOF LOCKS SHOULD ALWAYS BE INSTALLED IN ROOMS WHICH HAVE OPEN

EXTERIOR DOORS, EXCEPT FRONT EXTERIOR DOOR HANDING SHALL BE AS SHOWN ON THE SPACE FOR KIDS. IF A ROOM DOESN'T HAVE ACCESS TO A CHILD AND IT HAS A LOCK ON IT IT DOESN'T REQUIRE A CHILD PROOF LOCK, IE STORAGE ROOM, LAUNDRY, OFFICE, PANTRY



ARCHITECTS AND ENGINEERS INC

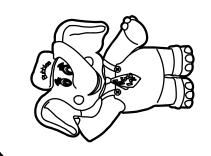
TEL: 973-994-9669 FAX: 973-994-4069 www.jarmelkizel.com Architecture

**42 OKNER PARKWAY** 

LIVINGSTON, NEW JERSEY 07039

Engineering Interior Design Implementation Services

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1	06-02-23	FOR TLE REVIEW	MBJ
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	-	REVISION	
NO.	DATE	DESCRIPTION	INT.
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PROFESSIONAL CERTIFICATION MATTHEW B. JARMEL, AIA, MBA

LICENSE NUMBER: A2017014316

Project Number:	Scale:
TLEMO22-164	AS NOTED
Drawn By:	Approved By:
OK	MBJ

DOOR SCHEDULE **AND DETAILS** 

Drawing Number:

Drawing Name:



#### **ENERGY COMPLIANCE**

OPAQUE EXTERIOR DOORS: MAXIMUM U-FACTOR = 0.61

KAWNEER ENTRANCE DOORS (>50% GLASS): U-FACTOR = 0.77 SHGC = 0.36

#### **LEGEND**

H.M. = HOLLOW METAL AL./GL. = ALUMINUM & GLASS HM./GL. = HOLLOW METAL & GLASS

#### **KEYING TYPES**

NOTE: MASTER KEY SHALL BE PROVIDED TO 'THI LEARNING EXPERIENCE' FOR EACH LOCKSET W/ KEYED FUNCTION.

- K1 SPECIFIED EXTERIOR DOORS K2 - OFFICE
- K3 PANTRY K4 - LOUNGE, LAUNDRY, ELEC. CLO., STORAGE ROOMS

		DOOR HARDWA	ARE SCH	EDULE	
ITEM TYPE	MANUF. / MODEL	REQUIREMENTS	ITEM TYPE	MANUF. / MODEL	REQUIREMENTS
HINGE	(	3 HEAVY-DUTY PER DOOR PANEL ) $1$	HARDWARE TY	PE 7 (EXTERIOR CORI	RIDOR DOORS)
DOOR STOP		WALL MOUNTED (TYPICAL) OR HINGE PIN STOP (ONLY WHERE WALL MOUNTED CANNOT BE USED)	"D" PULL	ROCKWOOD BF157A	INGRESS SIDE
SILENCER		1 PER HINGE	ELECTRIC LATCH	ASSA ABLOY HES 9600	EGRESS SIDE; SHALL NOT BE INSTALLED WITH ANY EGRESS DELAY FEATURE; CONFIGURED FOR FAIL SECURE
ITEMS NOTED ABOVE	SHALL BE PROVIDED AS PA	ART OF ALL HARDWARE TYPES; INTERIOR DOORS TO GET HINGE AND STOP SPECIFIED BELOW		OR ADAMS RITE 7800	OPERATION; REFER TO NOTES FOR HARDWARE TYPE 7 BELOW
HEAVY DUTY HINGE	HAGER HINGE BB1191 (3)	FULL MORTISE, BALL BEARING, STANDARD WEIGHT. FINISH US32D; 4.5"x4.5"	PANIC HARDWARE	ARROW S1250	EGRESS SIDE; SHALL NOT BE INSTALLED WITH ANY EGRESS DELAY FEATURE; REFER TO NOTES FOR HARDWARE
OVERHEAD STOP	ROCKWOOD OH101S	CONCEALED - STOP ONLY; MATERIAL: STAINLESS STEEL		NOT ELECTRIFIED	TYPE 7 BELOW
HARDWARE TYP	PF 1 (OFFICE)		ELECTRONIC SWIPE		INGRESS SIDE; REFER TO NOTES FOR HARDWARE TYPE 7 BELOW
CLASSROOM LEVER	ARROW MLX87	INGRESS SIDE; ADA COMPLIANT LEVER	POWER SUPPLY	ADAMS RITE PS1 OR	REFER TO NOTES FOR HARDWARE TYPE 7 BELOW
CLOSER	NORTON 1601 SERIES	EGRESS SIDE; ADJUSTABLE		SECURITRON BPS-12/24-1	
KICK PLATE	ROCKWOOD K1050	8"x34" (ONLY WHERE SPECIFIED IN SCHEDULE); STAINLESS STEEL; #6x\(\frac{5}{8}\) OVAL HEAD SHEET METAL FASTENERS	CLOSER	NORTON 1601 SERIES	EGRESS SIDE; ADJUSTABLE
KEYPAD LOCK		Y STANDALONE TOUCHSCREEN LOCK; V14 (ANSI STRIKE) STRIKE; FINISH: 26D -SATIN CHROME; LEVER SIERRA SR	KICK PLATE	ROCKWOOD K1050	8"x34" (ONLY WHERE SPECIFIED IN SCHEDULE); STAINLESS STEEL; #6 $x_8^5$ OVAL HEAD SHEET METAL FASTENERS
			DOOR SHOE	PEMKO 215APK	DOOR SHOE WITH SWEEP (OR EQUAL)
	· · · · · · · · · · · · · · · · · · ·	DOORS TO CORRIDOR) & 2A (CHILD TOILET ROOMS)	WEATHERSTRIPPING	PEMKO 319_R	PERIMETER GASKETING; WIDTH: $\frac{3}{16}$ ", PROFILE HEIGHT: 1", FINISH: C
PASSAGE LEVER	ARROW MLX01	INGRESS SIDE; ADA COMPLIANT LEVER	DOOR SWEEP		
CLOSER	NORTON 1601 SERIES	CLOSER TO BE LOCATED ON CLASSROOM SIDE OF DOOR; ADJUSTABLE; REFER TO NOTES FOR HARDWARE TYPE	NOTES FOR HARDWA	ARE TYPE 7	
KIOK DI ATE	DOCKINOOD KAOFO	2A BELOW			R ELECTRONIC EXIT DEVICE PROVIDED AND INSTALLED BY DOOR VENDOR/CONTRACTOR. CONNECTION TO ACCESS
KICK PLATE	ROCKWOOD K1050	8"x34" (ONLY WHERE SPECIFIED IN SCHEDULE); STAINLESS STEEL; #6x\frac{5}{8} OVAL HEAD SHEET METAL FASTENERS		EM BY REQUIRED SECURITY IFICATIONS FOR REQUIRED	VENDOR. SECURITY VENDOR'S CONTACT INFORMATION.
EMERGENCY LOCK	NIGHTLOCK	NIGHTLOCK LOCKDOWN 1, WITH 1 FLOOR PLATE. SEE VENDOR INFO ON SHEET T-201.	HARDWARF TYP	PE 8 (INTERIOR VEST	IBULE DOOR, RECEPTION/CORRIDOR DOOR)
•	ARE TYPE 2A AT CHILD TOILE THERWISE AS NOTED FOR I			,	INGRESS SIDE
2. OMIT NIGHTLOCK		· · · ·	ELECTRIC STRIKE	ASSA ABLOY HES 9800	EGRESS SIDE; SHALL NOT BE INSTALLED WITH ANY EGRESS DELAY FEATURE; CONFIGURED FOR FAIL SAFE
HARDWARE TYP	PES 3 (PANTRY, STAF	F LOUNGE, CLOSET, LAUNDRY) & 3A (ELECTRICAL CLOSET)		OR ADAMS RITE 7800	OPERATION; REFER TO NOTES FOR HARDWARE TYPE 8 BELOW
STOREROOM LEVER	ARROW MLX82	INGRESS SIDE; ADA COMPLIANT LEVER	PANIC HARDWARE	ADAMS RITE 8800 SERIES	EGRESS SIDE; MINIMUM 1200 LB HOLDING FORCE MANDATORY
CLOSER	NORTON 1601 SERIES	EGRESS SIDE; ADJUSTABLE		NOT ELECTRIFIED	
KICK PLATE	ROCKWOOD K1050	8"x34" (ONLY WHERE SPECIFIED IN SCHEDULE); STAINLESS STEEL; #6x\(\frac{5}{8}\) OVAL HEAD SHEET METAL FASTENERS	POWER SUPPLY	ADAMS RITE PS1 OR	REFER TO NOTES FOR HARDWARE TYPE 8 BELOW
KEYPAD LOCK	REVOLUTION, ASSA ABLO	Y STANDALONE TOUCHSCREEN LOCK; V14 (ANSI STRIKE) STRIKE; FINISH: 26D -SATIN CHROME; LEVER SIERRA SR	1	SECURITRON BPS-12/24-1	
NOTES FOR HARDWAI	NRE TYPE 3 AT PANTRY		ELECTRONIC SWIPE		INGRESS SIDE; POSITION VISIBLE FROM RECEPTION DESK; REFER TO NOTES FOR HARDWARE TYPE 8 BELOW
	NG TO 90 DEGREES.		RELEASE BUTTON		AT RECEPTION DESK BENEATH LOWER LEVEL OF RECEPTION DESK; REFER TO DRAWING A-135
			CLOSER	NORTON 1601 SERIES	RECEPTION SIDE; ADJUSTABLE
	NRE TYPE 3A AT ELECTRICAL	L CLOSET  AND FLUSH BOLT ON INACTIVE PANEL. OTHERWISE AS NOTED FOR HARDWARE TYPE 3.	NOTES FOR HARDWA	_  .RE TYPE 8	
	ROVIDE HALF DOWNT TRIVI				LINDER UNLESS KEYING IS SPECIFIED ON THE DOOR SCHEDULE.
NOTES FOR HARDWAI	ARE TYPE 3 AT CLOSET, AND	DELECTRICAL CLOSET 1		E AND POWER SUPPLY FOR M BY REQUIRED SECURITY	ELECTRONIC EXIT DEVICE PROVIDED AND INSTALLED BY DOOR VENDOR/CONTRACTOR. CONNECTION TO ACCESS VENDOR.
1. OMIT KEYPAD LO	OCKS.		3. REFER TO SPECI	FICATIONS FOR REQUIRED S	SECURITY VENDOR'S CONTACT INFORMATION.
HARDWARE TYP	PES 4 (STAFF TOILET	ROOMS)	HARDWARE TY	PE 9 (EXTERIOR VEST	TIBULE DOORS)
PRIVACY LEVER	ARROW MLX72	INGRESS SIDE; ADA COMPLIANT LEVER	STANDARD "D" PULL	KAWNEER CO-9	INGRESS SIDE; CYLINDER TYPE ARROW SFIC CYLINDER HOUSING - FINISH TO MATCH HARDWARE FINISH
CLOSER	NORTON 1601 SERIES	EGRESS SIDE; ADJUSTABLE	PANIC HARDWARE	ADAMS RITE 8600	BOTH DOORS; CONCEALED VERTICAL ROD; INTEGRAL KEY CYLINDER (SEE GENERAL NOTE 7)
KICK PLATE	ROCKWOOD K1050	8"x34" (ONLY WHERE SPECIFIED IN SCHEDULE); STAINLESS STEEL; #6x\(\frac{5}{8}\) OVAL HEAD SHEET METAL FASTENERS	CLOSER	NORTON 1601 SERIES	RECEPTION SIDE; ADJUSTABLE
HARDWARE TYP	PE 5 (TYPICAL EXTER	RIOR H.M. DOORS)	CYLINDER	ARROW SFIC	CYLINDER HOUSING - FINISH TO MATCH HARDWARE FINISH
LEVER		NO PULL HARDWARE ON INGRESS SIDE	WEATHERSTRIPPING	PEMKO 319_R	PERIMETER GASKETING; WIDTH: 3/16", PROFILE HEIGHT: 1", FINISH: C
PANIC HARDWARE	ARROW S1250	EGRESS SIDE	DOOR SWEEP		
CLOSER	NORTON 1601 SERIES	EGRESS SIDE; ADJUSTABLE	HARDWARE TYP	PE 10 (MECHANICAL F	ROOM)
DOOR SHOE	PEMKO 215APK	DOOR SHOE WITH SWEEP (OR EQUAL)	STOREROOM LEVER	· · · · · · · · · · · · · · · · · · ·	BOTH SIDES; ADA COMPLIANT LEVER; ARROW SFIC CYLINDER HOUSING, FINISH TO MATCH HARDWARE
WEATHERSTRIPPING			CLOSER	NORTON 1601 SERIES	EGRESS SIDE; ADJUSTABLE
DOOR SWEEP	1	PERIMETER GASKETING; WIDTH: 3/16", PROFILE HEIGHT: 1", FINISH: C	WEATHERSTRIPPING		
	BOCKWOOD K1050			FEMICO 319_K	PERIMETER GASKETING; WIDTH: 3/16", PROFILE HEIGHT: 1", FINISH: C
KICK PLATE	ROCKWOOD K1050	8"x34" (ONLY WHERE SPECIFIED IN SCHEDULE); STAINLESS STEEL; #6x <sub>8</sub> OVAL HEAD SHEET METAL FASTENERS	DOOR SWEEP		
	PE 6 (SPECIFIED EXT		NOTES FOR HARDWA	ARE TYPE 10	
STOREROOM LEVER		INGRESS SIDE; ADA COMPLIANT LEVER			E CATEC)
PANIC HARDWARE	ARROW S1250	EGRESS SIDE; FINISH 26D		PES 11 (6' HIGH FENC	
CLOSER	NORTON 1601 SERIES	EGRESS SIDE; ADJUSTABLE	PANIC HARDWARE	DETEX VALUE SERIES V40xEBxW; IC7R	EGRESS SIDE; WEATHERIZED PANIC BAR WITH BATTERY-POWERED ALARM AND EXTERIOR ADA LEVER HARDWARE; PROVIDE ADJUSTABLE LATCH BRACKET; RIM CYLINDER SFIC HOUSING
DOOR SHOE	PEMKO 215APK	DOOR SHOE WITH SWEEP (OR EQUAL)	NOTES FOR HARDWA	NRE TYPE 11 AT 6' HIGH GATE	
WEATHERSTRIPPING	PEMKO 319_R	PERIMETER GASKETING; WIDTH: $\frac{3}{16}$ ", PROFILE HEIGHT: 1", FINISH: C	1. NO CLOSER IS TO		DED TO ENOVOE (DIOENOVOE THE ALABA). THIS OVER DOES NOT AFFECT OF THE TOWN OF THE TWO THE TAXABLE PARTY.
DOOR SWEEP			SHALL PROVIDE		DER TO ENGAGE/DISENGAGE THE ALARM. THIS CYLINDER DOES <u>NOT</u> AFFECT OPERATION OF THE PANIC BAR. CONTRACTOF RE (KEYING TYPE K1 PER DOOR SCHEDULE) AS PART OF FINAL KEYING PROCEDURES. REFER TO GENERAL NOTE 11 ON
KICK PLATE	ROCKWOOD K1050	8"x34" (ONLY WHERE SPECIFIED IN SCHEDULE); STAINLESS STEEL; #6x\( \frac{5}{8} \) OVAL HEAD SHEET METAL FASTENERS	DRAWING A-121.		
	1	1		PES 12 (4' HIGH FENC	
			PANIC HARDWARE	DETEX VALUE SERIES	EGRESS SIDE; WEATHERIZED PANIC BAR; PROVIDE ADJUSTABLE LATCH BRACKET; RIM CYLINDER SFIC HOUSING
			NOTES EOD HADDIAM	V40xW (NO ALARM); IC7R ARE TYPE 12 AT 4' HIGH GATE	
					<u>ES</u> , OR EXTERIOR KEYING IS TO BE PROVIDED.
					,

#### SEQUENCE OF INSTALLATION

#### INTERIOR VESTIBULE DOOR:

- ALUMINUM STOREFRONT VENDOR PROVIDES DOORS AND PANIC HARDWARE FACTORY INSTALLED.
- ELECTRICIAN PROVIDES POWER SOURCE ABOVE CEILING PER KEY NOTE 10 ON E-200.
- ACCESS CONTROL VENDOR IS RESPONSIBLE FOR MAKING FINAL LOW VOLTAGE CONNECTIONS FOR KEY FOB ACCESS.

#### RECEPTION DOOR - OPTION 1

- ALUMINUM STOREFRONT VENDOR PROVIDES DOORS AND PANIC HARDWARE FACTORY INSTALLED.
- ELECTRICIAN PROVIDES POWER SOURCE ABOVE CEILING PER KEY NOTE 10 ON E-200.
- ACCESS CONTROL VENDOR IS RESPONSIBLE FOR MAKING FINAL LOW VOLTAGE CONNECTIONS AND INSTALLING THE ELECTRIC STRIKE FOR KEY FOB ACCESS.
- RECEPTION DOOR OPTION 2 (ONLY IF HOLLOW METAL DOOR IS SPECIFIED) ELECTRICIAN PROVIDES POWER SOURCE ABOVE CEILING PER KEY NOTE 10
- ACCESS CONTROL VENDOR IS RESPONSIBLE FOR MAKING FINAL LOW

VOLTAGE CONNECTIONS AND INSTALLING THE ELECTRIC STRIKE FOR KEY

- FOB ACCESS.
- PLAYGROUND DOOR ELECTRICIAN PROVIDES POWER SOURCE ABOVE CEILING PER KEY NOTE 10
- ON E-200. ACCESS CONTROL VENDOR IS RESPONSIBLE FOR INSTALLING PANIC DEVICE ELECTRIC STRIKE, AND MAKING FINAL LOW VOLTAGE CONNECTIONS FOR KEY FOB ACCESS.

#### **GENERAL NOTES**

- ALL DOORS AND HARDWARE SHALL COMPLY WITH ALL APPLICABLE BUILDING CODES AND ALL REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION.
- REFER TO SPECIFICATIONS SECTION 087100 FOR ADDITIONAL DOOR HARDWARE INFORMATION. CONTRACTOR TO PROVIDE SUBMITTALS TO ARCHITECT FOR APPROVALS PRIOR TO ORDERING.
- ALL EXTERIOR DOORS AND FRAMES TO COMPLY WITH THE FOLLOWING:
- a. NO DAYLIGHT SHALL BE VISIBLE ALONG THE PERIMETER OF THE DOOR ONCE WEATHER STRIPPING SEALS AND DOOR SWEEPS ARE INSTALLED AND DOOR IS FULLY CLOSED. b. REFER TO COMCHECK COMPLIANCE REPORT FOR REQUIRED ENERGY VALUES.
- CONTRACTOR SHALL PROVIDE ALL MISCELLANEOUS HARDWARE REQUIRED FOR COMPLETE OPERATION OF EACH DOOR.
- PANIC HARDWARE SHALL HAVE THE ACTIVATING MEMBER MOUNTED CENTERED BETWEEN A HEIGHT OF 30 INCHES MINIMUM AND 44 INCHES MAXIMUM A.F.F. GRASP TYPE DOOR KNOBS SHALL NOT BE USED. ALL PANIC BAR HARDWARE SHALL
- KEYING: ALL KEYED DOORS SHALL BE FURNISHED WITH HARDWARE COMPATIBLE WITH ARROW 7-PIN, FIGURE 8, SMALL FORMAT, FIGURE 8 INTERCHANGEABLE CORES, NO SUBSTITUTIONS WILL BE ALLOWED.
- TEMPORARY CONSTRUCTION CORES TO BE PROVIDED BY DOOR VENDOR. G.C. SHALL ORDER FINAL CORES FROM REQUIRED LOCKSMITH AND PROVIDE CYLINDERS FOR TLE CORES (REFER TO REQUIRED VENDOR LIST ON DRAWING T-200). INSTALLATION OF FINAL CORES AND FINAL KEYING TO BE COORDINATED WITH "TLE".
- ALL HARDWARE SHALL BE PROVIDED IN US26D FINISH. ALTERNATE FINISHES SHALL BE SUBMITTED TO "TLE" AND ARCHITECT FOR APPROVAL PRIOR TO ORDERING.
- 10. REFER TO DRAWING A-122 FOR DOOR HARDWARE SCHEDULE. 11. NO ALTERNATIVE HARDWARE SUBSTITUTIONS ALLOWED.

1. CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING THE CONTRACTOR'S BEST SKILL AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCTION MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB SITE SAFETY

2. GC MUST PROVIDE & INSTALL ALL PRODUCTS PER PLANS. ONLY SUBSTITUTED PRODUCTS NEED TO BE SUBMITTED TO THE ARCHITECT FOR APPROVAL. UNAPPROVED SUBSTITUTIONS WILL BE REPLACED A THE EXPENSE OF THE GC.

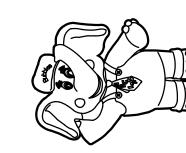
3. VERBAL REPRESENTATION HAS NO VALUE AND ALL REQUESTS TO CHANGE ANY PRODUCTS OR SPECIFICATIONS PER PLANS, MUST BE SUBMITTED IN WRITING TO THE ARCHITECT & TLE FOR APPROVAL.



ARCHITECTS AND ENGINEERS INC. 42 OKNER PARKWAY LIVINGSTON, NEW JERSEY 07039 TEL: 973-994-9669 FAX: 973-994-4069 www.jarmelkizel.com Architecture

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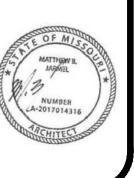
PROFESSIONAL CERTIFICATION

MATTHEW B. JARMEL, AIA, MBA LICENSE NUMBER: A2017014316

Project Number: TLEMO22-164	Scale: AS NOTED
Drawn By:	Approved By:
<b>OK</b>	MBJ

DOOR HARDWARE **SCHEDULE** 

Drawing Name:



#### EXTERIOR WINDOW SCHEDULE ELEVATION WIDTH HEIGHT TYPE FRAME RATING INSULATED WHITE 5-2" FIXED STYLE A 3'-0" VINYL TEMPERED (BY SAFETY MANUF.) GLASS CLEAR INSULATED WHITE 4'-0" 5-2" FIXED STYLE B VINYL TEMPERED (BY SAFETY MANUF.) GLASS CLEAR INSULATED WHITE STYLE C 8'-0" 5-2" FIXED VINYL TEMPERED (BY SAFETY MANUF.) GLASS CLEAR INSULATED WHITE 4'-0" 4'-2" FIXED VINYL

TEMPERED

SAFETY

GLASS

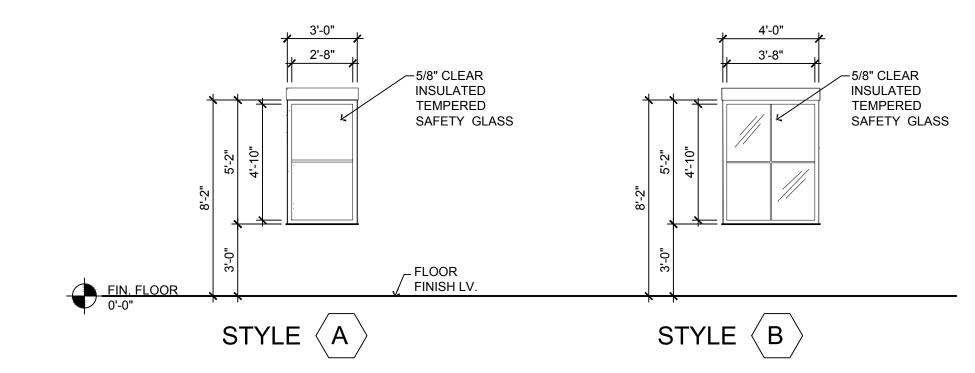
(BY

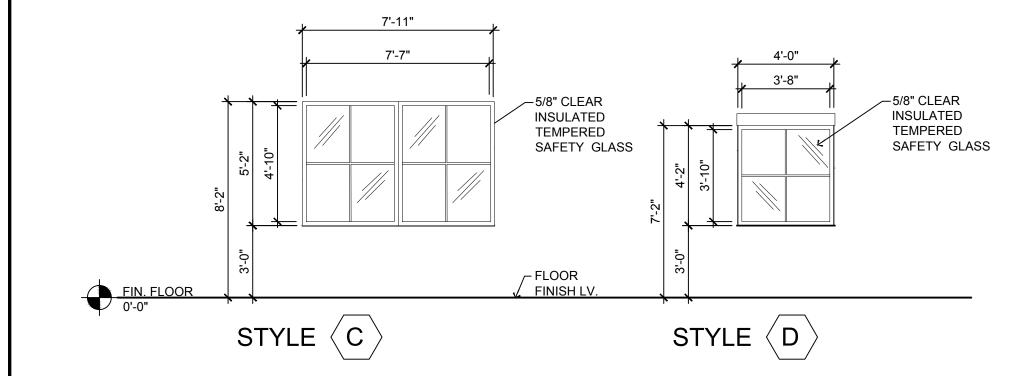
MANUF.)

- **EXTERIOR WINDOW NOTES**
- CONTRACTOR TO FIELD VERIFY ALL ROUGH OPENINGS AND REPORT ANY DISCREPANCIES TO THE ARCHITECT PRIOR TO FABRICATION AND INSTALLATION.
- 2. ALL EXTERIOR WINDOWS SHALL COMPLY WITH ALL AUTHORITIES HAVING JURISDICTION.
- 3. IF AN ALTERNATE WINDOW PRODUCT IS PROPOSED, CONTRACTOR SHALL SUBMIT WINDOW PRODUCT SPECIFICATIONS TO ARCHITECT AND TLE FOR REVIEW AND WRITTEN APPROVAL PRIOR TO ORDERING AND INSTALLATION. PRODUCT DATA/SPECIFICATIONS MUST MEET OR EXCEED THE DESIGN FACTORS PER NOTE #4 BELOW, AND THESE FACTORS MUST BE INCLUDED IN THE MANUFACTURER'S PRODUCT DATA SUBMITTED FOR REVIEW.
- 4. WINDOW SPECIFICATIONS VINYL FIXED WINDOWS
  - a. SIMONTON STORMBREAKER PLUS VINYL FIXED WINDOWS
  - b. U-FACTOR = 0.38 (MAXIMUM)
  - c. SHGC = 0.48 (MAXIMUM) d. GLASS - INSULATED AND TEMPERED
- 5. WINDOW SHALL BE INSTALLED WITH PROPER SUPPORT TO SECURE UNIT ON ALL SIDES. WINDOW SIZE TO BE COORDINATED WITH GENERAL CONTRACTOR AND/OR GLAZING CONTRACTOR. PROVIDE LIGHT GAUGE METAL FRAMING OR JAMB STIFFENERS DEPENDING ON TYPE OF CONSTRUCTION.
- 6. WINDOW PROTECTION THROUGH BUILDING COMPLETION CONTRACTOR SHALL COVER WINDOWS WITH TEMPORARY PROTECTIVE SHEATHING WHICH SHALL BE SECURED AND STRONG ENOUGH TO RESIST WIND LOADS, CONSTRUCTION MISHAPS, OR ANY OTHER UNFORESEEN CIRCUMSTANCES.
- 7. ALL WINDOWS TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
- 8. BLINDS TO BE INSTALLED AT ALL EXTERIOR WINDOWS
  - a. 1" EXTRUDED PVC (VINYL) CORDLESS

  - d. TILT OPERATION: MANUAL WITH WAND
  - SEE SPECIFICATIONS DRAWINGS FOR ADDITIONAL INFORMATION f. MOUNTED APPROX. 1" FROM FROM INTERIOR FACE OF GLASS.
- 9. REFER TO ENERGY COMPLIANCE SPECIFICATIONS ON DRAWING T-500.
- 10. REFER TO DRAWING A-081 FOR HEAD/JAMB/SILL DETAILS.

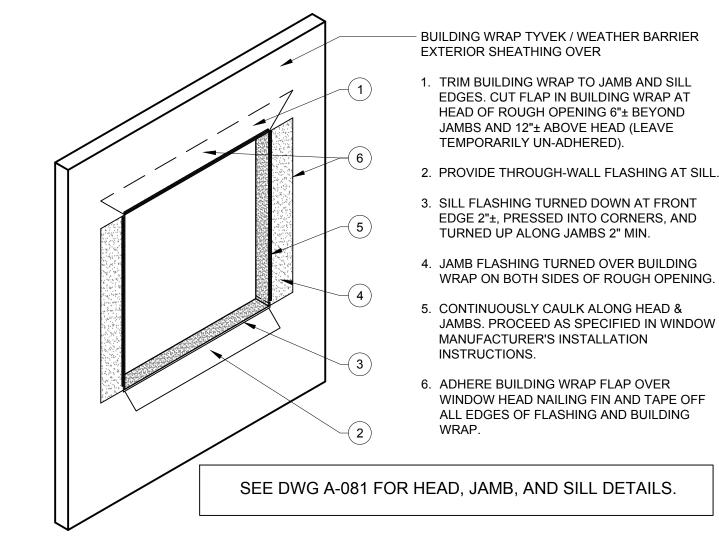
#### **EXTERIOR WINDOW ELEVATIONS**





#### EXTERIOR WINDOW DETAILS

NOTE: REFER TO DRAWING A-081 FOR HEAD/SILL/JAMB DETAILS.



## TYP. WINDOW FLASHING DETAIL

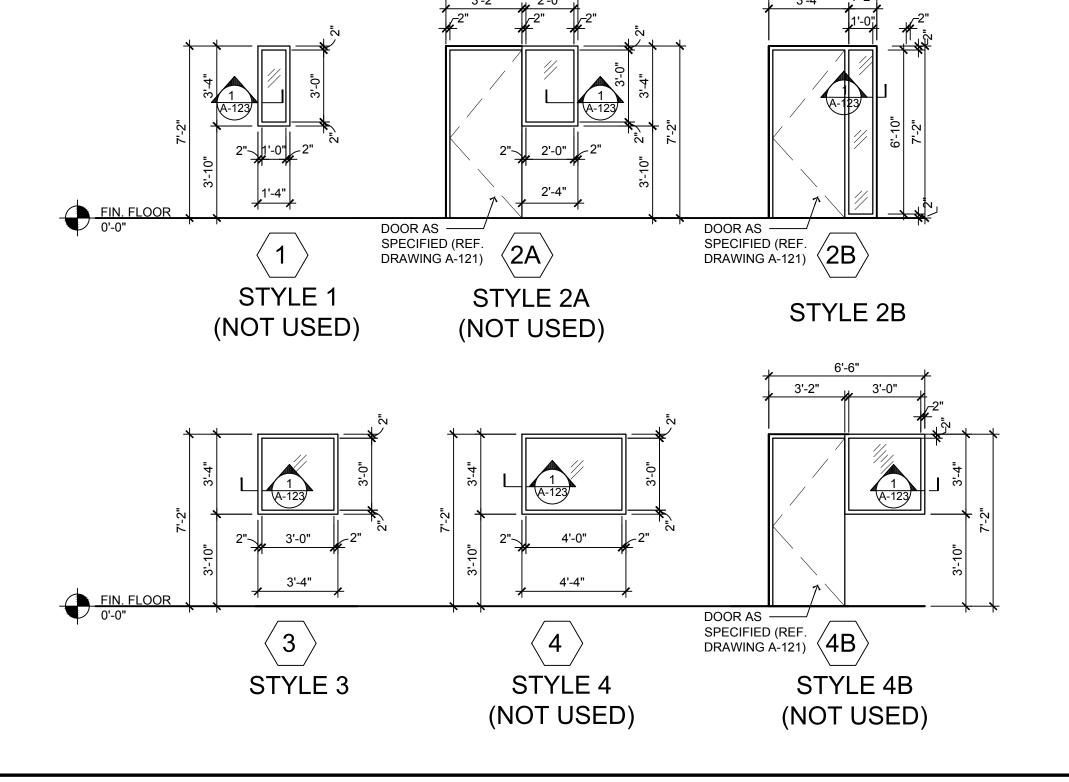
#### INTERIOR WINDOW SCHEDULE

ELEVATION TYPE	WIDTH	HEIGHT	TYPE	FRAME	FIRE RATING	GLASS	FINISH	GLASS THICK.
STYLE 1	NOT	T USED						
STYLE 2A	2'-4"	3'-4"	FIXED	НМ	N/A	CLEAR TEMPERED SAFETY GLASS	PRIME/ PAINT	1/4"
STYLE 2B	2'-2"	7'-2"	FIXED	НМ	N/A	CLEAR TEMPERED SAFETY GLASS	PRIME/ PAINT	1/4"
STYLE 3	NOT	T USED						
STYLE 4	NOT	T USED						
STYLE 4B	NOT	T USED						

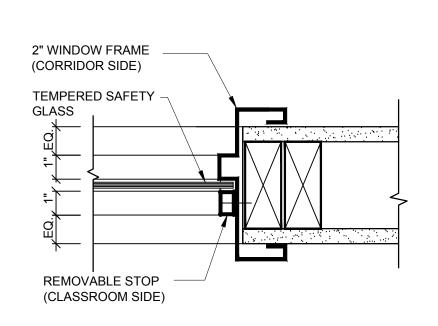
- CONTRACTOR TO FIELD VERIFY ALL ROUGH OPENINGS AND REPORT ANY DISCREPANCIES TO THE ARCHITECT PRIOR TO FABRICATION AND INSTALLATION.
- 2. ALL WINDOWS TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
- 3. ALL WINDOW FRAMES SHALL BE PAINTED PER SHEET A-042 / PAINT FINISH PLAN
- WINDOW PROTECTION THROUGH BUILDING COMPLETION CONTRACTOR SHALL COVER WINDOWS WITH TEMPORARY PROTECTIVE SHEATHING WHICH SHALL BE SECURED AND STRONG ENOUGH TO RESIST WIND LOADS, CONSTRUCTION MISHAPS, OR ANY OTHER UNFORESEEN CIRCUMSTANCES.
- BLINDS AT INTERIOR OFFICE WINDOWS (INSTALLED ON OFFICE SIDE)
  - a. 1" EXTRUDED PVC (VINYL) b. CORDLESS

  - COLOR: WHITE TILT OPERATION: MANUAL WITH WAND
  - SEE SPECIFICATIONS DRAWINGS FOR ADDITIONAL INFORMATION
  - MOUNTED APPROX. 1" FROM FROM INTERIOR FACE OF GLASS.
  - NOTE: NOT ALL WINDOW TYPES ARE USED AT EACH LOCATION. COORDINATE TYPES WITH TAGS ON CONSTRUCTION PLAN.

#### INTERIOR WINDOW ELEVATIONS



#### INTERIOR WINDOW FRAME DETAILS



JAMB/HEAD/SILL DETAIL

. CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING THE CONTRACTOR'S BEST SKILL AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCTION MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB

2. GC MUST PROVIDE & INSTALL ALL PRODUCTS PER PLANS. <u>ONLY</u> SUBSTITUTED PRODUCTS NEED TO BE SUBMITTED TO THE ARCHITECT FOR APPROVAL. UNAPPROVED SUBSTITUTIONS WILL BE REPLACED

3. VERBAL REPRESENTATION HAS NO VALUE AND ALL REQUESTS TO CHANGE ANY PRODUCTS OR SPECIFICATIONS PER PLANS, <u>MUST</u> BE SUBMITTED IN WRITING TO THE ARCHITECT & TLE FOR APPROVAL.



LIVINGSTON, NEW JERSEY 07039

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		REVISION	
NO.	DATE	DESCRIPTION	INT.

PROFESSIONAL CERTIFICATION MATTHEW B. JARMEL, AIA, MBA

LICENSE NUMBER: A2017014316

Project Number: TLEMO22-164	Scale: AS NOTED
Drawn By: <b>OK</b>	Approved By: MBJ

**SCHEDULES** 

**WINDOW** 



#### **GENERAL NOTES:**

- REFER TO SPECIFICATIONS DRAWINGS FOR APPLIANCE MAKE AND MODEL INFORMATION.
- 2. SEE ELECTRICAL DRAWINGS FOR ELECTRICAL OUTLETS AND TELEPHONE JACK LOCATIONS.
- 3. REFER TO CONSTRUCTION PLAN FOR SPECIFIC LAYOUT. PLANS AND ELEVATIONS SHOWN ARE FOR TYPICAL LAYOUTS.
- 4. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS PRIOR TO FABRICATION.
- 5. ALL SILICONE / CAULK APPLIED ON MILLWORK TO BE COLOR-MATCHING.
- 6. ALL MILLWORK SUPPLIED BY REQUIRED MILLWORK VENDOR. SEE VENDOR LIST ON DRAWING T-200.
- 7. BOOK CASES ARE TO BE 5/8" INDUSTRIAL GRADE M.D.F., WITH 100 GRAM MELAMINE ON FRONT AND BACK SHELF SIDES AND BOTTOM TO BE 5/8" M.D.F. TOP TO HAVE RADIUS CORNERS WITH A 3/4" OVERHANG IN FRONT. ALL EDGES TO BE 1 MM PVC.
- 8. PROVIDE 1mm PVC EDGING WHERE NOTED (REFER TO DETAIL 6/A-131). PVC EDGING COLOR TO BE GREY.
- 9. ALL BOOKSHELVES, COMPUTER TABLES, AND CUBBIES TO BE BUILT USING HEAVY DUTY COUNTER-SUNK MECHANICAL FASTENERS.
- 10. REFER TO MILLWORK SCHEDULE FOR MILLWORK QUANTITIES.
- 11. WALL MOUNTED CUBBIES WITH 100 GRAM MELAMINE FINISH. ADDITIONAL ELECTRICAL OUTLET SHALL BE MOUNTED ABOVE 1 CUBBY UNIT IN EACH ROOM.
- 12. BLOCKING TO BE INSTALLED PER MILLWORK SHOP DRAWINGS.
- 13. FOR STATES THAT REQUIRE COTS, FRP TO BE INSTALLED AT WALL(S) WHERE THEY WILL BE STACKED.

#### **KEY NOTES:**

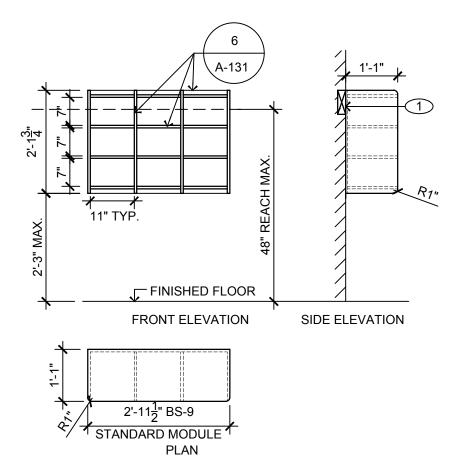
PROVIDE WALL BLOCKING AT ALL WALL ATTACHMENTS

#### MILLWORK FINISH AND COUNTER HEIGHTS SCHEDULE ROOM TYPES VARY SITE COUNTER PLASTIC LAMINATE COUNTER & EDGE BANDING COLOR TO SITE (REF. A-011) HEIGHT TYPICAL DIAPER CHANGING COUNTERS ALL INFANT ROOMS ALL TWADDLER ROOMS WILSONART LOLITE #Y0737-60 (MATTE) PREPPERS B WILSONART SUNNY SIDE UP #13089-60 ALL TODDLER ROOMS (ALL) PREPPERS A WILSONART LEMON LIME #Y0359-60 (MATTE) VALL PRE-K/K ROOMS TYPICAL ART COUNTERS MAKE BELIEVE BLVD. WILSONART LOLITE #Y0737-60 (MATTE) PREPPERS B PRESCHOOL 2B, 3B, & 4 WILSONART SUNNY SIDE UP #13089-60 (ALL) PRESCHOOL 1, 1A, 3, & 3A WILSONART LEMON LIME #Y0359-60 (MATTE) √PRESCHOOL 1B, 2, & 2A ALL PRE-K/K ROOMS TYPICAL PANTRY COUNTERS ALL INFANT ROOMS WILSONART LOLITE #Y0737-60 (MATTE) ALL TWADDLER ROOMS STAFF LOUNGE 2'-10" (ALL) WILSONART SUNNY SIDE UP #13089-60 ) ALL TODDLER ROOMS (MATTE) MAIN PANTRY RECEPTION COUNTERS REF. DTLS. WILSONART LOLITE #Y0737-60 (MATTE) RECEPTION ON DWG. A-134

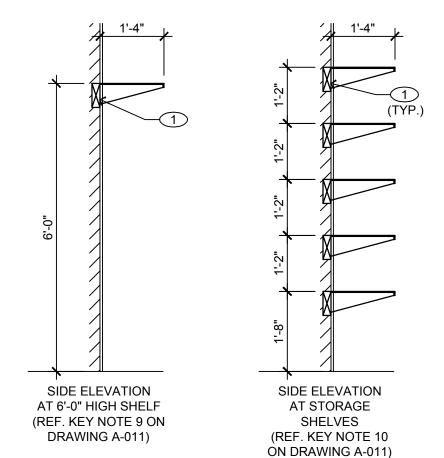
NOTE:
ALL MILLWORK TO BE PROVIDED AND INSTALLED
BY THE REQUIRED VENDOR BELOW. NO
SUBSTITUTIONS ALLOWED.
RODGERS WADE
1401 SW 3RD STREET
PARIS, TX 75460
PHONE: 903-783-3680
FAX: 903-739-2505
teamtle@rodgerswade.com

#### MILLWORK SCHEDULE

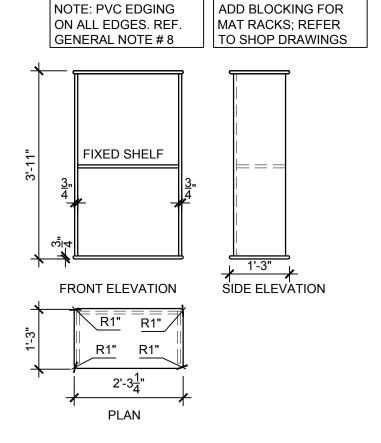
ROOM NAME	ROOM NUMBER	NO. OF CHILDREN	BIN CUBBIES	MAT RACKS	SHORT BOOKCASE	TALL BOOKCASE	COMPUTER TABLE
INFANT A	133	8	8	-	2	-	-
INFANT B	131	8	8	-	2	-	-
TODDLER A	108	8	10	1	2	3	-
TODDLER B	110	7	8	2	2	3	-
TWADDLERS	112	16	18	2	3	3	-
PREPPERS	105	16	18	2	-	5	1
PRESCHOOL #1	116	20	22	2	-	6	1
PRESCHOOL #2	124	20	22	2	-	6	1
PRESCHOOL #3	127	18	20	2	-	6	1
PRE-K/K	114	16	18	2	-	6	1
MBB/PRE-SCHOOL	121	20	22	-	-	2	-



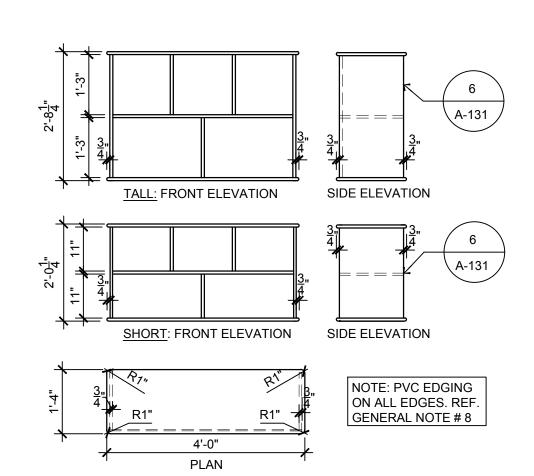




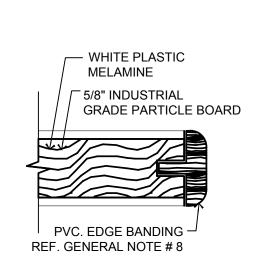




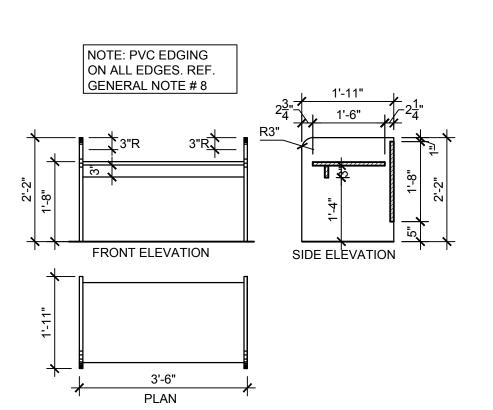








6 EDGE BAND DETAIL
SCALE: N.T.S.



1. CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING THE CONTRACTOR'S BEST SKILL AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCTION MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB

 GC MUST PROVIDE & INSTALL ALL PRODUCTS PER PLANS. <u>ONLY</u> SUBSTITUTED PRODUCTS NEED TO BE SUBMITTED TO THE ARCHITECT FOR APPROVAL.

UNAPPROVED SUBSTITUTIONS WILL BE REPLACED A

3. VERBAL REPRESENTATION HAS NO VALUE AND ALL

SPECIFICATIONS PER PLANS, <u>MUST</u> BE SUBMITTED IN WRITING TO THE ARCHITECT & TLE FOR APPROVAL.

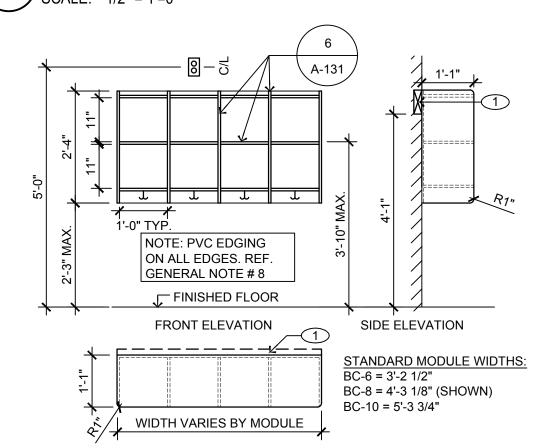
REQUESTS TO CHANGE ANY PRODUCTS OR

SITE SAFETY

THE EXPENSE OF THE GC.

3 COMP. DETAIL

SCALE: 1/2" = 1'=0"

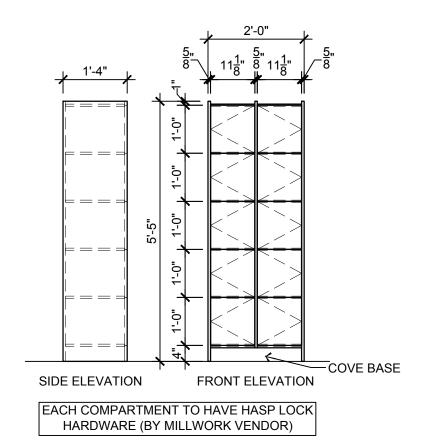


NOTES:

1. REFER TO A-011 AND A-043 FOR TOTAL NUMBER OF BIN CUBBIES TO BE PROVIDED IN EACH CLASSROOM.

2. MILLWORK VENDOR SHALL DETERMINE COMBINATION OF STANDARD MODULE SIZES NEEDED TO PROVIDE SPECIFIED TOTAL NUMBER OF CUBBIES.

## BIN CUBBIES FOR CLASSROOMS SCALE: 1/2" = 1'-0"



1 STAFF LOUNGE LOCKERS
SCALE: N.T.S.



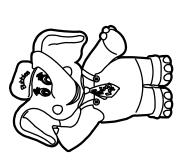
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2 06-14-23 FOR PERMIT MBJ

REVISION

NO. DATE DESCRIPTION INT.

PROFESSIONAL CERTIFICATION

MATTHEW B. JARMEL, AIA, MBA

**LICENSE NUMBER: A2017014316** 

Project Number: Scale:
TLEMO22-164 AS NOTED

Drawn By: Approved By:
--- MBJ

CUBBIES ELEVATIONS
AND DETAILS

Drawing Number:



#### **GENERAL NOTES:**

- 1. ALL BASE AND UPPER CABINETS TO BE WHITE PLASTIC LAMINATE. INTERIORS TO BE WHITE MELAMINE.
- 2. ALL CABINETS SHALL HAVE FINGER PULLS.
- 3. ALL LOWER LEVEL CABINET DOORS AND DRAWERS TO HAVE CHILD SAFETY LOCKS, EXCEPT FOR MAIN PANTRY RECEPTION AREA AND STAFF LOUNGE. PROVIDE TOT LOCK MAGNETS (2 PER ROOM). REFER TO KEY NOTE 17 FOR ADDITIONAL LOCATIONS.
- 4. SEE SPECIFICATIONS DRAWINGS FOR APPLIANCE MAKE AND MODEL INFORMATION.
- 5. ALL COUNTERS TO BE PLASTIC LAMINATE. SEE MILLWORK FINISH SCHEDULE FOR COLOR AND HEIGHT OF THE COUNTERS.
- 6. NO GROMMET HOLES IN CABINETS FOR ELECTRIC OUTLETS; OUTLETS ARE TO BE PLACED ABOVE THE COUNTERTOP.
- 7. SEE ELECTRICAL DRAWINGS FOR ELECTRICAL OUTLETS AND TELEPHONE JACK LOCATIONS.
- 8. REFER TO CONSTRUCTION PLAN FOR SPECIFIC LAYOUT. PLANS AND ELEVATIONS SHOWN ARE FOR TYPICAL LAYOUTS.
- 9. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS PRIOR TO FABRICATION.
- 10. ALL SILICONE / CAULK APPLIED ON MILLWORK TO BE COLOR-MATCHING.
- 11. ALL MILLWORK SUPPLIED BY REQUIRED MILLWORK VENDOR. SEE T-200.
- 12. PROVIDE 1mm PVC EDGING WHERE NOTED (REFER TO DETAIL 6/A-131). PVC EDGING COLOR TO MATCH SPECIFIED COUNTERTOP COLOR.
- 13. REFER TO DRAWING A-131 FOR QUANTITIES OF ALL FURNITURE AND MILLWORK.
- 14. ALL PANTRY COUNTERS AT CLASSROOMS, ART COUNTERS, DIAPER COUNTERS, AND ALL COUNTERS PROVIDED IN CLASSROOMS SHALL HAVE 2" RADIUS CORNERS.
- 15. BLOCKING TO BE INSTALLED PER MILLWORK SHOP DRAWINGS.

#### **KEY NOTES:**

- 1 SOAP DISPENSER, SEE DRAWING A-111 FOR ACCESSORY SCHEDULE.
- 2 PAPER TOWEL DISPENSER, SEE DRAWING A-111 FOR ACCESSORY SCHEDULE.
  - PARIS, TX 75460 PHONE: 903-783-3680
  - MILLWORK FINISH AND COUNTER HEIGHTS SCHEDULE FOR COLOR AND HEIGHT.
- 4 SINK PANEL (FIXED W/NO DAILY ACCESS).

3 PLASTIC LAMINATE COUNTER TOP. SEE

- 5 4" COVED VINYL WALL BASE TOE KICK. 6 8" PLASTIC LAMINATE GUARD WITH LIP ROUND CORNER TO PREVENT CHILDREN FROM FALLING. COLOR TO MATCH

COUNTERTOP.

- 7 RADIUS CORNER
- 8 SINK. SEE PLUMBING DWGS P-100.
- 9 NOT USED
- 10) NOT USED
- (11) FINISH CEILING LINE.
- (12) REFRIGERATOR. SEE SPECIFICATIONS DRAWINGS FOR MAKE AND MODEL.
- (13) 4" PLASTIC LAMINATE BACKSPLASH. COLOR TO MATCH COUNTERTOP.
- (14) MICROWAVE OUTLETS TO BE LOCATED ABOVE THE COUNTER.
- (15) NOT USED
- (16) PROVIDE BLOCKING AT ALL CUBBIES, CABINETS, ETC. REFER TO DTL. 6/A-132.
- (17) TOT LOCK TO BE PROVIDED ON LOWER CABINET DOORS AND DRAWERS, EXCEPT FOR TEACHER'S LOUNGE. REFER ALSO TO GENERAL NOTE 3.

ALL MILLWORK TO BE PROVIDED AND INSTALLED BY THE REQUIRED VENDOR BELOW. NO SUBSTITUTIONS ALLOWED. RODGERS WADE

3'-0" HOLD

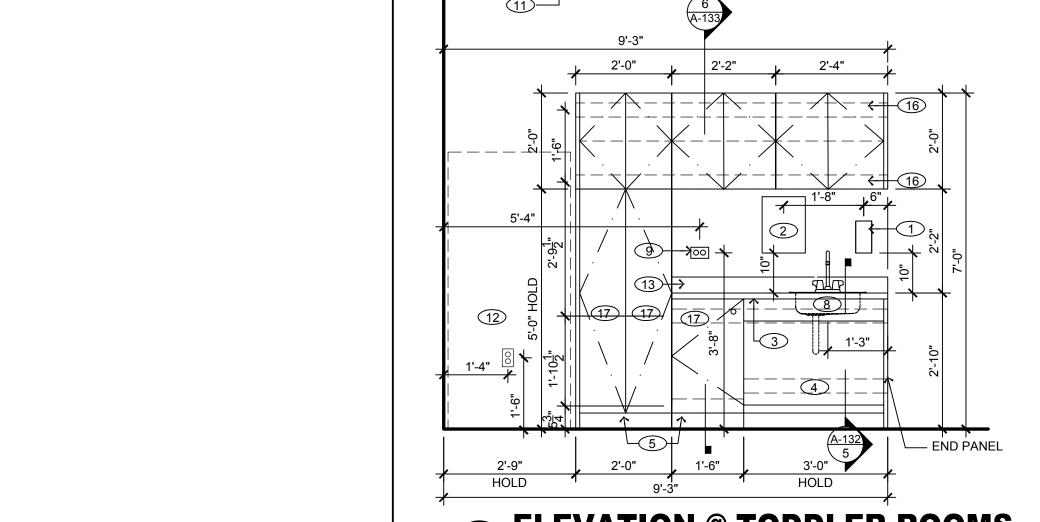
4'-0"

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

END PANEL-

3'-0" HOLD

1401 SW 3RD STREET ATTN: CATE SMITH, PROJECT COORDINATOR FAX: 903-739-2505 teamtle@rodgerswade.com



ELEVATION @ TODDLER ROOMS

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

. CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING THE CONTRACTOR'S BEST SKILL AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCTION

MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB

2. GC MUST PROVIDE & INSTALL ALL PRODUCTS PER

PLANS. ONLY SUBSTITUTED PRODUCTS NEED TO BE

UNAPPROVED SUBSTITUTIONS WILL BE REPLACED

3. VERBAL REPRESENTATION HAS NO VALUE AND ALL

SPECIFICATIONS PER PLANS, MUST BE SUBMITTED IN

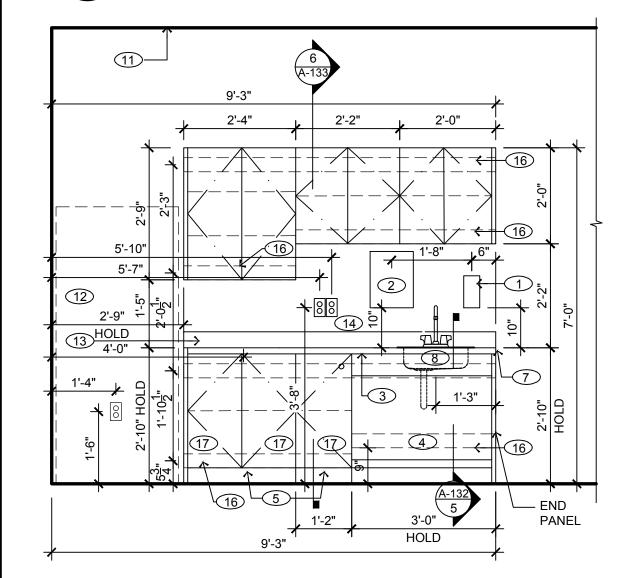
WRITING TO THE ARCHITECT & TLE FOR APPROVAL.

SUBMITTED TO THE ARCHITECT FOR APPROVAL.

REQUESTS TO CHANGE ANY PRODUCTS OR

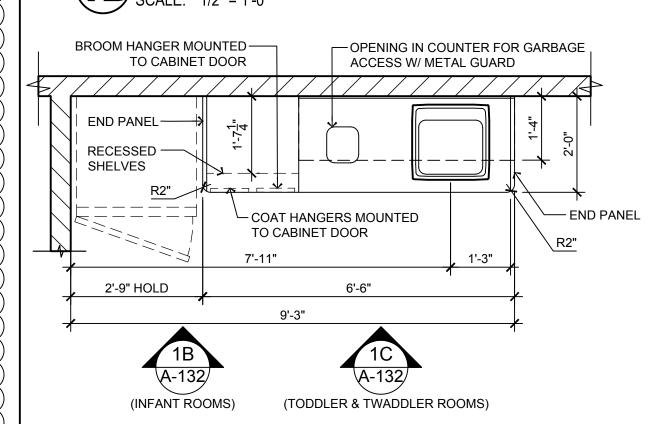
SITE SAFETY

THE EXPENSE OF THE GC.



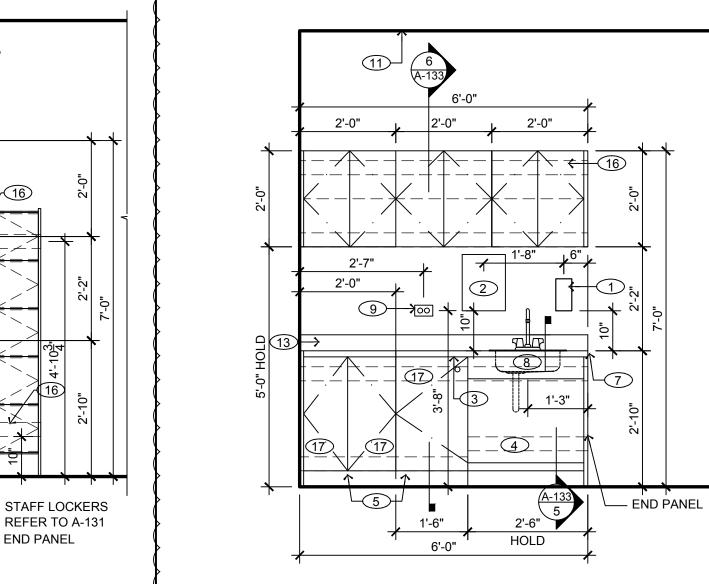
ELEVATION @ INFANT ROOMS

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

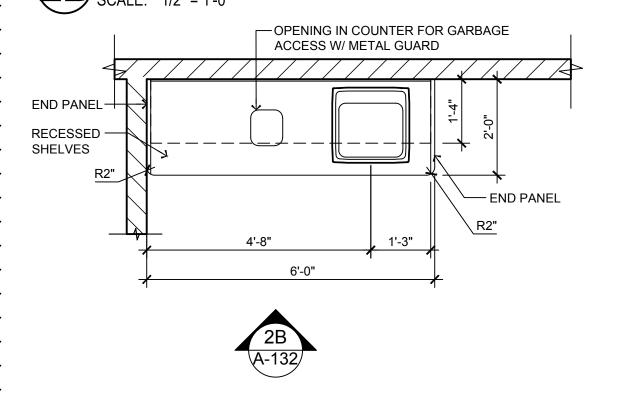


**ENLARGED PANTRY PLAN AT** CLASSROOMS

PANTRY DETAILS @ **INFANT & TODDLER** 



**ELEVATION @ TWADDLER ROOMS** 



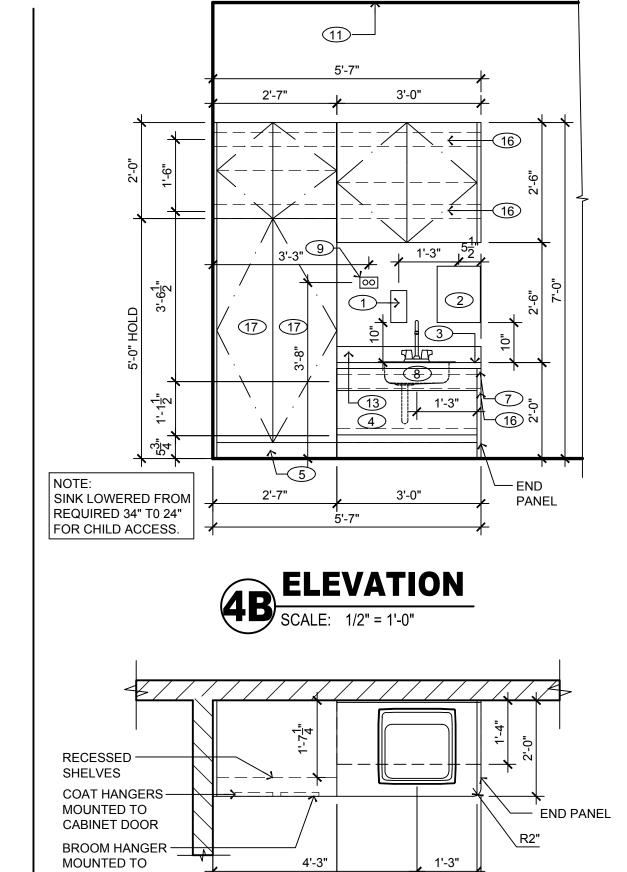
**ENLARGED PANTRY PLAN AT** CLASSROOMS

STAFF LOUNGE
SCALE: 1/2" = 1'-0"

PANTRY DETAILS @ TWADDLER

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

A-132



CABINET DOOR

**ENLARGED ART COUNTER PLAN** 

ART COUNTER DET. AT PREPPERS, PRESCHOOL, PRE K-K & M.B.B.

PANTRY DETAILS @ STAFF LOUNGE

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

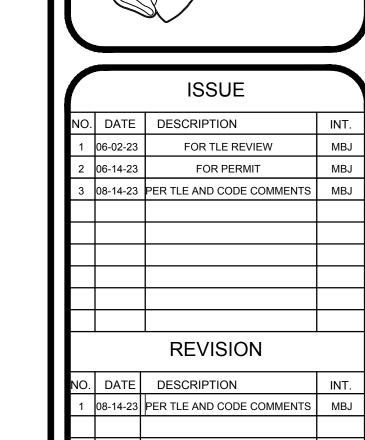
**ENLARGED PANTRY PLAN AT** 

LOCKERS

A-131

- END PANEL

REFER TO



ARCHITECTS AND ENGINEERS INC

42 OKNER PARKWAY

LIVINGSTON, NEW JERSEY 07039

TEL: 973-994-9669

FAX: 973-994-4069 www.jarmelkizel.com

Architecture

Engineering

Interior Design

Implementation Services

:ADI Y EI

PROFESSIONAL CERTIFICATION

MATTHEW B. JARMEL, AIA, MBA

LICENSE NUMBER: A2017014316

	Project Number:	Scale:	
	TLEMO22-164	AS NOTED	
	Drawn By:	Approved By:	
	ОК	MBJ	
Dra	wing Name:		

**MILLWORK ELEVATIONS AND DETAILS** 



#### **GENERAL NOTES:**

- 1. ALL BASE AND UPPER CABINETS TO BE WHITE PLASTIC LAMINATE. INTERIORS TO BE WHITE MELAMINE.
- 2. ALL CABINETS SHALL HAVE FINGER PULLS.
- 3. ALL LOWER LEVEL CABINET DOORS AND DRAWERS TO HAVE CHILD SAFETY LOCKS, EXCEPT FOR MAIN PANTRY RECEPTION AREA AND STAFF LOUNGE. PROVIDE TOT LOCK MAGNETS (2 PER ROOM). REFER TO KEY NOTE 17 FOR ADDITIONAL LOCATIONS.
- 4. SEE SPECIFICATIONS DRAWINGS FOR APPLIANCE MAKE AND MODEL INFORMATION.
- 5. ALL COUNTERS TO BE PLASTIC LAMINATE. SEE MILLWORK FINISH SCHEDULE FOR COLOR AND HEIGHT OF THE COUNTERS.
- 6. NO GROMMET HOLES IN CABINETS FOR ELECTRIC OUTLETS; OUTLETS ARE TO BE PLACED ABOVE THE COUNTERTOP.
- 7. SEE ELECTRICAL DRAWINGS FOR ELECTRICAL OUTLETS AND TELEPHONE JACK LOCATIONS.
- 8. REFER TO CONSTRUCTION PLAN FOR SPECIFIC LAYOUT. PLANS AND ELEVATIONS SHOWN ARE FOR TYPICAL LAYOUTS.
- 9. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS PRIOR TO FABRICATION.
- 10. ALL SILICONE / CAULK APPLIED ON MILLWORK TO BE COLOR-MATCHING.
- 11. ALL MILLWORK SUPPLIED BY REQUIRED MILLWORK VENDOR. SEE T-200.
- 12. PROVIDE 1mm PVC EDGING WHERE NOTED (REFER TO DETAIL 6/A-131). PVC EDGING COLOR TO MATCH SPECIFIED COUNTERTOP COLOR.
- 13. REFER TO DRAWING A-043 FOR QUANTITIES AND LOCATIONS OF ALL FURNITURE AND MILLWORK.
- 14. ALL PANTRY COUNTERS AT CLASSROOMS, ART COUNTERS, DIAPER COUNTERS, AND ALL COUNTERS PROVIDED IN CLASSROOMS SHALL HAVE 2" RADIUS

#### **KEY NOTES:**

- 1 SOAP DISPENSER, SEE DRAWING A-111 FOR ACCESSORY SCHEDULE.
- 2 PAPER TOWEL DISPENSER, SEE DRAWING A-111 FOR ACCESSORY SCHEDULE.
- 3 PLASTIC LAMINATE COUNTER TOP. SEE MILLWORK FINISH AND COUNTER HEIGHTS SCHEDULE FOR COLOR AND HEIGHT.
- 4 SINK PANEL (FIXED W/NO DAILY ACCESS).
- 5 4" COVED VINYL WALL BASE TOE KICK.
- 6 8" PLASTIC LAMINATE GUARD WITH LIP ROUND CORNER TO PREVENT CHILDREN FROM FALLING. COLOR TO MATCH COUNTERTOP.
- 7 RADIUS CORNER
- 8 SINK. SEE PLUMBING DWGS P-100.
- 9 NOT USED
- (10) MICROWAVE ON COUNTER. SEE SPECIFICATIONS DRAWINGS FOR MAKE
- (11) FINISH CEILING LINE.
- (12) REFRIGERATOR. SEE SPECIFICATIONS DRAWINGS FOR MAKE AND MODEL.
- (13) 4" PLASTIC LAMINATE BACKSPLASH. COLOR TO MATCH COUNTERTOP.
- (14) MICROWAVE OUTLETS TO BE LOCATED ABOVE THE COUNTER.
- (15) NOT USED
- (16) PROVIDE BLOCKING AT ALL CUBBIES, CABINETS, ETC. REFER TO DTL. 6/A-133.
- (17) TOT LOCK TO BE PROVIDED ON LOWER CABINET DOORS AND DRAWERS, EXCEPT FOR TEACHER'S LOUNGE. REFER ALSO TO GENERAL NOTE 3.

ALL MILLWORK TO BE PROVIDED AND INSTALLED BY THE REQUIRED VENDOR BELOW. NO SUBSTITUTIONS ALLOWED. RODGERS WADE 1401 SW 3RD STREET PARIS, TX 75460 ATTN: CATE SMITH, PROJECT COORDINATOR

PHONE: 903-783-3680 FAX: 903-739-2505 teamtle@rodgerswade.com

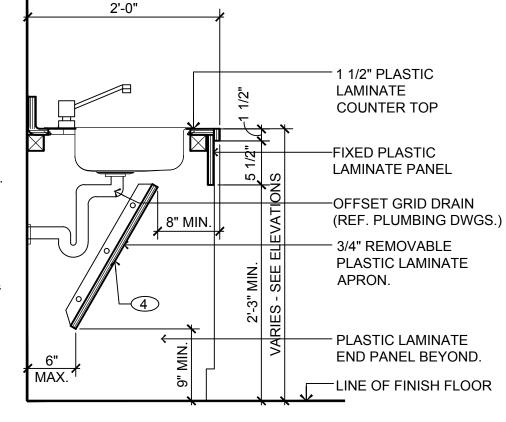
INTERIOR, CONCEALED SELF CLOSING HINGES AND PULLS TO MATCH LAMINATE DOORS. SHELVES-ADJUSTABLE 2 ½"X4" HARDWOOD BLOCKING AS REQUIRED. 90" AFF -LINE OF GYP. BD. PARTITION WALL FINISH PER A-042 1'-4" -3/4" THICK PLASTIC LAMINATE BACK MELAMINE SHELF ON ADJUSTABLE RECESSED TRACK. OMIT SHELF AT BASE CABINETS WITH GARBAGE RECEPTACLE (SEE DETAIL 1 THIS -DRAWER ON 3/4 EXTENSION GLIDES. -3/4" PLASTIC LAMINATE BASE CABINETS AND DRAWERS W/ WHITE MELAMINE INTERIOR, CONCEALED SELF CLOSING HINGES AND DOOR & DRAWER PULLS TO MATCH LAMINATE DOORS. - 4" COVED VINYL WALL BASE ON TOE KICK. FINISHED FLOOR.

3/4"PLASTIC LAMINATE OVERHEAD

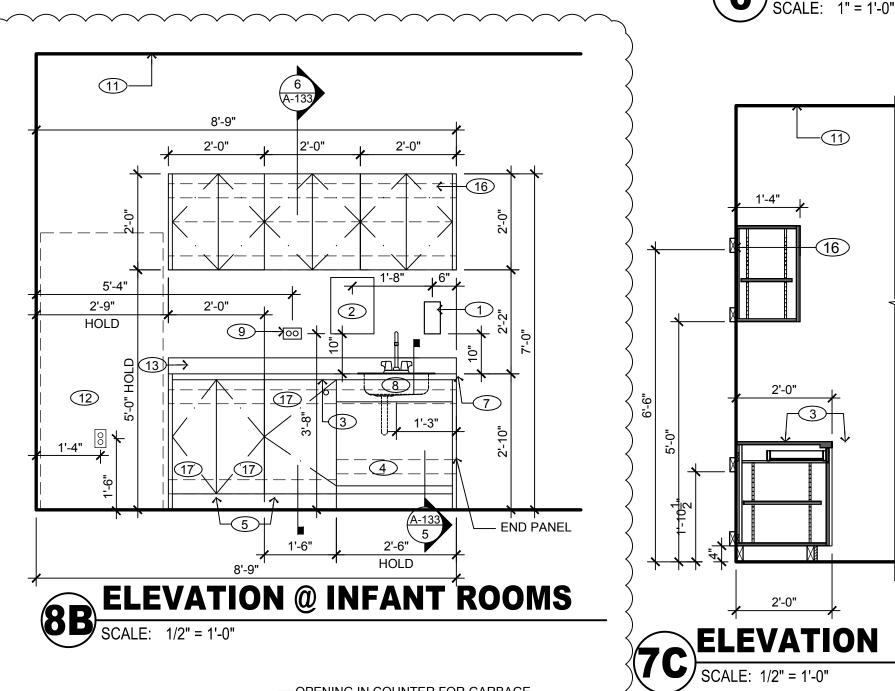
CABINETS W/ WHITE MELAMINE

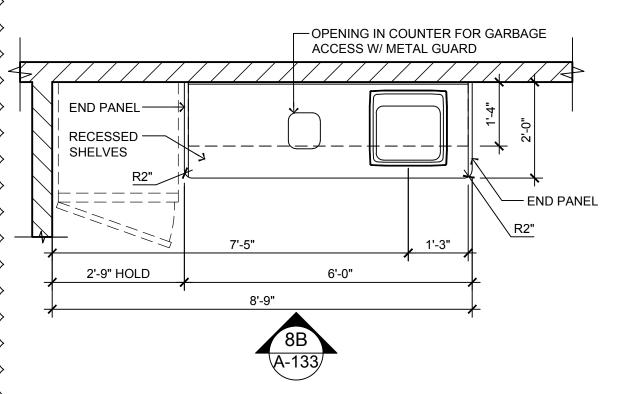
### **SECTION @ CLASSROOM** 6 MILLWORK

-(11)



#### **SECTION @ CLASSROOM** ADA SINK

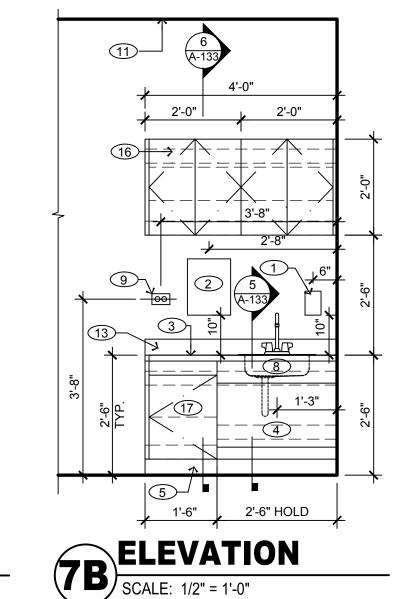


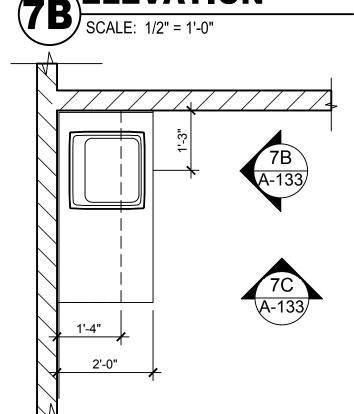


**ENLARGED PANTRY PLAN AT** SCALE: 1/2" = 1'-0"

PANTRY DETAILS @ TODDLER

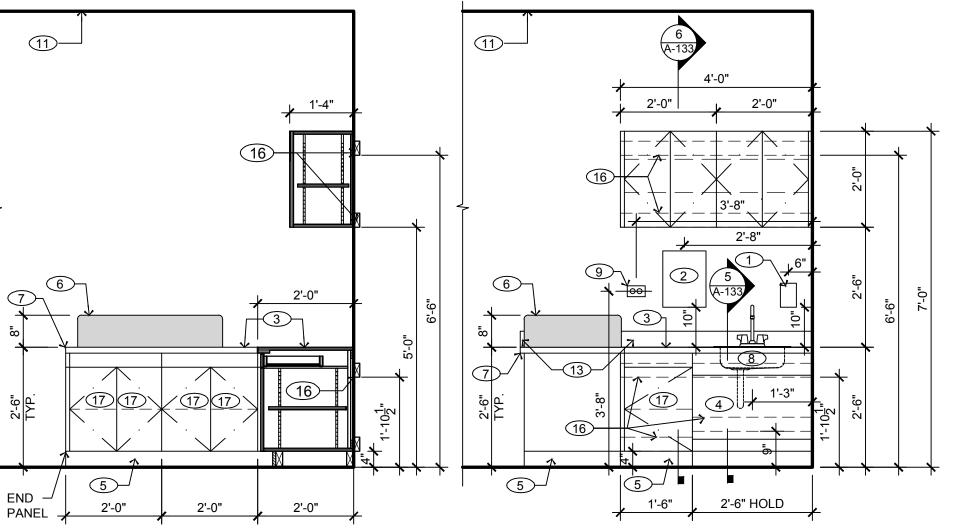
SCALE: 1/2" = 1'-0"



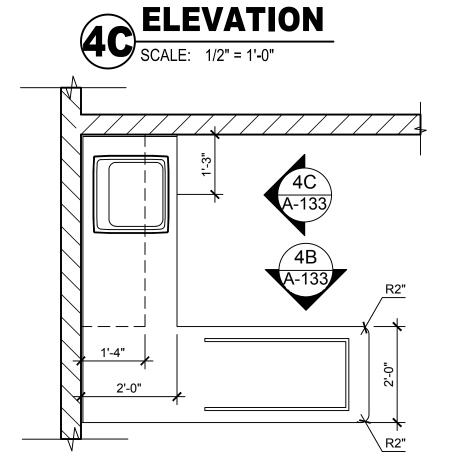




DIAPER CLEAN STATION @ PRE K-K



ELEVATION
SCALE: 1/2"



ENLARGED PLAN

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

DIAPER COUNTER DET. @ INFANT, **TODDLER, TWADDLER & PREPPER** 

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SPECIFICATIONS PER PLANS, MUST BE SUBMITTED IN

WRITING TO THE ARCHITECT & TLE FOR APPROVAL.

REQUESTS TO CHANGE ANY PRODUCTS OR

SUBMITTED TO THE ARCHITECT FOR APPROVAL.

SITE SAFETY

THE EXPENSE OF THE GC.

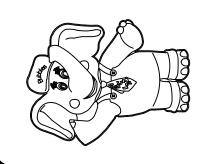
TEL: 973-994-9669 FAX: 973-994-4069 www.jarmelkizel.com Architecture

42 OKNER PARKWAY

LIVINGSTON, NEW JERSEY 07039

Engineering Interior Design Implementation Services

ADEM'Y EDUC



NO. DATE DESCRIPTION REVISION IO. DATE DESCRIPTION

PROFESSIONAL CERTIFICATION MATTHEW B. JARMEL, AIA, MBA LICENSE NUMBER: A2017014316

**AS NOTED** TLEMO22-164 Drawn By:

**MILLWORK ELEVATIONS AND DETAILS** 

A-133





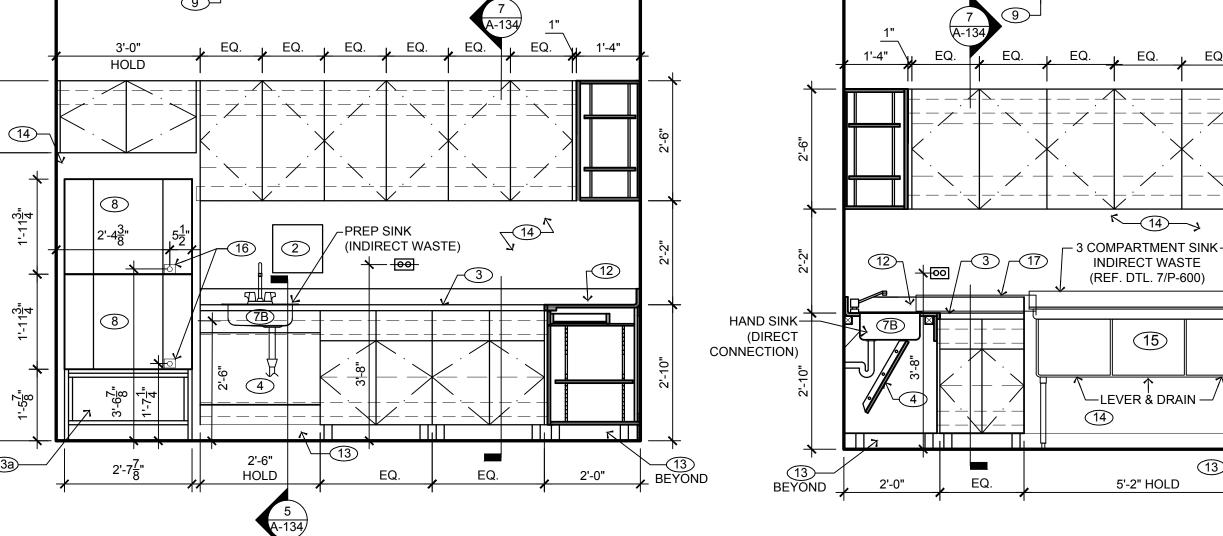
- FIXTURE SIZES PRIOR TO MILLWORK
- 4. BLOCKING TO BE INSTALLED PER MILLWORK

2'-0"

- 3 SEE DRAWING A-131, MILLWORK FINISH AND
- COUNTER HEIGHTS SCHEDULE.
- 5 NOT USED
- 6 PROVIDE A TELEPHONE JACK. 5'-6" HEIGHT A.F.F.
- (7A) HAND SINK WITH COUNTER-MOUNTED SPLASH GUARDS. PROVIDE DIRECT DRAIN CONNECTION. REFER TO PLUMBING DWGS P-100.
- 7B) FOOD PREP SINK. PROVIDE INDIRECT DRAIN
- 8 ELECTRIC CONVECTION OVEN (SUPPLIED AND
- 10 REFRIGERATOR (SUPPLIED AND INSTALLED BY G.C.)
- REFER TO SPECIFICATIONS.
- COUNTERTOP COLOR.
- 6" QUARRY BASE, SEE FINISH PLAN FOR SPECIFICATIONS.
- (14) WHITE FRP PANELS ON WALLS (TO TOP OF CABINETS ONLY).
- 16) PROVIDE OUTLETS FOR CONVECTION OVENS.
- THAT THEY WILL ANGLE INTO SINK AND HAVE PROVIDE ONE ON EACH SIDE.
- 18 NOT USED
- FOOD PREP SINK AND 3-COMPARTMENT SINK ONLY. PROVIDE DIRECT CONNECTION AT PANTRY HAND SINK.

ALL MILLWORK TO BE PROVIDED AND INSTALLED BY THE REQUIRED VENDOR BELOW. NO SUBSTITUTIONS ALLOWED. RODGERS WADE 1401 SW 3RD STREET PARIS, TX 75460 Attn: Cate Smith, Project Coordinator Ph: 903-783-3680 Fax:903-739-2505 teamtle@rodgerswade.com

## 9 EQ. (INDIRECT WASTE) 2



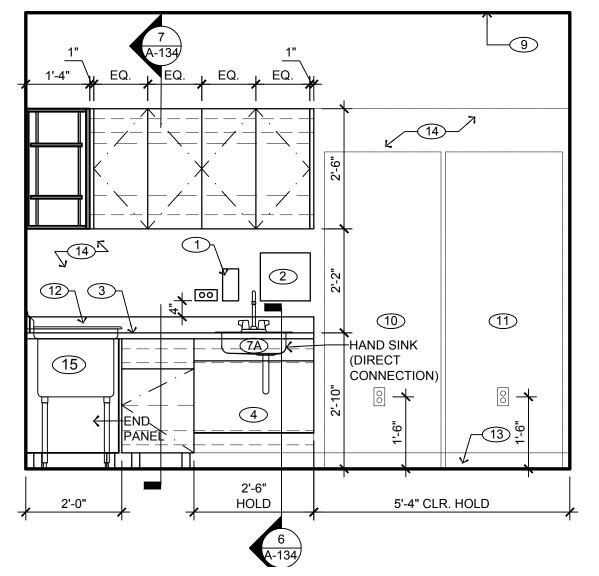
## ELEVATION AT PANTRY SCALE: 1/2" = 1'-0"

2'-0"

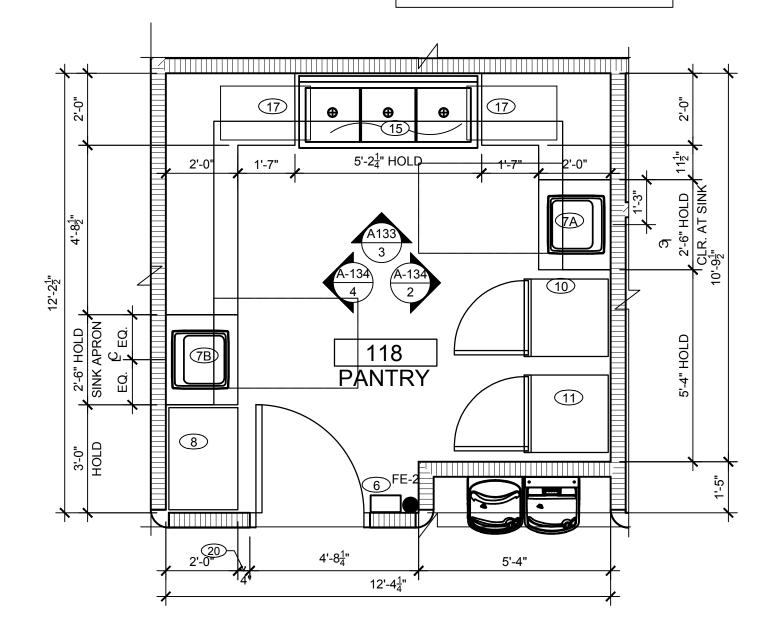
## 3 ELEVATION AT PANTRY SCALE: 1/2" = 1'-0"

15

5'-2" HOLD



**ELEVATION AT PANTRY** 





- FABRICATION.
- 3. LIMIT DOOR SWING TO 90 DEGREES.
- SHOP DRAWINGS AND AS INDICATED ON A-134
- A-111 FOR ACCESSORY SCHEDULE.
- 4 SINK PANEL (FIXED W/NO DAILY ACCESS).

- CONNECTION. REFER TO PLUMBING DWGS P-100.
- INSTALLED BY G.C.). REFER TO SPECIFICATIONS.
- 9 FINISH CEILING LINE.
- REFER TO SPECIFICATIONS.
- 11) FREEZER (SUPPLIED AND INSTALLED BY G.C.)
- 4" PLASTIC LAMINATE BACK SPLASH MATCH TO
- (13a) STAINLESS STEEL BASE STAND.
- THREE COMPARTMENT SINK. PROVIDE INDIRECT CONNECTIONS. SEE PLUMBING DRAWING P-100.
- 17) PROVIDE AERO NON-NSF DRAINBOARDS STAINLESS STEEL MODEL4D-1830. WITH STAINLESS STEEL FEET SO PROTECTIVE BOTTOM SO COUNTER DOESN'T SCRATCH.
- (19) INDIRECT CONNECTIONS SHALL BE PROVIDED AT PANTRY
- (20) HOLD DIMENSION FOR MINIMUM OF 4" FROM FACE OF MILLWORK TO DOOR FOR CLEARANCE FOR DOOR CLOSER

FOR PERMIT REVISION DESCRIPTION

ARCHITECTS AND ENGINEERS INC.

42 OKNER PARKWAY

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FAX: 973-994-4069

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NO. DATE DESCRIPTION

FOR TLE REVIEW

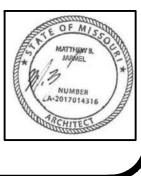
PROFESSIONAL CERTIFICATION MATTHEW B. JARMEL, AIA, MBA

LICENSE NUMBER: A2017014316

Project Number:	Scale:
TLEMO22-164	AS NOTED
Drawn By:	Approved By:
ОК	MBJ
Drawing Name:	

**PANTRY ELEVATIONS AND DETAILS** 

A-134





-3/4"PLASTIC LAMINATE OVERHEAD

CABINETS W/ WHITE MELAMINE

CLOSING HINGES AND PULLS TO

 $-2\frac{1}{2}$ "X4" FRT HARDWOOD BLOCKING

-3/4" THICK PLASTIC LAMINATE BACK

-DRAWER ON 3/4 EXTENSION GLIDES.

-3/4" PLASTIC LAMINATE BASE CABINETS

INTERIOR, CONCEALED SELF CLOSING

HINGES AND DOOR & DRAWER PULLS

-MELAMINE SHELF ON ADJUSTABLE

TO MATCH LAMINATE DOORS.

- 6" COVED QUARRY TILE BASE

- 6" STAINLESS STEEL LEGS

RECESSED TRACK.

FINISHED FLOOR

1 1/2" PLASTIC

COUNTER TOP

-FIXED PLASTIC

LAMINATE PANEL

3/4" REMOVABLE

PLASTIC LAMINATE

PLASTIC LAMINATE

END PANEL BEYOND.

LINE OF FINISH FLOOR

LAMINATE

AND DRAWERS W/ WHITE MELAMINE

-LINE OF GYP. BD. PARTITION

WALL FINISH PER A-042

INTERIOR, CONCEALED SELF-

MATCH LAMINATE DOORS.

SHELVES-ADJUSTABLE

-3/4" MELAMINE

AS REQUIRED

SPLASH

2'-0"

MILLWORK SECTION AT PANTRY

SCALE: 1" = 1'-0"

2'-0"



SECTION AT PANTRY ADA PREP SINK

SCALE: 1" = 1'-0"

1 1/2" PLASTIC

**COUNTER TOP** 

-FIXED PLASTIC

LAMINATE PANEL

- 3/4" REMOVABLE

APRON.

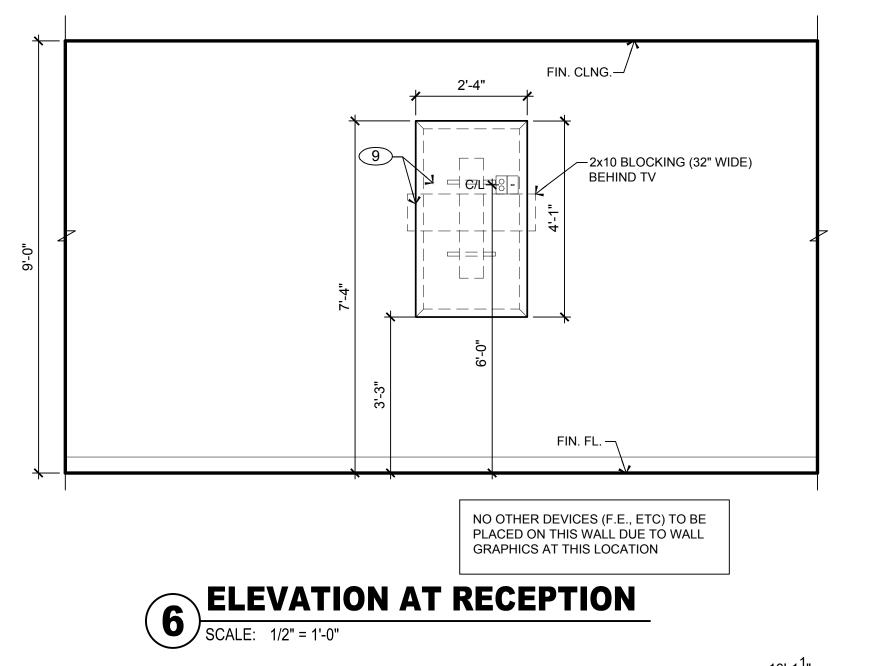
PLASTIC LAMINATE

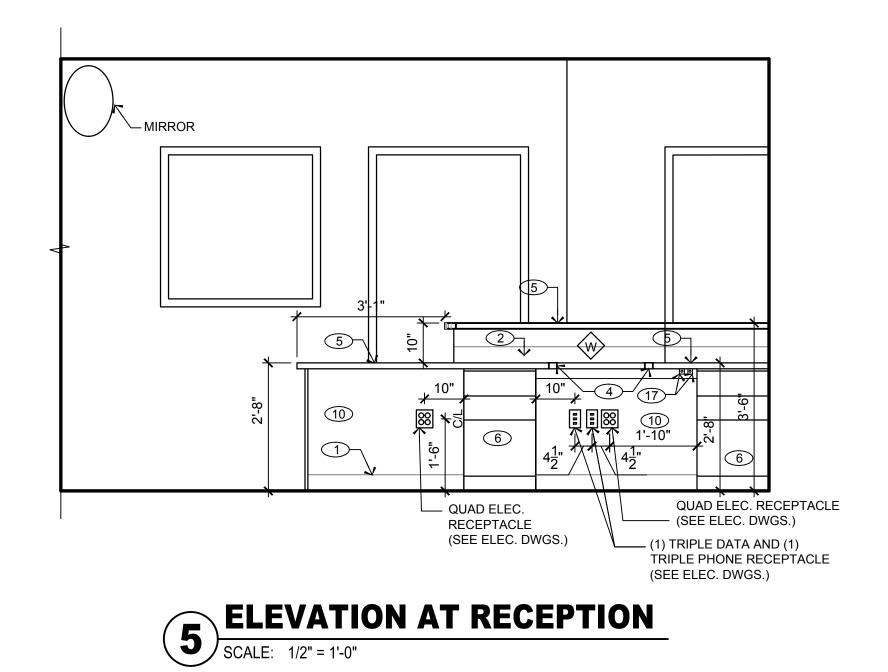
- PLASTIC LAMINATE

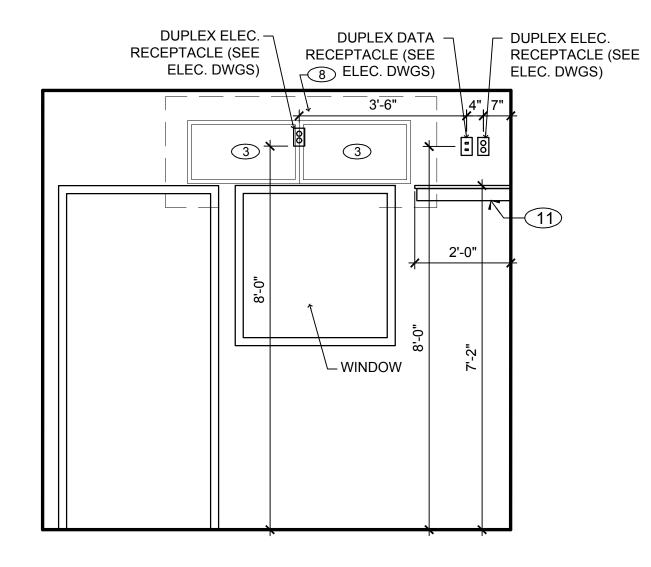
END PANEL BEYOND.

LINE OF FINISH FLOOR

LAMINATE







**ELEVATION AT OFFICE** 

**ISOLATION** 

104

103

 $\lceil 15 \rceil$ 

**VESTIBULE** 

100

6'-3 $\frac{1}{4}$ " HOLD

9'-10"

L\_(13)

**RECEPTION** 

101

**OFFICE** 

CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING THE CONTRACTOR'S BEST SKILL AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCTION MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB

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THE EXPENSE OF THE GC. 3. VERBAL REPRESENTATION HAS NO VALUE AND ALL REQUESTS TO CHANGE ANY PRODUCTS OR

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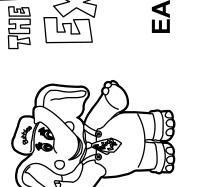
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# ACADEMY OF RLY EDUCATION



## ISSUE NO. DATE DESCRIPTION FOR TLE REVIEW FOR PERMIT REVISION DESCRIPTION

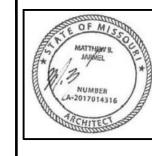
PROFESSIONAL CERTIFICATION MATTHEW B. JARMEL, AIA, MBA

LICENSE NUMBER: A2017014316

Project Number: TLEMO22-164	Scale: AS NOTED
Drawn By: <b>OK</b>	Approved By: <b>MBJ</b>

**RECEPTION AREA ELEVATIONS AND** 

**DETAILS** 



ALL MILLWORK TO BE PROVIDED AND INSTALLED BY THE REQUIRED VENDOR BELOW. NO SUBSTITUTIONS ALLOWED.

#### **GENERAL NOTES:**

RODGERS WADE 1401 SW 3RD STREET

PARIS, TX 75460

PHONE: 903-783-3680

teamtle@rodgerswade.com

FAX: 903-739-2505

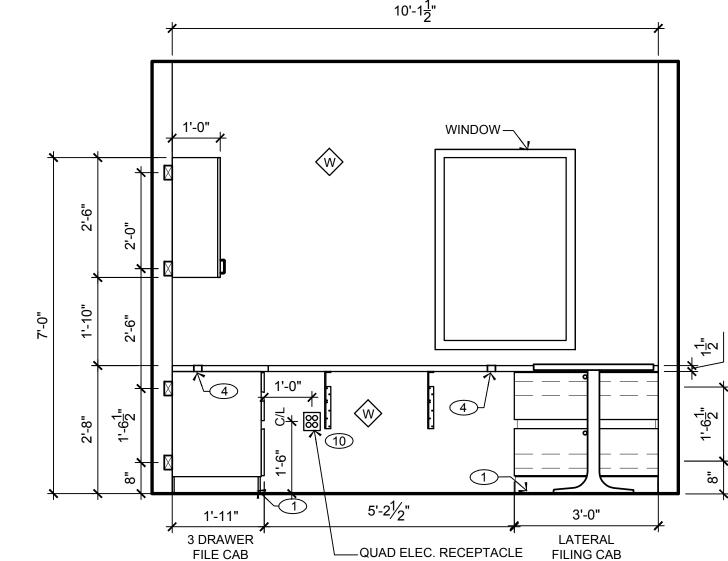
1. SEE DRAWING A-131 FOR GENERAL NOTES

ATTN: Cate Smith, Project Coordinator

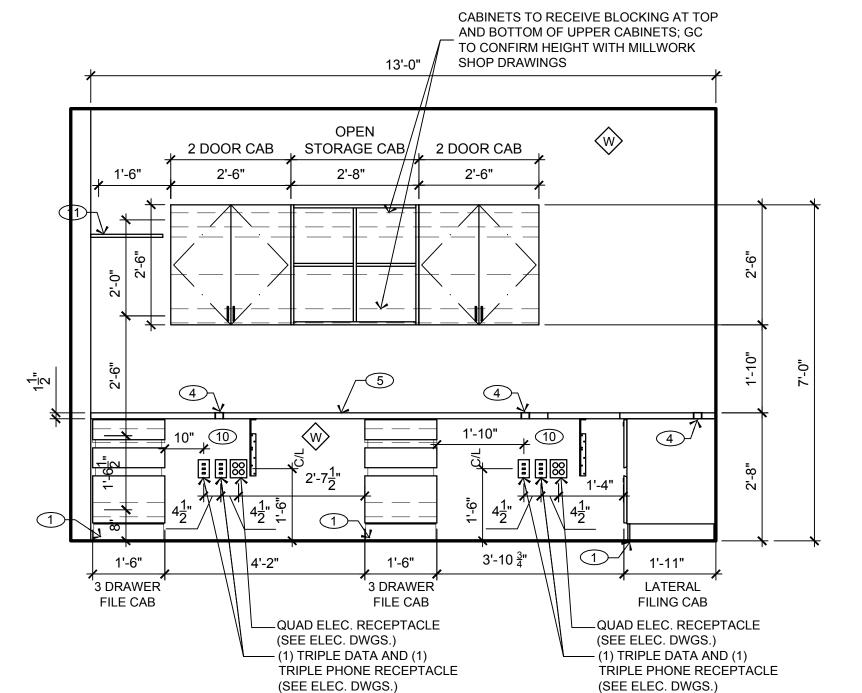
- 2. CONTRACTOR TO COORDINATE ALL PLUMBING FIXTURE SIZES PRIOR TO MILLWORK FABRICATION.
- 3. RUBBER BUMPERS ARE REQUIRED ON ALL DOORS TOP & BOTTOM
- 4. BLOCKING TO BE INSTALLED PER MILLWORK SHOP DRAWINGS.

#### **KEY NOTES:**

- 1) 4" PLASTIC LAMINATE TOE KICK ON CABINETS.
- 2 4" PLASTIC LAMINATE BACKSPLASH. COLOR TO MATCH COUNTERTOP.
- (2) 32" MONITORS TO BE COORDINATED WITH SECURITY VENDOR. SEE SPECIFICATION. MONITORS TO BE MOUNTED SIDE BY SIDE AND BOTTOM TO BE EVEN W/ TOP OF WINDOW FRAME.
- 4 2" GROMMET HOLE WITH INSERTS AT LOWER COUNTER.
- 4a) 2" DESK GROMMET HOLES IN OFFICE DESK (REFER TO MILLWORK SHOP DRAWINGS FOR DETAILS).
- 5 PLASTIC LAMINATE COUNTER/DESK. SEE MILLWORK FINISH AND COUNTER HEIGHTS SCHEDULE ON DRAWING A-131.
- 6 DESK PEDESTAL
- 7 COPIER/PRINTER BY TLE
- 8 2"x10" BLOCKING BEHIND MONITORS. BLOCKING TO BE LOCATED FLUSH WITH BOTTOM OF OUTLET AND CENTERED ON OUTLET.
- 9 55" LOBBY BOARD/RECEPTION TV PROVIDED THROUGH CDW. TV TO BE MOUNTED VERTICALLY AT 60" AFF TO C.L. (39" AFF TO BOTTOM, 88" AFF TO TOP) WITH FLUSH-MOUNT, NON-TILT BRACKET APPROVED FOR MOUNTING IN VERTICAL ORIENTATION. PROVIDE (1) DUPLEX RECEPTACLE AND (1) DATA RECEPTACLE AT 72" AFF TO C.L. PROVIDE 2x10 BLOCKING (32" WIDE) BEHIND TV, FLUSH WITH BOTTOM OF OUTLET, AND CENTERED ON OUTLET REFER TO SPECIFICATIONS DRAWINGS FOR ADDITIONAL AUDIO VISUAL EQUIPMENT INFORMATION.
- 10) DESK SUPPORT BY MILLWORK VENDOR. MILLWORK VENDOR SHALL COORDINATE FINAL RECEPTACLE LOCATIONS WITH ELECTRICIAN.
- 11) DVR SHELF. **DVR SHOULD NOT BE INSTALLED WITH HARD DRIVE AND** CAMERAS CANNOT RECORD.
- (12) KEY FOB. REFER TO ELECTRICAL DRAWINGS.
- (13) CALL BOX. REFER TO ELECTRICAL DRAWINGS.
- 14) BURGLAR ALARM KEYPAD. REFER TO ELECTRICAL DRAWINGS.
- 15 FIRE ALARM CONTROL PANEL. REFER TO ELECTRICAL DRAWINGS.
- (16) UNDER-COUNTER DRAWERS ARE INSTALLED BY MILLWORK VENDOR AND ARE INTEGRATED INTO THE COUNTER
- (17) DOOR RELEASE BUTTONS BY SECURITY VENDOR. ONE BUTTON SHALL OPERATE DOOR REC-1 AND THE OTHER SHALL OPERATE DOOR VES-2.



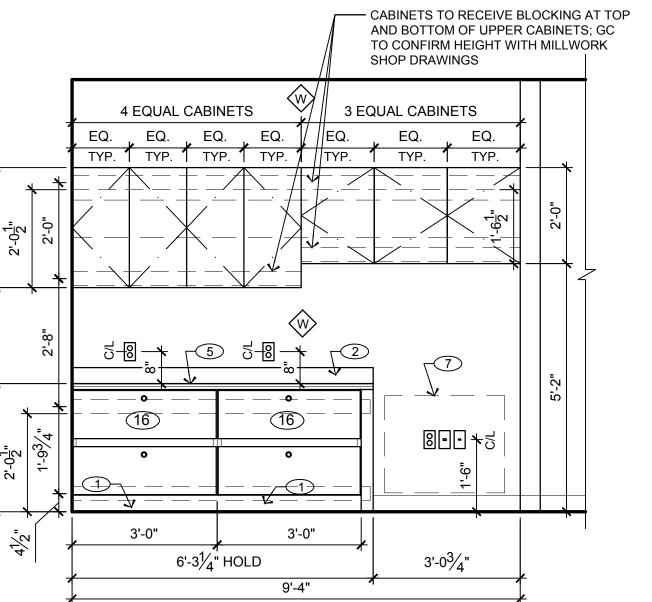
#### (SEE ELEC. DWGS.) **7** ELEVATION AT OFFICE

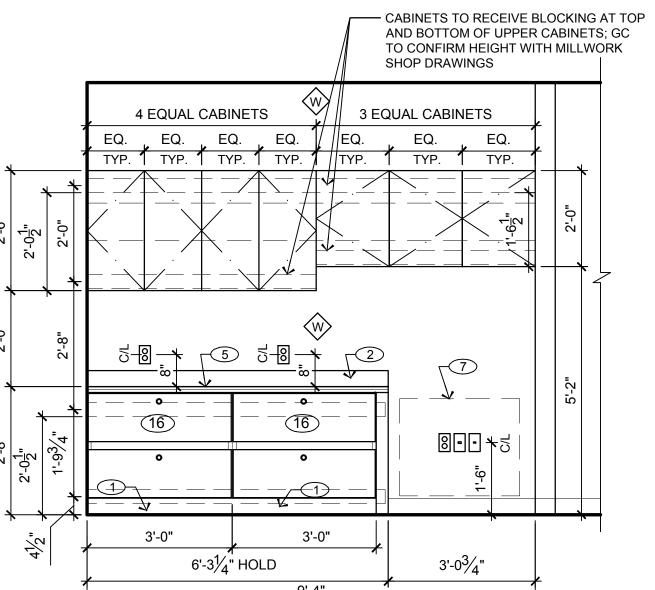


- SEE DETAIL 3 THIS PAGE-W PAINT

9'-4"

## **LEVATION AT RECEPTION**





**ELEVATION AT RECEPTION** SCALE: 1/2" = 1'-0"

PLAN AT RECEPTION & OFFICE

### **ELEVATION AT OFFICE**

ENTRY BLOCKS PAINT SCHEDULE SHERWIN WILLIAMS AREA COLOR NAME STOCK NO. BLOCKS 1 & A SW 6841 BLOCKS YELLOW | CONFIDENT YELLOW | SW 6911 2 & B BLOCKS 3 & C ORANGE OSAGE ORANGE SW 6980 BLOCKS 4 & D GREEN SW 6921 ELECTRIC LIME

ENTRY BLOCKS PAINT SCHEDULE NOTES:

WHITE

COLUMN WRAP

LETTERING SHALL BE WHITE ACRYLIC (PROVIDED BY SIGN VENDOR).

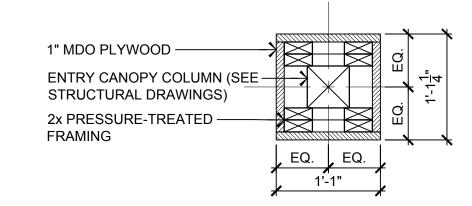
ALABASTER

PAINT FINISH (COLORS SPECIFIED ABOVE)

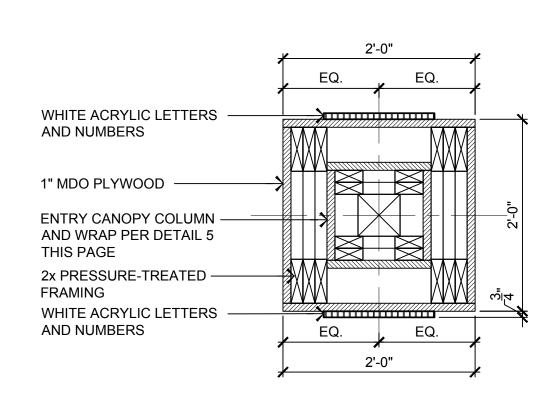
ALL PAINTED SURFACES SHALL RECEIVE MINIMUM ONE COAT OF PRIMER AND TWO COATS OF PAINT (UNLESS FACTORY PRIMED BY THE MANUFACTURER). REFER TO SPECIFICATIONS DRAWINGS FOR ADDITIONAL INFORMATION. NO SUBSTITUTIONS WILL BE ALLOWED.

SW 7008

NOTE: FINISH OUT COLUMNS TO MATCH THE BUILDING.



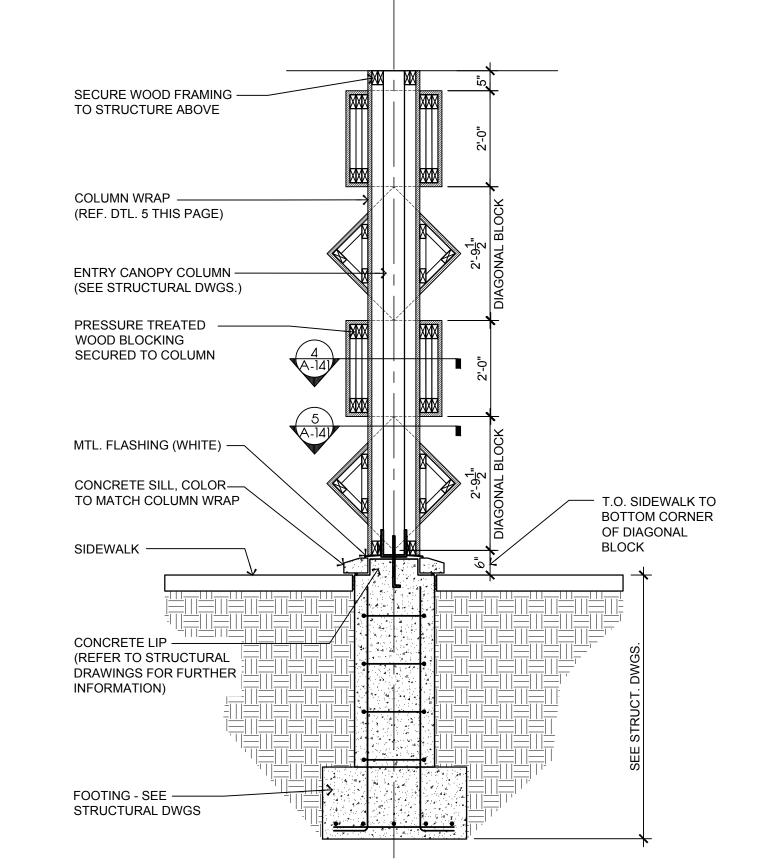




ABC-123 BLOCKS TO HAVE FLAT NUMBERS AND LETTERS AS SHOWN ON THE INTERIOR AND EXTERIOR SIDES OF THE COLUMN

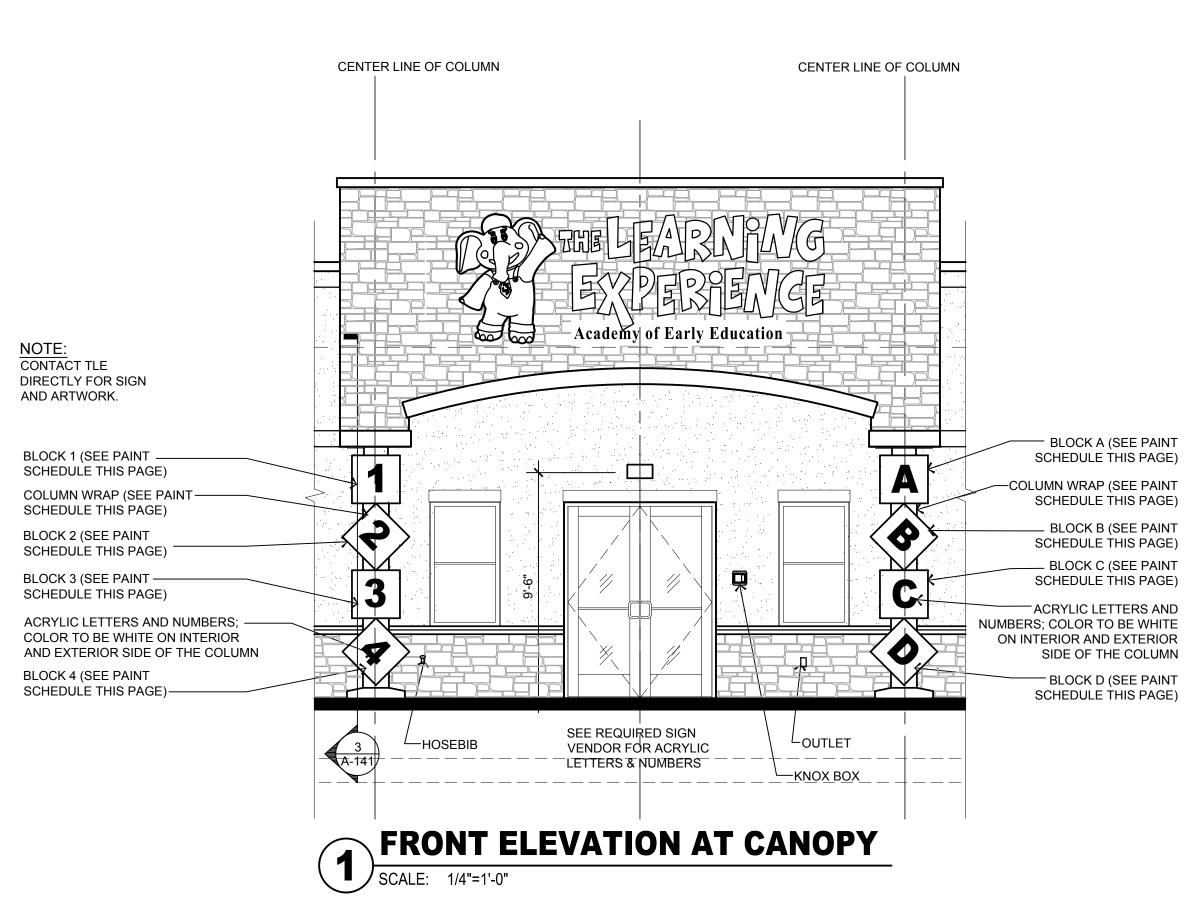
**BUILDING BLOCKS** PLAN DETAILS

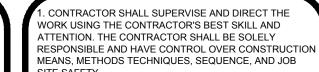
SCALE: 1"=1'-0"



## SECTION THROUGH COLUMN COVER SCALE: 1/2"=1'-0"







2. GC MUST PROVIDE & INSTALL ALL PRODUCTS PER PLANS. <u>ONLY</u> SUBSTITUTED PRODUCTS NEED TO BE SUBMITTED TO THE ARCHITECT FOR APPROVAL. UNAPPROVED SUBSTITUTIONS WILL BE REPLACED THE EXPENSE OF THE GC.

3. VERBAL REPRESENTATION HAS NO VALUE AND ALL REQUESTS TO CHANGE ANY PRODUCTS OR SPECIFICATIONS PER PLANS, <u>MUST</u> BE SUBMITTED IN WRITING TO THE ARCHITECT & TLE FOR APPROVAL.

- BLOCK A (SEE PAINT

-BLOCK B (SEE PAINT

BLOCK C (SEE PAINT

BLOCK D (SEE PAINT SCHEDULE THIS PAGE)

SIDE ELEVATION AT CANOPY

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

SCHEDULE THIS PAGE)

SCHEDULE THIS PAGE)

SCHEDULE THIS PAGE)

COLUMN WRAP (SEE PAINT SCHEDULE THIS PAGE)



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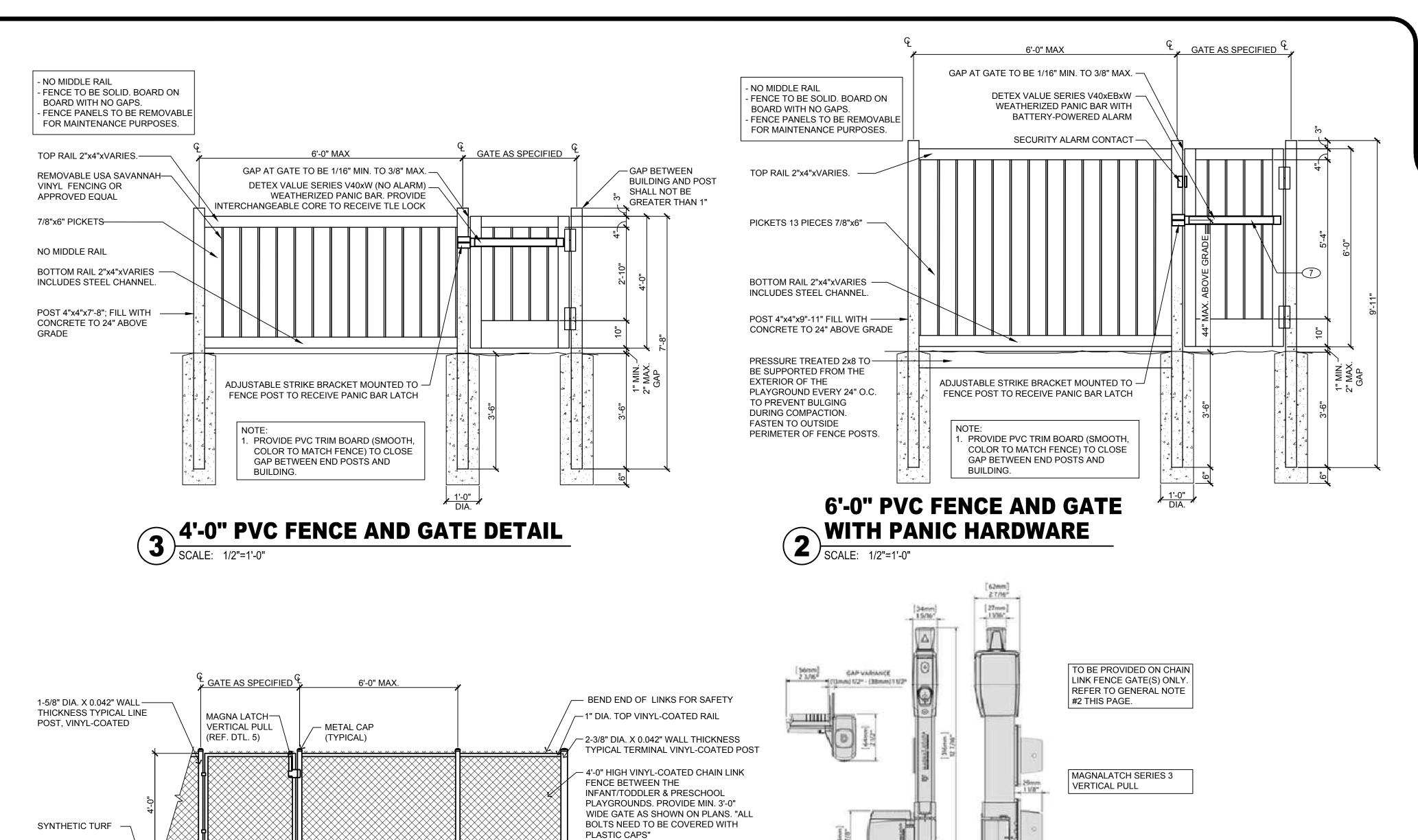
PROFESSIONAL CERTIFICATION MATTHEW B. JARMEL, AIA, MBA

**LICENSE NUMBER: A2017014316** 

Project Number: TLEMO22-164	Scale: AS NOTED
Drawn By:	Approved By:
OK	MBJ

**MAIN ENTRY DETAILS** 





- 1" DIA. BOTTOM VINYL-COATED RAIL @ 2" MAX. ABOVE GRADE

ENCASEMENT (TYP. AT EACH

10"X24" RND. CONC.

TERMINAL POST)

COMPACTED BASE

-ENCASEMENT (TYP. AT

EACH LINE POST)

4'-0" CHAIN LINK FENCE DETAIL

#### **GENERAL NOTES:**

**KEY NOTES:** 

COORDINATE WITH PLAYGROUND EQUIPMENT VENDOR, AND INSTALL FOOTINGS AND FOUNDATIONS AS REQUIRED FOR PLAYGROUND EQUIPMENT.

1 PROVIDE 6'-0" HIGH USA VINYL SAVANNAH (WHITE) PRIVACY

2 PROVIDE 3'-0" WIDE MIN. GATES WITH DETEX VALUE SERIES

V40xEBxW PANIC HARDWARE (WEATHERIZED WITH

3 SECURITY CAMERA TO BE MOUNTED 6" BELOW CANOPY HEIGHT.

4 PRESCHOOL PLAYGROUND P.I.P. SURFACING WITHIN SPLASH

5 REFER TO A-122 FOR DOOR HARDWARE SCHEDULE.

DETAIL #2 & 3 ON A-151 FOR MOUNTING HEIGHTS.

REFER TO A-051 FOR LOCATION.

PAD SHALL BE 100% BLUE FINISH.

6 CALL BOX TO BE INSTALLED AT 48" AFF

TO DETAIL #2 FOR ADDITIONAL INFORMATION.

STYLE FENCE OR APPROVED EQUAL. AROUND PERIMETER OF

PLAYGROUND AND WHEREVER ELSE SHOWN ON PLANS. REFER

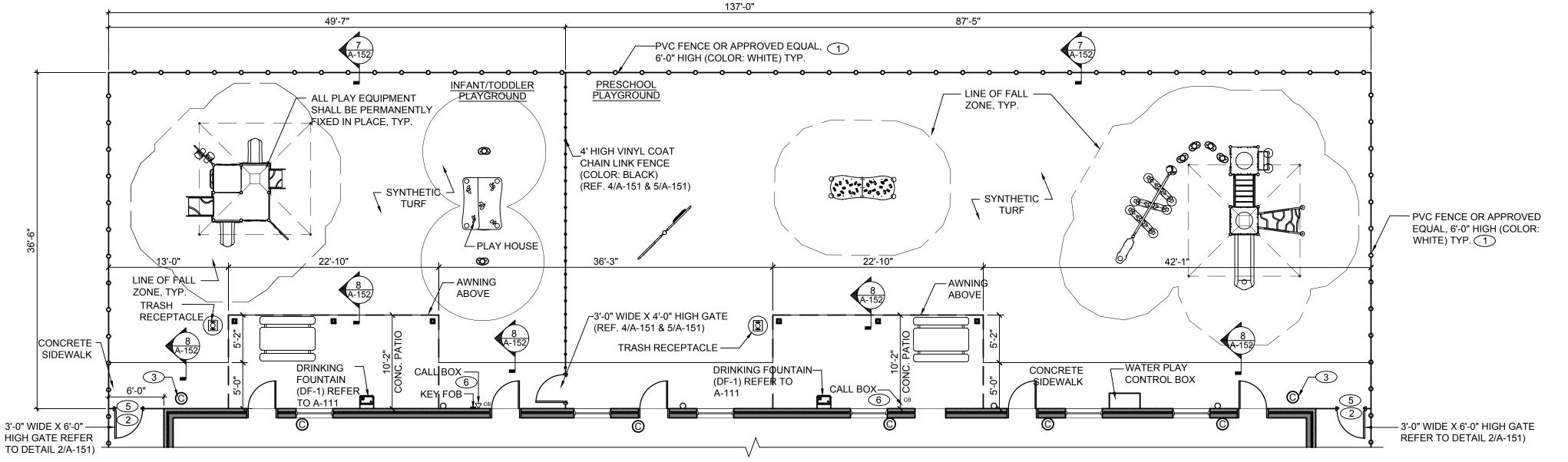
BATTERY-POWERED ALARM). NO ACCESS FROM OUTSIDE. SEE

DENSE GRADE -

AGGREGATE (¾")

- PROVIDE 4'-0" HIGH VINYL COATED, CHAIN LINK FENCE BETWEEN THE INFANT & PRESCHOOL PLAYGROUNDS. PROVIDE MIN. 3'-0" WIDE GATE WITH MAGNA LATCH OR APPROVED EQUAL. MAGNA LATCH TO REMAIN UNLOCKED AT ALL TIMES. REFER TO PLAYGROUND PLAN FOR GATE LOCATION(S).
- 3. INSTALL CAMERAS TO ENSURE ADEQUATE COVERAGE. PROVIDE ADDITIONAL CAMERAS TO ELIMINATE BLIND SPOTS. EXTERIOR CAMERAS SHALL BE INSTALLED IN EACH PLAYGROUND. EXACT QUANTITY AND LOCATIONS SHALL BE COORDINATED WITH "THE LEARNING EXPERIENCE."
- 4. CONTRACTOR TO ENSURE PROPER DRAINAGE FOR PLAYGROUND AREA, SO BELOW GRADE "PONDING" WILL NOT OCCUR. PROVIDE POSTIVE DRAINAGE AWAY FROM BUILDING AT 1/8" TO 1/4" PER FOOT PITCH. PROVIDE DRYWELL, CORRUGATED PIPE, FRENCH DRAIN, ETC IF NEEDED. NO ROOF DRAINS TO EMPTY DIRECTLY INTO
- 5. NO MIRRORED PLAY COMPONENTS SHALL BE PROVIDED.
- 6. PLAY SURFACING SPECIFICATIONS ARE AS FOLLOWS:
- SYNTHETIC TURF SURFACING-A. 8641 TURF GREEN; YARN POLYMER: NYLON B. PROVIDE WITH 1" PADDING FOR FULL TURF AREA
- 7. GC TO GRADE PLAYGROUND MINIMUM 1% AND MAXIMUM 2% AWAY FROM BUILDING. REFER TO CIVIL GRADING PLAN.
- 8. SECURITY ALARM CONTACT, SEE PAGES A-011 AND E-200
- FOR FURTHER DETAILS AND LOCATIONS.
- ENTIRE PLAYGROUND TO RECEIVE SYNTHETIC TURF GRASS, EXCEPT AT THE WATER PLAY AREA (FOR SOUTHERN STATES)
- 10. DETEX CORE HOUSING: RIM CYLINDER(S) SFIC HOUSING =





**PLAYGROUND PLAN** 

WORK USING THE CONTRACTOR'S BEST SKILL AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCTIO MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB

GC MUST PROVIDE & INSTALL ALL PRODUCTS PER PLANS. <u>ONLY</u>SUBSTITUTED PRODUCTS NEED TO BE SUBMITTED TO THE ARCHITECT FOR APPROVAL. UNAPPROVED SUBSTITUTIONS WILL BE REPLACED THE EXPENSE OF THE GC.

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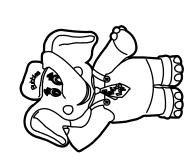
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PROFESSIONAL CERTIFICATION MATTHEW B. JARMEL, AIA, MBA

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**PLAYGROUND AREA DETAILS** 

A-151

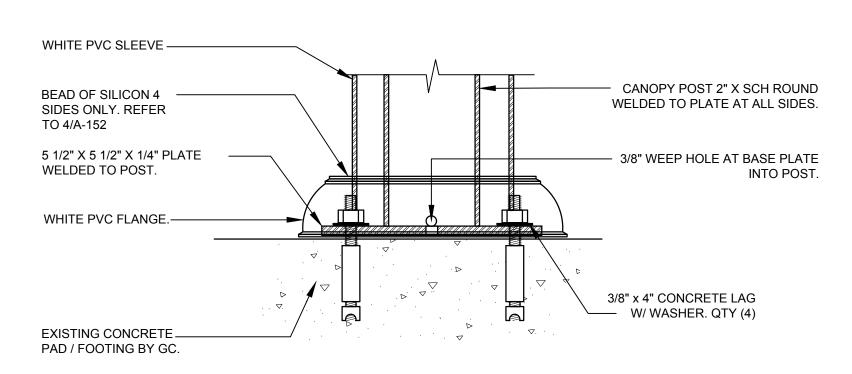




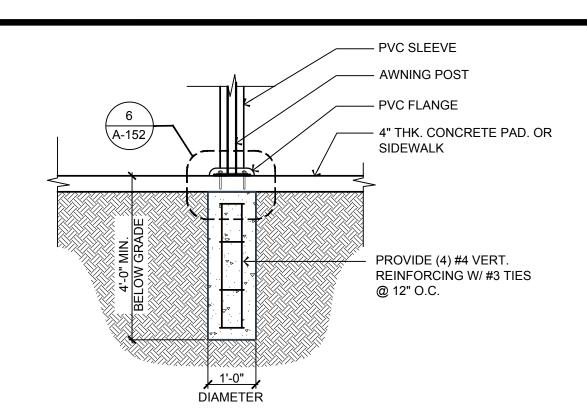
**\ POST / CONCRETE PAD PICTURE** (4) SCALE: NTS



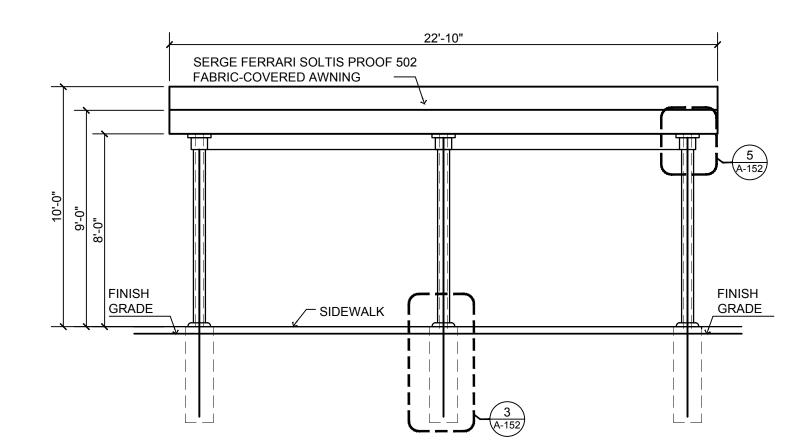
5 POST / CANOPY PICTURE SCALE: NTS



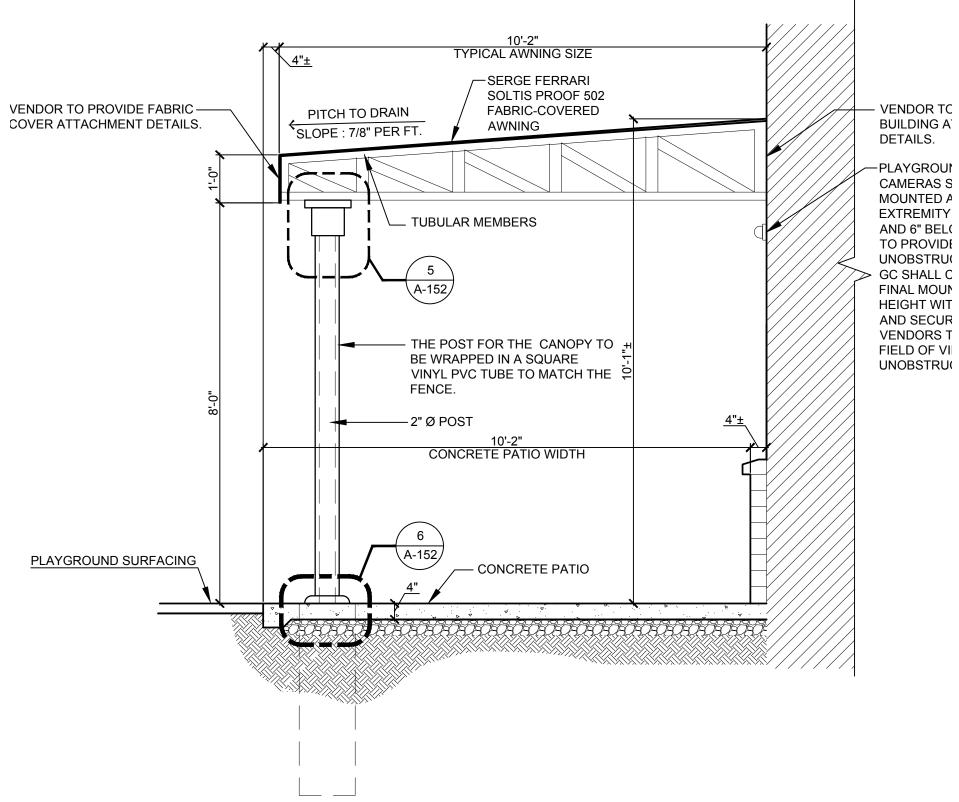
**ANCHOR DETAILS AT COLUMNS** 



**TYPICAL POST FOUNDATION DETAIL** 



PICNIC TABLES AWNING ELEVATION SCALE: 1/4" = 1'-0"



PICNIC TABLES AWNING CROSS SECTION

. CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING THE CONTRACTOR'S BEST SKILL AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCTION MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB SITE SAFETY

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#### **AWNING NOTES:**

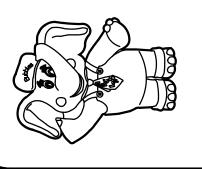
- 1. FRAME TO BE CONSTRUCTED OF GALVANIZED STRUCTURAL STEEL TUBING (ASTM RATING 513) WITH 50,000 PSI TENSILE STRENGTH OR ALUMINUM WITH EQUAL STRENGTH. DESIGN IN ACCORDANCE WITH REQUIRED BUILDING CODE.
- 2. ALL ANCHORS, BRACKETS AND BOLTS TO BE ZINC PLATED.
- 3. ALL COMPONENTS OF PLAYGROUND AWNINGS SHALL BE EXTERIOR GRADE.
- 4. VENDOR SHALL FIELD VERIFY ALL APPLICABLE DIMENSIONS.
- 5. GC. TO SUBMIT SHOP DRAWINGS OF AWNING FRAME TO THE ARCHITECT'S OFFICE FOR REVIEW AND APPROVAL PRIOR TO FABRICATION. SHOP DRAWINGS SHALL INDICATE ALL SITE SPECIFIC CONNECTIONS, WELDS AND ANCHORING. VENDOR IS RESPONSIBLE FOR PROVIDING SHOP DRAWINGS SEALED BY A LICENSED ENGINEER.
- 6. AWNING FABRIC COVER MATERIAL MANUFACTURER: SERGE FERRARI MATERIAL: SOLTIS PROOF 502 VINYL FABRIC COLOR: #502-2161, MIDNIGHT BLUE CLASS A RATED PER ASTM E84
- 7. ALL WELDS AT POST CONNECTION WELDED TOGETHER AT ALL SIDES. ALL WELDS TO BE GRIND SMOOTH, PRIMED AND PAINTED.
- 8. PROVIDE CERTIFICATE OF FLAME RESISTANCE FOR FABRIC COVER.

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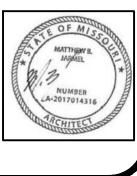
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PROFESSIONAL CERTIFICATION MATTHEW B. JARMEL, AIA, MBA

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Drawn By:	Approved By:
	MBJ
Б ' И	

**PLAYGROUND AREA DETAILS** 





PROVIDE 4" WIDE X 7" DEEP — CONTINUOUS EDGE HAUNCH.

SYNTHETIC TURF & FOAM —

AGGREGATE (3/4" ANGULAR AGGREGATE OR SMALLER

SUB-BASE COMPACTED TO 95% —

**↑ SIDEWALK EDGE DETAIL @ PLAY SURFACE** 

WITH FINES (SAND AND

COMPACTED TO 95%

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

BOARD

5" DENSE GRADE

QUARRY DUST))

- 4" CONC. SIDEWALK OR PICNIC TABLE PAD, W/ 6X6,W1.4XW1.4

WWM. REINFORCING.

- 4" MIN. DRAINAGE

GRAVEL.

-LINE OF FENCE POST (BEYOND)

-CHAMFER AT BOTTOM EDGES

1" MIN. / 2" MAX. GAP BETWEEN

-SYNTHETIC TURF ON 1" FOAM BOARD

-PRESSURE TREATED 2X8 TO BE FASTENED TO OUTSIDE OF FENCE POSTS AND PROJECT

-SUB-BASE COMPACTED TO 95%. COMPACTED SOIL TO BE BUILT UP AGAINST THE EXTERIOR

SIDE OF CONTAINMENT BOARD TO PREVENT

-5" DENSE GRADE AGGREGATE (3/4" ANGULAR AGGREGATE OR SMALLER WITH FINES (SAND AND QUARRY DUST))

ABOVE FINISHED GRADE BY 1/2"

GRAVEL BASE WASH-OUT

OF FENCE PANEL (TYP.)

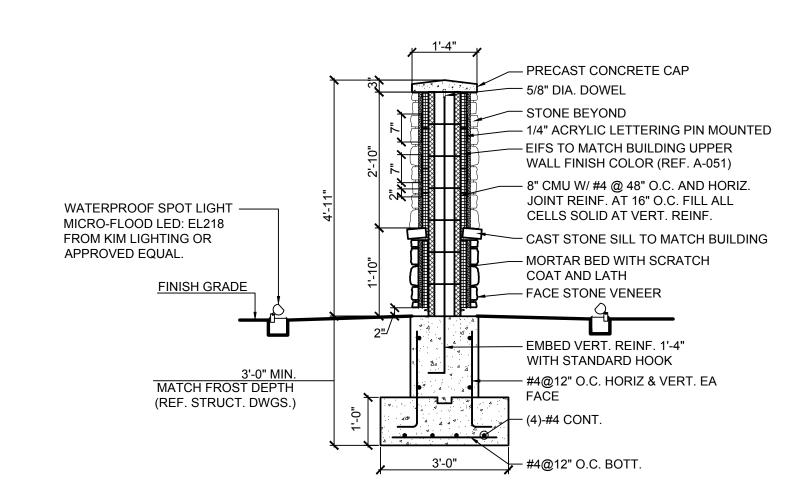
FENCE PANEL AND TURF

COMPACTED TO 95%

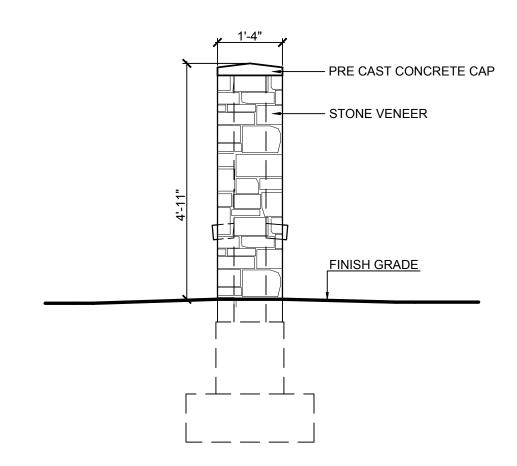
-PVC FENCE PANEL

1% MIN. TO 2% MAX. SLOPE

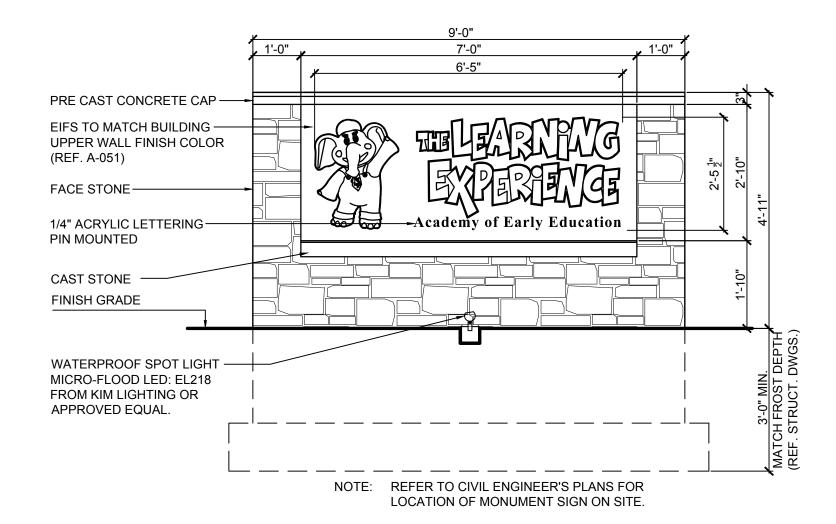
AWAY FROM BUILDING



## MONUMENT SIGNAGE SECTION SCALE: 1/2"=1'-0"



## MONUMENT SIGNAGE ELEVATION SCALE: 1/2"=1'-0"



## MONUMENT SIGNAGE ELEVATION SCALE: 1/2"=1'-0"

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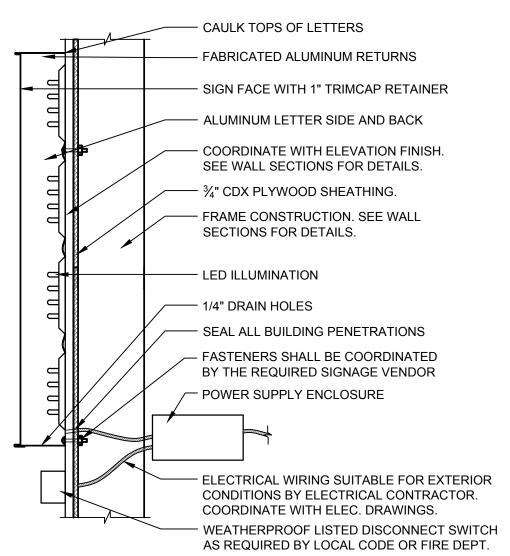
#### **GENERAL NOTES:**

1. CONTRACTOR SHALL VERIFY ALL FIELD CONDITIONS AND DIMENSIONS PRIOR TO PROCEEDING WITH THE WORK AND SHALL REPORT ANY AND ALL DISCREPANCIES TO THE ARCHITECT. 2. SIGNAGE CONTRACTOR TO SUPPLY & INSTALL, LIGHTED, 'THE LEARNING EXPERIENCE' SIGN AS INDICATED ON DRAWINGS. SIGN SHALL BE PAN CHANNEL LETTERING, RACEWAY MOUNTED WITH 120V INTERNAL FLUORESCENT LIGHTING. PROVIDE WHITE \( \frac{3}{16} \)" ACRYLIC CAP WITH BLACK JEWELITE TRIM AND TRANSLUCENT VINYL FILM APPLIED AS PER SPECIFIED COLORS.

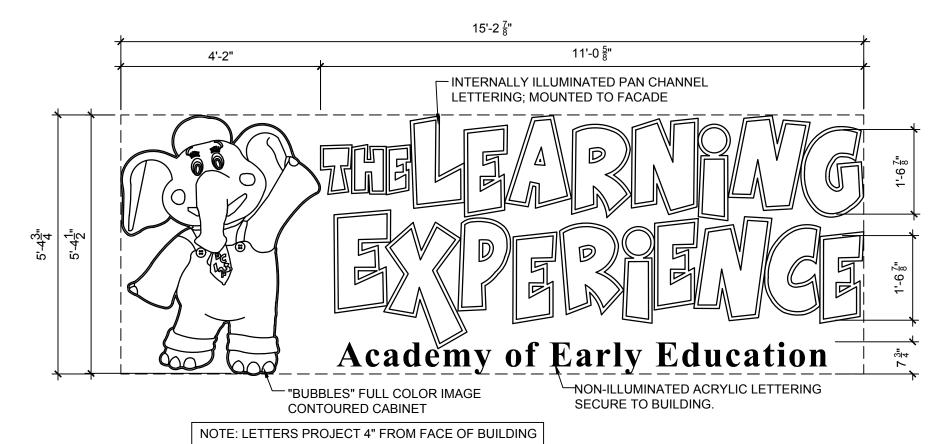
3. ANCHORAGE SHALL BE COMPLIANT WITH APPLICABLE BUILDING CODE PER THE DESIGN LOADS LISTED ON DRAWING S-100.

NOTE: SIGNAGE UNDER SEPARATE SIGN PERMIT APPLICATION.

ALL SIGNAGE TO BE PROVIDED AND INSTALLED BY THE REQUIRED VENDOR BELOW. NO SUBSTITUTIONS ALLOWED. IDENTITI RESOURCES, LTD. ATTN: LAUREN RAIMAN PH: 847-805-6685 EMAIL: thelearningexperience@identiti.net



### **BUILDING SIGN** MOUNTING DETAIL SCALE: 1 1/2"=1'-0"



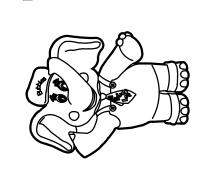
**BUILDING MOUNTED** SIGNAGE ELEVATION DETAIL ( **1** ) SCALE: 1/2"=1'-0"



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PROFESSIONAL CERTIFICATION

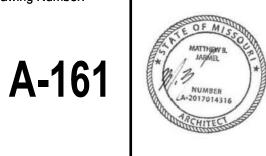
MATTHEW B. JARMEL, AIA, MBA

LICENSE NUMBER: A2017014316

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TLEMO22-164	AS NOTED	
Drawn By: <b>OK</b>	Approved By: <b>MBJ</b>	

**SIGNAGE DETAILS** 

Drawing Name:



#### **GENERAL NOTES**

ALL STRUCTURAL ITEMS FOR THIS PROJECT HAVE BEEN DESIGNED IN ACCORDANCE WITH APPROPRIATE PROVISIONS OF EACH OF THE FOLLOWING:

A. BUILDING CODE: INTERNATIONAL BUILDING CODE 2018 B. STRUCTURAL STEEL: THE A.I.S.C. "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS ANSI/AISC 360." C. CONCRETE: A.C.I. "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE", ACI 318.

THE STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE SPECIFICATIONS AND ALL OTHER DISCIPLINES DRAWINGS (INCLUDING ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING AND CIVIL). IF THERE ARE QUESTIONS BETWEEN DRAWINGS, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE ARCHITECT AND/OR STRUCTURAL ENGINEER IN WRITING PRIOR TO PERFORMING WORK.

IN ANY CASE OF QUESTIONS BETWEEN THE NOTES, DETAILS, AND SPECIFICATIONS, THE MOST RIGID REQUIREMENTS SHALL GOVERN.

DETAILS DESIGNATED AS "TYPICAL" APPLY TO ALL AREAS OF SIMILAR CONDITIONS UNLESS OTHERWISE NOTED. MECHANICAL/PLUMBING/ELECTRICAL OPENINGS SHALL BE COORDINATED BY CONTRACTOR. FINAL SIZES AND

LOCATIONS TO BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR APPROVAL CONTRACTOR IS RESPONSIBLE FOR AND SHALL VERIFY AND COORDINATE ALL DIMENSIONS, DETAILS, AND EXISTING CONDITIONS BEFORE PROCEEDING WITH WORK. ANY DISCREPANCIES SHALL BE BROUGHT IN WRITING

TO THE IMMEDIATE ATTENTION OF THE ARCHITECT AND/OR STRUCTURAL ENGINEER. CONTRACTOR SHALL FULLY BRACE AND OTHERWISE PROTECT ALL WORK IN PROGRESS UNTIL THE STRUCTURE IS COMPLETED.

CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR CONCRETE AND STRUCTURAL STEEL A MINIMUM OF TWO (2) WEEKS PRIOR TO THE START OF FABRICATION. THE OWNER SHALL ENGAGE AN INDEPENDENT TESTING AND INSPECTION AGENCY ACCEPTABLE TO THE

ARCHITECT AND/OR STRUCTURAL ENGINEER TO INSPECT THE FOLLOWING:

A. SOIL

B. STEEL - HIGH STRENGTH BOLTED CONNECTIONS AND WELDED CONNECTIONS IN THE SHOP AND FIELD C. CONCRETE - INSPECT REINFORCING PLACEMENT, INSPECT AND TEST CONCRETE QUALITY

CONTRACTOR SHALL COORDINATE INSPECTIONS REQUIRED FOR THE ABOVE AGENCIES.

10. ALL REQUESTS FOR SUBSTITUTIONS OF MATERIALS OR DETAILS SHOWN IN THE CONTRACT DOCUMENTS SHALL BE SUBMITTED FOR APPROVAL DURING THE BIDDING PERIOD. ONCE BIDS ARE ACCEPTED, PROPOSED SUBSTITUTIONS WILL BE CONSIDERED ONLY WHEN THEY ARE OFFICIALLY SUBMITTED WITH AN IDENTIFIED SAVINGS TO BE DEDUCTED FROM THE CONTRACT.

#### **DESIGN CRITERIA**

SEE PLANS FOR ROOF DEAD AND LIVE LOADS

2. SNOW LOADS:

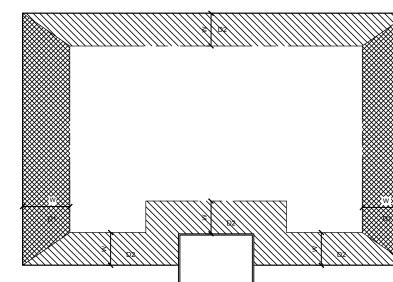
GROUND SNOW LOAD, Pg = 20 PSF FLAT ROOF SNOW LOAD, Pf = 20 PSF ' MINIMUM SNOW LOAD USED FOR DESIGN = 25 PSF SNOW EXPOSURE FACTOR, Ce = 1.0 SNOW LOAD IMPORTANCE FACTOR, I = 1.0

\* FLAT ROOF SNOW LOAD TO BE ADJUSTED PER CODE FOR DRIFT, SLIDING, UNBALANCED LOADING, ETC.

SNOW DRIFTS: DDIET

THERMAL FACTOR, Ct = 1.1

DRIFT MARK		SURCHAGE Pd	WIDTH W
D1	- 	47 PSF	6.5 FT
D2		53 PSF	8.0 FT



WIND LOADS:

BASIC WIND SPEED Vult = 109 MPHVasd = 84 MPH

CORNERS

RISK CATEGORY II WIND EXPOSURE - C

INTERNAL PRESSURE COEFFICIENT GCpi = ±0.18 COMPONENTS AND CLADDING PRESSURE: a = 5.58 FTb = 8.40 FTc= 2.80 FT

ROOF: □ P = +16.0 PSF, -24.0 PSF ZONE 1 P = +16.0 PSF, -41.3 PSF ZONE 1 P = +16.0 PSF, -54.4 PSF ZONE 2 ZONE 3 P = +16.0 PSF, -74.2 PSF WALLS: P = +25.9 PSF, -28.1 PSF FIELD

P = +25.9 PSF, -34.7 PSF

SEISMIC RISK CATEGORY - II SEISMIC IMPORTANCE FACTOR, I = 1.0

MAPPED SPECTRAL RESPONSE ACCELERATION PARAMETERS:

S1 = 0.068gSITE CLASS - D

4. SEISMIC LOADS:

DESIGN SPECTRAL RESPONSE COEFFICIENTS:

Sds = 0.107aSd1 = 0.109g

SEISMIC DESIGN CATEGORY - B

BASIC SEISMIC-FORCE-RESISTING SYSTEM: LIGHT FRAMED WALLS SHEATHED WITH WOOD STRUCTURAL PANELS RATED FOR SHEAR RESISTANCE DESIGN BASE SHEAR, V = 5.9 KIPS

SEISMIC RESPONSE COEFFICIENT, Cs = 0.016

RESPONSE MODIFICATION FACTOR, R = 6.5 ANALYSIS PROCEDURE - EQUIVALENT LATERAL FORCE PROCEDURE

#### FOUNDATION CONSTRUCTION NOTES

1. FOUNDATIONS FOR THIS PROJECT CONSIST OF SPREAD AND STRIP FOOTINGS DESIGNED TO BEAR ON UNDISTURBED VIRGIN SOIL OR STRUCTURAL COMPACTED FILL PLACED OVER UNDISTURBED VIRGIN SOIL HAVING AN ALLOWABLE BEARING CAPACITY OF 2000 POUNDS PER SQUARE FOOT IN ACCORDANCE WITH "GEOTECHNICAL ENGINEER REPORT" DATED 03/07/2023 BY ALPHA-OMEGA GEOTECH INC. CAPACITY OF FOOTING SUBGRADE SHALL BE INSPECTED AND VERIFIED BY A GEOTECHNICAL ENGINEER LICENSED IN THE STATE OF MISSOURI PRIOR TO PLACING CONCRETE.

2. ELEVATIONS SHOWN ON THE DRAWINGS ARE TO THE BOTTOM OF FOUNDATIONS AND ARE MINIMUM DEPTHS. IF BEARING MATERIALS AT THE SPECIFIED ELEVATIONS ARE FOUND TO HAVE LOWER BEARING CAPACITIES THAN REQUIRED, MATERIALS SHALL BE REMOVED AND REPLACED WITH LEAN CONCRETE.

3. DESIGN, FURNISH, AND PLACE ALL TEMPORARY OR PERMANENT SUPPORTS, WHETHER SHORING, SHEETING, OR BRACING, SO THAT NO HORIZONTAL MOVEMENT OR VERTICAL SETTLEMENT OCCURS TO EXISTING STRUCTURES, STREETS, OR UTILITIES ADJACENT TO PROJECT SITE.

4. CONTROL SURFACE AND SUBSURFACE WATER DURING CONSTRUCTION SO THAT FOUNDATION WORK WILL BE PERFORMED IN DRY CONDITIONS AND ON UNDISTURBED

5. EXCAVATIONS FOR FOOTINGS SHALL BE FINISHED BY HAND.

6. FOUNDATION CONCRETE SHALL NOT BE PLACED IN WATER OR ON FROZEN GROUND. DUE TO THE PRESENCE OF UNDOCUMENTED FILL, FOOTINGS OF THE BUILDING SHOULD BE OVEREXCAVATED A MINIMUM OF 18-INCHES BENEATH THE PLANNED BASE OF FOOTING ELEVATION AS WELL AS ONE (1) FOOT LATERALLY IN EACH DIRECTION. THE EXPOSED SUBGRADE AT THIS ELEVATION SHOULD BE EVALUATED BY A REPRESENTATIVE OF ALPHA-OMEGA GEOTECH. AND, DEPENDING UPON THE CONSISTENCY OF THE EXPOSED SUBGRADE MATERIAL. IT MAY BE NECESSARY TO EXTEND SOME OF THE OVER-EXCAVATIONS DEEPER.

8. PROVIDE A SINGLE LAYER OF TENSAR BX-1100. BI-AXIAL GEO GRID. SPREADED ACROSS THE BASE AND UP THE SIDES OF THE OVER-EXCAVATED FOOTING TRENCH, AND TO BE OVERLAPED AS PER MANUFACTURE RECOMMENDATION. THIS ACITIVITY SHALL BE

VERIFIED BY THE GEOTECH ENGINEER OF RECORD. PROVIDE COMPACTED CRUSHER-RUN LIMESTONE SUCH AS KDOT AB-3/MoDOT TYPE 5 IN LIFT NO MORE THAN 6 INCHES THICK AND COMPACTED TO A MIN. DENSITY OF 95% OF THE STANDARD PROCTOR (ASTM D698), UNDER THE SUPERVISION OF A LICENSED

SOILS ENGINEER. 10. CUT THE SUBGRADE A MIN. OF 24 INCHES BENEATH OF SLAB ON GRADE ELEVATION TO ALLOW THE PLACEMENT OF 20 INCH GRANULAR SUBBASE PLACED ON (3) EQUAL LIFTS AND COMPACTED TO AM MIN. OF 95% OF THE STANDARD PROCTOR (ASTM D-698) MAXIMUM DRY DESNSITY. 4 INCH BASE COURSE OF CLEAN, OPEN-GRADED CRUSHED LIMESTONE, AND COMPACTED WITH A SUITABLE VIBRATORY STEEL WHEEL ROLLER.

11. ALL FILL AND BACKFILL SHALL BE PLACED ON VIRGIN SOIL THAT DOES NOT CONTAIN ANY ORGANIC MATERIAL. STRIP ALL TOP SOIL. PRIOR TO PLACING FILL OR BACKFILL, PROOF-COMPACT SUBGRADE WITH A HEAVY VIBRATORY COMPACTOR TO AT LEAST 95% OF THE STANDARD PROCTOR DENSITY AS PER ASTM D-698 UNDER THE SUPERVISION OF A LICENSED SOILS ENGINEER.

12. CRUSHED STONE BASE FOR SLAB ON GRADE SHALL BE A CLEAN, FINE-GRADED MATERIAL WITH A MAXIMUM PARTICLE SIZE OF 3/4" AND AT LEAST 10%-30% PASSING A NO. 100 SIEVE. CRUSHED STONE SHALL CONTAIN NO CLAY, SILT, OR ORGANIC MATERIAL.

13. FOUNDATION ELEMENTS SHALL BE CONSIDERED CENTERED UNDER COLUMN CENTERLINES UNLESS OTHERWISE NOTED. 14. NO FOOTINGS SHALL BE PLACED ABOVE 1 VERTICAL ON 2 HORIZONTAL SLOPE EXTENDED FROM THE CLOSEST EDGE OF ANY UNDISTURBED SOIL OR OTHER FOUNDATION STRUCTURE. BOTTOM OF EXTERIOR FOOTINGS SHALL NOT BE LESS THAN

3'-0" BELOW FINISHED GRADE. 15. WHERE SOFT AREAS ARE ENCOUNTERED, THE AREA SHALL BE UNDERCUT AS DIRECTED BY THE SOILS ENGINEER AND REPLACED WITH COMPACTED FILL OR LEAN CONCRETE. 16. WHERE SHALLOW ROCK IS ENCOUNTERED AT FOOTING BEARING ELEVATION, THE ROCK SHALL BE REMOVED A MINIMUM OF 12" BELOW THE BOTTOM OF FOOTING AND

#### **CONCRETE CONSTRUCTION NOTES**

1. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE A.C.I. "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE" (ACI 318).

2. CONCRETE DESIGN MIXES SHALL CONFORM WITH ASTM C94, AND HAVE PROPERTIES AS INDICATED BELOW:

FOUNDATIONS, WALLS, AND PIERS:

REPLACED WITH CONTROLLED COMPACTED FILL.

f'c=4,000 psi AT 28 DAYS MAX. W/C RATIO: 0.50 AIR CONTENT: 5% ± 1 1/2%

SLABS-ON-GRADE:

f'c=4,000 psi AT 28 DAYS MAX. W/C RATIO: 0.50 AIR CONTENT: 3% MAX.

3. SLUMP SHALL BE LIMITED TO 4 INCHES. FOR CONCRETE WITH HRWR (SUPER-P), SLUMP SHALL BE LIMITED TO 2-4 INCHES PRIOR TO ADDITION OF HRWR, AND A MAXIMUM OF 8 INCHES AFTER ADDITION OF HRWR.

4. ADMIXTURES USED IN CONCRETE SHALL BE AS ALLOWED BY THE SPECIFICATIONS AND ONLY WITH LABORATORY DESIGN MIX APPROVAL. ALL ADMIXTURES SHALL CONTAIN NO MORE CHLORIDE IONS THAN ARE PRESENT IN MUNICIPAL DRINKING WATER.

5. CONCRETE MATERIALS SHALL BE AS INDICATED BELOW: A. PORTLAND CEMENT: ASTM C150, TYPE I/II ASTM C618 - 15% - 25% OF CEMENTITOUS MATERIAL B. FLY ASH: C. NORMAL-WEIGHT AGGREGATES: ASTM C33, 3/4" MAXIMUM

D. WATER: **ASTM C94 AND POTABLE** 6. ADMIXTURES SHALL BE AS INDICATED BELOW:

A. AIR-ENTRAINING ADMIXTURE: ASTM C260 B. WATER REDUCING ADMIXTURE: ASTM C494. TYPE A

C. WATER REDUCING AND RETARDING ADMIXTURE: ASTM C494 TYPE D D. WATER-REDUCING, ACCELERATING ADMIXTURE: ASTM C494 TYPE E

F. HIGH RANGE WATER REDUCING AND RETARDING ADMIXTURE: ASTM C494 TYPE G 7. EPOXY JOINT FILLER SHALL BE A TWO-COMPONENT SEMI RIGID RESIN, 100% SOLIDS, AND HAVE A MINIMUM SHORE A HARDNESS OF 80 WHEN MEASURED IN ACCORDANCE WITH ASTM D 2240.

E. HIGH RANGE WATER REDUCING ADMIXTURE (SUPER-PLASTICIZER): ASTM C494,

8. ALL REINFORCING STEEL SHALL BE INTERMEDIATE GRADE, NEW BILLET STEEL DEFORMED BARS, CONFORMING TO ASTM A-615, GRADE 60. ALL BARS SHALL BE SECURELY SUPPORTED AND WIRED IN PLACE PRIOR TO CONCRETE PLACEMENT.

9. ALL WELDED WIRE FABRIC (W.W.F.) SHALL CONFORM TO ASTM A-185. 10. FIBER REINFORCING SHALL BE MONOFILAMENT POLYPROPYLENE FIBERS FOR

SECONDARY REINFORCEMENT, ASTM C1116, TYPE III. 11. VAPOR RETARDER SHALL CONFORM TO ASTM E1745, CLASS C, WITH MINIMUM 10 MIL. THICKNESS. 12. REINFORCING STEEL SHOWN IN SECTIONS ARE SCHEMATIC INDICATIONS THAT

REINFORCING EXISTS. SEE SECTION NOTES, SCHEDULES, PLAN NOTES, ETC. FOR ACTUAL REINFORCING REQUIRED. 13. UNLESS OTHERWISE NOTED, ALL BARS MARKED CONT. SHALL BE SPLICED AT ALL LAP POINTS AND CORNERS AND DEVELOPED AT NON-CONTINUOUS ENDS AS TYPICAL DETAILS. SPLICE CONTINUOUS TOP BARS AT CENTER BETWEEN SUPPORTS AND SPLICE CONTINUOUS BOTTOM BARS AT SUPPORTS. WELDED WIRE FABRIC SHALL BE LAPPED 12

14. CONCRETE COVER FOR REINFORCING BARS SHALL BE AS SHOWN IN DETAILS. 15. SLAB ON GRADE SHALL BE WET CURED WITH A MOISTURE RETAINING COVER CONFORMING TO ASTM C171 WITH SIDES AND ENDS LAPPED AT LEAST 12", SEALED WITH WATERPROOF TAPE. MOISTURE RETAINING COVER SHALL REMAIN IN PLACE FOR A

MINIMUM OF 7 DAYS. 16. AT OPENINGS IN CONCRETE WALLS, PROVIDE ADDED REINFORCEMENT IN ACCORDANCE

WITH THE TYPICAL DETAILS UNLESS OTHERWISE NOTED. 17. REINFORCEMENT SHALL NOT BE WELDED OR HEATED IN ANY WAY 18. SLEEVES, MECHANICAL OPENINGS, CONDUITS, PIPES, RECESSES, DEPRESSIONS,

CURBS, AND ALL EMBEDDED ITEMS SHALL BE PROVIDED FOR AS SHOWN ON THE

ARCHITECTURAL AND MECHANICAL DRAWINGS AND AS REQUIRED BY EQUIPMENT MANUFACTURERS. MINIMUM CONCRETE BETWEEN SLEEVES SHALL BE 6". INSTALLATION OF THESE ITEMS SHALL BE COORDINATED WITH SHOP DRAWINGS OF TRADES REQUIRING THESE ITEMS. 19. SET FORMS TO FOLLOW SLOPES AND GRADES DEFINED ON PLAN, KEEPING MEMBER

DEPTHS CONSTANT AS DETAILED OR SCHEDULED, UNLESS NOTED OTHERWISE. SLOPE UNIFORMLY BETWEEN ELEVATIONS GIVEN. 20. REINFORCING, INCLUDING WELDED WIRE FABRIC, FOR SLABS ON GRADE AND FOOTINGS SHALL BE SUPPORTED ON SOLID CONCRETE BLOCKS AT 5'-0" ON CENTER MAXIMUM EACH WAY. REINFORCING, INCLUDING WELDED WIRE FABRIC, FOR OTHER SLABS SHALL BE SUPPORTED ON CHAIRS AND BOLSTERS AT ALL SUPPORTS AND AT 5'-0" ON CENTER MAXIMUM BETWEEN SUPPORTS.

#### CONCRETE CONSTRUCTION NOTES (CONT'D)

21. VERTICAL CONSTRUCTION JOINTS IN CONCRETE WALLS SHALL BE LOCATED AT MIDPOINT BETWEEN ANY SUPPORTING PIERS OR BUTTRESSES, AND AT LEAST 4'-0" FROM ANY WALL OPENING EXCEPT WHERE SPECIFICALLY SHOWN ON THE DRAWINGS. HORIZONTAL CONSTRUCTION JOINTS SHALL NOT BE PERMITTED, EXCEPT WHERE SHOWN ON DETAILS.

22. PROVIDE SHEAR KEY IN ALL CONSTRUCTION JOINTS IN WALLS. 23. ALL CONSTRUCTION JOINTS SHALL BE THOROUGHLY CLEANED AND TREATED WITH THE

SPECIFIED BONDING COMPOUND JUST BEFORE PLACING NEW CONCRETE. 24. SEE ARCHITECTURAL DRAWINGS FOR DETAILS OF WEEPHOLES, FLASHING REGLETS, FASCIA DETAILS, ETC.

25. UNDER NO CIRCUMSTANCES SHALL CONCRETE BE PUMPED THROUGH ALUMINUM PIPES. CONCRETE SHALL NOT BE PLACED IN CONTACT WITH ALUMINUM, ALUMINUM MIXING DRUMS, TRUCK MIXERS, BUGGLES, CHUTES, CONVEYORS, TREMIE PIPES, AND OTHER EQUIPMENT MADE OF ALUMINUM SHALL NOT BE USED ON THIS PROJECT.

26. WHERE CONCRETE ABUTS MASONRY, PROVIDE VERTICAL METAL SLOTS TO RECEIVE GALVANIZED METAL DOVETAIL ANCHORS. SLOTS SHALL BE SPACED AT 24" ON CENTER. 27. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR FABRICATION, BENDING, AND

PLACEMENT OF CONCRETE REINFORCEMENT. SHOP DRAWINGS SHALL COMPLY WITH ACI 315 "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES". 28. ALL CONCRETE REINFORCING IS SUBJECT TO INSPECTION BY THE DESIGN ENGINEER PRIOR TO CONCRETE PLACEMENT. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY

REINFORCED CONCRETE STRUCTURES" 29. COLD OR HOT WEATHER CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE APPLICABLE CODE REQUIREMENTS.

DISCREPANCY FROM ACI 315 "MANUAL OF STANDARD PRACTICE FOR DETAILING

30. INSTALLATION OF POST-INSTALLED ADHESIVE ANCHORS MUST BE INTO CONCRETE THAT HAS A MINIMUM AGE OF 21 DAYS AT THE TIME OF INSTALLATION.

#### STEEL CONSTRUCTION NOTES

ALL STRUCTURAL STEEL WORK SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH THE LATEST AISC CODE OF STANDARD PRACTICE. STRUCTURAL STEEL SHALL BE NEW, CLEAN, AND STRAIGHT, AND SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:

A. WIDE FLANGE ROLLED SHAPES: ASTM A992, GRADE 50 (Fy = 50 KSI). B. PLATES, ANGLES, BARS, CHANNELS, AND S SHAPES: ASTM A36 (Fy = 36 KSI).

C. RECTANGULAR HSS: ASTM A500, GRADE B (Fy = 46 KSI). D. ROUND HSS: ASTM A500, GRADE B (Fy = 42 KSI).

E. PIPE: ASTM A53, TYPE E OF S, GRADE B (Fy = 35 KSI). ALL ANCHOR RODS, UNLESS OTHERWISE NOTED, SHALL BE ASTM F1554, GRADE 36. ALL BOLTED CONNECTIONS, UNLESS OTHERWISE NOTED, SHALL BE 3/4"Ø A325 HIGH

STRENGTH BOLTS, IN BEARING TYPE CONNECTIONS AND SHALL BE PROVIDED WITH HARDENED WASHERS UNDER THE TURNED ELEMENT (NUT OR BOLT THREAD). ALL STRUCTURAL STEEL SHALL BE PAINTED WITH ONE COAT OF SHOP PRIMER. THE EXCEPTIONS INCLUDE WHERE FIELD WELDING OR SLIP CRITICAL BOLTING IS TO BE DONE, WHERE STEEL IS TO RECEIVE SPRAY-ON FIREPROOFING, WHERE STEEL IS TO BE

EMBEDDED IN CONCRETE, AND WHERE STEEL IS TO BE HOT-DIPPED GALVANIZED. 5. STRUCTURAL STEEL EXPOSED TO WEATHER, EXCESSIVE MOISTURE, OR CORROSIVE ENVIRONMENT AND AS INDICATED ON CONSTRUCTION DOCUMENTS, SHALL BE HOT-DIPPED GALVANIZED, MEETING REQUIREMENTS OF ASTM A123 AND A153 AS

APPLICABLE. INSTALLATION AND TIGHTENING OF ALL HIGH STRENGTH BOLTS SHALL CONFORM TO THE AISC "SPECIFICATION FOR THE STRUCTURAL JOINTS USING ASTM A325 OR A490

CONNECTIONS MAY BE WELDED OR HIGH STRENGTH BOLTED. ALL CONNECTIONS SHALL CONFORM TO THE TYPICAL CONNECTION DETAILS SHOWN ON THE DRAWINGS. 8. ALL WELDING SHALL CONFORM TO THE AMERICAN WELDING SOCIETY STRUCTURAL

WELDING CODE - STEEL (AWS D1.1) AND SHALL BE DONE BY A.W.S. QUALIFIED WELDERS USING E70XX ELECTRODES. 9. ALL CONTACT SURFACES WITHIN HIGH STRENGTH BOLTED CONNECTIONS AND WELDING

AREAS SHALL BE FREE OF OIL, PAINT, AND LACQUER. 10. THE CONTRACTOR SHALL COORDINATE THE SIZE AND LOCATION OF ALL ROOF OPENINGS SHOWN ON THE STRUCTURAL, ARCHITECTURAL AND/OR MECHANICAL.

PLUMBING, AND ELECTRICAL DRAWINGS. ANY STEEL WHICH IS NOT SHOWN ON THE CONTRACT DRAWINGS AS FURNISHED BY THE STRUCTURAL STEEL CONTRACTOR AND WHICH IS REQUIRED BY THE MECHANICAL, PLUMBING, AND ELECTRICAL TRADES FOR OPENINGS AND/OR TO SUPPORT THEIR WORK SHALL BE SUPPLIED AND INSTALLED BY THE CONTRACTOR REQUIRING SUCH STEEL, UNLESS OTHERWISE NOTED. 11. CUTS, HOLES, COPING, ETC. REQUIRED IN STRUCTURAL STEEL MEMBERS FOR THE

WORK OF OTHER TRADES SHALL BE SHOWN ON THE STRUCTURAL STEEL SHOP DRAWINGS AND BE MADE IN THE SHOP. HOLES SHALL BE REINFORCED AND APPROVED BY THE STRUCTURAL ENGINEER. 12. BURNING OF HOLES, CUTS, ETC. IN STRUCTURAL STEEL MEMBERS IN THE FIELD WILL

NOT BE PERMITTED, EXCEPT WITH THE SPECIFIC WRITTEN PERMISSION OF THE ENGINEER. 13. FOR MISCELLANEOUS STEEL, SEE ARCHITECTURAL DRAWINGS.

WOOD TRUSS CONSTRUCTION NOTES

#### 14. SUBMIT ALL STRUCTURAL STEEL SHOP DRAWINGS FOR REVIEW PRIOR TO ANY FABRICATION A MINIMUM OF TWO (2) WEEKS PRIOR TO THE START OF FABRICATION.

1. ROOF TRUSSES SHALL BE PRE-MANUFACTURED WOOD TRUSSES DESIGN BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF MO. TRUSS DESIGN DRAWINGS SHALL BE SIGNED AND SEALED BY THE DESIGN PROFESSIONAL ENGINEER AND SHALL

INCLUDE, AT A MINIMUM, THE FOLLOWING: a. SLOPE OR DEPTH, SPAN AND SPACING

b. LOCATIONS OF JOINTS c. REQUIRED BEARING WIDTHS d. DESIGN LOADS AS APPLICABLE

e. TOP CHORD LIVE LOAD (INCLUDING SNOW LOADS)

TOP CHORD DEAD LOAD BOTTOM CHORD LIVE LOAD

BOTTOM CHORD DEAD LOAD CONCENTRATED LOADS AND THEIR POINTS OF APPLICATION AS APPLICABLE CONTROLLING WIND AND EARTHQUAKE LOADS AS APPLICABLE

k. ADJUSTMENTS TO LUMBER AND METAL CONNECTOR PLATE DESIGN VALUE FOR

CONDITIONS OF USE I. EACH REACTION FORCE AND DIRECTION m. METAL CONNECTOR PLATE TYPE, SIZE, THICKNESS OR GAGE, AND THE

DIMENSIONED LOCATION OF EACH METAL CONNECTOR PLATE EXCEPT WHERE SYMMETRICALLY LOCATED RELATIVE TO THE JOINT INTERFACE

n. LUMBER SIZE, SPECIES AND GRADE FOR EACH MEMBER

o. CONNECTION REQUIREMENTS FOR:

o.a. TRUSS TO TRUSS o.b. TRUSS PLY TO PLY

o.c. FIELD SPLICES p. CALCULATED DEFLECTION RATIO AND MAXIMUM VERTICAL AND HORIZONTAL DEFLECTION FOR LIVE AND TOTAL LOAD AS APPLICABLE MAXIMUM AXIAL TENSILE AND COMPRESSION FORCES IN THE TRUSS MEMBERS

REQUIRE PERMANENT INDIVIDUAL TRUSS MEMBER BRACING INCHES OR TWO SPACES, WHICHEVER IS LONGER. SHEETS SHALL BE WIRED TOGETHER. 2. DESIGN, MANUFACTURE AND QUALITY ASSURANCE OF METAL-PLATE- CONNECTED WOOD TRUSSES SHALL BE IN ACCORDANCE WITH TPI 1.

#### WOOD CONSTRUCTION NOTES

1. STRUCTURAL SAWN LUMBER, STRUCTURAL GLUED LAMINATED TIMBER, STRUCTURAL COMPOSITE LUMBER. AND FASTENERS ARE TO CONFORM TO THE "NATIONAL DESIGNS SPECIFICATION (NDS) FOR WOOD CONSTRUCTION USING ALLOWABLE STRESS DESIGN (ASD). ALL LUMBER SHALL BEAR THE GRADE THE GRADE MARK OF A GRADING RULES AGENCY APPROVED BY THE AMERICAN LUMBER STANDARD COMMITTEE.

2. DIMENSIONAL LUMBER SHALL BE DOUGLAS FIR LARCH (NORTH), CONFORMING TO THE FOLLOWING MINIMUM STRESS REQUIREMENTS:

2"-4" FRAMING (NO. 1/NO. 2): 5"x5" AND LARGER (NO. 1): Fb - 1,200 psi Fb - 850 psi Ft - 500 psi Ft - 825 psi Fv - 170 psi Fv - 180 psi Fcperp - 625 psi Fcperp - 625 psi Fcpar - 1,400 psi Fc<sub>par</sub> - 1,000 psi

3. STRUCTURAL COMPOSITE LUMBER INDICATED LVL AND PSL ARE LAMINATED VENEER LUMBER AND PARALLEL STRAND LUMBER, RESPECTIVELY, AS MANUFACTURED BY iLEVEL, OR EQUAL, WITH THE FOLLOWING MINIMUM PROPERTIES:

E - 1,600,000 psi

E - 2,000,000 psi

PSL BEAM: Fb - 2,600 psi Fb - 2,900 psi Ft - 1,555 psi Ft - 2,025 psi Fv - 285 psi Fv - 290 psi Fcperp - 750 psi Fcperp - 750 psi Fcpar - 2,510 psi Fc<sub>par</sub> - 2,900 psi

PSL COLUMN: Fb - 2,400 psi Ft - 1,755 psi

Fv - 190 psi Fcperp - 425 psi Fcpar - 2,500 psi E - 1,800,000 psi

E - 1,900,000 psi

E - 1,600,000 psi

4. GRADE LOSS RESULTING FROM WEATHERING, HANDLING, STORAGE, RESAWING, OR

DIVIDING LENGTHS WILL BE CAUSE FOR REJECTION. 5. DO NOT NOTCH OR DRILL JOISTS, BEAMS, OR LOAD BEARING STUDS WITHOUT PRIOR

APPROVAL OF THE STRUCTURAL ENGINEER. 6. ALL SILL PLATES ON EXTERIOR FOUNDATION WALLS AND EXTERIOR WALL SHEATHING LOCATED WITHIN 8" FROM EXPOSED EARTH SHALL BE PRESERVATIVE TREATED USING WATER-BORNE PRESERVATIVES IN ACCORDANCE WITH AWPA U1.

ROOF SHEATHING SHALL BE 3/4" APA RATED 48/24 C-D EXPOSURE I, AS DESIGNATED ON DRAWINGS EXTERIOR WALL SHEATHING SHALL BE 5/8" APA RATED 16/0 C-D, EXPOSURE 1.

SHEATHING SHALL BE CONTINUOUS OVER THREE OR MORE SUPPORTS AND SHALL BE INSTALLED WITH FACE GRAIN PERPENDICULAR TO SUPPORTS WITH JOINTS STAGGERED. 10. ROOF SHEATHING SHALL BE FASTENED WITH 10d COMMON NAILS AT 6" O.C AT PANEL

EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS. 1 1/2" EMBEDMENT MINIMUM IN TRUSS CHORD OR BLOCKING. PROVIDE BLOCKING AT ALL EDGES OF SHEATHING. 11. SHEATHING SHALL NOT BE LESS THAN 4' X 8', EXCEPT AT BOUNDARIES AND CHANGES IN

FRAMING 12. BUILT UP COLUMNS SHALL BE FASTENED TOGETHER AS FOLLOWS, UNLESS OTHERWISE NOTED ON THE DRAWINGS: 1 ROW 10d NAILS @ 6" O.C., STAGGERED, 1" MIN. EDGE DISTANCE

(3) 2X4 - 1 ROW 30d NAILS @ 8" O.C., STAGGERED, 1 1/2" MIN. EDGE DISTANCE (2) 2x6 - 2 ROWS 10d NAILS @ 6" O.C., 1" MIN. EDGE DISTANCE (3) 2x6 - 2 ROWS 30d NAILS @ 8" O.C., 1 1/2" MIN. EDGE DISTANCE 13. NAILS AND STAPLES SHALL CONFORM TO ASTM F 1667. NAILS INDICATED ON PLANS, SECTIONS, AND NOTES ARE COMMON NAILS UNLESS OTHERWISE NOTED.

8d - 0.131" x 2 1/2" 10d - 0.148" x 3"

16d - 0.162" x 3 1/2" 14. FASTENERS IN CONTACT WITH PRESERVATIVE TREATED WOOD SHALL BE HOT-DIPPED

GALVANIZED STEEL, STAINLESS STEEL, SILICON BRONZE, OR COPPER, 15. METAL CONNECTORS CALLED OUT ON THE DRAWINGS ARE AS MANUFACTURED BY "SIMPSON STRONG-TIE COMPANY, INC." USE MANUFACTURER'S RECOMMENDED NAILING AT ALL METAL CONNECTORS. SUBSTITUTIONS WILL NOT BE ALLOWED WITHOUT PRIOR WRITTEN APPROVAL OF THE STRUCTURAL ENGINEER.

16. PROVIDE SOLID BLOCKING AND CONTINUOUS STUDS TO BEARING LEVEL BELOW ALL KING AND JACK STUDS IN BEARING WALLS.

17. ALL CONNECTORS TO STRUCTURAL COMPOSITE LUMBER SHALL BE FASTENED TO THE WIDE FACE OF THE MEMBER ONLY AND NOT TO THE EDGES OF THE LUMBER

#### SHOP DRAWING SUBMITTALS

GENERAL CONTRACTOR (GC) SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR REVIEW OF ALL REQUIRED INFORMATION AS INDICATED IN THE DRAWINGS AND

SPECIFICATIONS, PRIOR TO ANY FABRICATION. 2. NO PORTION OF THE STRUCTURAL DRAWINGS SHALL BE REPRODUCED FOR USE AS SHOP DRAWINGS. ALL DIMENSIONS SHALL BE COORDINATED BY THE GC AND/OR THE DETAILER.

ASSOCIATED WORK AND SHALL ALLOW FOR SUFFICIENT REVIEW TIME. SUBMIT A

DETAILER SHALL USE THE SAME GRID IDENTIFICATIONS AS THOSE SHOWN ON THE CONTRACT DRAWINGS. 5. ALL SHOP DRAWINGS SHALL BE SUBMITTED PRIOR TO PROCEEDING WITH ANY

MINIMUM OF TWO (2) WEEKS PRIOR TO THE START OF FABRICATION. 6. SHOP DRAWINGS SHALL BE SUBMITTED WITH GC'S STAMP OF APPROVAL, CERTIFYING THE GC HAS COORDINATED AND VERIFIED ALL DIMENSIONS, MATERIALS, AND ANY ADDITIONAL INFORMATION AFFECTING STRUCTURAL WORK. THE GC'S REVIEW INCLUDES BUT IS NOT LIMITED TO COORDINATION AND VERIFICATION OF ACTUAL FIELD CONDITIONS, DIMENSIONS, ELEVATIONS, AND SUPPORTS AND OPENINGS FOR ACTUAL

EQUIPMENT PURCHASED. 7. SHOP DRAWINGS NOT COMPLYING WITH THE ABOVE SHALL BE RETURNED FOR CORRECTION WITHOUT REVIEWING.

HAVE BEEN REVIEWED AND APPROVED BY THE ENGINEER.

8. RESUBMITTED SHOP DRAWINGS SHALL INCLUDE ALL CHANGES ON THE DRAWINGS CLOUDED AND MARKED WITH REVISION TAG NUMBER. 9. GC SHALL NOT PROCEED WITH ANY WORK OR FABRICATION UNTIL THE SHOP DRAWINGS

^^^^^^^^^^^^^^^^^ SPECIAL INSPECTIONS ITEMS REMARKS INSPECTION SOIL BC 1705.6 TABLE 1705.6 STRUCTURAL STEEL BC 1705.2 AISC 360, CHAPTER N BC 1705.3 TABLE 1705.3 COCNRETE

CONTRACTOR SHALL SUPERVISE AND DIRECT THE VORK USING THE CONTRACTOR'S BEST SKILL AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCT MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB SITE SAFETY

2. GC MUST PROVIDE & INSTALL ALL PRODUCTS PER PLANS. ONLY SUBSTITUTED PRODUCTS NEED TO F SUBMITTED TO THE ARCHITECT FOR APPROVAL UNAPPROVED SUBSTITUTIONS WILL BE REPLACED THE EXPENSE OF THE GC.

3. VERBAL REPRESENTATION HAS NO VALUE AND AL REQUESTS TO CHANGE ANY PRODUCTS OR SPECIFICATIONS PER PLANS, MUST BE SUBMITTED IN WRITING TO THE ARCHITECT & TLE FOR APPROVAL



42 OKNER PARKWAY

LIVINGSTON, NEW JERSEY 07039

TEL: 973-994-9669

FAX: 973-994-4069

www.jarmelkizel.com Architecture Engineering Interior Design Implementation Services



NO. DATE DESCRIPTION FOR PERMIT 06-14-23 3 08-14-23 PER TLE AND CODE COMMENTS

REVISION O. DATE DESCRIPTION 08-16-23 CODE COMMENTS

PROFESSIONAL CERTIFICATION

MATTHEW B. JARMEL, AIA, MBA

LICENSE NUMBER: A2017014316

TLEMO22-164 **AS NOTED** Approved By: Drawn Bv:

**GENERAL NOTES** 

Drawing Name:

#### NOTES:

1. TOP OF SLAB IS SET AS DATUM 0'-0" AND IS ACTUAL ELEVATION 1012.00'.

2. SLAB ON GRADE SHALL BE 4" NORMAL WEIGHT CONCRETE PLACED OVER A 10 MIL. VAPOR BARRIER ON 4" BASE OF CRUSHED LIMESTONE, 20" GRANNULAR SUBBASE OF CRUSHER-RUN LIMESTONE OR ROCK DUST IN THREE (3) EQUAL LIFTS AND COMPACTED TO 95% OF THE STANDARD PROCTOR (ASTM D-698) MAX. DRY DENSITY AND A SINGLE LAYER OF GEOGRID (TENSAR BX-1100 OR EQUIVALENT). REINFORCE WITH 6x6-W1.4xW1.4 WELDED WIRE FABRIC OR 1.5 POUNDS FIBER REINFORCEMENT PER CUBIC YARD OF CONCRETE AT CONTRACTOR'S DISCRETION. PROVIDE SUBMITTAL FOR W.W.F. OR CONCRETE MIX DESIGN WITH FIBER REINFORCEMENT INCLUDED AND APPROVED GEOGRID TO BE USED, BY GEOTECH ENGINEER, SEE ARCHITECTURAL DRAWINGS FOR SCHEDULE OF FINISHES ON ALL EXPOSED CONCRETE SURFACES.

3. FOOTINGS ARE DESIGNED TO BEAR ON UNDISTURBED VIRGIN SOIL OR STRUCTURAL COMPACTED FILL PLACED OVER UNDISTURBED VIRGIN SOIL HAVING A MINIMUM ALLOWABLE BEARING CAPACITY OF 2000 PSF.

4. BOTTOM OF FOOTING ELEVATIONS ARE NOTED THUS (-X'-X") ON PLAN, REFERENCED FROM DATUM. ALL EXTERIOR FOOTINGS SHALL BE A MINIMUM 3'-0" BELOW FINISHED GRADE. TOP OF COLUMN FOOTINGS TO ALIGN WITH TOP OF WALL FOOTINGS.

5. PX - INDICATES PIER TYPE, SEE PIER SCHEDULE FOR SIZE AND REINFORCING. TOP OF PIER ELEVATIONS ARE -0'-8" UNLESS NOTED THUS <-X'-X"> ON PLAN, REFERENCED FROM DATUM.

6. FX.X - INDICATES COLUMN FOOTING TYPE, SEE FOOTING SCHEDULE FOR SIZE AND REINFORCING.

SW-X INDICATES SHEAR WALL LOCATION, SEE SHEAR WALL SCHEDULE ON S-103. INDICATES SHEAR WALL HOLDDOWN LOCATION, SEE SHEAR WALL SCHEDULE ON S-103 FOR SIZE AND ANCHORAGE. FOR GENERAL NOTES, SEE DRAWING S-100.

10. FOR TYPICAL DETAILS, SEE DRAWING S-200. 11. \* COORDINATE LOCATION OF POSTS WITH APPROVED ROOF TRUSS SHOP DRAWINGS.

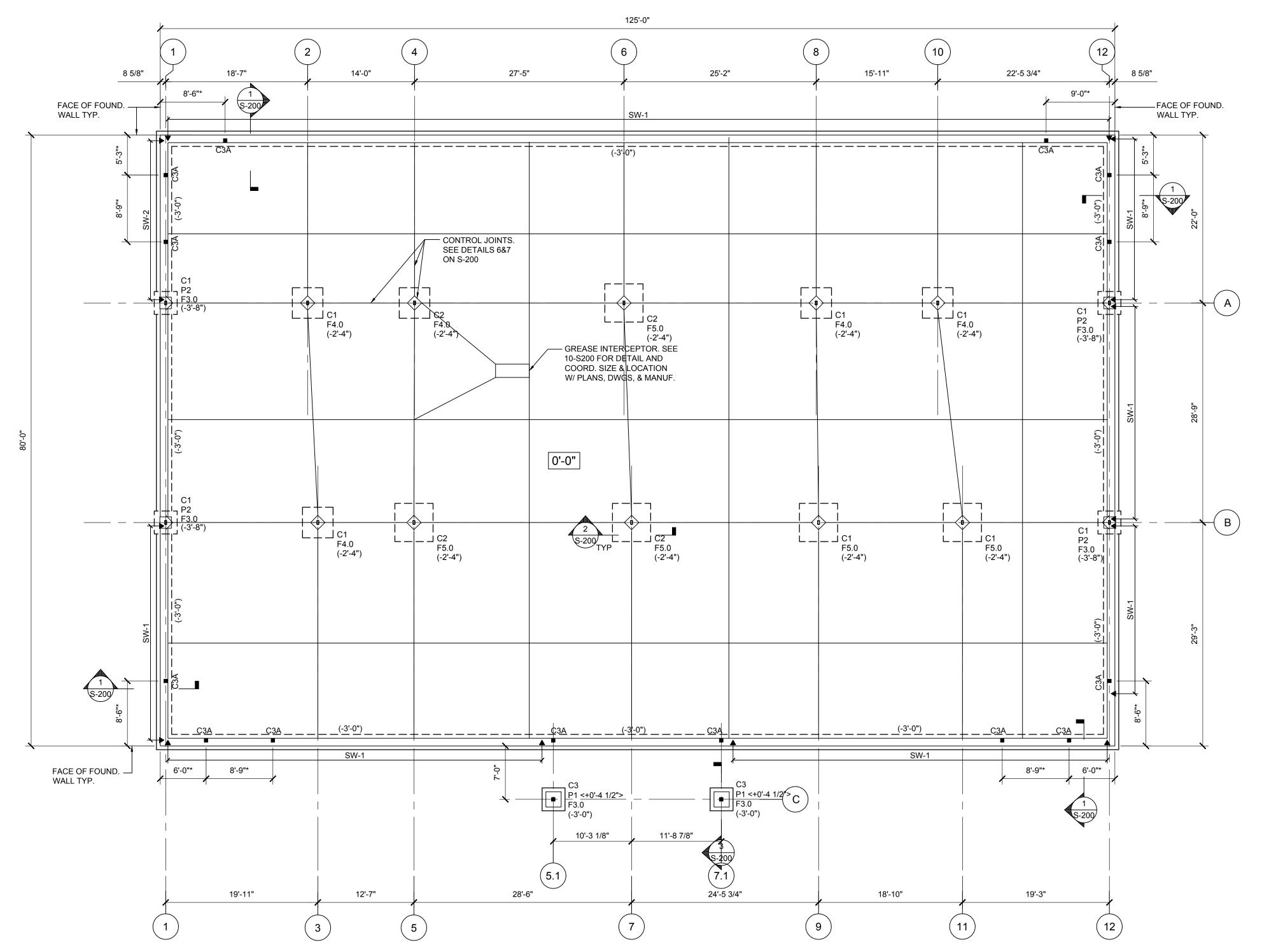
	SHEAR WALL SCHEDULE						
MARK	WALL FRAMING	SHEATHING	NAIL	ING	SILL PLATE	CHORD MEMBERS	HOLDOWN AT CHORDS
IVIARK	WALL FRAMING	SHEATHING	PANEL EDGES	INT. SUPPORTS	ANCHORAGE SPC.	CHORD MEMBERS	HOLDOWN AT CHORDS
SW-1	2x6 @ 16" O.C.	(1) LAYER 19/32" SHEATHING	10d @ 6" O.C.	10d @ 12" O.C.	REFER NOTE 2*	(2) 2x6	HDU2-SDS2.5 W/ 5/8"Ø THREADED ROD
SW-2	2x6 @ 16" O.C.	(1) LAYER 19/32" SHEATHING	10d @ 4" O.C.	10d @ 12" O.C.	REFER NOTE 2*	(2) 2x6	HDU8-SDS2.5 W/ 5/8"Ø THREADED ROD

\* REFER TO THE SHEAR WALL ELEVATION SCHEDULE ON S-103

PIER SCHEDULE					
MARK	SIZE		REINFORCING		REMARKS
IVIARK	LENGHT	WIDTH	VERT.	TIES	REWARKS
P1	24"	24"	8 -#6	#4 @ 12"	
P2	18"	18"	4 - #7	#4 @ 12"	

COLUMN SCHEDULE					
MARK	SIZE AND MATERIAL	BASE CONNECTION REQUIREMENTS			
C1	HSS 6X3X3/8	BASE PL - 12"X9"X3/4" W/ (4) 3/4"Ø F1554 ANCHOR RODS, EMBED. 1'-2"			
C2	HSS 6X3X1/2	BASE PL - 12"X9"X3/4" W/ (4) 3/4"Ø F1554 ANCHOR RODS, EMBED. 1'-2"			
C3	5-1/4 X 5-1/4 PSL	SIMPSON ABU66Z W/ (12) 16D NAILS. ANCHOR TO CONC. W/ 5/8"Ø THREADED ROD IN HILTI HIT-HY200 ADHESIVE EMBED 5 5/8"			
C3A	5-1/4 X 5-1/4 PSL	BEAR ON WALL BOTTOM PLATE. ATTACH W/ DTT1Z W/ 3/8"Ø THREADED ROD W/ HILTI HIT HY200 ADHESIVE EMBED 3 3/8" MIN. INTO CONCRETE			

	FOOTING SCHEDULE 2000 PSF BEARING CAPACITY						
MARK		SIZE		BOTT. REINF. E.W EACH WAY L-LONG S-SHORT	TOP REINF. E.W EACH WAY		
	LENGHT	WIDTH	DEPTH		L-LONG S-SHORT		
F3.0	3'-0"	3'-0"	20"	7 - #4 E.W.	-		
F4.0	4'-0"	4'-0"	20"	9 - #4 E.W.	-		
F5.0	5'-0"	5'-0"	20"	6 - #6 E.W.	-		



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2. GC MUST PROVIDE & INSTALL ALL PRODUCTS PER PLANS. ONLY SUBSTITUTED PRODUCTS NEED TO BE SUBMITTED TO THE ARCHITECT FOR APPROVAL. UNAPPROVED SUBSTITUTIONS WILL BE REPLACED A THE EXPENSE OF THE GC.

SITE SAFETY

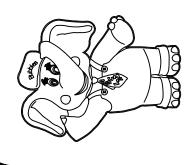
3. VERBAL REPRESENTATION HAS NO VALUE AND ALL REQUESTS TO CHANGE ANY PRODUCTS OR SPECIFICATIONS PER PLANS, MUST BE SUBMITTED IN WRITING TO THE ARCHITECT & TLE FOR APPROVAL.



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2	06-14-23	FOR PERMIT	MBJ
3	08-14-23	PER TLE AND CODE COMMENTS	MBJ
		REVISION	
NO.	DATE	DESCRIPTION	INT.

PROFESSIONAL CERTIFICATION MATTHEW B. JARMEL, AIA, MBA

LICENSE NUMBER: A2017014316

Project Number: TLEMO22-164	Scale: AS NOTED				
Drawn By:	Approved By:				
ММ	MBJ				
Duranda a Managa					

**FOUNDATION PLAN** 



FOUNDATION PLAN

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

LOAD SCHEDULE	
ROOF DEAD LOAD:	
WOOD TRUSSES 3/4" SHEATING ROOFING/ASPHALT SHINGLES CEILING/INSULATION MEP/MISC.	5 PSF 3 PSF 3 PSF 3 PSF 6 PSF
TOTAL DEAD LOAD	20 PSF
LIVE LOAD: ROOF	20 PSF
APPLY 10 PSF OF DL TO TRUSS BOTTOM CHORD	
DESIGN FLAT ROOF SNOW LOAD	20 PSF*
* CDOLIND SNOW LOAD TO BE AD ILISTED FOR DRIFT	SLIDING

\* GROUND SNOW LOAD TO BE ADJUSTED FOR DRIFT, SLIDING, UNBALANCED LOADING, ETC. PER CODE.

	HEADER SCHEDULE				
MARK	LOCATION	HEADER SIZE	JAMB MEMBER	HEADER CONNECTION	
H-1	SINGLE DOOR / WINDOW 4'-0" MAXIMUM OPNG.	3-2X10 W/ 2-1/2" PLYWOOD SPACERS	2-2X6 EACH SIDE	SIMPSON A21 & LSTA9	
H-2	DOUBLE DOOR / WINDOW 8'-0" MAXIMUM OPNG.	3-2X12 W/ 2-1/2" PLYWOOD SPACERS	2 (2x6) EACH SIDE	SIMPSON A21 & LSTA9	

	STRUCTURAL WOOD BEAM SCHEDULE				
MARK	TYPE	CONNECTION REQUIREMENT	COMMENT		
BM-1	5 1/4" X 9 1/4" PARALLAM PSL	CCTQ666-SDS2.5 TO CANOPY POSTS ECCQ66-SDS2.5 TO WALL POSTS			
BM-2	5 1/4" X 9 1/4" PARALLAM PSL	CCTQ666-SDS2.6			
BM-3	5 1/4" X 9 1/4" PARALLAM PSL	ECCQ66-SDS2.5 TO WALL POST			

NOTES:

1. TYPICAL ROOF CONSTRUCTION SHALL BE 3/4" SHEATHING OVER PRE-FABRICATED WOOD TRUSSES.

- WOOD TRUSSES ARE SUPPORTED BY EXTERIOR BEARING WALLS AND INTERIOR STEEL BEAMS AND SHALL BE BOTTOM CHORD BEARING.
   BOTTOM OF ROOF TRUSS BOTTOM CHORD (TOP OF BEARING PLATES) IS SET AT ELEVATION +11'-1 1/8". TOP OF ROOF TRUSS TOP CHORD SLOPES. WITH H.P.
- 4. ALL STUD WALLS SHOWN ON FRAMING PLAN ARE 2x6 AT 16" O.C. LOAD BEARING WALLS. SEE ARCHITECTURAL DRAWINGS FOR LOCATION AND DETAILS ON INTERIOR NON-LOAD BEARING PARTITION WALLS.
- 5. EXTERIOR WALLS ARE TO BE SHEATHED WITH 5/8" SHEATHING ANCHORED WITH 10d NAILS AT 6" O.C. AT PANEL EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS, UNLESS OTHERWISE DESIGNATED ON THE SHEAR WALL SCHEDULE ON S-103.
- SUPPORTS, UNLESS OTHERWISE DESIGNATED ON THE SHEAR WALL SCHEDULE ON S-103.

  6. ALL TRUSSES SHALL BE DESIGNED AND FABRICATED PER APPLICABLE LOADS BY THE TRUSS FABRICATOR. SUBMIT SHOP DRAWINGS AND CALCULATIONS
- SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF MISSOURI.

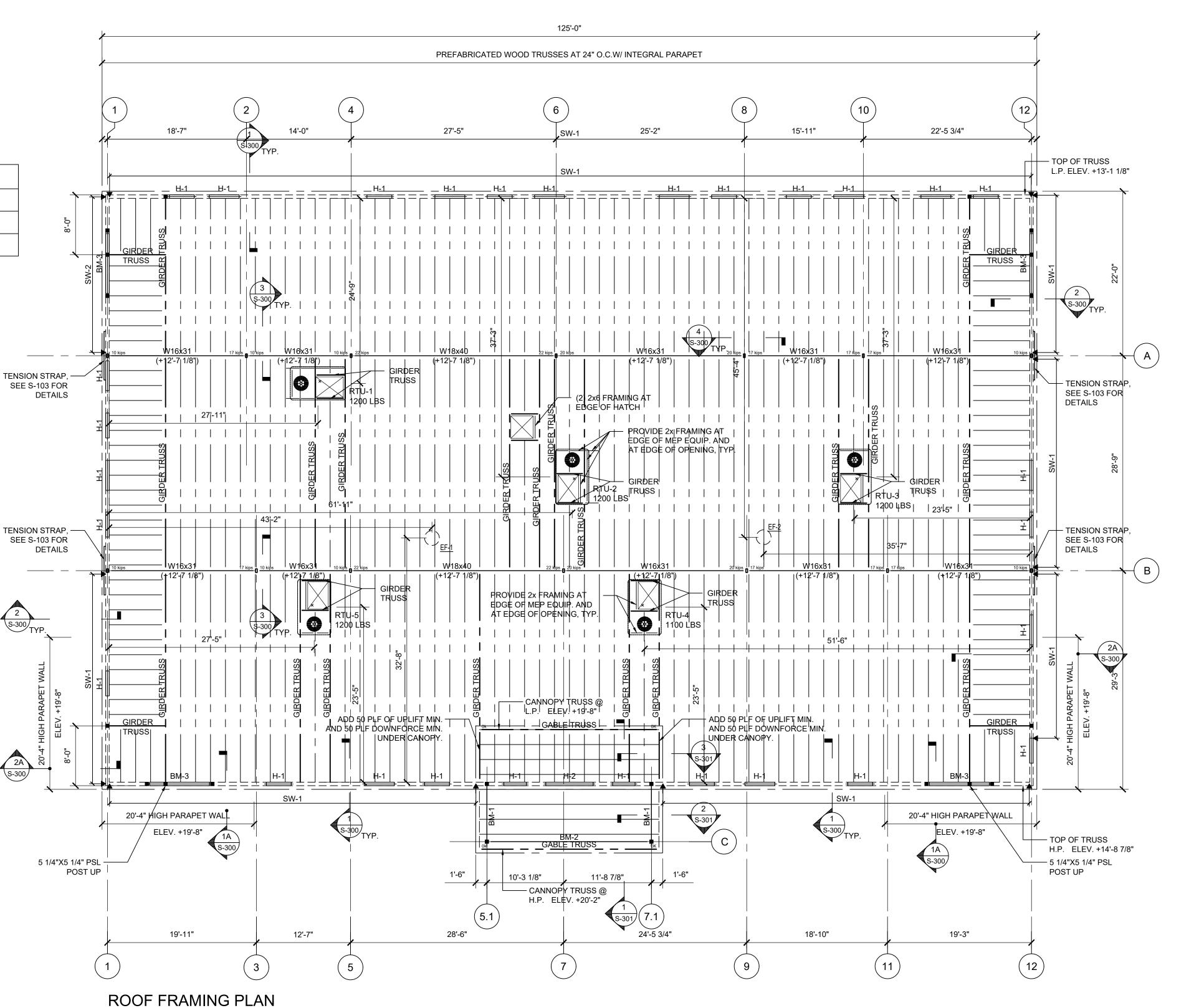
  7. ROOF TRUSSES ARE TO BE A DEFERRED SUBMITTAL. SIGNED AND SEALED COPIES OF THE TRUSS CALCULATIONS AND THE PLACEMENT PLANS, WITH
- EVIDENCE THAT THE ENGINEER OF RECORD HAS REVIEWED AND APPROVED, SHALL BE SUBMITTED TO THE BUILDING DEPARTMENT.

  8. TRUSSES ARE TO BE DESIGNED FOR ALL LOADING AS DESIGNATED IN THE LOAD SCHEDULE AND ALL MECHANICAL UNITS SHOWN. COORDINATED LOCATION AND WEIGHTS OF UNITS WITH MECHANICAL DRAWINGS.
- 9. MECHANICAL EQUIPMENT DIMENSIONS SHOWN ON PLAN ARE TO CENTERLINE OF UNIT. DIMENSIONS TO BE VERIFIED WITH MECHANICAL DRAWINGS AND APPROVED HVAC SHOP DRAWINGS.
- 10. ALL TRUSSES/ROOF FRAMING ARE TO BE COORDINATED WITH MECHANICAL DRAWINGS FOR ROOF PENETRATIONS AND DUCTWORK LOCATIONS.

  11. BM-X INDICATES BEAM TYPE, SEE BEAM SCHEDULE FOR SIZE AND CONNECTION REQUIREMENTS. TOP OF BEAM ELEVATION NOTED THUS (+X'-X") ON PLAN,
- I. BM-X INDICATES BEAM TYPE, SEE BEAM SCHEDULE FOR SIZE AND CONNECTION REQUIREMENTS. TOP OF BEAM ELEVATION NOTED THUS (+X'-X") ON PLAN, REFERENCED FROM BUILDINGS DATUM.
- 12. H-X INDICATES HEADER TYPE, SEE HEADER SCHEDULE FOR SIZE AND CONNECTION REQUIREMENTS.

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

- 13. SW-X INDICATES SHEAR WALL SEE SHEAR WALL SCHEDULE AND SHEAR WALL ELEVATION ON S-103 FOR MORE INFORMATION.
  14. ALL BEAMS, HEADERS, AND TRUSSES ARE TO BEAR ON POSTS SHOWN ON PLAN WITH CONNECTIONS AS SPECIFIED IN THE COLUMN SCHEDULE.
- 15. SEE DRAWING S-100 FOR GENERAL NOTES.
- 16. UNLESS OTHERWISE NOTED ON PLAN, PROVIDE A (2) 2x6 POST AT ALL 2-PLY GIRDER TRUSS AND A (3) 2x6 POST AT ALL 3-PLY GIRDER TRUSS. GC SHALL COORDINATE LOCATION AND SIZE OF POST WITH APPROVED ROOF TRUSS SHOP DRAWINGS.



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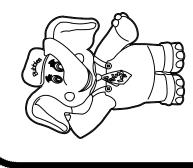
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MATTHEW B. JARMEL, AIA, MBA

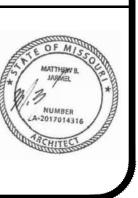
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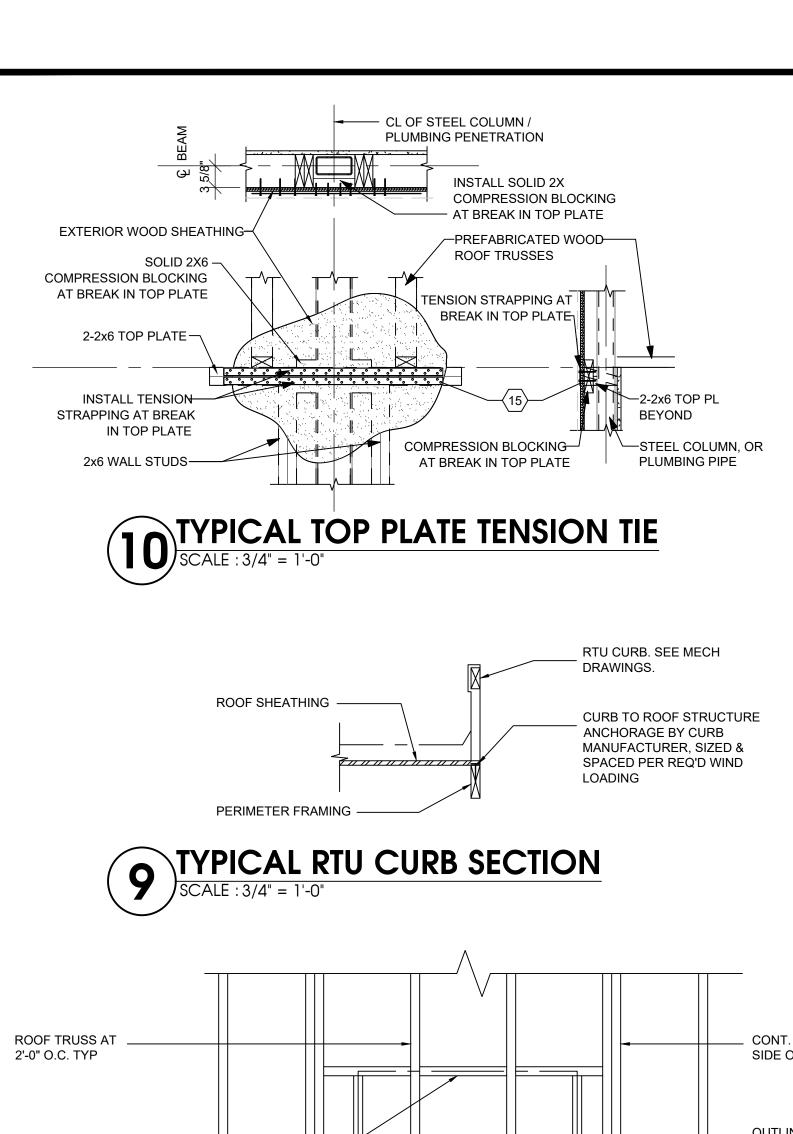
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мм	MBJ
Drawing Name	

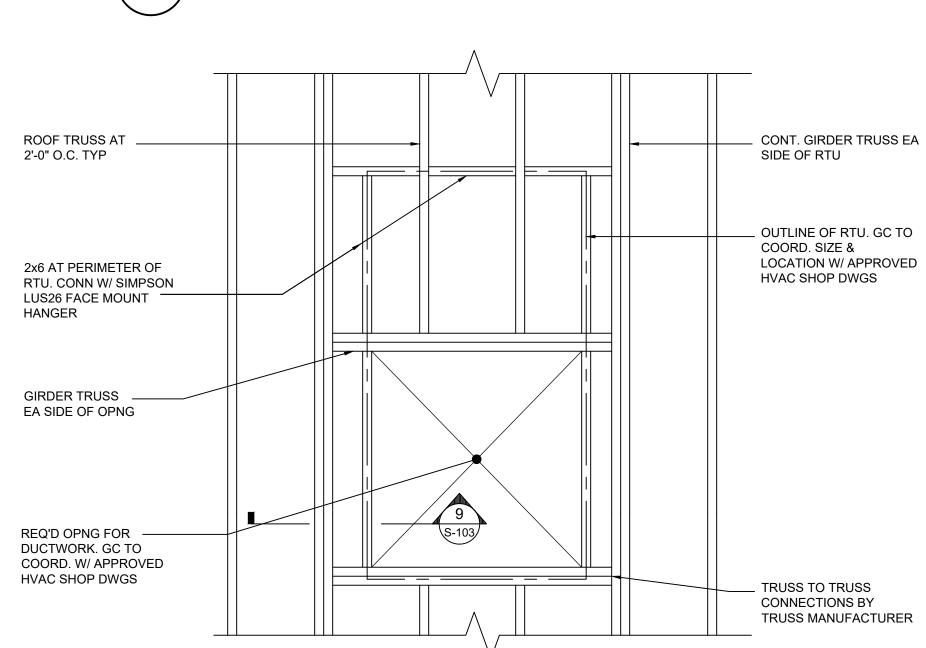
ROOF FRAMING PLAN

Drawing Number

5-102









4'-0" MIN. LAP

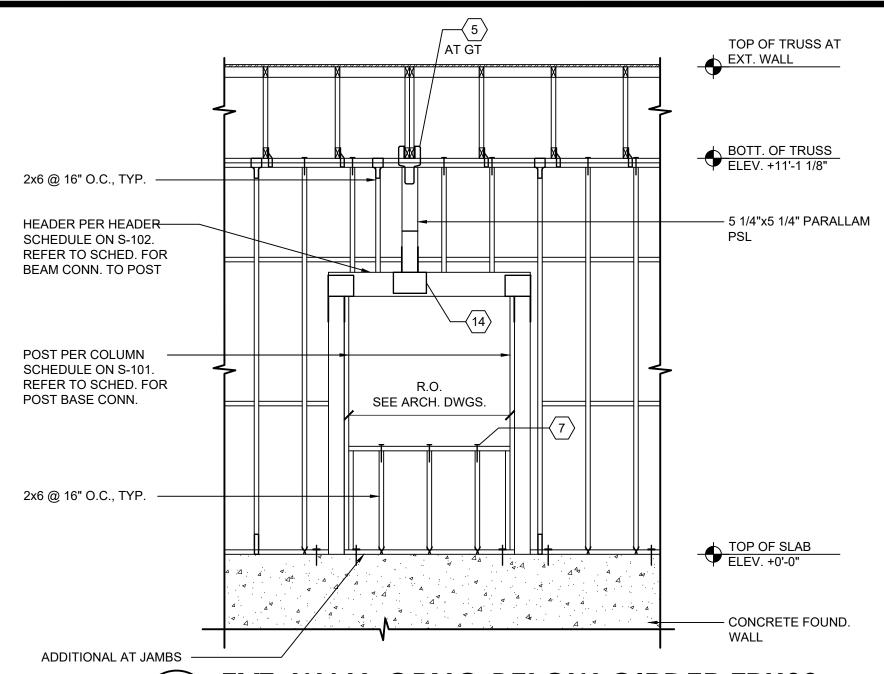
7 TOP PLATE SPLICE DETAIL

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

2 ROWS OF 26-16d

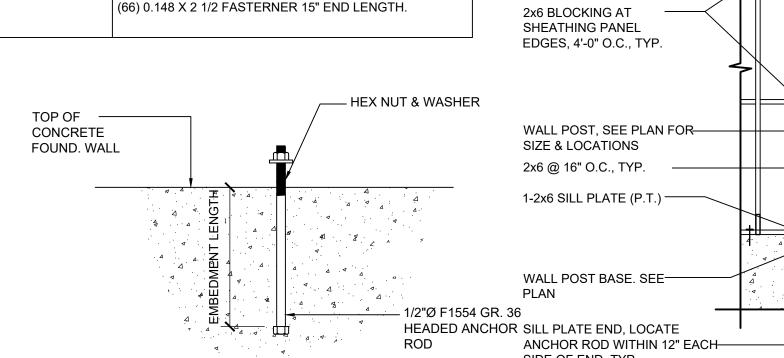
NAILS EA SIDE OF

SPLICE



EXT. WALL OPNG BELOW GIRDER TRUSS

	ITEM DESCRIPTION	REMARKS
1	REFER TO SHEAR WALL SCHEDULE	-
2	1/2"Ø F1554 GR. 36 HEADED ANCHOR RODS @ 4'-0" O.C., & WITHIN 12" OF SILL PL ENDS OR 1/2"Ø SIMPSON TITEN HD SCREW ANCHOR @ 2'-8" O.C. FOR <u>SW-1</u> AND 1-4" FOR <u>SW-2</u> & WITHIN 12" OF SILL PL ENDS	9" EMBEDMENT FOR HEADED ANCHOR 3 5/8" EMBEDMENT FOR SCREW ANCHOR PROVIDE W/ 3" X 3" X 1/4" PL ON SILL FOR BOTH CAST-IN & POST-INSTALLED ANCHORS
3	SIMPSON TSP	9-0.148 X 1 1/2 TO TRUSS, 6-0.148 X 1 1/2 TO PLATES AT EACH TRUSS
ļ	NOT USED	-
5	SIMPSON LGT2 (FOR 2-PLY GIRDER TRUSS) SIMPSON LGT3 (FOR 3-PLY GIRDER TRUSS)	LGT2- 14-16D SINKERS TO POST 16-16D SINKERS TO GIRDER TRUSS LGT3- 26-16D SINKERS TO POST 12-SDS 1/4"X2 1/2" TO GIRDER TRUSS
6	SIMPSON SP2	(6) 0.148x3 TO STUD AND (6) 0.148x3 TO PLATE EVERY OTHER STUD (2'-0" O.C.)
7	2-16d COMMON NAILS	END NAIL TOP PLATE TO STUD, TYP.
3	4-8d COMMON NAILS	TOE NAIL STUD TO SOLE PLATE, TYP.
9	SIMPSON SP1	(6) 0.148x3 TO STUD, (4) 0.148x3 TO SILL PL EVERY OTHER STUD, ALIGN W/ SP2 ABOVE USE HDG NAILS MEETING ASTM A153
0	SEE SHEAR WALL SCHEDULE FOR SHEATHING	EXTERIOR FACE ONLY
1	SHEAR WALL EDGE NAILING PER SHEAR WALL SCHEDULE	SPACING TO BE 12" O.C. AT INTERMEDIATE SUPPORTS, 1 1/2" EMBED. MIN. IN STUD/BLOCKING, TYP.
2	SIMPSON LSTA9	4-10D EACH TO STUD AND HEADER, 8-10D TOTAL
3	SIMPSON A21	2-10DX1 1/2 TO HEADER/ SILL 2-10DX1 1/2 TO JAMB
4	SIMPSON CCQ66SDS2.5	16 SDS 1/4"X2 1/2" SCREWS TO BEAM 14 SDS 1/4"X2 1/2" SCREWS TO POST
 5	SIMPSON (2) CSMT14	(66) 0.148 X 2 1/2 FASTERNER 15" END LENGTH.



SHEAR WALL CORNER HOLDDOWN PLAN DETAIL

NAIL SHEATHING TO CHORD POST PER SHEAR

SHEAR WALL CHORD POST

SHEAR WALL HOLDDOWN. SEE ELEVATION 1/S-103 AND SHEAR WALL ELEVATION SCHEDULE.

CORNER INTERSECTION OF

PER ELEVATION 1/S-103

WALL ELEVATION

SCHEDULE

**EXTERIOR SHEAR WALL** SHEATHING. SEE ELEVATION

1/-S103 AND SHEAR WALL

STUDS @ 16" O.C.

ELEVATION SCHEDULE

STAGGER UPPER

SPLICES

AND LOWER PLATE

- LOCATE STUD BELOW

SPLICES TYP.



TYPICAL EXTERIOR SHEAR BEARING WALL ELEVATION

NOTE: HARDWARE LOCATIONS SHOWN ARE DIAGRAMATIC ONLY. SEE SHEAR WALL ELEVATION SCHEDULE FOR LOCATIONS AND SPACING

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TOP OF TRUSS AT

EXT. WALL

BOTT. OF TRUSS ELEV. +11'-1 1/8"

- 2-2x6 FULL HEIGHT

TOP OF SLAB
ELEV. +0'-0"

- PREMANUFACTURED ROOF TRUSS,

- ROOF SHEATHING

- CONCRETE FOUND.

TOP OF TRUSS AT

EXT. WALL

BOTT. OF TRUSS
ELEV. +11'-1 1/8"

TRIPLE STUD POST MIN. AT CORNERS TYP.

TOP OF SLAB
ELEV. +0'-0"

CONCRETE FOUND.

TOP PLATE NAILING

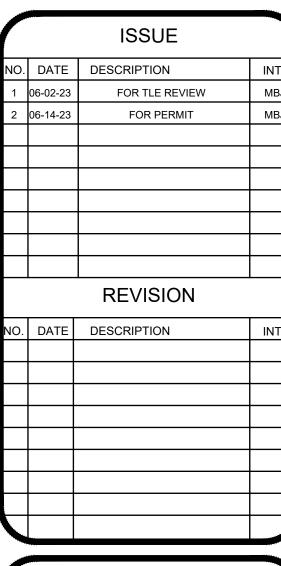
- FIELD NAILING

THRU LOWER 2x ONLY

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PROFESSIONAL CERTIFICATION MATTHEW B. JARMEL, AIA, MBA

LICENSE NUMBER: A2017014316

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Drawing Name:	

WALL ELEVATIONS



GIRDER TRUSS, SEE PLAN FOR LOCATIONS 2-2x6 TOP PLATE

WOOD BLOCKING

BTWN EA. TRUSS, TYP.

SHEATHING PANEL

NAILING. STAGGER

LOWER TOP PLATE

2x6 @ 16" O.C., TYP.

HEADER PER ---

JAMB PER

HEADER SCHEDULE

HEADER SCHEDULE

2x6 @ 16" O.C., TYP.

ATTACH ROOF & WALL

SHEATHING TO BLOCKING PER

PANEL EDGE ATTACHMENT

9 ADDITIONAL AT JAMBS ———

AT GT

INTO UPPER & ——

NAILING DETAIL AT TOP PLATE

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

R.O. SEE ARCH. DWGS.

TYPICAL BEARING WALL OPENING ELEVATION

SCALE: 3/8" = 1'-0"

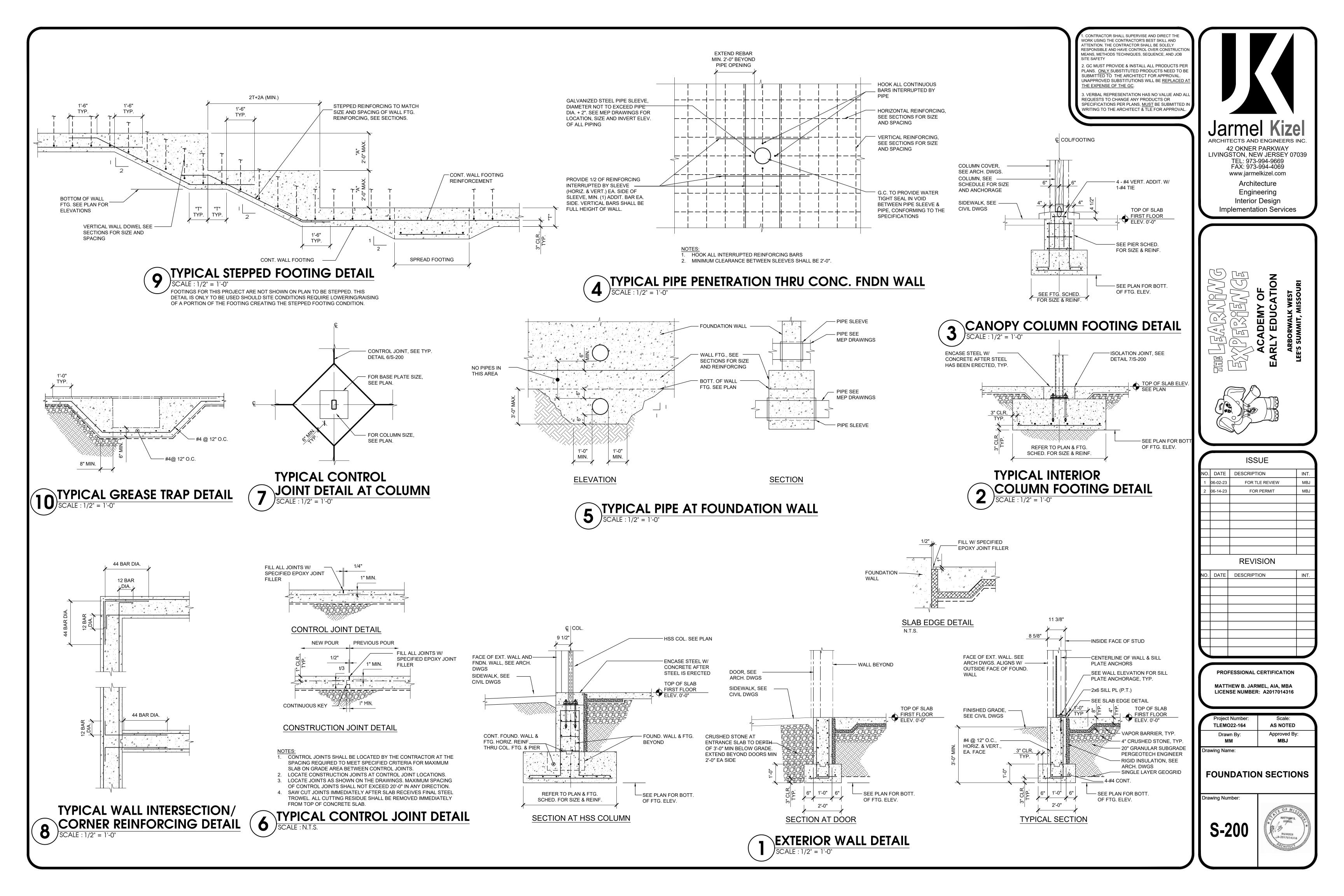
S-300

- EXTEND WALL SHEATHING TO

UNDERSIDE OF ROOF SHEATHING

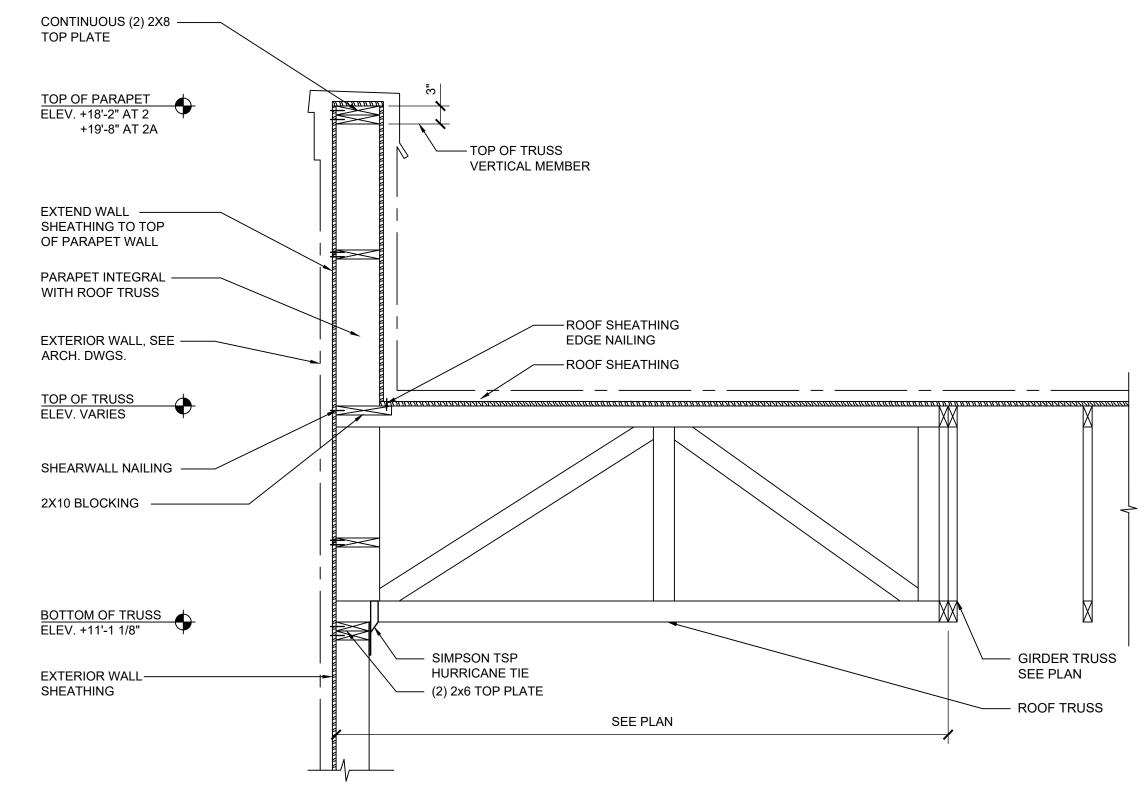
ONLY ONE HOLDDOWN REQ'D AT

SIDE OF END, TYP.



\_ CANOPY BEAM. SEE PLAN. BOTT. OF CANOPY BEAM ELEV. +13'-3" - ROOF TRUSSES AT CANOPY BM TO POST 2'-0" O.C. CONN. PER BEAM SCHED. TOP PLATE STRAPPING -PER #15 ON SHEAR WALL ELEVATION SCHEDULE BOTT. OF TRUSS
ELEV. +11'-1 1/8" 2x6 STUDS @ \_ CANOPY POST IN WALL. SEE PLAN. DOUBLE TOP PLS

## 5 STRAPPING AT CANOPY POST SCALE: 3/4" = 1'-0"

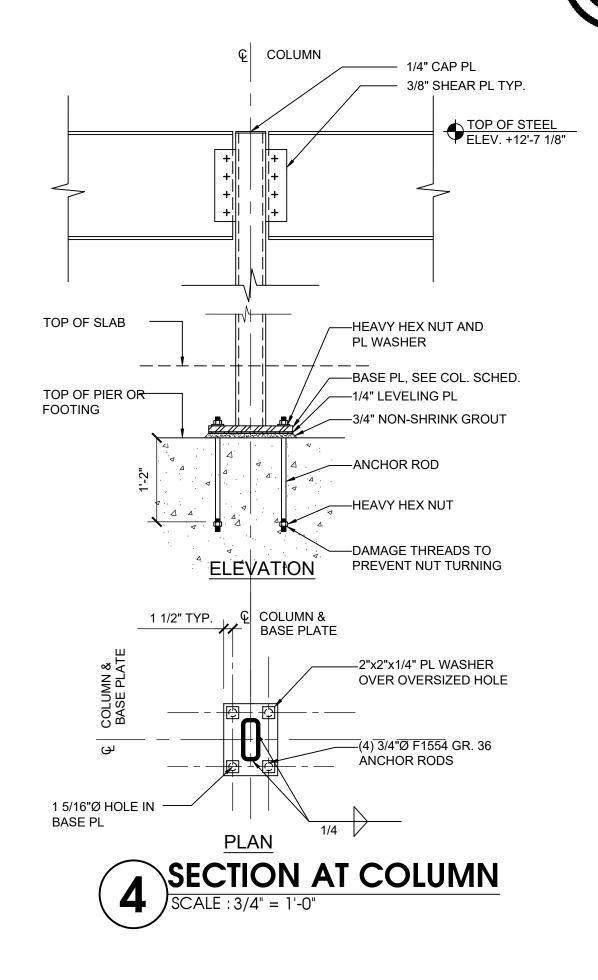


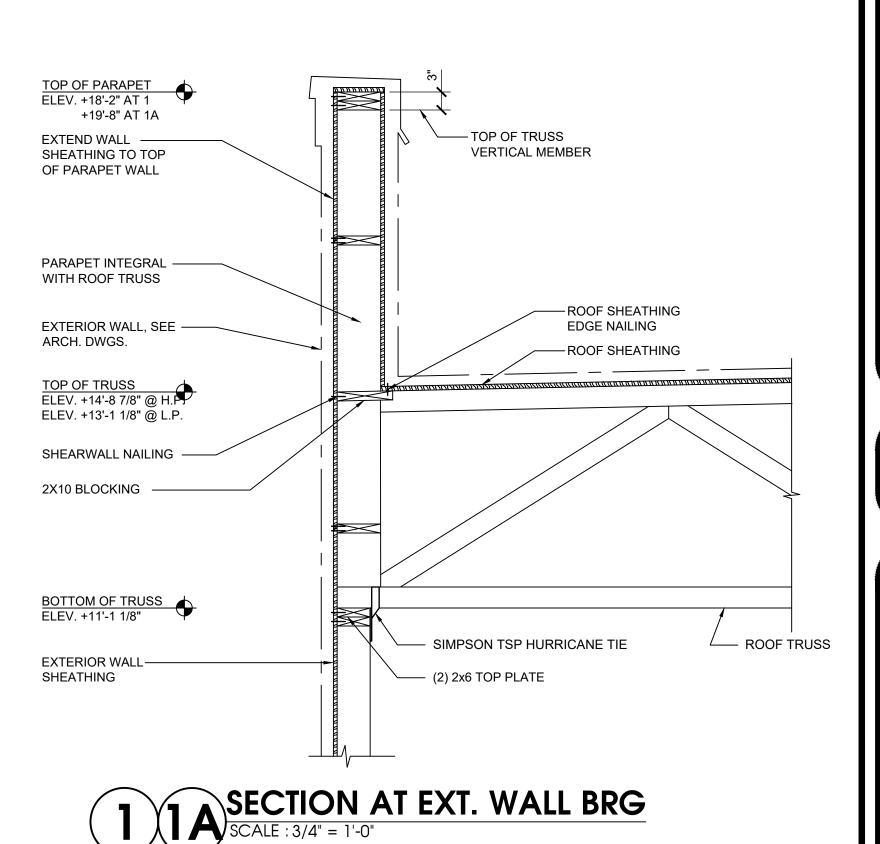
SECTION AT EXT. WALL BRG

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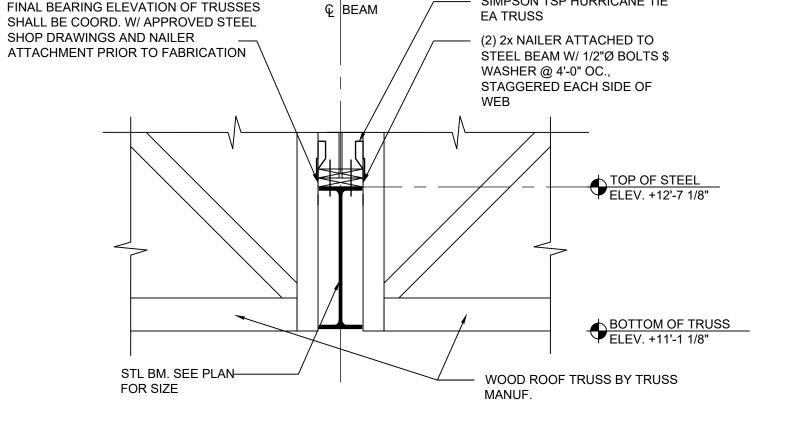
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FRAMING SECTIONS



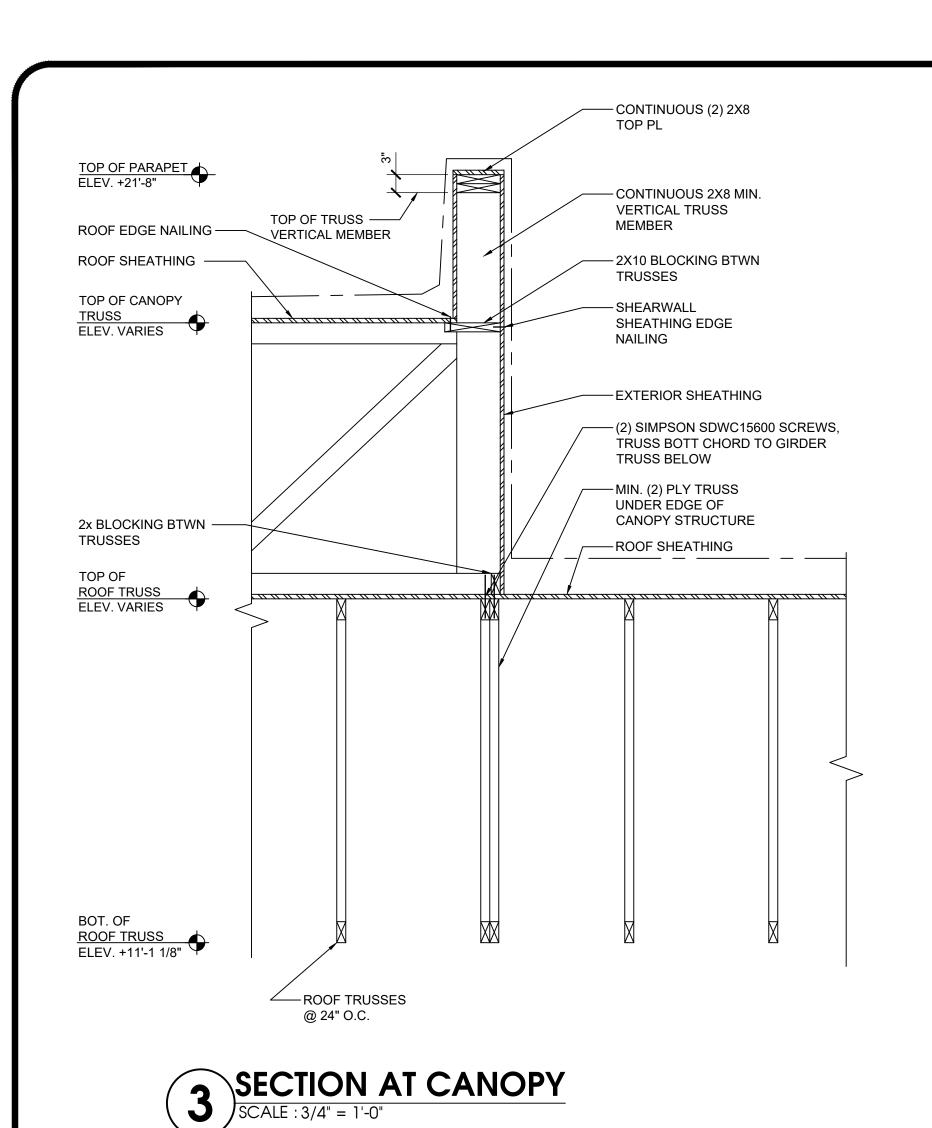


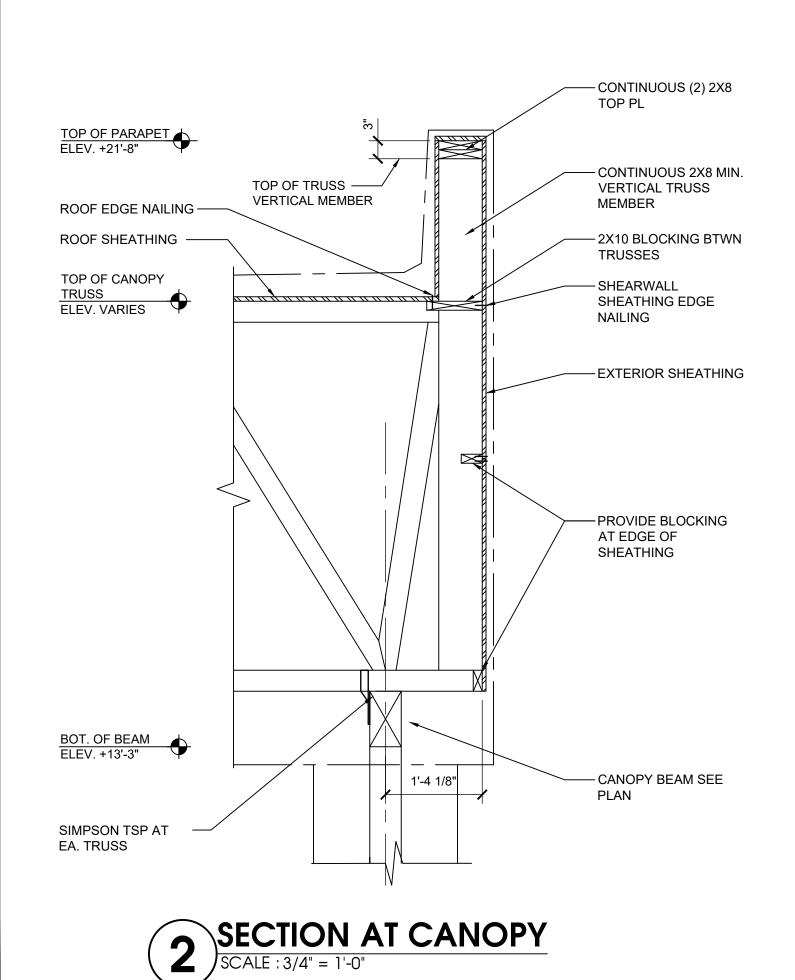
FINAL BEARING ELEVATION OF TRUSSES

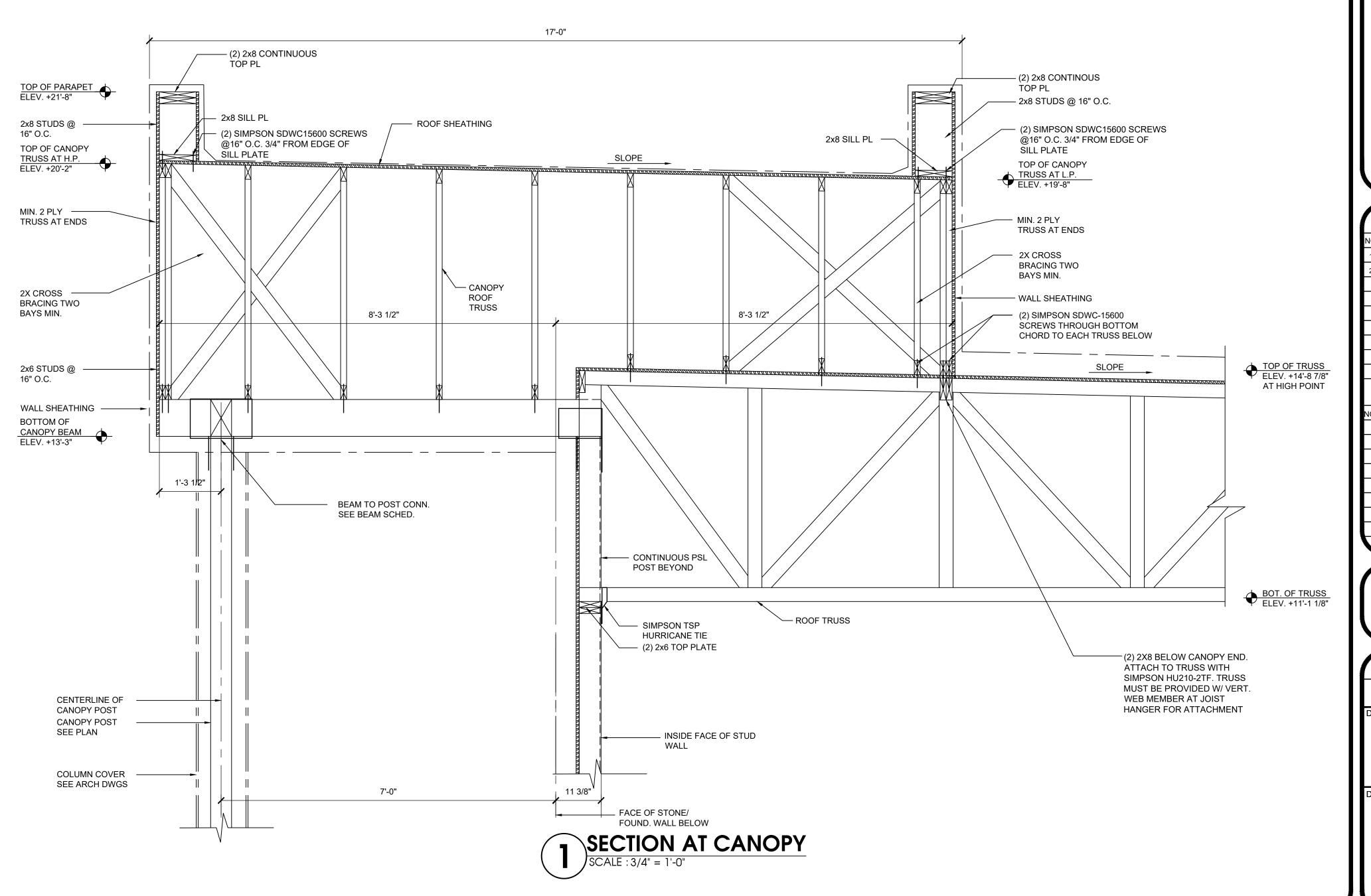
SIMPSON TSP HURRICANE TIE

SECTION THRU STEEL BEAM

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







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SITE SAFETY

2. GC MUST PROVIDE & INSTALL ALL PRODUCTS PER PLANS. <u>ONLY</u> SUBSTITUTED PRODUCTS NEED TO BE SUBMITTED TO THE ARCHITECT FOR APPROVAL. UNAPPROVED SUBSTITUTIONS WILL BE <u>REPLACED AT THE EXPENSE OF THE GC</u>.

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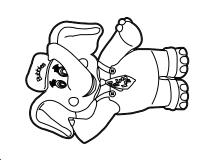
ARCHITECTS AND ENGINEERS INC.

42 OKNER PARKWAY
LIVINGSTON, NEW JERSEY 07039
TEL: 973-994-9669
FAX: 973-994-4069

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PROFESSIONAL CERTIFICATION

MATTHEW B. JARMEL, AIA, MBA

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#### MEP-FP GENERAL NOTES

- ATTENTION ALL USERS OF THESE DRAWINGS, GENERAL CONTRACTORS, SUBCONTRACTORS, MANUFACTURERS, AND MATERIAL SUPPLIERS ARE TO CAREFULLY AND THOROUGHLY REVIEW THESE GENERAL NOTES. IT IS YOUR RESPONSIBILITY TO KNOW AND ADHERE TO ALL OF THE
- CONTRACTOR SHALL DETERMINE THE APPLICABILITY OF THE GENERAL NOTES BASED UPON THE PROJECT SCOPE CRITERIA AND CONSTRAINTS. QUESTIONS AS TO APPLICABILITY SHOULD BE ADDRESSED TO THE ARCHITECT / ENGINEER PRIOR TO BID SUBMISSION. THE ARCHITECT / ENGINEER SHALL MAKE THE FINAL BINDING DECISION ON APPLICABILITY. CONTRACTOR SHALL NOT REQUEST A CHANGE ORDER BASED UPON THE ENGINEER'S DECISION ON APPLICABILITY.
- BIDDERS, PRIOR TO SUBMITTING A PROPOSAL/BID SHALL VISIT AND CAREFULLY EXAMINE THE AREAS AFFECTED BY THIS WORK AND TO BECOME FAMILIAR WITH EXISTING CONDITIONS SITE PARAMETERS AND WITH THE DIFFICULTIES THAT WILL BE ENCOUNTERED DURING THE EXECUTION OF WORK. SUBMISSION OF A PROPOSAL/BID WILL BE CONSTRUED AS EVIDENCE THAT SUCH AN EXAMINATION HAS BEEN MADE.
- NO CONSIDERATION OR ALLOWANCE WILL BE GRANTED FOR FAILURE TO VISIT THE SITE, NOR FOR ANY ALLEGED MISUNDERSTANDING OF MATERIALS TO BE FURNISHED OR WORK TO BE PERFORMED. THE CONTRACTOR SHALL INCLUDE IN THEIR BID PRICE ALL LABOR AND MATERIAL THAT MAY AFFECT THEIR WORK.
- IT IS THE INTENT OF THE CONSTRUCTION DOCUMENTS TO CALL FOR FINISHED WORK, TESTED AND READY FOR OPERATION. ANY APPARATUS, APPLIANCE, MATERIAL OR WORK NOT SHOWN ON DRAWINGS BUT MENTIONED IN THE SPECIFICATION, OR VICE VERSA, OR ANY INCIDENTAL ACCESSORIES NECESSARY TO MAKE THE INSTALLATION COMPLETE AND READY FOR OPERATION, EVEN IF NOT PARTICULARLY SPECIFIED, MUST BE FURNISHED, DELIVERED AND INSTALLED WITHOUT ADDITIONAL EXPENSE TO THE OWNER. DISCREPANCIES OR A QUESTION OF INTENT, MUST BE REFERRED TO THE ARCHITECT/ENGINEER IN WRITING FOR DECISION BEFORE SUBMITTING A PROPOSAL/BID. THE INTERPRETATIONS OF THE ARCHITECT/ENGINEER ARE FINAL, CONCLUSIVE AND BINDING.
- IT IS THE INTENT OF THESE SPECIFICATIONS AND ACCOMPANYING DRAWINGS THAT THE CONTRACTOR SHALL, UNLESS OTHERWISE SPECIFIED, FURNISH ALL LABOR, MATERIALS. TOOLS AND EQUIPMENT TO COMPLETE INSTALLATION OF THE SYSTEMS AS SPECIFIED. CONTRACTOR SHALL PROPERLY INSTALL EQUIPMENT, ADJUST TEST AND PUT INTO OPERATION PER EQUIPMENT MANUFACTURER'S REQUIREMENTS THE RESPECTIVE PORTIONS OF THE INSTALLATION SPECIFIED, AND TO SO INTERCONNECT THE VARIOUS ITEMS OR SECTIONS OF THE WORK IN ORDER TO FORM A COMPLETE AND PROPERLY OPERATING SYSTEM.
- THE CONTRACTOR UNDERSTANDS AND AGREES THAT THESE CONSTRUCTION DOCUMENTS INCLUDING DRAWINGS AND SPECIFICATIONS SHALL BE FULFILLED IN ACCORDANCE WITH MINOR MATERIALS OR DEVICES ESSENTIAL TO PROPER AND CONVENIENT OPERATION, REQUIRED OR IMPLIED AND SHALL BE SUPPLIED AND INSTALLED BY THE CONTRACTOR WITHOUT EXTRA CHARGE, THOUGH NOT SPECIFICALLY IDENTIFIED.
- THESE DRAWINGS ARE INTENDED TO BE USED ONLY BY AN EXPERIENCED CONTRACTOR FAILURE TO RECOGNIZE THE COMPLEXITIES OF CONSTRUCTION AND SEQUENCING CAN RESULT IN UNSAFE WORK CONDITIONS AND UNACCEPTABLE WORK. CONTRACTOR SHALL PROCEED WITH A TOTAL UNDERSTANDING OF THE ENTIRE PROJECTS SCOPE AND A COMPLETE SET OF THE LATEST CONSTRUCTION DOCUMENTS. THE CONTRACTOR SOLELY ASSUMES TOTAL RESPONSIBILITY OF PROCEEDING WITH THE WORK.
- READ SPECIFICATIONS AND INDIVIDUAL TRADE NOTES FOR REQUIREMENTS RELATED TO THESE DOCUMENTS.
- 10. DO NOT PRESUME THAT YOUR SCOPE OF WORK IS SINGULARLY DEFINED. YOUR SCOPE OF WORK IS DEFINED THROUGHOUT THE ENTIRE SET OF DRAWINGS AND SPECIFICATIONS AND IS NOT CONTAINED IN JUST ONE SERIES OF DRAWINGS OR DIVISION OF SPECIFICATIONS. YOU MUST REVIEW THE ENTIRE SET OF CONTRACT DOCUMENTS TO DETERMINE YOUR SCOPE OF
- EVERY EFFORT HAS BEEN MADE TO MAKE THESE DOCUMENTS CONCISE AND COORDINATED, TO DEFINE WORK IN THE MOST LOGICAL PLACE AND TO ELIMINATE REDUNDANCY. KEEP IN MIND HOWEVER THAT YOUR SCOPE OF WORK CAN BE CONTAINED IN VARIOUS PLACES, WITH VARYING DESCRIPTIONS. DO NOT CONSIDER THAT THERE IS ONE CUSTOMARY PLACE TO LOCATE YOUR WORK. THERE IS A DANGER OF OMITTING WORK FROM YOUR SCOPE BECAUSE THE ENTIRE SET OF DOCUMENTS WAS NOT REVIEWED.
- THE WORK SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, PERMITS HOISTING AND RIGGING, SCAFFOLDING, LOADING AND UNLOADING, CLEAN -UP OF DEBRIS AND OTHER SERVICES, TO PROVIDE THE OWNER WITH COMPLETE FULLY OPERATIONAL SYSTEMS.
- 13. CONTRACTOR SHALL PROCURE AND PAY FOR ALL PERMITS, LICENSE, APPROVALS INSPECTIONS, ETC., AS ARE REQUIRED TO PERFORM THE WORK. CONTRACTOR SHALL TRANSMIT ORIGINALS TO THE OWNER FOR RECORD.
- 14. THESE GENERAL NOTES, CODES, STANDARDS, AND SPECIFICATIONS, INCLUDING ADDENDA AND SUPPLEMENTS, REFERENCED IN THE CONTRACT DOCUMENTS SHALL BE THE LATEST APPROVED ISSUE, UNLESS OTHERWISE SPECIFICALLY NOTED.
- THE MEANS, METHODS, TECHNIQUES, SEQUENCES, AND OPERATIONS OF CONSTRUCTION ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE TO COORDINATE THE SEQUENCING, SCHEDULING, AND COORDINATION OF THE WORK WITH ALL TRADES INVOLVED.
- 16. PROJECT SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL COMPLY WITH ALL GOVERNMENTAL LAWS, RULES, AND REGULATIONS AS IT PERTAINS TO PROJECT SITE SAFETY. THE PROCEDURES TO BE USED SHALL PROVIDE FOR THE SAFE CONDUCT OF THE WORK, CAREFUL DISPOSITION AND INSTALLATION OF ALL MATERIALS, PROTECTION OF PROPERTY AND PERSONNEL, AND COORDINATION WITH OTHER WORK IN PROGRESS.
- DURING CONSTRUCTION OPERATIONS, ALL PERSONS AND PROPERTY SHALL BE PROTECTED. THE WORK SHALL PROCEED IN SUCH A MANNER SO AS TO MINIMIZE ANY SPREAD OF DEBRIS AND FLYING PARTICLES, AND SO THAT THE EFFECTS OF THE CONSTRUCTION DO NOT INTERFERE WITH OTHER WORK IN PROGRESS. PROJECT SITE SAFETY IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR.
- 18. THE CONTRACTOR SHALL COMPLY WITH ALL GOVERNMENTAL LAWS, RULES AND REGULATIONS AS IT PERTAINS WITH OPERATIONS AT THE PROJECT SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONFORMANCE WITH ALL APPLICABLE BUILDING CODES AND SHALL NOT KNOWINGLY EXECUTE WORK SPECIFIED WHICH IS NOT IN CONFORMANCE. UNLESS THE CONTRACTOR, BEFORE SIGNING THIS CONTRACT, HAS NOTIFIED THE ARCHITECT/ENGINEER IN WRITING OF ANY ITEMS IN CONFLICT WITH CODES, THEY SHALL THEREAFTER MAKE ANY ADJUSTMENTS NECESSARY TO MEET CODES AT NO COST TO THE OWNER.
- THE CONTRACTOR UPON SIGNING AGREEMENT, ACCEPTS THE CONSTRUCTION DOCUMENTS (INCLUDING THESE DRAWINGS WITH THE INCLUDED NOTES AND DESCRIPTIVE MATERIAL) AND AGREES TO EXECUTE THE NECESSARY WORK IN MANNER DESCRIBED THEREIN.
- 20. ALL CONSTRUCTION SHALL CONFORM TO THE MINIMUM STANDARDS OF THE PRESIDING APPLICABLE CODES INDICATED IN THE BUILDING SUMMARY COLUMN ON DRAWING T-1 AND ALL LOCAL CODES PRESENTLY IN EFFECT UNLESS MORE STRINGENT REQUIREMENTS ARE
- ALL NEW CONSTRUCTION SHALL COMPLY WITH THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG) AND CHAPTER 11 OF THE INTERNATIONAL BUILDING CODE (INCLUDES ICC A117.1 AS AMENDED BY IBC).
- 22. WHERE USED IN THESE DRAWINGS, THE TERM "PROVIDE" SHALL IMPLY "FURNISH AND INSTALL".
- 23. THE SCOPE OF WORK UNDER THIS SECTION INCLUDES THE FURNISHING OF ALL LABOR, MATERIALS, EQUIPMENT, SERVICES AND INCIDENTALS TO COMPLETE ALL WORK IN ACCORDANCE WITH THE INTENT OF THE SPECIFICATIONS AND THE DRAWINGS.
- 24. DELIVER PRODUCTS TO PROJECT SITE IDENTIFIED WITH NAMES, MODEL NUMBERS, TYPES, GRADES, COMPLIANCE LABELS, AND OTHER INFORMATION NEEDED FOR DISTINCT IDENTIFICATION; ADEQUATELY PACKAGED AND PROTECTED TO PREVENT DAMAGE DURING SHIPMENT, STORAGE, AND HANDLING. PROTECT STORED EQUIPMENT AND MATERIALS FROM DAMAGE, COMPLY WITH MANUFACTURER'S RIGGING AND MOVING INSTRUCTIONS FOR UNLOADING EQUIPMENT AND MOVING INTO FINAL LOCATION. MATERIALS SHALL BE STORED IN SUCH A MANNER THAT THEIR CONDITION IS EQUIVALENT TO NEW WHEN INSTALLED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING BUILDING AND SITE UTILITIES BETWEEN CIVIL & MEP-FP DRAWINGS. THE CONTRACTOR SHALL ALSO CONTACT ALL APPLICABLE UTILITY COMPANIES. THE CONTRACTOR SHALL PROVIDE AND INSTALL CONDUIT

- AND OTHER FACILITIES AS DIRECTED BY THE UTILITY COMPANIES.
- 26. MECHANICAL, ELECTRICAL, PLUMBING AND FIRE PROTECTION DRAWINGS SHOW INFORMATION IN A DIAGRAMMATIC FASHION WITHOUT DIMENSIONING. THE CONTRACTOR IS TO COORDINATE THE LOCATIONS OF ALL EQUIPMENT WITH RESPECT TO THE ARCHITECTURAL, STRUCTURAL AND CIVIL DRAWINGS AND DETAILING OF SHAFTS, CHASES, AND OTHER DIMENSIONAL
- DO NOT SCALE THE DRAWINGS. DRAWING SCALES AS INDICATED ARE FOR REFERENCE ONLY AND ARE NOT INTENDED TO ACCURATELY DEPICT ACTUAL OR DESIGNATED CONDITIONS. WRITTEN DIMENSIONS SHALL GOVERN.
- NOTES AND DETAILS ON DRAWINGS TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS. IF QUESTIONS OCCUR, IMMEDIATELY NOTIFY ARCHITECT/ENGINEER IN WRITING FOR
- 29. THE TERM "ALIGN" REFERS TO LOCATING DIFFERENT COMPONENTS OF CONSTRUCTION TO PROVIDE A FLUSH FINISH SURFACE.
- 30. USE OF THE WORD "VERIFY" POINTS OUT A SITUATION WHICH MUST BE CONFIRMED PRIOR TO PROCEEDING WITH THE WORK, FABRICATION OF EQUIPMENT, OR ORDERING MATERIAL AND EQUIPMENT. NOTIFY THE ARCHITECT/ENGINEER IN WRITING OF ANY QUESTIONS IN THIS
- THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL FIELD CONDITIONS AND DIMENSIONS AS THEY RELATE TO THIS PROJECT. SHOULD QUESTIONS ARISE BETWEEN THE WORK INDICATED AND ACTUAL FIELD CONDITIONS, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER IN WRITING PRIOR TO PROCEEDING WITH THE WORK. DO NOT PROCEED WITH WORK UNTIL DIRECTION HAS BEEN PROVIDED, DEFECTS HAVE BEEN CORRECTED, AND CONDITIONS ARE SATISFACTORY. COMMENCEMENT OF WORK SHALL BE CONSTRUED AS ACCEPTANCE OF CONDITIONS, VERIFY EXACT SIZES, LOCATIONS, INVERTS AND ELEVATIONS PRIOR TO COMMENCING WORK. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS OF ALL FIXTURES AND EQUIPMENT.
- DETERMINE INTERFERENCE BEFORE WORK IS FABRICATED OR INSTALLED. THE CONTRACTOR SHALL BE THOROUGHLY FAMILIAR WITH ALL DETAILS OF WORK AND WORKING CONDITIONS AND COORDINATE WORK DURING PRELIMINARY STAGES TO ENSURE ACTUAL ERECTION WILL PROCEED WITHOUT INTERFERENCE. COORDINATION IS OF PARAMOUNT IMPORTANCE AND NO REQUESTS FOR ADDITIONAL PAYMENT WILL BE CONSIDERED WHERE REQUEST IS BASED ON
- 33. WHERE THE PROJECT CONDITIONS REQUIRE REASONABLE DEVIATIONS FROM CONTRACT DOCUMENTS, MAKE DEVIATIONS WITHOUT ADDITIONAL COST TO OWNER, AFTER OBTAINING APPROVAL OF ARCHITECT/ENGINEER IN WRITING.
- 34. PROVIDE MAXIMUM PRACTICAL SPACE FOR OPERATION, REPAIR, REMOVAL, AND TESTING OF ALL EQUIPMENT. APPROVED DEVIATIONS MAY BE MADE TO PROVIDE REQUIRED ACCESSIBILITY AFTER OBTAINING APPROVAL OF ARCHITECT/ENGINEER.
- TEST AND ADJUST EQUIPMENT AND SYSTEMS INSTALLED AND DEMONSTRATE PROPER OPERATION TO OWNER'S REPRESENTATIVE. NO EQUIPMENT SHALL BE TESTED OR OPERATED FOR ANY PURPOSE UNTIL IT HAS BEEN FULLY PREPARED FOR OPERATION IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
- 36. EQUIPMENT MOUNTED ABOVE HUNG CEILING SHALL BE SUPPORTED FROM BUILDING STRUCTURE WITH VIBRATION ISOLATION RODS MEETING LOCAL SEISMIC RESTRAINT REQUIREMENTS.
- DRAWINGS ARE PREPARED USING DIMENSIONS AND PRODUCT CONFIGURATIONS OR DETAILS OF SPECIFIC MANUFACTURERS. DIMENSIONS AND DETAILS FOR SPECIFIC PRODUCTS MAY CHANGE BEFORE THEY ARE ACTUALLY INCORPORATED INTO THE WORK, AND PRODUCTS BY OTHER MANUFACTURERS MAY BE ACCEPTABLE UPON REVIEW AND APPROVAL BY THE ARCHITECT/ENGINEER. THEREFORE, ACTUAL INSTALLATION DETAILS AND DIMENSIONS MAY DIFFER FROM THOSE SHOWN. CONTRACTOR SHALL VERIFY INSTALLATION REQUIREMENTS FOR ALL PRODUCTS TO BE INCORPORATED IN THE WORK (INCLUDING THICKNESSES FOR RECESSED OR SEMI-RECESSED PRODUCTS), AND IS RESPONSIBLE FOR ACCOMMODATING AND COORDINATING CHANGES TO OTHER MATERIALS, PRODUCTS OR TRADES THAT DUE TO THESE DIFFERENCES.
- 38. "TYPICAL DETAILS" ARE APPLICABLE THROUGHOUT CONSTRUCTION DOCUMENTS AND MAY NOT BE SPECIFICALLY REFERENCED THEREIN. THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING THESE TYPICAL DETAILS AND UNDERSTANDING THE EXTENT OF THEIR APPLICATION PRIOR TO PERFORMING THE WORK.
- 39. THE DRAWINGS AND SPECIFICATIONS ARE SEPARATED INTO DISCIPLINES FOR CONVENIENCE. THE SEPARATIONS USED ARE ONLY FOR THE PURPOSE OF CONVENIENCE AND REFERENCE AND IN NO WAY DO THEY DEFINE OR LIMIT THE SCOPE OR INTENT OF ANY PART OF THE DRAWINGS, OR OF THE DRAWINGS AND SPECIFICATIONS AS A WHOLE. THE FACT THAT THE DRAWINGS ARE SEPARATED IN NO WAY SUGGESTS THAT THE WORK IS NOT TO BE CONSTRUCTED AS A COMPLETE, INTEGRATED AND UNIFIED WHOLE.
- 40. THE DRAWINGS AND SPECIFICATIONS, INCLUDING DRAWINGS PREPARED BY SPECIFIC ENGINEERING DISCIPLINES (SUCH AS CIVIL, STRUCTURAL, MECHANICAL, ELECTRICAL, ETC.) ARE COMPLEMENTARY; ITEMS SHOWN IN ANY ONE LOCATION IN THE DRAWINGS SHALL BE CONSIDERED TO BE REQUIREMENTS OF THE CONTRACT FOR CONSTRUCTION. IN THE EVENT OF AN INCONSISTENCY BETWEEN THE DRAWINGS AND SPECIFICATIONS, OR WITHIN EITHER DOCUMENT, THE CONTRACTOR SHALL SEEK CLARIFICATION OR INTERPRETATION FROM THE ARCHITECT/ENGINEER IN WRITING PRIOR TO BIDDING. WHERE INCONSISTENCIES ARE NOT CLARIFIED PRIOR TO BIDDING, AND WHERE THE ACTUAL SOLUTION OR INTENT CANNOT BE REASONABLY INFERRED, THE CONTRACTOR SHALL PROVIDE THE BETTER QUALITY OR GREATER QUANTITY OF WORK.
- 41. ALL MATERIALS SPECIFIED OR NOTED SHALL BE NEW UNLESS OTHERWISE NOTED AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS' RECOMMENDATIONS. ALL EXISTING EQUIPMENT THAT IS TO BE RE-USED SHALL BE CLEANED AND BROUGHT BACK TO ORIGINAL CONDITION AND MANUFACTURERS SPECIFICATIONS.
- 42. ALL MATERIAL USED IN THIS WORK SHALL BE NEW, OF THE BEST QUALITY, AND SHALL MEET THE REQUIREMENTS OF THESE SPECIFICATIONS AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. MATERIALS SHALL BE SAMPLED AND TESTED IN ACCORDANCE WITH CURRENT ASTM SPECIFICATIONS OR SUCH OTHERS AS SPECIFIED HEREINAFTER AND APPLICABLE CODES. THE CONTRACTOR WILL BE REQUIRED TO FURNISH CERTIFICATES OF CONFORMANCE TO ASTM OR OTHER APPLICABLE SPECIFICATIONS.
- 43. WHENEVER IN THESE DOCUMENTS REFERENCE IS MADE TO THE REQUIREMENTS OF THE NEC (NATIONAL ELECTRIC CODE), NATIONAL UPC (NATIONALUNIFORM PLUMING CODE) ASHRAE, (AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING ENGINEERS) ASTM (AMERICAN SOCIETY FOR TESTING MATERIALS), OR OTHER STANDARD SPECIFICATIONS, IT SHALL BE UNDERSTOOD THAT REFERENCES ARE MADE TO THE LATEST MODIFICATIONS OR REVISIONS OF SUCH SPECIFICATIONS AS ADOPTED BY AHJ.
- 44. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING COORDINATED SHOP DRAWINGS. PRODUCT DATA, OR SAMPLES FOR MECHANICAL, ELECTRICAL, PLUMBING FIXTURES EQUIPMENT, AND OTHER PERTINENT ITEMS REQUIRING REVIEW FOR CONFORMANCE WITH THE CONTRACT DOCUMENTS.
- 45. SUBMITTALS MUST BE REVIEWED AND BEAR THE GENERAL CONTRACTOR'S STAMP OF APPROVAL FOR CONFORMANCE AND COORDINATION WITH THE CONTRACT DOCUMENTS. SUBMITTALS FORWARDED WITHOUT A STAMP WILL BE RETURNED. ALL SUBMITTALS MUST BE REVIEWED AND APPROVED BY THE ARCHITECT/ENGINEER PRIOR TO PERFORMANCE OF THAT PORTION OF THE WORK AND/OR ASSOCIATED WORK.
- 46. CONTRACTOR SHALL INSTALL EQUIPMENT LOCATED IN MECHANICAL ROOM ONLY AFTER A THOROUGHLY COORDINATION WITH OTHER TRADES AND UTILITY COMPANY REQUIREMENTS.
- IF MATERIAL OR EQUIPMENT IS INSTALLED BEFORE IT IS APPROVED, OR IF IN THE OPINION OF THE ARCHITECT OR ENGINEER, THE MATERIAL OR EQUIPMENT DOES NOT MEET THE INTENT OF THE DRAWINGS AND SPECIFICATIONS, THE CONTRACTOR SHALL BE LIABLE FOR ITS REMOVAL AND REPLACEMENT AT NO ADDITIONAL COST.
- 48. ANY DEFECTS IN THE CONSTRUCTION, INCLUDING MATERIALS AND/OR WORKMANSHIP, SHALL BE REPLACED OR CORRECTED BY REMOVAL AND REPLACEMENT OR OTHER APPROVED METHOD WITHOUT ADDITIONAL COST PRIOR TO ACCEPTANCE BY THE OWNER.
- 49. CONTRACTOR SHALL PROVIDE A WRITTEN WARRANTY FOR THE CONSTRUCTION INCLUDING MATERIALS AND/OR WORKMANSHIP FOR A PERIOD OF NOT LESS THAN ONE (1) YEAR AFTER

- ACCEPTANCE DATE. FAULTY WORK SHALL BE REPLACED OR REPAIRED AT NO COST, UNLESS OTHERWISE NOTED.
- 50. CONTRACTOR SHALL RE-EXECUTE ANY WORK THAT FAILS TO CONFORM TO THE DRAWINGS/DETAILS AS SHOWN, AND ANY DEFECTS DUE TO FAULTY MATERIALS OR WORKMANSHIP WHICH APPEAR WITHIN A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE, UNLESS OTHERWISE NOTED,
- THE CONTRACTOR IS TO PROVIDE AS BUILT DRAWINGS IN HARD COPY AND AN ELECTRONIC AUTOCAD FILE TO THE OWNER AT THE CONCLUSION OF THE PROJECT. FILES AND HARD COPIES SHALL BE LABELED "AS-BUILT DRAWINGS".
- 52. UNLESS SPECIFICALLY SHOWN ON THE DRAWINGS, NO SLAB OR STRUCTURAL MEMBER SHALL BE CUT, DRILLED, NOTCHED, CORED OR OTHERWISE MODIFIED WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE ARCHITECT/ENGINEER,
- 53. PERFORM CUTTING AND PATCHING TO INSTALL THE WORK.
- 54. ALL SLEEVES AND ALL CORE DRILLING OF FLOORS AND WALLS SHALL BE BY THE CONTRACTOR.
- 55. ALL CUTTING SHALL BE PATCHED AND FINISHED TO MATCH THE SURROUNDING AREA, SATISFACTORY TO OWNER AND ARCHITECT/ENGINEER.
- 56. CONTRACTOR SHALL MAINTAIN FIRE RATINGS AT ALL PENETRATIONS, THROUGH-PENETRATION FIRESTOP SYSTEMS AND SHALL BE TESTED IN ACCORDANCE WITH ASTM E814. THE SYSTEM SHALL HAVE AN "F" RATING (WALLS) OR "F AND "T" RATING (HORIZONTAL ASSEMBLIES) OF NOT LESS THAN THE REQUIRED RATING OF THE ASSEMBLY PENETRATED. PENETRATIONS ARE TO BE PROPERLY FIRE-STOPPED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. USE ONLY A SINGLE MANUFACTURER FOR EACH PROJECT.
- 57. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL MATERIALS, INCIDENTAL ITEMS AND DEVICES FOR A COMPLETE AND OPERATIONAL SYSTEM.
- 58. ALL PIPING, CONDUIT AND EQUIPMENT SHALL BE SUPPORTED FROM THE BUILDING STRUCTURE'S HANGERS AND SUPPORTS AND SHALL BE SPECIFICALLY APPROVED FOR USE IN EACH LOCATION. WHERE OVERHEAD CONDITIONS EXIST THAT PREVENT THE FASTENING OF HANGER RODS IN THE REQUIRED LOCATIONS, PROVIDE AND INSTALL ADDITIONAL STEEL FRAMING. DO NOT USE EXPANSION SHIELDS.
- 59. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL SUPPORT HANGERS AND MISCELLANEOUS METALS, SUCH AS GALVANIZED IRON PIPE STANCHIONS, RACKS, FITTINGS, ETC. REQUIRED FOR PROPER INSTALLATION OF WORK. ALL MISCELLANEOUS RACKS AND FITTINGS SHALL BE GALVANIZED AND SHALL BE EITHER KINDORF CHANNEL, POWER STRUT OR UNISTRUT, UNLESS NOTED OTHERWISE.
- 60. STEEL SUPPORTS SHALL BE PAINTED WITH ONE COAT OF RUST INHIBITING PRIMER OR
- ANY ELEMENT, WHATSOEVER, REQUIRED BY AN AUTHORITY HAVING JURISDICTION (A.H.J) TO BE INCORPORATED IN CONSTRUCTION, BUT NOT SPECIFIED IN THE CONTRACT DOCUMENTS, SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER FOR REVIEW. NO MODIFICATIONS/REVISIONS/CHANGES SHALL BE UNDERTAKEN UNLESS SPECIFICALLY SO INSTRUCTED AND APPROVED IN WRITING BY ARCHITECT/ENGINEER.
- 62. ALL MATERIAL, EQUIPMENT, FIXTURES ETC. SHOWN ON THE CONSTRUCTION DRAWINGS SHALL BE NEW AND PROVIDED AND INSTALLED BY THE CONTRACTOR UNLESS OTHERWISE SHOWN OR SPECIFIED. ANY EXISTING ITEMS TO BE REUSED SHALL BE CLEANED AND SERVICED TO OPERABLE CONDITION MEETING THE ORIGINAL MANUFACTURER'S SPECIFICATIONS.
- 63. ALL MATERIALS SHALL CONFORM TO LOCAL, STATE AND FEDERAL CODES AND REGULATIONS AS THEY APPLY.
- ANY WORK NEEDED TO BE ACCOMPLISHED ON AN OVERTIME BASIS SHALL BE PRICED AND PRESENTED AS SUCH IN THE BID.
- 65. ALL WORKERS AND SUBCONTRACTORS SHALL BE SKILLED IN THEIR TRADES AND HAVE ALL APPLICABLE LICENSES AND CERTIFICATIONS.
- 66. DELIVERIES, INGRESS AND EGRESS FROM BUILDING SHALL BE OVER ROUTES PRESCRIBED BY THE BUILDING REPRESENTATIVE AND AT TIMES DESIGNATED BY THAT AUTHORITY.
- 67. THE CONTRACTOR SHALL PERMIT AND FACILITATE OBSERVATION OF WORK BY BUILDING OWNER, ARCHITECT, ENGINEER, THEIR AGENTS AND PUBLIC AUTHORITIES, AT ALL TIMES, AND
- 68. OWNER RETAINS THE RIGHT TO ALLOW OTHER CONTRACTORS IN CONNECTION WITH THE PROJECT WORK. OWNER SHALL PROPERLY COORDINATE AND INTERFACE THEIR SCHEDULE WITH ANY SUCH CONTRACTOR AND/OR VENDORS, ETC.
- 69. COORDINATE WITH OWNER'S FIELD REPRESENTATIVE AND/OR GENERAL CONTRACTOR FOR ALL PHASING AND SCHEDULING.
- 70. WHERE MORE THAN ONE REGULATION APPLIES, THE STRICTER ONE SHALL GOVERN.
- 71. A WRITTEN REQUEST MUST BE SUBMITTED TO THE ARCHITECT/ENGINEER PRIOR TO SUBMISSION OF A PROPOSED SUBSTITUTION. THE ARCHITECT/ENGINEER'S DETERMINATION OF THE USE OF A PROPOSED SUBSTITUTION WILL BE FINAL AND BINDING.
- 72. ALL PROPOSED SUBSTITUTIONS MUST BE SUBMITTED TO ARCHITECT/ENGINEER FOR WRITTEN APPROVAL PRIOR TO SUBSTITUTION BEING MADE.
- 73. WHERE REFERENCED AN APPROVED SUBSTITUTION SUBMISSION SHALL REQUIRE THE CONTRACTOR TO COORDINATE AND PROVIDE INFORMATION BY THE ARCHITECT/ENGINEER TO FULLY EVALUATE THE PROPOSED SUBSTITUTION INCLUDING BUT NOT LIMITED TO A SPREADSHEET OUTLYING THE DIFFERENCE BETWEEN THE SPECIFIED AND PROPOSED ITEM INCLUDING BUT NOT LIMITED TO WEIGHTS, DIMENSIONS, AND ELECTRICAL CHARACTERISTICS. CONTRACTOR SHALL BEAR THE FULL COST OF ENGINEERING DESIGN INCLUDING BUT NOT LIMITED TO SIGNED AND SEALED DOCUMENTS ASSOCIATED WITH PROPOSED SUBSTITUTION. THE ARCHITECT/ENGINEER APPROVAL SHALL NOT ALLEVIATE THE CONTRACTOR FROM ALL CONTRACT DOCUMENT REQUIREMENTS INCLUDING BUT NOT LIMITED TO COORDINATION OF THE APPROVED SUBSTITUTION WITHOUT ADDITIONAL COST TO OWNER OR ARCHITECT/ENGINEER.
- 74. THE CONDITION OF THE PROJECT SITE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE PROJECT SITE SHALL BE MAINTAINED IN A CLEAN SAFE AND ORDERLY FASHION. DEBRIS AND TRASH SHALL BE REMOVED DAILY.
- 75. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL LOCAL BUILDING DEPARTMENT APPROVALS, ETC.
- 76. CONTRACTOR SHALL CARRY AND DOCUMENT LIABILITY, ACCIDENT AND PROPERTY DAMAGE INSURANCE AS REQUIRED BY OWNER.
- CONTRACTOR SHALL EXERCISE EXTREME CARE IN PROTECTING AREAS ADJACENT TO CONSTRUCTION AREAS, AS WELL AS ALL EXISTING AND NEW BUILDING AND SITE FEATURES. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR PROTECTING THE SITE FROM ANY DAMAGE RESULTING FROM CONTRACTOR'S WORKMEN, SUBCONTRACTOR'S MATERIALMEN OR AGENTS, AND SHALL BE RESPONSIBLE FOR REPAIRING, CLEANING OR REPLACING ANY SUCH DAMAGE TO THE SATISFACTION OF THE OWNER AND ARCHITECT/ENGINEER AT NO ADDITIONAL
- 78. UNLESS SPECIFICALLY STATED OTHERWISE, CONTRACTOR SHALL FOLLOW MANUFACTURERS' DIRECTIONS, INSTRUCTIONS AND RECOMMENDATIONS FOR ALL MATERIALS AND PROCESSES USED IN THIS CONTRACT.
- 79. BUILDING DEPARTMENT APPROVED DRAWINGS SHALL BE TURNED OVER TO OWNER AT THE COMPLETION OF THE PROJECT.
- 80. AT THE FINAL COMPLETION OF THE PROJECT, CONTRACTOR SHALL SUBMIT TO THE OWNER AND ARCHITECT/ENGINEER A NOTARIZED AFFIDAVIT STATING COMPLIANCE WITH ALL PROVISIONS OF THIS CONTRACT, INCLUDING ALL NOTES, EXCEPT FOR THOSE CHANGES SPECIFICALLY APPROVED IN WRITING BY THE ARCHITECT/ENGINEER.
- MAINTAIN A FIELD REPRESENTATIVE ON THE PREMISES AT ALL TIMES DURING THE COURSE OF THE CONSTRUCTION WORK.

WORK USING THE CONTRACTOR'S BEST SKILL AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCTION MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB

2. GC MUST PROVIDE & INSTALL ALL PRODUCTS PER PLANS. ONLY SUBSTITUTED PRODUCTS NEED TO BE SUBMITTED TO THE ARCHITECT FOR APPROVAL. UNAPPROVED SUBSTITUTIONS WILL BE REPLACED A THE EXPENSE OF THE GC.

3. VERBAL REPRESENTATION HAS NO VALUE AND AL REQUESTS TO CHANGE ANY PRODUCTS OR SPECIFICATIONS PER PLANS, MUST BE SUBMITTED IN WRITING TO THE ARCHITECT & TLE FOR APPROVAL



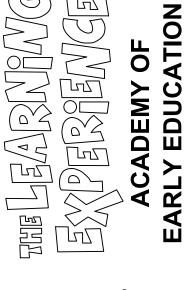
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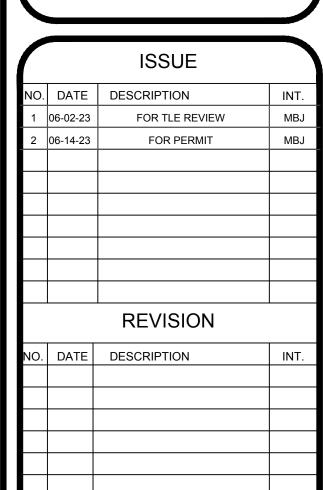
LIVINGSTON, NEW JERSEY 07039

TEL: 973-994-9669

FAX: 973-994-4069

www.jarmelkizel.com Architecture Engineering Interior Design Implementation Services





PROFESSIONAL CERTIFICATION

MATTHEW B. JARMEL, AIA, MBA

LICENSE NUMBER: A2017014316

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	Project Number:	Scale:
	TLEMO22-164	AS NOTED
	Drawn By:	Approved By:
	LN	MBJ

MECHANICAL, ELECTRICAL, PLUMBING 8 FIRE PROTECTION **GENERAL NOTES** 



#### HVAC GENERAL NOTES

- 1. GENERAL NOTES, SYMBOLS AND DETAILS ARE APPLICABLE TO ALL DRAWINGS WITH "H"OR "M".
- IT IS THE RESPONSIBILITY OF THIS CONTRACTOR TO COORDINATE ALL WORK WITH ALL NEW AND EXISTING WORK OF ALL OTHER TRADES. THE SHOP DRAWINGS PREPARED BY THIS CONTRACTOR SHALL INDICATE SPACE ALLOWANCES ABOVE CEILING FOR ALL WORK OF ALL OTHER TRADES (CABLE TRAYS, CONDUITS, SPRINKLER PIPES, STORM DRAINS, GLYCOL PIPES, ALL DOMESTIC SERVICES, ETC.) AND SHALL BE COORDINATED AND SIGNED OFF BY ALL OTHER CONTRACTORS.
- THE CONTRACTOR SHALL COORDINATE THE HEIGHTS AND LOCATIONS OF ALL DUCTWORK WITH ALL STRUCTURAL MEMBERS (COLUMNS, BEAMS, JOISTS, ANGLES, ROOF SCREENS, FRAMING, ETC.). ALL DUCTWORK IS TO BE MOUNTED TO HIGHEST POSSIBLE ELEVATION ABOVE THE FINISHED FLOOR AS SHOWN ON THE CONSTRUCTION DOCUMENTS. THE CONTRACTOR MAY BE REQUIRED TO RUN DUCTWORK THROUGH THE WEBS OF THE JOISTS TO MAINTAIN ADEQUATE CLEARANCE FOR CEILING HEIGHTS. BEFORE PROCEEDING WITH ANY WORK, THE CONTRACTOR SHALL REVIEW WITH THE ARCHITECT/ENGINEER THE MOUNTING HEIGHTS OF ALL DUCTWORK LAYOUTS.
- CONTRACTOR SHALL VERIFY IN FIELD ALL HUNG CEILING AND PARTITION HEIGHTS AND LOCATIONS AND CEILING AIR OUTLET LOCATIONS. WHERE WORK BETWEEN THE DRAWINGS AND FIELD DIMENSIONS ARE IN CONFLICT, ADVISE PRIOR TO FABRICATION OF SHEET METAL.
- VERIFY EXACT LOCATION, DIMENSIONS AND CONDITIONS IN THE FIELD FOR ALL EQUIPMENT, DUCTWORK AND PIPING LOCATIONS
- 6. VERIFY ALL EQUIPMENT CONNECTIONS WITH MANUFACTURERS CERTIFIED APPROVED DRAWINGS. VERIFY AND PROVIDE DUCT TRANSITIONS TO FURNISHED EQUIPMENT. FIELD VERIFY AND COORDINATE ALL DIMENSIONS BEFORE FABRICATION.
- INTERNAL AIR FLOW DIMENSIONS ARE SHOWN FOR DUCTS. ALL DUCT SIZES SHALL BE NET INSIDE DIMENSIONS, INCLUDING ACOUSTIC-LINED DUCTWORK, CONTRACTOR SHALL INCREASE SIZE FOR LINER, IF APPLICABLE. DUCT SIZES ARE ACTUAL SHEET METAL SIZES AND DO NOT INCLUDE 1 INCH DUCT LINER. INCREASE DUCTWORK SIZE ACCORDINGLY.
- 8. CONTRACTOR SHALL NOT PROCEED TO FABRICATE AND INSTALL ANY HVAC EQUIPMENT, DUCTWORK, PIPING AND ACCESSORIES WITHOUT A THOROUGH FIELD COORDINATION WITH ALL TRADES. ALL CONFLICTS RESULTING FROM LACK OF COORDINATION WILL BE RESOLVED BY CONTRACTOR AT NO ADDITIONAL COST.
- ALL WORK INSTALLED BY THIS CONTRACTOR SHALL BE INSTALLED IN SUCH A MANNER AS TO CLEAR ALL LIGHT FIXTURES, CEILING CONSTRUCTION, SPRINKLER PIPES AND HEADS, CONDUITS, PIPING, ETC.
- 10. PROVIDE INFORMATION AND HARDWARE TO COORDINATE HANGING OF EQUIPMENT REQUIRED FOR MECHANICAL WORK.
- 11. PROVIDE ESCUTCHEONS AND SEALING OF ALL PENETRATIONS OF FIRE SEPARATIONS IN ACCORDANCE WITH THE BUILDING CODE.
- 12. ALL EQUIPMENT SHALL BE INSTALLED IN ACCESSIBLE LOCATIONS TO PERMIT SERVICING AND
- 13. SUPPORT ALL EQUIPMENT, PIPING AND DUCTWORK FROM THE BUILDING STRUCTURE TO PROVIDE A VIBRATION-FREE INSTALLATION. NOTIFY ARCHITECT AND STRUCTURAL ENGINEER OF ALL WEIGHTS AND METHODS OF SUPPORT FOR APPROVAL.
- 14. PROVIDE ALL NECESSARY SUPPLEMENTARY STEEL FOR SUPPORT OF EQUIPMENT, PIPING, DUCTWORK ATTACHMENT OF HANGERS AND PIPE IN SHAFTS AND BETWEEN BUILDING STRUCTURAL MEMBERS.
- 15. CONTRACTOR SHALL PROVIDE CHANGE OF FILTERS AFTER START-UP AND BALANCING COMPLETION
- 16. CONTRACTOR TO PROVIDE CONDENSATE DRAIN PIPE SIZED PER MANUFACTURER'S REQUIREMENTS FOR EACH ROOFTOP UNIT WITH CONDENSATE TRAP. CONDENSATE TO BE DISCHARGED TO THE ROOF SLOPE TOWARD ROOF DRAIN, SCUPPER OR GUTTER.
- 17. CONTRACTOR TO PROVIDE INSULATED CONDENSATE DRAIN PIPE SIZED PER MANUFACTURER'S REQUIREMENTS FOR EACH INDOOR-MOUNTED AIR HANDLING UNIT WITH CONDENSATE TRAP. CONDENSATE TO DISCHARGE AS SHOWN ON DRAWINGS
- 18. DUCT TYPE SMOKE DETECTORS SHALL BE INSTALLED AND FURNISHED BY THE CONTRACTOR, WIRED TO FIRE ALARM. COORDINATE DETECTOR TYPE WITH FIRE ALARM SYSTEM.
- 19. ALL THERMOSTATS SHALL BE LOCATED ON COLUMNS OR WALL 48 INCHES A.F.F. REQUIREMENTS OR AS DIRECTED OTHERWISE BY ARCHITECT/ENGINEER. PROVIDE AND INSTALL THERMOSTAT IN NUMBER AND LOCATION SHOWN ON DRAWINGS.
- PROVIDE AND INSTALL TEMPERATURE SENSORS 60 INCHES A.F.F., UNLESS REQUIRED LOWER BY ADA REQUIREMENTS OR AS DIRECTED OTHERWISE BY ARCHITECT/ENGINEER. ALL TEMPERATURE SENSORS SHALL BE NEW. PROVIDE TEMPERATURE SENSORS IN NUMBER AND LOCATIONS SHOWN ON DRAWINGS AND AS PER DETAIL SHOWN IN HVAC DETAIL DRAWING.
- 21. THERMOSTATS AND SENSORS SHALL BE LOCATED A MINIMUM OF 6 INCHES FROM INSIDE OR OUTSIDE WALL CORNER.
- 22. THERMOSTATS AND SENSORS SHALL BE FULLY COMPATIBLE WITH PERFORMANCE AND CHARACTERISTICS OF INSTALLED HVAC EQUIPMENT AND SHALL BE COMPATIBLE WITH EACH OTHER.
- 23. INSTALL ALL RETURN GRILLES SO THAT DIRECTION OF BLADES OBSTRUCT VISIBILITY.
- 24. IN THE CASE WHERE A CONTRACTOR IS MAKING AN APPROVED BASIS OF DESIGN HVAC EQUIPMENT SUBSTITUTION, IT IS HIS RESPONSIBILITY TO COORDINATE WITH ALL OTHER TRADES AND PROVIDE ALL NECESSARY ADJUSTMENTS WITH NO EXTRA COST TO THE OWNER OR ARCHITECT/ENGINEER. TRUSS SHOP DRAWINGS REFLECTING THE ALTERNATE EQUIPMENT WEIGHTS, ROOF PENETRATIONS, ETC., SHALL BE SUBMITTED TO ARCHITECT/ENGINEER FOR REVIEW AND APPROVAL PRIOR TO ORDERING ALTERNATE HVAC EQUIPMENT.
- 25. CONTRACTOR SHALL TEST, BALANCE, ADJUST AND PUT THE SYSTEM IN FULL OPERATION INCLUDING SUPERVISION OF BUILDING OPERATING PERSONNEL, PER OWNER'S REQUIREMENTS.
- 26. WHERE DUCTS OR PIPE PENETRATE WALLS, SEAL OPENINGS TO PREVENT AIR TRANSFER BETWEEN

#### B. DUCTWORK

- 1. REFER TO THE SPECIFICATIONS FOR DUCTWORK CONSTRUCTION CLASSES, SEAL, AND LEAKAGE
- 2. SEE DRAWINGS FOR DUCT HANGER DETAILS.
- 3. SHEET METAL DUCTWORK SHALL COMPLY WITH THE STANDARDS AS SET FORTH IN THE LATEST EDITION OF THE ASHRAE GUIDE. DUCTS SHALL BE CONSTRUCTED OF GALVANIZED STEEL, AND SHALL BE IN ACCORDANCE WITH THE BUILDING CODE. ALL SHEET METAL DUCT JOINTS SHALL BE SEALED AIR TIGHT WITH APPROVED TYPE CAULKING SEALANT.
- 4. HORIZONTAL DUCTS SHALL BE HUNG AT INTERVALS NOT EXCEEDING 5 FEET ON CENTER IN ACCORDANCE WITH THE DUCT MANUALS OF THE SHEET METAL AND AIR CONDITIONING CONTRACTOR'S NATIONAL ASSOCIATION (SMACNA), SECOND EDITION.
- 5. PROVIDE TURNING VANES ON ALL RECTANGULAR ELBOWS AND/OR WHERE SHOWN ON THE DRAWING. TURNING VANES SHALL BE DOUBLE THICKNESS TYPE CONSTRUCTED IN ACCORDANCE WITH SMACNA MANUAL. SUBMIT DETAIL ON INITIAL DUCT SHOP DRAWINGS.
- 6. INSULATE ALL DUCTWORK AS HEREINAFTER SPECIFIED.
- 7. RUN DUCTS AND PIPING CONCEALED, UNLESS SPECIFIED OTHERWISE, AND CLEAR OF CEILING
- WHERE FIELD CONDITIONS DICTATE, DUCTWORK SHALL BE OFFSET AND DUCTWORK CONFIGURATIONS SHALL BE MADE, AT NO ADDITIONAL COST TO OWNER. ALL SUCH MODIFICATIONS SHALL BE MADE WITH THE APPROVAL OF THE ENGINEER.
- WHERE FIELD CONDITIONS DICTATE MODIFICATIONS TO DUCT ASPECT RATIO, TYPE AND SIZE SHALL BE MADE, AT NO ADDITIONAL COST TO OWNER. ALL SUCH MODIFICATIONS SHALL BE MADE WITH THE APPROVAL OF THE ENGINEER.

#### C. FLEXIBLE DUCT

- 1. PROVIDE AND INSTALL FLEXIBLE CONNECTIONS ON ALL DUCTS CONNECTING TO FANS AND AIR HANDLING UNITS. ALL DUCTS TO BE GROUNDED ACROSS FLEXIBLE CONNECTION WITH FLEXIBLE COPPER GROUNDING STRAPS. (MAXIMUM LENGTH OF FLEXIBLE DUCTWORK TO FANS AND AIR HANDLING UNITS NOT TO EXCEED 6 INCHES OR AS DIRECTED BY ENGINEER).
- 2. PROVIDE AND INSTALL FLEXIBLE CONNECTIONS ON ALL DUCTS CONNECTING TO AIR OUTLETS. (MAXIMUM LENGTH OF FLEXIBLE DUCTWORK TO AIR OUTLETS NOT TO EXCEED 6 FEET).
- 3. FLEXIBLE DUCT SHALL BE UL 181 CLASS 1 FACTORY-FABRICATED ASSEMBLY WITH HELICALLY WOUND SPRING STEEL WIRE INNER SLEEVE, INSULATION AND OTHER VAPOR BARRIER. EACH CONNECTION SHALL BE SECURED WITH APPROVED TYPE HOSE CLAMPS WITH WORM GEAR DRIVE STAINLESS STEEL BANDS ON SEALER MASTIC BEFORE HOSE CONNECTION IS MADE AT THE JOINTS. SEALING TAPE SHALL BE USED AT CONNECTION BETWEEN RIDGE DUCT AND FLEXIBLE DUCT.
- 4. FLEXIBLE DUCT DIAMETER SHALL MATCH THE NECK SIZE OF THE DIFFUSER TO WHICH IT CONNECTS, UNLESS NOTED OTHERWISE, EXTEND SHEET METAL DUCT TO WITHIN 5 FEET FOR SMACNA COMPLIANCE.
- 5. FLEXIBLE DUCTWORK SHALL NOT PASS THROUGH FIRE-RATED CONSTRUCTION. FLEXIBLE DUCTWORK MUST BE INSTALLED WITH SUPERIOR WORKMANSHIP MAINTAINING FULL CROSS-SECTIONAL AREA THROUGHOUT. SUPPORT FROM STRUCTURE AT 48 INCHES INTERVALS OR CLOSER TO ENSURE THAT THE FLEXIBLE DUCT DOES NOT SAG MORE THAN 1/2 INCH PER LINEAL FOOT BETWEEN THE SUPPORTS. ENSURE FULL CROSS-SECTIONAL AREA FOR MAXIMUM AIRFLOW. PLACE SUPPORTS AT EACH CONNECTION BETWEEN FLEX DUCT AND RIGID METAL DUCT.

#### D. DAMPERS

- 1. FURNISH AND INSTALL MANUAL VOLUME DAMPERS IN ALL BRANCH AND SUB-BRANCH DUCTS AND ELSEWHERE FOR BALANCING AND CONTROL OF ALL DUCT SYSTEMS, WHETHER OR NOT SHOWN ON THE DRAWINGS.
- 2. ALL DAMPERS WHICH ARE NOISY IN OPERATION ARE TO BE REMOVED, REPAIRED AND REINSTALLED UNTIL QUIET OPERATION IS OBTAINED. REFER TO SMACNA MANUAL, SECTION 1 FOR DETAILS OF
- EVERY DAMPER SHALL HAVE AN INDICATION DEVICE WHICH SHALL SHOW ITS POSITION AT ALL TIMES. ALL AUTOMATIC AND FIRE DAMPERS SHALL BE FURNISHED WITH DUCT ACCESS DOORS FOR
- 4. PROVIDE VOLUME DAMPERS AND WIRE MESH SCREEN FOR ALL RETURN AND DUCTWORK AND OPENINGS.
- 5. AIR DEVICES IN GYPSUM CEILING SHALL NOT BE UTILIZED AS ACCESS TO VOLUME DAMPERS. PROVIDE CABLE ACTUATED DAMPERS LOCATED AT THE TAKEOFF FROM MAIN DUCT.

#### E. ACCESS DOORS

- 1. WHERE NECESSARY AND INDICATED HEREIN IN DUCTWORK, SUITABLE ACCESS DOORS AND FRAMES TO PERMIT INSPECTION, OPERATION AND MAINTENANCE OF ALL DAMPERS. FANS, LOUVERS, CONTROLS, FIRE DAMPERS OR OTHER APPARATUS CONCEALED BEHIND THE SHEET METAL WORK SHALL BE PROVIDED. DOUBLE PANEL INSULATION OF NOT LESS THAN 20 GAUGE. ACCESS DOORS IN UNINSULATED DUCTS MAY BE OF SINGLE PANEL CONSTRUCTION OF NOT LESS THAN 18 GAUGE, GALVANIZED. ALL DOORS SHALL HAVE POLYURETHANE GASKETS CEMENTED IN PLACE WITH APPROVED ADHESIVE SO AS TO MAKE THEM AIRTIGHT. CONTRACTOR SHALL INSTALL ADDITIONAL ACCESS DOORS AT LOCATIONS REQUIRED BY THE CONFIGURATION OF THE WORK AT NO ADDITIONAL
- 2. ACCESS DOORS INTO DUCTS SHALL IN GENERAL NOT BE SMALLER THAN 16 INCHES X 16 INCHES EXCEPT FOR ACCESS DOORS TO FIRE DAMPER.

#### F. HANGERS DUCT

HANGERS SHALL BE ATTACHED TO THE BUILDING STRUCTURE. HANGERS SHALL BE AS DETAILED ON THE DRAWINGS OR IN SMACNA MANUAL. ALL MATERIALS SHALL BE GALVANIZED.

2. CONTROL FREEDOM FROM VIBRATION AND NOISE IS ESSENTIAL. TAKE PARTICULAR CARE IN INSTALLING VIBRATION ISOLATION MOUNT AND HANGERS SO THAT VIBRATION FROM OPERATING EQUIPMENT IS NOT TRANSMITTED TO THE STRUCTURE OR OTHER WORK.

- 1. INSULATION SHALL BE COMPLETE TO INCLUDE ALL DUCTWORK, PIPING AND EQUIPMENT AS HEREINAFTER SPECIFIED.
- ALL INSULATION IN A RETURN PLENUM SHALL HAVE A COMPOSITE (JACKETS, FACINGS, ADHESIVES, ETC.). FIRE AND SMOKE HAZARD RATINGS AS TESTED BY PROCEDURE ASTM E-84, NFPA 2TJ AND DL 723 NOT EXCEEDING FLAME SPREAD OF 25 AND SMOKE DEVELOPED OF 50.
- 3. INSULATE ALL SUPPLY DUCTWORK AND HVAC PLENUMS PER APPLICABLE ENERGY CODE.
- 4. INSULATE OUTSIDE AIR DUCTWORK AND PROVIDE AND INSTALL WEATHER PROTECTING JACKET. COORDINATE JACKET COLOR WITH ARCHITECT.
- 5. RETURN DUCTWORK TO BE INSULATED PER THE APPLICABLE ENERGY CODE.
- 6. PROVIDE AND INSTALL PIPING INSULATION PER THE APPLICABLE ENERGY CODE FOR THE
- a. COLD PIPING SYSTEMS (CHILLED WATER, BRINE, REFRIGERANT), 32°F (0°C) TO 65°F (18°C). b. DUAL TEMPERATURE SYSTEMS, 32°F (0°C) TO 220°F (104°C).
- c. HEATING SYSTEMS (STEAM, STEAM CONDENSATE, HOT WATER), AMBIENT UP TO 450°F (232°C). d. CONDENSATE PIPING.

#### H. AIR TESTING, ADJUSTING AND BALANCING (TAB) GENERAL

- PROVIDE QUALIFIED PERSONNEL, EQUIPMENT, APPARATUS AND SERVICES FOR TESTING, INSPECTION, BALANCING AND ADJUSTING OF ALL MECHANICAL SYSTEMS, TO PERFORMANCE DATA SHOWN IN SCHEDULES AND AS SPECIFIED, AND AS REQUIRED BY CODES, STANDARDS, REGULATIONS AND AUTHORITIES HAVING JURISDICTION INCLUDING CITY INSPECTORS, AND ENGINEER. NOTIFY THE ENGINEER AND INVOLVED AUTHORITIES AT LEAST 24 HOURS PRIOR TO TESTING OR INSPECTION. DO NOT COVER WORK PRIOR TO TESTING OR INSPECTION.
- ENGAGE A TAB PROFESSIONAL CERTIFIED BY THE TESTING, ADJUSTING AND BALANCING BUREAU (TABB) FOR ALL TESTING AND BALANCING WORK. ALL AIR BALANCING MUST BE PERFORMED BY AN INDEPENDENT TESTING AND BALANCING AGENCY AS A DIRECT SUB-CONTRACTOR TO THE GENERAL CONTRACTOR. PROVIDE 4 COPIES OF THE CERTIFIED BALANCING REPORT.
- INSTRUMENTS USED FOR TESTING AND BALANCING SHALL HAVE BEEN CALIBRATED WITHIN SIX MONTHS PRIOR TO TESTING OR BALANCING. CALIBRATION SHALL BE CERTIFIED.
- 4. CONTRACTOR TO BALANCE HVAC SYSTEM TO ACHIEVE AIR FLOWS SPECIFIED ON THE HVAC DRAWINGS. CONTRACTOR SHALL SUBMIT A CERTIFIED BALANCING REPORT TO ENGINEER FOR APPROVAL. SYSTEM TO BE BALANCED USING APPROVED ASHRAE METHODS.
- 5. TESTING, INSPECTION, BALANCING AND ADJUSTING SHALL IN NO WAY RELIEVE OR REDUCE GUARANTEE REQUIREMENTS.
- 6. DO NOT COVER OR CONCEAL WORK PRIOR TO TESTING AND INSPECTION AND OBTAINING APPROVAL.
- PRIOR TO DATE OF ACCEPTANCE, FURNISH ENGINEER WITH CERTIFIED CERTIFICATES OF TEST PERFORMED FOR HVAC SYSTEMS INDICATING APPROVAL OF AUTHORITIES HAVING JURISDICTION AND CONFORMANCE WITH REQUIREMENTS OF CONTRACT DOCUMENTS.
- 8. THE ARCHITECT/ENGINEER RESERVES THE RIGHT TO REQUEST ADDITIONAL TESTING TO DETERMINE CONFORMANCE WITH THE CONTRACT DOCUMENTS. THE COST OF ADDITIONAL TESTING SHALL BE BORNE BY THE CONTACTOR WITHOUT ADDITIONAL COMPENSATION.

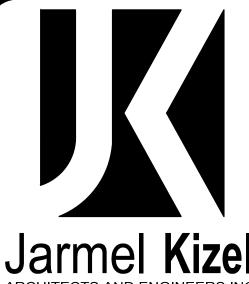
#### I. AIR BALANCING AND ADJUSTING

- 1. BALANCING SHALL NOT BEGIN UNTIL SYSTEMS HAVE BEEN INSTALLED COMPLETE. PUT HVAC SYSTEMS AND EQUIPMENT INTO FULL WORKING ORDER AND CONTINUE OPERATION OF SAME DURING EACH DAY OF TESTING AND BALANCING.
- 2. PROCURE SERVICE OF INDEPENDENT BALANCING AND TESTING AGENCY WITH FOLLOWING QUALIFICATIONS:
- a. AGENCY IS KNOWN TO SPECIALIZE IN STARTING AND TESTING OF HVAC SYSTEMS.
- b. AGENCY-EMPLOYED, PROFESSIONAL AND QUALIFIED HVAC ENGINEER SHALL PERFORM WORK
- c. CERTIFIED BY THE TESTING, ADJUSTING AND BALANCING BUREAU (TABB) FOR ALL TESTING AND BALANCING WORK.
- 3. TEST AND ADJUST EACH DIFFUSER, GRILLE AND REGISTER TO WITHIN 10% OF DESIGN REQUIREMENTS. IDENTIFY LOCATION AND AREA AND INCLUDE IN A REPORT EACH GRILLE, DIFFUSER,
- 4. TEST AND ADJUST EACH AIR HANDLING EQUIPMENT UNIT. BALANCE OUTSIDE AIR FLOW FOR EACH AIR HANDLING EQUIPMENT UNIT. PROVIDE STATIC PRESSURE REPORT FOR ALL AIR MOVING
- IDENTIFY AND LIST SIZE, TYPE AND MANUFACTURER OF DIFFUSERS, GRILLES, REGISTERS AND ALL TESTED EQUIPMENT. MANUFACTURER'S RATINGS ON ALL EQUIPMENT SHALL BE USED TO MAKE REQUIRED CALCULATIONS.
- READINGS AND TESTS OF DIFFUSERS, GRILLES, AND REGISTERS SHALL INCLUDE REQUIRED FPM VELOCITY AND TEST RESULTANT VELOCITY, REQUIRED CFM AND RESULTANT CFM AFTER ADJUSTMENTS.
- 7. ADJUST ALL DIFFUSERS, GRILLES, AND REGISTERS TO MINIMIZE DRAFTS.
- 8. A DRAWING SHALL BE SUBMITTED AS PART OF THE TESTING AND BALANCING REPORT. THE DRAWING SHALL SHOW CLEARLY THE TEST LOCATIONS IN THE DUCTWORK AND THE DUCT SIZES

. CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING THE CONTRACTOR'S BEST SKILL AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCT MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB

2. GC MUST PROVIDE & INSTALL ALL PRODUCTS PE PLANS. ONLY SUBSTITUTED PRODUCTS NEED TO B SUBMITTED TO THE ARCHITECT FOR APPROVAL. UNAPPROVED SUBSTITUTIONS WILL BE REPLACED THE EXPENSE OF THE GC.

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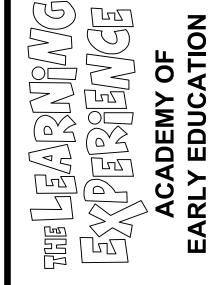


42 OKNER PARKWAY LIVINGSTON, NEW JERSEY 07039

> www.jarmelkizel.com Architecture Engineering Interior Design Implementation Services

TEL: 973-994-9669

FAX: 973-994-4069





		ISSUE	
NO.	DATE	DESCRIPTION	IN
1	06-02-23	FOR TLE REVIEW	М
2	06-14-23	FOR PERMIT	М
		REVISION	

NO. DATE DESCRIPTION

PROFESSIONAL CERTIFICATION

MATTHEW B. JARMEL, AIA, MBA

**LICENSE NUMBER: A2017014316** 

TLEMO22-164 **AS NOTED** 

Drawing Name:

**HVAC GENERAL NOTES** 

Drawing Number:

Drawn Bv:



Approved By:

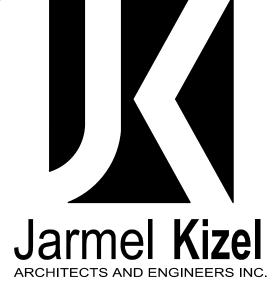
_		GENERAL ABBREVIA	ΑI -	IONS		
Α	Δ.	Air on Commercial Air	ı	ID	Inside Diameter	
	A AC	Air or Compressed Air Air Conditioning	17	IN	Inches	
	ACD	Automatic Control Damper	K	KW	Kilowatt	
	AD AF	Access Door Air Foil	L	IXVV	Nilowatt	
	AHU	Air Handling Unit		LAT	Leaving Air Temperature	
	AMP AP	Ampere Access Panel		LB LF	Pound Linear Feet	
	APD	Air Pressure Drop		LD	Linear Diffuser	
	AS ASHRAE	Air Stream  American Society of Heating, Refrigerating and Air-Conditioning Engineers	s	LP LPS	Low Point Low Pressure Steam	
	ATC	Automatic Temperature Control		LRA	Locked Rotor Amps	
	ATM AHJ	Atmosphere Authority Having Jurisdiction		LUVR LVDR	Louver Louvered Door	
3		<u>,                                     </u>		LVG	Leaving	
	BDD BHP	Back-Draft Damper Brake Horsepower	M	LWT	Leaving Water Temperature	
	BI	Backwards Inclined		MAX	Maximum	
	BOD	Bottom of Duct		MBH	1000 BTUH	
	BTU BTUH	British Thermal Unit BTU per Hour		MCA MD	Minimum Circuit Amps  Motorized Damper	
)		<u> </u>		MECH	Mechanical	
	CENT	Center or Centrifugal		MIN MU	Minimum Make-Up Water	
	CF CFM	Cubic Feet Cubic Feet per Minute		MUA	Make-Up Air	
	CH	Chilled or Chiller	N	NO	Noise Outside on Normal III Of the	
	CHW CHWR	Chilled Water Chilled Water Return		NC NO	Noise Criteria or Normally Closed Normally Open	
	CHWS	Chilled Water Supply		NOM	Nominal	
	CO CONN	Carbon Monoxide Connection	0	OA	Outside Air	
	CT	Cooling Tower		OAI	Outside Air Intake	
	CTBD CUH	Cooling Tower Blow Down Cabinet Unit Heater		00	On Center	
	CWR	Condenser Water Return		OD ODP	Outside Diameter Open Drip Proof	
	CWS	Condenser Water Supply		OV	Outlet Velocity	
,	D	Drain	Р	PCF	Dounda nor Cubia Foot	
	DB	Dry Bulb (Temperature)		PD	Pounds per Cubic Foot Pressure Drop	
	DEG DDC	Degree Direct Digital Control		PH	Phase	
	DIA	Diameter		PRV PSI	Pressure Reducing Valve Pounds per Square Inch	
	DIM DP	Dimension Differential Pressure		PSIA	Pounds per Square Inch - Absolute	
<u> </u>	שר	Differential Pressure		PSID PSIG	Pounds per Square Inch - Differential Pounds per Square Inch - Gauge	
	EA	Each or Exhaust Air		PVC	Polyvinyl Chloride	
	EAHU EAT	Exhaust Air Handling Unit Entering Air Temperature	R	Б	D. "	
	EF	Exhaust Fan		R RA	Radius Return Air	
	EMER EMS	Emergency Energy Management System		RET	Return	
	ESP	External Static Pressure		RH RLA	Relative Humidity Running Load Amps	
	ET EUH	Expansion Tank Electrical Unit Heater		RLF	Relief	
	EWT	Entering Water Temperature		RPM RTU	Revolutions per Minute Roof-Top Unit	
	EXH		S			
	EXT EXP	External Expansion		SA	Supply Air	
				SCR SCT	Screen Saturated Condensing Temperature	
	F FA	Fahrenheit Free Area or Fire Alarm		SD	Smoke Detector or Smoke Damper	
	FC	Flexible Connection		SE SEN	Smoke Exhaust Sensible	
	FCU FD	Fan Coil Unit Fire Damper, or Fire Department		SFD	Combination Smoke / Fire Damper	
	FLA	Full Load Amps		SHC SMACNA	Sensible Heat Capacity  Sheet metal and Air Conditioning Contractor's Na	itional Association
	FLEX FLRDR	Flexible Floor Drain		SP	Static Pressure	
	FLRDR FPM	Floor Drain Feet per Minute		SF SS	Square Feet Stainless Steel	
	FPS EDD	Feet per Second		SUP	Supply	
	FRP FS	Fiberglass Reinforced Plastic Flow Switch	T		<del></del>	
	FT	Feet		T TEFC	Temperature Totally Enclosed Fan Cooled	
	FTR	Fin Tube Radiation		TEMP	Temperature	
	G	Gas		TON TSP	12,000 BTUH (Cooling Capacity) Total Static Pressure	
	GA	Gauge		TSTAT	Thermostat	
	GAL GALV	Gallons Galvanized	U	TYP	Typical	
	GFU	Glycol Feed Unit	J	UC	Undercut (Door)	
	GPH GPM	Gallons per Hour – Gallons per Minute	٧		, , , , , , , , , , , , , , , , , , ,	
	GR	Grade		٧	Volts	
1	LID	Haaa Bik (O		VAV VD	Variable Air Volume Volume Damper	
	HB HD	Hose Bib (Connection) Head		VEL	Velocity	
	HP	Horsepower or High Point	W	VFD	Variable Frequency Drive	
	HR HRU	Hour Heat Recovery Unit	•	WB	Wet Bulb Temperature	
	HTG	Heating		WC	Water Column	
	HTHW	High Temperature Hot Water		WG WPD	Water Gauge Water Pressure Drop	
	HWR HWS	Hot Water Return  Hot Water Supply		WTD	Water Temperature Difference	
		i i u				

PROPERTY OF THE CONTROL CORNEL TO CONTROL OF THE CO	BLE LINE DUCT  R R R R R R R R R R R R R R R R R R
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MANUAL BALANCING VOLUME DAMPER   The Wired Wall Room Thermostat  Wired Wall Room Thermostat  Wired Remote Wall Mounted Averaging Temperature Sensor Capability  Return Duct Mounted Humidistat  Rise or Drop Supplyrieturn Exhaust  New Return/exhaust diffuser  New Return/exhaust diffuser  New Supply diffuser  ECH-1  ELECTRIC Ceiling Heater  EF-1  BY TAKE-OFF Rectangular / Round (a) - OVAL ( ) - OPA Rectangular / Rectangula	
	_
CAPABILITY  RETURN DUCT MOUNTED HUMIDISTAT  RISE OR DROP SUPPLY/RETURN/ EXHAUST  NEW RETURN/EXHAUST DIFFUSER  A5° TAP TAKE-OFF RECTANGULAR / ROUND (Ø) - OVAL ( ) 🕉  ECH-1  ELECTRIC CEILING HEATER  B0° TAP TAKE-OFF RECTANGULAR / RECTANGULAR / RECTANGULAR /	
NEW RETURN/EXHAUST DIFFUSER  NEW SUPPLY DIFFUSER  ECH-1  ELECTRIC CEILING HEATER  SUPPLY/RETURN/ EXHAUST  A5° TAP TAKE-OFF RECTANGULAR / ROUND (Ø) - OVAL ( ) 🌣	
NEW SUPPLY DIFFUSER  A5° TAP TAP TAKE-OFF RECTANGULAR / ROUND (Ø) - OVAL ( ) \$\phi\$  ECH-1  ELECTRIC CEILING HEATER  B0° TAP TAKE-OFF RECTANGULAR / ROUND (Ø) - OVAL ( ) \$\phi\$	R/D
NEW SUPPLY DIFFUSER  TAP TAKE-OFF  RECTANGULAR / ROUND (Ø) - OVAL ( ) •  ECH-1  ELECTRIC CEILING HEATER  EF-1  TAP TAKE-OFF  RECTANGULAR / ROUND (Ø) - OVAL ( ) •  RECTANGULAR /	
ELECTRIC CEILING HEATER  90° TAP TAKE-OFF RECTANGULAR /	
	M
	}
TYPE (REFER TO SCHEDULE)  BULLHEAD  CONVERCE	]
A1/2(325)  AIR OUTLET TAG  CONVERGE RETURN/EXHAUST RECTANGULAR / ROUND (Ø) - OVAL ( ) Ф	
——————————————————————————————————————	
NEW RIGID DUCT	
NEW FLEXIBLE DUCT	
PACKAGED ROOFTOP UNIT	
D(S) SMOKE DETECTOR - DUCT MOUNTED	

1. CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING THE CONTRACTOR'S BEST SKILL AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCTION MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB SITE SAFETY

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3. VERBAL REPRESENTATION HAS NO VALUE AND ALL REQUESTS TO CHANGE ANY PRODUCTS OR SPECIFICATIONS PER PLANS, <u>MUST</u> BE SUBMITTED IN WRITING TO THE ARCHITECT & TLE FOR APPROVAL.

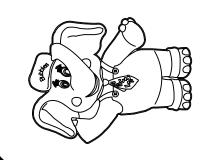


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PROFESSIONAL CERTIFICATION

MATTHEW B. JARMEL, AIA, MBA
LICENSE NUMBER: A2017014316

Project Number: TLEMO22-164	Scale: AS NOTED
Drawn By:	Approved By:
LN	MBJ
D : N	

HVAC ABBREVIATIONS
SPECIFICATIONS
AND SYMBOL LIST

Drawing Number

M-10



#### SHEET NOTES:

- 1. ALL SUPPLY AND RETURN DUCTWORK SHALL HAVE EXTERIOR DUCT WRAP INSULATION, MINIMUM R-6. SEE HVAC SPECIFICATIONS IN DWG M-101 FOR ACCEPTABLE MATERIAL.
- 2. PROVIDE 1" ACOUSTICAL LINER FOR THE FIRST 15' FEET OF RUN OF SUPPLY AND RETURN DUCT FROM EACH RTU OUTLET.
- 3. EACH RTU THERMOSTAT SHALL BE HONEYWELL MODEL TC-500. WHERE SHOWN ON THIS PLAN, CONTRACTOR SHALL INSTALL AN AVERAGE SENSOR MODEL HONEYWELL MODEL TR-40. ALL THERMOSTATS AND SENSORS SHALL BE MOUNTED 5 FEET ABOVE FINISHED FLOOR .VERIFY THEIR FINAL LOCATION AGAINST CONFLICT WITH WALL MOUNTED ITEMS / MILLWORK.
- 4. INSTALL BALANCING VOLUME DAMPER ON EACH INDIVIDUAL SUPPLY/RETURN/EXHAUST TAKEOFF AS PER DETAIL IN DWG M-500
- 5. CONTRACTOR SHALL INSTALL A PLASMA TUBE IN EACH ROOFTOP UNIT CABINET AS PER SCHEDULE IN DWG M-400
- 6. FOR DETAILED INFORMATION OF SPACE ALLOCATION IN MECHANICAL ROOM SEE ELECTRICAL DRAWING E-201.
- 7. SMOKE DETECTION SHALL BE PROVIDED IN EACH SUPPLY OR RETURN DUCT FOR ALL RTUS. SEE PLANS FOR LOCATION. RETURN DUCT SMOKE DETECTOR SHALL BE INSTALLED UPSTREAM OF OUTSIDE AIR DUCT CONNECTION. DUCT SMOKE DETECTION & HOUSING PROVIDED BY FIRE ALARM VENDOR. CHECK COMPATIBILITY WITH FIRE ALARM PANEL BEFORE ORDERING. HVAC CONTRACTOR SHALL PROVIDE & INSTALL SAMPLING TUBES PER FIRE ALARM VENDOR SPECIFICATIONS & DUCTWORK SHOP DRAWINGS. ALL WIRING BY FIRE ALARM VENDOR.

#### KEY NOTES:

- 22x14 SUPPLY AND RETURN DUCT UP TO RTU-1 ON ROOF ABOVE. CONTRACTOR TO PROVIDE THE TRANSITION BETWEEN THE SUPPLY
- 22x14 SUPPLY AND RETURN DUCT UP TO RTU-2 ON ROOF ABOVE. CONTRACTOR TO PROVIDE THE TRANSITION BETWEEN THE SUPPLY DUCT AND UNIT OPENINGS
- 3 22x14 SUPPLY AND RETURN DUCT UP TO RTU-3 ON ROOF ABOVE. CONTRACTOR TO PROVIDE THE TRANSITION BETWEEN THE SUPPLY DUCT AND UNIT OPENING
- 4 20x14 SUPPLY AND RETURN DUCT UP TO RTU-4 ON ROOF ABOVE. CONTRACTOR TO PROVIDE THE TRANSITION BETWEEN THE SUPPLY DUCT AND UNIT OPENINGS
- (5) 22x14 SUPPLY AND RETURN DUCT UP TO RTU-5 ON ROOF ABOVE. CONTRACTOR TO PROVIDE THE TRANSITION BETWEEN THE SUPPLY DUCT AND UNIT OPENING
- 6 4"Ø OUTSIDE AIR DUCT UP TO ROOF ABOVE. INSTALL A BALANCING DAMPER AND BALANCE TO ACHIEVE 20 CFM.
- 12x10 EXHAUST DUCT UP TO EF-1 ON ROOF ABOVE.
- 8 10x10 EXHAUST DUCT UP TO EF-2 ON ROOF ABOVE.
- 9 ROOF ACCESS / MAINTENANCE DOOR SHALL NOT BE BLOCKED BY ANY DUCT, PIPES, CONDUITS OR OTHER FIXED ITEMS
- CENTRAL EXHAUST FAN FOR TOILET EXHAUST TO OPERATE ON A TIMER LOCATED IN ELEC CLOSET. THE TIMER HAS EXHAUST FAN RUNNING FROM 6:00 AM TO 8:00 PM, SEVEN DAYS A WEEK. THEY SHOULD NOT BE CONNECTED TO THE LIGHT SWITCH OR BE INDIVIDUAL
- RUN 4"Ø DRYER EXHAUST DUCT UP TO ROOF. TERMINATE WITH GOOSENECK MIN. 3 FEET ABOVE ROOF LINE.. PROVIDE CLEAN OUT AT EVERY ELBOW. TOTAL EXHAUST DUCT DEVELOPED LENGTH 18' WITH TWO 90° ELBOWS. MAXIMUM ACCEPTABLE LENGTH WITH TWO 90° ELBOWS BY MANUFACTURER IS 40'. THEREFORE NO BOOSTER FAN REQUIRED. SEE DETAIL ON DWG M-500.

#### SHEET NOTES:

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3. VERBAL REPRESENTATION HAS NO VALUE AND ALL REQUESTS TO CHANGE ANY PRODUCTS OR SPECIFICATIONS PER PLANS, MUST BE SUBMITTED IN WRITING TO THE ARCHITECT & TLE FOR APPROVAL.

SITE SAFETY

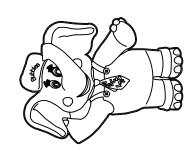


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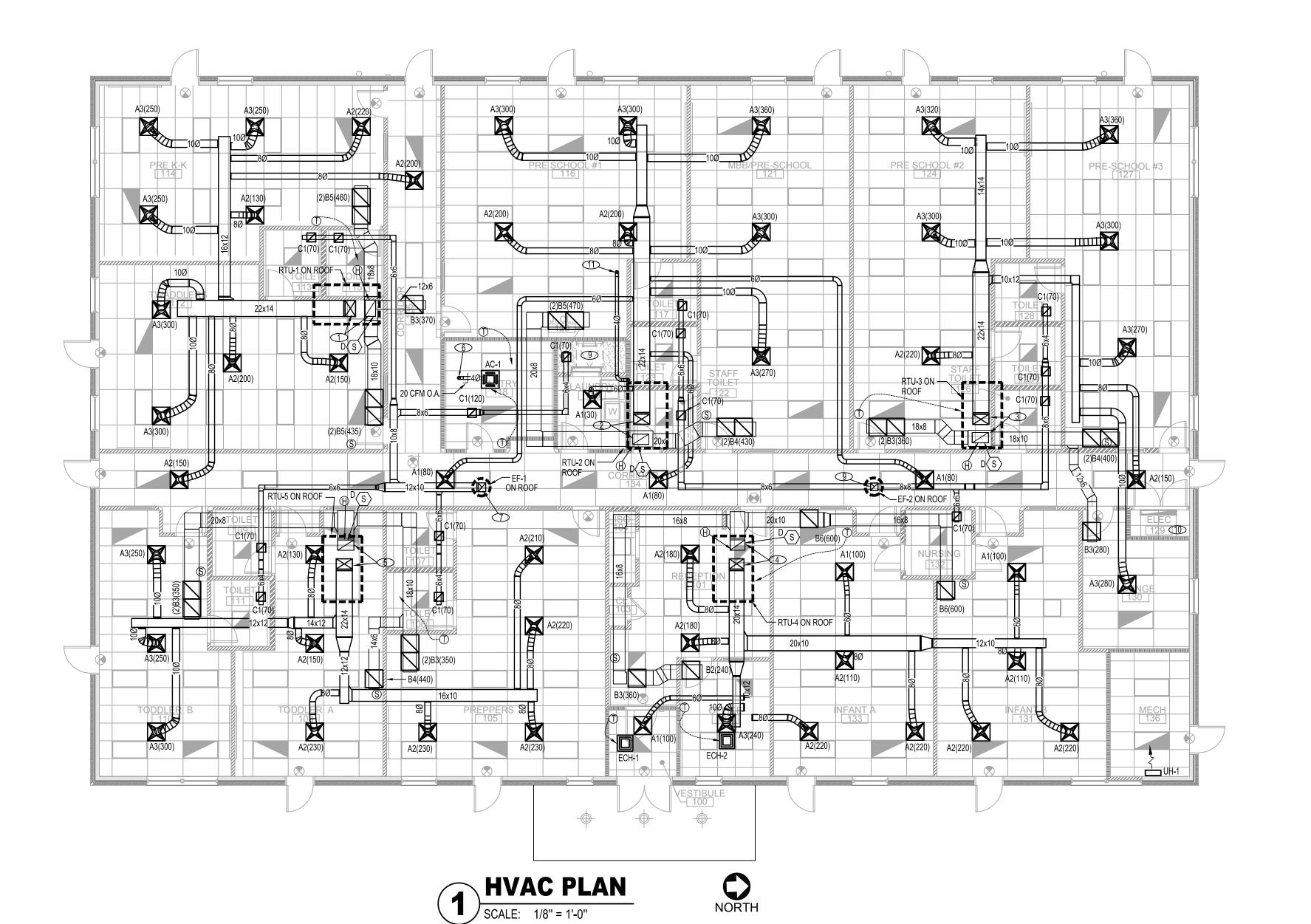
PROFESSIONAL CERTIFICATION MATTHEW B. JARMEL, AIA, MBA LICENSE NUMBER: A2017014316

Project Number:	Scale:
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Drawn By:	Approved By:
LN	MBJ

**HVAC PLAN** 

M-200





- THE HORIZONTAL DISTANCE FROM DRYER EXHAUST OUTLET TO CLOSEST ROOFTOP UNIT OUTSIDE AIR INTAKE SHALL BE MORE THAN

  SHEET NOTES: 10 FEET
- 2 PROVIDE CONDENSATE DRAIN PIPE SIZED PER MANUFACTURER'S REQUIREMENTS FOR EACH ROOFTOP UNIT WITH CONDENSATE TRAP. CONDENSATE TO BE DISCHARGED TO THE ROOF TOWARD ROOF DRAIN, MINIMUM PIPE LENGTH FIVE (5) FEET AWAY FROM RTU INLET TO PROVIDE POSITIVE DRAINAGE. PROVIDE P-TRAP WITH MINIMUM 2" DIFFERENCE BETWEEN INLET AND DISCHARGE. ALLOW PVC PIPE (SIZE TO MATCH THE RTU CONDENSATE DISCHARGE) FROM P-TRAP TO ROOF DRAIN WITH VENT. THE PVC DRAIN LINE SHALL BE INSTALLED THAT NO AIR BLOCK WILL OCCUR.
- 3 4"Ø DRYER EXHAUST DUCT. TERMINATE WITH GOOSENECK MIN. 3' ABOVE ROOF LINE
- 4"Ø O.A. DUCT FOR PANTRY CASSETTE. TERMINATE WITH MIN. 3' ABOVE ROOF LINE

- 1. FOR GAS PIPE LAYOUT REFER TO PLUMBING DRAWINGS
- 2. CENTRAL EXHAUST FANS FOR TOILET EXHAUST TO OPERATE ON A TIMER. THE TIMER HAS TWO (2) EXHAUST FANS RUNNING FROM 6:00 AM TO 8:00 PM, SEVEN DAYS A WEEK. THEY SHOULD NOT BE CONNECTED TO THE LIGHT SWITCH OR BE INDIVIDUAL FAN UNITS.
- 3. CONTRACTOR SHALL COORDINATE EXACT LOCATION OF ALL EQUIPMENT ON ROOF WITH STRUCTURAL DWGS. ALL SERVICEABLE EQUIPMENT MUST BE LOCATED A MINIMUM OF 10 FEET FROM ROOF EDGE OR OPENINGS. CONTRACTOR TO COORDINATE AND PROVIDE SAFETY RAILS IF UNITS ARE WITHIN 10 FEET OF ROOF EDGE OR

ROOF EXHAUST SYSTEM NOTES

ALL EXHAUST DISCHARGE AND VENTS TO BE LOCATED AT A MINIMUM

DISTANCE OF 10 FT. FROM ANY RTU'S O/A INTAKES

WORK USING THE CONTRACTOR'S BEST SKILL AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCTION MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB SITE SAFETY

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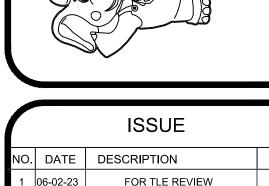
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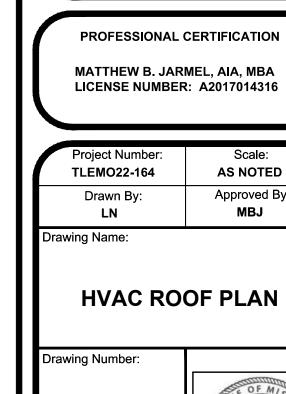


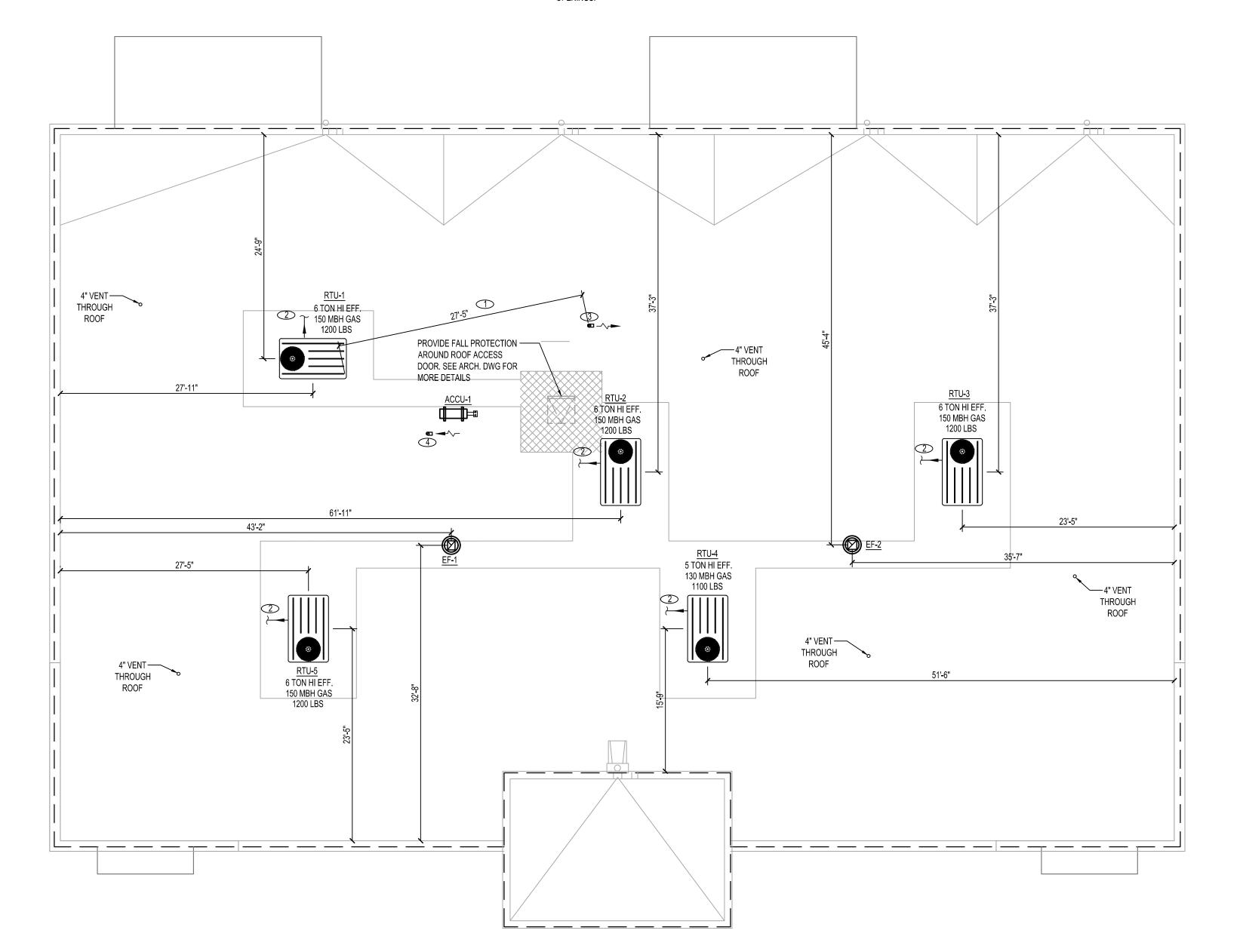
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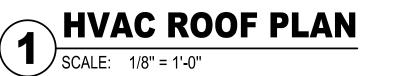
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**HVAC ROOF PLAN** 









												ROOF	TOP AIR	HANDLING UNIT SCI	HEDULE														
									D	X COOLING	COIL DATA						GAS HEA	TING COIL I	DATA				MOTOF	R/ELECTRICAL DA	λTA				NOTES
TAG	LOCATION	MANUF	MANUF MODEL	TOTAL CFM	MAX. O.A. CFM	COOLING TONS	NET TOTAL CAPACITY MBH	NET SENSIBLE CAPACITY MBH	LATENT CAPACITY MBH	COIL EAT DB °F	COIL EAT	UNIT LA DB °F	T UNIT LAT	COOLING DESIGN OUTDOOR AMBIENT TEMP DB/WB °F	TYPE OF HEAT	INPUT CAPACITY MBH	OUTPUT CAPACITY MBH	COIL EAT	UNIT LAT DB °F	HEATING DESIGN OUTDOOR AMBIENT TEMP DB °F	UNIT VOLTAGE			SUPPLY FAN MOTOR TYPE	EER	MCA	MOP	MAX. OPERATING UNIT WEIGHT LBS	
RTU-1	ROOF	TRANE	YHJ072A3S0H	2400	350	6 TONS	66.82	52.38	14.44	76.90	63.32	55.33	53.91	99 / 75	HIGH	150	121.50	62.35	108.34	2	208/60/3	0.7	3	MULTISPEED	12.1	38	50	1200	SEE NOTES
RTU-2	ROOF	TRANE	YHJ072A3S0H	2200	400	6 TONS	66.74	52.67	14.07	77.68	63.78	54.96	53.55	99 / 75	HIGH	150	121.50	60.22	110.34	2	208/60/3	0.7	3	MULTISPEED	12.1	38	50	1200	SEE NOTES
RTU-3	ROOF	TRANE	YHJ072A3S0H	2200	400	6 TONS	66.74	52.67	14.07	77.68	63.78	54.96	53.55	99 / 75	HIGH	150	121.50	60.22	110.34	2	208/60/3	0.7	3	MULTISPEED	12.1	38	50	1200	SEE NOTES
RTU-4	ROOF	TRANE	YHC060E3	2000	300	5 TONS	57.00	45.76	11.24	76.90	63.32	56.19	53.59	99 / 75	HIGH	130	104	62.35	110.75	2	208/60/3	0.7	1	STANDARD	11.9	26	40	1100	SEE NOTES
RTU-5	ROOF	TRANE	YHJ072A3S0H	2200	350	6 TONS	66.28	52.33	13.95	77.16	63.47	54.65	53.26	99 / 75	HIGH	150	121.50	61.64	111.73	2	208/60/3	0.7	3	MULTISPEED	12.1	38	50	1200	SEE NOTES

NOTES: 1. ALL UNITS SHALL HAVE DOWNFLOW DUCTS ARRANGEMENT

2. PROVIDE ECONOMIZER WITH COMPARATIVE ENTHALPY FOR ALL RTUS. PROVIDE RETURN DUCT SMOKE DETECTOR FOR ALL RTUS

3. PROVIDE FACTORY INSTALLED BAROMETRIC RELIEF DAMPERS WITH HOOD 4. PROVIDE FACTORY INSTALLED 2 IN MERV 8 FILTER

5. PROVIDE FACTORY INSTALLED UNPOWERED GFCI

6. PROVIDE FACTORY INSTALLED HINGED ACCESS DOORS 7. PROVIDE MINIMUM 14" TALL MANUFACTURER'S ROOFCURBS FOR EACH UNIT.

8. PROVIDE SUPPLY MOTOR TYPE AS PER SCHEDULE ABOVE

9. PROVIDE FACTORY INSTALLED HOT GAS REHEAT (DEHUMIDIFICATION) FOR ALL RTUS 10. PROVIDE FACTORY INSTALLED WEATHERPROOF DISCONNECT

11. PROVIDE CONDENSATE DRAIN OVERFLOW SWITCH, DIRTY FILTER SWITCH AN FAN FAILURE SWITCH

12. THE CONTRACTOR SHALL VERIFY AND COORDINATE REQUIRED ROOF ASSEMBLY OPENING LOCATIONS AND EQUIPMENT

WEIGHT(S) WITH THE ARCHITECTS PRIOR TO ORDERING HVAC EQUIPMENT AND REVIEW OF FRAMING SHOP DRAWINGS. 13. FOR EACH UNIT PROVIDE THERMOSTAT HONEYWELL TC500 AND WHEN THE UNIT SUPPLIES MORE THAN (1) ROOM, PROVIDE AVERAGING SENSORS HONEYWELL MODEL TR40

FOR LOCATIONS AND QUANTITIES SEE DWG M-200

	EXHAUST FAN SCHEDULE													
TAG	LOCATION	MANUF	MANUF MODEL	CFM	DRIVE	RPM	ESP. IN. W.C.	SONES	ROOF OPENING	WEIGHT LBS	HP	VOLTS	MOTOR TYPE	REMARKS
EF-1	ROOF	CARNES	VEBK08	610	BELT	1500	0.4	7.0	11x11	30	1/6	120/1	K4	SEE NOTES
EF-2	ROOF	CARNES	VEBK06	490	BELT	1667	0.4	6.2	11x11	30	1/6	120/1	K4	SEE NOTES

1. PROVIDE DISCONNECT SWITCH, BACKDRAFT DAMPER ALUMINUM INSECT SCREEN AND PREFABRICATED FLAT ROOF CURB BY FAN MANUFACTURER

FAN TO RUN ON TIMECLOCK PARAGON MODEL 7000 SERIES AS SHOWN IN ELECTRICAL DWGS

	MECH ROOM ELECTRIC UNIT HEATER SCHEDULE											
TAG	LOCATION	MANUF	MANUF MODEL	KW	BTUH	CFM	THROW FT.	MIN. MOUNTING HEIGHT FT.	MCA	CONTROL CIRCUIT & FAN MOTOR VOLTS	WEIGHT LBS	REMARKS
UH-1	MECH. RM.	QMARK	MWUH5004	1.87	6396	270	16	6	11.3	208/1/60	24	SEE NOTE 1

1. HEATER TO BE WALL MOUNTED. PROVIDE DISCONNECT SWITCH. BUILT IN THERMOSTAT TO BE SET AT 65° F

	GLOBAL PLASMA AIR DUCT TUBE SCHEDULE									
TAG	MANUFACTURER	MODEL	SERVING	ELEC. VOLTAGE	WEIGHT	QUANTITY PER UNIT				
GP-1	GLOBAL PLASMA SOLUTIONS	FC48- AC	ONE FOR EACH RTU	24 VOLTS	4 LBS	1				

ALL TUBES SHALL BE MOUNTED INSIDE CORRESPONDING ROOFTOP UNIT CABINET

DIFFUSER AND REGISTER SCHEDULE CFM RANGE SERVICE NECK SIZE PANEL REMARKS MANUF MODEL Ø IN. SIZE IN. CARNES SJTB SUPPLY 0-100 24x24 SEE NOTES A2 CARNES SJTB 101-230 SUPPLY 24x24 SEE NOTES A3 CARNES SJTB 231-380 SUPPLY 10 24x24 SEE NOTES A4 CARNES SJTB 381-460 SUPPLY 24x24 SEE NOTES 12 CARNES SJTB 461-600 SUPPLY 24x24 SEE NOTES CARNES SPRB 0-100 RETURN 24x24 | SEE NOTES 24x24 | SEE NOTES CARNES SPRB 101-230 RETURN CARNES SPRB 231-380 RETURN 24x24 SEE NOTES B4 CARNES SPRB 381-450 RETURN 12 | 24x24 | SEE NOTES | B5 CARNES SPRB 451-600 RETURN 14 24x24 SEE NOTES 24x24 SEE NOTES CARNES SPRB 601-1000 RETURN CARNES SPRB EXHAUST 12x12 SEE NOTES SPRB 120 12x12 | SEE NOTES CARNES EXHAUST

NOTES: CFM SHALL BE AS INDICATED IN DRAWINGS. C1 EXHAUST GRILLES SHALL BE FACE MOUNTED ON THE 24x24 CEILING TILE SUBMITTALS FOR HVAC EQUIPMENT AND COMPONENTS SHALL BE PROVIDED TO THE ARCHITECT AND TO THE LEARNING EXPERIENCE PRIOR TO ORDERING EQUIPMENT.

START UP OF UNITS MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR STARTUP OF ALL UNITS. CONTRACTOR SHALL COORDINATE WITH TRANE REP. TO SCHEDULE SITE VISIT(S) TO VERIFY INSTALLATION IS AS PER MANUFACTURER'S SPECIFICATIONS THE STARTUP ACTIVITIES MUST BE DOCUMENTED AND MADE PART OF THE CLOSE-OUT PACKAGE PROVIDED BY THE GENERAL CONTRACTOR TO THE OWNER AND TENANT ON THE PROJECT.

ELECTRIC CEILING HEATER SCHEDULE ALL SUBSTITUTION OF EQUIPMENT SHALL BE SUBMITTED FOR REVIEW AND APPROVAL BY TLE ELEC. TAG MANUFACTURER | MODEL VOLTAGE

> ECH - 2 QMARK

QMARK

EFF SERIES 1500

EFF SERIES 1500 | 1.5 | 120/1/60

ECH - 1

1. HEATER TO BE CEILING MOUNTED. PROVIDE T-BAR MOUNTING KIT, DISCONNECT SWITCH. PROVIDE WALL REMOTE THERMOSTAT (120V WITH CONTACTS RATED AT 20AMPS OR GREATER). THERMOSTAT TO BE SET AT 74° F.

1.5 120/1/60

WEIGHT

REMARKS

SEE NOTE 1

22 SEE NOTE 1

TRANE NATIONAL ACCOUNTS EQUIPMENT PACKAGE

FOR MORE INFORMATION OF EQUIPMENT CONTACT TRANE NATIONAL ACCOUNTS: TLE@TRANE.COM THE INSTALLING CONTRACTOR ACCEPTS ALL COSTS RELATED TO EQUIPMENT

SUBSTITUTIONS.CONDENSER STANDS PROVIDED BY OTHERS

ORDERING PROCEDURES: TRANE NATIONAL ACCOUNTS DEPARTMENT WILL ORDER EQUIPMENT AND COORDINATE SHIPMENT WITH THE SUCCESSFUL HVAC CONTRACTOR. THE HVAC CONTRACTOR WILL BE

RESPONSIBLE FOR EQUIPMENT WARRANTY, DELIVERY COORDINATION, RECEIVING AND INSTALLATION AS DESCRIBED IN THE SPECIFICATIONS.

START UP AND COMMISSIONING REQUIREMENTS:

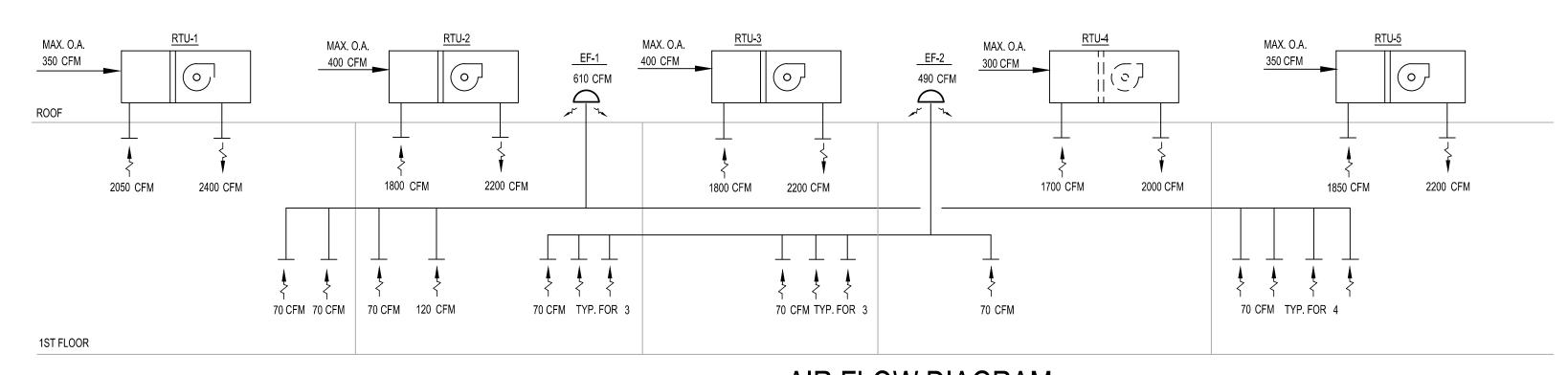
INSTALLING CONTRACTOR IS RESPONSIBLE FOR INITIAL STARTUP, CERTIFIED TEST & BALANCE, RUNNING THE UNITS & MAINTAINING THE AIR FILTERS DURING THE CONSTRUCTION PHASE. TWO WEEKS PRIOR TO THE BUILDING TRAINING, THE CONTRACTOR WILL COORDINATE THE EQUIPMENT UNIT VERIFICATION WITH MANUFACTURER. UPON COMPLETION, CONTRACTOR SHALL FURNISH A WRITTEN REPORT TO THE LEARNING EXPERIENCE AND AHJ

	PANTRY SPLIT SYSTEM UNIT SCHEDULE																	
	INDOOR UNIT								OUTDOOR UNIT									
TAG	LOCATION	MANUF	MANUF MODEL	CFM		HEATING CAPACITY AT 47°F / 17°F (BTU/H)	MCA	UNIT WEIGHT (LBS)	TAG	LOCATION	MANUF	MANUF MODEL	CFM	VOLTAGE	MCA	MOCP	REFRIGERANT TYPE	UNIT WEIGHT (LBS)
AC-1	PANTRY CEILING	MITSUBISHI	TPLA0A0241EA70A	530-640-710-810	24,000	26,000 / 26,000	1.0	56	ACCU-1	ROOF	MITSUBISHI	TRUZH0241HA10NA	1940	208/1	17.0	27	R410A	190

AS REQUIRED BY AHJ.

1. UNIT SHALL BE CONTROLLED BY A MITSUBISHI WIRED THERMOSTAT MODEL TAR-40MAAU, LOCATED IN PANTRY AS PER PLAN.

2. PROVIDE BLUE DIAMOND (MEGABLUE ADVANCED) CONDENSATE PUMP W/ RESERVOIR & SENSOR, OUTSIDE AIR KIT, DISCONNECT SWITCH CONDENSATE TO DISCHARGE INDIRECTLY TO JANITOR SINK. ROUTING SHALL BE COORDINATED IN FIELD.



AIR FLOW DIAGRAM

1. CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING THE CONTRACTOR'S BEST SKILL AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCTIO MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB SITE SAFETY

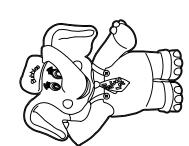
2. GC MUST PROVIDE & INSTALL ALL PRODUCTS PER PLANS. <u>ONLY</u> SUBSTITUTED PRODUCTS NEED TO BE SUBMITTED TO THE ARCHITECT FOR APPROVAL. UNAPPROVED SUBSTITUTIONS WILL BE REPLACED A THE EXPENSE OF THE GC.

3. VERBAL REPRESENTATION HAS NO VALUE AND ALL REQUESTS TO CHANGE ANY PRODUCTS OR SPECIFICATIONS PER PLANS, MUST BE SUBMITTED IN WRITING TO THE ARCHITECT & TLE FOR APPROVAL.

#### ARCHITECTS AND ENGINEERS INC. 42 OKNER PARKWAY LIVINGSTON, NEW JERSEY 07039 TEL: 973-994-9669 FAX: 973-994-4069

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NO.	DATE	DESCRIPTION	INT.
1	06-02-23	FOR TLE REVIEW	MBJ
2	06-14-23	FOR PERMIT	MBJ
3	08-14-23	PER TLE AND CODE COMMENTS	MBJ
		REVISION	
NO.	DATE	DESCRIPTION	INT.

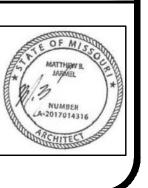
PROFESSIONAL CERTIFICATION

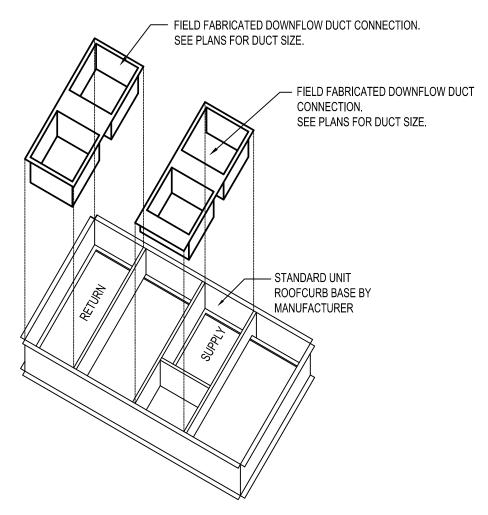
MATTHEW B. JARMEL, AIA, MBA LICENSE NUMBER: A2017014316

Drawn By: <b>LN</b>	Approved By: MBJ
TLEMO22-164	AS NOTED
Project Number:	Scale:

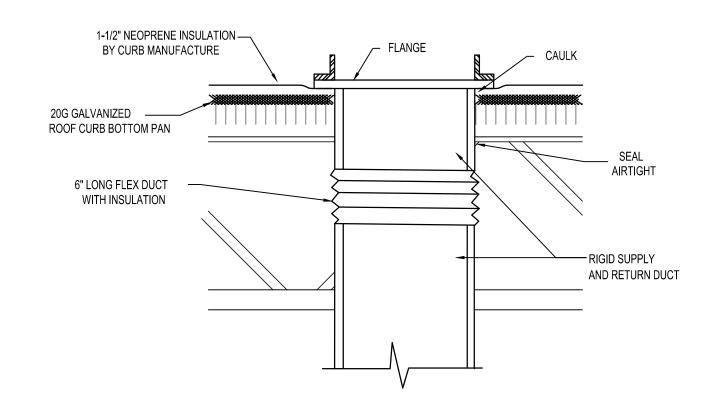
**HVAC SCHEDULES & AIR RISER DIAGRAM** 

Drawing Number:

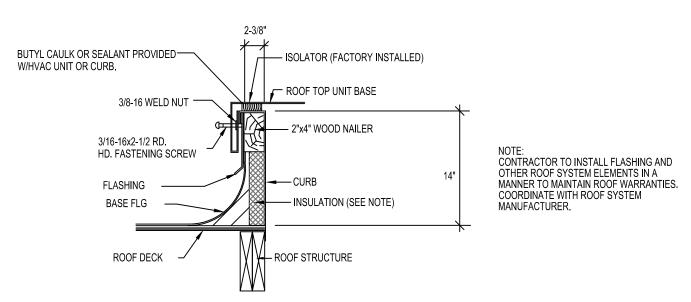




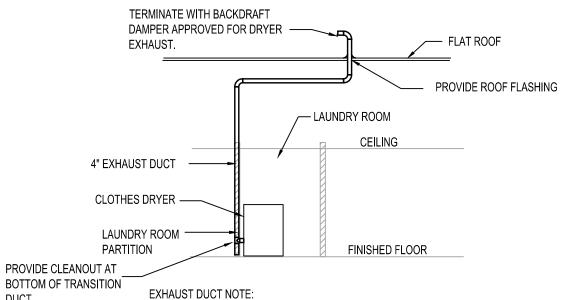
## DUCTWORK CONNECTION TO ROOFCURB SCALE: N.T.S.



## DUCT PENETRATION THROUGH ROOF

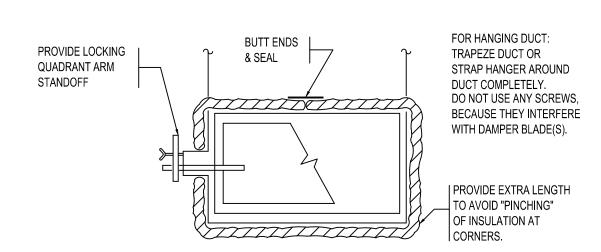


### **TYPICAL HVAC UNIT ROOFTOP CURB**

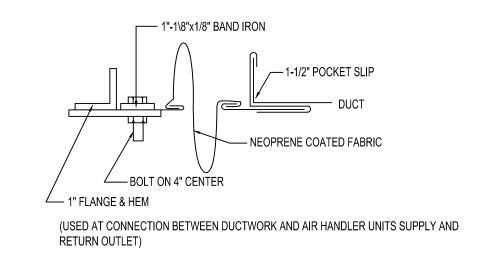


- 1. MALE END OF THE DUCT AT OVERLAPPED DUCT JOINTS SHALL EXTEND IN THE DIRECTION OF AIRFLOW
- PROTECTIVE SHIELD PLATES SHALL BE PLACED WHERE NAILS OR SCREWS FROM FINISH OR OTHER WORK ARE LIKELY TO PENETRATE THE CLOTHES DRYER EXHAUST DUCT. SHIELD PLATES HALL BE PLACED ON THE FINISHED FRAMING MEMBERS WHERE THERE IS LESS THAN 1-1/4" BETWEEN DUCT AND FINISHED FRAME MEMBER. SHIELDS SHALL BE STEEL (0.062" THICK) AND EXTEND AT-LEAST 2" ABOVE SOLE PLATES AND BELOW TOP PLATES
- 4" RIGID METAL EXHAUST DUCT SHALL HAVE SMOOTH INTERIOR FINISH WITH METAL THICKNESS OF NOT LESS THAN 0..016" IN THICKNESS AND SHALL BE SUPPORTED AND SECURED IN PLACE.
- 4. SCREENS SHALL NOT BE PROVIDED AT THE DRYER EXHAUST DUCT TERMINATION

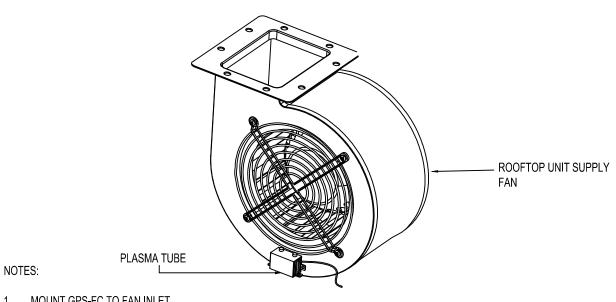
#### CLOTHES DRYER EXHAUST DIAGRAM 9 CLOTH SCALE: N.T.S.



### **DUCT INSULATION DIAGRAM**



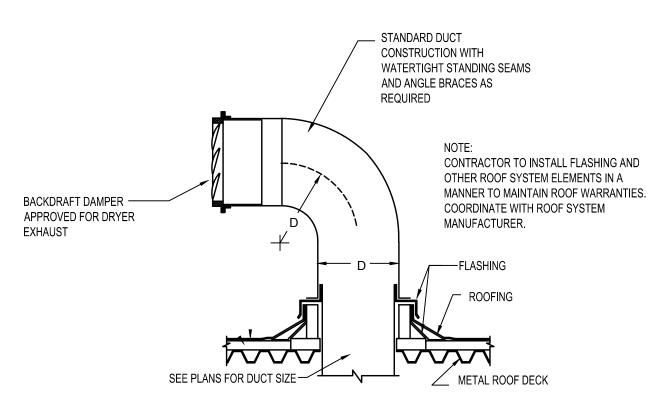
## FLEX CONNECTOR DIAGRAM



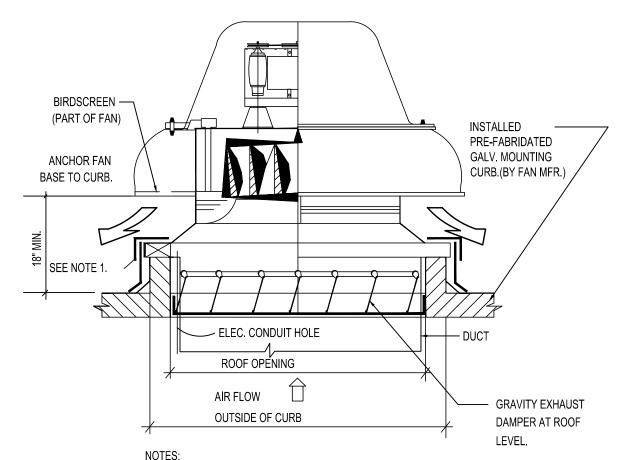
 MOUNT GPS-FC TO FAN INLET. USE TWO SELF-TAPPING SCREWS TO SECURE GPS-FC TO FAN INLET, ENSURING SCREWS DO NOT CONTACT FAN SCROLL. WIRE GPS-FC TO 24VAC CONTROLL POWER

"DRY" ALARM CONTACTS ARE PROVIDED WITH EACH GPS-FC, RATED FOR 24VAC/300mA MAX.

### GPS-FC-48-AC MOUNTING DIAGRAM

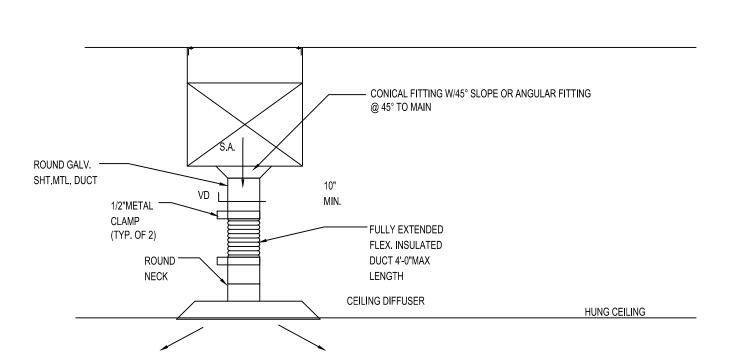


DRYER GOOSENECK DIAGRAM

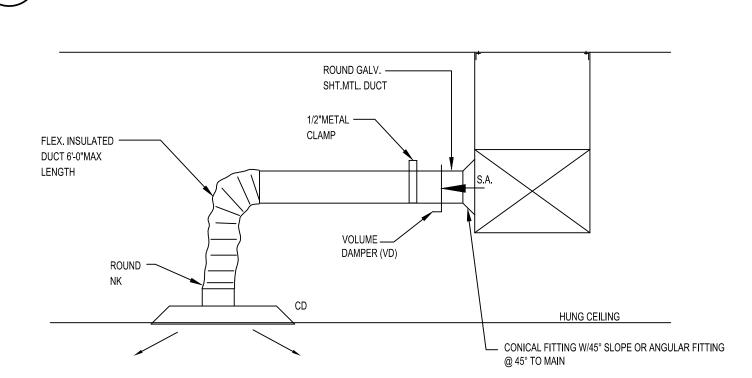


1. ROOF FLASHING AND SEAL TO PERFORMED IN A MANNER TO MAINTAIN ROOF WARRANTY. COORDINATE WITH ROOF SYSTEM MANUFACTURER. 2. EXHAUST DUCT RISER SHALL BE FLANGED OVER CURB RIM. COORDINATE SIZE WITH APPROVED DRAWING.

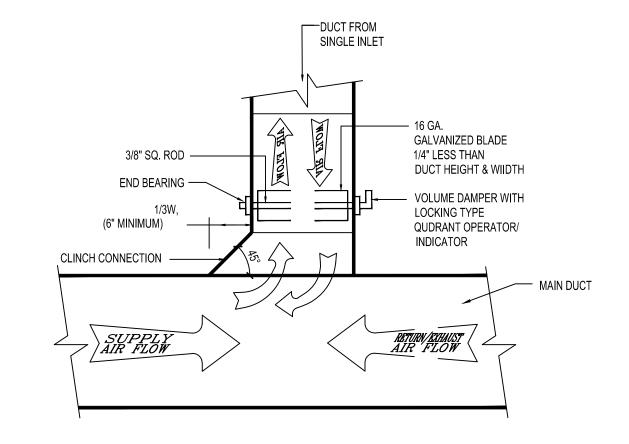
## ROOF EXHAUST FAN DIAGRAM SCALE: N.T.S



### **BOTTOM DUCT DIFFUSER CONNECTION**



## SUPPLY DIFFUSER CONNECTION SCALE: 1/2" = 1'-0"



SUPPLY/RETURN (EXHAUST) DUCT TAP

SCALE: N.T.S.

WORK USING THE CONTRACTOR'S BEST SKILL AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCTION MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB

2. GC MUST PROVIDE & INSTALL ALL PRODUCTS PEI PLANS. ONLY SUBSTITUTED PRODUCTS NEED TO BE SUBMITTED TO THE ARCHITECT FOR APPROVAL. UNAPPROVED SUBSTITUTIONS WILL BE REPLACED THE EXPENSE OF THE GC.

3. VERBAL REPRESENTATION HAS NO VALUE AND ALL REQUESTS TO CHANGE ANY PRODUCTS OR SPECIFICATIONS PER PLANS, MUST BE SUBMITTED IN WRITING TO THE ARCHITECT & TLE FOR APPROVAL



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NO. DATE DESCRIPTION FOR TLE REVIEW FOR PERMIT REVISION IO. DATE DESCRIPTION

> PROFESSIONAL CERTIFICATION MATTHEW B. JARMEL, AIA, MBA

LICENSE NUMBER: A2017014316

Project Number:	Scale:
TLEMO22-164	AS NOTED
Drawn By:	Approved By:
LN	MBJ
Drawing Name:	

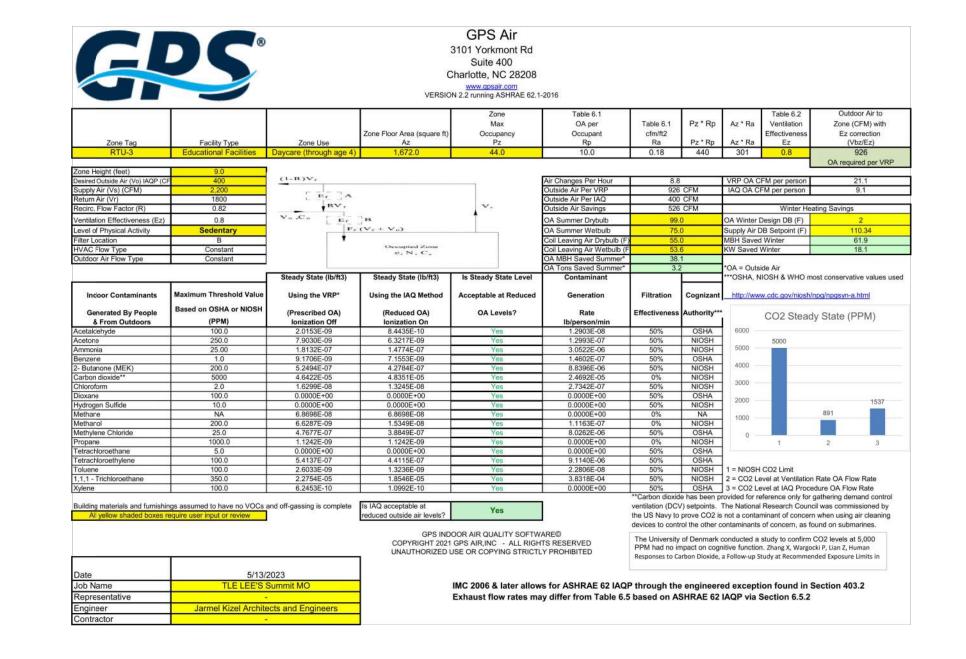
**HVAC DETAILS/DIAGRAMS** 

M-500



RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCTI MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB 2. GC MUST PROVIDE & INSTALL ALL PRODUCTS PER PLANS. ONLY SUBSTITUTED PRODUCTS NEED TO BE SUBMITTED TO THE ARCHITECT FOR APPROVAL. UNAPPROVED SUBSTITUTIONS WILL BE REPLACED A THE EXPENSE OF THE GC. VERBAL REPRESENTATION HAS NO VALUE AND ALL REQUESTS TO CHANGE ANY PRODUCTS OR

3101 Yorkmont Rd Suite 400 Charlotte, NC 28208 Zone (CFM) with Ez correction Max Occupancy Pz = Outside Air **Indoor Contaminants** Using the VRP\* Using the IAQ Method Acceptable at Reduced CO2 Level at Ventilation Rate OA Flow Rate ventilation (DCV) setpoints. The National Research Council was commissioned by the US Navy to prove CO2 is not a contaminant of concern when using air cleaning COPYRIGHT 2021 GPS AIR, INC - ALL RIGHTS RESERVED UNAUTHORIZED USE OR COPYING STRICTLY PROHIBITED IMC 2006 & later allows for ASHRAE 62 IAQP through the engineered exception found in Section 403.2 IMC 2006 & later allows for ASHRAE 62 IAQP through the engineered exception found in Section 403.2



BASED ON VENTILATION RATES PRESCRIBED BY THE 2015 INTERNATIONAL MECHANICAL CODE, RTU-1 WILL NEED TO PROVIDE 797 CFM OF OUTSIDE AIR AS PER EXCEPTIONS OF PARAGRAPH 403.2, THIS RATE OF CFM HAS BEEN REDUCED TO 350 CFM DUE TO AN ENGINEERED VENTILATION SYSTEM WHICH CONSIST OF A PLASMA TUBE ADDED INTO SUPPLY AIRFLOW

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Jsing the IAQ Method

Indoor Contaminants

OA per Occupant

BASED ON VENTILATION RATES PRESCRIBED BY THE 2015 INTERNATIONAL MECHANICAL CODE, RTU-2 WILL NEED TO PROVIDE 992 CFM OF OUTSIDE AIR AS PER EXCEPTIONS OF PARAGRAPH 403.2, THIS RATE OF CFM HAS BEEN REDUCED TO 400 CFM DUE TO AN ENGINEERED VENTILATION SYSTEM WHICH CONSIST OF A PLASMA TUBE ADDED INTO SUPPLY AIRFLOW

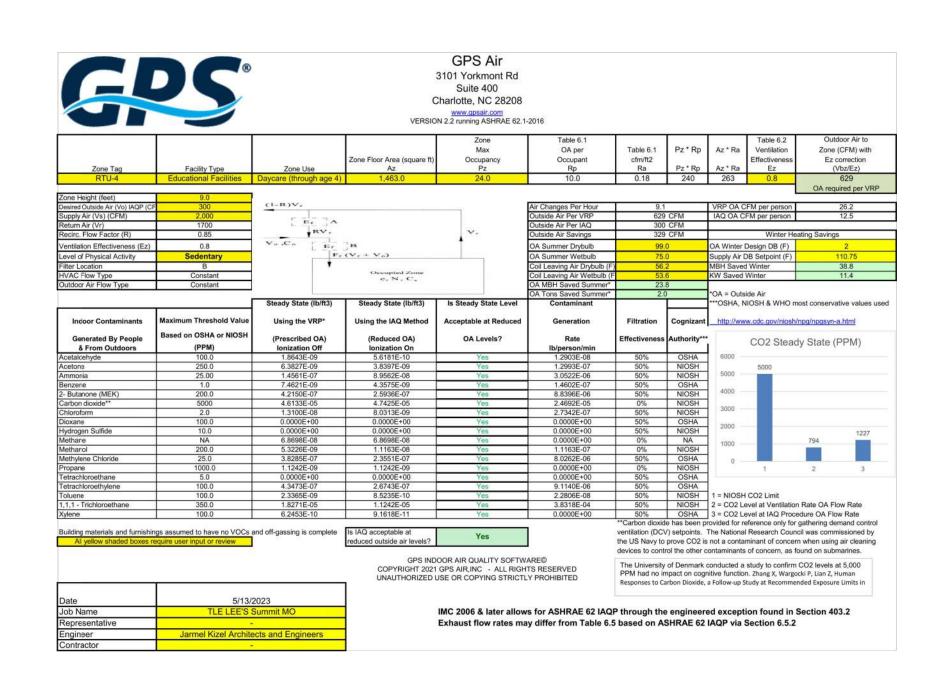
OA per Occupant Rp

CO2 Level at Ventilation Rate OA Flow Rate

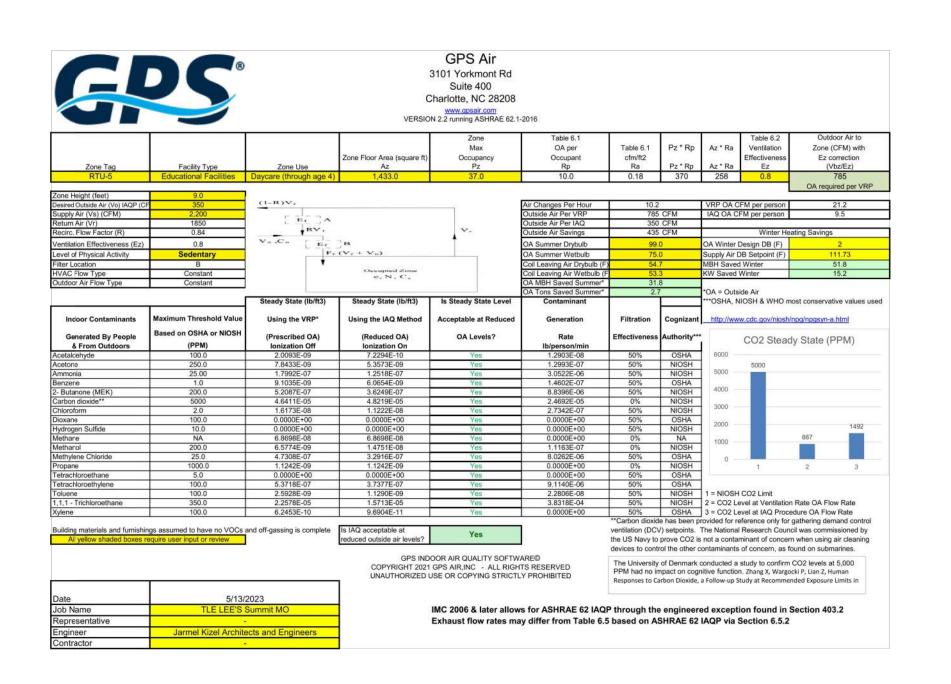
ventilation (DCV) setpoints. The National Research Council was commissioned by

the US Navy to prove CO2 is not a contaminant of concern when using air cleaning

BASED ON VENTILATION RATES PRESCRIBED BY THE 2015 INTERNATIONAL MECHANICAL CODE, RTU-3 WILL NEED TO PROVIDE 926 CFM OF OUTSIDE AIR AS PER EXCEPTIONS OF PARAGRAPH 403.2, THIS RATE OF CFM HAS BEEN REDUCED TO 400 CFM DUE TO AN ENGINEERED VENTILATION SYSTEM WHICH CONSIST OF A PLASMA TUBE ADDED INTO SUPPLY AIRFLOW



BASED ON VENTILATION RATES PRESCRIBED BY THE 2015 INTERNATIONAL MECHANICAL CODE, RTU-4 WILL NEED TO PROVIDE 629 CFM OF OUTSIDE AIR AS PER EXCEPTIONS OF PARAGRAPH 403.2, THIS RATE OF CFM HAS BEEN REDUCED TO 300 CFM DUE TO AN ENGINEERED VENTILATION SYSTEM WHICH CONSIST OF A PLASMA TUBE ADDED INTO SUPPLY AIRFLOW



BASED ON VENTILATION RATES PRESCRIBED BY THE 2015 INTERNATIONAL MECHANICAL CODE, RTU-5 WILL NEED TO PROVIDE 785 CFM OF OUTSIDE AIR AS PER EXCEPTIONS OF PARAGRAPH 403.2, THIS RATE OF CFM HAS BEEN REDUCED TO 350 CFM DUE TO AN ENGINEERED VENTILATION SYSTEM WHICH CONSIST OF A PLASMA TUBE ADDED INTO SUPPLY AIRFLOW

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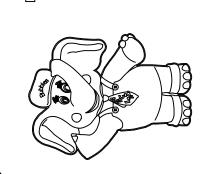
WORK USING THE CONTRACTOR'S BEST SKILL AND

SPECIFICATIONS PER PLANS, MUST BE SUBMITTED IN WRITING TO THE ARCHITECT & TLE FOR APPROVAL.

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		REVISION	
NO.	DATE	DESCRIPTION	INT.
1			
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PROFESSIONAL CERTIFICATION

MATTHEW B. JARMEL, AIA, MBA LICENSE NUMBER: A2017014316

Project Number: TLEMO22-164	Scale: <b>AS NOTED</b>
Drawn By:	Approved By:
LN	MBJ
Drawing Name:	

**HVAC VENTILATION CALCULATIONS** 

M-600



	ABB	REVIATIONS					
	A AC	AMPERE ARMOR CLAD CABLE	<u>I</u>	INTERMEDIATE CROSS CONNECT	<u>S</u>	SCHED SEC	SCHEDULE SECONDARY
	AFCI	ARC-FAULT CIRCUIT	ID	INSIDE DIAMETER		SF	SUPPLY FAN
ļ	AFF	INTERRUPTING ABOVE FINISHED FLOOR	IDF	INTERMEDIATE DISTRIBUTION FRAME		SFL SFP	SUB FEED LUGS SURGICAL FACILITY PANEL
A	AFG	ABOVE FINISHED GRADE	IMC	INTERMEDIATE METAL CONDUIT		SH	SHEET
	AHJ	AUTHORITY HAVING JURISDICTION	INF	INFANTS		SM SP	SINGLE MODE SINGLE POLE
	AHU AIC	AIR HANDLING UNIT AMPERE INTERRUPTING	IP IPS	INTERNET PROTOCOL IMAGES PER SECOND		SPDT	SINGLE POLE DOUBLE
		CAPACITY	iSCS	INTERNET SMALL COMPUTER		SPST	THROW SINGLE POLE SINGLE
	AL AM	ALUMINUM AMMETER	IR	SYSTEM INTERFACE INFRARED		SPC	THROW SPACE
A	ANN	ANNUNCIATOR	<u>J</u>			SPEC	SPECIFICATION
A	ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	JB	JUNCTION BOX		SPKR	SPEAKER
A	ATS	AUTOMATIC TRANSFER SWITCH	<u>K</u>	IANOGA GUT		SPR SS	SPARE STAINLESS STEEL
	AV	AUDIO VISUAL	KO KV	KNOCK OUT KILOVOLT		ST	SHUNT TRIP
	AWG	AMERICAN WIRE GAUGE	KVA	KILOVOLT AMPERE		STD STP	SHORT TIME DELAY SHIELDED TWISTED PAIR
<u>B</u>	BAS	BUILDING AUTOMATION	KW KWH	KILOWATT KILOWATT HOUR		STR	STARTER
		SYSTEM	<u>L</u>	Tuze W. W. West.		SWBD SWGR	SWITCHBOARD SWITCHGEAR
E	BDF	BUILDING DISTRIBUTION FRAME	LA	LIGHTNING ARRESTOR	_	SYM	SYMMETRICAL
	BFC	BELOW FINISHED CEILING	LAN LCD	LOCAL AREA NETWORK LIQUID CRYSTAL DISPLAY	<u>T</u>		
	BFG BKBD	BELOW FINISHED GRADE BACKBOARD	LED	LIGHT EMITTING DIODE		TB TBB	TERRA BYTES TELECOMMUNICATIONS
Е	BKR	BREAKER	LS LTD	LIFE SAFETY LONG TIME DELAY			BONDING BACKBONE
<u>C</u>	BPS	BOLTED PRESSURE SWITCH	LTG	LIGHTING		TC TERM	TERMINAL CABINET TERMINAL
	С	CONDUIT	LV M	LOW VOLTAGE		TEL	TELEPHONE
(	CAT	CATALOG	<u>M</u> MAG	MAGNETIC		TGB	TELECOMMUNICATIONS GROUNDING BUSBAR
	CATV CB	CABLE ANTENNA TELEVISION CIRCUIT BREAKER	MAN	MANUAL		THD	TOTAL HARMONIC DISTORTION
(	CCTV	CLOSED CIRCUIT TELEVISION	MAX MAT	MAXIMUM MASTER ANTENNA		TMGB	TELECOMMUNICATIONS MAIN
	CKT CLG	CIRCUIT CEILING		TELEVISION		TOD	GROUNDING BUSBAR TODDLERS
(	CM	CONSTRUCTION MANAGER	Mb MBB	MEGABIT MAKE BELIEVE BOULEVARD		TR	TELECOMMUNICATIONS ROOF
	CO COAX	COMPANY COAXIAL	MC	METAL CLAD CABLE		TRANS TSER	TRANSITION TELECOMMUNICATIONS
(	CT	CURRENT TRANSFORMER	MCA MCB	MINIMUM CIRCUIT AMPERES MAIN CIRCUIT BREAKER			SERVICE ENTRANCE ROOM
(	CTTS	CLOSE TRANSITION TRANSFER SWITCH	MCC	MOTOR CONTROL CENTER		TTC	TELEPHONE TERMINAL CABINET
	CU	COPPER	MCS MCM	MOLDED CASE SWITCH THOUSANDS OF CIRCULAR		TV TVSS	TELEVISION TRANSIENT VOLTAGE SURGE
<u>D</u>				MILS			SUPPRESSION
	DC DD	DIRECT CURRENT DUCT DETECTOR	MCP MDF	MOTOR CIRCUIT PROTECTOR MAIN DISTRIBUTION FRAME		TWAD TYP	TWADDLERS TYPICAL
_	DHCP	DYNAMIC HOST	MDP	MAIN DISTRIBUTION	<u>U</u>		
Г	DIA	CONFIGURATION PROTOCOL DIAMETER	MEC	PANELBOARD MECHANICAL	_	UC	UNDER COUNTER
	DIV	DIVISION	MER	MAIN EQUIPMENT ROOM		UG UNO	UNDERGROUND UNLESS NOTED OTHERWISE
	DN DO	DOWN DRAWOUT	MFG MFS	R MANUFACTURER MAIN FUSED SWITCH		UPS	UNINTERRUPTIBLE POWER
	DPDT	DOUBLE POLE DOUBLE	MGF	MEDICAL GAS PANEL		USS	SUPPLY UNIT SUBSTATION
[	DPST	THROW DOUBLE POLE SINGLE	MH MI	MANHOLE MINERAL INSULATED CABLE		UTP	UNSHIELDED TWISTED PAIR
	DS	THROW DISCONNECT SWITCH	MIC	MICROPHONE	<u>V</u>	UH	UNIT HEATER
	DSP	DIGITAL SIGNAL PROCESSOR	MIN MLO	MINIMUM MAIN LUGS ONLY	<u>v</u>	V	VOLT
	DVD	DIGITAL VERSATILE DISC	MM	MULTIMODE		VAV	VARIABLE AIR VOLUME
	DVR DVS	DIGITAL VIDEO RECORDER DIGITAL VIDEO	MOC	P MAXIMUM OVERCURRENT PROTECTION		VM VoIP	VOLTMETER VOICE OVER INTERNET
	DWG	SURVEILLANCE	MTD	MOUNTED			PROTOCOL
<u>Ε</u>	DWG	DRAWING	MTS MV	MANUAL TRANSFER SWITCH MEDIUM VOLTAGE		VPI	VACUUM-PRESSURE IMPREGNATED
Е	EA	EACH	MV <u>N</u>	MEDIUW VULTAGE		VSD	VARIABLE SPEED DRIVE
E	EF	EXHAUST FAN	N	NEUTRAL	<u>W</u>	347	\A/A TT
	EGS EL	ENGINE-GENERATOR SET ELEVATION	NA NC	NOT APPLICABLE		W WAN	WATT WIDE AREA NETWORK
Е	ELEC	ELECTRIC	NEC NEC	NORMALLY CLOSED NATIONAL ELECTRICAL CODE		WAP	WIRELESS ACCESS POINT
	ELEV EMT	ELEVATOR ELECTRICAL METALLIC	NEM	NATIONAL ELECTRICAL MANUFACTURERS		WLAN	WIRELESS LOCAL AREA NETWORK
		TUBING		ASSOCIATION		WP	WEATHERPROOF
	EO EOL	EQUIPMENT BY OWNER END OF LINE DEVICE	NFP.	NATIONAL FIRE PROTECTION ASSOCIATION		XFMR	TRANSFORMER
Е	EQUIP	EQUIPMENT	NIC	NOT IN CONTRACT			
	EWC EWH	ELECTRIC WATER COOLER ELECTRICAL WATER HEATER	NO NOC	NORMALLY OPEN NETWORK OPERATIONS			
Е	EXH	EXHAUST		CENTER			
	EXP ECH	EXPLOSION PROOF ELECTRIC CEILING HEATER	NTS <u>0</u>	NOT TO SCALE			
<u> </u>			<u>~</u> OA	OUTSIDE AIR			
F	FA	FIRE ALARM	OC	ON CENTER			
F	FAA	FIRE ALARM ANNUNCIATION PANEL	OCP	DEVICE			
F	FACP	FIRE ALARM CONTROL	OD OH	OUTSIDE DIAMETER OVERHEAD			
	FBO	PANEL FURNISHED BY OWNER	<u>Р</u>	OVEIVILAD			
F	FI	FILM ILLUMINATOR	Р	POLE			
	FLR FLUOR	FLOOR FLUORESCENT	PA PB	PUBLIC ANNOUNCEMENT PULLBOX/PUSHBUTTON			
F	FPS	FRAMES PER SECOND	PC	PULLBOX/PUSHBUTTON PERSONAL COMPUTER			
	FPU FS	FIELD PROCESSING UNIT FUSED SWITCH	PCU P/E	PACKAGED CONTROL UNIT PNEUMATIC- ELECTRIC			
F	FTL	FEED THRU LUGS	P/E PH	PHASE			
<u>G</u>			PNL	PANELBOARD			
	GA Gb	GAUGE GIGABIT	PLC	PROGRAMMABLE LOGIC CONTROLLER			
	Gb GE	GROUNDING EQUALIZER	PoE PRE	POWER OVER ETHERNET PREPPERS			
(	GEN	CONDUCTOR GENERATOR	PRI	PRIMARY			
	GFCI	GROUND FAULT CIRCUIT	PS#) PSU	PRE SCHOOL PATIENT SERVING UNIT			
(	GFI	INTERRUPTING GROUND FAULT	PT	POTENTIAL TRANSFORMER			
	GFR	INTERRUPTING	PTZ	PAN TILT ZOOM			
	GFR GFRT	GROUND FAULT RELAY GROUND FAULT RELAY	PVC PWR	POLYVINYL CHLORIDE POWER			
		TEST PANEL	<u>R</u>				
	GPS GRD	GLOBAL PLASMA TUBE GROUND	RAID	REDUNDANT ARRAY OF			
<u>H</u>			RCP	INDEPENDENT DISKS REFLECTED CEILING PLANS			
H	HCT	HARMONIC CONDITIONING TRANSFORMER	RCP	RECEPTACLE			
H	HF	HARMONIC FILTER	RE REF	REFER TO REFRIGERATOR			
	HFT	HARMONIC FILTER WITH INTEGRAL TRANSFORMER	RF	RADIO FREQUENCY			
	HID	HIGH INTENSITY DISCHARGE	RF RFID	RETURN FAN RADIO FREQUENCY			
H	HOA	HAND OFF AUTO		IDENTIFICATION DEVICE			
	HP HST	HORSEPOWER HARMONIC SUPPRESSION	RGS RM	RIGID GALVANIZED STEEL ROOM			
		TRANSFORMER	RP	RECIRCULATION PUMP			
	HSKPG HTR	HOUSEKEEPING HEATER	RTLS				
H	HV	HIGH VOLTAGE	RUP	ROTARY HYBRID			
	HZ HWRP	HERTZ (CYCLES/SECOND) HOT WATER RECIRCULATION PUMP	RTU	UNINTERRUPTIBLE POWER SUPPLY			
	UMKE			ROOF TOP UNIT			

#### ELECTRICAL SYMBOLS

WALL MOUNTED DUPLEX CHILDPROOF OUTLETS SHALL BE (PASS & SEYMOUR 'LEGRAND' MODEL #885TRW(15A), #TR26352RW(20A)) TAMPER RESISTANT UL RECEPTACLE OR EQUAL. (H) INDICATES HORIZONTAL MOUNTED; (GFI) INDICATES GROUND FAULT INTERRUPTER. WALL MOUNTED CHILDPROOF DEDICATED CIRCUIT DUPLEX OUTLET. WALL MOUNTED DEDICATED 2-POLE DRYER OUTLET TO 30A GFI CIRCUIT BREAKER. WALL MOUNTED CHILDPROOF QUAD GFI RECEPTACLES, DOUBLE DUPLEX. WALL MOUNTED CHILDPROOF QUAD GFI RECEPTACLES, DOUBLE DUPLEX - WITH A DEDICATED MICROWAVE CIRCUIT AND COUNTER TOP GFI RECEPTACLE. WALL MOUNTED TELEPHONE OUTLET. PROVIDE 3/4" CONDUIT FOR CABLE. WALL MOUNTED DUPLEX OUTLET AND CAT 5E JACK WITH SURGE PROTECTIVE PROVIDE 3/4"CONDUIT FOR CABLE. DATA OUTLET FOR WIRELESS INTERNET (VERIFY HEIGHT & LOCATION IN THE FIELD). WALL MOUNTED DATA OUTLET. PROVIDE 3/4" CONDUIT FOR CABLE. NUMBER 2 INDICATES DUPLEX DATA. WALL MOUNTED COMBO DATA & TELE OUTLET. PROVIDE 3/4" CONDUIT FOR CABLE, 1" IF USED FOR RECEPTION AREA. WALL MOUNTED CALLBOX. PROVIDE 3/4" CONDUIT FOR VOICE CABLE. WALL MOUNTED TRIPLE JACK FOR RJ PLUGS WALL MOUNTED TRIPLE PHONE HANDS FREE EMERGENCY PHONES WITH BUILT IN DIGITAL VOICE ANNOUNCER. ELECTRICAL PANEL. JUNCTION BOX. JUNCTION BOX W/ THERMAL DISCONNECT SWITCH. NEW DISCONNECT SWITCH. NEW FUSED DISCONNECT SWITCH. HOMERUN TO PANEL "RP" CIRCUIT #3. FOR CIRCUIT BREAKER SIZE & NUMBER OF CONDUCTORS, REFER TO RP-3 PANELBOARD SCHEDULES IN SHEET E-110. GLOBAL PLASMA TUBE. REFER TO MECHANICAL DRAWINGS. ELECTRIC CEILING HEATER **ROOFTOP UNIT** EXHAUST FAN UNIT HEATER IN THE WARMER CLIMATES; DETERMINED BY THE PROJECT ARCHITECT FIRE ALARM ANNUNICATOR PANEL FACP FIRE ALARM CONTROL PANEL BAKP BURGLAR ALARM KEYPAD EXHAUST FAN CONTROL PANEL FIRE SMOKE DAMPERS / SMOKE DAMPERS WITH ACCESS DOOR SD/AD -THERMOSTAT WITH BACK BOX & PULL STRING TIME CLOCK HOT WATER RECIRCULATION PUMP CHILDCARE FACILITY DEVICES SHALL BE CHILDPROOF, WHITE (PASS & SEYMOUR 'LEGRAND') TAMPER RESISTANT UL RECEPTACLE OR EQUAL. NOTE: REFER TO ARCHITECTURAL DRAWINGS FOR FINAL LOCATION, MOUNTING HEIGHTS AND FINISHES.

#### BID PRICE NOTES

- CONTRACTOR'S BID PRICE SHALL INCLUDE THE COST OF PURCHASING AND INSTALLING ALL INCOMING ELECTRICAL SERVICE EQUIPMENT AS APPROVED BY THE SUPPLYING UTILITY COMPANY.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE OWNER AND THE ARCHITECT/ENGINEER OF ANY QUESTIONS BETWEEN THE WORK PROPOSED IN THESE DRAWINGS AND THE REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION (AHJ), AND ELECTRICAL UTILITY COMPANY. IF THE CONTRACTOR DOES NOT MAKE NOTIFICATION OF THESE DIFFERENCES DURING THE BIDDING PROCESS, OWNERSHIP WILL NOT CONSIDER A CHANGE ORDER ASSOCIATED WITH DESIGN CHANGES NEEDED TO MEET THE UTILITY COMPANY REQUIREMENTS.

#### METER SPECIFICATIONS AND INCOMING ELECTRICAL SERVICE

- PRIOR TO PURCHASE, INSTALLATION AND CONSTRUCTION, THE ELECTRICAL CONTRACTOR SHALL CONTACT THE LOCAL UTILITY COMPANY AND IDENTIFY AND CONFIRM ALL UTILITY COMPANY METERING AND INCOMING ELECTRICAL SERVICE REQUIREMENTS. THIS SHALL INCLUDE THE TYPE AND CONFIGURATION OF ALL METERS AND RELATED EQUIPMENT, INCLUDING METER SOCKETS, CT CABINETS, MAIN DISCONNECTS, ETC.
- METERS AND METER SOCKETS SHALL BE APPROVED BY THE UTILITY COMPANY PRIOR TO PURCHASE AND INSTALLATION.
- CONTRACTOR SHALL GENERATE AND SUBMIT THE PROPOSED INCOMING ELECTRICAL SERVICE EQUIPMENT CONFIGURATION TO THE LOCAL UTILITY COMPANY FOR APPROVAL PRIOR TO PURCHASE AND INSTALLATION OF ANY EQUIPMENT.
- 4. CONTRACTOR SHALL FURNISH THE ARCHITECT/ENGINEER WITH SHOP DRAWINGS (FOR ALL METERING AND INCOMING ELECTRICAL EQUIPMENT) FOR REVIEW AND COMMENTS.
- ALL METERS AND OTHER EQUIPMENT THAT WILL BE INSTALLED OUTDOORS, SHALL BE TYPE NEMA 3R, AND SHALL COMPLY WITH

#### ELECTRICAL UTILITY PERFORMANCE NOTES

- ALL WORK SHALL CONFORM TO SUPPLYING UTILITY REQUIREMENTS FOR NONRESIDENTIAL SERVICE INSTALLATIONS.
- 2. THE ELECTRICAL SERVICE EQUIPMENT AND ITS INSTALLATION SHALL BE IN ACCORDANCE WITH THE UTILITY COMPANY'S LATEST STANDARDS FOR THE INSTALLATION, THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE (N.E.C.), NATIONAL ELECTRICAL SAFETY CODE [N.E.S.C.], AND ALL APPLICABLE ORDINANCES AND CODES. WHEN DIFFERENCES IN UTILITY SPECIFICATIONS OR STANDARDS OCCUR, OR DIFFERENCES IN GOVERNMENTAL ORDINANCES OR CODES OCCUR, THE MOST STRINGENT REQUIREMENTS SHALL GOVERN THE INSTALLATION.
- THE CONTRACTOR SHALL SUBMIT DRAWING(S) TO SUPPLYING UTILITY FOR APPROVAL BEFORE ORDERING EQUIPMENT OR STARTING WORK TO INSURE THAT THE PROPOSED DESIGN CONFORMS TO THE UTILITY COMPANY REQUIREMENTS. THE CONTRACTOR MUST FURNISH, FOR REVIEW BY UTILITY COMPANY THE FOLLOWING:
- a. MANUFACTURER'S EQUIPMENT DRAWINGS FOR THE INSTALLATION INCLUDING ELECTRICAL ONE-LINE DIAGRAMS AND CHARACTERISTICS OF PROTECTIVE EQUIPMENT WHEN APPLICABLE, PHYSICAL ARRANGEMENT AND CLEARANCES, AND INSTALLATION DETAILS FOR METERS AND RELATED METERING EQUIPMENT.
- b. A FINAL APPROVED SITE PLAN DRAWING DEPICTING ALL UNDERGROUND UTILITIES, (INCLUDING DRAINS, SEWER, GAS, ELECTRIC LINES, ETC.), ROADS AND REQUESTED SERVICE LOCATION. FABRICATION OF EQUIPMENT OR PROJECT CONSTRUCTION SHOULD NOT PROCEED WITHOUT APPROVALS FROM THE UTILITY COMPANY AND OTHER AGENCIES HAVING JURISDICTION.
- c. A 48 HOUR ADVANCE NOTICE IS REQUIRED FOR SCHEDULING INSPECTIONS, IT IS THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE FOR INSPECTION BY THE LOCAL AUTHORITY HAVING JURISDICTION. BEFORE THE SERVICE CAN BE ENERGIZED, THE CONTRACTOR SHALL FURNISH A CERTIFICATE OF SATISFACTORY INSPECTION AS EVIDENCE OF THE SAFE CONDITION OF THE
- PRIOR TO CONSTRUCTION THE ELECTRICAL CONTRACTOR SHALL CONTACT THE SUPPLYING UTILITY COMPANY'S WIRING INSPECTOR, ARRANGE FOR AN INSPECTION, AND IDENTIFY AND CONFIRM ALL THE DETAILS OF THE INSTALLATION.

#### POWER MISCELLANEOUS NOTES:

#### CABLING FOR NETWORKING

THE COMPUTER NETWORK SHALL REQUIRE THE FOLLOWING SPECIAL WIRING. SEE REQUIRED PHONE/DATA VENDOR NOTED ON DRAWING T-200. MUST USE REQUIRED VENDOR / NO SUBSTITUTIONS

#### NETWORK CABLING

1. INSTALL TELEPHONE AND NETWORK CABLING FOR A COMPLETE INSTALLATION. CABLING TO BE

2. CABLE INSTALLATION SHALL INCLUDE ALL CAT-5E AND CAT-3 CABLE AND WALL PLATES. USE RJ11 AND RJ45 CONNECTORS.

3. VOICE AND DATA CABLES TO INCLUDE THE FOLLOWING INSTALLATION:

A. INSTALL CAT-5E DATA CABLES PER PRINT AT WORK STATIONS INDICATING VOICE AND DATA. INSTALL (1) CAT-5 AND (1) 4PR. CAT-3 CABLE TO EACH.

B. USE TRIPLE LEVITON FLUSH MOUNT JACKS WHERE NEEDED. C. CUT IN (1) RJ45 AND (2) RJ11C CONNECTORS TO EACH TRIPLE FLUSH MOUNT. D. CLEARLY MARK EACH VOICE AND DATA CABLE AT JACK AND PATCH PANEL IN MECHANICAL ROOM.

#### 4. INTERCOM/DOOR CHIMES:

A. PROVIDE (1) IN EACH PLAY GROUND AND (1) INSTALLED IN FRONT VESTIBULE TO TIE INTO TELEPHONE SYSTEM. ALL THE ABOVE TO BE INSTALLED, PER CUSTOMER PLANS. FRONT VESTIBULE IS TO TIE INTO DOOR STRIKER FOR DOOR RELEASE.

PROVIDE (4) CEILING ACCESS POINT CABLES USING CAT-5E CABLE TO AREA'S MARKED ON E-200 FLOOR PLAN AP1-AP4. TERMINATE ON PATCH PANEL IN MECHANICAL ROOM.

#### 6. SMART BOARD CABLES:

PROVIDE (4) CAT-5E CABLES AS PER E-200 FLOOR PLAN IN CLASSROOMS. TERMINATE ON PATCH

NOTE: IF THE CENTER IS TO HAVE TWO ENTRANCES WITH TWO RECEPTION COUNTERS, THIS INSTALLATION SHOULD BE DUPLICATED FOR EACH ENTRANCE.

#### FAX - PHONE CONNECTION

1. A DEDICATED SINGLE PHONE LINE WILL BE PROVIDED FOR THE FAX MACHINE WHICH SHOULD BE DUPLICATED ON A TRIPLE FLUSH MOUNT JACK (SEE ABOVE) IN OFFICE, BEHIND RECEPTION AREA AND AT

1. RECEPTACLE IN AREAS WHICH ARE ACCESSIBLE TO CHILDREN, INCLUDING THE RECEPTION AREA, SHALL BE TAMPER RESISTANT UL DUPLEX TYPE WITH SPECIAL PROTECTIVE COVERS AS MANUFACTURED BY "PASS & SEYMOUR". CHILD PROOF GFCI RECEPTACLE.

#### 2. CIRCUIT BREAKERS SHALL HAVE A COMMON TRIP ON ALL MULTI-POLE BREAKERS.

3. BUS AND HARDWARE SHALL BE BRACED FOR INTERRUPTING CAPACITY AS SHOWN ON PANELBOARD SCHEDULE. BREAKERS SHALL MATCH AIC RATING OF PANEL AT PANEL VOLTAGE. ALL BUSSING SHALL BE

4. PROVIDE EACH PANEL BOARD WITH GREEN CODED GROUND BAR, FOR GREEN EQUIPMENT GROUND WIRES. EACH BAR TO HAVE A MINIMUM CAPACITY FOR THE NUMBER OF POLES IN PANEL, WITH SOLDERLESS. BOX LUGS FOR WIRE SIZE NO. 12 MINIMUM TO NO. 4 MAXIMUM. ONE WIRE PER LUG. LOCATE BAR ADJACENT TO NEUTRAL BAR BOLT OR WELD TO BACK BOX.

5. PROVIDE 120/208 AND 480/277 PANELBOARDS WITH AN ISOLATED NEUTRAL BAR. THERE SHALL BE AS MANY TERMINALS AS THERE ARE CIRCUIT POLES. THE TERMINAL FOR THE FEEDER NEUTRAL SHALL MATCH THE SIZE OF THE FEEDER PHASE TERMINATION(S).

6. ACCEPTABLE MANUFACTURERS SUBJECT TO COMPLIANCE WITH REQUIREMENTS, MANUFACTURERS OFFERING PRODUCTS WHICH MAY BE INCORPORATED IN THE WORK INCLUDE THE FOLLOWING: GENERAL ELECTRIC

SORGEL ELECTRIC DIV. (SQUARED) SIEMENS-ALLIS, INC. (ITE)

#### OUTLET BOXES

1. GALVANIZED STAMPED STEEL FOR ALL INTERIOR LOCATIONS. MOUNT ALL BOXES SO THAT COVERS AND PLATES WILL MOUNT FLUSH WITH THE WALL AND CEILING FINISH SURFACE. PROVIDE OUTLETS AND COVERS WITH WHITE FINISHES. PROVIDE PLASTER RINGS AS NECESSARY. GOOF RINGS ARE ACCEPTABLE.

#### 2. THE ENGINEER RESERVES THE RIGHT TO MAKE MINOR CHANGES.

3. SUITABLE GALVANIZED BARS, ROD HANGERS OR CADDY CLIPS SHALL BE USED THROUGHOUT THE WORK. WOODEN SUPPORTS, STRIPES, TIE WIRES, OR MAKESHIFT DEVICES SHALL NOT BE USED.

4. BOXES SHALL NOT BE LESS THAN 1 ½" DEEP. IN GENERAL, OUTLET BOXES SHALL BE OF SUFFICIENT DEPTH SO THAT CONDUIT ENTERING WITHIN TILE WALLS NEED NOT BE OFFSET SO THAT TILES HAVE TO BE CHIPPED OR ALTERED. ALL BOXES SHALL BE SET LEVEL AND PLUMB.

5. PROVIDE RAIN TIGHT CAST METAL BOXES WITH THREADED CONDUIT HOLES AND CAST METAL FACE PLATES ,COVERS SHALL MAINTAIN RATING WHILE IN USE.

6. REFER TO THE POWER PLANS FOR ALL FOR RECEPTACLE HEIGHTS, E-200.

#### ALL SWITCHES, RECEPTACLES AND PLATE MUST BE WHITE HD SMOOTH PLASTIC.

1. WHEN INSTALLED (IN MASONRY WALLS), LOCATE BOTTOM OF BOX AT NEAREST MASONRY JOINT TO DIMENSION INDICATED. WHERE OUTLETS OCCUR ABOVE COUNTERS, OR CABINETS, CORRELATE HEIGHT OF OUTLET WITH EQUIPMENT SO DEVICE WILL CLEAR ALL TRIM.

#### MAIN CIRCUIT BREAKERS & SWITCH BOARDS

1. WHERE REQUIRED, AS SPECIFIED: MANUFACTURER: GE, ITE, SQUARE D 2. MUST BE APPROVED BY LOCAL UTILITY.

#### **SAFETY SWITCHES:**

1. SAFETY SWITCHES, FUSIBLE HEAVY DUTY, GE, ITE OR SQUARE D RATINGS AS SHOWN. MANUFACTURERS: GE, ITE OR SQUARE D

#### METER CENTER:

1. WHERE REQUIRED, AS SPECIFIED: MANUFACTURER: GE, ITE, SQUARE D 2. METER MUST BE APPROVED BY LOCAL UTILITY.

#### WIRING DEVICES:

1. PROVIDE SPECIFICATION GRADE WIRING DEVICES OF 20 AMP RATING MINIMUM. AS REQUIRED ON THE PLANS AND MANUFACTURED BY PASS & SEYMOUR, GE OR HUBBELL. SWITCHES SHALL BE QUIET TYPE.

2. SWITCHES, WHERE REQUIRED, SHALL BE MOUNTED ON THE STRIKE SIDE OF DOORS AS FINALLY HUNG.

3. DEVICES SHALL HAVE SMOOTH WHITE PLATES-FIT & TYPE AS REQUIRED BY DEVICE. OUTLETS WITHOUT DEVICES, EXCEPT TELEPHONE, TO HAVE BLANK WHITE PLATES. FASTEN PLATES IN PLACE BY OVAL, HEAD, SCREWS MATCHING WHITE PLATE.

#### VOICE/DATA, TELEPHONE, CCTV, SECURITY:

1. SEE SPECIFICATIONS DRAWINGS FOR ADDITIONAL INFORMATION.

WORK USING THE CONTRACTOR'S BEST SKILL AND RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCTIO MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB

2. GC MUST PROVIDE & INSTALL ALL PRODUCTS PER PLANS. ONLY SUBSTITUTED PRODUCTS NEED TO BE SUBMITTED TO THE ARCHITECT FOR APPROVAL. UNAPPROVED SUBSTITUTIONS WILL BE REPLACED A THE EXPENSE OF THE GC.

SITE SAFETY

VERBAL REPRESENTATION HAS NO VALUE AND ALL REQUESTS TO CHANGE ANY PRODUCTS OR SPECIFICATIONS PER PLANS, MUST BE SUBMITTED IN WRITING TO THE ARCHITECT & TLE FOR APPROVAL.



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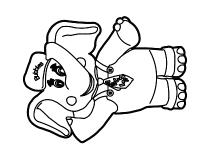
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2	06-14-23	FOR PERMIT	М
3	08-14-23	PER TLE AND CODE COMMENTS	М
		REVISION	
NO.	DATE	DESCRIPTION	IN

PROFESSIONAL CERTIFICATION

MATTHEW B. JARMEL, AIA, MBA **LICENSE NUMBER: A2017014316** 

Project Number: TLEMO22-164	Scale: AS NOTED
Drawn By: LN	Approved By: MBJ

**ELECTRICAL NOTES,** LEGEND, SYMBOLS, & **ABBREVIATIONS** 



#### ELECTRICAL NOTES

<u>GENERAL</u>

- GENERAL NOTES, SYMBOLS LIST AND DETAILS ARE APPLICABLE TO ALL DRAWINGS MARKED "E"
- PRIOR TO BEGINNING ANY WORK, SECURE NECESSARY PERMITS OR CLEARANCES FROM THE AUTHORITIES HAVING JURISDICTION. PROVIDE ALL LABOR AND MATERIALS FOR A COMPLETE INSTALLATION. WORK SHALL BE EXECUTED BY EXPERIENCED WORKMAN WHO ARE LICENSED IN THE JURISDICTION WHERE THE PROJECT IS LOCATED.
- ELECTRICAL DRAWINGS ARE DIAGRAMMATIC, SIZES AND LOCATION OF EQUIPMENT AND WIRING ARE SHOWN TO SCALE WHERE POSSIBLE, BUT MAY BE DISTORTED FOR CLARITY ON THE DRAWINGS. FINAL LOCATION OF OUTLETS AND EQUIPMENT SHALL BE AS APPROVED BY THE ARCHITECT OR HIS REPRESENTATIVE. IT IS NOT WITHIN THE SCOPE OF DRAWINGS TO SHOW ALL NECESSARY BENDS, OFFSETS, PULL BOXES AND OBSTRUCTIONS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL HIS WORK TO CONFORM TO THE STRUCTURE, PRESERVE HEADROOM AND KEEP OPENINGS AND PASSAGEWAYS CLEAN.
- CONTRACTOR SHALL INCLUDE THE COST OF ALL SMALL DETAILS, INCIDENTAL WORK, AND ACCESSORIES NOT SHOWN OR SPECIFIED, BUT WHICH CAN BE REASONABLY INFERRED FOR COMPLETE AND SATISFACTORY CODE COMPLIANT SYSTEM. PROVIDE OFFSETS, FITTINGS AND SIMILAR ITEMS NECESSARY TO ACCOMPLISH REQUIREMENTS OF COORDINATION WITHOUT
- BASE ELECTRICAL BID SHALL INCLUDE ALL CABLE MANAGEMENT HARDWARE AS SPECIFIED AND REQUIRED BY CODE.
- THE ELECTRICAL CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CODES AND STANDARDS INCLUDING THE FOLLOWING:
  - UNDERWRITERS LABORATORIES, INC. (UL)
  - BUILDING CODE NATIONAL
  - ELECTRICAL CODE WITH LOCAL AMENDMENTS
  - LOCAL ENERGY CONSERVATION CONSTRUCTION CODE
  - AMERICAN DISABILITIES ACT (ADA) ALL FEDERAL AND LOCAL JURISDICTION DIRECTIVES AND REQUIREMENTS OF NFPA 70
- THE TERM "WIRING" AS USED HEREIN SHALL INCLUDE FURNISHING AND INSTALLING CONDUIT, WIRES, JUNCTION/OUTLET BOXES, DISCONNECTS, OVERCURRENT PROTECTION AND FINAL CONNECTIONS. COORDINATE FINAL CONDUCTOR SIZES, QUANTITIES, VOLTAGE REQUIREMENTS, AND OVERCURRENT DEVICE AND OUTLET RATINGS WITH ACTUAL EQUIPMENT TO BE FURNISHED TO THE SITE PRIOR TO FINALIZING WIRING INSTALLATION. MINOR ADJUSTMENTS TO WIRING TO ACCOMMODATE ACTUAL FURNISHED EQUIPMENT SHALL BE PROVIDED AND INSTALLED AT NO ADDITIONAL COST.
- ALL WORK INSTALLED BY THIS CONTRACTOR SHALL BE INSTALLED IN SUCH A MANNER AS TO CLEAR ALL LIGHT FIXTURES, CEILING CONSTRUCTION, SPRINKLER PIPES AND HEADS, DUCTWORK CONDUITS, CABLES WIRING ETC.
- INSTALLATION OF ELECTRICAL CONDUIT, EQUIPMENT AND DEVICES SHALL BE FULLY COORDINATED WITH STRUCTURAL, ARCHITECTURAL, ELECTRICAL, FIRE PROTECTION, FIRE ALARM, LOW VOLTAGE, CIVIL AND HVAC DRAWINGS TO AVOID CONFLICT.
- 10. CONTRACTOR SHALL COORDINATE ALL NEW WORK WITH NEW WORK OF OTHER TRADES AND EXISTING CONDITIONS AND PARTICIPATE IN THE PREPARATION OF COORDINATED SHOP DRAWINGS, IN ORDER TO AVOID CONFLICTS OF ANY TYPE.
- 11. COORDINATE ROOF PENETRATIONS WITH WORK OF OTHER SECTIONS AND WITH FLASHING REQUIREMENTS.
- 2. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ALL FINAL CONNECTIONS.
- 13. ALL OUTLETS SHALL BE OF ADEQUATE RATING AND TYPE FOR THE PARTICULAR LOCATION AND SERVICE INTENDED.
- 14. OUTLET BOXES IN THE DRYWALL PARTITION OR COLUMN SHALL BE 4" SQUARE AND NOT LESS THAN 1-1/2" DEEP, GALVANIZED SHEET STEEL WITH PLASTIC COVERS.
- 5. NUMBERS AT DEVICES CORRESPOND TO PANELBOARD CIRCUIT BREAKERS (SEE PANELBOARD SCHEDULE). BRANCH CIRCUITS SHALL BE SIZED ACCORDING TO THE CIRCUIT BREAKER RATING AND VOLTAGE DROP REQUIREMENTS, UNLESS INDICATED OTHERWISE ON THE ELECTRICAL EQUIPMENT SCHEDULE.
- 16. CIRCUIT NUMBERS NOTED ON PLANS ARE INTENDED AS A GUIDE. FINAL NUMBERING SYSTEM TO BE NOTED ON AS-BUILT DRAWINGS AND ON TYPED PANELBOARD DIRECTORY CARDS.
- 17. CIRCUIT BREAKERS SHALL NOT BE LOADED MORE THAN 80% OF THEIR RATED AMPERE CAPACITY.
- 8. PROVIDE AND INSTALL ALL AUXILIARY STEEL MEMBERS FOR THE SUPPORT OF ELECTRICAL WORK TO THE BUILDING STRUCTURE. SECURE ALL SUPPORTS TO BUILDING STRUCTURE.
- 19. PROVIDE AND INSTALL ALL SUPPORT HANGERS AND MISCELLANEOUS METALS SUCH AS GALVANIZED IRON PIPE STANCHIONS, RACKS, FITTINGS, ETC. FOR PROPER INSTALLATION OF WORK, ALL MISCELLANEOUS RACKS AND FITTINGS SHALL BE GALVANIZED AND SHALL BE EITHER KINDORF CHANNEL, POWER STRUT OR UNISTRUT, UNLESS OTHERWISE NOTED.
- 20. ALL ITEMS INSTALLED IN HVAC PLENUM SPACES SHALL MEET CODE REQUIREMENTS FOR SMOKE AND
- 21. ALL ELECTRICAL SERVICES GOING INTO THE BUILDING AND LEAVING THE BUILDING SHALL BE CONNECTED TO THE SITE UTILITIES. COORDINATED WITH SITE UTILITY'S COMPANY AND CIVIL DRAWINGS. COORDINATE ALL EXTERIOR UNDERGROUND WORK WITH THE SITE UTILITIES BEFORE COMMENCING WORK. COORDINATE ALL UNDERGROUND CONDUIT WITH FOUNDATION DRAWINGS.
- 22. PROVIDE AND INSTALL ALL LUGS, BUS BAR EXTENSIONS, ENCLOSURE MODIFICATIONS ETC. TO MAKE ALL CONNECTIONS (BUS TAPS, FEEDER TAPS, ETC.).
- 23. BOLT ON TYPE LUGS SHALL BE FASTENED WITH TWO BOLTS MINIMUM.

PREVENT DAMAGE TO INSULATION OF WIRING.

- 24. INTERCONNECT DEVICES/FIXTURES WITH SAME CIRCUIT NUMBER WITH APPROPRIATELY SIZED WIRE AND CONDUIT AND ENERGIZE FROM CIRCUIT IN ASSOCIATED PANEL.
- 25. CONTRACTOR SHALL PROVIDE AND INSTALL TROUGHS, PULL AND JUNCTION BOXES WHERE SHOWN ON DRAWINGS AND ANY ADDITIONAL BOXES, TO FACILITATE PULLING WIRE AND CABLE OR TO
- 26. LOCATE TROUGHS, JUNCTION AND PULL BOXES TO BE ACCESSIBLE AND CONCEALED IN FINISH SPACES. WHERE NECESSARY, REROUTE RACEWAYS OR MAKE OTHER ARRANGEMENTS FOR CONCEALMENT. PROVIDE AND INSTALL PULL BOXES WHERE NECESSARY FOR WIRE PULLING. COORDINATE ALL BOX LOCATIONS WITH OTHER TRADES. COVERS OF TROUGHS, JUNCTION AND PULL BOXES SHALL BE ACCESSIBLE.
- 27. PROVIDE ACCESS PANELS IN ALL INACCESSIBLE JUNCTION BOX LOCATIONS AS PER THE NEC.
- 28. ALL BACK BOXES INSTALLED ON OPPOSITE SIDES OF THE SAME PARTITION SHALL BE STAGGERED. DO NOT MOUNT THE BACK BOXES BACK TO BACK.
- 29. IN COMMON PULL BOXES, PROVIDE METAL PARTITIONS TO SEPARATE THE FOLLOWING WIRE TYPES FROM EACH OTHER:
- b) CONTROL AND INDICATING c) COMMUNICATION
- 30. PROVIDE AND INSTALL BLANK COVER PLATES OVER ALL UNUSED OPENINGS IN PANELBOARDS, PULL AND JUNCTION BOXES AND TROUGHS.
- 31. RATING OF DISCONNECT SWITCHES TO MATCH OVERCURRENT PROTECTIVE DEVICE UNLESS
- 32. PROVIDE AND INSTALL ALL NECESSARY TEMPORARY AND INTERIM ELECTRICAL POWER WORK (PANELS, DISCONNECT SWITCHES, WIRE, CONDUITS, BREAKERS, CONNECTIONS, FUSES, GENERATORS, FUEL, ETC.) REQUIRED TO INSTALL THE PERMANENT WORK FOR ALL TRADES.
- 33. CONTRACTOR SHALL PROVIDE AND INSTALL THE SOURCE OF POWER, METERS, INSTRUMENTS, TEMPORARY WIRING AND LABOR, FOR PERMANENT POWER.
- 34. UPON COMPLETION OF ALL ELECTRICAL WORK, ELECTRICAL CONTRACTOR SHALL ADJUST AND TEST

- ALL CIRCUITS, OUTLETS, SWITCHES, LIGHTS, MOTORS AND ANY OTHER ELECTRICAL ITEMS INSTALLED. ANY DEFECTIVE ITEMS SHALL BE IMMEDIATELY REPAIRED OR REPLACED WITH NEW EQUIPMENT OR MATERIALS AND THAT PORTION OF THE SYSTEM SHALL BE RETESTED. ALL SUCH REMEDIAL WORK SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER, SHOW, BY DEMONSTRATION IN SERVICE, THAT ALL CIRCUITS AND DEVICES ARE IN GOOD OPERATING CONDITION. EACH PIECE OF EQUIPMENT AND COMPONENT OF THE ELECTRICAL SYSTEM SHALL FUNCTION NOT LESS THAN FIVE TIMES IN COURSE OF THE ACCEPTANCE TESTS.
- 35. UPON COMPLETION OF ALL ELECTRICAL WORK, ELECTRICAL CONTRACTOR SHALL BALANCE ALL PANELBOARDS AFFECTED TO WITHIN 10% DEVIATION BETWEEN PHASES. CONTRACTOR TO BALANCE THE NEW LOADS ON ALL THREE PHASES FOR EACH PANELBOARD WHERE WORK HAS BEEN PERFORMED IN ACCORDANCE WITH EQUIPMENT MANUFACTURER'S SPECIFICATIONS.
- 36. AFTER COMPLETION OF WORK, CLEAN UP ALL RESULTANT DEBRIS AND REMOVE FROM THE SITE.
- 37. THE OPERATION OF ELECTRICAL SYSTEM DOES NOT CONSTITUTE AN ACCEPTANCE OF WORK BY THE OWNER. FINAL ACCEPTANCE IS TO BE MADE AFTER THE CONTRACTOR HAS DEMONSTRATED THAT THE WORK FULFILLS THE REQUIREMENTS OF THE DRAWINGS AND SPECIFICATIONS AND HAS FURNISHED ALL REQUIRED CERTIFICATES OF APPROVAL FROM THE STATE AUTHORITIES, MUNICIPAL AUTHORITIES AND INSURANCE UNDERWRITERS.
- 38. ALL PANELS, SWITCHBOARDS, SWITCHGEAR AND DISCONNECT SWITCH BUSSES SHALL BE COPPER. ALL WIRING AND TRANSFORMER WINDINGS SHALL BE COPPER. ALUMINUM BUSSES AND WIRING ARE NOT PERMITTED.
- 39. ALL ELECTRICAL BOXES TO BE 4"X4".
- 40. ALL MOTOR LOADS ARE TO BE PROVIDED WITH HMCP TYPE BREAKERS.
- MISCELLANEOUS LOW VOLTAGE SYSTEMS
- THE CONTRACTOR IS RESPONSIBLE, FOR FURNISHING AND INSTALLING EMPTY CONDUITS, PLASTIC BUSHINGS RACEWAYS, BACK BOXES, PULL STRING (DRAG LINE), ETC. FOR VARIOUS LOW VOLTAGE SYSTEMS SUCH AS:
- a) TELECOMMUNICATION
- b) CABLE TV c) SECURITY
- d) AUDIO/VISUAL e) OTHER SYSTEMS AS NOTED.
- SPECIFIC REQUIREMENTS OF EACH SYSTEM SHALL BE AS OUTLINED IN RELEVANT LOW VOLTAGE SYSTEM CONTRACT DOCUMENTS, COORDINATE WITH TENANT AND SYSTEMS VENDORS FOR REQUIREMENTS.
- ALL THE ABOVE SYSTEMS CENTRAL EQUIPMENT, DEVICES AND VARIOUS COMPONENTS, WIRING AND CONNECTIONS ARE FURNISHED AND INSTALLED SEPARATE FROM ELECTRICAL WORK.
- THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL POWER CIRCUITRY FOR LOW VOLTAGE SYSTEMS, CENTRAL EQUIPMENT AND DEVICES. FINAL LOCATIONS AND POWER REQUIREMENTS FOR THESE ITEMS SHALL BE COORDINATED WITH RESPECTIVE CONSULTANTS.
- FOR EXACT LOCATIONS AND MOUNTING HEIGHTS OF ALL POWER AND VOICE/DATA OUTLETS AND JUNCTION BOXES, SEE ARCHITECTURAL DRAWINGS.
- PROVIDE 3/4" EMPTY CONDUIT AND PULL STRING TERMINATED 6" ABOVE SUSPENDED CEILING
- POWER NOTES

- a. SERVICE ENTRANCE CONDUCTORS MORE THAN THREE FEET (3') IN LENGTH, REQUIRE A DISCONNECT TO BE PROVIDED AND INSTALLED AT THE OUTSIDE OF THE STRUCTURE AND NEXT TO THE ELECTRICAL METER.
- b. DO NOT PENETRATE WALL FOOTINGS WITH CONDUIT. COORDINATE TO DROP FOOTINGS TO CLEAR SERVICES WHERE ABSOLUTELY NECESSARY.
- c. PIPE SLEEVES SHALL BE PROVIDED AND INSTALLED WHERE CONDUITS ARE ROUTED THROUGH FOUNDATION WALLS. PIPE SLEEVES SHALL BE GROUTED IN WALLS. SEALANT SHALL BE APPLIED AROUND THE CONDUIT IN THE SLEEVE IN ORDER TO PREVENT INGRESS OF MOISTURE. THE WALL PENETRATION SHALL BE COMPLETELY WATERPROOFED.
- d. ALL CONDUIT PENETRATING A BEARING WALL OR FOOTING MUST BE SLEEVED AND LOCATION APPROVED BY STRUCTURAL ENGINEER
- e. PULL BOXES TO BE COORDINATED WITH ARCHITECT'S AND FURNITURE VENDOR.
- ALL BRANCH WIRING SHALL BE RUN CONCEALED IN WALLS AND ABOVE HUNG CEILING. PROVIDE AND INSTALL ALL GROUNDING. ELECTRICAL SYSTEMS SHALL BE GROUNDED PER
- h. CIRCUITS ARE DESIGNATED BY THE NUMBER SHOWN ADJACENT TO EACH RECEPTACLE,

ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE. ALL GROUND WIRE SHALL BE ENCLOSED

- JUNCTION BOX OR OTHER ELECTRICAL DEVICE. PROVIDE CONDUITS, WIRES, METAL-CLAD CABLE, AND BOXES TO ENERGIZE THE EQUIPMENT AS SHOWN. i. VERIFY MILLWORK POWER REQUIREMENTS WITH MILLWORK CONTRACTOR PRIOR TO
- INSTALLATION. ALL COVER PLATE COVERS TO MATCH WALL COLOR AND/SHALL COORDINATE WITH ARCHITECTURAL DRAWINGS
- CIRCUIT BREAKER SHALL NOT BE LOADED MORE THAN 80% OF THEIR RATED AMPERE
- k. ALL CIRCUITING SHALL ORIGINATE FROM A PANEL LOCATED ON THE SAME FLOOR AS THE WIRED DEVICE UNLESS OTHERWISE NOTED
- I. RECEPTACLES SHALL PROVIDE CONTINUOUS UN-SWITCHED POWER UNLESS OTHERWISE NOTED. 24 HOURS PER DAY 7 DAYS PER WEEK.
- m. RECEPTACLES SHALL NOT BE RATED LESS THAN 20 AMPS.
- n. PROVIDE AND INSTALL GFI TYPE PROTECTION FOR ANY DEVICE WITHIN 6' OF WATER OR
- o. RECEPTACLES THAT FEED APPLIANCES SUCH AS REFRIGERATORS, DISHWASHERS, OVENS,

ETC. SHALL BE LOCATED BEHIND THE APPLIANCE. UNDER-CABINET MICROWAVES SHALL

p. COORDINATE LOCATION OF ALL CEILING RECEPTACLES WITH OTHER TRADES (I.E. DUCTWORK, SPRINKLERS, ETC.).

HAVE THE RECEPTACLE MOUNTED IN THE CABINET ABOVE THE APPLIANCES.

RECEPTACLES AND LIGHTING NEUTRALS ARE PERMITTED TO BE SHARED FOR MAXIMUM OF THREE (3) CIRCUITS. ALL OTHER NEUTRALS SHALL BE DEDICATED.

- a. WIRING SHALL CONSIST OF INSULATED CONDUCTORS INSTALLED IN RIGID-STEEL CONDUIT (RGS), ELECTRICAL METALLIC TUBING (EMT), AND INTERMEDIATE METAL CONDUIT (IMC). RACEWAY SYSTEMS SHALL BE INSTALLED AS INDICATED ON DRAWINGS. CONDUCTOR SIZES SHOWN ARE BASED ON CONDUCTOR INSULATION TYPES.
- TYPE MC CABLE MAY BE USED IN LIEU OF EMT FOR BRANCH CIRCUITS, IN DRYWALL PARTITION AND IN CEILING PLENUM WHERE IS ALLOWED BY NEC AND THE BUILDING OWNER. (MC CABLE FOR ISOLATED CIRCUIT SHALL HAVE TWO (2) SEPARATE GROUNDING CONDUCTORS).
- c. ALL CONDUCTORS SHALL BE COPPER
- d. WIRING TO AND FROM AN ITEM SHALL BE SIZED THE SAME UNLESS OTHERWISE REQUIRED
- e. ALL WIRING USED IN RETURN HVAC RETURN AIR PLENUM SHALL BE PLENUM RATED.
- f. QUANTITY AND SIZE OF WIRE (CABLE) AND SIZE OF CONDUIT SHALL BE AS REQUIRED BY CODE IF NOT SPECIFICALLY INDICATED, NOTED SIZES ARE FOR REFERENCE AND ARE MINIMUMS. INCREASE WIRE SIZE FOR VOLTAGE DROP. MINIMUM CONDUIT SIZE SHALL BE

#### (3/4") UNLESS NOTED OTHERWISE.

- g. CONDUCTORS MINIMUM SIZE SHALL BE #12 AWG. CONDUCTOR #10 AWG AND SMALLER SHALL BE SOLID. CONDUCTORS #8 AWG AND LARGER SHALL BE STRANDED. CONDUCTOR SHALL HAVE THHN/THWN INSULATION OR AS NOTED.
- h. MINIMUM CONDUCTOR SIZE, UNLESS OTHERWISE NOTED, SHALL BE #12 AWG FOR ALL BRANCH CIRCUIT RUNS UP TO THE FIRST OUTLET; OVER 100 FEET, #10 AWG; OVER 150 FEET, #8 AWG; CONTRACTOR SHALL INCREASE CONDUIT SIZE TO SUIT, QUANTITY AND SIZE OF CONDUCTORS PER NEC.
- NUMBER OF WIRES MAY NOT BE INDICATED FOR ALL CIRCUITS, ONLY THOSE WHERE CLARIFICATION IS NECESSARY, FURNISH AND INSTALL ALL WIRE NECESSARY FOR THE PROPER FUNCTION OF THE SYSTEM WHETHER INDICATED ON PLAN OR NOT.
- CONTRACTOR SHALL COLOR CODE THE CONDUCTORS OF EACH PHASE AS FOLLOWS: 120-208 VOLT; A - BLACK, B- RED, C - BLUE. 277-480 VOLT; A - BROWN, B- ORANGE, C -YELLOW. NEUTRAL CONDUCTORS - 120/208 WHITE, 480/277V GRAY, GROUND WIRES SHALL BE BARE COPPER OR CODED GREEN IF INSULATED.
- k. CURRENT CARRYING NEUTRALS SHALL HAVE INSULATION RATED FOR 600V.

#### a. RUN EXPOSED CONDUIT PARALLEL TO OR AT RIGHT ANGLES TO WALLS.

- b. ALL EXPOSED CONDUITS SHALL BE RUN AT OR CLOSE TO CEILING LEVEL UNLESS
- c. DO NOT PENETRATE WALL FOOTINGS WITH CONDUIT. COORDINATE TO DROP FOOTINGS TO CLEAR PLUMBING SERVICES WHERE ABSOLUTELY NECESSARY.
- d. PIPE SLEEVES SHALL BE PROVIDED AND INSTALLED WHERE CONDUITS ARE ROUTED THROUGH FOUNDATION WALLS. PIPE SLEEVES SHALL BE GROUTED IN WALLS. SEALANT SHALL BE APPLIED AROUND THE CONDUIT IN THE SLEEVE IN ORDER TO PREVENT INGRESS OF MOISTURE. THE WALL PENETRATION SHALL BE COMPLETELY WATERPROOFED.
- e. ALL CONDUIT PENETRATING A BEARING WALL OR FOOTING MUST BE SLEEVED AND LOCATION APPROVED BY STRUCTURAL ENGINEER
- ALL WIRING TO BE IN CONDUIT/EMT AND ALL CONDUIT TO BE SUPPORTED BY STANDOFF CONNECTED TO STRUCTURAL ELEMENTS, INDEPENDENT OF CEILING SUPPORTS, PIPES AND OTHER ITEMS.

- a. ALL CONDUCTORS OPERATING AT 50 VOLTS OR GREATER SHALL BE IN RACEWAY.
- b. ALL RACEWAY WITHIN THE STRUCTURE ABOVE THE FLOOR SLAB SHALL BE METAL. RACEWAY BELOW THE FLOOR SLAB AND UNDERGROUND RACEWAY OUTSIDE THE STRUCTURE SHALL BE PVC
- c. PVC RACEWAYS SHALL BE DIRECT BURIAL OR CONCRETE ENCASED TYPE AB SHALL BE MANUFACTURED IN ACCORDANCE WITH ASTM F512 AND NEMA TC 6/ 8 JOINED WITH SOLVENT-WELD
- d. A MINIMUM OF 18" OF COVER IS REQUIRED ABOVE BURIED RACEWAYS
- e. UNDER SLAB PVC RACEWAYS SHALL BE LAID ON A FIRM BED THROUGHOUT ITS ENTIRE
- PRIOR TO BACKFILL PVC CONDUIT SHALL BE WEIGHTED DOWN WITH CONCRETE BLOCKS TO PREVENT FLOTATION
- g. TRENCHES SHALL REMAIN OPEN FOR INSPECTION
- h. TRENCHES SHALL BE BACKFILLED AND COMPACTED IN 4" LIFTS TO 12" ABOVE THE TOP OF THE PVC RACEWAY WITH CLEAN SOIL OR SAND WHICH SHALL NOT CONTAIN STONES, BOULDERS, CONSTRUCTION DEBRIS OR MATERIALS THAT WOULD BREAK OR DAMAGE PIPING OR CAUSE CORROSIVE ACTION, UNLESS OTHERWISE NOTED.
- i. ALL WIRING SHALL BE RUN IN ELECTRICAL RACEWAY PER APPLICABLE CODES. COMBINING OF CIRCUITS WITHIN A SINGLE RACEWAY IS PERMITTED, WITH A MAXIMUM OF SIX (6) CURRENT CARRYING CONDUCTORS PER HOMERUN.
- RACEWAY ROUTING SHOWN IS DIAGRAMMATIC AND INDICATES GENERAL INTENT, ACTUAL ROUTING MUST BE COORDINATED WITH FIELD CONDITIONS AND ADJUSTED CONTRACTOR TO PROVIDE ALL OFFSETS AT NO ADDITIONAL COST.
- k. UNLESS OTHERWISE INDICATED ALL RACEWAYS SHALL BE INSTALLED CONCEALED IN FINISHED AREAS.
- I. RUN EXPOSED RACEWAYS PARALLEL TO OR AT RIGHT ANGLES TO WALLS.
- m. FURNISH FISH/PULL WIRE IN EACH RACEWAY RUN IN WHICH WIRING IS NOT INSTALLED.
- a. REFER TO MECHANICAL DRAWINGS FOR EXACT QUANTITIES AND LOCATIONS OF VAV BOXES, CONTROL VOLUME BOXES, DAMPERS, FIRE SMOKE DAMPERS, ETC. COORDINATE
- EXACT CONNECTION POINTS WITH HVAC CONTRACTOR. b. REFER TO PLUMBING AND ARCHITECTURAL DRAWINGS FOR EXACT QUANTITIES AND LOCATIONS OF ELECTRONIC FAUCETS, HAND DYERS ETC.
- c. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT QUANTITIES AND LOCATIONS OF ELECTRONIC DOOR HARDWARE.
- d. SEE ARCHITECTURAL MECHANICAL AND PLUMBING CONTRACT DOCUMENTS FOR EXACT QUANTITY, LOCATION AND ELECTRICAL CHARACTERISTICS OF EQUIPMENT.
- e. ALL ELECTRICAL EQUIPMENT SHALL BE "UL LISTED AND APPROVED".
- f. INSTALLATION OF EQUIPMENT, COMPONENTS AND WIRING FOR ELECTRICAL SYSTEMS SHALL BE IN ACCORDANCE WITH REQUIREMENTS OF EQUIPMENT MANUFACTURER
- INSTALL AND CONNECT EVERY STARTER AND VARIABLE FREQUENCY DRIVE FURNISHED BY OTHER TRADES/VENDORS ON THIS PROJECT.

h. FURNISH AND INSTALL WIRING FOR EQUIPMENT FURNISHED BY OTHERS, AS SHOWN ON

ARCHITECTURAL, HVAC, PLUMBING, FIRE ALARM, LOW VOLTAGE, CIVIL AND/OR ELECTRICAL DRAWINGS. COORDINATE WITH OTHER TRADES FOR DETAILS OF INSTALLATION AND WIRING REQUIREMENTS. VERIFY LOCATIONS AND QUANTITY OF ALL ELECTRICAL EQUIPMENT WITH ARCHITECTURAL DRAWINGS ELEVATIONS OR INTERIOR DETAILS. IN CENTERING OUTLETS AND LOCATING

BOXES OR OUTLETS, ALLOW FOR OVERHEAD PIPES, DUCTS, MECHANICAL EQUIPMENT,

VARIATIONS IN FIREPROOFING AND PLASTERING, WINDOW AND DOOR TRIM, PANELING,

HUNG CEILING, ETC., AND CORRECT ANY INACCURACY RESULTING FROM FAILURE TO DO SO WITHOUT ADDITIONAL EXPENSE. MINIMUM REQUIREMENT FOR EQUIPMENT GROUNDING SHALL BE GOVERNED BY THE NEC. ALL GROUNDS, BONDING, ETC. SHALL MEET THESE REQUIREMENTS. THE CONTRACTOR

SHALL PROVIDE AND INSTALL ANY AND ALL ITEMS TO MEET THESE REQUIREMENTS AT NO

k. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ALL CONNECTION TO EQUIPMENT TERMINALS, IF NOT AN INTEGRAL PART OF THE EQUIPMENT, AND SPLICES SHALL BE BY MEANS OF APPROVED COMPRESSION TYPE COPPER CONNECTORS.

ADDITIONAL COST.

- WHEREVER A CIRCUIT OR HOMERUN IS NOTED (I.E. AT EACH LOCATION WHERE A JUNCTION/PULL BOX WITH A HOMERUN NOTATION IS INDICATED FOR AN ITEM OF EQUIPMENT, AT EACH LOCATION WHERE A DISCONNECT SWITCH FOR A MOTOR IS INDICATED WITH THE FEEDER SIZING PER SCHEDULE, ETC.) CONNECT THE ITEM WITH THE REQUIRED CONDUIT AND WIRE FROM SOURCE TO LOAD.
- m. EXCEPT WHERE SPECIFICALLY INDICATED, ALL EXPOSED NON-CURRENT CARRYING METALLIC PARTS OF ELECTRICAL EQUIPMENT, METALLIC RACEWAY SYSTEMS, GROUND BUS, METALLIC CABLE ARMOR, AND NEUTRAL CONDUCTOR OF THE SERVICE ENTRANCE

SYSTEM SHALL BE BONDED TO GROUND. THE GROUND CONNECTION SHALL BE PERMANENTLY AND CONTINUOUSLY BONDED TO THE NON-CURRENT CARRYING PARTS OF

- n. PROVIDE DISCONNECT SWITCHES FOR ALL EQUIPMENT
- o. CIRCUIT NUMBERS AT EQUIPMENT CORRESPOND TO PANELBOARD BREAKERS (SEE PANELBOARD SCHEDULE). BRANCH CIRCUITS SHALL BE SIZED ACCORDING TO THE CIRCUIT BREAKER RATING AND VOLTAGE DROP REQUIREMENTS, UNLESS INDICATED OTHERWISE ON THE ELECTRICAL EQUIPMENT SCHEDULE.
- p. CONTRACTOR SHALL PERFORM TEST AND ADJUSTMENTS OF EQUIPMENT AND WIRING INSTALLED AND OR CONNECTED INCLUDING ELECTRICAL FURNISHED BY OTHERS TO DETERMINE PROPER PHASING, POLARITY, FREEDOM FROM GROUNDS AND OPERATION OF
- q. PROVIDE ACCESS TO AND CLEARANCES AROUND EQUIPMENT IN ACCORDANCE WITH THE
- r. ELECTRICAL CONNECTIONS TO ALL VIBRATION-ISOLATED EQUIPMENT INCLUDING PUMPS, FANS SHOULD BE MADE WITH FLEXIBLE CONDUIT, NOT LESS THAN 2' IN LENGTH AND INSTALLED IN A COMPLETE 360' LOOP.
- s. THE CONTRACTOR SHALL VERIFY ALL ROUGH-IN REQUIREMENTS FOR ELECTRICALLY OPERATED EQUIPMENT WITH THE EQUIPMENT SUPPLIERS.

- a. THE CONTRACTOR SHALL LABEL EACH AND EVERY PANELBOARD, SWITCH, RECEPTACLE OUTLET, JUNCTION BOX INSTALLED OR WIRED UNDER THIS CONTRACT. LABEL ALL RECEPTACLES, JUNCTION BOXES, LIGHTS, SWITCHES, OUTLETS WITH CIRCUIT NUMBERS AND PANEL DESIGNATION.
- b. ALL EQUIPMENT SUCH AS RELAYS, MOTOR STARTER DISCONNECT SWITCHES, PANELBOARDS, CONTROLLER, CONTROL DEVICE AND OTHER APPURTENANCES SHALL HAVE IDENTIFICATION PLATES OF BLACK LAMINATED PLASTIC WITH 1/2" ENGRAVED WHITE
- c. PROVIDE AND INSTALL TYPEWRITTEN PANEL SCHEDULES FOR EACH PANELBOARD. INDICATING THE FINAL ROOM NUMBER AND THE EQUIPMENT OR DEVICES SERVED BY THE
- d. THE CONTRACTOR SHALL LABEL WITH BLACK PERMANENT MARKER EACH RECEPTACLE, JUNCTION BOX, PULL BOX AND LIGHT SWITCH ON THE INSIDE OF EACH FACE PLATE WITH PANEL AND CIRCUIT NUMBER DESIGNATION. JUNCTION AND PULL BOXES IN UNFINISHED SPACE SHALL BE MARKED ON COVER PLATES
- e. THE CONTRACTOR SHALL LABEL ALL CONDUITS AND ARMORED CABLE PER ANSI A13.1. LABELS SHALL CONTAIN VOLTAGE, CIRCUIT NUMBER, SOURCE LOCATION (PANEL NUMBER). LABEL SHALL BE WHITE WITH BLACK PRINTED LETTERING. LABELS SHALL BE INSTALLED AT BOTH ENDS OF A CONDUIT OR CABLE AND JUNCTION BOX.
- CONTROL WIRING SHALL BE TAGGED AT EACH END AND TERMINATED WHERE WORK HAS BEEN PERFORMED IN ACCORDANCE WITH EQUIPMENT MANUFACTURES SPECIFICATIONS.

- a. SEE ARCHITECTURAL DRAWINGS AND APPROVED SUBMITTALS AND SHOP'S DRAWINGS FOR EXACT LOCATION AND MOUNTING HEIGHTS OF ALL LIGHTING FIXTURES, SWITCHES, JUNCTION BOXES AND FOR LIGHTING FIXTURE SCHEDULE. LIGHTING FIXTURE CUTS SHALL BE APPROVED BY ARCHITECT PRIOR TO INSTALLATION.
- SCHEDULES, SYMBOL LIST, AND EXACT FIXTURE LOCATION QUANTITY, AND MOUNTING HEIGHTS. ALL RECEPTACLES LOCATIONS SHALL BE IN ACCORDANCE WITH ARCHITECTURAL

REFER TO ARCHITECTURAL DRAWINGS, ELEVATIONS, AND DETAILS FOR FIXTURE

c. ALL LIGHTING FIXTURES SHALL BE AS SPECIFIED BY THE ARCHITECT. FOR EXACT LIGHTING FIXTURES LOCATIONS AND LIGHT FIXTURES SCHEDULE REFER TO ARCHITECTURAL d. ALL LIGHTING FIXTURES MOUNTED IN A SUSPENDED CEILING SHALL BE INDIVIDUALLY

SUPPORTED FROM THE BUILDING'S STRUCTURE ABOVE, UNLESS NOTED OTHERWISE.

SEISMIC RESTRAINT SHALL BE PROVIDED AND INSTALLED FOR LIGHTING FIXTURE.

- COORDINATE WITH AUTHORITIES HAVING JURISDICTION. e. SUSPENDED LIGHTING FIXTURES SHALL BE INDIVIDUALLY SUPPORTED FROM THE BUILDING'S STRUCTURE ABOVE, UNLESS NOTED OTHERWISE. SEISMIC RESTRAINT SHALL BE PROVIDED AND INSTALLED FOR LIGHTING FIXTURE. COORDINATE WITH AUTHORITIES
- f. THE ELECTRICAL CONTRACTOR SHALL INSTALL ALL NEW LIGHTING FIXTURES COMPLETE
- WITH MOUNTING ACCESSORIES TO MEET JOB CONDITIONS. CIRCUITS ARE DESIGNATED BY THE NUMBER SHOWN ADJACENT TO EACH LIGHTING FIXTURE OR JUNCTION BOX. WIRING IS SHOWN ONLY UNDER SPECIAL CIRCUMSTANCES. PROVIDE ALL CONDUIT, WIRE AND BOXES AS WELL AS CEILING OUTLETS AND WHIPS
- REQUIRED TO ENERGIZE LIGHTING FIXTURES AS SHOWN.
- h. CIRCUIT NUMBERS ARE FOR GROUPING PURPOSES AND REFERENCE ONLY. i. PROVIDE AND INSTALL NEW LIGHTING IN ACCORDANCE WITH CIRCUIT DESIGNATIONS AND
- LIGHTING CONTROL LEVEL (SEE NOTE FOR LOADING REQUIREMENTS). j. WIRING FOR LIGHTING BRANCH CIRCUIT HOMERUNS SHALL BE:

HAVING JURISDICTION.

a) #12 WIRE IF THE LENGTH DOESN'T EXCEED 80 FT;

COORDINATE EXACT LOCATION WITH BASE BUILDING.

BACKGROUND WITH KNOCK OUT ARROWS.

- b) #10 WIRE IF MORE THAN 80 FT.
- k. ALL LIGHT FIXTURE MUST BE CONTROLLED VIA BASE BUILDING SYSTEM. I. ALL LIGHTING FIXTURES SHALL BE INSTALLED IN SUCH WAY TO AVOID INTERFERENCE WITH MECHANICAL DIFFUSERS, HVAC DUCT WORK, SPRINKLERS, PUBLIC ACCESS SPEAKERS AND
- OTHER SYSTEMS' COMPONENTS. m. ELECTRICAL CONTRACTOR TO PROVIDE ALL CONNECTIONS FROM THE WALL AND FLOOR TO
- THE FIXTURES LOCATED AT MILLWORK. COORDINATE WITH MILLWORK CONTRACTOR. n. EMERGENCY LIGHTING FIXTURES AND EXIT SIGNS NOT EQUIPPED WITH BATTERY SHALL BE CONNECTED TO EXISTING EMERGENCY PANEL AND ARE NOT TO BE SWITCHED.
- o. EXIT LIGHTS, EMERGENCY BATTERY PACKS & NIGHT LIGHTS SHALL NOT BE SWITCHED UNLESS OTHERWISE NOTED. CONNECT TO UNSWITCHED LEG OF ASSOCIATED CIRCUIT. PROVIDE AND INSTALL CODE COMPLIANT EMERGENCY BATTERY PACKS.
- SWITCHES THAT ARE SHOWN AT ROOM ENTRANCES AND ARE NOT SPECIFICALLY IDENTIFIED BY KEY NOTES OR SWITCH-LEG INDICATORS ARE INTENDED TO OPERATE ALL OF THE GENERAL LIGHTING IN THAT ROOM ONLY. COORDINATE AND CONFIRM ALL DOOR SWINGS WITH THE ARCHITECTURAL DRAWINGS PRIOR TO ROUGH-IN OF ANY LIGHT
- q. COORDINATE LOCATION OF ALL CEILING DEVICES (I.E. DETECTORS, FIXTURES, AND ALL OTHER CEILING MOUNTED DEVICES) WITH OTHER TRADES (I.E. DUCTWORK, SPRINKLERS,
- r. UNLESS OTHERWISE SPECIFIED ALL LAMPS SHALL HAVE A COLOR TEMPERATURE OF 3500K. s. UNLESS OTHERWISE SPECIFIED EXIT SIGNS SHALL HAVE RED LETTERING WITH A WHITE

ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCTION MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB

> 2. GC MUST PROVIDE & INSTALL ALL PRODUCTS PER PLANS. ONLY SUBSTITUTED PRODUCTS NEED TO B SUBMITTED TO THE ARCHITECT FOR APPROVAL. UNAPPROVED SUBSTITUTIONS WILL BE REPLACED

WORK USING THE CONTRACTOR'S BEST SKILL AND

VERBAL REPRESENTATION HAS NO VALUE AND AL REQUESTS TO CHANGE ANY PRODUCTS OR SPECIFICATIONS PER PLANS, MUST BE SUBMITTED IN WRITING TO THE ARCHITECT & TLE FOR APPROVAL

THE EXPENSE OF THE GC.



LIVINGSTON, NEW JERSEY 07039 TEL: 973-994-9669 FAX: 973-994-4069 www.jarmelkizel.com Architecture Engineering

Interior Design

Implementation Services

**42 OKNER PARKWAY** 



	ISSUE	
DATE	DESCRIPTION	INT.
06-02-23	FOR TLE REVIEW	MBJ
06-14-23	FOR PERMIT	MBJ

3 08-14-23 PER TLE AND CODE COMMENTS

2 06-14-23

REVISION

NO. DATE DESCRIPTION

PROFESSIONAL CERTIFICATION

MATTHEW B. JARMEL, AIA, MBA

**LICENSE NUMBER: A2017014316** 

TLEMO22-164 **AS NOTED** Drawn Bv: Approved By:

**ELECTRICAL NOTES** 

#### DEMAND LOAD INDICATED CALCULATED LOAD.

ALL CIRCUIT NUMBERS ARE SHOWN FOR DESIGN INTENT ONLY. CONTRACTOR TO VERIFY ACTUAL CIRCUIT AVAILABILITY PRIOR TO START OF THE WORK. CONTRACTOR TO SUBMIT PANEL

SCHEDULE AFTER COMPLETION OF THE WORK

			F	PANEL		M	DP							
			ı	$\overline{\ }$		IVI								
VOLTAGE (L	N):	120					ENCLOSUR	E TYPE:						
VOLTAGE (L	L):	208					MOUNTING:			SURFACE				
PHASES, WIRES: 3 \( \phi \) 4 W AIC RATING (A): 65000														
MINIMUM B	US CAPACITY (A):	600 A					NOTES:		NEW - MC	B -				
MAIN O.C.	DEVICE (A):	600 A					FED FROM:							
CKT NO	DESCRIPTION	TRIP AMPS	POLE		1		OADS (VA)		C	POLE	TRIIP AMPS	DESCRIF	TION	CKT NO
1,3,5	ROOF TOP UNIT (RTU-1)	50	3	4803	4803		D.		<u> </u>	3		ROOF TOP UNIT (RTI	J-2)	2,4,6
1,3,5	ROOF TOP UNIT (RTU-1)	50	3			4803	4803			3	50	ROOF TOP UNIT (RT	J-2)	2,4,6
1,3,5	ROOF TOP UNIT (RTU-1)	50	3					4803	4803	3	50	ROOF TOP UNIT (RT	J-2)	2,4,6
7,9,11	ROOF TOP UNIT (RTU-3)	50	3	4803	3842					3	40	ROOF TOP UNIT (RT	J-4)	8,10,12
7,9,11	ROOF TOP UNIT (RTU-3)	50	3			4803	3842			3	40	ROOF TOP UNIT (RT	J <b>-</b> 4)	8,10,12
7,9,11	ROOF TOP UNIT (RTU-3)	50	3					4803	3842	3	40	ROOF TOP UNIT (RTI	J <b>-</b> 4)	8,10,12
13,15,17	ROOF TOP UNIT (RTU-5)	50	3	4803	0					1	20	SPARE		14
13,15,17	ROOF TOP UNIT (RTU-5)	50	3			4803	0			1	20	SPARE		16
13,15,17	ROOF TOP UNIT (RTU-5)	50	3					4803	0	1	20	SPARE		18
19	SPARE	20	1	0	0					1	20	SPARE		20
21	SPARE	20	1			0	0			1	20	SPARE		22
23	SPARE	20	1					0	0	1	20	SPARE		24
	SPARE	20	1	0	0					1	20	SPARE		26
	SPARE	20	1			0	0			1	20	SPARE		28
	SPARE	20	1					0	0	1	20	SPARE		30
	SPARE	20	1	0	24311					3	400	PANEL M		32,34,36
	SPARE	20	1			0	22135			3	400	PANEL M		32,34,36
	ROOF SERVICE GFI WP RECEPTACLE						720 19843		19843	3	400	PANEL M		32,34,36
	ELECTRIC WATER HEATER (EWH-1)	60	3	5000	8000			, 20	10010	3	90	ELECTRIC WATER HEA	ATFR (FWH-2)	38,40,42
	ELECTRIC WATER HEATER (EWH-1)	60	3	0000	0000	5000	8000			3		ELECTRIC WATER HEA	<u> </u>	38,40,42
	ELECTRIC WATER HEATER (EWH-1)	60	3			0000	0000	5000	8000	3	90	ELECTRIC WATER HEA	<u> </u>	38,40,42
,,		1 00			CONNEC	CTED LOAD	PHASE TOTA						()	1 , ,
				603			3189		617	†				
			ļ			1 00	7,00	1 00	<u> </u>	_				
				CONNECT	ED IOAD							DEMAND LOAD	170.4 KVA	
				(K)		DEMAND	FACTOR	DEMAND I	OAD (KVA)			SPARE CAPACITY	45.7 KVA	
	Noncontinuous Load				9.8		.00		9.8			SPARE CAPACITY	127.0 AMPS	
	Water Heaters				9.0		.00		9.0			SPARE CAPACITY	21%	
	Cooling and Heating				5.7		.00		5.7			PHASE BALANCE	2170	
	Electric Clothes Dryers				5.7 4		.00		4.4			A TO B	96 %	
	Equipment				2.0		.00		2.0			B TO C	97 %	
	Heating				.6		.00		1.6			C TO A	98 %	
	Lighting				.6 I.8		.25		6.0			C TO A	90 %	
	Lighting — Exterior				2.1					1				
							.25		2.7					
	Motors				0.0		.00		0.0					
	Motors (Largest)				.8		.25		2.3					
	Receptacles (0 - 10 KVA)				0.0		.00		0.0					
	Receptacles (Over 10 KVA)				3.9 	- -	.50		7.0	  -				
	TOTAL:			17					0.4					
	LOAD (AMPS):			48	6.2			47	3.0					
			Г	)		ı								
			<u> </u>	PANEL			P							
VOLTAGE (L	N):	120					ENCLOSUR	E TYPE:						

			F	PANEL		F	$\supset$						
VOLTAGE	(L-N):	120					ENCLOSUR	RE TYPE:					
VOLTAGE	• •	208					MOUNTING	:		SURFACE	<u> </u>		
PHASES, \	WIRES:	3 φ 4 V	V				AIC RATIN	G (A):		65000			
MINIMUM (	BUS CAPACITY (A):	125 A					NOTES:		NEW - ML	_0 –			
MAIN O.C.	DEVICE (A):	125 A					FED FROM	:	М				
CKT NO	DESCRIPTION	TRIP AMPS	POLE	ļ.	4		OADS (VA) B		С	POLE	TRIIP AMPS	DESCRIPTION	CKT NO
1	RCPTS ROOM 113	20	1	900	900					1	20	RCPTS ROOM 118	2
3	RCPTS ROOM 124	20	1			900	900			1	20	RCPTS ROOM 121	4
5	RCPTS ROOM 125	20	1					900	900	1	20	RCPTS ROOM 127	6
7	RCPTS ROOM 130	20	1	900	900					1	20	RCPTS ROOM 132	8
9	RCPTS ROOM 134	20	1			900	1260			1	20	RCPTS ROOM 105	10
11	RCPTS ROOM 110	20	1					1260	0	1	20	SPARE	12
13	SPARE PROPERTY AND ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY	20	1	0	540	5.40	5.40			1	20	RCPTS GFI ROOM 113, 118	14
15	RCPTS GFI ROOM 113, 118	20	1			540	540	7.00	700	1	20	RCPTS GFI ROOM 124, 121	16
17	RCPTS GFI ROOM 125	20	1	1000	F 4 0			360	720	1	20	RCPTS GFI ROOM 132, 134	18
19	RCPTS HOUSEKEEPING RCPTS GFI ROOM 130,128,129	20	1	1800	540	F.40				1	20	RCPTS NURSING RM SPARE	20
21	RCPTS GFI ROUM 150,128,129	20	1			540	0	360	360	1 1	20	RCPTS GFI PANTRY	24
25	RCPTS OFFICE	20	1	720	180			300	360	1	20	RCPT COPY/ PRINTER RECEPTION	
27	RCPTS RECEPTION	20	1	720	180	1260	360			1	20	RCPTS OFFICE CCTV	28
			1			1200	300	7.00	000			RCPT DEDICATED GFI FRIDGE RO	OOM
29	RCPT PRINTER/FAX OFFICE	20	1	0	1000			360	800	1	20	121 RCPT DEDICATED GFI FRIDGE RO	00M
31	SPARE	20	1	0	1800					1	20	125 RCPT DEDICATED GFI FRIDGE RO	OOM 32
33	SPARE  RCPT DEDICATED GFI MICROWAVE	20	1			0	800			1	20	132 RCPT DEDICATED GFI FRIDGE RO	00M
35	ROOM 132	20	1					1800	800	1	20	134	36
37	RCPT DEDICATED GFI MICROWAVE ROOM 134	20	1	1800	800					1	20	RCPT DEDICATED GFI FRIDGE LC	DUNGE 38
39	RCPT DEDICATED GFI MICROWAVE LOUNGE	20	1			1800	540			1	20	RCPT LAMINATOR	40
41	TV RECEPTION	20	1					500	0	1	20	SPARE	42
						CTED LOAD		_ <del>, ` ´</del>					
				117	780	10	340	9	120				
Noncontinuous Load Receptacles (0 — 10 KVA) Receptacles (Over 10 KVA)			CONNECTED LOAD (KVA) 11.4 10.0 9.8		1. 1.	DEMAND FACTOR 1.00 1.00 0.50		LOAD (KVA) 11.4 10.0 4.9			DEMAND LOAD 26.3 KV, SPARE CAPACITY 18.7 KV, SPARE CAPACITY 51.9 AM SPARE CAPACITY 42 % PHASE BALANCE A TO B 96 %	Ά	
	TOTAL: LOAD (AMPS):					-			26.3 73.1	-		B TO C 97% C TO A 98%	
	· /								• •				

\*PROVIDE LOCKABLE BREAKERS CIRCUIT LOCK-ON DEVICES SHALL BE INSTALLED ON ALL CIRCUITS PROVIDING POWER TO EMERGENCY LIGHTING, EXIT SIGNS, FIRE ALARMS AND SMOKE DETECTORS. AS PER NEC CODE REQUIREMENTS, SECTION 700.20(C).

VOLTAGE (				PANEL	•	17	Л						
VOLTAGE (L	·	120					ENCLOSURE	TYPE:					
VOLTAGE (L PHASES, W	•	208 3 φ 4 V	N				MOUNTING: AIC RATING	(A):		SURFACE 65000			
MINIMUM B	SUS CAPACITY (A):	400 A					NOTES:		NEW - ML				
	DEVICE (A):	400 A TRIP	5015				FED FROM: DADS (VA)		MDP	2015	TRIIP	250205500	0.47
1,3,5	DESCRIPTION PANEL P	AMPS 125	POLE 3	11780	A 5663	E	В		С	POLE 3	AMPS 125	DESCRIPTION PANEL L	2,4,
	PANEL P	125	3	11760	5663	10340	4507			3	125	PANEL L	2,4,
	PANEL P ACCU-1/AC-1 PANTRY UNIT	125 30	3 2	1768	0			9120	5323	3	125 20	PANEL L SPARE	2,4
7,9	ACCU-1/AC-1 PANTRY UNIT	30	2	1700	0	1768	500			1	20	EXHAUST FAN (EF - 1)	10
	FIRE ALARM CONTROL PANEL (FACP) SPARE	20	1	0	0			500	500	1	20 20	EXHAUST FAN (EF - 2) SPARE	12 14
15	SPARE	20	1			0	0			1	20	SPARE	16
	WATER FEATURE SPARE	20	1	0	2200			0	2200	2 2	30 30	RCPT DRYER RCPT DRYER	18,2
	UNIT HEATER (UH-1) UNIT HEATER (UH-1)	20	2			800	360	800	760	1	20	TELEPHONE BOARD	22
	EXHAUST CONTROLLER	20	2	0	1800			800	360	1	20 20	INTERNET BOARD RCPT WASHING MACHINE	24
	ELECTRIC CEILING HEATER (ECH-2)	20	1			1500	360			1	20	SECURITY PANEL FIRE ALARM ANNUNCIATOR PANEL	28
29	EXIT DEVICE	20	1					360	180	1	20	(FAAP)	30
	IRRIGATION PUMP	20	1	0	20					1	20	GLOBAL PLASMA SYSTEM PURIFIER (GPS)	32
	ELECTRIC CEILING HEATER (ECH-1) RE-CIRCULATOR PUMP FOR WATER	20	1			1500	500			1	20	TIME CLOCK (TC-1)	34
<u> </u>	HEATER (P-1)	20	1	4000	î			500	0	1	20	SPRINKLER PUMP	36
	RCPT GFI WP EXTERIOR SPACE	20	1	1080	0	0	0			1	20 20	SPACE SPACE	38 40
41	SPACE	20	1		CONNEC	CTED LOAD	DHASE TOTA	0	0	1	20	SPACE	42
				24	311		135		9843	]			
				CONNEC	TED LOAD							DEMAND LOAD 61.9 KVA	
				(K	VA)		FACTOR		LOAD (KVA)			SPARE CAPACITY 82.2 KVA	
	Noncontinuous Load Cooling and Heating				9.8 6.6		00 00		19.8 6.6			SPARE CAPACITY 228.2 AMPS SPARE CAPACITY 57 %	
	Electric Clothes Dryers			•	4.4	1.0	00		4.4			PHASE BALANCE	
	Equipment Heating				2.0 1.6		00 00		2.0 1.6			A TO B 96% B TO C 97%	
	Lighting Lighting Exterior				4.8	1.:	25		6.0			C TO A 98%	
	Lighting — Exterior Motors				2.1 0.0		25 00		2.7 0.0				
	Motors (Largest) Receptacles (0 — 10 KVA)				1.8 0.0	1.: 1.0			2.3 10.0				
	Receptacles (Over 10 KVA)				3.2		50		6.6				
	TOTAL:			66	6.3	-			51.9	_			
	LOAD (AMPS):			18	4.0			1	71.8				
			F	PANEL	-	L	_						
		120	F	PANEL			ENCLOSURE	TYPE:					
OLTAGE (L PHASES, W	L-L): //IRES:	208 3 φ 4 V		PANEL			MOUNTING: AIC RATING		lugu.	SURFACE 65000			
	L-L): /IRES: /US CAPACITY (A):	208 3 ф 4 V 125 A		PANEL	-		MOUNTING:		NEW — ML	SURFACE 65000			
OLTAGE (L PHASES, W MINIMUM B	L-L): //IRES:	208 3 \( \phi \) 4 \( \psi \) 125 \( \A \) 125 \( \A \)				PHASE LO	MOUNTING: AIC RATING NOTES: FED FROM: DADS (VA)		М	SURFACE 65000	TRIIP	DESCRIPTION	CKT
OLTAGE (LPHASES, WINIMUM BINIMUM O.C.	L-L): //IRES: PUS CAPACITY (A): DEVICE (A):	208 3 \( \phi \) 4 \( \psi \) 125 \( \A \)	N		A 317	PHASE LO	MOUNTING: AIC RATING NOTES: FED FROM:			SURFACE 65000 .0 –	TRIIP AMPS 20	DESCRIPTION LIGHTING ROOM 110	
OLTAGE (LEPHASES, WINIMUM BOUND BOUN	L-L): //RES: BUS CAPACITY (A): DEVICE (A):  DESCRIPTION  LIGHTING ROOM 113  LIGHTING ROOM 118	208 3 \ \ \ \ 4 \ \ \ \ \ \ \ \ \ \ \ \ \ \	POLE 1 1		A	PHASE LO	MOUNTING: AIC RATING NOTES: FED FROM: DADS (VA)	(A):	M C	SURFACE 65000 .0 – POLE 1	20 20	LIGHTING ROOM 110 LIGHTING ROOM 105	2 4
OLTAGE (LOPHASES, WINIMUM BOUND OF THE PROPERTY OF THE PROPERT	L-L): //IRES: BUS CAPACITY (A): DEVICE (A):  DESCRIPTION  LIGHTING ROOM 113  LIGHTING ROOM 118  LIGHTING ROOM 124  LIGHTING ROOM 121	208 3	POLE  1  1  1  1		A	PHASE LC E 346	MOUNTING: AIC RATING NOTES: FED FROM: DADS (VA) B 339		М	SURFACE 65000 0 – POLE	20 20 20 20 20	LIGHTING ROOM 110 LIGHTING ROOM 105 LIGHTING ROOM 101 RECEPTION LIGHTING ROOM 134	2 4 6 8
OLTAGE (LPHASES, WINIMUM BIMAIN O.C.  CKT NO  1  3  5  7  9	L-L):  VIRES:  BUS CAPACITY (A):  DEVICE (A):  DESCRIPTION  LIGHTING ROOM 113  LIGHTING ROOM 118  LIGHTING ROOM 124  LIGHTING ROOM 121  LIGHTING ROOM 125	208 3	POLE  1 1 1	418	A 317	PHASE LC	MOUNTING: AIC RATING NOTES: FED FROM: DADS (VA) B	(A): 353	C 319	SURFACE 65000 .0 – POLE 1	20 20 20 20 20 20	LIGHTING ROOM 110  LIGHTING ROOM 105  LIGHTING ROOM 101 RECEPTION  LIGHTING ROOM 134  LIGHTING ROOM 132  LIGHTING ROOM 130 & MECHANICAL	2 4 6 8
OLTAGE (LEPHASES, WINIMUM BIMAIN O.C.  CKT NO  1  3  5  7  9  11	L-L): //RES: BUS CAPACITY (A): DEVICE (A):  DESCRIPTION  LIGHTING ROOM 113  LIGHTING ROOM 124  LIGHTING ROOM 121  LIGHTING ROOM 125  LIGHTING ROOM 127  LIGHTING CORRIDOR	208 3	POLE  1  1  1  1	418	A 317 216	PHASE LC E 346	MOUNTING: AIC RATING NOTES: FED FROM: DADS (VA) B 339	(A):	M C	SURFACE 65000 .0 – POLE 1	20 20 20 20 20 20 20	LIGHTING ROOM 110  LIGHTING ROOM 105  LIGHTING ROOM 101 RECEPTION  LIGHTING ROOM 134  LIGHTING ROOM 132  LIGHTING ROOM 130 & MECHANICAL ROOM	2 4 6 8 10
OLTAGE (LEPHASES, WINIMUM BUTAIN O.C.  CKT NO  1 3 5 7 9 11	L-L): //IRES: BUS CAPACITY (A): DEVICE (A):  DESCRIPTION  LIGHTING ROOM 113  LIGHTING ROOM 118  LIGHTING ROOM 124  LIGHTING ROOM 121  LIGHTING ROOM 125  LIGHTING ROOM 127  LIGHTING CORRIDOR  135,PANTRY,LAUNDRY, LOUNGE	208 3	POLE  1  1  1  1	418	A 317	PHASE LC E 346 317	MOUNTING: AIC RATING NOTES: FED FROM: DADS (VA) B 339	(A): 353	C 319	SURFACE 65000 .0 – POLE 1	20 20 20 20 20 20 20 20	LIGHTING ROOM 110  LIGHTING ROOM 105  LIGHTING ROOM 101 RECEPTION  LIGHTING ROOM 134  LIGHTING ROOM 132  LIGHTING ROOM 130 & MECHANICAL ROOM  SMARTBOARD ROOM 113	2 4 6 8 10 12
OLTAGE (LEPHASES, WINIMUM BIAIN O.C.  CKT NO  1 3 5 7 9 11 13 15 17	L-L): //IRES: BUS CAPACITY (A): DEVICE (A):  DESCRIPTION  LIGHTING ROOM 113  LIGHTING ROOM 124  LIGHTING ROOM 121  LIGHTING ROOM 125  LIGHTING ROOM 127  LIGHTING CORRIDOR 135,PANTRY,LAUNDRY, LOUNGE  SMARTBOARD ROOM 121	208 3	POLE  1 1 1 1 1 1 1 1 1 1 1	418 353 669	A 317 216 180	PHASE LC E 346	MOUNTING: AIC RATING NOTES: FED FROM: DADS (VA) B 339	(A): 353	C 319	SURFACE 65000 .0 – POLE 1	20 20 20 20 20 20 20 20 20 20	LIGHTING ROOM 110  LIGHTING ROOM 105  LIGHTING ROOM 101 RECEPTION  LIGHTING ROOM 134  LIGHTING ROOM 132  LIGHTING ROOM 130 & MECHANICAL ROOM  SMARTBOARD ROOM 113  SMARTBOARD ROOM 124  SMARTBOARD ROOM 125	2 4 6 8 10 12 14
OLTAGE (LEPHASES, WINIMUM BIAIN O.C.  CKT NO  1 3 5 7 9 11 13 15 17	L-L): //IRES: BUS CAPACITY (A): DEVICE (A):  DESCRIPTION  LIGHTING ROOM 113  LIGHTING ROOM 124  LIGHTING ROOM 121  LIGHTING ROOM 125  LIGHTING ROOM 127  LIGHTING CORRIDOR 135,PANTRY,LAUNDRY, LOUNGE  SMARTBOARD ROOM 121  SMARTBOARD ROOM 127	208 3	POLE  1 1 1 1 1 1 1 1	418	A 317 216	PHASE LC  346  317	MOUNTING: AIC RATING NOTES: FED FROM: DADS (VA) B 339 317	(A): 353 245	C 319	SURFACE 65000 .0 – POLE 1	20 20 20 20 20 20 20 20 20 20 20	LIGHTING ROOM 110  LIGHTING ROOM 105  LIGHTING ROOM 101 RECEPTION  LIGHTING ROOM 134  LIGHTING ROOM 132  LIGHTING ROOM 130 & MECHANICAL ROOM  SMARTBOARD ROOM 113  SMARTBOARD ROOM 124  SMARTBOARD ROOM 125  SMARTBOARD ROOM 130	2 4 6 8 10 12 14 16 18 20
OLTAGE (LEPHASES, WINIMUM BIAIN O.C.  CKT NO  1 3 5 7 9 11 13 15 17 19 21 23	L-L): //IRES: BUS CAPACITY (A): DEVICE (A):  DESCRIPTION  LIGHTING ROOM 113  LIGHTING ROOM 124  LIGHTING ROOM 121  LIGHTING ROOM 125  LIGHTING ROOM 127  LIGHTING CORRIDOR 135,PANTRY,LAUNDRY, LOUNGE  SMARTBOARD ROOM 121  SMARTBOARD ROOM 127  SMARTBOARD ROOM 127  SMARTBOARD ROOM 127  SMARTBOARD ROOM 127  SMARTBOARD ROOM 105  RCPT REFRIGERATOR PANTRY	208 3	POLE  1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	418 353 669	A 317 216 180	PHASE LC E 346 317	MOUNTING: AIC RATING NOTES: FED FROM: DADS (VA) B 339	(A): 353 245	C 319	SURFACE 65000 .0 – POLE 1	20 20 20 20 20 20 20 20 20 20 20 20	LIGHTING ROOM 110  LIGHTING ROOM 105  LIGHTING ROOM 101 RECEPTION  LIGHTING ROOM 134  LIGHTING ROOM 132  LIGHTING ROOM 130 & MECHANICAL ROOM  SMARTBOARD ROOM 113  SMARTBOARD ROOM 124  SMARTBOARD ROOM 125  SMARTBOARD ROOM 130  SMARTBOARD ROOM 110  RCPT FREEZER PANTRY	2 4 6 8 10 12 14 16 18 20 22 24
OLTAGE (LEPHASES, WINIMUM BIAIN O.C.  CKT NO  1 3 5 7 9 11 13 15 17 19 21 23 25,27	L-L): //IRES: PUS CAPACITY (A): DEVICE (A):  DESCRIPTION  LIGHTING ROOM 113  LIGHTING ROOM 124  LIGHTING ROOM 121  LIGHTING ROOM 125  LIGHTING ROOM 125  LIGHTING ROOM 127  LIGHTING CORRIDOR 135,PANTRY,LAUNDRY, LOUNGE  SMARTBOARD ROOM 121  SMARTBOARD ROOM 127  SMARTBOARD ROOM 127  SMARTBOARD ROOM 127	208 3	POLE  1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	418 353 669	A 317 216 180	PHASE LC  346  317	MOUNTING: AIC RATING NOTES: FED FROM: DADS (VA) B 339 317	(A): 353 245	M C 319 411	SURFACE 65000 .0 – POLE 1	20 20 20 20 20 20 20 20 20 20 20 20	LIGHTING ROOM 110  LIGHTING ROOM 105  LIGHTING ROOM 101 RECEPTION  LIGHTING ROOM 134  LIGHTING ROOM 132  LIGHTING ROOM 130 & MECHANICAL ROOM  SMARTBOARD ROOM 113  SMARTBOARD ROOM 124  SMARTBOARD ROOM 125  SMARTBOARD ROOM 130  SMARTBOARD ROOM 110	2 4 6 8 10 12 14 16 18 20 22 24 26
OLTAGE (LEPHASES, WINIMUM BIAIN O.C.  CKT NO  1 3 5 7 9 11 13 15 17 19 21 23 25,27 25,27 29,31	L-L): //IRES: BUS CAPACITY (A): DEVICE (A):  DESCRIPTION  LIGHTING ROOM 113  LIGHTING ROOM 124  LIGHTING ROOM 121  LIGHTING ROOM 125  LIGHTING ROOM 125  LIGHTING ROOM 127  LIGHTING CORRIDOR 135,PANTRY,LAUNDRY, LOUNGE  SMARTBOARD ROOM 121  SMARTBOARD ROOM 121  SMARTBOARD ROOM 127  SMARTBOARD ROOM 105  RCPT REFRIGERATOR PANTRY  RCPT MICROWAVE PANTRY  RCPT MICROWAVE PANTRY	208 3	POLE  1 1 1 1 1 1 1 1 1 2 2 2	418 353 669 180	A 317 216 180 180	PHASE LC  346  317  180	MOUNTING: AIC RATING NOTES: FED FROM: DADS (VA) B 339 317	(A): 353 245	M C 319 411	SURFACE 65000 O - POLE 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	20 20 20 20 20 20 20 20 20 20 20 20 20 2	LIGHTING ROOM 110  LIGHTING ROOM 105  LIGHTING ROOM 101 RECEPTION  LIGHTING ROOM 134  LIGHTING ROOM 132  LIGHTING ROOM 130 & MECHANICAL ROOM  SMARTBOARD ROOM 113  SMARTBOARD ROOM 124  SMARTBOARD ROOM 125  SMARTBOARD ROOM 130  SMARTBOARD ROOM 110  RCPT FREEZER PANTRY  SPARE  SPARE  SPARE	2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
OLTAGE (LEPHASES, WINIMUM BIAIN O.C.  CKT NO  1 3 5 7 9 11 13 15 17 19 21 23 25,27 25,27 29,31 29,31	L-L): //IRES: PUS CAPACITY (A): DEVICE (A):  DESCRIPTION  LIGHTING ROOM 113  LIGHTING ROOM 124  LIGHTING ROOM 121  LIGHTING ROOM 125  LIGHTING ROOM 125  LIGHTING ROOM 127  LIGHTING CORRIDOR 135,PANTRY,LAUNDRY, LOUNGE  SMARTBOARD ROOM 121  SMARTBOARD ROOM 121  SMARTBOARD ROOM 127  SMARTBOARD ROOM 105  RCPT REFRIGERATOR PANTRY  RCPT MICROWAVE PANTRY	208 3	POLE  1 1 1 1 1 1 1 1 1 1 2 2	418 353 669	A 317 216 180	PHASE LC  346  317  180	MOUNTING: AIC RATING NOTES: FED FROM: DADS (VA) B 339 317	(A): 353 245 180	M C 319 411 180 900	SURFACE 65000 O - POLE 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	20 20 20 20 20 20 20 20 20 20 20 20 20 2	LIGHTING ROOM 110  LIGHTING ROOM 105  LIGHTING ROOM 101 RECEPTION  LIGHTING ROOM 134  LIGHTING ROOM 132  LIGHTING ROOM 130 & MECHANICAL ROOM  SMARTBOARD ROOM 113  SMARTBOARD ROOM 124  SMARTBOARD ROOM 125  SMARTBOARD ROOM 130  SMARTBOARD ROOM 110  RCPT FREEZER PANTRY  SPARE  SPARE	2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32,3
OLTAGE (L HASES, W INIMUM B IAIN O.C. CKT NO 1 3 5 7 9 11 13 15 17 19 21 23 25,27 25,27 29,31 29,31 33 35	L-L): //RES: BUS CAPACITY (A): DEVICE (A):  DESCRIPTION  LIGHTING ROOM 113  LIGHTING ROOM 124  LIGHTING ROOM 121  LIGHTING ROOM 125  LIGHTING ROOM 127  LIGHTING ROOM 127  LIGHTING CORRIDOR 135,PANTRY,LAUNDRY, LOUNGE  SMARTBOARD ROOM 121  SMARTBOARD ROOM 121  SMARTBOARD ROOM 127  SMARTBOARD ROOM 127  SMARTBOARD ROOM 127  SMARTBOARD ROOM 127  SMARTBOARD ROOM 105  RCPT REFRIGERATOR PANTRY  RCPT MICROWAVE PANTRY  LIGHTING CANOPY  SPARE	208 3	POLE  1 1 1 1 1 1 1 1 1 2 2 2 1 1 1	418 353 669 180 900	A 317 216 180 0 900	PHASE LC  346  317  180  180  900	MOUNTING: AIC RATING NOTES: FED FROM: DADS (VA) B 339 317 180 0	(A): 353 245 180	M C 319 411 180 900	SURFACE 65000 O - POLE 1 1 1 1 1 1 1 1 1 1 1 1 1 2	20 20 20 20 20 20 20 20 20 20 20 20 20 2	LIGHTING ROOM 110  LIGHTING ROOM 105  LIGHTING ROOM 101 RECEPTION  LIGHTING ROOM 134  LIGHTING ROOM 132  LIGHTING ROOM 130 & MECHANICAL ROOM  SMARTBOARD ROOM 113  SMARTBOARD ROOM 124  SMARTBOARD ROOM 125  SMARTBOARD ROOM 130  SMARTBOARD ROOM 110  RCPT FREEZER PANTRY  SPARE  SPARE  SPARE  RCPT MICROWAVE PANTRY  PARKING LOT LIGHTING	2 4 6 8 10 12 14 16 18 20 22 24 26 30 32,3 32,3
OLTAGE (LEPHASES, WINIMUM BIAIN O.C.  CKT NO  1 3 5 7 9 11 13 15 17 19 21 23 25,27 25,27 29,31 29,31 33 35 37	L-L): //IRES: DEVICE (A):  DESCRIPTION  LIGHTING ROOM 113  LIGHTING ROOM 124  LIGHTING ROOM 121  LIGHTING ROOM 125  LIGHTING ROOM 125  LIGHTING ROOM 127  LIGHTING CORRIDOR 135,PANTRY,LAUNDRY, LOUNGE  SMARTBOARD ROOM 121  SMARTBOARD ROOM 121  SMARTBOARD ROOM 127  SMARTBOARD ROOM 127	208 3	POLE  1 1 1 1 1 1 1 1 1 2 2 2 2 1	418 353 669 180	A 317 216 180 180	PHASE LC  346  317  180  180  900	MOUNTING: AIC RATING NOTES: FED FROM: DADS (VA) B 339 317 180 0	(A):  353 245 180 635	M C 319 411 180 900 0	SURFACE 65000 O - POLE 1 1 1 1 1 1 1 1 1 1 1 1 1 2	20 20 20 20 20 20 20 20 20 20 20 20 20 2	LIGHTING ROOM 110  LIGHTING ROOM 105  LIGHTING ROOM 101 RECEPTION  LIGHTING ROOM 134  LIGHTING ROOM 132  LIGHTING ROOM 130 & MECHANICAL ROOM  SMARTBOARD ROOM 113  SMARTBOARD ROOM 124  SMARTBOARD ROOM 125  SMARTBOARD ROOM 130  SMARTBOARD ROOM 110  RCPT FREEZER PANTRY  SPARE  SPARE  SPARE  RCPT MICROWAVE PANTRY	2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32,3 32,3 36 38
OLTAGE (LETAGES) WINIMUM BIAIN O.C.  CKT NO  1 3 5 7 9 11 13 15 17 19 21 23 25,27 25,27 29,31 29,31 33 35 37 39	L-L): //IRES: BUS CAPACITY (A): DEVICE (A):  DESCRIPTION  LIGHTING ROOM 113  LIGHTING ROOM 124  LIGHTING ROOM 121  LIGHTING ROOM 125  LIGHTING ROOM 127  LIGHTING ROOM 127  LIGHTING CORRIDOR 135,PANTRY,LAUNDRY, LOUNGE  SMARTBOARD ROOM 121  SMARTBOARD ROOM 121  SMARTBOARD ROOM 127  SMARTBOARD ROOM 127  SMARTBOARD ROOM 127  SMARTBOARD ROOM 105  RCPT REFRIGERATOR PANTRY  RCPT MICROWAVE PANTRY  LIGHTING CANOPY  SPARE  MAIN ENTRANCE SIGNAGE	208 3	POLE  1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	418 353 669 180 900	A 317 216 180 0 900 0	PHASE LC  346  317  180  180  900  168  500	MOUNTING: AIC RATING NOTES: FED FROM: DADS (VA) B 339 317 180 0 900	(A):  353 245 180 635 900 0	M C 319 411 180 900 0	SURFACE 65000 O - POLE 1 1 1 1 1 1 1 1 1 1 1 1 1 2 2 1 1 1	AMPS 20 20 20 20 20 20 20 20 20 20 20 20 20	LIGHTING ROOM 110  LIGHTING ROOM 105  LIGHTING ROOM 101 RECEPTION  LIGHTING ROOM 134  LIGHTING ROOM 132  LIGHTING ROOM 130 & MECHANICAL ROOM  SMARTBOARD ROOM 113  SMARTBOARD ROOM 124  SMARTBOARD ROOM 125  SMARTBOARD ROOM 130  SMARTBOARD ROOM 110  RCPT FREEZER PANTRY  SPARE  SPARE  SPARE  RCPT MICROWAVE PANTRY  PARKING LOT LIGHTING  SPARE	2 4 6 8 10 12 14 16 18 20 22 24 26 32,3 32,3 32,3 36 32,3
OLTAGE (LOCATION OF COLTAGE) CHASES, WINIMUM BIMAIN O.C.  CKT NO  1 3 5 7 9 11 13 15 17 19 21 23 25,27 25,27 29,31 29,31 33 35 37 39	IL-L):  VIRES:  BUS CAPACITY (A):  DEVICE (A):  DESCRIPTION  LIGHTING ROOM 113  LIGHTING ROOM 118  LIGHTING ROOM 124  LIGHTING ROOM 121  LIGHTING ROOM 125  LIGHTING ROOM 127  LIGHTING CORRIDOR 135,PANTRY,LAUNDRY, LOUNGE  SMARTBOARD ROOM 121  SMARTBOARD ROOM 121  SMARTBOARD ROOM 127  SMARTBOARD ROOM 127  SMARTBOARD ROOM 127  SMARTBOARD ROOM 105  RCPT REFRIGERATOR PANTRY  RCPT MICROWAVE PANTRY  LIGHTING CANOPY  SPARE  MAIN ENTRANCE SIGNAGE  MONUMENT SIGN LIGHTS	208 3	POLE  1 1 1 1 1 1 1 1 1 2 2 2 1 1 1 1 1 1	418 353 669 180 900 450	A 317 216 180 0 900 0	PHASE LC  346  317  180  180  900  168  500  CTED LOAD	MOUNTING: AIC RATING NOTES: FED FROM: DADS (VA) B 339 317 180 0 900	(A):  353  245  180  635  900  0  ALS (VA)	M C C 319 411 180 900 0	SURFACE 65000 O - POLE 1 1 1 1 1 1 1 1 1 1 1 1 1 2 2 1 1 1	AMPS 20 20 20 20 20 20 20 20 20 20 20 20 20	LIGHTING ROOM 110  LIGHTING ROOM 105  LIGHTING ROOM 101 RECEPTION  LIGHTING ROOM 134  LIGHTING ROOM 132  LIGHTING ROOM 130 & MECHANICAL ROOM  SMARTBOARD ROOM 113  SMARTBOARD ROOM 124  SMARTBOARD ROOM 125  SMARTBOARD ROOM 130  SMARTBOARD ROOM 110  RCPT FREEZER PANTRY  SPARE  SPARE  SPARE  RCPT MICROWAVE PANTRY  PARKING LOT LIGHTING  SPARE  LIGHTING EXTERIOR WALL PACKS	2 4 6 8 10 12 14 16 18 20 22 24 26 32,3 32,3 32,3 36 36 40
OLTAGE (LOPHASES, WINIMUM BIMAIN O.C.  CKT NO  1 3 5 7 9 11 13 15 17 19 21 23 25,27 25,27 29,31 29,31 33 35 37 39	IL-L):  VIRES:  BUS CAPACITY (A):  DEVICE (A):  DESCRIPTION  LIGHTING ROOM 113  LIGHTING ROOM 118  LIGHTING ROOM 124  LIGHTING ROOM 121  LIGHTING ROOM 125  LIGHTING ROOM 127  LIGHTING CORRIDOR 135,PANTRY,LAUNDRY, LOUNGE  SMARTBOARD ROOM 121  SMARTBOARD ROOM 121  SMARTBOARD ROOM 127  SMARTBOARD ROOM 127  SMARTBOARD ROOM 127  SMARTBOARD ROOM 105  RCPT REFRIGERATOR PANTRY  RCPT MICROWAVE PANTRY  LIGHTING CANOPY  SPARE  MAIN ENTRANCE SIGNAGE  MONUMENT SIGN LIGHTS	208 3	POLE  1 1 1 1 1 1 1 1 1 2 2 2 1 1 1 1 1 1	418 353 669 180 900 450	A 317 216 180 0 0 CONNEC	PHASE LC  346  317  180  180  900  168  500  CTED LOAD	MOUNTING: AIC RATING NOTES: FED FROM: DADS (VA) B 339 317 180 0 900 0 PHASE TOTA	(A):  353  245  180  635  900  0  ALS (VA)	M C 319 411 180 900 0 1200 0	SURFACE 65000 O - POLE 1 1 1 1 1 1 1 1 1 1 1 1 1 2 2 1 1 1	AMPS 20 20 20 20 20 20 20 20 20 20 20 20 20	LIGHTING ROOM 110  LIGHTING ROOM 105  LIGHTING ROOM 101 RECEPTION  LIGHTING ROOM 134  LIGHTING ROOM 132  LIGHTING ROOM 130 & MECHANICAL ROOM  SMARTBOARD ROOM 113  SMARTBOARD ROOM 124  SMARTBOARD ROOM 125  SMARTBOARD ROOM 130  SMARTBOARD ROOM 110  RCPT FREEZER PANTRY  SPARE  SPARE  SPARE  RCPT MICROWAVE PANTRY  PARKING LOT LIGHTING  SPARE  LIGHTING EXTERIOR WALL PACKS  SPARE	2 4 6 8 10 12 14 16 18 20 22 24 26 32,3 32,3 36 38 40
OLTAGE (LOCATION OF COLTAGE) CHASES, WINIMUM BIMAIN O.C.  CKT NO  1 3 5 7 9 11 13 15 17 19 21 23 25,27 25,27 29,31 29,31 33 35 37 39	L-L):  IRES:  US CAPACITY (A):  DEVICE (A):  DESCRIPTION  LIGHTING ROOM 113  LIGHTING ROOM 118  LIGHTING ROOM 124  LIGHTING ROOM 125  LIGHTING ROOM 125  LIGHTING ROOM 127  LIGHTING CORRIDOR 135,PANTRY,LAUNDRY, LOUNGE  SMARTBOARD ROOM 121  SMARTBOARD ROOM 127  SMARTBOARD ROOM 127  SMARTBOARD ROOM 105  RCPT REFRIGERATOR PANTRY  RCPT MICROWAVE P	208 3	POLE  1 1 1 1 1 1 1 1 1 2 2 2 1 1 1 1 1 1	418  418  353  669  180  900  900  450  CONNEC (K	A 317  216  180  0  900  CONNEC	PHASE LC  346  317  180  180  900  168  500  CTED LOAD  45	MOUNTING: AIC RATING NOTES: FED FROM: DADS (VA) B 339 317 180 0 900 0 PHASE TOTA 507	(A):  353  245  180  635  900  0  ALS (VA)	M C 319 411 180 900 0 1200 0 5323	SURFACE 65000 O - POLE 1 1 1 1 1 1 1 1 1 1 1 1 1 2 2 1 1 1	AMPS 20 20 20 20 20 20 20 20 20 20 20 20 20	LIGHTING ROOM 110  LIGHTING ROOM 105  LIGHTING ROOM 101 RECEPTION  LIGHTING ROOM 134  LIGHTING ROOM 132  LIGHTING ROOM 130 & MECHANICAL ROOM  SMARTBOARD ROOM 113  SMARTBOARD ROOM 124  SMARTBOARD ROOM 125  SMARTBOARD ROOM 130  SMARTBOARD ROOM 110  RCPT FREEZER PANTRY  SPARE  SPARE  SPARE  RCPT MICROWAVE PANTRY  RCPT MICROWAVE PANTRY  PARKING LOT LIGHTING  SPARE  LIGHTING EXTERIOR WALL PACKS  SPARE  DEMAND LOAD 17.2 KVA  SPARE CAPACITY 27.8 KVA	2 4 6 8 10 12 14 16 18 20 22 24 26 32,3 32,3 32,3 36 36 40
OLTAGE (LOPHASES, WINIMUM BIMAIN O.C.  CKT NO  1 3 5 7 9 11 13 15 17 19 21 23 25,27 25,27 29,31 29,31 33 35 37 39	L-L):  //IRES:  //IRE	208 3	POLE  1 1 1 1 1 1 1 1 1 2 2 2 1 1 1 1 1 1	418 353 669 180 900 900 450 CONNECT (K	A 317  216  180  180  0  CONNEC 663  TED LOAD VA) 8.4	PHASE LC  346  317  180  180  900  168  500  CTED LOAD  45  DEMAND 1.0	MOUNTING: AIC RATING NOTES: FED FROM: DADS (VA) B 339 317 180 0 900 0 PHASE TOTA 507  FACTOR 00	(A):  353  245  180  635  900  0  ALS (VA)	M C 319 411 180 900 0 1200 0 5323 LOAD (KVA) 8.4	SURFACE 65000 O - POLE 1 1 1 1 1 1 1 1 1 1 1 1 1 2 2 1 1 1 1	AMPS 20 20 20 20 20 20 20 20 20 20 20 20 20	LIGHTING ROOM 110  LIGHTING ROOM 105  LIGHTING ROOM 101 RECEPTION  LIGHTING ROOM 134  LIGHTING ROOM 132  LIGHTING ROOM 130 & MECHANICAL ROOM  SMARTBOARD ROOM 113  SMARTBOARD ROOM 124  SMARTBOARD ROOM 125  SMARTBOARD ROOM 130  SMARTBOARD ROOM 110  RCPT FREEZER PANTRY  SPARE  SPARE  SPARE  RCPT MICROWAVE PANTRY  RCPT MICROWAVE PANTRY  PARKING LOT LIGHTING  SPARE  LIGHTING EXTERIOR WALL PACKS  SPARE  DEMAND LOAD 17.2 KVA  SPARE CAPACITY 27.8 KVA  SPARE CAPACITY 77.2 AMPS	2 4 6 8 10 12 14 16 18 20 22 24 26 32,3 32,3 32,3 36 32,3
OLTAGE (LOPHASES, WINIMUM BIMAIN O.C.  CKT NO  1 3 5 7 9 11 13 15 17 19 21 23 25,27 25,27 29,31 29,31 33 35 37 39	L-L):  VIRES:  VIS CAPACITY (A):  DEVICE (A):  DESCRIPTION  LIGHTING ROOM 113  LIGHTING ROOM 124  LIGHTING ROOM 125  LIGHTING ROOM 125  LIGHTING ROOM 127  LIGHTING ROOM 127  LIGHTING CORRIDOR  135,PANTRY,LAUNDRY, LOUNGE  SMARTBOARD ROOM 121  SMARTBOARD ROOM 121  SMARTBOARD ROOM 127  SMARTBOARD ROOM 127  SMARTBOARD ROOM 127  SMARTBOARD ROOM 105  RCPT REFRIGERATOR PANTRY  RCPT MICROWAVE PANTRY  LIGHTING CANOPY  SPARE  MAIN ENTRANCE SIGNAGE  MONUMENT SIGN LIGHTS  SPARE  Noncontinuous Load  Lighting — Exterior	208 3	POLE  1 1 1 1 1 1 1 1 1 2 2 2 1 1 1 1 1 1	418 353 669 180 900 900 450 CONNEC	A 317  A 317  A 180  A 180  CONNECT  663  TED LOAD  VA)  8.4  4.8  2.1	PHASE LC	MOUNTING: AIC RATING NOTES: FED FROM: DADS (VA) B 339  317  180  0  900  PHASE TOTA 507  FACTOR 00 25 25	(A):  353  245  180  635  900  0  ALS (VA)	M C 319 411 180 900 0 1200 0 5323 LOAD (KVA) 8.4 6.0 2.7	SURFACE 65000 O - POLE 1 1 1 1 1 1 1 1 1 1 1 1 1 2 2 1 1 1 1	AMPS 20 20 20 20 20 20 20 20 20 20 20 20 20	LIGHTING ROOM 110  LIGHTING ROOM 105  LIGHTING ROOM 101 RECEPTION  LIGHTING ROOM 134  LIGHTING ROOM 132  LIGHTING ROOM 130 & MECHANICAL ROOM  SMARTBOARD ROOM 113  SMARTBOARD ROOM 124  SMARTBOARD ROOM 125  SMARTBOARD ROOM 130  SMARTBOARD ROOM 130  SMARTBOARD ROOM 110  RCPT FREEZER PANTRY  SPARE  SPARE  SPARE  RCPT MICROWAVE PANTRY  RCPT MICROWAVE PANTRY  PARKING LOT LIGHTING  SPARE  LIGHTING EXTERIOR WALL PACKS  SPARE  DEMAND LOAD 17.2 KVA  SPARE CAPACITY 27.8 KVA  SPARE CAPACITY 77.2 AMPS  SPARE CAPACITY 77.2 AMPS  SPARE CAPACITY 77.2 AMPS  SPARE CAPACITY 62 %  PHASE BALANCE	2 4 6 8 10 12 14 16 18 20 22 24 26 32,3 32,3 32,3 36 32,3
OLTAGE (LEPHASES, WINIMUM BIMAIN O.C.  CKT NO  1 3 5 7 9 11 13 15 17 19 21 23 25,27 25,27 29,31 29,31 33 35 37 39	L-L):  //IRES:	208 3	POLE  1 1 1 1 1 1 1 1 1 2 2 2 1 1 1 1 1 1	418 353 669 180 900 900 450 CONNEC	A 317  A 317  180  180  0  CONNEC	PHASE LC	MOUNTING: AIC RATING NOTES: FED FROM: DADS (VA) B 339 317 180 0 900 0 PHASE TOTA 507  FACTOR 00 25	(A):  353  245  180  635  900  0  ALS (VA)	M C 319 411 180 900 0 1200 0 5323 LOAD (KVA) 8.4 6.0	SURFACE 65000 O - POLE 1 1 1 1 1 1 1 1 1 1 1 1 1 2 2 1 1 1 1	AMPS 20 20 20 20 20 20 20 20 20 20 20 20 20	LIGHTING ROOM 110  LIGHTING ROOM 105  LIGHTING ROOM 101 RECEPTION  LIGHTING ROOM 134  LIGHTING ROOM 132  LIGHTING ROOM 130 & MECHANICAL ROOM  SMARTBOARD ROOM 113  SMARTBOARD ROOM 124  SMARTBOARD ROOM 125  SMARTBOARD ROOM 130  SMARTBOARD ROOM 110  RCPT FREEZER PANTRY  SPARE  SPARE  SPARE  RCPT MICROWAVE PANTRY  PARKING LOT LIGHTING  SPARE  LIGHTING EXTERIOR WALL PACKS  SPARE  DEMAND LOAD  17.2 KVA  SPARE CAPACITY  77.2 AMPS  SPARE CAPACITY  SPARE CAPACITY  77.2 AMPS	CKT  2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32,3 32,3 36 38 40 42

1. CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING THE CONTRACTOR'S BEST SKILL AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCTION MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB SITE SAFETY

2. GC MUST PROVIDE & INSTALL ALL PRODUCTS PER PLANS. ONLY SUBSTITUTED PRODUCTS NEED TO BE SUBMITTED TO THE ARCHITECT FOR APPROVAL. UNAPPROVED SUBSTITUTIONS WILL BE REPLACED AT THE EXPENSE OF THE GC.

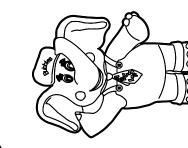
3. VERBAL REPRESENTATION HAS NO VALUE AND ALL REQUESTS TO CHANGE ANY PRODUCTS OR SPECIFICATIONS PER PLANS, <u>MUST</u> BE SUBMITTED IN WRITING TO THE ARCHITECT & TLE FOR APPROVAL.



**42 OKNER PARKWAY** LIVINGSTON, NEW JERSEY 07039 TEL: 973-994-9669 FAX: 973-994-4069 www.jarmelkizel.com

> Architecture Engineering Interior Design Implementation Services





NO. DATE DESCRIPTION

1 06-02-23 FOR TLE REV

3	08-14-23	PER TLE AND CODE COMMENTS	MB
		REVISION	
NO.	DATE	DESCRIPTION	INT

ISSUE

FOR TLE REVIEW FOR PERMIT

INT.

PROFESSIONAL CERTIFICATION MATTHEW B. JARMEL, AIA, MBA LICENSE NUMBER: A2017014316

Project Number: TLEMO22-164	Scale: AS NOTED
Drawn By:	Approved By: MBJ
Drawing Name:	0

**ELECTRICAL PANEL** SCHEDULES



ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCTION MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB SITE SAFETY

2. GC MUST PROVIDE & INSTALL ALL PRODUCTS PER PLANS. ONLY SUBSTITUTED PRODUCTS NEED TO BE SUBMITTED TO THE ARCHITECT FOR APPROVAL. UNAPPROVED SUBSTITUTIONS WILL BE REPLACED A THE EXPENSE OF THE GC.

1. CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING THE CONTRACTOR'S BEST SKILL AND

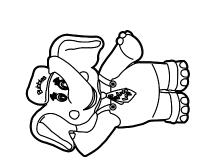
3. VERBAL REPRESENTATION HAS NO VALUE AND ALL REQUESTS TO CHANGE ANY PRODUCTS OR SPECIFICATIONS PER PLANS, MUST BE SUBMITTED IN WRITING TO THE ARCHITECT & TLE FOR APPROVAL. ARCHITECTS AND ENGINEERS INC.

**42 OKNER PARKWAY** LIVINGSTON, NEW JERSEY 07039

> www.jarmelkizel.com Architecture Engineering Interior Design Implementation Services

TEL: 973-994-9669 FAX: 973-994-4069

ACADEMY OF ARLY EDUCATION



NO.	DATE	DESCRIPTION	INT
1	06-02-23	FOR TLE REVIEW	МВ
2	06-14-23	FOR PERMIT	МВ
3	08-14-23	PER TLE AND CODE COMMENTS	МВ
		REVISION	
NO.	DATE	DESCRIPTION	INT
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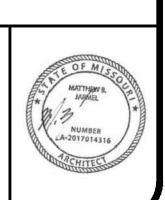
PROFESSIONAL CERTIFICATION

MATTHEW B. JARMEL, AIA, MBA LICENSE NUMBER: A2017014316

Project Number:	Scale:
TLEMO22-164	AS NOTED
Drawn By:	Approved By:
LN	MBJ

**ELECTRICAL SERVICE** RISER DIAGRAM

Drawing Name:



WHERE SHORT CIRCUIT RATINGS ARE NOT INDICATED, PROVIDE 65 KAIC MINIMUM. AS ACTUAL FEEDER ROUTING MAY VARY, THE SHORT CIRCUIT RATING OF ANY LOAD CENTER MAY BE REDUCED TO 42 KAIC IF THE FEEDER LENGTH FROM THE UTILITY TRANSFORMER TO THE LOAD CENTER EXCEEDS 70 FEET. CONTRACTOR TO OBTAIN INCOMING AIC FROM UTILITY COMPANY.

	EXTERIOR —	400			
(2) SETS OF 4 #350MCM, 3"C SCHEDULE 40 PVC, WITH A #2/0 BONDING CONDUCTOR. ADD (1) SPARE 3-1/2" SCHEDULE 40 PVC CONDUIT.  120/ 208V 600A DISC SW W/600A FUSES NEMA3R  REFER TO THE GROUNDING	CT CABINET SEE NOTES  NEMA3R  1ST FLOOR	PANEL 'MDP' 600A MCB 120/208V 3PH 4W SEE NOTES  ELECTRICAL CLOSET  PANEL 'L' 125  PANEL 'L' 125A MLO 120/208V 3PH 4W SEE NOTES  SEE NOTES  PANEL 'B' 400A MCD 120/208V 3PH 4W SEE NOTES  SEE NOTES			
DIAGRAM #1 ON DRAWINGS E-500 .  INCOMING SERVICE LOCATION OF FEEDERS AND CONDUITS SHALL BE APPROVED BY THE UTILITY COMPANY PRIOR TO PURCHASE & INSTALLATION  (2) SETS OF	4 #350MCM, 3"C SCHEDULE 40 PVC.	THE ELECTRIC UTILITY STRUCTURES SHOWN ARE FOR PERMIT APPLICATION PURPOSES ONLY AND DOES NOT CONSTITUTE THE FINAL DESIGN. COORDINATE WITH THE AUTHORITIES HAVING JURISDICTION AND THE UTILITY COMPANY FOR ACTUAL CONSTRUCTION PLANS, SPECIFICATIONS AND SERVICE CHARGES BASED ON LOCAL CODE REQUIREMENTS. CONTRACTOR SHALL COORDINATE INSTALLATION OF EQUIPMENT LOCATED IN MECHANICAL ROOM WITH ALL OTHER TRADES. ELECTRICAL EQUIPMENT LOCATION HAS PRIORITY OVER ANY OTHER TRADES EQUIPMENT.  1. THE SHORT CIRCUIT RATING FOR ALL EQUIPMENT AT THE MAIN SWTCHBOARD SHALL BE RATED FOR 65 KAIC. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN SUCH INFORMATION FROM THE LOCAL UTILITY COMPANY, PRIOR TO PURCHASE AND INSTALLATION.  2. THE SHORT CIRCUIT RATING FOR ALL PANELS THEREAFTER SHALL BE RATED BY THE CONTRACTOR BASED ON UTILITY COMPANY INFORMATION AND NATIONAL ELECTRICAL			

UTILITY, CABLE, LV, DATA FROM THE BUILDING

EXTERIOR ADJACENT TO THE ELECTRICAL

SERVICE EQUIPMENT TO THE MECHANICAL

ROOM. STUB UP ADJACENT TO PANEL MDP.

AND PULL STRINGS. CONDUITS SHALL

PROVIDE WEATHERPROOF REMOVABLE CAPS

PENETRATE FOUNDATION WALL IN A SLEEVE.

ADD (1) SPARE 3-1/2" SCHEDULE 40 PVC CONDUIT.

CONTRACTOR TO PROVIDE CONDUITS AND WIRING TO RUN FROM

UTILITY COMPANY TRANSFORMER TO SERVICE TERMINATION.

ELECTRICAL CONTRACTOR TO LIMIT BRANCH CIRCUIT VOLTAGE

DROPS TO 3% AT THE DESIGN LOAD AND TO 2% IN FEEDERS AT

DESIGN LOAD. REFER TO APPLICABLE VERSION OF THE N.E.C.

3. EQUIPMENT LOCATIONS AND MATERIALS SHALL BE APPROVED BY THE UTILITY COMPANY INSPECTOR AND THE ARCHITECT/ENGINEER PRIOR TO PURCHASE AND INSTALLATION.

ROOF

4. CONTRACTOR SHALL SUBMIT DRAWINGS AND SPECIFICATIONS FOR ALL EQUIPMENT(S), INCLUDING FUSE RATING KAIC, TO THE UTILITY COMPANY INSPECTOR AND THE ARCHITECT/ENGINEER FOR APPROVAL PRIOR TO PURCHASE AND INSTALLATION. THIS INFORMATION WILL BE PROVIDED TO AGENCY HAVING JURISTRICTION AFTER REVIEW.

5. INCOMING SERVICE EQUIPMENT SHOWN IS BASED ON THE SIEMENS CT CABINET LINE, AND SIEMENS TYPE 'P' PANELBOARDS. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DEVIATIONS, AND ANY ADDITIONAL WORK THAT MAY BE NECESSARY DUE TO SUBSTITUTE EQUIPMENT. SEE DRAWING E-100 FOR ADDITIONAL NOTES.

	COPPER WIRE			
TYPE NUMBER	WIRE SIZE & QUANTITIES	CONDUIT w/ NEUTRAL	CONDUIT w/o NEUTRAL	SERVICE GROUND
15	4#12, #12 GND	3/4"	3/4"	#8
20	4#12, #12 GND	3/4"	3/4"	#8
25	4#10, #10 GND	3/4"	3/4"	#8
30	4#10, #10 GND	3/4"	3/4"	#8
35	4#8, #10 GND	1"	1"	#8
40	4#8, #10 GND	1"	1"	#8
45	4#8, #10 GND	1"	1"	#8
50	4#8, #10 GND	1"	1"	#8
60	4#6, #10 GND	1"	1"	#8
70	4#4, #8 GND	1-1/4"	1"	#8
80	4#4, #8 GND	1-1/4"	1"	#8
90	4#3, #8 GND	1-1/4"	1"	#8
100	4#3, #8 GND	1-1/4"	1"	#8
110	4#2, #6 GND	1-1/2"	1-1/4"	#8
125	4#1, #6 GND	2"	1-1/2"	#6
150	4#1/0, #6 GND	2"	1-1/2"	#6
175	4#2/0, #6 GND	2"	2"	#4
200	4#3/0, #6 GND	2"	2"	#4
225	4#4/0, #4 GND	2-1/2"	2"	#2
250	4#250MCM, #4 GND	2-1/2"	2-1/2"	#2
300	4#350MCM, #4 GND	3"	2-1/2"	#2
350	4#500MCM, #3 GND	3"	3"	#1/0
400	4#600MCM, #3 GND	3-1/2"	3"	#1/0
450	(2 SETS) 4#4/0, #2 GND	2-1/2"	2"	#1/0
500	(2 SETS) 4#250MCM, #2 GND	2-1/2"	2-1/2"	#1/0
600	(2 SETS) 4#350MCM, #1 GND	3"	2-1/2"	#2/0
700	(2 SETS) 4#500MCM, #1/0 GND	3"	3"	#2/0
800	(2 SETS) 4#600MCM, #1/0 GND	3-1/2"	3-1/2"	#2/0
			1	

ALL FEEDERS ARE ASSUMED TO BE FOUR (4) CURRENT CARRYING CONDUCTORS

(3 PHASE CONDUCTORS AND 1 NEUTRAL) UNLESS OTHERWISE NOTED.

FEEDER SCHEDULE

1 INCOMING ELECTRICAL SERVICE & DISTRIBUTION SCALE: N.T.S.

#### **POWER PLAN SHEET NOTES:**

1. MOUNTING HEIGHTS AND LOCATIONS FOR WALL OUTLETS AS LISTED BELOW:

A. 44" FOR GENERAL ELECTRICAL RECEPTACLES @ -PANTRY STATIONS -ART COUNTERS -TOILET ROOMS (SEE A111 FOR PLACEMENT OF THE OUTLETS WITH THE TOILET LAYOUT.) -DIAPER CHANGING TABLES (CT) B. 18" PANTRY STATIONS FOR REFRIGERATORS. C. 76" PANTRY STATIONS FOR MICROWAVES. 27" FOR INFANT ROOM PANTRY STATION.

44" FOR STAFF LOUNGE PANTRY STATION. -VARIED HEIGHTS FOR PANTRY ROOM MICROWAVES. REFER TO THE DETAIL 2 ON DRAWING E-200 & DETAIL 4 ON DRAWING A-133.

NOTE; OUTLETS ABOVE COUNTERS IN THESE LOCATIONS, (PANTRY, DIAPER CHANGING TABLE AND ART COUNTER), TO BE INSTALLED HORIZONTALLY. REFER TO ARCHITECTURAL DRAWINGS 'A-43' FOR EXACT LOCATIONS.

2. CONTRACTOR SHALL COORDINATE INSTALLATION OF EQUIPMENT LOCATED IN MECHANICAL ROOM WITH ALL OTHER TRADES. ELECTRICAL EQUIPMENT LOCATION HAS PRIORITY OVER ANY OTHER TRADES EQUIPMENT.CONTRACTOR TO SEE REQUIRED PHONE/DATA VENDOR FOR INSTALLATION AND LOCATIONS OF EQUIPMENT.

3. SPECIAL PROTECTIVE COVERS FOR ELECTRICAL TAMPER RESISTANT UL RECEPTACLES SHALL BE INSTALLED IN ALL AREAS OCCUPIED BY CHILDREN.

4. PROVIDE GFI RECEPTACLES WHERE SHOWN AND AS REQUIRED BY CODE. ALL RECEPTACLES SHALL BE UL TAMPER RESISTANT. IF DISTANCE FROM THE SINK IS WITHIN 6' PROVIDE GFI RECEPTACLES AS PER NEC REQUIREMENTS.

5. SECURITY CAMERA SHOULD BE MOUNTED 6" BELOW AWNING LINE AND AT THE EXTREMITIES OF THE BUILDING SO THAT CAMERAS ON THE PLAYGROUND HAVE AN UNOBSTRUCTED VIEW. GENERAL CONTRACTOR TO COORDINATE WITH THE SECURITY VENDORS TO ENSURE VIEW IS UNOBSTRUCTED.

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ENLARGED PANTRY DETAIL

P-23

#### **POWER PLAN KEY NOTES:**

220V SINGLE PHASE GFI DEDICATED RECEPTACLES FOR MAIN PANTRY MICROWAVES. THE DEDICATED OUTLETS SHALL HAVE DEDICATED NEUTRALS. THE RECEPTACLES SHALL BE STACKED AT 30",48" & 66" ABOVE FINISHED FLOOR ALL 32" AWAY FROM THE SIDE WALL. REFER TO THE ARCHITECTURAL DRAWING A-133 FOR DETAILS.

CONTRACTOR SHALL FIELD COORDINATE CLEARANCES IN THIS AREA PRIOR TO EQUIPMENT LAYOUT AND INSTALLATION. AVOID DEDICATED SPACES ABOVE. REFER TO E-210 FOR ADDITIONAL INFORMATION.

(3) CONTRACTOR SHALL COORDINATE EXACT LOCATION & INSTALLATION OF CLOSED CIRCUIT TV SYSTEM WITH REQUIRED VENDOR. SEE DETAIL #7 & 8 ON A-135.

PROVIDE TWO DUPLEX RECEPTACLE, ONE (2) PORT DATA JACK RECEPTACLE AND EMPTY BOX WITH PULL CORD FOR CABLE (BY OTHERS) @96" AFF. SEE DETAIL #7 & 8

5 PROVIDE (1) DUPLEX RECEPTACLE, (1) DATA JACK @72" AFF AND EMPTY BOX FOR FLAT SCREEN TV WITH DRAG LINE FOR CABLE (BY REQUIRED VENDOR). VERIFY LOCATION WITH ARCHITECTURAL DRAWING.

6 COMPUTER TABLE (CT) DUPLEX RECEPTACLE AT 24" A.F.F.

PROVIDE DATA AND DUPLEX OUTLETS @ 36" AFF FOR SMART BOARD. COORDINATE LOCATION IN FIELD. REFER TO ELECTRICAL SYMBOLS ON E100 FOR MODEL NUMBER AND ARCHITECTURAL DRAWINGS TO CONFIRM MOUNTING HEIGHTS.

8 ROOF ACCESS/MAINTENANCE DOOR SHALL NOT BE BLOCKED BY ANY DUCT, PIPES, WIRES, CONDUITS OR OTHER FIXED ITEMS.

9 PROVIDE DATA LINES THROUGHOUT TLE IN CEILING LOCATIONS FOR WIRELESS INTERNET. VERIFY LOCATIONS AND HEIGHTS PRIOR TO PURCHASING AND INSTALLATION IN THE FIELD. PROVIDE 25' EXTRA LENGTH TO ENSURE SUFFICIENT COVERAGE. SEE REQUIRED PHONE/DATA VENDOR.

10) PROVIDE JUNCTION BOX IN THE RECEPTION AREA AND ALL PANELS AND EQUIPMENT NEEDED TO POWER ELECTRONIC EXIT DEVICES THROUGHOUT THE SCHOOL ABOVE THE CEILING. TIE INTO SECURITY SYSTEM FOR DOOR RELEASE UPON ALARM ACTIVATION. VERIFY LOCATIONS AND ELECTRICAL REQUIREMENTS PRIOR TO PURCHASING AND INSTALLATION IN THE FIELD. USE CIRCUIT FOR EXIT DEVICE INDICATED ON PANEL SCHEDULES.

PROVIDE KEY FOB DEVICE. COORDINATE W/ SECURITY SYSTEM VENDOR FOR INTEGRATION AND PROPER OPERATION OF KEY FOB.

REFER TO RISER DIAGRAM ON E-111 FOR ADDITIONAL INFORMATION.

PROVIDE VOICE CABLE FOR ALL CALL BOXES. FOR EXTERIOR CALL BOXES PROVIDE CONDUIT THROUGH EXTERIOR WALL. ALL SHALL BE MOUNTED AT 48" A.F.F.

NOT USED.

(15) CONTRACTOR SHALL PROVIDE DISCONNECT SWITCH AND/OR THERMAL CUT OFF SWITCH AS PER NATIONAL ELECTRICAL CODE FOR ALL EXHAUST FANS, UNIT HEATERS, SPACE HEATERS, WATER HEATERS, PUMPS, ETC. CONTRACTOR SHALL PROVIDE A STEP DOWN TRANSFORMER TO POWER 12V GLOBAL PLASMA TUBES. REFER TO PANEL SCHEDULES AND MECHANICAL DRAWINGS FOR CIRCUIT NUMBER FOR TRANSFORMER AND LOCATION OF PLASMA TUBES.

PROVIDE TWO 3/4"X3'X3' PLYWOOD BACKBOARD AROUND THE WALL. INSTALL BACKBOARD 3'+ ABOVE THE FINISHED FLOOR, ONE IS FOR SECURITY/FIRE PANELS AND THE OTHER FOR PHONE SYSTEM. PROVIDE ALL PANELS AND EQUIPMENT NEEDED TO POWER ELECTRONIC EXIT DEVICES AS PER DWG T500. TIE INTO SECURITY SYSTEM FOR DOOR RELEASE UPON FOR EXIT DEVICES. PLYWOOD SHALL BE TREATED WITH FIRE RESISTANT PAINT. INSTALLATION MUST COMPLY WITH ALL LOCAL CODE REQUIREMENTS

30"W X 36" DEEP ELECTRICAL WORKSPACE (TYP)

CONTROLLER & DISCONNECT FOR HWRP-1 (CIRCULATOR PUMP FOR EWH-1) SHALL BE BELL & GOSSET TIMER MODEL# "NBF-8S/LW". POWER CIRCULATOR PUMP HWRP-1 AND TIMECLOCK TC-1 FROM PANEL M AS SHOWN ON DRAWINGS.

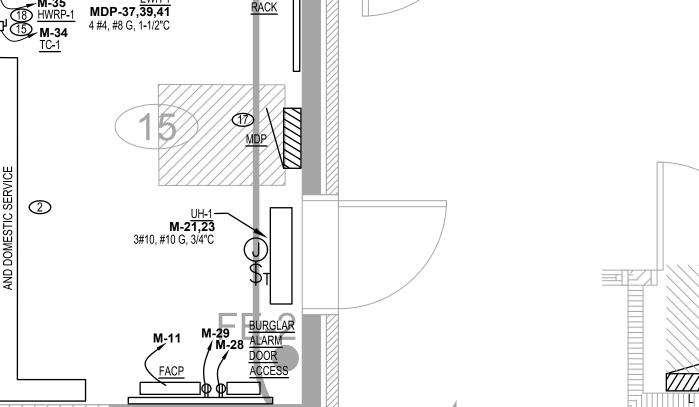
19 FEED OUTLET AND DATA/PHONE THROUGH CABINETRY FROM SIDE WALL. REFER TO ARCHITECTURAL DRAWING A-134 FOR DETAILS.

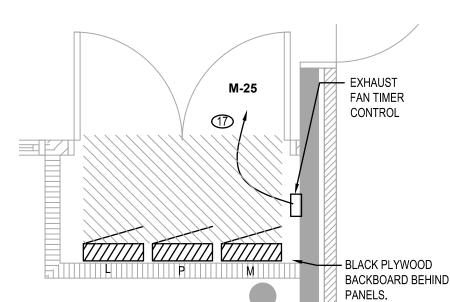
20 NOT USED

21) NOT USED

22 EMERGENCY BUTTON: HONEYWELL 269R - HARDWIRED HOLD UP SWITCH WITH PLASTIC COVER (TO BE PLACED AT RECEPTION DESK, OFFICE DESK AND EVERY CLASSROOM BATHROOM AT INTERIOR DOOR FRAME.

PROVIDE (2) GFI OUTLETS. COORDINATE WITH DRINKING FOUNTAIN SPECIFICATIONS,







ENLARGED ELEC. ROOM

I. CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING THE CONTRACTOR'S BEST SKILL AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCTIO MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB

SITE SAFETY

6

2. GC MUST PROVIDE & INSTALL ALL PRODUCTS PER PLANS. ONLY SUBSTITUTED PRODUCTS NEED TO BE SUBMITTED TO THE ARCHITECT FOR APPROVAL. UNAPPROVED SUBSTITUTIONS WILL BE REPLACED THE EXPENSE OF THE GC.

3. VERBAL REPRESENTATION HAS NO VALUE AND ALL REQUESTS TO CHANGE ANY PRODUCTS OR SPECIFICATIONS PER PLANS, MUST BE SUBMITTED IN WRITING TO THE ARCHITECT & TLE FOR APPROVAL.

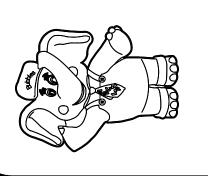


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> www.jarmelkizel.com Architecture Engineering Interior Design Implementation Services

FAX: 973-994-4069

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NO. DATE DESCRIPTION

2	06-14-23	FOR PERMIT	МВ
3	08-14-23	PER TLE AND CODE COMMENTS	МВ
REVISION			
NO.	DATE	DESCRIPTION	INT
1	08-10-23	PER TLE COMMENTS	MB

FOR TLE REVIEW

PROFESSIONAL CERTIFICATION **MATTHEW B. JARMEL, AIA, MBA** 

LICENSE NUMBER: A2017014316

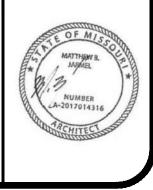
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Project Number:	Scale:	
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Drawn By:	Approved By:	
LN	MBJ	
rawing Name:		

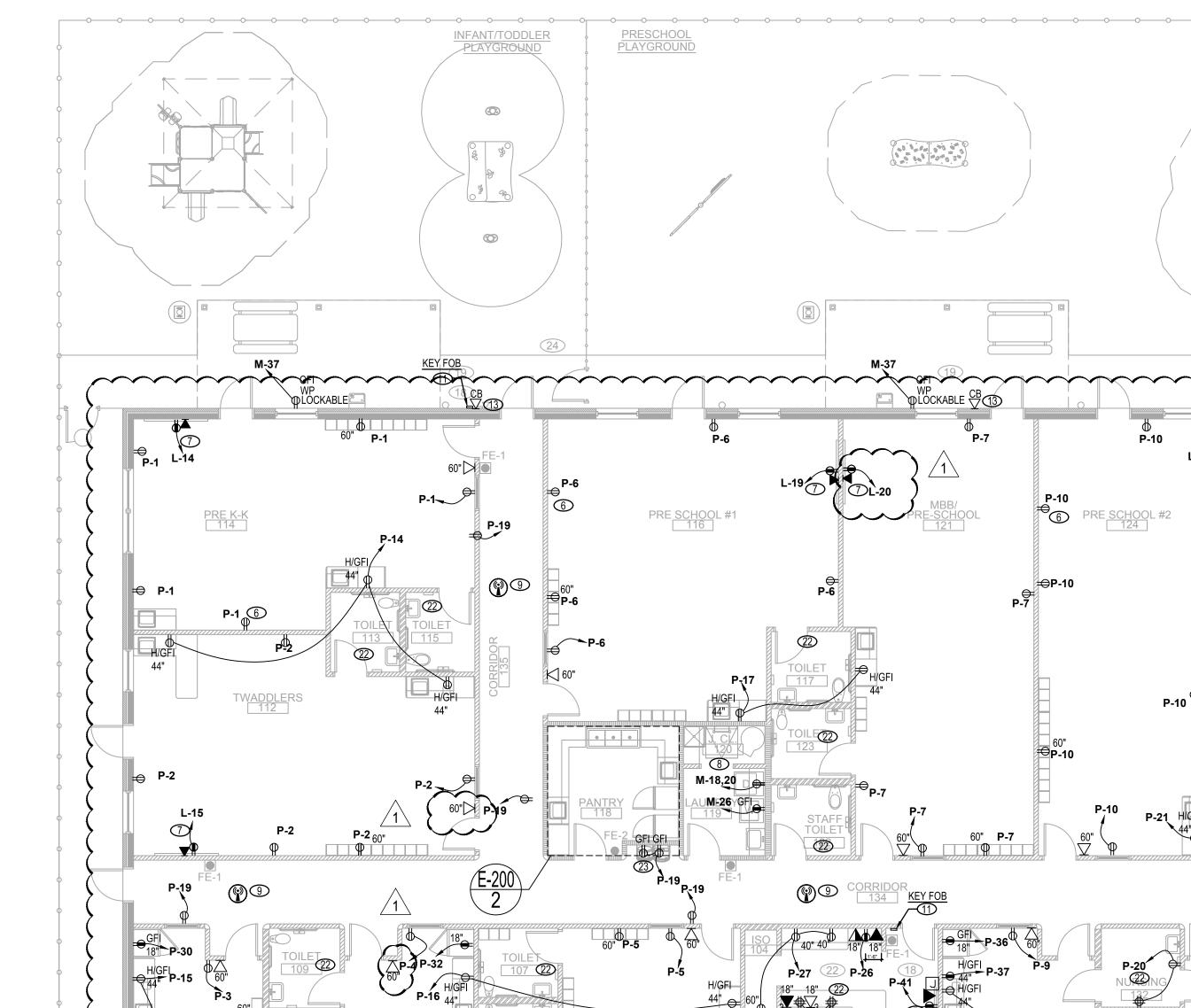
**ELECTRICAL POWER PLAN** 

600A DISC SWITCH

600A CT CABINET

E-200





**POWER PLAN** 

3 ENLARGED HVAC MECH ROOM PLAN

SCALE: 3/8" = 1'-0"

1. CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING THE CONTRACTOR'S BEST SKILL AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCTION MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB SITE SAFETY

2. GC MUST PROVIDE & INSTALL ALL PRODUCTS PER PLANS. ONLY SUBSTITUTED PRODUCTS PER PLANS. ONLY SUBSTITUTED PRODUCTS NEED TO BE SUBMITTED TO THE ARCHITECT FOR APPROVAL. UNAPPROVED SUBSTITUTIONS WILL BE REPLACED AT THE EXPENSE OF THE GC.

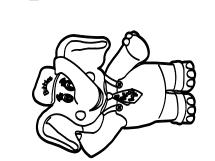
3. VERBAL REPRESENTATION HAS NO VALUE AND ALL REQUESTS TO CHANGE ANY PRODUCTS OR SPECIFICATIONS PER PLANS, MUST BE SUBMITTED IN WRITING TO THE ARCHITECT & TLE FOR APPROVAL.

# ARCHITECTS AND ENGINEERS INC.

42 OKNER PARKWAY LIVINGSTON, NEW JERSEY 07039 TEL: 973-994-9669 FAX: 973-994-4069 www.jarmelkizel.com

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PROFESSIONAL CERTIFICATION MATTHEW B. JARMEL, AIA, MBA

LICENSE NUMBER: A2017014316

Project Number: TLEMO22-164	Scale: AS NOTED
Drawn By: LN	Approved By

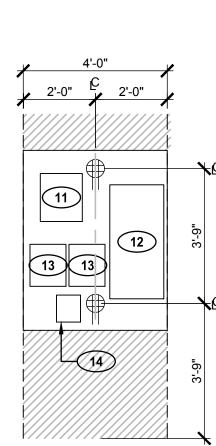
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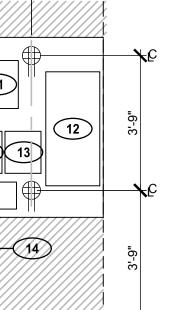
**MECHANICAL ROOM** LAYOUT

E-210

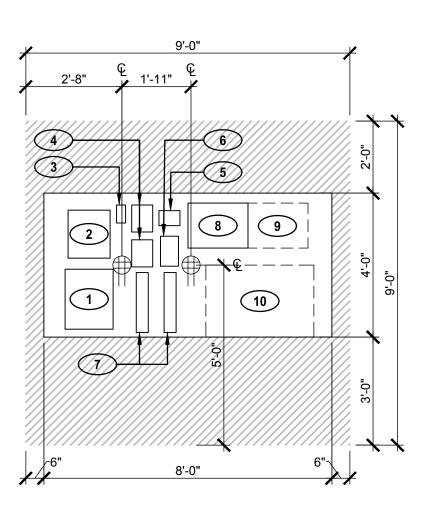
#### **SHEET NOTES:**

- 1. PROVIDE LIGHTING OUTLET AND 20A GFI RECEPTACLE AT 120V 1PH FOR SPACE THAT CONTAINS EQUIPMENT THAT MAY REQUIRE SERVICING , AS PER THE NATIONAL ELECTRICAL CODE 210.70(A)(3).
- 2. PROVIDE TWO 3/4" PLYWOOD BACKBOARD AROUND THE WALL. INSTALL BACKBOARD 3'+ ABOVE THE FINISHED FLOOR, ONE IS FOR SECURITY/FIRE PANELS AND THE OTHER FOR PHONE SYSTEM/ ISP. PROVIDE ALL PANELS AND EQUIPMENT NEEDED TO POWER ELECTRONIC EXIT DEVICES AS PER DWG T-500 . TIE INTO SECURITY SYSTEM FOR DOOR RELEASE UPON ALARM ACTIVATION. VERIFY LOCATIONS AND ELECTRICAL REQUIREMENTS PRIOR TO PURCHASING AND INSTALLATION IN THE FIELD. REFER TO PANEL SCHEDULES FOR CIRCUIT # FOR EXIT DEVICES.
- 3. 30"W X 36" DEEP ELECTRICAL WORKSPACE (TYP).
- 4. CONTRACTOR SHALL PROVIDE DISCONNECT SWITCH AND/OR THERMAL CUT OFF SWITCH AS PER NATIONAL ELECTRICAL CODE FOR ALL EXHAUST FANS, UNIT HEATERS, SPACE HEATERS, HOT WATER HEATERS, PUMPS, ETC.

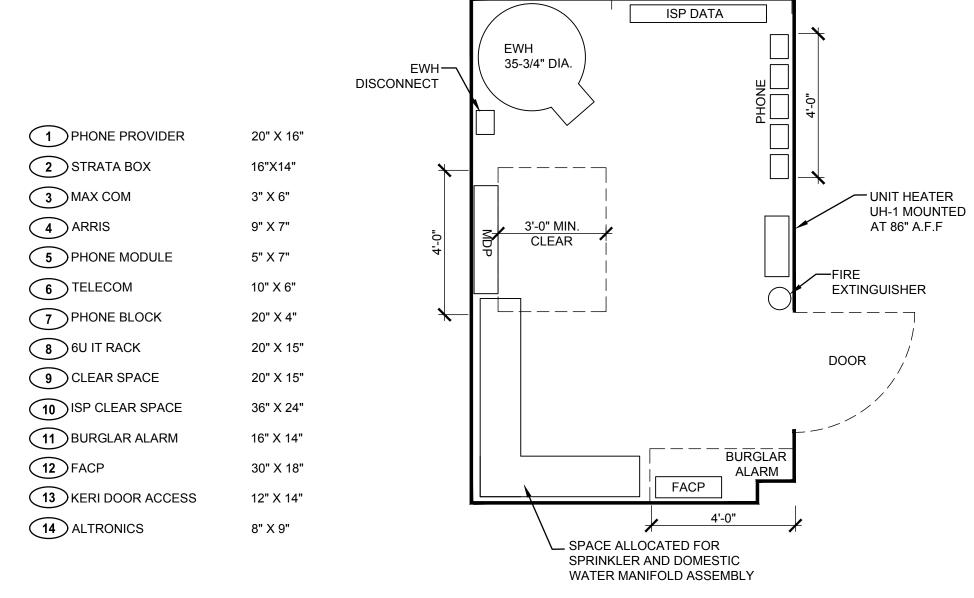








TYPICAL ISP/PHONE MOUNTING DIAGRAM.



THE LAYOUT ABOVE IS INTENDED TO DEMONSTRATE REQUIRED CLEARANCES ONLY. THE GC IS RESPONSIBLE FOR COORDINATING ALL TRADES TO ENSURE THAT REQUIRED CLEARANCES ARE MAINTAINED WITHIN THE MECHANICAL ROOM AS DIMENSIONED IN THE PROJECT-SPECIFIC FLOOR PLAN.



#### SHEET NOTES:

- 1. CONTRACTOR SHALL COORDINATE WITH OTHER TRADES FOR EXACT LOCATION OF MECHANICAL FIXTURES.
- 2. CONTRACTOR SHALL PROVIDE DISCONNECT SWITCH OR THERMAL SWITCHES AS PER NATIONAL ELECTRICAL CODE FOR ALL EXHAUST FANS, UNIT HEATERS, SPACE HEATERS, WATER HEATERS, PUMPS, ETC.
- 3. CONTROLLER & DISCONNECT FOR HWRP-1 (CIRCULATOR PUMP FOR EWH-1) SHALL BE BELL & GOSSET TIMER MODEL# "TC-1".

#### **KEY NOTES:**

ROOF ACCESS/MAINTENANCE DOOR SHALL NOT BE BLOCKED BY ANY DUCT, PIPES, WIRES, CONDUITS OR OTHER FIXED ITEMS.

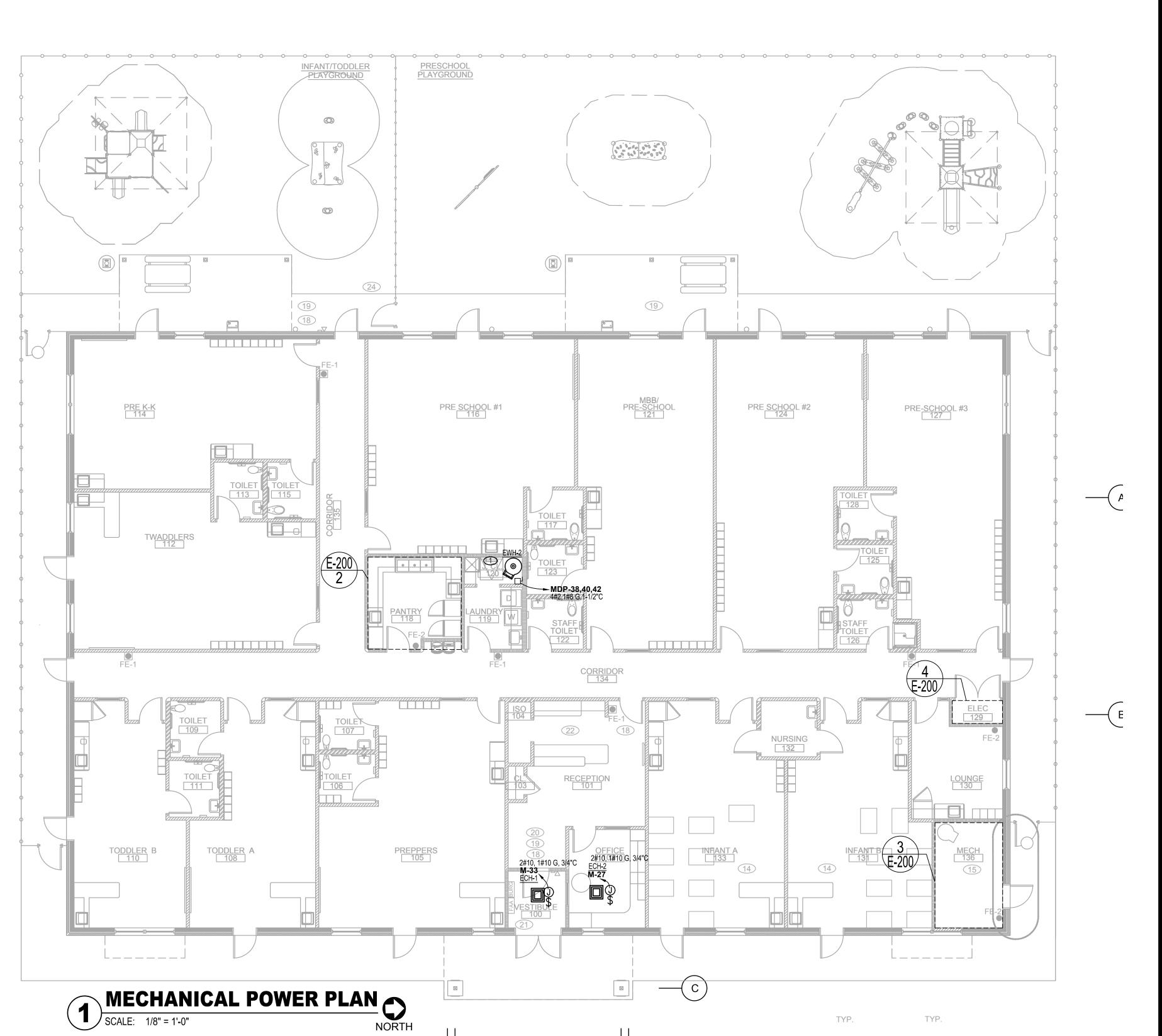
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2. GC MUST PROVIDE & INSTALL ALL PRODUCTS PER PLANS. <u>ONLY</u> SUBSTITUTED PRODUCTS NEED TO BE SUBMITTED TO THE ARCHITECT FOR APPROVAL. UNAPPROVED SUBSTITUTIONS WILL BE <u>REPLACED AT THE EXPENSE OF THE GC</u>.

3. VERBAL REPRESENTATION HAS NO VALUE AND ALL REQUESTS TO CHANGE ANY PRODUCTS OR SPECIFICATIONS PER PLANS, <u>MUST</u> BE SUBMITTED IN WRITING TO THE ARCHITECT & TLE FOR APPROVAL.



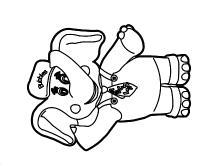
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(7.1)(7.2)

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PROFESSIONAL CERTIFICATION

MATTHEW B. JARMEL, AIA, MBA LICENSE NUMBER: A2017014316

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	Project Number:	Scale:
	TLEMO22-164	AS NOTED
	Drawn By:	Approved By:
	LN	MBJ

**MECHANICAL POWER PLAN** 

TYP.

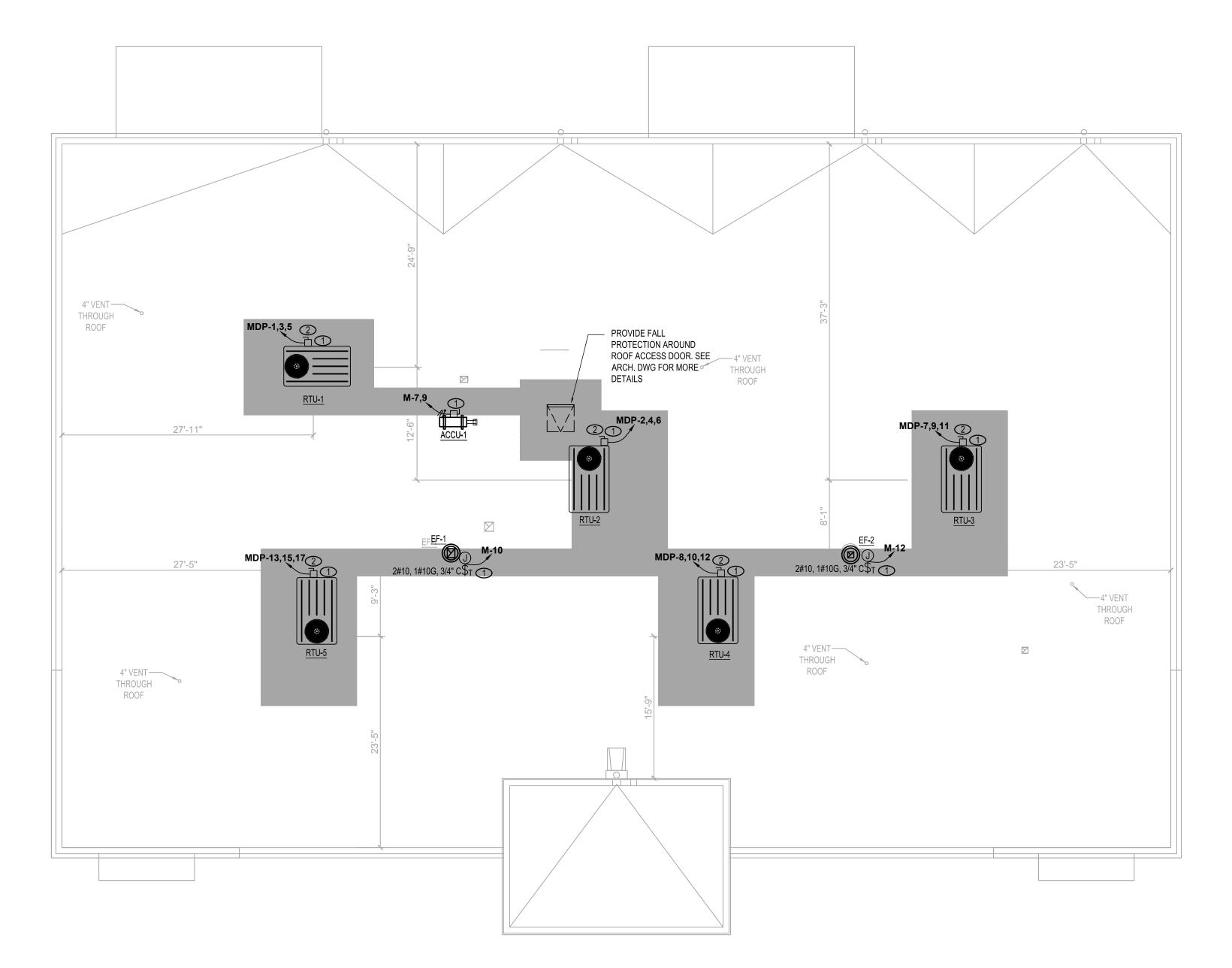


### **SHEET NOTES:**

- 1. CONTRACTOR SHALL COORDINATE WITH OTHER TRADES FOR EXACT LOCATION OF MECHANICAL FIXTURES.
- ROOF ACCESS/MAINTENANCE DOOR SHALL NOT BE BLOCKED BY ANY DUCT, PIPES, WIRES, CONDUITS OR OTHER FIXED ITEMS.

### **KEY NOTES:**

- CONTRACTOR SHALL PROVIDE DISCONNECT SWITCH AS PER CODE FOR ALL RTUS, AIR HANDLING UNITS, ACCUS, ETC. AS PER NATIONAL ELECTRICAL CODE.
- PROVIDE 120V 1PH POWER TO FACTORY INSTALLED WEATHER-PROOF GFI RECEPTACLE ON THE ROOF TOP UNITS FROM FROM PANEL "MDP" REFER TO THE PANEL SCHEDULE FOR CIRCUIT DETAILS. ILLUMINATION IS PROVIDED WITH A PLUG IN LIGHT BY THE HVAC TECHNICIAN AT THE TIME OF SERVICING POWERED FROM THE WEATHER-PROOF GFI RECEPTACLE. REFER TO THE PANEL SCHEDULE FOR DETAILS.





1. CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING THE CONTRACTOR'S BEST SKILL AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCTION MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB SITE SAFETY

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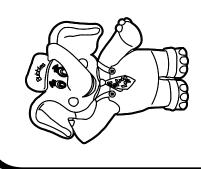
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42 OKNER PARKWAY
LIVINGSTON, NEW JERSEY 07039
TEL: 973-994-9669
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PROFESSIONAL CERTIFICATION

MATTHEW B. JARMEL, AIA, MBA LICENSE NUMBER: A2017014316

AS NOTED
Approved By: MBJ

Drawing Name

ELECTRICAL ROOF POWER PLAN

Drawing Number

E-230



		OLS SUBSTITUTIONS ARE NOT ALLOWED AT THE REQUEST OF THE TENANT.	817-929-8191				
		ELECTRICAL LIGHTING FIXTURE SCHED	OULE (AS STANDARD)				
TYPE	FIXTURE SYMBOL	DESCRIPTION	MANUFACTURER & CATALOG NUMBER	VOLTS			
А	а	2'X4' RECESSED LED LIGHT FIXTURE. TYPICAL FOR ALL 2X4 FIXTURES THROUGHOUT THE BUILDING, UNLESS OTHERWISE NOTED.	"SIGNIFY" 2SBP3550L8CS-4-UNV-DIM	120			
EM/NL	NL/EM	2'X4' RECESSED LED LIGHT FIXTURE, WITH INTEGRAL EMERGENCY BATTERY BACKUP.	"SIGNIFY" 2SBP3550L8CS-4-UNV-DIM-EM	120			
В	а	2'X2' RECESSED LED LIGHT FIXTURE. TYPICAL FOR ALL 2X2 FIXTURES THROUGHOUT THE BUILDING, UNLESS OTHERWISE NOTED.	"SIGNIFY" 2SBP3040L8CS-2-UNV-DIM	120			
EM/NL	NL/EM	2'X2' RECESSED LED LIGHT FIXTURE, WITH INTEGRAL EMERGENCY BATTERY BACKUP.	"SIGNIFY" 2SBP3040L8CS-2-UNV-DIM-EM	120			
G	-	8"Ø RECESSED DOWNLIGHT. SUITABLE FOR WET LOCATIONS. ORDER MOUNTING HARDWARE AS REQUIRED.	"WILLIAMS" 6DR-TL-L30-8-35-DIM-UNV-O-W-OF-WH-N-F1	120			
HE	NL/EM	EXTERIOR WALL PACK EGRESS LED FIXTURE WITH INTEGRATED BATTERY PACK. BATTERY SHALL PROVIDE A MINIMUM OF 90 MINUTES BACKUP POWER.	"WILLIAMS" VWP-V-L30-7-40-T3-FINISH-CGL-EM/4W-DIM-UNV	120			
K-48	WB	1'X4' LED LIGHT FIXTURE WITH PROTECTIVE WIRE CAGE. MOUNTED ABOVE THE DOOR FRAME. WB = WALL BRACKET .	"BEGHELLI" BS101LED-ECO-E-4-HT-HO-WT40-120/277	120			
K-48 EM	WB/EM	1'X4' LED LIGHT FIXTURE WITH PROTECTIVE WIRE CAGE. MOUNTED ABOVE THE DOOR FRAME. WB = WALL BRACKET - EMERGENCY BATTERY SHALL PROVIDE A MINIMUM OF 90 MINUTES STANDBY POWER. WIRE NIGHT LIGHTS AS PER DWG. E-300.	"BEGHELLI" BS101LED-ECO-E-4-SA-HO-WT40-120/277	120			
J	J	EXTERIOR GOOSENECK LIGHT FIXTURE.	"ANP" LEMM016D-D-W-40K-RTC-UNV-E6-SWL-41	120			
Р		WATERPROOF SPOT LIGHT FOR MONUMENT SIGN	"WINONA" LEM711-700KNL1-LSS1A-40K-MVOLT-DBT	120			
Х	<b>©</b>	BUILDING STANDARD CEILING MOUNTED ILLUMINATED EXIT SIGN WITH BATTERY BACKUP. USE OVERSIZED BATTERY IN LOCATIONS THAT SHALL HAVE REMOTE EMERGENCY LIGHTS CONNECTED. SHADING INDICATES ILLUMINATED FACE & ARROW INDICATES DIRECTION OF EGRESS. MOUNT ON UNDERSIDE OF SOFFIT WHERE REQUIRED FOR INTENDED VISIBILITY. BATTERY BACKUP SHALL PROVIDE A MINIMUM OF 90 MINUTES STANDBY POWER. ORDER MOUNTING HARDWARE.	"BEGHELLI" CRV-LG-1/2-M-S-W	120			
	VIVE HUB	LUTRON VIVE HUB	LUTRON CAT. NO. HJS-1-FM				
	$\mathbf{P}_{d,e}$	POWER PACK. SMALL LETTER DENOTES LIGHT ZONE.	LUTRON CAT. NO. RMJS-5R-DV-B				
	$\mathbb{C}_{c}$	CORRIDOR POWER PACK. SMALL LETTER DENOTES LIGHT ZONE.	LUTRON CAT. NO. RMJS-16R-DV-B				
	<b>\</b>	CEILING MOUNTED WIRELESS OCCUPANCY/VACANCY CEILING SENSOR	LUTRON CAT. NO. LRF2-OCR2B-P-WH				
	\$ <sup>a,b</sup>	LIGHTING SWITCH 4-BUTTON DUAL GROUP. SMALL CASE LETTERING INDICATES LIGHT ZONE.	LUTRON CAT. NO. PJ2-4B-GWH-L21				
	$D_{\text{g,h}}$	WALL MOUNTED DIMMABLE PASSIVE INFRARED SENSOR SWITCH SMALL CASE LETTERING INDICATES LIGHT ZONE.	LUTRON CAT. NO. MS-OPS6-DDV-WH				
	Р	WALL MOUNTED PASSIVE INFRARED SENSOR SWITCH.	LUTRON CAT. NO. MS-OPS2-WH				
	P2	WALL MOUNTED PASSIVE INFRARED SENSOR SWITCH.	LUTRON CAT. NO. MRF2S-8SS-WH				
	\$	LIGHTING SWITCH 2-BUTTON	LUTRON CAT. NO. PJ2-2B-GWH-L01				
	\$ <sup>or</sup>	CONTROL PANEL OVERRIDE SWITCH FOR RECEPTION AND CORRIDOR AREA. FOR AFTER HOURS USE.	VENDOR TO PROVIDE PART NUMBER OF THE SWITCH COMPATIBLE WITH THE LIGHTING PANEL.				
_	PS <sub>DLZ</sub>	CEILING MOUNTED PHOTOSENSOR DAYLIGHT HARVESTING ZONE ————————————————————————————————————	LUTRON CAT. NO. LRF2-DCRB-WH				
	\$	MANUAL LIGHT SWITCH	"LUTRON"- COMMERCIAL GRADE SWITCH-WHITE				
		NOTE: 1) WHITE TRIM FOR ALL FIXTURES. ALL LIGHTING FIXTURES SHALL HAVE LENS. B 2) MVOLT OR 120V ONLY. REFER TO E-111. 3) NL / NIGHT LIGHT SHALL BE WIRED AHEAD OF THE SWITCH. THE LIGHT SHALL 4) ALL EMERGENCY FIXTURES SHALL HAVE A MINIMUM 90 MINUTE BATTERY BAC 5) SMALL CASE LETTER DENOTES LIGHT ZONE.	BE ON AT ALL TIMES.				

	SITE LUMINAIRE SCHEDULE	FINAL SELECTIONS, POLE HEIGHTS AND QUANTITIES SHALL BE VERIFIED WITH APPROVED SITE LIGHTING SHOP DRAWINGS.
FIXTURE TYPE	FIXTURE DESCRIPTION	BASIS OF DESIGN
S1	POLE MOUNTED LED SITE LIGHT	"LSI" - PXSLM-3-24L-1-UNIVERSAL-40-4SQ20-AB

### **KEY NOTES:**

- MAIN ENTRANCE SIGNAGE AND ADDITIONAL SIGNAGE SHALL BE ON A LIGHT CONTROLLER. SEE DETAIL 3 ON SHEET E-500.
- ROOF ACCESS/MAINTENANCE DOOR SHALL NOT BE BLOCKED BY ANY DUCT, PIPES, WIRES, CONDUITS OR OTHER FIXED ITEMS.
- 3 OVERRIDE SWITCH TO CONTROL CORRIDOR LIGHTS.
- 4 EXTEND POWER TO MONUMENT SIGN AND PARKING LOT LIGHTS. PROVIDE ASTRONOMICAL TIME CLOCK FOR CONTROLS. FIELD VERIFY DISTANCES AND COORDINATE EXACT LOCATION. USE CIRCUIT # S INDICATED ON THE PANEL SCHEDULES.

### LIGHTING CONTROL NOTES:

- ALL SENSOR LOCATIONS ARE APPROXIMATE. REFER TO THE MANUFACTURER'S INSTALLATION INSTRUCTIONS PRIOR TO
- 2. IF ANY QUESTIONS ARISE REGARDING SENSOR PLACEMENT, CONTACT LIGHTING CONTRACTOR PRIOR TO INSTALLATION TO
- 3. IF PENDANT MOUNTED FIXTURES ARE PRESENT, LOCATION AND
- COVERAGE OF SENSORS SHOULD BE REVIEWED. CEILING MOUNTED SENSORS REQUIRE TO BE LOCATED NO
- MAXIMUM NUMBER OF SENSORS THAT CAN BE WIRED IN PARALLEL TO A SINGLE ROOM CONTROLLER OR POWER PACK,

DEPENDS ON SENSOR MODEL (SEE INDIVIDUAL SHEETS FOR MA

- CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF REQUIRED NUMBER OF POWER PACKS.
- 7. ONE POWER PACK IS REQUIRED FOR EACH CIRCUIT THAT IS TO BE CONTROLLED.
- POWER PACKS ARE SHOWN FOR ZONING PURPOSES ONLY. CONTRACTOR IS RESPONSIBLE FOR DETERMINING ACTUAL LOCATION AND CIRCUITING.
- POWER PACKS SHOULD BE MOUNTED AT LEAST 6-12 INCHES FROM ANY SENSOR.
- 10. LOCATIONS OF PHOTOCELLS (IF SHOWN) ARE DIAGRAMMATIC AND FOR QUANTITATIVE PURPOSES ONLY. ACTUAL MOUNTING LOCATIONS OF PHOTOCELLS SHOULD BE DETERMINED IN AN ONSITE PRE-INSTALLATION MEETING PRIOR TO ROUGHING IN
- 11. PER THE REQUIREMENTS OF THE ELECTRICAL CODE, AREAS LABELED AS "MECHANICAL" OR "ELECTRICAL" WHERE WORK MAY OCCUR ARE NOT TO BE CONTROLLED BY AUTOMATED LIGHTING CONTROLS ALONE.
- 12. TURN OFF ANY POWER AT THE CIRCUIT BREAKER BEFORE WIRING ANY PRODUCT

### **SHEET NOTES:**

- 1. CONTRACTOR SHALL COORDINATE WITH OTHER TRADES FOR EXACT LOCATION OF
- CONTROL DEVICE THAT INDEPENDENTLY CONTROLS THE GENERAL LIGHTING IN THE SPACE.
- OF LOCAL CODES.
- DETAIL 3 ON SHEET E-500.
- 6. LOCATE OCCUPANCY SENSOR WITH OVERRIDE WALL SWITCH AND OCCUPANCY SENSOR SWITCHES FOR OPTIMUM PERFORMANCE PER TLE INSTRUCTIONS. ADJUST SETTINGS FOR THE SWITCH TO BE SET FOR (SLEEPING MODE) IN THE CLASSROOMS. CONTRACTOR SHALL COORDINATE WITH VENDOR REPRESENTATIVE PRIOR TO PURCHASING AND INSTALLATION IN
- 7. THE LIGHTING IN THE BATHROOM MUST BE CONTROLLED AUTOMATICALLY. THE LIGHTS CAN COME ON WHEN SOMEONE ENTERS THE BATHROOM, THEN TURN OFF WHEN THAT PERSON LEAVES. HOWEVER, MOST IMPORTANTLY, WHEN THE POWER GOES OFF, THE EMERGENCY LIGHTS MUST COME ON AUTOMATICALLY. THESE LIGHTS SHALL NOT BE WIRED AS NIGHT
- 9. LIGHTING PACKAGE TO BE SOURCED FROM CED NATIONAL AND INCLUDES EXTERIOR SITE

### LIGHTING CONTROL TIMER NOTES:

1. INTERIOR LIGHTING TIMER SHOULD BE SET TO MONDAY - FRIDAY FROM 5:00 AM UNTIL 7:00 PM. 2. EXTERIOR LIGHTING TIMER SHOULD BE SET TO MONDAY - FRIDAY FROM 5:00 PM UNTIL 8:00 AM.

- MECHANICAL FIXTURES.
- 2. SEE APPROVED CIVIL PLAN FOR LOCATION OF PARKING LOT LIGHTING.
- 3. EACH SPACE THAT IS ENCLOSED BY CEILING-HEIGHT PARTITIONS MUST HAVE AT LEAST ONE
- 4. ALL EMERGENCY LIGHTING FIXTURES AND EXIT SIGNS SHALL BE WIRED TO THE UNSWITCHED LEG OF THE LOCAL LIGHTING CIRCUIT. EXTERIOR WALL PACK SHALL HAVE 90 MINUTE BATTERY BACKUP AND BE ABLE TO TURN ON AND OFF PER TLE SPECIFIED HOURS PER REQUIREMENTS
- 5. BUILDING WALL LIGHTING AND CANOPY LIGHTING SHALL BE ON A LIGHT CONTROLLER. SEE
- ORDER TO AVOID THE CONFLICT IN THE OPERATION OF THE MOTION SENSOR DEVICES.
- 8. LIGHTING TEMPERATURES IN THE ENTIRE BUILDING TO BE SET AT 4000K, BY MEANS OF AN INTEGRAL SLIDER ON THE LIGHTING FIXTURES. SETTING "NW" REFERS TO 4000K.
- LIGHTING AND LIGHTING GEAR.

**DESIGN BASED ON IECC-2018** 

### STAND ALONE ROOM - SEQUENCE OF OPERATION

- TOILET/FILE/SERVER AUTO-ON/OFF THROUGH WALL/SENSOR SWITCH.
- LOUNGE/CONFERENCE/OFFICE AUTO-ON/OFF THROUGH 0-10 DIMMING WALL/SENSOR SWITCH.
- CLASSROOMS/RECEPTION/STORAGE MANUAL-ON/AUTO-OFF THROUGH DIGITAL SWITCHES, ROOM CONTROLLERS AND VACANCY SENSORS. DAYLIGHTING AS SHOWN.
- CORRIDOR/LOBBY

INDICATES THE LOCAL SWITCH ZONE.

- AUTO-ON/OFF THROUGH CEILING SENSOR, ROOM CONTROLLER, AND LOCAL DIGITAL OVERRIDE SWITCH. ALL FIXTURES INDICATED WITH "NL" ARE UNSWITCHED AND SHALL OPERATE 24/7.
- NOTES ALL OCCUPANCY/VACANCY SENSORS SHALL TURN OFF RESPECTIVE LIGHTING FIXTURES 20 MIN AFTER VACANCY.
- AFTERHOUR OVERRIDE CONTROL SHALL HAVE A MAXIMUM OVERRIDE OF NO MORE THAN TWO HOURS PER ACTIVATION DURING SCHEDULED OFF CONFIRM THE EXACT DIMMING REQUIREMENTS OF EACH PURCHASED
- ROOM CONTROLLER. COMPATIBILITY MUST BE VERIFIED. LOWER CASE LETTER (EXAMPLE "A") LOCATED NEXT TO LIGHTING FIXTURE

LIGHTING FIXTURE, PRIOR TO ORDERING THE CORRESPONDING DIMMING

NOTES - CON'T

WHERE REQUIRED LIGHTS SHALL BE CONTROLLED BY THE DAYLIGHT SENSORS AND AUTOMATICALLY BRIGHTEN AND DIM TO MAINTAIN THE REQUIRED LIGHT LEVEL IN THE SPACE. WHERE REQUIRED LIGHTS SHALL BE CONTROLLED BY THE DAYLIGHT SENSORS AND AUTOMATICALLY BRIGHTEN AND DIM TO MAINTAIN THE REQUIRED LIGHT LEVEL IN THE SPACE. ALL ENGRAVING OF SWITCHES SHALL BE COORDINATED WITH THE OWNER PRIOR TO ORDERING.

SITE SAFETY

THE EXPENSE OF THE GC.

I. CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING THE CONTRACTOR'S BEST SKILL AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY

RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCTION

MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB

2. GC MUST PROVIDE & INSTALL ALL PRODUCTS PER

PLANS. ONLY SUBSTITUTED PRODUCTS NEED TO B

UNAPPROVED SUBSTITUTIONS WILL BE REPLACED

3. VERBAL REPRESENTATION HAS NO VALUE AND AL

SPECIFICATIONS PER PLANS, MUST BE SUBMITTED IN WRITING TO THE ARCHITECT & TLE FOR APPROVAL

SUBMITTED TO THE ARCHITECT FOR APPROVAL.

REQUESTS TO CHANGE ANY PRODUCTS OR

**AUTOMATIC RECEPTION CONTROLS:** 

WHERE REQUIRED AT LEAST 50% OF RECEPTACLES AND 25% OF FEEDERS TO MODULAR FURNITURE SHALL AUTO OFF BY EITHER: TIME SCHEDULE, OCCUPANCY SENOR WITH 20 MIN. OFF DELAY OR AUTOMATED SIGNAL THAT SHALL AUTO OFF RECEPTACLES WITHIN 20 MIN.

### **EMERGENCY NOTES**

ALL FIXTURES INDICATED WITH "EM" SHALL HAVE AN INTEGRAL EMERGENCY BATTERY BRIGHTNESS DURING EMERGENCY OPERATION. ALL FIXTURES INDICATED WITH "NL"

Interior Design Implementation Services

ARCHITECTS AND ENGINEERS INC

**42 OKNER PARKWAY** 

LIVINGSTON, NEW JERSEY 07039

TEL: 973-994-9669

FAX: 973-994-4069

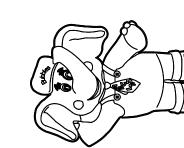
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Architecture

Engineering

AND BE INTERNALLY WIRED TO BYPASS LOCAL CONTROL, BRINGING FIXTURE TO FULL SHALL HAVE AN INTEGRAL EMERGENCY BATTERY AND BE UNSWITCHED NIGHT LIGHT.

> ADEM'Y EDUC ZZ



NO. DATE DESCRIPTION

1	06-02-23	FOR TLE REVIEW	N
2	06-14-23	FOR PERMIT	N
3	08-14-23	PER TLE AND CODE COMMENTS	N
		REVISION	
NO.	DATE	DESCRIPTION	II
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	08-10-23	PER TLE COMMENTS	N
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	08-10-23	PER TLE COMMENTS	N

**ISSUE** 

PROFESSIONAL CERTIFICATION

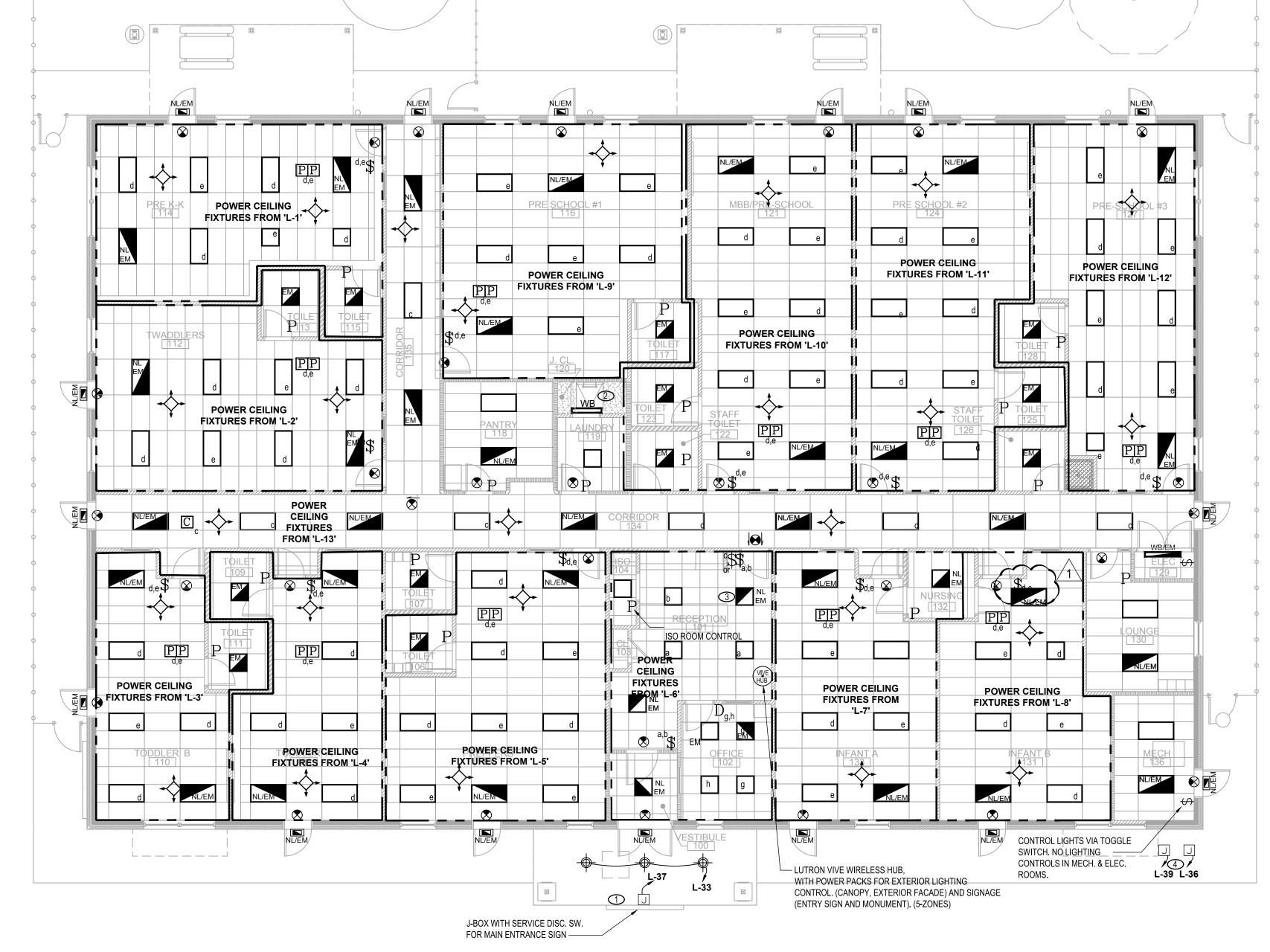
MATTHEW B. JARMEL, AIA, MBA **LICENSE NUMBER: A2017014316** 

Project Number:	Scale:
TLEMO22-164	AS NOTED
Drawn By:	Approved By:
LN	MBJ

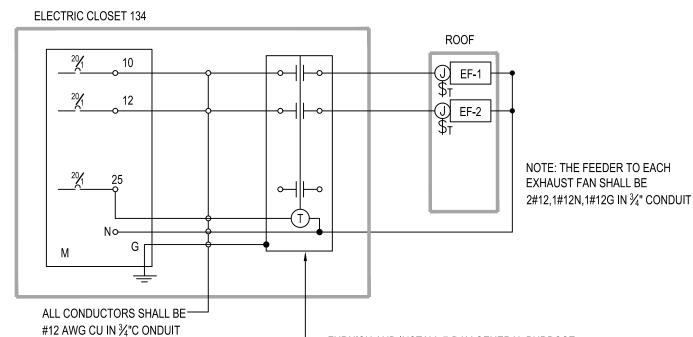
**ELECTRICAL LIGHTING PLAN** 

E-300





ELECTRICAL LIGHTING PLAN
SCALE: 1/8" = 1'-0"



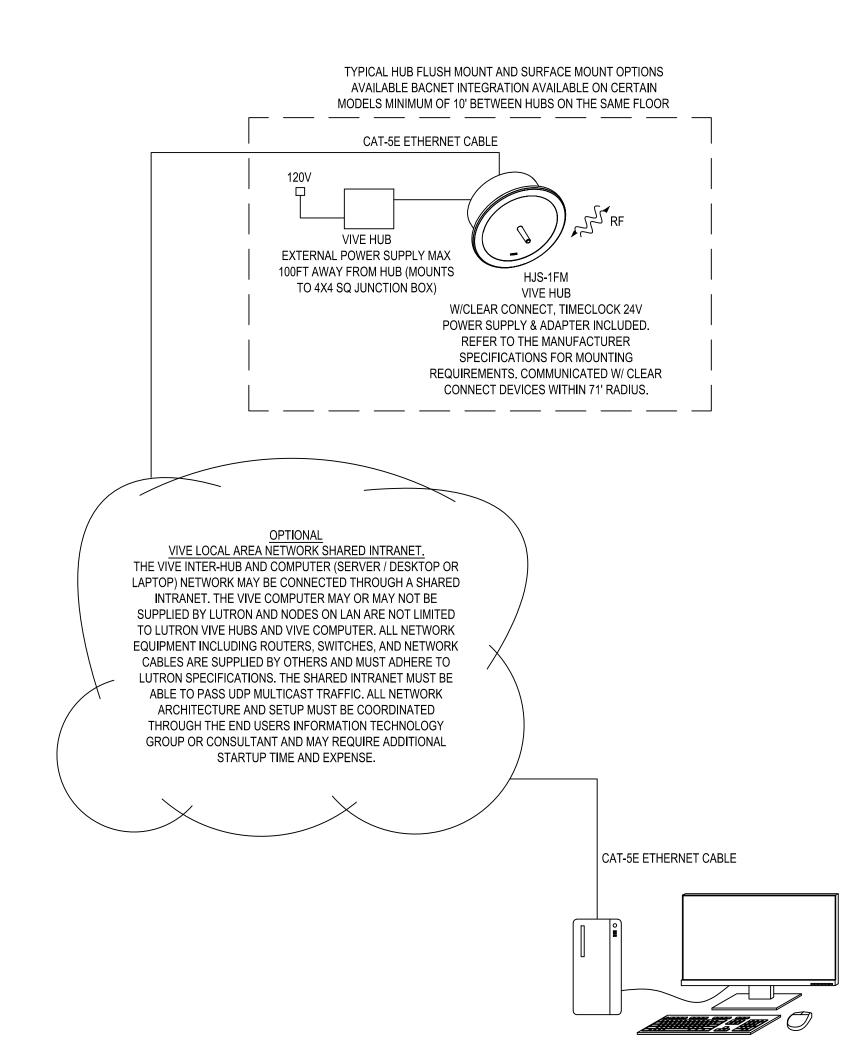
FURNISH AND INSTALL 7-DAY GENERAL PURPOSE ELECTROMECHANICAL TIME CONTROL SYSTEM IN A NEMA 1 SURFACE MOUNTED ENCLOSURE OPERATING ON 120V WITH 4PST NORMALLY OPEN CONTACTS. CONTACTS SHALL BE RATED FOR 1/2 HP,20A. "PARAGON" MODEL#-7000-00 OR APPROVED EQUAL.

# **EXHAUST FAN TIMER DIAGRAM**

LUTRON WIRELESS LIGHTING CONTROL SYSTEM DIAGRAM WIRING DIAGRAM LIGHTING SWITCH 4-BUTTON DUAL GROUP. SMALL CASE LETTERING INDICATES LIGHT ZONE. JUNCTION BOX LINE/HOT (L) NEUTRAL (N) Manager LOAD SWITCHED LINE/HOT CAT. NO. PJ2-4B-GWH-L2 CEILING MOUNTED WIRELESS CAT. NO. RMJS-5R-DV-B OCCUPANCY/VACANCY CEILING SENSOR CAT. NO. LRF2-OCR2B-P-WH

> THE DIAGRAM SHALL ONLY BE USED TO GIVE AN IDEA OF THE KIND OF SYSTEM IS IN THE BUILDING. THE ACTUAL WIRING DIAGRAM SHALL BE PROVIDED BY SUPPLIER/MANUFACTURER.

# TYPICAL CLASSROOM LIGHTING CONTROL DIAGRAM



3 LIGHTING CONTROL DIAGRAM & SPECIFICATIONS
SCALE: NTS

### NOTES:

CONTRACTOR TO COORDINATE EXACT CONTROLLER DETAILS AND REQUIREMENTS WITH LIGHTING MANUFACTURER'S REPRESENTATIVE.

CONTRACTOR TO PROVIDE AND INSTALL ALL LUTRON VIVE SYSTEMS DEVICES, WIRING, AND ASSOCIATED COMPONENTS/ACCESSORIES.

### **WIRING NOTES:**

LUTRON LIGHTING MANAGEMENT NETWORK

WHEN A LIGHTING MANAGEMENT NETWORK (LMN) IS REQUIRED TO ENABLE COMMUNICATIONS BETWEEN INDIVIDUAL LIGHT MANAGEMENT HUBS (LMH) AND BETWEEN LMH AND THE SYSTEM SERVER/DESKTOP/LAPTOP. THE LMN REQUIRES A DEDICATED LAN OR VLAN. IT IS THE RESPONSIBILITY OF THE NETWORK PROVIDER TO ENSURE THE RELIABILITY AND SECURITY OF THE LMN.

CATBE OR BETTER ETHERNET CABLE TO BE RUN FOR DEDICATED LMN TERMINATED WITH RJ45 CONNECTORS (PROVIDED BY OTHERS). THE NUMBER OF ETHERNET HOPS/SEGMENTS BETWEEN THE SERVER/DESKTOP/LAPTOP AND ANY LMN NODE SHALL NOT EXCEED 6. TOTAL LENGTH OF ETHERNET CABLE SHALL NOT EXCEED 328 FT (100M) POINT-TO-POINT.

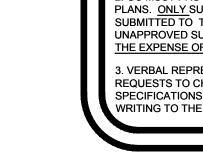
IF LONGER RUNS ARE REQUIRED, MILTI-MODE FIBER OPTIC CABLE CAN BE USED INSTEAD WITH APPROPRIATE FIBER OPTIC CONNECTORS (PROVIDED BY OTHERS). CONSULT WITH NETWORK PROVIDER FOR STANDARD ETHERNET AND FIIBER OPTIC WIRING RULES FOR DISTANCE AND SEPARATION AS WELL AS FOR PLACEMENT OF SWITCHES, ROUTERS, HUBS ETC.

### **CONCEPT DRAWINGS NOTES:**

CONTROL SYSTEM DRAWING IS PROVIDED FOR CONCEPTUAL PURPOSES ONLY AND IS NOT INTENDED FOR CONSTRUCTION. EXACT EQUIPMENT REQUIREMENTS, INCLUDING LOCATIONS AND QUANTITIES. SHOULD BE VERIFIED IN ACCORDANCE WITH THE MOST UP-TO-DATE LIGHTING/ELECTRICAL REFLECTED CEILING PLANS, LIGHTING FIXTURE SCHEDULES, PANEL SCHEDULES, CONTROL INTENT AND SPECIFICATIONS.

LIGHTING CONTROL TIMER NOTES:

INTERIOR LIGHTING TIMER SHOULD BE SET TO MONDAY - FRIDAY FROM 5:00 AM UNTIL 7:00 PM. 2. EXTERIOR LIGHTING TIMER SHOULD BE SET TO MONDAY - FRIDAY FROM 5:00 PM UNTIL 8:00 AM.



WORK USING THE CONTRACTOR'S BEST SKILL AND RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCTION MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB

2. GC MUST PROVIDE & INSTALL ALL PRODUCTS PER PLANS. ONLY SUBSTITUTED PRODUCTS NEED TO BE SUBMITTED TO THE ARCHITECT FOR APPROVAL. UNAPPROVED SUBSTITUTIONS WILL BE REPLACED THE EXPENSE OF THE GC.

3. VERBAL REPRESENTATION HAS NO VALUE AND AL REQUESTS TO CHANGE ANY PRODUCTS OR SPECIFICATIONS PER PLANS, MUST BE SUBMITTED IN WRITING TO THE ARCHITECT & TLE FOR APPROVAL



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Interior Design Implementation Services



NO. DATE DESCRIPTION INT. FOR TLE REVIEW FOR PERMIT 2 06-14-23 3 08-14-23 PER TLE AND CODE COMMENTS PLATE IS 1/4"D X 2"WX12"H OR LONGER CU GROUNDING REVISION NO. DATE DESCRIPTION

NEC 250.66(A): CONNECTIONS TO A ROD, PIPE, OR PLATE ELECTRODE(S). WHERE THE GROUNDING ELECTRODE CONDUCTOR IS CONNECTED TO A SINGLE OR MULTIPLE ROD, PIPE, OR PLATE ELECTRODE(S), OR ANY COMBINATION THEREOF, AS PERMITTED IN 250.52(A)(5) OR (A)(7), THAT PORTION OF THE CONDUCTOR THAT IS THE SOLE CONNECTION TO THE GROUNDING ELECTRODE(S) SHALL NOT BE REQUIRED TO BE LARGER THAN 6 AWG COPPER OR 4 AWG ALUMINUM WIRE.

ELECTRODES. WHERE THE GROUNDING ELECTRODE CONDUCTOR IS CONNECTED TO A SINGLE OR MULTIPLE CONCRETE-ENCASED ELECTRODE(S) AS PERMITTED IN 250.52(A)(3), THAT PORTION OF THE CONDUCTOR THAT IS THE SOLE CONNECTION TO THE GROUNDING ELECTRODE(S) SHALL NOT BE REQUIRED TO BE LARGER THAN 4 AWG COPPER WIRE. NEC ARTICLE 250.66 STATES THAT THE GROUNDING

NEC 250.66(B): CONNECTIONS TO CONCRETE-ENCASED

ELECTRODE CONDUCTOR (GEC) MUST BE SIZED BASE ON THE "LARGEST UNGROUNDED SERVICE-ENTRANCE CONDUCTOR OR EQUIVALENT AREA FOR PARALLEL CONDUCTORS". NEC ARTICLE 250.66(A)-(C) BASICALLY TELLS US WHAT SIZE GEC TO USE FOR WHICH TYPE OF GROUNDING ELECTRODE WE ARE ATTACHING TO. NEC TABLE 250.66 GIVES US THE REQUIRED SIZE GEC THAT MUST BE USED FOR THOSE UNGROUNDED CONDUCTORS.

1. IF MULTIPLE SETS OF SERVICE ENTRANCE CONDUCTORS CONNECT DIRECTLY TO A SERVICE DROP, SET OF OVERHEAD SERVICE CONDUCTORS, SET OF UNDERGROUND SERVICE CONDUCTORS, OR SERVICE LATERAL. THE EQUIVALENT SIZE OF THE LARGEST SERVICE-ENTRANCE CONDUCTOR SHALL BE DETERMINED BY THE LARGEST SUM OF THE AREAS OF THE CORRESPONDING CONDUCTORS OF EACH SET.

SERVICE ENTRANCE EQUIP

6 9 9999

CU - (1)-#2/0 G -

WATER METER

GROUND CLAMP ON

250.52(A)(5)

WATER METER

18-27-250.66.

TABLE 250.66

CONDUCTORS

COPPER

2 OR SMALLER

1 OR 1/0

2/0 OR 3/0

OVER 3/0

OVER 350

OVER 600

OVER 1100

THROUGH 350

THROUGH 600

THROUGH 1100

EFFECTIVELY GROUNDED

METALLIC WATER MAIN. PER

FULL SIZE JUMPER AROUND THE

CU - (1)-#2/0 G ---

CU - (1)-#4 G —

8

CONCRETE ENCASED ELECTRODE

ELECTRODES. PER NEC 250.52(A)(3)

CONNECTIONS TO

& 250.66(B):

ALL GROUNDING ELECTRODES SHALL BE CONNECTED AS PER LOCAL CODE

GROUNDING ELECTRODE CONDUCTOR FOR AC SYSTEMS

ALUMINUM OR

COPPER-CLAD ALUMINUM

1/0 OR SMALLER

2/0 OR 3/0

4/0 OR 250

THROUGH 500

THROUGH 900

THROUGH 1750

OVER 250

OVER 500

OVER 900

OVER 1750

SIZE OF LARGEST UNGROUNDED SERVICE ENTRANCE

CONDUCTOR OR EQUIVALENT AREA FOR PARALLEL

GROUNDING ELECTRODE CONDUCTORS SHALL BE SIZED IN ACCORDANCE WITH

REQUIREMENTS OR THESE ELECTRODES SHALL BE BONDED TOGETHER TO FORM THE

GROUNDING ELECTRODE SYSTEM AND CONNECTED TO GROUND BUS AS PER NEC 250.50.

CONCRETE-ENCASED

**GROUND BUS** 

CU - (1)-#2/0 G

BOND TO BUILDING STEEL

GROUND CONTINUOUS TO METAL

(IF AVAILABLE)

250.52(A)(5)

PLATE. PER 250.52(A)(5)

FRAME OF THE STRUCTURAL BUILDING

GROUNDING PLATE PER NEC 250.66(A)(7):

GROUNDING ROD CLUSTERS PER NEC 250.66(A)(5)OR

EACH IS 5/8" X 8'-0" CU DRIVEN TO ±6" BELOW FINISH

GRADE - PROVIDE HAND HOLE FOR INSPECTION. PER

COORDINATE W/ELECTRICAL PANEL SCHEDULES AND

DISCREPANCIES THAT MAY ARISE MUST BE BROUGHT

TO THE IMMEDIATE ATTENTION OF THE DESIGNER

INCOMING RISER DIAGRAM, UTILITIES. ANY

PRIOR TO BID AND CONSTRUCTION.



SIZE OF GROUNDING

ALUMINUM OR

ALUMINUM

SEE 250.64(A)

1/0

3/0

250

COPPER-CLAD

ELECTRODE

CONDUCTOR

(AWG/KCMIL)

COPPER

4

1/0

2/0

3/0

Drawing Name: **ELECTRICAL DIAGRAMS** 

PROFESSIONAL CERTIFICATION

**MATTHEW B. JARMEL, AIA, MBA** 

**LICENSE NUMBER: A2017014316** 

**AS NOTED** 

Approved By:

**TLEMO22-164** 

Drawn By:

### A. GENERAL

- 1. GENERAL NOTES, SYMBOLS LIST AND DETAILS ARE APPLICABLE TO ALL DRAWINGS MARKED "P".
- 2. THE CONTRACTOR SHALL FURNISH AND INSTALL THE PLUMBING SYSTEM IN A MANNER WHICH PROVIDES A COMPLETE AND OPERATIONAL PLUMBING SYSTEM, WITH ALL EQUIPMENT, PERMITS PIPING, VALVES, INSULATION, CONTROLS HANGERS, TRIM, ACCESSORIES AND ASSOCIATED INCIDENTAL WORK, IN ACCORDANCE WITH THE APPLICABLE CODES, ALL AUTHORITIES HAVING JURISDICTION, AND PER THE CONSTRUCTION DOCUMENTS.
- 3. CONTRACTOR SHALL INCLUDE THE COST OF ALL SMALL DETAILS, INCIDENTAL WORK, AND ACCESSORIES NOT SHOWN OR SPECIFIED, BUT WHICH CAN BE INFERRED FOR COMPLETE AND SATISFACTORY CODE COMPLIANT SYSTEM. PROVIDE OFFSETS, FITTINGS AND SIMILAR ITEMS TO ACCOMPLISH REQUIREMENTS OF COORDINATION WITHOUT ADDITIONAL EXPENSE.
- 4. THE DRAWINGS ARE DIAGRAMMATIC AND SHOW ONLY THE GENERAL ARRANGEMENTS/ROUTING OF ALL PIPING AND EQUIPMENT. BECAUSE OF THE SMALL SCALE OF THE DRAWINGS, IT IS NOT POSSIBLE TO SHOW OR INDICATE ALL OFFSETS, FITTINGS, AND ACCESSORIES WHICH MAY BE REQUIRED TO AVOID STRUCTURAL FEATURES AND OTHER OBSTRUCTIONS. DO NOT SCALE DRAWINGS FOR THE EXACT LOCATION OF FIXTURES, PIPING, EQUIPMENT, ETC. DETERMINE EXACT LOCATIONS OF SYSTEMS AND COMPONENTS IN FIELD.
- 5. ALL PLUMBING SYSTEMS ARE REQUIRED TO BE EXPOSED FOR INSPECTION.
- 6. PRIOR TO BEGINNING ANY WORK, SECURE PERMITS OR CLEARANCES FROM THE AUTHORITIES HAVING JURISDICTION. PROVIDE ALL LABOR AND MATERIALS FOR A COMPLETE INSTALLATION. WORK SHALL BE EXECUTED BY EXPERIENCED PLUMBERS WHO ARE LICENSED IN THE JURISDICTION WHERE THE PROJECT IS LOCATED.
- 7. CONTRACTOR SHALL COORDINATE ELECTRICAL CHARACTERISTICS AND REQUIREMENTS OF ALL PLUMBING EQUIPMENT WITH THE ELECTRICAL DRAWINGS, AND APPROVED SUBMITTALS AND SHALL FURNISH EQUIPMENT WIRED FOR THE APPROPRIATE VOLTAGES.
- 3. CONTRACTOR SHALL COORDINATE ALL NEW WORK WITH NEW WORK OF OTHER TRADES AND EXISTING CONDITIONS AND PARTICIPATE IN THE PREPARATION OF COORDINATED SHOP DRAWINGS, IN ORDER TO AVOID CONFLICTS OF ANY TYPE.
- 9. MANUFACTURER'S MODEL NUMBERS ARE SPECIFIED SOLELY TO ESTABLISH THE STANDARDS OF QUALITY FOR PERFORMANCE PRODUCT AND INSTALLATION. THE CONTRACTOR SHALL ADHERE TO MANUFACTURER'S RECOMMENDATIONS AND MATERIALS, UNLESS OTHERWISE NOTED.
- 10. ALL WORK SHALL BE COORDINATED AND INSTALLED BY THIS CONTRACTOR AND SHALL BE INSTALLED IN SUCH A MANNER AS TO CLEAR ALL LIGHT FIXTURES, CEILING CONSTRUCTION, SPRINKLER PIPES AND HEADS, DUCTWORK CONDUITS, CABLES, WIRING, ETC.
- 11. ALL PLUMBING SERVICES GOING INTO THE BUILDING AND LEAVING THE BUILDING SHALL BE CONNECTED TO THE SITE UTILITIES. COORDINATE WITH SITE UTILITIES' COMPANY AND CIVIL DRAWINGS. COORDINATE ALL EXTERIOR UNDERGROUND PLUMBING WORK WITH THE SITE UTILITIES, BEFORE COMMENCING WORK. COORDINATE ALL UNDERGROUND PIPING LOCATIONS AND INVERTS WITH FOUNDATION DRAWINGS.
- 12. PIPE SLEEVES SHALL BE PROVIDED AND INSTALLED WHERE PIPES ARE ROUTED THROUGH FOUNDATION WALLS. PIPE SLEEVES SHALL BE GROUTED IN WALLS. SEALANT SHALL BE APPLIED AROUND THE PIPE IN THE SLEEVE IN ORDER TO PREVENT INGRESS OF MOISTURE. THE WALL PENETRATION SHALL BE COMPLETELY WATERPROOFED.
- 13. DO NOT PENETRATE WALL FOOTINGS WITH PIPING. COORDINATE TO DROP FOOTINGS TO CLEAR PLUMBING SERVICES WHERE ABSOLUTELY NECESSARY
- 14. ALL PIPING PENETRATING A BEARING WALL OR FOOTING MUST BE SLEEVED AND LOCATION APPROVED BY STRUCTURAL ENGINEER.
- 15. ELEVATIONS LISTED FOR ALL PLUMBING SYSTEM PIPING IN THE CONTRACT DOCUMENTS ARE TO BE VERIFIED PRIOR TO CONSTRUCTION AGAINST EXISTING CONDITIONS, UTILITIES AND NEW CONSTRUCTION. CONTRACTOR SHALL COORDINATE ALL SLOPED PLUMBING SYSTEMS WITH OTHER BUILDING SYSTEM COMPONENTS.

- 16. PROVIDE ESCUTCHEONS AND SEALING OF ALL PENETRATIONS OF FIRE SEPARATIONS IN ACCORDANCE WITH THE APPLICABLE CODES.
- 17. INSTALLATION OF PLUMBING FIXTURES AND ACCESSORIES, INCLUDING FLUSH CONTROL VALVES INTENDED FOR PEOPLE WITH DISABILITIES, SHALL BE IN ACCORDANCE WITH ADA REQUIREMENTS.
- 18. ACCESS DOORS AND/OR PANELS SHALL BE PROVIDED AND INSTALLED AT ALL MAINTENANCE AND SERVICE LOCATIONS FOR CONCEALED CONTROL DEVICES, VALVES, TRAPS, CLEANOUTS, DRAIN POINT OR SIMILAR ITEMS AND PLUMBING EQUIPMENT/DEVICES. UNLESS A SIZE IS SPECIFICALLY NOTED, PANELS SHALL BE SIZED TO SERVICE EQUIPMENT/DEVICE. DOORS AND PANELS SHALL HAVE THE SAME FIRE RATING AS THE WALL OR CEILING IN WHICH THEY ARE INSTALLED. ACCESS DOORS AND/OR PANELS ARE NOT REQUIRED WHERE ADJUSTMENT, MAINTENANCE AND REPLACEMENT ARE POSSIBLE THROUGH LAY IN SUSPENDED CEILING.
- 19. ALL PIPING AND EQUIPMENT SHALL BE INDEPENDENTLY SUPPORTED FROM BUILDING STRUCTURE NOT FROM OTHER TRADES SUPPORT HANGERS.
- 20. NO PLUMBING (WATER, DRAINS, VENT, OR GAS PIPING) SHALL BE INSTALLED DIRECTLY ABOVE ANY ELECTRICAL PANELS. COORDINATE WITH OTHER DIVISIONS BEFORE PROCEEDING WITH INSTALLATION.
- 21. ALL PLUMBING EQUIPMENT, PIPING, INSULATION, ETC., INSTALLED IN HVAC PLENUM SPACES SHALL MEET CODE REQUIREMENTS FOR SMOKE AND FIRE RATING.
- 22. ALL INSULATION SHALL HAVE A COMPOSITE (JACKETS, FACINGS, ADHESIVES, ETC.). FIRE AND SMOKE HAZARD RATINGS AS TESTED BY PROCEDURE ASTM E-84, AND NFPA NOT EXCEEDING FLAME SPREAD OF 25 AND SMOKE DEVELOPED OF 50.
- 23. INSULATION SHALL NOT BE CRUSHED OR COMPRESSED THROUGH INTERFERENCE WITH SYSTEMS INSTALLED BY OTHER TRADES OR BUILDING CONSTRUCTION.
- 24. ALL PIPING SHALL BE INSTALLED AS HIGH AS POSSIBLE UNLESS NOTED OTHERWISE
- 25. INSTALL SLOPED PLUMBING AND PIPING HIGH POINTS AS TIGHT AS POSSIBLE TO THE BUILDING STRUCTURE TO ALLOW PROPER PITCH AND MAXIMIZE CEILING HEIGHT.
- 26. ALL PIPPING ABOVE GRADE SHALL BE PROPERLY SUPPORTED BY THE BUILDING STRUCTURE AND SHALL NOT REST ON CEILING TILES OR CEILING STRUCTURE.
- 27. ALL PIPING SHALL BE RUN PARALLEL TO BUILDING LINES AND COORDINATED WITH OTHER CONTRACT DOCUMENTS. PIPE IS TO BE SUPPORTED AND ANCHORED TO FACILITATE EXPANSION AND CONTRACTION.
- 28. ALL PIPING SHALL BE CONCEALED IN FURRED CHASES OR ABOVE SUSPENDED CEILING (CLEAR OF CEILING INSERTS) EXCEPT IN UNFINISHED SPACES. INSTALL REQUIRED PIPING TO MEET ALL CONSTRUCTION CONDITIONS AND TO ALLOW FOR INSTALLATION OF OTHER WORK INCLUDING BUT NOT LIMITED TO HVAC PIPING, DUCTWORK, HVAC EQUIPMENT, ELECTRICAL CONDUIT AND ELECTRICAL EQUIPMENT THAT IS TO BE INSTALLED WITH THE OTHER CONTRACTORS.
- 29. EXPOSED PIPING IN FINISHED AREAS SHALL BE CHROME-PLATED WITH A CHROME-PLATED ESCUTCHEON AT EACH FINISHED ENTRY/EXIT UNLESS OTHERWISE
- 30. PROVIDE AND INSTALL CLAMPS, OFFSETS, EXPANSION JOINTS, ANCHORS AND GUIDES TO PREVENT STRESS ON PIPING AS PER CODE REQUIREMENTS.
- 31. DIELECTRIC UNIONS AND FLANGES SHALL BE USED ON ALL CONNECTIONS BETWEEN DISSIMILAR METALS.
- 32. COORDINATE ROOF PENETRATIONS WITH WORK OF OTHER SECTIONS AND WITH FLASHING REQUIREMENTS.
- 33. ALL VALVES SHALL BE CLEARLY IDENTIFIED WITH METAL OR PLASTIC VALVE TAGS LETTERING SHALL BE ENGRAVED OR PERMANENT MARKER. PROVIDE AND INSTALL METAL HANG CHAIN VALVE NUMBER WHICH SHALL BE KEYED TO THE AS-BUILT DRAWING SHOWING VALVE TYPE, SIZE AND LOCATION.
- 34. ALL PIPES FOR ANY SERVICE SHALL BE IDENTIFIED AS TO THEIR SERVICE BY COMMERCIALLY AVAILABLE, COLOR-CODED SELF-STICKING VINYL PIPE MARKERS. MARKING SHALL INCLUDE PIPE CONTENT AND DIRECTION OF FLUID FLOW IN ACCORDANCE WITH ANSI/ASME A13.1. PIPES SHALL BE MARKED ADJACENT TO ALL TO VALVES AND FLANGES, BOTH SIDES OF A FLOOR, CHANGE IN DIRECTION AND AT 25' INTERVALS ON STRAIGHT RUNS.
- 35. THE VERTICAL DEFLECTION OF PVC PIPE SHALL NOT EXCEED 5%. NO DEFLECTION IS PERMITTED FOR IRON PIPE.
- 36. ALL PIPING SHALL BE INSTALLED IN SUCH A MANNER AS TO AVOID FREEZING. ALL WATER PIPING SHALL BE INSTALLED BELOW ATTIC INSULATION AND NO PIPING SHALL BE INSTALLED WITHIN EXTERIOR WALLS UNLESS OTHERWISE NOTED. THE INSTALLATION OF PLUMBING SYSTEMS SHALL IN NO WAY CRUSH OR COMPROMISE BUILDING INSULATION AND ALL BELOW-GRADE WATER PIPING SHALL BE INSTALLED BELOW FROST DEPTH AS PER APPLICABLE CODE REQUIREMENTS.

## PLUMBING GENERAL NOTES

- 37. AT THE COMPLETION OF THE WORK AND PRIOR TO THE FINAL ACCEPTANCE, ALL PARTS OF THE WORK SHALL BE THOROUGHLY CLEANED.
- 38. THE OPERATION OF THE PLUMBING SYSTEM DOES NOT CONSTITUTE AN ACCEPTANCE OF WORK BY THE OWNER. FINAL ACCEPTANCE IS TO BE MADE AFTER THE CONTRACTOR HAS DEMONSTRATED THAT THE WORK FULFILLS THE REQUIREMENTS OF THE DRAWINGS AND SPECIFICATIONS AND HAS FURNISHED ALL REQUIRED CERTIFICATES OF APPROVAL FROM THE STATE AUTHORITIES, MUNICIPAL AUTHORITIES AND INSURANCE UNDERWRITERS.

### B. DOMESTIC HOT AND COLD-WATER GENERAL NOTES

- 1. CONTRACTOR SHALL REFER TO ARCHITECTURAL DRAWINGS FOR ROOM LAYOUTS
- 2. CONTRACTOR SHALL FURNISH AND INSTALL PLUMBING FIXTURES COMPLETE WITH APPROPRIATE TRAPS, CARRIERS, FITTINGS, LOCAL STOPS AND ANCILLARY ITEMS.
- 3. WATER DISTRIBUTION PIPE THAT HAS BEEN TERMINATED OR IS AN UNUSED SEGMENT SHALL HAVE NO DEAD ENDS. NO SEGMENT OF PIPE WITH A DEVELOPED LENGTH OF MORE THAN TWO (2' -0") FEET SHALL BE PERMITTED.
- 4. PROVIDE AND INSTALL WATER HAMMER ARRESTERS AT PLUMBING FIXTURES AND GROUPS OF PLUMBING FIXTURES THAT ARE SUBJECT TO WATER HAMMER. SELECT ARRESTERS IN ACCORDANCE WITH THE PLUMBING AND DRAINAGE INSTITUTE
- 5. CONTRACTOR TO INSULATE ALL COLD & HOT WATER PIPING INCLUDING WALL RUN. INSULATION ON COLD AND HOT WATER PIPES SHALL BE PER APPLICABLE ENERGY CODE. ALL WATER LINES IN EXTERIOR WALLS SHALL BE INSULATED AND LOCATED WITHIN THE INSULATION ENVELOPE OF THE BUILDING EXTERIOR WALL.
- 6. PRESSURE REDUCING VALVES SHALL BE INSTALLED ON BRANCH LINES SERVING FIXTURES AND/OR EQUIPMENT WHEN THE PRESSURE IN THE LINE EXCEEDS 80 P.S.I.
- 7. PROVIDE AND INSTALL REDUCED PRESSURE BACKFLOW PREVENTERS FOR DOMESTIC WATER SUPPLY CONNECTIONS.
- 8. ALL BELOW GRADE/SLAB COPPER PIPE SHALL BE PLACED WITHIN COPPER PIPE SLEEVE (10 MIL) POLYETHYLENE PLASTIC SLEEVE. EXTEND ALL SLEEVES ABOVE GRADE/SLAB.
- 9. WHEN TYPE L COPPER TUBING IS INSTALLED UNDER SLABS OR BELOW GRADE, IT SHALL BE INSTALLED WITHOUT JOINTS, IF POSSIBLE. WHERE JOINTS ARE PERMITTED,
- THEY SHALL BE BRAZED AND FITTINGS SHALL BE WROUGHT COPPER. TYPE M COPPER IS PROHIBITED.

  10. UNIONS ARE NOT ALLOWED IN UNDER-SLAB OR BELOW-GRADE WATER PIPING
- 11. UNDER-SLAB PIPING SHALL BE LAID ON A FIRM BED OD CLEAN SAND THROUGHOUT ITS ENTIRE LENGTH PER CODE REQUIREMENTS.
- 12. ALL OUTSIDE HOSE BIBS MUST BE PROVIDED WITH ATMOSPHERIC VACUUM BREAKERS.
- 13. PROVIDE AND INSTALL SHUTOFF VALVES CLOSE TO WATER MAIN IN CORRIDORS AND WHERE INDICATED ON DRAWINGS ON ALL BRANCH PIPING AND ON ALL SUPPLIES TO INDIVIDUAL FIXTURES AND EQUIPMENT. ALL VALVES SHALL BE ACCESSIBLE. LOCATE AND ORIENT VALVE OPERATORS FOR EASE OF ACCESS AND FULL LIMITS OF
- 14. INSULATION AND VAPOR BARRIER SHALL BE PROVIDED ON ALL PIPING AND/OR EQUIPMENT SUBJECT TO HEAT LOSS, CONDENSATION, OR CONSTITUTING A POTENTIAL BURN HAZARD
- 15. PROVIDE AND INSTALL DRAIN VALVES AT LOW POINTS IN MAINS.
- 16. COORDINATE LOCATION OF WATER METER AND VALVES IN MECHANICAL ROOM WITH OTHER TRADES AND UTILITY COMPANIES.
- 17. SINK AND LAVATORY WATER SUPPLY PIPING SHALL BE INSULATED TO COMPLY WITH THE AUTHORITY HAVING JURISDICTION AND THE AMERICAN'S WITH DISABILITIES ACT USING PREFABRICATED INSULATION.
- 18. ALL PLUMBING FIXTURES SHALL BE CONNECTED TO RIDGED PLUMBING WITH STAINLESS STEEL BRAIDED FLEX TUBES OF THE APPROPRIATE SIZE. FLEXIBLE CONNECTIONS SHALL INCLUDE A SHUTOFF VALVE PRIOR TO THE CONNECTION TO THE BRANCH RIDGED PIPE.
- 19. TESTING OF WATER PIPING SYSTEMS SHALL CONSIST OF WORKING PRESSURE UNDER WHICH SYSTEM IS TO BE USED OR A SIXTY (60) PSI AIR PRESSURE TEST FOR 30 MINUTES OR PER AUTHORITIES HAVING JURISDICTION STANDARDS.

### C. DRAIN WASTE AND VENT PIPING

- CONTRACTOR SHALL VERIFY INVERT ELEVATIONS OF EXISTING SEWERS IN WHICH NEW SEWER LINES ARE TO BE CONNECTED PRIOR TO INSTALLATION.
- 2. PROVIDE AND INSTALL VENTS AT HIGH POINTS IN PIPING SYSTEMS.

- 4. TOPS OF ALL FLOOR DRAINS SHALL BE SET FLUSH WITH FINISHED FLOOR.
- 5. DEAD ENDS SHALL BE AVOIDED IN DRAINAGE SYSTEM, EXCEPT WHERE NECESSARY TO EXTEND THE SYSTEM TO INSTALL A CLEANOUT IN AN ACCESSIBLE LOCATION. THE DEAD ENDS INTENDED FOR FUTURE CONNECTION OR CREATED BY REMOVAL OR ABANDONMENT OF PIPE; WHICH IS MORE THAN 2 FEET ABOVE A FLOOR OR MORE THAN 10 FEET HORIZONTALLY FROM THE NEAREST VENTED CONNECTION MUST HAVE A VENTED CONNECTION TO THE OUTSIDE ATMOSPHERE.
- 6. REFER TO PLANS FOR VENT THRU ROOF (VTR) PIPE SIZES AND LOCATIONS. LOCATE VTR A MINIMUM 10 FEET HORIZONTAL FROM ANY BUILDING OPENING OR FRESH AIR INTAKE INCLUDING HVAC EQUIPMENT. EXTEND VTR 12 INCHES ABOVE ROOF SURFACE UNLESS OTHERWISE NOTED. IF 10 FEET DISTANCE CANNOT BE ACHIEVED, LOCATE VTR 2 FEET ABOVE ADJACENT TOP OF FRESH AIR INTAKE OR BUILDING OPENINGS UNLESS OTHERWISE NOTED. PROVIDE 1 INCH FIBERGLASS INSULATION WITH ALL-SERVICE JACKET ON VENT PIPE INSIDE BUILDING WITHIN 6 FEET OF VTR LOCATION. VERIFY SMOKE AND FLAME SPREAD REQUIREMENTS AND COMPLY WITH SAME. VERIFY FLASHING AND

COUNTERFLASHING AND COORDINATE INSTALLATION WITH ROOFING CONTRACTOR.

- 7. ALL INTERIOR SANITARY PIPING, 4 INCHES AND LARGER, SHALL BE SLOPED AT 1/8" PER FOOT, UNLESS NOTED OTHERWISE. ALL INTERIOR SANITARY PIPING, 3 INCHES AND SMALLER, SHALL BE SLOPED AT 1/4" PER FOOT, UNLESS NOTED OTHERWISE.
- 8. CHANGES IN THE DIRECTION OF SANITARY PIPING SHALL NOT BE MADE WITH FITTINGS WHICH WILL CAUSE EXCESSIVE REDUCTION IN THE VELOCITY OF FLOW OR CREATE ANY OTHER ADVERSE EFFECT. I.E.: USE OF SANITARY TEE IN A HORIZONTAL CONNECTION, USE OF A DOUBLE SANITARY TEE IN A VERTICAL STACK, USE OF SHORT RADIUS FITTINGS FOR BRANCH TO HOUSE DRAIN OR STACK CONNECTION.
- 9. SANITARY PIPING SHALL HAVE NO DEAD ENDS.

PREFABRICATED INSULATION.

PREVENT FLOTATION.

- 10. PROVIDE AND INSTALL CLEANOUTS IN SANITARY PIPING SYSTEMS AT ENDS OF RUNS, AT CHANGES IN DIRECTION, AT BASE OF STACKS AND AT 50-FOOT INTERVALS IN HORIZONTAL PIPING, AND ELSEWHERE AS INDICATED. CLEANOUTS SHALL BE INSTALLED IN NONPUBLIC PLACES WHENEVER POSSIBLE.
- 11. EXTEND ALL CLEANOUTS ON SANITARY SEWER AND KITCHEN WASTE BELOW SLAB-ON-GRADE TO FINISHED FLOOR LEVEL.
- 12. SINK AND LAVATORY WASTE PIPING SHALL BE INSULATED TO COMPLY WITH THE AUTHORITY HAVING JURISDICTION AND THE AMERICAN'S WITH DISABILITIES ACT USING
- 13. ALL PIPING SHALL BE INSTALLED IN SUCH A MANNER AS TO AVOID FREEZING.
- 14. INSTALL SLOPED PLUMBING AND PIPING HIGH POINTS AS TIGHT AS POSSIBLE TO THE BUILDING STRUCTURE TO ALLOW PROPER PITCH AND MAXIMIZE CEILING HEIGHT.
- 15. UNDER SLAB SANITARY PIPING SHALL BE LAID ON A FIRM BED THROUGHOUT ITS ENTIRE
- LENGTH. TRENCH SHALL BE SLOPED IN COMPLIANCE WITH APPLICABLE CODES.

  16. DRAIN, WASTE, AND VENT (DWV) SYSTEM SHALL BE TESTED WITH NO LESS THAN 10' OF

HEAD WATER ABOVE THE SYSTEM FOR 15 MINUTES OR 5 PSI AIR TEST FOR 15 MINUTES

- OR PER AUTHORITIES HAVING JURISDICTION STANDARDS.

  17. PRIOR TO BACKFILL, PIPES SHALL BE WEIGHTED DOWN WITH CONCRETE BLOCKS TO
- 18. CLEANOUTS SHALL BE APPROVED TYPE WYE, COMBO FITTINGS.
- 19. CLEANOUTS SHALL BE INSTALLED WITHIN 2 FEET OF THE BUILDING TERMINATING AT GRADE LEVEL.
- 20. CONTRACTOR SHALL INSTALL ADDITIONAL CLEANOUTS AT PROPERTY LINES, END OF LINE, HORIZONTAL CHANGE OF DIRECTION AND RUNS EXCEEDING 50 FEET IN LENGTH.
- 21. CLEANOUTS SHALL BE INSTALLED SO THAT IT OPENS TO ALLOW CLEANING IN THE
- 22. TRENCHES SHALL BE BACKFILLED AND COMPACTED IN 4 INCH LIFTS TO 12 INCHES ABOVE THE TOP OF THE PIPING WITH CLEAN SOIL OR SAND WHICH SHALL NOT CONTAIN STONES, BOULDERS, CONSTRUCTION DEBRIS OR DELETERIOUS MATERIALS THAT MAY BREAK OR DAMAGE PIPING OR CAUSE CORROSIVE ACTION.

## D. STORM CONDUCTOR GENERAL NOTES

- PROVIDE AND INSTALL CLEANOUTS IN STORM CONDUCTOR SYSTEMS AT ENDS OF RUNS, AT CHANGES IN DIRECTION, AT BASE OF STACKS AND AT 50-FOOT INTERVALS IN HORIZONTAL PIPING, AND ELSEWHERE AS INDICATED. CLEANOUTS SHALL BE INSTALLED IN NONPUBLIC PLACES WHENEVER POSSIBLE.
- 2. CHANGES IN THE DIRECTION OF STORM CONDUCTOR PIPING SHALL NOT BE MADE WITH FITTINGS WHICH WILL CAUSE EXCESSIVE REDUCTION IN THE VELOCITY OF FLOW OR CREATE ANY OTHER ADVERSE EFFECT. I.E.: USE OF SANITARY TEE IN A HORIZONTAL CONNECTION, USE OF A DOUBLE SANITARY TEE IN A VERTICAL STACK, USE OF SHORT RADIUS FITTINGS FOR BRANCH TO HOUSE DRAIN OR STACK CONNECTION.

- 3. EXTEND ALL CLEANOUTS ON RAIN WATER CONDUCTOR LINES BELOW SLAB-ON-GRADE TO FINISHED FLOOR LEVEL.
- 4. CLEANOUTS SHALL BE INSTALLED SO THAT IT OPENS TO ALLOW CLEANING IN THE
- 5. CLEANOUTS SHALL BE APPROVED TYPE WYE, COMBO FITTINGS.
- 6. FOOTING DRAINS, ROOF DOWN SPOUTS AND CURTAIN DRAINS ARE TO BE CONNECTED TO THE STORM DRAINAGE SYSTEM OR SWALES AS SHOWN ON THE CONSTRUCTION PLANS. UNLESS OTHERWISE NOTED.
- 7. DEAD ENDS SHALL BE AVOIDED IN DRAINAGE SYSTEM, EXCEPT WHERE NECESSARY TO EXTEND THE SYSTEM TO INSTALL A CLEANOUTS IN AN ACCESSIBLE LOCATION.
- 8. INSULATION AND VAPOR BARRIER SHALL BE PROVIDED ON ALL INTERIOR ABOVE-GROUND HORIZONTAL STORM CONDUCTOR SYSTEMS SUBJECT TO CONDENSATION.
- 9. INSULATION SHALL NOT BE CRUSHED OR COMPRESSED THROUGH INTERFERENCE WITH SYSTEMS INSTALLED BY OTHER TRADES OR BUILDING CONSTRUCTION.
- 10. ALL PIPING SHALL BE INSTALLED IN SUCH A MANNER AS TO AVOID FREEZING.
- 11. INSTALL SLOPED PLUMBING AND PIPING HIGH POINTS AS TIGHT AS POSSIBLE TO THE BUILDING STRUCTURE TO ALLOW PROPER PITCH AND MAXIMIZE CEILING HEIGHT.
- 12. UNDER SLAB AND BURIED STORM WATER PIPING SHALL BE LAID ON A FIRM BED OF CLEAN SAND THROUGHOUT ITS ENTIRE LENGTH. TRENCH SHALL BE SLOPED AS PER APPLICABLE
- 13. PRIOR TO BACKFILL PIPES SHALL BE WEIGHTED DOWN WITH CONCRETE BLOCKS TO PREVENT FLOTATION.
- 14. TRENCHES SHALL BE BACKFILLED AND COMPACTED IN 4 INCHES LIFTS TO 12 INCHES ABOVE THE TOP OF THE PIPING WITH CLEAN EARTH OR SAND WHICH SHALL NOT CONTAIN STONES, BOULDERS, CONSTRUCTION DEBRIS OR MATERIALS THAT WOULD BREAK OR DAMAGE PIPING OR CAUSE CORROSIVE ACTION.

### E. GAS PIPING SYSTEM GENERAL NOTES

- 1. CONNECTION AT EACH GAS APPLIANCE SHALL INCLUDE AN INVERTED TRAP, GAS SHUT-OFF COCK, UNION, AND DIRT LEG.
- . PROVIDE AND INSTALL DIRT LEG AT BOTTOM OF ALL VERTICAL RISERS AND DROPS IN GAS
- 3. THE CONTRACTOR SHALL PROVIDE GAS PIPING TO ROOFTOP EQUIPMENT. THE RTU AND MUA EQUIPMENT SUPPLIER SHALL FURNISH INTEGRAL GAS REGULATORS AND RESTRAINING DEVICES FOR EACH GAS CONSUMING APPLIANCE. CONTRACTOR SHALL INSTALL ALL GAS CONSUMING EQUIPMENT PER MANUFACTURER'S INSTALLATION REQUIREMENTS.
- 4. GAS REGULATING VALVES, AS DEPICTED ON DRAWINGS, SHALL BE SUPPLIED AND INSTALLED BY THIS CONTRACTOR.
- 5. THE CONTRACTOR SHALL PROVIDE GAS PIPING TO PLUMBING EQUIPMENT. THE WATER HEATER AND SIMILAR GAS EQUIPMENT CONTRACTOR SHALL FURNISH AND INSTALL GAS REGULATORS AND RESTRAINING DEVICES FOR EACH GAS CONSUMING APPLIANCE.

  CONTRACTOR SHALL INSTALL ALL GAS CONSUMING EQUIPMENT PER MANUFACTURER'S INSTALLATION REQUIREMENT.
- 6. GAS PIPING SHALL BE PROVIDED IN ACCORDANCE WITH THE CURRENT CODES.
- 7. FUEL GAS SERVICES SHALL BE SIZED TO SUPPLY THE REQUIRED BTUH INDICATED TO THE EQUIPMENT AT PRESSURES AS SHOWN ON THE DRAWINGS. PROVIDE AND INSTALL PRESSURE REGULATORS.
- 3. GAS PIPING SHALL BE SCHEDULE 40, ASME B36.10. PIPING JOINTS SHALL BE THREADED (4-INCH PIPE OR LESS) OR WELDED FITTINGS SHALL BE STEEL OR MALLEABLE IRON UNLESS OTHERWISE NOTED. FLEXIBLE GAS PIPING MAY BE USED IF APPROVED BY ENGINEER AND AUTHORITIES HAVING JURISDICTION.
- 9. REFER TO EQUIPMENT PRODUCT DATA FOR EXACT LOCATIONS OF FIXTURES, REQUIRED BTUH, PIPE ROUGH-IN HEIGHTS AND ADDITIONAL INFORMATION.
- 10. GAS PIPING SHALL BE INSPECTED, TESTED AND PURGED IN ACCORDANCE WITH THE BUILDING CODES AND GAS UTILITY REQUIREMENTS.
- 11. ALL GAS EQUIPMENT SHALL BE LISTED.
- 12. GAS PIPING OUTSIDE OF BUILDING SHALL BE PAINTED WITH YELLOW ZINC-RICH PAINT. IF AGAINST THE BUILDING, PAINT TO MATCH SURFACE.
- 13. GAS PIPING SHALL BE HUNG TIGHT TO THE STRUCTURE, AND SUPPORTED WITH HANGERS AS PER CODE REQUIREMENTS.
- 14. BRANCH TAPS SHALL BE MADE OFF THE TOP OF THE PIPING.

1. CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING THE CONTRACTOR'S BEST SKILL AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCTION MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB

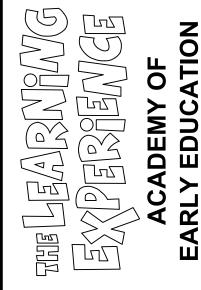
2. GC MUST PROVIDE & INSTALL ALL PRODUCTS PER PLANS. ONLY SUBSTITUTED PRODUCTS NEED TO BE SUBMITTED TO THE ARCHITECT FOR APPROVAL. UNAPPROVED SUBSTITUTIONS WILL BE REPLACED AT THE EXPENSE OF THE GC.

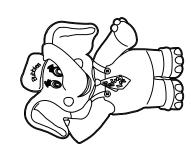
3. VERBAL REPRESENTATION HAS NO VALUE AND ALL REQUESTS TO CHANGE ANY PRODUCTS OR SPECIFICATIONS PER PLANS, <u>MUST</u> BE SUBMITTED IN WRITING TO THE ARCHITECT & TLE FOR APPROVAL.



Jarmel Kizel
ARCHITECTS AND ENGINEERS INC.
42 OKNER PARKWAY
LIVINGSTON, NEW JERSEY 07039
TEL: 973-994-9669
FAX: 973-994-4069

www.jarmelkizel.com
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ISSUE

NO. DATE DESCRIPTION INT.

1 06-02-23 FOR TLE REVIEW MBJ

2 06-14-23 FOR PERMIT MBJ

REVISION

NO. DATE DESCRIPTION INT.

PROFESSIONAL CERTIFICATION

MATTHEW B. JARMEL, AIA, MBA LICENSE NUMBER: A2017014316

Project Number: Scale:
TLEMO22-164 AS NOTED

Drawn By: Approved By:

MR.I.

PLUMBING GENERAL NOTES

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MAITHAN B.

NUMBER
A-2017014316

								SANITARY							
TAG	DESCRIPTION	MANUFACTURER No.	TRIM No.	SUPPORT No.	TYPE	SOIL OR WASTE	VENT	CW	HW	cw	HW	CW	HW	WASTE DFU	REMARKS
WC-1	WATER CLOSET	AMERICAN STANDARD  MADERA FLOWISE 16-1/2" ELONGATED  MODEL 3043.001 (ELONGATED  BOWL; 16.5" RIM; TOP SPUD)	FLUSH VALVE SLOAN ROYAL #111	FLOOR MTD 18" FROM SIDE WALL TO CENTER	NO TANK	4"	2"	1"		5.0		3.0	<b></b>	4.0	1.1 GPF/ LEVER HANDLE TO BE OF SIDE OF ROOM
WC-2	WATER CLOSET	OPEN SEAT 12x18 ROUGH  AMERICAN STANDARD  MADERA FLOWISE 14" ELONGATED  MODEL 2599.001 (ELONGATED  BOWL; 14" RIM; TOP SPUD)  OPEN SEAT 12x18 ROUGH	FLUSH VALVE SLOAN ROYAL #111	FLOOR MTD 14" FROM SIDE WALL TO CENTER	NO TANK	4"	2"	1"	<u></u>	5.0	-	3.0	_	4.0	1.1 GPF/ LEVER HANDLE TO BE OF 4.2 LPF SIDE OF ROOM
WC-3	WATER CLOSET	AMERICAN STANDARD  10" BABY DEVORO  PRESSURE ASSISTED  TOILET 2282.001, OPEN  FRONT SEAT LESS COVER	FLUSH VALVE SLOAN ROYAL #111	FLOOR MTD 12" FROM SIDE WALL TO CENTER	NO TANK	4"	2"	1"		5.0		2.5		4.0	COORDINATE WATER SUPPLY WITH GRAB BAR HEIGHT  1.28GPF/ LEVER HANDLE TO BE OF SIDE OF ROOM
L-1	LAVATORY	AMERICAN STANDARD LUCERNE WALL HUNG LAV MODEL 0355.012	FAUCET:MOEN 8938 (4")	WALL HUNG	-	1-1/2"	1-1/2"	1/2"	1/2"	1.0	1.0	2.0	2.0	1.0	E
DF-1	EXTERIOR DRINKING FOUNTAIN	ELKAY NO LEAD SWIRFLO EDFP214C (NO WALL PLATE & NO FROST PROTECTION) FOR SOUTHERN STATES. EDFP214FPK (FROST-PROOF) FOR NORTHERN STATES.		ES.	WALL MOUNTED	1-1/2"	1-1/2"	1/2"		0.5	-	0.75	-	0.5	REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING HEIG
DF-2	INTERIOR DRINKING FOUNTAIN	FOR INTERIOR LOC. ELKAY LZSTLDDWSI ELKAY EZH2O BOTTLE FILLING STATIO NON-REFRIGERATED, LIGHT GRAY	FILLING STATION & VERSATILE BI-LEVEL ADA COOLER, FILTERED		WALL MOUNTED	1-1/2"	1-1/2"	1/2"		0.5	-	0.75	_	0.5	REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHT
S-1	PANTRY HAND/ PREP SINK/ CLASSROOM SINK	ELKAY SINGLE BOWL SINK MODEL PSRADQ 1919-55 L/R	FAUCET MOEN TWO HANDLE BAR MODEL 4903 2 HOLES 4" CENTERS			2"	1-1/2"	1/2"	1/2"	1.5	1.5	3.0	3.0	2.0	INDIRECT WASTE FOR PANTRY PREP SINK ONLY. SAME MOD SERVES AS THE CLASSROOM SINK.
S-2	3 BAY SINK	AERO MANUFACTURING CO.	AERO NSF F3 SERIES TRIPLE SINK MF3-1818	FAUCET AERO S6 14" ONE SET	FLOOR MOUNTED WITH LEGS	2"	1-1/2"	1/2"	1/2"	1.5	1.5	3.0	3.0	2.0	PROVIDE W/ AERO LEVERWASTE MODEL S-97. PROVIDE DRAINBOARDS W/ STAINLESS STEEL FEET SO THAT THEY WI ANGLE INTO SINK AND HAVE PROTECTIVE BOTTOM, SO COUNTER DOESN'T SCRATCH. PROVIDE ONE ON EACH SIDE. PROVIDE INDIRECT WASTE AT EACH BASIN (REF. DTL. 7 / P-6! PROVIDE (2) COUNTERTOP DRAIN BOARDS (AERO 4D-1830). PROVIDE INDIVIDUAL DRAIN LEVERS.
S-3	LAUNDRY SINK	FIAT	FL-1 W/LEGS	MOEN FAUCET 4903	FLOOR MOUNTED WITH LEGS	2"	1-1/2"	1/2"	1/2"	2.0	2.0	3.0	3.0	2.0	
S-4	JANITOR SINK	FIAT	MSB2424	FAUCET 830-AA	FLOOR MOUNTED	2"	1-1/2"	1/2"	1/2"	2.0	2.0	3.0	3.0	2.0	PROVIDE HOSE AND HOSE BRACKET 832-AA PROVIDE MOP HANGER 889-CC
FD-1	FLOOR DRAIN	J.R. SMITH	MODEL NO. 2010 A	-	WITH 4"DEEP TRAP (WITH PRIMER)	3"	1-1/2"			_					
HB-1	HOSE BIB	ZURN	MODEL Z1341XL	-	WALL MOUNTED					_		-			ANNUAL WINTERIZATION SHALL BE PART OF TLE OPERATIONAL MAINTENANCE, VANDAL RESISTANT.
FS-1	FLOOR SINK	ZURN	MODEL NO. Z1751	-	WITH 8" DEEP SUMP DEPTH	3"	1-1/2"			_					
SH-1	SHOWER	FREEDOM SHOWERS	APFQ3637BF3P-RRF	-	~~~~	2"	1-1/2"	1/2"	1/2"	2.0	2.0	3.0	3.0	2,0	***************************************

			-
GREASE T	TRAP SCHE	DULE	
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TAG	TYPE	MFGR	MODEL	OUTLET	INLET	GPM	CAP.	REMARKS	
GT-1	RECESSED	SCHIER	GB-25	3"	3"	25	50	LIFTOUT SEDIMENT BUCKET WITH ACCESS HOUSING PROVIDE VENTED FLOW CONTROL DEVICE	

NOTE:

CONTRACTOR SHALL VERIFY WITH LOCAL CODE OFFICIAL IF THE GREASE TRAP IS REQUIRED AND IF SO, IT SHALL BE INSTALLED BELOW SLAB, FLUSH TO FLOOR IN CENTER OF THE ROOM AND MUST NOT BLOCK ANY CABINETS OR SINKS. IF NOT REQUIRED BY CODE, GREASE TRAP CAN BE OMITTED

H. W. RECIRC	ULATING PUMP							
TAG	LOCATION	MAKE & MODEL	STATIC HD FT.	GPM	RPM	WATTS	ELEC DATA	REMARKS
HWRP-1	MECH.ROOM	BELL&GOSSETT NBF-8S/LW	5 FT	5	2800	39	115V-1PH-60HZ	

PUMP SHALL BE CONTROLLED BY A DEDICATED TIME CLOCK LOCATED IN THE SAME ROOM AS THE WATER HEATER. SEE ELECTRICAL DWGS FOR DETAILS.

EXPANSION TA	ANK SCHEDULE		
TAG	TOTAL CAPACITY	MANU. & MODEL	LOCATION
ET-1	8.5	WATTS PLT-20	MOUNTED IN THE CEILING OF MECHANICAL ROOM
ET-2	2.1	WATTS PLT-20	MOUNTED IN THE CEILING OF THE JANITOR ROOM

	ELEC	ELECTRIC WATER HEATER SCHEDULE														
	TAG	STORAGE GALS		COVERY	NUMBER ELEMENTS		1	TRICAL		TEMP		MANUFACTURER & MODEL	REMARKS			
L		UALO	GPH	DEG RISE	ELEMENTS	TOTAL KW	V	PH	HZ	SETTING		& WODEL				
	EWH-1	120	102	60° F	3	15.0	208	3	60	110 F	ON FLOOR OF MECH. ROOM	RHEEM ES-120	PROVIDE EXPANSION TANK & RECIRCULATION PUMP HWRP-1			
	EWH-2	50	109	90° F	2	24.0	208	3	60	140 F	ON FLOOR OF JANITOR'S CL	RHEEM ES-50	PROVIDE EXPANSION TANK			

GREASE TRAP SELECTION		
DETERMINE THE CUBIC CONTENT OF THE FIXTURE	$\frac{3 \text{ BAY SINK} - 18" \times 18" \times 14" = 4,536 \text{ IN}^3 \times 3 \text{ (BAY)} = 13,608 \text{ IN}^3}{\frac{\text{PREP SINK}}{2} - 16" \times 13\frac{1}{2}" \times 5\frac{3}{6}" = 1,161 \text{ IN}^3}$	
DETERMINE THE CAPACITY IN GALLON 1 GAL=231 CUBIC INCHES	CONTENTS IN GALLONS 14,769 IN <sup>3</sup> /231 = 63.94 GALLONS.	
DETERMINE ACTUAL DRAINAGE LOAD ACTUAL DRAINAGE LOAD = 75% OF FIXTURE CAPACITY	ACTUAL DRAINAGE LOAD 0.75 x 63.94= 47.95 GALLONS	
DETERMINE THE FLOW RATE AND THE DRAINAGE PERIOD FLOW RATE = ACTUAL DRAINAGE LOAD/DRAINAGE PERIOD	CALCULATE FLOW RATE FOR 2 MINUTE PERIOD 47.95/2 MIN= 23.97 GPM	
SIZE OF GREASE TRAP	23.97 GPM REQUIRES A GREASE TRAP SIZE OF 50 LB/25 GPM SEE GREASE TRAP SCHEDULE FOR SELECTION	

WATER HAMMER ARRESTOR SCHEDULE					
TAG	PIPE SIZE	J.R. SMITH	JOSAM	ZURN	REMARKS
WHA-A	1/2"	5005	EQUAL	EQUAL	STAINLESS STEEL
WHA-B	1"	5007	EQUAL	EQUAL	STAINLESS STEEL

MARK	TMV-1	
MANUFACTURER	SYMMONS	
MODEL NO.	7-1000NW	
INLET& OUTLET SIZE	1 1/2" & 2"	
SERVICE	EWH-1	
MAX FLOW RATE (GPM)	140	
PRESSURE DROP (PSI)	20 @ 100 GPM	
INLET TEMP. (COLD WATER)	40	
OUTLET TEMP. (HOT WATER)	110	

MARK	BFP-1
MANUFACTURER	WATTS
MODEL NO.	957 (FOR 2 ½" OR HIGHER CW SERVICE) 009 (FOR 2 " OR LESS CW SERVICE)
SERVICE	BUILDING
TYPE	RED. PRESSURE
REMARKS	1

		PLUMBING ABBF	REVIA	ATIO	NS
	А		l		
1	AFF	Above Finish Floor		ID	Inside Diameter
7	AP	Access Panel		IN	Inch
				INV	Invert Elevation
	В			IW	Indirect Waste
	BLDG	Building –			
-	ВОВ	Bottom Of The Beam	J		
	ВОР	Bottom Of Pipe		JS	Janitor Sink
	ВТ	Bath Tub			
	BWV	Back Water Valve	M		
-l L			IVI	MAN	Managemen
	С			MAX	Maximum
		- · · · - · · · · · ·		MECH	Mechanical
	CFH	Cubic Feet per Hour		MH	Manhole
	CFM	Cubic Feet per Minute		MIN	Minimum
	CFS	Cubic Feet Per Second		MSB	Mop Service Basin
	CI CLG	Cast Iron	N		
	CLG	Ceiling Cement Lined Ductile Iron	IN	<b></b>	
	CO	Cleanout		(N)	New
	CONC	Concrete		NC	Normally Closed
	CONN	Connection		NIC	Not In This Contract
4	CONT	Continuation		NO	Normally Open
	COTG	Cleanout To Grade	0		
	CP	Chrome Plated	U		
	CTE	Connect to Existing		OD	Outside Diameter
	CV	Check Valve		OED	Open End Drain
†	CW	Cold Water			
	CWR	Cold Water Return	Р		
	CWS	Cold Water Supply		P/FT	Pitch Per Foot
				PIV	Post Indicator Valve
	D			PLBG	Plumbing
	DCVA	Double Check Valve Assembly		POC	Point Of Connection
+	DE	Drinking Fountain		PRV	Pressure Reducing Valve
	DIA	Diameter		PSI	Pounds per Square Inch
	DN	Down			
†	DROP	Drop (Within Floor)	R		
	DWG	Drawing		RC	Roof Receptor
]	DWV	DRAIN WASTE AND VENT		RD	Roof Drain
				RISE	Rise (With In Floor)
<u> </u>	Е			RPBP	Reduced Pressure Backflow Preventer
	(E)	Existing			
+	EL	Elevation	S		
	ET	Expansion Tank		SA	Shock Absorber
$\searrow$	EWC	Electrical Water Cooler (Drinking Fountain)		SAN	Sanitary
\ \ \				SD	Sanitary Drain
<i>'</i>	F			SHWR	Shower
		Floor Olympust		SE	Sewage Ejector
	FCO FD	Floor Cleanout Floor Drain		SF	Square Feet
	FEC	Fire Extinguisher Cabinet		SK	Sink
	FHC	Fire Hose Cabinet		SP	Sump pump
	FHR	Fire Hose Rack		SPKR	Sprinkler
	FHV	Fire Hose Valve		SS	Soil Stack or Stainless Steel
	FHVC	Fire Hose Valve Cabinet		ST	Storm Piping
	FL	Floor	Т		
	FP	Fire Protection	ı	T1 T	T 11 4
	FPWH	Freeze Proof Wall Hydrant		TLT	Toilet
	FS	Flow Switch		TOP	Top Of Pipe
	FSK	Floor Sink		TOS	Top Of Slab
	FT	Feet		TS TW	Tamper Switch
	FV	Flush Valve		TYP	Tempered Water
-		_		ITF	Typical
	G		U		
	GAL	Gallons	Ū	U	Urinal
	GALV	Galvanized		UON	Unless Otherwise Noted
	GCO	Ground Clean Out			
	Gl	Grease Interceptor	<u></u>	UP	Up (Penetrates Floor Slab)
	GPF	Gallons per Flush			
	GPM	Gallons per Minute	V		
	GT	Grease Trap		V	Vent
	GV	Gate Valve		VB	Vacuum Breaker
-				VFD	Variable Frequency Drive
	Н			VS	Vent Stack
	НВ	Hose Bib		VTR	Vent through Roof
	HC	Handicapped			
	HW	Hot Water	W		
	HWR	Hot Water Return		W	Washer
	HWRP	Hot Water Recirculating Pump		WC	Water Closet (Toilet)
	HWS	Hot Water Supply		WH	Wall Hydrant

٨			j		
Α			ļ		
AFF	: Abo	ve Finish Floor		ID	Inside Diameter
AP	Acce	ess Panel		IN	Inch
				INV	Invert Elevation
В				IW	Indirect Waste
	nile			144	maneot vvasto
BLD		<del>-</del>	J		
BOE		om Of The Beam	3		
BOF	• Botto	om Of Pipe		JS	Janitor Sink
BT	Bath	Tub			
BW\	√ Back	: Water Valve	М		
			171		
				MAX	Maximum
С				MECH	Mechanical
CFH	d Cubi	c Feet per Hour		MH	Manhole
CFM		c Feet per Minute		MIN	Minimum
CFS		c Feet Per Second		MSB	Mop Service Basin
				MOD	Wop der vice basili
CI	Cast				
CLG		ng	N		
CLD	)I Cem	ent Lined Ductile Iron		(N)	New
CO	Clea	nout		NC	Normally Closed
CON		crete		NIC	Not In This Contract
CON		nection			
				NO	Normally Open
CON		inuation			
COT	ΓG Clea	nout To Grade	0		
CP	Chrc	me Plated		OD	Outside Discoster
CTE		nect to Existing		OD	Outside Diameter
CV		ck Valve		OED	Open End Drain
CW	Cold	Water	Р		
CWI	R Cold	Water Return		5/57	DV 1 D . E
CWS	S Cold	Water Supply		P/FT	Pitch Per Foot
				PIV	Post Indicator Valve
Б				PLBG	Plumbing
D				POC	Point Of Connection
DCV	/A Doub	ole Check Valve Assembly		PRV	Pressure Reducing Valve
DF	Drinl	king Fountain			<del>-</del>
DIA		-		PSI	Pounds per Square Inch
DN	Dow		R		
DRO	OP Drop	(Within Floor)		RC	Doof Docontor
DWG	G Draw	<i>r</i> ing			Roof Receptor
DW\	V DRA	IN WASTE AND VENT		RD	Roof Drain
				RISE	Rise (With In Floor)
Е				RPBP	Reduced Pressure Backflow Prevent
	Fuie	:			
(E)	Exist	•	S		
EL	Eleva			SA	Shock Absorber
ET	Expa	ansion Tank			
EWO	C Elec	trical Water Cooler (Drinking Fountain)		SAN	Sanitary
				SD	Sanitary Drain
_				SHWR	Shower
F				SE	Sewage Ejector
FCC	) Floor	r Cleanout		SF	Square Feet
FD	Floo	r Drain		SK	Sink
FEC		Extinguisher Cabinet			
		_		SP	Sump pump
FHC		Hose Cabinet		SPKR	Sprinkler
FHR	₹ Fire	Hose Rack		SS	Soil Stack or Stainless Steel
FHV	/ Fire	Hose Valve		ST	Storm Piping
FHV	/C Fire	Hose Valve Cabinet			Otom r iping
FL	Floor		_		
FP		Protection	Т		
				TLT	Toilet
FPW		ze Proof Wall Hydrant		TOP	Top Of Pipe
FS	Flow	Switch			
	( Floo	r Sink		TOS	Top Of Slab
FSK				TS	Tamper Switch
	Foot			TW	Tempered Water
FT	Feet	ı valve		TYP	Typical
	Feet Flust				
FT FV					
FT			U		
FT FV	Flusi	nns	U	U	Urinol
FT FV G	Flusi _ Gallo	ons anized	U	U	Urinal
FT FV G GAL GAL	Flusi - Gallo LV Galv	anized	U	UON	Unless Otherwise Noted
G GAL GAL	Flusi - Gallo LV Galv O Grou	anized ınd Clean Out	U		
G GAL GCC	Flusi Gallo V Galv O Grou	anized ınd Clean Out ıse Interceptor	U	UON	Unless Otherwise Noted
G GAL GAL	Flusi Gallo V Galv O Grou	anized ınd Clean Out		UON	Unless Otherwise Noted
G GAL GCC	Flusi Gallo V Galv O Groot Grea	anized ınd Clean Out ıse Interceptor		UON UP	Unless Otherwise Noted Up (Penetrates Floor Slab)
G GAL GAL GCC GI GPF	Flusi  Gallo Galv Grea Grea Gallo Grea Gallo	anized und Clean Out use Interceptor ons per Flush ons per Minute		UON	Unless Otherwise Noted
G GAL GAL GCC GI GPR GPN GT	Flusi  Gallo  V Galv  O Grou  Grea  Gallo  Gallo  Grea	anized und Clean Out use Interceptor ons per Flush ons per Minute use Trap		UON UP	Unless Otherwise Noted Up (Penetrates Floor Slab)
G GAL GAL GCC GI GPF	Flusi  Gallo  V Galv  O Grou  Grea  Gallo  Gallo  Grea	anized und Clean Out use Interceptor ons per Flush ons per Minute		UON UP V VB	Unless Otherwise Noted Up (Penetrates Floor Slab)  Vent Vacuum Breaker
G GAL GAL GCC GI GPF GPN GT GV	Flusi  Gallo  V Galv  O Grou  Grea  Gallo  Gallo  Grea	anized und Clean Out use Interceptor ons per Flush ons per Minute use Trap		UON UP V VB VFD	Unless Otherwise Noted Up (Penetrates Floor Slab)  Vent Vacuum Breaker Variable Frequency Drive
G GAL GAL GCC GI GPR GPN GT	Flusi  Gallo  V Galv  O Grou  Grea  Gallo  Gallo  Grea	anized und Clean Out use Interceptor ons per Flush ons per Minute use Trap		UON UP V VB VFD VS	Unless Otherwise Noted Up (Penetrates Floor Slab)  Vent Vacuum Breaker Variable Frequency Drive Vent Stack
G GAL GCC GI GPF GPN GT GV	Flusi  Gallo  V Galv  Grou  Grea  Gallo  Grea  Gallo  Grea  Gallo	anized und Clean Out use Interceptor ons per Flush ons per Minute use Trap e Valve		UON UP V VB VFD	Unless Otherwise Noted Up (Penetrates Floor Slab)  Vent Vacuum Breaker Variable Frequency Drive
G GAL GAL GCC GI GPF GPN GT GV	Flusi  Gallo Grou Grea Gallo Grea Gallo Grea Gate	anized and Clean Out ase Interceptor ons per Flush ons per Minute ase Trap a Valve		UON UP V VB VFD VS	Unless Otherwise Noted Up (Penetrates Floor Slab)  Vent Vacuum Breaker Variable Frequency Drive Vent Stack
G GAL GAL GCC GI GPF GPN GT GV	Flusi  Gallo  Grou  Grea  Gallo  Grea  Gallo  Grea  Gallo  Grea  Gate	anized  Ind Clean Out  Isse Interceptor  Isse Interceptor  Isse Insert Flush  Isse Trap  Isse Valve  Isse Bib  Isse Bib	V	UON UP V VB VFD VS	Unless Otherwise Noted Up (Penetrates Floor Slab)  Vent Vacuum Breaker Variable Frequency Drive Vent Stack
G GAL GAL GCC GI GPF GPN GT GV	Flusi  Gallo  Grou  Grea  Gallo  Grea  Gallo  Grea  Gallo  Grea  Gate	anized and Clean Out ase Interceptor ons per Flush ons per Minute ase Trap a Valve		UON UP V VB VFD VS VTR	Unless Otherwise Noted Up (Penetrates Floor Slab)  Vent Vacuum Breaker Variable Frequency Drive Vent Stack Vent through Roof
G GAL GAL GCC GI GPF GPN GT GV	Flusi  Gallo  Grou  Grea  Gallo  Grea  Gallo  Grea  Gate  Hose  Hano	anized  Ind Clean Out  Isse Interceptor  Isse Interceptor  Isse Insert Flush  Isse Trap  Isse Valve  Isse Bib  Isse Bib	V	UON UP V VB VFD VS VTR	Unless Otherwise Noted Up (Penetrates Floor Slab)  Vent Vacuum Breaker Variable Frequency Drive Vent Stack Vent through Roof  Washer
G GAL GAL GCC GI GPF GPN GT GV	Flusi  Gallo V Galv O Grou Grea Gallo Grea Gate  Hose Hanc Hot V	anized and Clean Out ase Interceptor ons per Flush ons per Minute ase Trap a Valve  Bib dicapped Water Water Return	V	UON UP V VB VFD VS VTR	Unless Otherwise Noted Up (Penetrates Floor Slab)  Vent Vacuum Breaker Variable Frequency Drive Vent Stack Vent through Roof
G GAL GAL GCC GI GPF GPN GT GV H HB HC HW HWF	Flusi  Gallo V Galv O Grou Grea Gallo Grea Gate Hose Hand Hot \ R Hot \	anized  and Clean Out  ase Interceptor  ons per Flush  ons per Minute  ase Trap  a Valve  Bib  dicapped  Water  Water Return  Water Recirculating Pump	V	V VB VFD VS VTR	Unless Otherwise Noted Up (Penetrates Floor Slab)  Vent Vacuum Breaker Variable Frequency Drive Vent Stack Vent through Roof  Washer Water Closet (Toilet)
G GAL GAL GCC GI GPF GPN GT GV	Flusi  Gallo V Galv O Grou Grea Gallo Grea Gate Hose Hand Hot \ R Hot \	anized and Clean Out ase Interceptor ons per Flush ons per Minute ase Trap a Valve  Bib dicapped Water Water Return	V	UON UP V VB VFD VS VTR	Unless Otherwise Noted Up (Penetrates Floor Slab)  Vent Vacuum Breaker Variable Frequency Drive Vent Stack Vent through Roof  Washer

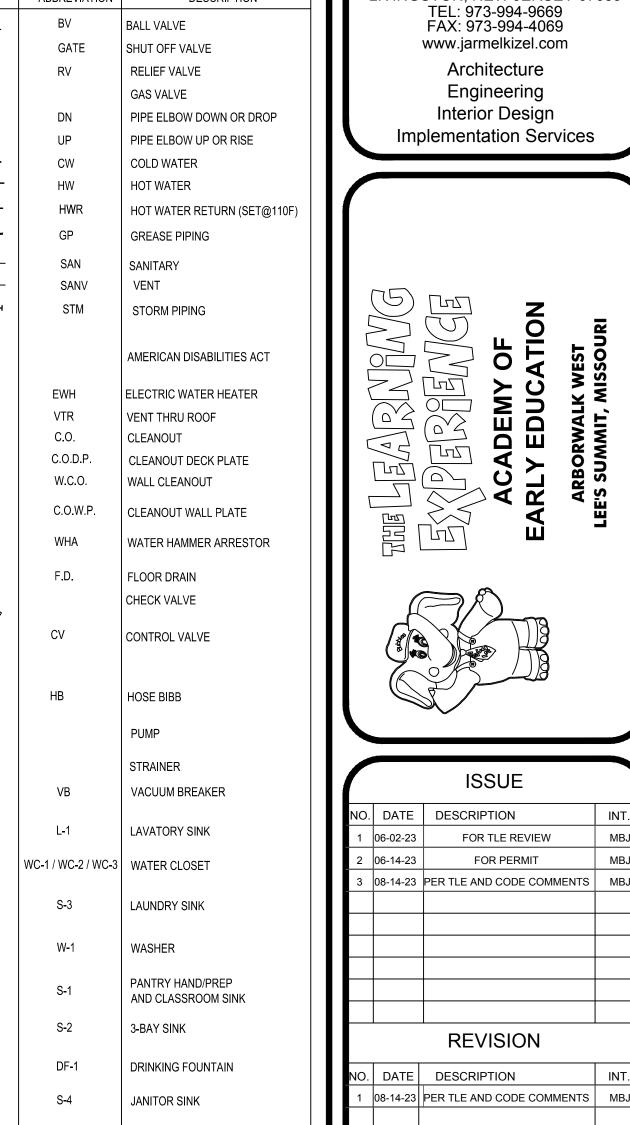
1. CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING THE CONTRACTOR'S BEST SKILL AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCTION MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB SITE SAFETY

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SYMBOL	ABBREVIATION	DESCRIPTION
— <del>—</del>	BV	BALL VALVE
->>- ∅	GATE	SHUT OFF VALVE
	RV	RELIEF VALVE
<b>-&gt;√</b> -		GAS VALVE
<del></del>	DN	PIPE ELBOW DOWN OR DROP
<b>├</b>	UP	PIPE ELBOW UP OR RISE
	CW	COLD WATER
	HW	HOT WATER
	HWR	HOT WATER RETURN (SET@110F
	GP	GREASE PIPING
——SAN ——	SAN	SANITARY
SANV STM	SANV	VENT
- 31W	STM	STORM PIPING
E		AMERICAN DISABILITIES ACT
	EWH	ELECTRIC WATER HEATER
	VTR	VENT THRU ROOF
<u> </u>	C.O.	CLEANOUT
⊚ 	C.O.D.P. W.C.O.	CLEANOUT DECK PLATE
. I 🕅		WALL CLEANOUT
	C.O.W.P.	CLEANOUT WALL PLATE
<u> </u>	WHA	WATER HAMMER ARRESTOR
	F.D.	FLOOR DRAIN
_ <b>N</b>		CHECK VALVE
	cv	CONTROL VALVE
太	НВ	HOSE BIBB
		PUMP
$\vdash$		STRAINER
' ~, ₽	VB	VACUUM BREAKER
	L-1	LAVATORY CINIC
		LAVATORY SINK
<b>*</b> •	WC-1 / WC-2 / WC-3	WATER CLOSET
	S-3	LAUNDRY SINK
	W-1	WASHER
•	S-1	PANTRY HAND/PREP AND CLASSROOM SINK
	S-2	3-BAY SINK
	DF-1	DRINKING FOUNTAIN
•	S-4	JANITOR SINK
	SP-1	ELEVATOR SUMP PUMP
<b>(0)</b>		
<b>©</b> •	SE-1	SEWAGE EJECTOR PUMP





PROFESSIONAL CERTIFICATION

MATTHEW B. JARMEL, AIA, MBA LICENSE NUMBER: A2017014316

Project Number: TLEMO22-164	Scale: AS NOTED
Drawn By:	Approved By:
LN	MBJ
D : N	1

PLUMBING ABBREVIATIONS, SCHEDULES, SPECIFICATIONS AND **LEGEND** 



## PLUMBING SPECIFICATIONS

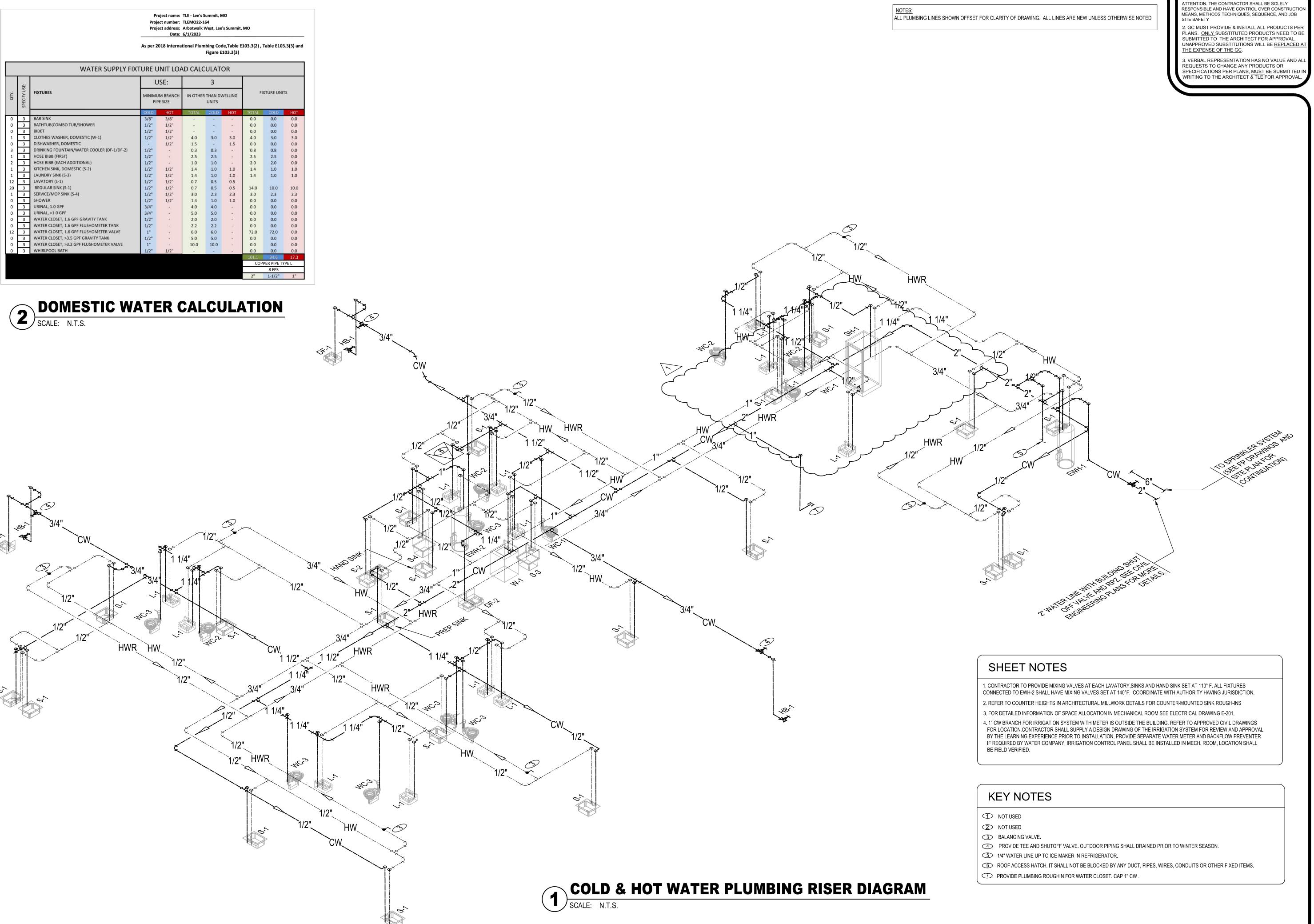
ALL DOMESTIC WATER PIPING SHALL BE COPPER TYPE L. CONTRACTOR SHALL PROVIDE ALTERNATE PRICE FOR PEX PIPING IF APPROVED BY AUTHORITY HAVING JURISDICTION. PIPE FITTING AND CLAMPS MUST BE COMPATIBLE AND MANUFACTURED BY ONE MANUFACTURER. SANITARY DRAIN PIPING AND FITTINGS 6" AND SMALLER SHALL BE CAST IRON. CONTRACTOR SHALL PROVIDE ALTERNATE PRICE FOR PVC IF APPROVED BY AUTHORITY HAVING JURISDICTION. NO COMBUSTIBLE PIPING CAN BE INSTALLED IN RETURN PLENUM OR IN NOT PROTECTED BY SPRINKLER ENCLOSURE.

DIELECTRIC FITTINGS: CONNECTIONS TO DISSIMILAR METALS 2" AND SMALLER PIPE SIZE SHALL BE MADE USING VICTAULIC CLEARFLOW STYLE 47 DIELECTRIC WATERWAY CONNECTOR 2-1/2" AND LARGE PIPE SIZE SHALL BE MADE BY USING FLANGES WITH DIELECTRIC ISOLATION GASKETS.

PIPE INSULATORS: FIBERGLASS WITH ALL SERVICE JACKET, SCHULLER, OWENS-CORNING OR KNAUF, MIN. 1" THICK.

HOT AND COLD WATER SHUTOFF VALVES FIBERGLASS WITH ALL SERVICE JACKET, SCHULLER, OWENS-CORNING OR KNAUF

ALL WATER HAMMER ARRESTOR TO BE CONNECTED BETWEEN THE TWO LAST TWO FIXTURES OF ANY RUN. THIS APPLIES BOTH TO HOT AND COLD WATER PIPING.



1. CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING THE CONTRACTOR'S BEST SKILL AND



ARCHITECTS AND ENGINEERS INC. 42 OKNER PARKWAY LIVINGSTON, NEW JERSEY 07039 TEL: 973-994-9669 FAX: 973-994-4069

www.jarmelkizel.com Architecture Engineering Interior Design Implementation Services



NO.	DATE	DESCRIPTION	INT.
1	06-02-23	FOR TLE REVIEW	MBJ
2	06-14-23	FOR PERMIT	MBJ
3	08-14-23	PER TLE AND CODE COMMENTS	MBJ
		REVISION	
NO.	DATE	DESCRIPTION	INT.
1	08-14-23	PER TLE AND CODE COMMENTS	MBJ

ISSUE

PROFESSIONAL CERTIFICATION

MATTHEW B. JARMEL, AIA, MBA LICENSE NUMBER: A2017014316

Project Number:	Scale:
TLEMO22-164	AS NOTED
Drawn By:	Approved By:
LN	MBJ
B ' 11	

**COLD & HOT WATER** 

**PLUMBING RISER DIAGRAM** 



Project name: TLE - Lee's Summit, MO Project number: TLEMO22-164 Project address: Arbotwalk West, Lee's Summit, MO Date: 6/1/2023

1. CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING THE CONTRACTOR'S BEST SKILL AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCTIO MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB SITE SAFETY

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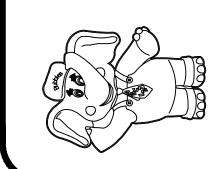
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Architecture Engineering Interior Design Implementation Services

ACADEMY OF ARLY EDUCATION



NO.	DATE	DESCRIPTION	INT
1	06-02-23	FOR TLE REVIEW	МВ
2	06-14-23	FOR PERMIT	МВ
		REVISION	•
NO.	DATE	DESCRIPTION	INT
			1

ISSUE

PROFESSIONAL CERTIFICATION

MATTHEW B. JARMEL, AIA, MBA LICENSE NUMBER: A2017014316

Project Number:	Scale:
TLEMO22-164	AS NOTED
Drawn By: <b>LN</b>	Approved By: MBJ

Drawing Name: **SANITARY PLUMBING** 

RISER DIAGRAM

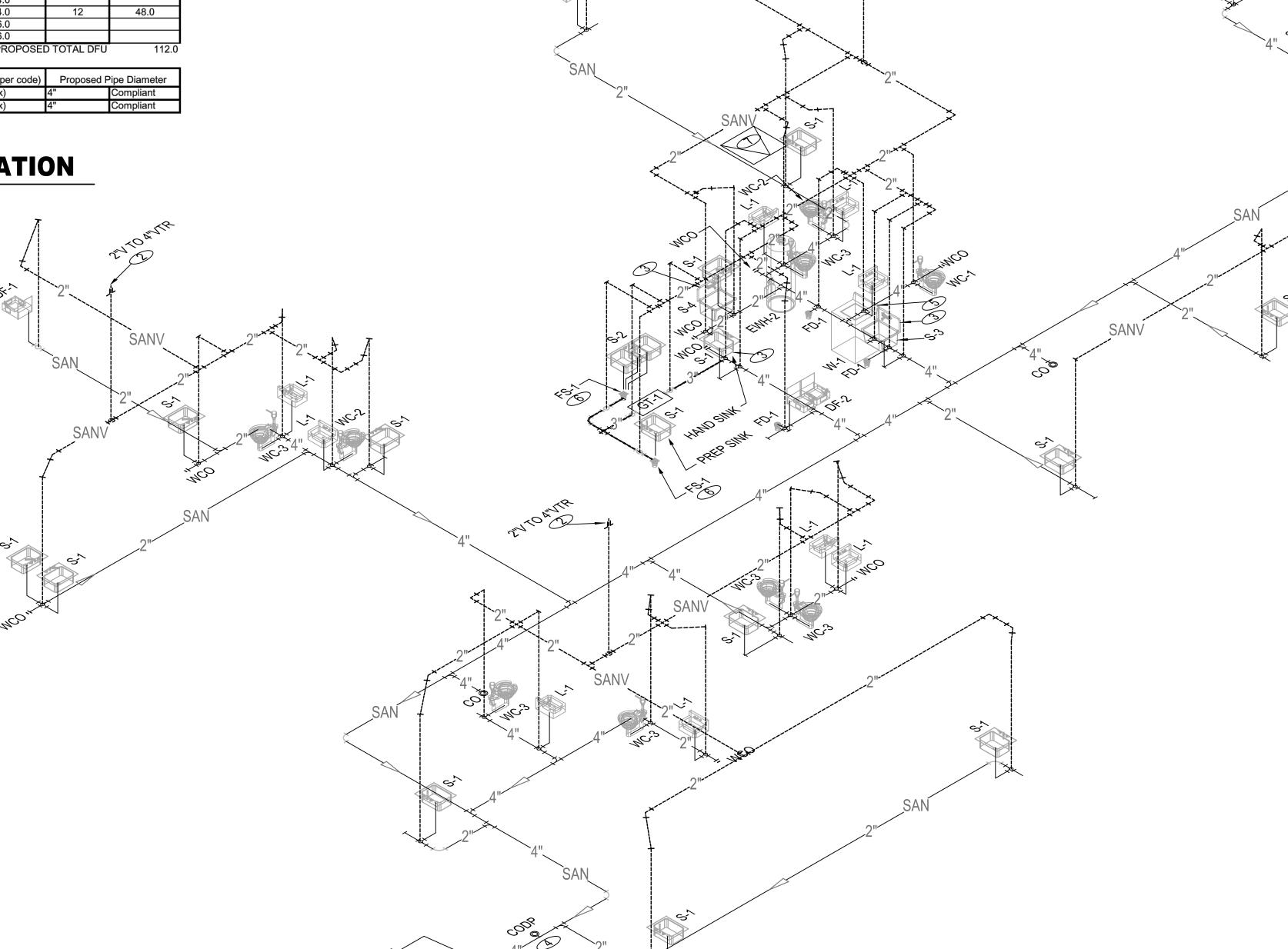
### As per 2018 International Plumbing Code, Table 709.1 and Table 710.1(1)

INDIVIDUAL FIXTURES	DFU	AMOUNT	TOTAL DF
Clothes washer, Domestic, 2" Standpipe (W-1)	3.0	1	3.0
Dishwasher, Domestic, With Independent Drain	2.0		
Drinking Fountain or Water Cooler (DF-1/DF-2)	0.5	2	1.0
Food-Waste-Grinder, Commercial, 2" Min. Trap	3.0		
Floor Drain, Emergency	0.0		
Kitchen Sink, Domestic, with One 1-1/2: Trap	2.0		
Kitchen Sink, Domestic, with Food-Waste-Grinder (S-2)	2.0	1	2.0
Kitchen Sink, Domestic, with Dishwasher	3.0		
Kitchen Sink, Domestic, with Grinder and Dishwasher	3.0		
Laundry Sink, One or Two Compartments, 1-1/2" Waste	2.0		
Laundry Sink, with Discharge from Clothes Washer	2.0		
Lavatory, 1-1/4" Waste (L-1)	1.0	12	12.0
Mop Basin, 3" Trap (S-4)	3.0	1	3.0
Service Sink, 3" Trap (S-3)	3.0	1	3.0
Shower Stall, 2" Trap	2.0		
Showers, Group, Per Head (Continuous Use)	5.0		
Sink, 1-1/2" Trap (S-1)	2.0	20	40.0
Sink, 2" Trap	3.0		
Sink, 3" Trap	5.0		
Trap Size, 1-1/4" (Other)	1.0		
Trap Size, 1-1/2" (Other)	2.0		
Trap Size, 2" (Other)	3.0		
Trap Size, 3" (Other)	5.0		
Trap Size, 4" (Other)	6.0		
Urinal, 1.0 GPF	4.0		
Urinal, Greater Than 1.0 GPF	5.0		
Wash Fountain, 1-1/2" Trap	2.0		
Wash Fountain, 2" Trap	3.0		
Wash Sink, Each Set Of Faucets	2.0		
Water Closet, 1.6 GPF Gravity or Pressure Tank	4.0		
Water Closet, 1.6 GPF Flushometer Valve (WC-1, WC-2 & WC-3)	4.0	12	48.0
Water Closet, 3.5 GPF Gravity Tank	6.0		
Water Closet, 3.5 GPF Flushometer Valve	6.0		

DFU(As per code) Proposed Pipe Diameter Dia (As per Code Slope (As per code) 1/8" per foot slope 180 (Max) 1/4" per foot slope

SANITARY LOAD CALCULATION

SCALE: N.T.S



SANITARY PLUMBING RISER DIAGRAM

ALL PLUMBING LINES SHOWN OFFSET FOR CLARITY OF DRAWING. ALL LINES ARE NEW UNLESS OTHERWISE NOTED

## SANITARY SEWER KEY NOTES

- 4" SANITARY SEWER DRAIN LINE BELOW GRADE. SEE CIVIL UTILITIES PLAN FOR CONTINUATION.
- SANITARY VENT UP THRU FLAT ROOF DECK.
  INSTALL WITH ROOF FLASHING PER LOCAL CODE.
- P-TRAP ON LAVATORY /SINK WITH WATER SAVER TRAP PRIMER CONNECTION TO CONNECT TO FLOOR DRAIN PER MANUFACTURER'S SPECIFICATIONS AND LOCAL CODE REGULATIONS.
- A SANITARY CLEAN-OUT FLUSH WITH TOP OF GRADE. IN CASE OF SANITARY PIPE BELOW CONCRETE, PROVIDE CLEAN-OUT WITH DECK PLATE.
- CLOTHES WASHING MACHINE CONNECTION BOX RECESSED IN WALL W/2 INCH DIAMETER P-TRAP AS REQUIRED BY BUILDING CODE.
- 6 PROVIDE INDIRECT WASTE CONNECTION AT PANTRY PREP SINK (S-1) AND PANTRY 3-COMPARTMENT SINK (S-2). REF. DTL. 7 ON P-600. COORDINATE LOCATION OF FLOOR SINK WITH SINK LEGS
- ROOF ACCESS HATCH. IT SHALL NOT BE BLOCKED BY ANY DUCT, PIPES, WIRES, CONDUITS OR OTHER FIXED ITEMS.

SANITARY CLEAN-OUTS BELOW LAVATORIES & SINKS MAY BE P-TRAPS WITH CLEAN-OUTS PER LOCAL CODE REGULATIONS REFER TO COUNTER HEIGHTS IN

ARCHITECTURAL MILLWORK DETAILS FOR COUNTER-MOUNTED SINK ROUGH-INS FRESH AIR INTAKE

2" MIN. SIZE UNDER SLAB DRAIN. 2" OR LESS DRAIN @  $\frac{1}{4}$ " DROP ALL FLOOR DRAINS W/TRAP-PRIMERS ALL VTR'S 10'-0" MIN. FROM ANY

Project name: TLE - Lee's Summit, MO Project number: TLEMO22-164 Project address: Arbotwalk West, Lee's Summit, MO

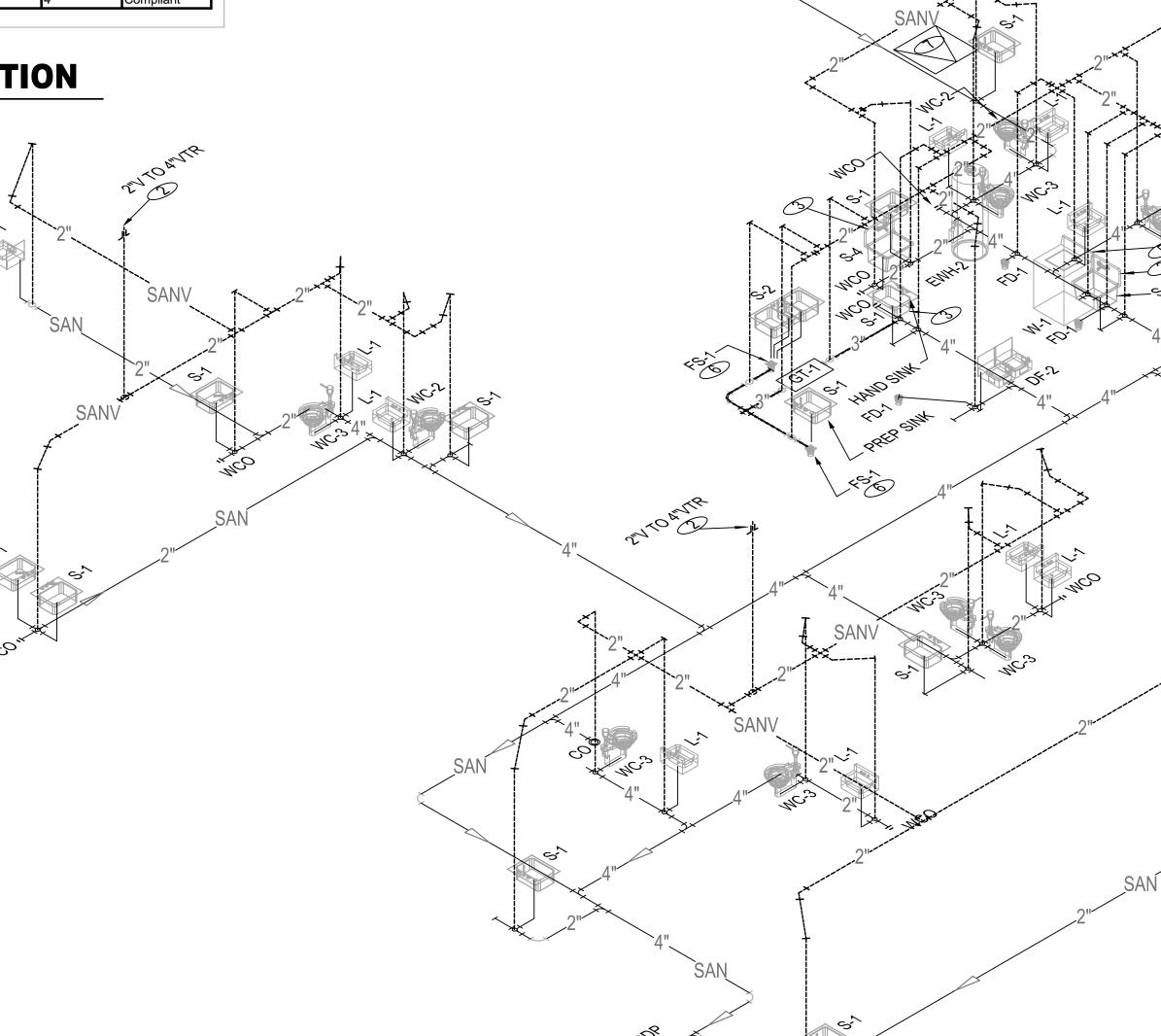
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The per rest steps	Dia (As per Code	Slope (As per code)	DFU(As per code)	Proposed F	ipe Diameter
4" 1/4" per foot slope 216 (Max) 4" Compliant	4"	1/8" per foot slope	180 (Max)	4"	Compliant
	4"	1/4" per foot slope	216 (Max)	4"	Compliant

# SANITARY LOAD CALCULATION SCALE: N.T.S



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SANITARY SEWER KEY NOTES

3 P-TRAP ON LAVATORY /SINK WITH WATER SAVER TRAP PRIMER CONNECTION TO CONNECT TO FLOOR DRAIN PER MANUFACTURER'S SPECIFICATIONS AND

A SANITARY CLEAN-OUT FLUSH WITH TOP OF GRADE. IN CASE OF SANITARY PIPE BELOW CONCRETE, PROVIDE CLEAN-OUT WITH DECK PLATE.

CLOTHES WASHING MACHINE CONNECTION BOX RECESSED IN WALL W/2 INCH DIAMETER P-TRAP AS REQUIRED BY BUILDING CODE.

ROOF ACCESS HATCH. IT SHALL NOT BE BLOCKED BY ANY DUCT, PIPES,

PROVIDE INDIRECT WASTE CONNECTION AT PANTRY PREP SINK (S-1) AND PANTRY 3-COMPARTMENT SINK (S-2). REF. DTL. 7 ON P-600. COORDINATE

PROVIDE ROUGH IN (4"SAN, 2" VENT CONNECTIONS) FOR TOILET IN NURSING

2" MIN. SIZE UNDER SLAB DRAIN.

ALL FLOOR DRAINS W/TRAP-PRIMERS

ALL VTR'S 10'-0" MIN. FROM ANY

2" OR LESS DRAIN @  $\frac{1}{4}$ " DROP

4" SANITARY SEWER DRAIN LINE BELOW GRADE. SEE CIVIL UTILITIES PLAN FOR CONTINUATION.

SANITARY VENT UP THRU FLAT ROOF DECK.
INSTALL WITH ROOF FLASHING PER LOCAL CODE.

LOCATION OF FLOOR SINK WITH SINK LEGS

WIRES, CONDUITS OR OTHER FIXED ITEMS.

SANITARY CLEAN-OUTS BELOW

REFER TO COUNTER HEIGHTS IN

REGULATIONS

LAVATORIES & SINKS MAY BE P-TRAPS WITH CLEAN-OUTS PER LOCAL CODE

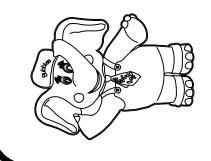
ARCHITECTURAL MILLWORK DETAILS FOR COUNTER-MOUNTED SINK ROUGH-INS

LOCAL CODE REGULATIONS.

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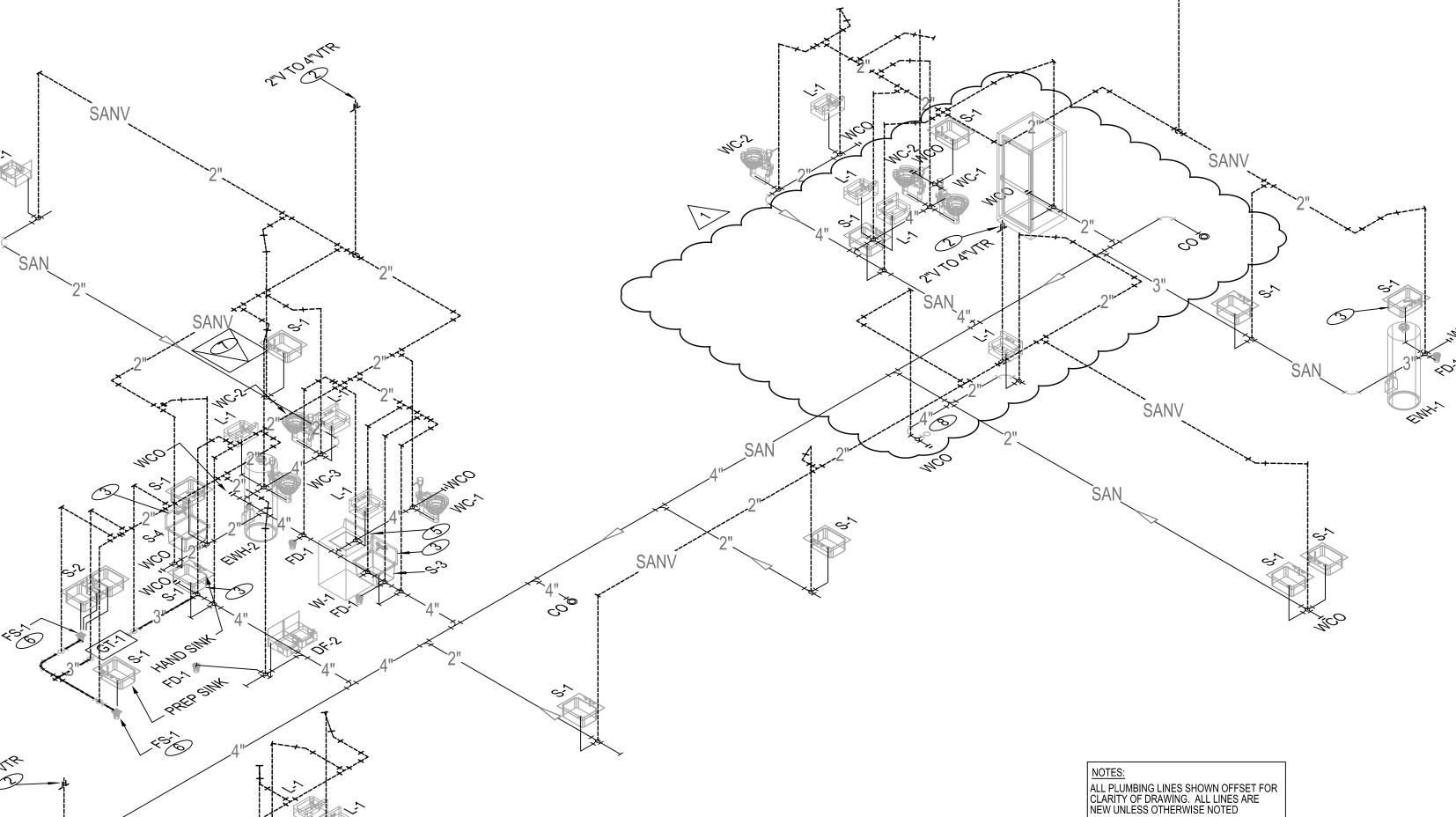
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MATTHEW B. JARMEL, AIA, MBA LICENSE NUMBER: A2017014316

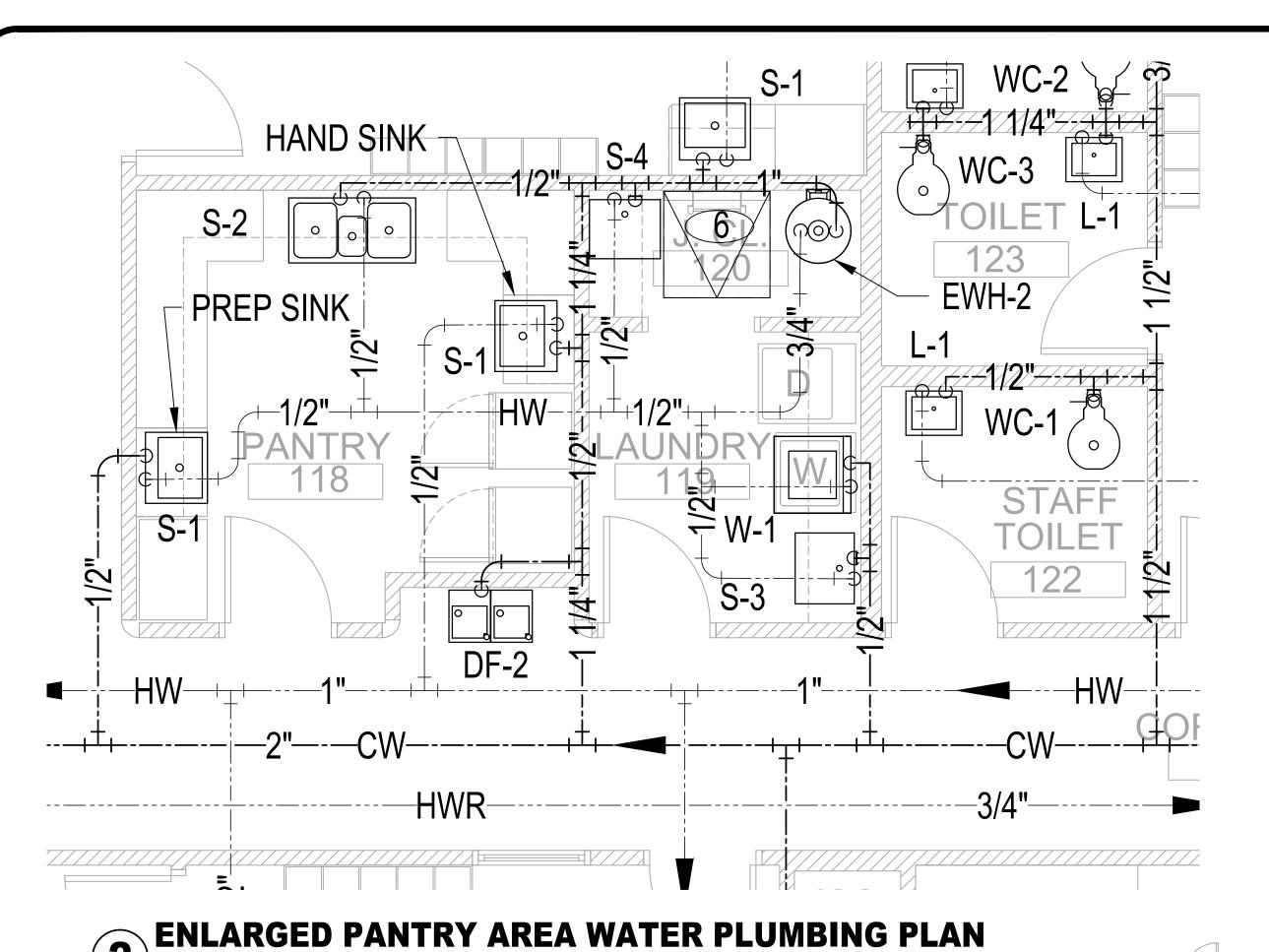
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Project Number:	Scale:
TLEMO22-164	AS NOTED
Drawn By:	Approved By:
LN	MBJ

**SANITARY PLUMBING** RISER DIAGRAM

Drawing Name:



SANITARY PLUMBING RISER DIAGRAM



### SHEET NOTES

1. CONTRACTOR TO PROVIDE MIXING VALVES AT EACH LAVATORY, SINKS AND HAND SINK SET AT 110° F. ALL FIXTURES CONNECTED TO EWH-2 SHALL HAVE MIXING VALVES SET AT 140°F. COORDINATE WITH AUTHORITY HAVING JURISDICTION.

2. REFER TO COUNTER HEIGHTS IN ARCHITECTURAL MILLWORK DETAILS FOR COUNTER-MOUNTED SINK ROUGH-INS

3. FOR DETAILED INFORMATION OF SPACE ALLOCATION IN MECHANICAL ROOM SEE ELECTRICAL DRAWING E-201.

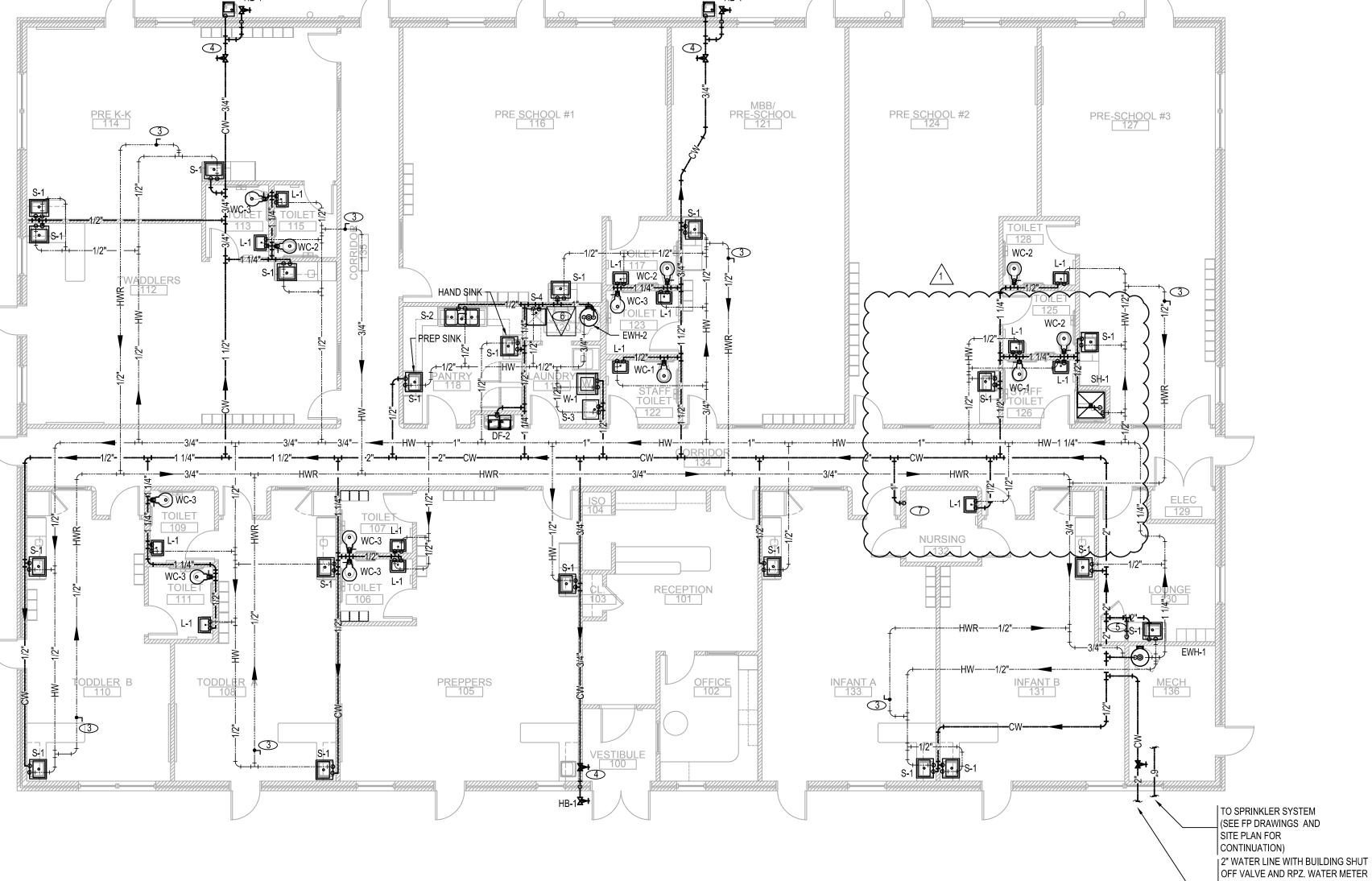
4. 1" CW BRANCH FOR IRRIGATION SYSTEM WITH METER IS OUTSIDE THE BUILDING. REFER TO APPROVED CIVIL DRAWINGS FOR LOCATION.CONTRACTOR SHALL SUPPLY A DESIGN DRAWING OF THE IRRIGATION SYSTEM FOR REVIEW AND APPROVAL BY THE LEARNING EXPERIENCE PRIOR TO INSTALLATION. PROVIDE SEPARATE WATER METER AND BACKFLOW PREVENTER IF REQUIRED BY WATER COMPANY. IRRIGATION CONTROL PANEL SHALL BE INSTALLED IN MECH. ROOM, LOCATION SHALL BE FIELD VERIFIED.

### **KEY NOTES**

- ① NOT USED
- 2 NOT USED
- 3 BALANCING VALVE.
- PROVIDE TEE AND SHUTOFF VALVE. OUTDOOR PIPING SHALL DRAINED PRIOR TO WINTER SEASON.
- 5 1/4" WATER LINE UP TO ICE MAKER IN REFRIGERATOR.
- 6 ROOF ACCESS HATCH. IT SHALL NOT BE BLOCKED BY ANY DUCT, PIPES, WIRES, CONDUITS OR OTHER FIXED ITEMS.
- PROVIDE PLUMBING ROUGHIN FOR WATER CLOSET. CAP 1" CW.

ALL PLUMBING LINES SHOWN OFFSET FOR CLARITY OF DRAWING. ALL LINES ARE NEW UNLESS OTHERWISE

INO I LAN



1 COLD & HOT WATER PLUMBING PLAN

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



1. CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING THE CONTRACTOR'S BEST SKILL AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCTIO MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB

2. GC MUST PROVIDE & INSTALL ALL PRODUCTS PER PLANS. ONLY SUBSTITUTED PRODUCTS NEED TO BE SUBMITTED TO THE ARCHITECT FOR APPROVAL. UNAPPROVED SUBSTITUTIONS WILL BE REPLACED AT THE EXPENSE OF THE GC.

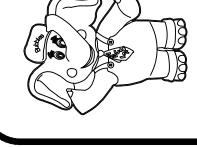
3. VERBAL REPRESENTATION HAS NO VALUE AND ALL REQUESTS TO CHANGE ANY PRODUCTS OR SPECIFICATIONS PER PLANS, <u>MUST</u> BE SUBMITTED IN WRITING TO THE ARCHITECT & TLE FOR APPROVAL.



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COLD & HOT WATER

**PLUMBING PLAN** 

Drawing Num

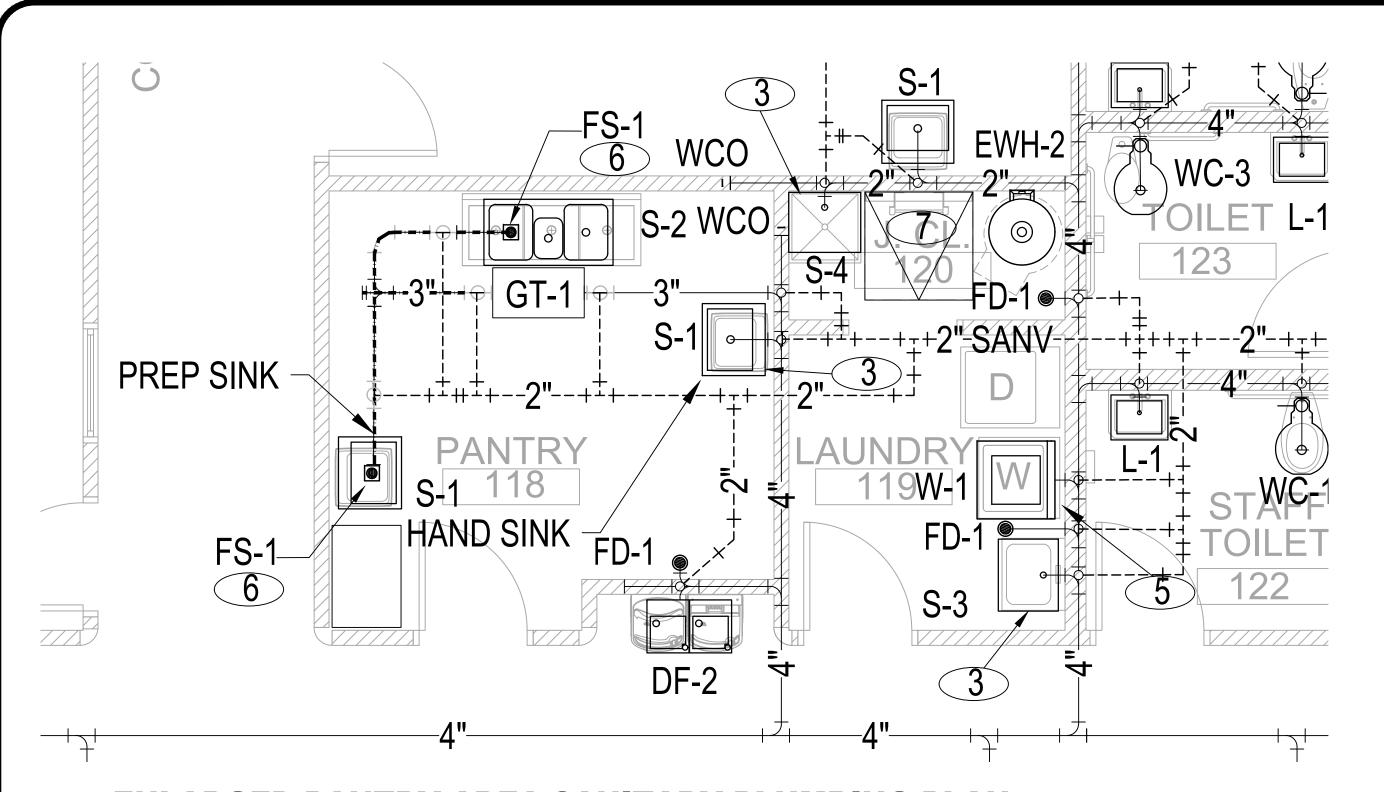
IS OUTSIDE THE BUILDING. SEE

CIVIL ENGINEERING PLANS FOR

MORE DETAILS.

P-300





### SANITARY SEWER KEY NOTES

### KEY NOTES:

- 4" SANITARY SEWER DRAIN LINE BELOW GRADE. SEE CIVIL UTILITIES PLAN FOR CONTINUATION.
- SANITARY VENT UP THRU FLAT ROOF DECK.
  INSTALL WITH ROOF FLASHING PER LOCAL CODE.
- P-TRAP ON LAVATORY /SINK WITH WATER SAVER TRAP PRIMER CONNECTION TO CONNECT TO FLOOR DRAIN PER MANUFACTURER'S SPECIFICATIONS AND LOCAL CODE REGULATIONS.
- SANITARY CLEAN-OUT FLUSH WITH TOP OF GRADE. IN CASE OF SANITARY PIPE BELOW CONCRETE, PROVIDE CLEAN-OUT WITH DECK PLATE.
- CLOTHES WASHING MACHINE CONNECTION BOX RECESSED IN WALL W/2 INCH DIAMETER P-TRAP AS REQUIRED BY BUILDING CODE.
- PROVIDE INDIRECT WASTE CONNECTION AT PANTRY PREP SINK (S-1) AND PANTRY 3-COMPARTMENT SINK (S-2). REF. DTL. 7 ON P-600. COORDINATE LOCATION OF FLOOR SINK WITH SINK LEGS
- ROOF ACCESS HATCH. IT SHALL NOT BE BLOCKED BY ANY DUCT, PIPES, WIRES, CONDUITS OR OTHER FIXED ITEMS.

2" MIN. SIZE UNDER SLAB DRAIN.

4" @ 1/8" ALL FLOOR DRAINS W/TRAP-PRIMERS

2" OR LESS DRAIN @  $\frac{1}{4}$ " DROP

ALL VTR'S 10'-0" MIN. FROM ANY

FRESH AIR INTAKE

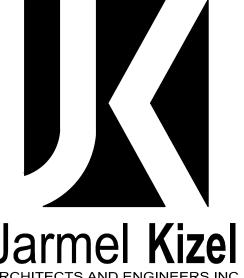
NOTE:
SANITARY CLEAN-OUTS BELOW
LAVATORIES & SINKS MAY BE P-TRAPS

- WITH CLEAN-OUTS PER LOCAL CODE REGULATIONS REFER TO COUNTER HEIGHTS IN
- REFER TO COUNTER HEIGHTS IN
  ARCHITECTURAL MILLWORK DETAILS FOR
  COUNTER-MOUNTED SINK ROUGH-INS

1. CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING THE CONTRACTOR'S BEST SKILL AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCTION MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB

2. GC MUST PROVIDE & INSTALL ALL PRODUCTS PER PLANS. <u>ONLY</u> SUBSTITUTED PRODUCTS NEED TO BE SUBMITTED TO THE ARCHITECT FOR APPROVAL. UNAPPROVED SUBSTITUTIONS WILL BE <u>REPLACED AT THE EXPENSE OF THE GC</u>.

3. VERBAL REPRESENTATION HAS NO VALUE AND ALL REQUESTS TO CHANGE ANY PRODUCTS OR SPECIFICATIONS PER PLANS, <u>MUST</u> BE SUBMITTED IN WRITING TO THE ARCHITECT & TLE FOR APPROVAL.

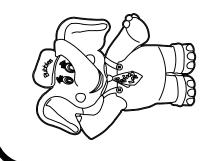


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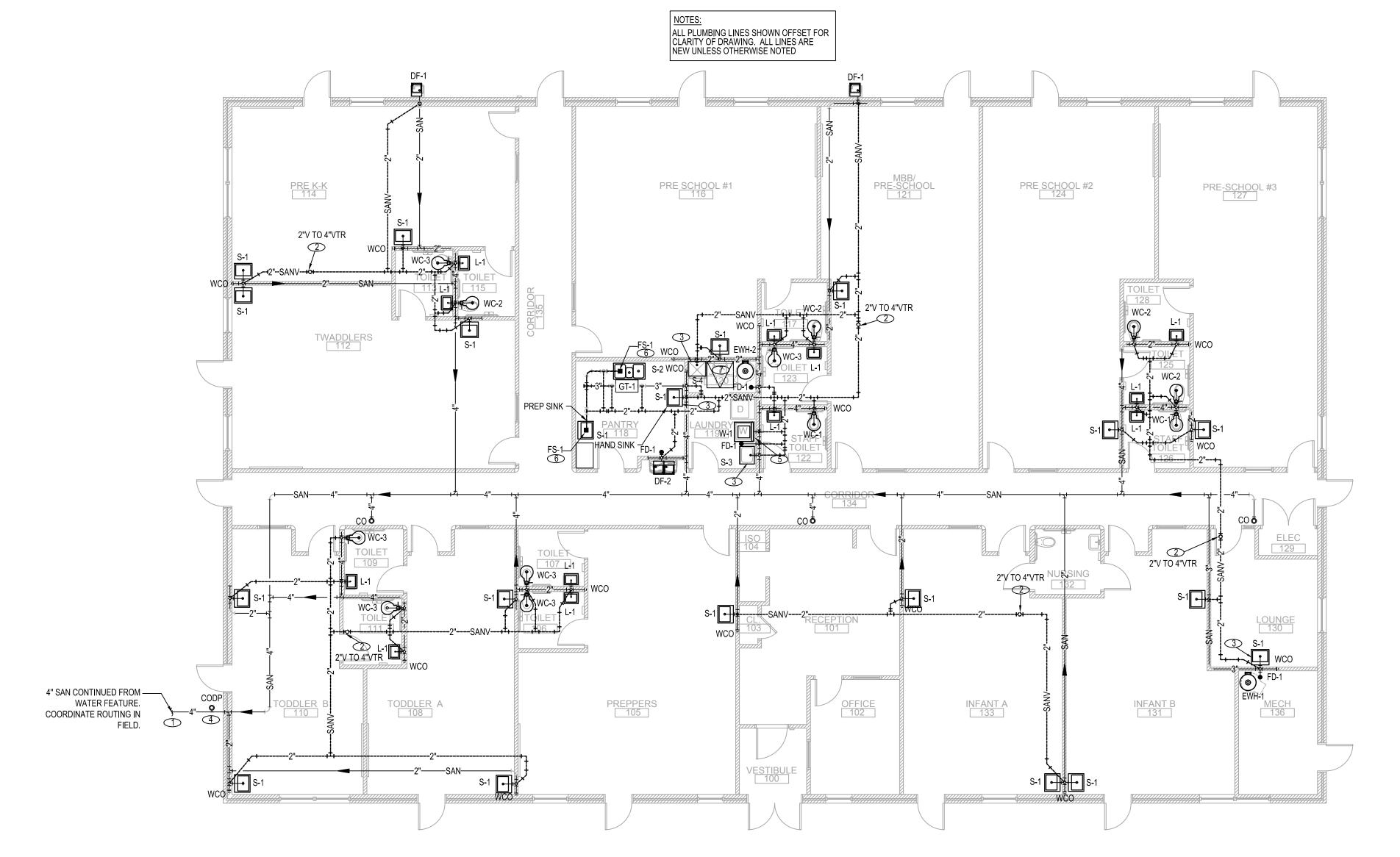
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awing Number

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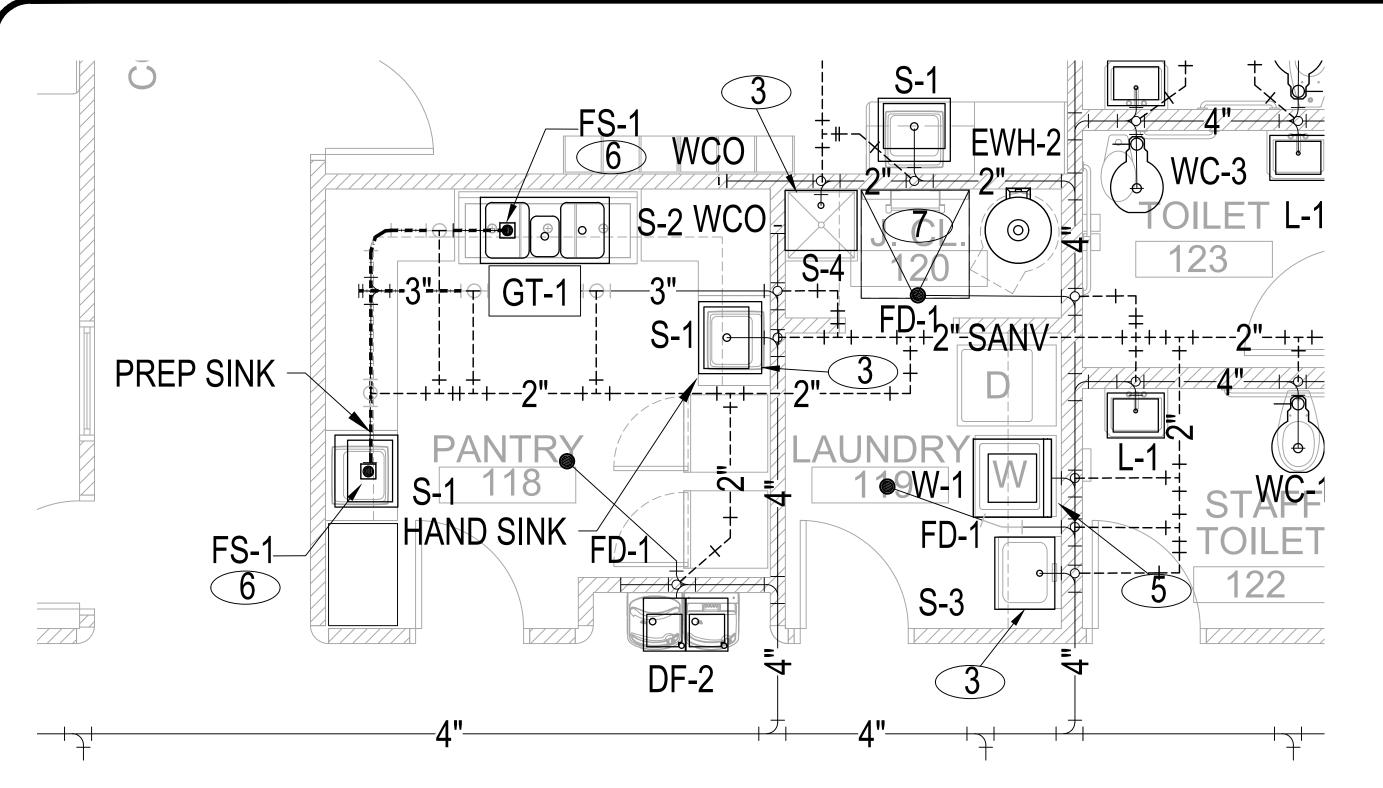


ENLARGED PANTRY AREA SANITARY PLUMBING PLAN
SCALE: 3/8" = 1'-0"



SANITARY PLUMBING PLAN

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



### SANITARY SEWER KEY NOTES

### KEY NOTES:

- 4" SANITARY SEWER DRAIN LINE BELOW GRADE. SEE CIVIL UTILITIES PLAN FOR CONTINUATION.
- SANITARY VENT UP THRU FLAT ROOF DECK. INSTALL WITH ROOF FLASHING PER LOCAL CODE.
- 3 P-TRAP ON LAVATORY /SINK WITH WATER SAVER TRAP PRIMER CONNECTION TO CONNECT TO FLOOR DRAIN PER MANUFACTURER'S SPECIFICATIONS AND LOCAL CODE REGULATIONS.
- 4 SANITARY CLEAN-OUT FLUSH WITH TOP OF GRADE. IN CASE OF SANITARY PIPE BELOW CONCRETE, PROVIDE CLEAN-OUT WITH DECK PLATE.
- CLOTHES WASHING MACHINE CONNECTION BOX RECESSED IN WALL
- W/2 INCH DIAMETER P-TRAP AS REQUIRED BY BUILDING CODE. PROVIDE INDIRECT WASTE CONNECTION AT PANTRY PREP SINK (S-1) AND PANTRY 3-COMPARTMENT SINK (S-2). REF. DTL. 7 ON P-600. COORDINATE
- LOCATION OF FLOOR SINK WITH SINK LEGS 7 ROOF ACCESS HATCH. IT SHALL NOT BE BLOCKED BY ANY DUCT, PIPES,
- WIRES, CONDUITS OR OTHER FIXED ITEMS. PROVIDE ROUGH IN (4"SAN, 2" VENT CONNECTIONS) FOR TOILET IN NURSING

2" MIN. SIZE UNDER SLAB DRAIN.

3" @ 1/8" 4" @ 1/8" ALL FLOOR DRAINS W/TRAP-PRIMERS

2" OR LESS DRAIN @ 1/4" DROP

ALL VTR'S 10'-0" MIN. FROM ANY

FRESH AIR INTAKE

SANITARY CLEAN-OUTS BELOW LAVATORIES & SINKS MAY BE P-TRAPS WITH CLEAN-OUTS PER LOCAL CODE

REGULATIONS REFER TO COUNTER HEIGHTS IN ARCHITECTURAL MILLWORK DETAILS FOR COUNTER-MOUNTED SINK ROUGH-INS

ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCTIO MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB

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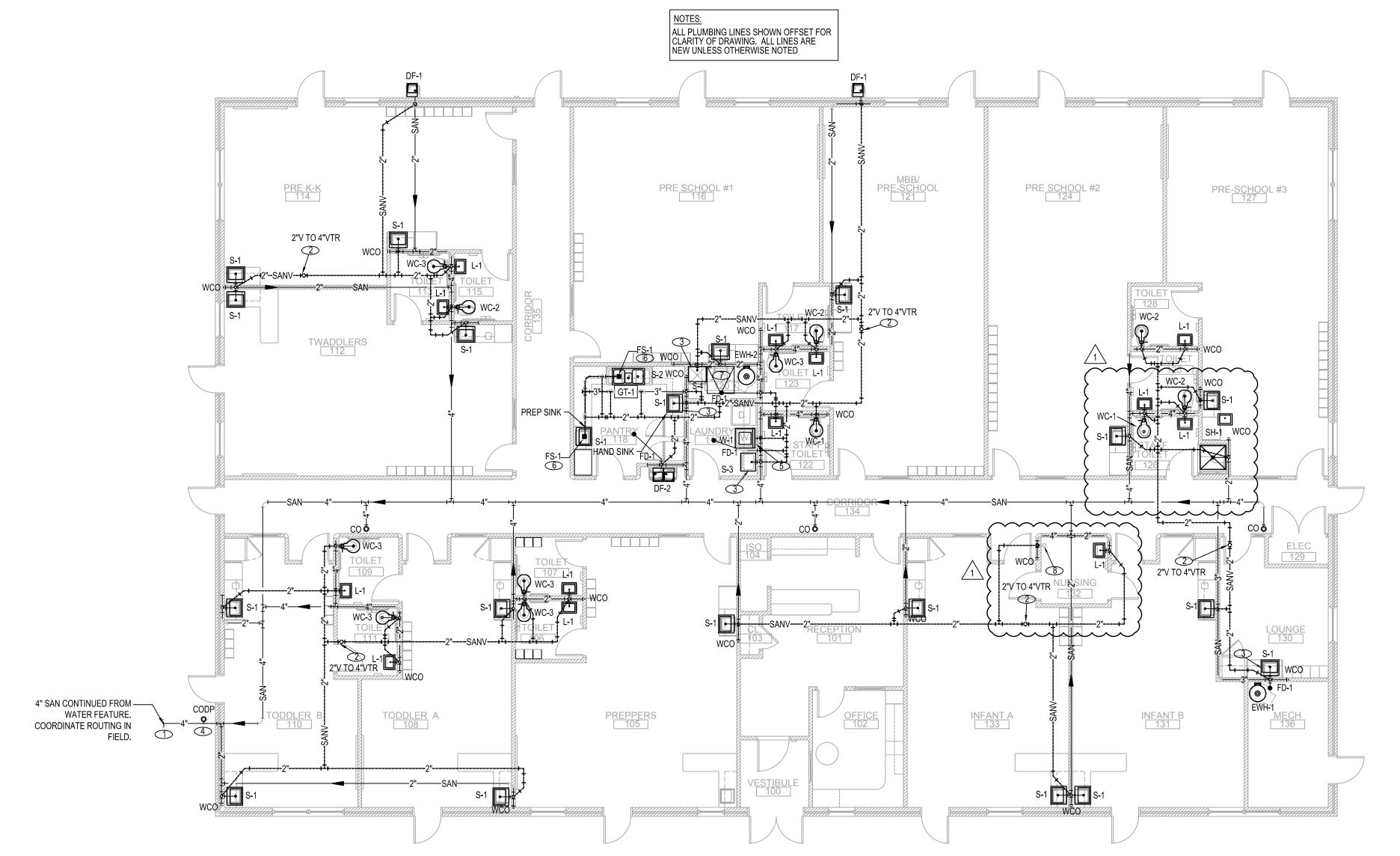
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**SANITARY PLUMBING** 

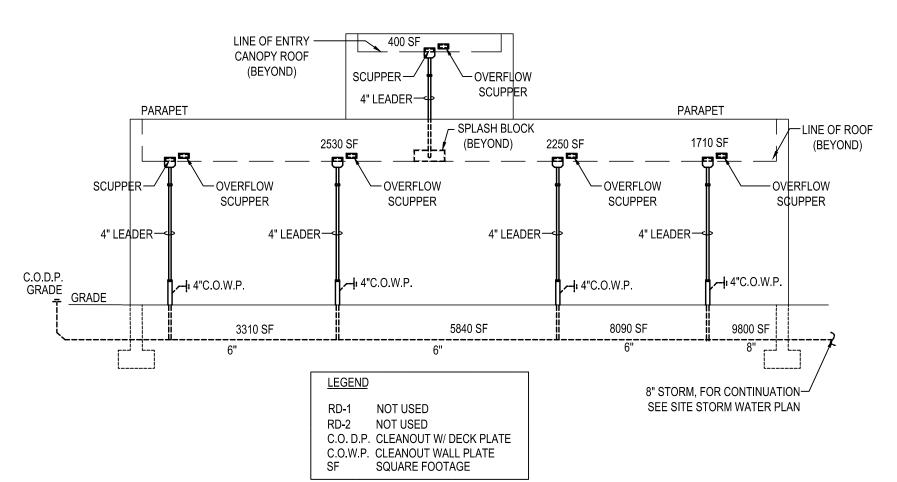


ENLARGED PANTRY AREA SANITARY PLUMBING PLAN

SCALE: 3/8" = 1'-0"

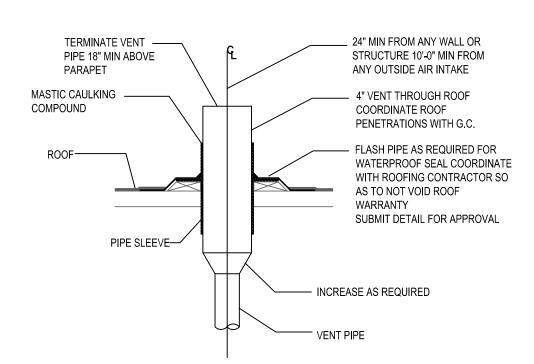


SANITARY PLUMBING PLAN SCALE: 1/8" = 1'-0"

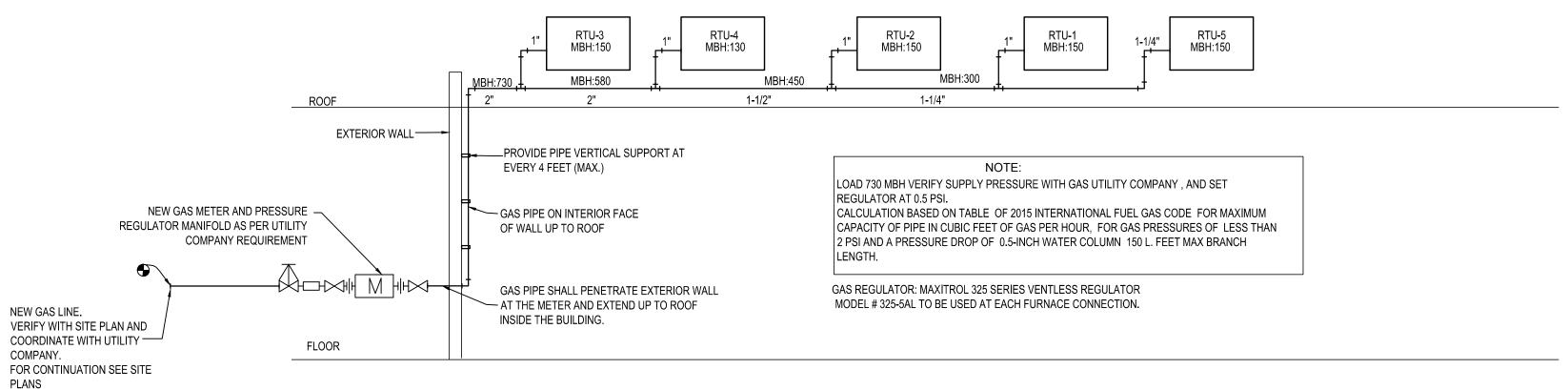


# STORM RISER DIAGRAM

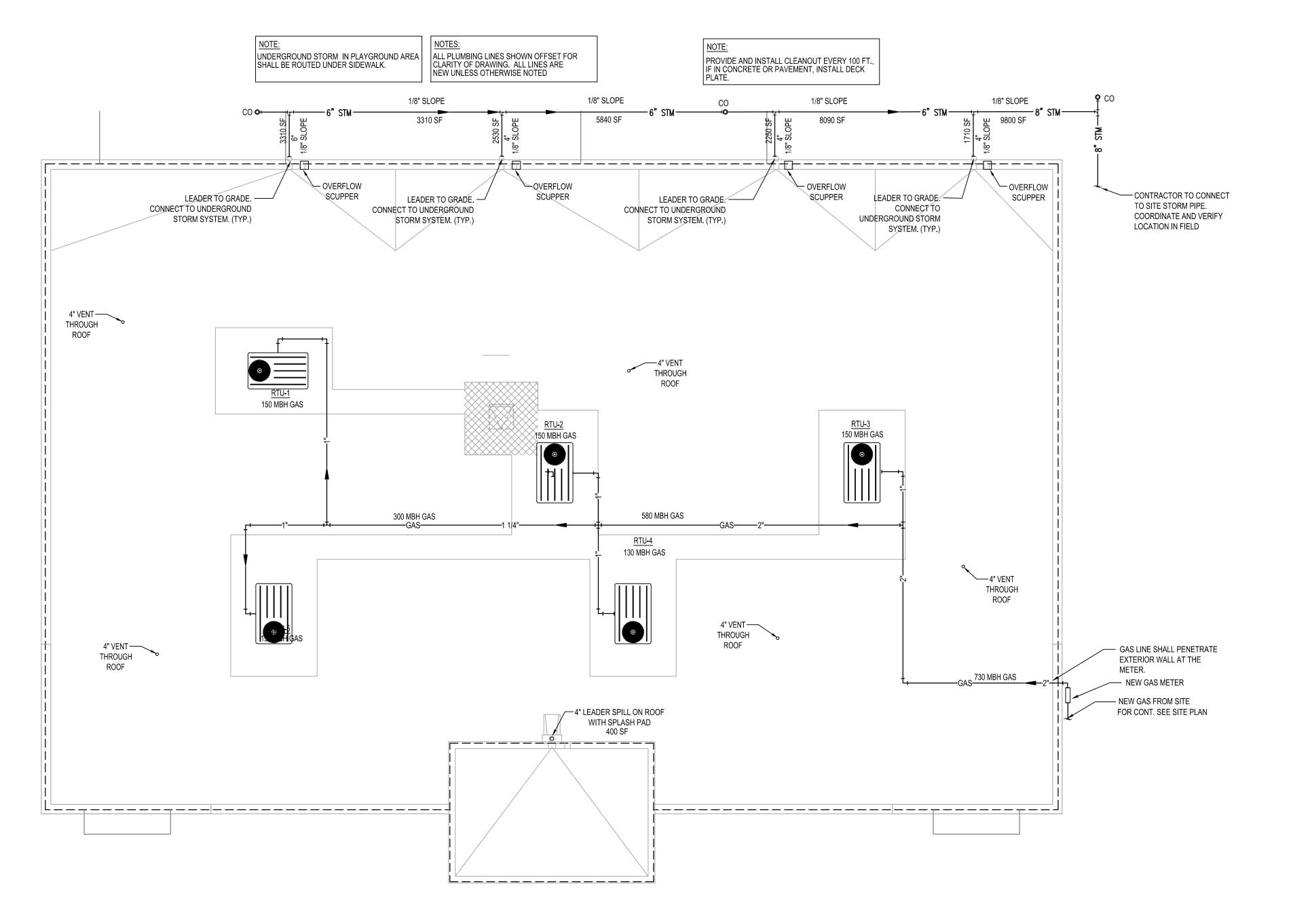
STORM CALCULATIONS **GUTTERS & DOWNSPOUTS**  ROOF TOTAL AREA IS 9800 FT<sup>2</sup> - RATE OF RAINFALL FOR THE AREA IS 4.0 INCH/HR = 0.33 FT/HR. -  $9800 \text{ FT}^2 \text{ X } 0.33 \text{ FT/HR} = 3234 \text{ FT}^3/\text{HR}$  3234 FT<sup>3</sup>/HR X 7.48052 GALLON/FT<sup>3</sup> = 24192 GALLON/HR - 24192 GALLON/HR ÷ 1/60 HR/MIN = 403.2 GALLON/MIN - 403.2 GALLON/MIN ÷ 4 LEADERS = 100.8 GALLON/MIN FOR EACH LEADER (AVG) - PER CHAPTER 11 OF THE 2018 IPC, TABLE 1106.2. 4" STORM LEADERS ARE USED.



## (BY ROOFING CONTRACTOR) **VENT PIPE AT ROOF PENETRATION**



GAS RISER DIAGRAM
SCALE: N.T.S.







. I. CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING THE CONTRACTOR'S BEST SKILL AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCTION MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB

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SITE SAFETY

3. VERBAL REPRESENTATION HAS NO VALUE AND ALL REQUESTS TO CHANGE ANY PRODUCTS OR SPECIFICATIONS PER PLANS, <u>MUST</u> BE SUBMITTED IN WRITING TO THE ARCHITECT & TLE FOR APPROVAL.

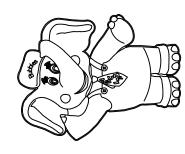


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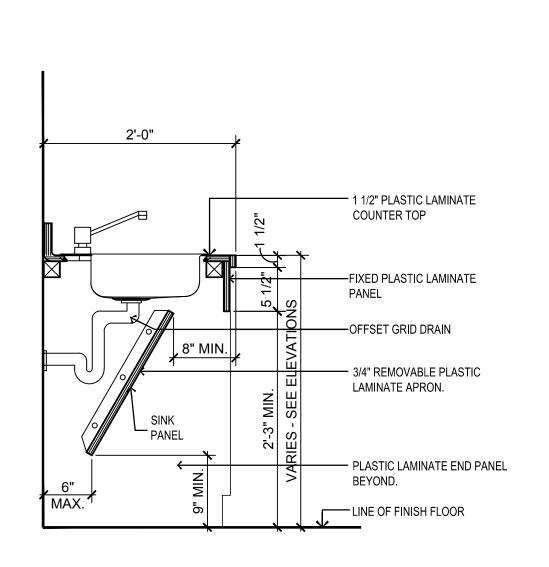
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GAS & STORM **PLUMBING PLANS** 





# **SECTION @ CLASSROOM** ADA SINK

CONTRACTOR TO PROVIDE MIXING VALVES AT EACH

LAVATORY/SINK (WALL HUNG OR

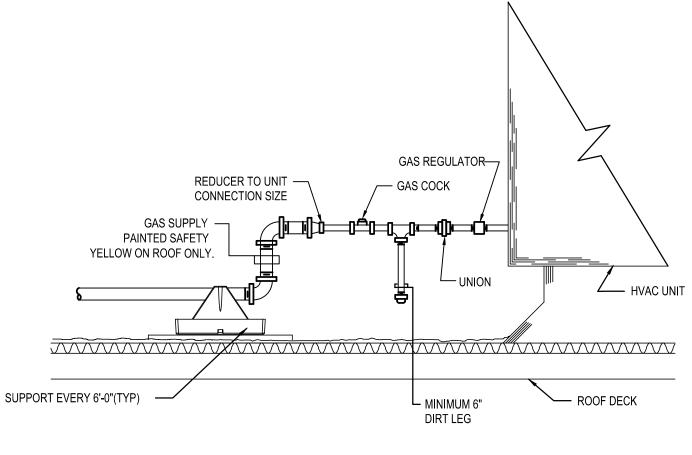
COUNTERTOP)

T.W. & C.W. SERVING LAV/SINK

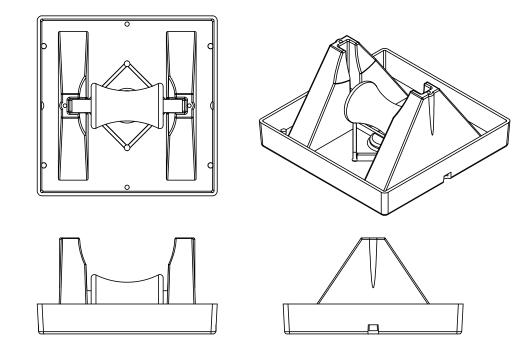
SYMMONS 7-210-CK THERMOSTATIC

MIXING VALVE W/COMPRESSION

FITTINGS & INLINE CHECKS

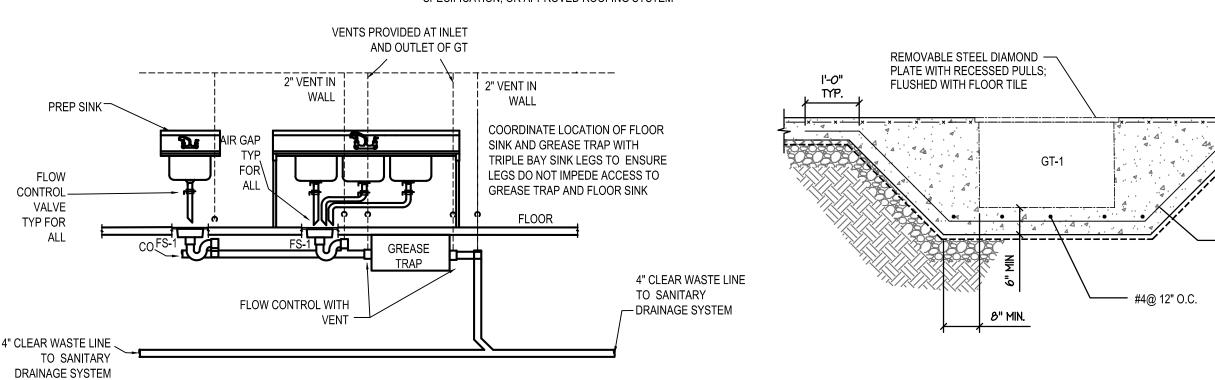


# GAS PIPE ON ROOF DIAGRAM



# GAS PIPE SUPPORT DIAGRAM SCALF: NT 9

PIPE STAND BY "MIRO INDUSTRY". PROVIDE WITH "MIRO" PIPE STRAP INSTALL PER MANUFACTURE SPECIFICATION, OR APPROVED ROOFING SYSTEM



# PLUMBING FIXTURES SANITARY CONNECTION DIAGRAM

JANITOR CLOSET EWH-2 WATER HEATER DIAGRAM

RELEASE VALVE

WATTS #FV4-1/8"

T & P RELIEF VALVE

UNION (TYPICAL)-

3/4" IW-SPILL OVER FUNNEL

FIXTURE

SINGLE FIXTURE

HOSE END

FUNNEL-

FLOOR DRAIN

FOR CONTINUATION

DRAIN VALVE —

ELECTRIC WATER

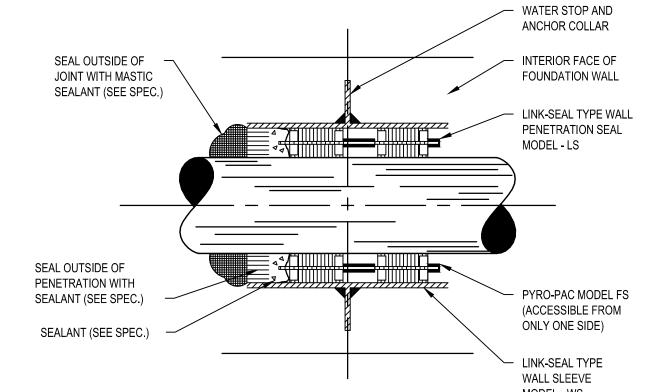
HEATER, EWH-2

FIXTURE

FIXTURE

BACK TO BACK FIXTURES

THERMOMETER -



FOUNDATION WALL PIPE PENETRATION DIAGRAM

CONTRACTOR TO PROVIDE MIXING VALVES AT EACH LAVATORY, SINK AND HAND SINK SET AT 110° F.

COORDINATE WITH AUTHORITY HAVING JURISDICTION

EXPANSION TANK

- THERMOMETER

OVERSIZED TEE

- OVERSIZED TEE

HOSE END DRAIN VALVE

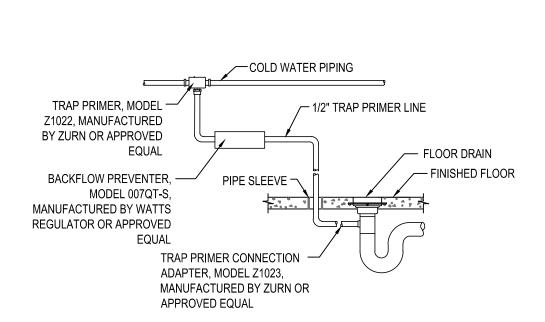
· CIRCULATOR (HWRP-2) WITH

DWG P-101 FOR APPLICABILITY

AQUASTAT CONTROL SEE SCHEDULE IN

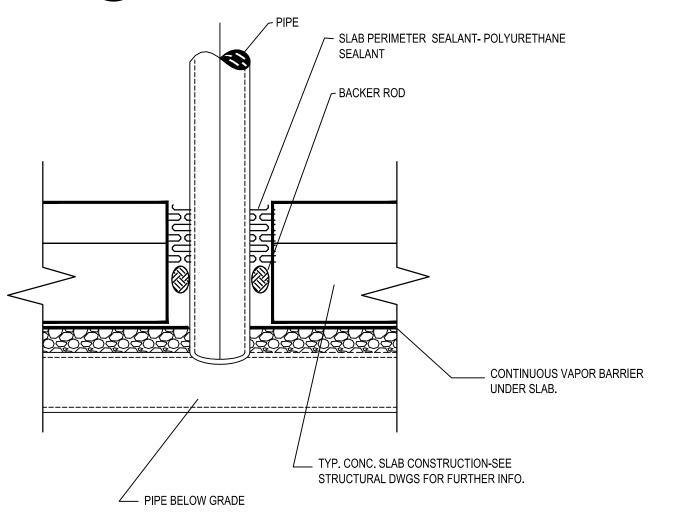
# MIXING VALVE DIAGRAM SCALE: N.T.S.

—COMPRESSION FITTING



TRAP PRIMER DIAGRAM

GREASE TRAP PIPING DIAGRAM



8 PIPE @ SLAB PENETRATION DIAGRAM SCALE: N.T.S.

CEILING 1 1/4" CW INCOMING SERVICE NOTES: HOLBY TEMPERING VALVE -SET BELOW 110°F METER FOR DOMESTIC WATER SERVICE AND IRRIGATION SERVICE IS OUTSIDE THE BUILDING BACKFLOW PREVENTER FOR SPRINKLER SERVICE IS OUTSIDE THE BUILDING. REFER TO CIVIL DRAWINGS FOR EXACT LOCATION AND CONTINUATION. **EXPANSION** PROVIDE AQUASTAT RECIRCULATION PUMP CONTROL VALVE FLOOR ─ 6" FIRE WATER DOMESTIC WATER CONTINUED. SEE FP-200 TO BE APPROVED BY WATER COMPANY PRIOR TO INSTALLATION 6" FIRE PROTECTION WATER -2" DOMESTIC WATER SERVICE SERVICE CONTINUED BACK TO CONTINUED BACK TO WATER METER. MAIN. SEE SITE/CIVIL DRAWINGS SEE SITE/CIVIL DRAWINGS FOR

**MECHANICAL ROOM DIAGRAM** 

CONTINUATION.

WORK USING THE CONTRACTOR'S BEST SKILL AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCTI MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB

2. GC MUST PROVIDE & INSTALL ALL PRODUCTS PE PLANS. <u>ONLY</u> SUBSTITUTED PRODUCTS NEED TO BE SUBMITTED TO THE ARCHITECT FOR APPROVAL. UNAPPROVED SUBSTITUTIONS WILL BE REPLACED

3. VERBAL REPRESENTATION HAS NO VALUE AND ALI REQUESTS TO CHANGE ANY PRODUCTS OR SPECIFICATIONS PER PLANS, MUST BE SUBMITTED IN

ALL FIXTURES CONNECTED TO EWH-2 SHALL HAVE MIXING

VALVES SET TO 140° F.

WRITING TO THE ARCHITECT & TLE FOR APPROVAL

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Drawing Name:	

**PLUMBING DIAGRAMS** 

P-600



## FIRE PROTECTION GENERAL NOTES

### A. GENERAL

- GENERAL NOTES, SYMBOLS LIST AND DETAILS ARE APPLICABLE TO ALL DRAWINGS MARKED "FP".
- FURNISH ALL LABOR AND MATERIALS REQUIRED FOR THE INSTALLATION OF THE FIRE PROTECTION SPRINKLER SYSTEM UNLESS OTHERWISE NOTED, IT IS THE INTENT OF THESE DOCUMENTS TO PROVIDE AN APPROVED AUTOMATIC SPRINKLER SYSTEM THROUGHOUT THE ENTIRE PROJECT.
- ALL NEW SPRINKLER WORK SHALL CONFORM TO THE REQUIREMENTS ALL APPLICABLE CODES AND LOCAL AUTHORITIES HAVING JURISDICTION INCLUDING BUT NOT LIMITED TO BUILDING DEPARTMENT AND FIRE DEPARTMENT.
- ALL FIRE PROTECTION SPRINKLER WORK INCLUDING DESIGN AND CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF APPLICABLE SECTIONS OF NFPA #13 AND #24.
- THE CONTRACTOR SHALL FURNISH AND INSTALL THE FIRE PROTECTION SPRINKLER SYSTEM IN A MANNER WHICH PROVIDES A COMPLETE AND OPERATIONAL SYSTEM, WITH ALL EQUIPMENT, PERMITS, PIPING, VALVES, INSULATION, CONTROLS, HANGERS, TRIM, ACCESSORIES AND ASSOCIATED INCIDENTAL WORK, IN ACCORDANCE WITH THE APPLICABLE CODES, ALL AUTHORITIES HAVING JURISDICTION, AND PER THE CONSTRUCTION DOCUMENTS.
- CONTRACTOR SHALL INCLUDE THE COST OF ALL SMALL DETAILS, INCIDENTAL WORK, AND ACCESSORIES NOT SHOWN OR SPECIFIED, BUT WHICH CAN BE REASONABLY INFERRED FOR COMPLETE AND SATISFACTORY CODE COMPLIANT SYSTEM. PROVIDE OFFSETS. FITTINGS AND SIMILAR ITEMS NECESSARY TO ACCOMPLISH REQUIREMENTS OF COORDINATION WITHOUT ADDITIONAL EXPENSE.
- ALL EQUIPMENT PIPING INSULATION ETC., INSTALLED IN HVAC PLENUM SPACES SHALL MEET CODE REQUIREMENTS FOR SMOKE AND FIRE RATING.
- THE INSTALLATION OF THE FIRE PROTECTION SPRINKLER SYSTEM SHALL PERMIT SAFE PERSONNEL ACCESSIBILITY FOR REQUIRED INSPECTION, TESTING, AND MAINTENANCE.
- THE OPERATION OF FIRE PROTECTION SPRINKLER INSTALLATION DOES NOT CONSTITUTE AN ACCEPTANCE OF WORK BY THE OWNER. FINAL ACCEPTANCE IS TO BE MADE AFTER THE CONTRACTOR HAS DEMONSTRATED THAT THE WORK FULFILLS THE REQUIREMENTS OF THE DRAWINGS AND SPECIFICATIONS AND HAS FURNISHED ALL REQUIRED CERTIFICATES OF APPROVAL FROM THE STATE AUTHORITIES, MUNICIPAL AUTHORITIES AND INSURANCE UNDERWRITERS.

### B. DRAWINGS/DESIGN

- REFER TO ARCHITECTURAL DRAWINGS FOR ALL CEILING HEIGHTS.
- THESE DOCUMENTS DEPICT A PERFORMANCE LEVEL ENGINEERING DESIGN LAYOUT TO BE UTILIZED AS GUIDANCE FOR THE PLANNING OF THE FIRE SPRINKLER SYSTEM BY THE CONTRACTOR. THE INTENT OF THE FIRE PROTECTION DRAWINGS PRESENTED IS TO PROVIDE A QUALIFIED FIRE PROTECTION CONTRACTOR WITH CONCEPTUAL INFORMATION TO DIAGRAMMATICALLY SHOW POTENTIAL SYSTEM ARRANGEMENT, ONLY. PROVIDE COMPLETE DOCUMENTS FOR REVIEW AND APPROVAL FROM THE ENGINEER OF RECORD, THE AUTHORITY HAVING JURISDICTION AND PRIOR TO INSTALLATION. INCLUDE IN THE SHOP DRAWINGS AND CALCULATIONS ANY ADDITIONAL EQUIPMENT NECESSARY, TO PROVIDE A COMPLETE CODE COMPLIANT SYSTEM INSTALLATION.
- THE CONTRACTOR SHALL PREPARE PIPING PLANS AND HYDRAULIC CALCULATIONS SEALED BY A LICENSED PROFESSIONAL ENGINEER HAVING A CURRENT LICENSE IN THE PROJECT'S JURISDICTION ENGAGED BY THE CONTRACTOR. PLANS INDICATING CALCULATION REFERENCE POINTS SHALL BE INCLUDED. IF REQUIRED CONTRACTOR SHALL PROVIDE A FIRE HYDRANT FLOW TEST. CALCULATIONS AND DRAWINGS SHALL BE SUBMITTED AND FILED WITH LOCAL FIRE AND BUILDING DEPARTMENT AUTHORITIES AND SUBMITTED TO THE ARCHITECT/ENGINEER FOR RECORD. APPROVALS OF SHOP DRAWINGS SHALL NOT RELEASE CONTRACTOR OF RESPONSIBILITY FOR WORK SPECIFIED.
- 4. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE DESIGN AND INSTALLATION OF THE FIRE PROTECTION SYSTEM IN ACCORDANCE WITH ALL APPLICABLE CODES AND REQUIREMENTS INCLUDING BUT NOT LIMITED TO APPLICABLE NFPA CODES AND STANDARDS, LOCAL AUTHORITIES HAVING JURISDICTION, OWNER'S PROPERTY INSURANCE CARRIER GUIDELINES, AND OWNER-SPECIFIED DIRECTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND VERIFYING FLOW TEST DATA IN THE PREPARATION OF HYDRAULIC CALCULATIONS. COORDINATE THE TIME AND DATE OF THE TEST WITH THE APPLICABLE WATER UTILITY OFFICIAL AND ARCHITECT/ENGINEER AT LEAST FIVE (5) WORKING DAYS PRIOR TO CONDUCTING THE TEST.
- THE CONTRACTOR SHALL FILE ALL DRAWINGS PER STATE AND LOCAL APPLICABLE CODES, OBTAIN AND PAY FOR ALL NECESSARY PERMITS, PROVIDE HYDRAULIC CALCULATIONS, AND FINAL

- 7. THE ROUTE OF FIRE PROTECTION MAINS IS INTENDED TO UTILIZE THE MOST EFFICIENT SPACE AVAILABLE AND TO AVOID INTERFERENCE WITH OTHER BUILDING EQUIPMENT AND SYSTEMS. FIELD VERIFY ACTUAL ROUTING OF MAINS PRIOR TO BEGINNING FABRICATION AND INSTALLATION.
- 8. SPRINKLER HEAD LOCATIONS SHOWN ARE INTENDED TO SHOW COORDINATION BETWEEN OTHER TRADES. OMISSION OF HEADS REQUIRED BY CODE SHALL NOT RELIEVE THE FIRE PROTECTION CONTRACTOR FROM PROVIDING THEM UNDER THIS CONTRACT.
- 9. CONTRACTOR SHALL COORDINATE ALL WORK WITH WORK OF OTHER TRADES. EXISTING CONDITIONS, THE BUILDING STRUCTURE AND PARTICIPATE IN THE PREPARATION OF COORDINATED SHOP DRAWINGS, IN ORDER TO AVOID CONFLICTS OF ANY TYPE,
- 10. THE CONTRACTOR SHALL CONFIRM ALL STRUCTURAL, AND EQUIPMENT INTERFERENCES PRIOR TO SYSTEM FABRICATION AND INSTALLATION. THE CONTRACTOR SHALL PROVIDE ANY ADDITIONAL PIPING, VALVES, SPECIALTIES, ALARM HORNS/BELLS, INDICATING STROBES, TAMPER SWITCHES, ACCESSORIES, SPRINKLERS, MATERIALS, LABOR, ENGINEERING, OR COMPONENTS REQUIRED FOR A COMPLETE AND CODE COMPLIANT FIRE PROTECTION SYSTEM AT NO EXTRA COST, WHETHER OR NOT SHOWN ON BID DRAWINGS.
- 11. ALL SPRINKLER HEADS SHALL BE CONCEALED TYPE UNLESS OTHERWISE NOTED.
- 12. DO NOT PENETRATE WALL FOOTINGS WITH PIPING. COORDINATE TO DROP FOOTINGS TO CLEAR SERVICES WHERE ABSOLUTELY NECESSARY.
- 13. PIPE SLEEVES SHALL BE PROVIDED AND INSTALLED WHERE PIPES ARE ROUTED THROUGH FOUNDATION WALLS. PIPE SLEEVES SHALL BE GROUTED IN WALLS. SEALANT SHALL BE APPLIED AROUND THE CONDUIT IN THE SLEEVE IN ORDER TO PREVENT INGRESS OF MOISTURE. THE WALL PENETRATION SHALL BE COMPLETELY WATERPROOFED.
- 14. ALL PIPING PENETRATING A BEARING WALL OR FOOTING MUST BE SLEEVED AND LOCATION APPROVED BY STRUCTURAL ENGINEER.
- 15. CONTRACTOR SHALL PROCURE AND PAY FOR ALL PERMITS, INSPECTIONS, ETC., TO PERFORM HIS
- 16. VALVES AND FITTINGS SHALL BE OF SAME SIZE OF LINE ON WHICH THEY ARE LOCATED, UNLESS OTHERWISE INDICATED ON DRAWING.
- 17. ALL SPRINKLER PIPING SHALL BE 1 INCH MINIMUM SIZE UNLESS OTHERWISE SHOWN ON THE DRAWINGS. PIPE SIZES SHALL BE DETERMINED BY CONTRACTOR'S HYDRAULIC CALCULATIONS BASED ON THEIR INSTALLATION DRAWINGS. CONTRACTOR SHALL ALLOW FOR THIS AND INCLUDE THIS IN THEIR CONTRACT PRICE.
- 18. PROVIDE DRAIN VALVES PER NFPA #13 AND #24.
- 19. SUPERVISORY VALVE TAMPER SWITCHES SHALL BE PROVIDED ON ALL CONTROL VALVES AND COORDINATED WITH THE FIRE ALARM CONTRACTOR FOR ELECTRONIC SUPERVISION.
- 20. PROVIDE AND INSTALL WATER FLOW SWITCHES AND COORDINATE WITH THE FIRE ALARM CONTRACTOR FOR ELECTRONIC SUPERVISION.
- 21. INSTALL SPRINKLERS BELOW DUCTS AND/OR COMBINATIONS OF DUCTS, CONDUIT, PIPING, AND EQUIPMENT MORE THAN 4 FEET WIDE IN ACCORDANCE WITH THE OBSTRUCTION REQUIREMENTS
- 22. DO NOT ROUTE FIRE PROTECTION PIPING NEAR ROOF-MOUNTED RELIEF HOOD DUCTWORK, COMBUSTION AIR INTAKE LOUVERS, OR ANY INTAKE OR RELIEF AIR DUCTWORK THAT MAY SUBJECT THE PIPING TO FREEZING CONDITIONS.
- 23. AREAS WITH COMBUSTIBLE CONCEALED SPACES SHALL BE PROVIDED WITH ADDITIONAL AUTOMATIC SPRINKLER PROTECTION FOR THE INTERSTITIAL AREA, UNLESS CONFIGURED IN ACCORDANCE WITH THE ACCEPTATIONS PROVIDED BY NFPA 13. WHERE SUCH EXCEPTIONS ARE APPLIED, THEY SHALL BE REFERRED TO THE ARCHITECT/ENGINEER FOR APPROVAL AND DOCUMENTATION.

### C. INSTALLATION NOTES

- 1. NO CAPPING OR ISOLATING OF SPRINKLER PIPING ALLOWED. SPRINKLER PROTECTION SHALL REMAIN OPERATIONAL THROUGHOUT ALL PHASES OF CONSTRUCTION, EXCEPT AS OTHERWISE
- SPRINKLER SHUTDOWNS ON A DAILY BASIS ONLY, SYSTEMS TO BE RESTORED AT THE END OF EACH WORK DAY. ALL SHUTDOWNS SHALL BE COORDINATED WITH THE GENERAL CONTRACTOR, BUILDING'S SECURITY, FIRE CONSOLE FIRE DEPARTMENT AND ALARM COMPANY AS APPLICABLE. RESTORATION OF SPRINKLER SYSTEM SHALL BE IN ACCORDANCE WITH BUILDING'S PROCEDURE AND ALL FIRE PROTECTION SYSTEMS (SPRINKLER AND ALARM) SHALL BE OPERATIONAL. SPRINKLER SYSTEM SHALL BE FILLED AFTER EACH WORK DAY AND SHALL NOT BE LEFT UNPROTECTED AT ANY TIME.
- WORK REQUIRING THE CLOSING OF ONE OR MORE CONTROL VALVES MUST BE CLOSELY COORDINATED WITH THE OWNER'S REPRESENTATIVE AND THE LOCAL FIRE DEPARTMENT, INSURANCE COMPANY, ETC., IF APPLICABLE. CONTRACTOR IS TO GIVE AT LEAST 24 HOURS NOTICE BEFORE PERFORMING ANY SPRINKLER WORK.

- 3. PROVIDE AND INSTALL CLAMPS, OFFSETS, EXPANSION JOINTS, ANCHORS AND GUIDES AS NECESSARY TO PREVENT STRESS ON PIPING.
- 4. CONTRACTOR SHALL COORDINATE ALL FIRE SPRINKLER WORK WITH THE HVAC, PLUMBING AND ELECTRICAL CONTRACTORS AND PROVIDE AND INSTALL REQUIRED PIPE OFFSETS, NEW PIPES AND DRAINS AS PART OF THE BASE CONTRACT WORK.
- 5. TEFLON TAPE SHALL BE USED ON ALL SPRINKLER PIPING. NO PIPE DOPE ALLOWED.
- 6. PROVIDE A MINIMUM OF SIX(6) SPARE HEADS AND WRENCHES IN A CABINET-MOUNTED ADJACENT TO THE SPRINKLER RISER, PER NFPA 13.
- DIELECTRIC UNIONS AND FLANGES SHALL BE USED ON ALL CONNECTIONS BETWEEN DISSIMILAR
- 8. ALL VALVES SHALL BE CLEARLY IDENTIFIED WITH BRASS VALVE TAGS WITH BLACK STAMPED LETTERING COMPLIANT WITH ANSI/ASME A13.1 STANDARD OR RED PLASTIC BACKGROUND WITH ENGRAVED WHITE LETTERING. PROVIDE AND INSTALL HANG METAL CHAIN. VALVE NUMBER SHALL
- 9. PROVIDE AND INSTALL A METAL HYDRAULIC DESIGNED SYSTEM SIGN COMPLIANT WITH NFPA 13 2018 - 25.5 AND MOUNTING HARDWARE.

BE KEYED TO THE AS-BUILT DRAWING SHOWING VALVE TYPE, SIZE AND LOCATION.

- 10. ALL PIPES FOR ANY SERVICE SHALL BE IDENTIFIED AS TO THEIR SERVICE BY COMMERCIALLY AVAILABLE, COLOR-CODED SELF-STICKING VINYL PIPE MARKERS. MARKING SHALL INCLUDE PIPE CONTENT AND DIRECTION OF FLUID FLOW IN ACCORDANCE WITH ANSI/ASME A13.1. PIPES SHALL BE MARKED ADJACENT TO ALL VALVES AND FLANGES, BOTH SIDES OF A FLOOR, CHANGE IN DIRECTION AND AT 25 INTERVALS ON STRAIGHT RUNS.
- 11. ALL PIPING SHALL BE RUN PARALLEL TO BUILDING LINES AND COORDINATED WITH OTHER CONTRACT DOCUMENTS. PIPE IS TO BE SUPPORTED AND ANCHORED AS REQUIRED TO FACILITATE EXPANSION AND CONTRACTION.
- 12. ALL FIRE PROTECTION SPRINKLER SERVICES GOING INTO THE BUILDING AND LEAVING THE BUILDING SHALL BE CONNECTED TO THE SITE UTILITIES, COORDINATED WITH SITE UTILITIES COMPANY AND CIVIL DRAWINGS. COORDINATE ALL EXTERIOR UNDERGROUND PIPING WORK WITH THE SITE UTILITIES BEFORE COMMENCING WORK. COORDINATE ALL UNDERGROUND PIPING WITH FOUNDATION DRAWINGS.
- 13. ALL PIPING SHALL BE SUPPORTED FROM THE STRUCTURE AND SHALL NOT BE SUPPORTED FROM THE ROOF DECK OR OTHER PIPING/EQUIPMENT/DUCTS. THERE SHALL BE NO EXCEPTIONS TO
- 14. DO NOT USE SPRINKLER PIPING OR HANGERS TO SUPPORT NON-SYSTEM COMPONENTS.
- 15. INSPECTOR'S TEST CONNECTIONS, DRAIN VALVES, AND CONTROL VALVES SHALL BE READILY ACCESSIBLE AND INSTALLED NOT OVER 7 FEET - 0 INCHES ABOVE THE FINISHED FLOOR.
- 16. ALL PIPING SHALL BE CONCEALED IN FURRED CHASES OR ABOVE SUSPENDED CEILING (CLEAR OF CEILING INSERTS) EXCEPT IN UNFINISHED SPACES. INSTALL PIPING TO MEET ALL CONSTRUCTION CONDITIONS AND TO ALLOW FOR INSTALLATION OF OTHER WORK INCLUDING BUT NOT LIMITED TO HVAC PIPING, DUCTWORK, HVAC EQUIPMENT, ELECTRICAL CONDUIT AND ELECTRICAL EQUIPMENT THAT IS TO BE INSTALLED WITH THE OTHER CONTRACTORS.
- 17. ALL SPRINKLER LINES PASSING THROUGH FIRE-RATED WALLS (SEE ARCHITECTURAL DRAWINGS FOR EXACT EXTENT OF NEW RATED WALLS) SHALL BE SLEEVED AND SHALL HAVE THEIR PENETRATIONS THROUGH SUCH WALLS FIRE-STOPPED WITH A PENETRATION SEALING SYSTEM MEETING THE RESPECTIVE UL RATING OF THE WALL.
- 18. ACCESS DOORS AND/OR PANELS SHALL BE PROVIDED AT ALL MAINTENANCE AND SERVICE LOCATIONS FOR CONCEALED CONTROL DEVICES, VALVES, DRAIN POINT OR SIMILAR ITEMS AND FIRE PROTECTION SPRINKLER EQUIPMENT/DEVICES. UNLESS A SIZE IS SPECIFICALLY NOTED, PANELS SHALL BE SIZED TO SERVICE EQUIPMENT/DEVICE. DOORS AND PANELS SHALL HAVE THE SAME FIRE RATING AS THE WALL OR CEILING IN WHICH THEY ARE INSTALLED. ACCESS DOORS AND/OR PANELS ARE NOT REQUIRED WHERE ADJUSTMENT, MAINTENANCE AND REPLACEMENT ARE POSSIBLE THROUGH LAY IN SUSPENDED CEILING.
- 19. ALL WORK INSTALLED BY THIS CONTRACTOR SHALL BE INSTALLED IN SUCH A MANNER AS TO CLEAR ALL LIGHT FIXTURES, CEILING CONSTRUCTION, PLUMBING PIPES AND CONDUITS, ETC.
- 20. ALIGN SPRINKLER HEADS WITH LIGHT FIXTURES, COORDINATE SPRINKLER HEADS WITH DIMENSIONS ON ARCHITECTURAL DRAWINGS.
- 21. SPRINKLER HEADS SHALL BE INSTALLED IN THE CENTER LINE OF TILES UNLESS OTHERWISE NOTED. CONTRACTOR SHALL ALLOW FOR ALL REQUIRED FITTINGS TO ACHIEVE THIS AND INCLUDE THIS IN THEIR CONTRACT PRICE.
- 22. AT THE COMPLETION OF THE WORK AND PRIOR TO THE FINAL ACCEPTANCE, ALL PARTS OF THE WORK SHALL BE THOROUGHLY CLEANED.
- 23. CONTRACTOR SHALL BE HELD RESPONSIBLE FOR TESTING OF THE SPRINKLER SYSTEM UPON COMPLETION OF HIS/HER WORK. THE SPRINKLER SYSTEM SHALL BE TESTED HYDROSTATICALLY FOR TWO (2) HOURS WITHOUT VISIBLE LEAKAGE AT NOT LESS THAN 200 PSI. CONTRACTOR SHALL VERIFY WITH LOCAL OFFICIAL IF HE/SHE IS REQUIRED TO WITNESS HYDROSTATIC TEST.

### FIRE PROTECTION ABBREVIATIONS

Α					
	ADD	Automotic Poll		ID	Inside Diameter
	ABD	Automatic Ball		IN	Inch
	ACV	Alarm Check Valve W/ All Related Appurtenances		INV	Invert Elevation
	AFF	Above Finished Floor			
	AP	Access Panel		IW	Indirect Waste
	ATS	Automatic Transfer Switch			
			J		
В				JS	Janitor Sink
	BLDG	Building			
	BOB	Bottom Of The Beam	М		
	BOP	Bottom Of Pipe		MAX	Maximum
				MH	Manhole
С				MIN	Minimum
	OFIL	0.1: 5 (0.1)			
	CFH	Cubic Feet Per Hour			
	CFM	Cubic Feet Per Minute	N		
	CFS	Cubic Feet Per Second		(N)	New
	CI	Cast Iron		NC	Normally Closed
	CLG	Ceiling		NFPA	National Fire Protection Association
	CO	Cleanout		NIC	Not In This Contract
	CONN	Connection		NO	Normally Open
	CONT	Continuation			
	COTG	Cleanout To Grade	0		
	CV	Check Valve		OS&Y	Outside Screw & York Gate Valve
D			—— Р		
	DCVA	Double Check Valve Assembly	٢	D/57	D''   D
				P/FT	Pitch Per Foot
	DIA	Diameter		PIV	Post Indicating Valve
	DLV	Deluge Valve With All Related Appurtenances		PLBG	Plumbing
	DN	Down		POC	Point Of Connection
	DR	Drain		PRV	Pressure Reducing Valve
	DROP	Drop (Within Floor)			_
	DSP	Dry Sprinkler		PSI	Pounds Per Square Inch
				PSIG	Pounds Per Square Inch (Gauge)
	DFS	Dry Fire Standpipe			
	DPV	Dry Pipe Valve W/ All Related Appurtenances	R		
	DWG	Drawing		RC	Roof Receptor
				RD	Roof Drain
Ε					
	(E)	Existing		RISE	Rise (With In Floor)
		-		RW	Reclaimed Water
	ET	Expansion Tank			
	EL	Elevation	S		
				SA	Shock Absorber
F				SAN	Sanitary
	FCO	Floor Cleanout		SD	Smoke Detector
	FD FDC	Floor Drain		SF	Square Feet
	FDC	Fire Department Connection		SK	Sink
	FHC	Fire Hose Cabinet		SPKR	Sprinkler
	FHR	Fire Hose Rack		ST	Storm Piping
	FHV	Fire Hose Valve			
	FHVC	Fire Hose Valve Cabinet	Т		
	FL	Floor	•	TDU	Tatal D' 1 11 11
	FP	Fire Protection		TDH	Total Discharge Head
				TOP	Top Of Pipe
	FS	Flow Switch		TOS	Top Of Slab
	FSK	Floor Sink		TS	Tamper Switch
	FSP	Fire Standpipe		TYP	Typical
	FT	Feet			. , , , , , , , , , , , , , , , , , , ,
			U		
G				UON	Unless Otherwise Noted
	GAL	Gallons		UP	Up (Penetrates Floor Slab)
	GPM	Gallons Per Minute		01	op (i offortation floor olab)
	GV	Gate Valve			
			V	VB	Vacuum Breaker
Н	LID	Uses Bible		۵ ک	vacadiii Dicakci
	HB	Hose Bibb	Z		
	HD	Hub Drain			
				Z	Zone

WORK USING THE CONTRACTOR'S BEST SKILL AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCTIO MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB

2. GC MUST PROVIDE & INSTALL ALL PRODUCTS PER PLANS. ONLY SUBSTITUTED PRODUCTS NEED TO BE SUBMITTED TO THE ARCHITECT FOR APPROVAL. UNAPPROVED SUBSTITUTIONS WILL BE REPLACED A THE EXPENSE OF THE GC.

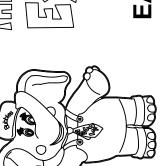
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42 OKNER PARKWAY LIVINGSTON, NEW JERSEY 07039 TEL: 973-994-9669 FAX: 973-994-4069 www.jarmelkizel.com

> Architecture Engineering Interior Design Implementation Services





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REVISION	1	06-02-23	FOR TLE REVIEW	MBJ
	2	06-14-23	FOR PERMIT	MBJ
NO. DATE DESCRIPTION IN			REVISION	
	NO.	DATE	DESCRIPTION	INT.

PROFESSIONAL CERTIFICATION

MATTHEW B. JARMEL, AIA, MBA

LICENSE NUMBER: A2017014316

**TLEMO22-164 AS NOTED** Approved By: Drawn By:

FIRE PROTECTION GENERAL **NOTES AND SCHEDULES** 



## SPRINKLER SPECIFICATION

ALL NEW SPRINKLER PIPING SHALL BE THREADED SCHEDULE 40 BLACK STEEL. NO MORE THAN TWO (2) SPRINKLER HEADS SHALL BE SUPPLIED BY A 1" DIA. BRANCH LINE. PROVIDE SEISMIC RESTRAIN.

### FIRE PROTECTION LEGEND

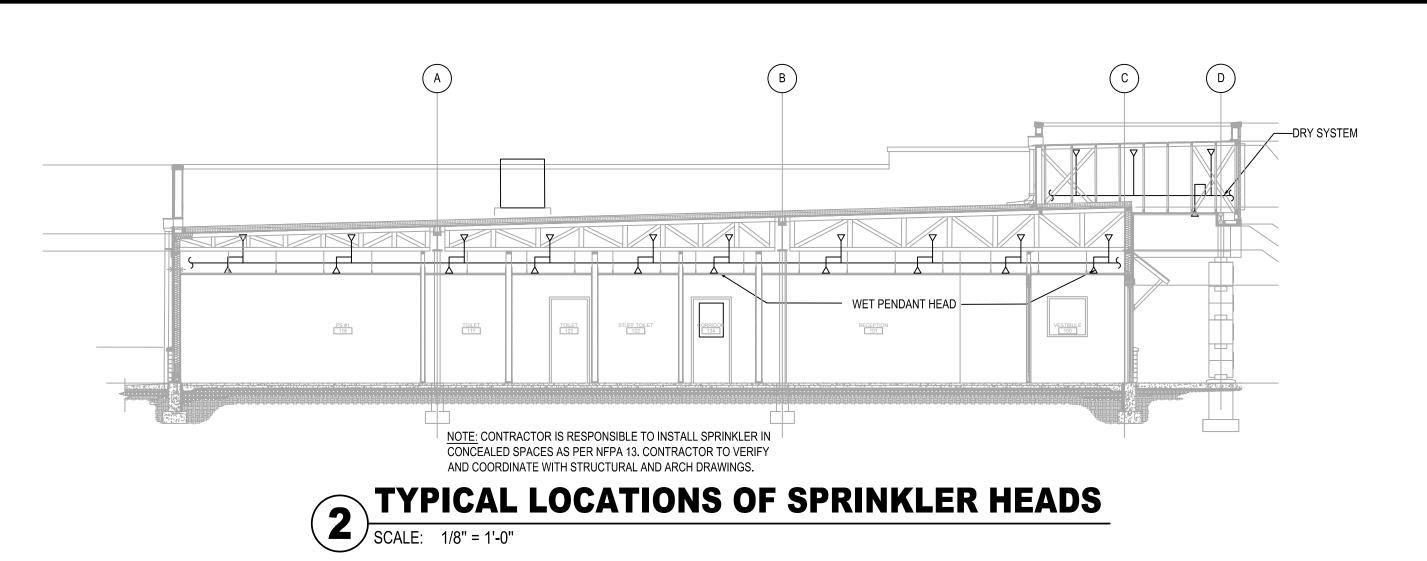
- NEW CONCEALED SPRINKLER HEAD: TEMP.RATING-135F°,1/2" NOMINAL ORIFICE WITH 1/"NPT(R1/2),"K" FACTOR-5.62, OR APPROVED BUILDING STANDARD.
- NEW CONCEALED SPRINKLER HEAD (DRY): "TYCO" RAVEN 5.6K, TEMP.RATING (165 F°),1/2" ORIFICE WITH 1/2" NPT
- NEW UPRIGHT INTERMEDIATE SPRINKLER HEAD: TEMP. RATING -175 F°, 1/2 " ORIFICE WITH 1/"NPT(R1/2), "K" FACTOR - 5.62, OR APPROVED BUILDING STANDARD.
- NEW SIDE WALL SPRINKLER HEAD: TEMP. RATING-165°F, 1/2" ORIFICE WITH 1/2" NPT, "K" FACTOR 5.6 OR APPROVED BUILDING STANDARD

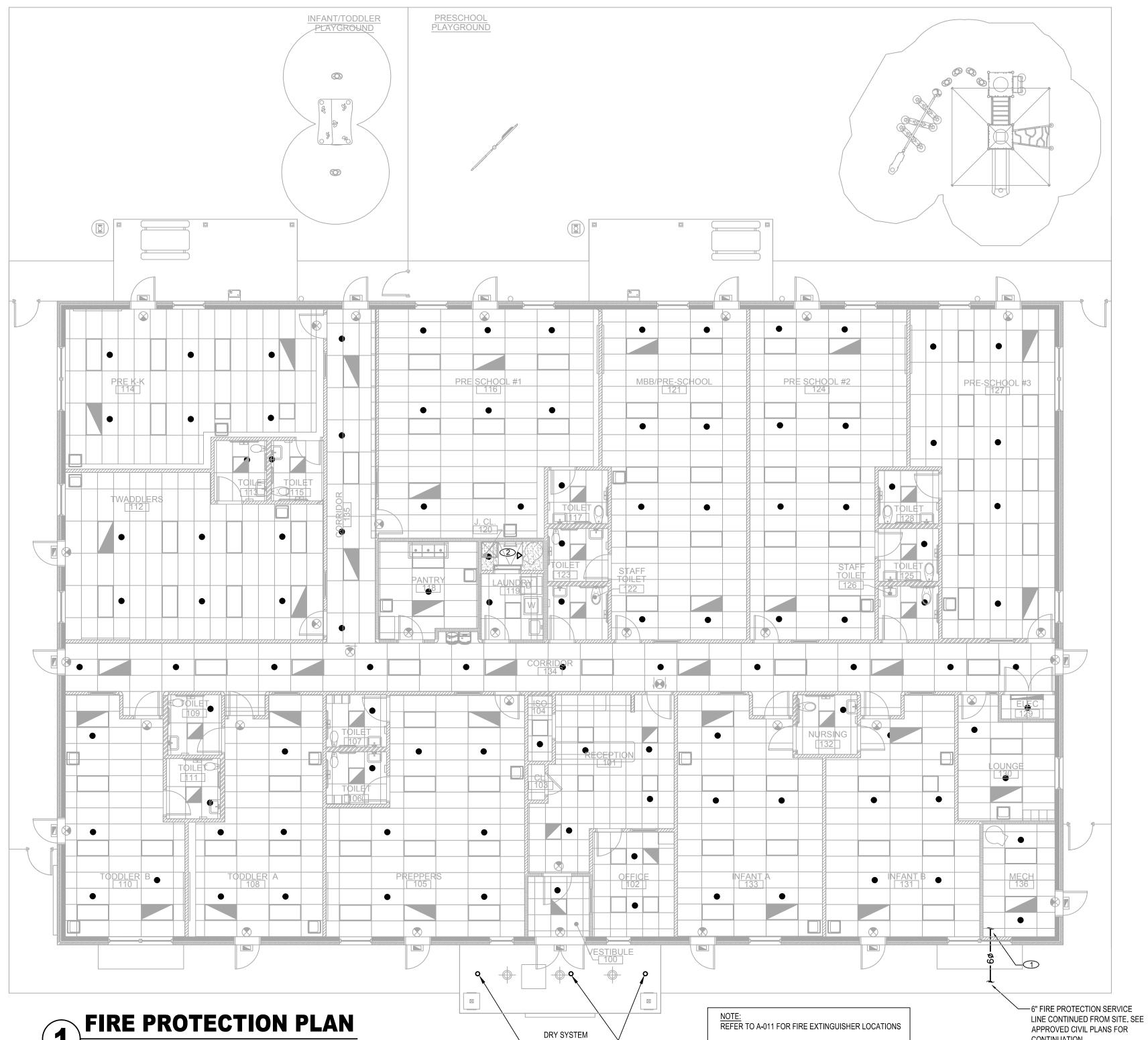
### MAXIMUM DISTANCE BETWEEN HANGERS.(FT-IN.)

NOMINAL PIPE SIZE(IN.)	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4	5	6	7	8
STEEL PIPE	N/A	12-0	12-0	15-0	15-0	15-0	15-0	15-0	15-0	15-0	15-0	15-0
		•	•		•		•	•	•	•	•	

## SCOPE OF WORK

- UNDER THIS CONTRACT, THE CONTRACTOR IS TO INSTALL NEW PIPING AND NEW SPRINKLER HEADS TO ACCOMMODATE THE HEAD LOCATION SHOWN ON FP-200
- THE SYSTEMS SHALL BE HYDRAULICALLY DESIGNED AND INSTALLED AS FOLLOWS:
- 2.1. WET SYSTEM
- 2.1.1. STORAGE AREA: ORDINARY HAZARD OCCUPANCY BASED UPON MAX. SPRINKLER COVERAGE OF 130 SF WITH 0.15 GPM/SF DENSITY OVER THE MOST REMOTE 1,500 SF.
- 2.1.2. OFFICE / CLASSROOM AREA: LIGHT HAZARD OCCUPANCY BASED UPON
- COVERAGE OF 225 SF WITH 0.10 GPM/SF DENSITY OVER THE MOST REMOTE
- 1,500 SF
- 2.2. DRY SYSTEM
- 2.2.1. ATTIC AREA / CANOPY: AS PER NFPA REQUIREMENTS.





FOR CANOPY

SHEET NOTES:

KEY NOTES:

CONTINUATION.

1. ALL SPRINKLER HEADS SHALL BE CONCEALED.

ROOM SEE ELECTRICAL DRAWINGS.

2. FOR DETAILED INFORMATION OF SPACE ALLOCATION IN MECHANICAL

① 6"FIRE WATER FROM SITE, SEE APPROVED CIVIL DRAWINGS FOR

BLOCKED BY ANY DUCT, PIPES OR OTHER FIXED OBJECTS.

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

② ACCESS/MAINTENANCE DOOR IN CEILING SHALL NOT BE

1. CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING THE CONTRACTOR'S BEST SKILL AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCTION MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB SITE SAFETY

2. GC MUST PROVIDE & INSTALL ALL PRODUCTS PER PLANS. <u>ONLY</u> SUBSTITUTED PRODUCTS NEED TO BE SUBMITTED TO THE ARCHITECT FOR APPROVAL. UNAPPROVED SUBSTITUTIONS WILL BE REPLACED A THE EXPENSE OF THE GC.

3. VERBAL REPRESENTATION HAS NO VALUE AND ALL REQUESTS TO CHANGE ANY PRODUCTS OR SPECIFICATIONS PER PLANS, <u>MUST</u> BE SUBMITTED IN WRITING TO THE ARCHITECT & TLE FOR APPROVAL.



ARCHITECTS AND ENGINEERS INC. 42 OKNER PARKWAY LIVINGSTON, NEW JERSEY 07039 TEL: 973-994-9669 FAX: 973-994-4069 www.jarmelkizel.com

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		REVISION	
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ISSUE

PROFESSIONAL CERTIFICATION MATTHEW B. JARMEL, AIA, MBA

LICENSE NUMBER: A2017014316

Project Number: TLEMO22-164	Scale: AS NOTED
Drawn By:	Approved By:
LN	MBJ
Drawing Name:	

FIRE PROTECTION **PLANS** 

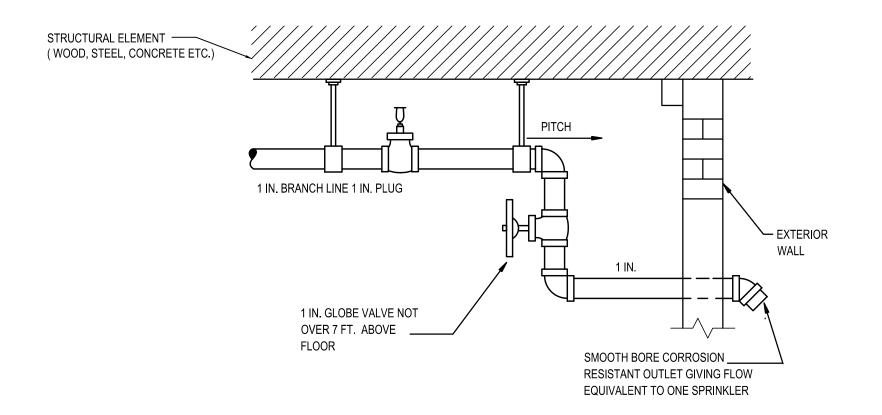
CONTINUATION



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# 3 INSPECTOR'S TEST CONNECTION WET SYSTEM SCALE: N.T.S.

UPRIGHT SPRINKLER HEAD

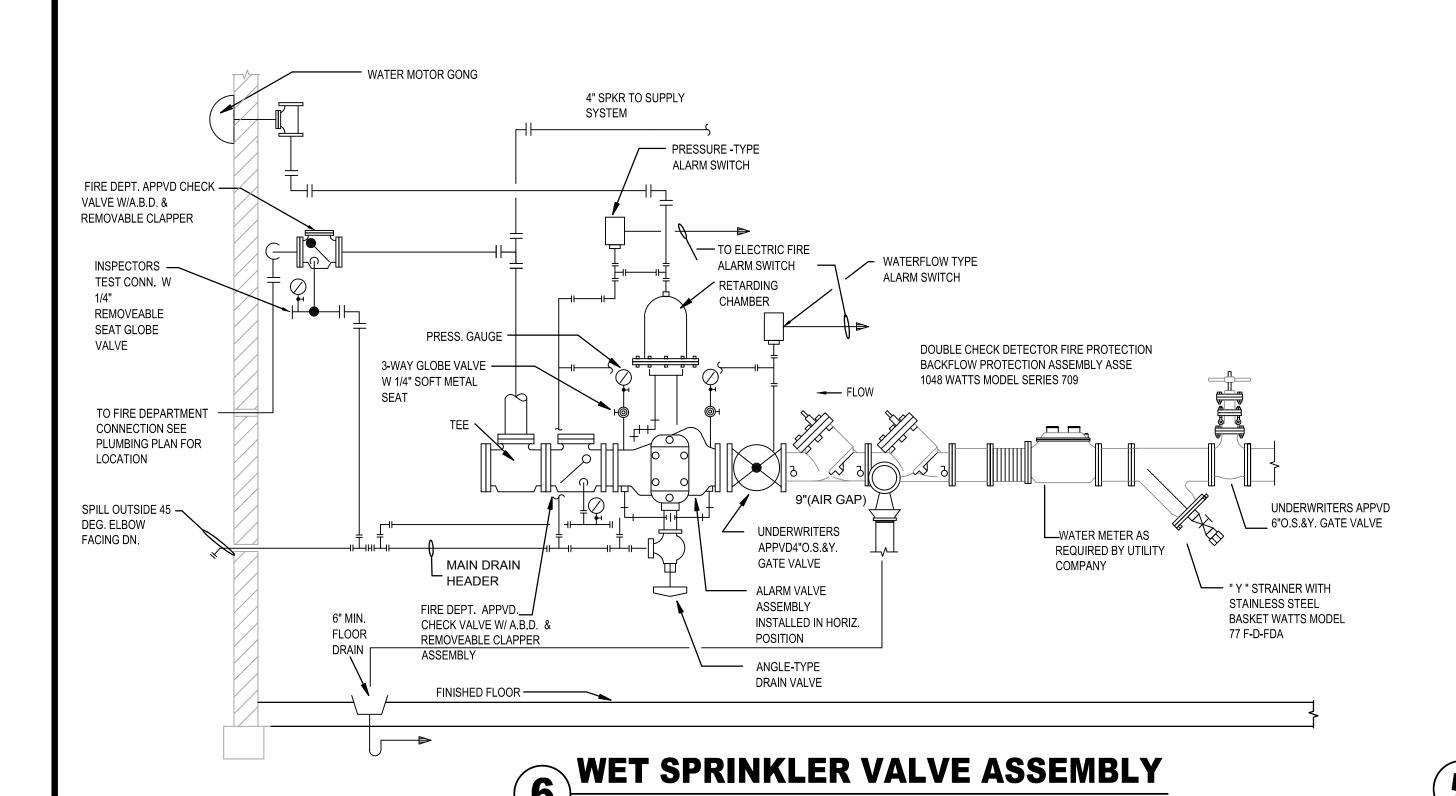
SEISMIC BRACE
(WOOD, STEEL, CONCRETE ETC.)

MAIN SPRINKLER LINES

1" SPRINKLER PIPE

CONCEALED SPRINKLER HEAD

UPRIGHT SPRINKLER HEAD DIAGRAM



\_ STRUCTURAL ELEMENT ( WOOD, STEEL, CONCRETE ETC.)

CLEVIS HANGER

CONCEALED SPRINKLER HEAD

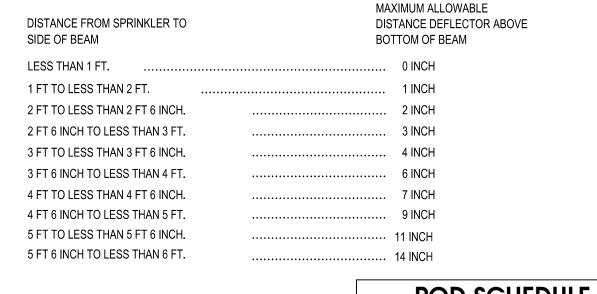
SEISMIC BRACE -

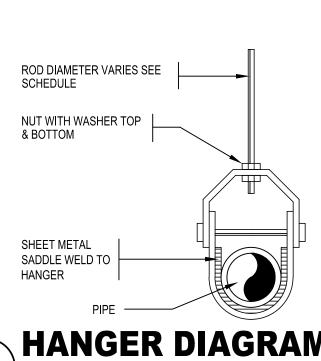
MAIN SPRINKLER LINES —

1" SPRINKLER PIPE

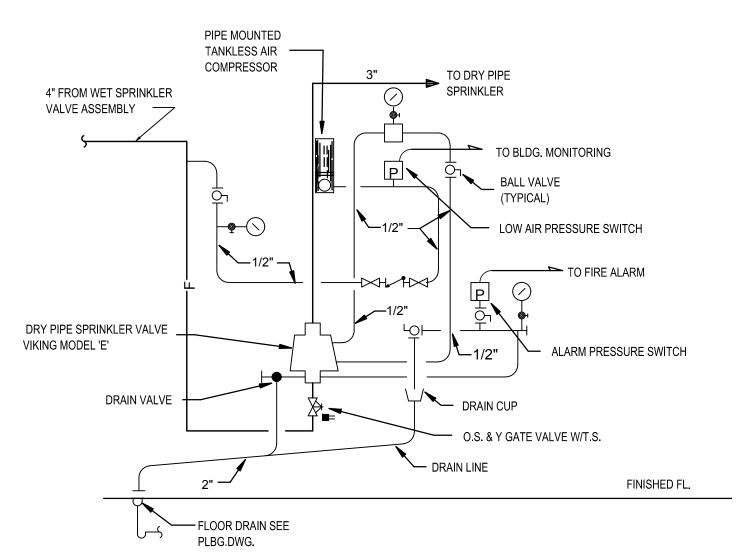
SPRINKLER HEAD DIAGRAM

(WHERE REQUIRED)





PIPE SIZE	ROD SIZE	SPACING
1/2"	3/8"	5'-8'
3/4"	3/8"	5'-8'
1"	3/8"	5'-8'
1 1/4"	3/8"	6'-10'
1 1/2"	3/8"	8'-10'
2"	3/8"	10'-12'
2 1/2"	3/8"	10'-12'
3"	3/8"	10'-12'
4"	1/2"	12'-15'
5"	1/2"	12'-15'
6"	1/2"	12'-15'



DRY SPRINKLER VALVE ASSEMBLY
SCALE: N.T.S.



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		ISSUE						
NO.	DATE	DESCRIPTION	INT.					
1	06-02-23	6-02-23 FOR TLE REVIEW						
2	2 06-14-23 FOR PERMIT							
		REVISION						
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PROFESSIONAL CERTIFICATION

MATTHEW B. JARMEL, AIA, MBA LICENSE NUMBER: A2017014316

Project Number: TLEMO22-164	Scale: AS NOTED
Drawn By:	Approved By:
LN	MBJ
Drowing Name:	

FIRE PROTECTION DIAGRAMS

Drawing Num

FP-300



I. CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING THE CONTRACTOR'S BEST SKILL AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCTION MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB

2. GC MUST PROVIDE & INSTALL ALL PRODUCTS PE PLANS. ONLY SUBSTITUTED PRODUCTS NEED TO B SUBMITTED TO THE ARCHITECT FOR APPROVAL. UNAPPROVED SUBSTITUTIONS WILL BE REPLACED THE EXPENSE OF THE GC.

VERBAL REPRESENTATION HAS NO VALUE AND A REQUESTS TO CHANGE ANY PRODUCTS OR SPECIFICATIONS PER PLANS, MUST BE SUBMITTED IN WRITING TO THE ARCHITECT & TLE FOR APPROVAL

### FIRE ALARM SYSTEM LEGEND

- F NEW MANUAL PULL STATION
- CP F NEW MANUAL PULL STATION WITH CHILD PROOF COVER. NO GLASS COVER ALLOWED.
- F/ NEW AUDIBLE AND VISUAL ALARM SIGNAL
- L/ NEW VISUAL ONLY ALARM SIGNAL
- NEW ADDRESSABLE SMOKE DETECTOR W/ HEAT DETECTOR FIRE.LITE.ALARMS BY HONEYWELL - MODEL SD365 WITH A SOUNDER BASE OR
- ⟨H⟩ NEW HEAT DETECTOR

APPROVED EQUAL.

- $\langle \underline{S} \rangle_{\!\!\!D}$  NEW SMOKE DETECTOR ELEVATOR RECALL
- D\(\s\) R "R" DENOTES MOUNTED ON RETURN SIDE "D" DENOTES ADDRESSABLE DUCT MOUNTED SMOKE DETECTOR. S "S" DENOTES MOUNTED ON SUPPLY SIDE
- NEW CARBON MONOXIDE DETECTOR, BATTERY POWERED BACK UP WITH SOUNDER BASE INTREGRATED INTO FACP.
- ADDRESSABLE CONTROL MODULE
- RI REMOTE INDICATOR
- AR AREA OF REFUSE
- FS FLOW SWITCH ON FIRE PROTECTION PIPING
- TS TAMPER SWITCH ON FIRE PROTECTION VALVE
- PS PRESSURE SWITCH
- HS HVAC UNIT EMERGENCY SHUT-OFF SWITCH
- EFS EXHAUST FAN EMERGENCY SHUT-OFF SWITCH
- FACP FIRE ALARM CONTROL PANEL
- FAA REMOTE FIRE ALARM ANNUNCIATION
- BAKP BURGLAR ALARM KEYPAD
- ID ADDRESSABLE INITIATING DEVICE CIRCUIT INTERFACE MODULE
- M ADDRESSABLE CONTACT MONITOR MODULE
- DL DOOR LOCK
- EOL ≥ END OF LINE RESISTOR

NUMBER OF CONTROL MODULES TO BE

FIRE ALARM RISER

- FIRE SMOKE DAMPERS / SMOKE DAMPERS WITH ACCESS DOOR SD/AD
  - NEW ADDRESSABLE COMBO SMOKE/CO/HEAT/FLAME DETECTOR FIRE.LITE.ALARMS BY HONEYWELL WITH SOUNDER BASE - SD365CO OR APPROVED EQUAL.

### FIRE ALARM GENERAL NOTES:

- THIS DIAGRAM IS GENERALIZED REPRESENTATION INTENDED TO SHOW OVERALL ARRANGEMENT OF THE FIRE ALARM SYSTEM AND RELATIONSHIPS TO OTHER BUILDING SYSTEMS
- 2. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS DETAILING, BUT NOT LIMITED TO, ALL OF THE FOLLOWING: 1. BATTERY CALCULATIONS.
  - 2. CONDUCTOR TYPE AND SIZES. 3. VOLTAGE DROP CALCULATIONS.
  - 4. MANUFACTURER'S MODEL NUMBERS AND LISTING INFORMATION
  - FOR EQUIPMENT, DEVICES AND MATERIALS. 5. THE INTERFACE OF FIRE SAFETY CONTROL FUNCTIONS.
- ALL WIRING AND CONDUIT SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS, MANUFACTURER WIRING DIAGRAMS AND SHOP DRAWINGS.
- 4. THE CONTRACTOR SHALL PROVIDE ALL MATERIALS AND DEVICES AS REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM. THE CONTRACTOR SHALL PROVIDE ALL INTERCONNECTING WIRING BETWEEN FIRE ALARM AND HVAC/ATC EQUIPMENT AS INDICATED AND/OR AS REQUIRED.
- FOR NUMBER AND LOCATION OF DUCT SMOKE DETECTORS REFER TO HVAC DRAWINGS. DUCT DETECTORS ARE TO BE WIRED TO THE FIRE ALARM CONTROL PANEL.
- FOR NUMBER AND LOCATION OF PRESSURE, FLOW AND TAMPER SWITCHES REFER TO FIRE PROTECTION

FIRE ALARM SYSTEM SHALL COMPLY WITH NFPA 72 "NATIONAL FIRE ALARM CODE"

- 8. SYSTEM SHALL BE TESTED AS PER NFPA 13 REQUIREMENTS.
- 9. ALL FIRE ALARM WIRING SHALL BE CLASS A.

VOICE EVACUATION IS REQUIRED FOR GROUP I-4 DAY CARE OCCUPANCIES. A MANUAL FIRE ALARM SYSTEM THAT INITIATES THE OCCUPANT NOTIFICATION SIGNAL UTILIZING AN EMERGENCY VOICE/ALARM COMMUNICATION SYSTEM MEETING THE REQUIREMENTS OF SECTION 907.5.2.2 AND INSTALLED IN ACCORDANCE WITH SECTION 907.6 SHALL BE INSTALLED IN GROUP I-4 OCCUPANCIES. WHEN AUTOMATIC SPRINKLER SYSTEMS OR SMOKE DETECTORS ARE

- a. A MANUAL FIRE ALARM SYSTEM IS NOT REQUIRED IN GROUP I-4 OCCUPANCIES WITH AN OCCUPANT LOAD OF 30
- MANUAL FIRE ALARM BOXES ARE NOT REQUIRED IN GROUP I-4 OCCUPANCIES WHERE ALL OF THE FOLLOWING
- (1) INTERIOR CORRIDORS ARE PROTECTED BY SMOKE DETECTORS.
- OTHER APPROVED DETECTION DEVICES.

# INSTALLED, SUCH SYSTEMS OR DETECTORS SHALL BE CONNECTED TO THE BUILDING FIRE ALARM SYSTEM. IBC 907.2.3

- (2) AUDITORIUMS, CAFETERIAS, GYMNASIUMS AND SIMILAR AREAS ARE PROTECTED BY HEAT DETECTORS OR OTHER APPROVED DETECTION DEVICES. (3) SHOPS AND LABORATORIES INVOLVING DUSTS OR VAPORS ARE PROTECTED BY HEAT DETECTORS OR
- MANUAL FIRE ALARM BOXES SHALL NOT BE REQUIRED IN GROUP I-4 OCCUPANCIES WHERE THE BUILDING IS EQUIPPED THROUGHOUT WITH AN APPROVED AUTOMATIC SPRINKLER SYSTEM INSTALLED IN ACCORDANCE WITH SECTION 903.3.1.1, THE EMERGENCY VOICE/ALARM COMMUNICATION SYSTEM WILL ACTIVATE ON SPRINKLER WATER FLOW AND MANUAL ACTIVATION IS PROVIDED FROM A NORMALLY OCCUPIED LOCATION.

### COORDINATED PER MANUFACTURERS REUIREMENTS. -RTU-1 THROUGH 5 —CO—√—CO—{EOL | RI THE CONTRACTOR SHALL USE THE FIRE ALARM PLAN TO DETERMINE THE EXACT NUMBER AND LOCATION OF FIRE ALARM DEVICES AND SHALL PROVIDE ALL ADDITIONAL DEVICES REQUIRED PER CODE FOR A SUCCESSFUL COMPLETION OF FIRE ALARM SYSTEM. STROBES AND HORNS MAY BE ON FOR TYPE 14 CONSTRUCTION, PROVIDE PULL STATION IN EVERY CLASSROOM. THE SAME ALARM CIRCUIT SCOPE OF WORK DL SEE FIRE ALARM REMOTE PROVIDE ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED FOR CONNECTION OF RTU-1 RTU-2 RTU-3 RTU-4 SYSTEM NOTE #10 FIRE DEVICES TO THE NEW FIRE ALARM SYSTEM, AS COVERED BY THESE SPECIFICATIONS, TO BE WIRED, CONNECTED AND LEFT IN FIRST CLASS OPERATING CONDITION. ALL SEE FIRE ALARM ANNUNCIATION EQUIPMENT SHALL BE U.L. LISTED, CONFORM TO REVISED IBC, NFPA CODES 70, 72, SYSTEM NOTE #13 90A, AND 101, AND MEET THE REQUIREMENTS OF THE BUILDING AND ELECTRICAL EFS EFS ——≨ EOL CODES FOR THE LOCAL JURISDICTION. FIRE ALARM DEVICES SHALL INCLUDE BUT NOT EF-1 EF-2 EF-3 BE LIMITED TO ADA COMPLIANT HORN STROBES, STROBES, MANUAL PULL STATIONS, SMOKE DETECTORS, HEAT DETECTORS AND FIRE ALARM PANEL. PS TS FS TS KNOX BOX WITH A TAMPER SWITCH, WHICH SENDS A SUPERVISORY FSD/AD FSD/AD EXACT NUMBER AND — FIRE ALARM LOCATION SHALL BE PLANS ARE FOR REFERENCE ONLY. FIRE ALARM SHOP DRAWINGS CONTROL PANEL COORDINATED WITH THE SHALL BE SUBMITTED UNDER A SEPARATE PERMIT APPLICATION. FIRE ALARM SURGE PROTECTIVE DEVICE APPROVED HVAC BATTERY BACKUP DRAWINGS. CENTRAL STATION MONITORING HOOK UP PANEL (EXTERNAL OR WITHIN CONTROL PANEL ENCLOSURE)

### FIRE ALARM SYSTEM NOTES

- 1. GENERAL NOTES, SYMBOLS LIST AND DETAILS ARE APPLICABLE TO ALL DRAWINGS MARKED "FA".
- 2. THE CONTRACTOR SHALL FILE ALL DRAWINGS PER STATE AND LOCAL CODES, OBTAIN AND PAY FOR ALL PERMITS, PROVIDE CALCULATIONS, AND FINAL INSPECTIONS.
- 3. THE CONTRACTOR SHALL FURNISH AND INSTALL THE FIRE ALARM SYSTEM IN A MANNER WHICH PROVIDES A COMPLETE AND OPERATIONAL ALARM SYSTEM, WITH ALL EQUIPMENT, WIRE MANAGEMENT, DEVICES PERMITS HANGERS, TRIM, ACCESSORIES AND ASSOCIATED AND INCIDENTAL WORK, IN ACCORDANCE WITH THE APPLICABLE CODES, ALL AUTHORITIES HAVING JURISDICTION, AND PER THE CONSTRUCTION DOCUMENTS. UNLESS OTHERWISE NOTED, IT IS THE INTENT OF THESE DOCUMENTS TO PROVIDE AN APPROVED ADDRESSABLE FIRE ALARM SYSTEM THROUGHOUT THE ENTIRE PROJECT.
- 4. CONTRACTOR SHALL INCLUDE THE COST OF ALL SMALL DETAILS, INCIDENTAL WORK. AND ACCESSORIES NOT SHOWN OR SPECIFIED. BUT WHICH CAN BE REASONABLY INFERRED FOR COMPLETE AND SATISFACTORY CODE COMPLIANT SYSTEM. PROVIDE ALL ITEMS TO ACCOMPLISH REQUIREMENTS OF COORDINATION WITHOUT ADDITIONAL
- BASE BID SHALL INCLUDE ALL CABLE MANAGEMENT HARDWARE AS 16. SPECIFIED AND REQUIRED BY CODE.
- 6. ALL NEW FIRE ALARM WORK SHALL CONFORM TO THE REQUIREMENTS OF APPLICABLE SECTIONS OF NFPA 72 NATIONAL FIRE ALARM AND SIGNALING CODE BUILDING DEPARTMENT, FIRE DEPARTMENT AND OTHER LOCAL AUTHORITIES HAVING JURISDICTION.
- 7. THE OPERATION OF FIRE ALARM INSTALLATION DOES NOT CONSTITUTE AN ACCEPTANCE OF WORK BY THE OWNER. FINAL ACCEPTANCE IS TO BE MADE AFTER THE CONTRACTOR HAS DEMONSTRATED THAT THE WORK FULFILLS THE REQUIREMENTS OF THE DRAWINGS AND SPECIFICATIONS AND HAS FURNISHED ALL REQUIRED CERTIFICATES OF APPROVAL FROM THE STATE AUTHORITIES, MUNICIPAL AUTHORITIES AND INSURANCE UNDERWRITERS.

### DRAWINGS/DESIGN

- THESE DOCUMENTS DEPICT A PERFORMANCE LEVEL ENGINEERING DESIGN LAYOUT TO BE UTILIZED AS GUIDANCE FOR THE PLANNING OF THE FIRE ALARM SYSTEM BY THE CONTRACTOR. PROVIDE COMPLETE DOCUMENTS FOR REVIEW AND APPROVAL FROM THE ARCHITECT/ENGINEER OF RECORD. AND THE AUTHORITY HAVING JURISDICTION AND PRIOR TO INSTALLATION.
- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE DESIGN AND INSTALLATION OF THE FIRE ALARM SYSTEM IN ACCORDANCE WITH ALL APPLICABLE CODES AND REQUIREMENTS, INCLUDING BUT NOT LIMITED TO APPLICABLE NFPA CODES AND STANDARDS, LOCAL AUTHORITIES HAVING JURISDICTION, OWNER'S PROPERTY INSURANCE CARRIER GUIDELINES, AND OWNER-SPECIFIED DIRECTION.
- 3. THE CONTRACTOR SHALL PROVIDE ALL INTERCONNECTING WIRING BETWEEN THE FIRE ALARM AND HVAC. AUTOMATED TEMPERATURE CONTROL (ATC) AND ELECTRONIC DOOR HARDWARE EQUIPMENT OR SYSTEMS AS INDICATED AND/OR AS REQUIRED PER NFPA 72 OR AUTHORITIES HAVING JURISDICTION.
- THE FIRE ALARM SYSTEM SHALL HAVE ALL INITIATING, MONITORING AND CONTROL DEVICES. SYSTEM SHALL BE A FULLY ADDRESSABLE TYPE
- 5. ALL WIRING AND CONDUIT SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS, MANUFACTURER WIRING DIAGRAMS AND SHOP
- THE FIRE ALARM SYSTEM SHALL BE DIRECTLY CONNECTED TO THE DESIGNATED DISPATCH CENTER OF THE LOCAL FIRE PROTECTION DISTRICT VIA APPROVED RADIO COVERAGE FOR EMERGENCY RESPONDERS AS SPECIFIED BY THE LOCAL FIRE MARSHAL. SYSTEM TO BE VERIFIED IN THE FIELD BY THE LOCAL FIRE MARSHAL.
- 7. THE FIRE ALARM SYSTEM SHALL HAVE THE CAPABILITY TO PROVIDE CENTRAL STATION MONITORING USING AN AUTO DIALER VIA PHONE LINE FOR INTERFACE BETWEEN SECURITY SYSTEMS. APPROVED BY THE LOCAL FIRE MARSHAL.
- THE FIRE ALARM SYSTEM SHALL NORMALLY BE POWERED BY A UTILITY DISTRIBUTION SYSTEM. THE FIRE ALARM CONTROL PANEL SHALL HAVE AN INTEGRAL STANDBY SEALED RECHARGEABLE BATTERY CAPABLE OF POWERING THE SYSTEM IN ACTIVE MODE FOR AT LEAST 60 HOURS IN THE EVENT OF PRIMARY POWER FAILURE. THE TRANSFER TO STANDBY BATTERY POWER SHALL BE AUTOMATIC AND WITHOUT INTERRUPTION TO OPERATION. UNLESS OTHERWISE NOTED.
- THE FIRE ALARM SYSTEM INCLUDING DUCT DETECTORS SHALL BE ELECTRICALLY OR ELECTRONICALLY MONITORED FOR INTEGRITY AND CONTINUITY SO THAT ANY MALFUNCTION OF THE SYSTEM SUCH AS AN ELECTRICAL OPEN, A GROUND FAULT, OR ANY SHORT CIRCUIT FAULT ON THE MAIN POWER SUPPLY SIGNALING LINE, OR ALARM-FIRE SAFETY CONTROL CIRCUIT WILL INDICATE A VISUAL AND AUDIBLE SIGNAL AT THE ALARM PANEL, WHEN PROPER ALARM OPERATION WOULD BE PREVENTED.
- 10. CONTRACTOR SHALL COORDINATE ALL NEW WORK WITH NEW WORK OF OTHER TRADES AND EXISTING CONDITIONS AND PARTICIPATE IN THE PREPARATION OF COORDINATED SHOP DRAWINGS, IN ORDER TO AVOID CONFLICTS OF ANY TYPE.
- 11. CONTRACTOR SHALL PROVIDE SUBMITTALS AND SHOP DRAWINGS DETAILING. BUT NOT LIMITED TO, ALL OF THE FOLLOWING:
- BATTERY CALCULATIONS. CONDUCTOR TYPE AND SIZES.
- VOLTAGE DROP CALCULATIONS.
- MANUFACTURER'S MODEL NUMBERS AND LISTING INFORMATION FOR EQUIPMENT, DEVICES AND MATERIALS.
- THE INTERFACE OF FIRE SAFETY CONTROL FUNCTIONS.
- SHOP DRAWING INCLUDING LOCATION AND HEIGHT OF ALL DEVICES.

- 12. CONTRACTOR SHALL INSTALL AMPLIFIERS TO SUPPORT LOAD FOR
- REMOTE TEST SWITCH WITH STATUS/ALARM INDICATORS SHALL BE PROVIDED AND INSTALLED FOR DUCT SMOKE DETECTORS AND FOR SPRINKLER SYSTEM TAMPER AND FLOW SWITCHES. COORDINATE WITH HVAC EQUIPMENT MANUFACTURER'S APPROVED SUBMITTALS.
- 14. PROVIDE AND INSTALL ADDRESSABLE DUCT SMOKE DETECTORS ON THE RETURN OR SUPPLY SIDE OF AIR HANDLING UNITS PER APPLICABLE CODES. COORDINATE WITH HVAC EQUIPMENT MANUFACTURER APPROVED SUBMITTALS. FOR NUMBER AND LOCATION OF DUCT SMOKE DETECTORS REFER TO HVAC DRAWINGS AND SHOP DRAWINGS. DUCT DETECTORS ARE TO BE WIRED TO THE FIRE ALARM CONTROL PANEL.
- PROVIDE AND INSTALL ADDRESSABLE DUCT SMOKE DETECTORS INSTALLED AT EACH STORY WHERE RETURN AIR RISERS SERVE TWO OR MORE STORIES AND SERVE ANY PORTION OF A RETURN AIR SYSTEM HAVING A DESIGN CAPACITY GREATER THAN 15,000 CFM UNLESS OTHERWISE NOTED LOCATE DUCT SMOKE DETECTORS UP STREAM OF THE CONNECTION BETWEEN THE RETURN AIR RISER AND ANY AIR DUCTS OR PLENUMS. COORDINATE WITH HVAC EQUIPMENT MANUFACTURERS APPROVED SUBMITTALS FOR NUMBER AND LOCATION OF RETURN AIR RISER DUCT SMOKE DETECTORS REFER TO HVAC DRAWINGS AND SHOP DRAWINGS. DUCT DETECTORS ARE TO BE WIRED TO THE FIRE ALARM CONTROL PANEL.
- ACTIVATION OF ANY FIRE ALARM EQUIPMENT SHALL SHUT OFF ALL HVAC UNITS EXCLUDING KITCHEN HOOD EXHAUST FANS.
- 17. AIR HANDLER UNITS SHALL UTILIZE ADDRESSABLE CONTROL MODULES FOR UNIT SHUTDOWN AND DAMPER CONTROLS.
- THE FIRE ALARM INTERCONNECTION TO THE SECURITY SYSTEM SHALL RELEASE ALL FAIL-SAFE EXIT EGRESS DOORS UPON ALARM ACTIVATION UNLESS OTHERWISE NOTED.
- PROVIDE AND INSTALL WATERFLOW ALARM SWITCHES, AND SUPERVISORY AIR PRESSURE AND VALVE TAMPER MONITORING ON ALL SPRINKLER CONTROL VALVES. FOR NUMBER AND LOCATION OF PRESSURE FLOW AND TAMPER SWITCHES REFER TO FIRE PROTECTION SHOP DRAWINGS. ACTUATION OF THE SPRINKLER WATER FLOW AND/OR TAMPER SWITCH SHALL ACTIVATE THE FIRE ALARM SYSTEM.
- C. INSTALLATION
- REFER TO ARCHITECTURAL DRAWINGS FOR ALL CEILING HEIGHTS.
- COORDINATE WITH OWNER'S FIELD REPRESENTATIVE AND OR GENERAL CONTRACTOR FOR ALL PHASING AND PROJECT SCHEDULING.
- TRADES IN ORDER TO AVOID CONFLICTS OF ANY TYPE. INSTALL SMOKE DETECTORS A MINIMUM OF 5' FROM SUPPLY DIFFUSER,

WHERE APPLICABLE IN CONFORMANCE WITH NFPA 72.

THE CONTRACTOR SHALL COORDINATE THEIR WORK WITH ALL OTHER

LOCATION OF SMOKE DETECTORS: SPOT TYPE SMOKE DETECTORS SHALL BE LOCATED ON THE CEILING NOT LESS THAN 4 INCHES FROM A SIDEWALL TO THE NEAR EDGE OR WHERE ON A SIDEWALL BETWEEN 4 INCHES AND 12 INCHES DOWN FROM THE CEILING TO THE TOP OF THE DETECTOR. THE

LOCATION OF ALL SMOKE DETECTORS SHOWN ARE CONSIDERED TO BE

SCHEMATIC ONLY. THE ACTUAL LOCATIONS (SPACING TO ADJACENT

DETECTORS, WALLS, DIFFUSERS, CEILING FANS, ETC.) MUST MEET MEET

- NFPA 72 REQUIREMENTS. LOCATION OF MANUAL FIRE ALARM BOXES: EACH MANUAL FIRE ALARM BOX SHALL BE SECURELY MOUNTED. THE OPERABLE PART OF EACH MANUAL FIRE ALARM BOX SHALL NOT BE LESS THAN 3 FEET-6 INCHES AND NOT MORE THAN 4 FEET -6 INCHES ABOVE FLOOR LEVEL PER NFPA 72 AND ADA REQUIREMENTS. MANUAL FIRE ALARM BOXES SHALL BE DISTRIBUTED THROUGHOUT THE PROTECTED AREA SO THAT THEY ARE UNOBSTRUCTED AND READILY ACCESSIBLE. THEY SHALL BE LOCATED IN THE NORMAL PATH OF EXIT FROM THE AREA WITH A MANUAL FIRE ALARM BOX AT EACH EXIT ON EACH FLOOR. ADDITIONAL MANUAL FIRE ALARM BOXES SHALL BE PROVIDED
- LOCATION OF AUDIBLE/VISIBLE SIGNAL APPLIANCES: INSTALL WALL-MOUNTED NOTIFICATION APPLIANCES WITH THE BOTTOM OF THE STROBE LENS AT 80 INCHES AFF, OR 6 INCHES BELOW THE CEILING, WHICHEVER IS LOWER. ALL STROBES THAT ARE IN ONE VIEWING TO BE SYNCHRONIZED IN ACCORDANCE WITH NFPA 72.

SO THAT TRAVEL DISTANCE TO THE NEAREST FIRE ALARM BOX WILL NOT BE

EXCESS OF 200 FEET MEASURED HORIZONTALLY ON THE SAME FLOOR.

- TO THE EXTENT POSSIBLE, FIRE ALARM VISUAL AND AUDIBLE/VISUAL DEVICES SHALL BE LOCATED NO MORE THAN 9 INCHES AWAY FROM INSIDE OR OUTSIDE WALL CORNERS, OPENINGS, PILASTERS OR COLUMNS.
- WHERE DEVICES ARE SHOWN ABOVE OR IN CLOSE PROXIMITY TO LIGHT SWITCHES, THE CENTERLINES OF THE DEVICES SHALL BE ALIGNED
- LOCATION OF CONTROL PANELS: THE TOP OF NEW CONTROL PANELS SHALL NOT BE INSTALLED HIGHER THAN 60 INCHES ABOVE FINISHED FLOOR LEVEL.
- ALL EQUIPMENT, CABLING DEVICES, ETC., INSTALLED IN HVAC PLENUM SPACES SHALL MEET CODE REQUIREMENTS FOR SMOKE AND FIRE RATING.
- ALL CABLING SHALL BE PLENUM RATED WHEN A RETURN AIR PLENUM IS
- ALL WORK INSTALLED BY THIS CONTRACTOR SHALL BE INSTALLED IN SUCH A MANNER AS TO CLEAR ALL LIGHT FIXTURES, CEILING CONSTRUCTION, SPRINKLER PIPES AND HEADS, CONDUITS, PIPING ETC.
- AT THE COMPLETION OF THE WORK AND PRIOR TO THE FINAL ACCEPTANCE, ALL PARTS OF THE WORK SHALL BE THOROUGHLY CLEANED

### FIRE ALARM SPECIFICATIONS

- ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR THE COMPLETE FIRE ALARM SYSTEM. INSTALLATION. SYSTEM SHALL COMPLY WITH ALL CURRENT APPLICABLE CODES, INCLUDING LOCAL LAWS AND PER AUTHORITY HAVING JURISDICTION FIRE ALARM INSTALLATION SHALL CONFORM TO BUILDING STANDARDS. COORDINATE ALL WORK WITH BUILDING MANAGEMENT, BASE BUILDING FIRE ALARM SYSTEM VENDOR AND OTHER TRADES.
- CONTRACTOR SHALL SUBMIT FIVE COPIES OF WIRING DIAGRAMS AND CATALOG CUTS FOR ALL FIRE ALARM
- FIRE ALARM DEVICES INSTALLATION:
- AND FIELD CONDITIONS.
- FIRE ALARM SPEAKER, STROBE AND COMBINATION SPEAKER/STROBE SHALL BE WHITE HOUSING SIMILAR TO BASE BUILDING SYSTEM TYPE. STROBE LIGHTS SHALL MATCH BASE BUILDING SYSTEM:
- CAPABLE OF DELIVERING 100,000 PEAK CANDLE POWER, 24/12 VDC, 90 MA AND SYNCHRONIZED
- THE LAMP SHALL BE A XENON STROBE TYPE.
- 3.2.1.3.
- THE FLASH RATE SHALL BE A MINIMUM OF 1 HZ AND A MAXIMUM OF 2HZ.
- THE STROBE SHALL BE WALL MOUNTED 80 INCHES ABOVE THE HIGHEST FLOOR LEVEL WITHIN THE SPACE, OR 6 INCHES BELOW THE CEILING, WHICHEVER IS LOWER.
- SPACE SMOKE DETECTORS SHALL BE PHOTOELECTRIC TYPE MATCHING THE STANDARD BUILDING SYSTEM. PROVIDE DUAL CHAMBER IONIZATION TYPE FOR ELEVATOR LOBBIES AND ELEVATOR MACHINE
- BASE BUILDING FIRE ALARM VENDOR, SHALL MAKE FINAL CONNECTIONS, MODIFICATIONS TO AND
- FIRE WARDEN STATION SHALL MATCH BASE BUILDING STANDARD.
- MOUNT 48" ABOVE FINISHED FLOOR.
- ALL EXISTING DEVICES WILL BE REINSTALLED IN THEIR ORIGINAL LOCATIONS OR AS NOTED ON PLAN AFTER NEW CEILING IS IN PLACE AND WALL FINISHES ARE COMPLETE. PROVIDE TEMPORARY SUPPORT
- AS A MINIMUM, PROVIDE NO. 16 AWG. TWISTED, SHIELDED MULTI- CONDUCTOR CABLE FOR SPEAKER SHALL BE TYPE 'FPLP' HAVING 150C AND COMPLY WITH FIRE DEPARTMENT REQUIREMENTS. CABLE SIZE AND CONFIGURATION (SHIELDED/NON) SHALL MATCH EXISTING.
- TO EXISTING BUILDING ALARM SPEAKER LOOPS ON THE FLOORS. ALL ROUTING AND TERMINATIONS OF CABLES SHALL BE DIRECTED AND APPROVED BY BUILDING MANAGEMENT. NO TERMINATIONS SHALL BE MADE WITHOUT PRIOR APPROVAL OF BUILDING
- ELECTRICAL CONTRACTOR SHALL INCLUDE ALL FEES, COSTS, ETC. FOR FILING, APPROVALS, FINAL CONNECTIONS, SYSTEM REPROGRAMMING, PRE-TESTING AND FIRE DEPARTMENT TESTING AND

1. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE ENGINEER, THE EXACT LOCATION OF WALL MOUNTED

EXISTING FIRE SMOKE DAMPERS AND DUCT SMOKE DETECTORS TO BE FURNISHED WITH NEW CODE

- 2. LETTERS: "A" OR "B" BESIDE SPEAKER/STROBE OR SPEAKER INDICATE SPEAKER/STROBE CIRCUIT.
- FOR TOTAL QUANTITIES OF FIRE ALARM DEVICE, REFER TO FIRE ALARM PLAN.
- COMPLIANT RED, TEFLON FA WIRING.

- WORK FOR REVIEW PRIOR TO THE START OF ANY WORK.
- PROVIDE FIRE ALARM SMOKE DETECTOR, STROBE LIGHT, SPEAKER UNITS AND OTHER DEVICES AS INDICATED ON THE PLAN. EXACT LOCATION OF DEVICES SHALL BE COORDINATED WITH ARCHITECTS
- THE LENS SHALL BE UNFILTERED OR CLEAR FILTERED WHITE LIGHT.
- THE MAXIMUM PULSE DURATION SHALL BE TWO-TENTHS OF ONE SECOND (0.2 SEC) WITH A MAXIMUM DUTY CYCLE OF 40 PERCENT. THE PULSE DURATION IS DEFINED AS THE TIME INTERVAL BETWEEN INITIAL AND FINAL POINTS OF 10 PERCENT OF MAXIMUM SIGNAL.
- 3.2.1.4. THE INTENSITY SHALL BE A MINIMUM OF 75 CANDELA.
- OPERATING VOLTAGE OF SPEAKER UNITS SHALL BE COMPATIBLE WITH 7) EXISTING BASE BUILDING FIRE ALARM SYSTEM.
- ROOMS AND DUCT MOUNTED DETECTORS WITH REMOTE INDICATOR LED AND KEY TEST SWITCH
- REPROGRAMMING OF THE FIRE COMMAND STATION.
- RED LED CALL-CONNECT INDICATOR WITHIN ENCLOSURE.
- FOR DEVICES AND KEEP OPERATIONAL DURING CONSTRUCTION. CIRCUIT AND NO. 14 AWG. MULTI- CONDUCTOR CABLE FOR STROBE LIGHT CIRCUIT. EXTEND SYSTEM ZONE OR ADDRESSABLE CIRCUITS WITH TYPE AND SIZE MATCHING THE EXISTING SYSTEM. ALL CABLES
- PERMITS, STANDARDS AND APPROVALS:
- OBTAIN PERMISSION FROM BUILDING MANAGEMENT FOR CONNECTIONS OF TENANT SPEAKER LOOPS
- **MANAGEMENT**

- FIRE ALARM SPEAKER/STROBE LIGHTS AND ALL NEW FIRE ALARM DEVICES.
- NUMBER IN PARENTHESIS INDICATES NUMBER OF DEVICES ON PLAN. OF THAT TYPE.

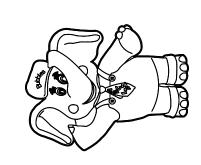


TEL: 973-994-9669 FAX: 973-994-4069 www.jarmelkizel.com Architecture Engineering

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NO. DATE DESCRIPTION INT. FOR TLE REVIEW FOR PERMIT 3 08-14-23 PER TLE AND CODE COMMENTS

REVISION

IO. DATE DESCRIPTION

PROFESSIONAL CERTIFICATION

**MATTHEW B. JARMEL, AIA, MBA** 

**LICENSE NUMBER: A2017014316** 

TLEMO22-164 **AS NOTED** Drawn Bv: Approved By:

FIRE ALARM RISER, NOTES, SPECIFICATIONS & LEGEND



### **SHEET NOTES:**

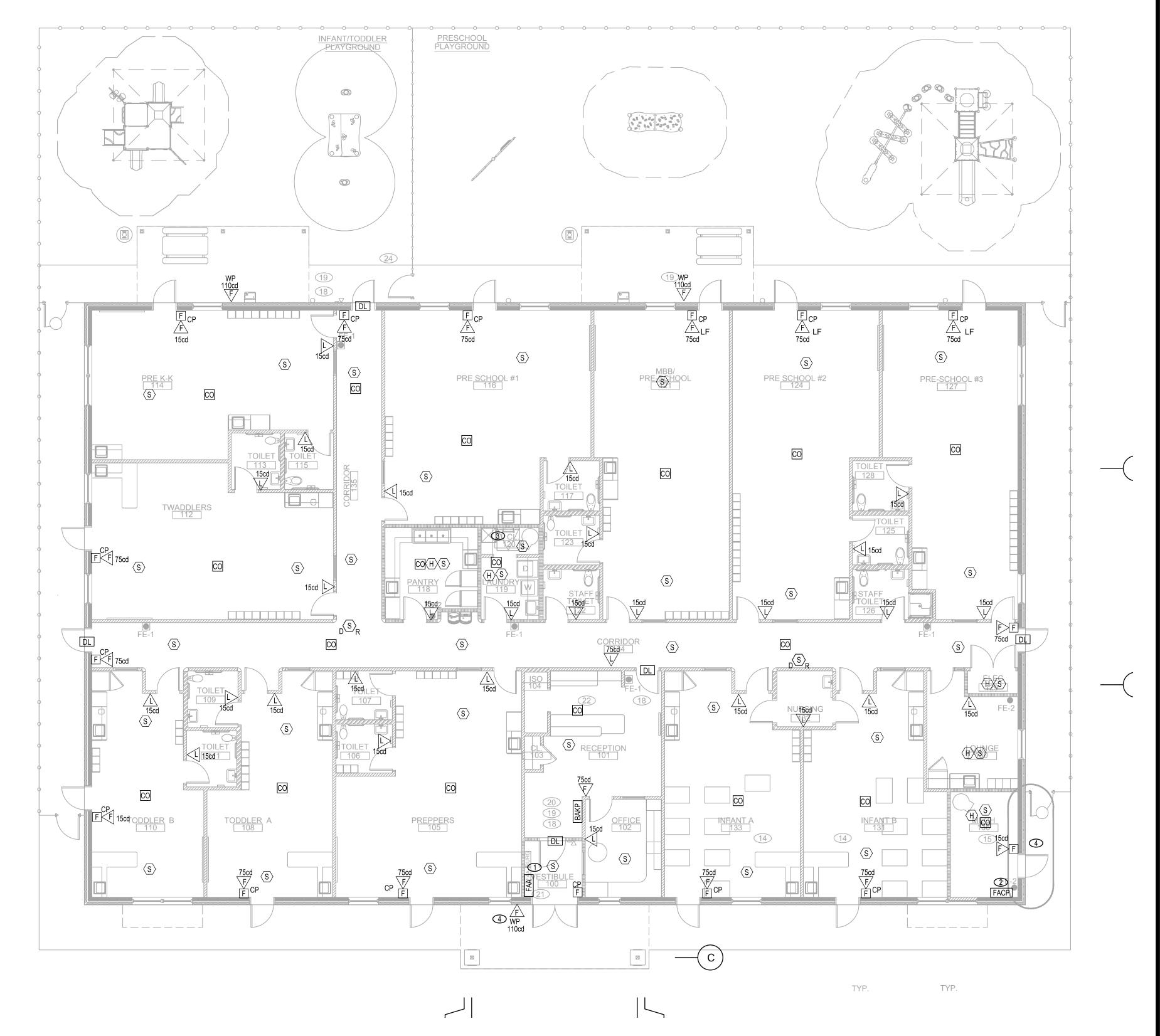
- 1. SEE DRAWING FA-100 FOR FIRE ALARM RISER, LEGEND & NOTES.
- 2. DAY CARE CENTERS CARING FOR CHILDREN SHALL HAVE SMOKE DETECTORS INSTALLED IN EACH ROOM USED BY THE CHILDREN AND IN OTHER LOCATIONS AS DEEMED NECESSARY BY THE FIRE INSPECTOR. ALL SMOKE DETECTORS SHALL BE POWERED BY THE BUILDING'S ELECTRICAL SYSTEM AND HAVE A BATTERY BACKUP.
- 3. LOCATE CARBON MONOXIDE DETECTOR/ALARM OR MULTI CRITERIA SMOKE/FIRE/CARBON DETECTOR ON CEILING AS CLOSE AS POSSIBLE TO RETURN GRILL(S) OR PER MANUFACTURER INSTRUCTIONS.
- 4. CONTRACTOR IS RESPONSIBLE FOR ALL WIRING AND CONNECTIONS FOR DUCT SMOKE DETECTORS.
- 5. THE GENERAL CONTRACTOR TO PROVIDE EMERGENCY RESPONDER RADIO COMMUNICATIONS AND RADIO SIGNAL BOOSTER EQUIPMENT REQUIRED TO BRING THE INTERIOR SIGNAL STRENGTH WITHIN THE ACCEPTABLE RANGE.
- 6. ELECTRONIC DOOR LOCKS SHALL RELEASE UPON FIRE ALARM ACTIVATION.

### FIRE ALARM PLAN KEY NOTES:

- 1 VERIFY EXACT LOCATION OF FIRE ALARM ANNUNCIATION PANEL WITH FIRE MARSHAL.
- ② VERIFY EXACT LOCATION OF FIRE ALARM CONTROL PANEL WITH FIRE MARSHAL.
- 3 ROOF ACCESS/MAINTENANCE DOOR SHALL NOT BE BLOCKED BY ANY DUCT, PIPES OR OTHER FIXED OBJECTS.
- 4 PROVIDE RECESSED KNOX BOX WITH TAMPER SWITCH CONNECTED TO THE SECURITY SYSTEM. REFER TO EXTERIOR ELEVATIONS SHEET A-051 FOR KNOX BOX SPECIFICATION AND LOCATION.

PLANS ARE FOR REFERENCE ONLY. FIRE ALARM SHOP DRAWINGS SHALL BE SUBMITTED UNDER A SEPARATE PERMIT APPLICATION.

SEQUENCE OF OPERATIONS															
FIRE ALARM SYSTEM MATRIX	FIRE ALARM SYSTEM MATRIX  BUILDING SYSTEM OUTPUTS														
	ACTUATE COMMON ALARM SIGNAL INDICATOR FIRE ALARM CONTROL PANEL AND ANNUNCIATOR	ACTUATE AUDIBLE ALARM SYSTEM - FIRE ALARM CONTROL PANEL AND ANNUNCIATOR	ACTUATE COMMON SUPERVISORY SIGNAL INDICATOR - FIRE ALARM CONTROL PANEL AND ANNUNCIATOR	ACTUATE AUDIBLE SUPERVISORY SIGNAL - FIRE ALARM CONTROL PANEL AND ANNUNCIATOR	ACTUATE COMMON TROUBLE SIGNAL INDICATOR FIRE ALARM CONTROL PANEL AND ANNUNCIATOR	ACTUATE AUDIBLE TROUBLE SIGNAL - FIRE ALARM CONTROL PANEL AND ANNUNCIATOR	ACTIVATE GENERAL EVACUATION SIGNAL FOR TEMPORAL-3 CODE	UNLOCK EXITS AND RELEASE DOOR HOLDERS	DISPLAY CHANGE OF STATUS - FIRE ALARM CONTROL PANEL AND ANNUNCIATOR	ACTIVATE EXTERNAL HORN/STROBE	TRANSMIT FIRE ALARM SIGNAL TO CENTRAL STATION	TRANSMIT SUPERVISORY SIGNAL TO CENTRAL STATION	TRANSMIT TROUBLE SIGNAL TO CENTRAL STATION	LOCAL SOUNDER BASE TO SOUND TEMPORAL-4 CODE	SHUT DOWN OF CO PRODUCING EQUIPMENT
MANUAL FIRE ALARM PULL BOXES	$\  \times \ $	X					X	X	X	X	X				
SMOKE DETECTORS AND HEAT DETECTORS	X	X					X	X	X	X	X				
CARBON MONOXIDE DETECTORS	1X	X						X	X		X			X	X
FIRE ALARM A.C. POWER FAILURE					Χ	X			X				X		
FIRE ALARM SYSTEM LOW BATTERY					Χ	X			X				X		
OPEN CIRCUIT					Χ	X			X				X		
GROUND FAULT					Χ	X			X				X		
NOTIFICATION APPLIANCE CIRCUIT SHORT					X	X			X				X		
SPRINKLER WATER FLOW	X	X					X	X	X	Χ	X				
SPRINKLER TAMPER			X	X					X			X			
KNOX BOX TAMPER SWITCH												X			
SMOKE OR FIRE SMOKE DAMPER WITH ACCESS DOOR (FSD/AD) / (SD/AD)	X	X	X						X			X	X		



1. CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING THE CONTRACTOR'S BEST SKILL AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCTION MEANS, METHODS TECHNIQUES, SEQUENCE, AND JOB SITE SAFETY

2. GC MUST PROVIDE & INSTALL ALL PRODUCTS PER PLANS. <u>ONLY</u> SUBSTITUTED PRODUCTS NEED TO BE SUBMITTED TO THE ARCHITECT FOR APPROVAL. UNAPPROVED SUBSTITUTIONS WILL BE <u>REPLACED ATHE EXPENSE OF THE GC</u>.

3. VERBAL REPRESENTATION HAS NO VALUE AND ALL REQUESTS TO CHANGE ANY PRODUCTS OR SPECIFICATIONS PER PLANS, <u>MUST</u> BE SUBMITTED IN WRITING TO THE ARCHITECT & TLE FOR APPROVAL.



42 OKNER PARKWAY
LIVINGSTON, NEW JERSEY 07039
TEL: 973-994-9669
FAX: 973-994-4069
www.jarmelkizel.com
Architecture
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ISSUE

NO. DATE DESCRIPTION

1 06-02-23 FOR TLE REVIEW

2 06-14-23 FOR PERMIT

3 08-14-23 PER TLE AND CODE COMMENTS

REVISION

NO. DATE DESCRIPTION INT

PROFESSIONAL CERTIFICATION

MATTHEW B. JARMEL, AIA, MBA
LICENSE NUMBER: A2017014316

Project Number: Scale:
TLEMO22-164 AS NOTED

Drawn By: Approved By:
LN MBJ

FIRE ALARM PLAN, NOTES & SYSTEM MATRIX

Drawing Num

A-200



