GARDENIA WAREHOUSE

2205 GARDENIA DR. AUSTIN, TX

ABBREVIATIONS

A.B.	ANCHOR BOLT	MAT.	MATERIAL
A.C.	AIR CONDITIONING	MAX.	MAXIMUM
ACCT	ACCENT	MB	MARKER BOARD
ACOUST	ACOUSTICAL	MD	METAL DECK
ADA	AMERICANS WITH DISABILITIES ACT	MDF	MEDIUM DENSITY FIBERBOARD
ADJ	ADJACENT	M.H.	MANHOLE
A.F.F.	ABOVE FINISHED FLOOR	MISC.	MISCELLANEOUS
ALUM.	ALUMINUM	MECH.	MECHANICAL
ALT	ALTERNATE	MIN.	MINIMUM
A.P.C.	ACRYLIC POLYMER COATING	MIR.	MIRROR
APPROX.	APPROXIMATE	MANUF	MANUFACTURER
ARCH.	ARCHITECT/ARCHITECTURAL	M.O.	MASONRY OPENING
ASPH.	ASPHALT	MTD.	MOUNTED
AUTO	AUTOMATIC	MTG	MEETING
AWI	AMERICAN WOODWORKING INST.	MTL.	METAL
BD.	BOARD	(N)	NEW
BITUM.	BITUMINOUS	N	NORTH
BLDG.	BUILDING	NA	NOT APPLICABLE
BLK.	BLOCK	NECE.	NECESSARY
BLKG.	BLOCKING	N.I.C.	NOT IN CONTRACT
B.M.	BENCH MARK	N.T.S.	NOT TO SCALE
BM	BEAM	NOM	NOMINAL
BO	BY OTHERS	NON-COM.	NON-COMBUSTIBLE
B.O.	BOTTOM OF	NO.	NUMBER
BRG.	BEARING	O.C.	ON CENTER
BSMT.	BASEMENT	O.D.	OUTSIDE DIAMETER
CAB.	CABINET	OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
CBB	CEMENTITIOUS BACKER BOARD	O.H.	OVER HEAD
CPT.	CARPET	OPG.	OPENING
CHNLS.	CHANNELS	OPP.	OPPOSITE
C.J.	CONTROL JOINT	PT	PAINT
C.L.	CENTERLINE	P.C.	PRECAST CONCRETE
CLG.	CEILING	P.L.	PROPERTY LINE
CLR	CLEAR	PL.	PLATE
C.I.P.	CAST IN PLACE	PLG.	PLUMBING
C.M.U.	CONCRETE MASONRY UNIT	PLAM	PLASTIC LAMINATE
COL.	COLUMN	PLYWD	PLYWOOD
CONC.	CONCRETE	PNL.	PANEL
CONT.	CONTINUOUS	PR.	PAIR
CONSTR.	CONSTRUCTION	PREFAB.	PREFABRICATED
COORD.	COORDINATE	POR.T.	PORCELAIN TILE
CSI	CONSTRUCTION SPEC. INSTITUTE	PTN.	PARTITION
C.T.	CERAMIC TILE	PVC	POLYVINYL CHLORIDE
CTB	CERAMIC TILE BASE	Q.T.	QUARRY TILE
CTP	CERAMIC TILE PAVERS	R	RISER
C.U.H.	CABINET UNIT HEATER	RAD.	RADIUS
CWT	CERAMIC WALL TILE	RB	RUBBER BASE
D	DRYER	RCP	REFLECTED CEILING PLAN
DBL.	DOUBLE	R.D.	ROOF DRAIN
DEMO	DEMOLISH, DEMOLITION	REF.	REFER/REFERENCE
DEPT.	DEPARTMENT	REF	REFRIGERATOR
D.F.	DRINKING FOUNTAIN	REINF.	REINFORCED
DIA.	DIAMETER	REQ.	REQUIRED
DIM	DIMENSION	RESIL.	RESILIENT
DISP.	DISPENSER	REV.	REVISION
DN.	DOWN	RFG.	ROOFING
DR.	DOOR	RM.	ROOM
DS.	DOWNSPOUT	R.O.	ROUGH OPENING
DTL.	DETAIL	R.O.W.	RIGHT OF WAY
DW	DISHWASHER	RTU	ROOF TOP UNIT
DWG.	DRAWING	S.A.T.	SUSPENDED ACOUSTICAL TILE
(E)	EXISTING	S.C.	SOLID CORE
E.W.	EACH WAY	SCHED.	SCHEDULE
EA.	EACH	S-CONC	SEALED CONCRETE
E.I.F.S.	EXTERIOR INSULATION & FINISH SYS.	SDW	SOAP DISPENSER
E.J.	EXPANSION JOINT	SEAL.	SEALER
ELEV/EL.	ELEVATION	SECT	SECTION
ELEC.	ELECTRICAL	S.F.	SQUARE FOOT/FEET
ENGR.	ENGINEERED	SHT.	SHEET
ENCL.	ENCLOSURE	SHWR	SHOWER
EPOXY	EPOXY PAINT	SPEC.	SPECIFICATION(S)
EQ.	EQUAL	SPRL.	SPANDREL
EQUIP.	EQUIPMENT	SQ.	SQUARE
EQUIV.	EQUIVALENT	S.S.	STAINLESS STEEL
EX	EXISTING	STA.	STATION
EXP.	EXPANSION	STC	SOUND TRANSMISSION CLASS
EXP.JT.	EXPANSION JOINT	STD.	STANDARD
EXH.	EXHAUST	S.STL.	STAINLESS STEEL
EXT.	EXTERIOR	ST	STAIN
E.W.C.	ELECTRIC WATER COOLER	SHTG	SHEATHING
FRGL.	FIBERGLASS	STL.	STEEL
F.D.	FLOOR DRAIN	SUP/PL.	SUPPLIED
FDN.	FOUNDATION	SUSP.	SUSPENDED
F.E.	FIRE EXTINGUISHER	STOR.	STORAGE
F.E.C.	FIRE EXTINGUISHER CABINET	STR	STRINGER
F.F.	FINISHED FLOOR	STRL.	STRUCTURAL
F.F.&E.	FURNITURE, FIXTURES & EQUIP	STRUCT.	STRUCTURE, STRUCTURAL
F.G.	FINISH GRADE	SYM.	SYMMETRICAL
F.H.C.	FIRE HOSE CABINET	SYST.	SYSTEM
FIN.	FINISH(ED)	SV	SHEET VINYL
FIN.FLR.	FINISHED FLOOR	T	TREAD (IN PLAN)
FIXT.	FIXTURE	T.	TEMPERED (ON WINDOW)
FLD	FIELD	TB	TACK BOARD
FLR.	FLOOR	TBB	TILE BACKER BOARD
FLRG.	FLOORING	TBD	TO BE DETERMINED
F.O.	FACE OF	T.&B.	TOP AND BOTTOM
F.O.S.	FACE OF STUD	T.C.	TOP OF CURB
F.R.	FIRE RESISTIVE	T.&G.	TONGUE & GROOVE
FR.	FRAME	TEL.	TELEPHONE
FRMG.	FRAMING	TEMP.	TEMPERED
F.R.P.	FIBER REINFORCED PANEL	THK.	THICKNESS
FT.	FOOT/FEET	THLD.	THRESHOLD
FTG.	FOOTING	T.O.	TOP OF
FUT.	FUTURE	T.O.B.	TOP OF BEAM
GA.	GAUGE	T.O.C.	TOP OF CONCRETE
GAL.	GALLON	T.O.F.	TOP OF FLOOR/FOOTING
GALV.	GALVANIZED	T.O.M.	TOP OF MASONRY
G.C.	GENERAL CONTRACTOR	T.O.STL	TOP OF SLAB/STEEL
GHM	GALVANIZED HOLLOW METAL	TS	TUBE STEEL
GL.	GLASS	T.V.	TELEVISION
GLU LAM	GLUE LAMINATED WOOD	TYP.	TYPICAL
GMGU	GLASS MESH GYPSUM UNIT	TYPE 'X'	FIRE RATED GYPSUM BOARD
GR.	GRADE	UBC	UNIFORM BUILDING CODE
GYP.	GYPSUM BOARD	U.L.	UNDERWRITERS LABORATORY
H	HEIGHT	UNFIN.	UNFINISHED
H.B.	HOSE BIB	U.O.N.	UNLESS OTHERWISE NOTED
H.C.	HOLLOW CORE	VAR.	VARIES
HC	HANDICAP, HANDICAPPED	VCT	VINYL COMPOSITION TILE
HDBD.	HARDBOARD	VERT.	VERTICAL
HDR	HEADER	VEST.	VESTIBULE
HDWR	HARDWARE	VIF	VERIFY IN FIELD
HM	HOLLOW METAL	V.W.C.	VINYL WALL COVERING
HORIZ.	HORIZONTAL	W	WASHER (IN PLAN)
HT	HEIGHT	W	WIRE GLASS (ON WINDOW)
HTR.	HEATER	W/	WITH
HVAC	HEATING,VENTILATING & AIR COND.	WD.	WOOD
IBC	INTERNATIONAL BUILDING CODE	WDW.	WINDOW
I.D.	INSIDE DIAMETER	W.C.	WATER CLOSET
INSUL.	INSULATION	WF	WIDE FLANGE
INT.	INTERIOR	W.H.	WATER HEATER
JAN	JANITOR	W.I.	WROUGHT IRON
JT.	JOINT	W/O	WITHOUT
JST.	JOIST	WP	WATERPROOF
KD	KNOCK DOWN	WR	WATER RESISTANT
KIT.	KITCHEN	WSCI	WAINSCOT
LAM.	LAMINATE(D)	WT.	WEIGHT
LAV.	LAVATORY	W.W.F.	WELDED WIRE FABRIC
L.F.	LINEAR FOOT		

SYMBOLS

XXXX — ELEVATION INDICATOR

A — WINDOW INDICATOR

VESTIBULE [101] — ROOM DESIGNATION

W5 — WALL TYPE INDICATOR

100A — DOOR INDICATOR

26 — ACCESSORY INDICATOR

LI CG — CORNER GUARD

VCT — CPT — FLOOR MATERIAL TRANSITION INDIC.

DETAIL LOCATION ON SHEET / DRAWING TITLE / 1 / 1 1/2" = 1'-0" / DRAWING SCALE — PLAN — DRAWING TITLE

13 / A1.1 — DETAIL NUMBER / SHEET WHERE DRAWN — SECTION REFERENCE

1 / RFI — REVISION INDICATOR

F.E.C. SURFACE — SURFACE MOUNTED FIRE EXTINGUISHER CABINET

F.E.C. SEMI-R — SEMI-RECESSED FIRE EXTINGUISHER CABINET

F.E. BRACKET — WALL MOUNTED FIRE EXTINGUISHER BRACKET

EME R — EMERGENCY LIGHTING

1 / 4 A1.1 2 / 3 — INTERIOR ELEVATION REFERENCE

A1.1 1 — DETAIL NUMBER / SHEET WHERE DRAWN — EXTERIOR ELEVATION REFERENCE

13 / A1.1 — DETAIL NUMBER / SHEET WHERE DRAWN — DETAIL REFERENCE

MATERIALS

- EARTH/COMPACT FILL
- GRAVEL/POROUS FILL
- CONCRETE (PRECAST OR CAST IN PLACE)
- SPRAY INSULATION
- STEEL
- ALUMINUM
- CONTINUOUS WOOD BLOCKING
- NON-CONTINUOUS WOOD BLOCKING
- WOOD FINISH
- PLYWOOD
- GYPSUM BOARD
- BATT/LOOSE FILL INSULATION
- RIGID INSULATION
- CARPET
- WOOD GLULAM
- MASONRY

REFER TO CONSTRUCTION SPECIFICATION INSTITUTE, UNIFORM DRAWING SYSTEM AND TO PROJECT SPECIFICATIONS FOR REFERENCE STANDARDS & ADDITIONAL ABBREVIATIONS

GENERAL NOTES

GENERAL REQUIREMENTS

1. ATTENTION ALL USERS OF THESE DRAWINGS, GENERAL CONTRACTORS, SUB-CONTRACTORS, MANUFACTURERS, SUPPLIERS: CAREFULLY AND THOROUGHLY REVIEW THESE GENERAL NOTES. IT IS YOUR RESPONSIBILITY TO KNOW AND ADHERE TO THESE REQUIREMENTS.

2. THE DRAWINGS AND SPECIFICATIONS ARE SEPARATED INTO DISCIPLINES FOR THE CONVENIENCE OF THE ARCHITECT AND THE CONTRACTOR. THE SEPARATIONS USED HEREIN ARE USED ONLY FOR THE PURPOSES 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.

3. EVERY EFFORT HAS BEEN MADE TO MAKE THESE DOCUMENTS CONCISE AND COORDINATED, TO DEFINE WORK IN THE MOST LOGICAL PLACE AND TO ELIMINATE REDUNDANCY. 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 WORK.

4. 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 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.

5. MECHANICAL AND ELECTRICAL DRAWINGS SHOW INFORMATION IN A DIAGRAMMATIC FASHION WITHOUT DIMENSIONING. THE GENERAL CONTRACTOR IS TO COORDINATE THE LOCATIONS OF ALL M.E. EQUIPMENT WITH RESPECT TO THE ARCHITECTURAL AND STRUCTURAL DETAILING OF SHAFTS, CHASES, ECT...

6. THE CONTRACTOR AND ALL SUB-CONTRACTORS SHALL VISIT THE SITE AND BECOME FAMILIAR WITH SITE CONDITIONS AS THEY MAY AFFECT CARRYING OUT THE WORK AS DESCRIBED IN THESE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL INVESTIGATE, VERIFY, AND BE RESPONSIBLE FOR ALL CONDITIONS OF THE PROJECT, AND NOTIFY THE ARCHITECT OF ANY CONDITIONS THAT REQUIRE MODIFICATION BEFORE PROCEEDING WITH THE WORK.

7. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND PROTECTING ALL UTILITY LINES. LOCATIONS SHOWN ARE APPROXIMATE. REPAIR ALL DAMAGE TO UTILITY LINES CAUSED BY CONSTRUCTION OPERATIONS AT NO COST TO THE OWNER.

8. ALL PERSONS DIRECTLY OR INDIRECTLY ASSOCIATED WITH THE PROJECT SHALL BE FAMILIAR WITH THE RULES AND REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ACT, AND IMPLEMENT THOSE RULES AS THEY APPLY TO THIS PROJECT.

9. THE CONTRACTOR SHALL PROVIDE ALL MATERIALS, EQUIPMENT, LABOR, AND SERVICES NECESSARY TO COMPLETE THE WORK.

10. ALL WORK PERFORMED SHALL BE IN ACCORDANCE WITH THE BUILDING CODE & LOCAL AMENDMENTS. RE: CODE EGRESS AND ACCESSIBILITY SHEET.

11. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF ALL TRADES AND THE PREVENTION OF CONFLICT BETWEEN ALL TRADES.

DRAWINGS AND DIMENSIONS

1. DO NOT SCALE THE DRAWINGS.

2. ALL DIMENSIONS ON PLANS ARE TO FACE OF BLOCK OR TO FACE OF STUD UNLESS NOTED OTHERWISE.

3. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE ARCHITECT IMMEDIATELY SHOULD ANY DISCREPANCIES BE FOUND IN THE DRAWINGS AND SPECIFICATIONS.

4. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR CHECKING ALL FIELD CONDITIONS AND DIMENSIONS AS THEY RELATE TO THIS PROJECT. SHOULD DISCREPANCIES EXIST BETWEEN THE WORK INDICATED AND ACTUAL FIELD CONDITIONS NOTIFY THE ARCHITECT PRIOR TO PROCEEDING WITH THE WORK.

5. ACTUAL CONTRACT LIMITS ARE TO BE DETERMINED BY THE CONTRACTOR AND APPROVED BY THE OWNER BEFORE ACTUAL CONSTRUCTION WORK BEGINS. ANY INDICATION OF PROJECT LIMITS OR LINES OF DEMARCATION ARE SHOWN FOR THE CONVENIENCE OF THE CONTRACTOR, AND ARE NOT TO BE TAKEN LITERALLY.

6. SEE GENERAL NOTES ON ALL 'A' SERIES DRAWINGS FOR INFORMATION RELATED TO PLANS AND DETAILS ON THOSE SHEETS.

7. THE TERM "ALIGN" REFERS TO LOCATING DIFFERENT COMPONENTS OF CONSTRUCTION TO PROVIDE A FLUSH FINISH SURFACE.

8. CONTRACTORS AND ALL SUB-CONTRACTORS SHALL FIELD VERIFY ALL DIMENSIONS PRIOR TO FABRICATION AND/OR ORDERING OF MATERIALS.

9. 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. NOTIFY THE ARCHITECT OF ANY DISCREPANCY.

10. REFER TO THE ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATIONS OF ALL CEILING FIXTURES. REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR COMPLETE CONSTRUCTION REQUIREMENTS.

11. ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS SHOW WHERE EXPOSED DUCTWORK IS TO BE INSTALLED AT A SPECIFIC ELEVATION IN A CONTROLLED PATTERN. THE CONTRACTOR MUST RELY ON ALL OF THESE DISCIPLINES TO COMPLETE THE WORK AND SHOULD NOTIFY THE ARCHITECT OF ANY DISCREPANCIES.

12. THE GENERAL CONTRACTOR SHALL COORDINATE THE WORK OF ALL TRADES INSTALLING THEIR RESPECTIVE EQUIPMENT IN THE CEILING PLENUMS. MECHANICAL, ELECTRICAL, STRUCTURAL, AND FIRE SPRINKLER SYSTEMS ALL SHARE THIS SAME SPACE. EACH SUB CONTRACTOR IS TO REVIEW THE REQUIREMENTS OF THEIR WORK WITH THE AWARENESS OF THE OTHER TRADES THAT NEED TO SHARE THESE SPACES AND MUST NOT ASSUME THAT THEIR INSTALLATION HAS BEEN CONSIDERED IN THE DESIGN AND SHOP DRAWINGS OF THE OTHER TRADES.

CONSTRUCTION NOTES

1. DRAWINGS ARE PREPARED USING DIMENSIONS AND PRODUCT CONFIGURATIONS OR DETAILS OF SPECIFIC MANUFACTURERS (TYPICALLY THE FIRST MANUFACTURER LISTED UNDER "ACCEPTABLE MANUFACTURERS" IN THE SPECIFICATIONS), DIMENSIONS AND DETAILS FOR SPECIFIC PRODUCTS MAY CHANGE BEFORE THEY ARE ACTUALLY INCORPORATED INTO THE WORK, AND PRODUCTS BY OTHER MANUFACTURERS MAY ALSO BE ACCEPTABLE. 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 PARTITION THICKNESSES FOR RECESSED OR SEMI-RECESSED PRODUCTS), AND IS RESPONSIBLE FOR ACCOMMODATING AND COORDINATING CHANGES TO OTHER MATERIALS OR PRODUCTS THAT ARE NECESSARY BECAUSE OF THESE DIFFERENCES.

2. PROVIDE & INSTALL SOLID BLOCKING WITHIN PARTITIONS AT ALL LOCATIONS WHERE ITEMS WILL BE MOUNTED ON PARTITIONS INCLUDING, BUT NOT LIMITED TO: ACCESSORIES, CASEWORK TRIM, FLASHING, WALL MOUNTED EQUIPMENT, TACK/BULLETIN/MARKER BOARDS, ETC.

3. ALL WOOD BLOCKING SHALL BE FIRE-RETARDANT TREATED (F.R.T.) WOOD.

4. MAINTAIN RATING AT ALL BLOCKOUTS FOR ALL FIRE EXTINGUISHERS AND TOILET ACCESSORIES THAT ARE TO BE INSTALLED IN RATED WALLS.

5. PROVIDE & INSTALL 24" X 24" ACCESS PANELS IN PARTITIONS WHERE REQUIRED FOR MECHANICAL EQUIPMENT EXCEPT WHERE SIZES ARE OTHERWISE NOTED.

6. PROVIDE & INSTALL GYPSUM BOARD CONTROL JOINTS IN PARTITIONS AND CEILINGS AT 30'-0" MAX. SPACING. COORDINATE TO MEET FIRE RESISTIVE RATINGS OF THE ASSEMBLY, FIRESTOP JOINTS AT RATED PARTITIONS. SUB-CONTRACTOR MUST PROVIDE A SUBMITTAL FOR JOINT MATERIAL.

7. CAULK ALL JOINTS OR CRACKS WHICH OCCUR WHERE DISSIMILAR MATERIALS INTERSECT PERPENDICULAR TO EACH OTHER AND WHERE THE INTERSECTION IS EXPOSED TO VIEW, UNLESS INDICATED OTHERWISE ON THE DRAWINGS.

8. FIREBLOCK ALL CONCEALED SPACES, SOFFITS, SHAFTS, CHASES AND CEILING AREAS PER REQUIREMENTS OF THE 2015 IBC AND THE LOCAL JURISDICTION'S AMENDMENTS.

9. PROVIDE & INSTALL SLIP JOINT CONNECTIONS AT PARTITIONS THAT EXTEND TO STRUCTURE ABOVE. PROVIDE BRACING ABOVE AS REQUIRED. REFER TO STRUCTURAL DRAWINGS AND TO SLIP JOINT DETAILS.

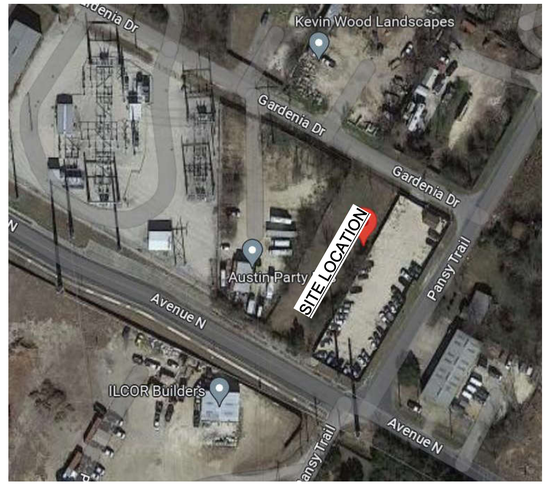
10. IT IS THE INTENT OF THE DESIGN THAT ALL METAL STUD PARTITIONS BE OF SUFFICIENT WIDTH TO ADEQUATELY ENCLOSE PIPING, CONDUITS, AND RECESSED EQUIPMENT. NOTIFY THE ARCHITECT OF ANY DISCREPANCIES WITH THIS INTENT.

11. ALL VERTICAL AND HORIZONTAL PIPES, CONDUITS, DUCTS, ETC. IN FINISHED ROOMS OR AREAS THROUGHOUT THE BUILDING SHALL BE FURRED IN TO MATCH THE ROOM FINISH, UNLESS OTHERWISE NOTED.

12. WHERE MECHANICAL WORK PENETRATES ANY COMPONENT OF A FIRE-RATED ASSEMBLY, PROVIDE & INSTALL THE APPROPRIATE FIRE AND/OR SMOKE DAMPERS. IF IT IS NOT CLEAR WHETHER DUCTWORK PENETRATES A PORTION OF THE RATED ASSEMBLY, OBTAIN CLARIFICATION FROM THE ARCHITECT PRIOR TO BIDDING. SEAL AROUND ALL PENETRATIONS THROUGH PROPOSED FIRE RATED PARTITIONS. PROVIDE UL APPROVED FIRESTOP SYSTEM TO MEET REQUIRED RATING.

13. THE FIRE ALARM SYSTEM WILL BE DESIGNED BY THE INSTALLING SUB-CONTRACTOR. THE GENERAL CONTRACTOR SHALL COORDINATE LAYOUT, CLEARANCES, AND LOCATION OF SYSTEM WITH THE STRUCTURE, MECHANICAL DUCTWORK, ELECTRICAL LIGHTING, DRAINAGE PIPING, AND THE ARCHITECTURAL REFLECTED CEILING PLANS. THE ALARM DESIGN MUST BE COORDINATED WITH THE PROVISIONS OF ALL ENGINEERING AND ARCHITECTURAL DOCUMENTS AND SHOULD NOT RELY SOLELY ON ONE SERIES OF DRAWINGS OR ONE DISCIPLINE. CONTRACTOR SHALL ADJUST OR ADD FIRE ALARM DEVICES TO ACCOMMODATE PARTITION LAYOUT. ALARM SPACING AND PLACEMENT SHALL MEET CODE REQUIREMENTS. SUB-CONTRACTOR SHALL COORDINATE ANY ALARM DEVICE LAYOUT CONFLICTS WITH THE ARCHITECT.

14. INTERIOR SIGNAGE TO BE DESIGN BUILD AND COMPLY WITH THE SFO, ANSI 117.1, TAS, AND ADA.



DON ECKOLS ARCHITECT
5807 City Park Road #6
Austin , Texas 78730
512.202.5453
don.eckols@gmail.com

REGISTERED ARCHITECT DON ECKOLS 19886 STATE OF TEXAS

THIS SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY DON ECKOLS R.A., #13886

9-14-2023

GARDENIA WAREHOUSE

COVER SHEET / GENERAL NOTES

PRESENTATION
DATE: 9-14-2023
DRAWN BY: IP
CHECKED BY: DE

A1

BUILDING CODE REVIEW

CITY OF AUSTIN, TEXAS
INTERNATIONAL BUILDING CODE, 2021
INTERNATIONAL FIRE CODE, 2021,
INTERNATIONAL PLUMBING CODE, 2021
INTERNATIONAL FUEL GAS CODE, 2021
INTERNATIONAL MECHANICAL CODE, 2021
INTERNATIONAL ENERGY CONSERVATION CODE, 2021
INTERNATIONAL ELECTRICAL CODE, 2021
NATIONAL ELECTRICAL CODE, 2020

CHAPTER 3 - USE AND OCCUPANCY CLASSIFICATION
GROUP S-2 – LOW HAZARD STORAGE (SECTION 311.3, IBC 2018)

CHAPTER 4 - SPECIAL DETAILED REQUIREMENTS BASED ON USE AND OCCUPANCY
S-2 OCCUPANCY - NOT APPLICABLE

CHAPTER 5 - GENERAL BUILDING HEIGHTS AND AREAS
TYPE II-B (NON-SPRINKLERED) CONSTRUCTION

-TABLE 504.3 ALLOWABLE BUILDING HEIGHT ABOVE GRADE PLANE
GROUP S-2
ALLOWABLE HEIGHT = 55'-0"
PROPOSED HEIGHT = 18'-10"

-TABLE 504.4 ALLOWABLE BUILDING HEIGHT ABOVE GRADE PLANE
GROUP S-2
STORIES ALLOWED = 3
STORIES PROPOSED = 1

-TABLE 506.2 ALLOWABLE AREA FACTOR
ALLOWABLE AREA (S-2 1 STORY NON-SPRINKLERED) = 26,000 S.F.
PROPOSED AREA = **8,330 S.F.**

TABLE 508.4 REQUIRED SEPARATION OF OCCUPANCIES (HOURS)
GROUP S-2 - BUSINESS OCCUPANCIES = NO SEPERATION REQUIRED
PROVIDED = NO SEPERATION PROVIDED

CHAPTER 6 - TYPES OF CONSTRUCTION
(SECTION 603.1) TYPE II-B **(UNSPRINKLERED)**
TYPE II CONSTRUCTION IS THAT TYPE OF CONSTRUCTION IN WHICH THE STRUCTURAL ELEMENTS,
EXTERIOR WALLS AND INTERIOR WALLS ARE OF ANY MATERIALS PERMITTED BY THIS CODE.

CHAPTER 7 - FIRE AND SMOKE PROTECTION FEATURES
OPEN BUSINESS SPACE - NONE REQUIRED
UN-SPRINKLERED

SECTION 718.4 DRAFTSTOPING:
718.4 OTHER GROUPS. DRAFTSTOPING SHALL BE INSTALLED IN ATTICS AND CONCEALED ROOF SPACES, SUCH THAT ANY HORIZONTAL AREA DOES NOT EXCEED 3,000 SQUARE FEET. (NO CONCEALED ROOF SPACES TO BE >3,000 S.F.)

CHAPTER 8 - INTERIOR FINISHES
TABLE 803.13 INTERIOR WALL AND CEILING FINISH REQUIREMENTS (NON-SPRINKLERED)
GROUP S-2 - LOW-HAZARD STORAGE OCCUPANCY -
EXIT ENCLOSURES AND EXIT PASSAGEWAYS = B
CORRIDORS = B
ROOMS AND ENCLOSED SPACES = C

SECTION 804 - INTERIOR FLOOR FINISH
804.4 INTERIOR FLOOR FINISH REQUIREMENTS -
MATERIALS IN EXIT ENCLOSURES, EXIT PASSAGEWAYS, CORRIDORS AND ROOMS OR SPACES NOT SEPARATED FROM CORRIDORS BY FULL HEIGHT PARTITIONS -
MINIMUM CRITICAL RADIANT FLUX = NOT LESS THAN CLASS II

MATERIALS IN ALL AREAS SHALL COMPLY WITH THE DOCFF-1 "PILL TEST" (CPSC 16 CFR, PART 1630)

CHAPTER 9 - FIRE PROTECTION SYSTEMS

AUTOMATIC SPRINKLER SYSTEMS
REQUIRED = NO
PROVIDED = NO

PORTABLE FIRE EXTINGUISHERS
REQUIRED = YES
PROVIDED = YES
SEE EGRESS / ACCESSIBILITY PLAN FOR LOCATIONS

FIRE ALARM AND DETECTION SYSTEMS
REQUIRED = NO (EXCEPTION: MANUAL ALARM SYSTEM NOT REQUIRED WITH 50 OR LESS OCCUPANTS)
PROVIDED = NO

CHAPTER 10 - MEANS OF EGRESS
SECTION 1004 OCCUPANT LOAD
GROUP S-2 - LOW-HAZARD STORAGE OCCUPANCY (WAREHOUSE)
(8,330 S.F.) 1 PER 500 GROSS = 17 OCCUPANTS

SECTION 1005 MEANS OF EGRESS SIZING
GROUP S-2 - LOW-HAZARD STORAGE OCCUPANCY (WAREHOUSE)
17 (.2) =3.4" (REQUIRED) >3.4" (PROVIDED)

SECTION 1006 MEANS OF EGRESS ILLUMINATION
1006.1 ILLUMINATION REQUIRED - THE MEANS OF EGRESS, INCLUDING THE EXIT DISCHARGE, SHALL BE ILLUMINATED AT ALL TIMES THE BUILDING SPACE SERVED BY THE MEANS OF EGRESS IS OCCUPIED.

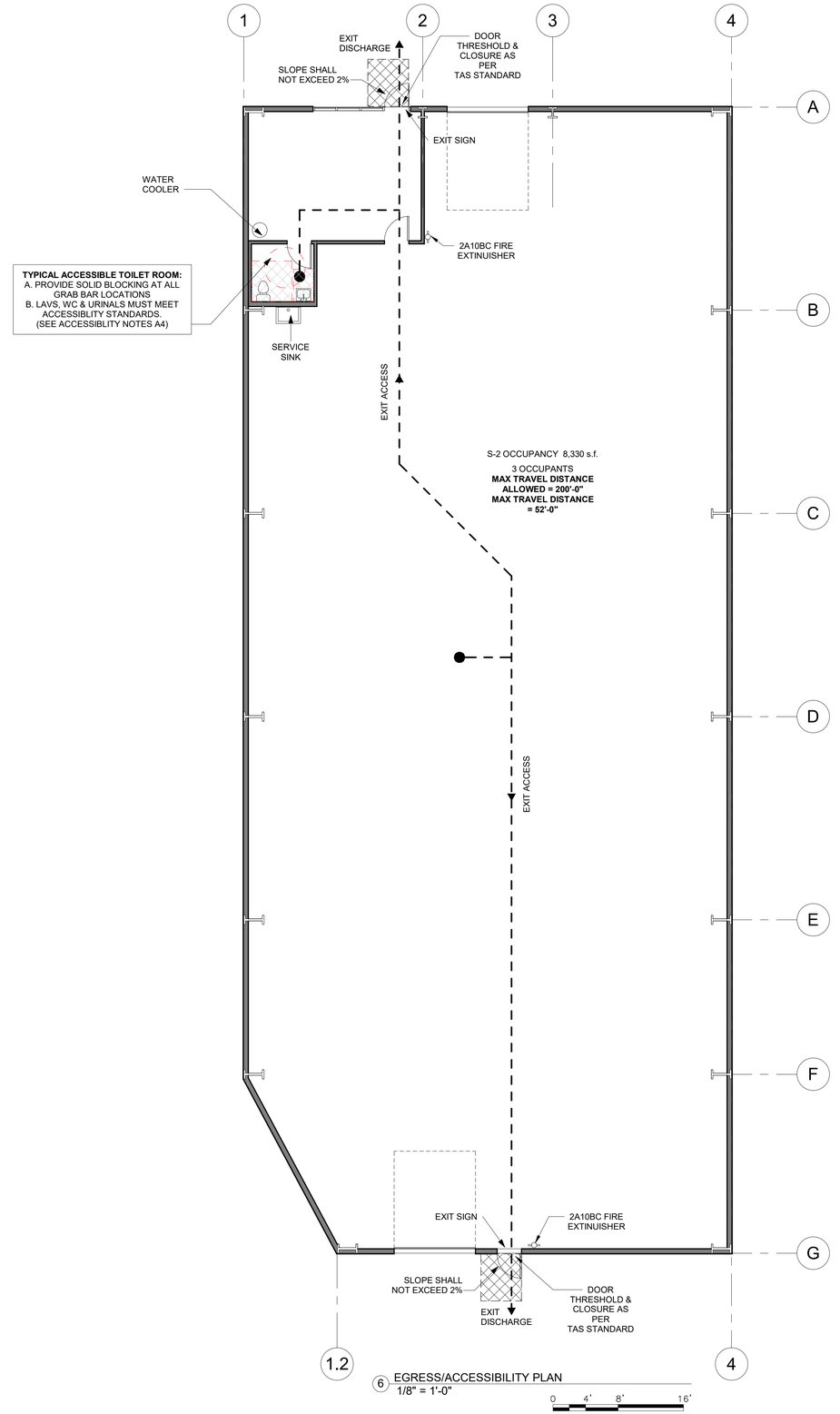
SECTION 1011 EXIT SIGNS
1011.1 WHERE REQUIRED - EXITS AND EXIT ACCESS DOORS SHALL BE MARKED BY AN APPROVED EXIT SIGN READILY VISIBLE FROM ANY DIRECTION OF EGRESS TRAVEL. ACCESS TO EXITS SHALL BE MARKED BY READILY VISIBLE EXIT SIGNS IN CASES WHERE THE EXIT OR THE PATH OF EGRESS TRAVEL IS NOT IMMEDIATELY VISIBLE TO THE OCCUPANTS. EXIT SIGN PLACEMENT SHALL BE SUCH THAT NO POINT IN AN EXIT ACCESS CORRIDOR IS MORE THAN 100 FT OR THE LISTED VIEWING DISTANCE FOR THE SIGN, WHICHEVER IS LESS, FROM THE NEAREST VISIBLE EXIT SIGN. **(SEE PLAN FOR LOCATIONS)**

CHAPTER 29 - PLUMBING SYSTEMS

SECTION 2902.2 SEPERATE FACILITIES
EXCEPTION 2: SEPERATE FACILITIES SHALL NOT BE REQUIRED IN STRUCTURES OR TENANT SPACES WITH A TOTAL OCCUPANT LOAD, INCLUDING BOTH EMPLOYEES AND CUSTOMERS, OF 15 OR FEWER
1 PER 100 = 17 OCCUPANTS
1 RESTROOM REQUIRED, 1 SINGLE USE RESTROOM PROVIDED

DRINKING FOUNTAINS: 1 PER 100
REQUIRED =1
PROVIDED = TENANT TO PROVIDE WATER BOTTLE

SERVICE SINK
REQUIRED = 1
PROVIDED = 1 **SEE PLAN FOR LOCATION**



6 EGRESS/ACCESSIBILITY PLAN
1/8" = 1'-0"

0 4' 8' 16'

DON ECKOLS ARCHITECT
5807 City Park Road #6
Austin , Texas 78730
512.202.5453
don.eckols@gmail.com

REGISTERED ARCHITECT DON ECKOLS 19966 STATE OF TEXAS

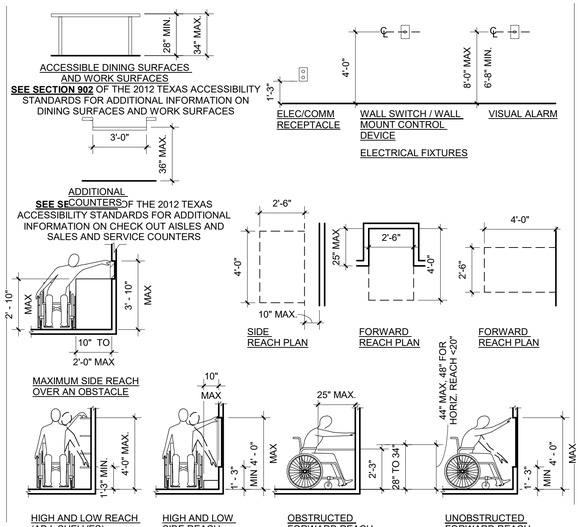
THIS SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY DON ECKOLS R.A., #12266
9-14-2023

GARDENIA WAREHOUSE

CODE REVIEW / ACCESSIBILITY PLAN

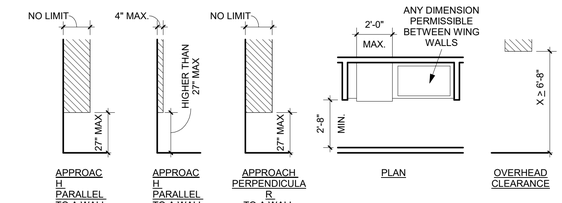
PRESENTATION
DATE: 9-14-2023
DRAWN BY: IP
CHECKED BY: DE

A2



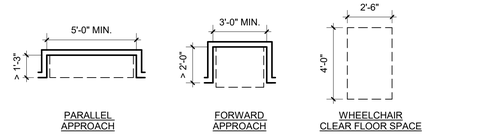
6 308 REACH RANGES4
1/4" = 1'-0"

SEE SECTION 308.1 OF THE 2012 TEXAS ACCESSIBILITY STANDARDS FOR ADDITIONAL INFORMATION



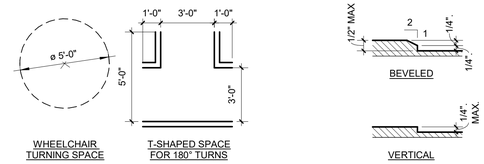
SEE SECTION 307 OF THE 2012 TEXAS ACCESSIBILITY STANDARDS FOR ADDITIONAL INFORMATION

7 307 PROTRUDING OBJECTS4
1/4" = 1'-0"



SEE SECTION 305 OF THE 2012 TEXAS ACCESSIBILITY STANDARDS FOR ADDITIONAL INFORMATION ON CLEAR FLOOR OR GROUND SPACES

8 305 CLEAR FLOOR OR GROUND SPACE4
1/4" = 1'-0"

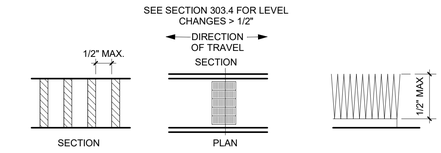


9 304 TURNING SPACE4
1/4" = 1'-0"

SEE SECTION 304 OF THE 2012 TEXAS ACCESSIBILITY STANDARDS FOR ADDITIONAL INFORMATION

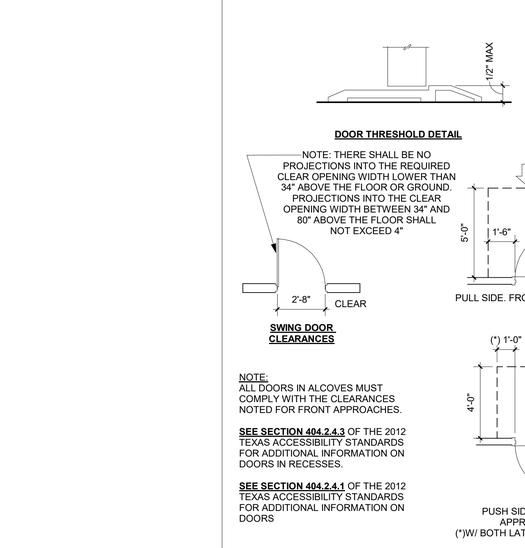
10 303 CHANGES IN LEVEL4
1/4" = 1'-0"

SEE SECTION 303 OF THE 2012 TEXAS ACCESSIBILITY STANDARDS FOR ADDITIONAL INFORMATION

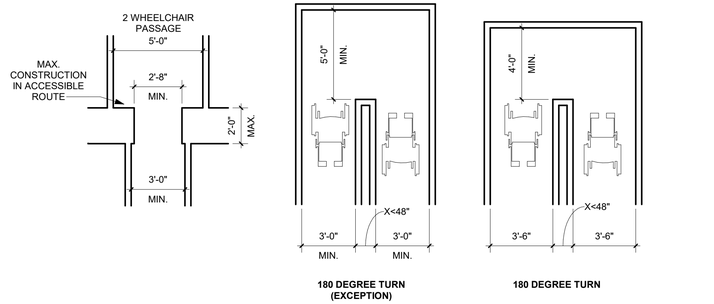


11 302 FLOOR AND GROUND SURFACES4
1/4" = 1'-0"

SEE SECTION 302 OF THE 2012 TEXAS ACCESSIBILITY STANDARDS FOR ADDITIONAL INFORMATION



3 404 DOORS, DOORWAYS, AND GATES4
1/4" = 1'-0"



4 403 WALKING SURFACES4
1/4" = 1'-0"

SEE SECTION 403 OF THE 2012 TEXAS ACCESSIBILITY STANDARDS FOR ADDITIONAL INFORMATION

DON ECKOLS ARCHITECT
5807 City Park Road #6
Austin , Texas 78730
512.202.5453
don.eckols@gmail.com

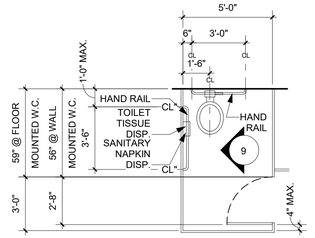
THIS SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY DON ECKOLS R.A., #12345
9-14-2023

GARDENIA WAREHOUSE

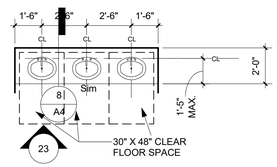
ACCESSIBILITY NOTES

PRESENTATION
DATE: 9-14-2023
DRAWN BY: IP
CHECKED BY: DE

A3

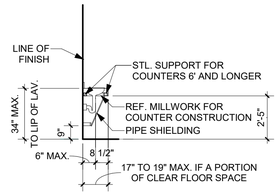


19 ACCESSIBLE END STALL2
1/4" = 1'-0"



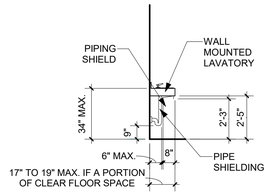
NOTE: REF. PLANS FOR NUMBER OF LAVATORIES

15 TYP. ACCESSIBLE LAVATORY COUNTER2
1/4" = 1'-0"



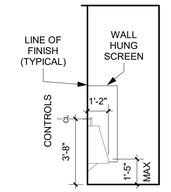
LAVATORY= FIXTURES FOR HAND WASHING IN TOILET OR BATHING FACILITIES

11 TYP. LAV. COUNTER SECTION2
1/4" = 1'-0"



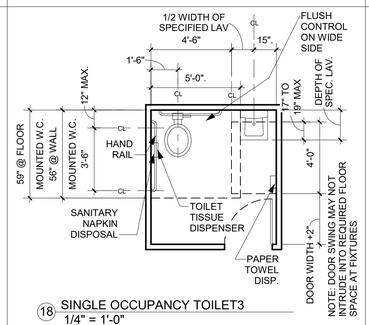
LAVATORY= FIXTURES FOR HAND WASHING IN TOILET OR BATHING FACILITIES

7 TYP. LAV. SECTION3
1/4" = 1'-0"

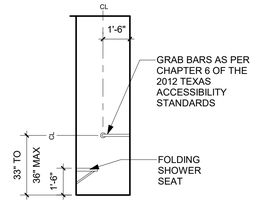


FIRE EXTINGUISHER CABINET OR BRACKET MOUNTING HEIGHT

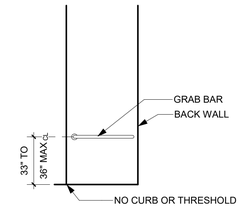
3 ACCESSIBLE URINAL SIDE3
1/4" = 1'-0"



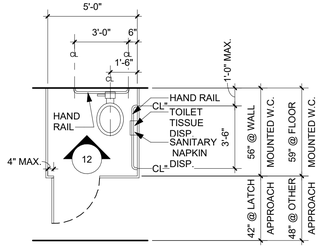
18 SINGLE OCCUPANCY TOILET3
1/4" = 1'-0"



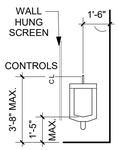
14 ACCESSIBLE SHOWER BACK WALL1
1/4" = 1'-0"



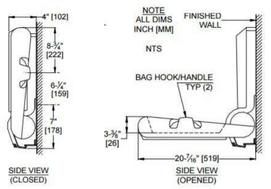
ACCESS. ROLL-IN SHOWER CTRL WALL1
10 1/4" = 1'-0"



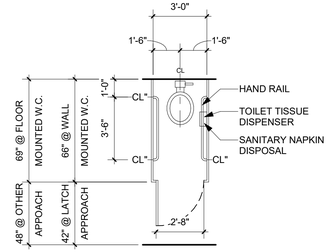
6 ACCESSIBLE STALL2
1/4" = 1'-0"



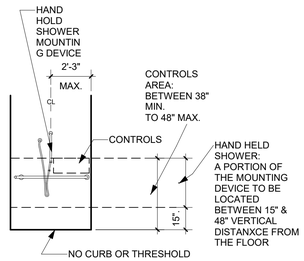
2 ACCESSIBLE URINAL FRONT3
1/4" = 1'-0"



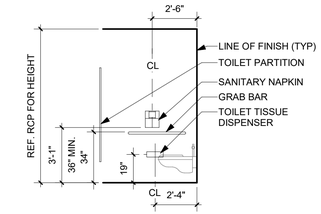
21 BABY CHANGING (SIDE)
1/4" = 1'-0"



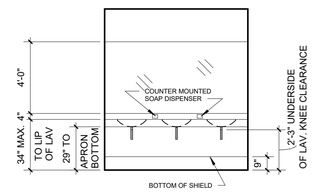
17 TYP. ACCESSIBLE (CRUTCH) STALL2
1/4" = 1'-0"



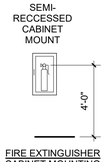
ACCESSIBLE ROLL-IN SHOWER CTRL WALL1
13 1/4" = 1'-0"



9 ACCESSIBLE STALL SIDE3
1/4" = 1'-0"

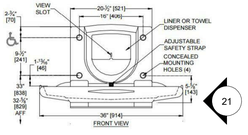


5 TYP. LAVATORY COUNTER FRONT2
1/4" = 1'-0"

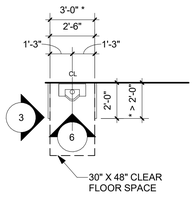


FIRE EXTINGUISHER CABINET MOUNTING HEIGHT

1 F.E.C. MOUNTING3
1/4" = 1'-0"

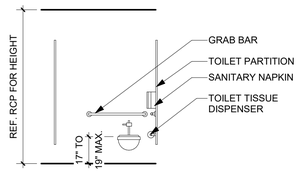


20 BABY CHANGING (FRONT)
1/4" = 1'-0"

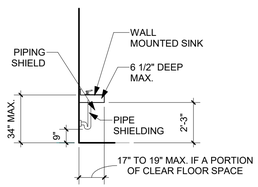


* FLOOR SPACE 36" WIDE IF PARTITION DEEPER THAN 24"

16 TYP. ACCESSIBLE URINAL2
1/4" = 1'-0"

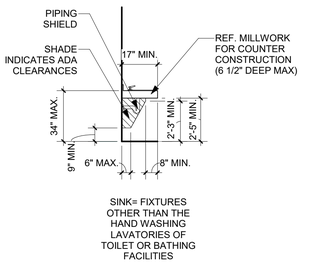


12 ACCESSIBLE STALL FRONT3
1/4" = 1'-0"



SINKS= FIXTURES OTHER THAN HAND WASHING LAVATORIES OF TOILET OR BATHING FACILITIES

8 TYP. SINK SECTION3
1/4" = 1'-0"



SINK= FIXTURES OTHER THAN THE HAND WASHING LAVATORIES OF TOILET OR BATHING FACILITIES

4 TYP. SINK COUNTER SECTION3
1/4" = 1'-0"

GENERAL NOTES - T.A.S.
1. THESE STANDARDS ARE TAKEN FROM FEDERAL AND STATE LAW AND TAKE PRECEDENT OVER THE DOCUMENTS. NOTIFY THE ARCHITECT
IMMEDIATELY OF ANY DISCREPANCIES BETWEEN THE ARCHITECTURAL
DRAWINGS AND THE INFORMATION GIVEN ON THIS SHEET.
2. INFORMATION SHOWN ON THIS SHEET IS THE MINIMUM REQUIRED FOR TAS COMPLIANCE.
3. NOT ALL CONDITIONS SHOWN ON THIS SHEET MAY BE REQUIRED BY
THIS PROJECT. COMPARE THE REQUIREMENTS OF THE ARCHITECTURAL
DRAWINGS WITH THIS SHEET FOR RELEVANCE OF INFORMATION.
4. UNLESS NOTED OTHERWISE, DIMENSIONS INDICATED ARE THE MINIMUM CLEAR DIMENSIONS REQUIRED BY THE TAS ACCESSIBILITY GUIDELINES. DIMENSIONS ACCOMPANIED WITH "INDICATES ABSOLUTE
DIMENSIONS. THE CONTRACTOR IS RESPONSIBLE FOR LAYOUT OF BUILDING ELEMENTS TO ASSURE THAT DIMENSIONS SHOWN ARE PROVIDED.
5. NOTIFY THE ARCHITECT IMMEDIATELY OF ANY CONFLICTS BETWEEN
THE ARCHITECTURAL DRAWINGS AND THE INFORMATION GIVEN ON THIS SHEET.
6. DO NOT SCALE THESE DRAWINGS.
7. REFER TO 2012 TEXAS ACCESSIBILITY STANDARDS & REGULATIONS FOR COMPLETE PROJECT ACCESSIBILITY REQUIREMENTS.
8. SEE CHAPTER 6 OF THE 2012 TEXAS ACCESSIBILITY STANDARDS FOR
ADDITIONAL INFORMARTION ON PLUMBING ELEMENTS AND FACILITIES
9. WEBSITES:
10. HTTPS://WWW.LICENSE.STATE.TX.US/AB/ABTAS.HTM

DON ECKOLS ARCHITECT
5807 City Park Road #6
Austin , Texas 78730
512.202.5453
don.eckols@gmail.com

REGISTERED ARCHITECT DON ECKOLS STATE OF TEXAS
THIS SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY DON ECKOLS R.A., #13288
9-14-2023

GARDENIA WAREHOUSE

ACCESSIBILITY NOTES

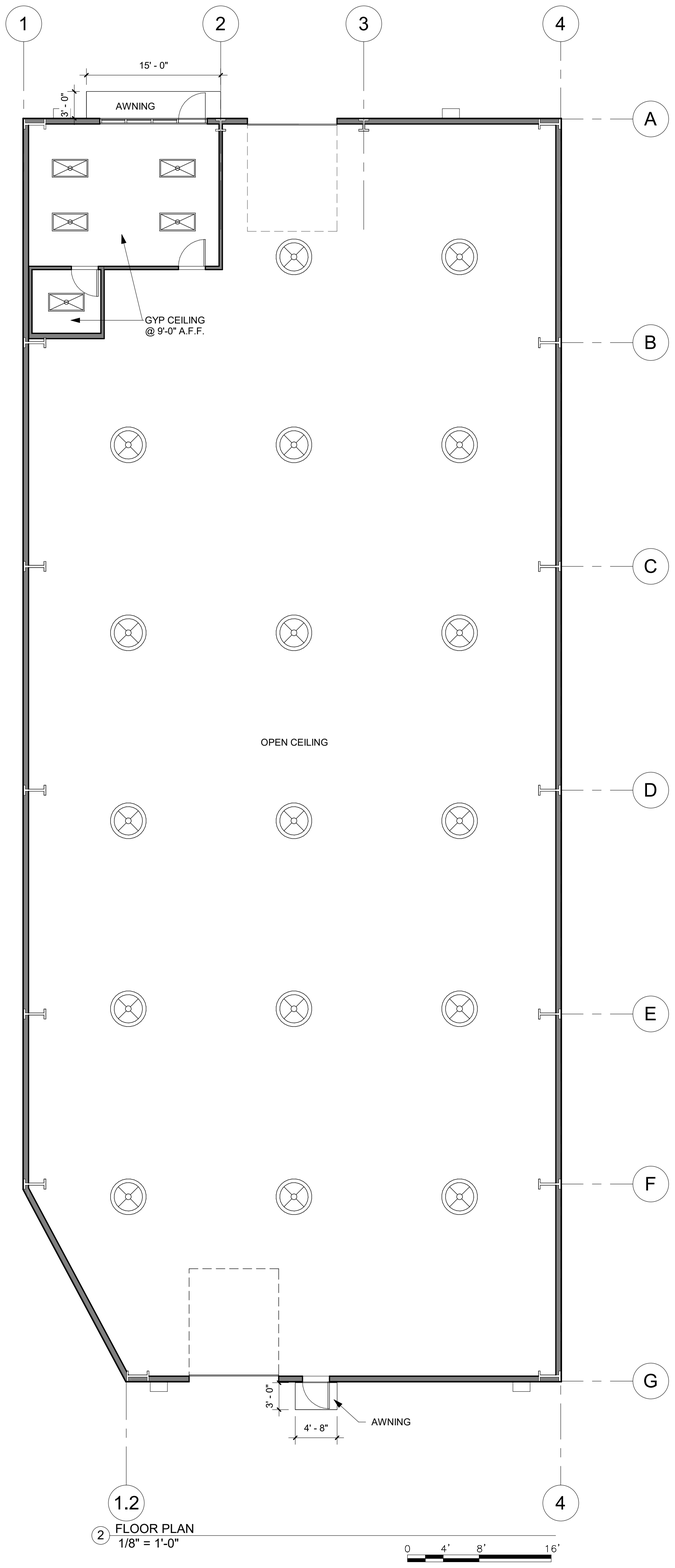
PRESENTATION
DATE: 9-14-2023
DRAWN BY: IP
CHECKED BY: DE

A4

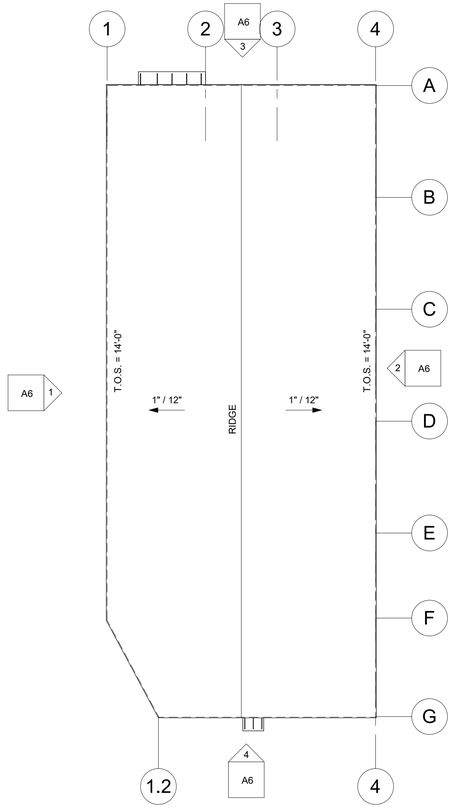
FINISH SCHEDULE						
ROOM NO	ROOM NAME	WALL FINISH	BASE FINISH	FLOOR MAT.	CEILING MAT.	NOTES & REMARKS
101	OFFICE SPACE	W-1	B-1	F-1	C-1	
102	UNI-SEX	W-1	B-1	F-1	C-1	
103	OPEN FLOOR SPACE	TBD	TBD	F-1	C-1	

WALLS: W-1	GYPSUM (FLOAT AND TEXTURE)	**COLOR** : WHITE
BASE: B-1:	(4" RUBBER)	**COLOR** : BLACK
FLOOR: (F-1)	(CLEAR SEAL)	**COLOR** : NA
CEILING: (C-1)	GYPSUM (FLOAT AND TEXTURE)	**COLOR** : WHITE

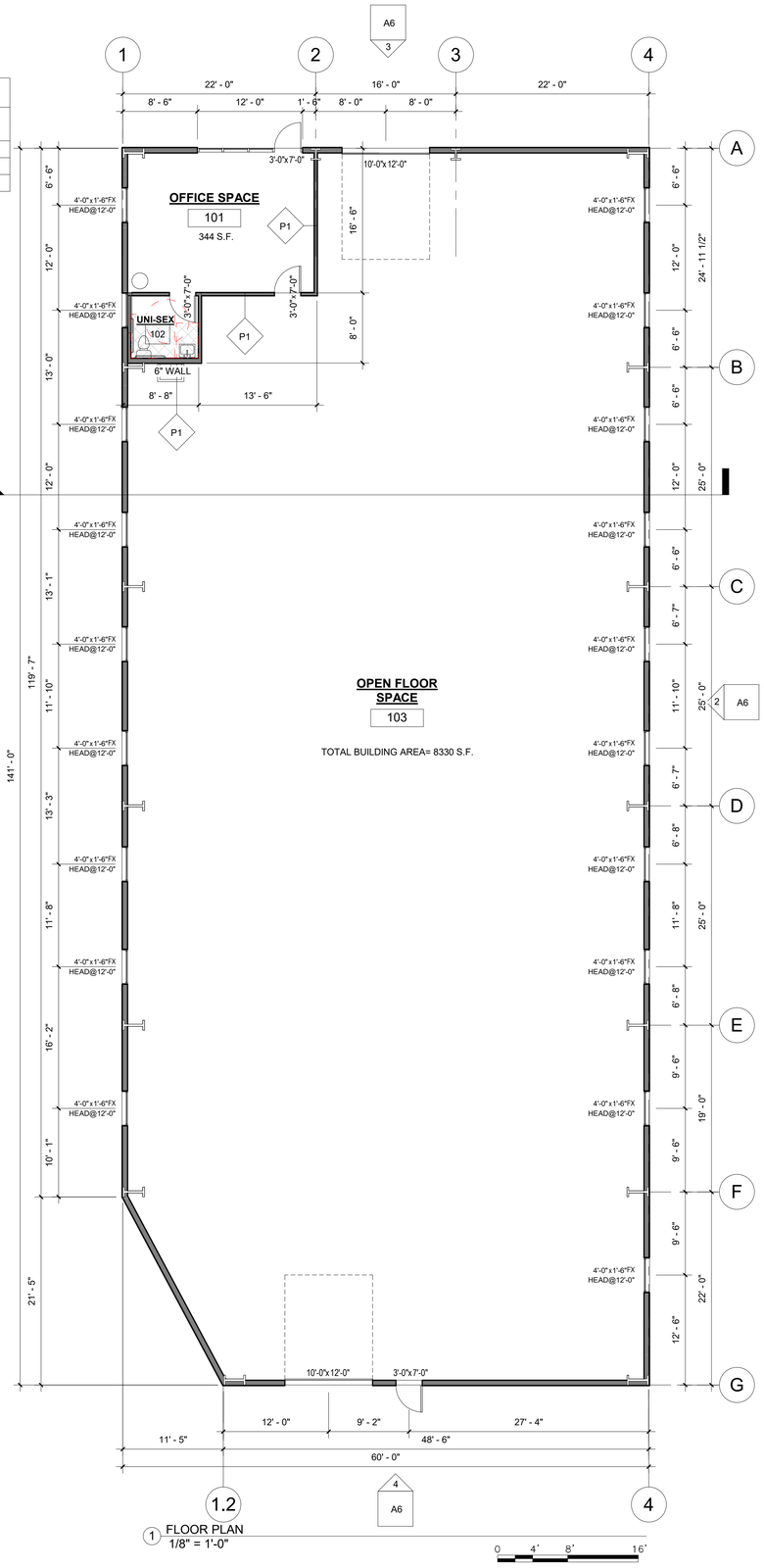
NOTE: -ALL DOOR AND WINDOW FRAMES TO BE METAL AND PAINTED GREY (VERIFY COLOR WITH TENANT)
-ALL DOORS TO HAVE A LIGHT WOOD FINISH (VERIFY COLOR WITH TENANT)
-VERIFY DOOR HARDWARE REQUIRMENTS WITH TENANT



2 FLOOR PLAN
1/8" = 1'-0"



3 ROOF PLAN
1/16" = 1'-0"



1 FLOOR PLAN
1/8" = 1'-0"

DON ECKOLS ARCHITECT
5807 City Park Road #6
Austin , Texas 78730
512.202.5453
don.eckols@gmail.com

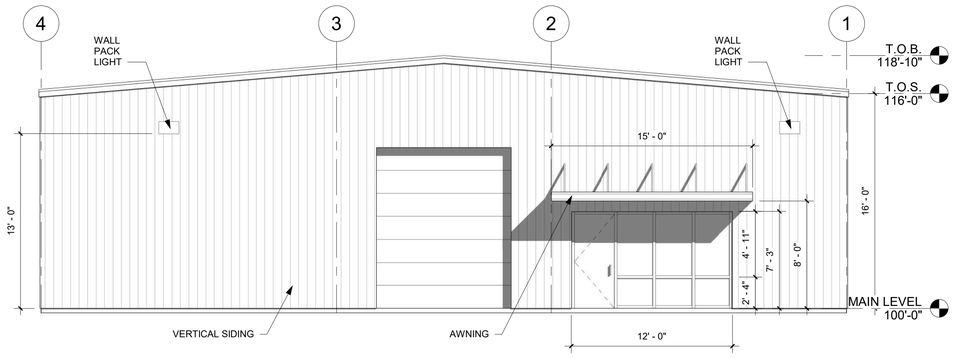
REGISTERED ARCHITECT DON ECKOLS 19998 STATE OF TEXAS
THIS SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY DON ECKOLS R.A., #13998
9-14-2023

GARDENIA WAREHOUSE

FLOOR PLAN - RCP

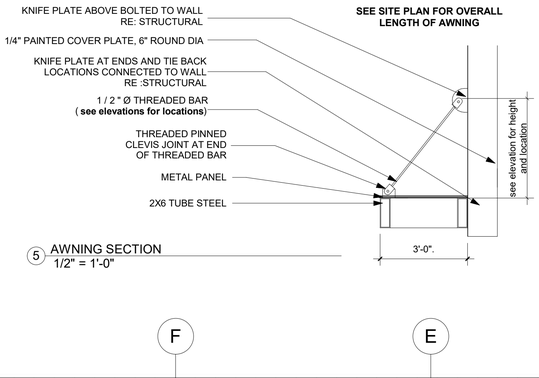
PRESENTATION
DATE: 9-14-2023
DRAWN BY: IP
CHECKED BY: DE

A5

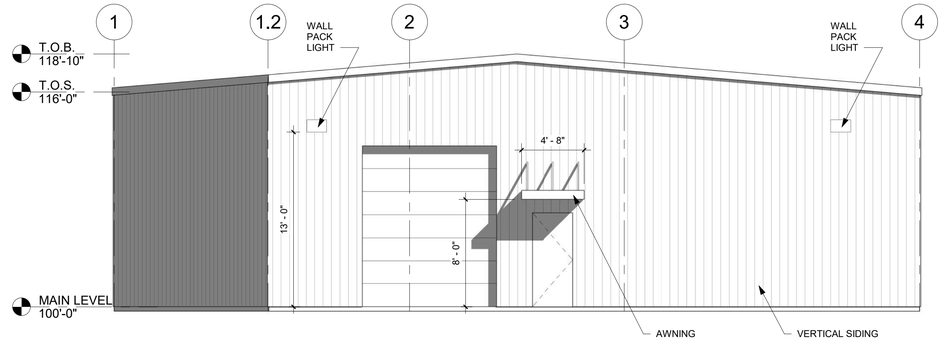


3 ELEVATION 1
3/16" = 1'-0"

0 4' 8' 12'

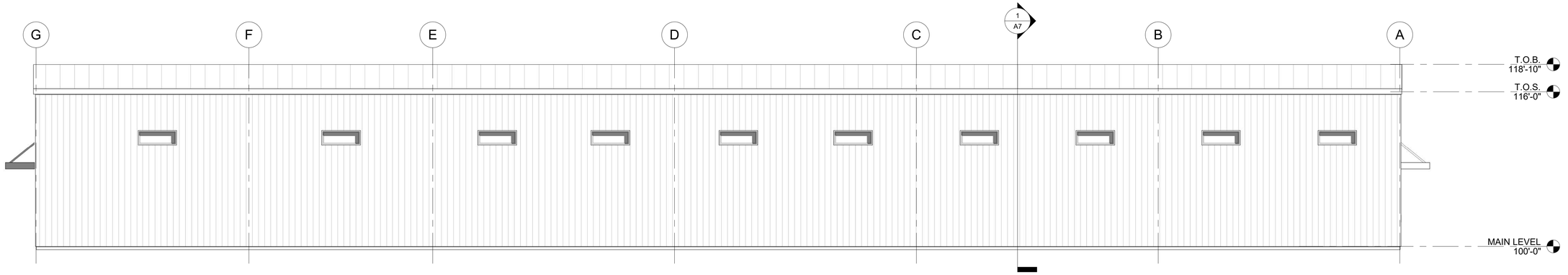


5 AWNING SECTION
1/2" = 1'-0"



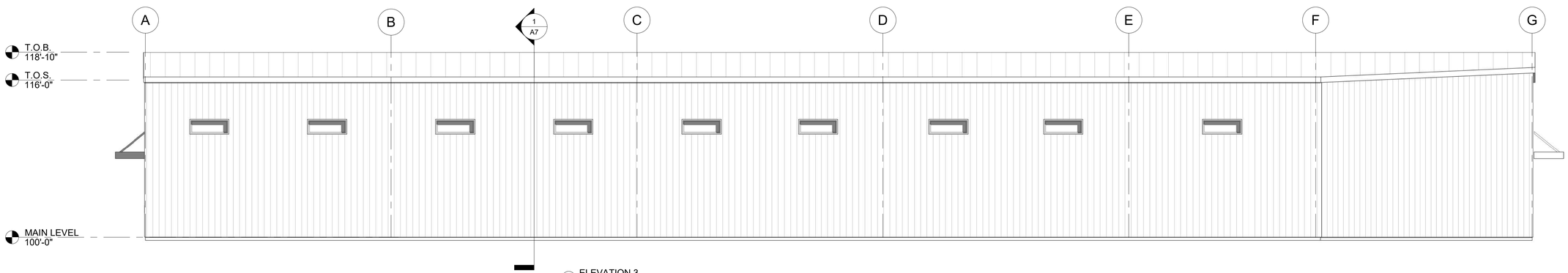
4 ELEVATION 2
3/16" = 1'-0"

0 4' 8' 12'



2 ELEVATION 4
3/16" = 1'-0"

0 4' 8' 12'



1 ELEVATION 3
3/16" = 1'-0"

0 4' 8' 12'

DON ECKOLS ARCHITECT
5807 City Park Road #6
Austin , Texas 78730
512.202.5453
don.eckols@gmail.com

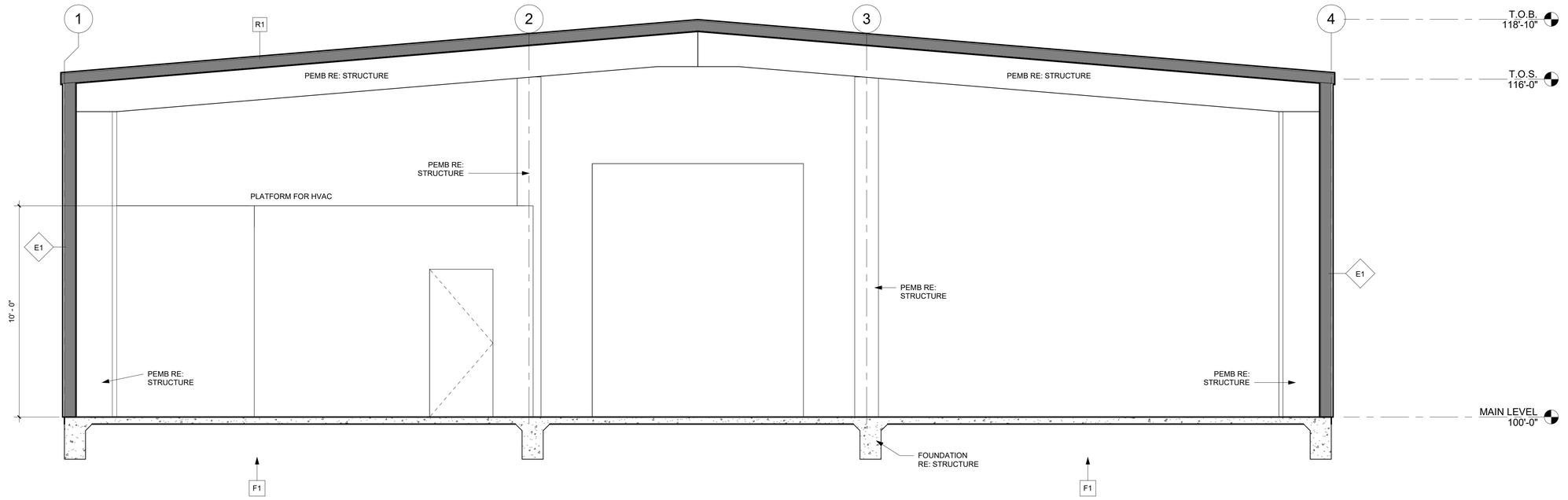
THIS SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY DON ECKOLS R.A., #13258
9-14-2023

GARDENIA WAREHOUSE

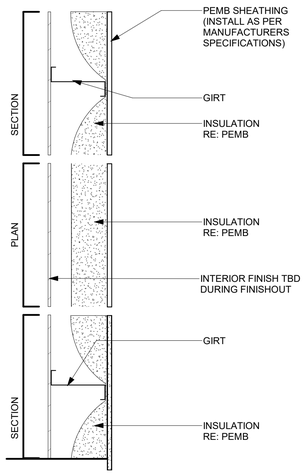
ELEVATIONS

PRESENTATION
DATE: 9-14-2023
DRAWN BY: IP
CHECKED BY: DE

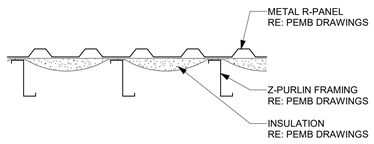
A6



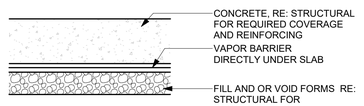
1 TYPICAL BUILDING SECTION
3/8" = 1'-0"



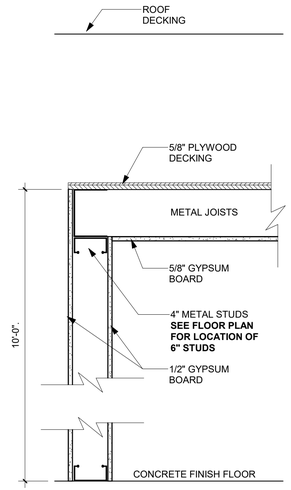
2 E1 - EXT. WALL - METAL
1 1/2" = 1'-0"



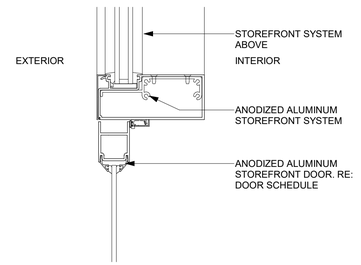
3 R1 - ROOF
1 1/2" = 1'-0"



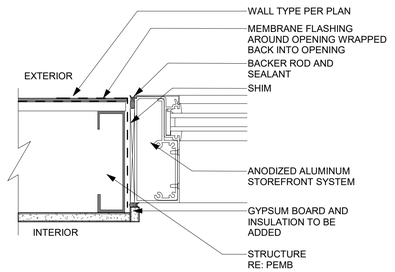
4 F1 - CONCRETE SLAB
1 1/2" = 1'-0"



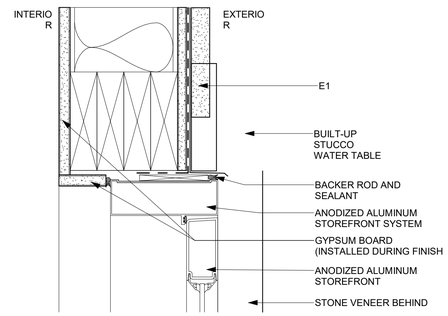
5 P1 - INTERIOR WALL
1 1/2" = 1'-0"



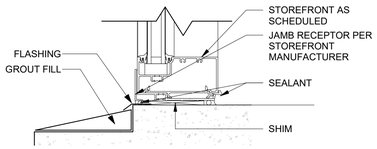
6 SF DOOR HEAD/JAM
3" = 1'-0"



7 SF SYSTEM (JAM)
3" = 1'-0"



8 SF SYSTEM (HEAD)
3" = 1'-0"



9 SF SYSTEM SILL
3" = 1'-0"

NOTE:
SEE ELEVATION 3 /A6 FOR
STOREFRONT SIZING

DON ECKOLS ARCHITECT
5807 City Park Road #6
Austin , Texas 78730
512.202.5453
don.eckols@gmail.com

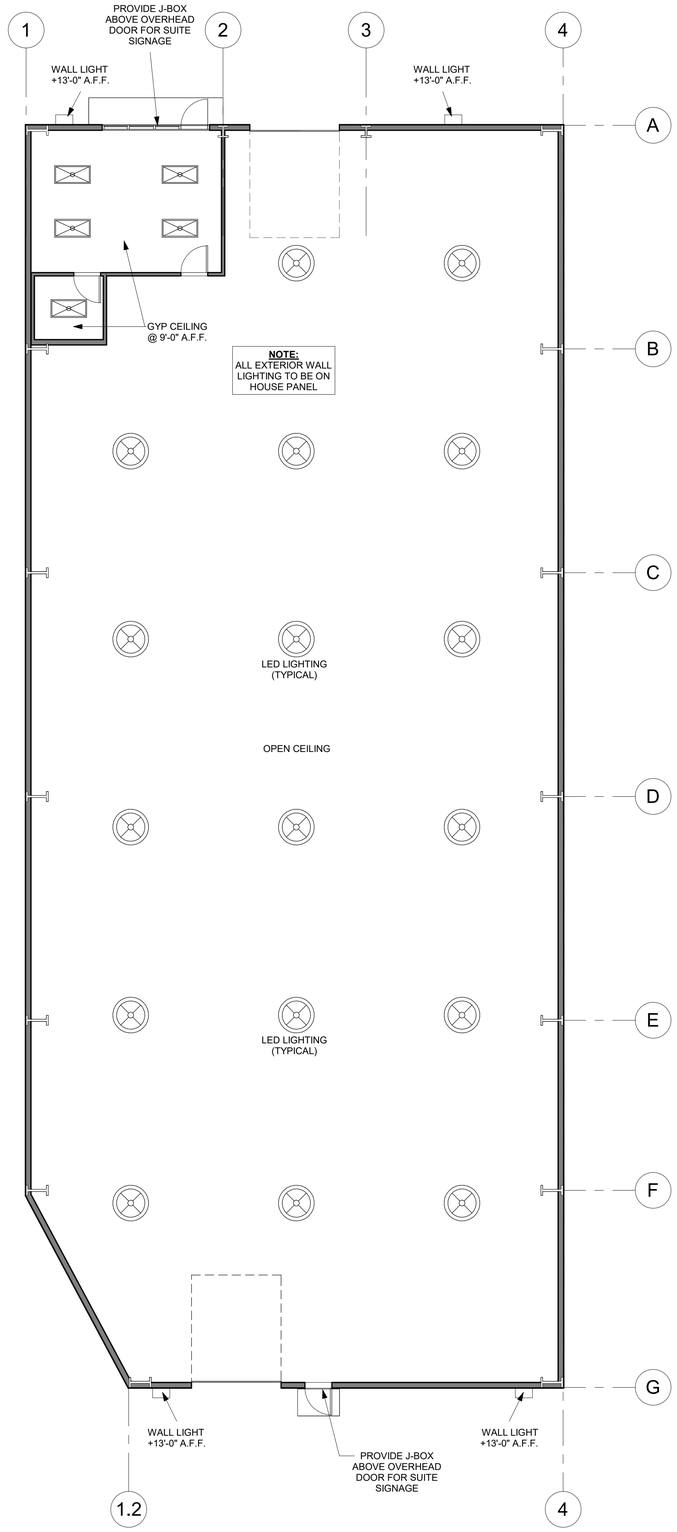
REGISTERED ARCHITECT DON ECKOLS STATE OF TEXAS
THIS SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY DON ECKOLS R.A., #13288
9-14-2023

GARDENIA WAREHOUSE

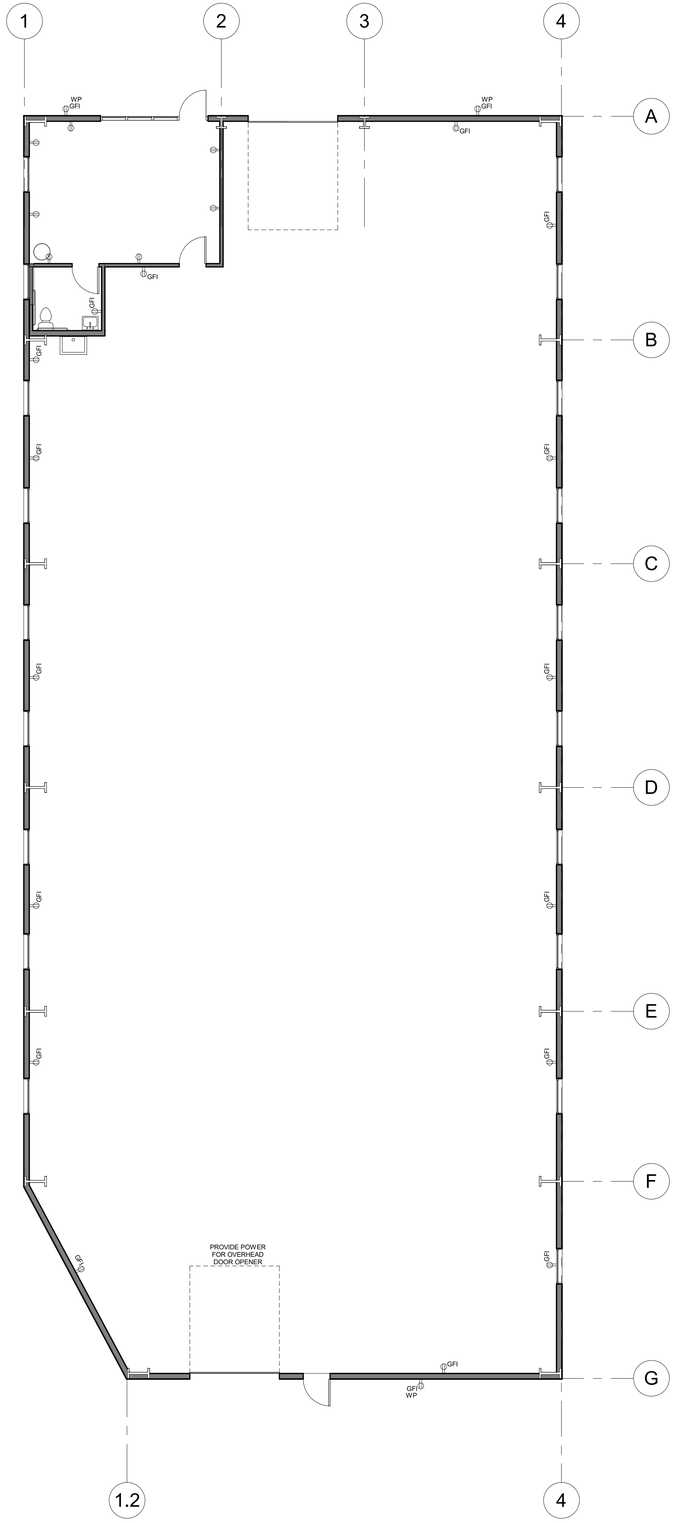
SECTIONS/ CONSTRUCTION ASSEMBLIES

PRESENTATION
DATE: 9-14-2023
DRAWN BY: IP
CHECKED BY: DE

A7



2 LIGHTING PLAN
1/8" = 1'-0"



1 POWER PLAN
1/8" = 1'-0"

DON ECKOLS ARCHITECT
5807 City Park Road #6
Austin , Texas 78730
512.202.5453
don.eckols@gmail.com

REGISTERED ARCHITECT DON ECKOLS 11828 STATE OF TEXAS

THIS SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY DON ECKOLS R.A., #11828
9-14-2023

GARDENIA WAREHOUSE

POWER AND LIGHTING PLAN

PRESENTATION
DATE: 9-14-2023
DRAWN BY: IP
CHECKED BY: DE

A8

GENERAL ELECTRICAL NOTES

1. ALL ELECTRICAL WORK SHALL COMPLY WITH 2020 NATIONAL ELECTRIC CODE (NEC), 2021 ENERGY CODE IECC, AND CITY OF AUSTIN ELECTRICAL AMENDMENTS.
2. ALL ELECTRIC WORK SHALL BE IN STRICT ACCORDANCE WITH MUNICIPAL AND STATE CODES, LAWS AND REGULATIONS, RULES OF NEC, OSHA, AND/OR OTHER AUTHORITIES THAT MAY HAVE JURISDICTION PERTAINING TO THE WORK.
3. ALL NECESSARY PERMIT, LICENSES, CERTIFICATES, TESTS, ETC. SHALL BE PROCURED AND PAID FOR BY THE CONTRACTOR.
4. IN CASES OF A DIFFERENCE BETWEEN THE MINIMUM REQUIREMENTS OF THE VARIOUS LAWS, CODES, AUTHORITIES, AND THE DOCUMENTS; THE WORK SHALL EXCEED THE LESSER REQUIREMENTS WHILE MEETING THE GREATER OR MORE STRINGENT REQUIREMENTS.
5. CONTRACTOR SHALL INDICATE ALL CHANGES FROM THE ORIGINAL PLANS MADE DURING THE INSTALLATION OF HIS WORK IN RED INK ON TWO BLUELINE PRINTS.
6. THE CONTRACTOR SHALL PROVIDE A TYPED PANEL BOARD DIRECTORY.
7. UPON COMPLETION OF HIS WORK, THE ELECTRICAL CONTRACTOR SHALL CLEAN ALL ELECTRICAL EQUIPMENT.
8. UPON COMPLETION OF THE WORK, ALL PARTS OF THE ELECTRICAL INSTALLATION SHALL BE TESTED AND PROVED TO BE FREE OF UNWANTED GROUNDS AND OTHER DEFECTS. FINAL TESTS SHALL BE ACCOMPLISHED BY USE OF A MEGGER.
9. ALL WIRING SHALL BE COPPER CONDUCTOR WITH TYPE THHN INSULATION.
10. MAKE ALL PENETRATIONS THROUGH WALLS AT 90 DEGREE ANGLES. SEAL ALL PENETRATIONS AT FIRE AND SMOKE PARTITIONS WITH FIRE SAFING MATERIAL. SEAL ALL PENETRATIONS AT SOUND WALLS WITH SOUND-PROOFING MATERIAL.
11. REFER TO MECHANICAL DRAWINGS FOR EXACT LOCATION OF HVAC AND PLUMBING EQUIPMENT.
12. COORDINATE WITH MECHANICAL AND PLUMBING DEVICES FOR CONDUIT ROUTING AND ELECTRICAL EQUIPMENT LOCATIONS.
13. CONTRACTOR IS RESPONSIBLE FOR CHECKING ALL CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS FOR ACCURACY, AND CONFIRMING THAT THE WORK IS BUILDABLE AS SHOWN AND MEETS ALL APPLICABLE CODES BEFORE PROCEEDING WITH CONSTRUCTION. IF THERE ARE ANY QUESTIONS REGARDING THESE OR OTHER COORDINATION ISSUES, THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING A CLARIFICATION FROM THE ARCHITECT BEFORE PROCEEDING WITH THE WORK IN QUESTION OR RELATED WORK.
14. ALL MATERIALS FURNISHED UNDER THIS CONTRACT SHALL BE NEW.
15. ALL WORK SHALL BE GUARANTEED AGAINST DEFECTIVE MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE (1) YEAR AFTER THE DATE OF SUBSTANTIAL COMPLETION OR ACCEPTANCE OF THE WORK. THE CONTRACTOR SHALL REPAIR OR REPLACE, AT HIS OWN EXPENSE WHEN ORDERED TO DO SO, ALL WORK THAT MAY DEVELOP DEFECTS IN MATERIAL OR WORKMANSHIP WITHIN SAID PERIOD OF TIME. ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S PUBLISHED RECOMMENDATIONS FOR SERVICE INTENDED, AS INTERPRETED BY THE ENGINEER. THE INSTALLATION OF ALL EQUIPMENT SHALL BE MADE BY EXPERIENCED CRAFTSMAN IN A NEAT, WORKMANLIKE MANNER. ALL MATERIALS, TOOLS, COSTS, AND SERVICES NECESSARY TO COMPLETELY INSTALL ALL ELECTRICAL WORK SHALL BE PROVIDED BY THE CONTRACTOR.
16. LOCATION OF ALL CEILING MOUNTED ITEMS ON THE ARCHITECTURAL DRAWINGS HAVE PRECEDENCE OVER MEP DRAWINGS. ARCHITECT SHALL BE NOTIFIED OF ANY CONFLICTS PRIOR TO CONSTRUCTION.
17. IT IS THE INTENT AND MEANING OF THE CONTRACT DOCUMENTS THAT THE CONTRACTOR SHALL PROVIDE AN ELECTRICAL INSTALLATION THAT IS COMPLETE. ALL ITEMS AND APPURTENANCES NECESSARY, REASONABLY INCIDENTAL, OR CUSTOMARILY INCLUDED, EVEN THOUGH EACH AND EVERY ITEM IS NOT SPECIFICALLY CALLED OUT OR SHOWN ON THE CONSTRUCTION DOCUMENTS SHALL BE PROVIDED.
18. CONTRACTOR SHALL BE RESPONSIBLE FOR ADEQUATELY BRACING AND PROTECTING ALL WORK DURING CONSTRUCTION AGAINST DAMAGES, BREAKAGE, COLLAPSE, AND MISALIGNMENT ACCORDING TO APPLICABLE CODES, STANDARDS, AND GOOD CONSTRUCTION PRACTICES. CONTRACTOR SHALL TAKE PROPER PRECAUTIONS TO PROTECT ALL EXISTING OPERATIONS AND PROPERTY ADJACENT WITH WHICH WORK COMES IN CONTACT, OR OVER OR UNDER WHICH HE MAY TRANSPORT, HOIST, OR MOVE MATERIALS, EQUIPMENT, DEBRIS, ETC., AND SHALL REPAIR SATISFACTORILY ALL DAMAGE CAUSED BY HIM DURING CONSTRUCTION.
19. COORDINATE WITH THE ARCHITECT FOR EXACT LIGHTING FIXTURE AND OUTLET LOCATIONS. WHEN INSTRUCTED BY THE ARCHITECT, THE CONTRACTOR SHALL RELOCATE OUTLETS LOCATED AT UNACCEPTABLE LOCATIONS AT NO ADDITIONAL COST IF NEW LOCATIONS ARE LESS THAN TWO-FEET.
20. CONTRACTOR SHALL USE MULTI-GANG BOXES IN ALL POSSIBLE LOCATIONS.
21. ABOVE COUNTER OUTLETS SHALL BE MOUNTED.
22. PROVIDE EXPANSION FITTINGS ON ALL CONDUIT CROSSING EXPANSION JOINTS.

POWER PLAN NOTES

A. FURNISH AND INSTALL BOXES, CONDUIT AND CONTROL CABLE FOR ALL CONTROLS AS INDICATED ON MECHANICAL DRAWINGS. VERIFY REQUIRED LOCATIONS WITH MECHANICAL CONTRACTOR.

B. ALL DISCONNECTS AND CONTROLS FOR MECHANICAL EQUIPMENT WILL BE FURNISHED WITH MECHANICAL EQUIPMENT BY MECHANICAL CONTRACTOR UNLESS SPECIFIED OTHERWISE ON DRAWINGS.

C. FINAL EQUIPMENT CONNECTIONS LESS THAN 110 VOLTS SHALL BE PERFORMED BY MECHANICAL CONTRACTOR. MAKE ALL OTHER REQUIRED EQUIPMENT CONNECTIONS.

D. COORDINATE ALL EQUIPMENT LOCATIONS AND REQUIREMENTS WITH MECHANICAL CONTRACTOR.

E. ELECTRICAL CONTRACTOR SHALL VERIFY PLACEMENT OF DATA/PHONE OUTLETS AND DUPLEX/QUADPLEX RECEPTACLES WITH OWNER PRIOR TO CONSTRUCTION.

F. ELECTRICAL CONTRACTOR SHALL UTILIZE A SPARE CIRCUIT AS NECESSARY FOR POWER TO PHONE BOARD.

G. ELECTRICAL CONTRACTOR SHALL VERIFY TYPE & SIZE OF SERVICE AND FEEDERS TO BUILDING & REPORT RESULTS TO ENGINEER.

H. ELECTRICAL CONTRACTOR SHALL INTEGRATE ANY FIRE & SMOKE DETECTION EQUIPMENT INTO HARD-WIRED SECURITY SYSTEM WITH MOTION SENSOR PER OWNER.

I. ELECTRICAL CONTRACTOR SHALL PROVIDE CIRCUIT RECEPTACLES, GFCI RECEPTACLES & WP GFCI RECEPTACLES PER PANEL SCHEDULES AS SHOWN ON E-2.

J. DISCONNECTING MEANS MUST BE CAPABLE OF BEING LOCKED IN THE OPEN POSITION. THE DEVICE MUST HAVE PROVISIONS FOR PLACEMENT OF A LOCK ON IT TO SECURE THE DEVICE IN THE OFF POSITION. THE LOCK-OUT DEVICE MUST BE PART OF OF THE DISCONNECT ASSEMBLY AND MUST REMAIN IN PLACE AFTER THE PADLOCK IS REMOVED, WHETHER IT IS A FUSED DISCONNECT SWITCH, A SINGLE CIRCUIT BREAKER, OR A CIRCUIT BREAKER IN A PANELBOARD.

LIGHTING PLAN NOTES

A. LIGHTING LOCATIONS ARE A SUGGESTION TO THE CONTRACTOR. LOCATIONS MAY CHANGE SLIGHTLY ON-SITE DUE TO PLACEMENT OF AIR DEVICES.

B. PRIOR TO INSTALLING BATHROOM LIGHT FIXTURES, ELECTRICAL CONTRACTOR SHALL VERIFY DIFFUSER AND BATHROOM FAN LOCATION WITH MECHANICAL CONTRACTOR.

C. EMERGENCY LIGHTS AND EXIT SIGNS TO BE POWERED CONTINUOUSLY. EMERGENCY BACKUP BALLASTS SHALL BE USED FOR ALL EMERGENCY LIGHTS PER THE LIGHTING FIXTURE SCHEDULE.

D. ANY OUTSIDE LIGHT SWITCHES TO BE PLACED BY ELECTRICAL CONTRACTOR.

E. ALL OUTSIDE LIGHT PLACEMENT TO BE VERIFIED BY ELECTRICAL CONTRACTOR.

F. ELECTRICAL CONTRACTOR SHALL PROVIDE FROG EYE ON MOTION SENSOR FOR PARKING AREA.

G. EMERGENCY LIGHTS AND EXIT SIGNS TO BE CIRCUITED TO L-1 AND SHALL BE PROVIDED WITH LOCKING DEVICES.

SYMBOL SCHEDULE

NOTE:
A. ALL SYMBOLS DO NOT NECESSARILY APPEAR ON THESE DRAWINGS

SYMBOL	DESCRIPTION	REMARKS
	HOMERUN (REFER TO PANEL SCHEDULES FOR CONDUIT/WIRING)	
f	CIRCUIT ROUTED THRU CONTACTOR OR RELAY	
UE	UNDERGROUND ELECTRIC	
UT	UNDERGROUND TELEPHONE	
OE	OVERHEAD ELECTRIC	
OT	OVERHEAD TELEPHONE	
	CIRCUIT INDICATORS (HOT, NEUTRAL, GROUND, SWITCHLEG)	
P	PHOTOCELL	
J	JUNCTION BOX	
J	JUNCTION BOX, FLOOR MOUNTED FLUSH	
J	JUNCTION BOX, FLOOR MOUNTED PEDESTAL	
J	JUNCTION BOX, WALL MOUNTED	
S^M	MANUAL STARTER WITH THERMAL TRIP	
	DISCONNECT SWITCH, REFER TO DISCONNECT SCHEDULE	
	STARTER	
	COMBINATION STARTER/DISCONNECT SWITCH, REFER TO SCHEDULE	
	POWER AND/OR LIGHTING PANELBOARD, REFER TO PANELBOARD SCHEDULE	
	SWITCHBOARD, REFER TO SWITCHBOARD SCHEDULE	
	TRANSFORMER, REFER TO TRANSFORMER SCHEDULE	
	TELEPHONE OUTLET, 16"AFF UON	
	TELEPHONE OUTLET, FLOOR MOUNTED PEDESTAL	
	TELEPHONE OUTLET, FLOOR MOUNTED FLUSH	
W	TELEPHONE OUTLET, WALL MOUNTED 48"AFF UON	
	COMBINATION TELEPHONE/DATA OUTLET, 16"AFF UON	
	COMBINATION TELEPHONE/DATA OUTLET, FLOOR MOUNTED FLUSH	
	LAN SYSTEM OUTLET, 16"AFF UON	
	DATA OUTLET, 16" AFF UON	
	DATA OUTLET, FLOOR MOUNTED PEDESTAL	
	DATA OUTLET, FLOOR MOUNTED FLUSH	
TEB	TELEPHONE EQUIPMENT BOARD	
	SINGLE RECEPTACLE 20A/120V 16" AFF UON	
	DUPLEX RECEPTACLE 20A/120V 16"AFF UON	
	DUPLEX RECEPTACLE 20A/120V 16" AFF UON WITH GROUND FAULT INTERRUPTER	
IG	DUPLEX RECEPTACLE 20A/120V 16" AFF UON WITH ISOLATED/INSULATED GROUND	
	FOURPLEX RECEPTACLE 20A/120V 16" AFF UON	
C	CLOCK RECEPTACLE 120V 96" AFF UON	
	SPECIAL PURPOSE RECEPTACLE 16" AFF SEE PLANS FOR DETAILS	
	DUPLEX RECEPTACLE 20A/120V MOUNTED HORIZONTALLY 48" AFF UON	
WP	WEATHER-PROOF DUPLEX RECEPTACLE 20A/120V 18"AFF UON	
SG	DUPLEX RECEPTACLE W/ SURGE SUPPRESSION 20A/120V 16" AFF UON	
	DUPLEX RECEPTACLE, FLOOR MOUNTED FLUSH	
F	DUPLEX RECEPTACLE, FLOOR MOUNTED PEDESTAL	
	FOURPLEX RECEPTACLE, FLOOR MOUNTED PEDESTAL	
	FOURPLEX RECEPTACLE, FLOOR MOUNTED FLUSH	
C	FOURPLEX RECEPTACLE, CEILING MOUNTED	
C	DUPLEX RECEPTACLE, CEILING MOUNTED	
R	DUPLEX RECEPTACLE ON ROOF	
S	SINGLE POLE SWITCH 20A, 48"AFF UON	
S^3	THREE-WAY SWITCH 20A, 48"AFF UON	
S^4	FOUR-WAY SWITCH 20A, 48"AFF UON	
S^K	SINGLE POLE KEY OPERATED SWITCH 20A, 48"AFF UON	
S^{2K}	DOUBLE POLE KEY OPERATED SWITCH 20A, 48" AFF UON	
S^{3K}	THREE-WAY KEY OPERATED SWITCH 20A, 48"AFF UON	
S^D	DIMMER SWITCH, 48"AFF UON, SEE PLANS FOR DETAILS	
S_{MS}	MOTION SENSOR SWITCH, 48"AFF UON	
S^{OS}	OCCUPANCY SENSOR SWITCH, 48"AFF UON	
S^2	TWO POLE SWITCH 20A, 48"AFF UON	
S^T	TIMER SWITCH, 48"AFF UON	
S^F	FAN SWITCH, 48"AFF UON	

Engineer

High Rise MEP Engineering
213 Watergate Way
Hutto, Texas 78634
designmep@aol.com
(512) 431 6702
Mechanical - Electrical
Plumbing

Gardenia Warehouse
2205 Gardenia Drive
Austin, Texas

High Rise MEP
Engineering
F-9491

Issue Date: 09/18/23

Revisions

No.	*Date*	*Description*

NAEEM EGHANI 93963 REGISTERED PROFESSIONAL ENGINEER STATE OF TEXAS

Project Number: 092303
Drawn By: NE
Designed By: NE
Checked By: Naeem Eghani, PE
Sheet Title: Code & Notes
Sheet Number: E0

General Notes:

1 - All receptacles and switches shall be 20 amperes.

2 - MC cable shall only be used for Lite Whips and in wall use only.

3 - All home-runs shall be hard piped.

4 - Conductors and equipment shall be approved and acceptable by 2020 national electric code.

5 - All wiring shall be accordance with 2020 NEC.

Key Notes:

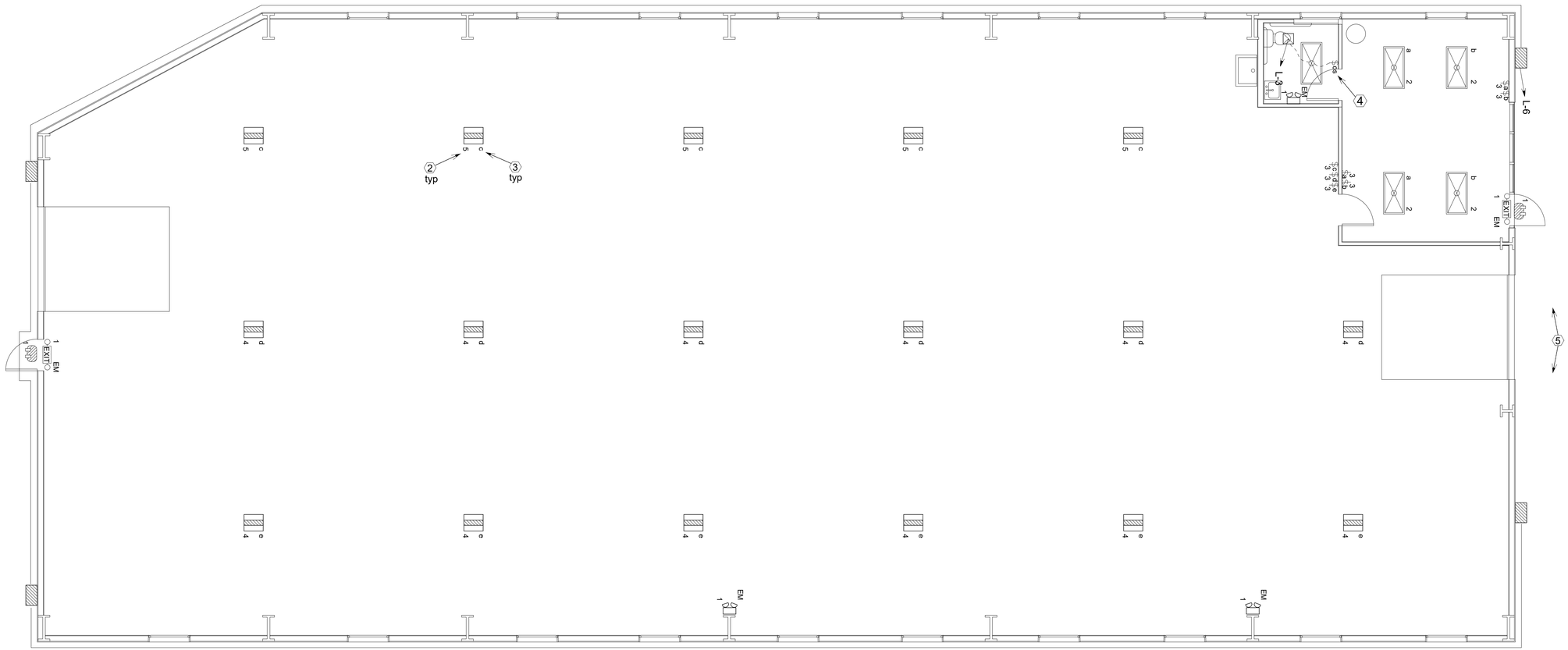
① - Install all exit and emergency lights with 90 minute battery backup.

② - Number adjacent to fixture indicates circuitry to panel "L".

③ - Lower case letter indicates corresponding switch leg for light fixtures control.

④ - Install occupancy sensor (os) to control light fixtures.

⑤ - Outside lighting shall be controlled by photocell or astronomical time clock.



1 Lighting plan

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

Engineer

High Rise MEP Engineering
213 Watergate Way
Hutto, Texas 78634
designmep@aol.com
(512) 431 6702
Mechanical - Electrical Plumbing

Gardenia Warehouse
2205 Gardenia Drive
Austin, Texas

High Rise
Engineering
F-9491

Issue Date:	*09/18/23*

Revisions

No.	*Date*	*Description*

STATE OF TEXAS
NAEEM EGHANI
93951
REGISTERED
PROFESSIONAL
ENGINEER

Project Number:	*092303*
Drawn By:	*NE*
Designed By:	*NE*
Checked By:	*Naeem Eghani, PE*
Sheet Title:	*Light*
Sheet Number:	*E-1*

General Notes:

1 - All receptacles and switches shall be 20 amperes.

2 - MC cable shall only be used for Lite Whips and in wall use only.

3 - All home-runs shall be hard piped.

4 - Conductors and equipment shall be approved and acceptable by 2020 national electric code.

5 - All wiring shall be accordance with 2020 NEC.

Key Notes:

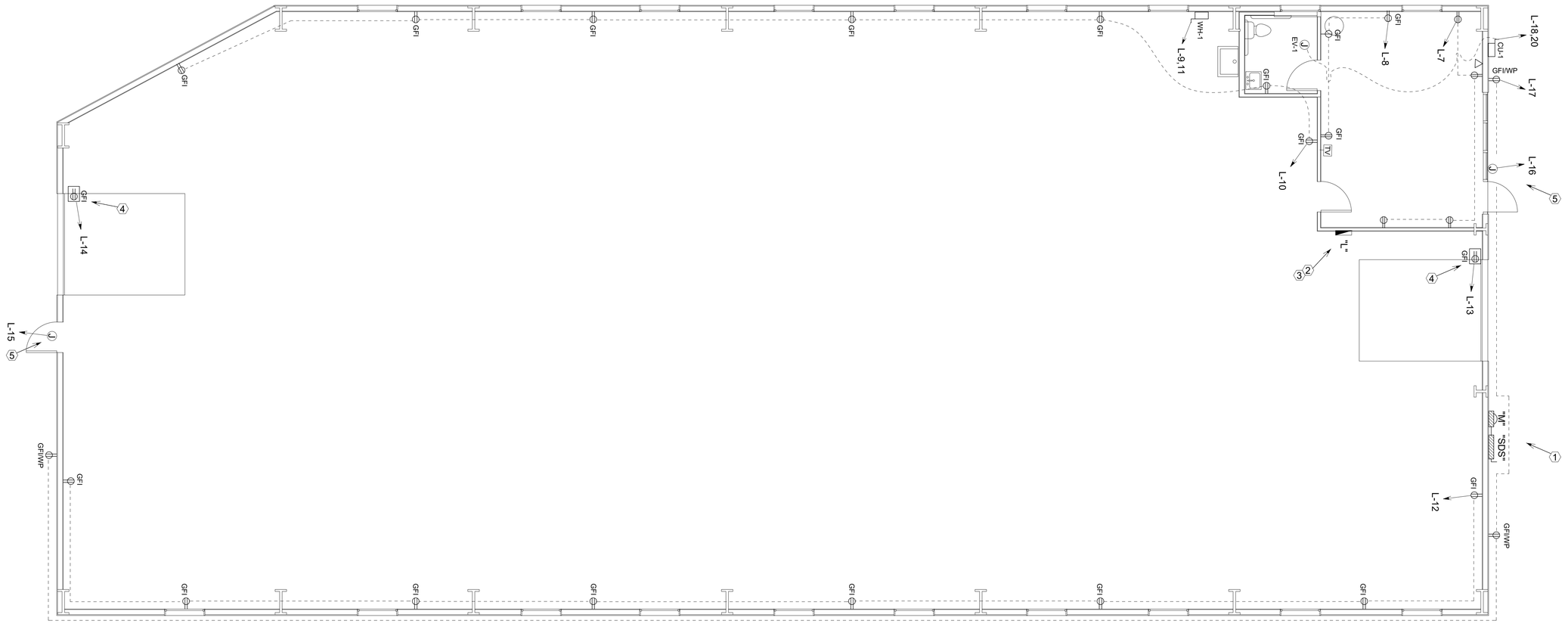
(1) - Install meter (M) and service disconnect switch (SDS) at outside.

(2) - Install Panel "L" inside of building.

(3) - Label all circuits identified to outlets and equipments.

(4) - Install power for roll-up door.

(5) - Install power for outside sign.



1 Power plan

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

Engineer

High Rise MEP Engineering
213 Watergate Way
Hutto, Texas 78634
designmep@aol.com
(512) 431 6702
Mechanical - Electrical Plumbing

Gardenia Warehouse
2205 Gardenia Drive
Austin, Texas

High Rise MEP Engineering
F-9491

Issue Date: 09/18/23

Revisions

No.	Date	Description

NAEEM EGHANI 93963 REGISTERED PROFESSIONAL ENGINEER

Project Number: 092303

Drawn By: NE

Designed By: NE

Checked By: Naeem Eghani, PE

Sheet Title: Power

Sheet Number: E-2

PANEL: "L"

SERVES		WIRE	AMPS /POLE	LOAD, VA LTG	RECPT.	OTHER	CKT	PH	CKT	LOAD, VA LTG	RECPT.	OTHER	AMPS /POLE	WIRE		SERVES
EMERGENCY LIGHT	L	12	20/1	500			1	A	2	400			20/1	12	L	LIGHT
EF-1	M	12	20/1			500	3	B	4	1200			20/1	12	L	LIGHT
LIGHT	L	12	20/1	700			5	C	6	500			20/1	12	L	LIGHT
RECEPTACLE	R	12	20/1		1800		7	A	8		1800		20/1	12	R	GFCI
WH-1	WH	12	20/2			1500	9	B	10		1800		20/1	12	R	GFCI
	WH	12				1500	11	C	12		1800		20/1	12	R	GFCI
OVERHEAD DOOR	E	12	20/1			1400	13	A	14			1400	20/1	12	E	OVERHEAD DOOR
SIGN	E	12	20/1			1000	15	B	16			1000	20/1	12	E	SIGN
GFCI	R	12	20/1		1800		17	C	18			950	20/2	12	AC	CU-1
							19	A	20			950		12	AC	
							21	B	22							
							23	C	24							
							25	A	26							
							27	B	28							
							29	C	30							
							31	A	32							
							33	B	34							
							35	C	36							
							37	A	38							
							39	B	40							
							41	C	42							
				1200	3600	5900				2100	5400	4300				

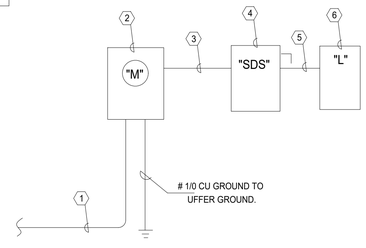
		CONN. LOAD		DESIGN LOAD
CATEGORY		KVA	DIV.	KVA
LIGHTING:		3.3	1.25	4.1
RECEPTACLE:		9.0	1	9.0
MOTORS:		0.5	1	0.5
MISCELLANEOUS:		-	1	-
ELECTRIC HEATING:		-	1	-
WATER HEATERS:		3.0	1	3.0
HVAC:		1.9	1	1.9
EQUIPMENT:		4.8	1	4.8
-		-	1	-
TOTAL LOAD KVA		23.3		
PANEL TOTAL AMPS		65		

MOUNTING:	SURFACE	NOTES:		
VOLTS:	120 / 208	*		
PHASE / WIRE:	3 / 4			
MAIN SIZE:	400 AMPS	**		
MAIN TYPE:	MLO			
BUSS TYPE:	COPPER	***		
A.I.C. (RMS):	22K			
BREAKER TYPE:	BOLT-ON	X		
NEMA RATING:	1			
FEEDER SIZE:	WIRE QTY.	WIRE SIZE	GRD. SIZE	CONDUIT SIZE
SET:	4	# 600 CU	# 1/0 CU	3 "

REMARKS:

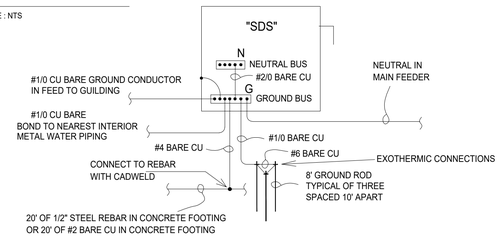
SYMBOL SCHEDULE

SYMBOL	DESCRIPTION	REMARKS
J	JUNCTION BOX	
	DISCONNECT SWITCH, REFER TO DISCONNECT SCHEDULE	
	DUPLEX RECEPTACLE 20A/120V 16"AFF UON	
$	SINGLE POLE SWITCH 20A, 48"AFF UON	
	COMBINATION TELEPHONE/DATA OUTLET, 16"AFF UON	



1 ELECTRICAL RISER DIAGRAM

SCALE : NTS



2 GROUNDING DETAIL

SCALE : NTS

LIGHT FIXTURE SCHEDULE

GENERAL NOTES:

A. CONFIRM CEILING TYPE AND CONSTRUCTION PRIOR TO ORDERING LIGHT FIXTURE.

B. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT OF WALL MOUNTED LIGHT FIXTURES WITH ARCHITECT PRIOR TO ROUGH-IN.

C. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF LIGHT FIXTURE.

D. CONFIRM FINISH WITH ARCHITECT PRIOR TO ORDERING LIGHT FIXTURES.

E. 'N' DESIGNATION ADJACENT TO LIGHTING FIXTURE TYPE INDICATES ONE LAMP IN FIXTURE SHALL BE UNSWITCHED.

MARK	MANUFACTURER'S CATALOG NUMBER	LAMPS NO./TYPE	FIXTURE VOLTS/WATTS	BALLAST
	LITHONIA 2GTL4 5000LM	LED	120 / 39	
	LITHONIA IBG 15LM 40K LED HIGH BAY	LED	120 / 107	
	LITHONIA OLW 31	LED	120 / 48	
EXIT	LITHONIA LHQM S W 3 R	EMERGENCY LIGHT	120 / 5	
	LITHONIA 6ELM2 120 CS CSA	EMERGENCY LIGHT 3-FOOT CORDSET	120 / 5.4	
	LIGHTFIXTURE INDUSTRIES LED WET LISTED EMERGENCY LIGHT	EMERGENCY LIGHT	120 / 10	

RISER DIAGRAM KEY NOTES

1. SET OF (4)W # 600 CU IN 4" CONDUIT.
2. 120/208V, 3Ø, 400A, NEMA 3R TRANS-SOCKET METER "M".
3. (2) SETS OF (4)W #3/0 CU AND (1)W #1/0 CU IN 3" CONDUITS.
4. 120 / 208V, 3Ø, 400A, NEMA 3R SERVICE DISCONNECT SWITCH "SDS".
5. (2) SETS OF (4)W #3/0 CU AND (1)W #1/0 CU IN 3" CONDUITS.
6. 120 / 208V, 3Ø, 400A, NEMA 1 PANEL "L".

ELECTRICAL LOAD ANALYSIS FOR SHELL BUILDING DESIGN

			KW
1. LIGHTING LOAD:			
A.	3.3x1.25	=	4.1
2. RECEPTACLE LOAD:			
A.	-	=	9.0
B.			
3. EQUIPMENT LOAD:			
A. MOTORS:		=	-
B. MISCELLANEOUS:		=	-
C. ELECTRIC HEATING:		=	-
D. WATER HEATERS:		=	3.0
E. HVAC:		=	1.9
F. EQUIPMENT:		=	4.8
4. 25% OF LARGEST MOTOR (KW):		=	-
5. TOTAL CONNECTED LOAD (KW)FOR EACH SUITE:		=	22.8

6. TOTAL AMP LOAD: 22800 / (208 X 1.731) = 65A

PROVIDE 400A, 120/208V, 3 PHASE, 4 WIRE

Engineer

High Rise MEP Engineering
213 Watergate Way
Hutto, Texas 78634
designmep@aol.com
(512) 431 6702
Mechanical - Electrical
Plumbing

Gardenia Warehouse
2205 Gardenia Drive
Austin, Texas

High Rise MEP Engineering
F-9491

Issue Date: 09/18/23

Revisions

No.	Date	Description

STATE OF TEXAS
NAEEM EGHANI
9.9961
REGISTERED
PROFESSIONAL ENGINEER

Project Number: 092303

Drawn By: NE

Designed By: NE

Checked By: Naeem Eghani, PE

Sheet Title: Electrical riser

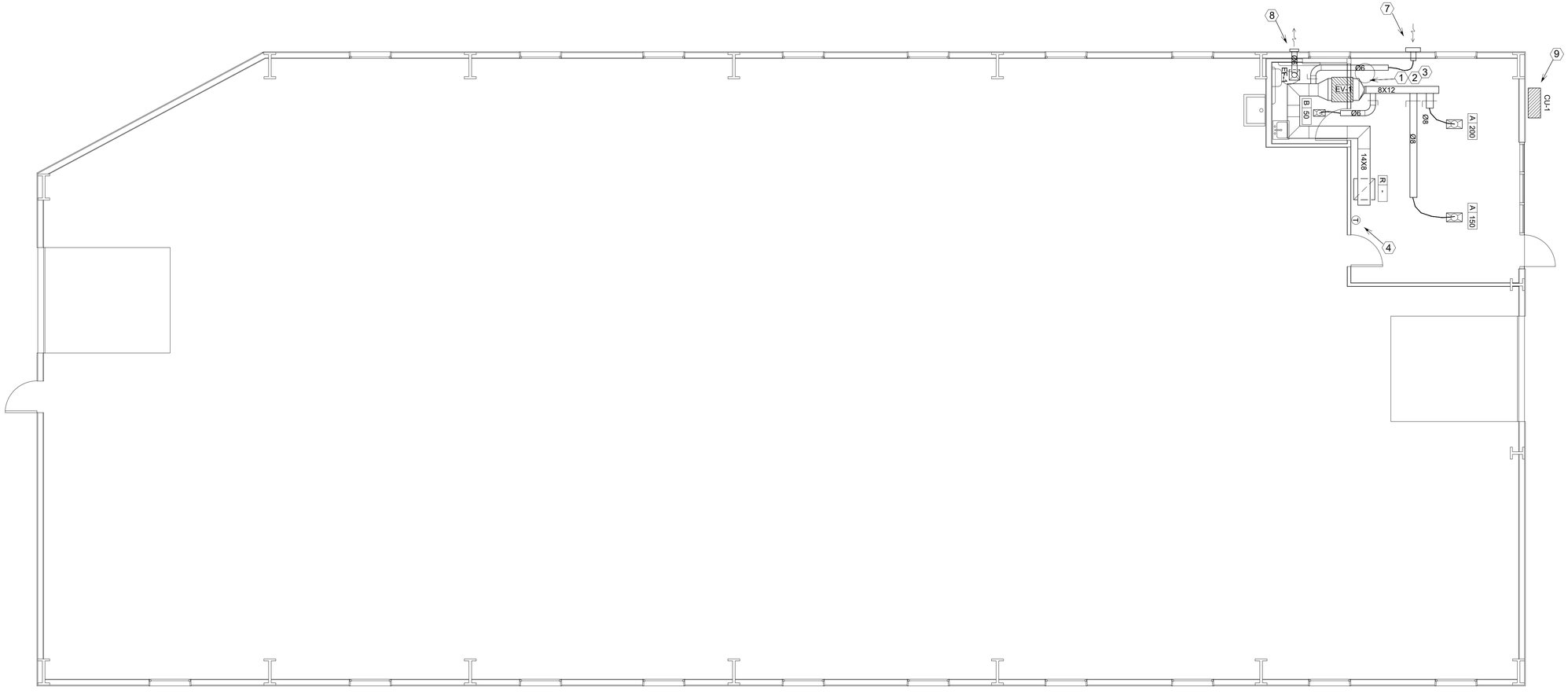
Sheet Number: E-3

General Note

1- All mechanical installation shall be per 2021 Uniform Mechanical Code (UMC) and city of Austin's mechanical amendments.

Key notes:

1. Install indoor unit over drop ceiling.
2. Install and secure condensate pan with overflow switch under coil.
3. Route condensate water from unit to mop sink (MS).
4. Mount thermostat (T) on wall at 48" above floor.
5. Balance supply, return and fresh air as recommended on drawing.
6. Insulate all air duct with R-8 duct insulator over drop ceiling.
7. Route intake fresh air duct though wall out. Install rain cap, bird screen and motorize damper on fresh air duct. Install ventilation controller by factory's requirement (Aprilaire - Model # 8120X) to monitor relative humidity, outside air temperature and control damper. Locate intake air 10 feet away from all exhaust air termination.
8. Route exhaust duct from restroom and through wall out. Install rain cap, damper and bird screen at the end.
9. Install condenser unit outside of building over concrete pad.



1 Mechanical plan

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

Engineer

High Rise MEP Engineering
213 Watergate Way
Hutto, Texas 78634
designmep@aol.com
(512) 431 6702
Mechanical - Electrical
Plumbing

Gardenia Warehouse
2205 Gardenia Drive
Austin, Texas

High Rise MEP Engineering
F-9491

Issue Date:	09/18/23

Revisions

No.	Date	Description

STATE OF TEXAS
NAEM EGHANI
9 995
REGISTERED
PROFESSIONAL ENGINEER

Project Number:	092303
Drawn By:	NE
Designed By:	NE
Checked By:	Naeem Eghani, PE
Sheet Title:	Mechanical
Sheet Number:	M-1

Heat Pump

MAKE	OUTDOOR UNIT		SEER2	HSPF2	COOLING BTU/H	HEATING BTU/H	ELECTRICAL MCA / MCOP	W / D / H	WEIGHT	INDOOR UNIT		EVAPORATOR AIR OUTSIDE AIR	W / D / H	WEIGHT
	MARK	MODEL								MARK	MODEL			
LENNOX	CU-1	MLA012S4S-1P	18	10	12.000	12,000	230V / 1Ø / 60HZ 9A / 20A	34 / 14 / 21	88 LBS	EV-1	MMDB012S4-2P	400 CFM 40 CFM	30 / 19 / 7	38 LBS

Outside Air

Space description	living Area	Outside Air criteria	Outside Air required	No. of People	Outside Air criteria	Minimum Outside Air required	Outside Air (A) + (B)	Outside Air Provided
	(SQFT)	ACH	(CFM)	VARIABLE OCCUPANCY (1)	(CFM/PERSON)	(CFM)	(CFM)	CFM AIR PROVIDE BY:
OFFICE	340	0.06	20 (A)	2	5	10 (B)	30 CFM	40 CFM BY "EV-1"

MOTE: (1) - Table 403.3.1.1 of 2021 UMC.

Restroom - Exhaust fan

MARK	MAKE	MODEL NO.	SP	CAPACITIES	AMP / WATT	DUCT SIZE	REMARK
EF	BROAN	L 100 MG	0.125	115 CFM	1.1 / 87	6"	1

1- Install rain cap and bird screen at the end of exhaust duct.

DIFFUSER

MARK	MAKE	MODEL #	DESCRIPTION	NECK SIZE	FINISH	REMARKS
A	SPECAIRE	AM5	CEILING DIFFUSER	8,10,12_Ø	OWNER OPTION	16X16
B	SPECAIRE	AM5	CEILING DIFFUSER	4,6,_Ø	OWNER OPTION	10X10
R	SPECAIRE	FBH1	RETURN , BACK FILTER	8,10,12_Ø	OWNER OPTION	24X24 & 24X12

Engineer

High Rise MEP Engineering
213 Watergate Way
Hutto, Texas 78634
designmep@aol.com
(512) 431 6702
Mechanical - Electrical Plumbing

Gardenia Warehouse
2205 Gardenia Drive
Austin, Texas

High Rise MEP Engineering F-9491

Issue Date: 09/18/23

Revisions

No.	Date	Description

NAEM EGHANI 93963 REGISTERED PROFESSIONAL ENGINEER

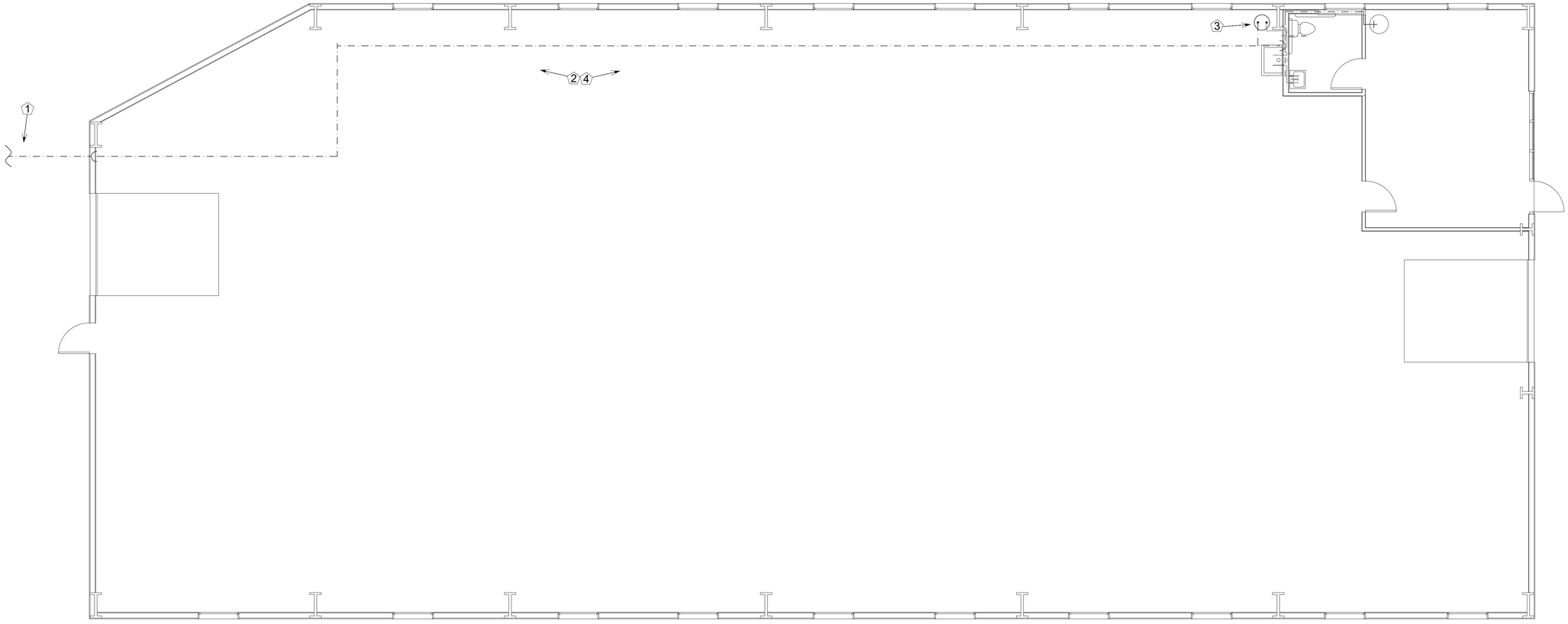
Project Number: 092303
Drawn By: NE
Designed By: NE
Checked By: Naeem Eghani, PE
Sheet Title: Mechanical spec
Sheet Number: M-2

General Note

1- All plumbing installation shall be per 2021 Uniform Plumbing Code (UPC) and city of Austin amendments.

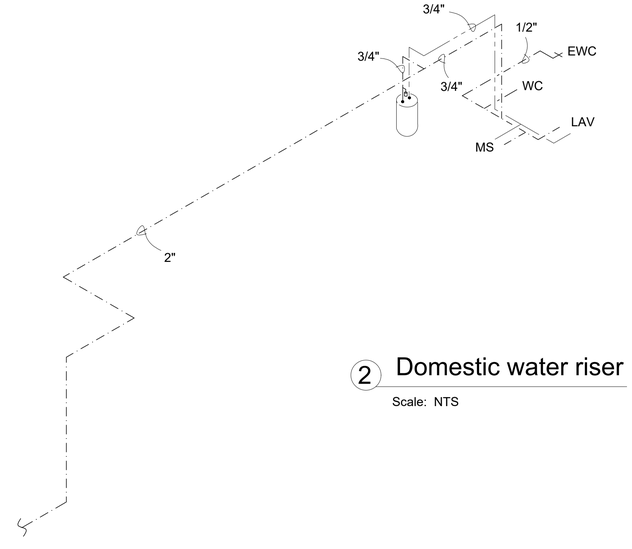
key notes :

1. - Water line from water meter to building, see civil utility plan.
2. - Route water line near ceiling inside building.
3. - Install water heater (WH-1) on housekeeping pad.
4. - Install 1" insulation on all cold and hot water line.
5. - See riser diagram for pipe sizing.



1 Domestic water plan

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



2 Domestic water riser

Scale: NTS

Engineer

High Rise MEP Engineering
213 Watergate Way
Hutto, Texas 78634
designmep@aol.com
(512) 431 6702
Mechanical - Electrical
Plumbing

Gardenia Warehouse
2205 Gardenia Drive
Austin, Texas

High Rise MEP Engineering F-9491

Issue Date:	09/18/23

Revisions

No.	Date	Description

STATE OF TEXAS
NAEEM EGHANI
93951
REGISTERED
PROFESSIONAL ENGINEER

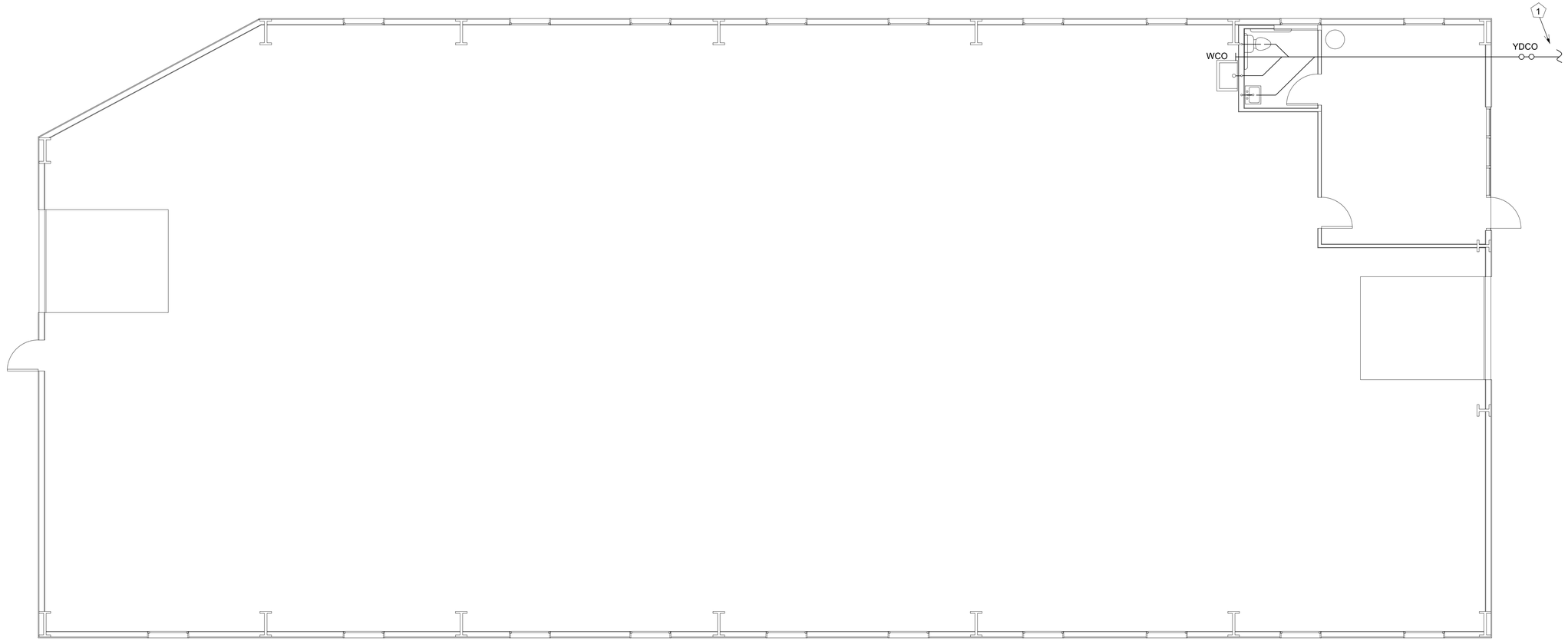
Project Number:	092303
Drawn By:	NE
Designed By:	NE
Checked By:	Naeem Eghani, PE
Sheet Title:	Water
Sheet Number:	P-1

General Note

1- All plumbing installation shall be per 2021 Uniform Plumbing Code (UPC) and city of Austin amendments.

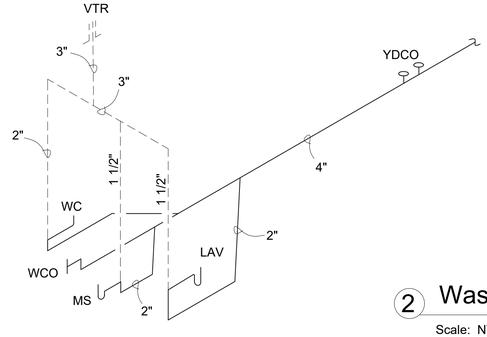
Key notes:

1. - Route waste water line from building out, see civil utility plan.
2. - Install wall clean out (WCO) and yard double clean out (YDCO) on sewer line.
3. - Route vent line through roof out (VTR), install rain cap and bird screen at the end.
4. - See riser diagram for pipe sizing.



1 Waste water plan

Scale: 3/6"=1'-0"



2 Waste water riser

Scale: NTS

Engineer

High Rise MEP Engineering
213 Watergate Way
Hutto, Texas 78634
designmep@aol.com
(512) 431 6702
Mechanical - Electrical
Plumbing

Gardenia Warehouse
2205 Gardenia Drive
Austin, Texas

High Rise MEP Engineering
F-9491

Issue Date: 09/18/23

Revisions

No.	Date	Description

NAEEM EGHANI 93951 REGISTERED PROFESSIONAL ENGINEER STATE OF TEXAS

Project Number: 092303
Drawn By: NE
Designed By: NE
Checked By: Naeem Eghani, PE
Sheet Title: Sewer
Sheet Number: P-2

FIXTURE AND EQUIPMENT SCHEDULE

MARK	FIXTURE / EQUIPMENT	MODEL NO.	SIZE / CAPACITY	TRIM / ACCESSORIES	REMARKS
WC	WATER CLOSET	AMERCAN STANDARD ELONGATED BOWL VITREOUS CHINA	TANK 1.28 GPF	WHITE, CHURCH 9500C SEAT OPEN FRONT TYPE SEAT	WC-1 AT ADA HEIGHT
LAV	WALL MOUNT LAVATORY	AMERCAN STANDARD 0321.026		WHITE, 2385.403 FAUCET, SUPPLIES WITH STOPS, WALL HANGER, CHROME PLATED P-TRAP, STRAINER DRAIN & SUPPLY INSUL. PER A.D.A. REQUIREMENTS	ADA COMPLIANCE
MS	MOP SINK	ADVANCE TABCO 9-OP-20 FLOOR MOUNTED	2" PIPE SIZE	K-240 SERVICE FAUCET K-242 MOP HANGER	
WC0	WALL CLEAN OUT				
DYC0	DOUBLE YARD CLEAN OUT				

NOTES:
1. FIXTURE MANUFACTURER SHALL BE EQUAL TO LISTED ONE.
2. PROVIDE ALL CARRIERS AND SUPPORT MATERIALS REQUIRED FOR A SOLID AND SECURE INSTALLATION.

ELECTRIC WATER HEATER TANK TYPE

MARK	MANUFACTURE MODEL	KW INPUT	CAPACITY	HEIGHT / DIAMETER	ELECTRICAL REQUIREMENT V/Ø/A	WEIGHT
WH-1	A.O. SMITH DSE-10	3 KW	10 GAL.	26" / 22"	208 / 1 / 14.4	116 LBS.

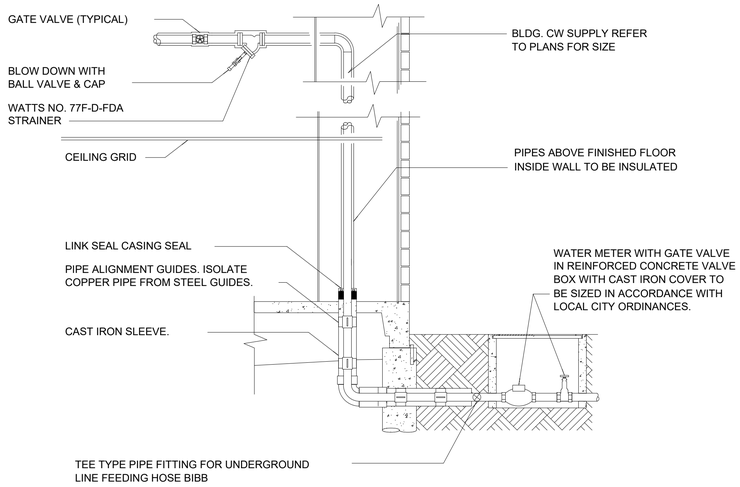
EXPANSION TANK

MARK	MANUFACTURE MODEL	CAPACITY	DIAMETER / HEIGHT	CONNECTION SIZE	WEIGHT
EXP	THERM-X-TROL ST-5	2 GAL.	8" / 13"	3/4"	5 LBS.

FIXTURE UNIT COUNT

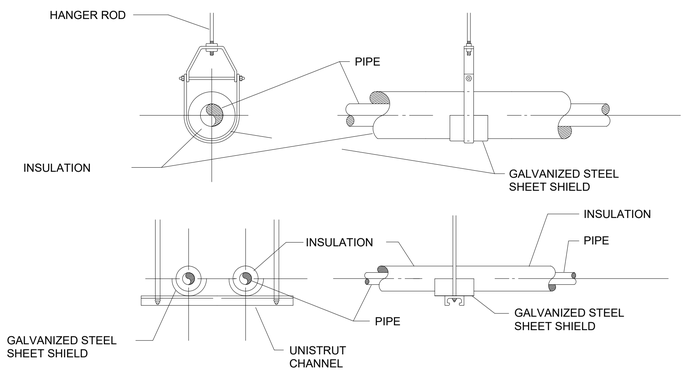
FIXTURE	QUANTITY			WATER F.U.		SEWER F.U.	
	NEW	EXISTING	ACCU.	EACH	TOTAL	EACH	TOTAL
WC	1	-		2.5	2.5	4	4
LAV	1	-		1	1	1	1
MS	1	-		1.5	1.5	3	3
TOTAL					5.0		8.0

U.PC. CHART A 103.1 (2) : 5 F.U. = 5 GPM



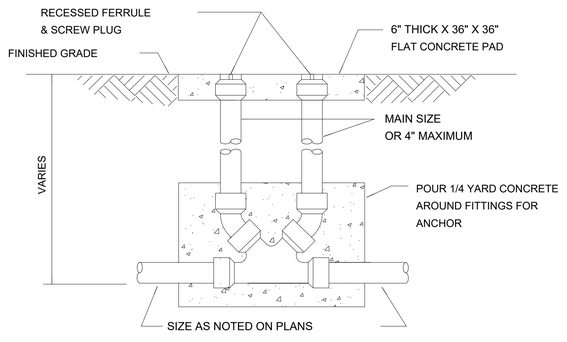
1 WATER SERVICE ENTRY DETAIL

SCALE: NTS



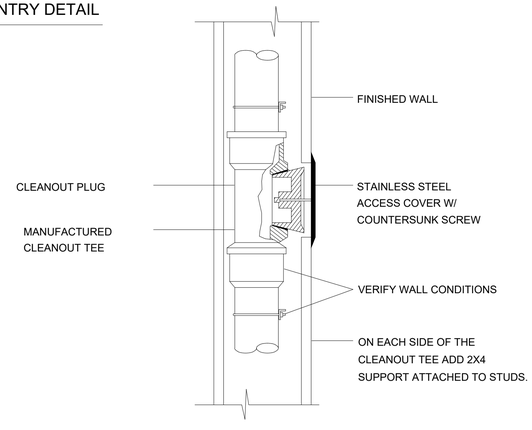
2 WATER PIPING HANGERS

SCALE: NTS



3 DOUBLE CLEANOUT DETAIL

SCALE: NTS



4 WALL CLEANOUT DETAIL

SCALE: NTS

Engineer

High Rise MEP Engineering
213 Watergate Way
Hutto, Texas 78634
designmep@aol.com
(512) 431 6702
Mechanical - Electrical Plumbing

Gardenia Warehouse
2205 Gardenia Drive
Austin, Texas

High Rise MEP
Engineering
F-9491

Issue Date: 09/18/23

Revisions

No.	Date	Description

NAEEM ECHANI 93963 REGISTERED PROFESSIONAL ENGINEER

Project Number: 092303
Drawn By: NE
Designed By: NE
Checked By: Naeem Eghani, PE
Sheet Title: Plumbing spec
Sheet Number: P-3

STRUCTURAL NOTES

STRUCTURAL NOTES

GENERAL

1. THESE GENERAL NOTES SHALL APPLY UNLESS NOTED OTHERWISE ON THE PLANS AND DETAILS.
2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND SITE CONDITIONS AND COORDINATE ALL DETAILS AND DIMENSIONS SHOWN ON THE STRUCTURAL DRAWINGS WITH RELATED REQUIREMENTS ON ARCHITECTURAL, MECHANICAL, ELECTRICAL AND/OR CIVIL DRAWINGS. THE ARCHITECT OR ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES PRIOR TO STARTING WORK
3. WHERE A CONFLICT OCCURS BETWEEN THE SPECIFICATIONS, NOTES ON THE DRAWINGS, GENERAL NOTES AND SPECIFIC DETAILS, THE MORE RESTRICTIVE SHALL GOVERN.
4. ALL MATERIAL AND WORKMANSHIP SHALL CONFORM TO THE INTERNATIONAL BUILDING CODE, 2021 EDITION.
5. DO NOT SCALE DRAWINGS.
6. THE DESIGN, ADEQUACY AND SAFETY OF ERECTION BRACING, SHORING, TEMPORARY SUPPORTS, ETC., IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND HAS NOT BEEN CONSIDERED BY THE STRUCTURAL ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR THE STABILITY OF THE STRUCTURE PRIOR TO THE APPLICATION OF ALL PERMANENT LATERAL BRACING, ROOF AND FLOOR DIAPHRAGMS AND FINISH MATERIALS. THE CONTRACTOR SHALL PROVIDE THE NECESSARY BRACING TO INSURE STABILITY PRIOR TO THE APPLICATION OF THE AFOREMENTIONED MATERIALS. OBSERVATION VISITS TO THE SITE BY THE STRUCTURAL ENGINEER SHALL NOT INCLUDE THE INSPECTION OF THE ABOVE ITEMS.
7. VIBRATIONAL EFFECTS OF MECHANICAL EQUIPMENT ARE ASSUMED TO BE NEGLIGIBLE TO STRUCTURAL MEMBERS. SEE MECHANICAL DRAWING FOR REQUIRED VIBRATION ISOLATORS.
8. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING UTILITIES WHETHER SHOWN HEREON OR NOT, AND TO PROTECT THEM FROM DAMAGE. THE CONTRACTOR SHALL BEAR ALL EXPENSE OF REPAIR OR REPLACEMENT IN CONJUNCTION WITH THE PERFORMANCE OF THIS WORK.
9. DIMENSIONS AND LOCATIONS OF ALL DOOR AND WINDOW OPENINGS SHALL BE DICTATED BY THE ARCHITECTURAL DRAWINGS. FLOOR, WALL AND ROOF OPENINGS AS REQUIRED BY OTHER TRADES SHALL BE VERIFIED FROM SHOP DRAWINGS, EQUIPMENT DATA, ETC.
10. ITEMS IDENTIFIED BY A TRADE NAME ARE INDICATIVE OF A LEVEL OF PERFORMANCE OR A GRADE OF MATERIAL. IN ALL SUCH CASES, THE PHRASE "OR APPROVED EQUAL" SHALL APPLY.
11. BACKFILL SHALL NOT BE PLACED AGAINST WALLS BEFORE FLOORS OR FRAMING SUPPORTING THE WALLS AT THE BOTTOM AND TOP ARE SECURELY IN PLACE EXCEPT AS SPECIFICALLY STATED IN WRITING BY THE STRUCTURAL ENGINEER.
12. PIPES, CONDUIT, DUCTS, ETC., SHALL NOT BE EMBEDDED INSIDE STRUCTURAL MEMBERS UNLESS SHOWN ON THE DRAWINGS OR PERMITTED IN WRITING BY THE STRUCTURAL ENGINEER.

CODES AND SPECIFICATIONS

1. 2021 EDITION OF THE INTERNATIONAL BUILDING CODE (IBC).
2. ASCE 7-10, MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES.
3. ACI 318/2014 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
4. ACI 304, "RECOMMENDED PRACTICE FOR MEASURING, MIXING, TRANSPORTING, AND PLACING CONCRETE".
5. ACI 301-10 SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS.
6. ACI 305, "RECOMMENDED PRACTICE FOR HOT WEATHER CONCRETING".
7. ACI 347, "RECOMMENDED PRACTICE FOR CONCRETE FORMWORK"
8. ACI 315, "DETAILS AND DETAILING OF CONCRETE REINFORCEMENT".

CONCRETE

1. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH AS FOLLOWS:

USAGE	COMPREHENSIVE STRENGTH	WATER/CEMENT RATIO (MAX.)
SLAB-ON GRADE, GRADE BEAMS	3,000 PSI	0.45

SUBMITTALS

1. SHOP DRAWINGS SHALL BE PREPARED FOR ALL STRUCTURAL ITEMS AND SUBMITTED FOR REVIEW BY THE ENGINEER. CONTRACT DRAWINGS SHALL NOT BE REPRODUCED AND USED AS SHOP DRAWINGS. ALL ITEMS DEVIATING FROM THE CONTRACT DRAWINGS OR FROM PREVIOUSLY SUBMITTED SHOP DRAWINGS SHALL BE CLOUDED.
2. THE CONTRACTOR SHALL REVIEW SHOP DRAWINGS FOR COMPLIANCE WITH THE CONTRACT DOCUMENTS AND SHALL CERTIFY THAT HE HAS DONE SO BY A STAMP NOTING THAT THE DRAWINGS HAVE BEEN "APPROVED" AND WHICH BEARS THE SIGNATURE (OR INITIALS) OF AN AUTHORIZED REPRESENTATIVE OF THE CONTRACTOR AND THE DATE.
3. CORRECTIONS OR COMMENTS ON SHOP DRAWINGS OR MANUFACTURER'S DATA SHEETS DO NOT RELIEVE THE CONTRACTOR FROM COMPLIANCE WITH REQUIREMENTS OF THE PLANS AND SPECIFICATIONS. THE ENGINEER'S REVIEW IS FOR GENERAL CONFORMANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING AND DOCUMENTS. THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING AND CORRECTING ALL QUANTITIES AND DIMENSIONS. SELECTING FABRICATION PROCESSES AND TECHNIQUES OF CONSTRUCTION AND COORDINATING HIS WORK WITH THAT OF ALL OTHER CONTRACTORS.
4. REFER TO INDIVIDUAL SECTIONS FOR SPECIFIC SUBMITTAL REQUIREMENTS.

SOILS AND FOUNDATION

1. LOCATE THE BOTTOM OF ALL EXTERIOR FOOTINGS A MINIMUM OF 18" INTO COMPACTED SELECT FILL.
2. LOCATE THE BOTTOM OF ALL INTERIOR FOOTINGS A MINIMUM OF 30" BELOW TOP OF FINISH CONCRETE SLAB UNLESS OTHERWISE NOTED.
3. ALL COMPACTED FILL SHALL HAVE A MINIMUM DENSITY OF 95% OF THE MAXIMUM OBTAINABLE IN ACCORDANCE WITH ASTM D1557.
4. THE FOUNDATION DESIGN IS BASED UPON A REPORT BY:

   SEC SOLUTIONS, LLC

   PROJECT #23192
5. SHALLOW FOUNDATION

   5.1.BUILDING SLAB

   REMOVE A MINIMUM OF 60" OF TOP SOILS AND REPLACE WITH COMPACTED SELECT FILL TO THE DESIRED FINAL GRADE ELEVATION (MIN. THICKNESS: 2FT). FOLLOW SELECT FILL AND COMPACTION REQUIREMENTS OUTLINE IN THE GEOTECHNICAL REPORT.

   DESIGN PI: 24, PVR: 2"

   ALLOWABLE BEARING PRESSURE: 2,000 PSF (MIN 1.5 FT INTO COMPACTED SELECT FILL)

SUBGRADE PREPARATION

1. STRUCTURAL FILL MATERIAL SHALL MEET REQUIREMENTS PRESENTED IN GEOTECHNICAL REPORT ITEM 6.1
2. PRIOR TO PLACING FILL MATERIAL, REMOVE ALL ORGANIC AND OTHER DELETERIOUS MATERIAL FROM THE EXISTING SUB GRADE FOR A DISTANCE OF 5'-0" BEYOND BUILDING LINE. ALL EXPOSED SURFACES SHALL THEN BE SCARIFIED TO A DEPTH OF 6 INCHES. WATERED AS REQUIRED AND RE COMPACTED TO A MINIMUM OF 95 PERCENT OF THE MAXIMUM DRY DENSITY AS DEFINED BY ASTM D 698 (STANDARD PROCTOR TEST) AT A MOISTURE CONTENT WITHIN 3 PERCENT OF THE OPTIMUM MOISTURE CONTENT.
3. STRUCTURAL FILL SHALL BE PLACED IN 8 INCH LOOSE LIFTS. WATERED PER PLAN AND COMPACTED TO A MINIMUM OF 95 PERCENT OF THE MAXIMUM DRY DENSITY AS DEFINED IN ASTM D698 AT A MOISTURE CONTENT WITHIN 4 PERCENT OF THE OPTIMUM MOISTURE CONTENT.
4. COMPACTION AND MOISTURE CONTENT OF SUB GRADE AND EACH LIFT OF STRUCTURAL FILL SHALL BE INSPECTED AND APPROVED BY A QUALIFIED ENGINEERING TECHNICIAN, SUPERVISED BY A GEOTECHNICAL ENGINEER.
5. STRUCTURAL FILL SHALL NOT BE PLACED BEYOND THE LIMITS OF THE EXTERIOR BUILDING STRUCTURE.
6. PROVIDE A 10 MIL POLYETHYLENE VAPOR BARRIER. PLACE VAPOR BARRIER IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION OF TOP OF STRUCTURAL FILL
7. SUBGRADE PREPARATION SHALL BE INSPECTED AND APPROVED BY A GEOTECHNICAL ENGINEER.

SLAB ON GROUND

1. SOIL SUPPORT SYSTEM: THE SOIL SUPPORT SYSTEM SHOULD BE WELL DRAINED AND PROVIDE ADEQUATE AND UNIFORM LOAD-BEARING SUPPORT.
2. VAPOR BARRIER: IF A VAPOR BARRIER OR VAPOR RETARDER IS REQUIRED DUE TO LOCAL CONDITIONS, THESE PRODUCTS SHOULD BE PLACED UNDER A MINIMUM OF 4" OF TRIMMABLE, COMPACTIBLE, GRANULAR FILL (NOT SAND). A USUALLY GRADED FROM 1 1/2" TO 2" DOWN TO ROCK DUST, IS SUITABLE FOLLOWING COMPACTION. THE SURFACE CAN BE CHOCKED OFF WITH A FINE GRADED MATERIAL TO REDUCE FRICTION BETWEEN THE BASE MATERIAL AND THE SLAB. THE RECOMMENDED POLYETHYLENE FILM A THICKNESS OF LOT LESS THAN 10 MILS BE USED.

SLAB ON GROUND (CONT.)

4. SAW-CUT JOINTS: THE RECOMMENDED SAW CUTTING SHOULD BE PERFORMED: (I) BEFORE CONCRETE STARTS TO CURE (II) AS SOON AS THE CONCRETE SURFACE IS FIRM ENOUGH TO BE TORN OR DAMAGED BY THE BLADE, AND (III) BEFORE RANDOM - DRYING - SHRINKAGE CRACKS FAN FORM IN THE CONCRETE SLAB. IF SAWING IS UNDULY DELAYED. THE CONCRETE CAN CRACK RANDOMLY BEFORE IT IS SAWED. ADDITIONALLY, DELAY CAN GENERATE CRACKS THAT RUN OFF FROM THE SAW BLADE TOWARD THE EDGE OF THE SLAB AT AN OBTUSE OR SKEWED ANGLE TO THE SAW CUT.
5. JOINT FILLING: WHERE THERE ARE WET CONDITIONS. HYGIENIC AND DUST -CONTROL REQUIREMENTS, OR WHERE THE FLOOR IS SUBJECTED TO TRAFFIC BY SMALL. HARD-SHEELED VEHICLES SUCH AS FORKLIFTS. CONTRACTION & CONSTRUCTION JOINTS SHOULD BE FILLED AND PROTECTED WITH A SEMIRIGID EPOXY THAT GIVES ADEQUATE SUPPORT TO THE JOINT EDGES AND HAS SUFFICIENT RESISTANCE TO WEAR.

CONCRETE

1. CEMENT SHALL CONFORM TO ASTM C150, TYPE V. WATER TO CEMENT RATIO SHALL NOT EXCEED 0.45 UNLESS NOTED OTHERWISE.
2. CONTRACTOR SHALL SUBMIT CONCRETE MIX DESIGNS IN ACCORDANCE WITH IBC. THE MIX DESIGNS SHALL BE SIGNED AND STAMPED BY A CIVIL ENGINEER REGISTERED IN TEXAS.
3. HARDROCK AGGREGATE SHALL CONFORM TO ASTM C33.
4. APPROXIMATE AIR-DRY DENSITY FOR HARDROCK CONCRETE SHALL BE 145 PCF.
5. LIGHTWEIGHT CONCRETE AGGREGATE SHALL CONFORM TO ASTM C330.
6. APPROXIMATE AIR-DRY DENSITY FOR LIGHTWEIGHT CONCRETE SHALL NOT EXCEED 110 PCF.
7. ALL CONCRETE OF COMPRESSIVE STRENGTH GREATER THAN 3,000 PSI SHALL HAVE CONTINUOUS INSPECTION BY A REGISTERED DEPUTY INSPECTOR APPROVED BY THE BUILDING DEPARTMENT.
8. STRIPPING OF FORMS AND SHORING SHALL BE IN STRICT ACCORDANCE WITH ACI 318, LATEST EDITION.
9. REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR LOCATIONS OF ALL PIPES, CONDUITS, ETC.

CONCRETE REINFORCEMENT

1. ALL REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60. REINFORCING TO BE WELDED SHALL BE ASTM A706, GRADE 60.
2. LOW HYDROGEN WELDING RODS SHALL BE USED FOR ALL WELDING OF REINFORCING BARS.
3. CONTINUOUS REINFORCING SHALL BE SPLICED WITH 30 BAR DIAMETERS MINIMUM (COMPRESSION) IN CONCRETE AND MASONRY AND 48 BAR DIAMETERS MINIMUM (TENSION) IN CONCRETE AND MASONRY UNLESS NOTED OTHERWISE.
4. REINFORCING BARS SHALL NOT BE REBENT WITHOUT PRIOR WRITTEN APPROVAL OF STRUCTURAL ENGINEER.
5. REINFORCING SHALL BE SPLICED ONLY AS SHOWN OR NOTED. SPLICES AT OTHER LOCATIONS SHALL BE APPROVED BY THE STRUCTURAL ENGINEER.
6. SPLICES IN ADJACENT HORIZONTAL WALL REINFORCING BARS SHALL BE STAGGERED 4'-0" MINIMUM UNLESS OTHERWISE NOTED. PROVIDE DOWELS IN FOOTINGS AND/OR GRADE BEAMS THE SAME SIZE AND NUMBER AS VERTICAL WALL OR COLUMN REINFORCING. DOWELS SHALL HAVE A MINIMUM PROJECTION EQUAL TO STANDARD LAP SPLICE UNLESS OTHERWISE NOTED.
7. ALL REINFORCING, ANCHOR BOLTS AND OTHER INSERTS SHALL BE SECURED IN PLACE PRIOR TO PLACING CONCRETE OR GROUTING MASONRY.
8. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185.
9. MINIMUM CONCRETE COVER SHALL BE AS SPECIFIED IN ACI 318 9.1.LATEST EDITION.

   9.1.1. CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH ..... 3"

   9.1.2. CONCRETE EXPOSED TO EARTH OR WEATHER:

   NO. 6 THROUGH NO. 18 BAR ..... 2"

   NO. 5 BAR, W31 OR D31 WIRE AND SMALLER ..... 1 1/2"

   9.0.1. CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND:

   SLAB, WALL, JOISTS:

   NO. 14 AND NO. 18 BAR ..... 1 1/2"

   NO. 11 BAR AND SMALLER ..... 3/4"

10. BARS WITH A CARBON EQUIVALENT ABOVE 0.75 SHALL NOT BE WELDED. WELDING SHALL NOT BE DONE ON OR WITHIN TWO BAR DIAMETERS OF ANY PORTION OF A BAR THAT HAS BEEN BENT COLD.

407 Forrest St
Liberty Hill, TX 78642
(512) 215-4364
F-15009

SEC SOLUTIONS

2205 GARDENIA DRIVE
RETAINING WALLS
AUSTIN, TX 78727

COORDINATION DRAWINGS.
NOT FOR CONSTRUCTION
NOT FOR CITY REVIEW

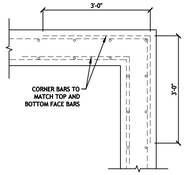
STATE OF TEXAS
MARCOS V. DEQUEIROGA
101049
LICENSED
PROFESSIONAL ENGINEER

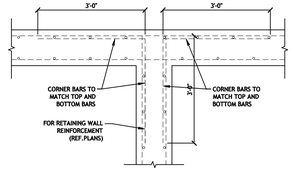
NO.	REVISION	DATE
1.	REVIEW SET	09-18-23

PROJECT: 23192
DATE: 06-28-23
DRAWN BY: RB

SCALE: AS NOTED

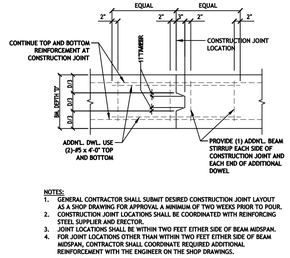
S0





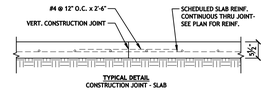
CORNER BAR DETAIL (1)
SCALE: 1/2" = 1'-0"

BAR @ INTERIOR INTERSECTION DETAIL (2)
SCALE: 1/2" = 1'-0"



NOTES:
1. GENERAL CONTRACTOR SHALL SUBMIT DESIRED CONSTRUCTION JOINT LAYOUT AS A SHOP DRAWING FOR APPROVAL A MINIMUM OF TWO WEEKS PRIOR TO POUR.
2. CONSTRUCTION JOINT LOCATIONS SHALL BE COORDINATED WITH REINFORCING STEEL SUPPLIER AND ERECTOR.
3. JOINT LOCATIONS SHALL BE WITHIN TWO FEET EITHER SIDE OF BEAM MIDSPAN.
4. FOR JOINT LOCATIONS OTHER THAN WITHIN TWO FEET EITHER SIDE OF BEAM MIDSPAN, CONTRACTOR SHALL COORDINATE REQUIRED ADDITIONAL REINFORCEMENT WITH THE ENGINEER ON THE SHOP DRAWINGS.

GRADE BEAM CONSTRUCTION JOINT (3)
N.T.S.

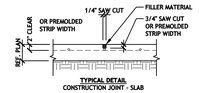


SAW CONTROL JOINT NOTES:
1. MAKE SAW CUT AS SOON AS SLAB IS ABLE TO SUPPORT WEIGHT OF WORKERS AND SAWING EQUIPMENT WITHOUT DAMAGE TO FINISH SURFACE OF SLAB.

JOINT FILLER MATERIAL NOTES:
1. FILLER MATERIAL USED SHALL HAVE A MINIMUM SHORE HARDNESS OF 35, AND SHALL CONFORM TO ASTM D2240. JOINT FILLER SHALL BE APPROVED BY ENGINEER PRIOR TO APPLICATION. APPROVED JOINT FILLER IS VULKEM 245 AS MANUFACTURED BY MAMECO INTERNATIONAL OR APPROVED EQUAL.
2. WHERE POSSIBLE, FILLER MATERIAL SHALL BE APPLIED WHEN BUILDING IS UNDER PERMANENT TEMPERATURE CONTROL. THIS SHALL BE EITHER AT THE END OF CONSTRUCTION OF THE COMPLETE BUILDING SHELL, OR A MINIMUM OR 90 DAYS AFTER SLAB CONSTRUCTION.
3. FOLLOW STRICTLY THE MANUFACTURERS RECOMMENDED PROCEDURES FOR APPLYING THE JOINT FILLER.

NOTES:
1. CONSTRUCTION JOINTS, IF REQUIRED, SHOULD BE LOCATED ON THE MIDDLE THIRD OF THE SLAB SPAN.
2. CONCRETE SURFACE AT CONSTRUCTION JOINT SHALL BE CLEAN AND FREE OF LAITANCE.

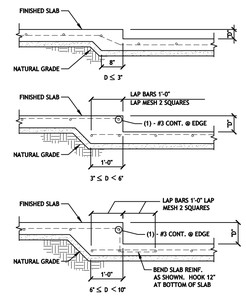
SLAB CONSTRUCTION JOINT (4)
N.T.S.



FORMED CONTROL JOINT NOTES:
1. FORM CONTROL JOINTS BY INSERTING PREMOLDED STRIP INTO FRESH CONCRETE UNTIL TOP SURFACE OF STRIP IS FLUSH WITH SLAB SURFACE.
2. TOOL SLAB EDGES ROUND ON EACH SIDE OF INSERT.
3. AFTER CONCRETE HAS CURED, REMOVE INSERTS AND CLEAN GROOVE OF LOOSE DEBRIS.

DOWEL NOTES:
1. ALL DOWELS SHALL CONFORM TO ASTM A615.
2. DOWELS SHALL BE CAREFULLY ALIGNED AND SUPPORTED DURING CONCRETING OPERATIONS.

SLAB CONSTRUCTION JOINT (5)
N.T.S.



NOTES:
1. COORDINATE DEPTH & LOCATIONS OF ALL FLOOR DEPRESSIONS WITH ARCHITECTURAL DRAWINGS.
2. PROVIDE (1) - #4 x 4'-0" TOP AT INTERIOR CORNERS OF ALL DEPRESSIONS.

FLOOR DEPRESSION DETAIL (6)
SCALE: 1/2" = 1'-0"

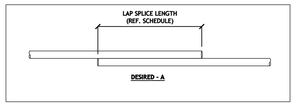
MINIMUM EMBEDMENT WITH STANDARD 90 DEG. (HOOK GRADE 60 STEEL)			
BAR SIZE	CONC f'C = 3000 OR GREATER	CONC f'C = 4000 OR GREATER	CONC f'C = 6000 OR GREATER
#3	0'-6"	0'-6"	0'-6"
#4	0'-8"	0'-7"	0'-6"
#5	0'-10"	0'-9"	0'-8"
#6	0'-1"	0'-10"	0'-9"
#7	1'-2"	1'-0"	0'-11"
#8	1'-4"	1'-2"	1'-0"
#9	1'-6"	1'-3"	1'-2"
#10	1'-8"	1'-5"	1'-4"
#11	1'-10"	1'-7"	1'-5"
#14	2'-0"	2'-9"	2'-5"
#18	2'-2"	3'-7"	3'-3"

LAP SPLICE LENGTH (GRADE 60 STEEL)						
BAR SIZE	LAP LENGTH (TOP BARS)	LAP LENGTH (OTHER BARS)	LAP LENGTH (TOP BARS)	LAP LENGTH (OTHER BARS)	LAP LENGTH (TOP BARS)	LAP LENGTH (OTHER BARS)
#3	2'-7"	2'-0"	2'-3"	1'-9"	2'-1"	1'-8"
#4	3'-4"	2'-7"	2'-11"	2'-4"	2'-8"	2'-1"
#5	4'-1"	3'-3"	3'-7"	2'-10"	3'-3"	2'-7"
#6	4'-11"	3'-10"	4'-3"	3'-4"	3'-10"	3'-0"
#7	7'-0"	5'-5"	6'-1"	4'-9"	5'-6"	4'-3"
#8	8'-0"	6'-2"	6'-11"	5'-5"	6'-3"	4'-10"
#9	8'-11"	6'-11"	7'-9"	6'-1"	7'-0"	5'-5"
#10	10'-1"	7'-9"	8'-9"	6'-9"	7'-10"	6'-1"
#11	11'-3"	8'-7"	9'-8"	7'-6"	8'-8"	6'-9"
#14	MECH. COUPLERS	MECH. COUPLERS	MECH. COUPLERS	MECH. COUPLERS	MECH. COUPLERS	MECH. COUPLERS
#18	MECH. COUPLERS	MECH. COUPLERS	MECH. COUPLERS	MECH. COUPLERS	MECH. COUPLERS	MECH. COUPLERS

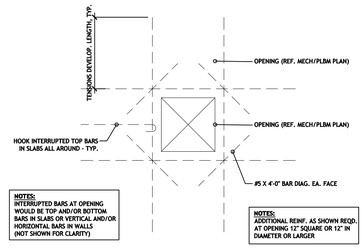
VERT. BARS	
BAR SIZE	LAP SPLICE LENGTH
#4	1'-11"
#5	2'-4"
#6	2'-9"
#7	3'-3"
#8	3'-9"
#9	4'-3"
#10	4'-9"
#11	5'-3"
#14	MECH. COUPLERS
#18	MECH. COUPLERS

BAR SPLICING NOTES:
1. SEE DETAILS A THRU B FOR TYPICAL BAR SPLICE CONDITIONS.
2. ALL COLUMN BAR SPLICES ARE TO BE IN ACCORDANCE WITH "SPLICE SCHEDULE 1" UNLESS NOTED OTHERWISE.
3. LAP SPLICE LENGTHS ARE TO BE CALCULATED BASED ON THE SMALLER BAR BEING LAPPED.
4. ALL COLUMN BAR SPLICES IN COLUMNS WHERE THE AREA OF REINFORCING DIVIDED BY THE AREA OF THE COLUMN CROSS SECTION IS GREATER THAN 0.04 (4%) SHALL BE MECHANICAL SPLICES SINCE THE CODE DOES NOT ALLOW MORE THAN 8%
5. SPLICE ALL COLUMN BARS AT EACH FLOOR/COLUMN INTERSECTION. DO NOT SPLICE COLUMN BARS BETWEEN FLOOR/COLUMN INTERSECTIONS EVEN IF THE COLUMN SPANS ACROSS MORE THAN MORE LEVEL WITHOUT ACTUALLY INTERSECTING WITH THE FLOOR FRAMING
6. WHERE VERTICAL BARS ARE OFFSET AT A SPLICE, THE SLOPE OF THE INCLINED POTION OF THE BAR WITH THE AXIS OF THE COLUMN SHALL NOT EXCEED 1:6, AND 3 ADDITIONAL TIES SHALL BE ADDED TO THE TOP OF THE COLUMN CENTERED ON THE BEND.
7. OFFSET LAPPED BARS IN A PLANE NORMAL TO THE TIE.

NOTES:
1. TOP BARS ARE DEFINED AS HORIZONTAL BARS LOCATED MORE THAN 12" ABOVE THE BOTTOM OF A POUR
2. LAP SPLICES OF DIFFERENT BAR SIZES MA USE THE SPLICE LENGTH OF THE SMALLER BAR, BUT NOT LESS THAN 80% OF THE SPLICE LENGTH OF THE LARGER BAR



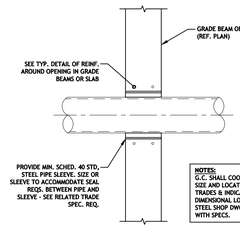
REBAR SPLICE SCHEDULE (7)
N.T.S.



NOTES:
INTERRUPTED BARS AT OPENING WOULD BE TOP AND/OR BOTTOM BARS IN SLABS OR VERTICAL AND/OR HORIZONTAL BARS IN WALLS (NOT SHOWN FOR CLARITY)

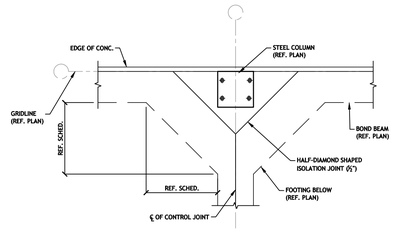
NOTES:
ADDITIONAL REINF. AS SHOWN REQD. AT OPENING 12" SQUARE OR 12" IN DIAMETER OR LARGER

TYPICAL DETAIL REINF. AT SLAB OPENINGS (8)
N.T.S.



NOTES:
G.C. SHALL COORDINATE SLEEVE SIZE AND LOCATIONS WITH RELATED TRADES & INDICATE EXACT DIMENSIONAL LOCATION ON REINF. STEEL SHOP DWGS. IN COMPLIANCE WITH SPECS.

TYPICAL DETAIL - PIPE/CONDUIT SLEEVE THRU FOUNDATION GRADE BEAM OR SLAB (9)
N.T.S.



TYPICAL BLOCKOUT PLAN DETAIL (10)
SCALE: 1/2" = 1'-0"

407 Forrest St.
Liberty Hill, TX 78642
(512) 215-4364
F-15009

SOLUTIONS

2205 GARDENIA DRIVE
RETAINING WALLS
AUSTIN, TX 78727

COORDINATION DRAWINGS.
NOT FOR CONSTRUCTION
NOT FOR CITY REVIEW

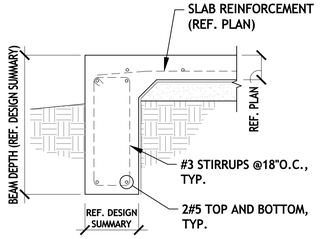
STATE OF TEXAS
MARCOS V. DEQUEIROGA
101049
LICENSED
PROFESSIONAL ENGINEER

NO.	REVISION	DATE
1.	REVIEW SET	09-18-23

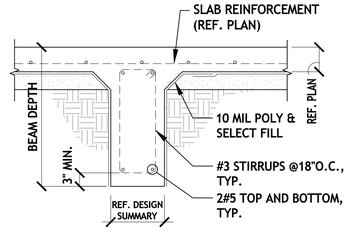
PROJECT: 23192
DATE: 06-28-23
DRAWN BY: RB

SCALE: AS NOTED

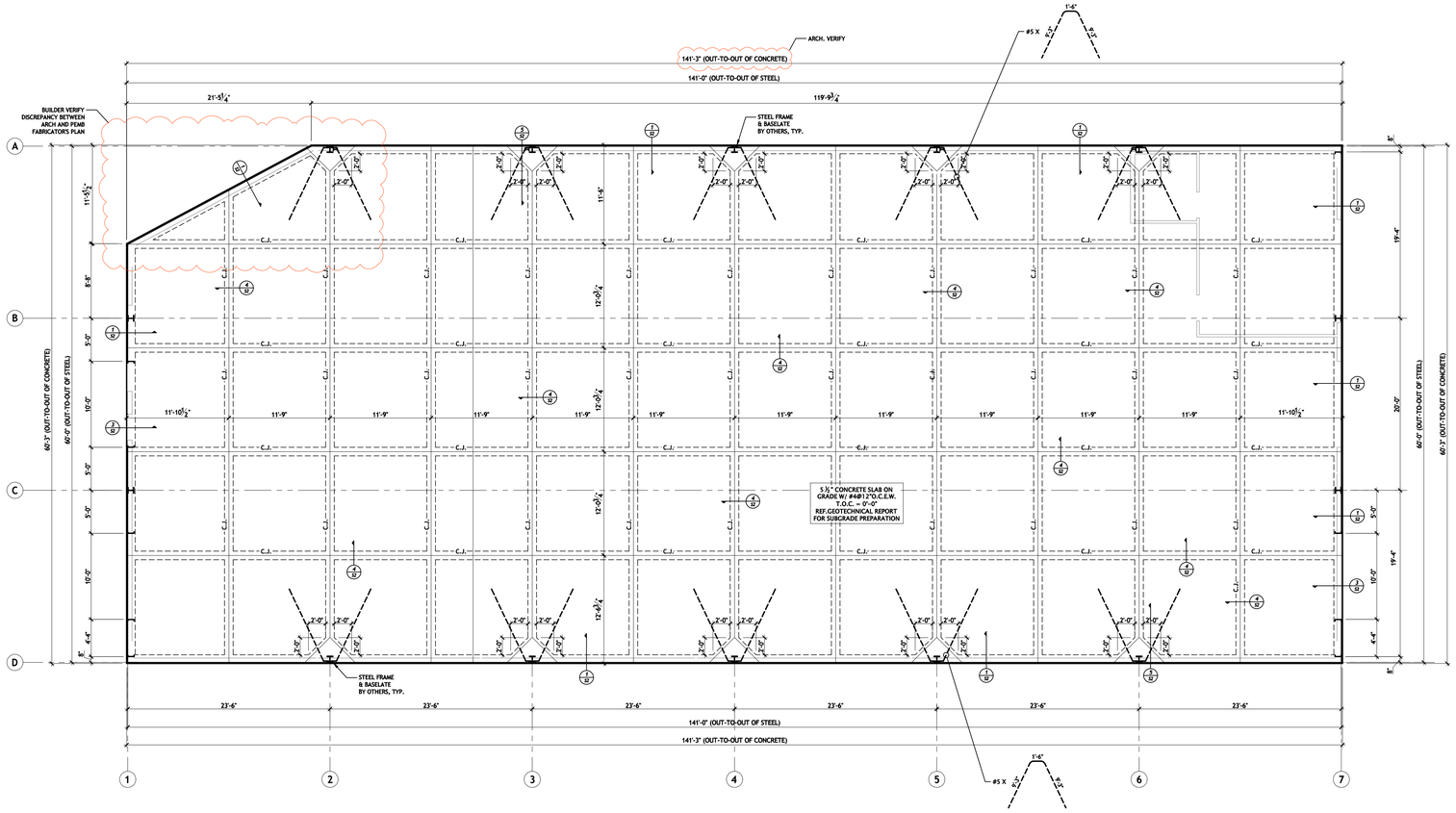
S0.2



BEAM REINF. A
PERIMETER



BEAM REINF. B



SITE PREPARATION NOTES:

1. ALL REQUIREMENTS TO FOLLOW THE REQUIREMENTS OUTLINED IN GEOTECHNICAL REPORT BY SEC SOLUTIONS LLC (REPORT #23192). CONTRACTOR MUST BE FAMILIAR WITH SPECIFIC REQUIREMENTS OF THE REPORT AND IMPLEMENT THEM AS INDICATED IN THE REPORT. ANY QUESTIONS ABOUT THE SITE PREPARATION REQUIREMENTS SHOULD BE DIRECTED TO THE GEOTECHNICAL ENGINEER.
2. REMOVE EXISTING NATURAL CLAYS TO A DEPTH OF 5FT (MIN.) BELOW GRADE. REMOVAL OF MATERIAL SHALL EXTEND 5FT BEYOND BUILDING FOOTPRINT.
3. PROOFROLL EXPOSED SURFACE TO ELIMINATE POTENTIAL SOFTSPOTS. REFER TO GEOTECHNICAL INVESTIGATION FOR ADDITIONAL REQUIREMENTS.
4. SELECT FILL MATERIAL (E.G., ROAD BASE) TO BE PLACED IN 6 TO 8 INCHES LIFTS AND COMPACTED TO 95% OF THE MODIFIED PROCTOR (ASTM D1557).
5. FILL MATERIAL SHALL BE COMPOSED OF CRUSHED LIMESTONE MEETING ALL OF THE REQUIREMENTS OF 2014 TXDOT ITEM 247, TYPE A, GRADE 1 OR 2.
6. CONTRACTOR TO GUARANTEE THAT EXISTING FILL IS FREE OF ORGANICS, TOPSOIL, LARGE BOULDERS OR OTHER DELETERIOUS MATERIALS.
7. CONTRACTOR TO RETAIN A 3RD PARTY COMPANY TO PERFORM QUALITY CONTROL OF THE PLACEMENT AND COMPACTION OF SELECT FILL. RECORDS FOR THE SAMPLING AND TEST RESULTS MUST BE SUBMITTED TO THE GEOTECHNICAL COMPANY AND SEC SOLUTIONS LLC FOR REVIEW AND APPROVAL.

CONTRACTOR TO VERIFY FINAL DIMENSIONS WITH ARCHITECTURE. CONCRETE FORM CONSTRUCTION TO BE SET BY ARCHITECTURAL PLANS/DIMENSIONS ONLY

**PRE-POUR INSPECTION BY SEC REPRESENTATIVE IS REQUIRED.
TO SCHEDULE CONTACT OFFICE@SECTEXAS.COM OR CALL 512-215-4364**

PLAN NOTES

1. FIRST FLOOR TOP OF SLAB ELEVATION 0'-0" (DATUM) UNLESS OTHERWISE NOTED. (REF. CIVIL PLANS FOR FINAL M.S.L.E.)
2. ALL ELEVATIONS SHOWN THUS ARE TO THE TOP OF CONC. ABOVE OR BELOW THE DATUM ELEVATION.
3. CONSTRUCTION/CONTROL JOINT SPACING IN SLAB-ON-GRADE SHALL NOT EXCEED 15'-0" IN ANY DIRECTION. LAYOUT SHOWN ON PLAN IS DIAGRAMMATIC AND A FINAL JOINT LAYOUT PLAN SHALL BE COORDINATED WITH THE ARCHITECT(REF. TYPICAL DETAILS 4 & 5/S0.3)
4. ALL COLUMNS ARE CENTERED ON COLUMN CENTERLINES UNLESS OTHERWISE NOTED.
5. CONTROL SURFACE OR SUB-SURFACE WATER TO ALLOW FOUNDATION WORK TO BE PERFORMED/DONE IN DRY UNDISTURBED CONDITIONS.
6. PIPE SLEEVES FOR UTILITIES ARE TO BE TWO PIPE SIZES LARGER THAN THE PIPE SHOWN ON THE MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS. VERIFY AND COORDINATE WITH THE INDIVIDUAL TRADE CONTRACTOR AS REQUIRED. COORDINATE WITH MEP DRAWINGS FOR REQUIRED LOCATIONS AND INVERT ELEVATIONS.
7. STAKEOUT/LOCATE THE BUILDING REFERENCING THE CIVIL AND ARCHITECTURAL DRAWINGS AND SPECIFICATIONS.
8. COORDINATE ALL DIMENSIONS WITH THE ARCHITECTURAL PLANS AND THE SPECIFIC CONTROL PLAN PREPARED FOR EACH LEVEL AND/OR REFER TO THE ARCHITECTURAL DRAWINGS FOR ADDITIONAL DIMENSIONS NOT SHOWN ON THE STRUCTURAL DRAWINGS. NOTIFY THE ARCHITECT/ENGINEER OF ANY DIMENSIONAL DISCREPANCIES.
9. SIZE AND LOCATION OF ALL FLOOR OPENINGS TO BE COORDINATED WITH ARCHITECTURAL, MECHANICAL, ELECTRICAL & PLUMBING DRAWINGS.

GEOTECHNICAL SUMMARY

1. GEOTECHNICAL REPORT BY: SEC SOLUTIONS LLC
2. PROJECT NUMBER: 23192
3. DESIGN PI: 24
4. ALLOWABLE BEARING CAPACITY: 2,000 PSF (COMPACTED FILL)

DESIGN SUMMARY

1. CONCRETE COMPRESSIVE STRENGTH (28 DAYS): 3000 PSI
2. SLAB THICKNESS: 4 IN
3. INTERIOR BEAM DIMENSIONS: WIDTH:12" DEPTH:30"
4. EXTERIOR BEAM DIMENSIONS: WIDTH: 12" DEPTH: 30" MIN. (PLAN NOTE 4)

FOUNDATION PLAN
SCALE: 1/8"=1'-0"

407 Forrest St
Liberty Hill TX 78642
(512) 215-4364
F-15009
SEC SOLUTIONS

2205 GARDENIA DRIVE
RETAINING WALLS
AUSTIN, TX 78727

COORDINATION DRAWINGS.
NOT FOR CONSTRUCTION
NOT FOR CITY REVIEW

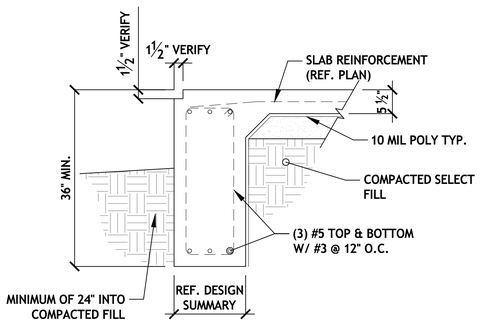
STATE OF TEXAS
MARCOS V. DEQUEIROGA
101049
LICENSED
PROFESSIONAL ENGINEER

NO.	REVISION	DATE
1.	REVIEW SET	09-18-23

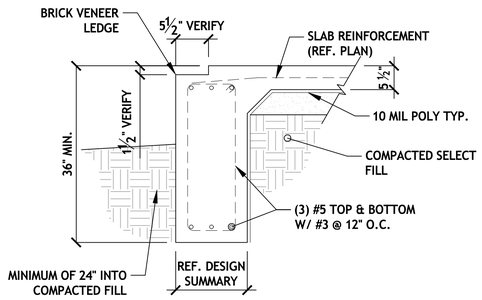
PROJECT: 23192
DATE: 06-28-23
DRAWN BY: RB

SCALE: AS NOTED

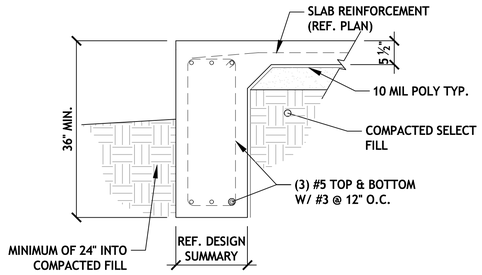
S1



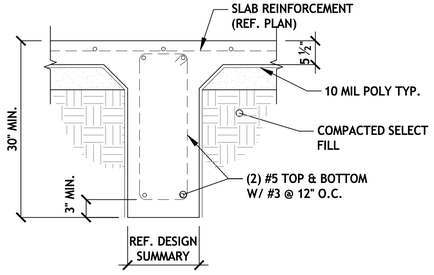
TYPICAL EXTERIOR BEAM 1



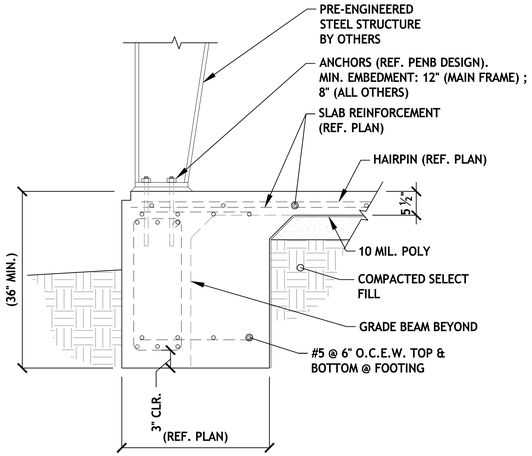
TYPICAL EXTERIOR BEAM 2



TYPICAL EXTERIOR BEAM 3



TYPICAL INTERIOR BEAM 4



FOUNDATION @ MAIN STEEL COLUMN 5

407 Forrest St
Liberty Hill, TX 78642
(512) 215-4364
F-15009

SOLUTIONS

2205 GARDENIA DRIVE
RETAINING WALLS
AUSTIN, TX 78727

COORDINATION DRAWINGS.
NOT FOR CONSTRUCTION
NOT FOR CITY REVIEW

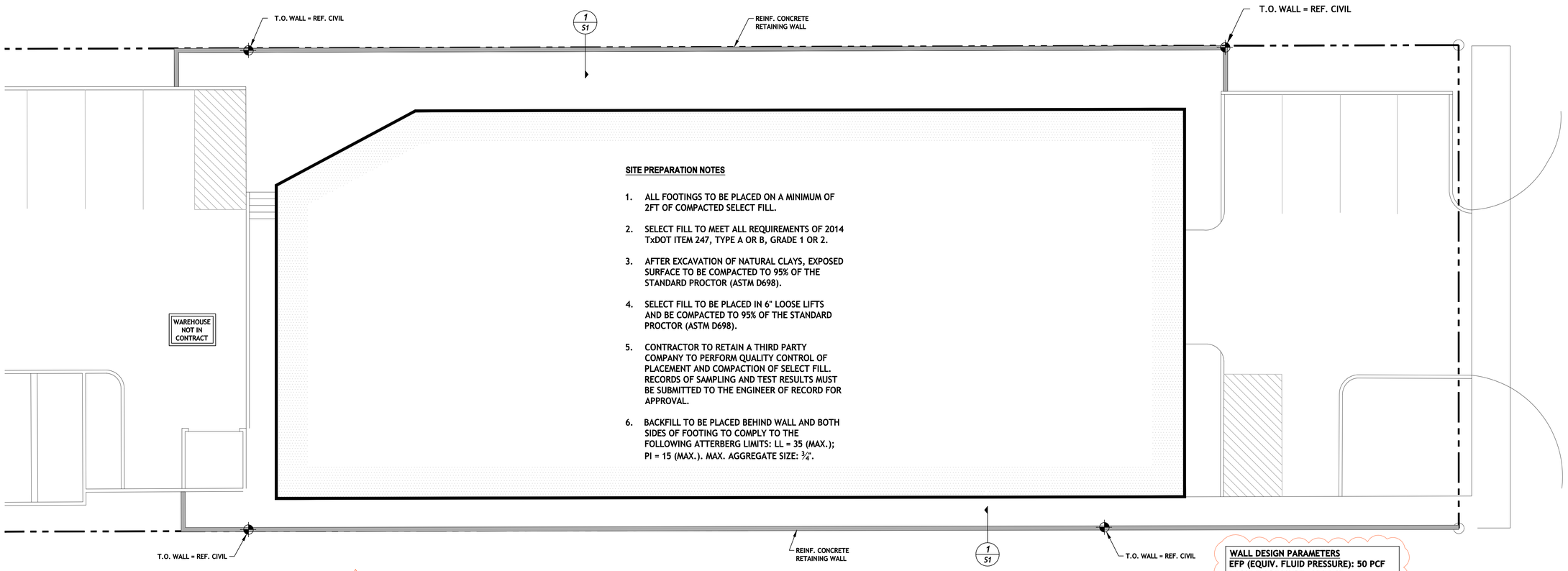
STATE OF TEXAS
MARCOS V. DEQUEIROGA
101049
LICENSED
PROFESSIONAL ENGINEER

NO.	REVISION	DATE
1.	REVIEW SET	09-18-23

PROJECT:	23192
DATE:	06-28-23
DRAWN BY:	RB

SCALE: AS NOTED

S2



WALL DESIGN PARAMETERS
EFP (EQUIV. FLUID PRESSURE): 50 PCF
PASSIVE PRESSURE: 250 PCF
F.S. (BEARING CAPACITY): 2.5
SLIDING:
FRICTION COEFFICIENT: 0.35
F.S. (ALLOWABLE): 1.5
F.S. (CALCULATED): 1.87 (3FT)/ 1.78 (6FT)
OVERTURNING:
F.S. (ALLOWABLE): 1.5
F.S. (CALCULATED): 4.47 (3FT)/ 3.57 (6FT)

STRUCTURAL NOTES

4

FOUNDATION NOTES

CODES AND SPECIFICATIONS

1. 2021 EDITION OF THE INTERNATIONAL BUILDING CODE.
2. ASCE 7-16, MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES.
3. ACI 301-05 SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS AND ACI-318-19 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE.

MATERIALS

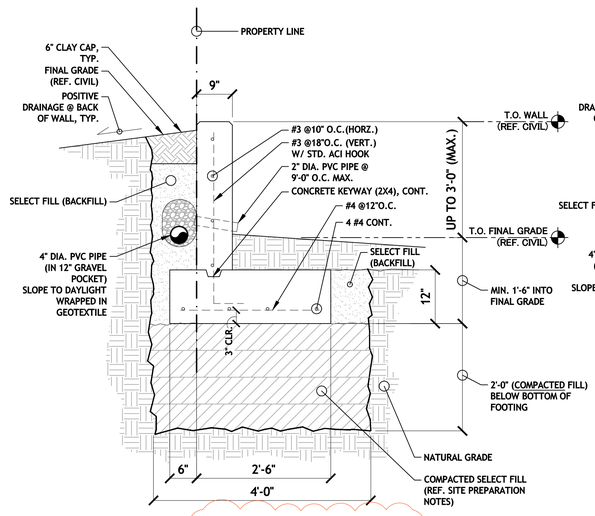
CONCRETE
1. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS OF 3600 PSI
   - 1.1. MINIMUM CEMENT CONTENT: 4 SACKS/C.Y.
   - 1.2. MAXIMUM WATER/CEMENT RATIO: 0.50
   - 1.3. SLUMP RANGE: 5" MIN - 8" MAX.
   - 1.4. MAX. COARSE AGGREGATE SIZE: 3/4"
2. ALL REINFORCING SHALL BE ASTM A-615, GRADE 60
3. STANDARD PROTECTIVE COVER OF REINFORCING BARS UNLESS OTHERWISE NOTED SHALL BE:
   - 3.1. WHERE CAST AGAINS DIRT OR FILL .. . . . . 3"
   - 3.2. EXPOSED TO EARTH OR WATER . . . . 2"
   - 3.3. SLABS AND WALLS (EXTERIOR) . . . . 2"

FOUNDATION CONSTRUCTION

1. DRAINAGE AROUND THE PERIMETER OF THE RETAINING WALL SHALL BE DONE PER IBC SUCH THAT NO WATER SHALL COLLECT UNDER OR ADJACENT TO THE WALL.
2. HEAVY VEGETATION SUCH AS TREES WITHIN 20 FT. OF RETAINING WALL MAY CAUSE EXCESSIVE WATER REMOVAL AND DAMAGE FOUNDATION.
3. FOR FIELD CONDITIONS NOT EXPLICITLY COVERED BY PLANS AND DETAILS, CONTACT ENGINEER OF RECORD.
4. REPORT ALL CONFLICTS TO THE ENGINEER OF RECORD.
5. PRE-POUR INSPECTIONS BY ENGINEER OF RECORD ARE REQUIRED.

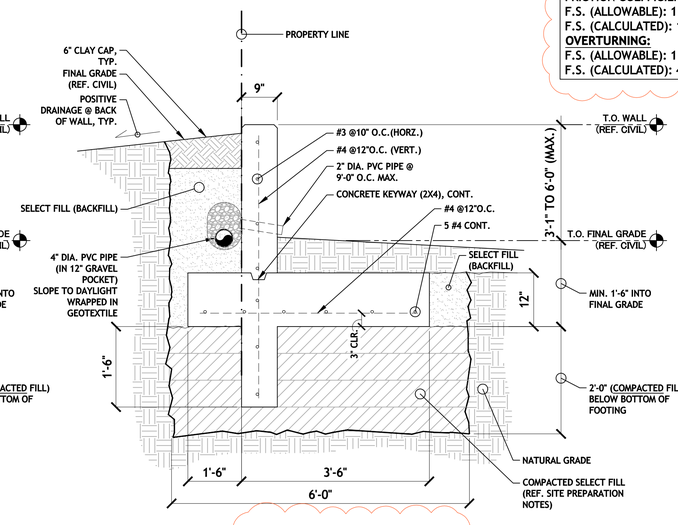
WALL MAINTENANCE NOTES

1. THE MAINTENANCE OF AND EVENTUAL REPAIRS TO THE RETAINING WALL(S) ARE THE RESPONSIBILITY OF THE OWNER.
2. CONDITION ASSESSMENT: THE RETAINING WALL MUST BE PERIODICALLY INSPECTED TO VERIFY THAT DRAINAGE MEASURES ARE FUNCTIONING PROPERLY, EROSION HAS NOT OCCURRED ALONG THE TOP, ENDS, OR BOTTOM OF THE WALL AND FOOTING AND IF ANY UNANTICIPATED MOVEMENT OR DEFLECTION OF THE WALL HAS OCCURED. RESULTS SHALL BE ASSESSES BY A QUALIFIED DESIGN PROFESSIONAL.
3. RETAINING WALL SHOULD BE INSPECTED AT PERIODIC INTERVALS. A MINIMUM OF ONE CONDITION ASSESSMENT EVERY 3 YEARS IS REQUIRED.
4. THE CONDITION ASSESSMENT SHALL BE CONDUCTED ON BEHALF OF THE OWNER BY OR UNDER THE DIRECT SUPERVISION OF A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF TEXAS.



DETAIL 1

4



DETAIL 2

4

CONTRACTOR TO VERIFY FINAL DIMENSIONS WITH ARCHITECTURE. CONCRETE FORM CONSTRUCTION TO BE SET BY ARCHITECTURAL PLANS/DIMENSIONS ONLY

PRE-POUR NSPECTION BY SEC REPRESENTATIVE IS REQUIRED. TO SCHEDULE CONTACT OFFICE@SECTEXAS.COM OR CALL 512-215-4364

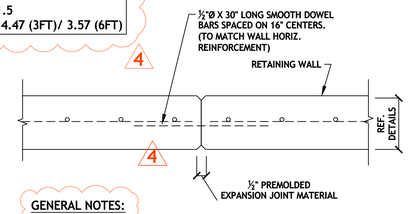
PLAN NOTES

1. CONCRETE CONTRACTOR MUST VERIFY ALL DIMENSIONS AND COORDINATE STRUCTURAL PLANS AND DETAILS WITH CIVIL DRAWINGS BEFORE CONCRETE WORK.
2. THE ENGINEER OF RECORD SHALL BE NOTIFIED OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.

4

DESIGN SUMMARY
1. CONCRETE COMPRESSIVE STRENGTH (28 DAYS): 3600 PSI

GEOTECHNICAL SUMMARY
1. GEOTECHNICAL REPORT BY: SEC SOLUTIONS LLC
2. PROJECT NUMBER: 23192
3. DESIGN PI: 60
4. ALLOWABLE BEARING CAPACITY: 1,500 PSF (COMPACTED FILL)



4

GENERAL NOTES:

1. ALL EXPOSED EDGES SHALL HAVE A 3/4" INCH CHAMFER.
2. ALL DISTANCES TO REINFORCING BARS REFER TO CLEAR CONCRETE COVER OF BAR USELESS NOTED OTHERWISE.
3. MINIMUM BAR LAP IS TO BE FORTY (40) BAR DIAMETERS.
4. MINIMUM GRADE OF REINFORCING STEEL IS TO BE ASTM A615 GRADE 60.
5. MAXIMUM SPACING OF EXPANSION JOINTS SHALL BE 20'-0" CENTER TO CENTER.
6. IT IS THE RESPONSIBILITY OF THE OWNER TO PROVIDE ROUTINE MAINTENANCE OF RETAINING WALLS AND ASSOCIATED WALL DRAINAGE SYSTEMS.

EXPANSION JOINT DETAIL

@ 20FT CENTERS, MAX.

3

SITE PLAN

SCALE: 1/8"=1'-0"

407 Forrest St.
Liberty Hill TX 78642
(512) 215-4364
F-15009
SEC SOLUTIONS

2205 GARDENIA DRIVE
RETAINING WALLS
AUSTIN, TX 78727

STATE OF TEXAS
MARCOS V. DEQUEIROGA
101049
LICENSED
PROFESSIONAL ENGINEER

NO.	REVISION	DATE
1.	REVIEW SET	08-07-23
2.	REVISION 2	08-21-23
3.	REVISION 3	08-23-23
4.	CLIENT COMMENTS 4	09-11-23

PROJECT: 23192
DATE: 06-28-23
DRAWN BY: RB

SCALE: AS NOTED

S1