Addendum #12

East Lake Community Center Renovations

CONTRACT NO. Y-17-005

Bid schedule per Addendum #11

Pre-Bid Meeting	January 9th, 2020 at 10:00am
Pre-bid Meeting #2	February 18th, 2020 at 10:00am
Last Day for Questions	March 6th, 2020
Bid Opening	March 12th, 2020 at 2:00 pm

Attachments:

1. Compiled Plan Set- all drawing changes made in previous addendums have been compiled into one plan set. This set is for reference only. Bidders are still required to purchase a set of plans from the City of Chattanooga Purchasing Department.

END OF ADDENDUM #10

CITY OF CHATTANOOGA, TENNESSEE
CONTRACT #Y-17-005-101
EAST LAKE YFD CENTER IMPROVEMENTS

RICHARD THOMPSON 12-20-2019
ARCHITECT
STATE LICENSE NO. 17840

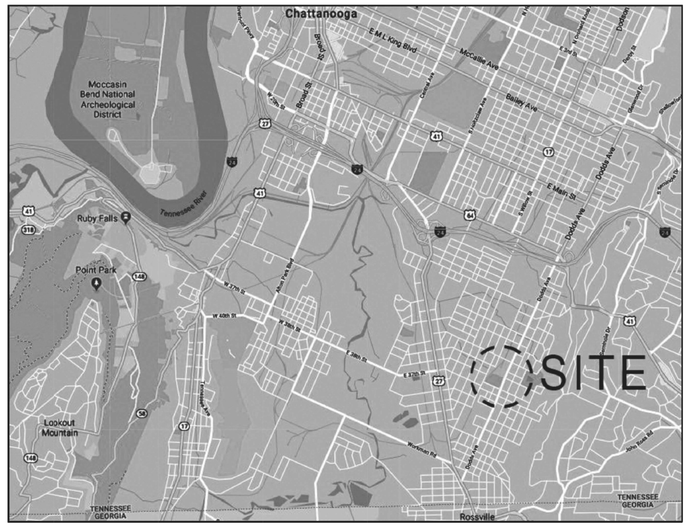
APPROVED FOR RELEASE 12-20-2019
WILLIAM C. PAYNE, PE
CITY ENGINEER

CHARLES WINKLER 12-20-2019
ELECTRICAL ENGINEER
STATE LICENSE NO. 104601

JEFF WESTBROOK 12-20-2019
MECHANICAL, PLUMBING, FIRE
PROTECTION ENGINEER
STATE LICENSE NO. 110599

VALENTINO BATES 12-20-2019
STRUCTURAL ENGINEER
STATE LICENSE NO. 00101888

JOE B. HUTCHERSON 12-20-2019
CIVIL ENGINEER
STATE LICENSE NO. 13152



LOCATION MAP

MAYOR

ANDY BERKE

CITY COUNCIL

DISTRICT 1 - CHIP HENDERSON - VICE CHAIR
DISTRICT 2 - JERRY MITCHELL
DISTRICT 3 - KEN SMITH, CHAIR
DISTRICT 4 - DARRIN LEDFORD
DISTRICT 5 - RUSSELL GILBERT, SR.
DISTRICT 6 - DR. CAROL B. BERZ
DISTRICT 7 - ERSKINE OGLESBY, JR. -CHAIR
DISTRICT 8 - ANTHONY BYRD
DISTRICT 9 - DEMETRUS COONROD

DEPARTMENT OF PUBLIC WORKS

JUSTIN C. HOLLAND, ADMINISTRATOR

East Lake YFD Center Improvements

3610 Dodds Avenue,
Chattanooga, TN 37402

INDEX OF DRAWINGS

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T1.2	BUILDING CODE SUMMARY	X		X							
T1.3	LIFE SAFETY PLAN	X									
T1.4	ADA COMPLIANCE STANDARDS	X									
T1.5	ADA COMPLIANCE STANDARDS	X									
CIVIL											
C0.1	GENERAL NOTES	X									
C1.1	SITE STAKING PLAN	X				X					
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A3.1	BUILDING SECTIONS	X		X							
A3.2	EXTERIOR WALL SECTIONS	X		X							
A3.3	EXTERIOR WALL SECTIONS	X		X							
A3.4	EXTERIOR WALL SECTIONS	X		X							
A4.1	ROOF PLAN	X		X							
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S0.0	GENERAL NOTES 1	X									
S0.1	GENERAL NOTES 2	X									
S1.0	FOUNDATION PLAN	X									
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S2.0	SECTIONS 1	X									
S2.1	SECTIONS			X							
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M8.1	MECHANICAL SCHEDULES & NOTES	X								X	
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PLUMBING											
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E0.1	ELECTRICAL SYMBOLS	X		X					X		
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E2.1	LIGHTING CONTROLS			X							
E3.0	POWER PLAN FLOOR	X		X							
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E3.3	PANEL SCHEDULES	X		X				4			
E4.0	FIRE ALARM PLAN	X							X		
E5.0	AUXILIARY PLAN	X		X							
E5.1	SOUND DIAGRAMS			X		X					
E5.2	SOUND RACK DETAILS			X		X					

1 2 3 4 5

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WWW.ARTECH.PRO

East Lake YFD Center Improvements

3610 Dodds Avenue, Chattanooga, TN 37402

RICHARD A. THOMPSON
REGISTERED ARCHITECT
No. 17840
STATE OF TENNESSEE

ISSUE DATES

	INITIAL ISSUE	12-20-19
1	Addendum 4	01/10/2020
2	Addendum 6	01/14/2020
3	Addendum 8	01/21/2020
4	Addendum 9	01/22/2020
5	Addendum 10	01/24/2020

JOB NO.	D'WN	CK'D
18-072	Author	Checker

T1.1

TITLE SHEET

ARTECH

KHAFRA

MA&A

CITY OF CHATTANOOGA CORPORATION SEAL TENNESSEE

GENERAL NOTES

1. WHERE A DETAIL IS SHOWN OR NOTE IS DESCRIBED FOR ONE CONDITION IT SHALL APPLY FOR ALL LIKE OR SIMILAR CONDITIONS EVEN THOUGH NOT SPECIFICALLY MARKED ON THE DRAWINGS

2. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND LOCATIONS AFFECTING THIS PROJECT PRIOR TO FABRICATION OR INSTALLATION OF NEW WORK. NOTIFY ARCHITECT OF ANY DISCREPANCIES FROM DIMENSIONS SHOWN, NOTED OR REQUIRED. ADJUST DIMENSIONS OF NEW CONSTRUCTION AT DIRECTION OF ARCHITECT TO ALLOW FOR ACTUAL FIELD DIMENSIONS. 1

3. PROVIDE OPENINGS WITH LINTELS OR HEADERS IN WALLS/PARTITIONS AS REQUIRED FOR MECHANICAL, ELECTRICAL AND PLUMBING WORK.

4. PROVIDE WOOD BLOCKING AS REQUIRED IN WALLS FOR ALL WALL MOUNTED CASEWORK, SHELVES, EQUIPMENT, ACCESSORIES, AND AS INDICATED FOR INSTALLATION OF EQUIPMENT BY OTHERS.

5. WOOD BLOCKING AND/OR NAILERS ARE GENERALLY SHOWN IN A GENERIC FASHION - CONTRACTOR MUST COORDINATE EXACT BLOCKING REQUIREMENTS WITH COMPONENT MANUFACTURER'S SUGGESTIONS OR STANDARDS, AND WITH OTHER TRADES.

SYMBOLS

1 View Name
SCALE:1/8" = 1'-0"
TITLE SYMBOL

SIM
1
AX.X
SECTION SYMBOL
SECTION #X
SHEET #AX.X

SIM
1
AX.X
DETAIL SYMBOL
DETAIL #X
SHEET #AX.X

SIM
1
AX.X
ENLARGED DETAIL SYMBOL
DETAIL #X
SHEET #AX.X

AX.X XX
INTERIOR ELEVATION SYMBOL
ELEVATION #XX
SHEET #AX.X

XX
AX.X
EXTERIOR ELEVATION SYMBOL
ELEVATION #XX
SHEET #AX.X

Room Name
XX
INTERIOR ROOM SYMBOL
ROOM #XXX

XX
DOOR SYMBOL
DOOR #XXX

XX
STOREFRONT SYMBOL
SEE STOREFRONT SCHEDULE

1i
WALL TYPES SYMBOL
SEE WALL/PARTITION LEGEND

+XX'
1
FINISH ELEVATION SYMBOL
ELEVATION NUMBER

REVISION SYMBOL

CONTACT LIST

OWNER:
CITY OF CHATTANOOGA DEPTARTMENT OF PUBLIC WORKS
ENGINEERING DIVISION
Suite 2100, Development Resource Center
1250 Market Street
Chattanooga, TN 37402
CONTACT: CLAY OLIVER P:(423) 643-6161
EMAIL: moliver@chattanooga.gov

ARCHITECT:
ARTECH DESIGN GROUP
1410 COWART STREET CHATTANOOGA, TN 37408
CONTACT: MARK WYNNEMER P:(423) 643-0617
EMAIL: markw@artech.pro

ENGINEERS:
STRUCTURAL & ELECTRICAL
KHAFRA
225 Peachtree Street, NE
Suite 1600
Atlanta, GA 30303
CONTACT: DIETRICH BANKHEAD P:(404) 525-2120
EMAIL: dbankhead@khafra.com

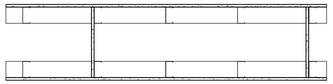
CIVIL, MECHANICAL, PLUMBING, FIRE PROTECTION
MARCH ADAMS & ASSOCIATES, INC.
P.O. Box 3689
310 Dodds Avenue
Chattanooga, TN 37404
CONTACT: JEFF WESTBROOK P:(423) 664-1470
EMAIL: jeff.westbrook@marchadams.com

WALL LEGEND

WALL/PARTITION NOTES:

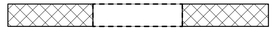
1. REFER TO WALL SECTIONS FOR CONSTRUCTION OF EXTERIOR WALLS.
2. SPECIAL CONDITIONS AND SPECIAL PARTITIONS ARE INDICATED ON PLANS AND DETAILS.
3. WALLS SHOWN WITH MORE THAN ONE INDICATOR SHALL CONTAIN ALL COMPONENTS OF THE WALL TYPES INDICATED.
4. ALL INTERIOR STUD SPACING TO BE 16" O.C. UNLESS NOTED OTHERWISE.
5. ALL INTERIOR METAL STUD WALLS TO BE 20 GAUGE UNLESS NOTED OTHERWISE.
6. PROVIDE SOLID WOOD BLOCKING IN WALLS AT ALL TOILET ACCESSORY, DOOR STOP AND TOILET PARTITION LOCATIONS, AS REQUIRED.

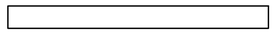
PARTITION LEGEND:

1		3-5/8" METAL STUDS @ 16" O.C. W/ 5/8" GYPSUM WALLBOARD EACH SIDE.
1A		6" METAL STUDS @ 16" O.C. W/ 5/8" GYPSUM WALLBOARD EACH SIDE.
1B		3-5/8" METAL STUDS @ 16" O.C. W/ 5/8" GYPSUM WALLBOARD EACH SIDE. 3-5/8" FIBERGLASS SOUND ATTENUATING BATTS IN ALL STUD CAVITIES
2		2-1/2" METAL STUD FURRING WITH 5/8" GYPSUM WALLBOARD ONE SIDE.
3		CMU (NOMINAL 8" x 8" x 16") IN RUNNING BOND PATTERN. REFER TO STRUCTURAL DRAWINGS FOR REINFORCMENT.
4		DOUBLE STUDDED WALL W/ 3-5/8" METAL STUDS @ 16" O.C. & 5/8" GLASS-MAT FACED GYPSUM WALLBOARD ON 2 OUTER FACES. GYPSUM WALLBOARD CROSS BRACE EVERY 48" O.C. LOCATED AT MID-HEIGHT OF PARTITION

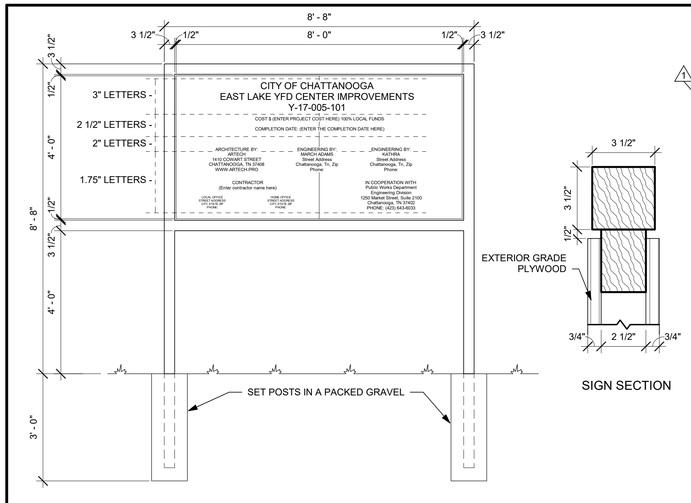
CONSTRUCTION ELEMENT LEGEND:


EXISTING CONSTRUCTION TO REMAIN.


EXISTING CONSTRUCTION TO BE REMOVED.


NEW CONSTRUCTION.

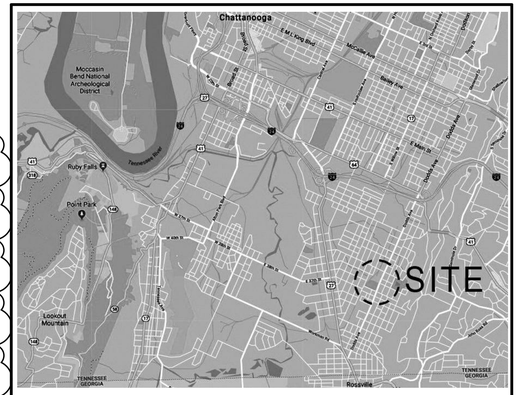
PROJECT SIGN



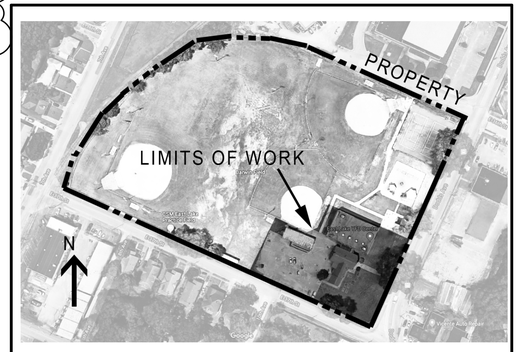
SIGN SECTION

PROJECT SIGN NOTES
1. THE CONTRACTOR SHALL ERECT TWO SIGNS AT LOCATIONS DESIGNATED BY THE CITY ENGINEER, AND SHALL BE MAINTAINED IN GOOD CONDITION UNTIL COMPLETION OF THE PROJECT.
2. ALL FRAME MATERIALS TO BE EXTERIOR GRADE.
3. FRAME, TRIM AND LETTERS SHALL BE DARK BLUE. SIGN BACKGROUND SHALL BE WHITE.
4. CONTRACTOR SHALL SUBMIT SIGN LAYOUT FOR APPROVAL PRIOR TO FABRICATION.

VICINITY MAP



KEY PLAN



ENERGY

THERMAL ENERGY SYNOPSIS

CONSTRUCTION ELEMENT		PROVIDED VALUE	ASSEMBLY DESCRIPTION
ROOFS (@ EXISTING BUILDING)		R-25ci	TAPERED RIGID INSULATION ON METAL DECK
ROOFS (METAL BUILDING)		R-19 +R-11LS	STANDARD PEMB INSULATED ROOF SYSTEM W/ R-5 THERMAL BLOCKS & INSULATED LINER SYSTEM
EXTERIOR WALLS, ABOVE GRADE	OTHER	R-13 + R-3.8 C1 OR R-20	RIGID INSULATION ON CMU W/ UNGROUTED CORES HAVING MAX. THERMAL CONDUCTIVITY OF 0.44 Btuh - in/h - F - F
FLOORS		-	
SLAB ON GRADE FLOORS		0	
OPAQUE DOORS (SWINGING)		U-0.61	INSULATED HOLLOW METAL
FENESTRATION U FACTOR/ SHGC	STOREFRONT	U-0.38/0.40	
	ENTRY DOORS	U-0.77/0.40	
	WINDOWS	U-0.38/0.40	

THERMAL ENVELOPE NOTES:

1. THERMAL ENVELOPE AND ENERGY EFFICIENCY ELEMENTS SHALL MEET THE REQUIREMENTS OF THE INTERNATIONAL ENERGY CONSERVATION CODE (IECC) - 2009

2. CLIMATE ZONE FOR THIS PROJECT AS DETERMINED IN IECC CHAPTER 3 IS ZONE **4.**

3. THE ASSEMBLIES LISTED ABOVE COMPLY WITH THE IECC REQUIREMENTS UNDER ONE OR MORE OF THE FOLLOWING METHODS, AS KEYED BY LETTER. NOT ALL METHODS WILL APPLY TO THIS PROJECT:

A. TABLE 502.2(1) BUILDING ENVELOPE REQUIREMENTS - OPAQUE ASSEMBLIES.
B. TABLE 502.3 BUILDING ENVELOPE REQUIREMENTS: FENESTRATION (MAXIMUM U VALUE)
C. TABLE 502.1.2 BUILDING ENVELOPE REQUIREMENTS OPAQUE ELEMENT, MAX U FACTOR.
D. COMPLIANCE USING ASHRAE/IESNA 90.1 PER SECTION 501 OF IECC

LEGEND: NR - NO REQUIREMENT NA - NOT APPLICABLE CI - CONTINUOUS INSULATION

CODE SUMMARY

PROJECT INFORMATION		
NAME OF PROJECT:	EAST LAKE YFD CENTER IMPROVEMENTS	
ADDRESS:	3610 DODDS AVENUE, CHATTANOOGA, TN 37402	
PROPOSED USE:	COMMUNITY CENTER	
OWNER/CONTACT PERSON:	CLAY OLIVER	PHONE: (423) 643-6161
CODE ENFORCEMENT JURISDICTION:	CHATTANOOGA	

APPLICABLE CODES	
ARCHITECTURAL:	IBC 2012
ELECTRICAL:	NEC 2017
PLUMBING:	IPC 2012
MECHANICAL:	IMC 2012
LIFE SAFETY:	IBC 2012
GAS:	IFGC 2012
ENERGY:	IECC 2009
ACCESSIBILITY:	ANSIICC A117.1 2009

DESIGNER OF RECORD			
DESIGNER	NAME	LICENSE #	TELEPHONE #
ARCHITECTURAL:	RICHARD THOMPSON	17840	(423) 265-4313
ELECTRICAL:	CHARLES WINKLER	104601	(404) 525-2120
PLUMBING:	JEFF WESTBROOK	110599	(423) 698-6675
MECHANICAL:	JEFF WESTBROOK	110599	(423) 698-6675
STRUCTURAL:	VALENTINO BATES	00101888	(404) 525-2120
CIVIL:	JOE B. HUTCHERSON	13152	(423) 698-6675

BUILDING DATA			
OCCUPANCY TYPE:	ASSEMBLY GROUP A-3		
MIXED OCCUPANCY:	NO	SEPARATION: NONE	
CONSTRUCTION TYPE:	V-B	MIXED CONSTRUCTION: NO	
SPRINKLED:	YES	NFPA-13	
FIRE DISTRICT:	YES		
BUILDING HEIGHT:	28 FEET	NUMBER OF STORIES: ONE	
MEZZANINE:	NO		
HIGH RISE:	NO		
GROSS BUILDING AREA:	16,212 S.F.		
TOTAL GROSS AREA:	16,212 S.F.		
AREA INCREASE:	YES	AREA INCREASE FOR SPRINKLER: 506.3 UNLIMITED AREA WITH 60FT. CLEAR ALL SIDES: 507.0	

FIRE RESISTANCE RATINGS

	REQUIRED HOURLY	DETAIL # & SHEET #	% WALL OPENING	DESIGN # FOR RATED ASSEMBLIES
PARTY/FIRE WALLS:	NA	NA	NA	NA
EXTERIOR BEARING WALLS:				
NORTH	NA	NA	NA	NA
EAST	NA	NA	NA	NA
WEST	NA	NA	NA	NA
SOUTH	NA	NA	NA	NA
EXTERIOR NON-BEARING WALLS:				
NORTH	NA	NA	NA	NA
EAST	NA	NA	NA	NA
WEST	NA	NA	NA	NA
SOUTH	NA	NA	NA	NA
INTERIOR WALLS:				
BEARING	NA	NA	NA	NA
NON-BEARING	NA	NA	NA	NA
CEILING-FLOORS ASSEMBLY:	NA	NA	NA	NA
BEAMS:	NA	NA	NA	NA
COLUMNS:	NA	NA	NA	NA
CEILING-ROOF ASSEMBLY:	NA	NA	NA	NA
VERTICAL SHAFTS:	NA	NA	NA	NA
CHASES - P.E.M.:	NA	NA	NA	NA
MIXED OCCUPANCY SEPARATION:	NA	NA	NA	NA
TENANT SEPARATION:	NA	NA	NA	NA

LIFE SAFETY SYSTEMS	
EMERGENCY LIGHTING AND EXIT SIGNS:	YES
FIRE ALARM AND SMOKE DETECTOR SYSTEMS:	YES
PANIC HARDWARE:	YES

EXIT REQUIREMENTS	
DEAD END LIMIT-MAXIMUM CONDITION:	20 FEET
TRAVEL DISTANCE TO EXIT - MAXIMUM CONDITION:	250 FEET

NOTE: SEE LIFE SAFETY PLAN ON SHEET T1.3

TOTAL FIXTURE SUMMARY

TOTAL OCCUPANT LOAD: 972

FIXTURES - MALE & FEMALE	REQUIRED	PROVIDED
LAVATORIES	6	8
WATER CLOSETS	12	10 WC + 2 URINALS

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East Lake YFD Center Improvements

3610 Dodds Avenue, Chattanooga, TN 37402

ISSUE DATES
INITIAL ISSUE 12-20-19
1 Addendum 4 01/10/2020

JOB NO. 18-072 | D'WN Author | CK'D Checker

T1.2
BUILDING CODE SUMMARY

ARTECH
1410 COWART STREET
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East Lake YFD Center Improvements

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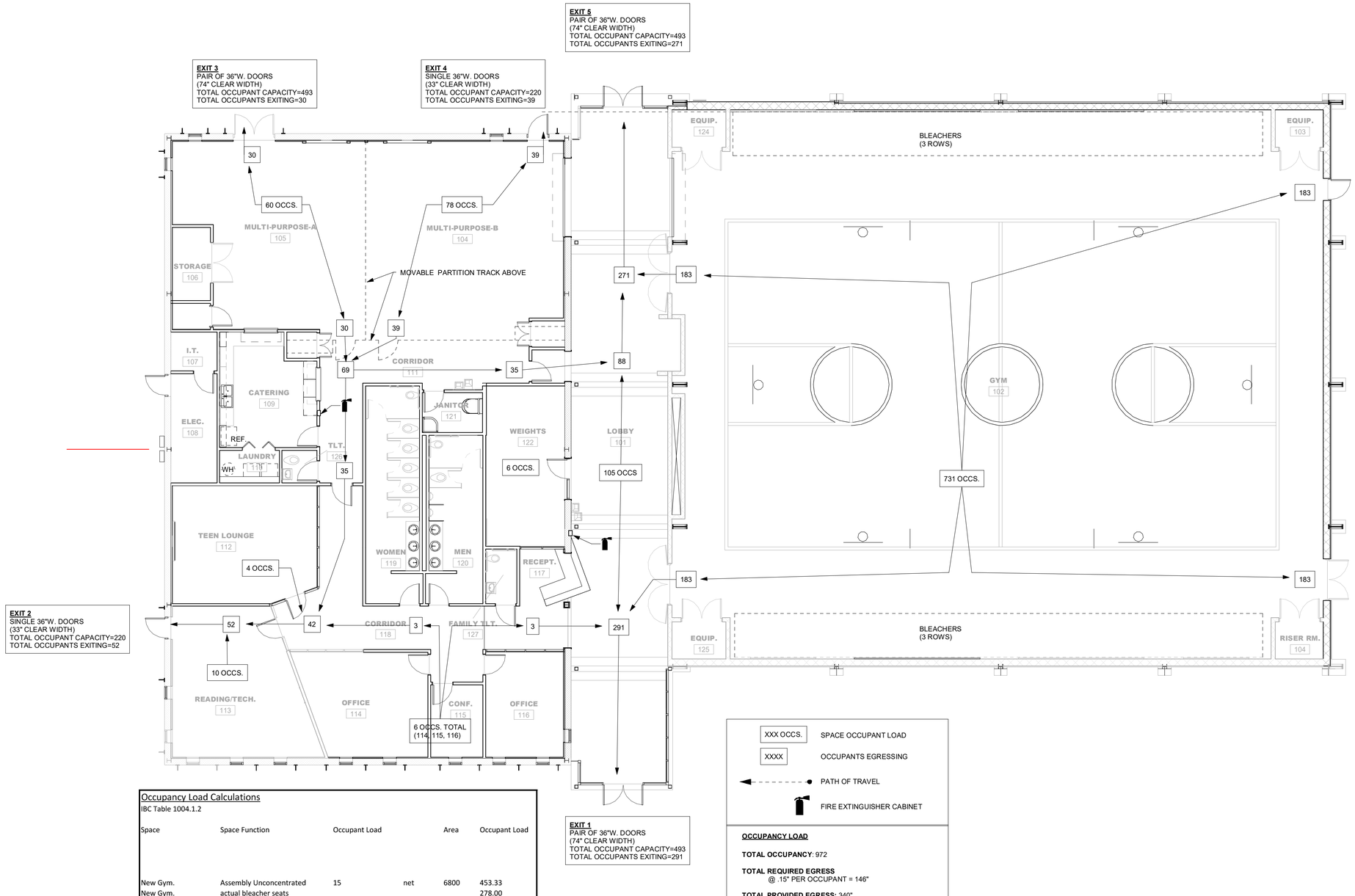

Occupancy Load Calculations

IBC Table 1004.1.2

Space	Space Function	Occupant Load		Area	Occupant Load
New Gym.	Assembly Unconcentrated	15	net	6800	453.33
New Gym.	actual bleacher seats				278.00
Multi-Purpose	Assembly Unconcentrated	15	net	1640	109.33
Lobby	Assembly Unconcentrated	15	net	1570	104.67
Weights	Exercise	50	gross	297	5.94
Kitchen	Business	100	gross	267	2.67
storage	Accessory	300	gross	272	0.91
Offices	Business	100	gross	573	5.73
Teen Lounge	Business	100	gross	392	3.92
elec/IT	Accessory	300	gross	117	0.39
Janitor	Accessory	300	gross	72	0.24
Tech/Reading	Reading/Library	50	net	336	6.72
total occupants					971.85

XXX OCCS. SPACE OCCUPANT LOAD

XXXX OCCUPANTS EGRESSING

PATH OF TRAVEL

FIRE EXTINGUISHER CABINET

OCCUPANCY LOAD

TOTAL OCCUPANCY: 972

TOTAL REQUIRED EGRESS
@ .15" PER OCCUPANT = 146"

TOTAL PROVIDED EGRESS: 340"

FIRE EXTINGUISHERS

FIRE EXTINGUISHERS TO BE 2A:10B:C MIN.

NOTE: LOCATE AS NOTED - TRAVEL DISTANCE NOT TO EXCEED 75 FT - ALL FIRE EXTINGUISHER CABINETS (F.E.C.) TO BE SEMI-RECESSED TYPE

LIFE SAFETY LEGEND

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

1 1ST FLOOR LIFE SAFETY PLAN

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

RICHARD D. THOMPSON
REGISTERED ARCHITECT
No. 17840
STATE OF TENNESSEE

ISSUE DATES
INITIAL ISSUE 12-20-19

JOB NO. 18-072 | D'WN Author | CK'D Checker

T1.3

LIFE SAFETY PLAN

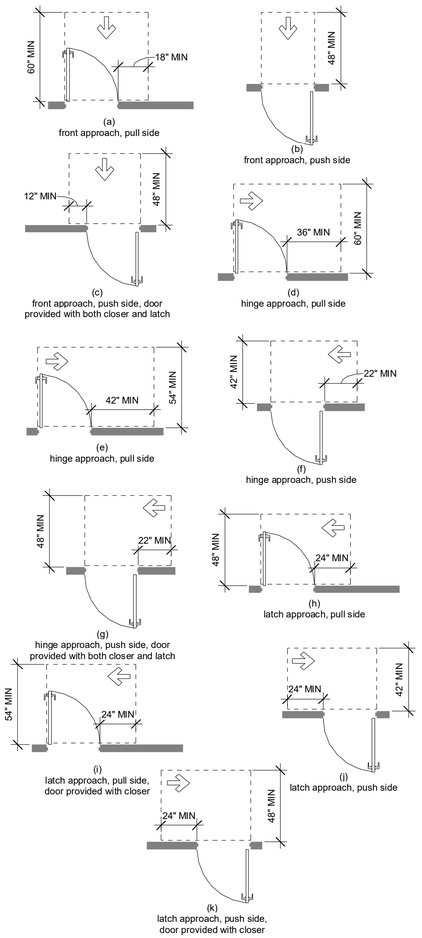

Figure 404.2.4.1 Maneuvering Clearances at Manual Swinging Doors and Gates

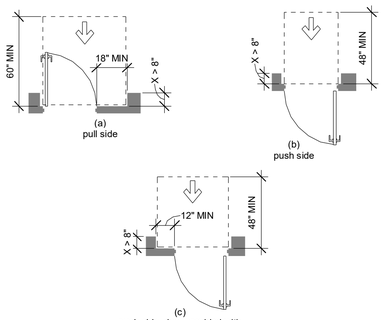

Figure 404.2.4.3 Maneuvering Clearances at Recessed Doors and Gates

Type of Use		Minimum Maneuvering Clearance	
Approach Direction	Door or Gate Side	Perpendicular to Doorway	Parallel to Doorway (Beyond latch side unless noted)
From front	Pull	60 inches	18 inches
From front	Push	48 inches	0 inches[1]
From hinge side	Pull	60 inches	36 inches
From hinge side	Pull	54 inches	42 inches
Fom hinge side	Push	42 inches[2]	22 inches[3]
From latch side	Pull	48 inches[4]	24 inches
From latch side	Push	42 inches[4]	24 inches

1. Add 12 inches if closer and latch are provided.
2. Add 6 inches if closer and latch are provided.
3. Beyond hinge side.
4. Add 6 inches if closer is provided.

404.2.4 Maneuvering Clearances. Minimum maneuvering clearances at doors and gates shall comply with 404.2.4. Maneuvering clearances shall extend the full width of the doorway and the required latch side or hinge side clearance.

EXCEPTION: Entry doors to hospitals patient rooms shall not be required to provide the clearance beyond the latch side of the door.

404.2.4.1 Swinging Doors and Gates. swinging doors and gates shall have maneuvering clearance complying with Table 404.2.4.1.

404.2.4.3 Recessed Doors and Gates. Maneuvering clearances for forward approach shall be provided when any obstruction within 18 inches (455 mm) of the latch side of a doorway projects more than 8 inches (205 mm) beyond the face of the door, measured perpendicular to the face of the door or gate.

Advisory 404.2.4.3 Recessed Doors and Gates. A door can be recessed due to wall thickness or because of the placement of casework and other fixed elements adjacent to the doorway. This provision must be applied wherever doors are recessed.

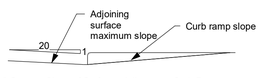

Figure 406.2 Counter Slope of Surfaces Adjacent to Curb Ramps

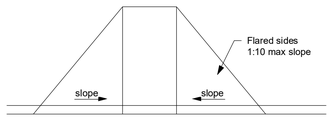

Figure 406.3 Sides of Curb Ramps

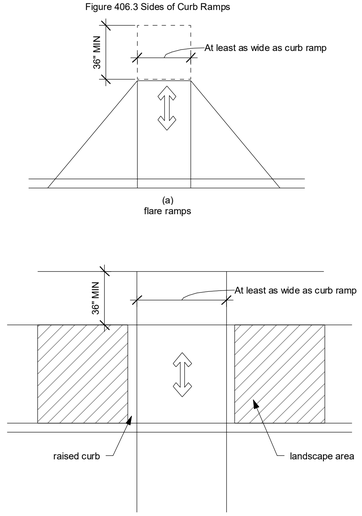

Figure 406.4 Landings at the Top of Curb Ramps

406 Curb Ramps

406.1 General. Curb ramps on accessible routes shall comply with 406, 405.2 through 405.5, and 405.10.

406.2 Counter Slope. Counter slopes of adjoining gutters and road surfaces immediately adjacent to the curb ramp shall not be steeper than 1:20. The adjacent surfaces at transitions at curb ramps to walks, gutters, and streets shall be at the same level.

406.3 Sides of Curb Ramps. Where provided, curb ramp flares shall not be steeper than 1:10.

406.4 Landings. Landings shall be provided at the tops of curb ramps. The landing clear length shall be 36 inches (915 mm) minimum. The landing clear width shall be at least as wide as the curb ramp, excluding flared sides, leading to the landing.

406.5 Location. Curb ramps and the flared sides of curb ramps shall be located so that they do not project into vehicular traffic lanes, parking spaces, or parking access aisles. Curb ramps at marked crossings shall be wholly contained within the markings, excluding any flared sides.

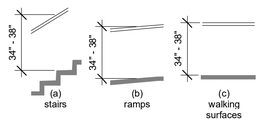

Figure 505.4 Handrail Height

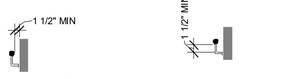

Figure 505.5 Handrail Clearance

Figure 505.6 Horizontal Projections Below Gripping Surface

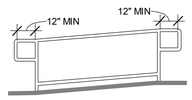

Figure 505.10.1 Top and Bottom Handrail Extension at Ramps

Figure 505.10.2
Top Handrail Extension at Stairs

Note: X = tread depth

Figure 505.10.3
Bottom Handrail Extension at Stairs

505 Handrails

505.1 General. Handrails provided along walking surfaces complying with 403, required at ramps complying with 405, and required at stairs complying with 504 shall comply with 505.

Advisory 505.1 General. Handrails are required on ramp runs with a rise greater than 6 inches (150 mm) (see 405.8) and on certain stairways (see 504). Handrails are not required on walking surfaces with running slopes less than 1:20. However, handrails are required to comply with 505 when they are provided on walking surfaces with running slopes less than 1:20 (see 403.6).
Sections 505.2, 505.3, and 505.10 do not apply to handrails provided on walking surfaces with running slopes less than 1:20 as these sections only reference requirements for ramps and stairs.

505.2 Where Required. Handrails shall be provided on both sides of stairs and ramps.

EXCEPTION: In assembly areas, handrails shall not be required on both sides of aisle ramps where a handrail is provided at either side or within the aisle width.

505.3 Continuity. Handrails shall be continuous within the full length of each stair flight or ramp run. Inside handrails on switchback or dogleg stairs and ramps shall be continuous between flights or runs.

EXCEPTION: In assembly areas, handrails on ramps shall not be required to be continuous in aisles serving seating.

505.4 Height. Top of gripping surfaces of handrails shall be 34 inches (865 mm) minimum and 38 inches (965 mm) maximum vertically above walking surfaces, stair nosings, and ramp surfaces. Handrails shall be at a consistent height above walking surfaces, stair nosings, and ramp surfaces.

Advisory 505.4 Height. The requirements for stair and ramp handrails in this document are for adults. When children are the principal users in a building or facility (e.g., elementary schools), a second set of handrails at an appropriate height can assist them and aid in preventing accidents. A maximum height of 28 inched (710 mm) measured to top of the gripping surface from the ramp surface or stair nosing is recommended for handrails designed for children. Sufficient vertical clearance between upper and lower handrails, 9 inches (230 mm) minimum, should be provided to help prevent entrapment.

505.5 Clearance. Clearance between handrail gripping surfaces and adjacent surfaces shall be 1 1/2 inches (38 mm) minimum.

505.6 Gripping Surface. Handrail gripping surfaces shall be continuous along their length and shall not be obstructed along their tops or sides. The bottoms of handrail gripping surfaces shall not be obstructed for more than 20 percent of their length. Where provided, horizontal projections shall occur 1 1/2 inches (38 mm) minimum below the bottom of the handrail gripping surface.

EXCEPTIONS:
1. Where handrails are provided along walking surfaces with slopes not steeper than 1:20, bottoms of handrail gripping surfaces shall be permitted to be obstructed along their entire length where they are integral to crash rails or bumper guards.
2. The distance between horizontal projections and the bottom of the gripping surface shall be permitted to be reduced by 1/8 inch (3.2 mm) for each 1/2 inch (13 mm) of additional handrail perimeter dimension that exceeds 4 inches (100 mm).

Advisory 505.6 Gripping Surface. People with disabilities, older people, and others benefit from continuous gripping surfaces that permit users to reach the fingers outward or downward to grasp the handrail, particularly as the user senses a loss of equilibrium or begins to fall.

505.7 Cross Section. Handrail gripping surface shall hace a cross section complying with 505.7.1 or 505.7.2.

505.7.1 Circular Cross Section. Handrail gripping surfaces with a circular cross section shall have an outside diameter of 1 1/4 inches (32 mm) minimum and 2 inches (51 mm) maximum.

505.10.1 Top and Bottom Extension at Ramps. Ramp handrails shall extend horizontally above the landing for 12 inches (305 mm) minimum beyond the top and bottom of ramp runs. Extensions shall return to a wall, guard, or the landing surface, or shall be continuous to the handrail of an adjacent ramp run.

505.10.2 Top Extension at Stairs. At the top of a stair flight, handrails shall extend horizontally above the landing for 12 inches (305 mm) minimum beginning directly above the first riser nosing. Extensions shall return to a wall, guard, or the landing surface, or shall be continuous to the handrail of an adjacent stair flight.

505.10.3 Bottom Extension at Stairs. At the bottom of a stair flight, handrails shall extend at the slope of the stair flight for a horizontal distance at least equal to one tread depth beyond the last riser nosing. Extension shall return to a wall, guard, or the landing surface, or shall be continuous to the handrail of an adjacent stair flight.

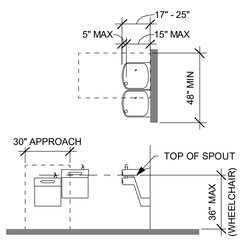

Figure 602.5 Drinking Fountain Spout Location

602 Drinking Fountains

602.4 Spout Height. Spout outlets shall be 36 inches (915 mm) maximum above the finish floor or ground. Spout outlets of drinking fountains for standing persons shall be 38 inches (965 mm) minimum and 43 inches (1090 mm) maximum above the finish floor or ground.

602.5 Spout Location. The spout shall be located 15 inches (380 mm) minimum from the vertical support and 5 inches (125 mm) maximum from the front edge of the unit, including bumpers. Where only a parallel approach is provided, the spout shall be 3-1/2 inches (90 mm) maximum from edge of the drinking fountain, including bumpers.

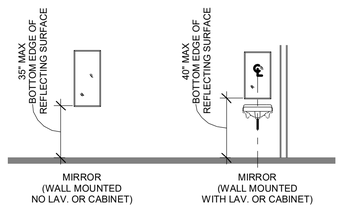

Figure 603.3 Mirrors

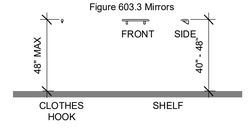

Figure 603.4 Coat Hooks and Shelves

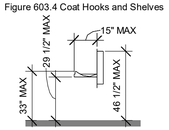

Figure 603.5 Baby Changing Stations

603 Toilet and Bathing Rooms

603.3 Mirrors. Mirrors located above lavatories or countertops shall be installed with the bottom edge of the reflecting surface 40 inches (1015 mm) maximum above the finish floor or ground. Mirrors not located above lavatories or countertops shall be installed with the bottom edge of the reflecting surface 35 inches (890 mm) maximum above the finish floor or ground.

603.4 Coat Hooks and Shelves. Coat hooks shall be located within one of the reach ranges specified in 308. Shelves shall be located 40 inches (1015 mm) minimum and 48 inches (1220 mm) maximum above the finish floor.

603.5 (Ansi 2009) Diaper Changing Tables. Diaper changing tables shall comply with Sections 309 and 902.

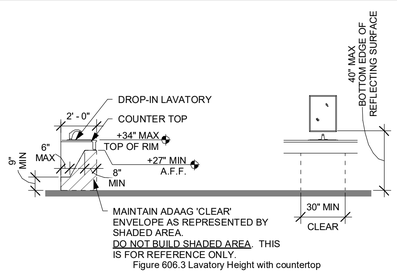

Figure 606.3 Lavatory Height with countertop

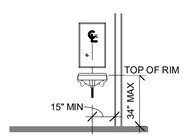

Figure 606.3 Lavatory Height

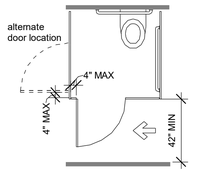

Figure 604.8.1.2 Wheelchair Accessible Toilet Compartment Doors

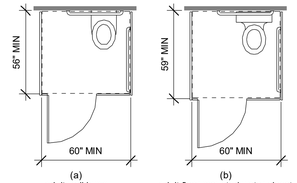

Figure 604.8.1.2 Wheelchair Accessible Toilet Compartment Doors

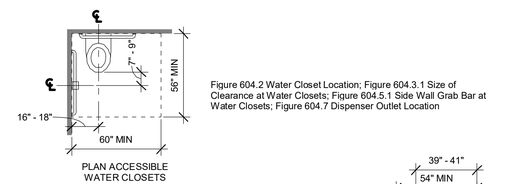

Figure 604.2 Water Closet Location; Figure 604.3.1 Size of Clearance at Water Closets; Figure 604.5.1 Side Wall Grab Bar at Water Closets; Figure 604.7 Dispenser Outlet Location

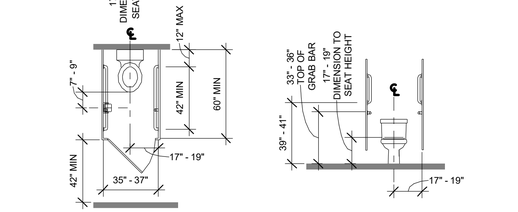

Figure 604.8.2 Ambulatory Accessible Toilet Compartment

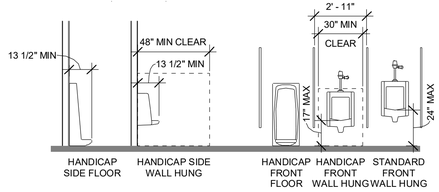

Figure 605.2 Height and Depth of Urinals

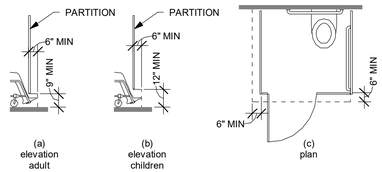

Figure 604.8.1.4 Wheelchair Accessible Toilet Compartment Toe Clearance

ARTECH
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East Lake YFD Center Improvements

3610 Dodds Avenue, Chattanooga, TN 37402

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T1.4

ADA COMPLIANCE STANDARDS

604 Water Closets and Toilet Compartments

604.2 Location. The water closet shall be positioned with a wall or partition to the rear and to one side. The centerline of the water closet shall be 16 inches (405 mm) minimum to 18 inches (455 mm) maximum from the side wall or partition, except that the water closet shall be 17 inches (430 mm) minimum and 19 inches (485 mm) maximum from the side wall or partition in the ambulatory accessible toilet compartment specified in 604.8.2. Water closets shall be arranged for a left-hand or right-hand approach.

604.3 Clearance. Clearance around water closets and in toilet compartments shall comply with 604.3.

604.3.1 Size. Clearance around a water closet shall be 60 inches (1525 mm) minimum measured perpendicular from the side wall and 56 inches (1420 mm) minimum measured perpendicular from the rear wall.

604.3.2 Overlap. The required clearance around the water closet shall be permitted to overlap the water closet, associated grab bars, dispensers, sanitary napkin disposal units, coat hooks, shelves, accessible routes, clear floor space and clearances required at other fixtures, and the turning space. No other fixtures or obstructions shall be located within the required water closet clearance.

604.4 Seats. The seat height of a water closet above the finish floor shall be 17 inches (430 mm) minimum and 19 inches (485 mm) maximum measured to the top of the seat. Seats shall not be sprung to return to a lifted position.

EXCEPTION:
1. A water closet in a toilet room for a single occupant accessed only through a private office and not for common use or public use shall not be required to comply with 604.4.
2. In residential dwelling units, the height of water closets shall be permitted to be 15 inches (380 mm) minimum and 19 inches (485 mm)maximum above the floor finish measured to the top of the seat.

604.5 Grab Bars. Grab bars for water closets shall comply with 609. Grab bars shall be provided on the side wall closest to the water closet and on the rear wall.

EXCEPTION:
1. Grab bars shall not be installed in a toilet room for a single occupant accessed only through a private office and not for common use or public use provided that reinforcement has been installed in walls and located so as to permit the installation of grab bars complying with 604.5.
2. In residential dwelling units, grab bars shall not be required to be installed in toilet or bathrooms provided that reinforcement has been installed in walls and located as to permit the installation of grab bars complying with 604.5.

Advisory 604.5 Grab Bars Exception 2. Reinforcement must be sufficient to permit the installation of rear and side wall grab bars that fully meet all accessibility requirements including, but not limited to, required length, installation height, and structural strength.

604.5.1 Side Wall (ADA). The side wall grab bar shall be 42 inches (1065 mm) long minimum, located 12 inches (305 mm) maximum from the rear wall and extending 54 inches (1370 mm) minimum from the rear wall.

604.5.1 Fixed side Wall Grab Bars (ANSI). Fixed side wall grab bars shall be 42 inches (1065 mm) minimum in length, located 12 inches (305 mm) maximum from the rear wall and extending 54 inches (1370 mm) minimum from the rear wall. In addition, a vertical grab bar 18 inches (455 mm) minimum in length shall be mounted with the bottom of the bar located 39" inches (990 mm) minimum and 41 inches (1040 mm) maximum above the floor, and with the center line of the bar located 39 inches (990 mm) minimum and 41 inches (1040 mm) maximum from rear wall.

604.5.2 Rear Wall. The rear wall grab bar shall be 36 inches (915 mm) long minimum and extend from the centerline of the water closet 12 inches (305 mm) minimum on one side and 24 inches (610 mm) minimum on the other side.

EXCEPTIONS:
1. The rear grab bar shall be permitted to be 24 inches (610 mm) long minimum, centered on the water closet, where wall space does not permit a length of 36 inches (915 mm) minimum due to the location of a recessed fixture adjacent to water closet.
2. Where an administrative authority requires flush controls for flush valves to be located in a position that conflicts with the location of rear grab bar, then the rear grab bar shall be permitted to be split or shifted to the open side of the toilet area.

604.7 Dispensers. Toilet paper dispensers shall comply with 309.4 and shall be 7 inches (180 mm) minimum and 9 inches (230 mm) maximum in front of the water closet measured to the centerline of the dispenser. The outlet of the dispenser shall be 15 inches (380 mm) minimum and 48 inches (1220 mm) maximum above the finish floor and shall not be located behind grab bars. Dispensers shall not be of a type that controls delivery or that does not allow continuous paper flow.

Advisory 604.7 Dispensers. If toilet paper dispensers are installed above the side wall grab bar, the outlet of toilet paper dispenser must be 48 inches (1220 mm) maximum above finish floor and the top of the gripping surface of the grab bar must be 33 inches (840 mm) minimum and 36 inches (915 mm) maximum above finish floor.

604.8 Toilet Compartments. Wheelchair accessible toilet compartments shall meet the requirements of 604.8.1 and 604.8.3. Compartments containing more than one plumbing fixture shall comply with 603. Ambulatory accessible compartments shall comply with 604.8.2 and 604.8.3.

604.8.1 Wheelchair Accessible Compartments. Wheelchair accessible compartments shall comply with 604.8.1.

604.8.1.1 Size. Wheelchair accessible compartments shall be 60 inches (1525 mm) wide minimum measured perpendicular to the side wall, and 56 inches (1420 mm) deep minimum for wall hung water closets and 59 inches (1500 mm) deep minimum for floor mounted water closets measured perpendicular to the rear wall. Wheelchair accessible compartments for children's use shall be 60 inches (1525 mm) wide minimum measured perpendicular to the side wall, and 59 inches (1500 mm) deep minimum for wall hung and floor mounted water closets measured perpendicular to the rear wall.

604.8.1.2 Doors. Toilet compartment doors, including door hardware, shall comply with 404 except that if the approach is to the latch side of the compartment door, clearance between the door side of the compartment and any obstruction shall be 42 inches (1065 mm) minimum. Doors shall be located in the front partition or in the side wall or partition farthest from the water closet. Where located in the front partition, the door opening shall be 4 inches (100 mm) maximum from the side wall or partition farthest from the water closet. Where located in the side wall or partition, the door opening shall be 4 inches (100 mm) maximum from the front partition. The door shall be self-closing. A door pull complying with 404.2.7 shall be placed on both sides of the door near the latch. Toilet compartment doors shall not swing into the minimum required compartment area.

604.8.1.4 Toe Clearance. The front partition and at least one side partition shall provide a toe clearance of 9 inches (230 mm) minimum above the finish floor and 6 inches (150 mm) deep minimum beyond the compartment-side face of the partition, exclusive of partition support members. Compartments for children's use shall provide a toe clearance of 12 inches (305 mm) minimum above the finish floor.

EXCEPTION: Toe clearance at the front partition is not required in a compartment greater than 62 inches (1575 mm) deep with a wall-hung water closet or 65 inches (1650 mm) deep with a floor-mounted water closet. Toe clearance at the side partition is not required in a compartment greater than 66 inches (1675 mm) wide. Toe clearance at the front partition is not required in a compartment for children's use that is greater than 65 inches (1650 mm) deep.

604.8.1.5 Grab Bars. Grab bars shall comply with 609. A side-wall grab bar complying with 604.5.1 shall be provided and shall be located on the wall closest to the water closet. In addition, a rear-wall grab bar complying with 604.5.2 shall be provided.

604.8.2 Ambulatory Accessible Compartments. Ambulatory accessible compartments shall comply with 604.8.2.

604.8.2.1 Size. Ambulatory accessible compartments shall have a depth of 60 inches (1525 mm) minimum and a width of 35 inches (890 mm) minimum and 37 inches (940 mm) maximum.

604.8.2.2 Doors. Toilet compartment doors, including door hardware, shall comply with 404, except that if the approach is to the latch side of the compartment door, clearance between the door side of the compartment and any obstruction shall be 42 inches (1065 mm) minimum. The door shall be self-closing. A door pull complying with 404.2.7 shall be placed on both sides of the door near the latch. Toilet compartment doors shall not swing into the minimum required compartment area.

604.8.2.3 Grab Bars. Grab bars shall comply with 609. A side-wall grab bar complying with 604.5.1 shall be provided on both sides of the compartment.

605 Urinals

605.2 Height and Depth. Urinals shall be the stall-type or the wall-hung type with the rim 17 inches (430 mm) maximum above the finish floor or ground. Urinals shall be 13 1/2 inches (345 mm) deep minimum measured from the outer face of the urinal rim to the back of the fixture.

606 Lavatories and Sinks

606.2 Clear Floor Space. A clear floor space complying with 305, positioned for a forward approach, and knee and toe clearance complying with 306 shall be provided.

EXCEPTIONS:
1. A parallel approach complying with 305 shall be permitted to a kitchen sink in a space where a cook top or conventional range is not provided and to wet bars.
2. A lavatory in a toilet room or bathing facility for single occupant accessed only through a private office and not for common use or public use shall not be required to provide knee and toe clearance complying with 306.
3. In residential dwelling units, cabinetry shall be permitted under lavatories and kitchen sinks provided that all of the following conditions are met:
   a) the cabinetry can be removed without removal or replacement of fixture;
   b) the finish floor extends under cabinetry; and
   c) the walls behind and surrounding the cabinetry are finished.
4. A knee clearance of 24 inches (610 mm) minimum above finish floor or ground shall be permitted at lavatories and sinks used primarily by children 6 through 12 years where the rim or counter surface is 31 inches (785 mm) maximum above the finish floor or ground.
5. A parallel approach complying with 305 shall be permitted to lavatories and sinks used primarily by children 5 years and younger.
6. The dip of the overflow shall not be considered in determining knee and toe clearances.
7. No more than one bowl of a multi-bowl sink shall be required to provide knee and toe clearance complying with 306.

606.3 Height. Lavatories and sinks shall be installed with the front of the higher of the rim or counter surface 34 inches (865 mm) maximum above the finish floor or ground.

606.4 Faucets. Controls for faucets shall comply with 309. Hand-operated metering faucets shall remain open for 10 seconds minimum.

606.5 Exposed Pipes and Surfaces. Water supply and drain pipes under lavatories and sinks shall be insulated or otherwise configured to protect against contact. There shall be no sharp or abrasive surfaces under lavatories and sinks.

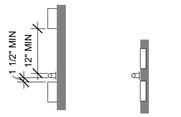


Figure 609.3 Spacing of Grab Bars

609 Grab Bars

609.2 Cross Section. Grab bars shall have a cross section complying with 609.2.1 or 609.2.2.

609.2.1 Circular Cross Section. Grab bars with circular cross sections shall have an outside diameter of 1 1/4 inches (32 mm) minimum and 2 inches (51 mm) maximum.

609.3 Spacing. The space between the wall and the grab bar shall be 1 1/2 inches (38 mm). The space between the grab bar and projecting objects below and at the ends shall be 1 1/2 inches (38 mm) minimum. The space between the grab bar and projecting objects above shall be 12 inches (305 mm) minimum.

EXCEPTION: The space between the grab bars and shower controls, shower fittings and other grab bars above shall be permitted to be 1-1/2 inches (38 mm) minimum.

609.4 Position of Grab Bars. Grab bars shall be installed in a horizontal position, 33 inches (840 mm) minimum and 36 inches (915 mm) maximum above the finish floor measured to the top of the gripping surface, except that at water closets for children's use complying with 604.9, grab bars shall be installed in a horizontal position 18 inches (455 mm) minimum and 27 inches (685 mm) maximum above the finish floor measured to the top of the gripping surface. The height of the lower grab bar on the back wall of a bathtub shall comply with 607.4.1.1 or 607.4.2.1.

609.5 Surface Hazards. Grab bars and any wall or other surfaces adjacent to grab bars shall be free of sharp or abrasive elements and shall have rounded edges.

609.6 Fittings. Grab bars shall not rotate within their fittings.

609.7 Installation. Grab bars shall be installed in any manner that provides a gripping surface at the specified locations and that does not obstruct the required clear floor space.

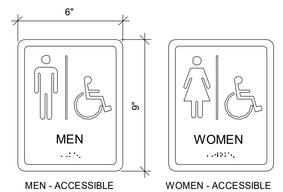
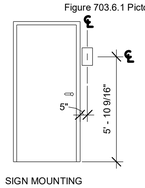


Figure 703.6.1 Pictogram Field dark-on-light.



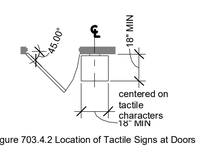


Figure 703.4.2 Location of Tactile Signs at Doors

Figure 703.4.1 Height of Tactile Characters Above Finish Floor or Ground

703 Signs

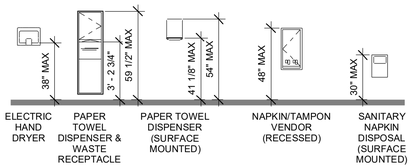
703.1 General. Signs shall comply with 703. Where both visual and tactile characters are required, either one sign with both visual and tactile characters, or two separate signs, one with visual, and one with tactile characters, shall be provided.

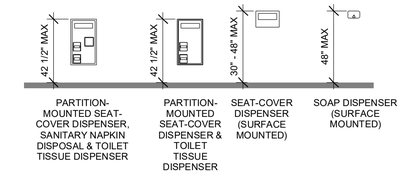
703.4 Installation Height and Location. Signs with tactile characters shall comply with 703.4.

703.4.1 Height Above Finish Floor or Ground. Tactile characters on signs shall be located 48 inches (1220 mm) minimum above the finish floor or ground surface, measured from the baseline of the lowest tactile character and 60 inches (1525 mm) maximum above the finish floor or ground surface, measured from the baseline of the highest tactile character.

703.4.2 Location. Where a tactile sign is provided at a door, the sign shall be located alongside the door at the latch side. Where a tactile sign is provided at double doors with one active leaf, the sign shall be located on the inactive leaf. Where a tactile sign is provided at double doors with two active leafs, the sign shall be located to the right of the right hand door. Where there is no wall space at the latch side of a single door or at the right side of double doors, signs shall be located on the nearest adjacent wall. Signs containing tactile characters shall be located so that a clear floor space of 18 inches (455 mm) minimum by 18 inches (455 mm) minimum, centered on the tactile characters, is provided beyond the arc of any door swing between the closed position and 45 degree open position.

EXCEPTION: Signs with tactile characters shall be permitted on the push side of doors with closer and without hold-open devices.





Miscellaneous Fixtures

These fixtures are not covered in ADA or ANSI. However, they still need to comply with section 308 on Reach Ranges.

ARTECH
1410 COWART STREET
CHATTANOOGA, TN 37408
423.265.4313
WWW.ARTECH.PRO

East Lake YFD Center Improvements

3610 Dodds Avenue, Chattanooga, TN 37402

RICHARD A. THOMPSON
REGISTERED ARCHITECT
No. 17845
STATE OF TENNESSEE

ISSUE DATES
INITIAL ISSUE 12-20-19

JOB NO.	D'WN	CK'D
18-072	Author	Checker

T1.5
ADA COMPLIANCE STANDARDS

GENERAL NOTES:

1 THESE DRAWINGS DO NOT PURPORT TO LOCATE ALL UTILITIES.

2 ALL UTILITY LOCATIONS TO BE FIELD VERIFIED BY PROPER AGENCIES BEFORE BEGINNING CONSTRUCTION. UNDERGROUND UTILITIES ARE NOT FIELD LOCATED NOR ARE ALL PURPORTED TO BE SHOWN. INFORMATION SHOWN SHOULD BE CONSIDERED APPROXIMATE. CONTRACTOR TO CONTACT ALL UTILITY COMPANIES TO HAVE UTILITIES FIELD LOCATED BEFORE EXCAVATION OR DEMOLITION WORK BEGINS.

3 THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES SHOWN HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES WITHIN THE WORKING AREA BEFORE COMMENCING WORK & AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE & PRESERVE ANY & ALL UNDERGROUND UTILITIES.

4 THE CONTRACTOR SHALL COORDINATE LOCATION & INSTALLATION OF ALL UNDERGROUND UTILITIES & APPURTENANCES TO MINIMIZE DISTURBING CURB & GUTTER, PAVING, EXISTING UTILITIES & COMPACTED SUBGRADE.

5 CONTRACTOR SHALL VERIFY EXISTING UTILITY LINE OR EXISTING INFRASTRUCTURE PRIOR TO BEGINNING WORK. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES ON THE DRAWING OR IN THE FIELD BEFORE BEGINNING WORK OR DURING CONSTRUCTION.

6 CONTRACTOR TO COORDINATE ALL WORK WITH OTHER UTILITY INSTALLATIONS NOT COVERED IN THESE PLANS (ELECTRIC, TELEPHONE, GAS, CABLE, ETC.) & ALLOW FOR THEIR OPERATIONS & CONSTRUCTION TO BE PREPARED.

7 THE CONTRACTOR SHALL IMMEDIATELY INFORM THE OWNERS REPRESENTATIVE OR ENGINEER OF ANY DISCREPANCIES OR ERRORS HE DISCOVERS IN THE PLAN.

8 DEVIATION FROM THESE PLANS & NOTES WITHOUT THE PRIOR CONSENT OF THE OWNERS REPRESENTATIVE MAY BE CAUSE FOR THE WORK TO BE UNACCEPTABLE.

9 ALL WORK SHALL COMPLY WITH APPLICABLE STATE, FEDERAL, AND LOCAL CODES, & ALL NECESSARY LICENSES & PERMITS SHALL BE OBTAINED BY THE CONTRACTOR AT HIS EXPENSE UNLESS PREVIOUSLY OBTAINED BY THE OWNER/DEVELOPER.

10 FOR THE WORK ON THE STATE OR CITY RIGHT-OF-WAY, THE CONTRACTOR SHALL:
- A. NOT STORE MATERIAL, EXCESS DIRT OR EQUIPMENT ON THE SHOULDERS OF PAVEMENT IN CASE OF MULTI-LANE HIGHWAYS, IN THE MEDIAN STRIPS. THE PAVEMENT SHALL BE KEPT FREE FROM ANY MUD OR EXCAVATION WASTE FROM TRUCKS OR OTHER EQUIPMENT. ON COMPLETION OF THE WORK ALL EXCESS MATERIAL SHALL BE REMOVED FROM THE R/W.
- B. SHALL PROVIDE ALL NECESSARY & ADEQUATE SAFETY PRECAUTIONS SUCH AS SIGNS, FLAGS, LIGHTS, BARRICADES & FLAG MEN AS REQUIRED BY THE LOCAL AUTHORITIES & IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR & HOLD HARMLESS THE STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION, THE CITY OF CHATTANOOGA & THE OWNER FROM ANY CLAIMS FOR DAMAGE DONE TO EXISTING PRIVATE PROPERTY, PUBLIC UTILITIES, OR TO THE TRAVELING PUBLIC.
- C. SHALL COMPLETE THE WORK TO THE SATISFACTION OF THE CITY OF CHATTANOOGA OR DOT AND OBTAIN A LETTER FROM THE DEPARTMENT STATING THAT THE WORK IS ACCEPTABLE.
- D. POST NECESSARY BONDS AS REQUIRED BY THE CITY AND/OR STATE.

11 ALL WORK & MATERIALS SHALL COMPLY WITH CITY OF CHATTANOOGA REGULATIONS & CODES OF O.S.H.A. STANDARDS.

12 A MINIMUM CLEARANCE OF TWO FEET SHALL BE MAINTAINED BETWEEN THE FACE OF CURB & ANY PART OF A TRAFFIC SIGNAL OR LIGHT POLE.

13 NECESSARY & SUFFICIENT BARRICADES, LIGHTS, SIGNS & OTHER TRAFFIC CONTROL MEASURES AS MAY BE NECESSARY FOR THE PROTECTION AND SAFETY OF THE PUBLIC SHALL BE PROVIDED & MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD.

14 CONTRACTORS SHOULD NOT BE DOING ANY OPEN BURNING OF CONSTRUCTION MATERIALS OR DEBRIS WITHOUT A PERMIT FROM THE DEPARTMENT OF AIR POLLUTION CONTROL OR LOCAL AUTHORITY. IF A CONTRACTOR DESIRES TO PERFORM OPEN BURNING, HE MUST BE RESPONSIBLE FOR OBTAINING ANY PERMITS AND IS RESPONSIBLE FOR ANY VIOLATION OF THE AIR POLLUTION LAWS.

15 CONTRACTOR SHALL BE RESPONSIBLE DURING CONSTRUCTION FOR THE CONTINUOUS MAINTENANCE OF SEDIMENT & EROSION CONTROL MEASURES AS CALLED FOR ON THE DRAWINGS.

16 EROSION CONTROL MEASURES ARE TO BE MAINTAINED DURING ALL PHASES OF CONSTRUCTION (SEE GRADING & DRAINAGE PLAN AND/OR SEDIMENT & EROSION CONTROL PLAN).

17 EXISTING DRAINAGE STRUCTURES TO BE INSPECTED, REPAIRED AS NEEDED & CLEANED OUT TO REMOVE ALL SILT & DEBRIS.

18 THE CONTRACTOR SHALL REPAIR OR REPLACE IN-KIND ANY DAMAGE THAT OCCURS TO PROPERTY AS RESULT OF HIS WORK.

19 ALL SIDE DITCHES TO BE CLEANED AND/OR REGRADED TO PROVIDE PROPER DRAINAGE.

20 ALL AREAS NOT OTHERWISE SURFACED ARE TO BE SEEDED, LANDSCAPED, MULCHED, WATERED, & MAINTAINED UNTIL ADEQUATE STAND OF GRASS IS OBTAINED.

21 UNLESS OTHERWISE SPECIFIED, ALL SLOPES TO BE COVERED WITH MINIMUM OF 4" OF TOPSOIL.

22 ALL PIPE LENGTHS & DISTANCES BETWEEN STRUCTURES ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE ALONG A HORIZONTAL PLANE.

23 THE CONTRACTOR SHALL PROVIDE ALL THE MATERIALS & APPURTENANCES NECESSARY FOR THE COMPLETE INSTALLATION OF THE STORM DRAINAGE, SEWER, WATER & UTILITY SYSTEMS. ALL PIPE & FITTINGS SHALL BE INSPECTED BY THE UTILITY DEPARTMENT INSPECTOR PRIOR TO BEING COVERED. THE INSPECTOR MUST ALSO BE PRESENT DURING PRESSURE TESTING & DISINFECTION OF LATERALS & HIS SIGNATURE OF APPROVAL IS REQUIRED.

24 THE CONTRACTOR SHALL MAKE ARRANGEMENTS WITH THE LOCAL UTILITY AUTHORITIES FOR CONNECTION TO THE EXISTING MAINS & PAY ALL APPLICABLE FEES.

25 UTILITY COORDINATION & COSTS SHALL BE INCLUDED IN THE PROJECT SCHEDULE & IT IS THE EXPLICIT RESPONSIBILITY OF THE CONTRACTOR TO ASSURE THAT THE PROJECT SCHEDULE INCLUDES THE NECESSARY RELOCATION. THE CONTRACTOR WILL NOT BE PAID ADDITIONALLY FOR THIS COORDINATION. THE CONTRACTOR SHOULD SEEK ASSISTANCE FROM ALL UTILITY COMPANIES TO LOCATE & PROTECT THEIR FACILITIES.

26 CONTRACTOR SHALL OBTAIN ALL PERMITS BEFORE CONSTRUCTION BEGINS.

27 DIMENSIONS ON BUILDINGS ARE FOR GRADING PURPOSES ONLY & ARE NOT TO BE USED TO LAYOUT FOOTINGS. REFER TO THE STRUCTURAL DRAWINGS FOR FOUNDATION INFORMATION.

28 ALL DIMENSIONS SHOWN ARE TO FACE OF CURB OR EDGE OF S/W UNLESS NOTED OTHERWISE.

29 CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO BEGINNING CONSTRUCTION.

30 JOINTS OR SCORE MARKS ARE TO BE SHARP & CLEAN WITHOUT SHOWING EDGES OF JOINT TOOL.

31 THE CONTRACTOR SHALL PROVIDE FOR ANY NECESSARY BONDS AS REQUIRED BY GOVERNING AGENCIES.

32 AN AUTO CAD BASE PLAN MAY BE PROVIDED TO THE CONTRACTOR FOR CONSTRUCTION PURPOSES.

33 TOPOGRAPHIC & BOUNDARY SURVEY BY CITY OF CHATTANOOGA & PROVIDED BY THE OWNER.

34 SEE FINAL PLAT BY SURVEYOR FOR LOCATIONS OF ALL NEW SANITARY SEWER & STORM DRAINAGE EASEMENTS. ALL DETENTION AREAS WILL BE A STORM DRAINAGE EASEMENT.

SITE NOTES:

1 CONTRACTOR SHALL VERIFY ALL DIMENSIONS BEFORE BEGINNING CONSTRUCTION.

2 FOR EXACT BUILDING DIMENSIONS SEE ARCHITECTURAL PLANS.

3 DIMENSIONS ON BUILDINGS ARE FOR GRADING PURPOSES ONLY & ARE NOT TO BE USED TO LAYOUT FOOTINGS. REFER TO THE STRUCTURAL DRAWINGS FOR FOUNDATION INFORMATION.

4 ALL DIMENSIONS SHOWN ARE TO FACE OF CURB, FACE OF SIDEWALK, OR FACE OF BUILDING UNLESS NOTED OTHERWISE.

5 A 1' CURB TAPER SHALL BE FORMED AT ALL PLACES WHERE CURB & GUTTER MEETS AN ADJACENT CONCRETE SIDEWALK OR PARKING AREA WHICH IS 0.5' LOWER THAN THE TOP OF CURB ELEVATION.

6 REFER ALSO TO GENERAL NOTES FOR ADDITIONAL REQUIREMENTS.

DEMOLITION NOTES:

1 THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING DEMOLITION PERMITS AS WELL AS OTHER ASSOCIATED PERMITS PRIOR TO CONSTRUCTION.

2 DIMENSIONS ON BUILDINGS ARE FOR GRADING PURPOSES ONLY & ARE NOT TO BE USED TO LAYOUT FOOTINGS. REFER TO THE STRUCTURAL DRAWINGS FOR FOUNDATION INFORMATION.

3 ALL DEMOLITION DIMENSIONS SHOWN ARE APPROXIMATE & SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION.

4 THE CONTRACTOR SHALL SAW-CUT TIE-INS AT EXISTING PAVEMENT OR CONC. AREAS AS NECESSARY TO ENSURE SMOOTH TRANSITIONS. THE CONTRACTOR SHALL SAW-CUT AND TRANSITION TO MEET EXISTING PAVEMENT AS NECESSARY & AS DIRECTED BY THE INSPECTOR TO ENSURE POSITIVE DRAINAGE (TYPICAL AT ALL INTERSECTIONS). INSTALL EXPANSION JOINTS AT ALL CONC. SAW-CUT TIE-INS.

5 ALL EXISTING TREES, VEGETATION & ORGANIC TOPSOIL SHALL BE STRIPPED & REMOVED FROM THE CONSTRUCTION AREA, AS REQUIRED.

6 EXISTING STRUCTURES WITHIN CONSTRUCTION LIMITS ARE TO BE ABANDONED, REMOVED, OR RELOCATED AS REQUIRED. COORDINATE WITH PROPER AUTHORITIES AND/OR UTILITY COMPANIES.

7 REFER ALSO TO GENERAL NOTES FOR ADDITIONAL REQUIREMENTS.

DRAINAGE & GRADING NOTES:

1 CONTRACTOR SHALL OBTAIN ALL PERMITS BEFORE CONSTRUCTION BEGINS.

2 NEW FINISHED CONTOURS SHOWN ARE TOP OF NEW PAVING IN AREAS TO RECEIVE PAVEMENT & TOP OF TOPSOIL IN AREAS TO BE SEEDED.

3 PROPOSED CONTOUR INTERVALS ARE AS LABELED. ALL PROPOSED CONTOURS ARE FINISHED GRADE.

4 CONTRACTOR SHALL NOTIFY & COOPERATE WITH ALL UTILITY COMPANIES OR FIRMS HAVING FACILITIES ON OR ADJACENT TO THE SITE BEFORE DISTURBING, ALTERING, REMOVING, RELOCATING, ADJUSTING OR CONNECTING TO SAID FACILITIES. CONTRACTOR SHALL PAY ALL COSTS IN CONNECTION WITH THE ALTERNATION OF OR RELOCATION OF THE FACILITIES. CONTRACTOR SHALL RAISE OR LOWER TOPS OF EXISTING MANHOLES AS REQUIRED TO MATCH FINISHED GRADES.

5 A QUALIFIED SOILS LABORATORY SHALL DETERMINE THE SUITABILITY OF THE EXISTING SUB-GRADE & EXISTING ON SITE MATERIAL PRIOR TO BEGINNING ANY FILLING OPERATION.

6 UNUSABLE EXCAVATED MATERIALS (SOIL) SHALL BE RESPREAD ON SITE AT LOCATIONS APPROVED BY THE ARCHITECT. ALL WASTE RESULTING FROM DEMOLITION, CLEARING & GRUBBING SHALL BE DISPOSED OF OFF SITE BY THE CONTRACTOR AT AN APPROVED LOCATION.

7 BEFORE ANY MACHINE WORK IS DONE, CONTRACTOR SHALL STAKE OUT & MARK THE ITEMS ESTABLISHED BY THE SITE PLAN. CONTROL POINTS SHALL BE PRESERVED AT ALL TIMES DURING THE COURSE OF THE PROJECT. LACK OF PROPER WORKING POINTS AND GRADE STAKES MAY REQUIRE CESSATION OF OPERATIONS UNTIL SUCH POINTS & GRADES HAVE BEEN PLACED TO THE OWNER'S SATISFACTION.

8 COMPACTION OF THE BACK FILL OF ALL TRENCHES SHALL BE COMPACTED TO THE DENSITY OF 95% OF THEORETICAL MAXIMUM DRY DENSITY (ASTM D698). BACK FILL MATERIAL SHALL BE FREE FROM ROOTS, STUMPS, OR OTHER FOREIGN DEBRIS & SHALL BE PLACED AT OR NEAR OPTIMUM MOISTURE. CORRECTION OF ANY TRENCH SETTLEMENT WITHIN A YEAR FROM THE DATE OF APPROVAL WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.

9 TO MINIMUM DRY DENSITIES CORRESPONDING TO 95% OF MAXIMUM DRY DENSITY AS OBTAINED BY STANDARD PROCTOR, ASTM D698 & AT LEAST 98% OF STANDARD PROCTOR WITHIN 1 FOOT BELOW PAVEMENT SUBGRADE. FILL SHALL BE PLACED IN LIFTS NO TO EXCEED 6 INCHES IN COMPACTED FILL THICKNESS. A REPORT FROM A GEOTECHNICAL ENGINEER MAY BE REQUIRED BY THE OWNER.

10 THE CONTRACTOR WILL INSURE THAT POSITIVE & ADEQUATE DRAINAGE IS MAINTAINED AT ALL TIMES WITHIN THE PROJECT LIMITS. THIS MAY INCLUDE, BUT NOT BE LIMITED TO, REPLACEMENT OR RECONSTRUCTION OF EXISTING DRAINAGE STRUCTURES THAT HAVE BEEN DAMAGED OR REMOVED OR RECONSTRUCTED AS REQUIRED BY THE ENGINEER, EXCEPT FOR THOSE DRAINAGE ITEMS SHOWN AT SPECIFIC LOCATIONS IN & HAVING SPECIFIC PAY ITEMS IN THE DETAILED ESTIMATE. NO SEPARATE PAYMENT WILL BE MADE AT ANY COSTS INCURRED TO COMPLY WITH THIS REQUIREMENT.

11 THE CONTRACTOR SHALL PROVIDE ANY EXCAVATION & MATERIAL SAMPLES NECESSARY TO CONDUCT REQUIRED SOIL TESTS. ALL ARRANGEMENTS & SCHEDULING FOR THE TESTING SHALL BE THE CONTRACTOR'S RESPONSIBILITY.

12 PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL VERIFY EXISTING GRADES ESPECIALLY WITHIN & ALONG DRAINAGE WAYS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO COMMENCEMENT OF WORK.

13 UNLESS OTHERWISE SPECIFIED, ALL SLOPES TO BE COVERED WITH MINIMUM OF 4" TOPSOIL.

14 MAXIMUM EMBANKMENT SLOPES TO BE AS FOLLOWS: CUT AREA – 3:1; FILL AREAS 3:1 (UNLESS NOTED OTHERWISE).

15 STOCKPILED TOPSOIL IS TO BE SPREAD OVER LAWN AREAS AT COMPLETION OF PROJECT (PROVIDE 4" MINIMUM SPREAD).

16 IT IS THE INTENT OF THIS PROJECT FOR THE CONTRACTOR TO VERIFY & MATCH EXISTING CONDITIONS UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL NOTIFY THE ENGINEER/ARCHITECT OF ANY ITEMS THAT DO NOT EXIST AS SHOWN.

17 STORM DRAIN PIPE TO BE CLASS III REINFORCED CONCRETE CONFORMING TO ASTM C-76, OR CMP, FULLY COATED (16 GAGE MIN.) PER ASTM A44, OR ADS N-12 WITH WATERTIGHT GASKET AS SHOWN ON DRAWINGS.

18 PRE CAST STRUCTURES MAY BE USED AT THE CONTRACTORS OPTION. ALL CONCRETE TO HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 P.S.I.

19 CONTRACTOR SHALL BLEND ALL SLOPES WITH THE SURROUNDING ENVIRONMENT.

20 THE CONTRACTOR SHALL COORDINATE WITH THE PROJECT ENGINEER FOR ANY FIELD GRADE ADJUSTMENTS NEEDED DUE TO ACTUAL TOPOGRAPHY VARYING FROM THE TOPOGRAPHIC SURVEY.

21 REFER ALSO TO GENERAL NOTES FOR ADDITIONAL REQUIREMENTS.

CITY OF CHATTANOOGA STORM WATER NOTES & CLARIFICATIONS:

IN ADDITION TO ALL EXISTING REQUIREMENTS THE FOLLOWING ITEMS WILL BE ENFORCED EFFECTIVE IMMEDIATELY. THESE REQUIREMENTS ARE ALREADY AUTHORIZED BY CITY CODE SECTION 31. PLEASE BE AWARE THAT THESE REQUIREMENTS ARE CITY REQUIREMENTS. STATE OF TENNESSEE NPDES PERMIT REQUIREMENTS MAY BE DIFFERENT.

1. ALL PERMIT APPLICATIONS AND REPORTS MUST BE SIGNED AS FOLLOWS:
   - A. CORPORATION: A PRESIDENT, SECRETARY, TREASURER, OR VICE PRESIDENT OF THE CORPORATION OR OTHER PERSON WHO PERFORMS SIMILAR POLICY- OR DECISION-MAKING FUNCTIONS FOR THE CORPORATION.
   - B. PARTNERSHIP OR SOLE PROPRIETORSHIP: BY A GENERAL PARTNER OR THE PROPRIETOR.
   - C. PUBLIC FACILITY: A PRINCIPAL EXECUTIVE OFFICER OR THE CHIEF EXECUTIVE OFFICER OF THE AGENCY OR A SENIOR EXECUTIVE OFFICER HAVING RESPONSIBILITY FOR THE OVERALL OPERATIONS OF A PRINCIPAL GEOGRAPHIC UNIT OF THE AGENCY.

   SIGNATURES WILL BE ACCEPTED ONLY FROM PROPERTY OWNERS AND/OR THE GENERAL CONTRACTORS. IN CASE OF A FILL PERMIT, WRITTEN AUTHORIZATION FROM THE PROPERTY OWNER MUST BE INCLUDED WITH THE APPLICATION. ALL ENFORCEMENT RESULTING FROM PERMIT OR POLLUTION VIOLATIONS WILL BE JOINTLY APPLIED TO BOTH THE PROPERTY OWNER AND GENERAL CONTRACTOR.
2. THE APPLICANT MUST SUBMIT THE NAME AND ADDRESS OF THE CONTRACTOR AND ANY SUBCONTRACTORS WHO SHALL PERFORM THE LAND DISTURBING ACTIVITY AND WHO SHALL IMPLEMENT THE EROSION CONTROL PLAN.
3. ON SITES WHERE A NPDES PERMIT IS REQUIRED, A NOTICE OF INTENT MUST BE SUBMITTED BEFORE A LAND DISTURBING PERMIT CAN BE ISSUED. A NOTICE OF COVERAGE MUST BE FAXED TO THE STORM WATER OFFICE BEFORE GRADING WORK IS AUTHORIZED TO BEGIN.
4. ON SITES THAT DISCHARGE INTO SINKHOLES, WRITTEN APPROVAL FROM THE TDEC OFFICE OF WATER SUPPLY MUST BE SUBMITTED BEFORE A LAND DISTURBING PERMIT IS ISSUED.
5. ALL OUTFALLS MUST BE NOTED ON THE SUBMITTED EROSION CONTROL PLAN. DISCHARGE FROM ANY ADDITIONAL OUTFALLS WILL BE CONSIDERED A PERMIT VIOLATION.
6. ALL DETENTION PONDS MUST HAVE A PAVED EMERGENCY SPILLWAY.
7. A LOCATION MUST BE NOTED ON THE PLANS FOR CONCRETE TRUCK WASH AREAS. THE DISCHARGE OF CONCRETE CHUTE WASH WATER AND ALL OTHER NON-STORM WATER DISCHARGES SUCH AS PAINT BRUSH WASH WATER ARE AN ILLEGAL DISCHARGE.
8. PERIMETER EROSION AND SEDIMENT CONTROL MEASURES MUST BE IN PLACE AND FUNCTIONAL BEFORE EARTH MOVING OPERATIONS BEGIN.
9. ANY DISTURBED AREAS THAT ARE TO REMAIN BARE FOR LONGER THAN 30-DAYS MUST BE TEMPORARILY STABILIZED.
10. A SPECIFIC INDIVIDUAL SHALL BE DESIGNATED TO BE RESPONSIBLE FOR EROSION AND SEDIMENT CONTROLS ON EACH SITE. THIS PERSON MUST BE IDENTIFIED, ALONG WITH A PHONE NUMBER, IN THE APPLICATION FOR LAND DISTURBANCE PERMIT.
11. AT A MINIMUM, ALL EROSION AND SEDIMENT CONTROL MEASURES MUST BE CHECKED AND, IF NECESSARY REPAIRED, WEEKLY AND WITHIN 24-HOURS AFTER A RAINFALL EVENT GREATER THAN 0.5-INCHES. THE PERMITTEE SHALL MAINTAIN RECORD OF SUCH CHECKS AND REPAIRS. THESE RECORDS MUST BE KEPT ON-SITE OR IN THE OFFICE OF THE RESPONSIBLE PERSON AND AVAILABLE FOR REVIEW AT ANY TIME BY STORM WATER PERSONNEL. THESE RECORDS MUST BE SUBMITTED TO THE STORM WATER OFFICE ON A YEARLY BASIS. PROJECTS PERMITTED UNDER THE STATE NPDES PERMIT PROGRAM MUST FOLLOW ITS REQUIREMENTS. USE OF THAT INSPECTION FORM IS PERMITTED INSTEAD OF CITY SELF-INSPECTION FORM.
12. UPON COMPLETION OF THE REQUIRED IMPROVEMENTS, AND PRIOR TO FINAL ACCEPTANCE BY THE CITY ENGINEER, THE DEVELOPER/CONTRACTOR WILL FURNISH "AS BUILT" DRAWINGS OF ALL SANITARY SEWER AND STORMWATER STRUCTURES. THE DEVELOPER/CONTRACTOR WILL HAVE A REGISTERED LAND SURVEYOR CERTIFY THAT THE INFORMATION FURNISHED IS A TRUE AND COMPLETE REPRESENTATION OF THE IMPROVEMENTS THAT WERE CONSTRUCTED. THE ENGINEER WILL REVIEW THE CERTIFIED "AS BUILT" DRAWINGS FOR COMPLIANCE WITH THE ORIGINAL CONSTRUCTION DOCUMENTS. THE "AS BUILT" DRAWINGS SHALL BE PROVIDED PER CITY OF CHATTANOOGA STANDARDS AND SPECIFICATIONS.

UTILITY NOTES:

1 EXISTING UTILITIES SHALL BE VERIFIED IN FIELD PRIOR TO INSTALLATION OF ANY NEW PIPELINES.

2 ALL SERVICE LATERALS SHALL BE MARKED WITH MAGNETIC TAPE.

3 LINES UNDERGROUND SHALL BE INSTALLED, TESTED & APPROVED BEFORE BACKFILLING. PRESSURE & LEAKAGE TESTS SHALL BE PERFORMED IN ACCORDANCE WITH CURRENT AWWA STANDARD C600 AND/OR MANUFACTURER'S PROCEDURE.

4 PRE CAST STRUCTURES MAY BE USED AT THE CONTRACTORS OPTION.

5 ALL CONCRETE TO HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 P.S.I.

6 THE SITE UTILITY CONTRACTOR SHALL COOPERATE & WORK WITH OTHER CONTRACTORS PERFORMING WORK ON THIS PROJECT TO INSURE PROPER & TIMELY COMPLETION OF THIS PROJECT.

7 LUBRICANTS SHALL BE NON-TOXIC & SHALL NOT PROMOTE BIOLOGICAL GROWTH SOLVENT CEMENTED JOINTS NOT PERMITTED.

8 WHERE PROPOSED WATER LINE EXTENDS UNDER ANY PAVED SURFACED, THE TRENCH MUST BE BACK FILLED WITH APPROVED STONE.

9 ALL VALVES (G.V.) SHALL BE GATE VALVES WITH CAST IRON BOXES.

10 WATER INSTALLATION SHALL BE IN ACCORDANCE WITH "TEN STATES STANDARDS" AND LOCAL UTILITY DISTRICT STANDARDS & REGULATIONS.

11 CONNECTION TO THE EX WATER MAIN SHALL BE MADE UNDER THE SUPERVISION OF THE LOCAL WATER UTILITY.

12 RADIUS (DEFLECT) WATER LINES IN LIEU OF FITTINGS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

13 ALL WATER LINES SHALL HAVE A MINIMUM COVER OF 36".

14 WHERE WATER PIPING CROSSES THE SANITARY SEWER LINE, THE WATER SERVICE WITHIN 10-FEET OF THE POINT OF CROSSING SHALL BE AT LEAST 18-INCHES ABOVE THE TOP OF THE SEWER LINE. THE SEWER LINE SHALL BE OF DUCTILE IRON WITH MECHANICAL JOINTS AT LEAST 10 FEET ON BOTH SIDES OF THE CROSSING.

15 WATER MUST BE CONSTRUCTED BY A LICENSED MUNICIPAL UTILITY CONTRACTOR (CLASSIFICATION MU).

16 ALL MATERIALS SHALL BE UI LISTED & FACTORY MUTUAL APPROVED UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

17 THRUST BLOCKS SHALL BE PROVIDED AT ALL TEES, ELBOW & BENDS OF SUFFICIENT SIZE TO COMPLY WITH MINIMUM STANDARDS OF N.F.P.A. #24 – EXISTING SOIL CONDITIONS.

18 THE CONTRACTOR SHALL NOTIFY THE WATER, SEWER, UTILITY & THE ENGINEER PRIOR TO BEGINNING CONSTRUCTION.

19 SANITARY SEWER SERVICE LINES SHOWN AS 6" P.V.C. (UNLESS NOTED TO BE D.I.P.) & SHALL BE LAID ON A MINIMUM SLOPE OF 1.10%.

20 SANITARY SEWER SERVICE LINES SHOWN AS 4" P.V.C. (UNLESS NOTED TO BE D.I.P.) & SHALL BE LAID ON A MINIMUM SLOPE OF 1.10%.

21 A CONCRETE ANCHOR BLOCK AS SHOWN ON THE UTILITY DETAIL SHEET SHALL BE POURED AROUND THE FIRST BELL & SPIGOT PIPE JOINT RESTRAINT FROM THE END OF THE WATERLINE. THE MECHANICAL RESTRAINT SECURING THE JOINT SHALL BE WRAPPED WITH PLASTIC PRIOR TO THE POURING OF THE CONCRETE. THE INTENT OF THE CONCRETE ANCHOR BLOCK WILL HELP KEEP THE JOINTS FROM SEPARATING NEAR THE END OF THE WATERLINE.

22 ALL DUCTILE IRON PIPE TO BE AWWA C-151-81, CLASS 50

23 ALL UNDERGROUND FITTINGS TO BE MECH JOINT AWWA C110/A21.10, CLASS 250

24 ALL UNDERGROUND VALVES TO BE MECH JOINT AWWA C509, CLASS 250

25 ALL UNDERGROUND JOINTS TO BE TESTED & FLUSHED AS PER NFPA #24

26 THE CONTRACTOR SHALL ADJUST LOCATION OF PROPOSED WATER LINES AS REQUIRED TO AVOID CONFLICTS WITH STORM & OTHER UTILITIES.

27 FIRE HYDRANTS ARE TO BE INSTALLED SO THAT THE FIRE DEPARTMENT CONNECTION FACES THE STREET. THE FIRE HYDRANT CONNECTION IS TO BE NO LESS THAN 18" OR MORE THAN 36" ABOVE FINISHED GRADE. FIRE HYDRANTS SHALL BE CLEAR OF ANY OBSTRUCTIONS WITHIN 5 FT IN ANY DIRECTION PARALLEL WITH THE APPROACH OR THE VISIBILITY OF ANY FIRE HYDRANT, OR F.D.C./SIAMESE. FIRE HYDRANTS LOCATED IN PARKING AREAS SHALL BE PROTECTED BY BARRIERS THAT WILL PREVENT PHYSICAL DAMAGE BY VEHICLES (NFPA 11413-6.5, 3-6.6).

28 PROCEDURE FOR DISINFECTING POTABLE WATER LINES SHALL CONFORM TO THE REQUIREMENTS OF AWWA C601.

29 ALL PIPING FROM THE "POINT OF SERVICE" INCLUDING UNDERGROUND USED FOR SPRINKLER OR STANDPIPE SYSTEM MUST BE INSTALLED BY A TENNESSEE REGISTERED SPRINKLER CONTRACTOR. [RULE 0780-2-7-08]

30 REFER ALSO TO GENERAL NOTES FOR ADDITIONAL REQUIREMENTS.

ADDITIONAL SANITARY SEWER SYSTEM NOTES:

1 EXISTING UTILITIES SHALL BE VERIFIED IN FIELD PRIOR TO INSTALLATION OF ANY NEW PIPELINES.

2 ALL SERVICE LATERALS SHALL BE MARKED WITH MAGNETIC TAPE.

3 LINES UNDERGROUND SHALL BE INSTALLED, TESTED & APPROVED BEFORE BACKFILLING.

4 ALL MANHOLES REQUIRE "KOR-N-SEAL" OR EQUAL RUBBER SEALS. SEWER PIPE SHALL HAVE GRAVEL BEDDING IN ACCORDANCE WITH CITY SANITARY SEWER TRENCH DETAILS.

5 PRE CAST STRUCTURES MAY BE USED AT THE CONTRACTORS OPTION.

6 CONCRETE RELATED TO SANITARY SEWER CONSTRUCTION TO HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4000 P.S.I.

7 THE SITE UTILITY CONTRACTOR SHALL COOPERATE & WORK WITH OTHER CONTRACTORS PERFORMING WORK ON THIS PROJECT TO INSURE PROPER & TIMELY COMPLETION OF THIS PROJECT.

8 CONCENTRIC MANHOLES ONLY ARE TO BE USED ON THIS PROJECT. NO ECCENTRIC MANHOLES ARE TO BE INSTALLED.

9 LUBRICANTS SHALL BE NON-TOXIC & SHALL NOT PROMOTE BIOLOGICAL GROWTH SOLVENT CEMENTED JOINTS NOT PERMITTED.

10 ALL SERVICE LATERALS SHALL BE MARKED WITH MAGNETIC TAPE.

11 THE SANITARY SEWER SYSTEM INSTALLATION SHALL BE IN ACCORDANCE WITH "TEN STATES STANDARDS", TDEC STANDARDS & REGULATIONS & THE CITY OF CHATTANOOGA/ HAMILTON COUNTY STANDARD DETAILS & SPECIFICATIONS.

12 SANITARY SEWER SERVICE LINES SHOWN AS 6" P.V.C. (UNLESS NOTED TO BE D.I.P.) & SHALL BE LAID ON A MINIMUM SLOPE OF 1.10%.

13 SANITARY SEWER SERVICE LINES SHOWN AS 4" P.V.C. (UNLESS NOTED TO BE D.I.P.) & SHALL BE LAID ON A MINIMUM SLOPE OF 1.10%.

14 NO MANHOLE COVERS OR CLEANOUTS ARE TO BE LOCATED IN THE CURB & GUTTER.

15 REFER ALSO TO GENERAL NOTES FOR ADDITIONAL REQUIREMENTS.

WATER DISTRIBUTION SYSTEM NOTES:

1 EXISTING UTILITIES SHALL BE VERIFIED IN FIELD PRIOR TO INSTALLATION OF ANY NEW PIPELINES.

2 ALL SERVICE LATERALS SHALL BE MARKED WITH MAGNETIC TAPE.

3 CONTRACTOR TO COORDINATE WITH THE UTILITY FOR CONNECTION TO EXISTING WATER MAIN.

4 WHERE WATER PIPING CROSSES THE SANITARY SEWER LINE, THE WATER SERVICE WITHIN 10-FEET OF THE POINT OF CROSSING SHALL BE AT LEAST 18-INCHES ABOVE THE TOP OF THE SEWER LINE. THE SEWER LINE SHALL BE OF DUCTILE IRON WITH MECHANICAL JOINTS AT LEAST 10 FEET ON BOTH SIDES OF THE CROSSING.

5 LINES UNDERGROUND SHALL BE INSTALLED, TESTED & APPROVED BEFORE BACKFILLING.

6 WATERLINES MUST BE CONSTRUCTED BY A LICENSED MUNICIPAL UTILITY CONTRACTOR (CLASSIFICATION MU).

7 UPON COMPLETION OF THIS PROJECT, "AS-BUILT" DRAWINGS MUST BE SUBMITTED TO THE ENGINEER, OWNER, & UTILITY.

8 PRE CAST STRUCTURES MAY BE USED AT THE CONTRACTORS OPTION.

9 ALL CONCRETE TO HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 P.S.I.

10 THE SITE UTILITY CONTRACTOR SHALL COOPERATE & WORK WITH OTHER CONTRACTORS PERFORMING WORK ON THIS PROJECT TO INSURE PROPER & TIMELY COMPLETION OF THIS PROJECT.

11 ALL MATERIALS SHALL BE UI LISTED & FACTORY MUTUAL APPROVED UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

12 THRUST BLOCKS SHALL BE PROVIDED AT ALL TEES, ELBOW & BENDS OF SUFFICIENT SIZE TO COMPLY WITH MINIMUM STANDARDS OF N.F.P.A. – EXISTING SOIL CONDITIONS.

13 A CONCRETE ANCHOR BLOCK AS SHOWN ON THE UTILITY DETAIL SHEET SHALL BE POURED AROUND THE FIRST BELL & SPIGOT PIPE JOINT RESTRAINT BE FROM THE END OF THE WATERLINE. THE MECHANICAL RESTRAINT SECURING THE JOINT SHALL BE WRAPPED WITH PLASTIC PRIOR TO THE POURING OF THE CONCRETE. THE INTENT OF THE CONCRETE ANCHOR BLOCK WILL HELP KEEP THE JOINTS FROM SEPARATING NEAR THE END OF THE WATERLINE.

14 ALL DUCTILE IRON PIPE TO BE AWWA C-151-81, CLASS 50

15 ALL UNDERGROUND FITTINGS TO BE MECH JOINT AWWA C110/A21.10, CLASS 250

16 ALL UNDERGROUND VALVES TO BE MECH JOINT AWWA C509, CLASS 250

17 ALL UNDERGROUND JOINTS TO BE TESTED & FLUSHED AS PER NFPA #24

18 ADEQUATE THRUST BLOCKS TO BE PROVIDED AS PER NFPA #24

19 THE CONTRACTOR SHALL ADJUST LOCATION OF PROPOSED WATER LINES AS REQUIRED TO AVOID CONFLICTS WITH STORM & OTHER UTILITIES.

20 FIRE HYDRANTS ARE TO BE INSTALLED SO THAT THE FIRE DEPARTMENT CONNECTION FACES THE STREET. THE FIRE HYDRANT CONNECTION IS TO BE NO LESS THAN 18" OR MORE THAN 36" ABOVE FINISHED GRADE. FIRE HYDRANTS SHALL BE CLEAR OF ANY OBSTRUCTIONS WITHIN 5 FT IN ANY DIRECTION PARALLEL WITH THE APPROACH OR THE VISIBILITY OF ANY FIRE HYDRANT, OR F.D.C./SIAMESE. FIRE HYDRANTS LOCATED IN PARKING AREAS SHALL BE PROTECTED BY BARRIERS THAT WILL PREVENT PHYSICAL DAMAGE BY VEHICLES (NFPA 11413-6.5, 3-6.6).

21 LUBRICANTS SHALL BE NON-TOXIC & SHALL NOT PROMOTE BIOLOGICAL GROWTH SOLVENT CEMENTED JOINTS NOT PERMITTED.

22 PROCEDURE FOR DISINFECTING POTABLE WATER LINES SHALL CONFORM TO THE REQUIREMENTS OF AWWA C601.

23 PRESSURE & LEAKAGE TESTS SHALL BE PERFORMED IN ACCORDANCE WITH CURRENT AWWA STANDARD C600 AND/OR MANUFACTURER'S PROCEDURE.

24 WHERE PROPOSED WATER LINE EXTENDS UNDER ANY PAVED SURFACE, THE TRENCH MUST BE BACKFILLED WITH APPROVED STONE.

25 ALL VALVES (G.V.) SHALL BE GATE VALVES WITH CAST IRON BOXES.

26 WATER INSTALLATION SHALL BE IN ACCORDANCE WITH "TEN STATES STANDARDS", TDEC STANDARDS & REGULATIONS, & THE CITY OF CHATTANOOGA STANDARDS.

27 CONNECTION TO THE WATER MAIN SHALL BE MADE UNDER THE SUPERVISION OF THE LOCAL WATER UTILITY.

28 RADIUS (DEFLECT) WATER LINES IN LIEU OF FITTINGS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

29 ALL WATER LINES SHALL HAVE A MINIMUM COVER OF 36".

30 THE CONTRACTOR SHALL NOTIFY THE WATER UTILITY & THE ENGINEER PRIOR TO BEGINNING CONSTRUCTION.

31 NO FIRE HYDRANTS OR WATER VALVE BOXES ARE TO BE LOCATED IN THE CURB & GUTTER.

32 ALL PIPING FROM THE "POINT OF SERVICE" INCLUDING UNDERGROUND USED FOR SPRINKLER OR STANDPIPE SYSTEM MUST BE INSTALLED BY A TENNESSEE REGISTERED SPRINKLER CONTRACTOR. [RULE 0780-2-7-08]

33 REFER ALSO TO GENERAL NOTES FOR ADDITIONAL REQUIREMENTS.

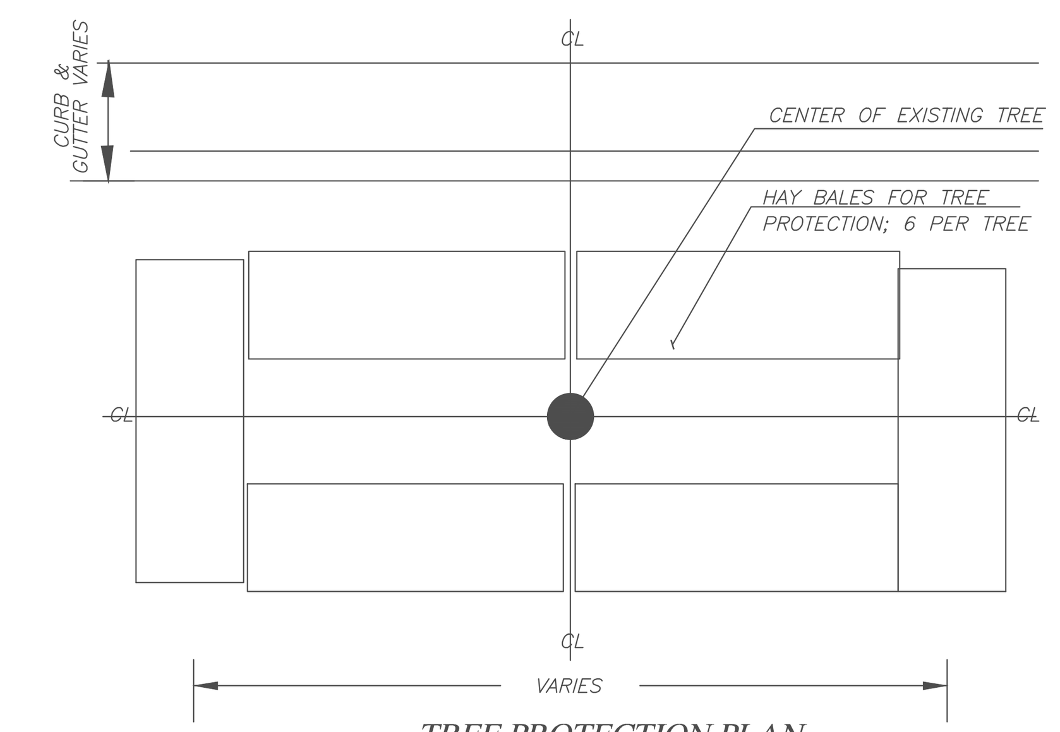
LANDSCAPE NOTES:

1. ALL PLANTS MUST BE HEALTHY, VIGOROUS & FREE OF PESTS & DISEASE.
2. ALL PLANTS MUST BE CONTAINER-GROWN OR BALLED & BUR LAPPED AS INDICATED IN THE PLANT LIST.
3. ALL TREES MUST BE FULL HEADED & MEET ALL REQUIREMENTS SPECIFIED.
4. ALL TREES MUST BE GUYED OR STAKED AS SHOWN IN THE DETAILS.
5. ALL PLANTS & PLANTING AREAS MUST BE COMPLETELY MULCHED AS SHOWN IN DETAILS.
6. PRIOR TO CONSTRUCTION; THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES & SHALL AVOID DAMAGE TO ALL UTILITIES DURING THE COURSE OF THE WORK. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY & ALL DAMAGE TO UTILITIES, STRUCTURES, SITE APPURTENANCES, ETC, WHICH OCCURS AS A RESULT OF THE LANDSCAPE CONSTRUCTION.
7. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES SHOWN ON THESE PLANS, BEFORE PRICING THE WORK.
8. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR FULLY MAINTAINING ALL PLANTING (INCLUDING, BUT NOT LIMITED TO: WATERING, SPRAYING, MULCHING, FERTILIZING, ETC.) OF PLANTING AREAS & LAWNS UNTIL THE WORK IS ACCEPTED IN TOTAL BY THE LANDSCAPE ARCHITECT AND OWNER.
9. THE LANDSCAPE CONTRACTOR SHALL COMPLETELY GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE (1) YEAR BEGINNING AT THE DATE OF TOTAL ACCEPTANCE. THE LANDSCAPE CONTRACTOR SHALL PROMPTLY MAKE ALL REPLACEMENTS BEFORE OR AT THE END OF THE GUARANTEE PERIOD (AS PER DIRECTION OF THE OWNER).
10. THE OWNER AGREES TO PERFORM ALL LANDSCAPE MAINTENANCE (INCLUDING WATERING) THROUGHOUT THE ONE YEAR GUARANTEE PERIOD UNLESS OTHERWISE DETERMINED.
11. ANY PLANT MATERIAL WHICH DIES, TURNS BROWN OR DEFOLIATES (PRIOR TO TOTAL ACCEPTANCE OF THE WORK) SHALL BE PROMPTLY REMOVED FROM THE SITE & REPLACED WITH MATERIAL OF THE SAME SPECIES, QUANTITY, SIZE, & MEETING ALL PLANT LIST SPECIFICATIONS.
12. STANDARDS SET FORTH IN "AMERICAN STANDARD FOR NURSERY STOCK" ARE ONLY GUIDELINE SPECIFICATIONS & SHALL BE CONSIDERED MINIMUM QUALITY REQUIREMENTS FOR PLANT MATERIAL.

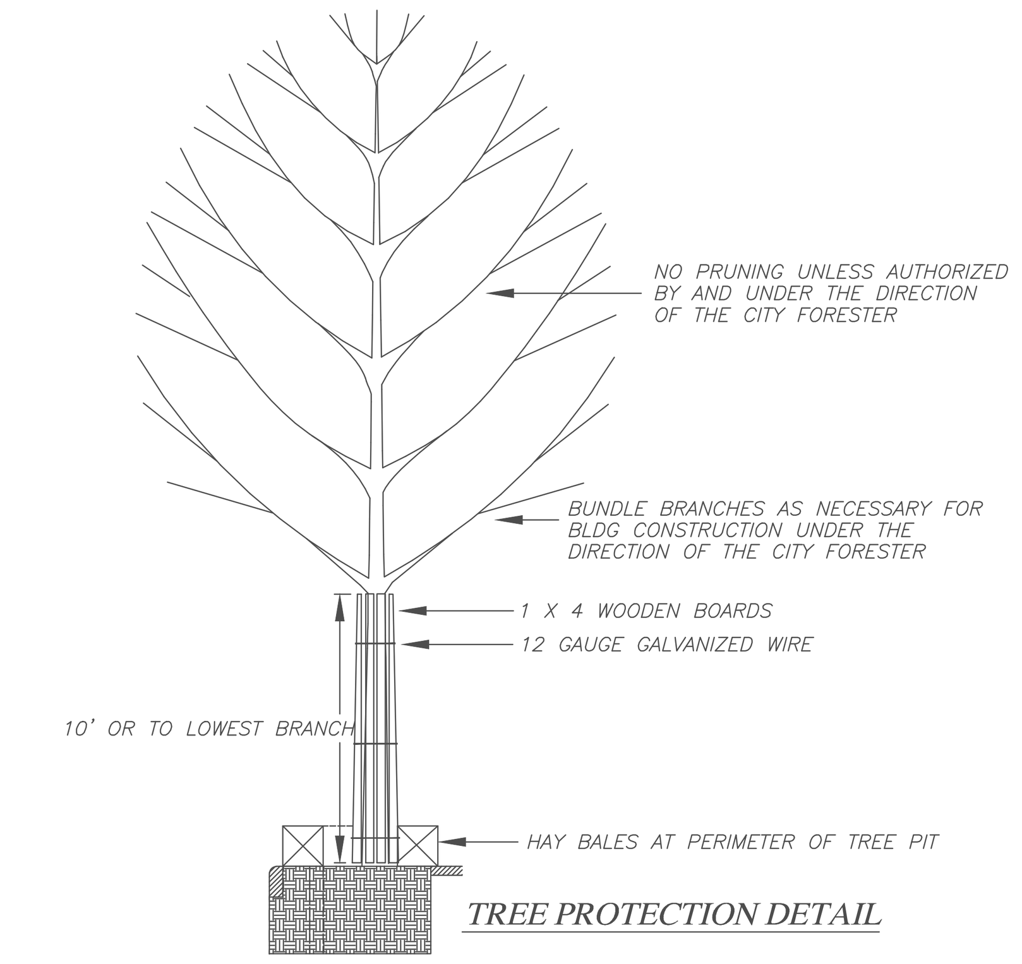
CITY OF CHATTANOOGA GENERAL NOTES PERTAINING TO EXISTING TREES
JOB CONDITIONS (SEE DETAIL "CTP" THIS SHEET):

1. PROTECTIONS: PROVIDE PROTECTION AS REQUIRED TO DESIGNATED LANDSCAPE IMPROVEMENTS TO AVOID DAMAGE CAUSED BY FALLING BUILDING MATERIALS OR THE REMOVAL OF MATERIALS RESULTING FROM EITHER CONSTRUCTION OR DEMOLITION OPERATIONS. EXISTING TREES AND OTHER PLANTINGS DESIGNATED TO REMAIN IN PLACE, SHALL BE PROTECTED FROM UNNECESSARY CUTTING, BREAKING, OR SKINNING OF ROOTS; SKINNING AND BRUISING OF BARK; SMOTHERING OF TREES BY STOCKPILING MATERIALS OF ANY KIND WITHIN THE DRIP LINE; AND FROM EXCESS FOOT OR VEHICULAR TRAFFIC OR PARKING OF VEHICLES WITHIN THE DRIP LINE. PROVIDE TEMPORARY GUARDS TO PROTECT TREES AND PLANTINGS TO BE LEFT STANDING.
2. TREE PROTECTION: INSTALL A SHIELD OF 1" X 4" WOODEN PLANKS COMPLETELY AROUND EACH TREE TRUNK FROM GROUND LEVEL TO WHERE THE TRUNK BEGINS TO "BRANCH OUT". ATTACH SUCH PROTECTION WITH 12 GAUGE GALVANIZED WIRE AROUND TREE TRUNK AT THE TOP, BOTTOM, AND MIDDLE OF THE PLANKING.
3. TREE PIT PROTECTION: PROTECT TREE PITS AND PIT VEGETATION FROM FALLING, SLIDING, OR WASHING BUILDING MATERIALS BY PLACING BALES OF STRAW AROUND THE PERIMETER OF EACH PIT OR OVER THE TOP OF THE PIT AS DIRECTED BY THE URBAN FORESTER. STRAW BALES SHALL REMAIN WHOLE AND UNBROKEN AND HAVE NO LOOSE STRAW THAT MAY BECOME SCATTERED AROUND THE AREA.
4. TREE REPAIRS: TREES AND/OR VEGETATION THAT HAVE BEEN DESIGNATED TO REMAIN AND THAT HAVE BEEN DAMAGED BY DEMOLITION OPERATIONS, ARE TO BE REPLACED OR REPAIRED IN A MANNER ACCEPTABLE TO THE URBAN FORESTER.
5. TREE REPLACEMENT: "TREE REPLACEMENT" IS DEFINED AS THE COMPLETE EXCAVATION OF AN EXISTING TREE AND ITS ROOT SYSTEM AND THE SUBSEQUENT PLANTING, BACK- FILLING, AND ADEQUATE FERTILIZATION AND WATERING OF ITS REPLACEMENT TREE FOR A PERIOD OF ONE YEAR AFTER PLANTING.

   THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, REPLACE TREES THAT CANNOT BE REPAIRED AND RESTORED TO A HEALTHY STATUS, AS DETERMINED BY THE URBAN FORESTER. REPLACEMENT TREES SHALL BE IN GOOD HEALTH AND SHALL BE EQUAL IN SPECIES, HEIGHT, SHAPE, AND CALIPER TO THE TREE(S) BEING REPLACED.



TREE PROTECTION PLAN



TREE PROTECTION DETAIL

(CTP) DETAIL: CITY OF CHATTANOOGA TREE PROTECTION PLAN & DETAIL

(NTS)

MAA CIVIL CONTACT: STEPHEN BRADY, P.E.
DIRECT LINE: 423-664-1480

ARTECH
1410 COWART STREET
CHATTANOOGA, TN 37408
423.265.4313
WWW.ARTECH.PRO

East Lake YFD Center Improvements

3610 Dodds Avenue, Chattanooga, TN 37402

ISSUE DATES
INITIAL ISSUE 12/20/19

JOB NO.	D'WN	CK'D
18-072	SDB	MH

C0.1

General Notes

CONTINUE DODDS AVENUE NEW METAL RAILING TO TENNIS COURTS. 18ft± LF. SEE A5.5 (DEDUCTIVE ALTERNATE #1)

APPROXIMATELY 180 LF NEW METAL RAILING ALONG DODDS AVENUE. FOR NEW GUARDRAIL, SEE A5.5 (DEDUCTIVE ALTERNATE #1)

SAWCUT & CONNECT NEW SIDEWALK TO DODDS AVE SIDEWALK, FLUSH

TO EXST STAIR GUARD RAIL, EACH SIDE

CONNECT TO EXST SIDEWALK

STANDARD CONCRETE SIDEWALK

NEW METAL RAILING TYP ALONG DODDS (106± LF) AND 37TH (250± LF). SEE A5.5. (DEDUCTIVE ALTERNATE #1)

BENCHES, TYP (6) PLACES SEE A5.5

CONNECT TO EXST SIDEWALK

EJ TYP ALONG FACE OF BUILDING

FFE=685.10

6'x6' CONCRETE STOOP AT DOOR

CONNECT TO EXST SIDEWALK

BIKE RACK LOCATION, SEE A5.5

(3) 3'-0" WIDE

EXISTING SIDEWALK TO REMAIN

EAST 37TH STREET

SIDEWALK FLUSH WITH PAVEMENT

FLUSH SIDEWALK ADJACENT TO PAVEMENT

MATCH LINE C1.1

MATCH LINE C1.2

STANDARD DUTY CONCRETE PAVING (ADA SPACE)

90° PARKING TYP ONSITE

18" CONCRETE CURB & GUTTER TYP ONSITE

LIGHT DUTY ASPHALT PAVING

HEAVY DUTY ASPHALT PAVING (WHERE SHADED)

NO CURB

LEGEND

- Ex. Curb
- Ex. Centerline
- Ex. Fence
- Ex. Water Line
- Ex. Fire Line
- Ex. Irrigation Line
- Ex. Storm Drainage Line
- Ex. Sanitary Sewer Line
- Ex. Sanitary Sewer Force Main
- Ex. Swale Centerline
- Ex. Ditch Centerline
- Ex. Gas Line
- Ex. Overhead Elect. or Utility Line
- Ex. Underground Electrical
- Ex. Underground Fiber Optics
- Ex. Underground Telephone
- **PROPERTY LINE**
- BUILDING LINE
- EASEMENT LINE
- BUILDING SETBACK LINE
- LANDSCAPE BUFFER LINE
- LOT LINE
- ROW LINE
- CURB
- CENTERLINE
- PROP. FENCE LINE
- PROP. LIMITS OF CONSTRUCTION
- PROPOSED TREE PROTECTION
- PROPOSED SWALE CENTERLINE
- PROPOSED DITCH CENTERLINE
- PROP. WATER LINE
- PROP. FIRE LINE
- PROP. IRRIGATION LINE
- PROP. GAS LINE
- PROP. STORM DRAINAGE LINE
- **PROP. SANITARY SEWER LINE**
- **PROP. SANITARY SEWER FORCE MAIN**
- PROP. OVERHEAD ELECT. OR UTILITY LINE
- PROP. UNDERGROUND ELECTRICAL
- PROP. UNDERGROUND FIBER OPTICS
- PROP. UNDERGROUND TELEPHONE

ABBREVIATIONS:
SSE = NEW PUBLIC SANITARY SEWER EASEMENT (SEE PLAN FOR WIDTH).
DE = NEW DRAINAGE EASEMENT (SEE PLAN FOR WIDTH).
WE, = NEW PUBLIC WATER EASEMENT (SEE PLAN FOR WIDTH).
L/A BUFFER = NEW LANDSCAPE BUFFER (SEE PLAN FOR WIDTH AND TYPE).
FYSI = FRONT YARD SETBACK
SYSI = SIDE YARD SETBACK
RYSI = REAR YARD SETBACK
FFE = FINISHED FLOOR ELEVATION
TW = FINISH GRADE AT TOP OF RETAINING WALL
BW = FINISHED GROUND GRADE AT BOTTOM OF RETAINING WALL (GRASS GRADE)
SDCO / SSCO = STORM DRAINAGE / SANITARY SEWER CLEAN-OUT
DS = ROOF DOWNSPOUT CONNECTION

SITE INFORMATION:
SITE AREA: 8± ACRES
SITE IS ZONED: R-2
LAND DISTURBANCE AREA: 0.90± ACRES
TAX MAP PARCEL #: 168B J 016
EXST BUILDING AREA: 11,341± SF
BUILDING AREA: 16,324± SF (44% INCREASE COMPARED TO PRE)
BUILDING TYPE: GYMNASIUM

STREET ADDRESS: 3610 DODDS AVENUE
FRONT YARD SETBACK: 25 FEET
SIDE YARD SETBACK: 10 FEET
REAR YARD SETBACK: 25 FEET

SANITARY SEWER AVAILABILITY: EXST. PUBLIC SEWER MAIN LOCATED IN EAST 37TH STREET.

POTABLE WATER SUPPLY AVAILABILITY: EXST. PUBLIC WATER MAIN LOCATED IN EAST 37TH STREET.

STORM DRAINAGE: STORM DRAINAGE WILL DISCHARGE INTO AN EXISTING CULVERT IN EAST 37TH STREET.

PROPERTY FRONTAGE: 240 LF DODDS AVE = 7 REQUIRED TREES
340 LF E 37TH ST = 10 REQUIRED TREES
REQUIRED STREET YARD TREES: 17
EXISTING STREET YARD TREES: 6
PROPOSED STREET YARD TREES: 11

REGULAR PARKING SPACES: 23
REGULAR H'CAP SPACES: 0
VAN ACCESSIBLE H'CAP SPACES: 1
TOTAL PARKING PROVIDED: 24 SPACES

FLOOD ZONE: PORTIONS OF THE PROPERTY ARE LOCATED IN FLOOD ZONE "X" AS SCALED FROM THE FIRM MAP COMMUNITY-PANEL NUMBER 47065C0457G, MAP REVISED 2/3/2016.

PROPERTY OWNER: CITY OF CHATTANOOGA

NORTH

10' 0 10' 20'

Scale 1" = 10'

MAA CIVIL CONTACT: STEPHEN BRADY, P.E.
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East Lake YFD Center Improvements

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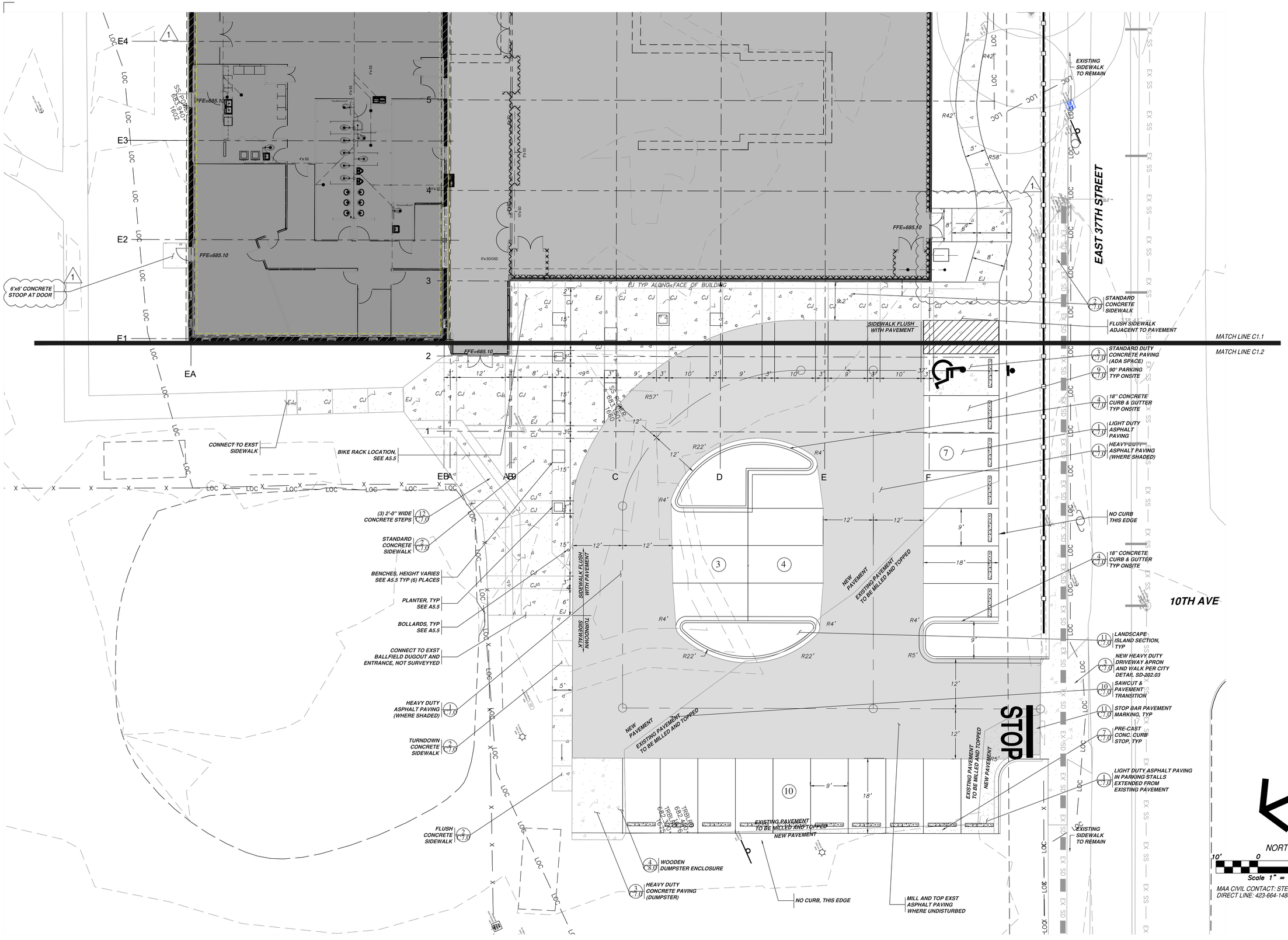
JOYCE E. HUTCHERSON
REGISTERED
LANDSCAPE ARCHITECT
No. 1315
STATE OF TENNESSEE

ISSUE DATES
INITIAL ISSUE 12/20/19
ADDENDUM 6 01/14/20

JOB NO. 18-072 | D'WN SDB | CK'D MH

C1.1

Site Staking Plan



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ISSUE DATES

	INITIAL ISSUE	12/20/19
1	ADDENDUM 6	01/14/20

MAA CIVIL CONTACT: STEPHEN BRADY, P.E.
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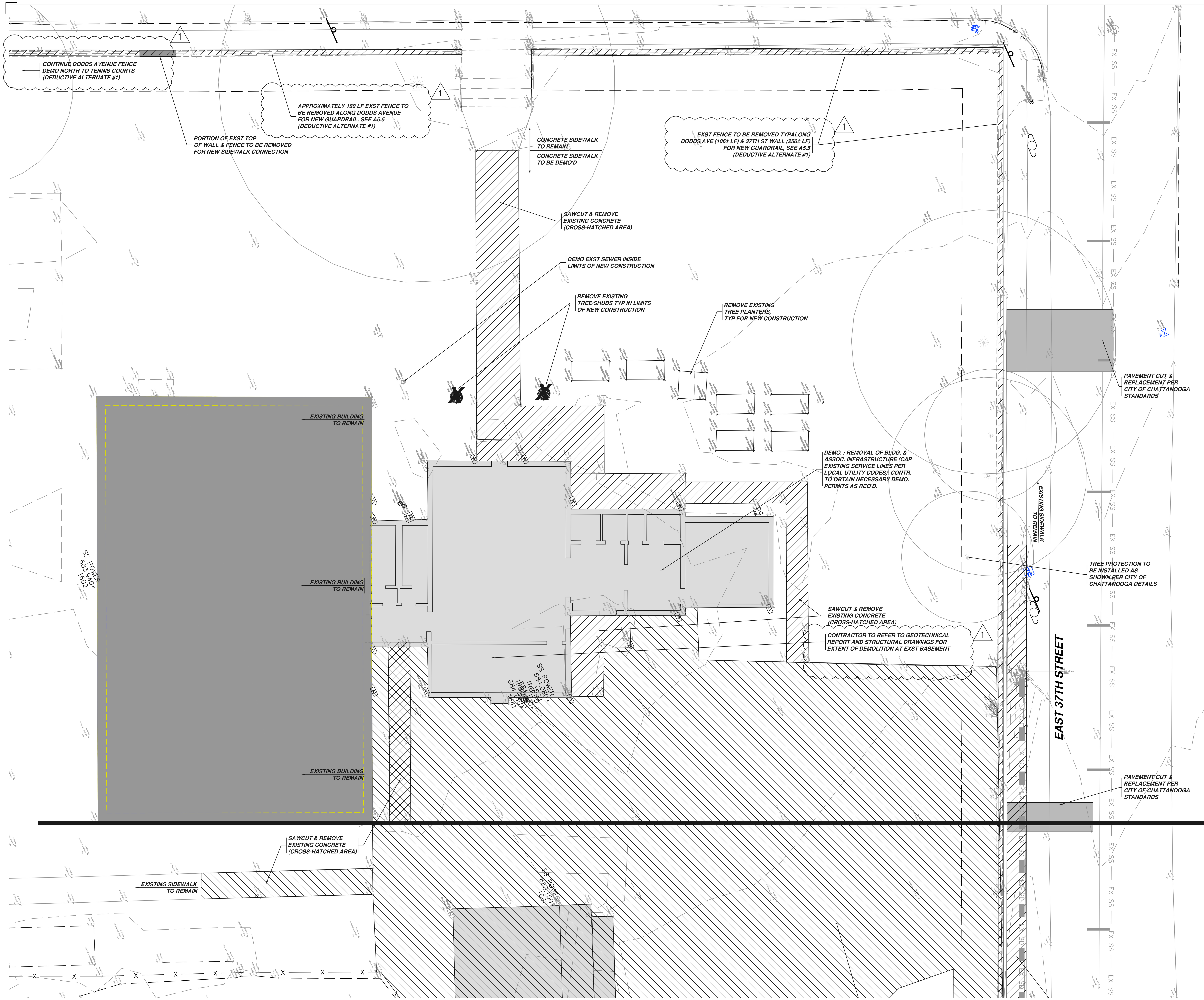
JOB NO.	D'WN	CK'D
18-072	SDB	MH

C1.2

Site Grading Plan


CONTINUE DODDS AVENUE FENCE DEMO NORTH TO TENNIS COURTS (DEDUCTIVE ALTERNATE #1)
APPROXIMATELY 180 LF EXST FENCE TO BE REMOVED ALONG DODDS AVENUE FOR NEW GUARDRAIL, SEE A5.5 (DEDUCTIVE ALTERNATE #1)
PORTION OF EXST TOP OF WALL & FENCE TO BE REMOVED FOR NEW SIDEWALK CONNECTION
CONCRETE SIDEWALK TO REMAIN
CONCRETE SIDEWALK TO BE DEMO'D
EXST FENCE TO BE REMOVED TYPALONG DODDS AVE (106± LF) & 37TH ST WALL (250± LF) FOR NEW GUARDRAIL, SEE A5.5 (DEDUCTIVE ALTERNATE #1)
SAWCUT & REMOVE EXISTING CONCRETE (CROSS-HATCHED AREA)
DEMO EXST SEWER INSIDE LIMITS OF NEW CONSTRUCTION
REMOVE EXISTING TREE/SHUBS TYP IN LIMITS OF NEW CONSTRUCTION
REMOVE EXISTING TREE PLANTERS, TYP FOR NEW CONSTRUCTION
PAVEMENT CUT & REPLACEMENT PER CITY OF CHATTANOOGA STANDARDS
EXISTING BUILDING TO REMAIN
DEMO. / REMOVAL OF BLDG. & ASSOC. INFRASTRUCTURE (CAP EXISTING SERVICE LINES PER LOCAL UTILITY CODES). CONTR. TO OBTAIN NECESSARY DEMO. PERMITS AS REQ'D.
EXISTING SIDEWALK TO REMAIN
TREE PROTECTION TO BE INSTALLED AS SHOWN PER CITY OF CHATTANOOGA DETAILS
SS POWER 683.940× 1602
EXISTING BUILDING TO REMAIN
SAWCUT & REMOVE EXISTING CONCRETE (CROSS-HATCHED AREA)
CONTRACTOR TO REFER TO GEOTECHNICAL REPORT AND STRUCTURAL DRAWINGS FOR EXTENT OF DEMOLITION AT EXST BASEMENT
SS POWER 684.080× 1638
EAST 37TH STREET
EXISTING BUILDING TO REMAIN
PAVEMENT CUT & REPLACEMENT PER CITY OF CHATTANOOGA STANDARDS
SAWCUT & REMOVE EXISTING CONCRETE (CROSS-HATCHED AREA)
EXISTING SIDEWALK TO REMAIN
SS POWER 683.150× 1660
EX SS
EX SD
MATCH LINE C2.1
MATCH LINE C2.2

LEGEND

	Ex. Curb
	Ex. Centerline
X	Ex. Fence
EX W	Ex. Water Line
EX FL	Ex. Fire Line
EX IRR	Ex. Irrigation Line
EX SD	Ex. Storm Drainage Line
EX SS	Ex. Sanitary Sewer Line
EX FM	Ex. Sanitary Sewer Force Main
S	Ex. Swale Centerline
D	Ex. Ditch Centerline
EX G	Ex. Gas Line
EX OHE	Ex. Overhead Elect. or Utility Line
EX UGE	Ex. Underground Electrical
EX UGFO	Ex. Underground Fiber Optics
EX UGT	Ex. Underground Telephone
	PROPERTY LINE
	BUILDING LINE
	EASEMENT LINE
	BUILDING SETBACK LINE
	LANDSCAPE BUFFER LINE
	LOT LINE
	ROW LINE
	CURB
	CENTERLINE
	PROP. FENCE LINE
LOC	PROP. LIMITS OF CONSTRUCTION
TF	PROPOSED TREE PROTECTION
S	PROPOSED SWALE CENTERLINE
D	PROPOSED DITCH CENTERLINE
W	PROP. WATER LINE
FL	PROP. FIRE LINE
IRR	PROP. IRRIGATION LINE
G	PROP. GAS LINE
SD	PROP. STORM DRAINAGE LINE
SS	PROP. SANITARY SEWER LINE
FM	PROP. SANITARY SEWER FORCE MAIN
OHE	PROP. OVERHEAD ELECT. OR UTILITY LINE
UGE	PROP. UNDERGROUND ELECTRICAL
UGFO	PROP. UNDERGROUND FIBER OPTICS
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BUILDING TYPE: GYMNASIUM

STREET ADDRESS: 3610 DODDS AVENUE
FRONT YARD SETBACK: 25 FEET
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SANITARY SEWER AVAILABILITY: EXST. PUBLIC SEWER MAIN LOCATED IN EAST 37TH STREET.

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PROPERTY FRONTAGE: 240 LF DODDS AVE = 7 REQUIRED TREES
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REQUIRED STREET YARD TREES: 17
EXISTING STREET YARD TREES: 6
PROPOSED STREET YARD TREES: 11

REGULAR PARKING SPACES: 23
REGULAR H'CAP SPACES: 0
VAN ACCESSIBLE H'CAP SPACES: 1
TOTAL PARKING PROVIDED: 24 SPACES

FLOODZONE: PORTIONS OF THE PROPERTY ARE LOCATED IN FLOOD ZONE "X" AS SCALED FROM THE FIRM MAP COMMUNITY-PANEL NUMBER 47065C0457G, MAP REVISED 2/3/2016.

PROPERTY OWNER: CITY OF CHATTANOOGA

NOTE:
CONTRACTOR TO REFER TO STRUCTURAL AND ARCHITECTURAL SHEETS FOR ADDITIONAL REQUIREMENTS OF DEMO OF EXISTING.

FOUNDRY SAND WAS LOCATED ON SITE PER THE GEOTECHNICAL REPORT. CONTRACTOR RESPONSIBLE FOR TESTING AND PROPER DISPOSAL OF ONSITE CONTAMINATED SOIL.

ITEMS TO BE SALVAGE INCLUDE:
1. EXTERIOR FLOOD LIGHTS (LED) MOUNTED TO THE EXISTING GYM.
2. INTERIOR LED BULBS IN OLD FLUORESCENT FIXTURES
3. INTERIOR GYM LED FIXTURES
4. BACKBOARDS
5. BACKBOARD SUPPORTS
6. SCOREBOARDS
7. EXTERIOR BIKE RACK

NORTH

10' 0 10' 20'
Scale 1" = 10'

MAA CIVIL CONTACT: STEPHEN BRADY, P.E.
DIRECT LINE: 423-664-1480

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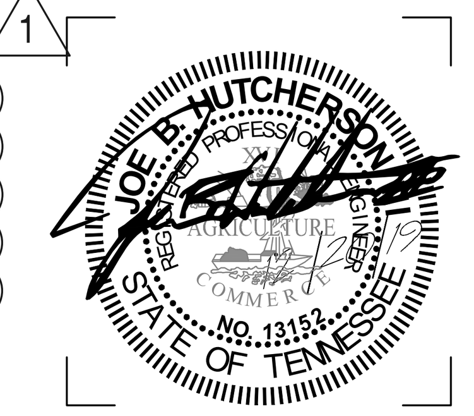

ISSUE DATES
INITIAL ISSUE 12/20/19
1 ADDENDUM 6 01/14/20

JOB NO.	D'WN	CK'D
18-072	SDB	MH

C2.1

Existing Conditions & Demolition Plan

LEGEND

- Ex. Curb
- Ex. Centerline
- X — Ex. Fence
- EX W — Ex. Water Line
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- EX FM — Ex. Sanitary Sewer Force Main
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DS = ROOF DOWNSPOUT CONNECTION

SITE INFORMATION:

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LAND DISTURBANCE AREA:	0.90± ACRES
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10' 0 10' 20'

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JUSTICE B. HUTCHERSON
LICENSED PROFESSIONAL ENGINEER
NO. 131154
STATE OF TENNESSEE

ISSUE DATES

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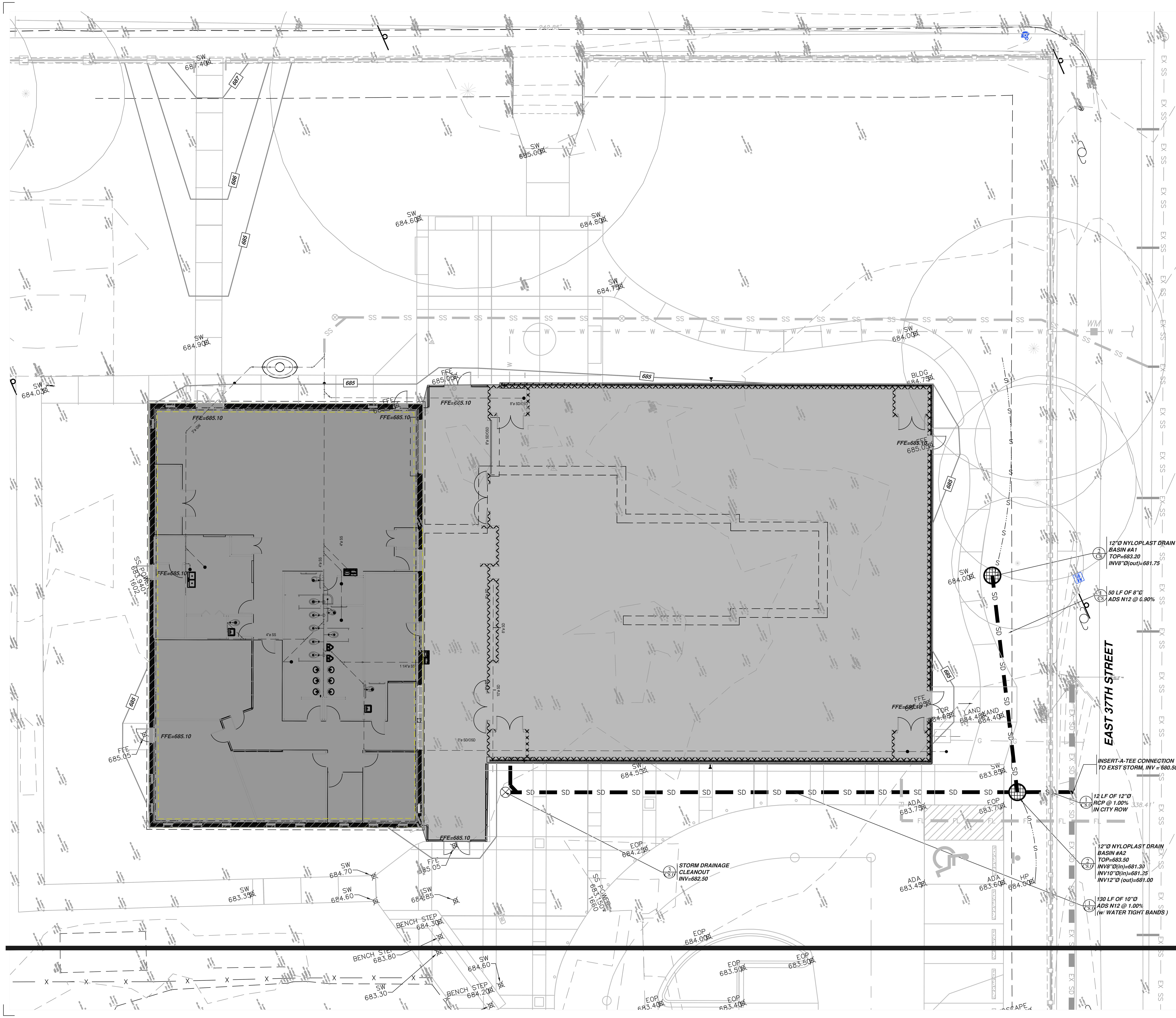
1	ADDENDUM 6	01/14/20

JOB NO.	D'WN	CK'D
18-072	SDB	MH

C2.2

Existing Conditions & Demolition Plan



LEGEND

Symbol	Description
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NOTES

- SEE SHEET C0.1 FOR GENERAL AND GRADING AND DRAINAGE NOTES. (1)
- REFER TO GEOTECHNICAL REPORT FOR UNDERCUTTING REQUIREMENTS (30" BELOW FOUNDATIONS/FLOORS; 15" BELOW PAVEMENTS)
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ISSUE DATES

INITIAL ISSUE	12/20/19
(1) ADDENDUM 6	01/14/20

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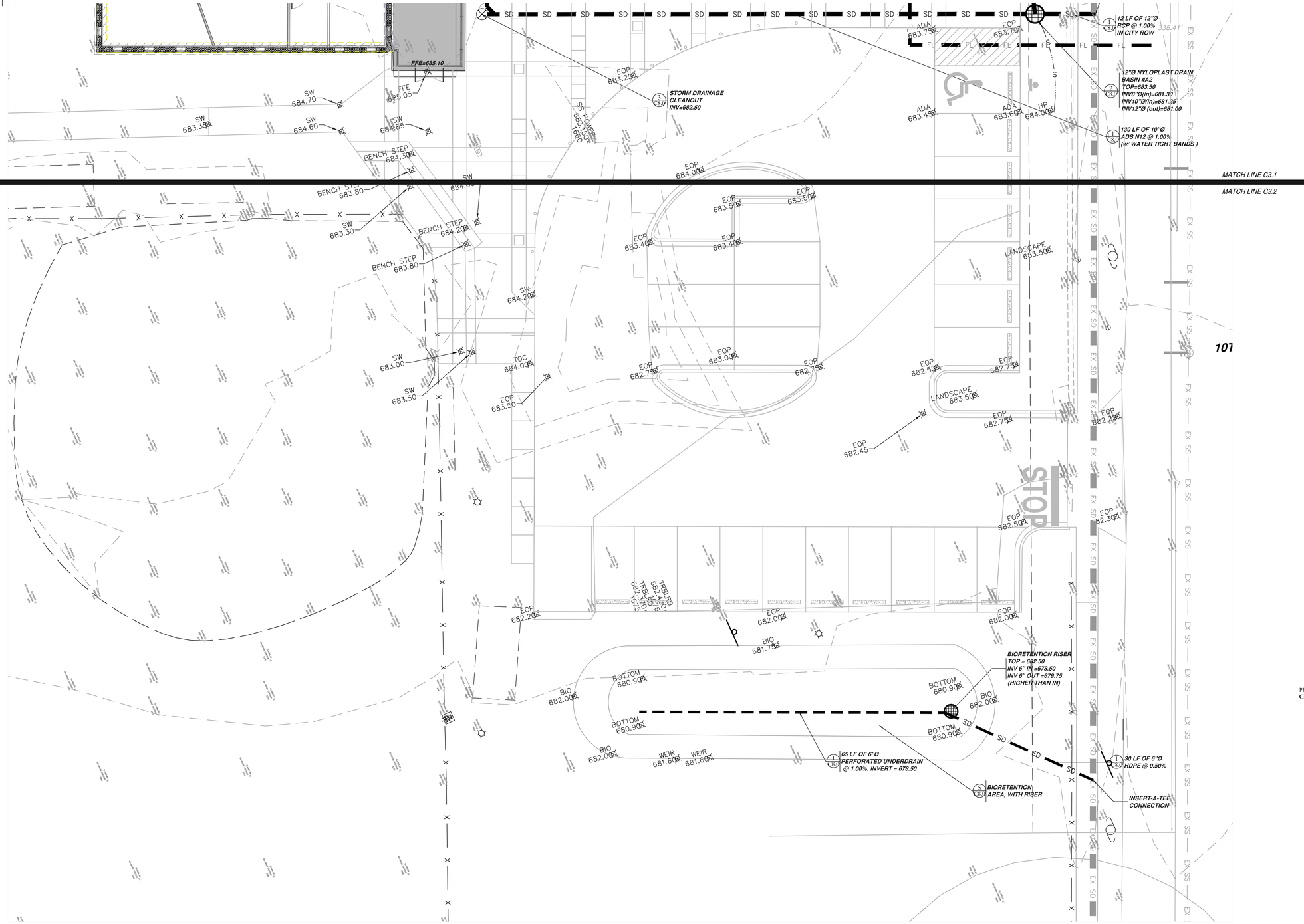
C3.1

Site Grading Plan



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ISSUE DATES
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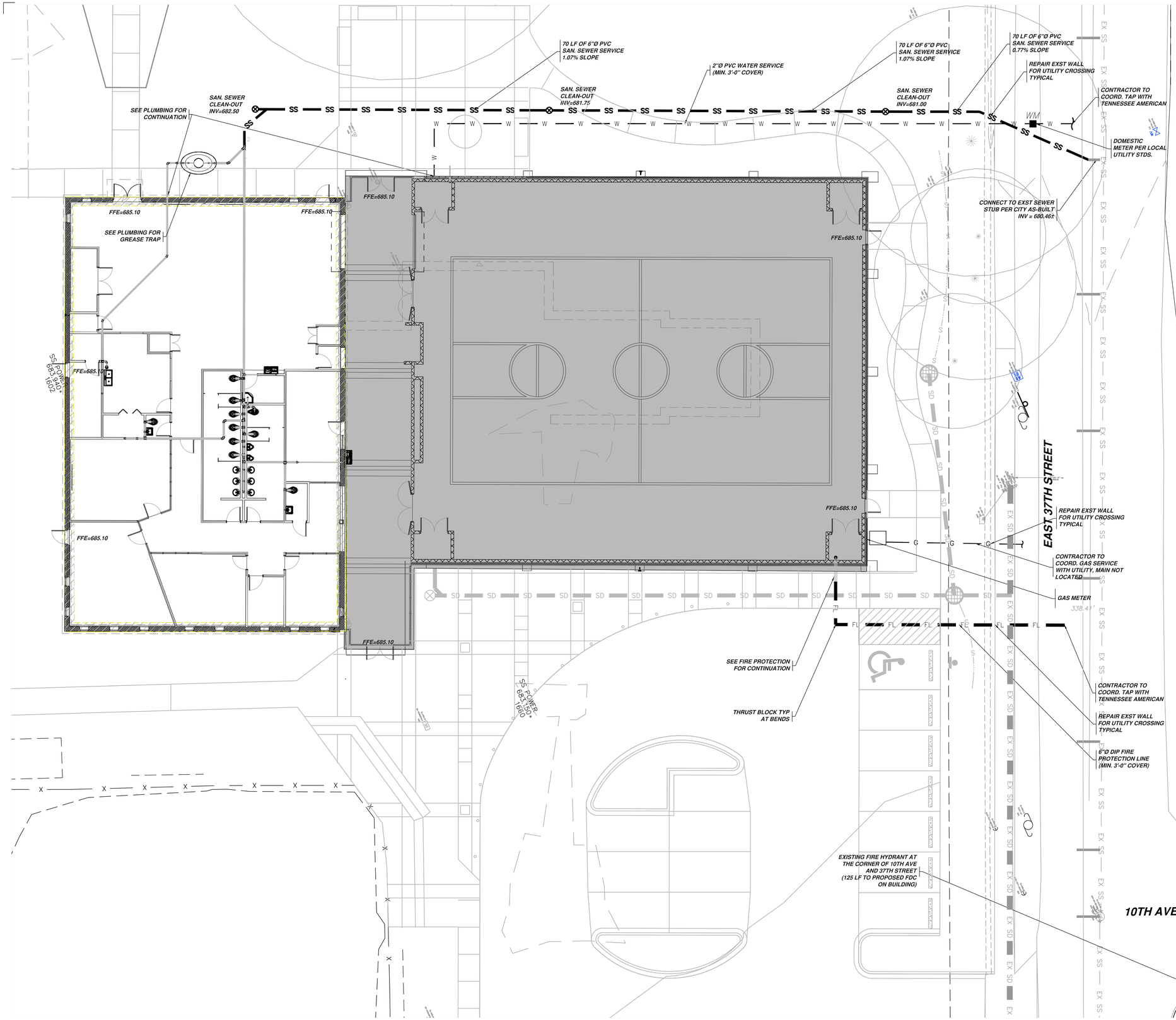
C3.2

Site Grading Plan



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NOTE
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JOE E. HUTCHERSON
REGISTERED PROFESSIONAL ENGINEER
AGRICULTURAL & BIOLOGICAL
No. 131534
STATE OF TENNESSEE

ISSUE DATES
INITIAL ISSUE 12/20/19

JOB NO.	D'WN	CK'D
18-072	SDB	MH

C4.1
Site Utilities Plan

TYPE OF SPECIES	YEAR	ANALYSIS OR EQUIVALENT N–P–K	RATE	N TOP DRESSING RATE
1. COOL SEASON GRASSES	FIRST SECOND MAINTENANCE	6–12–12 6–12–12 10–10–10	1500LBS./AC. 1000LBS./AC. 400LBS./AC.	50–100 LBS./AC. 1/ 2/ – 30
2. COOL SEASON GRASSES AND LEGUMES	FIRST SECOND MAINTENANCE	6–12–12 0–10–10 0–10–10	1500LBS./AC. 1000LBS./AC. 400LBS./AC.	0–50 LBS./AC. 1/ – –
3. GROUND COVERS	FIRST SECOND MAINTENANCE	10–10–10 10–10–10 10–10–10	1300LBS./AC. 3/ 1300LBS./AC. 3/ 1100LBS./AC.	– – –
4. SHRUB LESPEDEZA	FIRST MAINTENANCE	0–10–10 0–10–10	700LBS./AC. 700LBS./AC. 4/	– –
5. TEMPORARY COVER CROPS SEEDED ALONE	FIRST MAINTENANCE	10–10–10	500LBS./AC.	30 LBS./AC. 5/
6. WARM SEASON GRASSES	FIRST SECOND MAINTENANCE	6–12–12 6–12–12 10–10–10	1500LBS./AC. 800LBS./AC. 400LBS./AC.	50–100 LBS./AC. 2/ 6/ 50–100 LBS./AC. 2/ 30 LBS./AC.
7. WARM SEASON GRASSES AND LEGUMES	FIRST SECOND MAINTENANCE	6–12–12 0–10–10 0–10–10	1500LBS./AC. 1000LBS./AC. 400LBS./AC.	50 LBS./AC. 6/

1. APPLY IN SPRING FOLLOWING SEEDING.
2. APPLY IN SPLIT APPLICATIONS WHEN HIGH RATES ARE USED.
3. APPLY IN 3 SPLIT APPLICATIONS.
4. APPLY WHEN PLANTS ARE PRUNED.
5. APPLY TO GRASS SPECIES ONLY.
6. APPLY WHEN PLANTS GROW TO A HEIGHT OF 2 TO 4 INCHES.

MULCHING RATES:
1. DRY STRAW: 2 TONS PER ACRE.
2. DRY HAY: 2–1/2 TONS PER ACRE.
3. FOR HYDRAULIC SEEDING USE WOOD CELLULOSE MULCH OR WOOD PULP FIBER AT THE RATE OF 500 POUNDS / ACRE

FM FERTILIZER & MULCHING REQUIREMENTS

SPECIES	BROADCAST PER ACRE	BROADCAST PER 1000 S.F.	RESOURCE AREA	PLANTING DATES J F M A M J J A S O N D	REMARKS
BARLEY (HORDEUM VULGARE) ALONE	144 LBS.	3.3 LBS.	M–L 4/ P C		14,000 SEED PER POUND WINTERHARDY, USE ON PRODUCTIVE SOILS.
IN MIXTURES	24 LBS.	0.6 LBS.			
LESPEDEZA, ANNUAL (LESPEDEZA STRIATA) ALONE	40 LBS.	0.9 LBS.	M–L P C		200,000 SEED PER POUND MAY VOLUNTEER FOR SEVERAL YEARS USE INOCULANT EL.
IN MIXTURES	10 LBS.	0.2 LBS.			
LOVE GRASS, WEEPING (ERAGROTIS CURVULA) ALONE	4 LBS.	0.1 LBS.	M–L P C		1,500,000 SEED PER POUND MAY LAST FOR SEVERAL YEARS. MIX WITH SERICEA LESPEDEZA
IN MIXTURES	2 LBS.	0.05 LBS.			
MILLET, BROWNTOP (PANICUM FASCICULATUM) ALONE	40 LBS.	0.9 LBS.	M–L P C		137,000 SEED PER POUND, QUICK DENSE COVER. WILL PROVIDE TOO MUCH COMPETITION IN MIXTURES IF SEEDED AT HIGH RATES.
IN MIXTURES	10 LBS.	0.2 LBS.			
RYE, (SECALE CEREALE) ALONE	3 BU	3.9 LBS.	M–L P C		18,000 SEED PER POUND, QUICK COVER. DROUGHT TOLERANT AND WINTERHARDY.
IN MIXTURES	1/2 BU	0.6 LBS.			
RYEGRASS, ANNUAL (LOLIUM TEMULENTUM) ALONE	40 LBS.	0.9 LBS.	M–L P C		227,000 SEED PER POUND, DENSE COVER. VERY COMPETITIVE & IS NOT TO BE USED IN MIXTURES.

TS DISTURBED AREA STABILIZATION (TEMP)

SPECIES	BROADCAST PER ACRE	BROADCAST PER 1000 S.F.	RESOURCE AREA	PLANTING DATES J F M A M J J A S O N D	REMARKS
BERMUDA, COMMON HULLED SEED ALONE WITH OTHER PERENNIALS	10 LBS. 6 LBS.	0.2 LBS. 0.1 LBS.	P C		1,787,000 SEED PER POUND. QUICK COVER. LOW GROWING AND SOD FORMING. FULL SUN. GOOD FOR ATHLETIC FIELDS
BERMUDA, COMMON UNHULLED SEED W/ TEMP COVER WITH OTHER PERENNIALS	10 LBS. 6 LBS.	0.2 LBS. 0.1 LBS.	P C		PLANT WITH WINTER ANNUALS PLANT WITH TALL FESCUE
CENTIPEDE (EREMOCHLOA OPHIUROIDES)	BLOCK SOD ONLY		P C		DROUGHT TOLERANT, FULL SUN OR PARTIAL SHADE. EFFECTIVE ADJACENT TO CONC. & IN CONCENTRATED FLOW AREAS. IRRIGATION IS NEEDED UNTIL FULLY ESTABLISHED. DO NOT PLANT NEAR PASTURES.
CROWNVETECH (CORONILLA VARIA) WITH WINTER ANNUALS OR COOL SEASON GRASSES	15 LBS.	0.3 LBS.	M–L P		100,000 SEED PER POUND, DENSE GROWTH. DROUGHT TOLERANT & FIRE RESISTANT. USE FROM NORTH ATLANTA AND NORTHWARD.
FESCUE, TALL (FESTUCA ARUNDINACEA) ALONE	50 LBS.	1.1 LBS.	M–L P		227,000 SEED PER POUND. USE ALONE ONLY ON BETTER SITES. NOT FOR DROUGHTY SOILS. NOT FOR HEAVY USE
W/ OTHER PERENNIALS	30 LBS.	0.7 LBS.			
LESPEDEZA (AMBRO. VIRGATA) SCARIFIED UNSCARIFIED	60 LBS. 75 LBS.	1.4 LBS. 1.7 LBS.	M–L P C		300,000 SEED PER POUND. HEIGHT OF GROWTH IS 18 TO 24 INCHES. ADVANTAGES IN URBAN AREAS. MIX W/ WEEPING LOVE GRASS, COMMON BERMUDA BAHIA, TALL FESCUE, OR WINTER ANNUALS. INOCULATE SEED W/ INOCULANT.

PS DISTURBED AREA STABILIZATION (PERM)

SEDIMENT & EROSION CONTROL NOTES:

1. CONTRACTOR IS TO ADHERE TO THE TENNESSEE EROSION & SEDIMENT CONTROL HANDBOOK; & THE BEST MANAGEMENT PRACTICES MANUAL OF THE STORM WATER MANAGEMENT DEPARTMENT OF PUBLIC WORKS FOR THE CITY OF CHATTANOOGA.
2. CONTRACTOR SHALL BE RESPONSIBLE DURING CONSTRUCTION FOR THE CONTINUOUS MAINTENANCE OF SEDIMENT & EROSION CONTROL MEASURES AS CALLED FOR ON THE DRAWINGS & PER THE TN EROSION & SEDIMENT CONTROL HANDBOOK & THE REQUIREMENTS OF THE CITY OF CHATTANOOGA.
3. SEDIMENT & EROSION CONTROL FACILITIES, & STORM DRAINAGE FACILITIES SHALL BE CONSTRUCTED PRIOR TO ANY OTHER CONSTRUCTION.
4. SEDIMENT & EROSION CONTROL MEASURES SHALL NOT BE REMOVED UNTIL ALL CONSTRUCTION IS COMPLETE & UNTIL A PERMANENT GROUND COVER HAS BEEN ESTABLISHED.
5. ALL GRADED AREAS SHALL BE STABILIZED WITH A TEMPORARY FAST GROWING COVER AND/OR MULCH, NO LATER THAN 2 WEEKS AFTER EARTH DISTURBING ACTIVITY ENDS IN THOSE AREAS WHERE GRADING ACTIVITY HAS CEASED & FINE GRADING WILL NOT TAKE PLACE FOR AT LEAST 15 DAYS.
6. EXISTING DRAINAGE STRUCTURES TO BE INSPECTED, REPAIRED AS NEEDED & CLEANED OUT TO REMOVE ALL SILT & DEBRIS.
7. SEEDING & FERTILIZING RATES FOR TEMPORARY AND PERMANENT STANDS OF GRASS SHALL BE PER CHARTS ON DETAIL SHEET.
8. ADDITIONAL EROSION CONTROL DEVICES SHALL BE USED AS REQUIRED.
9. SILT FENCE AND/OR SILT LOGS SHALL BE CLEANED OR REPLACED WHEN SILT BUILDS UP TO 50% CAPACITY OF SILT FENCE AND/OR SILT LOGS.
10. IF ANY FINES OR PENALTIES ARE LEVIED AGAINST THE PROPERTY OR PROPERTY OWNER BECAUSE OF LACK OF EROSION AND/OR SEDIMENT CONTROL, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAYMENT OF SUCH FINES OR PENALTIES OR THE COST OF ANY FINES OR PENALTIES SHALL BE DEDUCTED FROM THE CONTRACT AMOUNT.
11. EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION & SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.
12. CONSTRUCTION EXIT SHALL BE MAINTAINED ON A CONTINUOUS BASIS.
13. THE CONTRACTOR SHALL USE WHATEVER MEASURES ARE REQUIRED TO PREVENT SILT & CONSTRUCTION DEBRIS FROM FLOWING ONTO ADJACENT PROPERTIES. THIS CAN BE ACCOMPLISHED BY SMALL TEMPORARY SEDIMENT POINTS, SILT FENCES OF STEEL WIRE & BURLAP OR BARRIERS OF CEDAR TREES AND/OR BALES OF STRAW. CONTRACTOR SHALL COMPLY WITH ALL LOCAL EROSION, CONSERVATION, & SILTATION ORDINANCES. CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION CONTROL STRUCTURES UPON COMPLETION OF PERMANENT DRAINAGE FACILITIES & THE ESTABLISHMENT OF A STAND OF GRASS SUFFICIENT TO PREVENT EROSION.
14. CONTRACTOR SHALL TAKE ALL AVAILABLE PRECAUTIONS TO CONTROL DUST. CONTRACTOR SHALL CONTROL DUST BY SPRINKLING, BY APPLYING CALCIUM CHLORIDE, OR BY OTHER METHODS AS DIRECTED BY ENGINEER AND/OR OWNER'S REPRESENTATIVE, AT NO ADDITIONAL COST TO OWNER.
15. CONTRACTOR TO COMPLY WITH ALL STATE & LOCAL SEDIMENT CONTROL & AIR POLLUTION ORDINANCES OR RULES.
16. ALL DISTURBED AREA TO BE GRASSED.
17. TEMPORARY EROSION CONTROL DEVICES TO BE INSTALLED PRIOR TO BEGINNING OF GRADING. CONTRACTOR SHALL MAINTAIN ALL TEMPORARY EROSION CONTROL DEVICES & SHALL REMOVE SILT FORM BERM DITCHES, SILT DAMS, & SILT FENCES AS NEEDED.
18. ALL SIDE DITCHES TO BE CLEANED AND/OR REGRADED TO PROVIDE PROPER DRAINAGE.
19. ALL AREAS NOT OTHERWISE SURFACED ARE TO BE SEEDED, LANDSCAPED, MULCHED, WATERED & MAINTAINED UNTIL AN ADEQUATE STAND OF GRASS IS OBTAINED.
20. SEEDING & FERTILIZING RATES FOR TEMPORARY & PERMANENT STANDS OF GRASS SHALL BE PER THE CITY OF CHATTANOOGA BEST MANAGEMENT PRACTICES MANUAL OF THE STORM WATER DEPARTMENT OF PUBLIC WORKS FOR THE CITY OF CHATTANOOGA.

MULCHING APPLICATION REQUIREMENTS		
MATERIAL	RATE	DEPTH
STRAW OR HAY	2–1/2 TON/ACRE	6" TO 10"
WOOD WASTE, CHIPS, SAWDUST, BARK	6 TO 9 TON/ACRE	2" TO 3"
CUTBACK ASPHALT	1200 GAL./ACRE OR 1/4 GAL./SY	----
POLYETHYLENE FILM	SECURE WITH SOIL, ANCHORS, WEIGHTS	----
CUTBACK ASPHALT	SEE MANUFACTURER'S	----
GEOTEXTILES, JUTE MATTING, NETTING, ETC.	RECOMMENDATIONS RATE	----

FM DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)

ANTICIPATED ACTIVITY SCHEDULE

ACTIVITY	J	F	M	A	M	J	J	A	S	O	N	D
1. INSTALL SEDIMENT CONTROLS												
2. CLEARING & GRADING												
3. STORM DRAIN INSTALLATION												
4. SANITARY SEWER INSTALLATION												
5. UTILITY INSTALLATION												
6. GRASS (TEMP.) (PERM.)												
7. MAINTAIN EROSION CONTROL												
8. PAVING												
9. FINAL LANDSCAPING												
10. CLEAN UP												

THE ABOVE CONSTRUCTION SEQUENCES ARE ANTICIPATED SERIES OF CONSTRUCTION EVENTS. SHOULD THE SEQUENCES OF EVENTS CHANGE SIGNIFICANTLY, THE CONTRACTOR SHALL UPDATE THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AS REQUIRED.

CONTRACTOR TO AMEND
24 HOUR EMERGENCY CONTACT:

NAME:
COMPANY:
ADDRESS:
CITY/STATE/ZIP:
OFFICE PHONE:

CONTRACTOR TO AMEND
OWNERS REPRESENTATIVE RESPONSIBLE FOR EROSION CONTROL IS _____

PHONE# _____

REPRESENTATIVE MUST BE TNEPSC LEVEL I CERTIFIED

CITY OF CHATTANOOGA SPECIAL NOTE:
SITE EROSION CONTROLS SHALL BE CHECKED AND, IF NECESSARY, REPAIRED WEEKLY & WITHIN 24 HOURS OF EACH RAINFALL GREATER THAN 1/2". IN THE EVENT OF CONTINUOUS RAINFALL, EROSION CONTROLS SHALL BE CHECKED DAILY.
THE PERMITTEE SHALL MAINTAIN RECORD OF SUCH CHECKS & REPAIRS. THESE RECORDS MUST BE KEPT ON-SITE OR IN THE OFFICE OF THE RESPONSIBLE PERSON & AVAILABLE FOR REVIEW AT ANY TIME BY STORM WATER PERSONNEL. THESE RECORDS MUST BE SUBMITTED TO THE STORM WATER OFFICE ON A YEARLY BASIS. PROJECTS PERMITTED UNDER THE STATE NPDES PERMIT PROGRAM MUST FOLLOW ITS REQUIREMENTS. USE OF THAT INSPECTION FORM IS PERMITTED INSTEAD OF CITY SELF INSPECTION FORM. SEE ALSO "NOTES & CHARTS" SHEET FOR ADDITIONAL NOTES.

LAND DISTURBING ACTIVITY NOTES:

VEGETATION: TOP SOIL WILL BE SALVAGED, STOCK PILED & SPREAD ON AREAS TO BE VEGETATED. TREES OUTSIDE OF THE CLEARING LINE WILL BE PROTECTED FROM DAMAGE BY APPROPRIATE MARKINGS. SUPPLEMENTAL VEGETATION WILL BE ESTABLISHED.

EROSION CONTROL PROGRAM: CLEARING WILL BE KEPT TO A MINIMUM. VEGETATION & MULCH WILL BE APPLIED TO APPLICABLE AREAS IMMEDIATELY AFTER GRADING IS COMPLETED. LAND DISTURBING WILL BE EMPLOYED TO PREVENT EROSION IN AREAS OF CONCENTRATED WATER FLOWS. EROSION AT THE EXITS OF ALL STORM WATER STRUCTURES WILL BE PREVENTED BY THE INSTALLATION OF STORM DRAIN OUTLET PROTECTION DEVICES.

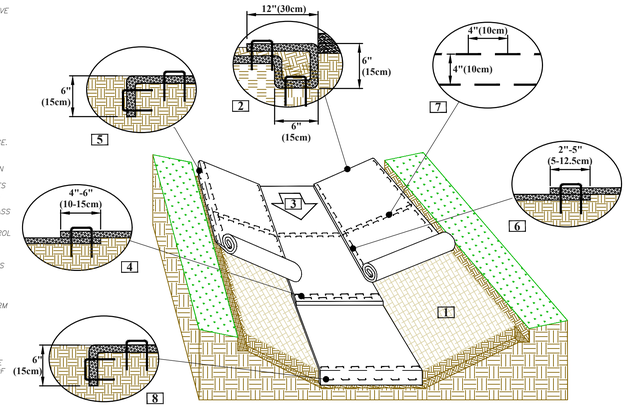
SEDIMENT CONTROL PROGRAM: SEDIMENT CONTROL WILL BE ACCOMPLISHED BY THE INSTALLATION OF SEDIMENT BASINS, SEDIMENT FENCES & ADDITIONAL MEASURES AS REQUIRED. DIVERSIONS & DIKES WILL BE INSTALLED TO DIVERT SEDIMENT LADEN RUNOFF INTO THE SEDIMENT BASINS & TO PROTECT CUT AND FILL SLOPES FROM EROSIVE WATER FLOWS. A TEMPORARY CONSTRUCTION EXIT WILL BE EMPLOYED TO PREVENT THE TRANSPORT OF SEDIMENT FROM SITE BY VEHICULAR TRAFFIC.

STANDARDS & SPECIFICATIONS: ALL DESIGNS WILL CONFORM TO AND ALL WORK WILL BE PERFORMED IN ACCORDANCE WITH THE STANDARDS & SPECIFICS OF THE PUBLICATION ENTITLED "THE TENNESSEE EROSION & SEDIMENT CONTROL HANDBOOK; & THE BEST MANAGEMENT PRACTICES MANUAL OF THE STORM WATER MANAGEMENT DEPARTMENT OF PUBLIC WORKS FOR THE CITY OF CHATTANOOGA.

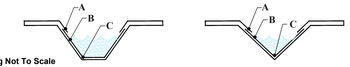
MAINTENANCE PROGRAM: SEDIMENT & EROSION CONTROL MEASURES WILL BE INSPECTED DAILY. ANY DAMAGES OBSERVED WILL BE REPAIRED BY THE END OF THAT DAY. CLEAN OUT OF SEDIMENT CONTROL STRUCTURES WILL BE ACCOMPLISHED IN ACCORDANCE WITH THE SPECIFICATIONS & SEDIMENT DISPOSAL ACCOMPLISHED BY SPREADING ON THE SITE. SEDIMENT BASINS & BARRIERS WILL REMAIN IN PLACE UNTIL SEDIMENT CONTRIBUTING AREAS ARE STABILIZED. SEDIMENT BASINS, THE SEDIMENT FENCES, & THE BARRIERS WILL THEN BE REMOVED & THE AREAS OCCUPIED BY THESE STRUCTURES VEGETATED. GUIDELINES FOR THE MAINTENANCE OF ESTABLISHED VEGETATION WILL BE PROVIDED TO THE OWNER WHEN ALL DISTURBED AREAS ARE STABILIZED.

CONCRETE TRUCKS: THE CONTRACTOR SHALL PROVIDE A BERMED AREA FOR CONCRETE TRUCKS TO "WASH-DOWN". CONTRACTOR TO PERIODICALLY REMOVE CONCRETE WASTE & BYPRODUCTS AND DISPOSE OF PROPERLY.

IF IMPAIRED OR HIGH QUALITY ONLY
SITE EROSION CONTROLS SHALL BE CHECKED AND, IF NECESSARY, REPAIRED WEEKLY & WITHIN 24 HOURS OF EACH RAINFALL GREATER THAN 1/2". IN THE EVENT OF CONTINUOUS RAINFALL, EROSION CONTROLS SHALL BE CHECKED DAILY. IN ADDITION TO REGULAR TWICE WEEKLY, INSPECTIONS.



CRITICAL POINTS
A. Overlaps and Seams
B. Projected Water Line
C. Channel Bottom/Side Slope Vertices



Drawing Not To Scale

NOTES:
*Horizontal staple spacing should be altered if necessary to allow staples to secure the critical points along the channel surface.

**In loose soil conditions, the use of staple or stake lengths greater than 6"(15cm) may be necessary to properly secure the RECP's.

Mb C3.0 DETAIL: MATTING AND BLANKETS IN CHANNELS (NTS)

CHANNEL INSTALLATION DETAIL

1. Prepare soil before installing rolled erosion control products (RECPs), including any necessary application of lime, fertilizer, and seed.
2. Begin at the top of the channel by anchoring the RECPs in a 6"(15cm) deep X 6"(15cm) wide trench with approximately 12"(30cm) of RECPs extended beyond the up-slope portion of the trench. Use ShoreMax mat at the channel/culvert outlet as supplemental scour protection as needed. Anchor the RECPs with a row of staples/stakes approximately 12"(30cm) apart in the bottom of the trench. Backfill and compact the trench after stapling. Apply seed to the compacted soil and fold the remaining 12"(30cm) portion of RECPs back over the seed and compacted soil. Secure RECPs over compacted soil with a row of staples/stakes spaced approximately 12" apart across the width of the RECPs.
3. Roll center RECPs in direction of water flow in bottom of channel. RECPs will unroll with appropriate side against the soil surface. All RECPs must be securely fastened to soil surface by placing staples/stakes in appropriate locations as shown in the staple pattern guide.
4. Place consecutive RECPs end-over-end (Shingle style) with a 4"-6" overlap. Use a double row of staples staggered 4" apart and 4" on center to secure RECPs.
5. Full length edge of RECPs at top of side slopes must be anchored with a row of staples/stakes approximately 12"(30cm) apart in a 6"(15cm) deep X 6"(15cm) wide trench. Backfill and compact the trench after stapling.
6. Adjacent RECPs must be overlapped approximately 2"-5" (5-12.5cm) (Depending on RECPs type) and stapled.
7. In high flow channel applications a staple check slot is recommended at 30 to 40 foot (9 -12m) intervals. Use a double row of staples staggered 4"(10cm) apart and 4"(10cm) on center over entire width of the channel.
8. The terminal end of the RECPs must be anchored with a row of staples/stakes approximately 12" (30cm) apart in a 6"(15cm) deep X 6"(15cm) wide trench. Backfill and compact the trench after stapling.

THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION CONTROL MEASURES AND PRACTICES PRIOR TO, OR CONCURRENT WITH LAND DISTURBANCE ACTIVITIES.

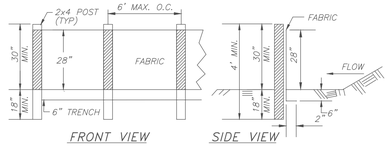
TOPSOIL STOCKPILE AREA SHALL BE COVERED WITH BLACK PLASTIC.

WIDTH OF FABRIC	SILT FENCE TYPE USES
TYPE A (36")	1 ON DEVELOPMENTS WHERE THE LIFE OF THE PROJECT IS GREATER THAN OR EQUAL TO 6 MONTHS 2 WHERE THE SLOPE GRADIENT IS STEEPER THAN 3:1.
TYPE B (22")	1 ON PROJECTS, SUCH AS RESIDENTIAL HOME SITES OR SMALL COMMERCIAL DEVELOPMENTS, WHERE THE LIFE OF THE PROJECT IS LESS THAN 6 MONTHS. 2 WHERE THE SLOPE GRADIENT IS LESS THAN OR EQUAL TO 3:1.
TYPE C (36") w/ WOVEN WIRE REINFORCEMENT	1 WHERE FILL SLOPES EXCEED A VERTICAL HEIGHT OF 20 FEET AND THE SLOPE GRADIENT IS STEEPER THAN 3:1.

POST SIZE	MINIMUM LENGTH	TYPE OF POST	SIZE OF POST
TYPE A	4'	SOFT WOOD OAK STEEL	3" DIA. OR 2X4 1.5" X 1.5" 1.3lb./FT. MIN.
TYPE B	3'	SOFT WOOD OAK STEEL	2" DIA. OR 2X2 1" X 1" .75lb./FT. MIN.
TYPE C	4'	STEEL	1.3lb./FT. MIN.

FASTENERS FOR WOOD POSTS	GAUGE	CROWN	LEGS	STAPLES/POST
WIRE STAPLES	17 MIN	3/4 " WIDE	1/2 " LONG	5 MIN.
	GAUGE	LENGTH	BUTTON HEADS	NAIL/POST
NAILS	14 MIN	1"	3/4 "	4 MIN.

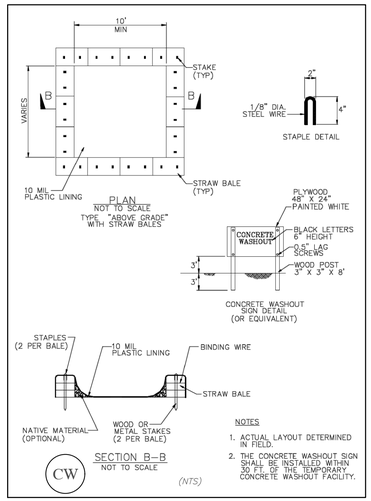
NOTE: FILTER FABRIC MAY ALSO BE ATTACHED TO THE POST BY WIRE, CORD, AND POCKETS.



FRONT VIEW SIDE VIEW

NOTE: USE 36" D.O.T. APPROVED FABRIC AND USE WOOD OR STEEL POSTS.

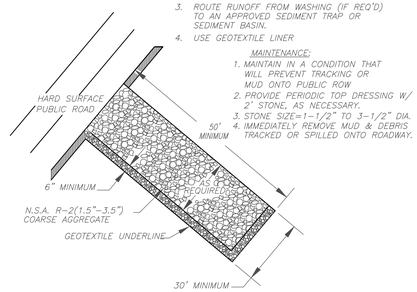
SF DETAIL: SILT FENCE - TYPE A (NTS)



CW (NTS)

INSTALLATION:
1. WIDTH=FULL WIDTH OF VEHICULAR ACCESS, 30' MINIMUM.
2. EXCAVATE FOOTPRINT 3 INCHES
3. ROUTE RUNOFF FROM WASHING (IF REQ'D) TO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
4. USE GEOTEXTILE LINER

MAINTENANCE:
1. MAINTAIN IN A CONDITION THAT WILL PREVENT TRACKING OR MUD ONTO PUBLIC ROW
2. PROVIDE PERIODIC TOP DRESSING W/ 2" STONE, AS NECESSARY.
3. STONE SIZE=1–1/2" TO 3–1/2" DIA.
4. IMMEDIATELY REMOVE MUD & DEBRIS TRACKED OR SPILLED ONTO ROADWAY.



CE DETAIL: STONE PAD CONSTRUCTION EXIT (NTS)

ARTECH
1410 COWART STREET
CHATTANOOGA, TN 37408
423.265.4313
WWW.ARTECH.PRO

East Lake YFD Center Improvements

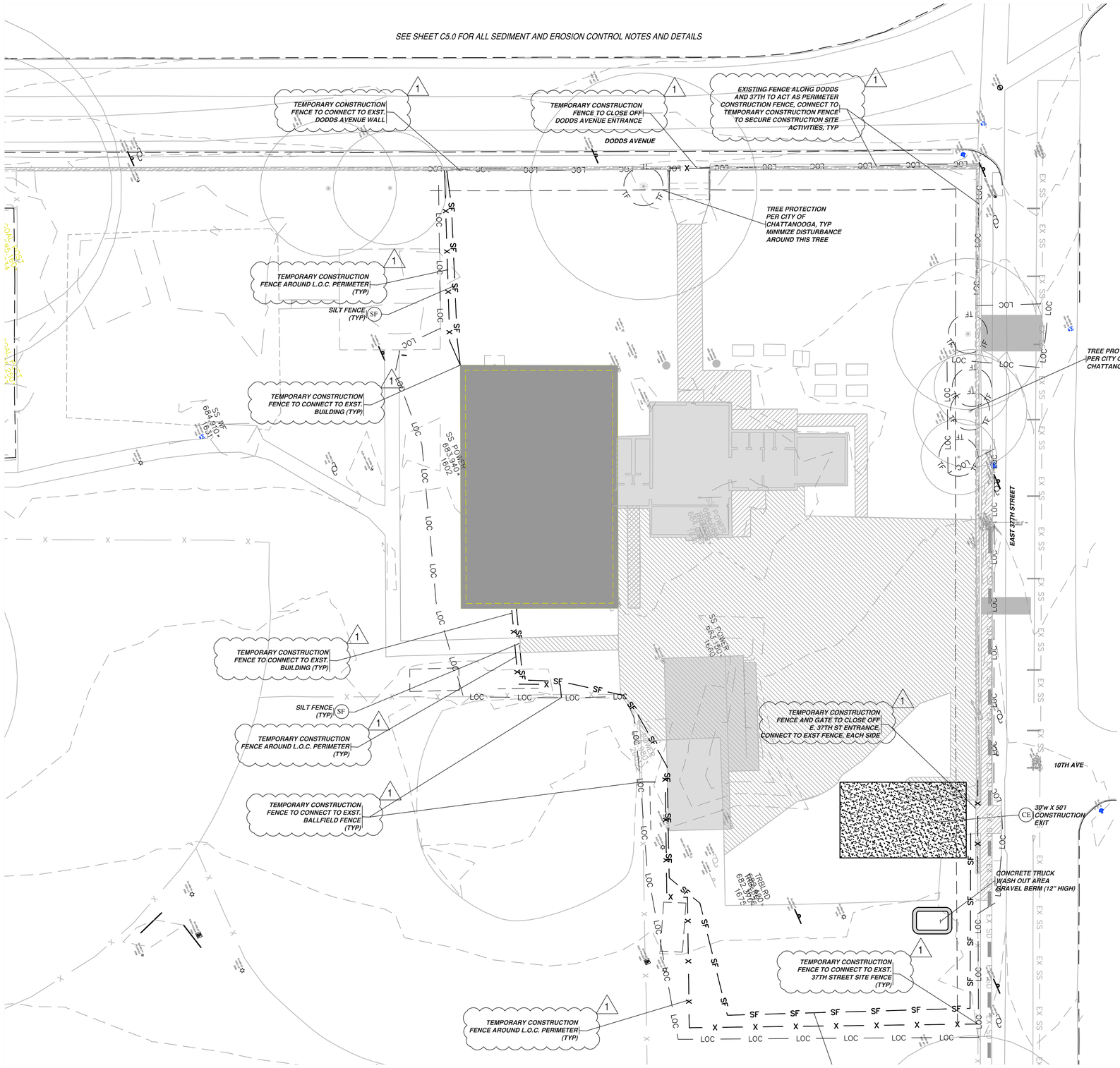
3610 Dodds Avenue, Chattanooga, TN 37402

ISSUE DATES
INITIAL ISSUE 12/20/19

JOB NO. 18-072 | D'WN SDB | CK'D MH

C5.0

Sediment & Erosion Control Notes & Details



LEGEND

- Ex. Curb
- Ex. Centerline
- X — Ex. Fence
- EX W — Ex. Water Line
- EX FL — Ex. Fire Line
- EX IRR — Ex. Irrigation Line
- EX SD — Ex. Storm Drainage Line
- EX SS — Ex. Sanitary Sewer Line
- EX FM — Ex. Sanitary Sewer Force Main
- S — Ex. Swale Centerline
- D — Ex. Ditch Centerline
- EX G — Ex. Gas Line
- EX OHE — Ex. Overhead Elect. or Utility Line
- EX UGE — Ex. Underground Electrical
- EX UGFO — Ex. Underground Fiber Optics
- EX UGT — Ex. Underground Telephone
- **PROPERTY LINE**
- BUILDING LINE
- EASEMENT LINE
- BUILDING SETBACK LINE
- LANDSCAPE BUFFER LINE
- LOT LINE
- ROW LINE
- CURB
- CENTERLINE
- PROP. FENCE LINE
- LOC — PROP. LIMITS OF CONSTRUCTION
- TF — PROPOSED TREE PROTECTION
- S — PROPOSED SWALE CENTERLINE
- D — PROPOSED DITCH CENTERLINE
- W — PROP. WATER LINE
- FL — PROP. FIRE LINE
- IRR — PROP. IRRIGATION LINE
- G — PROP. GAS LINE
- SD — PROP. STORM DRAINAGE LINE
- **SS — PROP. SANITARY SEWER LINE**
- **FM — PROP. SANITARY SEWER FORCE MAIN**
- OHE — PROP. OVERHEAD ELECT. OR UTILITY LINE
- UGE — PROP. UNDERGROUND ELECTRICAL
- UGFO — PROP. UNDERGROUND FIBER OPTICS
- UGT — PROP. UNDERGROUND TELEPHONE

ABBREVIATIONS:
SSE – NEW PUBLIC SANITARY SEWER EASEMENT (SEE PLAN FOR WIDTH).
DE – NEW DRAINAGE EASEMENT (SEE PLAN FOR WIDTH).
WE – NEW PUBLIC WATER EASEMENT (SEE PLAN FOR WIDTH).
L/A BUFFER – NEW LANDSCAPE BUFFER (SEE PLAN FOR WIDTH AND TYPE).
FYSB – FRONT YARD SETBACK
SYSB – SIDE YARD SETBACK
RYSB – REAR YARD SETBACK
FFE – FINISHED FLOOR ELEVATION
TW – FINISH GRADE AT TOP OF RETAINING WALL
BW – FINISHED GROUND GRADE AT BOTTOM OF RETAINING WALL (GRASS GRADE)
SDCO / SSCO – STORM DRAINAGE / SANITARY SEWER CLEAN–OUT
DS – ROOF DOWNSPOUT CONNECTION

SITE INFORMATION:
SITE AREA: 8± ACRES
SITE IS ZONED: R–2
LAND DISTURBANCE AREA: 0.90± ACRES
TAX MAP PARCEL #: 168B J 016
EXST BUILDING AREA: 11,341± SF
BUILDING AREA: 16,324± SF (44% INCREASE COMPARED TO PRE)
BUILDING TYPE: GYMNASIUM

STREET ADDRESS: 3610 DODDS AVENUE
FRONT YARD SETBACK: 25 FEET
SIDE YARD SETBACK: 10 FEET
REAR YARD SETBACK: 25 FEET

SANITARY SEWER AVAILABILITY: EXST. PUBLIC SEWER MAIN LOCATED IN EAST 37TH STREET.

POTABLE WATER SUPPLY AVAILABILITY: EXST. PUBLIC WATER MAIN LOCATED IN EAST 37TH STREET.

STORM DRAINAGE: STORM DRAINAGE WILL DISCHARGE INTO AN EXISTING CULVERT IN EAST 37TH STREET.

PROPERTY FRONTAGE: 240 LF DODDS AVE = 7 REQUIRED TREES
340 LF E 37TH ST = 10 REQUIRED TREES
REQUIRED STREET YARD TREES: 17
EXISTING STREET YARD TREES: 6
PROPOSED STREET YARD TREES: 11

REGULAR PARKING SPACES: 23
REGULAR H'CAP SPACES: 0
VAN ACCESSIBLE H'CAP SPACES: 1
TOTAL PARKING PROVIDED: 24 SPACES

FLOODZONE: PORTIONS OF THE PROPERTY ARE LOCATED IN FLOOD ZONE "X" AS SCALED FROM THE FIRM MAP COMMUNITY–PANEL NUMBER 47065C0457G, MAP REVISED 2/3/2016.

PROPERTY OWNER: CITY OF CHATTANOOGA

1 NOTE:
TEMPORARY CONSTRUCTION FENCING TO BE 6' TALL CHAIN-LINK PANEL FENCING WITH WIND-SCREEN, OR APPROVED EQUAL.

NORTH
20' 0 20' 40'
Scale 1" = 20'

MAA CIVIL CONTACT: STEPHEN BRADY, P.E.
DIRECT LINE: 423-664-1480

ARTECH
1410 COWART STREET
CHATTANOOGA, TN 37408
423.265.4313
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East Lake YFD Center Improvements

3610 Dodds Avenue, Chattanooga, TN 37402

STATE OF TENNESSEE — MATTHEW HUTCHERSON — LICENSED PROFESSIONAL ENGINEER — No. 131153

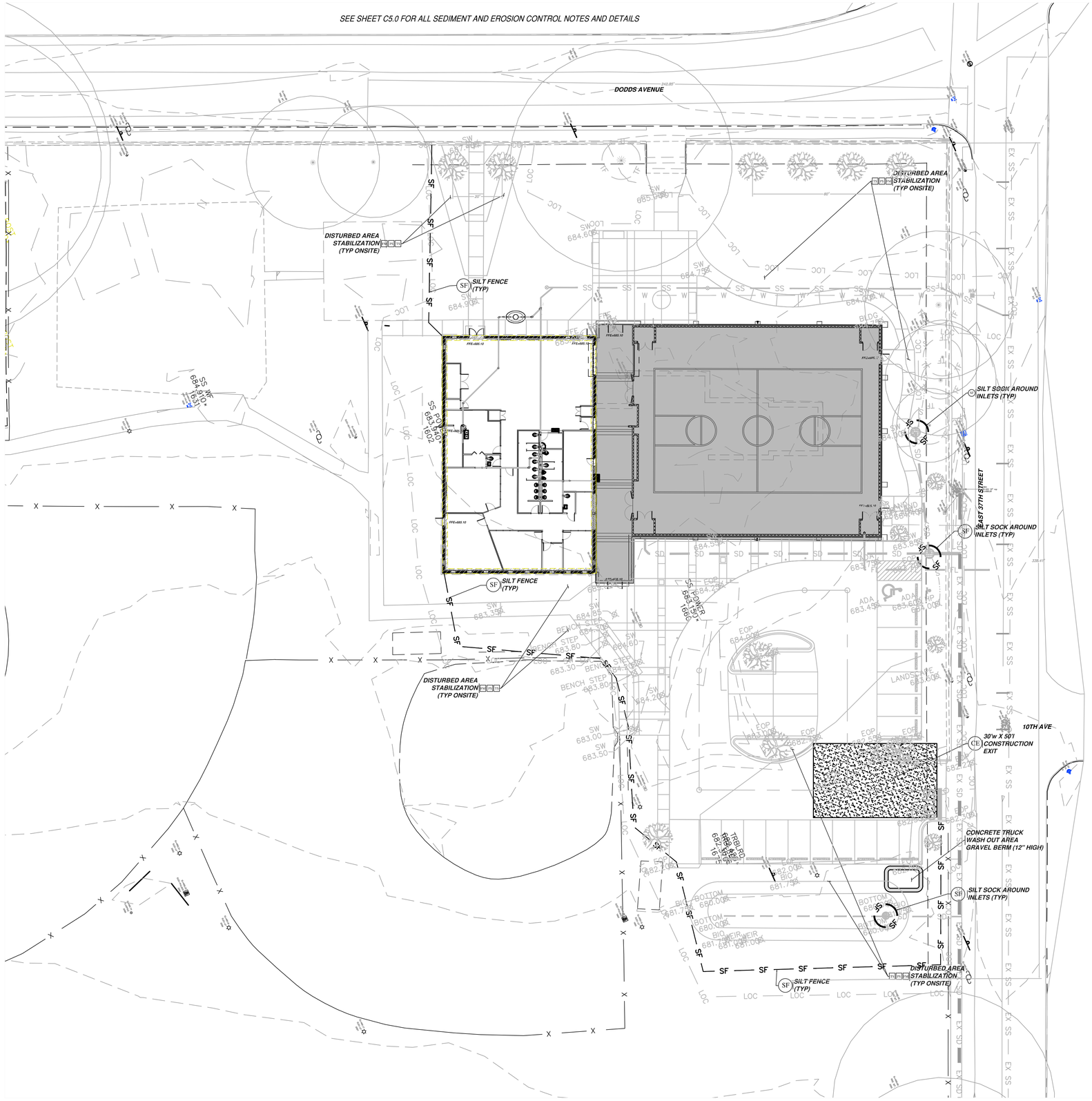
ISSUE DATES
INITIAL ISSUE 12/20/19
1 ADDENDUM 8 01/21/20

JOB NO. 18-072 | D'WN SDB | CK'D MH

C5.1

Sediment & Erosion Control Plan, Phase I

SEE SHEET C5.0 FOR ALL SEDIMENT AND EROSION CONTROL NOTES AND DETAILS



LEGEND

- Ex. Curb
- Ex. Centerline
- Ex. Fence
- Ex. Water Line
- Ex. Fire Line
- Ex. Irrigation Line
- Ex. Storm Drainage Line
- Ex. Sanitary Sewer Line
- Ex. Sanitary Sewer Force Main
- Ex. Swale Centerline
- Ex. Ditch Centerline
- Ex. Gas Line
- Ex. Overhead Elect. or Utility Line
- Ex. Underground Electrical
- Ex. Underground Fiber Optics
- Ex. Underground Telephone
- **PROPERTY LINE**
- BUILDING LINE
- EASEMENT LINE
- BUILDING SETBACK LINE
- LANDSCAPE BUFFER LINE
- LOT LINE
- ROW LINE
- CURB
- CENTERLINE
- PROP. FENCE LINE
- PROP. LIMITS OF CONSTRUCTION
- PROPOSED TREE PROTECTION
- PROPOSED SWALE CENTERLINE
- PROPOSED DITCH CENTERLINE
- PROP. WATER LINE
- PROP. FIRE LINE
- PROP. IRRIGATION LINE
- PROP. GAS LINE
- PROP. STORM DRAINAGE LINE
- **PROP. SANITARY SEWER LINE**
- **PROP. SANITARY SEWER FORCE MAIN**
- PROP. OVERHEAD ELECT. OR UTILITY LINE
- PROP. UNDERGROUND ELECTRICAL
- PROP. UNDERGROUND FIBER OPTICS
- PROP. UNDERGROUND TELEPHONE

ABBREVIATIONS:
SSE – NEW PUBLIC SANITARY SEWER EASEMENT (SEE PLAN FOR WIDTH).
DE – NEW DRAINAGE EASEMENT (SEE PLAN FOR WIDTH).
WE, – NEW PUBLIC WATER EASEMENT (SEE PLAN FOR WIDTH).
L/A BUFFER – NEW LANDSCAPE BUFFER (SEE PLAN FOR WIDTH AND TYPE).
FYSB – FRONT YARD SETBACK
SYSB – SIDE YARD SETBACK
RYSB – REAR YARD SETBACK
FFE – FINISHED FLOOR ELEVATION
TW – FINISH GRADE AT TOP OF RETAINING WALL
BW – FINISHED GROUND GRADE AT BOTTOM OF RETAINING WALL (GRASS GRADE)
SDCO / SSCO – STORM DRAINAGE / SANITARY SEWER CLEAN–OUT
DS – ROOF DOWNSPOUT CONNECTION

SITE INFORMATION:
SITE AREA: 8± ACRES
SITE IS ZONED: R–2
LAND DISTURBANCE AREA: 0.90± ACRES
TAX MAP PARCEL #: 168B J 016
EXST BUILDING AREA: 11,341± SF
BUILDING AREA: 16,324± SF (44% INCREASE COMPARED TO PRE)
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PROPERTY OWNER: CITY OF CHATTANOOGA

NORTH
20' 0 20' 40'
Scale 1" = 20'

MAA CIVIL CONTACT: STEPHEN BRADY, P.E.
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East Lake YFD Center Improvements

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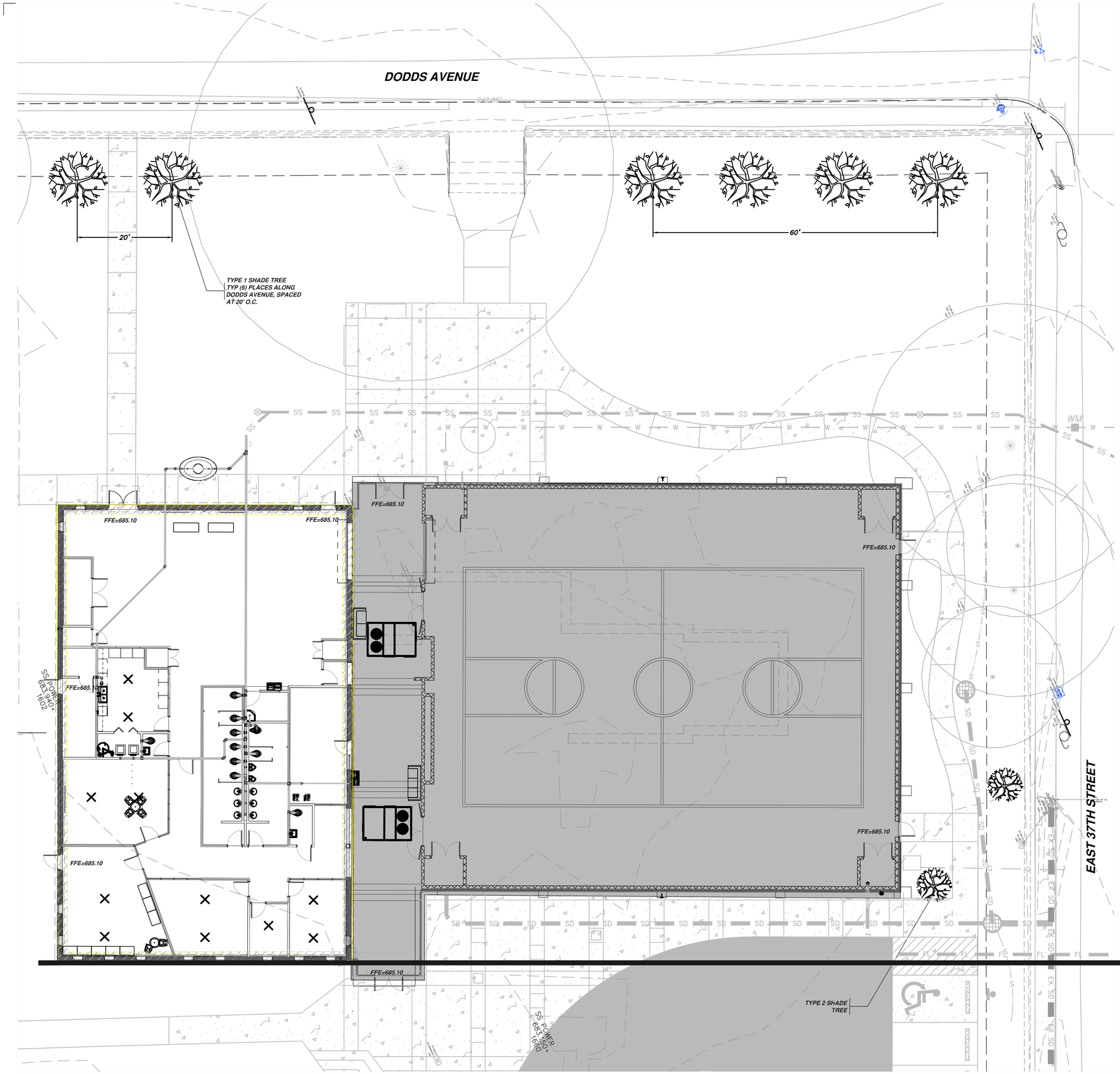
JOSEPH C. HUTCHERSON
PROFESSIONAL ENGINEER
STATE OF TENNESSEE
NO. 131543

ISSUE DATES
INITIAL ISSUE 12/20/19

JOB NO. 18-072 | D'WN SDB | CK'D MH

C5.2

Sediment & Erosion Control Plan, Phase II



PLANT LIST

TREES

SYMBOL	QTY	BOTANICAL NAME	COMMON NAME	CALIPER	SPACING	REMARKS
	10	ACER RUBRUM	RED MAPLE	3"	AS SHOWN (20' O.C.)	'OCTOBER GLORY'
	4	PRUNUS X YEDOENSIS	YOSHINO CHERRY	3"	AS SHOWN	

STREETYARD CALCULATIONS:

REQ'D. STREETYARD TREES: 1 TREE PER 35 FEET R.O.W. = 17 TREES
EX. STREETYARD TREES: 6 TREES
NEW STREETYARD TREES: 11 TREES
TOTAL STREETYARD TREES: 17 TREES

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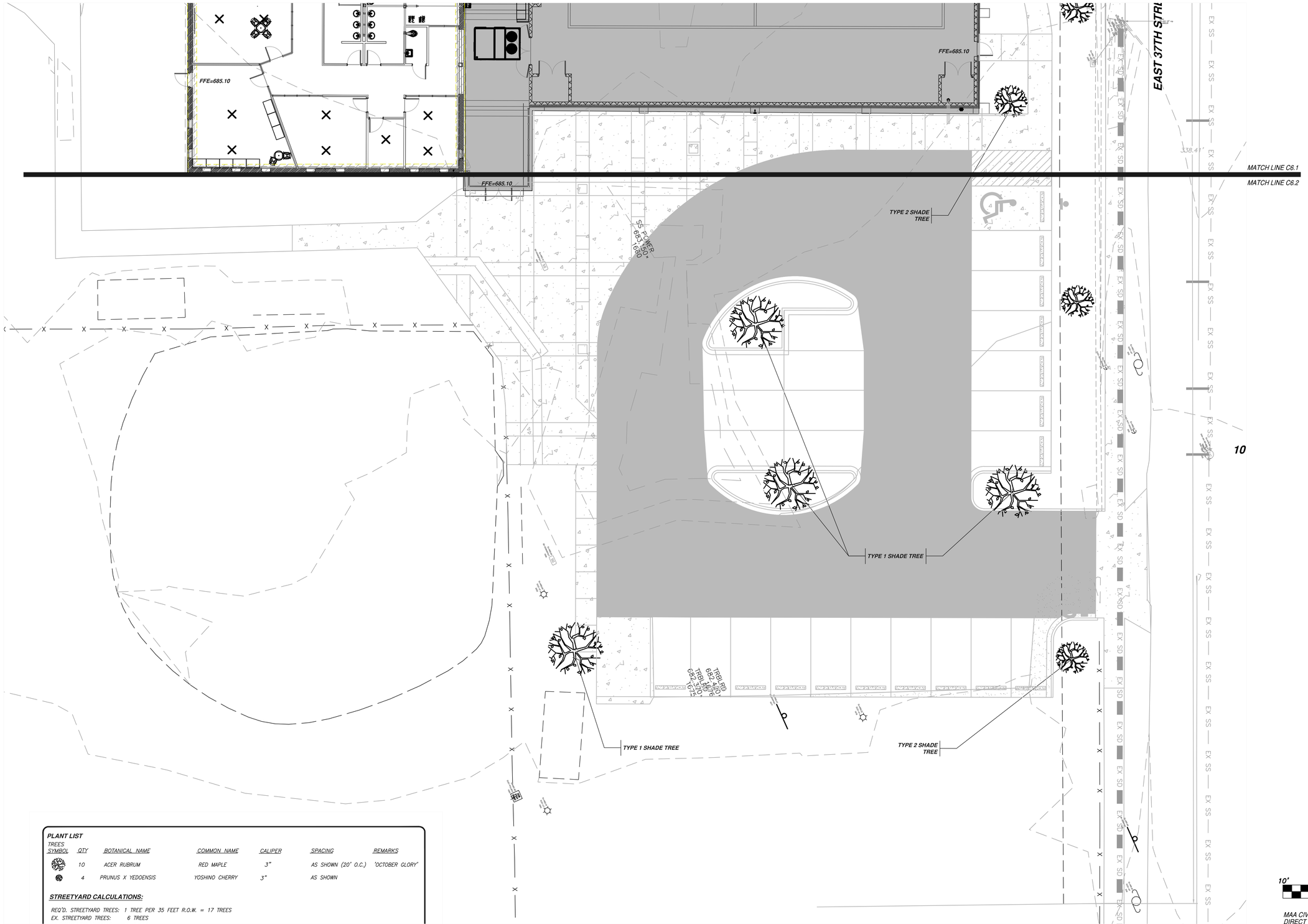
MAA CIVIL CONTACT: STEPHEN BRADY, P.E.
DIRECT LINE: 423-664-1480

JOB NO. 18-072 | D'WN SDB | CK'D MH

C6.1

Landscape Plan



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TOTAL STREETYARD TREES: 17 TREES

NORTH

10' 0 10' 20'

Scale 1" = 10'

MAA CIVIL CONTACT: STEPHEN BRADY, P.E.
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STATE OF TENNESSEE

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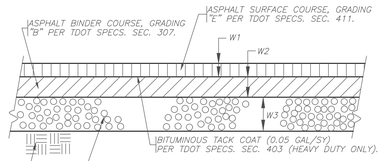
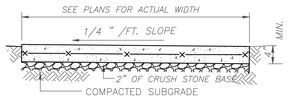
C6.2

Landscape Plan

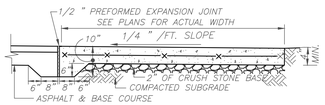
	STANDARD DUTY THICKNESS	HEAVY DUTY THICKNESS
ASPH. SURFACE COURSE THICKNESS "W1"	2"	1.5"
ASPH. BINDER COURSE THICKNESS "W2"	— — — —	2"
AGGREGATE BASE THICKNESS "W3"	6"	6"



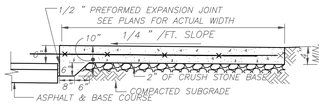
1/C7.0 DETAIL: ASPHALT PAVEMENT SECTIONS
(NTS)



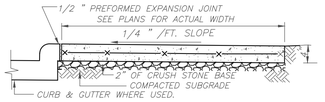
STD. CONCRETE SIDEWALK



CONCRETE SIDEWALK FLUSH w/ PAVEMENT



CONCRETE TURNDOWN SIDEWALK

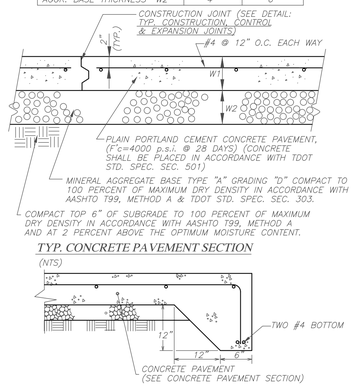


CONCRETE SIDEWALK ADJACENT TO CURB

NOTES:
1. 4,000 PSI CONCRETE @ 28 DAYS WITH REINFORCEMENT – 6X6–W1.4 X W1.4 W.W.M.
2. SEE ALSO DETAIL: TYP. CONSTRUCTION, CONTROL & EXPANSION JOINTS
3. PROVIDE 1" DEEP TRANSVERSE GROOVES AT 5'–0" INTERVALS, OR AS SHOWN ON PLAN.
4. PROVIDE 1/2 " WIDE EXPANSION JOINT AT 20' INTERVALS AND AT ALL CURBS, RIGID STRUCTURES AND RIGID PAVEMENT.
5. TOOL ALL EXPOSED EDGES AND JOINTS TO 1/4 " RADIUS.
6. BROOM FINISH ACROSS DIRECTION OF TRAVEL.
7. MAXIMUM SLOPE = 5%.
8. FIBERMESH ALTERNATIVE: MIX AND RATE OF APPLICATION OF "FIBERMESH" SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

2/C7.0 DETAIL: CONCRETE SIDEWALK
(NTS)

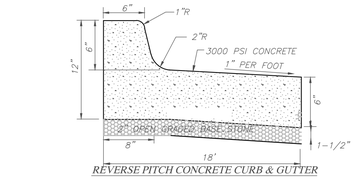
	STD. DUTY THICKNESS	HEAVY DUTY THICKNESS
CONC. PVMT. THICKNESS "W1"	5"	6"
AGGR. BASE THICKNESS "W2"	4"	6"



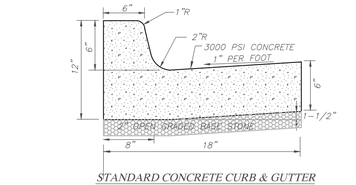
TYP. CONCRETE PAVEMENT SECTION
(NTS)

TYP. CONCRETE TURNDOWN (TYP ALL EDGES)
(NTS)

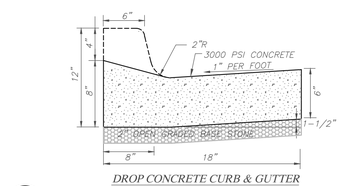
3/C7.0 DETAIL: TYP. CONCRETE PAVEMENT w/ TURNDOWN
(NTS)



REVERSE PITCH CONCRETE CURB & GUTTER

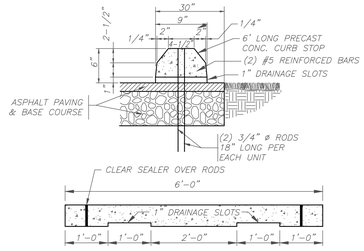


STANDARD CONCRETE CURB & GUTTER

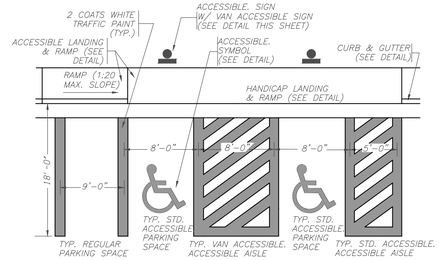


DROP CONCRETE CURB & GUTTER

4/C7.0 DETAIL: 18" CONCRETE CURB & GUTTER
(NTS)

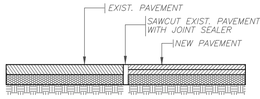


7/C7.0 DETAIL: PRE-CAST CONC. CURB STOP DETAIL
(NTS)



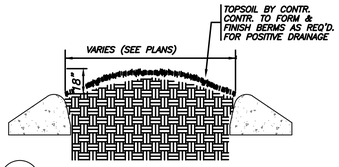
NOTES:
1. CURB RAMP & PARKING SPACE CONSTRUCTION & INSTALLATION SHALL CONFORM TO ALL ADA SPECIFICATIONS & LOCAL ORDINANCES.
2. PAVEMENT STRIPING PER LOCAL DOT STANDARDS AND SPECIFICATIONS.
3. FINISHED GROUND SLOPE AT NEW ACCESSIBLE PARKING SPACES AND ACCESS AISLES SHALL NOT BE STEEPER THAN 1:48 (1/4 INCH PER FOOT)

9/C7.0 DETAIL: 90° PARKING
(NTS)

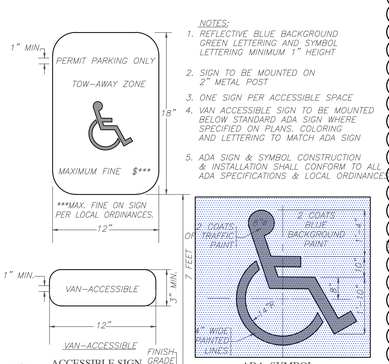


NOTE: NEW PAVEMENT TO MATCH ELEVATION OF EXISTING PAVEMENT. SAW CUT EXISTING PAVEMENT AS NECESSARY TO OBTAIN A FULL DEPTH SEAL BETWEEN THE PROPOSED PAVEMENT AND THE EXISTING PAVEMENT.

10/C7.0 DETAIL: SAWCUT & PAVEMENT TRANSITION
(NTS)



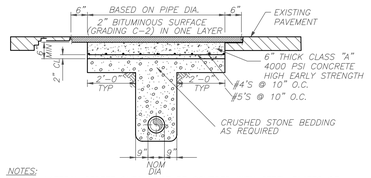
11/C7.0 DETAIL: LANDSCAPE ISLAND SECTION
(NTS)



ACCESSIBLE SIGN ADA SYMBOL

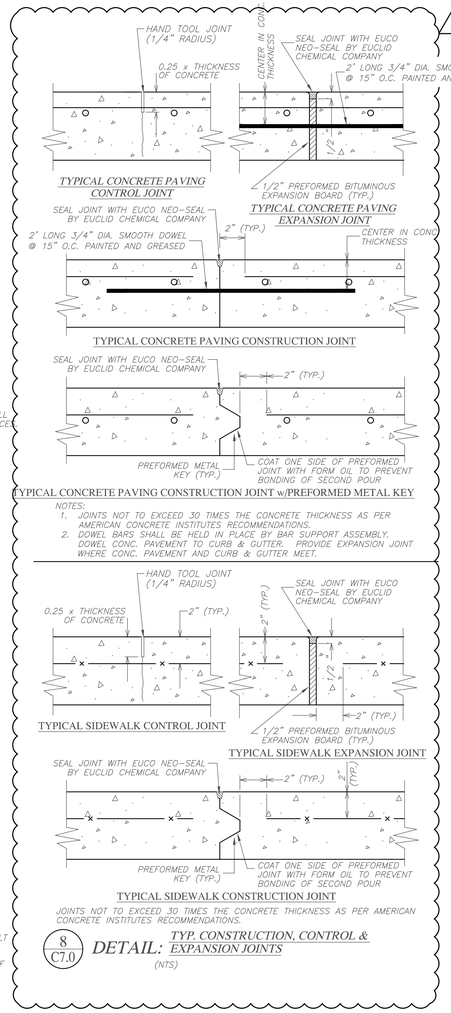
NOTES:
1. REFLECTIVE BLUE BACKGROUND GREEN LETTERING AND SYMBOL LETTERING MINIMUM 1" HEIGHT
2. SIGN TO BE MOUNTED ON 2" METAL POST
3. ONE SIGN PER ACCESSIBLE SPACE
4. VAN ACCESSIBLE SIGN TO BE MOUNTED BELOW STANDARD ADA SIGN WHERE SPECIFIED ON PLANS. COLORING AND LETTERING TO MATCH ADA SIGN
5. ADA SIGN & SYMBOL CONSTRUCTION & INSTALLATION SHALL CONFORM TO ALL ADA SPECIFICATIONS & LOCAL ORDINANCES

5/C7.0 DETAIL: ACCESSIBLE PARKING SIGN & SYMBOL
(NTS)



NOTES:
1. ALL LATERAL STREET CUTS MUST BE COVERED WITH STEEL PLATES OF SUFFICIENT THICKNESS TO SPAN THE CUT WITHOUT NOTICEABLE DEFLECTION. PLATES TO REMAIN IN PLACE UNTIL THE CONCRETE BASE HAS GAINED SUFFICIENT STRENGTH TO WITHSTAND TRAFFIC LOADS (24 HR. MINIMUM).
2. ON LONGITUDINAL CUTS 150 FT. IN LENGTH, THE CONCRETE IN THE TRENCH WILL BE BROUGHT FLUSH WITH THE EXISTING PAVEMENT AND THE ENTIRE WIDTH OF ROADWAY RESURFACED WITH A MINIMUM OF 1" OF TYPE "E" ASPHALT TOPPING OR 1 1/2 " OF TYPE "E" ASPHALT TOPPING OR SURFACE COURSE.
3. THE CONTRACTOR SHALL REPLACE ALL OTHER DAMAGED PAVEMENT OUTSIDE OF LIMITS SHOWN AT HIS OWN EXPENSE

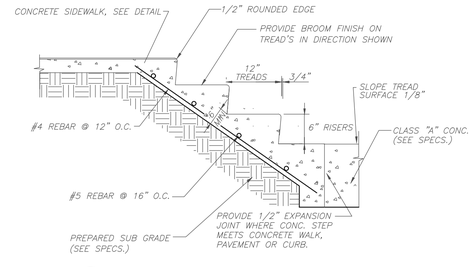
6/C7.0 DETAIL: PAVEMENT CUT & REPLACEMENT
(NTS)



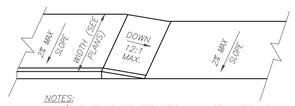
NOTES:
1. JOINTS NOT TO EXCEED 30 TIMES THE CONCRETE THICKNESS AS PER AMERICAN CONCRETE INSTITUTE'S RECOMMENDATIONS.
2. DOWEL BARS SHALL BE HELD IN PLACE BY BAR SUPPORT ASSEMBLY. DOWEL CONC. PAVEMENT TO CURB & GUTTER. PROVIDE EXPANSION JOINT WHERE CONC. PAVEMENT AND CURB & GUTTER MEET.

JOINTS NOT TO EXCEED 30 TIMES THE CONCRETE THICKNESS AS PER AMERICAN CONCRETE INSTITUTES RECOMMENDATIONS.

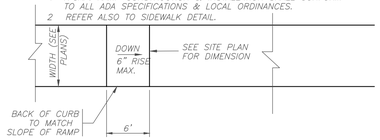
8/C7.0 DETAIL: TYP. CONSTRUCTION, CONTROL & EXPANSION JOINTS
(NTS)



12/C7.0 DETAIL: CONCRETE STEPS
(NTS)



NOTES:
1 H'CAP. RAMP CONSTRUCTION & INSTALLATION SHALL CONFORM TO ALL ADA SPECIFICATIONS & LOCAL ORDINANCES.
2 REFER ALSO TO SIDEWALK DETAIL.



13/C7.0 DETAIL: HANDICAP LANDING & RAMP
(NTS)

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East Lake YFD Center Improvements

3610 Dodds Avenue, Chattanooga, TN 37402

JOSEPH E. HUTCHERSON — PROFESSIONAL ENGINEER — CIVIL — No. 113152 — STATE OF TENNESSEE

ISSUE DATES
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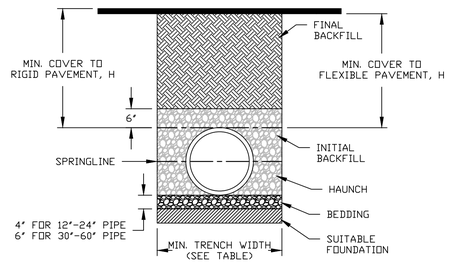
ADDENDUM 6 01/14/20

JOB NO. 18-072 | D'WN SDB | CK'D MH

C7.0
Site Details



RECOMMENDED MINIMUM TRENCH WIDTHS

PIPE DIAM.	MIN. TRENCH WIDTH
4"	21"
6"	23"
8"	26"
10"	28"
12"	30"
15"	34"
18"	39"
24"	48"
30"	56"
36"	64"
42"	72"
48"	80"
54"	88"
60"	96"

NOTES:

1. ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST ADDITION

2. MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.

3. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.

4. BEDDING: SUITABLE MATERIAL SHALL BE CLASS I, II OR III. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" (100mm) FOR 4"-24" (100mm-600mm); 6" (150mm) FOR 30"-60" (750mm-900mm).

5. INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I, II OR III IN THE PIPE ZONE EXTENDING NOT LESS THAN 6" ABOVE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.

6. MINIMUM COVER: MINIMUM COVER, H, IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM THE TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER, H, IS 12" UP TO 48" DIAMETER PIPE AND 24" OF COVER FOR 54"-60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.

MINIMUM RECOMMENDED COVER BASED ON VECHICLE LOADING CONDITIONS

	SURFACE LIVE LOADING CONDITION	
PIPE DIAM.	H-25	HEAVY CONSTRUCTION (75T AXLE LOAD) *
12" - 48"	12"	48"
54" - 60"	24"	60"

* VEHICLES IN EXCESS OF 75T MAY REQUIRE ADDITIONAL COVER

MINIMUM RECOMMENDED COVER BASED ON RAILWAY LOADING CONDITIONS

PIPE DIAM.	COOPER E-80**
UP TO 24"	24"
30"-36"	36"
42"-60"	48"

** COVER IS MEASURED FROM TOP OF PIPE TO BOTTOM OF RAILWAY TIE.
*** E-80 COVER REQUIREMENTS, ARE ONLY APPLICABLE TO ASTM F 2306 PIPE.

REV.	DESCRIPTION	BY	MM/DD/YY	CHK'D
2	ADDED E-80 INFORMATION	TJR	08/20/07	

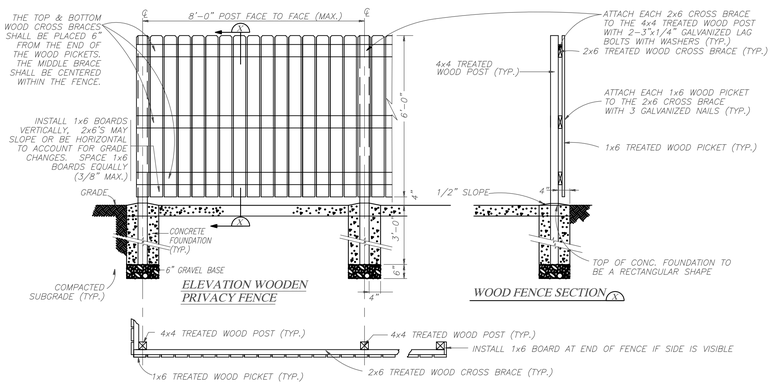
TYPICAL TRENCH DETAIL

DRAWING NUMBER: STD-101

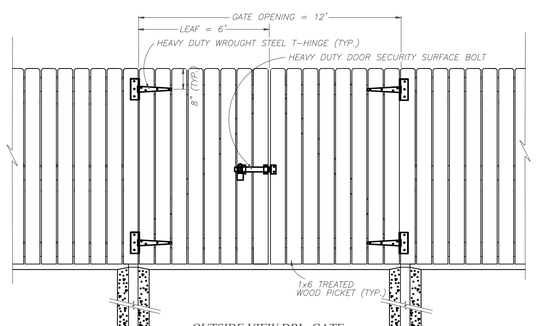
ADS. ADVANCED DRAINAGE SYSTEMS, INC.
4640 TRUEMAN BLVD
HILLIARD, OHIO 43026

DESIGN BY: CKS
DATE: 10/18/06
DRN BY:
SCALE: NTS
SHEET: 1 OF 1

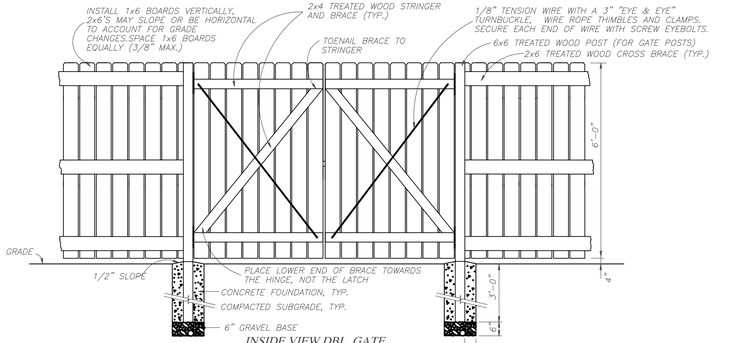
1/C8.0 DETAIL: ADS TRENCH INSTALLATION
(NTS)



PLAN VIEW WOODEN PRIVACY FENCE

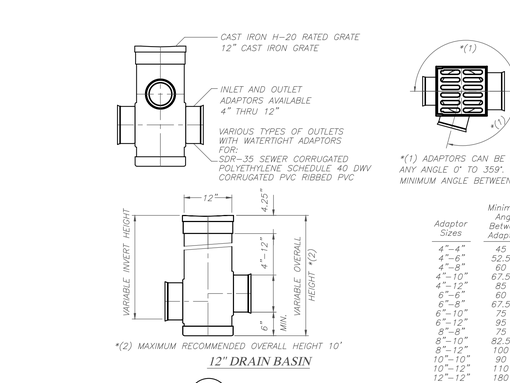


OUTSIDE VIEW DBL. GATE

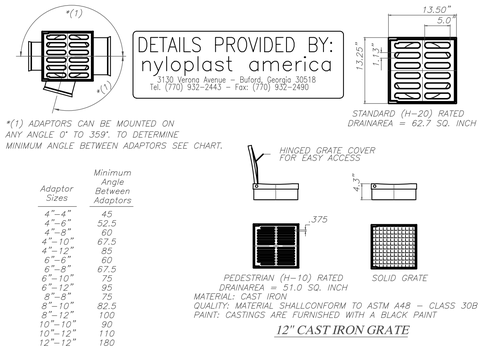


INSIDE VIEW DBL. GATE

4/C8.0 DETAIL: WOODEN PRIVACY FENCE & DOUBLE GATE
(NTS)



12" DRAIN BASIN

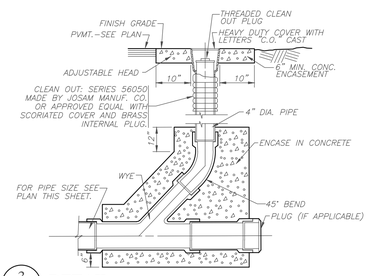


Adaptor Sizes	Minimum Angle Between Adaptors
4"-4"	45
4"-6"	52.5
4"-8"	60
4"-10"	67.5
4"-12"	85
6"-6"	60
6"-8"	67.5
6"-10"	75
6"-12"	95
8"-8"	75
8"-10"	82.5
8"-12"	100
10"-10"	90
10"-12"	110
12"-12"	180

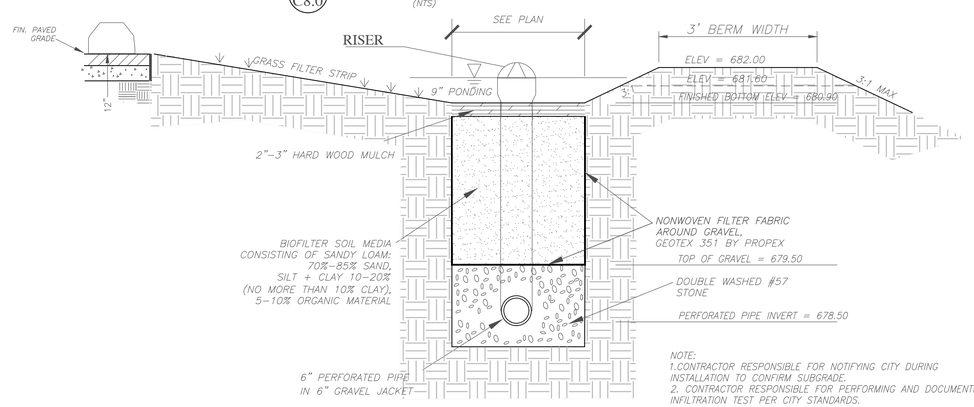
MATERIAL: CAST IRON
QUALITY: MATERIAL SHALLCONFORM TO ASTM A48 – CLASS 30B
PAINT: CASTINGS ARE FURNISHED WITH A BLACK PAINT

12" CAST IRON GRATE

2/C8.0 DETAIL: 12" NYLOPLAST DRAIN BASIN & GRATE
(NTS)



3/C8.0 DETAIL: SANITARY SEWER CLEAN-OUT
(NTS)



NOTE:
1.CONTRACTOR RESPONSIBLE FOR NOTIFYING CITY DURING INSTALLATION TO CONFIRM SUBGRADE.
2. CONTRACTOR RESPONSIBLE FOR PERFORMING AND DOCUMENTING INFILTRATION TEST PER CITY STANDARDS.
3. STAMPED AS-BUILT SURVEY REQUIRED FOR CERTIFICATION.

5/C8.0 DETAIL: BIO-RETENTION AREA
(NTS)

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East Lake YFD Center Improvements

3610 Dodds Avenue, Chattanooga, TN 37402

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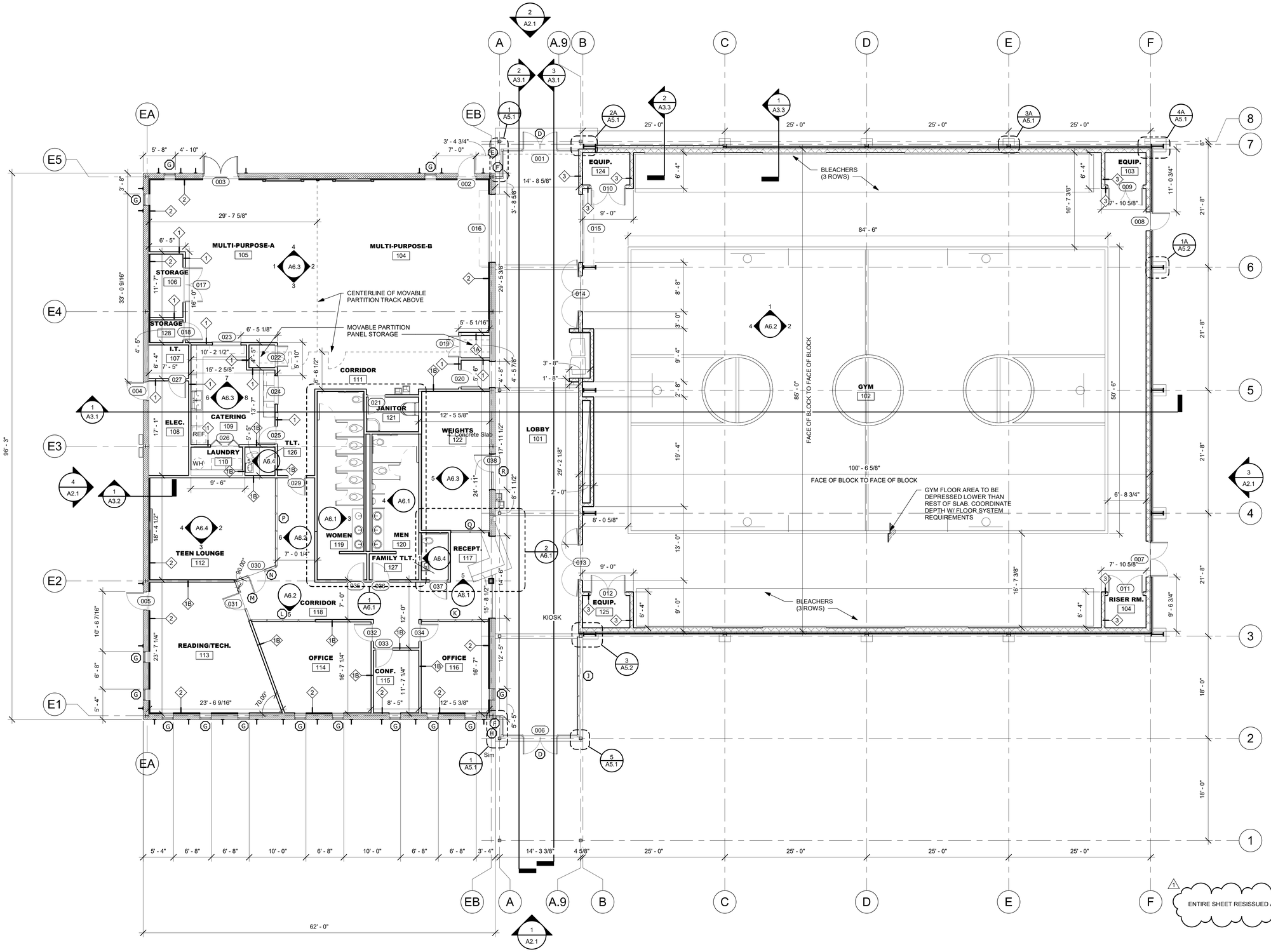
18-072	SDB	MH

C8.0
Drainage Details



1 1ST FLOOR PLAN

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

0 4' 8' 16'

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RICHARD A. THOMPSON
REGISTERED ARCHITECT
No. 17640
STATE OF TENNESSEE

ISSUE DATES

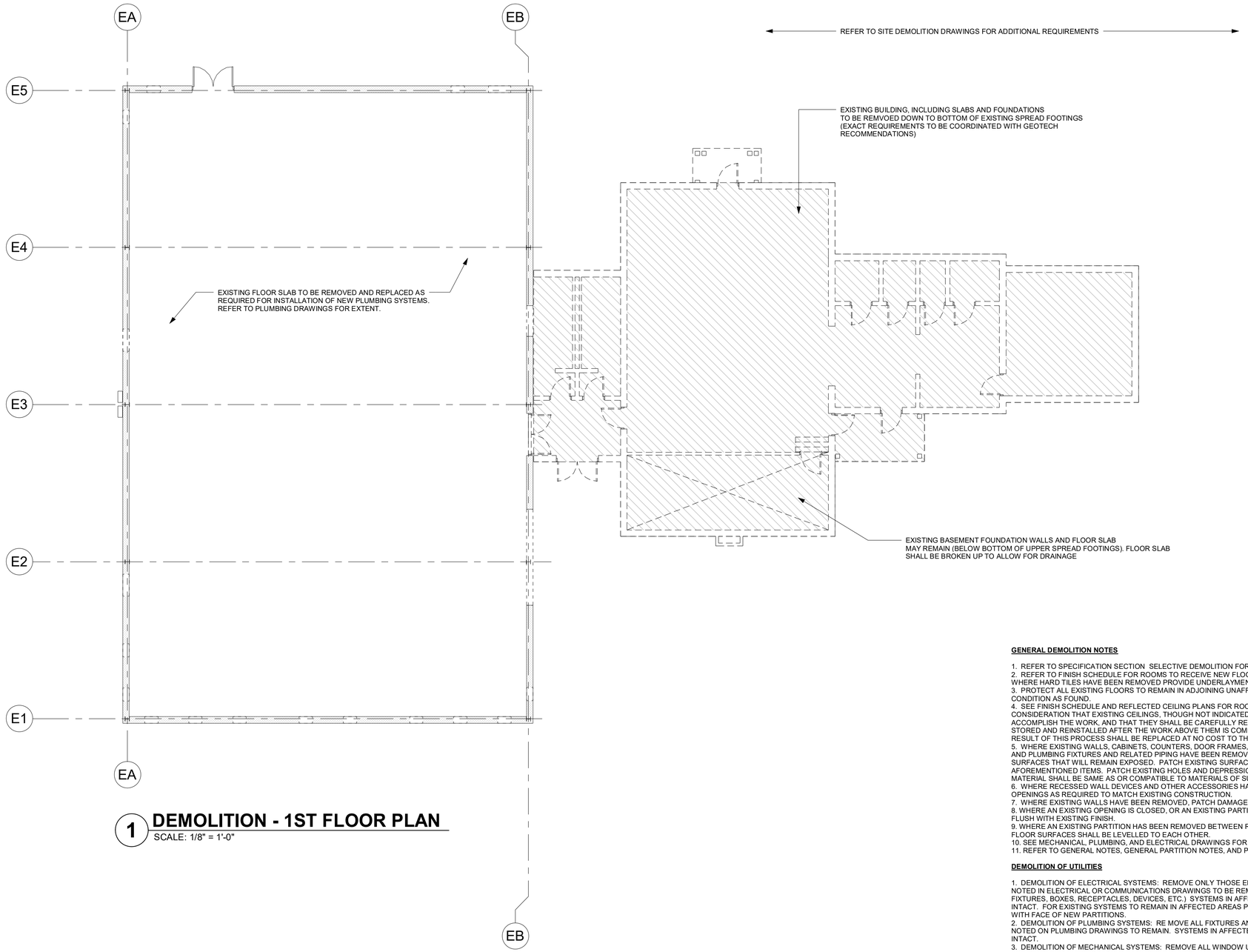
INITIAL ISSUE		12-20-19
1	Addendum 4	01/10/2020

1 ENTIRE SHEET RESISSUED AS PART OF THIS ADDENDUM.

JOB NO. 18-072 | D'WN Author | CK'D Checker

A1.1

FLOOR PLAN



1 DEMOLITION - 1ST FLOOR PLAN

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

GENERAL DEMOLITION NOTES

1. REFER TO SPECIFICATION SECTION SELECTIVE DEMOLITION FOR ADDITIONAL REQUIREMENTS.
2. REFER TO FINISH SCHEDULE FOR ROOMS TO RECEIVE NEW FLOOR FINISH. CLEAN AND PROVIDE LEVELLING MATERIAL, OR WHERE HARD TILES HAVE BEEN REMOVED PROVIDE UNDERLAYMENT, PRIOR TO INSTALLATION OF NEW FLOOR FINISH.
3. PROTECT ALL EXISTING FLOORS TO REMAIN IN ADJOINING UNAFFECTED AREAS OR OTHERWISE LEAVE FLOORS IN SAME CONDITION AS FOUND.
4. SEE FINISH SCHEDULE AND REFLECTED CEILING PLANS FOR ROOMS TO RECEIVE NEW CEILINGS. CONTRACTOR SHALL TAKE INTO CONSIDERATION THAT EXISTING CEILINGS, THOUGH NOT INDICATED TO BE REPLACED, MUST BE REMOVED AND REINSTALLED TO ACCOMPLISH THE WORK, AND THAT THEY SHALL BE CAREFULLY REMOVED BEFORE THE WORK ABOVE THEM IS BEGUN AND SHALL BE STORED AND REINSTALLED AFTER THE WORK ABOVE THEM IS COMPLETED. ANY TILE OR GRID SYSTEMS WHICH ARE DAMAGED AS A RESULT OF THIS PROCESS SHALL BE REPLACED AT NO COST TO THE OWNER.
5. WHERE EXISTING WALLS, CABINETS, COUNTERS, DOOR FRAMES, CEILINGS, DUCTWORK, ELECTRICAL DEVICES AND EQUIPMENT, AND PLUMBING FIXTURES AND RELATED PIPING HAVE BEEN REMOVED, PATCH DAMAGED SURFACES TO MATCH ADJOINING SURFACES THAT WILL REMAIN EXPOSED. PATCH EXISTING SURFACES DISTURBED IN THE PROCESS OF INSTALLING THE AFOREMENTIONED ITEMS. PATCH EXISTING HOLES AND DEPRESSIONS IN THE EXISTING WALLS AND FLOOR SLABS. PATCHING MATERIAL SHALL BE SAME AS OR COMPATIBLE TO MATERIALS OF SURFACES TO BE PATCHED.
6. WHERE RECESSED WALL DEVICES AND OTHER ACCESSORIES HAVE BEEN REMOVED FROM WALLS THAT REMAIN, PATCH OPENINGS AS REQUIRED TO MATCH EXISTING CONSTRUCTION.
7. WHERE EXISTING WALLS HAVE BEEN REMOVED, PATCH DAMAGE TO ADJOINING WALLS WHICH ARE TO REMAIN.
8. WHERE AN EXISTING OPENING IS CLOSED, OR AN EXISTING PARTITION IS EXTENDED WITH NEW WORK, FINISH FACE OF NEW WORK FLUSH WITH EXISTING FINISH.
9. WHERE AN EXISTING PARTITION HAS BEEN REMOVED BETWEEN ROOMS AND THE ADJOINING FLOOR SURFACES ARE UNEVEN, THE FLOOR SURFACES SHALL BE LEVELLED TO EACH OTHER.
10. SEE MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS FOR ADDITIONAL WORK ABOVE AND BELOW EACH FLOOR STRUCTURE.
11. REFER TO GENERAL NOTES, GENERAL PARTITION NOTES, AND PLAN NOTES FOR ADDITIONAL REQUIREMENTS.

DEMOLITION OF UTILITIES

1. DEMOLITION OF ELECTRICAL SYSTEMS: REMOVE ONLY THOSE ELECTRICAL AND COMMUNICATIONS SYSTEMS SPECIFICALLY NOTED IN ELECTRICAL OR COMMUNICATIONS DRAWINGS TO BE REMOVED IN AFFECTED AREAS (I.E. REMOVE ALL CONDUIT, WIRING, FIXTURES, BOXES, RECEPTACLES, DEVICES, ETC.) SYSTEMS IN AFFECTED AREAS WHICH SERVE UNAFFECTED AREAS SHALL REMAIN INTACT. FOR EXISTING SYSTEMS TO REMAIN IN AFFECTED AREAS PROVIDE EXTENSIONS AS REQUIRED TO ALIGN DEVICES FLUSH WITH FACE OF NEW PARTITIONS.
2. DEMOLITION OF PLUMBING SYSTEMS: RE MOVE ALL FIXTURES AND RELATED PIPING IN AFFECTED AREAS UNLESS SPECIFICALLY NOTED ON PLUMBING DRAWINGS TO REMAIN. SYSTEMS IN AFFECTED AREAS THAT SERVE UNAFFECTED AREAS SHALL REMAIN INTACT.
3. DEMOLITION OF MECHANICAL SYSTEMS: REMOVE ALL WINDOW UNITS, RADIATORS, GRILLES, DIFFUSERS, DUCTWORK, EQUIPMENT, ETC. NOT SPECIFICALLY NOTED IN MECHANICAL DRAWINGS TO REMAIN IN AFFECTED AREAS. SYSTEMS IN AFFECTED AREAS WHICH SERVE UNAFFECTED AREAS SHALL REMAIN INTACT.
4. DEMOLITION OF ALL UTILITIES (PLUMBING, MECHANICAL, ELECTRICAL, COMMUNICATIONS): WHERE SYSTEMS ARE ABANDONED, REMOVE TO BEHIND WALLS, 2' BELOW FLOORS, OR 2" BELOW STRUCTURE ABOVE. CAP AND/OR SEAL ANY REMOVED SYSTEM WHICH REMAINS IN SERVICE CONSISTENT WITH BEST PRACTICES OF TRADE INVOLVED.
5. ALL ELECTRICAL, COMMUNICATIONS, PLUMBING, OR MECHANICAL SYSTEMS IN AREAS NOT AFFECTED BY THIS WORK MUST REMAIN IN FULL SERVICE AT ALL TIMES. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING AND MAINTAINING SAME IF INTERRUPTED AS PART OF THIS WORK.
6. REFER TO PLUMBING, MECHANICAL, ELECTRICAL, AND COMMUNICATIONS DRAWINGS FOR ADDITIONAL DEMOLITION REQUIREMENTS.

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FIRST FLOOR DEMOLITION PLAN

ROOM FINISH SCHEDULE

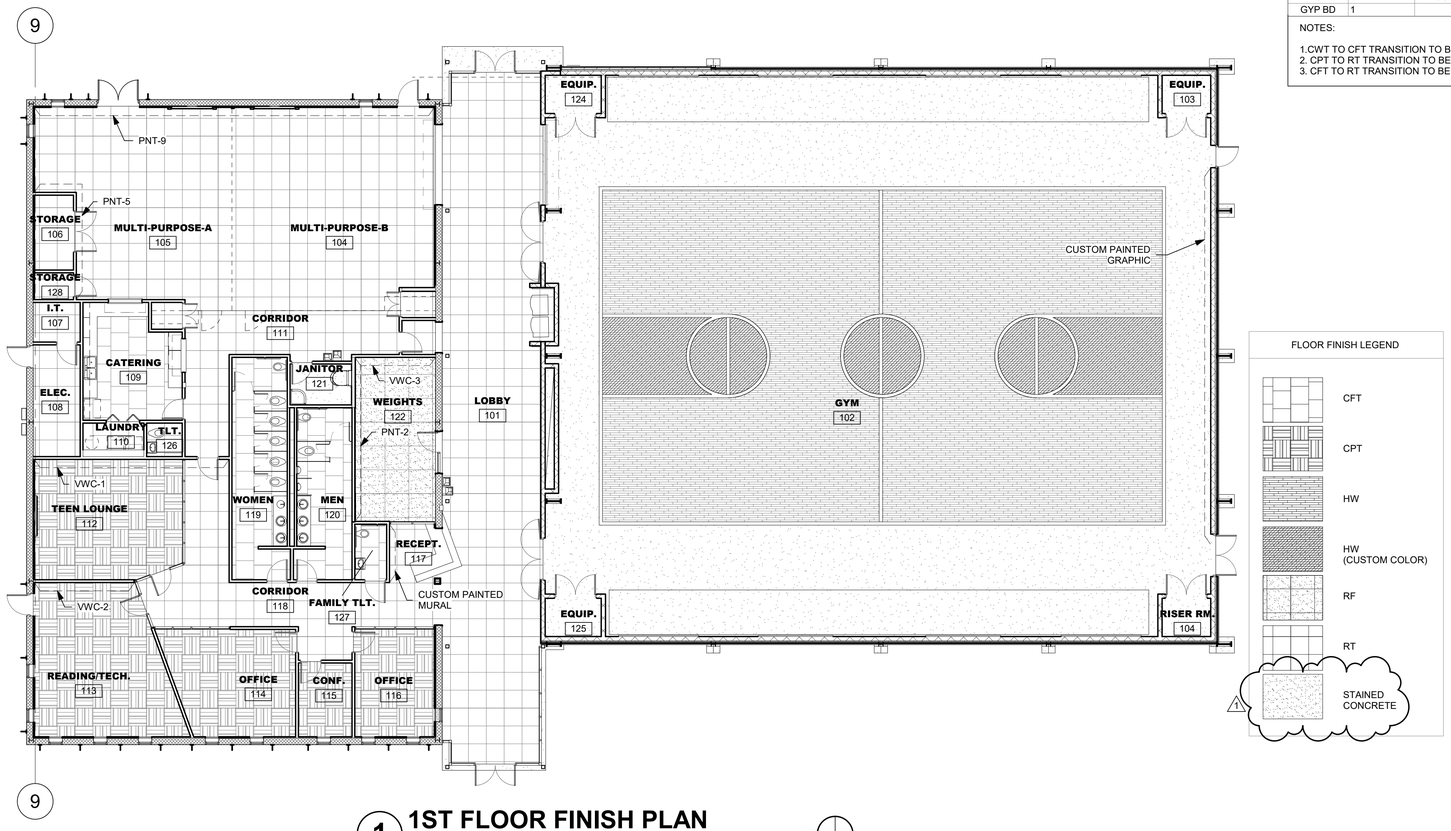
ROOM NUMBER	ROOM NAME	FLOORS		BASE MATERIAL	BASE	WALLS		TRIM FINISH	CEILINGS		CASEWOK			COMMENTS
		MATERIAL	COLOR		COLOR	MATERIAL	COLOR		TYPE	FINISH	COUNTERS	BASE CABINETS	WALL CABINETS	
101	LOBBY	RT	1-4	RB	1	PNT	1	PNT-9	ACP	1				
102	GYM	HW/ CONCRETE	1, 3	RB	1	PNT/AWP	1, 2, 8/ 1	PNT-9						WP-1 ON SIDE WALLS; SEE ELEVATIONS FOR PNT 1 & 2 AND AWP 1 LOCATIONS
103	EQUIP.	CONCRETE		RB	1	PNT	1	PNT-9						
104	RISER RM.	CONCRETE		RB	1	PNT	1	PNT-9						
104	MULTI-PURPOSE-B	RT	1-4	RB	1	PNT	1, 3, 9	PNT-9	ACP	3,4				PNT-3 ON BULKHEAD AS ACCENT; PNT-9 ON TV WALL; SEE FINISH PLAN. SEE RCP FOR COORDINATION OF ACP-3/4.
105	MULTI-PURPOSE-A	RT	1-4	RB	1	PNT	1, 3, 5, 9	PNT-9	ACP	3,4				PNT-3 ON BULKHEAD AS ACCENT; PNT-5 AS ACCENT, PNT-9 ON TV WALL; SEE FINISH PLAN. SEE RCP FOR COORDINATION OF ACP-4, 4.
106	STORAGE	RT	1	RB	1	PNT	1	PNT-5						
107	I.T.	RT	1	RB	1	PNT	1	PNT-9						
108	ELEC.	RT	1	RB	1	PNT	1	PNT-9						
109	CATERING	CFT	1	RB	1	PNT	1	PNT-9	ACT	1	PLAM-2	PLAM-1		
110	LAUNDRY	CFT	1	RB	1	PNT	1	PNT-9	ACT	1				
111	CORRIDOR	RT	1-4	RB	1	PNT	1	PNT-9						
112	TEEN LOUNGE	CPT	1	RB	1	PNT/VWC	1-4/1	PNT-9	ACT	1				PNT 2-4 AS ACCENT; SEE ELEVATIONS
113	READING/TECH.	CPT	1	RB	1	PNT/VWC	1, 5/2	PNT-9	ACT	1				
114	OFFICE	CPT	1	RB	1	PNT	7	PNT-9	ACT	1				
115	CONF.	CPT	1	RB	1	PNT	7	PNT-9	ACT	1				
116	OFFICE	CPT	1	RB	1	PNT	7	PNT-9	ACT	1				
117	RECEPT.	RT	1-4	RB	1	PNT	1	PNT-9			SS-1	PLAM-1		PLAM-4 AS BASE AT RECEPTION DESK
118	CORRIDOR	RT	1-4	RB	1	PNT	1	PNT-9						
119	WOMEN	CFT	1			CWT	1	PNT-9	GYP		SS-2	PLAM-3		SCHLUTER DILEX-AHK @ FLOOR/WALL TRANSITION
120	MEN	CFT	1			CWT	1	PNT-9	GYP		SS-2	PLAM-3		SCHLUTER DILEX-AHK @ FLOOR/WALL TRANSITION
121	JANITOR	CONCRETE		RB	1	PNT	1	PNT-9						
122	WEIGHTS	RF	1	RB	1	PNT/VWC	1, 2/3	PNT-9						PNT-2 ON MIRROR WALL; SEE ELEVATIONS
123	WATER	RT	1	RB	1	PNT	1	PNT-9						
124	EQUIP.	CONCRETE		RB	1	PNT	1	PNT-9						
125	EQUIP.	CONCRETE		RB	1	PNT	1	PNT-9						
126	TLT.	CFT	1			CWT	1	PNT-9	ACT	1				SCHLUTER DILEX-AHK @ FLOOR/WALL TRANSITION
127	FAMILY TLT.	CFT	1			CWT	1	PNT-9	GYP					SCHLUTER DILEX-AHK @ FLOOR/WALL TRANSITION
128	STORAGE	RT	1	RB	1	PNT	1	PNT-9	ACT	1				

FINISH LEGEND

SYMBOL	COLOR	DESCRIPTION	MANUFACTURER	PRODUCT	FINISH	NOTES
FLOOR						
CFT	1	CERAMIC FLOOR TILE	LOUISVILLE TILE	AMERICAN OLEAN - NEOSPECK	DARK GRAY NE05 - MATTE	1/3 OFFSET; CONTACT BETHE MOTLOW FOR INFORMATION: BMOTLOW@LOUISVILLE-TILE.COM
CPT	1	CARPET TILE	EF CONTRACT	KINETIX	SPREE - FLING SPR34	24" X 24"; QUARTER TURN INSTALL
HW	1	HARDWOOD	CONNOR SPORTS	VIP TM	MAPLE	MANUFACTURER TO PROVIDE REDUCER STRIP FOR HW TO CONCRETE TRANSITION
HW	2 (NOT USED)	HARDWOOD	CONNOR SPORTS	VIP TM	MAPLE	OAK STAIN
HW	3	HARDWOOD	CONNOR SPORTS	VIP TM	MAPLE	CUSTOM COLOR COURT LINE LAYOUT BY MANUFACTURER
RF	1	RUBBER FLOOR	DINOFLEX	SPORT MAT - STANDARD	10 GREEN 5119	
RT	1	RESILIENT TILE	UPOFLOOR	QUARTZ: MOSAIC COLLECTION	61903	610MM X 610MM
RT	2	RESILIENT TILE	UPOFLOOR	QUARTZ: MOSAIC COLLECTION	619304	610MM X 610MM
RT	3	RESILIENT TILE	UPOFLOOR	QUARTZ: MOSAIC COLLECTION	619306	610MM X 610MM
RT	4	RESILIENT TILE	UPOFLOOR	QUARTZ: MOSAIC COLLECTION	619301	610MM X 610MM
BASE						
RB	1	RESILIENT BASE	JOHNSONITE	MW-XX-F	32 PEBBLE WG	4.25" REVEAL
WALL						
AWP	1	ACOUSTIC WALL PANEL	ARMSTRONG	TECTUM DIRECT-ATTACH	TECTUM WHITE	48" X 144"
CWT	1	CERAMIC WALL TILE	LOUISVILLE TILE	ATLAS CONCORDE - CRAFT	WICKER DOVE	CONTACT BETHE MOTLOW FOR INFORMATION: BMOTLOW@LOUISVILLE-TILE.COM
FILM	1 (NOT USED)	FILM	OLEE CREATIVE	TEXTURED SURFCE FILM	CUSTOM GRAPHIC - TBD	OLEE0032937
PNT	1	PAINT	SHERWIN WILLIAMS		SW6252 ICE CUBE	
PNT	2	PAINT	SHERWIN WILLIAMS		SW6718 OVERT GREEN	
PNT	3	PAINT	SHERWIN WILLIAMS		SW6573 JUNEBERRY FLAT	
PNT	4	PAINT	SHERWIN WILLIAMS		SW6959 BLUE CHIP	
PNT	5	PAINT	SHERWIN WILLIAMS		SW6958 DYNAMIC BLUE	
PNT	6	PAINT	SHERWIN WILLIAMS		SW7069 IRON ORE	
PNT	7	PAINT	SHERWIN WILLIAMS		SW7667 ZIRCON	
PNT	8	PAINT	SHERWIN WILLIAMS		SW7609 GEORGIAN REVIVAL BLUE	
PNT	9	PAINT	SHERWIN WILLIAMS		SW7018 DOVETAIL	
VWC	1	WALL COVERING	NATIONAL WALLCOVERING	LEVEL - DESIGN	WORD WALLS (L51706) - SCRIPT SHARPIE	CONTACT AIMEE CHADWICK FOR INFORMATION: AIMEE.CHADWICK@NATIONALSOLUTIONS.COM
VWC	2	WALL COVERING	NATIONAL WALLCOVERING	LEVEL - DESIGN	NEON WORD WALL (L91502G) - STEEL	CONTACT AIMEE CHADWICK FOR INFORMATION: AIMEE.CHADWICK@NATIONALSOLUTIONS.COM
VWC	3	WALL COVERING	NATIONAL WALLCOVERING	LEVEL - DESIGN	WORD PLAY (L72201) - SPLASH TITANIUM	CONTACT AIMEE CHADWICK FOR INFORMATION: AIMEE.CHADWICK@NATIONALSOLUTIONS.COM
MILLWORK						
PLAM	1	PLASTIC LAMINATE	WILSONART		KENSINGTON MAPLE 10776-60	MATTE FINISH
PLAM	2	PLASTIC LAMINATE	PIONITE		MOONLIGHTING PAPEL AV971	SUEDE
PLAM	3	PLASTIC LAMINATE	WILSONART		ALABASTER D431-60	MATTE FINISH
PLAM	4	PLASTIC LAMINATE	WILSONART	DECORATIVE METALS	6277 (419) ALUMASTEEL	ONLY USED AS BASE AT RECEPTION DESK
SS	1	SOLID SURFACE	CORIAN		ASH CONCRETE	
SS	2	SOLID SURFACE	CORIAN		BISQUE	
CEILINGS						
ACP	1	ACOUSTIC CEILING PANEL	ARMSTRONG	WOODWORKS CANOPIES	MAPLE	CUSTOM SHAPE; CONTACT MANUFACTURER FOR DETAILS
ACP	2 (NOT USED)	ACOUSTIC CEILING PANEL	ARMSTRONG			
ACP	3	ACOUSTIC CEILING PANEL	ARMSTRONG	SOUNDSCAPES-VALLEY	LAGOON (LA)/KIWI (KW)	SEE RCP FOR SHAPE/COLOR COORDINATION
ACP	4	ACOUSTIC CEILING PANEL	ARMSTRONG	SOUNDSCAPES-HILL	LAGOON (LA)/KIWI (KW)	SEE RCP FOR SHAPE/COLOR COORDINATION
ACT	1	ACOUSTICAL CEILING TILE	ARMSTRONG	CIRRUS - TEGULAR		2' X 2'
GYP BD	1	GYPSUM BOARD				

NOTES:

1. CWT TO CFT TRANSITION TO BE: SCHLUTER DILEX-AHK; ANODIZED ALUMINUM FINISH.
2. CPT TO RT TRANSITION TO BE: JOHNSONITE CTA-XX-A; 29 MOONROCK WG
3. CFT TO RT TRANSITION TO BE: SCHLUTER RENO-U; STAINLESS STEEL BRUSHED



1 **1ST FLOOR FINISH PLAN**
SCALE: 3/32" = 1'-0"

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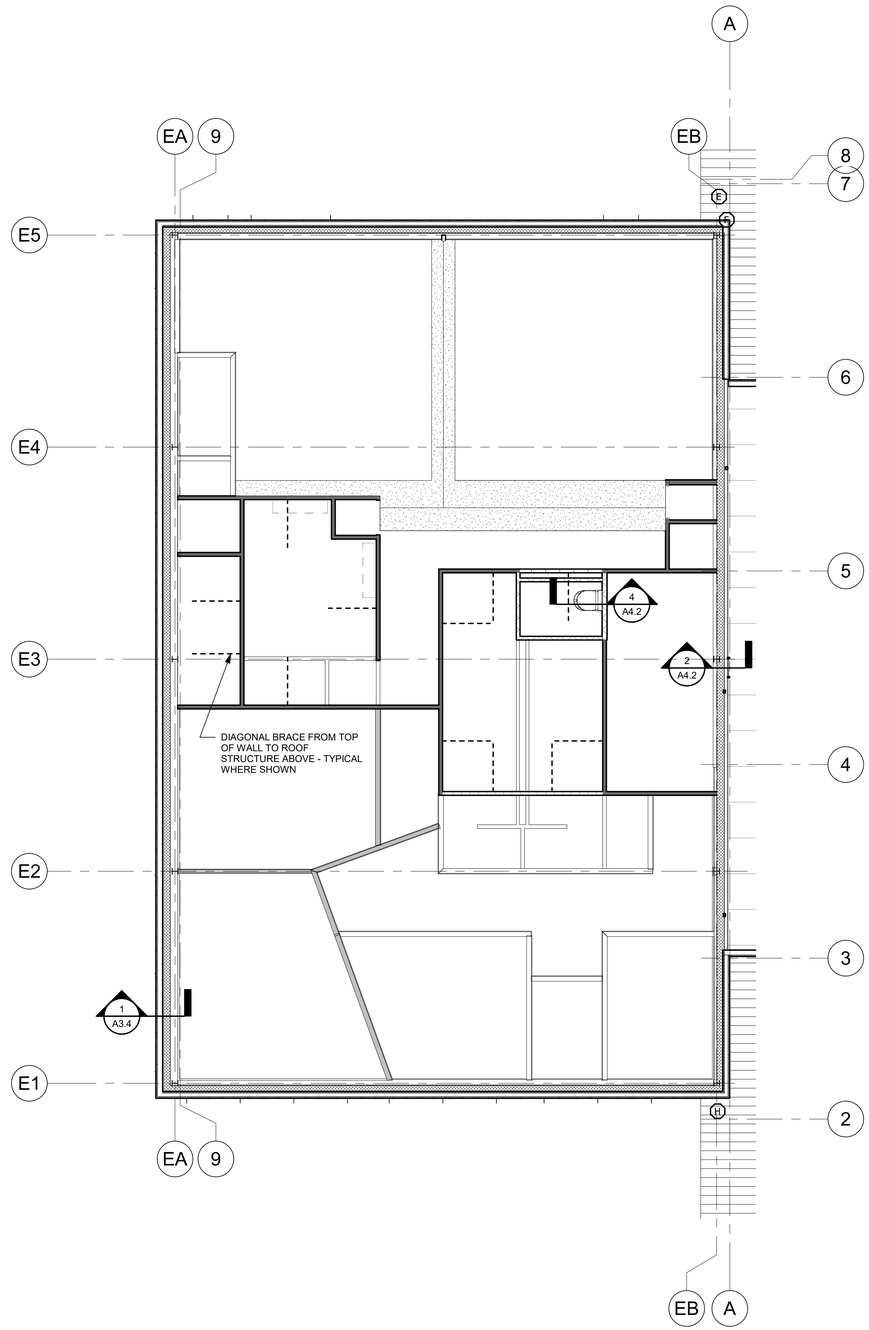
FINISH PLAN



1 INTERIOR PARTITION HEIGHTS

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

0 4' 8' 16'

WALL HEIGHT

- WALL HEIGHT TO UNDER SIDE OF DECKING
- 20' WALL HEIGHT
- 15' WALL HEIGHT
- 10' WALL HEIGHT
- 20' WALL HEIGHT BOTTOM @ 10' A.F.F.

1. ENTIRE SHEET RESISSUED AS PART OF THIS ADDENDUM.

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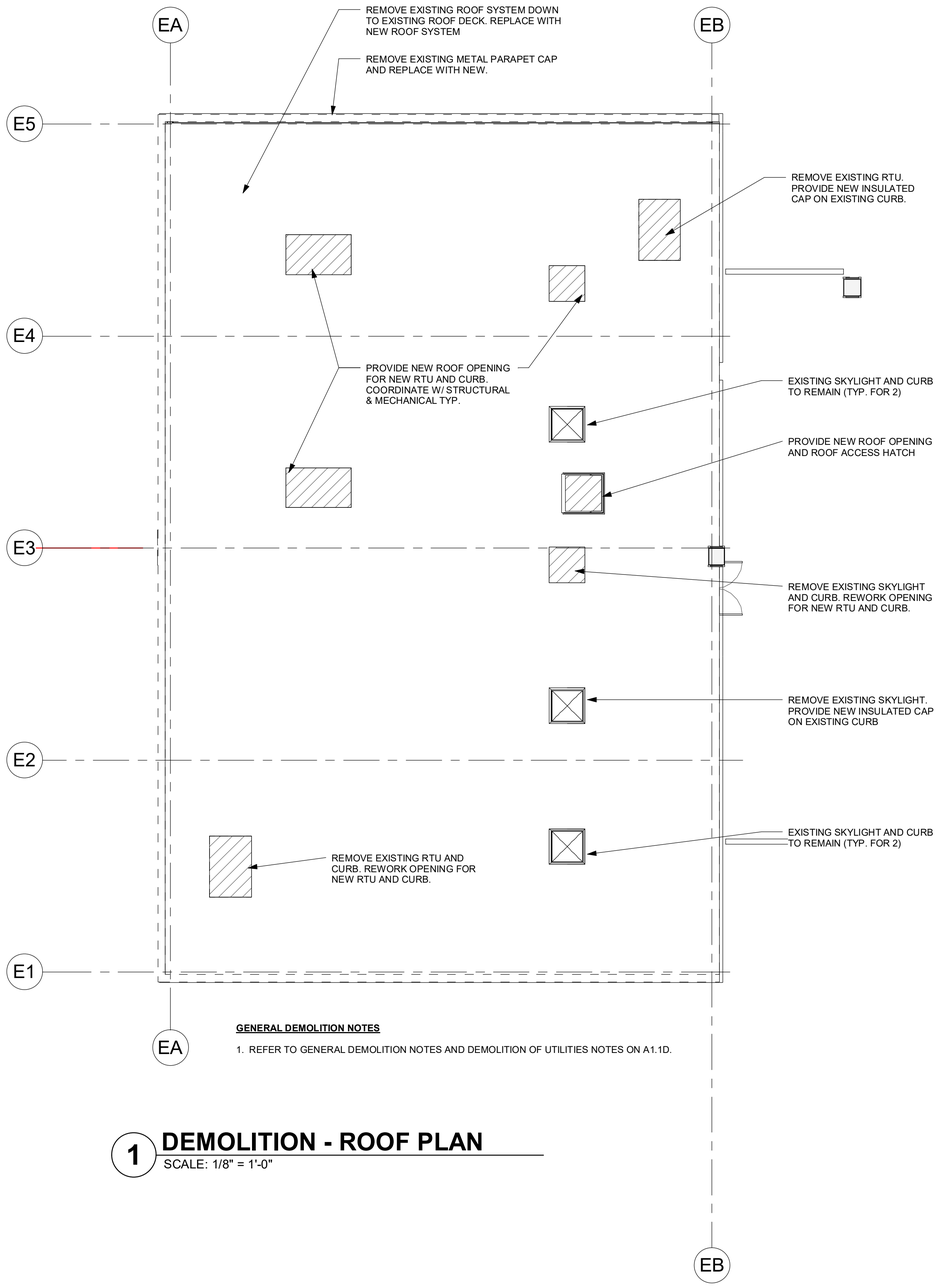
INTERIOR PARTITION HEIGHTS



GENERAL DEMOLITION NOTES

1. REFER TO GENERAL DEMOLITION NOTES AND DEMOLITION OF UTILITIES NOTES ON A1.1D.

1 DEMOLITION - ROOF PLAN

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

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East Lake YFD Center Improvements

3610 Dodds Avenue, Chattanooga, TN 37402

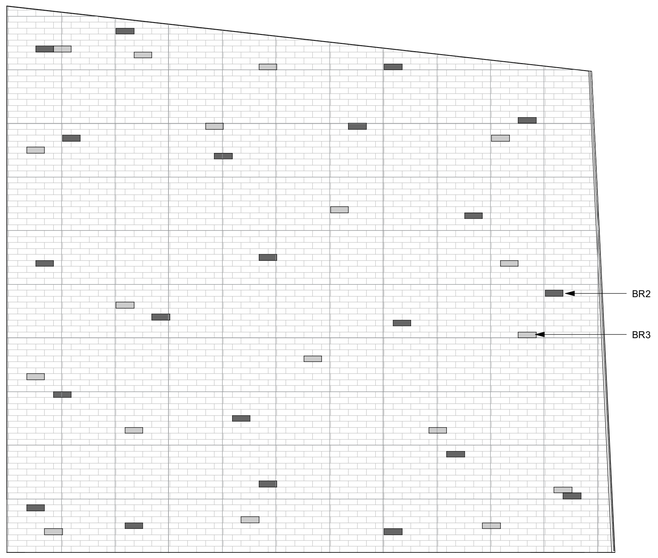
RICHARD D. THOMPSON
REGISTERED ARCHITECT
No. 17840
STATE OF TENNESSEE

ISSUE DATES
INITIAL ISSUE 12-20-19

JOB NO. 18-072 | D'WN Author | CK'D Checker

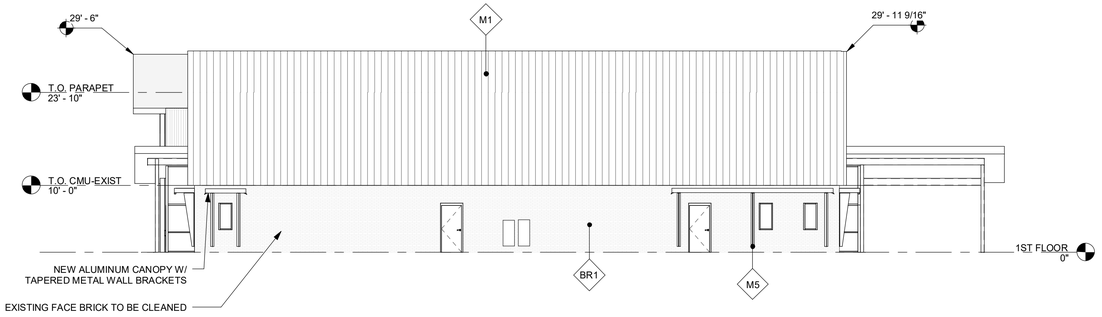
A1.2D

ROOF DEMOLITION PLAN

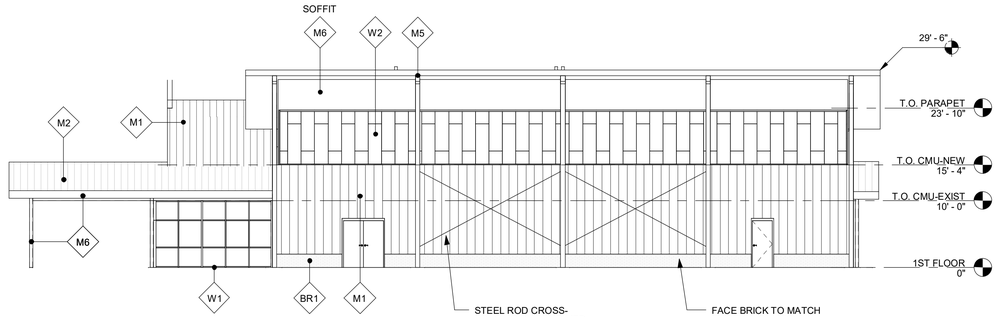


5 EXTERIOR ACCENT WALL DETAIL
SCALE: 3/8" = 1'-0"

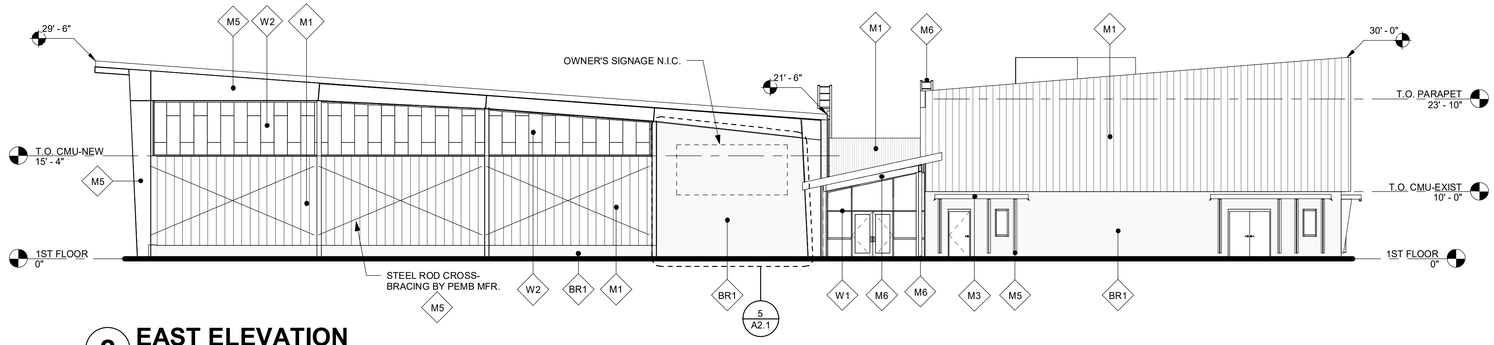
2'x2' GRID OVERLAY SHOWN FOR REFERENCE ONLY TO HELP APPROXIMATE LOCATIONS OF CUSTOM GLAZED BRICKS (BR2 & BR3)



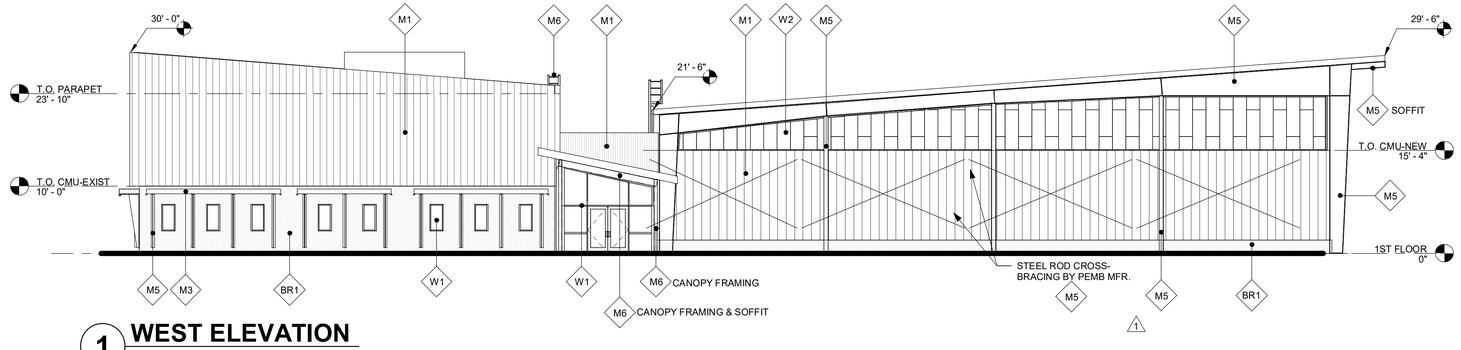
4 NORTH ELEVATION
SCALE: 3/32" = 1'-0"



3 SOUTH ELEVATION
SCALE: 3/32" = 1'-0"



2 EAST ELEVATION
SCALE: 3/32" = 1'-0"



1 WEST ELEVATION
SCALE: 3/32" = 1'-0"

ENTIRE SHEET RESISSUED AS PART OF THIS ADDENDUM.

MATERIAL LEGEND

	MATERIAL
	METAL
M1	METAL WALL PANEL - STANDING SEAM, BERRIDGE ZINC GREY
M2	METAL ROOF PANEL - STANDING SEAM (CONCEALED FASTENER). BERRIDGE ZINC GREY
M3	METAL CANOPY - PREFINISHED ALUMINUM CANOPY PER SPECIFICATIONS, MATCH P1
M4	METAL MISCELLANEOUS - GUTTERS, DOWNSPOUTS, SOFFIT, COPING; PREFINISHED FROM COLORS AS SPECIFIED
M5	EXPOSED EXTERIOR STRUCTURE (TYPICAL, EXCEPT WHERE NOTED), FINISHED TO MATCH P-1
M6	EXPOSED EXTERIOR STRUCTURE (CENTRAL SPINE), FINISHED TO MATCH P-2
	STOREFRONT/WINDOWS
W1	CLEAR ANODIZED STOREFRONT FRAMING WITH 1" CLEAR INSULATED SAFETY GLAZING (TEMPERED WHERE CODE REQUIRES)
W2	TRANSLUCENT THERMAL GLAZING SYSTEM - MANUFACTURER'S STANDARD WHITE COLOR
	PAINT
P1	DARK GRAY GREEN (ALL EXPOSED STEEL UNLESS NOTED OTHERWISE) SHERWIN WILLIAMS SW6209 RIPE OLIVE
P2	OFF-WHITE (ALL STEEL AT CENTRAL SPINE)
	MASONRY
BR1	FIELD COLOR AND MORTAR TO MATCH EXISTING. PROVIDE BR-2 & BR-3 ACCENTS AS INDICATED. PALMETTO RED SMOOTH
BR2	GLAZED ACCENT COLOR - (TO MATCH BR1 SIZE) - ELGIN BUTLER #4340 RAINFOREST GREEN
BR3	GLAZED ACCENT COLOR - (TO MATCH BR1 SIZE) - ELGIN BUTLER #4625 PURPLE HEART

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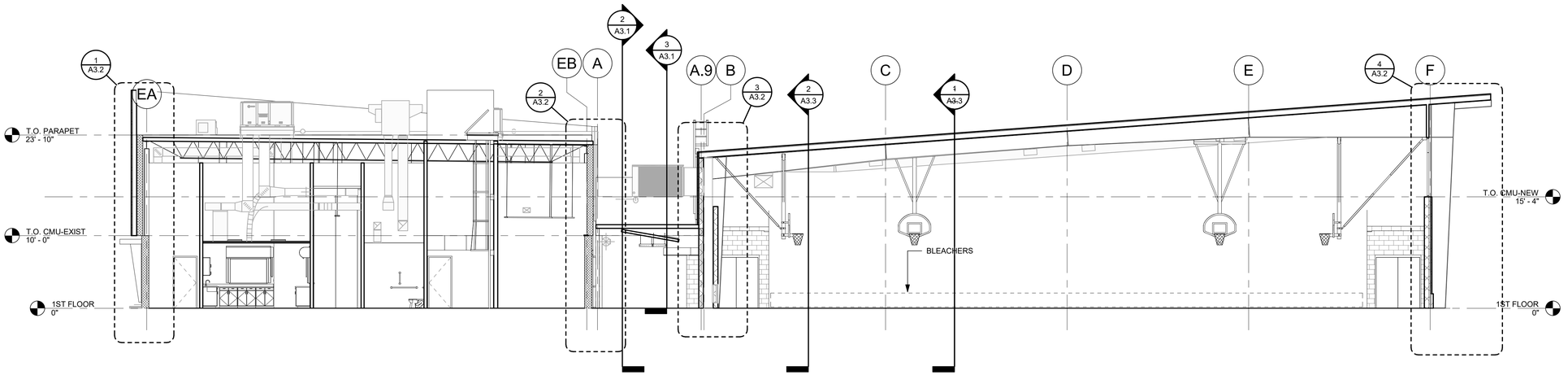
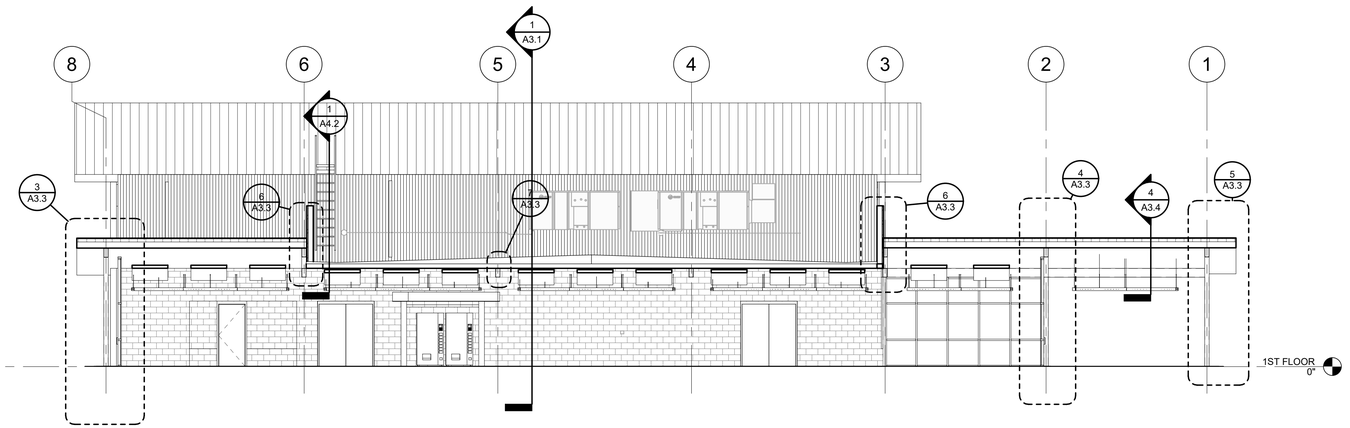
1	Addendum 4	01/10/2020
2	Addendum 8	01/21/2020

JOB NO. 18-072 | D'WN Author | CK'D Checker

A2.1
EXTERIOR ELEVATIONS



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



2 BUILDING SECTION
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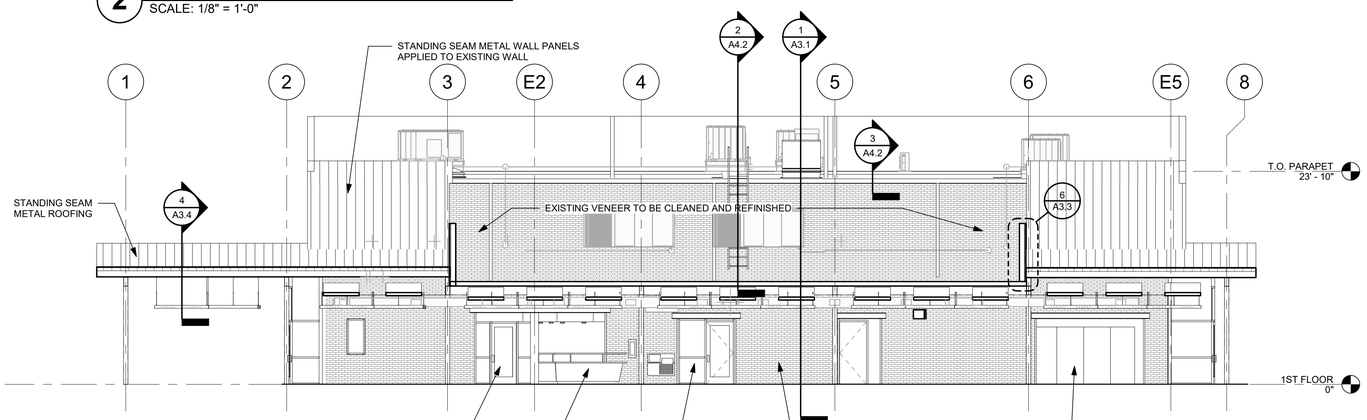

3 BUILDING SECTION
SCALE: 1/8" = 1'-0"

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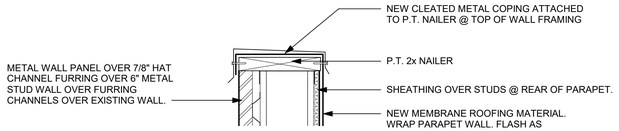
1 ENTIRE SHEET RESISSUED AS PART OF THIS ADDENDUM.

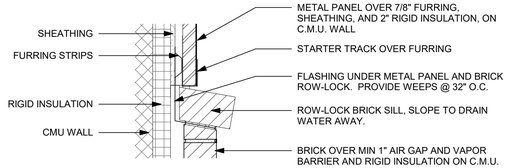
JOB NO.	D'WN	CK'D
18-072	Author	Checker

A3.1

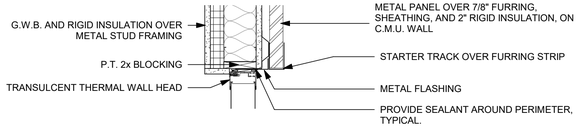
BUILDING SECTIONS



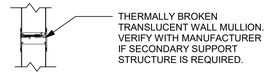
5 COPING DETAIL
SCALE: 1 1/2" = 1'-0"



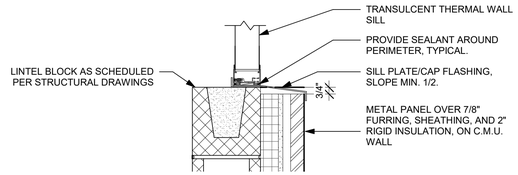
6 BRICK LEDGE
SCALE: 1 1/2" = 1'-0"



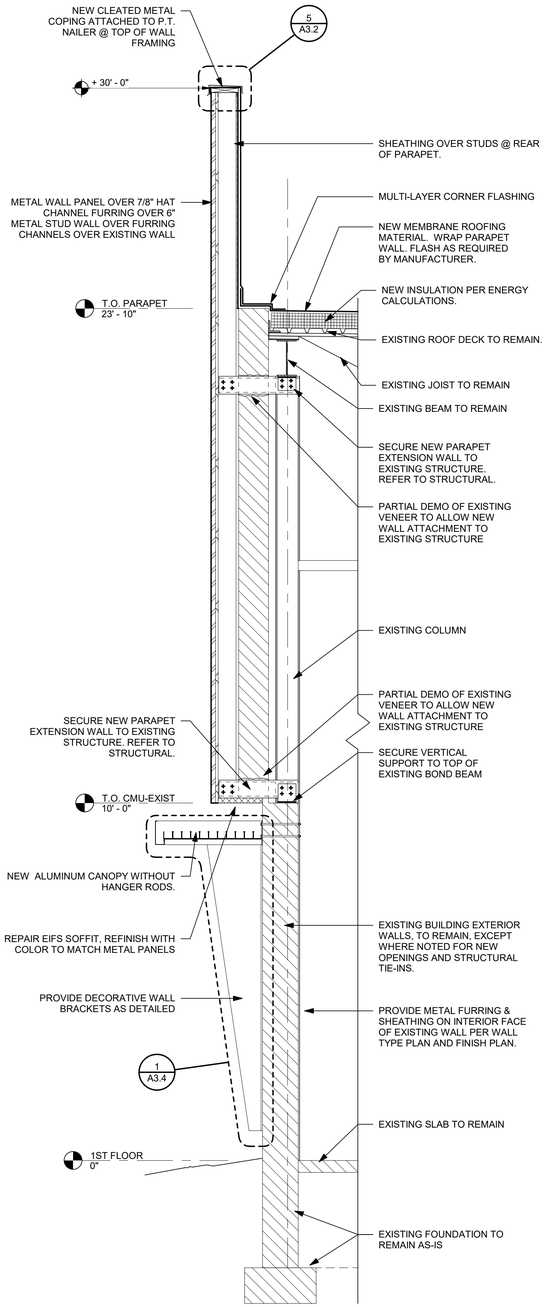
7 TRANSLUCENT WALL - HEAD
SCALE: 1 1/2" = 1'-0"



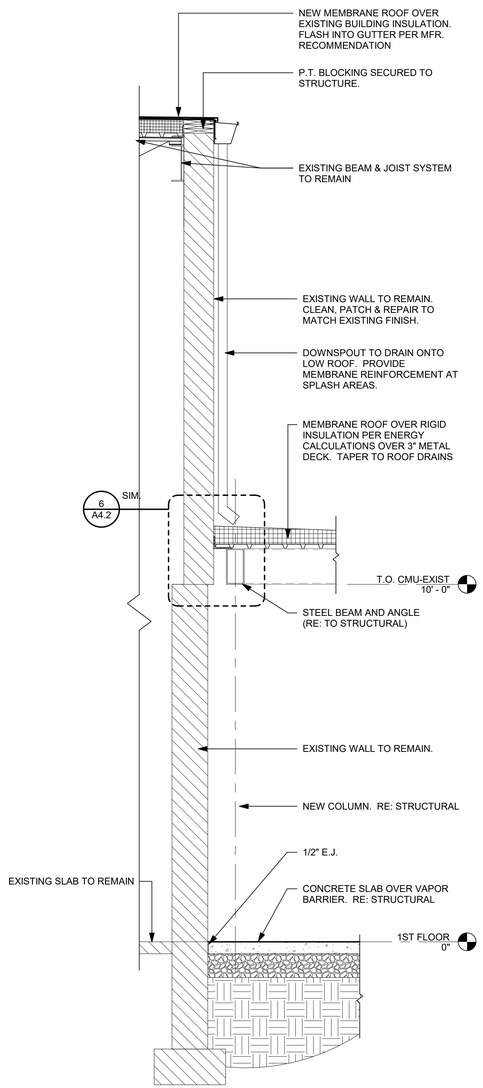
8 TRANSLUCENT WALL - MULLION
SCALE: 1 1/2" = 1'-0"



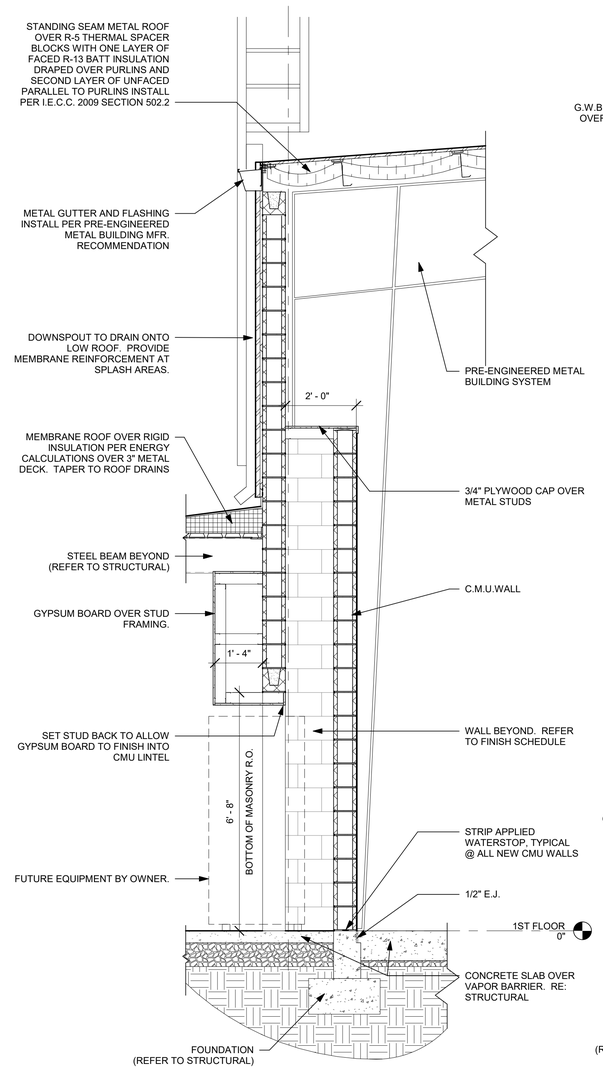
9 TRANSLUCENT WALL - SILL
SCALE: 1 1/2" = 1'-0"



1 WALL SECTION
SCALE: 1/2" = 1'-0"



2 WALL SECTION
SCALE: 1/2" = 1'-0"



3 WALL SECTION
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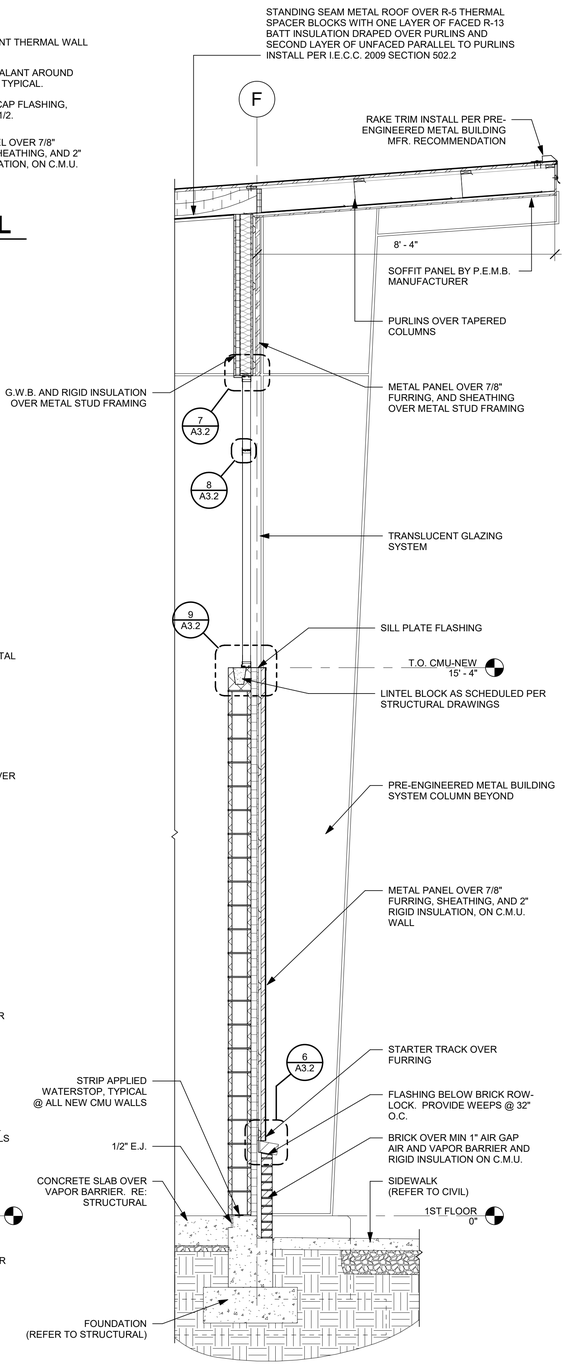

4 WALL SECTION
SCALE: 1/2" = 1'-0"

ENTIRE SHEET RESISSUED AS PART OF THIS ADDENDUM. 1

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RICHARD A. THOMPSON REGISTERED ARCHITECT No. 17846 STATE OF TENNESSEE

ISSUE DATES

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1	Addendum 4	01/10/2020

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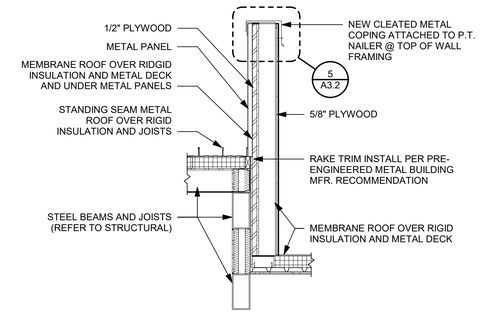
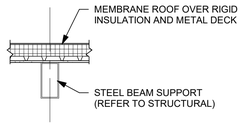
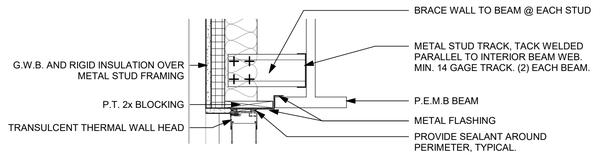
A3.2
EXTERIOR WALL SECTIONS



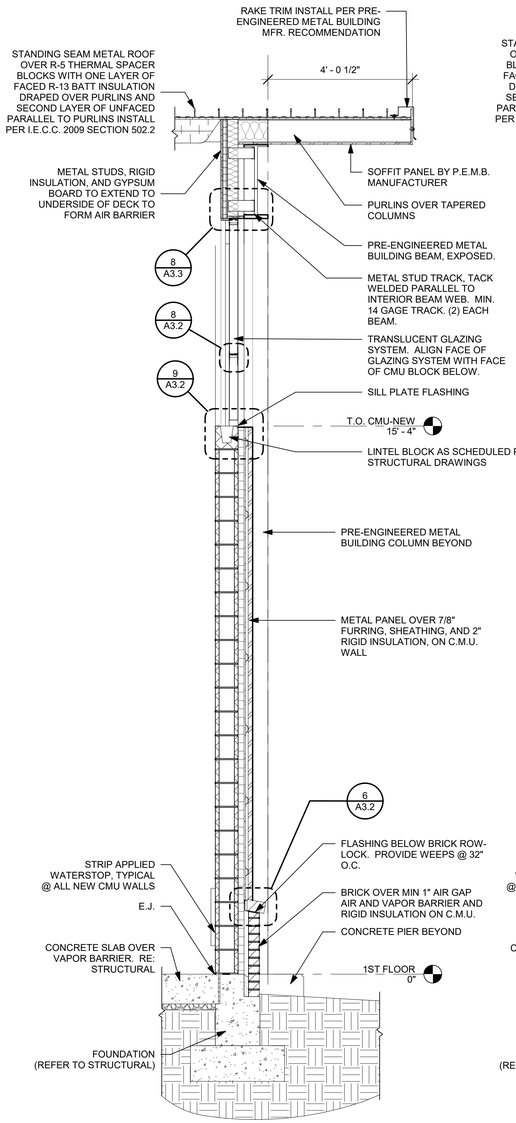
6 WALL SECTION
SCALE: 1/2" = 1'-0"



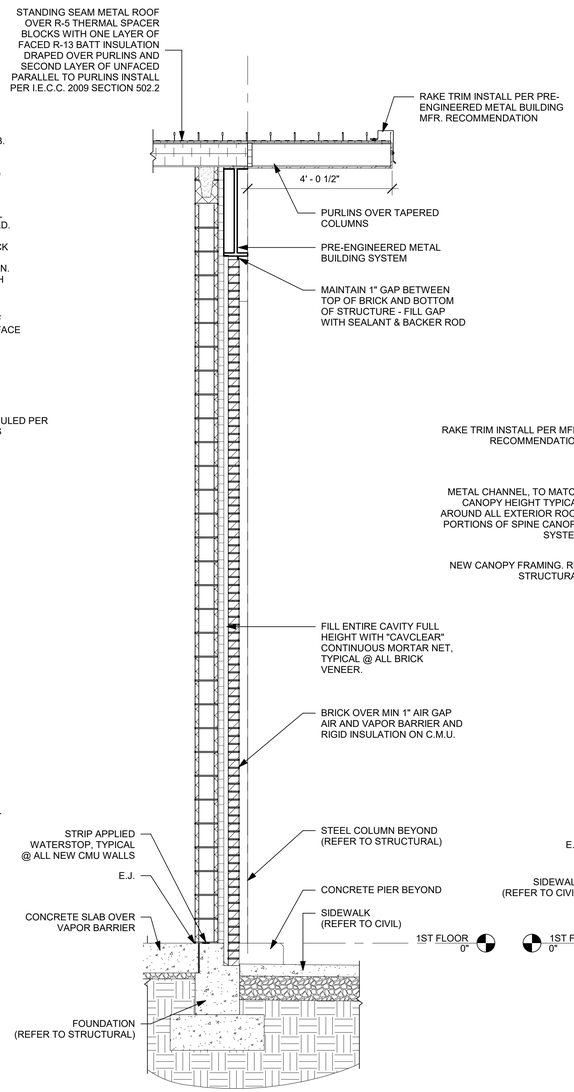
7 WALL SECTION
SCALE: 1/2" = 1'-0"



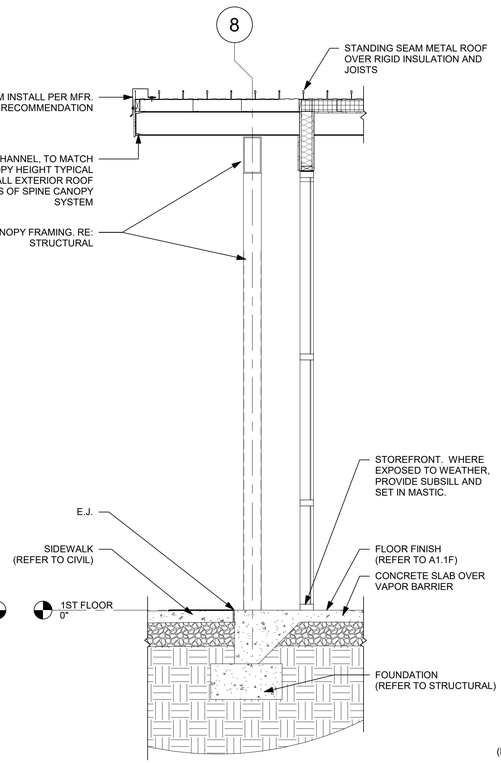
8 TRANSLUCENT WALL - HEAD ALT.
SCALE: 1 1/2" = 1'-0"



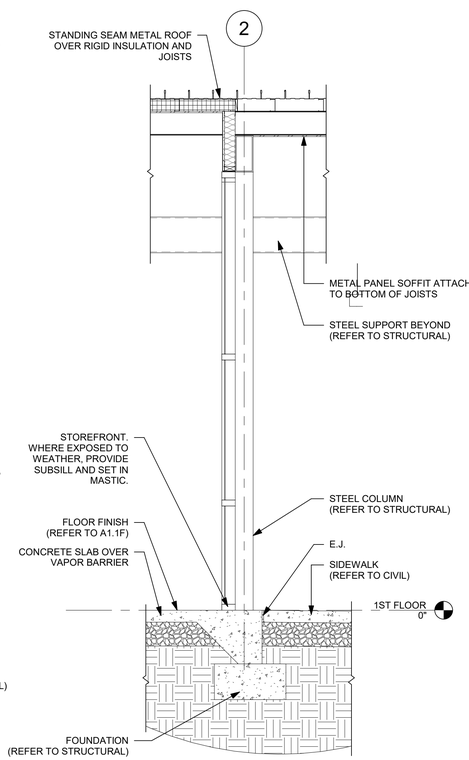
1 WALL SECTION
SCALE: 1/2" = 1'-0"



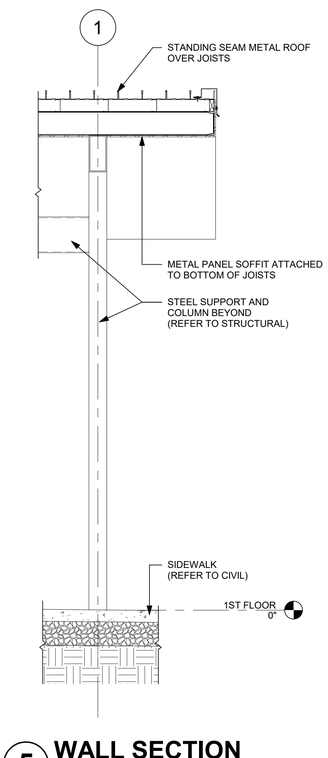
2 WALL SECTION
SCALE: 1/2" = 1'-0"



3 WALL SECTION
SCALE: 1/2" = 1'-0"



4 WALL SECTION
SCALE: 1/2" = 1'-0"



5 WALL SECTION
SCALE: 1/2" = 1'-0"

1 ENTIRE SHEET RESISSUED AS PART OF THIS ADDENDUM.

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90% REVIEW 2019-10-23

RICHARD A. THOMPSON REGISTERED ARCHITECT No. 17940 STATE OF TENNESSEE

ISSUE DATES

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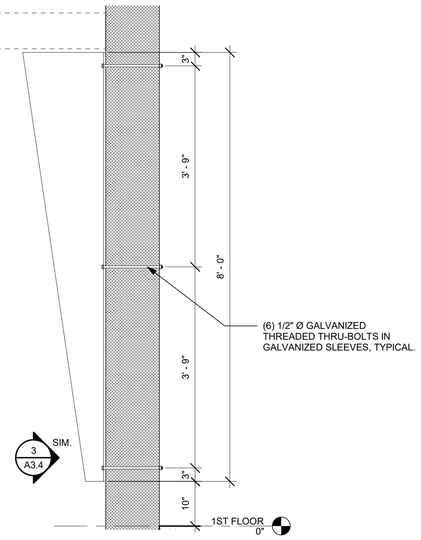
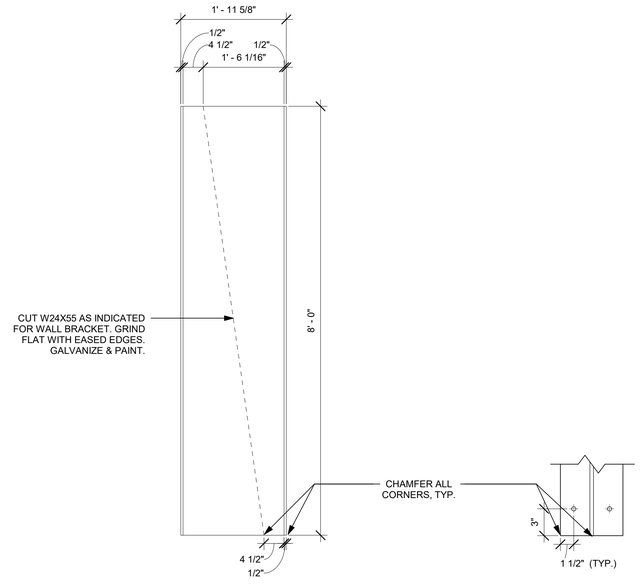
A3.3
EXTERIOR WALL SECTIONS

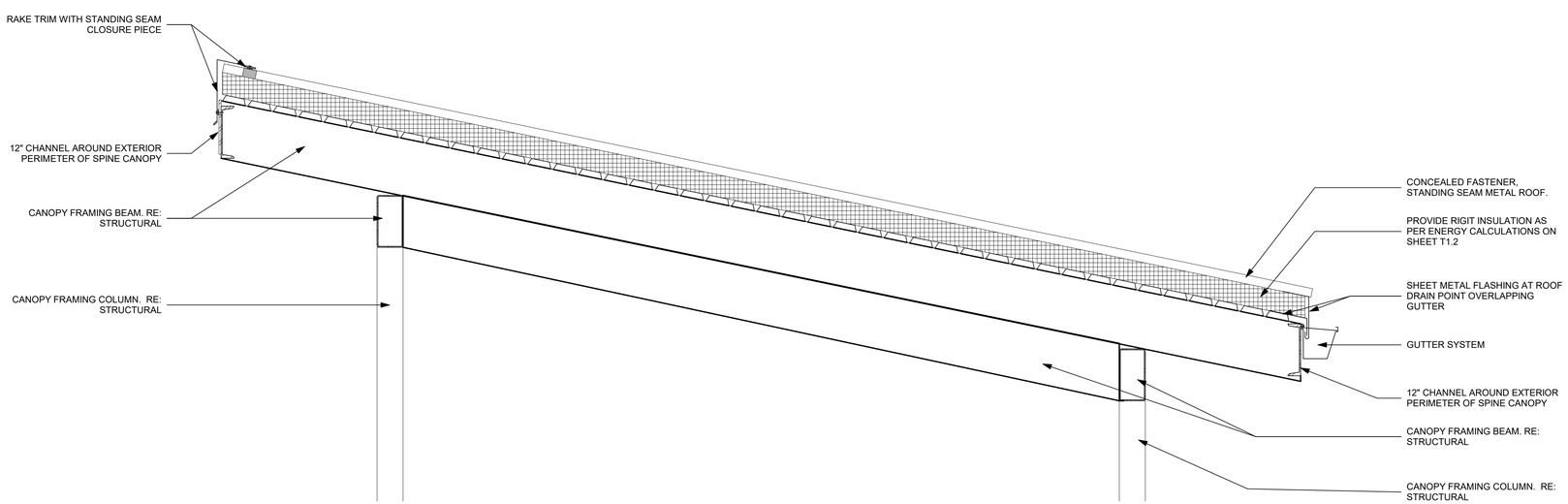


1 WALL BRACKET MOUNTING
SCALE: 3/4" = 1'-0"



2 BRACKET CUT DETAIL
SCALE: 3/4" = 1'-0"

3 BRACKET BOTTOM ELEVATION
SCALE: 1 1/2" = 1'-0"



4 CANOPY SECTION
SCALE: 3/4" = 1'-0"

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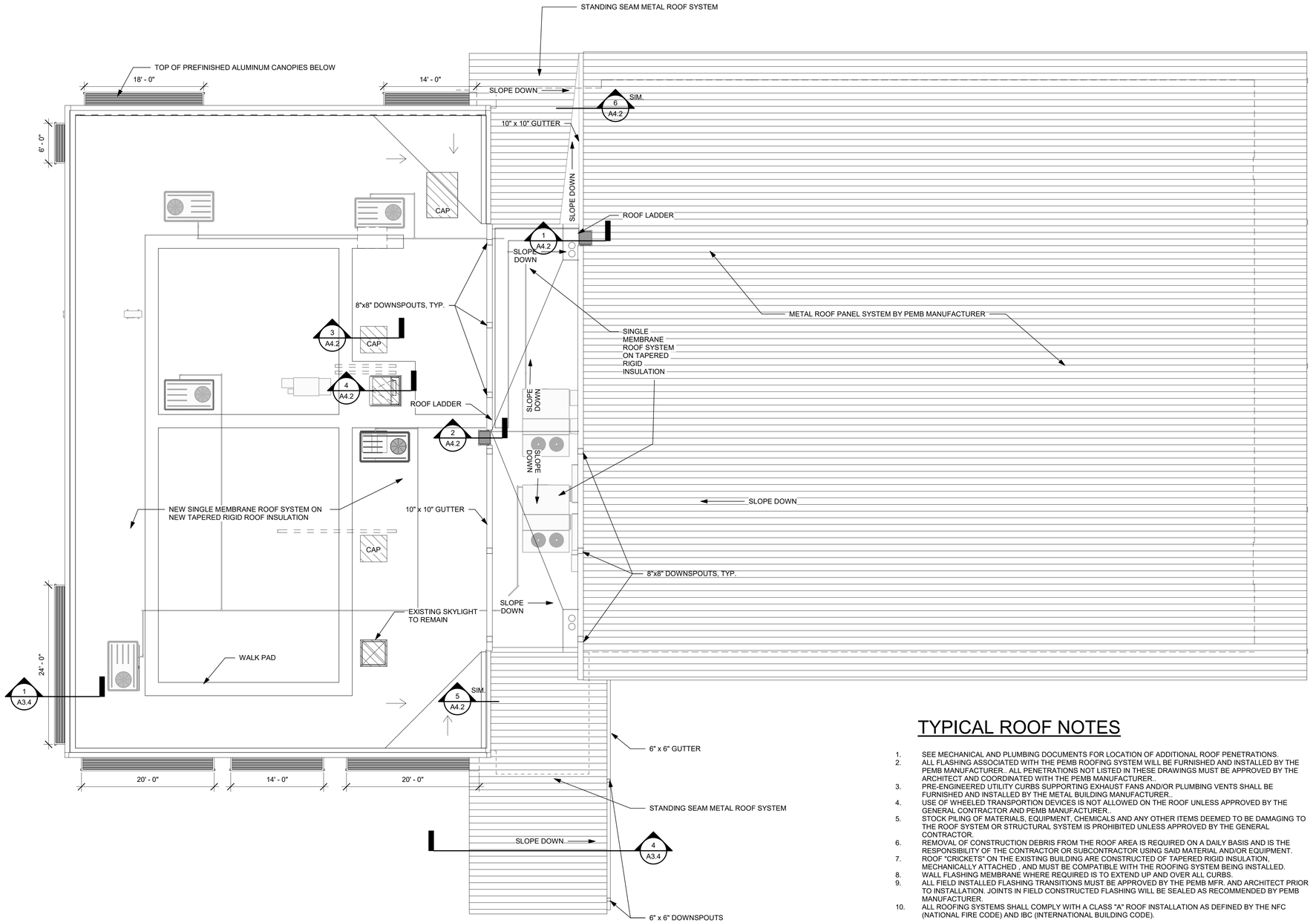
A3.4
EXTERIOR WALL SECTIONS



1 ROOF PLAN

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

0 4' 8' 16' N

TYPICAL ROOF NOTES

1. SEE MECHANICAL AND PLUMBING DOCUMENTS FOR LOCATION OF ADDITIONAL ROOF PENETRATIONS.
2. ALL FLASHING ASSOCIATED WITH THE PEMB ROOFING SYSTEM WILL BE FURNISHED AND INSTALLED BY THE PEMB MANUFACTURER.. ALL PENETRATIONS NOT LISTED IN THESE DRAWINGS MUST BE APPROVED BY THE ARCHITECT AND COORDINATED WITH THE PEMB MANUFACTURER..
3. PRE-ENGINEERED UTILITY CURBS SUPPORTING EXHAUST FANS AND/OR PLUMBING VENTS SHALL BE FURNISHED AND INSTALLED BY THE METAL BUILDING MANUFACTURER..
4. USE OF WHEELED TRANSPORTION DEVICES IS NOT ALLOWED ON THE ROOF UNLESS APPROVED BY THE GENERAL CONTRACTOR AND PEMB MANUFACTURER..
5. STOCK PILING OF MATERIALS, EQUIPMENT, CHEMICALS AND ANY OTHER ITEMS DEEMED TO BE DAMAGING TO THE ROOF SYSTEM OR STRUCTURAL SYSTEM IS PROHIBITED UNLESS APPROVED BY THE GENERAL CONTRACTOR.
6. REMOVAL OF CONSTRUCTION DEBRIS FROM THE ROOF AREA IS REQUIRED ON A DAILY BASIS AND IS THE RESPONSIBILITY OF THE CONTRACTOR OR SUBCONTRACTOR USING SAID MATERIAL AND/OR EQUIPMENT.
7. ROOF "CRICKETS" ON THE EXISTING BUILDING ARE CONSTRUCTED OF TAPERED RIGID INSULATION, MECHANICALLY ATTACHED , AND MUST BE COMPATIBLE WITH THE ROOFING SYSTEM BEING INSTALLED.
8. WALL FLASHING MEMBRANE WHERE REQUIRED IS TO EXTEND UP AND OVER ALL CURBS.
9. ALL FIELD INSTALLED FLASHING TRANSITIONS MUST BE APPROVED BY THE PEMB MFR. AND ARCHITECT PRIOR TO INSTALLATION. JOINTS IN FIELD CONSTRUCTED FLASHING WILL BE SEALED AS RECOMMENDED BY PEMB MANUFACTURER.
10. ALL ROOFING SYSTEMS SHALL COMPLY WITH A CLASS "A" ROOF INSTALLATION AS DEFINED BY THE NFC (NATIONAL FIRE CODE) AND IBC (INTERNATIONAL BUILDING CODE).

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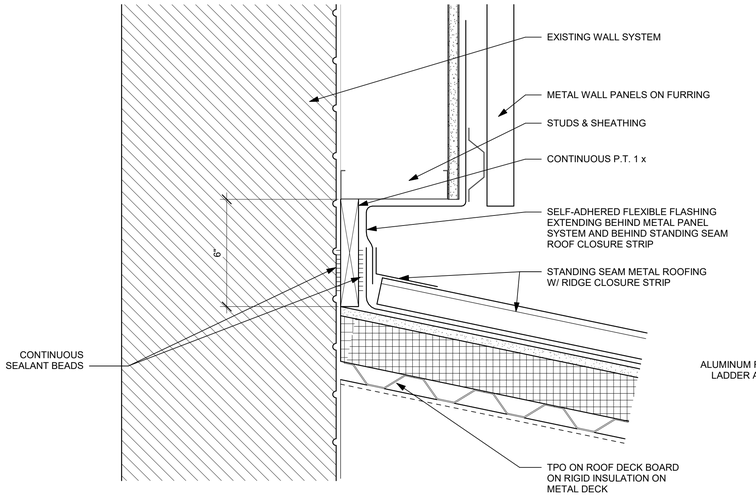
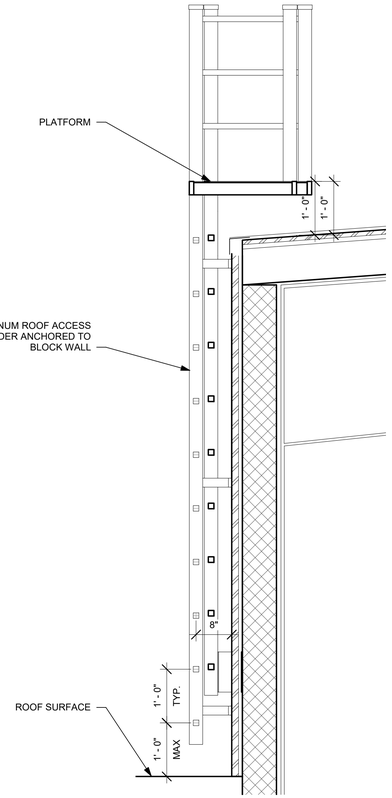
A4.1

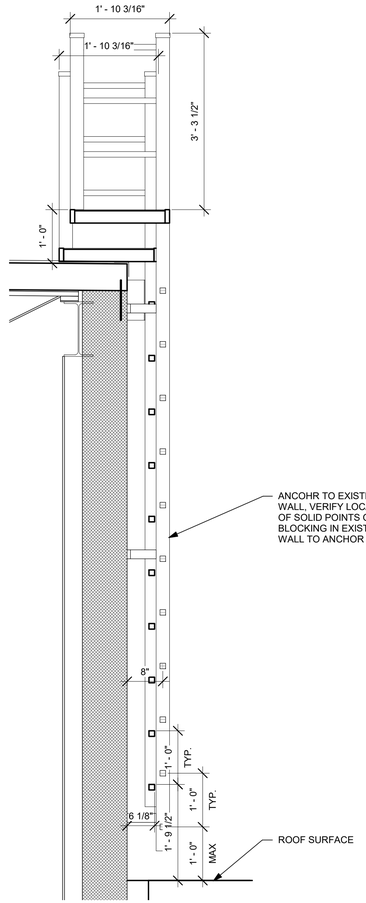
ROOF PLAN



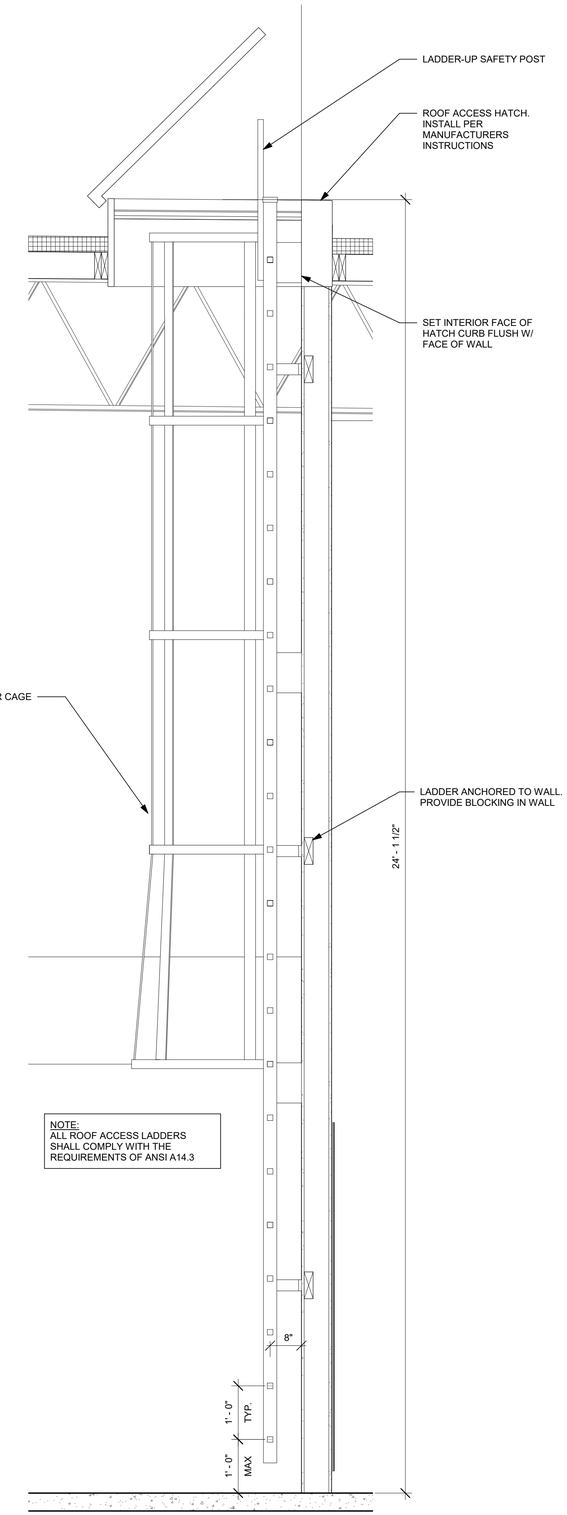
5 ROOF SECTION
SCALE: 3" = 1'-0"



1 ROOF ACCESS LADDER
SCALE: 3/4" = 1'-0"

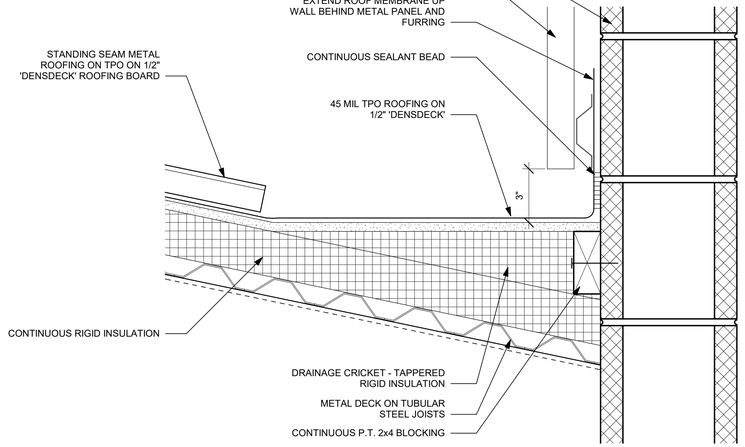


2 ROOF ACCESS LADDER
SCALE: 3/4" = 1'-0"

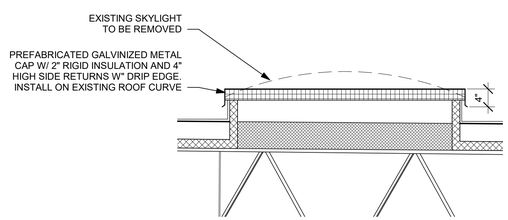


NOTE:
ALL ROOF ACCESS LADDERS SHALL COMPLY WITH THE REQUIREMENTS OF ANSI A14.3

4 ROOF HATCH LADDER SECTION
SCALE: 3/4" = 1'-0"



6 ROOF SECTION
SCALE: 3" = 1'-0"



3 CAPPED SKYLIGHT DETAIL
SCALE: 3/4" = 1'-0"

1 ENTIRE SHEET RESISSUED AS PART OF THIS ADDENDUM.

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CHATTANOOGA, TN 37408
423.265.4313
WWW.ARTECH.PRO

East Lake YFD Center Improvements

3610 Dodds Avenue, Chattanooga, TN 37402

RICHARD A. THOMPSON
REGISTERED ARCHITECT
No. 17841
STATE OF TENNESSEE

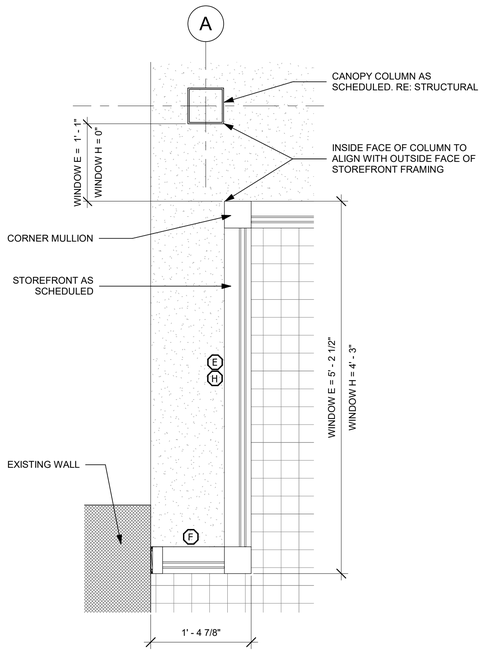
ISSUE DATES

INITIAL ISSUE		12-20-19
1	Addendum 4	01/10/2020

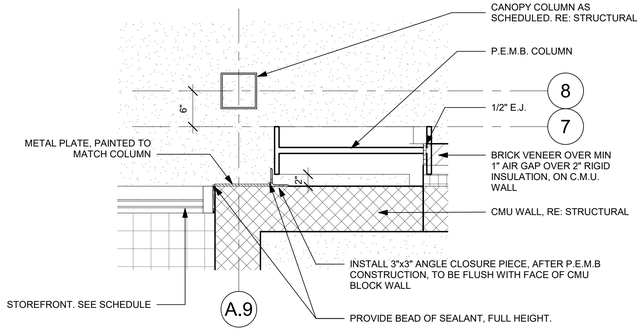
JOB NO. 18-072 | D'WN Author | CK'D Checker

A4.2

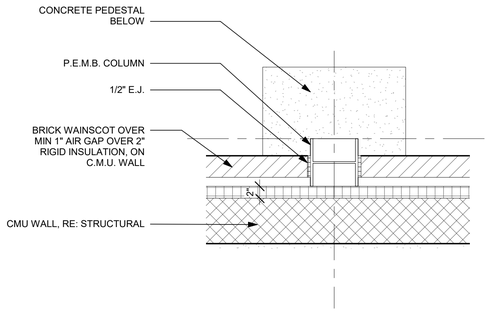
ROOF DETAILS



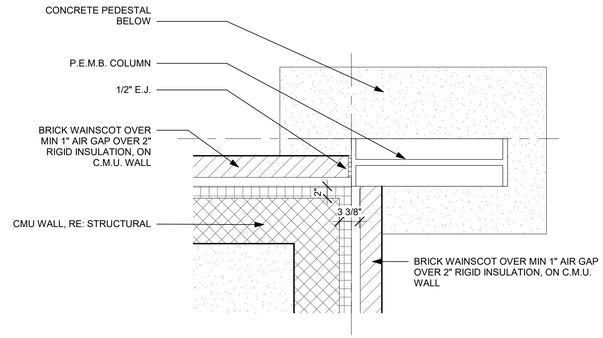
1 PLAN DETAIL
SCALE: 1" = 1'-0"



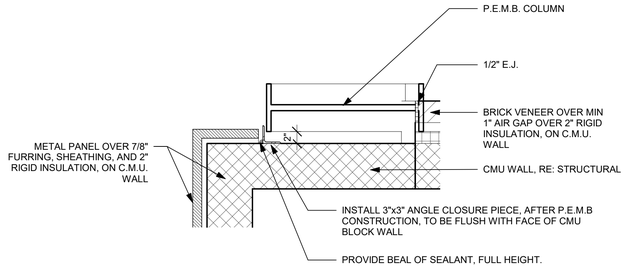
2A PLAN DETAIL - LOW
SCALE: 1" = 1'-0"



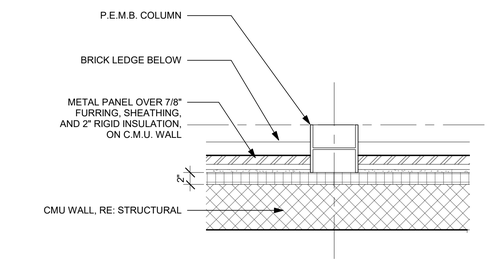
3A PLAN DETAIL - LOW
SCALE: 1" = 1'-0"



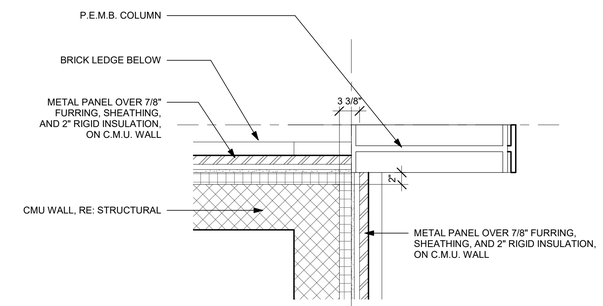
4A PLAN DETAIL- LOW
SCALE: 1" = 1'-0"



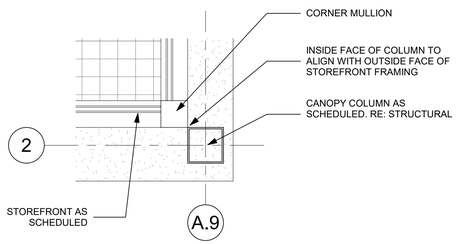
2B PLAN DETAIL - HIGH
SCALE: 1" = 1'-0"



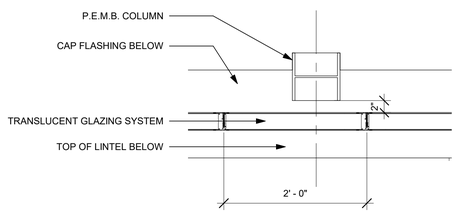
3B PLAN DETAIL - MID
SCALE: 1" = 1'-0"



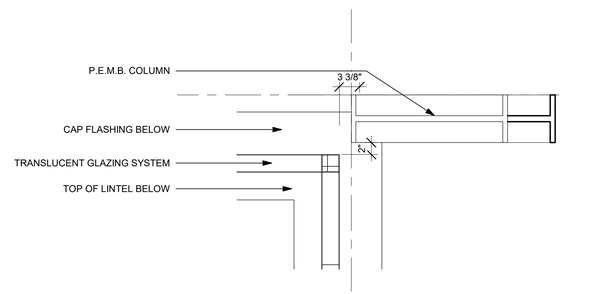
4B PLAN DETAIL- MID
SCALE: 1" = 1'-0"



5 PLAN DETAIL
SCALE: 1" = 1'-0"



3C PLAN DETAIL - HIGH
SCALE: 1" = 1'-0"



4C PLAN DETAIL- HIGH
SCALE: 1" = 1'-0"

ENTIRE SHEET RESISSUED AS PART OF THIS ADDENDUM.

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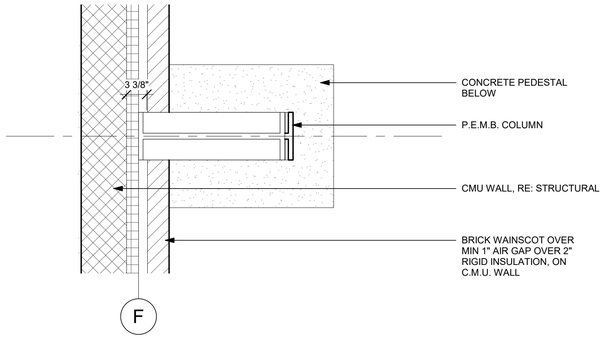
1	Addendum 4	01/10/2020

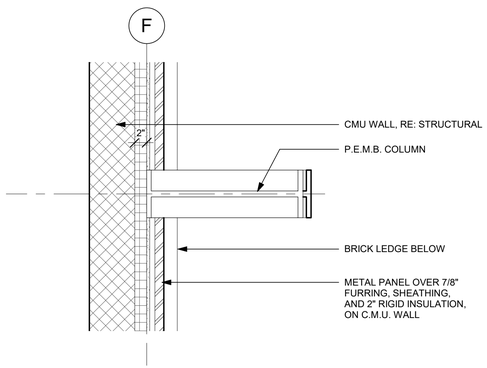
JOB NO. 18-072 | D'WN Author | CK'D Checker

A5.1

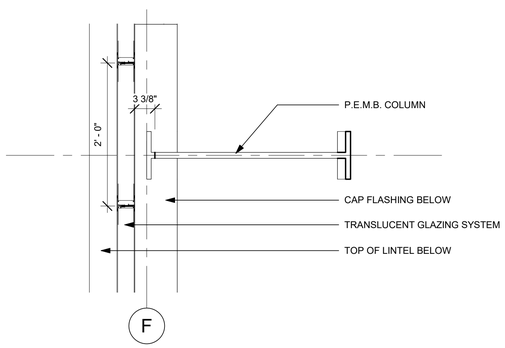
ENLARGED PLANS & DETAILS



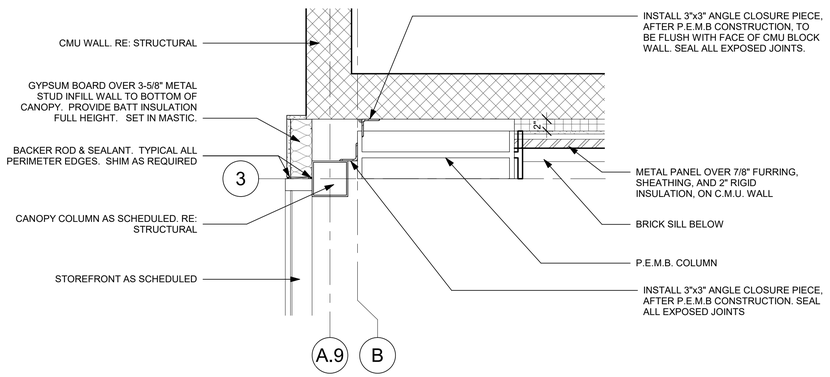
1A PLAN DETAIL -LOW
SCALE: 1" = 1'-0"



1 PLAN DETAIL MID
SCALE: 1" = 1'-0"



2 PLAN DETAIL HIGH
SCALE: 1" = 1'-0"



3 ENLARGED PLAN DETAIL
SCALE: 1" = 1'-0"

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A5.2

ENLARGED PLANS & DETAILS

1 ENTIRE SHEET RESISSUED AS PART OF THIS ADDENDUM.

SITE AMENITIES

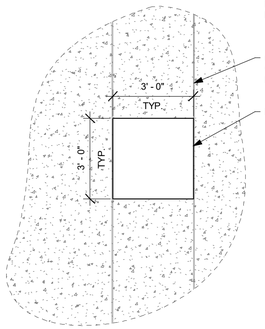
STEEL BOLLARD - SEE DETAIL

CUBE BENCH - PRECAST CONCRETE BENCHES @ VARYING HIEGHTS - BASIS OF DESIGN TF5119 WAUSAU MADE
COLOR: A20 WHITE

PRECAST CONCRETE BENCH - BASIS OF DESIGN TF5021 FROM WAUSAU MADE
COLOR: A20 WHITE

CUBE PLANTER - PRECAST CONCRETE CUBE PLANTER. BASIS OF DESIGN KORNEGAY DESIGN ASPECT SERIES SIZE: 36" x 36" HEIGHTS: 12", 21" 30"
COLOR: TBD

BIKE RACK (SPIRAL) - BASIS OF DESIGN "HELIX RACK" FROM DERO
COLOR: TBD



NOTE: COORDINATE PLACEMENT OF BENCHES AND PLANTERS WITH C1.1

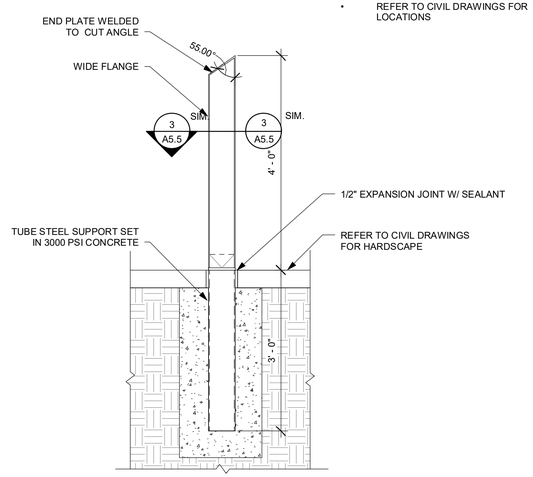
CONTROL JOINTS LINED UP WITH SIDES OF BENCHES & PLANTERS TYP.

PRECAST CONCRETE BENCH 18" TYP. HEIGHT

4 CONCRETE BENCH TYPICAL PATTERN
SCALE: 3/8" = 1'-0"

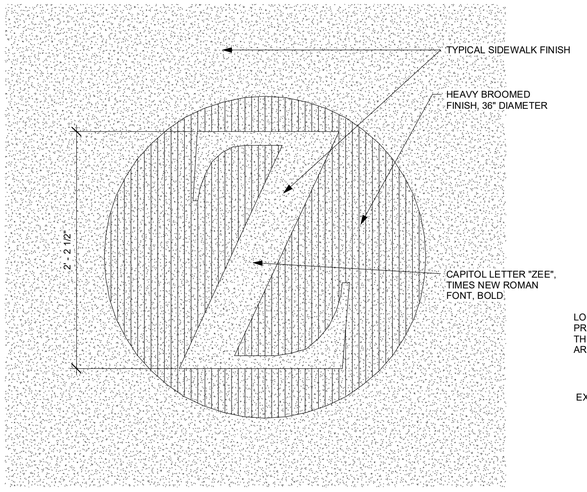
3 STEEL BOLLARD SECTION
SCALE: 1 1/2" = 1'-0"

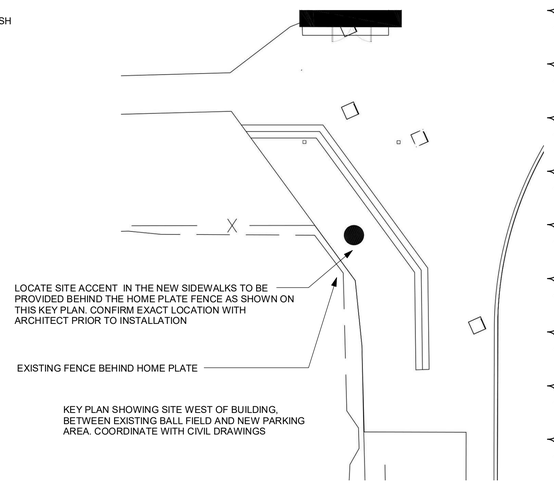
NOTE:
- ALL STEEL TO BE GALVANIZED AFTER PREFABRICATION, & PAINTED
- REFER TO CIVIL DRAWINGS FOR LOCATIONS



1 STEEL BOLLARD DETAIL
SCALE: 3/4" = 1'-0"

GUARD RAIL (DODDS & E 37TH ST) SEE DETAIL 2





LOCATE SITE ACCENT IN THE NEW SIDEWALKS TO BE PROVIDED BEHIND THE HOME PLATE FENCE AS SHOWN ON THIS KEY PLAN. CONFIRM EXACT LOCATION WITH ARCHITECT PRIOR TO INSTALLATION

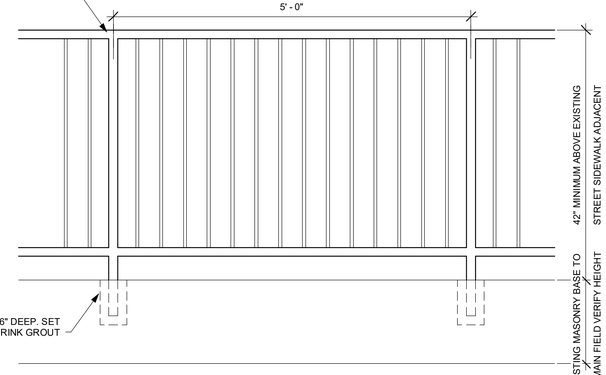
EXISTING FENCE BEHIND HOME PLATE

KEY PLAN SHOWING SITE WEST OF BUILDING, BETWEEN EXISTING BALL FIELD AND NEW PARKING AREA. COORDINATE WITH CIVIL DRAWINGS

5 SIDEWALK ACCENT GRAPHIC & KEY PLAN
SCALE: 1 1/2" = 1'-0"

PAINTED - COLOR TBD

1 1/2" SQUARE STUD TUBE W/ 1/2" SQUARE SOLID PICKETS SPACED 4" O.C.



CORE DRILL MINIMUM 6" DEEP. SET POSTS IN NON-SHRINK GROUT

2 TYPICAL GUARD DETAIL
SCALE: 1" = 1'-0"

NOTE:
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1

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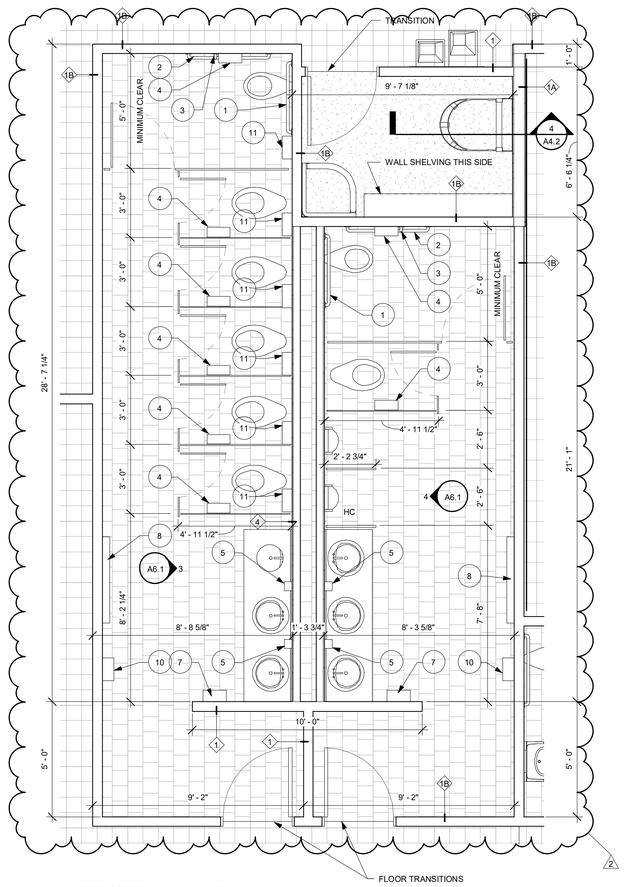
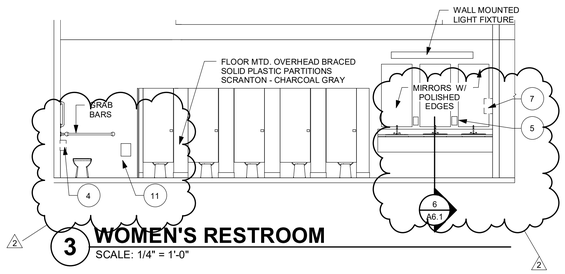
18-072	Author	Checker

A5.5

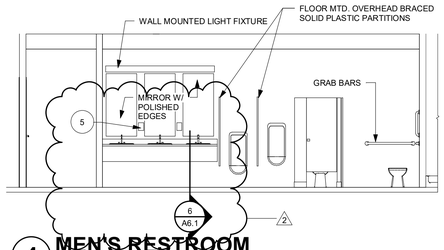
SITE AMENITIES



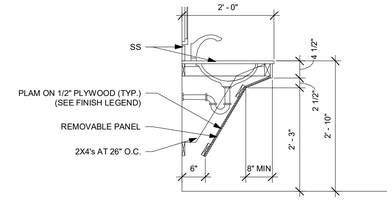
1 RESTROOMS PLAN
SCALE: 3/8" = 1'-0"



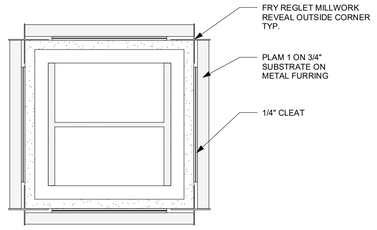
3 WOMEN'S RESTROOM
SCALE: 1/4" = 1'-0"



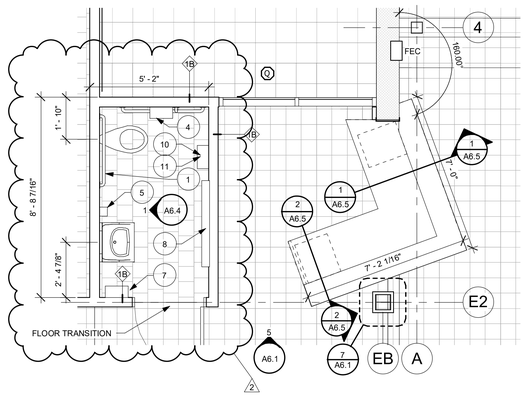
4 MEN'S RESTROOM
SCALE: 1/4" = 1'-0"



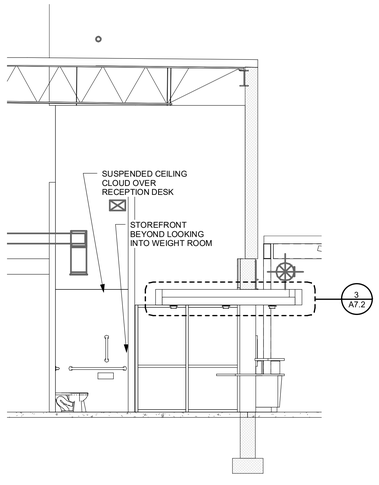
6 SECTION (ADA VANITY)
SCALE: 3/4" = 1'-0"



7 EXISTING COLUMN WRAP DETAIL
SCALE: 3" = 1'-0"



2 RECEPTION DESK PLAN
SCALE: 3/8" = 1'-0"



5 RECEPTION ELEVATION
SCALE: 1/4" = 1'-0"

TOILET ACCESSORIES

1	GRAB BAR 36"
2	GRAB BAR 42"
3	GRAB BAR 18"
4	DUAL ROLL TOILET PAPER DISPENSER
5	SOAP DISPENSER
6	MIRROR W/ POLISHED EDGES
7	ELECTRIC HAND DRYER
8	BABY CHANGING STATION
9	NOT USED
10	SANITARY NAPKIN DISPENSER
11	SANITARY NAPKIN DISPOSAL

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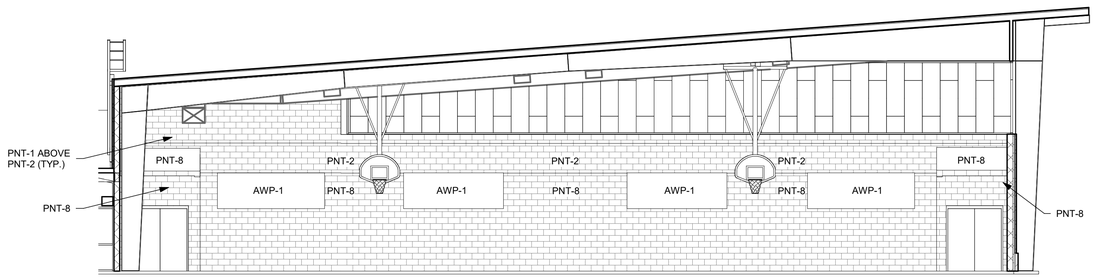
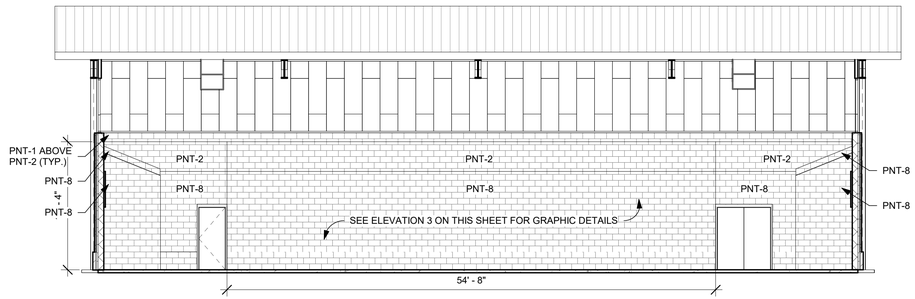
18-072	Author	Checker

A6.1

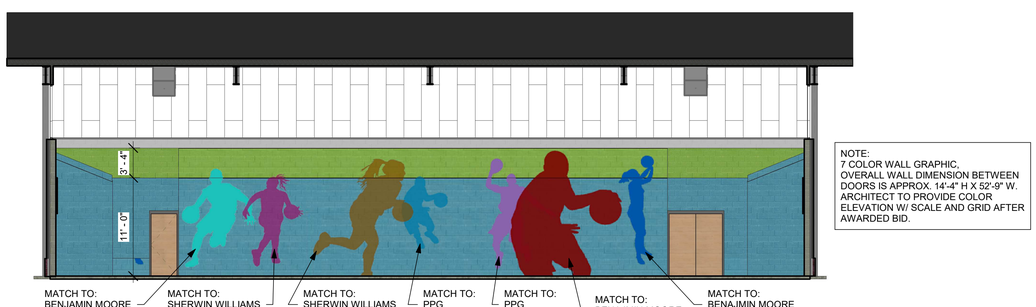
ENLARGED PLANS



1 GYM 102 LOOKING EAST (WEST SIM. OPP. HAND)
SCALE: 1/8" = 1'-0"

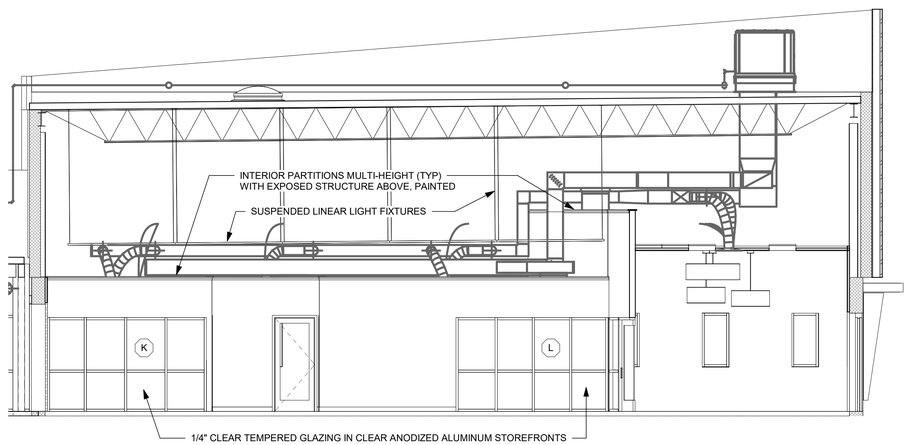


2 GYM 102 LOOKING SOUTH
SCALE: 1/8" = 1'-0"

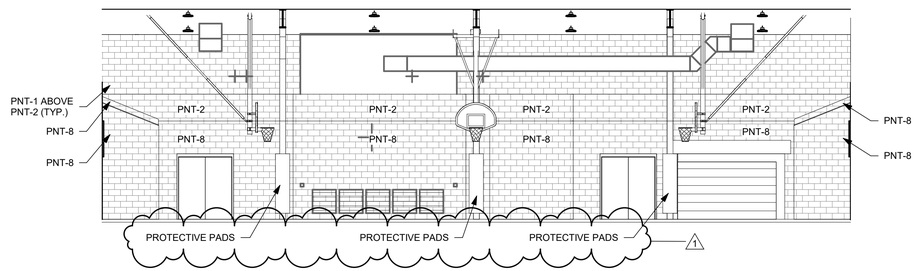


NOTE:
7 COLOR WALL GRAPHIC,
OVERALL WALL DIMENSION BETWEEN DOORS IS APPROX. 14'-4" H X 52'-9" W. ARCHITECT TO PROVIDE COLOR ELEVATION W/ SCALE AND GRID AFTER AWARDED BID.

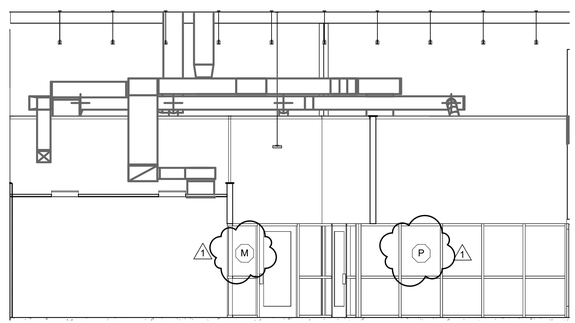
3 GYM 102 LOOKING SOUTH
SCALE: 1/8" = 1'-0"



5 CORRIDOR 118 LOOKING SOUTH
SCALE: 3/16" = 1'-0"



4 GYM 102 LOOKING NORTH
SCALE: 1/8" = 1'-0"



6 CORRIDOR 118 LOOKING WEST
SCALE: 3/16" = 1'-0"

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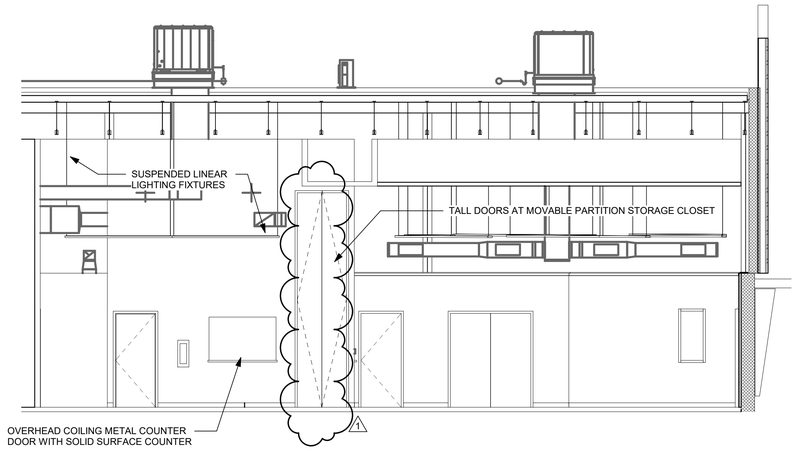
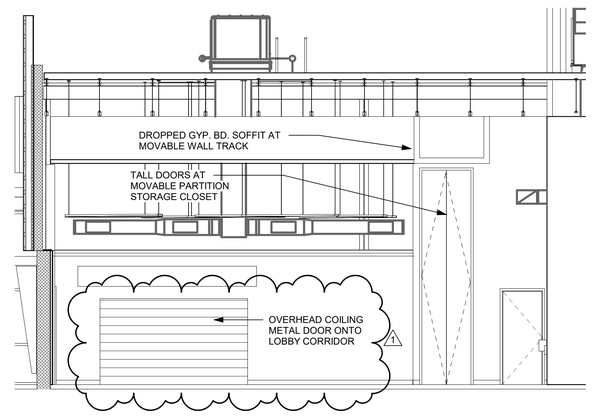
A6.2
INTERIOR ELEVATIONS



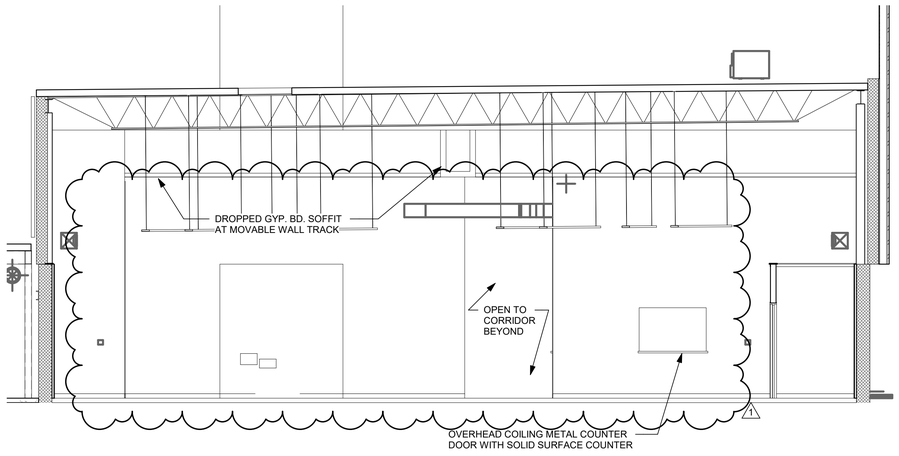
1 MULTI-PURPOSE ROOMS LOOKING NORTH

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



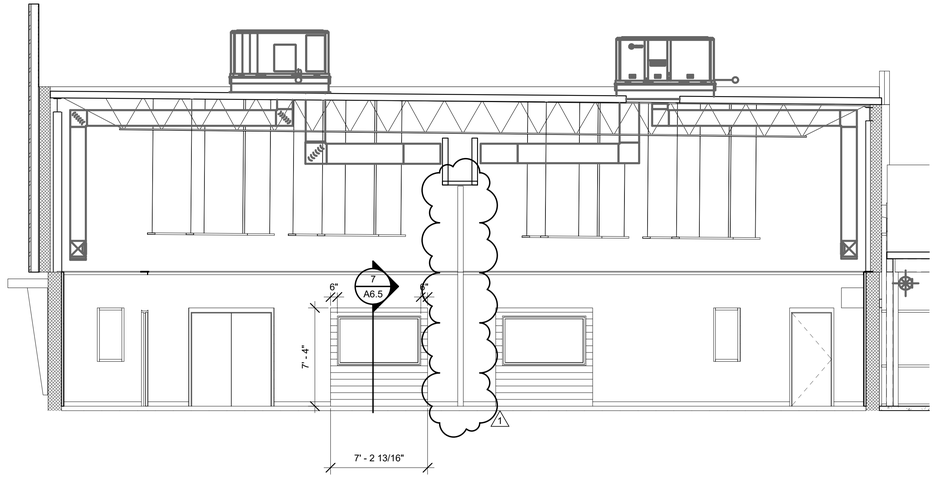
2 MULTI-PURPOSE ROOMS LOOKING SOUTH

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



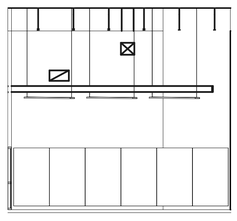
3 MULTI-PURPOSE ROOMS LOOKING WEST

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



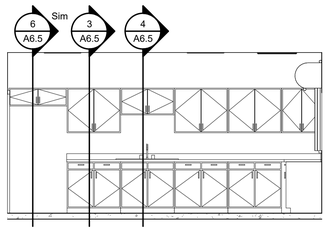
4 MULTI-PURPOSE ROOMS LOOKING EAST

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



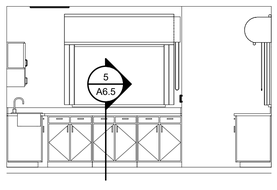
5 WEIGHTS 122

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



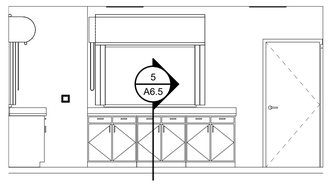
6 CATERING LOOKING NORTH

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



7 CATERING LOOKING EAST

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



8 CATERING LOOKING SOUTH

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

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East Lake YFD Center Improvements

3610 Dodds Avenue, Chattanooga, TN 37402

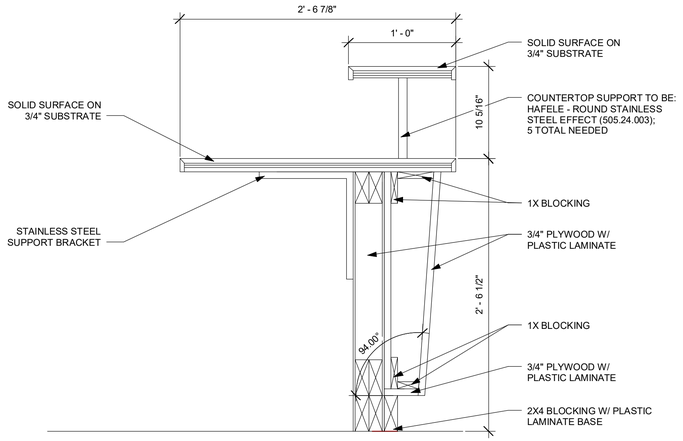
RICHARD A. THOMSON
REGISTERED ARCHITECT
No. 17640
STATE OF TENNESSEE

ISSUE DATES

	INITIAL ISSUE	12-20-19
1	Addendum 4	01/10/2020

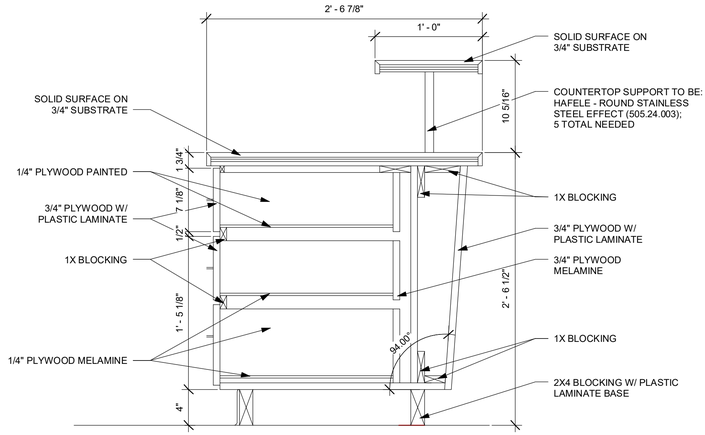
JOB NO.	D'WN	CK'D
18-072	Author	Checker

A6.3
INTERIOR ELEVATIONS



1 RECEPTION DESK W/ WORKSTATION

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



2 RECEPTION DESK W/ 3 DRW. BASE

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

MILLWORK GENERAL NOTES:

1. ALL MILLWORK CONSTRUCTION TO BE PLASTIC LAMINATE COVERED. AWI SECTION 400 CUSTOM GRADE, FLUSH OVERLAY CONSTRUCTION.

2. CONTRACTOR SHALL INSTALL ADEQUATE TREATED WOOD BLOCKING IN ALL STUD WALLS RECEIVING CASEWORK ANCHORS AND ATTACHMENTS.

3. CONTRACTOR TO PROVIDE MILLWORK SHOP DRAWINGS.

4. CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS.

5. ALL OPEN SHELVING TO COMPLY WITH awi SECTION 400B CUSTOM GRADE.

6. DOOR AND DRAWER FRONTS TO BE 3/4" SUBSTRATE WITH PLASTIC LAMINATE FINISH ON ALL EXPOSED SURFACES.

7. BODY OF DRAWERS TO BE 3/4" SUBSTRATE WITH MELAMINE FINISH ON ALL SURFACES.

8. INTERIOR SHELVES TO BE 3/4" SUBSTRATE WIHT MELAMINE FINISH ON ALL SIDES. COLOR TO MATCH THE INTERIORS OF THE CABINET IN WHICH IT OCCURS, UNLESS NOTED OTHERWISE.

9. ALL SURFACES ON THE INTERIORS OF THE CABINETS TO BE MELAMINE CLAD.

10. USE 2" GROMMETS AT COMPUTER STATIONS. FIELD INSTALL AT OWNERS DIRECTION.

11. ALL NON METAL UNDERCOUNTER SUPPORT BRACKETS TO BE PLASTIC LAMINATE CLAD.

12. ALL EXPOSED CORNERS ON WORKSURFACES TO HAVE A RADIUSED EDGE.

13. HARDWARE TO BE EQUAL TO:

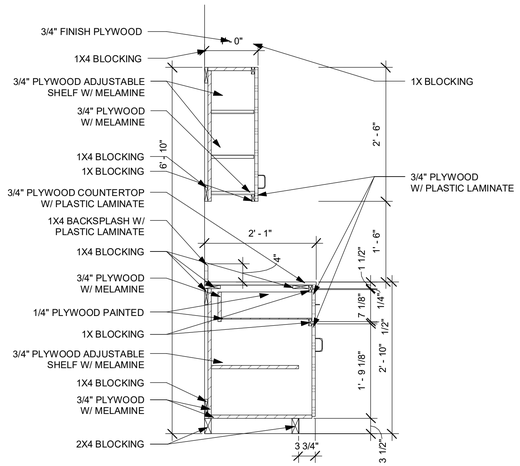
HINGES: CONCEALED, SELF CLOSSING GRASS 1003

SLIDES: BLUM 230M

BUMPERS: BLUM #TP-1950

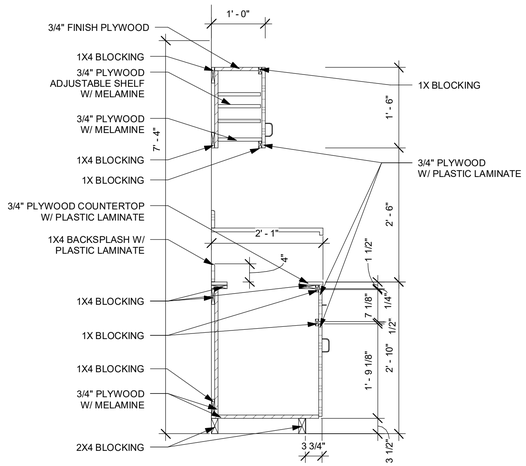
STANDARDS AND CLIPS: KV225, ZING OR HOLES BORED AT 32MM CENTERS WITH HAFELE PINS 282.04.711 NICKEL

PULLS: EQUAL TO OUTWATER PLASTICS MELROSE COLLECTION 88002 STAINLESS STEEL FINISH



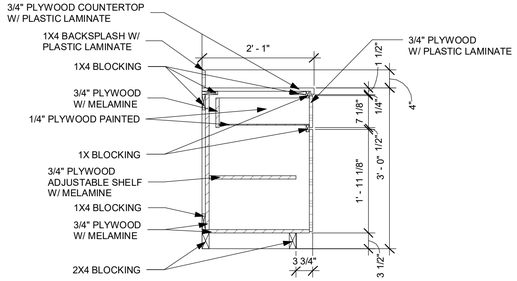
3 TYPICAL CABINETS

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



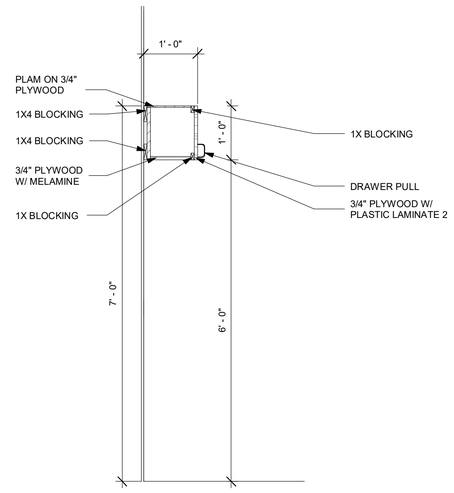
4 TYPICAL SINK CABINETS

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



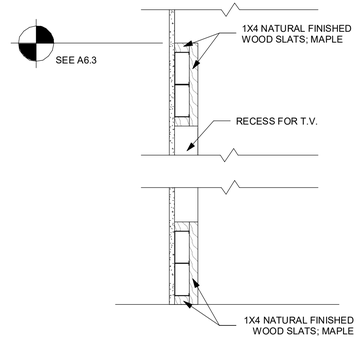
5 TYPICAL BASE CABINET

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



6 SECTION: WALL CABINETS @ REFRIGERATOR

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



7 SECTION - MULTIPURPOSE ROOM - TV WALL

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

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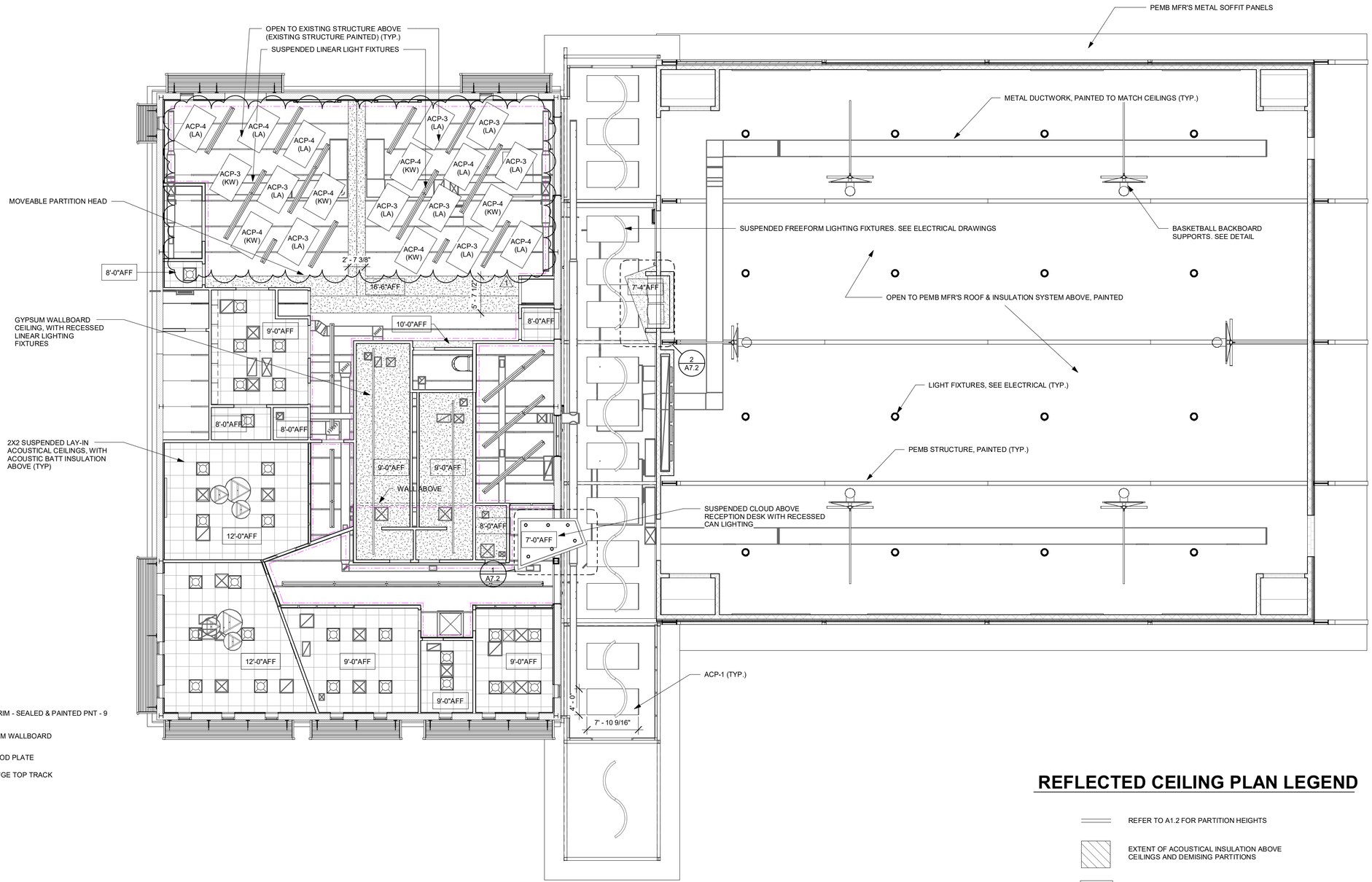
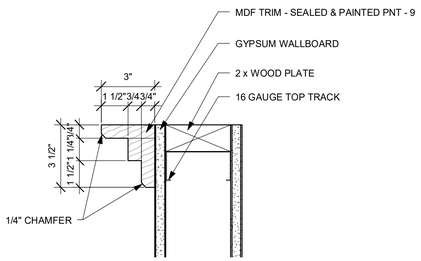
A6.4

INTERIOR MILLWORK DETAILS





3 PARTITION CAP TRIM
SCALE: 3" = 1'-0"

1 1ST FLOOR REFLECTED CEILING PLAN
SCALE: 1/8" = 1'-0"

0 4' 8' 16'

REFLECTED CEILING PLAN LEGEND

- REFER TO A1.2 FOR PARTITION HEIGHTS
- EXTENT OF ACOUSTICAL INSULATION ABOVE CEILINGS AND DEMISING PARTITIONS
- GYPSUM WALLBOARD CEILING
- 2' X 4' SUSPENDED ACOUSTICAL CEILING SYSTEM
- 2' X 2' SUSPENDED ACOUSTICAL CEILING SYSTEM
- 2' X 4' LIGHTING FIXTURE
- 1' X 4' LIGHTING FIXTURE OR PENDANT FIXTURE
- 4' STRIP LIGHT FIXTURE
- RECESSED CAN LIGHT FIXTURE
- PENDANT LIGHT FIXTURE
- SUPPLY DIFFUSER
- RETURN DIFFUSER
- SPRINKLER HEAD (CENTER WITHIN PANEL) SEE FIRE PROTECTION DRAWINGS
- WALL CAP SIDE DICTATION

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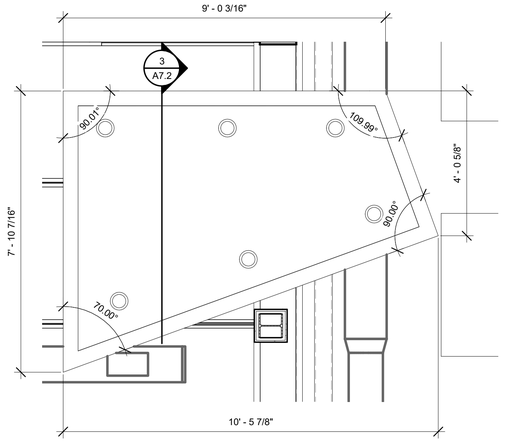
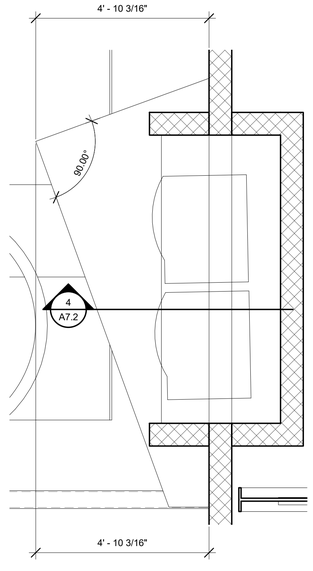
18-072	BL	MW

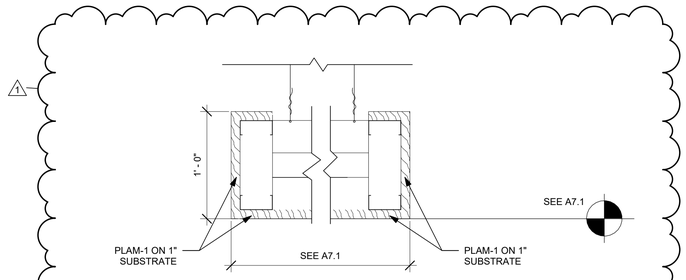
A7.1
REFLECTED CEILING PLAN



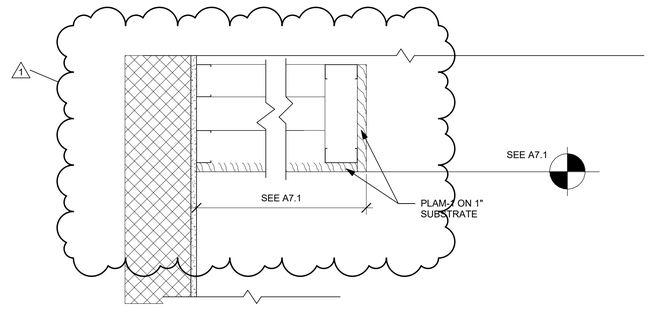
1 ENLARGED PLAN - SOFFIT @ RECEPTION DESK
SCALE: 1/2" = 1'-0"



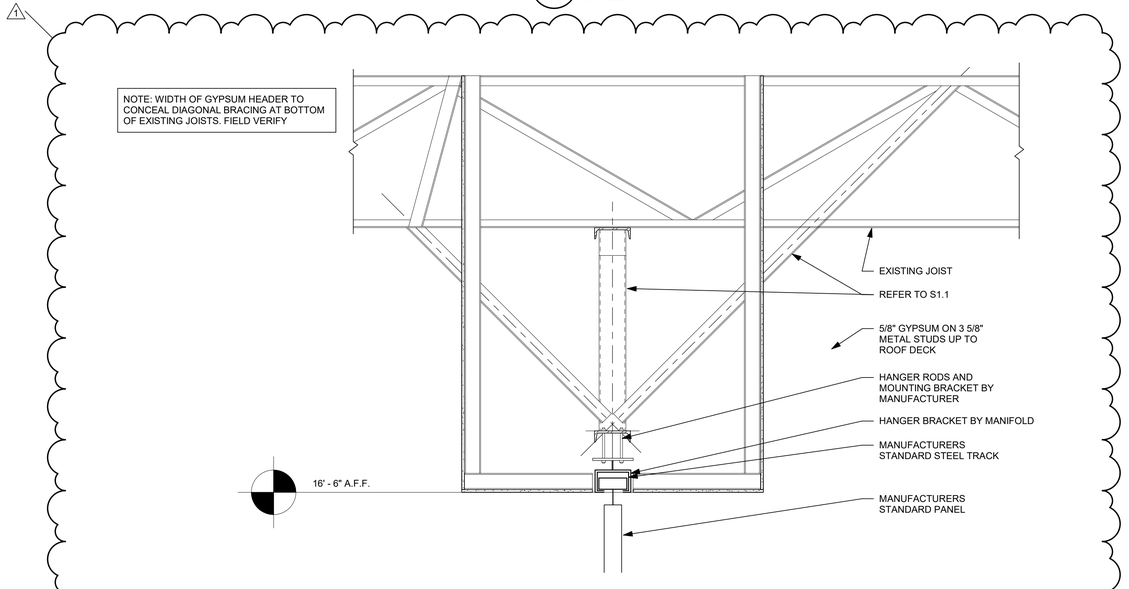
2 ENLARGED PLAN - SOFFIT @ VENDING
SCALE: 1/2" = 1'-0"



3 SECTION - SOFFIT @ RECEPTION DESK
SCALE: 1 1/2" = 1'-0"



4 SECTION - SOFFIT @ VENDING
SCALE: 1 1/2" = 1'-0"



5 PARTITION SUPPORT DETAIL
SCALE: 3/4" = 1'-0"

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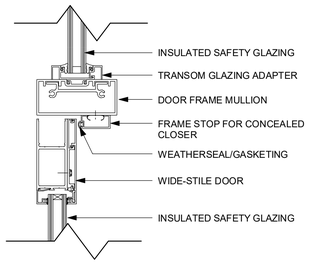
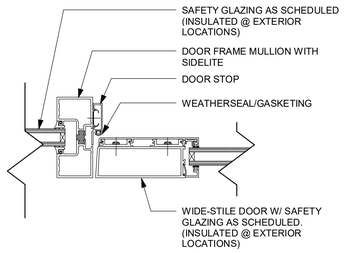
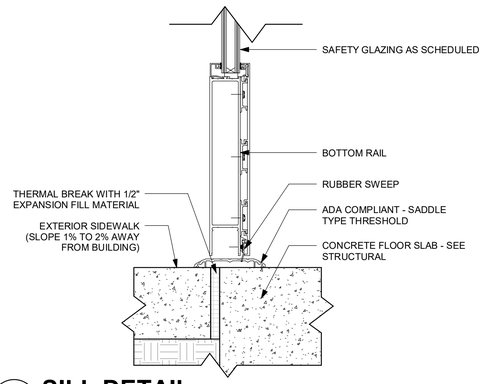
CEILING DETAILS



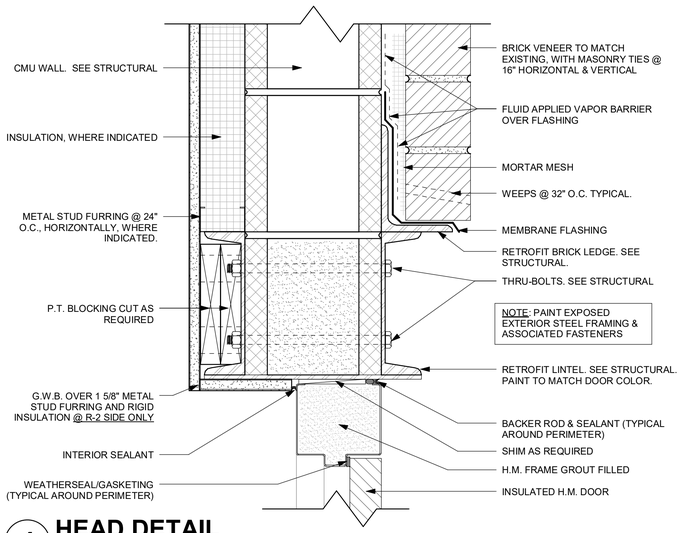
1 HEAD DETAIL
SCALE: 3" = 1'-0"



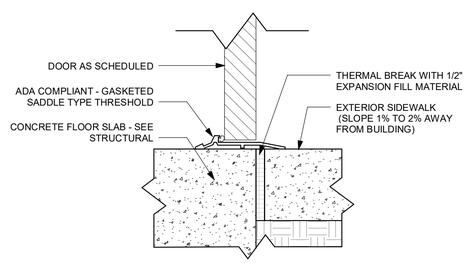
2 JAMB DETAIL
SCALE: 3" = 1'-0"



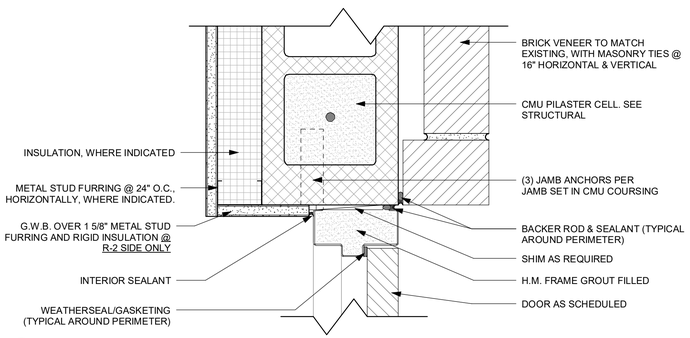
3 SILL DETAIL
SCALE: 3" = 1'-0"



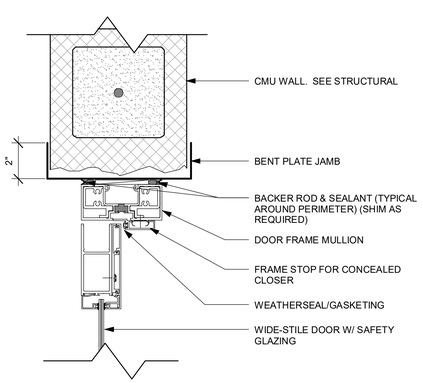
4 HEAD DETAIL
SCALE: 3" = 1'-0"



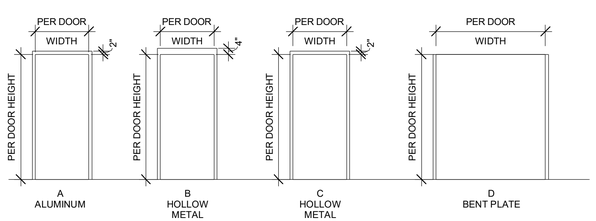
6 SILL DETAIL
SCALE: 3" = 1'-0"



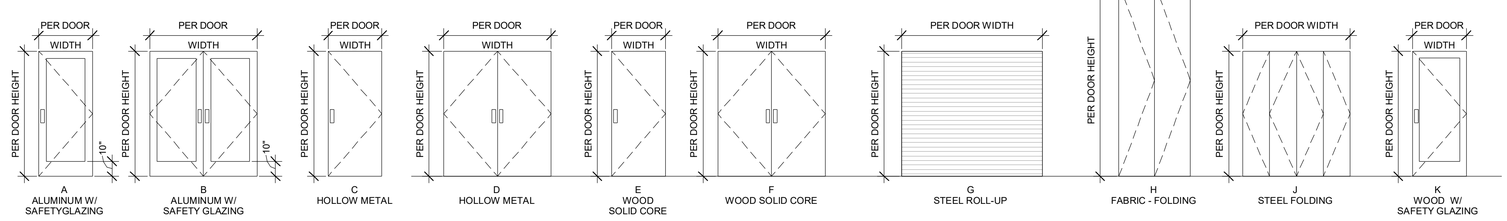
5 JAMB DETAIL
SCALE: 3" = 1'-0"



7 JAMB DETAIL
SCALE: 3" = 1'-0"



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



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

GLAZING:
IS = INSULATED SAFETY GLAZING
S = SAFETY GLAZING

DOOR SCHEDULE

MARK	DOOR				DOOR SIZE		FRAME						HARDWARE	COMMENTS
	TYPE	MATERIAL	DOOR FINISH	GLAZING	DOOR WIDTH	DOOR HEIGHT	TYPE	MATERIAL	FINISH	HEAD	JAMB	SILL		
001	B	ALUMINUM	CLEAR ANODIZED	IS	6' - 0"	7' - 0"	A	ALUMINUM	CLEAR ANODIZED	1/A8.1	2/A8.1	3/A8.1	1	
002	C	INSULATED H.M.	PAINTED	- - -	3' - 0"	7' - 0"	B	INSULATED H.M.	PAINTED	4/A8.1	5/A8.1	6/A8.1	2	
003	EX.	EXISTING	PAINTED	- - -	6' - 0"	7' - 0"	EXISTING	EXISTING	PAINTED	- - -	- - -	- - -	3	EXISTING, UPGRADE AS REQ'D
004	C	INSULATED H.M.	PAINTED	- - -	3' - 0"	7' - 0"	B	INSULATED H.M.	PAINTED	4/A8.1	5/A8.1	6/A8.1	4	
005	C	INSULATED H.M.	PAINTED	- - -	3' - 0"	7' - 0"	B	INSULATED H.M.	PAINTED	4/A8.1	5/A8.1	6/A8.1	4	
006	B	ALUMINUM	CLEAR ANODIZED	IS	6' - 0"	7' - 0"	A	ALUMINUM	CLEAR ANODIZED	1/A8.1	2/A8.1	3/A8.1	1	
007	D	INSULATED H.M.	PAINTED	- - -	6' - 0"	7' - 0"	B	INSULATED H.M.	PAINTED	1/A8.3	2/A8.3	6/A8.1	3	
008	C	INSULATED H.M.	PAINTED	- - -	3' - 0"	7' - 0"	B	INSULATED H.M.	PAINTED	1/A8.3	2/A8.3	6/A8.1	2	
009	F	WOOD	STAINED	- - -	6' - 0"	7' - 0"	B	HOLLOW METAL	PAINTED	3/A8.3	4/A8.3	- - -	5	
010	F	WOOD	STAINED	- - -	6' - 0"	7' - 0"	B	HOLLOW METAL	PAINTED	3/A8.3	4/A8.3	- - -	5	
011	F	WOOD	STAINED	- - -	6' - 0"	7' - 0"	B	HOLLOW METAL	PAINTED	3/A8.3	4/A8.3	- - -	5	
012	F	WOOD	STAINED	- - -	6' - 0"	7' - 0"	B	HOLLOW METAL	PAINTED	3/A8.3	4/A8.3	- - -	5	
013	D	HOLLOW METAL	PAINTED	- - -	6' - 0"	7' - 0"	B	HOLLOW METAL	PAINTED	3/A8.3	4/A8.3	- - -	6	
014	D	HOLLOW METAL	PAINTED	- - -	6' - 0"	7' - 0"	B	HOLLOW METAL	PAINTED	3/A8.3	4/A8.3	- - -	6	
015	G	STEEL SLAT	PAINTED	- - -	12' - 0"	7' - 4"	D	STEEL	PAINTED	5/A8.3	6/A8.3	- - -	7	
016	G	STEEL SLAT	PAINTED	- - -	12' - 0"	7' - 4"	D	STEEL	PAINTED	5/A8.3	6/A8.3	- - -	7	
017	F	WOOD	STAINED	- - -	6' - 0"	7' - 0"	C	HOLLOW METAL	PAINTED	7/A8.3	8/A8.3	- - -	5	
018	E	WOOD	STAINED	- - -	3' - 0"	7' - 0"	C	HOLLOW METAL	PAINTED	7/A8.3	8/A8.3	- - -	8	
019	H	BY MANUFACTURER	MATCH PANELS	- - -	3' - 8"	16' - 0"	- - -	- - -	- - -	- - -	- - -	- - -	(none)	POCKET DOOR BY MANUFACTURER
020	E	WOOD	STAINED	- - -	3' - 0"	7' - 0"	C	HOLLOW METAL	PAINTED	7/A8.3	8/A8.3	- - -	9	
021	E	WOOD	STAINED	- - -	3' - 0"	7' - 0"	C	HOLLOW METAL	PAINTED	7/A8.3	8/A8.3	- - -	9	
022	H	BY MANUFACTURER	MATCH PANELS	- - -	3' - 8"	16' - 0"	- - -	- - -	- - -	- - -	- - -	- - -	(none)	POCKET DOOR BY MANUFACTURER
023	G	STEEL SLAT	PREFINISHED	- - -	6' - 1 1/2"	4' - 11 3/8"	- - -	HOLLOW METAL	PAINTED	9/A8.3	10/A8.3	11/A8.3	7	
024	G	STEEL SLAT	PREFINISHED	- - -	6' - 1 1/2"	4' - 11 3/8"	- - -	HOLLOW METAL	PAINTED	9/A8.3	10/A8.3	11/A8.3	7	
025	E	WOOD	STAINED	- - -	3' - 0"	7' - 0"	C	HOLLOW METAL	PAINTED	7/A8.3	8/A8.3	- - -	10	
026	J	WOOD	STAINED	- - -	5' - 0"	6' - 8"	C	HOLLOW METAL	PAINTED	15/A8.3	8/A8.3	- - -	(none)	VERIFY TRACK AND HINGES ARE INCLUDED
027	C	HOLLOW METAL	PAINTED	- - -	3' - 0"	7' - 0"	C	HOLLOW METAL	PAINTED	7/A8.3	8/A8.3	- - -	8	
028	E	WOOD	STAINED	- - -	3' - 0"	7' - 0"	C	HOLLOW METAL	PAINTED	7/A8.3	8/A8.3	- - -	11	
029	K	WOOD	STAINED	S	3' - 0"	7' - 0"	C	ALUMINUM	CLEAR ANODIZED	14/A8.3	14/A8.3	- - -	12	
030	A	ALUMINUM	CLEAR ANODIZED	S	3' - 0"	6' - 10"	A	ALUMINUM	CLEAR ANODIZED	14/A8.3	2/A8.1	- - -	12	
031	A	ALUMINUM	CLEAR ANODIZED	S	3' - 0"	6' - 10"	A	ALUMINUM	CLEAR ANODIZED	14/A8.3	2/A8.1	- - -	12	
032	K	WOOD	STAINED	S	3' - 0"	7' - 0"	C	ALUMINUM	CLEAR ANODIZED	14/A8.3	14/A8.3	- - -	13	
033	K	WOOD	STAINED	S	3' - 0"	7' - 0"	C	ALUMINUM	CLEAR ANODIZED	14/A8.3	14/A8.3	- - -	12	
034	K	WOOD	STAINED	S	3' - 0"	7' - 0"	C	ALUMINUM	CLEAR ANODIZED	14/A8.3	14/A8.3	- - -	13	
035	E	WOOD	STAINED	- - -	3' - 0"	7' - 0"	C	HOLLOW METAL	PAINTED	7/A8.3	8/A8.3	- - -	12	
036	E	WOOD	STAINED	- - -	3' - 0"	7' - 0"	C	HOLLOW METAL	PAINTED	7/A8.3	8/A8.3	- - -	12	
037	E	WOOD	STAINED	- - -	3' - 0"	7' - 0"	C	HOLLOW METAL	PAINTED	7/A8.3	8/A8.3	- - -	11	
038	A	ALUMINUM	CLEAR ANODIZED	S	3' - 0"	7' - 0"	A	ALUMINUM	CLEAR ANODIZED	13/A8.3	7/A8.1	- - -	13	

DOOR HARDWARE SCHEDULE

SET #	HARDWARE TYPE	HINGES	LOCKSET	PANIC HARDWARE	PUSH/PULL PLATE	FLUSH BOLTS	CLOSER	HOLD OPEN DEVICE	WEATHER STRIPPING	THRESHOLD	KICK PLATE	SWEEP
1	STOREFRONT	BY MFR	ELECTRONIC	CROSSBAR	BY MFR	CONCEALED / PANIC	CONCEALED	- - -	GASKET-TYPE	ADA, GASKETED	- - -	RUBBER
2	EXTERIOR - SINGLE	1-1/2 PAIR BB	CYLINDER	DELAYED, PUSHBAR	- - -	- - -	SURFACE	- - -	GASKET-TYPE	ADA, GASKETED	- - -	RUBBER
3	EXTERIOR - DOUBLE	3 PAIR BB	CYLINDER	DELAYED, PUSHBAR	- - -	CONCEALED / PANIC	- - -	- --	GASKET-TYPE	ADA, GASKETED	- - -	RUBBER
4	EXTERIOR - KEY CARD SECURE	1-1/2 PAIR BB	ELECTRONIC	- - -	- - -	- - -	SURFACE	CLOSER	GASKET-TYPE	ADA, GASKETED	- - -	- - -
5	STORAGE - DOUBLE	3 PAIR	CYLINDER	- - -	- - -	TOP & BOTTOM INACTIVE LEAF	- - -	KICK-DOWN	- - -	- - -	10"x34"	- - -
6	INTERIOR - DOUBLE	3 PAIR-180°	CLASSROOM	CROSS BAR	PULL TRIM - LEVER TYPE	CONCEALED / PANIC	SURFACE-180°	CLOSER	- - -	- - -	10"x34"	- - -
7	ROLL-UP	- - -	CYLINDER	- - -	- - -	- - -	- - -	INTEGRATED	- - -	- - -	- - -	- - -
8	KEY CARD SECURE	1-1/2 PAIR	ELECTRONIC	- - -	- - -	CONCEALED / PANIC	- - -	KICK-DOWN	SILENCERS	- - -	- - -	- - -
9	STORAGE - SINGLE	1-1/2 PAIR	STOREROOM	- - -	- - -	- - -	SURFACE	CLOSER	SILENCERS	- - -	10"x34"	- - -
10	BASIC SECURED	1-1/2 PAIR	CLASSROOM	- - -	- - -	- - -	SURFACE	KICK-DOWN	SILENCERS	- - -	10"x34"	- - -
11	RESTROOM	1-1/2 PAIR	PRIVACY	- - -	- - -	- - -	DOOR MOUNT	CLOSER	SILENCERS	- - -	- - -	- - -
12	PASSAGE	1-1/2 PAIR	PASSAGE	- - -	PUSH / PULL	- - -	CONCEALED	CLOSER	SILENCERS	- - -	- - -	- - -
13	OFFICE	1-1/2 PAIR	OFFICE	- - -	- - -	- - -	SURFACE	CLOSER	SILENCERS	- - -	- - -	- - -

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No. 17845
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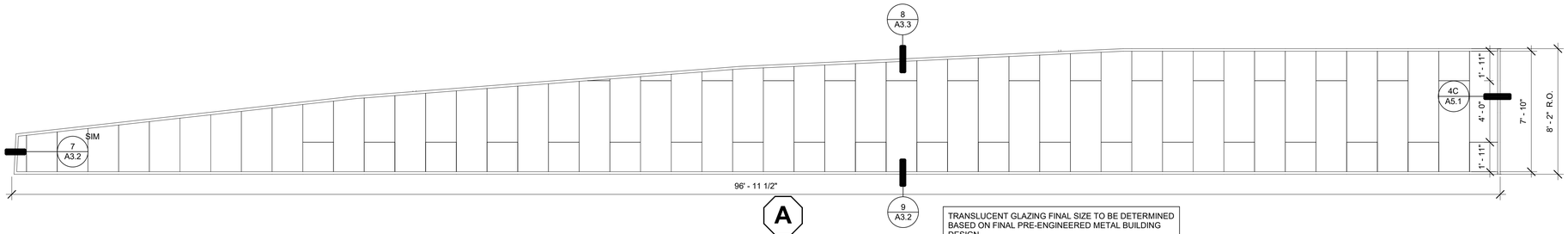
ISSUE DATES
INITIAL ISSUE 12-20-19

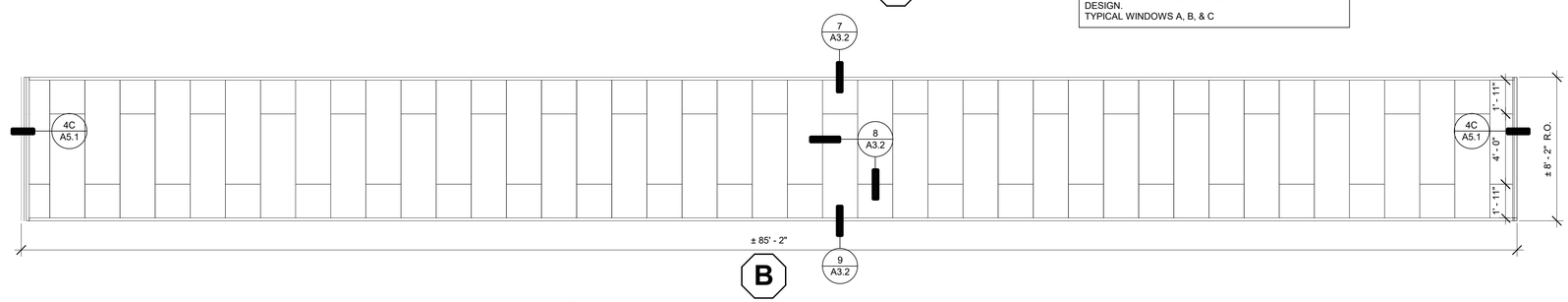
JOB NO. 18-072 | D'WN JG | CK'D Checker

A8.1
DOOR SCHEDULE & DETAILS



A

TRANSLUCENT GLAZING FINAL SIZE TO BE DETERMINED BASED ON FINAL PRE-ENGINEERED METAL BUILDING DESIGN.
TYPICAL WINDOWS A, B, & C



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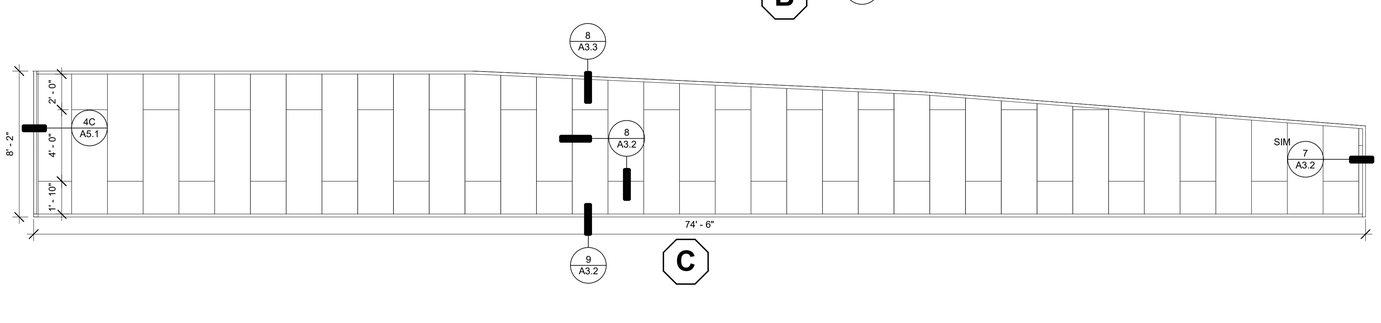

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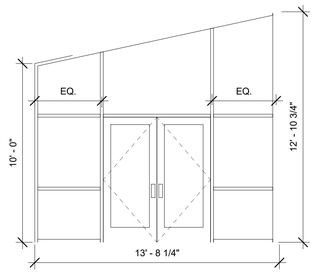

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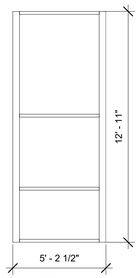

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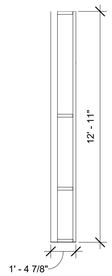

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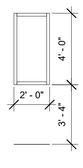

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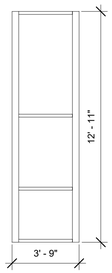

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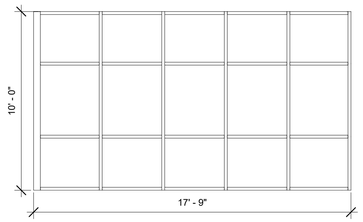

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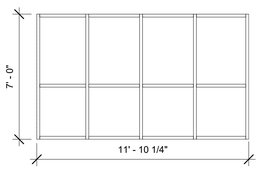

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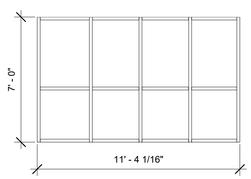

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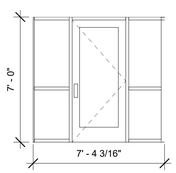

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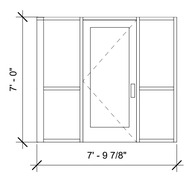

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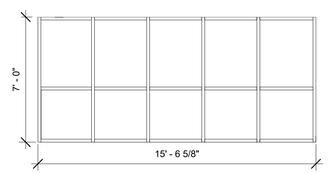

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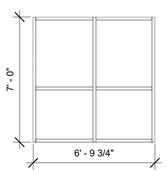

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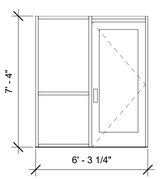

R

GLAZING SCHEDULE: (WINDOWS D - R)
INTERIOR: 1/4" CLEAR SAFETY GLAZING
EXTERIOR: 1" CLEAR INSULATED SAFETY GLAZING

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No. 17840
STATE OF TENNESSEE

ISSUE DATES

	INITIAL ISSUE	12-20-19
1	Addendum 4	01/10/2020

JOB NO.	D'WN	CK'D
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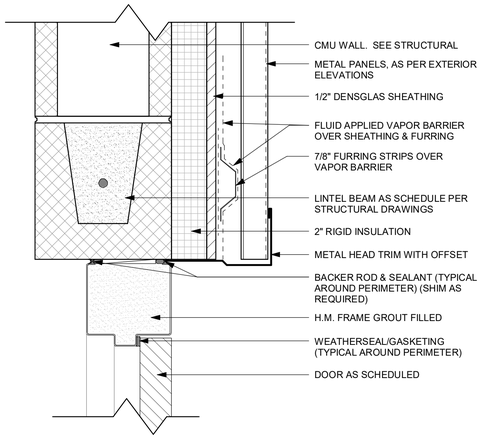
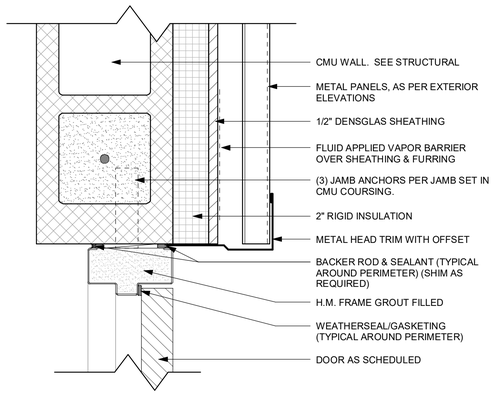
1 ENTIRE SHEET RESISSUED AS PART OF THIS ADDENDUM.

A8.2

WINDOW SCHEDULE



1 HEAD DETAIL
SCALE: 3" = 1'-0"



2 JAMB DETAIL
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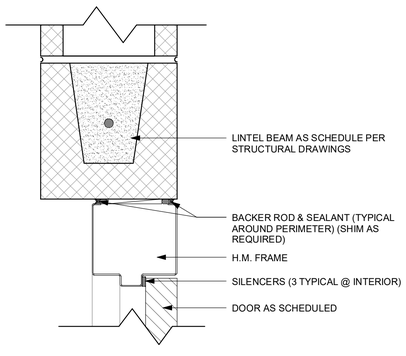
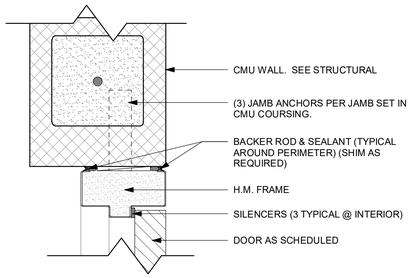
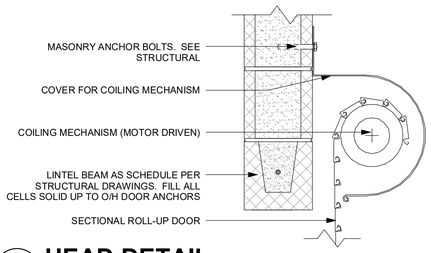


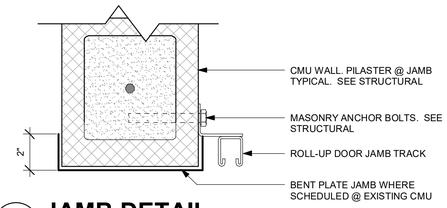
3 HEAD DETAIL
SCALE: 3" = 1'-0"



4 JAMB DETAIL
SCALE: 3" = 1'-0"



5 HEAD DETAIL
SCALE: 1 1/2" = 1'-0"



6 JAMB DETAIL
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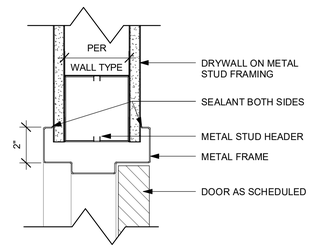
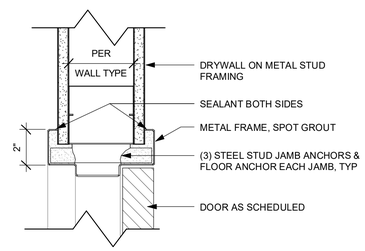


7 HEAD DETAIL
SCALE: 3" = 1'-0"



8 JAMB DETAIL
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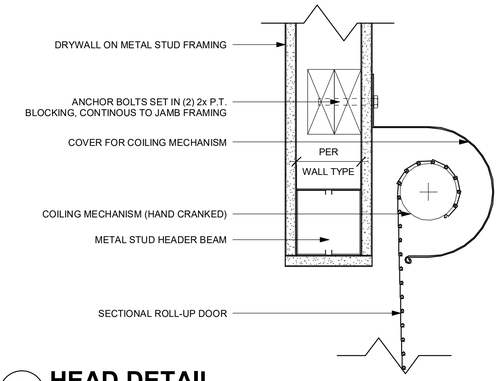
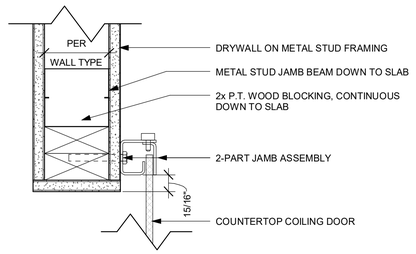


9 HEAD DETAIL
SCALE: 3" = 1'-0"



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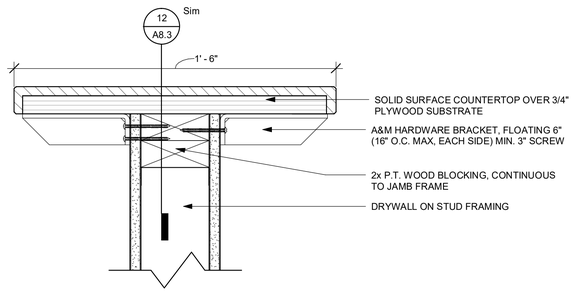
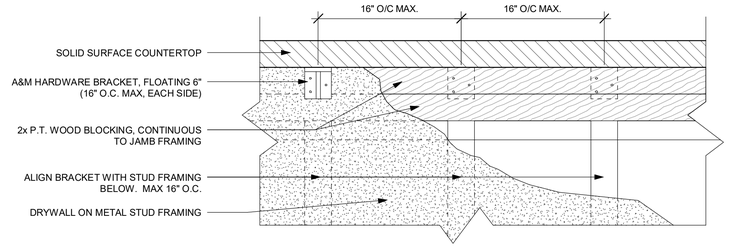
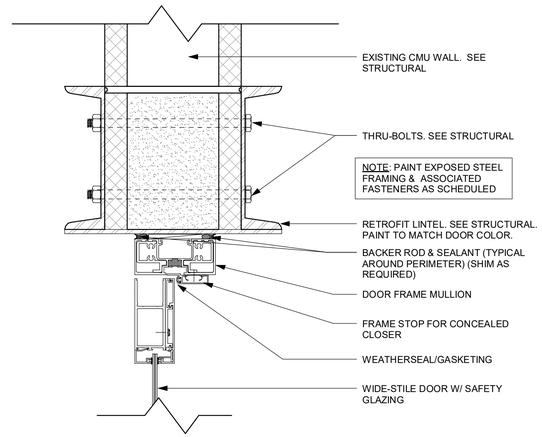


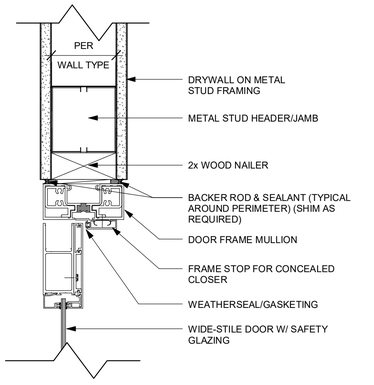
11 SILL DETAIL
SCALE: 3" = 1'-0"



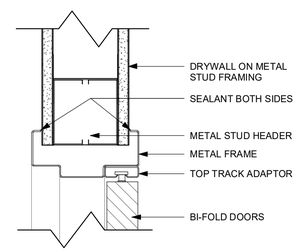
12 SILL REVEAL ELEVATION
SCALE: 3" = 1'-0"



13 HEAD DETAIL
SCALE: 3" = 1'-0"



14 HEAD/SILL DETAIL
SCALE: 3" = 1'-0"



15 HEAD DETAIL
SCALE: 3" = 1'-0"

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A8.3
DOOR & WINDOW DETAILS

DESIGN CRITERIA:

1. DESIGN CODE AND STANDARD:

   2012 INTERNATIONAL BUILDING CODE
   ASCE 7-10: MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES

2. COLLATERAL LOAD:

   ROOF: (ROOFING, CEILING, LIGHTS, MEP, ETC.) ——— 15 PSF

3. LIVE LOAD:

   ROOF: ROOF LIVE LOAD ——— 20 PSF (REDUCIBLE)

4. RISK CATEGORY ——— III

5. SNOW LOAD:

   GROUND SNOW LOAD, Pg ——— 10 PSF
   IMPORTANCE FACTOR, I ——— 1.0
   EXPOSURE FACTOR, Ce ——— 1.0
   THERMAL FACTOR, Ct ——— 1.10
   FLAT-ROOF SNOW LOAD, Pf ——— 11 PSF

   SNOW DRIFTS IN ACCORDANCE WITH CHAPTER 7 OF ASCE 7

6A. WIND LOAD: CORRIDOR BUILDING

   BASIC WIND SPEED (3-SECOND GUST) ——— 120 MPH
   EXPOSURE CATEGORY ——— C
   INTERNAL PRESSURE COEFFICIENT, GCpi ——— +/- 0.55
   ENCLOSURE CLASSIFICATION ——— PARTIALLY ENCLOSED

   COMPONENT AND CLADDING WIND PRESSURES:

   WIDTH OF PRESSURE COEFFICIENT ZONE (a) ——— 3 FT

ROOF AREA	SURFACE PRESSURES (PSF)		
	10 SF	50 SF	≥100 SF
NEGATIVE ZONE 1	-44	-41	-40
NEGATIVE ZONE 2	-51	-44	-42
NEGATIVE ZONE 3	-80	-66	-60
POSITIVE ALL ZONES	+24	+22	+21
OVERHANG ZONE 2	-64	-64	-64
OVERHANG ZONE 3	-98	-79	-71

WALL AREA	SURFACE PRESSURES (PSF)		
	10 SF	100 SF	≥500 SF
NEGATIVE ZONE 4	-40	-36	-33
NEGATIVE ZONE 5	-46	-38	-33
POSITIVE ZONE 4 & 5	+37	+33	+31

6B. WIND LOAD: PRE-ENGINEERED METAL BUILDING AND EXISTING BUILDING

   BASIC WIND SPEED (3-SECOND GUST) ——— 120 MPH
   EXPOSURE CATEGORY ——— C
   INTERNAL PRESSURE COEFFICIENT, GCpi ——— +/- 0.18
   ENCLOSURE CLASSIFICATION ——— ENCLOSED

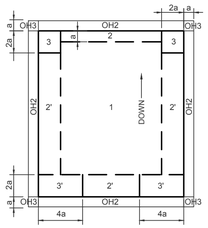
   COMPONENT AND CLADDING WIND PRESSURES:

   WIDTH OF PRESSURE COEFFICIENT ZONE (a) ——— 6.6 FT

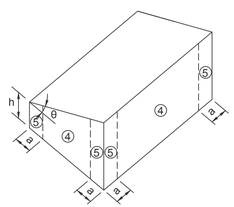
ROOF AREA	SURFACE PRESSURES (PSF)		
	10 SF	50 SF	≥100 SF
POSITIVE ALL ZONES	+13	+11	+10
NEGATIVE ZONE 1	-32	-32	-32
NEGATIVE ZONE 2	-36	-35	-29
NEGATIVE ZONE 3	-48	-38	-34
NEGATIVE ZONE 2'	-44	-42	-41
NEGATIVE ZONE 3'	-70	-51	-44
OVERHANG ZONE 2	-46	-36	-32
OVERHANG ZONE 3	-72	-39	-25

WALL AREA	SURFACE PRESSURES (PSF)		
	10 SF	100 SF	≥500 SF
NEGATIVE ZONE 4	-32	-27	-24
NEGATIVE ZONE 5	-39	-30	-24
POSITIVE ZONE 4 & 5	+29	+25	+22

TABLE NOTES:
1. PLUS AND MINUS SIGNS SIGNIFY PRESSURES ACTING TOWARD AND AWAY FROM BUILDING SURFACES, RESPECTIVELY.
2. COMPONENT AND CLADDING LOADS MAY BE INTERPOLATED BETWEEN THE WIND AREAS.
3. REFER TO FIGURES 30.4-1 THROUGH 30.4-7 IN ASCE 7 FOR COMPONENT AND CLADDING WIND LOAD DIAGRAMS.



ROOF



WALL

DESIGN CRITERIA, CONT.:

7. SEISMIC LOAD:

   IMPORTANCE FACTOR, I ——— 1.25
   SITE CLASS ——— D
   SPECTRAL RESPONSE ACCELERATIONS:
   S_S ——— 0.378g
   S_1 ——— 0.125g
   S_{DS} ——— 0.378g
   S_{D1} ——— 0.192g
   SEISMIC DESIGN CATEGORY ——— C
   ANALYSIS PROCEDURE ——— EQUIVALENT LATERAL FORCE PROCEDURE

   CORRIDOR BUILDING:
   SEISMIC FORCE RESISTING SYSTEM ——— ORDINARY STEEL MOMENT FRAMES AND ORDINARY REINFORCED MASONRY SHEAR WALLS
   RESPONSE MODIFICATION FACTOR, R ——— 2
   SEISMIC RESPONSE COEFFICIENT, Cs ——— 0.158
   DESIGN BASE SHEAR, V ——— 10 KIPS

   PRE-ENIGNEERED METAL BUILDING:
   NORTH-SOUTH DIRECTION:
   SEISMIC FORCE RESISTING SYSTEM ——— SEE PEMB PLANS
   RESPONSE MODIFICATION FACTOR, R ——— SEE PEMB PLANS
   SEISMIC RESPONSE COEFFICIENT, Cs ——— SEE PEMB PLANS
   DESIGN BASE SHEAR, V ——— SEE PEMB PLANS
   EAST-WEST DIRECTION:
   SEISMIC FORCE RESISTING SYSTEM ——— SEE PEMB PLANS
   RESPONSE MODIFICATION FACTOR, R ——— SEE PEMB PLANS
   SEISMIC RESPONSE COEFFICIENT, Cs ——— SEE PEMB PLANS
   DESIGN BASE SHEAR, V ——— SEE PEMB PLANS

8. SOIL DESIGN PARAMETERS:

   ALLOWABLE SOIL BEARING PRESSURE ——— 2000 PSF
   BELOW GRADE WALLS AND RETAINING WALLS:
   PASSIVE SOIL PRESSURE ——— 250 PCF
   COEFFICIENT OF FRICTION ——— 0.32
   SOIL UNIT WEIGHT ——— 125 PCF
   FROST DEPTH ——— 24 INCHES
   SOIL SUBGRADE MODULUS ——— 100 PCI

GENERAL CONSTRUCTION:

1. STRUCTURAL DRAWINGS SHALL NOT BE SCALED. REFERENCE SCALES INDICATED ON THE DRAWINGS ARE INTENDED FOR INFORMATION USE ONLY AND SHALL NOT BE USED TO DETERMINE SPECIFIC DIMENSIONS OR QUANTITY OF MATERIALS.
2. PRIOR TO FABRICATION AND CONSTRUCTION, THE CONTRACTOR SHALL VERIFY EXISTING ELEVATIONS AND DIMENSIONS ASSOCIATED WITH THE WORK. ALL OMISSIONS OR CONFLICTS BETWEEN VARIOUS ELEMENTS OF THE CONTRACT DRAWINGS AND/OR SPECIFICATIONS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE C.O. / OWNER PRIOR TO PROCEEDING WITH RELATED WORK.
3. SPECIFICATIONS SHALL BE USED IN CONJUNCTION WITH THE DRAWINGS FOR PURPOSES OF BIDDING, SCHEDULING, AND CONSTRUCTION.
4. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER TO LOCATE ALL EXISTING UNDERGROUND UTILITIES AND BURIED ITEMS PRIOR TO CONSTRUCTING FOUNDATIONS.
5. THE STRUCTURAL DRAWINGS REPRESENT THE FINISHED STRUCTURE AND DO NOT INDICATE THE METHOD OF CONSTRUCTION. CONSTRUCTION LOADS SHALL NOT EXCEED THE DESIGN LIVE LOADS.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK RELATED TO CONSTRUCTION, ERECTION METHODS, BRACING, SHORING, RIGGING, GUYS, SCAFFOLDING, FORMWORK, ETC. REQUIRED TO SAFELY PERFORM THE WORK.
7. STRUCTURAL MEMBERS SHALL NOT BE CUT (FOR PIPES, DUCTS, ETC.) UNLESS SPECIFICALLY DETAILED OR APPROVED IN WRITING BY THE C.O. / OWNER.
8. VERIFY SIZE AND LOCATION OF ALL OPENINGS THROUGH FLOORS, WALLS, SLABS, AND ROOFS WITH MECHANICAL, ELECTRICAL, AND ARCHITECTURAL DRAWINGS, AND WITH EQUIPMENT FURNISHED PRIOR TO PROCEEDING WITH RELATED WORK.
9. NOTES AND DETAILS ON THE DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS.
10. TYPICAL DETAILS AS SHOWN ON THE DRAWINGS APPLY TO SIMILAR SITUATIONS OCCURRING ON THE PROJECT WHETHER OR NOT THEY ARE IDENTIFIED IN EACH LOCATION. COORDINATE WITH THE C.O. / OWNER FOR INTERPRETATION OF APPLICABILITY OF TYPICAL DETAIL.
11. FOR STRUCTURAL ABBREVIATIONS, SEE DRAWING S0.1.
12. ALL EXISTING SITE STRUCTURES TO REMAIN IN PLACE SHALL BE PROTECTED FROM DAMAGE BY CONTRACTOR.
13. ANY DAMAGE DONE ON EXISTING SITE STRUCTURES DUE TO CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT NO COST TO THE OWNER.

DIMENSIONS AND DATUM:

1. UNLESS NOTED OTHERWISE, BEAMS AND JOISTS SHALL BE EQUALLY SPACED BETWEEN DIMENSIONS SHOWN.
2. ALL COLUMNS, FOOTINGS, DRILLED PIERS, OR OTHER FOUNDATION ELEMENTS SHALL BE CENTERED ON GRID LINES, UNLESS NOTED OTHERWISE.
3. DIMENSIONS SHOWN ARE TO THE CENTERLINE OF MEMBERS OR FACE OF WALLS, UNLESS NOTED OTHERWISE.
4. ALL ELEVATIONS ARE REFERENCED TO RELATIVE FINISH FLOOR DATUM ELEVATION OF 0'-0". REFER TO THE CIVIL SITE PLAN FOR ACTUAL FINISH FLOOR DATUM ELEVATION AND BUILDING COORDINATE LOCATIONS.

FOUNDATIONS:

1. FOUNDATION DESIGN IS BASED UPON THE GEOTECHNICAL ENGINEERING REPORT PREPARED BY:

   GEOTECHNICAL CONSULTANT: ——— TERRACON
   REPORT PROJECT NUMBER: ——— E2195045
   REPORT DATE: ——— JULY 23, 2019

2. SUBGRADE PREPARATION FOR GROUND SUPPORTED SLABS AND FOUNDATIONS SHALL BE IN ACCORDANCE WITH GEOTECH REPORT NOTED ABOVE.
3. ALL FOUNDATION BEARING SURFACES SHALL BE OBSERVED BY A GEOTECHNICAL ENGINEER, OR DESIGNEE, TO VERIFY CONFORMANCE WITH THE CONTRACT DOCUMENTS AND GEOTECHNICAL ENGINEERING REPORT. THE OBSERVATION SHALL BE MADE PRIOR TO PLACEMENT OF FORMS AND REINFORCING STEEL.
4. WALLS SHOWN RESTRAINED AT THE TOP SHALL NOT BE BACKFILLED UNTIL THE STRUCTURE PROVIDING RESTRAINT IS IN PLACE AND HAS ATTAINED DESIGN STRENGTH. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY WALL BRACING WHEN BACKFILLING OCCURS PRIOR TO CONSTRUCTION OF THE TOP RESTRAINT. THE CONTRACTOR SHALL NOTIFY THE C.O. / OWNER PRIOR TO PROCEEDING WITH RELATED WORK.
5. BACKFILL SHALL NOT BE PLACED BEHIND CANTILEVERED, FREE TOP WALLS UNTIL THE CONCRETE HAS ATTAINED DESIGN STRENGTH.

CONCRETE:

1. ALL CONCRETE WORK SHALL CONFORM TO THE REQUIREMENTS OF THE FOLLOWING, UNLESS OTHERWISE SPECIFIED:

   ACI 301-10; SPECIFICATIONS FOR STRUCTURAL CONCRETE
   ACI 318-14; BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE

2. CONCRETE PROPERTIES:

   APPLICATION: ——— MINIMUM 28 DAY COMPRESSIVE STRENGTH

   TYPICAL CONCRETE (UNLESS NOTED OTHERWISE) ——— 4,000 PSI

3. THE CONTRACTOR SHALL COORDINATE SIZE AND LOCATION OF EMBEDDED ITEMS, OPENINGS, SLEEVES, INSERTS, DOWELS, DEPRESSIONS, CURBS, PITS, CONDUITS, ETC. WITH MECHANICAL, ELECTRICAL, AND ARCHITECTURAL DRAWINGS, AND EQUIPMENT FURNISHED PRIOR TO PLACEMENT OF CONCRETE.
4. CONDUITS, PIPES, DUCTS, OR SLEEVES SHALL NOT BE EMBEDDED WITHIN SLABS, WALLS, BEAMS, OR COLUMNS UNLESS SPECIFICALLY INDICATED ON THE DRAWINGS. EMBEDDED ALUMINUM CONDUITS AND PIPES SHALL NOT BE PERMITTED.
5. WHEN THE SIDES OF GRADE BEAMS OR PIER CAPS ARE EARTH-FORMED, EACH SIDE SHALL BE WIDENED AT LEAST 3 INCHES MORE THAN THE REQUIRED DIMENSION. THE MINIMUM CONCRETE COVER FOR REINFORCING SHALL BE INCREASED ACCORDINGLY BY THE SAME AMOUNT.
6. EXPOSED EDGES OF CONCRETE (BEAMS, COLUMNS, WALLS, ETC.) SHALL BE CHAMFERED 3/4 INCH, UNLESS SPECIFICALLY NOTED OTHERWISE.
7. ROUGHEN AND CLEAN CONSTRUCTION JOINTS IN WALLS AND SLABS PRIOR TO PLACING ADJACENT CONCRETE. CONCRETE SURFACES SHALL BE ROUGHENED TO A FULL AMPLITUDE OF APPROXIMATELY 1/4 INCH.
8. TO COMPENSATE FOR WET CONCRETE DEFLECTION OF THE STRUCTURE (STEEL BEAMS, PRECAST TEES, ETC.), SLAB THICKNESSES SHALL BE INCREASED AS REQUIRED TO PROVIDE A LEVEL SURFACE WITHIN TOLERANCE. THE ADDITIONAL CONCRETE SHALL BE PROVIDED AT NO ADDITIONAL COST.
9. THE CONTRACTOR SHALL SUBMIT A PROPOSED FLOOR JOINT LAYOUT FOR SLABS ON GROUND AND FOUNDATION WALLS TO THE C.O. / OWNER FOR REVIEW. CONCRETE SLABS ON GROUND SHALL BE BOUND BY CONTRACTION JOINTS WITH AN ENCLOSED AREA NOT EXCEEDING 225 SQUARE FEET AND A MAXIMUM PANEL LENGHT TO WIDTH RATIO OF 1.5. JOINTS SHALL BE LOCATED ON COLUMN GRID LINES AND AT 15 FEET MAXIMUM.

REINFORCING STEEL:

1. ALL REINFORCING STEEL SHALL BE DETAILED, FABRICATED, AND PLACED IN ACCORDANCE WITH THE FOLLOWING, UNLESS OTHERWISE SPECIFIED:

   ACI SP-66; ACI DETAILING MANUAL - 2004
   CRSI MSP-1; MANUAL OF STANDARD PRACTICE, 28TH EDITION, 2009

2. TYPICAL REINFORCING STEEL:

   DEFORMED BARS (NON-WELDABLE) ——— ASTM A615, GRADE 60
   DEFORMED BARS (WELDABLE) ——— ASTM A706, GRADE 60

3. PROVIDE THE MINIMUM CONCRETE COVER INDICATED IN THE FOLLOWING SCHEDULE, UNLESS NOTED OTHERWISE IN A SPECIFIC SECTION OR DETAIL. INCREASE CONCRETE COVER AS REQUIRED TO ACCOMMODATE EMBEDDED ITEMS, BAR CONGESTION, FIELD CONDITIONS, ETC.

DESCRIPTION			COVER
CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH			3"
CONCRETE EXPOSED TO EARTH OR WEATHER			2"
CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND:	SLABS, WALLS, AND JOISTS	#14 AND LARGER	1½"
		#11 AND SMALLER	¾"
	BEAMS AND COLUMNS (TIES, STIRRUPS PRIMARY REINFORCEMENT, SPIRALS)		1½"

4. ALL REINFORCING BAR HOOKS INDICATED ON THE DRAWINGS SHALL BE ACI STANDARD HOOKS CONFORMING TO THE BEND DIMENSION REQUIREMENTS OF ACI 318, UNLESS SPECIFICALLY NOTED OTHERWISE.
5. REINFORCING BARS SHALL BE COLD BENT. BARS EMBEDDED IN CONCRETE SHALL NOT BE FIELD BENT, EXCEPT WHEN SPECIFICALLY INDICATED ON THE DRAWINGS.
6. THE CONTRACTOR SHALL NOT CUT REINFORCEMENT UNLESS INDICATED BY SECTION OR DETAIL. AT LOCATIONS OF CONFLICT, SPREAD THE REINFORCEMENT TO ACCOMMODATE PLACEMENT. ADD ADDITIONAL BARS IF NECESSARY TO MAINTAIN SPACING REQUIREMENTS.
7. ALL WELDED REINFORCING SHALL BE IN ACCORDANCE WITH AWS D1.4. TACK WELDING IS NOT PERMITTED.

REINFORCING STEEL, CONT.:

8. #11 AND SMALLER BARS MAY BE SPLICED USING MECHANICAL CONNECTIONS OR CONTACT LAP SPLICES. BAR LAPS SHALL BE SECURELY WIRED TOGETHER.
9. TENSION DEVELOPMENT AND REINFORCING BAR LAP SPLICES SHALL BE IN ACCORDANCE WITH THE FOLLOWING TABLES, UNLESS NOTED OTHERWISE. PROVIDE BENT CORNER BARS TO MATCH AND LAP WITH HORIZONTAL BARS AT CORNERS AND INTERSECTIONS OF FOOTINGS AND WALLS. PROVIDE CONTACT LAP SPLICES.

f 'c = 4,000 PSI
(GRADE 60 UNCOATED BARS)

BAR SIZE	TENSION DEVELOPMENT		CLASS "B" LAP SPLICE	
	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS
#3	19	15	24	19
#4	25	19	32	25
#5	31	24	40	31
#6	37	29	48	37
#7	54	42	70	54
#8	62	48	80	62
#9	70	54	91	70
#10	79	61	102	79
#11	87	67	113	87
ALL LENGTHS ARE IN INCHES				

NOTES:
1. TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12 INCHES OF CONCRETE CAST BELOW.
2. REINFORCING BAR LENGTHS ARE BASED ON NORMAL-WEIGHT CONCRETE.
3. REFER TO TENSION DEVELOPMENT VALUES FOR CLASS "A" LAP SPLICE LENGTHS.
4. WHEN REINFORCING BAR SPACING IS LESS THAN 2 db FOR BEAMS AND COLUMNS OR 3 db FOR ALL OTHER CONCRETE ELEMENTS, LENGTHS SHALL BE MULTIPLIED BY A FACTOR OF 1.5. (db = REINFORCING BAR DIAMETER)

MASONRY:

1. ALL MASONRY WORK SHALL CONFORM TO THE REQUIREMENTS OF THE FOLLOWING, UNLESS OTHERWISE SPECIFIED:

   ACI 530-11; BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES
   ACI 530.1-11; SPECIFICATION FOR MASONRY STRUCTURES

2. SPECIFIED DESIGN STRENGTH OF MASONRY, f 'm ——— 1,500 PSI
3. CONCRETE MASONRY PROPERTIES:
   a) CONCRETE MASONRY UNITS: ASTM C90, MEDIUM WEIGHT, NET 1900 PSI COMPRESSIVE MASONRY STRENGTH.
   b) MORTAR: ASTM C270, TYPE S. MASONRY CEMENT SHALL NOT BE USED.
   c) GROUT: ASTM C476 GROUT. GROUT SHALL HAVE A 28-DAY COMPRESSIVE STRENGTH OF 2000 TO 4000 PSI.
4. COMPRESSIVE STRENGTH OF MASONRY SHALL BE DETERMINED BY THE UNIT STRENGTH METHOD. PRISM TEST METHOD IS REQUIRED WHEN THE ABOVE REQUIREMENTS ARE NOT MET.
5. MASONRY COURSES SHALL BE PLACED IN A RUNNING BOND PATTERN, UNLESS SPECIFICALLY NOTED OTHERWISE.
6. GROUTING:
   a) SOLID GROUT ALL PIERS, COLUMNS, HEADERS, AND BOND BEAMS. SOLID GROUT ADDITIONAL MASONRY AREAS SPECIFICALLY INDICATED ON THE DRAWINGS.
   b) GROUT SHALL BE CONSOLIDATED BY MECHANICAL VIBRATION DURING PLACING AND RECONSOLIDATED AFTER EXCESS MOISTURE HAS BEEN ABSORBED.
7. EMBEDDED CONDUITS, PIPES, AND SLEEVES SHALL NOT BE LOCATED IN GROUTED CELLS.
8. VERTICAL REINFORCING (UNLESS NOTED OTHERWISE ON THE DRAWINGS):
   a) PROVIDE #5 VERTICAL BARS (CENTERED) AT 48 INCHES.
   b) PROVIDE ADDITIONAL #5 VERTICAL BARS (CENTERED) ALONG FULL HEIGHT OF WALL AT ALL:
      - CORNERS
      - INTERSECTIONS
      - WALL ENDS
      - OPENINGS
      - JAMBS
      - BEAM BEARING
      - EACH SIDE OF CONTROL JOINTS
   c) PROVIDE MATCHING DOWELS FOR ALL VERTICAL REINFORCING.
9. HORIZONTAL REINFORCING (UNLESS NOTED OTHERWISE ON THE DRAWINGS):
   a) PROVIDE WIRE TRUSS OR LADDER TYPE JOINT REINFORCING AT 16 INCHES. REINFORCING SHALL CONSIST OF W2.8 (3/16 INCH) SIDE WIRES AND W1.7 (9 GAGE) CROSS WIRES. JOINT REINFORCING SHALL BE HOT-DIPPED GALVANIZED WITH CORROSION RESISTANT COATING.
   b) LAP SPLICE JOINT REINFORCING 8 INCHES. JOINT REINFORCING SHALL BE CONTINUOUS THROUGH CONTROL JOINTS.
   c) PROVIDE (1) #5 CONTINUOUS BARS IN BOND BEAMS (8 INCH MINIMUM DEPTH) AT ROOF AND ELEVATED FLOOR LINES, TOP OF PARAPETS, AND TOP OF FREE-STANDING WALLS. SPACE BOND BEAMS @48" ON CENTER VERTICAL. BARS SHALL BE CONTINUOUS THROUGH CONTROL JOINTS.
   d) PROVIDE BENT BARS AT CORNERS AND WALL INTERSECTIONS TO MATCH HORIZONTAL BOND BEAM REINFORCING.
10. LAP SPLICES SHALL BE 40 BAR DIAMETERS, UNO. ADJACENT LAP SPLICES SHALL BE STAGGERED BY 24 INCHES WHEN SEPARATED BY 3 INCHES OR LESS.
11. UNLESS NOTED OTHERWISE ON THE PLANS, PLACE CONTROL JOINTS IN MASONRY WALLS SUCH THAT NO STRAIGHT RUN OF WALL EXCEEDS 48 FEET.
12. ALL OUTSIDE CORNERS TO BE BULLNOSED.

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KHAFRA

East Lake YFD Center Improvements

3610 Dodds Avenue, Chattanooga, TN 37402

ISSUE DATES
INITIAL ISSUE 12-20-19
1. XXX XX-XX-XX

JOB NO. 18-072 | D'WN BDLR | CK'D APWD

S0.0
GENERAL NOTES 1

STRUCTURAL STEEL:

1. ALL STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED, AND ERECTED IN ACCORDANCE WITH THE FOLLOWING, UNLESS OTHERWISE SPECIFIED:

   AISC 360-05; SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS
   AISC 303-05; CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES
   RCSC; SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS, JUNE 30, 2004
   AWS D1.1-04; STRUCTURAL WELDING CODE - STEEL

2. STRUCTURAL SHAPES AND PLATES:

		(Fy)
W-SHAPES AND WT-SHAPES	ASTM A992	50 KSI
M-SHAPES AND S-SHAPES	ASTM A36	36 KSI
ANGLES AND CHANNELS	ASTM A36	36 KSI
HP-SHAPES	ASTM A572 GRADE 50	50 KSI
RECTANGULAR AND SQUARE HSS	ASTM A500 GRADE B	46 KSI
ROUND HSS	ASTM A500 GRADE B	42 KSI
STEEL PIPE	ASTM A53 GRADE B	35 KSI
STRUCTURAL PLATES	ASTM A36	36 KSI

3. FASTENING PRODUCTS:

CONVENTIONAL BOLTS	ASTM A325, TYPE 1
TENSION-CONTROL BOLT ASSEMBLIES	ASTM F1852, TYPE 1 (TWIST-OFF)
DIRECT-TENSION INDICATORS	ASTM F959, TYPE 325
NUTS	ASTM A563
WASHERS	ASTM F436
ANCHOR RODS	ASTM F1554 GRADE 36
THREADED RODS	ASTM A36
SHEAR STUD CONNECTORS	ASTM A29 PER ASTM A108
WELD FILLER METAL	E70XX

   ALL ANCHOR RODS AND THREADED RODS IN EXTERIOR APPLICATIONS SHALL BE HOT DIP GALVANIZED.

4. TIGHTEN BOLTS TO THE SNUG-TIGHT OR PRE-TENSIONED CONDITION, EXCEPT WHERE INDICATED AS SLIP CRITICAL (SC). ALL SLIP-CRITICAL CONNECTIONS SHALL BE FULLY PRE-TENSIONED AND INSPECTED USING TENSION-CONTROL BOLT ASSEMBLIES, DIRECT-TENSION INDICATORS, OR BY THE TURN-OF-THE-NUT METHOD CONFORMING TO RCSC. ALL SLIP-CRITICAL CONNECTIONS SHALL HAVE FAYING SURFACES PREPARED AS REQUIRED FOR SLIP-CRITICAL CLASS A.

5. WHEN CONNECTIONS ARE NOT SPECIFICALLY INDICATED ON THE DRAWINGS, THE DETAILER SHALL SELECT A SINGLE-PLATE, DOUBLE-ANGLE, OR SINGLE-ANGLE CONNECTION FROM THE AISC STEEL CONSTRUCTION MANUAL (THIRTEENTH EDITION) OR FROM A SCHEDULE PROVIDED IN THE STRUCTURAL PLANS THAT IS ADEQUATE FOR THE LOAD INDICATED ON THE DRAWINGS.

6. ALL WELDING OF STRUCTURAL STEEL SHALL BE PERFORMED IN ACCORDANCE WITH A WELDING PROCEDURE SPECIFICATION (WPS) PREQUALIFIED BY AWS D1.1. WPS NOT PREQUALIFIED BY AWS SHALL BE QUALIFIED IN ACCORDANCE WITH AWS D1.1 PRIOR TO USE ON THE PROJECT. WELDERS SHALL BE QUALIFIED FOR EACH WPS USED ON THE PROJECT BY AN AWS CERTIFIED TESTING AGENCY AND IN ACCORDANCE WITH AWS D1.1.

7. WELDING SHALL BE PERFORMED IN THE FABRICATION SHOP TO THE EXTENT POSSIBLE. THE CONTRACTOR AND STEEL FABRICATOR SHALL DETERMINE WHERE FIELD WELDS ARE NECESSARY. STEEL SHOP DRAWINGS SHALL INDICATE WHETHER THEY ARE SHOP OR FIELD WELDS.

8. UNLESS NOTED OTHERWISE, FILLET WELD SIZES SHALL BE THE SMALLER OF 1/4 INCH OR THE MAXIMUM SIZE THAT CAN BE APPLIED IN ACCORDANCE WITH AISC 360 SECTION J2b

9. ALL BEAMS SHALL BE ERECTED WITH THE NATURAL CAMBER UPWARDS.

10. OPEN ENDS OF HSS MEMBERS SHALL HAVE 1/4 INCH CLOSURE PLATES, SEAL WELDED ALL AROUND.

11. HOLES OR OPENINGS SHALL NOT BE CUT IN ANY STRUCTURAL MEMBER UNLESS SPECIFICALLY DETAILED OR APPROVED IN WRITING BY THE C.O. / OWNER.

12. BASE PLATE HOLES AND PLATE WASHERS FOR ANCHOR RODS SHALL BE IN ACCORDANCE WITH TABLE 14-2 OF AISC 360.

13. THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY GUYING AND BRACING NECESSARY TO ERECT, STABILIZE, AND MAINTAIN ALL STEEL MEMBERS IN PROPER ALIGNMENT UNTIL ALL DECK, PERMANENT BRACING, FLOOR SLABS, WELDED CONNECTIONS, ETC. ARE IN PLACE. COLUMN ANCHOR BOLTS ARE NOT DESIGNED TO PROVIDE TEMPORARY STABILITY FOR COLUMNS DURING STEEL ERECTION. PLACE NON-SHRINK GROUT BELOW ALL COLUMN BASE PLATES BEFORE POURING CONCRETE ON DECKS OR APPLYING LOAD TO THE STRUCTURE.

PRE-ENGINEERED METAL BUILDING:

1. ALL STRUCTURAL STEEL USED FOR PRE-ENGINEERED BUILDING COMPONENTS SHALL BE DESIGNED, FABRICATED AND ERECTED IN CONFORMANCE WITH THE LATEST STANDARDS OF THE AISC. THE DESIGN OF LIGHT GAGE STEEL MEMBERS SHALL COMPLY WITH THE AISI, LATEST EDITION.

2. THE DESIGN FOR ALL PRE-ENGINEERED BUILDING MEMBERS AND COMPONENTS (INCLUDING ANCHOR BOLT SIZES, LENGTHS AND EMBEDMENT) SHALL BE THE RESPONSIBILITY OF THE PRE-ENGINEERED BUILDING MANUFACTURER. THE DESIGN SHALL BE CARRIED OUT UNDER THE DIRECTION OF A PROFESSIONAL ENGINEER IN THE STATE OF THE PROJECT.

3. THE DESIGN OF ALL PRE-ENGINEERED BUILDING COMPONENTS SHALL BE BASED ON THE LOADS INDICATED IN THE DESIGN CRITERIA SECTION OF THE GENERAL NOTES. DEFLECTIONS OF THE PRE-ENGINEERED BUILDING STRUCTURE UNDER LOADING SHALL NOT EXCEED THE FOLLOWING:

   3.1. RIGID FRAMES AND COLUMNS - DRIFT — L/400 LATERAL

   3.2. WALL GIRTS AND EAVE STRUTS SUPPORTING METAL SIDING AND GYP BOARD — L/240 LATERAL

   3.3. RIGID FRAMED AND ROOF PURLINS
   - 3.3.1. DROP-IN CEILING OR NO CEILING — L/240 VERTICAL FOR LIVE LOAD; L/180 VERTICAL FOR DEAD LOAD
   - 3.3.2. PLASTER OR GYPSUM BOARD CEILING — L/360 VERTICAL FOR LIVE LOAD; L/180 VERTICAL FOR DEAD LOAD

4. BASES OF COLUMNS SHALL BE DESIGNED AS PINNED SUPPORTS.

5. ALL BUILDING COMPONENTS SHALL BE COMPATIBLE WITH THE CONTRACT DOCUMENT. ANY REQUESTS FOR MODIFICATIONS SHALL BE SUBMITTED TO THE ARCHITECT DURING THE BIDDING PROCESS.

PRE-ENGINEERED METAL BUILDING, CONT:

6. FIELD WELDED CONNECTIONS FOR LIGHT GAUGE MEMBERS SHALL NOT BE PERMITTED WITHOUT SPECIFIC WRITTEN APPROVAL FROM THE ARCHITECT.

7. LATERAL STABILITY OF THE BUILDING FRAME SHALL BE PROVIDED IN THE STRUCTURAL FRAMING. WALLS AND OTHER BUILDING COMPONENTS SHALL NOT BE USED TO RESIST LATERAL LOADS UNLESS NOTED OTHERWISE. AT X-BRACING LOCATIONS STEEL RODS OR ANGLES SHALL BE USED. THE USE OF CABLES FOR PERMANENT X-BRACING IS NOT ACCEPTABLE.

8. SHOP DRAWINGS SHALL BE PREPARED FOR ALL STRUCTURAL ITEMS AND SUBMITTED FOR REVIEW. CONTRACT DRAWINGS SHALL NOT BE REPRODUCED AND USED AS SHOP DRAWINGS. ANY ITEMS DEVIATING FROM THE CONTRACT DOCUMENTS OR FROM PREVIOUSLY SUBMITTED SHOP DRAWINGS SHALL BE SO NOTED. SHOP DRAWINGS SHALL BE SEALED AND SIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE WHERE THE PROJECT IS TO BE CONSTRUCTED.

STEEL JOISTS AND JOIST GIRDERS:

1. ALL STEEL JOISTS AND JOIST GIRDERS SHALL BE DESIGNED, DETAILED, FABRICATED, AND ERECTED IN ACCORDANCE WITH THE FOLLOWING, UNLESS OTHERWISE SPECIFIED:

   STEEL JOIST INSITITUTE, 42ND EDITION STANDARD SPECIFICATIONS (ASD METHOD)

2. STEEL JOIST DESIGNATIONS BASED UPON THE SJI STANDARD ASD LOAD TABLES ARE INDICATED ON THE PLANS. JOISTS WITH SPECIAL LOADS SHALL BE DESIGNED BY THE MANUFACTURER AND ARE INDICATED ON THE PLANS AS [SLx]. REFERENCE THE JOIST LOADING DIAGRAM SCHEDULE FOR SPECIAL DESIGN CRITERIA.

3. TOP AND BOTTOM CHORD BRIDGING SHALL BE SIZED AND SPACED BY THE JOIST MANUFACTURER IN ACCORDANCE WITH THE STEEL JOIST INSTITUTE SPECIFICATIONS. FURNISH ADDITIONAL BRIDGING NECESSARY FOR WIND UPLIFT AND ANY EXTRA BRIDGING SPECIFICALLY INDICATED ON THE STRUCTURAL PLANS.

4. JOIST BRIDGING SHALL BE DESIGNED BY THE JOIST MANUFACTURER USING THE FOLLOWING LOADS TO CALCULATE THE NET WIND UPLIFT PRESSURE:

   DEAD LOAD — 15 PSF
   WIND LOAD — REFER TO ROOF COMPONENT AND CLADDING WIND PRESSURE TABLE IN THE DESIGN CRITERIA SECTION

   NET WIND UPLIFT PRESSURE = (0.6 x DEAD LOAD) + WIND LOAD

5. REPLACE DIAGONAL BRIDGING WITH HORIZONTAL BRIDGING BETWEEN THE ENDWALLS AND THE LAST JOIST.

6. WHERE DIAGONAL BRIDGING INTERFERES WITH MECHANICAL INSTALLATIONS, REMOVE DIAGONAL BRIDGING AFTER DECK IS IN PLACE AND REPLACE WITH A HORIZONTAL L2x2x3/16 CONNECTED TO THE TOP AND BOTTOM CHORDS. COORDINATE WITH THE JOIST MANUFACTURER.

7. BRIDGING SHALL NOT BE USED TO SUPPORT ANY EQUIPMENT.

8. PROVIDE STANDARD BEARING DEPTHS AT ALL JOISTS AND JOIST GIRDERS, UNLESS SPECIFICALLY INDICATED OTHERWISE ON THE DRAWINGS.

9. JOIST BOTTOM CHORDS SHALL BE DESIGNED TO SUPPORT A 50 POUND VERTICAL LOAD APPLIED ANYWHERE BETWEEN THE PANEL POINTS.

10 CONCENTRATED LOADS GREATER THAN 50 POUNDS SHALL BE APPLIED WITHIN 6 INCHES OF JOIST PANEL POINTS OR AT LOCATIONS OF CONCENTRATED LOAD REINFORCEMENT CONSISTING OF FIELD INSTALLED WEB MEMBERS IN ACCORDANCE WITH THE TYPICAL STEEL JOIST REINFORCING DETAIL.

11. CONCENTRATED LOADS OR HANGER LOADS SHALL BE ATTACHED TO JOIST CHORDS USING PLATES, ANGLES, WT SECTIONS, RODS, ETC. AND SHALL NOT RESULT IN ECCENTRICITY APPLIED TO THE JOIST. HOLES SHALL NOT BE FIELD DRILLED IN ANY JOIST CHORDS.

STEEL ROOF DECK:

1. ALL STEEL ROOF DECK SHALL BE DETAILED, FABRICATED, AND ERECTED IN ACCORDANCE WITH THE FOLLOWING, UNLESS OTHERWISE SPECIFIED:

   SDI; DESIGN MANUAL FOR COMPOSITE DECKS, FORM DECKS, AND ROOF DECKS, NOVEMBER 2007
   SDI; DIAPHRAGM DESIGN MANUAL THIRD EDITION, SEPTEMBER 2004
   ANSI/SDI RD1.0-2006; STANDARD FOR STEEL ROOF DECK
   AWS D1.3-98; STRUCTURAL WELDING CODE - SHEET STEEL

2. MINIMUM ROOF DECK PROPERTIES:

DEPTH	3"
DECK TYPE	TYPE N
GAGE	18
MINIMUM YIELD STRENGTH	33 KSI
Ip (in4 / ft)	1.43
Sp (in3 / ft)	0.688
Sn (in3 / ft)	0.749
FINISH	GALVANIZED G60

3. ROOF DECK ATTACHMENT:

   ALLOWABLE SUPPORT FASTENERS INCLUDE:

   a) POWDER-ACTUATED FASTENERS
   b) MINIMUM VISIBLE 5/8 INCH DIAMETER ARC PUDDLE WELDS

SUPPORTS	24/4 PATTERN
SUPPORTS PARALLEL TO DECK	12" MAXIMUM
SIDELAPS	#10 SCREWS AT 12" MAXIMUM
ALLOWABLE DIAPHRAGM SHEAR	302 PLF

4. LOADS SUSPENDED FROM STEEL ROOF DECK SHALL NOT BE PERMITTED.

5. DECK SHALL BE CONTINUOUS OVER TWO OR MORE SPANS. FOR CONDITIONS WITH LESS THAN TWO SPANS, SHORE THE DECK IN ACCORDANCE WITH THE MANUFACTURER'S AND SDI MAXIMUM SPAN REQUIREMENTS.

6. SHEETS SHALL HAVE LAPPED ENDS. MINIMUM LAP SHALL BE 2 INCHES.

7. MINIMUM DECK BEARING SHALL BE 2 INCHES ON SUPPORTS.

8. THE FIRST SHEET OF ROOF DECK ADJACENT TO AND PARALLEL TO A WALL, PERIMETER BEAM, OR BEAM IDENTIFIED AS A CHORD, COLLECTOR, OR DRAG MEMBER SHALL BE A FULL PANEL WIDTH SHEET.

COLD-FORMED STEEL FRAMING:

1. ALL COLD-FORMED STEEL FRAMING SHALL BE DESIGNED, DETAILED, FABRICATED, AND ERECTED IN ACCORDANCE WITH THE FOLLOWING, UNLESS OTHERWISE SPECIFIED:

   AISI S100-12; NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS
   AWS D1.3-98; STRUCTURAL WELDING CODE - SHEET STEEL

2. UNLESS NOTED OTHERWISE, THE CONTRACTOR SHALL DESIGN AND FURNISH ALL COLD-FORMED STEEL FRAMING, ACCESSORIES, AND FASTERNERS. REFER TO THE SPECIFICATIONS FOR PERFORMANCE REQUIREMENTS.

3. MEMBERS WITH A THICKNESS OF 54 MILS (16 GAGE) OR GREATER SHALL HAVE A MINIMUM YIELD STRENGTH OF 50,000 PSI. MEMBERS WITH A THICKNESS OF 43 MILS (18 GAGE) OR LESS SHALL HAVE A MINIMUM YIELD STRENGTH OF 33,000 PSI.

4. G-60 GALVANIZED COATING SHALL BE APPLIED TO COLD-FORMED STEEL AT LOCATIONS EXPOSED TO WEATHER OR WHERE SPECIFICALLY INDICATED ON THE DRAWINGS.

5. COLD-FORMED STEEL DESIGNATIONS INDICATED ON THE DRAWINGS ARE AS FOLLOWS:

   600S162-54 — STANDARD COLD-FORMED STEEL DESIGNATION

   600 — INDICATES MEMBER DEPTH IN 1/100 INCHES
   S — INDICATES STYLE (S=STUD, T=TRACK, U=CHANNEL)
   162 — INDICATES FLANGE WIDTH IN 1/100 INCHES
   54 — INDICATES MATERAL THICKNESS IN 1/1000 INCHES
   33 MILS = 20 GAGE
   43 MILS = 18 GAGE
   54 MILS = 16 GAGE
   68 MILS = 14 GAGE
   97 MILS = 12 GAGE

6. ALL LOAD-BEARING STUDS SHALL HAVE FULL END BEARING ON THE TOP AND BOTTOM TRACKS PRIOR TO STUD AND TRACK ATTACHMENT. UNLESS NOTED OTHERWISE, DOUBLE STUDS SHALL BE PROVIDED AT ALL JAMBS, CORNERS, INTERSECTIONS, BEAM BEARINGS, AND JOIST BEARINGS.

7. SPLICES IN AXIALLY-LOADED MEMBERS SHALL NOT BE PERMITTED UNLESS SPECIFICALLY APPROVED IN WRITING BY THE C.O. / OWNER.

8. TRACKS SHALL BE ATTACHED TO CONCRETE ELEMENTS WITH 1/2 INCH DIAMETER ANCHORS AT 48 INCHES, UNLESS NOTED OTHERWISE. ANCHORS SHALL BE PLACED AT ALL JAMBS, CORNERS, INTERSECTIONS, AND WALL ENDS. ALL BOTTOM TRACKS SHALL HAVE A MINIMUM OF 2 ANCHORS.

9. BRIDGING SHALL BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS WITH THE FOLLOWING MINIMUM REQUIREMENTS:

   - NON-LOAD BEARING WALLS: PROVIDE BRIDGING AT MID-HEIGHT FOR WALLS 10 FEET HIGH OR LESS. PROVIDE BRIDGING AT 5 FEET MAXIMUM SPACING FOR WALLS GREATER THAN 10 FEET HIGH.
   - LOAD BEARING WALLS: PROVIDE BRIDGING AT 4 FEET MAXIMUM SPACING. IN ADDITION, BRIDGING SHALL BE PROVIDED AT ROOF LINES, FLOOR LINES, AND AS INDICATED ON THE DRAWINGS.
   - SOLID BLOCKING SHALL BE INSTALLED IN LIEU OF BRIDGING WHERE INDICATED ON THE DRAWINGS.

10. COLD-FORMED STEEL FRAMING SHALL BE DESIGNED BY A LICENSED ENGINEER IN THE STATE WHERE THE PROJECT IS LOCATED. STRUCTURAL CALCULATIONS AND DRAWINGS SHALL BE SUBMITTED TO THE CONTRACTING OFFICER FOR APPROVAL PRIOR TO INSTALLATION.

POST-INSTALLED ANCHORS:

1. INSTALLATION AND INSPECTION OF ALL POST-INSTALLED ANCHORS SHALL CONFORM TO THE MANUFACTURER'S PUBLISHED INSTALLATION INSTRUCTIONS, THE EQUIPMENT MANUFACTURER'S REQUIREMENTS, THE REQUIREMENTS OF THE RESPECTIVE ICC-ES REPORT, AND THE APPLICABLE BUILDING CODE.

2. A MANUFACTURER'S TECHNICAL REPRESENTATIVE (NOT A DISTRIBUTOR OR AGENT) SHALL TRAIN INSTALLERS ON THE PROPER INSTALLATION PROCEDURES AND SHALL OBSERVE INITIAL INSTALLATION OF THE ANCHORS.

3. ADHESIVE ANCHORING SYSTEMS IN CONCRETE SHALL BE AS FOLLOWS:

   - HIT-RE 500 V3 BY HILTI, INC. (ICC-ES ESR-2322)
   - HIT-HY 200 BY HILTI, INC. (ICC-ES ESR-3187)
   - SET-XP BY SIMPSON STRONG-TIE ANCHOR SYSTEMS (ICC-ES ESR-2508)
   - APPROVED EQUAL WITH ICC-ES REPORT

   ANCHOR ELEMENTS SHALL CONFORM WITH THE RESPECTIVE ICC-ES REPORT.

4. MECHANICAL ANCHORING SYSTEMS IN CONCRETE SHALL BE AS FOLLOWS:

   - KWIK BOLT TZ BY HILTI, INC. (ICC-ES ESR-1917)
   - STRONG-BOLT 2 BY SIMPSON STRONG-TIE (ICC-ES ESR-3037)
   - APPROVED EQUAL WITH ICC-ES REPORT

   ANCHORS SHALL BE INSTALLED AND TORQUED IN COMPLETE ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

5. ADHESIVE ANCHORING SYSTEMS IN MASONRY SHALL BE AS FOLLOWS:

   - HIT-HY 200 BY HILTI, INC. (ICC-ES ESR-3963)
   - SET BY SIMPSON STRONG-TIE ANCHOR SYSTEMS (ICC-ES ESR-1772)
   - APPROVED EQUAL WITH ICC-ES REPORT

   ANCHOR ELEMENTS SHALL CONFORM WITH THE RESPECTIVE ICC-ES REPORT. ANCHORS SHALL BE INSTALLED IN GROUTED CELLS. IF GROUTED CELLS ARE NOT ENCOUNTERED, CELL FACE SHALL BE BROKEN AND GROUTED SOLID EIGHT INCHES (MINIMUM) ABOVE AND BELOW ANCHOR LOCATION.

6. MECHANICAL ANCHORING SYSTEMS IN MASONRY SHALL BE AS FOLLOWS:

   - KWIK BOLT 3 BY HILTI, INC. (ICC-ES ESR-1385)
   - WEDGE-ALL BY SIMPSON STRONG-TIE (ICC-ES ESR-1396)
   - APPROVED EQUAL WITH ICC-ES REPORT

   ANCHORS SHALL BE INSTALLED AND TORQUED IN COMPLETE ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

7. ANCHOR RODS USED IN ADHESIVE ANCHORING SYSTEMS SHALL CONFORM WITH ASTM A193, GRADE B7. MECHANICAL ANCHORING SYSTEMS SHALL BE ZINC PLATED CARBON STEEL, UNLESS NOTED OTHERWISE.

POST INSTALLED ANCHORS, CONT:

8. PROVIDE THE MINIMUM EMBEDMENT DEPTHS INDICATED IN THE FOLLOWING SCHEDULES, UNLESS NOTED OTHERWISE IN A SPECIFIC SECTION OR DETAIL.

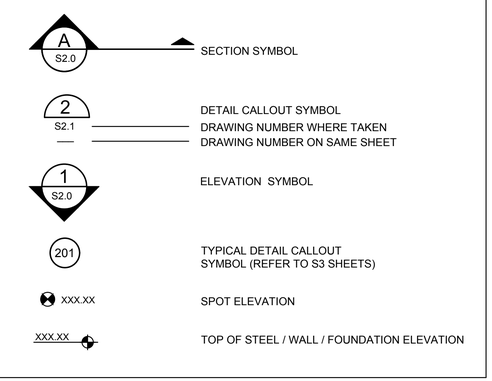
ADHESIVE ANCHORS (MINIMUM EMBEDMENT)

THREADED ANCHOR DIAMETER	CONCRETE	MASONRY
1/2"	4"	4 1/2"
5/8"	5"	5 5/8"
3/4"	6"	6 3/4"
7/8"	7"	———
1"	8"	———

MECHANICAL ANCHORS (MINIMUM EMBEDMENT)

ANCHOR DIAMETER	CONCRETE	MASONRY
1/2"	3 1/2"	3 1/2"
5/8"	4 1/2"	4 1/2"
3/4"	5 1/2"	5 1/2"

SYMBOLS LEGEND



STRUCTURAL ABBREVIATIONS

@	AT	IN	INCH
+/-	PLUS OR MINUS	INT	INTERIOR
ADJ	ADJACENT	JST	JOIST
ALUM	ALUMINUM	JT	JOINT
APPROX	APPROXIMATE		
ARCH	ARCHITECTURAL	K	KIPS
BLDG	BUILDING	LBS	POUNDS
BM	BEAM	LLH	LONG LEG HORIZONTAL
B.O.	BOTTOM OF	LLV	LONG LEG VERTICAL
BOS	BOTTOM OF STEEL	LONG	LONGITUDINAL
BOTT	BOTTOM	LP	LOW POINT
BRNG	BEARING	MAX	MAXIMUM
CJ	CONTROL / CONTRACTION JOINT	MECH	MECHANICAL
CL	CENTER LINE	MFR	MANUFACTURER
CLR	CLEAR	MIN	MINIMUM
CMU	CONCRETE MASONRY UNIT	MISC	MISCELLANEOUS
COL	COLUMN	N/A	NOT APPLICABLE
CONC	CONCRETE	NTS	NOT TO SCALE
CONN	CONNECTION	OC	ON CENTER
CONT	CONTINUOUS	OPNG	OPENING
CTR	CENTER	OPP	OPPOSITE
D	DEPTH	PEMB	PRE-ENGINEERED METAL BUILDING
DBL	DOUBLE	PJF	PREMOLDED JOINT FILLER
DIA	DIAMETER	PL	PLATE
DIM	DIMENSION	QTY	QUANTITY
DN	DOWN	RECT	RECTANGULAR
DWG	DRAWING	REINF	REINFORCEMENT
DWL	DOWEL	REQD	REQUIRED
EA	EACH	SCHED	SCHEDULE
EF	EACH FACE	SECT	SECTION
EJ	EXPANSION JOINT	SIM	SIMILAR
EL	ELEVATION	SOG	SLAB ON GRADE
EMBED	EMBEDMENT	SPEC	SPECIFICATION
EOD	EDGE OF DECK	STD	STANDARD
EOS	EDGE OF SLAB	STIF	STIFFENER
EQL SP	EQUALLY SPACED	STL	STEEL
EQUIP	EQUIPMENT	STRUCT	STRUCTURAL
EW	EACH WAY	T&B	TOP AND BOTTOM
EXIST	EXISTING	T.O.	TOP OF
EXT	EXTERIOR	TOC	TOP OF CONCRETE
FD	FLOOR DRAIN	TOF	TOP OF FOOTING
FDN	FOUNDATION	TOS	TOP OF STEEL
FF	FINISHED FLOOR	TYP	TYPICAL
FL	FLOOR	UNO	UNLESS NOTED OTHERWISE
FT	FEET	VERT	VERTICAL
FTNG	FOOTING	W/	WITH
GALV	GALVANIZED	W/O	WITHOUT
GB	GRADE BEAM	WP	WORK POINT
HDRL	HANDRAIL	WT	WEIGHT
HORIZ	HORIZONTAL	WWF	WELDED WIRE FABRIC
HP	HIGH POINT		
HSS	HOLLOW STRUCTURAL SECTION		

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ISSUE DATES
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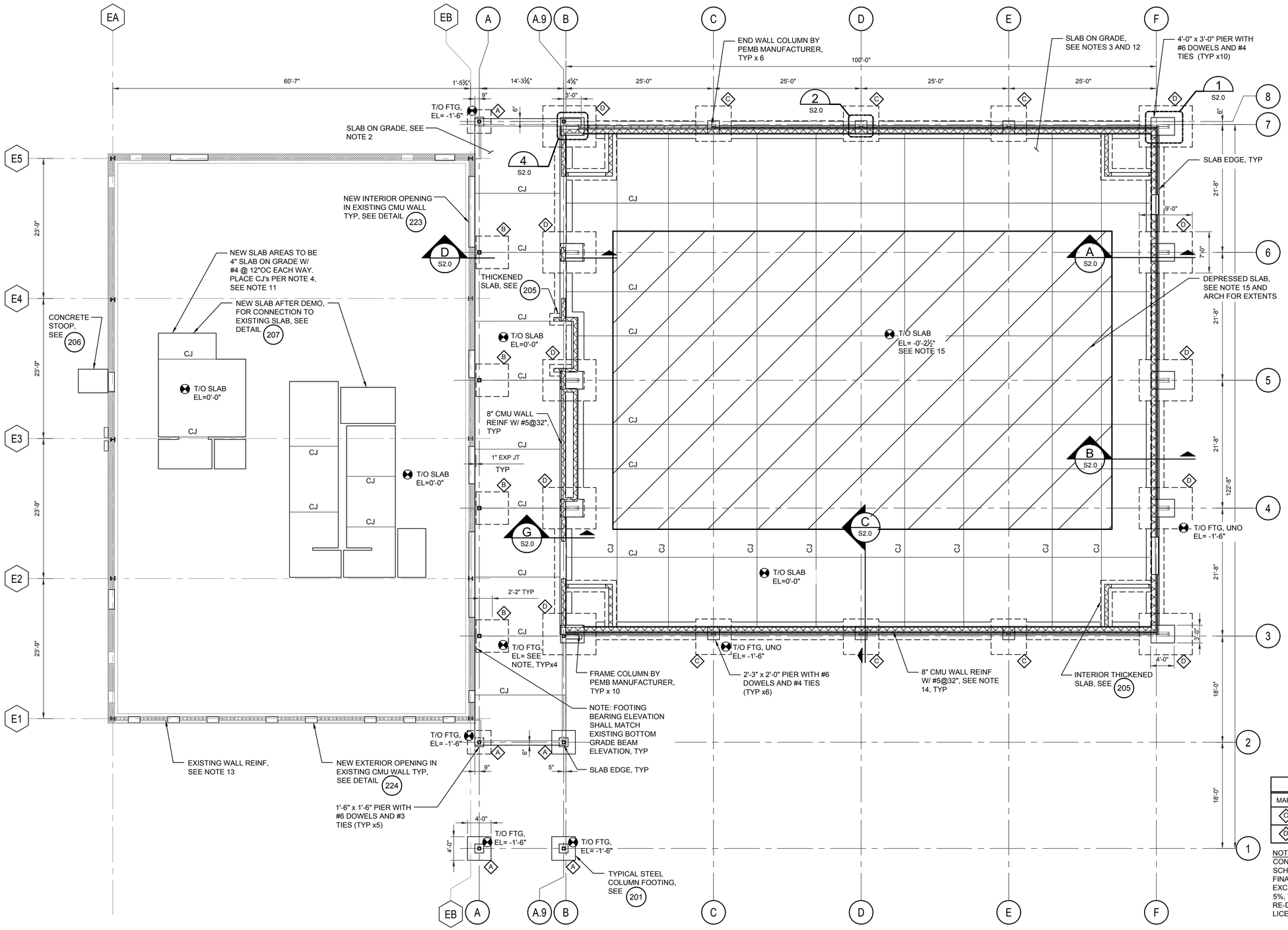
S0.1
GENERAL NOTES 2



NORTH

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

NOTES:

1. FOR GENERAL STRUCTURAL NOTES, ABBREVIATIONS AND SYMBOLS LEGEND, SEE SHEETS S0.0 AND S0.1.
2. 4" CONCRETE SLAB ON GRADE REINFORCED W/ 6x6-W2.9xW2.9 WWR. REINFORCING SHALL BE LOCATED 1½" BELOW TOP OF SLAB. SLAB SHALL BE PLACED ON 10 MIL-VAPOR RETARDER OVER 6" LAYER OF CRUSHED AGGREGATE, UNLESS NOTED OTHERWISE.
3. CONCRETE SLAB ON GRADE, THICKNESS VARIES. REINFORCE WITH #4@12" OC EACH WAY. SEE SECTIONS ON S2.0.
4. CONTRACTION JOINTS (CJ) ARE SHOWN ON PLAN. FOR JOINT LOCATIONS, SEE ARCHITECTURAL DRAWINGS. UNLESS OTHERWISE SHOWN ON DRAWINGS, PLACE CONTROL JOINTS AT COLUMNS LINES AND AT INTERMEDIATE LINES SUCH THAT AREA OF EACH PANEL DOES NOT EXCEED 225 SQUARE FEET. CONTRACTOR TO SUBMIT PLACING PLANS SHOWING LOCATION OF SLAB CONTROL JOINTS AND CONSTRUCTION JOINTS. PLANS ARE SUBJECT TO PRIOR APPROVAL. CONSTRUCTION JOINTS SHALL HAVE DIAMOND DOWELS PLACED AT THE CENTER OF SLAB SPACED AT 18" OC, SEE DETAIL 203.
5. ALL SLAB PENETRATIONS ARE NOT SHOWN. CONTRACTOR SHALL COORDINATE ALL SLAB PENETRATION LOCATIONS WITH MECHANICAL AND PLUMBING DRAWINGS.
6. SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS LOCATING ALL WALLS AND WALL OPENINGS.
7. ALL UNPAINTED OR UNCOATED EXTERIOR STEEL MATERIAL SHALL BE GALVANIZED AND CONNECTED WITH A316 STAINLESS STEEL BOLTS.
8. ALL FRAME AND END WALL COLUMN LOCATIONS SHALL BE COORDINATED WITH THE PEMB (PRE-ENGINEERED METAL BUILDING) MANUFACTURER AND ARCHITECTURAL DRAWINGS.
9. AT THE INTERSECTION OF CMU WALL AND CONCRETE SLAB OR CMU WALL AND CONCRETE WALL ABOVE FINISH FLOOR, USE ½" PJF TYPICAL UNO.
10. PER GEOTECHNICAL ENGINEER REPORT, CONTRACTOR SHALL UNDERCUT 30" BELOW FOUNDATION BEARING LEVEL IN FOOTING AREAS AND 30" BELOW SOIL SUBGRADE BENEATH PROPOSED FLOOR SLABS. UNDERCUT SHALL EXTEND AT LEAST 5 FT HORIZONTALLY BEYOND THE BUILDING PERIMETER. SEE GEOTECHNICAL REPORT FOR ADDITIONAL RECOMMENDATIONS TO PREPARE SUBGRADE FOR ITS INTENDED USES.
11. COORDINATE NEW SLAB EXTENT DIMENSIONS WITH PLUMBING AND ARCHITECTURAL DRAWINGS.
12. CONCRETE SLAB AROUND WOOD GYM FLOOR SHALL HAVE A FLOOR FLATNESS, Ff EQUAL TO 35 AND A FLOOR LEVELNESS, Fl OF 25.
13. EXISTING WALL REINFORCEMENT IN WEST WALL WAS LOCATED VIA WALL SCAN. NEW OPENINGS WITH REINFORCEMENT ON THE SIDE OF THE OPENING DO NOT REQUIRE ADDITIONAL REINFORCING. LOCATIONS INDICATED ARE APPROXIMATE AND SHOULD BE VERIFIED PRIOR TO PLACING OPENING REINFORCING.
14. PLACE CMU WALL CONTROL JOINTS AT EACH SLAB CONTROL JOINT AND ON THE SIDE OF EACH FRAME COLUMN.
15. COORDINATE THE DEPTH OF RECESS WITH WOOD FLOOR MANUFACTURER.

FOOTING LOAD SCHEDULE				
MARK	P (DOWN)	P (UP)	V (HORIZ)	MOMENT
C	12 K	0 K	7 K	0 FT-K
D	44 K	6 K	18 K	0 FT-K

NOTE:
CONTRACTOR SHALL VERIFY FOOTING REACTIONS NOTED IN SCHEDULE ABOVE WITH METAL BUILDING MANUFACTURER FINAL BUILDING REACTIONS. IF FINAL BUILDING REACTIONS EXCEED REACTIONS NOTED IN SCHEDULE BY MORE THAN 5%, THE CONTRACTOR SHALL BE RESPONSIBLE FOR RE-DESIGN OF FOUNDATIONS BY A QUALIFIED ENGINEER LICENSED IN THE STATE OF TENNESSEE.

FOUNDATION SCHEDULE					
MARK	SIZE	THK	FTNG REINFORCEMENT	PIER	PIER REINFORCEMENT
A	4'-0"x4'-0"	1'-0"	5-#6 EW T&B	1'-6" SQUARE	8-#6 DOWELS AND #3 @ 6"OC
B	5'-6"x5'-6"	1'-0"	6-#6 EW T&B	N/A	N/A
C	6'-0"x6'-0"	1'-6"	#6@12" OC, EW, T&B	2'-3" x 2'-0"	12-#6 DOWELS AND #4 @ 6"OC
D	9'-0"x7'-0"	1'-6"	#6@12" OC, EW, T&B	4'-0" x 3'-0"	24-#6 DOWELS AND #4 @ 6"OC

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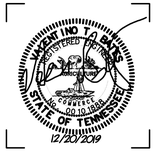

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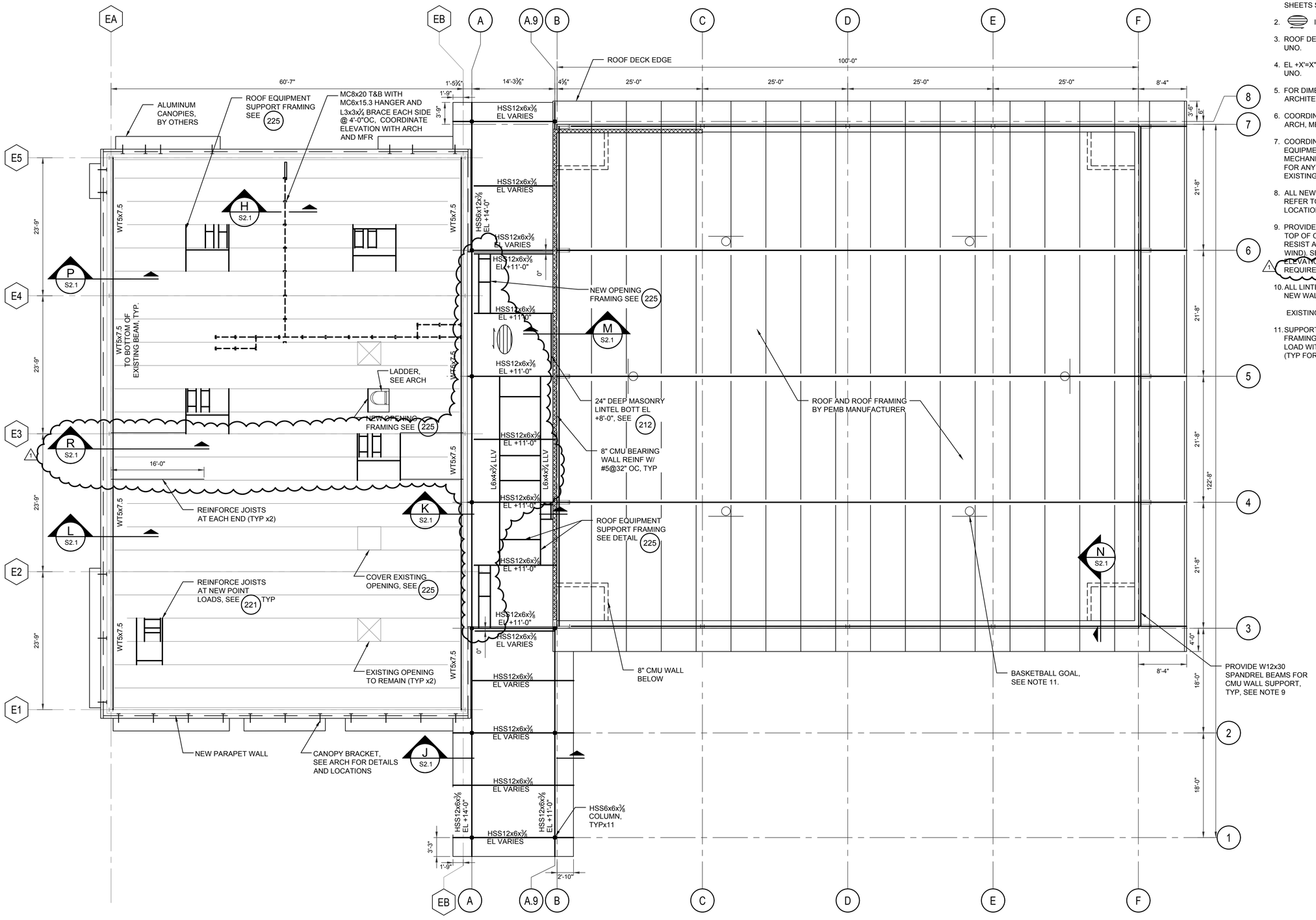
S1.0
FOUNDATION PLAN



NOTES

1. FOR GENERAL STRUCTURAL NOTES, ABBREVIATIONS AND SYMBOLS LEGEND, SEE SHEETS S0.0 AND S0.1.
2. INDICATES ROOF DECK SPAN.
3. ROOF DECK SHALL BE 3" DEEP, 18 GAGE DECKING UNO.
4. EL +X'=X" INDICATES ELEVATION TO TOP OF STEEL, UNO.
5. FOR DIMENSIONS LOCATING ALL WALLS, SEE ARCHITECTURAL DWGS.
6. COORDINATE ALL WALL AND SLAB OPENINGS WITH ARCH, MECH, AND PLUMBING DWGS.
7. COORDINATE WITH MECHANICAL DRAWINGS FOR EQUIPMENT LOCATIONS. COORDINATE WITH MECHANICAL AND EQUIPMENT MANUFACTURER FOR ANY OPENINGS THAT INTERFERE WITH EXISTING STEEL JOISTS.
8. ALL NEW INTERIOR WALLS MAY NOT BY SHOWN. REFER TO ARCHITECTURE FOR ALL WALL LOCATIONS.
9. PROVIDE W12x30 SPANDREL BEAMS TO SUPPORT TOP OF CMU WALL. SPANDREL BEAM DESIGNED TO RESIST A HORIZONTAL LOAD OF 350 PLF (DESIGN WIND). SEE ARCH DRAWINGS FOR TOP OF WALL ELEVATIONS. BRACE SPANDREL FLANGE AS REQUIRED. REFER TO DETAIL Q/S2.1.
10. ALL LINTELS MAY NOT BE SHOWN FOR LINTELS IN NEW WALLS SEE 212 AND FOR LINTELS IN EXISTING WALLS SEE 224 .
11. SUPPORT BASKETBALL GOALS FROM PEMB ROOF FRAMING. CONTRACTOR TO COORDINATE ACTUAL LOAD WITH PEMB AND GOAL MANUFACTURERS (TYP FOR 6 GOALS).

NORTH

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

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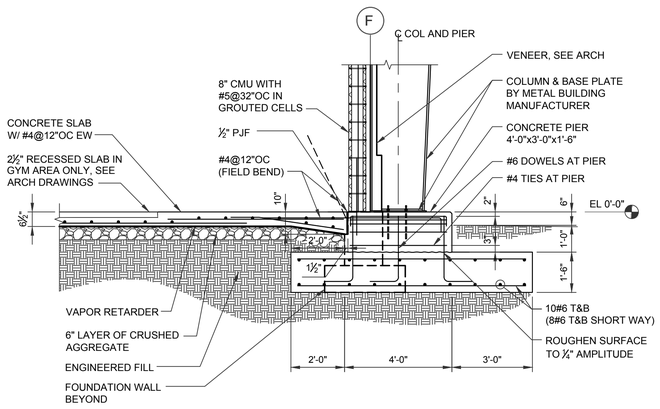
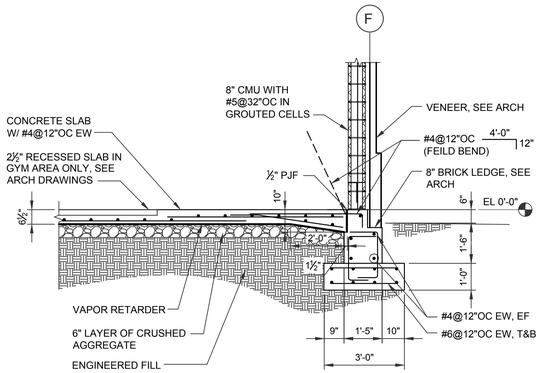
S1.1

ROOF FRAMING PLAN



SECTION A
SCALE: 3/8" = 1'-0" S1.0



SECTION B
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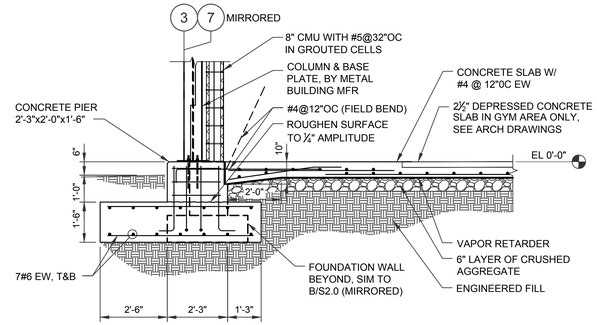

SECTION C
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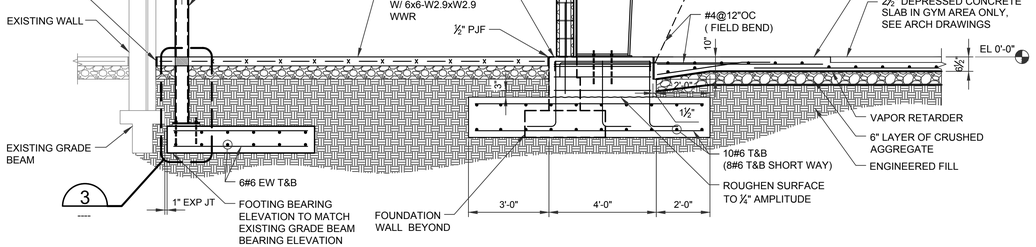

SECTION D
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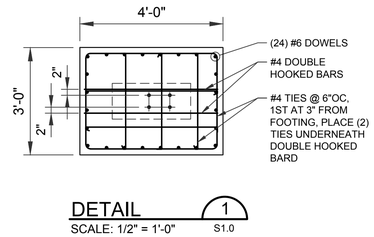

DETAIL 1
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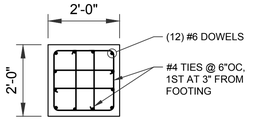

DETAIL 2
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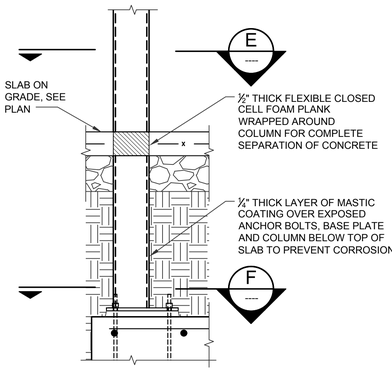

DETAIL 3
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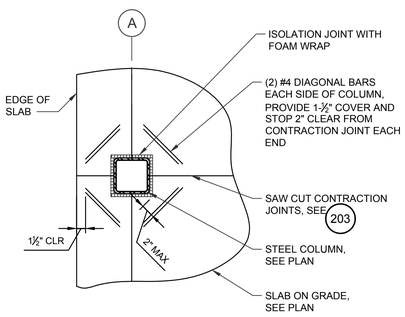

SECTION E
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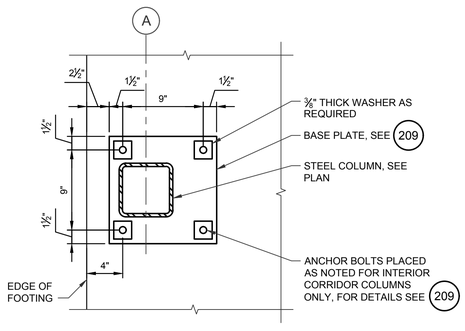

SECTION F
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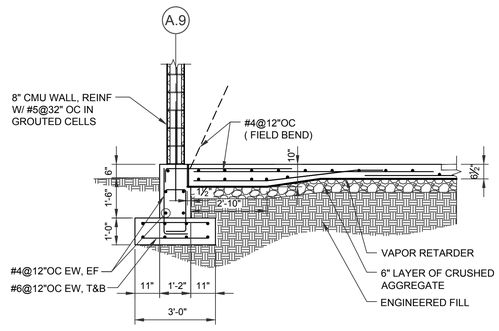

SECTION G
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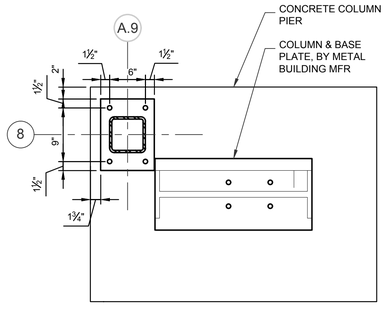

NOTE: DETAIL SIMILAR AT COLUMN LINES A.9 AND 3 (MIRRORED).

DETAIL 4
SCALE: 1" = 1'-0" S1.0

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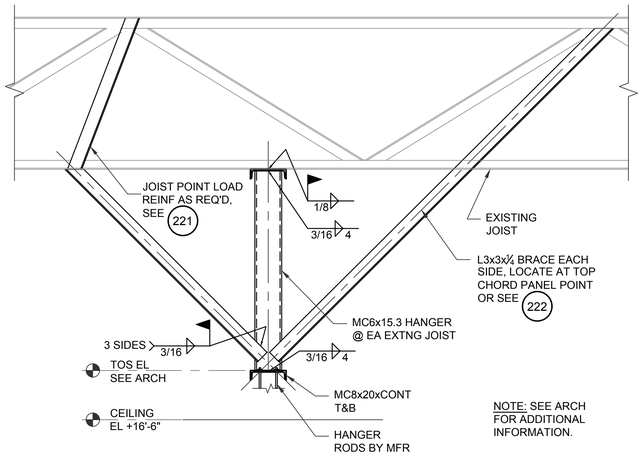
S2.0
SECTIONS 1



SECTION H
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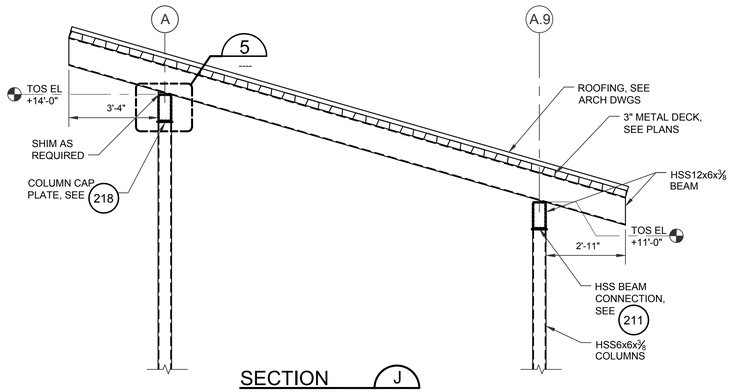

SECTION J
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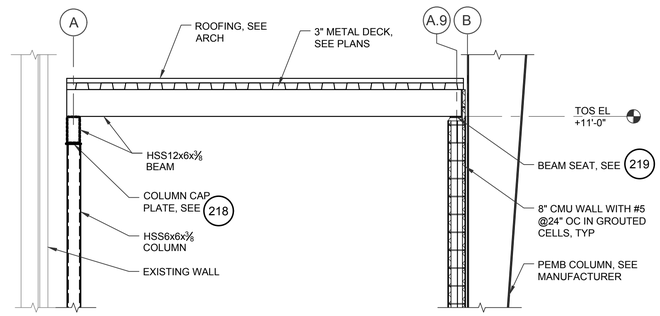

SECTION K
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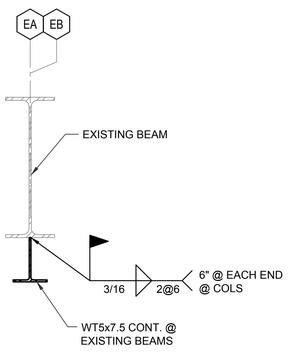

SECTION L
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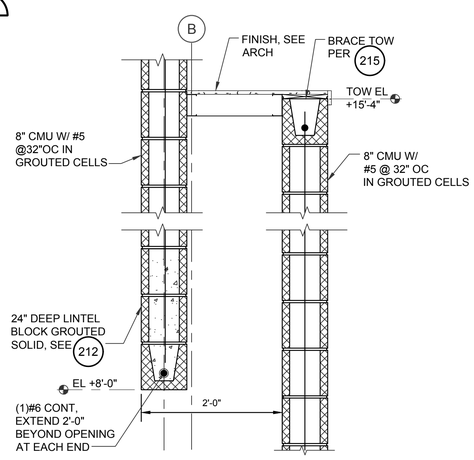

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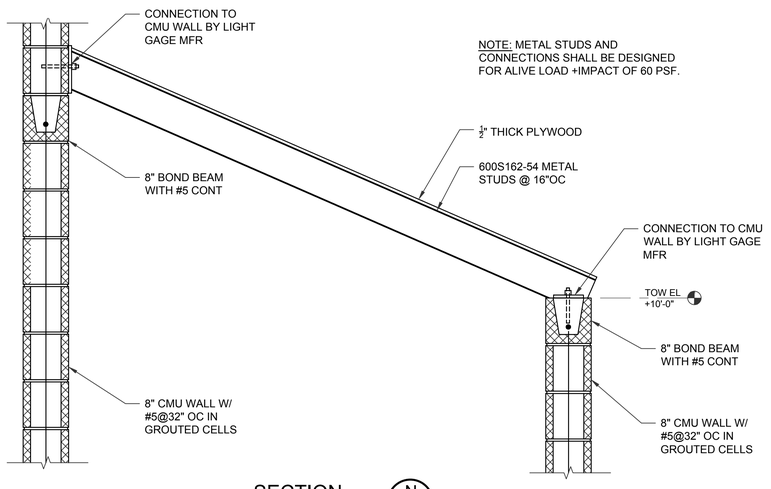

SECTION N
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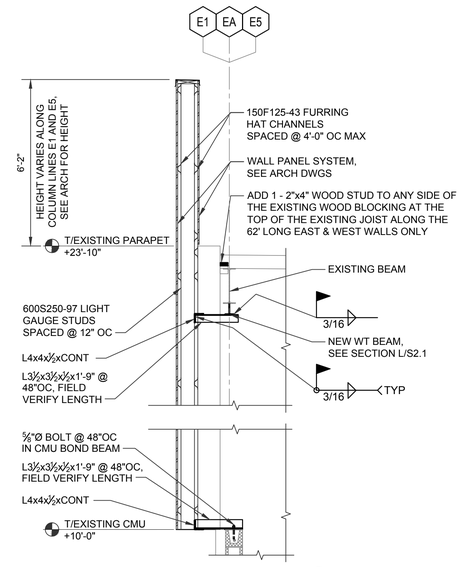

SECTION P
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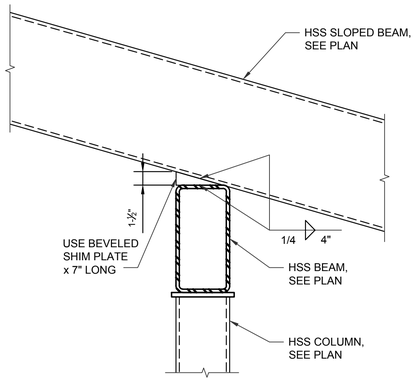
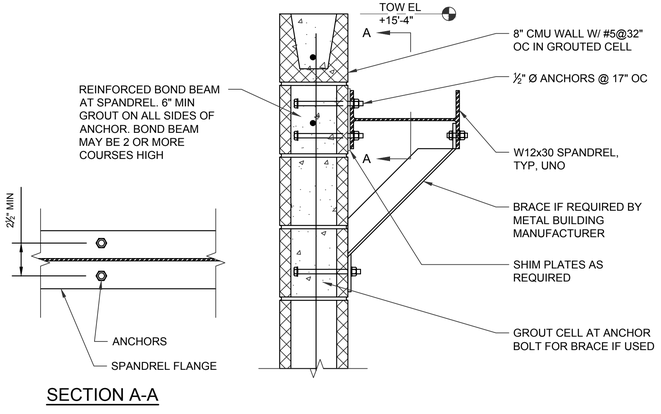
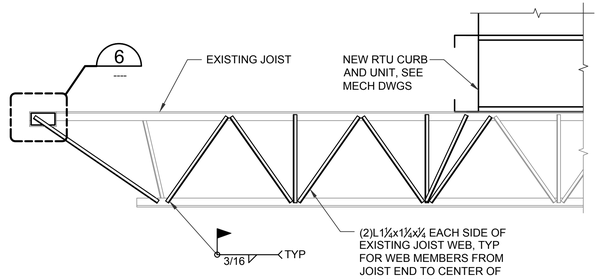


DETAIL 5
SCALE: 1-1/2"=1'-0" ----

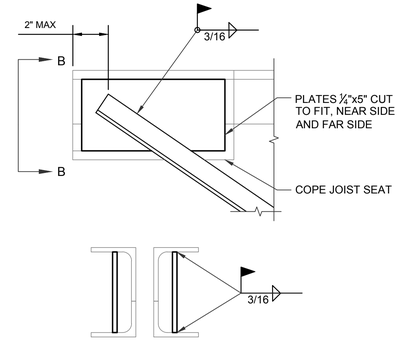


SECTION A-A

SECTION Q
SCALE: 1-1/2"=1'-0" S2.1



SECTION R
SCALE: 1-1/2"=1'-0" S1.1



SECTION B-B

DETAIL 6
SCALE: 3"=1'-0" ----

1 ENTIRE SHEET REISSUED AS PART OF THIS ADDENDUM

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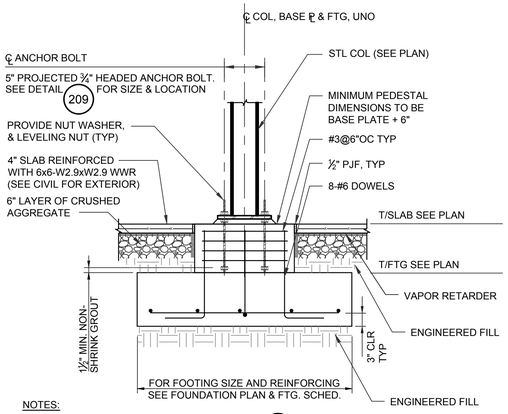
East Lake YFD Center Improvements

3610 Dodds Avenue, Chattanooga, TN 37402

ISSUE DATES
INITIAL ISSUE 12-20-19
1. ADD 04 01-09-20

JOB NO. 18-072 | D'WN APWD | CK'D DOBD

S2.1
SECTIONS 2

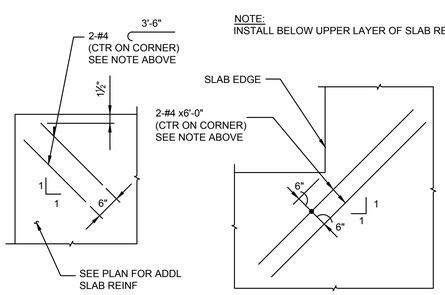


NOTES:

1. FOR BASE PLATE AND ANCHOR BOLTS, SEE 209.
2. SEE PLAN AND SCHEDULE FOR SIZE AND REINFORCING.

TYPICAL STEEL COLUMN FOOTING
NTS

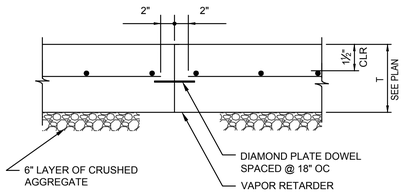
201



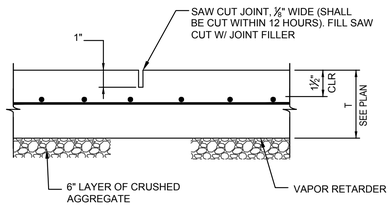
NOTE:
INSTALL BELOW UPPER LAYER OF SLAB REINF

TYPICAL SLAB CORNER REINFORCEMENT
NTS

202



TYPICAL SLAB HORIZONTAL CONSTRUCTION JOINT



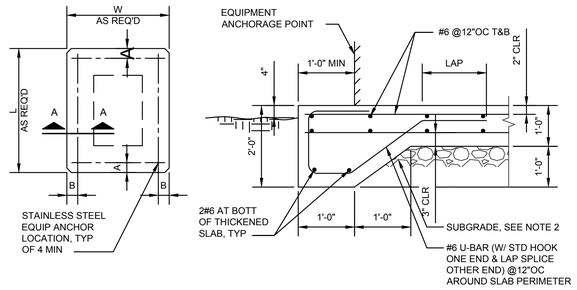
TYPICAL CONTRACTION/CONTROL JOINT

NOTES:

1. FOR SLAB THICKNESS AND REINFORCING, SEE PLANS.
2. CONSTRUCTION JOINTS OCCUR ONLY BETWEEN SEPARATE CONCRETE POURS.

CONSTRUCTION AND CONTRACTION JOINT DETAIL
NTS

203



PLAN

SECTION A-A

NOTES:
1. DIMENSIONS 'A' AND 'B' SHALL BE AS REQUIRED BY THE EQUIPMENT, BUT NOT LESS THAN 12".
2. SUBGRADE PREPARATION SHALL BE IN ACCORDANCE WITH GEOTECH REPORT.

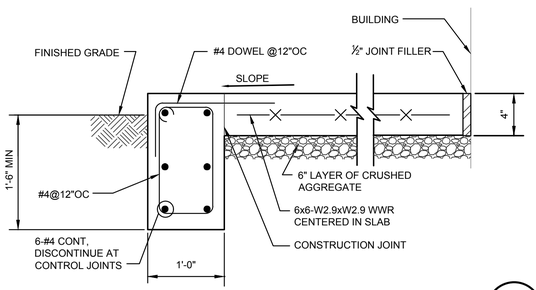
TYPICAL EXTERIOR EQUIPMENT BASE
NTS

204

NOTES:
1. PROVIDE THICKENED SLAB UNDER MASONRY WALLS WHERE INDICATED ON PLANS.
2. CMU WALL REINFORCING MAY BE CAST INTO THE SLAB WITH A STANDARD HOOK AT THE BOTTOM OF THE VERTICAL DOWEL OR DRILLED AND ADHESIVELY ANCHORED.

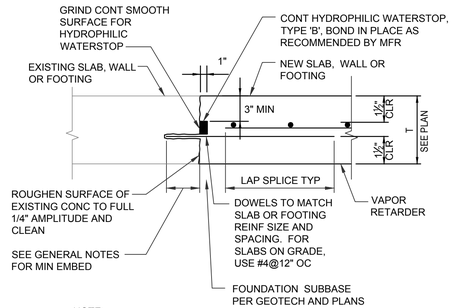
TYPICAL INTERIOR THICKENED SLAB
NTS

205



TYPICAL STOOP SLAB
NTS

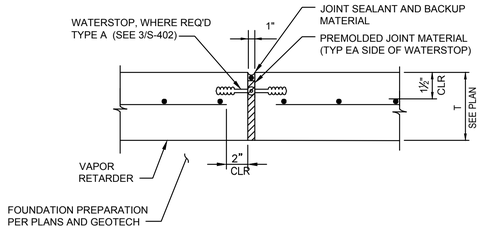
206



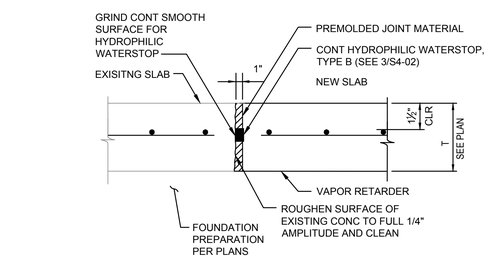
NOTE:
NO HYDROPHILIC WATERSTOP IS REQUIRED AT WALL AND FOOTING LOCATIONS.

NEW TO EXISTING CONCRETE
NTS

207



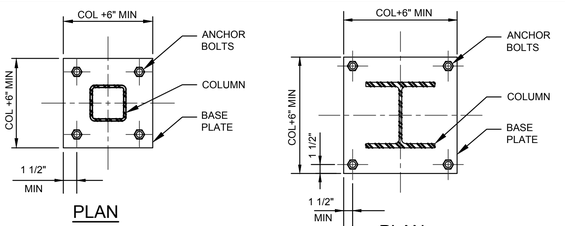
TYPICAL SLAB EXPANSION JOINT NEW CONCRETE



TYPICAL SLAB EXPANSION JOINT NEW CONCRETE TO EXISTING

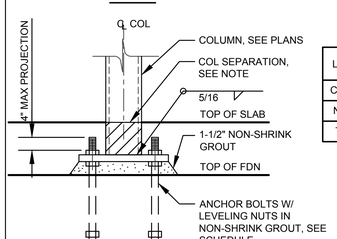
EXPANSION JOINT DETAIL
NTS

208



PLAN

PLAN



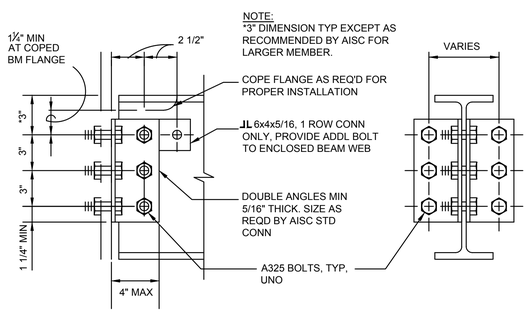
ELEVATION

LOCATION	BASE PLATE THICKNESS	ANCHOR BOLT DIA.	EMBEDMENT
CORRIDOR	¾"	¾"	8"
NEW GYM	1"	1"	12"
TYP UNO	¾"	¾"	8"

NOTE: COMPLETE COLUMN SEPARATION FROM CONCRETE SHALL BE MADE USING 1/2" THICK FLEXIBLE CLOSED CELL FOAM WRAP WRAPPED AROUND COLUMN. USE FOAM BLOCKING TO FILL VOID BETWEEN FLANGES AS REQUIRED..

TYPICAL COLUMN BASE
NTS

209



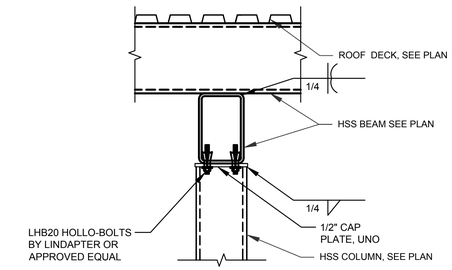
NOMINAL BEAM DEPTH, INCHES	ROWS OF BOLTS	BOLT DIA, INCHES	DOUBLE ANGLE, LENGTH, INCHES	COMMENTS
36	10	⅞"	2'-6"	ANGLE THK=3/8"
33	9	⅞"	2'-3"	ANGLE THK=3/8"
30	8	⅞"	2'-0"	ANGLE THK=3/8"
27	7	¾"	1'-8½"	ANGLE THK=5/16" MIN
24	6	¾"	1'-5½"	ANGLE THK=5/16" MIN
21	5	¾"	1'-2½"	ANGLE THK=5/16" MIN
16-18	4	¾"	1 1½"	ANGLE THK=5/16" MIN
12-15	3	¾"	8½"	ANGLE THK=5/16" MIN
8-10	2	¾"	5½"	ANGLE THK=5/16" MIN
6	1	¾"	3"	⊥L 6"x4"x5/16"
4	1	¾"	2½"	⊥L 6"x4"x5/16"

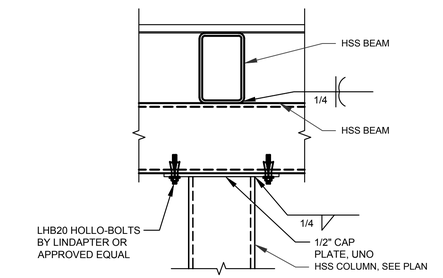
NOTES:

1. ALL FRAMING CONNECTIONS SHALL CONFORM TO SCHEDULE UNLESS DETAILED.
2. UNLESS OTHERWISE NOTED ON FRAMING PLANS. ADD 1-1/2" TO ANGLE LENGTH FOR STAGGERED BOLT CONNECTIONS.
3. UNO, ALL BOLTS SHALL BE BEARING TYPE CONNECTIONS WITH NO THREADS IN THE SHEAR PLANE. BOLTS SHALL BE SNUG TIGHT.

TYPICAL FRAMING CONNECTION
NTS

210





NOTE: DETAIL SIMILAR AT SLOPING BEAMS, SHIM AS REQUIRED.

TYPICAL CONTINUOUS BEAM TO COLUMN CAP
NTS

211

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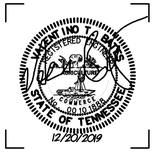
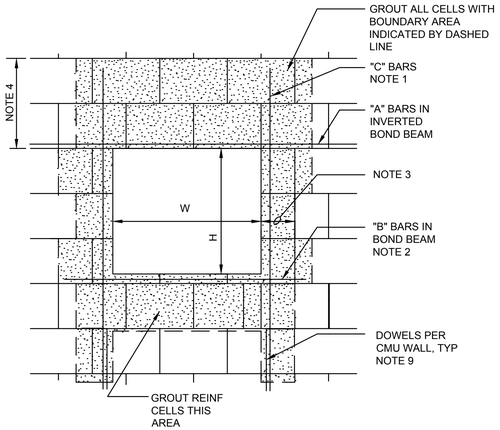


ISSUE DATES
INITIAL ISSUE 12-20-19
1. XXX XX-XX-XX

JOB NO. 18-072 | D'WN BDLR | CK'D APWD

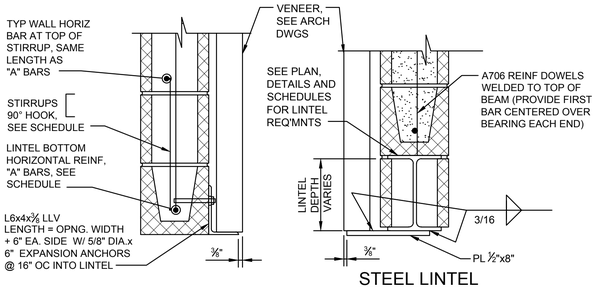
S3.0
DETAILS 1



CMU OPENING REINFORCEMENT SCHEDULE										
W	LINTEL DEPTH	STIRRUP SIZE/SPA	"A" BARS		"B" BARS		"C" BARS		# CELLS TO GROUT NOTE 3	
			8" CMU	12" CMU	8" CMU	12" CMU	8" CMU	12" CMU	8" CMU	12" CMU
≤2'-8"	8"	-	1-#5	2-#5	1-#5	2-#5	1-#5	2-#4	ONE	ONE
>2'-8" ≤4'-0"	16"	-	1-#6	2-#5	1-#6	2-#5	1-#5	2-#4	ONE	ONE
>4'-0" ≤6'-0"	24"	#3@8"	1-#7	2-#6	1-#7	2-#6	2-#5	4-#5	TWO	TWO
>6'-0" ≤10'-0"	8"	W8x24								
>10'-0" ≤18'-0"	16"	W16x36								

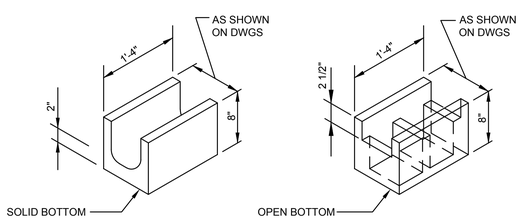
NOTES:

1. EXTEND "C" BARS 2'-0" MINIMUM BEYOND TOP AND BOTTOM OF OPENING EXCEPT THAT WHEN "H" OR "W" EXCEEDS 2'-0". "C" BARS SHALL EXTEND FULL HEIGHT. "C" BARS SHALL BE ONE CENTERED PER CELL IN 8" WALLS AND TWO (1 EF) PER CELL IN 12" WALLS.
2. "A" AND "B" BARS SHALL EXTEND 2'-0" EACH SIDE OF THE OPENING. GROUT TO END OF BARS.
3. SEE SCHEDULE FOR NUMBER OF CELLS TO GROUT ON EACH SIDE OF OPENING.
4. GROUT ALL CELLS OVER OPENING TO W/2 OR 2'-0" WHICH EVER IS GREATER UNLESS TOP OF WALL IS REACHED FIRST.
5. IF OPENING DOES NOT FALL EXACTLY ON A CELL, GROUT PARTIAL BLOCK IN ADDITION TO CELLS REQUIRED ABOVE.
6. JOINT REINFORCING SHALL BE @ 16" OC. SEE SPECIFICATION FOR TYPE.
7. MINIMUM LINTEL BEARING 8" EACH SIDE OF OPENING.
8. NOTCH BEAM FLANGES AS NEEDED TO PASS VERTICAL REINFORCING BARS AND GROUT BEAM BEARING AREA SOLID.
9. DOWELS INTO EXISTING CONCRETE SHALL BE DRILLED AND ANCHORED INTO FOUNDATION.



MASONRY LINTEL

STEEL LINTEL STRUCTURAL WALL

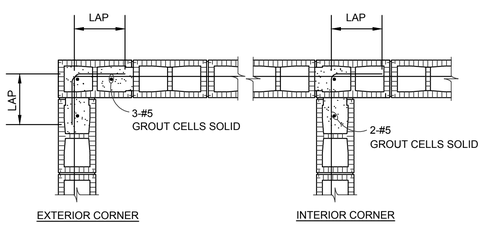


TYP. LINTEL BLOCK

TYP. BOND BEAM BLOCK

TYPICAL CMU OPENING REINFORCING
NTS NEW CMU WALL

212

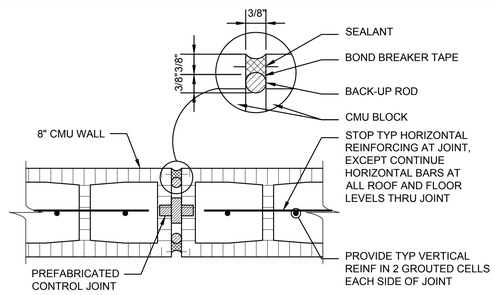


SINGLE MAT

NOTE:
PROVIDE MASONRY WALL REINFORCING TENSION LAP SPLICE FOR ALL BOND BEAM REINFORCING.

TYPICAL CMU WALL CORNERS
NTS

213

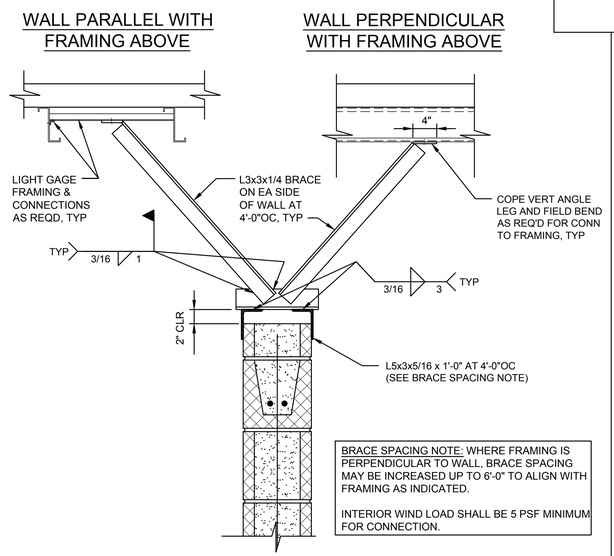


NOTE: CMU LINTEL HORIZONTAL REINFORCING AND HORIZONTAL BOND BEAM REINFORCING DIRECTLY ABOVE STEEL LINTELS SHALL EXTEND BEYOND THE EDGES OF OPENINGS AS REQUIRED AND SHALL BE DEBONDED BEYOND THE CONTROL JOINT.

MASONRY WALL REINFORCING LAP SPLICE TABLE	
BAR SIZE	LAP LENGTH
#3	18"
#4	24"
#5	30"
#6	36"
#7	42"
#8	48"

TYPICAL CMU CONTROL JOINT
NTS

214

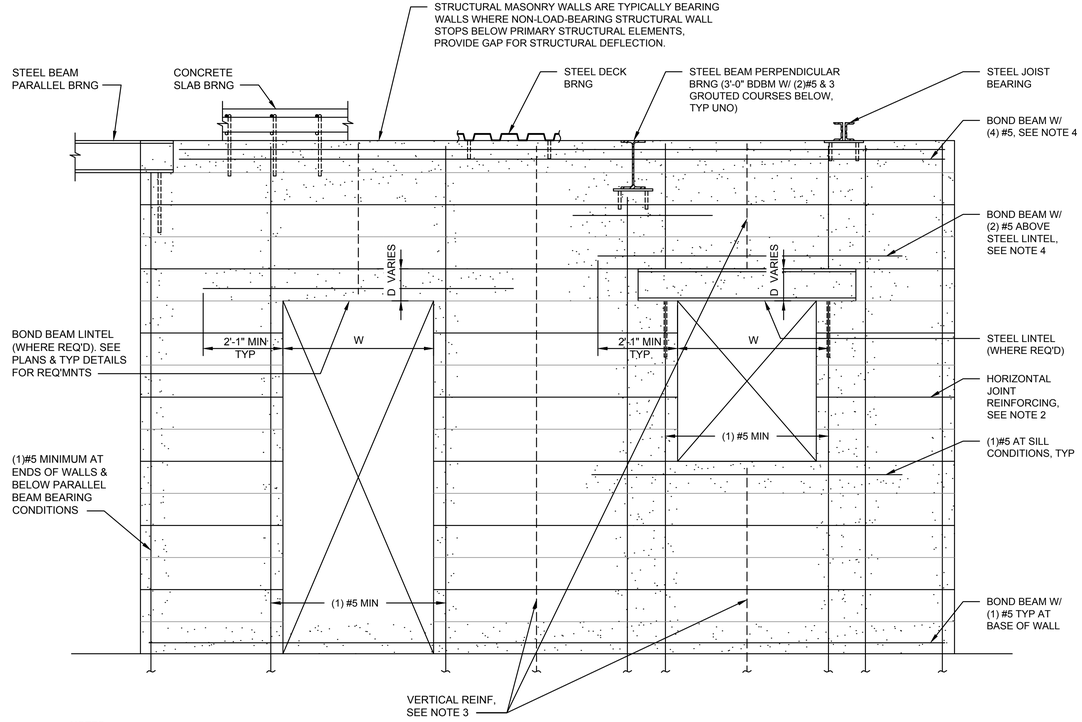


BRACE SPACING NOTE: WHERE FRAMING IS PERPENDICULAR TO WALL, BRACE SPACING MAY BE INCREASED UP TO 6'-0" TO ALIGN WITH FRAMING AS INDICATED.

INTERIOR WIND LOAD SHALL BE 5 PSF MINIMUM FOR CONNECTION.

TYPICAL PARTIAL HEIGHT INTERIOR PARTITION WALL TOP SUPPORT
NTS

215

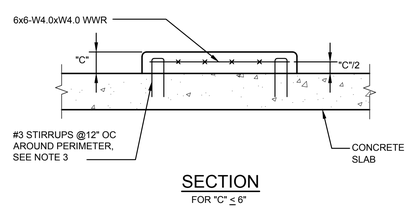


NOTES:

1. DETAIL APPLIES TO STRUCTURAL CMU WALLS WHICH ARE EXTERIOR (SUBJECT TO WIND PRESSURE), LOAD BEARING, OR PART OF THE LATERAL RESISTING SYSTEM. SEE PLANS FOR SPECIAL CONDITIONS. VARIOUS TYPICAL BEARING CONDITIONS ARE SHOWN AT THE TOP OF WALL. SEE ALL PROJECT TYPICAL AND SPECIFIC DETAILS FOR CONNECTION REQUIREMENTS OF FRAMING AND DECK ELEMENTS TO MASONRY WALLS.
2. HORIZONTAL JOINT REINFORCING: PROVIDE 3/16" DIA GALVANIZED LADDER-TYPE HORIZONTAL JOINT REINFORCEMENT AT 16" OC, UNO. LAP SPLICE HORIZONTAL JOINT REINFORCING 75 DIAMETERS OF SIDE RODS OR 14 INCHES MINIMUM, UNO. PROVIDE AT TOP & BOTTOM OF ALL OPENINGS AND EXTEND AT LEAST 24" BEYOND OPENING, TYPICAL.
3. VERTICAL REINFORCING: PROVIDE VERTICAL REINFORCING AS NOTED ON PLAN AND AS INDICATED IN TYPICAL STRUCTURAL CMU WALL DETAIL, AND NOT LESS THAN #5 @ 32"OC. MINIMUM REINFORCING NOTED SHALL BE INCREASED WHERE REQUIRED BY TYPICAL SHEAR WALL REINFORCING DETAILS OR OTHER DETAIL REQUIREMENTS. LAP SPLICE ALL REINFORCING PER MASONRY WALL REINFORCING LAP SPLICE TABLE. VERTICAL REINFORCING DOWELS SHALL BE CAST INTO THE FOUNDATION AND DETAILED TO LAP SPLICE WITH THE FOUNDATION VERTICAL REINFORCING OR DEVELOPED WITH A STANDARD HOOK, UNO.
4. BOND BEAMS: PROVIDE HORIZONTAL BOND BEAMS WITH 4-#5 CONTINUOUS AT TOPS OF WALLS AND AT ELEVATIONS OF FLOOR & ROOF FRAMING BEARING AND DECK CONNECTIONS. PROVIDE HORIZONTAL BOND BEAMS WITH 2-#5 CONTINUOUS AT ELEVATIONS OF FLOOR AND ROOF DIAPHRAGM CONNECTIONS, MISC STRUCTURAL ATTACHMENT, MISC STEEL ANCHORAGE, OR OTHER COMPONENT OR EQUIPMENT CONNECTIONS, UNO. COORDINATE AS REQUIRED WITH OTHER STRUCTURAL DETAILS AND ARCHITECTURAL & MEP DRAWINGS. BOND BEAMS SHALL BE CONTINUOUS THROUGH CONTROL JOINTS AT TOPS OF WALLS AND AT FLOOR AND ROOF BEARING AND DECK CONNECTION COURSES.

TYPICAL STRUCTURAL CMU WALL
NTS

216



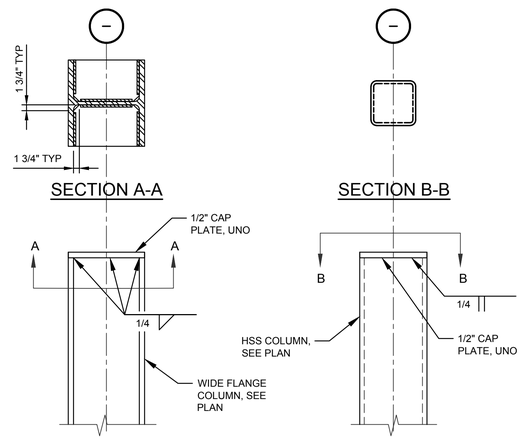
SECTION
FOR "C" ≤ 6"

NOTES:

1. EQUIPMENT BASE SHALL BE INSTALLED LEVEL.
2. "C" SHALL BE AS REQUIRED TO SET THE EQUIPMENT AT THE REQUIRED ELEVATION BUT SHALL NOT BE LESS THAN 4".
3. STIRRUPS CAN BE EITHER CAST-IN-PLACE OR EPOXY POST-INSTALLED.

TYPICAL INTERIOR EQUIPMENT BASE
NTS

217



NOTE: PROVIDE CAP PLATES AT TOP OF ALL HSS COLUMNS, AT TOPS OF WIDE FLANGE COLUMNS WHERE SUPPORTED BEAMS ARE FRAMED TO THE COLUMN WEB USING EXTENDED CONNECTIONS AND WHERE INDICATED ON DETAILS.

TYPICAL COLUMN CAP PLATE DETAILS
NTS

218

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East Lake YFD Center Improvements

3610 Dodds Avenue, Chattanooga, TN 37402

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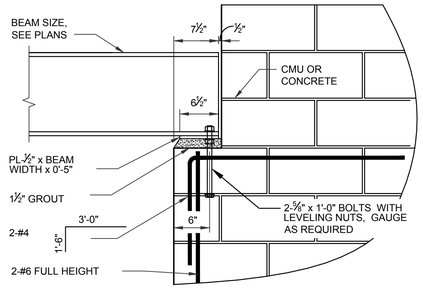
REGISTERED ENGINEER
AGRICULTURAL
STATE OF TENNESSEE
12/20/2019

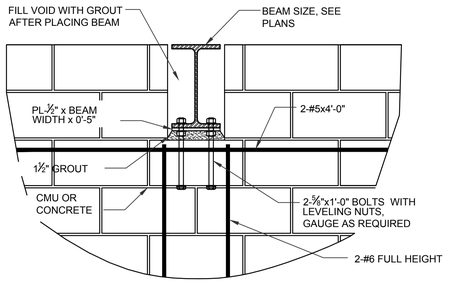
ISSUE DATES
INITIAL ISSUE 12-20-19
1. XXX XX-XX-XX

JOB NO. 18-072 | D'WN BDLR | CK'D APWD

S3.1
DETAILS 2



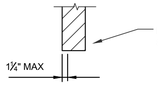
PARALLEL TO WALL



PERPENDICULAR TO WALL

BEAM SEAT
NTS

219

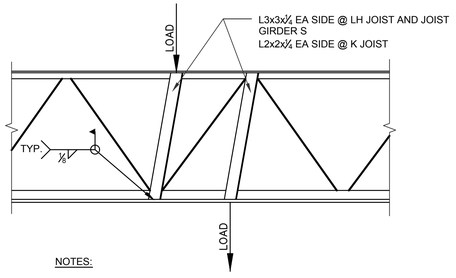


NOTE:
GALVANIZE OR EPOXY COAT EXPOSED LINTELS.

BRICK LOOSE LINTEL SCHEDULE		COMMENTS
SPAN	ANGLE SIZE	
UP TO 5'-6"	L4x4x¼	4" MIN BEARING EACH END
5'-6" TO 10'-0"	L7x4x⅜ LLV	8" MIN BEARING EACH END

LOOSE LINTEL SCHEDULE
NTS

220

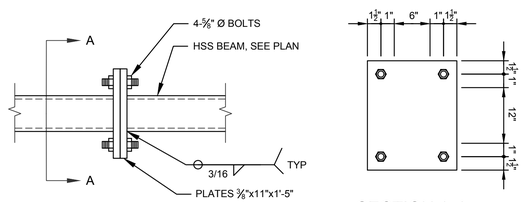


NOTES:

1. FOR LOADS AT LOCATIONS OTHER THAN PANEL POINTS.
2. WHERE DISTANCE FROM PANEL POINT DOES NOT EXCEED 6" FOR LH JOIST/JOIST GIRDER OR 3" FOR K JOIST, STRUT IS NOT REQUIRED.

TYPICAL JOIST/JOIST GIRDER CHORD SUPPORT
NTS

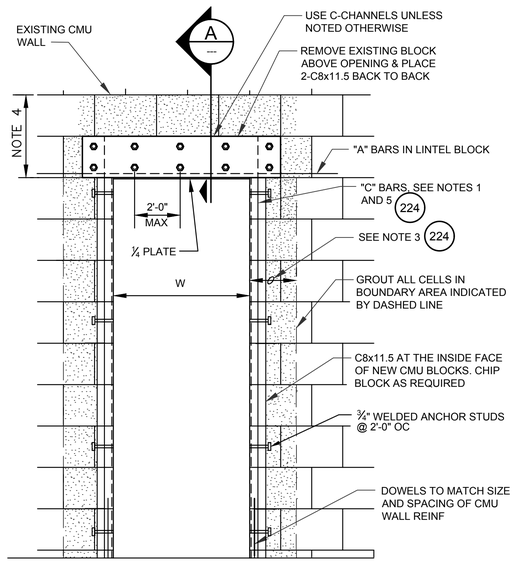
221

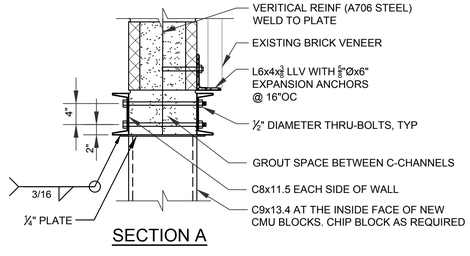


SECTION A-A

BEAM SPLICE
NTS

222

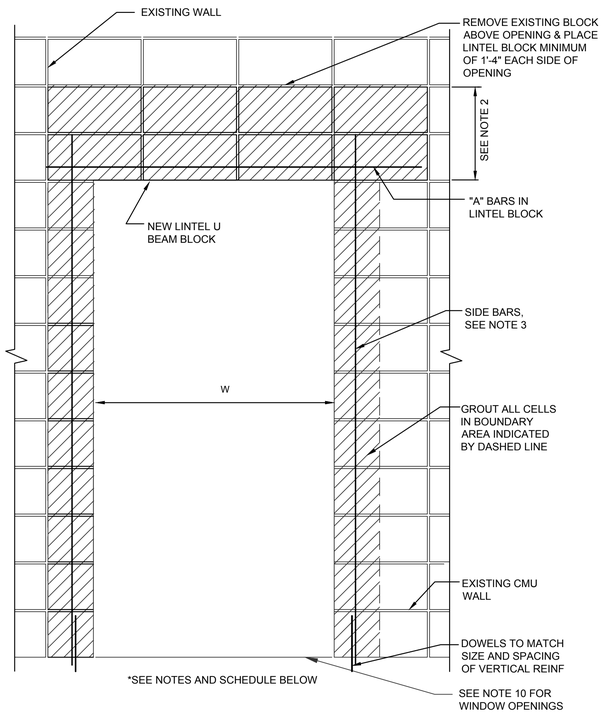




SECTION A

NEW OPENING IN EXISTING INTERIOR WALL
NTS

223

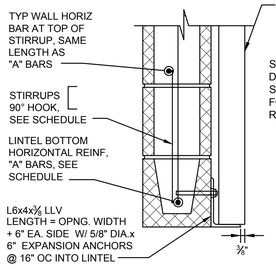


CMU OPENING REINFORCEMENT SCHEDULE

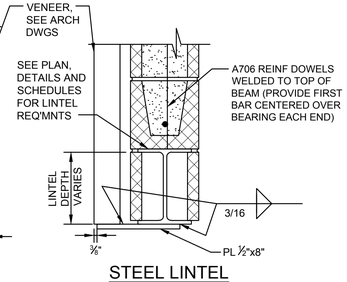
W	LINTEL DEPTH	STIRRUP SIZE/SPA	"A" BARS		"B" BARS		"C" BARS		# CELLS TO GROUT NOTE 3	
			8" CMU	12" CMU	8" CMU	12" CMU	8" CMU	12" CMU	8" CMU	12" CMU
≤2'-8"	8"	-	1-#5	2-#5	1-#5	2-#5	1-#5	2-#4	ONE	ONE
>2'-8" ≤4'-0"	16"	-	1-#6	2-#5	1-#6	2-#5	1-#5	2-#4	ONE	ONE
>4'-0" ≤6'-0"	24"	#3@8"	1-#7	2-#6	1-#7	2-#6	2-#5	4-#5	TWO	TWO
>6'-0" ≤10'-0"	8"	W8x24								
>10'-0" ≤18'-0"	16"	W16x36								

NOTES:

1. EXTEND "C" BARS 2'-0" MINIMUM BEYOND TOP AND BOTTOM OF OPENING EXCEPT THAT WHEN "H" OR "W" EXCEEDS 2'-0". "C" BARS SHALL EXTEND FULL HEIGHT. "C" BARS SHALL BE ONE CENTERED PER CELL IN 8" WALLS AND TWO (1 EF) PER CELL IN 12" WALLS.
2. "A" AND "B" BARS SHALL EXTEND 2'-0" EACH SIDE OF THE OPENING. GROUT TO END OF BARS.
3. SEE SCHEDULE FOR NUMBER OF CELLS TO GROUT ON EACH SIDE OF OPENING.
4. GROUT ALL CELLS OVER OPENING TO W/2 OR 2'-0" WHICH EVER IS GREATER UNLESS TOP OF WALL IS REACHED FIRST.
5. IF OPENING DOES NOT FALL EXACTLY ON A CELL, GROUT PARTIAL BLOCK IN ADDITION TO CELLS REQUIRED ABOVE.
6. JOINT REINFORCING SHALL BE @ 16" OC. SEE SPECIFICATION FOR TYPE.
7. MINIMUM LINTEL BEARING 8" EACH SIDE OF OPENING.
8. NOTCH BEAM FLANGES AS NEEDED TO PASS VERTICAL REINFORCING BARS AND GROUT BEAM BEARING AREA SOLID.
9. DOWELS INTO EXISTING CONCRETE SHALL BE DRILLED AND ANCHORED INTO FOUNDATION.
10. FOR WINDOWS IN EXISTING WALL SEE DETAIL 212 FOR "B" BARS.



MASONRY LINTEL



STEEL LINTEL
STRUCTURAL WALL

NEW OPENING IN EXISTING EXTERIOR WALL
NTS

224

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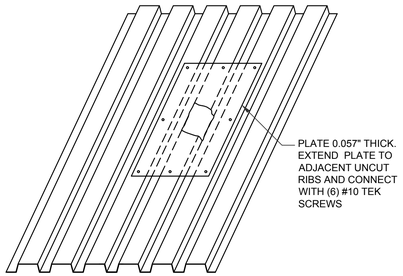
East Lake YFD Center Improvements

3610 Dodds Avenue, Chattanooga, TN 37402

ISSUE DATES
INITIAL ISSUE 12-20-19
1. XXX XX-XX-XX

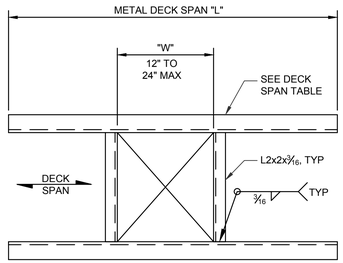
JOB NO. 18-072 | D'WN BDLR | CK'D APWD

S3.2
DETAILS 3



ISOMETRIC

OPENINGS 6" TO 12" DIAMTER

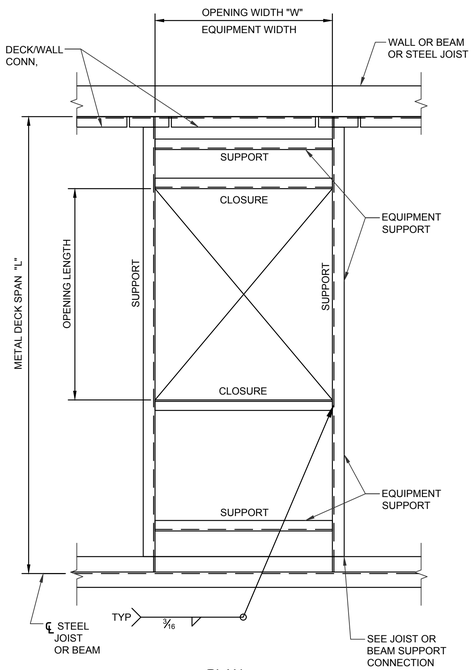


PLAN

OPENINGS 1'-0" TO 2'-0"

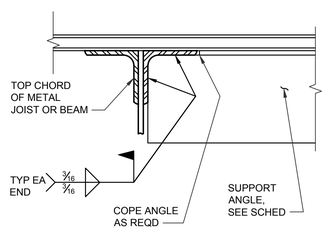
OPENING FRAMING	
OPENING	CLOSURE
1'-0" < W ≤ 2'-0"	L2x2x3/16
2'-0" < W ≤ 4'-0"	L3x3x1/4
4'-0" < W ≤ 6'-0"	L4x3x1/4 (LLV)
6'-0" < W	NA

DECK SPAN/EQUIPMENT SUPPORT	
SPAN	ANGLE SIZE
L ≤ 4'-0"	L3x3x1/4
4'-0" < L ≤ 6'-0"	L4x3x3/8 (LLV)
6'-0" < L ≤ 8'-0"	L5x3x3/8 (LLV)
8'-0" < L ≤ 10'-0"	L6x4x3/8 (LLV)
HVAC UNIT SUPPORT	L6x4x3/8 (LLV)



PLAN

OPENINGS 2'-1" TO 6'-0"



JOIST OR BEAM SUPPORT

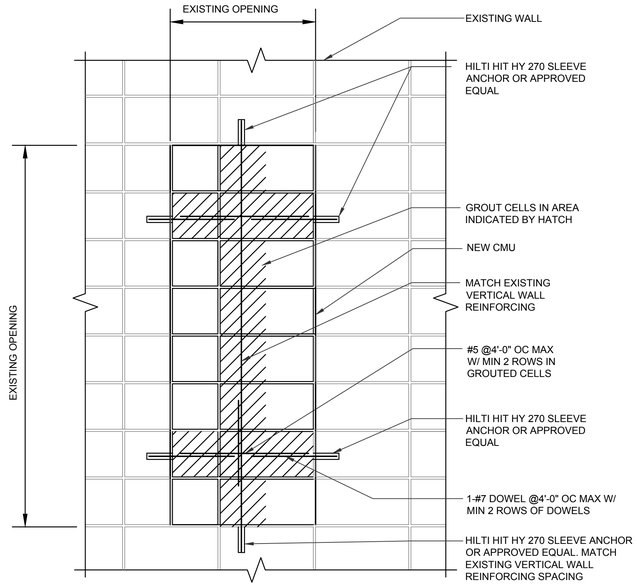
NOTES:

1. ATTACH METAL DECKING TO ALL SUPPORTS PERPENDICULAR TO DECKING SPAN WITH EITHER POWDER ACTUATED FASTENERS OR ⅝" PUDDLE WELDS AT EACH VALLEY OF DECKING. ATTACH METAL DECKING TO SUPPORTS PARALLEL TO SPAN @ 6" ON CENTER. WHERE VALLEY OF DECKING DOES NOT FALL AT SUPPORTS PARALLEL TO DECK SPAN, PROVIDE FILLER PIECES FOR EQUAL ATTACHMENTS.
2. EQUIPMENT TO BE SUPPORTED BY FOUR SUPPORTS SELECTED FROM SUPPORT TABLE. NO SUPPORTS SHALL SPAN LONGER THAN 7'-6" IN EITHER DIRECTION. WHEN SUPPORTS EXCEED 7'-6" SPAN IN LONG DIRECTION PLACE PERPENDICULAR SUPPORT AS NEEDED.

ROOF DECK OPENING FRAMING AND EQUIPMENT SUPPORT

NTS

225



INFILL CMU OPENING AT EXISTING WALL

NTS

226

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S3.3

DETAILS 4

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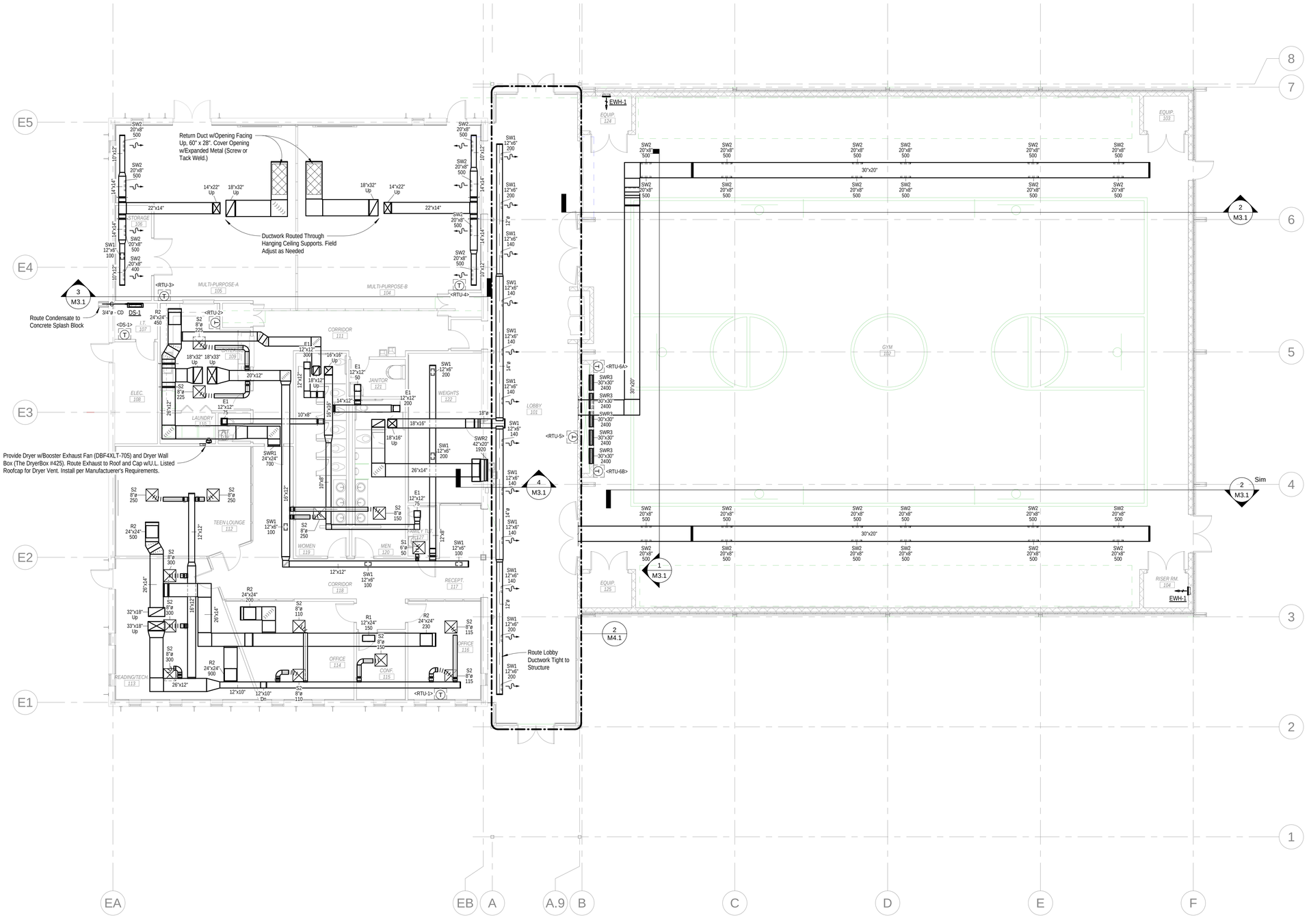

1 1ST FLOOR PLAN - MECHANICAL

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

March Adams & Associates Consulting Engineers
310 Dodds Ave.
P.O. Box 3689
Chattanooga, Tennessee 37404
PH: (423)698-6675
MAA #: 19211

JEFFREY WESLEY CRAWFORD — REGISTERED — AGRICULTURE — 110599 — STATE OF TENNESSEE — 12/20/19

ISSUE DATES
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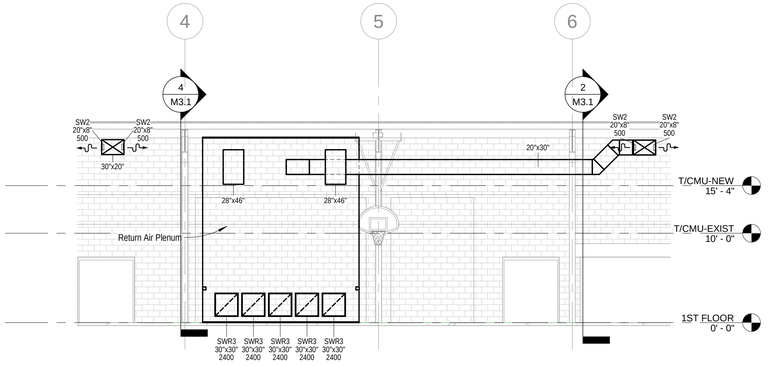
18-072	BRF/HSW	CJW

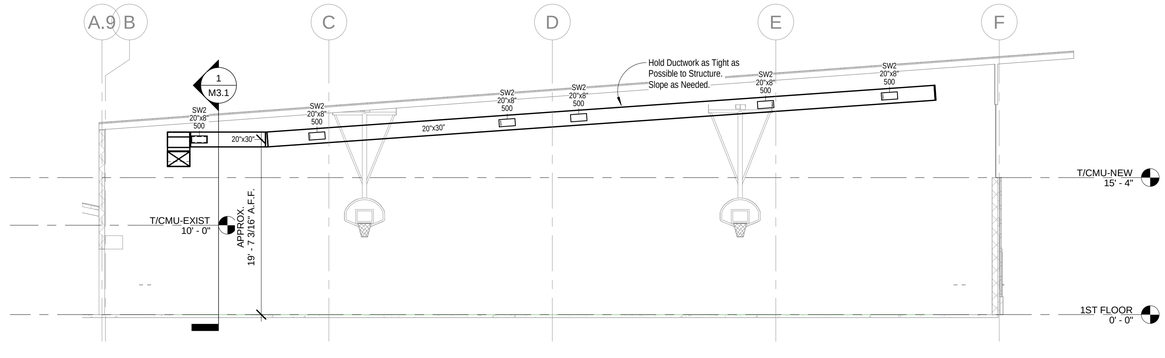
M1.1

MECHANICAL FLOOR PLAN



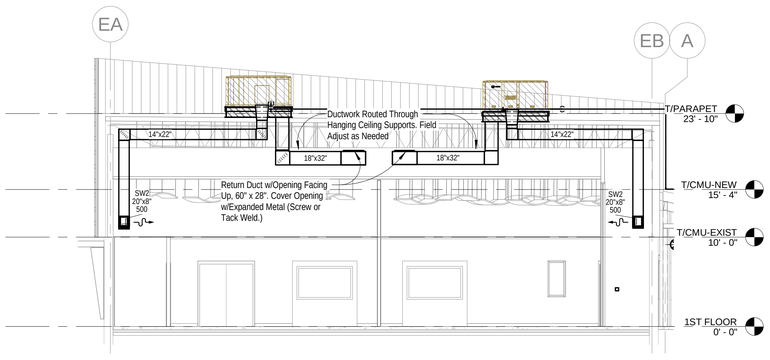
1 MECHANICAL SECTION - GYM RETURN GRILLES

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



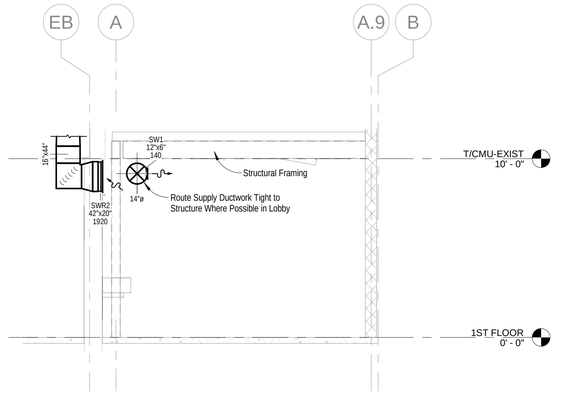
2 MECHANICAL SECTION - GYM DUCTWORK

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



3 MECHANICAL SECTION - MULTIPURPOSE

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



4 MECHANICAL SECTION - LOBBY DUCTWORK

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

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12/20/19

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MA&A March Adams & Associates Consulting Engineers
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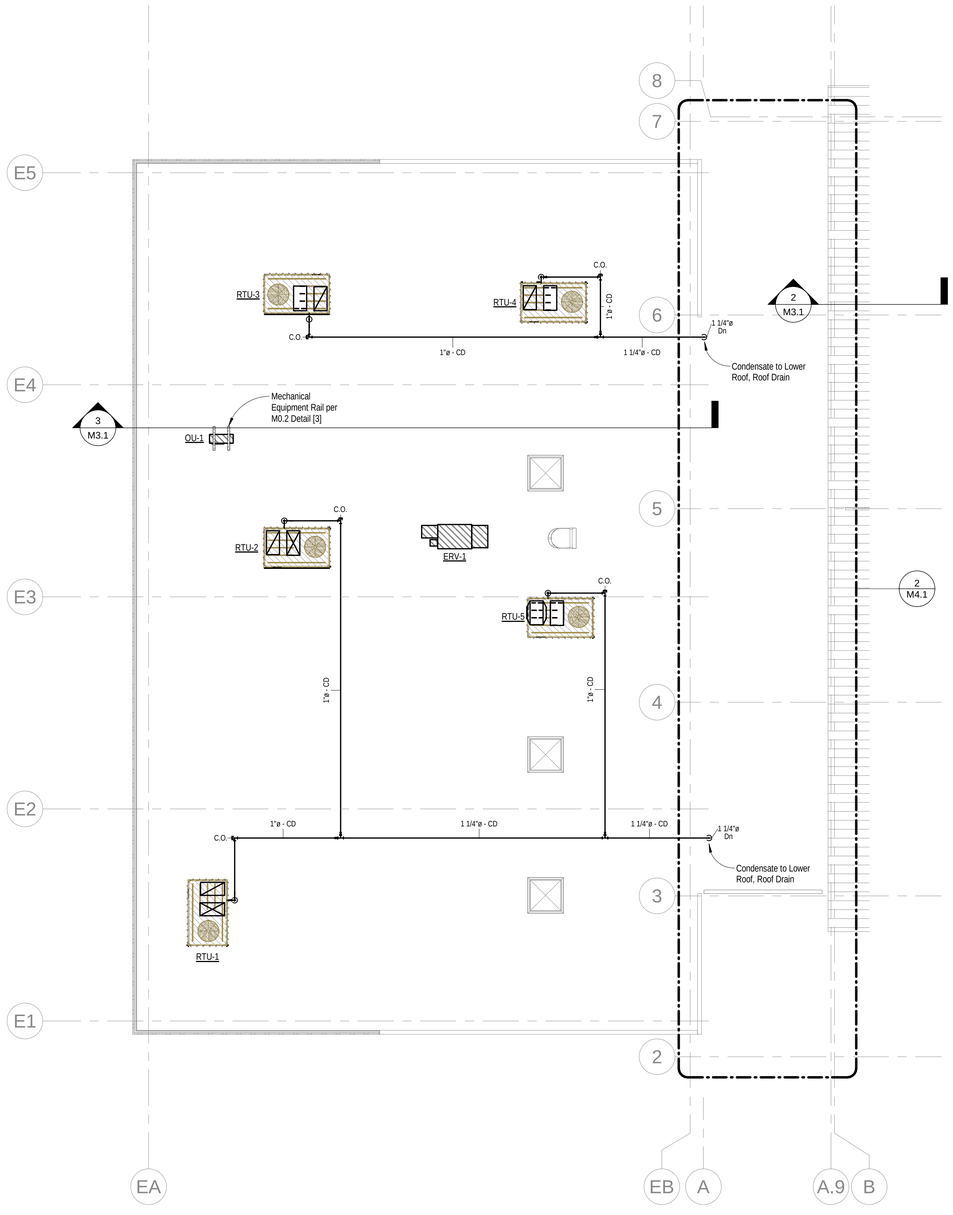
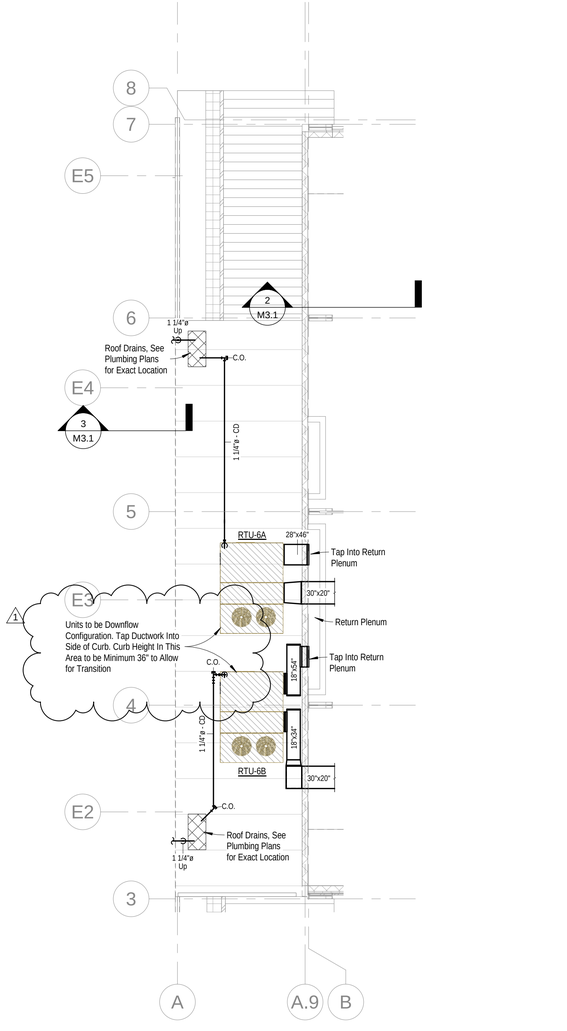
P.O. Box 3689
Chattanooga, Tennessee 37404
PH: (423)698-6675
MAA #: 19211

M3.1
MECHANICAL SECTIONS



1 UPPER ROOF PLAN - MECHANICAL

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



2 LOWER ROOF PLAN - MECHANICAL

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

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East Lake YFD Center Improvements

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JEFFREY WESLEY ROSS
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ARCHITECT
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STATE OF TENNESSEE
01/24/20

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1	ADDENDUM 10	01/24/20

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M4.1

MECHANICAL ROOF PLAN

Rooftop Unit Schedule - Gas Heat

Mark	Manufacturer	Model	Air Flow			External Static Pressure	Cooling			Energy Efficiency Rating	Gas Heating		Filter	Electrical				Operating Weight	Notes
			Supply Air	Outdoor Air			Nominal Capacity	Net Total	Net Sensible		Input	Output		Voltage	Number of Poles	MCA	MOCP		
				Minimum	Maximum														
RTU-1	Trane	YHC060E3	2,000 CFM	100 CFM	415 CFM	0.75 in-wg	5.0 ton	57,020 Btu/h	46,340 Btu/h	12.0	100,000 Btu/h	81,000 Btu/h	MERV 8	208 V	3	29 A	40 A	746 lb	1-9
RTU-2	Trane	YHC048F3	1,600 CFM	900 CFM	900 CFM	0.75 in-wg	4.0 ton	47,050 Btu/h	36,930 Btu/h	12.0	100,000 Btu/h	81,000 Btu/h	MERV 8	208 V	3	26 A	35 A	692 lb	1-9
RTU-3	Trane	YHC048F3	1,600 CFM	60 CFM	800 CFM	0.75 in-wg	4.0 ton	47,050 Btu/h	36,930 Btu/h	12.0	100,000 Btu/h	81,000 Btu/h	MERV 8	208 V	3	26 A	35 A	692 lb	1-9
RTU-4	Trane	YHC048F3	1,600 CFM	60 CFM	915 CFM	0.75 in-wg	4.0 ton	47,050 Btu/h	36,930 Btu/h	12.0	100,000 Btu/h	81,000 Btu/h	MERV 8	208 V	3	26 A	35 A	692 lb	1-9
RTU-5	Trane	YHC072F3	1,600 CFM	100 CFM	460 CFM	0.75 in-wg	6.0 ton	69,000 Btu/h	49,370 Btu/h	11.1	120,000 Btu/h	97,200 Btu/h	MERV 8	208 V	3	37 A	50 A	1408 lb	1-10
RTU-6A	Trane	YHH210G3RL	6,000 CFM	500 CFM	1,505 CFM	1.75 in-wg	17.5 ton	199,920 Btu/h	152,450 Btu/h	11.8	350,000 Btu/h	280,000 Btu/h	MERV 8	208 V	3	83 A	110 A	2723 lb	1-5,7-11
RTU-6B	Trane	YHH210G3RL	6,000 CFM	500 CFM	1,500 CFM	1.75 in-wg	17.5 ton	199,920 Btu/h	152,450 Btu/h	11.8	350,000 Btu/h	280,000 Btu/h	MERV 8	208 V	3	83 A	110 A	2723 lb	1-5,7-11

Notes:
1. Condenser coil hail guard
2. Manufacturer's 7-day programmable thermostat
3. Enthaply controlled economizer w/Barometric Relief
4. Unit mounted CO2 sensor. Include manufacturers controls to modulate outdoor air to maintain less than 800 p.p.m. (adjustable)
5. Convenience outlet (powered)
6. Roof curb height TBD - Slope as required to insure level equipment installation
7. Hot Gas Reheat
8. VFD Fan Controls
9. Unit mounted Humidity sensor
10. Dual Compressors for Part Load Applications
11. Roof curb height 36" Minimum Above Flashing on Supply/Return Side. - Slope as Required to Insure Level Equipment Installation - Coordiante w/Roofing Contractor

1

Approved Alternates: Carrier, Daikin, Johnson Controls (Any Alternate Must be Able to Meet Clearance of Low Roof RTUs)

Energy Recovery Ventilator (ERV) Schedule

Mark	Manufacturer	Model	Supply Fan			Exhaust Air			Load Reduction			Electrical				Operating Weight	Notes
			CFM	ESP	HP	CFM	ESP	HP	Cooling	Heating	Effectiveness	Voltage	Phase	MCA	MOCP		
ERV-1	RenewAire	HE1.5JRTVS355STANTL	900 CFM	0.50 in-wg	1.0 hp	900 CFM	0.50 in-wg	1.0 W	24,393 Btu/h	46,335 Btu/h	59.5%	208 V	3	5 A	15 A	548 lb	1-5

Notes:
1. Provide w/Frost Protection
2. Provide w/Insulated Roof Curb Sloped to Meet Roof - Height TBD
3. Provide w/MERV 8 Filters (Supply and Exhaust)
4. Must Be Able to Operate in Exhaust Only Application (Only During RTU-2 Economizer Cycle)
5. Provide w/Non-Fused Disconnect

Approved Alternates: Ruskin, Greenheck, or Equivalent

Electric Wall Heater Schedule

Mark	Manufacturer	Model	Watts	Voltage	Number of Poles	Operating Weight	Location	Control	Notes
EWH-1	Markel	E3321TD-RP	750 W	120 V	1	26 lb	Recessed	Integrated Thermostat	1-2

Notes:
1. Electric wall heater shall be provided with electrical disconnect, protective devices, sensors, and interlocks required for a complete, operable system.
2. Electric wall heater shall be hard wired, plugs are not acceptable.

Approved Alternates: QMark, Dayton

High-Wall Ductless Split System Schedule

Outdoor Section											Indoor Section				
Mark	Model	Manufacturer	Nominal Cooling Capacity	Cooling Coil		Ratings	Electrical				Mark	Model	Air Flow	Operating Weight	Notes
				Total	Sensible	SEER	Voltage	Number of Poles	MCA	MOCP					
OU-1	PUY-A12	Mitsubishi Electric	12,000 Btu/h	11,458 Btu/h	9,500 Btu/h	15.2	208 V	1	11 A	28 A	93 lb	DS-1	PKA-A12	425 CFM	55 lb	1-3

Notes:
1. Provide w/Variable Speed Inverter Driven Compressor
2. Provide w/7-Day Programmable Digital Thermostat
3. Electrical Shall Provide Conduit Pull String for Low Power Wiring by Mechanical.

Approved Alternates: LG, Daikin, or Equivalent

Air Terminal Schedule

Mark	Manufacturer	Model	Description	Material	Size	Count
E1	Price	80	Ceiling Exhaust Grille	Steel	12"x12"	5
R1	Price	80	Ceiling Return Grille	Steel	12"x24"	1
R2	Price	80	Ceiling Return Grille	Steel	24"x24"	5
S1	Price	SCD	Rectangular Face Ceiling Supply Diffuser - 24"x24" Face	Steel	6"ø	1
S2	Price	SCD	Rectangular Face Ceiling Supply Diffuser - 24"x24" Face	Steel	8"ø	14
SW1	Price	520D	Sidewall Supply Register	Steel	12"x6"	18
SW2	Price	520D	Sidewall Supply Register	Steel	20"x8"	32
SWR1	Price	535	Sidewall Return Grille	Steel	24"x24"	1
SWR2	Price	535	Sidewall Return Grille	Steel	42"x20"	1
SWR3	Price	91	Sidewall Return Grille - Heavy Duty Gym Grille	Steel	30"x30"	5

Notes:
1. Noise Criteria Shall Not Exceed 25
2. Contractor Shall Coordinate Border with Ceiling Type (Lay-In Or Gyp.)
3. Refer to Mechanical Floor Plan(S) For CFM
4. Air Devices Are 4-Way Throw (Unless Noted Otherwise on Mechanical Floor Plans)
5. Supply Air Terminals Shall Be Supplied with Opposed Blade Damper
6. Provide Manual Volume Damper at Main Trunk Take-Off For Balancing; Supply and Return
7. Air Terminal Finishes Shall Be Per Architect

Approved Alternates: Metalaire, Titus

Mechanical Symbols

Sections
- 1 / M301 — Indicates Similar to Noted View When Present; SIM; View Number on Sheet; Sheet on Which Detail Appears

Air Terminals
- CD1 / 6"ø / 125 — Mark (See Air Terminal Schedule); Duct Connection Size; Air Flow (cfm)
- Supply Air Duct Up | Supply Air Duct Down
- Return / Outdoor Air Duct Up | Return / Outdoor Air Duct Down
- Exhaust Air Duct Up | Exhaust Air Duct Down
- Duct Centerline (Round Duct)
- B — Damper in Ductwork, if Damper is Unlabeled, Assume Balancing Damper, Manual (B)
  Damper Types:
  - B = Balancing Damper, Manual
  - 2-P = 2-Position Damper, Motorized Actuator
  - M = Full Modulating Damper, Motorized Actuator
  - F = Fire Damper
  - FS = Combination Fire / Smoke Damper
- HD — Ceiling Diffuser with Flexible Duct Connection and 4-Way Throw Direction Arrows, if Throw Indication Arrows Are Not Present, Assume 4-Way Throw
- Direction of Air Flow
- Door Undercut (3/4" Unless Otherwise Indincated)
- Mitered Rectangular Duct Elbow with Turning Vanes (Provide Turning Vanes in All Rectangular Supply Ductwork Even if Vanes Are Not Indicated, Turning Vanes Not Required in Return Air, Outdoor Air, And Exhaust Air Ducts Unless Indicated)
- 18"x12" | 18"ø — Rectangular Duct with Dimensions | Round Duct with Dimensions
- T +48" A.F.F. <RTU-1> — Thermostat - Wall Mounted with Unit Designation and Mounting Height to Bottom of Thermostat (Mounting Height 48" A.F.F. Unless Noted Otherwise on Plans)
- T — Thermostat in Lockbox
- H +48" A.F.F. RTU-1 — Humidistat - Wall Mounted with Unit Designation and Mounting Height to Bottom of Thermostat (Mounting Height 48" A.F.F. Unless Noted Otherwise on Plans)
- S — Remote Temperature Sensor
- R — Thermostat Remote Display
- CO2 — Carbon Dioxide Sensor
- CD — Condensate Drain Piping (CD)
- R — Relocate Existing
- Center Line
- Connection - New/Existing

Mechanical Controls Notes

Controls for Gas RTU's
- RTUs to Have Standard Thermostat Wiring Interface
- Supply Temp, Space Temperature, Return Air Humidity, and CO2 Sensors Provided by ECI
- 0-10VDC Outside Air and Return Air Economizer Dampers to be Provided by Unit Manufacture Controlled by ECI
- Units will be Connected to Existing City of Chattanooga City Wide Building Automation System.
- Controls to be Delta Controls by ECI – Contact Steve Green 423-629-4014 ext 104

Gas RTU's Sequence of Operations
- RTU-2 to Operate in Conjunction with ERV-1 at Design Outdoor Air Load During Occupied Hours
- During Economizer Mode, Wheel for ERV-1 to Deenergize, Fan to Continue Operating. Calls for Dehumidification Shall Override Economizer Cycle Until Design RH Has Been Met
- RTU-1/RTU-3/RTU-4/RTU-5/RTU-6a/b Outdoor Air Dampers to Modulate Open Upon a Call for CO2 as Needed up to Design Outdoor Air CFM
- For all RTUs, Upon a Call For Humidity Control Units to Enter Dehumidification Cycle.

Controls for Ductless Mini Splits
- Units to be Provided with Compatible PAC-US44CN-1 Thermostat Interface
- Supply Temp, Space Temperature, Sensors Provided by ECI
- Units will be Connected to Existing City of Chattanooga City Wide Building Automation System.
- Controls to be Delta Controls by ECI – Contact Steve Green 423-629-4014 ext 104

Ductless Mini Splits Sequence of Operations
- HP-1 in Conjunction with FC-1 to Maintain Space Setpoint Temperature

Mechanical Project Notes

1. All mechanical work shall be done in accordance with all state and local laws and ordinances and in a manner satisfactory to the authority having jurisdiction. It shall be the responsibility of the Mechanical contractor to obtain all required permits, inspections and pay all applicable fees.
2. The mechanical contractor shall coordinate the routing of ductwork with other trades and ensure there is available space for all involved occupations before fabrication of ductwork begins. Ductwork sizes noted on mechanical plans are net clear inside dimensions.
3. The mechanical contractor shall not pass ductwork, piping, or place mechanical equipment directly over any electrical panels or electrical equipment. Coordinate with the electrical contractor to maintain clearances as required by codes.
4. Fire dampers are required where ductwork penetrates a one or more hour fire resistance rated assembly. [International Mechanical Code section 607 and International Building code 716.5]. Fire dampers may be omitted in 1-hour rated fire partitions where the duct penetrating the wall is not larger than 100 in², the duct does not terminate at a wall register, steel duct material is at least 0.0217 in. Thick, and the duct is located above a ceiling [International Building Code 716.5.4 and International Mechanical Code 607.5.3]. Fire dampers are also required where ducts pass through fire rated floor assemblies. Coordinate placement of all fire dampers with rated assemblies indicated on the architectural plans.
5. Coordinate the location of all ceiling mounted air terminals with architectural reflected ceiling plans.
6. The mechanical contractor shall furnish all labor, materials, equipment, services and incidentals required for a complete and operating facility.
7. All mechanical equipment shall be provided complete with electrical starter, protective devices, and interlocks required for complete operable system.
8. Mechanical equipment placement shall allow for full service/maintenance as recommended by the equipment manufacturer.
9. Color and finish of air terminals, louvers, and wall caps shall be coordinated with the architect.
10. The mechanical contractor is responsible for the testing, adjusting and balancing of all air systems.
11. All ductwork shall be connected to mechanical equipment with flexible U.L. listed connectors.
12. Outdoor air intakes shall not be located within 10'-0" of exhaust/relief louvers, wall caps, plumbing vents, or roof caps.
13. Units with air flows above 2,000 cfm must have a duct mounted smoke detector mounted in the supply duct downstream of all filters [2002 NFPA 90a 6.4.2.1]. Smoke detectors are also required in the return air stream prior to any exhausting from the building or mixing with outdoor air unless all portions of the building served by the air distribution system are protected by area smoke detectors connected to a fire alarm system in accordance with the international fire code [International Mechanical Code 606.2.1 and exception]. These smoke detectors must be wired to a fire alarm system when one is provided in a constantly attended location for supervisory signals [International Mechanical Code 606.4.1 and 2002 NFPA 90a 6.4.4]. Local ordinances may have more stringent requirements. Coordinate with electrical contractor. See electrical drawings for locations.
14. Insulating materials shall have a flame spread index not more than 25 and a smoke-developed index not exceeding 450 in accordance with ASTM E 84.
15. The mechanical contractor shall provide access panels in non-lay-in type ceiling (example gypsum ceilings) for all mechanical valves and dampers.
16. Where ductwork is visible through registers and grilles, the mechanical contractor shall prime and paint the interior of the ductwork black.
17. The mechanical contractor shall size refrigerant line sets in accordance with the equipment manufacturer's guidelines.
18. Furnish mechanical as-built drawings as well as Operations & Maintenance manuals for all mechanical systems to the owner within 90 days of system acceptance by the authority having jurisdiction.

HVAC Submittals
The mechanical contractor shall provide the HVAC equipment submittals with an electrical summary sheet for use by the electrical engineer. The sheet shall indicate voltage, phase, MCA, and MOCP for all HVAC equipment submitted. Electrical values that conflict with information provided in the HVAC equipment submittals is sole responsibility of the mechanical contractor.

Mechanical Sheet List

Sheet Number	Sheet Name	Current Revision Description
M1.1	MECHANICAL FLOOR PLAN	
M3.1	MECHANICAL SECTIONS	
M4.1	MECHANICAL ROOF PLAN	ADDENDUM 10
M8.1	MECHANICAL SCHEDULES & NOTES	ADDENDUM 10
M8.2	MECHANICAL DETAILS	

Design Conditions

Outdoor	
Design Data Location	Chattanooga, TN
Heating db (99.6%)	19.6
Cooling db (0.4%)	95.0
Mean Coincident wb (0.4%)	74.5
Weather Station	Chattanooga AP, TN, USA (WMO:723240)
Current Energy Code	2012 IECC
Climate Zone	4A
Indoor	
Heating db	70
Cooling db	74
Cooling Relative Humidity	55% (Maximum)

db: Dry Bulb °F
wb: Wet Bulb °F
Note: Outdoor conditions based upon ASHRAE Climatic Design Conditions 2017.

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East Lake YFD Center Improvements

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JEFFREY WESLEY BROOKS — PROFESSIONAL ENGINEER — AGRICULTURE — LICENSE NO. 120599 — STATE OF TENNESSEE
01/24/20

ISSUE DATES
INITIAL ISSUE 12/20/19
1 ADDENDUM 10 01/24/20

JOB NO. 18-072 | D'WN BRF/HSW | CK'D CJW

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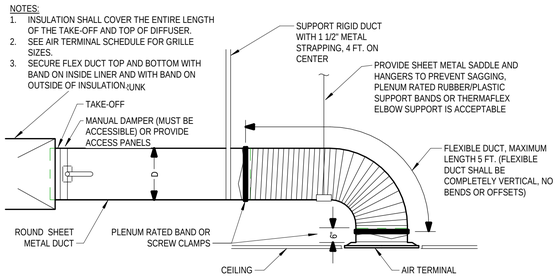
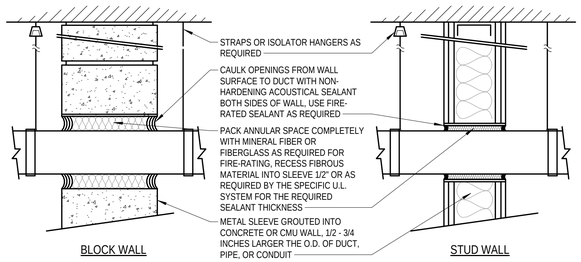
M8.1
MECHANICAL SCHEDULES & NOTES

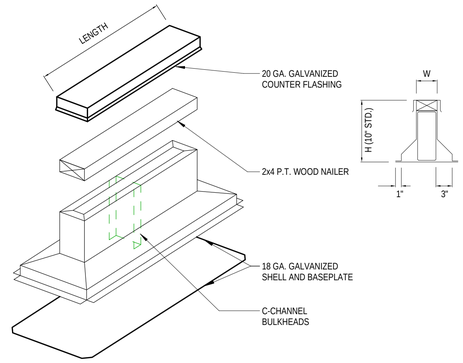


1 DUCT TAKE-OFF - SUPPLY
SCALE:NTS



NOTE:
1. THIS DETAIL DOES NOT APPLY TO DUCT PENETRATIONS WITH A FIRE/SMOKE DAMPER.

2 DUCT WALL PENETRATION
SCALE:NTS



3 ROOF EQUIPMENT CURB
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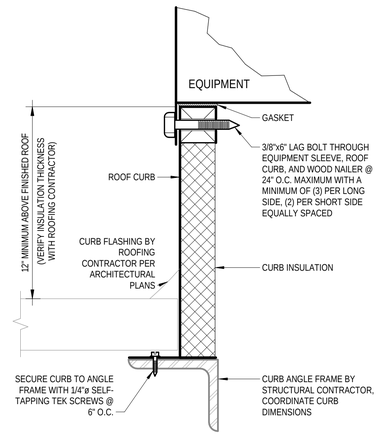
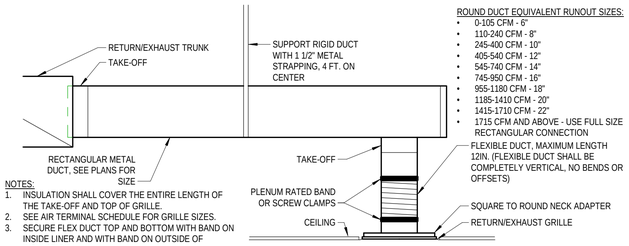


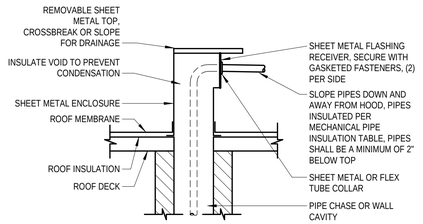
4 ROOF CURB
SCALE:NTS



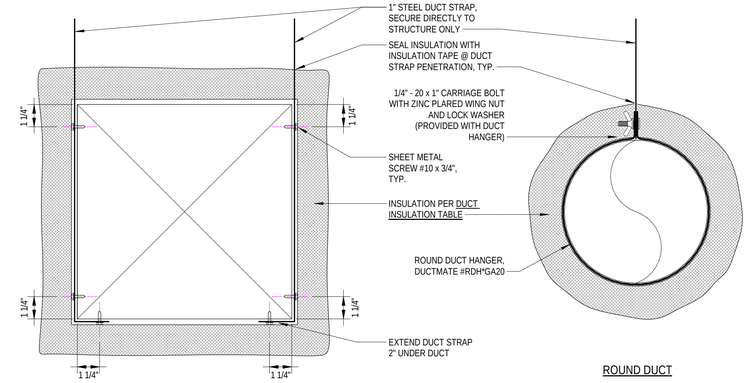
NOTES:
1. INSULATION SHALL COVER THE ENTIRE LENGTH OF THE TAKE-OFF AND TOP OF GRILLE.
2. SEE AIR TERMINAL SCHEDULE FOR GRILLE SIZES.
3. SECURE FLEX DUCT TOP AND BOTTOM WITH BAND ON INSIDE LINER AND WITH BAND ON OUTSIDE OF INSULATION.

ROUND DUCT EQUIVALENT RUNOUT SIZES:
- 0-105 CFM - 6"
- 110-240 CFM - 8"
- 245-400 CFM - 10"
- 405-540 CFM - 12"
- 545-740 CFM - 14"
- 745-950 CFM - 16"
- 955-1180 CFM - 18"
- 1185-1410 CFM - 20"
- 1415-1710 CFM - 22"
- 1715 CFM AND ABOVE - USE FULL SIZE RECTANGULAR CONNECTION

5 DUCT TAKE-OFF - RETURN/EXHAUST
SCALE:NTS



6 PIPING ROOF PENETRATION
SCALE:NTS



RECTANGULAR DUCT

ROUND DUCT

NOTES:
1. STEEL STRAPS SHALL BE THE ONLY THING PENETRATING THE INSULATION. DO NOT SUPPORT DUCTS WITH UNISTRUT OR SIMILAR PRODUCT.
2. DUCT STRAPS SHALL SUPPORT THE DUCT DIRECTLY. DO NOT PLACE DUCT STRAPS EXTERIOR OF THE INSULATION.
3. PROVIDE DUCT SUPPORTS FOR HORIZONTAL DUCTS WITHIN 24 INCHES OF ELBOWS AND WITH 48 INCHES OF BRANCH INTERSECTIONS. STRAIGHT LENGTHS OF HORIZONTAL DUCT SHALL BE SUPPORTED A MINIMUM OF EVERY 10 FT.

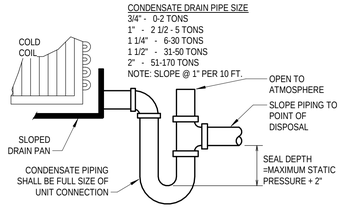
8 DUCT HANGERS
SCALE:NTS

DUCT INSULATION SCHEDULE

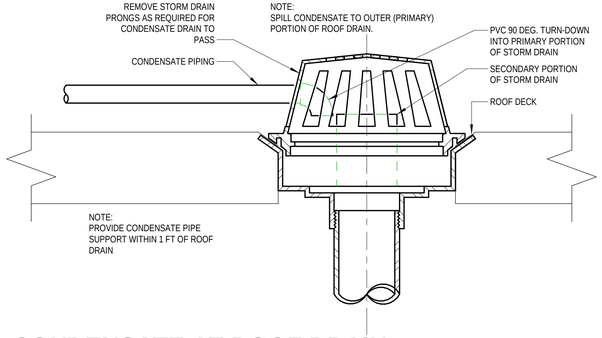
SERVICE	LOCATION	R-VALUE	DESCRIPTION
RECTANGULAR / ROUND - SUPPLY, RETURN, OUTSIDE AIR	INTERIOR / CONCEALED	R=6.0 MINIMUM	EXTERNAL DUCT INSULATION - WRAP: OWENS-CORNING SOFTR DUCT WRAP INSULATION TYPE 75, 2.2" THICK, 3/4 LBS/CF DENSITY WITH TYPE FRK FACING (OR EQUAL.) FIRST 15 FT FROM MECHANICAL EQUIPMENT SHALL HAVE AN INTERNAL ACOUSTICAL LINER, CERTAIN-TEED (OR EQUAL) "ULTRALITE" HEAVY GRADUATED DENSITY, 1" THICK. LINER SHALL MEET ASTM G21 AND G22 FOR MICRO-BIOLOGICAL TREATMENT.
ROUND - SUPPLY, RETURN, OUTSIDE AIR	INTERIOR / EXPOSED	R=6.0 MINIMUM	PAINTABLE DOUBLE WALL SPIRAL. FINISH TO BE ESTABLISHED BY OWNER / ARCHITECT.
RECTANGULAR - SUPPLY, RETURN, OUTSIDE AIR	INTERIOR / EXPOSED	R=6.0 MINIMUM	INTERNALLY ACOUSTICAL LINER CERTAIN-TEED (OR EQUAL) "ULTRALITE" HEAVY GRADUATED DENSITY, 1" THICK. LINER SHALL MEET ASTM G21 AND G22 FOR MICRO-BIOLOGICAL TREATMENT. FINISH SHALL BE ESTABLISHED BY OWNER / ARCHITECT.
RECTANGULAR / ROUND - SUPPLY, RETURN, OUTSIDE AIR	EXTERIOR	R=8.0 MINIMUM	FIRST 15 FT FROM MECHANICAL EQUIPMENT SHALL HAVE AN INTERNAL ACOUSTICAL LINER, CERTAIN-TEED (OR EQUAL) "ULTRALITE" HEAVY GRADUATED DENSITY, 1" THICK. LINER SHALL MEET ASTM G21 AND G22 FOR MICRO-BIOLOGICAL TREATMENT. ALL EXTERIOR DUCT INCLUDING THE LINED PORTIONS SHALL INCLUDE A WEATHERPROOF INSULATION SYSTEM EQUAL TO THE POLYGUARD LARGE DUCTS WATERSHED DESIGN (SEE DETAIL.) THE SYSTEM SHALL INCLUDE R-MAX 2" THICK THERMASHEATH POLYISOCYANURATE CLOSED CELL FOAM CORE SANDWICHED BETWEEN EXTERIOR FACES WITH WELDING PINS AND SPEED CLIPS. COVER ALL PINS AND CLIPS WITH MATCHING (FOIL FACED) VAPOR RETARDER PATCHES. SEAL ALL JOINTS AND SEAMS WITH MANUFACTURER'S TAPE FOR VAPOR PROOF INSTALLATION. COVER WITH ALUMAGUARD 60 EXTERIOR WRAP BY POLYGUARD PRODUCTS (OR APPROVED EQUAL.)
DIFFUSER NECKS, BOOTS AND BOXES FOR GRILLES AND REGISTERS	INTERIOR / CONCEALED	R=6.8 MINIMUM	EXTERNAL DUCT INSULATION - WRAP: OWENS-CORNING SOFTR DUCT WRAP INSULATION TYPE 75, 2.2" THICK, 3/4 LBS/CF DENSITY WITH TYPE FRK FACING (OR EQUAL.)
FLEXIBLE DUCTWORK	INTERIOR / CONCEALED	R=6.0 MINIMUM	INSULATED FLEXIBLE AIR DUCT WITH 2", 0.76 LB. MINIMUM DENSITY FIBERGLASS BLANKET AND FIBERGLASS SCRIM REINFORCED ALUMINIZED POLYESTER FILM VAPOR BARRIER.

HYDRONIC PIPE INSULATION SCHEDULE

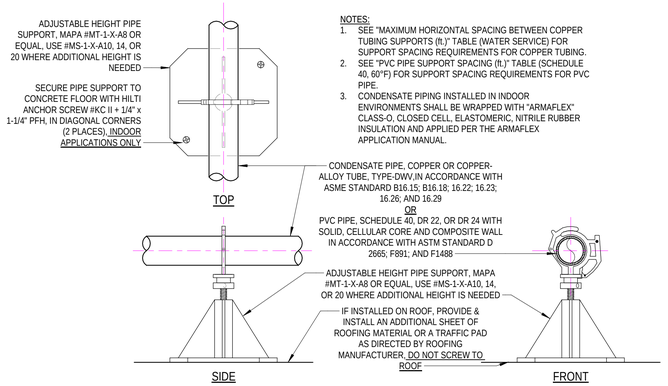
SERVICE	LOCATION	R-VALUE	DESCRIPTION
REFRIGERATION PIPING	INTERIOR / EXTERIOR	----	SUCTION LINES- ¾ INCH AEROFLEX AC, LIQUID LINES ½ INCH AEROFLEX AC. AEROFLEX AC PIPE INSULATION.



7 COIL CONDENSATE DRAIN PIPING
SCALE:NTS



9 CONDENSATE AT ROOF DRAIN
SCALE:NTS



NOTES:
1. SEE "MAXIMUM HORIZONTAL SPACING BETWEEN COPPER TUBING SUPPORTS (ft.)" TABLE (WATER SERVICE) FOR SUPPORT SPACING REQUIREMENTS FOR COPPER TUBING.
2. SEE "PVC PIPE SUPPORT SPACING (ft.)" TABLE (SCHEDULE 40, 60°F) FOR SUPPORT SPACING REQUIREMENTS FOR PVC PIPE.
3. CONDENSATE PIPING INSTALLED IN INDOOR ENVIRONMENTS SHALL BE WRAPPED WITH "ARMAFLEX" CLASS-O, CLOSED CELL, ELASTOMERIC, NITRILE RUBBER INSULATION AND APPLIED PER THE ARMAFLEX APPLICATION MANUAL.

10 HVAC - CONDENSATE PIPING SUPPORT
SCALE:NTS

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East Lake YFD Center Improvements

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12/20/19

ISSUE DATES
INITIAL ISSUE 12/20/19

JOB NO. 18-072 | D'WN BRF/HSW | CK'D CJW

M8.2
MECHANICAL DETAILS

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DRAINAGE FIXTURE UNITS

FIXTURE TYPE	FIXTURE UNIT VALUE	NO. OF FIXTURES	TOTAL VALUE
DRINKING FOUNTAIN	1/2	2	1
LAVATORY	1	4	4
URINAL	2	1	2
MOP SINK (3" TRAP)	5	1	5
DISHWASHER	2	1	2
FLOOR DRAIN	2	1	2
WATER CLOSET	4	8	32
KITCHEN SINK	2	1	2
BASED ON 2012 IPC		DRAINAGE FIXTURE UNITS=	50
		BUILDING DRAIN PIPE SIZE=	4"

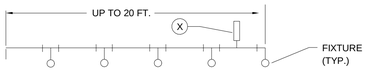
WATER SUPPLY FIXTURE UNITS

FIXTURE	COLD	HOT	TOTAL	NO. OF FIXTURES	TOTAL VALUE
DRINKING FOUNTAIN	0.25	--	0.25	2	0.5
LAVATORY	1.5	1.5	2.0	4	8
URINAL	5.0	--	5.0	1	5
MOP SINK (3" TRAP)	2.3	2.25	3.0	1	3
DISHWASHER	--	1.4	1.4	1	1.4
WATER CLOSET (PUBLIC, FLUSH VALVE)	10.0	--	10.0	8	80
WASHING MACHINE (15 LB.)	3.0	3.0	4.0	2	8
KITCHEN SINK	3.0	3.0	4.0	1	4
BASED ON 2012 IPC				WATER SUPPLY FIXTURE UNITS=	109.9
				DOMESTIC WATER SUPPLY PIPE SIZE=	2"
				GALLONS PER MINUTE=	71 gpm

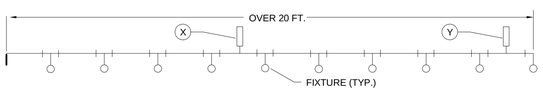
WATER HAMMER ARRESTER SCHEDULE

P.D.I. SYMBOL	MANUFACTURER	MODEL NO.	CONNECTION SIZE	FIXTURE UNIT RATING	REMARKS
"A"	ZURN	Z1700-100	3/4"	1-11	THREADED NIPPLE CONNECTION
"B"	ZURN	Z1700-200	1"	12-32	THREADED NIPPLE CONNECTION
"C"	ZURN	Z1700-300	1"	33-60	THREADED NIPPLE CONNECTION

RULE 1:
THE PREFERRED PLACEMENT LOCATION IS AT THE END OF THE BRANCH LINE BETWEEN THE LAST TWO FIXTURES IN A BRANCH LESS THEN 20 FEET.



RULE 2:
IN LINES THAT EXCEED 20 FT. IN LENGTH. THE SUM OF THE FIXTURE UNIT RATINGS OF UNITS
(X) & (Y) SHALL BE EQUAL TO OR GREATER THAN THE DEMAND OF BRANCH.



PIPE SCHEDULE

DWV	PVC
DOMESTIC WATER PIPING	ALL UNDERGROUND DOMESTIC WATER PIPING SHALL BE TYPE K COPPER PIPE.
DOMESTIC WATER PIPING	ABOVE GROUND DOMESTIC WATER PIPING 2" AND LARGER SHALL BE TYPE L COPPER PIPE OR AQUATHERM BY WIRSBO AT CONTRACTOR'S OPTION.
DOMESTIC WATER PIPING	ABOVE GROUND DOMESTIC WATER PIPING SMALLER THAN 2" SHALL BE TYPE L COPPER PIPE, OR PEX-A. CONTRACTOR SHALL OBTAIN APPROVAL FROM LOCAL JURISDICTION AND WRITTEN APPROVAL FROM OWNER PRIOR TO BIDDING. PEX-a REQUIRES A 25 YEAR WARRANTY. PVC AND CPVC WILL NOT BE ACCEPTED.
STORM WATER PIPING	CAST IRON
NATURAL GAS	BLACK STEEL PIPING

1. THE BASIS OF DESIGN FOR DOMESTIC WATER PIPE IS COPPER PIPE
2. OTHER PIPE TYPES (AS LISTED ABOVE) MAY BE SUBSTITUTED FOR COPPER AT CONTRACTORS DISCRETION.
3. IF SUBSTITUTED PIPE IS PROVIDED THE CONTRACTOR SHALL HAVE THE MANUFACTURER RESIZE ALL PIPE TO EQUAL OR EXCEED THE FLOW VOLUME OF COPPER PIPE. THE PIPE SIZING MUST BE IN STRICT COMPLIANCE WITH MANUFACTURER'S PUBLISHED REQUIREMENTS.
4. COMPLY WITH ASTM F876/F877, NSF 61, 5006 CHLORINE RESISTANCE RATING AND 60 DAY MIN. UV RATING.
5. PIPING MUST BE SECURELY ANCHORED TO PREVENT MOVEMENT AND ENSURE NO PIPE IS WITHIN 6" OF ANY HEAT SOURCE; LIKE LIGHT FIXTURES.
6. FINAL CONNECTIONS MUST BE ANCHORED SO STOPS DO NOT MOVE.

PLUMBING LEGEND

SYMBOL	DESCRIPTION
	COLD WATER PIPING (CW)
	HOT WATER PIPING (HW)
	HOT WATER RECIRCULATED PIPING (HWR)
	SOIL/WASTE PIPING
	VENT PIPING (V)
	STORM DRAIN PIPING (SD)
G	GAS PIPING (G)
	PIPE RISE
	PIPE DROP
	CONCENTRIC TRANSITION
	SHUT-OFF VALVE
S	SOLENOID ACTUATED VALVE
	CHECK VALVE
	DIELECTRIC UNION
	GAS COCK
GM	GAS METER
	HOSE BIBB OR WALL HYDRANT IN BOX
	CONNECTION TO CIVIL

PLUMBING FIXTURE SCHEDULE

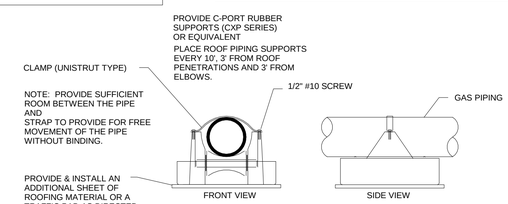
MARK	MANUFACTURER	MODEL	DESCRIPTION	CONNECTIONS CW	HW	WASTE	VENT
DF1	Elkay Manufacturing	VRCTLR8WSK	Mechanical pushbar actuated water cooler				
DS	Zurn Industries	Z-199-NH8	Downspout with Removable Screen (No Hub)				
FD1	ZURN	Z415-6S-P	6" ZURN FLOOR DRAIN WITH "TYPE S" SQUARE STRAINER AND 1/2" TRAP PRIMER CONNECTION.			3"	2"
FPHB	Zurn Industries, LLC	Z1320XL	Ecolotrol Ceramic Disc Wall Hydrant, Encased, Non-Freeze, Anti-Siphon, Automatic Draining				
GI	Green Turtle Technologies	500-4-SM	500 GALLON FIBERGLASS GREASE INTERCEPTOR				
KS1	Elkay Manufacturing	LRADQ3322	SEAMLESS TYPE 304 18 GUAGE STAINLESS STEEL DOUBLE COMPARTMENT COUNTERTOP SINK, 33 INCHES X 22 INCHES X 8 INCHES DEEP WITH TWO HOLE PUNCH 4 INCH ON CENTER AND CENTER DRAIN, SINGLE LEVER HANDLE,DECK MOUNTED FAUCET WITH 5" GOOSENECK SPUT. ELKAY FAUCET MODEL NUMBER LK406GN05T4				
L1	AMERICAN STANDARD	0356.421	21" X 18" ADA WALL HUNG SINK. CHICAGO FAUCETS MODEL NUMBER 3500-E2805ABCP	1/2"	1/2"	2"	2"
L2	AMERICAN STANDARD	0419.444	AMERICAN STANDARD "CADET" OVAL COUNTERTOP LAVATORY WITH SYMMONS "ULTRA-SENSE" SENSOR ACTIVATED FAUCET WITH 0.5 GPM FLOW RESTRICTOR #S-6080-FR, (2) ZURN Z8804 STANDARD ANGLE STOPS, ZURN Z8743 STRAINER ZURN Z8700 P-TRAP AND ZURN ZW1070 MIXING VALVE TO BE SET IN FIELD BETWEEN 90°-105°. VERIFY LAVATORY COLOR AND FAUCET FINISH WITH ARCHITECT.	1/2"	1/2"	2"	2"
MSB	FIAT	MSB 2424	MOLDED-STONE SERVICE SINK SINGLE SQUARE COMPARTMENT UNIT. 24 INCHESX 24 INCHES X 10 INCHES DEEP FLOOR MOUNTED WITH WALL FAUCET FIAT MODEL NUMBER 830-AA FOR MOP SINK WITH MOP HANGER, 3" QUICK DRAIN CONNECTOR,HOSE AND HOSE BRACKET.				
RFD	Zurn Industries, LLC	Z163	15 Inch Diameter Combination Main Roof and Overflow Drain with Low Silhouette Domes and Double Top-Set Deck Plate				
U1	AMERICAN STANDARD	6501.01	AMERICAN STANDARD "WASHBROOK" WALL HUNG URINAL (3/4") WITH ZURN "AQUAFLUSH" Z6003-YB-WS-1 FLUSH VALVE AND ZURN Z-1222 PLATE TYPE SYSTEM URINAL CARRIER WITH BEARING PLATE. VERIFY COLORS WITH ARCHITECT.	3/4"		3"	2"
W1	AMERICAN STANDARD	2234.015	"AMERICAN STANDARD "MADERA" FLUSH VALVE TOILET WITH ZURN "AQUAVANTAGE" Z6000AV-WS1 1.6 GPF FLUSH VALVE AND OLSONITE #955S COMMERCIAL SEAT. VERIFY COLORS WITH ARCHITECT.	1"		3"	2"
WCO	ZURN	Z-1441	ZURN "LEVEL-TROL" NICKEL BRONZE WALL CLEANOUT.				
YCO	ZURN	Z-1400	ZURN "LEVEL-TROL" CAST IRON YARD CLEANOUT.				

Mechanical Equipment Plumbing Gas Schedule

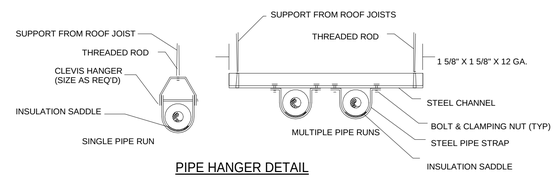
Mark	Manufacturer	Model	Gas Input
RTU-1	Trane	YHC060E3	100000 Btu/h
RTU-2	Trane	YHC074F3	100000 Btu/h
RTU-3	Trane	YHC074F3	100000 Btu/h
RTU-4	Trane	YHC074F3	100000 Btu/h
RTU-5	Trane	YHC072F3	120000 Btu/h
RTU-6A	Trane	YHH210G3RL	350000 Btu/h
RTU-6B	Trane	YHH210G3RL	350000 Btu/h
WH1	PVI Industries, LLC	20 L 100A-GCL	199000 Btu/h

TOTAL BTU = 1,419,000
BASED ON 2 PSIG AND 300 FT. DEVELOPED LENGTH
FUEL GAS SUPPLY PIPE SIZE= 1-1/4"

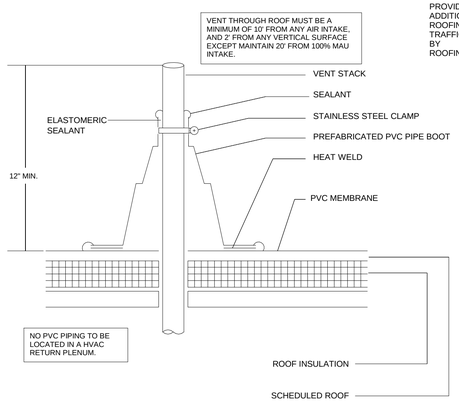
WALL CLEANOUTS DETAIL



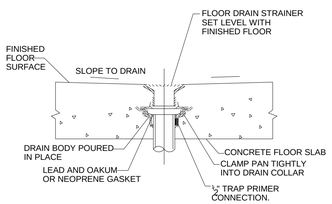
ROOF SUPPORT DETAIL



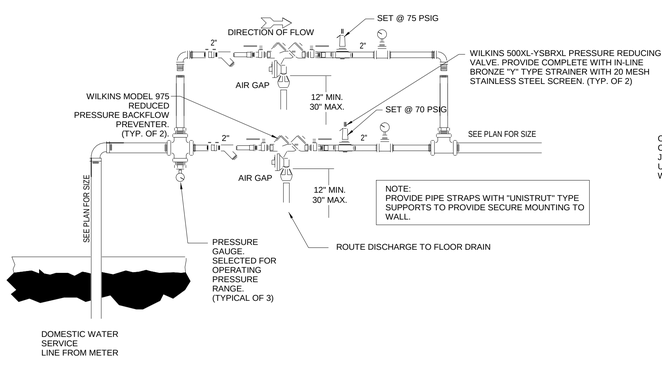
PIPE HANGER DETAIL



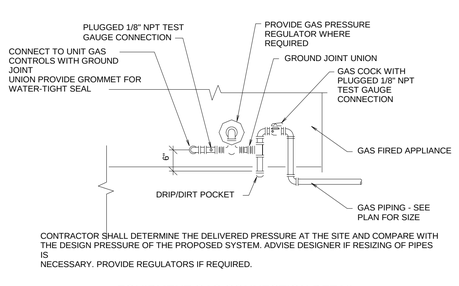
VENT THRU ROOF DETAIL (VTR)



CONCRETE FLOOR DRAIN INSTALLATION DETAIL



PRV - BACKFLOW PREVENTOR DETAIL



CONTRACTOR SHALL DETERMINE THE DELIVERED PRESSURE AT THE SITE AND COMPARE WITH THE DESIGN PRESSURE OF THE PROPOSED SYSTEM. ADVISE DESIGNER IF RESIZING OF PIPES IS NECESSARY. PROVIDE REGULATORS IF REQUIRED.

EQUIPMENT GAS CONNECTION DETAIL

PLUMBING GENERAL NOTES:

1. THESE DRAWINGS HAVE BEEN DEVELOPED FROM THE BEST AVAILABLE INFORMATION. CONTRACTOR SHALL FIELD VERIFY ALL FIELD CONDITIONS, DIMENSIONS, CLEARANCES, LOCATION OF EXISTING UTILITIES, ETC. PRIOR TO BIDDING, FABRICATION, OR INSTALLATION. DO NOT SCALE FROM THESE DRAWINGS. COORDINATE ALL STUB-UPS AND CONNECTIONS WITH MANUFACTURER INSTALLATION DATA.

2. COORDINATE PLUMBING INSTALLATION AMONG TRADES TO AVOID INTERFERENCES.

3. ALL COLD, HOT AND RECIRCULATING WATER PIPING SHALL BE INSULATED W/CLOSED CELL INSULATION. INSULATE ALL ABOVE GROUND DOMESTIC WATER PER SPECIFICATIONS SECTION 15090.

4. THE CONTRACTOR SHALL FURNISH ALL LABOR, INSTALL ALL MATERIAL AND EQUIPMENT AND INCLUDE SERVICES AND INCIDENTALS TO THE INSTALLATION OF WORK INVOLVED FOR A COMPLETE AND OPERATING FACILITY.

5. CONTRACTOR SHALL BE RESPONSIBLE FOR ASSEMBLING ANY EQUIPMENT SHIPPED IN SECTIONS, IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

6. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL REQUIRED PERMITS, INSPECTIONS, AND PAY ALL FEES REQUIRED FOR THIS JOB.

7. THE PIPING SYSTEM SHALL BE ARRANGED SO AS TO PREVENT WATER HAMMER. EACH ISOLATED FIXTURE SHALL HAVE A WATER HAMMER ARRESTOR ON THE WATER CONNECTION. ALL GROUPS OF FIXTURES SHALL CONNECT TO A WATER BRANCH WHICH SHALL END WITH A FULL SIZE WATER HAMMER ARRESTOR.

8. THE PLUMBING CONTRACTOR SHALL PROVIDE AND INSTALL STANDARD 1/2"x3/8" COMPRESSION ANGLE STOPS ON ALL WATER LINES UNLESS ANOTHER TYPE OF VALVE IS SPECIFIED.

9. ALL WASTE PIPING ABOVE GRADE SHALL BE APPROVED CAST IRON OR PVC SOIL PIPE, AND ALL VENT PIPING ABOVE GRADE SHALL BE "PVC" OR "ABS". CAST IRON ONLY IN PLENUM RETURN SPACES.

10. ALL VENTS THROUGH ROOF (VTR) SHALL EXTEND A MINIMUM OF 12" ABOVE ROOF AND BE MAINTAINED A MINIMUM OF 10'-0" FROM ALL OUTSIDE AIR INTAKES, EXCEPT 20' FROM 100% MAU INTAKES.

11. ALL ROOF PENETRATIONS FOR PLUMBING PIPING SHALL BE MADE IN ACCORDANCE WITH ROOF SYSTEM MANUFACTURER GUIDELINES. COORDINATE WITH ARCHITECTURAL.

12. COPPER PIPING JOINTS SHALL BE SOLDERED USING SOLDER FILLER METAL (ASTM B-32) 95-5 TIN ANTIMONY.

13. ALL PENETRATIONS THROUGH MASONRY WALLS WILL BE CORE DRILLED AND SLEEVED.
(A) SLEEVES ARE REQUIRED WHERE A PIPE PASSES THROUGH A WALL OR FLOOR. PIPES PASSING THROUGH A WALL OR FLOOR MUST BE INDIVIDUALLY SLEEVED UNLESS APPROVED BY ARCHITECT.
(B) SLEEVES SHALL FINISH FLUSH WITH THE WALL FINISH AND SHALL FINISH 1/4" ABOVE FINISH FLOOR.
(C) SLEEVES SHALL BE AS FOLLOWS:
· THROUGH MASONRY WALLS - GALVANIZED STEEL PIPE.
· THROUGH PARTITIONS AND FLOOR - 22 GAUGE GALVANIZED SHEET METAL.

14. ALL FLOOR DRAINS, FLOOR SINKS, AND HUB DRAINS SHALL BE INSTALLED WITH A TRAP PRIMER CONNECTION AND PROVIDED WITH A TRAP PRIMER, TO BE "PRECISION PLUMBING PRODUCTS" (PRIMERITE PR-500) OR EQUIVALENT. USE DISTRIBUTION BLOCKS AS REQUIRED. TRAP PRIMERS SHALL BE LOCATED AS TO FACILITATE EASE OF MAINTENANCE AND CONCEALED FROM DIRECT VIEW.

15. GAS SERVICE CONNECTION LOCATION(S) SHOWN ON ENGINEERING DRAWINGS IS BASED ON THE BEST INFORMATION AVAILABLE FROM THE CIVIL ENGINEER. GAS CONTRACTOR IS TO CONFIRM THE GAS SERVICE CONNECTION LOCATION(S) WITH THE GAS COMPANY PROVIDING SERVICE, PRIOR TO CONSTRUCTION. GAS CONTRACTOR SHALL COORDINATE THE GAS PIPING SERVICE LOCATION WITH THE SITE CONTRACTOR.

16. PORTIONS OF FUEL GAS PIPING INSTALLED IN CONCEALED LOCATIONS SHALL NOT HAVE UNIONS, TUBING FITTINGS, RIGHT AND LEFT COUPLINGS, BUSHINGS, COMPRESSION COUPLINGS AND SWING JOINTS MADE BY COMBINATIONS OF FITTINGS OR OTHERWISE THE FUEL GAS PIPING MUST BE SLEEVED AND THE SLEEVE MUST VENT TO ATMOSPHERE. VENTING OF THE SLEEVE SHALL BE ACCOMPLISHED AS TO PREVENT THE ENTRANCE OF WATER OR INSECTS.

17. ALL GAS PIPING INSTALLED OUTDOORS SHALL BE ELEVATED NOT LESS THAN 3 1/2" ABOVE GROUND AND WHERE INSTALLED ACROSS ROOF SURFACES, SHALL BE ELEVATED NOT LESS THAN 31/2" ABOVE THE ROOF SURFACE.

18. ALL HOT AND COLD WATER PIPING DROPPING OR RISING TO SERVE PLUMBING FIXTURES SHALL BE SUPPLIED WITH SHOCK STOPS TO PREVENT WATER HAMMER IN PIPING.

19. EQUIPMENT AND APPLIANCES NOT HAVING AIR GAP SHALL BE PROTECTED WITH AN APPROVED BACKFLOW PREVENTOR.

20. PLUMBING CONTRACTOR SHALL PROVIDE VENTILATION FOR EXHAUST AND COMBUSTION FOR WATER HEATERS. PROVIDE DIRECT VENT SYSTEM AS DESCRIBED IN MANUFACTURER'S PUBLISHED INSTRUCTIONS.

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STATE OF TENNESSEE
12/20/19

ISSUE DATES
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JOB NO. 18-072 | D'WN ML | CK'D TAQ

P0.1
PLUMBING NOTES AND DETAILS

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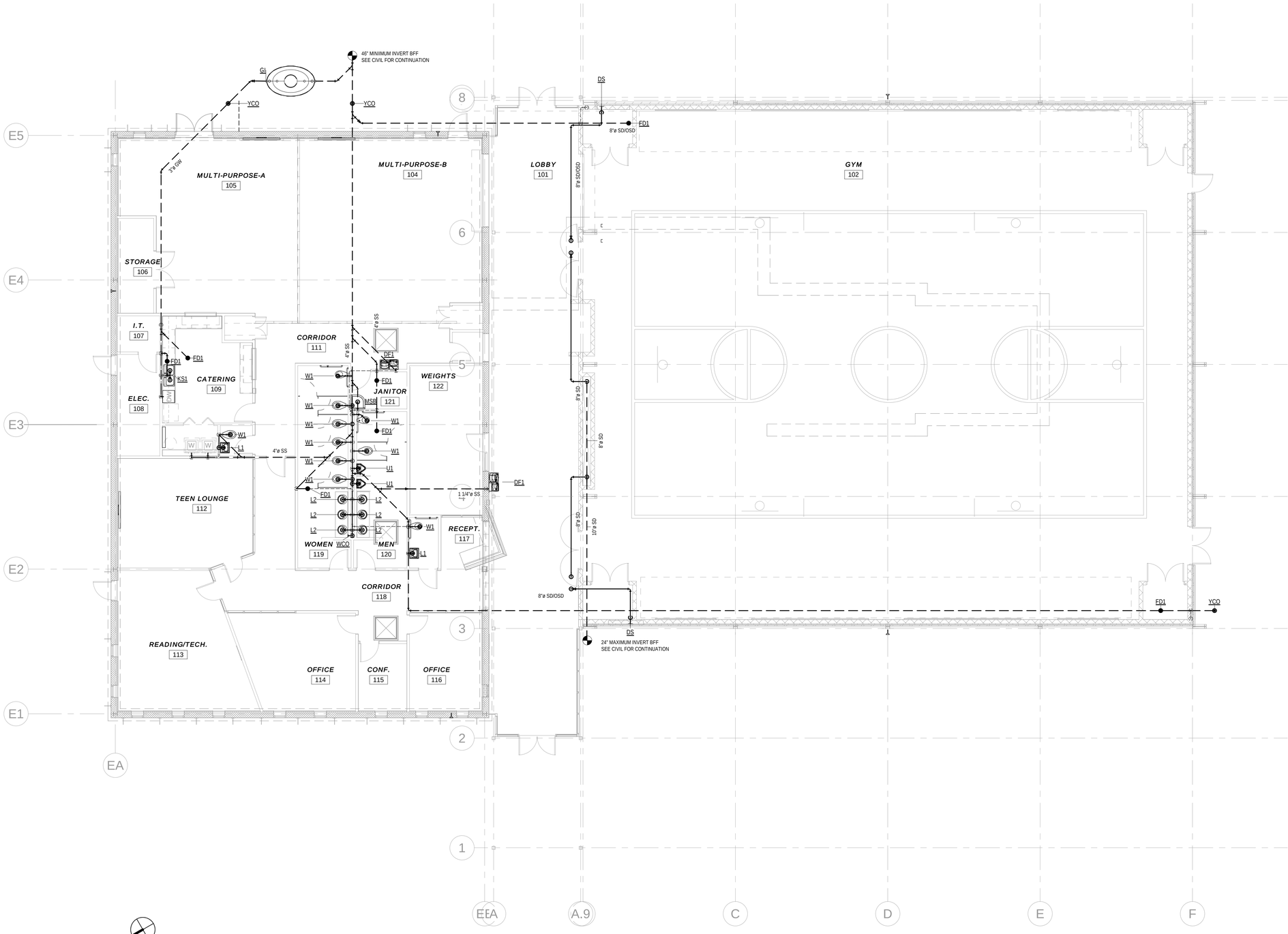

1 1ST FLOOR Sanitary
1/8" = 1'-0"

SANITARY NOTES

MOUNT URINAL (U1) AT ADA COMPLIANT HEIGHT.

COORDINATE PENETRATIONS THROUGH RATED ASSEMBLIES TO ENSURE FINAL INSTALLATION IS PROPERLY PROTECTED AS REQUIRED BY APPLICABLE CODES. EX: WATER PIPE PENETRATIONS THROUGH RATED WALLS.

COORDINATE VENT PENETRATION WITH MECHANICAL OUTSIDE AIR INTAKES (TYPICAL).

COORDINATE LOCATION OF DRAIN AT SPRINKLER RISER WITH FIRE PROTECTION CONTRACTOR.

ROUTE PRIMARY STORM PIPE TO AND THROUGH CHASE CONSTRUCTED INTO TRUSSES. COORDINATE CHASE LOCATION WITH TRUSS SUPPLIER'S ENGINEER.

PLUMBING CONTRACTOR TO VERIFY PROPER FLOW-CONTROLS OF GREASE SYSTEM. MODIFY AS REQUIRED BY GREASE INTERCEPTOR MANUFACTURER AND GOVERNING CODES.

INSULATE DRAINS AND DRAIN BODIES ABOVE SLAB THAT RECEIVE CONDENSATE FROM MECHANICAL UNITS.

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P1.1
First Floor Sanitary

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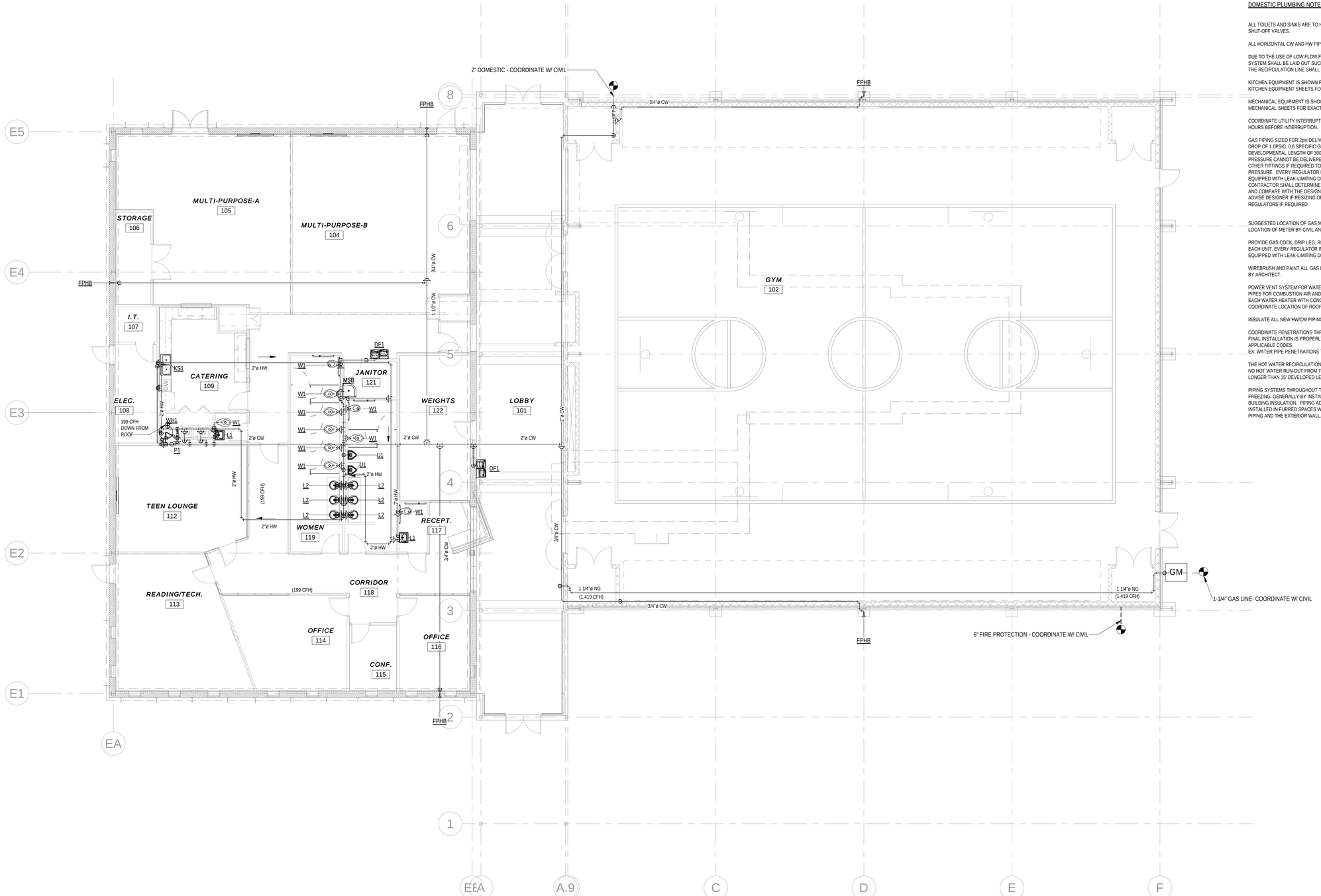

1 1ST FLOOR Domestic
1/8" = 1'-0"

DOMESTIC PLUMBING NOTES

ALL TOILETS AND SINKS ARE TO HAVE BRAIDED SUPPLY LINES AND 1/4 TURN SHUT-OFF VALVES.

ALL HORIZONTAL CW AND HW PIPING TO BE 3/4" UNLESS OTHERWISE NOTED.

DUE TO THE USE OF LOW FLOW FIXTURES, THE HOT WATER RECIRCULATION SYSTEM SHALL BE LAID OUT SUCH THAT NO HOT WATER RUN-OUT FROM THE RECIRCULATION LINE SHALL BE LONGER THAN 15' DEVELOPED LENGTH.

KITCHEN EQUIPMENT IS SHOWN FOR REFERENCE ONLY. REFER TO THE KITCHEN EQUIPMENT SHEETS FOR EXACT LOCATIONS AND LOADS.

MECHANICAL EQUIPMENT IS SHOWN FOR REFERENCE ONLY. REFER TO THE MECHANICAL SHEETS FOR EXACT LOCATIONS.

COORDINATE UTILITY INTERRUPTIONS WITH OWNER A MINIMUM OF 72 HOURS BEFORE INTERRUPTION.

GAS PIPING SIZED FOR 2psi DELIVERED GAS PRESSURE WITH A PRESSURE DROP OF 1.0PSIG, 0.6 SPECIFIC GRAVITY AND SCHEDULE 40 PIPE. DEVELOPMENTAL LENGTH OF 300'. NOTIFY DESIGNER IF THAT GAS PRESSURE CANNOT BE DELIVERED. PROVIDE NEW REGULATORS AND OTHER FITTINGS IF REQUIRED TO MATCH EQUIPMENT TO DELIVERED GAS PRESSURE. EVERY REGULATOR INSTALLED INSIDE THE BUILDING SHALL BE EQUIPPED WITH LEAK-LIMITING DEVICES. PRIOR TO INSTALLATION, CONTRACTOR SHALL DETERMINE THE DELIVERED PRESSURE AT THE SITE AND COMPARE WITH THE DESIGN PRESSURE OF THE PROPOSED SYSTEM. ADVISE DESIGNER IF RESIZING OF PIPES IS NECESSARY. PROVIDE REGULATORS IF REQUIRED.

SUGGESTED LOCATION OF GAS METER IS SHOWN. VERIFY ACTUAL LOCATION OF METER BY CIVIL AND GAS COMPANY.

PROVIDE GAS COCK, DRIP LEG, REGULATOR, AND DIELECTRIC UNION AT EACH UNIT. EVERY REGULATOR INSTALLED INSIDE THE BUILDING SHALL BE EQUIPPED WITH LEAK-LIMITING DEVICES.

WIREBRUSH AND PAINT ALL GAS LINES. COLOR: YELLOW OR AS DIRECTED BY ARCHITECT.

POWER VENT SYSTEM FOR WATER HEATERS IS TO INCLUDE INDIVIDUAL 4" PIPES FOR COMBUSTION AIR AND EXHAUST FOR EACH HEATER. PROVIDE EACH WATER HEATER WITH CONCENTRIC VENT KIT & PITCHED ROOF CURB. COORDINATE LOCATION OF ROOF PENETRATION WITH ARCHITECT.

INSULATE ALL NEW HW/CW PIPING, INCLUDING TIE-IN POINTS.

COORDINATE PENETRATIONS THROUGH RATED ASSEMBLIES TO ENSURE FINAL INSTALLATION IS PROPERLY PROTECTED AS REQUIRED BY APPLICABLE CODES.
EX: WATER PIPE PENETRATIONS THROUGH RATED WALLS.

THE HOT WATER RECIRCULATION SYSTEM SHALL BE LAID OUT SUCH THAT NO HOT WATER RUN-OUT FROM THE RECIRCULATION LINE SHALL BE LONGER THAN 15' DEVELOPED LENGTH.

PIPING SYSTEMS THROUGHOUT THE BUILDING SHALL BE PROTECTED FROM FREEZING, GENERALLY BY INSTALLING PIPES ON THE HEATED SIDE OF BUILDING INSULATION. PIPING ADJACENT TO EXTERIOR WALLS SHALL BE INSTALLED IN FURRED SPACES WITH BUILDING INSULATION BETWEEN THE PIPING AND THE EXTERIOR WALL.

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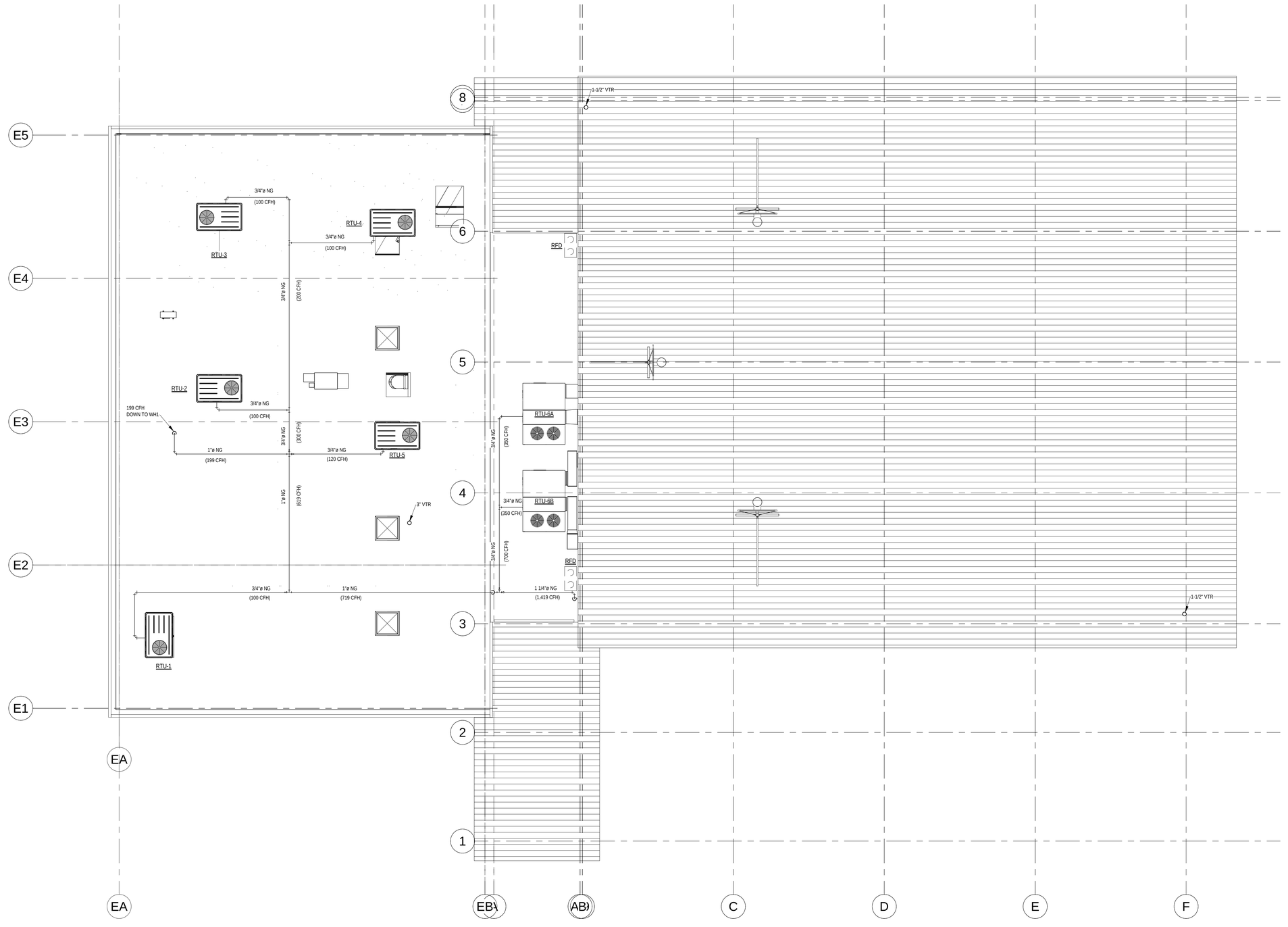
P1.2

First Floor Domestic



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

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P1.3

ROOF PLAN

FLOW TEST DATA :

PERFORMED BY: TENNESSEE AMERICAN WATER COMPANY
DATE: 08/13/2019
HYDRANT: H-301
LOCATION: 3610 DODDS AVE
ELEVATION: 687
STATIC PRESSURE: 70 PSI
RESIDUAL PRESSURE: 64 PSI
FLOW : 949 GPM

NOTE:
CONTRACTOR TO REFER TO THE MOST CURRENT CIVIL PLANS. CONTRACTOR TO OBTAIN THE MOST RECENT HYDRANT TEST. FLOW TEST IS NOT TO OCCUR MORE THAN SIX MONTHS BEFORE THE ISSUE OF THE BUILDING PERMIT.

SHOP DRAWING SUBMITTALS

FIRE PROTECTION CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND ASSOCIATED CALCULATIONS, DRAWN AND SIGNED BY A TENNESSEE REGISTERED FIRE PROTECTION SPRINKLER CONTRACTOR. PRIOR TO INSTALLATION CONTRACTOR TO OBTAIN THE MOST RECENT HYDRANT TEST THAT MUST BE WITHIN SIX MONTHS OF SUBMITTALS. CONTRACTOR SHALL SUBMIT DRAWINGS TO THE LOCAL FIRE MARSHAL'S OFFICE. DRAWINGS MUST BE APPROVED PRIOR TO INSTALLATION AFTER APPROVAL BY THE MECHANICAL ENGINEER OF RECORD (PROCESSED WITH THE ENGINEER'S SHOP DRAWING REVIEW STAMP.) HYDRAULIC CALCULATIONS MUST INCLUDE A 10% SAFETY FACTOR (MINIMUM OF 10PSI) WITH PIPE SIZING BASED ON VELOCITIES NOT EXCEEDING 30FT/S. DESIGN AREAS MUST NOT BE REDUCED BELOW 1,500 SF.

19211 East Lake YFD			
Hazard	Light Hazard	inputs=	
Density	0.1	Important values=	
Hose Demand	100	Q	13
Total GPM	250	K-value	5.6
	FT	Size	PSI
Distance to riser	125	4	0.8
Elbows	2	4	0.1
Tees	2	4	0.1
Riser/DDCV loss		6	10.0
Distance to test hydrant	540	6	1.0
Elevation	24		10.4
PSI required at most demanding sprinkler			5.4
		Total PSI loss	27.8

SPRINKLER DESIGN INTENT

SPRINKLER DESIGN INTENT

1. THIS IS AN NFPA-13 DESIGN. CONTRACTOR SHALL PROVIDE A COMPLETE COMPLIANT SYSTEM WHETHER INDICATED ON THE PLANS OR NOT.
2. THIS IS A WET SYSTEM, LIGHT HAZARD OCCUPANCY.
3. TOTAL SPRINKLER AREA FOR THE FIRST FLOOR IS APPROXIMATELY 16,349 SQ. FT
4. PIPING: CLASS I, SCHEDULE 40 ASTM A-120 BLACK STEEL PIPING. DRY SYSTEMS REQUIRE GALVANIZED PIPING AND FITTINGS. CPVC (BLAZEMASTER OR APPROVED EQUAL) FIRE SPRINKLER PIPING IS PERMITTED IF APPROVED BY LOCAL JURISDICTION. CONTRACTOR IS RESPONSIBLE TO ASSURE CPVC IS IN COMPLIANCE WITH LOCAL JURISDICTIONAL REQUIREMENTS PRIOR TO BID.
5. FITTINGS: 2" AND SMALL FITTINGS ARE 125# C.I. SCREWED 2 ½" AND LARGE FITTINGS ARE GROOVED. MECHANICAL TEES OR WELD OUTLETS. CPVC (BLAZEMASTER OR APPROVED EQUAL) FIRE SPRINKLER PIPING IS PERMITTED IF APPROVED BY LOCAL JURISDICTION. CONTRACTOR IS RESPONSIBLE TO ASSURE CPVC IS IN COMPLIANCE WITH LOCAL JURISDICTIONAL REQUIREMENTS PRIOR TO BID.
6. CPVC INSTALLATION: ALL INSTALLATION AND PAINTING SHALL BE DONE IN STRICT ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS. INSTALLATION CONTRACTOR AND FIELD PERSONAL ARE TO BE TRAINED AND QUALIFIED IN THE INSTALLATION OF CPVC FIRE SPRINKLER PIPING WITH IN TWO YEARS OF THIS PROJECT'S INSTALLATION. TRAINING SHALL BE PROVIDED BY A CPVC FIRE SPRINKLER PIPING MANUFACTURER AND SHALL INCLUDE PROPER PIPE PREPARATION TECHNIQUES, SOLVENT CEMENTING REQUIREMENTS, INSTALLATION INSTRUCTIONS AND THE PROPER HANDING OF PLASTIC PIPING INSIDE AND OUTSIDE OF THE BUILDING.
- CPVC PIPE AND FITTINGS ARE NOT INTENDED TO BE INSTALLED IN COMBUSTIBLE CONCEALED SPACES WHERE SPRINKLERS ARE REQUIRED BY NFPA 13 OR 13R
- CPVC PIPE AND FITTINGS ARE INTENDED TO BE INSTALLED IN APPLICATIONS WHERE PROTECTION IS PROVIDED. THE MINIMUM PROTECTION SHALL CONSIST OF EITHER:
(1) ONE LAYER OF 3/8" GYPSUM WALLBOARD.
(2) A SUSPENDED MEMBRANE CEILING WITH LAY-IN PANELS OR TILES HAVING A WEIGHT OF NOT LESS THAN 0.35PSF WHEN INSTALLED WITH METALIC SUPPORT GRIDS
(3) 1/2" PLYWOOD SOFFITS.
- CPVC PIPE AND FITTINGS MAY BE INSTALLED WITHOUT PROTECTION (EXPOSED WHEN SUBJECT TO THE FOLLOWING ADDITIONAL LIMITATIONS:
(1) EXPOSED PIPING IS TO BE INSTALLED BELOW A SMOOTH, FLAT, HORIZONTAL CEILING CONSTRUCTION.
(2) LISTED QUICK-RESPONSE, ORDINARY TEMPERATURE RATED PENDENT SPRINKLERS HAVING DEFLECTORS INSTALLED WITHIN 8 IN. FROM THE CEILING OR LISTED RESIDENTIAL ORDINARY TEMPERATURE RATED PENDENT SPRINKLERS LOCATED IN ACCORDANCE WITH THEIR LISTING AND A MAXIMUM DISTANCE BETWEEN SPRINKLERS NOT TO EXCEED 15 FT.
(3) LISTED QUICK-RESPONSE, ORDINARY TEMPERATURE RATED HORIZONTAL SIDEWALL SPRINKLERS HAVING DEFLECTORS INSTALLED WITHIN 6 IN. OF THE CEILING AND WITHIN 6 IN. FROM THE SIDEWALL OR LISTED RESIDENTIAL ORDINARY TEMPERATURE RATED HORIZONTAL SIDEWALL SPRINKLERS LOCATED IN ACCORDANCE WITH THEIR LISTING AND A MAXIMUM DISTANCE BETWEEN SPRINKLERS NOT TO EXCEED 14 FT.
7. SPRINKLER CONTRACTOR SHALL AFFIX A PERMANENT SIGN AT EACH HOSE CONNECTION PER NFPA REQUIREMENTS IN EACH STAIRWELL. SPRINKLER CONTRACTOR SHALL AFFIX A PERMANENT SIGN AT FIRE RISER PUMP ROOM STATING CONTROL VALVE FOR FIRST FLOOR LOCATED IN FIRE RISER PUMP ROOM. CONTROL VALVES FOR 2ND, 3RD AND 4TH FLOORS LOCATED IN STAIRS.
8. ALL SPRINKLER PIPING SHALL BE SEISMICALLY RESTRAINED PER NFPA 13 9.3.2.1 AND CLEARANCE AROUND PIPING PASSING THROUGH FLOORS AND WALLS AND FOUNDATIONS IN ACCORDANCE WITH NFPA 13 9.3.4.
9. SPACE IS EXTREMELY LIMITED IN THE CORRIDORS. COORDINATE WITH ALL TRADES BEFORE INSTALLATION.
10. SPRINKLER HYDRAULIC CALCULATIONS MUST INCLUDE A 10% SAFETY FACTOR (MINIMUM OF 10PSI) WITH PIPE SIZING BASED ON VELOCITIES NOT EXCEEDING 30FT/S.

FIRE PROTECTION GENERAL NOTES

1. SCOPE OF WORK

A. THE CONTRACTOR IS RESPONSIBLE FOR ALL WORK, MATERIALS, AND INCLUDE SERVICES AND INCIDENTALS TO SATISFY A COMPLETE AND OPERATING SYSTEM WHETHER SPECIFIED OR IMPLIED.
B. ALL FIRE PROTECTION WORK SHALL BE PERFORMED IN STRICT COMPLIANCE WITH ALL STATE, LOCAL LAWS AND ORDINANCES AND IN A MANNER SATISFACTORY TO THE AUTHORITY HAVING JURISDICTION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL REQUIRED PERMITS, INSPECTIONS AND PAY ALL APPLICABLE FEES. ALL FIRE PROTECTION SYSTEMS TO MEET RELEVANT STANDARDS OF NATIONAL FIRE PROTECTION ASSOCIATION (NFPA), INCLUDING, BUT NOT LIMITED TO 13, 20, 24, AND 70.
C. ALL EQUIPMENT AND MATERIALS SHALL BE AS SPECIFIED OR "APPROVED EQUAL" BY THE ENGINEER OR ARCHITECT.
D. FIRE PROTECTION/SPRINKLER CONTRACTOR SHALL PROVIDE SPRINKLER SYSTEM PER SPECIFICATIONS.

2. PERMITS

A. THE CONTRACTOR SHALL BE A LICENSED FIRE SPRINKLER CONTRACTOR.
B. THE CONTRACTOR SHALL SECURE ALL PERMITS OR APPLICATIONS AND PAY ANY AND ALL FEES.
C. BEFORE BEGINNING CONSTRUCTION THE SPRINKLER CONTRACTOR IS TO CONFIRM FLOW DATA AND PROVIDE HYDRAULIC SPRINKLER DESIGN. FLOW TEST IS NOT TO OCCUR MORE THAN SIX MONTHS BEFORE THE ISSUE OF THE BUILDING PERMIT.

3. SHOP DRAWINGS

A. SUBMIT MATERIAL LIST AND SHOP DRAWINGS FOR MAJOR EQUIPMENT TO THE ARCHITECT/ENGINEER AND STATE FIRE MARSHALL FOR APPROVAL.

4. SPRINKLER HEADS

A. WHERE SPRINKLER HEADS ARE INSTALLED IN ACOUSTICAL CEILING TILES, HEADS SHALL BE CENTERED IN THE TILE.
B. SPRINKLER HEADS ARE TO BE PROVIDED IN THE STYLE AND COLOR/FINISH AS SPECIFIED ON THE DRAWING. HOWEVER, CONTRACTOR TO CONFIRM WITH OWNER / ARCHITECT PRIOR TO PURCHASE THAT COLOR/FINISH ACCEPTABLE.
C. HEAD LOCATIONS SHOWN ON DRAWINGS ARE FOR ESTIMATING PURPOSES ONLY.
D. UNLESS OTHERWISE SHOWN OR NOTED, INSTALL UPRIGHT HEADS IN AREAS WITHOUT CEILINGS; PROVIDE ESCUTCHEON PLATES FOR AREAS WITH CEILINGS. TEMPERATURE RATING OF SPRINKLERS SHALL BE AS REQUIRED BY NFPA OR AHJ.
E. MAXIMUM SPACING OF SPRINKLERS TO NOT EXCEED SPRINKLER HEAD MANUFACTURER'S PUBLISHED SPRAY LIMITATIONS.
F. THIS IS A CONCEPTUAL PLAN ONLY. A LICENSED FIRE PROTECTION CONTRACTOR SHALL PROVIDE A COMPLETE FIRE PROTECTION SYSTEM IN ACCORDANCE WITH ALL CODES. ANY ADDITIONAL SPRINKLER HEADS ABOVE WHAT IS SHOWN ON THIS PLAN SHALL BE PROVIDED AT NO ADDITIONAL COST.

5. SPRINKLER PIPING

A. ALL SPRINKLER PIPE IS TO BE RUN AS HIGH AS POSSIBLE AND COORDINATED WITH ALL TRADES.
B. SPRINKLER PIPE SHALL BE MADE TO ANY OF THE SPECIFICATIONS LISTED. WELDING WILL NOT BE PERMITTED IF THERE ARE ANY SPRINKLERS CONNECTED THERETO.
ASTM A53
ASTM A120
ASTM A135
C. PIPING MATERIAL MAY BE SCHEDULE 10 (THINWALL) PROVIDED JOINTS ARE MADE BY ROLL-GROOVE COUPLING, THREADING WILL NOT BE PERMITTED.
D. PIPING MATERIAL MAY BE SCHEDULE 40 WITH FLANGED, ROLL-GROOVED COUPLINGS, OR THREADED JOINTS.
E. DRYWET SPRINKLER PIPING SHALL BE SLOPED TO DRAIN. LOW POINT DRAINS SHALL BE PROVIDED AT ANY CHANGE IN PITCH.
F. COORDINATE WORK WITH OTHER TRADES TO AVOID INTERFERENCES. CUTTING AND PATCHING SHALL BE RESTORED IN A MANNER ACCEPTABLE TO THE ARCHITECT AND OWNER.
G. ALL PIPING FROM "POINT OF SERVICE" INCLUDING UNDERGROUND USED FOR SPRINKLER OR STANDPIPE SYSTEM MUST BE INSTALLED BY A REGISTERED SPRINKLER CONTRACTOR.
H. PAINT ALL PIPING 2" NPS OR LARGER RED EXCEPT WHERE OTHERWISE REQUIRED BY ARCHITECT. APPLY ONE (1) COAT OF PRIMER BEFORE INSTALLATION. APPLY MIN. OF ONE (1) COAT OF PAINT AFTER INSTALLATION.

6. WALL AND FLOOR PENETRATIONS:

A. SLEEVES ARE REQUIRED WHERE A PIPE PASSES THROUGH A WALL OR FLOOR. PIPES PASSING THROUGH A WALL OR FLOOR MUST BE INDIVIDUALLY SLEEVED UNLESS APPROVED BY ARCHITECT.
B. SLEEVES SHALL FINISH FLUSH WITH THE WALL FINISH AND SHALL FINISH 1/4" ABOVE FINISHED FLOOR.
C. SLEEVES SHALL BE AS FOLLOWS:
-THROUGH MASONRY WALLS - GALVANIZED STEEL PIPE.
-THROUGH PARTITIONS AND FLOOR - 22 GAUGE GALVANIZED SHEET METAL.
D. PROVIDE FIRE STOP PROTECTION WHEN PENETRATING FIRE RATED PARTITION OR WALL.
E. ALL PENETRATIONS THROUGH MASONRY WALLS WILL BE CORE DRILLED AND SLEEVED.

7. PIPE SUPPORTS

A. ALL HANGERS MUST BE AN APPROVED TYPE BY NFPA 13, NO SPRINKLER PIPING IS TO BE SUPPORTED FROM ANY MECHANICAL OR ELECTRICAL DEVICES.

B. ALL PIPE SHALL BE SUPPORTED FROM THE BUILDING STRUCTURE IN A NEAT AND WORKMANLIKE MANNER. VERTICAL RISERS SHALL BE SUPPORTED AT EACH FLOOR LEVEL WITH STEEL PIPE CLAMPS. THE USE OF WIRE OR STRAP METAL HANGER TO SUPPORT PIPES WILL NOT BE PERMITTED. HANGING PIPES FROM OTHER PIPES WILL NO BE PERMITTED. PIPING SHALL BE CAREFULLY COORDINATED BEFORE INSTALLATION WITH SYSTEMS AND EQUIPMENT IN CHASES AND OTHER CONGESTED AREAS.

C. SEISMIC PERFORMANCE: FIRE-SUPPRESSION PIPING BRACING SHALL BE IN ACCORDANCE TO NFPA 13.

8. STANDPIPES

A. GAUGES ARE TO BE LISTED 90-mm (3 1/2-in) DIAL SPRING PRESSURE GAUGE TYPE. GAUGES ARE TO BE CONNECTED TO EACH DISCHARGE PIPE FROM THE FIRE PUMP AND AT THE TOP OF EACH STANDPIPE. GAUGES ARE TO BE LOCATED IN A PLACE SO AS NOT TO FREEZE. EACH VALVE SHALL INCLUDE AN ARRANGEMENT FOR DRAINING, SEE NFPA 14 5.6.

B. STANDPIPES SHALL BE SUPPORTED BY ATTACHMENTS CONNECTED DIRECTLY TO THE STANDPIPE IN AGREEMENT WITH NFPA 14 6.4.1.

C. 65-mm (2 1/2-in) HOSE CONNECTIONS FOR CLASS 1 SYSTEMS MUST BE LOCATED AT EACH INTERMEDIATE LANDING BETWEEN FLOOR LEVELS IN EVERY REQUIRED EXIT STAIR, SEE NFPA 14 7.3.2.

D. A DRAIN RISER MUST BE INSTALLED ADJACENT TO EACH STANDPIPE EQUIPPED WITH PRESSURE REGULATING DEVICES.

9. SEISMIC

A. SEISMIC RESTRAINT FOR SPRINKLER PIPING IS REQUIRED. PROVIDE FLEXIBLE COUPLINGS AT FLEXURE JOINTS PER NFPA 13 9.3.2.1 AND, CLEARANCES AROUND PIPING PASSING THROUGH FLOORS AND WALLS AND FOUNDATIONS PER NFPA 13 9.3.4.
B. SEE STRUCTURAL DRAWINGS FOR LOCAL SEISMIC DESIGN COEFFICIENTS.

10. WORKING PLANS

A. THE DRAWINGS INCLUDED AS PART OF THIS SET OF CONSTRUCTION DOCUMENTS ARE TO PROVIDE ENGINEERING DESIGN INTENT. THE CONTRACTOR SHALL PREPARE WORKING DRAWINGS. (AS DEFINED BE NFPA 13) WHICH SHALL INCLUDE HYDRAULIC CALCULATIONS AND WILL BE SUBMITTED TO THE ENGINEER AND FIRE MARSHALL FOR APPROVAL.

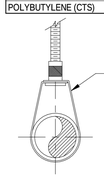
11. MISCELLANEOUS

A. DO NOT SCALE THIS DRAWING FOR EXACT DIMENSIONS, VERIFY ALL FIGURES, CONDITIONS, AND DIMENSIONS AT THE JOB SITE. THE SPRINKLER PLANS ARE INTENDED TO BE DIAGRAMMATIC. THEY ARE NOT INTENDED TO SHOW EVERY ITEM IN ITS EXACT LOCATION.
B. PROVIDE TAMPER SWITCHES ON ALL OS&Y VALVES. TAMPER SWITCHES SHALL BE FURNISHED AND INSTALLED BY FIRE PROTECTION CONTRACTOR, WIRED BY ELECTRICAL CONTRACTOR. CHAIN AND LOCK ALL OS&Y VALVES IN FULLY OPEN POSITION.
C. CONTRACTOR SHALL BE RESPONSIBLE FOR ASSEMBLING ANY EQUIPMENT SHIPPED IN SECTIONS, IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
D. COMPLETE SPRINKLER SHOP DRAWINGS AND ASSOCIATED CALCULATIONS MUST BE DRAWN AND SIGNED BY A REGISTERED FIRE PROTECTION CONTRACTOR'S RESPONSIBLE MANAGING EMPLOYEE. THE SPRINKLER SHOP DRAWINGS AND ASSOCIATED CALCULATIONS MUST BE SUBMITTED TO THE ARCHITECT FOR REVIEW AND APPROVAL BY THE FIRE PROTECTION ENGINEER AFTER DESIGN INTENT HAS BEEN APPROVED BY THE AHJ.
F. HOSE CONNECTIONS AND HOSE STATIONS MUST BE UNOBSTRUCTED AND LOCATED BETWEEN 3 FT AND 5 FT ABOVE FINISHED FLOOR.
G. ALL SYSTEM WATER SUPPLY VALVES, ISOLATION CONTROL VALVES, AND OTHER VALVES IN THE FIRE SYSTEM LINE ARE TO BE SUPERVISED IN AN APPROVED MANNER IN THE OPEN POSITION BY A LOCAL SIGNALING SERVICE THAT INITIATES AN AUDIBLE SIGNAL AT A CONSTANTLY ATTENDED LOCATION, SEE NFPA 14 6.2.7.
H. DRAINS MUST BE PLACED AT ALL SYSTEM LOW POINTS. DRAINS MUST BE LOCATED DOWNSTREAM OF ISOLATION VALVES AND DRAIN TO A LOCATION APPROVED BY THE AHJ.
I. THE MAXIMUM PRESSURE AT ANY POINT IN THE SYSTEM AT ANY TIME SHALL NOT EXCEED 175 PSI. IF STATIC PRESSURE AT THE HOSE CONNECTION EXCEEDS 175 PSI, AN APPROVED PRESSURE REGULATING DEVICE MUST BE PROVIDED TO LIMIT THE STATIC AND RESIDUAL PRESSURES TO 175 PSI AT THE HOSES.
J. PROVIDE A FLOW SWITCH OR ALARM CHECK VALVE CONNECTION TO THE BUILDING FIRE ALARM SYSTEM (MUST SOUND WITHIN FIVE MINUTES OF FLOW.) [NFPA 13 6.9.1]
K. ALL SYSTEM GAUGES AND VALVES MUST BE ACCESSIBLE FOR INSPECTION AND MAINTENANCE. [NFPA 13 8.15.1.2]
L. SOLENOID VALVES USED FOR ELEVATOR HOISTWAYS AND MACHINE ROOMS SHALL BE LISTED FOR THE PARTICULAR APPLICATION AND BE SUPERVISED BY THE FIRE ALARM SYSTEM. STAND ALONE SOLENOID VALVES SERVING A DRY SYSTEM BRANCH LINE FOR ELEVATOR HOISTWAYS AND MACHINE ROOMS IS NOT AN ACCEPTABLE ALTERNATIVE TO A PREACTION SPRINKLER SYSTEM.
M. FIRE SPRINKLER CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND INSTALLING ELECTRIC BELL. WIRING OF ELECTRIC BELL SHALL BE BY FIRE ALARM CONTRACTOR. IN THE EVENT THAT A FIRE ALARM SYSTEM IS NOT PROVIDED OR IS NOT WITHIN THE PROJECT SCOPE, THE FIRE SPRINKLER CONTRACTOR SHALL PROVIDE AND INSTALL A STAND ALONE FIRE ALARM CONTROL PANEL DEDICATED TO MONITORING THE FIRE RISER FLOW AND TAMPER SWITCHES AS WELL AS OPERATING THE ELECTRIC BELL. THE FIRE ALARM CONTROL PANEL SHALL INCLUDE BATTERY BACKUP AND DIAL OUT CAPABILITY. FIRE SPRINKLER CONTRACTOR SHALL SUBCONTRACT A LICENSED FIRE ALARM CONTRACTOR FOR ALL WIRING.
N. CONTRACTOR TO INSPECT ALL DRAWINGS CAREFULLY FOR LOCATIONS SUBJECT TO FREEZING CONDITIONS. DO NOT INSTALL PIPING IN AREAS EXPOSED TO AMBIENT CONDITIONS UNLESS ADEQUATELY PROTECTED. PIPING SYSTEMS THROUGHOUT THE BUILDING SHALL BE PROTECTED FROM FREEZING, GENERALLY BY INSTALLING PIPES ON THE HEATED SIDE OF BUILDING INSULATION. PIPING ADJACENT TO EXTERIOR WALLS SHALL BE INSTALLED IN FURRED SPACES WITH BUILDING INSULATION BETWEEN THE PIPING AND THE EXTERIOR WALL.
O. UNDERGROUND PIPING FOR FIRE LINES REQUIRE THRUST BLOCKS TO BE PROVIDED AT ANY BELOW GRADE TURN. THESE MUST BE INSPECTED PRIOR TO COVERING UP BY THE FIRE INSPECTOR.
P. CONTRACTOR TO PROVIDE OWNER WITH SPARE SPRINKLER HEADS ALONG WITH THE APPROPRIATE SPRINKLER HEAD WRENCHES. PROVIDE SIX (6) SPARE SPRINKLER HEADS OF EACH TYPE AND TEMPERATURE RATING. ADDITIONAL SPRINKLER HEADS ARE TO BE PROVIDED WHEN THE TOTAL NUMBER PROJECT SPECIFIC SPRINKLER HEADS EXCEED 300. FOR PROJECTS WHERE A TYPE SPRINKLER HEAD COUNT IS BETWEEN 300 TO 1000, A MINIMUM OF TWELVE (12) SPARE HEADS SHALL BE PROVIDED FOR THAT TYPE SPRINKLER HEAD. FOR PROJECTS WITH A TYPE SPRINKLER HEAD COUNT THAT EXCEED 1000, PROVIDE TWENTY-FOUR (24) SPARE HEADS FOR THAT TYPE HEAD SPRINKLER HEAD.

SITE PLAN
NOT TO SCALE

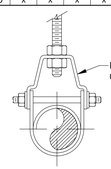
FIRE SPRINKLER PIPE HANGER SIZE AND SPACING

PIPE SIZE	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	6"	8"	10"
HANGER ROD SIZE	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	1/2"	1/2"	5/8"
SCD. 40 STEEL PIPE	x	12-0	12-0	15-0	15-0	15-0	15-0	15-0	15-0	15-0	15-0
SCD. 10 STEEL PIPE	x	12-0	12-0	12-0	12-0	12-0	12-0	x	x	x	x
COPPER TUBE	8-0	8-0	10-0	10-0	12-0	12-0	12-0	15-0	15-0	15-0	15-0
CPVC	5-6	6-0	6-6	7-0	8-0	9-0	10-0	x	x	x	x
POLYBUTYLENE (IPS)	x	3-9	4-7	5-0	5-11	x	x	x	x	x	x
POLYBUTYLENE (CTS)	2-11	3-4	3-11	4-5	5-5	x	x	x	x	x	x



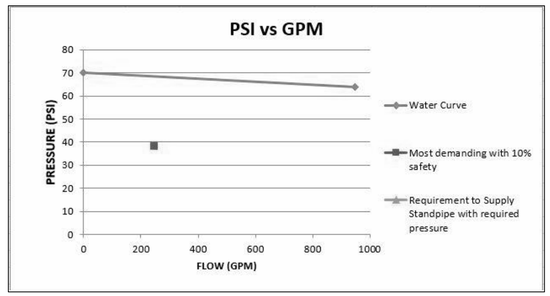
USE WITH ATTACHMENTS C1, C2, C3, C4, M1, M2, M3, M4, M5 & W1

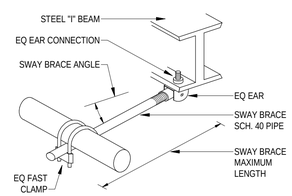
PIPE HANGER MSS TYPE 10



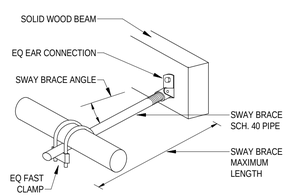
USE WITH ATTACHMENTS C2, C3, C4, M1, M2, M3, M4, M5, B1, B2, B3, B4, B5, B6 & W1

PIPE HANGER MSS TYPE 1





EARTH QUAKE BRACE



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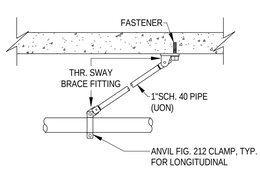
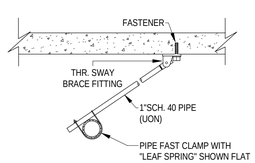
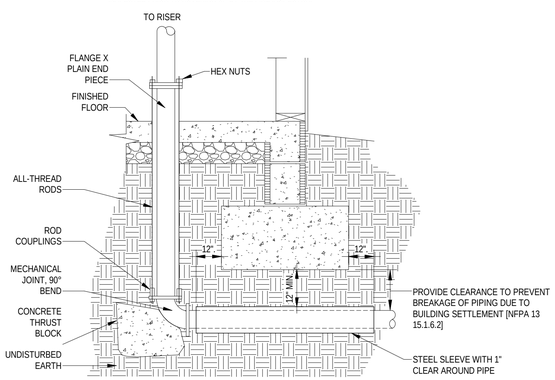


LONGITUDINAL SWAY BRACE WITH THREADED FITTINGS

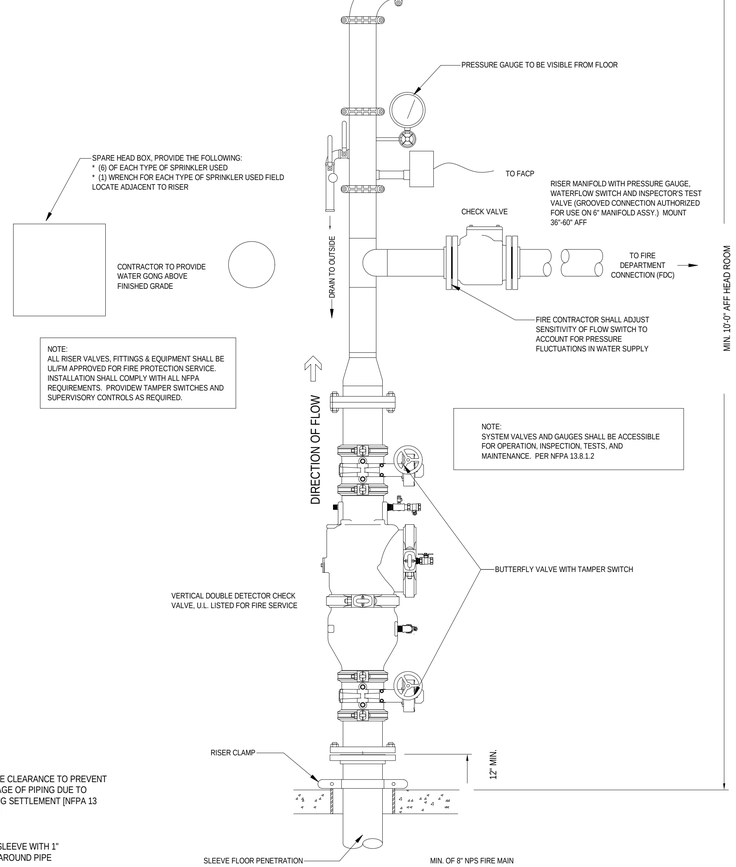


LATERAL SWAY BRACE WITH THREADED FITTINGS

NOTE:
UNDERGROUND PIPING FOR FIRE LINES REQUIRE THRUST BLOCKS TO BE PROVIDED AT ANY BELOW GRADE TURN. THESE MUST BE INSPECTED PRIOR TO COVERING UP BY THE FIRE INSPECTOR.



LEAD IN UNDERGROUND DETAIL
NO SCALE



FIRE RISER DETAIL WITH DDCV
NO SCALE

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East Lake YFD Center Improvements

3610 Dodds Avenue, Chattanooga, TN 37402

C. JEFFREY WEST — REGISTERED PROFESSIONAL ENGINEER — AGRICULTURE — COMPUTER — CIVIL — No. 110599 — STATE OF TENNESSEE — 12/20/19

ISSUE DATES
INITIAL ISSUE 12/20/19

JOB NO. 18-072 | D'WN TAQ | CK'D EM

FP1.0
FP SITE PLAN AND NOTES

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FIRE PROTECTION SPRINKLER HEAD LEGEND
● WET PENDANT SPRINKLER HEAD
△ SIDE WALL SPRINKLER HEAD
○ UPRIGHT SPRINKLER HEAD
⊗ UPRIGHT WITH GUARD SPRINKLER HEAD

PER NFPA13-2016 SECTION 8.15.7.2 - SPRINKLERS SHALL BE OMITTED WHERE THE EXTERIOR CANOPIES, ROOFS, PORTE-COCHERES, BALCONIES, DECKS, AND SIMILIAR PROJECTIONS ARE CONSTRUCTED WITH MATERIALS THAT ARE NONCOMBUSTIBLE, LIMITED-COMBUSTIBLE, OR FIRE RETARDANT-TREATED WOOD AS DEFINED IN NFPA 703, OR WHERE THE PROJECTIONS ARE CONSTRUCTED UTILIZING A NONCOMBUSTIBLE FRAME, LIMITED -COMBUSTIBLES, OR FIRE RETARDANT-TREATED WOOD WITH AN INHERENTLY FLAME-RESISTANT FABRIC OVERLAY AS DEMONSTRATED BY TEST METHOD 2 IN ACCORDANCE WITH NFPA 701.

MULTI-PURPOSE-A 105

MULTI-PURPOSE-B 104

SEE FP1.2 FOR SPRINKLERING OF HIGHER CEILING

STORAGE 106

I.T. 107

ELEC. 108

CATERING 109

CORRIDOR 111

JANITOR 121

WEIGHTS 122

SEE FP1.2 FOR SPRINKLERING OF HIGHER CEILING

LAUNDRY 110

WOMEN 119

MEN 120

TEEN LOUNGE 112

SEE FP1.2 FOR SPRINKLERING OF HIGHER CEILING

RECEPT. 117

CORRIDOR 118

READING/TECH. 113

OFFICE 114

OFFICE 116

CONF. 115

LOBBY 101

SEE FP1.2 FOR SPRINKLERING OF HIGHER CEILING

GYM 102

EQUIP. 103

RISER RM. 104

FIRE LINE UP

HOLD PIPE TIGHT TO STRUCTURE

FIRE SUPPLY LINE FOR LOWER CEILINGS

HOLD FIRE LINE TIGHT TO STRUCTURE

FIRE LINE SUPPLY CONTINUES UP FOR UPPER CEILING SPRINKLERING

FDC ON BUILDING WITH APPROVAL OF LOCAL AHJ

6" FIRE PROTECTION LINE - SEE CIVIL FOR CONTINUATION. RISER WITH DDCV.

PER NFPA13-2016 SECTION 8.15.7.2 - SPRINKLERS SHALL BE OMITTED WHERE THE EXTERIOR CANOPIES, ROOFS, PORTE-COCHERES, BALCONIES, DECKS, AND SIMILIAR PROJECTIONS ARE CONSTRUCTED WITH MATERIALS THAT ARE NONCOMBUSTIBLE, LIMITED-COMBUSTIBLE, OR FIRE RETARDANT-TREATED WOOD AS DEFINED IN NFPA 703, OR WHERE THE PROJECTIONS ARE CONSTRUCTED UTILIZING A NONCOMBUSTIBLE FRAME, LIMITED -COMBUSTIBLES, OR FIRE RETARDANT-TREATED WOOD WITH AN INHERENTLY FLAME-RESISTANT FABRIC OVERLAY AS DEMONSTRATED BY TEST METHOD 2 IN ACCORDANCE WITH NFPA 701.

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

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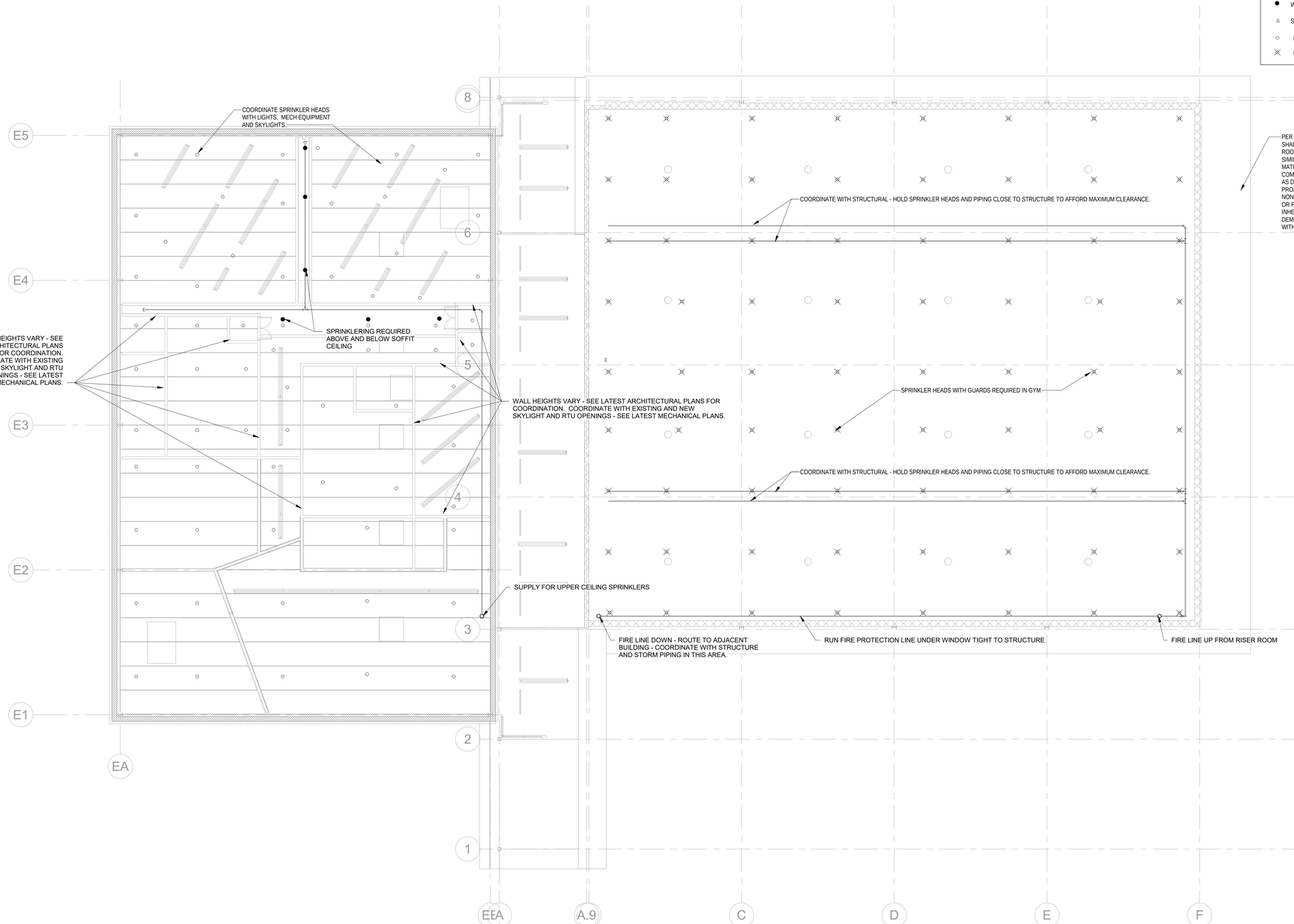
FP1.1
FP FIRST FLOOR PLAN



1 UPPER CEILING

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

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FP1.2

FP UPPER CEILIING PLAN

ELECTRICAL SYMBOLS

- CONDUIT CONCEALED IN FINISHED AREAS, EXPOSED IN UNFINISHED AREAS.
- CONDUIT CONCEALED IN OR UNDER FLOOR SLAB.
- FLEXIBLE CONNECTION TO EQUIPMENT.
- R1:1,3 20/2 — HOMERUN TO PANELBOARD. EXAMPLE: HOMERUN TO PANEL R1, CKTS. #1 AND #3, 2 POLE BREAKER, 3#12 & 1#12 G ½" CONDUIT MINIMUM. CONDUCTORS SIZED PER NEC.
- J — JUNCTION BOX, 4" SQUARE OR SIZED AS NEEDED.
- FIXTURE OUTLET CEILING – SEE SCHEDULE FOR LAMP TYPE.
- FIXTURE OUTLET CEILING – STRIP
- WALL MOUNTED FIXTURE.
- FIXTURE PROVIDING EMERGENCY ILLUMINATION.
- EXIT LIGHTING FIXTURE, ARROWS AND EXIT FACE AS INDICATED ON DWGS.
- BOLLARD TYPE SITE LIGHTING.
- STANDARD DESIGNATIONS FOR ALL LIGHTING FIXTURES.
  "A" = FIXTURE TYPE, REFER TO FIXTURE SCHEDULE
  "2" = CIRCUIT NUMBER
  "a" = SWITCH IDENTIFICATION
  "p" = PHOTOCELL CONTROL – DUSK TO DAWN OPERATION
- ^{OS} — OCCUPANCY SENSOR SWITCH OUTLET – AC TYPE, 1 POLE, 20A, 120, HUBBELL LHDMMTS2 DIMMING DUAL TECH LIGHTHAWK OR EQUAL. (1)
- $_{WP}$ — SWITCH OUTLET – AC TYPE, 1 POLE, 20A, 120/277V, HUBBELL 1221 OR EQUAL. "WP" INDICATES WITH WEATHER PROOF COVER.
- $_{L}$ — SWITCH OUTLET – AC TYPE, 1 POLE, 20A, 120/277V, ILLUMINATED WITH LOAD OFF, HUBBELL 1221IL OR EQUAL.
- $_{3}$ — SWITCH OUTLET – AC TYPE, 3 WAY, 20A, 120/277V, HUBBELL 1223 OR EQUAL.
- WALL OUTLET – DUPLEX 20A, 125V, 2P/3W NEMA 5–20R GROUNDING, HUBBELL 5362 OR EQUAL. 2 INDICATES CIRCUIT #2.
- WALL OUTLET – DUPLEX 15A, 250V, 2P/3W NEMA 6–15R GROUNDING, HUBBELL 5662GY OR EQUAL. COORDINATE WITH UPS VENDOR FOR EXACT CONFIGURATION.
- WALL OUTLET – DOUBLE DUPLEX 20A, 125V, 2P/3W NEMA 5–20R GROUNDING, 2 EACH HUBBELL 5362 OR EQUAL.
- GFI — WALL OUTLET – DUPLEX GROUND FAULT CURRENT INTERRUPTER, 20A, 125V, 2P/3W NEMA 5–20R GROUNDING, HUBBELL GFR5352 OR EQUAL.
- WALL OUTLET – SINGLE OUTLET, 50A, 250V, 2P/3W. NEMA 6–50R GROUNDING, HUBBELL 9367 OR AS REQUIRED TO MATCH EQUIPMENT.
- WP — WALL OUTLET – DUPLEX WEATHER PROOF 20A, 125V, 2P/3W NEMA 5–20R GFCI, HUBBELL GFR5352 WITH WP26 COVER IN DAMP LOCATIONS & WP826MP IN WET LOCATIONS, AS DEFINED BY NEC, OR EQUAL.
- C — WALL OUTLET – MOUNTED 6" ABOVE COUNTER. COORDINATE EXACT MOUNTING HEIGHT WITH ARCHITECTURAL. RATING AS INDICATED.
- WALL OUTLET – DUPLEX 20A, 250V, 2P/3W NEMA 6–20R GROUNDING, HUBBELL 5462 OR EQUAL.
- EWC — WALL OUTLET – ELECTRICAL WATER COOLER. COORDINATE LOCATION & HEIGHT W/PLUMBING. CONCEAL RECEP. BEHIND WATER COOLER NEMA 5–20R GFCI.
- (WA) — WIRELESS ACCESS DATA POINT LOCATION. WALL OR CEILING MOUNTED AS REQUIRED. PROVIDE OUTLET BOX AND CONDUIT ROUTED TO LAYIN CEILING OR TBB.
- ▼ — TELEPHONE/DATA OUTLET. 2 GANG BOX WITH TWO GANG PLASTER RING. PROVIDE 1" CONDUIT FROM FLUSH MOUNTED OUTLET BOX TO VOID ABOVE DROPPED CEILING. TURN CONDUIT INTO CEILING VOID WITH 90 DEGREE BEND. INSTALL INSULATED BUSHING ON END OF CONDUIT. IN ROOMS WITH NO DROPPED CEILING, ROUTE CONDUIT TO NEAREST CEILING VOID. COMMUNICATIONS CABLES AND OUTLETS FURNISHED AND INSTALLED UNDER OTHER SECTIONS.
- ^{M} — TOGGLE MANUAL MOTOR STARTER SWITCH OUTLET – AC TYPE, 2 POLE, 30A, 120/277V, WITH MOTOR THERMAL OVERLOADS, HUBBELL 1372D
- DISCONNECT SWITCH, NON–FUSED, SIZED AS INDICATED ON DRAWINGS.
- F — DISCONNECT SWITCH, FUSED, SIZED AS INDICATED ON DRAWINGS.
- ACROSS THE LINE MOTOR STARTER, FURNISHED BY MECHANICAL CONTRACTOR ADN INSTALLED AND CONNECTED BY THE ELECTRICAL CONTRACTOR.
- SPD — TRANSIENT VOLTAGE SURGE SUPPRESSOR. TYPE AS NOTED IN SPECIFICATIONS. MOUNT AS CLOSE TO PANEL TERMINALS AS POSSIBLE.
- R1 — RECEPTACLE PANEL, SEE PANEL SCHEDULES AND SINGLE LINE DIAGRAM.
- L1 — LIGHTING PANEL, SEE PANEL SCHEDULES AND SINGLE LINE DIAGRAM.
- H1 — MECHANICAL SYSTEMS PANEL, SEE PANEL SCHEDULES AND SINGLE LINE DIAGRAM.
- MP — SERVICE ENTRANCE MAIN PANEL WITH METERING OF EACH LOAD AS REQUIRED BY ASHRAE 90.3, SEE PANEL SCHEDULES AND SINGLE LINE DIAGRAM.
- 8" BASKET CABLE TRAY — WIRE BASKET CABLE TRAY FOR EXPOSED PLENUM RATED SYSTEMS WIRING ABOVE LAY IN CEILING AND IN STRUCTURAL CEILING SPACES. INSTALL AT ELEVATIONS SHOWN AND PROVIDE THE INDICATED SIZES AND ROUTING. SEE SHEET E5.10 FOR ROUTING AND CONFIGURATION. SYSTEMS INCLUDE AUDIOVISUAL, DATA, LIGHTING CONTROLS, AND OTHER COMPATIBLE LOW VOLTAGE SYSTEMS.

LIGHTING CONTROLS SYSTEM

- PSC — WALL MOUNTED PRESET SCENE CONTROL FOR LOCAL LIGHTING CONTROL PANEL. MOUNTS 48" AFF.
- LC4 — LOCAL 4 ZONE CONTROL PANEL WITH ON/OFF AND 0–10VDC DIMMING CONTROL FOR EACH ZONE. INSTALL ABOVE LAY–IN CEILING OR IN CLOSET SHOWN. INTERFACE WITH AV CONTROLS FOR PRESET ACTIVATIONS. FURNISH ALL BOXES, MOUNTING HARDWARE AND OTHER REQUIREMENTS OF THE EQUIPMENT MANUFACTURER, WALL MOUNTED 48" AFF OR ABOVE LAY IN CEILING.
- OS — OCCUPANCY SENSOR FOR CONTROL OF LIGHTING AND RECEPTACLES AS INDICATED. PROVIDE WALL OR CEILING MOUNTED DUAL TECHNOLOGY UNITS AS SHOWN. FURNISH ALL BOXES, MOUNTING HARDWARE AND OTHER REQUIREMENTS OF THE EQUIPMENT MANUFACTURER. WALL UNITS MOUNTED 48" AFF.
- INV — EMERGENCY LIGHTING INVERTER FOR GYMNASIUM LIGHTING. PROVIDE 90 MINUTE RUN TIME FOR LOADS SHOWN. (1)

FIRE CONTROLS DEVICE LEGEND

- F — FIRE PULL STATION. SINGLE ACTION, SINGLE POLE WITH CLEAR PLASTIC COVER. MOUNTED 48" A.F.F.
- SD — PHOTOELECTRIC SMOKE DETECTOR.
- F — STROBE, LIGHT LEVEL 75cd UNLESS OTHERWISE NOTED. MOUNTED 95" A.F.F. OR 12" BELOW CEILING, WHICHEVER IS LOWER. IN AREAS WITH LAY–IN CEILINGS, STROBES MAY BE COMBINED WITH A STROBE/SPEAKER MOUNTED FLUSH IN THE CEILING. (2)
- DD — PHOTOELECTRIC DUCT SMOKE DETECTOR WITH INTEGRAL LED. PROVIDE RELAY & CONNECT TO AHU SHUTDOWN.
- FACP — FIRE ALARM CONTROL PANEL.
- FRA — FIRE ALARM REMOTE ANNUNCIATOR
- F — AUDIBLE WATER FLOW WARNING HORN, SOUND LEVEL 87dB @ 10'–0" UNLESS OTHERWISE NOTED. (2)
- HD — HEAT DETECTOR
- RCP RT — RELAY CONTROL POINT FOR HVAC FAN SHUTDOWN. "RT" INDICATES IN NEMA 3R RAIN TIGHT CABINET.
- CT — CONTROL INPUT
- RT — REMOTE LAMP AND TEST STATION FOR DUCT DETECTOR ABOVE LAY IN CEILING.
- WF — WATER FLOW SWITCH BY SPRINKLER CONTRACTOR. MONITORED BY FIRE ALARM SYSTEM.
- SS — VALVE SUPERVISORY SWITCH BY SPRINKLER CONTRACTOR. MONITORED BY FIRE ALARM SYSTEM.
- RT — REMOTE LAMP AND TEST STATION FOR DUCT DETECTOR
- FA — RED PAINTED FIRE ALARM CONDUIT AND BOX SYSTEM. PROVIDE CONCEALED CONDUIT WHERE POSSIBLE ABOVE LAY IN CEILING OR WALLS. CONDUIT SHALL BE ¾" MINIMUM SIZE AND CONTAIN FPLP RATED CONDUCTORS AS DEFINED BY FIRE ALARM SHOP DRAWINGS.
- FS — GREEN PAINTED EMERGENCY WARNING SYSTEM CONDUIT AND BOX SYSTEM. PROVIDE CONCEALED CONDUIT WHERE POSSIBLE ABOVE LAY IN CEILINGS OR WALLS. CONDUIT SHALL BE ¾" MINIMUM SIZE AND CONTAIN FPLP RATED CONDUCTORS AS DEFINED BY EMERGENCY WARNING SYSTEM SHOP DRAWINGS.
- z3 EW — UL LISTED EMERGENCY WARNING SYSTEM CEILING MOUNTED SPEAKER. DEFINE TYPE, POWER TAP, ZONE NUMBER IN CERTIFIED NICET PREPARED SHOP DRAWINGS.
- z3 EW — UL LISTED EMERGENCY WARNING SYSTEM DIRECTIONAL WALL MOUNTED HORN TYPE SPEAKER. DEFINE TYPE, POWER TAP, AND ZONE NUMBER IN CERTIFIED NICET PREPARED SHOP DRAWINGS.

PAGING AND AV SYSTEMS DEVICES

- SP — PAGING SYSTEM CEILING MOUNTED SPEAKER. FLUSH MOUNTED IN LAY IN CEILINGS AND PENDANT TYPE (12'AFF) IN EXPOSED AREAS. SEE SPECS FOR TYPES.
- SPH — PAGING SYSTEM GYMNASIUM CEILING MOUNTED SPEAKER, MTD 20' ABOVE FLOOR LEVEL. SEE SINGLE LINE AND SPECS FOR SPECIFIC TYPES. (1)
- SPK–S — TEEN LOUNGE SOUND SYSTEM 12" SUBWOOFER, WALL MOUNTED SPEAKER, MTD 9' ABOVE FLOOR LEVEL. SEE SINGLE LINE AND SPECS FOR SPECIFIC TYPES.
- SPK–X — TEEN LOUNGE SOUND SYSTEM 8" COAXIAL SPEAKER, WALL MOUNTED SPEAKER, MTD 9' ABOVE FLOOR LEVEL. SEE SINGLE LINE AND SPECS FOR SPECIFIC TYPES.
- S — PAGING SYSTEM 70.7 VOLT OR 8 OHM SPEAKER CIRCUIT, PLENUM RATED, MINIMUM #16AWG TWISTED JACKETED PAIR INSTALLED ABOVE LAY IN CEILING IN CABLE TRAYS OR SUPPORTED BY STRUCTURE WHERE CABLE TRAY IS NOT AVAILABLE. INSTALL IN CONDUIT IN WALLS AND IN EXPOSED STRUCTURE SUBJECT TO PHYSICAL DAMAGE SUCH AS THE GYMNASIUM. TEEN LOUNGE AND MULTIPURPOSE ROOMS MAY BE EXPOSED ABOVE 9'–0"AFF.
- SS–X — AMPLIFIER RACK FOR PAGING AND AV SYSTEMS. PROVIDE INSTALLATION OF PROCESSORS, POWER SUPPLIES, CONTROL SYSTEMS, NETWORK FUNCTIONS, ETC., AS SHOWN OR REQUIRED. FREE STANDING OR SWINGING WALL MOUNTED AS SHOWN. (1)
- SWC — LOCAL WALL EQUIPMENT CABINET FOR AUDIOVISUAL EQUIPMENT LOCATED IN EACH INDEPENDENT SYSTEM ROOM. "X" INDICATES ROOM LOCATION. INSTALL INPUT DEVICES. CONTROL PROCESSORS, TOUCH SCREENS, POWER SUPPLIES, AUDIO EQUIPMENT ETC., AS SHOWN ON SINGLE LINES ETC., OR AS REQUIRED
- #"VIDEO DISPLAY — WALL MOUNTED VIDEO DISPLAY UNIT "#" INDICATES DIAGONAL DIMENSION SIZE. FURNISH WITH ADJUSTABLE WALL MOUNT, AND INTERCONNECTIONS AS INDICATED. UNITS MOUNTED WITH TOP SIX INCHES BELOW CEILING OR BOTTOM SIX FEET ABOVE THE FLOOR, WHICHEVER IS LOWER. PROVIDE MOUNTING SUPPORT STRUCTURE COORDINATED WITH GENERAL CONTRACTOR TO SUPPORT EXPECTED WEIGHT PLUS 150%.
- TS–XX — LOCAL TOUCH SCREEN CONTROL PANEL FOR AUDIOVISUAL EQUIPMENT LOCATED IN EACH INDEPENDENT SYSTEM ROOM. "X" INDICATES ROOM LOCATION. INSTALL INTERNAL TO PANEL SWC OR WALL LOCATION AS SHOWN 54" AFF. MOUNTING BOX BY AV CONTRACTOR.
- WP–XX — LOCAL PLATE FOR CONNECTION OF PORTABLE DEVICES AS SHOWN ON SINGLE LINE DIAGRAMS. MOUNTED FLUSH IN WALL WITH STANDARD GANG BOX LOCATION SHOWN AT 18" AFF. "X" INDICATES ROOM LOCATION. (1)
- UCI–XX — LOCAL PLATE FOR CONNECTION OF USER LAP TOP OR OTHER PORTABLE DEVICES AS SHOWN ON SINGLE LINE DIAGRAMS. MOUNTED FLUSH IN WALL LOCATION SHOWN AT 48" AFF. "X" INDICATES ROOM LOCATION.
- FB–X# — FLUSH FLOOR MOUNTED BOX FOR CONNECTION OF PORTABLE DEVICES AS SHOWN ON SINGLE LINE DIAGRAMS. "X" INDICATES ROOM LOCATION AND "#" INDICATES SEQUENCE NUMBER AS SHOWN ON DRAWINGS. SEE SHEET E5.02 FOR MOUNTING DETAILS. FURNISH FBS TYPE C4X RECESSED FLOOR BOX WITH DEVICE PLATES INDICATED DRAWINGS. COVER TO BE APPROVED BY ARCHITECT.

SECURITY CONTROLS DEVICE LEGEND

- CR — CARD READER BY OWNER. COORDINATE CONDUITS AND ACCESS WITH DOOR HARDWARE.
- CAM 10'–0"H — SECURITY CAMERA BY OWNER. FURNISH 4" SQUARE BOX WITH TWO GANG BLANK PLATE. HOME–RUN 2" CONDUIT FROM BOX TO NEAREST LAY IN/ACCESSIBLE CEILING, CABLE TRAY OR NEAREST TBB.

GENERAL NOTES

1. MINIMUM POWER CIRCUIT CONDUCTOR SIZE SHALL BE NO. 12 AND MINIMUM CONDUIT SIZE SHALL BE 1/2". CONDUIT SHALL BE SCHEDULE 40 PVC, RGS, IMC, OR EMT AS DEFINED IN SPECIFICATIONS. CONDUCTORS SHALL BE COPPER. BELOW GRADE CONDUIT SHALL BE SCHEDULE 40 PVC. SERVICE ENTRANCE CONDUITS SHALL BE SCHEDULE 80.
2. MOUNTING HEIGHTS OF ALL WALL DEVICES SHALL BE AS FOLLOWS UNLESS OTHERWISE NOTED. WALL SWITCHES: 4'–0" A.F.F., GENERAL RECEPTACLES: 1–6" A.F.F., EXIT LIGHT J–BOX: 1'–0" ON CENTER LINE ABOVE DOOR, TELEPHONE OUTLET: 1'–6" A.F.F.
3. THE CONTRACTOR SHALL CHECK ALL LIGHTING LUMINARIES FOR EXACT TYPE, MOUNTING, AND SPACE REQUIREMENTS BEFORE ROUGHING IN.
4. SHOULD ANY ELECTRICAL POWER, LIGHT, OR AUXILIARY CIRCUIT BE DAMAGED OR DISCONNECTED DURING CONSTRUCTION, THE ELECTRICAL CONTRACTOR SHALL RESTORE THE CIRCUIT TO ITS ORIGINAL STATE WITH NO ADDITIONAL COST TO THE OWNER.
5. VERIFY ALL DOOR SWINGS WITH ARCHITECTURAL BEFORE ROUGHING IN LIGHT SWITCHES IN ORDER TO ENSURE PROPER SWITCH LOCATION.
6. ELECTRICAL CONTRACTOR SHALL COORDINATE ALL WORK WITH GENERAL CONTRACTOR AND OTHER TRADES. VERIFY THE EXACT LOCATION, AMPACITY REQUIREMENTS, OVER CURRENT PROTECTION AND DIMENSIONS OF ALL MOTORS AND EQUIPMENT BEFORE ROUGHING IN.
7. ALL BRANCH CIRCUITS SHALL INCLUDE A GREEN INSULATED GROUND CONDUCTOR SIZED PER N.E.C. ARTICLE 250 (GROUNDING) OR AS SHOWN ON DRAWINGS, WHICHEVER IS LARGER.
8. WHEREVER HOME RUNS ARE SHOWN COMPRISING OF TWO OR MORE CIRCUITS, CONNECT ALL RECEPTACLES AND / OR LIGHTING FIXTURES ON ALTERNATING CIRCUITS UNLESS OTHERWISE INDICATED ON THE DRAWINGS.
9. ALL POWER RACEWAYS SHALL CONSIST OF A MINIMUM OF 3 NO. 12 THHN/THWN CONDUCTORS; ONE POWER, ONE NEUTRAL, AND ONE GROUND INSTALLED IN A 1/2" MINIMUM CONDUIT UNLESS OTHERWISE INDICATED ON DRAWINGS. BELOW GRADE CONDUCTORS MUST BE THWN OR XHHW.
10. DO NOT UTILIZE A COMMON NEUTRAL CONDUCTOR ON POWER CIRCUITS IN COMMON CONDUITS. EACH CIRCUIT SHALL HAVE ITS OWN NEUTRAL CONDUCTOR EVEN WHEN DIFFERENT CIRCUITS ARE CONTAINED IN THE SAME CONDUIT.
11. LIGHTING CIRCUITRY IS SHOWN IN CONCEPT ONLY. PROVIDE AND INSTALL ALL CONDUCTORS NECESSARY TO PROVIDE THE SWITCHING AND CONTROL FUNCTIONS SHOWN ON THE DRAWINGS. "a" SWITCH CONTROLS "a" FIXTURES, ETC. PROVIDE ALL CONDUCTORS NECESSARY FOR PHOTOCELLS, 3 WAY SWITCHING AND OCCUPANCY SENSORS, REQUIRED HOT LEGS, ETC., AS SHOWN.
12. ELECTRICAL INSTALLATION SHALL CONFORM TO NATIONAL ELECTRICAL CODE NEC 2017 OR AS INDICATED BY LOCAL AUTHORITY.
13. HOLD

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CHARLES JOE WINER — REGISTERED ENGINEER — STATE OF TENNESSEE — 12/20/2019

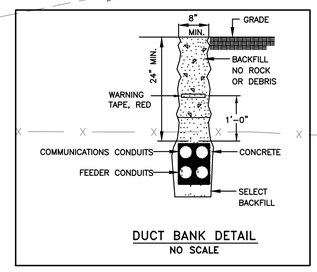
ISSUE DATES

INITIAL ISSUE	12-20-19
(1) ADDENDUM 4	01-09-20
(2) ADDENDUM 9	01-22-20

JOB NO. 18-072 | D'WN JRTT | CK'D CJWR

E0.1

ELECTRICAL SYMBOLS



DUCT BANK DETAIL
NO SCALE

ELECTRICAL KEY NOTES:

1. APPROXIMATE LOCATION OF THE EXISTING ELECTRICAL SERVICE POLE AND OVERHEAD TRANSFORMERS. COORDINATE WITH THE UTILITY FOR REVISIONS TO EXISTING TRANSFORMERS.
2. APPROXIMATE LOCATION FOR INSTALLATION OF NEW PAD MOUNTED TRANSFORMER. COORDINATE REQUIREMENTS WITH UTILITY ENGINEER. UTILITY (EPB) CONTACT IS AARON WILLLEY, INDUSTRIAL AND COMMERCIAL ENGINEER, TELEPHONE: 423-551-0730, EMAIL: WILLEYAD@EPB.NET.
3. LOCATION OF EXISTING ELECTRICAL SERVICE DISCONNECTS TO BE REMOVED AND DISPOSED OF BY THE CONTRACTOR.
4. NEW ELECTRICAL SERVICE CONDUITS, SEE SINGLE LINE DIAGRAM, SHEET E3.1 FOR SIZE AND REQUIREMENTS.
5. NEW COMMUNICATIONS CONDUITS FOR FIBER SERVICE. COORDINATE WITH U (EPB) FOR EXACT ROUTING AND REQUIREMENTS. CONDUITS ARE TWO EACH 2" SCHEDULE 80 PVC IN TRENCH DUCT (SEE DETAIL THIS SHEET).
6. APPROXIMATE LOCATION OF NEW METER CABINET. COORDINATE EXACT METER REQUIREMENTS WITH UTILITY ENGINEER AND LOCATE METER CABINET AS DIRECTED BY EPB. ANY COSTS OF THE METER CABINET OR ELECTRICAL SERVICE SHALL BE PROVIDED BY THE CONTRACTOR.
7. APPROXIMATE LOCATION OF NEW WATER SERVICE INTO THE BUILDING. COORDINATE WITH PLUMBING FOR GROUND CONNECTIONS. PROVIDE A GROUNDING JUMPER AROUND METER CONNECTIONS FOR GROUND CONTINUITY. SEE DETAILS SHEET E3.1.
8. APPROXIMATE LOCATION OF NEW FIRE SERVICE INTO THE FACILITY. PROVIDE SUPERVISORY MONITOR POINTS ON THE FIRE ALARM SYSTEM FOR ANY VALVES OR OTHER DEVICES CAPABLE OF REMOVING SPRINKLER SERVICE FROM THE FACILITY. COORDINATE WITH SPRINKLER CONTRACTOR FOR PROVISION OF AN AUDIBLE SIGNAL AND SIGNAGE MOUNTED ON THE EXTERIOR OF THE BUILDING TO BE ACTIVATED BY THE WATER FLOW ALARM ON THE INTERIOR OF THE BUILDING. FURNISH AN AUDIBLE DEVICE MONITORED, SUPERVISED AND CONTROLLED BY THE FIRE ALARM SYSTEM IN NOT OTHERWISE PROVIDED BY THE SPRINKLER CONTRACTOR. (2)

(1) ENTIRE SHEET REISSUED AS PART OF THIS ADDENDUM

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ELECTRICAL SITE PLAN

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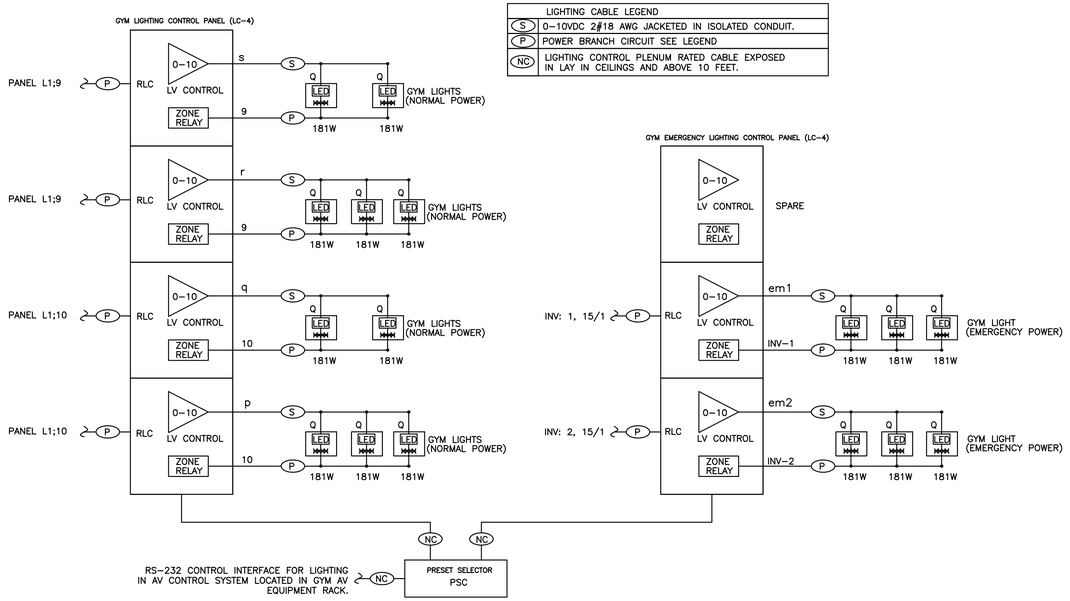
E2.0
LIGHTING PLAN

ZONE LIGHTING CONTROL SEQUENCE

ZONE	AREA	DESCRIPTION	MANUAL OR	AV	REMARKS
a	MULTIPURPOSE A	VIDEO AMBIENT CONTROL	PSC	YES	FOUR PRESETS TBD
b	MULTIPURPOSE A	GENERAL LEVEL CONTROL	PSC	YES	FOUR PRESETS TBD
c	MULTIPURPOSE B	VIDEO AMBIENT CONTROL	PSC	YES	FOUR PRESETS TBD
d	MULTIPURPOSE B	GENERAL LEVEL CONTROL	PSC	YES	FOUR PRESETS TBD
e	NORTH EXTERIOR	AUTOMATIC TOD CONTROL	NO	YES	ASTRONOMICAL AND TOD CONTROL
f	SOUTH EXTERIOR	AUTOMATIC TOD CONTROL	NO	NO	ASTRONOMICAL AND TOD CONTROL
g	TEEN LOUNGE	VIDEO AMBIENT CONTROL	PSC	YES	FOUR PRESETS TBD
h	TEEN LOUNGE	GENERAL LEVEL CONTROL	PSC	YES	FOUR PRESETS TBD
i	TEEN LOUNGE	AMBIENT CONTROL	PSC	YES	FOUR PRESETS TBD
j	READING/TECH	GENERAL LEVEL CONTROL	PSC	NO	FOUR PRESETS TBD
k	READING/TECH	AMBIENT CONTROL	PSC	NO	FOUR PRESETS TBD
l	INT. CORRIDORS	AUTOMATIC TOD CONTROL	PSC	NO	TOD/MANUAL FOUR PRESETS TBD
m	RECEPTIONIST	AUTOMATIC TOD CONTROL	PSC	NO	TOD/MANUAL FOUR PRESETS TBD
n	LOBBY DOWNLIGHTS	AUTOMATIC TOD CONTROL	PSC	NO	TOD/MANUAL FOUR PRESETS TBD
o	LOBBY UPLIGHTS	AUTOMATIC TOD CONTROL	PSC	NO	TOD/MANUAL FOUR PRESETS TBD
p	GYM WEST	GENERAL LEVEL CONTROL	PSC	YES	FOUR PRESETS TBD
q	GYM WEST CENT.	GENERAL LEVEL CONTROL	PSC	YES	FOUR PRESETS TBD
r	GYM EAST CENT.	GENERAL LEVEL CONTROL	PSC	YES	FOUR PRESETS TBD
s	GYM EAST	GENERAL LEVEL CONTROL	PSC	YES	FOUR PRESETS TBD
t	WEIGHT ROOM	GENERAL LEVEL CONTROL	PSC	NO	FOUR PRESETS TBD
em1	GYM NORTH	EMERGENCY LIGHTING	PSC	YES	FOUR PRESETS TBD/MINIMUM
em2	GYM SOUTH	EMERGENCY LIGHTING	PSC	YES	FOUR PRESETS TBD/MINIMUM

NOTES:
1. ALL CONTROL SYSTEMS ARE STANDALONE WITHOUT CENTRAL NETWORK CONTROL.
2. GYMNASIUM SYSTEM IS SHOWN AS "TYPICAL" CONFIGURATION. OTHERS ARE SIMILAR IN GENERAL ARRANGEMENT.
3. ALL ZONES ARE 0-10VDC DIMMABLE AND ARE ACTIVATED BY PRESET CONFIGURATION. CONFIGURATION TO BE DETERMINED IN SHOP DRAWINGS.
4. AUDIO-VISUAL CONTROL SYSTEMS ARE PROVIDED FOR SPACES INDICATED AS "AV". THE AV TOUCH SCREEN WILL PROVIDE CONTROL OF PRESETS.
5. PRESET CONTROLS ARE PROVIDED WITH MANUAL DIMMING ADJUSTMENT FOR EACH ZONE
6. EMERGENCY LIGHTING ZONES ARE CONTROLLED WITH PRESETS BUT HAVE A MINIMUM SETTING FOR EMERGENCY ILLUMINATION 24/7.



LIGHTING CABLE LEGEND	
S	0-10VDC 2#18 AWG JACKETED IN ISOLATED CONDUIT.
P	POWER BRANCH CIRCUIT SEE LEGEND
NC	LIGHTING CONTROL PLENUM RATED CABLE EXPOSED IN LAY IN CEILINGS AND ABOVE 10 FEET.

GYM LIGHTING CONTROL SINGLE LINE — 1 / E2.1
NTS

LIGHTING FIXTURE SCHEDULE

SYMBOL	DESCRIPTION	MANUFACTURER	CATALOG NUMBER	WATTS PER UNIT	LAMP TYPE	MOUNTING HEIGHT	TYPE MOUNTING	REMARKS
A	2X2 VOLUMETRIC RECESSED	LITHONIA	2VTL2-48LADP-GZ1-LP840	40	LED	CLG	RECESSED CEILING	PROVIDE DRIVERS FOR 0-10VDC DIMMING CONTROL TO 1%.
AE	2X2 VOLUMETRIC RECESSED	LITHONIA	2VTL2-48LADP-GZ1-LP840-E10WCP	40	LED	CLG	RECESSED CEILING	WITH 10W CONSTANT POWER EMERGENCY BATTERY PACK
B	2X2 LED FLAT PANEL	LITHONIA	EPANL 2X2 4000LM 80CRI 40K MIN1 ZT MVOLT GMF	32	LED	CLG	RECESSED CEILING	PROVIDE DRIVERS FOR 0-10VDC DIMMING CONTROL TO 1%.
BE	2X2 LED TROFFER	LITHONIA	EPANL 2X2 4000LM 80CRI 40K MIN1 ZT MVOLT E10WCP GMF	32	LED	CLG	RECESSED CEILING	WITH 10W CONSTANT POWER EMERGENCY BATTERY PACK
C	STRIP	LITHONIA	ZL1N L48 SMR 5000LM L/LENS MVOLT 40K 80CRI GALV WGZ48	34	LED	10'-0" AFF	PENDANT BELOW STRUCTURE	PROVIDE WIRE GUARD. WALL MOUNTED WHERE SHOWN IN MECHANICAL ROOMS.
D	2X2 RECESSED CEILING	KENALL	CSED22-45TD-120-PAF-PAH-SYM-FN	45	LED	CLG	RECESSED CEILING	WASHABLE, GASKETED FIXTURE FOR USE IN FOOD PREPARATION AREAS.
E	EMERGENCY LIGHT	LITHONIA	ELM2 LED SD	3	LED	8'-6" AFF	WALL	WALL MOUNT EMERGENCY LIGHT
F1	ACOUSTIC SHADE	LIGHTART	34 MN ZN STD 830 BP BK BP	12	LED	10'-0"AFF	PENDANT BELOW STRUCTURE	TYPE L ACOUSTIC SHADE, COLORS VERIFIED BY ARCHITECT
F2	ACOUSTIC SHADE	LIGHTART	27 MN ZN STD 830 BP BK BP	7	LED	10'-0"AFF	PENDANT BELOW STRUCTURE	TYPE M ACOUSTIC SHADE, COLORS VERIFIED BY ARCHITECT
F3	ACOUSTIC SHADE	LIGHTART	22 MN ZN STD 830 BP BK BP	7	LED	10'-0"AFF	PENDANT BELOW STRUCTURE	TYPE S ACOUSTIC SHADE, COLORS VERIFIED BY ARCHITECT
K	PENDANT	LEDALITE TRUGROOVE	29 0 6L AC QQ 08K D E	43.2	LED	10'-0" AFF	PENDANT BELOW STRUCTURE	COLOR TO BE DETERMINED BY ARCHITECT
L	RECESSED	LEDALITE TRUGROOVE	39 0 1L AD Q S4 08 7 D E	29.7	LED	CLG	RECESSED INTO GYPBOARD	COLOR TO BE DETERMINED BY ARCHITECT
M	WALL MOUNT	LEDALITE TRUGROOVE	29 2 6L AC WW 087 D E	23.3	LED	8'-0"	WALL MTD ABOVE VANITIES	COLOR TO BE DETERMINED BY ARCHITECT
Q	HIGH BAY PENDANT	LITHONIA	JEBL 24L 40K 80CRI WH WG2 M6 SC120 DALR2 M4	181	LED	20'-0" AFF	PENDANT BELOW STRUCTURE	WITH WIRE GUARD, REFLECTOR AND SAFETY CABLE
R	IN GRADE FLAG LIGHT	HYDREL	PDX10B 18LED WHT41K MVOLT NSP FLC	90	LED	IN GRADE	IN GRADE FOR FLAG ILLUMINATION	
S	RECESSED DOWN LIGHT	LITHONIA	LDN6 40/20 LO6 WR LSS MVOLT GZ1	22.6	LED	CLG	RECESSED CEILING	
T	DECORATIVE	BETA CALCO	1AX12/2AX13 J4 CB1 CCD L0 W1 Y1	389	LED	10'-0" AFF	PENDANT BELOW STRUCTURE	ALL END CAPS, AND HARDWARE REQUIRED FOR CONFIGURATION SHOWN ON THE DRAWINGS.
T1	DECORATIVE	BETA CALCO	1AX12/1AX13 J4 CB1 CCD L0 W1 Y1	257	LED	10'-0" AFF	PENDANT BELOW STRUCTURE	ALL END CAPS, AND HARDWARE REQUIRED FOR CONFIGURATION SHOWN ON THE DRAWINGS.
W	WALL MOUNT	LITHONIA	OLWX1 LED 40W 40K	40	LED	10'0" ABOVE GRADE	EXTERIOR WALL MOUNTED	
Z	EGRESS LIGHT	LIGHTALARMS	CAMACSDDB-FT	12	LED	9'-0"	EXTERIOR EGRESS LIGHT	EMERGENCY EGRESS LIGHTING WITH -4F TO +104F TEMPERATURE RANGE
XL	EXIT LIGHT	LITHONIA	EDG-G-EL-SD-WM	4.5	LED	8'-6" AFF	WALL	LED EXIT SIGN WITH CHEVRONS AS REQ'D, SINGLE/DOUBLE FACE, NICAD BATTERY

FIXTURE SCHEDULE ABBREVIATIONS:
LED - LIGHT EMITTING DIODE C - CEILING O.B. - OUTLET BOX S - SURFACE L.I. - LAY-IN

FIXTURE SCHEDULE NOTES:
1. CATALOG NUMBERS ARE PROVIDED FOR REFERENCE ONLY. DETERMINE EXACT CATALOG NUMBER FROM FIXTURE APPLICATION AND DESCRIPTIONS.
2. ALL SUBSTITUTIONS MUST BE SUBMITTED TO THE ENGINEER FOR APPROVAL AT LEAST 10 DAYS PRIOR TO PROJECT BID DATE.
3. ALL DRIVERS TO BE 120 VOLTS UNLESS SHOWN OTHERWISE.
4. EACH LED DRIVER SHALL BE FUSED WITH APPROVED DUAL ELEMENT FUSE.
5, ALL FIXTURES SHALL BE WIRED WITH FLEX WITH A SEPARATE GREEN GROUND WIRE.
6. ALL FIXTURES SHALL HAVE JOINING PLATES, END CAPS, CANOPIES, ETC.
7. FIXTURE MOUNTING AND SUSPENSION SHALL BE AS APPROVED BY ENGINEER. NO COMBUSTIBLE MATERIALS SHALL BE USED.
8. MOUNTING AND SUPPORT DETAILS FOR LIGHTING FIXTURES SHALL BE SUBMITTED TO AND APPROVED BY THE ENGINEER BEFORE THE FIXTURES ARE INSTALLED.
9. FIXTURE OUTLET BOX LOCATIONS SHOWN ON THE DRAWINGS ARE DIAGRAMMATIC AND APPROXIMATE IN LOCATION. EXACT POSITION OF THE OUTLET BOX DEPENDS ON THE FIXTURE AND THE MOUNTING DETAIL.

1 ENTIRE SHEET REISSUED AS PART OF THIS ADDENDUM

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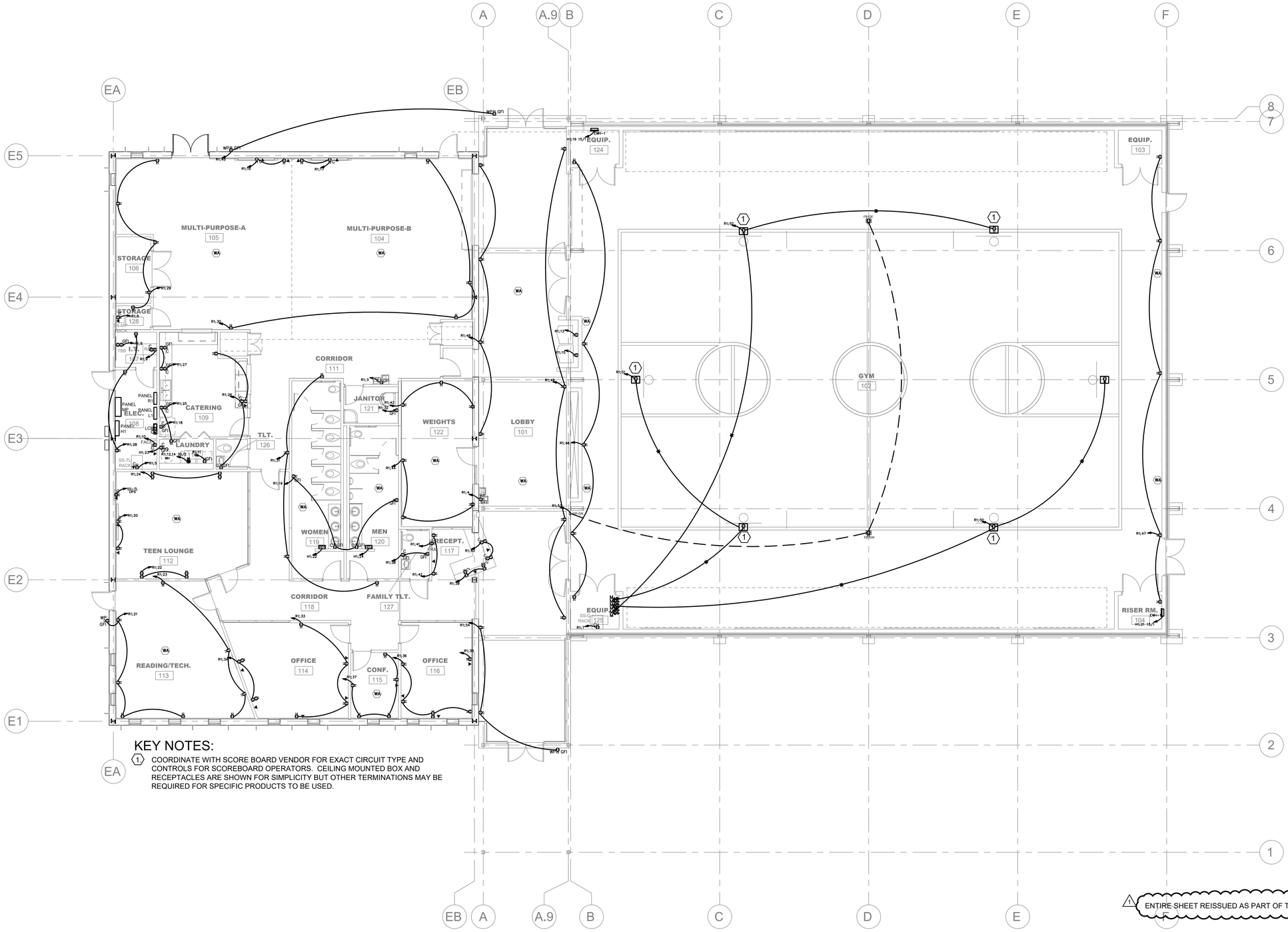
E2.1
LIGHTING CONTROLS



KEY NOTES:

1. COORDINATE WITH SCORE BOARD VENDOR FOR EXACT CIRCUIT TYPE AND CONTROLS FOR SCOREBOARD OPERATORS. CEILING MOUNTED BOX AND RECEPTACLES ARE SHOWN FOR SIMPLICITY BUT OTHER TERMINATIONS MAY BE REQUIRED FOR SPECIFIC PRODUCTS TO BE USED.

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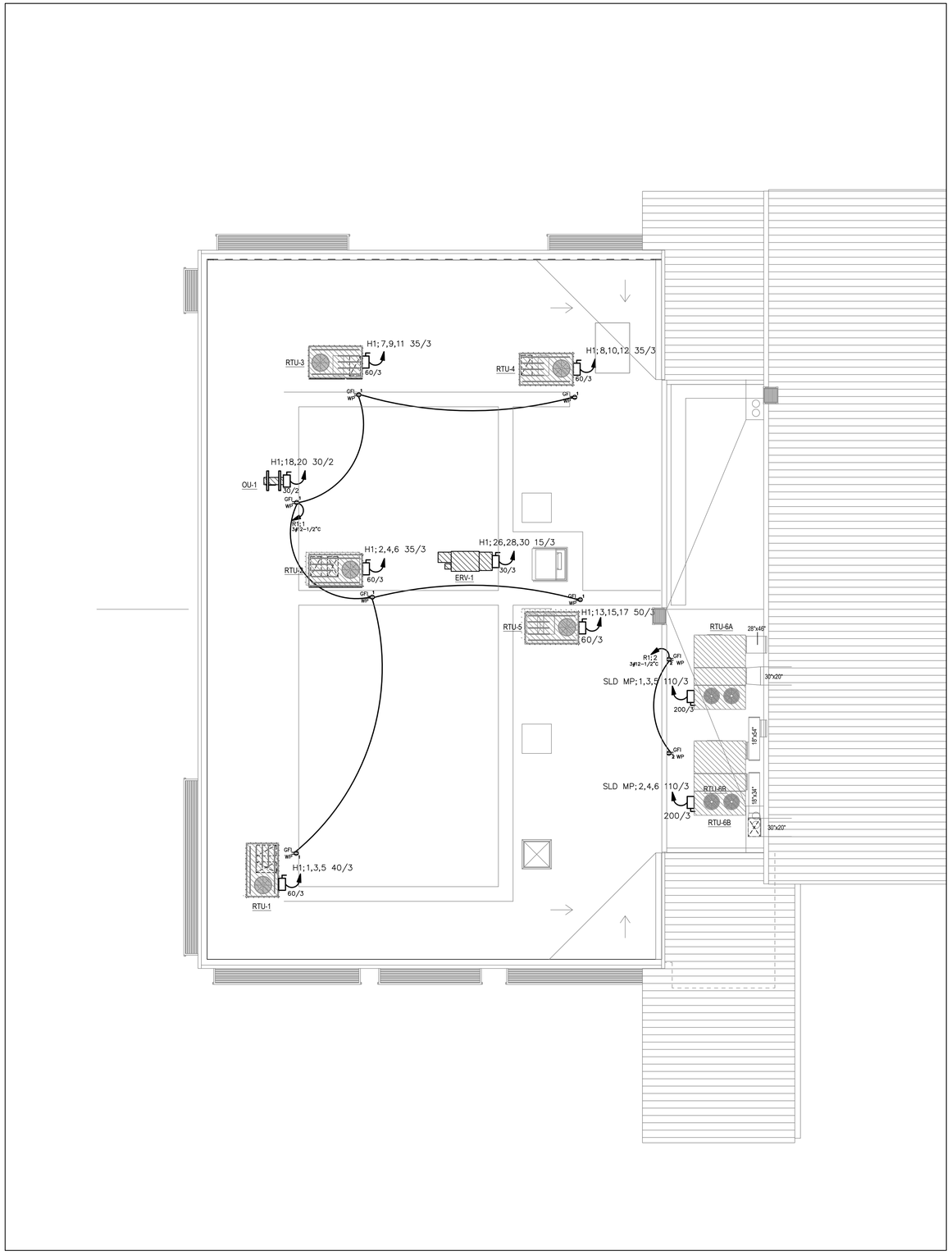
E3.0
POWER PLAN FLOOR



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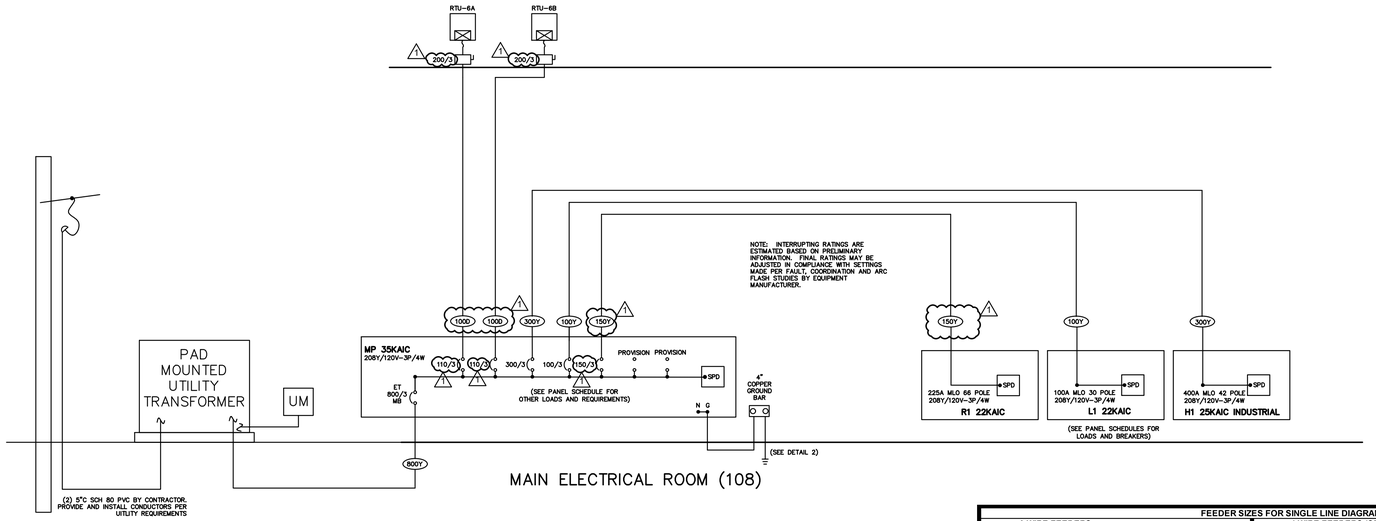
POWER PLAN ROOF



SINGLE LINE POWER 1 / E3.01
NTS

FEEDER SIZES FOR SINGLE LINE DIAGRAM					
3 WIRE FEEDERS			4 WIRE FEEDERS (SEE NOTE 1)		
CKT	THWN OR XHHW (EMT, RGS or IMC)		CKT	THWN OR XHHW (EMT, RGS or IMC)	
20A/1P	3#12, 1#12G, 1/2"C		20Y	3#12, 1#12N & 1#12G, 1/2"C	NOTE 3
20A/2P	3#12, & 1#12G, 1/2"C	NOTE 4	30Y	4#10 & 1#10G, 3/4"C	"
20D	3#12 & 1#12G, 1/2"C	NOTE 4	40Y	4#6 & 1#10G, 3/4"C	"
30A/2P	3#10 & 1#10G, 1/2"C	"	50Y	4#6 & 1#10G, 1"C	"
30D	3#10 & 1#10G, 1/2"C	"	60Y	4#6 & 1#10G, 1"C	"
40D	3#8 & 1#10G, 3/4"C	"	70Y	4#4 & 1#8G, 1-1/4"C	"
60D	3#6 & 1#10G, 3/4"C	"	80Y	4#4 & 1#8G, 1-1/4"C	"
70D	3#4 & 1#8G, 1"C	"	90Y	4#3 & 1#8G, 1-1/4"C	"
80D	3#3 & 1#8G, 1"C	"	100Y	4#2 & 1#8G, 1-1/2"C	"
90D	3#3 & 1#8G, 1"C	"	110Y	4#2 & 1#8G, 1-1/2"C	"
100D	3#2 & 1#8G, 1-1/4"C	"	125Y	4#1 & 1#8G, 2"C	"
110D	3#2 & 1#8G, 1-1/4"C	"	150Y	4#1/0 & 1#8G, 2"C	"
125D	3#1 & 1#8G, 1-1/2"C	"	175Y	4#2/0 & 1#8G, 2"C	"
150D	3#1/0 & 1#8G, 2"C	"	200Y	4#3/0 & 1#8G, 2-1/2"C	"
175D	3#2/0 & 1#8G, 2"C	"	225Y	4#4/0 & 1#4G, 2-1/2"C	"
200D	3#3/0 & 1#8G, 2"C	"	250Y	4#250KCMIL & 1#4G, 2-1/2"C	"
225D	3#4/0 & 1#4G, 2"C	"	300Y	4#350KCMIL & 1#4G, 3"C	"
250D	3#250KCMIL & 1#4G, 2-1/2"C	"	350Y	4#400 KCMIL & 1#3G, 3"C	"
300D	3#350KCMIL & 1#4G, 3"C	"	400Y	4#500KCMIL & 1#2G, 4"C	"
350D	3#400 KCMIL & 1#3G, 3"C	"	450Y	2 RUNS EACH(4#4/0 & 1#2G, 2-1/2"C)	"
400D	3#500KCMIL & 1#2G, 3-1/2"C	"	500Y	2 RUNS EACH (4#250KCMIL & 1#2G, 3"C)	"
450D	2 RUNS EACH(3#4/0 & 1#2G, 2-1/2"C)	"	600Y	2 RUNS EACH (3#350KCMIL & 1#1G, 3"C)	"
500D	2 RUNS EACH (3#250KCMIL & 1#2G, 2-1/2"C)	"	700Y	2 RUNS EACH(4#500KCMIL & 1#1/0G, 4"C)	"
600D	2 RUNS EACH (3#350KCMIL & 1#1G, 3"C)	"	800Y	2 RUNS EACH (4#500KCMIL & 1#1/0G, 4"C)	"
800D	2 RUNS EACH (3#500KCMIL & 1#1/0G, 3-1/2"C)	"	1000Y	3 RUNS EACH (4#4/0 KCMIL & 1#2/0G, 3-1/2"C)	"
1000D	3 RUNS EACH (3#400KCMIL & 1#2/0G, 3"C)	"	1100Y	3 RUNS EACH (4#500KCMIL & 1#2/0G, 4"C)	NOTE 2
1100D	3 RUNS EACH (3#500KCMIL & 1#3/0G, 3-1/2"C)	NOTE 2	1200Y	4 RUNS EACH (4#350KCMIL & 1#3/0G, 3-1/2"C)	"
1200D	4 RUNS EACH (3#350KCMIL & 1#3/0G, 3"C)	"	1500Y	4 RUNS EACH (4#500KCMIL & 1#4/0G, 4"C)	NOTE 2
1500D	4 RUNS EACH (3#500KCMIL & 1#4/0G, 3-1/2"C)	NOTE 2	1600Y	5 RUNS EACH (4#4/0KCMIL & 1#4/0G, 3-1/2"C)	"
1600D	5 RUNS EACH (3#400KCMIL & 1#4/0G, 3"C)	"	1900Y	5 RUNS EACH 4#500KCMIL & 1#250KCMIL G, 4"C	NOTE 2
1900D	5 RUNS EA (3#500KCMIL & 1#250KCMIL G, 3-1/2"C	NOTE 2	2000Y	6 RUNS EA (3#400KCMIL & 1#250KCMIL G, 3-1/2"C)	"
2000D	6 RUNS EACH (3#400KCMIL & 1#250KCMIL G, 3"C)	"	2200Y	6 RUNS EACH (4#500KCMIL & 1#350KCMIL G, 4"C)	NOTE 2
2200D	6 RUNS EA (3#500KCMIL & 1#350KCMIL G, 3-1/2"C)	NOTE 2	2500Y	7 RUNS EACH (4#500KCMIL & 1#350KCMIL G, 4"C)	"
2500D	7 RUNS EA (3#500KCMIL & 1#350KCMIL G, 3-1/2"C)		3000Y	8 RUNS EACH (4#500KCMIL & 1#400KCMIL G, 4"C)	"
3000D	8 RUNS EA (3#500KCMIL & 1#400KCMIL G, 3-1/2"C)		3800Y	10 RUNS EACH 4#500KCMIL & 1#500KCMIL G, 4"C	NOTE 2
3800D	10 RUNS EA (3#500KCMIL & 1#500KCMIL G, 3-1/2"C)	NOTE 2	3000Y	8 RUNS EACH (4#500KCMIL & 1#400KCMIL G, 4"C)	"
4000D	11 RUNS EA (3#500KCMIL & 1#500KCMIL G, 3-1/2"C)		3800Y	10 RUNS EA(4#500KCMIL & 1#500KCMIL G, 4"C)	NOTE 2
4100D	11 RUNS EA (3#500KCMIL & 1#700KCMIL G, 3-1/2"C)	NOTE 2	4000Y	11 RUNS EA (3#500KCMIL & 1#500KCMIL G, 3-1/2"C)	"
PRIMARY	2-5"EC 48" LG W/PULL CORD/ TAPE.		4100Y	11 RUNS EACH (4#500KCMIL & 1#700KCMIL G, 4"C)	NOTE 2
- "	DENOTES 200% NEUTRAL				

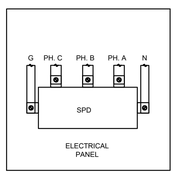
NOTE 1: PER NFPA 70 "ON A 4-WIRE, 3-PHASE WYE CIRCUIT WHERE THE MAJOR PORTION OF THE LOAD CONSISTS OF NON-LINEAR LOADS, HARMONIC CURRENTS ARE PRESENT IN THE NEUTRAL CONDUCTOR; THE NEUTRAL CONDUCTOR SHALL BE CONSIDERED A CURRENT CARRYING CONDUCTOR" REQUIRED ADJUSTMENTS SHALL BE APPLIED PER PROVISIONS OF 2014 NEC 310.15(B)(3)(A).

NOTE 2: USE OF NONSTANDARD CIRCUIT BREAKER SETTINGS IS RESTRICTED PER NEC 240.6, STANDARD AMPERE RATINGS.

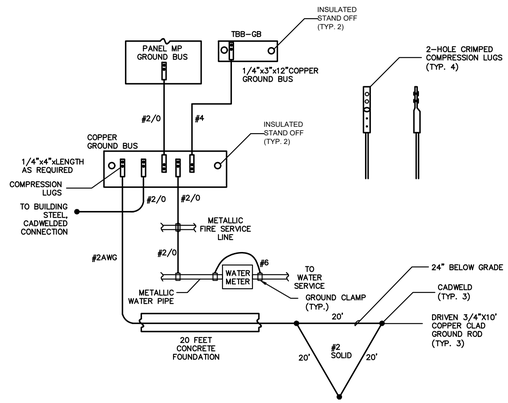
NOTE 3: FOR 120/208 VOLT BRANCH CIRCUITS LONGER THAN 100 FEET, INCREASE THE CONDUCTOR SIZE ONE GAUGE. FOR EVERY ADDITIONAL 50 FEET INCREASE THE CONDUCTOR SIZE ONE ADDITIONAL GAUGE.

NOTE 4: FOR 208 VOLT BRANCH CIRCUITS LONGER THAN 150 FEET, INCREASE THE CONDUCTOR SIZE BY 1 GAUGE. FOR EVERY ADDITIONAL 75 FEET, INCREASE THE CONDUCTOR SIZE ONE ADDITIONAL GAUGE

NOTES:
1. SURGE PROTECTIVE DEVICE FACTORY INSTALLED INSIDE PANEL, BUS CONNECTED FOR PHASE AND NEUTRAL CONDUCTORS. BOND GROUND TO CAN.



3 / E3.01 INTERNAL PANEL SPD DETAIL
N.T.S.



2 / E3.01 GROUND SYSTEM
N.T.S.

ARTECH
1410 COWART STREET
CHATTANOOGA, TN 37408
423.265.4313
WWW.ARTECH.PRO

KHAFRA

East Lake YFD Center Improvements

3610 Dodds Avenue, Chattanooga, TN 37402

ISSUE DATES
INITIAL ISSUE 12-20-19
1 ADDENDUM 4 01-90-20

JOB NO. 18-072 | D'WN JRTT | CK'D CJWR

E3.2
SINGLE LINE DIAGRAM

MP

LOCATION: ELECTRICAL ROOM 108
RATING: 800A. MCB (NOTE 7)
VOLTAGE (L-L): 208
VOLTAGE (L-N): 120
PHASE: 3
WIRE: 4
MOUNTING: SURFACE MOUNTED

CODE	CKT #	BKR	POLE	DESCRIPTION	LOAD (VA)	PHASE A	PHASE B	PHASE C	LOAD (VA)	DESCRIPTION	POLE	BKR	CKT #	CODE
M	1	110	3	RTU 6A 12.5 TON (NOTE 6)	9,960	19,920			9,960	RTU 6B 12.5 TON (NOTE 6)	3	110	2	M
M	3	---	---	"	9,960		19,920		9,960	"	---	---	4	M
M	5	---	---	"	9,960			19,920	9,960	"	---	---	6	M
M	7	300	3	PANEL H-1 (NOTE 6)	25,950	30,700			4,750	PANEL L-1	3	100	8	L
M	9	---	---	"	25,730		31,230		5,500	"	---	---	10	L
M	11	---	---	"	25,530			31,380	5,850	"	---	---	12	L
R	13	150	3	PANEL R-1	11,711	16,711			5,000	PROVISION	3	225	14	S
R	15	---	---	"	12,377		17,377		5,000	"	---	---	16	S
R	17	---	---	"	11,863			16,863	5,000	"	---	---	18	S
S	19	225	3	PROVISION	5,000	7,500			2,500	PROVISION	3	225	20	S
S	21	---	---	"	5,000		7,500		2,500	"	---	---	22	S
S	23	---	---	"	5,000			7,500	2,500	"	---	---	24	S
				SURGE PROTECTION DEVICE						SURGE PROTECTION DEVICE				
				BUS CONNECTED						BUS CONNECTED				
				"						"				

NOTES:
1 BASIS OF DESIGN IS SCHNEIDER SQUARE D. MINIMUM AIC RATING SHALL BE 35K
2 PANEL TO BE PROVIDED WITH MANUFACTURER'S STANDARD INTERNAL SURGE SUPPRESSION
3 FULLY RATED, NOT SERIES RATED.
4 SERVICE ENTRANCE RATED
5 DOOR-IN-DOOR HINGED COVER.
6 HACR RATED
7 ELECTRONIC TRIP (LSI)

Load Type	Load Factor	Connected Load (VA)			Total Conn. Load (VA)	Demand Factor	Demand Load (VA)			Total Demand Load (VA)
		Phase					Phase			
		A	B	C			A	B	C	
Lighting (L)	1.00	4750	5500	5850	16100	1.00	4750	5500	5850	16100
Receptacles (R)	1.00	11711	12377	11863	35951	NEC	7484	7910	7581	22975
Motor (M)	1.00	45870	45650	45450	136970	1.00	45870	45650	45450	136970
Largest Motor	1	9960	9960	9960	29880	1	9960	9960	9960	29880
Other (O)	1.00	0	0	0	0	1.00	0	0	0	0
Spare (S)	1.00	12500	12500	12500	37500	1.00	12500	12500	12500	37500
Electric Heat (H)	1.00	0	0	0	0	1.00	0	0	0	0
Total Load (VA)	1.00	**84791**	**86987**	**86623**	**263871**	---	**80564**	**81520**	**81341**	**250895**
Total Load (AMPS)	--	**707**	**717**	**714**	**732**	---	**671**	**679**	**678**	**696**

R1

LOCATION: ELECTRICAL ROOM 108
RATING: 225 AMPERE MAIN LUGS
VOLTAGE (L-L): 208
VOLTAGE (L-N): 120
PHASE: 3
WIRE: 4
MOUNTING: SURFACE MOUNTED

CODE	CKT #	BKR	POLE	DESCRIPTION	LOAD (VA)	PHASE A	PHASE B	PHASE C	LOAD (VA)	DESCRIPTION	POLE	BKR	CKT #	CODE
R	1	20	1	ROOF TOP MECH MTCE	1000	2000			1000	ROOF TOP MECH MTCE	1	20	2	R
R	3	20	1	WATER FOUNTAIN CORR. 111	1200		2400		1200	WATER FOUNTAIN LOBBY 101	1	20	4	R
R	5	20	1	AV RACK SS-TL ELEC. 108	1200			2000	800	AV RACK SS-MP STOR. 128	1	20	6	R
R	7	20	1	AV RACK SS-GM EQUIP. 125	1200	2000			800	TBB	1	20	8	R
R	9	20	1	IT EQUIP. RACK 107	1200		2000		800	FACP ELEC. 108 (NOTE 4)	1	20	10	R
R	11	20	1	CLOTHES WASHER LAUND. 110	950			3110	2160	CLOTHES DRYER LAUND. 110	2	30	12	R
R	13	20	1	DRINK COOLER LOB. 101	1200	3360			2160	"	--	--	14	R
R	15	20	1	DRINK COOLER LOB. 101	1200		1800		600	VIDEO OUTLET MULTIPURP.-A	1	20	16	R
R	17	20	1	VIDEO OUTLET MULTIPURP.-B	800			2000	1200	REFRIGERATOR CATERING 109	1	20	18	R
R	19	20	1	RESTROOMS 119/120 RECEPT.		800			800	VIDEO OUTLET TEEN LGE 112	1	20	20	R
R	21	20	1	READING/TECH 113 NORTH REC	1000		1800		800	TEEN LGE WEST RECEPT.112	1	20	22	R
R	23	20	1	READING/TECH 113/SOUTH REC	800			1600	800	TEEN LGE EAST RECEPT.112	1	20	24	R
R	25	20	1	CATERING/LAUNDRY 109/110	600	1400			800	CATERING SOUTH REC. 109	1	20	26	R
R	27	20	1	CATERING 109 NORTH REC.	800		1400		600	ELEC./IT 108/107 REC.	1	20	28	R
R	29	20	1	MULTIPURP .A NORTH REC.	1000			1800	800	MULTIPURP. B SOUTH REC.	1	20	30	R
R	31	20	1	CORRIDOR 126 REC.	1231	1631			400	JANITOR 121 RECEPTACLES	1	20	32	R
R	33	20	1	OFFICE 114 SOUTH RECEPT.	800		1600		800	OFFICE 114 NORTH RECEPTACLES	1	20	34	R
R	35	20	1	OFFICE 116 PRINTER	900			1900	1000	OFFICE 116 RECEPT.	1	20	36	R
R	37	20	1	CONFERENCE 115 RECEPT.	900	1300			400	FAMILY TOILET 127 RECEPT.	1	20	38	R
R	39	20	1	RECEPTION COUNT. 117 NORTH	800		1600		800	RECEPTION 117 COUNTER SOUTH	1	20	40	R
R	41	20	1	FA/ANN. FRA 117 (NOTE 4)	600			1000	400	RECEPTION 117 RECEPTACLES	1	20	42	R
R	43	20	1	WEIGHTS 122 EAST RECEPT.	800	1400			600	WEIGHTS 122 WEST RECEPT.	1	20	44	R
R	45	20	1	EAST EXTERIOR RECEPT.	600		1600		1000	GYM 102 NORTH RECEPT.	1	20	46	R
R	47	20	1	GYM 102 SOUTH RECEPT.	1000			1800	800	LOBBY 101 NORTH RECEPT.	1	20	48	R
R	49	20	1	LOBBY 101 SOUTH RECEPT.	800	2000			1200	SOUTH SCOREBOARDS	1	20	50	R
R	51	20	1	NORTH SCOREBOARDS	1200		2400		1200	EAST SCOREBOARDS	1	20	52	R
R	53	20	1	GYM AV OUTLETS (WP/FP)	600			1200	600	LOBBY 101 WEST RECEPTACLES	1	20	54	R
S	55	20	1	SPARE	600	800			200	SPARE	1	20	56	S
S	57	20	1	SPARE	600		800		200	SPARE	1	20	58	S
S	59	50	1	PROVISION	200			400	200	PROVISION	1	50	60	S
S	61	50	1	PROVISION	200	400			200	PROVISION	1	50	62	S
S	63	50	1	PROVISION	200		400		200	PROVISION	1	50	64	S
S	65	50	1	PROVISION	200			400	200	PROVISION	1	50	66	S
				SURGE PROTECTION DEVICE						SURGE PROTECTION DEVICE				
				BUS CONNECTED						BUS CONNECTED				
				"						"				

NOTES:
1 BASIS OF DESIGN IS SIEMENS P2. MINIMUM AIC RATING SHALL BE 22K
2 PANEL TO BE PROVIDED WITH MANUFACTURER'S STANDARD INTERNAL SURGE SUPPRESSION
3 FULLY RATED, NOT SERIES RATED.
4 PROVIDE LOCKING DEVICE FOR LIFE SAFETY BREAKER
5 DOOR-IN-DOOR HINGED COVER.
6 HOLD

Load Type	Load Factor	Connected Load (VA)			Total Conn. Load (VA)	Demand Factor	Demand Load (VA)			Total Demand Load (VA)
		Phase					Phase			
		A	B	C			A	B	C	
Lighting (L)	1.00	0	0	0	0	1.00	0	0	0	0
Receptacles (R)	1.00	16491	16600	16410	49501	NEC	9911	9977	9863	29751
Motor (M)	1.00	0	0	0	0	1.00	0	0	0	0
Largest Motor	1	1200	1200	1200	3600	1	1200	1200	1200	3600
Other (O)	1.00	0	0	0	0	1.00	0	0	0	0
Spare (S)	1.00	600	1200	800	2600	1.00	600	1200	800	2600
Electric Heat (H)	1.00	0	0	0	0	1.00	0	0	0	0
Total Load (VA)	1.00	**18291**	**19000**	**18410**	**56601**	---	**11711**	**12377**	**11863**	**36851**
Total Load (AMPS)	--	**152**	**158**	**153**	**157**	---	**98**	**103**	**99**	**102**

H1 (MECHANICAL SYSTEMS)

LOCATION: ELECTRICAL ROOM 108
RATING: 400 MAIN LUGS ONLY
VOLTAGE (L-L): 4
VOLTAGE (L-N): 120
PHASE: 3
WIRE: 4
MOUNTING: SURFACE MOUNTED

CODE	CKT #	BKR	POLE	DESCRIPTION	LOAD (VA)	PHASE A	PHASE B	PHASE C	LOAD (VA)	DESCRIPTION	POLE	BKR	CKT #	CODE
M	1	40	3	RTU-1	3480	6600			3120	RTU-2	3	35	2	M
M	3	-	-	"	3480		6600		3120	"	-	-	4	M
M	5	-	-	"	3480			6600	3120	"	-	-	6	M
M	7	35	3	RTU-3	3120	6240			3120	RTU-4	3	35	8	M
M	9	-	-	"	3120		6240		3120	"	---	---	10	M
M	11	---	---	"	3120			6240	3120	"	---	---	12	M
M	13	60	3	RTU-5	4440	4840			400	SPARE	2	15	14	M
M	15	---	---	"	4440		4840		400	"	---	---	16	M
M	17	---	---	"	4440			4440		OU-1	2	30	18	M
H	19	15	1	EWH-1	760	2070			1320	"	---	---	20	M
H	21	20	1	EWH-1	760		2200		1460	HD-1	1	20	22	S
H	23	20	1	WH	600			2050	1460	HD-2	1	20	24	S
S	25	20	1	SPARE	600	1100			600	ERV-1	3	15	26	S
S	27	30	2	SPARE	600		1100		600	"	-	-	28	S
S	29	---	---	"	600			1100	600	"	1	20	30	S
S	31	60	3	PROVISION	100	360			260	PROVISION	3	60	32	S
S	33	-	-	"	100		360		260	"	---	---	34	S
S	35	-	-	"	100			360	260	"	-	-	36	S
S	37	60	3	PROVISION	100	360			260	PROVISION	3	60	38	S
S	39	-	-	"	100		360		260	"	-	-	40	S
S	41	-	-	"	100			360	260	"	-	-	42	S
				SURGE PROTECTION DEVICE						SURGE PROTECTION DEVICE				
				BUS CONNECTED						BUS CONNECTED				
				"						"				

NOTES:
1 BASIS OF DESIGN IS SCHNEIDER SQUARE D, WITH INTERUPTING RATING OF 25KAIC
2 PANEL TO BE PROVIDED WITH MANUFACTURER'S STANDARD INTERNAL SURGE SUPPRESSION
3 FULLY RATED, NOT SERIES RATED.
4 ALL BREAKERS INDUSTRIAL GRADE HACR RATED
5 DOOR-IN-DOOR HINGED COVER.
6 COORDINATE ALL BREAKER SIZES WITH MECHANICAL FOR FINAL EQUIPMENT SELECTIONS AND FUSE SIZING.

Load Type	Load Factor	Connected Load (VA)			Total Conn. Load (VA)	Demand Factor	Demand Load (VA)			Total Demand Load (VA)
		Phase					Phase			
		A	B	C			A	B	C	
Lighting (L)	1.00	0	0	0	0	1.00	0	0	0	0
Receptacles (R)	1.00	0	0	0	0	NEC	0	0	0	0
Motor (M)	1.00	19000	17680	17280	53960	1.00	19000	17680	17280	53960
Largest Motor	1	4400	4400	4400	13200	1	4400	4400	4400	13200
Other (O)	1.00	0	0	0	0	1.00	0	0	0	0
Spare (S)	1.00	1800	3250	3250	8300	1.00	1800	3250	3250	8300
Electric Heat (H)	1.00	750	400	600	1750	1.00	750	400	600	1750
Total Load (VA)	1.00	**25950**	**25730**	**25530**	**80510**	---	**25950**	**25730**	**25530**	**80510**
Total Load (AMPS)	--	**216**	**214**	**213**	**11621**	---	**216**	**214**	**213**	**11621**

L1 (LIGHTING)

LOCATION: ELECTRICAL ROOM 108
RATING: 100 AMPERE MAIN LUGS ONLY
VOLTAGE (L-L): 208
VOLTAGE (L-N): 120
PHASE: 3
WIRE: 4
MOUNTING: SURFACE MOUNTED

CODE	CKT #	BKR	POLE	DESCRIPTION	LOAD (VA)	PHASE A	PHASE B	PHASE C	LOAD (VA)	DESCRIPTION	POLE	BKR	CKT #	CODE
L	1	20	1	MULTIPURPOSE ROOMS	800	1700			900	WEST INTERIOR LIGHTS	1	20	2	L
L	3	20	1	CENTRAL INTERIOR LIGHTS	500		1700		1200	LOBBY DECORATIVE LIGHTS	1	20	4	L
L	5	20	1	LOBBY DECORATIVE LIGHTS	1050			1850	800	SOUTH INTERIOR LIGHTS	1	20	6	L
L	7	20	1	OFFICE BLDG EXT. LIGHTS	450	1050			600	GYM EXT. LIGHTS	1	20	8	L
L	9	20	1	EAST GYM LIGHTS	1000		1800		800	WEST GYM LIGHTS	1	20	10	L
L	11	20	1	GYM INVERTER (NOTE 4)	1100			2200	1100	GYM MISC LIGHTS	1	20	12	L
L	13	20	1	SPARE	700	1200			500	SPARE	1	20	14	S
S	15	20	1	SPARE	700		1200		500	SPARE	1	20	16	S
S	17	20	1	SPARE	500			1000	500	SPARE	1	20	18	S
S	19	50	1	PROVISION	200	400			200	PROVISION	1	50	20	S
S	21	50	1	PROVISION	200		400		200	PROVISION	1	50	22	S
S	23	50	1	PROVISION	200			400	200	PROVISION	1	50	24	S
S	25	50	1	PROVISION	200	400			200	PROVISION	1	50	26	S
S	27	50	1	PROVISION	200		400		200	PROVISION	1	50	28	S
S	29	50	1	PROVISION	200			400	200	PROVISION	1	50	30	S
				SURGE PROTECTION DEVICE						SURGE PROTECTION DEVICE				
				BUS CONNECTED						BUS CONNECTED				
				"						"				

NOTES:
1 BASIS OF DESIGN IS SCHNEIDER SQUARE D. MINIMUM AIC RATING SHALL BE 22K
2 PANEL TO BE PROVIDED WITH MANUFACTURER'S STANDARD INTERNAL SURGE SUPPRESSION
3 FULLY RATED, NOT SERIES RATED.
4 PROVIDE LOCKING DEVICE FOR EMERGENCY POWER CIRCUITS
5 DOOR-IN-DOOR HINGED COVER.
6 HOLD

Load Type	Load Factor	Connected Load (VA)			Total Conn. Load (VA)	Demand Factor	Demand Load (VA)			Total Demand Load (VA)
		Phase					Phase			
		A	B	C			A	B	C	
Lighting (L)	1.00	3450	3500	4050	11000	1.00	3450	3500	4050	11000
Receptacles (R)	1.00	0	0	0	0	NEC	0	0	0	0
Motor (M)	1.00	0	0	0	0	1.00	0	0	0	0
Largest Motor	1				0	1				0
Other (O)	1.00	0	0	0	0	1.00	0	0	0	0
Spare (S)	1.00	1300	2000	1800	5100	1.00	1300	2000	1800	5100
Electric Heat (H)	1.00	0	0	0	0	1.00	0	0	0	0
Total Load (VA)	1.00	**4750**	**5500**	**5850**	**16100**	---	**4750**	**5500**	**5850**	**16100**
Total Load (AMPS)	--	**40**	**46**	**49**	**45**	---	**40**	**46**	**49**	**45**

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ISSUE DATES
INITIAL ISSUE 12-20-19
1 ADDENDUM 1 01-10-20

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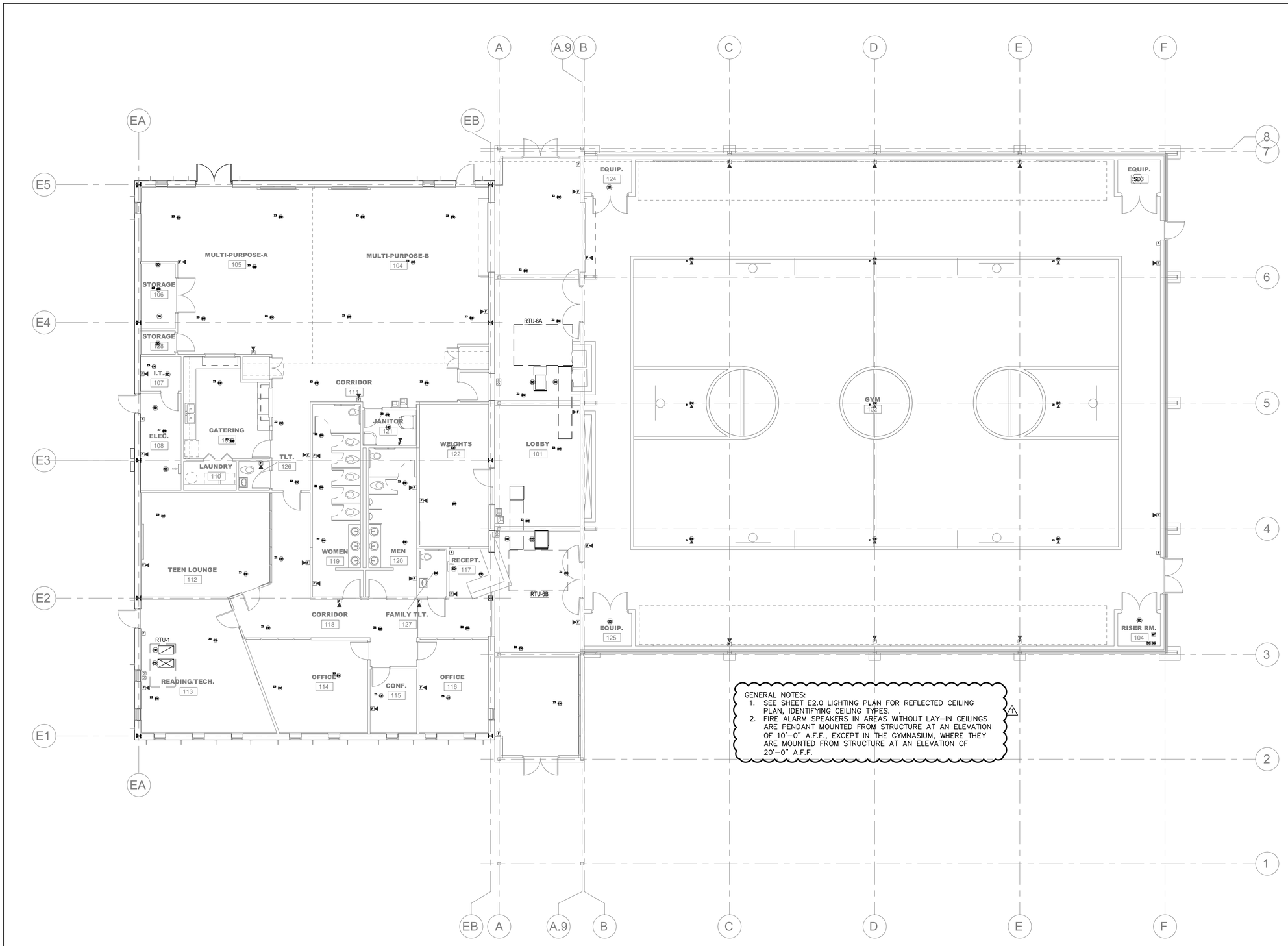
JOB NO. 18-072 | D'WN JRTT | CK'D CJWR

E3.3
PANEL SCHEDULES



GENERAL NOTES:
1. SEE SHEET E2.0 LIGHTING PLAN FOR REFLECTED CEILING PLAN, IDENTIFYING CEILING TYPES.
2. FIRE ALARM SPEAKERS IN AREAS WITHOUT LAY-IN CEILINGS ARE PENDANT MOUNTED FROM STRUCTURE AT AN ELEVATION OF 10'-0" A.F.F., EXCEPT IN THE GYMNASIUM, WHERE THEY ARE MOUNTED FROM STRUCTURE AT AN ELEVATION OF 20'-0" A.F.F.

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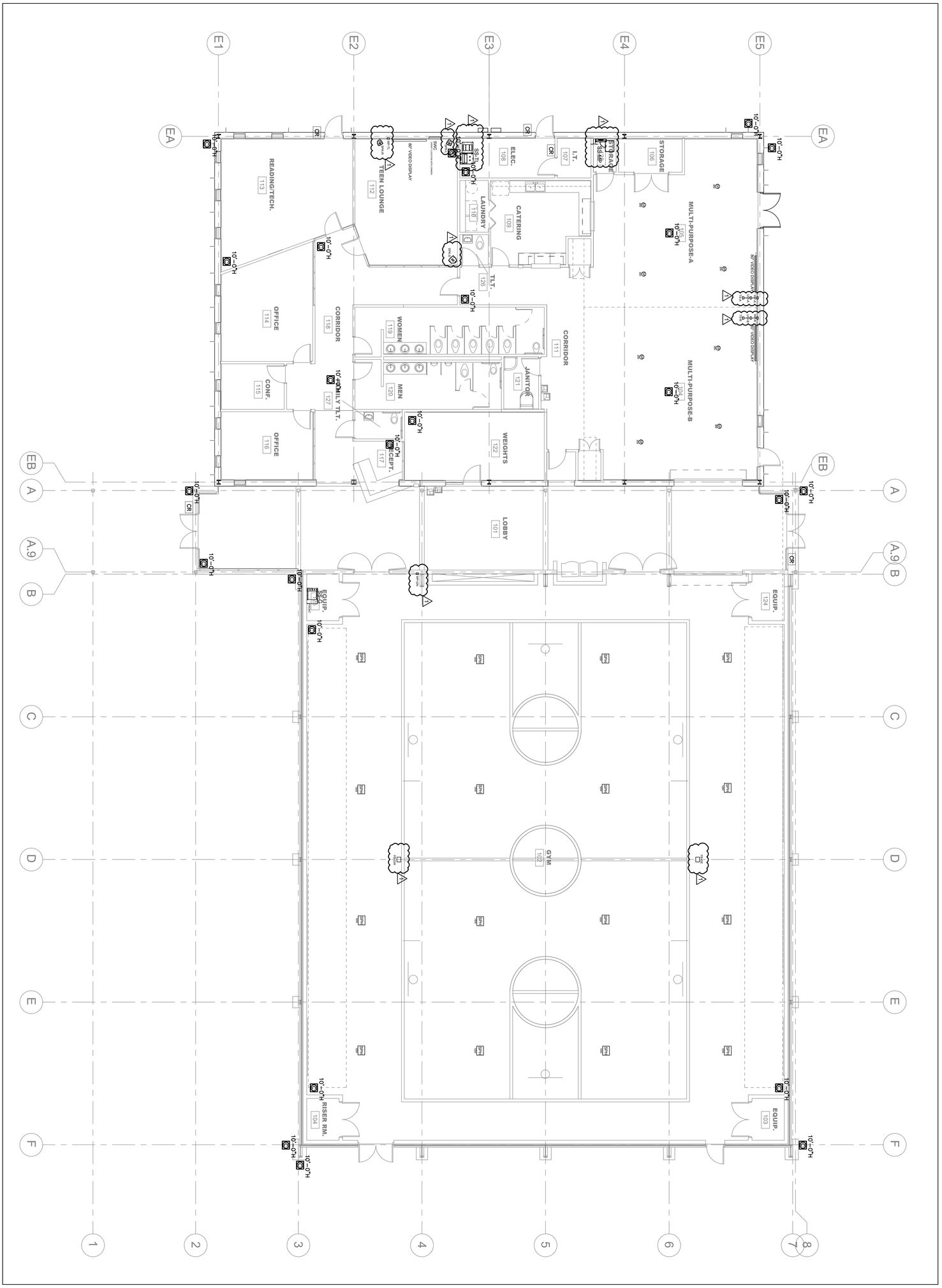
E4.0
FIRE ALARM PLAN



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E5.0
AUXILIARY PLAN

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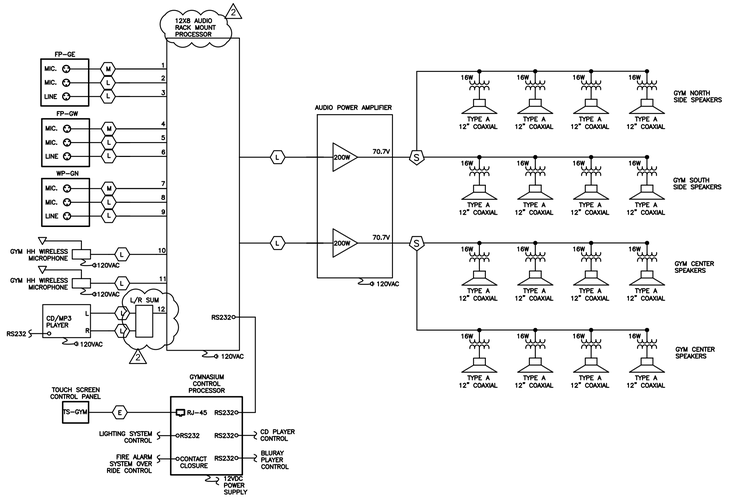
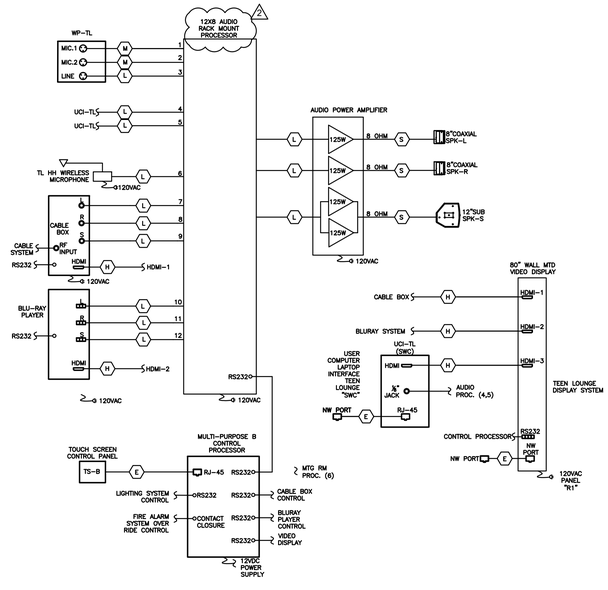
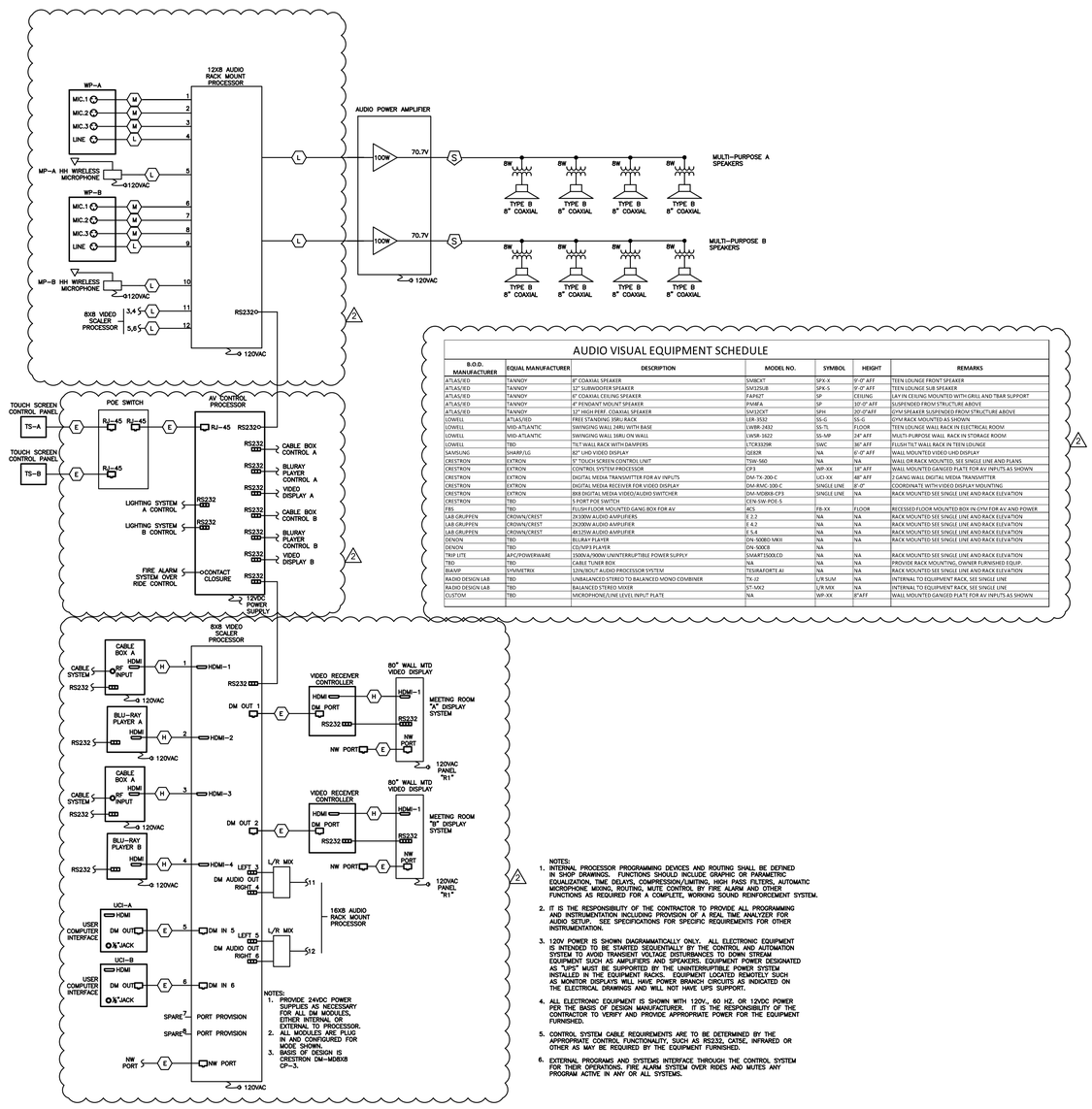


GYMNASIUM SOUND SYSTEM SINGLE LINE DIAGRAM



TEEN LOUNGE SOUND SYSTEM SINGLE LINE DIAGRAM



MULTI-PURPOSE ROOMS SOUND SYSTEM SINGLE LINE DIAGRAM

AUDIO VISUAL EQUIPMENT SCHEDULE

B.O.D. MANUFACTURER	EQUAL MANUFACTURER	DESCRIPTION	MODEL NO.	SYMBOL	HEIGHT	REMARKS
ATLAS/IED	TANNOY	8" COAXIAL SPEAKER	SMBICKT	SPX-X	9'-0" AFF	TEEN LOUNGE FRONT SPEAKER
ATLAS/IED	TANNOY	12" SUBWOOFER SPEAKER	SMS39UB	SPX-S	9'-0" AFF	TEEN LOUNGE SUB SPEAKER
ATLAS/IED	TANNOY	6" COAXIAL CEILING SPEAKER	PAPAT	SP	CEILING	LAY-IN CEILING MOUNTED WITH GRILL AND TBAR SUPPORT
ATLAS/IED	TANNOY	4" PENDANT MOUNT SPEAKER	PMMFA	SP	10'-0" AFF	SUSPENDED FROM STRUCTURE ABOVE
ATLAS/IED	TANNOY	12" HIGH PERF. COAXIAL SPEAKER	SM32CKT	SPH	20'-0"AFF	GYM SPEAKER SUSPENDED FROM STRUCTURE ABOVE
LOWELL	ATLAS/IED	FREE STANDING 35RU RACK	LER-3532	SS-G	SS-G	GYM RACK MOUNTED AS SHOWN
LOWELL	WID-ATLANTIC	SWINGING WALL 24RU WITH BASE	LWBR-2432	SS-TL	FLOOR	TEEN LOUNGE WALL RACK IN ELECTRICAL ROOM
LOWELL	WID-ATLANTIC	SWINGING WALL 35RU ON WALL	LWDR-3622	SS-WP	24" AFF	MULTI-PURPOSE WALL RACK IN STORAGE ROOM
LOWELL	TBD	TILT WALL RACK WITH DAMPERS	LTCR3329R	SWC	36" AFF	FLUSH TILT WALL RACK IN TEEN LOUNGE
SAMSUNG	SHARP/LG	82" UHD VIDEO DISPLAY	QB82R	NA	6'-0" AFF	WALL MOUNTED VIDEO UHD DISPLAY
CRESTRON	EXTRON	5" TOUCH SCREEN CONTROL UNIT	TSW-560	NA	NA	WALL OR RACK MOUNTED, SEE SINGLE LINE AND PLANS
CRESTRON	EXTRON	CONTROL SYSTEM PROCESSOR	CP3	WP-XX	18" AFF	WALL MOUNTED GANGED PLATE FOR AV INPUTS AS SHOWN
CRESTRON	EXTRON	DIGITAL MEDIA TRANSMITTER FOR AV INPUTS	DM-TX-200-C	UCI-XX	48" AFF	2 GANG WALL DIGITAL MEDIA TRANSMITTER
CRESTRON	EXTRON	DIGITAL MEDIA RECEIVER FOR VIDEO DISPLAY	DM-RMC-100-C	SINGLE LINE	0'-0"	COORDINATE WITH VIDEO DISPLAY MOUNTING
CRESTRON	EXTRON	8X8 DIGITAL MEDIA VIDEO/AUDIO SWITCHER	DM-MD8X8-CP3	SINGLE LINE	NA	RACK MOUNTED SEE SINGLE LINE AND RACK ELEVATION
CRESTRON	TBD	5 PORT POE SWITCH	CEN-SW-POE-5			
FBS	TBD	FLUSH FLOOR MOUNTED GANG BOX FOR AV	4CS	FB-XX	FLOOR	RECESSED FLOOR MOUNTED BOX IN GYM FOR AV AND POWER
LAB GRUPPEN	CROWN/CREST	2X100W AUDIO AMPLIFIERS	IT 2:2	NA	NA	RACK MOUNTED SEE SINGLE LINE AND RACK ELEVATION
LAB GRUPPEN	CROWN/CREST	2X300W AUDIO AMPLIFIER	IT 4:2	NA	NA	RACK MOUNTED SEE SINGLE LINE AND RACK ELEVATION
LAB GRUPPEN	CROWN/CREST	4X125W AUDIO AMPLIFIER	IT 5.4	NA	NA	RACK MOUNTED SEE SINGLE LINE AND RACK ELEVATION
DENON	TBD	BLURAY PLAYER	DN-500BD MKII	NA	NA	RACK MOUNTED SEE SINGLE LINE AND RACK ELEVATION
DENON	TBD	CD/MP3 PLAYER	DN-500CB	NA		
TRIP LITE	APC/POWERWARE	1500VA/800W UNINTERRUPTIBLE POWER SUPPLY	SMART1500LCD	NA	NA	RACK MOUNTED SEE SINGLE LINE AND RACK ELEVATION
TBD	TBD	CABLE TUNER BOX	NA	NA	NA	PROVIDE RACK MOUNTING, OWNER FURNISHED EQUIP.
BIAMP	SYNAETRIX	12IN/8OUT AUDIO PROCESSOR SYSTEM	TESIRAFORTE AI	NA	NA	RACK MOUNTED SEE SINGLE LINE AND RACK ELEVATION
RADIO DESIGN LAB	TBD	UNBALANCED STEREO TO BALANCED MONO COMBINER	TX-22	L/R SUM	NA	INTERNAL TO EQUIPMENT RACK, SEE SINGLE LINE
RADIO DESIGN LAB	TBD	BALANCED STEREO MIXER	ST-MX2	L/R MIX	NA	INTERNAL TO EQUIPMENT RACK, SEE SINGLE LINE
CUSTOM	TBD	MICROPHONE/LINE LEVEL INPUT PLATE	NA	WP-XX	18"AFF	WALL MOUNTED GANGED PLATE FOR AV INPUTS AS SHOWN

NOTES:
1. INTERNAL PROCESSOR PROGRAMMING DEVICES AND ROUTING SHALL BE DEFINED IN SHOP DRAWINGS. FUNCTIONS SHOULD INCLUDE GRAPHIC OR PARAMETRIC EQUALIZATION, TIME DELAYS, COMPRESSION/LIMITING, HIGH PASS FILTERS, AUTOMATIC MICROPHONE MIXING, ROUTING, MUTE CONTROL BY FIRE ALARM AND OTHER FUNCTIONS AS REQUIRED FOR A COMPLETE, WORKING SOUND REINFORCEMENT SYSTEM.
2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ALL PROGRAMMING AND INSTRUMENTATION INCLUDING PROVISION OF A REAL TIME ANALYZER FOR AUDIO SETUP. SEE SPECIFICATIONS FOR SPECIFIC REQUIREMENTS FOR OTHER INSTRUMENTATION.
3. 120V POWER IS SHOWN DIAGRAMMATICALLY ONLY. ALL ELECTRONIC EQUIPMENT IS INTENDED TO BE STARTED SEQUENTIALLY BY THE CONTROL AND AUTOMATION SYSTEM TO AVOID TRANSIENT VOLTAGE DISTURBANCES TO DOWN STREAM EQUIPMENT SUCH AS AMPLIFIERS AND SPEAKERS. EQUIPMENT POWER DESIGNATED AS "UPS" MUST BE SUPPORTED BY THE UNINTERRUPTIBLE POWER SYSTEM INSTALLED IN THE EQUIPMENT RACKS. EQUIPMENT LOCATED REMOTELY SUCH AS MONITOR DISPLAYS WILL HAVE POWER BRANCH CIRCUITS AS INDICATED ON THE ELECTRICAL DRAWINGS AND WILL NOT HAVE UPS SUPPORT.
4. ALL ELECTRONIC EQUIPMENT IS SHOWN WITH 120V., 60 HZ, OR 12VDC POWER PER THE BASIS OF DESIGN MANUFACTURER. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY AND PROVIDE APPROPRIATE POWER FOR THE EQUIPMENT FURNISHED.
5. CONTROL SYSTEM CABLE REQUIREMENTS ARE TO BE DETERMINED BY THE APPROPRIATE CONTROL FUNCTIONALITY, SUCH AS RS232, CAT5E, INFRARED OR OTHER AS MAY BE REQUIRED BY THE EQUIPMENT FURNISHED.
6. EXTERNAL PROGRAMS AND SYSTEMS INTERFACE THROUGH THE CONTROL SYSTEM FOR THEIR OPERATIONS; FIRE ALARM SYSTEM OVER RIDES AND MUTES ANY PROGRAM ACTIVE IN ANY OR ALL SYSTEMS.

NOTES:
1. PROVIDE 24VDC POWER SUPPLIES AS NECESSARY FOR ALL DM MODULES, EITHER INTERNAL OR EXTERNAL TO PROCESSOR.
2. ALL MODULES ARE PLUG IN AND CONFIGURED FOR MODE SHOWN.
3. BASIS OF DESIGN IS CRESTRON DM-MD8X8 CP-3.

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ISSUE DATES

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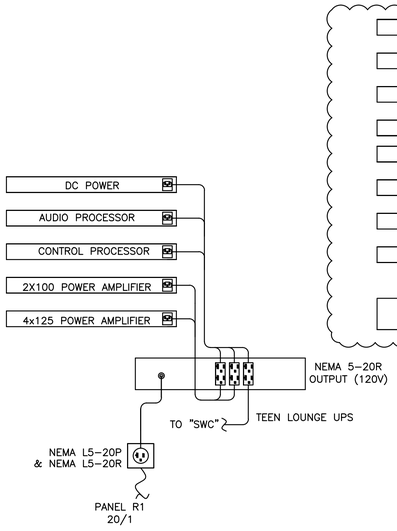
1 ADDENDUM 4	01-09-20
2 ADDENDUM 6	01-14-20

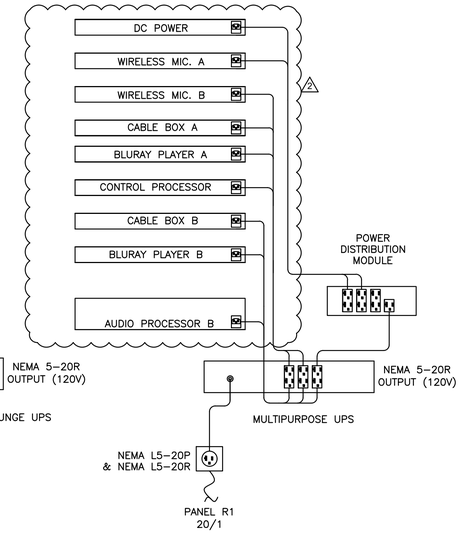
JOB NO.	D'WN	CK'D
18-072	JRTT	CJWR

E5.1
SOUND DIAGRAMS

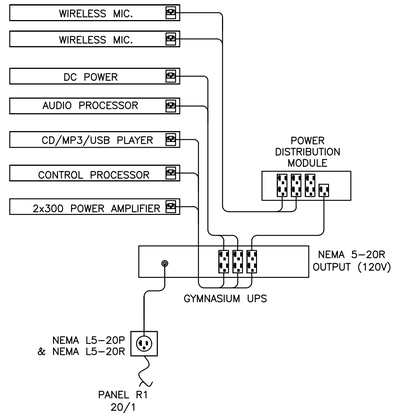
MISCELLANEOUS SOUND SYSTEM EQUIPMENT SCHEDULE		
QUANTITY	USE AREA	Description
4	ALL SYSTEMS	HANDHELD WIRED MICROPHONES
AS SHOWN	SEE SINGLE LINES	WIRELESS MICROPHONES
6	ALL SYSTEMS	MICROPHONE FLOOR STANDS
2	ALL SYSTEMS	MICROPHONE TABLE STANDS
8	ALL SYSTEMS	25 FOOT MICROPHONE CABLE
4	ALL SYSTEMS	50 FOOT MICROPHONE CABLE
4	ALL SYSTEMS	10 FOOT LINE LEVEL CABLE
4	ALL SYSTEMS	6 FOOT HDMI CABLE



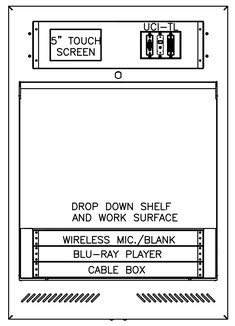
SS-TL POWER DISTRIBUTION



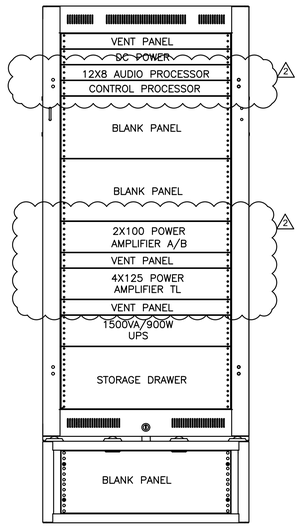
SS-MP POWER DISTRIBUTION



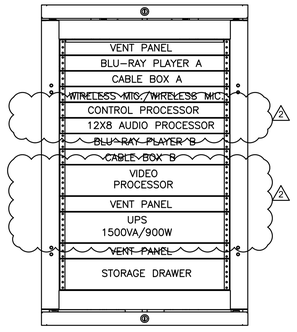
SS-G POWER DISTRIBUTION



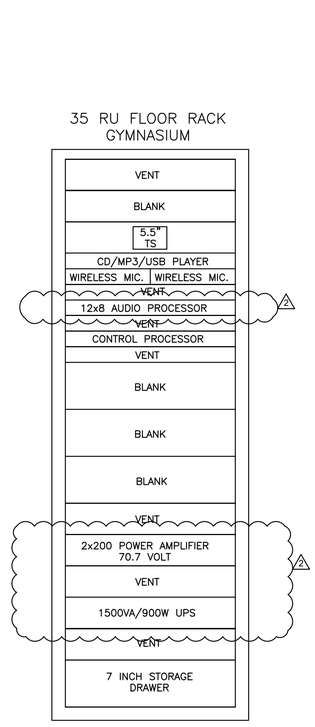
TEEN ROOM WALL CABINET "SWC"
N.T.S.



TEEN LOUNGE RACK "SS-TL"
N.T.S.



MULTI-PURPOSE ROOM RACK SS-MP
N.T.S.



GYMNASIUM RACK SS-G
N.T.S.

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12/20/2019

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E5.2

SOUND RACK DETAILS