

9.0 - DESIGN LOADS:

- 9.01 GENERAL DESIGN REQUIREMENTS (IBC 2018, SECTION 1604)
(A) RISK CATEGORY IV (ASCE 7-16, TABLE 1.5-1)
(B) MUNICIPALITY VILLAGE OF ARDSLEY, NY
- 9.02 DESIGN LOADS TO BE VERIFIED BY PRE-ENGINEERED METAL BUILDING DESIGNER.
- 9.03 FLOOR DESIGN LOADING CRITERIA LOADS (IBC 2018, SECTION 1607)

OCCUPANCY / USE	SUPERIMPOSED DEAD LOAD ^a	LIVE LOADS	
		UNIFORM	CONCENTRATED
OFFICE + PARTITIONS	20 psf	80 psf	2000 lbs
LOBBIES, 1st FLOOR CORRIDORS, CONFERENCE	20 psf	100 psf	2000 lbs
SLABS-ON-GRADE IN VEHICLE STORAGE, VEHICLE MAINTENANCE, AND SHOPS	ACTUAL WEIGHT OF EQUIPMENT	250 psf OR HS-20 ^a	-
ROOF	16 psf ^b	20 psf ^c	-
MEZZANINE	20 psf	250 psf	3000 lbs
MECHANICAL ROOMS	20 psf	150 psf	-
STAIRS AND EXITS	5 psf	100 psf	300 lbs ^d
MAINTENANCE CATWALKS	5 psf	40 psf	300 lbs ^d
HANDRAIL AND GUARDRAIL SYSTEMS	-	50 lb/ft ^e	200 lbs ^f
INTERMEDIATE RAILS & PANEL FILLERS	-	50 lb/ft ^g	-

NOTE(S):

- (a) SUPERIMPOSED DEAD LOADS ARE APPLIED IN ADDITION TO FRAMING AND SLAB SELF-WEIGHTS.
(b) PRE-ENGINEERED METAL BUILDING COLLATERAL LOAD AND 8PSF ALLOWANCE FOR FUTURE SOLAR PANEL SYSTEM.
(c) ROOF LIVE LOAD, ALSO REFER TO SNOW LOAD REQUIREMENTS IN 9.04.
(d) NOT CONCURRENT WITH THE UNIFORM LOAD. THE CONCENTRATED LOAD ON STAIR TREADS SHALL BE APPLIED ON AN AREA OF 2 INCHES BY 2 INCHES.
(e) APPLIED IN ANY DIRECTION ALONG THE HANDRAIL OR TOP RAIL TO PRODUCE THE MAXIMUM EFFECTS. UNIFORM AND CONCENTRATED LOADS ARE NOT APPLIED CONCURRENTLY.
(f) APPLIED NORMAL TO THE SURFACE ON AN AREA NOT TO EXCEED 12"x12" (NOT CONCURRENT WITH TOP RAIL LOADS).
(g) VEHICLE LOADING PER IBC 2015 1607.7.

- 9.04 ROOF SNOW LOAD (IBC 2018, SECTION 1608)
- (A) GROUND SNOW LOAD, P_g 30 PSF (ASCE 7-16, FIGURE 7.2-1)
(B) MINIMUM FLAT ROOF SNOW LOAD, P_F 27.72 PSF* (ASCE7-16, SEC. 7.3)
(C) SNOW EXPOSURE FACTOR, C_e 1.1 (ASCE 7-16, TABLE 7.3-1)
(D) THERMAL FACTOR, C_t 1.0 (ASCE 7-16, TABLE 7.3-2)
(E) SNOW LOAD IMPORTANCE FACTOR, I_s 1.2 (ASCE 7-16, TABLE 1.5-2)
(F) ROOF SLOPE FACTOR, C_s 1.0 (ASCE 7-16, FIGURE 7.4-1)
(G) * ADJUST FOR SNOW DRIFT AND UNBALANCED SNOW LOADING

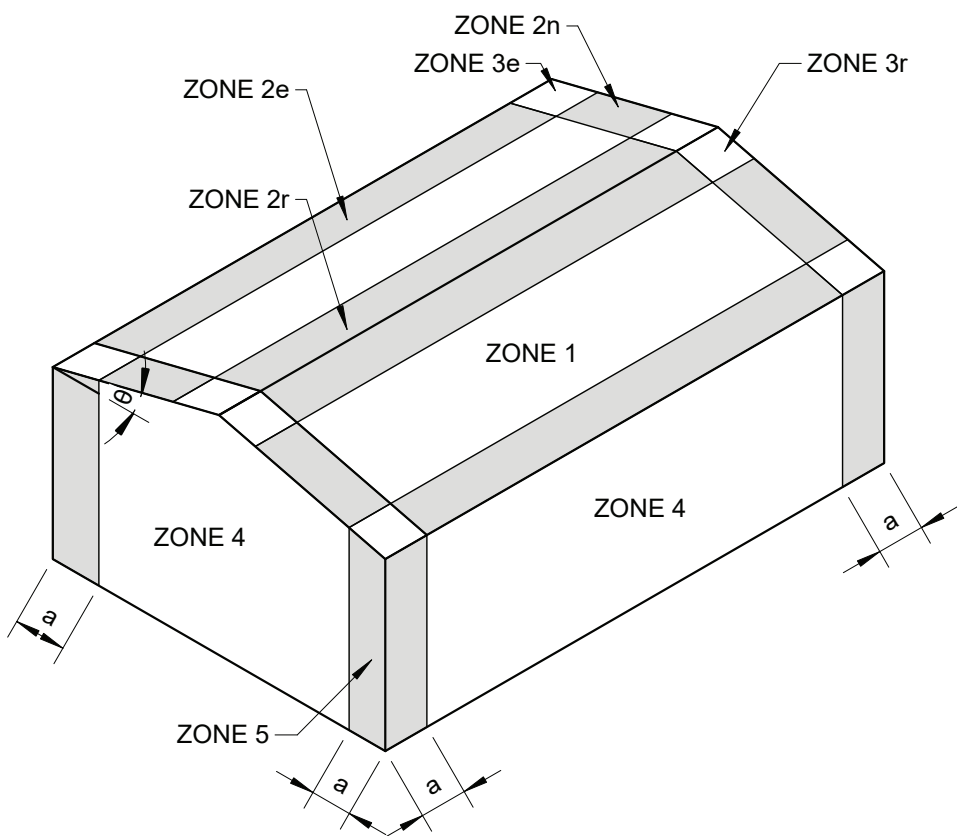
- 9.05 WIND LOADS (IBC 2018, SECTION 1609)
- (A) BASIC WIND SPEED, V (3-SECOND GUST WIND SPEED) 129 MPH (ASCE 7-16, FIG. 26.5-1D)
(B) BUILDING ENCLOSURE CLASSIFICATION ENCLOSED (ASCE 7-16, SEC. 26.2)
(C) WIND EXPOSURE CATEGORY C (ASCE 7-16, SEC. 26.7)
(D) DESIGN BUILDING DIMENSIONS
(E) COMPONENTS AND CLADDING (ASCE 7-16, SEE TABLE)
(1) ANALYSIS PROCEDURE LOW RISE BUILDINGS (ASCE 7-16)
(a) WIND DIRECTIONALITY FACTOR, K_d 0.85 (ASCE 7-16, TABLE 26.6-1)
(b) TOPOGRAPHIC FACTOR, K_{zt} 1.0 (ASCE 7-16, SECTION 26.8)
(c) VELOCITY PRESSURE COEFFICIENT, K_z 0.94 (ASCE 7-16, TABLE 26.10-1)
(d) INTERNAL PRESSURE COEFFICIENT, GC_{pi} +/-0.18 (ASCE 7-16, TABLE 26.13-1)
(e) GROUND ELEVATION FACTOR, K_e 1.0 (ASCE 7-16, TABLE 26.9-1)

COMPONENTS AND CLADDING WIND PRESSURE LOADS ON BUILDING

EFFECTIVE WIND AREA (SF)	ROOF LOADS (psf)						WALL LOADS (psf)			
	ZONE 1		ZONE 2		ZONE 3		ZONE 4		ZONE 5	
	POS	NEG	POS	NEG	POS	NEG	POS	NEG	POS	NEG
10	17.09	-66.8	17.09	-88.13	17.09	-120.1	N/A	N/A	N/A	N/A
50	14.6	-56.55	14.6	-75.0	14.6	-93.8	N/A	N/A	N/A	N/A
100	13.51	-52.1	13.51	-69.2	13.51	-82.5	N/A	N/A	N/A	N/A
500	13.51	-52.1	13.51	-69.2	13.51	-82.5	N/A	N/A	N/A	N/A

NOTE(S):

- (A) POS - INDICATES POSITIVE PRESSURE (INWARD OR TOWARD THE SURFACES)
(B) NEG - INDICATES NEGATIVE PRESSURE (OUTWARD OR AWAY FROM SURFACES)



- 9.06 EARTHQUAKE LOADS (IBC 2018, SECTION 1613)
- (A) SITE CLASS C (GEOTECH REPORT)
(B) SPECTRAL RESPONSE ACCELERATIONS
(1) S_s 0.295 (ASCE 7-16, SEC. 11.4.2)
(2) S₁ 0.061 (ASCE 7-16, SEC. 11.4.2)
(C) SPECTRAL RESPONSE COEFFICIENTS
(1) S_{ds} 0.256 (ASCE 7-16, SEC. 11.4.5)
(2) S_{d1} 0.061 (ASCE 7-16, SEC. 11.4.5)
(D) SEISMIC DESIGN CATEGORY C (ASCE 7-16, SEC 11.6)
(E) SEISMIC IMPORTANCE FACTOR, I_e 1.5 (ASCE 7-16, TABLE 1.5-2)
(F) SEISMIC FORCE RESISTING SYSTEM:
(1) STEEL SYSTEM NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE
(a) RESPONSE MODIFICATION COEFFICIENT, R 3
(b) SYSTEM OVERSTRENGTH PARAMETER, Q_o 3
(c) DEFLECTION AMPLIFICATION FACTOR, C_d 3
(G) ANALYSIS PROCEDURE EQUIVALENT LATERAL FORCE ANALYSIS (ASCE 7-16, SEC. 12.8)

LOADING NOTES

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

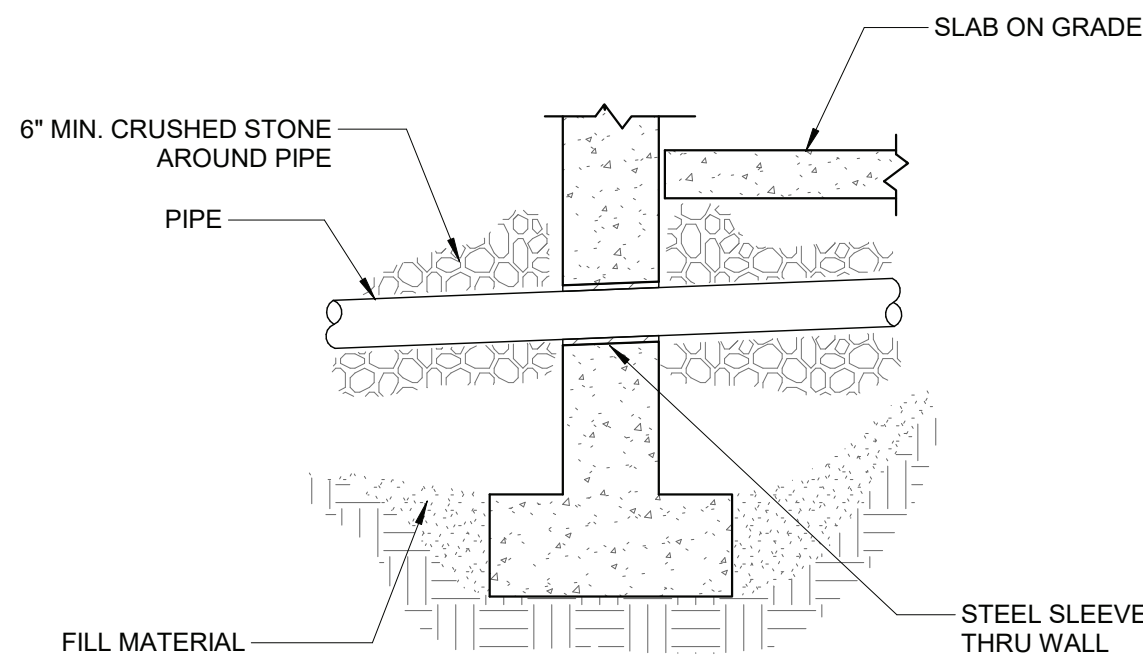
10.0 - BUILDING DEFLECTION LIMITS

BUILDING DEFLECTION LIMITS			
CONSTRUCTION	LIVE	SNOW OR WIND (c)	DEAD+LIVE
ROOF MEMBER (d)	(a)	(a)	
SUPPORTING PLASTER CEILING	1/360	1/360	1/360
SUPPORTING NON PLASTER CEILING	1/240	1/240	1/240
	1/180	1/180	1/180
FLOOR MEMBERS	(b)	-	1/240
	1/360		
EXTERIOR WALLS AND INTERIOR PARTITIONS WITH MASONRY VENEER	-	1/600	-
ALL OTHER CASES		1/240	

- (A) TOTAL ROOF SNOW LOAD DEFLECTION SHALL NOT EXCEED 1 1/4".
(B) TOTAL FLOOR LIVE LOAD DEFLECTION SHALL NOT EXCEED 1".
(C) WIND DEFLECTIONS MAY BE BASED ON A 10-YEAR WIND.
(D) DEFLECTIONS OF MEMBERS SUPPORTING CRANES SHALL MEET DEFLECTION CRITERIA REQUIRED BY THE CRANE MANUFACTURER OR AS SPECIFIED IN THE ABOVE, WHICHEVER IS MORE STRINGENT.

BUILDING DEFLECTION LIMITS

SCALE: 1" = 1'-0"

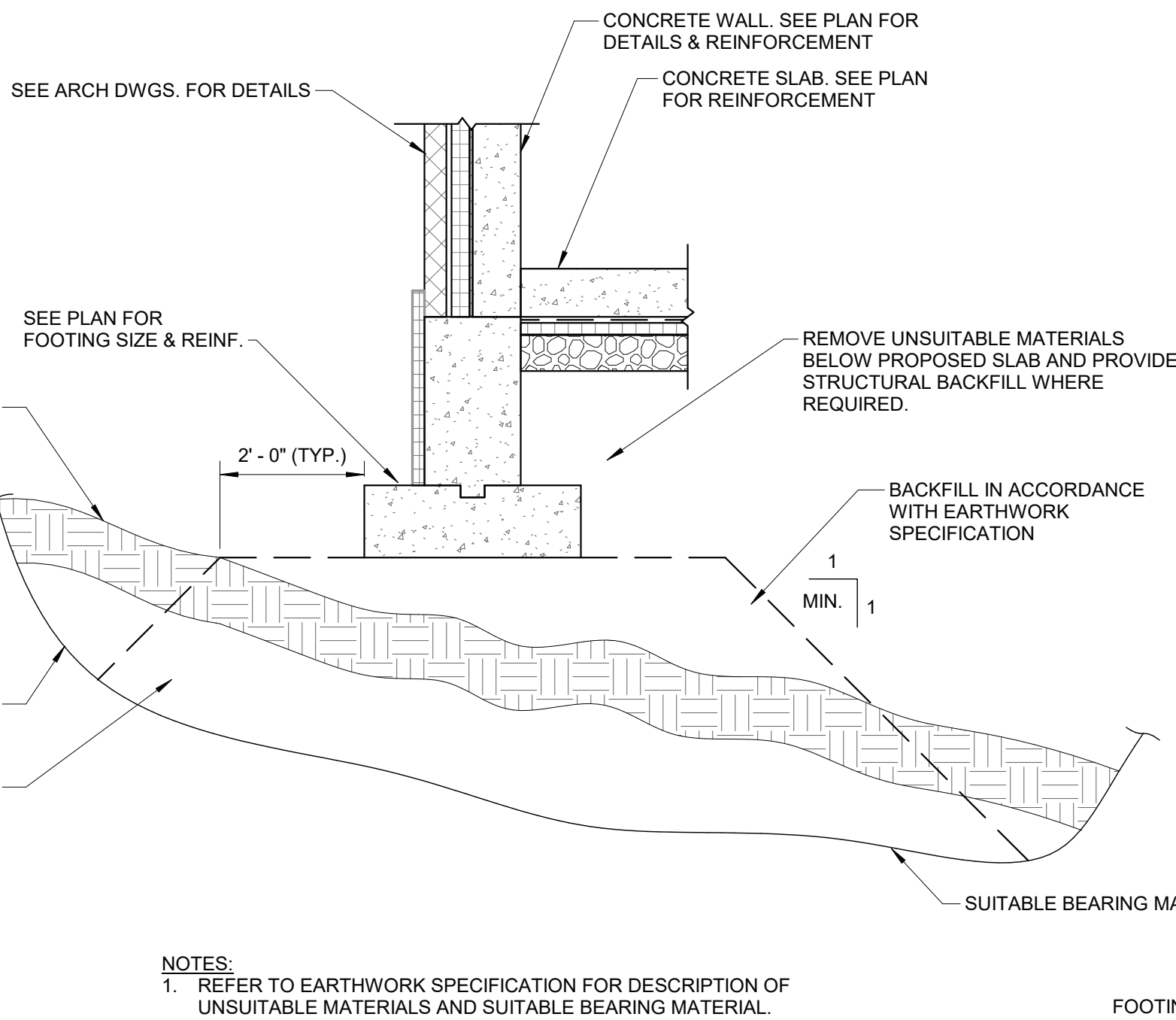


NOTE(S):

1. PIPE SHALL NOT PASS UNDER OR THRU WALL FOOTING. LOWER FOOTING BY STEPPING TO AVOID INTERFERENCE.

PIPE THROUGH FOUNDATION WALL

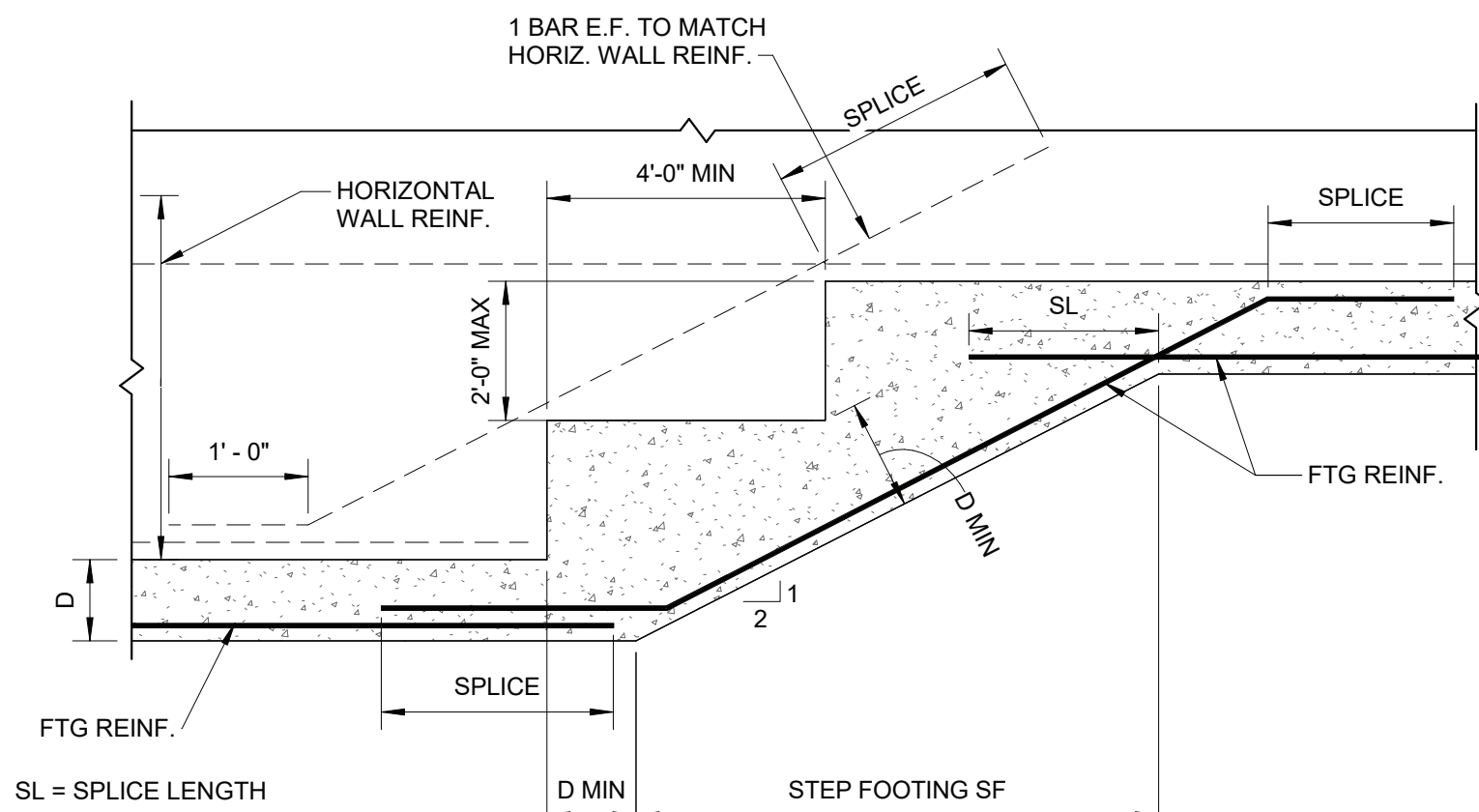
SCALE: 3/4" = 1'-0"



- NOTES:
1. REFER TO EARTHWORK SPECIFICATION FOR DESCRIPTION OF UNSUITABLE MATERIALS AND SUITABLE BEARING MATERIAL.

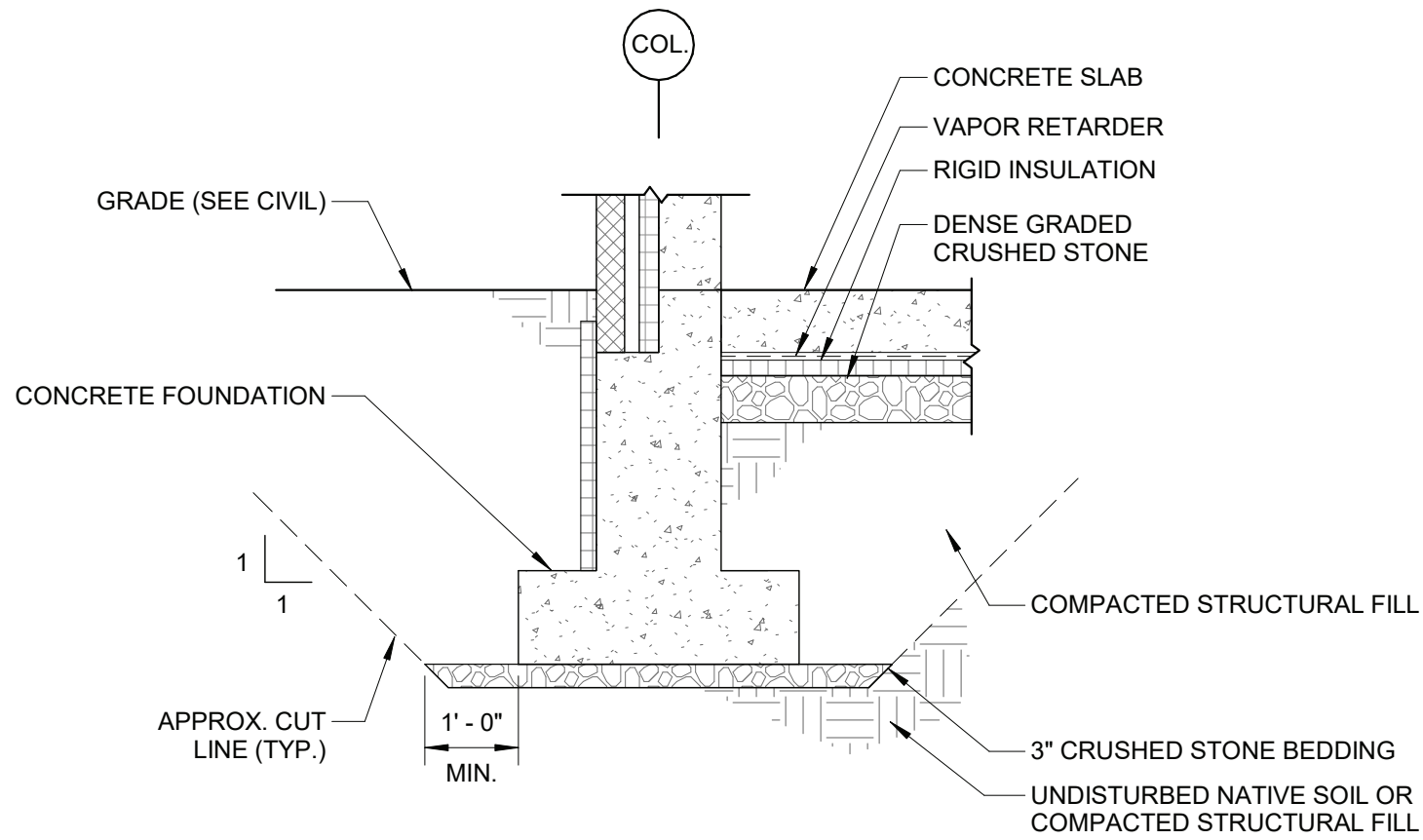
TYPICAL REMOVAL OF UNSUITABLE MATERIALS

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



STEP FOOTING DETAIL

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



FOUNDATION NOTE(S):

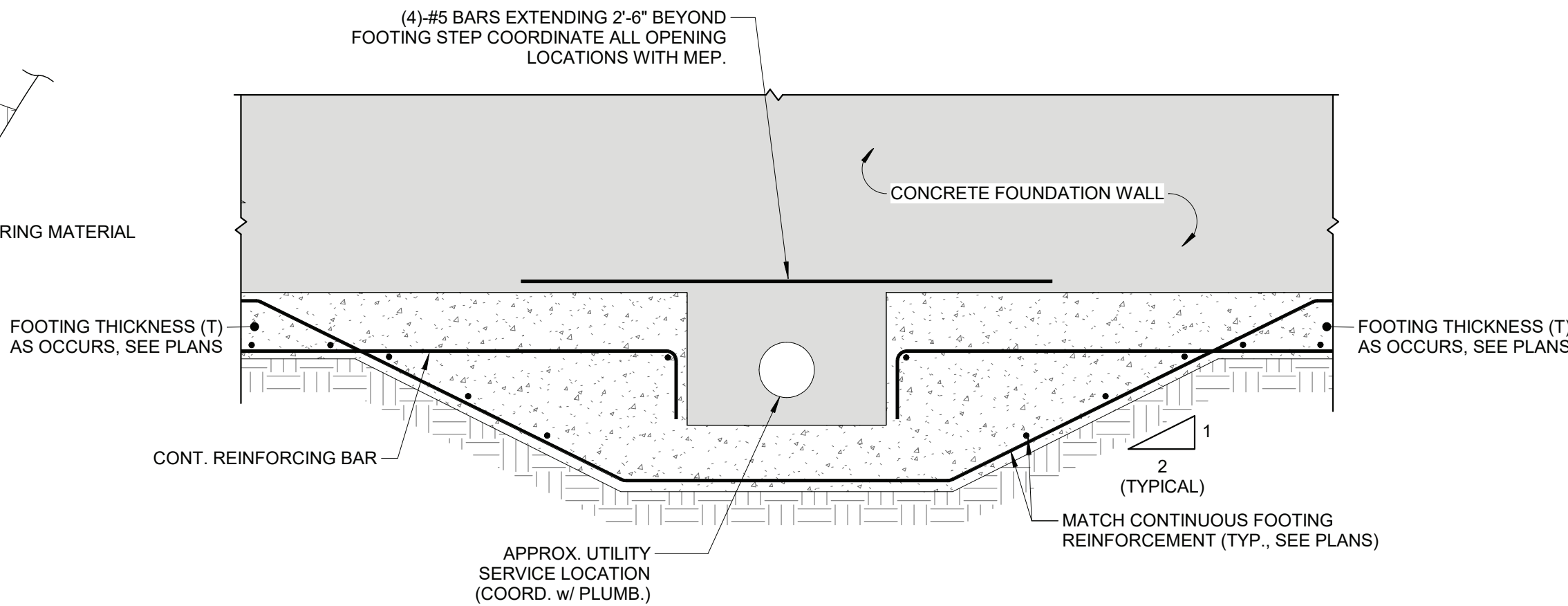
1. UNDOCUMENTED FILL AND LOOSE OR DISTURBED SOILS SHALL BE REMOVED FROM ALL FOUNDATION AREAS. THE CONTRACTOR SHALL CONTACT THE ENGINEER PRIOR TO FOUNDATION CONSTRUCTION TO OBSERVE ALL FOUNDATION SUBGRADES. REFER TO DETAIL 7/S002 AND EARTHWORK SPECIFICATION FOR LIMITS OF UNSUITABLE SOILS REMOVAL AND BACKFILL REQUIREMENTS BELOW FOUNDATIONS AND SLABS.
2. 3-INCHES OF CRUSHED STONE SHALL BE PLACED AND COMPACTED AT THE BASE OF FOOTING EXCAVATIONS.
3. THE CONTRACTOR IS RESPONSIBLE FOR SUBGRADE PROTECTION.

SLAB NOTE(S):

1. A MINIMUM OF 12-INCHES OF DENSE GRADED CRUSHED STONE SHALL BE PLACED BELOW SLABS. REFER TO EARTHWORK SPECIFICATION FOR PLACEMENT AND COMPACTION REQUIREMENTS. THE CONTRACTOR SHALL CONTACT THE ENGINEER PRIOR TO PLACEMENT TO EVALUATION SUBGRADE CONDITIONS.
2. REFER TO DETAIL 7/S002 AND EARTHWORK SPECIFICATION FOR LIMITS OF UNSUITABLE SOILS REMOVAL AND BACKFILL REQUIREMENTS BELOW FOUNDATIONS AND SLABS.
3. IF UNDERSLAB STONE IS TRAPPING WATER, THE WATER SHALL BE REMOVED PRIOR TO SLAB PLACEMENT.

TYPICAL CUT/FILL DETAIL

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



NOTE(S):


1. REFER TO ARCH/CIVIL/GEOTECHNICAL DETAILS FOR ADDITIONAL UNDER SLAB & FOUNDATION REQUIREMENTS NOT SHOWN ON THESE DRAWINGS. REQUIREMENTS MAY INCLUDE BUT ARE NOT LIMITED TO: PERIMETER DRAINS, INSULATION, WEEP HOLES, & SITE PREPARATION. REPORT ANY DISCREPANCIES BETWEEN DISCIPLINES TO A/E FOR CLARIFICATION PRIOR TO PROCEEDING WITH WORK.

UTILITY OPENING

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

FOR BIDDING
NOT FOR CONSTRUCTION

Project:
ARDSLEY DEPARTMENT OF
PUBLIC WORKS



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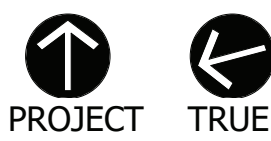
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Reviewed By: NMS
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Drawing Title:

GENERAL NOTES
& TYPICAL
DETAILS

Sheet Number:

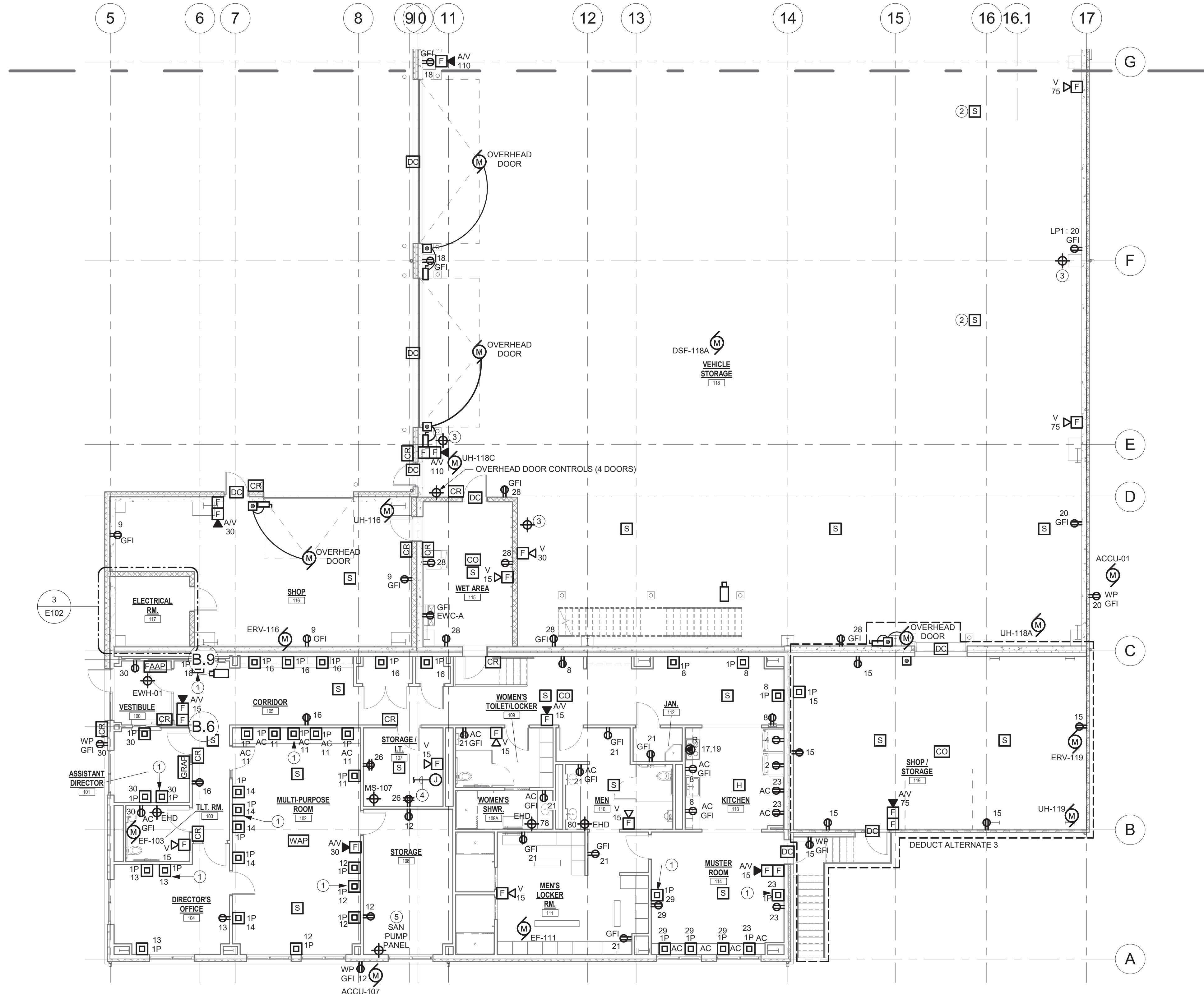
S002

GENERAL NOTES:

- A. UNLESS OTHERWISE NOTED, ALL BRANCH CIRCUIT WIRING SHALL BE (2)#12, (1)#12G, 3/4"C. TO PANEL LP1, UNLESS OTHERWISE NOTED.
- B. REFER TO ONE-LINE DIAGRAM, SCHEDULES AND DETAILS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

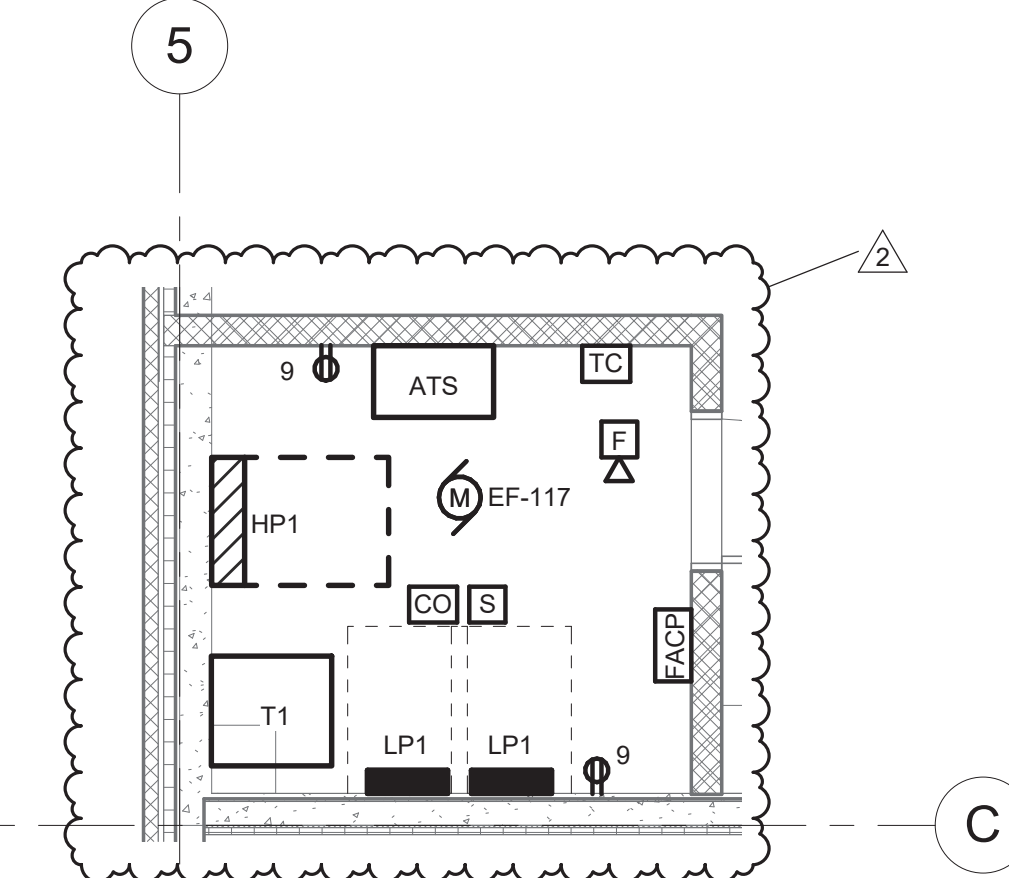
E102 DRAWING NOTES:

1. RECEPTACLE AND DATA DROP ARE FOR WALL MOUNTED TV. CONTRACTOR TO COORDINATE MOUNTING HEIGHTS IN FIELD PRIOR TO ROUGH-IN.
2. SMOKE DETECTORS ARE PART OF ADD ALTERNATE 1. SHOULD ADD ALTERNATE 1 BE ACCEPTED PROVIDE SMOKE DETECTORS MOUNTED TO UNDERSIDE OF MEZZANINE 2A.
3. E3POINT SENSOR PROVIDED BY OTHERS. PROVIDE (2)#12, (1)#12G, 3/4"C. REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.
4. PROVIDE 2" CONDUIT FROM IT ROOM TO HANDHOLE ON TELE/DATA HANDHOLE ON SITE.
5. PROVIDE 20A 3P CIRCUIT BREAKER IN PANEL HP1, CIRCUIT WITH (3)#12, (1)#12G, 3/4"C FOR CIRCUITING OF SAN PUMP PANEL. PROVIDE (1)2" CONDUIT FROM SAN PUMP PANEL TO SAN PUMPS ON SITE FOR ROUTING OF CABLE PROVIDED BY OTHERS.



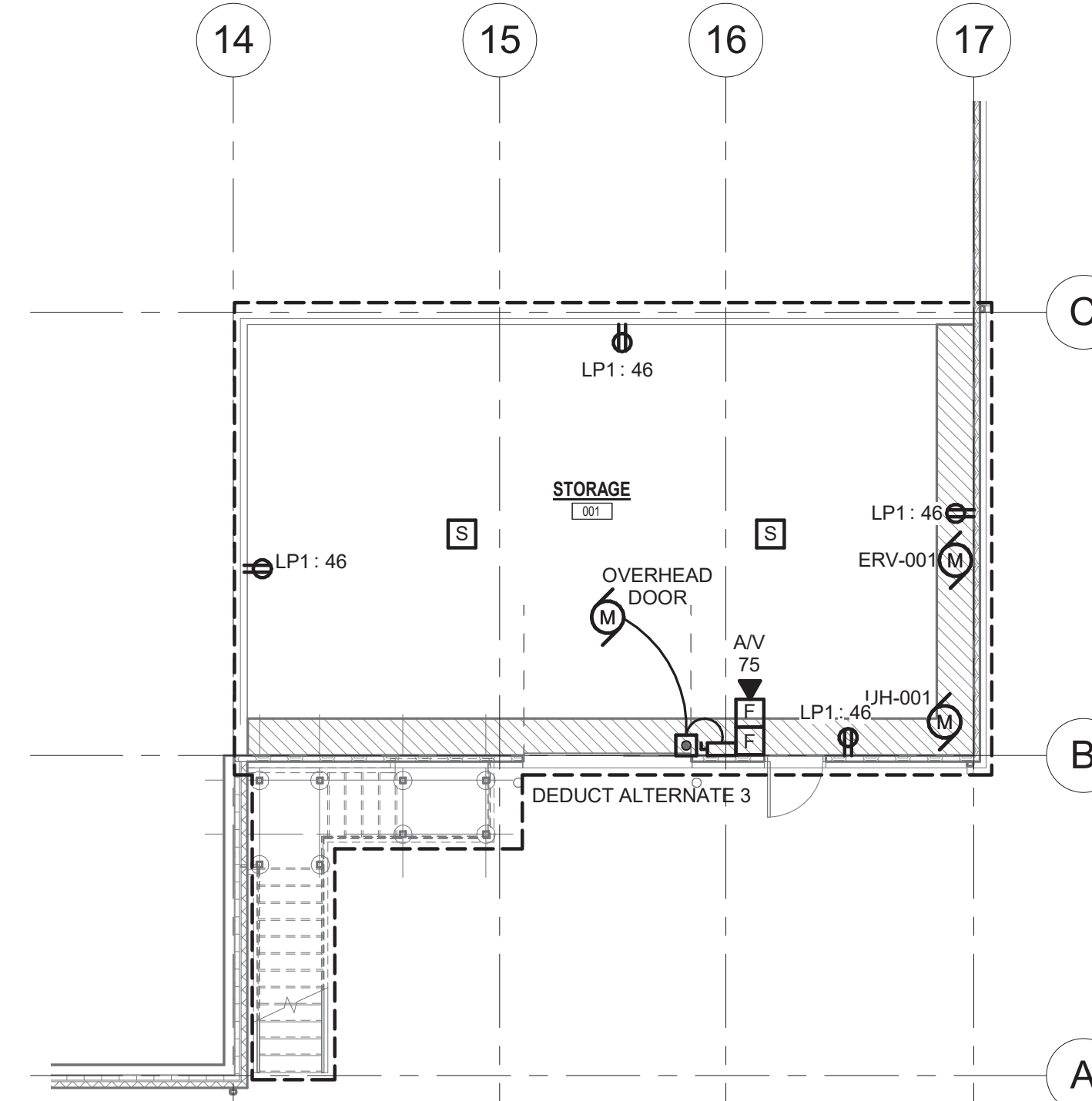
1 FIRST FLOOR POWER & SYSTEMS - AREA B

1/8" = 1'-0"



ENLARGED ELECTRICAL ROOM

1/4" = 1'-0"



2 BASEMENT FLOOR POWER & SYSTEMS PLAN

1/8" = 1'-0"

Project:

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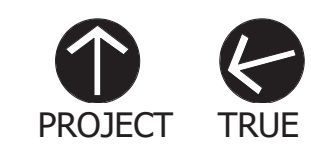
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FIRST FLOOR
AREA B AND
BASEMENT
POWER &
SYSTEMS PLAN

Sheet Number:

E102

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- A. UNLESS OTHERWISE NOTED, CIRCUIT ALL LUMINAIRES AND DEVICES USING (2# 12.1)1#2G, 3/4" TO PANEL HP2 UNLESS OTHERWISE NOTED.
- B. COORDINATE MOUNTING OF ALL CEILING MOUNTED LUMINAIRES WITH OTHER TRADES PRIOR TO INSTALLATION.
- C. ALL EXIT SIGNS SHALL BE POWERED FROM THE LOCAL LIGHTING CIRCUIT, TAPPED UPSTREAM OF ANY CONTROL DEVICES.
- D. ALL EXTERIOR LIGHT FIXTURES SHALL BE ON THE SAME CIRCUIT AND CONTROLLED BY THE TIME CLOCK LOCATED IN ELEC. ROOM 117.

1 LIGHT FIXTURE IS PART OF MEZZANINE 2A ALTERNATE 1, FOR BASE BID LIGHTING LAYOUT SEE DRAWINGS E203 & E204. BASE BID PROVIDE CIRCUITING AS SHOWN TO A JUNCTION BOX FOR UNDER MEZZANINE LIGHTING.

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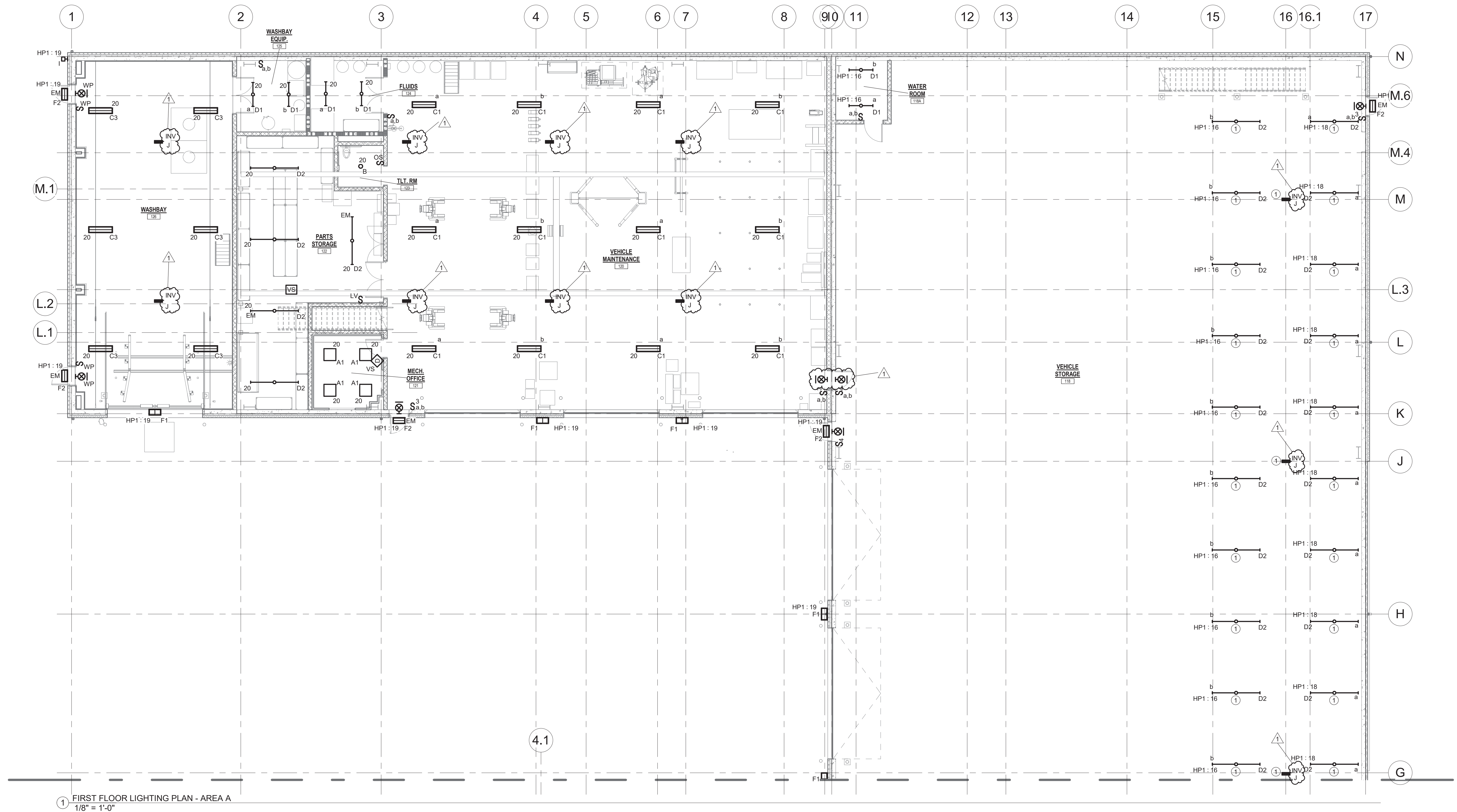
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E201

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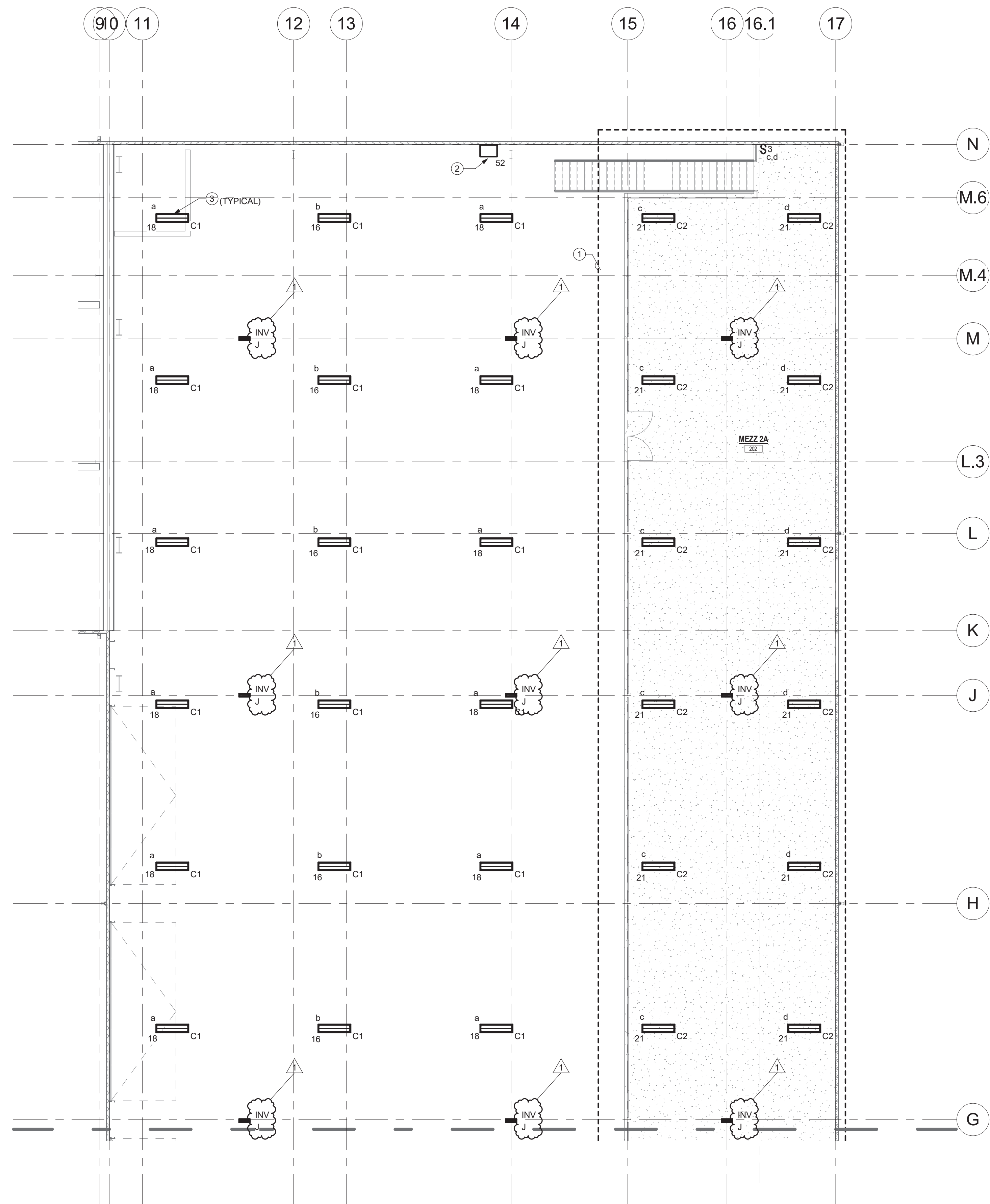
1 FIRST FLOOR LIGHTING PLAN - AREA A
1/8" = 1'-0"

- A. UNLESS OTHERWISE NOTED, CIRCUIT ALL LUMINAIRES AND DEVICES USING (2# 12,1)1#12G, 3/4" TO PANEL HP1, UNLESS OTHERWISE NOTED.
- B. COORDINATE MOUNTING OF ALL CEILING MOUNTED LUMINAIRES WITH OTHER TRADES PRIOR TO INSTALLATION.
- C. ALL EXIT SIGNS SHALL BE POWERED FROM THE LOCAL LIGHTING CIRCUIT, TAPPED UPSTREAM OF ANY CONTROL DEVICES.
- D. ALL EXTERIOR LIGHT FIXTURES SHALL BE ON THE SAME CIRCUIT AND CONTROLLED BY THE TIME CLOCK LOGGED IN ELEC. ROOM 117

1 LIGHT FIXTURE IS PART OF MEZZANINE ALTERNATE 1, FOR BASE BID LIGHTING LAYOUT SEE DRAWINGS E203 & E204. BASE BID PROVIDE CIRCUITING AS SHOWN TO A JUNCTION BOX FOR UNDER MEZZANINE LIGHTING.



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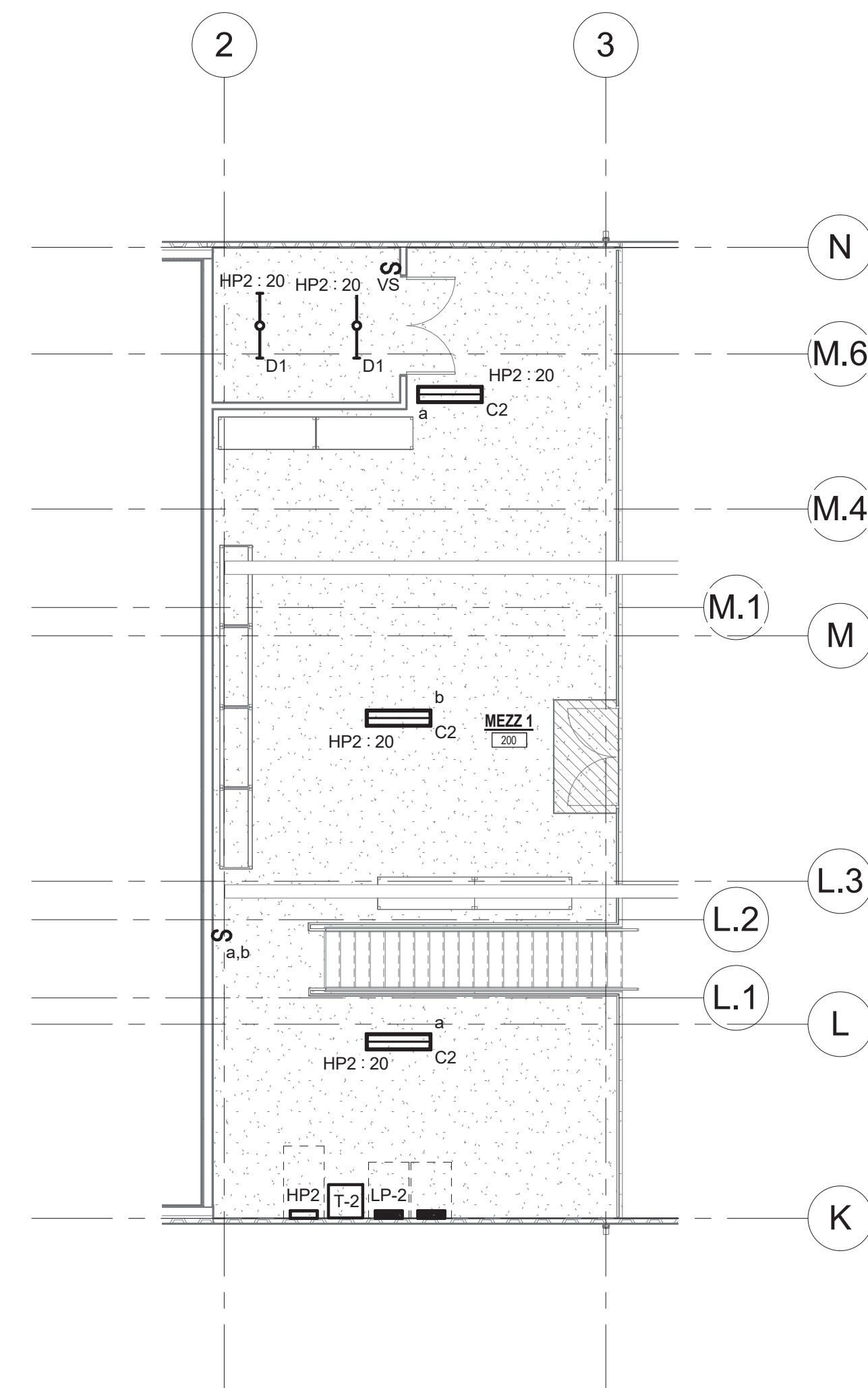
2 MEZZANINE LIGHTING PLAN - MEZZANNINE 2A
1/8" = 1'-0"

GENERAL NOTES:

- UNLESS OTHERWISE NOTED, CIRCUIT ALL LUMINARIES AND DEVICES USING (2)#12,(1)#12G, 3/4"C TO PANEL HP1, UNLESS OTHERWISE NOTED.
- COORDINATE MOUNTING OF ALL CEILING MOUNTED LUMINARIES WITH OTHER TRADES PRIOR TO INSTALLATION.
- ALL EXIT SIGNS SHALL BE POWERED FROM THE LOCAL LIGHTING CIRCUIT, TAPPED UPSTREAM OF ANY CONTROL DEVICES.
- ALL EXTERIOR LIGHT FIXTURES SHALL BE ON THE SAME CIRCUIT AND CONTROLLED BY THE TIME CLOCK LOCATED IN ELEC. ROOM 117

E203 DRAWING NOTES

- AREA IS PART OF THE MEZZANINE 2A ALTERNATE 1, SHOULD ADD ALTERNATE NOT BE ACCEPTED LIGHT FIXTURES SHOWN SHALL BE TYPE "C1", AND SHALL BE CONNECTED TO THE VEHICLE STORAGE LIGHTING CONTROLS.
- PROVIDE CENTRAL BATTERY SYSTEM FOR TYPE "INV" LIGHTS (DESIGN MAKE: SIGTEX SERIES CBL) SUITABLE FOR 277V INPUT. PROVIDE WITH OPTIONAL LCD DISPLAY SCREEN. CIRCUIT ALL TYPE "INV" LIGHTS FROM CENTRAL BATTERY SYSTEM USING #10 WIRING.
- CIRCUIT ALL FIXTURES ON SWITCHLEG "a" IN VEHICLE STORAGE 118 WITH (2)#10, (1)#10G, 3/4"C. PROVIDE 30A/1P BREAKER.



1 MEZZANINE LIGHTING PLAN - MEZZANNINE 1
1/8" = 1'-0"

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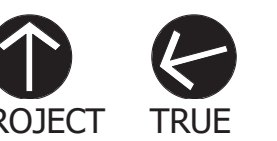
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MEZZANINE
LIGHTING PLAN

Sheet Number:

E203

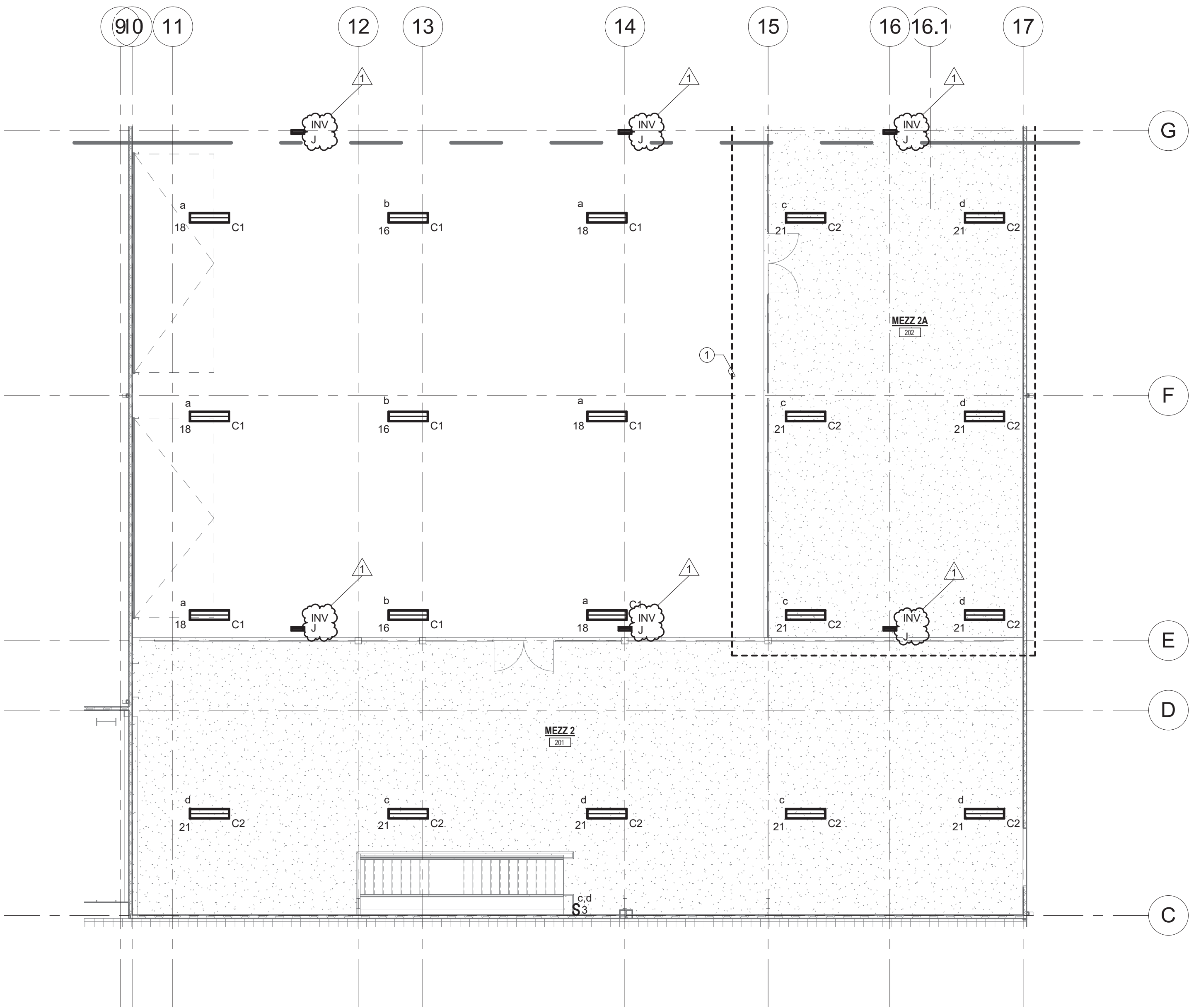
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GENERAL NOTES:

- A. UNLESS OTHERWISE NOTED, CIRCUIT ALL LUMINARIES AND DEVICES USING (2)# 12,(1)#12G, 3/4"C TO PANEL HP1, UNLESS OTHERWISE NOTED.
- B. COORDINATE MOUNTING OF ALL CEILING MOUNTED LUMINARIES WITH OTHER TRADES PRIOR TO INSTALLATION.
- C. ALL EXIT SIGNS SHALL BE POWERED FROM THE LOCAL LIGHTING CIRCUIT, TAPPED UPSTREAM OF ANY CONTROL DEVICES.
- D. ALL EXTERIOR LIGHT FIXTURES SHALL BE ON THE SAME CIRCUIT AND CONTROLLED BY THE TIME CLOCK LOCATED IN ELEC. ROOM 117

E204 DRAWING NOTES

- 1 AREA IS PART OF THE MEZZANINE 2A ADD ALTERNATE, SHOULD ADD ALTERNATE NOT BE ACCEPTED LIGHT FIXTURES SHOWN SHALL BE TYPE "C1", AND SHALL BE CONNECTED TO THE VEHICLE STORAGE LIGHTING CONTROLS.



1 MEZZANINE LIGHTING PLAN - MEZZANNINE 2/2A
1/8" = 1'-0"

Project:

VILLAGE OF ARDSLEY, NY



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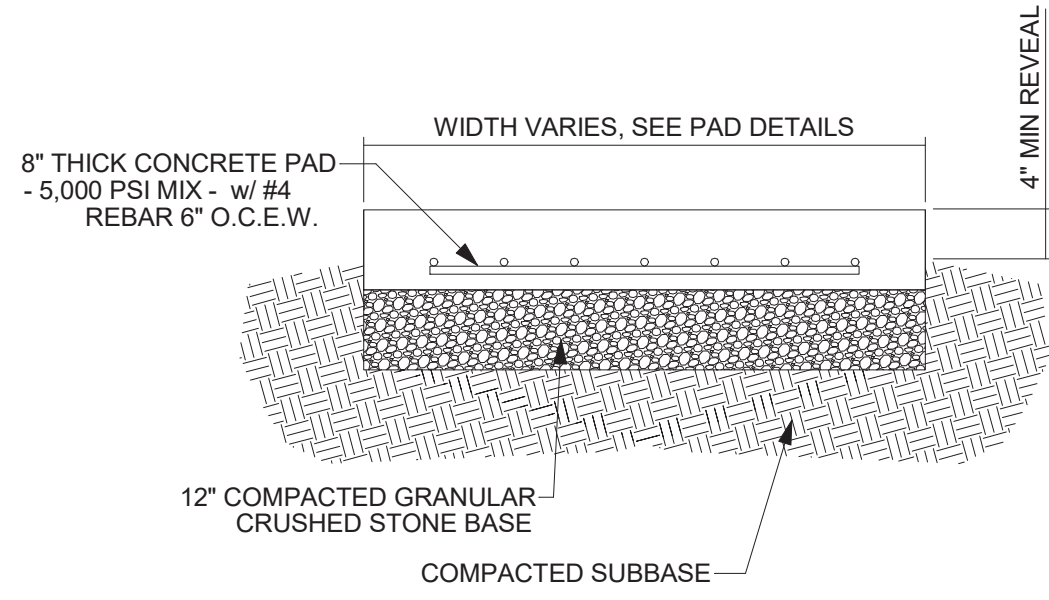
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MEZZANNINE
LIGHTING PLAN

Sheet Number:

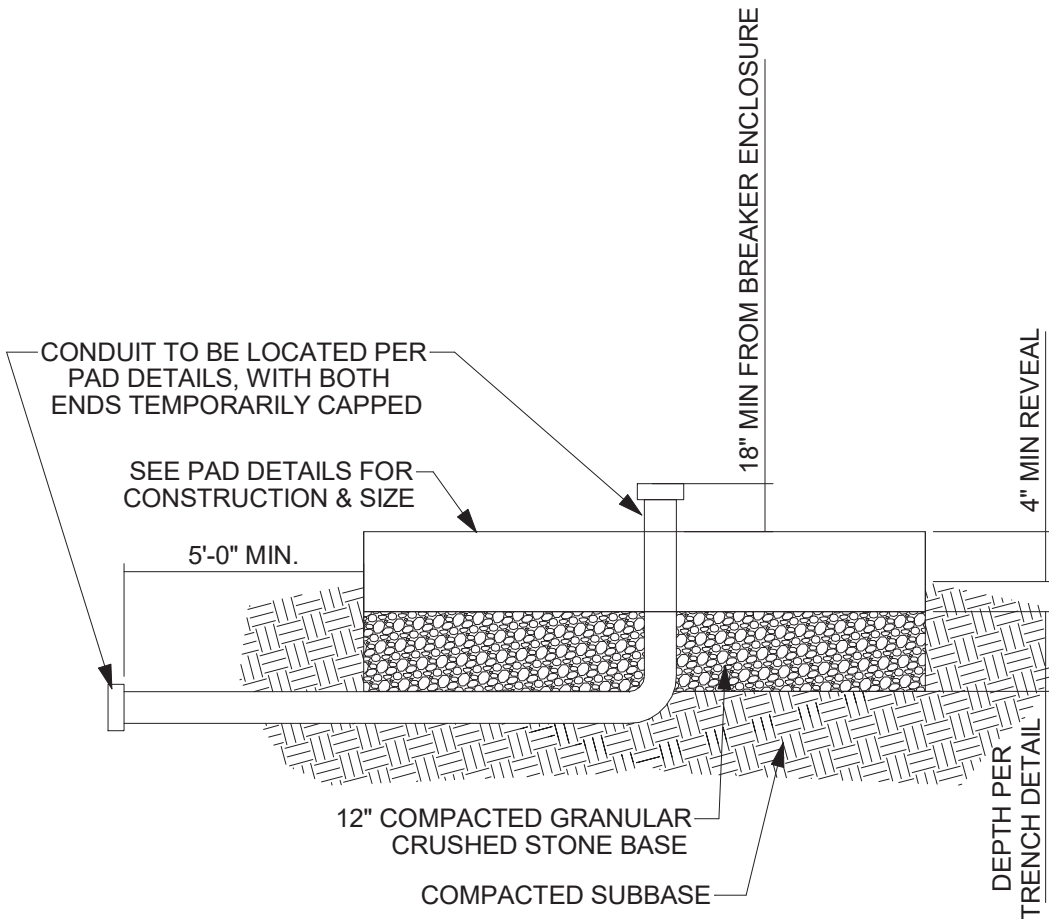
E204



CONCRETE PAD DETAIL

NOTE:

1. CONCRETE PAD TO EXTEND A MINIMUM OF 6" BEYOND THE PERIMETER OF ENCLOSURE.



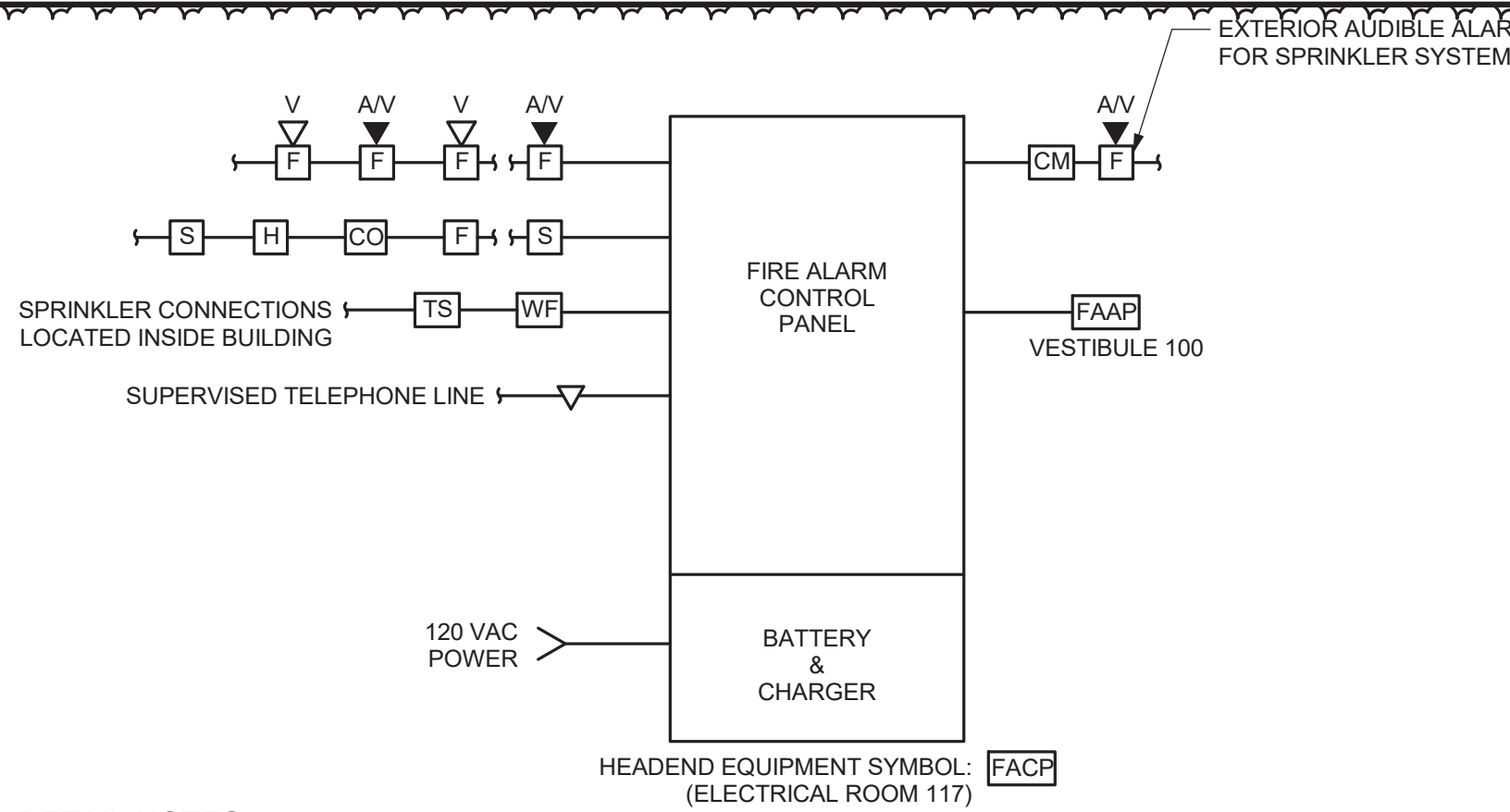
CONDUIT STUB DETAIL

NOTE:

1. CONCRETE PAD TO EXTEND A MINIMUM OF 6" BEYOND THE PERIMETER OF ENCLOSURE.

GENERAL EQUIPMENT PAD DETAIL

1 NTS

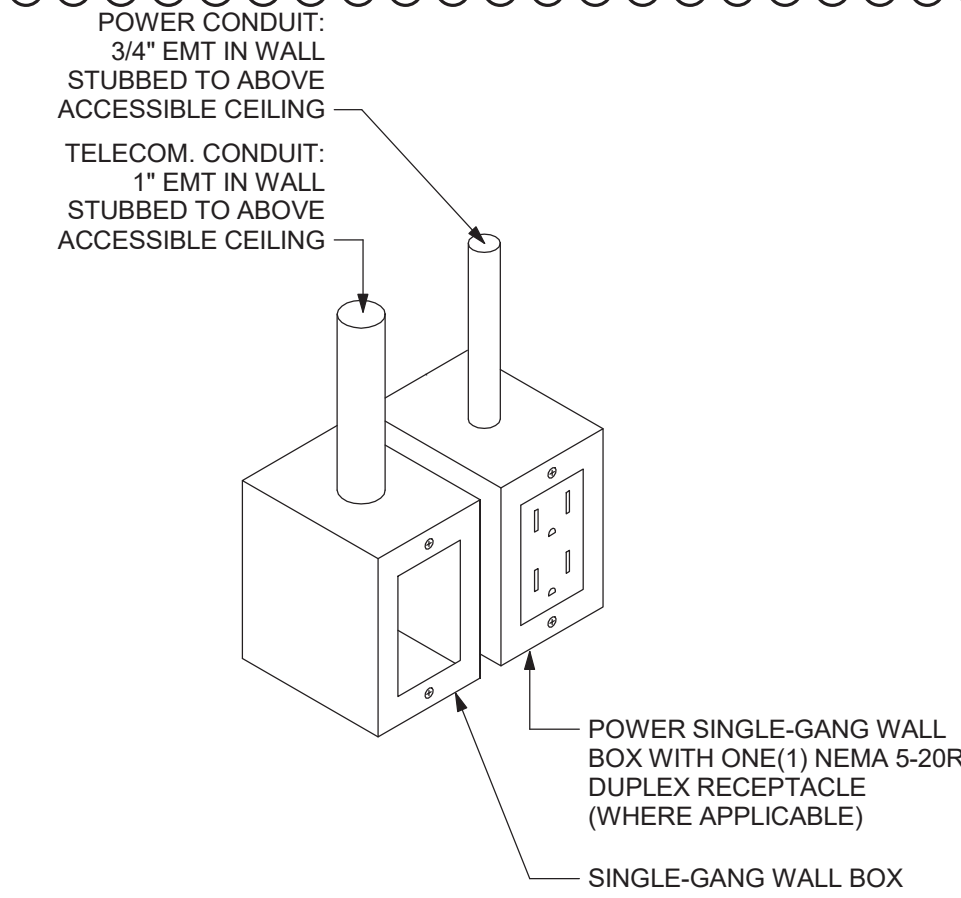


DETAIL NOTES:

1. INSTALLATION SHALL BE IN ACCORDANCE WITH NFPA-70, NFPA-72, AHJ, STATE CODES, LOCAL CODES, AND THE CONTRACT DOCUMENTS.
2. ALL WIRING SHALL COMPLY WITH CURRENT CODES AND THE MANUFACTURER'S REQUIREMENTS.
3. DETAIL IS DIAGRAMMATIC ONLY AND NOT REPRESENTATIVE OF ALL FIRE LARM DEVICES TO BE INCLUDED. REFER TO THE FLOOR PLANS FOR ADDITIONAL DEVICE TYPES, CONNECTIONS, AND FEATURES THAT ARE REQUIRED THROUGHOUT THE BUILDING.

FIRE ALARM BLOCK DIAGRAM

3 NTS



SYMBOL: 1P

TYPICAL COMBINATION POWER & TELE/DATA OUTLET DETAIL

5 NTS

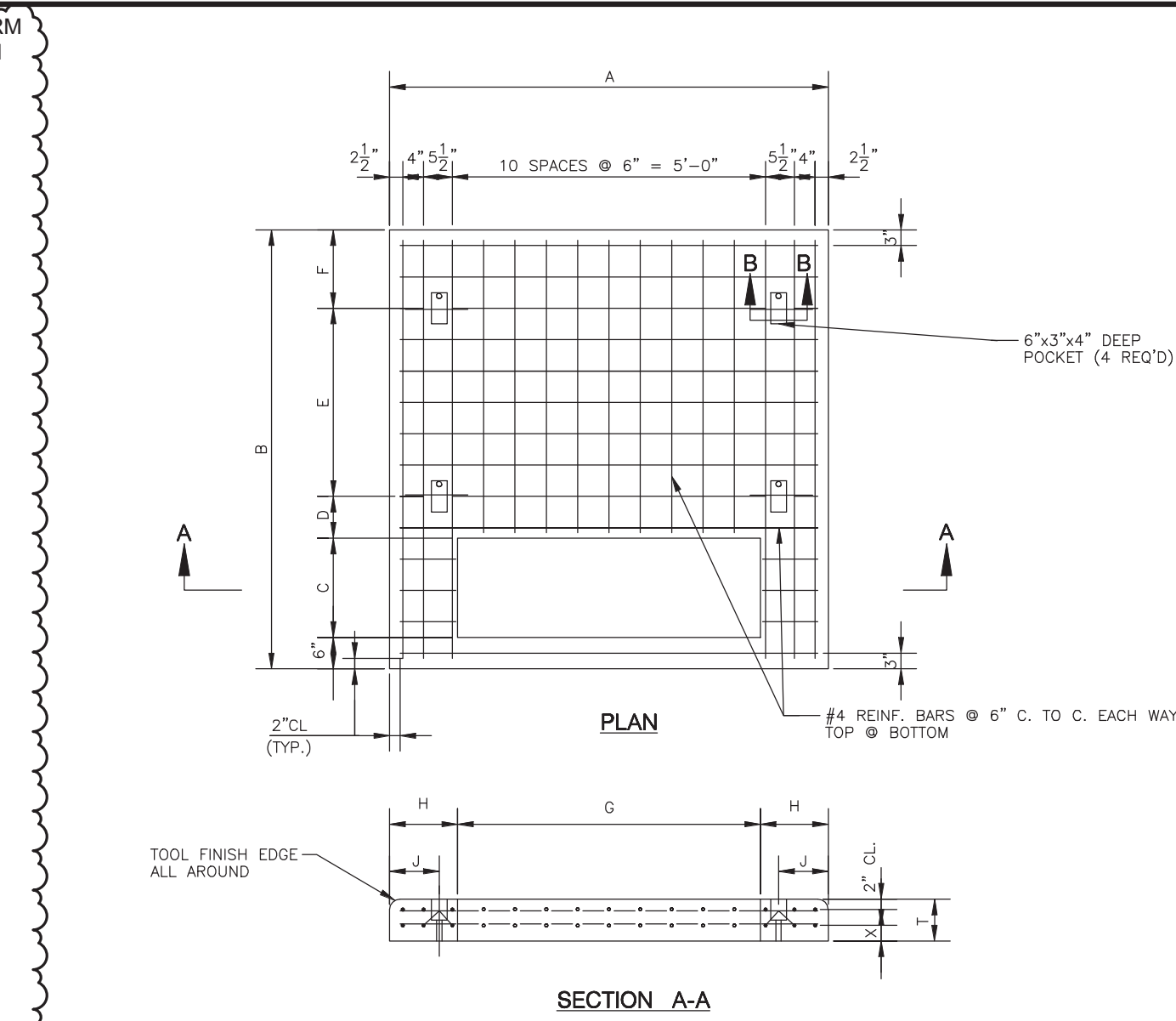


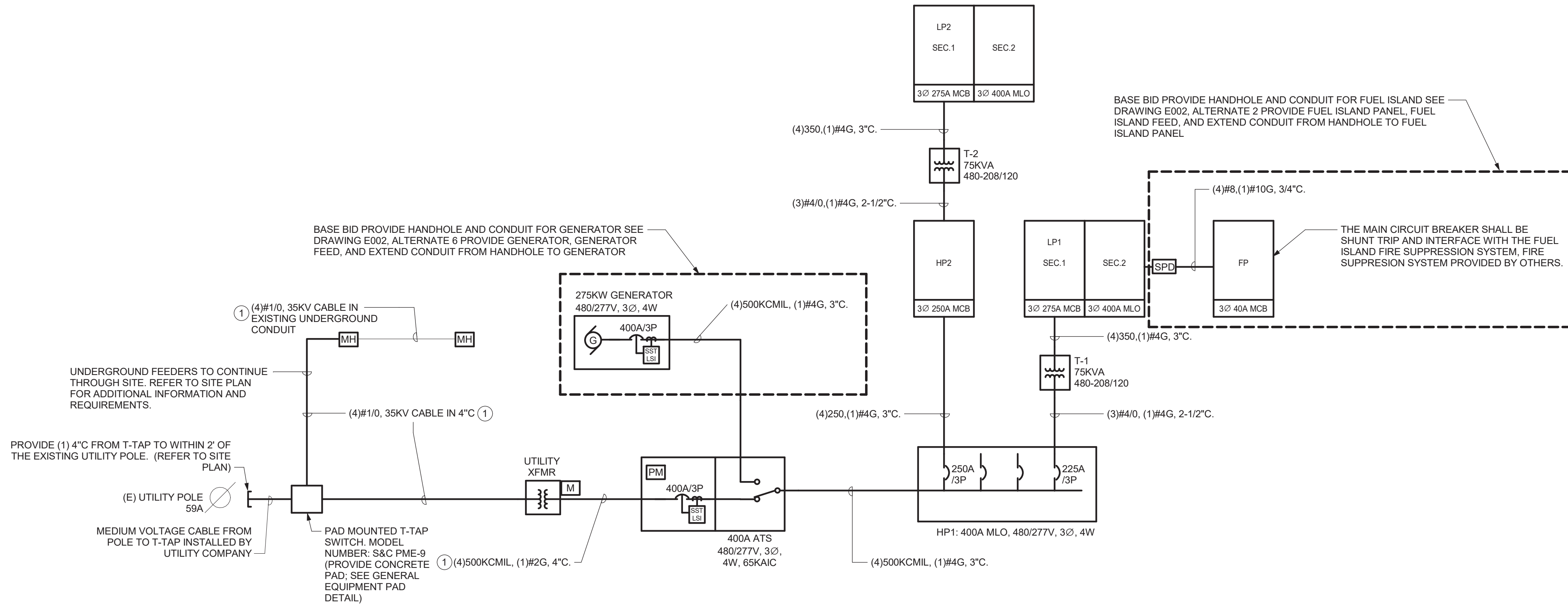
TABLE																			
THREE PHASE TRANSFORMER		CONCRETE PAD TYPE OF INSTALLATION		DIMENSIONS (INCHES)													APPROX. VOLUME (CU. YDS)	APPROX. PRECAST PAD WEIGHT (LBS)	
SIZE (KVA)	PRIMARY VOLTAGE	A	B	C	D	E	F	G	H	J	T	X			REINF.	PAD			
75-500	4KV & 13KV	FIELD POURED		84	72	19	—	—	44	20	—	8 1/2	3	0.95					
		PRECAST	84	72	19	8	30	9	44	20	12	7 1/2	2	0.84	212	3395			

DETAIL GENERAL NOTES:

1. REINFORCING BARS SHALL BE WIRE TIED AT ALL CONTACT POINTS WITH PLASTIC COATED WIRE TIES.
2. ALL REINFORCING BARS SUPPORTED FROM FRAMEWORK SHALL REST ON COATED WIRE BAR SUPPORTS.
3. EPOXY COATING, DAMAGED AS A RESULT OF HANDLING OR CUTTING OF REINFORCING BARS, SHALL BE REPAIRED WITH PATCHING MATERIAL CONFORMING TO ASTM SPEC. DES A-775.
4. A 2" MINIMUM OF CONCRETE SHALL BE MAINTAINED OVER ALL REINFORCING BARS AND SHAPES, UNLESS OTHERWISE NOTED.
5. WHERE HORIZONTAL BARS ARE CUT FOR REPLACEMENT PURPOSES, SPICE BARS OF THE SAME SIZE AND AT LEAST 2"—6" LONG SHALL BE INSTALLED ACROSS THE CUT POSITION.
6. PAD SHALL BE INSTALLED ON A MINIMUM OF 6" CRUSHED STONE.
7. TOP SURFACE OF PAD SHALL HAVE A STEEL TROWEL FINISH.
8. TOP OF PAD SHALL BE 6" ABOVE GRADE.
9. OMIT LIFTING EYES, POCKETS AND DRAIN HOLES FROM FIELD—POURED PADS.
10. FOR PRECAST PADS, FILL LIFTING HOLES AND OPEN AREAS AROUND CONDUITS WITH MORTAR AFTER PAD IS INSTALLED.
11. CONCRETE SHALL CONFORM TO CON EDISON SPEC. EO—1 008, CLASS II.
12. CEMENT MORTAR SHALL CONFORM TO CON EDISON SPEC. EO—1 00, 167 (STK § 000—0802).
13. ALL REINFORCING BARS SHALL BE BILLET STEEL, DEFORMED, AND SHALL CONFORM TO ASTM SPEC. A—615, GRADE 60. ALL REINFORCING BARS SHALL BE EPOXY COATED AND SHALL CONFORM TO ASTM N. SPEC. A—775.
14. STRUCTURAL STEEL SHALL CONFORM TO ASTM SPEC. A—36.
15. WELD STRUCTURAL STEEL MEMBERS IN ACCORDANCE WITH EO—11320.

UTILITY TRANSFORMER PAD DETAIL

2 NTS



DETAIL DRAWING NOTES:

1. REFER TO APPENDICES "A" AND "B" OF SPECIFICATIONS SECTION 260501 FOR REQUIREMENTS FOR PRIMARY AND SECONDARY CONDUCTORS.

ELECTRICAL ONLINE DIAGRAM

4 NTS

Project:

VILLAGE OF ARDSLEY, NY



NEW PUBLIC WORKS FACILITY

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Seal:

Revisions:

Rev	Date	Description
1	04/22/22	ADDENDUM NO. 1
2	04/28/22	ADDENDUM NO. 2

Issued For: BID



SCALE: AS NOTED

Date: APRIL 7, 2022

Drawn By: KML

Reviewed By: SZE

Approved By: BAB

W&S Project No: N2190088

Drawing Title:

ELECTRICAL
DETAILS

Sheet Number:

E503

PANELBOARD DIRECTORY

		M/E PROJECT: NEW PUBLIC WORKS FACILITY PROJECT NO.: 203050 FACILITY: LOCATION: MEZZ 1 200			PANEL NAME: VOLTAGE: 480/277 Wye L-L AIC: 14 k SOURCE: HP1			HP2 PHASE: 3 WIRE: 4			TYPE: BRANCH MOUNTING: SURFACE OCP TYPE: MCB BUS RATING: 400 A MCB RATING: 225 A						
CKT NO.	CIRCUIT DESCRIPTION			TRIP	POLE	A		B		C		POLE	TRIP	CIRCUIT DESCRIPTION			CKT NO.
1	5 TON CRANE			35 A	3	3879.8	1662.8					3	20 A	OH DOORS VEHICLE MAINT 120			2
3								3879.8	1662.8								4
5										3879.8	1662.8						
7	VEHICLE WASH PRESS PLANT			20 A	3	3048.4	23453					3	225 A	T2 (FEEDING LP2)			8
9								3048.4	28503.4								10
11										3048.4	19190.6						
13	COMP-1			60 A	3	5819.7	19399					3	90 A	AUTO UNDERCARRIAGE PUMP SKID			14
15								5819.7	19399								16
17										5819.7	19399						
19	DSF-120A,B			15 A	1	127.4	4329					1	20 A	VEHICLE MAINT/ WASHBAY LTG			20
21	DSF-126			15 A	1			63.7	0			--	--	SPACE			22
23	SPACE			--	--					0	0	--	--	SPACE			24
25	SPACE			--	--	0	0					--	--	SPACE			26
27	SPACE			--	--			0	0			--	--	SPACE			28
29	SPACE			--	--					0	0	--	--	SPACE			30
31	SPACE			--	--	0	0					--	--	SPACE			32
33	SPACE			--	--			0	0			--	--	SPACE			34
35	SPACE			--	--					0	0	--	--	SPACE			36
37	SPACE			--	--	0	0					--	--	SPACE			38
39	SPACE			--	--			0	0			--	--	SPACE			40
41	SPACE			--	--					0	0	--	--	SPACE			42

PANELBOARD DIRECTORY															
		M/E PROJECT: NEW PUBLIC WORKS FACILITY PROJECT NO.: 203050 FACILITY: LOCATION: MEZZ 1 200			PANEL NAME:			LP-2 120/208 Wye L-L 10 k VOLTAGE: AIC: SOURCE: T2			TYPE: BRANCH MOUNTING: SURFACE OCP TYPE: MCB BUS RATING: 400 A MCB RATING: 275 A				
CKT NO.	CIRCUIT DESCRIPTION			TRIP	POLE	A		B		C		POLE	TRIP	CIRCUIT DESCRIPTION	CKT NO.
1	UH-122	15 A	2	124.8	312							1	20 A	ERV-126,122	2
3						124.8	168					1	20 A	PARTS WASHER	4
5	VEHICLE WASH HOT WATER HEATER			20 A	1					120	180	1	20 A	BATTERY CHARGER	6
7	CHAINSAW SHARPENER			20 A	1	252	624					1	20 A	4 POST MOBILE LIFT	8
9	DEF MOBILE CART W/ PUMP			20 A	1			336	720			1	20 A	GAS DETECTION SYSTEM	10
11	WH-2			15 A	1					600	696	1	15 A	EF-200	12
13	REC EXTERIOR			20 A	1	720	900					1	20 A	REC MEZZ 2A	14
15	REC WASHBAY EQP, FLUIDS, & TLT			20 A	1			1080	972			1	20 A	AC RECHARGE MACHINE	16
17	ELECTRICAL REEL			20 A	1					900	7.2	1	20 A	FLUID STORAGE SUMP ALARM	18
19	BACK GATE			20 A	1	1176	1800					1	20 A	CHARGING STATION	20
21	REC MECH OFF & PARTS STOR			20 A	1			1260	416			2	15 A	EF-124	22
23	DRILL PRESS			20 A	1					2300	416				24
25	HYDRAULIC HOSE CRIMPING...			40 A	1	2400	2912					2	50 A	TWO POST LIFT	26
27	HOSE SAW			20 A	1			6700	2912						28
29	TIRE CHANGER	20 A	2							624	1040	2	20 A	TIRE BALANCER	30
31				624	1040					32					
33	WASTE ANTIFREEZE HIGH LVL ALARM			20 A	1			7.2	1320			1	20 A	BENCH GRINDER	34
35	SPACE			--	--					0	0	--	--	SPACE	36
37	SPACE			--	--	0	0					--	--	SPACE	38
39	SPACE			--	--			0	0			--	--	SPACE	40
41	SPACE			--	--					0	0	--	--	SPACE	42

PANELBOARD DIRECTORY																		
		M/E PROJECT: NEW PUBLIC WORKS FACILITY PROJECT NO.: 203050			PANEL NAME:			LP-2			TYPE: BRANCH MOUNTING: SURFACE							
		FACILITY:			VOLTAGE:			120/208 Wye		L-L		PHASE: 3		OCP TYPE: MLO				
		LOCATION: MEZZ 1 200			AIC:			10		k		WIRE: 4		BUS RATING: 400 A				
					SOURCE:			LP-2				MCB RATING:						
CKT NO.	CIRCUIT DESCRIPTION				TRIP	POLE	A		B		C		POLE	TRIP	CIRCUIT DESCRIPTION		CKT NO.	
43	OIL HIGH LEVEL ALARM				20 A	1	7.2	900					1	20 A	REC MEZZ 1		44	
45	WELDER				50 A	2			5928	260			2	15 A	UH-120A		46	
47											5928	260					48	
49	REC VEHICLE MAINT				20 A	1	900	1393.6					2	20 A	VRF-121		50	
51	UH-120C				15 A	2			260	1393.6							52	
53											260	1508	2	20 A	EUH-2		54	
55	EUH-1				20 A	2	1508	1508									56	
57									1508	300.2							58	
59											936.7	300.2	3	15 A	EF-126		60	
61	EF-120				20 A	3	936.7	300.2									62	
63									936.7	0							64	
65											1200.9	0	2	20 A	WELDER		66	
67	MONOXIVENT				20 A	3	1200.9	0									68	
69									1200.9	0			2	20 A	WELDER		70	
71												0	1393.6	2	15 A	ACCU-121		72
73	WELDER				20 A	2	0	1393.6									74	
75	REC LIFT UTILITY				20 A	1			180	260							76	
77											260	260	2	15 A	UH-120B		78	
79	UH-126A				15 A	2	260	260									80	
81	SPACE				--	--			0	260			2	15 A	UH-126B		82	
83	SPACE				--	--					0	0	--	--	SPACE		84	

PANELBOARD DIRECTORY																
		M/E PROJECT: NEW PUBLIC WORKS FACILITY			PANEL NAME:				FP				TYPE: BRANCH			
		PROJECT NO.: 203050											MOUNTING: SURFACE			
		FACILITY:			VOLTAGE: 120/208 Wye		L-L	PHASE: 3	OCP TYPE: MCB							
		LOCATION:			AIC: 10		k	WIRE: 4	BUS RATING: 100 A							
					SOURCE: LP1					MCB RATING: 40 A						
CKT NO.	CIRCUIT DESCRIPTION			TRIP	POLE	A		B		C		POLE	TRIP	CIRCUIT DESCRIPTION	CKT NO.	
1	HEATER			20 A	1	500.4	600					1	20 A	FUEL ISLAND LIGHTS	2	
3	GAS DISPENSER			20 A	1			1200	1656			1	25 A	GAS PUMP	4	
5	DIESEL PUMP			40 A	1						2400	240	1	20 A	TANK MONITORING SYSTEM	6
7	FUEL MANAGEMENT UNIT			15 A	1	600	1200						1	20 A	DIESEL DISPENSER	8
9	GAS ANTI-SIPHON VALVE			20 A	1				240	240			1	20 A	DIESEL ANTI-SIPHON VALVE	10
11	SPARE			20 A	1						0	0	1	20 A	SPARE	12
13	SPARE			20 A	1	0	0						1	20 A	SPARE	14
15	SPARE			20 A	1				0	0			1	20 A	SPARE	16
17	SPACE			--	--						0	0	--	--	SPACE	18
19	SPACE			--	--	0	0						--	--	SPACE	20


LUMINAIRE SCHEDULE							
TYPE	DESCRIPTION	MFR. & CATALOG No.	LAMP	VOLTAGE	MOUNTING	UNIT WATTS	REFERENCE NOTES
A1	2X4 RECESSED TROFFER WITH CURVED, RIBBED DIFFUSER	LITHONIA LIGHTING 2BLT2 SERIES	LED 3300 LUMENS 3500K	MVOLT	RECESSED	27W	1
A2	SAME AS A1 EXCEPT LUMENS AND WATTAGE	LITHONIA LIGHTING 2BLT2 SERIES	LED 5100 LUMENS 3500K	MVOLT	RECESSED	45W	1
B	6" RECESSED DOWNLIGHT WITH MEDIUM DISTRIBUTION, CLEAR REFLECTOR AND SEMI-SPECULAR FINISH	GOTHAM LIGHTING EVO SERIES	LED 2000 LUMENS 3500K	MVOLT	RECESSED	23W	1
C1	HIGHBAY FIXTURE WITH STANDARD EFFICIENCY, ACRYLIC FROSTED LENS, AND GENERAL DISTRIBUTION	LITHONIA LIGHTING 1GB SERIES	LED 30000 LUMENS 3500K	MVOLT	SUSPENDED 25'-0" AFF	186W	
C2	SAME AS C1 EXCEPT LUMENS AND WATTAGE		LED 15000 LUMENS 3500K	MVOLT	SUSPENDED 25'-0" AFF	95W	
C3	4" HIGH PRESSURE HOSE DOWN FIXTURE WITH CLEAR LENS AND MEDIUM DISTRIBUTION	LITHONIA LIGHTING FHE SERIES	LED 28000 LUMENS 3500K	MVOLT	SUSPENDED 25'-0" AFF	173W	
D1	4' LED STRIP LIGHT	LITHONIA LIGHTING ZL1D SERIES	LED 5500 LUMENS 3500K	MVOLT	SUSPENDED 13'-0" AFF	41W	1
D2	8' LED STRIP LIGHT	LITHONIA LIGHTING ZL1D SERIES	LED 11000 LUMENS 3500K	MVOLT	SUSPENDED 13'-0" AFF	81W	1
E	2' LED STRIP	LITHONIA LIGHTING WL2 SERIES	LED 800 LUMENS 3500K	MVOLT	WALL	8W	
F1	LED WALL PACK WITH T3M DISTRIBUTION AND PIRH LIGHT SENSOR	LITHONIA LIGHTING DSXW2 SERIES	LED 5500 LUMENS 4000K	MVOLT	WALL 14'-0" AFF	47W	
F2	LED WALL PACK WITH SR3 DISTRIBUTION, PIR LIGHT SENSOR, AND EMERGENCY BATTERY BACKUP	LITHONIA LIGHTING WSQ SERIES	LED 2000 LUMENS 4000K	MVOLT	WALL 8'-0" AFF	20W	1
G1	2" LINKABLE UNDER CABINET LIGHT	LITHONIA LIGHTING UCFL SERIES	LED 750 LUMENS 3000K	120V	SURFACE	10W	
G2	3" LINKABLE UNDER CABINET LIGHT	LITHONIA LIGHTING UCFL SERIES	LED 1200 LUMENS 3000K	120V	SURFACE	15W	
H	WALL MOUNT ARCHITECTURAL SIGN LIGHT, TYPE II LATERAL THROW, 12" STEM	COOPER LIGHTING EON 303 S1-LEDB1 SERIES	LED 568 LUMENS 4000K	MVOLT	SURFACE	8.5W	
I	WALL MOUNTD EXTERIOR FLOOD LIGHT	LITHONIA LIGHTING TFX1 SERIES	LED 7300 LUMENS 4000K	MVOLT	WALL	54W	
J	LED HIGH BAY EMERGENCY LIGHT	SIGNTEX LIGHTING MHE SERIES	LED 6637 LUMENS 4700K	24VDC	SURFACE	40W	2
K	EXIT SIGNS WITH WHITE HOUSING, STENCIL FACE, AND RED LETTERING	LITHONIA LQM SERIES	LED	MVOLT	CEILING		
WP	EXIT SIGNS WITH WHITE HOUSING, STENCIL FACE, AND RED LETTERING, WET LOCATION RATED	LITHONIA WLTE SERIES	LED	MVOLT	WALL		

REFERENCE NOTES:

1. PROVIDE INTEGRAL BATTERY BACKUP FO ALL FIXTURES TAGGED AS "EM" ON THE FLOOR PLANS
2. SEE DRAWING E203 DRAWING NOTE 2 FOR INFORMATION ON CIRCUITING TO CENTRAL BATTERY SYSTEM.

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