

ABBREVIATIONS

@ &	AT AND	ETR	EXISTING TO REMAIN	OPNG	OPENING
AC	ACOUSTICAL	EX	EXISTING	PLBG	PLUMBING
A/C	AIR CONDITIONING	EXIST	EXISTING	PLC	PLUMBING CONTRACTOR
ACD	ACCESS DOOR	F&I	FURNISH & INSTALL	PLYWD	PLYWOOD
ACT	ACOUSTICAL TILE	FA	FIRE ALARM	PT	POINT
AD	AREA DRAIN	FC	FLOORING CONTRACTOR	PTD	PAINTED
ADD	ADDENDUM	FE	FIRE EXTINGUISHER	PTN	PARTITION
AFF	ABOVE FINISHED FLOOR	FEC	FIRE EXTINGUISHER CABINET	PV	PHOTOVOLTAIC
ALT	ALTERNATE	FF	FINISHED FLOOR	QT	QUARRY TILE
ALUM	ALUMINUM	FFE	FINISHED FLOOR (ELEVATION LEVEL)	RA	RETURN AIR
ALZN	ALUMINUM ZINC GALVANIZED	FFL	FINISHED FLOOR LINE	RB	RUBBER BASE
AP	ACCESS PANEL	FHC	FIRE HOSE CABINET	RBT	RUBBER TILE
ARCH	ARCHITECT / ARCHITECTURAL	FIN	FINISH / FINISHED	RC	REINFORCED CONCRETE
ASB	ASBESTOS	FLD	FLOOR DRAIN	RD	ROOF DRAIN
ASC	ABOVE SUSPENDED CEILING	FLG	FLASHING	REF	REFERENCE
ASPH	ASPHALT	FLR	FLOOR	REG	REGISTERED
		FLUOR	FLUORESCENT	REINF	REINFORCEMENT
		FT	FEET	REM	REMOVE
		FUR	FURRED	REQ	REQUIRED
BLDG	BUILDING	GB	GYPSUM BOARD	RET	RETURN
BM	BEAM	GC	GENERAL CONTRACTOR	REV	REVISION
BMO	BRICK MASONRY OPENING	GWB	GYPSUM WALL BOARD	RH	ROOF HATCH
BO	BOTTOM OF	GYP	GYPSUM	RL	ROOF LADDER
BRK	BRICK			RO	ROUGH OPENING
BUR	BUILT-UP ROOFING			RM	ROOM
		HB	HOSE BIBB	RV	ROOF VENT
CAB	CABINET	HC	HOLLOW CORE	SC	SOLID CORE
CC	CONSTRUCTION CONTRACTOR	HM	HOLLOW METAL	SCHED	SCHEDULE
CJT	CONTROL JOINT	HT	HEIGHT	SD	STORM DRAIN
CLG	CEILING	HVAC	HEATING/VENTILATING/AIR CONDITIONING	SEC	SECTION
CLL	CONTRACT LIMIT LINE			SIM	SIMILAR
CM	CROWN MOULDING	INCAN	INCANDESCENT	SK	SKYLIGHT
CMU	CONCRETE MASONRY UNIT	INFO	INFORMATION	SP	STARTING POINT
COL	COLUMN	INST	INSTALLATION	SPEC	SPECIFICATION
CONC	CONCRETE	INSUL	INSULATED / INSULATION	SQ	SQUARE
CONST	CONSTRUCTION	INT	INTERIOR	SS	STAINLESS STEEL
CONT	CONTINUOUS	JC	JANITOR'S CLOSET	STD	STANDARD
CONTR	CONTRACTOR			STL	STEEL
CPT	CARPET	KIT	KITCHEN	SUSP	SUSPENDED
CRG	CROSS GRAIN	LAM	LAMINATE	SYM	SYMMETRICAL
CU.IN.	CUBIC INCHES	LB	POUND	T&G	TONGUE & GROOVE
CU.FT.	CUBIC FEET	MAS	MASONRY	TC	TOP OF CURB
		MAX	MAXIMUM	TEL	TELEPHONE
		MC	MECHANICAL CONTRACTOR	TF	TOP OF FOOTING
		MECH	MECHANICAL	TG	TEMPERED GLASS
		MET	METAL	TO	TOP OF
		MIN	MINIMUM	TSL	TOP OF SLAB
		MISC	MISCELLANEOUS	TST	TOP OF STEEL
		MO	MASONRY OPENING	TT	TERRAZZO TILE
		MRB	MARBLE	TW	TOP OF WALL
		MTL	MATERIAL	TYP	TYPICAL
		MUL	MULLION	UON	UNLESS OTHERWISE NOTED
		MW	MICROWAVE		
		NO	NOT IN CONTRACT	VB	VINYL BASE
		NIC	NUMBER	VIF	VERIFY IN FIELD
		NTS	NOT TO SCALE	VS	VENT STACK OR PIPE
				VT	VINYL TILE
		OC	ON CENTER	WD	WOOD
				WG	WIRE GLASS

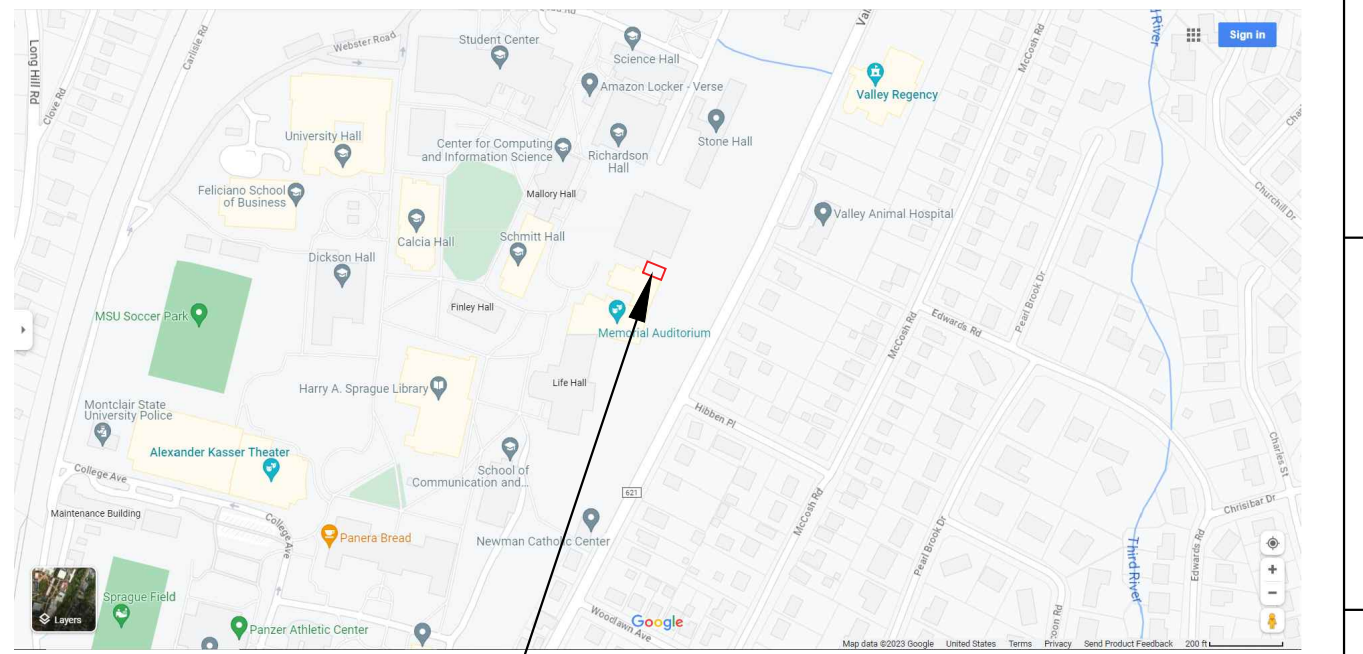


LOADING DOCK ALTERATIONS AT L. HOWARD FOX STUDIO THEATRE MONTCLAIR STATE UNIVERSITY

GENERAL NOTES

- ALL MATERIAL, ASSEMBLIES, FORMS AND METHODS OF CONSTRUCTION AND SERVICE EQUIPMENT SHALL COMPLY WITH THE REQUIREMENTS OF THE BUILDING CODE OF THE AIA, THE INTERNATIONAL BUILDING CODE 2021 - NEW JERSEY EDITION, THE UNIFORM CONSTRUCTION CODE (UCC) 2021 THE INTERNATIONAL CODE COUNCIL 2021 (ICC), THE AMERICANS WITH DISABILITY ACT. (ADA) AND ANY OTHER APPLICABLE CODES HAVING JURISDICTION.
- THE GENERAL CONTRACTOR SHALL FURNISH ADEQUATE LIABILITY INSURANCE AND BONDING AS REQUIRED BY THE OWNER AND MUNICIPAL REGULATIONS SPECIFICATIONS AND GENERAL CONDITIONS.
- ANY DIMENSIONAL DISCREPANCIES BETWEEN THE PLANS, SECTIONS, ELEVATIONS AND DETAILS MUST BE BROUGHT TO THE ATTENTION OF THE ARCHITECT BY THE CONTRACTOR FOR RESOLUTION PRIOR TO THE START OF WORK.
- ANY INCONSISTENCIES IN THE NOTES, SYMBOLS, LEGENDS MUST BE BROUGHT TO THE ATTENTION OF THE ARCHITECT BY THE CONTRACTOR FOR RESOLUTION PRIOR TO THE START OF WORK.
- ANY INCONSISTENCIES BETWEEN THE DRAWINGS AND TECHNICAL SPECIFICATIONS MUST BE BROUGHT TO THE ATTENTION OF THE ARCHITECT BY THE CONTRACTOR FOR RESOLUTION PRIOR TO THE START OF WORK.
- ALL CONTRACTORS AND SUBCONTRACTORS MUST CHECK AND VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS AND REPORT ANY DISCREPANCIES TO THE ARCHITECT PRIOR TO THE START OF WORK.
- ALL CONTRACTORS SHALL MAINTAIN SAFE EGRESS AT ALL TIMES TO ALL-BUILDING EXITS. ALL EXITS SHALL BE KEPT READILY ACCESSIBLE AND UNOBSTRUCTED AT ALL TIMES. IF IT IS NECESSARY TO PROVIDE TEMPORARY PATHS OF EGRESS, ALL DETAILS OF SAME SHALL BE APPROVED BY LOCAL FIRE DEPARTMENT AS WELL AS OWNER.
- DAMAGE TO PROPERTY SHALL BE CORRECTED BY THE CONTRACTOR SO INVOLVED. IF AREA IS NOT REPAIRED IN A REASONABLE TIME, OWNER HAS THE RIGHT TO TAKE OVER THE WORK WITH ITS OWN FORCES AND ANY COST WILL BE DEDUCTED AGAINST THE CONTRACTOR'S CONTRACT.
- THE GENERAL CONTRACTOR SHALL BE REQUIRED TO ESTABLISH STAGING AND PHASING PLANS TO COORDINATE WITH ALL SUB CONTRACTORS. SUCH PLANS SHALL BE UPDATED PERIODICALLY. PLANS SHALL SHOW STORAGE AREAS, TRAILERS, FENCES, LOCATION OF CRANES AND/OR HOISTS THAT MAY BE REQUIRED, TEMPORARY FACILITIES AND ACCESS ROUTES TO AND WITHIN THE BUILDING. SUCH A PLAN SHALL BE SUBMITTED BEFORE THE START OF THE PROJECT. SUCH STAGING AND PHASING PLAN SHALL ALSO COMPLY WITH THE WORK RULES AS WELL AS THE GENERAL STAGING PLAN ESTABLISHED BY THE OWNER, ARCHITECT AND OWNER'S REPRESENTATIVE.
- GENERAL CONTRACTOR SHALL PROVIDE A TOILET FOR THE USE OF ALL CONTRACTORS' EMPLOYEES AND ALL SUB-CONTRACTORS.
- PARKING LOCATIONS FOR CONTRACTORS' VEHICLES, ACCEPTABLE HOURS FOR DEMOLITION, CONSTRUCTION, AND MATERIAL DELIVERY OR REMOVAL, AND ANY OTHER SPECIAL REQUIREMENTS ARE TO BE VERIFIED WITH THE OWNER, THE OWNER'S REPRESENTATIVE PRIOR TO THE START OF WORK.
- GENERAL CONTRACTOR SHALL MAINTAIN A DAILY REPORT INDICATING TRADE(S) WORKED AND NUMBER OF WORKERS, WORK COMPLETED, MATERIALS DELIVERED, WEATHER CONDITIONS AND ANY UNUSUAL EVENTS. A COPY OF SUCH A REPORT SHALL BE PROVIDED TO THE ARCHITECT AND OWNERS REPRESENTATIVE ON A BI-WEEKLY BASIS AND WHEN REQUESTED.
- ALL CONTRACTORS SHALL COMPLY WITH OSHA RULES & REGULATIONS
- UNLESS A LONGER GUARANTEE IS SPECIFIED, ALL WORK SHALL BE GUARANTEED AGAINST DEFECTS IN ACCORDANCE WITH THE REQUIREMENTS OF THE GENERAL CONDITIONS. ANY PORTIONS OF THE WORK WHICH DEVELOP DEFECTS DURING THE GUARANTEE PERIOD SHALL BE REPLACED IN A MANNER SATISFACTORY TO THE ARCHITECT, TENANT AND OWNER.
- IN THE EVENT OF CONFLICT, AMBIGUITY, INCONSISTENCIES, AND/OR UNCLEAR CIRCUMSTANCES BETWEEN ANY OF THE REQUIREMENTS OF THE CONTRACT DOCUMENTS AND APPLICABLE STANDARDS, CODES, ORDINANCES, OR OTHER REQUIREMENTS OF THE CONTRACT DOCUMENTS, THE REQUIREMENT THAT IS MOST INCLUSIVE AND OF HIGHEST QUANTITY AND/OR QUALITY AND/OR COST SHALL GOVERN. THE CONTRACTOR SHALL:
 - PROVIDE THE BETTER QUALITY OR GREATER QUANTITY OF WORK, OR
 - COMPLY WITH THE MORE STRINGENT REQUIREMENT; EITHER OR BOTH IN ACCORDANCE WITH THE ARCHITECT'S INTERPRETATION. THE CONTRACTOR HEREWITH AGREES THAT NO EXTRA COMPENSATION SHALL BE AWARDED TO HIM, SINCE HE HEREWITH RECEIVED SPECIFIC INSTRUCTIONS TO THE PROCEDURE AND VALUES OF THE WORK. THE TERMS AND CONDITIONS OF THIS PARAGRAPH, HOWEVER, SHALL NOT RELIEVE THE CONTRACTOR OF ANY OF THE OBLIGATIONS SET FORTH IN REVIEW OF THE CONTRACT DOCUMENTS AND FIELD CONDITIONS.
- SHOP DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT FOR APPROVAL BEFORE FABRICATION IS STARTED.
- ALL COLORS TO BE SELECTED AND APPROVED BY THE ARCHITECT. SAMPLES OF ALL FINISHES SPECIFIED SHALL BE SUBMITTED TO THE ARCHITECT PRIOR TO COMMENCEMENT OF WORK. UPON REQUEST, SAMPLES OF ACCEPTED PAINT SHALL BE MOCKED-UP ON SITE FOR THE ARCHITECT'S FINAL APPROVAL AT NO EXTRA COST TO THE OWNER.
- DIMENSIONS OF NEW WALLS ARE TAKEN TO FACE OF FINISH UNLESS OTHERWISE NOTED.
- DIMENSIONS ARE TO FACE OF GYPSUM WALL BOARD AT ROOMS WITH PAINTED OR EXPOSED GYPSUM BOARD U.O.N.
- ALL SYMBOLS AND FINISH SCHEDULE DESIGNATIONS OF MATERIALS INDICATE NEW MATERIAL UNLESS OTHERWISE NOTED.
- ALL NEW INSTALLED EQUIPMENT SHALL BE UL LABELED. ALL LIGHTING FIXTURES SHALL BE REVIEWED AND APPROVED BY ARCHITECT, LIGHTING CONSULTANT AND CONSULTING ENGINEER AND SHALL HAVE UL LABEL.
- ALL FIELD WELDING WORK SHALL BE ACCOMPANIED WITH A FIRE EXTINGUISHER. SMOKE FROM WELDING SHALL BE VENTED DIRECTLY TO EXTERIOR WHEN BUILDING IS OCCUPIED.
- ALL WELDS SHALL RECEIVE TWO (2) COATS OF RUSTPROOFING PAINT. U.O.N.
- SEE FINISH SCHEDULE FOR PAINTING; OTHER PAINTING SCOPE SHALL BE FOUND ON DRAWINGS.
- WHERE FINISH FLOOR MATERIAL ENDS AT DOOR AND OPENINGS AND IS HIGHER THAN THE ADJACENT FLOORING MATERIAL, A REDUCING STRIP SHALL BE USED OF THE SPECIFIED TRANSITION MATERIAL.
- A WET SAW SHALL BE USED TO CUT ALL STONE TILE & CERAMIC TILES. USE OF MANUAL CUTTING TOOLS IS UNACCEPTABLE.
- WHERE THERE ARE SMALL GAPS AT STONE, TILE AND WALLS, CAULKING OF SIMILAR COLOR SHALL BE USED. COLOR TO BE VERIFIED AND APPROVED BY ARCHITECT.
- ALL CONTRACTORS ARE ASSUMED TO HAVE THOROUGHLY REVIEWED GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION PRIOR TO START OF WORK AND EXPECTED TO FULLY COMPLY WITH THE REQUIREMENTS THEREIN AND ANY OTHER REQUIREMENTS.
- GENERAL CONTRACTOR IS RESPONSIBLE TO FIRESTOP, CAULK AND SEAL PENETRATIONS PERFORMED BY SUB CONTRACTORS UNLESS ALTERNATE AGREEMENT IS IN PLACE. CAULK TO BE LOW VOC
- GENERAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING CONSTRUCTION DOCUMENTS FROM ALL TRADES TO LOCATE ANY AND ALL DUCT, PIPE, CONDUIT, ELECTRIC PENETRATIONS OR SLEEVES IN CONSTRUCTION AND COORDINATING THESE LOCATIONS WITH OTHER TRADES AND THEIR SHOP DRAWINGS BEFORE WALLS AND PARTITIONS ARE PUT IN PLACE.
- CONTRACTOR IS REQUIRED TO HAVE ON SITE PRE-INSTALLATION TRAINING WITH THE MANUFACTURER OR MANUFACTURERS REPRESENTATIVE FOR DOOR HARDWARE PRIOR TO OR IN CONJUNCTION WITH HANGING EACH HARDWARE SET. CONTRACTOR TO NOTIFY ARCHITECT AND OWNER WHEN TRAINING WILL OCCUR.
- ALL WOOD PANELS ARE EDGE BANDED WITH MINIMUM 1/2" SOLID STOCK VENEER EXTENDING OVER EDGE BAND UNLESS OTHERWISE NOTED.
- DOORS SHALL BE UNDERCUT 1/2" HIGHER THAN THE FINISH FLOOR, COORDINATE WITH AIR TRANSFER REQUIREMENTS IN MECHANICAL SECTION, U.O.N.
- ALL TRIM (RECESSED FIXTURES), DIFFUSERS, REFLECTORS, SPRINKLER COVERS, SWITCHES, OUTLETS, COVERS, LIGHT TRACKS, AND TRACK LIGHTS AND OTHER MOUNTED DEVICES ARE TO BE PAINTED TO MATCH THE SURFACE IN WHICH THEY SIT OR PROVIDED IN A COLOR TO BE SELECTED BY ARCHITECT.
- DO NOT SCALE THE DRAWINGS. FOLLOW DIMENSIONS INDICATED ON DRAWINGS. ALL DIMENSIONS ARE TO BE VERIFIED ON FIELD. AS DIMENSIONS SHOWN ARE FOR REFERENCE ONLY. IF CLARIFICATION IS NEEDED IN REFERENCE TO A PARTICULAR DIMENSION, CONTACT THE ARCHITECT.
- CONTRACTOR TO PROVIDE FIRE EXTINGUISHERS FOR EMERGENCY DURING CONSTRUCTION
- NO USE OF TOBACCO PRODUCTS IS PERMITTED ON THE CONSTRUCTION SITE.
- CONTRACTOR TO PROVIDE ADDITIONAL REINFORCEMENTS FOR SUSPENDED CEILING SYSTEMS (INC. ACOUSTIC) AS RECOMMENDED BY MANUFACTURER AT LOCATIONS OF LIGHTS AND DEVICE PENETRATIONS.
- ALL WORK PERTAINING TO THESE DRAWINGS SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE STATE AND LOCAL CODES AND IN AGREEMENT WITH ALL AGENCIES HAVING JURISDICTION. ALL TRADE CONTRACTORS SHALL BE LICENSED AND INSURED TO PERFORM THE WORK OUTLINED IN THE CONSTRUCTION DOCUMENTS.
- ALL GYPSUM BOARD SHALL BE FIRE RATED TYPE (TYPE X).
- ALL ROUGH FRAMING AND BLOCKING SHALL BE FIRE-TREATED.
- BENJAMIN MOORE AND SHERWIN WILLIAMS ARE ACCEPTABLE PAINT MANUFACTURERS. ALL OTHERS MUST HAVE THE APPROVAL OF THE ARCHITECT. ONLY NO-VOC PAINTS ARE TO BE USED.
- CONTRACTOR TO PROVIDE WEATHERSTRIPPING AT ALL EXTERIOR DOORS.

VICINITY MAP NOT TO SCALE



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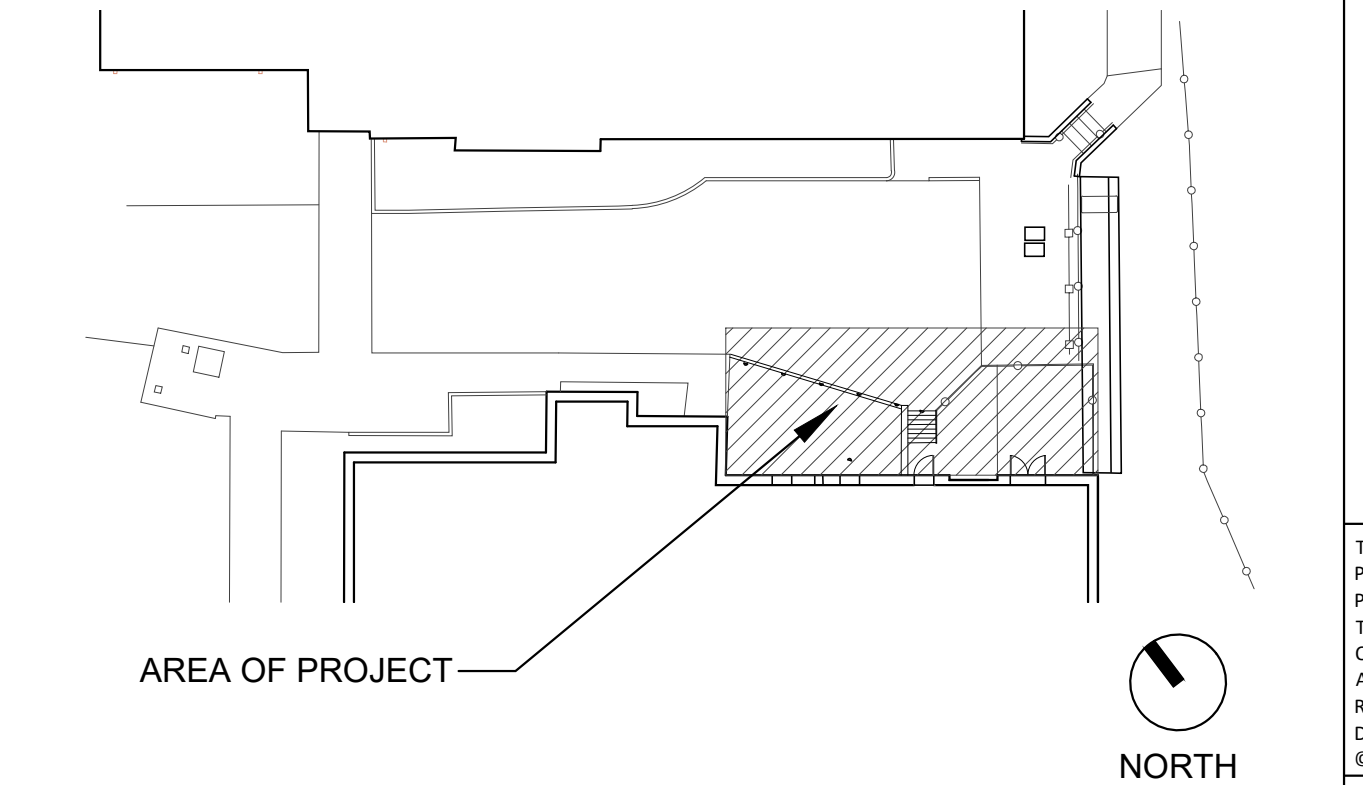
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KEY PLAN NOT TO SCALE



SHEET INDEX

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E0-1	GENERAL NOTES, SYMBOL, LISTS AND ABBREVIATIONS
E1-1	LOADING DOCK PLAN

09-19-2024 ISSUED FOR BID
03-29-2024 OWNER REVIEW

DATE ISSUED FOR SEAL

DATE: _____

STATE OF NEW JERSEY REGISTERED ARCHITECT
MARK A. SULLIVAN
NJ 13746

LOADING DOCK ALTERATIONS AT L. HOWARD FOX STUDIO THEATRE MONTCLAIR STATE UNIVERSITY

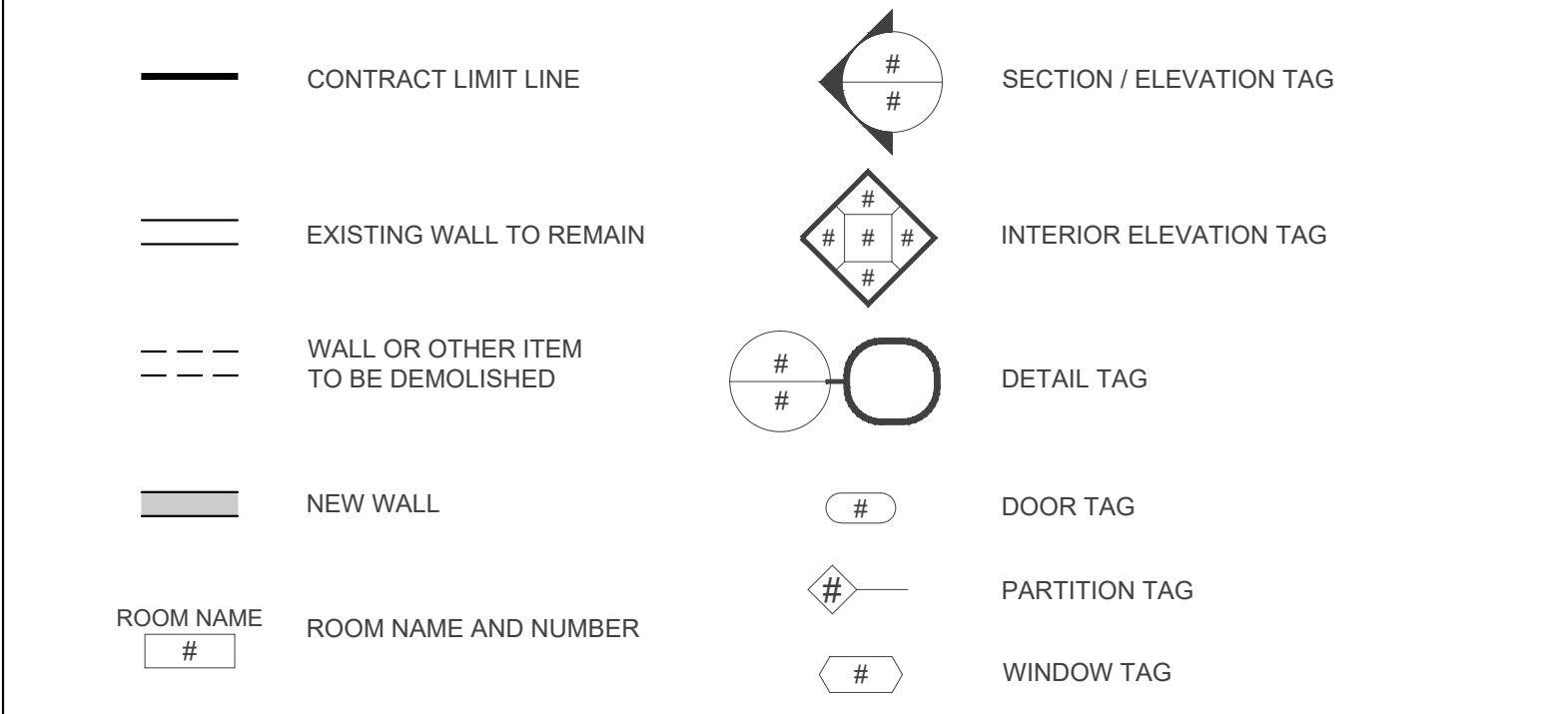
MSU PROJECT #PR24C009

COVER SHEET & GENERAL NOTES

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DATE: 01-26-2023 SCALE: AS NOTED

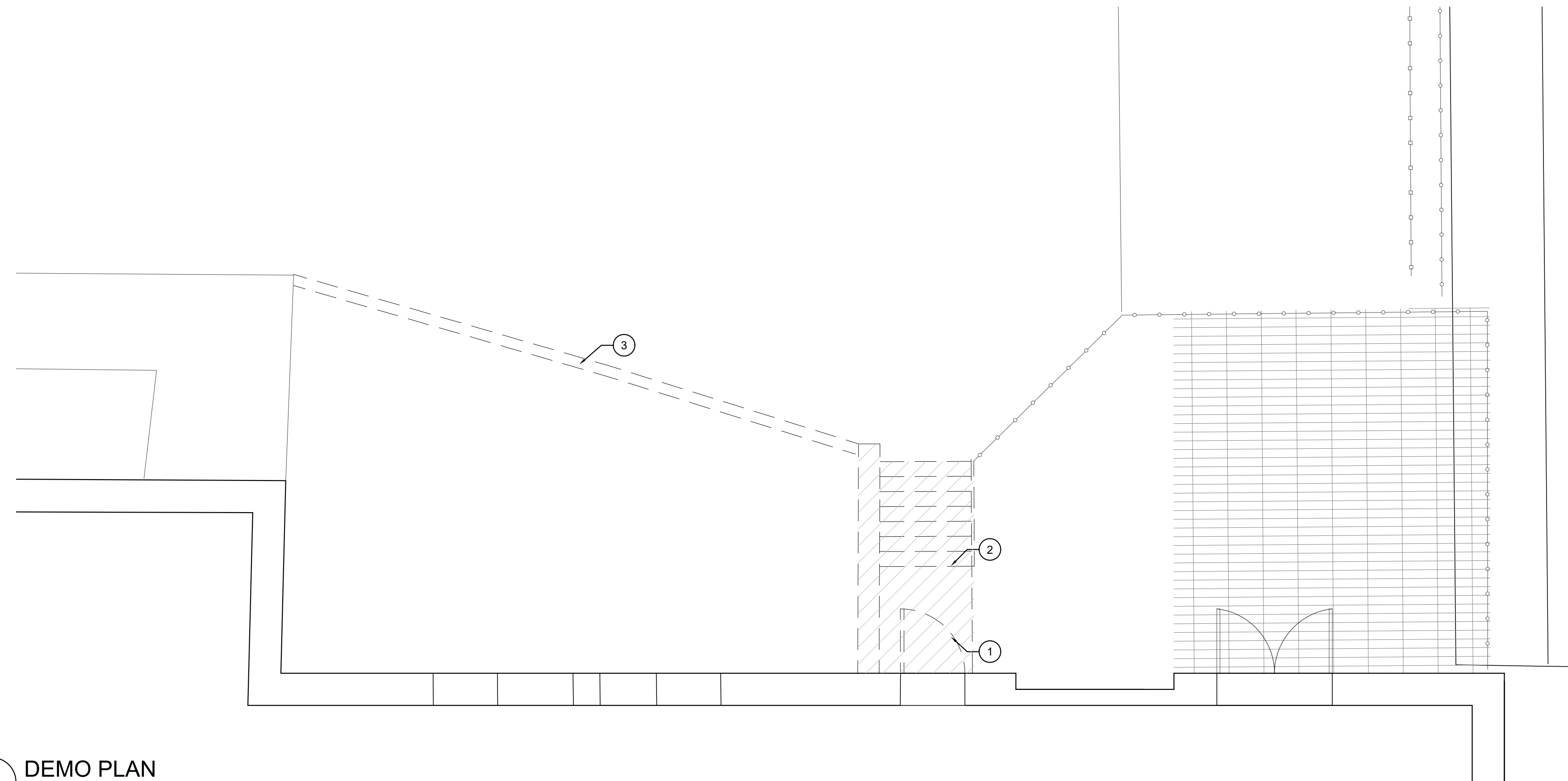
T1-1

LEGEND

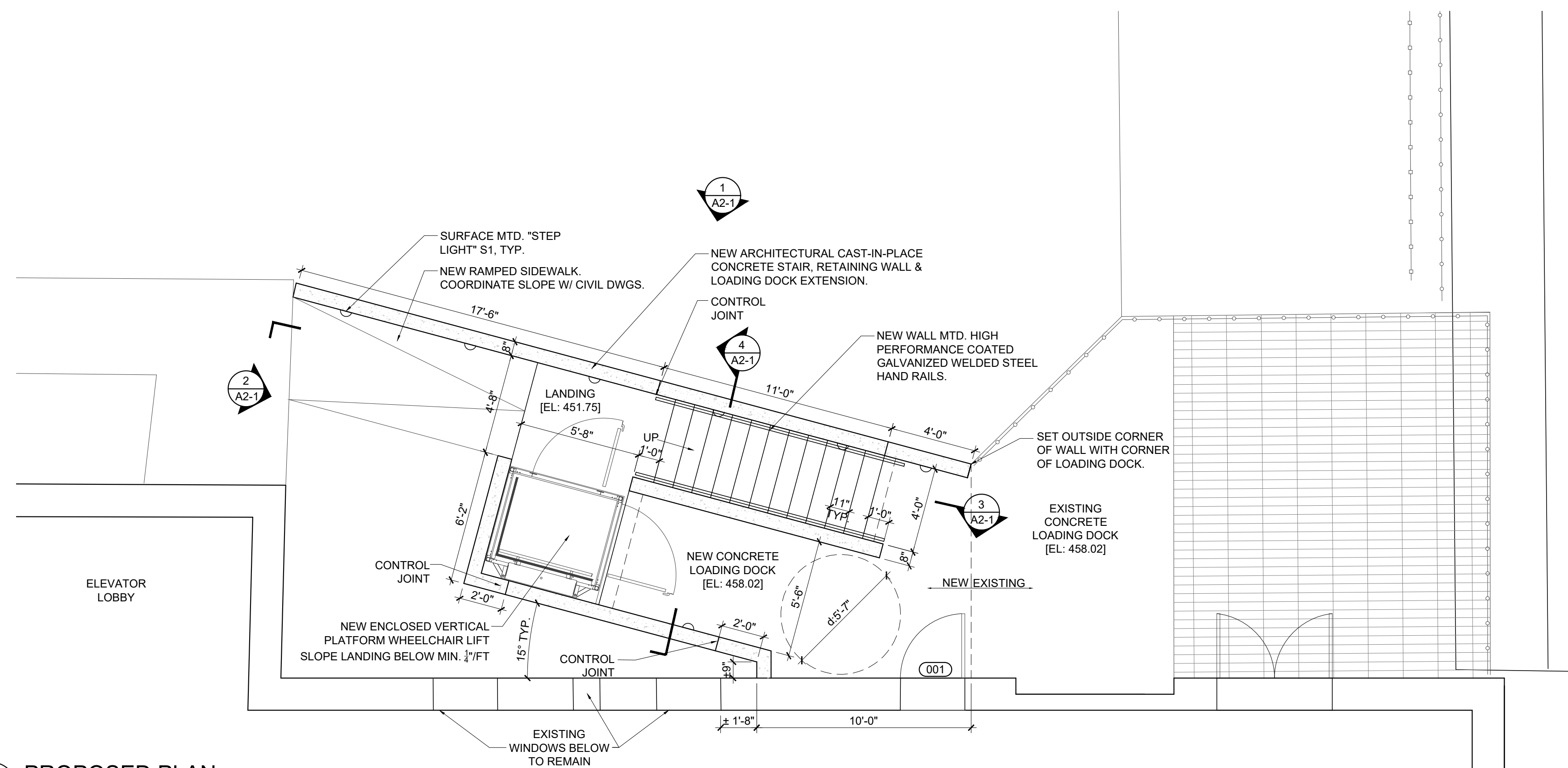


PROJECT SUMMARY

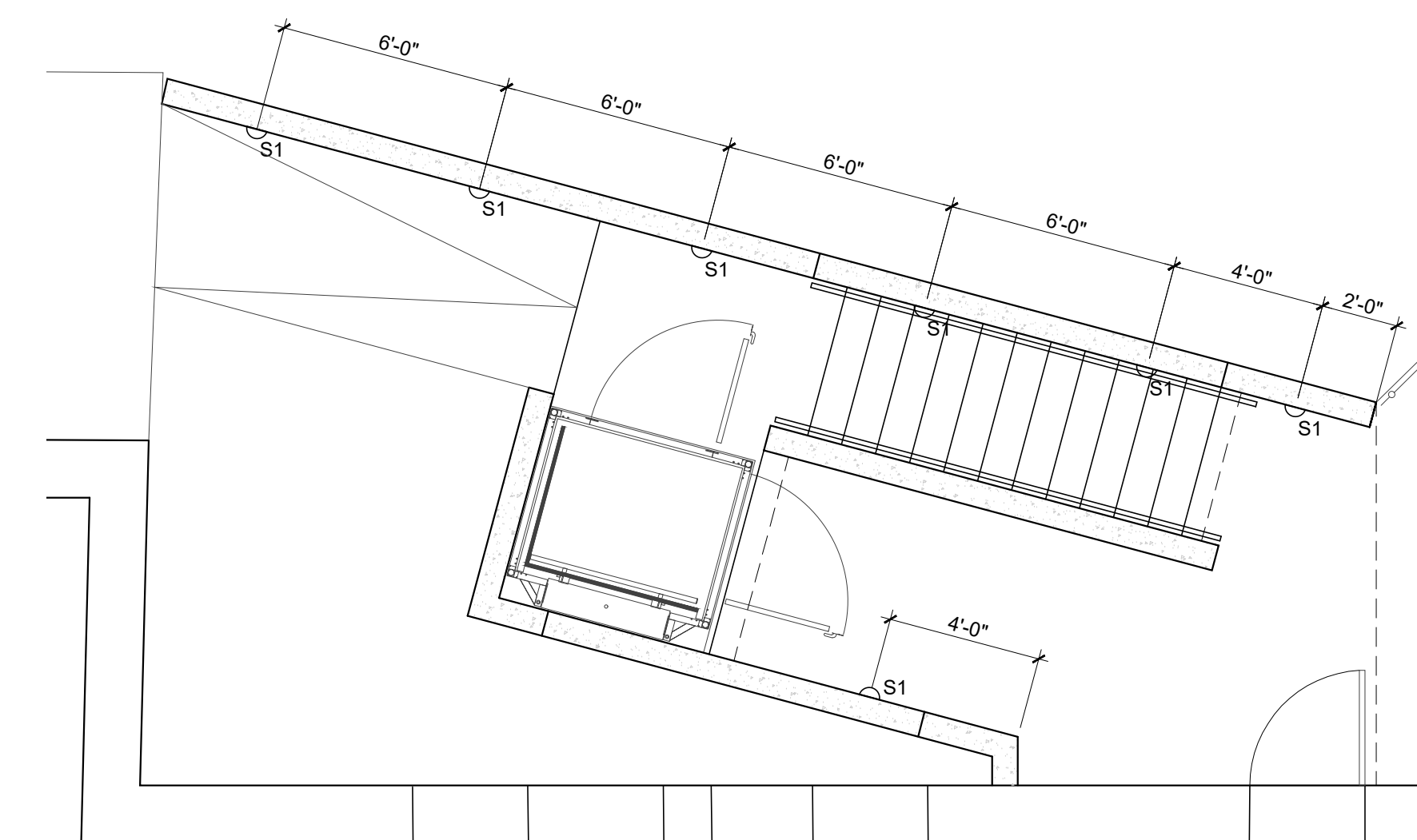
THE PROJECT IS AN ALTERATION TO THE EXISTING LOADING DOCK, ON THE NORTH SIDE OF L. HOWARD FOX STUDIO THEATRE, TO INCORPORATE A NEW ACCESSIBLE LIFT. THE PURPOSE OF THIS LIFT IS TO MAINTAIN AN ACCESSIBLE PATH TO MEMORIAL AUDITORIUM DRESSING ROOMS. PREVIOUSLY THIS PATH ROUTED THROUGH FOX THEATRE, INTERIOR ALTERATIONS HAVE NOW BLOCKED ACCESS.



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



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



2 LIGHTING PLAN
SCALE: 1/4" = 1'-0"

DEMOLITION KEYNOTES

- 1 REMOVE EXISTING DOOR & HARDWARE IN THEIR ENTIRETY. PREPARE FRAME TO RECEIVE NEW DOOR AS SCHEDULED.
- 2 REMOVE PORTION OF EXISTING LOADING DOCK TO THE EXTENT SHOWN TO ACCOMMODATE NEW LOADING DOCK EXTENSION. PROTECT ADJACENT EXTERIOR WALLS, GUARDRAILS, AND REMAINING PORTION OF LOADING DOCK TO REMAIN. COORDINATE WITH STRUCTURAL DRAWINGS.
- 3 REMOVE EXISTING CURB IN ITS ENTIRETY AND CUT BACK ASPHALT AS REQ'D TO INSTALL NEW RETAINING WALL.

GENERAL NOTES FOR DEMOLITION

1. SEE SHEET T1-1 FOR ADDITIONAL GENERAL NOTES.
2. THE DEMOLITION WORK SHOWN ON THESE PLANS IS INTENDED TO BE A GENERAL OVERVIEW OF MAJOR DEMOLITION WORK REQUIRED. IT IS NOT A COMPLETE AND EXCLUSIVE REPRESENTATION OF ALL DEMOLITION WORK NEEDED FOR EXECUTION OF THE PROJECT. THE CONTRACTOR MUST COMPLETELY FAMILIARIZE HIMSELF WITH THE ITEMS TO BE REMOVED BY INSPECTING THE SITE, AND REVIEWING THE FULL SET OF CONSTRUCTION DOCUMENTS FOR VARIOUS MISCELLANEOUS ITEMS WHICH MUST BE REMOVED AND/OR RELOCATED AS PART OF THE WORK. ANY INCONSISTENCIES IN THE NOTES, SYMBOLS, LEGENDS MUST BE BROUGHT TO THE ATTENTION OF THE ARCHITECT BY THE CONTRACTOR FOR RESOLUTION PRIOR TO THE START OF WORK.
3. IT IS NOT EXPECTED THAT HAZARDOUS MATERIALS WILL BE ENCOUNTERED IN THE WORK. IF MATERIALS ARE ENCOUNTERED WHICH ARE SUSPECTED TO BE HAZARDOUS, DO NOT DISTURB, IMMEDIATELY NOTIFY OWNER AND ARCHITECT.
4. PROTECT ALL EXTERIOR WALLS, EXTERIOR WINDOWS, EXTERIOR DOORS, STAIRS, STRUCTURAL FLOORS, COLUMNS, ROOFS, & FIRE RESISTANCE RATED CONSTRUCTION AGAINST DEMOLITION ACTIVITIES. PRIOR TO DEMOLITION CONTRACTOR SHALL NOTIFY OWNER & ARCHITECT IF PARTITIONS INDICATED FOR REMOVAL ARE FOUND TO BE INTEGRAL TO ANY EXISTING FIRE RESISTANCE RATED CONSTRUCTION.
5. EXCEPT FOR ITEMS TO BE RECYCLED, REUSED, SALVAGED, OR INDICATED TO REMAIN, REMOVE DEMOLISHED MATERIALS FROM PROJECT SITE AND LEGALLY DISPOSE OF THEM IN AN EPA APPROVED LANDFILL. ALL MATERIAL DISPOSAL SHALL BE CONDUCTED IN ACCORDANCE WITH APPLICABLE LAWS.
6. THE GENERAL CONTRACTOR SHALL NOTIFY ARCHITECT/OWNER PRIOR TO START OF DEMOLITION WORK.
7. ALL DEMOLITION WORK SHALL BE CONDUCTED DURING HOURS APPROVED BY BUILDING OWNER, AND ALL EQUIPMENT MUST MEET LOCAL NOISE ORDINANCES.

GENERAL NOTES

1. B.O.D. FOR ENCLOSED VERTICAL PLATFORM WHEELCHAIR LIFT:
 -GARAVENTA, GENESIS ENCLOSURE (GVL-EN-96)
 -FLOOR MOUNT, LARGE PLATFORM, 90DEG CONFIGURATION
 -PLEXIGLASS DOME
 -TOTAL RISE DESIGNED TO BE 75.25". V.I.F WITH FINAL CONSTRUCTION
 -SEE PROJECT MANUAL SPECIFICATION FOR ADDITIONAL INFORMATION.

LIGHTING FIXTURE LEGEND

S1	6 1/2" LED STEP LIGHT MANUF. LITHONIA LIGHTING MODEL: OLSR T.O. FIXTURE SHALL BE 1'-8" A.F.F
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 AT L. HOWARD FOX STUDIO THEATRE
 MONTCLAIR STATE UNIVERSITY

MSU PROJECT #PR24C009

DRAWING NAME

DEMO PLAN,
 PROPOSED
 PLANS, & NOTES

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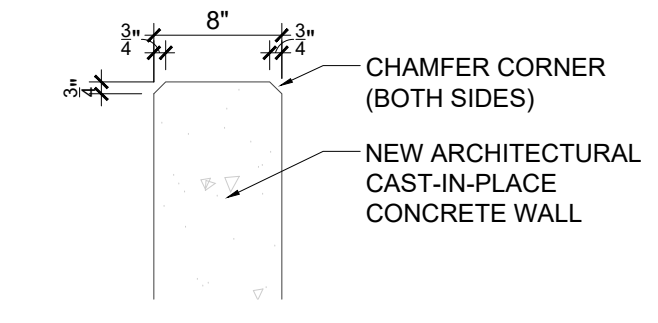
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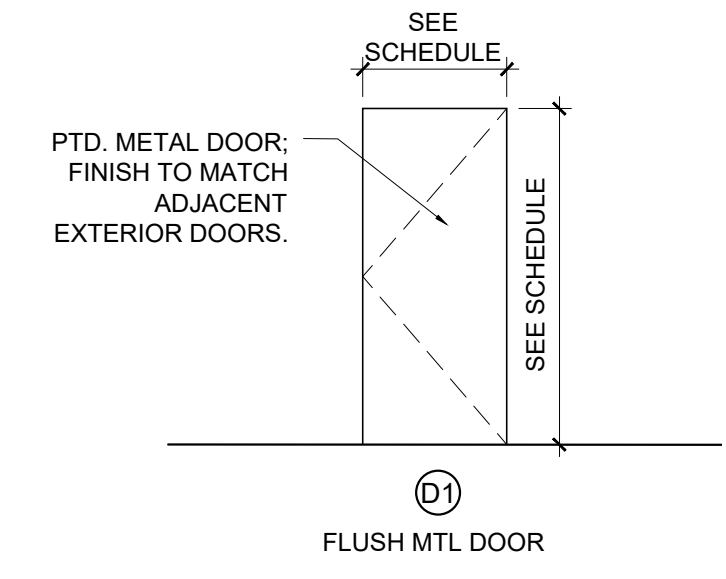
DOOR SCHEDULE													
DOOR #	ROOM NAME	RM. #	TYPE	DR SIZE/OR CLR OPG	DOOR			FRAME				HDWR	COMMENTS
					MATL	GLAZ	TYPE	HEAD	JAMB	SADDLE	RATG		
001	LOADING DOCK	-	D-1	3'-0" x 7'-7" (V.I.F.)	MTL	-	EX	EX	EX	-	-	SET 8	-EXISTING FRAME TO REMAIN

DOOR HARDWARE

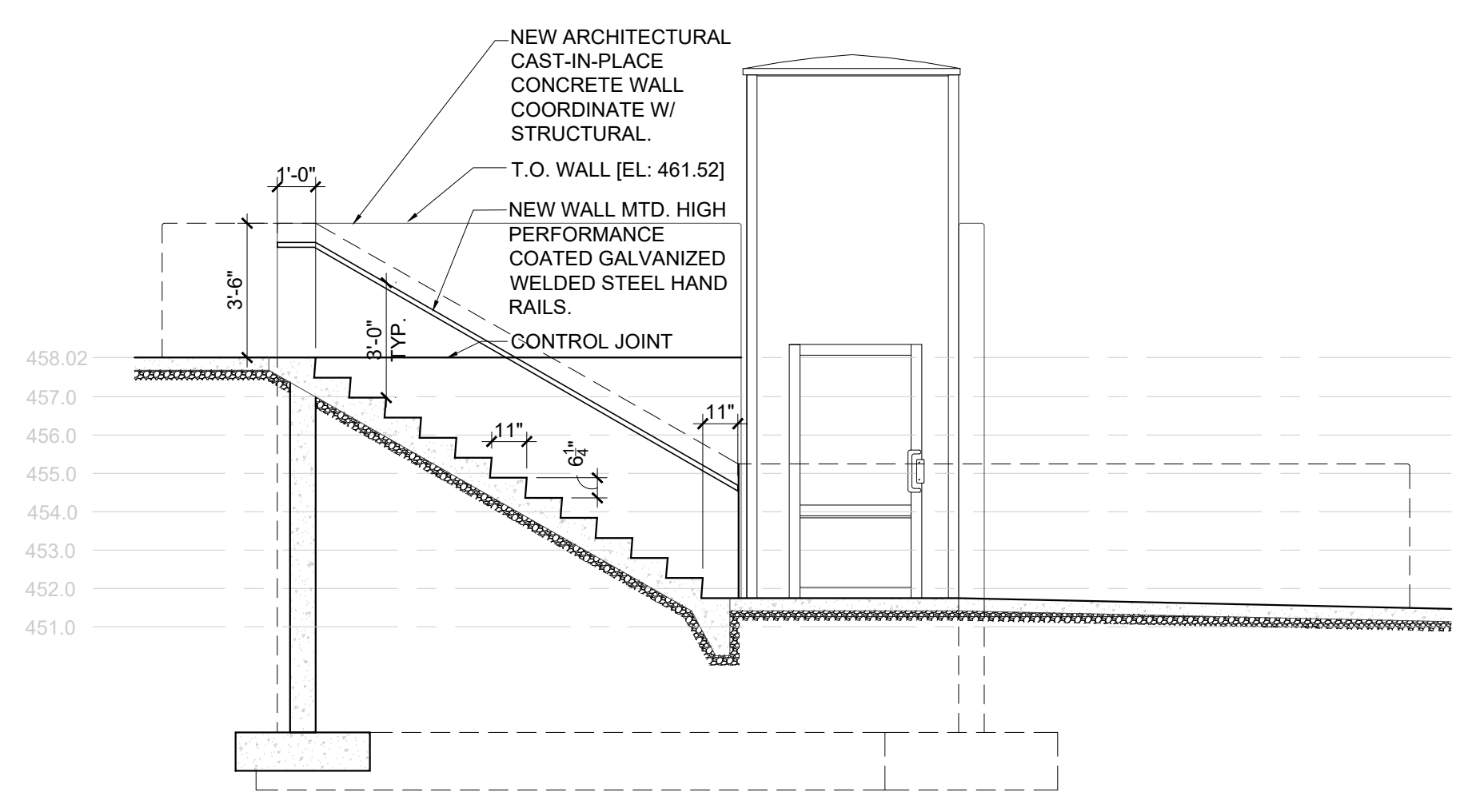
- SET 8
- (3) 5-KNUCKLE HINGES
 - (1) LEVER LOCKSET, ENTRANCE FUNCTION
 - (1) PANIC BAR W/CONCEALED ROD
 - (1) SURFACE MTD. CLOSER
 - (1) DOOR SWEEP
 - (1) DOOR SILENCERS



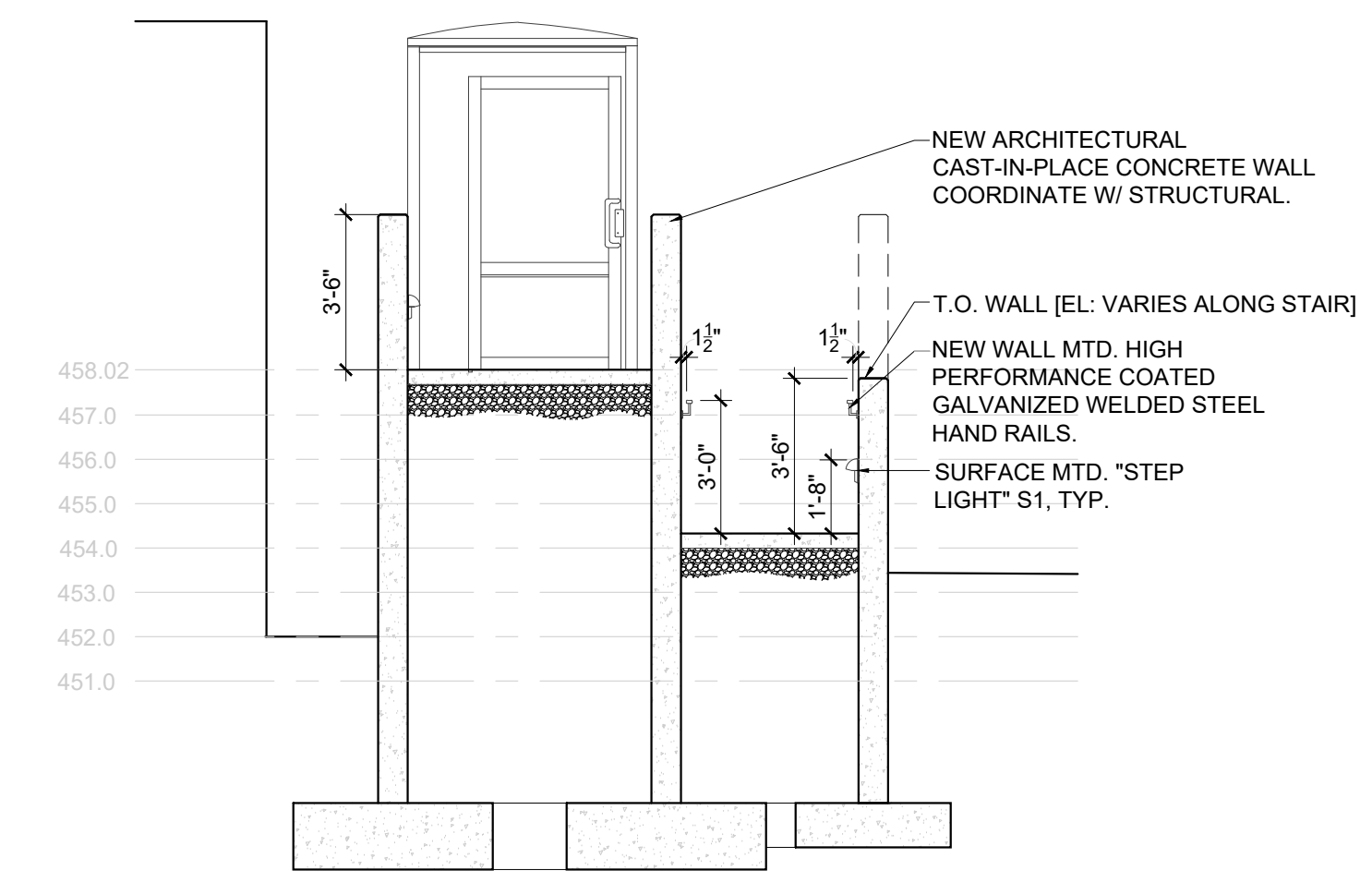
5 CHAMFER DETAIL, TYP.
SCALE: 1" = 1'-0"



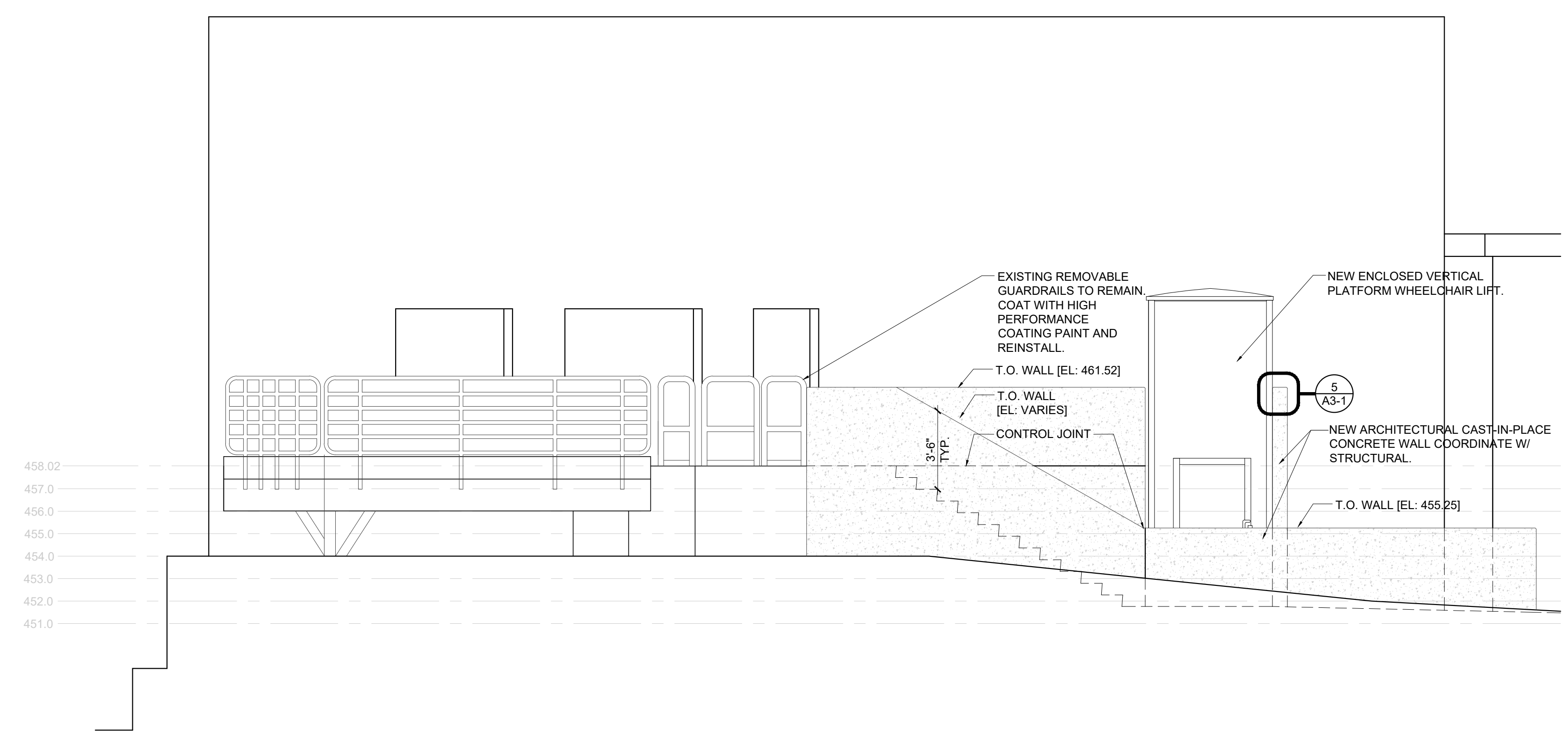
6 DOOR TYPE
SCALE: 1/4" = 1'-0"



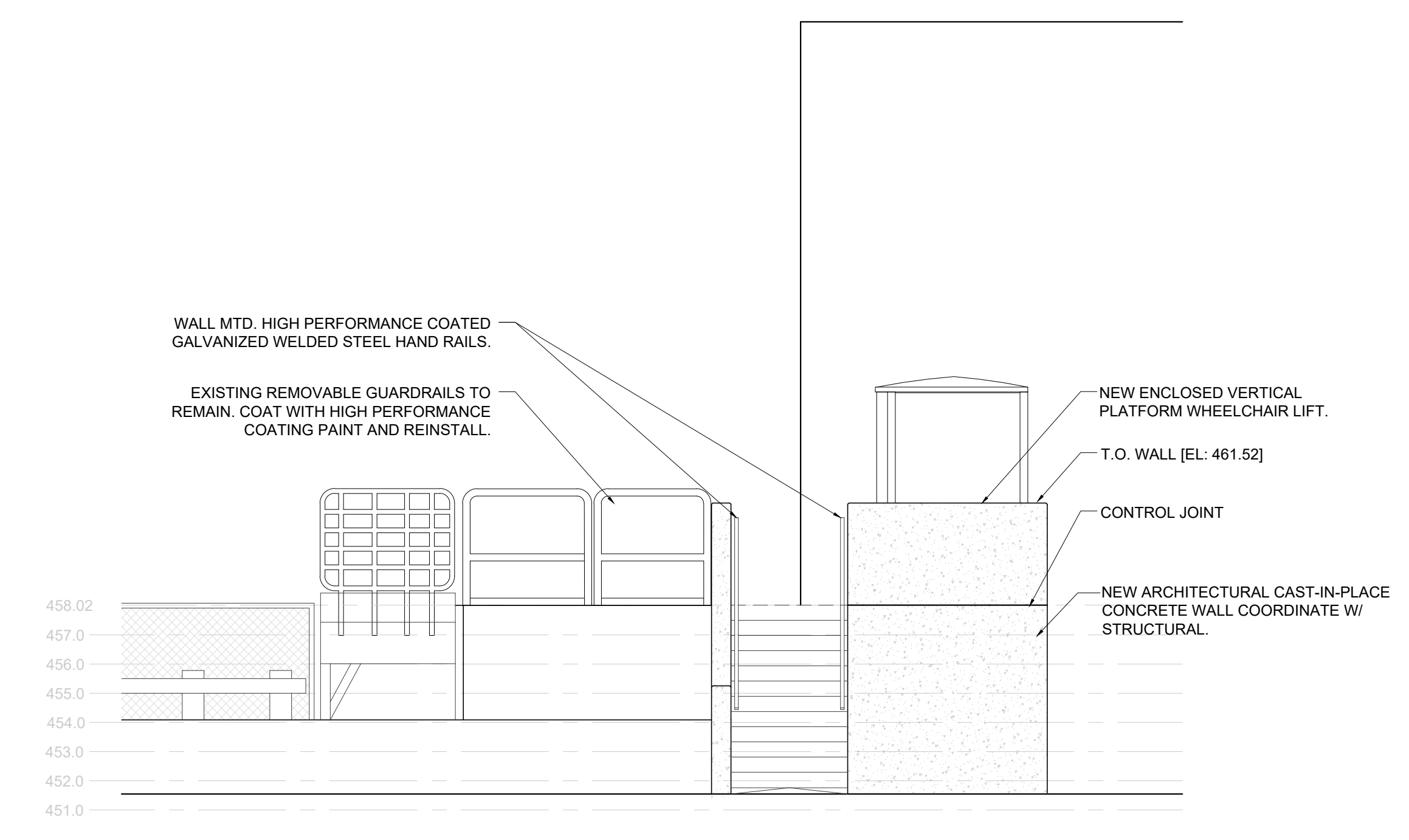
3 SECTION DETAIL
SCALE: 1/4" = 1'-0"



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



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



2 WEST ELEVATION
SCALE: 1/4" = 1'-0"

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09-19-2024 ISSUED FOR BID
03-29-2024 OWNER REVIEW

DATE ISSUED FOR SEAL

DATE: _____

STATE OF NEW JERSEY REGISTERED ARCHITECT
MARK A. SULLIVAN
NJ 13746

PROJECT NAME

LOADING DOCK ALTERATIONS
AT L. HOWARD FOX STUDIO THEATRE
MONTCLAIR STATE UNIVERSITY

MSU PROJECT #PR24C009
DRAWING NAME

ELEVATIONS,
SECTIONS,
& DETAILS

DRAWN BY: PROJECT NO.: 22322
DATE: 01-26-2023 SCALE: AS NOTED

SHEET NUMBER

A3-1

GENERAL NOTES:

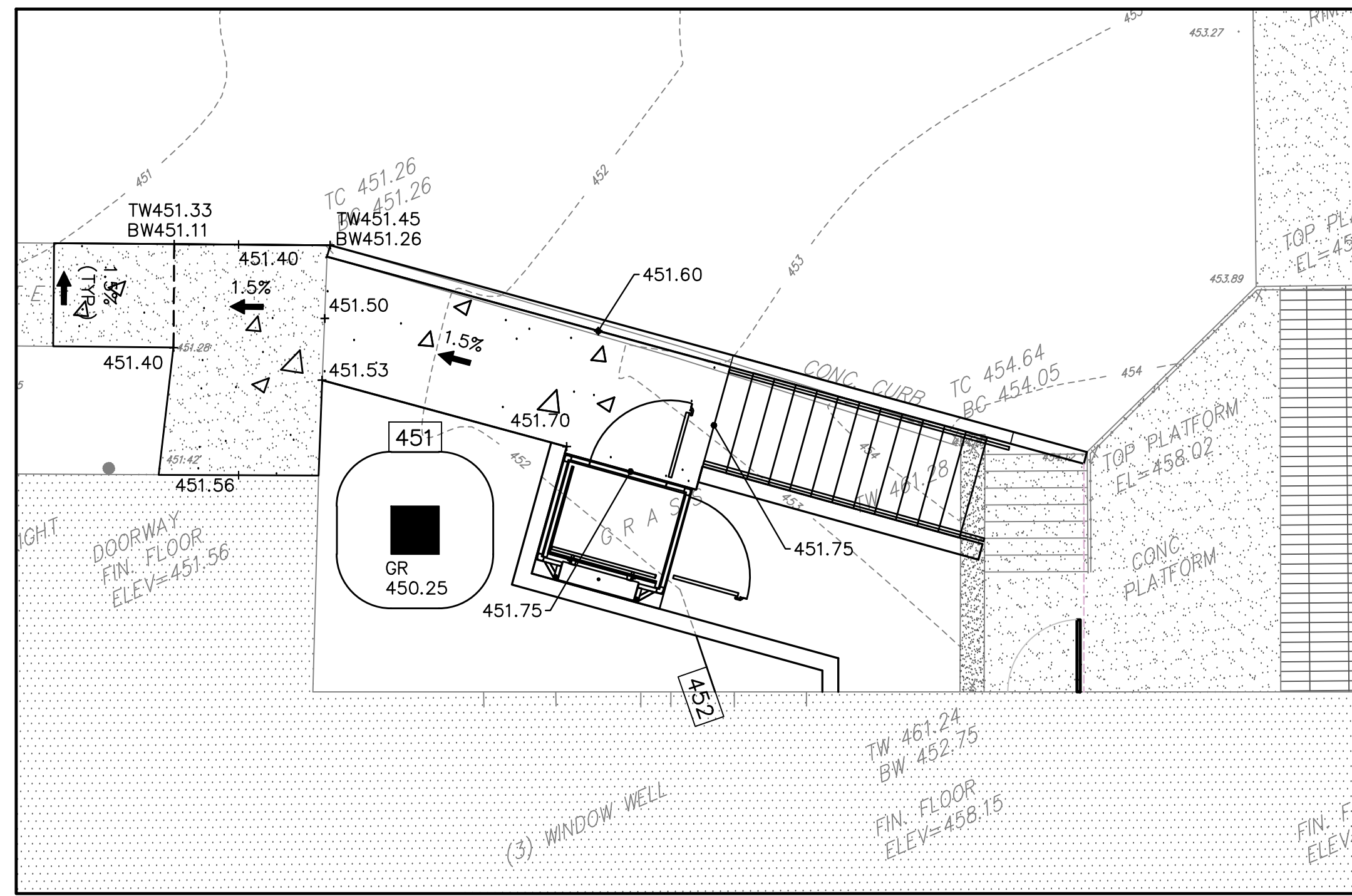
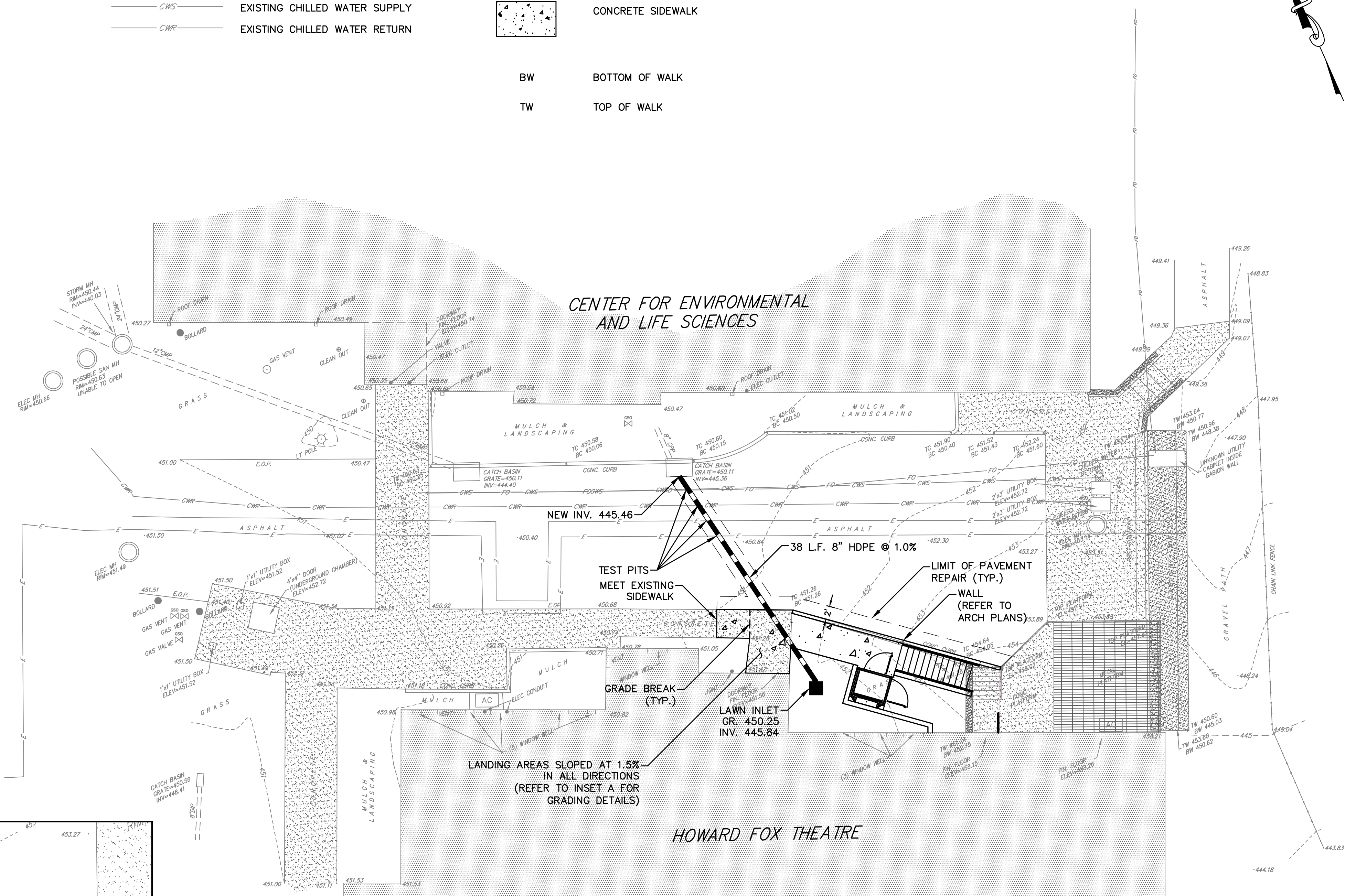
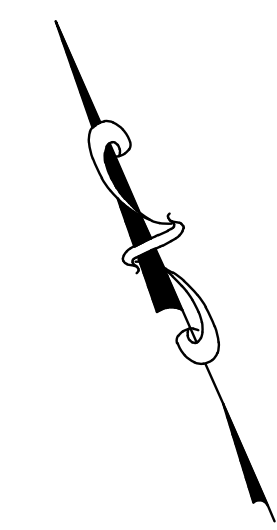
- NOT ALL EXISTING TOPOGRAPHIC FEATURES HAVE BEEN SHOWN ON PLAN. ASCERTAIN ALL LOCATIONS PRIOR TO CONSTRUCTION.
- UTILITY LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY THEIR LOCATION AND COMPLETENESS. THE CONTRACTOR MUST HIRE AN INDEPENDENT 3RD PARTY TO MARK OUT ALL UTILITIES PRIOR TO BEGINNING CONSTRUCTION. THE CONTRACTOR SHALL SUBMIT A SKETCH OF THE MARKOUT PRIOR TO MOBILIZATION.
- UTILITY LOCATIONS MUST BE CONFIRMED INDEPENDENTLY WITH LOCAL UTILITY COMPANIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION OR EXCAVATION TO AVOID DISRUPTION OF SERVICE. ALL DISCREPANCIES SHALL BE REPORTED IMMEDIATELY IN WRITING TO THE ENGINEER. CROSSINGS WITH EXISTING UNDERGROUND INSTALLATIONS SHALL BE FIELD VERIFIED BY TEST PITS PRIOR TO COMMENCEMENT OF CONSTRUCTION & ORDERING OF MATERIALS. THE ENGINEER AND THE APPROPRIATE UTILITY COMPANY SHALL BE NOTIFIED OF ANY CONFLICTS FOUND IMMEDIATELY.
- EQUIPMENT STAGING AND MATERIAL STORAGE AREAS MUST BE COORDINATED WITH THE OWNER AND APPROVED IN WRITING PRIOR TO MOBILIZATION.
- MONITOR ALL GRADES INCLUDING PAVEMENT, DRIVEWAY, DRAINAGE, CURB AND SIDEWALK THROUGHOUT THE PROJECT SO THAT POSITIVE DRAINAGE IS MAINTAINED AND PONDING DOES NOT OCCUR.
- PERFORM ALL CONSTRUCTION WORK IN ACCORDANCE WITH ALL APPLICABLE SAFETY CODES. APPLICABLE SAFETY CODES MEANS THE LATEST EDITION INCLUDING ANY AND ALL AMENDMENTS, REVISIONS AND ADDITIONS THERETO OF THE FEDERAL DEPARTMENT OF LABOR, OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION'S "OCCUPATIONAL SAFETY AND HEALTH STANDARDS"(OSHA); "SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION" OF THE STATE OF NEW JERSEY, DEPARTMENT OF LABOR AND INDUSTRY, BUREAU OF ENGINEERING AND SAFETY; "CONSTRUCTION SAFETY CODE," AND "MAINTENANCE, CONSTRUCTION AND DEMOLITION," AND "BUILDING CODE."
- ALL EXISTING FEATURES DISTURBED BY CONSTRUCTION ACTIVITIES SHALL BE RESTORED TO THE PRE-CONSTRUCTION CONDITION AT NO ADDITIONAL COST TO THE OWNER.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL CONSTRUCTION STAKEOUT/LAYOUT. THE CONSTRUCTION STAKEOUT/LAYOUT SHALL BE PERFORMED BY A QUALIFIED NEW JERSEY LICENSED PROFESSIONAL LAND SURVEYOR. THE ENGINEER WILL SUPPLY THE CAD FILES FOR LAYOUT PURPOSES, UPON REQUEST.
- THE CONTRACTOR SHALL PERFORM TEST PITS IN ORDER TO IDENTIFY POTENTIAL CONFLICTS WITH THE PROPOSED DRAINAGE ITEMS. LOCATIONS OF POTENTIAL CONFLICTS SHOULD BE PROVIDED TO THE ENGINEER FOR REVIEW AND REDESIGN, AS NEEDED.

SURVEY NOTES:

- FIELD SURVEY DATA COLLECTED ON DECEMBER 28, 2023.
- HORIZONTAL DATUM BASED ON THE NORTH AMERICAN DATUM OF 1983 (NAD 83).
- ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) AND WERE OBTAINED VIA GNSS SURVEYING UTILIZING THE SMARTNET NORTH AMERICA NETWORK.
- UNDERGROUND UTILITIES IF DEPICTED ARE BASED ON VISIBLE EVIDENCE. THE LACK OF UTILITY INFORMATION DOES NOT DENY THE EXISTENCE OF SAME. REFERENCE TO THE APPROPRIATE UTILITY AUTHORITY SHOULD BE MADE TO VERIFY THE PRESENCE OR ABSENCE OF UTILITIES PRIOR TO ANY EXCAVATION.

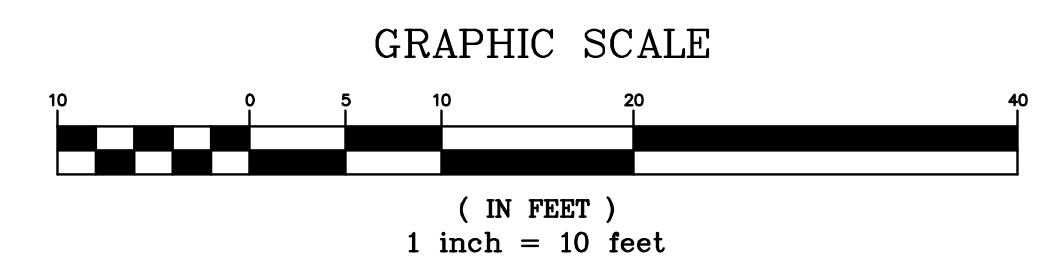
LEGEND

- EXISTING CURB
- EXISTING STORM SEWER
- EXISTING U.G. ELECTRICAL
- EXISTING U.G. FIBEROPTIC
- EXISTING CHILLED WATER SUPPLY
- EXISTING CHILLED WATER RETURN
- STORM PIPE (SEE PLAN FOR SIZE & TYPE)
- INLET
- CONCRETE SIDEWALK
- BW BOTTOM OF WALK
- TW TOP OF WALK



INSET A
SCALE = 1"=5'

PLAN
SCALE = 1"=10'



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09-19-2024	ISSUED FOR BID
03-29-2024	OWNER REVIEW
DATE	ISSUED FOR

PROJECT NAME

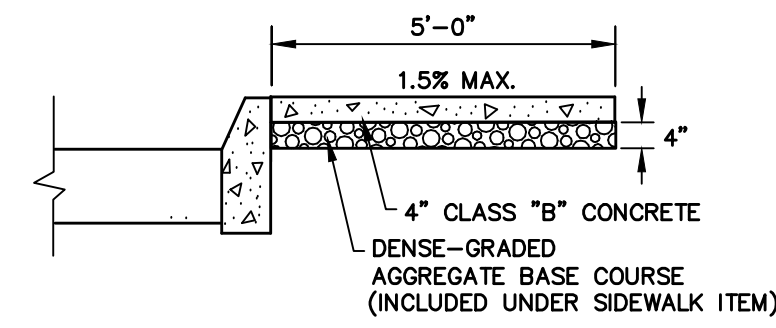
LOADING DOCK ALTERNATIONS

AT L. HOWARD FOX STUDIO
THEATRE
MONTCLAIR STATE UNIVERSITY
MSU PROJECT #PR24C009
DRAWING NUMBER

SITE PLAN

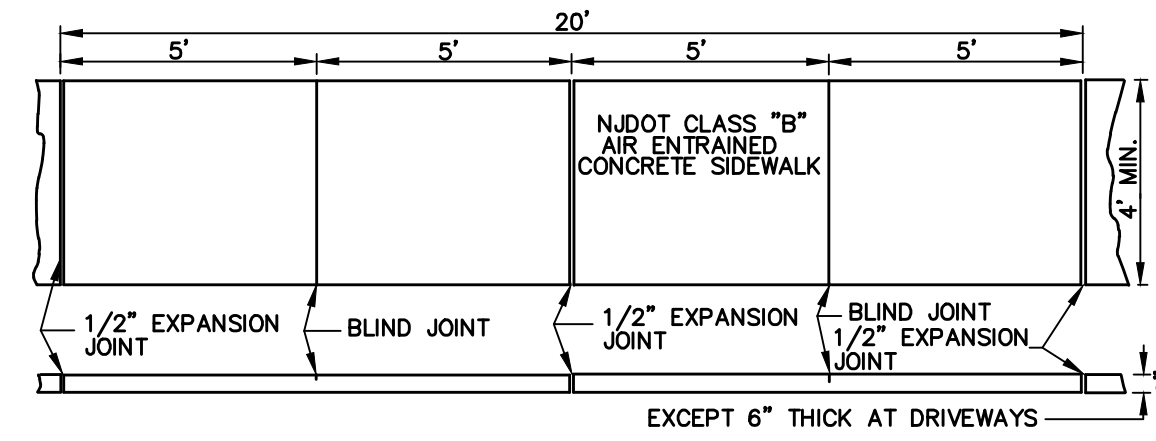
DRAWN BY: JIM	PROJECT NO.: 22322
DATE: 03-25-2023	SCALE: AS NOTED

SHEET NUMBER
C1



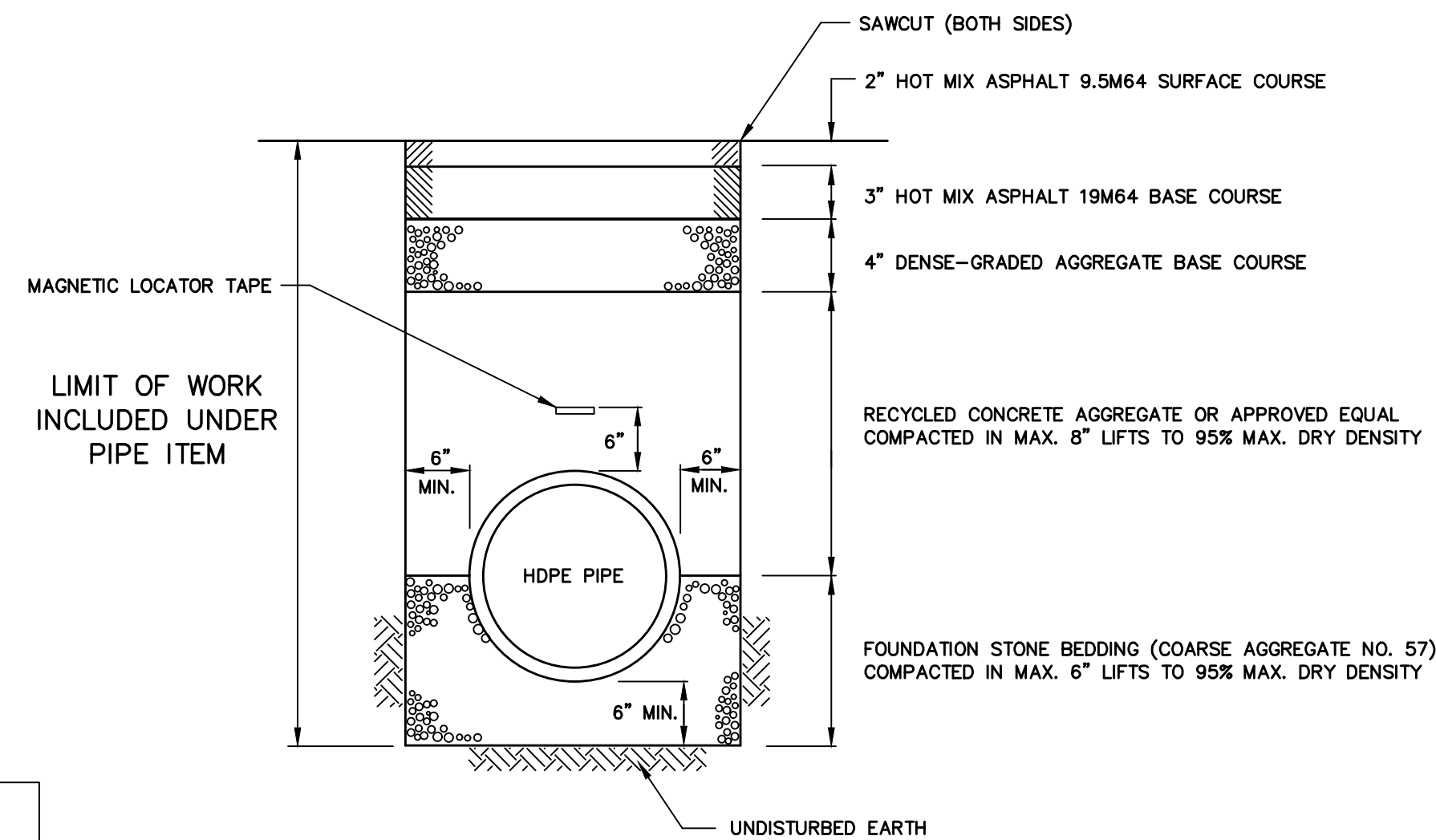
- NOTES:
1. ALL CONCRETE SURFACES SHALL BE TREATED WITH A CONCRETE CURING AND SEALING COMPOUND.
 2. PROVIDE 1/2" PREFORMED EXPANSION JOINT FILLER, 4" DEPTH AT 10'± O.C.

CONCRETE SIDEWALK, 4" THICK
N.T.S.

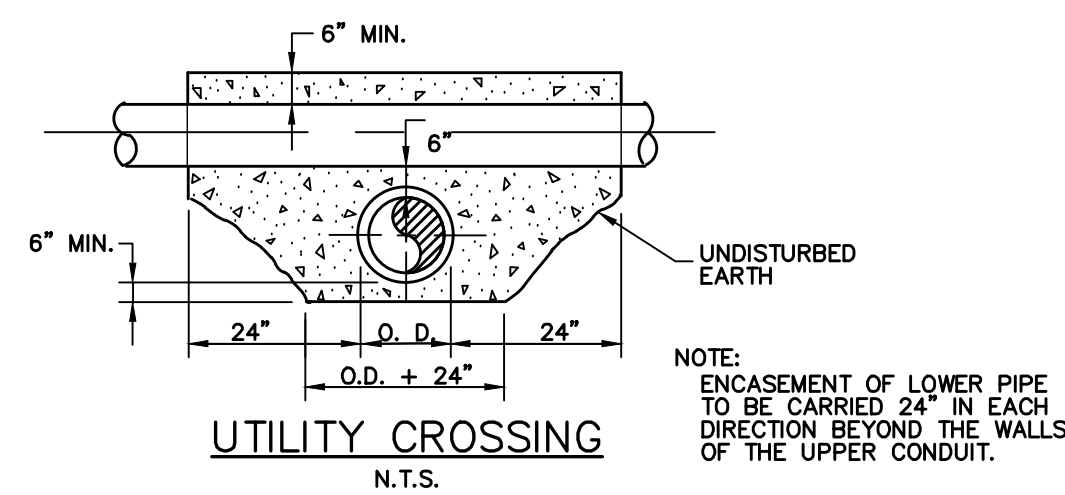


- NOTE:
1. SUBGRADE IS TO BE IN A MANNER SUITABLE TO THE ENGINEER.
 2. EXPANSION JOINTS ARE TO BE 1/2" WIDE AND FILLED WITH PREFORMED HOT MIX ASPHALT TYPE JOINT FILLER. THE TOP OF ALL JOINT FILLER SHALL BE 1/4" BELOW THE TOP OF THE SURFACE. EXPANSION JOINT SHALL BE LOCATED 10' ON CENTER.
 3. BLIND JOINTS ARE TO BE SURFACE GROOVES CUT INTO SIDEWALK 1/2" DEEP, AND SHALL BE LOCATED 10' ON CENTER.
 4. THE CONTRACTOR SHALL RESTORE LAWN ADJACENT TO ALL SIDEWALK CONSTRUCTION, IF APPLICABLE. LAWN RESTORATION SHALL CONSIST OF NEW TOPSOIL (5" THICK), FERTILIZING & SEEDING, TYPE A-3 AND STRAW MULCHING AND SHALL EXTEND 2' BEYOND THE EDGE LIMITS OF CONCRETE SIDEWALK CONSTRUCTION.

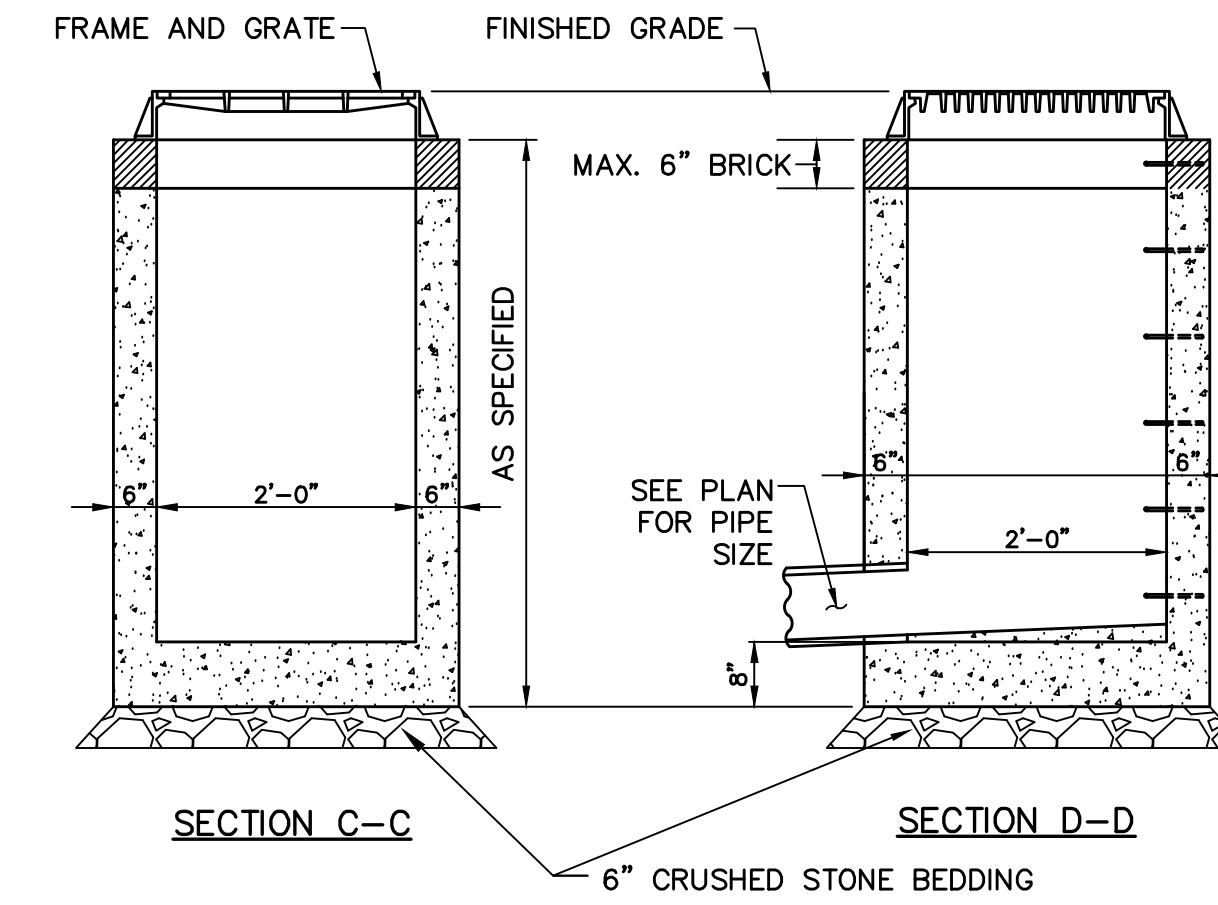
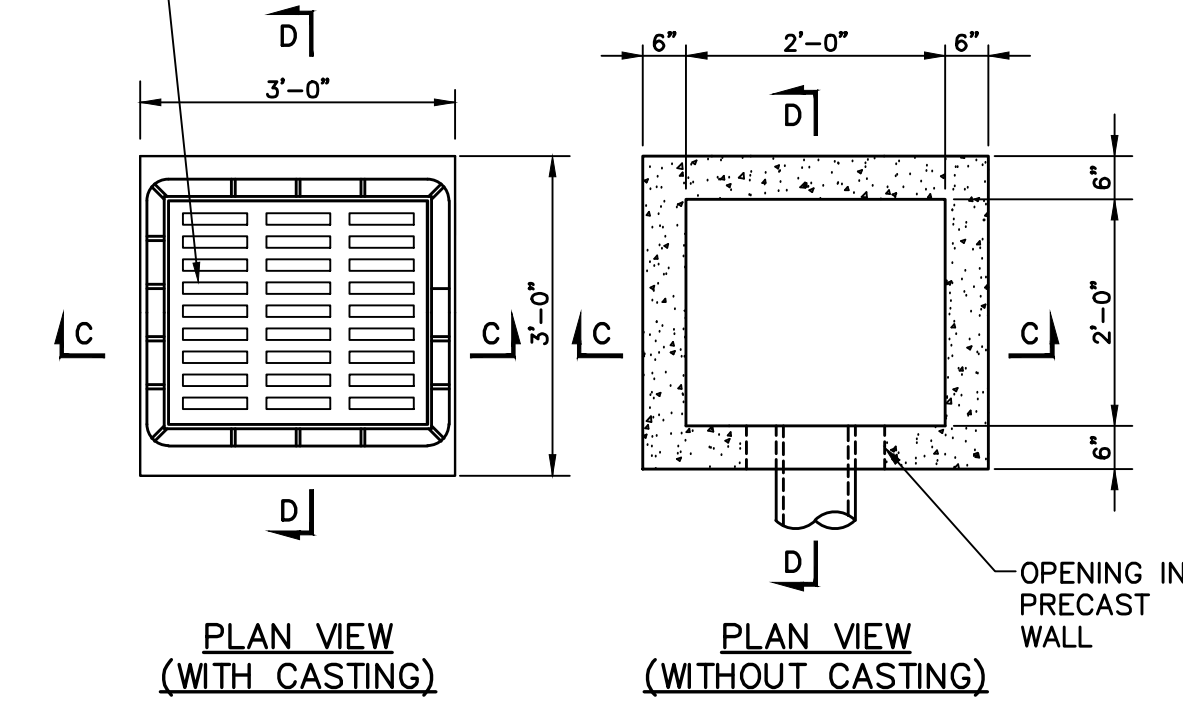
TYPICAL SIDEWALK SECTION
N.T.S.



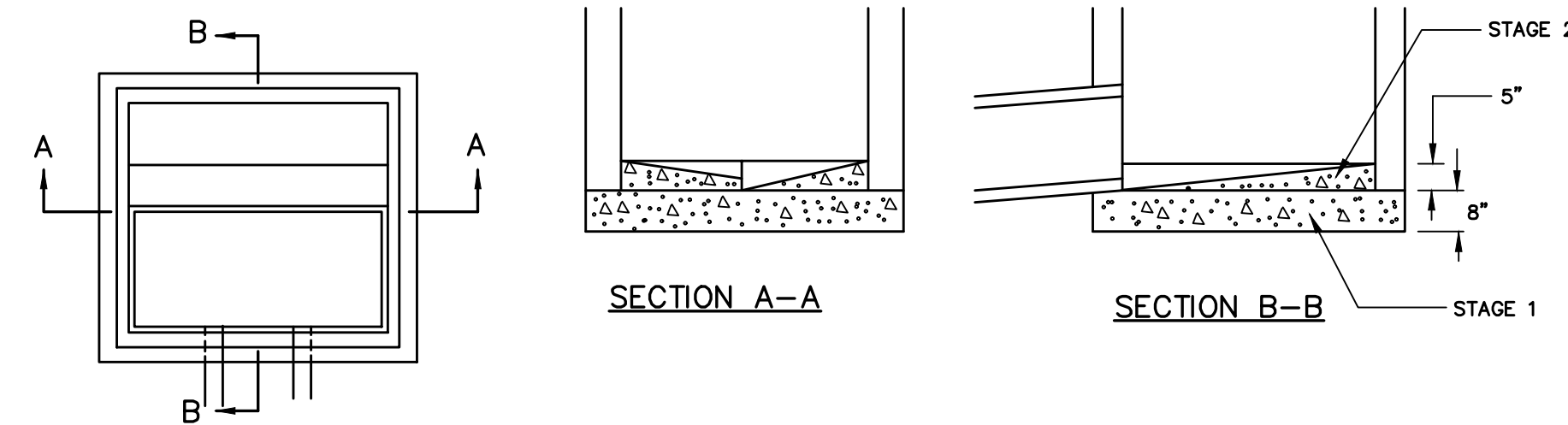
- THE FOLLOWING ITEMS OF WORK ARE INCLUDED UNDER THE PIPE ITEM UNLESS OTHERWISE NOTED:
- EXCAVATION, UNCLASSIFIED
 - RECYCLED CONCRETE AGGREGATE
 - FOUNDATION STONE BEDDING
 - SAWCUTTING
 - HOT MIX ASPHALT SURFACE COURSE
 - HOT MIX ASPHALT BASE COURSE
 - DENSE-GRADED AGGREGATE BASE COURSE
 - MAGNETIC LOCATOR TAPE
 - BYPASS PUMPING (IF REQUIRED)
 - DEWATERING (IF REQUIRED)
 - SHEETING (IF REQUIRED)
- PIPE TRENCH AND PAVEMENT REPAIR (HDPE PIPE)**
N.T.S.



HEAVY DUTY CAST IRON FRAME AND GRATE BY CAMPBELL FOUNDRY CO. PATTERN NO. 2815



INLET, TYPE LAWN
N.T.S.



- NOTE:
- FOUNDATION AND INVERT TO BE CONSTRUCTED IN TWO STAGES. THE TOP SURFACE OF STAGE 1 TO BE LEFT ROUGH.

DETAIL OF INVERT FOR INLET WITHOUT CONTINUOUS PIPE
N.T.S.

INLET NOTES

1. INLETS MAY BE CONSTRUCTED OF BRICK, CONCRETE, CONCRETE BLOCK OR PRECAST CONCRETE. WALLS SHALL BE 8" THICK IF BRICK AND 6" THICK IF CONCRETE, CONCRETE BLOCK OR PRECAST CONCRETE. INLET FOUNDATIONS AND INVERTS SHALL BE CLASS B CONCRETE.
2. CORBELLING OF INLET WALLS WILL BE PERMITTED AT THE RATE OF 1/2 INCH PER 8 INCHES OF HEIGHT; MAXIMUM CORBEL 6 INCHES PER WALL.
3. EXCEPT FOR INLETS TYPE A AND C, FOUNDATIONS AND INVERTS SHALL BE CONSTRUCTED IN TWO STAGES, AND THE BOTTOM OF THE FOOTING SHALL BE 8" BELOW THE OUTER WALL OF THE LOWEST PIPE IN THE INLET.
4. WHEN THE DEPTH OF AN INLET THAT IS NOT PRECAST EXCEEDS 10' AS MEASURED FROM TOP OF GRATE TO INVERT, WALLS BELOW A DEPTH OF 8" SHALL BE 12" THICK AND THE DEPTH OF FOUNDATION INCREASED TO 12". WHEN ROCK IS ENCOUNTERED THE DEPTH OF THE FOUNDATION SHALL NOT BE INCREASED.
5. WHEN THE DEPTH OF A PRECAST INLET EXCEEDS 10' AS MEASURED FROM TOP OF GRATE TO INVERT, THE FOUNDATION SHALL BE INCREASED TO 12". WHEN ROCK IS ENCOUNTERED THE DEPTH OF THE FOUNDATION SHALL NOT BE INCREASED.
6. INLET FOUNDATIONS SHALL BE PLACED ON A 6" THICK BED OF COARSE AGGREGATE SIZE NO. 57. THE COARSE AGGREGATE SHALL EXTEND 6" BEYOND THE HORIZONTAL LIMITS OF THE INLET FOUNDATION.
7. CASTINGS FOR PRECAST INLETS SHALL BE ADJUSTED TO GRADE WITH COURSES OF BRICK, AS REQUIRED, 12" MAXIMUM.
8. LADDER RUNGS SHALL BE CONSTRUCTED FACING TRAFFIC, 12" C TO C
- 9.

MINIMUM WALL REINFORCEMENT FOR PRECAST INLETS TYPES A, B, C, E, D-1, D-2, AND B MODIFIED:

DEPTH BELOW TOP OF GRATE	HORIZONTAL REINF.	VERTICAL REINF.	WALL THK.
0' TO 10'-0"	#13 @ 10" C.C.	#13 @ 18" C.C.	6"
10'-1" TO 15'-0"	#13 @ 8" C.C.	#13 @ 18" C.C.	6"
15'-1" TO 20'-0"	#13 @ 6" C.C.	#13 @ 18" C.C.	6"

REINFORCING SHOWN FOR PRECAST INLETS IS THE MINIMUM REQUIRED. ADDITIONAL REINFORCING FOR HANDLING IS THE RESPONSIBILITY OF THE CONTRACTOR.

ALTERNATE REINFORCEMENT

DEPTH BELOW TOP OF GRATE	REINFORCEMENT
0' TO 10'-0"	WWF 3 x 6 W6 WIRES SPACED AT 3" TO RUN HORIZONTAL IN ALL CASES.
10'-1" TO 15'-0"	WWF 3 x 6 W6 ADD #10 REINFORCEMENT STEEL @ 18" HORIZONTAL.
15'-1" TO 20'-0"	WWF 3 x 6 W6 ADD #10 REINFORCEMENT STEEL @ 9" HORIZONTAL OR ADD #13 REINFORCEMENT STEEL AT 15" HORIZONTAL.

10. DIMENSIONS, WEIGHTS, AND OTHER CRITERIA SHOWN ON THESE DETAILS ARE FOR CLASS 358 CAST IRON.

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09-19-2024 ISSUED FOR BID
03-29-2024 OWNER REVIEW

PROJECT NAME
LOADING DOCK ALTERNATIONS

AT L. HOWARD FOX STUDIO
THEATRE
MONTCLAIR STATE UNIVERSITY
MSU PROJECT #PR24C009

DRAWING NAME
CONSTRUCTION DETAILS

DRAWN BY: JIM PROJECT NO.: 22322
DATE: 03-25-2023 SCALE: AS NOTED
SHEET NUMBER

GENERAL NOTES:

- REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL ELECTRICAL REQUIREMENTS AND LIGHTING FIXTURE SCHEDULE.
- CONTRACTOR SHALL VISIT THE JOB SITE, REVIEW THE ARCHITECTURAL DRAWINGS AND BE RESPONSIBLE FOR REVIEWING A FULL SET OF BID DOCUMENTS TO MAKE HIMSELF AWARE OF THE TOTAL JOB BEFORE SUBMITTING HIS PRICE.
- VERIFY ALL EXISTING CONDITIONS IN THE FIELD AND INCLUDE IN BID THE PRICE OF ALL WORK REQUIRED TO ACCOMMODATE THE EXISTING INSTALLATION.
- ALL WORK SHALL BE INSTALLED CONCEALED, UNLESS OTHERWISE NOTED. BRANCH WIRING SHALL BE CONCEALED IN WALLS U.O.N.
- CONTRACTOR SHALL FIELD VERIFY DIMENSIONS OF FINISHED CONSTRUCTION PRIOR TO FABRICATION AND INSTALLATION OF FIXTURES AND EQUIPMENT.
- CONTRACTOR SHALL SUBMIT SAMPLES OF RECEPTACLES AND PLATES TO THE ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION.
- CONTRACTOR SHALL PROVIDE AND CONNECT ALL RACEWAYS AND WIRING FROM EQUIPMENT AND DEVICES TO THEIR SOURCE OF POWER. PROVIDE ALL REQUIRED CONDUITS, WIRING AND JUNCTION BOXES TO ENERGIZE EQUIPMENT AS INDICATED.
- AFTER HIS WORK IS COMPLETED, CONTRACTOR SHALL TEST THE ELECTRICAL DISTRIBUTION SYSTEM FOR SHORT CIRCUITS, LOOSE WIRING, ETC., TO THE SATISFACTION OF THE OWNER. ALL COSTS FOR THIS TEST SHALL BE BORNE BY THE CONTRACTOR.
- FOR EXACT LOCATIONS AND MOUNTING HEIGHTS OF ALL ELECTRICAL OUTLETS, SWITCHES AND LIGHTING FIXTURES SEE ARCHITECTURAL FLOOR, DETAILS AND ELEVATIONS.
- MOUNTING HEIGHTS OF EQUIPMENT AND DEVICES SHALL BE AS INDICATED ON THE ARCHITECTURAL DRAWINGS. WHERE MOUNTING HEIGHTS ARE NOT GIVEN ON THE ARCHITECTURAL DRAWINGS, UTILIZE THE FOLLOWING MOUNTING HEIGHTS UNLESS OTHERWISE NOTED (ALL DIMENSIONS TO CENTERLINE OF BOX):
 - RECEPTACLES (WALL MOUNTED) - 18" A.F.F.
 - LIGHTING SWITCHES AND CONTROLS - 48" A.F.F. TO TOP OF HANDLE
- MINIMUM RACEWAY SIZE SHALL BE 3/4" AND SHALL BE RUN PARALLEL TO BUILDING STRUCTURAL LINES. RACEWAYS SHALL NOT BE RUN HORIZONTALLY BELOW 8'-0" IN PARTITIONS. ALL EMPTY RACEWAYS SHALL BE FURNISHED WITH A 200 LB. TEST NYLON DRAG LINE.
- WHERE EQUIPMENT, LIGHTING FIXTURES AND WIRING DEVICES ARE SHOWN WITH CIRCUIT NUMBERS ONLY, THE MINIMUM BRANCH CIRCUITING REQUIREMENTS SHALL BE AS FOLLOWS, U.O.N.:
 - LIGHTING FIXTURES - 2#12, 1#12 GRD-3/2"C.
 - RECEPTACLES - 2#12, 1#12 GRD-3/2"C.
 - HOMERUNS TO PANELBOARDS SHALL CONTAIN NO MORE THAN (3) CIRCUITS. PROVIDE DEDICATED NEUTRAL FOR ALL LIGHTING AND OFFICE POWER CIRCUITS. NEUTRAL CONDUCTOR FOR MULTI-POLE CIRCUITS FEEDING FURNITURE SYSTEMS SHALL BE SIZED ONE TRADE SIZE LARGER THAN PHASE CONDUCTORS, MINIMUM #10 AWG (EXAMPLE: 3#12, 1#10N, 1#12GRD-3/2"C) AND UTILIZE MULTI-POLE CIRCUIT BREAKERS TO DISCONNECT ALL PHASE CONDUCTORS.
 - WHERE LIGHTING SWITCH INDICATIONS ARE NOT SHOWN, SWITCHES SHALL BE CONNECTED TO CONTROL ALL SWITCHED FIXTURES WITHIN THE CORRESPONDING SPACE.
- WIRE SIZES SHALL BE INCREASED TO COMPENSATE FOR VOLTAGE DROP AS FOLLOWS:
 - 120V CIRCUITS LONGER THAN 50' SHALL UTILIZE MIN. #10 AWG.
 - 120V CIRCUITS LONGER THAN 110' SHALL UTILIZE MIN. #8 AWG.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TEMPORARY LIGHT AND POWER TO INSURE THE SAFETY OF PERSONNEL AND POWER REQUIREMENTS OF THE VARIOUS TRADES. PROVIDE TEMPORARY LIGHT AND POWER FOR GENERAL BUILDING ACCESS.
- BARRIER FREE REQUIREMENTS OF NJAC 5.23-7.2 APPLY TO THIS INSTALLATION.

ELECTRICAL SPECIFICATIONS:

1 CODES AND STANDARDS

- ALL WORK SHALL BE SYSTEMATICALLY, CAREFULLY AND NEATLY PERFORMED AND SHALL CONFORM TO THE FOLLOWING STANDARDS:
 - THE 2021 INTERNATIONAL BUILDING CODE.
 - 2020 NATIONAL ELECTRICAL CODE
 - ASHRAE 90.1-2019
 - UNDERWRITERS LABORATORIES, INC (UL)
 - OSHA, AND ALL AGENCIES HAVING JURISDICTION

2 RACEWAYS

- ELECTRICAL METALLIC TUBING (EMT) SHALL CONFORM TO UL 797. FITTINGS SHALL BE GLAND AND RING COMPRESSION TYPE.
- FLEXIBLE METALLIC CONDUIT SHALL CONFORM TO UL 1. LIQUID TIGHT FLEXIBLE METAL CONDUIT SHALL CONFORM TO UL 360.
- ALL CONDUIT FITTINGS AND CONNECTORS SHALL BE STEEL WITH INSULATED THROATS. DIE-FORMED ZINC OR MALLEABLE IRON FITTINGS ARE NOT ACCEPTABLE. BUSHINGS SHALL BE PROVIDED AT ALL CONDUIT TERMINATIONS. BUSHINGS LARGER THAN 1" SHALL BE GROUNDING TYPE. PVC BUSHINGS MAY BE UTILIZED ONLY FOR 3/4" BRANCH CIRCUIT CONDUITS TERMINATING AT PANELBOARDS.
- MINIMUM RACEWAY SIZE SHALL BE 3/4". RACEWAYS SHALL BE RUN PARALLEL TO BUILDING STRUCTURAL LINES. RACEWAYS SHALL NOT BE RUN HORIZONTALLY BELOW 8'-0" AFF IN PARTITIONS. ALL EMPTY RACEWAYS SHALL BE FURNISHED WITH A 200LB TEST NYLON DRAG LINE.
- ALL WIRING BETWEEN JUNCTION BOXES AND FOR CIRCUIT HOMERUNS BETWEEN FIRST OUTLET SERVED BY THE BRANCH CIRCUIT AND THE PANELBOARD SHALL BE RUN IN EMT OR RGS AS REQUIRED.
- RACEWAY UTILIZATION SHALL BE AS FOLLOWS:
 - RIGID GALVANIZED STEEL (RGS) - FIRE ALARM SYSTEM WIRING WHERE REQUIRED BY CODE. BURIED IN CONCRETE OR DIRECT CONTACT WITH EARTH WHERE PROTECTED BY CORROSION PROTECTION AND JUDGED SUITABLE FOR THE CONDITION.
 - ELECTRICAL METALLIC TUBING (EMT) - INTERIOR CONCEALED AND EXPOSED LOCATIONS, (EXCEPT AS NOTED ABOVE) INTERIOR COMMUNICATIONS WIRING. EMT FITTINGS SHALL BE STEEL. CONNECTORS SHALL HAVE INSULATED THROATS.
 - FLEXIBLE METALLIC CONDUIT - FINAL CONNECTIONS TO LIGHTING FIXTURES IN INTERIOR LOCATIONS (MIN. LENGTH 18", MAX. LENGTH 6'-0"), WHERE APPROVED BY THE ENGINEER.
 - LIQUID TIGHT FLEXIBLE CONDUIT - FINAL CONNECTIONS TO MOTORS MECHANICAL EQUIPMENT AND SYSTEMS
 - RIGID NONMETALLIC CONDUIT - WET LOCATIONS, INSTALLED AND EQUIPPED SO AS TO PREVENT WATER FROM ENTERING CONDUIT. ALL SUPPORTS, STRAPS, SCREWS, ETC., SHALL BE OF CORROSION RESISTANT MATERIAL OR PROTECTED BY CORROSION RESISTANT MATERIAL. DRY AND DAMP LOCATIONS. UNDERGROUND INSTALLATIONS.

3 WIRES, CABLES, SPLICES AND TERMINATIONS

- POWER AND CONTROL WIRING SHALL BE COPPER, MINIMUM 98% CONDUCTIVITY, WITH TYPE THHN/THWN INSULATION RATED 600 VOLTS, 90°C. MINIMUM WIRE SIZE SHALL BE #12 AWG FOR POWER AND LIGHTING CIRCUITS AND #14 AWG FOR CONTROL CIRCUITS. CONDUCTORS SHALL BE SOLID FOR WIRE SIZED #10 AWG AND SMALLER AND STRANDED FOR WIRE SIZES #8 AWG AND LARGER.
- METAL CLAD CABLE SHALL BE 90°C RATED CODE TYPE ACTHH WITH A SEPARATE GREEN INSULATED GROUND CONDUCTOR IN ACCORDANCE WITH UL 4. JACKET SHALL BE GALVANIZED STEEL ARMOR.
- CONDUCTORS SHALL BE COLOR CODED AS FOLLOWS:

208/120V	PHASE	480/277V
BLACK	A	BROWN
RED	B	ORANGE
BLUE	C	YELLOW
WHITE	NEUTRAL	GRAY
GREEN	GROUND	GREEN
WHITE WITH TRACER	NEUTRAL FOR GFI CIRCUIT	

ELECTRICAL SYMBOLS LIST	
POWER	ABBREVIATIONS
	CONDUIT RUN CONCEALED IN HUNG CEILING SPACE AND WALLS.
	CONDUIT TURNING UP
	CONDUIT TURNING DOWN
	FLUSH TYPE PANELBOARD
	SURFACE TYPE PANELBOARD
	FUSED DISCONNECT SWITCH WITH EQUIPMENT CONNECTION. HORSEPOWER RATING AS REQUIRED BY MOTOR LOAD. SWITCH RATING SAME AS, OR NEXT STANDARD SIZE HIGHER THAN UPSTREAM CIRCUIT PROTECTIVE DEVICE AND FUSE RATING SAME AS UPSTREAM CIRCUIT PROTECTIVE DEVICE U.O.N. 'WP' INDICATES WEATHERPROOF ENCLOSURE, OTHERWISE ENCLOSURE IS NEMA-1.
	UNFUSED DISCONNECT SWITCH WITH EQUIPMENT CONNECTION. HORSEPOWER RATING AS REQUIRED BY MOTOR LOAD. RATING SAME AS, OR NEXT STANDARD SIZE HIGHER THAN UPSTREAM CIRCUIT PROTECTIVE DEVICE U.O.N. 'WP' INDICATES WEATHERPROOF ENCLOSURE, OTHERWISE ENCLOSURE IS NEMA-1.
WIRING DEVICES	
	DUPLEX RECEPTACLE, 20A, 125V, 2P, 3W, GROUNDED NEMA CONFIG. 5-20R
	DUPLEX GFI TYPE RECEPTACLE, 20A, 125V, 2P, 3W, GROUNDED NEMA CONFIG. 5-20R
	DUPLEX RECEPTACLE 20A, 125V, 2P, 3W, GROUNDED NEMA CONFIG. 5-20R (DEDICATED CIRCUIT)
	CEILING MOUNTED JUNCTION / SPLICE BOX WITH EQUIPMENT CONNECTION. SIZE AS REQUIRED
	FLOOR MOUNTED JUNCTION / SPLICE BOX WITH EQUIPMENT CONNECTION. SIZE AS REQUIRED
	WALL MOUNTED JUNCTION/SPLICE BOX WITH EQUIPMENT CONNECTION. SIZE AS REQUIRED
LIGHTING	
	OUTLET BOX AND LIGHTING FIXTURE: 'A' - DENOTES FIXTURE TYPE 'Z' - DENOTES CIRCUIT NUMBER 'a' - DENOTES SWITCH CONTROL 'NL' - DENOTES UNSWITCHED NIGHT LIGHT 'EM' - EMERGENCY FIXTURE WITH INTEGRAL OR REMOTE EMERGENCY BATTERY PACK
	CEILING, WALL EXIT LIGHT WITH INTEGRAL BATTERY PACK - DIRECTIONAL ARROWS AS INDICATED - SHADED AREA DENOTES FACE(S) UPON WHICH 'EXIT' APPEARS
	SELF CONTAINED EMERGENCY LIGHTING BATTERY PACK WITH SEALED BEAM HEADS
	+ SPECIAL HEIGHT - REFER TO ARCHITECTURAL DRAWINGS
	A AMPERE(S)
	AC ABOVE COUNTER / ALTERNATING CURRENT
	AFF ABOVE FINISHED FLOOR
	AFG ABOVE FINISHED GRADE
	AIC AMPERES INTERRUPTING CURRENT
	ATC AUTOMATIC TEMPERATURE CONTROL
	ATS AUTOMATIC TRANSFER SWITCH
	BAS, BMS BUILDING AUTOMATION SYSTEM, BUILDING MANAGEMENT SYSTEM
	BFG BELOW FINISHED GRADE
	BLDG BUILDING
	C CONDUIT
	CB CIRCUIT BREAKER
	☐ CENTERLINE
	CATV CABLE TELEVISION
	CCTV CLOSED CIRCUIT TV
	CLG CEILING
	CH COUNTER HEIGHT
	CKT(S) CIRCUIT(S)
	CU COPPER
	D DIMMER SWITCH
	DIA DIAMETER
	DP DISTRIBUTION PANELBOARD
	DW DISHWASHER
	DWG DRAWING
	EC EMPTY CONDUIT
	E/EM EMERGENCY
	EMT ELECTRICAL METALLIC TUBING
	ER EXISTING TO BE REMOVED
	EX/EXIST EXISTING TO REMAIN
	EWC ELECTRICAL WATER COOLER
	F FUSE/DEGREES FAHRENHEIT
	FA FIRE ALARM
	FL FLOOR
	GEC GROUNDING ELECTRODE CONDUCTOR
	G/GRD/GND GROUND
	GFI GROUND FAULT INTERRUPTER
	HC HUNG CEILING
	HD HAND DRYER
	HP HORSE POWER
	HZ HERTZ
	ICCB INSULATED CASE CIRCUIT BREAKER
	IG ISOLATED GROUND
	J/JB JUNCTION BOX
	IMC INTERMEDIATE METALLIC CONDUIT
	KCMIL THOUSAND CIRCULAR MILS
	KV KILOVOLTS
	KVA KILOVOLT-AMPERES
	KW KILOWATTS
	LTG LIGHTING
	LV LOW VOLTAGE
	MCB MAIN CIRCUIT BREAKER
	MCCB MOLDED CASE CIRCUIT BREAKER
	MLO MAIN LUGS ONLY
	MTD MOUNTED
	MW MEGA WATTS
	N NEUTRAL
	NIC NOT IN CONTRACT
	NTS NOT TO SCALE
	P POLE(S)
	PH PHASE
	PNL PANEL
	R RELOCATED
	RR EXISTING TO BE REMOVED AND RELOCATED
	STD STANDARD
	SW SWITCH
	TYP TYPICAL
	UNF/SW UNFUSED SWITCH
	UNLESS OTHERWISE NOTED
	V VOLTS
	VA VOLT-AMPERES
	W WIRE, WATTS
	WP WEATHERPROOF

4 WIRING DEVICES

- WIRING DEVICES SHALL BE DECORA STYLE WITH NEMA CONFIGURATIONS AS INDICATED ON THE DRAWINGS. COLOR OF DEVICES SHALL BE AS SELECTED BY THE ARCHITECT. WIRING DEVICES SHALL BE MANUFACTURED BY ARROW-HART, HUBBELL, LEVITON, PASS & SEYMOUR OR APPROVED EQUAL.
- FACEPLATES SHALL BE WHITE, NYLON TYPE OR OTHERWISE SPECIFIED BY THE ARCHITECT. FACEPLATES SHALL BE FURNISHED FOR ALL LOW VOLTAGE OUTLETS AND SHALL BE CONFIGURED TO SUIT THE SYSTEM SUPPLIERS' REQUIREMENTS.
- NEW, OR NEW AND EXISTING DEVICES MOUNTED ADJACENT TO EACH OTHER SHALL BE FURNISHED WITH A COMMON FACEPLATE AND BE GANGED IN ONE BOX.

5 BOXES

- OUTLET, PULL AND JUNCTION BOXES SHALL BE FABRICATED FROM STEEL AND CONFORM TO UL 50, UL 514 AND NEMA OS1. BOXES FOR INTERIOR LOCATIONS SHALL BE CODE GAUGE, GALVANIZED SHEET STEEL. BOXES FOR MECHANICAL ROOMS SHALL BE CAST STEEL WITH GASKETED COVERS.
- BOXES SHALL CONTAIN SUITABLE KNOCKOUTS. BARRIERS SHALL BE FURNISHED AS REQUIRED BY CODE AND TO SEPARATE SWITCHES FOR 277 VOLT CIRCUITS ON DIFFERENT PHASES.
- BOXES SHALL BE SIZED AS REQUIRED BY CODE FOR NUMBER AND GAUGE OF CONDUCTORS THEREIN, EXCEPT WHERE NOTED TO BE LARGER. THE MINIMUM BOX SHALL BE 4" SQUARE BY 1-1/2" DEEP. COVERS GREATER THAN 50LB SHALL BE DIVIDED INTO MULTIPLE SECTIONS.
- WIREWAYS AND AUXILIARY GUTTERS SHALL BE TWO-PIECE STEEL CONSTRUCTION WITH ANSI 61 GRAY ENAMEL FINISH. COVERS SHALL BE COMBINATION HINGED AND SCREW-ON TYPE. HOUSINGS SHALL HAVE REGULARLY SPACED KNOCKOUTS FOR CONDUIT ENTRY. WIREWAYS SHALL BE MANUFACTURED BY SQUARE D OR APPROVED EQUAL. PROVIDE ALL END PIECES, CONNECTORS AND REQUIRED ACCESSORIES.

6 GROUNDING

- THE DISTRIBUTION SYSTEM SHALL BE COMPLETELY AND PROPERLY GROUNDED USING APPROVED FITTINGS. SEPARATE INSULATED GROUND CONDUCTORS SHALL BE RUN WITH ALL FEEDERS WHERE INDICATED. RECEPTACLE BRANCH CIRCUITS AND FLEXIBLE CONNECTIONS TO LIGHTING FIXTURES AND EQUIPMENT.
- METAL RACEWAYS, METAL ENCLOSURES OF ELECTRICAL DEVICES AND OTHER EQUIPMENT SHALL BE COMPLETELY GROUNDED IN AN APPROVED MANNER. PROPER HARDWARE REQUIRED FOR A COMPLETE GROUNDING SYSTEM SHALL BE INSTALLED BY THE CONTRACTOR.

7 SEALING OF PENETRATIONS

- ALL PENETRATIONS OF FIRE RATED WALLS, FLOORS OR CEILINGS SHALL BE SEALED WITH APPROVED MATERIAL TO PROVIDE SAME RATING AS FLOOR, WALL OR CEILING ASSEMBLY. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS OF FIRE RATED PARTITIONS.

LIGHTING FIXTURE SCHEDULE					
FIXTURE TYPE	DESCRIPTION	MANUFACTURER CAT NO.	VOLTAGE	LAMPS	INPUT WATTS
				(#) WATTS, TYPE	
S1	LED STEP LIGHT	LITHONIA LIGHTING	120VOLT	LED	9

NOTES:

- LIGHTING FIXTURE SCHEDULE SHOWN ON ENGINEER'S DRAWINGS ARE FOR INFORMATION PURPOSES ONLY. LIGHTING FIXTURES SHOWN ARE THOSE SELECTED BY ARCHITECT. ENGINEER SHALL NOT BE RESPONSIBLE FOR INFORMATION SHOWN RELATED TO FIXTURE SELECTION AND OVERALL LIGHTING DESIGN. ARCHITECT SHALL CONFIRM EXACT STYLES, COLORS, FINISHES AND MODEL NUMBERS OF ALL LIGHT FIXTURES.
- COORDINATE LOCATION OF REMOTE DRIVERS IN FIELD. LOCATE DRIVERS WITHIN ACCESSIBLE SPACE.

LEGEND	
	EXISTING TO REMOVE
	NEW ELECTRICAL WORK / DEVICES
	EXISTING TO REMAIN

ELECTRICAL DRAWING LIST:

- | | |
|------|--|
| E0-1 | GENERAL NOTES, SYMBOL LIST & ABBREVIATIONS |
| E1-1 | ELECTRICAL LOADING DOCK PLAN |

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09-19-2024 ISSUED FOR BID
03-29-2024 OWNER REVIEW

DATE ISSUED FOR

PROJECT NAME

LOADING DOCK ALTERATIONS
AT L. HOWARD FOX STUDIO
THEATRE
MONTCLAIR STATE UNIVERSITY

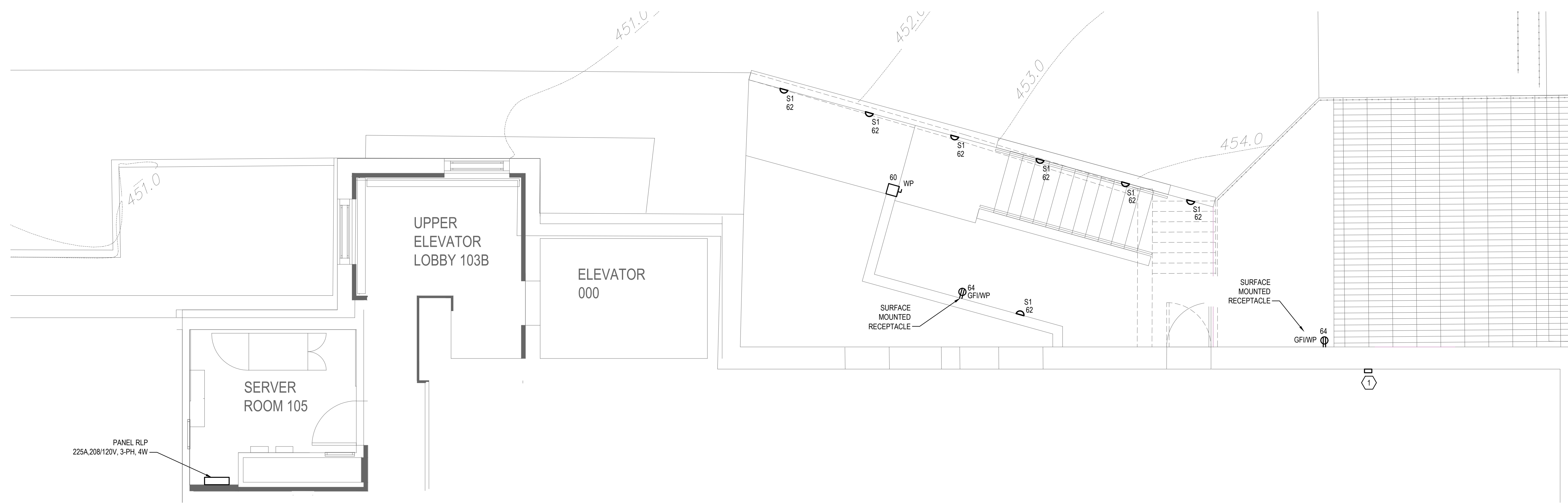
MSU PROJECT #PR24C009
DRAWING NUMBER

ELECTRICAL: GENERAL NOTES, SYMBOL LIST & ABBREVIATIONS

DRAWN BY: SC PROJECT NO.: 2322
DATE: 03-20-2023 SCALE: AS NOTED

SHEET NUMBER

E0-1



1 **LOADING DOCK PLAN**
SCALE: 1/4"=1'-0"
0 4 8 FEET

LOCATION: SERVER ROOM 105		REMARKS:		PANEL DESIGNATION:					
SERVICE: 208 / 120 VOLTS, 3 PHASE, 4 WIRE		A.I.C. RATINGS NEEDS TO BE CONFIRMED		RLP					
MANS: 225 AMPS MAIN OVERCURRENT PROTECTION: MLO									
GROUNDING: GROUND BUS: YES ISOLATED GROUND BUS: NO									
MOUNTING: SURFACE		SCCR RATING: 22 kVAC		NEW					
CKT NO.	TRIP AMPS	DESCRIPTION OF LOAD	LOAD (kVA)	PER PHASE (kVA)	LOAD (kVA)	DESCRIPTION OF LOAD	REMARKS	TRIP NO.	CKT NO.
1	201	LIGHTING LOBBY	1.2	1.8	0.6	LOUNGE PENDANT		201	2
3	201	LIGHTING LOBBY	0.9	1.5	0.6	LAB DEV AREA EGG PENDANT		201	4
5	201	LOUNGE & LAB DEV TRACK	0.3	1.8	1.3	VR POD DMX LTG		201	6
7	201	LOUNGE CHECK-IN/LAB DEV AREA LTG	0.7	1.9	1.2	CLASSROOM R1 LTG FIXTURES		201	8
9	201	IMMERSIVE CLASSROOM LTG	1.3	3.0	1.7	IMMERSIVE CLASSROOM LTG		201	10
11	201	IMMERSIVE CLASSROOM LTG	0.4	2.6	2.2	IT SERVER RACK (2#10, 1#10G IN 3/4")		302	12
13	302	IT SERVER RACK (2#10, 1#10G IN 3/4")	2.2	4.4	2.2		X	X	14
15	X	X	2.2	4.4	2.2	IT SERVER RACK (2#10, 1#10G IN 3/4")		302	16
17	302	IT SERVER RACK (2#10, 1#10G IN 3/4")	2.2	4.4	2.2		X	X	18
19	X	X	2.2	2.9	0.7	IT ROOM REC		201	20
21	201	ACCESS PANEL, DOOR M/L LOCK, ELEC STRIKE	0.3	0.5	0.2	SIGNAGE		201	22
23	201	LOUNGE CHECK IN AREA REC	1.1	1.4	0.4	LAB DEV AREA FLOOR REC		201	24
25	201	LAB DEV AREA FLOOR REC	0.4	1.1	0.7	LAB DEV AREA REC		201	26
27	201	CONVENIENCE REC	0.9	1.6	0.7	SPECIAL EFFECT POWER REC POD		201	28
29	203	POD RACK POWER	1.4	2.2	0.7	SPECIAL EFFECT POWER REC POD		201	30
31	X	X	1.4	2.2	0.7	SPECIAL EFFECT POWER REC POD		201	32
33	X	X	1.4	2.2	0.7	SPECIAL EFFECT POWER REC POD		201	34
35	201	CABINET RACK POWER	0.4	1.4	1.1	IMMERSIVE CLASSROOM FLOOR REC		201	36
37	201	UPPER CABINET RACK POWER	0.4	1.1	0.7	IMMERSIVE CLASSROOM FLOOR REC		201	38
39	201	IMMERSIVE CLASSROOM GENERAL REC	0.7	1.8	1.1	IMMERSIVE CLASSROOM FLOOR REC		201	40
41	201	IMMERSIVE CLASSROOM TV	0.2	1.3	1.1	IMMERSIVE CLASSROOM FLOOR REC		201	42
43	201	IT ROOM DEDICATED REC	0.2	0.9	0.7	IMMERSIVE CLASSROOM FLOOR REC		201	44
45	201	ECHO LIGHTING CONTROL PANEL	0.2	0.9	0.7	IMMERSIVE CLASSROOM FLOOR REC		201	46
47	201	LOBBY GENERAL REC	0.7	1.6	0.9	WATER COOLER/RESTROOM REC		201	48
49	201	LOBBY GENERAL REC	0.7	1.3	0.6	IMMERSIVE CLASSROOM LTG		201	50
51	201	WVA-4-1.2	0.5	1.0	0.6	E-1		201	52
53	402	CU-1AC-1 (3#8, 1#10G IN 1")	2.3	3.8	1.5	ECH-1		202	54
55	X	X	2.3	3.8	1.5	X	X	X	56
57	201	CONDENSATE PUMP	0.2	0.8	0.6	EMERGENCY LIGHTING		201	58
59	201	EMERGENCY LIGHTING	0.5	1.9	1.4	EXTERIOR PLATFORM LIFT-LOADING DOCK		201	60
61	201	HAND DRYER	1.0	1.1	0.1	EXTERIOR STAR LOADING DOCK LTG		201	62
63	201	ROOF GFI REC	0.2	0.5	0.4	OUTDOOR GFIWP REC		201	64
65	201	NVA-3-1, 3-2	0.5	0.5	0.0	SPARE		201	66
67	201	SPARE	0.0	0.0	0.0	SPARE		201	68
69	201	SPARE	0.0	0.0	0.0	SPARE		201	70
71	201	SPARE	0.0	0.0	0.0	SPARE		201	72
73	201	SPARE	0.0	0.0	0.0	SPARE		201	74
TOTAL LTG		12.0 kVA	1.00	12.0 kVA	TOTAL DEMAND		62.5 kVA	X	1.25
TOTAL HVAC		7.9 kVA	1.00	7.9 kVA	TOTAL LOAD		78.2 kVA		217 AMPS
TOTAL REC		35.8 kVA	Per NEC	22.9 kVA	TOTAL LOAD		78.2 kVA		
TOTAL HVAC		5.6 kVA	1.00	5.6 kVA	TOTAL LOAD		78.2 kVA		
TOTAL HTG		3.0 kVA	1.00	3.0 kVA	TOTAL LOAD		78.2 kVA		

DRAWING NOTES

- REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS AND MOUNTING HEIGHTS OF ALL ELECTRICAL DEVICES.
- ALL CIRCUITS SHOWN SHALL BE WIRED TO PANEL 'RLP' U.O.N.

KEYED NOTES

- PROVIDE TORK DGM100A-Y 24HOUR/7-DAY ASTRONOMIC DIGITAL TIMER, 1 CHANNEL, 120V FOR LED STEP LIGHTING CONTROL. PROVIDE TORK EPC-A PHOTO SENSOR ON EXTERIOR WALL AS SHOWN.

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09-19-2024	ISSUED FOR BID
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PROJECT NAME
LOADING DOCK ALTERATIONS
AT L. HOWARD FOX STUDIO THEATRE
MONTCLAIR STATE UNIVERSITY

MSU PROJECT #PR24C009
DRAWING NUMBER

ELECTRICAL: LOADING DOCK PLAN

DRAWN BY: SC	PROJECT NO.: 2232
DATE: 03-20-2023	SCALE: AS NOTED

E1-1

DESIGN CODE REFERENCES

- 1. THE STRUCTURE IS DESIGNED IN ACCORDANCE WITH THE FOLLOWING BUILDING AND DESIGN CODES
- 2021 INTERNATIONAL BUILDING CODE (IBC 2021)
- MINIMUM DESIGN LOADS AND ASSOCIATED CRITERIA FOR BUILDING AND OTHER STRUCTURES (ASCE7-16 WITH SUPPLEMENT 1)
- BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE (ACI 318-19)
- SPECIFICATIONS FOR STRUCTURAL CONCRETE (ACI 301-16)

GENERAL CONSTRUCTION NOTES

- 1. THE STRUCTURE IS DESIGNED IN ACCORDANCE WITH THE 2021 INTERNATIONAL BUILDING CODE (N.J. EDITION).
2. THE STRUCTURE HAS BEEN ANALYZED AND DESIGNED TO WITHSTAND GRAVITY LOADS IN ACCORDANCE WITH THE REQUIREMENTS SPECIFIED IN SECTION 1602.0 OF THE INTERNATIONAL BUILDING CODE. REFER TO THE "DESIGN LOAD SCHEDULE" FOR ALL DESIGN CRITERIA.
3. THE STRUCTURE HAS BEEN ANALYZED AND DESIGNED TO WITHSTAND WIND PRESSURES IN ACCORDANCE WITH THE REQUIREMENTS SPECIFIED IN SECTION 1609.0 OF THE INTERNATIONAL BUILDING CODE. REFER TO THE "LATERAL LOAD DESIGN SCHEDULE" FOR ALL DESIGN CRITERIA.
4. THE STRUCTURE HAS BEEN ANALYZED FOR SEISMIC LOADS AND RESISTANCE IN ACCORDANCE WITH THE REQUIREMENTS SPECIFIED IN SECTION 1613.0 OF THE INTERNATIONAL BUILDING CODE. REFER TO THE "LATERAL LOAD DESIGN SCHEDULE" FOR ALL DESIGN CRITERIA.
5. WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE "2021 INTERNATIONAL BUILDING CODE" AND ALL FEDERAL, STATE AND CITY LAWS, BYLAWS, ORDINANCES AND REGULATIONS IN ANY MANNER AFFECTING THE CONDUCT OF THIS WORK AS WELL AS ALL ORDERS OR DECREES WHICH HAVE BEEN PROMULGATED OR ENACTED BY ANY LEGAL BODIES OR TRIBUNALS HAVING AUTHORITY OR JURISDICTION OVER THE WORK, MATERIALS, EMPLOYEES OR CONTRACT.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING SAFETY OF ALL PERSONNEL ON THE JOBSITE. GUIDELINES FOR CONSTRUCTION SAFETY SHALL BE IN ACCORDANCE WITH, BUT NOT LIMITED TO, THE CONSTRUCTION INDUSTRY OSHA SAFETY AND HEALTH STANDARDS (1926 STANDARDS), AND ANY LOCAL ORDINANCES OR CODES WHICH MAY BE APPLICABLE.
7. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE ARCHITECTURAL AND MECHANICAL DRAWINGS, AS WELL AS ALL SPECIFICATIONS. IF THERE IS A DISCREPANCY BETWEEN DRAWINGS, IT IS THE CONTRACTORS RESPONSIBILITY TO NOTIFY THE ARCHITECT PRIOR TO PERFORMING WORK.
8. IN CASE OF CONFLICT BETWEEN THE GENERAL NOTES, SPECIFICATIONS AND DETAILS, THE MOST RIGID REQUIREMENTS SHALL GOVERN.
9. DO NOT SCALE DRAWINGS TO OBTAIN DIMENSIONAL INFORMATION.
10. SEE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR WATER/DAMP/PROOFING AND FIREPROOFING ASSEMBLIES.
11. SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS OF MASONRY AND DRYWALL NON-LOAD BEARING PARTITIONS. PROVIDE SLIP CONNECTION THAT ALLOW VERTICAL MOVEMENT AT THE TOP OF ALL SUCH PARTITIONS. CONNECTIONS SHALL BE DESIGNED TO LATERALLY SUPPORT THE TOP OF THE WALLS FOR THE CODE-REQUIRED LOAD.
12. ALL COSTS OF INVESTIGATION AND/OR REDESIGN DUE TO IMPROPER INSTALLATION OF STRUCTURAL ELEMENTS BY THE CONTRACTOR OR OTHER ITEMS NOT IN CONFORMANCE WITH THE CONTRACT DOCUMENTS SHALL BE AT THE CONTRACTORS EXPENSE.
13. THE CONTRACTOR SHALL COORDINATE PRINCIPAL OPENINGS (SLEEVES, CURBS, INSERTS,SHAFTS, ETC.) IN THE STRUCTURE AS INDICATED ON THE CONTRACT DOCUMENTS, WHICH INCLUDE BUT ARE NOT LIMITED TO ARCHITECTURAL, MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS. THE LOCATION OF SLEEVES OR OPENINGS IN STRUCTURAL MEMBERS NOT INDICATED ON THE STRUCTURAL DRAWINGS SHALL BE APPROVED BY THE STRUCTURAL ENGINEER BEFORE INSTALLATION.
14. THE CONTRACTOR SHALL PROVIDE BRACINGS AS REQUIRED TO MAINTAIN PLUMBNESS AND STABILITY DURING CONSTRUCTION OF BOTH NEW AND EXISTING STRUCTURE.
15. METHODS, PROCEDURES AND THE SEQUENCES (OTHER THAN THAT NOTED ON THE DRAWINGS) OF CONSTRUCTION ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO MAINTAIN AND ENSURE INTEGRITY OF THE STRUCTURE AT ALL STAGES OF CONSTRUCTION AND COORDINATION OF WORK WITH MECHANICAL AND ELECTRICAL WORK.
16. AT ALL TIMES THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE CONDITIONS OF THE JOBSITE INCLUDING SAFETY OF PERSONS AND PROPERTY, THE ARCHITECTS OR ENGINEERS PRESENCE OR REVIEW OF WORK DOES NOT INCLUDE THE ADEQUACY OF THE CONTRACTORS MEANS OR METHODS OF CONSTRUCTION.
17. SHORING, BRACING AND PROTECTION OF EXISTING ADJACENT STRUCTURES (INCLUDING STREETS, BUILDINGS, AND STRUCTURES) DURING CONSTRUCTION IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
18. WORK NOT INDICATED ON A PART OF THE DRAWINGS BUT REASONABLY IMPLIED TO BE SIMILAR TO THAT SHOWN AT CORRESPONDING PLACES SHALL BE PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL COST.
19. MINOR DETAILS OR INCIDENTAL ITEMS NOT SHOWN OR SPECIFICALLY INDICATED ON DRAWINGS, BUT NECESSARY FOR A PROPER AND COMPLETE INSTALLATION SHALL BE PROVIDED AS REQUIRED SUCH AS MISCELLANEOUS WOOD OR COLD FORMED STEEL BLOCKING, FRAMING MEMBERS, ANCHORS, FASTENERS, ETC.

PERFORMANCE ASSEMBLIES/ STRUCTURAL COMPONENT DESIGN SUBMITTALS

- 1. WHEN APPLICABLE, THE CONTRACTOR SHALL SUBMIT, FOR REVIEW, DRAWINGS AND CALCULATIONS FOR ALL PERFORMANCE ASSEMBLIES / STRUCTURAL COMPONENTS IDENTIFIED IN THE GENERAL NOTES AND LISTED BELOW. THE DESIGN OF THESE ASSEMBLIES / ELEMENTS SHALL BE PERFORMED BY LICENSED ENGINEER RETAINED BY THE CONTRACTOR. ALL SUBMITTALS SHALL BE SIGNED AND SEALED BY ENGINEERS LICENSED IN THE STATE OF THE PROJECT'S JURISDICTION. REVIEW SHALL BE FOR GENERAL CONFORMANCE WITH THE PROJECT REQUIREMENTS AS INDICATED ON THE DRAWINGS AND IN THE GENERAL NOTES.
A. METAL STAIRS, RAILINGS, GUARDRAILS, AND LADDERS: DESIGN SHALL TAKE INTO ACCOUNT ALL VERTICAL AND LATERAL LOADS REQUIRED BY APPLICABLE BUILDING CODES. ALL CONNECTIONS TO BUILDING STRUCTURE SHALL CONCENTRICALLY LOAD FRAMING MEMBERS WHERE EVER POSSIBLE. WHERE ECCENTRIC CONNECTIONS TO STRUCTURE ARE NECESSARY SUPPLEMENTARY FRAMING MAY BE REQUIRED TO STRENGTH MEMBERS. ANY ADDITIONAL FRAMING IDENTIFIED BY E.O.R. DURING SHOP DRAWING REVIEW SHALL BE ADDED TO STRUCTURE AT NO ADDITIONAL COST TO OWNER. HANDRAILS / GUARDRAILS SHALL BE DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF IBC SECTION 1607.0.

SHOP DRAWINGS

- 1. SHOP DRAWINGS SHALL BE SUBMITTED FOR ALL STRUCTURAL COMPONENTS. SUBMISSIONS TO DESIGN PROFESSIONALS SHALL INCLUDE, BUT ARE NOT LIMITED TO THE ITEMS INDICATED IN THE SHOP DRAWING SUBMITTAL SCHEDULE.
2. SHOP DRAWINGS SHALL BEAR THE CONTRACTORS STAMP OF APPROVAL WHICH SHALL CONSTITUTE CERTIFICATION THAT THE CONTRACTOR HAS VERIFIED ALL CONSTRUCTION CRITERIA, MATERIALS, AND SIMILAR DATA AND HAS CHECKED EACH DRAWING FOR COMPLETENESS, COORDINATION, AND COMPLIANCE WITH THE CONTRACT DOCUMENTS.
3. ANY SUBMISSION INDICATED TO INCLUDE SIGNED & SEALED CALCULATIONS AND DO NOT MEET MINIMUM DESIGN / SUBMISSION REQUIREMENTS SHALL BE IMMEDIATELY REJECTED.
4. ALL SUBMITTALS SHALL INDICATE THE ISSUE DATE OF STRUCTURAL DRAWINGS UTILIZED WHEN PREPARING SUBMITTAL. IF CONTRACT DOCUMENT DATE IS NOT CURRENT, SUBMITTAL SHALL BE IMMEDIATELY REJECTED.
5. ALL UPDATES / CHANGES TO SUBMITTALS AS A PART OF RESUBMISSION SHALL BE BUBBLED. ANY RESUBMISSION WITHOUT REVISION BUBBLES SHALL BE IMMEDIATELY REJECTED.
6. IT IS THE FABRICATOR & CONTRACTOR RESPONSIBILITY TO VERIFY ALL DIMENSIONS ARE IN ACCORDANCE WITH CONTRACT DOCUMENTS.
7. ANY CHANGES, SUBSTITUTIONS, OR DEVIATIONS FROM CONTRACT DOCUMENTS SHALL BE BUBBLED BY MANUFACTURER OR FABRICATOR. ANY OF THE AFOREMENTIONED WHICH ARE NOT BUBBLED OR FLAGGED BY SUBMITTING PARTIES SHALL BE CONSIDERED NOT APPROVED AFTER ENGINEERS REVIEW, UNLESS NOTED ACCORDINGLY.
8. THE ENGINEER HAS THE RIGHT TO APPROVE OR DISAPPROVE ANY CHANGES TO CONTRACT DOCUMENTS AT ANYTIME BEFORE OR AFTER SHOP DRAWING REVIEW. ANY REPRODUCTION OF THE ORIGINAL STRUCTURAL DOCUMENTS ON THE SHOP DRAWINGS IS PROHIBITED AND SHALL BE IMMEDIATELY REJECTED.
9. THE SHOP DRAWINGS DO NOT REPLACE THE CONTRACT DOCUMENTS. ITEMS OMITTED OR SHOWN INCORRECTLY AND ARE NOT FLAGGED BY THE STRUCTURAL ENGINEER OR ARCHITECT ARE NOT TO BE CONSIDERED CHANGES TO CONTRACT DOCUMENTS. IT IS THE CONTRACTORS RESPONSIBILITY TO MAKE SURE ITEMS ARE CONSTRUCTED TO CONTRACT DOCUMENTS.
10. THE ADEQUACY OF ENGINEERING DESIGNS AND LAYOUT PERFORMED BY OTHERS RESTS WITH THE DESIGNING OR SUBMITTING PARTY.
11. REVIEWING IS INTENDED ONLY AS AN AID TO THE CONTRACTOR IN OBTAINING CORRECT SHOP DRAWINGS. RESPONSIBILITY FOR CORRECTNESS SHALL REST WITH THE FABRICATOR / CONTRACTOR.
12. SHOP DRAWINGS FOR ALL STRUCTURAL MATERIALS TO BE SUBMITTED TO ARCHITECT FOR REVIEW PRIOR TO THE START OF FABRICATION OR COMMENCEMENT OF WORK. REVIEW PERIOD SHALL BE A MINIMUM OF TWO (2) WEEKS.
13. SUBMITTAL MARKED "NO EXCEPTIONS TAKEN" OR "MAKE CORRECTIONS NOTED" DOES NOT REQUIRE RESUBMISSION TO E.O.R. SUBMITTAL MARKED "REVISE / RESUBMIT" OR "REJECTED" SHALL REQUIRE RESUBMISSION.
14. FABRICATOR / CONTRACTOR REQUEST FOR REVIEW / VERIFICATION OF PREVIOUSLY APPROVED SUBMITTAL SHALL BE AT AN ADDITIONAL COST TO THE PROJECT AND SHALL BE SUBMITTED TO OWNER AS CHANGE ORDER TO STRUCTURAL ENGINEERING CONTRACT.

SHOP DRAWING SUBMITTAL SCHEDULE table with columns: MATERIAL/COMPONENT, SUBMITTAL REQUIRED (YES/NO), SIGNED & SEALED CALCULATIONS (YES/NO). Rows include FOUNDATION, CAST-IN-PLACE CONCRETE, MASONRY, METALS, WOOD AND COMPOSITES, and OTHER.

- NOTES:
1. REFERENCE PERFORMANCE ASSEMBLIES NOTES FOR ADDITIONAL INFORMATION CONCERNING MINIMUM DESIGN & SUBMISSION REQUIREMENTS FOR DELEGATED DESIGN ITEMS.

ABBREVIATION KEY

ABBREVIATION KEY table listing various abbreviations and their full names, such as ADD'L, AESS., ALT., ARCH., BAL., BM., B.O.S., BOT., BP., BR., C., C.J., CL., CL.R., COL., CONC., CONT., CONST., COVER, DIA., DBL., DNG., DYN(L), EA., EE., EP., ELEV., E.O.D., E.O.S., EQ., EXP. JT., EXIST., FIN., F.L., FLG., FLR., F.P., FTG., FU., GALV., GC., GRAD., HOR., H.P., H.S., HT., IN., JST., KSI., LLH., LLV., ADDITIONAL ARCHITECTURALLY EXPOSED, ALTERNATE ARCHITECTURAL, BALANCE, BEAM, BOTTOM OF STEEL, BOTTOM, BASE PLATE BEARING PLATE, CAMBER, CONTRACTION JOINT, CLEARANCE, COLUMN, CONCRETE CONTINUOUS CONSTRUCTION COVER, DIAMETER, DOUBLE DRAWING, DONEL(S), EACH, EACH END, EACH FACE, ELEVATION, EDGE OF DECK, EDGE OF SLAB, EQUAL SPACING, EACH WAY, EXPANSION JOINT, EXISTING, FINISH, FAÇADE LINE, FLANGE FT FEET OR FOOT, FLOOR, FIREPROOFING (FIREPROOF), FOOTING STEP, FOOTING, YIELD STRESS, GALVANIZED, GC. COORDINATE, GRADE, HORIZONTAL, HIGH POINT, HIGH STRENGTH, HIGH STRENGTH BOLT, HEIGHT, OR' INCHES, JOIST, KIPS PER SQUARE INCHES, LONG LEG HORIZONTAL, LONG LEG VERTICAL, LONG. L.P., L.V., MAX, M.C., M.I.D., MECH., MIN, MISCELLANEOUS, MASONRY OPENING, MOM., NO FIREPROOFING NON-LOAD BEARING WALL, NOT TO SCALE, ON CENTER (SPACING), OUTSIDE DIAMETER, OPENING, OPPOSITE, P.A.F., PLT., P.S., POUNDS PER SQUARE INCH, POUNDS PER SQUARE FOOT, RADIUS, R.A., REF, REINFORC., REQUIRED, S.C., SHEAR CONNECTION SCHEDULE, SECTION, SIMILAR, S.O.G., SLAB ON GRADE, STU., STAINLESS STEEL, THICK, STIFFENER STRUCTURE, SHORT WAY, SYMM., SYMMETRICAL T TOP, T.G., TRANSFER GIRDER, T.H.K., THROUGH OUT, T.O., TOP OF BUTTRISS, T.O.P., TOP OF PIER, T.O.S., TOP OF STEEL, T.O.V., TOP OF WALL, TYP, UN.O., UNLESS NOTED OTHERWISE, V.A., VARIES, VERT., VERTICAL, V.I.F., VERIFY IN FIELD, V.V., WITH WALL COLUMN, W.P., WALL STEP, W.F., WIRE WELDED FABRIC

SPECIAL INSPECTIONS

SPECIAL INSPECTION SHALL MEET THE REQUIREMENTS OF THE 2018 INTERNATIONAL BUILDING CODE (NEW JERSEY EDITION). WHERE ALL SPECIAL INSPECTOR(S) SHALL BE HIRED BY THE OWNER TO PERFORM THE REQUIRED SPECIAL INSPECTIONS. THE NAMES OF PERSONS OR FIRMS WHO ARE TO PERFORM THE SPECIAL INSPECTIONS SHALL BE FORWARDED TO THE BUILDING OFFICIAL FOR APPROVAL. THE SPECIAL INSPECTOR(S) SHALL COMPLETE AND SUBMIT ALL FORMS REQUIRED BY MONTCLAIR, NEW JERSEY.
1. SPECIAL INSPECTOR(S) SHALL:
A. OBSERVE THE WORK ASSIGNED FOR CONFORMANCE TO THE APPROVED DRAWING AND SPECIFICATIONS.
B. FURNISH INSPECTION REPORTS TO THE ENGINEER OF RECORD AND BUILDING DEPARTMENT. DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION, THEN, IF NOT CORRECTED TO THE ENGINEER AND THE BUILDING DEPARTMENT.
C. SUBMIT TO THE ENGINEER OF RECORD AND THE BUILDING DEPARTMENT A SIGNED FINAL REPORT STATING THAT THE WORK WAS IN CONFORMANCE WITH THE APPROVED DRAWINGS AND SPECIFICATIONS AND THE APPLICABLE WORKMANSHIP PROVISIONS OF THE IBC.
2. SPECIAL INSPECTION NOTES:
A. CONTINUOUS SPECIAL INSPECTION IS ALWAYS REQUIRED DURING THE PERFORMANCE OF THE WORK UNLESS SPECIFICALLY NOTED BELOW.
B. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE THE SPECIAL INSPECTOR(S) WITH ADVANCE NOTICE, NO LESS THAN ONE WORKING DAY, OF THE INITIATION OF ANY WORK REQUIRED TO HAVE SPECIAL INSPECTIONS. ALL WORK PERFORMED WITHOUT REQUIRED SPECIAL INSPECTION WILL BE SUBJECT TO REMOVAL.

SPECIAL INSPECTION SCHEDULE table with columns: Y/N, SPECIAL INSPECTION, CODE/SECTION. Rows include STEEL CONSTRUCTION, CONCRETE CONSTRUCTION, MASONRY CONSTRUCTION, SOILS, DRIVEN DEEP FOUNDATIONS, CAST-IN-PLACE DEEP FOUNDATIONS, HELICAL PILE FOUNDATIONS, FABRICATED ITEMS, SEISMIC RESISTANCE (SPECIAL INSPECTIONS), SEISMIC RESISTANCE (TESTING), SPRAYED FIRE-RESISTANT MATERIALS, MASTIC & INTUMESCENT FIRE-RESISTANT COATINGS, POST INSTALLED ANCHORS.

- NOTES:
1. REFERENCE STATEMENT OF SPECIAL INSPECTIONS FOR LIST OF ALL REQUIRED INSPECTIONS LISTED ABOVE.
2. WHERE FABRICATION OF STRUCTURAL LOAD-BEARING MEMBERS AND ASSEMBLIES IS BEING PERFORMED ON THE PREMISES OF A FABRICATOR'S SHOP, CONTINUOUS SPECIAL INSPECTION IS REQUIRED DURING THE PERFORMANCE OF THE WORK EXCEPT AS ALLOWED IN IBC SECTION 1704.2.5.1 AND UNLESS SPECIFICALLY NOTED BELOW.

SYMBOLS KEY

SYMBOLS KEY table showing symbols and their corresponding descriptions: CONCRETE WALL - LOAD BEARING (UP/DOWN), CONCRETE WALL - LOAD BEARING (TERMINATES AT UNDERSIDE OF SLAB), CMU WALL - LOAD BEARING (UP/DOWN), CONCRETE WALL - LOAD BEARING (CHANGE IN WIDTH), CONCRETE WALL - LOAD BEARING (UP FROM FLOOR LEVEL), LOAD BEARING STUD WALL (BELOW), SHEAR WALL (BELOW), LOAD BEARING CMU WALL - ABOVE (FOR REFERENCE), LOAD BEARING STUD WALL - ABOVE (FOR REFERENCE), NON-LOAD BEARING CMU WALL - ABOVE (FOR REFERENCE), CONCRETE COLUMN DOWN, STEEL COLUMN DOWN, STEEL COLUMN UP & DOWN, STEEL COLUMN, OPENING / PENETRATION, TIMBER PILE OR STEEL PIPE PILE, STEEL H-PILE, BEAM TO COLUMN MOMENT CONNECTION, BEAM TO BEAM MOMENT CONNECTION, TORSIONAL MOMENT CONNECTION, DIRECTION OF DECK FRAMING / DECK, STEP IN SLAB/FLOOR, INDICATES SLOPE IN SLAB/FLOOR, TWO-WAY CONCRETE SLAB, ONE-WAY CONCRETE SLAB, CONCRETE SLAB ON GRADE, CONCRETE COLUMN UP, STEEL COLUMN UP, WOOD POST DOWN, DOUBLE 2X JACK STUD U.O. (SEE NOTE 4), SLAB DEPRESSION.

- NOTES:
1. REFERENCE TYPICAL CONCRETE WALL CONSTRUCTION DETAIL FOR ADDITIONAL INFORMATION.
2. REFERENCE TYPICAL CMU WALL CONSTRUCTION DETAIL ON FOR ADDITIONAL INFORMATION.
3. REFERENCE TYPICAL INTERIOR NON-LOAD BEARING CMU CONSTRUCTION DETAIL FOR ADDITIONAL INFORMATION.
4. DOUBLE 2X POST SIZE SHALL MATCH ADJACENT WALL SIZE (U.N.O.).

STRUCTURAL DRAWING LIST table with columns: DRAWING TITLE, SHEET NO. Rows include GENERAL NOTES & DESIGN CRITERIA, STRUCTURAL SPECIFICATIONS, STRUCTURAL SPECIFICATIONS, FOUNDATION PLAN, FOUNDATION DETAILS, TYPICAL SPREAD FOOTING DETAILS, TYPICAL SLAB ON GRADE DETAILS, TYPICAL CONCRETE WALL DETAILS.

- NOTES:
1. STANDARD SHEET NUMBERING:
S000 SERIES - GENERAL NOTES
S100 SERIES - PLANS
S200 SERIES - FOUNDATION DETAILS
S300 SERIES - SUPERSTRUCTURE DETAILS
S400 SERIES - LATERAL BRACING DETAILS
S500 SERIES - TYPICAL DETAILS
2. S500 SERIES SHEET NUMBERING MAY NOT BE SEQUENTIAL BASED ON BUILDING MATERIALS UTILIZED WITHIN STRUCTURE.

ARCHITECT: JZA+D (JOSHUA ZINDER ARCHITECTURE + DESIGN)
MECHANICAL/ELECTRICAL/PLUMBING/FIRE: LORING CONSULTING ENGINEERS, INC.
CIVIL ENGINEER: BOSWELL ENGINEERING
STRUCTURAL ENGINEER: JT ENGINEERING Building Solutions
PROJECT NAME: LOADING DOCK ALTERNATIONS
DRAWN BY: DATE: 03-20-2023
PROJECT NO.: 2322
SCALE: AS NOTED
SHEET NUMBER: S001

SUPERIMPOSED DESIGN LOAD SCHEDULE
(ALL LOADS SHOWN ARE IN POUNDS PER SQ. FT.)

COMPONENT	AREA	EXTERIOR LANDING/RAVINE/LIFT
FLOOR/ROOF FINISHES		0
M/E/P		0
CEILING		0
PONDING/FIREPROOF/INSULATION		0
MISCELLANEOUS		0
TOTAL DEAD LOAD		0
TOTAL LIVE LOAD		100

NOTES:

- LOADS INDICATED WITHIN SCHEDULE INCLUDE SUPERIMPOSED DEAD & LIVE LOADS. (DOES NOT INCLUDE SELF-WEIGHT OF FLOOR STRUCTURE)
- SELF-WEIGHT OF STRUCTURE ACCOUNTS FOR ALL COMPONENTS ASSOCIATED WITH FLOOR STRUCTURE INCLUDING BUT NOT LIMITED TO SLABS, SUB-FLOOR, METAL DECK, JOISTS, & BEAMS.
- ALL LIVE LOADS LESS THAN 80psf INCLUDE 15psf FOR PARTITIONS.
- STAIRS AND CORRIDORS HAVE BEEN DESIGNED FOR 100PSF LIVE LOADING.

EXISTING CONDITIONS

- DRAWINGS HAVE BEEN PREPARED BASED ON AVAILABLE KNOWLEDGE OF EXISTING CONDITIONS. IF DURING DEMOLITION, EXCAVATION OR CONSTRUCTION, ACTUAL CONDITIONS ARE DISCOVERED TO DIFFER FROM THOSE INDICATED ON DRAWINGS, ENGINEER OF RECORD SHALL BE NOTIFIED PRIOR TO PROCEEDING WITH CONSTRUCTION. FAILURE TO NOTIFY ARCHITECT/ENGINEER OF UNSATISFACTORY CONDITIONS CONSTITUTES ACCEPTANCE OF FIELD CONDITIONS BY GENERAL CONTRACTOR.
- THE CONTRACTOR SHALL VERIFY ALL EXISTING BUILDING INFORMATION SHOWN (DIMENSIONS, ELEVATIONS, ETC.) AND NOTIFY THE ARCHITECT/ENGINEER OF ANY DISCREPANCIES PRIOR TO FABRICATION OF ANY STRUCTURAL COMPONENT. FAILURE TO NOTIFY ARCHITECT/ENGINEER OF DISCREPANCY CONSTITUTES ACCEPTANCE OF FIELD CONDITIONS.
- IF THE EXISTING FIELD CONDITIONS DO NOT PERMIT THE INSTALLATION OF THE WORK IN ACCORDANCE WITH THE DETAILS SHOWN, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER IMMEDIATELY AND PROVIDE A SKETCH OF THE CONDITIONS WITH HIS PROPOSED MODIFICATION. THE ARCHITECT/ENGINEER SHALL BE NOTIFIED IMMEDIATELY. DO NOT COMMENCE WORK UNTIL CONDITION IS RESOLVED AND MODIFICATION IS APPROVED BY THE AOR/EOR.
- THE CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF EXISTING ELEVATIONS WHEN EXCAVATING WITHIN 10FT OF EXISTING STRUCTURE. E.O.R. SHALL BE NOTIFIED OF FOOTING ELEVATION AND CONTRACTOR SHALL SUBMIT PROPOSED WORK PLAN FOR EXCAVATION, SHORING, AND FOR THE EVALUATION AND PROTECTION OF EXISTING ADJACENT STRUCTURES.
- THE DRAWINGS MAY REFLECT INFORMATION PROVIDED BY OTHERS AND/OR EXISTING CONDITIONS THAT HAVE BEEN SURVEYED AND/OR DOCUMENTED TO THE GREATEST POSSIBLE EXTENT BUT NOT FIELD VERIFIED BY JT ENGINEERING. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FULLY COORDINATE THE WORK, INCLUDING BUT NOT NECESSARILY LIMITED TO, THE VERIFICATION OF ALL CONDITIONS THAT ARE SHOWN IN THE DRAWINGS, COORDINATION OF ALL NECESSARY BUILDING TRADES, ETC. ANY AND ALL CONDITIONS THAT ARE NOT SHOWN BUT WARRANT THE ATTENTION OF THE ARCHITECT AND/OR ENGINEER SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ARCHITECT AND/OR ENGINEER.
- MEANS AND METHODS OF CONSTRUCTION AND TEMPORARY SHORING AND BRACING OF THE EXISTING STRUCTURE(S) ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE ENGINEER MAY INCLUDE PHASING, SEQUENCING SHORING REQUIREMENTS, ETC. IN THE CONSTRUCTION DOCUMENTS TO ALERT, ASSIST, OR OTHERWISE DICTATE PROCEDURAL REQUIREMENTS THAT MAY BE NECESSARY TO PROPERLY IMPLEMENT THE STRUCTURAL PORTION OF THE WORK OR THAT MAY BE REQUIRED TO ENSURE BUILDING STABILITY; HOWEVER, THE CONTRACTOR SHALL PROPERLY COORDINATE THESE REQUIREMENTS AND SHALL REMAIN COMPLETELY AND SOLELY RESPONSIBLE FOR ERECTING THE BUILDING STRUCTURE IN A SAFE AND TIMELY MANNER.
- UNLESS OTHERWISE NOTED, IT HAS BEEN ASSUMED THAT THE EXISTING STRUCTURE(S) ARE IN SERVICEABLE CONDITION. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY AND ALL AREAS OF STRUCTURAL DISTRESS (INCLUDING BUT NOT LIMITED TO CRACKS, SPALLING, ETC.) NOT INDICATED IN THE STRUCTURAL DRAWINGS. THE CONTRACTOR SHALL NOT PROCEED WITH WORK IN SUCH AREAS WITHOUT DIRECTION FROM THE ENGINEER.

SURVEY AND MONITORING

- A PRE-CONSTRUCTION (PRE-CONDITION) SURVEY OF THE ADJACENT STRUCTURES SHALL BE DONE PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL REVIEW AND FAMILIARIZE HIMSELF WITH THE RESULTS OF THE PRE-CONDITION SURVEY. CONTRACTOR SHALL ALSO MAKE VISUAL INSPECTION OF THE ADJACENT STRUCTURES (INSIDE AND OUT) PRIOR TO STARTING THE WORK. SUMMARY REPORT OF PRE-CONSTRUCTION SURVEY SHALL BE SUBMITTED TO ARCHITECT/SEE ENGINEER FOR REVIEW.
- MONITORING LOCATIONS FOR ADJACENT BUILDINGS SHALL BE DEVELOPED BY MONITORING AGENCY AND PRESENT TO E.O.R FOR FINAL APPROVAL. THE FOLLOWING ARE MINIMUM REQUIREMENTS FOR BUILDING MONITORING:
 - MONITOR THE ADJACENT BUILDINGS AT ABOUT 25-FT INTERVALS FOR VERTICAL AND LATERAL MOVEMENT.
 - MONITORING PLAN SHALL BE PREPARED BY ENGINEER LICENSED IN THE STATE OF THE PROJECTS JURISDICTION.
- BASILINE READINGS OF THE MONITORING POINTS SHALL BE OBTAINED PRIOR TO THE START OF EXCAVATION. ON GOING MEASUREMENTS OF MONITOR POINTS SHALL BE SUBMITTED TO THE CONTRACTOR/ENGINEER/OWNER DURING EXCAVATION AND BUILDING CONSTRUCTION.
- PERFORM OPTICAL SURVEYS AT LEAST TWICE PER WEEK. IF EXISTING BUILDING MOVEMENT OCCURS, INCREASE THE FREQUENCY OF THE READINGS AS DIRECTED BY THE SUPPORT OF EXCAVATION ENGINEER.
- NON-LANDMARK BUILDING MOVEMENT AND VIBRATION CRITERIA:
 - IF THE VERTICAL OR LATERAL BUILDING MOVEMENT REACHES 1/4-INCH IMMEDIATELY NOTIFY THE CONSTRUCTION MANAGER AND SUPPORT OF EXCAVATION ENGINEER.
 - IF THE BUILDING MOVEMENT REACHES 1/2-INCH, IMMEDIATELY INFORM THE CONSTRUCTION MANAGER, AND SUPPORT OF EXCAVATION ENGINEER AND STOP WORK. WORK MAY NOT RESUME UNTIL APPROVAL BY THE CONSTRUCTION MANAGER AND APPROVED REMEDIAL MEASURES AND/OR MODIFIED CONSTRUCTION PROCEDURES BY THE SUPPORT OF EXCAVATION ENGINEER.
 - IF THE VIBRATIONS REACH 1-INCHES PER SECOND (IPS) THE CONSTRUCTION MANAGER AND ENGINEER SHALL BE NOTIFIED IMMEDIATELY.
 - IF THE VIBRATIONS EXCEED 2-INCHES PER SECOND (IPS), IMMEDIATELY INFORM THE CONSTRUCTION MANAGER AND ENGINEER AND STOP WORK. THE WORK SHALL NOT RESUME UNTIL APPROVAL BY THE CONSTRUCTION MANAGER AND APPROVED REMEDIAL MEASURES AND/OR MODIFIED CONSTRUCTION PROCEDURES BY THE ENGINEER.
- VIBRATION MONITORS SHALL TAKE REAL TIME READINGS.
- ALL MONITORING DATA SHALL BE PRESENTED TO THE CONSTRUCTION MANAGER AND SUPPORT OF EXCAVATION ENGINEER AT THE END OF EACH DAY.

SPREAD FOOTING FOUNDATIONS & SUB-GRADE

- THE FOUNDATION FOR THE STRUCTURE HAS BEEN DESIGNED FOR THE FOLLOWING ASSUMED ALLOWABLE SOIL BEARING PRESSURES AT A BEARING DEPTH OF APPROXIMATELY 36" BELOW FINISHED FLOOR.
TOTAL LOAD.....1,500 PSF (NET)
- THE FOOTING LEVEL SHALL BE TESTED USING DROP-BAR PERCUSSION TEST OR PENETROMETER TO A DEPTH OF 3 OR 4 FEET BELOW BEARING LEVELS TO INSURE ADEQUATE BEARING MATERIALS COMPLY WITH BORING LOGS AND DESIGN CRITERIA.
- THE BOTTOM OF EXTERIOR FOOTINGS SHALL BE A MINIMUM OF THREE (3) FEET BELOW FINISHED GRADE, OR AS REQUIRED BY LOCAL BUILDING CODES.
- EXCAVATION SHALL BE PERFORMED SO AS NOT TO DISTURB EXISTING ADJACENT BUILDINGS, STREETS, AND UTILITY LINES. VERIFY LOCATION OF ALL UTILITIES PRIOR TO COMMENCEMENT OF WORK. HAND EXCAVATE AROUND UTILITIES AS REQUIRED.
- REMOVE EXISTING VEGETATION, TOPSOIL, AND UNSATISFACTORY SOILS MATERIALS. PROOF ROLL SUBGRADE TO OBTAIN UNIFORMLY DENSIFIED SUBSTRATA PRIOR TO PLACING FILL MATERIAL EVENLY IN 8" THICK (MAXIMUM) LAYERS AND COMPACTING TO REQUIRED DENSITY.
- SEE THE GEOTECHNICAL REPORT FOR EXCAVATION, BACKFILL AND PREPARATION OF THE FOUNDATION AND SLAB-ON-GRADE SUBGRADE INCLUDING COMPACTON REQUIREMENTS. IF GEOTECHNICAL REPORT IS NOT AVAILABLE, GEOTECHNICAL ENGINEER SHALL BE CONTRACTED WITH TO PROVIDE SPECIFICATIONS.
- THE OWNER SHALL RETAIN THE SERVICES OF A PROFESSIONAL GEOTECHNICAL ENGINEER, SUBJECT TO THE APPROVAL OF THE ARCHITECT/ENGINEER, TO PERFORM SOIL TESTING AND INSPECTION. THE GEOTECHNICAL ENGINEER SHALL INSPECT THE SUBGRADE TO VERIFY BEARING LEVELS AND ENSURE THAT THE SAFE BEARING CAPACITY MEETS OR EXCEEDS THE DESIGN VALUE INDICATED ON CONTRACT DOCUMENTS. FIELD REPORTS SHALL BE SUBMITTED TO THE ARCHITECT/ENGINEER OUTLINING THE WORK PERFORMED AND TEST RESULTS.
- THE INSPECTION AND TESTING OF ALL SUBGRADE AND COMPACTED EARTHWORK SHALL BE CONDUCTED UNDER THE SUPERVISION OF A QUALIFIED GEOTECHNICAL CONSULTANT. THE CONTRACTOR SHALL NOTIFY THE GEOTECHNICAL ENGINEER 24 HOURS PRIOR TO PLACEMENT OF CONCRETE IN THE FOOTINGS. IF UNSUITABLE SUBGRADE SOILS ARE ENCOUNTERED, THE CONTRACTOR SHALL SUBMIT RECOMMENDATIONS PREPARED BY A GEOTECHNICAL CONSULTANT TO THE STRUCTURAL ENGINEER FOR APPROVAL.
- THE SUBGRADE AND EACH LAYER OF FILL OR BACKFILL SHALL BE COMPACTED TO A DRY DENSITY AT LEAST EQUAL TO 95% OF THE MAXIMUM DRY DENSITY ATTAINED BY THE MODIFIED PROCTOR TEST ASTM D1557.
- IF CONDITIONS PROVE TO BE UNACCEPTABLE AT THE BEARING ELEVATIONS SHOWN, THE FOOTING BEARING ELEVATIONS MAY NEED TO BE LOWERED BASED ON THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER. FINAL BEARING ELEVATIONS AND BACKFILL RECOMMENDATIONS MUST BE APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO FIELD MODIFICATION. CONCRETE FOR FOUNDATIONS SHALL BE POURED ON THE SAME DAY THE SUBGRADE IS APPROVED BY THE GEOTECHNICAL ENGINEER.
- CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF GROUND WATER ELEVATION PRIOR TO THE START OF CONSTRUCTION. LICENSED ENGINEER WITHIN THE PROJECT JURISDICTION SHALL BE CONTRACTED TO CONFIRM CURRENT WATER TABLE ELEVATION, LOCATION OF MODELING WITHIN SOIL PROFILE, IDENTIFICATION OF PERCHED WATER TABLE AND OTHER FACTORS CONSIDERED IMPORTANT TO IDENTIFYING THE ANTICIPATED MEAN HIGH WATER TABLE ELEVATION. GROUNDWATER ELEVATION MAY FLUCTUATE IN LEVEL DUE TO VARIATIONS IN THE SEASON, RAINFALL, SNOW MELT, SURFACE INFILTRATION, TEMPERATURE, CONSTRUCTION ACTIVITIES, PUMPING OF DEWATERING SYSTEMS, LEAKAGE OF UTILITIES AND OTHER FACTORS. EOR/ AOR SHALL BE NOTIFIED IN WRITING OF CURRENT WATER TABLE ELEVATION PRIOR TO START OF FOUNDATION CONSTRUCTION AND WE RESERVE THE RIGHT TO RECOMMEND MODIFICATION TO CONCRETE SLABS, FOUNDATION WALLS, WATERPROOFING AND SUMP PUMP SYSTEMS AS REQUIRED TO PERMIT CONSTRUCTION WHERE HIGH WATER TABLE ELEVATIONS ARE PRESENT.
- CONCRETE FOUNDATIONS SHALL NOT BE PLACED IN WATER OR ON FROZEN EARTH.
- UTILITY LINES SHALL NOT BE PLACED THROUGH OR BELOW FOUNDATIONS WITHOUT THE STRUCTURAL ENGINEER'S APPROVAL.
- SLAB-ON-GRADE HAS BEEN DESIGNED USING A SUBGRADE MODULUS OF K=100 PCF AND DESIGN LOADING OF 100 PSF. THE GEOTECHNICAL ENGINEER SHALL ENSURE SUB-GRADE IS PREPARED TO MINIMUM SPECIFICATION, OTHERWISE THE DESIGNER IS NOT RESPONSIBLE FOR DIFFERENTIAL SETTLEMENT, SLAB CRACKING OR OTHER FUTURE DEFECTS RESULTING FROM UNREPORTED CONDITIONS MITIGATING THE ABOVE ASSUMPTIONS.
- SLAB-ON-GRADE SHALL BE UNDERLAIN BY A MINIMUM OF SIX INCHES OF STABLE GRANULAR MATERIAL AND 10 MIL VAPOR BARRIER.
- THE CONTRACTOR SHALL OBSERVE WATER CONDITIONS AT THE SITE AND TAKE THE NECESSARY PRECAUTIONS TO ENSURE THAT THE FOUNDATION EXCAVATIONS REMAIN DRY DURING CONSTRUCTION.
- DEWATERING OF THE SITE DURING CONSTRUCTION IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. ANY SHEETING OR SHORING REQUIRED FOR DEWATERING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. PRECAUTIONS SHALL BE TAKEN BY THE CONTRACTOR NOT TO UNDERMINE EXISTING FOUNDATIONS. METHOD OF DEWATERING AND CALCULATIONS FOR THE APPROPRIATE SYSTEM ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- PROVIDE A CONTINUOUS WATERSTOP AT ALL HORIZONTAL AND VERTICAL CONSTRUCTION JOINTS IN THE ELEVATOR PIT AND ALL OTHER PIT WALLS. REFERENCE CONCRETE NOTES FOR WATERSTOP SPECIFICATIONS.
- BACKFILL SHALL BE BROUGHT UP SIMULTANEOUSLY ON EACH SIDE OF WALLS AND GRADE BEAMS WITH A GRADE DIFFERENCE NOT TO EXCEED 2'-0" AT ANY TIME.
- BACK-FILLING AGAINST FOUNDATION WALLS WHICH RETAIN EARTH SHALL BE DONE CAREFULLY WITH SMALL COMPACTION EQUIPMENT AFTER CONCRETE SLAB AND ELEVATED FLOOR SLAB ARE IN PLACE AND CONCRETE HAS OBTAINED THE SPECIFIED 28-DAY COMPRESSIVE STRENGTH. TRUCKS, BULLDOZERS, ETC. SHALL NOT BE ALLOWED CLOSER THAN 6'-0" TO ANY FOUNDATION WALL. CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE TEMPORARY SHORING WHERE REQUIRED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE NEED TO USE FOUNDATION REBAR AS A GROUNDING ELECTRODE SYSTEM AND SHALL BE RESPONSIBLE FOR INSTALLING THE BONDING CLAMP PRIOR TO PLACEMENT OF THE CONCRETE AS PER NJCC BULLETIN NO. 02-2.

CAST-IN-PLACE CONCRETE SPECIFICATIONS

- CONCRETE SHALL BE DESIGNED AND DETAILED IN ACCORDANCE WITH THE BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE (ACI 318), AND CONSTRUCTED IN ACCORDANCE WITH THE CRSI MANUAL OF STANDARD PRACTICE.
- CONCRETE SHALL HAVE NATURAL SAND FINE AGGREGATE AND NORMAL WEIGHT COARSE AGGREGATES CONFORMING TO ASTM C33, TYPE 1 PORTLAND CEMENT CONFORMING TO ASTM C150.
- CONCRETE IN THE FOLLOWING AREAS SHALL HAVE THE FOLLOWING MAXIMUM WATER/CEMENT RATIO (W/CM):
W/CM
FTG/GBS (F1 EXPOSURE).....0.55
FNDN WALLS/PIERS (F1 EXPOSURE).....0.55
INTERIOR SOG (F1 EXPOSURE).....0.55
EXTERIOR SOG (F3 EXPOSURE).....0.4
COLUMNS (F1 EXPOSURE).....0.55
STRUCTURAL SLAB (NT) (F0 EXPOSURE).....0.5
STRUCT SLAB (EXT) (F2 EXPOSURE).....0.4
SLAB ON METAL DECK (F0 EXPOSURE).....0.5
- AIR ENTRAINMENT SHALL BE A MINIMUM OF 6% IN ALL EXPOSED CONCRETE.
- MAXIMUM AGGREGATE SIZE SHALL BE:
FOOTINGS.....1-1/2"
WALLS / GRADE BEAMS / SLAB.....3/4"
- NORMAL WEIGHT CONCRETE (145 PCF ± 5) SHALL BE PROVIDED WITH ALL CEMENT CONFORMING TO ASTM C150, TYPE I. WHERE NOTED, LIGHTWEIGHT SLAB CONCRETE (110 PCF ± 5) SHALL BE PROVIDED WITH ALL CEMENT CONFORMING TO ASTM C330, TYPE I. REFERENCE PLANS AND SCHEDULE FOR THE MINIMUM CONCRETE STRENGTH AT 28 DAYS (F_c).
- CONCRETE REINFORCEMENT BARS SHALL CONFORM TO ASTM A615, GRADE 60.
- WHERE NOTED ON PLAN, EPOXY COATED REINFORCING STEEL SHALL CONFORM TO ASTM A775.
- REINFORCEMENT BARS SHALL NOT BE TACK WELDED, WELDED, HEATED OR CUT UNLESS INDICATED ON THE CONTRACT DOCUMENTS OR APPROVED BY THE STRUCTURAL ENGINEER. WELDING OF REINFORCEMENT BARS, WHEN APPROVED BY THE STRUCTURAL ENGINEER, SHALL CONFORM TO THE AMERICAN WELDING SOCIETY STANDARD D1.4. ELECTRODES FOR SHOP AND FIELD WELDING OF REINFORCEMENT BARS SHALL BE CLASS E90XX.
- WELDED WIRE FABRIC WHEN USED SHALL CONFORM TO ASTM A185. FABRIC SHALL BE SUPPLIED IN FLAT SHEETS. FABRIC SHALL BE LAPPED WITH MINIMUM TWO MESHES AT SPLICES. WELDED WIRE FABRIC SHALL BE LOCATED NO MORE THEN 1" FROM TOP OF SLAB.
- FIBROUS REINFORCEMENT FOR SLABS SHALL BE FIBRILLATED POLYPROPYLENE FIBERS ENGINEERED AND DESIGNED FOR USE IN CONCRETE COMPLYING WITH ASTM C 1116 TYPE III, 1/2" TO 1 1/2". UNIFORMLY DISPERSE FIBERS IN THE CONCRETE MIX AT THE MANUFACTURER'S RECOMMENDED RATE BUT NOT LESS THAN 1.5 POUNDS PER CUBIC YARD.
- GROUT SHALL BE NON-SHRINK GROUT CONFORMING TO ASTM C927, AND SHALL HAVE SPECIFIED COMPRESSIVE STRENGTH AT 28 DAYS OF 5,000 PSI. PRE-GROUTING OF BASE PLATES IS NOT BE PERMITTED.
- RIGID INSULATION USED AS FLOOR FILL SHALL BE STYROFOAM HIGHLOAD 40 EXTRUDED POLYSTYRENE INSULATION (40 PSI COMPRESSIVE STRENGTH) ASTM C870, TYPE VI MANUFACTURED BY DOW CHEMICAL COMPANY, OR APPROVED EQUAL.
- ALL EMBEDDED STEEL SHALL BE ASTM A36. ALUMINUM INSERTS ARE NOT PERMITTED.
- CONSTRUCT EXPANSION JOINTS WHERE INDICATED. EXPANSION JOINT FILLER SHALL BE NONEXTRUDING BITUMINOUS TYPE PER ASTM D1751 INSTALL TO FULL DEPTH OF CONCRETE RECESSED TO ACCOMMODATE JOINT SEALANT AND BACKER ROD WHERE NECESSARY.
- CONCRETE COVERING OF REINFORCING STEEL (INCLUDING TIES AND STIRRUPS) SHALL CONFORM TO THE FOLLOWING MINIMUM REQUIREMENTS (SEE ACI 318 FOR CONDITIONS NOT NOTED):
CONCRETE POURED AGAINST EARTH..... 3"
CONCRETE EXPOSED TO EARTH OR WEATHER:
#5 OR SMALLER..... 1 1/2"
#6 OR LARGER..... 2"
CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND:
COLUMNS (TIES AND MAIN REINFORCING)..... 1 1/2"
SLABS, WALLS, JOISTS:
#14 OR #18 BARS..... 1 1/2"
#11 OR SMALLER..... 1"
BEAMS (STIRRUPS AND MAIN REINFORCING)..... 1 1/2"
ALL OTHER SURFACES NOT EXPOSED TO EARTH OR WEATHER..... 3/4"

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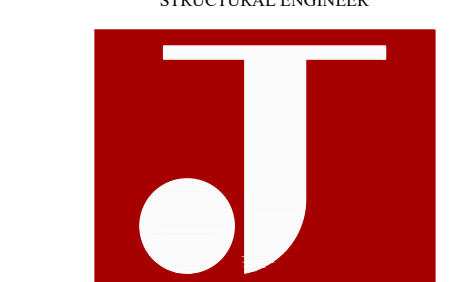
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LOADING DOCK ALTERNATIVES

AT L. HOWARD FOX STUDIO
THEATRE
MONTCLAIR STATE UNIVERSITY
MSU PROJECT #PR24C009

DRAWING NUMBER

STRUCTURAL SPECIFICATIONS

DRAWN BY: PROJECT NO.: 2322

DATE: 03-20-2023 SCALE: AS NOTED

SHEET NUMBER

S002

CAST-IN-PLACE CONCRETE TESTING/INSPECTIONS

- EVALUATION AND ACCEPTANCE OF CONCRETE STRUCTURES SHALL BE IN ACCORDANCE WITH ACI 301.
- CONCRETE SHALL NOT BE POURED UNTIL THE PLACEMENT OF REINFORCING HAS BEEN APPROVED BY THE INSPECTION AGENCY.
- INSPECTIONS SHALL BE PERFORMED BY A SPECIAL INSPECTOR WHO HAS BEEN APPROVED BY THE ENGINEER OF RECORD. BUILDING OFFICIAL. THE SPECIAL INSPECTOR SHALL VERIFY THAT ALL REINFORCEMENT, TIES, ANCHORS, & SLEEVES WERE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS, THE APPLICABLE ICC ESR REPORTS AND THE MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS. THE INSPECTION SHALL INCLUDE VERIFICATION OF ANCHOR SPACING, EMBEDMENT AND EDGE DISTANCE REQUIREMENTS.
- REINFORCING STEEL SHALL BE INSTALLED TO WITHIN THE FOLLOWING TOLERANCES PER ACI 117, "STANDARD SPECIFICATION FOR TOLERANCES FOR CONCRETE CONSTRUCTION AND MATERIALS":
 CONCRETE COVER FOR SLAB TOP AND BOTTOM BARS..... 1 1/4"
 COVER FOR OTHER REINFORCING STEEL..... 3/8"
 SPECIFIED SPACING BETWEEN PARALLEL BARS IN SLABS..... (SPECIFIED SPACING/4") BUT NOT TO EXCEED 1"
 HORIZONTAL DEVIATION FROM SPECIFIED LOCATION, U.N.O..... ±3"
 SPACING AND LOCATION OF BEAM STIRRUPS..... (BEAM DEPTH IN INCHES/12) x 1"
 SPACING AND LOCATION OF COLUMN TIES..... (MIN. COL. DIM. IN INCHES/12) x 1"
 LOCATION OF ENDS OF BARS PERPENDICULAR TO SLAB EDGES..... ±1"

THE ABOVE LIST OF PERMITTED TOLERANCES MUST BE PROVIDED ON ALL REINFORCING STEEL PLACING DRAWINGS. PLACING DRAWINGS THAT DO NOT PROVIDE THIS LIST OF TOLERANCES WILL BE REJECTED.

- THE CONCRETE SUPPLIER SHALL SUBMIT MIX DESIGNS FOR REVIEW. COMPRESSIVE STRENGTH MUST BE SUBSTANTIATED BY A SUITABLE EXPERIENCE RECORD OR BY THE METHOD OF LABORATORY TRIAL BATCHES. THE PERTINENT CRITERIA OF ACI 318 SHALL APPLY TO THE PROPORTIONING OF MIX DESIGNS AND TO THE ACCEPTANCE OF CONCRETE PRODUCED FOR THE JOB. IF DURING CONSTRUCTION ANY CLASS OF CONCRETE FAILS TO MEET THE ACCEPTANCE CRITERIA THE CONTRACTOR SHALL TAKE SUCH STEPS AS ARE DEEMED NECESSARY BY THE STRUCTURAL ENGINEER TO IMPROVE SUBSEQUENT TEST RESULTS AT NO ADDITIONAL COST TO THE OWNER. THE CONTRACTOR SHALL ALSO BEAR THE COST OF SPECIAL INVESTIGATION, TESTING, OR REMEDIAL WORK NECESSARY BECAUSE OF EVIDENCE OF LOW STRENGTH OR NON-CONFORMING CONCRETE OR WORKMANSHIP.
- PREPARE A MINIMUM OF (1) CONCRETE TEST CYLINDERS AT 1 DAYS / (3) CONCRETE TEST CYLINDERS AT 28 DAYS / (1) CONCRETE TEST CYLINDER AT 56 DAYS PER BATCH OF CONCRETE. CYLINDERS SHALL BE PROPERLY CURED AND STORED. SAMPLE FRESH CONCRETE IN ACCORDANCE WITH ASTM C112.
- RETAIN LABORATORY TO PROVIDE TESTING SERVICE. SLUMP PER ASTM C143L AIR CONTENT PER ASTM C231 OR C119, CYLINDER TESTS PER ASTM C31 AND C39. A MINIMUM OF ONE SET OF FIVE CYLINDERS SHALL BE TESTED PER DAY, 150 CUBIC YARDS OF CONCRETE, AND 5000 SQUARE FEET OF SURFACE AREA OF SLABS AND WALLS. A MINIMUM OF (5) STRENGTH TESTS AT 28 DAYS PER CONCRETE MIXTURE MUST BE PERFORMED. SAMPLES FOR TESTS ARE TO BE TAKEN RANDOMLY. REPORTS OF ALL TESTS TO BE SUBMITTED TO THE ENGINEER OF RECORD.
- SLUMP TESTS SHALL BE MADE PRIOR TO THE ADDITION OF PLASTICIZERS. CONCRETE FOR THE PREPARATION OF TEST CYLINDERS SHALL BE TAKEN FROM THE HOSE END FOR CONCRETE PLACED BY PUMP. PROPORTION AND DESIGN MIXES TO RESULT IN CONCRETE SLUMP OF 3-1/2IN. ± 1 IN. AT THE POINT OF PLACEMENT. CONCRETE CONTAINING HIGH-RANGE WATER REDUCERS (HRWR) SHALL HAVE A SLUMP OF 4 IN. TO 8 IN.
- ALL CONCRETE SHALL BE PLACED IN ACCORDANCE WITH ACI 117 "STANDARD SPECIFICATIONS FOR TOLERANCE FOR CONCRETE CONSTRUCTION AND MATERIALS" AND SHALL MEET THE FOLLOWING REQUIREMENTS:

MINIMUM SLAB CONSTRUCTION TOLERANCE SPECIFICATIONS:

- FLOOR FLATNESS (FF) = 32 OR GREATER +0" / -3/16 FOR EVERY 24"
- FLOOR LEVELNESS (FL) = 30 OR GREATER (PRIOR TO REMOVAL OF FORMWORK)
- ELEVATION ENVELOPE = +/- 3/4" (FROM AVERAGE SLAB ELEVATION)
- SLAB THICKNESS TOLERANCE = +/- 3/8 IN. AND -1/4 IN. (FOR SLABS 12" THICK OR LESS)
- FORMED SURFACE TOLERANCE = +/- 1/4"

THE CONTRACTOR SHALL ALSO COORDINATE CONCRETE CLASS OF SURFACE WITH THE PROPOSED ARCHITECTURAL FINISHES.

- CLASS A - SURFACE PROMINENTLY EXPOSED TO PUBLIC VIEW WHERE APPEARANCE IS OF SPECIAL IMPORTANCE.
- CLASS B - COARSE-TEXTURED CONCRETE-FORMED SURFACE INTENDED TO RECEIVE PLASTER, STUCCO OR MAINTCOATING.
- CLASS C - STANDARD FOR EXPOSED SURFACE WHERE FINISHES ARE NOT SPECIFIED.
- CLASS D - MINIMUM QUALITY OF SURFACE WHERE ROUGHNESS IS NOT OBJECTIONABLE.

CONSTRUCTION JOINTS

- CONSTRUCTION JOINTS FOR SLABS ON METAL DECK SHALL BE LOCATED MIDWAY BETWEEN BEAMS WHERE THE JOINT IS PARALLEL TO THE BEAM SPAN. JOINTS SHALL BE LOCATED WITHIN THE MIDDLE THIRD OF SPAN WHERE THE JOINT IS PERPENDICULAR TO THE BEAM SPAN. ANY STOP IN CONCRETE WORK MUST BE MADE WITH VERTICAL BULKHEADS, UNLESS OTHERWISE SHOWN. ALL REINFORCING IS TO BE CONTINUOUS THROUGH JOINTS.
- HORIZONTAL JOINTING WILL NOT BE PERMITTED IN CONCRETE CONSTRUCTION EXCEPT AS SHOWN ON THE CONTRACT DOCUMENT. VERTICAL JOINTS SHALL OCCUR AT CENTER OF SPANS AT LOCATIONS APPROVED BY THE STRUCTURAL ENGINEER.
- CONSTRUCTION JOINTS BETWEEN FOOTINGS AND PLASTERS AND SIMILAR JOINTS SHALL BE PREPARED BY ROUGHENING THE CONTACT SURFACE IN AN APPROVED MANNER TO A FULL AMPLITUDE OF APPROXIMATELY 1/4 INCH, LEAVING THE CONTACT SURFACE FREE AND CLEAR OF LAITANCE. REINFORCED (DONNELLED) JOINTS SHALL HAVE BINDER ADDITIVE APPLIED PRIOR TO POUR.
- PROVIDE CONTINUOUS WATERSTOPS AT ALL HORIZONTAL AND VERTICAL CONSTRUCTION JOINTS AND/OR AS NOTED ON PLAN. SIZED AND CONFIGURED TO SUIT JOINTS. MINIMUM PROVIDED WATERSTOP SHALL BE 6" PVC RIBBED WITH CENTER BULB WATERSTOP BY "GREENSTREAK" OR APPROVED EQUAL. INSTALL TO FORM CONTINUOUS, WATER-TIGHT DAM, WITH FIELD JOINTS FABRICATED IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
- CONSTRUCTION JOINTS FOR MILD-REINFORCED CONCRETE SHALL BE LOCATED WITHIN THE MIDDLE THIRD OF SPAN. PROPOSED CONSTRUCTION JOINT LOCATIONS SHALL BE SHOWN ON REINFORCING STEEL SHOP DRAWINGS. ANY STOP IN CONCRETE WORK MUST BE MADE WITH VERTICAL BULKHEADS AND HORIZONTAL KEYS, UNLESS OTHERWISE SHOWN. ALL REINFORCING IS TO BE CONTINUOUS THROUGH JOINTS.

CAST-IN-PLACE ANCHORS

- ALL ANCHORS SHALL ASSUME THE CRACKED CONCRETE DESIGN CONDITION, U.N.O.
- THE CONTRACTOR SHALL ARRANGE FOR AN ANCHOR MANUFACTURER'S REPRESENTATIVE TO PROVIDE ON SITE INSTALLATION TRAINING FOR EACH SPECIFIED ANCHOR TYPE. THE STRUCTURAL ENGINEER OF RECORD SHALL RECEIVE DOCUMENTATION VERIFYING THAT ALL OF THE CONTRACTOR'S PERSONNEL WHO INSTALL ANCHORS HAVE BEEN TRAINED PRIOR TO COMMENCEMENT OF INSTALLING ANCHORS.
- SURVEY ANCHOR BOLTS FOR PLACEMENT AND ALIGNMENT PRIOR TO CASTING CONCRETE.
- ANCHOR CAPACITY IS DEPENDENT UPON SPACING BETWEEN ANCHORS AND PROXIMITY OF ANCHORS TO EDGES OF CONCRETE OR MASONRY. INSTALL ANCHORS IN ACCORDANCE WITH SPACING AND EDGE CLEARANCES INDICATED ON THE DRAWINGS.
- ALL INSERTS AND SLEEVES SHALL BE CAST-IN-PLACE WHENEVER FEASIBLE. DRILLED OR POWDER DRIVEN FASTENERS WILL BE PERMITTED WHEN PROVEN TO THE SATISFACTION OF THE ENGINEER OF RECORD THAT THE FASTENERS WILL NOT SPALL THE CONCRETE AND HAVE THE SAME CAPACITY AS CAST-IN-PLACE INSERTS. WHEN INSTALLING EXPANSION BOLTS OR ADHESIVE ANCHORS, THE CONTRACTOR SHALL TAKE MEASURES TO AVOID DRILLING OR CUTTING OF ANY EXISTING REINFORCING AND DESTRUCTION OF CONCRETE. HOLES SHALL BE BLOWN CLEAN PRIOR TO PLACING BOLTS OR ADHESIVE ANCHORS.

CAST-IN-PLACE CONCRETE MISC. DIRECTIONS

- MIXING, TRANSPORTING AND PLACING OF CONCRETE SHALL CONFORM TO ACI 301.
- REFER TO THE ARCHITECTURAL DRAWINGS FOR DIMENSIONS, LOCATIONS AND DETAILS OF ALL ARCHITECTURAL FEATURES IN THE CONCRETE; REFER TO THE ARCHITECTURAL DRAWINGS AND PROJECT SPECIFICATIONS FOR REQUIREMENTS FOR ALL CONCRETE FINISHES; REFER TO THE ARCHITECTURAL DRAWINGS FOR TOP OF WALL ELEVATIONS FOR ALL WALLS WHERE TOP OF WALL ELEVATIONS ARE NOT INDICATED ON THE STRUCTURAL DRAWINGS.
- THE CONTRACTOR IS RESPONSIBLE FOR DESIGN, ENGINEERING, AND CONSTRUCTION OF FORMWORK, CAPABLE OF SUPPORTING ALL APPLIED LOADS UNTIL THE CONCRETE IS ADEQUATELY CURED, WITHIN ALLOWABLE TOLERANCES AND DEFLECTION LIMITS.
- ALL REINFORCEMENT SHALL BE SECURELY HELD IN PLACE WHILE PLACING CONCRETE. ADDITIONAL BARS, STIRRUPS OR CHAIRS SHALL BE PROVIDED BY THE CONTRACTOR TO FURNISH LOCATION AND PROVIDE MINIMUM REINFORCEMENT COVER FOR ALL BARS.
- BONDING AGENT SHALL BE USED WHERE NEW CONCRETE IS PLACED AGAINST EXISTING CONCRETE.
- ALL BEAMS, SPANDRELS AND SLABS ARE TO BE PLACED MONOLITHICALLY UNLESS OTHERWISE SHOWN.
- WHERE MASONRY ABUTS CONCRETE WALLS, PROVIDE DOVETAIL SLOTS AND MASONRY ANCHORS.
- THE CONCRETE SLABS SHALL BE FINISHED FLAT AND LEVEL WITHIN TOLERANCE, TO THE ELEVATION INDICATED ON THE DRAWINGS. THE CONTRACTOR SHALL PROVIDE ADDITIONAL CONCRETE REQUIRED DUE TO FORMWORK, METAL DECK, AND FRAMING DEFLECTION TO ACHIEVE THIS FINISHED TOP OF SLAB ELEVATION. THE CONTRACTOR SHALL PROVIDE FOR A MINIMUM OF 5/8" AVERAGE THICKNESS FOR ADDITIONAL CONCRETE DURING PLACEMENT FOR ALL SLABS SUPPORTED AND FORMED ON STEEL DECK OVER THE ENTIRE FLOOR AREA. THE CONTRACTOR SHALL PROVIDE THE MEANS BY WHICH THE MAXIMUM AND MINIMUM CONCRETE SLAB THICKNESS CAN BE MONITORED AND VERIFIED DURING AND AFTER THE PLACING AND FINISHING OPERATIONS.
- REPAIR CONCRETE EXHIBITING VOIDS DUE TO SNAP TIES, "HONEYCOMBS," ROCK POCKETS, AND RUNS, SPALLS OR OTHERWISE DAMAGED SURFACES WITH DRY PACK OR CEMENT GROUT, AND FINISH FLUSH WITH ADJOINING SURFACES. AT THE DISCRETION OF THE STRUCTURAL ENGINEER OR AS QUALIFIED BY LAB TESTING, EXCESSIVE HONEYCOMBS OR EXPOSED REINFORCEMENT THAT JEOPARDIZE THE DESIGN, SHALL BE REMOVED AND REPLACED AT THE EXPENSE OF THE CONTRACTOR.
- ALL EXPOSED CORNERS SHALL BE CHAMFERED 3/4" UNLESS OTHERWISE INDICATED.

- CONTRACTOR SHALL TAKE EVERY PRECAUTION TO PROTECT FINISHED SURFACES FROM STAINS OR ABRASIONS. NO FIRE SHALL BE ALLOWED IN DIRECT CONTACT WITH CONCRETE. PROVIDE ADEQUATE PROTECTION AGAINST INJURIOUS ACTION BY SUN OR WIND. FRESH CONCRETE SHALL BE THOROUGHLY PROTECTED FROM HEAVY RAIN, FLOWING WATER, AND MECHANICAL INJURY.
- TOPS OF FOUNDATIONS SHALL BE TROWEL FINISHED AND SMOOTH.
- PROVIDE 10 MIL. VAPOR BARRIER (SLAB) & WATERPROOFING MEMBRANE (ELEVATOR PIT) IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS. REFERENCE ARCHITECTURAL DRAWINGS FOR SPECIFICATIONS FOR WATERPROOFING MEMBRANE.
- WATER SHALL NOT BE ADDED TO THE CONCRETE AT THE JOBSITE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE THE REQUIREMENTS OF THE CONCRETE SUPPLIER AND PUMPER TO ENSURE PUMPABLE AND WORKABLE MIX WITHOUT THE ADDITION OF WATER AT THE JOBSITE. THE USE OF PLASTICIZERS, RETARDANTS AND OTHER ADDITIVES SHALL BE AT THE OPTION OF THE CONTRACTOR SUBJECT TO THE APPROVAL OF THE STRUCTURAL ENGINEER. FOLLOW THE RECOMMENDATIONS OF THE MANUFACTURER FOR PROPER USE OF RETARDANTS AND OTHER ADDITIVES. USE OF CALCIUM CHLORIDE OR OTHER CHLORIDE BEARING SALTS SHALL NOT BE PERMITTED.
- PLACE CONCRETE IN A MANNER SO AS TO PREVENT SEGREGATION OF THE MIX. DELAY FLOATING AND TROWELING OPERATIONS UNTIL THE CONCRETE HAS LOST SURFACE WATER SHEEN OR ALL FREE SLAB SURFACE. FINISHING OF SLAB SURFACES SHALL COMPLY WITH ACI RECOMMENDATIONS 302-04 AND 304-04 FOR GARAGES.
- CONTRACTOR SHALL PROTECT CONCRETE THAT IS NOT AIR ENTRAINED BUT WHICH IS EXPOSED TO WEATHER DURING CONSTRUCTION FROM FREEZE THAW DAMAGE UNTIL SUCH TIME AS THE CONDITIONS IS NO LONGER EXPOSED TO FREEZE/THAW CONDITIONS.
- FOUNDATION SURFACES AGAINST WHICH CONCRETE IS TO BE PLACED MUST BE FREE FROM STANDING WATER, MUD AND DEBRIS. SURFACES SHALL BE CLEAN AND FREE FROM OIL, OBJECTIONABLE COATINGS, AND LOOSE OR UNSOUND MATERIAL.
- PROTECT CONCRETE FROM SUN AND RAIN. DO NOT PERMIT CONCRETE TO BECOME DRY DURING CURING PERIOD. CONCRETE SHALL NOT BE SUBJECTED TO ANY LOADS UNTIL CONCRETE IS COMPLETELY CURED, AND UNTIL CONCRETE HAS ATTAINED ITS 28 DAY STRENGTH AND 14 DAYS MINIMUM.
- UPON COMPLETION OF FINISHING OPERATION, THE SURFACE OF SLABS SHALL BE SEALED AGAINST MOISTURE LOSS FOR 7 DAYS BY THE APPLICATION OF A CURING MEMBRANE OR BLANKET.
- CONCRETE IN FORMS SHALL BE KEPT MOIST UNTIL REMOVAL. IMMEDIATELY UPON REMOVAL OF FORMS, AN APPROVED SPRAYED-ON CURING COMPOUND SHALL BE APPLIED TO THE CONCRETE SURFACES IN STRICT COMPLIANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. CURING SHALL BE MAINTAINED FOR 7 DAYS.

- PROVIDE 7 DAY CURING IMMEDIATELY AFTER FINISHING USING ONE OF THE FOLLOWING METHODS:
 A. CONTINUOUSLY WATERED BURLAP
 B. WATERPROOF MEMBRANES
 C. SPRAYED-ON LIQUID MEMBRANE
 REFER TO THE MANUFACTURER'S SPECIFICATIONS FOR REQUIREMENTS. PROTECT THE CONCRETE SURFACE BETWEEN FINISHING OPERATIONS ON HOT, DRY DAYS OR ANY TIME PLASTIC SHRINKAGE CRACKS DEVELOP USING NET BURLAP, PLASTIC MEMBRANES OR FOGGING. PROTECT CONCRETE DECK AT ALL TIMES FROM RAIN, HAIL OR OTHER INJURIOUS EFFECTS.
- PROVIDE POUR STOP MATERIAL WHERE NOT INDICATED ON PLAN AS REQUIRED TO COMPLETE JOB.
- HOT WEATHER CONCRETING (ABOVE 90°F):
 WHEN PLACING CONCRETE IN HOT WEATHER CONDITIONS THAT COULD ADVERSELY AFFECT THE PROPERTIES AND SERVICEABILITY OF CONCRETE, PREPARATIONS AND PROCEDURES OUTLINED IN ACI 309R-91 SHOULD BE FOLLOWED UNLESS OTHERWISE NOTED IN CONSTRUCTION SPECIFICATIONS.
- COLD WEATHER CONCRETING (BELOW 40°F):
 WHEN PLACING CONCRETE IN COLD WEATHER CONDITIONS THAT COULD ADVERSELY AFFECT THE PROPERTIES AND SERVICEABILITY OF CONCRETE, PREPARATIONS AND PROCEDURES OUTLINED IN ACI 306R-88 SHOULD BE FOLLOWED UNLESS OTHERWISE NOTED IN CONSTRUCTION SPECIFICATIONS.

POST-INSTALLED ANCHORS

- ALL POST INSTALLED ANCHORS SHALL BE HLTI UNLESS NOTED OTHERWISE ON PLAN.
- ALL ALTERNATE FASTENER TYPE / MANUFACTURER SHALL BE SUBMITTED TO EOR FOR REVIEW / APPROVAL. SUBMITTAL SHALL INCLUDE DESIGN CALCULATIONS SIGNED & SEALED BY LICENSED PROFESSIONAL WITHIN PROJECT JURISDICTION.
- POST-INSTALLED CONCRETE ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.
- POST INSTALLED ANCHORS SHALL BE INSTALLED IN MANNER THAT DOES NOT DAMAGE REINFORCING STEEL WITH CAST-IN-PLACE CONCRETE. CONTRACTOR SHALL SCAN ALL AREAS WITH REINFORCEMENT PRIOR TO INSTALLATION TO MITIGATE DAMAGE OF REINFORCEMENT.
- NOTIFY EOR IF AS-BUILT LOCATION OF ANCHORAGE IS LARGER THEN 1/2" FROM LOCATION AS DESIGNATED WITHIN CONTRACT DOCUMENTS.
- MECHANICAL ANCHORS (WEDGE / UNDERCUT) SHALL BE ANY OF THE FOLLOWING:
- CHEMICAL ANCHORS (EPOXY SET) SHALL BE ANY OF THE FOLLOWING:
- UNLESS NOTED OTHER, ALL DRILL & EPOXY SET REBAR SHALL USE HLTI HIT-HY-200 ADHESIVE, AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS. MINIMUM EMBEDMENT LENGTHS SHALL BE AS FOLLOWS:
- ALL ANCHORS SHALL ASSUME CRACKED CONCRETE DESIGN CONDITION.
- CONTRACTOR SHALL ARRANGE FOR HLTI REPRESENTATIVE TO PROVIDE ON SITE INSTALLATION TRAINING FOR EACH SPECIFIED ANCHOR TYPE. THE STRUCTURAL ENGINEERING OF RECORD SHALL RECEIVE DOCUMENTATION VERIFY THAT ALL OF CONTRACTOR'S PERSONNEL INSTALLING ANCHORS HAVE BEEN TRAINED PRIOR TO COMMENCEMENT OF ANCHOR INSTALLATION.
- CONCRETE SHALL HAVE ACHIEVED DESIGN STRENGTH PRIOR TO INSTALLING POST-INSTALLED ANCHORS. ADHESIVE ANCHORS SHALL BE INSTALLED IN CONCRETE THAT HAS CURED A MINIMUM OF 21 DAYS.
- ANCHOR CAPACITY IS DEPENDENT UPON SPACING BETWEEN ANCHORS AND PROXIMITY OF ANCHORS TO EDGES OF CONCRETE / MASONRY. INSTALL ANCHOR IN ACCORDANCE WITH SPACING AND EDGE CLEARANCES INDICATED ON DRAWINGS.
- POST-INSTALLED ANCHORS SHALL BE INSTALLED IN MANNER THAT DOES NOT DAMAGE REINFORCING STEEL. REINFORCING STEEL SHALL BE LOCATED BY NON-DESTRUCTIVE MEANS PRIOR TO DRILLING HOLES. WHERE THE ANCHOR LAYOUT CANNOT AVOID INTERFERENCE WITH REINFORCEMENT STEEL, THE CONTRACTOR SHALL NOTIFY STRUCTURAL ENGINEER TO OBTAIN AN ALTERNATIVE ANCHOR LAYOUT.
- ADHESIVE ANCHOR SHALL BE INSTALLED WITH A 6" EMBEDMENT DEPTH UNLESS NOTED OTHERWISE. ANCHORS OTHER THEN ADHESIVE ANCHORS SHALL BE INSTALLED WITH EMBEDMENT DEPTH EQUAL TO MAXIMUM EMBEDMENT DEPTH NOTED IN THE MANUFACTURER'S PRODUCT TECHNICAL GUIDE UNLESS NOTED OTHERWISE ON PLAN. WHERE EMBEDMENT DEPTH IS SPECIFIED, THAT DEPTH IS REQUIRED MINIMUM EMBEDMENT DEPTH.
- POST INSTALLED ANCHORS SHALL BE INSPECTED PERIODICALLY DURING INSTALLATION.
- POST INSTALLED ANCHORS IN VERTICAL AND OVERHEAD INSTALLATION ORIENTATIONS SHALL BE CONTINUOUSLY INSPECTED DURING INSTALLATION.
- INSPECTIONS SHALL BE PERFORMED BY SPECIAL INSPECTOR WHO HAS BEEN APPROVED BY LOCAL BUILDING OFFICIAL. THE INSPECTOR SHALL VERIFY THAT ALL ANCHORS WERE INSTALLED IN ACCORDANCE WITH REQUIREMENTS OF THE CONTRACT DOCUMENTS, THE APPLICABLE ICC ESR REPORTS AND THE MANUFACTURER'S INSTALLATION MANUAL. INSPECTIONS SHALL INCLUDE VERIFICATION OF ANCHOR SPACING, EMBEDMENT AND EDGE DISTANCE REQUIREMENTS.

POST INSTALLED ANCHORS SCHEDULE	
INSTALLATION TYPE	HLTI ANCHOR SELECTION
CONCRETE EXPANSION ANCHOR	K/KIK BOLT TZ
CONCRETE ADHESIVE ANCHOR	HIT-HY 200 SAFE SET w/ HIT-2 ROD HIT-HY 200 w/ HOLLOW DRILL BIT w/ HAS-E ROD HIT-RE 500 SD w/ HAS-E ROD
CONCRETE SCREW ANCHOR	K/KICK HUS EZ
CONCRETE DOVEL REINFORCEMENT	HIT-HY 200 SAFE SET w/ HOLLOW DRILL BIT HIT-RE 500 SD
CMU - GROUT FILLED EXPANSION ANCHOR	K/KIK BOLT 3
CMU - GROUT FILLED SCREW ANCHOR	K/KIK HUS EZ
CMU - GROUT FILLED ADHESIVE ANCHOR	HIT-HY 70 w/ HAS-E ROD
CMU - HOLLOW BLOCK ADHESIVE ANCHOR	HIT-HY 270 w/ HAS-E ROD & SCREEN TUBE

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PROJECT NAME

LOADING DOCK ALTERNATIONS

AT L. HOWARD FOX STUDIO
THEATRE
MONTCLAIR STATE UNIVERSITY
MSU PROJECT #PR24C009

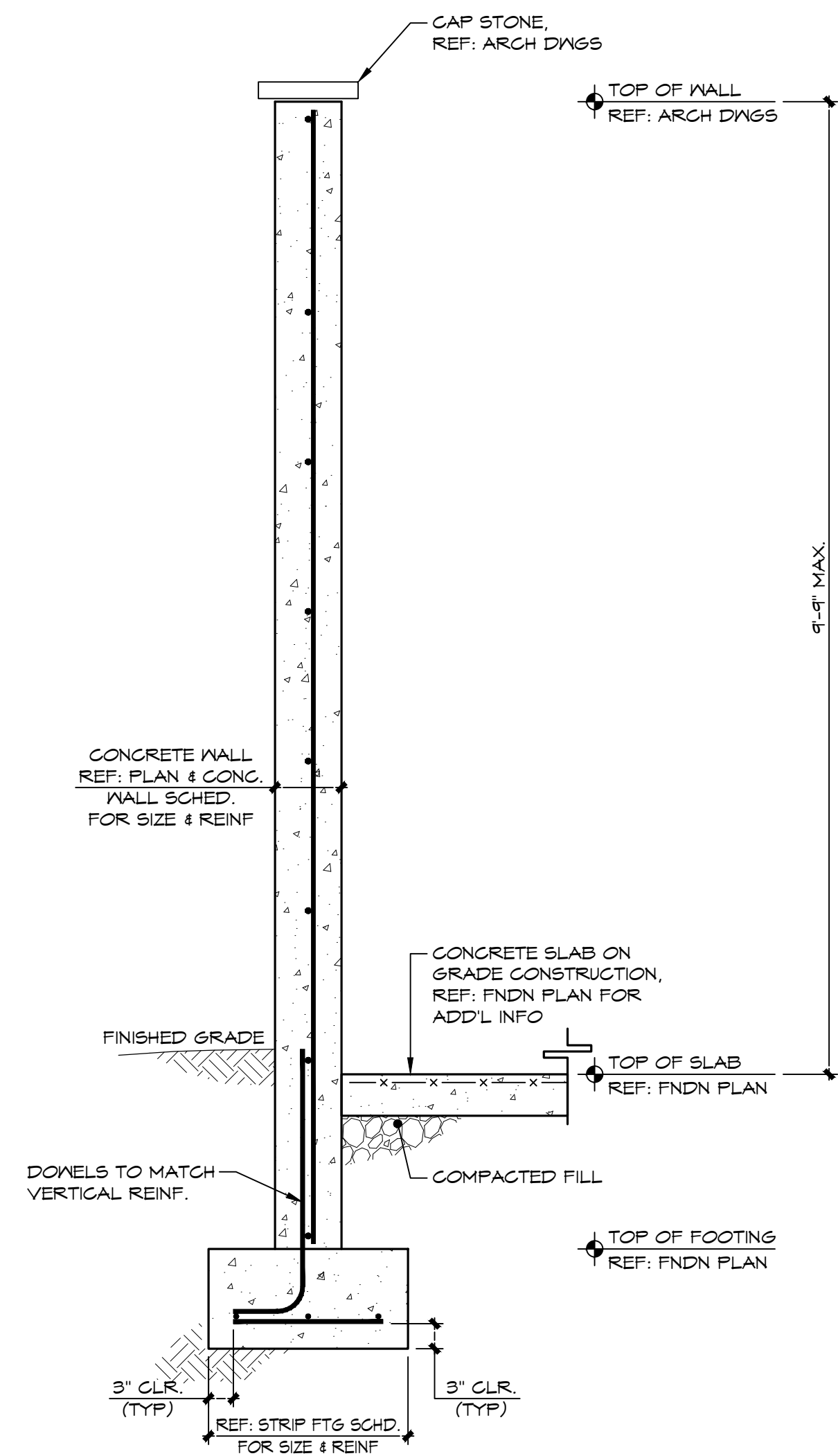
DRAWING NAME

STRUCTURAL SPECIFICATIONS

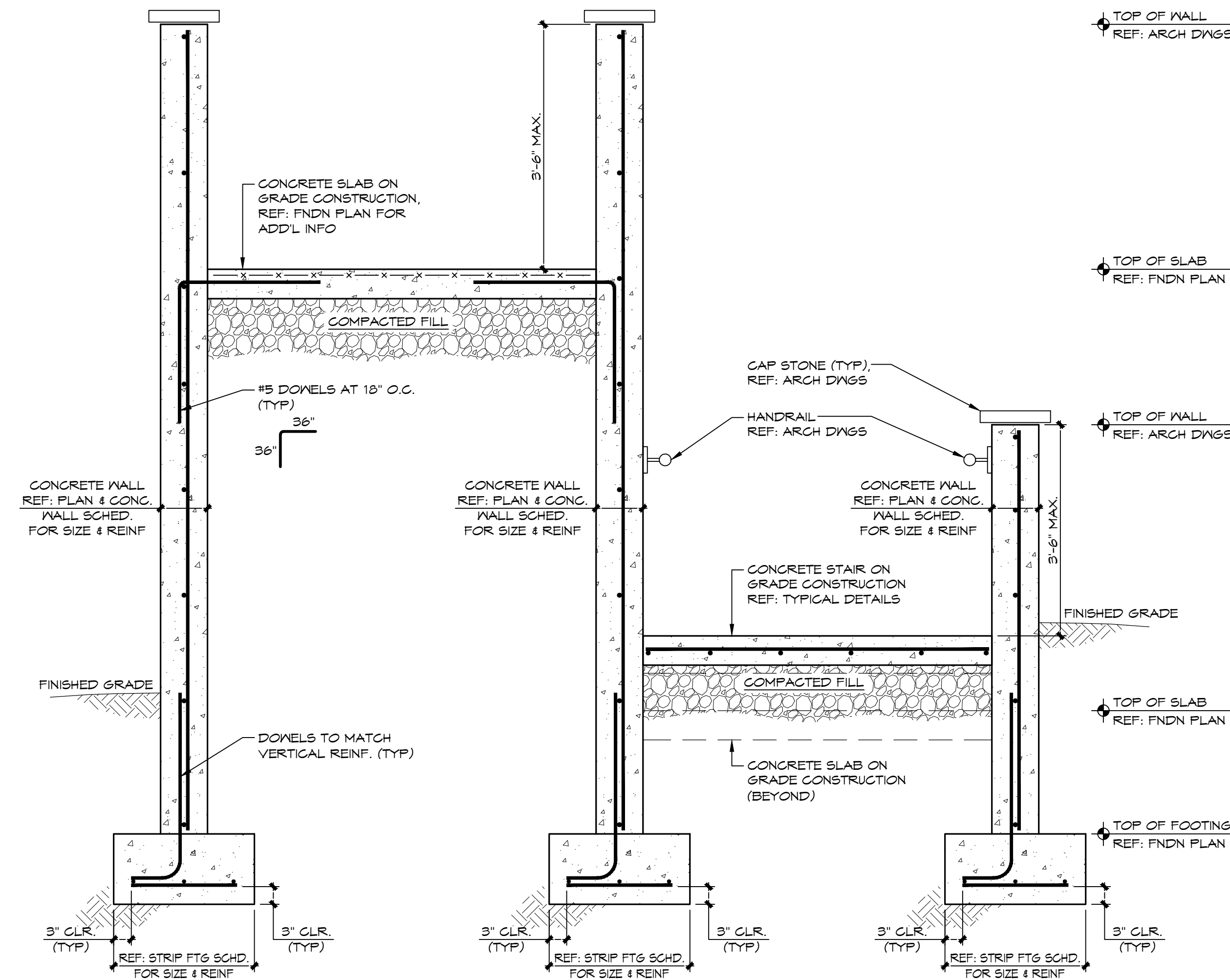
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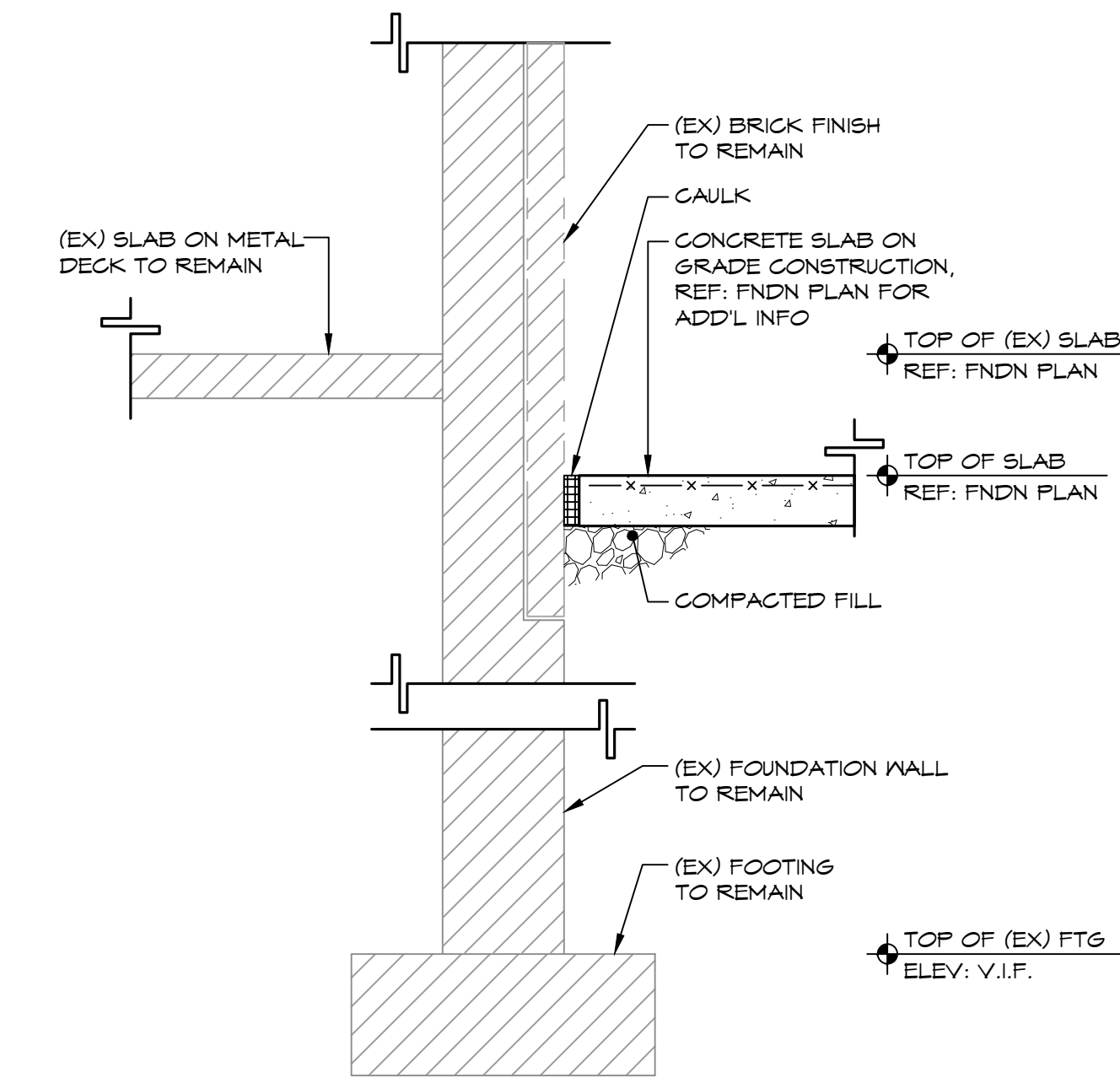
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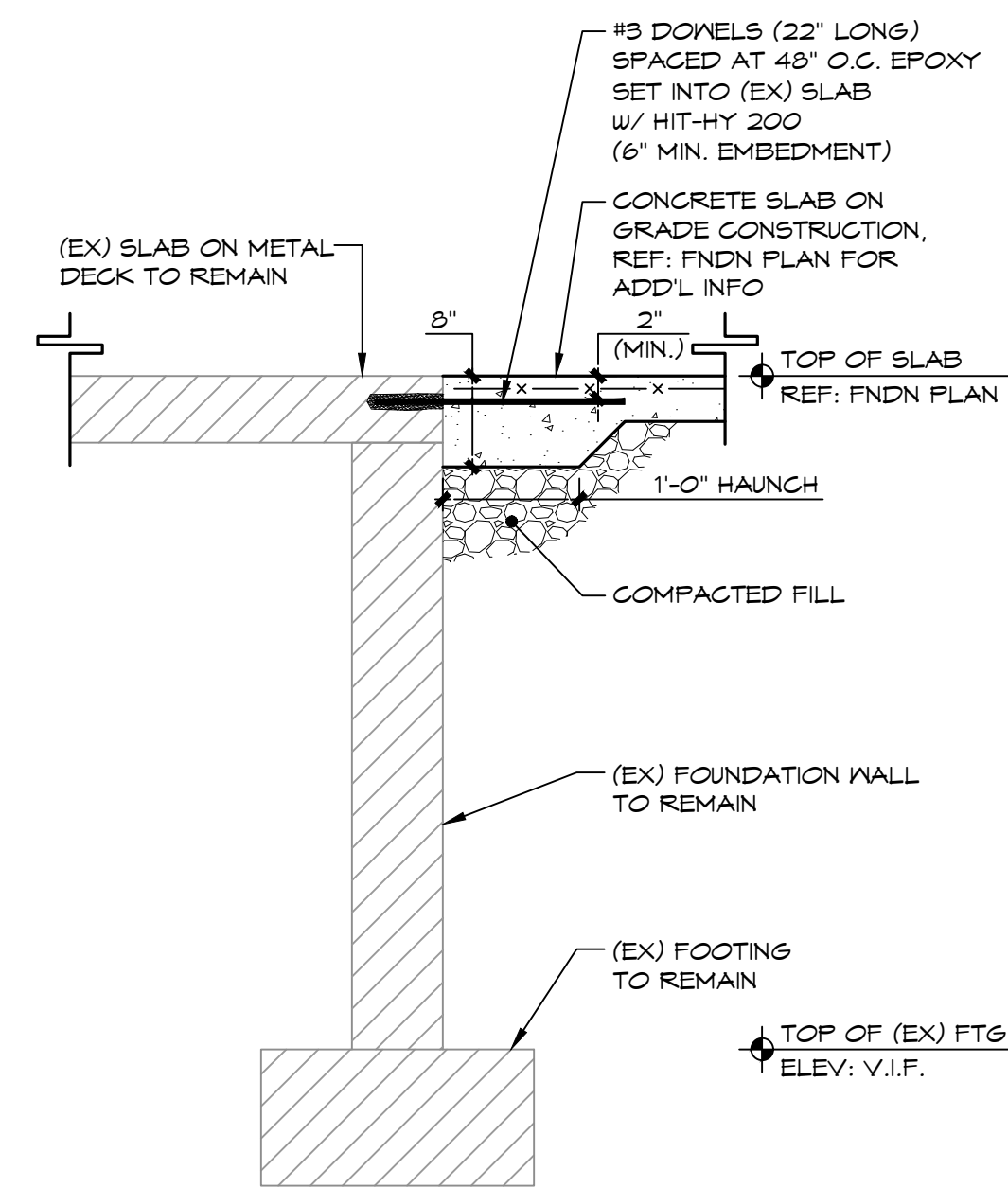
1 RETAINING WALL DETAIL
SCALE: 3/4"=1'-0"



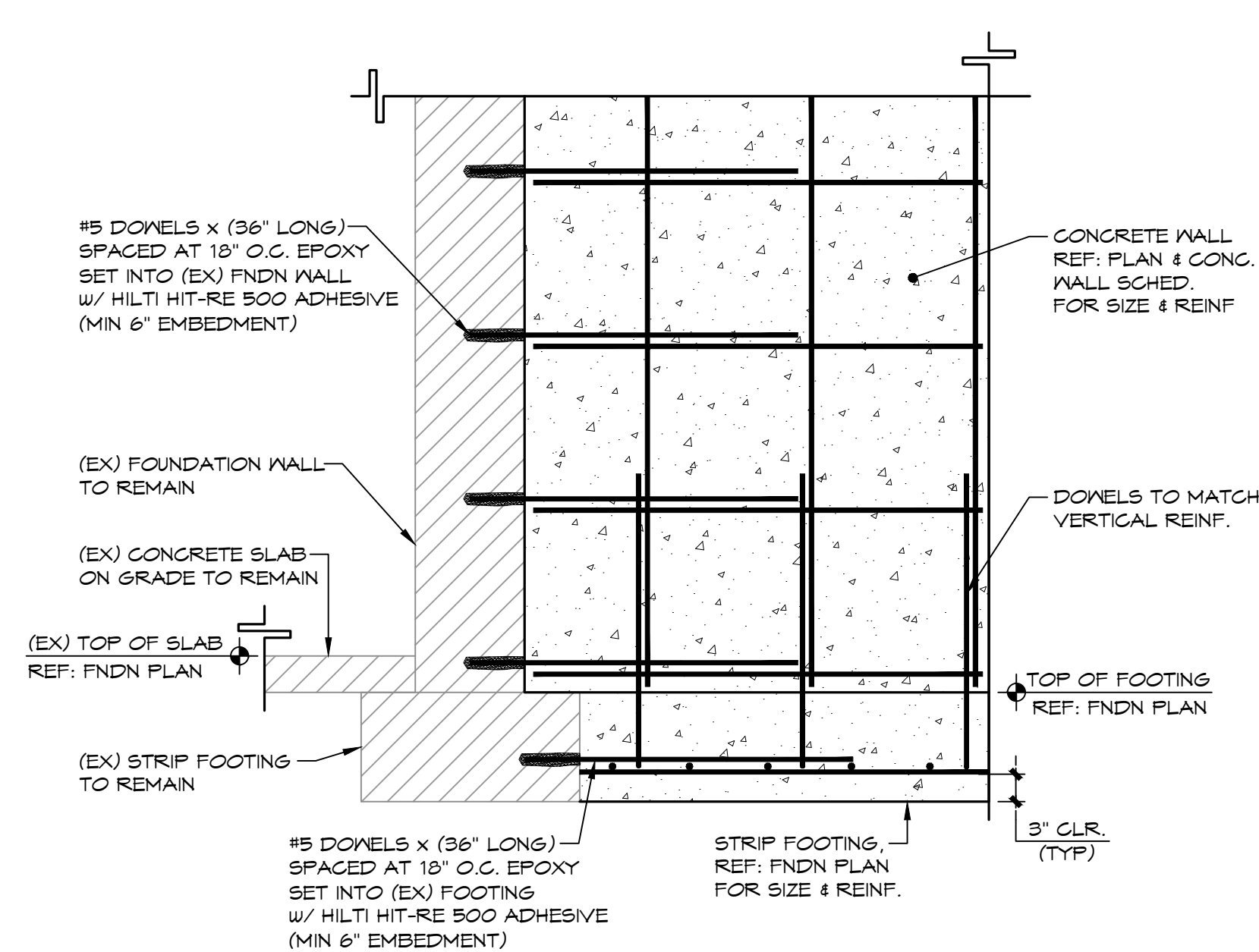
2 FOUNDATION WALL DETAIL
SCALE: 3/4"=1'-0"



3 SLAB AT (EX) FNDN. WALL DETAIL
SCALE: 3/4"=1'-0"



4 SLAB AT (EX) FNDN. WALL DETAIL
SCALE: 3/4"=1'-0"



5 FOUNDATION WALL DETAIL
SCALE: 3/4"=1'-0"

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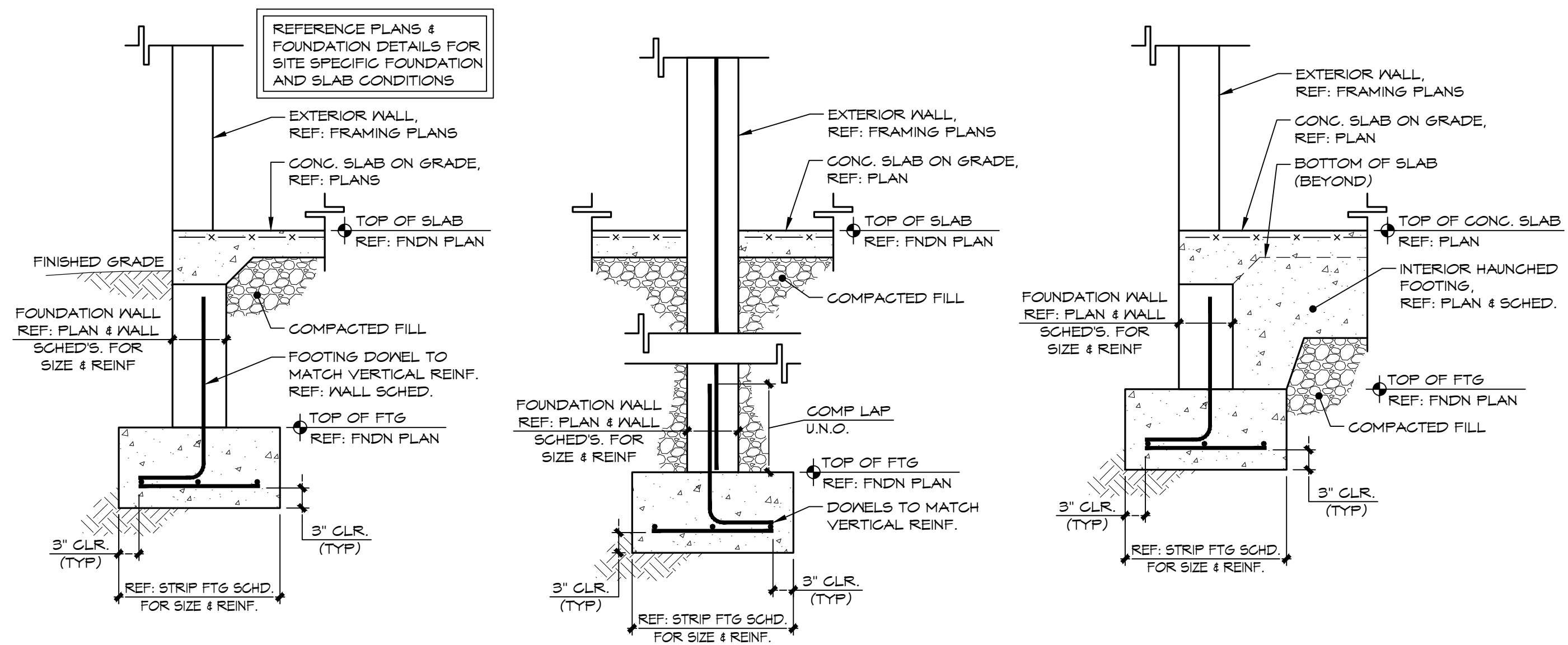
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FOUNDATION DETAILS

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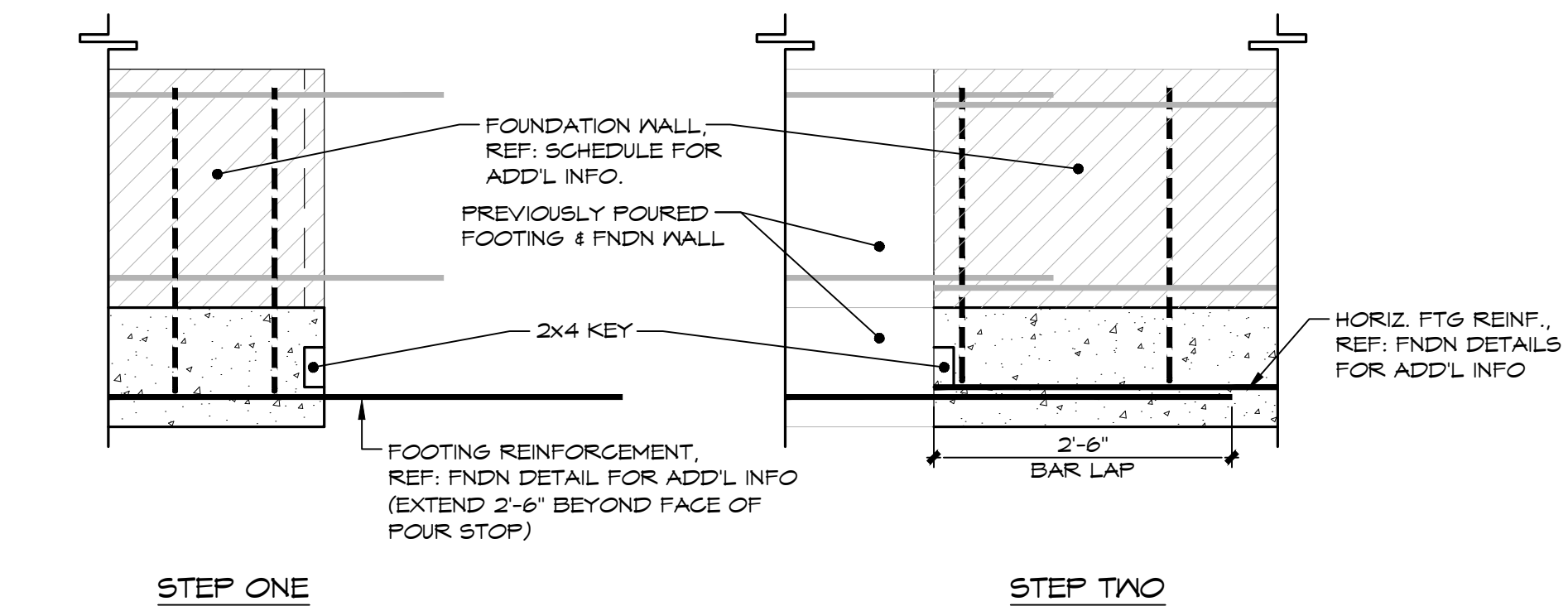
S201



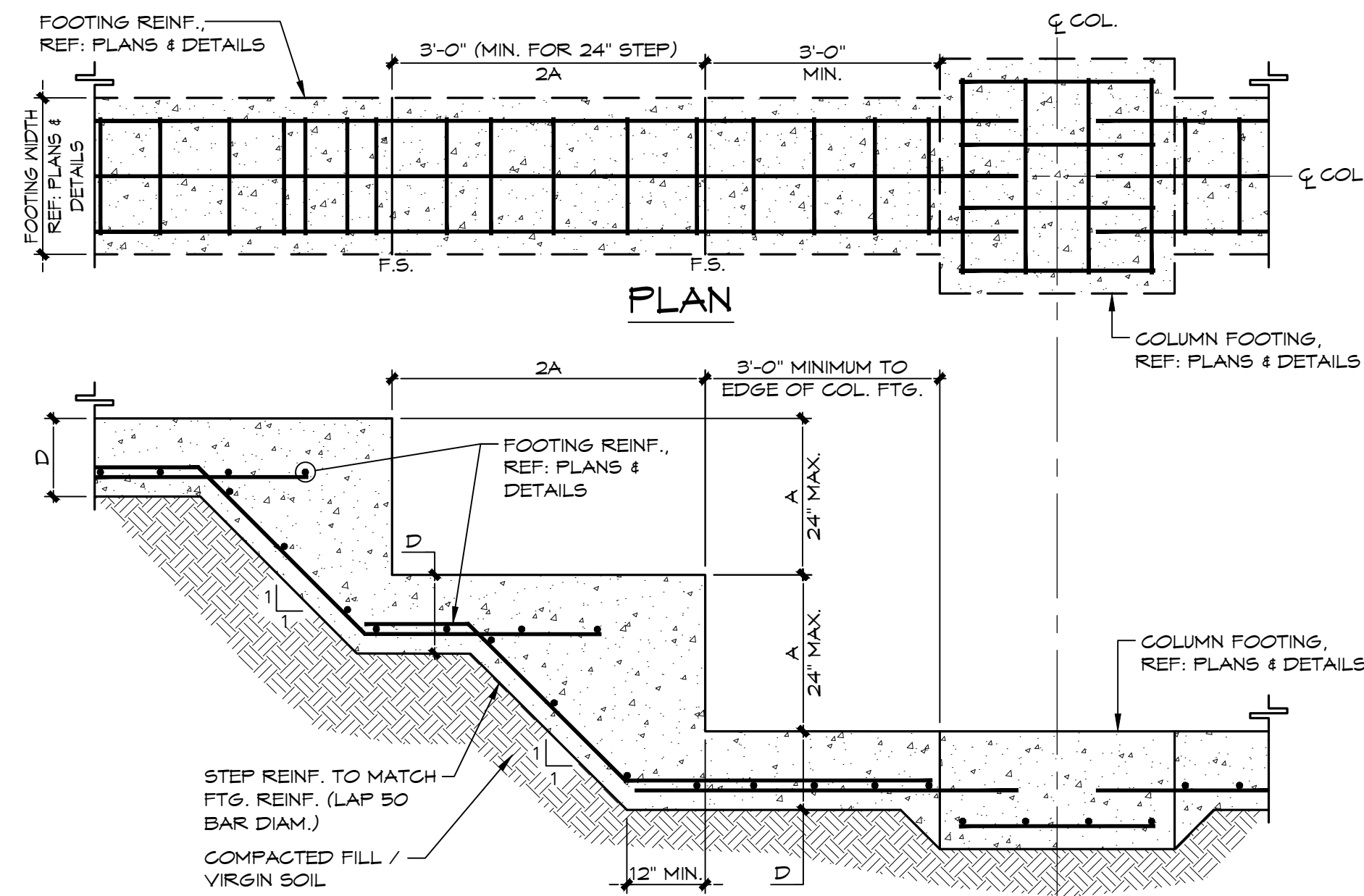
EXTERIOR w/ S.O.G.

EXTERIOR w/ S.O.G. TYPICAL STRIP FOOTING DETAILS

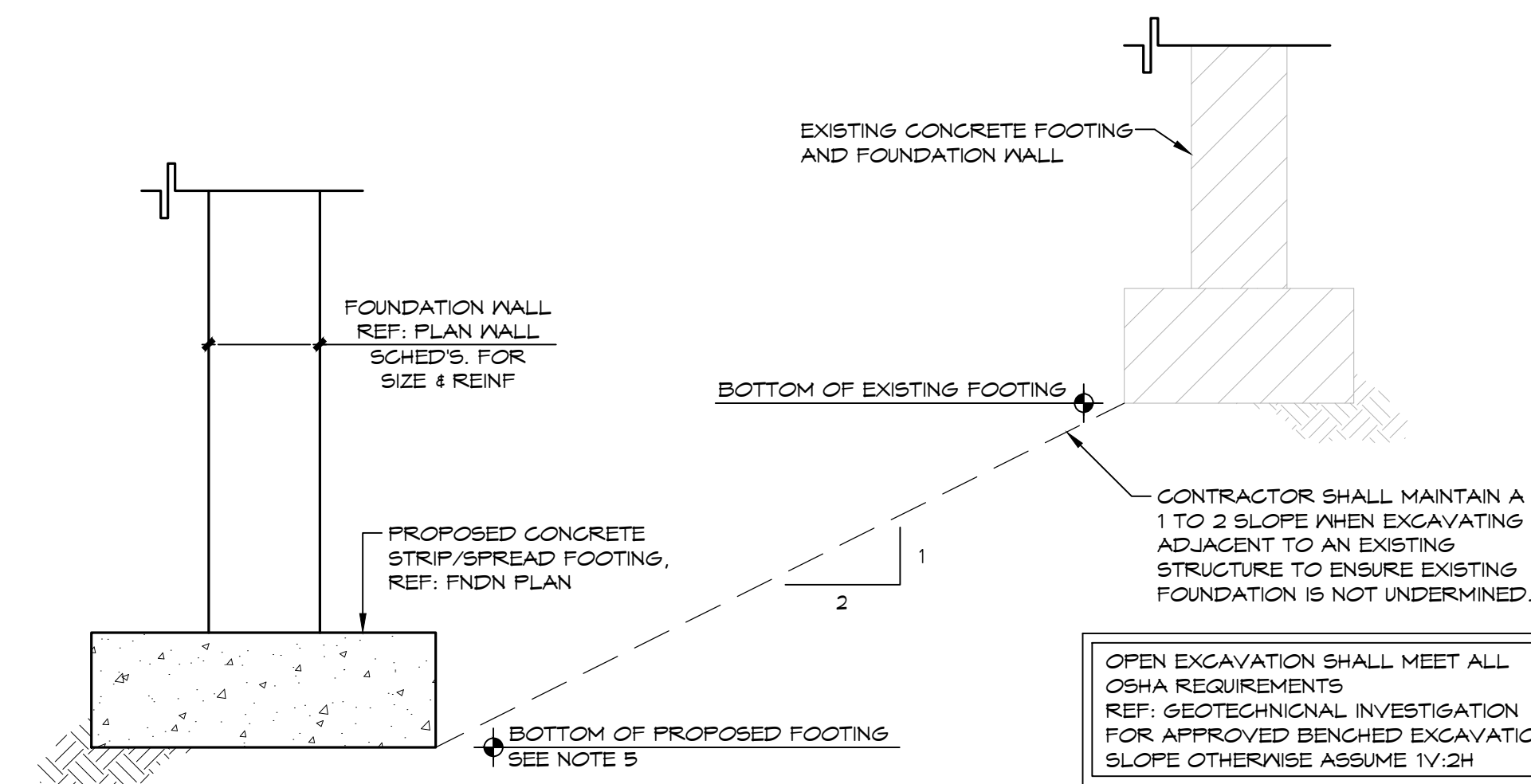
EXTERIOR w/ HAUNCHED INTERIOR FOOTING



CONCRETE STRIP FOOTING CONSTRUCTION JOINT DETAIL



TYPICAL FOOTING STEP DETAIL



TYPICAL FOOTING EXCAVATION ADJACENT TO EXISTING STRUCTURE

- NOTES:
1. PRE-CONDITION SURVEY AND MONITOR OF EXISTING BUILDING STRUCTURE IS RECOMMENDED DURING EXCAVATION TO ENSURE ANY MOVEMENT / SETTLEMENT WITHIN BUILDING IS IDENTIFIED.
 2. CONTRACTOR SHALL USE EXTREME CAUTION WHEN EXCAVATING ADJACENT TO EXISTING STRUCTURE & FOOTING AS TO ENSURE EXISTING FOUNDATION IS NOT DAMAGED.
 3. CONTRACTOR SHALL PROVIDE WEATHER PROTECTION TO EXISTING FOOTING AND SOIL TO ENSURE EROSION & UNDERMINING DOES NOT OCCUR DURING THE EXCAVATION AND CONSTRUCTION.
 4. IF 1 TO 2 SLOPE IS NOT OBTAINABLE, CONTRACTOR SHALL BE REQUIRED TO UNDERPIN EXISTING FOOTING TO A DEPTH THAT WILL MAINTAIN THE EXISTING FOOTINGS BEARING CAPACITY. E.O.R. SHALL BE NOTIFIED TO PROVIDE DETAILED UNDERPINNING / SEQUENCING PLAN.
 5. REFERENCE FOUNDATION PLAN FOR PROPOSED BOTTOM OF FOOTING. SUB-GRADE SHALL BE FIELD VERIFIED BY LICENSED GEOTECHNICAL ENGINEER TO CONFIRM SOIL BEARING CAPACITY AT PROPOSED FOOTING ELEVATION.

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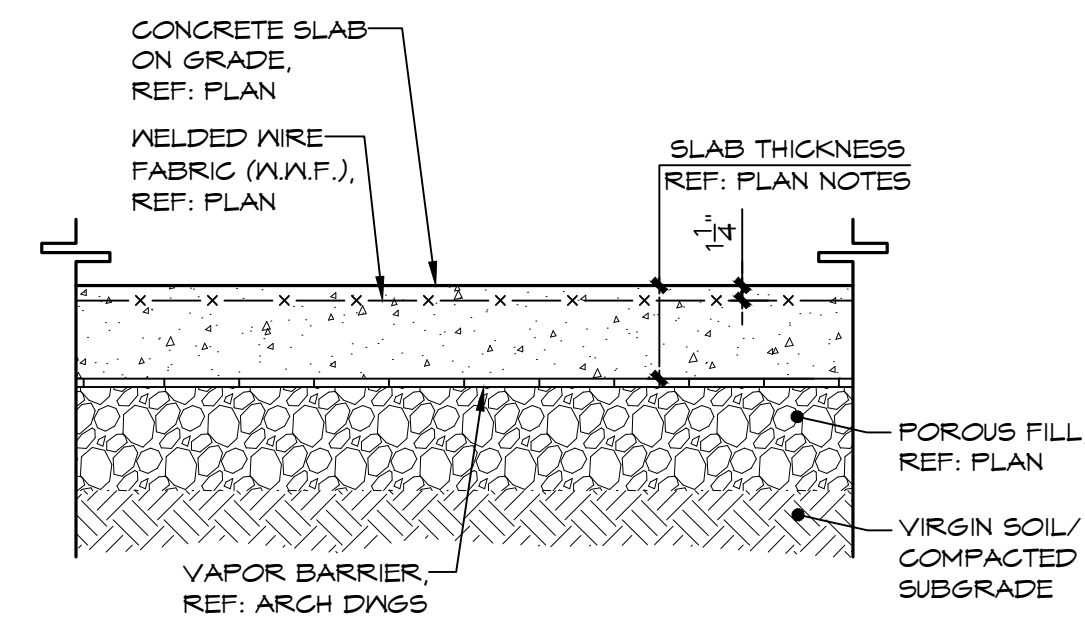
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TYPICAL SPREAD FOOTING DETAILS

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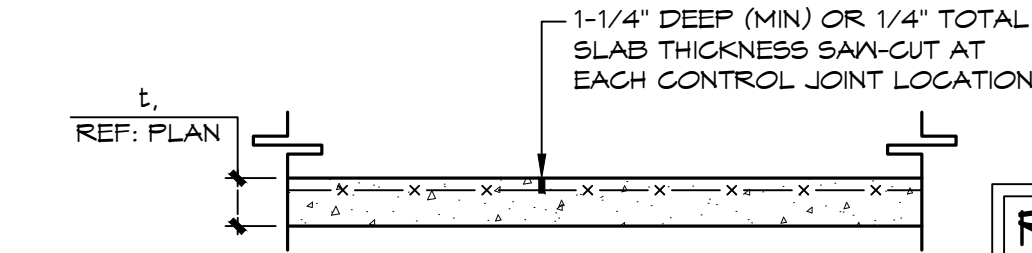
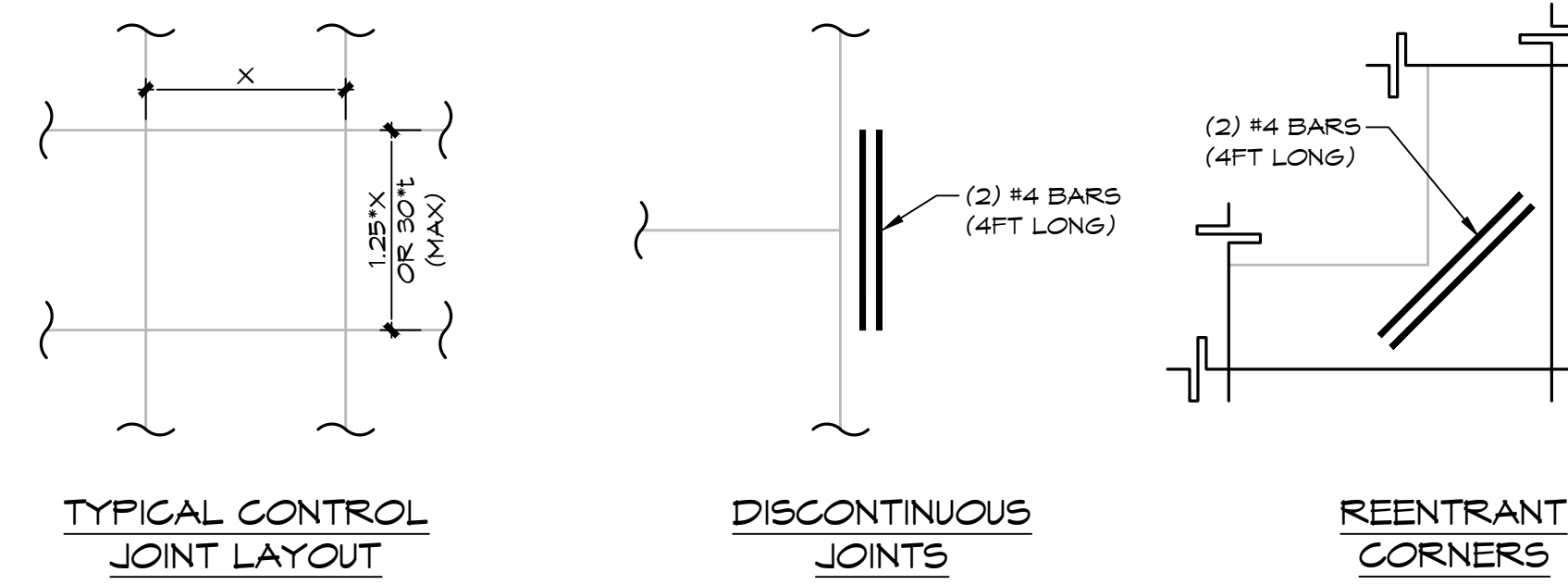
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FIBROUS REINFORCEMENT ALTERNATE:
CONTRACTOR MAY SUBSTITUTE SIKA FIBERMESH 300 REINFORCEMENT OR APPROVED EQUAL TO CONCRETE MIX IN LIEU OF REINFORCEMENT. (NOT RECOMMENDED FOR POLISH CONCRETE).

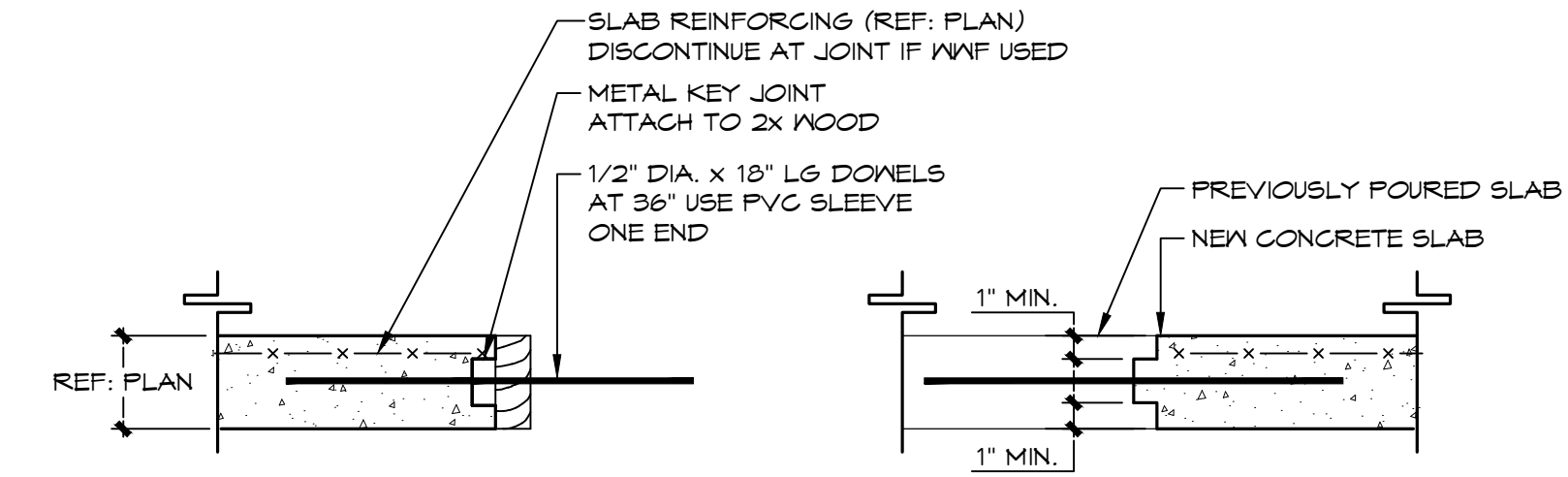
TYPICAL CONCRETE SLAB ON GRADE



- NOTES:
1. MAXIMUM JOINT SPACING SHALL BE 30X SLAB THICKNESS (t) U.N.O.
 2. PANELS SHALL BE SQUARE SHAPED. IF PANELS ARE UNABLE TO BE SQUARE, LENGTH OF LONG EDGE OF PANEL SHALL NOT EXCEED 1.25X LENGTH OF SHORT EDGE.
 3. CONTRACTOR MAY PROVIDE PREFORMED CONTROL JOINT SUCH AS "STRESSLOCK" OR APPROVED EQUAL.
 4. UPON CONTRACTORS REQUEST, FORMAL CONTROL JOINT LAYOUT CAN BE PROVIDED.

RECOMMENDED CONTROL JOINT SPACING	
SLAB THICKNESS (t) (IN)	MAX SPACING (FT)
4	10
5	12
6	15
7	17
8	20

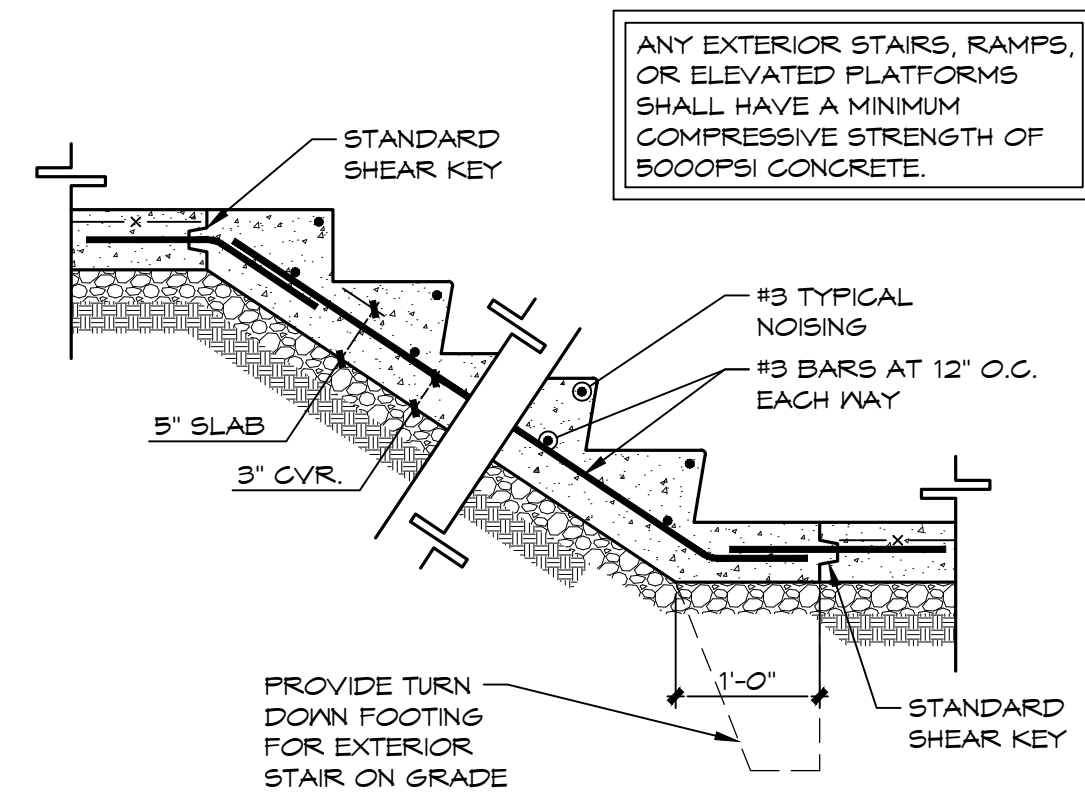
TYPICAL CONTROL JOINT DETAIL



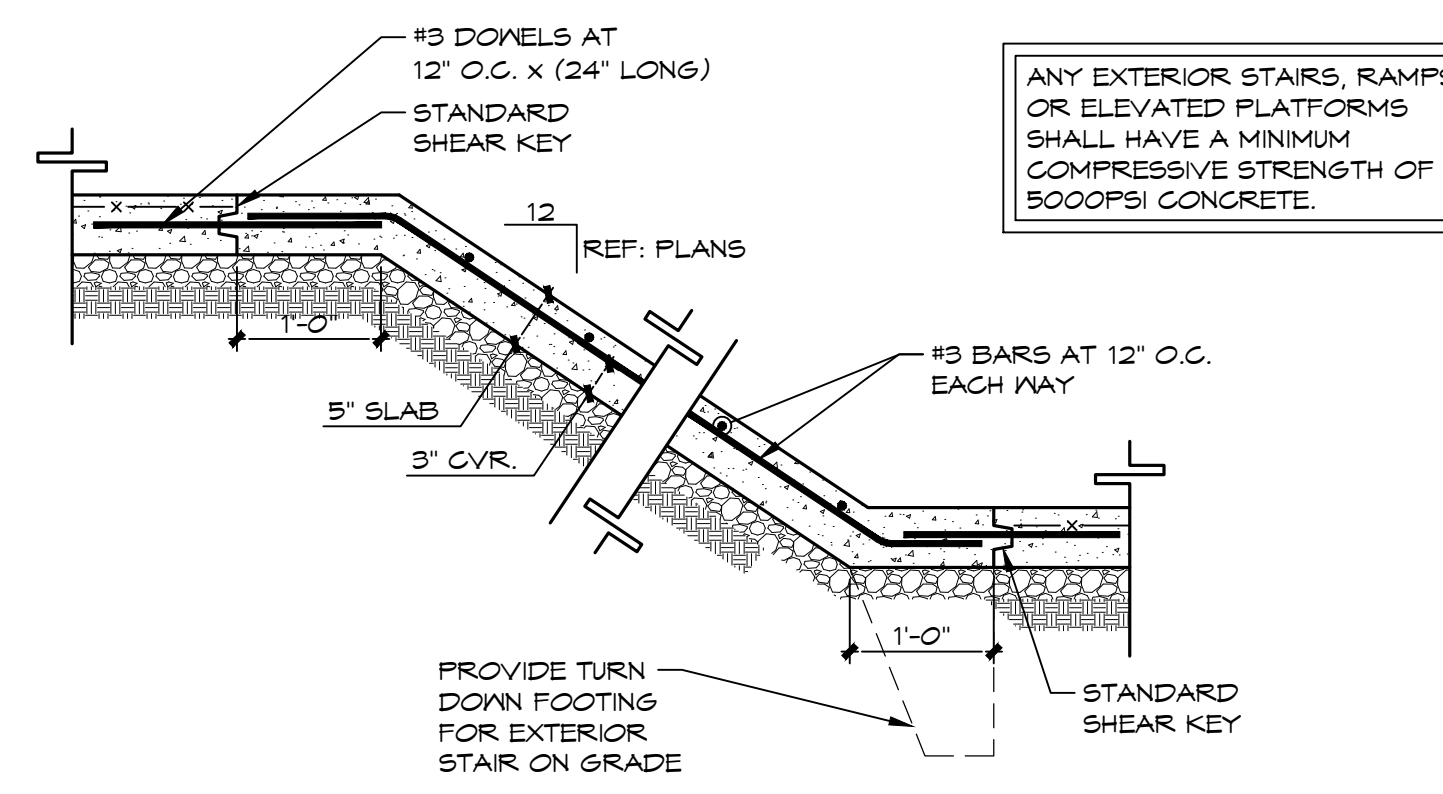
STEP ONE

STEP TWO
REMOVE WOOD FORMS FOR SECOND POUR.

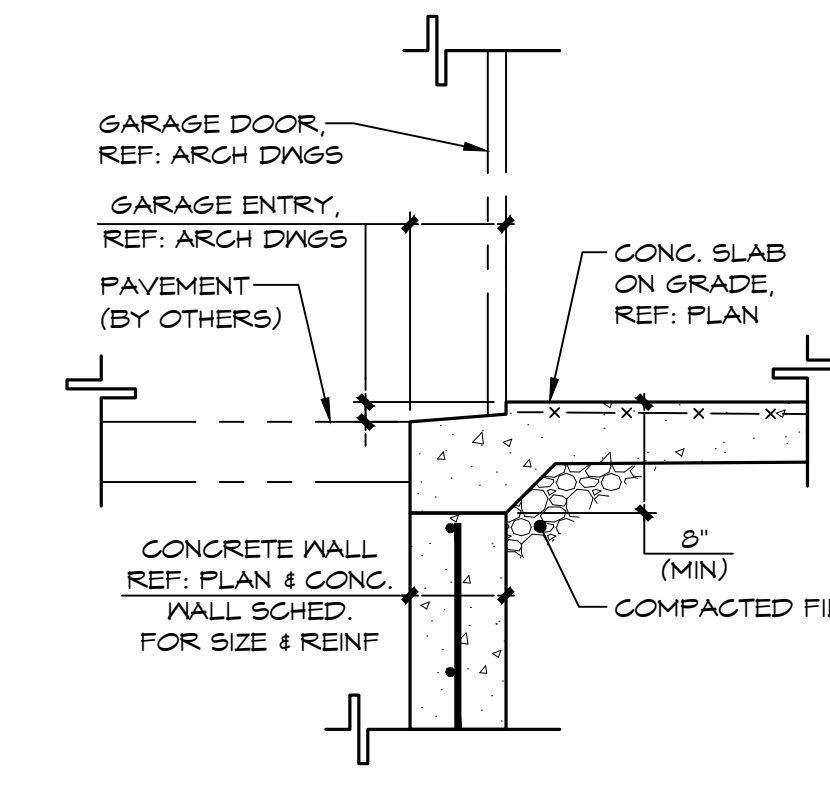
TYPICAL SLAB ON GRADE CONSTRUCTION JOINT



TYPICAL STAIR ON GRADE



TYPICAL RAMP ON GRADE



TYPICAL GARAGE ENTRY SLAB DETAIL

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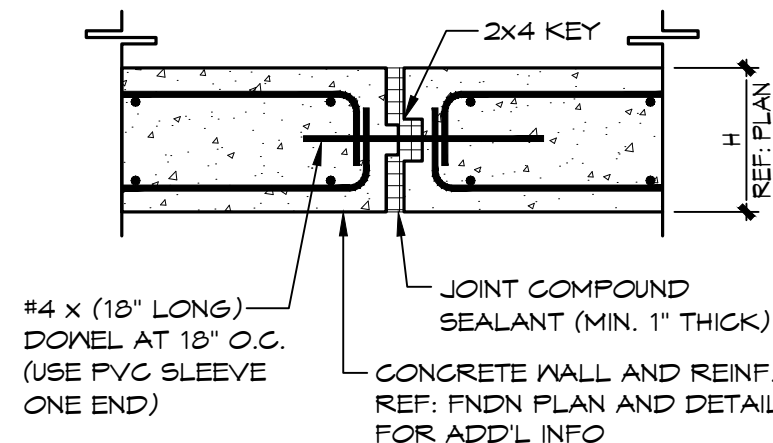
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TYPICAL SLAB ON GRADE DETAILS

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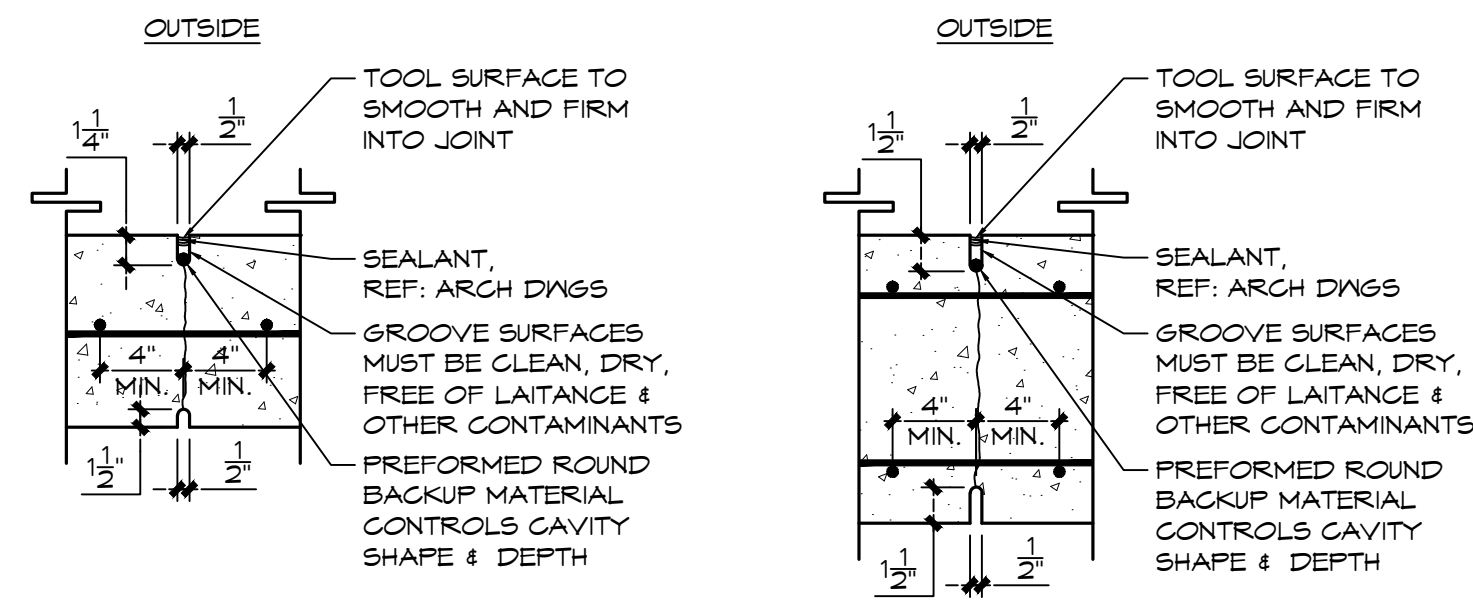
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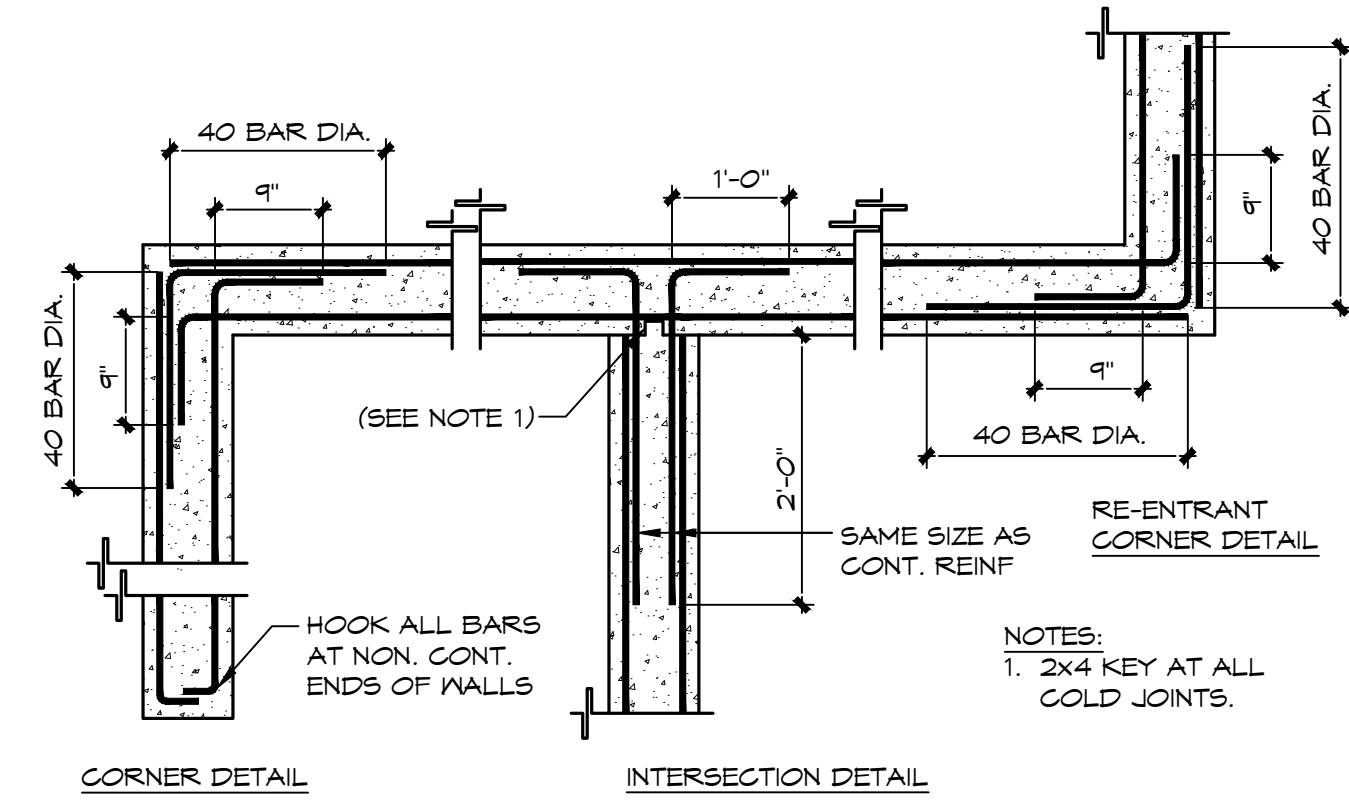
- NOTES:
- EXPANSION JOINTS SHALL BE PLACED AT A MAXIMUM OF 100 FT O.C.
 - EXPANSION JOINTS SHALL BE PLACED A MAXIMUM OF 50 FT FROM BUILDING CORNERS
 - CONTRACTOR SHALL PROVIDE EOR/ACR WITH PLAN INDICATING PROPOSED EXPANSION JOINT LOCATIONS FOR FINAL APPROVAL

CONCRETE WALL EXPANSION JOINT DETAIL

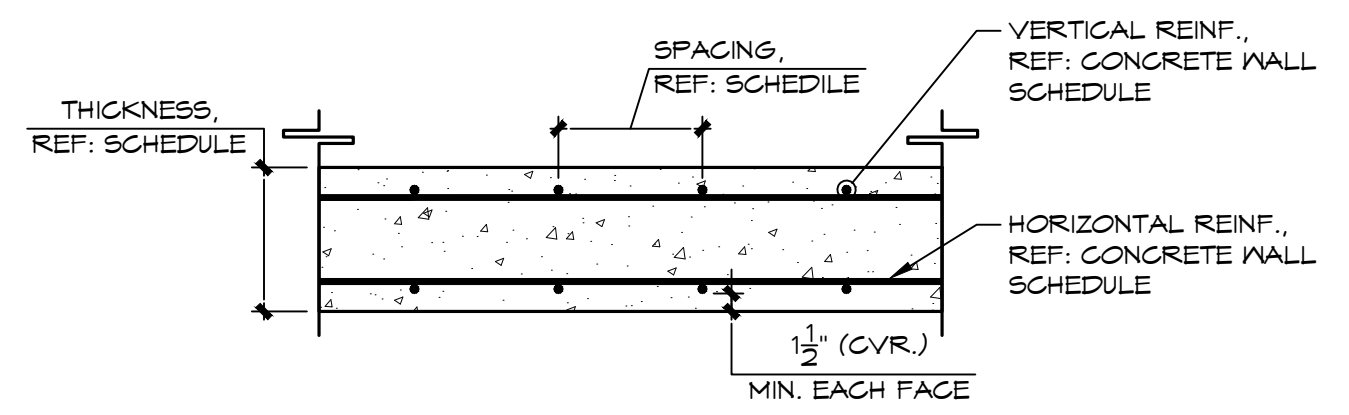


- NOTES:
- CONTROL JOINTS SHALL BE PROVIDED IN CONCRETE WALL CONSTRUCTION BY SAW-CUTTING JOINT IN WALL AS INDICATED.
 - CONTROL JOINTS SHALL BE SPACED EQUAL TO THE WALL HEIGHT WITH A MAXIMUM OF 25 FT O.C. AND SHALL BE PROVIDED AT 15 FT MAX. FROM WALL CORNERS.
 - COORDINATE JOINT LOCATION TO AVOID WALL VERTICAL REINFORCEMENT. MINIMUM 4" BETWEEN JOINT AND VERTICAL REINFORCEMENT.

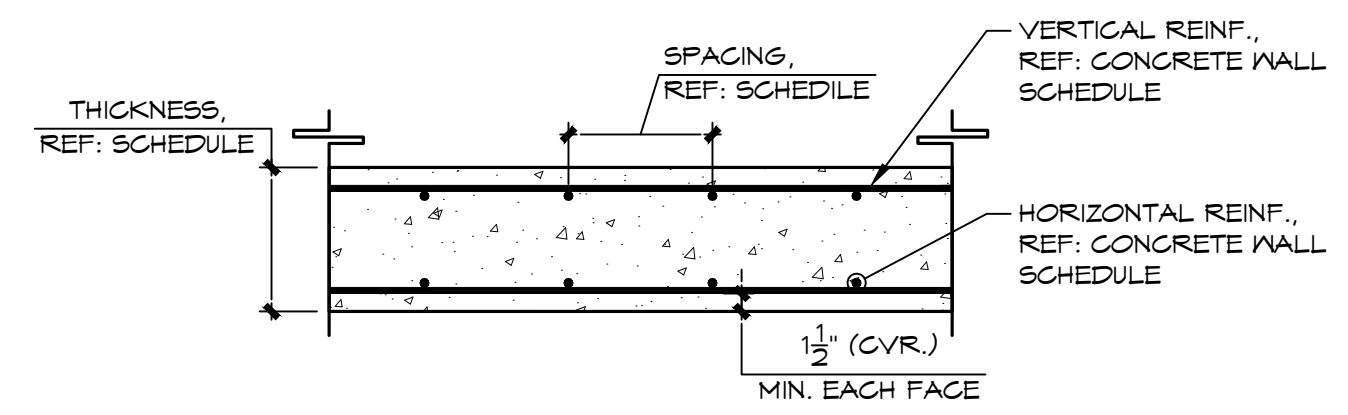
CONCRETE WALL CONTROL JOINT DETAIL



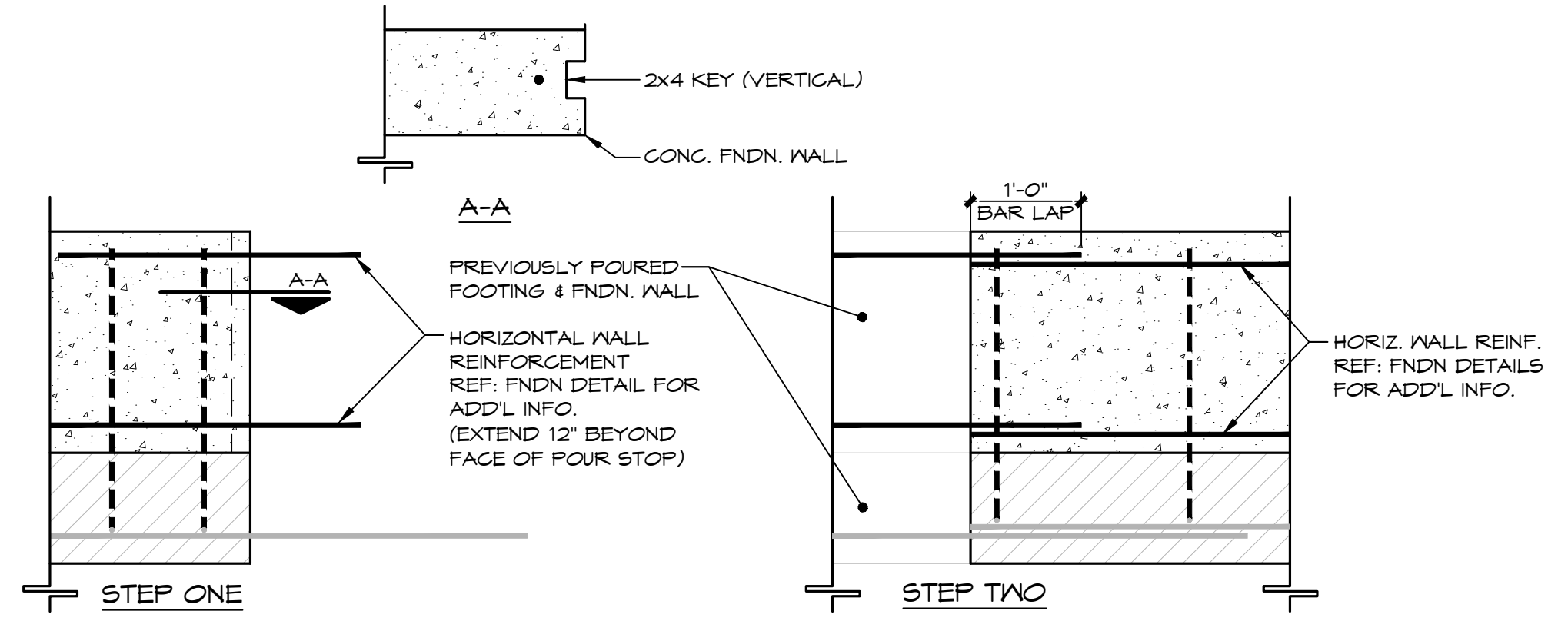
TYPICAL HORIZONTAL REINFORCEMENT DETAIL FOR CAST-IN-PLACE CONCRETE WALL



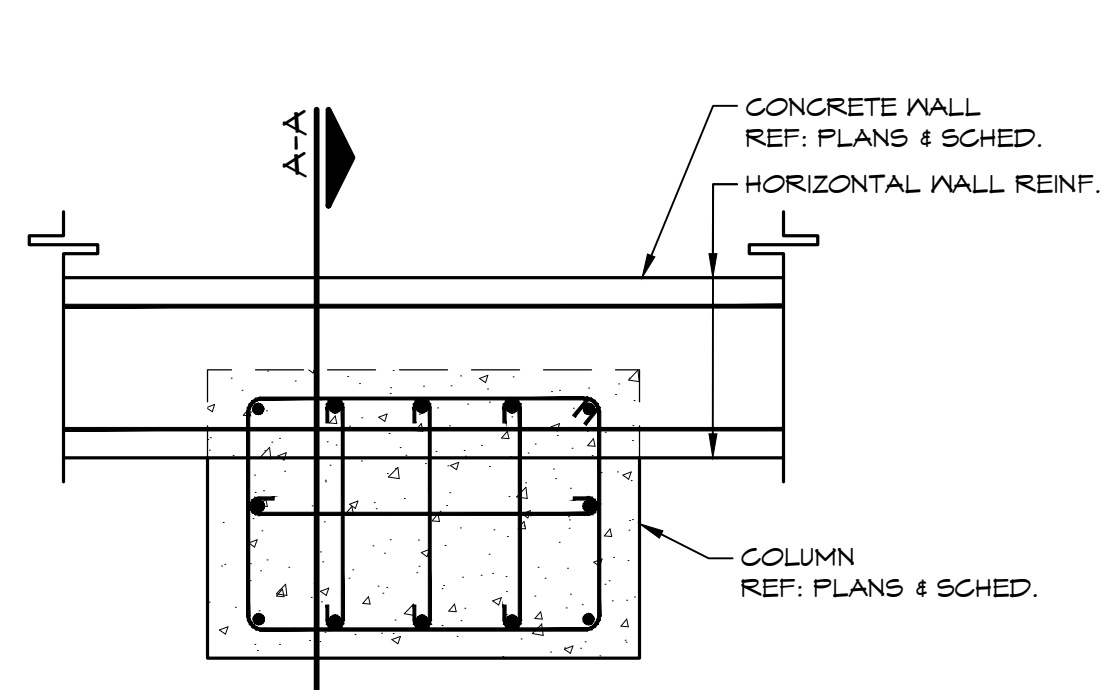
TYPICAL CONCRETE WALL (VERTICAL SPANNING) (U.N.O.)



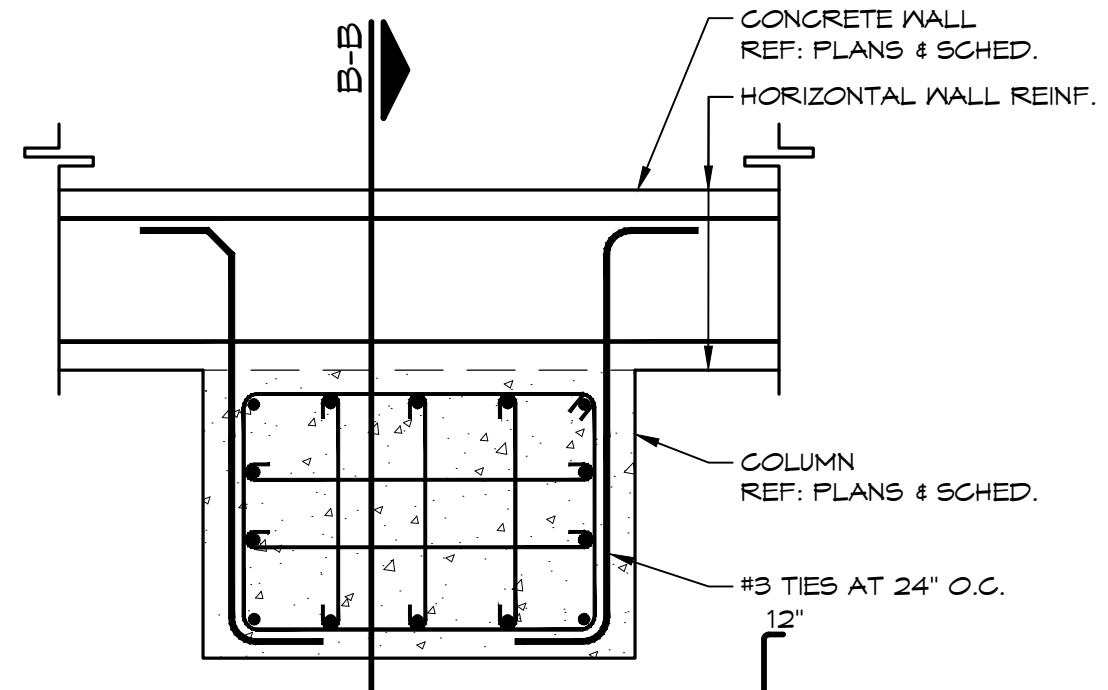
TYPICAL CONCRETE WALL (HORIZONTAL SPANNING)



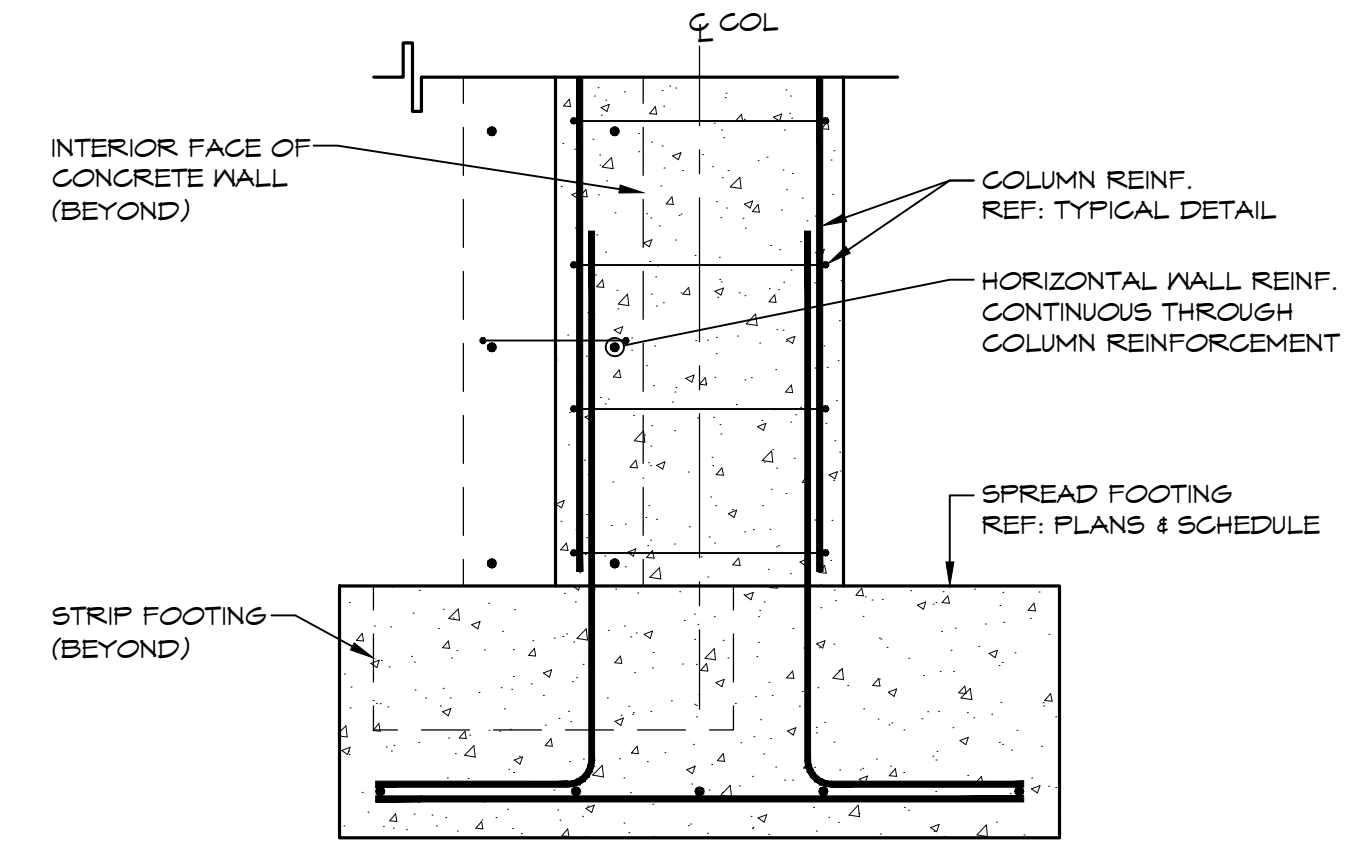
CONCRETE FOUNDATION WALL & STRIP FOOTING CONSTRUCTION JOINT DETAILS



PLAN VIEW

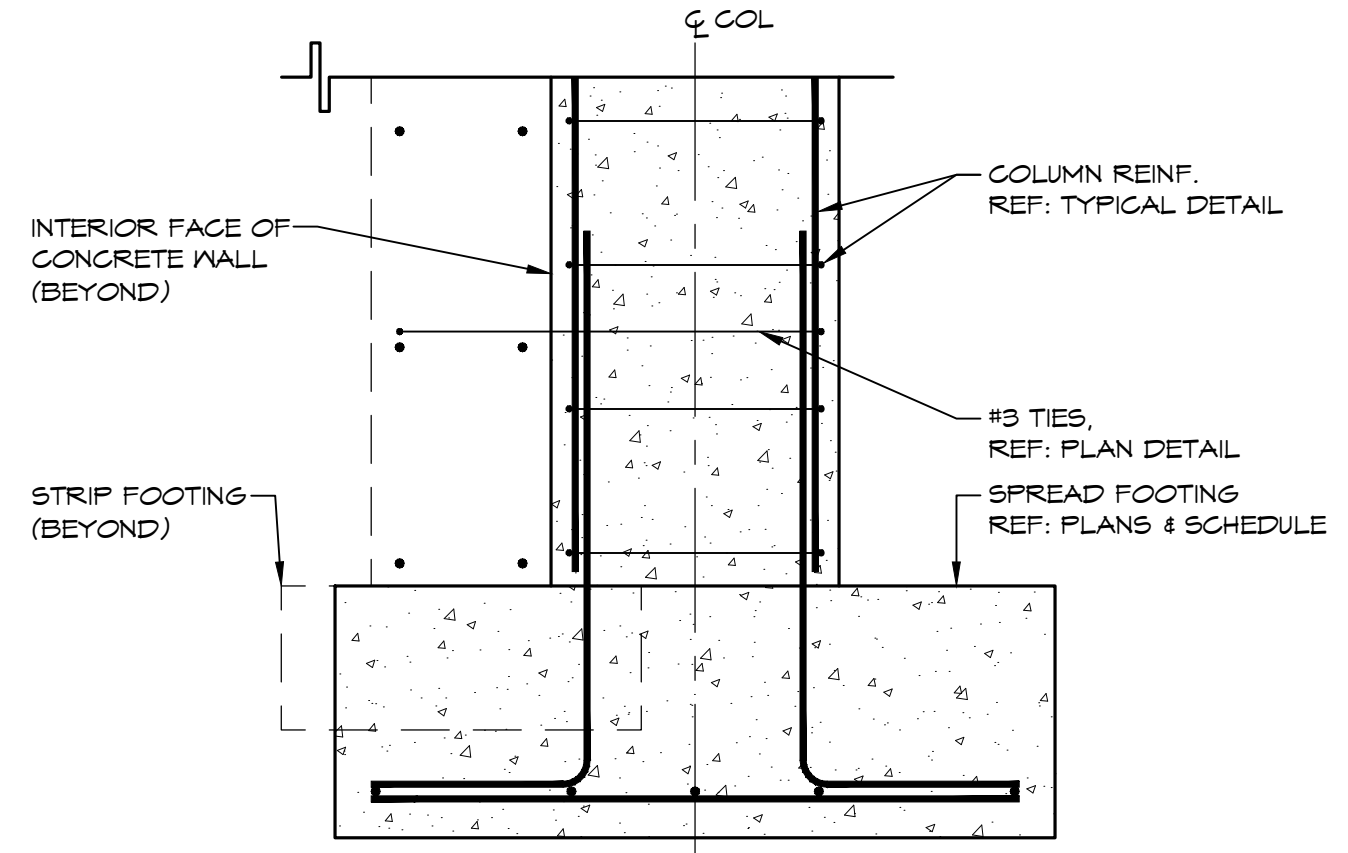


PLAN VIEW



A-A

CONCRETE WALL w/ INTEGRATED CONCRETE COLUMN/PIER



B-B

CONCRETE WALL w/ ADJACENT CONCRETE COLUMN/PIER

TYPICAL CONCRETE WALL CONSTRUCTION DETAIL

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