



CITY OF PHILADELPHIA DEPARTMENT OF PUBLIC PROPERTY

MAYOR – JAMES F. KENNEY

MANAGING DIRECTOR – TUMAR ALEXANDER

COMMISSIONER OF PUBLIC PROPERTY – BRIDGET COLLINS-GREENWALD

ZONE 5 GARAGE RENOVATIONS 6666 RIDGE AVENUE PROJECT NO. 20-20-4897-01

ARCHITECT

SEILER & DRURY ARCHITECTURE
420 DEKALB STREET
NORRISTOWN, PA 19401
PHONE NO. 610-272-4809

STRUCTURAL ENGINEER

WZG STRUCTURAL CONSULTING ENGINEERING, INC
180 W. RIDGE PIKE
ROYERSFORD, PA 19468
PHONE NO. 610-831-0555

ELECTRICAL ENGINEER

HUTEC ENGINEERING AND CONSULTING
304 MASTER ST., 1ST FLOOR
PHILADELPHIA, PA 19122
PHONE NO. 267-800-3540

ABBREVIATIONS

ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR
APC	ACOUSTICAL PANEL CEILING
ALUM	ALUMINUM
ANOD	ANODIZED
BM	BEAM
BYDN	BEYOND
CLNG	CEILING
CLR	CLEAR
CONC	CONCRETE
DEMO	DEMOLISH
DIA	DIAMETER
EA	EACH
EL	ELEVATION
ELEC	ELECTRICAL
EJ	EXPANSION JOINT
EJ(R)	EXPANSION JOINT, RETROFITTED
EQ	EQUAL
EX	EXISTING
EXIST	EXISTING
FIN	FINISH
FLR	FLOOR
FET	FIRE RESISTANT TREATED
FT	FEET
GA	GUAGE
GALV	GALVANIZED
GWB	GYPSUM WALL BOARD
HDWR	HARDWARE
HM	HOLLOW METAL
HVAC	HEATING/VENTILATION/AIR CONDITIONING
MAT	MATERIAL
MAX	MAXIMUM
MIN	MINIMUM
MO	MASONRY OPENING
MTL	METAL
NIC	NOT IN CONTRACT
NO	NUMBER
NOM	NOMINAL
OC	ON CENTER
OH	OVERHEAD
PL	PLATE
PLAM	PLASTIC LAMINATE
PLYD	PLYWOOD
PT	PRESSURE TREATED
PT	PAINT OR PAINTED
RCP	REFLECTED CEILING PLAN
REQD	REQUIRED
REV	REVISION
RM	ROOM
SCHED	SCHEDULE
SIM	SIMILAR
SGT	STRUCTURAL GLAZED TILE
SS	STAINLESS STEEL
STL	STEEL
TO	TOP OF
TOB	TOP OF BLOCK
TYP	TYPICAL
UC	UNDER-COUNTER
UNO	UNLESS NOTED OTHERWISE
VCT	VINYL COMPOSITION TILE
VIF	VERIFY IN FIELD
W/	WITH
WD	WOOD

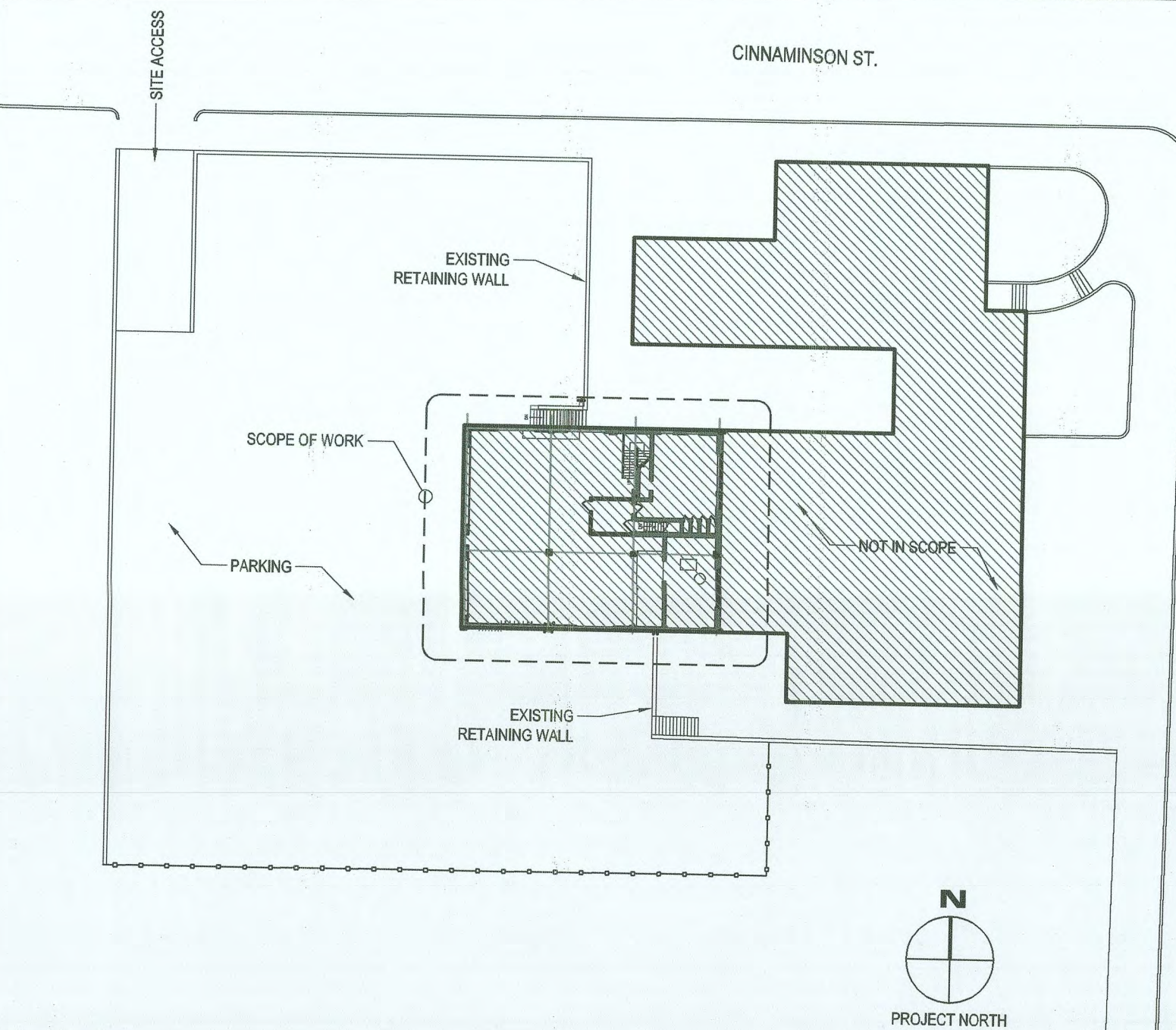
SYMBOLS

	SECTION TAG
	DETAIL REFERENCE NUMBER SHEET NUMBER
	INTERIOR ELEVATION TAG DETAIL REFERENCE NUMBER SHEET NUMBER
	DOOR TAG - SEE DOOR SCHED
	ROOM NAME ROOM TAG
	NEW DOOR
	EXISTING DOOR
	ITEMS TO BE DEMOLISHED
	EXISTING CONSTRUCTION
	NEW CONSTRUCTION
	EXPANSION JOINT

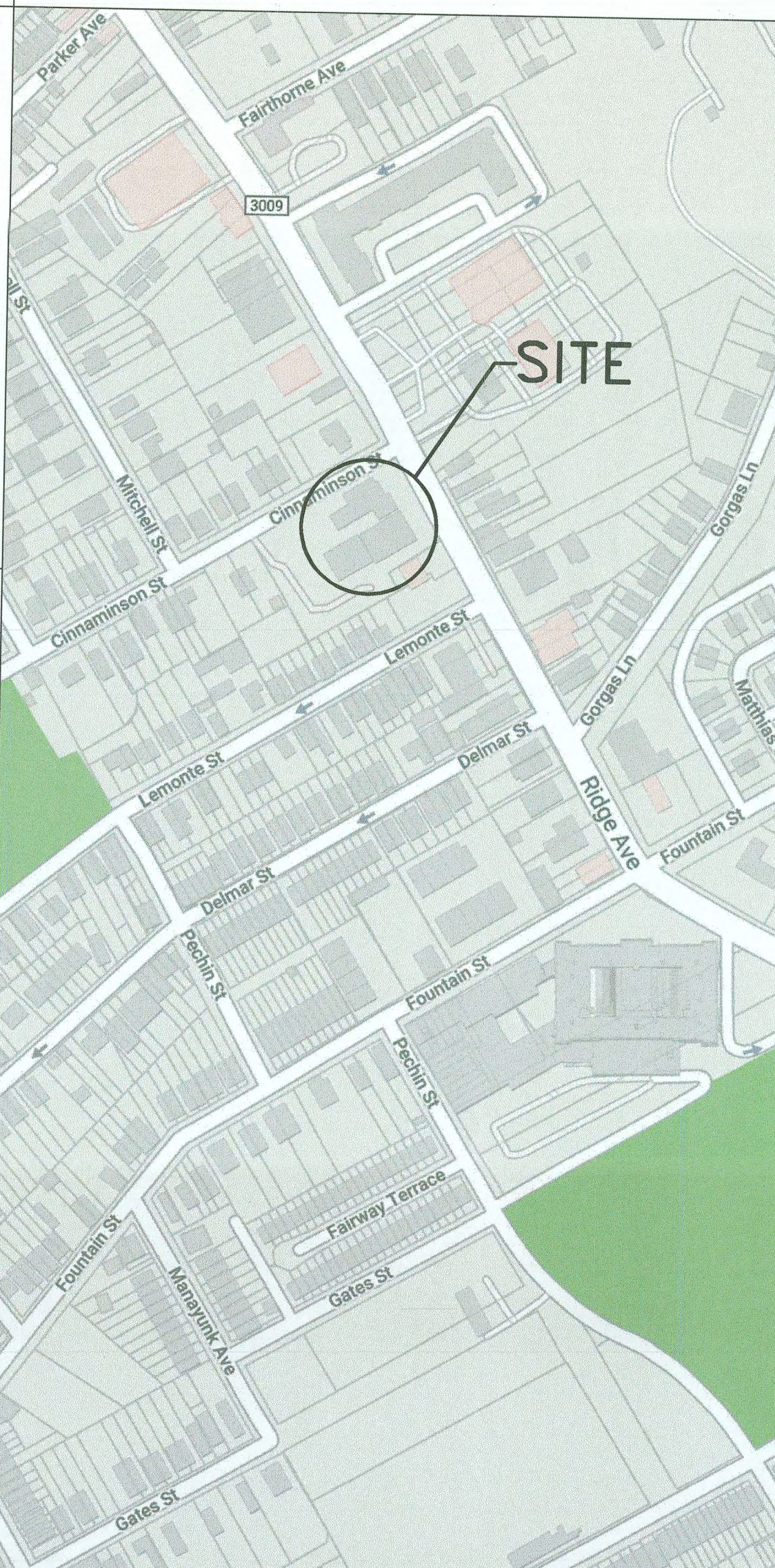
DRAWING LIST

CS1.0	COVER SHEET
EX3.0	EXISTING CONDITION EXTERIOR ELEVATIONS
EX3.1	EXISTING CONDITION EXTERIOR ELEVATIONS
AD3.0	SELECTIVE DEMOLITION EXTERIOR ELEVATIONS
AD3.1	SELECTIVE DEMOLITION EXTERIOR ELEVATIONS
A3.0	EXTERIOR ELEVATIONS & DETAILS
A3.1	EXTERIOR ELEVATIONS & DETAILS
A3.2	EXTERIOR ELEVATIONS & DETAILS
A5.0	INTERIOR ELEVATIONS & DETAILS
S0.0	STRUCTURAL GENERAL NOTES
S3.0	STRUCTURAL PLANS AND ELEVATIONS
S3.1	STRUCTURAL PLANS AND ELEVATIONS
S3.2	STRUCTURAL PLANS AND ELEVATIONS
ECS-1	ELECTRICAL COVER SHEET
ECS-2	ELECTRICAL COVER SHEET
ED-1	SELECTIVE ELECTRICAL DEMO PLANS & NOTES
E-1	ELECTRICAL PLAN

SITE DIAGRAM



LOCATION PLAN



PROJECT APPROVED

COMMISSIONER/DEPARTMENT OF PUBLIC PROPERTY
DEPUTY COMMISSIONER/DEPARTMENT OF PUBLIC PROPERTY
PROJECT DIRECTOR/PPP-CAPITAL PROJECTS DIVISION

ART COMMISSION

HISTORICAL COMMISSION

SEALS



CITY OF PHILADELPHIA
DEPARTMENT OF PUBLIC PROPERTY

CAPITAL PROJECTS DIVISION
1400 JFK BLVD 7TH FLR CITY HALL
PHILADELPHIA PENNSYLVANIA

PROJECT NO. 20-20-4897-01 DRAWING NO.

DATE 12/07/2021

SCALE AS NOTED

DRAWN BY KK

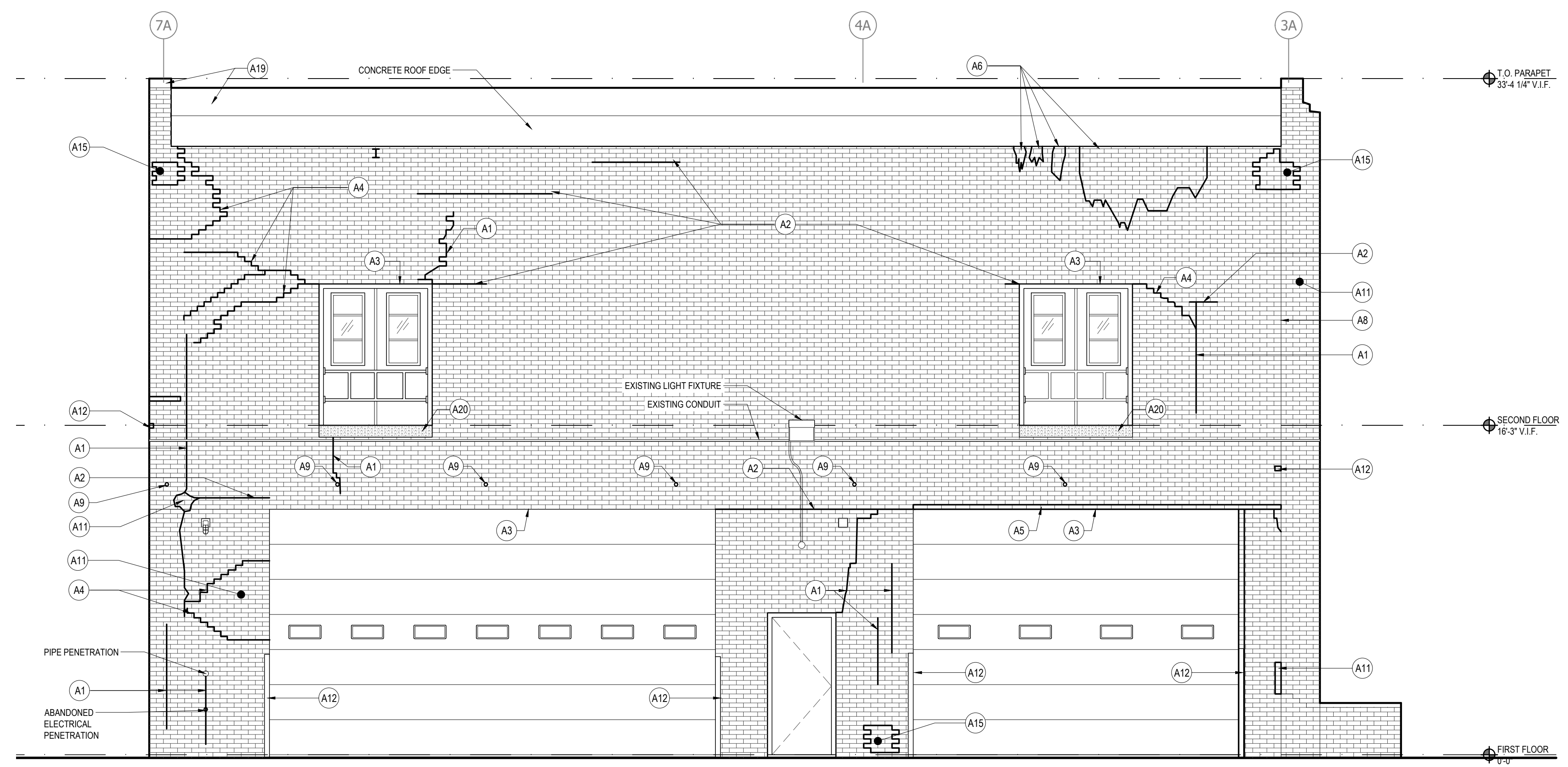
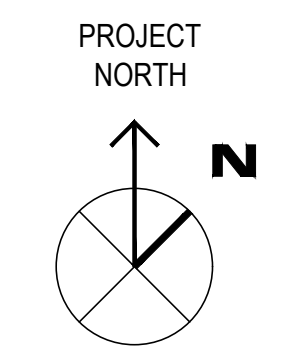
CHECKED BY DS

CS1.0

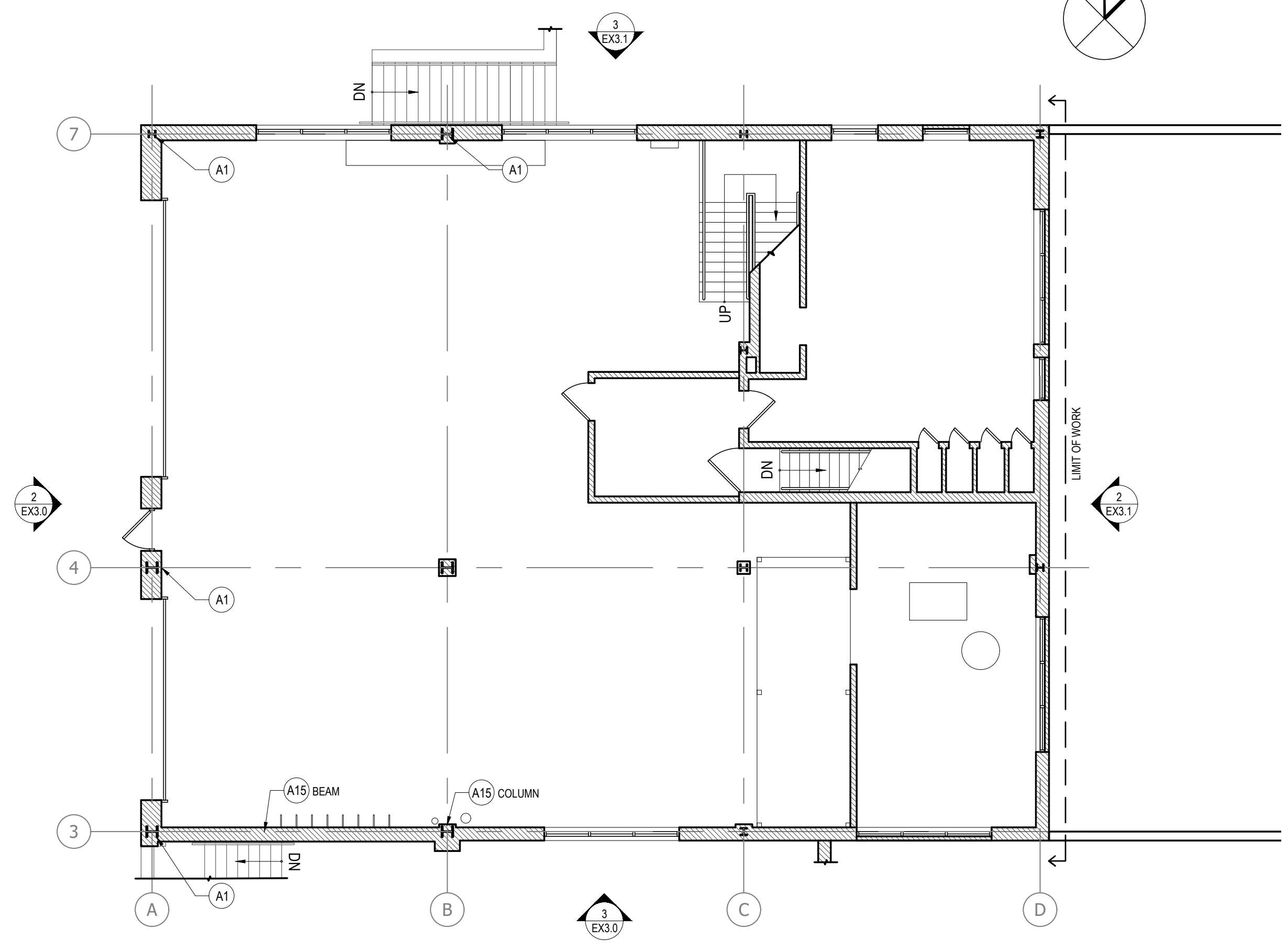
NOTE: ALL DIMENSIONS AND CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR BY FIELD SURVEY BEFORE PROCEEDING WITH THE WORK.

REVISIONS

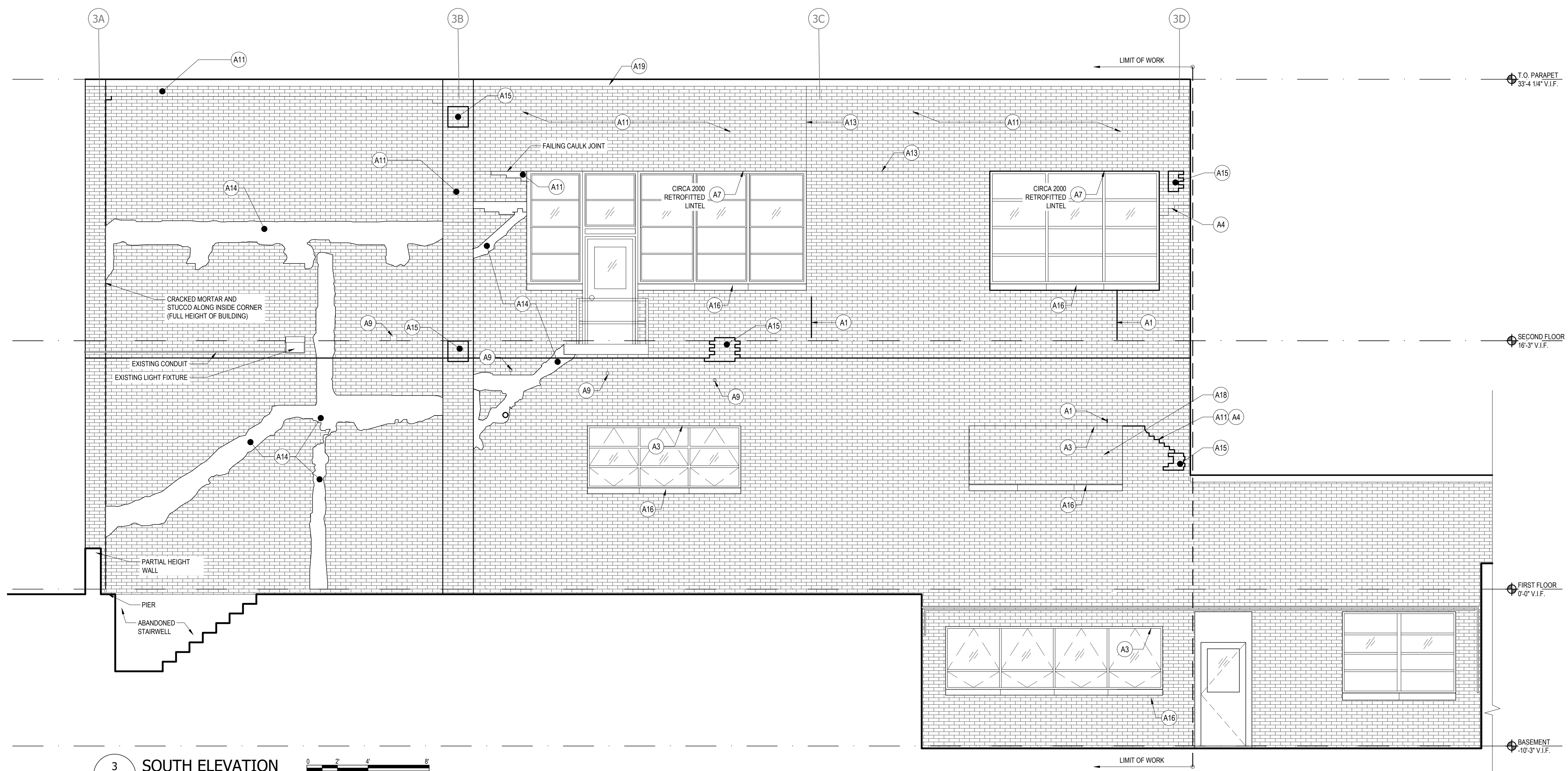
ISSUE	DATE	REVISIONS
0	12/07/2021	BID/PERMIT SET



2 WEST ELEVATION
EX3.0 SCALE: 1/4"=1'-0"



1 1ST FLOOR KEYMAP
EX3.0 SCALE: 1/8"=1'-0"

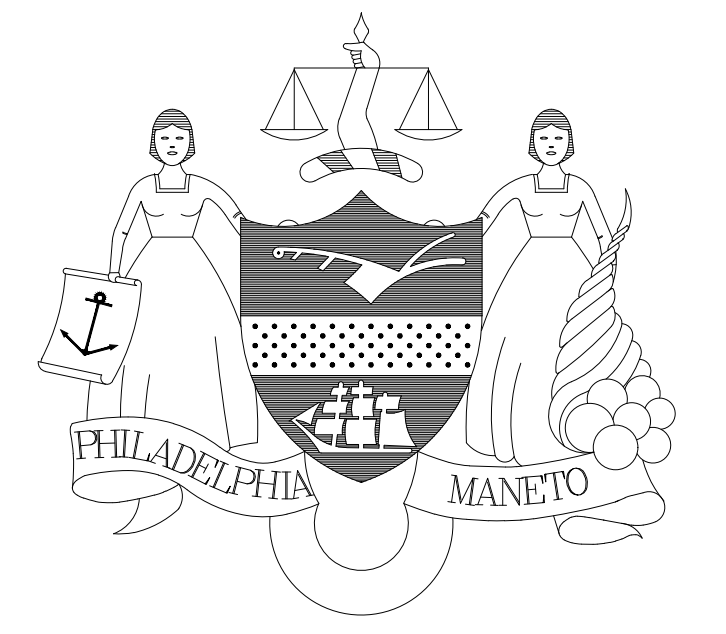


3 SOUTH ELEVATION
EX3.0 SCALE: 1/4"=1'-0"

HATCH LEGEND

[Hatched Pattern]	EXISTING BRICK
[Solid Grey]	NEW BRICK
[Diagonal Lines]	INFILLED WINDOW
[Dotted Pattern]	EXISTING WALL (PLAN)

- ELEVATION KEY NOTES** SYMBOL: (X)
- A1. VERTICAL CRACKING OF BRICK AND MORTAR JOINT.
 - A2. HORIZONTAL CRACKING OF MORTAR JOINT.
 - A3. RUSTED LINTELS.
 - A4. STAIR-STEPPED CRACKING OF BRICK.
 - A5. SPALLED BRICK.
 - A6. EFFLORESCENCE.
 - A7. SLIGHTLY RUSTED LINTEL.
 - A8. EXPANSION JOINT, APPEARS TO BE DETERIORATING.
 - A9. CORRODING METAL OBJECT IN MASONRY WALL.
 - A10. NOTE NOT USED.
 - A11. EVIDENCE OF PRIOR BRICK REPAIR.
 - A12. SPALLED/ DAMAGED BRICK, ISOLATED AREA.
 - A13. EXPANSION JOINT IN FAIR CONDITION. WEEPS PRESENT AT HORIZONTAL EXPANSION JOINTS.
 - A14. STUCCO PATCH/ AT REMOVED STAIR LOCATION.
 - A15. SEILER & DRURY ARCH / WZG STRUCTURAL PROBE LOCATION FOR REPORT DATED 8/12/2020
 - A16. LIMESTONE SILL.
 - A17. ROWLOCK SILL.
 - A18. INFILLED WINDOW.
 - A19. METAL COPING, TYP.
 - A20. METAL BENT PLATE OVER CONC. SLAB.



PROJECT COORDINATOR: FREDDA LIPPES



SEILER + DRURY
ARCHITECTURE
420 DEKALB STREET NORRISTOWN PA 19401
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CAPITAL PROJECTS DIVISION
1400 JFK BLVD 7TH FLR CITY HALL
PHILADELPHIA PENNSYLVANIA

PROJECT TITLE: DPP ZONE 5 GARAGE RENOVATIONS

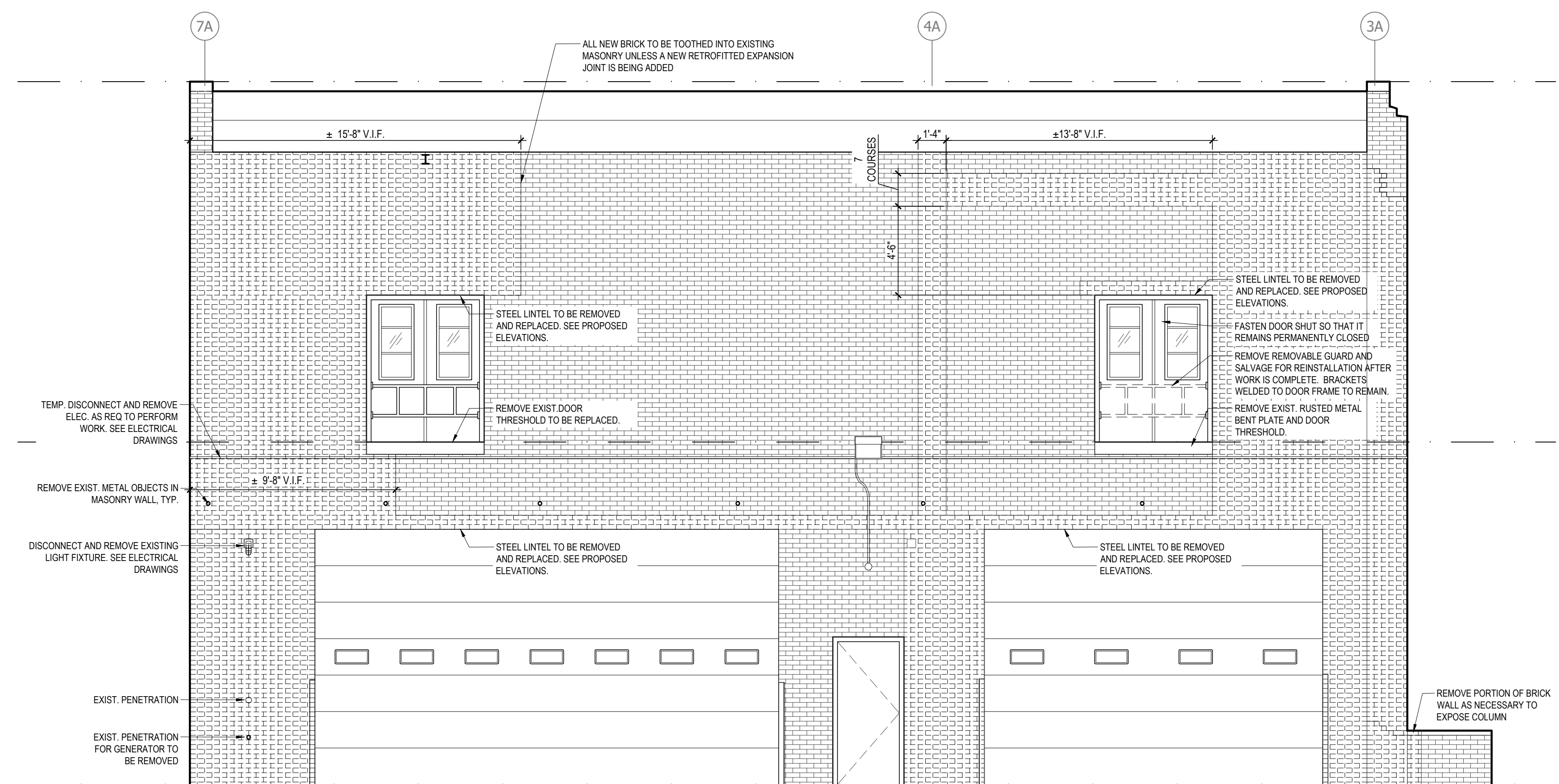
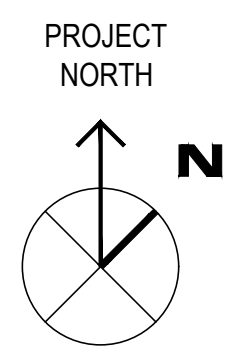
DRAWING TITLE: EXISTING CONDITION EXTERIOR ELEVATIONS

PROJECT NO. 20-20-489-01	DRAWING NO. EX3.0
DATE 12/07/2021	SCALE AS NOTED
DRAWN BY KK	CHECKED BY DS

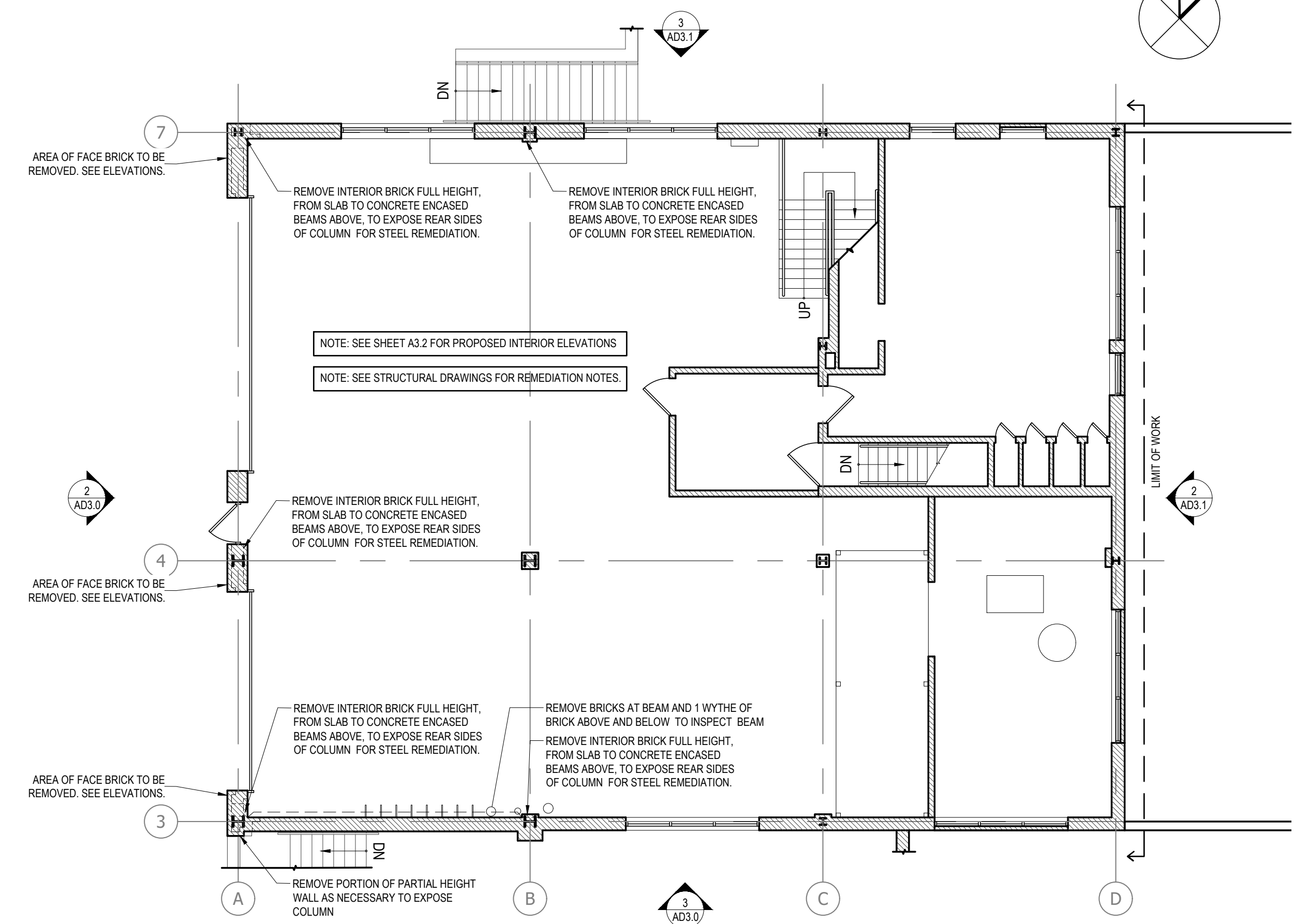
NOTE: ALL DIMENSIONS AND CONDITIONS SHALL BE DERIVED BY THE CONTRACTOR AT THE SITE BEFORE PROCEEDING WITH THE WORK.

REVISIONS

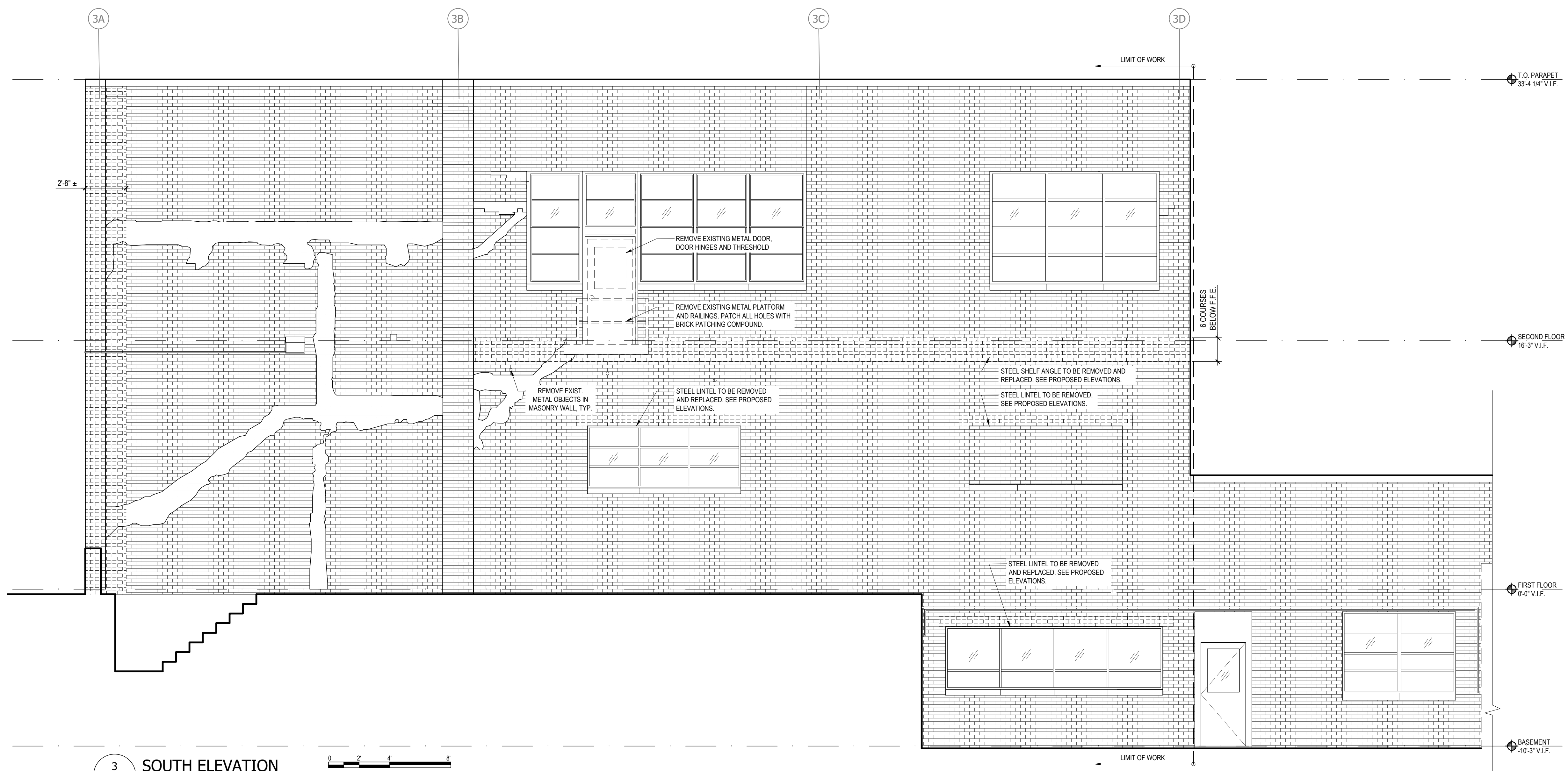
ISSUE	DATE	REVISIONS
0	12/07/2021	BID/PERMIT SET



2 WEST ELEVATION
AD3.0 SCALE: 1/4"=1'-0"



1 1ST FLOOR KEYMAP
AD3.0 SCALE: 1/8"=1'-0"

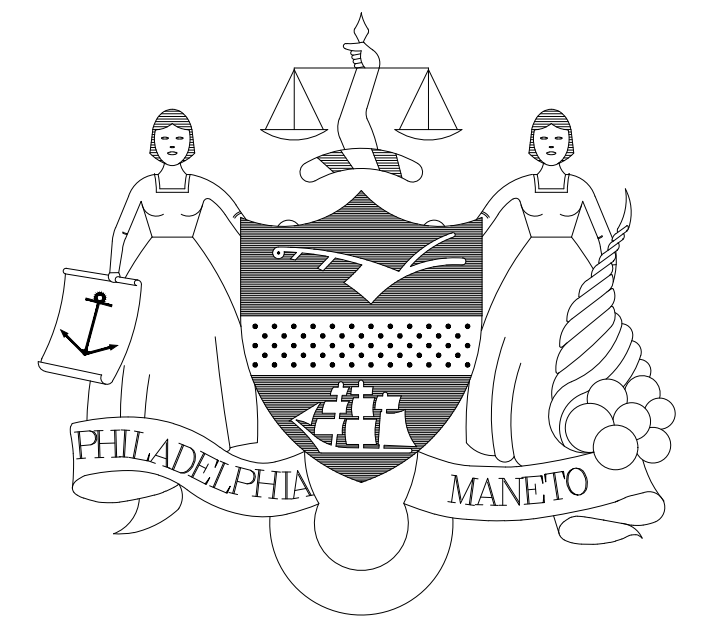


3 SOUTH ELEVATION
AD3.0 SCALE: 1/4"=1'-0"

GENERAL NOTES:
BRICKS SHOWN ARE NOT TO SCALE

HATCH LEGEND

- EXISTING BRICK
- AREA OF FACE BRICK TO BE REMOVED AND REPLACED
- INFILLED WINDOW
- EXISTING WALL (PLAN)



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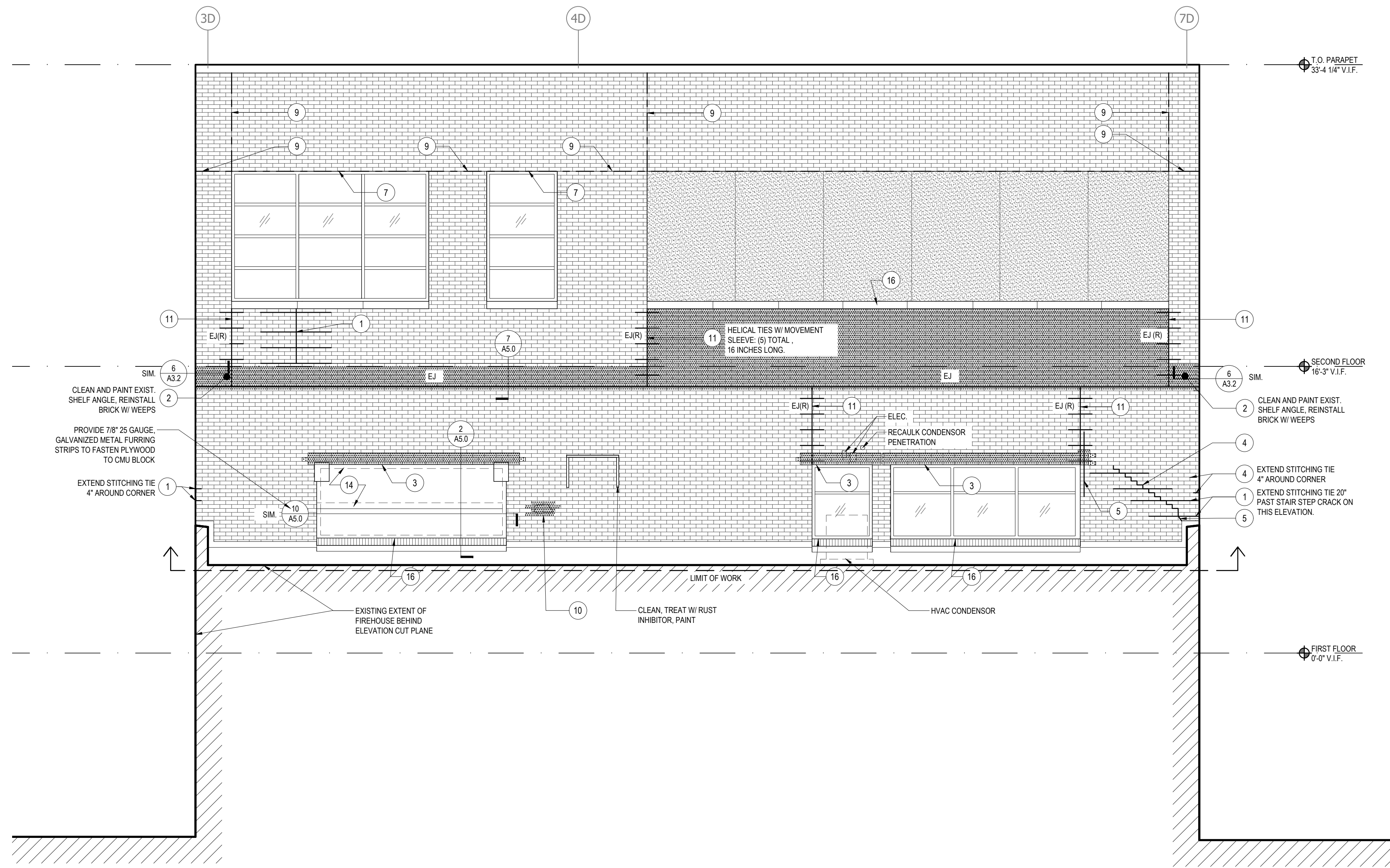
PROJECT TITLE: DPP ZONE 5 GARAGE RENOVATIONS

DRAWING TITLE: SELECTIVE DEMOLITION EXTERIOR ELEVATIONS

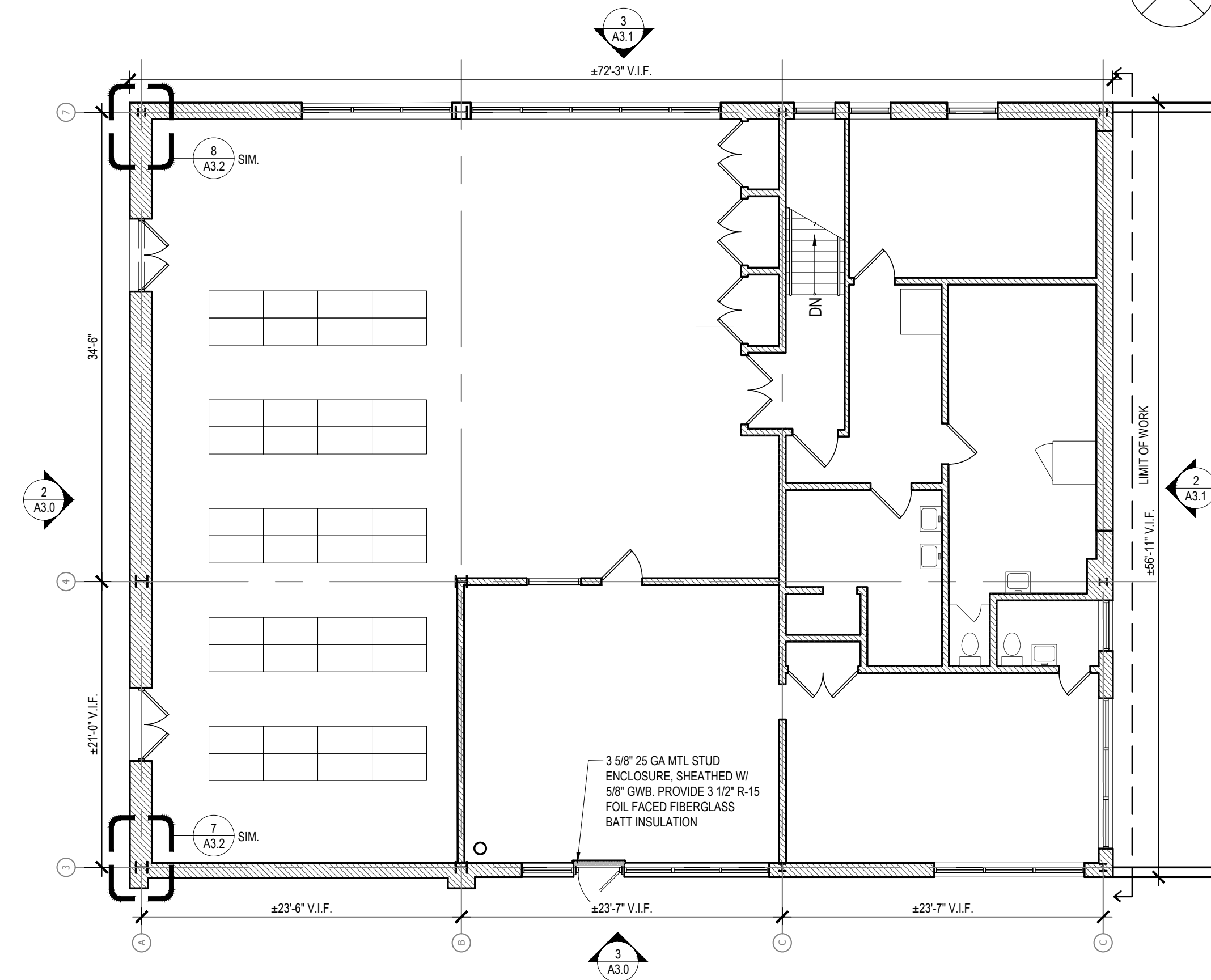
PROJECT NO.: 20-20-4897-01
DATE: 12/07/2021
SCALE: AS NOTED
DRAWN BY: KK
CHECKED BY: DS

DRAWING NO.: **AD3.0**

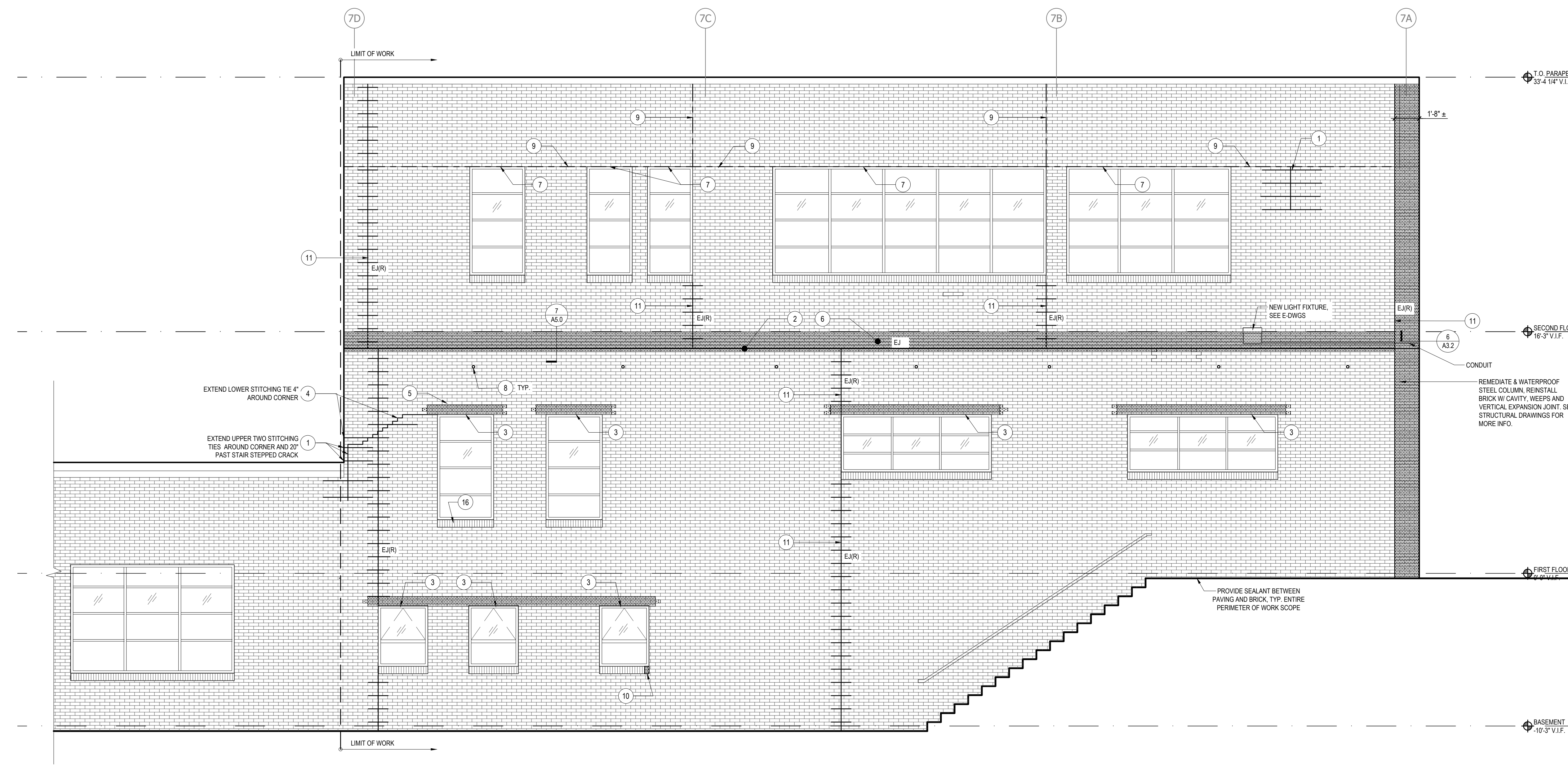
NOTE: ALL DIMENSIONS AND CONDITIONS SHALL BE CHECKED BY THE CONTRACTOR AT THE SITE BEFORE PROCEEDING WITH THE WORK.



2 EAST ELEVATION
A3.1 SCALE: 1/4"=1'-0"



1 2ND FLOOR KEYMAP
A3.1 SCALE: 1/8"=1'-0"



3 NORTH ELEVATION
A3.1 SCALE: 1/4"=1'-0"

GENERAL NOTES:
BRICKS SHOWN ARE NOT TO SCALE

HATCH LEGEND	
[Hatched pattern]	EXISTING BRICK
[Solid grey]	NEW BRICK
[Diagonal lines]	INFILLED WINDOW
[Horizontal lines]	EXISTING WALL (PLAN)

ELEVATION KEY NOTES

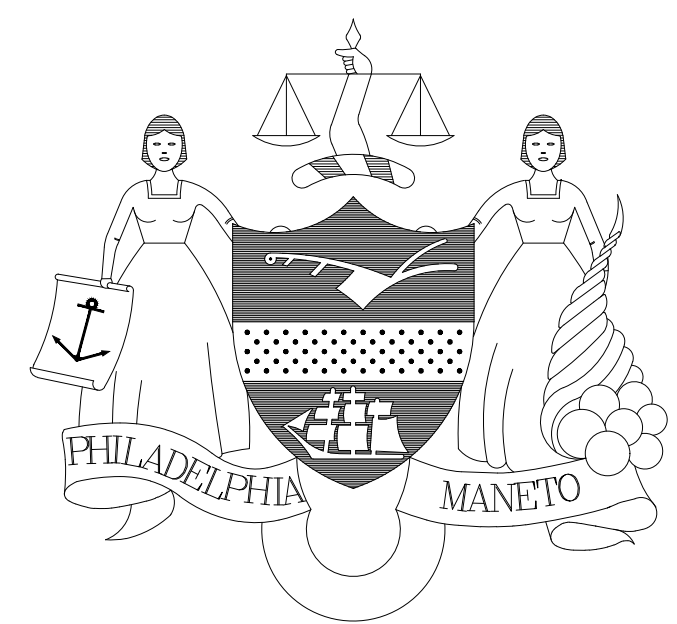
- STITCH CRACK W/ HELICAL STITCHING TIES EVERY 4 COURSES VERT. 20 INCH MIN EMBEDMENT EA. SIDE OF CRACK PER MANUFACTURER'S INSTRUCTIONS. REPORT BED JOINTS AFTER INSTALLATION AND SEAL CLEANED VERTICAL CRACKS WITH HELIFIX CRACKBOND TE
- NEW GALVANIZED, WATERPROOFED SHELF ANGLE, REINSTALL BRICK W/ FLASHING & WEEPS. PROVIDE HORIZONTAL EXPANSION JOINT ONE COURSE BELOW NEW ANGLE. SEE 7A5.0 FOR BRICK SHELF ANGLE DETAIL
- NEW GALVANIZED STEEL LINTEL W/ FLASHING, WEEPS AND NEW BRICK. REMOVE AND REINSTALL WINDOW INFILL IF PRESENT AND UNLESS NOTED OTHERWISE. SEE 8A5.0
- REMOVE EXISTING SEALANT AND STITCH STAR-STEPPED CRACK W/ HELICAL TIES. EVERY 4 COURSES VERTICALLY, 20 INCH EMBEDMENT EA. SIDE OF CRACK. WHERE TIE EXTENDS THRU PROPOSED VERTICAL EXPANSION JOINT, PROVIDE DEBONDING SLEEVE ON 8\"/>

GENERAL ELEVATION NOTES:

- RECAULK ALL EXISTING DOORS AND WINDOWS THAT ARE NOT INFILLED. (22 LOCATIONS)
- REPORT ALL LIMESTONE & BRICK WINDOW SILLS
- ALL METAL THROUGH PENETRATIONS TO REMAIN ARE TO BE CLEANED, TREATED WITH RUST INHIBITORS, AND SURROUNDING JOINTS SEALED. CLEAN IRON STAINING ON MASONRY.
- LOCATE HORIZONTAL EXPANSION JOINTS IMMEDIATELY BELOW SHELF ANGLES.

REVISIONS

ISSUE	DATE	REVISIONS
0	12/07/2021	BID/PERMIT SET



PROJECT COORDINATOR: FREDDA LIPPES

SEALS



SPACE FOR CONSULTANT RECORDING

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PHILADELPHIA PENNSYLVANIA

PROJECT TITLE
DPP ZONE 5 GARAGE RENOVATIONS

DRAWING TITLE
EXTERIOR ELEVATIONS

PROJECT NO. 20-20-4897-01 DRAWING NO.

DATE 12/07/2021

SCALE AS NOTED

DRAWN BY KK

CHECKED BY DS

A3.1

NOTE: ALL DIMENSIONS AND CONDITIONS SHALL BE CHECKED BY THE CONTRACTOR AT THE SITE BEFORE PROCEEDING WITH THE WORK.

DESIGN CRITERIA NOTES:

1. THE FOLLOWING CODES AND STANDARDS, INCLUDING ALL SPECIFICATIONS REFERENCED WITHIN, SHALL APPLY TO THE DESIGN, CONSTRUCTION, QUALITY CONTROL, AND SAFETY OF ALL WORK PERFORMED ON THE PROJECT. USE THE LATEST EDITIONS UNLESS NOTED OTHERWISE.

INTERNATIONAL BUILDING CODE, 2018 EDITION
 ASCE 7-16 - MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES
 AISI 360-16 - SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS
 AISI 303-16 - CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES
 ACI 318-14 - BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE AND MASONRY
 TMS 402/602-16 - SPECIFICATION OF MASONRY STRUCTURES

2. DESIGN LOADS ARE AS LISTED BELOW.

WIND LOADS:
 BASIC WIND SPEED, V (ULT) = 125 MPH
 RISK CATEGORY = IV
 WIND EXPOSURE = B
 APPLICABLE INTERNAL PRESSURE COEFFICIENT +/- 0.18

SEISMIC LOADS:
 RISK CATEGORY = IV
 IMPORTANCE FACTOR = 1.5
 MAPPED SPECTRAL RESPONSE ACCELERATIONS:
 S_a=18.3%g
 S₁=4.8%g
 SPECTRAL RESPONSE COEFFICIENTS:
 SDS=19.5%g
 SD1=7.0%g
 SITE CLASS = D
 SEISMIC DESIGN CATEGORY = B

SNOW LOADS:
 GROUND SNOW LOAD P_g=25 PSF
 FLAT ROOF SNOW LOAD = 21 PSF + DRIFT
 EXPOSURE FACTOR C_e=1.0
 IMPORTANCE FACTOR = 1.2
 THERMAL FACTOR C_t=1.0

SPECIAL INSPECTION:

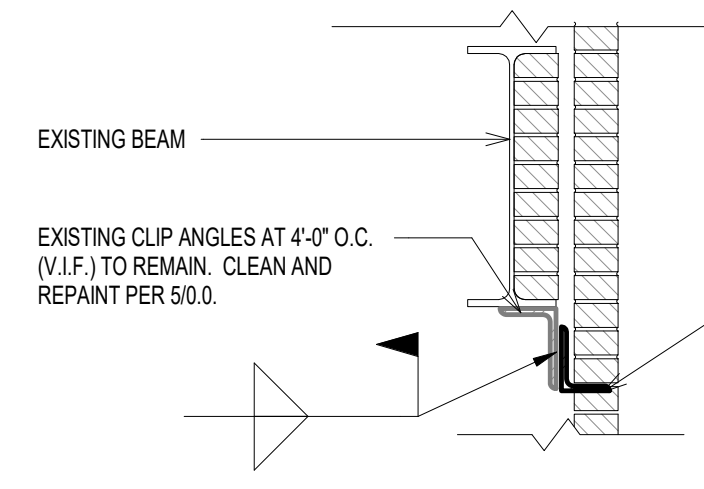
- SPECIAL INSPECTION BY A QUALIFIED INSPECTOR APPROVED BY THE BUILDING OFFICIAL IN ACCORDANCE WITH CHAPTER 17 OF THE INTERNATIONAL BUILDING CODE SHALL BE REQUIRED FOR THE FOLLOWING TYPES OF WORK:
 - FABRICATED STRUCTURAL STEEL
 - WELDING:
 - STRUCTURAL STEEL
 - ANCHOR BOLTS
 - HIGH STRENGTH BOLTING
 - STRUCTURAL MASONRY
 - EXPANSION TYPE ANCHOR BOLTS
 - ADHESIVE TYPE ANCHOR BOLTS

MISCELLANEOUS NOTES:

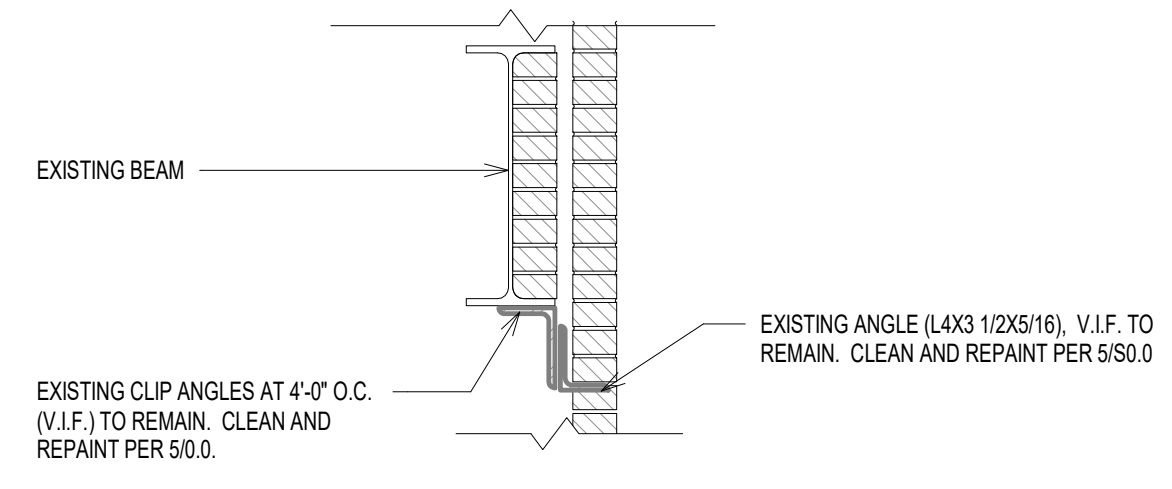
- THE DETAILS DESIGNATED AS "TYPICAL DETAILS" APPLY GENERALLY TO THE DRAWINGS IN AREAS WHERE CONDITIONS ARE SIMILAR TO THOSE DESCRIBED IN THE DETAILS, UNLESS NOTED OTHERWISE.
- ALL DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALE SHOWN ON PLANS, SECTIONS, AND DETAILS. DO NOT SCALE THE DRAWINGS.
- THE STRUCTURAL DRAWINGS ARE PART OF THE CONTRACT DOCUMENTS AND DO NOT BY THEMSELVES PROVIDE ALL THE INFORMATION REQUIRED TO PROPERLY COMPLETE THE PROJECT STRUCTURE. THE GENERAL CONTRACTOR SHALL CONSULT THE ARCHITECTURAL AND ELECTRICAL DRAWINGS AND COORDINATE THE INFORMATION CONTAINED IN THESE DRAWINGS WITH THE STRUCTURAL DRAWINGS TO PROPERLY CONSTRUCT THE PROJECT. PRINCIPAL OPENINGS ARE SHOWN ON THE DRAWINGS. SEE ARCHITECTURAL AND ELEC. DRAWINGS FOR SLEEVES, CURBS, INSERTS, OTHER OPENINGS, AND SLAB DEPRESSIONS NOT SHOWN. THE CONTRACTOR SHALL PROVIDE FOR ALL OPENINGS WHETHER SHOWN ON STRUCTURAL DRAWINGS OR NOT. ANY DEVIATION FROM OPENINGS SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER FOR APPROVAL PRIOR TO PROCEEDING WITH ANY WORK.
- THE CONTRACTOR SHALL COMPARE THE STRUCTURAL DRAWINGS WITH THE ARCH. AND ELEC. DRAWINGS TO CONFIRM ALL REQUIREMENTS OF THE WORK. REPORT ANY CONFLICTS/DISCREPANCY BETWEEN THE DISCIPLINES TO THE ARCHITECT PRIOR TO FABRICATING OR INSTALLING STRUCTURAL ELEMENTS, BEFORE ORDERING ANY MATERIALS OR DOING ANY WORK. THE CONTRACTOR SHALL VERIFY ALL MEASUREMENTS TO PROPERLY SIZE OR FIT THE WORK. NO EXTRA CHARGE OR COMPENSATION WILL BE ALLOWED BY THE OWNER RESULTING FROM THE CONTRACTOR'S FAILURE TO COMPLY WITH THIS REQUIREMENT.
- THE HORIZONTAL AND VERTICAL DIMENSIONS OF EXISTING STRUCTURES SHALL BE VERIFIED BEFORE WORK IS BEGUN. ANY VARIATION BETWEEN DIMENSIONS SHOWN AND EXISTING DIMENSIONS SHALL BE REPORTED TO THE ARCHITECT.
- THE CONTRACTOR SHALL INSURE THAT CONSTRUCTION LOADS DO NOT EXCEED THE DESIGN LIVE LOADS INDICATED ON THE STRUCTURAL DRAWINGS AND THAT THESE LOADS ARE NOT PUT ON THE STRUCTURAL MEMBERS PRIOR TO THE TIME THAT THE CONCRETE REACHES THE FULL DESIGN STRENGTH AND ALL FRAMING MEMBERS AND THEIR CONNECTIONS ARE IN PLACE.
- ALL STRUCTURES HAVE BEEN DESIGNED TO RESIST THE DESIGN LOADS LISTED ONLY AS COMPLETED STRUCTURES. THE GENERAL CONTRACTOR SHALL FULLY BRACE AND OTHERWISE PROTECT WORK IN PROGRESS UNTIL THE STRUCTURES ARE COMPLETED. THE GENERAL CONTRACTOR SHALL ALSO INSURE THAT ITS OPERATIONS AND PROCEDURES PROVIDE NO LOADING GREATER THAN THE DESIGN LOADS LISTED ON ANY MEMBER.
- PROVIDE CHAMFERS AS SPECIFIED AND/OR DETAILED ON THE ARCHITECTURAL DRAWINGS. CHAMFERS HAVE NOT BEEN SHOWN ON THE STRUCTURAL DRAWINGS.
- ALL DETAILS, SECTIONS AND NOTES SHOWN ON THE DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL APPLY TO SIMILAR SITUATIONS ELSEWHERE UNLESS OTHERWISE SHOWN.

SELECTIVE DEMOLITION NOTES:

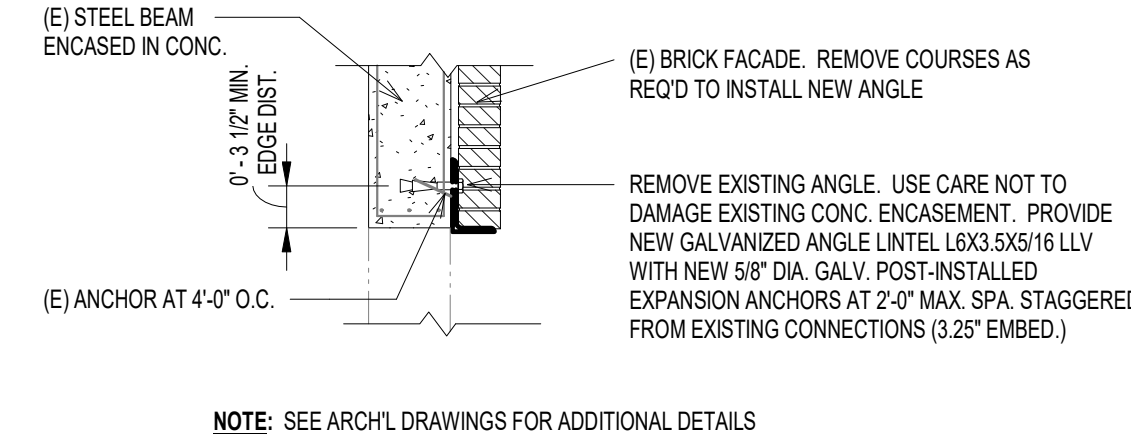
- REMOVAL AS DESCRIBED HEREIN SHALL BE ACCOMPLISHED WITHOUT STORING ON THE FLOOR EXCESSIVE QUANTITIES OF ANY MATERIALS, RUBBISH, DIRT, DEBRIS, OR WASTE OF ANY SORT RESULTING FROM THE REMOVAL OPERATIONS ON THE FLOOR.
- ALL DEBRIS SHALL BE REMOVED FROM THE CONSTRUCTION SITE DAILY.
- THE CONTRACTOR SHALL TAKE PRECAUTIONS TO MAINTAIN FREE PROTECTED ACCESS OF ALL TENANTS AND SERVICE PERSONNEL THROUGH THE AREAS INVOLVED.
- THE CONTRACTOR SHALL REMOVE ALL PIPE SLEEVES PROJECTING THROUGH SLAB, PATCH ALL PENETRATIONS, HOLES, ETC.
- ALL PIPES AND CONDUITS IN WALLS THAT ARE TO BE DEMOLISHED ARE TO BE REMOVED AND/OR RELOCATED AS REQUIRED.
- CONTRACTOR SHALL REVIEW WITH ARCHITECTS/ENGINEER ANY AND ALL ITEMS OF DEMOLITION NOT IMPLIED OR SPECIFIED ON DRAWINGS OR SPECIFICATIONS AND TO INCLUDE SUCH COSTS IN BID UNLESS OTHERWISE ADVISED.
- PROVIDE ALL LABOR, MATERIAL, EQUIPMENT AND SERVICES AND PERFORM ALL OPERATIONS REQUIRED FOR SELECTIVE INTERIOR DEMOLITION AND RELATED WORK AS DESCRIBED AND SPECIFIED HEREIN, AND AS MAY BE REASONABLY IMPLIED AS NECESSARY TO COMPLETE WORK IN ALL RESPECTS.
- JOBSITE INSPECTION MUST BE CONDUCTED TO EXAMINE EXISTING CONDITIONS. TO DETERMINE NATURE AND SCOPE OF WORK OR ANY DIFFICULTIES THAT MIGHT ARISE AT TIME OF WORK. IN ADDITION, EXAMINE ALL WORK THAT IS INTENDED TO REMAIN AS PART OF THE COMPLETED PROJECT AND REPORT ALL UNSATISFACTORY CONDITIONS TO ARCHITECT/ENGINEER PRIOR TO COMMENCEMENT OF WORK. EXERCISE EXTREME CARE DURING DEMOLITION SO AS NOT TO DAMAGE CONSTRUCTION AND OTHER STRUCTURES THAT ARE INTENDED TO REMAIN. ANYTHING DAMAGED AT WORK IS TO BE REPAIRED AND/OR REPLACED TO MATCH EXISTING CONSTRUCTION AT CONTRACTOR'S EXPENSE.
- REFER TO DRAWINGS FOR EXISTING ITEMS/ SYSTEMS TO REMAIN.
- CONTRACTOR TO PROVIDE DUST BARRIER FOR PROTECTION OF EXISTING AREAS TO REMAIN AS REQUIRED.
- WHEN DEMOLITION TAKES PLACE, SHOULD ANY WORK AFFECT THE INTEGRITY OF THE STRUCTURE, WORK MUST STOP IMMEDIATELY, AND ARCHITECT/ENGINEER NOTIFIED. UNDER NO CIRCUMSTANCES SHALL REINFORCING OF ANY KIND BE DAMAGED, CUT OR BROKEN.
- PRIOR TO DEMOLITION OF LOAD BEARING MEMBERS, SUPPORTED MEMBERS SHALL BE SHORED.



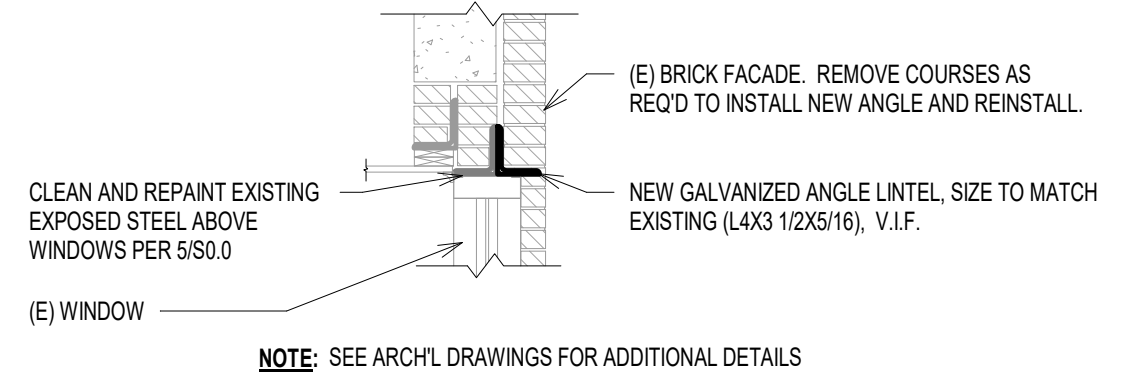
NOTE: SEE ARCH. DRAWINGS FOR ADDITIONAL DETAILS



NOTE: SEE ARCH. DRAWINGS FOR ADDITIONAL DETAILS



NOTE: SEE ARCH. DRAWINGS FOR ADDITIONAL DETAILS

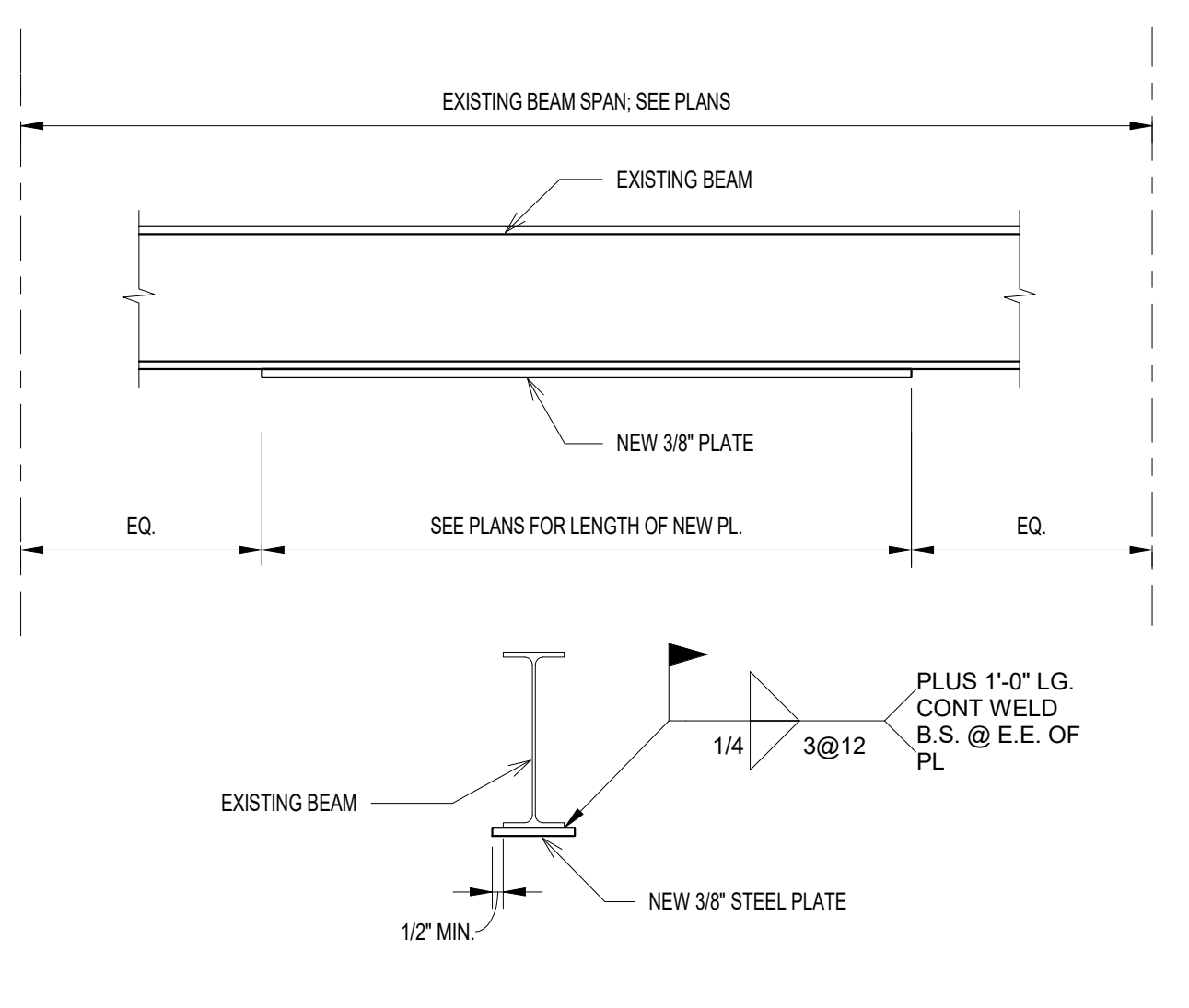


NOTE: SEE ARCH. DRAWINGS FOR ADDITIONAL DETAILS

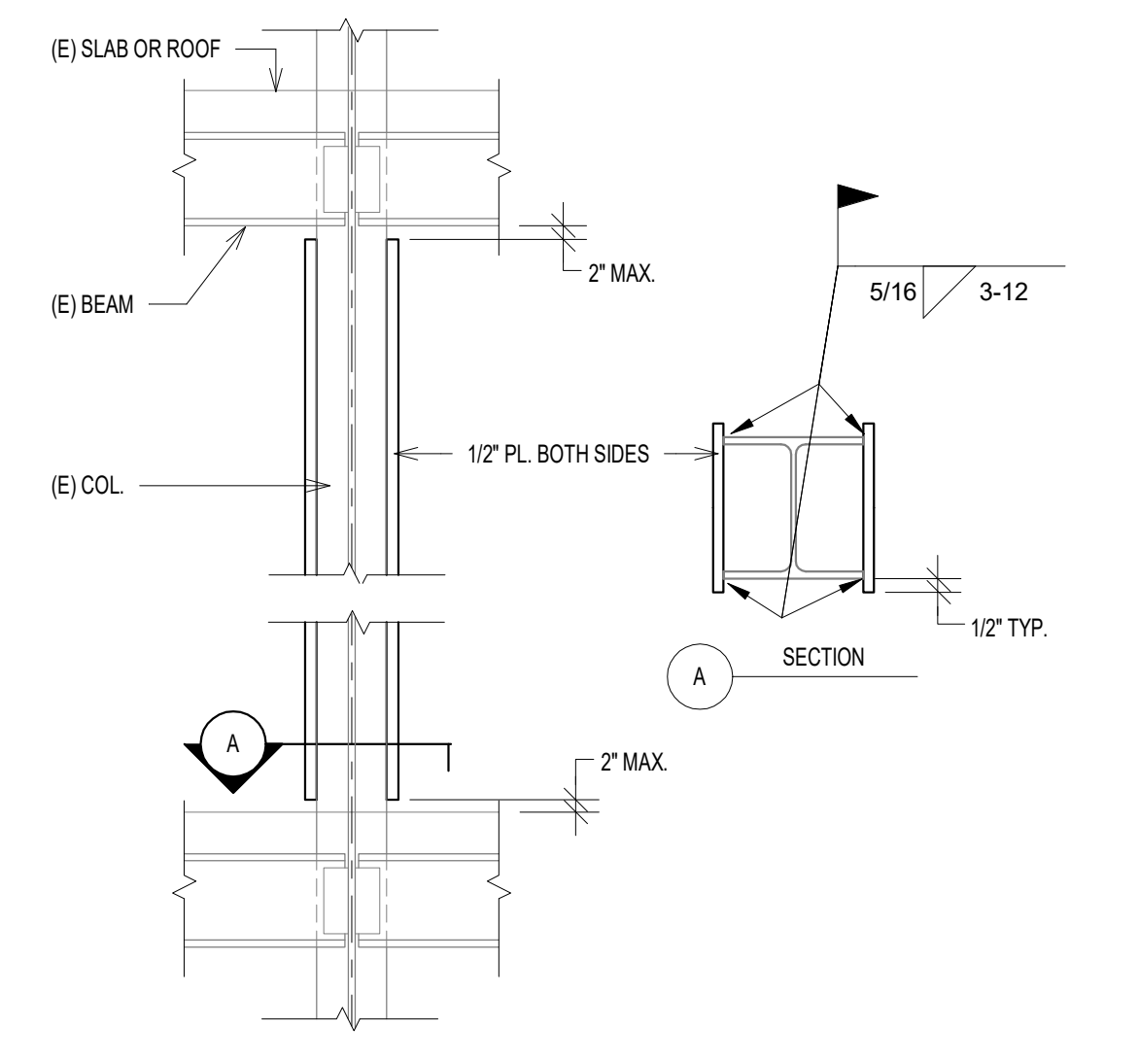
6 S.O.0 3/4" = 1'-0"

5 S.O.0 STEEL REMEDIATION NOTES 3/4" = 1'-0"

4 S.O.0 NEW LINTEL DETAIL (LOOSE LINTEL) 3/4" = 1'-0"



- BEAM REINF. NOTES:**
- REFER TO PLANS FOR APPROXIMATE LOCATION OF REINFORCING REQUIRED.
 - MECHANICALLY CLEAN WEB AND FLANGES OF BEAM TO SSPC-SP3 AND INSPECT BEAM FOR SECTION LOSS ALONG FULL LENGTH OF MEMBER.
 - IF NO SECTION LOSS IS FOUND, THE BEAM SHALL BE PAINTED WITH AN EPOXY MASTIC PAINT, SUCH AS CARBOMASTIC 15, OR AN APPROVED EQUAL.
 - IF SECTION LOSS IS FOUND, REINFORCE BEAM PER THE DETAIL ABOVE. FINAL EXTENT AND LAYOUT OF REPAIR SHALL BE VERIFIED IN FIELD BY THE ENGINEER.



- COLUMN REINF. NOTES:**
- REFER TO PLANS FOR APPROXIMATE LOCATION OF REINFORCING REQUIRED.
 - MECHANICALLY CLEAN WEB AND FLANGES OF COLUMN TO SSPC-SP3 AND INSPECT COLUMN FOR SECTION LOSS ALONG FULL LENGTH OF MEMBER.
 - IF NO SECTION LOSS IS FOUND, THE COLUMN SHALL BE PAINTED WITH AN EPOXY MASTIC PAINT, SUCH AS CARBOMASTIC 15, OR AN APPROVED EQUAL.
 - IF SECTION LOSS IS FOUND, REINFORCE COLUMN PER THE DETAIL ABOVE. FINAL EXTENT AND LAYOUT OF REPAIR SHALL BE VERIFIED IN FIELD BY THE ENGINEER.

3 S.O.0 NEW SHELF ANGLE DETAIL (SECOND FLOOR) 1" = 1'-0"

2 S.O.0 EXISTING BEAM REINFORCEMENT 3/4" = 1'-0"

1 S.O.0 EXISTING COLUMN REINFORCEMENT 3/4" = 1'-0"

REVISIONS

ISSUE	DATE	REVISIONS
0	12/07/2021	80/PERMIT SET

REQUIRED VERIFICATION AND INSPECTION OF STEEL CONSTRUCTION - FROM AISI STEEL CONSTRUCTION MANUAL - CHAPTER N - QUALITY CONTROL AND QUALITY ASSURANCE (AISC 360-10)

TABLE N5.4-1 - INSPECTION TASKS PRIOR TO WELDING		
INSPECTION TASK PRIOR TO WELDING	QUALITY CONTROL	QUALITY ASSURANCE
WELDING PROCEDURE SPECIFICATIONS (WPSs) AVAILABLE	P	P
MANUFACTURER CERTIFICATIONS FOR WELDING CONSUMABLES AVAILABLE	P	P
MATERIAL IDENTIFICATION (TYPE/GRADE)	O	O
WELDER IDENTIFICATION SYSTEM (SEE NOTE 1)	O	O
FIT - UP OF GROOVE WELDS (INCLUDING JOINT GEOMETRY)		
JOINT PREPARATION		
DIMENSIONS (ALIGNMENT, ROOT OPENING, ROOT FACE, BEVEL)	O	O
CLEANLINESS (CONDITION OF STEEL SURFACE)		
TACKING (TACK WELD QUALITY AND LOCATION)		
BACKING TYPE AND FIT (IF APPLICABLE)		
CONFIGURATION AND FINISH OF ACCESS HOLES	O	O
FIT - UP OF FILLET WELDS		
DIMENSIONS (ALIGNMENT, GAPS OF ROOT)		
CLEANLINESS (CONDITION OF STEEL SURFACE)	O	O
TACKING (TACK WELD QUALITY AND LOCATION)		
CHECK WELDING EQUIPMENT	O	---

NOTE 1 - THE FABRICATOR OF ERECTOR, AS APPLICABLE, SHALL MAINTAIN A SYSTEM BY WHICH A WELDER WHO HAS WELDED A JOINT OR MEMBER CAN BE IDENTIFIED. STAMPS, IF USED, SHALL BE THE LOW - STRESS TYPE.

TABLE N5.4-2 - INSPECTION TASKS DURING WELDING		
INSPECTION TASK DURING WELDING	QUALITY CONTROL	QUALITY ASSURANCE
USE OF QUALIFIED WELDERS	O	O
CONTROL AND HANDLING OF WELDING CONSUMABLES		
PACKAGING	O	O
EXPOSURE CONTROL		
NO WELDING OVER CRACKED TACK WELDS	O	O
ENVIRONMENTAL CONDITIONS		
WIND SPEED WITHIN LIMITS	O	O
PRECIPITATION AND TEMPERATURE		
WPS FOLLOWED		
SETTINGS ON WELDING EQUIPMENT		
TRAVEL SPEED		
SELECTED WELDING MATERIALS		
SHIELDING GAS TYPE/FLOW RATE	O	O
PREHEAT APPLIED		
INTERPASS TEMPERATURE MAINTAINED (MIN./MAX)		
PROPER POSITION (E, V, H, OH)		
WELDING TECHNIQUES		
INTERPASS AND FINAL CLEANING	O	O
EACH PASS WITHIN PROFILE LIMITATIONS		
EACH PASS MEETS QUALITY REQUIREMENTS		

TABLE N5.4-3 - INSPECTION TASKS AFTER WELDING		
INSPECTION TASK DURING WELDING	QUALITY CONTROL	QUALITY ASSURANCE
WELDS CLEANED	O	O
SIZE, LENGTH, AND LOCATION OF WELDS	P	P
WELDS MEET VISUAL ACCEPTANCE CRITERIA		
CRACK PROHIBITION		
WELD/BASE-METAL FUSION		
CRATER CROSS SECTION		
WELD PROFILES	P	P
WELD SIZE		
UNDERCUT		
POROSITY		
ARC STRIKES	P	P
k-AREA (SEE NOTE 1)	P	P
BACKING REMOVED AND WELD TABS REMOVED (IF REQUIRED)	P	P
REPAIR ACTIVITIES	P	P
DOCUMENT ACCEPTANCE OF REJECTION OF WELDED JOINT OR MEMBER	P	P

NOTE 1 - WHEN WELDING OF DOUBLER PLATES, CONTINUITY PLATES OR STIFFENERS HAS BEEN PERFORMED IN THE k-AREA, VISUALLY INSPECT THE WEB k-AREA FOR CRACKS WITHIN 3 in. (75mm) OF THE WELD.

TABLE N5.6-1 - INSPECTION TASKS PRIOR TO BOLTING		
INSPECTION TASKS PRIOR TO BOLTING	QUALITY CONTROL	QUALITY ASSURANCE
MANUFACTURER'S CERTIFICATIONS AVAILABLE FOR FASTENER MATERIALS	O	O
FASTENERS MARKED IN ACCORDANCE WITH ASTM REQUIREMENTS	O	O
PROPER FASTENERS SELECTED FOR THE JOINT DETAIL (GRADE, TYPE, BOLT LENGTH IF THREADS ARE TO BE EXCLUDED FROM THE SHEAR PLANE)	O	O
PROPER BOLTING PROCEDURE SELECTED FOR JOINT DETAIL	O	O
CONNECTING ELEMENTS, INCLUDING THE APPROPRIATE FAYING SURFACE CONDITION AND HOLE PREPARATION, IF SPECIFIED, MEET APPLICABLE REQUIREMENTS	O	O
PRE-INSTALLATION VERIFICATION TESTING BY INSTALLATION PERSONNEL OBSERVED AND DOCUMENTED FOR FASTENER ASSEMBLIES AND METHODS USED	P	O
PROPER STORAGE PROVIDED FOR BOLTS, NUTS, WASHERS, AND OTHER FASTENER COMPONENTS	O	O

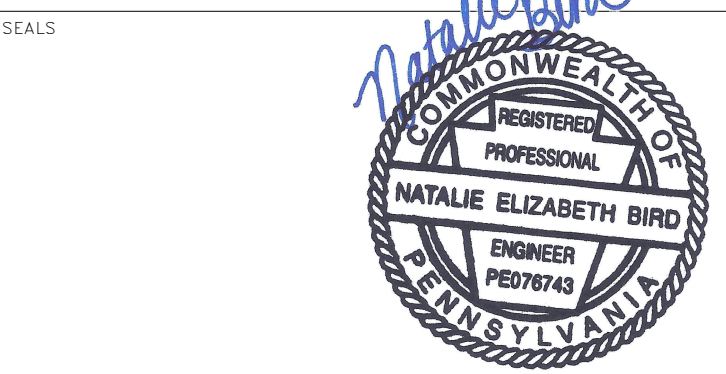
TABLE N5.6-2 - INSPECTION TASKS DURING BOLTING		
INSPECTION TASKS DURING BOLTING	QUALITY CONTROL	QUALITY ASSURANCE
FASTENER ASSEMBLIES, OF SUITABLE CONDITION, PLACED IN ALL HOLES AND WASHERS (IF REQUIRED) ARE POSITIONED AS REQUIRED	O	O
JOINT BROUGHT TO THE SNUG-TIGHT CONDITION PRIOR TO THE PRETENSIONING OPERATION	O	O
FASTENER COMPONENT NOT TURNED BY THE WRENCH PREVENTED FROM ROTATING	O	O
FASTENERS ARE PRETENSIONED IN ACCORDANCE WITH THE RCSC SPECIFICATION. PROGRESSING SYSTEMATICALLY FROM THE MOST RIGID POINT TOWARDS THE FREE EDGES	O	O

TABLE N5.6-2 - INSPECTION TASKS AFTER BOLTING		
INSPECTION TASKS AFTER BOLTING	QUALITY CONTROL	QUALITY ASSURANCE
DOCUMENT ACCEPTANCE OR REJECTION OF BOLTED CONNECTIONS	P	P
TABLE N6.1 - INSPECTION OF STEEL ELEMENTS OF COMPOSITE CONSTRUCTION PRIOR TO CONCRETE PLACEMENT		
INSPECTION OF STEEL ELEMENTS OF COMPOSITE CONSTRUCTION PRIOR TO CONCRETE PLACEMENT	QUALITY CONTROL	QUALITY ASSURANCE
PLACEMENT AND INSTALLATION OF STEEL DECK	P	P
PLACEMENT AND INSTALLATION OF STEEL HEADED STUD ANCHORS	P	P
DOCUMENT ACCEPTANCE OR REJECTION OF STEEL ELEMENTS	P	P

- NOTES:**
- THESE TABLES WERE TAKEN FROM THE 14TH EDITION AISI STEEL CONSTRUCTION MANUAL - CHAPTER N - QUALITY CONTROL AND QUALITY ASSURANCE
 - P USED IN THE ABOVE TABLE STANDS FOR "PERFORM THESE TASKS FOR EACH WELDED CONNECTION, BOLTED CONNECTION, OR STEEL ELEMENT"
 - O USED IN THE ABOVE TABLE STANDS FOR "OBSERVE THESE ITEMS ON A RANDOM BASIS. OPERATIONS NEED NOT BE DELAYED PENDING THESE INSPECTIONS"



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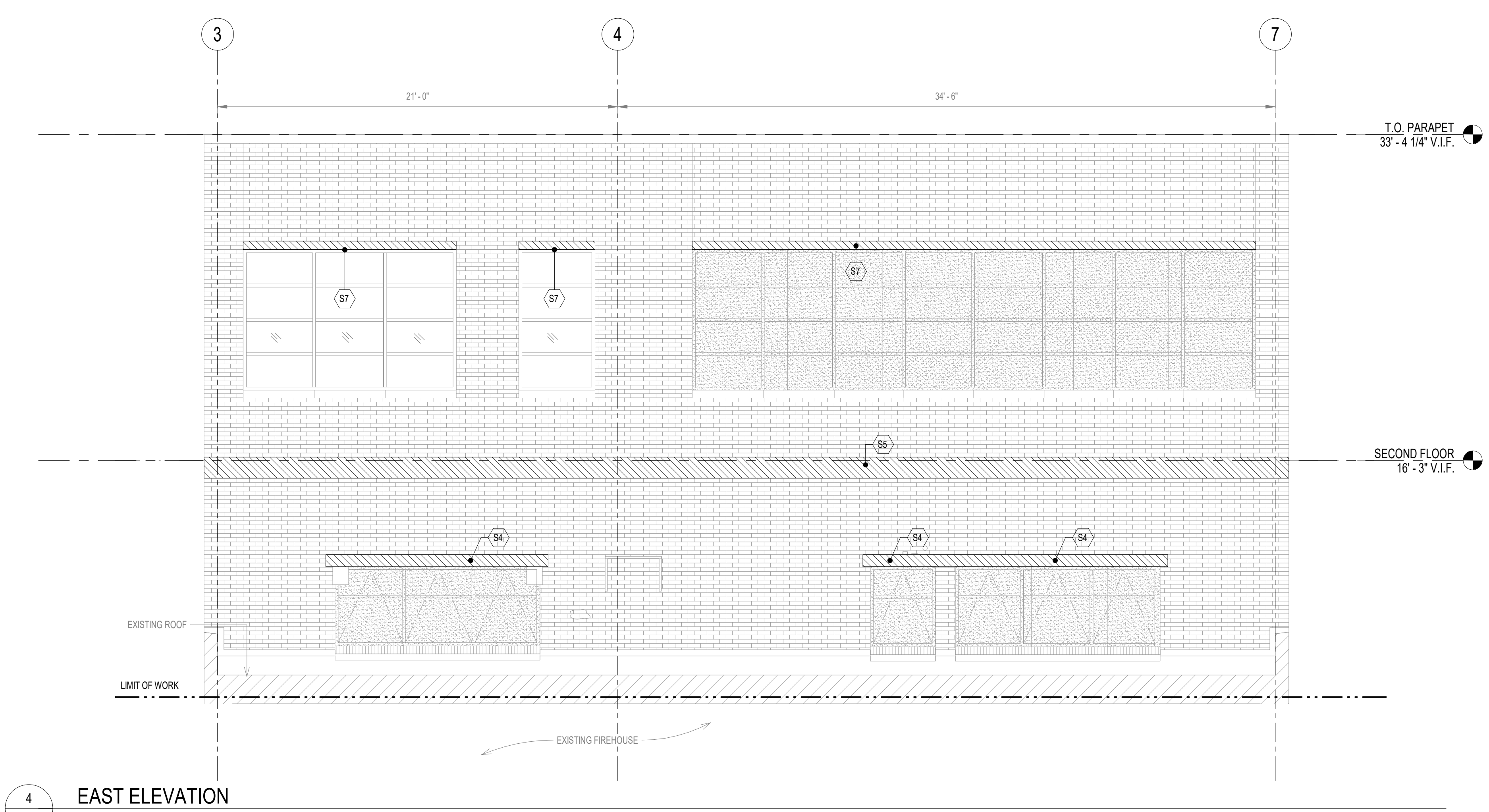
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 1400 JFK BLVD 7TH FLR CITY HALL
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DPP ZONE 5 GARAGE RENOVATIONS

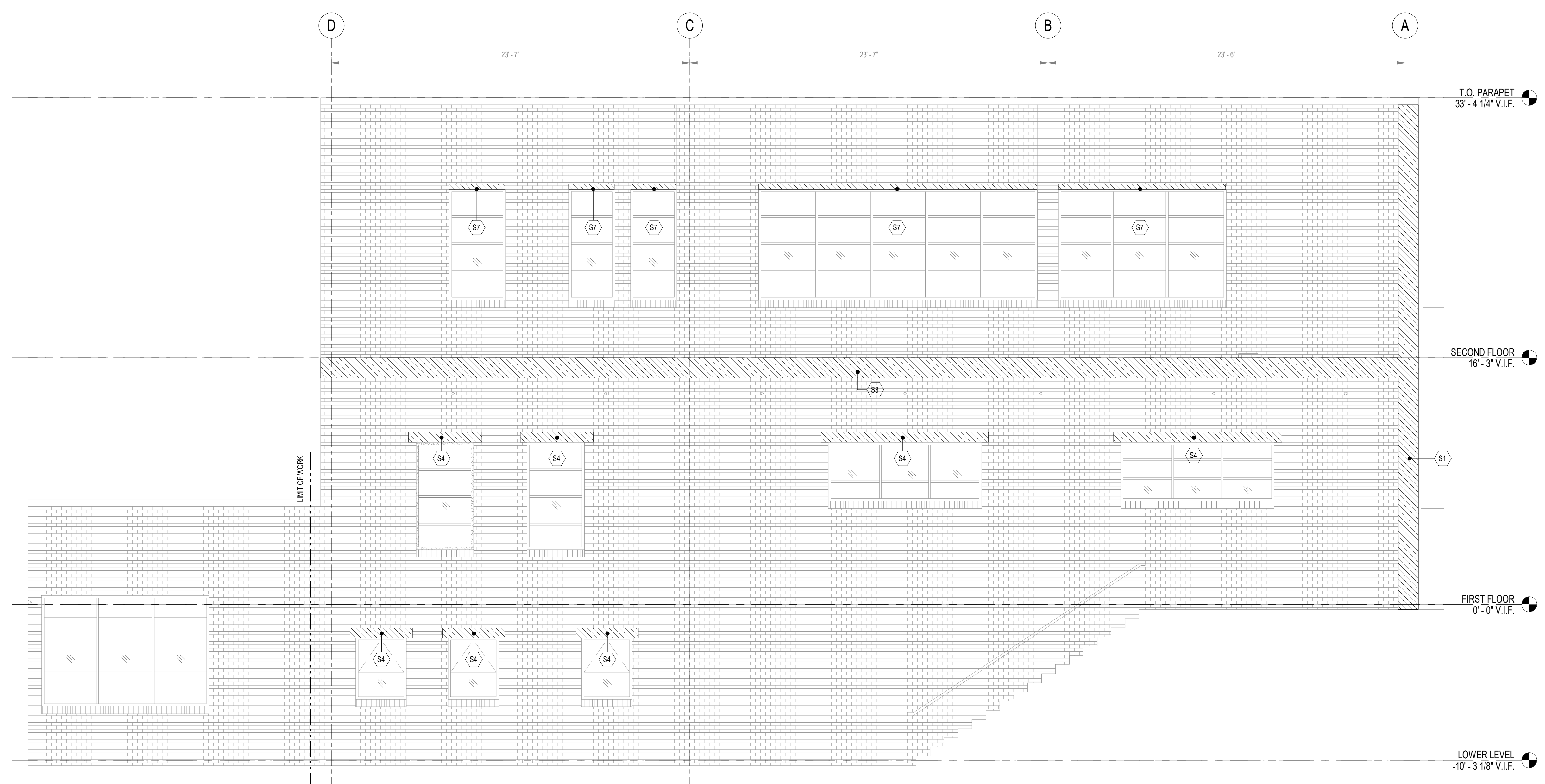
DRAWING TITLE: STRUCTURAL GENERAL NOTES

PROJECT NO.	20-20-4897-01	DRAWING NO.	S0.0
DATE	12/07/2021	SCALE	AS NOTED
DRAWN BY	CJW	CHECKED BY	NB
RIG PROJECT NO. 07			

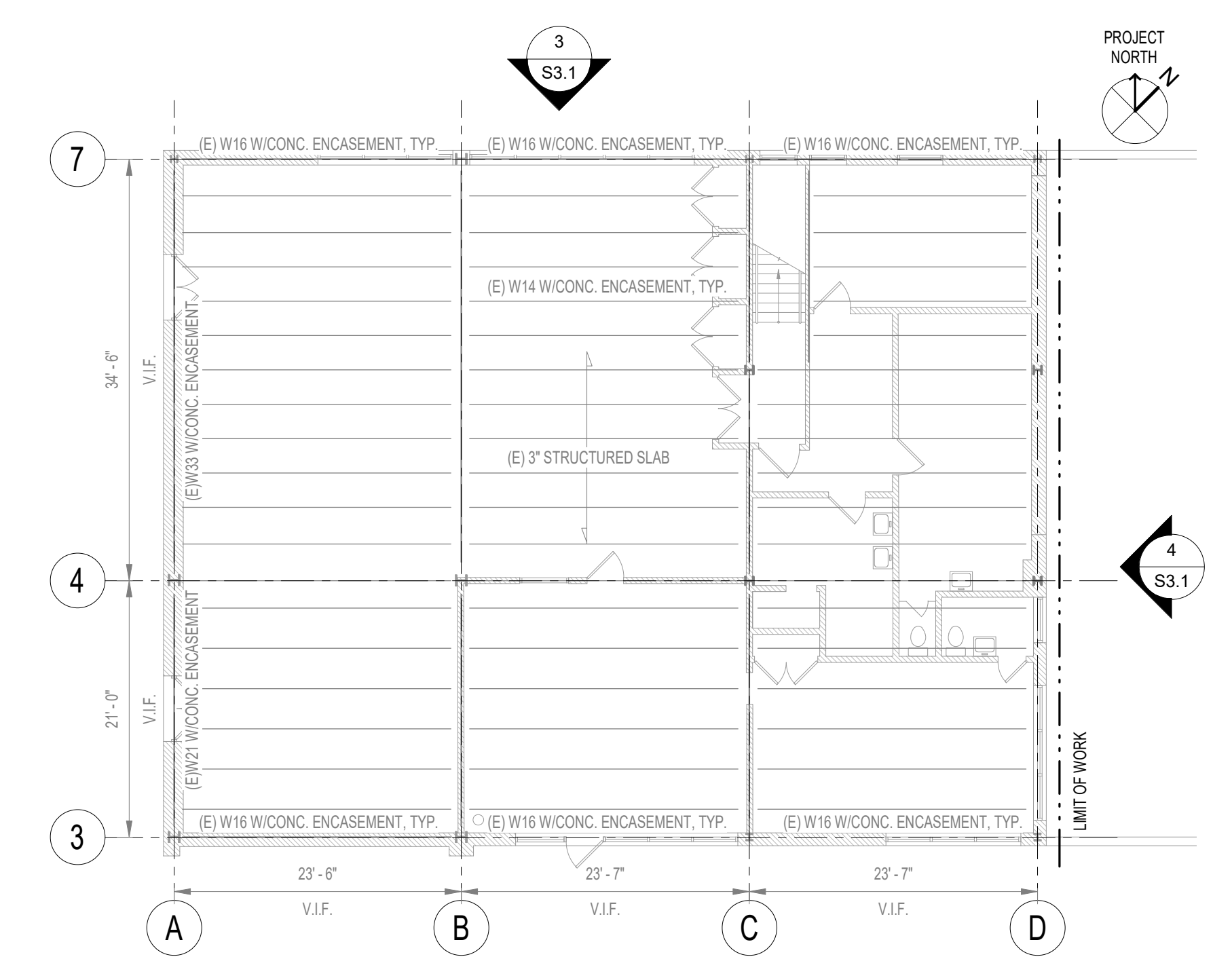
NOTE: ALL DIMENSIONS AND CONDITIONS SHALL BE BEFORE PROCEEDING WITH THE WORK.



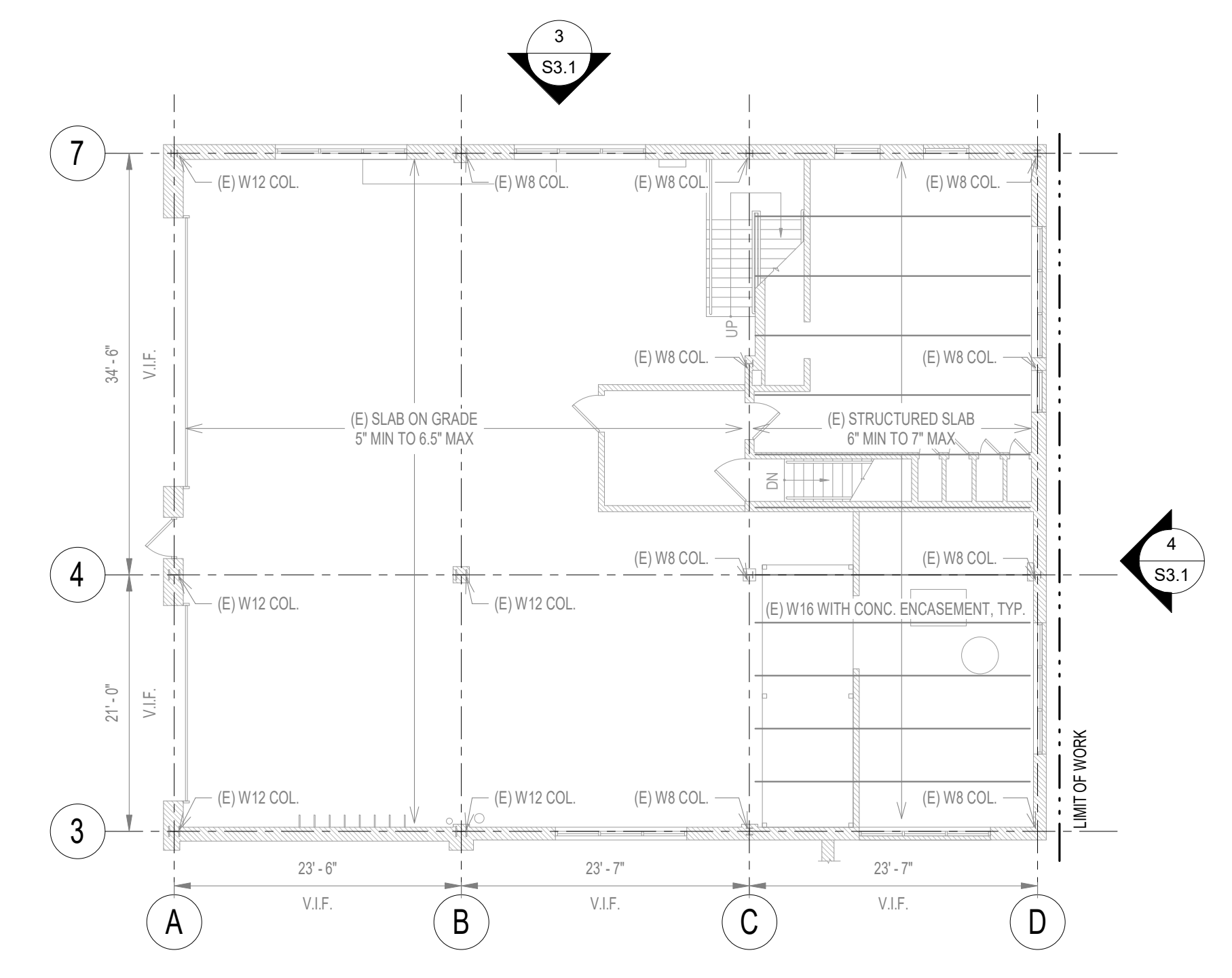
4 EAST ELEVATION
1/4" = 1'-0"



3 NORTH ELEVATION
1/4" = 1'-0"



2 2ND FLOOR KEYMAP
3/32" = 1'-0"

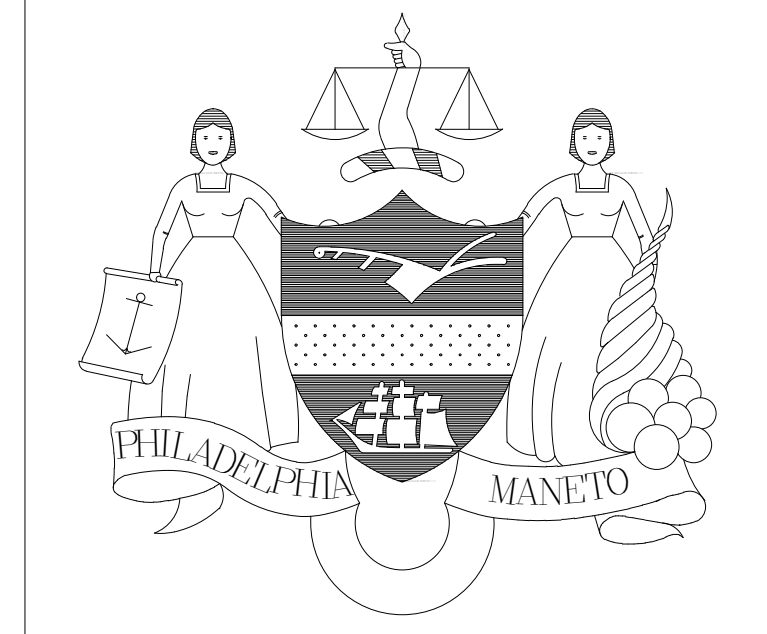


1 1ST FLOOR KEYMAP
3/32" = 1'-0"

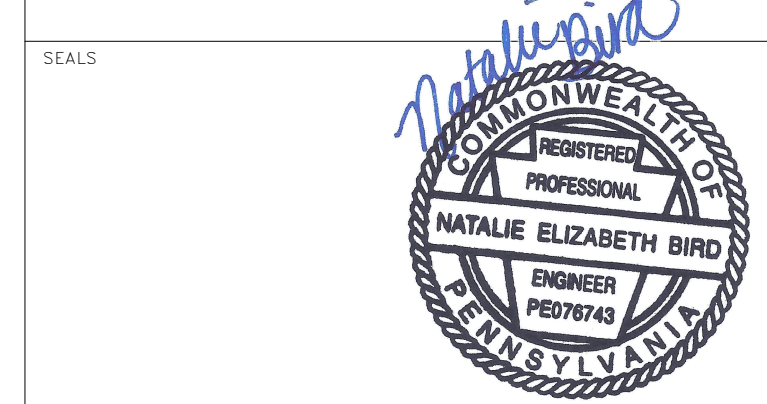
- STRUCTURAL NOTES:**
- DIAGONAL DOWN HATCH PATTERN INDICATES AREA OF STRUCTURAL REPAIRS REQUIRED. SEE REPAIR SCHEDULE FOR FURTHER INFORMATION.
 - ALL EXPOSED STEEL SHALL BE GALVANIZED.
 - ALL EXISTING DIMENSIONS AND FRAMING SHALL BE FIELD VERIFIED.

MARK	REPAIR	DETAIL
S1	CLEAN AND PAINT STEEL COLUMN AND REINFORCE PER DETAIL REFERENCED.	1/SO.0
S2	CLEAN AND PAINT STEEL BEAM AND REINFORCE PER REFERENCED DETAIL.	2/SO.0
S3	REPLACE EXISTING SHELF ANGLE IN KIND WITH GALVANIZED ANGLE. REMOVE EXISTING BRICK AS REQ'D AND REPLACE.	3/SO.0
S4	REPLACE EXISTING ANGLE IN KIND WITH GALVANIZED LINTEL. REMOVE EXISTING BRICK AS REQ'D AND REPLACE.	4/SO.0
S5	CLEAN AND PAINT EXISTING STEEL LINTEL OR SHELF ANGLE PER DETAIL REFERENCED.	5/SO.0
S6	REPLACE EXISTING ANGLE PER DETAIL WITH GALVANIZED LINTEL. REMOVE EXISTING BRICK AS REQ'D AND REPLACE.	6/SO.0
S7	CLEAN EXISTING SHELF ANGLE PER DETAIL. REMOVE EXISTING BRICK AS REQ'D AND REPLACE.	7/SO.0
S8	REPLACE EXISTING ANGLE PER DETAIL WITH GALVANIZED LINTEL. REMOVE EXISTING BRICK AS REQ'D AND REPLACE.	8/SO.0

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PROJECT TITLE: DPP ZONE 5 GARAGE RENOVATIONS

DRAWING TITLE: STRUCTURAL PLANS AND ELEVATIONS

PROJECT NO.: 20-20-4897-01

DATE: 12/07/2021

SCALE: AS NOTED

DRAWN BY: CJW
CHECKED BY: NB
RIG PROJECT NO: 257

S3.1

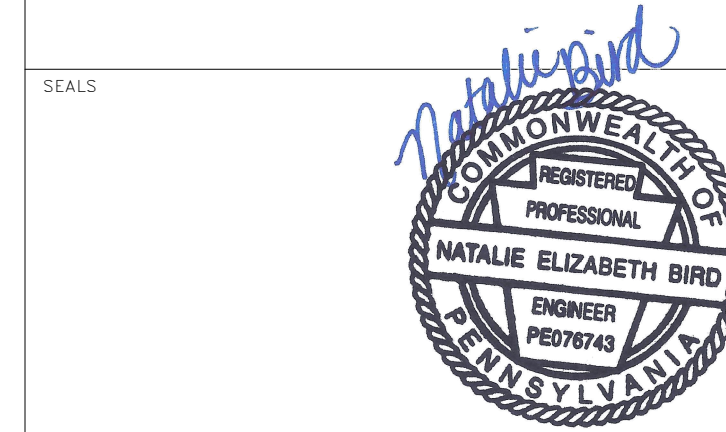
NOTE: ALL DIMENSIONS AND CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR BEFORE PROCEEDING WITH THE WORK.

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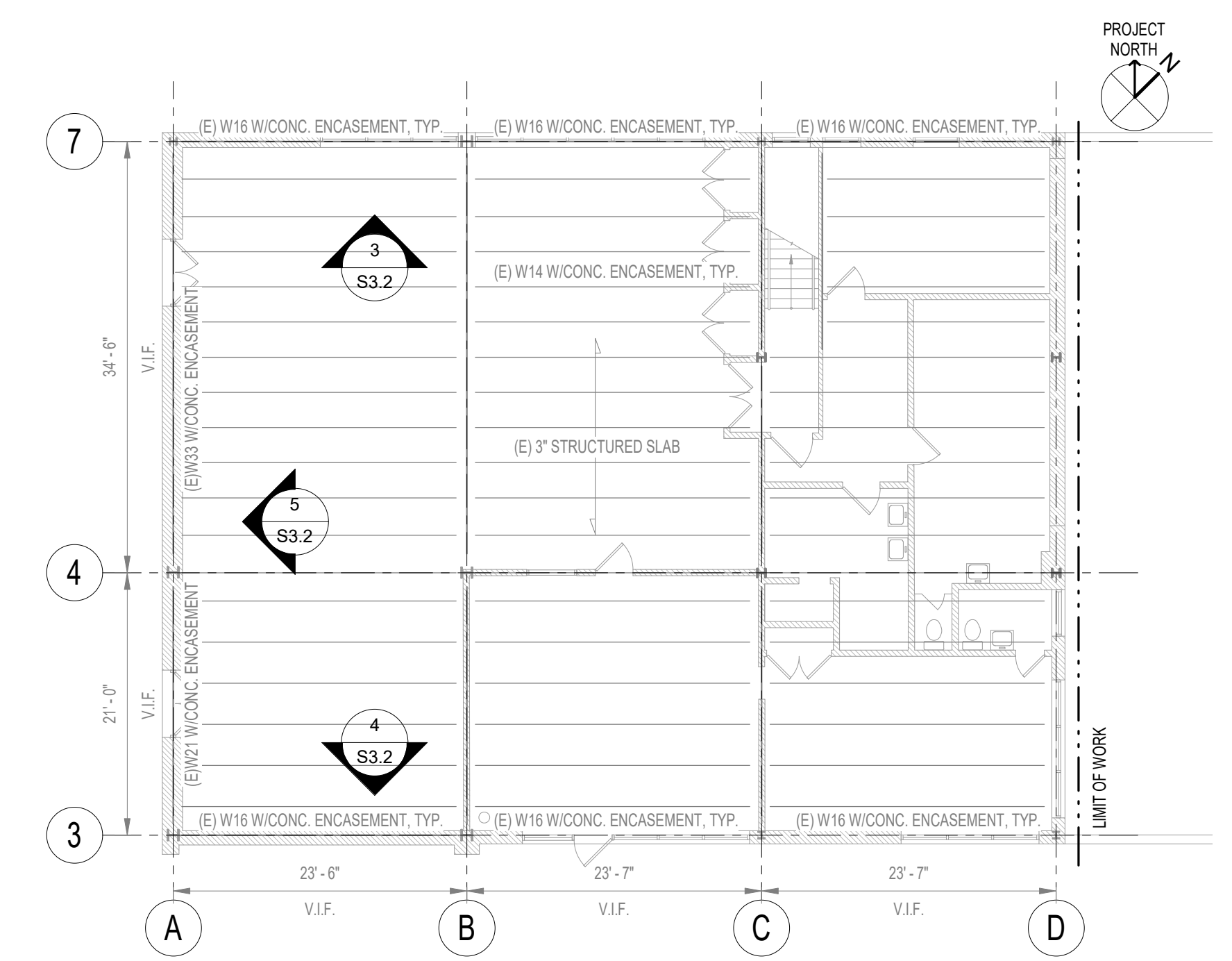
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PROJECT TITLE: **DPP ZONE 5 GARAGE RENOVATIONS**

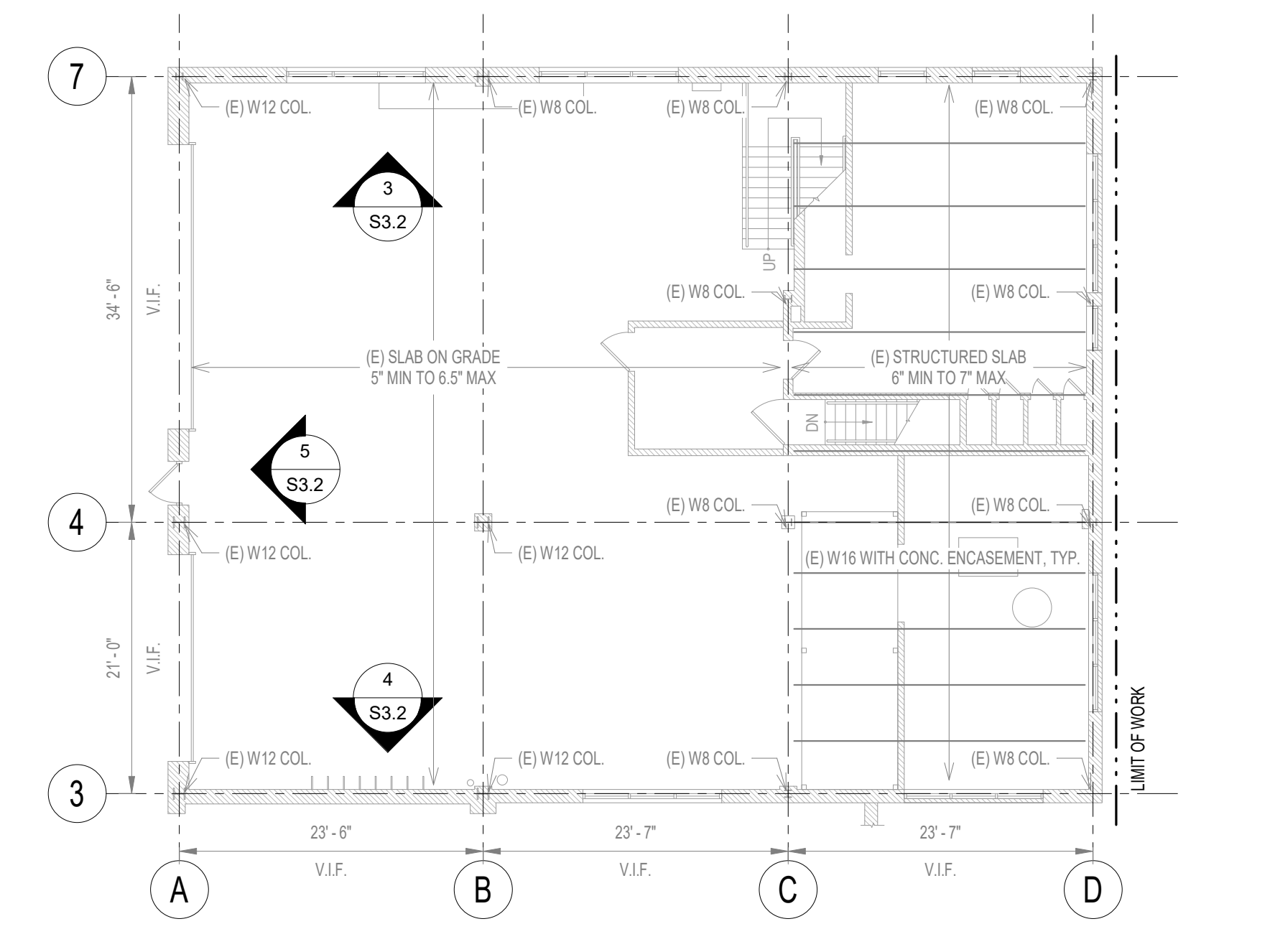
DRAWING TITLE: **STRUCTURAL PLANS AND ELEVATIONS**

PROJECT NO: **20-20-4897-01** DRAWING NO: **S3.2**
DATE: **12/07/2021**
SCALE: **AS NOTED**
DRAWN BY: **CJW**
CHECKED BY: **NB** RID PROJECT NO: 257

NOTE: ALL DIMENSIONS AND CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR BEFORE PROCEEDING WITH THE WORK.



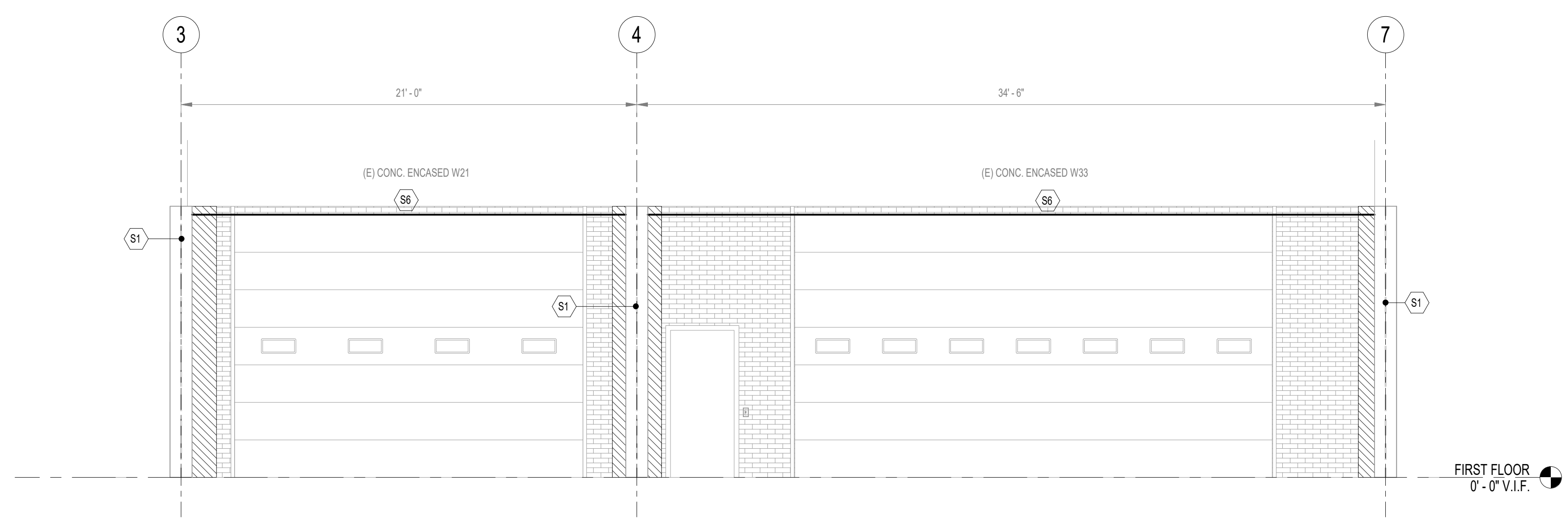
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S3.2 **2ND FLOOR KEYMAP**
3/32" = 1'-0"



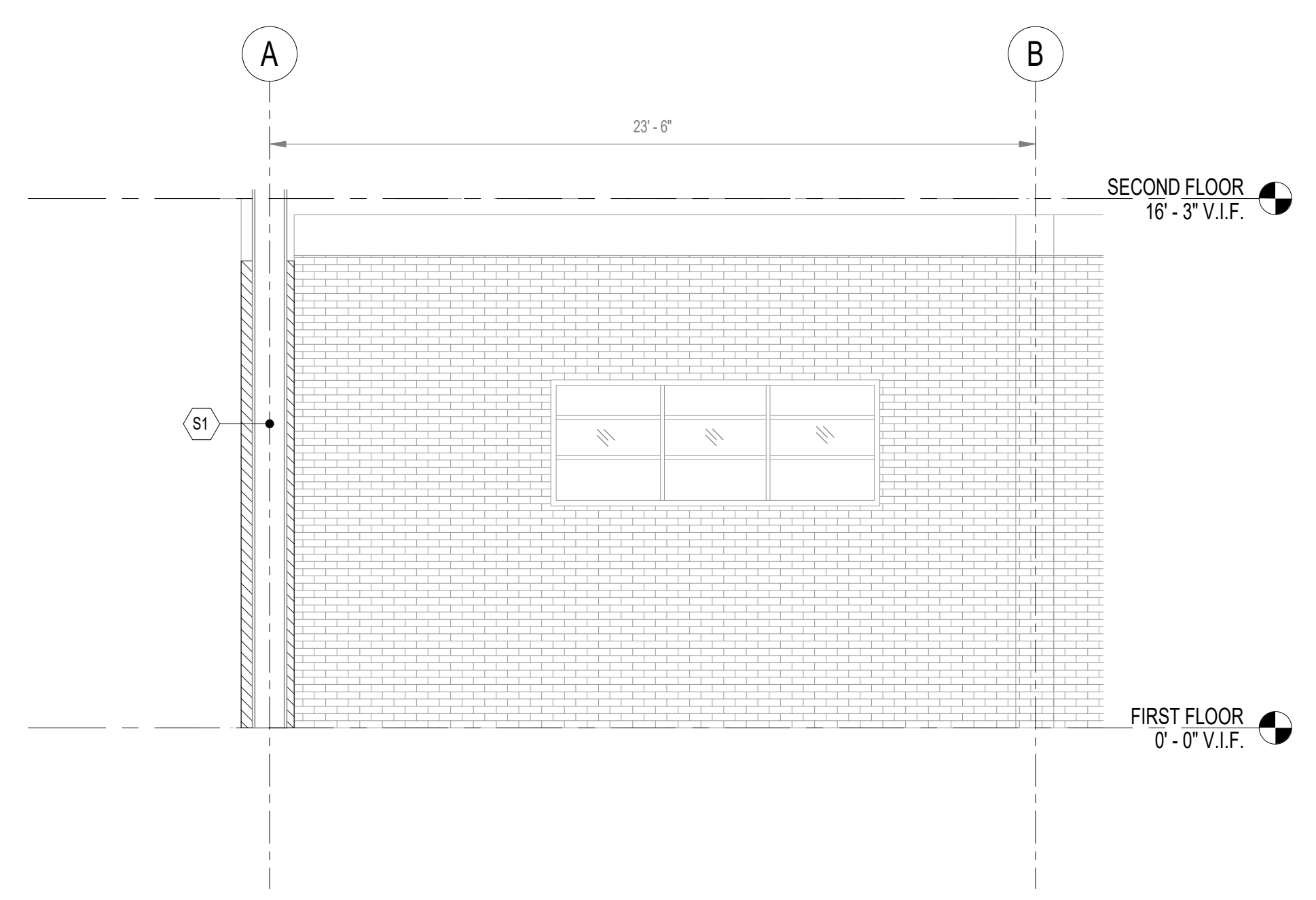
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S3.2 **1ST FLOOR KEYMAP**
3/32" = 1'-0"

- STRUCTURAL NOTES:**
- DIAGONAL DOWN HATCH PATTERN INDICATES AREA OF STRUCTURAL REPAIRS REQUIRED. SEE REPAIR SCHEDULE FOR FURTHER INFORMATION.
 - ALL EXPOSED STEEL SHALL BE GALVANIZED.
 - ALL EXISTING DIMENSIONS AND FRAMING SHALL BE FIELD VERIFIED.

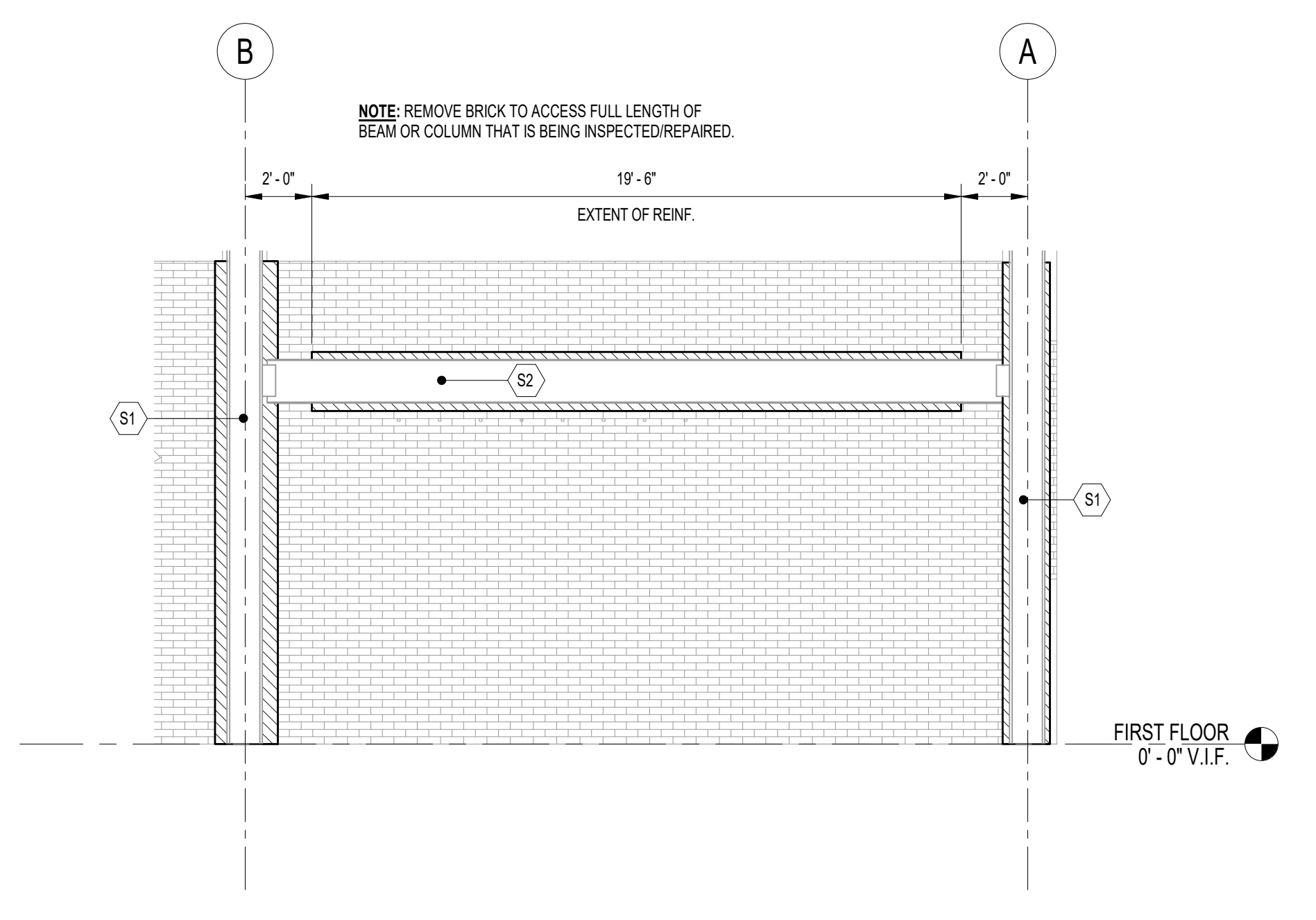
MARK	REPAIR	DETAIL
(S1)	CLEAN AND PAINT STEEL COLUMN AND REINFORCE PER DETAIL REFERENCED.	1/SO.0
(S2)	CLEAN AND PAINT STEEL BEAM AND REINFORCE PER REFERENCED DETAIL.	2/SO.0
(S3)	REPLACE EXISTING SHELF ANGLE IN KIND WITH GALVANIZED ANGLE. REMOVE EXISTING BRICK AS REQ'D AND REPLACE.	3/SO.0
(S4)	REPLACE EXISTING ANGLE IN KIND WITH GALVANIZED LINTEL. REMOVE EXISTING BRICK AS REQ'D AND REPLACE.	4/SO.0
(S5)	CLEAN AND PAINT EXISTING STEEL LINTEL OR SHELF ANGLE PER DETAIL REFERENCED.	5/SO.0
(S6)	REPLACE EXISTING ANGLE PER DETAIL WITH GALVANIZED LINTEL. REMOVE EXISTING BRICK AS REQ'D AND REPLACE.	6/SO.0
(S7)	CLEAN EXISTING SHELF ANGLE PER DETAIL. REMOVE EXISTING BRICK AS REQ'D AND REPLACE.	7/SO.0
(S8)	REPLACE EXISTING ANGLE PER DETAIL WITH GALVANIZED LINTEL. REMOVE EXISTING BRICK AS REQ'D AND REPLACE.	8/SO.0



5
S3.2 **INTERIOR GARAGE ELEVATION**
1/4" = 1'-0"



3
S3.2 **INTERIOR GARAGE ELEVATION**
1/4" = 1'-0"



4
S3.2 **INTERIOR GARAGE ELEVATION**
1/4" = 1'-0"

BASIC ELECTRICAL REQUIREMENTS:

1. GENERAL: ALL ELECTRICAL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE LATEST APPROVED PHILADELPHIA CODE AND NATIONAL ELECTRICAL CODE (NEC) AND NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA) STANDARDS UNLESS MORE STRINGENT REQUIREMENTS ARE INDICATED. ALL ELECTRICAL WORK SHALL COMPLY WITH ADA RECOMMENDATIONS. ALL ELECTRICAL WORK SHALL BE PERFORMED IN A NEAT AND WORKMANLIKE MANNER BY A LICENSED ELECTRICIAN, OR A CERTIFIED APPRENTICE WORKING UNDER THE DIRECT SUPERVISION OF A LICENSED ELECTRICIAN, USING THE BEST METHODS KNOWN TO THE TRADE AND SHALL PRESENT A NEAT AND PROFESSIONAL APPEARANCE. WHEN COMPLETED, THE OWNER RESERVES THE RIGHT TO CHANGE, WITHOUT ADDITIONAL COST, THE LOCATION OF ANY APPARATUS OR OUTLET, PROVIDED SUCH CHANGE DOES NOT ADD MORE THAN 10 FT TO THE FEEDER AND IS REQUESTED BEFORE INSTALLATION OF THE AFFECTED PORTION OF THE WORK IS COMMENCED. CONTRACTOR SHALL BRING ALL CONFLICTS ON THE DRAWINGS TO THE OWNERS ATTENTION FOR HIS RESOLUTION PRIOR TO PERFORMING THAT WORK.

2. THE CONTRACTOR SHALL SURVEY THE PROJECT SITE PRIOR TO THE BID TO ASSESS ACTUAL FIELD CONDITIONS. FAILURE TO PERFORM THIS INSPECTION BINDS THE CONTRACTOR TO PERFORM THE WORK WITH OUT EXTRA CHARGES DESPITE THE IGNORANCE OF REASONABLY ANTICIPATED CONDITIONS.

3. ROUGH-INS: THE CONTRACTOR SHALL VERIFY AND COORDINATE THE ROUGH-IN REQUIREMENTS OF EACH ITEM OF EQUIPMENT WITH THE CONTRACTOR SUPPLYING THE EQUIPMENT.

4. INSTALLATION: THE ELECTRICAL DRAWINGS INDICATE THE EXTENT AND GENERAL LOCATION AND ARRANGEMENT OF EQUIPMENT AND MATERIALS. THE CONTRACTOR SHALL BECOME FAMILIAR WITH ALL DETAILS OF THE WORK AND VERIFY ALL DIMENSIONS IN THE FIELD SO THAT EQUIPMENT AND MATERIALS WILL BE PROPERLY LOCATED AND READILY ACCESSIBLE. THE CONTRACTOR SHALL SEQUENCE, COORDINATE, AND INTEGRATE THE VARIOUS ELEMENTS OF ELECTRICAL SYSTEMS, EQUIPMENT, AND MATERIALS. COMPLY WITH THE FOLLOWING REQUIREMENTS:

- A. VERIFY ALL DIMENSIONS BY FIELD MEASUREMENTS.
- B. COORDINATE ELECTRICAL SYSTEMS, EQUIPMENT, AND MATERIALS INSTALLATION WITH OTHER BUILDING COMPONENTS AND TRADES.
- C. ARRANGE FOR CHASES, SLOTS, AND OPENINGS IN OTHER BUILDING COMPONENTS DURING PROGRESS OF CONSTRUCTION TO ALLOW FOR INSTALLATION OF ELECTRICAL SYSTEMS, EQUIPMENT, AND MATERIALS.
- D. SEQUENCE, COORDINATE, AND INTEGRATE INSTALLATION OF ELECTRICAL SYSTEMS, EQUIPMENT, AND MATERIALS FOR EFFICIENT FLOW OF THE WORK.
- E. WHERE MOUNTING HEIGHTS ARE NOT INDICATED, INSTALL ELECTRICAL SYSTEMS, EQUIPMENT, AND MATERIALS TO PROVIDE MAXIMUM HEADROOM POSSIBLE.
- F. INSTALL ELECTRICAL SYSTEMS, EQUIPMENT, AND MATERIALS TO CONFORM WITH APPROVED SUBMITTAL DATA TO THE GREATEST EXTENT POSSIBLE. CONFORM TO THE ARRANGEMENTS INDICATED ON THE ELECTRICAL DRAWINGS, RECOGNIZING THAT PORTIONS OF THE WORK ARE SHOWN ONLY IN DIAGRAMATIC FORM. WHERE COORDINATION REQUIREMENTS CONFLICT WITH INDIVIDUAL SYSTEM REQUIREMENTS, REFER CONFLICT TO THE ARCHITECT/ENGINEER OR OWNER'S REPRESENTATIVE FOR RESOLUTION.
- G. IN GENERAL, INSTALL ELECTRICAL SYSTEMS, EQUIPMENT, AND MATERIALS LEVEL AND PLUMB, PARALLEL AND PERPENDICULAR TO BUILDING LINES AND/OR FEATURES AND/OR OTHER BUILDING SYSTEMS.
- H. INSTALL ELECTRICAL EQUIPMENT TO FACILITATE SERVICING, MAINTENANCE, AND REPAIR OR REPLACEMENT OF EQUIPMENT AND COMPONENT PARTS. AS MUCH AS PRACTICAL, CONNECT EQUIPMENT FOR EASE OF DISCONNECTING, WITH MINIMUM OF INTERFERENCE WITH OTHER INSTALLATIONS.
- I. INSTALL ELECTRICAL SYSTEMS, EQUIPMENT, AND MATERIALS OWING RIGHT-OF-WAY PRIORITY TO SYSTEMS REQUIRED TO BE INSTALLED AT A SPECIFIC SLOPE (I.E., SPRINKLER SYSTEMS).
- 5. CUTTING AND PATCHING: ALL ELECTRICAL WORK SHALL BE CAREFULLY LAID OUT IN ADVANCE, AND WHERE CUTTING, CHANNELING, CHASING, OR DRILLING OF FLOORS, WALLS, PARTITIONS, CEILING, OR OTHER SURFACES IS NECESSARY FOR THE PROPER INSTALLATION, SUPPORT, OR ANCHORAGE OF CONDUIT OR OTHER ELECTRICAL WORK, THIS WORK SHALL BE CAREFULLY DONE. ANY RESULTING DAMAGE TO THE BUILDING OR OTHER SYSTEMS, EQUIPMENT, OR MATERIALS SHALL BE REPAIRED BY SKILLED MECHANICS OF THE TRADES INVOLVED, AT NO ADDITIONAL COST TO THE OWNER.

6. SUBMITTALS: SYSTEMS, EQUIPMENT, AND MATERIALS DESCRIBED ON THE ELECTRICAL DRAWINGS ESTABLISH THE MINIMUM STANDARDS FOR QUALITY AND STYLE. ALL SHALL BE THE BASIS OF THE BID. ALL SYSTEMS, EQUIPMENT, AND MATERIALS SHALL BE NEW AND SHALL BEAR THE UL LABEL OR BE UL LISTED, WHERE APPLICABLE, AND SHALL BE INSTALLED IN ACCORDANCE WITH THE NEC AND NEMA STANDARDS.

7. SUBSTITUTIONS: WHERE SYSTEMS, EQUIPMENT, OR MATERIALS ARE SPECIFIED BY MANUFACTURER OR BRAND NAME AND CATALOG NUMBER, SUCH SPECIFICATION SHALL ESTABLISH THE MINIMUM STANDARDS FOR QUALITY AND STYLE AND SHALL BE THE BASIS OF THE BID. SYSTEMS, EQUIPMENT, AND MATERIALS SHALL BE FURNISHED UNDER THE CONTRACT UNLESS CHANGED BY WRITTEN AGREEMENT. SHOULD THE CONTRACTOR PROPOSE TO FURNISH PRODUCTS OTHER THAN THOSE SPECIFIED, AS PERMITTED BY OR APPROVED EQUALS CLAUSES, HE SHALL SUBMIT A WRITTEN REQUEST FOR SAID SUBSTITUTIONS THROUGH APPROPRIATE CHANNELS TO THE ARCHITECT/ENGINEER FOR HIS REVIEW. SUCH REQUEST SHALL BE ACCOMPANIED WITH COMPLETE DESCRIPTIVE LITERATURE INCLUDING, BUT NOT LIMITED TO, CATALOG CUT SHEETS, BROCHURES, CIRCULARS, SPECIFICATIONS, PERFORMANCE DATA, INSTALLATION INSTRUCTIONS, SHOP DRAWINGS, AND OTHER PRINTED INFORMATION IN SUFFICIENT DETAIL AND SCOPE TO VERIFY COMPLIANCE WITH THE REQUIREMENTS OF THE CONTRACT. DESCRIPTIVE LITERATURE ON PROPOSED SUBSTITUTIONS SHALL BE CLEAR, CONCISE, AND LOGICALLY ARRANGED. ALL DATA WHICH IS, AND IS NOT, APPLICABLE SHALL BE CLEARLY IDENTIFIED AS SUCH. IF REQUESTED, THE CONTRACTOR SHALL SUBMIT SAMPLES OF BOTH SPECIFIED AND PROPOSED ITEMS FOR INSPECTION. DESCRIPTIVE LITERATURE ON PROPOSED SUBSTITUTIONS SHALL BE RETURNED WITHOUT REVIEW IF NOT PROPERLY PREPARED. ACCEPTANCE OR REJECTION OF PROPOSED SUBSTITUTIONS SHALL BE UP TO THE DISCRETION OF THE ARCHITECT/ENGINEER AND/OR THE OWNER.

8. RECORD DRAWINGS: THE CONTRACTOR SHALL MAINTAIN AT THE SITE A CLEAN, UNDAMAGED SET OF BLUE- OR BLACK-LINE WHITE PRINTS OF CONTRACT DRAWINGS. THIS RECORD SET OF CONTRACT DRAWINGS SHALL BE MARKED TO SHOW THE ACTUAL INSTALLATION AND WHERE THE ACTUAL INSTALLATION VARIES SUBSTANTIALLY FROM THE ELECTRICAL WORK AS ORIGINALLY SHOWN. MARK WHICHEVER DRAWINGS ARE MOST CAPABLE OF SHOWING CONDITIONS FULLY AND ACCURATELY. GIVE PARTICULAR ATTENTION TO CONCEALED ELEMENTS THAT WOULD BE DIFFICULT TO MEASURE AND RECORD AT A LATER DATE. MARK RECORD DRAWINGS WITH A RED ERASABLE PENCIL; USE OTHER COLORS TO DISTINGUISH BETWEEN VARIATIONS IN SEPARATE CATEGORIES OF THE ELECTRICAL WORK. NOTE CONTRACT MODIFICATIONS AND APPROVED SUBSTITUTIONS WHERE APPLICABLE.

10. PROTECTION OF INSTALLED SYSTEMS, EQUIPMENT, AND MATERIALS: PROTECT INSTALLED SYSTEMS, EQUIPMENT, AND MATERIALS FROM DAMAGE UNTIL FINAL ACCEPTANCE BY THE OWNER. REPAIR, OR REPLACE, AT NO ADDITIONAL COST TO THE OWNER, DAMAGED SYSTEMS, EQUIPMENT, AND MATERIALS TO THE SATISFACTION OF THE ARCHITECT, ENGINEER AND/OR OWNER.

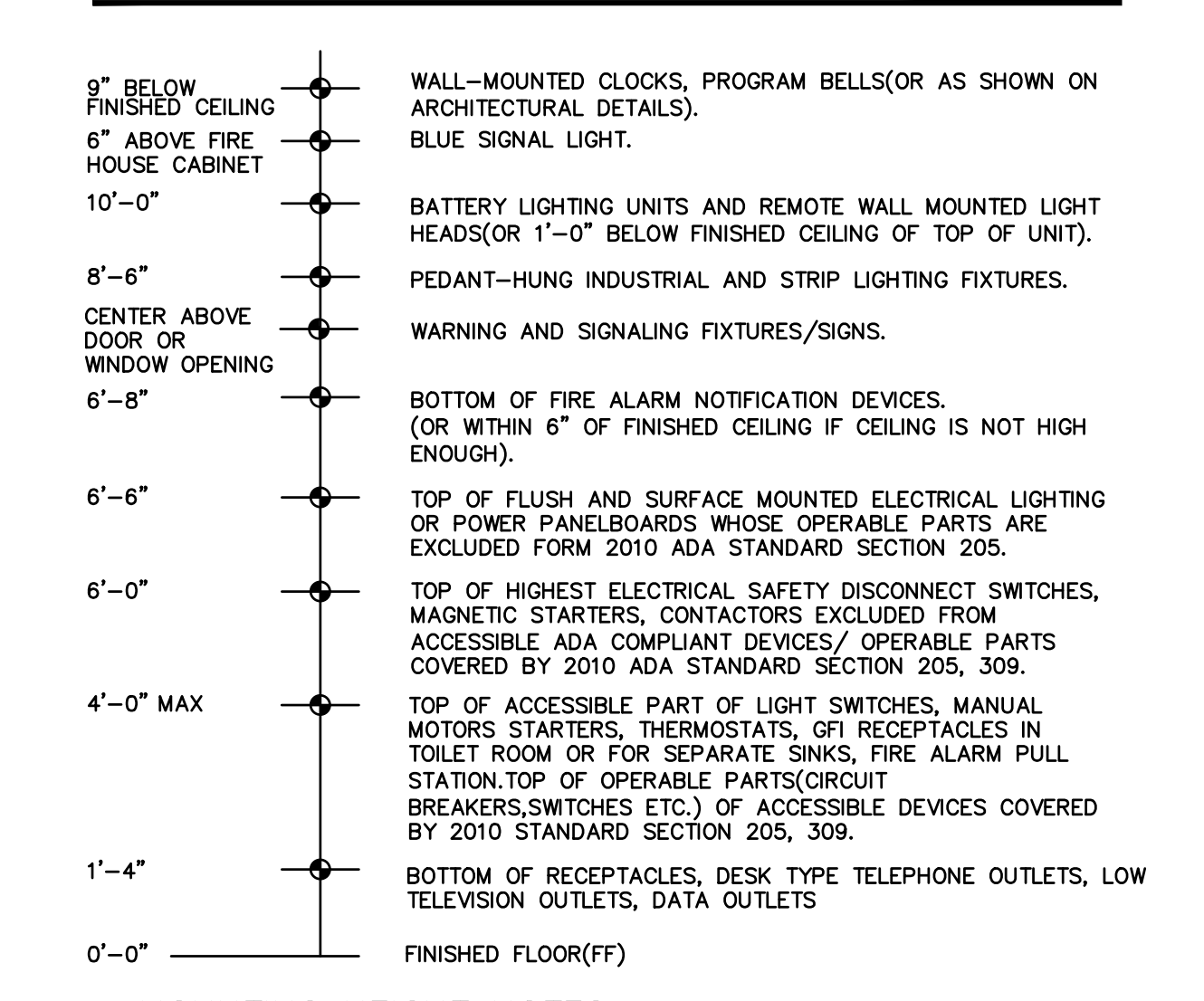
11. CLEANING: UPON COMPLETION OF INSTALLATION, INSPECT INTERIOR AND EXTERIOR OF ALL ELECTRICAL EQUIPMENT. REMOVE PAINT SPLATTERS AND OTHER SPOTS, DIRT, AND DEBRIS. TOUCH-UP SCRATCHES AND MARKS OF FINISH TO MATCH ORIGINAL FINISH.

12. CERTIFICATIONS: THE FOLLOWING SHALL BE OBTAINED AND SUBMITTED TO THE OWNER PRIOR TO FINAL PAYMENT:

- A. ELECTRICAL SYSTEMS: A CERTIFICATE OF FINAL INSPECTION AND APPROVAL BY THE AUTHORITIES HAVING JURISDICTION.

13. GUARANTEE: THE CONTRACTOR SHALL SUBMIT A WRITTEN GUARANTEE TO THE OWNER, PRIOR TO FINAL PAYMENT, THAT WARRANTS THE INSTALLATION SHALL REMAIN FREE OF DEFECTS FOR A PERIOD OF ONE YEAR AFTER FINAL ACCEPTANCE BY THE OWNER. THE GUARANTEE SHALL STATE THAT THE OWNER IS NOT LIABLE FOR PARTS AND LABOR COSTS INCURRED BY THE CONTRACTOR IN THE REPAIR OF ACTUAL PRODUCT OR INSTALLATION DEFECTS. THE GUARANTEE SHALL ALSO STATE THAT THE ON-SITE RESPONSE TIME TO REQUESTS FOR ASSISTANCE WILL BE 24 HOURS FOR NON-EMERGENCY CONDITIONS AND 2 HOURS FOR EMERGENCY CONDITIONS.

STANDARD MOUNTING HEIGHTS (UNLESS OTHERWISE NOTED)



- MOUNTING HEIGHT NOTES:**
1. STANDARD MOUNTING HEIGHTS: (COORDINATE WITH ARCH DRAWINGS) ALL MOUNTING HEIGHTS SHALL BE AS INDICATED BY ARCHITECT. IF NOT INDICATED BY ARCHITECT THEN PROVIDE AS NOTED ABOVE.
 2. MOUNTING HEIGHTS CENTER OF OUTLETS UNLESS NOTED IN STANDARD MOUNTING HEIGHTS ABOVE, IN MASONRY CONTRITION THE ABOVE MOUNTING HEIGHTS SHALL BE USED FOR REFERENCE TO NEAREST BLOCK OR BRICK COURSE.
 3. THE ABOVE MOUNTING HEIGHTS SHALL BE ADHERED TO UNLESS SPECIFICALLY NOTED OR DETAILED OTHERWISE ON THE DRAWING OR SPECIFICATIONS.
 4. INDICATION (+) NEXT TO A DEVICE INDICATES THAT DEVICE IS MOUNTED ABOVE A COUNTER OR CASEWORK. COORDINATE WITH ARCHITECTURAL DETAILS AND CASEWORK CONTRACTOR.
 5. ALL ACCESSIBLE ADA COMPLIANT DEVICES AND ITS OPERABLE PARTS SHALL BE MOUNTED PER 2010 ADA STANDARD SECTION 205.309.

ELECTRICAL MATERIALS:

1. RACEWAYS:
- A. RIGID GALVANIZED STEEL (RGS) CONDUIT: ANSI C80.1.
 - B. ELECTRICAL METALLIC TUBING (EMT) AND FITTINGS: ANSI C80.3 WITH COMPRESSION TYPE FITTINGS.
 - C. LIQUIDTIGHT FLEXIBLE METAL CONDUIT: UL 360. FLEXIBLE STEEL CONDUIT WITH PVC JACKET.
 - D. NONMETALLIC CONDUIT AND TUBING (ENT): NEMA TC 13.
2. BOXES:
- A. SHEET METAL: NEMA OS 1.
 - B. CAST METAL: NEMA FB 1, TYPE FD, CAST FERROUS BOX WITH GASKETED COVER.
 - C. HINGED COVER ENCLOSURES: NEMA 250, GALVANIZED STEEL ENCLOSURE WITH CONTINUOUS HINGE COVER, QUICK RELEASE TYPE LATCHES, REMOVABLE INTERIOR PANEL, AND MANUFACTURER'S STANDARD GRAY ENAMEL INSIDE AND OUT.
3. WIRES AND CABLES:
- A. CONDUCTOR MATERIAL: ANNEALED COPPER OR ALUMINUM.
 - B. INSULATION: THHN/THWN CONFORMING TO WC 5.
 - C. CONDUCTORS #16 AWG AND SMALLER SHALL BE SOLID; CONDUCTORS #14 AWG AND LARGER SHALL BE STRANDED. NO CABLE IS PERMITTED FOR BRANCH CIRCUITRY, AND SHALL UTILIZE SOLID CONDUCTORS.
 - D. GROUND CONDUCTORS #10 AWG AND SMALLER SHALL HAVE GREEN THHN/THWN INSULATION.
4. WIRING DEVICES:
- A. GENERAL: COMPLY WITH NEMA WD 1, "GENERAL PURPOSE WIRING DEVICES."
 - B. COLOR: WHITE, BLACK, GRAY, WHITE, OR BROWN TO BE AS SELECTED BY THE ARCHITECT/ENGINEER AND/OR THE OWNER.
 - C. RECEPTACLES: COMPLY WITH UL 498, "ELECTRICAL ATTACHMENT PLUGS AND RECEPTACLES, HEAVY DUTY SPECIFICATION GRADE EXCEPT AS OTHERWISE INDICATED." GROUND FAULT CIRCUIT INTERRUPTER (GFCI) TYPE RECEPTACLES SHALL COMPLY WITH UL 943, "GROUND FAULT CIRCUIT INTERRUPTERS" WITH INTEGRAL NEMA 5-20R DUPLEX RECEPTACLE DESIGNED FOR INSTALLATION IN A 2-3/4" DEEP DEVICE BOX WITHOUT ADAPTER.
 - D. TOGGLE SWITCHES: 20A, 120V-277V AC, QUIET TYPE, SPECIFICATION GRADE AND SHALL COMPLY WITH UL 20, "GENERAL USE SNAP SWITCHES." SINGLE-POLE, TWO-POLE, THREE-WAY, AND FOUR-WAY AS INDICATED AND/OR REQUIRED.
 - E. DEVICE PLATES: SINGLE AND COMBINATION TYPES WHICH MATE AND MATCH WITH CORRESPONDING WIRING DEVICES.
 - F. MANUFACTURER: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PRODUCTS AS MANUFACTURED BY HUBBEL INC., OR APPROVED EQUAL BY LEVITON.

5. GROUNDING:
- A. GROUNDING AND BONDING PRODUCTS: OF TYPES INDICATED AND/OR OF SIZES AND RATINGS TO COMPLY WITH THE NEC. WHERE TYPES, SIZES, RATINGS, AND QUANTITIES ARE IN EXCESS OF NEC REQUIREMENTS, THE GREATER SIZE, RATING, AND QUANTITIES SHALL GOVERN. SMOOTH MATCHING NYLON IN ALL AREAS.
 - B. WIRE AND CABLE CONDUCTORS: CONFORM TO NEC TABLE 8, EXCEPT AS OTHERWISE INDICATED. FOR CONDUCTOR PROPERTIES, INCLUDING STRANDING.
 - C. CONDUCTOR PRODUCTS: UL LISTED AND LABELED AS GROUNDING CONNECTORS FOR THE MATERIALS USED.
 - 6. PANELBOARDS:
 - A. CIRCUIT BREAKERS: PROVIDE TYPE, RATING, AND FEATURES INDICATED. BOLT-ON EXCEPT WHERE PLUG-IN FOR USE ON EXISTING PANELBOARDS (NOT BEING UPGRADED). TANDEM CIRCUIT BREAKERS SHALL NOT BE USED. MULTIPLE CIRCUIT BREAKERS SHALL HAVE AN INTERNAL COMMON TRIP AND A SINGLE HANDLE.
 - B. TERMINALS: UNLESS OTHERWISE INDICATED.
 - C. FRONT: SECURED TO BOX WITH CONCEALED TRIM CLAMPS EXCEPT AS INDICATED. FRONT FOR CONDUIT FRAME: METAL WITH CLEAR PLASTIC COVER MOUNTED ON INSIDE OF PANELBOARD DOOR.
 - D. WORK: HARD DRAWN COPPER OF 98% CONDUCTIVITY.
 - E. MAIN AND NEUTRAL LUGS: COMPRESSION TYPE.
 - F. EQUIPMENT GROUND BUS: ADEQUATE FOR FEEDER AND BRANCH CIRCUIT EQUIPMENT GROUND CONDUCTORS. BONDED TO BOX.
 - G. PROVISIONS FOR FUTURE DEVICES: EQUIP WITH MOUNTING BRACKETS, BUS CONNECTION, AND NECESSARY APPURTENANCES. FOR THE CIRCUIT BREAKER AMPERE RATINGS INDICATED FOR FUTURE INSTALLATION OF DEVICES.
 - H. MAIN AND SUBFED LUGS: PROVIDE WHERE INDICATED.
 - I. NAMEPLATE: CUSTOM ENGRAVED PLASTIC NAMEPLATE, WRITE LETTERS ON BLACK FIELD, FOR EACH PANELBOARD MOUNTED WITH EPOXY OR INDUSTRIAL CEMENT OR ADHESIVE.
 - K. MANUFACTURER: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PRODUCTS AS MANUFACTURED BY SQUARE-D, SIEMENS OR CUTLER HAMMER CO.
7. DISCONNECTS AND CIRCUIT BREAKERS:
- A. FUSIBLE SWITCH, 800A AND SMALLER: NEMA KS 1, TYPE HD, CLIPS TO ACCOMMODATE SPECIFIED FUSES, ENCLOSURE SUITABLE FOR THE ENVIRONMENT WHERE INSTALLED, HANDLE LOCKABLE WITH TWO (2) PAD LOCKS, AND INTERLOCKED WITH COVER IN "CLOSED" POSITION. ENCLOSURES SHALL COMPLY WITH NEMA KS 1, TYPE 1 INDOOR DRY LOCATIONS.
 - B. MOLDED CASE CIRCUIT BREAKER: NEMA AB 1, HANDLE LOCKABLE WITH TWO (2) PADLOCKS. FRAME SIZE, TRIP RATING, NUMBER OF POLES, AND AUXILIARIES AS INDICATED. ENCLOSURES SHALL COMPLY WITH NEMA AB 1, TYPE 1, INDOOR DRY LOCATIONS. CIRCUIT BREAKERS SHALL HAVE A MINIMUM INTERRUPTING CAPACITY AS FOLLOWS:
 - C. MANUFACTURER: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PRODUCTS AS SUITABLE FOR INSTALLATION IN EXISTING PANELS. DISCONNECTS SHALL BE BY SQUARE-D.

GENERAL ELECTRICAL NOTES:

1. WIRING METHODS: WIRING SHALL CONSIST OF CABLES AND WIRES INSTALLED IN RGS CONDUIT WITH LIQUIDTIGHT FLEXIBLE METAL CONDUIT AND MC CABLES. RACEWAYS SHALL BE CONCEALED WITHIN FINISHED WALLS AND CEILINGS UNLESS OTHERWISE INDICATED. OTHER THAN ROOF PENETRATIONS REQUIRED TO CONNECT EMT TO RGS CONDUIT AND CAST METAL BOXES AND CONDUIT BOXES, PENETRATIONS OF THE BUILDING.
2. RACEWAYS: RACEWAYS SHALL BE PROVIDED WHERE INSTALLED AND REQUIRED AND SHALL BE INSTALLED AS SPECIFIED BELOW, UNLESS OTHERWISE INDICATED. MINIMUM RACEWAY SIZE SHALL BE 3/4 IN. INDOOR INSTALLATIONS. LIQUIDTIGHT FLEXIBLE METAL CONDUIT, 6 FT MAXIMUM LENGTH, SHALL BE USED FOR ALL CONDUIT TERMINATIONS AT EQUIPMENT SUBJECT TO VIBRATION. BUSHINGS, MANUFACTURED FITTINGS, OR BOXES PROVIDING EQUIVALENT MEANS OF PROTECTION SHALL BE INSTALLED ON THE ENDS OF ALL CONDUITS AND SHALL BE OF THE INSULATING TYPE WHERE REQUIRED BY THE N.E.C. ONLY LISTED ADAPTERS SHALL BE USED TO CONNECT EMT TO RGS CONDUIT AND CAST METAL BOXES AND CONDUIT BOXES. PENETRATIONS OF SLABS AND FIRE RATED WALLS SHALL BE FIRESTOPPED.
- KEEP RACEWAYS AT LEAST 6 IN. AWAY FROM PARALLEL RUNS OF FLUES AND STEAM OR HOT WATER PIPING. INSTALL HORIZONTAL RACEWAY RUNS HIGHER THAN WATER AND STEAM PIPING. RACEWAYS CROSSING STRUCTURAL EXPANSION JOINTS SHALL BE PROVIDED WITH SUITABLE EXPANSION FITTINGS OR OTHER MEANS TO PREVENT DEFORMATION OR DAMAGE TO STRUCTURES. RACEWAYS SHALL BE INSTALLED PARALLEL OR PERPENDICULAR TO WALLS, STRUCTURAL MEMBERS AND FEATURES, MECHANICAL DUCT AND PIPING SYSTEMS, OR INTERSECTIONS OF VERTICAL PLANES OR CAST METAL FITTINGS. FIELD-MADE ELBOWS AND OFFSETS SHALL BE MADE WITH AN APPROVED HICKEY OR CONDUIT BENDING TOOL. RACEWAYS SHALL BE INSTALLED AS CLOSE TO THE WALL AS PRACTICABLE. CARE SHALL BE TAKEN TO PREVENT THE LODGMENT OF DIRT, AND CONSTRUCTION MATERIALS AND DEBRIS IN RACEWAYS DURING THE COURSE OF CONSTRUCTION. CLOGGED RACEWAYS SHALL BE ENTIRELY FREED OF OBSTRUCTIONS OR SHALL BE REPLACED.
- RGS CONDUIT AND EMT SHALL BE SECURELY AND RIGIDLY FASTENED IN PLACE AT INTERVALS OF NOT MORE THAN 10 FT AND WITHIN 3 FT OF FITTINGS AND BOXES WITH APPROVED PIPE STRAPS, WALL BRACKETS, CONDUIT CLAMPS, CONDUIT HANGERS, THREADED C-CLAMPS, OR CEILING CLAMPS OR BEAM CLAMPS SHALL HAVE STRAP OR ROD TYPE RETAINERS. LOADS AND SUPPORTS SHALL BE COORDINATE WITH SUPPORT STRUCTURES TO PREVENT DEFORMATION OR DAMAGE TO STRUCTURES, BUT NO LOAD SHALL BE APPLIED TO JOIST BRIDGING. FASTENINGS SHALL BE BY WOOD SCREWS OR SCREW TYPE NAILS TO WOOD; BY TOGGLE BOLTS ON HOLLOW CMU; BY EXPANSION BOLTS ON CONCRETE OR BRICK; AND BY MACHINE SCREWS, WELDED THREADED OR SPRING STEEL TENSION CLAMPS ON STEEL WORK. NAIL TYPE NYLON ANCHORS OR THREADED STUDS DRIVEN IN BY A POWDER CHARGE AND PROVIDED WITH SUPPORTING STRUCTURES TO PREVENT DEFORMATION OR DAMAGE TO STRUCTURES. EXPANSION BOLTS, SCREWS, RACEWAYS OR PIPE STRAPS SHALL NOT BE WELDED TO STEEL STRUCTURES. IN PARTITIONS OF LIGHT STEEL CONSTRUCTION, SHEET METAL SORLVS MAY BE USED. CONDUIT SHALL NOT BE SUPPORTED USING WIRE OR NYLON TIES. RACEWAYS SHALL BE INSTALLED AS A COMPLETE SYSTEM AND BE INDEPENDENTLY SUPPORTED FROM THE STRUCTURE. UPPER RACEWAYS SHALL NOT BE THE SUPPORT OF LOWER RACEWAYS. RACEWAYS SHALL NOT BE SHARED BETWEEN ELECTRICAL, MECHANICAL AND MECHANICAL DUCTS OR PIPING. MOUNTING HARDWARE SHALL NOT PRESENT SHARP EDGES WHERE PERSONNEL CONTACT IS POSSIBLE. IN MECHANICAL SPACES, "MINERLAC" SUPPORTS SHALL NOT BE USED BELOW 10'.
3. BOXES: BOXES SHALL BE PROVIDED IN RACEWAY SYSTEMS WHEREVER REQUIRED FOR PULLING OF WIRES, MAKING CONNECTIONS AND MOUNTING OF DEVICES OR LIGHTING FIXTURES. IN GENERAL, BOXES SHALL BE CONSTRUCTED OF HOT-DIPPED GALVANIZED FINISHED SHEET STEEL. BOXES FOR METALLIC RACEWAYS, 4 IN. AND 4 IN. NOMINAL SIZE AND SMALLER SHALL BE OF THE METALLIC HUB TYPE AND GASKETED WHEN LOCATED OUTSIDE OF THE BUILDING. BOXES SHALL BE LISTED AS SUITABLE FOR THE ENVIRONMENTAL CONDITIONS OF THE LOCATION THEY ARE INSTALLED. BOXES FOR MOUNTING OF LIGHTING FIXTURES SHALL BE NOT LESS THAN 4 IN. SQUARE EXCEPT SMALLER BOXES SHALL BE INSTALLED WHERE REQUIRED BY FIXTURE CONFIGURATION. UNLESS OTHERWISE INDICATED, DEVICE BOXES FOR RECEPTACLES SHALL BE MOUNTED WITH THE CENTER OF THE DEVICE BOX APPROXIMATELY 18 IN. AFF. INDICATED, DEVICE BOXES FOR TOGGLE SWITCHES SHALL BE MOUNTED WITH THE TOP OF THE ACCESSIBLE PART APPROXIMATELY 48 IN. AFF. BOXES AND BOX SUPPORTS SHALL BE FASTENED TO WOOD WITH WOOD SCREWS OR SCREW TYPE NAILS OF EQUAL HOLDING STRENGTH WITH BOLTS AND METAL EXPANSION SHIELDS ON CONCRETE AND BRICK, WITH TOGGLE BOLTS ON HOLLOW CMU AND WITH MACHINE SCREWS OR WELDED STUDS ON STEEL WORK. THREADED STUDS DRIVEN IN BY POWDER CHARGE AND PROVIDED WITH LOCKWASHERS AND NUTS, OR NAIL TYPE NYLON ANCHORS MAY BE USED IN LIEU OF EXPANSION SHIELDS OR MACHINE SCREWS. HANGERS SHALL NOT BE FASTENED OR SUPPORTED FROM JOIST BRIDGING.
4. WIRES AND CABLES: EXAMINE RACEWAYS AND BUILDING FINISHES TO RECEIVE WIRES AND CABLES FOR COMPLIANCE WITH INSTALLATION TOLERANCES AND OTHER CONDITIONS. DO NOT PROCEED WITH INSTALLATION UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED. PULL WIRES AND CABLES INTO RACEWAY SIMULTANEOUSLY WHERE MORE THAN ONE IS BEING INSTALLED IN THE SAME RACEWAY. USE PULLING COMPOUND OR LUBRICANT WHERE NECESSARY. COMPOUND USES MUST NOT DEGRADATE CONDUCTORS OR INSULATION. USE PULLING MEANS, INCLUDING FISH TAPE, CABLE, ROPE, AND BASKET-WEAVE WIRE/CABLE GRIPS THAT WILL NOT DAMAGE WIRES/CABLES OR RACEWAY. INSTALL EXPOSED CABLE, PARALLEL AND PERPENDICULAR TO WALLS, STRUCTURAL MEMBERS AND FEATURES, MECHANICAL DUCT AND PIPING SYSTEMS, OR INTERSECTIONS OF VERTICAL PLANES AND CEILINGS. HORIZONTAL RUNS OF MC CABLE SHALL BE SUPPORTED ON 3 FT MAXIMUM CENTERS. VERTICAL RUNS OF MC CABLES SHALL BE SUPPORTED ON 6 FT MAXIMUM CENTERS. EXPOSED PLENUM CABLE SHALL BE SUPPORTED ON 3 FT MAXIMUM CENTERS. THE NUMBER OF SPLICES SHALL BE KEPT TO AN ABSOLUTE MINIMUM. WIRING AT EACH OUTLET SHALL BE INSTALLED WITH AT LEAST 8 IN. SLACK.
5. WIRING DEVICES: INSTALL WIRING DEVICES WHERE INDICATED IN ACCORDANCE WITH MANUFACTURER'S PUBLISHED INSTALLATION INSTRUCTION, APPLICABLE REQUIREMENTS OF THE NEC, AND RECOGNIZED INDUSTRY PRACTICES. INSTALL WIRING DEVICES IN DEVICE BOXES WHICH ARE CLEAN AND FREE FROM DIRT AND CONSTRUCTION MATERIALS AND DEBRIS. INSTALL WIRING DEVICES AFTER WIRING WORK IS COMPLETE. INSTALL DEVICE PLATES AFTER PAINTING WORK IS COMPLETE. TIGHTEN CONNECTORS AND TERMINALS, INCLUDING SCREWS AND BOLTS, IN ACCORDANCE WITH MANUFACTURER'S PUBLISHED TORQUE-TIGHTENING VALUES. PRIOR TO ENERGIZING CIRCUITS, TEST WIRING FOR ELECTRICAL CONTINUITY AND SHORTS. ENSURE PROPER POLARITY OF CONNECTIONS IS MAINTAINED. SUBSEQUENT TO ENERGIZING, TEST WIRING DEVICES AND DEMONSTRATE COMPLIANCE WITH REQUIREMENTS.
6. GROUNDING: ELECTRICAL SYSTEMS AND EQUIPMENT, METALLIC RACEWAYS AND BOXES, CABLE SHIELDS, METALLIC CABLE SHEATHS AND ARMOR, AND OTHER NON-CURRENT CARRYING METALLIC PARTS OF EQUIPMENT SHALL BE GROUNDED IN CONFORMANCE WITH THE NEC. EQUIPMENT GROUND CONDUCTORS SHALL COMPLY WITH NEC ARTICLE 250 FOR SIZES AND QUANTITIES, EXCEPT WHERE LARGER SIZES AND/OR MORE CONDUCTORS ARE INDICATED. PROVIDE SEPARATE INSULATED GROUND CONDUCTOR IN ALL RACEWAYS, REGARDLESS OF RACEWAY TYPE. SEPARATELY DERIVED SYSTEMS AS DEFINED BY THE NEC SHALL BE GROUNDED IN CONFORMANCE WITH NEC ARTICLE 250 PARA. 26. TERMINATE EQUIPMENT GROUND WIRES FOR FEEDERS AND BRANCH CIRCUITS WITH PRESSURE TYPE GROUND LUGS. WHERE METALLIC CONDUITS TERMINATE AT METALLIC HOUSINGS WITH MECHANICAL AND ELECTRICAL CONNECTION TO HOUSING, TERMINATE EACH CONDUIT WITH A GROUNDING BUSHING. CONNECT GROUNDING BUSHINGS WITH A GROUND WIRE TO THE GROUND BUS IN THE HOUSING. BOND ELECTRICALLY NONCONTINUOUS CONDUITS AT BOTH ENTRANCES AND EXITS WITH GROUNDING BUSHINGS AND GROUND WIRES. TIGHTEN GROUNDING AND BONDING CONNECTORS AND TERMINALS, INCLUDING SCREWS AND BOLTS, IN ACCORDANCE WITH MANUFACTURER'S PUBLISHED TORQUE-TIGHTENING VALUES.

7. PANELBOARDS: INSTALL PANELBOARDS AND ACCESSORY ITEMS IN ACCORDANCE WITH NEMA PB 1.1. "GENERAL INSTRUCTIONS FOR PROPER INSTALLATION, OPERATION, AND MAINTENANCE OF PANELBOARDS HAVING 600 VOLTS OR LESS" AND MANUFACTURER'S PUBLISHED INSTALLATION INSTRUCTIONS. MOUNT PANELBOARDS PLUMB AND RIGID WITHOUT DISTORTION OF BOX AND WITH THE TOP OF THE TRIM AT 78 IN. AFF UNLESS OTHERWISE INDICATED. PROVIDE NEATLY TYPED AND ACCURATE CIRCUIT DIRECTORIES IN EACH PANELBOARD. PROVIDE FINAL CIRCUIT CONFIGURATION. PROVIDE FULLER PLATES IN ALL UNUSED SPACES. TRAIL WIRES IN PANELBOARDS CUTTERS NEATLY IN GROUPS, BUNDLE, AND WRAP WITH WIRE TIES. GROUND PANELBOARD IN CONFORMANCE WITH THE NEC. TIGHTEN ELECTRICAL CONNECTORS AND TERMINALS, INCLUDING GROUNDING CONNECTIONS, IN ACCORDANCE WITH MANUFACTURER'S PUBLISHED TORQUE-TIGHTENING VALUES. PERFORM INSULATION RESISTANCE TESTS OF PANELBOARD BUSES, COMPONENTS, AND FEEDER AND BRANCH CIRCUIT WIRING. INSULATION RESISTANCE LESS THAN 100 MEGOHM IS UNACCEPTABLE.
8. DISCONNECTS AND CIRCUIT BREAKERS: PROVIDE DISCONNECTS AND CIRCUIT BREAKERS WHERE INDICATED ON THE ELECTRICAL DRAWINGS AND/OR WHERE REQUIRED BY THE NEC, WHETHER INDICATED ON THE ELECTRICAL DRAWINGS OR NOT. INSTALL DISCONNECTS AND CIRCUIT BREAKERS PLUMB AND LEVEL AND IN ACCORDANCE WITH MANUFACTURER'S PUBLISHED INSTALLATION INSTRUCTIONS. UPON COMPLETION OF INSTALLATION OF DISCONNECTS AND CIRCUIT BREAKERS, ENERGIZE CIRCUITS AND DEMONSTRATE CAPABILITY AND COMPLIANCE WITH REQUIREMENTS. EXCEPT AS OTHERWISE INDICATED, DO NOT DEMONSTRATE DISCONNECTS AND CIRCUIT BREAKERS BY OPERATING THEM UNDER LOAD; HOWEVER, DEMONSTRATE DISCONNECT AND CIRCUIT BREAKER OPERATION THROUGH SIX OPENING/CLOSING CYCLES WITH CIRCUIT UNLOADED. OPEN DISCONNECT AND CIRCUIT BREAKER ENCLOSURES FOR INSPECTION OF INTERIOR, MECHANICAL AND ELECTRICAL CONNECTIONS, FUSE INSTALLATION IF APPLICABLE, AND FOR VERIFICATION OF TYPE AND RATING OF FUSES INSTALLED IF APPLICABLE. CORRECT DEFICIENCIES THEN RETEST TO DEMONSTRATE COMPLIANCE WITH REQUIREMENTS. REMOVE AND REPLACE DEFECTIVE UNITS WITH NEW UNITS AND RETEST.
9. LIGHTING FIXTURES: INSTALL FIXTURES WHERE AND AT HEIGHTS INDICATED IN ACCORDANCE WITH FIXTURE MANUFACTURER'S PUBLISHED INSTALLATION INSTRUCTIONS, REQUIREMENTS OF THE NEC, AND RECOGNIZED INDUSTRY PRACTICES. TIGHTEN ELECTRICAL CONNECTORS AND TERMINALS, INCLUDING GROUNDING CONNECTIONS, IN ACCORDANCE WITH MANUFACTURER'S PUBLISHED TORQUE-TIGHTENING VALUES. RECESSED OR SEMIRECESSED FIXTURES MAY BE SUPPORTED BY CEILING SUPPORT SYSTEM. INSTALL CEILING SUPPORT SYSTEM RODS OR WIRES AT A MINIMUM OF FOUR (4) RODS OR WIRES PER FIXTURE LOCATED NOT MORE THAN 6 IN. FROM FIXTURE CORNERS. FIXTURES WHICH ARE SMALLER THAN CEILING GRID SHALL BE CENTERED IN ACOUSTICAL CEILING PANEL AND SUPPORTED BY AT LEAST TWO (2) 3/4 IN. METAL CHANNELS SPANNING AND SECURED TO CEILING SYSTEM GRID TEES. FIXTURES WHICH LAY-IN CEILING GRID SYSTEM SHALL BE SECURED IN PLACE BY INSTALLATION OF CLIPS WHICH SECURELY FASTEN FIXTURE TO CEILING GRID TEES. SUPPORT SURFACE MOUNT FIXTURES GREATER THAN 2 FT IN LENGTH AT A POINT IN ADDITION TO THE OUTLET BOX FIXTURE STUD. UPON COMPLETION OF INSTALLATION AND JUST PRIOR TO DEMONSTRATION, CLEAN AND RELAMP FIXTURES. LAMP FIXTURES WITH SPECIFIED LAMPS IN ACCORDANCE WITH MANUFACTURER'S PUBLISHED INSTRUCTIONS. UPON COMPLETION OF INSTALLATION, DEMONSTRATE CAPABILITY AND COMPLIANCE WITH REQUIREMENTS. WHERE POSSIBLE, CORRECT MALFUNCTIONING FIXTURES AT THE SITE. THEN RETEST TO DEMONSTRATE COMPLIANCE; OTHERWISE, REMOVE MALFUNCTIONING UNITS AND REPLACE WITH NEW UNITS AND PROCEED WITH RETESTING.

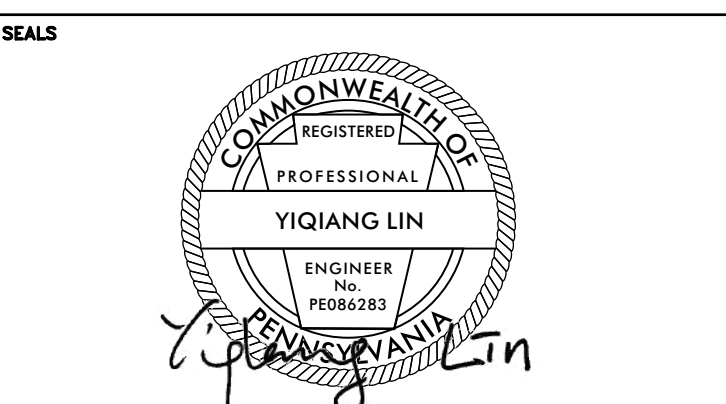
10. ELECTRICAL POWER & LIGHTING PLANS ARE DIAGRAMMATIC. FINAL LOCATIONS OF OUTLETS AND LIGHT FIXTURES ARE APPROXIMATE. EXACT ROUTING OF WIRING, LOCATIONS OF SWITCHES, OUTLETS & LIGHT FIXTURES SHALL BE GOVERNED BY STRUCTURAL, MECHANICAL, AND PLUMBING CONDITIONS AND OBSTRUCTIONS. FINAL LOCATIONS OF ELECTRICAL FIXTURES SHALL BE DETERMINED DURING WALKTHROUGH W/ GENERAL CONTRACTOR AND OWNER PRIOR TO START OF ROUGH-IN.
11. THE MOUNTING HEIGHT OF ALL ELECTRICAL DEVICES, EQUIPMENT, FIXTURES SHALL COMPLY WITH THE STANDARD MOUNTING HEIGHT TABLE AND MOUNTING HEIGHT NOTES UNLESS OTHERWISE NOTED.
12. ALL ELECTRICAL AND LIGHTING DEVICE INSTALLATION SHALL MAINTAIN THE FIRE RATING SPECIFIED BY THE ARCHITECTURE PLANS.

REVISIONS

ISSUE	DATE	REVISIONS
0	12/07/2021	ISS/PEN/MT SET



PROJECT COORDINATOR: FREDDA LIPPES



SPACE FOR CONSULTANT RECOGNITION

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PHILADELPHIA PENNSYLVANIA

PROJECT TITLE: DPP ZONE 5 GARAGE RENOVATIONS

DRAWING TITLE: ELECTRICAL COVER SHEET

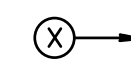
PROJECT NO.	20-20-4897-01	DRAWING NO.	ECS-1
DATE	12/07/2021		
SCALE	AS NOTED		
DRAWN BY	MY		
CHECKED BY	LH		

NOTE: ALL DIMENSIONS AND CONDITIONS SHALL BE BEFORE PROCEEDING WITH THE WORK.


HATCH LEGEND:

 STRUCTURAL REPAIR AREA. COORDINATE WITH THE ARCHITECT AND STRUCTURAL ENGINEER FOR EXACT LOCATION.

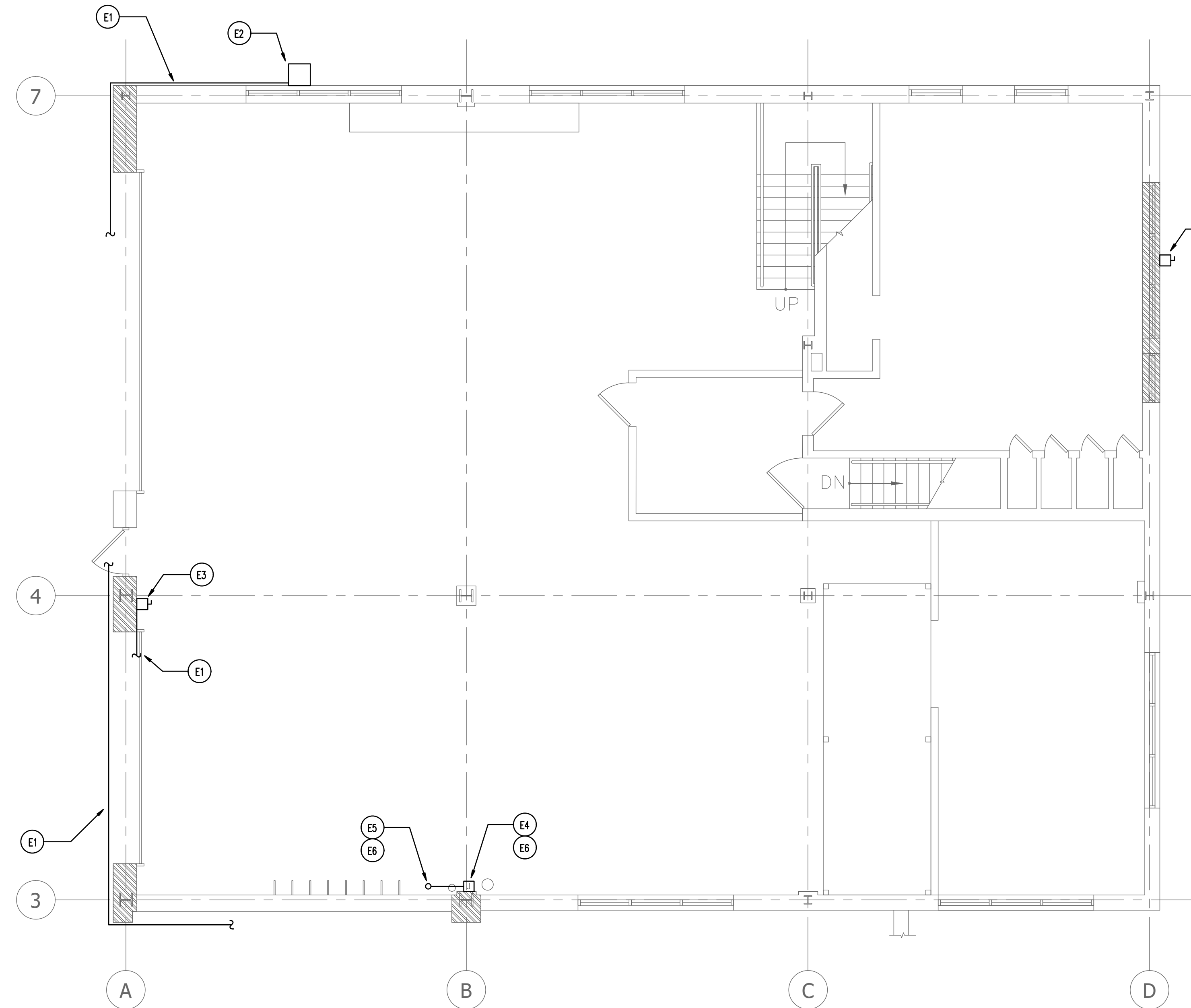
ELECTRICAL PLAN KEY NOTES

SYMBOL: 

- (E1)** REUSE AND RECONNECT THE EXISTING WIRING. REINSTALL THE CONDUIT AND ASSOCIATED SUPPORTS AND ACCESSORIES AT THE ORIGINAL LOCATION PER NEC.
- (E2)** REUSE AND EXTEND THE EXISTING WIRING, INSTALL NEW LED LIGHT FIXTURE AT THE ORIGINAL LOCATION.
- (E3)** REUSE AND REINSTALL THE EXISTING MOTOR, DISCONNECT, WIRING, CONDUIT, ASSOCIATED SUPPORTS AND ACCESSORIES AT THE ORIGINAL LOCATION AS SHOWN IN THE PLAN PER NEC.
- (E4)** REUSE AND REINSTALL THE EXISTING JUNCTION BOX AND ASSOCIATED SUPPORTS AT THE ORIGINAL LOCATION PER NEC.
- (E5)** REUSE AND RECONNECT THE EXISTING WIRING. REINSTALL THE VERTICAL & HORIZONTAL CONDUIT, ASSOCIATED SUPPORTS AND ACCESSORIES AT THE ORIGINAL LOCATION PER NEC.
- (E6)** REMOVE THE TEMPORARY SUPPORTS FROM FLOOR OR NEAR STRUCTURES FOR THE EXISTING CONDUITS AND PROVIDE NEW SUPPORTS AND ACCESSORIES ON THE INTERIOR WALL FOR THE EXISTING CONDUIT.
- (E7)** REUSE AND REINSTALL THE EXISTING DISCONNECT, WIRING, CONDUIT, ASSOCIATED SUPPORTS AND ACCESSORIES AT THE ORIGINAL LOCATION PER NEC.

LIGHTING FIXTURE SCHEDULE						
SYMBOL/TAG	DESCRIPTION	BASIS OF DESIGN	CATALOG NUMBER	LAMP	WATTAGE	VOLTS
	EXTERIOR LED WALL LUMINAIRE	LITHONIA	TW2 LED - AL0 - 30K - MVOLT - PE - DDBXD	LED	54W	120V

NOTE: 1. ALL MANUFACTURE AND CATALOG NUMBER IN LIGHTING FIXTURE SCHEDULE ARE BASIS OF DESIGN. CONTRACTOR SHALL SELECT AS THE SAME OR THE EQUIVALENT.

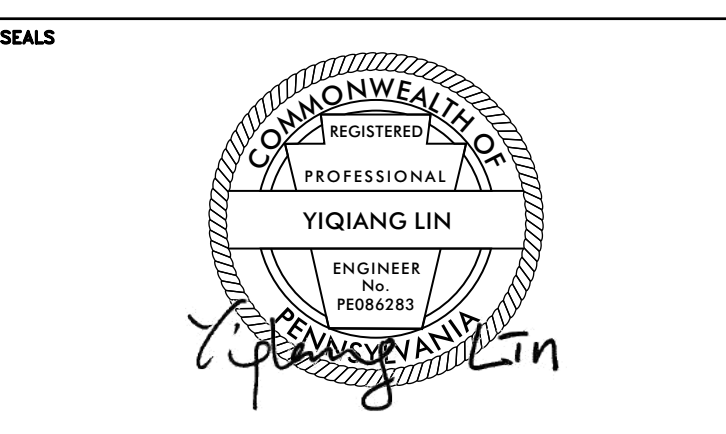


1 FIRST FLOOR ELECTRICAL PLAN
E-1 SCALE: 3/16"=1'-0"

REVISIONS		
ISSUE	DATE	REVISIONS
0	12/07/2021	ISS/PERMIT SET



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PROJECT TITLE
DPP ZONE 5 GARAGE RENOVATIONS

DRAWING TITLE
ELECTRICAL PLAN

PROJECT NO. 20-20-4897-01	DRAWING NO. E-1
DATE 12/07/2021	
SCALE AS NOTED	
DRAWN BY MY	
CHECKED BY LH	

NOTE: ALL DIMENSIONS AND CONDITIONS SHALL BE REFERRED TO THE SUPPLEMENTAL SPECIFICATIONS TO THE CITY OF PHILADELPHIA STANDARD SPECIFICATIONS FOR CONSTRUCTION AND SHALL BE RESPONDED TO PRIOR TO THE COMMENCEMENT OF WORK.