INTERIOR IMPROVEMENTS FOR FIRE DEPT. HEADQUARTERS AT 93 JOYCE KILMER AVE, NEW BRUNSWICK, NJ 08901

FILE NUMBER 1029-26

CONSTRUCTION DOCUMENTS 10/23/2026

REVISION SCHEDULE		
No.	DATE	DESCRIPTION

MW STUDIOS
ARCHITECTURE + MASTER PLANNING
8098 SANDPIPER CIR, SUITE H
NOTTINGHAM, MD 21236
☎ 410-344-1460
✉ INFO@MWSARCH.COM
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CONSULTANT:

SEAL:

SYMBOLS & TAGS LEGEND

TAG	DESCRIPTION
J 100A	DOOR TAG
CASEWORK SERIES; NUMBER OF SHELVES; CABINET DEPTH; 402; 30.00 × 24.00; 84.00; CABINET WIDTH; CABINET HEIGHT	CASEWORK TAG *AS OUTLINED IN THE ARCHITECTURAL WOODWORK INSTITUTE (AWI) STANDARDS* *MINIMUM CLEAR CABINET DEPTH DIMENSION = DEPTH LESS 1"*
EQ-XX	SPECIALTY EQUIPMENT TAG
1 A	COLUMN LINE DESIGNATION TAG
REFERENCE 0'-0"	LEVEL ELEVATION TAG
P T	NORTH ARROW TAG T = TRUE NORTH P = PROJECT NORTH
ROOM 101	ROOM NAME & NUMBER TAG
1 A101	SECTION TAG
1 A101	CALLOUT / DETAIL
0'-0"	SPOT ELEVATION TAG
1 DRAWING TITLE DRAWING SCALE	DETAIL / DRAWING TITLE TAG
CLG-12 1'-0" TYPE HEIGHT	CEILING TAG
99	PARTITION TAG
	MATERIAL TAG
11	WINDOW TAG
12 6	SLOPE ANNOTATION
1 A101 ; 0 0.0.0 0	ELEVATION TAG
0 NEW CONSTRUCTION ; 0 DEMOLITION	SPECIFIC NOTE

KEY TO MATERIALS

SECTION PATTERN	DESCRIPTION
	BRICK
	CMU MASONRY
	CONCRETE
	POROUS FILL
	EARTH
	PLYWOOD
	GYPSUM BOARD
	RIGID INSULATION
	BATT INSULATION
	END GRAIN LUMBER
	WOOD BLOCK OR SHIM
	FINISH WOOD

COMMON ABBREVIATIONS

SYMBOLS
& - AND
@ - AT
⌀ - DIAMETER
□ - SQUARE

A
AB - ANCHOR BOLT
ABV - ABOVE
ACOUST - ACOUSTICAL
ACT - ACOUSTIC CEILING TILE
AFF - ABOVE FINISH FLOOR
AHJ - AUTHORITY HAVING JURISDICTION
ALUM - ALUMINUM
AP - ACCESS PANEL
APPROX - APPROXIMATELY
ARCH - ARCHITECTURAL

B
B.C. - BOTTOM CHORD
BLK - BLOCK
BLDG - BUILDING
BLKG - BLOCKING
BLKHD - BULKHEAD
BM - BEAM
B.O. - BOTTOM OF
BOD - BASIS OF DESIGN
BOT - BOTTOM
B.R. - BULLET RESISTANT
BRNG - BEARING

C
℄ - CENTER LINE
CFCI - CONTRACTOR FURNISHED, CONTRACTOR INSTALLED
CFOI - CONTRACTOR FURNISHED, OWNER INSTALLED
CFLS - COUNTER FLASHING
CJ - CONTROL JOINT
CL - CLOSET
CLG - CEILING
CMU - CONCRETE MASONRY UNIT
CND - CONDUIT
COL. - COLUMN
COOR - COORDINATE
CONC - CONCRETE
CONSTR - CONSTRUCTION
CONT - CONTINUOUS
C.T. / CT - CERAMIC TILE
CPT - CARPET / CARPET TILE
CTSK - COUNTERSUNK
CU - CUBIC
CU FT - CUBIC FOOT
CU YD - CUBIC YARD

D
D - DEEP / DEPTH
DEG - DEGREE
DIA - DIAMETER
DIM - DIMENSION
DL - DEAD LOAD
DMPR - DAMPER
DN - DOWN
DR - DOOR
DS - DOWNSPOUT
DTL - DETAIL
DWG - DRAWING

E
EA - EACH
EIFS - EXTERIOR INSULATON AND FINISHING SYSTEM
ELEC - ELECTRICAL
EL - ELEVATION
ELEV - ELEVATION
ELMA - ELEVATOR MACHINE ROOM
EJ - EXPANSION JOINT
ENT - ENTRANCE, ENTRY
EQ - EQUAL
EST - ESTIMATE
ETR - EXISTING TO REMAIN
EW - EACH WAY
EXST - EXISTING
EXT - EXTERIOR
EXP - EXPOSED
EXP JT - EXPANSION JOINT

F
F - FAHRENHEIT
FD - FLOOR DRAIN
F.E. - FIRE EXTINGUISHER
F.E.C. - FIRE EXTINGUISHER CABINET
FF - FINISHED FLOOR
FF EL - FINISHED FLOOR ELEVATION
FG - FINISHED GRADE
FHY - FIRE HYDRANT
FDC - FIRE DEPARTMENT CONNNECTION
FIN - FINISH
FIN FL - FINISHED FLOOR
FL - FLOOR
FLEX - FLEXIBLE
FLUOR - FLUORESCENT
FND - FOUNDATION
FPM - FEET PER MINUTE
FRT - FIRE RETARDANT TREATED
FSK - FOIL SCRIM KRAFT
FT - FEET, FOOT
FT - FLOOR TRANSITION
FTG - FOOTING

G
GA - GAGE, GAUGE
GALV - GALVANIZED
GL - GLASS, GLAZING
GND - GROUND
GRTG - GRATING
GWB - GYPSUM WALL BOARD

H
H - HIGH / HEIGHT
HC - HANDICAPPED
HD - HEAD
HM - HOLLOW METAL
HORIZ - HORIZONTAL
HR - HOUR
HT - HEIGHT

I
ID - INSIDE DIAMETER
IN - INCH
INFO - INFORMATION
INSUL - INSULATION

J
JB - JUNCTION BOX
JM - JAMB
JST - JOIST
JT - JOINT

L
LG - LONG
LL - LIVE LOAD
LSC - LIFE SAFETY CODE
LTG - LIGHTING

M
MACH - MACHINE
MAT'L - MATERIAL
MAX - MAXIMUM
MBT - MARBLE THRESHOLD
MECH - MECH
MEP - MECHANICAL / ELECTRICAL / PLUMBING
MFGR - MANUFACTURER
MH - MANHOLE
MIN - MINIMUM
MO - MASONRY OPENING
MSNRY - MASONRY
M.T. - METAL THRESHOLD
MTL - METAL
MTD - MOUNTED

N
NA - NOT APPLICABLE
NIC - NOT IN CONTRACT
NO - NUMBER
NTS - NOT TO SCALE

O
O/C - ON CENTER
OD - OUTSIDE DIAMETER
OFCI - OWNER FURNISHED, CONTRACTOR INSTALLED
OFOI - OWNER FURNISHED, OWNER INSTALLED
OPNG - OPENING
OPP - OPPOSITE
OPP HND - OPPOSITE HAND
OV - OVER
OVHD - OVERHEAD

P
P.LAM - PLASTIC LAMINATE
PLY - PLYWOOD
PLYWD - PLYWOOD
PNLBD - PANELBOARD
PNT/ PT - PAINT
POLYISO - POLYISOCYANURATE
PRESS - PRESSURE
PROJ - PROJECT
PROP - PROPERTY
PSF - POUNDS PER SQUARE FOOT
PSI - POUNDS PER SQUARE INCH
PT - PRESSURE TREATED
PTD - PAINTED
PVC - POLYVINYL CHLORIDE
PVMT - PAVEMENT
PWT - PREFABRICATED WOOD TRUSS

R
R - RADIUS
RCP - REFLECTED CEILING PLAN
REINF - REINFORCING, REINFORCED
RES - RESINOUS
REQD - REQUIRED
REV - REVISION
RGD - RIGID
RM - ROOM
RO - ROUGH OPENING
RST - REINFORCING STEEL

S
SB - SMART BOARD
SCHED - SCHEDULE
SD - STORM DRAIN
SECT - SECTION
SF - SQUARE FOOT
SI - SQUARE INCH
SIM - SIMILAR
SLP - SLOPE
SPCL - SPECIAL
SPEC - SPECIFICATIONS
SPLY - SUPPLY
SQ - SQUARE
SS - STAINLESS STEEL
ST - STREET
STD - STANDARD
STL - STEEL
STOR - STORAGE
STRUCT - STRUCTURAL
SURF - SURFACE
SUSP - SUSPENDED
SW - SWITCH
SYS - SYSTEM

T
T & B - TOP AND BOTTOM
T.B. - TACK BOARD
T.B.D. - TO BE DETERMINED
TEMP - TEMPERATURE
THK - THICK
THRES - THRESHOLD
T&G - TONGUE & GROOVE
T0 - TOP OF
TOB - TOP OF BEARING POINT
TOC - TOP OF CONCRETE
TOF - TOP OF FOOTING
TOM - TOP OF MASONRY
TOP - TOP OF PAVEMENT, PARAPET
TOS - TOP OF STEEL
TRTD - TREATED
T.S. - TRANSITION STRIP
TYP - TYPICAL

U
UGND - UNDERGROUND
UL - UNDERWRITERS LAB
UNO - UNLESS NOTED OTHERWISE
UON - UNLESS OTHERWISE NOTED

V
VB - VAPOR BARRIER
VCT - VINYL COMPOSITION TILE
VERT - VERTICAL
VIF - VERIFY IN FIELD
VOL - VOLUME

W
W - WIDE / WIDTH
W/ - WITH
W/0 - WITHOUT
W.B. - WHITEBOARD
WD - WOOD
WR - WATER RESISTANT
WTRPRF - WATERPROOF
WWF - WELDED WIRE FABRIC
WWM - WELDED WIRE MESH

THIS LIST OF ABBREVIATIONS IS A GUIDE TO ABBREVIATIONS WHICH MAY BE USED IN THESE DOCUMENTS. ABBREVIATIONS NOT LISTED MAY ALSO BE USED.

CITY OF NEW BRUNSWICK
THE HEART OF NEW JERSEY

MAYOR
JAMES M CAHILL

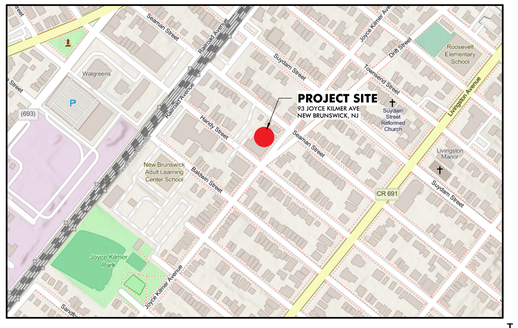
CITY COUNCIL
MANUEL J. CASTANEDA (COUNCIL PRESIDENT)
PETRA N. GASKINS (COUNCIL VICE PRESIDENT)
JOHN ANDERSON
REBECCA ESCOBAR
MATTHEW FERGUSON
GLENN FLEMING
SUZANNE M. SICORA LUDWIG

BUSINESS ADMINISTRATOR
MICHAEL DRULIS

CITY ATTORNEY
T.K. SHAMY, ESQ.

DIVISION HEAD OF ENGINEERING
ANTONIO SANTOS MARTINEZ, PE

CITY CLERK
LESLIE R. ZELEDON



VICINITY MAP
NOT TO SCALE

DRAWING INDEX

SHEET NUMBER	SHEET NAME
GENERAL / CODE	
G000	COVER SHEET
G001	CODE ANALYSIS & DIAGRAM
ARCHITECTURAL - NEW WORK	
A100	ASSEMBLY TYPES & NOTES
A101	FLOOR PLANS - EXISTING & DEMOLITION
A102	FLOOR PLANS - PROPOSED
A700	ENLARGED PLANS & INT. ELEVATIONS
A701	ENLARGED PLANS & INT. ELEVATIONS
A702	ENLARGED PLANS & INT. ELEVATIONS
A801	REFLECTED CEILING PLAN
A900	ROOF PLAN
STRUCTURAL - GENERAL	
S001	GENERAL NOTES AND ABBREVIATIONS
STRUCTURAL - NEW WORK	
S100	FIRST FLOOR REPAIR PLAN
S200	REPAIR DETAILS 1
S201	REPAIR DETAILS 2
PLUMBING - GENERAL	
P001	GENERAL NOTES AND ABBREVIATIONS
PLUMBING - DEMOLITION	
PD100	PLUMBING DEMOLIITON BASEMENT, FIRST, & SECOND FLOOR
PD200	PLUMBING DEMOLITION, ENLARGED PLANS
PLUMBING - NEW WORK	
P100	BASEMENT, FIRST, & SECOND FLOOR PLAN
P200	PLUMBING ENLARGED PLANS
P300	PLUMBING SCHEDULE AND DETAILS
P500	PLUMBING SPECIFICATIONS
ELECTRICAL - GENERAL	
E001	ELECTRIC GENERAL NOTES & ABBREVIATIONS
ELECTRICAL - NEW WORK	
E100	ELECTRIC - BASEMENT, FIRST & SECOND FLOOR PLAN
E200	ELECTRIC - ENLARGED PLANS

PROJECT TEAM

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FAX: 631-694-4122

CORRELATION AND INTENT OF THE CONTRACT DOCUMENTS

THE INTENT OF THE CONSTRUCTION DRAWINGS AND THE CONSTRUCTION SPECIFICATIONS/PROJECT MANUAL IS TO INCLUDE ALL ITEMS NECESSARY FOR THE PROPER EXECUTION AND COMPLETION OF THE WORK BY THE CONTRACTOR. THE CONSTRUCTION DRAWINGS AND THE CONSTRUCTION SPECIFICATIONS/PROJECT MANUAL ARE COMPLEMENTARY, AND WHAT IS REQUIRED BY ONE SHALL BE AS BINDING AS IF REQUIRED BY ALL; PERFORMANCE BY THE CONTRACTOR SHALL BE REQUIRED ONLY TO THE EXTENT CONSISTENT WITH THE CONSTRUCTION DRAWINGS AND THE CONSTRUCTION SPECIFICATIONS/PROJECT MANUAL AND REASONABLY INFERABLE FROM THEM AS BEING NECESSARY TO PRODUCE THE INDICATED/INTENDED RESULTS. IN THE CASE OF INCONSISTENCIES BETWEEN THE CONSTRUCTION DRAWINGS AND THE CONSTRUCTION SPECIFICATIONS/PROJECT MANUAL OR WITHIN EITHER DOCUMENT NOT CLARIFIED BY ADDENDUM, THE BETTER QUALITY OR GREATER QUANTITY OF WORK SHALL BE PROVIDED IN ACCORDANCE WITH THE ARCHITECT'S INTERPRETATION.

INTERIOR IMPROVEMENTS FOR FIRE DEPT. HEADQUARTERS AT 93 JOYCE KILMER AVE, NEW BRUNSWICK, NJ 08901

PROJECT NUMBER: 23-154

SUBMISSION:
CONSTRUCTION DOCUMENTS

ORIGINAL ISSUE DATE:
10/23/2026

SHEET REVISION SCHEDULE:
No. DATE

COVER SHEET

SHEET NUMBER:
G000

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CODE ANALYSIS - SUMMARY

PROJECT	APPLICABLE CODES	
NEW BRUNSWICK FIRE HEADQUARTERS INTERIOR RENOVATION	NEW JERSEY UCC FIRE PREVENTION CODE	2018
	INTERNATIONAL EXISTING BUILDING CODE, NJ ED	2021
	INTERNATIONAL BUILDING CODE, NJ ED	2021
	INTERNATIONAL MECHANICAL CODE	2021
	NATIONAL ELECTRIC CODE (NFPA 70)	2020
	NATIONAL STANDARD PLUMBING CODE	2021
	INTERNATIONAL ENERGY CODE	2021
	INTERNATIONAL FIRE CODE	2021

PROJECT DESCRIPTION

IEBC ALTERATION LEVEL 1

602.1 SCOPE:
LEVEL 1 ALTERATIONS INCLUDE THE REMOVAL AND REPLACEMENT OR THE COVERING OF EXISTING MATERIALS, ELEMENTS, EQUIPMENT, OR FIXTURES USING NEW MATERIALS, ELEMENTS, EQUIPMENT OR FIXTURES SERVING THE SAME PURPOSE.
- -
THE SCOPE OF THIS WORK INCLUDES THE INTERIOR RENOVATION OF LIMITED AREAS WITHIN AN EXISTING FIRE STATION.
TOILET ROOMS WILL RECEIVE NEW FINISHES, PLUMBING & ELECTRICAL FIXTURES WILL BE REPLACED.
REPAIRS TO CEILINGS WILL BE CONDUCTED IN AREAS OF DAMAGE DUE TO PREVIOUS WATER INFILTRATION.

PLUMBING AND ELECTRICAL WORK WILL OCCUR AS SHOWN IN DRAWINGS TO ACCOMMODATE RENOVATION WORK.

STRUCTURAL REPAIRS WILL BE EXECUTED AS OUTLINED WHERE SUPPORTS HAVE DEGRADED OVER THE LIFETIME OF THE BUILDING.

NFPA 101: LIFE SAFETY 2018

OCCUPANCY CLASSIFICATIONS - 6.1	HAZARD CLASSIFICATION - 6.2.2
BUSINESS: OFFICES, & ASSOCIATED SPACES	ORDINARY HAZARD
CONSTRUCTION TYPE - TABLE A8.2.1.2	**FIRE-RES. REQUIREMENTS FOR BLDG ELEMENTS - TABLE A8.2.1.2**
CONSTRUCTION TYPE: II(000)	ALL BUILDING ELEMENTS ARE NOT REQUIRED TO BE RATED
CONSTRUCTION TYPE LIMITATIONS	**DETECTION AND ALARM**
BUSINESS: NO SPECIAL REQUIREMENTS	39.3.4.1 - A FIRE ALARM IS REQUIRED AND CURRENTLY EXISTS WITHIN THE FACILITY.

COMMON PATH OF EGRESS	TRAVEL DISTANCE	DEAD-END CORRIDORS
BUSINESS: ALLOWABLE = 100'-0" (39.2.5.3.1)	BUSINESS: ALLOWABLE = 300'-0" (39.2.6.3)	BUSINESS: ALLOWABLE = 50'-0" (39.2.5.2)

INTERNATIONAL EXISTING BUILDING CODE 2021

USE & OCCUPANCY CLASSIFICATIONS - IBC 304.1	WORK AREA SF & PERCENTAGE - IEBC 501.2
CURRENT USE & PROPOSED USE: BUSINESS(B), RESIDENTIAL(R2), STORAGE(S2)	TOTAL EXISTING FLOOR AREA IS 14,251 SF AND THE TOTAL WORK AREA IS 3,253SF. 22% OF THE TOTAL BUILDING.
COMPLIANCE METHOD - IEBC 301 & 503	**BUILDING ELEMENTS & MATERIALS - IEBC 702**
THIS ALTERATION IS A LEVEL 1. THE WORK SHALL COMPLY WITH THE PROVISIONS OF CHAPTER 7.	ALL NEW WORK SHALL COMPLY WITH THE REQUIREMENTS IN THE IBC, IECC, IMC, & IPC, AS APPLICABLE.
CONFORMANCE - IEBC 701.2	
AN EXISTING BUILDING OR PORTION THEREOF SHALL NOT BE ALTERED SUCH THAT THE BUILDING BECOMES LESS SAFE THAN ITS EXISTING CONDITION.	

INTERNATIONAL BUILDING CODE 2021

USE CLASSIFICATIONS - CHAPTER 3	OCCUPANCY CLASSIFICATIONS - TABLE 1004.1.2
B: OFFICE SPACE, R2: RESIDENTIAL DORMITORY, S2 STORAGE	BUSINESS AREAS: OFFICES AND ASSOCIATED SPACES ACCESSORY
CONSTRUCTION TYPE - CH.6	
MAIN BUILDING CONSTRUCTION TYPE: IIB NON SPRINKLERED NON-SEPARATED MIXED OCCUPANCIES (IBC SECTION 508.3)	
OCCUPANT LOAD FACTORS - TABLE 1004.1.2	
ACCESSORY STOR/MECH.EQUIP 300 GSF BUSINESS 100 GSF SEE OCCUPANCY CHARTS	

GENERAL NOTES ON ADA COMPLIANCE

INTERNATIONAL EXISTING BUILDING CODE
306.7: ALTERATIONS
A FACILITY THAT IS ALTERED SHALL COMPLY WITH THE APPLICABLE PROVISIONS IN CHAPTER 11 OF THE INTERNATIONAL BUILDING CODE...UNLESS TECHNICALLY INFEASIBLE.
WHERE COMPLIANCE WITH THIS SECTION IS TECHNICALLY INFEASIBLE, THE ALTERATION SHALL PROVIDE ACCESS TO THE MAXIMUM EXTENT TECHNICALLY FEASIBLE.
- -
THIS PROJECT DOES NOT MEET CURRENT ADA CLEARANCE OR OPERATIONAL STANDARDS.

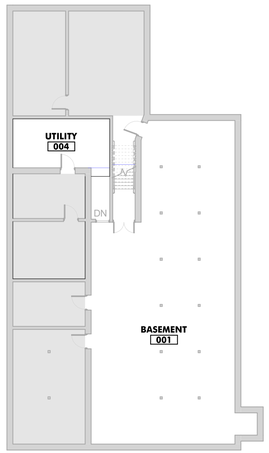
THE SCOPE OF THE WORK IS THE REPLACEMENT OF EXISTING FIXTURES AND RESTORATION TO WORKING ORDER WHILE AVOIDING THE ELIMINATION OF FIXTURES. THE GOAL IS TO IMPROVE FIRE DEPARTMENT OPERATIONS AND READINESS.
NO REVISIONS TO EXISTING ROOM SIZES ARE OCCURRING DUE TO THE IMPACT ON ADJACENT CRITICAL SPACES WITHIN THE STATION. UPGRADING THESE SPACES AND THIS FACILITY TO ADA STANDARDS WOULD CAUSE AN ELIMINATION OF MULTIPLE FIXTURES AND GREATLY REDUCE FIRE DEPARTMENT READINESS STANDARDS.

THIS FACILITY IS NOT OPEN TO THE GENERAL PUBLIC, AND DUE TO THE NATURE OF THE MISSION OF THIS FACILITY, WILL NOT BE OCCUPIED BY STAFF THAT CAN NOT OPERATE AS FULLY MOBILE FIRST RESPONDERS. ADA COMPLIANT FIXTURES WILL NOT BE NEEDED BY OCCUPANTS.

GENERAL NOTES ON SCOPE OF WORK IN REGARDS TO PLAN

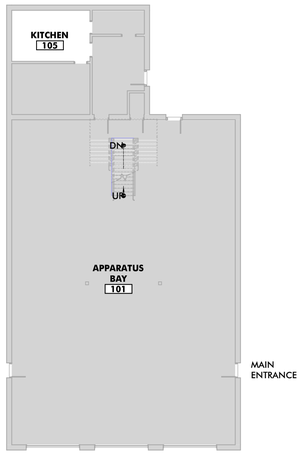
SCOPE OF WORK IS MAINLY SYSTEMIC.
NO EXISTING ROOM PARTITIONS ARE BEING RELOCATED.
NO ROOM OCCUPANCY IS BEING ALTERED.
NO OCCUPANT LOADS ARE BEING CHANGED.

WORK IN BASEMENT LEVEL IS LIMITED TO ELECTRICAL, PLUMBING, AND STRUCTURAL UPGRADES IN UTILITY SPACES



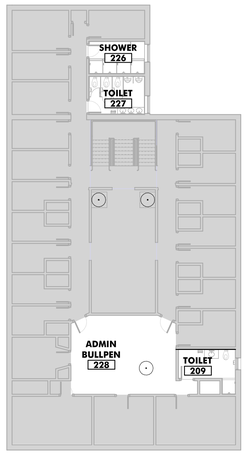
1 BASEMENT CODE DIAGRAM
1/16" = 1'-0"

WORK ON FIRST FLOOR IS LIMITED TO ELECTRICAL AND PLUMBING UPGRADES IN KITCHEN



2 LEVEL 1 CODE DIAGRAM
1/16" = 1'-0"

WORK ON SECOND FLOOR IS LIMITED TO ELECTRICAL AND PLUMBING UPGRADES IN TOILET/SHOWER ROOMS. CEILING IN ADMINISTRATION AREA IS BEING REPLACED



3 LEVEL 2 CODE DIAGRAM
1/16" = 1'-0"

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NEW BRUNSWICK FIRE DEPT.
HEADQUARTERS - INTERIOR
RENOVATION
93 JOYCE KILMER AVE NEW
BRUNSWICK, NJ 08901

PROJECT NUMBER: 23-154

SUBMISSION:
CONSTRUCTION DOCUMENTS

ORIGINAL ISSUE DATE:
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SHEET REVISION SCHEDULE:
No. DATE

CODE ANALYSIS & DIAGRAM

SHEET NUMBER:

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GENERAL PROJECT NOTES

1	THE FOLLOWING GENERAL NOTES APPLY TO THE ENTIRE PROJECT.
2	THE CONTRACTOR SHALL EXAMINE ALL CONTRACT DOCUMENTS AND ALL SPECIFICATIONS AND DRAWINGS FOR THE PROJECT, INCLUDING THOSE THAT MAY PRIMARILY PERTAIN TO WORK THAT THE CONTRACTOR NORMALLY DOES NOT PERFORM WITH ITS OWN FORCES. THE CONTRACTOR SHALL USE ALL OF THE PROJECT DRAWINGS AND SPECIFICATIONS FOR A COMPLETE UNDERSTANDING OF THE PROJECT AND ITS WORK, TO DETERMINE THE TYPE OF CONSTRUCTION AND SYSTEMS, FOR COORDINATION, TO DETERMINE WHAT OTHER WORK MAY BE INVOLVED THROUGHOUT, TO ANTICIPATE AND NOTIFY OTHERS WHEN THEIR COORDINATED EFFORTS WILL BE REQUIRED, AND ALL OTHER RELEVANT MATTERS RELATED TO THE PROJECT AND ITS WORK.
3	IF THERE IS ANY INCONSISTENCY IN THE QUALITY OR QUANTITY OF THE WORK REQUIRED UNDER THE CONTRACT DOCUMENTS, THEN THE CONTRACTOR SHALL (1) IMMEDIATELY NOTIFY THE ARCHITECT IN WRITING OF SUCH INCONSISTENCY AND (2) PROVIDE THE BETTER QUALITY OF OR GREATER QUANTITY OF WORK OR MATERIALS, UNLESS OTHERWISE ORDERED IN WRITING BY THE OWNER. COMPUTED DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALE DIMENSIONS. THE CONTRACT DOCUMENTS GENERALLY SET FORTH THE BASIS AND ANALYSIS OF DESIGN, AND THE CONTRACTOR SHALL OBTAIN SUCH INFORMATION AS MAY BE NECESSARY TO SATISFACTORILY PERFORM AND COMPLETE THE WORK.
4	THE ARCHITECTURAL DRAWINGS ARE A PART OF A LARGER SET OF DRAWINGS WHICH, WHEN COMPLETE, CONSISTS OF ALL DRAWINGS LISTED BY THE INDEX OF DRAWINGS AND WITHIN THE SPECIFICATIONS. THE WORK DESCRIBED BY THE DRAWINGS OF ANY ONE DISCIPLINE MAY BE AFFECTED BY THE WORK DESCRIBED ON DRAWINGS OF ANOTHER DISCIPLINE AND MAY REQUIRE REFERENCE TO THE DRAWINGS OF ANOTHER DISCIPLINE. PARTIAL SETS OF DRAWINGS ARE INCOMPLETE AND SHOULD NOT BE DISTRIBUTED OR UTILIZED BY THE CONTRACTOR. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW AND COORDINATE THE WORK OF ALL SUB-CONTRACTORS, TRADES, AND SUPPLIERS WITH ALL REQUIREMENTS OF THE CONTRACT DOCUMENTS BEFORE COMMENCING CONSTRUCTION AND TO ASSURE THAT ALL PARTIES ARE AWARE OF ALL REQUIREMENTS, REGARDLESS OF WHERE THE REQUIREMENTS OCCUR IN THE CONTRACT DOCUMENTS, WHICH MIGHT AFFECT THE WORK OF THAT PARTY. THE CONTRACTOR IS RESPONSIBLE FOR ALL COORDINATION BETWEEN SUBCONTRACTORS, SUPPLIERS, AND VENDORS BASED ON THE ENTIRE SET OF THESE DOCUMENTS. NO ADDITIONAL COMPENSATION WILL BE DUE TO A CONTRACTOR FOR ANY ISSUES AS A RESULT OF ANY USE OF AN INCOMPLETE SET OF CONSTRUCTION DOCUMENTS.
5	LINE OF GRADES AS SHOWN ON THE BUILDING ELEVATIONS AND SECTION ARE APPROXIMATE. THEY ARE AT THE BUILDING FACE OR THE SECTION END UNLESS NOTED OTHERWISE.
6	AT WALLS WITH SOUND ATTENUATION BLANKETS, CONTRACTOR SHALL SEAL DOOR FRAMES, GLAZED OPENING FRAMES, INTERSECTIONS, AND OTHER PENETRATIONS WITH ACOUSTICAL SEALANT.
7	VERIFY ALL ROUGH-IN DIMENSIONS FOR EQUIPMENT PROVIDED IN THIS CONTRACT, OR BY OTHERS. UNLESS NOTED OTHERWISE, ALL MATERIALS AND EQUIPMENT TO BE INSTALLED PER THE APPLICABLE PROVISIONS OF THESE DOCUMENTS AND THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
8	CUTTING INTO NEW WORK OF OTHER TRADES SHALL BE DONE BY THE TRADE REQUIRING THE CUTTING. ALL CUTTING SHALL BE DONE IN A NEAT MANNER USING SAWS WHERE POSSIBLE. ALL PATCHING AND PAINTING REQUIRED AS A RESULT OF THIS CUTTING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. PROVIDE ADEQUATE TEMPORARY SUPPORT FOR WORK BEING CUT AND PATCHED TO PREVENT FAILURE. DO NOT ENDANGER OTHER WORK. PROVIDE ADEQUATE PROTECTION OF OTHER WORK DURING CUTTING AND PATCHING TO PREVENT DAMAGE.
9	PROPERLY PREPARE ALL SURFACES FOR NEW FINISHES. PATCH WITH SEAMS WHICH ARE DURABLE AND AS INVISIBLE AS POSSIBLE. COMPLY WITH SPECIFIC TOLERANCES FOR THE TYPE OF WORK BEING DONE.
10	ALL PENETRATIONS OF FIRE RATED ASSEMBLIES SHALL BE SEALED WITH PROPER/APPROVED THROUGH PENETRATION FIRE STOP SYSTEM AS RECOGNIZED BY AND LISTED WITH NATIONALLY AND ACCEPTED TESTING LABORATORIES.
11	OBTAIN ARCHITECT'S SPECIFIC APPROVAL PRIOR TO DEVIATING FROM THE CONTRACT DOCUMENTS. THE ARCHITECT'S RESPONSIBILITY IS LIMITED TO THE ITEMS SHOWN ON THE ARCHITECTURAL DRAWINGS. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO COMPLY WITH STANDARD BUILDING AND CONSTRUCTION PRACTICES AND MANUFACTURER'S RECOMMENDATIONS FOR ALL ITEMS NOT SPECIFICALLY INDICATED AND DETAILED ON THE DRAWINGS. FOLLOW THE BEST TRADE PRACTICES AND ENGINEERING FOR THE ITEMS NOT SPECIFICALLY DETAILED AND INDICATED.
12	ALL PARTS OF THE WORK, INCLUDING MATERIALS, METHODS, ASSEMBLIES, ETC, MUST COMPLY WITH THE MINIMUM REQUIREMENTS OF THE GOVERNING REGULATIONS OF ALL FEDERAL, STATE, DISTRICT, AND LOCAL AUTHORITIES HAVING JURISDICTION OVER THE PROJECT AS WELL AS THOSE GREATER REQUIREMENTS INDICATED BY THE CONTRACT DOCUMENTS. NO PART OF THE CONTRACT DOCUMENTS MAY BE CONSTRUED TO REQUIRE OR PERMIT WORK CONTRARY TO A GOVERNING REGULATION.
13	THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING A CURRENT SET OF CONSTRUCTION DRAWINGS ON SITE DURING CONSTRUCTION. THE CONTRACTOR SHALL INDICATE ON THESE DRAWINGS ALL APPROVED CHANGES TO THE WORK. THIS SET OF DRAWINGS SHALL BE TURNED OVER TO THE OWNER/CLIENT WHEN THE PROJECT IS COMPLETE.
14	THE BUILDING HAS BEEN DESIGNED TO BE SELF-SUPPORTING AND STABLE AFTER THE BUILDING IS FULLY COMPLETED. IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE DEMOLITION, ERECTION PROCEDURES, SEQUENCE, AND TO ENSURE THE STABILITY OF ITS COMPONENTS AND PARTS, AND THE ADEQUACY OF TEMPORARY OR INCOMPLETE CONNECTIONS DURING ERECTION. THIS INCLUDES THE ADDITION OF ANY GUYS, SHORING, SHEETING OR TEMPORARY BRACING AND TIE-DOWNS THAT MIGHT BE NECESSARY. SUCH MATERIALS ARE NOT SHOWN ON THE DRAWINGS. IF APPLIED, THEY SHALL BE REMOVED AS CONDITIONS PERMIT, AND SHALL REMAIN THE CONTRACTOR'S PROPERTY.
15	CONTRACTOR SHALL COORDINATE THE FRAMING LAYOUT INCLUDING PRE-ENGINEERED TRUSS WEB DESIGN WITH ELECTRICAL AND MECHANICAL WORK.
16	THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL GRADING, MECHANICAL, AND ELECTRICAL PERMITS, AND ALL OTHER RELATED PERMITS REQUIRED TO COMPLETE THE WORK. ALL PLUMBING, ELECTRICAL & MECHANICAL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE LATEST ADOPTED BUILDING CODE AND SHALL BE SUBJECT TO FIELD INSPECTION BY THE AGENCIES HAVING JURISDICTION.
17	MANNS WOODWARD STUDIOS, INC. HAS NO EXPERTISE IN, AND TAKES NO RESPONSIBILITY FOR, CONSTRUCTION MEANS AND METHODS OR JOB SITE SAFETY DURING CONSTRUCTION. PROCESSING AND/OR APPROVING SUBMITTALS MADE BY THE CONTRACTOR CONTAINING INFORMATION RELATED TO CONSTRUCTION METHODS, OR SAFETY ISSUES, OR PARTICIPATION IN MEETINGS WHERE SUCH ISSUES MIGHT BE DISCUSSED. IT SHALL NOT BE CONSTRUED AS VOLUNTARY ASSUMPTION BY MANNS WOODWARD STUDIOS, INC. OR ANY RESPONSIBILITY FOR SAFETY PROCEDURES. IT IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR TO FOLLOW ALL APPLICABLE SAFETY CODES AND REGULATIONS DURING CONSTRUCTION. MANNS WOODWARD STUDIOS, INC. DOES NOT ENGAGE IN, AND DOES NOT SUPERVISE THE CONSTRUCTION PROCESS.
18	THESE DRAWINGS ARE THE PROPERTY OF MANNS WOODWARD STUDIOS, INC. AND MAY NOT BE MODIFIED OR REPRODUCED WITHOUT WRITTEN PERMISSION. REPRODUCTIONS OF THE DRAWINGS MUST BEAR THE NAME OF THE ARCHITECT AND PROJECT LOCATION. THESE DRAWINGS ARE FULLY PROTECTED BY FEDERAL AND STATE COPYRIGHT LAWS; ANY INFRINGEMENT WILL BE PROSECUTED TO THE FULL EXTENT OF THE LAW.
19	ALL DEVICES INCLUDING SWITCHES, PLATES, THERMOSTATS, CONTROL PANELS, ETC. SHALL BE COORDINATED BY THE CONTRACTOR BASED UPON THE FOLLOWING CRITERIA: A. DEVICES LOCATED WITHIN 36" OF EACH OTHER HORIZONTALLY (IN PLAN VIEW) OF EACH OTHER SHALL BE INSTALLED SUCH THAT THE TOPS OF ALL DEVICES ARE ALIGNED OR THE CENTERLINE OF DEVICES ARE MAINTAINED. B. DEVICES LOCATED VERTICALLY (TWO OR MORE STACKED DEVICES) SHALL BE INSTALLED SUCH THAT THE CENTERLINES ARE MAINTAINED. SEE DIAGRAMS FOR REFERENCE. ADA REACH HEIGHTS AND DEVICE REQUIREMENTS PER CODE SUPERCEDE THIS NOTE AND WHERE IN CONFLICT SHALL REQUIRE COORDINATION AND APPROVAL FROM THE ARCHITECT.
20	FINAL LOCATION OF ALL FIRE ALARM DEVICES, EMERGENCY EGRESS LIGHTING, EXIT SIGNS, FIRE EXTINGUISHERS AND FIRE EXTINGUISHER CABINETS, ETC. SHALL BE REVIEWED AND FIELD COORDINATED WITH CONSIDERATION OF FINAL FINISHES WITH THE ARCHITECT PRIOR TO INSTALLATION. APPROVAL MUST BE OBTAINED BY THE ARCHITECT PRIOR TO INSTALLATION.
21	***EXISTING BUILDING ONLY***WHERE REQUIRED BY THE AUTHORITY HAVING JURISDICTION, THE SPRINKLER CONTRACTOR SHALL BE RESPONSIBLE FOR THE DELEGATED DESIGN RESPONSIBILITY OF PROVIDING CALCULATIONS, DRAWINGS, FIELD VERIFICATION AND CERTIFICATION, IN THE FORM REQUIRED BY THE AHJ, THAT THE STRUCTURE OF THE EXISTING BUILDING IS SUITABLE TO ACCOMMODATE THE INSTALLATION AND OPERATION OF THE SPRINKLER SYSTEM AND ALL SPRINKLER SYSTEM COMPONENTS. THIS SHALL INCLUDE BUT NOT BE LIMITED TO THE DEAD LOAD OF THE SYSTEM COMPONENTS AND THE LIVE LOADS AND FORCES IMPOSED UPON THE STRUCTURE BY THE OPERATION OF THE SPRINKLER SYSTEM. CERTIFICATION SHALL BE PROVIDED BY A STRUCTURAL ENGINEER LICENSED WITHIN THE JURISDICTION WHERE THE PROJECT IS LOCATED. THE CERTIFICATION SHALL BE PROVIDED AS PART OF THE SPRINKLER SYSTEM SUBMITTALS.
22	***PRE-ENGINEERED BUILDING ONLY***WHERE REQUIRED BY THE AUTHORITY HAVING JURISDICTION, THE PRE-ENGINEERED BUILDING/STRUCTURE DESIGNER/CONTRACTOR SHALL BE RESPONSIBLE FOR THE DELEGATED DESIGN RESPONSIBILITY OF PROVIDING CALCULATIONS, DRAWINGS, AND CERTIFICATION, IN THE FORM REQUIRED BY THE AHJ, THAT THE STRUCTURE OF THE PRE-ENGINEERED BUILDING/STRUCTURE IS SUITABLE TO ACCOMMODATE THE INSTALLATION AND OPERATION OF THE SPRINKLER SYSTEM AND ALL SPRINKLER SYSTEM COMPONENTS. THIS SHALL INCLUDE BUT NOT BE LIMITED TO THE DEAD LOAD OF THE SYSTEM COMPONENTS AND THE LIVE LOADS AND FORCES IMPOSED UPON THE STRUCTURE BY THE OPERATION OF THE SPRINKLER SYSTEM. CERTIFICATION SHALL BE PROVIDED BY A STRUCTURAL ENGINEER LICENSED WITHIN THE JURISDICTION WHERE THE PROJECT IS LOCATED. THE CERTIFICATION SHALL BE PROVIDED AS PART OF THE PRE-ENGINEERED BUILDING/STRUCTURE DELEGATED DESIGN SUBMITTAL.

GENERAL PARTITION NOTES

1	ENTRY SPACES, LOBBIES, AND CORRIDORS TO RECEIVE IMPACT RESISTANT GYPSUM WALL BOARD, U.N.O.
2	PROVIDE FIBERGLASS REINFORCED MOISTURE RESISTANT GYPSUM WALL BOARD IN ALL EQUIPMENT ROOMS, JANITOR'S CLOSETS, RESTROOMS, KITCHENS AND OTHER WET AREAS. PROVIDE FIBERGLASS REINFORCED MOISTURE RESISTANT WALL BOARD IN ALL OTHER AREAS WITHIN 8'-0" OF WATER SOURCE.
3	CONTRACTOR SHALL PROVIDE BLOCKING AND NAILERS AS REQUIRED TO SUPPORT ALL NEW WORK, INCLUDING ITEMS TO BE PROVIDED AND/OR INSTALLED BY OWNER.
4	ALL CORRIDOR AND FIRE-RATED PARTITIONS SHALL BE EXTENDED TO THE UNDERSIDE OF THE STRUCTURE ABOVE, U.N.O. THE PERIMETER WALLS OF ANY SPACE NOT PROVIDED WITH A CEILING SHALL EXTEND THE THE UNDERSIDE OF DECK ABOVE.
5	PROVIDE DEFLECTION TRACKS AT TOP OF ALL NON-LOAD BEARING STUD WALLS EXTENDING TO THE UNDERSIDE OF STRUCTURE ABOVE, U.N.O.
6	PROVIDE CONCRETE BACKER BOARD IN LIEU OF GYPSUM WALL BOARD WHERE TILE FINISH IS INDICATED.
7	ALL FIRE WALLS SHALL BE PLACARDED OR STENCILED ON BOTH SIDES WITH THE PHRASE "FIRE WALL" PER IBC SECTION 703.7.1. THE LETTERS SHALL BE RED IN COLOR, 6" INCHES HIGH AND A MIN. OF 3/4" WIDE. THE PHRASE SHALL BE WRITTEN ONCE FOR EACH 15 FEET OF HORIZONTAL WALL LENGTH. THIS SIGNAGE MAY BE LOCATED IN THE CONCEALED SPACE ABOVE A CEILING.
8	INTERIOR METAL STUD FRAMING AND EXTERIOR FURRING/MISCELLANEOUS FRAMING, UNLESS NOTED OTHERWISE, SHALL BE A MINIMUM OF 20 GAUGE THICKNESS AND SHALL BE SPACED 16 INCHES ON CENTER. METAL STUD PROVIDER/INSTALLER SHALL BE RESPONSIBLE FOR THE DELEGATED DESIGN AND FINAL ENGINEERING OF ALL METAL STUD FRAMING COMPONENTS INCLUDING BUT NOT LIMITED TO SOFFITS, BULKHEADS, PARTITIONS, FURRING, CEILINGS, AND MISCELLANEOUS FRAMING/BLOCKING REQUIRED TO SUPPORT AND COMPLETE THE WORK. METAL STUD PROVIDER/INSTALLER/DESIGNER SHALL PROVIDE METAL STUDS IN WIDTHS INDICATED. METAL STUD DESIGNER SHALL FIRST INCREASE METAL STUD THICKNESS, SECOND DECREASE METAL STUD SPACING TO 12 INCHES ON CENTER, AND THIRD INCREASE STUD WIDTH WHERE ADJUSTING STUD THICKNESS AND SPACING ARE INSUFFICIENT TO COMPLY WITH REQUIREMENTS.
9	NEW MASONRY WALLS ABUTTING EXISTING MASONRY WALLS SHALL BE TOOTHED INTO EXISTING WALLS.
10	MOISTURE RESISTANT GYPSUM WALL BOARD SHALL BE UTILIZED IN ALL AREAS WHERE GYPSUM WALL BOARD IS TO BE DIRECTLY ADHERED TO CONCRETE OR MASONRY SURFACES IN INTERIOR APPLICATIONS. SUBSTRATE SHALL BE CLEANED AS REQUIRED AND FREE OF DUST, DEBRIS, AND MOISTURE PRIOR TO ADHESION AND FINISHING.
11	CONSTRUCTION OF RATED WALL ASSEMBLIES SHALL BE STRICTLY ADHERED TO IN ACCORDANCE WITH UL AND/OR GYPSUM ASSEMBLY SPECIFICATIONS. REFER TO CODE PLANS FOR ADDITIONAL INFORMATION.
12	PROVIDE A BULLNOSE CMU AT ALL OUTSIDE CORNERS OF INTERIOR MASONRY WALLS & SILLS.

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SUBMISSION:
CONSTRUCTION DOCUMENTS

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ASSEMBLY TYPES & NOTES

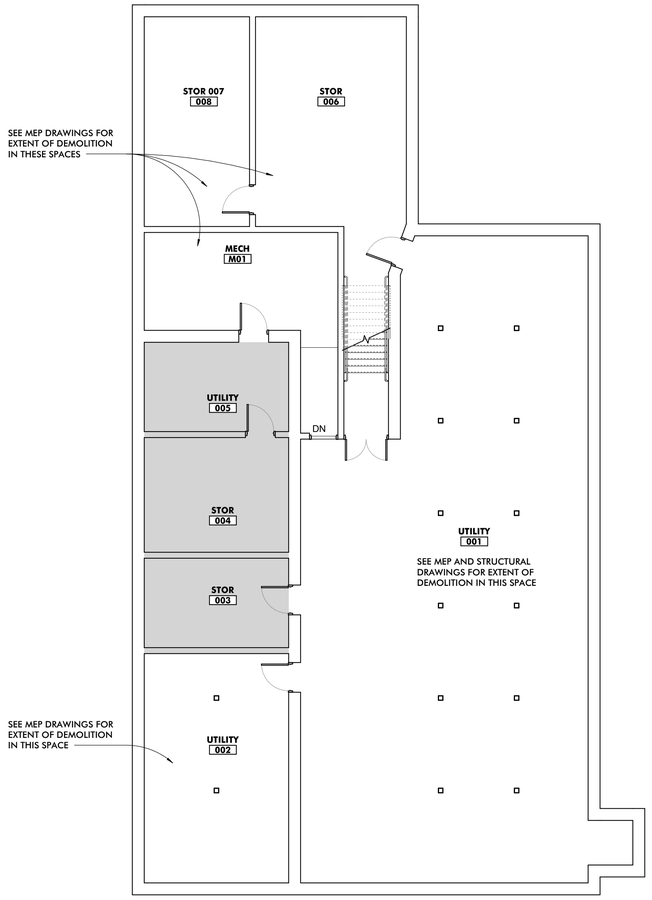
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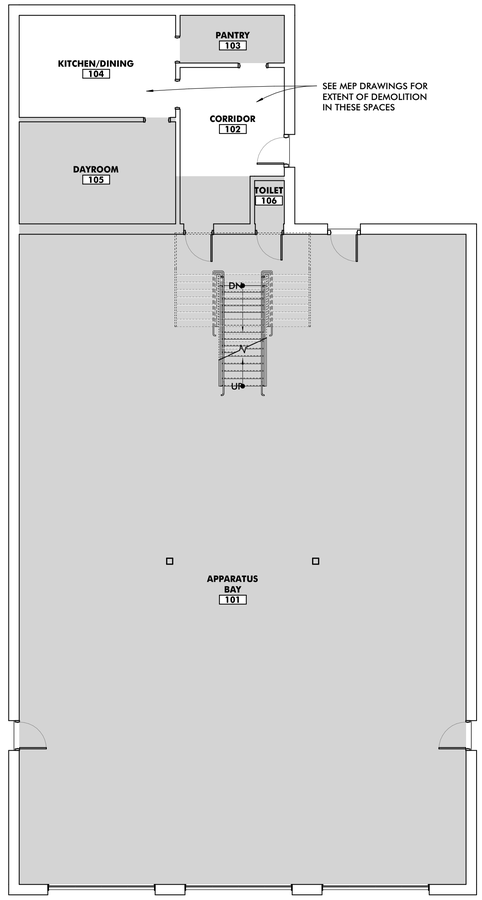
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GENERAL DEMOLITION NOTES

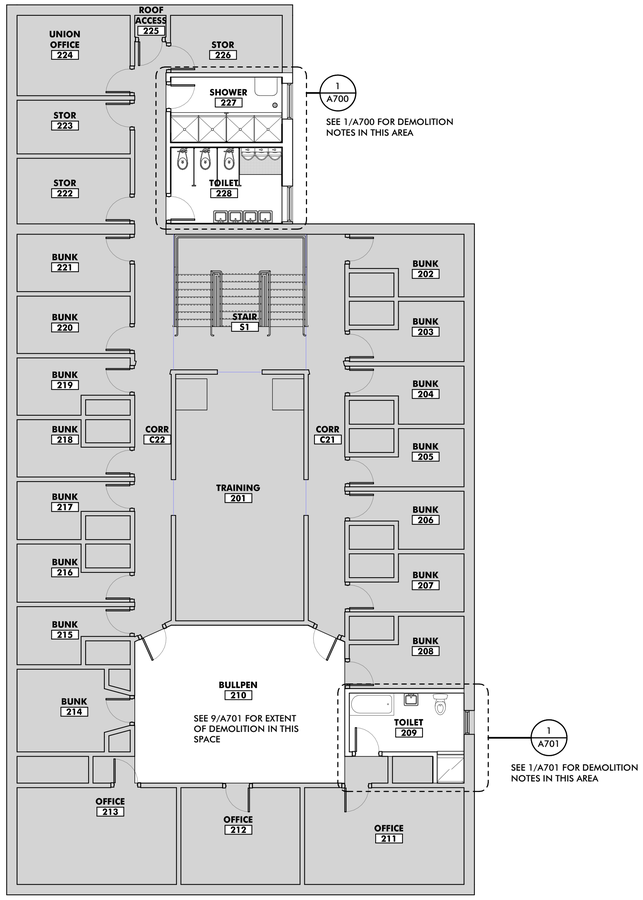
1	ALL BIDDERS SHALL MAKE THEMSELVES FAMILIAR WITH THE EXISTING PROJECT CONDITIONS PRIOR TO SUBMITTING A BID. THIS IS INCLUSIVE OF CONDITIONS ABOVE ACCESSIBLE CEILINGS TO DETERMINE WORKING CONDITIONS.
2	PRIOR TO THE PERFORMANCE OF ANY DEMOLITION WORK THE CONTRACTOR SHALL MAKE THEMSELVES FAMILIAR WITH THE EXISTING CONDITIONS OF THE PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DESIGNING, PROVIDING, INSTALLING, AND MAINTAINING ALL TEMPORARY SUPPORT AND BRACING REQUIRED TO COMPLETE THE WORK.
3	THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EXISTING CONDITIONS, DIMENSIONS, CONSTRUCTION ASSEMBLIES PRIOR TO FABRICATING, INSTALLING, OR PURCHASING ANY NEW WORK. DETAILS INDICATING EXISTING MATERIALS OR CONDITIONS MAY BE SHOWN WITHIN THE DOCUMENTS BUT ARE NOT INTENDED TO FULLY DEFINE EXISTING CONDITIONS.
4	DEMOLITION WORK MAY BE INDICATED THROUGHOUT THE CONTRACT DOCUMENTS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL DOCUMENTS FOR ADDITIONAL DEMOLITION WORK.
5	IT IS THE CONTRACTORS RESPONSIBILITY TO MAINTAIN SAFE WORKING CONDITIONS THROUGHOUT THE CONSTRUCTION SITE. THE CONTRACTOR SHALL PROVIDE TEMPORARY BARRIERS AS REQUIRED TO PROTECT PERSONS AND PROPERTY AND OTHERWISE MAINTAIN SAFE WORKING CONDITIONS.
6	THE CONTRACTOR SHALL MAINTAIN A CLEAR, CLEAN, USEABLE CONSTRUCTION SITE THROUGH DAILY CLEANUP OF WORK AREAS.
7	THE OWNER SHALL BE MAINTAINING OCCUPANCY OF THE SITE AND PORTIONS OF THE BUILDING DURING THE CONSTRUCTION PROCESS. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER AND THE OWNER'S PERSONNEL THROUGHOUT THE CONSTRUCTION TO MINIMIZE, TO THE GREATEST EXTENT POSSIBLE, ANY DISRUPTIONS IN THE OWNER'S WORKING PROCEDURES. THE PHASING OF THE PROJECT SHALL BE DETERMINED BY THE CONTRACTOR AND SHALL NOT BE REASON FOR ADDITIONAL FEES. ADDITIONALLY, THE CONTRACTOR SHALL COORDINATE WITH THE OWNER A MINIMUM OF 72 HOURS PRIOR TO ANY DISRUPTION OF SERVICES/UTILITIES REQUIRED TO COMPLETE THE WORK.
8	THE CONTRACTOR SHALL PROVIDE TEMPORARY DUST AND DEBRIS BARRIERS BETWEEN AREAS TO REMAIN IN OPERATION AND WORK AREAS. BARRIERS SHALL BE PROVIDED AT, BUT NOT LIMITED TO HVAC SUPPLY AND RETURN OPENINGS, TRANSFER VENTS, EXHAUST VENTS, AND OTHER SUCH OPENINGS. BARRIERS SHALL BE A MINIMUM OF 10 MIL PLASTIC SHEETING SECURED AND SEALED TO EXISTING CONSTRUCTION AND/OR TEMPORARY FRAMING. PLASTIC SHEETING SHALL BE OVERLAPPED A MINIMUM OF 12" AND TAPED BOTH SIDES.
9	THE CONTRACTOR SHALL PROVIDE PROTECTION FROM THE WEATHER FOR PORTIONS OF EXISTING CONSTRUCTION THAT ARE TO REMAIN OCCUPIED OR USEABLE BY THE OWNER OR TO AREAS THAT CONTAIN ITEMS TO REMAIN THAT WILL BE DAMAGED BY WEATHER.
10	ALL ITEMS INDICATED TO BE REMOVED AND/OR DEMOLISHED SHALL REMAIN THE PROPERTY OF THE OWNER. THE CONTRACTOR SHALL REVIEW WITH THE OWNER IF ANY ITEMS TO BE REMOVED AND/OR DEMOLISHED ARE TO BE RETAINED BY THE OWNER PRIOR TO ANY DEMOLITION WORK BEING PERFORMED. ALL ITEMS TO BE RETAINED BY THE OWNER SHALL BE REMOVED BY THE CONTRACTOR AND DELIVERED TO THE OWNER IN THE CONDITION FOUND PRIOR TO ANY WORK BEING PERFORMED. ALL OTHER ITEMS INDICATED TO BE REMOVED AND/OR DEMOLISHED SHALL BE DISPOSED OF OFF SITE BY THE CONTRACTOR IN A LAWFUL MANNER.
11	THE CONTRACTOR SHALL REPLACE OR REPAIR ANY ITEMS DAMAGED BY THE CONTRACTOR OR ANY OF ITS AGENTS TO A MINIMUM CONDITION MATCHING THE ITEMS' CONDITION AT THE START OF CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER.
12	THE CONTRACTOR SHALL REPAIR ANY MATERIALS, SYSTEMS, OR FINISHES WITHIN OR OUTSIDE OF THE GENERAL WORK AREA THAT ARE REQUIRED TO BE DISTURBED TO COMPLETE THE ENTIRE SCOPE OF WORK ASSOCIATED WITH BUILDING SYSTEM CONNECTIVITY.
13	THE CONTRACTOR SHALL PREPARE ALL SURFACES AFFECTED BY DEMOLITION OPERATIONS TO RECEIVE NEW WORK AS BOTH INDICATED WITHIN THESE DRAWINGS AND SPECIFICATIONS/PROJECT MANUAL AND AS RECOMMENDED BY THE MANUFACTURERS' WRITTEN INSTRUCTIONS FOR THE INSTALLATION OF EACH RESPECTIVE PRODUCT.
14	THE CONTRACTOR SHALL REMOVE EXISTING FINISHES AS INDICATED THROUGHOUT THE CONTRACT DOCUMENTS AND ENSURE THAT SUBSTRATE CONDITIONS ARE SMOOTH AND IN SATISFACTORY CONDITION TO RECEIVE NEW WORK.
15	THE CONTRACTOR SHALL REMOVE ALL ANCHORS, FASTENERS, WALL HANGERS, AND MISCELLANEOUS EXTRUSIONS AND APPURTENANCES OF ITEMS BOTH NO LONGER INSTALLED AND ITEMS REMOVED THROUGH DEMOLITION PROCEDURES.
16	THE CONTRACTOR SHALL COORDINATE ANY SAW CUTS WITHIN THE EXISTING SLABS WITHIN THE NEW WORK AREA AS REQUIRED TO INSTALL NEW ELECTRICAL CONDUIT, PLUMBING, AND/OR STRUCTURAL ELEMENTS. CONTRACTOR SHALL COORDINATE SIZE, LOCATION, AND DEPTH WITH THE FULL SET OF DOCUMENTS. REPLACE AND REPAIR CONCRETE AND FLASH AS REQUIRED TO CREATE A FLUSH SUBSTRATE AFTER COMPLETION OF WORK TASKS.



1 EXISTING BASEMENT PLAN
1/8" = 1'-0"



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



3 EXISTING SECOND FLOOR PLAN
1/8" = 1'-0"

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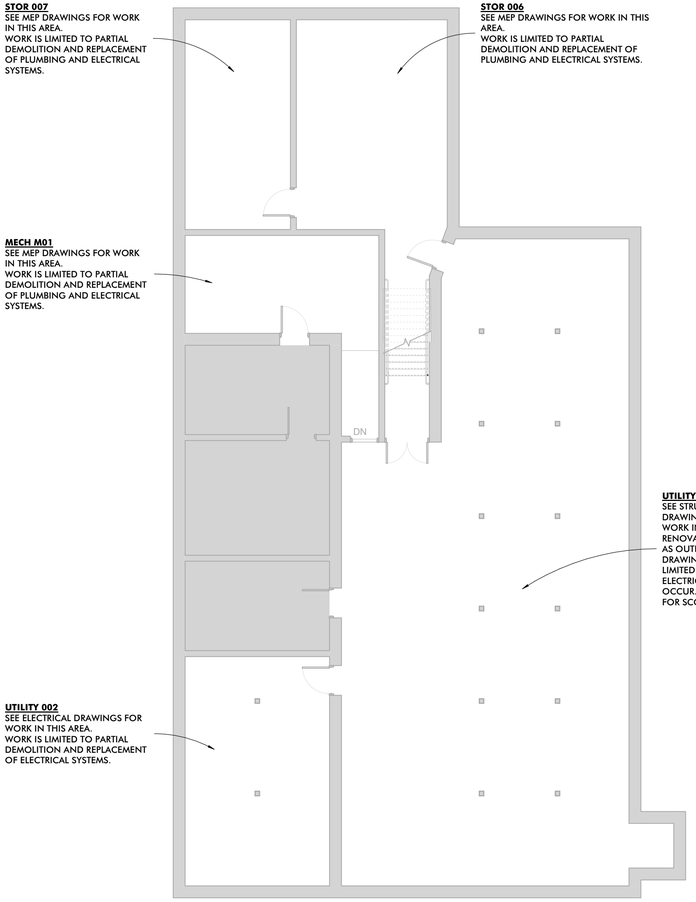
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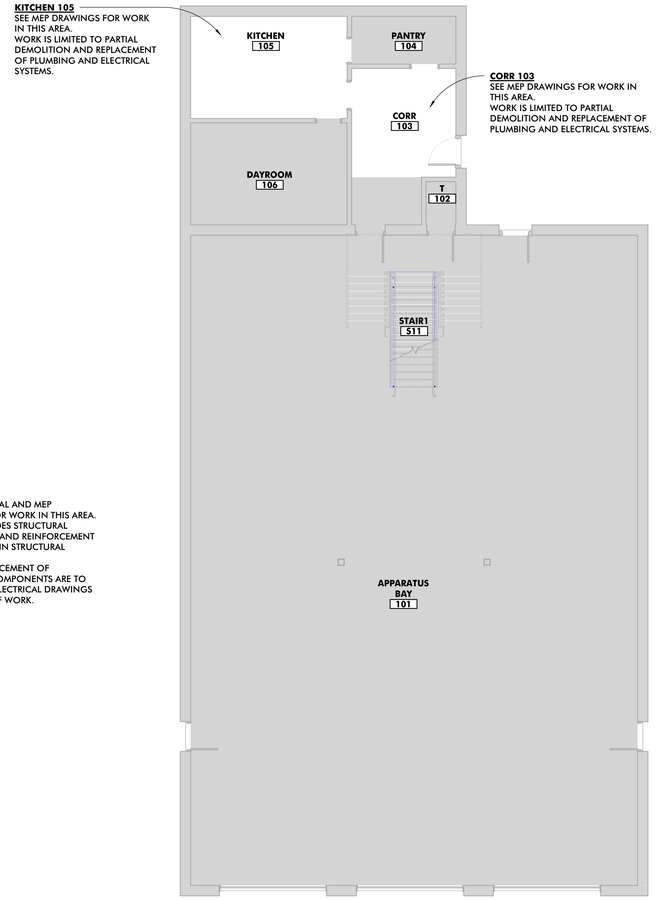
FLOOR PLANS - EXISTING & DEMOLITION

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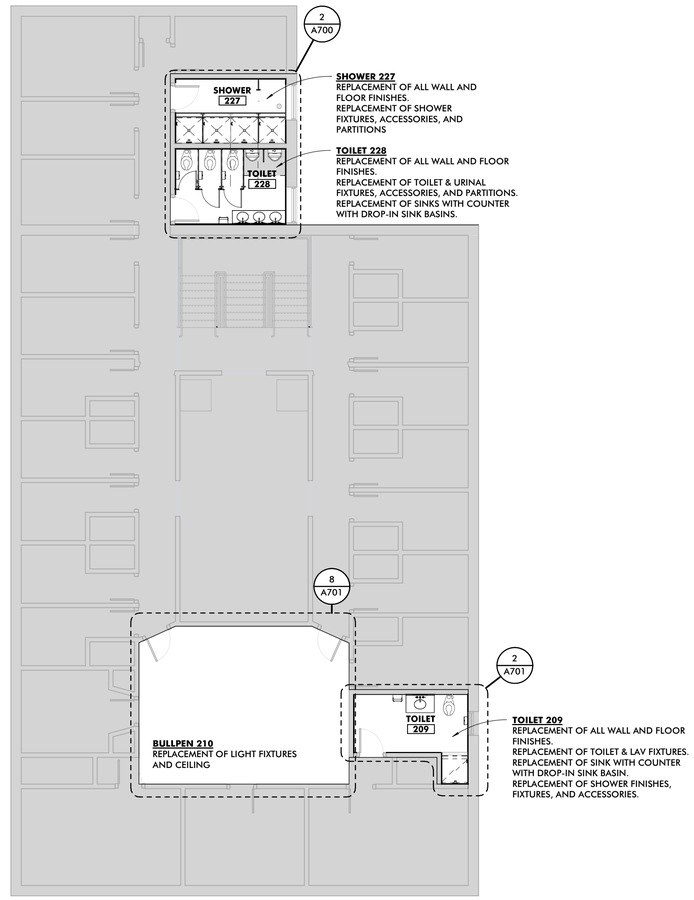
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1 **BASEMENT PLAN**
1/8" = 1'-0"



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



3 **SECOND FLOOR PLAN**
1/8" = 1'-0"

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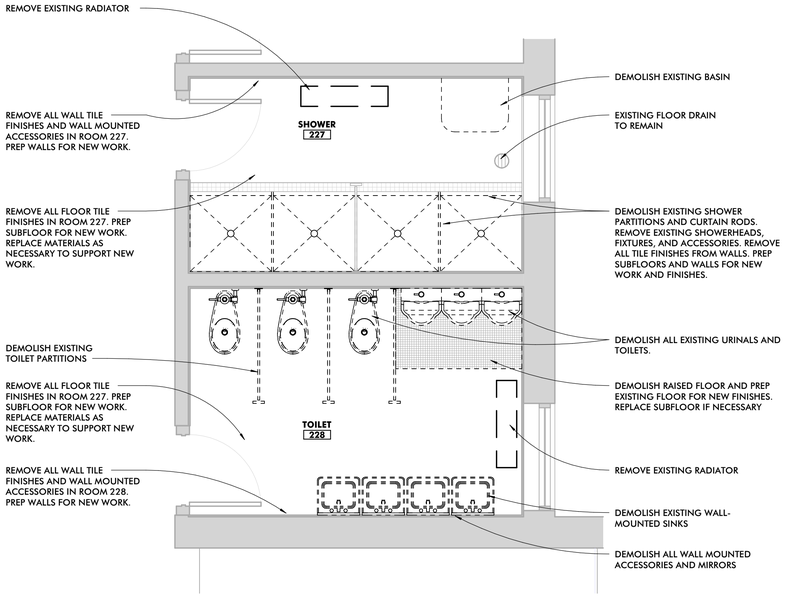
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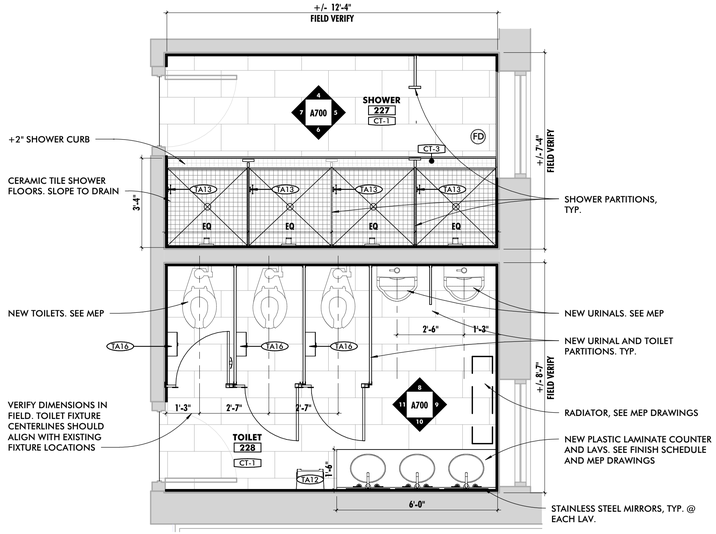
FLOOR PLANS - PROPOSED

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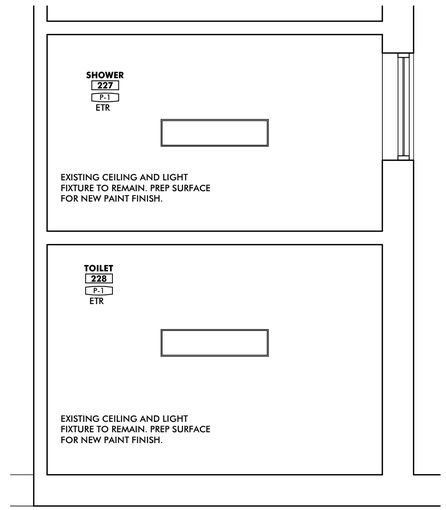
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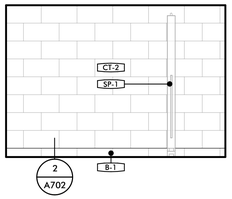
1 TOILET & SHOWER ROOM - DEMOLITION PLAN
3/8" = 1'-0"



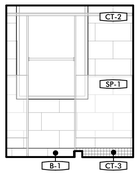
2 ENLARGED PLAN - SHOWER 227 & TOILET 228
3/8" = 1'-0"



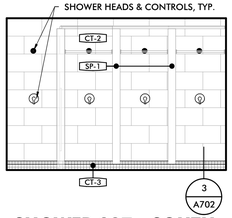
3 TOILET/SHOWER - ENLARGED RCP
3/8" = 1'-0"



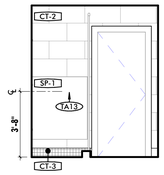
4 SHOWER 227 - NORTH
1/4" = 1'-0"



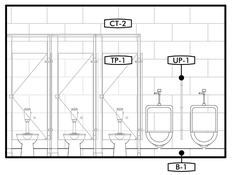
5 SHOWER 227 - EAST
1/4" = 1'-0"



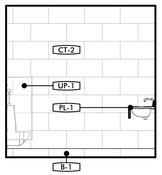
6 SHOWER 227 - SOUTH
1/4" = 1'-0"



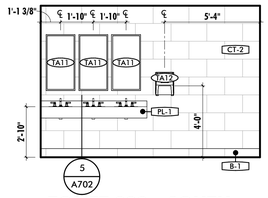
7 SHOWER 227 - WEST
1/4" = 1'-0"



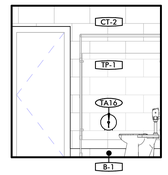
8 TOILET 228 - NORTH
1/4" = 1'-0"



9 TOILET 228 - EAST
1/4" = 1'-0"



10 TOILET 228 - SOUTH
1/4" = 1'-0"



11 TOILET 228 - WEST
1/4" = 1'-0"

GENERAL FINISH NOTES

1	ALL MECHANICAL, ELECTRICAL, PLUMBING, AND SPRINKLER WORK TO OCCUR IN AREAS WHERE THE STRUCTURE IS EXPOSED SHALL BE EXECUTED IN A COORDINATED, NEAT AND WORKMANLIKE MANNER. AT A MINIMUM, ALL WIRING SHALL BE RUN THROUGH CONDUITS, PIPE AND DUCT INSULATION SHALL BE NEATLY INSTALLED AND PAINTABLE. ALL PENETRATIONS SHALL EITHER BE NEATLY COPED OR UTILIZE PAINTABLE ESCUTCHEONS/COVER PLATES. ALL PIPES AND DUCTS SHALL BE RUN EITHER PERPENDICULAR OR PARALLEL TO WALL CONSTRUCTION AND SHALL BE INSTALLED AT THE SAME NOMINAL ELEVATION OR SLOPE. ALL MATERIALS AND INSTALLATION METHODS SHALL COMPLY WITH APPLICABLE CODES AND STANDARDS. WHERE MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS INDICATE OTHER REQUIREMENTS, THE GREATER QUALITY SHALL PREVAIL.
2	DO NOT MAKE INDELIBLE MARKS ON PORTIONS OF SLAB THAT WILL BE VISIBLE INCLUDING, BUT NOT LIMITED TO PERMANENT MARKER, PAINT, ETCHED LINES OR PINS. REMOVE ALL STAINS, MARKING, DISCOLORATIONS, AND VISIBLE SOILS FROM CONCRETE BEFORE APPLYING SEALER.
3	ADD MARBLE THRESHOLDS TO EXISTING TOILET ROOM DOORS.
4	ALL CEILINGS TO BE PAINTED P-1 U.N.O. IN FINISH SCHEDULE.

SCHEDULE - CEILING TYPES

MARK	DESCRIPTION	BOD MANUFACTURER	BOD MODEL	COMMENTS
CLG-1	1/2" GWB ON HORIZONTAL 2 BY @ 16" O.C.			
CLG-2	5/8" GWB ON 3 5/8" METAL STUDS @ 16" O.C.	N/A	N/A	

SCHEDULE - TOILET ROOM ACCESSORIES

MARK	DESCRIPTION	BOD MANUFACTURER	BOD MODEL	COMMENTS
	As Specified in 10 21 00	American Sanitary Partition Corp.	As Specified in 10 21 00	
TA11	18" x 36" STAINLESS STEEL MIRROR	BOBRICK	B-1556 1836	
TA12	SURFACE MOUNTED PAPER TOWEL DISPENSER	BOBRICK	B-72860	
TA13	DOUBLE ROBE HOOK	AMERICAN SPECIALTIES	7345	
TA16	SURFACE MOUNTED TOILET PAPER DISPENSER	BOBRICK	B-2890	

SCHEDULE - FINISHES

ROOM INFORMATION				WALL FINISH				CEILING FINISH	REMARKS
RM #	ROOM NAME	FLOOR FINISH	BASE	NORTH	SOUTH	EAST	WEST		
209	TOILET	CT-1	B-1	CT-2	CT-2	CT-2	CT-2	P-1	
210	BULLPEN	--	--	--	--	--	--	CLG-1	
227	SHOWER	CT-1	B-1	CT-2	CT-2	CT-2	CT-2	P-1	
228	TOILET	CT-1	B-1	CT-2	CT-2	CT-2	CT-2	P-1	

SCHEDULE - MATERIAL FINISH KEY

FINISH MARK	DESCRIPTION	BOD MANUFACTURER	BOD MODEL/PRODUCT LINE	BOD COMMENTS
B-1	6" x 24" PORCELAIN TILE BASE	MOSAIC TILE	LAB - 45LABASH1224	CONTRACTOR TO CUT 12"x24" TILES INTO 6"x24 TILES FOR BASE.
CT-1	12" x 24" PORCELAIN TILE	MOSAIC TILE	LAB - 45LABASH1224	
CT-2	12" x 24" PORCELAIN TILE	MOSAIC TILE	REFLEX - 15REFBR11224	
CT-3	2"x2" PORCELAIN MOSAIC TILE	MOSAIC TILE	LAB - 45LABASH2M	
P-1	GENERAL CEILING PAINT	SHERWIN WILLIAMS	SW7757 HIGH REFLECTIVE WHITE	
PL-1	PLASTIC LAMINATE COUNTERTOP	FORMICA	08830-58 ELEMENTAL CONCRETE	
SP-1	SHOWER PARTITION	SCRANTON PRODUCTS	SHOWER & DRESSING COMPARTMENTS - BLUEBERRY	
TP-1	TOILET PARTITION	SCRANTON PRODUCTS	HINY HIDERS - ORANGE PEEL - BLUEBERRY	
UP-1	URINAL PARTITION	SCRANTON PRODUCTS	HINY HIDERS - ORANGE PEEL - BLUEBERRY	

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PROJECT NUMBER: 23-154

SUBMISSION:
CONSTRUCTION DOCUMENTS

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10/23/2026

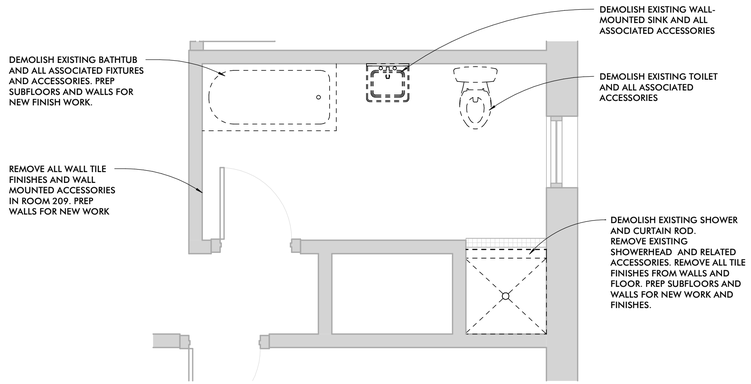
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ENLARGED PLANS & INT. ELEVATIONS

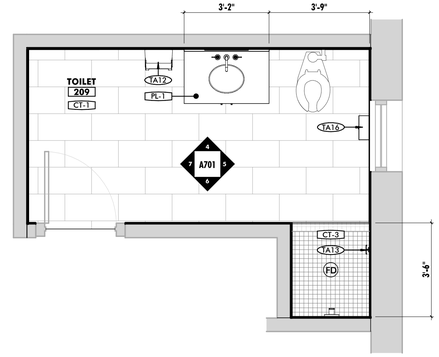
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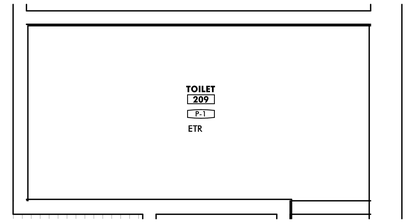
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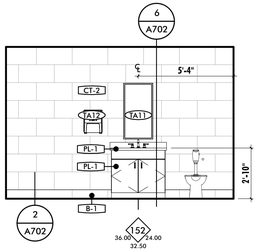
1 TOILET 209 - DEMOLITION PLAN
3/8" = 1'-0"



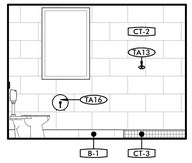
2 TOILET 209 - NEW WORK
3/8" = 1'-0"



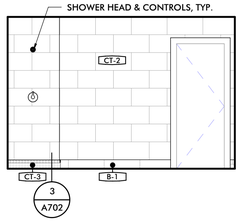
3 TOILET 209 - ENLARGED RCP
3/8" = 1'-0"



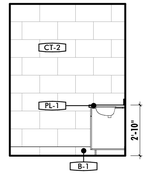
4 TOILET 209 - NORTH
1/4" = 1'-0"



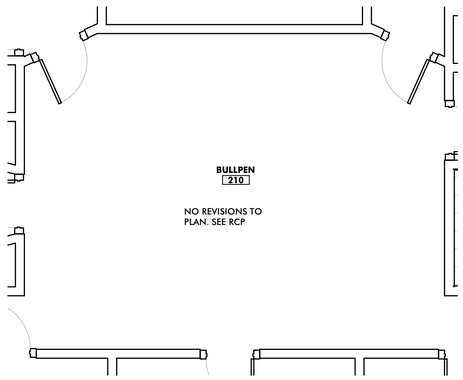
5 TOILET 209 - EAST
1/4" = 1'-0"



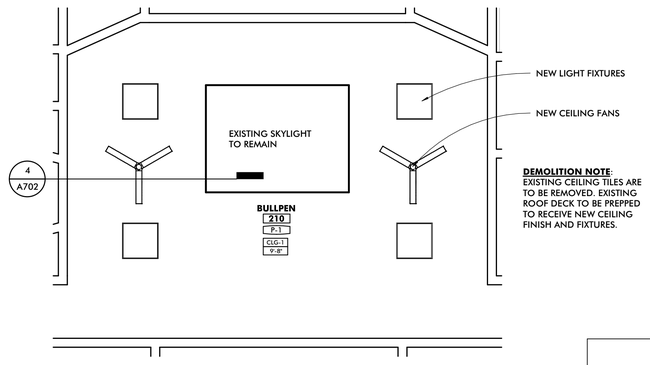
6 TOILET 209 - SOUTH
1/4" = 1'-0"



7 TOILET 209 - WEST
1/4" = 1'-0"



8 ENLARGED PLAN - BULLPEN 210
1/4" = 1'-0"



9 BULLPEN 210 - ENLARGED RCP
1/4" = 1'-0"

GENERAL FINISH NOTES

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4	ALL CEILINGS TO BE PAINTED P-1 U.N.O. IN FINISH SCHEDULE.

SCHEDULE - CEILING TYPES

MARK	DESCRIPTION	BOD MANUFACTURER	BOD MODEL	COMMENTS
CLG-1	1/2" GWB ON HORIZONTAL 2 BY @ 16" O.C.			
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SCHEDULE - TOILET ROOM ACCESSORIES

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SCHEDULE - FINISHES

ROOM INFORMATION				WALL FINISH				CEILING FINISH	REMARKS
RM #	ROOM NAME	FLOOR FINISH	BASE	NORTH	SOUTH	EAST	WEST		
209	TOILET	CT-1	B-1	CT-2	CT-2	CT-2	CT-2	P-1	
210	BULLPEN	--	--	--	--	--	--	CLG-1	
227	SHOWER	CT-1	B-1	CT-2	CT-2	CT-2	CT-2	P-1	
228	TOILET	CT-1	B-1	CT-2	CT-2	CT-2	CT-2	P-1	

SCHEDULE - MATERIAL FINISH KEY

FINISH MARK	DESCRIPTION	BOD MANUFACTURER	BOD MODEL/PRODUCT LINE	BOD COMMENTS
B-1	6" x 24" PORCELAIN TILE BASE	MOSAIC TILE	LAB - 45LABASH1224	CONTRACTOR TO CUT 12"x24" TILES INTO 6"x24 TILES FOR BASE.
CT-1	12" x 24" PORCELAIN TILE	MOSAIC TILE	LAB - 45LABASH1224	
CT-2	12" x 24" PORCELAIN TILE	MOSAIC TILE	REFLEX - 15REFBRI1224	
CT-3	2"x2" PORCELAIN MOSAIC TILE	MOSAIC TILE	LAB - 45LABASH2M	
P-1	GENERAL CEILING PAINT	SHERWIN WILLIAMS	SW7757 HIGH REFLECTIVE WHITE	
PL-1	PLASTIC LAMINATE COUNTERTOP	FORMICA	08830-58 ELEMENTAL CONCRETE	
SP-1	SHOWER PARTITION	SCRANTON PRODUCTS	SHOWER & DRESSING COMPARTMENTS - BLUEBERRY	
TP-1	TOILET PARTITION	SCRANTON PRODUCTS	HINY HIDERS - ORANGE PEEL - BLUEBERRY	
UP-1	URINAL PARTITION	SCRANTON PRODUCTS	HINY HIDERS - ORANGE PEEL - BLUEBERRY	

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93 JOYCE KILMER AVE NEW BRUNSWICK, NJ 08901

PROJECT NUMBER: 23-154

SUBMISSION:
CONSTRUCTION DOCUMENTS

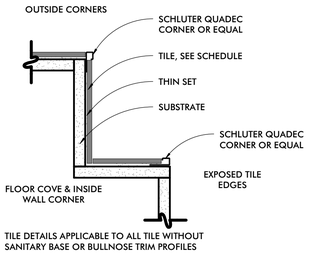
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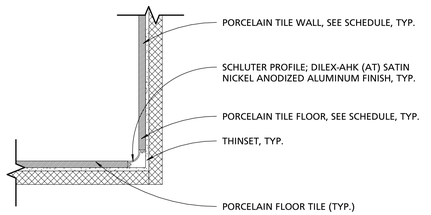
ENLARGED PLANS & INT. ELEVATIONS

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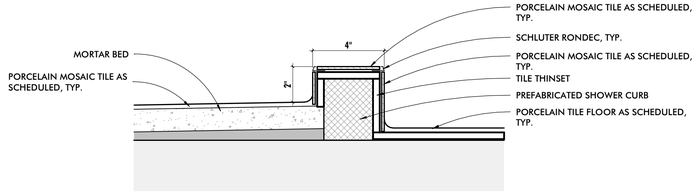
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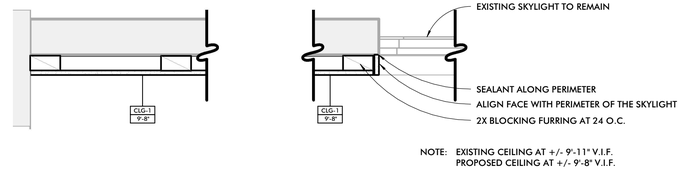
1 TYPICAL WALL TILE EDGE DETAILS
3" = 1'-0"



2 PORCELAIN TILE FLOOR @ PORCELAIN TILE WALL
3" = 1'-0"

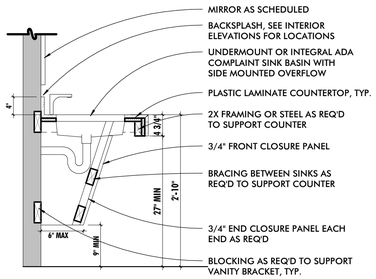


3 TYPICAL SHOWER CURB DETAIL
3" = 1'-0"



NOTE: EXISTING CEILING AT +/- 9'-11" V.I.F.
PROPOSED CEILING AT +/- 9'-8" V.I.F.

4 TYPICAL CEILING DETAIL AT BULLPEN
1 1/2" = 1'-0"

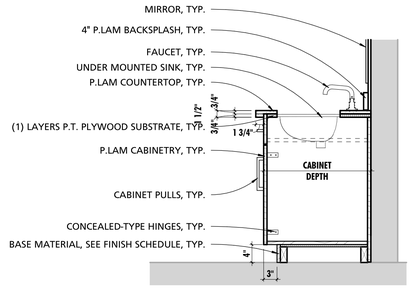


1. CONTRACTOR RESPONSIBLE FOR ENSURING ALL FABRICATED CASEWORK CONFORMS WITH ADA REQUIREMENTS. SEE ADA CODE SHEET FOR ADDITIONAL INFORMATION RELATED TO CLEARANCE REQUIREMENTS.

2. SEE INTERIOR ELEVATIONS FOR WALL FINISHES AND BACKSPLASH REQUIREMENTS.

3. ALL COUNTERS SHALL BE SEAMLESS UNLESS NOTED OTHERWISE.

5 TYPICAL LAVATORY DETAIL
3/4" = 1'-0"



6 TYPICAL SINK @ CASEWORK
3/4" = 1'-0"

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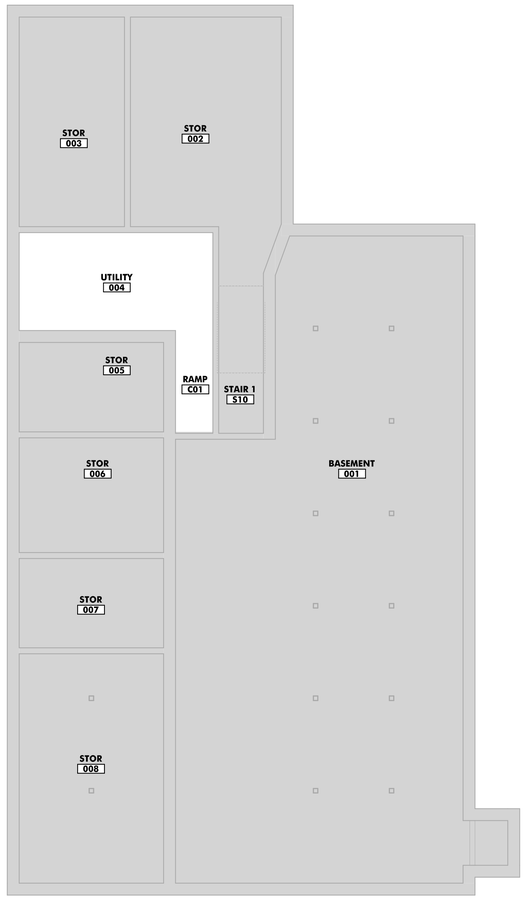
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No. DATE

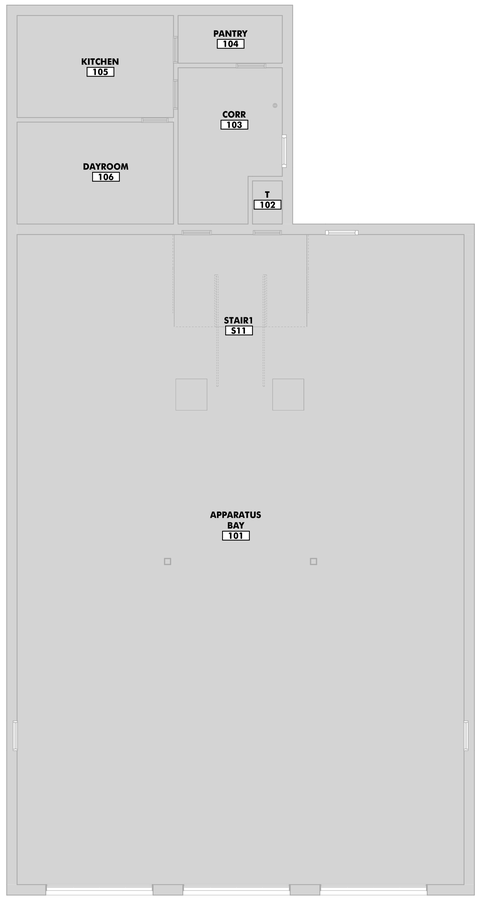
ENLARGED PLANS & INT. ELEVATIONS

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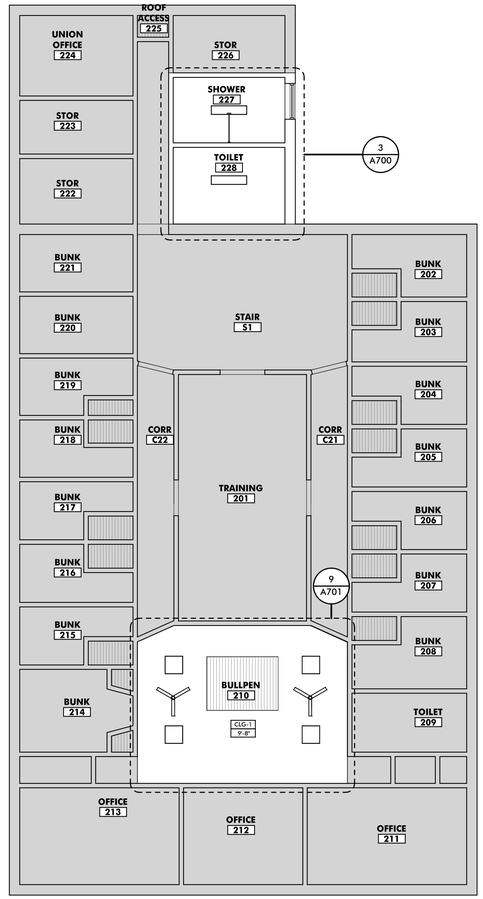
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1 BASEMENT REFLECTED CEILING PLAN
1/8" = 1'-0"



2 FIRST FLOOR REFLECTED CEILING PLAN
1/8" = 1'-0"



3 SECOND FLOOR REFLECTED CEILING PLAN
1/8" = 1'-0"

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CONSTRUCTION DOCUMENTS

ORIGINAL ISSUE DATE:
10/23/2026

SHEET REVISION SCHEDULE:
No. DATE

REFLECTED CEILING PLAN

SHEET NUMBER:
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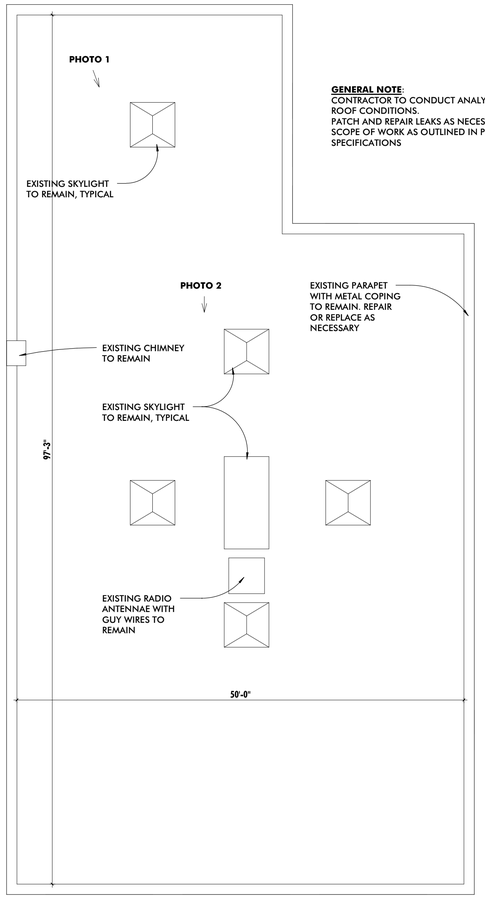
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PHOTO 1



PHOTO 2



GENERAL NOTE:
CONTRACTOR TO CONDUCT ANALYSIS OF ROOF CONDITIONS.
PATCH AND REPAIR LEAKS AS NECESSARY.
SCOPE OF WORK AS OUTLINED IN PROJECT SPECIFICATIONS

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

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ROOF PLAN

SHEET NUMBER:
A900

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STRUCTURAL ABBREVIATIONS

NOTES:
1. ALL ABBREVIATIONS MAY NOT BE USED.
2. THESE ABBREVIATIONS APPLY TO STRUCTURAL DWGS ONLY. SEE ARCH & MEP DWGS FOR SEPARATE SYMBOLS AND ABBREVIATIONS LIST.

@	AT	JT	JOINT
ABV	ABOVE		
ACI	AMERICAN CONCRETE INSTITUTE	K	KIPS
ADH	ADHESIVE	KB	KNEE BRACE
ADDL	ADDITIONAL		
ADJ	ADJUSTABLE	MAS	MASONRY
AFF	ABOVE FINISHED FLOOR	MAX	MAXIMUM
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION	MBR	MEMBER
ALT	ALTERNATE	MECH	MECHANICAL
APPROX	APPROXIMATELY	MEP	MECHANICAL, ELECTRICAL & PLUMBING
AR	ANCHOR ROD	MFR	MANUFACTURER
ARCH	ARCHITECT	MIN	MINIMUM
ASCE	AMERICAN SOCIETY OF CIVIL ENGINEERS	MISC	MISCELLANEOUS
ASTM	AMERICAN SOCIETY OF TESTING & MATERIALS	MO	MASONRY OPENING
AWS	AMERICAN WELDING SOCIETY	MTL	METAL
BCX	BOTTOM CHORD EXTENSION	#	NUMBER
BLDG	BUILDING	NIC	NOT IN CONTRACT
BM	BEAM	NOM	NOMINAL
BOT	BOTTOM	NS	NEAR SIDE
BPL	BEARING PLATE/ BASE PLATE	NTS	NOT TO SCALE
CANT	CANTILEVER	OA	OVERALL
CJ	CONTROL JOINT/CONSTRUCTION JOINT	OC	ON CENTER
CL	CENTER LINE	OD	OUTSIDE DIAMTER
CLR	CLEAR/CLEARANCE	O/F	OUTSIDE FACE
CMU	CONCRETE MASONRY UNIT(S)	OPH	OPPOSITE HANG
COL	COLUMN	OPNG	OPENING
CONC	CONCRETE	OPP	OPPOSITE
CONN	CONNECTION		
CONSTR	CONSTRUCTION	PAF	POWER ACTUATED FASTENER
CONT	CONTINUOUS	PART	PARTITION
COORD	COORDINATE	PC	PIECE
		PCF	POUNDS PER CUBIC FOOT
DBE	DECK BEARING ELEVATION	PEN	PENETRATION
DBL	DOUBLE	PFB	PREFABRICATE(D)
DEMO	DEMOLITION	PL	PLATE
DEG	DEGREE	PLF	POUNDS PER LINEAR FOOT
DIA	DIAMETER	PRESS	PRESSURE
DIAG	DIAGONAL	PROJ	PROJECT; PROJECTED; PROJECTION
DIM	DIMENSION	PSF	POUNDS PER SQUARE FOOT
DIR	DIRECTION	PSI	POUNDS PER SQUARE INCH
DL	DEAD LOAD		
DN	DOWN	R	RADIUS
DWG	DRAWING(S)	RC	REINFORCED CONCRETE
DWLS	DOWELS	RD	ROOF DRAIN
		RECT	RECTANGULAR
EA	EACH	REF	REFER(ENCE)
EF	EACH FACE	REINF	REINFORCING
EL	ELEVATION	REQD	REQUIRED
ELEV	ELEVATOR	REV	REVISE; REVISION
EMBED	EMBEDMENT		
EOD	EDGE OF DECK	SC	SLIP CRITICAL
EOR	ENGINEER OF RECORD	SCH	SCHEDULE
EOS	EDGE OF SLAB	SDL	SUPERIMPOSED DEAD LOAD
EQ	EQUAL	SECT	SECTION
EQUIP	EQUIPMENT	SF	STEP FOOTING
EW	EACH WAY	SHT	SHEET
EWEF	EACH WAY EACH FACE	SIM	SIMILAR
EXIST	EXISTING	SL	SLOPE
EXP	EXPANSION	SOG	SLAB ON GRADE
EXT	EXTERIOR	SPEC	SPECIFICATION
		SQ	SQUARE
FD	FLOOR DRAIN	STD	STANDARD
FDN	FOUNDATION	STGR	STAGGER
FF	FINISHED FLOOR	STIFF	STIFFERNER
FLR	FLOOR	STIRR	STIRRUP
FO	FACE OF	STL	STEEL
FS	FAR SIDE	STRUCT	STRUCTURAL
FTG	FOOTING	SWB	SHORT WAY BOTTOM
FV	FIELD VERIFY	SWT	SHORT WAY TOP
		SYM	SYMMETRICAL
GA	GAUGE, GAGE		
GALV	GALVANIZE	T	TOP
GC	GENERAL CONTRACTOR	T/	TOP OF
GR	GRADE	T&B	TOP AND BOTTOM
GYP	GYPSUM	TCX	TOP CHORD EXTENSION
		TEMP	TEMPORARY
H&V	HORIZONTAL AND VERTICAL	THK	THICK
HEF	HORIZONTAL EACH FACE	THRU	THROUGH
HI	HIGH	TOS	TOP OF STEEL
HK	HOOK	T/SL	TOP OF SLAB
HOF	HORIZONTAL OUTSIDE FACE	T/W	TOP OF WALL
HORIZ	HORIZONTAL	TYP	TYPICAL
HP	HIGH POINT		
HT	HEIGHT	UNO	UNLESS NOTED OTHERWISE
IBC	INTERNATIONAL BUILDING CODE	VEF	VERTICAL EACH FACE
ID	INSIDE DIAMTER	VERT	VERTICAL
IE	INVERT ELEVATION	VIF	VERIFY IN FIELD
I/F	INSIDE FACE	VSC	VERTICAL SLOTTED CONNECTION
INFO	INFORMATION		
INT	INTERIOR	W	WIDTH, WIDE
		W/	WITH
LAT	LATERAL	WD	WOOD
LF	LINEAR FOOT	WF	WIDE FLANGE
LL	LIVE LOAD	W/O	WITHOUT
LLH	LONG LEG HORIZONTAL	WPRF	WATERPROOF
LLV	LONG LEG VERTICAL	WP	WORKING POINT
LO	LOW	WS	WATERSTOP
LP	LOW POINT	WT	WEIGHT
LTL	LINTEL	WWF	WELDED WIRE REINFORCING

1.0 - CODES

1. 2021 INTERNATIONAL BUILDING CODE, NJ EDITION INCLUDING LATEST AMENDMENTS ("NJ CODE")
2. AMERICAN INSTITUTE OF STEEL CONSTRUCTION "SPECIFICATIONS FOR STRUCTURAL STEEL BUILDING - AISC 360-16".
3. AMERICAN CONCRETE INSTITUTE "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE" ACI 318-19 ("ACI").
4. THE MASONRY SOCIETY "BUILDING CODE REQUIREMENTS AND SPECIFICATIONS FOR MASONRY STRUCTURES" TMS-602-16 (ACI-530).

2.0 - MATERIALS

UNLESS OTHERWISE SHOWN OR NOTED ON DRAWINGS:

1. STRUCTURAL STEEL:
   ALL ROLLED SHAPES: ASTM A572 OR A992, GRADE 50
   ALL PLATES AND CONNECTION MATERIAL: ASTM A36 OR A572, GRADE 50
   ALL TUBULAR SECTIONS: ASTM A500, GRADE C
   ALL PIPE SECTIONS: ASTM A53, GRADE B
   ANCHOR BOLTS, UNO: ASTM F1554
2. CAST-IN-PLACE CONCRETE:
   CONCRETE REPAIR SLABS: 4 KSI NORMAL WEIGHT CONCRETE
3. REINFORCEMENT:
   DEFORMED BARS: ASTM A615, GRADE 60
   WELDED WIRE FABRIC: ASTM A1064
4. WELDING ELECTRODES: E70XX LOW HYDROGEN
5. BOLTING MATERIALS: ASTM F3125 GR A325 OR F1852 GR A490 (TWIST OFF TYPE), OR F2280 (TWIST OFF TYPE), UNO

3.0 - GENERAL

1. ALL WORK SHALL CONFORM TO THE "2021 INTERNATION BUILDING CODE NEW JERSEY EDITION" TO ALL OTHER APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS.
2. IN CASE OF CONFLICT BETWEEN THE GENERAL NOTES, SPECIFICATIONS, AND DETAILS, THE MOST RIGID REQUIREMENTS SHALL GOVERN.
3. WORK NOT INDICATED ON A PART OF THE DRAWINGS BUT REASONABLY IMPLIED TO BE SIMILAR TO THAT SHOWN AT CORRESPONDING PLACES SHALL BE REPEATED.
4. THE CONTRACTOR'S ATTENTION IS DIRECTED TO FEDERAL, STATE, AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH STANDARDS. THE CONSTRUCTION CONTRACTOR AWARDED THIS PROJECT SHALL INSURE ALL WORKING SURROUNDINGS AND CONDITIONS ARE SANITARY, AND ARE NOT HAZARDOUS OR DANGEROUS TO THE HEALTH OR SAFETY OF THE WORK CREWS OR BUILDING OCCUPANTS. PRECAUTION SHALL BE EXERCISED AT ALL TIMES FOR THE PROTECTION OF PERSONS AND PROPERTY. IT IS MANDATORY THAT THE SAFETY PROVISIONS OF APPLICABLE LOCAL LAWS, OSHA REGULATIONS AND BUILDING AND CONSTRUCTION CODES, BE OBSERVED FOR ALL CONTRACTORS.
5. ALL COSTS OF INVESTIGATION AND/OR REDESIGN DUE TO CONTRACTOR IMPROPER INSTALLATION OF STRUCTURAL ELEMENTS, SUBSTITUTION OF MATERIAL OR DESIGN, OR OTHER ITEMS NOT IN CONFORMANCE WITH THE CONTRACT DOCUMENTS SHALL BE AT THE CONTRACTOR'S EXPENSE.
6. THE STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE MANUFACTURES, ARCHITECTURAL AND MECHANICAL DRAWINGS. IF THERE IS A DISCREPANCY BETWEEN DRAWINGS, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE ARCHITECT PRIOR TO PERFORMING THE WORK.
7. 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.
8. THE CONTRACTOR SHALL VERIFY AND/OR ESTABLISH ALL EXISTING CONDITIONS AND DIMENSIONS AT THE SITE. FAILURE TO NOTIFY ARCHITECT/ENGINEER OF UNSATISFACTORY CONDITIONS CONSTITUTES ACCEPTANCE OF UNSATISFACTORY CONDITIONS.
9. 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 CONDITION WITH HIS PROPOSED MODIFICATION OF THE DETAILS GIVEN ON THE CONTRACT DOCUMENTS. DO NOT COMMENCE WORK UNTIL CONDITION IS RESOLVED AND MODIFICATION IS APPROVED BY THE ARCHITECT/ENGINEER.
10. FPA SHALL NOT BE RESPONSIBLE FOR DEMOLITION WORK PERFORMED ON THIS PROJECT. THIS SHALL REMAIN THE RESPONSIBILITY OF THE CONTRACTOR AND THE INDIVIDUAL/ENTITY PREPARING DRAWINGS FOR SUCH WORK.
11. WHERE ALTERATIONS INVOLVE THE EXISTING SUPPORTING STRUCTURE, THE CONTRACTOR SHALL PROVIDE SHORING AND PROTECTION REQUIRED TO ENSURE THE STRUCTURAL INTEGRITY OF THE EXISTING STRUCTURE.
12. THE CONTRACTOR SHALL BE RESPONSIBLE TO DETERMINE ALLOWABLE CONSTRUCTION LOADS AND TO PROVIDE DESIGN AND CONSTRUCTION OF FALSEWORK, FORMWORK, STAGINGS, BRACING, AND SHORING, ETC., FOR THE AFFECTED AREA, INCLUDING THE PATH TO TRANSPORT THE PROPOSED EQUIPMENT.
13. ALL SUBMITTALS TO BE PROVIDED TO FPA IN ELECTRONIC PDF FORMAT, UPON REVIEW, FPA WILL PROVIDE STAMPED PDF'S TO THE ARCHITECT FOR DISTRIBUTION. SHOP DRAWINGS SUBMITTED FOR STRUCTURAL REVIEW SHALL CONSIST OF TWO (2) SETS OF PRINTS AND ONE (1) SET OF REPRODUCIBLE'S. ONLY ONE (1) MARKED UP SET OF REPRODUCIBLE WITH THE STRUCTURAL ENGINEER'S COMMENTS WILL BE RETURNED TO THE CONTRACTOR.
14. SHOP DRAWINGS SHALL BEAR THE CONTRACTOR'S 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.
15. THE DRAWINGS HAVE BEEN PRODUCED ENTIRELY ON FPA CADD SYSTEM. ANY OTHER LETTERING, LINES OR SYMBOLS, OTHER THAN PROFESSIONAL STAMPS AND SIGNATURES, HAVE BEEN MADE WITHOUT THE AUTHORIZATION OF FPA ARE INVALID.
16. THE STRUCTURAL DRAWINGS SHALL GOVERN THE WORK FOR ALL STRUCTURAL FEATURES, UNLESS NOTED OTHERWISE. THE ARCHITECTURAL DRAWINGS SHALL GOVERN THE WORK FOR ALL DIMENSIONS.
17. ALL MATERIALS SHALL BE STORED TO PROTECT THEM FROM EXPOSURE TO THE ELEMENTS.

4.0 - CAST-IN-PLACE CONCRETE

1. CONCRETE SHALL BE DESIGNED AND DETAILED IN ACCORDANCE WITH THE CURRENT BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE (ACI-318), AND CONSTRUCTED IN ACCORDANCE WITH THE CRSI MANUAL OF STANDARD PRACTICE.
2. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE 28 DAY STRENGTH OF 4,000 PSI, BE NORMAL WEIGHT, AIR ENTRAINED, & HAVE A MAX W/C RATIO OF 0.45.
3. READY MIX:
   *COMPLY WITH ACI-301, ACI-304 AND ASTM C-94.
   *MAXIMUM TIME BETWEEN INTRODUCTION OF WATER AND PLACING TO BE 1-1/2" HOURS.
   *DO NOT LOAD TRUCKS ABOVE RATED CAPACITY.
4. REINFORCING STEEL: ASTM A615 GRADE 60.
5. BONDING AGENT SHALL BE USED WHERE NEW CONCRETE IS PLACED AGAINST EXISTING CONCRETE.
6. EPOXY ADHESIVE SHALL BE USED WHERE DOWELS ARE TO BE INSTALLED INTO EXISTING CONCRETE. SUBMIT MANUFACTURER INFORMATION FOR ENGINEER REVIEW.
7. CONCRETE SHALL NOT BE PUMPED THROUGH ALUMINUM PIPES AND SHALL NOT BE PLACED IN CONTACT WITH ALUMINUM FORMS, MIXING DRUMS, BUGGIES, CHUTES, CONVEYORS OR OTHER EQUIPMENT MADE OF ALUMINUM.
8. 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.
9. EARLY DRYING OUT OF CONCRETE, ESPECIALLY DURING THE FIRST 24 HOURS, SHALL BE CAREFULLY GUARDED AGAINST. ALL SURFACES SHALL BE MOIST CURED OR PROTECTED USING A MEMBRANE CURING AGENT APPLIED AS SOON AS FORMS ARE REMOVED. IF MEMBRANE CURING AGENT IS USED, EXERCISE CARE NOT TO DAMAGE COATING.
10. THROUGHOUT CONSTRUCTION, THE CONCRETE WORK SHALL BE ADEQUATELY PROTECTED AGAINST DAMAGE DUE TO EXCESSIVE LOADING, CONSTRUCTION EQUIPMENT, MATERIALS OR METHODS, EXCESSIVE HEAT, AND FREEZING TEMPERATURES.

5.0 - STRUCTURAL STEEL

1. FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE LATEST EDITION "STEEL CONSTRUCTION MANUAL", THIRTEENTH EDITION, 2005, AMERICAN INSTITUTE OF STEEL CONSTRUCTION INCLUDING SPECIFICATIONS FOR STRUCTURAL STEEL BUILDINGS, SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS, AND AISC CODE OF STANDARD PRACTICE EXCEPT SECTIONS 4.2 AND 7.9 WHICH SHALL NOT BE APPLICABLE TO THIS PROJECT.
2. ALL WELDING SHALL BE PERFORMED BY CERTIFIED WELDERS AND SHALL CONFORM TO "STRUCTURAL WELDING CODE ANSI/AWS D1.12", AMERICAN WELDING SOCIETY.
3. WIDE FLANGE SHAPES: ASTM A992, GRADE 50.
4. STEEL TUBING (SQUARE, RECT OR ROUND): ASTM A500, GRADE B.
5. STRUCTURAL SHAPES & PLATES: ASTM A36, A572 OR A992
6. GALVANIZED STRUCTURAL STEEL:
   A. STRUCTURAL SHAPES AND RODS ASTM A123.
   B. BOLTS, FASTENERS & HARDWARE ASTM A153.
7. WELDING ELECTRODES SHALL BE E70XX LOW-HYDROGEN FOR MANUAL ARC WELDING AND F7X-EXXX FOR SUBMERGED ARC WELDING. ALL WELDERS SHALL BE CERTIFIED BY THE AWS. MINIMUM WELD SIZE SHALL BE 3/16" UNLESS NOTED OTHERWISE.
8. CUTS, HOLES, COPING, ETC REQUIRED FOR OTHER TRADES OR FIELD CONDITIONS SHALL BE SHOWN ON THE SHOP DRAWINGS AND MADE IN THE SHOP. CUTTING OR BURNING OF MAIN STRUCTURAL MEMBERS IN THE FIELD WILL NOT BE PERMITTED.
9. THE GENERAL CONTRACTOR AND STEEL ERECTOR SHALL NOTIFY THE STRUCTURAL ENGINEER OF ANY FABRICATION OR ERECTION ERRORS OR DEVIATIONS AND RECEIVE WRITTEN APPROVAL BEFORE ANY FIELD CORRECTIONS ARE MADE.
10. ALTERNATE CONNECTION DETAILS MAY BE USED IF SUCH DETAILS ARE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL. HOWEVER, THE ENGINEER SHALL BE THE SOLE JUDGE OF ACCEPTANCE AND THE CONTRACTOR'S BID SHALL ANTICIPATE THE USE OF THOSE DETAILS SHOWN ON THE DRAWINGS. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF SUCH ALTERNATE DETAILS WHICH HE PROPOSES.
11. STEEL PLATES ALONG WITH BOLTS AND WASHERS SHALL BE HOT-DIPPED GALVANIZED.
12. ALL EXPOSED STRUCTURAL STEEL SHALL BE HOT-DIPPED GALVANIZED PER ASTM A123.
13. EXISTING FRAMING REQUIRING WELDING SHALL BE THOROUGHLY CLEANED TO ENSURE PROPER WELDING. PROVIDE TEMPORARY SHORING WHEN WELDING TO EXISTING STEEL.
14. FIELD WELDED SURFACES WITHIN FOUR (4) INCHES OF WELD SHALL BE CLEANED AND GROUND SMOOTH. AFTER WELDING COAT THE EXPOSED AREA WITH GALVANIZING REPAIR PAINT. GALVANIZING REPAIR PAINT SHALL BE A HIGH ZINC DUST CONTENT PAINT COMPLYING WITH FEDERAL SPECIFICATIONS DOD-P-21035A OR SSPC-PAINT-20, COLD GALVANIZING COMPOUND BY ZRC PRODUCTS CO OR EQUAL.

6.0 - HEADED AND POST-INSTALLED ANCHORS

1. ALL HEADED CONCRETE ANCHORS SHALL BE MANUFACTURED FROM MATERIAL WHICH CONFORMS TO ASTM A108 FOR LOW CARBON STEEL.
2. ALL WELDS SHALL BE MADE IN ACCORDANCE WITH THE STRUCTURAL WELDING CODE, ANSI/AWS D1.1, LATEST EDITION AND WITH THE RECOMMENDATIONS OF THE STUD MANUFACTURER.
3. ALL POST-INSTALLED ANCHORS SHALL BE BY HILTI FASTENING SYSTEMS, INC. OR AN APPROVED EQUAL.
4. EXCEPT WHERE INDICATED ON THE DRAWINGS, POST-INSTALLED ANCHORS SHALL CONSIST OF THE FOLLOWING ANCHOR TYPES OR APPROVED EQUAL AND INSTALLED IN ACCORDANCE WITH THEIR RESPECTIVE ICC-ES REPORT AND MANUFACTURER'S PUBLISHED INSTALLATION INSTRUCTIONS (MPII): SEE HEADED AND POST-INSTALLED ANCHOR TABLE
5. ANCHOR CAPACITY USED IN DESIGN SHALL BE BASED ON THE TECHNICAL DATA PUBLISHED BY HILTI OR SUCH OTHER METHOD AS APPROVED BY THE STRUCTURAL ENGINEER OF RECORD. SUBSTITUTION REQUESTS FOR ALTERNATE PRODUCTS MUST BE APPROVED IN WRITING BY THE STRUCTURAL ENGINEER OF RECORD PRIOR TO USE. CONTRACTOR SHALL PROVIDE CALCULATIONS DEMONSTRATING THAT THE SUBSTITUTED PRODUCT IS CAPABLE OF ACHIEVING THE PERFORMANCE VALUES OF THE SPECIFIED PRODUCT IN BOTH DRY AND WATER SATURATED CONCRETE, INCLUDING AN ICC-ES REPORT SHOWING COMPLIANCE WITH THE RELEVANT BUILDING CODE, SEISMIC USE, LOAD RESISTANCE, INSTALLATION CATEGORY, IN-SERVICE TEMPERATURE, INSTALLATION TEMPERATURE, ETC.
6. DRILL HOLES WITH ROTARY IMPACT HAMMER DRILLS USING CARBIDE-TIPPED DRILL BIT, OR HOLLOW DRILL BIT WITH INTEGRAL VACUUM CLEAN AS PERMITTED BY ICC-ESR. USE OF DIAMOND CORE BIT WITH ROUGHENING TOOL SHALL BE PERMITTED AFTER ENGINEERS OF RECORD APPROVAL. UNLESS OTHERWISE SHOWN ON THE DRAWINGS, ALL HOLES MUST BE DRILLED PERPENDICULAR TO THE CONCRETE SURFACE.
7. ADHESIVE ANCHORS INSTALLED IN A HORIZONTALLY OR UPWARDLY INCLINED ORIENTATION INTO CONCRETE AND SUPPORTING A SUSTAINED TENSION LOAD SHALL BE INSTALLED BY A CERTIFIED ADHESIVE ANCHOR INSTALLER. INSTALLER SHALL BE CERTIFIED THROUGH THE ACI/CRSI ADHESIVE ANCHOR INSTALLER CERTIFICATION PROGRAM OR APPROVED EQUAL. IN ACCORDANCE WITH ACI 318-14 SECTION D.9.2.2 PROOF OF CURRENT CERTIFICATION SHALL BE SUBMITTED TO THE EOR PRIOR TO INSTALLATION.
8. CONTRACTOR SHALL ARRANGE AN ANCHOR MANUFACTURER'S REPRESENTATIVE TO PROVIDE ON-SITE ANCHOR INSTALLATION TRAINING FOR ALL OF THEIR ANCHORING PRODUCTS SPECIFIED. CONTRACTOR SHALL SUBMIT DOCUMENTED CONFIRMATION THAT ALL OF THE CONTRACTOR'S PERSONNEL INSTALLING ANCHORS HAVE RECEIVED THE REQUIRED TRAINING PRIOR TO THE COMMENCEMENT OF WORK.
9. ANCHOR CAPACITY IS DEPENDANT UPON SPACING BETWEEN ADJACENT ANCHORS AND PROXIMITY OF ANCHORS TO EDGE OF CONCRETE. INSTALL ANCHORS IN ACCORDANCE WITH SPACING AND EDGE CLEARANCES INDICATED ON THE DRAWINGS.
10. CONTINUOUS OR PERIODIC SPECIAL INSPECTION FOR POST INSTALLED ANCHORS SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 4 3/4.4 OF THE ICC-ES REPORT FOR THE INDIVIDUAL ANCHOR. SPECIAL INSPECTOR SHALL BE NOTIFIED PRIOR TO COMMENCEMENT OF WORK TO COORDINATE INSPECTION EFFORTS.
11. THE SPACING, MINIMUM EMBEDMENT, AND INSTALLATION OF THE ANCHORS SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDED PROCEDURES.
12. ANCHOR RODS USED IN ADHESIVE ANCHORAGE SYSTEMS SHALL CONFORM TO THE MANUFACTURER'S RECOMMENDED STEEL.
13. STUD ANCHORS SHALL CONFORM TO ASTM A108 AND THE NUTS SHALL CONFORM TO ASTM A563.
14. ANCHORS EXPOSED TO EARTH OR WEATHER SHALL BE PROTECTED FROM CORROSION BY HOT-DIP GALVANIZING OR USE OF STAINLESS STEEL. PERMANENTLY EXPOSED EMBEDDED PLATES AND ANGLES SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION, UNLESS NOTED OTHERWISE.
15. NO LOADS OR WELDS SHALL BE PLACED ON EMBEDDED PLATES OR ANGLES FOR A MINIMUM OF 7 DAYS AFTER CASTING. IN ACCORDANCE WITH ACI 318 SECTION D.2.2 ADHESIVE ANCHORS SHALL NOT BE INSTALLED FOR A MINIMUM OF 21 DAYS AFTER CASTING.

7.0 - CONCRETE REPAIR NOTES

1. ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE CONTRACT DOCUMENTS, THE LATEST EDITIONS OF ACI 562, ACI 563, ACI 546R, ACI 318, APPLICABLE ICRI GUIDELINES, AND ALL GOVERNING CODES AND REGULATIONS.
2. REPAIR AREAS SHOWN ON THE DRAWINGS ARE APPROXIMATE. THE ACTUAL LIMITS OF REPAIR SHALL BE DETERMINED IN THE FIELD BASED ON SOUNDING, VISUAL OBSERVATION, AND THE EXTENT OF DETERIORATED OR DE-LAMINATED CONCRETE.
3. REMOVE ALL UNSOUND, DE-LAMINATED, DETERIORATED, AND/OR CONTAMINATED CONCRETE TO EXPOSE SOUND SUBSTRATE. SAWCUT THE PERIMETER OF ALL REPAIRS TO A MINIMUM DEPTH OF 1" UNO AND PROVIDE SQUARE EDGES. FEATHER EDGES SHALL NOT BE PERMITTED.
4. CONCRETE REMOVAL OPERATIONS SHALL NOT DAMAGE REMAINING SOUND CONCRETE OR REINFORCING STEEL OR SOUND ADJACENT STRUCTURAL ELEMENTS. EXISTING REINFORCING STEEL SHALL NOT BE CUT OR DAMAGED WITHOUT WRITTEN APPROVAL OF THE ENGINEER.
5. EXPOSED REINFORCING STEEL SHALL BE CLEANED OF ALL RUST, SCALE, AND OTHER DELETERIOUS MATERIALS BY ABRASIVE BLASTING TO A NEAR-WHITE/SHINY METAL FINISH. REINFORCING STEEL EXHIBITING GREATER THAN 20 PERCENT SECTION LOSS SHALL BE REPLACED WITH SPLICING OF NEW REINFORCING STEEL AS DIRECTED BY THE ENGINEER.
6. ALL REPLACEMENT OR SUPPLEMENTAL REINFORCING STEEL SHALL MATCH THE SIZE, GRADE, AND DETAILING REQUIREMENTS SHOWN ON THE DRAWINGS. REINFORCING STEEL SHALL BE SECURELY SUPPORTED AND MAINTAINED IN ITS PROPER POSITION DURING CONCRETE PLACEMENT.
7. REPAIR MATERIALS SHALL BE STRUCTURAL-GRADE, NON-SHRINK, AND COMPATIBLE WITH THE EXISTING CONCRETE SUBSTRATE. REPAIR MATERIAL COMPRESSIVE STRENGTH SHALL BE EQUAL TO OR GREATER THAN THE EXISTING CONCRETE AT 28 DAYS UNLESS OTHERWISE NOTED.
8. PRIOR TO PLACEMENT OF REPAIR MATERIALS, ALL REPAIR SURFACES SHALL BE CLEAN, SOUND, AND FREE OF DUST, OIL, GREASE, CURING COMPOUNDS, AND OTHER CONTAMINANTS. PREPARE SURFACES IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN RECOMMENDATIONS.
9. CONCRETE SUBSTRATES SHALL BE BROUGHT TO A SATURATED SURFACE DRY (SSD) CONDITION PRIOR TO PLACEMENT OF REPAIR MATERIALS UNLESS OTHERWISE RECOMMENDED BY THE MANUFACTURER. REMOVE ALL STANDING WATER BEFORE PLACEMENT.
10. PLACE, CONSOLIDATE, FINISH, AND CURE ALL REPAIR MATERIALS IN STRICT ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS. REPAIRED SURFACES SHALL MATCH THE ADJACENT CONCRETE IN PROFILE, TEXTURE, AND FINISH.
11. PROVIDE POSITIVE DRAINAGE AT ALL REPAIRED HORIZONTAL SURFACES. LOW AREAS CAPABLE OF RETAINING WATER SHALL NOT BE PERMITTED.
12. STRUCTURAL CRACKS DESIGNATED FOR REPAIR SHALL BE PRESSURE-INJECTED WITH EPOXY RESIN. CRACKS EXHIBITING ACTIVE MOVEMENT SHALL BE EVALUATED BY THE ENGINEER PRIOR TO REPAIR.
13. PROTECT REPAIR MATERIALS FROM PREMATURE DRYING, MOISTURE LOSS, RAIN, FREEZING TEMPERATURES, VIBRATION, AND MECHANICAL DAMAGE UNTIL FULLY CURED.
14. FINISHED REPAIR SURFACES SHALL BE TRUE TO LINE AND GRADE AND SHALL TRANSITION SMOOTHLY INTO ADJACENT SURFACES. OFFSETS GREATER THAN 1/8 IN. SHALL NOT BE ACCEPTED.
15. THE ENGINEER SHALL BE NOTIFIED A MINIMUM OF 48 HOURS PRIOR TO CONCRETE REMOVAL AND PRIOR TO PLACEMENT OF REPAIR MATERIALS. ALL REPAIR AREAS SHALL BE OBSERVED AND ACCEPTED BEFORE REPAIR MATERIALS ARE INSTALLED.
16. THE CONTRACTOR SHALL PROTECT ADJACENT CONSTRUCTION, UTILITIES, EQUIPMENT, AND FINISHED SURFACES FROM DAMAGE RESULTING FROM REPAIR OPERATIONS AND SHALL REPAIR ANY DAMAGE CAUSED BY THE WORK AT NO ADDITIONAL COST TO THE OWNER.
17. REMOVE AND LEGALLY DISPOSE OF ALL DEMOLISHED MATERIALS AND CONSTRUCTION DEBRIS. LEAVE THE SITE CLEAN AND FREE OF WASTE MATERIALS UPON COMPLETION OF THE WORK.
18. ALL REPAIRS SHALL BE COMPLETED IN ACCORDANCE WITH THE PROJECT DRAWINGS, SPECIFICATIONS, AND THE MANUFACTURER'S WRITTEN REQUIREMENTS. IN THE EVENT OF A CONFLICT, THE MORE STRINGENT REQUIREMENT SHALL GOVERN.

SNOW DESIGN LOAD SCHEDULE
INTERNATIONAL BUILDING CODE 2021 NEW JERSEY EDITION /ASCE 7-16

ITEM	SYMBOL	VALUE	REFERENCE
GROUND SNOW LOAD	Pg	25 psf	FIGURE 1608.2
SNOW EXPOSURE FACTOR	Ce	1.0	TABLE 7.3-1
SNOW LOAD IMPORTANCE FACTOR	Is	1.1	TABLE 1.5-2
THERMAL FACTOR	Ct	1.0	TABLE 7.3-2
FLAT-ROOF SNOW LOAD	Pf	22 psf	SECTION 7.3

LATERAL LOAD SCHEDULE IN ACCORDANCE WITH
INTERNATIONAL BUILDING CODE 2021 NEW JERSEY EDITION /ASCE 7-16

WIND DESIGN CRITERIA	
RISK CATEGORY, (TABLE 1604.5)	III
BASIC WIND SPEED, Vult (3-SECOND GUST), (FIGURE 1609.3)	126 MPH
EXPOSURE CATEGORY, (SECT. 1609.4)	B
INTERNAL WIND PRESSURE COEFFICIENT (GCpi)	+/- 0.18
INTERNAL WIND PRESSURE	+/- 5 PSF

SEISMIC DESIGN CRITERIA	
SITE CLASS, (TABLE 20.3-1)	D - DEFAULT
SEISMIC IMPORTANCE FACTOR (Ie), (TABLE 1.5-2)	1.25
SPECTRAL RESPONSE ACCELERATION AT SHORT PERIODS, (FIGURE 22-1) (Ss)	25.80%g
SPECTRAL RESPONSE ACCELERATION AT A 1-SECOND PERIOD, (FIGURE 22-2) (S1)	5.6%g
DESIGN SPECTRAL RESPONSE ACCELERATION PARAMETER, (EQUATION 11.4-3), (Sds)	0.274
DESIGN SPECTRAL RESPONSE ACCELERATION PARAMETER, (EQUATION 11.4-4), (Sd1)	0.089
SEISMIC DESIGN CATEGORY, (TABLE 11.6-1 & 11.6-2)	B

GRAVITY DESIGN LOAD SCHEDULE
(ALL LOADS ARE IN POUNDS PER SQUARE FOOT)

COMPONENT \ AREA	GROUND FLOOR
8" THICK ELEVATED NW CONCRETE SLAB	100 PSF
MECHANICAL DUCT ALLOWANCE	5 PSF
SPRINKLERS, LIGHT, ETC	5 PSF
MISC FILL & FINISHES	20 PSF
TOTAL DEAD LOAD	130 PSF
MINIMUM LIVE LOAD (BC TABLE 1607.1)	250 PSF *
TOTAL LOAD	380 PSF

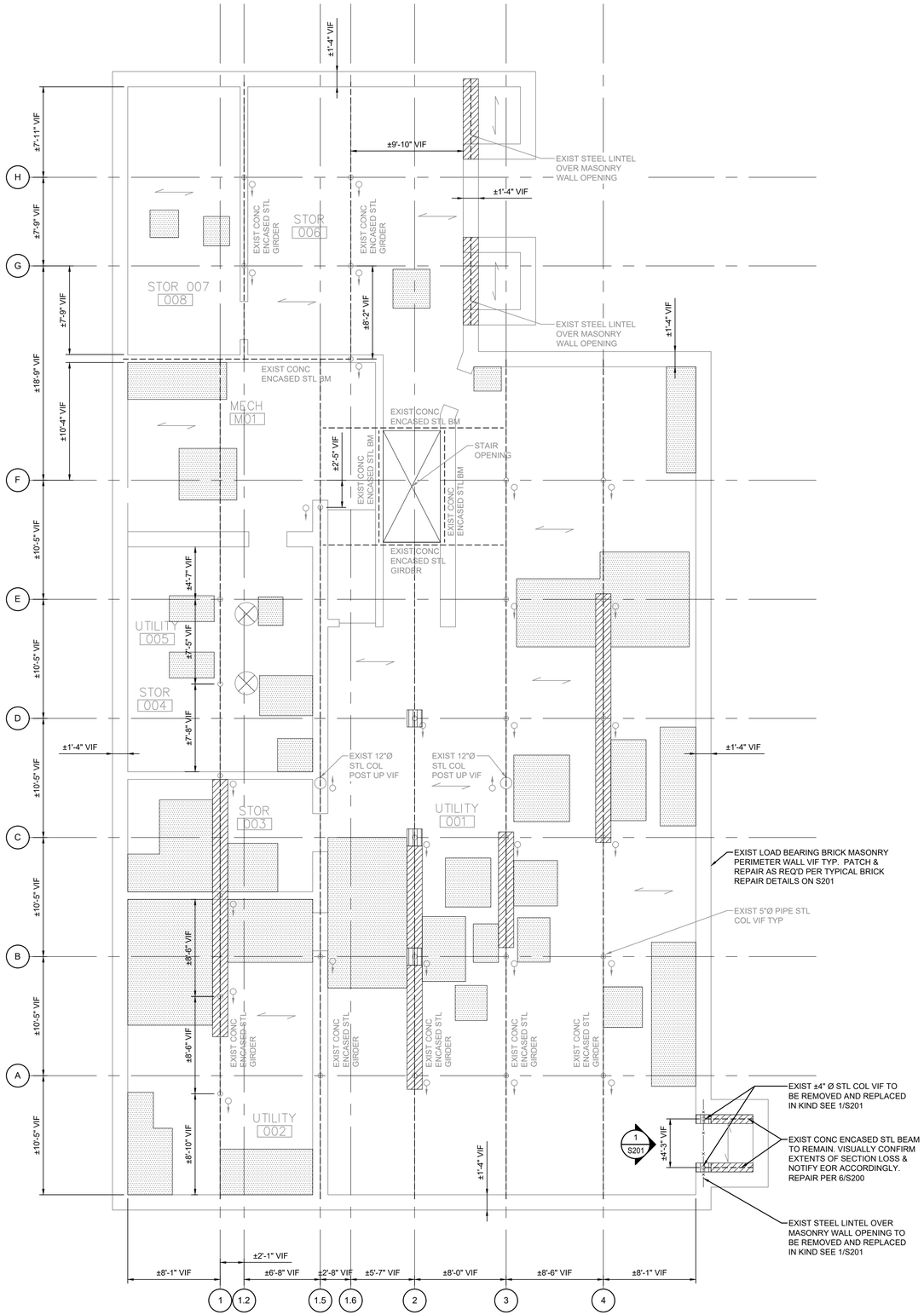
* - OR EQUIPMENT WEIGHT WHICHEVER GOVERNS.

SPECIAL INSPECTION ITEMS
(AS REQUIRED BY IBC NJ 2021)

INSPECTION	CODE REFERANCE	STANDARD
STEEL CONSTRUCTION	NJBC 1705.2	SEE NOTE #1
CONCRETE CONSTRUCTION	NJBC 1705.3	SEE NOTE #1

NOTE #1 - INSPECTION TO BE PERFORMED IN ACCORDANCE WITH THE REFERENCED STANDARD WHERE INSPECTIONS ARE DEFINED.

INSPECTION	CODE REFERANCE	STANDARD	CONTINUOUS	PERIODIC
POST-INSTALLED ADHESIVE ANCHORS IN HARDENED CONCRETE MEMBERS	NJBC 1705.3 (ACI 318:17.8.2.4)		X



1/S100 - FIRST FLOOR STRUCTURAL REPAIR PLAN

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

NOTES:

1. ALL DIMENSIONS TO BE COORDINATED WITH ARCHITECTURAL DRAWINGS.
2. GC SHALL FIELD VERIFY ALL EXISTING CONDITIONS, DIMENSIONS, & ELEVATIONS AND SHALL COORDINATE THIS INFORMATION WILL ALL RESPECTIVE TRADES & DISCIPLINES.
3. GC TO PROVIDE ANY REQ'D TEMPORARY SHORING IN ORDER TO FACILITATE REPAIR WORK.
4. GC TO TEMPORARILY RE-LOCATE ANY EXISTING UTILITIES INCLUDING DUCTWORK, PLUMBING, ELECTRICAL CONDUITS, ETC. IN ORDER TO FACILITATE REPAIR WORK. REFER TO ARCH AND MEP DRAWINGS FOR MORE INFO.
5. EXTENTS OF DAMAGED AREAS SHOWN ARE APPROXIMATE. GC SHALL VERIFY CONDITIONS IN THE FIELD & APPLY THE REQUIRED APPLICABLE REPAIR DETAILS. IF THERE ARE DAMAGED AREAS THAT ARE NOT INDICATED ON PLAN, THE GC SHALL NOTIFY FPA ACCORDINGLY FOR DIRECTION.
6. REFER TO STEEL FRAMING REPAIR SEQUENCE NOTES ON 5/S200 FOR MORE INFORMATION.
7. FOR EXISTING BRICK INFILL WALLS THAT ARE CURRENTLY DAMAGED OR THAT BECOME DAMAGED DUE TO REPAIR WORK TO THE EXISTING DETERIORATED SLABS AND/OR EXISTING STEEL FRAMING, REFER TO THE TYPICAL BRICK REPAIR DETAILS ON S201 FOR MORE INFO.

LEGEND:

- INDICATES EXISTING ±8" THICK ONE-WAY CAST IN PLACE CONCRETE SLAB, VIF
- INDICATES EXISTING COLUMN STARTS OR STOPS AT THIS LEVEL, VIF
- INDICATES EXISTING SLAB DETERIORATION, SEE REPAIR DETAIL 1/S200 FOR MORE INFO. SEE NOTE #5
- INDICATES EXISTING STL BEAM & CONC ENCASEMENT DETERIORATION, SEE REPAIR DETAIL 4/S200 FOR MORE INFO. SEE NOTE #5
- INDICATES EXISTING STEEL COLUMN/POST DETERIORATION, SEE REPAIR DETAIL 6/S200 FOR MORE INFO. SEE NOTE #5
- INDICATES TO DEMOLISH & REMOVE EXISTING DETERIORATED BEAM. GC TO PROVIDE TEMP SHORING AS REQ'D PRIOR TO REMOVAL. REFER TO REPAIR DETAILS FOR REPAIR INFORMATION.

THE DIMENSIONS AND ELEVATIONS SHOWN FOR THE EXISTING CONSTRUCTION ARE NOT AS-BUILT CONDITIONS, BUT WERE OBTAINED FROM FIELD MEASUREMENTS AND OBSERVATION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS, ELEVATIONS, AND MEMBER SIZES AS REQUIRED PRIOR TO BEGINNING CONSTRUCTION, FABRICATION, ETC. NOTIFY EOR OF ANY DISCREPANCIES FROM WHAT IS SHOWN ON DRAWINGS.

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PROJECT NUMBER: 23-154

SUBMISSION:
CONSTRUCTION DOCUMENTS

ORIGINAL ISSUE DATE:
10/23/2026

SHEET REVISION SCHEDULE:

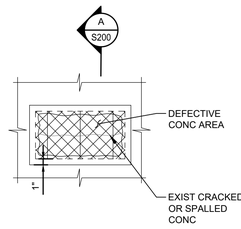
STRUCTURAL
FIRST FLOOR REPAIR PLAN

SHEET NUMBER:
S100

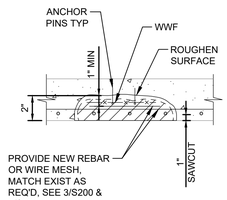
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NOTES:
1. REMOVE DEFECTIVE CONCRETE AS REQUIRED.
2. SAW CUT 1" DEEP AROUND PERIMETER OF VOID. REMOVE REMAINING CONCRETE WITHIN SAW CUT LINES.
3. BLAST CLEAN THE SURFACE AND CLIP TO A 1/8" FRACTURED AGGREGATE SURFACE AND COAT ALL EXPOSED REBAR WITH SIKA ARMATEC-110 OR APPROVED EQUAL. IF EXISTING RE-BAR IS ALSO DETERIORATED, REFER TO 6/S201 FOR REPAIR.
4. INSTALL 1/4"Ø STAINLESS STEEL ANCHOR PINS IN CONCRETE @ 12" OC EACH WAY BY SETTING IN EPOXY PASTE ADHESIVE AND TIE GALVANIZED WIRE FABRIC 2x2-W0.9xW0.9 TO THE SAME.
5. APPLY REPAIRING MORTAR SIKATOP 123-PLUS (OR TO OVERHEAD MORTAR WITH CI), IN MAXIMUM 1-1/2" LIFTS. MORTAR MUST BE SCRUBBED INTO SUBSTRATE.
6. FINISH ALL SURFACES WITH A CORROSION INHIBITING IMPREGNATION COATING, SIKA FERROGAURD 903 OR APPROVED EQUAL.



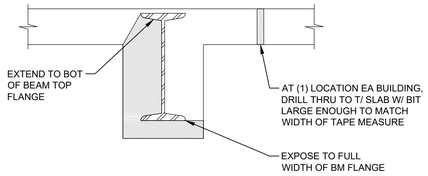
PLAN



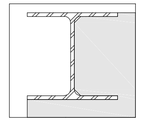
SECTION A-A

1/S200 - DETAIL FOR REPAIR OF UNDERSIDE OF CONCRETE SLAB

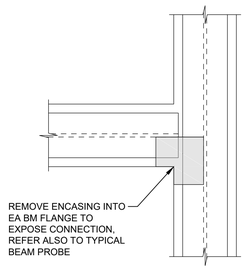
NOT TO SCALE



TYPICAL ENCASING PROBE AT BEAM



TYPICAL ENCASING PROBE AT COLUMN

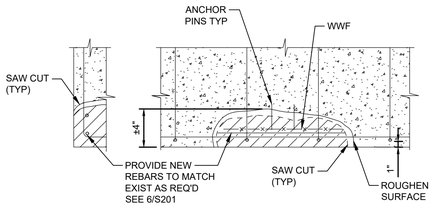


PLAN VIEW

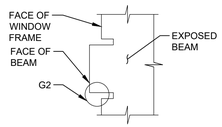
TYPICAL ENCASING PROBE AT BEAM INTERSECTION

2/S200 - TYPICAL PROBE DETAIL

NOT TO SCALE

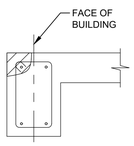


TYPE G2

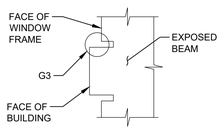


KEY

NOTES:
1. REMOVE DEFECTIVE CONCRETE AS REQUIRED.
2. SAW CUT 1" DEEP AROUND PERIMETER OF VOID. REMOVE REMAINING CONCRETE WITHIN SAW CUT LINES.
3. BLAST CLEAN THE SURFACE AND CLIP TO A 1/8" FRACTURED AGGREGATE SURFACE AND COAT ALL EXPOSED REBAR WITH SIKA ARMATEC-110 OR APPROVED EQUAL.
4. INSTALL 1/4"Ø STAINLESS STEEL ANCHOR PINS IN CONCRETE @ 12" OC EACH WAY BY SETTING IN EPOXY PASTE ADHESIVE AND TIE GALVANIZED WIRE FABRIC 2x2-W0.9xW0.9 TO THE SAME.
5. APPLY REPAIRING MORTAR SIKATOP 123-PLUS (OR TO OVERHEAD MORTAR WITH CI), IN MAXIMUM 1-1/2" LIFTS. MORTAR MUST BE SCRUBBED INTO SUBSTRATE.
6. FINISH TO MATCH ADJOINING SURFACES.



TYPE G3

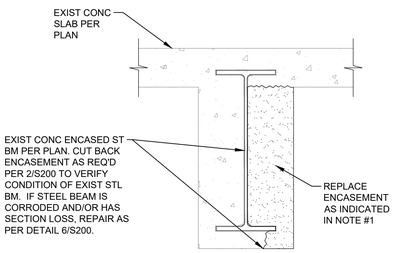


KEY

HORIZONTAL TOPSIDE BEAM SPALL (EXTERIOR CONCRETE REPAIR)

3/S200 - SPALLED CONCRETE REPAIR DETAILS

NOT TO SCALE



NOTES:
1. REMOVE DAMAGED ENCASEMENT BASED ON FIELD CONDITIONS AND OBSERVATIONS AND REPAIR ENCASEMENT SAME AS ORIGINAL CONDITION AFTER NEW BM IS INSTALLED. USE A PATCHING/REPAIR MORTAR SUCH AS SIKA TOP 123 PLUS OR AN APPROVED EQUAL AND FOLLOW ALL MANUFACTURER'S INSTALLATION GUIDELINES.
2. IF DAMAGED BEAM REQUIRES REPAIR PER 6/S200, WELDING TO EXISTING STEEL SHALL BE PERFORMED ONLY AFTER COUPONS HAVE BEEN TAKEN AND TESTED FOR VERIFICATION OF PROPER WELDING ELECTRODES. PROVIDE TEST RESULTS AND PROVIDE ELECTRODES FOR APPROVAL. AT A MINIMUM LOW HYDROGEN ELECTRODES SHOULD BE USED WHEN WELDING TO EXISTING STEEL.

4/S200 - EXIST CONC ENCASED STL BM REPAIR DETAIL

NOT TO SCALE

NOTES:
1. GC TO VIF DAMAGED STRUCTURAL MEMBERS AND NOTIFY EOR OF ADDITIONAL MEMBERS NOT LISTED ON PLAN THAT EXHIBIT SIGNS OF DAMAGE.
2. PROBE EXIST FRAMING PER 2/S200. NOTIFY EOR OF OBSERVED CORROSION.
3. WHERE OCCURS, REPAIR CONCRETE ENCASED STEEL FRAMING PER 4/S200 AND 6/S200.
4. REPAIR EXIST SLAB WHERE OCCURS PER 1/S200 AND 3/S200.
5. REFER TO GENERAL NOTES FOR CONC NOTES AND REINFORCING INFORMATION.

5/S200 - EXISTING STEEL FRAMING REPAIR SEQUENCE

NOT TO SCALE

NOTES:

STEP 1:
THE CONTRACTOR SHALL SCRAPE CLEAN AND REMOVE ALL SURFACE RUST AND/OR LOOSE DELAMINATED STEEL DOWN TO SOUND STEEL.

STEP 2:
THE CONTRACTOR SHALL MEASURE THE SECTION OF THE MEMBER INCLUDING THE OVERALL DEPTH, FLANGE WIDTH, FLANGE THICKNESS, ETC. TO DETERMINE THE DEGREE OF SECTION LOSS THAT HAS OCCURRED. THIS IS TO BE COMPARED TO THE ORIGINAL SECTION OF THE MEMBER NOTED ON PLAN OR FROM FIELD VERIFICATION OF OTHER SIMILAR MEMBERS AND EXPRESSED AS A PERCENTAGE OF SECTION LOSS. SEE ALSO ATTACHED SKETCH.

STEP 3:

A. IF THE SECTION LOSS HAS OCCURRED IS BETWEEN 0% <_10% - THE CONTRACTOR SHALL PAINT THE CLEANSED STEEL MEMBER WITH A RUST INHIBITIVE PAINT.

B. IF THE SECTION LOSS HAS OCCURRED IS BETWEEN 10% <_25% - THE CONTRACTOR SHALL PROVIDE A COVER PLATE (ASTM A572 GR.50) WELDED TO THE FLANGE AND/OR WEB (WHERE THE SECTION LOSS HAS OCCURRED) EQUAL TO THE THICKNESS OF THE EXISTING FLANGE AND/OR WEB (USE 1/2" THICK PLATE MIN) MINUS 1" (FLANGE) AND/OR MINUS 3" (WEB) TO ALLOW FOR WELDING. NOTIFY ENGINEER OF LENGTH AND LOCATION OF OBSERVED SECTION LOSS AND ENGINEER WILL CONFIRM LENGTH AND WELDING OF COVER PLATE(S).

THE CONTRACTOR SHALL THEN PAINT THE REINFORCED STEEL MEMBER WITH A RUST INHIBITIVE PAINT. IF THE MEMBER IS TO BE RE-ENCASED IN CONCRETE OR TO BE FIREPROOFED, REFER TO THE ARCHITECTURAL DRAWINGS AND/OR SPECIFICATION FOR FINISH REQUIREMENTS.

ALTERNATE DETAILS MAY BE PROPOSED BY THE CONTRACTOR TO ACCOMMODATE FIELD CONDITIONS AND FINAL ARCHITECTURAL/MEP REQUIREMENTS. CONTRACTOR TO SUBMIT ALTERNATE DETAILS TO EOR FOR REVIEW AND APPROVAL.

SEE ALSO ATTACHED SKETCH.

C. IF THE SECTION LOSS THAT HAS OCCURRED IS BETWEEN 25% ≤ 50% - THE CONTRACTOR SHALL WELD A WT (ASTM A992 GR. 50) TO THE FLANGE OF THE EXISTING MEMBER (BOTTOM FLANGE FOR BEAMS; FLANGE PENDING REVIEW BY EOR FOR COLUMNS). THE WT SHALL BE THE CORRESPONDING SIZE OF THE MEMBER BEING REINFORCED CUT IN HALF. FOR EXAMPLE, IF THE MEMBER BEING REINFORCED IS A W8x31, THE WT TO BE ADDED WILL BE A WT4x15.5. THE WT TO BE PLACED SHALL BE DETERMINED BY THE EOR BASED ON FIELD INFORMATION PROVIDED BY CONTRACTOR.

COVER PLATES SHALL ALSO BE WELDED TO THE WEB OF THE MEMBER (ASTM A572 GR. 50) ON EACH SIDE IF SECTION LOSS HAS ALSO OCCURRED AT THE WEB EQUAL TO THE THICKNESS OF THE EXISTING WEB (USE 1/2" THICK PLATE MINIMUM) MINUS 3" TO ALLOW FOR WELDING.

FOR ROUND STEEL COLUMNS, IF SECTION LOSS IS GREATER THAN 25% IT SHOULD BE REMOVED & REPLACED IN-KIND.

THE CONTRACTOR SHALL THEN PAINT THE REINFORCED STEEL MEMBER WITH A RUST INHIBITIVE PAINT. IF THE MEMBER IS TO BE RE-ENCASED IN CONCRETE OR TO BE FIREPROOFED, REFER TO THE ARCHITECTURAL DRAWINGS AND/OR SPECIFICATIONS FOR FINISH REQUIREMENTS.

ALTERNATE DETAILS MAY BE PROPOSED BY THE CONTRACTOR TO ACCOMMODATE FIELD CONDITIONS AND FINAL ARCHITECTURAL/MEP REQUIREMENTS. CONTRACTOR TO SUBMIT ALTERNATE DETAILS TO EOR FOR REVIEW AND APPROVAL.

SEE ALSO ATTACHED SKETCH.

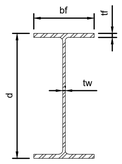
D. IF THE SECTION LOSS THAT HAS OCCURRED IS > 50% - THE CONTRACTOR SHALL REMOVE AND REPLACE THE MEMBER IN-KIND. THE CONTRACTOR SHALL PROVIDE THE REQUIRED TEMPORARY SHORING/BRACING IN ORDER TO REMOVE THE MEMBER, INSTALL THE NEW IN-KIND MEMBER, AND RE-CONNECT THE EXISTING FRAMING TO THE NEW MEMBER.

IF THE NEW MEMBER IS TO BE RE-ENCASED IN CONCRETE OR IS TO BE FIREPROOFED, REFER TO THE ARCHITECTURAL DRAWINGS AND/OR SPECIFICATIONS FOR FINISH REQUIREMENTS.

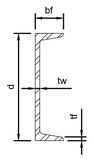
CONTRACTOR IN COORD/W/AOR & EOR SHALL PREPARE & SUBMIT DETAILS FOR REVIEW & APPROVAL FOR THE REPLACEMENT OF EXISTING MEMBERS W/SECTION LOSS > 50%.

6/S200 - CORRODED STEEL BEAM/COLUMN REPAIR DETAIL

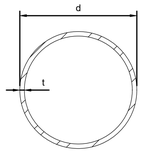
NOT TO SCALE



WF OR I OR S BEAM/GIRDER OR COLUMN

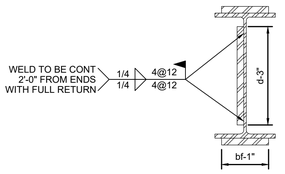


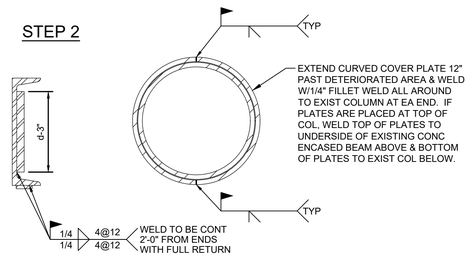
CHANNEL



ROUND STEEL COLUMN

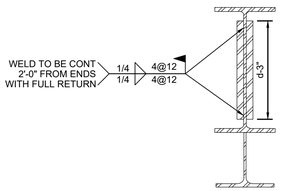
STEP 2

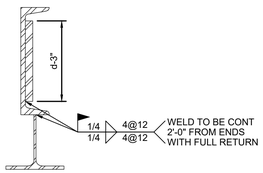




NOTES:
NOTE THAT EXTENTS OF AND DETAILS OF WELD ARE SUBJECT TO REVIEW BY EOR FOR EACH CASE. DO NOT PROCEED WITHOUT DIRECTION FROM EOR.

STEP 3B





NOTES:
NOTE THAT EXTENTS OF AND DETAILS OF WELD ARE SUBJECT TO REVIEW BY EOR FOR EACH CASE. DO NOT PROCEED WITHOUT DIRECTION FROM EOR.

STEP 3C

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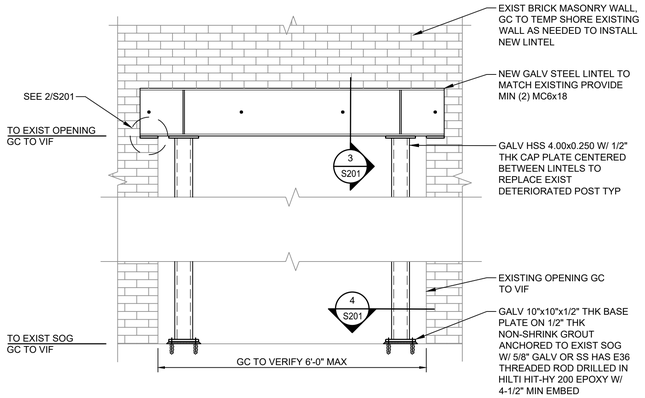
SHEET REVISION SCHEDULE:

STRUCTURAL
REPAIR DETAILS 1

SHEET NUMBER:
S200

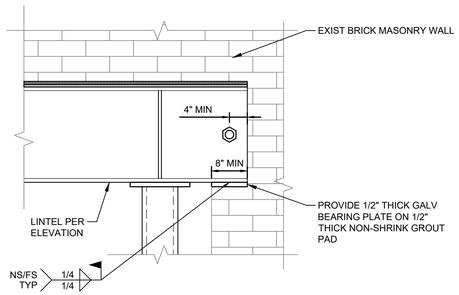
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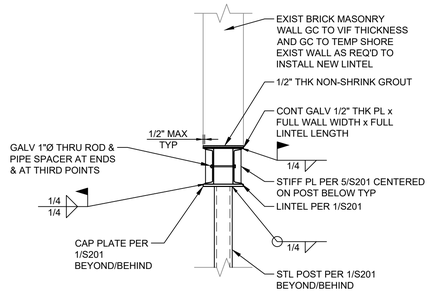
1S201 - NEW LINTEL IN EXISTING BRICK MASONRY WALL

NOT TO SCALE



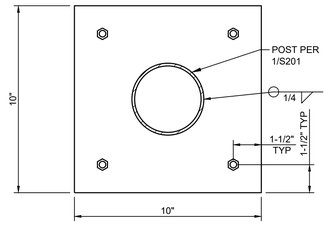
2S201 - LINTEL AT BEARING ENDS

NOT TO SCALE



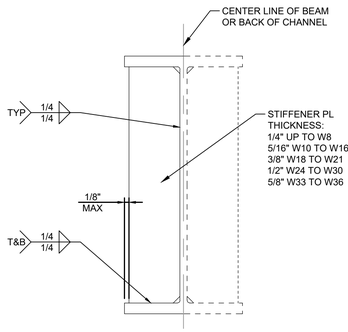
3S201 - SECTION THRU NEW LINTEL

NOT TO SCALE



4S201 - POST BASE PLATE DETAIL

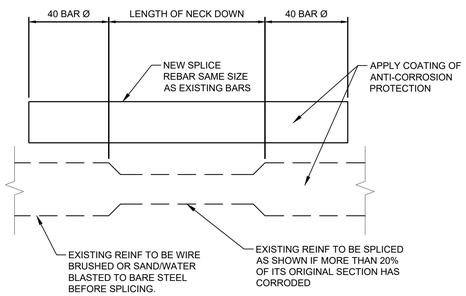
NOT TO SCALE



NOTE:
PROVIDE STIFF BOTH SIDES OF BM UNLESS NOTED OTHERWISE ON PLAN. USE THIS DETAIL WHEN STIFF INFO NOT OTHERWISE NOTED.

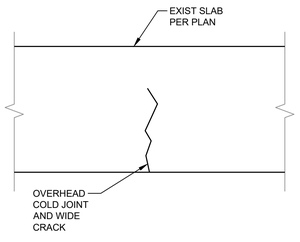
5S201 - STANDARD STIFFENER

NOT TO SCALE



6S201 - TYPICAL REBAR PREPARATION AND SPLICE DETAIL

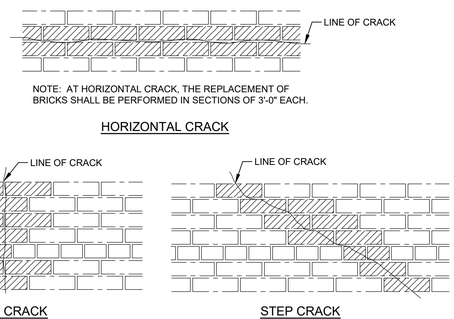
NOT TO SCALE



REPAIR STEPS:
1. PROPERLY CLEAN CRACK.
2. PROPERLY INSTALL ONE-WAY POLYETHYLENE VALVES OR GROMMETS OVER THE CRACK AND SEAL ENTRY AREA AROUND PORT WITH SIKADUR 31 (OR APPROVED EQUAL).
3. INJECT SIKADUR 33 (OR APPROVED EQUAL) EPOXY ADHESIVE INTO CRACK WITH STEADY PRESSURE TO FILL CRACK.

7S201 - TYPICAL OVERHEAD CONCRETE CRACK REPAIR DETAIL

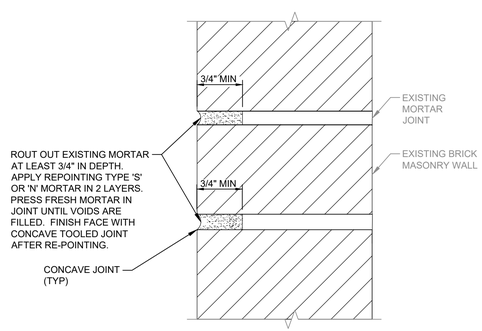
NOT TO SCALE



NOTES:
1. REPLACE HATCHED BRICKS WITH NEW BRICKS TO MATCH EXIST.
2. DO NOT REPLACE HEADER BRICKS IF NOT CRACKED.

8/S201 - TYPICAL DETAIL FOR BRICK STITCHING

NOT TO SCALE



NOTES:
1. ALL RAKING TO BE DONE BY HAND. NO POWER TOOLS ARE ALLOWED.

9/S201 - TYPICAL DETAIL FOR REPOINTING

NOT TO SCALE

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NEW BRUNSWICK FIRE DEPT.
HEADQUARTERS - INTERIOR RENOVATION
93 JOYCE KILMER AVE
NEW BRUNSWICK, NJ 08901

PROJECT NUMBER: 23-154

SUBMISSION:
CONSTRUCTION DOCUMENTS

ORIGINAL ISSUE DATE:
10/23/2026

SHEET REVISION SCHEDULE:

STRUCTURAL
REPAIR DETAILS 2

SHEET NUMBER:
S201

10/21/2026 3:51:14 PM

ELECTRICAL LEGENDS

SYMBOL	DESCRIPTION	COMMENTS
S_3	THREE - WAY SWITCH	46" AFF TO CL UON
S_4	FOUR - WAY SWITCH	46" AFF TO CL UON
S_I	ILLUMINATED SWITCH	46" AFF TO CL UON
S^A	SINGLE POLE SWITCH; "A" INDICATES SWITCH CONTROL	46" AFF TO CL UON
S_D	SINGLE POLE DIMMER SWITCH	46" AFF TO CL UON
S_{3D}	THREE - WAY DIMMER SWITCH	46" AFF TO CL UON
S_K	SINGLE POLE KEYED SWITCH	46" AFF TO CL UON
S_{3K}	KEYED THREE - WAY SWITCH	46" AFF TO CL UON
S_{K4}	KEYED FOUR - WAY SWITCH	46" AFF TO CL UON
S_{4K}	SWITCH AND PILOT LIGHT	
S_T	SWITCH WITH THERMAL OVERLOAD PROTECTION (CONTRACTOR SHALL COORDINATE VOLTAGE AND PHASE WITH EQUIPMENT)	
$S_{OS/VS}$	OCCUPANCY/VACANCY SENSOR WITH MANUAL OVERRIDE, WALL MOUNT	
TC	TIME CLOCK	
E,G	EMERGENCY SHUT OFF SWITCH; 'E' INDICATES ELECTRICAL; 'G' INDICATES GAS	
	2 #12 AWG + #12 AWG GND IN 3/4" E.C. CONCEALED IN WALL OR CEILING	
	3 #12 AWG + #12 AWG GND IN 3/4" E.C. CONCEALED IN OR BELOW SLAB	
LP1-35	DEDICATED HOME RUN TO PANEL LP1 FOR CIRCUIT NO. 35 ONLY. 2 #12 AWG + #12 AWG GND IN 3/4" E.C. CONCEALED IN WALL OR CEILING	
	SIMPLEX RECEPTACLE: 120V, 20A. COORDINATE MOUNTING HEIGHT WITH MECHANICAL CONTRACTOR TO CLEAR BASEBOARDS.	FLUSH
	DUPLEX RECEPTACLE: 120V, 20A. COORDINATE MOUNTING HEIGHT WITH MECHANICAL CONTRACTOR TO CLEAR BASEBOARDS.	FLUSH
	QUAD RECEPTACLE, DOUBLE DUPLEX RECEPTACLE: 120V, 20A. COORDINATE MOUNTING HEIGHT WITH MECHANICAL CONTRACTOR TO CLEAR BASEBOARDS.	FLUSH
C	DUPLEX RECEPTACLE: 120V, 20A; SUBSCRIPT "C" INDICATES CEILING MOUNT.	FLUSH
ADA	DUPLEX RECEPTACLE: 120V, 20A; SUBSCRIPT "ADA" INDICATES DEDICATED FOR ADA DOOR OPENER.	7'-6" AFF TO CL UON
	DUPLEX RECEPTACLE: 120V, 20A; FLOOR MOUNTED.	FLUSH
	QUAD RECEPTACLE: 120V, 20A; FLOOR MOUNTED.	
D/T	DUPLEX RECEPTACLE AND DATA JACK: 120V, 20A; FLOOR MOUNTED.	
D/T	DATA JACK; FLOOR MOUNTED.	
IG	ISOLATED GROUND DUPLEX RECEPTACLE. COORDINATE MOUNTING HEIGHT WITH MECHANICAL CONTRACTOR TO CLEAR BASEBOARDS.	FLUSH
GFCI	DUPLEX RECEPTACLE: 120V, 20A; WITH GROUND FAULT INDICATOR. COORDINATE MOUNTING HEIGHT WITH MECHANICAL CONTRACTOR TO CLEAR BASEBOARDS.	FLUSH
UC	DUPLEX RECEPTACLE: 120V, 20A; SUBSCRIPT "UC" INDICATES UNDER COUNTER	AS PER ENGINEER
CT	DUPLEX RECEPTACLE: 120V, 20A; SUBSCRIPT "CT" INDICATES COUNTER TOP.	AS PER ENGINEER
WP	DUPLEX RECEPTACLE: 120V, 20A; SUBSCRIPT "WP" INDICATED WEATHER PROOF.	AS PER ENGINEER
USB	DUPLEX RECEPTACLE: 120V, 20A; SUBSCRIPT "USB" INDICATES INTEGRAL USB.	FLUSH
40 / 240	SPECIAL PURPOSE OUTLET: 240V, 40A. VERIFY NEMA CONFIGURATION WITH EQUIPMENT MANUFACTURER.	AS PER ENGINEER
TL	TWISTED LOCK RECEPTACLE: 125V, 20A, 3 WIRE; UNLESS OTHERWISE NOTED.	AS PER ENGINEER
	SURFACE RACEWAY WITH 2 GROUNDED AND ISOLATED TYPE DUPLEX RECEPTACLES AND 1 DATA OUTLET PER POSITION, 18" AFF UNLESS OTHERWISE NOTED.	
M_{S1}	MAGNETIC STARTER "S1"; SEE STARTER SCHEDULE	
V_{DS1}	DISCONNECTION SWITCH "DS1"; SEE DISCONNECT SWITCH SCHEDULE.	
J	JUNCTION BOX.	
J_{4X}	NEMA 4X STAINLESS STEEL JUNCTION BOX WITH GASKET COVER.	
J_S	JUNCTION BOX RECESSED IN WALL WITH BLANK COVER. PROVIDE 3/4" E.C. AND DRAG LINE TO ABOVE FINISHED CEILING. MOUNT 18" AFF, UNLESS OTHERWISE NOTED.	
J_M	FOR MONITOR, JUNCTION BOX RECESSED IN WALL WITH BLANK COVER. PROVIDE 3/4" E.C. AND DRAG LINE TO ABOVE FINISHED CEILING.	
J_{HD}	FOR HAND DRYER, JUNCTION BOX RECESSED IN WALL. COORDINATE MOUNTING HEIGHT WITH ARCHITECT. PROVIDE 1" E.C. WITH DRAGLINE UP TO ABOVE CEILING FOR FUTURE USE.	
T_{T1}	TRANSFORMER "T1"; SEE TRANSFORMER SCHEDULE.	
P1	ELECTRICAL PANEL "P1", RECESSED; SEE PANEL SCHEDULE.	
P1	ELECTRICAL PANEL "P1", SURFACE MOUNT; SEE PANEL SCHEDULE.	
	CONDUIT GOING UP.	
	CONDUIT GOING DOWN.	

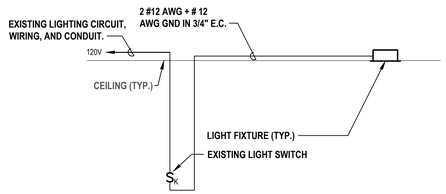
ABBREVIATION	DESCRIPTION	COMMENTS
AFF	ABOVE FINISHED FLOOR	
AFC	ABOVE FINISHED CEILING	
AFCI	ARC FAULT CIRCUIT INTERRUPTER	
AFG	ABOVE FINISHED GRADE	
AHJ	AUTHORITY HAVING JURISDICTION	
AMP, A	AMPERE	
ATS	AUTOMATIC TRANSFER SWITCH; SEE TRANSFER SWITCH SCHEDULE	
AWG	AMERICAN WIRE GAUGE	
BFC	BELOW FINISHED CEILING	
CL	CENTERLINE	
CT	COUNTER TOP	
E.C.	ELECTRICAL CONDUIT	
GFCI	GROUND FAULT CIRCUIT INTERRUPTER	
GFI	GROUND FAULT INDICATOR	
GND	GROUND	
FE	FREEPORT ELECTRIC (LOCAL ELECTRIC UTILITY)	
MCB	MAIN CIRCUIT BREAKER	
MLO	MAIN LUGS ONLY	
N.T.S.	NOT TO SCALE	
TYP	TYPICAL	
UON	UNLESS OTHERWISE NOTED	
UC	UNDER COUNTER	
V	VOLT	
VAC	VOLTS ALTERNATING CURRENT	
VDC	VOLTS DIRECT CURRENT	
X-FMR	TRANSFORMER	
WP	WEATHERPROOF	

SYMBOLS LEGEND

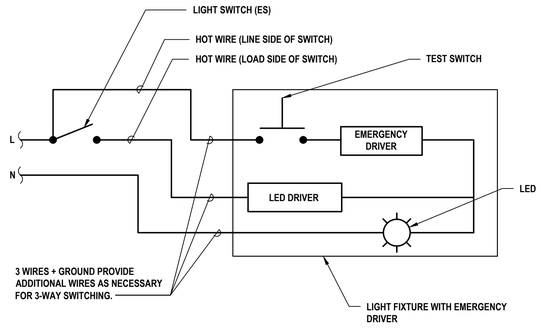
100	ROOM DESIGNATION
5 / A2.2	BUILDING SECTION CUT
5 / A2.2	WALL SECTION CUT
5 / A2.2	DETAIL KEY
5 / A2.2	ELEVATION KEY
H	COLUMN GRID
	ELEVATION LINE
1 Title SCALE:	DRAWING TITLE
4 / 3 5 1 / A2.2 / 2	INTERIOR ELEVATION REFERENCE
# / #	SEE NOTE # ON DWG #

LIGHTING FIXTURE SCHEDULE

DESIGNATION	SYMBOL	MANUFACTURER	MODEL NUMBER	TYPE	WATTS	COLOR TEMPERATURE	VOLTAGE	LUMENS	MOUNTING	REMARKS	MOUNTING HEIGHT	
F1		LITHONIA LIGHTING	SPX-2x2-4000LM-80CRI-35K-3DCP-MVOLT OR EQUAL	LED	27	3500	UNV	4000	RECESSED		CEILING	1 / E 001
F1E		LITHONIA LIGHTING	SPX-2x2-4000LM-80CRI-35K-3DCP-MVOLT-E10WLCP OR EQUAL	LED	27	3500	UNV	4000	RECESSED	EMERGENCY BATTERY BACKUP WITH 90 MINUTES OF CAPACITY	CEILING	1,2 / E 001
F2		MARK ARCHITECTURAL LIGHTING	SPRLED-3FT-RLP-80-30K-400LMF-MVOLT OR EQUAL	LED	10.2	3000	120	1200	RECESSED	-	CEILING	1 / E 001



1 **Typical Detail of Light Fixture With Occupancy Control Sensor**
SCALE: NTS



2 **Typical Detail of Light Fixture With Emergency Ballast**
SCALE: NTS

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NEW BRUNSWICK FIRE DEPT.
HEADQUARTERS - INTERIOR RENOVATION
93 JOYCE KILMER AVE NEW
BRUNSWICK, NJ 08901

PROJECT NUMBER: MWSA2601

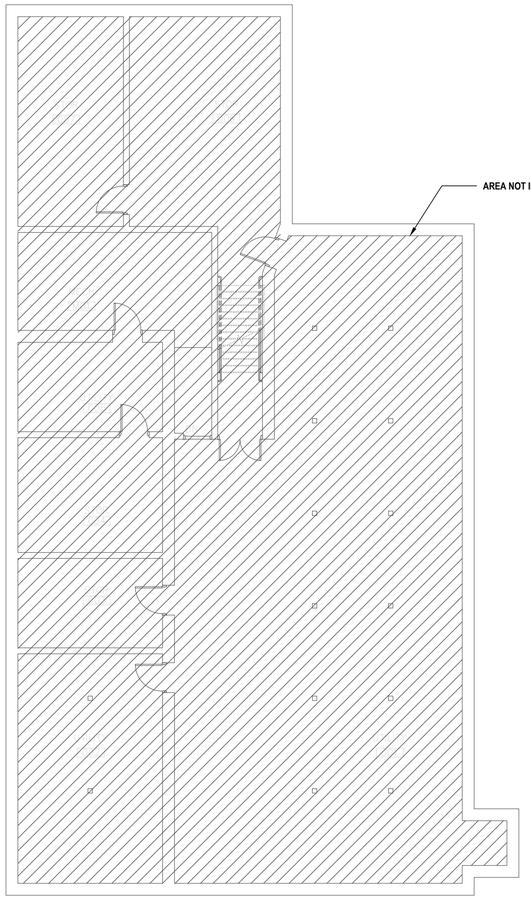
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10/23/2026

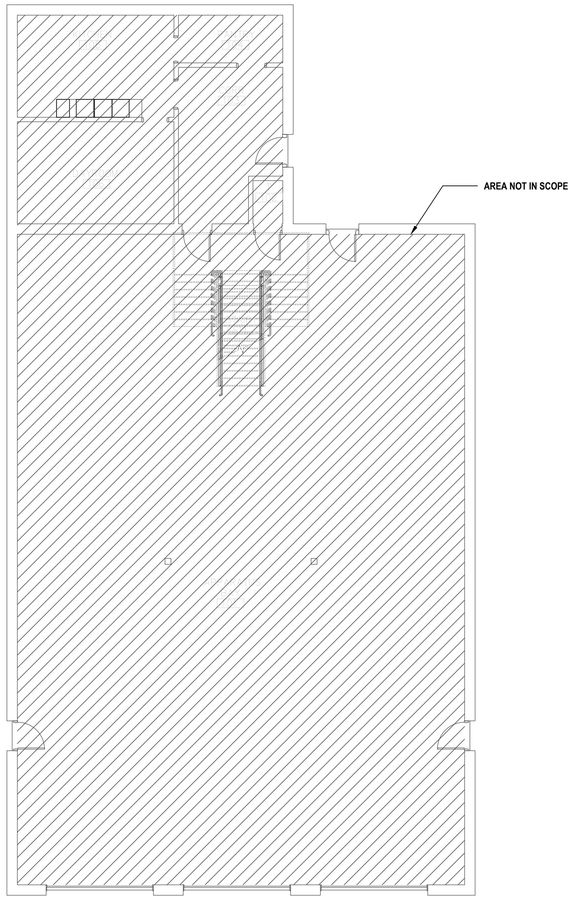
SHEET REVISION SCHEDULE:
No. DATE

ELECTRIC
GENERAL NOTES, LEGENDS AND ABBREVIATIONS
SHEET NUMBER:
E-001

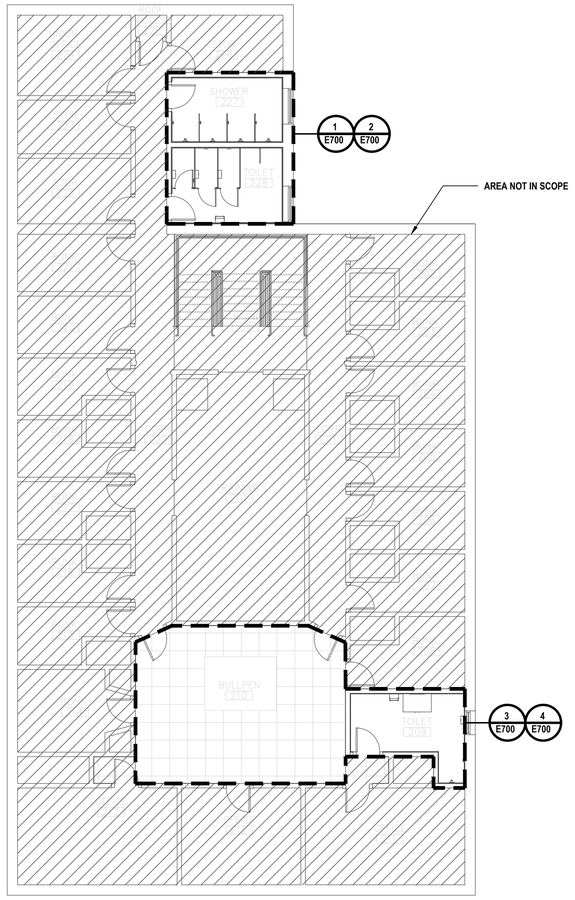
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1 EXISTING BASEMENT PLAN
1/8" = 1'-0"



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



3 NEW SECOND FLOOR PLAN
1/8" = 1'-0"

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NEW BRUNSWICK FIRE DEPT.
HEADQUARTERS - INTERIOR
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93 JOYCE KILMER AVE
BRUNSWICK, NJ 08901

PROJECT NUMBER: MWSA2601

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SHEET REVISION SCHEDULE:
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ELECTRIC
BASEMENT, FIRST FLOOR
AND SECOND FLOOR PLAN
SHEET NUMBER:

E-100

LEGEND

- REMOVE AND DISPOSE OF ITEM IDENTIFIED, U.O.N.

GENERAL ELECTRICAL DEMOLITION NOTES:

DG1. REMOVE AND DISPOSE OF INCLUDES REMOVAL OF ITEM IDENTIFIED INCLUDING ALL CONDUITS, WIRES AND CABLES, BACK TO SOURCE UNLESS OTHERWISE NOTED.

DG2. CONTRACTOR SHALL BE REQUIRED TO MAINTAIN CIRCUIT CONTINUITY FOR ALL EXISTING DEVICES ON A CIRCUIT WHEN THE DRAWINGS CALL FOR REMOVAL AND/OR DISPOSAL OF A DEVICE ON THAT CIRCUIT.

DG3. EXISTING RECEPTACLES IN BATHROOMS TO BE REPLACED IN KIND WITH NEW. MATCHING EXISTING CONFIGURATION. SURFACE MOUNTED CONDUIT AND WIRE TO BE CUT BACK AND REMOVED TO CEILING. PROVIDE NEW JUNCTION BOX IN CEILING. PROVIDE SPICE AND EXTEND CONDUIT AND WIRING AS REQUIRED TO CONNECT TO NEW RECEPTACLE. VERIFY EXACT LOCATION OF RECEPTACLES IN FIELD.

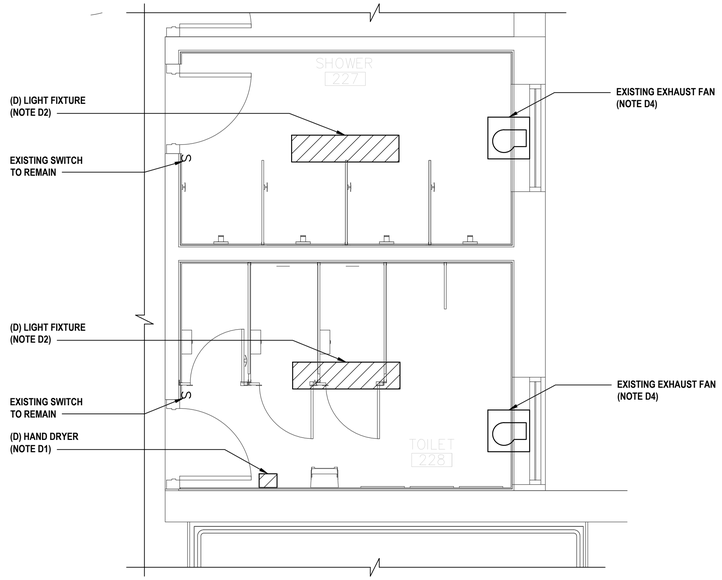
ELECTRICAL DEMOLITION NOTES:

D1. CONTRACTOR SHALL REMOVE AND SALVAGE EXISTING HAND DRYER. EXISTING CIRCUIT, WIRE AND CONDUIT TO REMAIN. PROVIDE AND EXTEND CIRCUIT, WIRING, AND CONDUIT AS REQUIRED TO TERMINATE AT NEW HAND DRYER LOCATION. COORDINATE EXACT LOCATION WITH ARCHITECT IN THE FIELD.

D2. CONTRACTOR SHALL REMOVE AND DISPOSE OF EXISTING LIGHT FIXTURES INCLUDING BUT NOT LIMITED TO BALLAST, BULBS, HOUSING AND ALL WIRE AND CONDUIT BACK TO THE EXISTING LIGHT SWITCH SERVING THE THE ROOM. PROVIDE AND EXTEND WIRE AND CONDUIT FROM EXISTING LIGHT SWITCH TO TERMINATE AT NEW LIGHT FIXTURES. REFER TO ASSOCIATED LIGHTING PLAN FOR ADDITIONAL INFORMATION.

D3. CONTRACTOR SHALL REMOVE AND DISPOSE OF WIRE AND CONDUIT FROM CEILING FAN BACK TO SOURCE.

D4. EXISTING EXHAUST FAN TO REMAIN. CONTRACTOR SHALL REMOVE/ REINSTALL EXISTING WIRING AND CONDUIT TO FACILITATE RENOVATION. PROVIDE AND EXTEND WIRE AND CONDUIT AS REQUIRED TO INTERLOCK EXISTING EXHAUST FAN WITH ASSOCIATED LIGHT SWITCH SERVING THE ROOM.



1 SECOND FLOOR – TOILET & SHOWER ROOM – DEMOLITION PART PLAN
3/8" = 1'-0"

GENERAL ELECTRICAL LIGHTING NOTES:

L1. FIXTURES INDICATED WITH LETTER DESIGNATIONS SHALL BE CONNECTED TO THE SWITCH WITH CORRESPONDING LETTER DESIGNATION.

L2. PROVIDE AND INSTALL A DEDICATED NEUTRAL FOR EACH CIRCUIT. CONTRACTOR IS NOT PERMITTED TO USE COMMON NEUTRALS.

L3. PROVIDE BOX AND ACCESSORIES AS PER MANUFACTURER'S RECOMMENDATION FOR ALL SWITCHES.

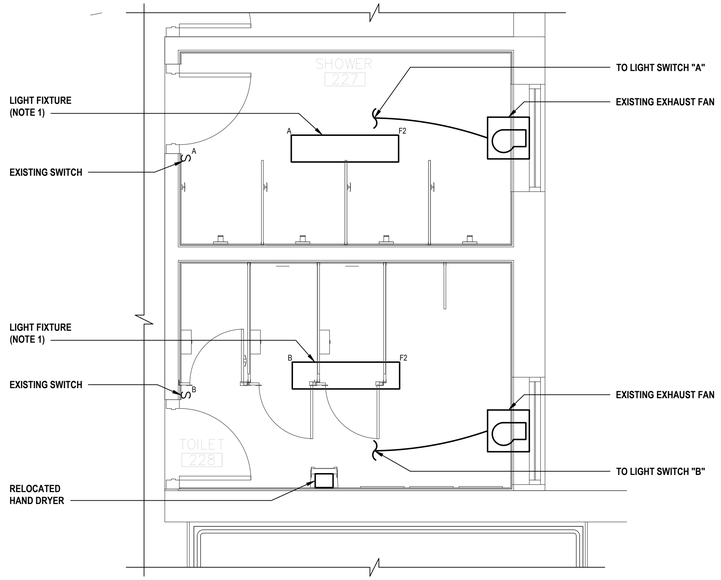
L4. VERIFY EXACT LOCATIONS AND MOUNTING HEIGHTS WITH ARCHITECT/ENGINEER IN FIELD.

L5. ALL CEILING MOUNTED FIXTURES WITH EMERGENCY DRIVER SHALL BE LABELED. THESE LABELS SHALL BE EASILY READ FROM THE FLOOR LEVEL AND STATE THAT THE FIXTURE IS AN EMERGENCY FIXTURE AND CONTAIN THE PANEL NAME AND CIRCUIT NUMBER THAT IT IS FED FROM.

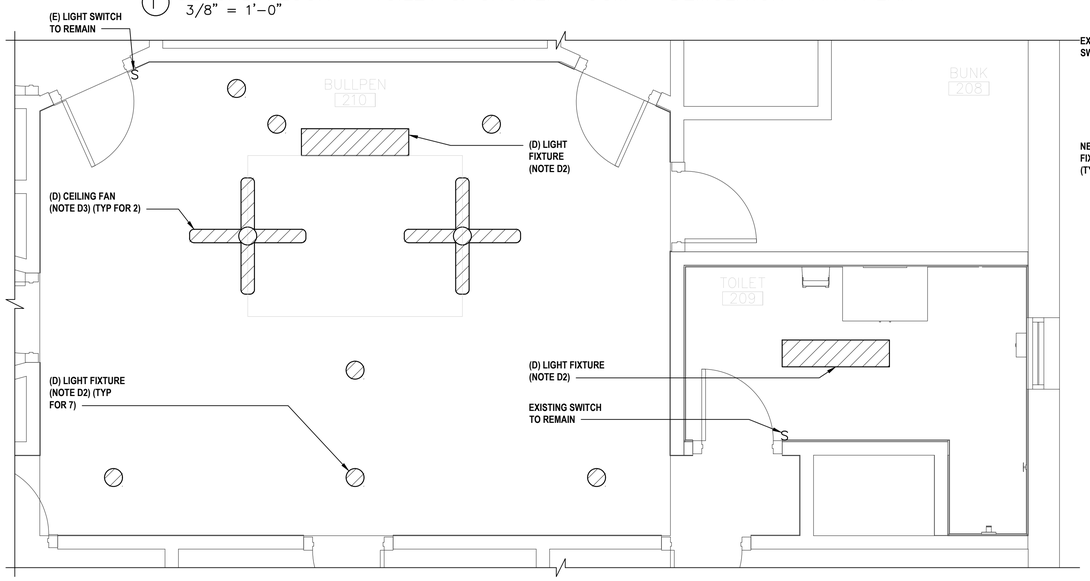
L6. WIRING FOR EMERGENCY DRIVER IS NOT SHOWN ON PLANS. FIXTURES WITH EMERGENCY DRIVER SHALL BE PROVIDED WITH AN UNSWITCHED POWER FEED FROM CIRCUIT FEEDING LIGHT FIXTURE.

ELECTRICAL NOTES:

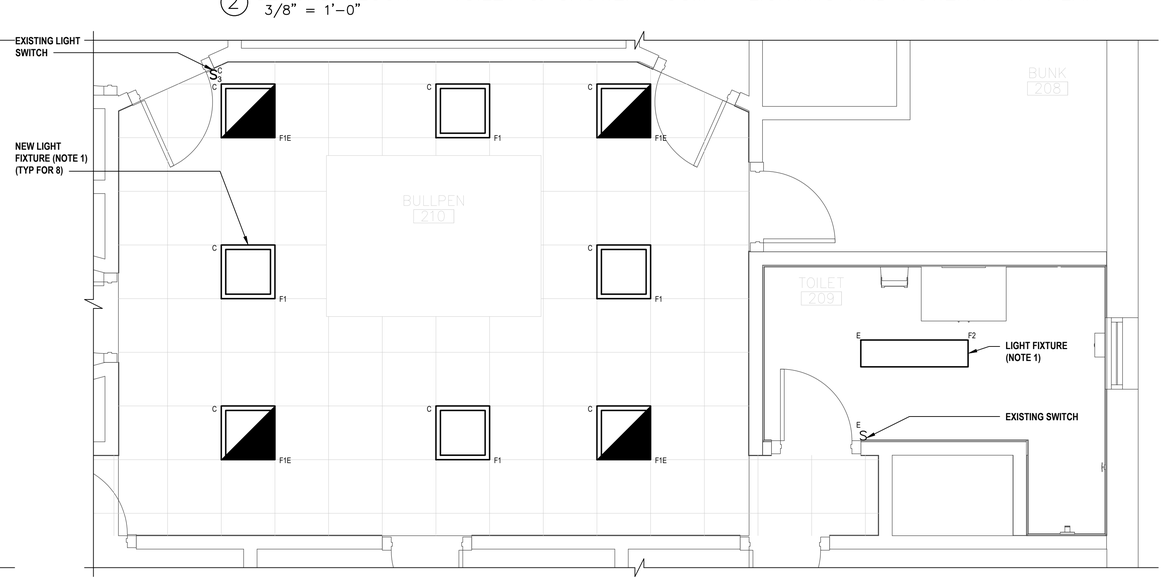
1. CONTRACTOR SHALL PROVIDE AND EXTEND EXISTING WIRE AND CONDUIT FROM THE EXISTING LIGHTING LIGHT SWITCH SERVING THIS ROOM TO TERMINATE AT NEW LIGHT FIXTURE. PROVIDE AND INSTALL ALL MOUNTING HARDWARE AND ACCESSORIES AS REQUIRED. WIRE AND CONDUIT SHALL BE 2 #12 AWG + #12 AWG GND IN 3/4" E.C.



2 SECOND FLOOR – TOILET & SHOWER ROOM – LIGHTING AND POWER PART PLAN
3/8" = 1'-0"



3 SECOND FLOOR – TOILET & SHOWER ROOM – DEMOLITION PART PLAN
3/8" = 1'-0"



4 SECOND FLOOR – TOILET & SHOWER ROOM – LIGHTING AND POWER PART PLAN
3/8" = 1'-0"

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NEW BRUNSWICK FIRE DEPT.
HEADQUARTERS – INTERIOR
RENOVATION
93 JOYCE KILMER AVE NEW
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PROJECT NUMBER: MWSA2601

SUBMISSION:
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ORIGINAL ISSUE DATE:
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SHEET REVISION SCHEDULE:
No. DATE

ELECTRIC
ENLARGED PLANS

SHEET NUMBER:
E-200

LEGEND

SYMBOL	DESCRIPTION
	PIPING UP
	PIPING DOWN
	PIPING RISE OR DROP
	BRANCH-TOP CONNECTION
	BRANCH-BOTTOM CONNECTION
	REDUCER
CO CO	CLEANOUT
	FLOOR CLEANOUT
	CAPPED PIPE
M	METER
	FLOOR DRAIN
	AQUASTAT
	PUMP
	STRAINER
	UNION
	THERMOSTATIC MIXING VALVE
	BALANCING VALVE (BLV)
	GLOBE VALVE (GLV)
	CHECK VALVE (CV)
	GAS COCK, GAS STOP
	BALL VALVE (BV)
	BUTTERFLY VALVE (BFV)
S	SOLENOID VALVE
	PRESSURE-REDUCING VALVE (PRV)
	GATE VALVE (GV)
	PRESSURE-RELIEF VALVE (RV)
	BACKFLOW PREVENTER
	FROST FREE HOSE BIBB
	HOSE BIBB
	RECESSED-BOX HOSE BIBB OR WALL HYDRANT
	EXPANSION JOINT
	WATER HAMMER ARRESTER
	VALVE IN RISER
CO	WALL CLEANOUT (WCO)
	PITCH DOWN OR UP IN DIRECTION OF ARROW
	FLOW IN DIRECTION OF ARROW
	COLD WATER (CW)
	TEMPERED WATER (TW)
	HOT WATER (HW)
	TEMPERED WATER RETURN (TWR)
	HOT WATER RETURN (HWR)
	WASTE PIPING (W,S,OW)
	BELOW SLAB WASTE PIPING
	VENT PIPING (V)
	GAS PIPING (G)
	TO BE REMOVED
	POINT OF CONNECTION
	POINT OF DISCONNECTION

ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR
AV	AIR VENT
BTU	BRITISH THERMAL UNIT
BTUH	BTU PER HOUR
CLG	CEILING
CO	CLEAN OUT
CODP	CLEAN OUT DECK PLATE
COWP	CLEAN OUT WALL PLATE
CW	COLD WATER
(D)	DEMOLISH
DCV	DOUBLE CHECK VALVE DEVICE
DEG. F	° FAHRENHEIT
DIA	DIAMETER
DN	DOWN
(E)	EXISTING
EA	EACH
FAI	FRESH AIR INTAKE
FD	FLOOR DRAIN
G	GAS
'GC'	GENERAL CONSTRUCTION CONTRACTOR
GPM	GALLONS PER MINUTE
GPH	GALLONS PER HOUR
'H'	HVAC CONTRACTOR
HP	HORSEPOWER
HW	HOT WATER
HWR	HOT WATER RETURN
IN.	INCHES
IN. W.C. (W.G.)	INCHES WATER COLUMN (WATER GAUGE)
KW	KILOWATTS
LBS	POUNDS
M	METER
MAX	MAXIMUM
MIN	MINIMUM
NTS	NOT TO SCALE
OD	OUTER DIAMETER
(P)	PROPOSED
'P'	PLUMBING CONTRACTOR
PD	PRESSURE DROP
RD	ROOF DRAIN
RPM	REVOLUTIONS PER MINUTE
RPZ	REDUCED PRESSURE ZONE
SAN / S	SANITARY
ST	STORM DRAIN
TEMP	TEMPERATURE
TYP	TYPICAL
TW	TEMPERED WATER (110°F)
TWR	TEMPERED WATER RETURN
V	VENT
VTR	VENT THROUGH ROOF
W	WASTE

GENERAL PLUMBING NOTES

1. PROVIDE ALL MATERIALS AND EQUIPMENT AND PERFORM ALL LABOR REQUIRED TO INSTALL COMPLETE AND OPERABLE PLUMBING SYSTEMS AS INDICATED ON THE DRAWINGS, AS SPECIFIED AND AS REQUIRED BY CODE.
2. THE CONTRACTOR, BY PRESENTING THEIR BID FOR THE WORK, REPRESENTS THAT HE/SHE HAS INSPECTED THE SITE AND IS COMPLETELY FAMILIAR WITH THE SCOPE OF WORK AND ALL FIELD CONDITIONS RELATED TO, AND AFFECTING THE WORK AND ITS PERFORMANCE. EXCEPTIONS AFFECTING THE WORK AND ITS PERFORMANCE, OR CONFLICTS BETWEEN FIELD CONDITIONS, SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER PRIOR TO THE SUBMISSION OF BIDS.
3. PERFORM ALL WORK IN ACCORDANCE WITH THE 2024 NATIONAL STANDARD PLUMBING CODE, NEW JERSEY EDITION (NJSPC), THE 2024 NEW JERSEY STATE MECHANICAL CODE (NJSMC), THE 2024 NEW JERSEY STATE FUEL GAS CODE, THE 2024 NEW JERSEY STATE FIRE PREVENTION CODE (NJSFC), ENERGY CONSERVATION CODE OF NEW JERSEY (ECCNJ), ASHRAE 90.1-2022, AND THE REQUIREMENTS OF THE LOCAL AUTHORITIES HAVING JURISDICTION.
4. APPLY FOR AND SECURE ALL REQUIRED PERMITS AND INSPECTIONS AND PAY ALL COSTS FOR THE SAME.
5. DO NOT SCALE DRAWINGS. DRAWINGS FOR PLUMBING WORK ARE DIAGRAMMATIC AND ARE INTENDED TO CONVEY SCOPE AND GENERAL ARRANGEMENT ONLY. THE LOCATIONS OF ALL ITEMS SHOWN ON THE DRAWINGS OR CALLED FOR IN THE SPECIFICATIONS THAT ARE NOT DEFINITELY FIXED BY DIMENSIONS ARE APPROXIMATE.
6. COORDINATE CONTRACT DOCUMENTS PROJECT REQUIREMENTS, WORK OF OTHERS, AND EQUIPMENT AND MATERIALS PURCHASED WITH FIELD DIMENSIONS, MANUFACTURERS REQUIREMENTS FOR INSTALLATION, OPERATION, AND MAINTENANCE. CONTRACTORS INTENDED MEANS AND METHODS OF INSTALLATION AND CONTRACTORS FABRICATED ITEMS TO ENSURE A PROPER "FIT" AND INSTALLATION. BRING ANY CONFLICTS TO THE ATTENTION OF THE ARCHITECT/ENGINEER DURING THE SUBMITTAL PHASE FOR RESOLUTION PRIOR TO PURCHASING ANY EQUIPMENT.
7. FIELD VERIFY AND COORDINATE ALL PIPING DIMENSIONS BEFORE FABRICATION. MAKE MODIFICATIONS IN THE LAYOUT AS NEEDED TO PREVENT CONFLICT WITH WORK OF OTHER TRADES OR FOR PROPER EXECUTION OF THE WORK. OBTAIN THE APPROVAL OF THE ARCHITECT/ENGINEER FOR MODIFICATIONS.
8. PROVIDE PRODUCTS OF ONE MANUFACTURER WHERE TWO OR MORE ITEMS OF THE SAME TYPE OF MATERIAL OR EQUIPMENT IS REQUIRED.
9. INSTALL ALL EQUIPMENT AND APPURTENANCES IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS, CONTRACT DOCUMENTS, AND APPLICABLE CODES AND REGULATIONS. REFER TO DETAILS FOR ADDITIONAL PIPING AND EQUIPMENT INSTALLATION REQUIREMENTS.
10. LOCATE ALL TEMPERATURE, PRESSURE, AND FLOW MEASURING DEVICES IN ACCESSIBLE LOCATIONS WITH STRAIGHT SECTION OF PIPE UP- AND DOWNSTREAM AS RECOMMENDED BY THE MANUFACTURER TO ENSURE MANUFACTURER CERTIFIED ACCURACY.
11. COORDINATE ALL EQUIPMENT CONNECTIONS WITH MANUFACTURER'S CERTIFIED DRAWINGS. COORDINATE AND PROVIDE ALL PIPING TRANSITIONS REQUIRED FOR FINAL CONNECTIONS TO EQUIPMENT.
12. COORDINATE LOCATIONS AND SIZES OF ALL FLOOR, WALL, AND ROOF OPENINGS WITH ALL OTHER TRADES. COORDINATE ALL PIPING AND EQUIPMENT SUPPORTED FROM STRUCTURE WITH GENERAL CONSTRUCTION WORK.
13. COMPLETE ALL PRESSURE TESTS BEFORE ANY PLUMBING EQUIPMENT, OR PIPING INSULATION IS APPLIED.
14. MAKE ALL ATTACHMENTS TO JOISTS, TRUSSES, OR JOIST GIRDERS AT PANEL POINTS. PROVIDE BEAM CLAMPS MEETING MSS STANDARDS. THE USE OF C-CLAMPS IS NOT PERMITTED.
15. PROVIDE CONCRETE PADS A MINIMUM OF 4 INCHES HIGH FOR ALL FLOOR MOUNTED EQUIPMENT. EXTEND PAD 4 INCHES BEYOND THE EQUIPMENT ON ALL SIDES.
16. INSTALL PIPING, AND CONDUIT CONCEALED IN AREAS HAVING HUNG CEILINGS AND/OR FURRED SPACES UNLESS OTHERWISE INDICATED ON THE DRAWINGS.
17. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF ALL ACCESSIBLE FIXTURES. MOUNT ALL SUCH FIXTURES IN ACCORDANCE WITH THE REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION.
18. PROVIDE ACCESS DOORS IN WALLS, PARTITIONS, AND CEILINGS AS REQUIRED TO MAKE VALVES, WATER HAMMER ARRESTERS, ETC. READILY ACCESSIBLE.
19. ARRANGE FOR, COORDINATE, AND MAKE CONNECTION TO ALL SERVICES PROVIDED BY OTHERS. CONFORM TO ALL REQUIREMENTS APPLICABLE TO CONNECTIONS IMPOSED BY UTILITY COMPANIES AND AUTHORITIES HAVING JURISDICTION.
20. INSTALL FIXTURES AND EQUIPMENT WITH VALVES, UNIONS, ETC. TO ALLOW FOR EASE OF SERVICE AND/OR REMOVAL.
21. PROVIDE A CLEANOUT AT THE BASE OF WASTE AND VENT STACKS WITH FINISHED WALL PLATE IN FINISHED WALLS.
22. FURNISH AND INSTALL WATER PRESSURE REDUCING VALVE AND PRESSURE RELIEF VALVE IN ACCORDANCE WITH THE 2021 NATIONAL STANDARD PLUMBING CODE, NEW JERSEY EDITION ON ALL INCOMING DOMESTIC WATER SYSTEMS IN EXCESS OF 80 P.S.I.G.
23. SLOPE ALL VENT PIPING TO DRAIN BACK TO THE DRAINAGE SYSTEM.
24. FLUSH AND DISINFECT ALL DOMESTIC POTABLE WATER PIPING AND TEST THE WATER IN ACCORDANCE WITH THE 2021 NATIONAL STANDARD PLUMBING CODE, NEW JERSEY EDITION. PROVIDE CERTIFICATE OF PERFORMANCE AND LABORATORY TEST REPORT TO LOCAL AUTHORITIES HAVING JURISDICTION AND OBTAIN THEIR APPROVAL.
25. PROVIDE WATER HAMMER ARRESTORS AT ALL QUICK CLOSING FIXTURE VALVE LOCATIONS.
26. ALL PIPING, VALVES AND FITTINGS USED FOR POTABLE WATER SHALL BE NSF 61/372 COMPLIANT AND BE TESTED FOR LOW LEAD.
27. ANY PENETRATIONS THROUGH AIR BARRIER SHALL BE SEALED AS PER ASHRAE 90.1-2022 AND COMMERCIAL PROVISIONS.
28. ALL PIPING IN PLENUM SPACES SHALL BE CAST IRON FOR SANITARY, STORM, VENT SYSTEMS, AND COPPER PIPING FOR DOMESTIC SYSTEMS, AND STEEL PIPING FOR GAS SYSTEMS. NO PLASTIC PIPING ALLOWED.
29. HOT WATER TEMPERATURE FOR ALL PUBLIC HAND WASHING FIXTURES SHALL BE TEMPERED TO A MAXIMUM TEMPERATURE OF 110 DEGREES F.
30. ALL FIXTURES SHALL MEET THE MAXIMUM DEMAND AT INDIVIDUAL WATER OUTLET REQUIREMENTS LISTED IN TABLE B.3 OF THE 2021 NATIONAL STANDARD PLUMBING CODE, NEW JERSEY EDITION.
31. ALL FIXTURES THAT HAS THE ABILITY TO HAVE A HOSE CONNECTED TO IT, OR DIRECT CONNECTED FIXTURES, SHALL HAVE A BACKFLOW PREVENTION DEVICE ON THE FAUCET, VACUUM BREAKER (ASSE 1052 AND ASME A112.21.3).
32. ALL SANITARY FITTINGS SHALL BE 'WYE' TYPE AND SHALL FOLLOW THE DIRECTION OF FLOW.
33. IN THE EVENT THAT THERE IS A DISCREPANCY BETWEEN DESIGN PLANS, RISER DIAGRAMS, AND/OR SPECIFICATIONS CONCERNING PIPE SIZES, FIXTURES, AND/OR EQUIPMENT, THE MOST STRINGENT REQUIREMENTS SHALL BE APPLIED TO THE PROJECT.
34. FIRE STOP ALL OPENINGS IN FIRE RATED CONSTRUCTION FOR PIPING, CONDUIT, ETC.
35. MAINTAIN MAXIMUM HEADROOM AND SPACE CONDITIONS AT ALL POINTS. WHERE HEADROOM AND SPACE CONDITIONS APPEAR INADEQUATE, NOTIFY ARCHITECT PRIOR TO PROCEEDING WITH INSTALLATION. MAINTAIN A MINIMUM OF 6'-8" CLEARANCE FROM FINISHED FLOOR TO UNDERSIDE OF PIPES, CONDUITS, SUSPENDED EQUIPMENT, ETC., THROUGHOUT ACCESS ROUTES IN MECHANICAL ROOMS.
36. CORE DRILL ALL PENETRATIONS THROUGH CONCRETE FLOORS, WALLS, AND FOOTINGS.
37. INSTALL LINK SEAL TYPE PROTECTION FOR WATER RESISTANT SEALS AT ALL SLAB AND BELOW GROUND WALL FOOTING PENETRATIONS.
38. COVER ALL COPPER PIPING BELOW SLAB WITH "ARMAFLEX" TYPE INSULATION.

ENERGY NOTES

2021 ENERGY CONSERVATION CONSTRUCTION CODE OF NEW JERSEY NOTES: STATEMENT OF COMPLIANCE:

TO THE BEST OF MY KNOWLEDGE, AND PERSONAL JUDGEMENT, THESE PLANS AND SPECIFICATIONS ARE IN COMPLIANCE WITH THE 2024 NEW JERSEY ENERGY CONSERVATION CODE (NJECCC).

1. SERVICE WATER HEATING EQUIPMENT PERFORMANCE EFFICIENCY:
   - 1.1. WATER HEATING EQUIPMENT AND HOT WATER STORAGE TANKS SHALL MEET THE REQUIREMENTS OF ASHRAE 90.1-2019
   - 1.2. SERVICE WATER HEATING SHALL BE COMMISSIONED AND COMPLETED IN ACCORDANCE WITH ASHRAE 90.1-2019.
2. TEMPERATURE CONTROL:
   - 2.1. SERVICE WATER HEATING EQUIPMENT SHALL BE PROVIDED WITH CONTROLS ALLOWING A SETPOINT OF 110°F AND 90 °F FOR OTHER OCCUPANCIES. PUBLIC REST ROOM LAVATORIES SHALL HAVE A MAXIMUM OUTLET TEMPERATURE OF 110°F.
   - 2.2. WHERE WATER HEATING EQUIPMENT SERVING NONCIRCULATING SYSTEMS IS NOT SUPPLIED WITH INTEGRAL HEAT TRAPS, HEAT TRAPS SHALL BE PROVIDED ON THE SUPPLY AND DISCHARGE PIPING.
3. PIPE INSULATION:
   - 3.1. AUTOMATIC CIRCULATING HOT WATER SYSTEM PIPING SHALL BE INSULATED WITH 1 INCH OF INSULATION WITH A CONDUCTIVITY NOT EXCEEDING 0.27 BTU PER INCH, OR THE INSULATION REQUIREMENTS, WHICHEVER IS GREATER. THE FIRST 8 FT OF PIPING IN NONCIRCULATING SYSTEMS WITH EQUIPMENT WITHOUT INTEGRAL HEAT TRAPS SHALL BE INSULATED WITH 0.5 INCH OF MATERIAL HAVING A CONDUCTIVITY NOT EXCEEDING 0.27 BTU PER INCH, OR THE INSULATION REQUIREMENTS, WHICHEVER IS GREATER.
   - 3.2. ALL PIPING TO BE INSULATED WITH 0.21-0.28 CONDUCTIVITY
   - 3.3. COLD WATER PIPING - ALL SIZES - 1-INCH INSULATION, A.S. JACKET.
   - 3.4. STORM DRAINAGE PIPING ALL HORIZONTAL RUNS AND DRAIN BODY - MINIMUM 1-INCH INSULATION, A.S. JACKET.
   - 3.5. HOT WATER PIPING (140°F) AND TEMPERED WATER PIPING (110°F)
     - 3.5.1. PIPE SIZE: < 1" INSULATION: 1"
     - 3.5.2. PIPE SIZE: 1" TO < 1-1/2" INSULATION: 1"
     - 3.5.3. PIPE SIZE: 1-1/2 TO < 4" INSULATION: 1.5"
     - 3.5.4. PIPE SIZE: 4" TO < 8" INSULATION: 1.5"
4. HOT WATER SYSTEM CONTROLS:
   - 4.1. CIRCULATING HOT WATER SYSTEM PUMPS OR HEAT TRACE SHALL BE ARRANGED TO BE TURNED OFF EITHER AUTOMATICALLY OR MANUALLY WHEN THERE IS LIMITED HOT WATER DEMAND. READY ACCESS SHALL BE PROVIDED TO THE OPERATING CONTROLS.
5. PIPE VOLUME AND MAXIMUM LENGTHS
   - 5.1. ALL MAXIMUM PIPE LENGTHS FROM FIXTURES SHALL COMPLY WITH THE MAXIMUM PIPE LENGTHS ON THE CHART BELOW. CONTRACTOR TO ENSURE HOT WATER RETURN PIPING IS INSTALLED AS PER PLANS AND THAT THESE LENGTHS ARE MAINTAINED.

NOMINAL PIPE SIZE (INCHES)	VOLUME (LIQUID OUNCES PER FOOT LENGTH)	MAXIMUM PIPING LENGTH (FEET)	
		PUBLIC LAVATORY FAUCETS	OTHER FIXTURES AND APPLIANCES
1/4"	0.33	6	50
5/16"	0.5	4	50
3/8"	0.75	3	50
1/2"	1.5	2	43
5/8"	2	1	32
3/4"	3	0.5	21
7/8"	4	0.5	16
1"	5	0.5	13
1-1/4"	8	0.5	8
1-1/2"	11	0.5	6
2" OR LARGER	18	0.5	4

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NEW BRUNSWICK FIRE DEPT.
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93 JOYCE KILMER AVE
BRUNSWICK, NJ 08901

PROJECT NUMBER: MWSA2601

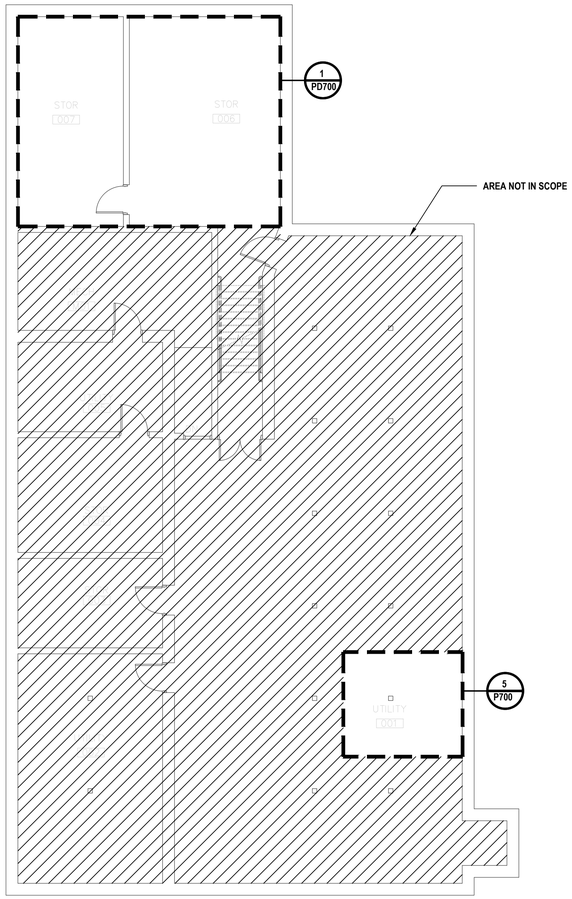
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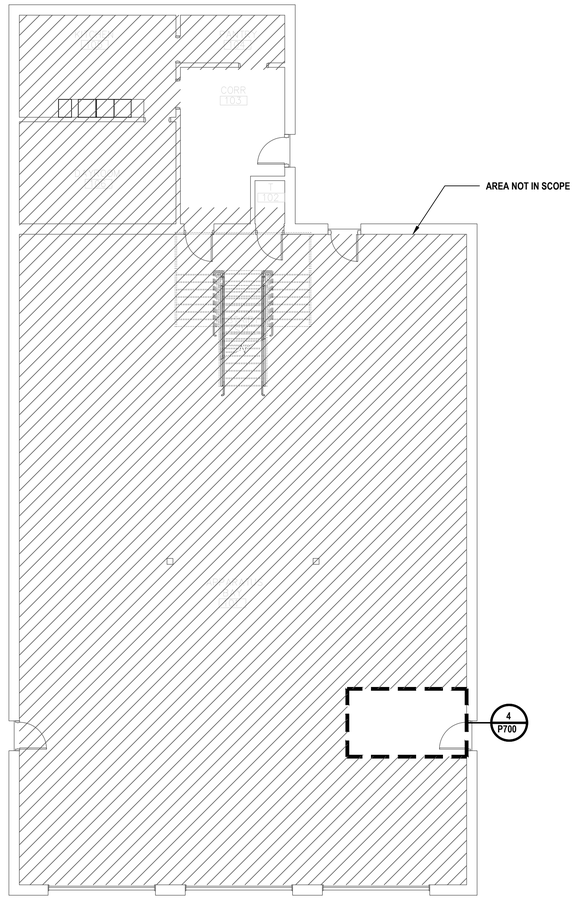
SHEET REVISION SCHEDULE:
No. DATE

PLUMBING
GENERAL NOTES, LEGENDS AND ABBREVIATIONS
SHEET NUMBER:

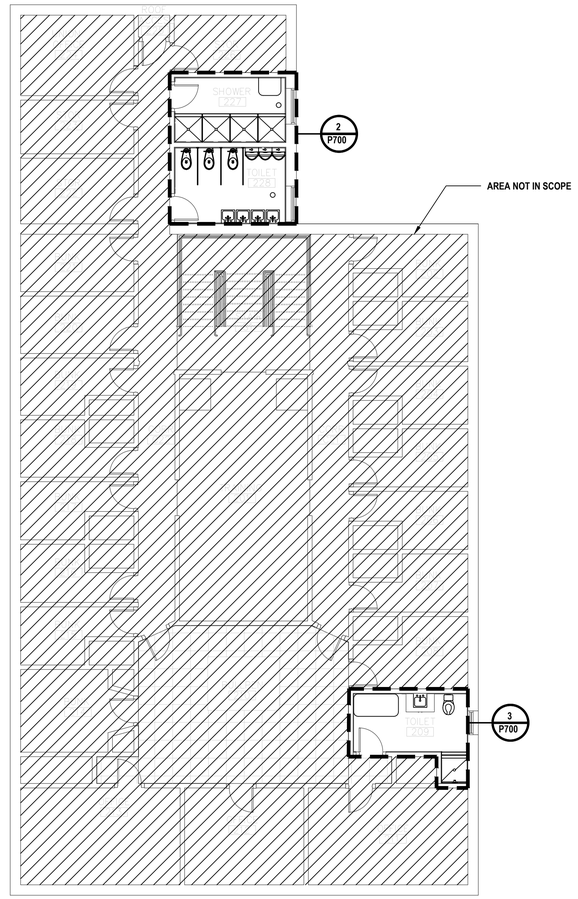
P-001



1 BASEMENT DEMOLITION PLAN
1/8" = 1'-0"



2 LEVEL 1 DEMOLITION PLAN
1/8" = 1'-0"



3 LEVEL 2 DEMOLITION PLAN
1/8" = 1'-0"

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NEW BRUNSWICK FIRE DEPT.
HEADQUARTERS - INTERIOR
RENOVATION
93 JOYCE KILMER AVE NEW
BRUNSWICK, NJ 08901

PROJECT NUMBER: MWSA2601

SUBMISSION:
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ORIGINAL ISSUE DATE:
10/23/2026

SHEET REVISION SCHEDULE:
No. DATE

PLUMBING DEMOLITION
BASEMENT, FIRST FLOOR
AND SECOND FLOOR PLAN
SHEET NUMBER:

PD-100

DEMOLITION NOTES

GENERAL

1. PRIOR TO PROPOSAL SUBMISSION, THE CONTRACTOR SHALL VISIT THE SITE TO REVIEW THE EXISTING CONDITIONS ASSOCIATED WITH THE SCOPE OF WORK TO ASCERTAIN THE DIFFICULTIES WHICH WILL AFFECT THE EXECUTION OF THE WORK INCLUDING PIPING ACCESS.
2. SUBMISSION OF A PROPOSAL WILL BE CONSTRUED AS EVIDENCE THAT THE ABOVE SITE EXAMINATION HAS BEEN MADE AND LATER CLAIMS WILL NOT BE RECOGNIZED FOR EXTRA LABOR, EQUIPMENT OR MATERIALS REQUIRED BECAUSE OF DIFFICULTIES ENCOUNTERED WHICH COULD HAVE BEEN FORESEEN HAD SUCH AN EXAMINATION BEEN MADE.
3. ALL DEMOLITION WORK SHALL BE IN COMPLIANCE WITH ALL FEDERAL AND NEW JERSEY STATE APPLICABLE BUILDING AND LIFE AND SAFETY REGULATIONS.
4. DEMOLITION WORK SHALL INCLUDE ALL MATERIALS, LABOR, EXTENSIONS, CONNECTIONS, CUTTING, REPAIRING, ADAPTING AND OTHER PLUMBING WORK REQUIRED TO MAINTAIN SERVICE IF REQUIRED. COORDINATE THE EXTENT OF DEMOLITION WORK WITH THE ARCHITECT AND BUILDING OWNER.
5. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL CONSTRUCTION DEBRIS AND UNWANTED MATERIAL OFF SITE IN ACCORDANCE WITH CONTRACT SPECIFICATIONS. COORDINATE WITH OWNER FOR ANY EQUIPMENT OR FIXTURES TO BE KEPT ON SITE.
6. THE CONTRACTOR SHALL TAKE CARE NOT TO DAMAGE ADJOINING SURFACES OUTSIDE THE CONTRACT AREA. THE CONTRACTOR SHALL BE RESPONSIBLE TO RESTORE ALL EXISTING CONDITION SURFACES DAMAGED DURING CONSTRUCTION INCLUDING PATCHING AND PAINTING AS REQUIRED AND DEEMED NECESSARY BY THE ARCHITECT.
7. ALL EXISTING WORK REQUIRED TO REMAIN BUT INTERFERING WITH PROPOSED NEW PLUMBING (AS WELL AS ELECTRICAL, MECHANICAL AND GENERAL CONSTRUCTION WORK) SHALL BE RELOCATED AND RECONNECTED USING MATERIALS CONFORMING TO STANDARDS OF THIS CONTRACT.

PIPING SCOPE OF WORK

1. REMOVE ALL ABANDONED BASE BUILDING PIPING BACK TO THE EXISTING WET COLUMNS OR SHAFTS, OR AS NOTED ON DRAWINGS.
2. IF THE BUILDING IS TO REMAIN OPERATIONAL, CONTRACTOR SHALL COORDINATE WITH THE BUILDING OWNER ON TIMING OF WORK AND TO PROVIDE A MINIMUM OF 48-HOURS IN ADVANCE.
3. PROVIDE ADDITIONAL SUPPORT FOR ALL EXISTING PIPING TO REMAIN WHICH ARE AFFECTED BY DEMOLITION OF EXISTING CEILING AND PARTITIONS.

PLUMBING FIXTURE SCOPE OF WORK

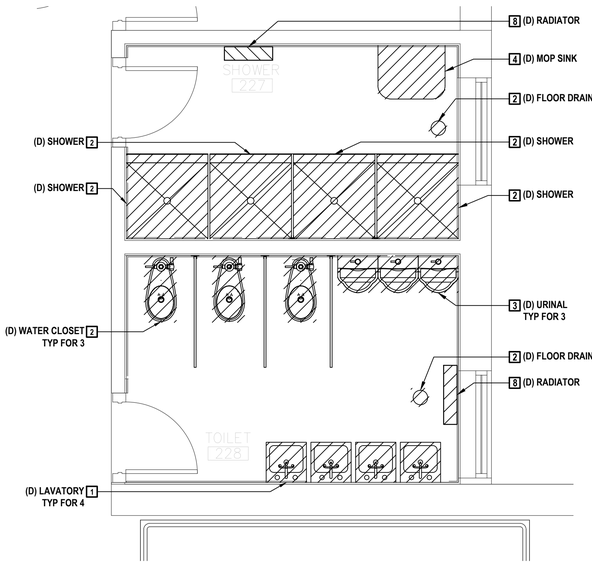
1. ALL FIXTURES INDICATED ON THE PLANS DESIGNATED FOR REMOVAL OR REPLACEMENT SHALL BE COMPLETELY REMOVED AND DISPOSED OF. SCOPE TO INCLUDE ALL PLUMBING FIXTURES INCLUDING, SINKS, FAUCETS, FLOOR DRAINS, STOP VALVES AND ALL DEVICES USED TO SECURE THESE FIXTURES IN PLACE.
2. PRIOR TO THE REMOVAL OF FIXTURES, THE CONTRACTOR SHALL MAKE ALL NECESSARY DISCONNECTS AND WORK REQUIRED TO ACCESS THE PIPING WITHIN CHASES AND WALLS. THE CONTRACTORS SHALL SHUT WATER OFF TO THE FIXTURES AND REPLACE ANY DAMAGED VALVES WITHIN THE SCOPE OF WORK AREA.
3. FLUSH AND SNAKE ALL SANITARY/WASTE LINES BACK TO THEIR ASSOCIATED RISERS PRIOR TO THE START OF THE WORK.

X KEYED PLUMBING DEMOLITION NOTES

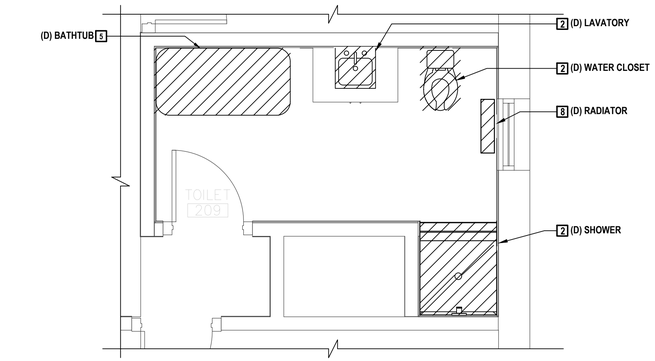
1. COMPLETELY REMOVE AND DISPOSE OF ALL PLUMBING FIXTURES IN ITS ENTIRETY, INCLUDING ALL DEVICES USED TO SECURE IT IN PLACE. WORK SHALL INCLUDE THE REMOVAL OF EXISTING SUPPORT CARRIERS AND TO CUT AND CAP ALL PLUMBING PIPING. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE ADEQUATE ACCESS INTO WALLS, CHASES, AND SOFFITS TO ENSURE REMOVAL. UPON INSTALLATION OF NEW FIXTURES, CARRIERS, AND PIPING, THE CONTRACTOR SHALL PATCH ALL ACCESS AREAS AND PREPARE SURFACES FOR NEW FINISHES.
   - 1.1. REMOVE AND DISPOSE OF ALL WALL/FLOOR CARRIERS AND BRANCH PIPING AS NEEDED TO ACCOMMODATE NEW FIXTURE LAYOUTS. SEE ARCHITECTURAL DRAWINGS FOR NEW FIXTURE LAYOUTS.
   - 1.2. PRIOR TO THE REMOVALS OF FIXTURES, THE CONTRACTOR SHALL MAKE ALL NECESSARY DISCONNECTS. WORK SHALL INCLUDE COLD WATER, HOT WATER, HOT WATER RETURN, SANITARY, AND VENT PIPING. THE CONTRACTORS SHALL SHUT WATER OFF TO THE FIXTURES AND REPLACE ANY DAMAGED VALVES.
   - 1.3. REMOVE AND DISPOSE OF ALL PIPING DEEMED OBSOLETE OR LEAD CONTAINING, INCLUDING WATER DISTRIBUTION, SANITARY, VENT, HANGERS, SUPPORTS, STRAPS, FITTINGS, VALVES, AND ALL DEVICES USED TO SECURE THEIR PIPE/FITTINGS IN PLACE.
   - 1.4. SEAL ALL PIPING PENETRATIONS AND INSTALL FIRE-STOPPING IN ALL RATED WALLS, FLOORS, SOFFITS, ETC. OPENINGS LARGER THAN 1.5x THE DIAMETER OF THE PIPING PASSING THROUGH SHALL BE SEALED WITH NON-SHRINK EPOXY GROUT OR FIRESTOP SEALANT PER UL REQUIREMENTS.
   - 1.5. FLUSH AND SNAKE ALL SANITARY/WASTE LINES INCLUDING FLOOR DRAINS AND CLEANOUTS BACK TO THEIR ASSOCIATED RISERS PRIOR TO THE START OF THE WORK.
2. ALL WORK ASSOCIATED WITH KEY NOTE 1 ABOVE IN ADDITION TO PREPARING THE EXISTING ROUGH-IN FOR RECONNECTION. MODIFY ROUGH-IN AS REQUIRED.
3. COMPLETELY REMOVE AND DISPOSE OF EXISTING URINAL, FLUSH VALVE AND CARRIER.
4. COMPLETELY REMOVE AND DISPOSE OF EXISTING MOP SINK, FAUCET AND CARRIER. CAP AND ABANDON EXISTING COLD WATER, HOT WATER AND SAN DRAIN LINE.
5. COMPLETELY REMOVE AND DISPOSE OF EXISTING BATHTUB, FAUCET AND CARRIER. CAP AND ABANDON EXISTING COLD WATER, HOT WATER AND SAN DRAIN LINE.
6. CAP AND ABANDON EXISTING RISER
7. REMOVE EXISTING SANITARY AS SHOWN
8. DISCONNECT, REMOVE AND REFURBISH EXISTING RADIATOR. RADIATOR TO BE FLUSHED, STRIPPED, CLEANED AND REPAINTED. PREPARE RADIATOR FOR RE-INSTALLATION. REMOVE EXISTING ANGLE VALVE AND STEAM TRAP. REPAIR AND REPLACE EXISTING DAMAGED STEAM AND STEAM CONDENSATE PIPING IN FLOOR AS REQUIRED. PREPARE PIPING FOR RECONNECTION. CONTRACTOR TO FIELD VERIFY EXACT LOCATION. COORDINATE WITH BUILDING.

LEGEND

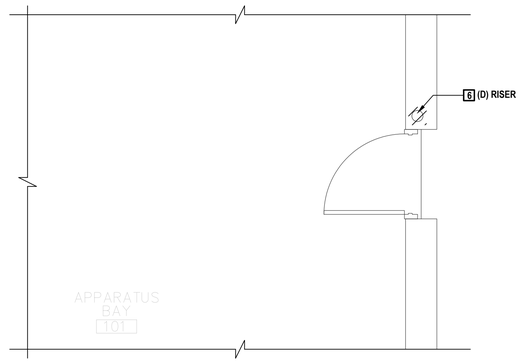
REMOVE AND DISPOSE OF ITEM IDENTIFIED



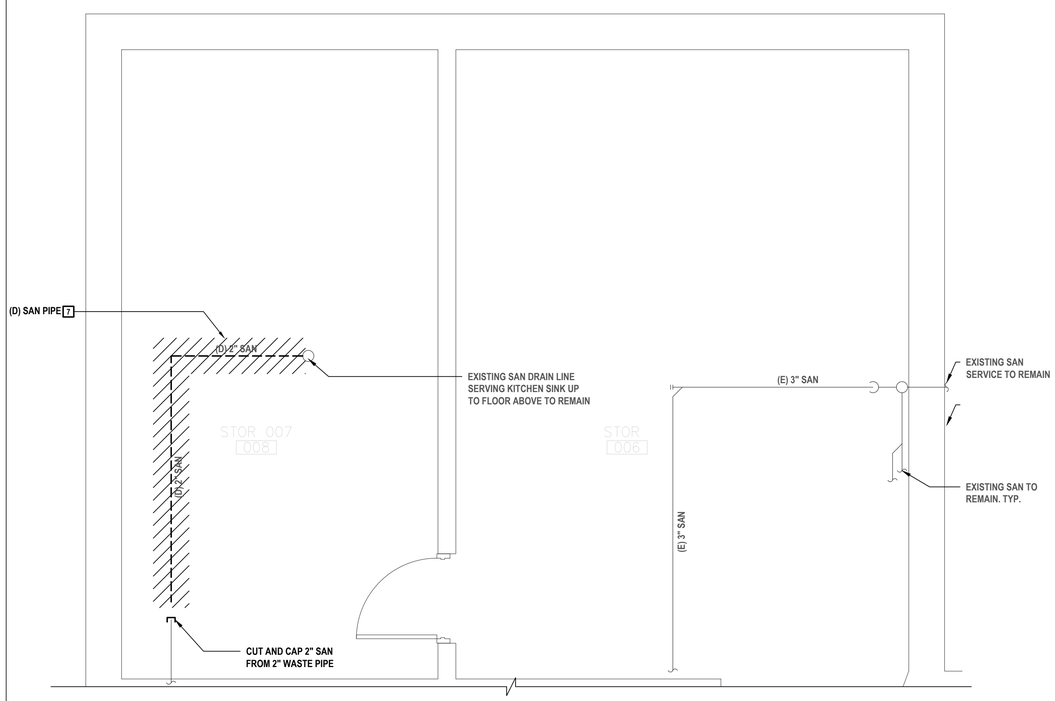
② SECOND FLOOR – TOILET & SHOWER ROOM – DEMOLITION PART PLAN
3/8" = 1'-0"



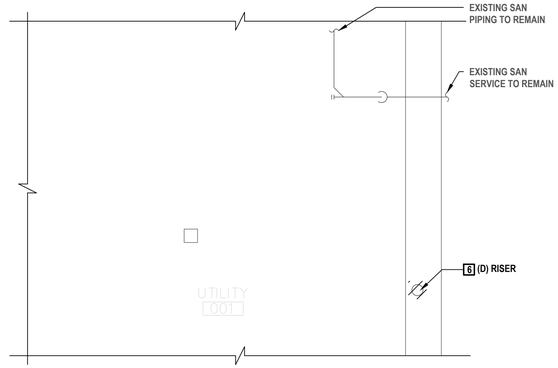
③ SECOND FLOOR TOILET ROOM – DEMOLITION PART PLAN
3/8" = 1'-0"



④ FIRST FLOOR APPARATUS BAY – DEMOLITION PART PLAN
3/8" = 1'-0"



① BASEMENT – STORAGE – DEMOLITION PART PLAN
3/8" = 1'-0"



⑤ BASEMENT UTILITY ROOM – DEMOLITION PART PLAN
3/8" = 1'-0"

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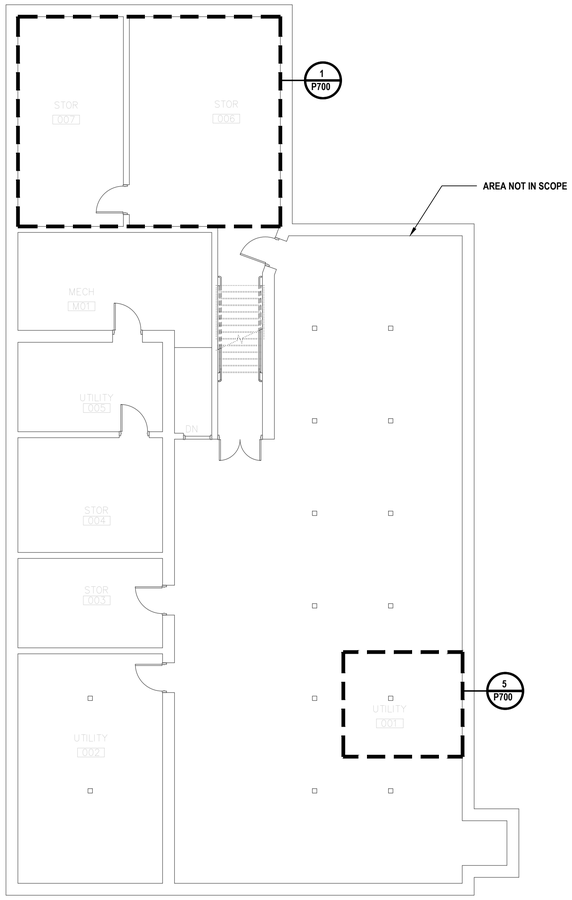
ORIGINAL ISSUE DATE:
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SHEET REVISION SCHEDULE:
No. DATE

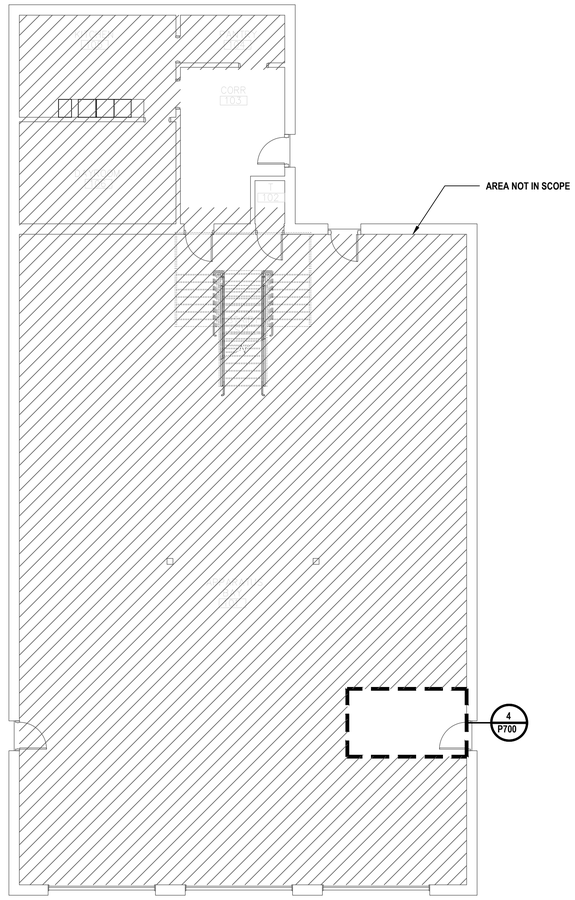
PLUMBING DEMOLITION ENLARGED PLANS

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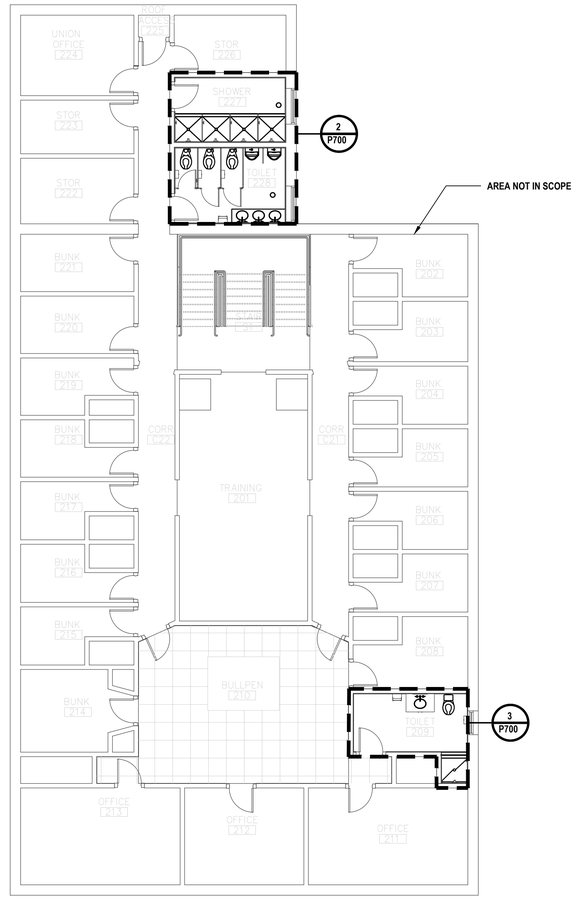
PD-200



1 EXISTING BASEMENT PLAN
1/8" = 1'-0"



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



3 NEW SECOND FLOOR PLAN
1/8" = 1'-0"

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PROJECT NUMBER: MWSA2601

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ORIGINAL ISSUE DATE:
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PLUMBING
BASEMENT, FIRST FLOOR
AND SECOND FLOOR PLAN
SHEET NUMBER:

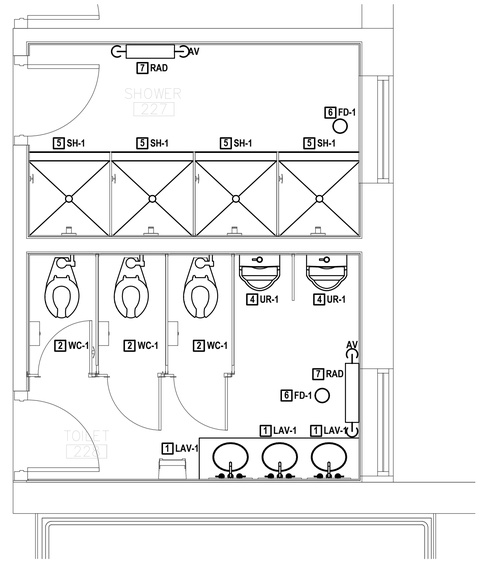
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[X] KEYED PLUMBING NOTES

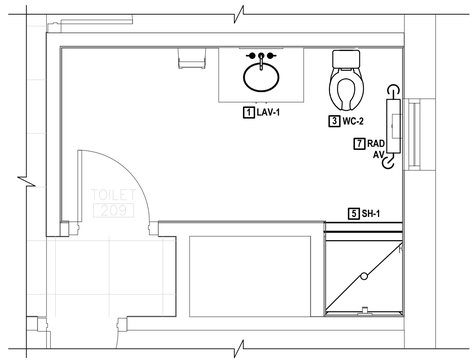
1. PROVIDE NEW LAVATORY WITH FAUCET. INSTALL 1/2-INCH COLD AND HOT WATER TO FAUCET WITH NEW STOP VALVES AND STAINLESS STEEL FLEXIBLE HOSES. INSTALL 1-1/2-INCH SANITARY AND VENT TO SINK AND CONNECT NEW PIPING TO EXISTING. MODIFY PIPING AS REQUIRED. CONTRACTOR RESPONSIBLE FOR PATCHING AND REPAIRING WALL TO MATCH EXISTING CONDITIONS. PROVIDE TEMPERATURE LIMITING DEVICE ON THE HOT WATER LINE TO ALL HAND SINKS AND SET AT 105°F.
2. PROVIDE NEW FLOOR-MOUNTED WATER CLOSET WITH NEW FLUSH VALVE. CONNECT FIXTURE TO EXISTING ROUGH-INS AND MODIFY PIPING AS REQUIRED. PROVIDE WATER HAMMER ARRESTOR ON MOST REMOTE FIXTURE. CONTRACTOR RESPONSIBLE FOR PATCHING AND REPAIRING WALL TO MATCH EXISTING CONDITIONS.
3. PROVIDE NEW FLOOR-MOUNTED TANK TYPE WATER CLOSET. CONNECT FIXTURE TO EXISTING ROUGH-INS AND MODIFY PIPING AS REQUIRED. CONTRACTOR RESPONSIBLE FOR PATCHING AND REPAIRING WALL TO MATCH EXISTING CONDITIONS.
4. PROVIDE NEW WALL-MOUNTED URINAL WITH NEW CARRIER AND FLUSH VALVE. INSTALL NEW 3/4" CW, 2" SAN, AND 2" V PIPING TO URINAL. CONNECT NEW 3/4" CW PIPING FROM NEW URINAL TO MINIMUM 3/4" EXISTING CW PIPING IN WET WALL. CONNECT NEW 2" SAN TO EXISTING ON FLOOR BELOW; MODIFY EXISTING PIPING IN WET WALL AND FLOOR BELOW ACCORDINGLY; REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHTS. CONTRACTOR RESPONSIBLE FOR PATCHING AND REPAIRING WALL TO MATCH EXISTING CONDITIONS.
5. PROVIDE NEW SHOWER BASE, WALL MOUNTED SHOWER HEAD AND/OR HAND SHOWER, PRESSURE-BALANCE SHOWER VALVE, AND VALVE TRIM. CONNECT FIXTURE TO EXISTING ROUGH-INS AND MODIFY PIPING AS REQUIRED.
6. PROVIDE NEW FLOOR DRAIN SUITABLE FOR THE SPECIFIC FLOOR CONSTRUCTION TYPE AND WATER PROOFING METHOD. REFER TO ARCHITECTURAL PLANS FOR MORE DETAIL. SEE FIXTURE SCHEDULE FOR CONNECTION SIZE.
7. INSTALL REFURBISHED RADIATOR. CONNECT RADIATOR TO EXISTING STEAM AND STEAM CONDENSATE PIPING. FURNISH AND INSTALL NEW ANGLE VALVE, AIR VENT AND STEAM TRAP. REPAIR AND REPLACE EXISTING DAMAGED STEAM AND STEAM CONDENSATE PIPING IN FLOOR AS REQUIRED. CONTRACTOR TO FIELD VERIFY EXACT LOCATION. COORDINATE WITH BUILDING.

PLUMBING NOTES

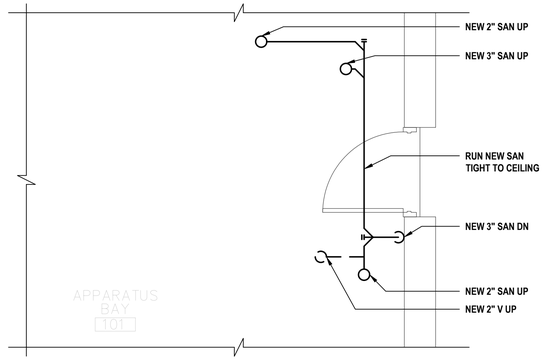
1. VERIFY IN FIELD EXACT LOCATIONS OF ALL COLD WATER, HOT WATER, HOT WATER RETURN, SANITARY, AND VENT PIPES. REROUTE AND MODIFY EXISTING PLUMBING PIPES AS REQUIRED FOR CONNECTIONS TO NEW PLUMBING FIXTURES.
2. INSULATE ALL NEW WATER PIPING AND RE-INSULATE ALL EXISTING WATER PIPING IN SCOPE OF WORK AREAS.
3. ALL SANITARY PIPING 3" AND LARGER SHALL BE SLOPED AT A MINIMUM OF 1/8"/FT. ALL SANITARY PIPING 2" AND SMALLER SHALL BE SLOPED AT A MINIMUM OF 1/4"/FT.
4. CHASE WALLS WILL NEED TO BE OPENED TO ALLOW ACCESS TO EXISTING PIPING AND THEN REPAIRED. REFER TO ARCHITECTURAL DRAWINGS FOR MORE DETAIL.
5. INSTALL NEW SHUT OFF VALVES OR REPLACE EXISTING VALVES ON ALL COLD WATER, HOT WATER, AND HOT WATER RETURN BRANCH PIPING ENTERING BATHROOMS IN SCOPE OF WORK AREAS.



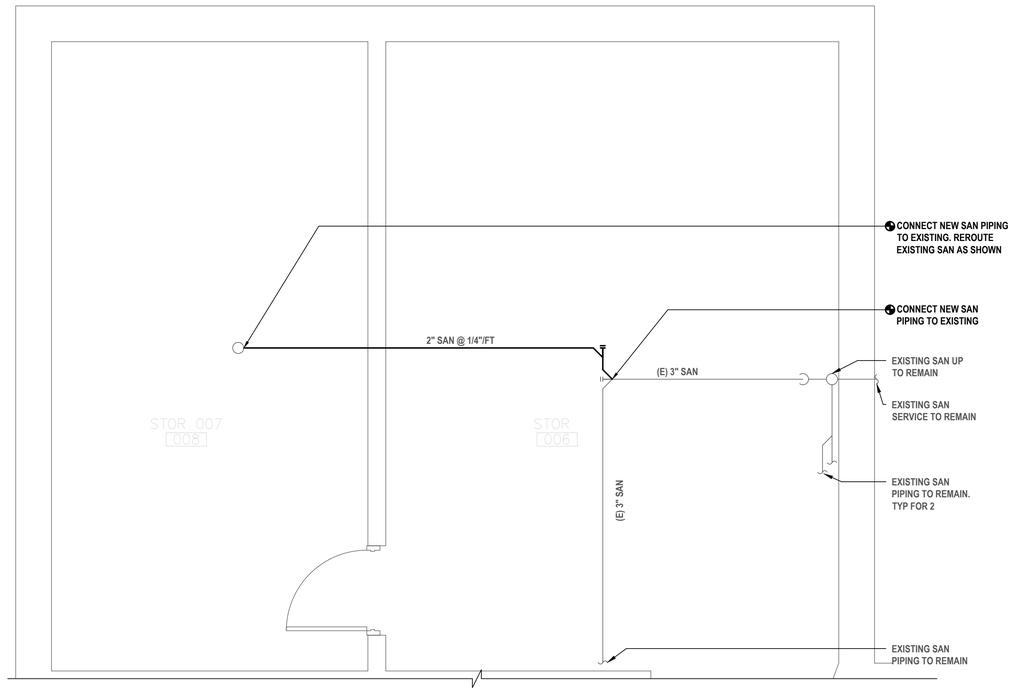
② SECOND FLOOR – TOILET & SHOWER ROOM – ENLARGEMENT PART PLAN
3/8" = 1'-0"



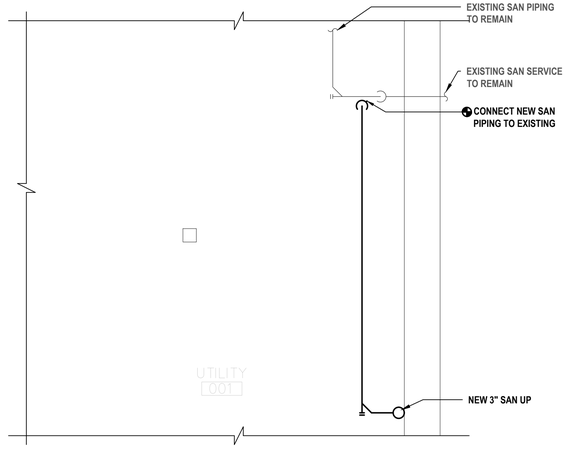
③ SECOND FLOOR TOILET ROOM – ENLARGEMENT PART PLAN
3/8" = 1'-0"



④ FIRST FLOOR APPARATUS BAY – ENLARGEMENT PART PLAN
3/8" = 1'-0"



① BASEMENT – STORAGE – ENLARGEMENT PART PLAN
3/8" = 1'-0"



⑤ BASEMENT UTILITY ROOM – ENLARGEMENT PART PLAN
3/8" = 1'-0"

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NEW BRUNSWICK FIRE DEPT.
HEADQUARTERS – INTERIOR RENOVATION
93 JOYCE KILMER AVE NEW BRUNSWICK, NJ 08901

PROJECT NUMBER: MWSA2601

SUBMISSION:
FOR BID

ORIGINAL ISSUE DATE:
10/23/2026

SHEET REVISION SCHEDULE:
No. DATE

PLUMBING ENLARGEMENT ENLARGED PLANS

SHEET NUMBER:
P-200

PLUMBING FIXTURE SCHEDULE

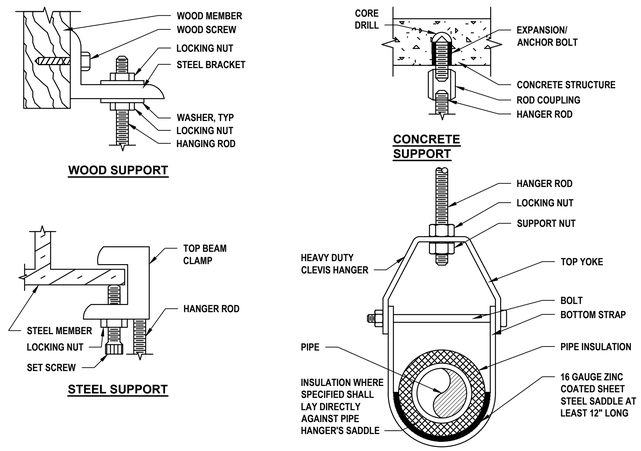
FIXTURE TAG	DESCRIPTION	BASIS OF DESIGN						MINIMUM CONNECTION SIZES							SPECIFICATION	REMARKS
		MAKE	MODEL	TRIM / FAUCET				COLD WATER		HOT WATER		DRAIN		VENT		
				MAKE	MODEL	OPERATION	MAX FLOW	SIZE	WFU	SIZE	WFU	SIZE	DFU			
LAV-1	LAVATORY - DROP IN - MANUAL FAUCET - 4-INCH O.C.	SLOAN	SS-3002	AMERICAN STANDARD	MONTERREY 5500170	MANUAL	0.5 GPM	1/2"	0.5	1/2"	0.5	1-1/2"	1	1-1/2"	SINK: VITREOUS CHINA DROP-IN, SELF-RIMMING, 4-INCH " O.C., ASME A112.19.2, FRONT OVERFLOW. FAUCET: DECK MOUNTED CENTERSET, 4-INCH LEVER HANDLE, VANDAL RESISTANT, CHROME, GRID STRAINER, WITH 0.5 GPM AERATOR. COMPLIES WITH ASME A112.18.1 AND NSF 372.	PROVIDE BRASS ANGLE STOP VALVES WITH FLEXIBLE STAINLESS STEEL SUPPLIES, AND 1-1/2" BRASS P-TRAP. HOT WATER SHALL NOT EXCEED 100°F.
WC-1	WATER CLOSET - FLOOR MOUNTED - FLOOR OUTLET - TOP SPUD	SLOAN	ST-2029	SLOAN	ROYAL 111	MANUAL	1.28 GPF	1"	10	---	---	3"	4	1-1/2"	TOILET: VITREOUS CHINA, ELONGATED, FLOOR MOUNTED, ASME A112.19.2. PROVIDE TOILET SEAT CHURCH 295CT OR APPROVED EQUAL. MINIMUM OF 25 PSI. FLUSH VALVE: EXPOSED MANUAL FLUSHOMETER, POLISHED CHROME, VANDAL RESISTANT. COMPLIES WITH ASSE 1037. NO PIPE SEALANT ALLOWED.	
WC-2	WATER CLOSET - TANK TYPE - FLOOR MOUNTED - FLOOR OUTLET	ZURN	Z5555-K	---	---	---	1.28 GPF	1/2"	0.5	---	---	3"	4	1-1/2"	VITREOUS CHINA, 12-INCH ROUGH-IN, ELONGATED BOWL, TOILET SEAT, WATER SENSE, AND COMPLIES WITH ASME A112.19.2. TRIP LEVER TO BE ON APPROACH SIDE OF TOILET.	PROVIDE BRASS ANGLE STOP WITH FLEXIBLE STAINLESS STEEL SUPPLIES, CLOSET BOLT AND WAX RING.
UR-1	URINAL - TOP SPUD	SLOAN	SU-1009	SLOAN	ROYAL 186	MANUAL	0.125 GPF	3/4"	5	---	---	2"	4	2"	URINAL: VITREOUS CHINA, WALL MOUNTED, ASME A112.19.2. FLUSH VALVE: EXPOSED SENSOR FLUSHOMETER, POLISHED CHROME, VANDAL RESISTANT. COMPLIES WITH ASSE 1037. NO PIPE SEALANT ALLOWED.	PROVIDE CARRIER SUPPORT WATTS CA-311 OR APPROVED EQUAL.
SH-1	SHOWER - CENTER DRAIN - SHOWER FAUCET	ZURN	ZB415-BZ1-VP	DELTA	SEE REMARKS	MANUAL	2 GPM	1/2"	0.5	1/2"	0.5	1-1/2	2	1-1/2"	FLOOR DRAIN: DURA-COATED CAST IRON BODY. POLISHED BRONZE TOP AND VANDAL PROOF SECURED TOP. SHOWER: TRIM PACKAGE: DELTA T13H332, 1.5 GPM, WATERSENSE SHOWER HEAD & HANDSHOWER, 24-INCH WALL BAR, METAL HOSE, FAUCET TRIM WITH LEVER HANDLE - ROUGH VALVE BODY: DELTA MULTICHOICE R10700-UNWS, UNIVERSAL ROUGH VALVE BODY WITH DIVERTER VALVE ROUGH IN. ALL FAUCET PARTS TO COMPLY WITH ASME A112.18.1, AND APPROVED EQUAL.	PIPING FROM THE MIXING VALVE TO THE DIVERT VALVE AND THE SHOWER HEADS SHALL BE COPPER.
FD-1	FLOOR DRAIN (CONCRETE FLOORS)	ZURN	ZB415-BZ1-VP	-	-	-	-	-	-	-	-	-	2	2	FLOOR DRAIN: DURA-COATED CAST IRON BODY. POLISHED BRONZE TOP AND VANDAL PROOF SECURED TOP.	PROVIDE TRAP SEALS: ZURN Z1072. SEE PLANS FOR SIZES.

HANGER SPACING

PIPING MATERIAL	MAX. HORIZONTAL (FT)	MAX. VERTICAL (FT)
POLYETHYLENE	2.67	4
PEX	2.67	10
CPVC 1" OR SMALLER	3	10
ABS/PVC/CPVC (>1")	4	10
CAST-IRON	5	15
COPPER (<1-1/2)	6	10
COPPER (≥ 1-1/2")/BRASS)	10	10
STEEL	12	15

HANGER ROD SCHEDULE

PIPE SIZE	ROD SIZE (DIA.)	PIPE SIZE	ROD SIZE (DIA.)
≤ 2"	3/8"	4" THRU 5"	5/8"
2 1/2" THRU 3 1/2"	1/2"	6" THRU 8"	3/4"



1 Pipe Hanger Detail
SCALE: NTS

PLB-018-V1

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SEAL:

dd/mm/yyyy

NEW BRUNSWICK FIRE DEPT.
HEADQUARTERS – INTERIOR RENOVATION
93 JOYCE KILMER AVE NEW BRUNSWICK, NJ 08901

PROJECT NUMBER: MWSA2601

SUBMISSION:
FOR BID

ORIGINAL ISSUE DATE:
10/23/2026

SHEET REVISION SCHEDULE:
No. DATE

PLUMBING
SCHEDULE AND DETAILS

SHEET NUMBER:
P-300

PLUMBING SPECIFICATIONS

SCOPE OF WORK

1. PROVIDE ALL TOOLS, MACHINERY, EQUIPMENT, SCAFFOLDING, APPURTENANCES, APPLIANCES, TRANSPORTATION, MATERIALS, SERVICES AND EQUIPMENT NECESSARY TO FURNISH, FABRICATE AND INSTALL ALL PLUMBING WORK AS INDICATED ON THE DRAWINGS.
2. KEEP THE PREMISES FREE FROM ACCUMULATIONS OF WASTE MATERIAL AND RUBBISH CAUSED BY MACHINES, MATERIAL, EMPLOYEES OR WORK. PLACE WASTE AND RUBBISH IN NEAT PILES OR IN CONTAINERS OUTSIDE OF THE BUILDING AS DIRECTED. COOPERATE WITH ALL THE OTHER TRADES APPURTENANT TO THIS WORK. AT THE COMPLETION OF HIS WORK, REMOVE ALL TOOLS, SCAFFOLDING AND SURPLUS MATERIAL.
3. ALL WORK MUST BE INSTALLED IN FULL ACCORDANCE WITH THE REQUIREMENTS OF ALL GOVERNMENTAL DEPARTMENTS HAVING JURISDICTION OVER THESE MATTERS.

SUBMITTALS

1. APPROVAL BY THE ARCHITECT/ENGINEER OF THE LAYOUTS AND SHOP DRAWINGS FOR ANY MATERIAL, APPARATUS, DEVICES AND LAYOUTS SHALL NOT RELIEVE CONTRACTOR FROM THE RESPONSIBILITY OF FURNISHING SAME OF PROPER DIMENSIONS, SIZE, QUANTITY, QUALITY AND ALL PERFORMANCE CHARACTERISTICS TO EFFICIENTLY PERFORM THE REQUIREMENTS AND INTENT OF THE CONTRACT DOCUMENTS. SUCH APPROVAL SHALL NOT RELIEVE CONTRACTOR FROM THE RESPONSIBILITY FOR ERRORS OF ANY SORT ON THE SHOP DRAWINGS. IF THE SHOP DRAWINGS DEVIATE FROM THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL ADVISE THE ARCHITECT/ENGINEER OF THE DEVIATIONS IN WRITING ACCOMPANYING THE INITIAL SUBMISSION SHOP DRAWINGS, AND INCLUDING THE REASONS FOR THE DEVIATIONS.
2. SUBMIT SHOP DRAWINGS AND PRODUCT DATA GROUPED TO INCLUDE COMPLETE SUBMITTALS OF RELATED SYSTEMS, PRODUCTS AND ACCESSORIES IN A SINGLE SUBMITTAL.

REVIEW OF CONTRACT DOCUMENTS AND SITE

1. GIVE WRITTEN NOTICE WITH THE SUBMISSION OF BID TO THE ARCHITECT/ENGINEER OF ANY MATERIALS OR APPARATUS BELIEVED INADEQUATE OR UNSUITABLE, IN VIOLATION OF LAWS, ORDINANCES, RULES OR REGULATIONS OF AUTHORITIES HAVING JURISDICTION, AND ANY NECESSARY ITEMS OF WORK OMITTED. IN THE ABSENCE OF SUCH WRITTEN NOTICE IT IS MUTUALLY AGREED THAT THE CONTRACTOR HAS INCLUDED THE COST OF ALL REQUIRED ITEMS IN HIS PROPOSAL FOR A COMPLETE PROJECT.
2. CONTRACTORS SHALL ACKNOWLEDGE THAT THEY HAVE EXAMINED THE PLANS, SPECIFICATIONS AND SITE, AND THAT FROM HIS OWN INVESTIGATIONS HE HAS SATISFIED HIMSELF AS TO THE NATURE AND LOCATION OF THE WORK; THE GENERAL AND LOCAL CONDITIONS, PARTICULARLY THOSE BEARING UPON TRANSPORTATION, DISPOSAL, HANDLING AND STORAGE OF MATERIALS; AVAILABILITY OF LABOR, UTILITIES, ROADS AND UNCERTAINTIES OF WEATHER; THE COMPOSITION AND CONDITION OF THE GROUND; THE CHARACTERS QUALITY AND QUANTITY OF SUBSURFACE MATERIALS TO BE ENCOUNTERED; THE CHARACTER OF EQUIPMENT AND FACILITIES NEEDED PRELIMINARY TO AND DURING THE EXECUTION OF THE WORK; ALL FEDERAL, STATE, COUNTY, TOWNSHIP AND MUNICIPAL LAWS, ORDINANCES AND REGULATIONS PARTICULARLY THOSE RELATING TO EMPLOYMENT OF LABOR, RATES OF WAGES, AND CONSTRUCTION METHODS; AND ALL OTHER MATTERS WHICH CAN IN ANY WAY AFFECT THE WORK OR THE COST THEREOF UNDER THIS CONTRACT. ANY FAILURE BY THE CONTRACTOR TO ACQUAINT HIMSELF WITH THE AVAILABLE INFORMATION CONCERNING THESE CONDITIONS WILL NOT RELIEVE HIM FROM THE RESPONSIBILITY FOR SUCCESSFULLY PERFORMING THE WORK.
3. OWNER ASSUMES NO RESPONSIBILITY FOR ANY UNDERSTANDING OR REPRESENTATION MADE DURING OR PRIOR TO THE NEGOTIATION AND EXECUTION OF THIS CONTRACT UNLESS SUCH UNDERSTANDING OR REPRESENTATIONS ARE EXPRESSLY STATED IN THE CONTRACT AND THE CONTRACT EXPRESSLY PROVIDES THAT THE RESPONSIBILITY, THEREFORE, IS ASSUMED BY THE OWNER.

OPERATING AND MAINTENANCE INSTRUCTIONS

1. PROVIDE O & M MANUALS.
2. PROVIDE INSTRUCTIONS AND DEMONSTRATION FOR OWNER'S PERSONNEL. PROVIDE AND PAY FOR OPERATING AND MAINTENANCE INSTRUCTION BY MANUFACTURE'S REPRESENTATIVE TO THE OWNER WHEN PROJECT IS COMPLETED AND EQUIPMENT IS READY TO BE TURNED OVER TO THE OWNER. INSTRUCT THE OWNER'S PERSONNEL IN THE USE, OPERATION AND MAINTENANCE OF ALL EQUIPMENT OF EACH SYSTEM.

RECORD DRAWINGS

1. KEEP MASTER SET OF PRINTS ON JOB SITE FOR RECORDING DEVIATIONS FROM THE DRAWINGS.

WARRANTY AND GUARANTEES

1. THE CONTRACTOR SHALL GUARANTEE HIS WORK AGAINST DEFECTS IN WORKMANSHIP AND MATERIALS FOR A PERIOD OF ONE YEAR AFTER WRITTEN ACCEPTANCE OF THE INSTALLATION BY THE OWNER.
2. PROVIDE MANUFACTURER WARRANTEE FOR ALL INSTALLED EQUIPMENT.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR, AND BE REQUIRED TO MAKE GOOD AT HIS OWN EXPENSE, ANY AND ALL DAMAGE DONE TO THE OWNER'S PROPERTY AND/OR TO ANY WORK OR MATERIAL IN PLACE IN THE PREMISES, WHICH IS CAUSED BY HIS WORK OR WORKERS.

MATERIALS

1. ALL EQUIPMENT AND MATERIALS REQUIRED SHALL BE NEW AND WITHOUT BLEMISH OR DEFECTS. ALL ELECTRICAL EQUIPMENT SHALL BEAR THE UNDERWRITERS LABORATORIES APPROVAL.
2. PROVIDE ALL MATERIALS AND APPARATUS REQUIRED FOR THE WORK OF NEW AND FIRST-CLASS QUALITY. FURNISH, DELIVER, ARRANGE, ERECT, CONNECT AND FINISH ALL MATERIALS AND EQUIPMENT IN EVERY DETAIL, SO SELECTED AND ARRANGED AS TO FIT PROPERLY INTO THE BUILDING SPACES.
3. REMOVE ALL MATERIALS DELIVERED, OR WORK ERECTED, WHICH DOES NOT COMPLY WITH DRAWINGS OR SPECIFICATIONS, AND REPLACE WITH PROPER MATERIALS, OR CORRECT SUCH WORK AS DIRECTED, AT NO ADDITIONAL COST TO THE OWNER.

PROTECTION

1. PROTECT THE WORK AND MATERIAL OF ALL TRADES FROM DAMAGE AND REPLACE ALL DAMAGED MATERIAL WITH NEW.
2. PROTECT WORK AND EQUIPMENT UNTIL WORK IS FINALLY INSPECTED, TESTED, AND ACCEPTED; PROTECT WORK AGAINST THEFT, INJURY OR DAMAGE; AND CAREFULLY STORE MATERIAL AND EQUIPMENT RECEIVED ON SITE WHICH IS NOT IMMEDIATELY INSTALLED; CLOSE OPEN ENDS OF WORK WITH TEMPORARY COVERS OR PLUGS DURING CONSTRUCTION TO PREVENT ENTRY OF FOREIGN MATERIAL.
3. PRESERVE ALL PUBLIC AND PRIVATE PROPERTY, ALONG AND ADJACENT TO THE WORK, AND USE EVERY PRECAUTION NECESSARY TO PREVENT DAMAGE OR INJURY THERETO. USE SUITABLE PRECAUTIONS TO PREVENT DAMAGE TO PIPES, CONDUITS AND OTHER UNDERGROUND STRUCTURES OR UTILITIES, AND CAREFULLY PROTECT FROM DISTURBANCE OR DAMAGE ALL PROPERTY MARKS UNTIL AN AUTHORIZED AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION, AND DO NOT REMOVE THEM UNTIL DIRECTED.

CUTTING AND PATCHING

1. PROVIDE ALL CUTTING AND ROUGH PATCHING REQUIRED FOR WORK. PERFORM ALL FINISH PATCHING.
2. FURNISH AND LOCATE ALL SLEEVES AND INSERTS. PROVIDE ALL DRILLING REQUIRED FOR THE INSTALLATION OF HANGERS.
3. CORE DRILL ALL HOLES CUT THROUGH WALLS. DO NOT CUT STRUCTURAL MEMBERS WITHOUT THE APPROVAL OF THE ARCHITECT/ENGINEER. PERFORM ALL CUTTING IN A MANNER DIRECTED BY THE ARCHITECT/ENGINEER.
4. DO NOT DO ANY CUTTING THAT MAY IMPAIR STRENGTH OF BUILDING CONSTRUCTION. DO NO DRILL ANY HOLES, EXCEPT FOR SMALL SCREWS, IN BEAMS OR OTHER STRUCTURAL MEMBERS WITHOUT OBTAINING PRIOR APPROVAL. ALL WORK SHALL BE DONE IN A NEAT MANNER BY MECHANICS SKILLED IN THEIR TRADES AND AS APPROVED.

PIPE HANGER AND SUPPORTS

1. C-CLAMPS TO BE MALLEABLE IRON CLAMPS, HARDENED STEEL CUP POINT SET SCREW WITH RETAINING CLIP.
2. HANGERS AND SUPPORTS:
   - 2.1. CONFORM TO ASME B31.9.
   - 2.2. HANGERS FOR PIPE SIZES 1/2 TO 1-1/2 INCH: CARBON STEEL, ADJUSTABLE SWIVEL, SPLIT RING.
   - 2.3. HANGERS FOR COLD PIPE SIZES 2 INCHES AND OVER: CARBON STEEL, ADJUSTABLE, CLEVIS.
   - 2.4. HANGERS FOR HOT PIPE SIZES 2 TO 3 INCHES: CARBON STEEL, ADJUSTABLE, CLEVIS.
   - 2.5. HANGERS FOR HOT PIPE SIZES 3 1/2 INCHES AND OVER: ADJUSTABLE STEEL YOKE, CAST IRON ROLL, DOUBLE HANGER.
   - 2.6. MULTIPLE OR TRAPEZE HANGERS: STEEL CHANNELS WITH WELDED SPACERS AND HANGER RODS.
   - 2.7. FLOOR SUPPORT FOR HOT PIPE SIZES TO 4 INCHES: CAST IRON ADJUSTABLE PIPE SADDLE, LOCK NUT, NIPPLE, FLOOR FLANGE, AND CONCRETE PIER OR STEEL SUPPORT.
   - 2.8. COPPER PIPE SUPPORT: CARBON STEEL RING, ADJUSTABLE, PLASTIC COATED.
3. THRUST BRACING OF HORIZONTAL NO-HUB CAST IRON PIPE, FITTING AND COUPLINGS OVER 4" IN SIZE MEET THE INTENT OF CISPI DESIGNATION 310-04, CISPI DESIGNATION 301-09 AND THE CISPI CAST IRON SOIL PIPE HANDBOOK, REGARDING AUXILIARY SUPPORT FOR HO-HUB CAST IRON PIPE AND FITTING JOINTS SUBJECTED TO EXCESSIVE THRUST FORCES. USE MANUFACTURED ASSEMBLIES WITH APPROPRIATE THRUST PRESSURE RATINGS, RATHER THAN FIELD ASSEMBLED MISCELLANEOUS MATERIALS. HOLDRITE #117 SERIES FITTING RESTRAINTS, OR APPROVED EQUAL.

SLEEVES

1. INTERIOR WALL PIPE PENETRATIONS
   - 1.1. FOR CONCRETE OR MASONRY INTERIOR WALLS:
     - 1.1.1. SPLIT WALL ACOUSTICAL SEALS CONSIST OF TWO BOLTED PIPE HALVES WITH MINIMUM 3/4" THICK NEOPRENE SPONGE BONDED TO THE INNER FACES.
     - 1.1.2. SPOOL TYPE ACOUSTICAL PIPE SEALS SHALL CONSIST OF A CLOSED CELL NEOPRENE SPONGE INTERIOR SURROUNDED BY A WELDED STEEL SLEEVE AND FLANGE.
     - 1.1.3. PROVIDE A MINIMUM 10 GAUGE PIPE.
   - 1.2. FOR GYPSUM BOARD WALLS:
     - 1.2.1. BOX IN ROUND SLEEVE OPENINGS FOR PIPE WITH NO. 20 GAUGE GALVANIZED SHEET METAL. FLANGE OUT EDGES OF SHEET METAL A MINIMUM OF 1 ½ INCHES TO SECURE SLEEVE TO WALL.
2. INTERIOR WALL DUCT SLEEVES AND SEALS
   - 2.1. BOX IN RECTANGULAR OR ROUND SLEEVE OPENINGS FOR DUCTWORK WITH NO. 20 GAUGE GALVANIZED SHEET METAL. METAL SLEEVE TO BE 0.5 TO 0.75 INCHES LARGER THAN OUTSIDE DIMENSIONS OF DUCT. FLANGE OUT EDGES OF SHEET METAL A MINIMUM OF 1 ½ INCHES TO SECURE SLEEVE TO WALL.
3. EXTERIOR WALL AND FLOOR PENETRATIONS
   - 3.1. FURNISH AND INSTALL A COMPLETE LINK-SEAL MODULAR SEAL ASSEMBLY.
     - 3.1.1. FOR STANDARD SERVICE APPLICATIONS = MODEL C -40 TO +250°F (-40 TO +121°C) EPDM = ATSM D2000 M3 BA510 COLOR = BLACK
     - 3.1.2. FOR THIN WALLED PIPE APPLICATIONS = MODEL L -40 TO +250°F (-40 TO +121°C) EPDM = ATSM D2000 M3 BA510 COLOR = BLUE
   - 3.2. PRESSURE PLATES:
     - 3.2.1. LINK-SEAL MODULAR SEAL PRESSURE PLATES SHALL BE MOLDED OF GLASS REINFORCED NYLON POLYMER WITH THE FOLLOWING PROPERTIES:
       - 3.2.1.1. IZOD IMPACT - NOTCHED = 2.05FT-LB/IN. PER ASTM D-256
       - 3.2.1.2. FLEXURAL STRENGTH @ YIELD = 30,750 PSI PER ASTM D-790
       - 3.2.1.3. FLEXURAL MODULUS = 1,124,000 PSI PER ASTM D-790
       - 3.2.1.4. ELONGATION BREAK = 11.07% PER ASTM D-638
       - 3.2.1.5. SPECIFIC GRAVITY = 1.38 PER ASTM D-792
   - 3.3. FOR FIRE AND HI-TEMP SERVICE, PRESSURE PLATES SHALL BE STEEL WITH 2-PART ZINC DICHROMATE COATING.
4. SEAL HARDWARE: ALL FASTENERS SHALL BE SIZED ACCORDING TO LATEST LINK-SEAL MODULAR SEAL TECHNICAL DATA. BOLTS, FLANGE HEX NUTS SHALL BE EITHER:
   - 4.1. MILD STEEL WITH A 60,000 PSI MINIMUM TENSILE STRENGTH AND 2-PART ZINC DICHROMATE COATING PER ASTM B-633 AND ORGANIC COATING, TESTED IN ACCORDANCE WITH ASTM B-117 TO PASS A 1,470 HOUR SALT SPRAY TEST.
   - 4.2. 316 STAINLESS STEEL PER ASTM F593-95, WITH A 85,000 PSI AVERAGE TENSILE STRENGTH.
5. WALL OPENING:
   - 5.1. CENTURY-LINE SLEEVES - FOR OPENINGS TO 24.81" DIAMETER. WHERE PIPES MUST PASS THROUGH EXTERIOR WALLS OF NEW STRUCTURES, UNLESS OTHERWISE SHOWN OR SPECIFIED.

PIPE IDENTIFICATION

1. NAMEPLATES
   - 1.1. MANUFACTURER: SETON NAMEPLATE COMPANY OR APPROVED EQUAL
   - 1.2. LAMINATED THREE-LAYER PLASTIC WITH ENGRAVED WHITE LETTERS ON DARK CONTRASTING BACKGROUND COLOR.
2. PLASTIC AND METAL TAGS
   - 2.1. MANUFACTURER: SETON NAMEPLATE COMPANY OR APPROVED EQUAL
   - 2.2. LAMINATED THREE-LAYER PLASTIC WITH ENGRAVED WHITE LETTERS ON DARK CONTRASTING BACKGROUND COLOR OR BRASS WITH STAMPED LETTERS AND SERVICE DESIGNATION TAG. TAG SIZE MINIMUM 1-1/2" DIAMETER BRASS 'S' HOOK.
3. STENCILS
   - 3.1. MANUFACTURER: SETON NAMEPLATE COMPANY OR APPROVED EQUAL
   - 3.2. WITH CLEAN CUT SYMBOLS AND LETTERS OF THE FOLLOWING SIZES:
     - 3.2.1. UP TO 2" WITH INSULATION": 1/2" HIGH LETTERS
     - 3.2.2. 2-1/2" TO 6" WITH INSULATION": 1" HIGH LETTERS
     - 3.2.3. OVER 6" WITH INSULATION": 1-3/4" HIGH LETTERS
4. PIPE MARKERS
   - 4.1. CONFORM TO ASME A13.1.
   - 4.2. PLASTIC PIPE MARKERS
     - 4.2.1. MANUFACTURER: SETON NAMEPLATE COMPANY OR APPROVED EQUAL
     - 4.2.2. FACTORY FABRICATED, FLEXIBLE, SEMI-RIGID PLASTIC, PREFORMED TO FIT AROUND PIPE.
   - 4.3. PLASTIC TAPE PIPE MARKERS
     - 4.3.1. MANUFACTURER: SETON NAMEPLATE COMPANY OR APPROVED EQUAL
     - 4.3.2. FACTORY FABRICATED, FLEXIBLE, SEMI-RIGID PLASTIC, PREFORMED TO FIT AROUND PIPE.
5. INSTALLATION
   - 5.1. INSTALL PLASTIC NAMEPLATES WITH CORROSIVE RESISTANT MECHANICAL FASTENERS OR ADHESIVE
   - 5.2. IDENTIFY PUMPS AND TANKS WITH STENCIL PAINTING, OR TAGS WITH SMALLER EQUIPMENT AND VALVES
   - 5.3. IDENTIFY CONTROL PANELS WITH PLASTIC NAMEPLATES
   - 5.4. IDENTIFY PIPING, EXPOSED AND CONCEALED, WITH PLASTIC PIPE MARKERS AND IDENTIFY FLOW DIRECTION. MARKINGS SHALL BE EVERY 20 FEET.

PIPING INSULATION

1. GLASS FIBER
   - 1.1. MANUFACTURER: MANVILLE MECHANICAL INSULATION SYSTEM MODEL MICRO-LOK OR APPROVED EQUAL.
   - 1.2. INSULATION: ASTM C547; RIGID MOLDED, NONCOMBUSTIBLE.
     - 1.2.1. "K" VALUE: ASTM C177, 0.24 AT 75 DEGREES F.
     - 1.2.2. MAXIMUM SERVICE TEMPERATURE: 850 DEGREES F.
     - 1.2.3. MAXIMUM MOISTURE ABSORPTION: 0.2 PERCENT BY VOLUME.
   - 1.3. INSULATION: ASTM C795; SEMI-RIGID, NONCOMBUSTIBLE, END GRAIN ADHERED TO JACKET.
     - 1.3.1. 'K' VALUE: ASTM C177, 0.24 AT 75 DEGREES F.
     - 1.3.2. MAXIMUM SERVICE TEMPERATURE: 650 DEGREES F.
     - 1.3.3. MAXIMUM MOISTURE ABSORPTION: 0.2 PERCENT BY VOLUME.
   - 1.4. VAPOR BARRIER JACKET:
     - 1.4.1. ASTM C921, WHITE KRAFT PAPER WITH GLASS FIBER YARN, BONDED TO ALUMINIZED FILM.
     - 1.4.2. MOISTURE VAPOR TRANSMISSION: ASTM E96; 0.02 PERM-INCHES.
   - 1.5. TIE WIRE: 0.048-INCH STAINLESS STEEL WITH TWISTED ENDS ON MAXIMUM 12-INCH CENTERS.
     - 1.5.1. VAPOR BARRIER LAP ADHESIVE: COMPATIBLE WITH INSULATION.
     - 1.5.2. INSULATING CEMENT/MASTIC: ASTM C195; HYDRAULIC SETTING ON MINERAL WOOL.
2. JACKETS
   - 2.1. PVC PLASTIC.
     - 2.1.1. JACKET: ASTM D1784, ONE PIECE MOLDED TYPE FITTING COVERS AND SHEET MATERIAL, OFF-WHITE COLOR. TEMP RANGE: 0 TO 150 DEG F.
   - 2.2. EXAMINATION
     - 2.2.1. VERIFY PIPE SYSTEM HAS BEEN TESTED PRIOR TO INSTALLING INSULATION.
   - 2.3. INSTALLATION
     - 2.3.1. INSULATED PIPES CONVEYING FLUIDS BELOW AMBIENT TEMPERATURE: INSULATE ENTIRE SYSTEM INCLUDING FITTINGS, VALVES, UNIONS, FLANGES, STRAINERS, FLEXIBLE CONNECTIONS AND EXPANSION JOINTS.
     - 2.3.2. GLASS FIBER INSULATED PIPES CONVEYING FLUIDS BELOW AMBIENT TEMPERATURE:
     - 2.3.3. PROVIDE VAPOR BARRIER JACKETS, FACTORY-APPLIED OR FIELD-APPLIED. SECURE WITH SELF-SEALING LONGITUDINAL LAPS AND BUTT STRIPS WITH PRESSURE SENSITIVE ADHESIVE. SECURE WITH OUTWARD CLINCH EXPANDING STAPLES AND VAPOR BARRIER MASTIC.
     - 2.3.4. INSULATE FITTINGS, JOINTS, AND VALVES WITH MOLDED INSULATION OF LIKE MATERIAL AND THICKNESS AS ADJACENT PIPE. FINISH WITH GLASS CLOTH AND VAPOR BARRIER ADHESIVE OR PVC FITTING COVERS.
     - 2.3.5. FOR HOT PIPING CONVEYING FLUIDS 140 DEGREES F OR LESS, DO NOT INSULATE FLANGES AND UNIONS AT EQUIPMENT, BUT BEVEL AND SEAL ENDS OF INSULATION.
     - 2.3.6. GLASS FIBER INSULATED PIPES CONVEYING FLUIDS ABOVE AMBIENT TEMPERATURE:
     - 2.3.7. PROVIDE STANDARD JACKETS, WITH OR WITHOUT VAPOR BARRIER, FACTORY-APPLIED OR FIELD-APPLIED. SECURE WITH SELF-SEALING LONGITUDINAL LAPS AND BUTT STRIPS WITH PRESSURE SENSITIVE ADHESIVE. SECURE WITH OUTWARD CLINCH EXPANDING STAPLES.
     - 2.3.8. INSULATE FITTINGS, JOINTS, AND VALVES WITH INSULATION OF LIKE MATERIAL AND THICKNESS AS ADJOINING PIPE. FINISH WITH GLASS CLOTH AND ADHESIVE OR PVC FITTING COVERS.
   - 2.4. INSERTS AND SHIELDS:
     - 2.4.1. APPLICATION: PIPING 1-1/2 INCHES DIAMETER OR LARGER.
       - 2.4.1.1. SHIELDS: GALVANIZED STEEL BETWEEN PIPE HANGERS OR PIPE HANGER ROLLS AND INSERTS.
       - 2.4.1.2. INSERT LOCATION: BETWEEN SUPPORT SHIELD AND PIPING AND UNDER THE FINISH JACKET.
       - 2.4.1.3. INSERT CONFIGURATION: MINIMUM 6 INCHES LONG, OF SAME THICKNESS AND CONTOUR AS ADJOINING INSULATION; MAY BE FACTORY FABRICATED.
       - 2.4.1.4. INSERT MATERIAL: HYDROUS CALCIUM SILICATE INSULATION OR OTHER HEAVY DENSITY INSULATING MATERIAL SUITABLE FOR THE PLANNED TEMPERATURE RANGE.
       - 2.4.1.5. CONTINUE INSULATION THROUGH WALLS, SLEEVES, PIPE HANGERS, AND OTHER PIPE PENETRATIONS. FINISH AT SUPPORTS, PROTRUSIONS, AND INTERRUPTIONS. AT FIRE SEPARATIONS, REFER TO SECTION 078100 - APPLIED FIREPROOFING.

PLUMBING PIPING

1. QUALITY ASSURANCE
   - 1.1. ALL CAST IRON SOIL PIPE AND FITTINGS SHALL BEAR THE COLLECTIVE TRADEMARK OF THE CAST IRON SOIL PIPE INSTITUTE (CISPI) AND BE LISTED BY NSF INTERNATIONAL.
   - 1.2. STANDARD, STAINLESS-STEEL SHIELDED, COUPLINGS: STANDARD COUPLINGS SHALL CONFORM TO CISPI 310 AND ASTM C 1277. SHIELD ASSEMBLIES SHALL CONSIST OF A STAINLESS STEEL BI-DIRECTIONAL CORRUGATED SHIELD; STAINLESS-STEEL BANDS AND TIGHTENING DEVICES; AND A ASTM C 564, RUBBER SLEEVE WITH INTEGRAL CENTER STOP. COUPLINGS SHALL BEAR THE NSF TRADEMARK, AND BE MANUFACTURED IN THE USA.
   - 1.3. MATERIALS WITHIN MECHANICAL AIR PLENUMS SHALL BE NONCOMBUSTIBLE OR SHALL HAVE A FLAME SPREAD INDEX OF NOT MORE THAN 25 AND A SMOKE-DEVELOPED INDEX OF NOT MORE THAN 50 WHEN TESTED IN ACCORDANCE WITH ASTM E84.
   - 1.4. ALL CAST IRON SOIL PIPE AND FITTINGS SHALL BE MARKED WITH THE COLLECTIVE TRADEMARK OF THE CAST IRON SOIL PIPE INSTITUTE (CISPI) AND BE LISTED BY NSF INTERNATIONAL.
2. SANITARY, VENT, STORM, SUMP PUMP DISCHARGE PIPING - BELOW GRADE
   - 2.1. CAST IRON PIPE AND FITTINGS: ASTM A74 EXTRA HEAVY WEIGHT. HUB-AND-SPIGOT WITH COMPRESSION GASKET THAT MEETS THE ASTM C-564 REQUIREMENTS.
3. SANITARY, VENT, STORM , SUMP PUMP DISCHARGE PIPING - ABOVE GRADE
   - 3.1. CAST IRON (SERVICE WEIGHT) PIPE AND FITTINGS, ASTM A74. JOINTS SHALL HAVE NEOPRENE GASKET SYSTEM, AST, C564..
   - 3.2. CAST IRON (HUBLESS) PIPE AND FITTINGS: CISPI 301. JOINTS SHALL HAVE A NEOPRENE GASKETS AND STAINLESS STEEL CLAMP-AND-SHIELD ASSEMBLY, CISPI 310.
4. DOMESTIC WATER PIPING - ABOVE GRADE
   - 4.1. COPPER TUBING: ASTM B88, TYPE L, HARD DRAWN. FITTINGS TO BE ASME B16.18, CAST COPPER ALLOY OR ASME B16.22, WROUGHT COPPER AND BRONZE.
   - 4.2. PRESS FITTINGS, APOLLO XPRESS, OR APPROVED EQUAL: BRONZE, OR COPPER CONFORMING TO ASME B16.51, ICC LC 1002, IAPMO PS 117, NSF 61, AND NSF 61-G OR NSF 372.
5. DOMESTIC WATER PIPING - BELOW GRADE, CONDENSATE PIPING - ABOVE GRADE
   - 5.1. COPPER TUBING: ASTM B88, TYPE K, HARD DRAWN. FITTINGS TO BE ASME B16.18, CAST COPPER ALLOY OR ASME B16.22, WROUGHT COPPER AND BRONZE.
   - 5.2. PRESS FITTINGS, APOLLO XPRESS, OR APPROVED EQUAL: BRONZE, OR COPPER CONFORMING TO ASME B16.51, ICC LC 1002, IAPMO PS 117, NSF 61, AND NSF 61-G OR NSF 372.

VALVES

1. GATE VALVES SHALL BE APOLLO LEAD FREE 120 SERIES.
2. CHECK VALVES SHALL BE APOLLO LEAD FREE 61 SERIES.
3. BALL VALVES SHALL BE APOLLO LEAD FREE 77 SERIES.
4. GAS COCKS SHALL BE APOLLO 50 SERIES
5. PRV SHALL BE APOLLO LEAD FREE 36 SERIES.
6. STRAINER SHALL BE APOLLO LEAD FREE 59 SERIES.
7. BALANCING VALVE SHALL BE NIBCO LEAD FREE DZR SERIES.

PLUMBING SPECIALTIES

1. CLEANOUTS
   - 1.1. FINISHED FLOOR AREAS:
     - 1.1.1. ZURN MODEL Z-1400 OR APPROVED EQUAL.
     - 1.1.2. LACQUERED CAST IRON BODY WITH ANCHOR FLANGE, ADJUSTABLE THREADED TOP ASSEMBLY, AND ROUND GASKETED SCORED COVER IN CONCRETE FLOOR AREAS AND SQUARE GASKETED DEPRESSED COVER TO ACCEPT FLOOR FINISH IN FINISHED FLOOR AREAS.
   - 1.2. INTERIOR FINISHED WALL AREAS:
     - 1.2.1. ZURN MODEL Z1447 OR APPROVED EQUAL.
     - 1.2.2. LINE TYPE WITH LACQUERED CAST IRON BODY AND ROUND EPOXY COATED GASKETED COVER, AND ROUND STAINLESS STEEL ACCESS COVER SECURED WITH MACHINE SCREW.
     - 1.2.1. INTERIOR UNFINISHED ACCESSIBLE AREAS: CALKED OR THREADED TYPE. PROVIDE BOLTED STACK CLEANOUTS ON VERTICAL RAINWATER LEADERS.
2. WATER HAMMER ARRESTORS
   - 2.1. SIOUX CHIEF 650 SERIES OR APPROVED EQUAL, PISTON-TYPE WATER HAMMER ARRESTORS SHALL BE REQUIRED IN PIPING SYSTEMS. WATER HAMMER ARRESTORS SHALL BE ANSI/ASSE 1010 2004 CERTIFIED AND SHALL BE SIZED AND PLACED PER MANUFACTURER'S INSTRUCTIONS.
3. INSULATION KITS
   - 3.1. TRUEBRO LAVGUARD 2 OR APPROVED EQUAL
   - 3.2. COVER EXPOSED SUPPLY AND DRAIN PIPE UNDER LAVATORIES IN ACCORDANCE WITH ADA REQUIREMENTS.
4. TRAP PRIMERS
   - 4.1. MECHANICAL:
   - 4.2. SIOUX CHIEF 695 SERIES OR APPROVED EQUAL TRAP PRIMER WITH 1/2" FIP INLET X 1/2" MIP OUTLET WHICH ACTIVATES WITH A 10 PSIG PRESSURE DROP BETWEEN 30-150 PSIG. WATER RELEASE SHALL BE FACTORY SET. TRAP PRIMER VALVE SHALL HAVE LARGE PORT OPENINGS AND A NON-CORROSIVE BRASS FINISH. MUST BE UPC/IAPMO LISTED, AND ASSE CERTIFIED TO THE ASSE 1018 STANDARD.
   - 4.3. TRAP PRIMER SHALL BE CAPABLE OF SERVING UP TO EIGHT (8) DRAINS. PROVIDE TRAP PRIMER SPLITTER/DISTRIBUTION UNITS (SERIES 695 SPLITTERS) AS NECESSARY.

CLEANING AND ADJUSTING

1. CLEAN ALL EQUIPMENT AND ALL AREAS AFFECTED BY THE CONSTRUCTION WORK OF ALL RUBBISH AND DEBRIS ON A DAILY BASIS.

TESTS

1. THE PLUMBING CONTRACTOR SHALL PROVIDE ALL APPARATUS, TEMPORARY WORK OR ANY OTHER REQUIREMENTS NECESSARY FOR ALL PLUMBING TESTS. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS TO PREVENT DAMAGE TO THE BUILDING AND ITS CONTENTS THAT MAY OCCUR BY SUCH TESTS. THE CONTRACTOR WILL BE REQUIRED TO REPAIR AND MAKE GOOD, AT HIS EXPENSE, ANY DAMAGE DO CAUSED.
2. ANY DEFECT OR DEFICIENCIES DISCOVERED AS A RESULT OF TESTS SHALL BE IMMEDIATELY REPAIRED AND TESTS SHALL BE REPEATED UNTIL ALL REQUIREMENTS ARE FULFILLED.
3. NO CAULKING OF THREADED OR SOLDERED JOINTS SHALL BE PERMITTED TO REMEDY LEAKS.
4. WATER SYSTEMS SHALL BE TESTED WITH 125 P.S.I.G. PRESSURE AND STAND WITHOUT LOSS OF PRESSURE FOR A PERIOD OF NOT LESS THAN THIRTY MINUTES.

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NEW BRUNSWICK FIRE DEPT.
HEADQUARTERS – INTERIOR RENOVATION
93 JOYCE KILMER AVE NEW BRUNSWICK, NJ 08901

PROJECT NUMBER: MWSA2601

SUBMISSION:
FOR BID

ORIGINAL ISSUE DATE:
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SHEET REVISION SCHEDULE:
No. DATE

PLUMBING SPECIFICATIONS

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