LIBERTY CENTRAL SCHOOL DISTRICT
MAINTENANCE BUILDING

125 Buckley St., Liberty, NY 12754

Construction Documents: 12/13/22

CSARCH - ARCHITECTS

BLAKE ENGINEERING, PLLC - MEP ENGINEERS

PASSERO ASSOCIATES - SITE/CIVIL & STRUCTURAL ENGINEERS

STATE EDUCATION DEPARTMENT PROJECT CONTROL NUMBER:

MAINTENANCE BUILDING 59-09-01-06-3-016-001

THE DESIGN OF THIS PROJECT CONFORMS TO APPLICABLE PROVISIONS OF THE NEW YORK STATE UNIFORM FIRE PREVENTION AND BUILDING CODE, THE NEW YORK STATE ENERGY CONSERVATION CONSTRUCTION CODE, AND THE MANUAL OF PLANNING STANDARDS OF THE NEW YORK STATE EDUCATION DEPARTMENT.

CSArch PROJECT NO. 203-2201

VICINITY MAP NTS

DRAWING LIST - MAINTENANCE BUILDING (MB)

GENERAL DRAWINGS

G001	SYMBOLS, ABBREVIATIONS, AND MISC

CIVIL DRAWINGS

C111	NOTES
C130	EXISTING CONDITIONS, DEMOLITION, EROSION AND SEDIMENT CONTROL PLAN & SITE AND UTILITIES PLAN
C540	DETAILS

ARCHITECTURAL DEMOLITION DRAWINGS

AD101	DEMOLITION PLAN

LIFE SAFETY DRAWINGS

LS101	LIFE SAFETY PLANS

STRUCTURAL DRAWINGS

S001	GENERAL NOTES, DESIGN CRITERIA, AND SCHEDULES
S002	SPECIAL INSPECTIONS
S101	PLANS & SECTIONS
S501	TYPICAL DETAILS

ARCHITECTURAL DRAWINGS

A111	FIRST FLOOR PLAN
A201	EXTERIOR ELEVATIONS
A251	BUILDING SECTIONS
A301	WALL SECTIONS
A302	WALL SECTIONS
A351	SECTION DETAILS
A352	PLAN DETAILS
A401	ROOF PLAN AND DETAILS
A451	ROOF FRAMING PLAN
A601	ENLARGED PLAN AND ELEVATIONS
A602	ENLARGED PLAN AND ELEVATIONS
A603	ENLARGED PLAN AND ELEVATIONS
A604	TYPICAL EQUIPMENT PLANS, ELEVATIONS, AND DETAILS
A701	PARTITION TYPES
A811	FIRST FLOOR REFLECTED CEILING PLAN AND DETAILS
A901	DOOR SCHEDULE, ELEVATIONS, AND DETAILS

ARCHITECTURAL FINISH DRAWINGS

AF001	FINISH SCHEDULES AND PLANS

PLUMBING DRAWINGS

P101	PLUMBING NOTES, SCHEDULE, LEGEND, & DETAILS
P201	WATER & GAS DISTRIBUTION PLAN
P202	SANITARY PLAN

MECHANICAL DRAWINGS

M101	MECHANICAL NOTES, LEGEND, SCHEDULE, & DETAILS
M102	MECHANICAL SCHEDULES & PIPING DIAGRAM
M201	MECHANICAL PLAN
M202	HYDRONIC PLANS

ELECTRICAL DRAWINGS

E101	ELECTRICAL NOTES, LEGEND, DETAILS, & SCHEDULES
E102	ELECTRICAL SITE PLAN
E201	LIGHTING PLAN
E301	POWER PLAN

ABBREVIATIONS

ABBREVIATION	DESCRIPTION
ADD	ADDENDUM
ADMIN	ADMINISTRATIVE
AFF	ABOVE FINISHED FLOOR
ALT	ALTERNATE
APPROX	APPROXIMATE
ARCH	ARCHITECT / ARCHITECTURAL
AV	AUDIO VISUAL
BLDG	BUILDING
BOT OR B/	BOTTOM OF
BSMT	BASEMENT
CJ	CONTROL / CONSTRUCTION JOINT
CL	CENTERLINE
CLG / CLNG	CEILING
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
CONF	CONFERENCE
CONT	CONTINUOUS
COORD	COORDINATE
CORR	CORRIDOR
DEMO	DEMOLITION
DET	DETAIL
DIA	DIAMETER
DN	DOWN
DWG	DRAWING
ED	EDUCATION
EIFS	EXTERIOR INSULATION FINISH SYSTEM
ELECT	ELECTRIC / ELECTRICAL
EPDM	ETHYLENE PROPYLENE DIENE MONOMER
EQ	EQUAL
EQUIP	EQUIPMENT
EXST	EXISTING
EJ	EXPANSION JOINT
EXT	EXTERIOR
FIN	FINISH
FIN FL	FINISH FLOOR
FIXT	FIXTURE
FLR	FLOOR
FRT	FIRE-RETARDENT-TREATED MATERIAL
FTG	FOOTING
GA	GAUGE
GAL	GALLON
GALV	GALVANIZE(D)
GC	GENERAL CONTRACT(OR)
GND	GROUND
GWB	GYPSUM WALL BOARD
GWBS	GYPSUM WALL BOARD SOFFIT
HC	HANDICAPPED ACCESSIBLE
HM	HOLLOW METAL
HORIZ	HORIZONTAL
HR	HOUR
HT	HEIGHT
HTG	HEATING
HVAC	HEATING/VENTILATING/AIR CONDITIONING
ID	INSIDE DIMENSION
IN	INCH / INCHES
INT	INTERIOR
JAN	JANITOR
JC	JANITOR'S CLOSET
JST	JOIST
JT	JOINT
LAB	LABORATORY
LB	POUND
LIN	LINEAR
LVL	LEVEL
MAN	MANUAL
MAS	MASONRY
MAX	MAXIMUM
MDF	MEDIUM DENSITY FIBERBOARD
MECH	MECHANICAL
MEZZ	MEZZANINE
MFR	MANUFACTURE(R)
MID	MIDDLE
MIN	MINIMUM
MISC	MISCELLANEOUS
MO	MASONRY OPENING
MTL	METAL
NA	NOT APPLICABLE
NIC	NOT IN CONTRACT
NOM	NOMINAL
NTS	NOT TO SCALE
OA	OVERALL
OC	ON CENTER
OD	OUTSIDE DIAMETER
O/HD	OVERHEAD
OPT	OPTIONAL
OZ	OUNCE
PERIM	PERIMETER
PLAM	PLASTIC LAMINATE
PLBG	PLUMBING
PLAS	PLASTER
PLYWD	PLYWOOD
PNL	PANEL
PNT	PAINTED)
POLYISO	POLYISOCYANURATE
PPT	PRESSURE PRESERVATIVE TREATED
PR	PAIR
PREP	PREPARATORY
PTN	PARTITION
PVC	POLYVINYL CHLORIDE
RAD	RADIUS
RB	RUBBER / RUBBER WALL BASE
REQD	REQUIRED
RM	ROOM
RND	ROUND
RO	ROUGH OPENING
SCH	SCHEDULED
SECT	SECTION
SF	SQUARE FEET
SIM	SIMILAR
SPEC	SPECIFICATION
SQ	SQUARE
SS	STAINLESS STEEL
STC	SOUND TRANSMISSION CLASS
STD	STANDARD
STL	STEEL
STOR	STORAGE
STRUCT	STRUCTURAL / STRUCTURE
SUSP	SUSPENDED
SAC	SUSPENDED ACOUSTICAL CEILING
T&B	TOP AND BOTTOM
T&G	TONGUE AND GROOVE
TECH	TECHNOLOGY
TEMP	TEMPORARY
TMPD	TEMPERED
TOM	TOP OF MASONRY
TOS	TOP OF STEEL
TYP	TYPICAL
UL	UNDERWRITERS LABORATORY
UNO	UNLESS NOTED OTHERWISE
VERT	VERTICAL
VEST	VESTIBULE
VIF	VERIFY IN FIELD
W/	WITH
W/O	WITHOUT
WD	WOOD
WPT	WOOD PRESERVED-TREATED MATERIAL
WT	WEIGHT
YD	YARD

ARCHITECTURAL LEGEND

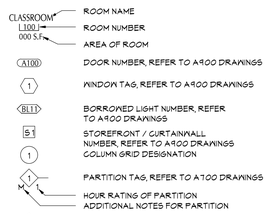
MATERIAL INDICATIONS

- EARTH
- GRANULAR FILL
- BRICK
- CONCRETE MASONRY UNIT
- CONCRETE
- GROUT
- ROUGH WOOD BLOCKING
- SHIM
- FINISH WOOD
- PLYWOOD
- SHEATHING
- RIGID INSULATION
- BATT INSULATION
- SPRAY FOAM INSULATION
- EPS INSULATION
- STEEL

DIMENSIONING CONVENTIONS

- FACE OF STUD OR CMU
- GOLUMN CENTER LINE

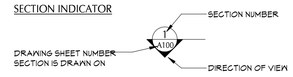
SYMBOLS



- ROOM NAME
- ROOM NUMBER
- AREA OF ROOM
- A100 — DOOR NUMBER, REFER TO A900 DRAWINGS
- 1 — WINDOW TAG, REFER TO A900 DRAWINGS
- BL11 — BORROWED LIGHT NUMBER, REFER TO A900 DRAWINGS
- S1 — STOREFRONT / CURTAINWALL NUMBER, REFER TO A900 DRAWINGS
- 1 — GOLUMN GRID DESIGNATION
- 1 / A100 — PARTITION TAG, REFER TO A100 DRAWINGS
- HOUR RATING OF PARTITION
- ADDITIONAL NOTES FOR PARTITION
- 1 — REVISION NUMBER
- 1 — KEY NOTE, NEW WORK
- 1 — KEY NOTE, DEMOLITION WORK
- 10'-0" — ELEVATION TAG
- HANDICAPPED ACCESSIBLE ELEMENT OR FIXTURE
- WALL FINISH / BASE FINISH / FLOOR FINISH / CEILING FINISH — INTERIOR FINISH TAG, REFER TO AF100 DRAWINGS

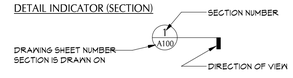
DETAIL INDICATOR LEGEND

SECTION INDICATOR



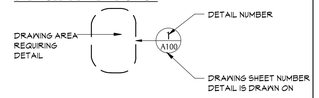
- SECTION NUMBER
- DRAWING SHEET NUMBER SECTION IS DRAWN ON
- DIRECTION OF VIEW

DETAIL INDICATOR (SECTION)



- SECTION NUMBER
- DRAWING SHEET NUMBER SECTION IS DRAWN ON
- DIRECTION OF VIEW

ENLARGED DETAIL INDICATOR



- DETAIL NUMBER
- DRAWING AREA REQUIRING DETAIL
- DRAWING SHEET NUMBER DETAIL IS DRAWN ON

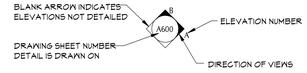
DETAIL TITLE

- DETAIL NUMBER
- DETAIL TYPE / NAME
- DRAWING SHEET NUMBER
- SCALE

EXTERIOR ELEVATION INDICATOR

- DIRECTION OF VIEW
- ELEVATION NUMBER
- DRAWING SHEET NUMBER DETAIL IS DRAWN ON

INTERIOR ELEVATION INDICATOR

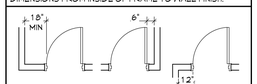


- BLANK ARROW INDICATES ELEVATIONS NOT DETAILED
- ELEVATION NUMBER
- DRAWING SHEET NUMBER DETAIL IS DRAWN ON
- DIRECTION OF VIEWS

PLAN GRAPHICS LEGEND

- EXISTING CONSTRUCTION TO REMAIN
- EXISTING CONSTRUCTION TO BE REMOVED
- NEW CONCRETE MASONRY WALL
- NEW METAL STUD WALL
- NEW BRICK VENEER
- EXISTING DOOR TO REMAIN
- EXISTING DOOR TO BE REMOVED
- NEW DOOR

FINISHED DOOR OPENINGS SHALL BE LOCATED AS INDICATED BELOW UNO. DIMENSIONS SHOWN ARE CLEAR DIMENSIONS FROM INSIDE OF FRAME TO WALL FINISH.



GENERAL NOTES

1. DIMENSIONS ARE GIVEN THUS (UNLESS NOTED OTHERWISE)
   A. TO FACE OF MASONRY WALL
   B. TO FACE OF METAL STUD
   C. TO COLUMN CENTERLINES
   D. TO FINISH FACE OF SOFFIT OR CEILING
   E. FACE OF EXISTING CONSTRUCTION
2. DO NOT SCALE DRAWINGS. IF A DIMENSION IS NOT SHOWN, BRING IT TO THE ATTENTION OF THE ARCHITECT FOR VERIFICATION BEFORE PROCEEDING WITH THE ASSOCIATED WORK
3. WALLS ON COLUMN LINES ARE CENTERED, UNO
4. ALL DIMENSIONS RELATED TO EXISTING CONDITIONS SHALL BE VERIFIED IN FIELD. CONTRACTOR TO NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO BEGINNING WORK IN THAT AREA.
5. LAYOUT OF TOILET FIXTURES AND ACCESSIBILITY CLEARANCES ARE SHOWN AS CLEAR DIMENSION. CONTRACTORS ARE REQUIRED TO COODINATE LAYOUTS OF PARTITIONS, UTILITY CONNECTIONS, AND THICKNESS OF FINISHES TO ALLOW THESE CLEAR DIMENSIONS.
6. ALL ELEVATIONS (X'-X") ARE REFERENCE FROM FIRST FLOOR ELEVATION
7. ALL WOOD BLOCKING WITHIN ROOFING SYSTEM AND WITHIN 2'-0" OF GRADE SHALL BE PRESSURE TREATED
8. ALL FLOOR PENETRATIONS SHALL BE SMOKE-SEALED AND /OR FIRE STOPPED. COORDINATE WITH H DWGS FOR SMOKE / FIRE DAMPER REQUIREMENTS.
9. FOR INTERIOR PARTITION TYPES, REFER TO DRAWING A701
10. FOR DOOR SCHEDULE, REFER TO DRAWING A901
11. FOR FINISH SCHEDULE, REFER TO DRAWING AF901
12. ALL EXPOSED SURFACES OF NEW PARTITIONS AND SOFFITS ARE TO BE FINISHED.
13. PROVIDE PATCH TO MATCH EXISTING FINISHES AT ALL WALL REMOVAL AREAS, COORDINATE WITH DEMOLITION DRAWINGS AND SPECIFICATIONS.
14. FOR ALL MATERIAL TESTING, REFER TO SPECIFICATION DIVISION 000220
15. ALL CONSTRUCTION SHOWN IS NEW UNLESS NOTED OTHERWISE

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Consultant

LIBERTY CENTRAL SCHOOL DISTRICT MAINTENANCE BUILDING

Project Title

REGISTERED ARCHITECT ROBERT M. RITTENHOUSE 023344 STATE OF NEW YORK

#	DATE	DESCRIPTION

Drawn By:	CSA
Checked By:	CSA
Proj. #:	59-09-01-06-3-016-001
CSArch Proj. #:	203-2201
Construction Documents:	12/13/22

Sheet Title

SYMBOLS, ABBREVIATIONS, AND MISC

Sheet No.

MB G001

CONSTRUCTION DOCUMENTS

MAP REFERENCE:

1. ALL EXISTING CONDITIONS AND PROPERTY INFORMATION HAVE BEEN OBTAINED FROM THE SURVEY "BOUNDARY AND TOPOGRAPHIC SURVEY OF A PORTION OF LIBERTY JR/SR HIGH SCHOOL" PERFORMED BY BOLTON LAND SURVEYING, P.C. DATED NOVEMBER 16, 2017 .

DEMOLITION NOTES:

1. SECURITY PROVIDE, INSTALL AND MAINTAIN TEMPORARY BARRIERS AND SECURITY DEVICES.
2. DIG SAFE CONTRACTOR IS RESPONSIBLE TO CALL DIG SAFE PRIOR TO BEGINNING DEMOLITION.
3. VERIFICATION CONTRACTOR TO VERIFY VERTICAL AND HORIZONTAL LOCATION OF ALL UTILITIES WITHIN THE WORK AREA OR THOSE EXPECTED TO BE AFFECTED BY NEW WORK, AND SUBSURFACE FEATURES. THE CONTRACTOR MUST BRING ANY ISSUES TO THE DESIGN ENGINEER AND OBTAIN WRITTEN APPROVAL FROM THE PROJECT ARCHITECT UPON COMPLETION OF VERIFICATION PRIOR TO THE START OF DEMOLITION OR CONSTRUCTION.
4. APPLICABILITY THE CONTRACTOR IS RESPONSIBLE FOR ALL DEMOLITION WORK SHOWN ON THE "C" SERIES DRAWINGS AND AS DEFINED IN THE SPECIFICATIONS UNLESS SPECIFICALLY DEFINED OTHERWISE. THIS INCLUDES ALL REMOVALS AS NECESSARY FOR THE CONSTRUCTION OF NEW WORK EVEN IF NOT SPECIFICALLY NOTED ON THE CONTRACT DOCUMENTS.
5. RECORD MAP - DURING REMOVAL/DEMOLITION PROCESS THE CONTRACTOR SHALL OBTAIN DETAILED RECORD INFORMATION TO ACCURATELY LOCATE ALL EXISTING UNDERGROUND UTILITIES ENCOUNTERED. THIS INFORMATION SHALL BE INCLUDED ON THE RECORD/AS-BUILT MAPS TO BE SUPPLIED BY THE SITE CONTRACTOR TO LIBERTY CENTRAL SCHOOLS.
6. SHUTDOWNS CONTRACTOR TO COORDINATE ALL UTILITY SHUT DOWNS, RELOCATIONS, SERVICE INSTALLATIONS WITH THE SCHOOL DISTRICT AND LOCAL UTILITY COMPANIES.
7. COORDINATION CONTRACTOR SHALL COORDINATE THE REMOVAL OF DEMOLISHED MATERIAL WITH THE PROJECT ARCHITECT. SITE FURNISHINGS AND MATERIAL DETERMINED TO BE REMOVED SHALL BE REMOVED AND EXPORTED OFFSITE IN A LEGAL MANNER AND IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS.
8. PROTECT ALL EXISTING FEATURES TO REMAIN. DAMAGE TO EXISTING ASPHALT, LAWN AND OTHER FEATURES TO REMAIN AND SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
9. DISTURBANCE ALL SURFACES THAT ARE DISTURBED DUE TO UTILITY CONSTRUCTION, OUTSIDE OF THE MAJOR WORK AREAS, ARE TO BE RESTORED TO PRE-CONSTRUCTION CONDITION, IN ACCORDANCE WITH THE ASPHALT AND CONCRETE SECTION DETAILS INCLUDED IN THESE PLANS. LAWN AREAS ARE TO BE RE-ESTABLISHED WITH A MINIMUM OF 4 INCHES OF TOPSOIL AND SEED.
10. HAZARDOUS MATERIAL ANY MATERIALS CONTAINING ASBESTOS SHALL BE REMOVED AND DISPOSED OF IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS. NOTE THIS MAY INCLUDE UNDERGROUND UTILITIES. SITE CONTRACTOR SHALL CONTACT THE OWNERS REPRESENTATIVE TO NOTIFY THEM OF ANY UNKNOWN HAZARDOUS MATERIAL.
11. EXISTING SERVICE CONTRACTOR SHALL MAINTAIN SERVICE FROM ALL UTILITIES NOT SLATED FOR DEMOLITION AND SHALL REMAIN FUNCTIONAL UPON COMPLETION OF DEMOLITION.
12. EXISTING UTILITIES THAT ARE PROPOSED TO BE REMOVED, UNLESS OTHERWISE INDICATED, SHALL BE EXCAVATED, UTILITY MATERIAL REMOVED, AND DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE SPECIFICATIONS. ALL TRENCHES SHALL BE BACKFILLED WITH GRANULAR FILL, COMPACTED IN 12" LIFTS TO 95% MODIFIED PROCTOR TEST. ALL DISTURBED AREAS SHALL BE RESTORED IN KIND IN ACCORDANCE WITH THE DETAILS IN THESE PLANS AND AT A MINIMUM TO THEIR ORIGINAL STATE.
13. SAWCUT AREAS OF ASPHALT AND CONCRETE REMOVAL SHALL BE SAWCUT WITH A NEAT STRAIGHT LINE AT ALL REMOVAL LIMITS.
14. PERMITS CONTRACTOR IS RESPONSIBLE TO OBTAIN ALL PERMITS REQUIRED FOR DEMOLITION AND CONSTRUCTION, INCLUDING ALL FEES ASSOCIATED WITH THOSE PERMITS, IN THE BID.
15. ENVIRONMENTAL CONDITIONS OR ISSUES, NOT PREVIOUSLY IDENTIFIED, ARE ENCOUNTERED DURING DEMOLITION. THE CONTRACTORS SHALL IMMEDIATELY NOTIFY THE OWNER AND ENGINEER BEFORE CONTINUING THE DEMOLITION PROCESS.
16. RECYCLE ALL MATERIALS WHEN APPROPRIATE.
17. SPOIL MATERIALS FROM DEMOLITION OR EARTHWORK, SHALL BE REMOVED FROM THE SITE AND LEGALLY DISPOSED OF AT THE CONTRACTOR'S EXPENSE.
18. EXISTING STRUCTURES THAT ARE ABANDONED IN PLACE SHALL BE REMOVED TO A DEPTH OF 2 FEET BELOW FINISHED GRADE. STRUCTURES SHALL BE FILLED WITH CRUSHED STONE, (MEETING NYSDOT STANDARD SPECIFICATION SECTION 304) COMPACTED IN 12" LIFTS TO 95% MODIFIED PROCTOR TEST.
19. MILLING THE CONTRACTOR CAN MILL AND STOCKPILE MILLINGS FOR RE-USE IF DETERMINED BY THE PROJECT ARCHITECT AND DESIGN ENGINEER THAT THE MATERIAL IS SUITABLE FOR FILL MATERIAL.
20. FIELD TILE IN THE EVENT FIELD TILE IS ENCOUNTERED, THE CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER. UNDER NO CIRCUMSTANCES SHALL FIELD TILE BE PERMITTED TO EXIST NEAR BUILDING FOUNDATIONS.
21. ELECTRICAL DEMOLITION - THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR DEMOLITION OF EXISTING ELECTRICAL FEATURES, AND SHALL COORDINATE WITH THE CONTRACTOR ON BACKFILLING TRENCHES TO MEET THE SPECIFICATIONS OUTLINED WITHIN THE CONTRACT DOCUMENTS.

EROSION AND SEDIMENT CONTROL NOTES:

THE CONTRACTOR SHALL REVIEW THE EROSION AND SEDIMENT CONTROL PLAN INCLUDED IN THE CONTRACT DOCUMENTS, AND IF NECESSARY, MODIFY THE PLAN WITH THE SITE CONTRACTOR'S INTENDED SEQUENCE AND TYPES OF OPERATIONS. THE CONTRACTOR'S MODIFIED EROSION AND SEDIMENT CONTROL PLAN SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL, ALONG WITH A PROGRESS SCHEDULE THAT ADDRESSES THIS WORK.

1. THE CONTRACTOR SHALL DESIGNATE AN "EROSION AND SEDIMENT CONTROL SUPERVISOR" FOR THE PROJECT, AS DEFINED BY THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION. THE SUPERVISOR SHALL BE RESPONSIBLE FOR IMPLEMENTING THE EROSION AND SEDIMENT CONTROL PLAN AND FOR INSPECTING AND MAINTAINING THE CONTROL MEASURES. THE NAME AND QUALIFICATIONS (TRAINING AND EXPERIENCE) OF THIS INDIVIDUAL SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO STARTING EARTHWORK.
2. THE DESIGNATED "EROSION AND SEDIMENT CONTROL SUPERVISOR" SHALL NOTIFY THE ENGINEER IN ADVANCE OF ANY FIELD CHANGES TO THE EROSION AND SEDIMENT CONTROL MEASURES INDICATED IN THE CONTRACT DOCUMENTS. THE ENGINEER MAY REQUIRE THE CONTRACTOR TO SUBMIT A MODIFIED EROSION AND SEDIMENT CONTROL PLAN FOR APPROVAL PRIOR TO IMPLEMENTING ANY FIELD CHANGES.
3. THE SITE SHALL AT ALL TIMES BE GRADED AND MAINTAINED SUCH THAT ALL STORM WATER RUNOFF FROM DISTURBED AREAS IS DIVERTED TO SOIL EROSION AND SEDIMENT CONTROL DEVICES BEFORE ENTERING A WATER BODY OR WETLAND.
4. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY SOIL DISTURBANCE FOR WHICH THEY ARE INTENDED AND SHALL REMAIN IN PLACE UNTIL SOILS ARE PERMANENTLY STABILIZED.
5. UNDER NO CONDITION SHALL DISCONTINUED CONSTRUCTION ACTIVITIES IN AREAS WITH SOIL DISTURBANCES BE LEFT FOR A PERIOD OF GREATER THAN 7 DAYS WITHOUT TEMPORARILY STABILIZING THOSE AREAS WITH TEMPORARY SEED AND MULCH. MAINTENANCE OF THOSE AREAS SHALL INCLUDE RESEEDING AND REMULCHING AS NEEDED TO ESTABLISH A SATISFACTORY STAND OF GRASS. THERE SHALL BE NO ADDITIONAL PAYMENT FOR RESEEDING AND REMULCHING.
6. NO WET OR FRESH CONCRETE, LEACHATE, MATERIAL, OR DEBRIS SHALL BE ALLOWED TO ESCAPE INTO A WATER BODY OR WETLAND, NOR SHALL WASHINGS FROM CONCRETE TRUCKS OR OTHER DEVICES BE ALLOWED TO ENTER A WATER BODY OR WETLAND. ANY MATERIAL OR DEBRIS ACCIDENTALLY DROPPED INTO THE CHANNEL SHALL BE IMMEDIATELY AND COMPLETELY REMOVED AND DEPOSITED IN AN UPLAND PROTECTED AREA.
7. THE CONTRACTOR SHALL COVER TEMPORARY STOCKPILES OF ERODIBLE MATERIAL (SUCH AS TOPSOIL OR EARTH FILL) WITH POLY SHEETING, OR RING THE STOCKPILES WITH SILT FENCE TO CONTROL EROSION. POLY SHEETING SHALL COMPLETELY COVER THE STOCKPILE AND BE SECURELY ANCHORED AT ALL TIMES. ANY POLY SHEETING OR SILT FENCE THAT IS DAMAGED SHALL BE PROMPTLY REPAIRED OR REPLACED AS DIRECTED BY THE ENGINEER. RINGED STOCKPILES EXPOSED OR EXPECTED TO BE EXPOSED FOR LONGER THAN 7 CALENDAR DAYS SHALL IMMEDIATELY BE STABILIZED WITH APPROPRIATE MEASURES. THE COST OF COVERING AND RINGING/STABILIZING STOCKPILES SHALL BE INCLUDED IN THE PRICE BID FOR THE CORRESPONDING STOCKPILED MATERIAL.
8. DUST CONTROL MEASURES SHALL BE APPLIED AS NEEDED. SWEEP ROADWAYS WHEN THEY BECOME SEDIMENT LADEN. MINIMIZE DISTURBED AREAS. APPLY TEMPORARY SOIL STABILIZATION PRACTICES SUCH AS MULCHING, SEEDING, AND SPRAYING WATER. WATER SHALL BE SPRAYED AS NEEDED BUT AVOID EXTRA SPRAYING WHICH COULD CREATE RUNOFF AND EROSION PROBLEMS.

CONSTRUCTION SEQUENCE FOR GRADING AND EROSION CONTROL:

1. INSTALL STABILIZED CONSTRUCTION ENTRANCE.
2. CONSTRUCT EROSION CONTROL MEASURES AND STORMWATER MANAGEMENT AREAS AS SHOWN ON THE PLANS.
3. CONSTRUCT TEMPORARY/PERMANENT SWALES AS SHOWN ON THE CONTRACT DOCUMENTS.
4. CLEAR AND GRUB THE PROJECT IMPROVEMENTS AREAS.
5. STRIP TOPSOIL AND STOCKPILE FOR LATER USE.
6. GRADE IMPROVEMENT AREAS WITHIN THE PROJECT SITE. AREAS WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASES FOR MORE THAN 7 DAYS SHALL BE STABILIZED WITH TEMPORARY SEED AND MULCH WITHIN 7 DAYS OF THE LAST DISTURBANCE.
7. CONSTRUCT SEDIMENTATION BARRIERS AS SHOWN ON THIS PLAN.
8. REPLACE TOPSOIL AND FINE GRADE.
9. HYDRO-SEED ALL DISTURBED AREAS WITHIN 10 DAYS AFTER FINAL GRADING, SITE CONTRACTOR IS RESPONSIBLE TO RESEED IF GRADING IS UNSATISFACTORY.
10. UPON APPROVAL OF THE ENGINEER, CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROLS.
11. SLOPES SHALL NOT EXCEED 1' VERTICAL TO 3' HORIZONTAL MAX. MAINTAIN 1:4 WHERE POSSIBLE.
12. MINIMUM OF 6" OF TOPSOIL IS TO BE PLACED ON ALL GRASS AREAS.
13. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED BASED UPON ACTUAL FIELD CONDITIONS AS ORDERED BY ENGINEER (AOBE). SITE CONTRACTOR SHALL PROVIDE FOR THIS COST IN THEIR CONTRACT.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EROSION AND SEDIMENT CONTROL MEASURES FROM INSTALLATION THROUGH MAINTENANCE AND REMOVAL AFTER NEW VEGETATION HAS BEEN ESTABLISHED.
15. ALL END SECTIONS SHALL BE PROVIDED WITH RIP-RAP APRONS.
16. ALL EROSION AND SEDIMENT CONTROL METHODS SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF THE NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL.

AT THE VERY MINIMUM, EROSION CONTROL SHALL BE AS SHOWN ON THIS PLAN. EROSION CONTROL MAY CONSIST OF SEDIMENT TRAPS AND/OR ENVIRONMENTAL FENCES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INTEGRITY, MAINTENANCE AND REMOVAL OF EROSION CONTROL MEASURES UNTIL NO LONGER DEEMED NECESSARY BY THE ENGINEER. THE CONTRACTOR SHALL MAINTAIN THE STORM SEWER SYSTEM UNTIL THE PROJECT IS DEVELOPED AND APPROVED BY THE OWNER AND ENGINEER.

ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED IN GOOD WORKING ORDER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE STONE FILL. CORRECTIVE ACTIONS, AS IDENTIFIED BY THE QUALIFIED SWPPP INSPECTOR SHALL BE INITIATED WITHIN 24 HOURS OF BEING REPORTED. THE ENGINEER MAY REVIEW THE PROJECT SITE AT ANY TIME. REVIEW OF EROSION CONTROL MEASURES BY THE ENGINEER DOES NOT RELIEVE THE CONTRACTOR OF THEIR OBLIGATIONS UNDER THE NYSDEC SPDES GENERAL PERMIT FOR STORM WATER DISCHARGE FROM CONSTRUCTION ACTIVITY. (GP-0-20-001).

SITE PLAN NOTES:

1. LAYOUT THE DIMENSIONS SHOWN ARE TO THE FACE OF THE CURB AND INCLUDES THE OVERALL SIDEWALK WIDTH, WHERE APPLICABLE.
2. ASPHALT ASPHALT SHALL BE CALCULATED BY WEIGHT (TONNAGE) USING THE SPECIFIED COMPACTED THICKNESS. PAVEMENTS WILL BE BASED ON THE TONNAGE PLACED AS ACCOUNTED FOR BY EACH DELIVERY TRUCK. FULL TIME ON-SITE OBSERVATION WILL BE PRESENT DURING ALL RELATED PAVING OPERATIONS.
3. VEHICULAR TRAFFIC SHALL NOT BE PERMITTED ON THE SURFACE OF SUBBASE COURSE MATERIAL ONCE IT HAS BEEN FINE GRADED, COMPACTED, AND IS READY FOR PAVING. SUBBASE MATERIAL PREPARED FOR PAVING SHALL BE PAVED WITHIN THREE DAYS OF PREPARATION.
4. SUBBASE MATERIAL AND THE VARIOUS ASPHALT CONCRETE MATERIALS CALLED FOR IN THESE DRAWINGS SHALL CONFORM WITH THE REFERENCED SECTION OF THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, DATED "LATEST EDITION". CONSTRUCTION SHALL BE AS FURTHER SET FORTH IN THOSE SPECIFICATIONS AND AS OTHERWISE PROVIDED FOR IN THESE DRAWINGS.
5. PLACE ASPHALT CONCRETE MIXTURE ON PREPARED SURFACE, SPREAD AND STRIKE-OFF USING A SELF-PROPELLED PAVING MACHINE, WITH VIBRATING SCREED. PLACEMENT IN INACCESSIBLE AND SMALL AREAS MAY BE BY HAND.
6. JOINTS PROVIDE JOINTS BETWEEN OLD AND NEW PAVEMENT OR BETWEEN SUCCESSIVE DAYS WORK.
7. TACK COAT SHALL BE APPLIED TO BINDER COURSE TACK COAT SHALL CONFORM WITH THE FOLLOWING:
   - A. TACK COAT SHALL MEET THE MATERIAL REQUIREMENTS OF 702-90 ASPHALT EMULSION FOR TACK COAT OF THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, DATED "LATEST EDITION" AND SHALL BE APPLIED IN ACCORDANCE WITH SECTION 407. TACK COAT SHALL BE IN ACCORDANCE WITH THOSE SPECIFICATIONS AND AS OTHERWISE PROVIDED FOR IN THESE DRAWINGS.
   - B. REMOVE LOOSE AND FOREIGN MATERIAL FROM ASPHALT SURFACE BEFORE PAVING NEXT COURSE. USE POWER BROOMS, BLOWERS OR HAND BROOM.
   - C. APPLY TACK COAT TO THE ASPHALT PAVEMENT SURFACES AND SURFACES OF CURBS, GUTTERS, MANHOLES, AND OTHER STRUCTURES PROJECTING INTO OR ABUTTING PAVEMENT, DRY TO A "TACKY" CONSISTENCY BEFORE PAVING.
   - D. TACK COAT ENTIRE VERTICAL SURFACE OF ABUTTING EXISTING PAVEMENT.
6. CLEAN SURFACE AFTER COMPLETION OF PAVING AND SURFACING OPERATIONS, CLEAN SURFACES OF EXCESS OR SPILLED ASPHALT, GRAVEL OR STONE MATERIALS TO THE SATISFACTION OF THE ENGINEER.

UTILITY NOTES:

1. PRIOR TO THE START OF UTILITY INSTALLATION THE CONTRACTOR (AND ANY SUBCONTRACTORS) IS RESPONSIBLE FOR COORDINATION OF ALL UTILITY CONNECTIONS WITH MECHANICAL/ELECTRICAL/ PLUMBING DRAWINGS FOR INCLUDING BUT NOT LIMITED TO VERTICAL AND HORIZONTAL LOCATION, PENETRATIONS, AND SIZES. THE CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION TO PROCEED WITH UTILITY INSTALLATION BY THE PROJECT ARCHITECT UPON COMPLETION OF COORDINATION WITH CONTRACTORS AND PLANS.
2. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING GAS, ELECTRICAL, CABLE, TELEPHONE AND ANY OTHER UTILITIES NOT SPECIFICALLY SHOWN WITHIN THIS PLAN SET WITH APPROPRIATE AGENCY. PASSERO ASSOCIATES ASSUMES NO RESPONSIBILITY FOR THE DESIGN OR PERFORMANCE OF UTILITIES NOT SPECIFICALLY SHOWN WITHIN THIS PLAN SET.
3. PRIOR TO THE START OF UTILITY INSTALLATION THE CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY AND COORDINATE WITH EXISTING UTILITIES SHOWN ON THE PLANS AND REPORT ANY DISCREPANCIES TO THE DESIGN ENGINEER. THE CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION TO PROCEED WITH UTILITY INSTALLATION BY THE PROJECT ARCHITECT UPON COMPLETION OF EXISTING UTILITY VERIFICATION.
4. UTILITY CROSSINGS THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE LOCATION OF EXISTING UTILITIES AT ALL PROPOSED CROSSINGS AND NOTIFY THE OWNERS REPRESENTATIVE OF ANY CONFLICTS PRIOR TO UTILITY INSTALLATION. THE CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION TO PROCEED WITH INSTALLATION UPON UTILITY VERIFICATION COMPLETION.
5. FLUSH AND CAMERA EXISTING STORM SEWER(S). THE CONTRACTOR SHALL FLUSH AND CAMERA THE EXISTING STORM SEWER PRIOR TO PROJECT COMPLETION AND PROVIDE THE VIDEO FOR REVIEW TO THE PROJECT ARCHITECT. THE CONTRACTOR SHALL OBTAIN WRITTEN APPROVAL PRIOR TO PAYMENT APPLICATION FOR STORM SEWER WORK COMPLETED.
6. LATERALS ALL STORM, SANITARY, WATER ETC. LATERALS SHALL BE CONSTRUCTED TO 5' FROM THE FACE OF THE BUILDING, VERTICAL AND HORIZONTAL LOCATION SHALL BE COORDINATED WITH THE MECHANICAL/ELECTRICAL/PLUMBING CONTRACTORS.

TEMPORARY CONSTRUCTION AREA SEEDING NOTES

1. THE AREA SHALL BE ROUGH GRADED AND SLOPES PHYSICALLY STABLE.
2. SEEDING SHALL TAKE PLACE WITHIN 24 HOURS OF DISTURBANCE OR SCARIFICATION OF THE SOIL SHALL BE NEEDED PRIOR TO SEEDING.
3. TYPICALLY FERTILIZER OR LIME SHALL NOT USED FOR TEMPORARY SEEDING.
4. ANY SEEDING METHOD MAY BE USED THAT PROVIDES UNIFORM APPLICATION OF SEED TO THE AREA.
5. SEEDING

PLANTING SEASON	SPECIES	RATE IN LBS./ACRE
SPRING, SUMMER, OR EARLY FALL	RYE GRASS (ANNUAL OR PERENNIAL)	30
LATE FALL OR EARLY WINTER	WINTER RYE (CEREAL RYE)	100

*MULCH THE AREA WITH HAY OR STRAW AT 2 TONS/ACRE. WOOD FIBER, HYDROMULCH OR OTHER SPRAYABLE PRODUCTS APPROVED FOR EROSION CONTROL MAY BE USED IF APPLIED ACCORDING TO SPECIFICATIONS.

COMPACTION NOTES

1. THE CONTRACTOR SHALL STRIP THE TOPSOIL AND REMOVE ANY UNSUITABLE SOILS, WITHIN THE PROPOSED GRADING LIMITS PRIOR TO PLACEMENT OF FILL MATERIAL.
2. ALL FILL AREAS SHALL BE COMPACTED TO A MINIMUM OF 95% OF MAXIMUM DENSITY OF STANDARD PROCTOR TEST AT OPTIMUM MOISTURE CONTENT.
3. THE COMPACTION TESTS SHALL BE CONDUCTED BY A LICENSED TESTING LABORATORY AND RESULTS SUBMITTED TO DESIGN ENGINEER.

SOIL RESTORATION NOTES

1. TILL COMPOST INTO SUBSOIL TO A DEPTH OF AT LEAST 12" USING CAT-MOUNTED RIPPER, TRACTOR MOUNTED DISC, OR TILLER, MIXING, AND CIRCULATING AIR AND COMPOST INTO SUBSOILS.
2. ROCK-PICK UNTIL UPLIFTED STONE/ROCK MATERIALS OF 4" AND LARGER ARE CLEANED OFF SITE.
3. APPLY TOPSOIL TO A DEPTH OF 6" ON ALL AREAS BEING RETURNED TO GRASS.
4. VEGETATE AS REQUIRED BY APPROVED PLAN.

TOPSOIL AND SEEDING NOTES:

1. THE CONTRACTOR IS RESPONSIBLE FOR ROUGH GRADING AND RE-SPREADING TOPSOIL IN ALL TURF AND LANDSCAPE AREAS (BEDS AND ISLANDS).
2. THE CONTRACTOR IS RESPONSIBLE FOR FINE GRADING AND PREPARATION OF ALL LAWN AND LANDSCAPE AREAS.
3. REMOVE ALL EXISTING VEGETATION DURING GRADING PROCESS.
4. APPLY MINIMUM OF 6 INCHES OF CLEAN TOPSOIL (IMPORTED OR SCREEN ON -SITE) AND FINE GRADE. LEAVING TOPSOIL IN A LOOSE AND FRIABLE CONDITION FOR SEEDING.
5. LIME SOIL OR ADD OTHER ORGANIC AMENDMENTS AS NECESSARY TO ACHIEVE A SOIL pH BETWEEN 5.5 - 7.0.
6. THE CONTRACTOR SHALL WORK OVER LAWN AREAS THAT HAVE REMAINED PARTIALLY INTACT, TOP DRESSING WITH SOIL, SCARIFYING, AND SEEDING TO FORM A SMOOTH, FULL, EVEN LAWN, FREE OF BARE SPOTS, INDENTATIONS, AND WEEDS.
7. SEEDING SHALL BEGIN IMMEDIATELY UPON COMPLETION OF FINE GRADING. SEED SHOULD BE PRESSED INTO THE SOIL TO CREATE GOOD SEED-TO-SOIL CONTACT, NO DEEPER THAN THE THICKNESS OF THE SEED.
8. 10-0-10 FERTILIZER SHALL BE APPLIED EVENLY AT THE RATE OF 20 POUNDS PER 1000 SQ FT. NO FERTILIZER CONTAINING PHOSPHORUS IS PERMITTED ON SITE.
9. SEED SHALL BE APPLIED EITHER BY HAND BROADCASTING OR HYDRO SEEDING. TWO PASSES SHALL BE MADE IN PERPENDICULAR DIRECTIONS TO INSURE PROPER COVERAGE.
10. LAWN SEED MIX

    MIX A: SEEDING RATE: 6 LBS./1,000 SQ.FT
    LOW MAINTENANCE FESCUE LAWN
    PREFERRED SEED: LOW MAINTENANCE GRASS SEED MIX OR APPROVED EQUAL

    25% FIREFLY HARD FESCUE
    25% BIG HORN GT HARD/SHEEP
    20% INTRIGUE CHEWINGS FESCUE
    20% QUATRO SHEEP FESCUE
    10% MINOTAUR HARD FESCUE

    SEED MIX B IS TO BE USED ONLY FOR WET-OCCASIONALLY WET LOCATIONS.

    MIX B: SEEDING RATE: 4LBS./1,000 SQ.FT
    OCCASIONAL WET - WET LOCATIONS:

20% RED TOP	20% VIRGINIA WILD RYEGRASS
20% ALKALI GRASS	20% FOX SEDGE
10% AUTUMN BENTGRASS	10% FOWL BLUEGRASS

11. DRY APPLICATION MULCH
    - A. STRAW MULCH SHOULD BE APPLIED TO NEWLY SEEDED AREAS WITHIN 12 HOURS IF HYDRO MULCH IS NOT UTILIZED.
    - B. DRY APPLICATION, STRAW: STALKS OF OATS, WHEAT, RYE OR OTHER APPROVED CROPS WHICH ARE FREE OF NOXIOUS WEEDS. WEIGHT SHALL BE BASED ON A 15 PERCENT MOISTURE CONTENT.
    - C. DRY APPLICATION: WITHIN ONE DAY AFTER SEEDING, COVER THE SEEDED AREAS WITH A UNIFORM BLANKET OF STRAW MULCH AT THE RATE OF 100 POUNDS PER 1000 SQ FT OF SEEDED AREA.
12. HYDRO APPLICATION: APPLY APPROVED MULCH IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS AND RECOMMENDED RATES OF APPLICATION. APPLY SEEDING MATERIALS WITH AN APPROVED HYDRO SEEDER.
    - A. COLORED WOOD CELLULOSE FIBER PRODUCT SPECIFICALLY DESIGNED FOR USE AS A HYDRO-MECHANICAL APPLIED MULCH. ACCEPTABLE PRODUCT: CONWED HYDRO MULCH, CONWED FIBERS, 231 4TH STREET SW, HICKORY, NC
13. FILL TANK WITH WATER AND AGITATE WHILE ADDING SEEDING MATERIALS. USE SUFFICIENT FERTILIZER, MULCH, AND SEED TO OBTAIN THE SPECIFIED APPLICATION RATE. ADD SEED TO THE TANK AFTER THE FERTILIZER AND MULCH HAVE BEEN ADDED. MAINTAIN CONSTANT AGITATION TO KEEP CONTENTS IN HOMOGENEOUS SUSPENSION. PROLONGED DELAYS IN APPLICATION OR AGITATION THAT MAY BE INJURIOUS TO THE SEED WILL BE THE BASIS OF REJECTION OF MATERIAL REMAINING IN TANK.
14. DISTRIBUTE A SLURRY MIXTURE OF WATER, SEED, FERTILIZER, AND MULCH UNIFORMLY AT A MINIMUM RATE OF 57 GALLONS PER 1000 SQ FT (2500 GALLONS PER ACRE). THE OWNER AND/OR PROJECT ARCHITECT MAY ORDER THE AMOUNT OF WATER INCREASED IF DISTRIBUTION OF SEEDING MATERIALS IS NOT UNIFORM.

SHEET NUMBER	TITLE
C111	NOTES
C130	EXISTING CONDITIONS, DEMOLITION, EROSION AND SEDIMENT CONTROL PLAN
C130	SITE AND UTILITIES PLAN
C540	DETAILS

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Project Title
LIBERTY CENTRAL SCHOOL DISTRICT
MAINTENANCE BUILDING

STATE OF NEW YORK · CHRISTOPHER J. LAWSON · 102592 · LICENSED PROFESSIONAL ENGINEER

NO.	DATE	DESCRIPTION

Drawn By:	RV
Checked By:	CJL
Proj. #:	59-09-01-06-0-009-016
CSArch Proj. #:	203-2201
Construction Documents:	7/29/22

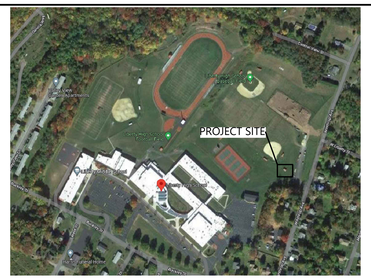
Sheet Title
NOTES

Sheet No.
LCSD C111

CONSTRUCTION DOCUMENTS

LEGEND:

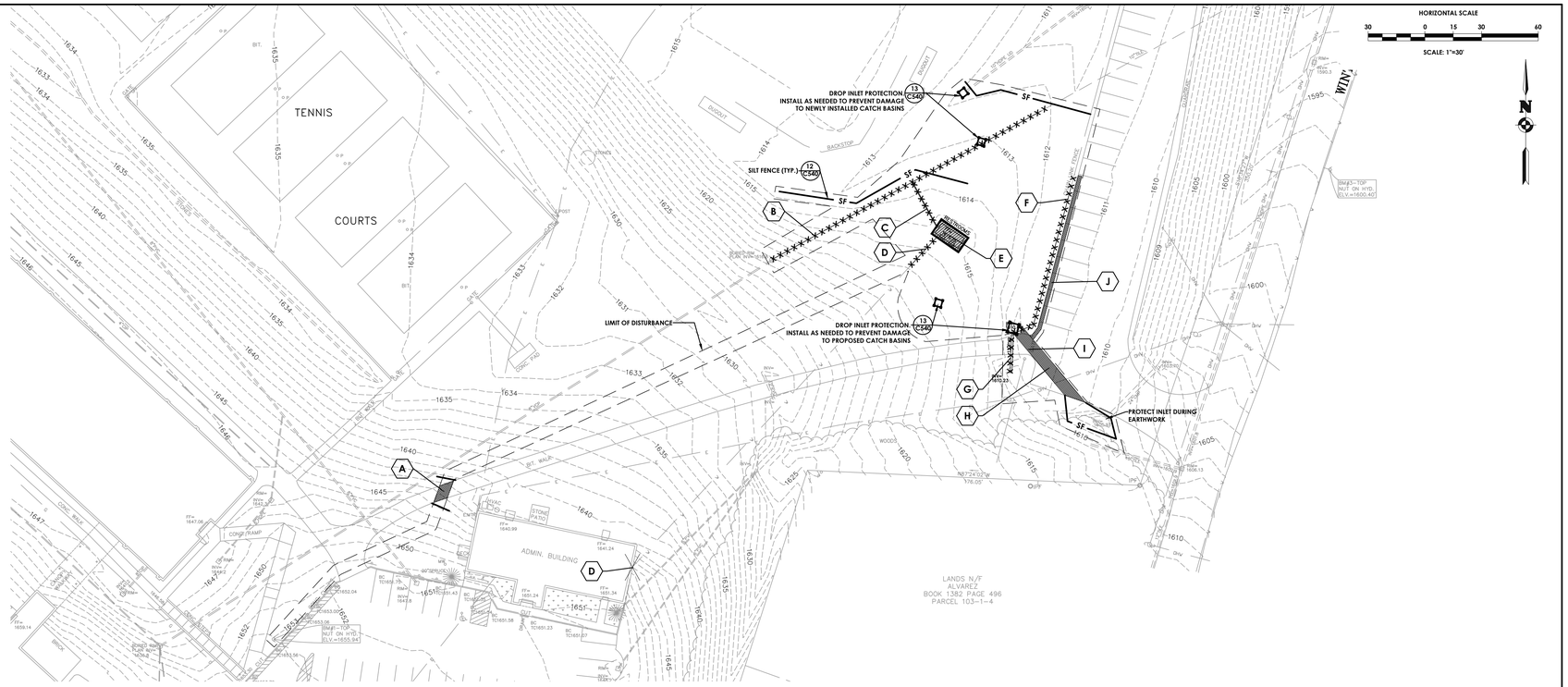
- 1635 — EXISTING MAJOR CONTOUR
- 1634 — EXISTING MINOR CONTOUR
- PROPERTY BOUNDARY
- EXISTING FENCE
- EXISTING BUILDING
- XXXXXXXXXX — EXISTING FEATURE TO BE REMOVED
- EXISTING ASPHALT TO BE REMOVED
- EXISTING BUILDING TO BE REMOVED
- 520 — PROPOSED MAJOR CONTOUR
- 521 — PROPOSED MINOR CONTOUR
- PROPOSED CONCRETE
- PROPOSED ASPHALT
- LIMIT OF DISTURBANCE
- SF — SILT FENCE
- INLET PROTECTION



PROJECT LOCATION

DEMOLITION KEY:

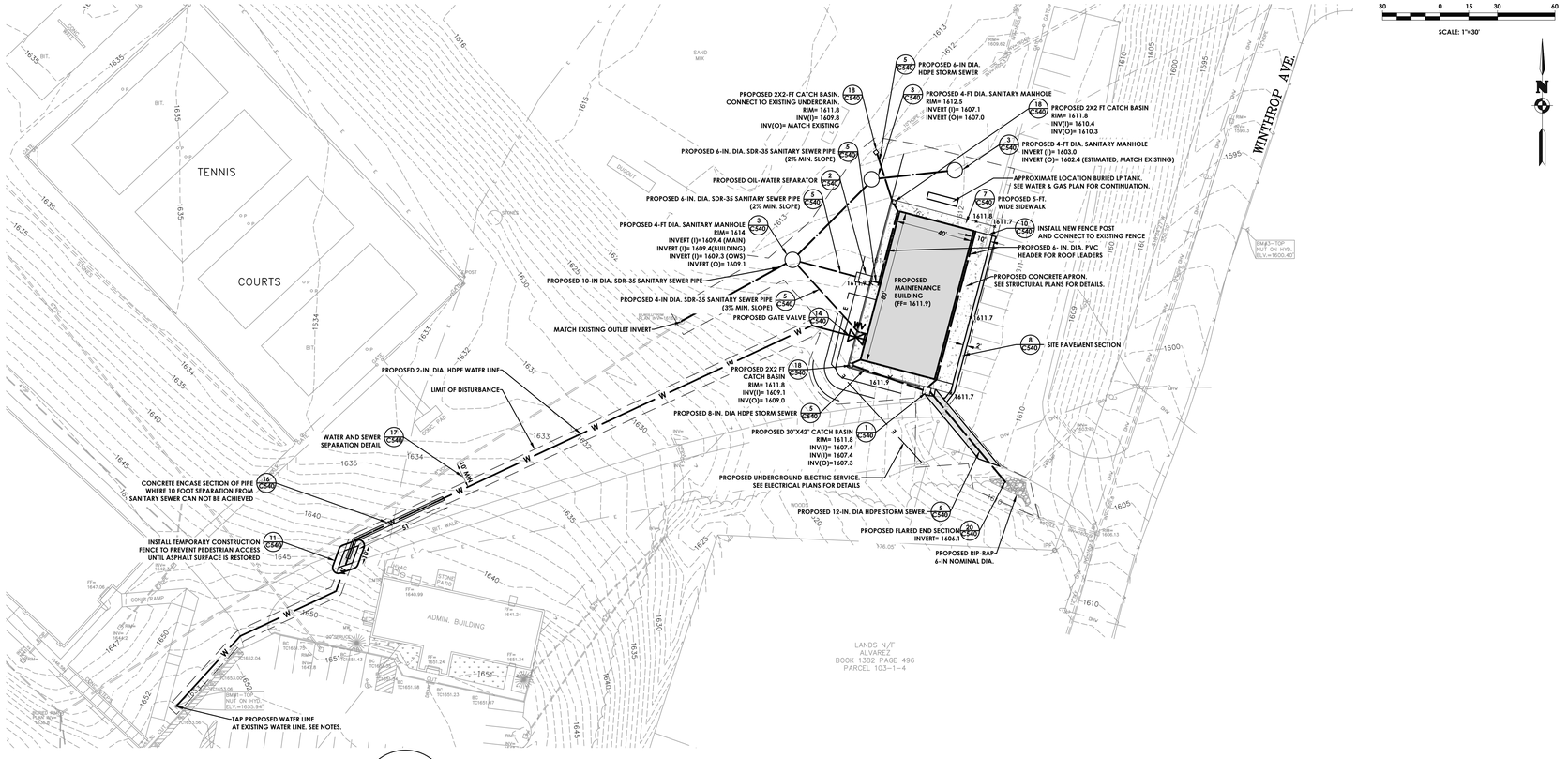
- (A) SAWCUT, REMOVE, AND DISPOSE OF EXISTING ASPHALT AND SUBBASE. REPLACE IN KIND AFTER NEW WATER LINE INSTALLATION.
- (B) REMOVE AND DISPOSE OF EXISTING SANITARY SEWER PIPE FROM EXISTING MANHOLE TO NEW MANHOLE. CONTRACTOR SHALL FIELD VERIFY OUTLET INVERT ELEVATION AT THE EXISTING MANHOLE AND INFORM THE ENGINEER OF ANY DISCREPANCY BETWEEN FIELD CONDITIONS AND THESE PLANS. CONTRACTOR SHALL NOT INSTALL NEW SANITARY SEWER PIPE UNTIL APPROVED BY THE PROJECT ARCHITECT AND/OR ENGINEER.
- (C) REMOVE AND DISPOSE OF EXISTING SANITARY SEWER PIPE.
- (D) REMOVE AND DISPOSE EXISTING WATER PIPE WITHIN 10 FEET OF NEW CONSTRUCTION. TERMINATE SERVICE CONNECTION AT ADMINISTRATION BUILDING.
- (E) REMOVE AND DISPOSE OF EXISTING BUILDING, INCLUDING FOUNDATION.
- (F) REMOVE AND DISPOSE OF EXISTING FENCE. INSTALL POLES AS REQUIRED TO SUPPORT EXISTING FENCE AT NEW TERMINATIONS.
- (G) CAP OR OTHERWISE REMOVE EXISTING PIPE FROM SERVICE.
- (H) SAWCUT, REMOVE, AND DISPOSE OF EXISTING ASPHALT AND SUBBASE. REPLACE IN KIND AFTER NEW STORM SEWER INSTALLATION.
- (I) REMOVE AND STORE GATE AND HARDWARE FOR RE-INSTALLATION AFTER PAVING IS COMPLETE.
- (J) SAWCUT, REMOVE, AND DISPOSE OF EXISTING ASPHALT AND SUBBASE A MINIMUM OF TWO FEET FROM THE EDGE OF THE PROPOSED CONCRETE APRON.



A C130 EXISTING CONDITIONS, DEMOLITION, AND EROSION AND SEDIMENT CONTROL PLAN

NOTES

1. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF THE EXISTING WATER LINE AND PRESENCE/ABSENCE OF A VALVE OR OTHER SUITABLE CONNECTION POINT FOR THE PROPOSED WATER LINE. CONTRACTOR SHALL INFORM PROJECT ARCHITECT AND/OR ENGINEER OF THEIR FINDINGS AND RECEIVE APPROVAL OF THE PROPOSED CONNECTION METHOD PRIOR TO CONSTRUCTION.
2. CONTRACTOR SHALL BE AWARE THAT SEVERAL UTILITY CONNECTION INVERTS SHOWN ON THIS PLAN ARE BASED ON ESTIMATIONS FROM INCOMPLETE SURVEY DATA. CONTRACTOR SHALL FIELD VERIFY EXISTING INVERT ELEVATIONS AT CONNECTION POINTS AND INFORM THE PROJECT ARCHITECT AND ENGINEER OF ANY DISCREPANCIES BETWEEN THE FIELD MEASUREMENTS AND THE ESTIMATED ELEVATIONS SHOWN ON THIS PLAN. CONTRACTOR SHALL NOT PROCEED WITH THE WORK UNTIL AUTHORIZED BY THE PROJECT ARCHITECT AND/OR ENGINEER.



B C130 SITE AND UTILITIES PLAN

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Project Title

LIBERTY CENTRAL SCHOOL DISTRICT
MAINTENANCE BUILDING

STATE OF NEW YORK · CHRISTOPHER J. LADD · 102592 · LICENSED PROFESSIONAL ENGINEER

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Drawn By:	RV
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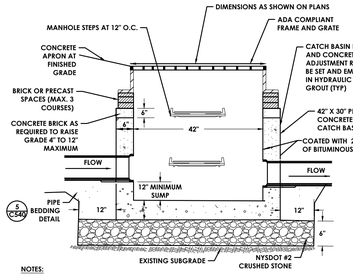
Sheet Title

AS SHOWN

Sheet No.

LCSD
C130

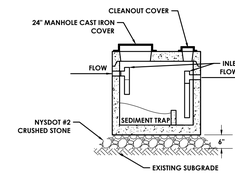
CONSTRUCTION DOCUMENTS



NOTES:

1. ALL CONCRETE IN CONTACT WITH ASPHALT PAVEMENT SHALL BE COVERED WITH A TACK COAT IN ACCORDANCE WITH N.Y.S.D.O.T. SECTION 407.
2. CATCH BASINS IN PEDESTRIAN WALKWAYS AND BICYCLE AREAS SHALL HAVE ADA COMPLIANT GRATES.
3. CATCH BASIN SHALL BE PRECAST CONCRETE DESIGNED FOR HS20-44 VEHICULAR LOADING AND 25% IMPACT.
4. FRAME AND COVER SHALL BE DESIGNED FOR HS20-44 VEHICULAR LOADING AND 25% IMPACT.
5. CATCH BASINS HAVING A DEPTH GREATER THAN 48" FROM FINISHED SURFACE TO THE TOP OF THE CONCRETE BASE SHALL BE PROVIDED WITH MANHOLE STEPS.
6. SUBGRADE SHALL BE COMPACTED TO A FIRM, UNYIELDING STATE PRIOR TO PLACEMENT OF ANY MATERIALS ABOVE IT. A WATER-PERMEABLE SEPARATION FABRIC SHALL BE INSTALLED BETWEEN THE SUBGRADE AND STONE MATERIALS.

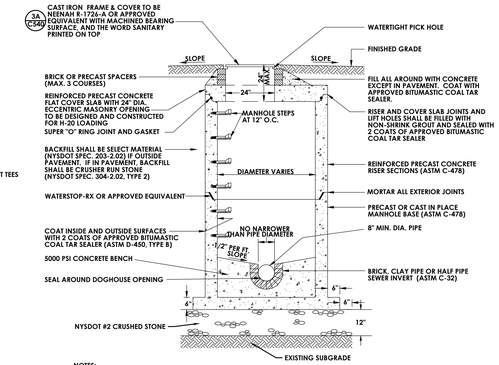
1 STANDARD 30"x42" CATCH BASIN DETAIL
N.T.S.



NOTES:

1. DETAIL ABOVE IS FOR A WOODARDS OIL- WATER SEPARATOR MODEL OWS-5. CONTRACTOR MAY PROVIDE APPROVED EQUAL FOR REVIEW AND APPROVAL BY SITE ENGINEER.
2. OIL-WATER SEPARATOR SHALL BE PRECAST CONCRETE STRUCTURE DESIGNED FOR HS20-44 VEHICULAR LOADING AND 25% IMPACT.
3. SUBGRADE SHALL BE COMPACTED TO A FIRM, UNYIELDING STATE PRIOR TO PLACEMENT OF ANY MATERIALS ABOVE IT. A WATER-PERMEABLE SEPARATION FABRIC SHALL BE INSTALLED BETWEEN THE SUBGRADE AND STONE MATERIALS.

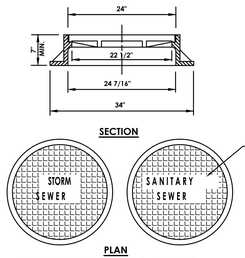
2 OIL- WATER SEPARATOR DETAIL
N.T.S.



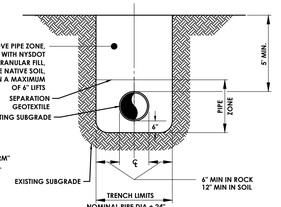
NOTES:

1. OPENING IN ECCENTRIC SLAB SHALL BE ALIGNED WITH STEPS AND DOWNSTREAM INVERT.
2. SUBGRADE SHALL BE COMPACTED TO A FIRM, UNYIELDING STATE PRIOR TO PLACEMENT OF ANY MATERIALS ABOVE IT. A WATER-PERMEABLE SEPARATION FABRIC SHALL BE INSTALLED BETWEEN THE SUBGRADE AND STONE MATERIALS.

3 SANITARY SEWER MANHOLE
N.T.S.



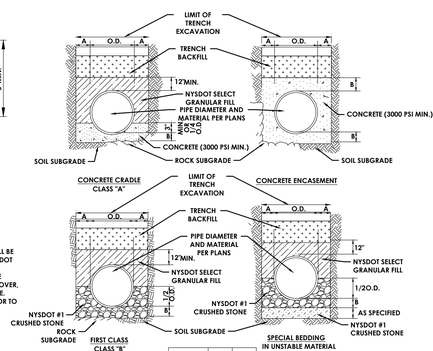
3A MANHOLE FRAME & COVER
N.T.S.



NOTES:

1. PIPE ZONE SHALL EXTEND A MINIMUM OF 6-INCHES ABOVE AND BELOW THE PIPE. PIPE SHALL BE CENTERED HORIZONTALLY AND VERTICALLY IN THE PIPE ZONE. PIPE ZONE FILL SHALL BE NYSDOT SELECT GRANULAR FILL OR APPROVED EQUAL, COMPACTED TO 95% MODIFIED PROCTOR. MECHANICAL COMPACTION MAY BE USED BEFORE THE PIPE IS INSTALLED. FOLLOWING PIPE INSTALLATION, MANUAL COMPACTION MUST BE USED UNTIL THE PIPE HAS THREE FEET OF COVER, AFTER WHICH LIGHT MECHANICAL COMPACTION MAY BE USED AGAIN TO ACHIEVE GRADE.
2. SUBGRADE ON TRENCH BOTTOM SHALL BE COMPACTED TO A FIRM, UNYIELDING STATE PRIOR TO PLACEMENT OF ANY MATERIALS ABOVE IT.

4 WATERMAIN TRENCH
N.T.S.

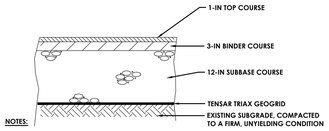


PIPE DIA.	DIM. A	DIM. B
UP TO 18"	1.0'	6"
21" TO 36"	1.5'	9"
OVER 36"	1.5'	12"

NOTES

1. TRENCH BACKFILL SHALL NYSDOT SELECT GRANULAR FILL, OR SUITABLE NATIVE SOIL APPROVED BY THE ENGINEER AND SHALL BE COMPACTED TO 95% MODIFIED PROCTOR.
2. SUBGRADE ON TRENCH BOTTOM SHALL BE COMPACTED TO A FIRM, UNYIELDING STATE PRIOR TO PLACEMENT OF ANY MATERIALS ABOVE IT.

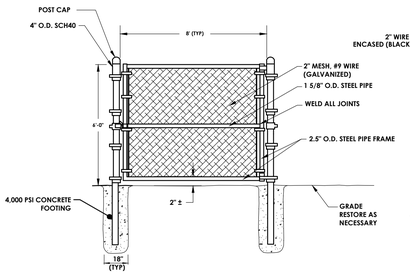
5 STORM SEWER/SANITARY SEWER BEDDING DETAILS
N.T.S.



NOTES:

1. ALL DEPTHS ARE COMPACTED THICKNESS.
2. MATERIALS SHALL BE AS SPECIFIED OR APPROVED EQUAL.
3. MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION (NYSDOT) STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, DATED "CURRENT VERSION" AND ALL ADDENDA THERE TO.
4. WHEN SPECIFIED OR REQUIRED BY THE REFERENCED SPECIFICATIONS, TACK COAT SHALL CONFORM WITH SECTION 407-TACK COAT OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATION.
5. BINDER COURSE SHALL BE SWEPT CLEAR TO REMOVE ANY LOOSE MATERIAL PRIOR TO PLACING TOP COAT. IF TOP COURSE IS NOT PLACED WITHIN TWENTY FOUR HOURS OF BINDER PLACEMENT, A TACK COAT SHALL BE APPLIED TO CLEAN SURFACE PRIOR TO PLACEMENT OF TOP COURSE.

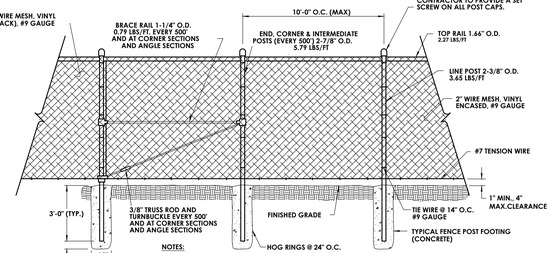
8 SITE PAVEMENT SECTION
N.T.S.



NOTES:

1) THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR GATES. NO FENCE SHALL BE ERECTED PRIOR TO APPROVAL OF THE DETAILS.
2) THE FENCE AND ALL COMPONENTS SHALL BE CONSTRUCTED OF GALVANIZED STEEL.

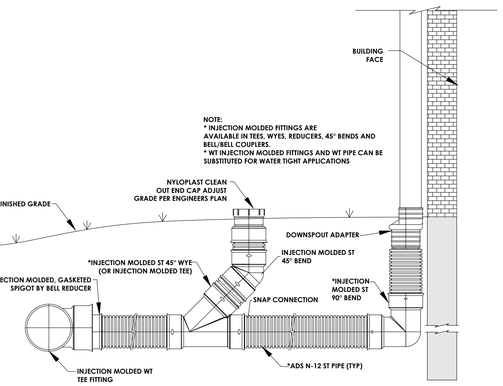
9 SINGLE SWING GATE WITH POSTS
N.T.S.



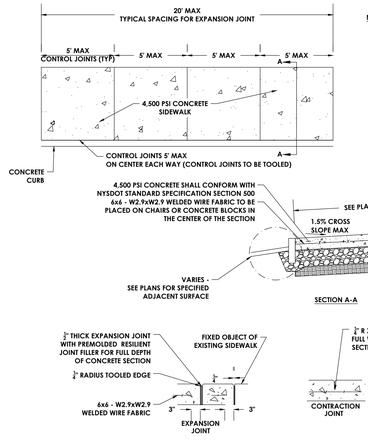
NOTES:

1) THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR GATES AND ADJACENT CHAIN LINK FENCE TO THE ENGINEER. NO FENCE OR GATES SHALL BE ERECTED PRIOR TO APPROVAL OF THE DETAILS.
2) THE FENCE AND ALL COMPONENTS SHALL BE CONSTRUCTED OF GALVANIZED STEEL.
3) A GROUNDING ROD AND CONNECTION SHALL BE PLACED EVERY 500'.

10 6FT HIGH CHAIN-LINK FENCE
N.T.S.



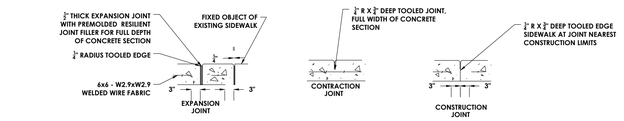
6 ROOF DRAIN DETAIL WITH CLEANOUT
N.T.S.

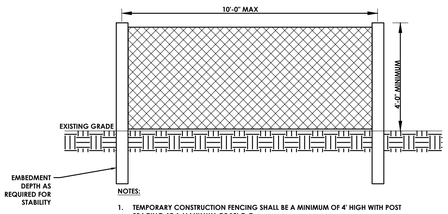


NOTES:

1. SIDEWALK WIDTH SHALL BE MEASURED FROM THE BACK OF THE CURB UNLESS OTHERWISE SPECIFIED.
2. WHERE IT IS NECESSARY TO PLACE FILL FOR PURPOSE OF BRINGING THE SUBGRADE ELEVATION UP TO A SPECIFIED GRADE. THE FILL MATERIAL SHALL BE SELECT GRANULAR FILL PLACED IN ACCORDANCE WITH NYSDOT STANDARD SPECIFICATION SECTION 203. LATEST EDITION
3. CONCRETE SHALL NOT BE PLACE UNLESS THE AMBIENT AIR SURFACE TEMPERATURE IS ABOVE 40 DEGREES UNLESS DISCUSSED WITH OWNER AND ENGINEER.
4. SIDEWALKS SHALL HAVE A CROSS SLOPE OF 1.5% PER FOOT UNLESS OTHERWISE SPECIFIED ON THE PLANS.
5. ALL EXPOSED CONCRETE SURFACES SHALL BE BROOM FINISHED AND THE EDGES SHALL BE FINISHED WITH A 1.5" RADIUS EDGING TOOL.
6. THE FINISHED CONCRETE SURFACE SHALL BE TREATED WITH CONCRETE SEALER, HARDENER AND DUSTPROOFER. RATE AND METHOD OF APPLICATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

7 TYPICAL SIDEWALK DETAIL
N.T.S.

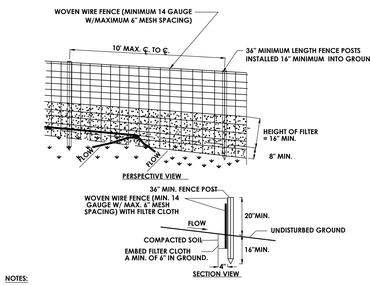




NOTES:

1. TEMPORARY CONSTRUCTION FENCING SHALL BE A MINIMUM OF 4' HIGH WITH POST SPACING AT A MAXIMUM OF 10' O.C.
2. FENCING SHALL NOT SAG WHEN INSTALLED. MATERIAL SHALL BE HIGHLY VISIBLE.

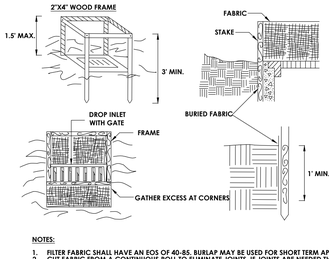
11 TEMPORARY CONSTRUCTION FENCING
N.T.S.



NOTES:

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL EITHER "T" OR "U" TYPE OR HARDWOOD.
2. FILTER CLOTH TO BE TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 14 GAUGE, 6" MAXIMUM MESH OPENING.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUIVALENT.
4. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE, OR APPROVED EQUIVALENT.
5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN BULGES DEVELOP IN THE SILT FENCE.

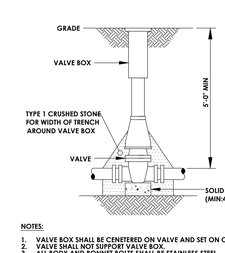
12 SILT FENCE DETAIL
N.T.S.



NOTES:

1. FILTER FABRIC SHALL HAVE AN EOS OF 40-85. BURLAP MAY BE USED FOR SHORT TERM APPLICATIONS.
2. CUT FABRIC FROM A CONTINUOUS ROLL TO ELIMINATE JOINTS. IF JOINTS ARE NEEDED THEY SHALL BE OVERLAPPED WITH THE NEXT STAKE.
3. STAKE MATERIALS SHALL BE STANDARD 2" x 4" WOOD, METAL WITH A MINIMUM LENGTH OF 3 FEET OR APPROVED EQUIVALENT.
4. STAKES SHALL BE SPACED EVENLY AROUND INLET 3 FEET APART AND EMBEDDED A MINIMUM 18 INCHES DEEP. SPANS GREATER THAN 3 FEET SHALL BE BRIDGED WITH THE USE OF WIRE MESH BEHIND THE FILTER FABRIC FOR SUPPORT.
5. FABRIC SHALL BE EMBEDDED 1 FOOT MINIMUM BELOW GROUND AND BACKFILLED. IT SHALL BE SECURELY FASTENED TO THE STAKES AND FRAME.
6. A 2"x 4" WOOD FRAME SHALL BE COMPLETED AROUND THE CREST OF THE FABRIC FOR OVER FLOW STABILITY.
7. MAXIMUM DRAINAGE AREA TO BE DIVERTED TO THIS TEMPORARY MEASURE: 1 ACRE

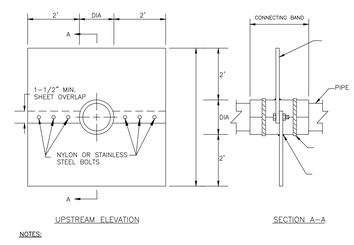
13 FILTER FABRIC DROP INLET PROTECTION
N.T.S.



NOTES:

1. VALVE BOX SHALL BE CENETERED ON VALVE AND SET ON COMPACTED BACKFILL.
2. VALVE SHALL NOT SUPPORT VALVE BOX.
3. ALL BODY AND BONNET BOLTS SHALL BE STAINLESS STEEL.

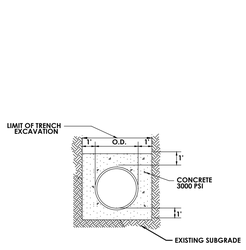
14 WATER VALVE
N.T.S.



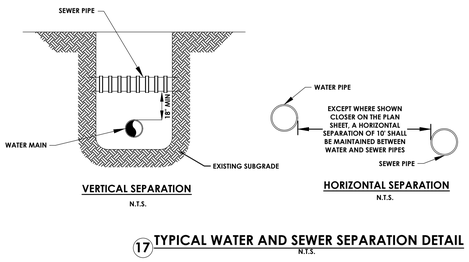
NOTES:

1. THE PIPE, CONNECTING BAND, AND SEAM COATING WITH SILICON CAULKING:
2. APPLY SILICON CAULK, TO THE CONNECTING BAND AND LAY THE PIPE ON IT. APPLY SILICON CAULK, TO THE OTHER HALF OF THE CONNECTING BAND AND SET IT IN PLACE, LINING UP THE BOLT HOLES.
3. INSTALL THE STAINLESS STEEL CLAMPS ON THE SPLIT HALVES OF THE CONNECTING BANDS AND TIGHTEN THE BOLTS AND CLAMPS.
4. APPLY SILICON CAULK ON THE SEAMS AS NEEDED TO INSURE A GOOD SEAL SO THAT THE COMPLETED INSTALLATION IS WATERTIGHT.

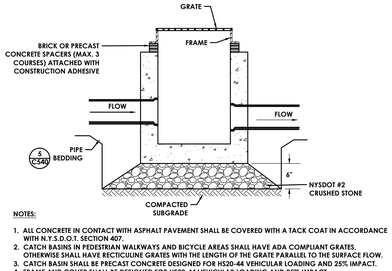
15 ANTI-SEEP COLLAR DETAIL
N.T.S.



16 CONCRETE ENCASEMENT DETAIL
N.T.S.



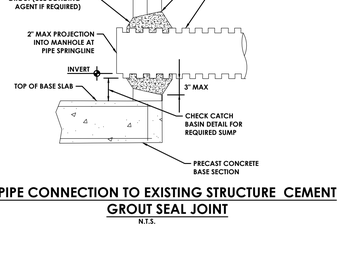
17 TYPICAL WATER AND SEWER SEPARATION DETAIL
N.T.S.



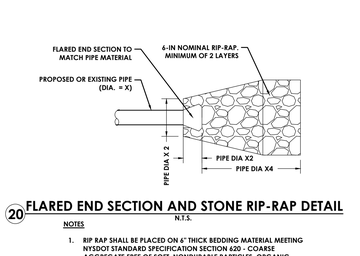
NOTES:

1. ALL CONCRETE IN CONTACT WITH ASPHALT PAVEMENT SHALL BE COVERED WITH A TACK COAT IN ACCORDANCE WITH N.Y.S.D.O.T. SECTION 407.
2. CATCH BASINS IN PEDESTRIAN WALKWAYS AND BICYCLE AREAS SHALL HAVE ADA COMPLIANT GRATES. OTHERWISE SHALL HAVE RECTICULINE GRATES WITH THE LENGTH OF THE GRATE PARALLEL TO THE SURFACE FLOW.
3. CATCH BASIN SHALL BE PRECAST CONCRETE DESIGNED FOR HS20-44 VEHICULAR LOADING AND 25% IMPACT.
4. FRAME AND COVER SHALL BE DESIGNED FOR HS20-44 VEHICULAR LOADING AND 25% IMPACT.
5. CATCH BASINS HAVING A DEPTH GREATER THAN 48" FROM FINISHED SURFACE TO THE TOP OF THE CONCRETE BASE SHALL BE PROVIDED WITH MANHOLE STEPS.
6. SUBGRADE SHALL BE COMPACTED TO A FIRM, UNYIELDING STATE PRIOR TO PLACEMENT OF ANY MATERIALS ABOVE IT. A WATER-PERMEABLE SEPARATION FABRIC SHALL BE INSTALLED BETWEEN THE SUBGRADE AND STONE MATERIALS.

18 STANDARD 2 FT x2 FT CATCH BASIN DETAIL
N.T.S.



19 PIPE CONNECTION TO EXISTING STRUCTURE CEMENT GROUT SEAL JOINT
N.T.S.



20 FLARED END SECTION AND STONE RIP-RAP DETAIL
N.T.S.

NOTES

1. RIP RAP SHALL BE PLACED ON 6" THICK BEDDING MATERIAL MEETING NYSDOT STANDARD SPECIFICATION SECTION 620 - COARSE AGGREGATE FREE OF SOFT, NONDURABLE PARTICLES, ORGANIC MATERIAL AND THIN OR ELONGATED PARTICLES (703-02).
2. FLARED END SECTION SHALL BE CONNECTED TO PIPE PER MANUFACTURER'S RECOMMENDATIONS.

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Consultant

LIBERTY CENTRAL SCHOOL DISTRICT MAINTENANCE BUILDING

Project Title

STATE OF NEW YORK · CHRISTOPHER J. LAWSON · 102592 · LICENSED PROFESSIONAL ENGINEER

No.	DATE	DESCRIPTION

Drawn By:	RV
Checked By:	CJL
Proj. #:	59-09-01-06-0-009-018
CSArch Proj. #:	203-2201
Construction Documents:	7/20/22

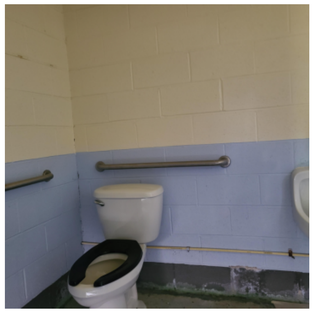
Sheet Title

DETAILS

Sheet No.

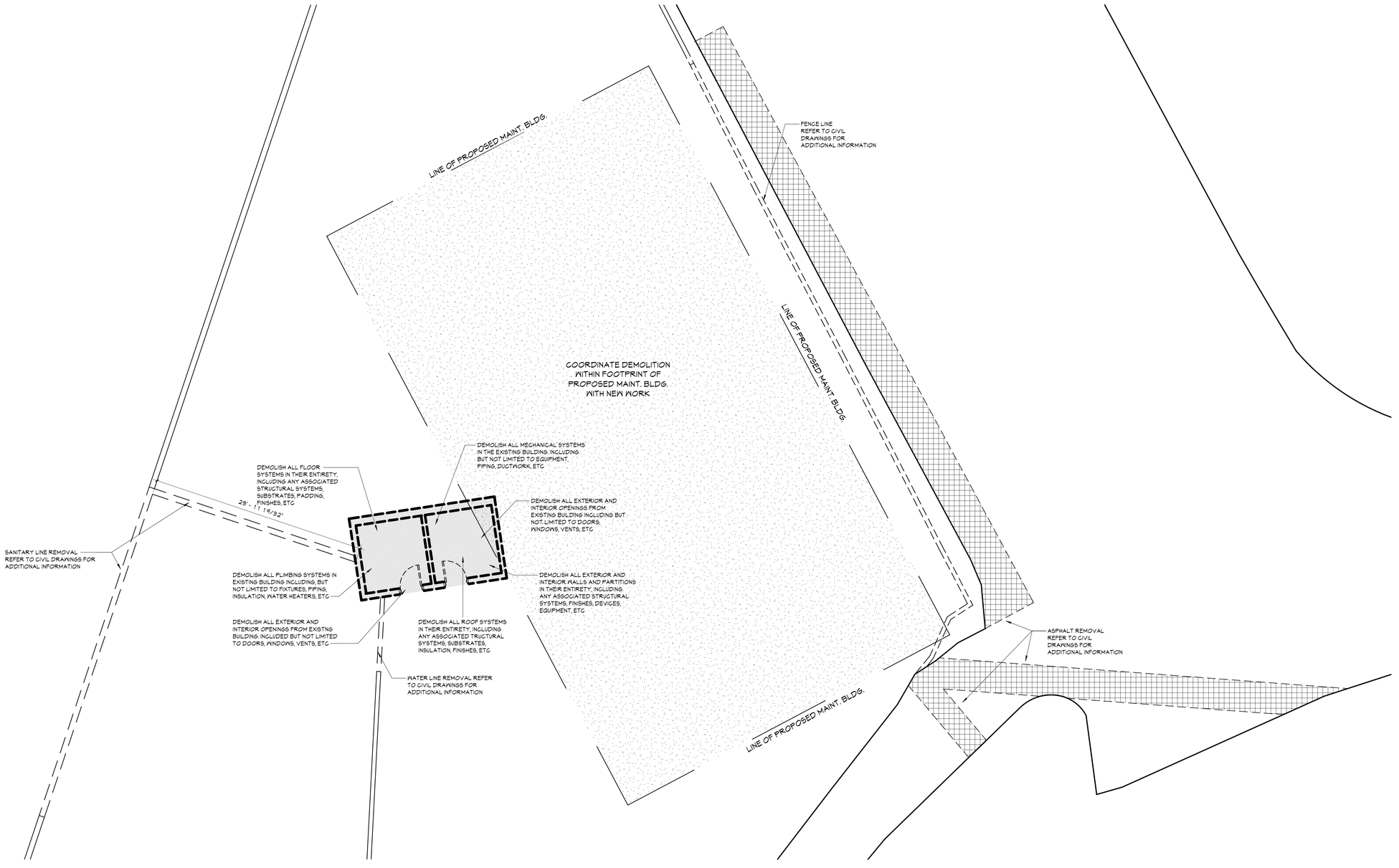
LCSD C540

CONSTRUCTION DOCUMENTS



2 EXISTING CONDITION PHOTOS

AD101 12" = 1'-0"



1 DEMOLITION PLAN

AD101 3/16" = 1'-0"

GENERAL NOTES

1. CONTRACTOR MUST EMPLOY WORKERS TRAINED, EXPERIENCED, AND KNOWLEDGEABLE IN THIS TYPE OF WORK.

2. ALL MATERIALS IN THE BUILDING SHALL BE DISPOSED OF AS PART OF THIS WORK. THIS INCLUDES BUT IS NOT LIMITED TO FURNITURE, CABINETS, CEILING TILES, AND CARPETING.

3. CONTRACTOR IS TO PROVIDE UTILITIES FOR PROJECT MONITOR.

4. SITE SECURITY IS THE RESPONSIBILITY OF THE CONTRACTOR UNDER CONTROLLED DEMOLITION. CONTRACTOR MUST DEFINE HIS WORK ZONE AND INSTALL 6' HIGH CHAIN LINK CONSTRUCTION FENCING AROUND THE ENTIRE WORK ZONE. THE FENCING SHALL HAVE LOCKABLE GATES FOR EGRESS/INGRESS.

5. THE CONTRACTOR SHALL COMPLETELY DEMOLISH THE BUILDINGS AND REMOVE ALL FOUNDATIONS AND/OR FOOTER WALLS SPECIFIED.

6. ANY DAMAGE TO ROADWAYS, SIDEWALKS, CURBS, TREES, UTILITIES OR THEIR STRUCTURES NOT INCLUDED IN THIS WORK SHALL BE REPAIRED TO A CONDITION ACCEPTABLE TO THE OWNER.

7. REMOVE AND DISPOSE OF ALL MATERIALS INACCORDANCE WITH THESE SPECIFICATIONS, THE LATEST REGULATIONS FROM THE ENVIRONMENTAL PROTECTION AGENCY, OSHA, THE U.S. DEPARTMENT OF HEALTH, EDUCATIONS AND WELFARE, NYS DEPARTMENT OF ENVIRONMENTAL CONSERVATION, AND OTHER APPLICABLE FEDERAL, STATE, AND LOCAL GOVERNMENT REGULATIONS. WHENEVER THERE IS A CONFLICT OR OVERLAP OF THE ABOVE REFERNCES, THE MOST STRINGENT PROVISION IS APPLICABLE.

8. UTILITIES THAT ARE CAPPED ARE TO BE REMOVED FROM THE DISTURBANCE ZONE.

9. ALL UTILITY DISCONNECTIONS ARE TO BE COORDINATED WITH INDIVIDUAL UTILITY COMPANIES.

KEY NOTES

DEMOLISH EXISTING 1 STORY STRUCTURAL MASONRY BUILDING, INCLUDING ALL STRUCTURE, FINISHES, EQUIPMENT, ETC.

DEMOLISH EXISTING ASPHALT AND CONCRETE. REFER TO CIVIL DRAWING FOR ADDITIONAL INFORMATION.

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LIBERTY CENTRAL SCHOOL DISTRICT
MAINTENANCE BUILDING

Project Title

REGISTERED ARCHITECT
WILLIAM M. RITTENHOUSE
023344
STATE OF NEW YORK

#	DATE	DISCRIPTION

Drawn By:	Author
Checked By:	Checker
Proj. #:	59-09-01-06-3-016-001
CSArch Proj. #:	203-2201
Construction Documents:	12/13/22

Sheet Title

DEMOLITION PLAN

Sheet No.

MB
AD101

CONSTRUCTION DOCUMENTS

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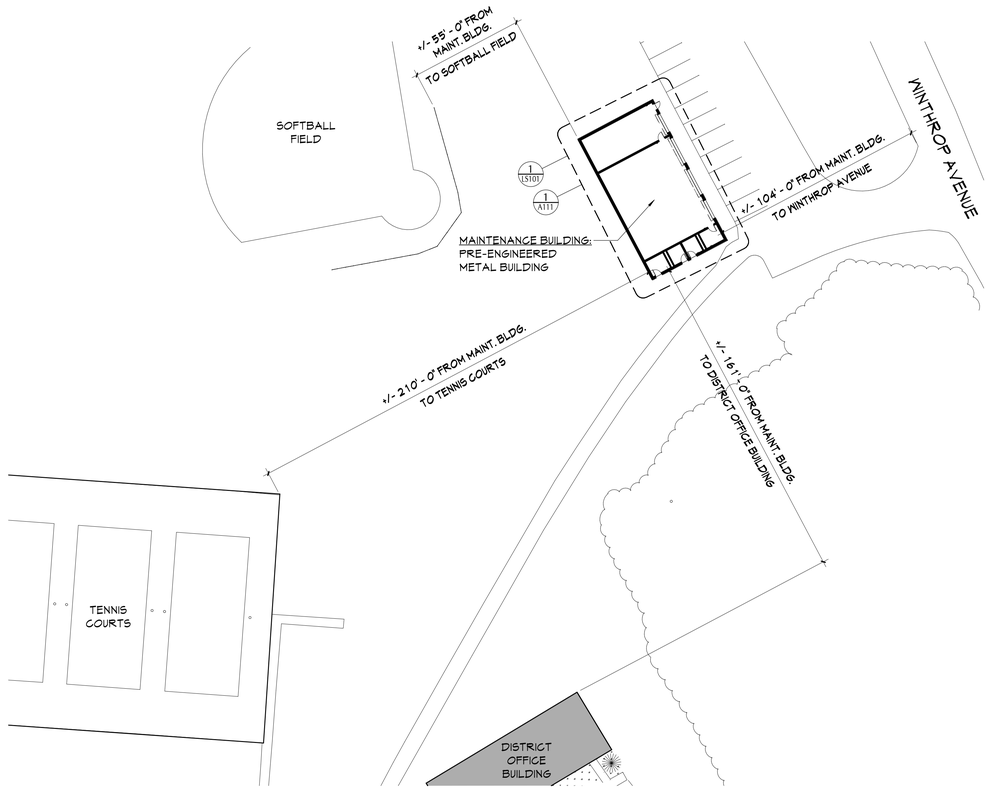
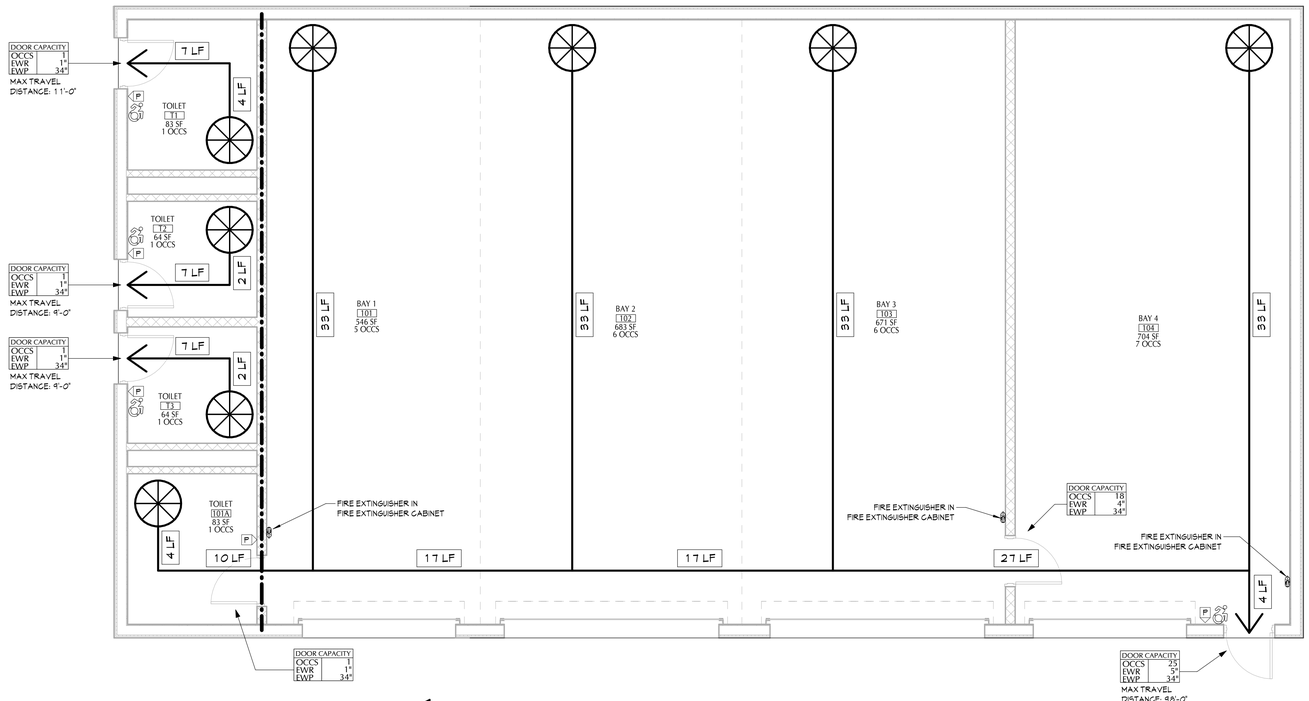


2 SITE PLAN
LS101 1" = 30'-0"



1 LIFE SAFETY FLOOR PLAN
LS101 1/4" = 1'-0"

LIFE SAFETY PLAN LEGEND

- PRIMARY EXIT
- SECONDARY EXIT
- RESCUE WINDOW (SECONDARY EXIT)
- ACCESSIBLE EXIT
- RESCUE ASSISTANCE STATION / AREA OF REFUGE
- ## OCCS (## OCCS) — NUMBER OF OCCUPANTS PER TABLE 1004.1.2 (ACTUAL NUMBER OF OCCUPANTS)
- EGRESS WIDTH: DOOR 1 EWR 1 EWP 1 — REQUIRED EXIT WIDTH FOR DOOR BASED ON (OCCUPANT * 0.2)
- EGRESS WIDTH: STAIRS 1 EWR 1 EWP 1 — REQUIRED EXIT WIDTH FOR STAIRS BASED ON (OCCUPANT * 0.3)
- EXIT PATH OF TRAVEL (START - END)

ABBREVIATIONS

DC	DEFIBRILLATOR CABINET
EWP	EXIT WIDTH PROVIDED
EWR	EXIT WIDTH REQUIRED
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
OCCS	NUMBER OF OCCUPANTS IN SPACE

FIRE SEPARATION NOTES

- 1 HOUR RATED FIRE PARTITION
- 2 HOUR RATED FIRE PARTITION

CODE NARRATIVE:

NEW CONSTRUCTION:
CONSTRUCTION TYPE: IIB
FIRST FLOOR AREA: 3,080 SF GROSS
CURRENT USE: S1-MODERATE HAZARD STORAGE

BUILDING AREA:
PERMITTED FOR TYPE (PER TABLE 506.2)

REQUIRED CORRIDOR FIRE-RESISTANCE RATING:
1-HOUR (PER TABLE 1020.1)

CODE NOTES

ALL NEW WORK TO BE PERFORMED SHALL BE IN ACCORDANCE WITH THE FOLLOWING:

1. 2020 INTERNATIONAL BUILDING CODE
2. 2020 INTERNATIONAL EXISTING BUILDING CODE
3. NYS BUILDING CODE SUPPLEMENTS
4. ANSI A117.1-09
5. 1998 NYSED MANUAL OF PLANNING STANDARDS

ALL EXISTING CONDITIONS AND NEW WORK CONDITIONS CONTAIN THE FOLLOWING MAXIMUM TRAVEL DISTANCES:

1. EXIT ACCESS TRAVEL DISTANCE SHALL NOT EXCEED 200 FEET FOR UNSPRINKLERED BUILDINGS OF OCCUPANCY TYPE 'E'.
2. ANY POINT IN ANY GROUND FLOOR CORRIDOR MUST BE WITHIN 150 FEET ALONG THE LINE OF TRAVEL TO AN EXTERIOR DOORWAY. ANY POINT IN A CORRIDOR OTHER THAN A GROUND FLOOR CORRIDOR SHALL NOT EXCEED 120 FEET ALONG THE LINE OF TRAVEL TO THE STAIR ENCLOSURE OF AN EXIT STAIRWAY.

ALL EXISTING CONDITIONS AND NEW WORK CONDITIONS CONTAIN THE FOLLOWING DEAD-END CORRIDOR INFORMATION:

1. DEAD-END CORRIDOR POCKETS SHALL NOT EXCEED A MAXIMUM DEPTH OF 1 1/2 TIMES THE WIDTH OF THE POCKET, OR 1 1/2 TIMES THE WIDTH OF THE CORRIDOR, WHICHEVER IS LESS. MAX DEAD-END DISTANCE IS 20'.

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LIBERTY CENTRAL SCHOOL DISTRICT MAINTENANCE BUILDING

Project Title

REGISTERED ARCHITECT WILLIAM M. RITTENHOUSE 023344 STATE OF NEW YORK

#	DATE	DESCRIPTION

Drawn By:	Author
Checked By:	Checker
Proj. #:	59-09-01-06-3-016-001
CSArch Proj. #:	203-2201
Construction Documents:	12/13/22

Sheet Title: LIFE SAFETY PLANS

Sheet No.: MB LS101

CONSTRUCTION DOCUMENTS

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GENERAL NOTES:

1. ALL STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE ARCHITECTURAL, MECHANICAL, ELECTRICAL, HVAC, AND PLUMBING DRAWINGS AND SPECIFICATIONS.
2. THE CONTRACTOR(S) SHALL VERIFY ALL EXISTING CONDITIONS, DIMENSIONS, ELEVATIONS, ETC. IN THE FIELD AND NOTIFY THE OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES PRIOR TO THE START OF CONSTRUCTION OR SHOP DRAWINGS.
3. THE DRAWINGS ARE INTENDED TO REQUIRE AND TO INCLUDE ALL LABOR, MATERIAL AND EQUIPMENT PROPER FOR THE WORK.
4. ALL WORK SHALL COMPLY WITH ALL LOCAL, STATE AND NATIONAL CODES AND REQUIREMENTS.
5. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND SAFETY PROCEDURES. THE ARCHITECT/ENGINEER SHALL NOT BE RESPONSIBLE FOR THE ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTORS OR THEIR AGENTS OR EMPLOYEES OR ANY OTHER PERSONS PERFORMING ANY OF THE WORK.
6. OBSERVE ALL OSHA AND OTHER APPLICABLE SAFETY REQUIREMENTS INCLUDING THE USE OF SAFETY GLASSES, HARD HATS, AND PROTECTION OF AREA WHEN WORKING OVERHEAD. THE CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR CONSTRUCTION SAFETY AT ALL TIMES.
7. COORDINATE WORK OF ALL DISCIPLINES (STRUCT., ARCH., MECH., ELECT., ETC.) WITH EXISTING CONDITIONS, SPECIAL REQUIREMENTS, CONSTRUCTION SCHEDULE AND OTHER CONTRACTORS PERFORMING WORK AT THE SITE.
8. ALL TEMPORARY SHORING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL DESIGN AND PROVIDE ANY TEMPORARY SHORING, BRACING, ETC., AS NEEDED FOR THE WORK SO AS NOT TO ENDANGER THE STRUCTURAL INTEGRITY OF ANY EXISTING FEATURE.
9. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR ANY DAMAGE DONE TO EXISTING FEATURES AS A RESULT OF THIS WORK. DAMAGED ITEMS SHALL BE REPLACED IN KIND AND AT NO ADDITIONAL COST TO THE OWNER.
10. DO NOT SCALE DRAWINGS. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND LAYOUT PRIOR TO CONSTRUCTION. ALL DIMENSIONS ON STRUCTURAL DRAWINGS SHALL BE CHECKED AGAINST ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, AND CIVIL DRAWINGS AND ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE. IMMEDIATELY. SEE THE ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS NOT SHOWN ON THE STRUCTURAL DRAWINGS. REFER TO MECHANICAL, ELECTRICAL, AND ARCHITECTURAL DRAWINGS FOR OPENINGS NOT SHOWN ON STRUCTURAL DRAWINGS. CHANGES AFFECTING THE LAYOUT SHOWN MUST BE SPECIFIC AND CLEARLY CONVEYED TO THE OWNER'S REPRESENTATIVE IN WRITTEN FORM AS A CHANGE FOR INCLUSION INTO THESE PLANS.
11. SHOP DRAWINGS: REPRODUCTION OF DESIGN DRAWINGS SHALL NOT BE PERMITTED FOR SHOP DRAWING SUBMISSIONS. THE GENERAL CONTRACTOR/CONSTRUCTION MANAGER SHALL REVIEW AND PROVIDE REVIEW STAMP ON SHOP DRAWING SUBMISSIONS PRIOR TO SUBMITTAL TO ARCHITECT/ENGINEER INDICATING UNDERSTANDING AND ACCEPTANCE OF SUBMITTAL AND CONFIRMING CONFORMANCE TO PROJECT PLANS/SPECIFICATIONS.
12. IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ERECTION PROCEDURE AND SEQUENCE TO INSURE THE SAFETY OF THE BUILDING AND ITS COMPONENT PARTS DURING ERECTION. THIS INCLUDES, BUT IS NOT LIMITED TO, THE ADDITION OF WHATEVER TEMPORARY BRACING, GUYS OR TIE-DOWNS MAY BE NECESSARY.
13. EQUIPMENT FRAMING LOADS, OPENINGS AND STRUCTURE IN ANY WAY RELATED TO HVAC, PLUMBING, PROCESS OR ELECTRICAL REQUIREMENTS ARE SHOWN FOR BIDDING PURPOSES ONLY. CONTRACTOR SHALL OBTAIN APPROVAL OF THE PERTINENT TRADES BEFORE PROCEEDING WITH SUCH PORTION OF THE WORK. EXCESS COST RELATED TO VARIATION IN THESE REQUIREMENTS SHALL BE BORNE BY THE APPROPRIATE CONTRACTOR.

FOUNDATION NOTES

1. FOOTING ELEVATION SHOWN REPRESENT THE MINIMUM DEPTH TO WHICH FOOTINGS SHALL BE PLACED, BUT SHALL BEAR AT A DEPTH BELOW FINISHED GRADE NO LESS THAN 4' - 0". FOOTINGS SHALL BE LOWERED AS REQUIRED TO OBTAIN SUITABLE BEARING. WHERE FOOTINGS ARE REQUIRED TO BE LOWERED MORE THAN 1 FOOT, NOTIFY THE ENGINER OF RECORD. ALL UNSUITABLE FOUNDATION MATERIAL SHALL BE REMOVED WITH FOOTINGS RESTING ON STRUCTURAL FILL WITH A MINIMUM BEARING CAPACITY OF 1500 PSF, UNLESS OTHERWISE INDICATED.
2. A GEOTECHNICAL ENGINEER SHALL VERIFY THE ALLOWABLE BEARING CAPACITY OF THE SOILS PRIOR TO THE START OF CONSTRUCTION, AND NOTIFY THE EOR IF THE ALLOWABLE BEARING CAPACITY IS LOWER THAN 1500 PSF. THE GEOTECHNICAL ENGINEER SHALL PROVIDE RECOMMENDATIONS FOR REMEDIATING POOR BEARING OR PROVIDE ALTERNATIVE BEARING/FOUNDATION SUPPORT SOLUTIONS.
3. A GEOTECHNICAL ENGINEER SHALL OBSERVE THE OPEN EXCAVATION TO DETERMINE THAT THE SOIL TYPE AND CONDITIONS ARE CONSISTENT WITH DESIGN CRITERIA OF THE SOIL REPORT. IF THE SOIL PROPERTIES ARE FOUND TO BE DIFFERENT FROM THIS CRITERIA THE OWNER'S REPRESENTATIVE SHALL BE PROMPTLY NOTIFIED SO THAT THE FOUNDATION DESIGN MAY BE REVIEWED.
4. NO FOUNDATION CONCRETE SHALL BE INSTALLED UNTIL ALL FOUNDATION WORK HAS BEEN COORDINATED WITH UNDERGROUND UTILITIES. FOOTINGS SHALL BE LOWERED WHERE REQUIRED TO AVOID UTILITIES. WHERE FOOTINGS ARE REQUIRED TO BE LOWERED MORE THAN 1 FOOT, NOTIFY THE ENGINEER OF RECORD.
5. TO MINIMIZE WEATHERING, THE LAST 6 INCHES OF EXCAVATION FOR ALL FOOTINGS SHALL BE MADE IMMEDIATELY PRIOR TO PLACEMENT OF FOOTINGS.
6. WHERE ROCK OUTCROPPINGS ARE ENCOUNTERED IN ANY FOOTING EXCAVATION, UNDERCUT TO A DEPTH OF NOT LESS THAN 6 INCHES BELOW ELEVATION OF BOTTOM OF FOOTING AND BACKFILL WITH THOROUGHLY COMPACTED #10 FINES.
7. UNLESS OTHERWISE SHOWN, THE CENTERLINES OF ALL PIERS AND COLUMN FOOTINGS SHALL BE LOCATED ON COLUMN CENTERLINES.

CONCRETE NOTES

1. COMPLY WITH THE FOLLOWING CODES AND STANDARDS:
   1. ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS".
   2. ACI 305, ACI 306, ACI 318, "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE".
   3. ACI DETAILING MANUAL (ACI SP-66-04).
   4. ACI 347 "RECOMMENDED PRACTICE FOR CONCRETE FORM WORK".
   5. CONCRETE REINFORCING STEEL INSTITUTE (CRSI), "MANUAL OF STANDARD PRACTICE".
   6. ACI 304 "RECOMMENDED PRACTICE FOR MEASURING, MIXING, TRANSPORTING AND PLACING CONCRETE".
2. MATERIALS:
   1. REINFORCING BARS - ASTM A615, GRADE 60, DEFORMED
   2. WELDED WIRE FABRIC (WWF) - ASTM A185, FLAT SHEETS.
   3. PORTLAND CEMENT-ASTM C150, TYPE I OR TYPE II.
   4. AGGREGATES-ASTM C33.
   5. AIR ENTRAINING ADMIXTURE-ASTM C260, CERTIFIED BY MANUFACTURER TO BE COMPATIBLE WITH OTHER REQUIRED ADMIXTURES.
   6. PROHIBITED ADMIXTURES-CALCIUM CHLORIDE THYOCYANATES OR ADMIXTURES CONTAINING MORE THAN 0.1% CHLORIDE IONS ARE NOT PERMITTED.
3. CONTINUOUS REINFORCING IN WALLS AND SLABS MAY BE SPLICED, AS REQUIRED, PROVIDING BARS ARE OF THE LONGEST PRACTICABLE LENGTH AND SPLICES ARE SHOWN ON REINFORCING SHOP DRAWINGS. WHEREVER POSSIBLE, SPLICES SHALL BE STAGGERED. FIELD CUTTING OF REINFORCEMENT WILL NOT BE PERMITTED.
4. UNLESS OTHERWISE SHOWN, BARS AT WALL AND CONTINUOUS FOOTING CORNERS AND INTERSECTIONS SHALL BE DETAILED AS SHOWN ON FIGURE 15 OF ACI SP-66-04. CORNER BARS SHALL BE DETAILED AS SHOWN FOR OUTSIDE LOADED ONLY CORNERS. INTERSECTIONS SHALL BE DETAILED WITHOUT DIAGONAL BARS. ALL END HOOKS SHALL BE STANDARD 90 DEGREE END HOOKS AND CORNER BARS SHALL BE 48 BAR DIAMETERS X 48 BAR DIAMETERS MINIMUM UNLESS NOTED OTHERWISE.
5. PROVIDE DOWELS TO MATCH REINFORCEMENT SIZE AND SPACING INDICATED FOR ALL STRUCTURAL ELEMENTS, UNLESS OTHERWISE INDICATED. DOWELS MUST BE PLACED AND SECURED PRIOR TO CONCRETE PLACEMENT ("WET STICKING" REINFORCING NOT PERMITTED").
6. MAJOR CONSTRUCTION JOINTS ARE SHOWN ON THE DRAWINGS. INTERMEDIATE JOINTS IN WALLS, SLABS, AND FLOOR FRAMING ARE NOT SHOWN. CONSTRUCTION JOINTS MAY BE ADDED, OMITTED OR RELOCATED IF PROPERLY DETAILED ON SHOP DRAWINGS AND APPROVED BY THE OWNER'S REPRESENTATIVE.
7. SEE ARCHITECTURAL AND MECHANICAL DRAWINGS FOR LOCATIONS OF OPENINGS AND SLEEVES IN CONCRETE WALLS AND SUPPORTED FLOORS. SPREAD REINFORCEMENT AT OPENINGS AND SLEEVES UNLESS OTHERWISE SHOWN. DO NOT CUT REINFORCEMENT. SEE TYPICAL REINFORCEMENT DETAILS FOR OPENINGS IN SLABS AND WALLS FOR ADDITIONAL REQUIREMENTS.
8. PLACING OF REINFORCEMENT: PROVIDE CHAIRS, BOLSTERS, ADDITIONAL REINFORCEMENT, AND ACCESSORIES NECESSARY TO SUPPORT REINFORCEMENT AT POSITION SHOWN ON DRAWINGS. SUPPORT OF REINFORCEMENT ON FORM TIES, WOOD, BRICK, BRICKBAT OR OTHER UNACCEPTABLE MATERIAL, WILL NOT BE PERMITTED.
9. THE CONTRACTOR SHALL REVIEW ALL DRAWINGS FOR SIZE AND LOCATION OF ALL EMBEDDED ITEMS, SLEEVES, SLAB DEPRESSIONS, OPENINGS, ETC. REQUIRED BY OTHER TRADES. RECONCILE THEIR EXACT SIZES AND LOCATIONS BEFORE PROCEEDING WITH THE WORK. ALL ITEMS SHALL BE FURNISHED AND INSTALLED PRIOR TO PLACEMENT OF CONCRETE. SECURE THE APPROVAL OF THE OWNER'S REPRESENTATIVE PRIOR TO PLACING OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS
10. IN SLABS-ON-GRADE, PROVIDE 2 #4X4' 0" DIAGONAL BARS IN THE MIDDLE OF THE SLAB AT EACH CORNER OF OPENINGS OVER 1' 0" SQUARE AND AT RE-ENTRANT CORNERS.
11. PROVIDE CONTROL JOINTS IN CAST-IN-PLACE CONCRETE SLABS-ON-GRADE AT ___ FEET O.C. MAX. LOCATE CONTROL JOINTS TO FORM APPROXIMATE SQUARE PANELS WITH THE LENGTH OF ONE SIDE NOT EXCEEDING THE ADJACENT SIDE BY A FACTOR OF 1.5. CONTROL JOINTS MAY BE CONTRACTION JOINTS, CONSTRUCTION JOINTS, OR EXPANSION JOINTS.
12. WHERE CONSTRUCTION JOINTS ARE REQUIRED BUT ARE NOT INDICATED ON THE DRAWINGS, THEY SHALL BE LOCATED AT THE MID-SPAN OF BEAMS, SLABS AND WALLS AND SHALL BE SUBJECT TO REVIEW BY THE OWNER'S REPRESENTATIVE. UNLESS NOTED OTHERWISE OR SHOWN ON THE DRAWINGS, AT CONCRETE SLABS ON STEEL DECK, SUPPORTED BY STEEL BEAMS AND GIRDERS, CONSTRUCTION JOINTS SHALL BE PLACED AT MID-SPAN OF DECK AND MID-WAY BETWEEN GIRDERS
13. CHAMFER EDGES OF PERMANENTLY EXPOSED CONCRETE SURFACES 3/4-INCH, UNO.
14. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING WHEN IT IS SAFE TO REMOVE FORMS AND/OR SHORING. FORMS AND SHORING MUST NOT BE REMOVED UNTIL THE CONCRETE IS STRONG ENOUGH TO CARRY ITS OWN WEIGHT AND ANY ANTICIPATED SUPERIMPOSED LOADS. WHEN FORMS ARE STRIPPED THERE MUST BE NO EXCESSIVE DEFLECTION, DISTORTION, DISCOLORATION, AND NO EVIDENCE OF DAMAGE TO THE CONCRETE.

MASONRY NOTES:

1. MASONRY WORK SHALL CONFORM TO THE LATEST EDITIONS OF ACI 530 AND 530.1.
2. MATERIALS:
   - A. CONCRETE MASONRY UNITS: HOLLOW OR SOLID UNITS ASTM C90. ALL UNITS SHALL BE TYPE I, NORMAL WEIGHT AUTOCLAVED CURED. MOISTURE CONTENT SHALL NOT EXCEED 30% OF MAXIMUM ABSORPTION, AND SHRINKAGE SHALL BE LESS THAN 0.35% AS PER ASTM C426.
   - B. MORTAR: ASTM C270, TYPE S. NO MASONRY CEMENT WILL BE ALLOWED.
   - C. f'_m = 2,000 psi
   - D. REINFORCEMENT BARS: ASTM A615 GRADE 60.
   - E. JOINT REINFORCEMENT: TRUSS TYPE WITH 0.148 INCH DIAMETER
   - F. FINE GROUT: ASTM C476.
3. REINFORCING BARS IN MASONRY SHALL BE FULLY GROUTED FOR THEIR ENTIRE LENGTH AND SHALL BE LAP SPLICED 48 BAR DIAMETERS,UNO. VERTICAL REINFORCEMENT SHALL CONFORM TO ASTM A615 GRADE 60.
4. UNLESS OTHERWISE NOTED OR SHOWN, PROVIDE CMU LINTELS OVER OPENINGS IN CMU WALLS IN ACCORDANCE WITH TYPICAL CMU LINTEL SCHEDULE.
5. UNLESS OTHERWISE SHOWN, PROVIDE SOLID MASONRY BLOCK COURSES, CONSISTING OF SOLID BLOCKS OR GROUT FILLED BLOCKS FOR BEARING UNDER STRUCTURAL MEMBERS IN ACCORDANCE WITH THE FOLLOWING SCHEDULE:
   - A. THREE COURSES UNDER STEEL BEAMS AND COLUMNS (2' 0" EACH SIDE OF MEMBER)
6. ALL EXPOSED MORTAR JOINTS SHALL BE TOOLED.
7. CMU WALLS SHALL RECEIVE TEMPORARY BRACING. TEMPORARY BRACING SHALL NOT BE REMOVED UNTIL WALL IS PERMANENTLY BRACED BY THE ROOF OR FLOOR.
8. PROTECT MASONRY WORK FROM DAMAGE DUE TO OTHER WORK AND THE WEATHER AS RECOMMENDED BY NCMA. ALL UNITS SHALL BE LAID WITH FULL MORTAR COVERAGE ON HORIZONTAL AND VERTICAL FACE SHELLS. SOLID UNITS SHALL BE LAID WITH FULL HEAD AND BED JOINTS, 3/8" THICK. LAY IN FULL RUNNING BOND UNLESS INDICATED OTHERWISE.
9. PLACE HORIZONTAL REINFORCING ON FULL MORTAR BED AT 16" OC MIN OR AS INDICATED ON DRAWINGS. VERTICAL REINFORCING IN MASONRY WHERE SHOWN SHALL BE PLACED IN GROUT FILLED CORES AND PROPERLY LOCATED AS INDICATED. SPLICES SHALL BE MINIMUM 36 X BAR DIAMETER.
10. USE LOW-LIFT GROUTING TECHNIQUES TO FILL CORES, UNLESS HIGH-LIFT GROUTING (VERTICAL PLACEMENT >4'0") IS APPROVED BY THE OWNER'S REPRESENTATIVE IN WRITING.
11. PROVIDE DOWELS TO MATCH REINFORCEMENT SIZE AND SPACING INDICATED FOR ALL STRUCTURAL ELEMENTS, UNLESS OTHERWISE INDICTED. DOWELS MUST BE PLACED AND SECURED PRIOR TO CONCRETE PLACEMENT ("WET-STICKING" REINFORCING NOT PERMITED).

POST-INSTALLED ANCHOR NOTES:

1. POST INSTALLED ANCHORS HAVE BEEN DESIGNED WITH HILTI ANCHORS (NOTED BELOW) AS THE BASIS OF DESIGN. INSTALL ANCHORS PER THE MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS.
   - A. EXPANSION ANCHORS: KWIK BOLT ((3 OR TZ))
   - B. SLEEVE ANCHORS: HLC SLEEVE ANCHOR
   - C. ADHESIVE ANCHORS: HIT HY-200
   - D. SCREEN TUBE ANCHORS: HIT HY-270
2. CONTRACTOR MAY PROVIDE EQUIVALENT ANCHORS WITH SIZE AND FINISH AS NOTED AND EQUIVALENT SHEAR AND TENSION CAPACITIES AFTER MODIFICATION DUE TO EMBEDMENT, SPACING AND EDGE DISTANCES AT THE DISCRETION OF THE OWNER'S REPRESENTATIVE
3. ALL ADHESIVE ANCHORS FOR REINFORCING SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ACI 355.4 AND ICC-ES AC308 FOR CRACKED CONCRETE AND SEISMIC APPLICATIONS.
4. DESIGN ADHESIVE BOND STRENGTH FOR ADHESIVE ANCHORS IN CONCRETE HAS BEEN BASED ON ACI 355.4, TEMPERATURE CATEGORY B WITH INSTALLATIONS INTO DRY HOLES DRILLED USING A CARBIDE DRILL BIT INTO CRACKED CONCRETE THAT HAS CURED FOR AT LEAST 21 DAYS.
5. ADHESIVE ANCHORS REQUIRING CERTIFIED INSTALLATIONS SHALL BE INSTALLED BY A CERTIFIED ADHESIVE ANCHOR INSTALLER PER ACI 318 D.9.2.2. INSTALLATIONS REQUIRING CERTIFIED INSTALLERS SHALL BE INSPECTED PER ACI 318 D.9.2.4.

METAL BUILDING SYSTEMS NOTES:

1. DESIGN, FABRICATION AND ERECTION OF THE PRE-ENGINEERED METAL BUILDING (PEMB) SYSTEM SHALL BE SUFFICIENT TO WITHSTAND LOADS FROM THERMAL, WIND, GRAVITY, STRUCTURAL MOVEMENT AND SEISMIC ACTION WITHOUT EXCEEDING ALLOWABLE STRESSES AND SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE FOLLOWING:
   - A. METAL BUILDING MANUFACTURERS ASSOCIATION (MBMA) "METAL BUILDING SYSTEM MANUAL" (LATEST EDITION)
   - B. AERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) "SPECIFICATIONS FOR STRUCTURAL STEEL BUILDINGS" AND STEEL DESIGN GUIDE SERIES 3: SERVICABILITY DESIGN CONSIDERATIONS FOR LOW-RISE BUILDINGS", UNO.
   - C. IRON AND STEEL INSTITUTE (AISI) "SPECIFICATION FOR THE DESIGN OF COLD FORMED STEEL STRUCTURAL MEMBERS" (LATEST EDITION)
   - D. AMERICAN WELDING SOCIETY (AWS) "STRUCTURAL WELDING CODE STEEL AWS D1.1/D1.1M"
2. DEFORMATIONS OF THE PRE-ENGINEERED BUILDING (INCLUDING BUT NOT LIMITED TO LATERAL DRIFT, RACKING OF FRAMES, AND HORIZONTAL AND OR VERTICAL DEFLECTION OF STRUCTURAL ELEMENTS, CLADDING, OR OTHER SUPPORTED ELEMENTS), IS TO BE LIMITED BY THE RECOMMENDATIONS SET FORTH IN AISC'S STEEL DESIGN GUIDE SERIES 3 "SERVICABILITY DESIGN CONSIDERATIONS FOR LOW-RISE BUILDINGS" AND AS FOLLOWS:
   - A. DRIFT OF MAIN FRAMES AT EAVE HEIGHT, UNO: H/100
   - B. DRIFT OF MAIN FRAMES WITH MASONRY/CONCRETE EXTERIOR WALLS: H/240
   - C. HORIZONTAL DEFLECTION OF GIRTS SUPPORTING METAL SIDING: L/120
   - D. VERITCAL DEFLECTION OF MAIN FRAME: L/240 (LIVE) & L/180 (TOTAL)
   - E. VERITCAL DEFLECTION OF PURLINS: L/240 (LIVE) & L/180 (TOTAL)
   - F. LATERAL MOVEMENT OF ELEMENTS SUPPORTING DRYWALL PARTITIONS (H=PARTITION HT) H/500
   - G. HORIZONTAL DEFLECTION OF GIRTS SUPPORTING MASONRY WALLS: L/600
3. WIND AND SEISMIC FORCES USED FOR THE COMPUTATION OF MEMBER STRESSES ARE TO BE BASED ON THE LATERAL LOAD DESIGN CRITERIA LISTED IN THE DESIGN CRITERIA ON SHEET S-002.
4. CONTRACTOR IS TO ENGAGE AN EXPERIENCED INSTALLER TO ERECT THE PRE-ENGINEERED METAL BUILDING WHO IS EXPERIENCED IN THE ERECTION OF METAL BUILDINGS SIMILAR TO THAT REQUIRED FOR THIS PROJECT AND WHO IS CERTIFIED IN WRITING BY THE METAL BUILDING SYSTEM MANUFACTURER AS QUALIFIED FOR THE ERECTION OF THE MANUFACTURER'S PRODUCTS.
5. FABRICATE FRAMING COMPONENTS IN THE SHOP TO THE GREATEST EXTENT POSSIBLE. IN GENERAL, SHOP WELD AND FIELD BOLT CONNECTIONS.
6. EXERCISE CARE IN DELIVERING, UNLOADING, STORING AND ERECTING BUILDING MEMBERS, WALL AND ROOF COVERING PANELS AND OTHER BUILDING COMPONENTS TO PREVENT BENDING, WARPING, TWISTING AND SURFACE DAMAGE.
7. ERECT FRAMING TRUE TO LINE, LEVEL AND PLUMB. LEVEL BASE PLATES TO A TRUE PLANE WITH FULL BEARING TO SUPPORTING STRUCTURE: USE A NON-SHRINKING GROUT TO OBTAIN UNIFORM BEARING AND TO MAINTAIN LEVEL BASE LINE ELEVATION.
8. PROVIDE LATERAL LOAD RESISTING SYSTEMS AS REQUIRED TO RESIST THE INDICATED WIND AND SEISMIC LOADS IN ROOF AND SIDE WALLS. WHERE OVERHEAD DOORS INTERFERE WITH DIAGANOL BRACING, PROVIDE STRUCTURAL WIND FRAMES. PROVIDE SAG RODS AS REQUIRED TO MAINTAIN VERTICAL ALLIGNEMENT OF WALL GIRTS. REFERENCE THE ARCHITECTURAL AND STRUCTURAL PLAN DRAWINGS FOR PERIMETER BRACING AND FRAME LOCATIONS.
9. PROVIDE FRAMED DOOR AND WINDOW OPENINGS OF PROPER DESIGN AND SIZE TO ACCOMMODATE FINISHED UNITS AND TO TRASMIT ALL LOADS TO THE BUILDING STRUCTURE.
10. THE FOUNDATION AND ANCHOR ROD DESIGN ON THESE CONTRACT DRAWINGS IS PRELIMINARY AND BASED UPON ASSUMED COLUMNBASE REACTIONS CALCULATED BY A STRUCTURAL ENGINEER. THESE REACTIONS ARE INDICATED IN 'PEMB COLUMN BASE REACTIONS' SCHEDULE ON SHEET S-604. UPON FINAL BUILDING DESIGN, THE ACTUAL COLUMN BASE REACTIONS ARE TO BE COMPARED TO THE PRELIMINARY FOUNDATION AND ANCHOR ROD DESIGN PROVIDED IS VOID AND A REGISTERED PROFESSIONAL ENGINEER MUST BE EMPLOYED BY THE GENERAL CONTRACTOR TO COMPLETE A FOUNDATION DESIGN BASED UPON THE ACTUAL REACTIONS.
    - A. COLUMN BASES ARE TO BE PINNED. FIXED BASES ARE NOT PERMITTED.
11. DESIGN THE PRE-ENGINEERED METAL BUILDING TO PROVIDE LATERAL SUPPORT FOR THE TOP OF ALL MASONRY WALLS. LATERAL SUPPORT SHALL BE IN THE FORM OF A GIRT, SPANDREL BEAM OR OTHER APPROVED MEANS. THE TOP OF THE MASONRY WALLS SHALL BE BOLTED TO THE LATERAL SUPPORT. THE LATERAL SUPPOR SHALL BE CLIPPED TO THE MAIN FRAME COLUMNS WITH VERTICALLY SLOTTED CONNECTIONS.
12. CONTRACTORS TO COORDINATE WITH THE PEMB MANUFACTURER AND SUBCONTRACTORS TO PROVIDE SUPPORT FOR ALL SUSPENDED EQUIPMENT, PIPING, DUCTWORK AND UTILITIES IDENTIFIED ON THE DRAWINGS OR OTHERWISE NOTED OR REQUIRED.

SPECIAL INSPECTION NOTES:

1. SPECIAL INSPECTIONS WILL BE PERFORMED IN ACCORDANCE WITH THE STATEMENT OF SPECIAL INSPECTIONS.
2. OWNER, OR ARCHITECT/STRUCTURAL ENGINEER OF RECORD ACTING AS THE OWNER'S AGENT, SHALL DIRECTLY EMPLOY AND PAY FOR SERVICES OF THE SPECIAL INSPECTORS TO PERFORM REQUIRED SPECIAL INSPECTIONS.

STRUCTURAL DESIGN CRITERIA

		DESIGN CRITERIA
BUILDING DATA:		
LOCATION		LIBERTY, NY
BUILDING OCCUPANCY RISK CATEGORY		II
APPLICABLE BUILDING CODE		2020 BUILDING CODE OF NEW YORK STATE (IBC 2018)
GEOTECHNICAL INFORMATION:		
ALLOWABLE BEARING PRESSURE		1500 PSF (ASSUMED)
ROOF DEAD LOADING:		
ROOF	DLr	BY PEMB
COLLATERAL	CL	10 PSF
ROOF LIVE LOADING:		
ROOF	LLr	20 PSF
SNOW LOADING:		
SNOW IMPORTANCE FACTOR	Is	1.0
GROUND SNOW LOAD	Pg	63 PSF
SNOW EXPOSURE FACTOR	Ce	1.0
ROOF THERMAL FACTOR	Ct	1.2
FLAT ROOF SNOW LOAD	Pf	49 PSF
DRIFTING SNOW		BY PEMB MANUF
WIND LOADING (MAIN WIND FORCE RESISTING SYSTEM):		
ANALYSIS PROCEDURE		DIRECTIONAL PROCEDURE
ULTIMATE DESIGN WIND SPEED (3- SECOND GUST)	Vult	110 mph
NOMINAL DESIGN WIND SPEED (3-SECOND GUST)	Vasd	85 mph
EXPOSURE CATEGORY		B
ENCLOSURE CLASSIFICATION		ENCLOSED
INTERNAL PRESSURE COEFFICIENT	GCpi	+0.18/-0.18
WIND LOADING (COMPONENTS AND CLADDING):		
COMPONENTS AND CLADDING WIND PRESSURE:		BY PEMB MANUF
SEISMIC LOADING:		
MAPPED SHORT PERIOD SPECTRAL RESPONSE ACELERATION	Ss	0.148g
MAPPED 1-SEC PERIOD SPECTRAL RESPONSE ACELERATION	S1	0.049g
SHORT PERIOD DESIGN SPECTRAL RESPONSE ACELERATION	Sds	0.158g
1-SEC PERIOD DESIGN SPECTRAL RESPONSE ACELERATION	Sd1	0.078g
SOIL SITE CLASS		D (DEFAULT)
SEISMIC DESIGN CATEGORY		B
SEISMIC FORCE RESISTING SYSTEM		BY PEMB MANUF
RESPONSE MODIFICATION FACTOR	R	BY PEMB MANUF
DEFLECTION AMPLIFICATION FACTOR	Cd	BY PEMB MANUF
SEISMIC RESPONSE COEFFICIENT	Cs	BY PEMB MANUF
ANALYSIS PROCEDURE		EQUIVALENT LATERAL FORCE
DESIGN BASE SHEAR	V	BY PEMB MANUF

FOOTING SCHEDULE

MARK	FOOTING DIMENSIONS			BOTTOM REINFORCING		TOP REINFORCING	REMARKS
	LENGTH	WIDTH	DEPTH	LONGITUDINAL	TRANSVERSE		
F5.0	5' - 0"	5' - 0"	1' - 0"	(6) #5 BARS	(6) #5 BARS	-	-
F6.0	6' - 0"	6' - 0"	1' - 0"	(7) #5 BARS	(7) #5 BARS	-	-
F8.0	8' - 0"	8' - 0"	1' - 0"	(9) #5 BARS	(9) #5 BARS	-	-

WALL FOOTING SCHEDULE

MARK	FOOTING DIMENSIONS		FOOTING REINFORCING		REMARKS
	WIDTH	DEPTH	LONGITUDINAL	TRANSVERSE	
WF2.5	2' - 6"	1' - 0"	(3) #5 BARS	#5 BARS @ 12" OC	-

PIER SCHEDULE

TYPE	PIER DIMENSIONS		PIER REINFORCING		REMARKS
	DEPTH	WIDTH	VERTICAL	TIES	
P2.0	2' - 0"	2' - 0"	(16) #6 BARS	#4 TIES (TOP 2 @ 3" OC, REMIANER @ 12" OC)	SEE PIER DETAIL
P3.1	2' - 6"	2' - 6"	(16) #8 BARS	#4 TIES (TOP 2 @ 3" OC, REMIANER @ 12" OC)	SEE PIER DETAIL
P3.2	3' - 0"	2' - 6"	(18) #8 BARS	#4 TIES (TOP 2 @ 3" OC, REMIANER @ 12" OC)	SEE PIER DETAIL

FOUNDATION WALL SCHEDULE

MARK	TYPE	THICKNESS	WALL REINFORCING		REMARKS
			HORIZONTAL	VERTICAL	
CW18	CONC FOUNDATION WALL	1' - 6"	#5 BARS @ 12" OC, EF	#5 BARS @ 12" OC, EF	SEE SECTION
CW19.5	CONC FOUNDATION WALL	1' - 7 1/2"	#5 BARS @ 12" OC, EF	#5 BARS @ 12" OC, EF	SEE SECTION

SLAB-ON-GRADE SCHEDULE

MARK	TYPE	THICKNESS	SLAB REINFORCING	REMARKS
SOG1	INTERIOR SOG	6"	6X6 - W2.9XW2.9 WWF	-
SOG2	EXTERIOR SOG	8"	#4 BARS @ 12" OC, EW	-

CONCRETE REINF SPLICE & DEVELOPMENT LENGTHS SCHEDULE

	BAR SIZE	LAP SPLICE LENGTHS (IN.)					DEVELOPMENT LENGTHS (IN.)		
		TENSION LAP LENGTH				COMP.	TENSION	COMP.	HOOKED
		TOP BARS		OTHER					
	CLASS	A	B	A	B				
fc' = 4,000 psi	#3	19	24	15	19	12	SAME AS CLASS A TENSION LAP SPLICE	8	8
	#4	25	33	19	25	15		10	10
	#5	31	41	24	31	19		12	12
	#6	37	49	29	37	23		15	15
	#7	54	71	42	54	27		17	17
	#8	62	81	48	62	30		19	19
	#9	70	91	54	70	34		22	22
	#10	79	102	61	79	39		25	25
	#11	87	113	67	87	43		27	27

	BAR SIZE	LAP SPLICE LENGTHS (IN.)					DEVELOPMENT LENGTHS (IN.)		
		TENSION LAP LENGTH				COMP.	TENSION	COMP.	HOOKED
		TOP BARS		OTHER					
	CLASS	A	B	A	B				
fc' = 4,500 psi	#3	18	23	14	18	12	SAME AS CLASS A TENSION LAP SPLICE	8	7
	#4	24	31	18	24	15		9	9
	#5	30	38	23	30	19		12	12
	#6	35	46	27	35	23		14	14
	#7	51	67	40	51	27		16	16
	#8	59	76	45	59	30		18	18
	#9	66	86	51	66	34		21	21
	#10	74	96	57	74	39		23	23
	#11	82	107	64	82	43		26	26

	BAR SIZE	LAP SPLICE LENGTHS (IN.)					DEVELOPMENT LENGTHS (IN.)		
		TENSION LAP LENGTH				COMP.	TENSION	COMP.	HOOKED
		TOP BARS		OTHER					
	CLASS	A	B	A	B				
fc' = 5,000 psi	#3	17	22	13	17	12	SAME AS CLASS A TENSION LAP SPLICE	8	7
	#4	23	29	17	23	15		9	9
	#5	28	36	22	28	19		12	12
	#6	34	43	26	34	23		14	13
	#7	49	63	38	49	27		16	15
	#8	56	72	43	56	30		18	17
	#9	63	81	48	63	34		21	20
	#10	70	92	54	70	39		23	22
	#11	78	102	60	78	43		26	24

NOTES:

1. TOP BARS ARE HORIZONTAL BARS, PLACED SO THAT MORE THAN 12 INCHES OF FRESH CONCRETE IS PLACED BELOW THE BAR.
2. ALL LAP SPLICES SHALL BE CLASS "B" UNLESS OTHERWISE NOTED.
3. LENGTHS IN THE TABLE ARE FOR UNCOATED OR ZINC-COATED (GALVANIZED) BARS.
4. CLEAR SPACING OF BARS BEING DEVELOPED OR SPLICED NOT LESS THAN 2Db AND CLEAR COVER NOT LESS THAN Db.
5. VALUES IN TABLE ARE FOR NORMAL WEIGHT CONCRETE.
6. SPACING REQUIREMENTS AND END ANCHORAGE SHALL BE SPACED PER THE REQUIREMENTS OF ACI-318.

REINFORCED CONCRETE COVER SCHEDULE

STRUCTURAL ELEMENT			*MIN COVER (IN)*
CAST AGAINST EARTH			3"
EXPOSED TO EARTH OR WEATHER	#5 BARS AND SMALLER, WWF		1-1/2"
	#6 BARS AND LARGER		2"
NOT EXPOSED TO EARTH OR WEATHER	SLABS & WALLS	#11 BARS AND SMALLER, WWF	3/4"
		#14 BARS AND LARGER	1-1/2"
	BEAMS AND COLUMNS		1-1/2"

CONCRETE STRENGTH AND MATERIAL SCHEDULE

STRUCTURAL ELEMENT	*MIN COMPRESSIVE STRENGTH AT 28 DAYS (PSI)*	*MAX WATER/CEMENT RATIO*	*AIR CONTENT (%)*
FOOTINGS, SOG	4,000	0.50	N/A
PIERS, FDN WALLS	4,500	0.45	6 +/- 1.5%
EXT CONC APRON	5,000	0.40	6 +/- 1.5%

NOTES:

1. PREPARE DESIGN MIXES FOR EACH TYPE, AND STRENGTH OF CONCRETE BY EITHER LABORATORY TRIAL BATCH OR FIELD EXPERIENCE METHODS AS SPECIFIED IN ACI 318.
2. CONCRETE SHALL BE READY MIXED PER ASTM C94. JOBSITE MIXING SHALL NOT BE PERMITTED.
3. MAXIMUM NOMINAL AGGREGATE SIZE IS 3/4".
4. SEE REINFORCED CONCRETE NOTES ON S-001 FOR ADDTIONAL REQUIREMENTS.
5. ENSURE ENTRAPPED AIR IN SLAB CONCRETE TO BE TROWEL FINISHED DOES NOT EXCEED 3%.
6. DO NOT HARD-TROWEL SLABS THAT ARE TO BE AIR-ENTRAINED. COORDINATE SLAB FINISH WITH ARCHITECTURAL AND/OR OWNER REQUIREMENTS. CARE SHALL BE TAKEN FOR FINISHING SLABS WITH AIR-ENTRAINMENT.

STRUCTURAL ABBREVIATION LEGEND

ABV	ABOVE
ACI	AMERICAN CONCRETE INSTITUTE
ADDL	ADDITIONAL
AFF	ABOVE FINISH FLOOR
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
ALT	ALTERNATE
APPROX	APPROXIMATELY
ARCH	ARCHITECT/ARCHITECTURAL
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
AWS	AMERICAN WELDING SOCIETY
BD	BOARD
BFE	BASE FLOOD ELEVATION
BLKG	BLOCKING
BM	BEAMS
BO	BOTTOM OF
BOT	BOTTOM
BRG	BEARING
BTWN	BETWEEN
C/C	CENTER TO CENTER
CFMF	COLD FORMED METAL FRAMING
CIP	CAST-IN-PLACE
CJ	CONTROL JOINT
CJP	COMPLETE JOINT PENETRATION
CL	CENTER LINE
CLR	CLEAR(ANCE)
CMU	CONCRETE MASONRY UNIT
CNJ	CONSTRUCTION JOINT
COL	COLUMN
CONC	CONCRETE
CONN	CONNECT(ED)(ION)
CONST	CONSTRUCTION
CONT	CONTINUOUS
COORD	COORDINATE
CTR	CENT(ER)(ERED)(TRAL)
DEG	DEGREE(S)
DEMO	DEMO(LISH)(LITION)
DFE	DESIGN FLOOD ELEVATION
DIA	DIAMETER
DIAG	DIAGONAL
DIF	DIFFEREN(CE)(TIAL)
DIM	DIMENSION
DIV	DIVI(DE)(DED)(DER)(SION)
DL	DEAD LOAD
DN	DOWN
DTL	DETAIL
DWG(S)	DRAWING(S)
DWL	DOWEL(REBAR)
(E)	EXISTNG
EA	EACH
EF	EACH FACE
EJ	EXPANSION JOINT
ELEV	ELEVATION
EMBED	EMBEDMENT
EOD	EDGE OF DECK
EOS	EDGE OF SLAB
EQ	EQUAL
EW	EACH WAY
EXIST	EXISTING
EXP	EXPAN(D)(SION)
EXT	EXTERIOR
FD	FLOOR DRAIN
FFE	FINISHED FLOOR ELEVATION
FIN	FINISHED
FNDN	FOUNDATION
FP	FIREPROOF(ING)
FRMG	FRAMING
FS	FAR SIDE
FS	FOOTING STEP
FTG	FOOTING
GA	GAUGE
GALV	GALVANIZED
GC	GENERAL CONTRACTOR/CONSRTUCTION MANAGER
HD	HEAVY DUTY
HK	HOOK
HORIZ	HORIZONTAL
HP	HIGH POINT
HS	HIGH STRENGTH
HSS	HOLLOW STRUCTURAL SECTION(STRUC SHAPE)
HT	HEIGHT
IF	INSIDE FACE
INFO	INFORMATION

STRUCTURAL ABBREVIATION LEGEND

INSUL	INSULATION
INTMD	INTERMEDIATE
JT	JOINT
K	KIP (1000 POUNDS)
KLF	KIPS PER LINEAR FOOT
KSI	KIPS PER SQUARE INCH
LB/LBS	POUNDS
LF	LINEAR FOOT,FEET
LL	LIVE LOAD
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LOC	LOCATION(S)
LP	LOW POINT
LVL	LEVEL
LW	LIGHTWEIGHT
MANUF	MANUFACTURER
MATL	MATERIAL
MAX	MAXIMUM
MECH	MECHANICAL
MEZZ	MEZZANINE
MIN	MINIMUM
MISC	MISCELLANEOUS
MTL	METAL
(N)	NEW
NS	NEAR SIDE
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER/DIMENSION
OF	OUTSIDE FACE
OPN'G	OPENING(S)
OPP	OPPOSITE
P	PIER (SEE SCHEDULE)
PCC	PRECAST CONCRETE
PCF	POUNDS PER CUBIC FOOT
PEMB	PRE-ENGINEERED METAL BUILDING
PERF	PERFORATE(D)
PERIM	PERIMETER
PL	PLATE
PLF	POUNDS PER LINEAR FOOT
PREFAB	PREFABRICATED
PREFIN	PREFINISH(ED)
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	POST TENSION(FD)(ING)
QTY	QUANTITY
R	RADIUS,RADII
RC	REINFORCED CONCRETE
RD	ROOF DRAIN
REINF	REINFORCING, REINFORCEMENT
REQ('D)	REQUIRE(D)
REV	REVIS(E)(ED)(ION)
RTU	ROOF TOP UNITS
SCHED	SCHEDULE
SDI	STEEL DECK INSTITUTE
SHT	SHEET
SHTG	SHEATHING
SIM	SIMILAR
SL	SNOW LOAD
SOG	SLAB ON GRADE
SPA	SPACE OR SPACING
SQ	SQUARE
SQ(FT)	SQUARE FOOT/FEET
STD	STANDARD
STIFF	STIFFENER
STL	STEEL
STRUCT	STRUCTUR(E)(AL)
T&B	TOP&BOTTOM
TBE	TOP OF BEAM ELEVATION
TDE	TOP OF DECK ELEVATION
TEMP	TEMPORARY
TFE	TOP OF FOOTING ELEVATION
THRD	THREAD(ED)
TJE	TOP OF JOIST ELEVATION
TLE	TOP OF LEDGE ELEVATION
TME	TOP OF MASONRY ELEVATION
TO	TOP OF
TOS	TOP OF STEEL
TPG	TOPPING
TRTD	TREATED
TS	THICKENED SLAB
TSE	TOP OF SLAB ELEVATION
TWE	TOP OF WALL ELEVATION
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
VERT	VERTICAL
VIF	VERIFY IN FIELD
W/	WITH
W/O	WITHOUT
WF	WIDE FLANGE
WGHT	WEIGHT
WP	WORK POINT
WT	STRUCTURAL TEE(STRUCT SHAPE)
WWR	WELDED WIRE REINFORCEMENT

NOTES

1. ANCHOR ROD SIZES SHOWN ARE MINIMUM FOR CONCRETE FOOTING DESIGN. ANCHOR ROD DIAMETER SHALL BE INCREASED IF REQUIRED BY PEMB MANUFACTURER.

3 TYPICAL ANCHOR ROD DETAIL

N.T.S.

RIGID FRAME LINES B, C, & D				
COLUMN	H (k)	H2 (k)	-V (k)	+V (k)
1	+/- 10	N/A	23	6
3	+/- 10	N/A	23	6

RIGID FRAME LINE A & E				
COLUMN	H (k)	H2 (k)	-V (k)	+V (k)
1	+/- 5	N/A	11	3
2	N/A	N/A	24	5
3	+/- 5	N/A	11	3

PRE-ENGINEERED METAL BUILDING FOUNDATION DESIGN LOADS

1. FOOTINGS, GRADE BEAMS, AND ANCHOR RODS ARE DESIGNED FOR THE COLUMN REACTIONS AS SHOWN. THE REACTIONS SHOWN ARE THE GOVERNING ASD LOAD COMBINATION REACTIONS PROVIDED.
2. POSITIVE VERTICAL REACTIONS REPRESENT A UPWARD FORCE FROM THE COLUMN (UPLIFT). NEGATIVE VERTICAL REACTIONS REPRESENT AN DOWNWARD FORCE FROM THE COLUMN. REACTIONS LABELED "H" ARE PARALLEL WITH THE FRAME. "H2" REACTIONS ARE PERPENDICULAR TO THE FRAME.

1 PRE-ENGINEERED METAL BUILDING FOUNDATION DESIGN LOADS

N.T.S.

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engineering architecture
STRUCTURAL

Project Title

LIBERTY CENTRAL SCHOOL DISTRICT
MAINTENANCE BUILDING

#	DATE	DESCRIPTION

Drawn By: JAMIE WOLMERING, EIT
Checked By: PATRICK J. WILLIAMS, PE, SE
Proj. #: 59-09-01-06-3-016-001
CSArch Proj. #: 203-2201
Construction Documents: 12/13/22

Sheet Title

GEN NOTES, DESIGN CRITERIA, AND SCHEDULES

Sheet No.

S-001

CONSTRUCTION DOCUMENTS

C:\Users\jwolmering\Documents\Liberty Maintenance Building_xxxxxxxx.xxxx - STR - RVT22_jwolmering.rvt

SCHEDULE OF STRUCTURAL SPECIAL INSPECTIONS

THE FOLLOWING TABLES COMPRISES THE STRUCTURAL SPECIAL INSPECTION REQUIREMENTS FOR THIS PROJECT IN ACCORDANCE WITH CHAPTER 17 OF THE 2018 INTERNATIONAL BUILDING CODE. REFER TO THE PROJECT SPECIFICATIONS FOR REQUIRED QUALIFICATIONS OF ALL PERSONNEL PERFORMING SPECIAL INSPECTION ACTIVITIES AND ADDITIONAL TESTING INFORMATION.

EARTHWORK - REQUIREMENTS FOR SPECIAL INSPECTION & TESTING

AREAS OF INSPECTION & TESTING	FREQUENCY OF INSPECTION OR TESTING	REFERENCE STANDARD	IBC REFERENCE
1. VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.	PERIODIC	-	1705.6
2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.	PERIODIC		
3. PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS	PERIODIC		
4. VERIFY USE OF PROPER MATERIALS, DENSITIES, AND LIFT THICKNESS DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	CONTINUOUS		
5. PRIOR TO PLACEMENT OF COMPACTED FILL, INSPECT SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.	PERIODIC		

CAST-IN-PLACE CONCRETE - REQUIREMENTS FOR SPECIAL INSPECTION & TESTING

AREAS OF INSPECTION & TESTING	FREQUENCY OF INSPECTION OR TESTING	REFERENCE STANDARD	IBC REFERENCE
1. INSPECT REINFORCEMENT, INCLUDING PRESTRESSING TENDONS, AND VERIFY PLACEMENT.	PERIODIC	ACI 318 CH. 20, 25.2, 25.3, 26.6.1 - 26.6.3	1908.4
2. REINFORCING BAR WELDING: A. VERIFY WELDABILITY OF REINFORCING BARS OTHER THAN ASTM A706; B. INSPECT SINGLE-PASS FILLET WELDS, MAXIMUM 5/16"; AND C. INSPECT ALL OTHER WELDS.	PERIODIC PERIODIC CONTINUOUS	AWS D1.4 ACI 318: 26.6.4	-
3. INSPECT ANCHORS CAST IN CONCRETE	PERIODIC	ACI 318:17.8.2	-
4. INSPECT ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS. A. ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS. B. MECHANICAL ANCHORS AND ADHESIVE ANCHORS.	CONTINUOUS PERIODIC	ACI 318: 17.8.2.4 ACI 318:17.8.2	-
5. VERIFY USE OF REQUIRED DESIGN MIX.	PERIODIC	ACI 318: CH. 19, 26.4.3, 26.4.4	1904.1, 1904.2, 1908.2, 1908.3
6. PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	CONTINUOUS	ASTM C172 ASTM C31 ACI 318: 26.4, 26.12	1908.10
7. INSPECT CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.	CONTINUOUS	ACI 318: 26.5	1908.6, 1908.7, 1908.8
8. VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.	PERIODIC	ACI 318: 26.5.3 - 26.5.5	1908.9
9. INSPECT PRESTRESSED CONCRETE FOR: A. APPLICATION OF PRESTRESSING FORCES; AND B. GROUTING OF BONDED PRESTRESSING TENDONS.	CONTINUOUS CONTINUOUS	ACI 318: 26.10	-
10. INSPECT ERECTION OF PRECAST CONCRETE MEMBERS.	PERIODIC	ACI 318: CH. 26.8	-
11. VERIFY IN-SITU CONCRETE STRENGTH, PRIOR TO STRESSING OF TENDONS IN POST-TENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS.	PERIODIC	ACI 318: 26.11.2	-
12. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	PERIODIC	ACI 318: 26.11.2 (b)	-

MASONRY CONSTRUCTION - REQUIREMENTS FOR LEVEL B SPECIAL INSPECTION & TESTING

AREAS OF INSPECTION & TESTING	FREQUENCY OF INSPECTION OR TESTING	REFERENCE STANDARD	IBC REFERENCE
1. VERIFY COMPLIANCE WITH THE APPROVED SUBMITTALS	PERIODIC	-	1705.4
2. AS MASONRY CONSTRUCTION BEGINS, VERIFY THAT THE FOLLOWING ITEMS ARE IN COMPLIANCE: A. PROPORTIONS OF SITE-PREPARED MORTAR. B. CONSTRUCTION OF MORTAR JOINTS. C. GRADE AND SIZE OF PRESTRESSING TENDONS AND ANCHORAGES. D. LOCATION OF REINFORCEMENT, CONNECTORS, AND PRESTRESSING TENDONS, AND ANCHORAGES. E. PRESTRESSING TECHNIQUE. F. PROPERTIES OF THIN-BED MORTAR FOR AAC MASONRY.	PERIODIC PERIODIC PERIODIC PERIODIC PERIODIC PERIODIC	-	
3. PRIOR TO GROUTING, VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE: A. GROUT SPACE B. GRADE, TYPE AND SIZE OF REINFORCEMENT AND ANCHOR BOLTS, AND PRESTRESSING TENDONS AND ANCHORAGES. C. PLACEMENT OF REINFORCEMENT, CONNECTORS, AND PRESTRESSING TENDONS AND ANCHORAGES. D. PROPORTIONS OF SITE-PREPARED GROUT AND PRESTRESSING GROUT FOR BONDED TENDONS. E. CONSTRUCTION OF MORTAR JOINTS.	PERIODIC PERIODIC PERIODIC PERIODIC PERIODIC	TMS 402 SEC. 6.1 TMS 402 SEC. 6.1, 6.2.1, 6.2.6, 6.2.7	
4. VERIFY DURING CONSTRUCTION: A. SIZE AND LOCATION OF STRUCTURAL ELEMENTS. B. TYPE, SIZE, AND LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGES OF MASONRY TO STRUCTURAL MEMBERS, FRAMES, OR OTHER CONSTRUCTION. C. WELDING OF REINFORCEMENT. D. PREPARATION, CONSTRUCTION, AND PROTECTION OF MASONRY DURING COLE WEATHER (TEMPERATURES BELOW 40) OR HOT WEATHER (TEMPERATURES ABOVE 90). E. APPLICATION AND MEASUREMENT OF PRESTRESSING FORCE. F. PLACEMENT OF GROUT AND PRESTRESSING GROUT FOR BONDED TENDONS IS IN COMPLIANCE G. PLACEMENT OF AAC MASONRY UNITS AND CONSTRUCTION OF THIN-BED MORTAR JOINTS.	PERIODIC PERIODIC CONTINUOUS PERIODIC CONTINUOUS CONTINUOUS PERIODIC	TMS 402 SEC. 1.2.1(E), 6.1.4.3, 6.2.1 TMS 402 SEC. 8.1.6.7.2, 9.3.3.4(C), 11.3.3.4(B)	
5. OBSERVE PREPARATION OF GROUT SPECIMENS, MORTAR SPECIMENS, AND/OR PRISMS.	PERIODIC		

COLD-FORMED STEEL LIGHT-FRAME CONSTRUCTION - REQUIREMENTS FOR SPECIAL INSPECTION & TESTING

AREAS OF INSPECTION & TESTING	FREQUENCY OF INSPECTION OR TESTING	REFERENCE STANDARD	IBC REFERENCE
1. FOR WELDING OPERATIONS OF ELEMENTS OF THE SEISMIC FORCE-RESISTING SYSTEM AND FOR SCREW ATTACHMENT, BOLTING, ANCHORING AND OTHER FASTENING OF ELEMENTS OF THE SEISMIC FORCE-RESISTING SYSTEM, INCLUDING SHEAR WALLS, BRACES, DIAPHRAGMS, COLLECTORS AND HOLD-DOWNS.	REQUIRED FOR SEISMIC CATEGORY C, D, E OR F.	1705.12.3	-
2. MATERIAL VERIFICATION OF COLD-FORMED STEEL STRUCTURAL MEMBERS AND CONNECTORS a. PRODUCT IDENTIFICATION TO CONFORM TO AISI STANDARDS AND AS SPECIFIED IN THE CONSTRUCTION DOCUMENTS OR APPROVED SHOP DRAWINGS.	PERIODIC	AISI TABLE D6.5	-
3. INSPECTION OF WELDING a. VERIFICATION OF WELDS MEET THE MATERIALS, PROCEDURES AND WORKMANSHIP ARE IN CONFORMANCE WITH AWS D1.3 AND THE CONSTRUCTION DOCUMENTS OR APPROVED SHOP DRAWINGS.	PERIODIC	AISI TABLE D6.6	-
4. INSPECTION OF MECHANICAL FASTENING a. VERIFICATION OF MECHANICAL FASTENERS MEET THE MATERIALS, PROCEDURES, AND WORKMANSHIP ARE IN CONFORMANCE WITH MANUFACTURERS INSTALLATION INSTRUCTIONS AND THE CONSTRUCTION DOCUMENTS OR APPROVED SHOP DRAWINGS.	PERIODIC	AISI TABLE D6.7	-
5. INSPECTION OF COLD-FORMED STEEL LIGHT-FRAME CONSTRUCTION VERIFICATION OF FIELD INSTALLED MEMBERS, COMPONENT ASSEMBLIES AND CONNECTORS ARE IN CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS OR APPROVED SHOP DRAWINGS.	PERIODIC	AISI TABLE D6.8	-

STEEL CONSTRUCTION - REQUIREMENTS FOR SPECIAL INSPECTION & TESTING

AREAS OF INSPECTION & TESTING	FREQUENCY OF INSPECTION OR TESTING	REFERENCE STANDARD	IBC REFERENCE
1. FABRICATOR'S SHOP TESTING AND QUALITY CONTROL PROGRAM: A. VERIFY FABRICATOR'S CERTIFICATION AND QUALITY CONTROL PROGRAM. B. SPECIAL INSPECTIONS REQUIRED IN FABRICATOR'S SHOP FOR ELEMENTS IDENTIFIED BELOW.	 PERIODIC NOT REQUIRED IF FABRICATOR IS AISC CERTIFIED	AISC PLANT CERTIFICATION PROGRAM	1705.2
2. INSPECTION TASKS FOR HIGH-STRENGTH BOLTS, NUTS AND WASHERS PRIOR TO BOLTING: A. VERIFY MANUFACTURER'S CERTIFICATIONS AVAILABLE FOR FASTENER MATERIALS. B. FASTENERS MARKED IN ACCORDANCE WITH ASTM REQUIREMENTS. C. PROPER FASTENERS SELECTED FOR JOINT DETAIL (GRADE, TYPE, BOLT LENGTH IF THREADS ARE TO BE EXCLUDED FROM SHEAR PLANE) D. PROPER BOLTING PROCEDURE SELECTED FOR JOINT DETAIL. E. CONNECTING ELEMENTS, INCLUDING THE APPROPRIATE FAYING SURFACE CONDITION AND HOLE PREPARATION, IF SPECIFIED, MEET APPLICABLE REQUIREMENTS. F. PRE-INSTALLATION VERIFICATION AND TESTING BY INSTALLATION PERSONNEL OBSERVED AND DOCUMENTED FOR FASTENER ASSEMBLIES AND METHODS USED. G. PROPER STORAGE PROVIDED FOR BOLTS, NUTS, WASHERS, AND OTHER FASTENERS.	 CONTINUOUS PERIODIC PERIODIC PERIODIC PERIODIC PERIODIC	AISC 360, TABLE N5.6-1	
3. INSPECTION TASKS FOR HIGH-STRENGTH BOLTS, NUTS AND WASHERS DURING BOLTING: A. FASTENER ASSEMBLIES, OF SUITABLE CONDITION, PLACED IN ALL HOLES AND WASHERS (IF REQUIRED) ARE POSITIONED AS REQUIRED. B. JOINT BROUGHT TO THE SNUG-TIGHT CONDITION PRIOR TO THE PRETENSIONING OPERATION. C. FASTENER COMPONENT NOT TURNED BY THE WRENCH PREVENTED FROM ROTATING. D. FASTENERS ARE PRETENSIONED IN ACCORDANCE WITH THE RCSC SPECIFICATION, PROGRESSING SYSTEMATICALLY FROM THE POST RIGID POINT TOWARD THE FREE EDGES.	 PERIODIC PERIODIC PERIODIC PERIODIC	AISC 360, TABLE N5.6-2	
4. INSPECTION TASK FOR HIGH-STRENGTH BOLTS, NUTS AND WASHERS AFTER BOLTING: A. DOCUMENT ACCEPTANCE OR REJECTION OF BOLTED CONNECTIONS.	 CONTINUOUS	AISC 360, TABLE N5.6-3	
5. INSPECTION TASKS PRIOR TO WELDING: A. WELDING PROCEDURE SPECIFICATIONS (WPSs) ARE AVAILABLE B. MANUFACTURER CERTIFICATIONS FOR WELDING CONSUMABLES ARE AVAILABLE C. MATERIAL IDENTIFICATION (TYPE/GRADE) D. WELDER IDENTIFICATION SYSTEM F. FIT-UP OF GROOVE WELDS (INCLUDING JOINT GEOMETRY): JOINT PREPARATION DIMENSIONS (ALIGNMENT, ROOT OPENING & FACE, LEVEL) CLEANLINESS (CONDITION OF STEEL SURFACES) TACKING (TACK WELD QUALITY AND LOCATION) BACKING TYPE AND FIT (IF APPLICABLE) G. CONFIGURATION AND FINISH OF ACCESS HOLE. H. FIT-UP OF FILLET WELDS: DIMENSIONS (ALIGNMENT, GAPS AT ROOT) CLEANLINESS (CONDITION OF STEEL SURFACES) ALIGNMENT (TACK WELD QUALITY AND LOCATION)	 CONTINUOUS CONTINUOUS PERIODIC PERIODIC PERIODIC PERIODIC PERIODIC	AISC 360, TABLE N5.4-1	
6. INSPECTION TASKS DURING WELDING: A. USE OF QUALIFIED WELDERS B. CONTROL AND HANDLING OF WELDING CONSUMABLES, INCLUDING PACKING AND EXPOSURE C. ENVIRONMENTAL CONDITIONS INCLUDING WIND SPEED WITHIN LIMITS, PRECIPITATION, AND TEMPERATURE D. WPS FOLLOWED: SETTINGS ON WELDING EQUIPMENT TRAVEL SPEED SELECTED WELDING MATERIALS SHIELDING GAS TYPE/FLOW RATE PREHEAT APPLIED INTERPASS TEMPERATURE MAINTAINED (MIN/MAX) PROPER POSITION (F, V, H, OH) E. WELDING TECHNIQUES: INTERPASS AND FINAL CLEANING EACH PASS WITHIN PROFILE LIMITATIONS EACH PASS MEETS QUALITY REQUIREMENTS	PERIODIC PERIODIC PERIODIC PERIODIC PERIODIC	AISC 360, TABLE N5.4-2	
7. INSPECTION TASKS AFTER WELDING: A. WELDS CLEANED. B. SIZE, LENGTH, AND LOCATIONS OF WELDS C. WELDS MEET VISUAL ACCEPTANCE CRITERIA: CRACK PROHIBITION WELD/BASE-METAL FUSION CRATER CROSS SECTION WELD PROFILES WELD SIZE UNDERCUT POROSITY D. ARC STRIKES E. k-AREA F. BACKING REMOVED AND WELD TABS REMOVED (IF REQUIRED) G. REPAIR ACTIVITIES H. DOCUMENT ACCEPTANCE OR REJECTION OF WELDED JOINT OR MEMBER	 PERIODIC CONTINUOUS CONTINUOUS CONTINUOUS CONTINUOUS CONTINUOUS CONTINUOUS CONTINUOUS	AISC 360, TABLE N5.4-3	
8. VERIFY PLACEMENT OF ANCHOR RODS AND OTHER EMBEDMENT SUPPORTING STRUCTURAL STEEL FOR COMPLIANCE WITH THE ***CONSTRUCTION DOCUMENTS***. VERIFY DIAMETER, GRADE, TYPE, AND LENGTH OF ANCHOR ROD OR EMBEDMENT ITEM AND THE EXTENT OR DEPTH OF THE EMBEDMENT INTO THE CONCRETE PRIOR TO PLACEMENT OF CONCRETE.	PERIODIC	AISC 360, N5.7	
9. INSPECT STEEL FRAME JOINT DETAILS FOR COMPLIANCE WITH CONSTRUCTION DOCUMENTS: A. DETAILS SUCH AS BRACING AND STIFFENERS. B. MEMBER LOCATIONS. C. APPLICATION OF JOINT DETAILS AT EACH CONNECTION.	PERIODIC	AISC 360, N5.8	
10. INSPECT STEEL ELEMENTS OF COMPOSITE CONSTRUCTION PRIOR TO CONCRETE PLACEMENT: A. PLACEMENT AND INSTALLATION OF STEEL DECK. B. PLACEMENT AND INSTALLATION OF STEEL HEADED STUD ANCHORS. C. DOCUMENT ACCEPTANCE OR REJECTION OF STEEL ELEMENTS.	PERIODIC	AISC 360, N6	

STATEMENT OF SPECIAL INSPECTIONS

LOCATION	Liberty, NY
OWNER	Liberty Central School District
DESIGN PROFESSIONAL IN CHARGE	Patrick J. Williams, PE, SE

This statement of Special Inspections is submitted as a condition for permit issuance in accordance with the Special Inspection and Structural Testing requirements of the applicable building code. It includes a schedule of Special Inspection services applicable to this project as well as the name of the Special Inspection coordinator and the identity of other approved agencies to be retained for conducting these inspections and tests. This Statement of Special Inspections encompasses the following disciplines: STRUCTURAL. The Special Inspection Coordinator shall keep records of all inspections and shall furnish inspection reports to the Building Official and the Registered Design Professional in Responsible Charge (RDP). Discovered discrepancies shall be brought to the immediate attention of the contractor for correction. If such discrepancies are not corrected, the discrepancies shall be brought to the attention of the Building Official and the RDP. The Special Inspection program does not relieve the contractor of his or her responsibility for quality assurance.

Interim reports shall be submitted to the Building Official and the RDP, monthly.

A Final Report of Special Inspections documenting completion of all required Special Inspections, testing, and correction of any discrepancies noted in the inspections shall be submitted by the special Inspection Coordinator prior to issuance of a Certificate of Use and Occupancy.

Job site safety and means and methods of construction are solely the responsibility of the contractor.

In accordance with the applicable building code, the Observations and Inspections listed in the Schedule of Special Inspections are required.

SCHEDULE OF INSPECTION AND TESTING AGENCIES

SPECIAL INSPECTION AGENCIES	*FIRM*	*ADDRESS*	*TELEPHONE No.*
Special Inspection Coordinator	TBD	TBD	(###) ###-####
Inspector	TBD	TBD	(###) ###-####

Note: The inspectors and testing agencies shall be engaged by the Owner or the Owner's Agent in accordance with the applicable building code, and not by the Contractor or Subcontractor whose work is to be inspected or tested. An approved agency shall be objective, competent and independent from the contractor responsible for the work being inspected. The agency shall also disclose to the building official and the registered design professional in responsible charge possible conflicts of interest so that objectivity can be confirmed.

STATEMENT OF CONTRACTORS RESPONSIBILITY

In accordance with the applicable building code, each contractor responsible for the construction of a main wind or seismic force-resisting system, designated seismic system or a wind or seismic force-resisting component listed in the statement of special inspections above shall submit a written statement of responsibility to the building official and the owner or the owner's authorized agent prior to the commencement of work on the system or component. The contractor's statement of responsibility shall contain acknowledgement of awareness of the special requirements contained in the statement of special inspections.

QUALIFICATIONS OF INSPECTORS AND TESTING TECHNICIANS

The qualifications of all personnel performing Special Inspection and testing activities are subject to the approval of the Building Official. The credentials of all Inspectors and testing technicians shall be provided.

Key for Minimum Qualifications of Inspection Agents:

When the Registered Design Professional in Responsible Charge deems it appropriate that the individual performing a stipulated test of inspection have a specific certification or license as indicated below, such designation shall appear below the Agency Number on the Schedule.

PE/SE	Structural Engineer - a licensed PE specializing in the design of building structures
PE/GE	Geotechnical Engineer - a licensed PE specializing in soil mechanics and foundations
EIT	Engineer - In - Training - a graduate engineer who as passed the Fundamentals of Engineering examination
	AMERICAN CONCRETE INSTITUTE (ACI) CERTIFICATION
ACI-CFTT	Concrete Field Testing Technician - Grade 1
ACI-CCSI	Concrete Construction Special Inspector
ACI-LTT	Laboratory Testing Technician - Grade 1&2
ACI-STT	Strength Testing Technician
	AMERICAN WELDING SOCIETY (AWS) CERTIFICATION
AWS-CWI	Certified Welding Inspector
AWS/AISC-SSI	Certified Structural Steel Inspector
	INTERNATIONAL CODE COUNCIL (ICC) CERTIFICATION
ICC-SMSI	Structural Masonry Special Inspector
ICC-SWSI	Structural Steel and Welding Special Inspector
ICC-SFSI	Spray-Applied Fireproofing Special Inspector
ICC-PCSI	Prestressed Concrete Special Inspector
ICC-RCSI	Reinforced Concrete Special Inspector
	NATIONAL INSTITUTE FOR CERTIFICATION IN ENGINEERING TECHNOLOGIES (NICET)
NICET-CT	Concrete Technician - Levels I, II, III, & IV
NICET-ST	Soil Technicians - Levels I, II, III & IV
NICET-GET	Geotechnical Engineering Technician - Levels I, II, III & IV

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Project Title
LIBERTY CENTRAL SCHOOL DISTRICT
MAINTENANCE BUILDING

STATE OF NEW YORK · PATRICK JAMES WILLIAMS · 100958 · LICENSED PROFESSIONAL ENGINEER

NO	DATE	DESCRIPTION

Drawn By: JAMIE WOLMERING, EIT
Checked By: PATRICK J. WILLIAMS, PE, SE
Proj. #: 59-09-01-06-3-016-002
CSArch Proj. #: 203-2001
Construction Documents: 12/13/24

Sheet Title
SPECIAL INSPECTIONS

Sheet No.
S-002

CONSTRUCTION DOCUMENTS

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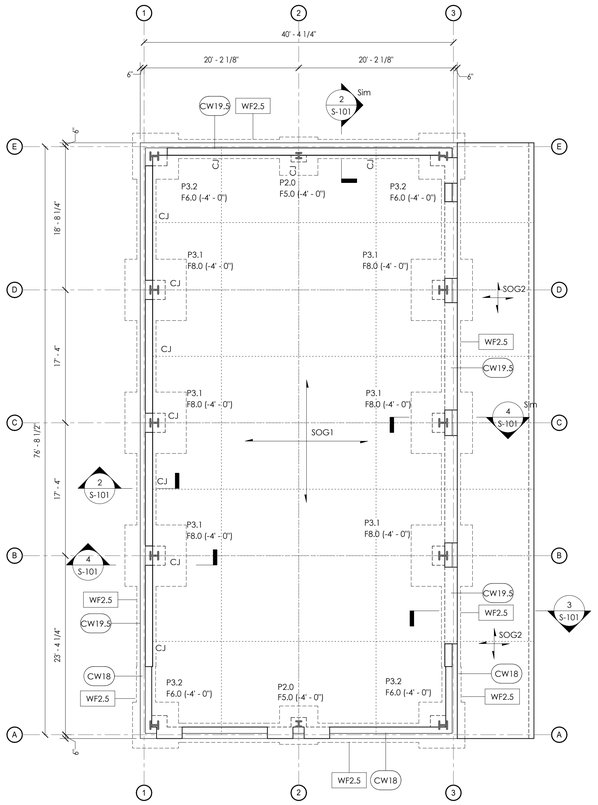
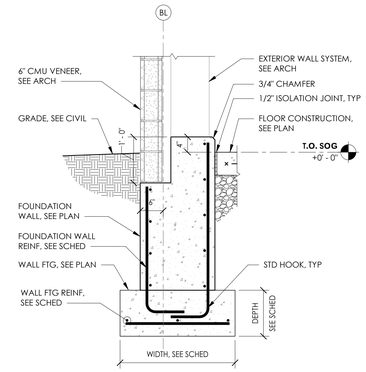


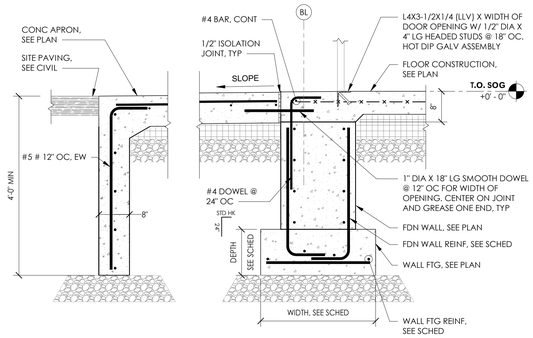
FOUNDATION PLAN NOTES:

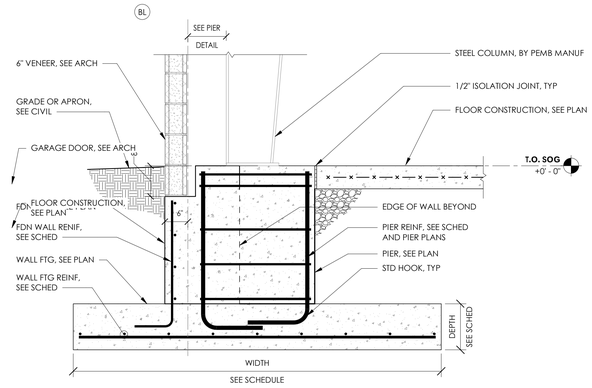
1. SEE SHEET S-001 THROUGH S-002 FOR GENERAL NOTES, DESIGN CRITERIA, SCHEDULES, AND LEGENDS.
2. SEE SHEET S-500 SERIES FOR TYPICAL DETAILS
3. FINISH FLOOR REFERENCE ELEVATION = 0' - 0".
4. TOP OF FOOTING IS (-4' - 0") BELOW FINISH FLOOR REFERENCE ELEVATION, UNLESS OTHERWISE NOTED ON PLAN AS (-X' - X") RELATIVE TO TOP OF FINISHED FLOOR REFERENCE ELEVATION.
5. COORDINATE DOOR WIDTHS AND LOCATING DIMENSIONS WITH ARCH.
6. COORDINATE WITH CIVIL, ARCH AND MEP DRAWINGS ON ANY REQUIRED PENETRATIONS THROUGH FOUNDATION WALLS AND FOOTINGS.

FOUNDATION LEGEND

F# (+/- #' - #"]	F# - DENOTES FOOTING MARK (SEE FOOTING SCHEDULE) (#' - #"] - DENOTES TOP OF FOOTING ELEVATION WITH RESPECT TO DATUM ELEVATION = 0' - 0"
P# (#' - #"]	P# - DENOTES PIER MARK (SEE PIER SCHEDULE) (#' - #"] - DENOTES TOP OF PIER ELEVATION WITH RESPECT TO DATUM ELEVATION = 0' - 0"
CW# MW#	CW# - DENOTES CONCRETE WALL MARK (SEE FOUNDATION WALL AND/OR WALL SCHEDULE) MW# - DENOTES MASONRY WALL MARK (SEE MASONRY WALL SCHEDULE)
WF#	WF# - DENOTES WALL FOOTING MARK (SEE WALL FOOTING SCHEDULE)
#'-#"	#' - #" - DENOTES TOP OF WALL FOOTING ELEVATION WITH RESPECT TO DATUM ELEVATION = 0' - 0







1 FOUNDATION PLAN

0" 2" 4" 8" 16'
1/8" = 1'-0"

2 FOUNDATION SECTION

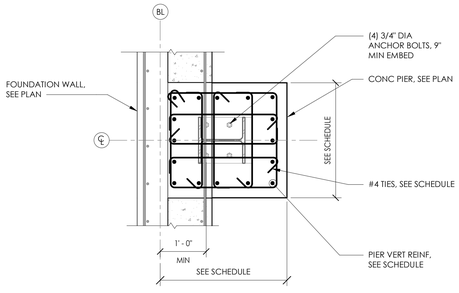
0" 6" 1' 2' 4'
3/4" = 1'-0"

3 FOUNDATION SECTION

0" 6" 1' 2' 4'
3/4" = 1'-0"

4 FOUNDATION SECTION

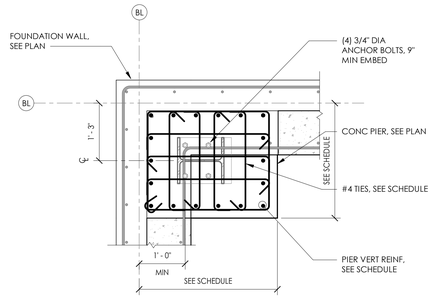
0" 6" 1' 2' 4'
3/4" = 1'-0"



NOTE: ANCHOR RODS SHALL BE PLACED IN ACCORDANCE WITH PEMB ANCHOR ROD DRAWINGS

5 P3.1

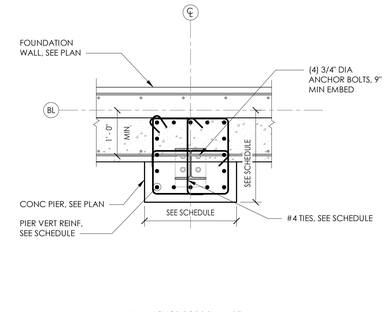
0" 6" 1' 2' 4'
3/4" = 1'-0"



NOTE: ANCHOR RODS SHALL BE PLACED IN ACCORDANCE WITH PEMB ANCHOR ROD DRAWINGS

6 P3.2

0" 6" 1' 2' 4'
3/4" = 1'-0"



NOTE: ANCHOR RODS SHALL BE PLACED IN ACCORDANCE WITH PEMB ANCHOR ROD DRAWINGS

7 P2.0

0" 6" 1' 2' 4'
3/4" = 1'-0"

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Project Title
LIBERTY CENTRAL SCHOOL DISTRICT
MAINTENANCE BUILDING

STATE OF NEW YORK PATRICK JAMES WILLIAMS 100959 LICENSED PROFESSIONAL ENGINEER

No.	DATE	DESCRIPTION

Drawn By: JAMIE WOLMERING, EIT
Checked By: PATRICK J. WILLIAMS, PE, SE
Proj. #: 59-09-01-06-3-016-001
CSArch Proj. #: 202-2001
Construction Documents: 12/12/22

Sheet Title
PLANS & SECTIONS

Sheet No.
S-101

CONSTRUCTION DOCUMENTS

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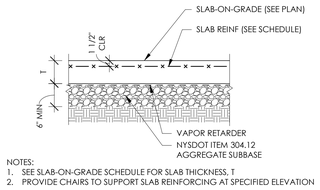
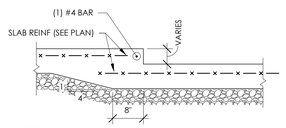


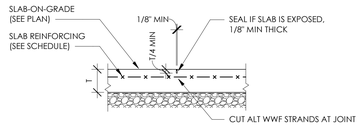
NOTES:
1. SEE SLAB-ON-GRADE SCHEDULE FOR SLAB THICKNESS, T
2. PROVIDE CHAIRS TO SUPPORT SLAB REINFORCING AT SPECIFIED ELEVATION

1 TYPICAL SLAB-ON-GRADE
N.T.S.

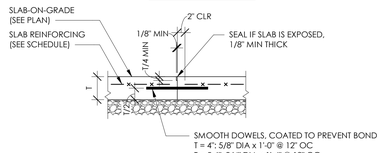


NOTES:
1. SEE ARCH DRAWINGS FOR LOCATION AND DEPTH OF SLAB DEPRESSION.
2. SEE TYPICAL SLAB-ON-GRADE DETAIL THIS SHEET, FOR SLAB DETAILS NOT SHOWN.
3. SEE SLAB-ON-GRADE SCHEDULE FOR SLAB THICKNESS.

2 TYPICAL SLAB-ON-GRADE DEPRESSION
N.T.S.



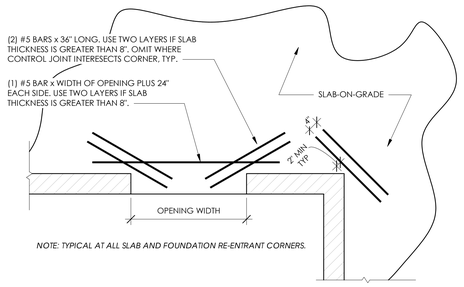
CONTROL JOINT (CJ)



CONSTRUCTION JOINT (CNJ)

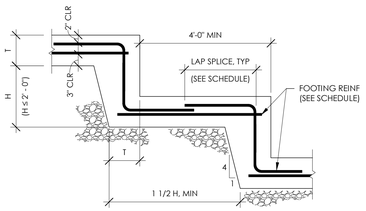
NOTES:
1. SEE TYPICAL SLAB-ON-GRADE DETAIL FOR INFORMATION NOT SHOWN
2. IF FORMED JOINT IS USED INSERT 1/8" PREMOLDED OR METAL STRIPS WHEN CONCRETE IN PLACED.
3. IF SAWED JOINT IS USED, SEAL IF SLAB IS EXPOSED
4. SPACE CONTROL JOINTS AS FOLLOWS:
   T=4", 10'-0" OC
   T=5", 12'-0" OC
   T=8", 16'-0" OC

3 TYPICAL SOG CONTROL/CONSTRUCTION JOINT
N.T.S.

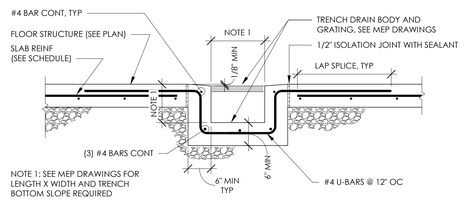


NOTE: TYPICAL AT ALL SLAB AND FOUNDATION RE-ENTRANT CORNERS.

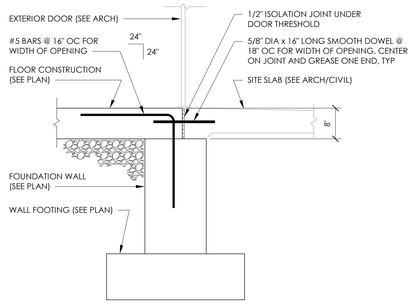
4 TYPICAL REENTRANT CORNER REINFORCING
N.T.S.



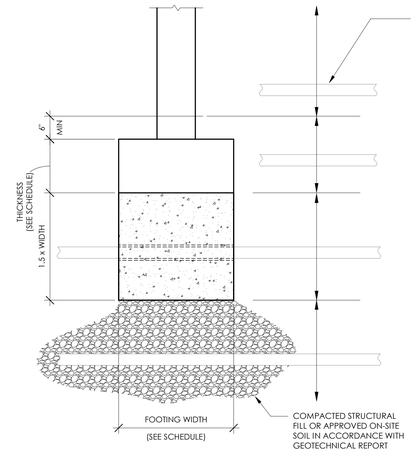
5 TYPICAL WALL FOOTING STEP
N.T.S.



6 TYPICAL TRENCH DRAIN DETAIL
N.T.S.



7 TYPICAL SLAB AT EXTERIOR DOOR
N.T.S.



PROVIDE PIPE SLEEVE THRU FOUNDATION WALL AND WRAP THE CONTINUOUS PIPE WITH 1- 1/2" MIN COMPRESSIBLE WATERSTOP, TYP.

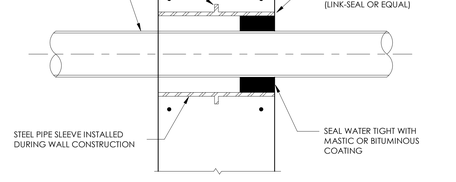
DO NOT PLACE PIPES THRU FOOTING.

SLEEVE PIPE AND FOOTING TO BOTTOM OF TRENCH (SEE TPICAL DETAILS).

NOTE:
1. THE PIPE SLEEVE SHALL BE FURNISHED BY OTHERS AND INSTALLED BY THE GENERAL CONTRACTOR. THE COMPRESSIBLE WATERSTOP SHALL BE FURNISHED AND INSTALLED BY THE TRADE REQUIRING THE CONTINUOUS PIPE PENETRATION
2. WALL AND FOOTING REINFORCING NOT SHOWN FOR CLARITY.

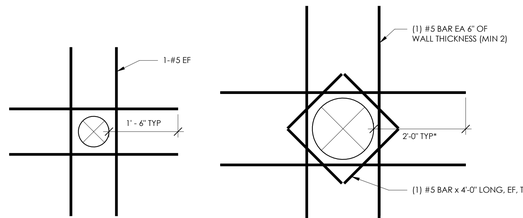
BACKFILL AND COMPACT TRENCH 95%.

8 TYPICAL PIPES AT FOUNDATION
N.T.S.



NOTE: SLEEVE DIAMETER SHALL BE > 2X PIPE DIAMETER

9 TYPICAL PIPE SLEEVE BELOW GRADE
N.T.S.



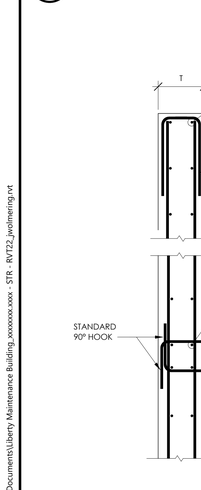
DETAIL - PIPES <18"Ø

DETAIL - PIPES > 18"Ø

10 TYPICAL PIPE OPENING IN CONCRETE WALL
N.T.S.

NOTES:
1. ALL TOP & BOTT. SLAB BARS INTERRUPTED BY THE OPENING SHALL BE REPLACED WITH ADDITIONAL REINF EQUAL TO THAT INTERRUPTED. PLACE HALF OF THE ADDITIONAL REINF ON EACH SIDE OF OPENING AND EXTEND IT A DEVELOPMENT LENGTH BEYOND EDGE OF OPENING.
2. BOXED OUT OPENINGS RECESSED BOXES & PIPE SLEEVE CLUSTERS SHALL BE TREATED AS FOR SLAB OPENINGS.

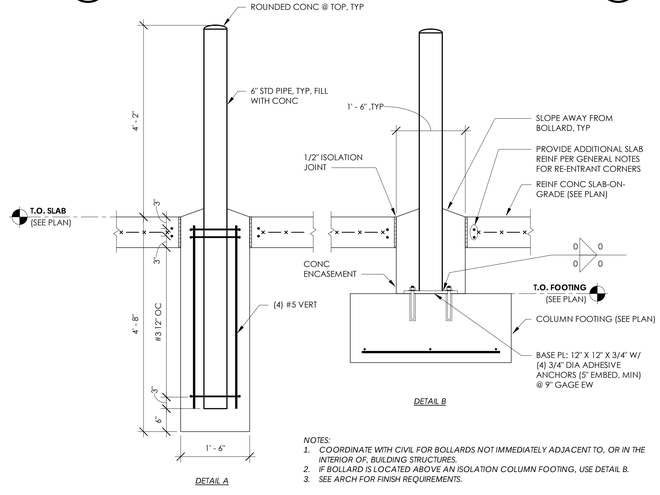
11 TYPICAL REINF AT OPENING IN SLAB
N.T.S.



REINFORCING - SINGLE MAT

REINFORCING - DOUBLE MAT

12 TYPICAL CONCRETE WALL REINFORCING
N.T.S.



DETAIL A

DETAIL B

NOTES:
1. *COORDINATE WITH CIVIL FOR BOLLARDS NOT IMMEDIATELY ADJACENT TO, OR IN THE INTERIOR OF, BUILDING STRUCTURES.*
2. *IF BOLLARD IS LOCATED ABOVE AN ISOLATION COLUMN FOOTING, USE DETAIL B.*
3. *SEE ARCH FOR FINISH REQUIREMENTS.*

13 TYPICAL BOLLARD DETAIL
N.T.S.

NOTES:
1. SEE FOUNDATION PLAN FOR SLAB THICKNESS.
2. THICKEN SLAB UNDER ALL INTERIOR CMU PARTITIONS EXCEEDING 8'-0" IN LENGTH.
3. SEE TYPICAL SLAB-ON-GRADE DETAIL THIS SHEET, FOR SLAB DETAILS NOT SHOWN.

14 TYPICAL SLAB DETAIL AT CMU PARTITION WALL
N.T.S.

CORNER COLUMN / PIER

EXTERIOR COLUMN / PIER

15 TYPICAL SLAB ON GROUND ISOLATION JOINT AT PIER/COLUMN
N.T.S.

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Project Title
LIBERTY CENTRAL SCHOOL DISTRICT
MAINTENANCE BUILDING

NO.	DATE	DESCRIPTION

Drawn By:	JAMIE WOLMERING, EIT
Checked By:	PATRICK J. WILLIAMS, PE, SE
Proj. #:	59-09-01-06-3-016-001
CSArch Proj. #:	203-2201
Construction Documents:	12/13/22

Sheet Title
TYPICAL DETAILS

Sheet No.
S-501

CONSTRUCTION DOCUMENTS

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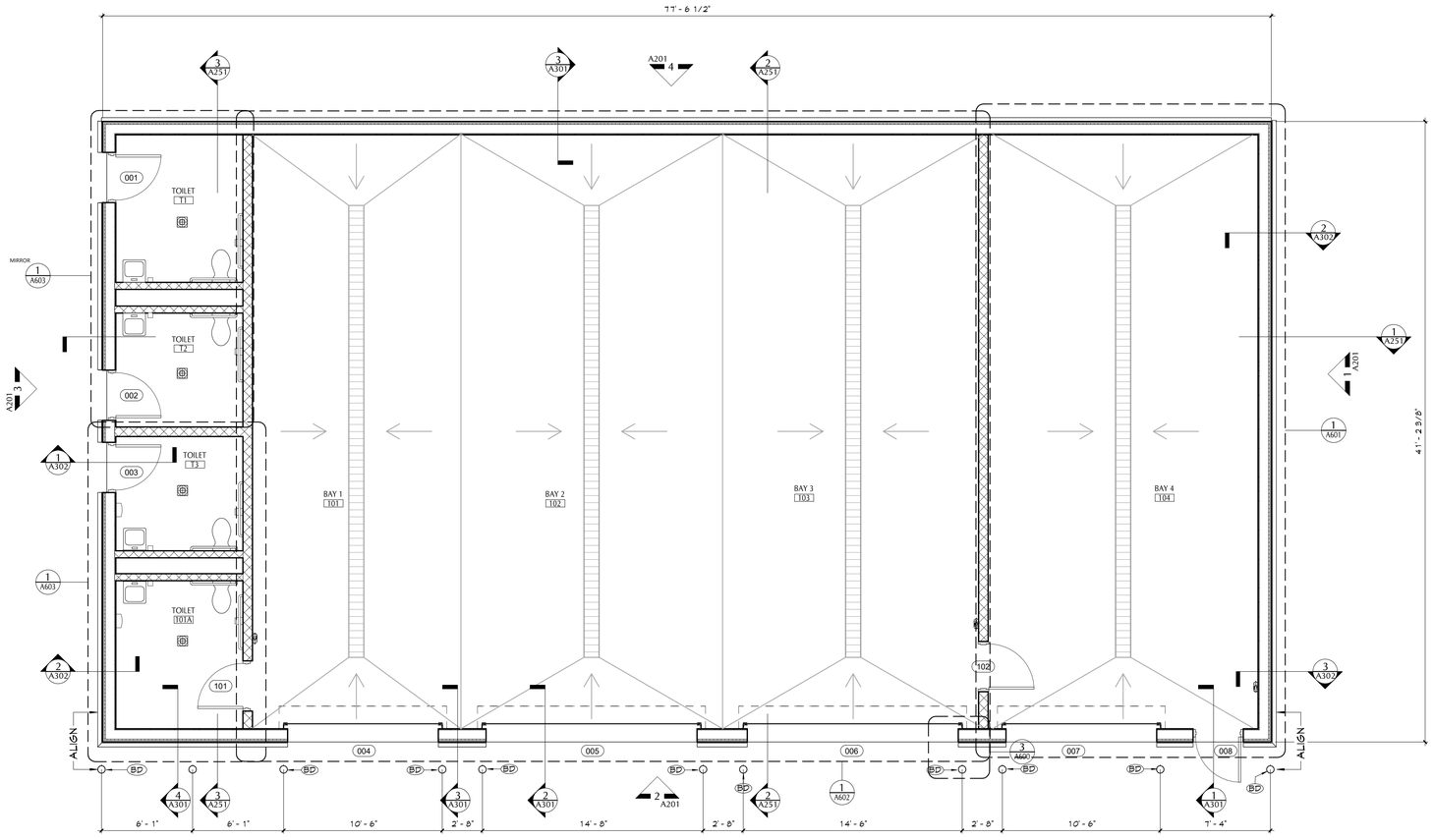

1 FIRST FLOOR PLAN

A111 1/4" = 1'-0"

GENERAL NOTES

1. REFER TO SHEET G001 FOR ADDITIONAL GENERAL NOTES.
2. REFER TO A600 SERIES DRAWINGS FOR ADDITIONAL DIMENSIONS AND DETAILED INFORMATION OF CABINETRY.
3. REFER TO A900 SERIES DRAWINGS FOR DOOR, STOREFRONT, CURTAINWALL, WINDOW AND LOUVER SCHEDULES, DETAILS AND NOTES.
4. REFER TO SHEET A101 FOR PARTITION TYPES AND ADDITIONAL NOTES.

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Project Title

LIBERTY CENTRAL SCHOOL DISTRICT
MAINTENANCE BUILDING

REGISTERED ARCHITECT
RICHARD M. FITZPATRICK
023344
STATE OF NEW YORK

No.	DATE	DESCRIPTION

Drawn By:	Author
Checked By:	Checker
Proj. #:	59-09-01-06-3-016-001
CSArch Proj. #:	203-2201
Construction Documents:	12/13/22

Sheet Title

FIRST FLOOR PLAN

Sheet No.

MB
A111

CONSTRUCTION DOCUMENTS

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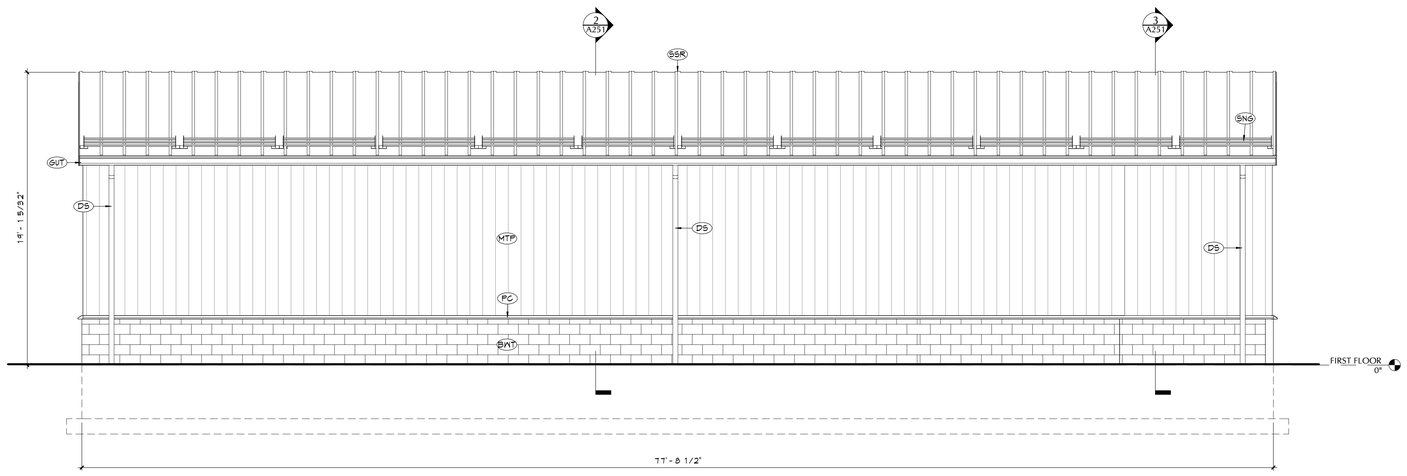
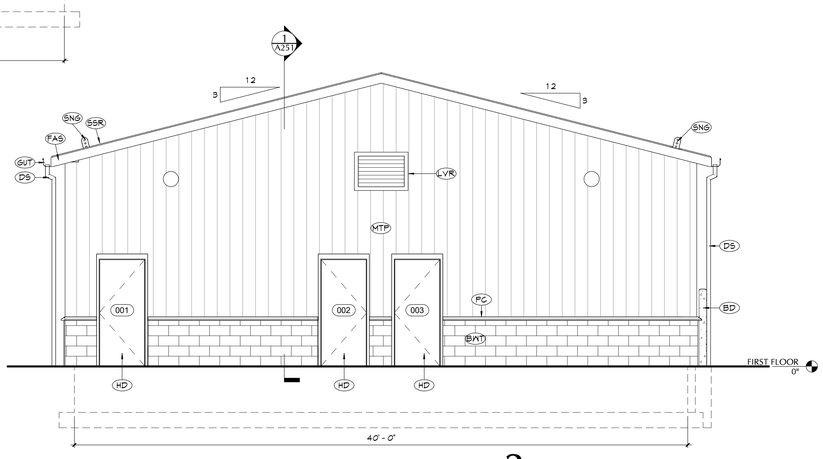
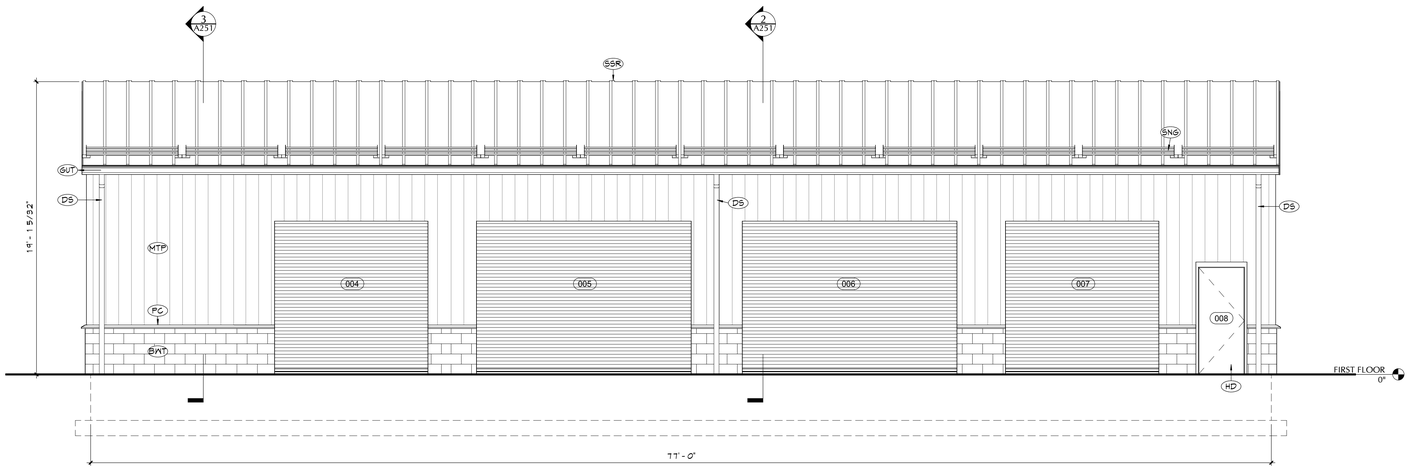


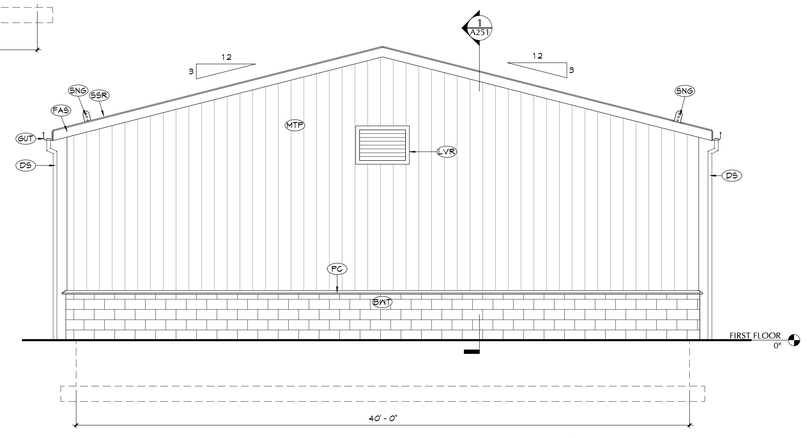
4 WEST ELEVATION
A201 1/4" = 1'-0"



3 SOUTH ELEVATION
A201 1/4" = 1'-0"



2 EAST ELEVATION
A201 1/4" = 1'-0"



1 NORTH ELEVATION
A201 1/4" = 1'-0"

GENERAL NOTES

1. REFER TO SHEET G001 FOR ADDITIONAL GENERAL NOTES.
2. REFER TO A600 SERIES DRAWINGS FOR ADDITIONAL DIMENSIONS AND DETAILED INFORMATION OF CABINETRY.
3. REFER TO A900 SERIES DRAWINGS FOR DOOR, STOREFRONT, CURTAINWALL, WINDOW AND LOUVER SCHEDULES, DETAILS AND NOTES.
4. REFER TO SHEET A101 FOR PARTITION TYPES AND ADDITIONAL NOTES.

KEYNOTES

#	DESCRIPTION
BD	BOLLARD, TYP. (REFER TO SHEET A600)
BMT	WATERTABLE BLOCK, TYP.
DS	4" x 5" DOWNSPOUT WITH UNDERGROUND CAST IRON BOOT AT ALL LOCATIONS, TYP.
FAS	FASCIA TO MATCH ROOF FINISH, TYP.
GUT	6" x 6" BEVEL GUTTER, TYP.
HD	HOLLOW METAL DOOR
LVR	LOUVER, COORDINATE WITH MC, FINAL LOCATION TO BE DETERMINED IN THE FIELD.
MTP	METAL PANELS, TYP.
PC	PRE-CAST CONC. WATERTABLE COPING, TYP.
SNG	SNOWGUARDS
SSR	STANDING SEAM METAL ROOF, TYP.

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LIBERTY CENTRAL SCHOOL DISTRICT MAINTENANCE BUILDING

Project Title

REGISTERED ARCHITECT ROBERT M. RITTENHOUSE 023344 STATE OF NEW YORK

#	DATE	DESCRIPTION

Drawn By:	Author
Checked By:	Checker
Proj. #:	59-09-01-06-3-016-001
CSArch Proj. #:	203-2201
Construction Documents:	12/13/22

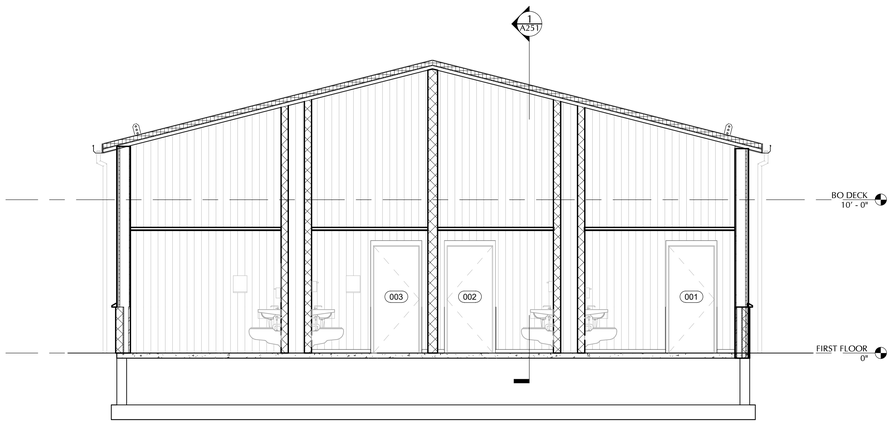
Sheet Title

EXTERIOR ELEVATIONS

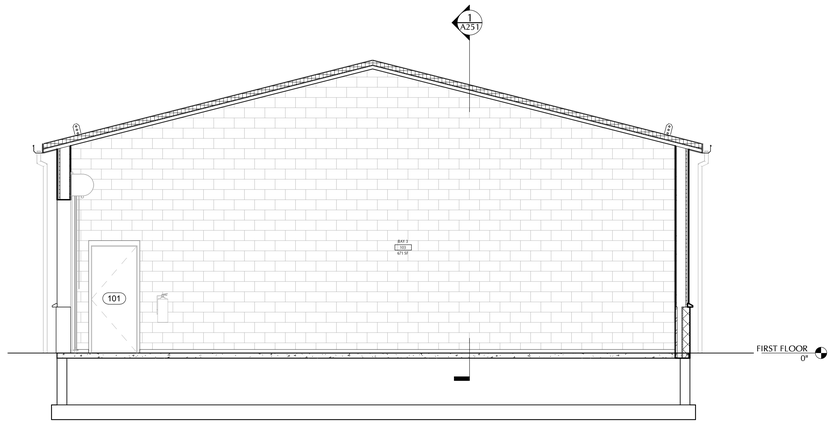
Sheet No.

MB A201

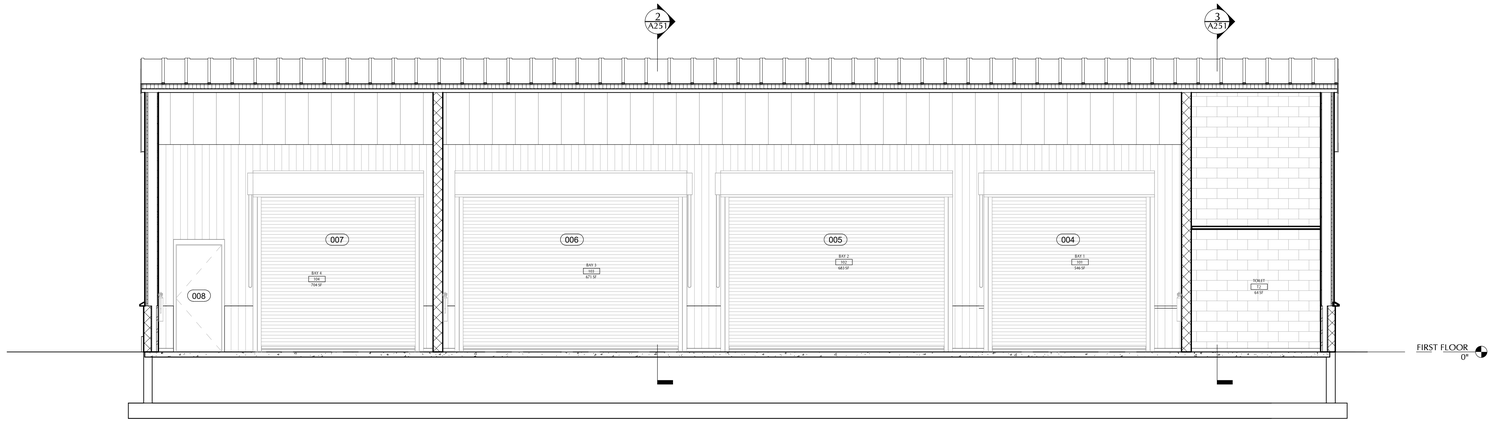
CONSTRUCTION DOCUMENTS



3 BUILDING SECTION
A251 1/4" = 1'-0"



2 BUILDING SECTION
A251 1/4" = 1'-0"



1 BUILDING SECTION
A251 1/4" = 1'-0"

GENERAL NOTES

1. REFER TO SHEET G001 FOR ADDITIONAL GENERAL NOTES.
2. REFER TO A800 SERIES DRAWINGS FOR ADDITIONAL DIMENSIONS AND DETAILED INFORMATION OF CABINETRY.
3. REFER TO A900 SERIES DRAWINGS FOR DOOR, STOREFRONT, CURTAINWALL, WINDOW AND LOUVER SCHEDULES, DETAILS AND NOTES.
4. REFER TO SHEET A101 FOR PARTITION TYPES AND ADDITIONAL NOTES.

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Project Title

LIBERTY CENTRAL SCHOOL DISTRICT
MAINTENANCE BUILDING

REGISTERED ARCHITECT
JOHN M. FITZPATRICK
023344
STATE OF NEW YORK

#	DATE	DESCRIPTION

Drawn By:	Author
Checked By:	Checker
Proj. #:	59-09-01-06-3-016-001
CSArch Proj. #:	203-2201
Construction Documents:	12/13/22

Sheet Title

BUILDING SECTIONS

Sheet No.

MB
A251

CONSTRUCTION DOCUMENTS

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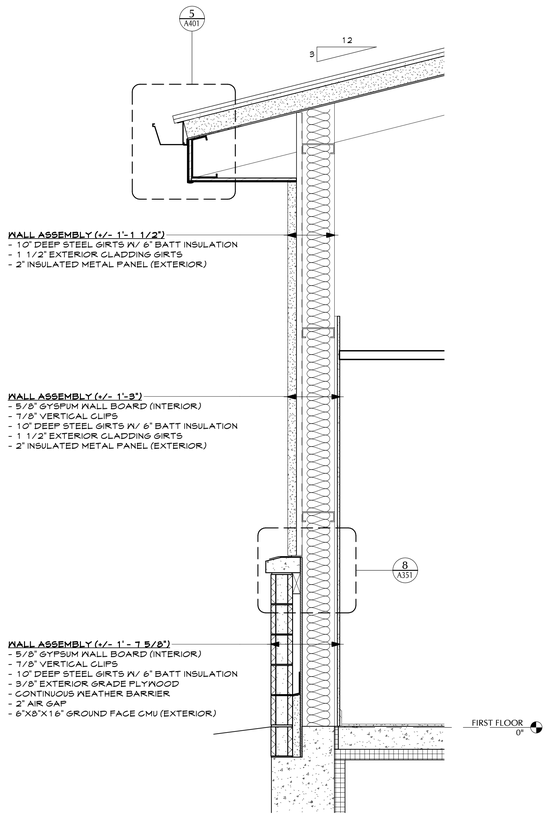
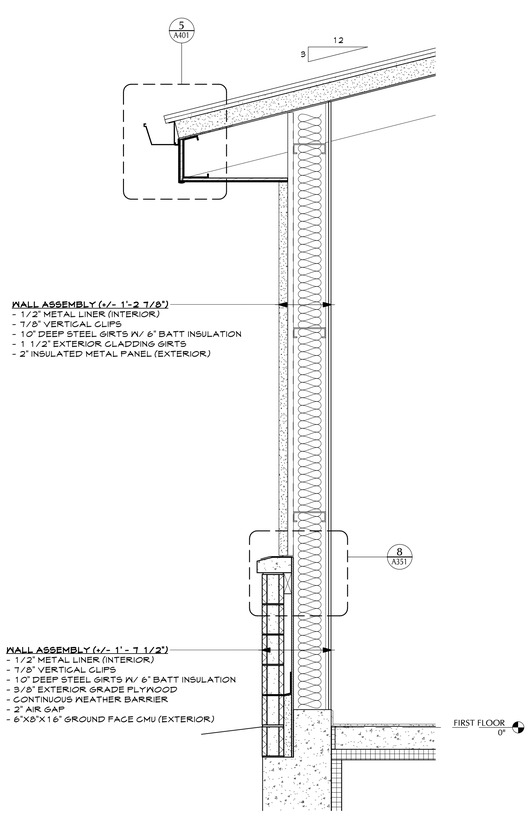
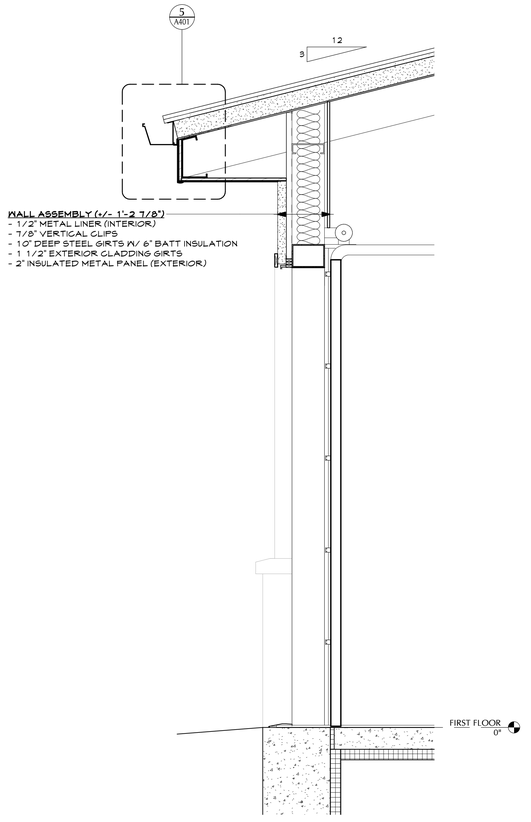


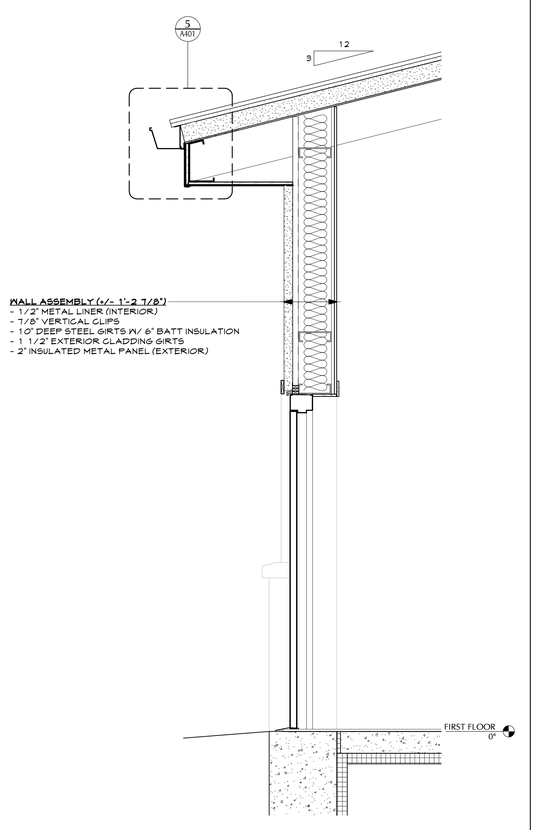
4 WALL SECTION
A301 3/4" = 1'-0"



3 WALL SECTION
A301 3/4" = 1'-0"



2 WALL SECTION
A301 3/4" = 1'-0"



1 WALL SECTION
A301 3/4" = 1'-0"

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LIBERTY CENTRAL SCHOOL DISTRICT
MAINTENANCE BUILDING

Project Title

REGISTERED ARCHITECT
ROBERT M. RITTENHOUSE
023344
STATE OF NEW YORK

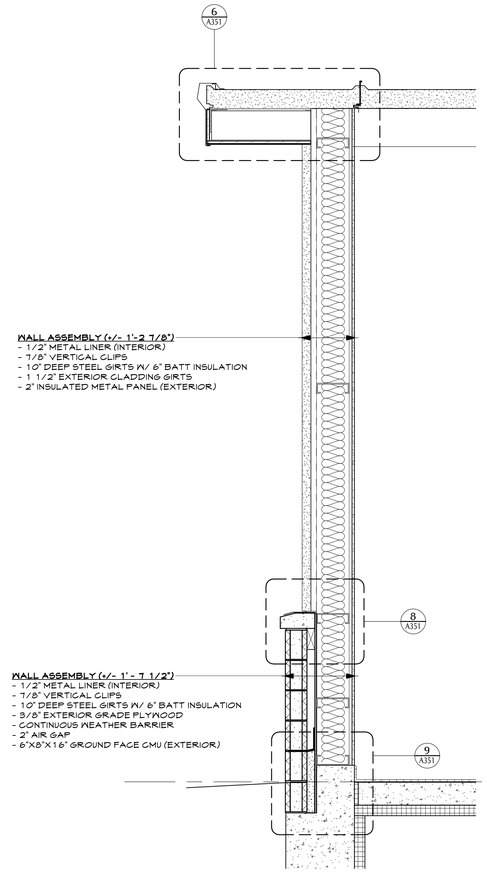
#	DATE	DESCRIPTION

Drawn By:	Author
Checked By:	Checker
Proj. #:	59-09-01-06-3-016-001
CSArch Proj. #:	203-2201
Construction Documents:	12/13/22

Sheet Title
WALL SECTIONS

Sheet No.
MB
A301

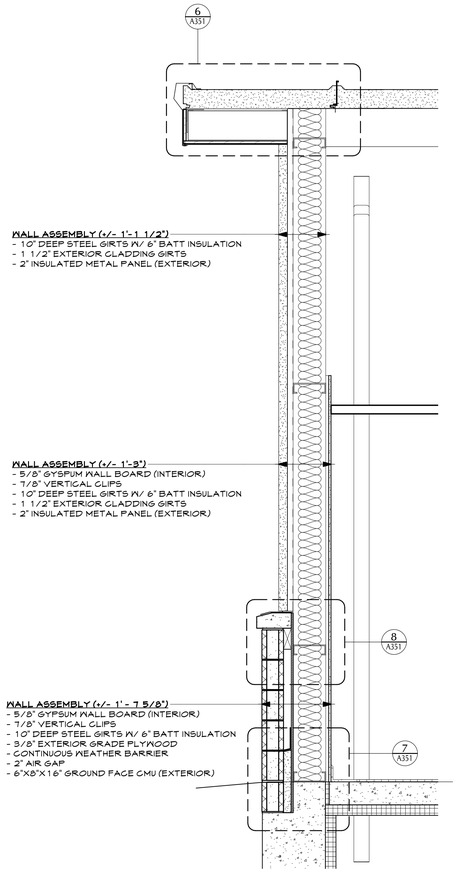
CONSTRUCTION DOCUMENTS



WALL ASSEMBLY (+/- 1'-2 7/8")
- 1/2" METAL LINER (INTERIOR)
- 7/8" VERTICAL CLIPS
- 10" DEEP STEEL GIRTS W/ 6" BATT INSULATION
- 1 1/2" EXTERIOR CLADDING GIRTS
- 2" INSULATED METAL PANEL (EXTERIOR)

WALL ASSEMBLY (+/- 1'- 7 1/2")
- 1/2" METAL LINER (INTERIOR)
- 7/8" VERTICAL CLIPS
- 10" DEEP STEEL GIRTS W/ 6" BATT INSULATION
- 5/8" EXTERIOR GRADE PLYWOOD
- CONTINUOUS WEATHER BARRIER
- 2" AIR GAP
- 6"X8"X16" GROUND FACE CMU (EXTERIOR)

3 WALL SECTION
A302 3/4" = 1'-0"

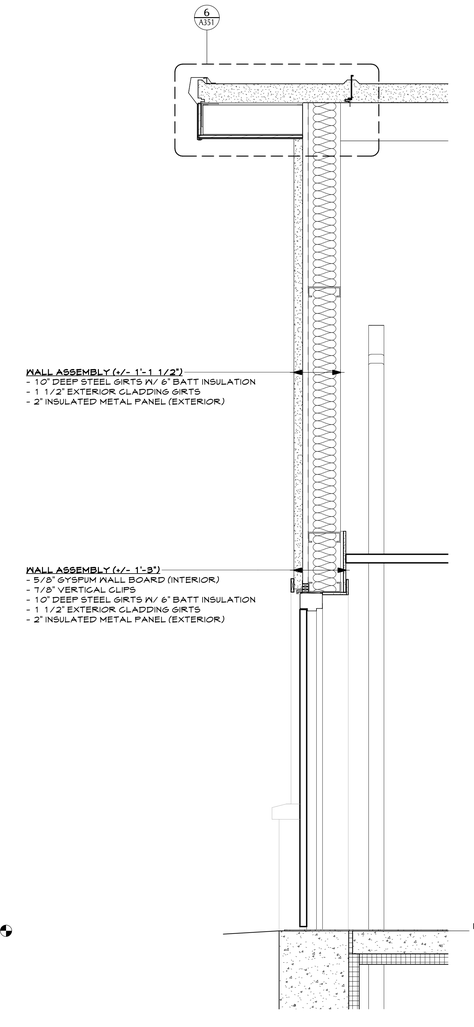


WALL ASSEMBLY (+/- 1'-1 1/2")
- 10" DEEP STEEL GIRTS W/ 6" BATT INSULATION
- 1 1/2" EXTERIOR CLADDING GIRTS
- 2" INSULATED METAL PANEL (EXTERIOR)

WALL ASSEMBLY (+/- 1'-3")
- 5/8" GYPSUM WALL BOARD (INTERIOR)
- 7/8" VERTICAL CLIPS
- 10" DEEP STEEL GIRTS W/ 6" BATT INSULATION
- 1 1/2" EXTERIOR CLADDING GIRTS
- 2" INSULATED METAL PANEL (EXTERIOR)

WALL ASSEMBLY (+/- 1'- 7 5/8")
- 5/8" GYPSUM WALL BOARD (INTERIOR)
- 7/8" VERTICAL CLIPS
- 10" DEEP STEEL GIRTS W/ 6" BATT INSULATION
- 5/8" EXTERIOR GRADE PLYWOOD
- CONTINUOUS WEATHER BARRIER
- 2" AIR GAP
- 6"X8"X16" GROUND FACE CMU (EXTERIOR)

2 WALL SECTION
A302 3/4" = 1'-0"



WALL ASSEMBLY (+/- 1'-1 1/2")
- 10" DEEP STEEL GIRTS W/ 6" BATT INSULATION
- 1 1/2" EXTERIOR CLADDING GIRTS
- 2" INSULATED METAL PANEL (EXTERIOR)

WALL ASSEMBLY (+/- 1'-3")
- 5/8" GYPSUM WALL BOARD (INTERIOR)
- 7/8" VERTICAL CLIPS
- 10" DEEP STEEL GIRTS W/ 6" BATT INSULATION
- 1 1/2" EXTERIOR CLADDING GIRTS
- 2" INSULATED METAL PANEL (EXTERIOR)

1 WALL SECTION
A302 3/4" = 1'-0"

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LIBERTY CENTRAL SCHOOL DISTRICT MAINTENANCE BUILDING

Project Title

REGISTERED ARCHITECT
MARK M. INTERMILL
023344
STATE OF NEW YORK

#	DATE	DESCRIPTION

Drawn By:	Author
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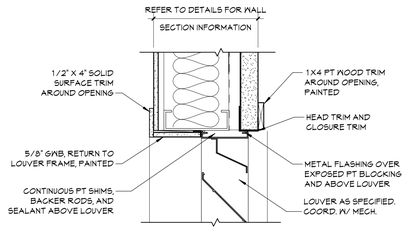
Sheet Title

WALL SECTIONS

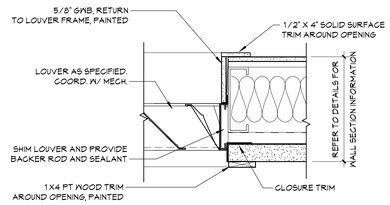
Sheet No.

MB A302

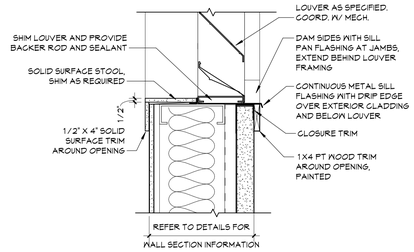
CONSTRUCTION DOCUMENTS



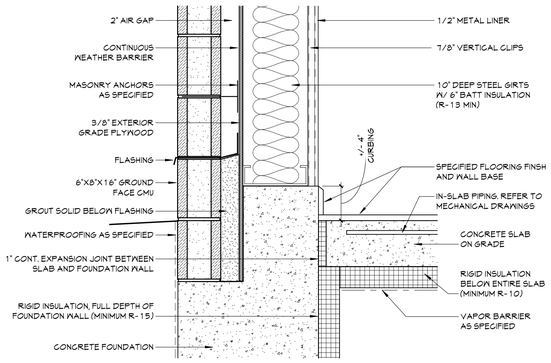
12 LOUVER HEAD
A351 1 1/2" = 1'-0"



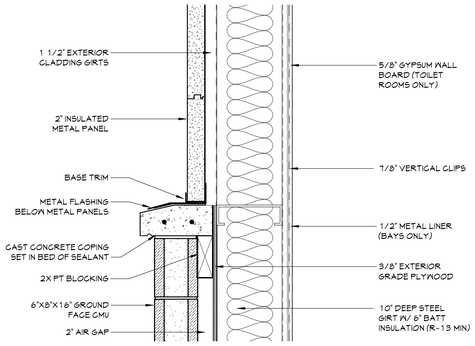
11 LOUVER JAMB
A351 1 1/2" = 1'-0"



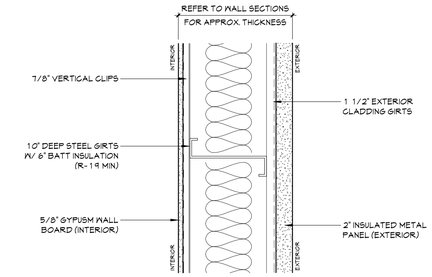
10 LOUVER SILL
A351 1 1/2" = 1'-0"



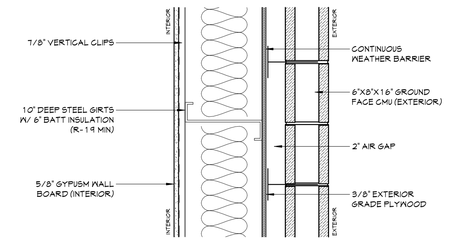
9 WALL SECTION DETAIL
A351 1 1/2" = 1'-0"



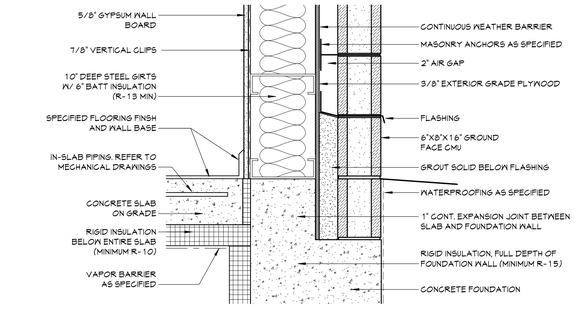
8 WALL SECTION DETAIL
A351 1 1/2" = 1'-0"



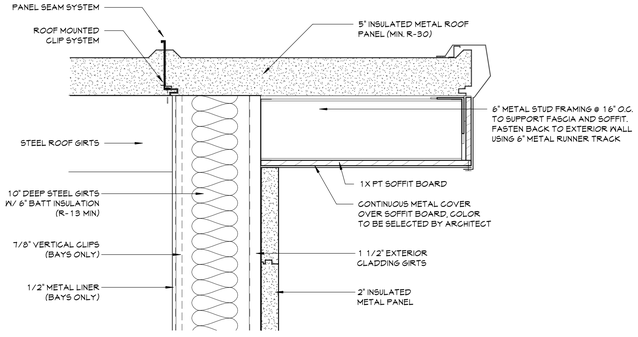
TOILET ROOMS
EXTERIOR CLADDING - METAL PANELS
INTERIOR FINISH - GYPSUM WALL BOARD



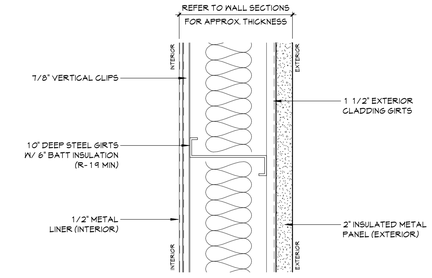
TOILET ROOMS
EXTERIOR CLADDING - MASONRY
INTERIOR FINISH - GYPSUM WALL BOARD



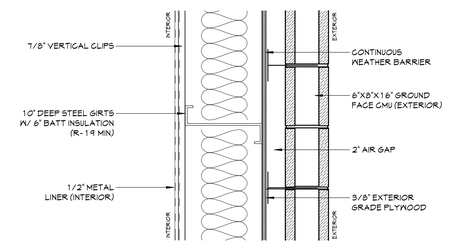
7 WALL SECTION DETAIL
A351 1 1/2" = 1'-0"



6 WALL SECTION DETAIL
A351 1 1/2" = 1'-0"

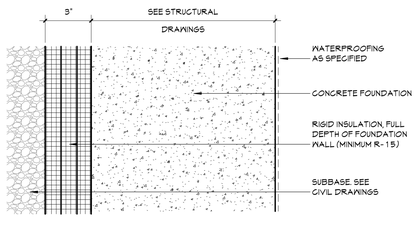


BAYS
EXTERIOR CLADDING - METAL PANELS
INTERIOR FINISH - METAL LINER

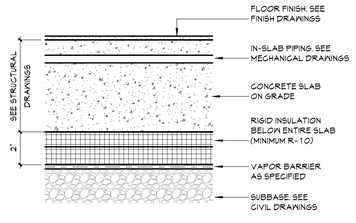


BAYS
EXTERIOR CLADDING - MASONRY
INTERIOR FINISH - METAL LINER

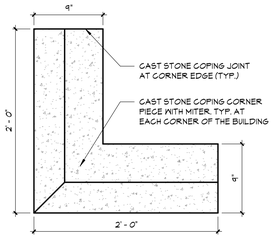
5 TYPICAL EXTERIOR WALL ASSEMBLIES
A351 1 1/2" = 1'-0"



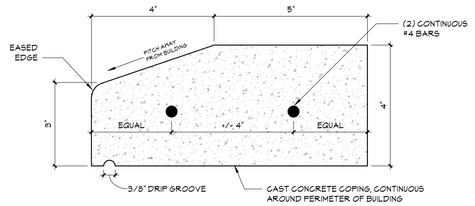
4 TYPICAL FOUNDATION WALL COMPOSITION
A351 3" = 1'-0"



3 TYPICAL SLAB ON GRADE
A351 3" = 1'-0"



2 TYPICAL CAST CONCRETE CORNER DETAIL
A351 1 1/2" = 1'-0"



1 TYPICAL CAST CONCRETE COPING DETAIL
A351 6" = 1'-0"

CAST STONE NOTES

1. ALL DIMENSIONS FOR CAST CONCRETE ARE APPROXIMATE. VERIFY DIMENSIONS WITH ADJACENT CONSTRUCTION BEFORE FABRICATION.
2. LENGTHS OF CAST CONCRETE SECTIONS VARY. BREAK CAST CONCRETE INTO EQUAL SEGMENTS, UNLESS NOTED OTHERWISE.
3. ALL ANCHORS, WIRES, STRAPS, PINS, DOWELS, ETC. USED TO ANCHOR CAST CONCRETE SHALL BE STAINLESS STEEL, UNLESS NOTED OTHERWISE.
4. ALL ANCHORS TO BE SECURED TO STRUCTURE, OR BLOCKING SECURED TO STRUCTURE.
5. ALL EXPOSED 90 DEG. OR LESS EDGES TO BE EASED W/ 1/8" CHAMFER.
6. ALL DIMENSIONS GIVEN ARE BASED ON 3/8" MASONRY JOINTS. PROVIDE 3/8" JOINTS AT CAST CONCRETE SECTIONS. IF MASONRY JOINT SIZES ARE CHANGED, ALL DIMENSIONS MUST BE ADJUSTED ACCORDINGLY.

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LIBERTY CENTRAL SCHOOL DISTRICT
MAINTENANCE BUILDING

Project Title

REGISTERED ARCHITECT
WILLIAM M. RITTENHOUSE
023344
STATE OF NEW YORK

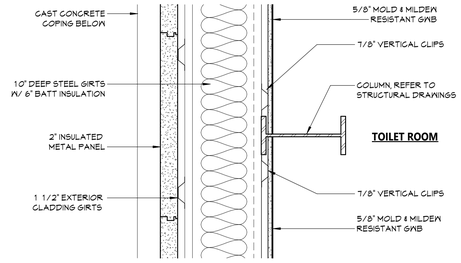
#	DATE	DESCRIPTION

Drawn By:	CSA
Checked By:	CSA
Proj. #:	59-09-01-06-3-016-001
CSArch Proj. #:	203-2201
Construction Documents:	12/13/22

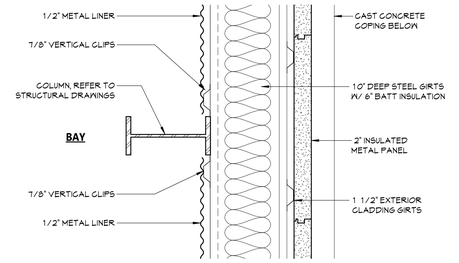
Sheet Title
SECTION DETAILS

Sheet No.
MB
A351

CONSTRUCTION DOCUMENTS



10 PLAN DETAIL H
A352 1 1/2" = 1'-0"



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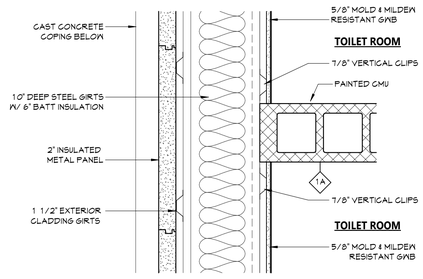
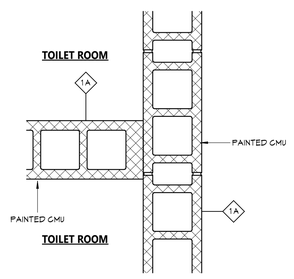
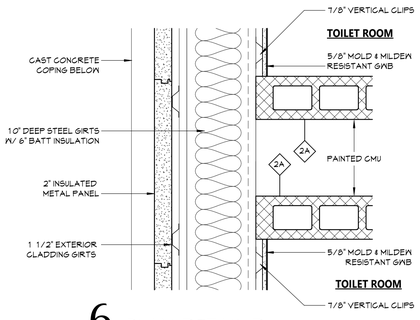


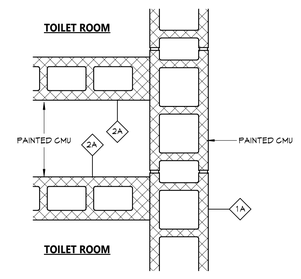
8 PLAN DETAIL F
A352 1 1/2" = 1'-0"



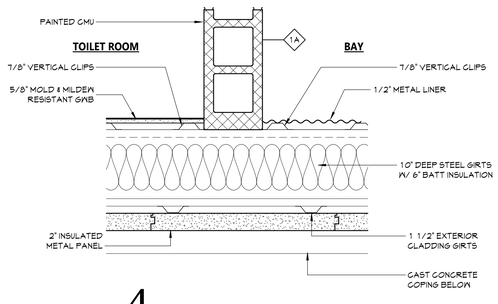
7 PLAN DETAIL E
A352 1 1/2" = 1'-0"



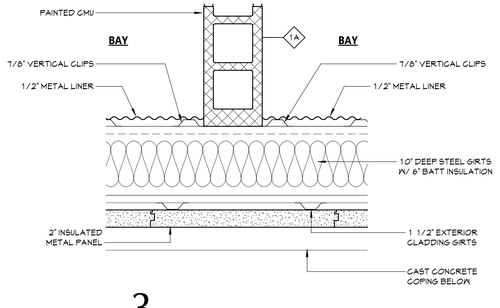
6 PLAN DETAIL D
A352 1 1/2" = 1'-0"



5 PLAN DETAIL C
A352 1 1/2" = 1'-0"



4 PLAN DETAIL B
A352 1 1/2" = 1'-0"



3 PLAN DETAIL A
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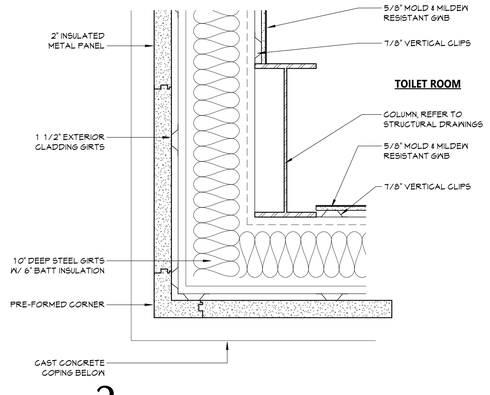
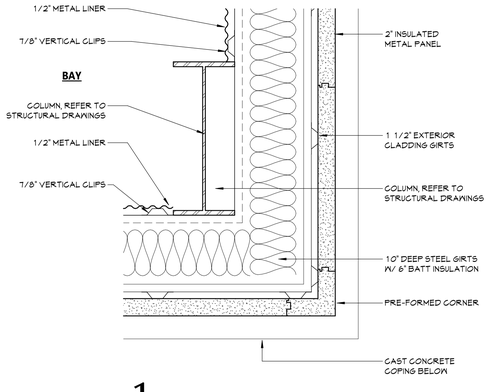


2 CORNER DETAIL B
A352 1 1/2" = 1'-0"



1 CORNER DETAIL A
A352 1 1/2" = 1'-0"

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LIBERTY CENTRAL SCHOOL DISTRICT
MAINTENANCE BUILDING

Project Title

REGISTERED ARCHITECT
WILLIAM M. RITSENHOUSE
023344
STATE OF NEW YORK

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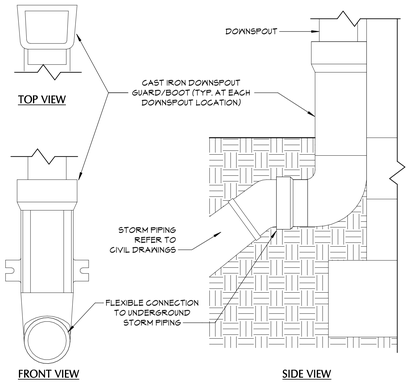
Sheet Title

PLAN DETAILS

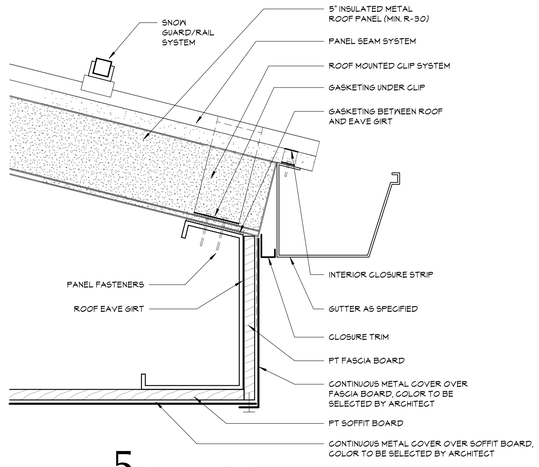
Sheet No.

MB
A352

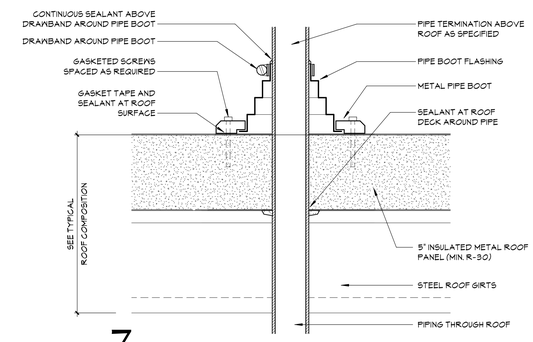
CONSTRUCTION DOCUMENTS



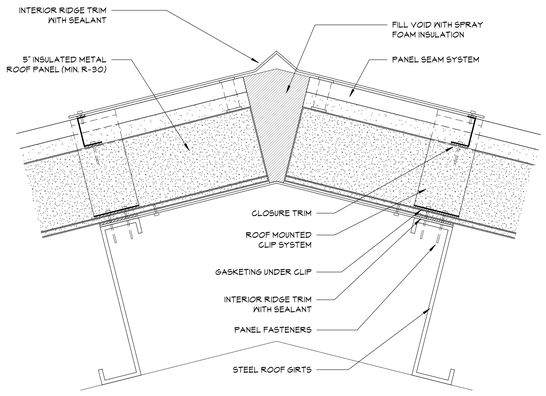
6 DOWNSPOUT BOOT DETAIL, TYP.
A401 1 1/2" = 1'-0"



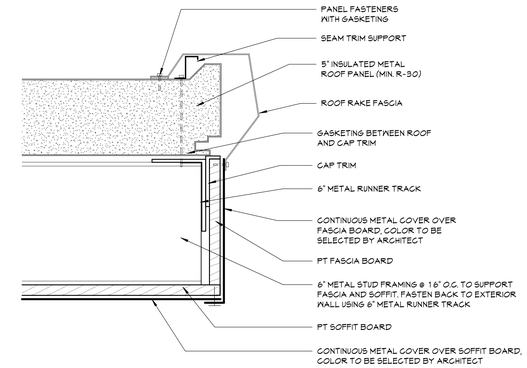
5 ROOF EAVE
A401 3" = 1'-0"



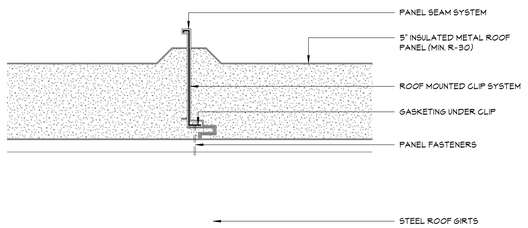
7 ROOF PIPE PENETRATION
A401 3" = 1'-0"



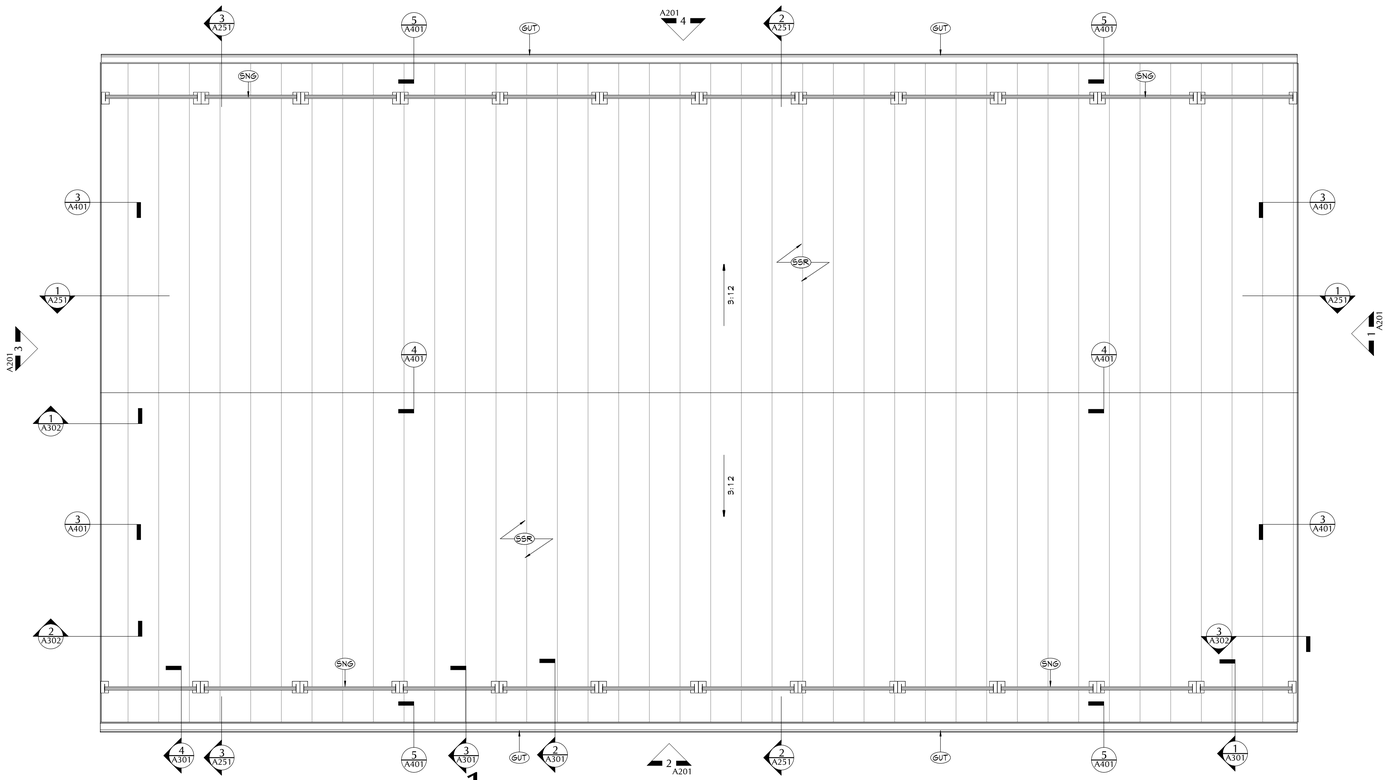
4 ROOF RIDGE
A401 3" = 1'-0"



3 ROOF GABLE END RAKE
A401 3" = 1'-0"



2 TYPICAL ROOF COMPOSTION
A401 3" = 1'-0"



1 ROOF PLAN
A401 1/4" = 1'-0"

GENERAL NOTES
1. REFER TO SHEET G001 FOR ADDITIONAL GENERAL NOTES.
2. REFER TO A500 SERIES DRAWINGS FOR ADDITIONAL DIMENSIONS AND DETAILED INFORMATION OF CABINETRY.
3. REFER TO A900 SERIES DRAWINGS FOR DOOR, STOREFRONT, CURTAINWALL, WINDOW AND LOUVER SCHEDULES, DETAILS AND NOTES.
4. REFER TO SHEET A101 FOR PARTITION TYPES AND ADDITIONAL NOTES.

KEYNOTES

#	DESCRIPTION
GUT	5" x 6" BEVEL GUTTER, TYP.
SNG	SNOWGUARDS
SSR	STANDING SEAM METAL ROOF, TYP.

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LIBERTY CENTRAL SCHOOL DISTRICT
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Project Title

REGISTERED ARCHITECT
HOWARD M. RITTENHOUSE
023344
STATE OF NEW YORK

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Drawn By:	CSA
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Sheet Title

ROOF PLAN AND DETAILS

Sheet No.

MB
A401

CONSTRUCTION DOCUMENTS

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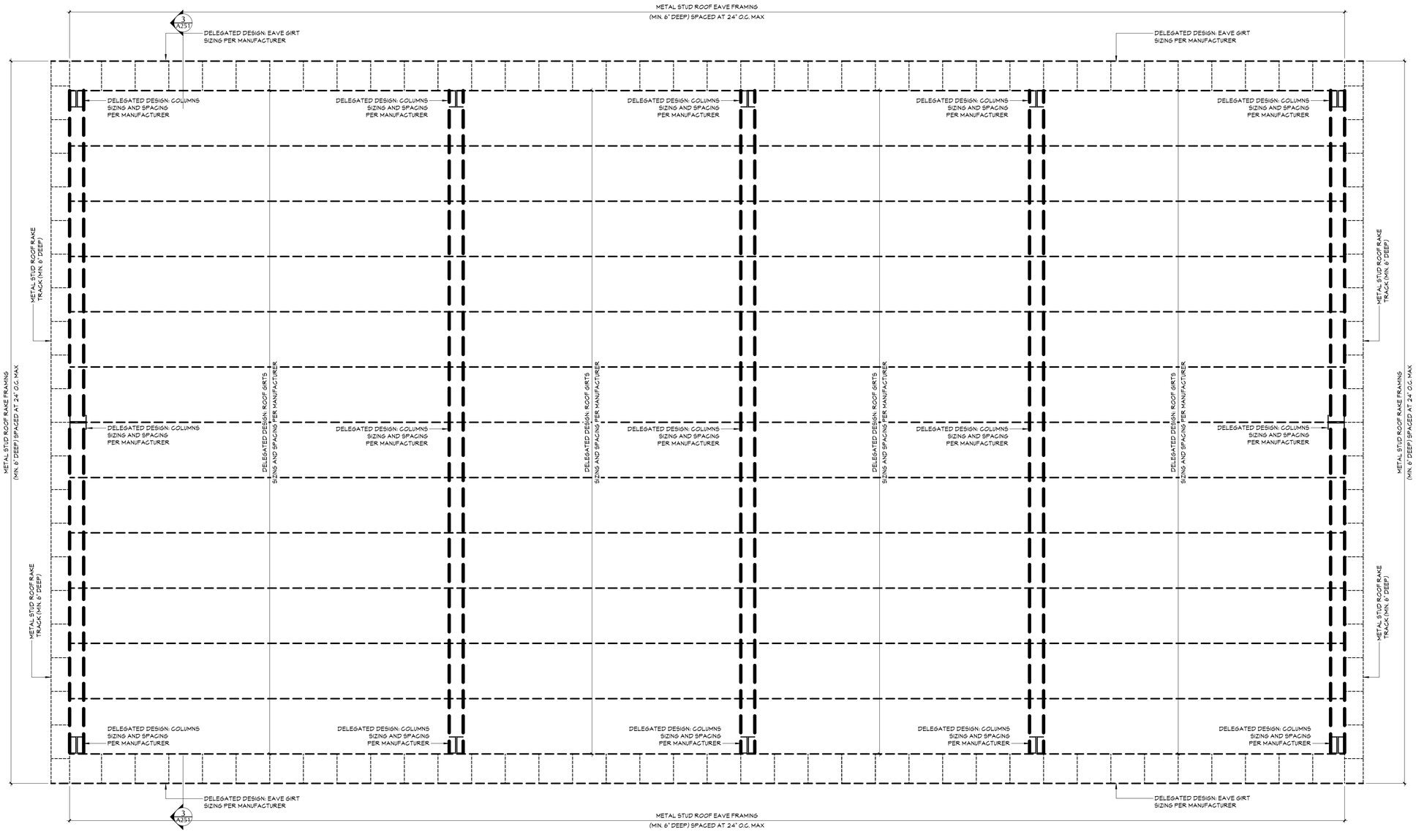

1 ROOF FRAMING PLAN
A451 3/8" = 1'-0"

GENERAL NOTES

1. REFER TO SHEET G001 FOR ADDITIONAL GENERAL NOTES.
2. REFER TO A600 SERIES DRAWINGS FOR ADDITIONAL DIMENSIONS AND DETAILED INFORMATION OF CABINETRY.
3. REFER TO A900 SERIES DRAWINGS FOR DOOR, STOREFRONT, CURTAINWALL, WINDOW AND LOUVER SCHEDULES, DETAILS AND NOTES.
4. REFER TO SHEET A101 FOR PARTITION TYPES AND ADDITIONAL NOTES.

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Consultant

Project Title

LIBERTY CENTRAL SCHOOL DISTRICT
MAINTENANCE BUILDING

REGISTERED ARCHITECT
ROBERT M. FITZMAURICE
023344
STATE OF NEW YORK

#	DATE	DESCRIPTION

Drawn By:	CSA
Checked By:	CSA
Proj. #:	59-09-01-06-3-016-001
CSArch Proj. #:	203-2201
Construction Documents:	12/13/22

Sheet Title

ROOF FRAMING PLAN

Sheet No.

MB
A451

CONSTRUCTION DOCUMENTS

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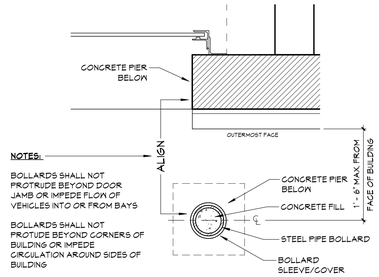
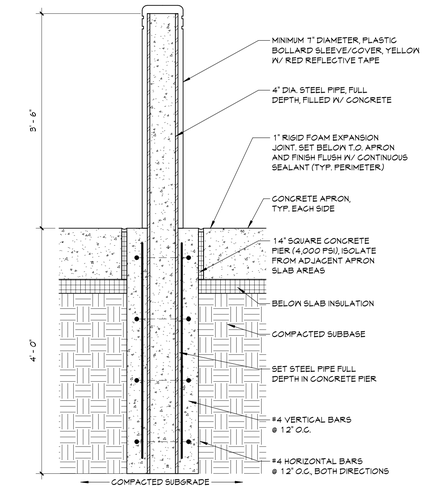
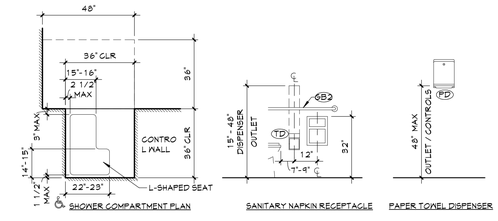
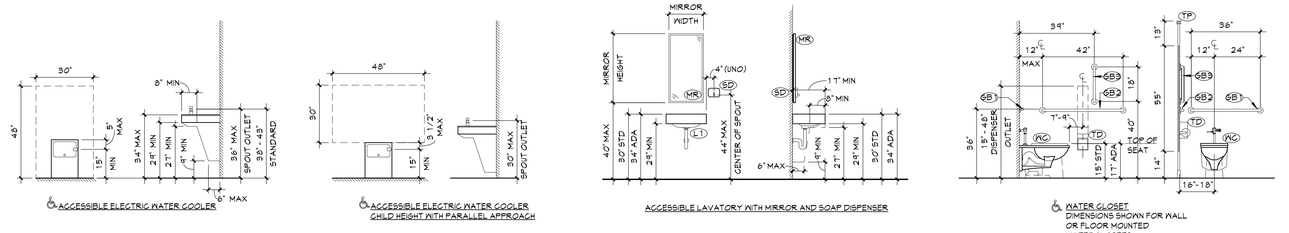


3 BOLLARD PLAN, TYP.
A600 1" = 1'-0"



2 BOLLARD DETAIL, TYP.
A600 1" = 1'-0"





1 PLUMBING FIXTURE ELEVATIONS
A600 3/8" = 1'-0"

GENERAL NOTES

1. ALL CASEWORK SHALL HAVE PLASTIC LAMINATE (PLAM) COUNTERTOPS AND 4" BACK SPLASHES, UNO.
2. INSTALL MATCHING FILLER PANELS IN LOCATIONS SHOWN. ADD MATCHING FILLER PANELS AS REQUIRED FOR FINAL FIT/FINISH.
3. PROVIDE BLOCKING IN ALL ADJACENT WALLS AS REQUIRED TO INSTALL ALL CASEWORK.
4. PROVIDE FINISHED END PANEL AT ALL EXPOSED FACES OF CASEWORK.
5. PROVIDE WALL BASE AS SCHEDULED ON ALL EXPOSED TOE KICK SPACES AND EXPOSED END PANELS.

CASEWORK NOTES

XX/XX
XXXX

HEIGHT OF CASEWORK
WIDTH OF CASEWORK
A/N DESIGN NUMBER (INDICATES ELEVATION LAYOUT ONLY, REFER TO DETAILS AND SPECIFICATIONS FOR CASEWORK CONSTRUCTION REQUIREMENTS)

KEY NOTES

- BS PLAM BACKSPLASH, 4" HIGH, UNO
- DA DATA OUTLET, COORDINATE WITH ELECTRICAL DRAWINGS
- DUP DUPLEX OUTLET, COORDINATE WITH ELECTRICAL DRAWINGS
- FEP FINISHED END PANEL
- GFI GROUND FAULT INTERRUPT OUTLET, COORDINATE WITH ELECTRICAL DRAWINGS
- LS LIGHT SWITCH, COORDINATE WITH ELECTRICAL DRAWINGS
- MB MARKER BOARD, SIZE AS INDICATED
- PCT PLAM COUNTER TOP, CONTINUOUS
- PS PROJECTION SCREEN, SIZE AS INDICATED
- SWB SCHEDULED WALL BASE
- TB TACKABLE SURFACE BOARD, LENGTH AS INDICATED (#)
- WB WHITEBOARD, LENGTH AS INDICATED (#)

TOILET ROOM NOTES

1. THE HEIGHTS SHOWN ARE TYPICAL AND DO NOT NECESSARILY SHOW ALL EQUIPMENT THAT ARE TO BE LOCATED ON WALLS.
2. THESE GUIDELINES ESTABLISH LOCATION OF FIXTURES AND EQUIPMENT VERTICALLY AT THE WALL GENERALLY THROUGHOUT THE PROJECT.
3. THE DIMENSIONS CALLED OUT ARE TO THE TOP OR BOTTOM OF FIXTURES AND EQUIPMENT FACE PLATES/TRIM AS SHOWN, UNO.
4. THE DIMENSIONS CALLED OUT ARE TO THE CENTERLINE OF FIXTURES AND EQUIPMENT AS SHOWN, UNO.
5. ALL ACCESSORIES TO BE SURFACE MOUNTED, UNO.
6. INSTALL PRESSURE TREATED WOOD BLOCKING IN STUD PARTITIONS AT ALL LOCATIONS WHERE TOILET ACCESSORIES ARE MOUNTED TO THE WALL.

TOILET ROOM KEY NOTES

- EWC ELECTRIC WATER COOLER, COORDINATE WITH PLUMBING DRAWINGS
- GB1 36" GRAB BAR
- GB2 42" GRAB BAR
- GB3 18" VERTICAL GRAB BAR
- L1 SINGLE STATION LAVATORY, COORDINATE WITH PLUMBING DRAINGS
- L2 DOUBLE STATION LAVATORY, COORDINATE WITH PLUMBING DRAWINGS
- L3 THREE STATION LAVATORY, COORDINATE WITH PLUMBING DRAWINGS
- MR1 18"X30" CHANNEL FRAMED GLASS MIRROR
- MR2 30"X60" CHANNEL FRAMED GLASS MIRROR
- PD PAPER TOWEL DISPENSER (FURNISHED BY OWNER)
- SD SOAP DISPENSER (FURNISHED BY OWNER)
- SNR SANITARY NAPKIN WASTE RECEPTACLE
- SND SANITARY NAPKIN AND TAMPON DISPENSER
- TD TOILET TISSUE DISPENSER (FURNISHED BY OWNER)
- TP TOILET PARTITION
- UP URINAL PARTITION
- UR URINAL, COORDINATE WITH PLUMBING DRAWINGS
- WCM WATER CLOSET, WALL MOUNTED, COORDINATE WITH PLUMBING DRAWINGS

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Consultant

LIBERTY CENTRAL SCHOOL DISTRICT MAINTENANCE BUILDING

Project Title

REGISTERED ARCHITECT THOMAS M. BITENTHALER 023344 STATE OF NEW YORK

#	DATE	DESCRIPTION

Drawn By:	Author
Checked By:	Checker
Proj. #:	59-09-01-06-3-016-001
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Sheet Title
TYPICAL EQUIPMENT PLANS, ELEVATIONS, AND DETAILS

Sheet No.
MB
A600

CONSTRUCTION DOCUMENTS

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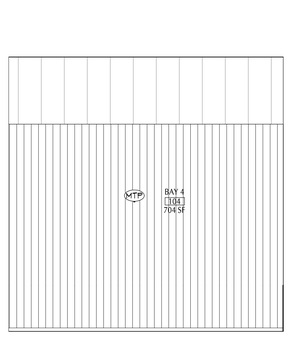
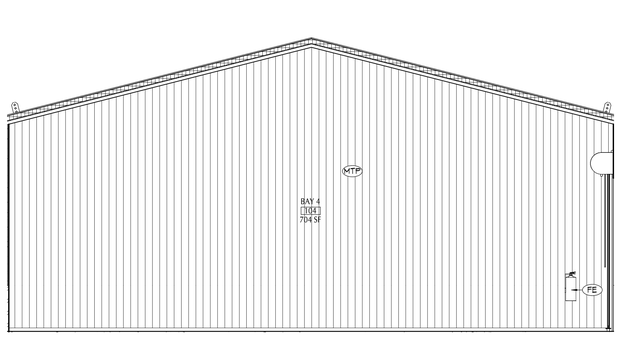
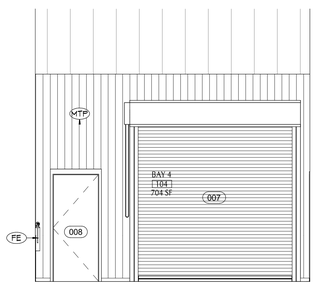


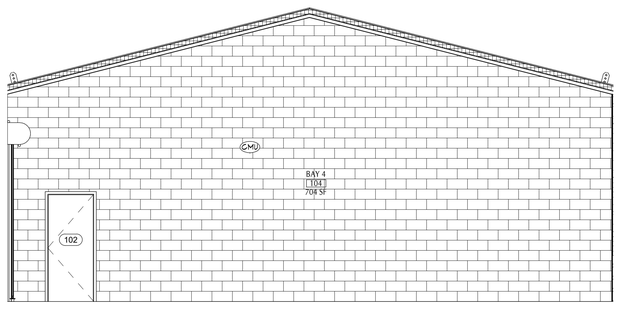
5 INTERIOR ELEVATION - BAY 4
A601 1/4" = 1'-0"



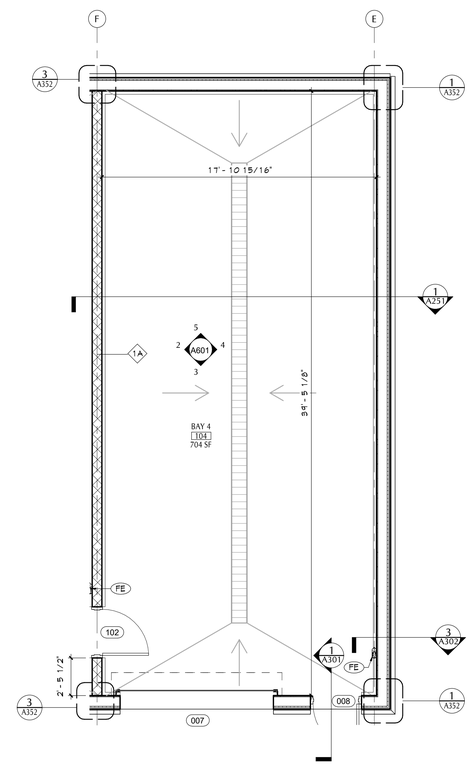
4 INTERIOR ELEVATION - BAY 4
A601 1/4" = 1'-0"



3 INTERIOR ELEVATION - BAY 4
A601 1/4" = 1'-0"



2 INTERIOR ELEVATION - BAY 4
A601 1/4" = 1'-0"



1 ENLARGED FLOOR PLAN
A601 1/4" = 1'-0"

GENERAL NOTES

1. ALL CASEWORK SHALL HAVE PLASTIC LAMINATE (PLAM) COUNTERTOPS AND 4" BACK SPLASHES, UNO.
2. INSTALL MATCHING FILLER PANELS IN LOCATIONS SHOWN. ADD MATCHING FILLER PANELS AS REQUIRED FOR FINAL FIT/FINISH.
3. PROVIDE BLOCKING IN ALL ADJACENT WALLS AS REQUIRED TO INSTALL ALL CASEWORK.
4. PROVIDE FINISHED END PANEL AT ALL EXPOSED FACES OF CASEWORK.
5. PROVIDE WALL BASE AS SCHEDULED ON ALL EXPOSED TOE KICK SPACES AND EXPOSED END PANELS.

CASEWORK NOTES

XX/XX
XXW

- HEIGHT OF CASEWORK
- WIDTH OF CASEWORK
- AW DESIGN NUMBER (INDICATES ELEVATION LAYOUT ONLY, REFER TO DETAILS AND SPECIFICATIONS FOR CASEWORK CONSTRUCTION REQUIREMENTS)

KEY NOTES

- (BS) PLAM BACKSPLASH, 4" HIGH, UNO
- (DA) DATA OUTLET, COORDINATE WITH ELECTRICAL DRAWINGS
- (DUP) DUPLEX OUTLET, COORDINATE WITH ELECTRICAL DRAWINGS
- (FEP) FINISHED END PANEL
- (GFI) GROUND FAULT INTERRUPT OUTLET, COORDINATE WITH ELECTRICAL DRAWINGS
- (LS) LIGHT SWITCH, COORDINATE WITH ELECTRICAL DRAWINGS
- (MB) MARKER BOARD, SIZE AS INDICATED
- (PCT) PLAM COUNTER TOP, CONTINUOUS
- (PS) PROJECTION SCREEN, SIZE AS INDICATED
- (SAB) SCHEDULED WALL BASE
- (TBB) TACKABLE SURFACE BOARD, LENGTH AS INDICATED (#)
- (WB) WHITEBOARD, LENGTH AS INDICATED (#)

KEYNOTES

#	DESCRIPTION
CMU	CMU WALL, REFER TO DETAILS'
FE	FIRE EXTINGUISHER, WALL MOUNT.
MTP	METAL PANELS, TYP.

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Consultant

Project Title

LIBERTY CENTRAL SCHOOL DISTRICT
MAINTENANCE BUILDING

REGISTERED ARCHITECT
THOMAS M. RITTENHOUSE
023344
STATE OF NEW YORK

Δ	DATE	DESCRIPTION

Drawn By:	Author
Checked By:	Checker
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Sheet Title

ENLARGED PLAN AND ELEVATIONS

Sheet No.

MB
A601

CONSTRUCTION DOCUMENTS

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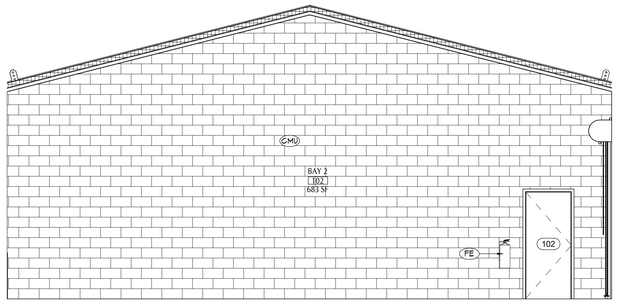
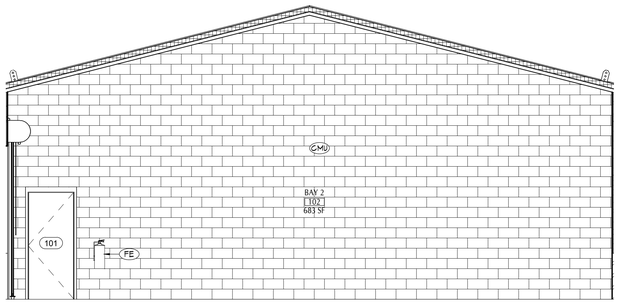
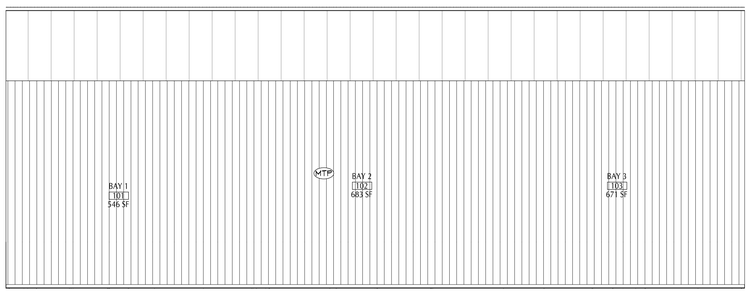


5 INTERIOR ELEVATION - BAYS
A602 1/4" = 1'-0"

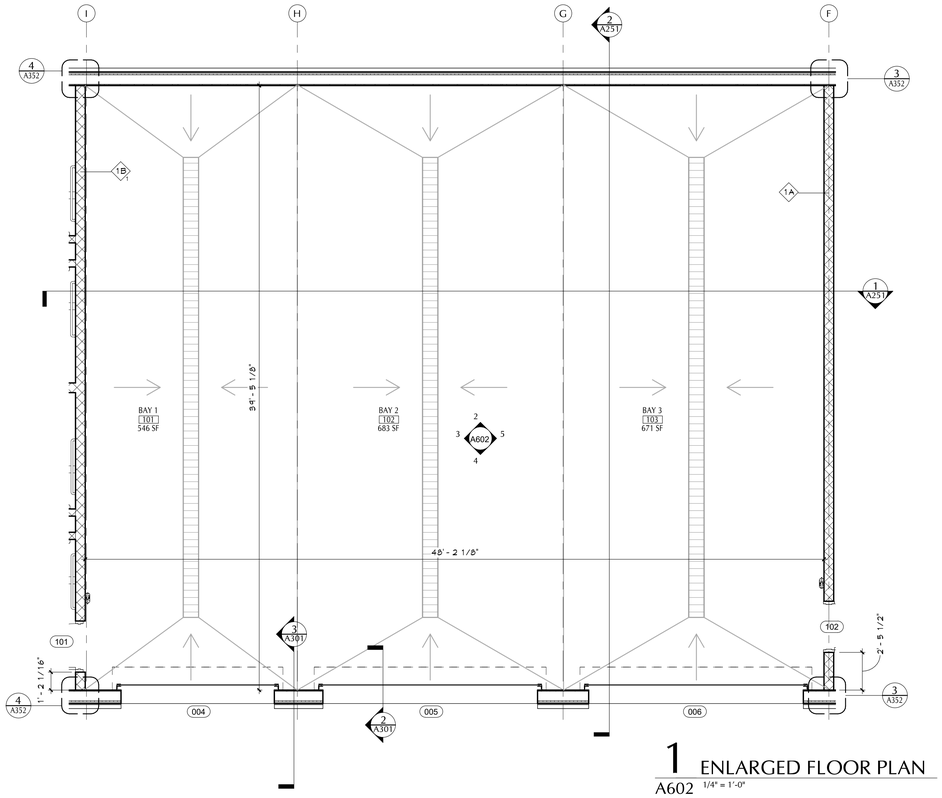
4 INTERIOR ELEVATION - BAYS
A602 1/4" = 1'-0"



3 INTERIOR ELEVATION - BAYS
A602 1/4" = 1'-0"



2 INTERIOR ELEVATION - BAYS
A602 1/4" = 1'-0"



1 ENLARGED FLOOR PLAN
A602 1/4" = 1'-0"

GENERAL NOTES

1. ALL CASEWORK SHALL HAVE PLASTIC LAMINATE (PLAM) COUNTERTOPS AND 4" BACK SPLASHES, UNO.
2. INSTALL MATCHING FILLER PANELS IN LOCATIONS SHOWN. ADD MATCHING FILLER PANELS AS REQUIRED FOR FINAL FIT/FINISH.
3. PROVIDE BLOCKING IN ALL ADJACENT WALLS AS REQUIRED TO INSTALL ALL CASEWORK.
4. PROVIDE FINISHED END PANEL AT ALL EXPOSED FACES OF CASEWORK.
5. PROVIDE WALL BASE AS SCHEDULED ON ALL EXPOSED TOE KICK SPACES AND EXPOSED END PANELS.

CASEWORK NOTES

HEIGHT OF CASEWORK
XX/XX
XXXX
WIDTH OF CASEWORK
AN DESIGN NUMBER (INDICATES ELEVATION LAYOUT ONLY, REFER TO DETAILS AND SPECIFICATIONS FOR CASEWORK CONSTRUCTION REQUIREMENTS)

KEY NOTES

- BS PLAM BACKSPLASH, 4" HIGH, UNO
- DA DATA OUTLET, COORDINATE WITH ELECTRICAL DRAWINGS
- DUP DUPLEX OUTLET, COORDINATE WITH ELECTRICAL DRAWINGS
- EP FINISHED END PANEL
- GFI GROUND FAULT INTERRUPT OUTLET, COORDINATE WITH ELECTRICAL DRAWINGS
- LS LIGHT SWITCH, COORDINATE WITH ELECTRICAL DRAWINGS
- MB MARKER BOARD, SIZE AS INDICATED
- CT PLAM COUNTER TOP, CONTINUOUS
- PS PROJECTION SCREEN, SIZE AS INDICATED
- SWB SCHEDULED WALL BASE
- TB TACKABLE SURFACE BOARD, LENGTH AS INDICATED (#)
- WB WHITEBOARD, LENGTH AS INDICATED (#)

KEYNOTES

#	DESCRIPTION
CMU	CMU WALL, REFER TO DETAILS'
FE	FIRE EXTINGUISHER, WALL MOUNT
MTP	METAL PANELS, TYP.

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Project Title

LIBERTY CENTRAL SCHOOL DISTRICT
MAINTENANCE BUILDING

REGISTERED ARCHITECT
WILLIAM M. RITZENTHALER
10
023344
STATE OF NEW YORK

#	DATE	DESCRIPTION

Drawn By:	Author
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Sheet Title

ENLARGED PLAN AND ELEVATIONS

Sheet No.

MB
A602

CONSTRUCTION DOCUMENTS

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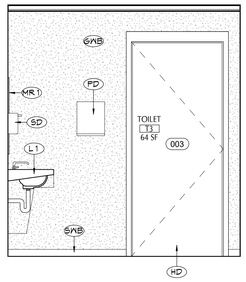
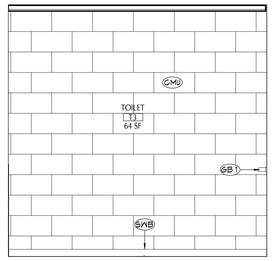
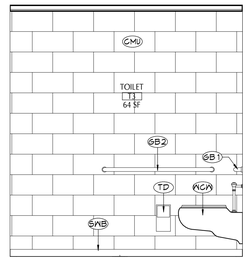


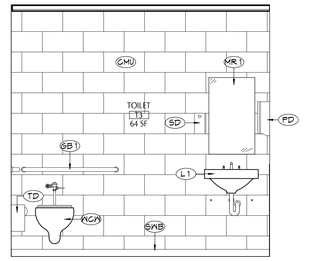
9 INTERIOR ELEVATION - TOILET T3
A603 1/2" = 1'-0"



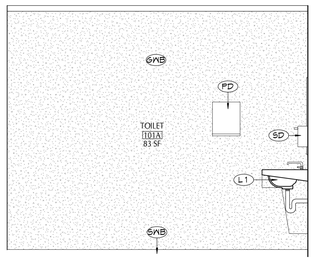
8 INTERIOR ELEVATION - TOILET T3
A603 1/2" = 1'-0"



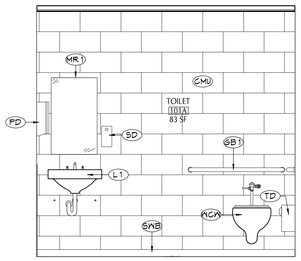
7 INTERIOR ELEVATION - TOILET T3
A603 1/2" = 1'-0"



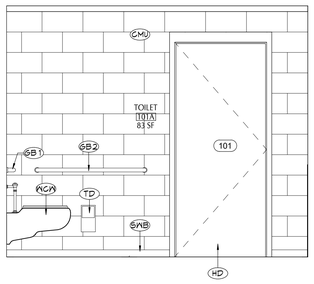
6 INTERIOR ELEVATION - TOILET T3
A603 1/2" = 1'-0"



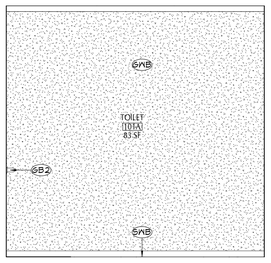
5 INTERIOR ELEVATION - TOILET 101A
A603 1/2" = 1'-0"



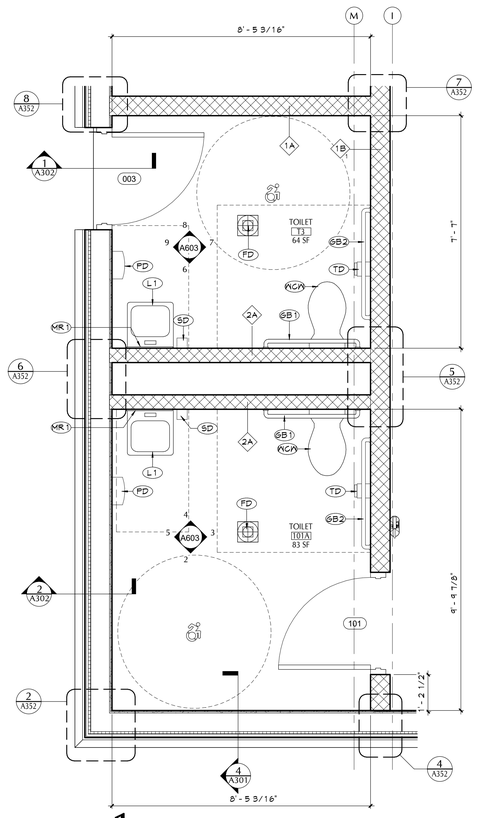
4 INTERIOR ELEVATION - TOILET 101A
A603 1/2" = 1'-0"



3 INTERIOR ELEVATION - TOILET 101A
A603 1/2" = 1'-0"



2 INTERIOR ELEVATION - TOILET 101A
A603 1/2" = 1'-0"



1 ENLARGED FLOOR PLAN
A603 1/2" = 1'-0"

GENERAL NOTES

1. ALL CASEWORK SHALL HAVE PLASTIC LAMINATE (PLAM) COUNTERTOPS AND 4" BACK SPLASHES, UNO.
2. INSTALL MATCHING FILLER PANELS IN LOCATIONS SHOWN. ADD MATCHING FILLER PANELS AS REQUIRED FOR FINAL FIT/FINISH.
3. PROVIDE BLOCKING IN ALL ADJACENT WALLS AS REQUIRED TO INSTALL ALL CASEWORK.
4. PROVIDE FINISHED END PANEL AT ALL EXPOSED FACES OF CASEWORK.
5. PROVIDE WALL BASE AS SCHEDULED ON ALL EXPOSED TOE KICK SPACES AND EXPOSED END PANELS.

CASEWORK NOTES

HEIGHT OF CASEWORK
WIDTH OF CASEWORK
API DESIGN NUMBER (INDICATES ELEVATION LAYOUT ONLY, REFER TO DETAILS AND SPECIFICATIONS FOR CASEWORK CONSTRUCTION REQUIREMENTS)

KEY NOTES

- BS PLAM BACKSPLASH, 4" HIGH, UNO
- DA DATA OUTLET, COORDINATE WITH ELECTRICAL DRAWINGS
- DUP DUPLEX OUTLET, COORDINATE WITH ELECTRICAL DRAWINGS
- FEP FINISHED END PANEL
- GFI GROUND FAULT INTERRUPT OUTLET, COORDINATE WITH ELECTRICAL DRAWINGS
- LS LIGHT SWITCH, COORDINATE WITH ELECTRICAL DRAWINGS
- MB MARKER BOARD, SIZE AS INDICATED
- PCT PLAM COUNTER TOP, CONTINUOUS
- PS PROJECTION SCREEN, SIZE AS INDICATED
- SNB SCHEDULED WALL BASE
- TBB TACKABLE SURFACE BOARD, LENGTH AS INDICATED (#)
- WBB WHITEBOARD, LENGTH AS INDICATED (#)

TOILET ROOM NOTES

1. THE HEIGHTS SHOWN ARE TYPICAL AND DO NOT NECESSARILY SHOW ALL EQUIPMENT THAT ARE TO BE LOCATED ON WALLS.
2. THESE GUIDELINES ESTABLISH LOCATION OF FIXTURES AND EQUIPMENT VERTICALLY AT THE WALL GENERALLY THROUGHOUT THE PROJECT.
3. THE DIMENSIONS CALLED OUT ARE TO THE TOP OR BOTTOM OF FIXTURES AND EQUIPMENT FACE PLATES/TRIM AS SHOWN, UNO.
4. THE DIMENSIONS CALLED OUT ARE TO THE CENTERLINE OF FIXTURES AND EQUIPMENT AS SHOWN, UNO.
5. ALL ACCESSORIES TO BE SURFACE MOUNTED, UNO.
6. INSTALL PRESSURE TREATED WOOD BLOCKING IN STUD PARTITIONS AT ALL LOCATIONS WHERE TOILET ACCESSORIES ARE MOUNTED TO THE WALL.

TOILET ROOM KEY NOTES

- EWC ELECTRIC WATER COOLER, COORDINATE WITH PLUMBING DRAWINGS
- GB1 36" GRAB BAR
- GB2 42" GRAB BAR
- GB3 18" VERTICAL GRAB BAR
- L1 SINGLE STATION LAVATORY, COORDINATE WITH PLUMBING DRAINGS
- L2 DOUBLE STATION LAVATORY, COORDINATE WITH PLUMBING DRAWINGS
- L3 THREE STATION LAVATORY, COORDINATE WITH PLUMBING DRAWINGS
- MR1 18"x30" CHANNEL FRAMED GLASS MIRROR
- MR2 30"x60" CHANNEL FRAMED GLASS MIRROR
- PD PAPER TOWEL DISPENSER (FURNISHED BY OWNER)
- SD SOAP DISPENSER (FURNISHED BY OWNER)
- SNB SANITARY NAPKIN WASTE RECEPTACLE
- SND SANITARY NAPKIN AND TAMPON DISPENSER
- TD TOILET TISSUE DISPENSER (FURNISHED BY OWNER)
- TP TOILET PARTITION
- UP URINAL PARTITION
- UR URINAL, COORDINATE WITH PLUMBING DRAWINGS
- WCA WATER CLOSET, WALL MOUNTED, COORDINATE WITH PLUMBING DRAWINGS

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Consultant

LIBERTY CENTRAL SCHOOL DISTRICT MAINTENANCE BUILDING

Project Title

REGISTERED ARCHITECT RICHARD M. FITZPATRICK 023344 STATE OF NEW YORK

No.	DATE	DESCRIPTION

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Sheet Title

ENLARGED PLAN AND ELEVATIONS

Sheet No.

MB
A603

CONSTRUCTION DOCUMENTS

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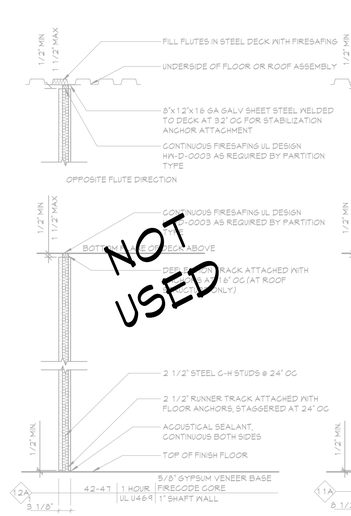
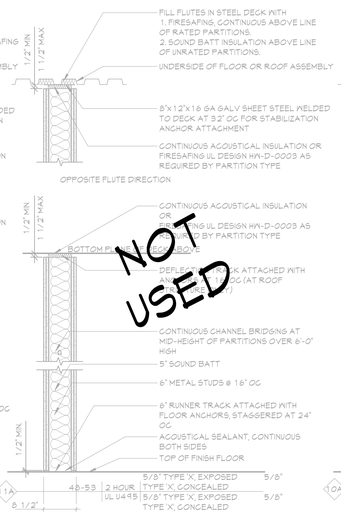


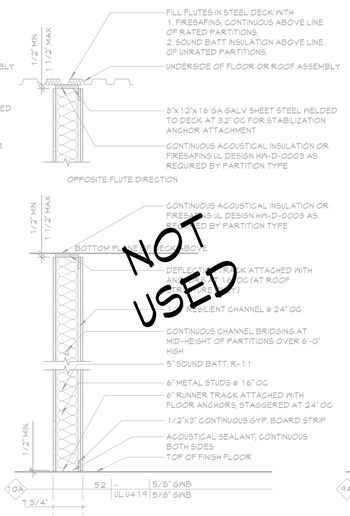
NOT USED

12 PARTITION TYPE '12'
A701 3/4" = 1'-0"



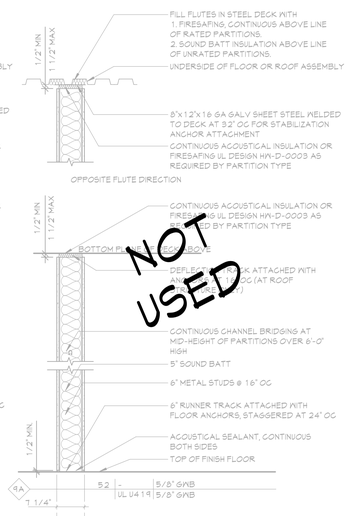
NOT USED

11 PARTITION TYPE '11'
A701 3/4" = 1'-0"



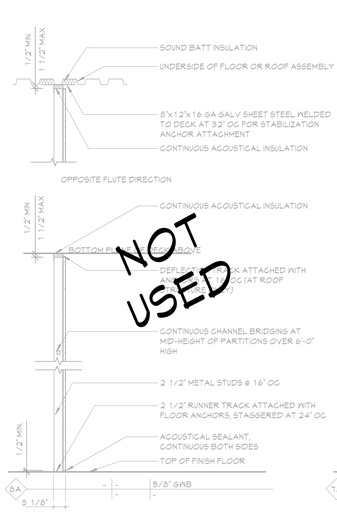
NOT USED

10 PARTITION TYPE '10'
A701 3/4" = 1'-0"



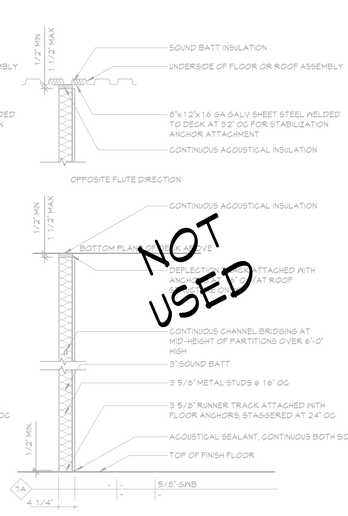
NOT USED

9 PARTITION TYPE '9'
A701 3/4" = 1'-0"



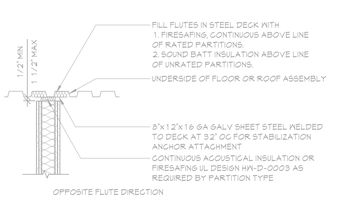
NOT USED

8 PARTITION TYPE '8'
A701 3/4" = 1'-0"



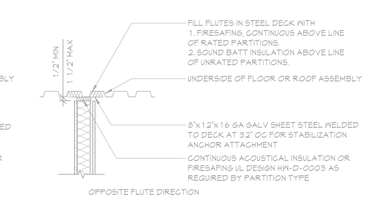
NOT USED

7 PARTITION TYPE '7'
A701 3/4" = 1'-0"



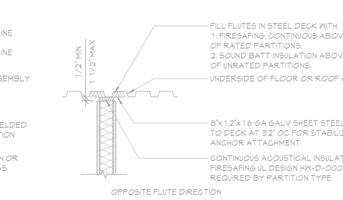
NOT USED

6 PARTITION TYPE '6'
A701 3/4" = 1'-0"



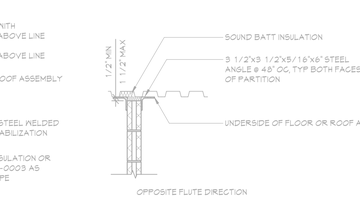
NOT USED

5 PARTITION TYPE '5'
A701 3/4" = 1'-0"



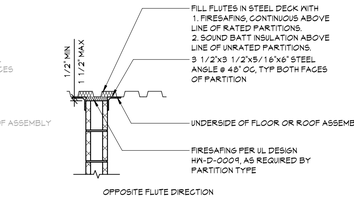
NOT USED

4 PARTITION TYPE '4'
A701 3/4" = 1'-0"

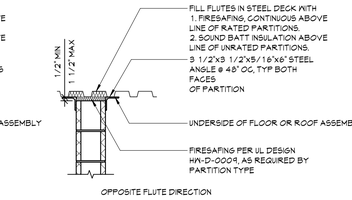


NOT USED

3 PARTITION TYPE '3'
A701 3/4" = 1'-0"



2 PARTITION TYPE '2'
A701 3/4" = 1'-0"



1 PARTITION TYPE '1'
A701 3/4" = 1'-0"

PARTITION NOTES

1A — PARTITION TYPE NUMBER
1 — FIRE RATING HOUR

NOM CMU SIZE	STC RATING	FIRE RATING TEST DESIGN	SIDE ONE FINISH SIDE TWO FINISH

GENERAL PARTITION NOTES

1. THIS PARTITION TYPE SCHEDULE IS GENERIC IN NATURE. NOT ALL OF THE PARTITION TYPES ILLUSTRATED ON THIS SHEET HAVE BEEN UTILIZED IN THIS PROJECT. SEE FLOOR PLANS FOR LOCATIONS OF PARTITION TYPES USED.
2. ALL INTERIOR PARTITIONS INDICATED ON THE FLOOR PLANS SHALL BE INCLUDED IN THE CONTRACTOR'S BID. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT IN WRITING OF ANY PARTITION SHOWN ON THE FLOOR PLANS WITHOUT A PARTITION TAG. THE ARCHITECT WILL DETERMINE THE PARTITION TYPE TO BE USED AT SUCH LOCATIONS.

FIRE RATED SYSTEMS

1. PROVIDE FIRE RATED JOINT SYSTEMS AT ALL INTERSECTIONS OF FIRE RATED PARTITION ASSEMBLIES AND FIRE RATED FLOOR/ROOF ASSEMBLIES. THE FIRE RATED JOINT SYSTEM SHALL HAVE A MINIMUM FIRE RESISTANCE RATING GREATER THAN OR EQUAL TO THE PARTITION IN WHICH IT IS BEING USED. THIS JOINT SYSTEM MUST BE AN APPROVED ASSEMBLY TESTED BY A NATIONALLY RECOGNIZED TESTING AGENCY.
2. PROVIDE THROUGH-PENETRATION FIRE STOP SYSTEM AT ALL PENETRATIONS THROUGH FIRE RATED PARTITION, FLOOR AND ROOF ASSEMBLIES. THE THROUGH-PENETRATION FIRE STOP SYSTEM SHALL HAVE A MINIMUM FIRE RESISTANCE RATING GREATER THAN OR EQUAL TO THE ASSEMBLY THAT IT IS BEING USED IN. THIS FIRE STOP SYSTEM MUST BE AN APPROVED ASSEMBLY TESTED BY A NATIONALLY RECOGNIZED TESTING AGENCY.
3. ANY PRODUCT THAT EMITS ODOR MUST MEET THE REQUIREMENTS OF THE NEW YORK STATE EDUCATION DEPARTMENT.
4. CONCEALED VERTICAL SPACES IN PARTITIONS SHALL BE FILLED WITH NON COMBUSTIBLE MATERIAL OR FIRE-STOPPED AT EACH FLOOR LEVEL AND AT THE CEILING OF THE UPPERMOST STORY, SO THAT SUCH SPACES WILL NOT BE CONTINUOUS FOR MORE THAN ONE STORY, OR COMMUNICATE WITH CONCEALED HORIZONTAL SPACES IN THE FLOOR OR ROOF CONSTRUCTION.
5. ALL PARTITION TYPE DIAGRAMS ARE GRAPHICAL IN NATURE. IN CASE WHERE A DIAGRAM DOES NOT SHOW ALL MATERIALS REQUIRED BY A FIRE-RATED PARTITION, THE PARTITION TYPE DESCRIPTION GOVERNS.

CMU WALL SYSTEMS

1. ALL PLAN DIMENSIONS ARE TO FACE OF CMU, UNLESS NOTED OTHERWISE.
2. PROVIDE HORIZONTAL JOINT REINFORCEMENT EVERY OTHER CMU COURSE.
3. PROVIDE (2) VERTICAL #4 BARS IN FULLY GROUTED CORES AT THE FOLLOWING LOCATIONS:
   A) PARTITION INTERSECTIONS (REINFORCE FULL HEIGHT)
   B) DOOR OPENINGS (REINFORCE FULL HEIGHT OF DOOR)
   C) WINDOW OPENINGS (REINFORCE FLOOR TO WINDOW HEAD)
   D) WALL ENDS (REINFORCE FULL HEIGHT)
4. SEE STRUCTURAL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL REINFORGING AND ANCHORING REQUIRENTS.
5. PROVIDE BULLNOSE MASONRY UNITS ON ALL OUTSIDE CORNERS OF WALLS UNLESS NOTED OTHERWISE.

METAL STUD PARTITION AND CEILING SYSTEMS

1. ALL DIMENSIONS ARE TO THE FACE OF METAL STUDS UNLESS NOTED OTHERWISE.
2. PROVIDE METAL BRACING AT THIRD POINTS AT THE INTERIOR OF METAL STUD CHASE PARTITIONS. BRACING SHALL NOT EXCEED 48" OC.
3. PROVIDE METAL LG. BEAD, BACKER ROD AND SEALANT AT THE INTERSECTION OF GYP BD PARTITIONS AND MASONRY PARTITIONS.
4. PROVIDE ACOUSTICAL SEALANT IN THE FOLLOWING LOCATIONS:
   A) PERIMETER OF PARTITIONS
   B) RUNNERS
   C) ELECTRICAL OUTLETS
   D) PARTITION PENETRATIONS AND OPENINGS
5. PROVIDE BLOCKING WITHIN PARTITIONS TO SUPPORT PARTITION MOUNTED EQUIPMENT, FIXTURES AND ACCESSORIES. COORDINATE WITH CABINETRY DETAILS AND MEP DRAWINGS.
6. ALL INTERIOR METAL STUDS AND METAL FURRING AT PARTITIONS ARE 20 GAUGE UNLESS OTHERWISE NOTED. ALL INTERIOR METAL STUDS AND FURRING FOR CEILING SOFFITS ARE 25 GAUGE UNLESS NOTED OTHERWISE.
7. ANCHOR INSULATION TO STUD SYSTEM WITH WIRE SUPPORT SYSTEM IF INSULATION IS NOT SUPPORTED ON BOTH SIDES BY GYPSUM BOARD. WHERE DOUBLE STUD PARTITIONS ARE USED TO FORM CHASE PARTITIONS ONLY PROVIDE SOUND ATTENUATION BLANKETS ON ONE SIDE OF CHASE
8. GYPSUM BOARD SCHEDULE
   - 5/8" TYPE 'X' GYPSUM BOARD UNLESS NOTED OTHERWISE.
   - CORRIDOR AND STUDENT OCCUPIED SPACES FROM FLOOR TO 8'-0" ABOVE FINISHED FLOOR: 5/8" TYPE 'X' ABUSE RESISTANT GYPSUM BOARD
   - SUSPENDED GYPSUM BOARD CEILINGS: 5/8" TYPE 'X' SAG RESISTANT GYPSUM BOARD
   - EXTERIOR CEILINGS AND SOFFITS: 5/8" GLASS-MAT GYPSUM SHEATHING
   - PARTITIONS TO RECEIVE TILE FINISH: 5/8" TYPE 'X' GLASS-MAT WATER RESISTANT BACKING BOARD
   - TOILET ROOMS, KITCHENS & JANITOR CLOSETS: PARTITIONS & CEILINGS THAT DO NOT RECEIVE TILE SHALL RECEIVE 5/8" TYPE 'X' MOISTURE & MOLD RESISTANT GYPSUM BOARD

MAXIMUM SPACING - GYPSUM BOARD CONTROL JOINTS

CONSTRUCTION AND LOCATION	MAX SINGLE DIMENSION FEET	MAX SINGLE AREA FEET
PARTITION - INTERIOR	30	-
CEILING - INTERIOR		
W/ PERIMETER RELIEF	50	2500
W/O PERIMETER RELIEF	30	900

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Consultant

LIBERTY CENTRAL SCHOOL DISTRICT MAINTENANCE BUILDING

Project Title

REGISTERED ARCHITECT MICHAEL M. ATTERMEYER 023344 STATE OF NEW YORK

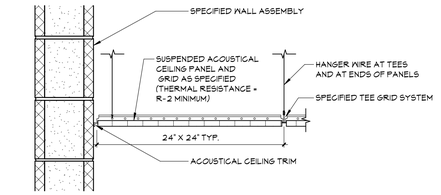
NO.	DATE	DESCRIPTION

Drawn By:	Author
Checked By:	Checker
Proj. #:	59-09-01-06-3-016-001
CSArch Proj. #:	203-2201
Construction Documents:	12/13/22

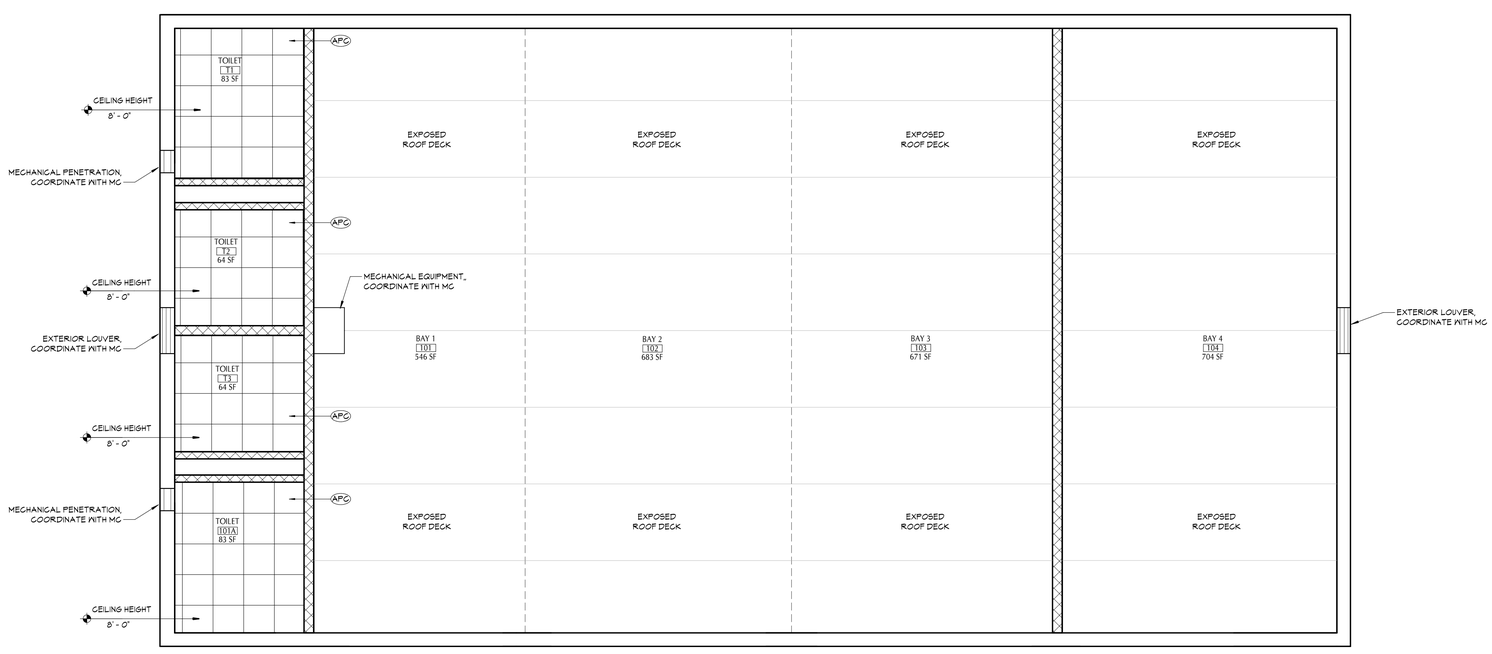
Sheet Title
PARTITION TYPES

Sheet No.
MB
A701

CONSTRUCTION DOCUMENTS



2 ACT CEILING, TYP.
A811 1 1/2" = 1'-0"



1 FIRST FLOOR REFLECTED CEILING PLAN
A811 1/4" = 1'-0"

CEILING NOTES

1. INSTALL CEILING GRIDS CENTERED IN THE ROOM, UNO. IN ROOMS OTHER THAN RECTANGULAR SHAPED, INSTALL GRIDS CENTERED ON WALLS OR OTHER BUILT FEATURES AS INDICATED.
2. INSTALLATION HEIGHTS OF THE CEILINGS MAY VARY SLIGHTLY FROM PLANS IN ROOMS WITH EXTERIOR WINDOWS. ACTUAL CEILING HEIGHT TO BE VERIFIED IN THE FIELD.
3. FINAL INSTALLED CEILINGS SHALL HAVE HEIGHTS COORDINATED WITH OTHER CONTRACTORS WITH ABOVE CEILING WORK AND VERIFIED WITH FIELD CONDITIONS. ALL CHANGES IN CONFIGURATION OR HEIGHTS ARE TO BE APPROVED BY THE ARCHITECT.

CEILING LEGEND

- GWB OR PLASTER CEILING, REFER TO DETAILS AND ROOM FINISH SCHEDULE
- SUSPENDED ACOUSTICAL PANEL CEILING SYSTEM
- +X'-X" — CEILING HEIGHT ABOVE FINISHED FLOOR

ELECTRICAL EQUIPMENT, REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.

- 2'X4' LIGHT FIXTURE
- 2'X2' LIGHT FIXTURE
- 1'X LIGHT FIXTURE
- PENDANT LIGHT FIXTURE
- RECESSED DOWN LIGHT
- CEILING MOUNTED EXIT SIGN
- CEILING MOUNTED OCCUPANCY SENSOR
- CEILING MOUNTED SMOKE DETECTOR
- CEILING MOUNTED HEAT DETECTOR
- CEILING MOUNTED PA SPEAKER
- CEILING MOUNTED SECURITY J-BOX
- CEILING MOUNTED MOTION SENSOR
- CEILING MOUNTED DATA J-BOX

MECHANICAL EQUIPMENT, REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.

- HVAC SUPPLY GRILLE
- HVAC RETURN GRILLE

KEYNOTES

#	DESCRIPTION
APC	ACOUSTICAL PANEL CEILING SYSTEM.

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Consultant

Project Title
LIBERTY CENTRAL SCHOOL DISTRICT
MAINTENANCE BUILDING

REGISTERED ARCHITECT
ROBERT M. RITZENTHALER
023344
STATE OF NEW YORK

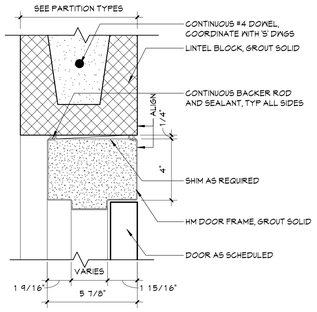
#	DATE	DESCRIPTION

Drawn By:	CSA
Checked By:	CSA
Proj. #:	59-09-01-06-3-016-001
CSArch Proj. #:	203-2201
Construction Documents:	12/13/22

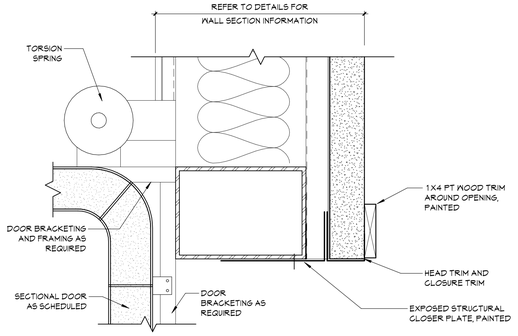
Sheet Title
FIRST FLOOR REFLECTED CEILING PLAN AND DETAILS

Sheet No.
MB
A811

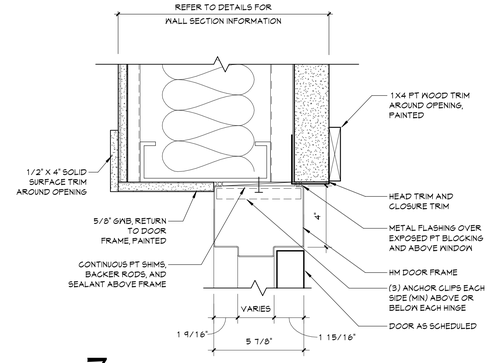
CONSTRUCTION DOCUMENTS



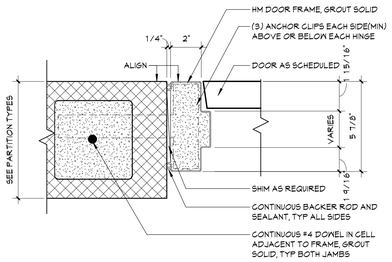
9 HEAD DETAIL C
A901 3" = 1'-0"



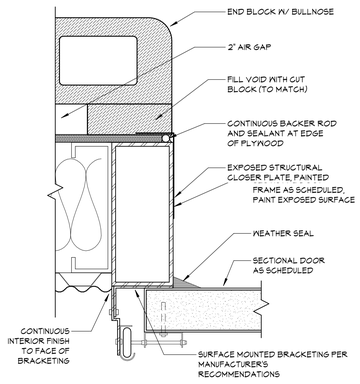
8 HEAD DETAIL B
A901 3" = 1'-0"



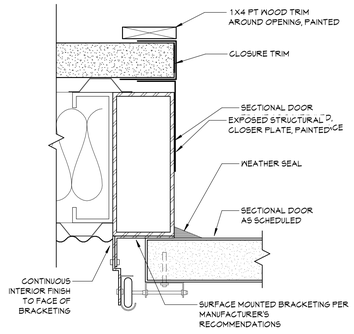
7 HEAD DETAIL A
A901 3" = 1'-0"



5 JAMB DETAIL C
A901 3" = 1'-0"

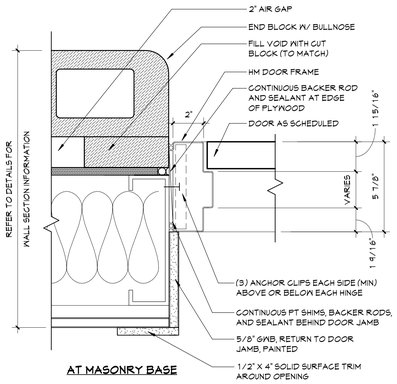


AT MASONRY BASE

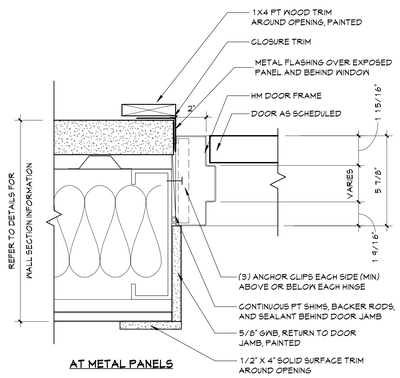


AT METAL PANELS

4 JAMB DETAIL B
A901 3" = 1'-0"

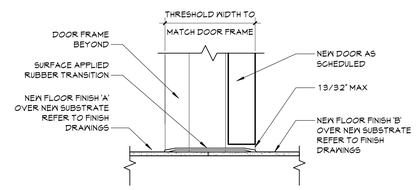


AT MASONRY BASE

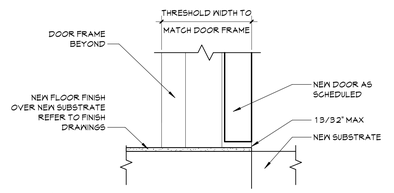


AT METAL PANELS

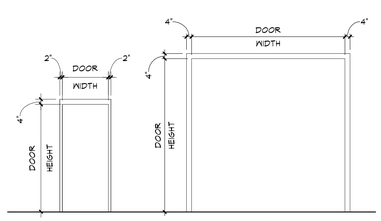
3 JAMB DETAIL A
A901 3" = 1'-0"



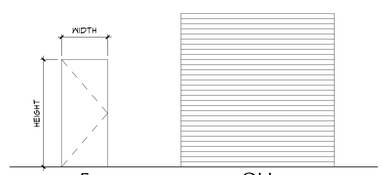
2 SILL DETAIL B
A901 3" = 1'-0"



1 SILL DETAIL A
A901 3" = 1'-0"



FRAME TYPES
1/4" = 1'-0"



DOOR TYPES
1/4" = 1'-0"

DOOR SCHEDULE

DOOR NUMBER	DOOR QUANTITY	DOOR FROM		DOOR TO		DOOR WIDTH	DOOR HEIGHT	DOOR THICKNESS	DOOR TYPE	DOOR MATERIAL	DOOR FINISH	FRAME TYPE	FRAME MATERIAL	FRAME FINISH	HEAD DETAIL	JAMB DETAIL	SILL DETAIL	LABEL (MIN)	GLAZING	HARDWARE	MAG HOLD-OPEN	ACCESS CONTROL	R-VALUE (MIN)	U-FACTOR (MAX)	REMARKS	DOOR NUMBER
001	1	T1	TOILET	-	EXTERIOR	3' - 0"	7' - 0"	1 3/4"	F	HM	PNT	1	HM	PT	6/A901	3/A901	1/A901	-	-	1	-	-	-	0.37	VACANCY INDICATOR	001
002	1	-	EXTERIOR	T2	TOILET	3' - 0"	7' - 0"	1 3/4"	F	HM	PNT	1	HM	PT	6/A901	3/A901	1/A901	-	-	1	-	-	-	0.37	VACANCY INDICATOR	002
003	1	T3	TOILET	-	EXTERIOR	3' - 0"	7' - 0"	1 3/4"	F	HM	PNT	1	HM	PT	6/A901	3/A901	1/A901	-	-	1	-	-	-	0.37	VACANCY INDICATOR	003
004	1	-	EXTERIOR	101	BAY 1	10' - 0"	10' - 0"	2"	OH	ST/INSUL	FF	2	ST	FF	7/A901	4/A901	1/A901	-	-	-	-	-	18.0	-		004
005	1	102	BAY 2	-	EXTERIOR	14' - 0"	10' - 0"	2"	OH	ST/INSUL	FF	2	ST	FF	7/A901	4/A901	1/A901	-	-	-	-	-	18.0	-		005
006	1	-	EXTERIOR	103	BAY 3	14' - 0"	10' - 0"	2"	OH	ST/INSUL	FF	2	ST	FF	7/A901	4/A901	1/A901	-	-	-	-	-	18.0	-		006
007	1	104	BAY 4	-	EXTERIOR	10' - 0"	10' - 0"	2"	OH	ST/INSUL	FF	2	ST	FF	7/A901	4/A901	1/A901	-	-	-	-	-	18.0	-		007
008	1	104	BAY 4	-	EXTERIOR	3' - 0"	7' - 0"	1 3/4"	F	HM	PNT	1	HM	PT	6/A901	3/A901	1/A901	-	-	2	-	-	-	0.37		008
101	1	101A	TOILET	101	BAY 1	3' - 0"	7' - 0"	1 3/4"	F	HM	PNT	1	HM	PT	8/A901	5/A901	2/A901	45	-	1	-	-	-	0.37	VACANCY INDICATOR	101
102	1	104	BAY 4	103	BAY 3	3' - 0"	7' - 0"	1 3/4"	F	HM	PNT	1	HM	PT	8/A901	5/A901	1/A901	-	-	3	-	-	-	0.37		102

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LIBERTY CENTRAL SCHOOL DISTRICT
MAINTENANCE BUILDING

Project Title

REGISTERED ARCHITECT
RICHARD M. FITZENREITER
023344
STATE OF NEW YORK

#	DATE	DESCRIPTION

Drawn By:	CSA
Checked By:	CSA
Proj. #:	59-09-01-06-3-016-001
CSArch Proj. #:	203-2201
Construction Documents:	12/13/22

Sheet Title
DOOR SCHEDULE, ELEVATIONS, AND DETAILS

Sheet No.
MB
A901

CONSTRUCTION DOCUMENTS

FLOOR FINISHES

EPOXY RESINOUS FLOOR	MANUFACTURER	STYLE	COLOR # /	SIZE	NOTE
ERF-1	DUR-A-FLEX, INC.	HYBRI-FLEX EQ	AS SELECTED BY ARCHITECT FROM FULL RANGE	SEAMLESS	ALL TOILET ROOMS

BASE FINISHES

EPOXY RESINOUS WALL BASE	MANUFACTURER	STYLE	COLOR # /	SIZE	NOTE
ERB-1	DUR-A-FLEX, INC.	HYBRI-FLEX EQ	AS SELECTED BY ARCHITECT FROM FULL RANGE	SEAMLESS	ALL TOILET ROOMS

WALL FINISHES

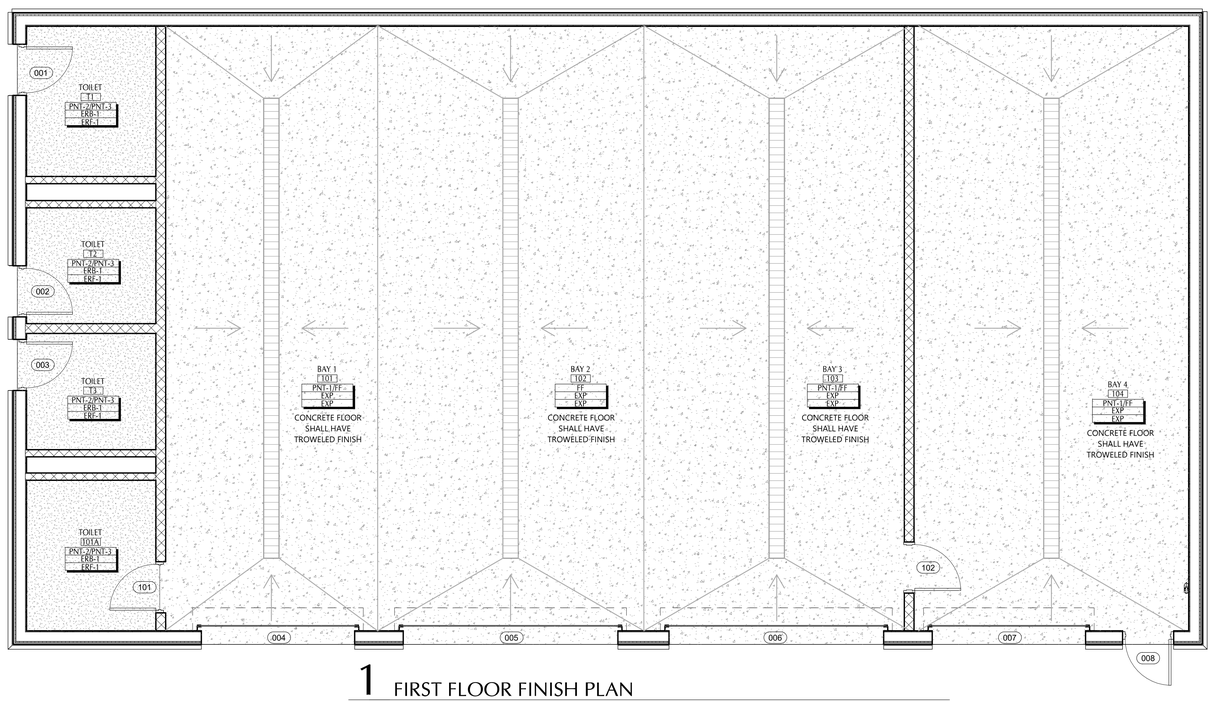
WALL PAINT	MANUFACTURER	STYLE	COLOR # /	SIZE	NOTE
PNT-1	SHERWIN WILLIAMS	EGG-SHELL	AS SELECTED BY ARCHITECT FROM FULL RANGE		BAYS 1 THRU 4 (CMU WALLS)
PNT-2	SHERWIN WILLIAMS	EGG-SHELL	AS SELECTED BY ARCHITECT FROM FULL RANGE		ALL TOILET ROOMS (CMU WALLS)
PNT-3	SHERWIN WILLIAMS	EGG-SHELL	AS SELECTED BY ARCHITECT FROM FULL RANGE		ALL TOILET ROOMS (GWB WALLS)
PNT-4	SHERWIN WILLIAMS	SEMI-GLOSS	AS SELECTED BY ARCHITECT FROM FULL RANGE		HM DOOR FRAMES
PNT-5	SHERWIN WILLIAMS	SEMI-GLOSS	AS SELECTED BY ARCHITECT FROM FULL RANGE		HM DOOR PANELS

CEILING FINISHES

ACOUSTIC PANEL CEILINGS	MANUFACTURER	STYLE	COLOR # /	SIZE	NOTE
C-1	USG INTERIORS, INC	MARS, SHADOWLINE	WHITE	24" X 24"	ALL TOILET ROOMS

FINISH SCHEDULE

ROOM NUMBER	ROOM NAME	FLOOR SUBSTRATE	FLOOR FINISH	BASE SUBSTRATE	BASE FINISH	NORTH WALL SUBSTRATE	NORTH WALL FINISH	EAST WALL SUBSTRATE	EAST WALL FINISH	SOUTH WALL SUBSTRATE	SOUTH WALL FINISH	WEST WALL SUBSTRATE	WEST WALL FINISH	CEILING MATERIAL	CEILING FINISH	COMMENTS
101	BAY 1	CONC	EXP	CONC/CMU	EXP	-	-	MTP	FF	CMU	PNT-1	MTP	FF	EXP	-	
101A	TOILET	CONC	ERF-1	GWB/CMU	ERB-1	CMU	PNT-2	GWB	PNT-3	GWB	PNT-3	CMU	PNT-2	ACT	C-1	
102	BAY 2	CONC	EXP	CONC/CMU	EXP	-	-	MTP	FF	-	-	MTP	FF	EXP	-	
103	BAY 3	CONC	EXP	CONC/CMU	EXP	CMU	PNT-1	MTP	FF	-	-	MTP	FF	EXP	-	
104	BAY 4	CONC	EXP	CONC/CMU	EXP	MTP	FF	MTP	FF	CMU	PNT-1	MTP	FF	EXP	-	
T1	TOILET	CONC	ERF-1	GWB/CMU	ERB-1	CMU	PNT-2	CMU	PNT-2	GWB	PNT-3	GWB	PNT-3	ACT	C-1	
T2	TOILET	CONC	ERF-1	GWB/CMU	ERB-1	CMU	PNT-2	CMU	PNT-2	GWB	PNT-3	CMU	PNT-2	ACT	C-1	
T3	TOILET	CONC	ERF-1	GWB/CMU	ERB-1	CMU	PNT-2	CMU	PNT-2	GWB	PNT-3	CMU	PNT-3	ACT	C-1	



1 FIRST FLOOR FINISH PLAN
AF001 1/4" = 1'-0"

DISCLAIMER NOTE

MANUFACTURER'S NAMES AND FINISH INFORMATION ARE INDICATED AS REFERENCED TO THE ARCHITECT'S BASIS-OF-DESIGN SELECTIONS AND HAVE BEEN DETERMINED PRIOR TO BID. THE CONTRACTOR AND OWNER ARE HEREBY NOTIFIED THAT FINISHES INSTALLED IN THE WORK ARE SUBJECT TO CHANGE IN RESPONSE TO SUBMITTALS, CONFIRMED SELECTIONS, PRODUCT AVAILABILITY AND THE SUBSEQUENT COORDINATION OF FINISHES BY ARCHITECT AND MAY DIFFER FROM PRODUCTS LISTED HEREIN.

ABBREVIATIONS

ACMU	ARCHITECTURAL CONCRETE MASONRY UNIT
ACT	ACOUSTICAL CEILING TILE
APC	ACOUSTICAL PANEL CEILING
BBT	BIO-BASED TILE
BRK	BRICK
CFT	CERAMIC FLOOR TILE
CMU	CONCRETE MASONRY UNIT
CONC	CONCRETE
CWR	CONCRETE WATER REPELLENT
CPT	CARPET
CTB	CERAMIC TILE BASE
CWT	CERAMIC WALL TILE
ETR	EXISTING TO REMAIN
EXP	EXPOSED
FAC/FF	FACTORY FINISH
GWB/GYP	GYPSUM WALL BOARD
LMC	LINEAR METAL CEILING
MSS	MUSIC STORAGE SYSTEM
MWP	METAL WALL PANEL
PCON	POLISHED CONCRETE
PLAM	PLASTIC LAMINATE
PLAS	PLASTER
PNT	PAINT
RAF	RESILIENT ATHLETIC FLOORING
RB	RUBBER BASE
RF	RESINOUS FLOORING
RST	RUBBER STAIR TREAD / LANDING
RT	RUBBER TILE FLOORING
SCONC	SEALED CONCRETE
SS	STAINLESS STEEL
STF	SYNTHETIC TURF FLOORING
STL	STEEL
TERR	TERRAZZO
TP	TOILET PARTITIONS
TYP	TYPICAL
VCT	VINYL COMPOSITION TILE
VCTAS	VINYL COMPOSITION TILE ANTI-STATIC
VWC	VINYL WALLGOVERING
WAF	WOOD ATHLETIC FLOORING
WD	WOOD
WOM	WALK-OFF MAT
X-	EXISTING

GENERAL FINISH NOTES

1. ALL EXPOSED SURFACES OF NEW PARTITIONS ARE TO BE PAINTED.
2. WHEN ANY WORK IS PERFORMED ON ANY EXISTING WALL, THE ENTIRE WALL SURFACE IS TO BE PAINTED GORNER TO GORNER, UNLESS NOTED OTHERWISE.
3. ALL ELECTRIC, MECHANICAL COMPONENTS AND TELEPHONE PANELS EXPOSED IN A ROOM TO MATCH WALL COLOR.
4. ALL NEW GWB CEILINGS, FASCIAS, AND SOFFITS TO BE PAINTED PNT-2, UNO.
5. ALL EXPOSED CEILING STRUCTURE, DECK, DUCTWORK, CONDUIT AND PIPING TO BE PAINTED PNT-2, UNO.
6. ALL STEEL COLUMNS IN AREAS OF WORK ARE TO BE PAINTED.
7. ALL EXPOSED STEEL ASSOCIATED WITH STAIRS TO BE PAINTED PNT-B , INCLUDING STRINGERS, CHANNELS, RISERS, GOLUMNS, PLATES, TUBES, GUARDRAILS, POSTS, UNDERSIDES OF FLOORS, LANDINGS, DECKS, AND STAIR PANS WITH THE EXCEPTION OF SS & FF, UNO.
8. NEW HM DOORS, DOOR FRAMES AND WINDOW FRAMES AND ETR. CORRIDOR DOOR & WINDOW FRAMES AS SCHEDULED ON A600 SERIES DRAWINGS, PNT-7.
9. ALL EXPOSED GROUND FACE CMU LOCATIONS TO RECEIVE GRAFFITIT COATING, TYPICAL FOR INTERIOR LOCATIONS.

FINISH KEYNOTES

#	DESCRIPTION
K.1	PROVIDE NEW WALL BASE & PAINT AT NEW WORK TO MATCH EXISTING ADJACENT MATERIALS & FINISHES.
F.2	ALIGN FLOOR FINISH TRANSITION TO FACE OF WALL
F.3	INFILL AREA AFFECTED BY DEMOLITION WITH NEW VCT TO MATCH EXISTING AS REQUIRED.

FINISH KEYS

Room Name
101
Wall Finish
Base Finish
Floor Finish
= FINISH TAGE

PNT-# ACCENT PAINT LOCATION

CSARCH
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Consultant

LIBERTY CENTRAL SCHOOL DISTRICT MAINTENANCE BUILDING

Project Title

REGISTERED ARCHITECT RICHARD M. RITTENHOUSE 023334 STATE OF NEW YORK

#	DATE	DESCRIPTION

Drawn By:	CSA
Checked By:	CSA
Proj. #:	59-09-01-06-3-016-001
CSArch Proj. #:	203-2201
Construction Documents:	12/13/22

Sheet Title
FINISH SCHEDULES AND PLANS

Sheet No.
MB
AF001

CONSTRUCTION DOCUMENTS

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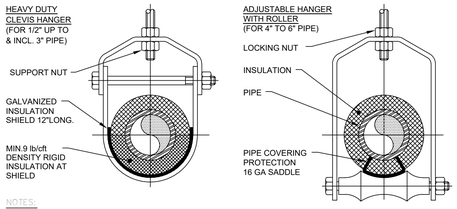
Plumbing Fixture Schedule

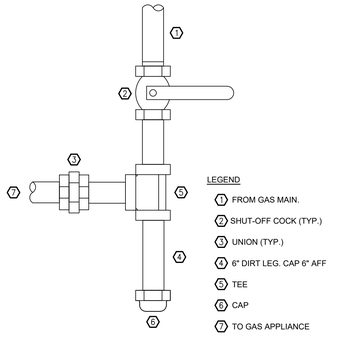
FIXTURE MARK	DESCRIPTION	PIPING CONNECTION				WATER SUPPLY FIXTURE UNITS	DRAINAGE FIXTURE UNITS	ADA (Y/N)	ELECTRONIC CONTROL (Y/N)	MANUFACTURER/MODEL (OR ACCEPTABLE EQUAL)	REMARKS
		H.W.	C.W.	WASTE	VENT						
1	EXPOSED WALL HYDRANT	-	3/4	-	-	-	-	-	-	EXPOSED WALL HYDRANT TYPICAL OF ZURN ECOLOTROL MODEL #Z1333XL; EXPOSED, LEAD FREE, ANTI SIPHON, AUTO DRAINING	MTD. AT 24" ABOVE FINSHED FLOOR. INSTALL PER MANUFACTURER'S REQUIREMENTS
2	WATER CLOSET	-	1	4	2	10.0	4	Y	Y	WATER CLOSET TYPICAL OF ZURN MODEL #Z5615 HET; WALL HUNG W/ ELONGATED FRONT RIM; 1.28 GPF; FURNISH W/ SEAT MODEL #Z5955SS-EL AND BATTERY SENSOR FLUSH VALVE MODEL# ZER6000AV-HET-CPM.	INSTALL PER ADA & MANUFACTURER'S REQUIREMENTS. PROVIDE WALL CARRIER TYPICAL OF ZURN Z1201 OR EQUAL
3	LAVATORY	1/2	1/2	1-1/2	1-1/2	2.0	1	Y	Y	WALL HUNG LAVATORY TYPICAL OF ZURN MODEL #Z5340; VITREOUS CHINA; FURNISH W/ BATTERY SENSOR FAUCET MODEL #Z6955-XL-S-N-LL, CONCEALED ARM CARRIERS, ADA GRID STRAINER AND ADA TRAP/SUPPLY PROTECTORS	INSTALL PER ADA & MANUFACTURER'S REQUIREMENTS
4	FLOOR DRAIN	-	-	4	2	-	2	-	-	4"Ø FLOOR DRAIN W/ 6" STRAINER TYPICAL OF ZURN MODEL #Z415-BZ1-TSP; FURNISH WITH TRAP SEAL DEVICE	INSTALL PER MANUFACTURER'S REQUIREMENTS
5	TRENCH DRAIN	-	-	4	2	-	2	-	-	12" WIDE PRE-SLOPED HDPE TRENCH DRAIN TYPICAL OF ZURN MODEL #Z882; FURNISH WITH FIBERGLASS CLASS-F GRATE; ASSEMBLE SECTIONS TO HAVE CONTINUOUS SLOPE	INSTALL PER MANUFACTURER'S REQUIREMENTS
6	GAS WATER HEATER	3/4	3/4	-	-	-	-	-	-	GAS WATER HEATER TYPICAL OF BRADFORD WHITE MODEL #LC2PV50H763N; 50 GAL. CAPACITY; 81 GPH RECOVERY @ 100F RISE; 89% THERMAL EFFICIENCY; 76 MBH INPUT	INSTALL PER MANUFACTURER'S REQUIREMENTS
7	RECIRC/MIXING STATION	1(110F) 1(140F)	3/4	-	-	-	-	-	-	RECIRCULATION AND MIXING STATION TYPICAL OF BRADLEY MODEL#NRS-4; FURNISH W/ TACO SMARTPLUS MODEL #008-IQSF6-IFC RECIRC PUMP AND AQUASTAT	INSTALL PER MANUFACTURER'S REQUIREMENTS
8	NON-FREEZE WALL HYDRANT	-	3/4	-	-	-	-	-	-	ENCASED WALL HYDRANT TYPICAL OF ZURN ECOLOTROL MODEL #Z1320XL; ENCASED, LEAD FREE, ANTI SIPHON, AUTO DRAINING, NON-FREEZE	MTD. AT 36" ABOVE FINISHED GRADE. INSTALL PER MANUFACTURER'S REQUIREMENTS



NOTES:
1. PIPE 8" AND LARGER SHALL HAVE ROLLER SUPPORTED WITH DUAL RODS.
2. FOR CHW SERVICE OVER 3" REPLACE SADDLE WITH 12" LONG 14 GA SHIELD WITH RIGID INSULATION BETWEEN PIPE AND SHIELD.

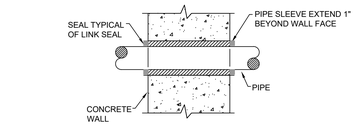
PIPE Ø (IN.)	MAX. SPACING BETWEEN HANGERS (FT.)			MIN. ROD SIZE (IN.)
	STEEL PIPE	COPPER PIPE	CPVC	
1/2 THRU 1	7	5	5	3/8
1-1/2 THRU 2	9	8	6	3/8
2-1/2	11	9	7.5	1/2
3	12	10	7.5	1/2
4	14	12	8.5	5/8
6	17	14	9	3/4
8	19	16	10	7/8
10	22	18	10.5	7/8

3 / P101 Pipe Hanger Support
N.T.S.

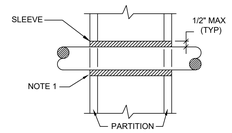


LEGEND
1. FROM GAS MAIN.
2. SHUT-OFF COCK (TYP.)
3. UNION (TYP.)
4. 6" DIRT LEG. CAP 6" AFF
5. TEE
6. CAP
7. TO GAS APPLIANCE

4 / P101 Gas Piping Appliance Connection Detail
N.T.S.

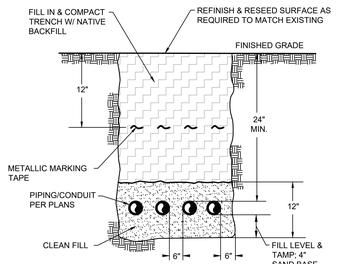


1 / P101 Exterior Wall Pipe Penetrations
N.T.S.

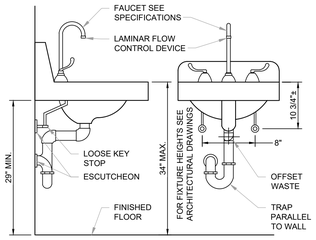


NOTES:
1. AT FIRE RATED PARTITIONS, ADD ADDITIONAL LAYER OF FIRE SAFING INSULATION AROUND PENETRATION SO AS TO FILL CAVITY.
2. DUCT AND PIPE PENETRATIONS THRU CORRIDOR WALLS ABOVE THE CEILING ARE TO BE FIRE STOPPED AROUND THE PENETRATION.

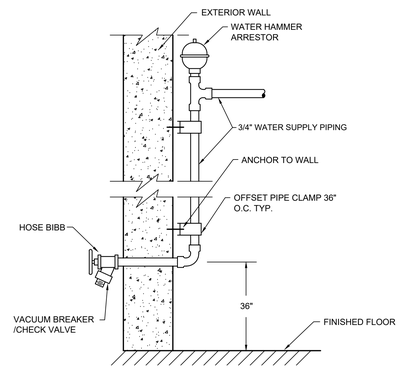
2 / P101 Pipe Penetrations Detail
N.T.S.



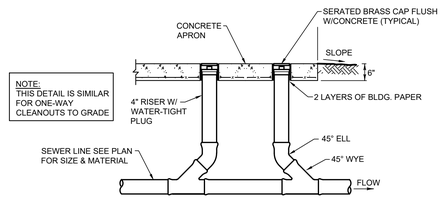
5 / P101 Typical Shared Trench Detail
N.T.S.



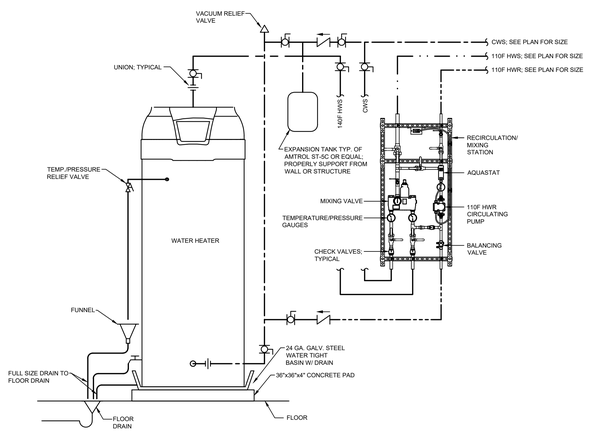
7 / P101 Accessible Lavatory Detail
Scale: None



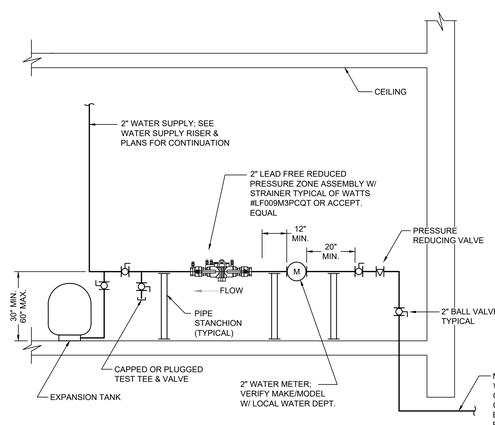
6 / P101 Non-Freeze Hose Bibb Detail
N.T.S.



8 / P101 Double Cleanout To Grade
N.T.S.



9 / P101 Typical Water Heater Detail
N.T.S.



10 / P101 Domestic Water Service Detail
N.T.S.

Plumbing Legend:

	DOMESTIC COLD WATER SUPPLY
	110 °F DOMESTIC HOT WATER SUPPLY
	140 °F DOMESTIC HOT WATER SUPPLY
	HOT WATER RETURN
	SANITARY SEWER, ABOVE GRADE
	SANITARY SEWER, BELOW GRADE
	GREASE WASTE, BELOW GRADE
	PLUMBING VENT
	STORM WATER, ABOVE GRADE
	STORM WATER, BELOW GRADE
GAS GAS	NATURAL GAS PIPING
	DIRECTION OF PIPE SLOPE (DOWN)
	CONCENTRIC REDUCER OR INCREASER
	ECCENTRIC REDUCER
	TOP CONNECTION, 45° OR 90°
	BOTTOM CONNECTION, 45° OR 90°
	SIDE CONNECTION
	CAPPED OUTLET
	RISE OR DROP IN PIPE
	UNION
	PIPE UP
	PIPE DOWN
	POINT OF CONNECTION BETWEEN NEW AND EXISTING WORK
	STRAINER
	HOSE BIB
	SOLENOID VALVE
	GATE VALVE
	GLOBE VALVE
	CHECK VALVE
	BUTTERFLY VALVE
	FULL PORT BALL VALVE
	PRESSURE GAUGE
	PRESSURE REDUCING VALVE (PRV)
	DRAIN VALVE
	FLEXIBLE PIPING CONNECTION
C.O.	CLEANOUT
W.C.O.	WALL CLEANOUT
F.C.O.	FLOOR CLEANOUT
C.O.T.G.	CLEANOUT TO GRADE
D.C.O.T.G.	DOUBLE CLEANOUT TO GRADE
P-X	PLUMBING FIXTURE MARK

Plumbing Notes:

1. ALL MATERIALS AND EQUIPMENT ARE TO BE NEW, UNUSED, AND FREE FROM DEFECTS OF ANY KIND. THE BASIS OF QUALITY SHALL BE THE LATEST REVISION OF ASTM, ANSI, OR OTHER ACCEPTABLE STANDARDS.
2. THESE DRAWINGS ARE DIAGRAMMATIC, AND INDICATE GENERAL ARRANGEMENT OF WORK. THE CONTRACTOR SHALL BE RESPONSIBLE TO HAVE REVIEWED THE SITE FOR HIS WORK PRIOR TO HAVING SUBMITTED HIS PROPOSAL. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR CONDITIONS FOUND DURING THE COURSE OF THE CONTRACT.
3. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH THAT OF ALL OTHER TRADES.
4. ALL CUTTING, PATCHING, FIRE-STOPPING, AND SURFACE RESTORATION IN CONNECTION WITH THIS TRADE SHALL BE COMPLETED BY THIS CONTRACTOR.
5. THIS CONTRACTOR SHALL PAY ALL FEES, GIVE ALL NOTICES, FILE ALL NECESSARY DRAWINGS, AND OBTAIN ALL PERMITS, INSPECTIONS AND CERTIFICATES OF APPROVAL REQUIRED IN CONNECTION WITH WORK UNDER THIS CONTRACT.
6. ALL WORK IN ASSOCIATION WITH THIS CONTRACT SHALL BE COMPLETED IN STRICT COMPLIANCE WITH THE 2020 BUILDING CODE OF NEW YORK STATE, 2020 PLUMBING CODE OF NEW YORK STATE, 2020 FUEL GAS CODE OF NEW YORK STATE & 2020 ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK STATE.
7. WHERE THE PROJECT INVOLVES A GAS SERVICE, THIS CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COORDINATION, APPLICATIONS AND FEES OF ALL WORK ASSOCIATED WITH THE LOCAL GAS UTILITY COMPANY. ALL WORK INVOLVING THE GAS UTILITY COMPANY SHALL BE COMPLETED IN ACCORDANCE WITH THEIR REGULATIONS AND GUIDELINES.
8. ALL DOMESTIC COLD AND HOT WATER PIPING AND FITTINGS ARE TO BE INSULATED WITH 1" THICK RIGID ONE-PIECE MOLDED SECTIONAL FIBERGLASS PIPE COVERING WITH UNIVERSAL JACKET. ALL JOINTS ARE TO BE COMPLETELY SEALED A MINIMUM OF 6" BEYOND JOINT ENDS.
9. ALL PIPING SHALL BE PROPERLY SUPPORTED AND ROUTED PARALLEL OR PERPENDICULAR TO BUILDING WALLS. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL SUPPORT HANGERS AND MISCELLANEOUS METALS REQUIRED FOR PROPER INSTALLATION OF WORK.
10. ALL EXPOSED PIPING, FITTINGS, TRAPS, ESCUTCHEONS, VALVES, ETC. SHALL BE CHROME PLATED.
11. SLOPE SANITARY DRAINAGE PIPING 2" DIAMETER AND SMALLER NOT LESS THAN 1/4" PER FOOT. SLOPE SANITARY DRAINAGE PIPING OVER 2" DIAMETER NOT LESS THAN 1/8" PER FOOT.
12. INSTALL A CLEANOUT AT THE BASE OF EACH SOIL STACK, AT EACH CHANGE IN DIRECTION, AT INTERVALS NOT OVER 50 FEET AND ELSEWHERE AS SHOWN ON DRAWINGS OR REQUIRED BY CODE.
13. PROVIDE EXPOSED PIPING WITH CHROME PLATED CAST BRASS ESCUTCHEON WITH SET SCREW WHERE PENETRATING FLOORS, CEILINGS, WALLS OR PARTITIONS.
14. TEST PIPING AND PROVE TIGHT FOR AT LEAST TWO HOURS IN ACCORDANCE WITH REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION AND/OR AS SPECIFIED. TEST SHALL BE PERFORMED IN THE PRESENCE OF THE ENGINEER AND LOCAL INSPECTOR. TEST SHALL BE REPEATED IF NECESSARY UNTIL FINAL APPROVAL OF SYSTEM IS OBTAINED.
    - 14.1. WATER & GAS PIPING TO BE AIR-PRESSURE TESTED TO 1-1/2 TIMES MAXIMUM WORKING PRESSURE.
    - 14.2. DRAINAGE, WASTE & VENT PIPING TO BE TESTED BY FILLING THE SYSTEM WITH WATER TO 10-FEET ABOVE HIGHEST POINT.
15. SUPPORT HORIZONTAL PIPING UTILIZING A SPACING PER PIPING MANUFACTURER'S REQUIREMENTS.
16. INSTALL VALVES ON THE ENTIRE DISTRIBUTION SYSTEM, SO LOCATED AS TO GIVE COMPLETE CONTROL TO ALL FIXTURES AND EQUIPMENT.
17. INSTALL DRAIN VALVES AT BASE OF ALL RISERS AND AT LOW POINTS OF PIPING SYSTEM.
18. THE CONTRACTOR IS RESPONSIBLE TO TEST ALL EQUIPMENT, PIPING, FIXTURES, AND SYSTEMS INSTALLED UNDER THIS CONTRACT TO ENSURE PROPER OPERATION PRIOR TO FINAL ACCEPTANCE BY THE OWNER AND ENGINEER.
19. THE CONTRACTOR IS RESPONSIBLE TO DETERMINE WHETHER SPECIAL LICENSING IS REQUIRED IN ORDER TO PERFORM THE REQUIRED WORK IN THE MUNICIPALITY WHERE THE PROJECT IS LOCATED. IF THE CONTRACTOR CANNOT OBTAIN THE REQUIRED LICENSING TO COMPLETE THE WORK WITHIN THE PROJECT SCHEDULE, THEN THE CONTRACTOR SHALL NOT BE PERMITTED TO BID ON THIS PROJECT.
20. CONTRACTOR IS RESPONSIBLE TO CREATE AND SUBMIT RED-LINE "AS-BUILT" PLANS TO THE ENGINEER AT THE END OF THE PROJECT. AS-BUILT PLANS SHALL ACCURATELY REPRESENT THE SYSTEMS AS THEY WERE INSTALLED.

DRAINAGE NOTES:
1. DRAINAGE MUST BE PROVIDED TO ACCOMMODATE DISCHARGE DURING TESTING OR RELIEF VALVE DISCHARGE.
2. DISCHARGE FROM RELIEF VALVES MUST BE READILY VISIBLE. ADEQUATE LIGHTING MUST BE PROVIDED.
3. DISCHARGE PIPING FROM ANY RELIEF VALVE MUST TERMINATE AT LEAST 1" ABOVE GRADE OR RECEIVING RECEPTACLE.

BACKFLOW DEVICE INSTALLATION NOTES:
1. STRAINERS ARE RECOMMENDED PRIOR TO EACH BACKFLOW DEVICE ON NON-FIRE FIGHTING LINES ONLY. NO STRAINER IS TO BE USED ON A FIRE LINE WITHOUT INSURANCE UNDERWRITER APPROVAL.
2. ASSEMBLIES SHOULD BE SPECIFIED AND INSTALLED WITH MANUFACTURER SUPPLIED VALVES.
3. WATER LINES SHOULD BE THOROUGHLY FLUSHED BEFORE INSTALLATION OF DEVICE TO PREVENT DEBRIS FOULING THE DEVICE CHECK VALVES.
4. DEVICES MUST BE MOUNTED HORIZONTALLY UNLESS APPROVED FOR VERTICAL INSTALLATION.
5. ASSEMBLIES SHOULD NOT BE INSTALLED IN AREAS CONTAINING CORROSIVE OR TOXIC GASES WHICH COULD RENDER THE DEVICE INOPERABLE.
6. DUE TO INHERENT DESIGN OF RPZ ASSEMBLIES, FLUCTUATING SUPPLY PRESSURE ON A LOW FLOW CONDITION MAY CAUSE NUISANCE DRIPPING. INSTALLATION OF A SOFT SEATED CHECK VALVE AHEAD OF THE RPZ WILL OFTEN HOLD PRESSURE CONSTANT DURING PERIODS OF LOW FLOW.
7. THE INSTALLATION OF A DOUBLE CHECK VALVE DEVICE IS ACCEPTABLE FOR ANY NON-HAZARDOUS TENANT OCCUPANCY. IF A POTENTIALLY HAZARDOUS OCCUPANT (MEDICAL OFFICES, DRY CLEANERS, ETC.) TAKES TENANCY A REDUCED PRESSURE ZONE (RPZ) TYPE BACKFLOW DEVICE NEEDS TO BE INSTALLED IN LIEU OF A DOUBLE CHECK VALVE DEVICE AND ALL ORANGE COUNTY DOH INSTALLATION REQUIREMENTS MUST BE MET. IF AN RPZ IS REQUIRED TO BE INSTALLED, RE-APPROVAL FROM THE ORANGE COUNTY HEALTH DEPARTMENT IS REQUIRED.
8. THE INSTALLATION OF THE BACKFLOW PREVENTION DEVICE SHALL MEETING ALL STATE OF NEW YORK DEPARTMENT OF HEALTH (NY DOH) REQUIREMENTS.
9. IT IS UNLAWFUL TO REMOVE THIS DEVICE FOR ANY REASON UNLESS NY-DOH IS NOTIFIED.
10. EACH BACKFLOW PREVENTION DEVICE SHALL BE TESTED ANNUALLY BY A STATE OF NEW YORK CERTIFIED TESTER.
11. THE ROOM WHERE THE BACKFLOW PREVENTION DEVICE IS TO BE LOCATED HAS HEATING AND LIGHTING.
12. STRAINERS ARE RECOMMENDED PRIOR TO EACH BACKFLOW DEVICE ON NON-FIRE FIGHTING LINES ONLY. NO STRAINER IS TO BE USED ON A FIRE LINE WITHOUT INSURANCE UNDERWRITER APPROVAL.
13. ASSEMBLIES SHOULD BE SPECIFIED AND INSTALLED WITH MANUFACTURER SUPPLIED VALVES.
14. THE DEVICE SHALL BE ADEQUATELY SUPPORTED AND/OR RESTRAINED TO PREVENT MOVEMENT.
15. MAINTAIN MIN. 12" CLEAR FROM REAR SIDE OF DEVICE TO ANY WALL OR OBSTRUCTION.
16. MAINTAIN MIN. 30" CLEAR FROM FRONT SIDE OF DEVICE TO ANY WALL OR OBSTRUCTION.
17. BETWEEN POINT OF ENTRY AND BACKFLOW DEVICE, PIPED MUST BE STENCILED "FEED TO BACKFLOW PREVENTER. DO NOT TAP OR CONNECT TO THIS LINE." AT 5' INTERVALS, AND AT WALL PENETRATION.

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LIBERTY CENTRAL SCHOOL DISTRICT MAINTENANCE BUILDING

Project Title

STATE OF NEW YORK · MATTHEW GEORGE BLAKE · 089039 · LICENSED PROFESSIONAL ENGINEER

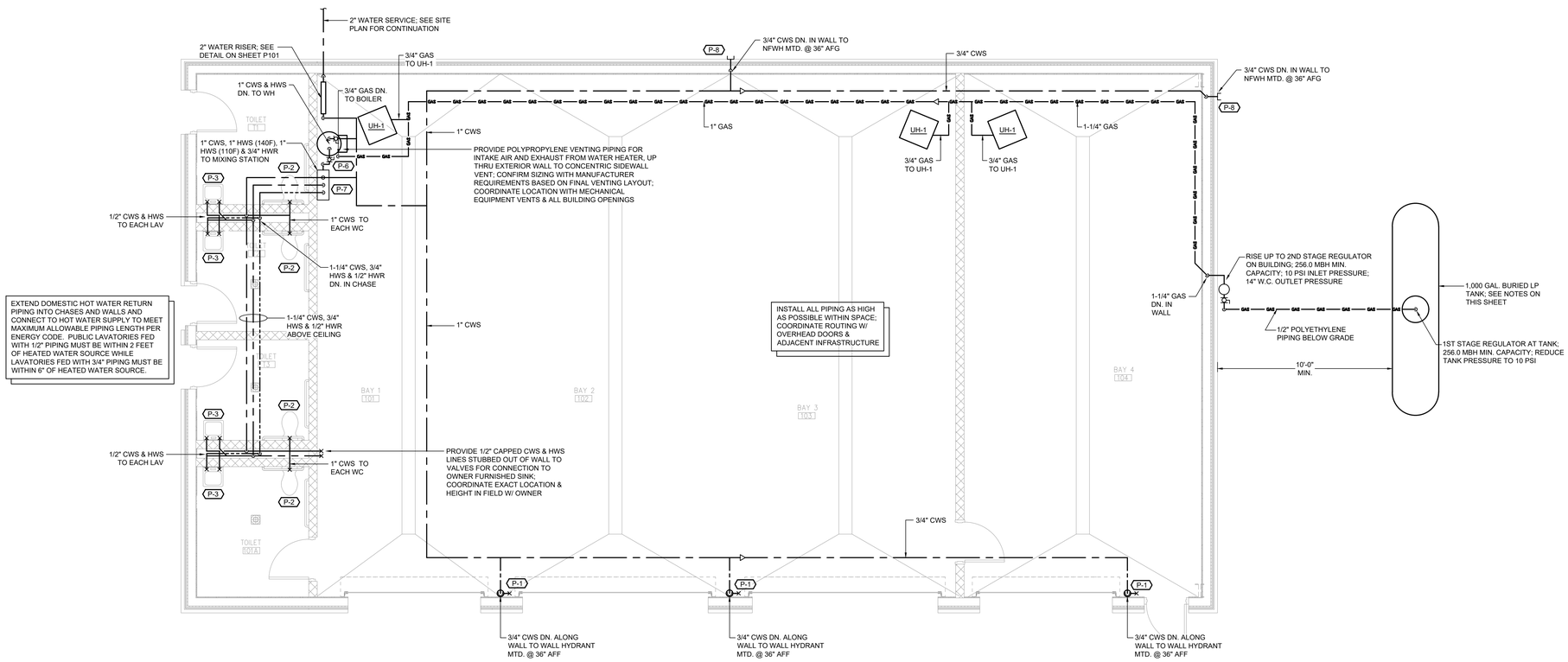
	DATE	DESCRIPTION

Drawn By:	BJK
Checked By:	BJK
Proj. #:	59-09-01-06-3-016-001
CSArch Proj. #:	203-2201
Construction Documents:	12/13/22

Sheet Title
PLUMBING NOTES, SCHEDULE, LEGEND & DETAILS

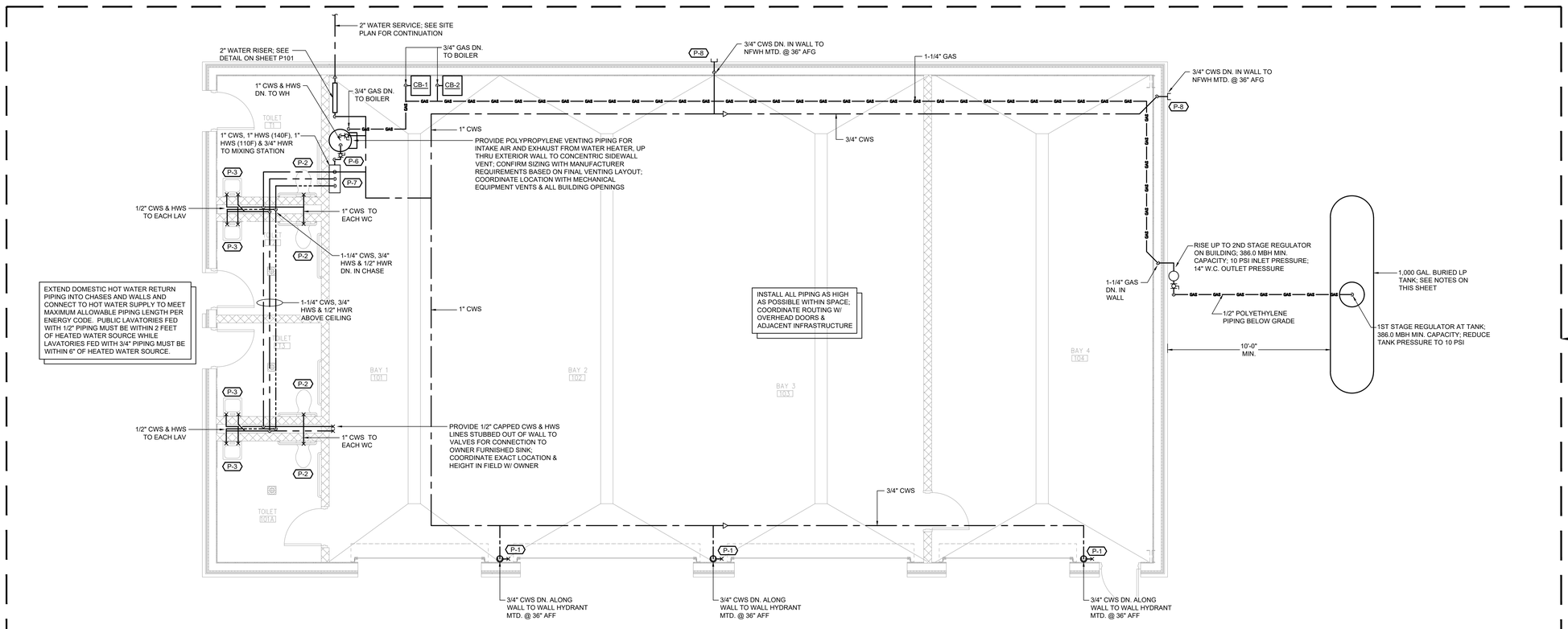
Sheet No.
MB P101

CONSTRUCTION DOCUMENTS



1 P201 Water & Gas Distribution Plan

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



ADD ALTERNATE NO. 03-001

2 P201 Water & Gas Distribution Plan - ALTERNATE

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

LP TANK NOTES:

- BURIED PROPANE TANK IS TO BE 1,000-GALLONS IN VOLUME, AND IS TO BE DESIGNED AND FABRICATED IN ACCORDANCE WITH ASME RULES FOR CONSTRUCTION OF PRESSURE VESSELS, SECTION VIII, DIVISION 1 (YEAR OF LATEST REVISION), AND SHALL COMPLY WITH NFPA 58 (YEAR OF LATEST REVISION).
- THE TANK SHALL BE RATED FOR A DESIGN PRESSURE OF 17.6 BAR (250 PSI) AT -20°F TO 125°F.
- THE TANK SHALL BE REGISTERED WITH THE NATIONAL BOARD, AND SHALL BEAR A NATIONAL BOARD NUMBER ON THEIR DATA PLATE OR STAMPED INTO THE STEEL.
- THE TANK SHALL BEAR A DURABLE READY-TO-BURY COATING CONSISTING OF A PHENOLIC EPOXY POWDER COATING. THEY SHALL BE SHIPPED WITH SHIPPED VACUUM PRE-PURGED TO ENABLE SIMPLIFIED FIRST FILL OF THE VESSEL
- THE TANK IS TO BE FURNISHED WITH DUAL LIFTING LUGS, A GREEN COMPOSITE DOME, AND AN ANODE STUD ATTACHED TO RISER PIPE TO ENABLE EASE OF CATHODIC CONNECTION
- INSTALLATION MUST BE IN ACCORDANCE WITH NFPA 58
- THE RELIEF VALVE, FILLING CONNECTION & LIQUID FIXED MAXIMUM LEVEL GAUGE VENT CONNECTION AT THE CONTAINER MUST BE AT LEAST 10-FT FROM ANY EXTERIOR SOURCE OF IGNITION, OPENINGS INTO DIRECT-VENT APPLIANCES, OR MECHANICAL VENTILATION AIR INTAKES
- NO PART OF AN UNDERGROUND CONTAINER SHALL BE LESS THAN 10-FT FROM AN IMPORTANT BUILDING OR LINE OF ADJOINING PROPERTY
- GENERAL CONSTRUCTION CONTRACTOR IS RESPONSIBLE FOR ALL EXCAVATION, BACKFILL, COMPACTION & SURFACE RESTORATION
- 6" OF SAND BEDDING IS TO BE INSTALLED UNDER TANK
- THE ENTIRE HOLE IS TO BE BACKFILLED WITH SAND
- CATHODIC PROTECTION CONSISTING OF (2) 17-LB. ANODE BAGS CONNECTED TO EACH TANK & INSTALLED MIN. 2'-0" AWAY FROM TANK & LOW IN HOLE
- TOP OF TANK IS TO BE MIN. 6" BELOW FINISH GRADE
- FURNISH & INSTALL TANK DOME W/ 28" RISER HEIGHT & GRADE DOWNWARD AWAY FROM DOME
- NO PIPING JOINTS OR SPLICES ARE TO BE INSTALLED BELOW GRADE
- ALL VALVES & PIPING CONNECTIONS ARE TO BE INSTALLED ABOVE GRADE

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MEP / FP CONSULTING & ENGINEERING SERVICES

LIBERTY CENTRAL SCHOOL DISTRICT MAINTENANCE BUILDING

Project Title

STATE OF NEW YORK · MATTHEW GEORGE BLAKE · 089039 · LICENSED PROFESSIONAL ENGINEER

	DATE	DESCRIPTION

Drawn By:	BJK
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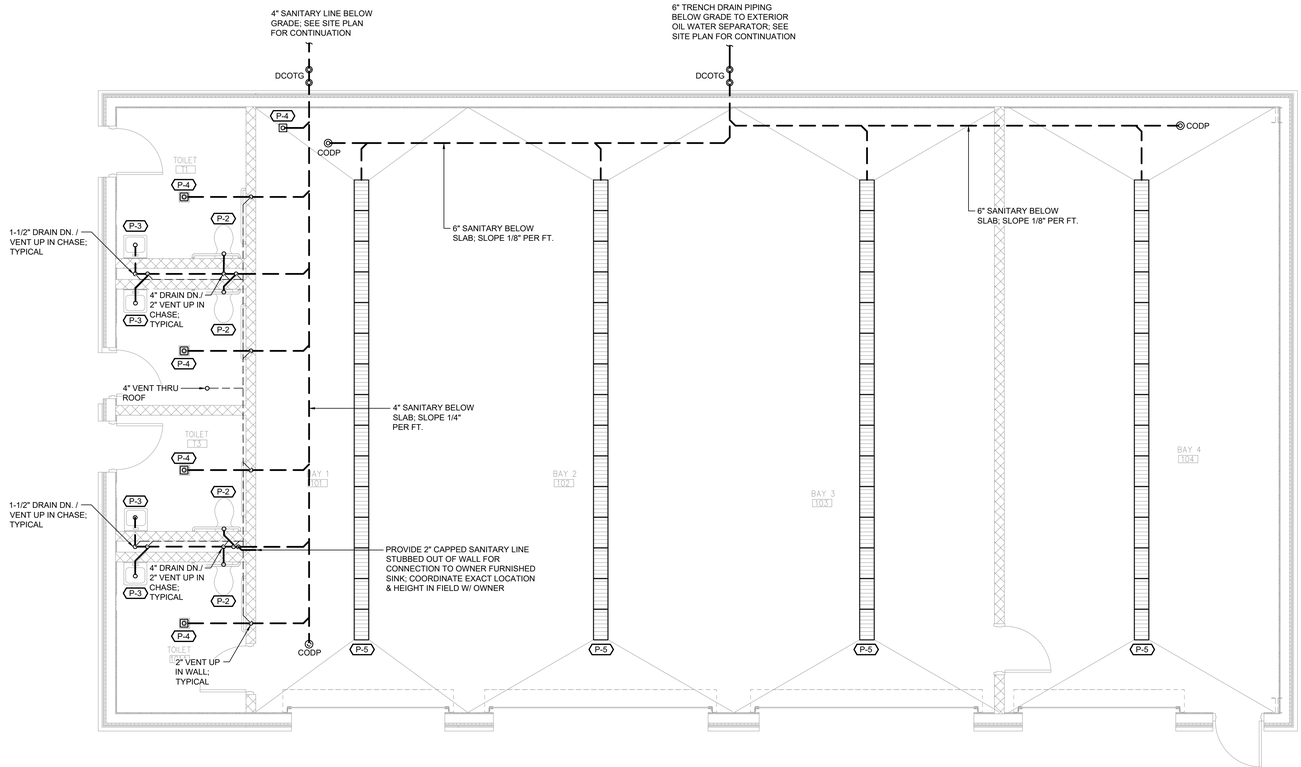
Sheet Title

WATER & GAS DISTRIBUTION PLAN

Sheet No.

MB P201

CONSTRUCTION DOCUMENTS



1 / P202 Sanitary Plan

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

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Project Title

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MAINTENANCE BUILDING

STATE OF NEW YORK MATTHEW GEORGE BLAKE 089039 LICENSED PROFESSIONAL ENGINEER

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Sheet Title

SANITARY PLAN

Sheet No.

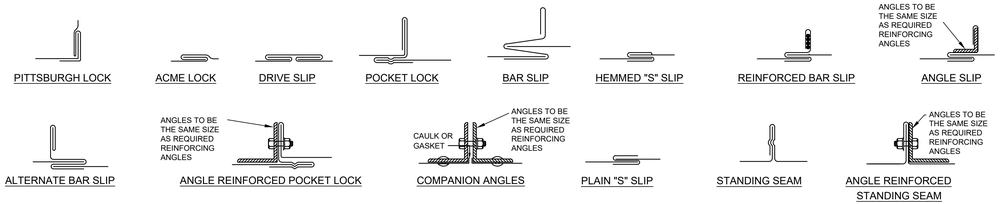
MB P202

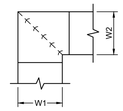
CONSTRUCTION DOCUMENTS

THICKNESS & REINFORCING SCHEDULE - * LOW PRESSURE DUCTWORK

* NOTE: LOW PRESSURE DUCTWORK SHALL BE DUCTWORK IN WHICH THE PRESSURE DOES NOT EXCEED 2" WATER GAUGE.

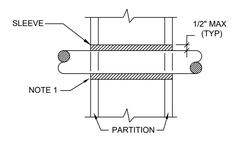
GREATEST DUCT DIMENSION	STEEL DUCTS U.S. STANDARD GAUGE	ALUMINUM DUCTS B & S GAUGE	LONGITUDINAL SEAM	TRANSVERSE JOINT SMALLEST DIMENSION	TRANSVERSE JOINT GREATEST DIMENSION	REINFORCING (ALL DUCTS 18" THRU 54" SHALL BE CROSSBROKEN)
12" OR LESS	26	24(0.020")	PITTSBURGH OR ACME LOCK	DRIVE SLIP OR POCKET LOCK OR BAR SLIP	PLAIN "S" SLIP OR POCKET LOCK OR BAR SLIP	NONE REQUIRED
13" THRU 18"	24	22(0.025")	PITTSBURGH OR ACME LOCK	DRIVE SLIP OR POCKET LOCK OR BAR SLIP	PLAIN "S" SLIP OR POCKET LOCK OR BAR SLIP	NONE REQUIRED
19" THRU 30"	24	22(0.025")	PITTSBURGH OR ACME LOCK	HEMMED "S" SLIP OR BAR SLIP OR DRIVE SLIP OR 1" POCKET LOCK	HEMMED "S" SLIP OR BAR SLIP OR 1" POCKET LOCK	IF TRANSVERSE JOINTS ARE LOCATED 4'-0" OR LESS ON CENTER NO REINFORCING IF ON 5'-0" CENTERS REINFORCE WITH 1"X1"X1/8" ANGLES AT 4 FT. O.C. FASTENED ON 8" CENTERS
31" THRU 42"	22	20(0.032")	PITTSBURGH OR ACME LOCK	DRIVE SLIP 18" OR LESS BAR SLIP REINFORCED BAR SLIP OR POCKET LOCK	BAR SLIP OR REINFORCED BAR SLIP OR POCKET LOCK	IF TRANSVERSE JOINTS ARE LOCATED 4'-0" OR LESS ON CENTER NO REINFORCING IF ON 5'-0" CENTERS REINFORCE WITH 1"X1"X1/8" ANGLES AT 4 FT. O.C. FASTENED ON 8" CENTERS
43" THRU 54"	22	20(0.032")	PITTSBURGH LOCK	1 1/4" BAR SLIP, OR REINFORCED BAR SLIP, OR 1 1/2" POCKET LOCK	1 1/4" BAR SLIP, OR REINFORCED BAR SLIP, OR 1 1/2" POCKET LOCK	IF TRANSVERSE JOINTS ARE LOCATED 4'-0" OR LESS ON CENTER NO REINFORCING IF ON 5'-0" CENTERS REINFORCE WITH 1"X1"X1/8" ANGLES AT 4 FT. O.C. FASTENED ON 8" CENTERS
55" THRU 60"	20	18(0.040")	PITTSBURGH LOCK	1 1/4" BAR SLIP, OR REINFORCED BAR SLIP, OR 1 1/2" POCKET LOCK	1 1/4" BAR SLIP, OR REINFORCED BAR SLIP OR 1 1/2" POCKET LOCK	IF TRANSVERSE JOINTS ARE LOCATED 4'-0" OR LESS ON CENTER NO REINFORCING IF ON 8'-0" CENTERS REINFORCE WITH 1"X1"X1/8" ANGLES AT 4 FT. O.C. FASTENED ON 8" CENTERS
61" THRU 84"	20	18(0.040")	PITTSBURGH LOCK	REINFORCED BAR SLIP, OR ANGLE SLIP, ALTERNATE BAR SLIP, OR ANGLE REINFORCED POCKET LOCK	REINFORCED BAR SLIP, OR ANGLE SLIP, ALTERNATE BAR SLIP, OR ANGLE REINFORCED POCKET LOCK	REINFORCE ALL SIDES OVER 60" WITH 1 1/2"X1 1/2"X1/8" ANGLES ON 2'-0" CENTERS. SIDES UNDER 60" NEED NO REINFORCING IF JOINTS ARE ON 4'-0" CENTERS. IF JOINTS ARE ON 8'-0" CENTERS REINFORCE WITH 1 1/2"X 1 1/2"X1/8" ANGLES ON 4'-0" CENTERS.
85" THRU 96"	18	16(0.051") (LONGITUDINAL SEAM MAY BE STANDING SEAM)	PITTSBURGH LOCK	1 1/2" COMPANOIN ANGLES, OR ANGLE REINFORCED POCKET LOCK, OR 1 1/2" ANGLE SLIP OR REINFORCED BAR SLIP	1 1/2" COMPANOIN ANGLES, OR ANGLE REINFORCED POCKET LOCK, OR 1 1/2" ANGLE SLIP OR REINFORCED BAR SLIP	REINFORCE ALL SIDES OVER 84" WITH 1 1/2"X1 1/2"X3/16" ANGLES ON 2'-0" CENTERS. SIDES 61" THRU 84" REINFORCE WITH 1 1/2"X1 1/2"X1/8" ANGLES ON 2'-0" CENTERS. SIDES 60" OR LESS NEED NO REINFORCING IF JOINTS ARE ON 4'-0" CENTERS. IF JOINTS ARE ON 8'-0" CENTERS REINFORCE WITH 1 1/2"X 1 1/2"X1/8" ANGLES ON 4'-0" CENTERS.
OVER 96"	18	16(0.051") (LONGITUDINAL SEAM MAY BE STANDING SEAM)	PITTSBURGH LOCK	2" COMPANOIN ANGLE, OR 2"X2"X1/4" ANGLE SLIP, OR 2"X2"X1/4" ANGLE REINFORCED POCKET LOCK OR REINFORCED BAR SLIP	2" COMPANOIN ANGLE, OR 2"X2"X1/4" ANGLE SLIP, OR 2"X2"X1/4" ANGLE REINFORCED POCKET LOCK OR REINFORCED BAR SLIP	REINFORCE ALL SIDES OVER 96" WITH 2"X2"X1/4" ANGLES ON 2'-0" CENTERS REINFORCE ALL SIDES 85" THRU 96" WITH 1 1/2"X1 1/2"X3/16" ANGLES ON 2'-0" CENTERS. REINFORCE ALL SIDES 61" THRU 84" WITH 1 1/2"X1 1/2"X1/8" ANGLES ON 2'-0" CENTERS. REINFORCE ALL SIDES UNDER 60" WITH 1 1/2"X1 1/2"X1/8" ANGLES IF JOINTS ARE 8'-0" ON CENTER. NO REINFORCING IF JOINTS ARE 4'-0" ON CENTER.





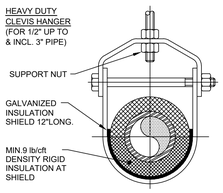
NOTE:
1. ALL VANED ELBOWS SHALL BE CONSTRUCTED AND INSTALLED AS DETAILED BY SMACNA.
2. WHEN W1 IS NOT EQUAL TO W2, VANE SHALL BE SINGLE VANE TYPE REGARDLESS OF W DIMENSION.
3. ALL SINGLE VANES SHALL HAVE A 2" RADIUS, 1-1/2" MAXIMUM SPACE BETWEEN VANES AND A 3/4" TRAILING EDGE.
4. WHEN W EQUALS W2 AND W1 IS GREATER THAN 20" VANES SHALL BE DOUBLE VANE TYPE.

2 M101 Ductwork Squared Elbow Detail
N.T.S.



NOTES:
1. AT FIRE RATED PARTITIONS, ADD ADDITIONAL LAYER OF FIRE SAFING INSULATION AROUND PENETRATION SO AS TO FILL CAVITY.
2. DUCT AND PIPE PENETRATIONS THRU CORRIDOR WALLS ABOVE THE CEILING ARE TO BE FIRE STOPPED AROUND THE PENETRATION.

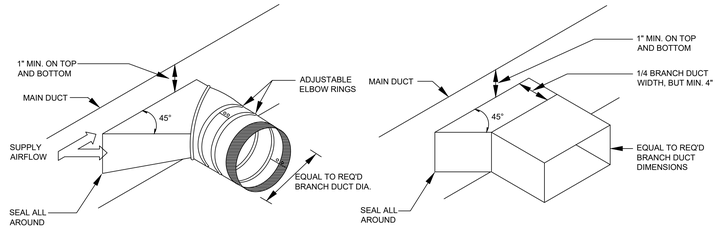
3 M101 Pipe Penetrations Detail
N.T.S.



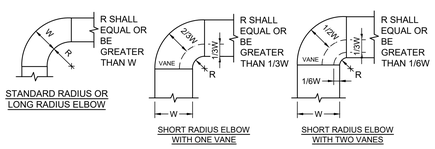
NOTES:
1. PIPE 8" AND LARGER SHALL HAVE ROLLER SUPPORTED WITH DUAL RODS.
2. FOR CHW SERVICE OVER 3" REPLACE SADDLE WITH 12" LONG 14 GA SHIELD WITH RIGID INSULATION BETWEEN PIPE AND SHIELD.

PIPE Ø (IN.)	MAX. SPACING BETWEEN HANGERS (FT.)			MIN. ROD SIZE (IN.)
	STEEL PIPE	COPPER PIPE	CPVC	
1/2 THRU 1	7	5	5	3/8
1-1/2 THRU 2	9	8	6	3/8
2-1/2	11	9	7.5	1/2
3	12	10	7.5	1/2
4	14	12	8.5	5/8
6	17	14	9	3/4
8	19	16	10	7/8
10	22	18	10.5	7/8

1 M101 Pipe Hanger Support
N.T.S.

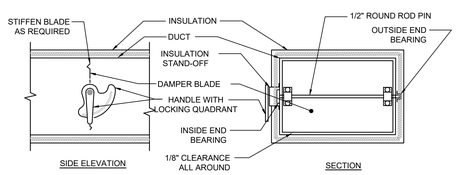


4 M101 Typical Branch Take-Off Fitting Detail
N.T.S.



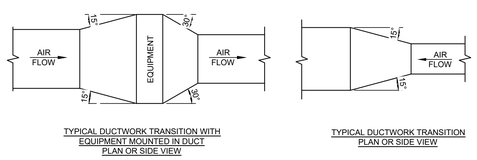
NOTE:
1. THE INTERIOR SURFACE OF ALL RADIUS ELBOWS SHALL BE MADE ROUND.
2. ALL STANDARD RADIUS ELBOWS CAN BE SUBSTITUTED WITH SHORT RADIUS ELBOWS. ALL SHORT RADIUS ELBOWS SHALL HAVE VANES. VANES SHALL BE CONSTRUCTED, SUPPORTED AND FASTENED AS RECOMMENDED BY SMACNA.

5 M101 Ductwork Radius Elbow Detail
N.T.S.



NOTE:
1. DELETE INSULATION STAND-OFF ON DUCTWORK WITHOUT EXTERIOR INSULATION.
2. DETAIL SHOWS SINGLE-BLADE DAMPER. DAMPER INSTALLATION SHALL BE SIMILAR FOR MULTI-BLADE DAMPERS & ROUND DAMPERS.

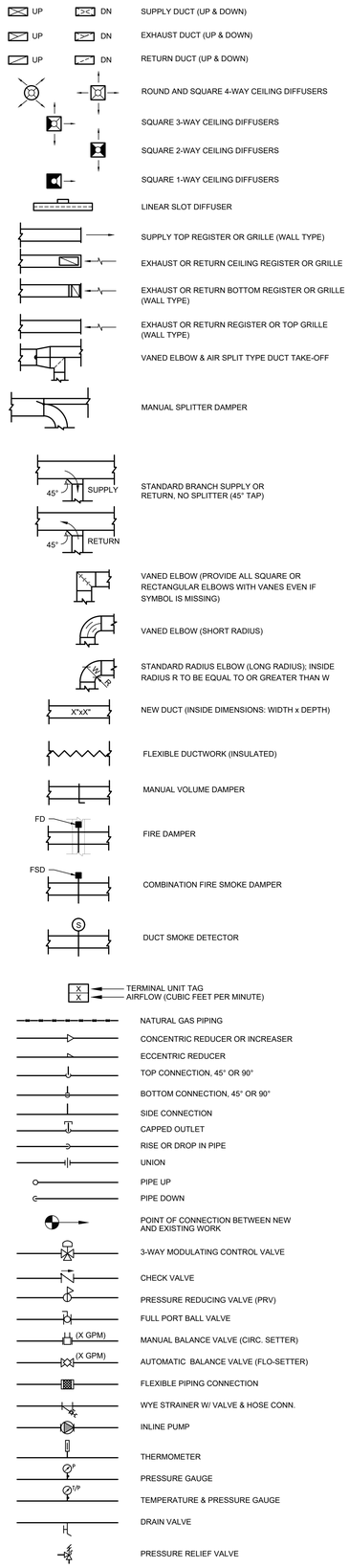
6 M101 Ductwork Volume Damper Detail
N.T.S.



NOTE:
UNLESS OTHERWISE INDICATED ON PLANS, MAXIMUM ANGLES SHOWN SHALL APPLY.

7 M101 Ductwork Transition Detail
N.T.S.

Mechanical Legend :



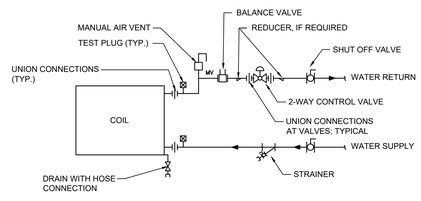
Mechanical Notes:

1. ALL MATERIALS AND EQUIPMENT ARE TO BE NEW, UNUSED, AND FREE FROM DEFECTS OF ANY KIND. THE BASIS OF QUALITY SHALL BE THE LATEST REVISION OF ASTM, ANSI, OR OTHER ACCEPTABLE STANDARDS.
2. THESE DRAWINGS ARE DIAGRAMMATIC, AND INDICATE GENERAL ARRANGEMENT OF WORK. THE CONTRACTOR SHALL BE RESPONSIBLE TO HAVE REVIEWED THE SITE FOR HIS WORK PRIOR TO HAVING SUBMITTED HIS PROPOSAL. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR CONDITIONS FOUND DURING THE COURSE OF THE CONTRACT.
3. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH THAT OF ALL OTHER TRADES.
4. ALL WORK INCLUDING LABOR AND MATERIALS SHALL BE FULLY GUARANTEED FOR ONE (1) YEAR FROM THE DATE OF PAYMENT AND FINAL ACCEPTANCE BY THE OWNER AND ENGINEER.
5. ALL CUTTING, PATCHING, FIRE-STOPPING, AND SURFACE RESTORATION IN CONNECTION WITH THIS TRADE SHALL BE COMPLETED BY THIS CONTRACTOR.
6. A MINIMUM OF FOUR (4) COPIES OF SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO ORDERING AND INSTALLATION OF THE EQUIPMENT AND/OR MATERIALS. BY SUBMITTING SHOP DRAWINGS, THE CONTRACTOR REPRESENTS THAT ACTUAL FIELD CONDITIONS ARE VERIFIED BY HIM AND ARE REFLECTED ON HIS SUBMITTALS.
7. THIS CONTRACTOR SHALL PAY ALL FEES, GIVE ALL NOTICES, FILE ALL NECESSARY DRAWINGS, AND OBTAIN ALL PERMITS, INSPECTIONS AND CERTIFICATES OF APPROVAL REQUIRED IN CONNECTION WITH WORK UNDER THIS CONTRACT.
8. ALL WORK IN ASSOCIATION WITH THIS CONTRACT SHALL BE COMPLETED IN STRICT COMPLIANCE WITH THE 2020 BUILDING CODE OF NEW YORK STATE, 2020 MECHANICAL CODE OF NEW YORK STATE & 2020 ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK STATE.
9. ALL HYDRONIC HOT WATER PIPING AND FITTINGS ARE TO BE INSULATED WITH A MINIMUM OF R-3 INSULATION. ALL JOINTS ARE TO BE COMPLETELY SEALED A MINIMUM OF 6" BEYOND JOINT ENDS.
10. ALL PIPING SHALL BE PROPERLY SUPPORTED AND ROUTED PARALLEL OR PERPENDICULAR TO BUILDING WALLS. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL SUPPORT HANGERS AND MISCELLANEOUS METALS REQUIRED FOR PROPER INSTALLATION OF WORK.
11. ALL PIPING SHALL BE PITCHED SUCH THAT AIR IN THE SYSTEM CAN BE VENTED THROUGH MANUAL AIR VENTS.
12. TEST PIPING AND PROVE TIGHT FOR AT LEAST TWO HOURS TO TWICE THE SYSTEM WORKING PRESSURE. TEST SHALL BE PERFORMED IN THE PRESENCE OF THE ENGINEER AND LOCAL INSPECTOR. TEST SHALL BE REPEATED IF NECESSARY UNTIL FINAL APPROVAL OF SYSTEM IS OBTAINED.
13. SUPPORT HORIZONTAL PIPING UTILIZING A SPACING PER PIPING MANUFACTURER'S REQUIREMENTS.
14. INSTALL VALVES ON THE ENTIRE DISTRIBUTION SYSTEM, SO LOCATED AS TO GIVE COMPLETE CONTROL TO ALL FIXTURES AND EQUIPMENT.
15. INSTALL DRAIN VALVES AT BASE OF ALL RISERS AND AT LOW POINTS OF PIPING SYSTEM. INSTALL MANUAL AIR VENT VALVE FACILITIES AT THE TOP OF ALL RISERS AND AT HIGH POINTS OF THE PIPING SYSTEM.
16. INSTALL ALL HYDRONIC PIPING AS HIGH AS POSSIBLE PROVIDING RISERS, DROPS AND OFFSETS TO CLEAR STRUCTURAL MEMBERS, LIGHT FIXTURES, OTHER PIPING, AND OTHER OBSTRUCTIONS. WHERE CONFLICTS ARISE, IT SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION PRIOR TO PROCEEDING.
17. THE ENTIRE HYDRONIC SYSTEM IS TO BE BALANCED TO WITHIN 10% OF THE SPECIFIED WATER FLOWRATE REQUIREMENTS. A CERTIFIED BALANCING REPORT AND VERIFICATION IS TO BE SUBMITTED TO THE ENGINEER PRIOR TO FINAL ACCEPTANCE.
18. ALL DUCTWORK IS TO BE CONSTRUCTED OF GALVANIZED SHEET STEEL (EXCEPT WHERE OTHERWISE SPECIFIED) WITH GAUGES, BRACING AND CONSTRUCTION IN ACCORDANCE WITH THE LATEST SMACNA DUCT MANUAL STANDARDS AND ALL OTHER AUTHORITIES HAVING JURISDICTION.
19. PROVIDE MANUAL DAMPERS AT EACH SPLIT OR TAP CONNECTION TO TRUNK DUCTS FOR BALANCING PURPOSES WHETHER OR NOT SPECIFICALLY SHOWN ON DRAWINGS. EACH DAMPER SHALL BE OF THE OPPOSED BLADE DAMPER TYPE INSTALLED WITH AN OPERATOR AND LOCKING DEVICE. ALL DAMPERS LOCATED ABOVE HARD OR INACCESSIBLE CEILINGS SHALL BE INSTALLED WITH REMOTE GEAR OPERATORS.
20. FURNISH & INSTALL FUSIBLE LINK FIRE DAMPERS AT ALL LOCATIONS WHERE DUCT PENETRATES FIRE-RATED FLOOR OR CEILING ASSEMBLY WHETHER OR NOT SPECIFICALLY SHOWN. INSTALL DUCTWORK CASING ACCESS DOORS AND FRAMES AHEAD OF EACH FIRE DAMPER FOR INSPECTION AND MAINTENANCE. DOORS SHALL BE A MINIMUM OF 20 GA. DOUBLE PANEL INSULATED TYPE.
21. INSTALL TURNING VANES ON ALL RECTANGULAR TURNS. TURNING VANES SHALL BE DOUBLE THICKNESS TYPE CONSTRUCTED IN ACCORDANCE WITH SMACNA MANUAL.
22. ROUND SHEET STEEL ELBOWS ARE TO BE INSTALLED AT THE DUCT CONNECTION TO ALL SUPPLY AIR DIFFUSERS. SHEET STEEL PLENUM BOXES ARE TO BE INSTALLED AT THE DUCT CONNECTION TO ALL RETURN AND EXHAUST AIR GRILLES. THE CONTRACTOR IS TO PAINT THE INSIDE OF THE SHEET STEEL PLENUM BOXES FLAT BLACK.
23. ALL SUPPLY AND RETURN DUCTWORK LOCATED IN UNCONDITIONED SPACES OR ABOVE CEILINGS SHALL BE INSULATED WITH A MINIMUM OF R-5 INSULATION. ALL DUCTWORK LOCATED OUTSIDE THE BUILDING ENVELOPE SHALL BE INSULATED WITH A MINIMUM OF R-8 INSULATION. INSULATION SHALL BE FIBERGLASS DUCT WRAP WITH VAPOR SEAL SECURELY TAPED AROUND DUCT. IF DUCT LINING IS TO BE USED, ALL DUCT SIZES SHOWN SHALL BE CONSIDERED TO BE INSIDE CLEAR DIMENSIONS.
24. INSTALL ALL DUCTWORK AS HIGH AS POSSIBLE PROVIDING RISERS, DROPS AND OFFSETS TO CLEAR STRUCTURAL MEMBERS, LIGHT FIXTURES, OTHER PIPING, AND OTHER OBSTRUCTIONS. WHERE CONFLICTS ARISE, IT SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION PRIOR TO PROCEEDING.
25. THE ENTIRE AIR DISTRIBUTION SYSTEM IS TO BE BALANCED TO WITHIN 10% OF THE SPECIFIED AIRFLOW REQUIREMENTS.
26. THE CONTRACTOR IS RESPONSIBLE TO TEST ALL EQUIPMENT, PIPING, FIXTURES, AND SYSTEMS INSTALLED UNDER THIS CONTRACT TO ENSURE PROPER OPERATION PRIOR TO FINAL ACCEPTANCE BY THE OWNER AND ENGINEER.
27. THE CONTRACTOR IS RESPONSIBLE TO DETERMINE WHETHER SPECIAL LICENSING IS REQUIRED IN ORDER TO PERFORM THE REQUIRED WORK IN THE MUNICIPALITY WHERE THE PROJECT IS LOCATED. IF THE CONTRACTOR CANNOT OBTAIN THE REQUIRED LICENSING TO COMPLETE THE WORK WITHIN THE PROJECT SCHEDULE, THEN THE CONTRACTOR SHALL NOT BE PERMITTED TO BID ON THIS PROJECT.
28. CONTRACTOR IS RESPONSIBLE TO CREATE AND SUBMIT RED-LINE "AS-BUILT" PLANS TO THE ENGINEER AT THE END OF THE PROJECT. AS-BUILT PLANS SHALL ACCURATELY REPRESENT THE SYSTEMS AS THEY WERE INSTALLED.

Mechanical Equipment:

T R PROGRAMMABLE THERMOSTAT TYPICAL OF WATTS RADIANT THERMOSTAT MODEL 519; PROVIDE W/ SLAB SENSOR 079; MTD. @ 5'-0" A.F.F.

T H PROGRAMMABLE THERMOSTAT TYPICAL OF HONEYWELL MODEL TH8321R1001; 7 DAY PROGRAMMABLE; MTD. @ 5'-0" A.F.F.



8 M101 Coil Piping Connection Detail
Scale: None

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LIBERTY CENTRAL SCHOOL DISTRICT
MAINTENANCE BUILDING

Project Title

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Sheet Title
MECHANICAL NOTES, LEGEND, SCHEDULE & DETAILS

Sheet No.
MB M101

CONSTRUCTION DOCUMENTS

ENERGY RECOVERY VENTILATOR SCHEDULE

EQUIPMENT TAG	MANUFACTURER (OR ACCEPT. EQUAL)	MODEL	FRESH AIR FLOW RATE (CFM)	EXHAUST AIR FLOW RATE (CFM)	ROOM EXH. AIR (°F)				OUTSIDE AIR (°F)				SUPPLY AIR (°F)				RECOVERY EFFECTIVENESS				ELECTRICAL DATA								WEIGHT (LB)	NOTES
					WINTER		SUMMER		WINTER		SUMMER		WINTER		SUMMER		SENSIBLE		TOTAL		MOTOR		VOLT.	PHASE	Hz.	MCA	MOCP			
					DB	WB	DB	WB	DB	WB	DB	WB	DB	WB	DB	WB	WINTER	SUMMER	WINTER	SUMMER	HP	FLA							
ERV-1	RENEWAIRE	HE1.5XINH	650	650	70	25	75	50	0.0	-1.5	86	71	53.9	41.6	77.5	65.4	77.2%	77.2%	75.9%	62.7%	1	4.4 x 2	208	1	60	9.9	15	504	FURNISH W/ MERV 8 FILTERS, 12" BACKDRAFT DAMPERS, LOUVERED WALL VENTS, DIGITAL TIME CLOCK & 4 kW ELECTRIC DUCT HEATER (208V, 3 PH., SCR, 12"x12")

AIR GRILLE/DIFFUSER SCHEDULE

EQUIPMENT TAG	MANUFACTURER (OR ACCEPT. EQUAL)	MODEL	AIR DEVICE TYPE	AIRFLOW (CFM)		MAX AIR PRESS. DROP (IN. W.C.)	MOUNTING	PANEL/FRAME SIZE (IN.)	NECK SIZE (IN.)	MAX NC	DAMPER	FINISH	NOTES
				MIN.	MAX.								
D-1	KRUEGER	PLQ-6-F22-12x12-00-00-44	SQUARE PLAQUE FACE DIFFUSER	50	175	0.10	SURFACE MOUNT	12"x12"	6"Ø	20	OBD	WHITE	-
D-2	KRUEGER	5DMGDR-H-10-6-10-01-81	DUCT MOUNTED SUPPLY GRILLE	0	200	0.10	DUCT MTD.	12"x8"	10"x6"	20	OBD	CLEAR ANOD.	-
EG-1	KRUEGER	S80H-6x6-F22-NONE-00-00-00-44	35° DEFLECTION RETURN GRILLE	0	125	0.08	SURFACE MTD.	8"x8"	6"x6"	20	-	WHITE	FURNISH & INSTALL FULL-SIZE INSULATED SHEET METAL BOX ON REAR OF GRILLE; PAINT INSIDE OF BOX FLAT BLACK
EG-2	KRUEGER	5DMGPR-H-10-6-10-01-81	DUCT MOUNTED EXHAUST GRILLE	0	200	0.10	DUCT MTD.	12"x8"	10"x6"	20	OBD	CLEAR ANOD.	-

LOUVER SCHEDULE

EQUIPMENT TAG	QTY.	MANUFACTURER (OR ACCEPT. EQUAL)	MODEL	AIR DEVICE TYPE	LOUVER SIZE			FREE AREA (SQ. FT.)	AIRFLOW (CFM)	VELOCITY (FT./MIN.)	MOUNTING	SCREEN	FINISH	NOTES
					WIDE	HIGH	DEPTH							
SL-1	1	RUSKIN	ELF6375DAX	STATIONARY LOUVER	36"	30"	6"	3.17	2,000	630.9	METAL WALL	YES	TBD	1, 2, & 3
CL-1	1	RUSKIN	ELC6375DAX	COMBINATION LOUVER	36"	30"	6"	3.17	2,000	630.9	METAL WALL	YES	TBD	1, 2, 3 & 4

1. COLOR TO BE COORDINATED WITH OWNER BEFORE ORDERING
2. FURNISH WITH INSECT-SCREEN OPTION.
3. FURNISH W/ PROPER MOUNTING HARDWARE.
4. FURNISH W/ 120VAC ACTUATOR.

EXHAUST FAN SCHEDULE

EQUIPMENT TAG	MANUFACTURER	MODEL	SERVICE	FAN C.F.M.	R.P.M.	EXTERNAL STATIC PRESSURE INCH H_2O	MOTOR				REMARKS
							POWER	VOLT.	PHASE	HZ.	
EF-1	LOREN COOK	150SQ17D	GARAGE EXHAUST	2,000	1,298	0.30	1.0 HP	208	3	60	FURNISH W/ BACKDRAFT DAMPER & VFD

VENTILATION SCHEDULE

SYSTEM	SPACE SERVED	SPACE TYPE	SPACE AREA (SQ. FT.)	OCCUPANTS PER 1000 SQ. FT.	# OF OCCUPANTS (NOTE 1)	CFM PER PERSON	CFM PER SQ. FT.	CALCULATED VENTILATION RATE (CFM)	PROVIDED VENTILATION RATE (CFM)	EA CFM PER FIXTURE	EA CFM PER SQ. FT.	MIN. EA RATE (CFM)	EA PROVIDED (CFM)
ERV-1	BAY 1-3	STORAGE/ GARAGE	1,885	-	-	-	0.12	226.2	250	-	0.75	1413.8	1450
	BAY 4	STORAGE/ GARAGE	710	-	-	-	0.12	85.2	100	-	0.75	532.5	550
	TOILET T1	BATHROOM	85	-	-	-	-	-	75	75	-	75	75
	TOILET T2	BATHROOM	65	-	-	-	-	-	75	75	-	75	75
	TOILET T3	BATHROOM	65	-	-	-	-	-	75	75	-	75	75
	TOILET 101A	BATHROOM	85	-	-	-	-	-	75	75	-	75	75

GAS UNIT HEATER SCHEDULE

EQUIPMENT TAG	MANUFACTURER (OR ACCEPT. EQUAL)	MODEL	AREA OF BUILDING SERVED	TOTAL AIRFLOW (CFM)	HEATING CAPACITY					ELECTRICAL DATA						TOTAL WEIGHT (LB)	NOTES
					GAS INPUT (MBH)	OUTPUT (MBH)	E.A.T. Db (°F)	L.A.T. Db (°F)	AFUE (%)	BLOWER FAN MOTOR HP	UNIT POWER CONNECTION						
											VOLT.	PHASE	Hz.	FLA	MOCP		
UH-1	REZNOR	UBZ60	BAYS	1012	60.0	49.2	50.0	125.0	82	1/3	120	1	60	7.1	15	103	FURNISH W/ HEATING THERMOSTAT & PROPANE CONVERSION KIT; MOUNT UNIT @ 10'-0" A.F.F.

HOT WATER UNIT HEATER SCHEDULE

EQUIPMENT TAG	MANUFACTURER (OR ACCEPT. EQUAL)	MODEL	AIRFLOW (CFM)	EFT (°F)	LFT (°F)	CAPACITY (MBH)	E.A.T. DB (°F)	L.A.T. DB (°F)	FPD (FT)	FLOW RATE (GPM)	MOTOR						NOTES
											NOM. H.P.	VOLT.	PHASE	HZ.	RPM	FLA	
UH-2	STERLING	HS-60	900	160	140	31.2	60	105	0.17	4.4	1/20	120	1	60	-	1.4	PROPERLY SUPPORT FROM STRUCTURE ABOVE; PROVIDE W/ CONTROL TRANSFORMER, FAN GUARD & DISCONNECT SWITCH

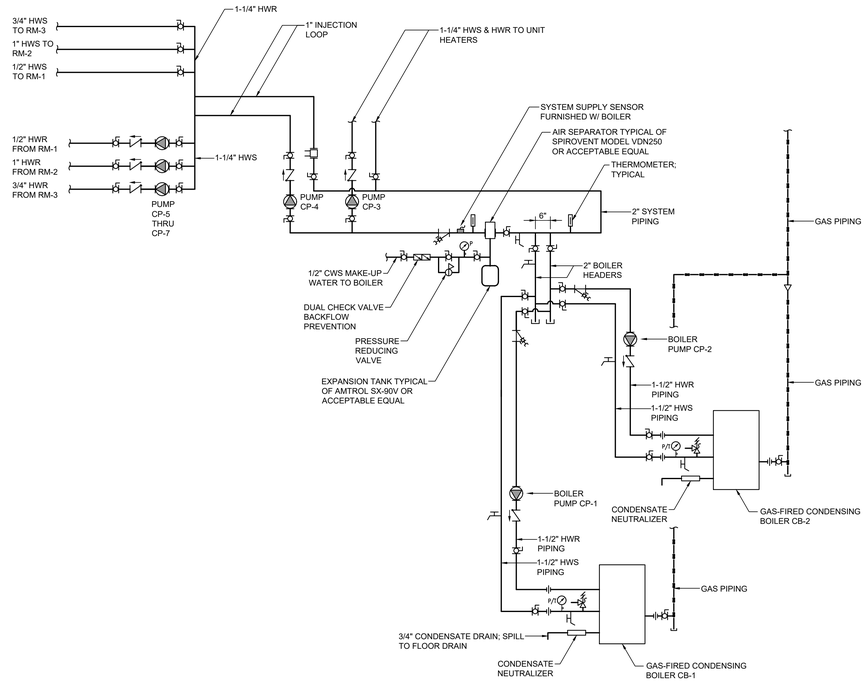
HOT WATER PUMP SCHEDULE

EQUIPMENT TAG	MANUFACTURER (OR ACCEPT. EQUAL)	MODEL	LOCATION	AREA SERVED	PUMP TYPE	CIRCULATING FLUID				MOTOR					NOTES
						FLUID	G.P.M.	HEAD (FT.)	TEMP. (°F)	NOM. H.P.	VOLT.	PHASE	HZ.	RPM	FLA	
CP-1	GRUNDFOS	UPMXL	MECHANICAL ROOM	BOILER PUMP	IN-LINE	HOT WATER	14.7	15.0	160	-	120	1	60	1160	1.4	FURNISHED W/ BOILER
CP-2	GRUNDFOS	UPMXL	MECHANICAL ROOM	BOILER PUMP	IN-LINE	HOT WATER	14.7	15.0	160	-	120	1	60	1160	1.4	FURNISHED W/ BOILER
CP-3	GRUNDFOS	MAGNA3 32-60F	MECHANICAL ROOM	UNIT HEATERS	IN-LINE	HOT WATER	13.2	18.0	160	-	120	1	60	VARI.	1.0	VARIABLE SPEED ECM
CP-4	GRUNDFOS	MAGNA3 32-60F	MECHANICAL ROOM	INJECTION PUMP	IN-LINE	HOT WATER	3.8	5.0	160	-	120	1	60	VARI.	1.0	VARIABLE SPEED ECM
CP-5	GRUNDFOS	ALPHA1 26-99F	MECHANICAL ROOM	RADIANT ZONE RM-1	IN-LINE	HOT WATER	1.0	3.1	125	-	120	1	60	VARI.	1.7	VARIABLE SPEED ECM
CP-6	GRUNDFOS	MAGNA3 32-60F	MECHANICAL ROOM	RADIANT ZONE RM-2	IN-LINE	HOT WATER	5.5	6.2	125	-	120	1	60	VARI.	1.0	VARIABLE SPEED ECM
CP-7	GRUNDFOS	ALPHA1 15-55FR	MECHANICAL ROOM	RADIANT ZONE RM-3	IN-LINE	HOT WATER	2.1	5.6	125	-	120	1	60	VARI.	0.65	VARIABLE SPEED ECM

CONDENSING BOILER SCHEDULE

EQUIPMENT TAG	MANUFACTURER	MODEL	INPUT (MBH)		THERMAL EFFICIENCY	OUTPUT (MBH)	NET AHRI RATING (MBH)	TURNDOWN RATIO	REMARKS
			MIN.	MAX.					
CB-1 & CB-2	LOCHINVAR	WHB155N	15.5	155	95%	144	125	10:1	FURNISH W/ ADD'L HIGH LIMIT & LOW WATER CUTOFF

ADD ALTERNATE
NO. 02-001



1 / M102 Hot Water System Piping Diagram
N.T.S.

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BLAKE ENGINEERING PLLC
MEP / FP CONSULTING & ENGINEERING SERVICES
Project Title
LIBERTY CENTRAL SCHOOL DISTRICT
MAINTENANCE BUILDING
STATE OF NEW YORK MATTHEW GEORGE BLAKE 099659 PROFESSIONAL ENGINEER

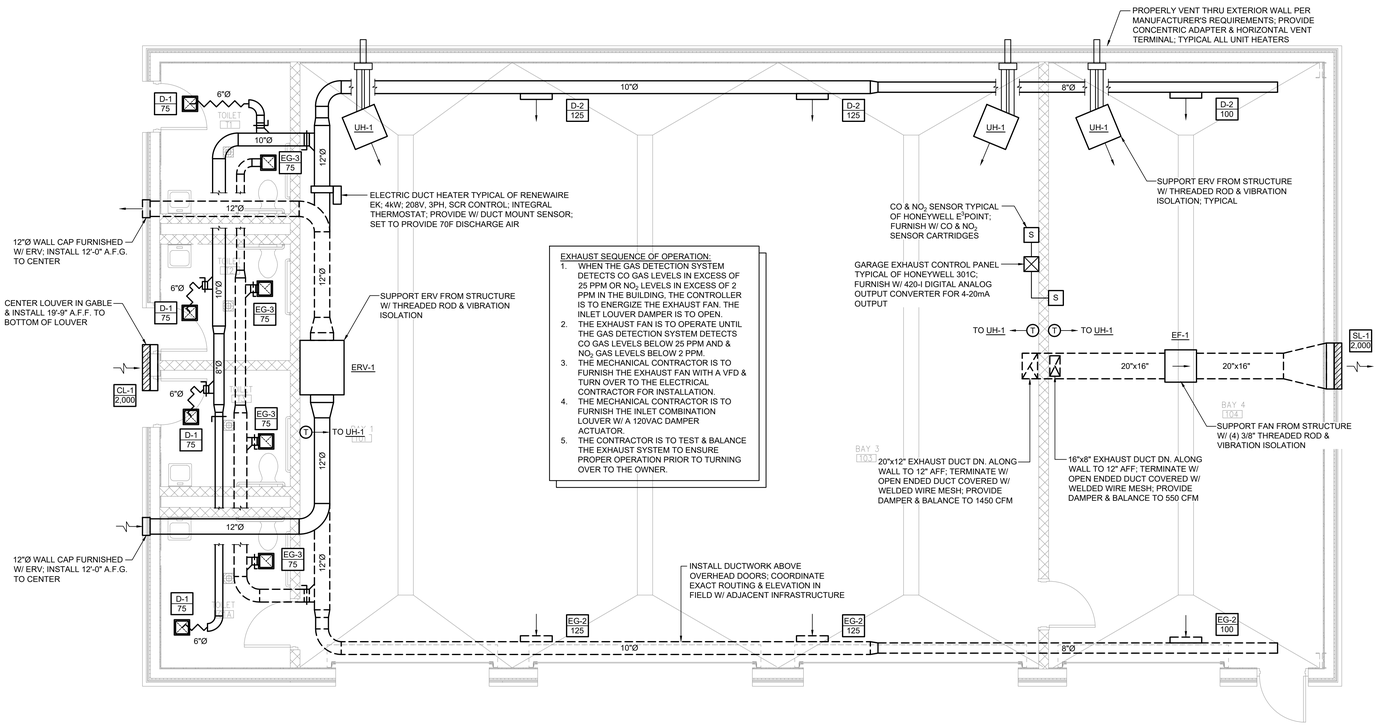
DATE	DESCRIPTION

Drawn By: BJK
Checked By: BJK
Proj. #: 59-09-01-06-3-016-001
CSArch Proj. #: 203-2201
Construction Documents: 12/13/22

Sheet Title
MECHANICAL SCHEDULES & PIPING DIAGRAM

Sheet No.
MB
M102

CONSTRUCTION DOCUMENTS



1 M201 **Mechanical Plan**

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

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Project Title

LIBERTY CENTRAL SCHOOL DISTRICT
MAINTENANCE BUILDING

MATTHEW GEORGE BLAKE 089683 LICENSED PROFESSIONAL ENGINEER STATE OF NEW YORK

DATE	DESCRIPTION

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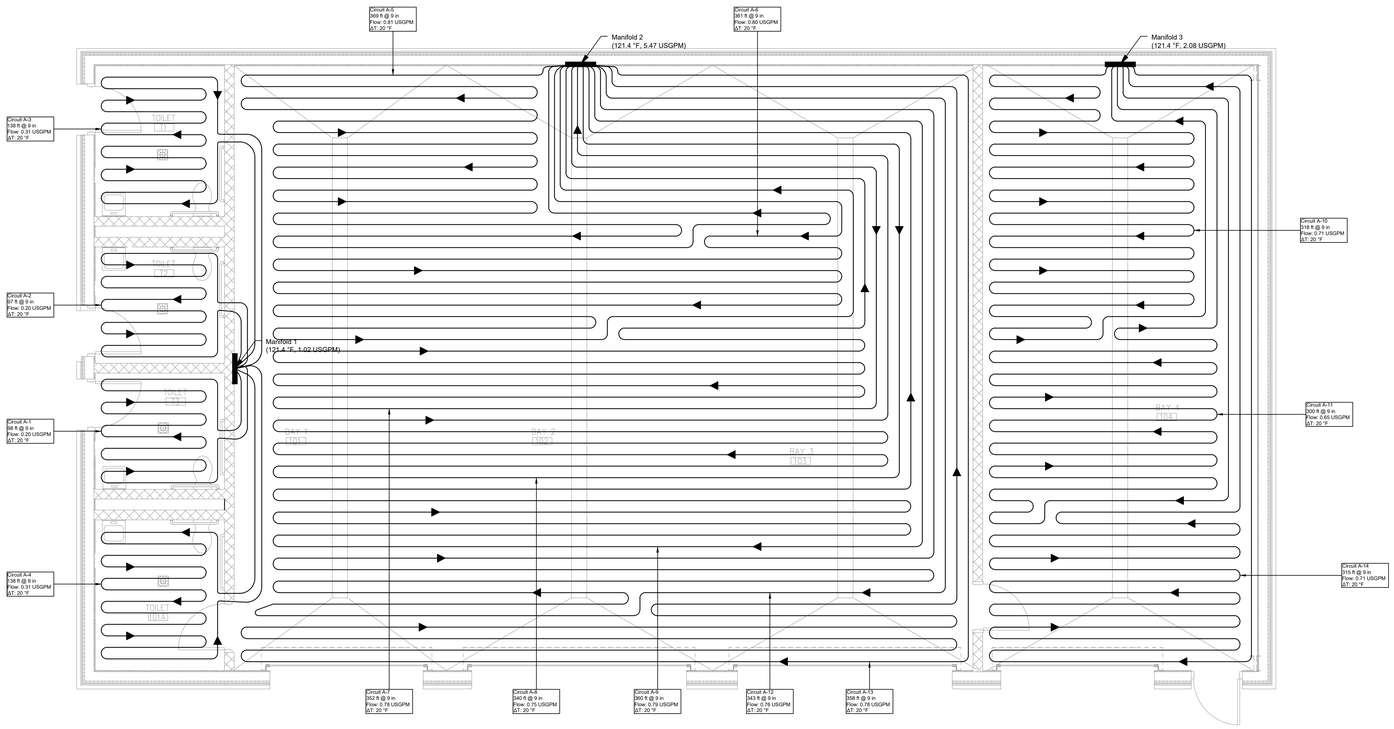
Sheet Title

MECHANICAL PLAN

Sheet No.

MB M201

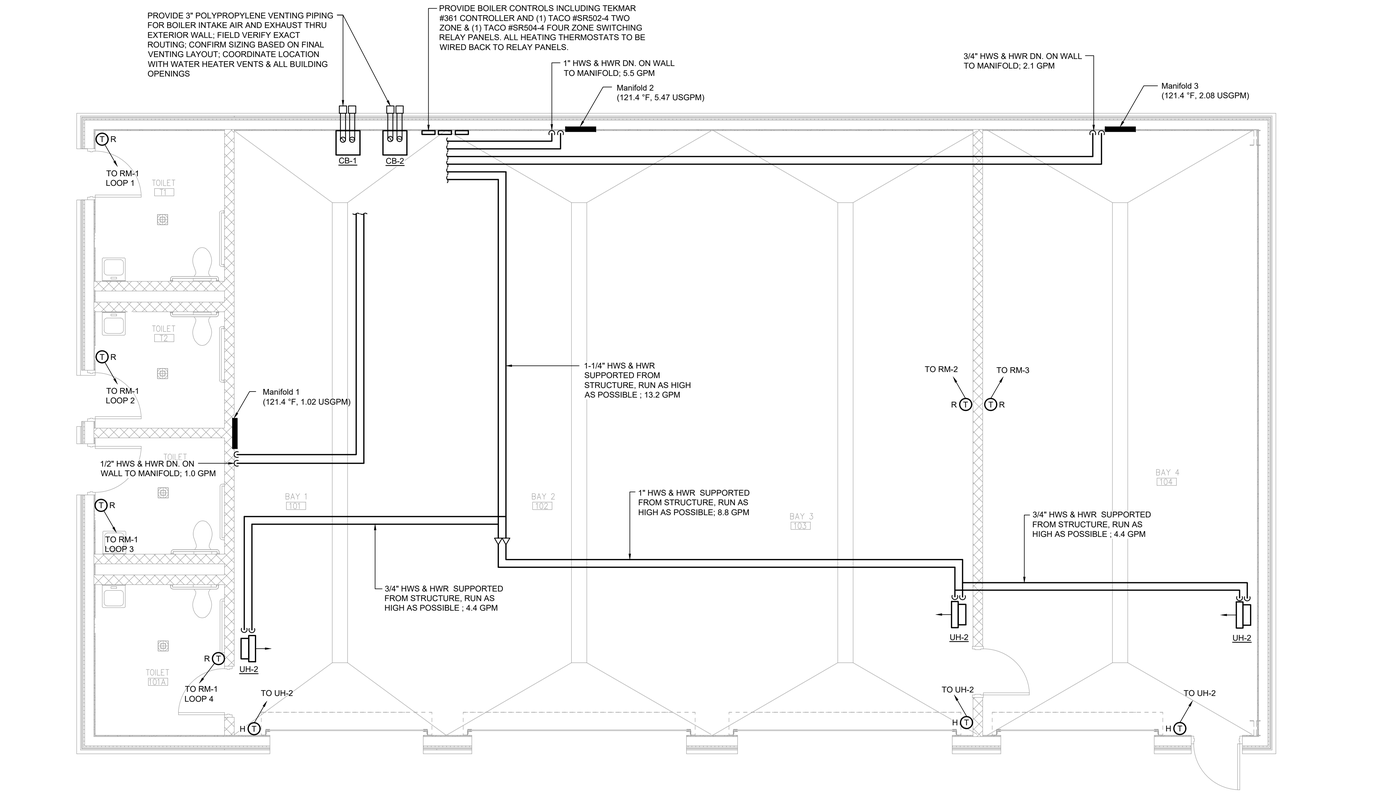
CONSTRUCTION DOCUMENTS



1 M201 **Radiant Heating Plan**
Scale: 1/4" = 1'-0"

Infloor Radiant Heating Notes:

1. RADIANT FLOOR TUBING LAYOUT IS PROVIDED FOR BIDDING PURPOSES & BASIS OF DESIGN ONLY. CONTRACTOR IS REQUIRED TO PROVIDE DETAILED SHOP DRAWING OF RADIANT FLOOR LAYOUT TO THE ENGINEER FOR REVIEW.
2. ALL TUBING IS TO BE TYPICAL OF WATTS RADIANTPEX+ BARRIER TUBING OR ACCEPTABLE EQUAL. ALL TUBING IS TO BE 5/8" IN SIZE.
3. ALL RADIANT MANIFOLD SETS ARE TO BE TYPICAL OF WATTS STAINLESS MANIFOLDS W/ SHUT OFF, BALANCING VALVES & FLOW METERS FOR EACH CIRCUIT.
4. EACH CIRCUIT SERVING INDIVIDUAL ROOMS IS TO BE EQUIPPED WITH A 24V POWERHEAD FOR ADDITIONAL ZONE CONTROL. FURNISH & INSTALL A HEATING THERMOSTAT TYPICAL OF WATTS DIGITAL THERMOSTAT OR ACCEPTABLE EQUAL IN EACH ROOM TO CONTROL THE INDIVIDUAL POWERHEADS. FURNISH THERMOSTAT WITH SLAB TEMPERATURE SENSOR.
5. MECHANICAL CONTRACTOR IS TO FURNISH & INSTALL UNDER-CONCRETE INSULATION UNDER THE ENTIRE RADIANT FLOORING SYSTEM. UNDERSLAB INSULATION SHALL HAVE A MINIMUM RATING OF R-10. SUBMIT PRODUCT DATA TO ENGINEER & ARCHITECT FOR DESIGN CONFORMANCE REVIEW PRIOR TO ANY WORK. PROPERLY OVERLAP & SEAL ALL JOINTS PER MANUFACTURER'S REQUIREMENTS. COORDINATE INSTALLATION W/ GENERAL CONSTRUCTION CONTRACTOR.
6. PROPERLY SECURE ALL RADIANT TUBING TO THE WELDED WIRE MESH OR REBAR IN CONCRETE FLOOR.
7. RIGID PVC TUBING ELBOWS TO BE USED AS SLEEVES FOR THE PEX TUBING WHEREVER IT PENETRATES THE CONCRETE FLOOR.
8. MECHANICAL CONTRACTOR IS TO PRESSURE TEST THE ENTIRE SYSTEM WITH AIR TO 1.5 TIMES OPERATING PRESSURE, AND THE SYSTEM IS TO REMAIN PRESSURIZED DURING THE CONCRETE POUR.
9. MECHANICAL CONTRACTOR IS TO COORDINATE THE ROUTING OF ALL RADIANT TUBING WITH THE GENERAL CONSTRUCTION CONTRACTOR TO ENSURE THAT THE TUBING DOES NOT INCUR DAMAGE DURING THE INSTALLATION OF THE WALL FRAMING.



2 M201 **Hydronic Plan**
Scale: 1/4" = 1'-0"

ADD ALTERNATE NO. 02-001

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LIBERTY CENTRAL SCHOOL DISTRICT MAINTENANCE BUILDING

Project Title

STATE OF NEW YORK MATTHEW GEORGE BLAKE 102610 LICENSED PROFESSIONAL ENGINEER

	DATE	DESCRIPTION

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Checked By:	BJK
Proj. #:	59-09-01-06-3-016-001
CSArch Proj. #:	203-2201
Construction Documents:	12/13/22

Sheet Title
HYDRONIC PLANS

Sheet No.
MB
M202

CONSTRUCTION DOCUMENTS

LIGHTING FIXTURE SCHEDULE

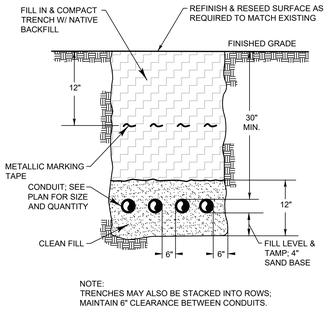
TAG	SYMBOL	MANUFACTURER & MODEL	TYPE	VOLTAGE	# OF LAMPS	LAMP WATTS	FIXTURE WATTS	MOUNTING	SIZE	NOTES
A	A	HE WILLIAMS HIGH BAY LED GLN-4-L150/84-DRV-UNV	LED	120	1	101.2	101.2	SUSPENDED	48"x8"x3"	4000K COLOR TEMPERATURE; FURNISH W/ CABLE SUSPENSION KIT; SUSPEND 18'-6" A.F.F.
B	B	HE WILLIAMS HIGH BAY LED GLN-4-L63/84-DRV-UNV	LED	120	1	42.3	42.3	SUSPENDED	48"x8"x3"	4000K COLOR TEMPERATURE; FURNISH W/ CABLE SUSPENSION KIT; SUSPEND 8'-6" ABOVE MEZZ. FLOOR
C	C	HE WILLIAMS LED WRAP 17-4-L55/840-AF-DRV-UNV	LED	120	1	42.3	42.3	SURFACE MTD.	48"x10"x3"	4000K COLOR TEMPERATURE
D	D	HE WILLIAMS LED WALLPACK WPCS-L44/840-BZ-PC-DIM-UNV	LED	120	1	42	42	SURFACE MTD.	8"x5"x3"x11"	4000K COLOR TEMP; MOUNT 15'-6" A.F.G.
F	F	HUBBELL LIGHTING LED EMERGENCY WALL PACK CUSO4DB-H-ND	LED	120	1	3.4	3.4	SURFACE MTD.	~9"x6"x3"	4000K COLOR TEMP.; FURNISH W/ PHOTO- SENSOR, HEATER & EMERGENCY BATTERY; MOUNT 8'-6" A.F.G.
-		HE WILLIAMS LED EMERGENCY LIGHT EMER/LED-WHT-SDT-D	LED	120	2	1.0	2.0	UNIVERSAL	-	90-MINUTE BATTERY BACKUP
-		HE WILLIAMS LED EXIT & EMERGENCY LIGHT EXIT/EM/LED-R-WHT-RC-SDT-D	LED	120	2	3	6	UNIVERSAL	-	90-MINUTE BATTERY BACKUP; PROVIDE W/ REMOTE HEAD MODEL WETRHL-T-WHT-HL-MV

ADD ALTERNATE NO. 04-001

120/208V 3Ø 4W+G, 22 kAIC — BUS RATING: 225A — 225A MAIN CIRCUIT BREAKER

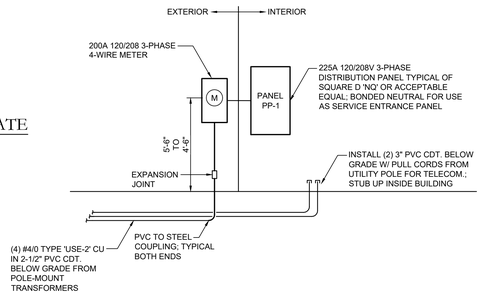
CONNECTED LOAD	CONDUCTORS	CKT. BREAKER AMPACITY	POSITION	L1 kVA	L2 kVA	L3 kVA	POSITION	CKT. BREAKER AMPACITY	CONDUCTORS	CONNECTED LOAD
			1	1.03 / 0.58			2			
ERV	(2) #12 CU & (1) #12 GND.	15	3		1.03 / 0.58		4	15	(2) #12 CU & (1) #12 GND.	EF-1
WATER HEATER	(2) #12 CU & (1) #12 GND.	20	5			0.53 / 0.58	6			
OVERHEAD DOOR	(2) #12 CU & (1) #12 GND.	15	7	0.50 / 0.50			8	15	(2) #12 CU & (1) #12 GND.	OVERHEAD DOOR
			9		0.50 / 0.50		10			
OVERHEAD DOOR	(2) #12 CU & (1) #12 GND.	15	11			0.50 / 0.50	12	15	(2) #12 CU & (1) #12 GND.	OVERHEAD DOOR
			13	0.50 / 0.50			14			
BOILER CB-1	(2) #12 CU & (1) #12 GND.	20	15		0.50 / 0.50		16	20	(2) #12 CU & (1) #12 GND.	BOILER CB-2
MIXING STATION	(2) #12 CU & (1) #12 GND.	20	17			1.20 / 0.50	18	20	(2) #12 CU & (1) #12 GND.	HVAC CTRLS & PUMPS
GAS DETECTION SYSTEM	(2) #12 CU & (1) #12 GND.	15	19	0.18 / 0.17			20	20	(2) #12 CU & (1) #12 GND.	LIGHTS
LIGHTS	(2) #12 CU & (1) #12 GND.	20	21		0.91 / 0.31		22	20	(2) #12 CU & (1) #12 GND.	LIGHTS
LIGHTS	(2) #12 CU & (1) #12 GND.	20	23			0.17 / 0.36	24	20	(2) #12 CU & (1) #12 GND.	RECEPTACLES
RECEPTACLES	(2) #12 CU & (1) #12 GND.	20	25	0.36 / 0.36			26	20	(2) #12 CU & (1) #12 GND.	RECEPTACLES
RECEPTACLES	(2) #12 CU & (1) #12 GND.	20	27		0.36 / 0.36		28	20	(2) #12 CU & (1) #12 GND.	RECEPTACLES
RECEPTACLES	(2) #12 CU & (1) #12 GND.	20	29			0.36 / 0.36	30	20	(2) #12 CU & (1) #12 GND.	RECEPTACLES
RECEPTACLES	(2) #12 CU & (1) #12 GND.	20	31	0.54 / 0.36			32	20	(2) #12 CU & (1) #12 GND.	RECEPTACLES
RECEPTACLES	(2) #12 CU & (1) #12 GND.	20	33		0.18 / 0.18		34	20	(2) #12 CU & (1) #12 GND.	RECEPTACLES
RECEPTACLES	(2) #12 CU & (1) #12 GND.	20	35			0.18 / 0.92	36	15	(2) #12 CU & (1) #12 GND.	UNIT HEATER
UNIT HEATER	(2) #12 CU & (1) #12 GND.	15	37	0.92 / 0.92			38	15	(2) #12 CU & (1) #12 GND.	UNIT HEATER
ELECTRIC WALL HEATER	(2) #12 CU & (1) #12 GND.	20	39		1.5 / 1.5		40	20	(2) #12 CU & (1) #12 GND.	ELECTRIC WALL HEATER
ELECTRIC WALL HEATER	(2) #12 CU & (1) #12 GND.	20	41			1.5 / 1.5	42	20	(2) #12 CU & (1) #12 GND.	ELECTRIC WALL HEATER
			43	1.33 /			44	20	-	SPARE
ELECTRIC DUCT HEATER	(3) #12 CU & (1) #12 GND.	15	45		1.33 /		46	20	-	SPARE
			47			1.33 /	48	20	-	SPARE
SPARE	-	20	49	/			50	20	-	SPARE
SPARE	-	20	51		/		52	20	-	SPARE
SPARE	-	20	53			/	54	20	-	SPARE
SQUARE 'D' NQ PANELBOARD W/ BOLT ON BREAKERS				8.75	10.24	10.49	29.48 kVA TOTAL			

1 E101 — New Panelboard PP-1
Scale: None



NOTE:
TRENCHES MAY ALSO BE STACKED INTO ROWS; MAINTAIN 6" CLEARANCE BETWEEN CONDUITS.

2 E101 — Typical Conduit Trench Detail
N.T.S.



3 E101 — Electric Riser Diagram
Scale: None

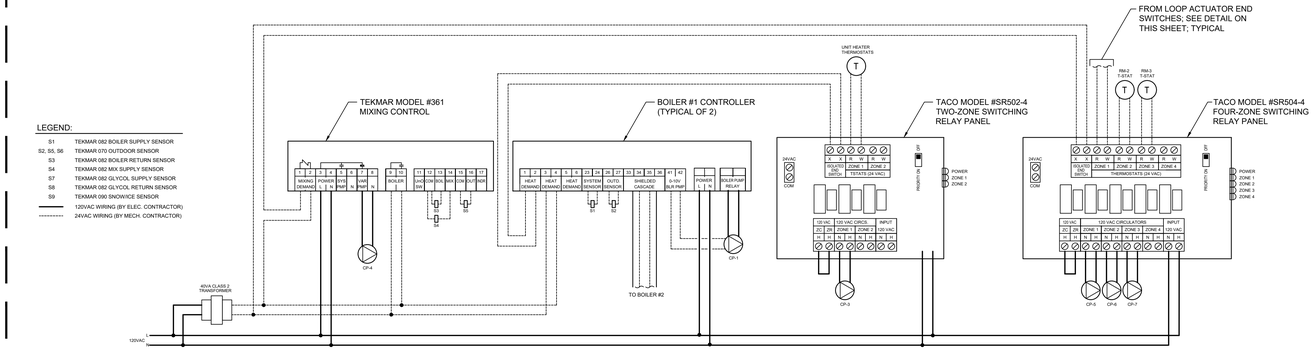
ELECTRICAL LEGEND:

- MOTOR
- EARTH GROUND
- JUNCTION BOX
- PB — PULL BOX
- FUSE WITH RATING
- MOLDED CASE CIRCUIT BREAKER
- DISCONNECT SWITCH, FUSED
- DISCONNECT SWITCH, UNFUSED
- STARTER, COMBINATION WITH DISCONNECT SWITCH
- STARTER OR MOTOR CONTROLLER
- M — METER
- 20A 120V DUPLEX CEILING MOUNTED RECEPTACLE
- 20A 120V DUPLEX WALL MOUNTED RECEPTACLE; 18" A.F.F. UNLESS OTHERWISE NOTED
- 20A 120V DUPLEX WALL MOUNTED RECEPTACLE WITH GROUND FAULT CIRCUIT INTERRUPTER
- 20A 120V QUADRAPLEX RECEPTACLE
- WALL MOUNTED SPECIAL PURPOSE RECEPTACLE
- USB — 20A 120V WALL MOUNTED USB CHARGER RECEPTACLE TYPICAL OF HUBBELL USB20X OR ACCEPTABLE EQUAL
- F — FLOOR BOX WITH STAINLESS COVER TYPICAL OF LEW EECTRIC #OB-1-SP OR ACCEPTABLE EQUAL; PUSH BUTTON OPEN; FULLY IP66 RATED WATER PROOF (WHEN IN CLOSED POSITION); W/ 20A 125V E60120 GFCI RECEPTACLE (UNLESS OTHERWISE NOTED)
- W — WALL PHONE OUTLET MTD. 48" A.F.F.; 3/4" EMT CDT. IN WALL TO ABOVE CEILING W/ PULL CORD
- WALL BOX FOR TELEVISION CONNECTION; 1-1/4" EMT CDT. IN WALL TO ABOVE CEILING W/ PULL CORD
- TELEPHONE/DATA COMMUNICATION BOX W/ (2) 3/4" EMT CDT. IN WALL TO ABOVE CEILING W/ PULL CORD; NO FACE PLATE
- #6 — BRANCH CIRCUIT HOMERUN; LINES INDICATE NUMBER OF CIRCUITS, NEUTRAL, AND SWITCH LEG CONDUCTORS; ONE SEPARATE GROUNDING CONDUCTOR SHALL BE PROVIDED FOR EACH HOMERUN; NOT SHOWN
- $2 — SWITCH
  BLANK = SINGLE POLE; 2 = DOUBLE POLE
  3 = THREE-WAY; 4 = FOUR-WAY
  D = DIMMER; K = KEY OPERATED
  P = WITH PILOT LIGHT; PB= PUSH BUTTON
  T = TIMER OPERATED; WP= WEATHER PROOF
  X = EXPLOSION PROOF; OC= OCCUPANCY SENSOR
- OS — DUAL TECHNOLOGY OCCUPANCY SENSOR
- DS — DAYLIGHT SENSOR
- HORN/STROBE DEVICE, ONE ASSEMBLY; MTD. 80" A.F.F. UNLESS OTHERWISE NOTED; 15 CANDELA UNLESS OTHERWISE NOTED
- STROBE DEVICE; MTD. 80" A.F.F. UNLESS OTHERWISE NOTED; 15 CANDELA UNLESS OTHERWISE NOTED
- MANUAL PULL STATION; MTD. 48" A.F.F.
- WATER FLOW SWITCH
- VALVE TAMPER SWITCH
- X — DETECTOR; LETTER INDICATES AS FOLLOWS:
  BLANK = SMOKE DETECTOR
  P = PHOTOELECTRIC SMOKE
  M = MULTIPLE STATION SMOKE ALARM
  D = PHOTOELECTRIC DUCT SMOKE DETECTOR
  FSD = DUCT SMOKE DETECTOR FOR FIRE SMOKE DAMPER
- HR — RATE OF RISE HEAT DETECTOR, 135°F
- CO — CARBON MONOXIDE DETECTOR
- FACP — ADDRESSABLE FIRE ALARM CONTROL PANEL
- FANP — FIRE ALARM ANNUNCIATOR PANEL
- RTS — REMOTE TEST SWITCH & LED FOR DUCT SMOKE DETECTORS
- R — FIRE ALARM RELAY

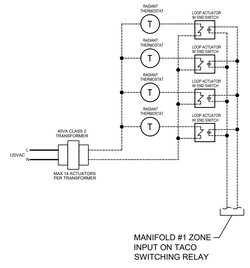
ELECTRICAL NOTES:

1. ALL MATERIALS AND EQUIPMENT ARE TO BE NEW, UNUSED, AND FREE FROM DEFECTS OF ANY KIND. THE BASIS OF QUALITY SHALL BE THE LATEST REVISION OF ASTM, ANSI, OR OTHER ACCEPTABLE STANDARDS.
2. THESE DRAWINGS ARE DIAGRAMMATIC, AND INDICATE GENERAL ARRANGEMENT OF WORK. THE CONTRACTOR SHALL BE RESPONSIBLE TO HAVE REVIEWED THE SITE FOR HIS WORK PRIOR TO HAVING SUBMITTED HIS PROPOSAL. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR CONDITIONS FOUND DURING THE COURSE OF THE CONTRACT.
3. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH THAT OF ALL OTHER TRADES.
4. ALL WORK INCLUDING LABOR AND MATERIALS SHALL BE FULLY GUARANTEED FOR ONE (1) YEAR FROM THE DATE OF PAYMENT AND FINAL ACCEPTANCE BY THE OWNER AND ENGINEER.
5. ALL CUTTING, PATCHING, FIRE-STOPPING, AND SURFACE RESTORATION IN CONNECTION WITH THIS TRADE SHALL BE COMPLETED BY THIS CONTRACTOR.
6. A MINIMUM OF FOUR (4) COPIES OF SHOP DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT FOR APPROVAL PRIOR TO ORDERING AND INSTALLATION OF THE EQUIPMENT AND/OR MATERIALS. BY SUBMITTING SHOP DRAWINGS, THE CONTRACTOR REPRESENTS THAT ACTUAL FIELD CONDITIONS ARE VERIFIED BY HIM AND ARE REFLECTED ON HIS SUBMITTALS.
7. THIS CONTRACTOR SHALL PAY ALL FEES, GIVE ALL NOTICES, FILE ALL NECESSARY DRAWINGS, AND OBTAIN ALL PERMITS, INSPECTIONS AND CERTIFICATES OF APPROVAL REQUIRED IN CONNECTION WITH WORK UNDER THIS CONTRACT.
8. EQUIPMENT AND MATERIALS FOR WHICH UNDERWRITERS LABORATORIES INC. (UL) PROVIDES PRODUCT LISTING SERVICE SHALL BE LISTED AND BEAR THE LISTING MARK.
9. ALL WORK IN ASSOCIATION WITH THIS CONTRACT SHALL BE COMPLETED IN STRICT COMPLIANCE WITH THE 2015 NATIONAL ELECTRIC CODE, 2020 BUILDING CODE OF NEW YORK STATE, 2020 FIRE CODE OF NEW YORK STATE & 2020 ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK STATE.
10. ALL NEW LIGHTING FIXTURES SHALL BE INSTALLED FULLY LAMPED AND OPERABLE. THE CONTRACTOR SHALL TURN OVER TO THE OWNER SPARE LAMPS OF EVERY TYPE ON THE PROJECT IN AN AMOUNT NOT LESS THAN 20% OF THE TOTAL NUMBER OF EACH TYPE (MINIMUM 1 PER TYPE).
11. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COORDINATION, APPLICATIONS AND FEES OF ALL WORK ASSOCIATED WITH THE LOCAL UTILITY COMPANY AND/OR THE TELEPHONE COMPANY. ALL WORK INVOLVING THE UTILITY COMPANY SHALL BE COMPLETED IN ACCORDANCE WITH THEIR REGULATIONS AND GUIDELINES.
12. ALL CONDUCTORS SHALL BE COPPER, SHALL NOT BE LESS THAN #12 AWG, AND SHALL NOT EXCEED 70 FEET FROM PANEL BOARD TO FURTHEST CONNECTION UNLESS OTHERWISE NOTED ON PLANS.
13. LIGHTING LOADS SHALL NOT BE COMBINED ON THE SAME CIRCUIT AS ANY OTHER ELECTRICAL LOADS.
14. CONTRACTOR SHALL BE RESPONSIBLE TO FURNISH & INSTALL ALL SMALL DETAILS AND INCIDENTAL WORK NOT SHOWN OR SPECIFIED, BUT WHICH CAN BE REASONABLY INFERRED AS REQUIRED FOR A COMPLETE AND OPERATING SYSTEM OF HIGH QUALITY MEETING ALL APPLICABLE CODES AND REGULATIONS.
15. FOR EACH NEW OR MODIFIED ELECTRICAL PANEL, THE CONTRACTOR SHALL PROVIDE A TYPE WRITTEN DIRECTORY CARD TO REFLECT ALL CIRCUITING. ADDITIONALLY, THE CONTRACTOR SHALL LABEL (WITH A PERMANENT MARKER OR LABEL) EACH RECEPTACLE ON THE INSIDE OF EACH FACE PLATE WITH PANEL AND CIRCUIT NUMBER DESIGNATION.
16. MINIMUM REQUIREMENT FOR EQUIPMENT GROUNDING SHALL BE GOVERNED BY THE NEC. ALL GROUNDS, BONDING, ETC. SHALL MEET THESE REQUIREMENTS. THE CONTRACTOR SHALL FURNISH AND INSTALL ANY AND ALL ITEMS NECESSARY TO MEET THESE REQUIREMENTS AT NO EXTRA COST, EVEN IF SUCH ITEMS ARE NOT DETAILED ON THE DRAWINGS.
17. ALL CONDUIT AND CABLE SHALL BE PROPERLY SUPPORTED AND ROUTED PARALLEL OR PERPENDICULAR TO BUILDING WALLS. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL SUPPORT HANGERS AND MISCELLANEOUS METALS REQUIRED FOR PROPER INSTALLATION OF WORK.
18. THE CONTRACTOR IS RESPONSIBLE TO TEST ALL EQUIPMENT, WIRING, DEVICES, AND SYSTEMS INSTALLED UNDER THIS CONTRACT TO ENSURE PROPER OPERATION PRIOR TO FINAL ACCEPTANCE BY THE OWNER AND ENGINEER.
19. THE CONTRACTOR IS RESPONSIBLE TO DETERMINE WHETHER SPECIAL LICENSING IS REQUIRED IN ORDER TO PERFORM THE REQUIRED WORK IN THE MUNICIPALITY WHERE THE PROJECT IS LOCATED. IF THE CONTRACTOR CANNOT OBTAIN THE REQUIRED LICENSING TO COMPLETE THE WORK WITHIN THE PROJECT SCHEDULE, THEN THE CONTRACTOR SHALL NOT BE PERMITTED TO BID ON THIS PROJECT.

ADD ALTERNATE NO. 04-001



4 E101 — Heating System Control Schematic
Scale: None



5 E101 — Radiant Loop Actuator Control Schematic
Scale: None

WIRE COLOR CODING TABLE

PHASE	WIRES	VOLTAGE	L1	L2	L3	NEUTRAL	GROUND
1	2 (1)	120	BLACK	-	-	WHITE	-
1	2 (1)	208	BLACK	RED	-	-	-
1	3	120	BLACK	-	-	WHITE	GREEN (2)
1	3	208	BLACK	RED	-	-	GREEN (2)
3	4	208	BLACK	RED	BLUE	-	GREEN (2)
3	5	208	BLACK	RED	BLUE	WHITE	GREEN (2)
1	3	277	BROWN	-	-	GRAY	GREEN (2)
1	3	480	BROWN	ORANGE	-	-	GREEN (2)
3	4	480	BROWN	ORANGE	YELLOW	-	GREEN (2)
3	5	480	BROWN	ORANGE	YELLOW	GRAY	GREEN (2)

NOTES:
1. FOR DOUBLE INSULATED EQUIPMENT ONLY.
2. GREEN/YELLOW MAY BE USED:
   - GREEN/YELLOW SHALL BE GREEN WITH ONE OR MORE YELLOW STRIPES.
   - GREEN = 50 TO 70%, YELLOW = 50 TO 30%.
   - GREEN/YELLOW IS THE ONLY COLOR INTERNATIONALLY ACCEPTED FOR USE AS AN EQUIPMENT GROUNDING CONDUCTOR.
   - GREEN OR GREEN/YELLOW MUST ONLY BE USED FOR GROUNDING CONDUCTORS.

DEVICE MOUNTING HEIGHTS

POWER RECEPTACLES (INTERIOR)	18" A.F.F.
POWER RECEPTACLES (EXTERIOR)	36" A.F.G.
POWER RECEPTACLES (@ COUNTER)	44" A.F.F.
LIGHT SWITCHES	44" A.F.F. TO TOP OF DEVICE
DISCONNECT SWITCHES	SEE NEC 404.8(A)
TELEPHONE/DATA RECEPTACLES	18" A.F.F.
TELEPHONE/DATA RECEPTACLES (@ COUNTER)	44" A.F.F.
WALL TELEPHONE RECEPTACLES	48" A.F.F. TO TOP OF DEVICE
FIRE ALARM PULL STATIONS	42" A.F.F. MIN./44" A.F.F. MAX.
FIRE ALARM AUDIO/VISUAL DEVICES	80" A.F.F. MIN./96" A.F.F. MAX.
EXIT LIGHTS (WALL MOUNTED)	12" ABOVE DOOR
EMERGENCY LIGHTS (WALL MOUNTED)	90" A.F.F.
TV & A/V OUTLETS	18" A.F.F.

NOTE: ALL DIMENSIONS ARE TO CENTER OF DEVICE UNLESS OTHERWISE NOTED

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Project Title
LIBERTY CENTRAL SCHOOL DISTRICT
MAINTENANCE BUILDING

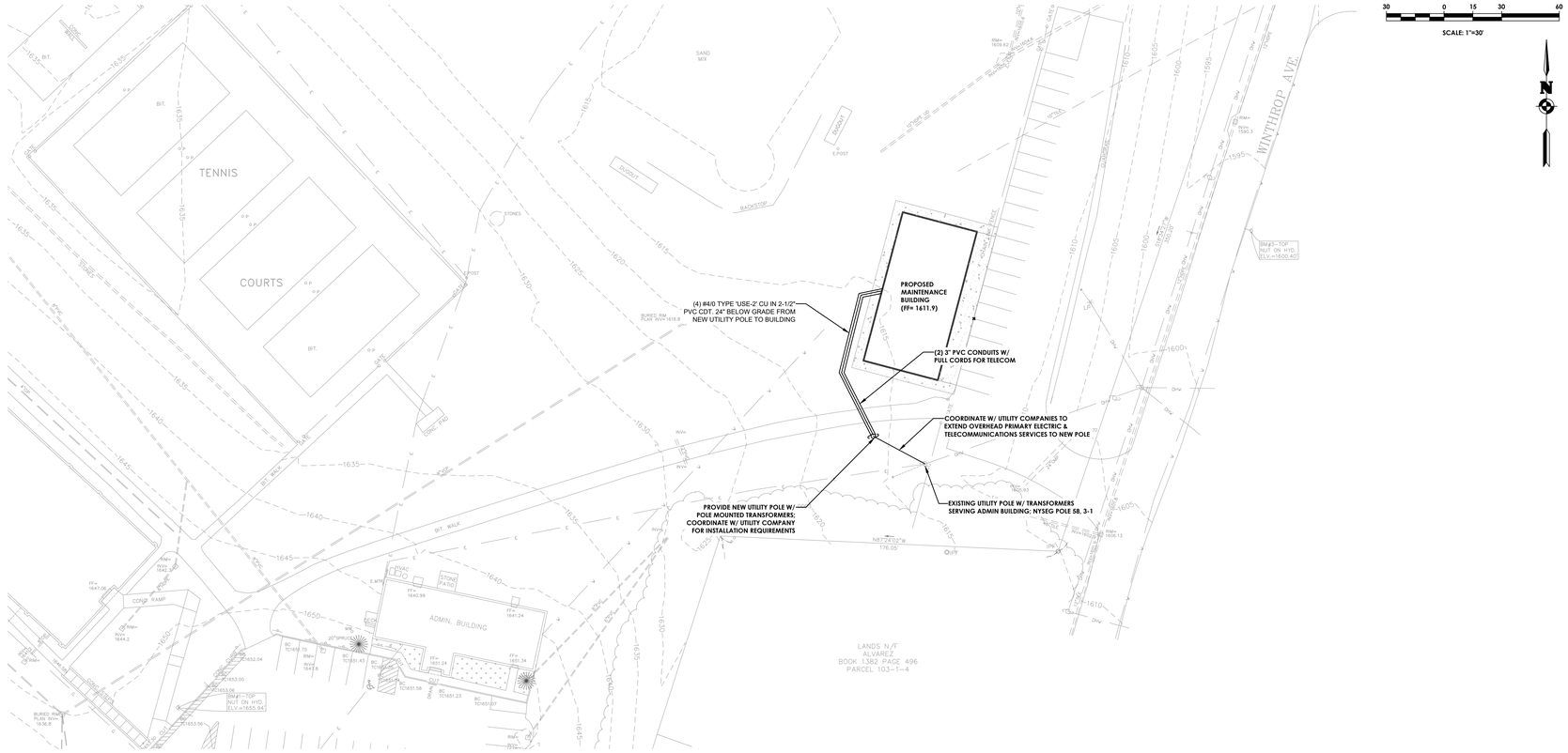
1	12/15/78	BID Addendum #3
Δ	DATE	DESCRIPTION

Drawn By: BJK
Checked By: BJK
Proj. #: 59-09-01-06-3-016-001
CSArch Proj. #: 203-2201
Construction Documents: 12/13/22

Sheet Title
ELECTRICAL NOTES, LEGEND, DETAILS & SCHEDULES

Sheet No.
MB
E101

CONSTRUCTION DOCUMENTS



1 / E102 Site Electric Plan

Scale: 1" = 30'-0"

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845-565-1100 www.blakeengineering.com

Project Title

LIBERTY CENTRAL SCHOOL DISTRICT
MAINTENANCE BUILDING

STATE OF NEW YORK
MATTHEW GEORGE BLAKE
090659
LICENSED PROFESSIONAL ENGINEER

	DATE	DESCRIPTION

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Proj. #:	59-09-01-06-3-016-001
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Construction Documents:	12/13/22

Sheet Title

ELECTRIC SITE PLAN

Sheet No.

MB
E102

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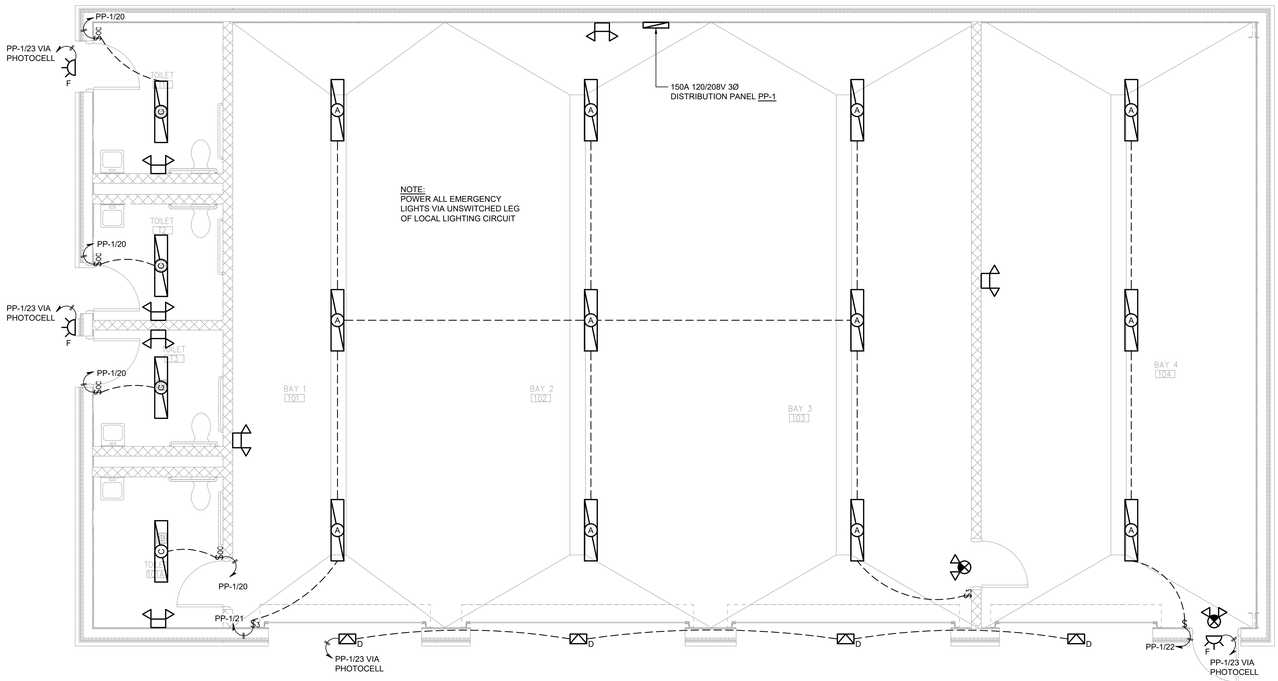

LIGHTING CONTROL SEQUENCE OF OPERATION - STORAGE BAYS
FIXTURE MOUNTED OCCUPANCY SENSOR(S) TO BE USED FOR AUTO-ON/OFF OF EACH FIXTURE AFTER 20 MIN. TIME DELAY.

LOCAL WALL SWITCH TO BE USED FOR MANUAL ON/OFF OVERRIDE FOR 15 MIN.

1 E201 Lighting Plan
Scale: 1/4" = 1'-0"

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BLAKE ENGINEERING PLLC
ELECTRICAL ENGINEERING & CONSULTING

Project Title
LIBERTY CENTRAL SCHOOL DISTRICT
MAINTENANCE BUILDING

STATE OF NEW YORK MATTHEW GEORGE BLAKE 089039 LICENSED PROFESSIONAL ENGINEER

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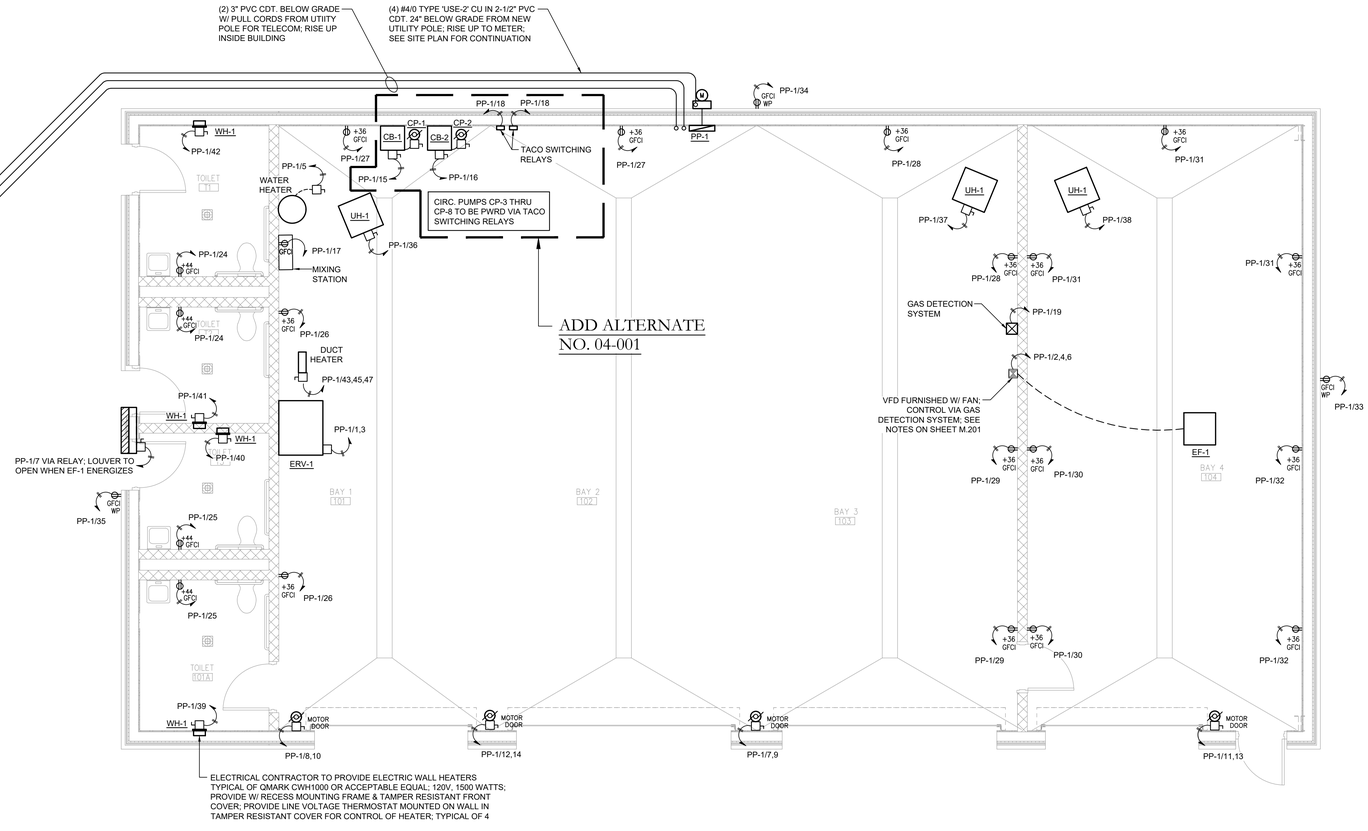
Construction Documents:	12/13/22

Sheet Title
LIGHTING PLAN

Sheet No.
MB E201

CONSTRUCTION DOCUMENTS



1 / E301 **Power Plan**
Scale: 1/4" = 1'-0"

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Project Title

LIBERTY CENTRAL SCHOOL DISTRICT
MAINTENANCE BUILDING

MATTHEW GEORGE BLAKE
STATE OF NEW YORK
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CSArch Proj. #:	203-2201
Construction Documents:	12/13/22

Sheet Title

POWER PLAN

Sheet No.

MB E301

CONSTRUCTION DOCUMENTS