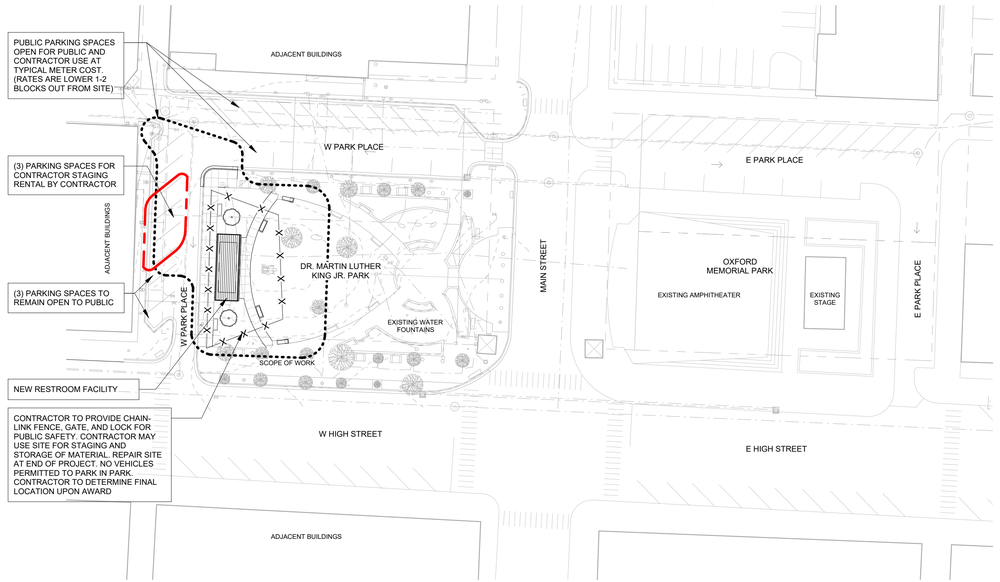
Restroom Facility

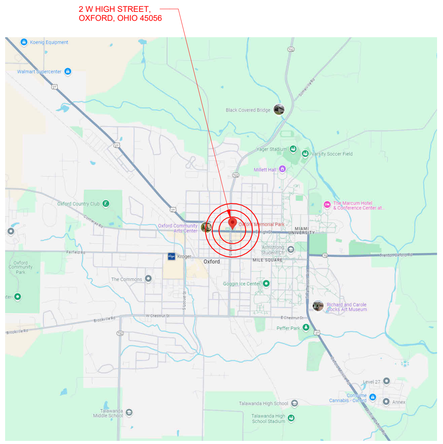
Oxford Park Place

2 West High Street, Oxford, Ohio 45056



D1 OVERALL SITE PLAN
1" = 40'-0"

VICINITY MAP



CODE INFORMATION (OBC 2024)

PROJECT DESCRIPTION

PROJECT CONSISTS OF A STAND ALONE BUILDING FOR A NEW PUBLIC FOUR SEASON RESTROOM FACILITY. THE BUILDING INCLUDES TWO SINGLE USE FAMILY RESTROOMS.

USE GROUP CLASSIFICATION

OBC (302) USE GROUP: = U (UTILITY)
BUILDING GROSS AREA: = 271 SF

CONSTRUCTION TYPE CLASSIFICATION

OBC (T: 601) CONSTRUCTION TYPE: = VB

OBC (T: 705.5) FIRE-RESISTANCE BASED ON FIRE SEPARATION DISTANCE:

SEPARATION DISTANCE: (X ≥ 30') = 0 HOUR

HEIGHT AND AREA LIMITATIONS

OBC (T: 504.3) HEIGHT:
ALLOWABLE (NS): = 40'
ACTUAL HEIGHT: = 13'-10"

OBC (T: 504.4) NUMBER OF STORIES:
ALLOWABLE (NS): = 1 STORY
ACTUAL HEIGHT: = 1 STORY

OBC (T: 506.2) AREA
ALLOWABLE (NS): = 5,500 SF
ACTUAL: = 271 SF

OCCUPANT LOAD

OBC (T: 1004.1.2) OCCUPANT LOAD:
ACTUAL: = 4 MAXIMUM OCCUPANTS ANTICIPATED

OTHER CODE PROVISIONS

OBC (T601) FIRE RESISTANCE RATINGS:

PRIMARY STRUCTURAL FRAME = 0 HRS
EXTERIOR BEARING WALLS = 0 HRS
INTERIOR BEARING WALLS = 0 HRS
EXTERIOR NON-LOAD BEARING WALLS = 0 HRS
INTERIOR NON-LOAD BEARING WALLS = 0 HRS
FLOOR CONSTRUCTION INCLUDING BEAMS = 0 HRS
ROOF CONSTRUCTION INCLUDING BEAMS = 0 HRS

FIRE PROTECTION

OBC (903) AUTOMATIC SPRINKLER SYSTEM:
SPRINKLERS NOT REQUIRED / NOT PROVIDED

OBC (906) PORTABLE FIRE EXTINGUISHERS
NOT REQUIRED AT NORMALLY UNMANNED GROUP U OCCUPANCY BUILDINGS
PORTABLE FIRE EXTINGUISHER PROVIDED ON THE VEHICLE OF VISITING PERSONNEL.

OBC (907) FIRE ALARM AND DETECTION SYSTEMS:
OBC (907) FIRE ALRAM NOT REQUIRED / NOT PROVIDED

INTERIOR FINISHES

OBC (T: 803.13) INTERIOR WALL AND CEILING FINISH REQUIREMENTS:
NO RESTRICTIONS

OBC (804) INTERIOR FLOOR FINISH:
NO RESTRICTIONS

ZONING

1133.01 ESTABLISHMENT OF ZONING DISTRICTS:
DISTRICT: = UP (UPTOWN - COMMERCIAL)
HISTORIC DISTRICT OVERLAY

YARD REQUIREMENTS:
FRONT YARD: = 16'-6" EXCEPT ON HIGH STREET (70% OF BUILDING ON ROW)
REAR YARD = 0' (ADJ TO RESIDENTIAL DISTRICT = 10')
SIDE YARD = 0' (ADJ TO RESIDENTIAL DISTRICT = 6')

BUILDING HEIGHT:
MIN = 23' AND MIN OF 2 STORIES ABOVE STREET GRADE
MAX = 48' AND 4 STORIES MAX ABOVE STREET GRADE

DESIGN CRITERIA PER THE 2024 OHIO BUILDING CODE (IBC 2021)(ASCE7-16)			
Building Risk Category			II
Roof Live Load			
Roof Live Load (psf)			20
Roof Snow Load			
Ground Snow Load, Pg (psf)			20
Flat Roof Snow Load, Pf (psf)			14
Minimum Specified Roof Snow Load, (psf)			20
Sloped Roof Snow Load, Ps (psf)			20
Snow Load Importance Factor, Is			1.00
Snow Exposure Factor, Ce			1.0
Sloped Roof Factor, Cs			1.0
Snow Thermal Factor, Ct			1.0
Wind Design Data			
Ultimate Design Wind Speed, Vult, (mph)			106
Nominal Design Wind Speed, Vasd, (mph)			82.1
Wind Exposure Category			C
Enclosure Classification			ENCLOSED
Internal Pressure Coefficients			+/- 0.18
Earthquake Design Data			
Seismic Importance Factor, Ie			1.00
Spectral Response Acceleration at 0.2-sec Period, Ss			0.145
Spectral Response Acceleration at 1-sec Period, S1			0.076
Design Spectral Response Acceleration at Short Periods, Sds			0.155
Design Spectral Response Acceleration at 1-sec Period, Sd1			0.121
Site Class			D
Seismic Design Category			B
Ordinary Reinforced Masonry Shear Walls	R=	2	Cs= 0.077
Design Base Shear (kips), V = Cs W			Cs x W
Analysis Procedure: Equivalent Lateral Force Procedure			
Roof Load			
Dead Load (psf)			15.0
Live Load (psf)			20.0
Rain			
15-minute Precipitation Intensity (in./hr.)			5.63
60-minute Precipitation Intensity (in./hr.)			2.72
Foundations Designed for Bearing on Assumed 1,500 psf Soil per the OBC table 1806.2			

DRAWING INDEX

ARCHITECT

App Architecture
615 Woodside Drive
Englewood, Ohio 45322
(937) 836-8898

MECHANICAL & ELECTRICAL ENGINEERS

Prater Engineering
6130 Wilcox Road
Dublin, Ohio 43016
(614) 766-4896

STRUCTURAL ENGINEER

Tri-Tech Engineering
1785 South Metro Parkway
Centerville, Ohio 45459
(937) 306-1630

CIVIL ENGINEER

Bayer & Becker, Inc
110 South College Avenue, Suite 101
Oxford, Ohio 45056
(513) 523-4270

App Architecture
creative focused design
615 Woodside Drive, Englewood, Ohio 45322
T 937-836-8898 F 937-832-3696
www.app-arch.com

STATE OF OHIO ★ MARIANNE L WEBER 9675 ★ REGISTERED ARCHITECT
Marianne L Weber License #9675
Expiration Date 12/31/2025

Restroom Facility
Oxford Park Place
2 West High Street, Oxford, Ohio 45056

ISSUE

NO.	DATE	DESCRIPTION
	09/03/25	FOR PERMIT & REBID

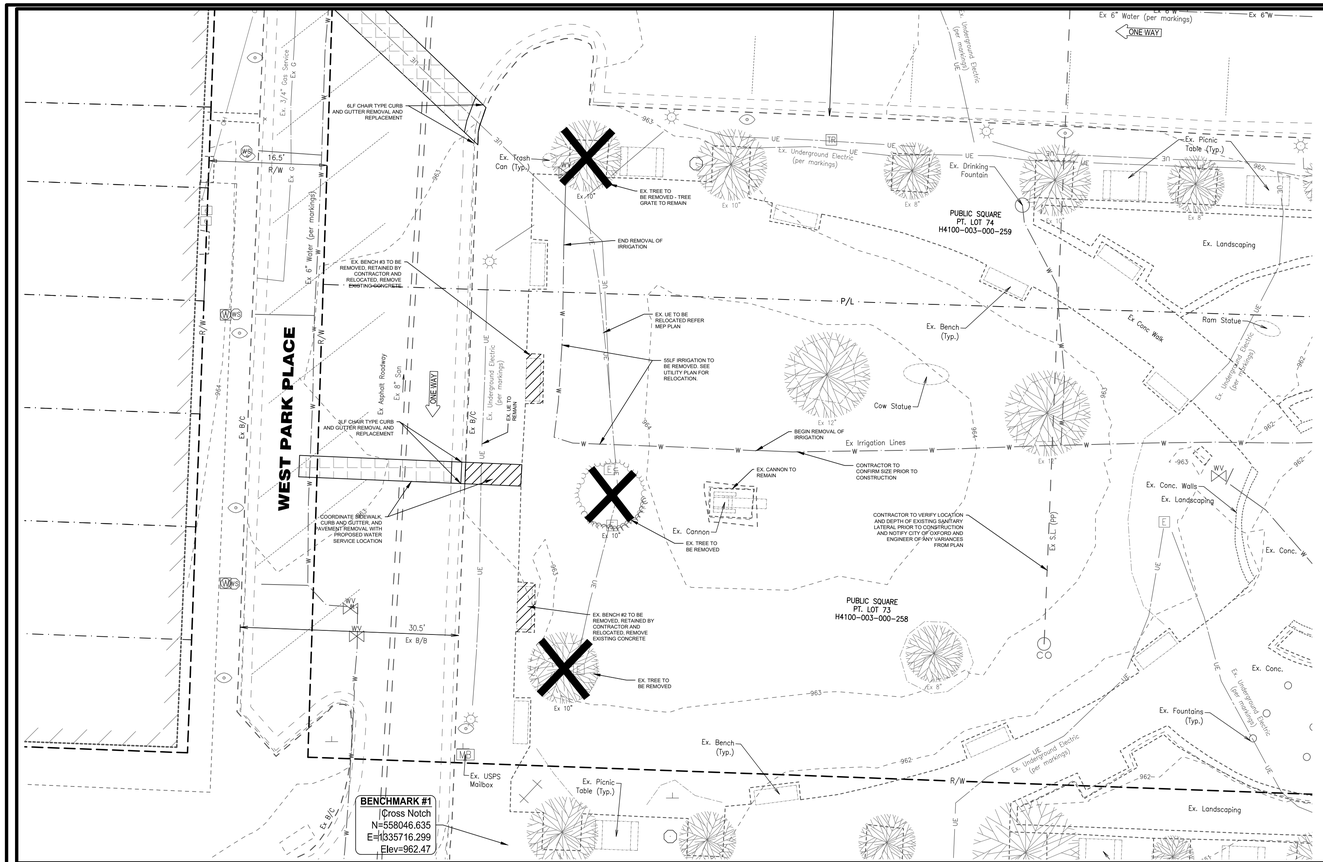
DATE	09.03.2025
JOB NO.	4265.00
DRAWN	JAK
CHECKED	MES/TAG

TITLE
COVER SHEET

SHEET NO.
G0.1

9/8/2025 5:34:08 PM

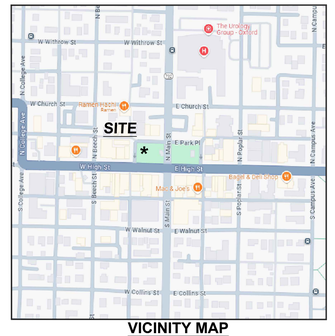
OXFORD PARK PLACE
RESTROOM FACILITY
PUBLIC SQUARE
PT LOTS 73 & 74
CITY OF OXFORD
BUTLER COUNTY, OHIO



DEMOLITION PLAN
1"=10'

DEMOLITION LEGEND

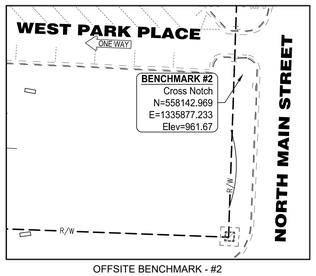
- CONCRETE SIDEWALK AND CURB AND GUTTER REMOVAL
- ASPHALT PAVEMENT REMOVAL
- TREE REMOVAL



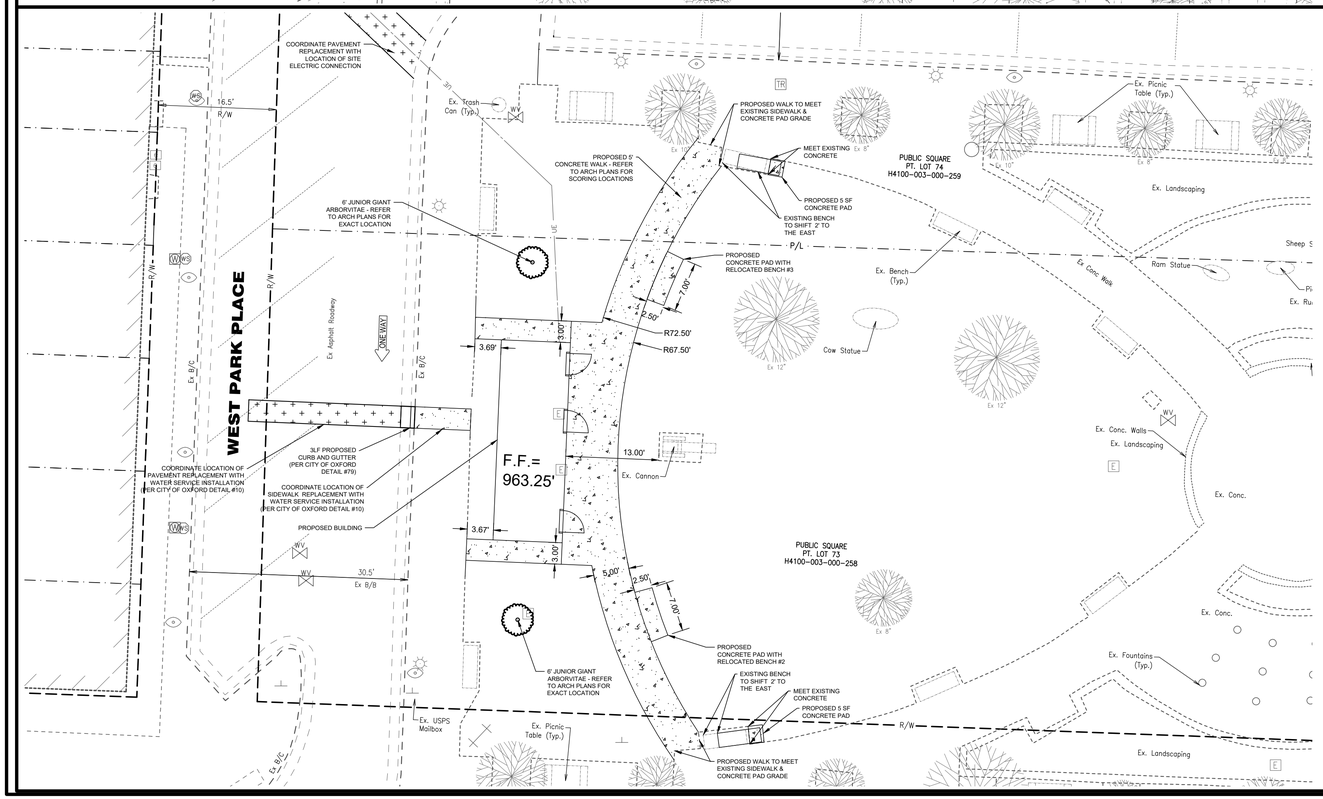
VICINITY MAP
n.t.s.

BENCHMARK #1
SET CROSS NOTCH LOCATED IN THE SIDEWALK APPROXIMATELY 15.02 FEET NORTH OF THE BACK OF CURB ON WEST HIGH STREET AND 8.03 FEET EAST OF THE BACK OF CURB ON WEST PARK PLACE
N = 558046.635 E = 1335716.299
ELEVATION = 962.47

BENCHMARK #2
SET CROSS NOTCH LOCATED IN THE SIDEWALK APPROXIMATELY 9.39 FEET SOUTH OF THE BACK OF CURB ON WEST PARK PLACE AND 7.87 FEET WEST OF THE BACK OF CURB ON NORTH MAIN STREET
N = 558142.969 E = 1335877.233
ELEVATION = 961.67



OFFSITE BENCHMARK - #2
SCALE: 1" = 40'



LAYOUT PLAN
1"=10'

LAYOUT LEGEND

- CONCRETE WALK (PER CITY OF OXFORD DETAIL #80)
- ASPHALT PAVEMENT REPLACEMENT (PER CITY OF OXFORD STANDARD DETAIL #10 FOR PAVED AREAS)

ARCHITECT
APP ARCHITECTURE, INC.
615 WOODSIDE DRIVE
ENGLEWOOD, OHIO 45322

STRUCTURAL ENGINEER
TRI-TECH
1785 SOUTH METRO PARKWAY
CENTERVILLE, OHIO 45459
(937) 306-1630

ENGINEER & SURVEYOR
BAYER BECKER
110 SOUTH COLLEGE AVENUE, SUITE 101
OXFORD, OHIO 45056
(513)523-4270

MECHANICAL & ELECTRICAL ENGINEER
PRATER ENGINEERING
6130 WILCOX ROAD
DUBLIN, OHIO 43016
(614)766-4896

PROJECT DATA
PROJECT AREA = 0.055 +/- ACRES

UTILITY CONTACTS
SANITARY, WATER & STORM SEWER
CITY OF OXFORD
15 S. COLLEGE AVE
OXFORD, OHIO 45056
ATTN: SCOTT OTTO, PE
513-524-5208

GAS
GLENWOOD ENERGY
5181 COLLEGE CORNER PIKE
OXFORD, OHIO 45056
ATTN: RICK KREIGER
513-839-0109

DUKE ENERGY (DISTRIBUTION)
ATTN: MATTEO MORRISON
513-477-6570

Know what's below. Call before you dig.

Basis of Bearing: State Plane NAD83 (2011)
0 10 15
SCALE: 1" = 10'

STATE OF OHIO
JOHN A. BAYER
86794
REGISTERED PROFESSIONAL ENGINEER
9/3/2025

Item	Revision Description	Date	Drwn	Chk

OXFORD PARK PLACE
RESTROOM FACILITY
PUBLIC SQUARE
PT LOTS 73 & 74
CITY OF OXFORD
BUTLER COUNTY, OHIO

Title, Demolition, & Layout Plan

bayer becker
www.bayerbecker.com
6600 Wales Road, Suite A
Mason, OH 45040 - 513.336.6600

Drawing:	21-0258 CD
Drawn by:	JBB
Checked By:	JAB
Issue Date:	09-03-25
Sheet:	C1.0

Plot time: Sep 03, 2025 - 4:28pm
Drawing name: J:\2021\21-0258\CVIDWG\21-0258 CD.DWG - Layout Tab: C1.0 Title & Demolition & Site Plan

GENERAL

1. ITEM NUMBERS REFER TO THE OHIO DEPARTMENT OF TRANSPORTATION (ODOT) CONSTRUCTION AND MATERIAL SPECIFICATIONS (2016) AND ALL CONSTRUCTION WORK SHALL BE DONE ACCORDING TO SAID SPECIFICATIONS AND IN ACCORDANCE WITH APPLICABLE STANDARDS OF THE GOVERNING AGENCIES. WHEN IN CONFLICT, THE MORE STRINGENT REQUIREMENTS SHALL GOVERN.
2. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION AND ELEVATIONS OF ALL EXISTING UTILITIES PRIOR TO THE BEGINNING OF CONSTRUCTION OR EARTH MOVING OPERATIONS.
3. FORTY-EIGHT (48) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTOR SHALL NOTIFY THE OHIO UTILITY PROTECTION SERVICE (OUPS) AND ALL OTHER AGENCIES WHICH MAY HAVE UNDERGROUND UTILITIES INVOLVED IN THIS PROJECT AND ARE NOT MEMBERS OF OHIO UNDERGROUND PROTECTION, INC.
4. CONTRACTOR AND OWNER SHALL VERIFY AND ACCEPT ALL QUANTITIES PRIOR TO BEGINNING CONSTRUCTION.
5. CONTRACTOR SHALL VERIFY THAT COORDINATES, IF USED, MATCH PLAN DIMENSIONS. WHEN IN CONFLICT, THE PLAN DIMENSIONS SHALL GOVERN OVER COORDINATES, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
6. UNLESS OTHERWISE NOTED, ALL CONSTRUCTION DETAILS SHALL CONFORM WITH THE "STANDARD CONSTRUCTION DRAWINGS OF THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION" AND THE REQUIREMENTS OF THE CITY OF OXFORD.
7. EXISTING SITE SURVEY, TOPOGRAPHY, AND SUBSURFACE CONDITIONS: EXISTING CONDITIONS PRESENTED IN DRAWING, REPORT OR SPECIFICATION FORM ARE BELIEVED ACCURATE WITHIN NORMAL INDUSTRY TOLERANCES BUT ARE NOT GUARANTEED. INVESTIGATE, SURVEY, CONFIRM AND VERIFY ALL CONDITIONS BEARING ON THE WORK BY ANY MEANS NECESSARY BEFORE STARTING ANY WORK THAT CHANGES EXISTING CONDITIONS. REPORT ANY UNACCEPTABLE DISCREPANCIES TO THE ENGINEER IN WRITING BEFORE BEGINNING OPERATIONS
   - 7.1. WRITTEN CLAIMS OF DIFFERENCE SHALL BE ACCOMPANIED BY SUBSTANTIATING EVIDENCE. CLAIMS OF DIFFERENCE SHALL BE RESOLVED, INCLUDING DETERMINATION OF QUANTITIES AND COSTS AND METHODS OF CONTRACT MODIFICATION, BEFORE WORK THAT ALTERS SUCH EXISTING CONDITIONS IS STARTED.
   - 7.2. INITIATION OF SITE-CLEARING, SOIL-MOVING OPERATIONS, DEMOLITION OR OTHER ACTIVITY THAT ALTERS EXISTING CONDITIONS SHALL BE EVIDENCE THAT CONTRACTOR HAS MADE ALL INVESTIGATIONS AND EVALUATIONS IT DEEMS NECESSARY AND HAS ACCEPTED ALL EXISTING CONDITIONS PRESENT WHETHER OR NOT THEY CONFORM EXACTLY TO THE DOCUMENTS.
   - 7.3. WITHOUT ADVANCE WRITTEN NOTIFICATION OF UNACCEPTABLE DISCREPANCY, NO CLAIM FOR EXTRA WILL BE CONSIDERED FOR A CLAIM OF DIFFERENCE BETWEEN DOCUMENTS AND ACTUAL CONDITIONS AFTER THE CONTRACTOR HAS ALTERED EXISTING CONDITIONS.
8. WHERE CONNECTING TO EXISTING ASPHALT PAVEMENT, THE CONTRACTOR SHALL SAW CUT THE EXISTING EDGE OF PAVEMENT TO PROVIDE A CLEAN AND SOUND EDGE. ITEM 407 TACK COAT SHALL BE APPLIED TO THE ENTIRE CUT FACE OF THE EXISTING PAVEMENT PRIOR TO THE PLACEMENT OF THE PROPOSED PAVEMENT.
9. ALL SITE CONCRETE SHALL BE PER ODOT ITEM 499 CLASS C UNLESS OTHER WISE NOTED ON THE PLANS.

DEMOLITION NOTES

1. THE TOPOGRAPHIC AND UTILITY INFORMATION SHOWN IS BASED ON A TOPOGRAPHIC SURVEY PREPARED BY BAYER BECKER, AND VARIOUS UTILITY PLANS PROVIDED BY THOSE GOVERNING AGENCIES.
2. THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLAN HAVE BEEN OBTAINED BY FIELD CHECKS AND SEARCHES OF AVAILABLE RECORDS AND DO NOT NECESSARILY REPRESENT ALL UNDERGROUND UTILITIES ADJACENT TO OR UPON THE PREMISES. THE ENGINEER DOES NOT GUARANTEE THEIR ACCURACY OR COMPLETENESS. THE CONTRACTOR SHALL VERIFY LOCATIONS WITH UTILITY COMPANIES BEFORE MAKING EXCAVATIONS. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR VERIFYING ALL EXISTING UTILITY LOCATIONS WHETHER SHOWN ON THESE PLANS OR NOT.
3. APPROPRIATE UTILITY COMPANIES AND OHIO UTILITIES PROTECTION SERVICE (811) SHALL BE NOTIFIED AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO BREAKING GROUND FOR THE PURPOSE OF VERIFYING BY FIELD INSPECTION THE EXACT LOCATION OF THE UNDERGROUND UTILITY. UTILITIES ARE SHOWN IN THEIR APPROXIMATE LOCATIONS ACCORDING TO AVAILABLE INFORMATION.
4. THESE PLANS, AS PREPARED BY BAYER BECKER, DO NOT EXTEND TO OR INCLUDE SYSTEMS PERTAINING TO THE SAFETY OF THE DEMOLITION/CONSTRUCTION CONTRACTOR OR ITS EMPLOYEES, AGENTS OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK. THE SEAL OF BAYER BECKER'S REGISTERED PROFESSIONAL ENGINEER HEREON DOES NOT EXTEND TO ANY SUCH SAFETY SYSTEMS THAT MAY NOW OR HEREAFTER BE INCORPORATED INTO THESE PLANS. THE CONTRACTOR SHALL PREPARE OR OBTAIN THE APPROPRIATE SAFETY SYSTEMS WHICH MAY BE REQUIRED BY U.S. OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION (OSHA) AND/OR LOCAL REGULATIONS..
5. ALL CONTRACTORS INCLUDING BUT NOT LIMITED TO THE DEMOLITION, EXCAVATION, PAVING, PLUMBING, ELECTRICAL, SIGN, FIRE PROTECTION, HVAC CONTRACTORS SHALL BE UNDER THE DIRECTION OF THE GENERAL CONTRACTOR OR OWNER WHO WILL BE HELD RESPONSIBLE FOR THE COORDINATION OF ALL WORK ON THIS PROJECT AND THE PROPER EXECUTION OF THE SAME.
6. THE CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
7. REMOVAL AND/OR RELOCATION OF ANY UTILITIES SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY COMPANY AND SHALL BE DISCONNECTED PER THE ASSOCIATED UTILITY AGENCY'S REQUIREMENTS.
8. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ANY DAMAGE TO EXISTING UTILITIES, FACILITIES, AND STRUCTURES THAT ARE INTENDED TO CONTINUE TO PROVIDE SERVICE WHETHER SHOWN ON THE PLANS OR NOT.
9. WHERE CONNECTING TO EXISTING PAVEMENT, THE CONTRACTOR SHALL SAWCUT THE EXISTING EDGE OF PAVEMENT TO PROVIDE A SOUND & CLEAN EDGE. THE CONTRACTOR SHALL APPLY ITEM 407 TACK COAT TO THE ENTIRE CUT FACE OF THE EXISTING PAVEMENT PRIOR TO THE PLACEMENT OF THE PROPOSED PAVEMENT.
10. THE CONTRACTOR SHALL INSTALL EROSION CONTROL MEASURES PRIOR TO DEMOLITION AND CONSTRUCTION.
11. AS SOON AS DEMOLITION WORK HAS BEEN OTHERWISE COMPLETED AND APPROVED BY THE OWNER, EARTHWORK MAY BEGIN. THE FINAL GRADE IN AREAS OUTSIDE THE CONSTRUCTION SITE SHALL BE SUCH AS TO PRESENT A NEAT, WELL-DRAINED APPEARANCE, AND TO PREVENT WATER FROM DRAINING UNNECESSARILY ONTO ADJACENT PROPERTIES.

GENERAL UTILITY

1. BACKFILL OF ALL UTILITY EXCAVATIONS IN STRUCTURAL AREAS INCLUDING UNDER PAVEMENTS OR WITHIN TEN (10) FEET OF ANY BUILDING AREAS SHOULD BE CONTINUALLY MONITORED BY A REPRESENTATIVE OF THE PROJECT GEOTECHNICAL ENGINEER TO VERIFY THAT PROPER LIFT THICKNESS, MOISTURE CONDITION, AND COMPACTIVE EFFORT ARE MAINTAINED.
2. CONTRACTOR SHALL VERIFY ALL UTILITY AND CONDUIT SIZES AND LOCATIONS WITH THE ARCHITECTURAL, MECHANICAL, AND STRUCTURAL DRAWINGS PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES.
3. ALL BUILDING UTILITY SERVICES ARE TO BE STUBBED 5 FT. FROM THE BUILDING FOR CONNECTION BY INTERIOR CONTRACTOR.
4. CONTRACTOR SHALL OBTAIN RIGHT OF WAY PERMIT FROM CITY OF OXFORD FOR ALL WORK PROPOSED WITHIN THE PUBLIC RIGHT OF WAY.

WATER MAINS

1. ALL WATER WORK AND WATER MAIN MATERIALS INCLUDING PIPE, FITTINGS, VALVES, HYDRANTS, AND INSTALLATION SHALL CONFORM TO THE REQUIREMENTS OF CITY OF OXFORD'S WATER AND SANITARY SEWER IMPROVEMENT SPECIFICATIONS AND BACKFLOW CROSS CONNECTIONS MANUAL.
2. ALL PUBLIC WATER MAIN MATERIALS, VALVES, FIRE HYDRANTS, FITTINGS, AND APPURTENANCES SHALL BE CLASS 53 DUCTILE IRON PER AWWA C-151.
3. NO PART OF ANY FIRE HYDRANT SETTING SHALL BE CLOSER THAN FIVE (5) FEET FROM ANY INLET, DRIVEWAY, PARKING LOT, UTILITY POLE, OR GUY WIRE ANCHOR.
4. WATER MAINS SHALL MAINTAIN A MINIMUM COVER OF FOUR (4) FEET.
5. ALL WATER MAIN VALVES SHALL HAVE A MINIMUM DEPTH OF 2.5 FT. AND MAXIMUM DEPTH OF 4.0 FT. FROM PROPOSED GRADE TO THE TOP OF THE VALVE OPERATING NUT.
6. A MINIMUM CLEAR DISTANCE OF TEN (10) FEET HORIZONTAL OR EIGHTEEN (18) INCHES VERTICAL SHALL BE MAINTAINED BETWEEN SANITARY AND/OR STORM SEWERS AND WATER MAINS.
7. SANITARY AND STORM SEWERS THAT CROSS WATER MAINS SHALL BE LOCATED SUCH THAT THE SEWER JOINTS WILL BE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE WATER MAIN JOINTS.
8. ALL WATER MAINS SHALL BE PROVIDED WITH JOINT RESTRAINT AT ALL TEES, HORIZONTAL AND VERTICAL BENDS, ETC., WHETHER SHOWN ON THE PLAN VIEW OR NOT. JOINT RESTRAINT SHALL MEET THE REQUIREMENTS OF THE CITY OF OXFORD'S WATER AND SANITARY SEWER IMPROVEMENT SPECIFICATIONS AND BACKFLOW CROSS CONNECTION MANUAL.
9. SERVICE PIPING SMALLER THAN THREE (3) INCHES SHALL BE SEAMLESS COPPER FLEXIBLE WATER TUBING, ASTM B 88, TYPE K, PRESSURE CLASS 250.
   - 9.1. FITTINGS SHALL BE COMPRESSION STYLE FOR CTS TUBING, CONSULT GOVERNING AGENCY FOR A LISTING OF ACCEPTABLE MANUFACTURERS AND PRODUCTS.
   - 9.2. COUPLINGS WITH SET SCREWS OR GRIP RINGS WILL NOT BE ACCEPTABLE.
   - 9.3. WATER SERVICE TUBING SHALL BE BEDDED SIX (6) INCHES ABOVE AND BELOW WITH SAND OR OTHER NON-COMPACTIBLE MATERIAL APPROVED BY THE GOVERNING AGENCY.
10. CITY OF OXFORD WATER DEPARTMENT SHALL ESTABLISH PROCEDURES FOR REPAIRS TO WATER MAIN OR WATER SERVICES DAMAGED.
11. ALL WATER METER PITS SHALL CONFORM TO THE MATERIALS AND SPECIFICATIONS OF THE GOVERNING AGENCY.

WATER MAINS (CONTINUED)

12. THE FOLLOWING ITEMS ARE TO BE APPROVED BY THE FIRE DEPARTMENT:
   - 12.1. INSTALLATION OF ALL UNDERGROUND FIRE SUPPRESSION LINES ARE TO BE INSPECTED BY THE FIRE DEPARTMENT; INSTALLERS ARE REQUIRED TO BE LICENSED BY THE OHIO FIRE MARSHALL.
   - 12.2. WATER SUPPLY AND CONNECTIONS TO THE SUPPLY.
   - 12.3. PRESSURE REGULATORS OR METERS ON THE WATER SUPPLY LINES.
   - 12.4. LOCATION AND/OR OMISSION OF FIRE DEPARTMENT CONNECTIONS.
   - 12.5. FIRE DEPARTMENT CONNECTION HOSE CONNECTION THREADS (CAPS ALSO REQUIRED)
   - 12.6. USE OF CONTROL VALVES IN WATER SUPPLY OTHER THAN INDICATING VALVES.
   - 12.7. SIZE AND LOCATION OF VALVE PITS; USE OF BURIED VALVES OR PITS.
   - 12.8. LOCATION AND IDENTIFICATION OF SECTION VALVES IN UNDERGROUND WATER SUPPLIES.
   - 12.9. TYPE, ARRANGEMENT, LOCATION, IDENTIFICATION, THREADS, PROTECTION OF ALL HYDRANTS
   - 12.10. UNDERGROUND PIPING INSTALLATION METHODS AND PROCEDURES.
   - 12.11. HYDROSTATIC TESTING OF UNDERGROUND SYSTEMS; FIRE DEPT. MUST BE CALLED TO WITNESS TESTING; PROVIDE COPY OF CONTRACTOR'S MATERIAL & TEST CERTIFICATE FOR UNDERGROUND SYSTEM. AMOUNT OF PIPE LEAKAGE TO BE ACCEPTABLE TO FIRE DEPT.
   - 12.12. FLUSHING OF UNDERGROUND SYSTEM TO BE WITNESSED BY FIRE DEPT.
   - 12.13. HYDRANT OPERATING TEST TO BE WITNESSED BY FIRE DEPT.

GAS FACILITIES AND SERVICES

1. FOR GAS ENGINEERING NOTIFICATION, AGREEMENTS AND OFFICIAL CORRESPONDENCE RELATED TO GLENWOOD ENERGY, ADDRESS TO:
   KEITH SMITH
   513-523-2555
   5181 COLLEGE CORNER PIKE
   OXFORD, OHIO 45056
2. THE GAS MAIN INFORMATION PROVIDED SHOWS THE APPROXIMATE LOCATIONS AND DEPTHS OF COVER AND IS PROVIDED TO COMPLY WITH OUPS INFORMATORY REGULATIONS. THIS INFORMATION SHOULD BE USED ONLY FOR PLANNING, NOT CONSTRUCTION.
3. ALL GAS MAIN DEPTHS OF COVER IF NOTED ARE APPROXIMATE DEPTHS OF COVER RECORDED AT THE TIME OF INSTALLATION. ANY RESULTING GRADE CHANGES SINCE THE TIME OF THE MAIN INSTALLATION WILL CAUSE THE EXISTING DEPTHS OF COVER TO BE DIFFERENT. EXTREME CARE MUST BE TAKEN TO ENSURE SAFE EXCAVATION WHEN APPROACHING KNOWN OR SUSPECTED GAS FACILITIES.
4. GAS SERVICE SHALL MEET THE REQUIREMENTS OF THE UTILITY PROVIDER.
5. FOR ADDITIONAL GAS FACILITY RECORD INFORMATION, CALL 513-523-2555.
6. TO COMPLY WITH FEDERAL AND STATE REGULATIONS CONCERNING DAMAGE PREVENTION PROGRAMS, THE UTILITY COMPANIES MUST BE CONTACTED AT LEAST 48 HOURS (2 WORKING DAYS) PRIOR TO EXCAVATION BY CALLING THE OHIO UTILITIES PROTECTION SERVICE (OUPS), TOLL FREE AT 811.
7. GAS FACILITIES ARE TO BE KEPT IN SERVICE AT ALL TIMES.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGES TO GAS FACILITIES DURING OR AS A RESULT OF THE CONTRACTOR'S CONSTRUCTION. ALL DAMAGE TO GAS FACILITIES REQUIRING ADJUSTMENTS, RELOCATIONS AND REPAIRS WILL BE MADE AT THE CONTRACTOR'S EXPENSE.
9. THE CONTRACTOR SHALL SHEET AND SHORE ALL EXCAVATIONS AS REQUIRED TO CONTINUOUSLY SUPPORT GAS FACILITIES WITHIN THE ZONE OF INFLUENCE (AS DETERMINED BY THE NATURAL ANGLE OF REPOSE OF THE SOIL).
10. CROSSING BURIED GAS FACILITIES WITH HEAVY CONSTRUCTION EQUIPMENT MAY CAUSE DAMAGE TO THE GAS FACILITIES. CONTACT THE GAS ENGINEERING DEPARTMENT FOR DETAILS ON HOW TO PROTECT THE GAS FACILITIES FROM DAMAGE.
11. THE CONTRACTOR SHALL NOT BACKFILL EXPOSED GAS FACILITIES UNTIL THE UTILITY HAS INSPECTED ITS FACILITIES AND PERFORMED ANY MAINTENANCE AND/OR ADJUSTMENTS THAT MAY BE REQUIRED.
12. THE CONTRACTOR IS RESPONSIBLE FOR PREVENTING ANY DAMAGE TO EXISTING GAS FACILITIES. THIS INCLUDES PROTECTION OF COATINGS AND WRAPPINGS ON STEEL GAS MAINS. IT ALSO INCLUDES ANY DAMAGE WHICH MAY HAVE OCCURRED TO PLASTIC GAS MAINS, SUCH AS CRIMPS OR GOUGES.
13. WHEN CAST IRON OR SIMILAR GAS FACILITIES ARE EXPOSED OR INTERFERED WITH BY THE CONTRACTOR, REPLACEMENT OR REINFORCEMENT BY THE UTILITY OWNER MAY BE REQUIRED AT THE CONTRACTOR'S EXPENSE. BACKFILL WITH CONTROL LOW STRENGTH MATERIAL WILL BE REQUIRED.
14. BLASTING OR OTHER CONSTRUCTION PROCEDURES WHICH MAY TRANSMIT LOADS OR VIBRATIONS IN THE VICINITY OF GAS FACILITIES MUST BE APPROVED BY THE GAS ENGINEERING DEPARTMENT. A BLASTING PLAN, IDENTIFYING ALL PERTINENT INFORMATION, MUST BE SUBMITTED IN WRITING BY A BLASTING EXPERT PRIOR TO ANY WORK.
15. PROPOSED DEVELOPMENT PLANS AROUND AND NEAR GAS FACILITIES WITHIN PRIVATE EASEMENTS MUST BE SUBMITTED TO THE GAS ENGINEERING DEPARTMENT FOR REVIEW. THESE PLANS MUST BE APPROVED BEFORE ANY WORK MAY BEGIN WITHIN THE UTILITY OWNER'S EASEMENTS.
16. SPECIFIED EASEMENT WIDTHS MUST BE MAINTAINED IN ORDER FOR THE UTILITY PROVIDER TO PROTECT ITS FACILITIES.
17. NO PERMANENT STRUCTURES MAY BE BUILT WITHIN THE EASEMENTS.
18. CUTS AND FILLS ARE GENERALLY NOT PERMITTED WITHIN THE EASEMENTS. SOME FILLS MAY BE ALLOWED, AND WILL BE REVIEWED ON AN INDIVIDUAL BASIS. ANY PERMITTED FILLS WILL BE LIMITED TO AN AMOUNT WHICH WILL ALLOW THE UTILITY OWNERS TO PROPERLY MAINTAIN ITS FACILITIES.
19. PERPENDICULAR UTILITY CROSSINGS OF GAS EASEMENTS ARE ACCEPTABLE, PROVIDED PROPER CLEARANCES ARE MAINTAINED. PARALLEL INSTALLATIONS ARE NORMALLY NOT ALLOWED.

GRADING NOTES

1. ITEM NUMBERS REFER TO THE OHIO DEPARTMENT OF TRANSPORTATION (ODOT) CONSTRUCTION AND MATERIAL SPECIFICATIONS (2018) AND ALL CONSTRUCTION WORK SHALL BE DONE ACCORDING TO SAID SPECIFICATIONS AND IN ACCORDANCE WITH APPLICABLE STANDARDS OF THE GOVERNING AGENCIES. WHEN IN CONFLICT, THE MORE STRINGENT REQUIREMENTS SHALL GOVERN.
2. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION AND ELEVATIONS OF ALL EXISTING UTILITIES PRIOR TO THE BEGINNING OF CONSTRUCTION OR EARTH MOVING OPERATIONS.
3. FORTY-EIGHT (48) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTOR SHALL NOTIFY THE OHIO UTILITY PROTECTION SERVICE (OUPS) AND ALL OTHER AGENCIES WHICH MAY HAVE UNDERGROUND UTILITIES INVOLVED IN THIS PROJECT AND ARE NOT MEMBERS OF OHIO UNDERGROUND PROTECTION, INC.
4. CONTRACTOR AND OWNER SHALL VERIFY AND ACCEPT ALL QUANTITIES PRIOR TO BEGINNING CONSTRUCTION.
5. CONTRACTOR SHALL VERIFY THAT COORDINATES, IF USED, MATCH PLAN DIMENSIONS. WHEN IN CONFLICT, THE PLAN DIMENSIONS SHALL GOVERN OVER COORDINATES, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
6. UNLESS OTHERWISE NOTED, ALL CONSTRUCTION DETAILS SHALL CONFORM WITH THE "STANDARD CONSTRUCTION DRAWINGS OF THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION".
7. EXISTING SITE SURVEY, TOPOGRAPHY, AND SUBSURFACE CONDITIONS: EXISTING CONDITIONS PRESENTED IN DRAWING, REPORT OR SPECIFICATION FORM ARE BELIEVED ACCURATE WITHIN NORMAL INDUSTRY TOLERANCES BUT ARE NOT GUARANTEED. INVESTIGATE, SURVEY, CONFIRM AND VERIFY ALL CONDITIONS BEARING ON THE WORK BY ANY MEANS NECESSARY BEFORE STARTING ANY WORK THAT CHANGES EXISTING CONDITIONS. REPORT ANY UNACCEPTABLE DISCREPANCIES TO THE ENGINEER IN WRITING BEFORE BEGINNING OPERATIONS
   - 7.1. WRITTEN CLAIMS OF DIFFERENCE SHALL BE ACCOMPANIED BY SUBSTANTIATING EVIDENCE. CLAIMS OF DIFFERENCE SHALL BE RESOLVED, INCLUDING DETERMINATION OF QUANTITIES AND COSTS AND METHODS OF CONTRACT MODIFICATION, BEFORE WORK THAT ALTERS SUCH EXISTING CONDITIONS IS STARTED.
   - 7.2. INITIATION OF SITE-CLEARING, SOIL-MOVING OPERATIONS, DEMOLITION OR OTHER ACTIVITY THAT ALTERS EXISTING CONDITIONS SHALL BE EVIDENCE THAT CONTRACTOR HAS MADE ALL INVESTIGATIONS AND EVALUATIONS IT DEEMS NECESSARY AND HAS ACCEPTED ALL EXISTING CONDITIONS PRESENT WHETHER OR NOT THEY CONFORM EXACTLY TO THE DOCUMENTS.
   - 7.3. WITHOUT ADVANCE WRITTEN NOTIFICATION OF UNACCEPTABLE DISCREPANCY, NO CLAIM FOR EXTRA WILL BE CONSIDERED FOR A CLAIM OF DIFFERENCE BETWEEN DOCUMENTS AND ACTUAL CONDITIONS AFTER THE CONTRACTOR HAS ALTERED EXISTING CONDITIONS.
8. BACKFILL OF ALL UTILITY EXCAVATIONS IN STRUCTURAL AREAS INCLUDING UNDER PAVEMENTS OR WITHIN TEN (10) FEET OF ANY BUILDING AREAS SHOULD BE CONTINUALLY MONITORED BY A REPRESENTATIVE OF THE PROJECT GEOTECHNICAL ENGINEER TO VERIFY AND DOCUMENT THAT PROPER LIFT THICKNESS, MOISTURE CONDITION, AND COMPACTIVE EFFORT ARE MAINTAINED. THE GRADING PLAN IS TO BE USED FOR GRADING PURPOSES ONLY.
9. SPOT ELEVATIONS REPRESENT FINISH PAVEMENT GRADE. CONTRACTOR SHALL REVIEW THE FOUNDATION PLAN TO DETERMINE BUILDING SUBGRADE ELEVATIONS.
10. CONTRACTOR AND OWNER SHALL AGREE TO ALL EXCAVATION AND EMBANKMENT QUANTITIES PRIOR TO CONSTRUCTION.
11. CONTRACTOR SHALL REMOVE ALL TREES AND CLEAN ALL AREAS AS DETERMINED BY THE ENGINEER OR ARCHITECT TO PERFORM ALL GRADING AND UTILITY WORK IN ACCORDANCE WITH THE DRAWINGS, GENERAL NOTES, AND PROJECT SPECIFICATIONS. RESERVE MULCH FOR SOIL EROSION MULCHING AS NECESSARY.
12. THE PROJECT HAS BEEN DESIGNED TO CONTROL EROSION AND PREVENT DAMAGE TO OTHER PROPERTY. ALL STRIPPING, EARTHWORK, AND REGRADING SHALL BE PERFORMED TO MINIMIZE EROSION. NATURAL VEGETATION SHALL BE RETAINED WHEREVER POSSIBLE. THE PROPOSED PLAN WILL ALLOW MOST ERODED MATERIALS TO BE RETAINED ON SITE.
13. CONTRACTOR SHALL SETUP AN ONSITE PRE-CONSTRUCTION MEETING WITH OWNER, ARCHITECT, EARTHWORK CONTRACTOR, AND SITE CIVIL ENGINEER PRIOR TO BEGINNING CONSTRUCTION.
14. ALL EARTHWORK AND CONSTRUCTION ACTIVITY SHALL BE PERFORMED PER THE PROJECT SPECIFICATIONS.
15. BUILDING PAD PREPARATION SHALL BE MADE IN ACCORDANCE WITH GEOTECHNICAL ENGINEER'S, STRUCTURAL ENGINEER'S, AND ARCHITECT'S RECOMMENDATIONS. BUILDING DIMENSIONS SHALL BE VERIFIED WITH THE ARCHITECTURAL AND STRUCTURAL DRAWINGS PRIOR TO CONSTRUCTION.
16. EXCESSIVELY ORGANIC TOPSOIL AND LOOSE MATERIALS SHALL BE STRIPPED FROM THE CONSTRUCTION AREAS AND WASTED OR STOCKPILED.
17. AFTER STRIPPING OF THE TOPSOIL HAS BEEN PERFORMED, THE EXPOSED SUBGRADE SHALL BE PROOFROLLED WITH APPROVED EQUIPMENT TO IDENTIFY POCKETS OF SOFT UNSUITABLE MATERIALS. UNDER THE DIRECTION OF THE PROJECT GEOTECHNICAL ENGINEER, UNSUITABLE MATERIALS SHOULD BE REMOVED AND REPLACED WITH A WELL-COMPACTED MATERIAL.
18. THE LAST 8" OF ALL FILLS OUTSIDE OF PAVEMENT AND BUILDING AREAS SHALL BE TOPSOIL UNLESS OTHERWISE NOTED. ALL TOPSOIL FILLS SHALL BE BENCHED OR KNIT INTO FILL SLOPES AS DIRECTED BY THE GEOTECHNICAL ENGINEER.
19. SEE SEEDING NOTES ON C2.0 FOR SEED MIXTURES TO BE USED THE GRADED AREAS.

5 SILT FENCE

INSTALLATION

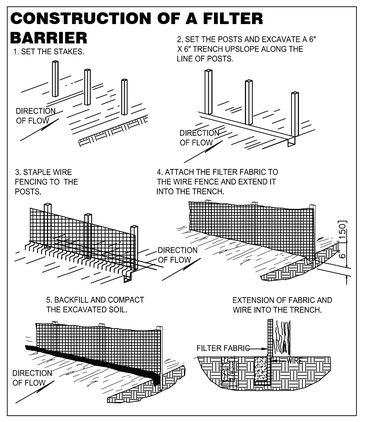
1. PUT UP BEFORE ANY OTHER WORK IS DONE.
2. INSTALL ON DOWNSLOPE SIDE(S) OF SITE WITH ENDS EXTENDED UP SIDESLOPES A SHORT DISTANCE.
3. PLACE PARALLEL TO THE CONTOUR OF THE LAND AND AT THE FLATTEST AREA AVAILABLE TO ALLOW WATER TO POND BEHIND FENCE.
4. STAKE TO BE A MINIMUM OF 32 INCHES LONG
5. MINIMUM HEIGHT SILT FENCE 16 INCHES ABOVE ORIGINAL GROUND SURFACE
6. LEAVE NO GAPS BETWEEN SECTIONS OF SILT FENCE INSPECT AND REPAIR ONCE A WEEK AND AFTER EVERY 1/2 INCH RAIN. REMOVE SEDIMENT IF DEPOSITS REACH HALF THE FENCE HEIGHT.
7. MAXIMUM DISTANCE FROM TOE OF THE SLOPE, LEAVING AT LEAST 5' DISTANCE.
8. STAKE ON DOWNHILL SIDE OF GEOTEXTILE WITH 8" OF CLOTH CLOTH BELOW THE GROUND SURFACE; EXCESS MATERIAL TO LAY ON THE BOTTOM OF 6" TRENCH
9. ODOT TYPE "C" GEOTEXTILE FABRIC OR EQUAL
10. MAINTAIN UNTIL A LAWN IS ESTABLISHED.

MATERIALS: FILTER FABRIC SHALL MEET THE REQUIREMENTS OF CMS 712.09, TYPE C. SUPPORT STAKES SHALL BE A MINIMUM OF 1.5"X1.5" [38X38], NOMINAL, AND SHALL BE HARDWOOD OF SOUND QUALITY. THE STAKES SHALL BE DRIVEN A MINIMUM OF 6" [150] BELOW THE BOTTOM OF THE FILTER FABRIC. THE MAXIMUM SPACING BETWEEN SUPPORT STAKES SHALL BE 10' [3 M].

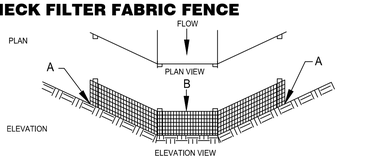
CONSTRUCTION: THE BOTTOM OF THE FABRIC SHALL BE BURIED 6" [150] BELOW THE GROUND. THE ENDS OF ADJACENT SECTIONS OF FENCE SHALL BE OVERLAPPED WITH THE END STAKE OF EACH SECTION WRAPPED TOGETHER PRIOR TO INSTALLATION. THE GROUND ELEVATION OF THE FENCE SHALL BE HELD CONSTANT EXCEPT THAT THE END ELEVATIONS SHALL BE RAISED UPSLOPE TO PREVENT FLOW AROUND THE END OF THE FENCE. MAINTENANCE: THE FILTER FABRIC FENCE SHALL BE MAINTAINED TO BE FUNCTIONAL THIS SHALL INCLUDE REMOVAL OF TRAPPED SEDIMENT AND REQUIRED CLEANING, REPAIR, AND REPLACEMENT OF THE FILTER FABRIC. THE MAINTENANCE OR REPLACEMENT COST WILL BE PAID FOR BY THE DEPARTMENT UNDER UNIT BID PRICES, AGREED UNIT PRICES, OR CMS 109.04.

PAYMENT: THE COST OF ALL MATERIALS, CONSTRUCTION AND REMOVAL SHALL BE PAID FOR UNDER ITEM 207 - TEMPORARY PERIMETER FILTER FABRIC FENCE OR TEMPORARY DITCH CHECK FILTER FABRIC FENCE, LINEAR FOOT [METER].

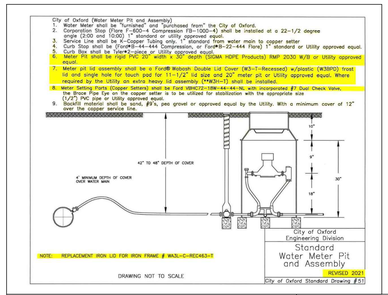
CONSTRUCTION OF A FILTER BARRIER

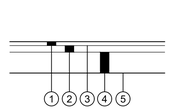


PLACEMENT AND CONSTRUCTION OF DITCH CHECK FILTER FABRIC FENCE



POINTS A SHOULD BE HIGHER THAN POINT B

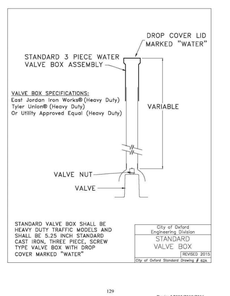


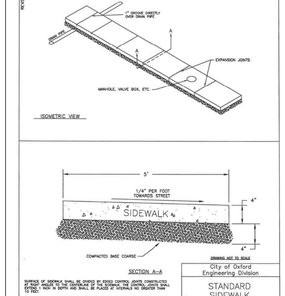


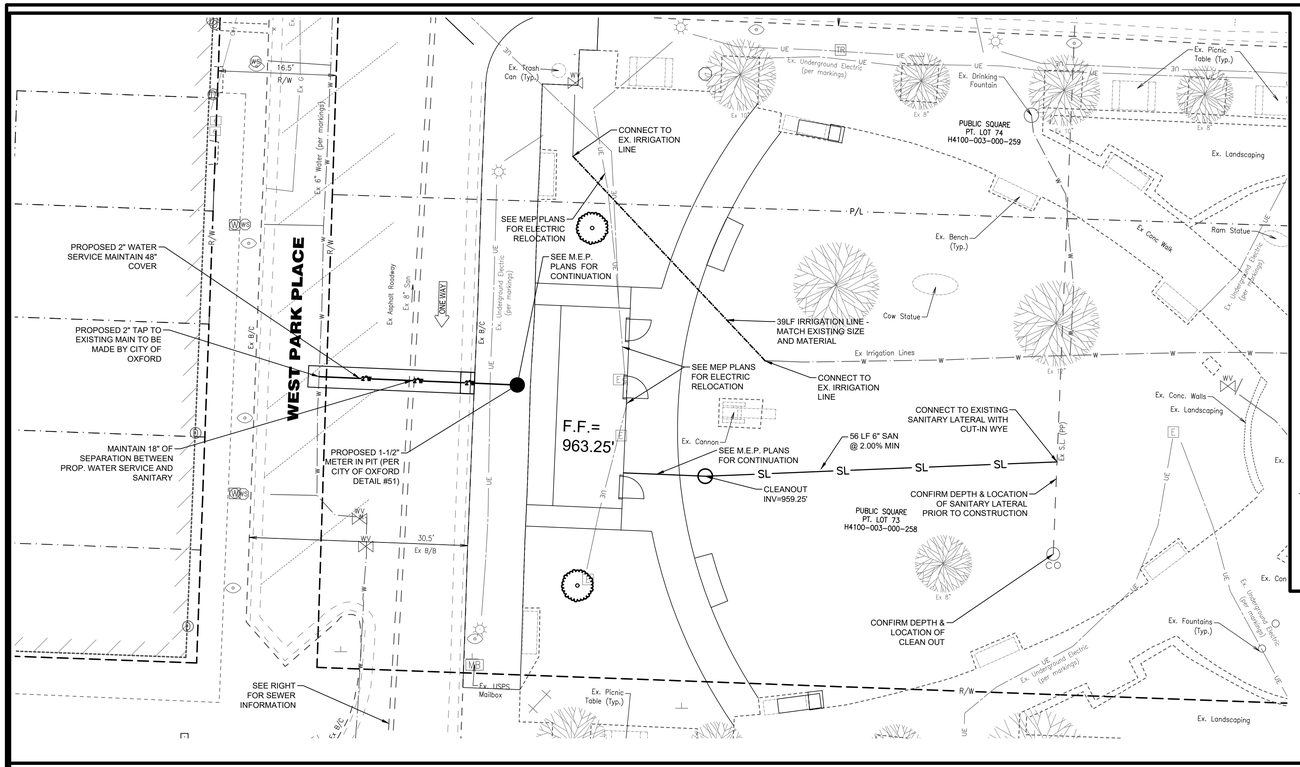
ASPHALT PAVEMENT

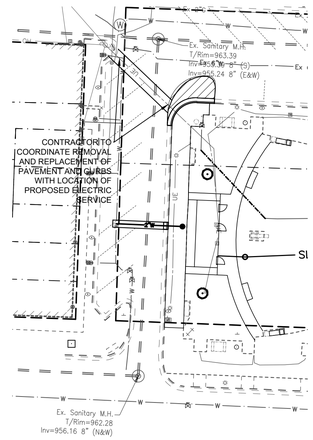
NOT TO SCALE

1. ITEM 448 - 1-1/2" SURFACE COURSE
2. ITEM 448 - 1-3/4" INTERMEDIATE COURSE
3. ITEM 407 - TACK COAT
4. ITEM 304 - 10" AGGREGATE BASE
5. ITEM 203 - SUBGRADE COMPACTION




REVISED 10/2021
6" BRIDGE VARIETY CAST IRON PIPE
EXPANSION JOINTS
MANHOLE, VALVE BOX, ETC



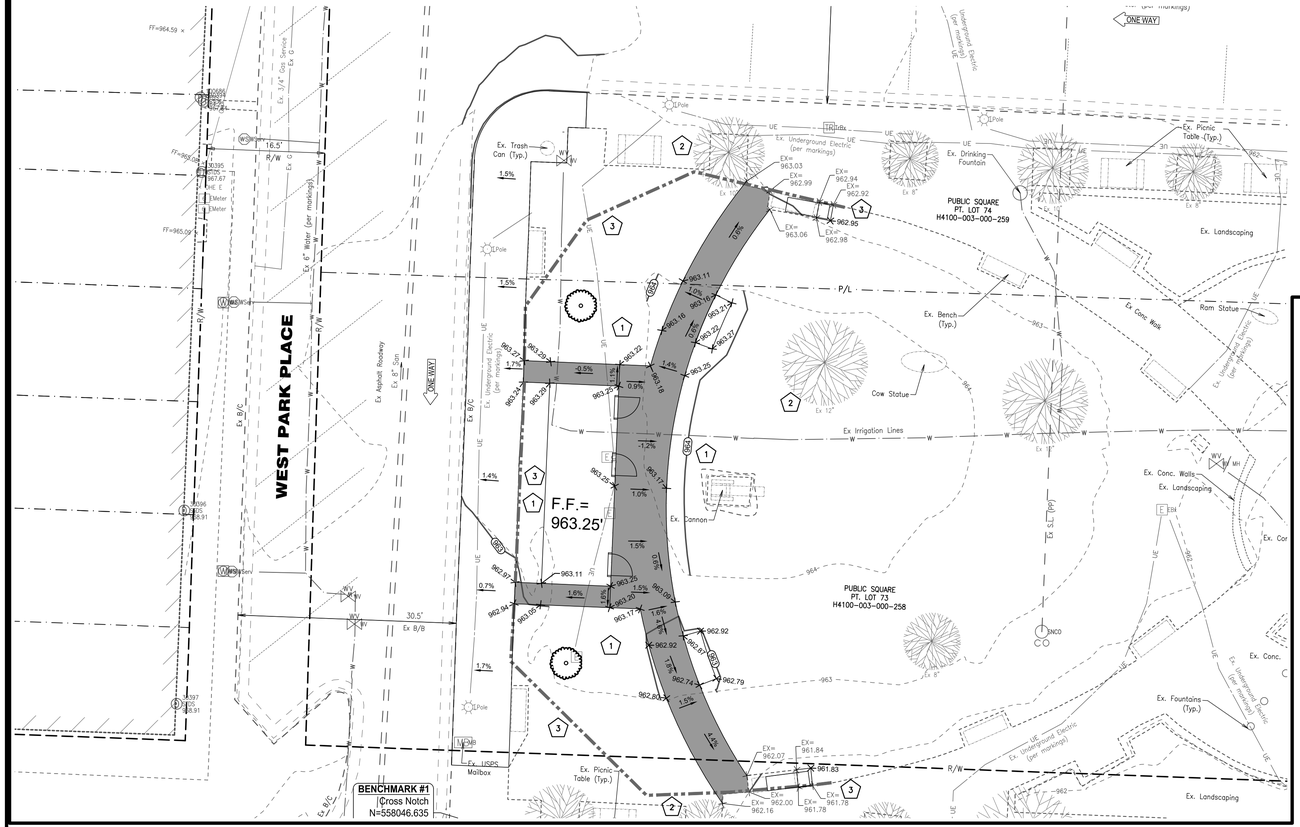


SEWER & ELECTRIC INFORMATION
1"=30'

UTILITY PLAN
1"=10'

UTILITY NOTES

1. BACK FLOW PREVENTOR FOR DOMESTIC WATER LINE TO BE ASSE 1013
2. THE 2" WATER SERVICE UNDER WEST PARK PLACE SHALL BE K COPPER.



GRADING & EROSION CONTROL PLAN
1"=10'

GRADING LEGEND

ADA ACCESSIBLE ROUTE

EROSION CONTROL LEGEND

1. SEEDING AND MULCHING
2. PRESERVE EXISTING VEGITATION
3. SILT FENCE

NOTES:

1. Regular inspection and maintenance will be provided for all erosion and sediment control practices. Permanent records of maintenance and inspections must be kept throughout the construction period. Inspections must be made a minimum of once every seven (7) days and immediately after storm events greater than 0.5 inches of rain in a 24 hour period. Provided will be the name of inspector, major observations, date of inspection and corrective measures taken.
2. All erosion and sediment control practices must conform to the specifications of Rainwater and Land Development, Ohio's standards for storm water management, land development and urban stream protection.
3. Perimeter Sedimentation control and basins/traps shall be implemented as the first step of grading and within seven (7) days of initial grubbing or grading and shall continue to function until upland areas are stabilized.
4. Disturbed areas which will remain unworked for a period of twenty-one (21) days or more, shall be stabilized with seeding and mulching or other approved means within seven (7) days. All disturbed areas within fifty (50) feet of an intermittent or solid blue line stream shall be stabilized within two (2) days. All areas of a site which are at final grade shall be stabilized with seeding and mulching or other approved means within seven (7) days.
5. Quantities for Erosion Control may vary between detailed plans and field conditions during construction. Plan quantities are a minimum; more erosion control may be necessary due to environmental conditions.
6. Sedimentation control and ditch swales are subject to change upon completion of entire set of construction drawings.
7. No solid or liquid waste shall be discharged into storm water runoff.
8. All earthwork shall be performed per the recommendations of the project geotechnical engineer.

PERMANENT SEEDING (1)

Permanent seeding includes the seedbed preparation, seeding, and the establishment of perennial vegetation used to permanently stabilize soil, prevent sediment pollution, reduce runoff by promoting infiltration, and provide storm water quality benefits offered by dense vegetation.

CONDITIONS WHERE PRACTICE APPLIES

Permanent seeding should be applied to:

- Areas or portions of construction-sites which can be brought to final grade. Applications of permanent seeding should not be delayed while construction on limited portions of the site being completed.
- Areas on that will be regraded, but will be dormant for a year or more.

PLANNING CONSIDERATIONS

Healthy dense turf will have a dramatic long lasting effect on stormwater quality as well as promoting infiltration and reducing the amount of runoff. To establish quality vegetation, careful preparation of the seedbed, soil, even subsoil is highly encouraged.

Soil Compaction--Stormwater quality and the amount of runoff both very significantly with soil compaction. Non-compacted soils improve stormwater by promoting:

- dense vegetation.
- high infiltration & lower runoff rates.
- pollutant filtration, deposition & absorption, and
- beneficial biologic activity in the soil.

Construction activity can cause highly compacted soils but also offers the opportunity to improve soil condition. The best time for improving soil condition is during the establishment of permanent vegetation. It is highly recommended that subsoilers, plows or others implements be specified as part of final seedbed preparation. Use discretion in slip-prone areas.

Minimum Soil Conditions--Vegetation cannot be expected to stabilize soil that is unstable due to its texture, structure, water movement or excessively steep slope. The following minimum soil conditions are needed for the establishment and maintenance of a long-lived vegetation cover. If these conditions cannot be met, see the Standards and Specifications for Resoiling.

- Soils must include enough fine-grained material to hold at least a moderate amount of available moisture.
- The soil must be free from material that is toxic or otherwise harmful to plant growth.

Permanent Seeding			
Seed Mix	Seeding Rate		Notes:
	lb./ac.	lb./1,000 ft. ^{2}	
General Use			
Creeping Red Fescue Ryegrass Kentucky Bluegrass	20-40 10-20 10-20	1/2-1 1/4-1/2 1/4-1/2	
Tall Fescue	40	1	
Dwarf Fescue	40	1	
Steep Banks or Cut Slopes			
Tall Fescue	40	1	
Crown Vetch Tall Fescue	10 20	1/4 1/2	Do not seed later than August
Flat Pea Tall Fescue	20 20	1/2 1/2	Do not seed later than August
Road Ditches and Swales			
Tall Fescue	40	1	
Dwarf Fescue Kentucky Bluegrass	90 5	2 1/4	
Lawns			
Perennial Ryegrass Kentucky Bluegrass	60 60	1 1/2 1 1/2	
Creeping Red Fescue Kentucky Bluegrass	60 60	1 1/2 1 1/2	For shaded areas

Note: Other approved seed species may be substituted.

Maintenance for Permanent Seedings Fertilization and Mowing					
Mixture	Formula	lb./ac.	lb./1,000 sq. ft.	Time	Mowing
Creeping Red Fescue Ryegrass Kentucky Bluegrass	10-10-10	500	12	Fall, yearly or as needed	Not closer than 3"
Tall Fescue	10-10-10	500	12		Not closer than 4"
Dwarf Fescue	10-10-10	500	12		Not closer than 2"
Crown Vetch Fescue	0-20-20	400	10	Spring, yearly following establishment and every 4-7 yrs. thereafter	Do not mow
Flat Pea Fescue	0-20-20	400	10		Do not mow

Note: Following soil test recommendations is preferred to fertilizer rates shown above.

SITE PREPARATION

1. A subsoiler, plow or other implement shall be used to reduce soil compaction and allow maximum infiltration. (Maximizing infiltration will help control both runoff rate and water quality.) Subsoiling should be done when the soil moisture is low enough to allow the soil to crack or fracture. Subsoiling shall not be done on slip-prone areas where soil preparation should be limited to what is necessary for establishing vegetation.
2. The site shall be graded as needed to permit the use of conventional equipment for seedbed preparation and seeding.
3. Resoil shall be applied where needed to establish vegetation.

SEEDBED PREPARATION

1. Lime--Agricultural group limestone shall be applied to acid soil as recommended by a soil test. In lieu of a soil test, lime shall be applied at the rate of 100 lb./1,000 sq. ft. or 2 tons/ac.
2. Fertilizer--Fertilizer shall be applied as recommended by a soil test. In lieu of a soil test, fertilizer shall be applied at a rate of 12 lb./1,000 sq. ft. or 500 lb./ac. of 10-10-10- or 12-12-12 analysis.
3. The lime and fertilizer shall be worked into the soil with a disk harrow, spring-tooth harrow, or other suitable field implement to a depth of 3 in. On sloping land the soil shall be worked on the contour.

SEEDING DATES AND SOIL CONDITIONS

Seeding should be done March 1 to May 31 or August 1 to September 30. These seeding dates are ideal but, with the use of additional mulch and irrigation, seedings may be made any time throughout the growing season. Tillageseedbed preparation should be done when the soil is dry enough to crumble and not form ribbons when compressed by hand. For winter seeding, see the following section on dormant seeding.

MULCHING

1. Mulch material shall be applied immediately after seeding. Seedings made during optimum seeding dates and with favorable soil conditions and on very flat areas may not need mulch to achieve adequate stabilization. Dormant seeding shall be mulched.
2. Materials
   - Straw--If straw is used it shall be unrotted small-grain straw applied at the rate of 2 tons/ac. or 90 lb./1,000 sq. ft. (two to three bales). The mulch shall be spread uniformly by hand or mechanically so the soil surface is covered. For uniform distribution of hand-spread mulch, divide area into approximately 1,000-sq.-ft. sections and spread two 45-lb. bales of straw in each section.
   - Hydroseeders--If wood cellulose fiber is used, it shall be used at 2,000 lb/ac. or 46 lb./1,000 sq. ft.
   - Other--Other acceptable mulches include mulch mattings applied according to manufacturer's recommendations or wood chips applied at 6 tons/ac.
3. Straw mulch shall be anchored immediately to minimize loss by wind or water. Anchoring Methods:
   - Mechanical--A disk, crimper, or similar type tool shall be set straight to punch or anchor the mulch material into the soil. Straw mechanically anchored shall not be finely chopped but, generally, be left longer than 6 in.
   - Mulch Nettings--Nettings shall be used according to the manufacturer's recommendations. Netting may be necessary to hold mulch in place in areas of concentration runoff and on critical slopes.
   - Asphalt Emulsion--Asphalt shall be applied as recommended by the manufacturer or at the rate of 160 gal./ac.
   - Synthetic Binders--Synthetic binders such as Acrylic DLR (Agri-Tac), DCA-70, Petroset, Terra Tack or equal may be used at rates recommended by the manufacturer.
   - Wood-Cellulose Fiber--Wood-cellulose fiber binder shall be applied at a net dry weight of 750 lb./ac. The wood-cellulose fiber shall be mixed with water and the mixture shall contain a maximum of 50 lb./100 gal.

TEMPORARY SEEDING (1)

Temporary seeding provides erosion control on areas in between construction operations. Grasses which are quick growing are seeded and usually mulched to provide prompt, temporary soil stabilization. It effectively minimizes the area of a construction-site prone to erosion and should be used everywhere the sequence of construction operations allows vegetation to be established.

CONDITIONS WHERE PRACTICE APPLIES

Temporary seeding should be applied on exposed soil where additional work (grading,etc.) is not scheduled for more than 14 days. Permanent seeding should be applied if the areas will be idle for more than a year.

PLANNING CONSIDERATIONS

This practice has the potential to drastically reduce the amount of sediment eroded from a construction-site. Control efficiencies greater than 90% will be achieved with proper applications of temporary seeding. Because practices used to trap sediment are usually much less effective, temporary seeding is to be used even on areas where runoff is treated by sediment trapping practices. Because temporary seeding is highly effective and practical on construction-sites, its liberal use is highly recommended.

Temporary Seeding Species Selection			
Seeding Dates	Species	Lb./1,000 ft. ^{2}	Per Acre
March 1 to August 15	Oats Tall Fescue Annual Ryegrass	3 1 1	4 bushel 40 lb. 40 lb.
	Perennial Ryegrass Tall Fescue Annual Ryegrass	1 1 1	40 lb. 40 lb. 40 lb.
August 16 to November 1	Rye Tall Fescue Annual Ryegrass	3 1 1	2 bushel 40 lb. 40 lb.
	Wheat Tall Fescue Annual Ryegrass	3 1 1	2 bushel 40 lb. 40 lb.
	Perennial Ryegrass Tall Fescue Annual Ryegrass	1 1 1	40 lb. 40 lb. 40 lb.
November 1 to Spring Seeding	Use mulch only, sodding practices or dormant seeding.		

Note: Other approved seed species may be substituted.

1. Structural erosion- and sediment-control practices such as diversions and sediment traps shall be installed and stabilized with temporary seeding prior to grading the rest of the construction-site.
2. Temporary seed shall be applied between construction operations on soil that will not be graded or reworked for 14 days or more. These idle areas should be seeded as soon as possible after grading or shall be seeded within 7 days. Several applications of temporary seeing are necessary on typical construction projects.
3. The seedbed should be pulverized and loose to ensure the success of establishing vegetation. However, temporary seeding shall not be postponed if ideal seedbed preparation is not possible.
4. Soil Amendments--Applications of temporary vegetation shall establish adequate stands of vegetation which may require the use of soil amendments. Soil tests should be taken on the site to predict the need for lime and fertilizer.
5. Seeding Method--Seed shall be applied uniformly with a cyclone seeder, drill cultipacker seeder, or hydroseeder. When feasible, seed that has been broadcast shall be covered by raking or dragging and then lightly tamped into place using a roller or cultipacker. If hydroseeding is used, the seed and fertilizer will be mixed on-site and the seeding shall be done immediately and without interruption.

MULCHING TEMPORARY SEEDING

1. Applications of temporary seeding shall include mulch which shall be applied during or immediately after seeding. Seedings made during optimum seeding dates and with favorable soil conditions and on very flat areas may not need mulch to achieve adequate stabilization.
2. Materials:
   - Straw--If straw is used, it shall be unrotted small-grain straw applied at the rate of 2 tons/ac. or 90 lb./1,000 sq. ft. (two to three bales). The mulch shall be spread uniformly by hand or mechanically so the soil surface is covered. For uniform distribution of hand-spread mulch, divide area into approximately 1,000-sq.-ft. sections and spread two 45-lb. bales of straw in each section.
   - Hydroseeders--If wood cellulose fiber is used, it shall be used at 2,000 lb/ac. or 46 lb./1,000 sq. ft.
   - Other--Other acceptance mulches include mulch mattings applied according to manufacturer's recommendations or wood chips applied at 6 tons/ac.
3. Straw mulch shall be anchored immediately to minimize loss by wind or water. Anchoring Methods:
   - Mechanical--A disk, crimper, or similar type tool shall be set straight to punch or anchor the mulch material into the soil. Straw mechanically anchored shall not be finely chopped but, generally, be left longer than 6 in.
   - Mulch Nettings--Nettings shall be used according to the manufacturer's recommendations. Netting may be necessary to hold mulch in place in areas of concentration runoff and on critical slopes.
   - Asphalt Emulsion--Asphalt shall be applied as recommended by the manufacturer or at the rate of 160 gal./ac.
   - Synthetic Binders--Synthetic binders such as Acrylic DLR (Agri-Tac), DCA-70, Petroset, Terra Tack or equal may be used at rates recommended by the manufacturer.
   - Wood-Cellulose Fiber--Wood-cellulose fiber binder shall be applied at a net dry weight of 750 lb./ac. The wood-cellulose fiber shall be mixed with water and the mixture shall contain a maximum of 50 lb./100 gal.

SITE PREPARATION

1. A subsoiler, plow or other implement shall be used to reduce soil compaction and allow maximum infiltration. (Maximizing infiltration will help control both runoff rate and water quality.) Subsoiling should be done when the soil moisture is low enough to allow the soil to crack or fracture. Subsoiling shall not be done on slip-prone areas where soil preparation should be limited to what is necessary for establishing vegetation.
2. The site shall be graded as needed to permit the use of conventional equipment for seedbed preparation and seeding.
3. Resoil shall be applied where needed to establish vegetation.

SEEDBED PREPARATION

1. Lime--Agricultural group limestone shall be applied to acid soil as recommended by a soil test. In lieu of a soil test, lime shall be applied at the rate of 100 lb./1,000 sq. ft. or 2 tons/ac.
2. Fertilizer--Fertilizer shall be applied as recommended by a soil test. In lieu of a soil test, fertilizer shall be applied at a rate of 12 lb./1,000 sq. ft. or 500 lb./ac. of 10-10-10- or 12-12-12 analysis.
3. The lime and fertilizer shall be worked into the soil with a disk harrow, spring-tooth harrow, or other suitable field implement to a depth of 3 in. On sloping land the soil shall be worked on the contour.

SEEDING DATES AND SOIL CONDITIONS

Seeding should be done March 1 to May 31 or August 1 to September 30. These seeding dates are ideal but, with the use of additional mulch and irrigation, seedings may be made any time throughout the growing season. Tillageseedbed preparation should be done when the soil is dry enough to crumble and not form ribbons when compressed by hand. For winter seeding, see the following section on dormant seeding.

MULCHING

1. Mulch material shall be applied immediately after seeding. Seedings made during optimum seeding dates and with favorable soil conditions and on very flat areas may not need mulch to achieve adequate stabilization.
2. Materials
   - Straw--If straw is used it shall be unrotted small-grain straw applied at the rate of 2 tons/ac. or 90 lb./1,000 sq. ft. (two to three bales). The mulch shall be spread uniformly by hand or mechanically so the soil surface is covered. For uniform distribution of hand-spread mulch, divide area into approximately 1,000 sq. ft. sections and spread two 45-lb. bales of straw in each section.
   - Hydroseeders--If wood cellulose fiber is used, it shall be used at 2,000 lb./ac. or 46 lb./1,000 sq. ft.
   - Other--Other acceptable mulches include mulch mattings applied according to manufacturer's recommendations or wood chips applied at 6 tons/ac.
3. Straw Mulch Anchoring Methods

   Straw mulch shall be anchored immediately to minimize loss by wind or water.

   - Mechanical--A disk, crimper, or similar type tool shall be set straight to punch or anchor the mulch material into the soil. Straw mechanically anchored shall not be finely chopped by, generally, be left longer than 6 in.

MAINTENANCE

1. Permanent seeding shall not be considered established for at least 1 full yr. from the time of planting. Seeded areas shall be inspected for failure and vegetation conditions, it may be necessary to irrigate, fertilize, overseed, or reestablish plantings in order to provider permanent vegetation for adequate erosion control.
2. Maintenance fertilization rates shall be established by soil test recommendations or by using the rates shown in the following table.

DORMANT SEEDINGS.

1. Seeding shall not be planted from October 1 through November 20. During this period the seeds are likely to germinate but probably will not be able to survive the winter.
2. The following methods may be used for "Dormant Seeding":
   - From October 1 through November 20, prepare the seedbed, add the required amounts of lime and fertilizer, then mulch and anchor. After November 20, and before March 15, broadcast the selected seed mixture. Increase the seeding rates by 50% for this type of seeding.
   - From November 20 through March 15, when soil conditions permit, prepare the seedbed, lime and fertilize, apply the selected seed mixture, mulch and anchor. Increase the seeding rates by 50% for this type of seeding.
   - Apply seed uniformly with a cyclone seeder, drill, cultipacker seeder, or hydro-seeder (slurry may include seed and fertilizer) on a firm, moist seedbed.
   - Where feasible, except when a cultipacker type seeder is used, the seedbed should be firmed following seeding operations with a cultipacker, roller, or light drag. On sloping land, seeding operations should be on the contour where feasible.
   - Mulch Nettings--Nettings shall be used according to the manufacturer's recommendations. Netting may be necessary to hold mulch in place in areas of concentrated runoff and on critical slopes.
   - Asphalt Emulsion--Asphalt shall be applied as recommended by the manufacturer or at the rate of 160 gal./ac.
   - Synthetic Binders--Synthetic binders such as Acrylic DLR (Agri-Tac), DAC-70, Petroset, Terra Tack or equal may be used at rates recommended by the manufacturer.
   - Wood Cellulose Fiber--Wood cellulose fiber binder shall be applied at a net dry weight of 750 lb./ac. The wood cellulose fiber shall be mixed with water and the mixture shall contain a maximum of 50 lb./100 gal. of wood cellulose fiber.

IRRIGATION

1. Permanent seeding shall include irrigation to establish vegetation during dry or hot weather or on adverse site conditions as needed for adequate moisture for seed germination and plant growth.
2. Excessive irrigation rates shall be avoided and irrigation monitored to prevent erosion and damage from runoff.

Basis of Bearing: State Plane NAD83 (2011)

0 5 10 15
SCALE: 1" = 10'

STATE OF OHIO
JOHN A. BAYER
86794
REGISTERED PROFESSIONAL ENGINEER
9/3/2025

Item	Date	Revision Description	Drawn	Chk

OXFORD PARK PLACE RESTROOM FACILITY

PUBLIC SQUARE
PT LOTS 73 & 74
CITY OF OXFORD
BUTLER COUNTY, OHIO

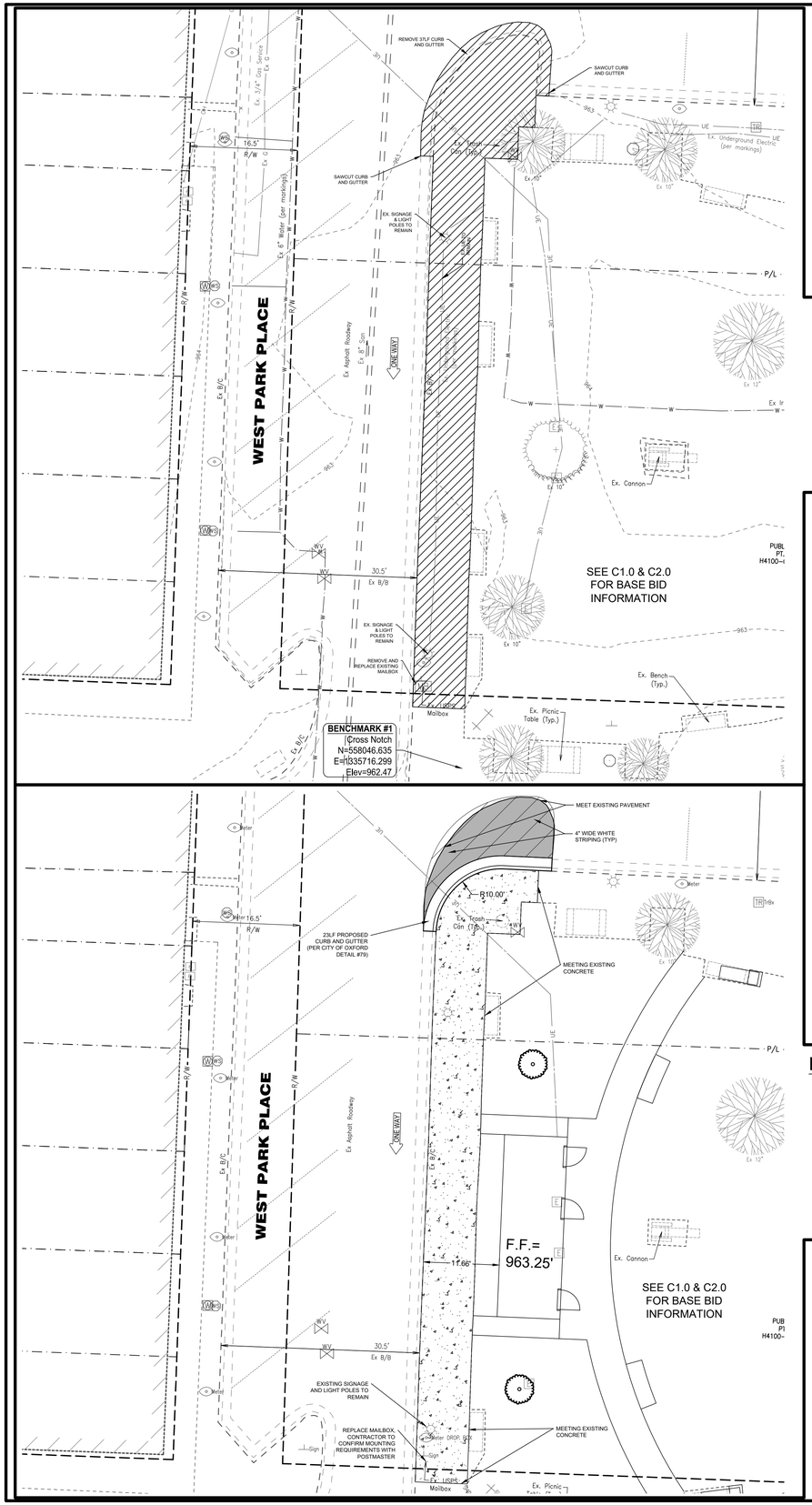
Grading, Erosion Control, & Utility Plan

bayer becker
www.bayerbecker.com
6900 Tylersville Road, Suite A
Mason, OH 45040 - 513.336.6600

Drawing: 21-0258 CD
Drawn by: JBD
Checked By: JAB
Issue Date: 09-03-25

Sheet: **C2.0**

Plot time: Sep 03, 2025 - 4:17pm
Drawing name: J:\2021\21-0258\CVIDWG\21-0258 CD.DWG - Layout Tab: C2.0 Grading & Erosion Control Plan & Utility Plan



DEMOLITION PLAN
1"=10'

DEMOLITION LEGEND

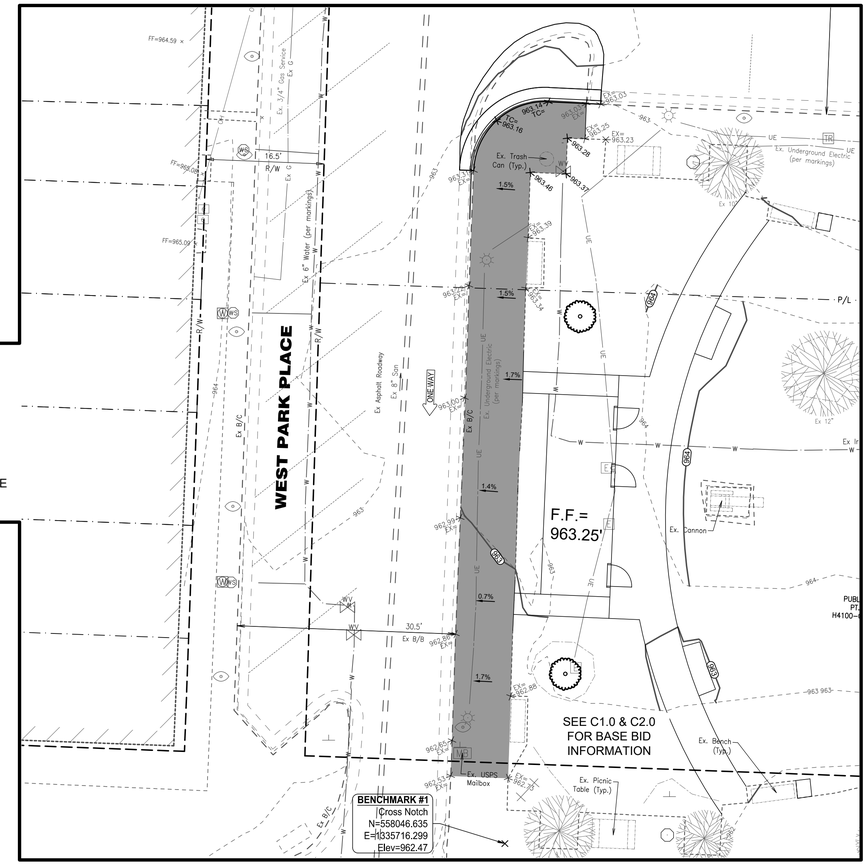
CONCRETE SIDEWALK AND CURB AND GUTTER REMOVAL

LAYOUT PLAN
1"=10'

LAYOUT LEGEND

CONCRETE WALK (PER CITY OF OXFORD DETAIL #80)

ASPHALT PAVEMENT (SEE DETAIL ON C1.1)



GRADING & EROSION CONTROL PLAN
1"=10'

GRADING LEGEND

ADA ACCESSIBLE ROUTE

Basis of Bearing:
State Plane NAD83 (2011)

0 10 15
SCALE: 1" = 10'

STATE OF OHIO
JOHN A. BAYER
86794
REGISTERED PROFESSIONAL ENGINEER
9/3/2025

Item	Revision Description	Date	Drawn	Chk.

OXFORD PARK PLACE
RESTROOM FACILITY
PUBLIC SQUARE
PT LOTS 73 & 74
CITY OF OXFORD
BUTLER COUNTY, OHIO

Alternative #1 - Demolition, Site, & Grading Plan

bayer becker
www.bayerbecker.com
6900 Wilkinson Road, Suite A
Mason, OH 45040 - 513.336.6600

Drawing: 21-0258 CD
Drawn by: JBB
Checked By: JAB
Issue Date: 09-03-25
Sheet: C3.0

811 Know what's below. Call before you dig.

Plot time: Sep 03, 2025 - 4:18pm
Drawing name: J:\2021\21-0258\CVIDWG\21-0258 CD.DWG - Layout Tab: C3.0 Demolition Site & Grading Plan

ABBREVIATIONS

SYMBOL	
@	AT
&	AND
∠	ANGLE
Ø	DIAMETER
℄	CENTER LINE
PL	PLATE

A	
ABV	ABOVE
A/C	AIR CONDITIONING
AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLER UNIT
AL	ALUMINUM
ALT	ALTERNATE
ANOD	ANODIZED
ANCH	ANCHOR
APPROX	APPROXIMATELY
ARCH	ARCHITECT OR ARCHITECTURAL
ATTEN	ATTENUATED
AUTO	AUTOMATIC
AVG	AVERAGE

B	
BLDG	BUILDING
BLK	BLOCK
BLKG	BLOCKING
BOT	BOTTOM
BRG	BEARING
BSMT	BASEMENT

C	
CAB	CABINET
CB	CATCH BASIN
C/C	CENTER TO CENTER
CF	CUBIC FOOT
CFCI	CONTRACTOR FURNISH, CONTRACTOR INSTALL
CFOI	CONTRACTOR FURNISH, OWNER INSTALL
CG	CORNER GUARD
CJ	CONTROL JOINT
CLG	CEILING
CL	CLOSET
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
CO	CLEAN OUT
COL	COLUMN
CONC	CONCRETE
CONST	CONSTRUCTION
CONT	CONTINUOUS OR CONTINUE
CPU	CENTRAL PROCESSING UNIT (COMPUTER)
CY	CUBIC YARD

D	
DBL	DOUBLE
DEMO	DEMOLISH, DEMOLITION
DF	DRINKING FOUNTAIN
DIA	DIAMETER
DIM	DIMENSION
DISP	DISPENSER
DIV	DIVISION
DS	DOWNSPOUT
DWG	DRAWING
DTL	DETAIL

E	
EA	EACH
EC	ELECTRICAL CONTRACTOR
EIFS	EXTERIOR INSULATION AND FINISH SYSTEM
EJ	EXPANSION JOINT
ELEC	ELECTRIC OR ELECTRICAL
ELEV	ELEVATION OR ELEVATOR
EMERG	EMERGENCY
EQ	EQUAL
EQUIP	EQUIPMENT
EWC	ELECTRIC WATER COOLER
EXIST OR EX	EXISTING
EXP	EXPANSION
EXT	EXTERIOR

F	
FD	FLOOR DRAIN
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
FF	FINISH FLOOR
FIN	FINISH OR FINISHED
FLR	FLOOR
FND	FOUNDATION
FRT	FIRE RETARDANT TREATED WOOD
FT	FOOT OR FEET OR FULLY TEMPERED
FTG	FOOTING
FUR	FURRING
FV	FIELD VERIFY
FOW	FACE OF WALL

G	
GA	GAUGE
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GD	GRADE OR GRADING
GEN	GENERAL
GL	GLASS OR GLAZING
GND	GROUND
GYP	GYPSUM
GWB	GYPSUM BOARD
GWT	GLAZED WALL TILE

H	
HB	HOSE BIBB
HDW	HARDWARE
HM	HOLLOW METAL
HORIZ	HORIZONTAL
HT	HEIGHT
HVAC	HEATING, VENTILATION & AIR CONDITIONING
HWD	HARDWARE

I	
ID	INSIDE DIAMETER
IN	INCH
INCL	INCLUDE (D) (ING)
INT	INTERIOR
INV	INVERT

J	
JB	JUNCTION BOX
JC	JANITOR CLOSET

L	
L	LONG
LAV	LAVATORY
LBS	POUNDS
LH	LEFT HAND
LL	LIVE LOAD
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LTL	LINTEL
LVR	LOUVER

M	
M	MEN OR METER
MAS	MASONRY
MAT	MATERIAL
MAX	MAXIMUM
MC	MECHANICAL CONTRACTOR
MECH	MECHANICAL
MFR	MANUFACTURER
MH	MOUNTING HEIGHT, MANHOLE
MIL	THOUSANDTHS OF AN INCH
MM	MILLIMETER
MIN	MINIMUM
MISC	MISCELLANEOUS
MO	MASONRY OPENING
MTD	MOUNTED
MTL	METAL

N	
N	NORTH OR NITROGEN
NC	NURSE CALL
NIC	NOT IN CONTRACT
NO	NUMBER OR NITROUS OXIDE
NOM	NOMINAL
NRC	NOISE REDUCTION COEFFICIENT
NTS	NOT TO SCALE

O	
OD	OUTSIDE DIAMETER
OFCI	OWNER FURNISH, CONTRACTOR INSTALL
OFOI	OWNER FURNISH, OWNER INSTALL
OFVI	OWNER FURNISH, VENDOR INSTALL
OH	OVERHEAD
OHD	OVERHEAD DOOR
OPNG	OPENING
OPP	OPPOSITE
O_2	OXYGEN

P	
PAR	PARALLEL
PC	PLUMBING CONTRACTOR
PCF	POUNDS PER CUBIC FOOT
PL	PLATE OR PROPERTY LINE
PLBG	PLUMBING
PLWD	PLYWOOD
PME	PLUMBING, MECHANICAL & ELECTRICAL
PNL	PANEL
PR	PAIR
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PVC	POLYVINYL CHLORIDE

Q	
QTY	QUANTITY

R	
R	RADIUS
RA	RETURN AIR
RB	RUBBER BASE
RD	ROOF DRAIN
RECEPT	RECEPTACLE
REF	REFERENCE
REINF	REINFORCE
REQD	REQUIRED
RET	RETURN
REV	REVISION
RH	RIGHT HAND
RM	ROOM
RO	ROUGH OPENING
ROW	RIGHT OF WAY

S	
S	SOUTH
SAN	SANITARY
SB	SINK BASE
SCHED	SCHEDULE
SEAL	SEALANT
SECT	SECTION
SF	SQUARE FEET
SG	SAFETY GLASS
SH	SPRINKLER HEAD OR SHOWER HEAD
SHT	SHEET
SHTG	SHEATHING
SIM	SIMILAR
SPEC	SPECIFICATION(S)
SPK	SPEAKER
SQ	SQUARE
ST	STREET
STC	SOUND TRANSMISSION CLASSIFICATION
STD	STANDARD
STL	STEEL
STR	STRUCTURAL
SUSP	SUSPENDED
SV	SHEET VINYL
SYS	SYSTEM

T	
T & G	TONGUE & GROOVE
TB	TOWEL BAR
T&B	TOP AND BOTTOM
TEL	TELEPHONE
TOC	TOP OF CONCRETE
TOS	TOP OF STEEL
TOM	TOP OF MASONRY
TOW	TOP OF WALL
TRANS	TRANSFORMER
TV	TELEVISION
TYP	TYPICAL

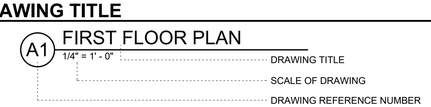
U	
UC	UNDER CABINET OR COUNTER
UH	UNIT HEATER
UL	UNDERWRITERS LABORATORY
UNO	UNLESS NOTED OTHERWISE

V	
V	VACUUM
VB	VAPOR BARRIER
VCT	VINYL COMPOSITION TILE
VERT	VERTICAL
VS	VACUUM SLIDE

W	
W	WIDE OR WEST OR WOMEN
W/	WITH
W/O	WITHOUT
WC	WATER CLOSET OR WALL CABINET
WD	WOOD
WIN	WINDOW
WP	WORK POINT
WPT	WOOD PRESERVATIVE TREATMENT
WT	WEIGHT
WWF	WELDED WIRE FABRIC

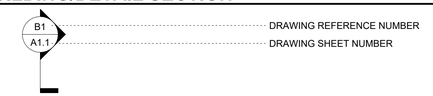
REFERENCE SYMBOLS

DRAWING TITLE

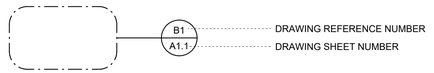


INTERIOR ELEVATIONS

BUILDING/DETAIL SECTION



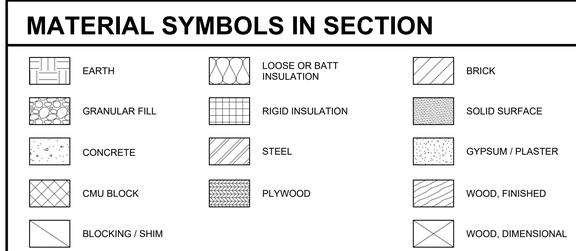
ENLARGED DETAIL



EXTERIOR ELEVATIONS

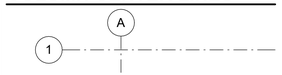
MATCH LINE

MATERIAL SYMBOLS IN SECTION



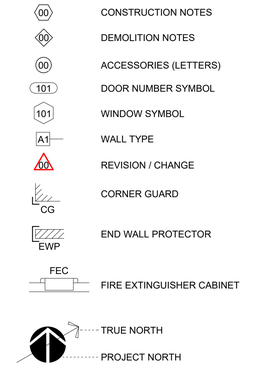
DRAWING SYMBOLS

COLUMN CENTER LINES



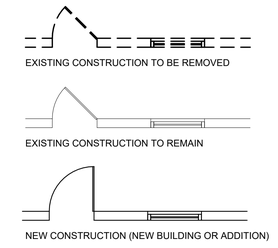
ROOM SYMBOL

PLAN SYMBOLS

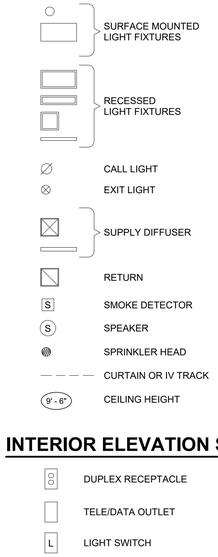


ELEVATION SYMBOLS

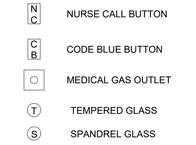
TYPICAL WALL CONVENTIONS



REFLECTED CEILING SYMBOLS



INTERIOR ELEVATION SYMBOLS

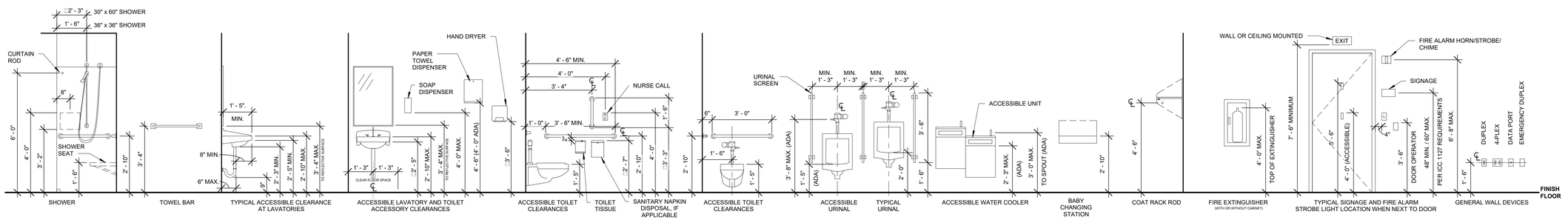


FIRE BARRIER LEGEND

ALL SYMBOLS OR ABBREVIATIONS MIGHT NOT NECESSARILY BE USED ON THIS PROJECT.
ADDITIONAL SYMBOLS OR ABBREVIATIONS MAY APPEAR ON SUBSEQUENT SHEETS.

MOUNTING & CLEARANCE STANDARDS N.T.S.

(FOLLOW THESE UNLESS NOTED OTHERWISE)



SHOWER | TOWEL BAR | TYPICAL ACCESSIBLE CLEARANCE AT LAVATORIES | ACCESSIBLE LAVATORY AND TOILET ACCESSORY CLEARANCES | ACCESSIBLE TOILET CLEARANCES | TOILET TISSUE | SANITARY NAPKIN DISPOSAL, IF APPLICABLE | ACCESSIBLE TOILET CLEARANCES | ACCESSIBLE URINAL | TYPICAL URINAL | ACCESSIBLE WATER COOLER | BABY CHANGING STATION | COAT RACK ROD | FIRE EXTINGUISHER (WITH OR WITHOUT CABINET) | TYPICAL SIGNAGE AND FIRE ALARM STROBE LIGHT LOCATION WHEN NEXT TO DOOR | GENERAL WALL DEVICES

ACCESSIBLE FIXTURE, ACCESSORIES, AND DIMENSIONS ARE BASED ON: ICC 117.1 - 2017 FOR NEW CONSTRUCTION AND ICC 117.1 - 2009 FOR EXISTING BUILDINGS

App Architecture
creative focused design
615 Woodside Drive, Englewood, Ohio 45322
T 937-836.8898 F 937-832-3696
www.app-arch.com

STATE OF OHIO ★ MARIANNE L WEBER 9675 ★ REGISTERED ARCHITECT

Marianne L Weber License #9675
Expiration Date 12/31/2025

Restroom Facility

Oxford Park Place

2 West High Street, Oxford, Ohio 45056

ISSUE

NO.	DATE	DESCRIPTION
	09/03/25	FOR PERMIT & REBID

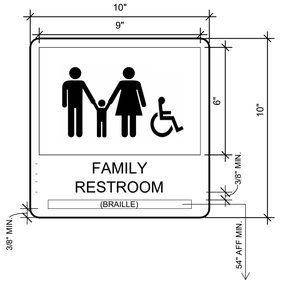
DATE	09.03.2025
JOB NO.	4265.00
DRAWN	JAK
CHECKED	MES/TAG

TITLE
ABBREVIATIONS AND SYMBOLS

SHEET NO.
A0.1

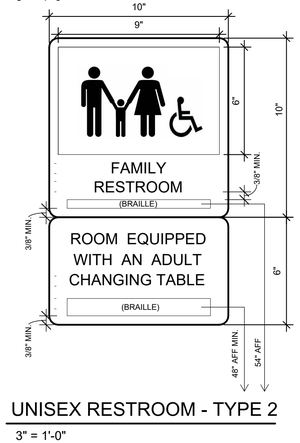
9/8/2025 5:34:09 PM

SIGNAGE LEGEND



UNISEX RESTROOM - TYPE 1

3" = 1'-0"



UNISEX RESTROOM - TYPE 2

3" = 1'-0"

SIGN NOTES

A. ALL SIGNS SHALL HAVE BRAILLE LETTERING BENEATH TEXT, TYPICAL.

B. TEXT AND GRAPHICS TO BE NON-GLARE COLOR IN HIGH CONTRAST WITH BACKGROUND. SELECTED BY ARCHITECT FROM MANUFACTURER'S STANDARD COLORS.

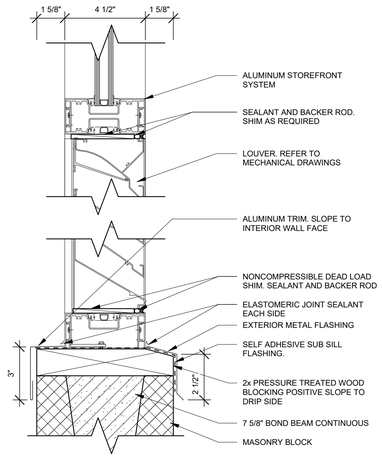
C. BACKGROUND TO BE NON-GLARE COLOR IN HIGH CONTRAST WITH TEXT AND GRAPHICS. SELECTED BY ARCHITECT FROM MANUFACTURER'S STANDARD COLORS.

D. 1/2" RADIUS CORNERS.

E. ALL TEXT ON SIGNS LOCATED NEXT TO INTERIOR DOORS WILL BE 1/32" RAISED CHARACTERS, UPPERCASE, AND VIEWABLE AT LESS THAN 6 FEET.

F. MECHANICALLY FASTENED AND SECURED INTO MORTAR JOINTS. DO NOT PENETRATE VENEER.

G. ACRYLIC PLASTIC BASE WITH APPLIED PLASTIC LETTERS AND BRAILLE.



F1 LOUVER HEAD / SILL DETAIL

3" = 1'-0"

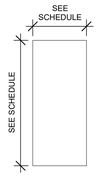
OPENINGS SCHEDULE

DOOR No.	ROOM NAME	HDW. SET	SIZE W	SIZE H	SIZE T	DOOR MAT.	DOOR TYPE	DOOR FIN.	FRAME MAT.	FRAME TYPE	FRAME FIN.	FRAME DETAILS HEAD	FRAME DETAILS JAMB	FRAME DETAILS SILL	FIRE RTG.	REMARKS
101	TOILET	1	3' - 0"	7' - 0"	1 3/4"	HM	F1	DEP-1	HM	1	DEP-1	B3/A0.3	D3/A0.3	F3/A0.3	-	1, 2
102	UTILITY	2	3' - 0"	7' - 0"	1 3/4"	HM	F1	DEP-1	HM	1	DEP-1	B3/A0.3	D3/A0.3	F3/A0.3	-	1, 2 (SIM)
103	TOILET	1	3' - 0"	7' - 0"	1 3/4"	HM	F1	DEP-1	HM	1	DEP-1	B3/A0.3	D3/A0.3	F3/A0.3	-	1, 2
SF1	-	-	27' - 8"	VARIES	-	-	-	-	ALUM	SF1	ANOD	B5/A0.3	D5/A0.3	F5/A0.3	-	-
SF2	-	-	27' - 8"	VARIES	-	-	-	-	ALUM	SF2	ANOD	B5/A0.3	D5/A0.3	F5/A0.3	-	-

DOOR REMARKS

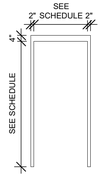
No.	REMARK
1	SEE SPECIFICATIONS FOR HARDWARE SET
2	SEE WIRING DIAGRAM SHEET E1.2

DOOR ELEVATIONS

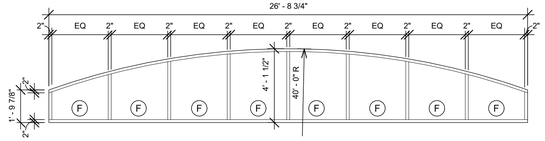


TYPE F1
FLUSH

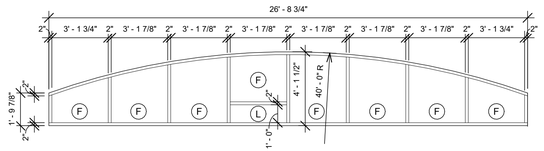
FRAME ELEVATIONS



TYPE 1
SINGLE / PAIR
STANDARD



TYPE SF1
STOREFRONT
WINDOW



TYPE SF2
STOREFRONT
WINDOW

(F) INDICATES INSULATED FROSTED GLASS

(L) INDICATES LOUVER - SEE MECHANICAL

ROOM FINISH SCHEDULE

ROOM No.	ROOM NAME	FLOOR	BASE	WALLS N	WALLS S	WALLS E	WALLS W	CEILING MAT.	REMARKS
101	TOILET	SC-1	--	EXP	EXP	EXP	EXP	EXP / EP-2	1
102	UTILITY	SC-1	--	EXP	EXP	EXP	EXP	EXP / EP-2	1
103	TOILET	SC-1	--	EXP	EXP	EXP	EXP	EXP / EP-2	1

ROOM FINISH SCHEDULE REMARKS

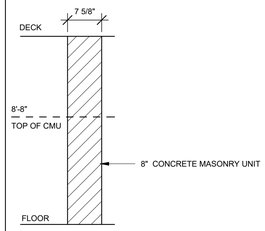
No.	REMARK
1	MAINTAIN SLOPE TO FLOOR DRAIN.

MATERIAL LEGEND

ITEM	MATERIAL	MANUFACTURER	MATERIAL MODEL NO.	COLOR	FLAME / SMOKE	REMARKS
CEILING						
EXP / EP-2	EXPOSED STRUCTURE	SHERWIN-WILLIAMS	SW 6258	TRICORN BLACK	--	
DOORS						
DEP-1	DOOR & FRAME PAINT	SHERWIN-WILLIAMS	SW 6215	ROCKY RIVER	--	DIRECT TO METAL ALKYD ENAMEL, SEMI-GLOSS FINISH.
FLOOR						
SC-1	SEALED CONCRETE	--	--	--	--	
WALL						
EP-1	EPOXY PAINT	SHERWIN-WILLIAMS	SW 0035	WARM BEIGE	--	ON INTERIOR OF CMU BLOCK
EXP	EXPOSED	--	--	--	--	EXPOSED WITH A SEALER / GRAFFITI STOP

INTERIOR WALL TYPES SCHEDULE

X

TYPE	BASE WALL WIDTH	FIRE RATING TESTING AGENCY, ASSEMBLY NO.	DETAILS & NOTES
M1	7 5/8"	- -	

GENERAL NOTES

A. UL TEST NUMBERS FOR INTERIOR PARTITIONS WILL VARY DEPENDING ON THE MANUFACTURER OF COMPONENTS ACTUALLY USED. MAINTAIN RATING AND ADVISE IF WALL THICKNESS WILL CHANGE.

B. REFER TO FLOOR PLANS FOR LOCATIONS OF INTERIOR PARTITION TYPES.

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TITLE
FINISH SCHEDULES

SHEET NO.
A0.2

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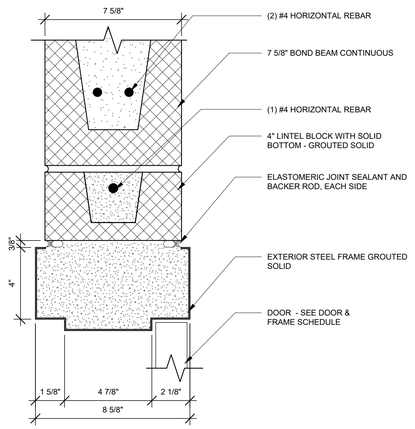
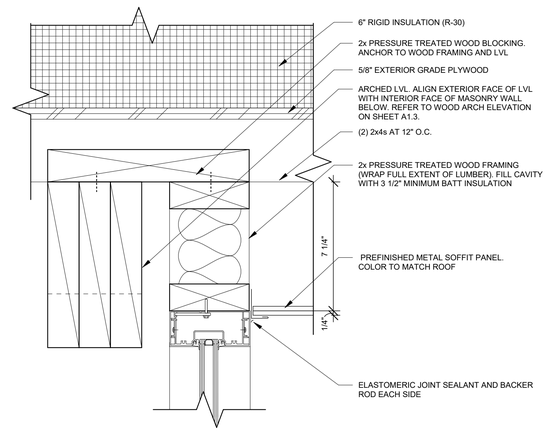
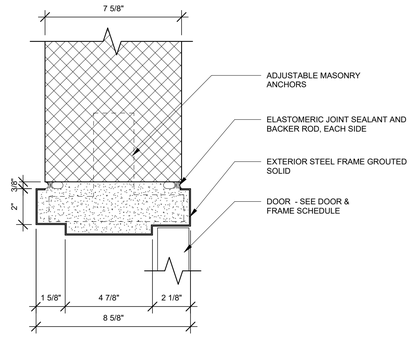


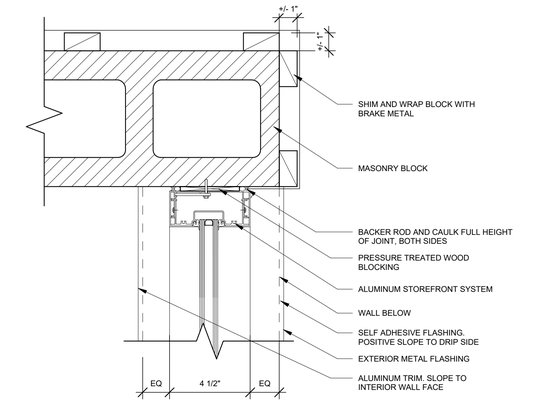
B3 DOOR HEAD DETAIL
3" = 1'-0"



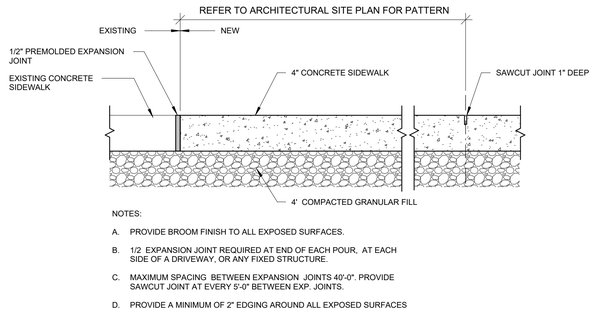
B5 WINDOW HEAD DETAIL
3" = 1'-0"



D3 DOOR JAMB DETAIL
3" = 1'-0"



D5 WINDOW JAMB DETAIL
3" = 1'-0"



NOTES:

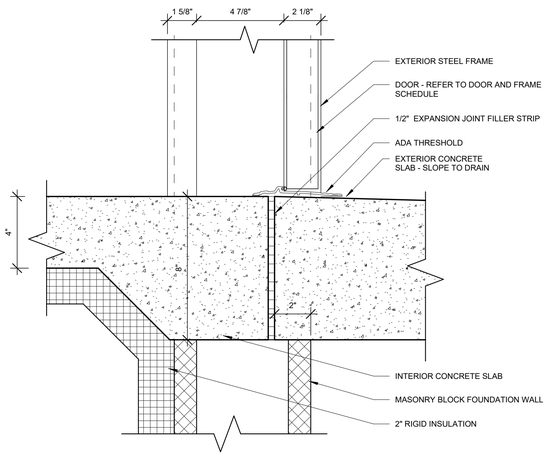
A. PROVIDE BROOM FINISH TO ALL EXPOSED SURFACES.

B. 1/2 EXPANSION JOINT REQUIRED AT END OF EACH POUR, AT EACH SIDE OF A DRIVEWAY, OR ANY FIXED STRUCTURE.

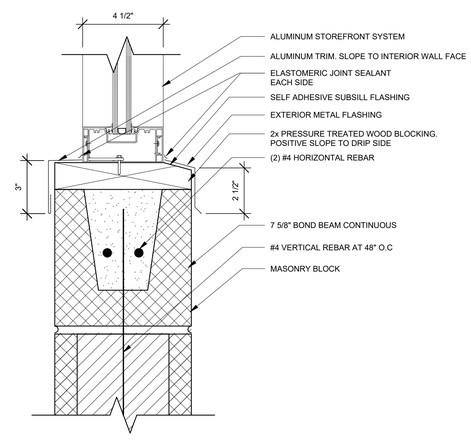
C. MAXIMUM SPACING BETWEEN EXPANSION JOINTS 40'-0". PROVIDE SAWCUT JOINT AT EVERY 5'-0" BETWEEN EXP. JOINTS.

D. PROVIDE A MINIMUM OF 2" EDGING AROUND ALL EXPOSED SURFACES

D1 CONCRETE SIDEWALK DETAIL
1 1/2" = 1'-0"



F3 DOOR SILL DETAIL
3" = 1'-0"



F5 WINDOW SILL DETAIL
3" = 1'-0"

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TITLE
MISCELLANEOUS DETAILS

SHEET NO.
A0.3

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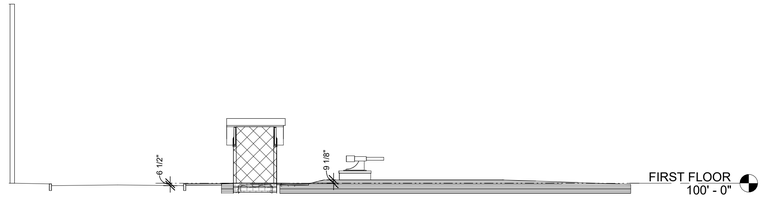
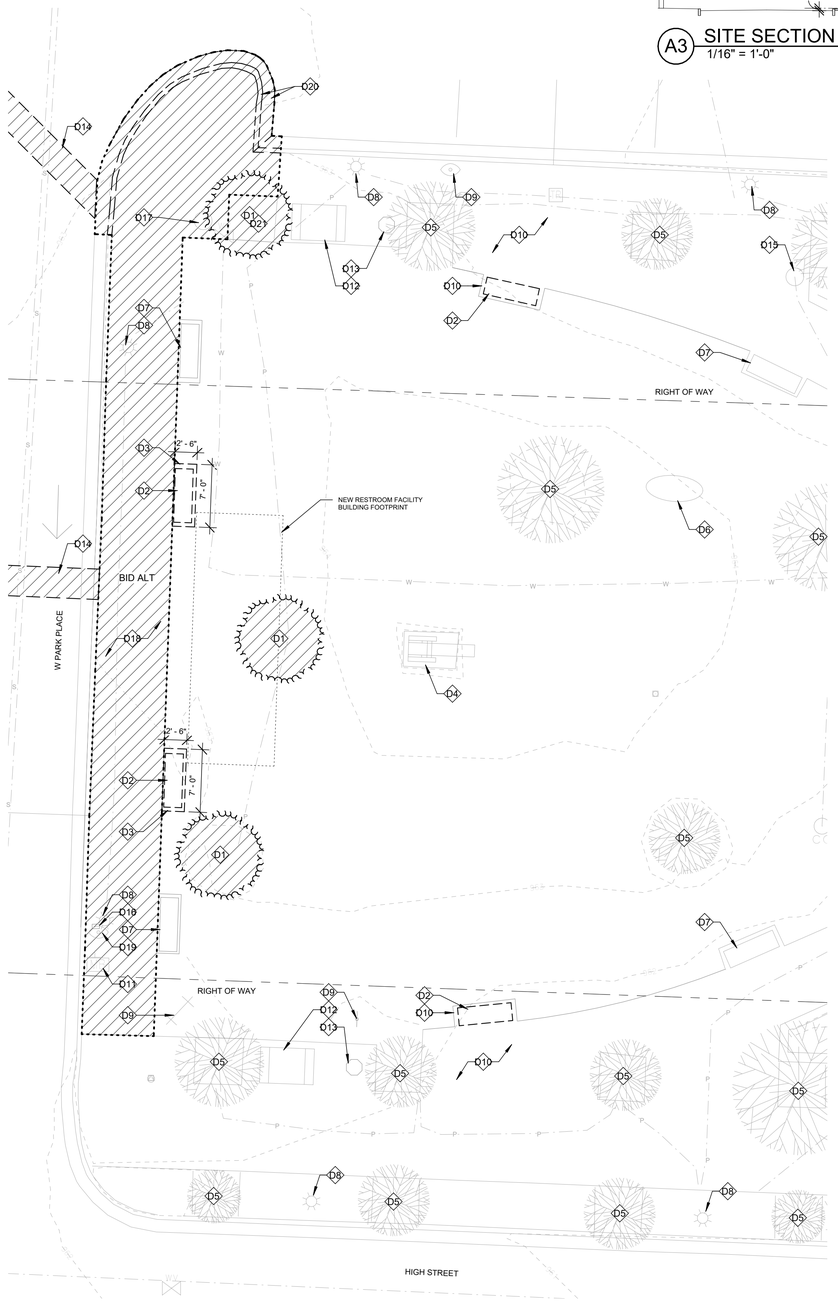
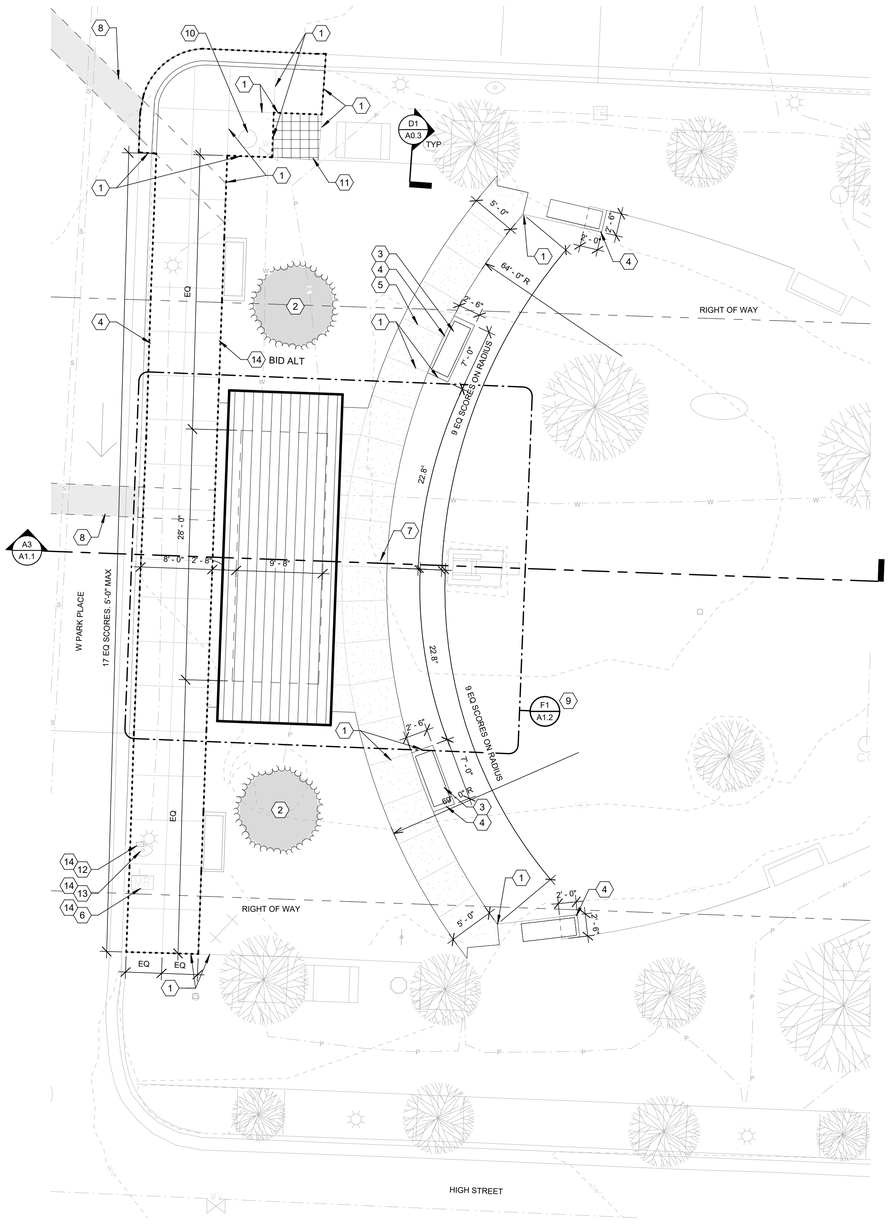


A3 SITE SECTION
1/16" = 1'-0"



F1 DEMOLITION SITE PLAN
1/8" = 1'-0"



F4 NEW WORK SITE PLAN
1/8" = 1'-0"

LEGEND

- UNDERGROUND WATER LINE
- UNDERGROUND POWER LINE
- UNDERGROUND SEWAGE LINE
- BUILDING FOOTPRINT
- TOPOGRAPHY LINE
- BUILDING EXTERIOR FACADE
- RIGHT OF WAY

DEMOLITION NOTES

(00) INDICATES DEMOLITION NOTE.

D1 REMOVE EXISTING TREE.

D2 REMOVE AND RETAIN EXISTING BENCH. REFER TO NEW WORK SITE PLAN FOR RELOCATION.

D3 REMOVE EXISTING CONCRETE PAD.

D4 EXISTING CANNON TO REMAIN.

D5 EXISTING TREE TO REMAIN.

D6 EXISTING STATUE TO REMAIN.

D7 EXISTING BENCH AND ASSOCIATED CONCRETE PAD TO REMAIN.

D8 EXISTING STREET LIGHT TO REMAIN.

D9 EXISTING SIGNAGE TO REMAIN.

D10 EXISTING CONCRETE SIDEWALK AND CURB TO REMAIN. PATCH AND REPAIR ALL AREAS DISTURBED BY CONSTRUCTION.

D11 REMOVE AND RETAIN EXISTING MAILBOX. REFER TO NEW WORK SITE PLAN FOR RELOCATION.

D12 EXISTING PICNIC TABLE TO REMAIN.

D13 EXISTING BIKE RACK TO REMAIN.

D14 REMOVE PORTION OF EXISTING CONCRETE CURB, GUTTER, AND ASPHALT PAVEMENT FOR SERVICE CONNECTION. REFER TO CIVIL DRAWINGS FOR ADDITIONAL INFORMATION AND CONTINUATION OF EXTENT.

D15 EXISTING DRINKING FOUNTAIN TO REMAIN.

D16 REMOVE AND RETAIN EXISTING PAYMENT DROP. REFER TO NEW WORK SITE PLAN FOR RELOCATION.

D17 REMOVE AND RETAIN EXISTING TRASH RECEPTACLE. REFER TO NEW WORK SITE PLAN FOR RELOCATION.

D18 REMOVE EXISTING CONCRETE SIDEWALK. CONCRETE CURB TO REMAIN.

D19 REMOVE AND RETAIN EXISTING SIGNAGE. REFER TO NEW WORK SITE PLAN FOR RELOCATION.

D20 REMOVE PORTION OF EXISTING CONCRETE CURB AND GUTTER.

D21 REMOVE AND RETAIN TREE GRATE.

CONSTRUCTION NOTES

(00) INDICATES CONSTRUCTION NOTE.

1 ALIGN.

2 NEW 6' JUNIOR GIANT ARBORVITAE - THUJA X. PLICATA 'JUNIOR GIANT'. PLACEMENT: CENTERED 8' FROM BOTH ADJACENT CONCRETE EDGES.

3 ANCHOR RETAINED BENCH TO NEW CONCRETE PAD.

4 NEW 4" CONCRETE PAVEMENT OVER 4" GRANULAR FILL

5 RADIAL SAWCUT CONTROL JOINT 1" DEEP. TYPICAL SPACING 5'-0" UNLESS INDICATED OTHERWISE. REFER TO REFERENCE PLAN FOR ADDITIONAL INFORMATION.

6 ANCHOR RETAINED MAILBOX TO NEW SIDEWALK.

7 START SIDEWALK SCORE CENTERED ON EAST BUILDING FACADE.

8 NEW CONCRETE CURB, GUTTER, AND ASPHALT PAVEMENT FOR SERVICE CONNECTION. REFER TO CIVIL DRAWINGS FOR ADDITIONAL INFORMATION AND CONTINUATION OF EXTENT.

9 REFER TO REFERENCE FLOOR PLAN FOR CONTINUATION OF CONCRETE PAVEMENT NOTES.

10 ANCHOR RETAINED TRASH RECEPTACL TO NEW CONCRETE PAVEMENT.

11 PLACE RETAINED RETAINED TREE GRATE.

12 ANCHOR RETAINED PAYMENT DROP TO NEW CONCRETE PAVEMENT.

13 ANCHOR RETAINED RETAINED SIGNAGE. TO NEW CONCRETE PAVEMENT.

14 BOLD DOTTED LINE INDICATES BID ALTERNATE #1 LIMIT OF CONCRETE SIDEWALK AND CURB REWORK.

GENERAL NOTES

A. DIMENSIONS ARE FROM FINISHED FACE TO FINISHED FACE UNLESS OTHERWISE NOTED.

B. PATCH AND REPAIR ALL EXISTING SURFACES DAMAGED IN CONSTRUCTION.

C. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS AND INFORM ARCHITECT OF ANY DISCREPENCIES.

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TITLE
DEMOLITION + NEW SITE PLANS

SHEET NO.
A1.1

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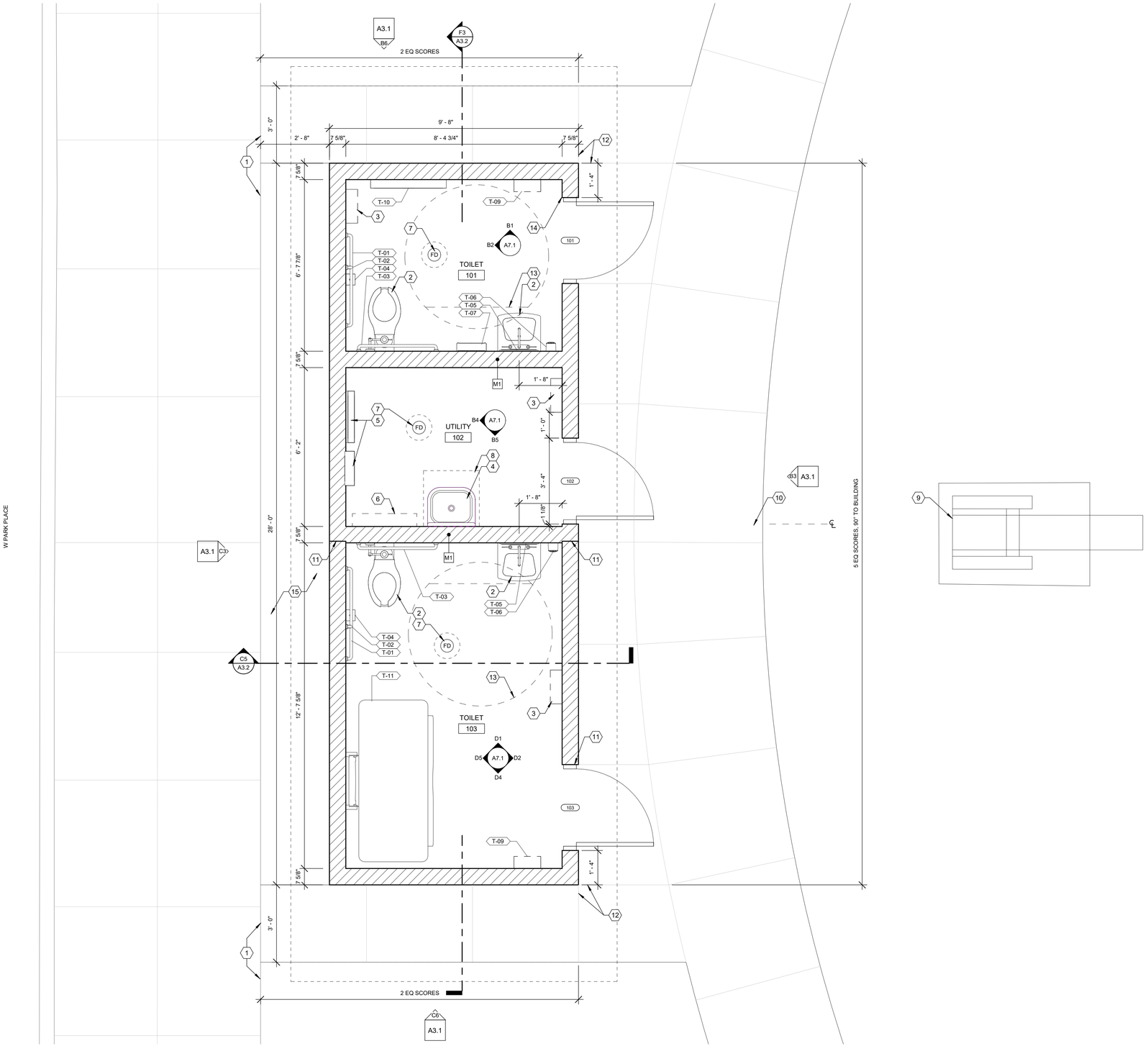

F1 REFERENCE FLOOR PLAN
1/2" = 1'-0"

CONSTRUCTION NOTES

00 INDICATES CONSTRUCTION NOTE.

1 ALIGN.

2 PLUMBING FIXTURE. REFER TO M.E.P. DRAWINGS FOR ADDITIONAL INFORMATION.

3 CABINET UNIT HEATER. REFER TO M.E.P. DRAWINGS FOR ADDITIONAL INFORMATION.

4 WALL HUNG MOP SINK AND HOLDER. REFER TO M.E.P. DRAWINGS FOR ADDITIONAL INFORMATION.

5 ELECTRICAL PANEL. REFER TO M.E.P. DRAWINGS FOR ADDITIONAL INFORMATION.

6 BACKFLOW PREVENTOR. REFER TO M.E.P. DRAWINGS.

7 FLOOR DRAIN. REFER TO M.E.P. DRAWINGS. PITCH FLOOR TO DRAIN PROVIDE MINUMIN DISH EQUAL TO 1.5x'S THE DRAIN RADIUS, MAXIMUM 1/8" PER FOOT SLOPE.

8 TANK WATER HEATER ON SHELF ABOVE MOP SINK. REFER TO INTERIOR ELEVATIONS AND M.E.P. DRAWINGS FOR ADDITIONAL INFORMATION.

9 EXISTING CANNON TO REMAIN.

10 START SIDEWALK SCORE CENTERED ON EAST BUILDING FACADE.

11 WALL EXPANSION JOINT. USE 1700 CONTROL JOINT ANCHORS BY WIRE BOND AT 16" O.C., REFER TO CONTROL JOINT DETAIL AND ELEVATIONS ON SHEET A3.1 FOR ADDITIONAL INFORMATION.

12 ALGIN SIDEWALK SCORE TO CORNER OF BUILDING.

13 67" DIAMETER ACCESSIBLE FLOOR SPACE.

14 BULLNOSE AT JAMB, TYPICAL.

15 REGRADE AREA TO MAINTAIN POSITIVE SLOPE AWAY FROM BUILDING. INSTALL LAWN PER CIVIL.

GENERAL NOTES

A. DIMENSIONS ARE FROM FINISHED FACE TO FINISHED FACE UNLESS OTHERWISE NOTED.

B. PATCH AND REPAIR ALL EXISTING SURFACES DAMAGED IN CONSTRUCTION.

C. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS AND INFORM ARCHITECT OF ANY DISCREPENCIES.

ACCESSORY SCHEDULE T-0

ITEM NO.	DESCRIPTION	INSTALLED BY	REMARKS
T-01	42" GRAB BAR	CFCI	1, 2
T-02	18" GRAB BAR	CFCI	1, 2
T-03	36" GRAB BAR	CFCI	1, 2
T-04	TOILET TISSUE DISPENSER	CFCI	1, 2
T-05	MIRROR (18" x 36")	CFCI	1, 2
T-06	SOAP DISPENSER	CFCI	1, 2
T-07	HAND DRYER	CFCI	1, 2
T-08	MOP AND BROOM HOLDER	CFCI	2
T-09	CHILD PROTECTION SEAT	CFCI	2
T-10	BABY CHANGING STATION	CFCI	2
T-11	ADULT CHANGING STATION	OFCI	2

ACCESSORY SCHEDULE REMARKS:

1. REFER TO SHEET A0.1 FOR TYPICAL MOUNTING HEIGHTS AND RELATIONSHIPS TO FIXTURES.
2. REFER TO FLOOR PLAN AND INTERIOR ELEVATIONS FOR LOCATION AND ADDITIONAL REMARKS.

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TITLE
REFERENCE PLANS

SHEET NO.
A1.2

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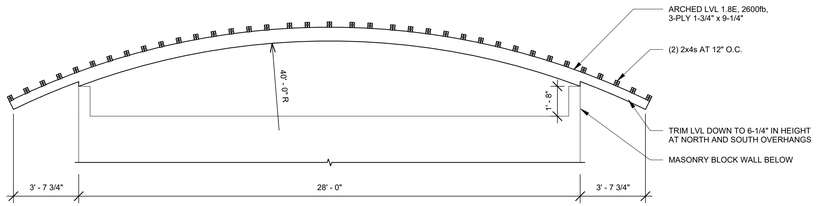
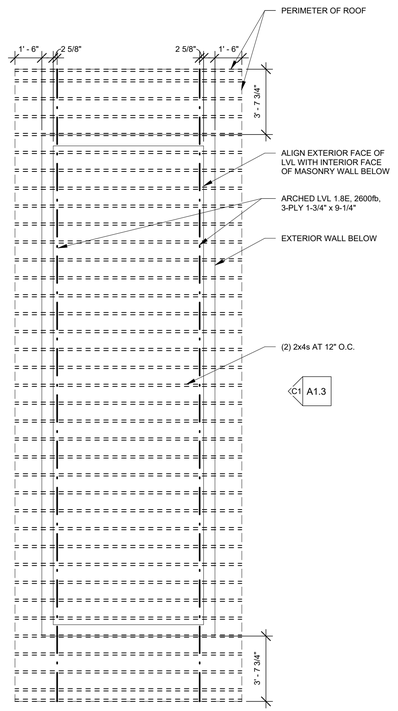
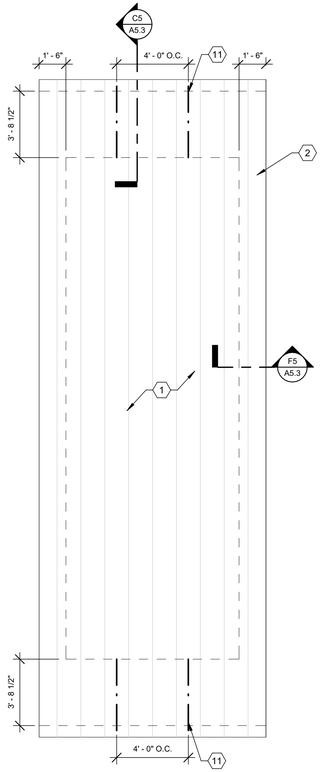


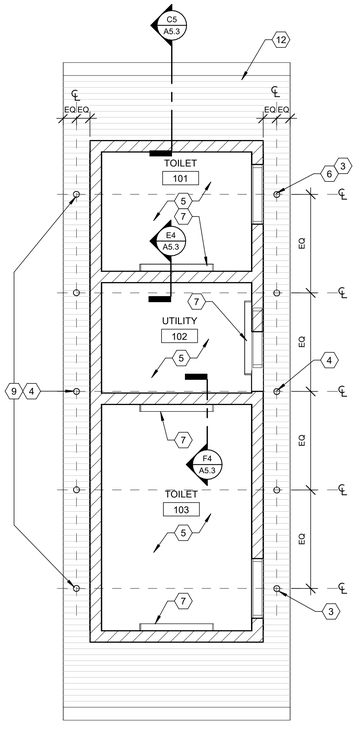
C1 WOOD ARCH ELEVATION
1/4" = 1'-0"



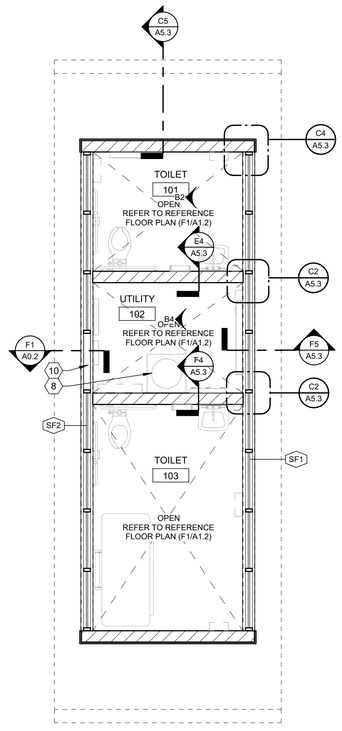
F1 FRAMING PLAN
1/4" = 1'-0"



F2 ROOF PLAN
1/4" = 1'-0"



F4 REFLECTED CEILING PLAN
1/4" = 1'-0"



F5 CLERESTORY PLAN (@ 109'-0")
1/4" = 1'-0"

CONSTRUCTION NOTES

00 INDICATES CONSTRUCTION NOTE.

1 CURVED METAL ROOF.

2 FACE OF EXTERIOR WALL INDICATED BY DASHED LINE. REFER TO REFERENCE FLOOR PLAN FOR ADDITIONAL INFORMATION.

3 CENTER LIGHT OVER DOOR.

4 CENTER LIGHT ON BUILDING.

5 EXPOSED STRUCTURE. PAINT.

6 SOFFIT CAN LIGHT, TYPICAL. REFER TO M.E.P. DRAWINGS FOR ADDITIONAL INFORMATION.

7 4' WALL MOUNTED LINEAR LIGHT FIXTURE. REFER TO M.E.P. DRAWINGS FOR ADDITIONAL IFNORMATION.

8 INSTALL TANK WATER HEATER ON SHELF. REFER TO M.E.P. DRAWINGS FOR ADDITIONAL INFORMATION.

9 MATCH LIGHT SPACING ON EAST SIDE OF BUILDING.

10 LOUVER. REFER TO M.E.P. DRAWINGS.

11 (2) 2x WOOD RIBS TO SUPPORT ALUMINUM SOFFIT AT NORTH AND SOUTH ENDS.

12 PREFINISHED METAL SOFFIT PANEL. COLOR TO MATCH ROOF.

TIMBER NOTES

1. TIMBER WORK SHALL CONFORM TO ALL REQUIREMENTS OF THE CURRENT ANSI/AF&PA "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION", WITH THE FOLLOWING SUPPLEMENTAL REQUIREMENTS:
2. MINIMUM DESIGN VALUES ARE BASED ON NORMAL LOADING CONDITIONS, SURFACED DRY AND USED AT 19% MAXIMUM MOISTURE CONTENT SHALL BE AS FOLLOWS:
   - EXTREME FIBER IN BENDING (F b) 1,000 PSI
   - TENSION PARALLEL TO GRAIN (F t) 600 PSI
   - HORIZONTAL SHEAR (F v) 75 PSI
   - COMPRESSION PERPENDICULAR TO GRAIN (F c) 565 PSI
   - COMPRESSION PARALLEL TO GRAIN (F c) 1,400 PSI
   - MODULES OF ELASTICITY (E) 1,400,000 PSI
3. SIZES SHOWN FOR LUMBER ARE STANDARD NOMINAL SIZES.
4. SPLICING TIMBER MEMBERS IS PROHIBITED EXCEPT AS DETAILED.
5. TIMBER EXPOSED TO WEATHER OR GROUND, OR IN CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE-IMPREGNATED BY AN APPROVED PROCESS AND PRESERVATIVE.
6. ALL FASTENERS USED IN PRESSURE TREATED SHALL BE HOT DIPPED GALVANIZED OR STAINLESS STEEL.
7. LAG SCREWS SHALL BE OF MATERIAL CONFORMING TO ASTM STANDARD A307. LEAD HOLES SHALL BE BORED PER SECTION 9.1.2 OF THE "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION

WOOD SHEATHING NOTES

1. ROOF SHEATHING SHALL BE 5/8" APA RATED PLYWOOD. PANELS SHALL BE ATTACHED WITH 8D X 2 ½ " COMMON NAILS AT 6" ON CENTER AT PANEL EDGES AND 12 " ON CENTER AT INTERMEDIATE SUPPORTS MINIMUM.
2. INSTALL SHEATHING WITH THE LONG DIMENSION OF THE PANEL PERPENDICULAR TO THE SUPPORTS WITH A MINIMUM OF TWO SPANS FOR EACH PANEL. STAGGER ALL END JOINTS.

GENERAL NOTES

A. REFER TO P.M.E DRAWINGS FOR ADDITIONAL CEILING DEVICES AND DESCRIPTIONS.

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ROOF + REFLECTED CEILING PLANS

SHEET NO.
A1.3

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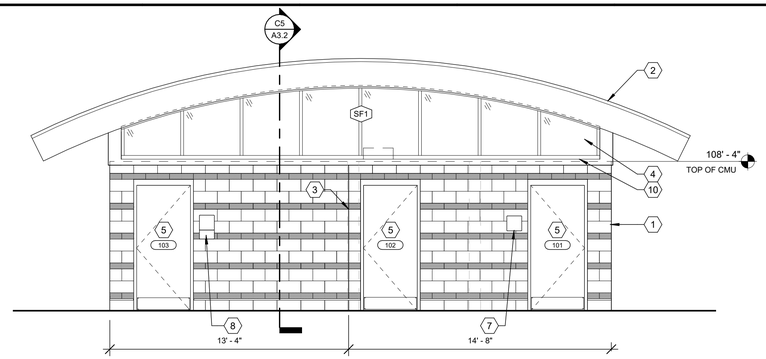
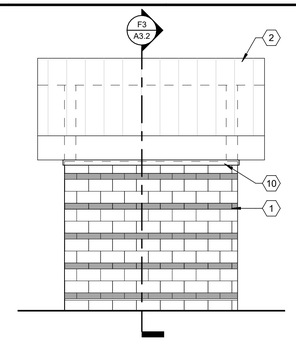
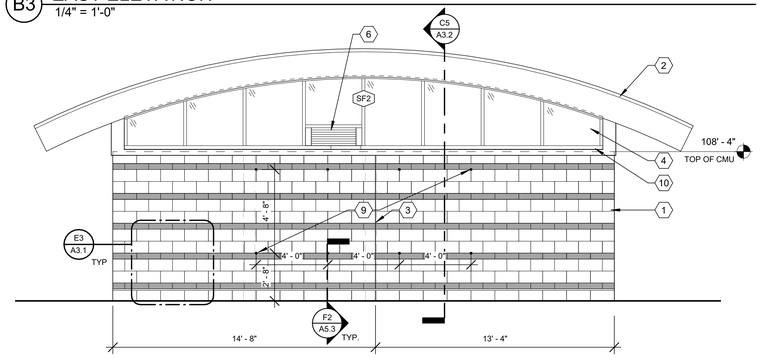


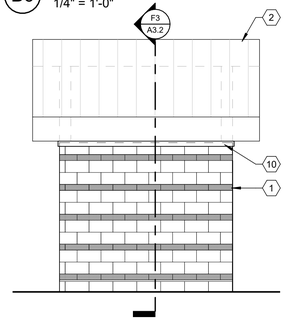
B3 EAST ELEVATION
1/4" = 1'-0"



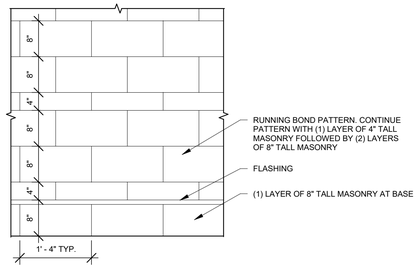
B6 NORTH ELEVATION
1/4" = 1'-0"



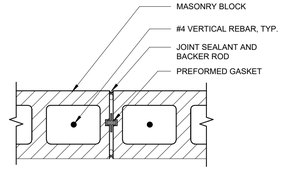
C3 WEST ELEVATION
1/4" = 1'-0"



C6 SOUTH ELEVATION
1/4" = 1'-0"



E3 MASONRY PATTERN
3/4" = 1'-0"



E5 CONTROL JOINT DETAIL
1 1/2" = 1'-0"

CONSTRUCTION NOTES

00 INDICATES CONSTRUCTION NOTE.

1 MASONRY BLOCK.

2 CURVED METAL ROOF.

3 WALL EXPANSION JOINT. USE 1700 CONTROL JOINT ANCHORS BY WIRE BOND AT 16" O.C.. REFER TO CONTROL JOINT DETAIL AND ELEVATIONS ON SHEET A3.1 FOR ADDITIONAL INFORMATION.

4 ALUMINUM STOREFRONT SYSTEM.

5 HOLLOW METAL DOOR AND FRAME. PAINT.

6 LOUVER. REFER TO M.E.P. DRAWINGS.

7 SIGNAGE (TYPE 1) BY G.C.. REFER TO SIGNAGE LEGEND.

8 SIGNAGE (TYPE 2) BY G.C.. REFER TO SIGNAGE LEGEND.

9 ALUMINUM STANDOFFS WITH ANCHOR PLACED IN GRID PATTERN (12 TOTAL). CENTER STANDOFF HORIZONTALLY ON DIMENSIONAL MASONRY. REFER TO ANCHOR FOR ART INSTALLATION DETAIL.

10 SELF ADHESIVE FLASHING.

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STATE OF OHIO ★ MARIANNE L WEBER 9675 ★ REGISTERED ARCHITECT

Marianne L. Weber License #9675
Expiration Date 12/31/2025

Restroom Facility

Oxford Park Place

2 West High Street, Oxford, Ohio 45056

ISSUE

NO.	DATE	DESCRIPTION
	09/03/25	FOR PERMIT & REBID

DATE	09.03.2025
JOB NO.	4265.00
DRAWN	JAK
CHECKED	MES/TAG

TITLE
EXTERIOR ELEVATIONS

SHEET NO.
A3.1

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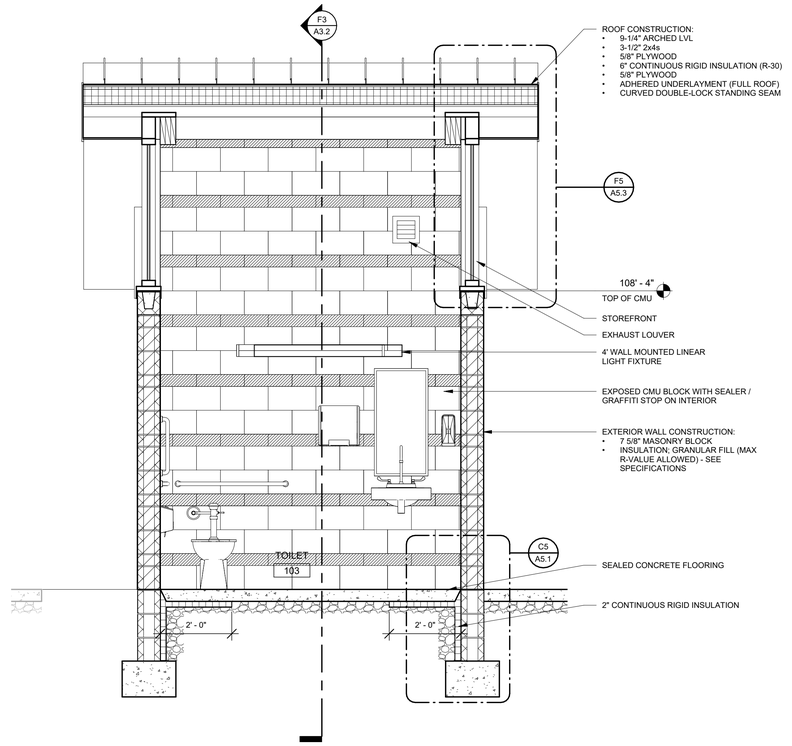
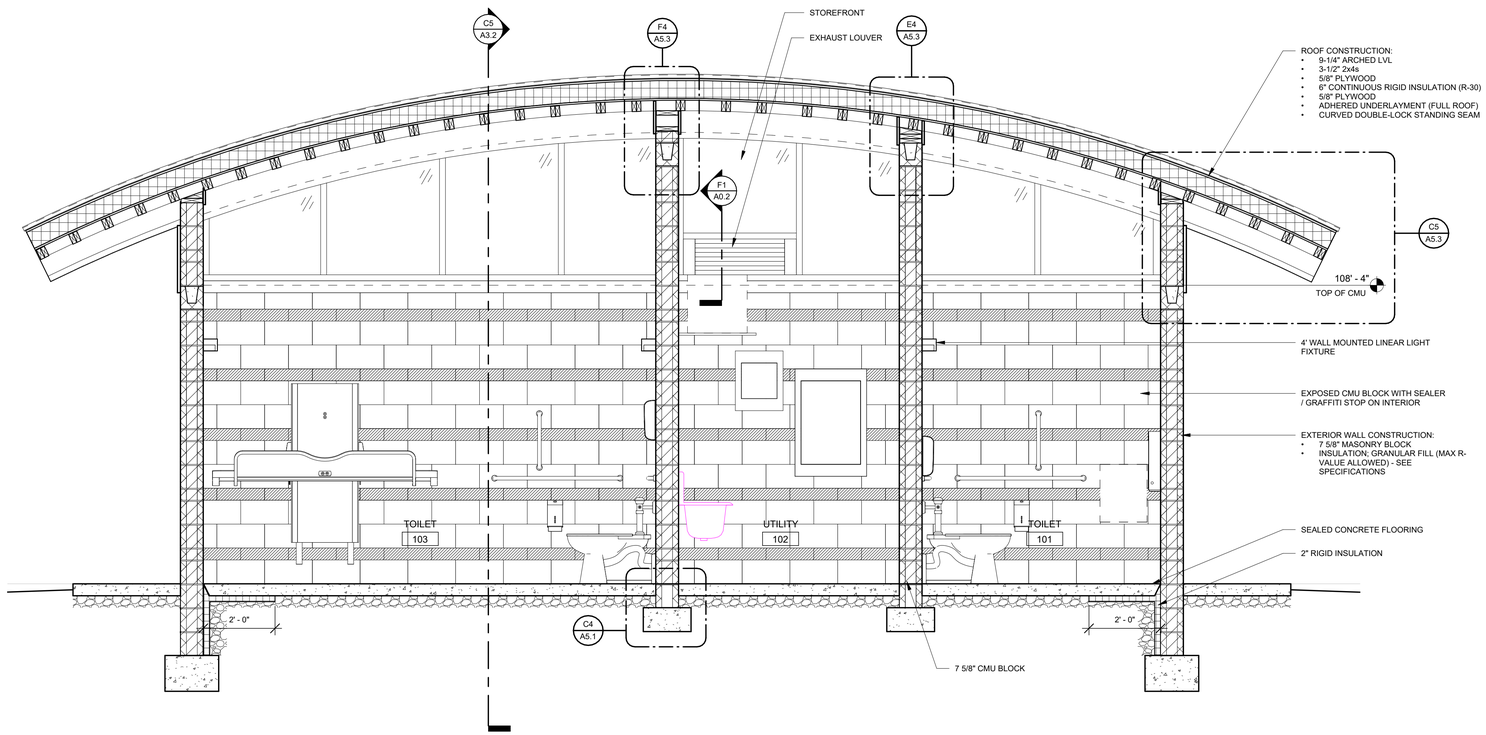


C5 BUILDING SECTION
1/2" = 1'-0"



F3 BUILDING SECTION
1/2" = 1'-0"

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TITLE
BUILDING SECTIONS

SHEET NO.
A3.2

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SPECIAL INSPECTION AND TEXTING NOTES

THIS PROJECT REQUIRES SPECIAL INSPECTION AND TESTING IN ACCORDANCE WITH CHAPTER 17 OF THE INTERNATIONAL BUILDING CODE, 2015 EDITION. THESE NOTES AND THE STATEMENT OF SPECIAL INSPECTIONS PREPARED FOR THE PROJECT OWNER ARE INTENDED TO INFORM THE CONTRACTOR OF THE QUALITY ASSURANCE PROGRAM AND THE EXTENT OF THE CONTRACTOR'S RESPONSIBILITIES.

GENERAL NOTES:
THE SPECIAL INSPECTION AND TESTING PROGRAM IS A QUALITY ASSURANCE PROGRAM INTENDED TO ENSURE THAT THE WORK IS PERFORMED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

1. THE SPECIAL INSPECTION PROGRAM DOES NOT RELIEVE THE CONTRACTOR OF HIS OR HER RESPONSIBILITY TO COMPLY WITH THE OFFICIAL CONTRACT DOCUMENTS. THE CONTRACTOR HAS THE SOLE RESPONSIBILITY FOR ANY DEVIATIONS FROM THE OFFICIAL CONTRACT DRAWINGS. THE SPECIAL INSPECTOR DOES NOT REPLACE THE DUTIES OF THE BUILDING OFFICIAL NOR THE QUALITY CONTROL RESPONSIBILITIES AND PERSONNEL OF THE CONTRACTOR. JOB SITE SAFETY AND MEANS AND METHODS OF CONSTRUCTION ARE SOLELY THE RESPONSIBILITY OF THE CONTRACTOR.

2. THESE INSPECTIONS ARE IN ADDITION TO THE INSPECTIONS SPECIFIED IN THE IBC SECTION 110 AND SPECIFIC STRUCTURAL OBSERVATION AS MAY BE REQUIRED BY THE CODE.

3. THOUGH NOT REQUIRED BY CODE, SPECIAL INSPECTORS AND/OR INSPECTION AGENCIES CAN DOCUMENT ACCEPTANCE OF THEIR RESPONSIBILITIES AND SCOPE OF WORK FOR A PROJECT BY SIGNING AN AGREEMENT THAT INCLUDES A DETAILED SCHEDULE OF SERVICES, COMMONLY KNOWN AS THE SPECIAL INSPECTION AND TESTING AGREEMENT AND THE SPECIAL INSPECTION AND TESTING SCHEDULE. THIS DOCUMENT MAY REFERENCE THIS SHEET AS THE "STATEMENT OF SPECIAL INSPECTIONS," (SSI).

4. THE STRUCTURAL DESIGN METHODS AND/OR ASSUMPTIONS UTILIZED ARE BASED UPON THE SPECIAL INSPECTIONS REQUIRED WITHIN THE CONTRACT DOCUMENTS.

OWNER RESPONSIBILITIES AND DUTIES:
THE PROJECT OWNER, THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE, OR AN AGENT OF THE OWNER IS RESPONSIBLE FOR ENGAGING AND FUNDING SPECIAL INSPECTION SERVICES.

CONTRACTOR RESPONSIBILITIES AND DUTIES:
THE CONTRACTOR IS RESPONSIBLE FOR SCHEDULING AND PROVIDING ADEQUATE NOTICE TO THE SPECIAL INSPECTORS FOR ALL INSPECTIONS. THE CONTRACTOR SHALL REQUEST SPECIAL INSTRUCTION OF THE REQUIRED ITEMS PRIOR TO THOSE ITEMS BECOMING INACCESSIBLE AND UNOBSERVABLE DUE TO PROGRESSION OF WORK.

5. THE CONTRACTOR SHALL PROVIDE THE SPECIAL INSPECTOR ACCESS TO THE APPROVED CONTRACT DOCUMENTS. THESE DOCUMENTS INCLUDE SEALED DRAWINGS AND SPECIFICATIONS, ADDENDA, CHANGE ORDERS, APPROVED SHOP DRAWINGS, ISSUED SKETCHES AND REVISION DRAWINGS, AND ALL DIRECTIVES ISSUED BY THE ARCHITECT/ENGINEER. THIS CURRENT SET OF DOCUMENTS SHALL BE AVAILABLE AT THE JOB SITE.

6. THE CONTRACTOR IS TO CORRECT DISCREPANCIES AND DEVIATIONS AS DETERMINED BY SPECIAL INSPECTOR. ALL DISCREPANCIES AND DEVIATIONS OBSERVED SHALL BE RE-INSPECTED UNTIL THE SPECIAL INSPECTOR DEEMS CONSTRUCTION TO BE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

7. THE CONTRACTOR IS TO RETAIN SPECIAL INSPECTION RECORDS COMPLETED BY THE SPECIAL INSPECTORS AT THE JOB SITE.

SPECIAL INSPECTOR QUALIFICATIONS AND RESPONSIBILITIES:
THE SPECIAL INSPECTOR SHALL BE A QUALIFIED PERSON WHO SHALL DEMONSTRATE COMPETENCE, TO THE SATISFACTION OF THE BUILDING OFFICIAL, FOR INSPECTION OF THE PARTICULAR TYPE OF CONSTRUCTION OR OPERATION REQUIRING SPECIAL INSPECTION.

8. SPECIAL INSPECTORS SHALL NOTIFY CONTRACTOR PERSONNEL OF THEIR PRESENCE AND RESPONSIBILITIES AT THE JOB SITE.

9. THE SPECIAL INSPECTOR/AGENCY SHALL NOT BE IN THE EMPLOY OF THE CONTRACTOR, SUBCONTRACTOR, OR MATERIAL SUPPLIER. IN THE CASE OF AN OWNER/CONTRACTOR, THE SPECIAL INSPECTOR/AGENCY SHALL BE EMPLOYED AS SPECIFIED BY THE BUILDING OFFICIAL.

10. THE SPECIAL INSPECTOR IS OBLIGATED TO BOTH THE OWNER AND THE BUILDING OFFICIAL FOR OBSERVING THAT THE WORK IS EXECUTED IN ACCORDANCE WITH THE OFFICIAL CONTRACT DOCUMENTS. THESE DOCUMENTS INCLUDE SEALED DRAWINGS AND SPECIFICATIONS, ADDENDA. CHANGE ORDERS, APPROVED SHOP DRAWINGS, ISSUED SKETCHES AND REVISION DRAWINGS, AND ALL DIRECTIVES ISSUED BY THE ARCHITECT/ENGINEER.

11. SPECIAL INSPECTORS SHALL KEEP ORGANIZED RECORDS OF INSPECTIONS AND SUBMIT INSPECTION REPORTS WITH A MINIMUM WEEKLY FREQUENCY TO THE CONTRACTOR, BUILDING OFFICIAL, ENGINEERS, AND ARCHITECTS INDIVIDUALLY. REPORTS SHOULD INDICATE THAT WORK INSPECTED WAS DONE IN CONFORMANCE TO APPROVED CONSTRUCTION DOCUMENTS. DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION TO THE CONTRACTOR FOR CORRECTION. IF THE DISCREPANCIES ARE NOT CORRECTED, THEY SHOULD BE REPORTED TO THE BUILDING OFFICIAL AND TO THE ENGINEER OF RECORD.

12. A FINAL SIGNED REPORT IS TO BE SUBMITTED AT THE END OF THE PROJECT DOCUMENTING REQUIRED SPECIAL INSPECTIONS AND CORRECTION OF ANY DISCREPANCIES. THIS REPORT SHOULD STATE THAT ALL ITEMS REQUIRING SPECIAL INSPECTION AND TESTING WERE FULFILLED AND REPORTED TO THE BEST OF THEIR KNOWLEDGE IN CONFORMANCE WITH THE APPROVED PLANS, SPECIFICATIONS, AND THE APPLICABLE PROVISIONS OF THE IBC. ITEMS NOT IN CONFORMANCE, UNRESOLVED ITEMS, OR ANY DISCREPANCIES IN INSPECTION COVERAGE SHOULD BE SPECIFICALLY ITEMIZED.

13. THE FOLLOWING ARE THE QUALIFICATIONS FOR INDIVIDUALS PERFORMING SPECIFIC INSPECTIONS OR TESTS INCLUDING IN THIS PROJECTS SSI:
A. AMERICAN CONCRETE INSTITUTE (ACI):
CONCRETE FIELD TESTING TECHNICIAN - GRADE 1 (ACI-CFTT)
CONCRETE CONSTRUCTION INSPECTOR (ACI-CCI)
LABORATORY TESTING TECHNICIAN - GRADE 1 OR 2 (ACI-LTT)
STRENGTH TESTING TECHNICIAN (ACI-STT)

B. AMERICAN WELDING SOCIETY (AWS):
CERTIFIED WELDING INSPECTOR (AWS-CWI)
CERTIFIED STRUCTURAL STEEL INSPECTION (AWS/AISC-SSI)

C. AMERICAN SOCIETY OF NON-DESTRUCTIVE TESTING(ASNT)
NON-DESTRUCTIVE TESTING TECHNICIAN - LEVEL II OR III (ANST)

D. INTERNATIONAL CODE COUNCIL (ICC):
STRUCTURAL MASONRY SPECIAL INSPECTOR (ICC-SMSI)
STRUCTURAL STEEL AND BOLTING SPECIAL INSPECTOR (ICC-SSSI)
STRUCTURAL WELDING SPECIAL INSPECTOR (ICC-SWI)
PRE-STRESSED CONCRETE SPECIAL INSPECTOR (ICC-PCSI)
REINFORCED CONCRETE SPECIAL INSPECTOR (ICC-RCSI)
SOILS SPECIAL INSPECTOR (ICC-SSI)

E. PROFESSIONAL STATE LICENSING:
PROFESSIONAL ENGINEER (PE)

STATEMENT OF SPECIAL INSPECTIONS (SSI):
THE FOLLOWING TABLES INDICATE THE MINIMUM SPECIFIC SPECIAL INSPECTION AND TESTING TO BE PERFORMED ON THIS PROJECT AND THE QUALIFICATIONS OF THE INDIVIDUAL INSPECTORS AND TESTING TECHNICIANS.

DEFINITIONS:

CONTINUOUS SPECIAL INSPECTION:
THE FULL-TIME OBSERVATION OF WORK REQUIRING SPECIAL INSPECTION BY AN APPROVED SPECIAL INSPECTOR WHO IS PRESENT IN THE AREA WHERE THE WORK IS BEING PERFORMED. 100% OF THE WORK MUST BE INSPECTED AND IT MUST BE INSPECTED AS THE WORK IS BEING PERFORMED.

PERIODIC SPECIAL INSPECTION:
THE PART-TIME OR INTERMITTENT OBSERVATION OF WORK REQUIRING SPECIAL INSPECTION BY AN APPROVED SPECIAL INSPECTOR WHO IS PRESENT IN THE AREA WHERE THE WORK HAS BEEN, OR IS BEING, PERFORMED AND AT THE COMPLETION OF WORK.
YES: THE INSPECTION AND/OR TESTING IS REQUIRED BY THE BUILDING CODE AND MUST BE PERFORMED.
NO: THIS INSPECTION AND/OR TESTING IS NOT APPLICABLE TO THE PROJECT, AND NEED NOT BE PERFORMED.

SUGGESTED: THIS INSPECTION AND/OR TESTING IS NOT REQUIRED BY THE BUILDING CODE. HOWEVER, THE ENGINEER OF RECORD RECOMMENDS IMPLEMENTING THEM FOR QUALITY ASSURANCE. A POTENTIAL EXISTS FOR THESE MEASURES TO BE A VALUE ADDED SERVICE FOR THE OWNER TO ENSURE PROPER PROJECT COMPLETION.

Special Inspections - Cast-in-Place Concrete (Ref IBC Section 1704.3 & 1704.4)

Verification and Inspection	Agency Qualification	Scope	Referenced Standard	Frequency of Inspection	Required on Project
Mix Design	ACI-CCI, ICC-RCSI	Review concrete batch tickets and verify compliance with approved mix design. Verify that water added on site does not exceed that allowed by the mix design.	ACI 318	Prior to start of concrete construction on project, Periodic	Yes
Material Certification	Structural Engineer of Record	Verify that concrete supplier's concrete components meet requirements set forth by the applicable ASTM standards.	Applicable ASTM & ACI Specs	Prior to start of concrete construction on project	Yes
Reinforcement Installation	ACI-CCI, ICC-RCSI	Inspect size, spacing, cover, positioning and grade of reinforcing steel. Verify that bars are free of form oil or other deleterious materials. Inspect bar laps and mechanical splices. Verify that bars are adequately tied and supported on chairs or bolsters.	Applicable ACI Specs	Prior to each casting	Yes
Concrete Placement	ACI-CCI, ICC-RCSI	Inspect placement of concrete. Verify that concrete conveyance and depositing avoids segregation or contamination. Verify that concrete is properly consolidated.	Applicable ACI Specs	Periodic	Yes
Sampling and Testing of Concrete	ACI-CFTT, ACI-LTT, ACI-STT	Test concrete compressive strength, slump, air content and temperature.	Applicable ACI and ASTM Specs	Not less than once a day, nor less than once every 150 cubic yard, nor less than once for every 5000 SF of surface area for slabs or walls	Yes
Curing and Protection	ACI-CCI, ICC-RCSI	Inspect curing, cold weather protection and hot weather protectoin procedures.	Applicable ACI Specs	Monitor on site after each casting	Yes

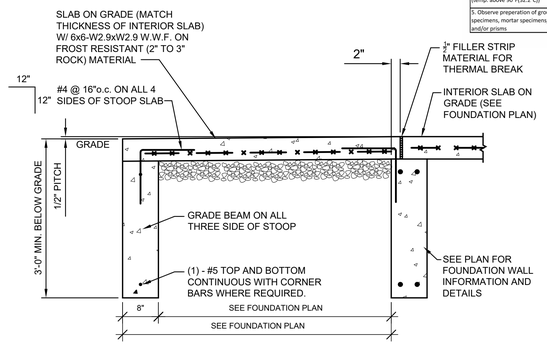
Exceptions per IBC 1704.4:
Special Inspections are not required for the following unless otherwise required by the Building Official or Structural Engineer of the Record.
1. Nonstructural concrete slabs supported directly on the ground
2. Concrete patios, driveways and sidewalks, on grade.

Special Inspections - Soils and Foundation (Ref IBC Section 1704.7, 1704.8 & 1704.9)

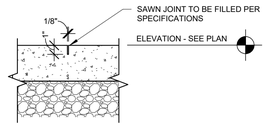
Verification and Inspection	Agency Qualification	Scope	Referenced Standard	Frequency of Inspection	Required on Project
1. Shallow Foundation	ICC-SSI, PE-GEOTECH	Inspect the soils below footings for compliance with the Class Of Materials from Ohio Building Code Section 1806.2	N/A	Prior to placing the reinforcing steel and concrete.	Yes

Special Inspections - Masonry Structures Level B Quality Assurance (Ref TMS 402-08/ACI 530-08 Table 1.18.2)

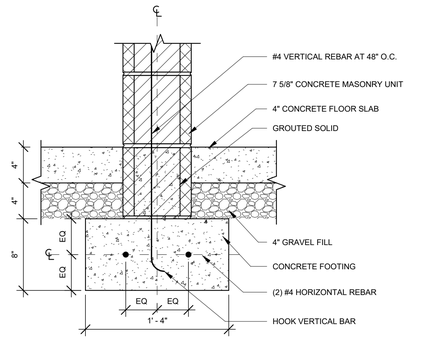
Verification and Inspection	Agency Qualification	Scope	Referenced Standard	Frequency of Inspection	Required on Project
1. Verify compliance with the approved submittals	-	-	N/A	Periodic	Yes
2. As masonry construction begins, verify that the following are in compliance: a. Proportions of site-prepared mortar	-	Verify as masonry construction begins.	ACI 530.1; 2.6A	Periodic	Yes
b. Construction of mortar joints	-	Verify as masonry construction begins.	ACI 530.1; 3.3B	Periodic	Yes
c. Grade and size of reinforcement, connectors and prestressing tendons and anchorages	-	Verify as masonry construction begins.	ACI 530.1; 3.4, 3.6A	Periodic	Yes
d. Location of reinforcement, connectors, and prestressing tendons and anchorages	-	Verify as masonry construction begins.	ACI 530.1; 3.4, 3.6A	Periodic	Yes
3. Prior to grouting, verify that the following are in compliance: a Grout space	-	Verify prior to grouting.	ACI 530.1; 3.2D	Periodic	Yes
b. Grade, type, and size of reinforcement and anchor bolts, and prestressing tendons and achorages	-	Verify prior to grouting. Review submittals and inspection of materials.	ACI 530; 1.15, ACI 530.1; 2.4, 3.4, 3.6	Periodic	Yes
c. Placement of reinforcement, connectors, and prestressing tendons and anchorages.	-	Verify prior to grouting.	ACI 530-08; 1.13, ACI 530.1; 3.4	Periodic	Yes
d. Proportions of site-prepared grout and prestressing grout for bonded tendons	-	Verify prior to grouting.	ACI 530.1; 2.6B	Periodic	Yes
e. Construction of mortar joints	-	Verify prior to grouting.	ACI 530.1; 3.3B	Periodic	Yes
4. Verify during construction: a.Size and location of structural elements	-	Review submittals and inspection of materials.	ACI 530.1; 3.3F	Periodic	Yes
b. Type, size, and location of anchors, including other details of anchorage of masonry to structral members, frames, or other construction	-	Inspections of anchorages.	ACI 530-08; 1.2.2(e), 2.1.4, 3.1.6	Periodic	Yes
c. Welding of reinforcement	-	Inspection of welding process.	ACI 530-08; 2.1.9.7.2, 3.3.3.4(b)	Continuous	No
d. Preparation, construction and protection of masonary during cold weather (temp. below 40°F(4.4°C) or hot weather (temp. above 90°F(32.2°C))	-	Inspection of protection techniques.	ACI 530.1; 1.8C, 1.8D, IBC 2009; 2104.3, 2104.4	Periodic	Yes
5. Observe preperation of grout specimens, mortar specimens, and/or prisms.	-	Inspection of preparations.	ACI 530.1; 1.4	Periodic	Yes



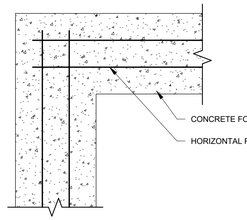
F1 TYPICAL STOOP DETAIL
3/4" = 1'-0"



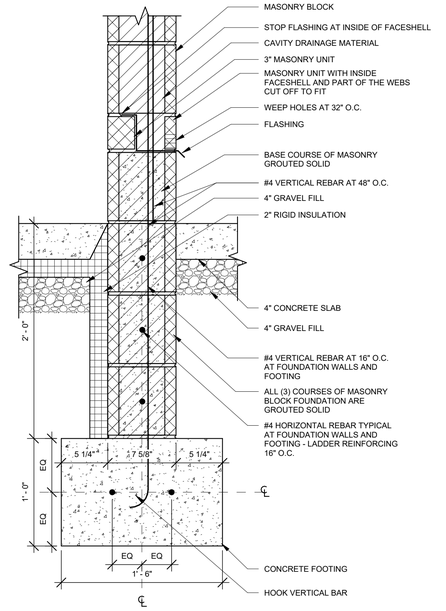
A4 CONCRETE SLAB CONTROL JOINT
1 1/2" = 1'-0"



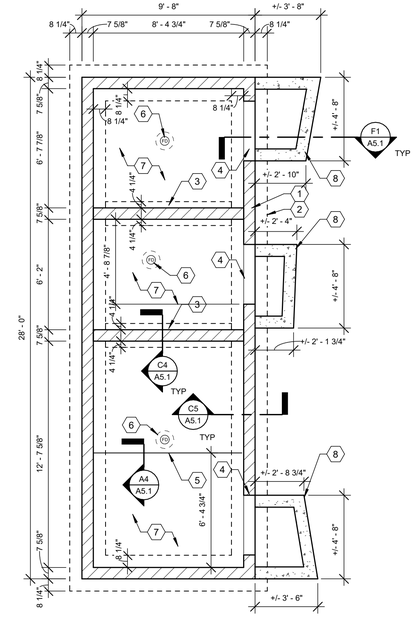
C4 FOUNDATION AT INT. PARTITION
1 1/2" = 1'-0"



D4 CONCRETE FOOTING REINFORCEMENT
3/4" = 1'-0"



C5 INT. TO EXT. SLAB TRANSITION
1 1/2" = 1'-0"



F5 FOUNDATION & SLAB PLAN
1/4" = 1'-0"

CONSTRUCTION NOTES

00 INDICATES CONSTRUCTION NOTE.

1 CONCRETE FOUNDATION WALL. TYPICAL.
2 CONCRETE FOOTING. TYPICAL.
3 CONCRETE MASONRY UNIT BLOCK. CENTERLINE TO ALIGN WITH WALL ABOVE.
4 HOLD DOWN FOUNDATION WALL AND OVERPOUR SLAB AT DOORS.
5 CONCRETE SLAB COUNTROL JOINT. REFER TO DETAIL.
6 FLOOR DRAIN LOCATION. COORDINATE WITH MEP DRAWINGS, PROVIDE POSTIVE SLOPE TO DRAIN WITH DISH EQUAL TO 1.5 x'S THE RADIUS OF THE FLOOR DRAIN.
7 SLAB ON GRADE: 4" CONCRETE SLAB REINFORCED WITH 6X6 W2.9XW2.9 WWF PLACED 1" BELOW TOP OF SLAB. PLACE SLAB OVER 10 MIL POLYETHEYLENE VAPOR BARRIER OVER 6" DRAINAGE COURSE.
8 ANTI-HEAVE SLAB. REFER TO TYPICAL STOOP DETAIL FOR ADDITIONAL INFORMATION. ALIGN EDGE OF SLAB WITH SIDEWALK SCORING AS INDICATED ON THE REFERENCE PLAN.

CONCRETE NOTES

1. ALL CONCRETE WORK INCLUDING FORMING, REINFORCING, MIXING, PLACING, FINISHING AND CURING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE AMERICAN CONCRETE INSTITUTE (ACI) MANUAL OF CONCRETE PRACTICE INCLUDING "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE", ACI 318 AND "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS", ACI 301, AND ALL STANDARDS REFERENCED THEREIN.
2. ALL CONCRETE SHALL BE NORMAL WEIGHT (145 PCF) WITH AGGREGATES CONFORMING TO ASTM C33.
3. ALL CONCRETE SHALL DEVELOP THE FOLLOWING MINIMUM 28-DAY COMPRESSIVE STRENGTH (F'C): 4,000 PSI
4. CONCRETE EXPOSED TO WEATHER, VEHICLES, AND/OR DE-ICING CHEMICALS SHALL BE 4,000 PSI AND ARE ENTRAINED W/ 6% (+/-) 1.5% ENTRAINED AIR BY VOLUME @ POINT OF DISCHARGE.
5. CHLORIDE BASED ADMIXTURES ARE PROHIBITED IN ALL REINFORCED CONCRETE. OTHER ADMIXTURES SHALL CONFORM TO ASTM C494.
6. REINFORCING STEEL SHALL BE DEFORMED AND CONFORM TO A615, A616, OR A617, GRADE 60, WITH A MINIMUM YIELD STRESS (Fy) OF 60,000 PSI. THE MINIMUM LAP FOR SPLICES SHALL BE AS SHOWN.
7. ALL CONCRETE COVER ON REINFORCING STEEL SHALL BE A MINIMUM OF 2"UNLESS OTHERWISE NOTED.
8. MAXIMUM SLUMP SHALL BE 3" +/- 1" AS DETERMINED IN ACCORDANCE WITH ASTM C143, PRIOR TO FLOW ENHANCING WATER REDUCING ADMIXTURE, AS REQUIRED FOR PLACEMENT, PUMPING AND/OR WORKABILITY.
9. MAXIMUM WATER TO CEMENT RATIO (W/C) SHALL BE 0.45. TOTAL AIR CONTENT SHALL NOT EXCEED 3% AND BE GREATER THAN 1 1/2% FOR INTERIOR SLABS. FOR EXTERIOR SLABS EXPOSED TO FREEZE THAW CONDITIONS, AIR CONTENT SHALL BE 5.5% +/- 1.5%. DO NOT AIR ENTRAIN INTERIOR SLABS.
10. SUBMIT REINFORCEMENT SHOP DRAWINGS AND CONCRETE MIX DESIGN TO THE ENGINEER OF RECORD (E.O.R.) FOR REVIEW PRIOR TO PLACEMENT.
11. GENERAL CONTRACTOR SHALL CHECK ENTIRE SET OF CONTRACT DOCUMENTS AND DRAWINGS (E.G. ARCHITECTURAL, M.E.P., F.P., ETC.) AND WITH OTHER CONTRACTORS FOR OPENINGS, SLEEVES, ANCHORS, HANGERS, INSERTS, SLAB DEPRESSIONS AND OTHER ITEMS RELATED TO THE CONCRETE WORK, AND SHALL ASSUME FULL RESPONSIBILITY FOR THEIR PROPER LOCATION BEFORE PLACING CONCRETE.
12. ALL REINFORCING SHALL BE DETAILED AND PLACED IN ACCORDANCE WITH ACI 315 AND ACI 315-R. THE REINFORCING STEEL CONTRACTOR SHALL FABRICATE ALL REINFORCEMENT AND FURNISH ALL ACCESSORIES, CHAIRS, SPACER BARS, AND SUPPORTS NECESSARY TO SECURE THE REINFORCEMENT (BARS & W.W.F.) IN THE POSITIONS SHOWN ON THE PLANS AND DETAILS. PLASTIC COATED ACCESSORIES SHALL BE USED IN ALL EXPOSED CONCRETE.
13. THE WELDING OF REINFORCING BARS WILL ONLY BE ALLOWED WHEN SHOWN ON THE STRUCTURAL DRAWINGS.
14. PROVIDE CONTROL/CONSTRUCTION JOINTS AS SHOWN ON THE DRAWINGS. NO CONSTRUCTION, CONTROL OR EXPANSION JOINTS SHALL BE INSTALLED IN THE COMPOSITE CONCRETE SLAB WITHOUT THE PRIOR WRITTEN APPROVAL OF THE E.O.R. OR UNLESS SPECIFICALLY INDICATED ON THE SLAB PLAN.
15. CONCRETE FINISH:
    - FLOOR SLABS – HARD TROWELED FF 25 FINISH (OR AS REQUIRED FOR FLOOR FINISH SUBSTRATE)

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FOUNDATION DETAILS

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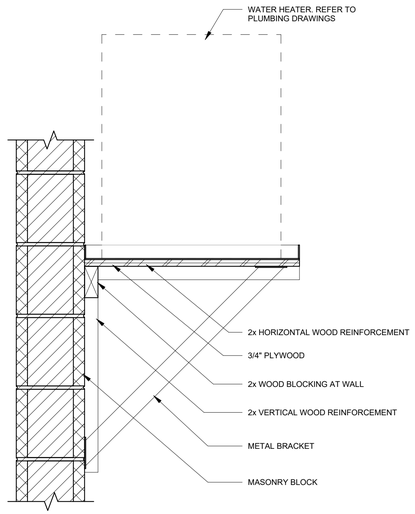
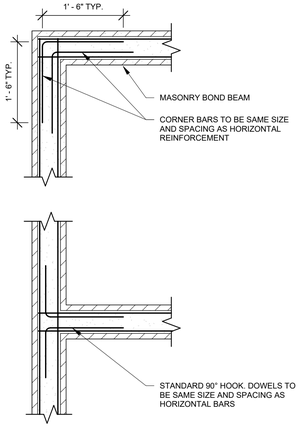
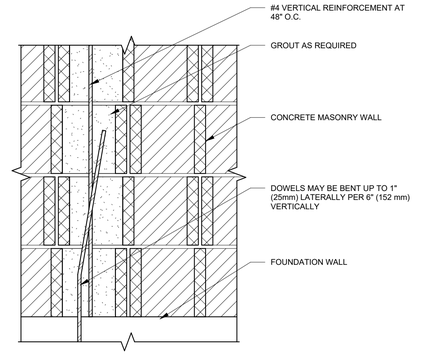


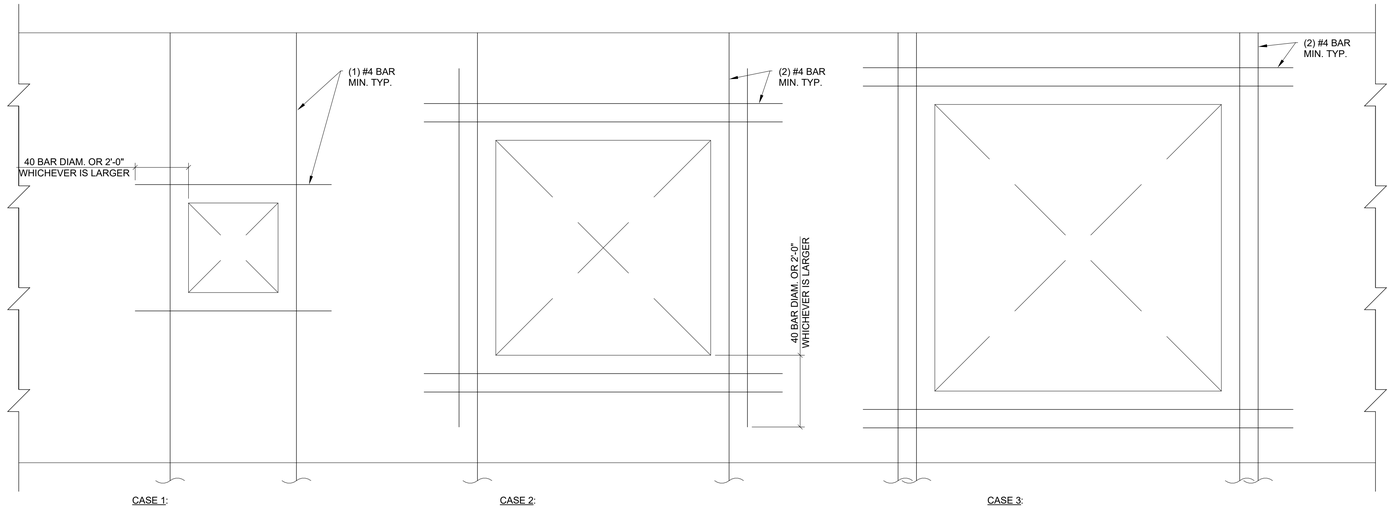
C2 WATER HEATER SHELF
1 1/2" = 1'-0"



C4 TYP. CORNER BARS - CMU BOND BEAMS
3/4" = 1'-0"



C5 CMU REINFORCING DOWEL PLACEMENT
1 1/2" = 1'-0"



CASE 1:

APPLIES TO (1) ALL OPENINGS IN NON-STRUCTURAL PARTITIONS OVER 100 SQ. IN., AND (2) AND OPENINGS 2 FT OR LESS BOTH WAYS OVER 100 SQ.FT. IN STRUCTURAL OR EXTERIOR WALLS.

CASE 2:

APPLIES TO STRUCTURAL AND EXTERIOR WALL WHEN OPENING EXCEEDS 2 FT BUT NOT MORE THAN 4 FT IN EITHER DIRECTION.

CASE 3:

APPLIES TO STRUCTURAL AND EXTERIOR WALLS WHEN OPENING EXCEEDS 4 FT IN EITHER DIRECTION.

NOTE:

1. VERTICAL REINFORCEMENT OF 2 BARS, EACH BAR MAY BE PLACED IN A SEPARATE CELL.
2. VERTICAL BARS SHALL BE OF THE SAME SIZE, EXTEND, AND ANCHORAGE AS THE TYPICAL REINF. IN THAT WALL UNLESS OTHERWISE INDICATED.
3. VERTICAL BARS CAN BE PART OF NORMAL REINF. IN THE WALL.
4. REINFORCEMENT AT TOP OF OPEINGS SHALL BE NOT LESS THAN THAT REQUIRED BY THE LINTEL DESIGN.

F2 REINFORCING AROUND WALL OPENINGS
NOT TO SCALE

UNIT MASONRY NOTES

A. ALL MASONRY CONSTRUCTION SHALL CONFORM TO ACI 530, "BUILDING CODE REQUIREMENTS FOR CONCRETE MASONRY STRUCTURES", AND ACI 530.1, "SPECIFICATION FOR MASONRY STRUCTURES", AND COMMENTARIES, LATEST EDITIONS.
B. MATERIAL PROPERTIES:
   1. PROVIDE UNIT MASONRY THAT DEVELOPS THE MINIMUM NET-AREA COMPRESSIVE STRENGTHS OF THE MASONRY ASSEMBLIES (F'm) AT 28 DAYS AS FOLLOWS:
      a. CONCRETE UNIT MASONRY F'm = 2,000 psi
   2. UNIT MASONRY MATERIALS AND REINFORCING SHALL CONFORM TO THE LATEST EDITIONS OF THE FOLLOWING ASTM SPECIFICATIONS:
      a. CONCRETE MASONRY UNITS (SOLID AND HOLLOW) SHALL BE NORMAL WEIGHT UNITS, TYPE 1, GRADE N AND CONFORM TO ASTM C90 WITH A MINIMUM NET AREA UNIT COMPRESSION STRENGTH OF 1,900 psi.
      b. PORTLAND CEMENT-LIME MORTAR MIX SHALL CONFORM TO ASTM C270, TYPE "S", WITH A MINIMUM COMPRESSIVE STRENGTH OF 1,800 psi AT 28 DAYS.
      c. REINFORCED MASONRY WALL GROUT SHALL CONFORM TO ASTM C476 WITH A MAXIMUM AGGREGATE SIZE OF 3/8" AND A MINIMUM COMPRESSIVE STRENGTH OF 3,000 psi AT 28 DAYS.
      d. STEEL REINFORCING BARS SHALL CONFORM TO ASTM A615 (GRADE 60) WITH A MINIMUM TENSILE STRENGTH (Fy) = 60,000 psi.
      e. HORIZONTAL JOINT REINFORCING SHALL CONFORM TO ASTM A951 AND BE #9 GAGE (W1.7) CONTINUOUS SIDE WIRES WITH #9 GAGE (W1.7) CROSS TIES AND HOT-DIPPED GALVANIZED.
C. GENERAL MASONRY NOTES
   1. MORTAR BEDDING FOR NON-LOAD BEARING HOLLOW UNITS REQUIRES THE FACE SHELLS TO BE FULLY COVERED WITH MORTAR. FOR THE ERECTION OF PIERS, PILASTERS AND COLUMNS, FULL MORTAR COVERAGE SHALL BE USED ON HEAD, BED (FACE SHELLS), WEBS AND COLLAR JOINTS, UNO.
   2. MORTAR BEDDING FOR LOAD BEARING HOLLOW UNITS SHALL USE FULL MORTAR COVERAGE ON THE HEAD, BED (FACE SHELLS), WEBS AND COLLAR JOINTS, UNO.
   3. MORTAR BEDDING FOR NON-LOAD BEARING - 2 HOUR FIRE RATED HOLLOW UNIT WALLS (UL DESIGN No. U905) SHALL BE LAID IN FULL BED OF MORTAR WITH COVERAGE ON HEAD, BED (FACE SHELLS), WEBS AND COLLAR JOINTS. WITH A 3/8 " NOMINAL THICKNESS, OF NOT LESS THAN 2-1/4 AND NOT MORE THAN 3-1/2 PARTS OF CLEAN SHARP SAND TO 1 PART PORTLAND CEMENT (PROPORTIONED BY VOLUME), WITH VERTICAL JOINTS STAGGERED.
   4. THE FIRST COURSE OF HOLLOW UNIT MASONRY AT THE BASE (AND ABOVE EACH FLOOR) SHALL BE LAID IN A FULL BED OF MORTAR AND GROUTED SOLID.
   5. HOLLOW UNITS THAT ARE TO HAVE A GROUTED CORE SHALL HAVE THE SURROUNDING WEBS FULLY MORTARED TO CONFINE THE GROUT TO THE INTENDED CORE.
   6. CLEAN-OUT OPENINGS ARE NOT REQUIRED WHEN WALLS ARE ERECTED AND THE CORES GROUTED AT NO MORE THAN FOUR (4) FOOT LIFTS. WALLS CARRIED UP HIGHER THAN FOUR (4) FOOT LIFTS SHALL HAVE A CLEAN-OUT AT THE BASE OF THE CORES TO BE FILLED WITH GROUT.
   7. MASONRY WALLS SHALL HAVE TWO (2) COURSES X 24 " MINIMUM FILLED WITH GROUT DIRECTLY BELOW ALL STEEL BEAM/OPEN WEB STEEL JOIST BEARING LOCATIONS, UNO.
   8. SUPPLY VERTICAL STEEL REINFORCING BARS IN 4 '-0" + 48 BAR DIAMETER LAP LENGTHS FOR LOW-LIFT GROUTING METHOD, UNO.
   9. PROVIDE DOWELS BETWEEN FOUNDATIONS AND WALL BASES EQUAL TO THE SIZE AND SPACING OF THE VERTICAL STEEL REINFORCING BARS IN THE WALL, UNO. IF A FOUNDATION DOWEL DOES NOT LINE UP WITH A VERTICAL CORE, IT SHALL NOT BE SLOPED MORE THAN ONE (1) HORIZONTAL TO SIX (6) VERTICAL.
   10. ALL VERTICAL STEEL REINFORCING BARS SHALL BE AS NOTED ON THE DRAWINGS AND DETAILS WITH CORES FILLED WITH GROUT. THE FIRST CELL AT CORNERS, END WALLS AND EACH SIDE OF CONTROL JOINTS SHALL BE FULLY GROUTED AND REINFORCED PER DETAILS. THE FIRST CELL NEXT TO AN OPENING (DOOR OR WALL OPENING) SHALL BE FULLY GROUTED AND REINFORCED PER DETAILS. VERTICAL STEEL REINFORCING SHALL EXTEND THE FULL HEIGHT OF THE WALLS, UNO.
   11. ALL HORIZONTAL JOINT REINFORCEMENT SHALL BE #9 GAGE (W1.7) CONTINUOUS, HOT-DIPPED GALVANIZED, LADDER/TRUSS TYPE (DUR-O-WALL, OR EQUAL) SPACED AT 16" ON CENTER MAXIMUM FOR THE FULL HEIGHT OF WALL UNO AND LOCATED AT THE BASE OF ALL TOP COURSES AND AT TOP OF FIRST COURSE ABOVE ANY WALL OPENING OR FLOOR. HORIZONTAL JOINT REINFORCING SPLICES SHALL BE LAPPED AT LEAST 6 " AND CONTAIN AT LEAST ONE CROSS WIRE OF EACH PIECE OF REINFORCEMENT WITHIN THE 6 ".
   12. SEE ARCHITECTURAL DRAWINGS FOR REQUIRED MASONRY BRICK AND CONCRETE MASONRY UNIT CONTROL JOINT DETAILS AND LOCATIONS FOR ALL NON-LOAD BEARING MASONRY WALLS. FOLLOW "NCMA" RECOMMENDATIONS AND GUIDELINES FOR JOINT DETAILS AND LOCATIONS IF NONE IS PROVIDED ON THE ARCHITECTURAL DRAWINGS, UNO. PROVIDE CONTROL JOINTS IN MASONRY WALLS NO GREATER THAN 20'-0" ON CENTER MAXIMUM, UNO ON THE ARCHITECTURAL DRAWINGS. SEE STRUCTURAL DRAWINGS FOR REQUIRED MASONRY WALL CONTROL/CONSTRUCTION JOINTS IN LOAD BEARING MASONRY WALLS.
   13. PLACEMENT OF ALL MASONRY AT WALL RETURNS, CORNERS AND INTERSECTIONS SHALL BE INTEGRAL AND TOOTHED TOGETHER AT EVERY OTHER COURSE PER ACI 530.1 REQUIREMENTS. PROVIDE PROPERLY LAPPED CORNER BARS AT ALL BOND BEAMS AND HORIZONTAL JOINTS AS REQUIRED.
   14. MASONRY WALLS SHALL BE ADEQUATELY BRACED/SHORED DURING ERECTION TO SAFELY WITHSTAND ALL ERECTION LOADS, INCLUDING LATERAL LOADS (I.E., WIND AND SEISMIC) PER GOVERNING BUILDING CODE. ALL BRACING/SHORING SHALL REMAIN IN PLACE UNTIL ALL PERMANENT LATERAL SUPPORTS (I.E., FLOOR SLABS, ROOFS, ETC.) ARE FULLY INSTALLED AND HAVE ACHIEVED THEIR FULL DESIGN CAPACITIES.
D. MASONRY LINTELS
   1. PROVIDE MASONRY LINTELS OVER ALL OPENINGS WIDER THAN 8" IN MASONRY WALLS. ALL MASONRY WALL OPENINGS AND MASONRY LINTELS REQUIRED ARE NOT SPECIFICALLY NOTED ON THE STRUCTURAL DRAWINGS. REFER TO THE ARCHITECTURAL AND MECHANICAL DRAWINGS FOR LOCATION, NUMBER AND SIZES OF MASONRY WALL OPENINGS.
   2. PROVIDE 8" DEEP CONCRETE MASONRY UNIT BOND BEAM LINTEL FOR ALL OPENINGS LESS THAN 4 '-0" IN WIDTH WITH (2) #5 REINFORCING BARS AT BOTTOM, UNO. PROVIDE SOLID GROUT FOR THREE (3) COURSES DIRECTLY BELOW LINTEL BEARING. FOR LINTELS IN WALL OPENINGS GREATER THAN OR EQUAL TO 4 '-0" IN WIDTH, REFER TO STRUCTURAL SECTIONS AND DETAILS.
E. QUALITY ASSURANCE
   1. ALL MASONRY SHALL BE INSPECTED BY A QUALIFIED, INDEPENDENT, TRAINED AND CERTIFIED FULL-TIME MASONRY INSPECTOR.
   2. THE OWNER SHALL EMPLOY AN INDEPENDENT TESTING AGENCY TO PEFORM THREE (3) PRISM TESTS FOR EACH 5,000 SQ.FT. OF MASONRY WALL ERECTED IN ACCORDANCE WITH ACI 530.1.
   3. SUBMIT ALL REINFORCING SHOP DRAWINGS FOR CONCRETE MASONRY UNITS PRIOR TO FABRICATION.

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STATE OF OHIO ARCHITECT MARIANNE L WEBER 9675 REGISTERED
Marianne L Weber License #9675
Expiration Date 12/31/2025

Restroom Facility

Oxford Park Place

2 West High Street, Oxford, Ohio 45056

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TITLE
MASONRY DETAILS

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A5.2

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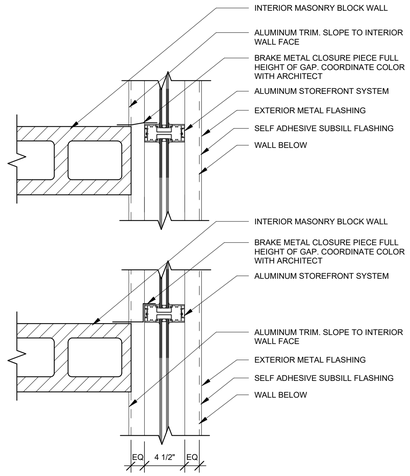
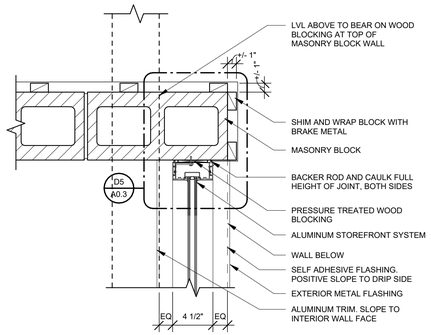
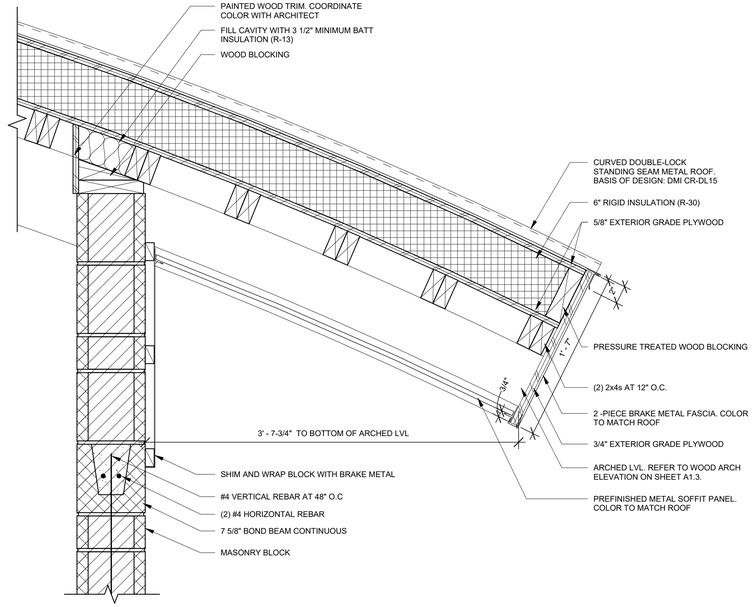


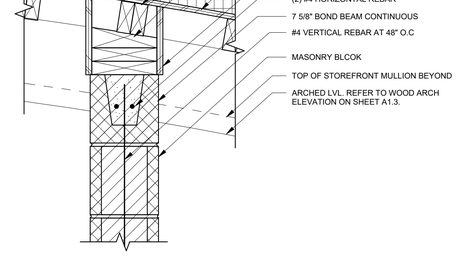
C2 STOREFRONT PLAN DETAIL AT INT WALL
1 1/2" = 1'-0"



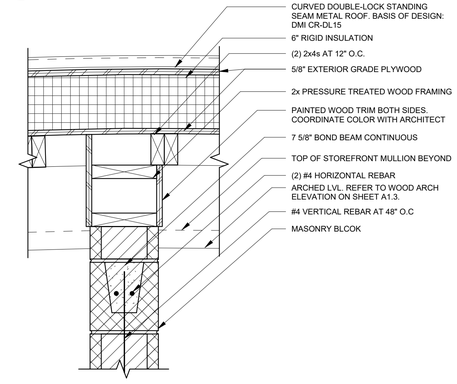
C4 STOREFRONT PLAN DETAIL AT EXT WALL
1 1/2" = 1'-0"



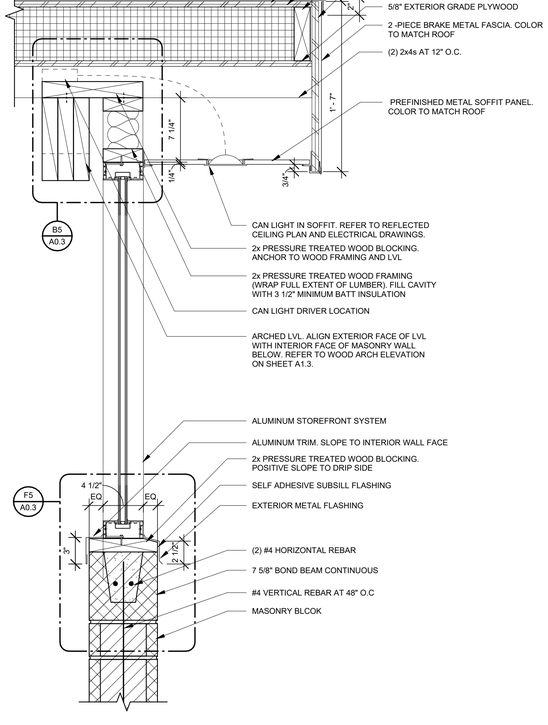
C5 NORTH / SOUTH OVERHANG SECTION DETAIL
1 1/2" = 1'-0"



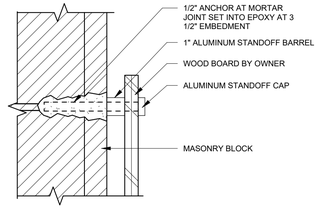
E4 NORTH INTERIOR WALL SECTION DETAIL
1 1/2" = 1'-0"



F4 SOUTH INTERIOR WALL SECTION DETAIL
1 1/2" = 1'-0"



F5 EAST / WEST OVERHANG SECTION DETAIL AT WINDOW
1 1/2" = 1'-0"



F2 ANCHOR FOR ART INSTALLATION
3" = 1'-0"

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REGISTERED ARCHITECT

Marianne L. Weber License #9675
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TITLE
EXTERIOR DETAILS

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A5.3

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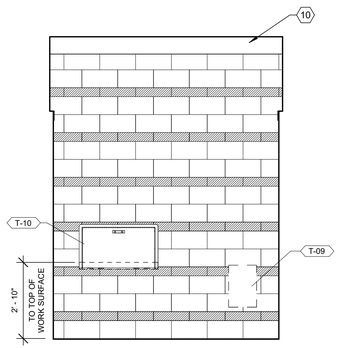
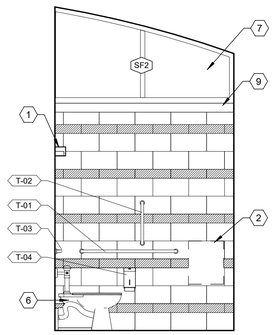
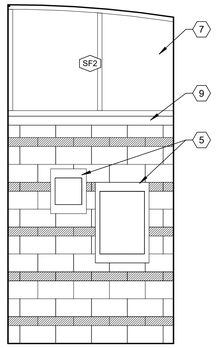


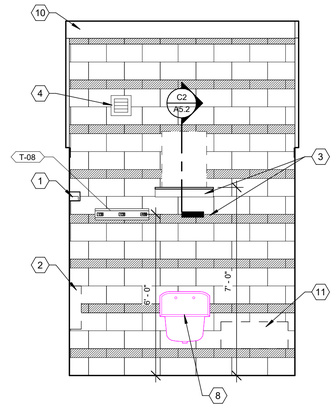
B1 101 - TOILET, NORTH
3/8" = 1'-0"



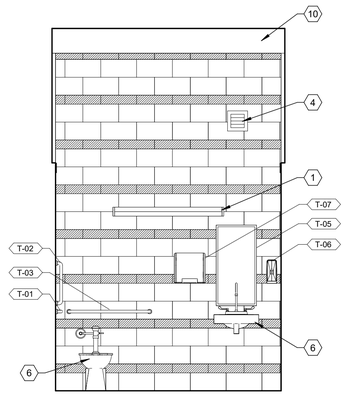
B2 101 - TOILET, WEST
3/8" = 1'-0"



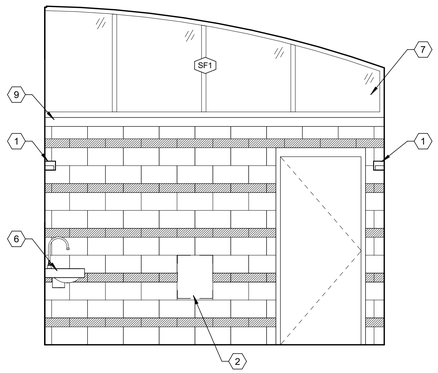
B4 102 - UTILITY, WEST
3/8" = 1'-0"



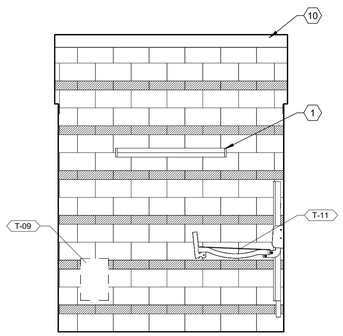
B5 102 - UTILITY, SOUTH
3/8" = 1'-0"



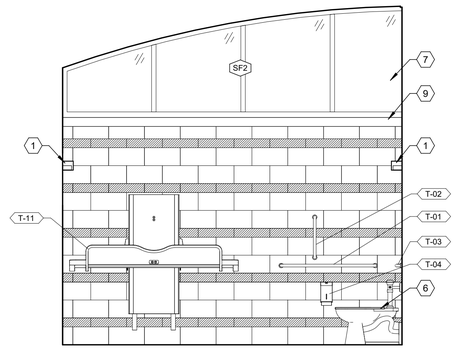
D1 103 - TOILET, NORTH
3/8" = 1'-0" TOILET (101), SOUTH - SIMILAR



D2 103 - TOILET, EAST
3/8" = 1'-0" TOILET (101), EAST - SIMILAR



D4 103 - TOILET, SOUTH
3/8" = 1'-0"



D5 103 - TOILET, WEST
3/8" = 1'-0" TOILET (101), WEST - SIMILAR

ACCESSORY SCHEDULE

ITEM NO.	DESCRIPTION	INSTALLED BY	REMARKS
T-01	42" GRAB BAR	CFCI	1, 2
T-02	18" GRAB BAR	CFCI	1, 2
T-03	36" GRAB BAR	CFCI	1, 2
T-04	TOILET TISSUE DISPENSER	CFCI	1, 2
T-05	MIRROR (18" x 36")	CFCI	1, 2
T-06	SOAP DISPENSER	CFCI	1, 2
T-07	HAND DRYER	CFCI	1, 2
T-08	MOP AND BROOM HOLDER	CFCI	2
T-09	CHILD PROTECTION SEAT	CFCI	2
T-10	BABY CHANGING STATION	CFCI	2
T-11	ADULT CHANGING STATION	OFCI	2

ACCESSORY SCHEDULE REMARKS:

1. REFER TO SHEET A0.1 FOR TYPICAL MOUNTING HEIGHTS AND RELATIONSHIPS TO FIXTURES.
2. REFER TO FLOOR PLAN AND INTERIOR ELEVATIONS FOR LOCATION AND ADDITIONAL REMARKS.

CONSTRUCTION NOTES

00 INDICATES CONSTRUCTION NOTE.

1 4" WALL MOUNTED LINEAR LIGHT FIXTURE. REFER TO M.E.P. DRAWINGS FOR ADDITIONAL IFNORMATION.

2 WALL MOUNTED CABINET UNIT HEATER. REFER TO M.E.P. DRAWINGS FOR ADDITIONAL INFORMATION.

3 INSTALL TANK WATER HEATER ON SHELF. REFER TO M.E.P. DRAWINGS FOR ADDITIONAL INFORMATION.

4 LOUVER. REFER TO M.E.P. DRAWINGS.

5 ELECTRICAL PANEL. REFER TO M.E.P. DRAWINGS FOR ADDITIONAL INFORMATION.

6 PLUMBING FIXTURE. REFER TO M.E.P. DRAWINGS FOR ADDITIONAL INFORMATION.

7 ALUMINUM STOREFRONT SYSTEM.

8 WALL HUNG MOP SINK AND HOLDER. REFER TO M.E.P. DRAWINGS FOR ADDITIONAL INFORMATION.

9 ALUMINUM TRIM.

10 WOOD TRIM. PAINT.

11 BACKFLOW PREVENTOR. REFER TO M.E.P. DRAWINGS.

GENERAL NOTES

A. ALL INTERIOR WALLS TO HAVE A WALL BASE. REFER TO FINISH SCHEDULE FOR TYPE.

B. REFER TO ELECTRICAL DRAWINGS FOR ELECTRICAL RECEPTACLE LOCATIONS.

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TITLE
INTERIOR ELEVATIONS

SHEET NO.
A7.1

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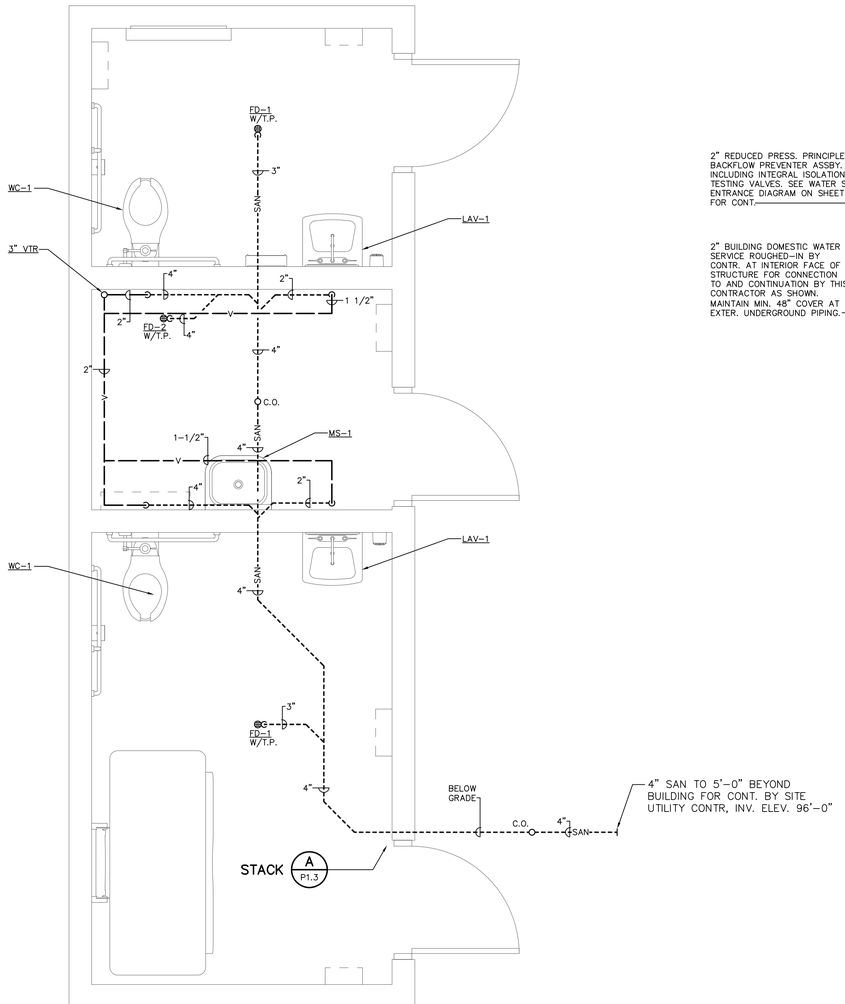
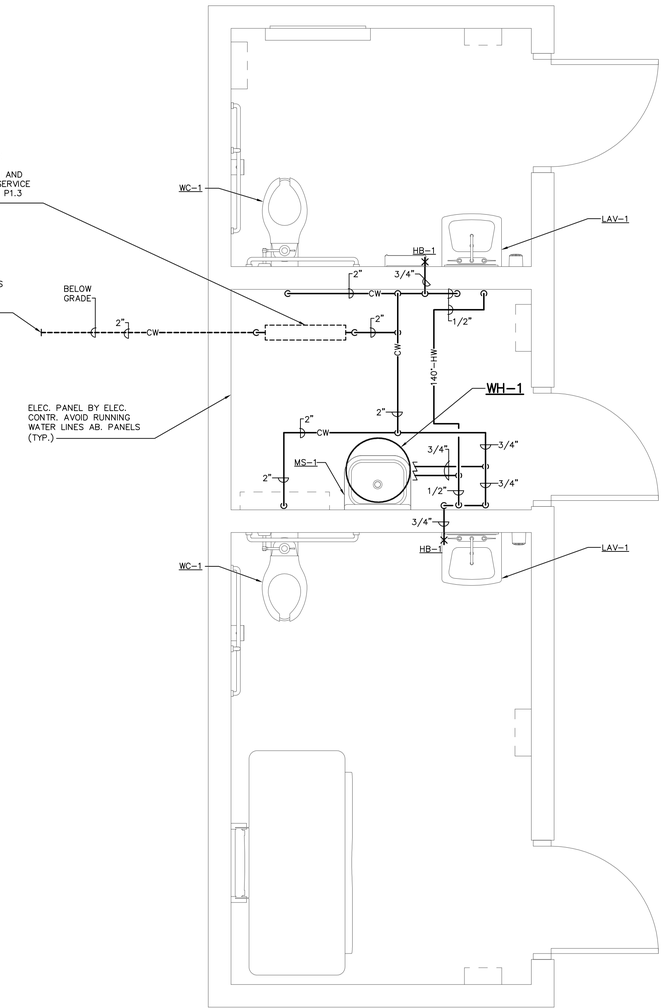


PLUMBING WASTE & VENT PLAN
SCALE: 1/2"=1'-0"



PLUMBING SUPPLY PLAN
SCALE: 1/2"=1'-0"

P1.2-24335.DWG

PRATER
Engineering Associates, Inc.
6130 Wilcox Road
Dublin, Ohio 43016
(614) 766 4896
praterengineering.com

DESIGNED BY	DRAWN BY	CHECKED BY	JOB NUM.
Kirby O.	Kirby O.	CMA	24335

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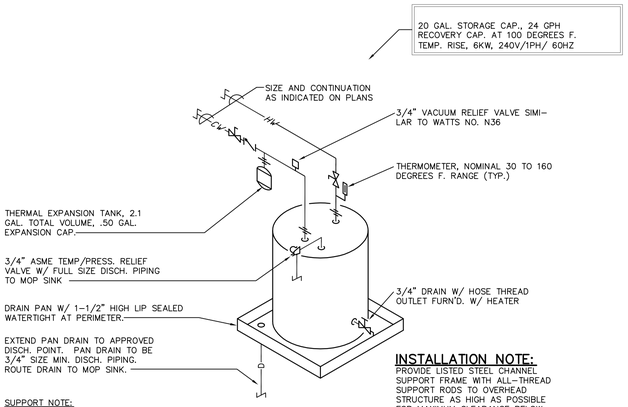
TITLE
PLUMBING PLAN

SHEET NO.
P1.2

ELECTRIC WATER HEATER DIAGRAM



INSTALLATION NOTE:
PROVIDE LISTED STEEL CHANNEL SUPPORT FRAME WITH ALL-THREAD SUPPORT RODS TO OVERHEAD STRUCTURE AS HIGH AS POSSIBLE FOR MAXIMUM CLEARANCE BELOW. MINIMUM OF FOUR (4) SUPPORT RODS TO BE PROVIDED

PLUMBING FIXTURE SCHEDULE

PLUMBING FIXTURE NOTES:

1. UNLESS INDICATED OTHERWISE, THE ARCHITECT SHALL SELECT THE FIXTURE COLOR/FINISH FROM THE MANU-FACTURER'S FULL RANGE OF STANDARD OPTIONS.
2. UNLESS INDICATED OTHERWISE, ALL EXPOSED METALLIC COMPONENTS TO BE FURNISHED WITH POLISHED CHROME FINISH, INCLUDING FAUCETS, TRAPS, STOPS, PIPING, ETC.
3. UNLESS INDICATED OTHERWISE, ALL EXPOSED PIPING SHALL BE FURNISHED WITH POLISHED CHROME FINISH BRASS ESCUTCHEONS AT ALL WALL/CABINET PENETRATIONS AND FIXTURE CONNECTIONS.

FIXTURE	MANUFACTURER	REMARKS	PIPE SIZE CW	PIPE SIZE HW
WC-1 (HANDICAP ACCESS-IBLE)	WILLOUGHBY BEMIS/ZURN	FIXTURE; WILLOUGHBY ETF-1490-FM-HC-BS, STAINLESS STEAL, REAR MOUNTED, FLOOR OUTLET, FLOOR MOUNTED, SIPHON JET SERIES TOILET. FLUSH VALVE; ZURN SENSOR FLUSH VALVE (WIRED 120V POWER); NO. ZEMS6152AV-WS1-ACA-BA (1.6 GPF) SEAT; BEMIS MODEL NO. 1655/SSC (SELF-SUSTAINING CHECK HINGE) FIXTURE ASSEMBLY TO COMPLY WITH HANDICAP ACCESS REQUIREMENTS.	1"	---
LAV-1 (HANDICAP ACCESS-IBLE)	AMERICAN STAN-DARD/McGUIRE/ ZURN/LEONARD	FIXTURE; ELKAY MODEL NO. ELV2219SACC STAINLESS STEEL 22" X 19" X 5-1/2", SINGLE BOWL WALL-MOUNT SINK. MANUFACTURED FROM 18 GAUGE 304 SERIES STAINLESS STEEL WITH #4 FINISH, CENTER DRAIN PLACEMENT. CONTROLS; ZURN SENSOR FAUCET (HARD-WIRED); NO. Z6955-XL-S-N-HW6 WITH .5 GPM LAMINAR FLOW OUTLET. ALL REQUIRED TRANSFORMER AND LOW VOLTAGE WIRING BY PLUMBING CONTRACTOR, 120V TO TRANSFORMER BY E.C. TW MIXER; SIMILAR TO LEONARD MODEL NO. 270 THERMOSTATIC MIXING MIXING VALVE WITH INTEGRAL INLET CHECK STOPS, LOCKING TEMPERATURE ADJUSTMENT, AND ASSE 1070 CERTIFIED. ADJ-UST VALVE AS REQUIRED TO PROVIDE A MAXIMUM OF 110T TEMPERED WATER TO LAVATORY. MIXING VALVE TO BE INS-TALLED WITHIN ACCESSIBLE CASEWORK BELOW FIXTURE. VALVE TO SERVE A MAXIMUM OF (4) LAVATORYS. TRAP; McGUIRE MODEL 8902 1 1/4"x1 1/2" 17 GA. P-TRAP, CHROME PLATED STOP(S); McGUIRE MODEL 2165LK 1/2" LAVATORY SUPPLIES W/ LOOSE KEY BRASS ANGLE STOPS & COPPER FLEX TUBE RISERS. ALL CHROME PLATED	1/2"	1/2"
MS-1	AMERICAN STANDARD/	FIXTURE; AMERICAN STANDARD LAKEWELL SERVICE SINK, ENAMELED CAST IRON, SUPPLIED W/ WALL HANGER AND RIM GUARD CONTROLS; AMERICAN STANDARD MODEL NO. 8351.076 WITH INTEGRAL STOPS & VAC. BRKR. TRAP; CAST IRON OR COPPER 3" P-TRAP	1/2"	1/2"

PLUMBING EQUIPMENT

WH-1; ELECTRIC WATER HEATER
WATER HEATER SHALL BE GLASS-LINED DESIGN, ELECTRICALLY HEATED, AND APPROVED BY THE UNDERWRITERS LABORATORY (UL-174). THE HEATER SHALL MEET ALL APPLICABLE ENERGY CODES, WITH ONE HEATING ELEMENT, SEE PLANS FOR RATINGS & CAPACITIES. HEATER TO BE EQUIPPED WITH CORE-GARD STAINLESS-STEEL CORE ALUMINUM ANODE ROD. ALL INTERNAL SURFACES OF THE HEATER EXPOSED TO WATER SHALL BE PERMA-GLASS LINED. UNIT SHALL BE EQUIPPED WITH DYNA-CLEAN DIFFUSER DIP TUBE AND PROVIDED WITH VANDAL RESISTANT BRASS DRAIN VALVE. HEATING ELEMENT SHALL BE CONTROLLED BY AN INTEGRAL MOUNTED THERMOSTAT AND HIGH TEMPERATURE CUT-OFF SWITCH. THE OUTER JACKET SHALL BE OF BAKED ENAMEL FINISH WITH HINGED FRONT ACCESS PANEL OVER FOAM INSULATION OVER ELECTRICAL JUNCTION BOX WITH INTEGRAL TERMINAL BLOCK. PROVIDE WITH INTEGRAL HEAT TRAP NIPPLES, ASME RATED TEMPERATURE AND PRESSURE RELIEF VALVE, DRAIN PAN AND INSTALL PER MANUFACTURER'S RECOMMENDATIONS. WATER HEATER BASED A.O. SMITH DEL-20

THERMAL EXPANSION TANK (ASME LISTED)
AMTROL ST-C SERIES (ASME LISTED/150 PSI WORKING PRESSURE) WITH STEEL SHELL, RIGID POLYPROPYLENE LINER AND HEAVY DUTY RUBBER DIAPHRAGM. LINER AND DIAPHRAGM MECHANICALLY BONDED TO SHELL TO FORM A SEPARATE AIR CHAMBER AND NON-CORROSIVE WATER RESERVOIR. AIR CHAMBER PRE-CHARGED TO 55 PSIG, AND PROVIDED WITH A STANDARD AIR VALVE FITTING. SEE WATER HEATER DIAGRAM FOR RATINGS AND CAPACITIES. P.C. TO CONFIRM PROPER AIR CHAMBER CHARGE ACCORDING TO MANUFACTURES REQUIREMENTS PRIOR TO INSTALLATION. THE PLUMBING CONTRACTOR SHALL FIELD ADJUST THE TANK PRESSURE IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS BASED ON THE PROJECT SPECIFIC CONDITIONS.

HB-1; HOSE BIB
SIMILAR TO ZURN NO. Z-1321-C WITH EXPOSED FLUSH SURFACE MOUNTING, INTEGRAL BACKFLOW PREVENTER, AUTO-MATIC DRAIN, BRONZE FITTINS, CERAMIC DISC DISCHARGE, 3/4" HOSE THREAD OUTLET, LOOSE KEY OPERATOR AND STAINLESS STEEL FACE.

DRAIN & CLEANOUT SCHEDULE

DES.	LOCATION	DESCRIPTION
CO	CONCEALING WALL	USE CLEANOUT TEE AND PROVIDE CLEANOUT AND ACCESS COVER SIMILAR TO ZURN ZANB-1468 WITH ROUND POLISHED STAINLESS STEEL ACCESS COVER, SECURING SCREW, AND BRONZE TAPER THREADED PLUG. FOR CLEANOUTS LOCATED WITHIN RATED STRUCTURES PROVIDE A FIRE RATED 8" SQUARE FLUSH MOUNTED STEEL ACCESS DOOR SIMILAR TO AN ACUDOR NO. FB-5060 WITH FLUSH KEY LATCH AND PRIMER COAT FINISH.
CO	FLOOR IN FINISH AREAS	ZURN MODEL NO.ZN-1400 CAST IRON BODY ADJUSTABLE CLEANOUT WITH ANCHOR FLANGE, POLISHED NICKEL BRONZE ROUND SCORIATED FRAME AND TOP, AND BOTTOM GASKET CONNECTION OUTLET. CLEANOUTS IN STRUCTURES ABOVE GRADE TO BE FURNISHED WITH CLAMPING COLLAR.
CO	EXPOSED OR WITHIN ACCESS-IBLE STRUCTURE	ZURN MODEL ZB-1470 WITH COUNTER-SUNK TAPERED THREAD BRONZE PLUG.
FD-1	FINISHED AREA FLOOR DRAIN	ZURN Z415BZ CAST IRON FLOOR DRAIN WITH DOUBLE DRAINAGE FLANGE AND WEEPHOLES, BOTTOM CAULK OUTLET WITH TYPE BZ SIZE 6¼" DIAMETER POLISHED NICKEL BRONZE LEVELING STRAINER. FURNISH WITH CLAMPING COLLAR EXCEPT FLOOR DRAINS IN ON-GRADE LOCATIONS.
FD-2	EQUIPMENT RM. FLOOR DRAIN	ZURN Z-541 "SUPER-FLOW", CAST IRON FLOOR DRAIN WITH DOUBLE DRAINAGE FLANGE, WEEPHOLES, REMOVABLE SHALLOW SEDIMENT BUCKET, INSIDE CAULK BOTTOM OUTLET, 12" ROUND TOP AND LOOSE-SET, DUCTILE IRON GRATE.

PLUMBING LEGEND

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
CW	DOMESTIC COLD WATER LINE		P-TRAP (PLAN VIEW)
HW	HOT WATER LINE (DOMESTIC)		CAPPED LINE
SAN	SANITARY LINE		EXISTING WORK TO REMAIN
	TRAP PRIMER LINE		EXISTING WORK TO BE REMOVED
V	VENT LINE		PIPE BRANCH TOP CONNECTION
	FLOOR OR AREA DRAIN		PIPE BRANCH BOTTOM CONNECTION
	CONNECT TO EXISTING		PETE'S PLUG
	THRU FLOOR AS SHOWN		COMB. BALANCE & STOP VALVE
			BALL VALVE

PLUMBING ABBREVIATIONS

ABV.	ABOVE	GEN.	GENERAL
A.F.F.	ABOVE FINISHED FLOOR	INV. ELEV.	INVERT ELEVATION
APPROX.	APPROXIMATELY	INT.	INTERIOR
BTM.	BOTTOM	LAV.	LAVATORY
BLDG.	BUILDING	MECH.	MECHANICAL
CLG.	CEILING	PLBG.	PLUMBING
C.O.	CLEAN OUT	PRESS.	PRESSURE
CONN.	CONNECT	RM.	ROOM
CONTR.	CONTRACTOR	THERM.	THERMOMETER
DIA.	DIAMETER	TYP.	TYPICAL
ELEC.	ELECTRICAL	W/	WITH
E.W.C.	ELECTRIC WATER COOLER	WC	WATER CLOSET
F.D.	FLOOR DRAIN	EXIST.	EXISTING
FURN.	FURNISH	FLR.	FLOOR

CONSTRUCTION NOTES

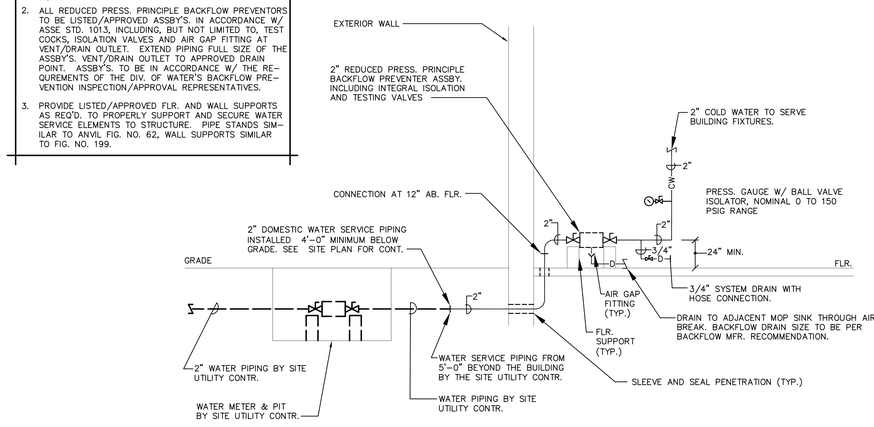
1. ALL WORK TO BE SCHEDULED IN ADVANCE WITH THE OWNER.
2. HOURS AND AREAS OF ACCESS FOR CONSTRUCTION TO BE PER THE OWNER'S DIRECTION.
3. SEQUENCING AND PHASING OF WORK TO BE PER THE OWNER'S DIRECTION.
4. DESIGNATED WORK AREAS ARE AS INDICATED BY THE ARCHITECTURAL PLANS AND THE OWNER. ANY WORK REQUIRED OUTSIDE OF THESE AREAS TO BE APPROVED BY AND SCHEDULED IN ADVANCE WITH THE OWNER.
5. WORK TO BE DONE IN SUCH A MANNER AS TO AVOID OR MINIMIZE INTERUPTION OF NORMAL ACTIVITIES IN ADJACENT AREAS REMAINING IN OPERATION DURING CONSTRUCTION. ANY UTILITY OUTAGES OR IMPAIRMENTS TO BE SCHEDULED WITH THE OWNER IN ADVANCE, AND EXECUTED IN THE MANNER DIRECTED.
6. THE PLUMBING CONTRACTOR IS RESPONSIBLE FOR FIRESTOPPING AT ALL FIRE PROTECTION RELATED PENETRATIONS OF FIRE, SMOKE AND OTHER RATED STRUCTURES, INCLUDING FLOORS, WALLS, PARTITIONS, ETC.. REFER TO ARCHITECTURAL DOCUMENTATION FOR LOCATIONS OF ALL RATED STRUCTURES, AND SPECIFIC INFORMATION AND REQUREMENTS PERTAINING TO SAME.
7. ALL CONDITIONS UPON COMPLETION OF WORK INCLUDED UNDER THIS CONTRACT TO MATCH CONDITIONS PRIOR TO START OF WORK.

PLUMBING NOTES

1. NOTE THAT EXISTING CONDITIONS SHOWN ON PLANS ARE FROM PREVIOUS ENGINEERING DOCUMENTATION AND FIELD OBSERVATION. ACTUAL CONDITIONS MAY VARY, AND MUST BE FIELD VERIFIED BY THIS CONTRACTOR (WHETHER SHOWN OR NOT). THIS CONTRACTOR SHALL MAKE MINOR ADJUSTMENTS AS NECESSITATED BY ACTUAL CONDITIONS, REQUIRED TO COMPLETE INSTALLATION OF NEW ELEMENTS. IF EXISTING CONDITIONS PROHIBIT INSTALLATION OF NEW ELEMENTS, NOTIFY THE CONSTRUCTION MANAGER/OWNER'S REPRESENTATIVE FOR REDIRECTION AS REQUIRED.
2. REFER TO ARCHITECTURAL DOCUMENTATION FOR ADDITIONAL SCOPE/INFORMATION REGARDING DEMOLITION/REMODELING WORK, INCLUDING IDENTIFICATION OF AREAS AND ITEMS/ELEMENTS INVOLVED, AS WELL AS INFORMATION OF BOTH A GENERAL AND SPECIFIC NATURE.
3. UNLESS DIRECTED OTHERWISE, WHERE CONCEALING/FINISH STRUCTURE IS PROVIDED UNDER SEPARATE CONTRACT, ALL WORK IN THE PLUMBING CONTRACT NOT SPECIFICALLY INTENDED OR IDENTIFIED FOR EXPOSED/VISIBLE INSTALLATION SHALL BE INSTALLED WITHIN THE CONCEALING STRUCTURE.
4. CUTTING/REMOVAL AND REPAIR/REPLACEMENT OF EXISTING STRUCTURES AND/OR SURFACES REQUIRED BY WORK IN THE PLUMBING CONTRACT IS BY THE PLUMBING CONTRACTOR, UNLESS INDICATED OTHERWISE. REPAIR/REPLACEMENT TO BE TO ORIGINAL CONDITION, AND TO MATCH ADJACENT SURFACES IN TYPE, KIND AND FINISH. THIS INCLUDES CEILINGS, PARTITIONS, FLOORS, SOFFITS, ETC., BOTH WITHIN AND OUTSIDE THE REVISED/REMODELED AREA(S) THAT ARE AFFECTED BY WORK IN THE PLUMBING CONTRACT. THIS CONDITION DOES NOT APPLY IF EXISTING STRUCTURES AND/OR SURFACES ARE BEING REVISED/REMOVED/REPLACED UNDER SEPARATE CONTRACT.
5. ALL PIPING SHOWN IS ABOVE CEILING IN AREAS WITH DROPPED CEILINGS, OR AT BOTTOM OF OVERHEAD SUPPORT STRUCTURE IN EXPOSED STRUCTURE AREAS, UNLESS INDICATED OTHERWISE.
6. THE PLUMBING CONTRACTOR IS TO SECURE AND VERIFY ALL MEASUREMENTS AND CONDITIONS AT THE PROJECT IN ADVANCE OF WORK (INCLUDING FABRICATION).
7. THE PLUMBING CONTRACTOR IS TO PROVIDE ALL ADDITIONAL STEEL, HANGERS, RODS, CLAMPS, ETC., AS REQUIRED FOR PROPER INSTALLATION, SUPPORT, AND COORDINATION WITH WORK PROVIDED UNDER SEPARATE CONTRACT. UNLESS INDICATED OTHERWISE IN PROJECT SPECIFICATIONS OR BY THE PIPE MATERIAL MANUFACTURER, SUPPORT PIPING AS FOLLOWS:
   A. CAST IRON PIPING (NOT IN EARTH); 5FT. CENTERS
   B. STEEL PIPING; 10 FT. CENTERS
   C. COPPER PIPING; 8FT. CENTERS
   D. PLASTIC PIPING; 4FT. CENTERS
8. THE PLUMBING CONTRACTOR IS RESPONSIBLE FOR FIRESTOPPING AT ALL PLUMBING RELATED PENETRATIONS OF FIRE, SMOKE AND OTHER RATED STRUCTURES, INCLUDING FLOORS, WALLS, PARTITIONS, ETC.. REFER TO ARCHITECTURAL DOCUMENTATION FOR LOCATIONS OF ALL RATED STRUCTURES, AND SPECIFIC INFORMATION AND REQUIREMENTS PERTAINING TO SAME.
9. LAYOUT AND INSTALLATION OF PLUMBING CONTRACT PIPING, EQUIPMENT, ITEMS AND ELEMENTS INDICATED ON PLAN IS SCHEMATIC IN NATURE. EXACT LOCATION, ROUTING AND INSTALLATION TO BE COORDINATED WITH BUILDING STRUCTURE AND ALL OTHER WORK PROVIDED UNDER SEPARATE CONTRACT.
10. COORDINATE EXACT LOCATION AND INSTALLATION OF ALL PLUMBING UTILITIES REQUIRED AND PROVIDED FOR WORK UNDER SEPARATE CONTRACT WITH APPROPRIATE CONTRACTOR(S) IN ADVANCE OF WORK. THIS INCLUDES SUPPLY AND DRAIN ELEMENTS, FOR DIRECT (PIPED) AND/OR INDIRECT (FLOOR/HUB DRAIN, AIR GAP, ETC.) CONNECTION/SERVICE.
11. RUN ALL WATER LINES LEVEL.
12. ROUGH IN ALL PIPING (SUPPLY, RETURN, WASTE, DRAIN, ETC.) FOR FIXTURES/EQUIPMENT INSTALLATION THRU OR ON FACE OF WALL (AS APPLICABLE), AND TERMINATE WITH SHORT PIPE NIPPLE AND CAP. ROUGH INS AT EXTERIOR WALLS (IF ANY) TO BE ON "WARM" SIDE OF INSULATION ASSEMBLY, AS REQUIRED FOR NON-FREEZE INSTALLATION.
13. ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF OXFORD/ STATE OF OHIO BUILDING CODE, INCLUDING APPLICABLE PLUMBING, MECHANICAL AND HANDICAP ACCESSIBILITY PROVISIONS.
14. PROVIDE CLEANOUTS AS FOLLOWS:
   A. AT THE BASE OF ALL SANITARY STACKS.
   B. IN ALL AND SANITARY PIPING AT INTERVALS NOT TO EXCEED 100 L.F. IN LENGTH
   C. AT EACH CHANGE OF DIRECTION BY SANITARY PIPING BELOW GRADE OR AT THE LOWEST POINT OF THE HORIZONTAL DRAINAGE SYSTEM GREATER THAN 45 DEGREES, UNLESS ANOTHER CLEANOUT IS WITHIN 40 FT. DEVELOPED LENGTH.
   D. AT ALL SANITARY PIPING BUILDING EXIT POINTS, AND/OR BUILDING SEWER CONNECTIONS FOR SITE UTILITY 11E-IN.
   E. AT CONNECTING POINTS TO EXISTING SANITARY AND VENT PIPING (TEST TYPE CLEANOUTS).
15. UNLESS INDICATED OTHERWISE, ALL FIXTURES AND EQUIPMENT PROVIDED WITH PLUMBING SUPPLY PIPING TO BE FURNISHED WITH APPROVED/LISTED STOPS IN ACCESSIBLE LOCATIONS.
16. SEE ARCHITECTURAL DRAWINGS FOR DETAILS OF CASEWORK, EQUIPMENT AND OTHER ITEMS/ELEMENTS PROVIDED UNDER SEPARATE CONTRACT, INCLUDING EXACT LOCATIONS AND UTILITY CONNECTION REQUIREMENTS. COORDINATE PLUMBING UTILITY WORK AS REQUIRED IN ADVANCE, INCLUDING PLACEMENT OF FITTINGS, ACCESSORIES, APPURTENANCES, DRAINS, ETC.
17. VERIFY THE EXACT LOCATION AND INSTALLATION REQUIREMENTS FOR ALL DRAINS WITH THE ARCHITECTURAL AND STRUCTURAL DOCUMENTATION FOR PROPER PLACEMENT IN RESPECT TO SLOPES AND STRUCTURE AT EACH DRAIN. COORDINATE INSTALLATION WITH THE APPROPRIATE CONTRACTOR. FINAL INSTALLATION AND LOCATION SUBJECT TO APPROVAL.
18. PLUMBING PIPING IS NOT PERMITTED TO RUN ABOVE ANY ELECTRICAL SWITCHGEAR, MOTOR CONTROL CENTERS OR PANELS (INCLUDING ACCESS/CLEARANCE SPACE 42" IN FRONT OF THESE ITEMS, AND A MIN. 30" WIDE), UNDER ANY CIRCUMSTANCES.
   A. LOCATION OF NEW ITEMS OF THESE TYPES TO BE DETERMINED AND CONFIRMED FROM INDICATION BY THE PROJECT ELECTRICAL DOCUMENTATION, AND ACTUAL INSTALLATION CONFIRMED WITH THE ELECTRICAL CONTRACTOR PRIOR TO START OF WORK.
   B. LOCATION OF EXISTING ITEMS OF THESE TYPES TO BE DETERMINED AND CONFIRMED IN THE FIELD PRIOR TO START OF WORK.

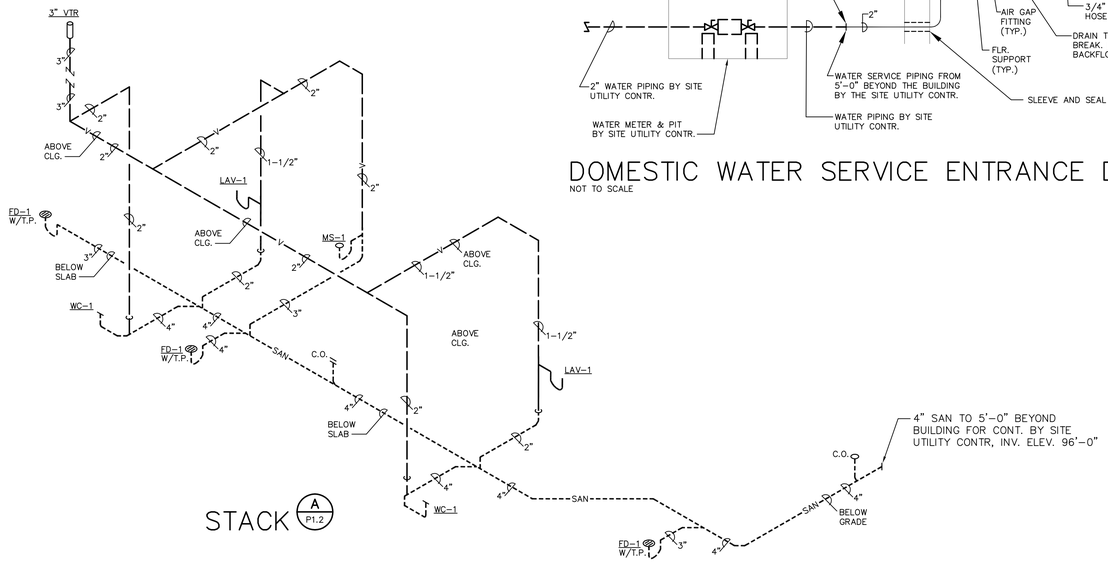
WATER SERVICE NOTES:

1. WATER SERVICE ENTRANCE MATERIALS, INSTALLATION, AND ALL COMPONENTS (INCL'G. BUT NOT LIMITED TO METERS AND BACKFLOW PREVENTORS) TO BE IN ACCORDANCE WITH THE RQMT'S. OF CITY OF OXFORD THE DIVISION OF WATER, VERIFIED IN ADVANCE OF WORK.
2. ALL REDUCED PRESS. PRINCIPLE BACKFLOW PREVENTORS TO BE LISTED/APPROVED ASSBY'S. IN ACCORDANCE W/ ASSE STD. 1013, INCLUDING, BUT NOT LIMITED TO, TEST COCKS, ISOLATION VALVES AND AIR GAP FITTING AT VENT/DRAIN OUTLET. EXTEND PIPING FULL SIZE OF THE ASSBY'S. VENT/DRAIN OUTLET TO APPROVED DRAIN POINT. ASSBY'S. TO BE IN ACCORDANCE W/ THE RE-QUREMENTS OF THE DIV. OF WATER'S BACKFLOW PRE-VENTION INSPECTION/APPROVAL REPRESENTATIVES.
3. PROVIDE LISTED/APPROVED FLR. AND WALL SUPPORTS AS REQ'D. TO PROPERLY SUPPORT AND SECURE WATER SERVICE ELEMENTS TO STRUCTURE. PIPE STANDS SIM-ILAR TO ANVIL FIG. NO. 62, WALL SUPPORTS SIMILAR TO FIG. NO. 199.



DOMESTIC WATER SERVICE ENTRANCE DIAGRAM

NOT TO SCALE



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P1.3-24335.DWG

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E-51932
PROFESSIONAL ENGINEER
09/03/2025

Restroom Facility
Oxford Park Place
2 High Street, Oxford, OH 45056

ISSUE

NO.	DATE	DESCRIPTION
1	09/03/2025	BID/PERMIT

DATE	09.03.2025
JOB NO.	4265.00
DRAWN	PEA
CHECKED	PEA

TITLE
PLUMBING NOTES & DETAILS

SHEET NO.
P1.3

GENERAL

1. EXCEPT AS SPECIFIED TO THE CONTRARY, THIS CONTRACTOR SHALL INCLUDE FURNISHING, INSTALLING, CONNECTING AND OPERATION OF ALL EQUIPMENT WHICH IS PART OF MECHANICAL SYSTEMS.
2. GENERAL AND SPECIAL CONDITIONS OF AIA (AMERICAN INSTITUTE OF ARCHITECTS) AND OWNER'S GENERAL REQUIREMENTS SHALL APPLY UNLESS NOTED OTHERWISE.
3. THE REQUIREMENTS SET FORTH UNDER "GENERAL CONDITIONS". "MODIFICATIONS TO GENERAL CONDITIONS" AND "SPECIAL CONDITIONS" ARE PART OF THIS CONTRACT.
4. THIS CONTRACT SHALL INCLUDE A VISIT TO THE JOB SITE AND TAKE INTO CONSIDERATION MECHANICAL, ELECTRICAL AND GENERAL TRADE WORK IN PLACE AND WORK TO BE PUT INTO PLACE PRIOR TO BIDDING. REROUTING OF DUCTWORK, PIPING, AND EQUIPMENT, AS REQUIRED TO MISS THIS WORK SHALL BE ACCOMPLISHED AT NO ADDITIONAL COST TO THE OWNER.
5. ALL MOTORS FOR SUCH EQUIPMENT (IF AND WHERE SPECIFIED ON THE DRAWINGS) SHALL BE FURNISHED AND INSTALLED AS PART OF THIS CONTRACT. CONTROLS FOR SUCH MOTORS SHALL BE FURNISHED UNDER THIS CONTRACT AND INSTALLATION OF CONTROLS AND ALL ELECTRICAL WIRING NOT SHOWN ON ELECTRICAL DRAWINGS, SHALL BE PERFORMED UNDER THIS CONTRACT.

ORDINANCES, PERMIT CERTIFICATES AND OWNER REQUIREMENTS

1. ALL WORK UNDER THIS CONTRACT SHALL BE INSTALLED IN FULL ACCORDANCE WITH THE OWNER'S REQUIREMENTS, ALL LAWS, ORDINANCES AND ALL REGULATIONS OF THE STATE, COUNTY, AND MUNICIPALITY WHICH IN ANY WAY AFFECTS THIS WORK. THE ARCHITECT WILL OBTAIN THE GENERAL BUILDING PERMITS. THE PLUMBING AND ANY OTHER PERMITS AND CERTIFICATES OF INSPECTION REQUIRED FOR THE PROJECT WILL BE OBTAINED BY THE PLUMBING CONTRACTOR PERFORMING THE WORK. FEES WILL BE INCLUDED IN THE BID PRICE. ALL WORK SHALL ALSO BE INSTALLED IN ACCORDANCE WITH REGULATIONS OF THE FIRE UNDERWRITERS HAVING JURISDICTION AND LOCAL UTILITIES. CONTRACTOR SHALL ALSO SECURE ANY PERMITS OR PAY ANY FEES TO THE LOCAL UTILITY COMPANIES FOR THE WORK REQUIRED.

DRAWINGS

1. MECHANICAL DRAWINGS ARE DIAGRAMMATIC AND ARE INTENDED TO SHOW THE APPROXIMATE LOCATION OF OUTLETS, EQUIPMENT AND PIPING.
2. THE EXACT LOCATION OF OUTLETS, EQUIPMENT AND PIPING MAY BE CHANGED FROM TIME TO TIME AS WORK PROGRESSES. UNDER THIS CONTRACT ALL LOCATIONS SHALL BE VERIFIED WITH ALL TRADES AND THAT THEY ARE ACCORDING TO THE LATEST INFORMATION AVAILABLE. SHOULD THIS NOT BE DONE THE WORK WILL BE CHANGED AT NO ADDITIONAL EXPENSE TO THE OWNER.
3. THE OWNER RESERVES THE RIGHT TO MAKE MINOR CHANGES IN LOCATION OF EQUIPMENT OF PIPING ARRANGEMENTS UP TO THE TIME OF ROUGH-IN WITHOUT ADDITIONAL COSTS TO THE OWNER.
4. THE DRAWINGS AND SPECIFICATION ARE INTENDED TO SUPPLEMENT EACH OTHER AND ANY MATERIALS OR LABOR CALLED FOR IN ONE SHALL BE FURNISHED EVEN THOUGH NO MENTIONED IN BOTH. ANY MATERIAL OR LABOR WHICH IS NEITHER SHOWN ON THE DRAWINGS NOR CALLED FOR IN THE SPECIFICATIONS BUT WHICH IS OBVIOUSLY NECESSARY TO COMPLETE THE WORK AND WHICH IS USUALLY INCLUDED IN WORK OF A SIMILAR CHARACTER SHALL BE FURNISHED UNDER THIS CONTRACT.

SHOP DRAWINGS

1. AS PART OF THIS WORK INCLUDING UNDER EACH MECHANICAL SECTION, WITHOUT CAUSING ANY DELAY IN WORK, ELECTRONIC SHOP DRAWINGS OF ALL EQUIPMENT AND MATERIAL SHALL BE SUBMITTED FOR ENGINEER'S REVIEW.
2. SUBMITTAL SHALL INCLUDE WIRING DIAGRAMS, PERFORMANCE CURVES AND DATA SPECIFIC TO THIS PROJECT AND BEAR CONTRACTOR'S APPROVAL STAMP CERTIFYING THAT THIS CONTRACTOR HAS VERIFIED CONFORMANCE TO THE CONTRACTUAL DOCUMENTS.
3. IN THE ENGINEER'S REVIEW IF SHOP DRAWINGS, REVIEW IS FOR CONFORMANCE WITH THE GENERAL DESIGN CONCEPT AND ARRANGEMENT ONLY. COMMENTS, CORRECTIONS OR MARKING SO NOT CONSTITUTE WAIVER OF THE CONTRACT DOCUMENTS REQUIREMENTS. DIMENSIONS, QUANTITIES AND COORDINATION ARE THE RESPONSIBILITY OF THE CONTRACTOR.

CLEANING UP

1. UNLESS OTHERWISE NOTED, ALL EXCESS MATERIALS AND DEBRIS CAUSED BY THIS WORK SHALL BE COME THE PROPERTY OF THE CONTRACTOR AND PROMPTLY BE REMOVED FROM THE SITE. ALL FIXTURES AND EQUIPMENT INSTALLED SHALL BE THOROUGHLY CLEANED WEEKLY. ALL MOTORS AND EQUIPMENT SHALL BE COVERED OR OTHERWISE PROTECTED FORM CONSTRUCTION DUST AND DEBRIS. NO EQUIPMENT OTHER THAN THOSE DESIGNED TO ARE TO BE EXPOSED TO INCLEMENT WEATHER. TOUCH UP ALL SCRATCHES AND REPAIR ANY DENTS IN EQUIPMENT.
2. THE PLUMBING CONTRACTOR SHALL PROVIDE COORDINATION DRAWINGS SHOWING ALL OF HIS WORK WITH OTHER TRADES. THIS CONTRACTOR SHALL AGREE WITH OTHER TRADES ON SCALE OF DRAWINGS PRIOR TO ANY WORK.

OPERATING AND MAINTENANCE INSTRUCTIONS

1. THIS CONTRACTOR SHALL THOROUGHLY INSTRUCT AND SUPERVISE OWNER'S MAINTENANCE PERSONNEL IN THE PROPER OPERATION AND MAINTENANCE OF THE MECHANICAL SYSTEM EQUIPMENT. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR ARRANGING FOR THE INSTRUCTION AND SUPERVISION AT A TIME CONVENIENT TO THE OWNER AND NOTIFYING THE ASSOCIATE OF THE TIME AT LEAST 48 HOURS IN ADVANCE.

INSTRUCTIONS TO OWNER

1. LOCATION OF EQUIPMENT AND EXPLANATION OF WHAT IT DOES.
2. REFERENCE TO "OPERATING INSTRUCTION MANUALS" FOR RECORD AND CLARITY.
3. COORDINATION OF WRITTEN AND VERBAL INSTRUCTION SO THAT EACH IS UNDERSTOOD BY ALL PERSONNEL.
4. SPECIFIC MAINTENANCE TO BE PERFORMED BY OWNER.
5. OPERATION AND MAINTENANCE MANUALS SHALL BE SUBMITTED ELECTRONICALLY FOR REVIEW BY THE ENGINEER. ONE FINAL BOUND PHYSICAL COPY SHALL BE PROVIDED TO THE OWNER, IF REQUIRED. FINAL PHYSICAL COPY SHALL CONSIST OF THE FOLLOWING ITEMS:
   A. TITLE PAGE: TITLE OF PROJECT, ADDRESS, DATE OF SUBMITTAL, NAME AND ADDRESS OF CONTRACTOR, NAME OF ASSOCIATE.
   B. SECOND PAGE: INDEX OF MANUAL CONTENTS.
   C. FIRST SECTION: A COPY OF EACH APPROVED SHOP DRAWING AND SUBMITTAL WITH AN INDEX AT THE BEGINNING OF THE SECTION.
   D. SECOND SECTION: A LIST OF ALL EQUIPMENT USED ON THE PROJECT, TOGETHER WITH SUPPLIER'S NAME AND ADDRESS.
   E. MANUFACTURER'S MAINTENANCE MANUALS FOR EACH ITEM OF EQUIPMENT FURNISHED UNDER THIS CONTRACT. MANUALS SHALL INCLUDE SUCH ITEMS AS PARTS LIST, DETAILED LUBRICATION INSTRUCTIONS, PROCEDURES FOR PERFORMING NORMAL MAINTENANCE FUNCTIONS, PRELIMINARY TROUBLE SHOOTING PROCEDURES AND WIRING DIAGRAMS.
   F. COMPLETE WIRING DIAGRAMS FOR THE MECHANICAL SYSTEMS AS ACTUALLY WIRED INCLUDING CONTROL AND INTERLOCK WIRING.
   G. BRIEF BUT COMPLETE INSTRUCTIONS FOR START-UP, SHUT- DOWN AND ROUTINE MAINTENANCE OF EACH SYSTEM.
   H. ROUTINE AND 24-HOUR EMERGENCY INFORMATION:
   I. NAME, ADDRESS AND TELEPHONE NUMBER OF SERVICING AGENCY.
   J. INCLUDE NAMES OF PERSONNEL TO BE CONTACTED FOR SERVICE ARRANGEMENTS.
6. FRAME ONE (1) COPY OF BRIEF START-UP, SHUT-DOWN AND ROUTINE MAINTENANCE INSTRUCTIONS AND COMPLETE SYSTEM WIRING DIAGRAMS UNDER GLASS AND MOUNT ON THE EQUIPMENT ROOM WALL. TEMPERATURE CONTROL SCHEMATICS MAY BE LAMINATED WITH PLASTIC AT THE CONTRACTOR'S OPTION.

GUARANTEE

1. ALL LABOR AND MATERIALS FURNISHED UNDER THIS CONTRACT SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR FORM THE DATE OF FINAL ACCEPTANCE BY THE OWNER WHICH WILL COMMENCE UPON THE FINAL INSPECTION BY THE ENGINEER. DURING THIS TIME, ALL LEAKS, CORRECTION OF ALL THE FAILURES TO SUCH MATERIAL AND THE CORRECTION OF ALL DISCREPANCIES WITH THE PLUMBING CODE, THE CONTRACT DRAWINGS, AND THE PROJECT SPECIFICATIONS SHALL BE DONE UNDER THIS CONTRACT AT NO ADDITIONAL EXPENSE TO THE OWNER.

RECORD DRAWINGS

1. THIS CONTRACTOR SHALL KEEP AN ACCURATE RECORD OF ALL DEVIATIONS FROM CONTRACT DRAWINGS AND SPECIFICATIONS. THIS CONTRACTOR SHALL NEATLY AND CORRECTLY RECORD ALL DEVIATIONS IN A COLOR CODED LEGIBLE ELECTRONIC FORMAT.

PLUMBING REFERENCES

1. APPLICABLE CONSTRUCTION CODES, STANDARDS AND GUIDELINES FOR ALL PLUMBING CONTRACT ELEMENTS, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:
   A. STATE OF OHIO, OHIO BUILDING CODE, OBC, INCLUDING THE STATE OF OHIO PLUMBING CODE AND ALL APPLICABLE REFERENCED STANDARDS INCLUDED THEREIN.
   B. CITY OF TEXT BUILDING CODE, INCLUDING PLUMBING, FUEL GAS MECHANICAL, HANDICAP ACCESSIBILITY, AND ENERGY CONSERVATION PORTIONS THEREOF.
   C. LOCAL SEWER, DRAINS, AND WATER AUTHORITY.
   D. LOCAL BOARD OF HEALTH.
   E. STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY (E.P.A.).
   F. LOCAL GAS UTILITY PROVIDER.
   G. AMERICAN GAS ASSOCIATION (AGA) STANDARDS FOR MATERIALS AND CONSTRUCTION.
   H. AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME) STANDARDS FOR MATERIALS AND CONSTRUCTION.
   I. AMERICAN SOCIETY OF SANITARY ENGINEERING (ASSE) STANDARDS FOR PERFORMANCE AND TESTING.
   J. AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM) STANDARDS FOR MATERIALS, CONSTRUCTION AND TESTING.
   K. NATIONAL SANITATION FOUNDATION (NSF) STANDARDS FOR MATERIALS AND CONSTRUCTION.
   L. CAST IRON SOIL PIPE INSTITUTE (CISPI) STANDARDS FOR MATERIAL AND CONSTRUCTION.
   M. UNDERWRITER'S LABORATORIES (UL) STANDARDS FOR MATERIALS AND CONSTRUCTION.
   N. THE MANUFACTURER'S INSTALLATION GUIDELINES AND RECOMMENDATIONS FOR INDIVIDUAL ITEMS, ELEMENTS AND/OR SYSTEM INDICATED HEREIN.

SCOPE OF WORK

1. THIS CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, TOOLS, INCIDENTALS, DETAILS, ETC. NECESSARY TO PROVIDE A COMPLETE, OPERATIONAL AND APPROVED PLUMBING SYSTEM, INCLUDING BUT NOT LIMITED TO ALL ITEMS AND ELEMENTS DESCRIBED IN THE PLUMBING SPECIFICATION AND SHOWN ON THE PLUMBING DRAWINGS, AND AS REQUIRED FOR COORDINATION AND/OR INTERFACE WITH WORK UNDER SEPARATE CONTRACT AS INDICATED BY COMPLETE CONSTRICTION DOCUMENTATION PACKAGE.
2. THE PLUMBING CONTRACTOR IS RESPONSIBLE FOR SATISFACTORILY ADDRESSING ALL REVIEW AND INSPECTION AUTHORITIES REQUIREMENTS AND DIRECTIVES IN REGARD TO METHODS OF INSTALLATION NECESSARY FOR FINAL APPROVAL.

PERMITS AND FEES

1. UNLESS DIRECTED OTHERWISE BY THE GENERAL CONDITIONS PORTION OF PROJECT DOCUMENTATION, THE PLUMBING CONTRACTOR SHALL APPLY FOR AND PAY ANY REVIEW INSPECTION, PERMIT, LICENSE, TESTING AND/OR OTHER SERVICE FEES REQUIRED BY ALL REVIEW/INSPECTION/APPROVAL AUTHORITIES IN CONNECTION WITH THE WORK UNDER THIS CONTRACT.

SLEEVES

1. SLEEVE MATERIAL: SCHEDULE 40 ASTM A53 OR ASTM A120 BLACK STEEL PIPE, MACHINE CUT, LARGE ENOUGH TO ALLOW 1/4" CLEARANCE ALL AROUND PIPE AND PIPE COVERING. USE MACHINE CUT COPPER SLEEVES FOR UN-INSULATED COPPER PIPE.
2. SLEEVES IN PARTITIONS TO HAVE LENGTH EQUAL TO THE THICKNESS OF FINISHED PARTITIONS. SLEEVES IN FLOORS OF FINISHED AREAS TO PROJECT 2" ABOVE THE FINISHED FLOOR. SLEEVES IN FLOORS OF NON-FINISHED AREAS TO PROJECT 2" ABOVE THE FINISHED FLOOR. FILL SPACE BETWEEN PIPE AND SLEEVES INTO EXPOSED AREAS WITH SEALING COMPOUND. REAM ALL SLEEVES BEFORE INSTALLING.
3. WHERE PIPES PASS THROUGH FIRE RATED WALLS OF FLOORS, THE SPACE BETWEEN THE PIPE AND SLEEVE SHALL BE FILLED WITH THE PROPER FIRE RATED SEALANT OR PACKING.

FIRESTOPPING

1. EACH CONTRACTOR SHALL BE RESPONSIBLE FOR FIRESTOPPING AROUND ALL OPENINGS FOR PIPES, DUCTS, CONDUITS ETC. INSTALLED BY HIM AT ALL FIRE WALLS. FIRESTOPPING SHALL BE PERFORMED BY AN INSTALLER WHO HAS BEEN TRAINED BY THE MANUFACTURER, OR MANUFACTURER'S REPRESENTATIVE. INSTALLATION PROCEDURES BASED ON PUBLISHED UL TESTED FIRE STOP SYSTEMS.
2. FIRESTOPPING SHALL MEET THE REQUIREMENTS OF ASTM E-814 OR UL 1479 FIRE TESTS BY A RECOGNIZED TESTING AGENCY. FIRESTOPPING SHALL ALSO CONFORM TO THE FOLLOWING GOVERNING CODES;OHIO BUILDING CODE, NFPA 101 LIFE SAFETY CODE AND NFPA 70 – NATIONAL ELECTRIC CODE.
3. PENETRATION
   A. CLEAN PENETRATION HOLE OF DIRT, LOOSE MATERIALS AND FOREIGN MATTER WHICH MAY AFFECT BOND OR INSTALLATION.
   B. REMOVE COATINGS SUCH AS PAINT, CURING COMPOUNDS, WATER REPELLENT AND SEALERS AS REQUIRED.
   C. INSTALL BACKING MATERIALS TO PREVENT LIQUID MATERIAL LEAKAGE.
4. APPLICATION
   A. PREPARE AND APPLY PENETRATION SEALING SYSTEMS IN ACCORDANCE WITH MANUFACTURER'S PRINTED INSTRUCTIONS.
   B. EMPLOY INSTALLATION TECHNIQUES WHICH WILL ENSURE THAT FIRESTOPPING IS DEPOSITED TO FILL AND SEAL HOLES AND OPENINGS.
   C. TOOL EXPOSED SURFACES OF APPLIED SEALANT TO SMOOTH FINISH.
   D. PROTECT MATERIALS FROM DAMAGE ON SURFACES SUBJECTED TO TRAFFIC.
5. PROVIDE INTUMESCENT SEALANT AND COLLARS AT OPENINGS INVOLVING PLASTIC OR INSULATED PIPE SIMILAR TO THE METACAULK SERIES 880 AND 950.
6. FIRESTOPPING BY HILTI, DOW CORNING, 3M, OR METACAULK MAY BE FURNISHED AT THE CONTRACTOR'S OPTION.

PIPE ANCHORS, HANGERS AND SUPPORTS

1. ALL PIPING SHALL BE SEPARATELY HUNG AND SUPPORTED FROM APPROVED STRUCTURAL MEMBERS OR CONCRETE OVERHEAD STRUCTURE ONLY. NO PIPE SHALL BE HUNG FROM ROOF DECK, PIPE DUCTS, OR OTHER COMPONENTS OR EQUIPMENT OF OTHER TRADES.
2. PROVIDE LISTED/APPROVED ADJUSTABLE HANGERS, INSERTS, BRACKETS, CLAMPS, SUPPLEMENTAL STEEL AND OTHER DEVICES REQUIRED FOR PROPER SUPPORT OF ALL PIPE LINES.
3. HANGERS SHALL BE DESIGNED TO ALLOW FOR EXPANSION AND CONTRACTION AND TO ALLOW INSULATION (WHERE APPLICABLE) TO RUN CONTINUOUSLY THROUGH HANGERS.
4. WIRE OR STRAP HANGERS ARE NOT PERMITTED. ADJUST HANGERS SO AS TO DISTRIBUTE WEIGHT LOAD EQUALLY ON ATTACHMENTS.
5. USE OF TRAPEZE HANGERS DO NOT PERMIT THE ELIMINATION OF THE PIPING INSULATION TO NOT BE CONTINUOUS THRU THE HANGER.
6. PIPING TO BE SUPPORTED ACCORDING TO THE APPLICABLE ADOPTED PLUMBING CODE OR MANUFACTURER'S RECOMMENDATIONS, WHICHEVER IS MOST STRINGENT. SUPPORT AT INTERVALS NOT TO EXCEED SPACING LISTED OR ELSEWHERE AS REQUIRED IN ACCORDANCE WITH GOOD WORKMANSHIP. NO PIPE SHALL BE SUPPORTED FROM ANOTHER PIPE. ALL HANGERS SHALL BE PLUMBED BEFORE INSULATION IS APPLIED AND ALL HANGERS SHALL BE DOUBLE NUTTED. ALL HANGERS SHALL MEET THE OHIO PLUMBING CODE REQUIREMENTS.

VALVES

1. GENERAL
   A. SCOPE
      1. FURNISH AND INSTALL ALL NECESSARY VALVES FOR PIPING SYSTEMS AND EQUIPMENT IN THE BUILDING REQUIRED TO PROVIDE PROPER SHUT OFF AND BALANCING OF SYSTEMS INCLUDED UNDER THIS CONTRACT.
2. PRODUCTS
   A. CHECK VALVES SHALL BE CRANE, HAMMOND, JENKINS, MILWAUKEE, NIBCO, POWELL OR STOCKHAM AND SHALL ALL BE BY THE SAME MANUFACTURER.
   B. BALL VALVES SHALL BE AS MANUFACTURED BY GRINNELL, APOLLO, MILWAUKEE, WATTS, OR ANY OF THE MANUFACTURER'S LISTED HEREIN FOR GATE, GLOBE AND CHECK VALVES. ALL BALL VALVES TO BE BY THE SAME MANUFACTURER.
   C. BALL VALVES
      1. 2-1/2" SIZE AND SMALLER MAY BE TWO-PIECE BRONZE BODY BALL VALVE, SCREWED PIPING CONNECTIONS, UNION CONNECTION BODY, TEFLON SEATS, CONVENTIONAL PORT, BLOWOUT PROOF STAINLESS STEEL STEM, ADJUSTABLE PACKING GLAND, STAINLESS STEEL BALL, AND LEVER HANDLE LABELED FOR SERVICE CONTROLLED. RATED FOR 150 S.W.P. AND 400 WOG. EQUAL TO APOLLO 70-300 SERIES.
      2. 3" SIZE MAY BE TWO-PIECE BRONZE BODY BALL VALVE, SOLDER PIPING CONNECTIONS, FORGED DZR COPPER ALLOY BODY, FULL PORT, PTFE SEATS, BLOWOUT PROOF STAINLESS STEEL STEM, BRASS PACKING NUT, STAINLESS STEEL BALL, AND LEVER HANDLE LABELED FOR SERVICE CONTROLLED. RATED FOR 400 PSI NON-SHOCK COLD WORKING PRESSURE. EQUAL TO NIBCO S-FP-600A-LF. NSF/ANSI 61-8.

VALVE TAGGING AND CODING, AND PIPING IDENTIFICATION

1. PROVIDE BRASS TAGS ON ALL VALVES. TAGS SHALL STATE TYPE OF LINE IN WHICH THE VALVE IS INSTALLED (HOT WATER SUPPLY, STEAM, ETC.) AND NUMBER OF VALVE. FURNISH A SCHEDULE OR SCHEDULES OF ALL VALVES TAGGED WITH NUMBER, LOCATION AND PURPOSE OF EACH VALVE AND MOUNT SCHEDULES UNDER GLASS ON EQUIPMENT ROOM WALL, OR ELSEWHERE AS REQUIRED. SCHEDULES SHALL BE LOCATED NEAR AND CONVENIENT TO THE VALVES ON THE SCHEDULE.
2. PIPE VALVE TAG SCHEDULE:

SERVICE	STENCIL DESIGNATION
DOMESTIC COLD WATER	D.C.W.
DOMESTIC HOT WATER (BY DIST. TEMP.)	D.H.W.
DOMESTIC HOT WATER RETURN (BY DIST. TEMP.)	D.H.W.R.
NATURAL GAS (BY DIST. PRES.)	GAS
COMPRESSED AIR (BY DIST. PRES.)	AIR
VACUUM	VAC

3. IN THE CASE OF REMODELING WORK WHEN A VALVE IDENTIFICATION SYSTEM ALREADY EXISTS, NUMBERING SHALL START WITH THE NEXT NUMBER AFTER THE HIGHEST EXISTING NUMBER.
4. VALVE TAGS SHALL BE BRASS, MINIMUM 2" DIAMETER, 16 GAUGE.
5. ALL MARKERS SHALL MEET ANSI/ASME A13.1 PIPE MARKING GUIDELINES. ALL PIPE MARKERS SHALL BE INSTALLED UTILIZING SNAP-AROUND PIPE MARKER APPLICATION KITS FROM SAME MANUFACTURER. MARKERS SHALL INCLUDE FLOW DIRECTIONAL ARROWS. MARKER THICKNESS SHALL BE A MINIMUM OF .02" WITH A MINIMUM LENGTH OF 8" FOR PIPE SIZES UP TO 2" AND 12" FOR PIPE SIZES UP TO 6". ALL MARKERS SHALL PROVIDE 360 DEGREES OF VISIBILITY. MARKERS SHALL BE BASED ON SETON. APPROVED EQUALS PROVIDED ALL SPECIFICATIONS ARE MET. UNLESS OTHERWISE REQUIRED BY THE OWNER'S REPRESENTATIVE, AS VERIFIED IN ADVANCE, PIPE LABELS/COLORS SHALL BE BASED ON THE PIPE CONTENTS AS SPECIFIED BELOW.
6. AFTER PIPING IS INSTALLED (AND PAINTED OR PROVIDED WITH INSULATION COVER AS APPLICABLE); THIS CONTRACTOR SHALL THEN INSTALL PIPING IDENTIFICATION MARKERS. FLOW DIRECTION ARROWS OF THE SAME COLORS ARE TO BE LOCATED ADJACENT TO THE IDENTIFICATION LEGENDS. PIPE IDENTIFICATION SPACING SHALL BE PROVIDED AT MAXIMUM 20 FEET ON CENTER, AT EACH BRANCH CONNECTION, AT EACH RISER, AND AT LEAST ONCE IN EACH ROOM. DO NOT USE ADHESIVE MARKERS. COLORS AS FOLLOWS:

PIPE CONTENTS	COLOR CODE
FIRE QUENCHING	WHITE TEXT ON RED
TOXIC OR CORROSIVE	BLACK TEXT ON ORANGE
FLAMMABLE OR OXIDIZING	BLACK TEXT ON YELLOW
COMBUSTIBLE	WHITE TEXT ON BROWN
WATER	WHITE TEXT ON GREEN
SANITARY AND STORM DRAINAGE	WHITE TEXT ON PURPLE
COMPRESSED GAS	WHITE TEXT ON BLUE
ABANDONED PIPING	BLACK TEXT ON WHITE

EXCAVATION AND BACKFILL

1. THIS CONTRACTOR SHALL EXCAVATE AND BACKFILL ALL TRENCHES AND OTHER EXCAVATIONS REQUIRED FOR LAYING DRAINS, SEWERS, APPURTENANCES AND OTHER EXCAVATIONS REQUIRED FOR HIS WORK.
2. EARTH FILL: SOIL AS APPROVED BY THE OWNER'S REPRESENTATIVE, FREE OF ORGANIC SOIL, SOD, ROOTS, WOOD, METAL, RUBBISH, DEBRIS, LUMPS OR EXCESSIVE AMOUNTS OF CLAY AND ROCKS GREATER THAN 2" IN DIAMETER; CAPABLE OF BEING COMPACTED INTO DENSE AND STABLE CONDITIONS AS SPECIFIED.
3. ALL UNDERGROUND PIPING SHALL BE INSTALLED ON A MINIMUM OF A 3" BED OF COMPACTED SAND. ALL UNDERGROUND PIPING SHALL BE BACKFILLED BY HAND TO A LEVEL OF 12" ABOVE THE CROWN OF THE PIPE. BACKFILL SHALL BE MECHANICALLY COMPACTED IN 6" LAYERS UP TO 12" ABOVE THE CROWN OF THE PIPE AT WHICH NON-COMPACTED LOOSE EARTH FILL MAY BE USED. EACH LAYER SHALL BE MECHANICALLY COMPACTED TO A MINIMUM OF 92% MODIFIED PROCTOR.
4. PROTECT ALL UTILITIES SHOWN ON DRAWINGS OR ENCOUNTERED IN THE CONSTRUCTION WORK. ANY DAMAGE TO UTILITIES SHALL BE REPAIRED BY THIS CONTRACTOR TO OWNER'S SATISFACTION, WITHOUT COST TO THE OWNER.
5. THIS CONTRACTOR SHALL REMOVE ANY UNUSABLE OF SURPLUS EXCAVATED MATERIAL FROM THE SITE.

FLUSHING AND STERILIZATION

1. FLUSH OUT ALL DOMESTIC WATER PIPING SYSTEMS TO REMOVE ALL DIRT AND GREASE FROM PIPING AND EQUIPMENT BEFORE SYSTEMS ARE PLACED INTO OPERATION. CLEAN STRAINERS AFTER EACH FLUSHING UNTIL THE STRAINER REMAINS CLEAN.
2. FURNISH A CERTIFICATE OF STERILIZATION AND APPROVAL FOR HUMAN CONSUMPTION SIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF OHIO REGULARLY IN THE EMPLOY OF THE TESTING LABORATORY. CERTIFICATION SHALL BE FURNISHED TO THE ARCHITECT/ENGINEER PRIOR TO ANY PAYMENT IS MADE.
3. STERILIZATION: CHLORINATING MATERIAL AND CONCENTRATIONS TO BE PER APPLICABLE PLUMBING CODE.

SUBSTITUTIONS AND MISCELLANEOUS EQUIPMENT

1. THE BIDDING OF THIS WORK WILL CONTEMPLATE THE USE OF EQUIPMENT AND MATERIALS EXACTLY AS SPECIFIED HEREIN. WHERE ONE OR MORE NAMES OF MANUFACTURERS ARE MENTIONED ANY ONE MAY BE UTILIZED.
2. ALTERNATE MANUFACTURER'S NOT LISTED HEREIN ARE PROHIBITED FROM INSTALLATION UNLESS FIRST APPROVED BY THE OWNER/ARCHITECT/ENGINEER IN ADVANCE.
3. MISCELLANEOUS ITEMS NECESSARY TO COMPLETE THE PIPING SYSTEMS SUCH AS FITTING, HANGERS, ETC., CAN BE OF ANY RECOGNIZED MANUFACTURER PROVIDED THESE ITEMS MEET MINIMUM STANDARDS AS SET BY THE ENGINEER.

PLUMBING INSULATION

1. PROVIDE LISTED INSULATION COVER FOR ALL ITEMS/ELEMENTS AS SPECIFIED HEREIN, AS SHOWN ON DRAWINGS, AND FOR ANY OTHER ITEMS/ELEMENTS REQUIRING SAME.
2. INSULATE PIPING AND ASSOCIATED ACCESSORIES AND APPURTENANCES INCLUDING IN THE FOLLOWING SYSTEMS:
   A. DOMESTIC HOT AND COLD WATER AND HOT WATER RETURN.
   B. BUILDING SOIL WASTE AND VENT SYSTEM.
   C. BUILDING HORIZONTAL PRIMARY AND SECONDARY STORM PIPING.
3. PROVIDE A PRE-MANUFACTURED INSULATION COVERS ON ALL EXPOSED LAVATORY WASTE PIPING AND LAVATORY SUPPLY PIPING. PRODUCT TO BE SIMILAR TO HANDIWRAP, PRO-WRAP, AND TRUBRO MANUFACTURES.
4. PRODUCTS
   A. ALL INSULATING MATERIALS, INCLUDING JACKETS, CEMENTS, ADHESIVES, VAPOR BARRIERS, ETC., SHALL BE U.L. LISTED, WITH A FLAME SPREAD RATING NOT TO EXCEED 25, AND A SMOKE DEVELOPMENT RATING NOT TO EXCEED 50. ALL EXTERIOR FINISHES SHALL HAVE A MINIMUM SERVICE TEMPERATURE LIMIT (FSTM 70) OF MINUS 50 TO 220 DEGREES F.
   B. MOLDED PLASTIC FITTING COVERS SHALL BE U.L. LISTED WITH A FLAME SPREAD RATING NOT TO EXCEED 25, AND A SMOKE DEVELOPMENT RATING NOT TO EXCEED 50.
   C. INSULATED THICKNESS' ARE BASED ON INSULATION HAVING THERMAL RESISTANCE IN THE RANGE OF 4.0 HR F. FT2/BTU TO 4.6 HR F. FT2/BTU PER INCH OF THICKNESS ON A FLAT SURFACE AT A MEAN TEMPERATURE OF 75 DEGREES F. MINIMUM INSULATION THICKNESS SHALL BE INCREASED FOR MATERIALS HAVING R VALUES LESS THAN 4.0 OR MAY BE REDUCED FOR MATERIALS HAVING R VALUES GREATER THAN 4.6 TO GIVE EQUIVALENT "R" VALUES.
   D. PIPE COVERS SHALL BE SIMILAR TO JOHNS MANVILLE "MICRO-LOK" GLASS FIBER INSULATION, RATED FOR 850 DEGREES F. WITH A FACTORY APPLIED AP-T ALL-PURPOSE SELF-SEALING VAPOR BARRIER JACKET. BUTT STRIPS SHALL BE MINIMUM 3" WIDE, AND OF SAME MATERIAL AS JACKET, EQUAL MATERIALS, INCLUDING THICKNESS AND CONDUCTIVITY RATINGS/LISTINGS. AS MANUFACTURED BY OWENS CORNING, KNAUF OR MANSON MAY BE FURNISHED, AT THE CONTRACTOR'S OPTION. WHERE INSULATION THICKNESS IS INDICATED FOR COVER HEREIN. IT IS NOMINAL THICKNESS REQUIRED THICKNESS.
   E. ALL CEMENTS, ADHESIVES, FINISHES, AND ASSOCIATED MATERIALS SHALL BE SIMILAR TO THAT PROVIDED BY FOSTER. EQUAL MATERIALS AS PROVIDED BY CHILDERS OR VIMASCO MAY BE FURNISHED AT THE CONTRACTOR'S OPTION.
   F. LONGITUDINAL LAP JOINTS AND BUTT STRIPS FOR GLASS FIBER PIPING INSULATION SHALL BE SECURED WITH STAPLES ON THREE (3) INCH CENTERS, AND SEALED WITH AN APPROVED VAPOR BARRIER ADHESIVE WHERE APPLICABLE. STAPLES ARE NOT REQUIRED WHEN INSULATION UTILIZES A "DOUBLE" ADHESIVE SELF-SEALING SYSTEM.
5. EXECUTION
   A. COVER DOMESTIC COLD WATER, HOT WATER, TEMPERED WATER (FULL TEMPERATURE RANGE), HOT WATER RETURN, AND HORIZONTAL STORM PIPING AS FOLLOWS:
   B. COVER HOT WATER, TEMPERED WATER (FULL TEMPERATURE RANGE), AND HOT WATER RETURN PIPING WITH 1" THICKNESS GLASS FIBER PIPE INSULATION.
   C. COVER COLD WATER AND HORIZONTAL STORM PIPING WITH 1/2" THICKNESS GLASS FIBER PIPE INSULATION.
   D. PROVIDE INSULATION ON THE BOTTOM OF ALL ROOF DRAIN ASSEMBLIES.
   E. ALL APPURTENANCES AND ACCESSORIES SUCH AS VALVES, FLANGES, UNIONS, ETC. INSTALLED IN REFERENCED PIPING (WITH THE EXCEPTION OF BACKFLOW PREVENTION ASSEMBLIES LISTED AT THE END OF THIS PARAGRAPH) SHALL BE WRAPPED WITH FULL THICKNESS INSULATION AND COVERED WITH A LISTED MOLDED PLASTIC FITTING COVER, OR AN OPEN MESH GLASS CLOTH SHALL BE FIRE RESISTANT MASTIC. BACKFLOW PREVENTION ASSEMBLIES WHICH REQUIRE PERIODIC INSPECTION/TESTING/MAINTENANCE SHALL NO BE PROVIDED WITH INSULATION COVER, UNLESS THESE ASSEMBLIES ARE IN WATER SENSITIVE LOCATIONS SUCH AS ABOVE LAY-IN CEILINGS. IF LISTED BACKFLOW PREVENTION ASSEMBLIES ARE IN WATER SENSITIVE LOCATIONS, FURNISH COVER COMPLYING WITH THIS SPECIFICATION THAT ALLOWS REMOVAL AND REPLACEMENT AS NECESSARY FOR REQUIRED ACCESS.
   F. USE 12" LONG SECTIONS OF CALCIUM SILICATE RIGID INSULATION, WITH JACKET SAME AS ADJACENT PIPE COVERING FOR TRANSFER OF SUPPORT TO PIPING AT EACH HANGER, WITHOUT STRESS TO THE PIPE COVERING ASSEMBLY. AT THE CONTRACTOR'S OPTION, AN APPROVED WOOD OR HIGH-DENSITY (20 LB./CU. FT.) FIBERGLASS BLOCK MAY BE SUBSTITUTED FOR THE RIGID INSULATION SECTION. VAPOR BARRIER TO BE MAINTAINED THROUGHOUT.
   G. ALL APPLICATIONS SHALL BE MADE ON CLEAN, DRY SURFACES WITH ALL JOINTS BUTTED FIRMLY TOGETHER.
   H. INSULATION MUST RUN CONTINUOUS THROUGH HANGERS, SLEEVES AND WALL FOR ALL COLD WATER, HOT WATER, HOT WATER RETURN, VACUUM PUMP EXHAUST AND AIR COM

8. RUN ALL WATER PIPING LEVEL AND CONCEAL WHEREVER POSSIBLE. PIPING TO BE INSTALLED TO ALLOW COMPLETE DRAIN DOWN OF SYSTEM BACK TO THE MAIN RISER(S). AT BASE OF SYSTEM WHENEVER POSSIBLE, PROVIDE 3/4" DRAINS AT BASE OF RISER(S), AND ANY OTHER TRAPPED OR LOW POINTS WHEN SUCH ARE UNAVOIDABLE DUE TO PROJECT CONDITIONS. 3/4" DRAINS TO CONSIST OF BALL VALVE WITH OUTLET CONNECTION VACUUM BREAKER AS SPECIFIED HEREIN.
9. BALANCE RECIRCULATING BRANCH LINE FLOW AS REQUIRED FOR PROPER OPERATION OF SYSTEMS. PROVIDE COMBINATION BALANCE/SHUTOFF VALVE, CHECK VALVE, THERMOMETER/PRESSURE GAUGE FOR EACH BRANCH RECIRCULATING LINE.
10. COORDINATE INSTALLATION WITH STRUCTURE, AND WORK OF OTHER TRADES AT AND ADJACENT TO DOMESTIC WATER SERVICE PIPING INSTALLATION.

PIPING GENERAL

1. WHERE ITEMS/ELEMENTS ARE INDICATED HEREIN TO BE LISTED/APPROVED. THE INTENT OF THE SPECIFICATION IS THAT SAID ITEM/ELEMENT SHALL BE LISTED BY ALL APPLICABLE MATERIAL/CONSTRUCTION STANDARDS, AND SUBJECT TO FINAL APPROVAL (INCLUDING METHODS OF INSTALLATION) BY ALL REVIEW/INSPECTION/APPROVAL AUTHORITIES.
2. UNLESS INDICATED OTHERWISE, ALL PLUMBING CONTRACT ITEMS/ELEMENTS (PIPE, FITTINGS, VALVES, SPECIALTIES, FIXTURES, EQUIPMENT, ETC.) MATERIALS, CONSTRUCTION, PERFORMANCE, TESTING AND METHODS OF INSTALLATION TO BE AS LISTED/APPROVED BY ALL APPLICABLE MATERIAL/CONSTRUCTION/ INSTALLATION STANDARDS FOR SAME, AND BE IN ACCORDANCE WITH THE REQUIREMENTS OF ALL REVIEW/INSPECTION/APPROVAL AUTHORITIES. THIS INCLUDES, BUT IS NOT LIMITED TO, THE STANDARDS AND AUTHORITIES REFERENCED IN THIS SPECIFICATION. IN THE ABSENCE OF SUCH STANDARDS AND/OR REQUIREMENTS, THE ITEM/ELEMENT MANUFACTURER'S RECOMMENDATIONS, AS CONFIRMED BY THE PLUMBING CONTRACTOR IN ADVANCE, SHALL BE FOLLOWED.
3. UNLESS INDICATED OTHERWISE, ALL PLUMBING PIPING SHALL BE IN ACCORDANCE WITH THE FOLLOWING STANDARDS IN REGARD TO MATERIALS, CONSTRUCTION, DIMENSIONS/TOLERANCES, TYPE OF SERVICE/TRANSMISSION MEDIUM (WATER, AIR, GAS, ETC.) AND METHODS OF INSTALLATION (AS APPLICABLE). UNLESS LISTED, FINAL APPROVAL FOR USE IS SUBJECT TO THE REQUIREMENTS OF THE REVIEW AND INSPECTION AUTHORITIES:
   A. STEEL PIPE, STEEL MALLEABLE AND CAST IRON FITTINGS AND JOINING METHODS; PER APPLICABLE ASTM/ANSI/ASME STANDARDS. IN ADDITION, WHERE UTILIZED FOR POTABLE WATER SERVICE, ALL ELEMENTS SHALL BE PER APPLICABLE NSF AND ASTM A53 (FOR CARBON STEEL STANDARDS.
   B. PLASTIC PIPE, FITTINGS AND JOINING METHODS; PER APPLICABLE ASTM/ANSI/ASME/NSF STANDARDS.
   C. CAST IRON PIPE, FITTINGS AND JOINING METHODS; PER APPLICABLE ASTM/ANSI/ASME/CISPI STANDARDS.
   D. COPPER/COPPER ALLOY/BRASS PIPE/TUBE, FITTINGS AND JOINING METHODS; PER APPLICABLE ASTM/ANSI/ASME STANDARDS. IN ADDITION, WHERE UTILIZED FOR POTABLE WATER SERVICE, ALL ELEMENTS SHALL BE PER APPLICABLE NSF STANDARDS.
4. ALL PLUMBING CONTRACT ITEMS/ELEMENTS SHALL HAVE THE MANUFACTURER'S MARK OF NAME AND THE QUALITY OF THE PRODUCT OR IDENTIFICATION OF SAME CAST, EMBOSSED, STAMPED OR INDELIBLY MARKED ON EACH ITEM/ELEMENT IN ACCORDANCE WITH THE STANDARDS UNDER WHICH THEY ARE ACCEPTED AND APPROVED PER APPLICABLE CODE(S).

PLUMBING UTILITY CONNECTIONS

1. PROVIDE PLUMBING SUPPLY, WASTE, DRAIN, VENT, AND ANY OTHER PIPED UTILITIES INCLUDED FOR THE PROJECT AS REQUIRED, AS LISTED HEREIN, AND/OR AS SHOWN ON THE PLUMBING DRAWINGS FOR ITEMS FURNISHED AND/OR INSTALLED UNDER SEPARATE CONTRACT REQUIRING SAME. THESE ITEMS SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING.
   A. HVAC EQUIPMENT; FINAL CONNECTION (WHERE APPLICABLE) BY THE HVAC CONTRACTOR.
   B. EQUIPMENT FINAL CONNECTION (WHERE APPLICABLE) AS INDICATED BY PLAN NOTES.
   C. OWNER PROVIDED ITEMS; FINAL CONNECTION (WHERE APPLICABLE) BY THE PLUMBING CONTRACTOR.
2. ROUGH-IN PLUMBING SUPPLY, WASTE, DRAIN, VENT, AND ANY OTHER PIPED UTILITIES INCLUDED FOR THE PROJECT AS REQUIRED, AS LISTED HEREIN, AND/OR AS SHOWN ON THE PLUMBING DRAWINGS FOR ALL FUTURE ITEMS REQUIRING SAME.

DOMESTIC WATER PIPING SYSTEMS

1. PROVIDE A COMPLETE DOMESTIC WATER SUPPLY PIPING SYSTEM AS SHOWN ON THE DRAWINGS, AND AS NECESSARY TO SERVE ALL ITEMS REQUIRING SAME.
2. THE DOMESTIC WATER PIPING SYSTEM SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING:
   A. COLD WATER SUPPLY, HOT WATER SUPPLY, AND HOT WATER RETURN.
   B. TEMPERED WATER SUPPLY (FULL TEMPERATURE RANGE).
   C. TRAP PRIMER SUPPLY.
   D. DOMESTIC WATER MAKE-UP SUPPLY TO ELEMENTS PROVIDED UNDER SEPARATE CONTRACT, SUCH AS HVAC EQUIPMENT/SYSTEMS, KITCHEN EQUIPMENT, ETC.
3. PRODUCTS
   A. UNDER GROUND PIPING: UP TO AND INCLUDING 2" SIZE TO BE TYPE K SOFT COPPER TUBING IN A SINGLE LENGTH WITH NO IN-LINE COUPLINGS OR JOINTS, AND MINIMUM NUMBER OF FITTINGS UNLESS INDICATED OTHERWISE. FITTINGS IF REQUIRED TO BE WROT COPPER WITH SOCKET SOLDER BRAZED CONNECTIONS. COMPLETE INSTALLATION TO BE RATED FOR 175 PSIG WORKING PRESSURE. UNLESS INDICATED OTHERWISE, HORIZONTAL PIPING AND CONDUIT BELOW SLAB TO RUN IN A STRAIGHT LINE DIRECT FROM ENTRY TO EXIST JOINTS.
   B. UNDER GROUND PIPING: UP TO AND INCLUDING 1-1/2" SIZE, SDR-9, ASTM D 2737, CSA B 67.1 POLYETHYLENE (PE) PLASTIC TUBING. TUBING SHALL BE RATED FOR 200 PSI WORKING PRESSURE. TUBING SHALL BE PURCHASED IN ROLL FORM IN A SINGLE LENGTH WITH MINIMAL IN-LINE COUPLINGS OR JOINTS, AND MINIMUM NUMBER OF FITTINGS UNLESS INDICATED OTHERWISE. FITTINGS IF REQUIRED TO BE COMPATIBLE WITH THE PIPING.
   C. ABOVE GROUND PIPING: UP TO AND INCLUDING 6" SIZE TO BE TYPE L, ASTM B-75, ASTM B88, ASTM B251, ASTM B447, HARD DRAWN COPPER TUBE WITH WROT COPPER FITTINGS AND SOCKET SOLDER JOINTS AND CONNECTIONS. TEE DRILL MECHANICAL SADDLE CONNECTIONS MAY BE UTILIZED. COMPLETED INSTALLATION TO BE RATED FOR 100 PSIG WORKING PRESSURE AT 180 DEGREE F.
   D. AT THE CONTRACTOR'S OPTION: UTILIZE FOR ABOVE GROUND DOMESTIC WATER PIPING 2" AND LARGER; GROOVED COPPER PIPING, FITTINGS, AND VALVES MAY BE INSTALLED. INSTALLATION READY COUPLINGS SHALL BE RATED TO 250 DEGREE F. AND 300 PSI. VICTAULIC STYLE 607 OR APPROVED EQUAL. (FLARING OF TUBE OF FITTING ENDS TO ACCOMMODATE IPS SIZED COUPLINGS, IS NOT PERMITTED).
   E. PIPE FITTINGS SHALL BE APPROVED FOR INSTALLATION WITH THE PIPING MATERIAL INSTALLED AND SHALL CONFORM TO THE RESPECTIVE PIPE STANDARDS OR ONE OF THE STANDARDS LISTED IN THE PLUMBING CODE.
   F. PLASTIC PIPING WHICH CONFORMS TO ASTM D 2737 SHALL BE FURNISHED WITH #12 COPPER TRACE ALONG ENTIRE LENGTH OF UNDERGROUND INSTALLATION. PLASTIC PIPING SHALL BE USED FOR UNDERGROUND INSTALLATION ONLY. JOINTS TO BE KEPT TO MINIMUM QUANTITY POSSIBLE.
   G. PIPING BELOW SLAB TO BE TYPE K SOFT COPPER TUBING IN A SINGLE LENGTH WITH NO IN-LINE COUPLINGS OR JOINTS, AND MINIMUM NUMBER OF FITTINGS UNLESS INDICATED OTHERWISE. FITTINGS IF REQUIRED TO BE WROT COPPER WITH SOCKET SOLDER BRAZED CONNECTIONS. COMPLETE INSTALLATION TO BE RATED FOR 175 PSIG WORKING PRESSURE. UNLESS INDICATED OTHERWISE, HORIZONTAL PIPING AND CONDUIT BELOW SLAB TO RUN IN A STRAIGHT LINE DIRECT FROM ENTRY TO EXIST JOINTS.
   H. VALVES 2-1/2" SIZE AND SMALLER MAY BE TWO-PIECE BRONZE BODY BALL VALVE, SCREWED CONNECTIONS, UNION CONNECTION BODY, TEFLON SEATS, CONVENTIONAL PORT BLOWOUT PROOF STEM, ADJUSTABLE PACKING GLAND, CHROME PLATED BRONZE BALL AND LEVER HANDLE LABELED FOR THE SERVICE CONTROLLED. DESIGN FOR 150 S.W.P. AND 400 WOG. EQUAL TO APOLLO 70-300 SERIES.
   I. CHECK VALVES; TO BE ALL BRONZE HORIZONTAL SWING WITH BRONZE DISC RATED FOR 125 S.W.P. 3" AND LARGER TO BE FLANGED.
   J. PRESSURE REDUCING VALVE; WATTS MODEL LF223S, AUTOMATIC REDUCING VALVE, BRONZE BODY, STAINLESS STEEL INTEGRAL STRAINER, STAINLESS STEEL SEAT, ADJUSTABLE PRESSURE RANGE FROM 25 TO 75 PSIG. BUILT IN THERMAL EXPANSION BYPASS FEATURE, UNIT SHALL BE SERVICEABLE WHEN IN-LINE. EQUAL MANUFACTURE: CASH ACME VALVES.
   K. VALVES BY NIBCO, APOLLO, WATTS, ZURN, OR VICTAULIC MAY BE FURNISHED AT THE CONTRACTOR'S OPTION.
   L. ALL VALVES USED ON DOMESTIC WATER SYSTEMS LOCATED AT THE WATER METER AND BACKFLOW PREVENTER MUST MEET THE REQUIREMENTS OF THE LOCAL WATER AUTHORITY.
4. EXECUTION
   A. ALL DOMESTIC WATER PIPING SHALL BE CLEAN, FLUSHED AND TESTED PER STATE AND LOCAL HEALTH DEPARTMENT REQUIREMENTS.
   B. ALL DOMESTIC WATER PIPING SHALL BE CERTIFIED SAFE FOR HUMAN CONSUMPTION BY A CERTIFIED PROFESSIONAL BY THE STATE OF OHIO (BACTERIAL CERTIFICATION NUMBER) EMPLOYED BY A TESTING LABORATORY THAT STATES THE SYSTEM MEETS THE DEPARTMENT OF HEALTH REQUIREMENTS AND IS APPROVED FOR HUMAN CONSUMPTION.
   C. SOLDER AND FLUX MATERIAL SHALL BE CERTIFIED "LEAD FREE" AND NSF LISTED FOR USE WITH POTABLE WATER SYSTEMS.
   D. ALL PIPING THAT SUPPLIES A FLUSH VALVE, SOLENOID VALVE (OTHER THAN SLOW-CLOSING TYPE) FOOT PEDAL OPERATOR, SPRING RETURN OPERATOR OR OTHER QUICK CLOSING TYPE DEVICE SHALL HAVE A SHOCK ABSORBER INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. UNLESS INDICATED OTHERWISE, WHERE MULTIPLE FIXTURES OR EQUIPMENT IN ADJACENT LOCATIONS (SUCH AS WITHIN A CHASE OR OTHER ENCLOSURE) ARE SUPPLIED BY COMMON PIPING MANIFOLD, A PROPERLY SIZED AND INSTALLED SHOCK ABSORBER MAY BE UTILIZED.
   E. RUN ALL WATER PIPING LEVEL AND CONCEAL WHENEVER POSSIBLE. PIPING TO BE INSTALLED TO ALLOW COMPLETE DRAIN DOWN OF SYSTEM BACK TO MAIN RISER AT BASE OF SYSTEM WHENEVER POSSIBLE. PROVIDE 3/4" DRAINS AT BASE OF RISER, AND ANY OTHER TRAPPED OR LOW POINTS WHEN SUCH ARE UNAVOIDABLE DUE TO PROJECT CONDITIONS. 3/4" DRAINS TO CONSIST OF BALL VALVE WITH OUTLET CONNECTION VACUUM BREAKER.
   F. BALANCE RECIRCULATION BRANCH LINE FLOW AS REQUIRED FOR PROPER OPERATION OF SYSTEMS. PROVIDE COMBINATION BALANCE/SHUTOFF VALVE, CHECK VALVE, THERMOMETER/PRESSURE GAUGE FOR EACH BRANCH RECIRCULATING LINE.
   G. HORIZONTAL SUPPLY PIPING BELOW SLABS ON GRADE TO BE INSTALLED ENTIRELY BELOW THE SLAB STRUCTURE, INCLUDING CONDUIT SLEEVE WHEN PROVIDED. UNDER SLAB PIPING AND/OR CONDUIT SHALL NOT BE EMBEDDED OR SUPPORT SLAB STRUCTURES.
   H. COORDINATE INSTALLATION WITH STRUCTURE, SITE CONDITIONS AND WORK OF OTHER TRADES AT AND ADJACENT TO DOMESTIC WATER SERVICE PIPING INSTALLATIONS.
   I. MAINTAIN NECESSARY CLEARANCE FORM STRUCTURAL SUPPORT ELEMENTS AS REQUIRED FOR INSTALLATION OF DOMESTIC WATER SERVICE PIPING OUTSIDE OF SUPPORT/BEARING ZONES.
   J. WITH ALL OUTLETS CLOSED, FILL SYSTEM TO WORKING PRESSURE AND CLOSE VALVE AT SUPPLY MAIN.

SHOCK ABSORBERS

1. SIMILAR TO ZURN SHOCKTROL SERIES Z-1700, SIZED AND INSTALLED AS RECOMMENDED BY THE MANUFACTURER FOR SPECIFIC CONDITIONS AT EACH LOCATION.
2. EQUAL SHOCK ABSORBERS AS MANUFACTURED BY J.R. SMITH, JOSAM, SIOUX CHIEF OR PRECISION PLUMBING PRODUCTS MAY BE PROVIDED AT THE CONTRACTOR'S OPTION.

BACKFLOW PREVENTORS

1. NON-CARBONATED BEVERAGE DISPENSERS: 1/2" THRU 1" DUAL CHECK TYPE BACKFLOW PREVENTOR ASSEMBLIES SHALL BE SIMILAR TO WATTS MODEL NO. 7 WITH UNION CONNECTION BODY, BRONZE CONSTRUCTION, TWO (2) PLASTIC CHECK MODULES, BUNA-N-SEALS, STAINLESS STEEL SPRING AND "O" RING CHECK MODULE AND UNION BODY UNIT TO BE LISTED AS ASSE STANDARD 1024. SIZE AS INDICATED BY PIPING SIZE WHERE INSTALLED ON PLANS. ASSEMBLY TO BE RATED FOR 125 PSIG WORKING PRESSURE.
2. HIGH HAZARD/CONTAMINATION: REDUCED PRESSURE TYPE 2" AND SMALLER; WATTS LF009 REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTER ASSEMBLY, UNIT TO BE NON-CORROSIVE 300 SERIES STAINLESS STEEL CONSTRUCTION, UNIT TO BE FULLY SERVICEABLE WHILE IN-LINE. UNIT SHALL HAVE A 175 PSI WORKING PRESSURE, STRAIGHT THROUGH FLOW DESIGN, ASSE 1013 APPROVED AND LABELED, AIR GAP FITTING, AND STRAINER UPSTREAM WITH ISOLATION QUARTER TURN BALL VALVES FOR ISOLATION. PIPE AIR GAP DRAIN TO FLOOR DRAIN WITH COPPER PIPING.
3. HIGH HAZARD/CONTAMINATION: REDUCED PRESSURE TYPE 2-1/2" AND LARGER; AMES MODEL 4000ss REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTER ASSEMBLY, UNIT TO BE NON-CORROSIVE 300 SERIES STAINLESS STEEL CONSTRUCTION, UNIT TO BE FULLY SERVICEABLE WHILE IN-LINE. UNIT SHALL HAVE A 175 PSI WORKING PRESSURE, STRAIGHT THROUGH FLOW DESIGN, ASSE 1013 APPROVED AND LABELED, AIR GAP FITTING, AND STRAINER UPSTREAM WITH ISOLATION QUARTER TURN BALL VALVES FOR ISOLATION. PIPE AIR GAP DRAIN TO FLOOR DRAIN WITH COPPER PIPING.
4. AT ALL HOSE THREAD OUTLET CONNECTIONS TO THE DOMESTIC WATER SUPPLY SYSTEM NOT FURNISHED WITH AN INTEGRAL BACKFLOW PREVENTION DEVICE; PROVIDE ASSE 1011, 1019, 1035, OR 1052 LISTED HOSE CONNECTION VACUUM BREAKER, SELECTION DEPENDING ON APPLICATION, PERMANENTLY AFFIXED, WITH A 3/4" HOSE THREAD CONNECTION AT OUTLET.
5. UNLESS INDICATED OTHERWISE, BACKFLOW PREVENTION ASSEMBLY SIZE AS INDICATED BY THE PIPING SIZE WHERE INSTALLED ON DRAWINGS; EQUAL ASSEMBLIES AS MANUFACTURED BY ZURN, WILKINS, FEBCO, CONBRACO, HERSEY, AMES, OR LAWLER MAY BE FURNISHED AT THE CONTRACTOR'S OPTION.
6. PROVIDE BACKFLOW PREVENTORS FOR KITCHEN EQUIPMENT WHEN NOT PROVIDED BY THE KITCHEN EQUIPMENT SUPPLIER. PROVIDE THE FOLLOWING MODEL(S) UNLESS DIRECTED DIFFERENTLY BY THE DEPARTMENT OF HEALTH OR THE KITCHEN EQUIPMENT SUPPLIER:
   A. PROVIDE AN ASSE 1022 (SIMILAR TO WATTS REGULATOR MODEL SD-3) FOR THE FOLLOWING ITEMS; SODA MACHINE OR COKE MACHINE WITH WATER OUTLET.

TRAP PRIMER ASSEMBLIES

1. SIMILAR TO SIOUX CHIEF PRODUCTS PRIME PERFECT SERIES 695 WITH BRASS BODY AND WORKING PRESSURE OF 250 PSIG. PROVIDE WITH DISTRIBUTION UNIT AS REQUIRED FOR MULTIPLE SUPPLIES TO FLOOR DRAIN. PROVIDE COPPER PIPING FROM TRAP PRIMER UNIT TO FLOOR DRAIN TRAP PRIMER INLET.
2. EQUAL TRAP PRIMER ASSEMBLIES AS MANUFACTURED BY ZURN, J.R. SMITH, JOSAM, PRECISION PLUMBING PRODUCTS, WADE, SLOAN, MIFAB OR SIOUX CHIEF MAY BE FURNISHED AT THE CONTRACTOR'S OPTION.

HOSE BIBBS

1. INSTALL HOSE BIBBS PER MANUFACTURER RECOMMENDATIONS.
2. EXTERIOR HOSE BIBBS SHALL BE FROST PROOF TYPE. FURNISH WITH PERMANENTLY AFFIXED VACUUM BREAKER AND 3/4" HOSE BIBB CONNECTION AT OUTLET.
3. INTERIOR HOSE BIBBS TO HAVE A PERMANENTLY ATTACHED ASSE 1011 VACUUM BREAKER.
4. ROOF HYDRANTS TO BE ASSE 1052 LISTED/APPROVED AND MUST BE DRAINLESS.
5. EQUAL HOSE BIBBS AS MANUFACTURED BY WOODFORD, WATTS, WADE, JOSAM, J.R.SMITH, OR ZURN MAY BE FURNISHED AT THE CONTRACTOR'S OPTION.

BUILDING SOIL, WASTE AND VENT SYSTEM

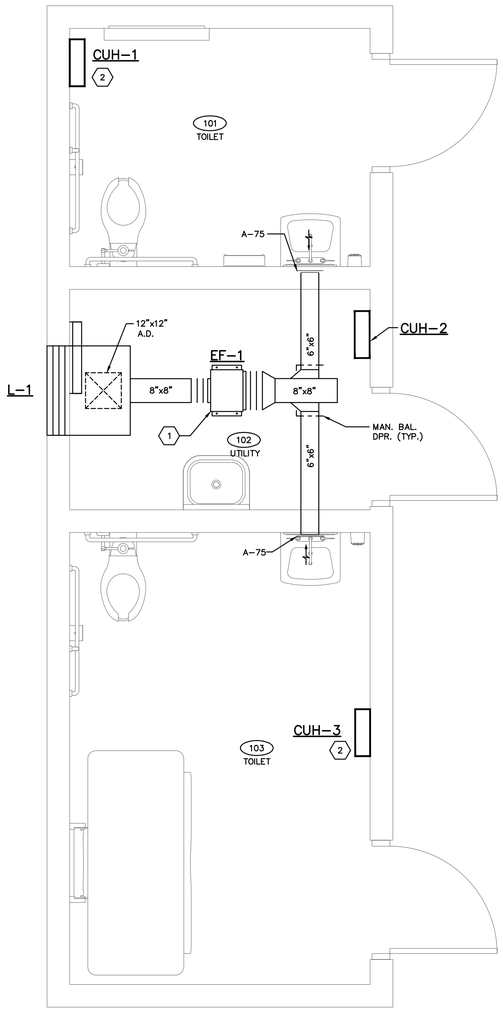
1. APPLICATIONS FOR SANITARY AND VENT SYSTEMS INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING:
   A. SANITARY AND VENT PIPING FROM DESIGNATED POINTS WITH ALL CONNECTIONS.
   B. DRAINAGE AND VENT PIPING FOR ALL OTHER MISCELLANEOUS SYSTEMS OR EQUIPMENT AS INDICATED ON DOCUMENTS AND AS REQUIRED.
   C. DIRECT AND INDIRECT DRAINAGE AND VENT PIPING FOR ALL OTHER MISCELLANEOUS SYSTEMS OR EQUIPMENT AS INDICATED ON DOCUMENTS AND AS REQUIRED.
   D. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SANITARY PIPING FINAL CONNECTIONS AND ALL INDIRECT PIPING FROM EQUIPMENT TO DRAIN TO COMPLETE THE SANITARY WASTE AND VENT PIPING SYSTEM AND TO COMPLETE THE INDIRECT DRAINAGE PIPING SYSTEM TO OPERATE ALL EQUIPMENT AND FIXTURES PROPERLY.
   E. FURNISH A COMPLETE SYSTEM OF INTERIOR SOIL WASTE DRAINAGE (INCLUDES SANITARY AND VENT PIPING) FROM BUILDING FIXTURES, EQUIPMENT, AND ANY OTHER ELEMENTS REQUIRING THE SAME.
2. PIPING TO BE AS FOLLOWS:
   A. STANDARD WEIGHT CAST IRON ASTM A-74/ASTM A-88/CISPI 301 LISTED/STAMPED DWV PIPE AND FITTINGS WITH NEOPRENE GASKET HUB AND SPIGOT. GASKETED NO-HUB MECHANICAL JOINTS AND CONNECTIONS MAY BE PROVIDED IN EXPOSED/ACCESSIBLE LOCATIONS WHERE IN FULL-COMPLIANCE WITH MANUFACTURER'S INSTALLATION GUIDELINES AND THE APPLICABLE PLUMBING CODE. INSTALLATION OF ALL CAST IRON PIPING AND FITTINGS SHALL BE IN FULL ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND CISPI.
   B. ABOVE FLOOR, ACCESSIBLE LOCATIONS ONLY: STANDARD WEIGHT CAST IRON DWV PIPE AND DWV FITTINGS WITH NO-HUB MECHANICAL COUPLING JOINTS AND CONNECTIONS.
   C. BELOW SLAB ONLY: SCHEDULE 40 TYPE 1, GRADE 1, ASTM LISTED/STAMPED SOLID CORE TYPE PVC DWV PIPE AND FITTINGS WITH SOCKET SOLVENT SOLDER JOINTS AND CONNECTIONS MAY BE PROVIDED FOR ALL AREAS AND LOCATIONS NOT SUBJECT TO A RETURN AIR PLENUM. ALL PLENUM LOCATIONS TO BE CONFIRMED WITH THE HVAC CONTRACTOR IN ADVANCE. CAST IRON TO BE USED FOR ALL DRAINS AND FIXTURES RECEIVING DISCHARGE THAT EXCEEDS 120 DEGREES F FOR THE ENTIRE LENGTH OF WASTE CONVEYANCE.
   D. ABOVE FLOOR ONLY: ALL EXPOSED FIXTURE DRAINS AND DIRECT WASTE LINES SHALL BE CHROME PLATED BRASS PIPING.
   E. EXPOSED LOCATIONS ONLY: STANDARD WEIGHT COPPER DWV PIPE AND DWV FITTINGS WITH SOCKET SOLDER JOINTS AND CONNECTIONS.
   F. DRAIN-PUMP DISCHARGE ONLY: SCHEDULE 40 ASTM A53 GALVANIZED STEEL PIPE AND GALVANIZED CAST IRON DWV FITTINGS WITH THREADED JOINTS AND CONNECTIONS. OPTIONAL JOINTS AND CONNECTIONS MAY BE GROOVED PIPE SIMILAR TO VICTAULLIC STYLES 75 AND 77 FOR USE ABOVE GRADE ONLY.
3. EXECUTION
   A. FURNISH AND INSTALL A CLEANOUT AT THE BASE OF EACH STACK AND ELSEWHERE AS REQUIRED BY APPLICABLE THE PLUMBING CODE.
   B. ALL CAST IRON SOIL PIPE SHALL BE BITUMASTIC COATED INSIDE AND OUTSIDE. ALL CAST IRON PIPING (INCLUDING JOINTS AND CONNECTIONS) SHALL BE INSTALLED IN ACCORDANCE WITH STANDARDS AS SET FORTH BY THE CAST IRON SOIL PIPE INSTITUTE (CISPI).
   C. AT THE CONTRACTOR'S OPTION, HUBLESS CAST IRON SOIL PIPE MAY BE JOINED BY USING HEAVY DUTY "CLAMP ALL" COUPLINGS IN LIEU OF "NO-HUB" COUPLINGS. COUPLINGS ARE TO BE MADE OF 24 GAUGE TYPE 304 STAINLESS STEEL WITH HI-TORQUE CLAMPS AND NEOPRENE GASKETS. COUPLINGS SHALL BE INSTALLED AND TESTED IN ACCORDANCE WITH THE MANUFACTURE'S RECOMMENDATIONS.
   D. PIPING SHALL BE INSTALLED ACCORDING TO THE PIPE MANUFACTURER'S SPECIFICATIONS & RECOMMENDATIONS INCLUDING PREPARATION, JOINING METHODS, ALLOWANCES FOR EXPANSION/CONTRACTION, BEDDING, BACKFILL, SUPPORT & RESTRAINT. CAST IRON PIPING 6"SIZE & LARGER SUSPENDED FROM OVERHEAD STRUCTURE WITH THE TOP OF PIPE MORE THAN 18"BELOW SHALL HAVE LISTED SWAY BRACING PROVIDED AT EACH 6"SIZE AND LARGER BRANCH CONNECTION GREATER THAN 45 DEGREES, AND AT EACH CHANGE OF DIRECTION GREATER THAN 45 DEGREES. IN ADDITION ALL PIPING 6"SIZE & LARGER SHALL HAVE ROD & CLAMP RESTRAINTS PROVIDED FOR FITTINGS AT EACH BRANCH CONNECTION & CHANGE OF DIRECTION (HORIZONTAL & VERTICAL). A TEE-WYE FITTING AND/OR A WYE FITTING WITH A DIRECT ATTACHED 1/8 BEND ELBOW IS CONSIDERED A BRANCH CONNECTION GREATER THAN 45 DEGREES. CAST IRON NO-HUB PIPING 12'SIZE & LARGER IN TEN FOOT LENGTHS SHALL HAVE HANGERS PROVIDED ON BOTH SIDES OF EACH COUPLING.
   E. PLASTIC PIPING SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS, WITH PARTICULAR ATTENTION TO REQUIREMENTS FOR JOINING METHODS, SUPPORT, AND ALLOWANCES FOR EXPANSION AND CONTRACTION. PROVIDE LISTED EXPANSION JOINT FITTINGS IN ALL PLASTIC PIPING DOWNSPOUT MAINS EXTENDING THROUGH TWO OR MORE FLOOR LEVELS IN ACCORDANCE WITH THE PIPING MANUFACTURER'S RECOMMENDATIONS. PLASTIC PIPING SHALL NOT BE INSTALLED IN ANY RETURN AIR PLENUM OR CHASE THAT IS USED FOR RETURN AIR.
   F. COORDINATE INSTALLATION WITH STRUCTURE, EXISTING CONDITIONS AND WORK OF OTHER TRADES AT AND ADJACENT TO SOIL, WASTE AND VENT SERVICE PIPING INSTALLATION.

DRAINS, CLEANOUTS, AND DRAINAGE SPECIALTIES

1. FURNISH AND INSTALL DRAINS, CLEANOUTS AND DRAINAGE SPECIALTIES AS INDICTED ON THE DRAWINGS, AND ELSEWHERE AS REQUIRED FOR COMPLETE DRAINAGE, ACCESS AND SPECIAL FUNCTION/OPERATION AT ALL ITEMS/ELEMENTS AND AREAS REQUIRING SAME AND FOR PROPER INTEGRATION WITH THE BUILDING DRAINAGE SYSTEM.
2. UNLESS INDICATED OTHERWISE, ALL ITEMS/ELEMENTS AND THEIR COMPONENT PARTS DESCRIBED HEREIN TO BE OF METALLIC CONSTRUCTION WHEN SUCH IS AVAILABLE FOR THE BASE SPECIFIED ITEM/ELEMENT. USE OF PLASTIC, COMPOSITE, OR OTHER NON-METALLIC COMPONENTS AND/OR MATERIALS BY LISTED ALTERNATE ITEMS/ELEMENTS IS PROHIBITED.
3. PRODUCTS
   A. HUB DRAINS TO CONSIST OF STRAIGHT SECTION OF HUB OR SOCKET TYPE CONNECTION WASTE PIPE INSTALLED IN THE VERTICAL POSITION, WITH THE HUB OR SOCKET PORTION EXPOSED ABOVE THE FLOOR. THE HUB INLET SHALL BE A MINIMUM OF 1" ABOVE THE FLOOR SURFACE. HUB OR SOCKET WASTE PIPE MATERIAL TO MATCH THAT OF THE SYSTEM IT IS CONNECTED TO.
   B. FURNISH AND INSTALL A P-TRAP FOR EACH SANITARY DRAIN INLET TERMINAL (FLOOR DRAIN, HUB DRAIN, FLOOR SINK, ETC.,) OF THE SAME MATERIAL AND CONNECTION TYPE AS THE PIPING SYSTEM CONNECTED TO, UNLESS INDICATED OTHERWISE.
   C. THIS CONTRACTOR TO USE BRONZE PLUGS ONLY.
   D. ALL CLEANOUTS INSTALLED IN CARPETED AREAS TO BE PROVIDED WITH APPROVED VANDALPROOF CARPET MARKERS. CARPETED AREAS TO BE AS INDICATED BY ARCHITECTURAL DOCUMENTATION, AND CONFIRMED WITH THE GENERAL CONTRACTOR.
   E. CLEANOUTS IN TILE, MARBLE, TERRAZZO, PARQUET OR OTHER "SPECIAL" FLOOR TREATMENT AREAS TO BE PROVIDED WITH RECESSED TOPS TO ALLOW THE INTEGRATION WITH THE FLOOR TREATMENT. "SPECIAL" FLOOR TREATMENT AREAS TO BE AS INDICATED BY ARCHITECTURAL DOCUMENTATION, AND CONFIRMED WITH THE ARCHITECT/PRIME.
   F. EQUAL DRAINS, DRAINAGE SPECIALTIES AND CLEANOUTS AS MANUFACTURED BY ZURN, JOSAM, MIFAB, SIOUX CHIEF, WATTS OR J.R. SMITH MAY BE FURNISHED AT THE CONTRACTOR'S OPTION.
4. EXECUTION
   A. WHEN TRAP PRIMER WATER SUPPLY IS INDICATED ON PLANS FOR DRAIN ASSEMBLIES, THE CONTRACTOR HAS THE OPTION TO CONNECT TO A FITTING ON EITHER THE DRAIN ASSEMBLY OR THE P-TRAP INLET ABOVE THE WATER SEAL, IN ACCORDANCE WITH INSPECTION/APPROVAL AUTHORITIES. PROVIDE A DIELECTRIC UNION AT TRAP PRIMER SUPPLY CONNECTION POINTS. WHEN DRAIN BODY PRIMER CONNECTIONS OCCUR WITHIN THE SLAB/FLOOR STRUCTURE, PROVIDE AN OFFSET IMMEDIATELY ADJACENT TO THE DRAIN LOCATION TO ALLOW INSTALLATION OF SUPPLY PIPING ENTIRELY BELOW THE SLAB/FLOOR STRUCTURE, INCLUDING THE CONDUIT SLEEVE REQUIRED FOR TRAP PRIMER SUPPLY PIPING UNDER SLAB ON GRADE.
   B. PROVIDE A COMPATIBLE FASTENING ASSEMBLY WITH INTERNAL SECONDARY DRAINAGE FLANGE AND WEEPHOLES FOR ALL ITEMS SPECIFIED HEREIN BEING INSTALLED IN STRUCTURES HAVING A WATER PROOF MEMBRANE, FLASHING, VAPOR BARRIER, OR SIMILAR ELEMENT PROVIDED UNDER SEPARATE CONTRACT. INSTALLATION CONDITIONS TO BE VERIFIED FROM ARCHITECTURAL DOCUMENTATION AND COORDINATED WITH THE APPROPRIATE CONTRACTOR.
   C. COUNTER FLASHING (WHEN REQUIRED) FOR ITEMS SPECIFIED HEREIN IS TO BE COMPATIBLE WITH WATERPROOF MEMBRANE, VAPOR BARRIER, FLASHING, OR SIMILAR ELEMENTS PROVIDED UNDER SEPARATE CONTRACT AT THE INTERFACE POINT. COUNTER FLASHING TO BE PROVIDED AND SET IN PLACE BY THE PLUMBING CONTRACTOR. BUT WILL BE MADE WATERTIGHT BY THE CONTRACTOR INSTALLING THE MEMBRANE, VAPOR BARRIER, FLASHING OR SIMILAR ELEMENTS PROVIDED UNDER SEPARATE CONTRACT. INSTALLATION CONDITIONS TO BE VERIFIED FROM ARCHITECTURAL DOCUMENTATION AND COORDINATED WITH THE APPROPRIATE CONTRACTOR.
   D. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING ALL DRAINS, CLEANOUTS AND OTHER ITEMS SO NOTED INSTALLED FLUSH AND LEVEL WITH FINISH WALL, FLOOR OR OTHER STRUCTURE AS APPLIES. COORDINATE INSTALLATION WITH CONTRACTOR'S PROVIDING ASSOCIATED STRUCTURE, INCLUDING REQUIRED ELEVATIONS AND DIMENSIONAL LOCATIONS. ITEMS NOT PROPERLY INSTALLED SHALL BE REMOVED AND REPLACED TO THE SATISFACTION OF THE OWNERS' ON-SITE REPRESENTATIVE.
   E. ALL ITEMS AND ACCESSORIES SPECIFIED HEREIN ARE TO BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS, AND IN ACCORDANCE THE REQUIREMENTS OF THE INSPECTION/APPROVAL AUTHORITIES.
   F. COORDINATE LOCATION OF ALL DRAINS AS REQUIRED FOR PROPER OPERATION WHEN ASSOCIATED WITH SLOPED FLOORS, DECKS OR OTHER STRUCTURES PROVIDED UNDER SEPARATE CONTRACT.
   G. VERIFY EXACT LOCATIONS OF DRAINS FURNISHED FOR ITEMS UNDER SEPARATE CONTRACT WITH THE EQUIPMENT AS ACTUALLY PROVIDED AND INSTALLED BY THE APPROPRIATE CONTRACTOR. COORDINATE INSTALLATION IN ADVANCE OF WORK.
   H. WITH THE EXCEPTION OF CLEANOUTS, ALL ITEMS SPECIFIED ARE TO HAVE CONNECTION SIZE SAME AS CONNECTED PIPING SIZE SHOWN ON THE DRAWINGS, UNLESS DIRECTED OTHERWISE.
   I. CLEANOUTS ARE TO HAVE OUTLET SIZE, CONNECT

CODED NOTES ⬡

1. SUSPEND FAN FROM STRUCTURE WITH VIBRATION ISOLATORS.
2. CUH SERVING RESTROOM SHALL BE SEMI RECESSED IN BLOCK WALL.



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

H1.1-24335.DWG

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PROFESSIONAL ENGINEER
09/03/2025

Restroom Facility

Oxford Park Place

2 High Street, Oxford, OH 45056

ISSUE

NO.	DATE	DESCRIPTION
1	09/03/2025	BID/PERMIT

DATE	09.03.2025
JOB NO.	4265.00
DRAWN	PEA
CHECKED	PEA

TITLE
HVAC PLAN

SHEET NO.
H1.1

MECHANICAL SPECIFICATIONS

I. GENERAL CONDITIONS

A. GENERAL

1. EXCEPT AS SPECIFIED TO THE CONTRARY, THIS CONTRACT SHALL INCLUDE FURNISHING, INSTALLING, CONNECTING, AND OPERATION OF ALL EQUIPMENT WHICH IS PART OF MECHANICAL SYSTEMS.
2. GENERAL AND SPECIAL CONDITIONS OF AIA (AMERICAN INSTITUTE OF ARCHITECTS) AND OWNER'S GENERAL REQUIREMENTS SHALL APPLY UNLESS NOTED OTHERWISE.
3. THE REQUIREMENTS SET FORTH UNDER "GENERAL CONDITIONS". "MODIFICATIONS TO GENERAL CONDITIONS" AND "SPECIAL CONDITIONS" ARE A PART OF THIS CONTRACT.
4. THIS CONTRACT SHALL INCLUDE A VISIT TO THE JOB SITE AND TAKE INTO CONSIDERATION MECHANICAL, ELECTRICAL AND GENERAL TRADE WORK IN PLACE AND WORK TO BE PUT INTO PLACE PRIOR TO BIDDING. REROUTING OF DUCTWORK, PIPING AND EQUIPMENT AS REQUIRED, TO MISS THIS WORK SHALL BE ACCOMPLISHED AT NO ADDITIONAL COST TO THE OWNER.
5. ALL MOTORS FOR SUCH EQUIPMENT (IF AND WHERE SPECIFIED ON DRAWINGS) SHALL BE FURNISHED AND INSTALLED AS PART OF THIS CONTRACT. CONTROLS FOR SUCH MOTORS SHALL BE FURNISHED UNDER THIS CONTRACT AND INSTALLATION OF CONTROLS AND ALL ELECTRICAL WIRING, NOT SHOWN ON ELECTRICAL DRAWINGS, SHALL BE PERFORMED UNDER THIS CONTRACT.

B. SUBSTITUTIONS AND MISCELLANEOUS EQUIPMENT

1. THE BIDDING OF THIS WORK WILL CONTEMPLATE THE USE OF EQUIPMENT AND MATERIALS EXACTLY AS SPECIFIED HEREIN. WHERE ONE OR MORE NAMES OF MANUFACTURES ARE MENTIONED ANY ONE MAY BE UTILIZED.
2. ALTERNATE EQUIPMENT MAY BE BID AS A SUBSTITUTION TO THAT SPECIFIED WITH THE APPROPRIATE DEDUCT NOTED. HOWEVER, THE EQUIPMENT SUBSTITUTED SHALL MEET ALL SPECIFICATIONS IN DESIGN AND BE SUBJECT TO OWNER AND/OR ENGINEER APPROVAL. ANY ADDITIONAL COST INCURRED DUE TO SUBSTITUTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AT NO EXPENSE TO THE OWNER.

C. ORDINANCES, PERMITS, AND CERTIFICATES AND OWNER REQUIREMENTS

1. ALL WORK UNDER THIS CONTRACT SHALL BE INSTALLED IN FULL ACCORDANCE WITH THE OWNER'S REQUIREMENTS, ALL LAWS, ORDINANCES AND ALL REGULATIONS OF THE STATE, COUNTY, AND MUNICIPALITY WHICH IN ANY WAY AFFECTS THIS WORK. THIS CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS AND CERTIFICATES OF INSPECTION REQUIRED BY THE FOREGOING GOVERNMENTAL AUTHORITIES. ALL WORK SHALL ALSO BE INSTALLED IN ACCORDANCE WITH REGULATIONS OF THE FIRE UNDERWRITERS HAVING JURISDICTION AND LOCAL UTILITIES. CONTRACTOR SHALL ALSO SECURE ANY PERMITS OR PAY ANY FEES TO THE LOCAL UTILITY COMPANIES FOR THE WORK REQUIRED.

D. DRAWINGS

1. MECHANICAL DRAWINGS ARE DIAGRAMMATIC AND ARE INTENDED TO SHOW THE APPROXIMATE LOCATION OF DUCTWORK AND EQUIPMENT.
2. THE EXACT LOCATION OF DUCTWORK AND EQUIPMENT MAY BE CHANGED FROM TIME TO TIME AS WORK PROGRESSES. UNDER THIS CONTRACT ALL LOCATIONS SHALL BE VERIFIED WITH ALL TRADES AND THAT THEY ARE ACCORDING TO THE LATEST INFORMATION AVAILABLE. SHOULD THIS NOT BE DONE THE WORK WILL BE CHANGED AT NO ADDITIONAL EXPENSE TO THE OWNER.
3. THE OWNER RESERVES THE RIGHT TO MAKE MINOR CHANGES IN LOCATIONS OF EQUIPMENT OR DUCT ARRANGEMENTS UP TO THE TIME OF ROUGH-IN WITHOUT ADDITIONAL COSTS.
4. THE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO SUPPLEMENT EACH OTHER AND ANY MATERIALS OR LABOR CALLED FOR IN ONE SHALL BE FURNISHED EVEN THOUGH NOT MENTIONED IN BOTH. ANY MATERIAL OR LABOR WHICH IS NEITHER SHOWN ON THE DRAWINGS NOR CALLED FOR IN THE SPECIFICATIONS BUT WHICH IS OBVIOUSLY NECESSARY TO COMPLETE THE WORK AND WHICH IS USUALLY INCLUDED IN WORK OF A SIMILAR CHARACTER SHALL BE FURNISHED UNDER THIS CONTRACT.
5. ALL EXISTING UTILITY AND MECHANICAL SERVICES SHALL BE FIELD VERIFIED. CORRECTIONS TO THE DESIGN AND INSTALLATION SHALL BE MADE WITHOUT ADDITIONAL COST TO THE OWNER.
6. AS PART OF THIS WORK THE CONTRACTOR SHALL SUBMIT A DIGITAL SET OF AS BUILT DRAWINGS INDICATING THE EXACT LOCATION OF ALL WORK INSTALLED. ACCEPTANCE SHALL NOT OCCUR UNTIL RECEIPT OF THESE DRAWINGS IS OBTAINED BY THE OWNER.

E. SHOP DRAWINGS

1. AS PART OF THE WORK INCLUDED UNDER EACH MECHANICAL SECTION, WITHOUT CAUSING ANY DELAY IN WORK, SHOP DRAWINGS OF ALL EQUIPMENT AND MATERIAL SHALL BE SUBMITTED FOR ENGINEER'S REVIEW.
2. SUBMITTAL SHALL INCLUDE WIRING DIAGRAMS, PERFORMANCE CURVES AND DATA SPECIFIC TO THIS PROJECT AND BEAR CONTRACTOR'S APPROVAL STAMP CERTIFYING THAT HE HAS VERIFIED CONFORMANCE TO THE CONTRACTUAL DOCUMENTS.
3. IN THE ENGINEER'S REVIEW OF SHOP DRAWINGS AND REVIEW IS FOR CONFORMANCE WITH THE GENERAL DESIGN CONCEPT AND ARRANGEMENT ONLY. COMMENTS, CORRECTIONS OR MARKINGS DO NOT CONSTITUTE WAIVER OF THE CONTRACT DOCUMENTS REQUIREMENTS. DIMENSIONS, QUANTITIES AND AND COORDINATION ARE THE RESPONSIBILITY OF THE CONTRACTOR.

F. CLEANING UP

1. UNLESS OTHERWISE NOTED, ALL EXCESS MATERIALS AND DEBRIS CAUSED BY THIS WORK SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND PROMPTLY BE REMOVED FROM THE SITE. ALL FIXTURES AND EQUIPMENT INSTALLED SHALL BE THOROUGHLY CLEANED WEEKLY. ALL MOTORS AND EQUIPMENT SHALL BE COVERED OR OTHERWISE PROTECTED FROM CONSTRUCTION DUST AND DEBRIS. NO EQUIPMENT OTHER THAN THOSE DESIGNED TO ARE TO BE EXPOSED TO INCLEMENT WEATHER.

G. CUTTING AND PATCHING

1. CUTTING FOR OPENINGS, WHEN NECESSARY, SHALL BE DONE BY THIS CONTRACTOR WITH SUCH TOOLS AND METHODS AS TO PREVENT UNNECESSARY DAMAGE TO SURROUNDING AREAS OR EQUIPMENT.
2. FILL SPACE IN ALL AREAS WITH PACKING WHERE REQUIRED TO MAINTAIN FIRE RATING. OPENINGS SHALL BE TEMPORARILY FIRE STOPPED UNTIL PERMANENT FIRE STOPPING IS DONE. THIS INCLUDES HOLES LEFT DUE TO REMOVAL OF PIPING.
3. PATCHING SHALL MATCH EXISTING SURFACES IN KIND AND FINISH, AND SHALL BE DONE BY THE GENERAL CONTRACTOR.
4. NO STRUCTURAL MEMBER WILL BE CUT INTO WITHOUT THE EXPRESSED PERMISSION OF THE OWNER'S REPRESENTATIVE.

H. FIRESTOPPING

1. EACH CONTRACTOR SHALL BE RESPONSIBLE FOR FIRESTOPPING AROUND ALL OPENINGS FOR PIPES, DUCTS, CONDUITS ETC., INSTALLED HIM AT ALL FIRE WALLS AND SMOKE WALLS. FIRESTOPPING SHALL BE PERFORMED BY AN INSTALLER WHO HAS BEEN TRAINED BY MANUFACTURER, OR MANUFACTURER'S REPRESENTATIVE, IN THE INSTALLATION PROCEDURES BASED ON PUBLISHED UL TESTED FIRE STOP SYSTEMS.
2. FIRESTOPPING MEET THE REQUIREMENTS OF ASTM E-814 OR UL 1479 FIRE TESTS BY RECOGNIZED TESTING AGENCY. FIRESTOPPING SHALL ALSO CONFORM BY THE FOLLOWING GOVERNING CODES: OHIO BASIC BUILDING CODE, NFPA 101-LIFE SAFETY CODE & NFPA 70 – NATIONAL ELECTRIC CODE.
3. PENETRATION
   a. CLEAN PENETRATION HOLES OF DIRT, LOOSE MATERIALS, AND FOREIGN MATTER WHICH MAY AFFECT BOND OR INSTALLATION.
   b. REMOVE COATINGS SUCH AS PAINT, CURING COMPOUNDS, WATER REPELLENT, SEALERS AS REQUIRED.
   c. INSTALL BACKING MATERIALS TO PREVENT LIQUID MATERIAL LEAKAGE.
4. APPLICATION

   PREPARE AND APPLY PENETRATION SEALING SYSTEMS IN ACCORDANCE WITH MANUFACTURER'S PRINTED INSTRUCTIONS.

   EMPLOY INSTALLATION TECHNIQUES WHICH WILL ENSURE THAT FIRESTOPPING IS DEPOSITED TO FILL AND SEAL HOLES AND OPENINGS.

   TOOL EXPOSED SURFACES OF APPLIED SEALANT TO SMOOTH FINISH.

   PROTECT MATERIALS FROM DAMAGE ON SURFACES SUBJECTED TO TRAFFIC.

5. FIRESTOPPING BY DOW CORNING, 3M, HILTI OR METACAULK MAY FURNISHED AT THE CONTRACTOR'S OPTION.

I. GUARANTEE

1. ALL LABOR AND MATERIALS FURNISHED UNDER THIS CONTACT SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE BY THE OWNER WHICH WILL COMMENCE UPON THE FINAL INSPECTION BY THE ENGINEER. DURING THIS TIME, ALL LEAKS, CORRECTION OF ALL THE FAILURES TO SUCH MATERIAL AND THE CORRECTION OF ALL DISCREPANCIES WITH DRAWING CODE AND THE SPECIFICATIONS SHALL BE DONE UNDER THIS CONTRACT AT NO ADDITIONAL EXPENSE TO THE OWNER.

III. HVAC

A. HVAC INSULATION

1. INSULATION THICKNESSES ARE BASED ON INSULATION HAVING THERMAL RESISTANCE IN THE RANGE OF 4.0 HR F ft.2/BTU TO 4.6 HR F ft2/BTU PER INCH OF THICKNESS ON A FLAT SURFACE AT A MEAN TEMPERATURE OF 75°F. MINIMUM INSULATION THICKNESS SHALL BE INCREASED FOR MATERIALS HAVING R VALUES LESS THAN 4.0 OR MAY BE REDUCED FOR MATERIALS HAVING R VALUES GREATER THAN 4.6 TO GIVE EQUIVALENT "R" VALUES.
2. COVER LOW PRESSURE SUPPLY DUCTWORK ABOVE CEILINGS AS FOLLOWS:
   a. ALL SUPPLY AIR DUCTS SHALL BE INSULATED WITH 1/2" THICK, 1 LB DENSITY BLANKET FLEXIBLE DUCT INSULATION.
   b. SEAL ALL BREAKS AND JOINTS IN VAPOR BARRIER WITH 2-1/2" WIDE PRESSURE SENSITIVE TAPE TO MATCH VAPOR BARRIER FACING. ADHERE WITH FOSTER 85-20 ADHESIVE WHERE NECESSARY.
5. ALL SUPPLY AIR CONDITIONING DUCT INSULATION TO BE CONTINUOUS THROUGH WALLS AND HANGERS.

B. LOW PRESSURE DUCTWORK AND ACCESSORIES

1. DUCTWORK AND ACCESSORIES SHALL BE FABRICATED AND INSTALL IN STRICT ACCORDANCE WITH THE 2" W.G. TABLE IN THE LATETST EDITION OF SMACNA EXCEPT AS HEREIN NOTED AND/OR AS DETAILED ON THE DRAWINGS.
   a. FIBERGLASS DUCT BOARD SHALL NOT BE UTILIZED. DUCTWORK, PLENUM, ETC. SHALL BE CONSTRUCTED OF SHEET METAL.
   b. VANED ELBOWS ARE TO UTILIZE DOUBLE THICKNESS VANES WITH THE ELBOW HEAL RADIUSED THE SAME AS THE TURNING VANE. ELBOW CHEEKS ARE TO BE MINIMUM OF 3". VANED ELBOWS ARE NOT TO BE UTILIZED IN DUCTWORK WHERE VELOCITY EXCEEDS 2000 FPM.
   c. RADIUS ELBOWS, 1/3 RADIUS OR FULL RADIUS ARE TO BE UTILIZED EXCEPT WITHIN 20' OF AN AIR OUTLET. 1/3 RADIUS ELBOWS SHALL HAVE A TURNING VANE ONE GAGE HEAVIER THAN DUCT CONSTRUCTION.
   d. ALL DUCTWORK DIMENSIONS INDICATED ON PLANS ARE CLEAR INSIDE DIMENSIONS. WHERE DUCTS ARE LINED, DUCTWORK IS TO BE INCREASED TO MAINTAIN THAT FREE AREA.
   e. FLEXIBLE CONNECTIONS TO ALL EQUIPMENT SHALL BE MADE WITH 3" WIDE DOUBLE NEOPRENE COATED FLAME RETARDANT FIBER GLASS FLEXIBLE CONNECTION. FLEXIBLE TO HAVE A MINIMUM OF 24" GAGE, 3" WIDE SHEET METAL COLLARS PERMANENTLY ATTACHED TO EACH SIDE.
   f. MITERED OFFSETS GREATER THAN 30° IN EITHER DIRECTION SHALL NOT BE PERMITTED.
   g. CHANGES IN DUCT SIZES SHALL BE MADE BY UNIFORM TAPER SECTION WITH A MAXIMUM INCLUDED ANGLE OF DIVERGENCE OF 15°.
   h. SPLITTER DAMPERS SHALL NOT BE PERMITTED UNLESS SPECIFICALLY NOTED ON THE DRAWING.
   i. VOLUME DAMPERS SHALL BE SINGLE BLADE UP TO 6" IN WIDTH AND MULTIBLADE FOR LARGER SIZES. VOLUME DAMPERS SHALL HAVE BALL BEARINGS AND SHALL INCORPORATE LOCKING TYPE INDICATING ADJUSTMENT.
   j. DUCT HANGER – WHERE DUCTWORK EXCEEDS 36" IN THE LARGEST DIMENSION TRAPEZE HANGERS SHALL BE UTILIZED.
   k. FLEXIBLE DUCTS TO BE WIREMOLD WG INSULATED FLEXIBLE DUCTWORK RATED AT 0.5" POSITIVE STATIC PRESSURE MINIMUM. MAXIMUM LENGTH OF FLEXIBLE DUCT TO BE 5'-0".

C. GRILLES, REGISTERS AND DIFFUSERS

1. REFER TO DRAWINGS FOR BASIS OF DESIGN.
2. AIR DEVICES BY TITUS, ANEMOSTAT, CARNES OR BARBER COLEMAN MEETING ALL SPECIFIED REQUIREMENTS MAY BE FURNISHED AT THE CONTRACTOR'S OPTION.

D. MANUAL BALANCE DAMPERS

1. BASED ON AMERICAN WARMING TYPE VC-2 OPPOSED BLADE WITH HEAVY DUTY MOLDED NYLON BEARINGS, 16 GAUGE GALVANIZED STEEL BLADES (8" MAX. WIDTH), EXTENDED SHAFT AND LINKAGE.
   a. BALANCE DAMPERS FOR ROUND DUCTS SHALL BE AMERICAN WARMING TYPE VC-9 SINGLE BALDE, 22 GAUGE (4" TO 12"), 20 GAUGE (13" TO 18") AND AND 18 GAUGE (19" TO 24") GALVANIZED STEEL.
   b. ALL DAMPERS SHALL BE EQUIPPED WITH LOCKING QUADRANTS.
2. AT THE CONTRACTOR'S OPTION, MANUAL BALANCING DAMPERS SHALL BE MANUFACTURED BY THE CONTRACTOR PER SMACNA STANDARDS. DAMPERS SHALL HAVE LOCKING QUADRANTS ON BOTH SIDES OF THE DUCT.
3. DAMPERS BY RUSKIN, AIR BALANCE, GREENHECK OR VENT PRODUCTS OF THE SAME TYPE AND MEETING SPECIFIED REQUIREMENTS, MAY BE FURNISHED AT THE CONTRACTOR'S OPTION.

E. TESTS AND ADJUSTMENTS

1. CONTRACTOR SHALL ARRANGE AND PAY FOR A CERTIFIED TEST AND AIR BALANCE FOR THE PROJECT, WITHIN TWO WEEKS AFTER COMPLETION OF THE CONSTRUCTION. A CERTIFIED AIR BALANCE REPORT SHALL BE SUBMITTED TO THE OWNER FOR REVIEW AND APPROVAL. IN THE EVENT THAT THE OWNER REQUIRED ADJUSTMENTS TO OWNER'S AIR DISTRIBUTION, CONTRACTOR SHALL PAY ALL COSTS RELATED THERE TO.

EXHAUST FAN SCHEDULE

MANUFACTURER'S MODEL NUMBER BASED ON GREENHECK UNLESS OTHERWISE NOTED.
KEY: CENT.–CENTRIFUGAL; PROP.–PROPELLER; F.C.–FORWARD CURVED; B.I.–BACKWARD INCLINE; A.F.–AIR FOIL; A.T.L.–ACROSS THE LINE; VFD–VARIABLE FREQUENCY DRIVE

FAN NO.	LOCATION	FUNCTION	MFGR. MODEL NUMBER	FAN TYPE	WHEEL TYPE & SIZE	CFM	TOTAL S.P. "W.G.	R.P.M.	TIP SPEED F.P.M.	OUTLET VELOCITY F.P.M	MAX. SOUND RATING (SONES)	MOTOR H.P.	BHP REQ'D	VOLT / PHASE	TYPE MOTOR STARTING	DAMPER: GRAVITY	DAMPER: MOTOR OPERATED	DRIVE: ADJUST. SHEAVE	DRIVE: DIRECT	REMARKS
EF-1	MECHANICAL ROOM	RESTROOM EXHAUST	GREENHECK CSP-A390-VG	B.I. EXHAUST	F.C. 7.75"	150	0.5"	1220	1765	139	2.0	1/15	0.04	120 / 1	V.F.D.	●			●	(1)(2)(3)

(1) FAN SHALL BE FURNISHED W/FACTORY MOUNTED VARIABLE SPEED SWITCH FOR BALANCING. (2) SUPPORT FAN FROM OVERHEAD STRUCTURE W/ VIBRATION ISOLATION KIT, RODS & AUXILIARY STEEL. (3) FAN TO BE CONTROLLED BY OCCUPANCY SENSOR IN EITHER RESTROOM.

CABINET UNIT HEATER SCHEDULE

MANUFACTURER'S MODEL NUMBER BASED ON QMARK UNLESS OTHERWISE NOTED.

UNIT NO.	MFGR. MODEL NUMBER	KW	MBH	AMPS	MOUNTING TYPE	CFM	VOLT / PHASE	REMARKS
CUH-1	AWH4004	4.0	13.6	16.7	RECESSED	---	240 / 1	(1)(2)
CUH-2	AWH4004	4.0	13.6	16.7	WALL-MOUNTED	---	240 / 1	(1)(2)(3)
CUH-3	AWH4004	4.0	13.6	16.7	RECESSED	---	240 / 1	(1)(2)

(1) FURNISH WITH TAMPER PROOF THERMOSTAT. (2) PROVIDE INTEGRAL DISCONNECT SWITCH. (3) FURNISH WITH SURFACE MOUNTING FRAME.

AIR TERMINAL SCHEDULE

TYPE OF OUTLET — A – 8 – 300 — AIR QUANTITY IN C.F.M. (DIFF. & REG. ONLY)
SIZE OF OUTLET (NECK SIZE DIAMETER FOR DIFFUSERS)
TYPE OF OUTLET — B4 – 300 — AIR QUANTITY IN C.F.M. (DIFF. & REG. ONLY)
LINEAR DIFFUSERS: NUMBER OF SLOTS

TYPE	DESCRIPTION
A	RETURN/EXHAUST AIR GRILLE, LAY-IN, PRICE MODEL 630: 6"x6". FURNISH WITH BLADES PARALLEL TO "LONG" DIMENSION.

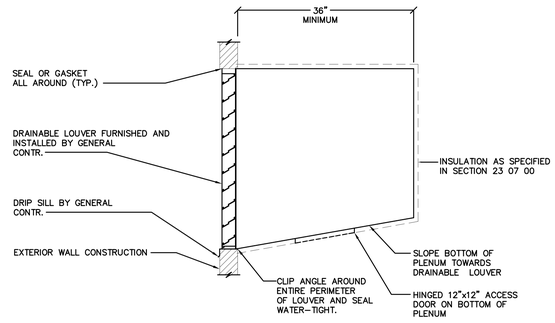
NOTES: 1. PROVIDE A SHEET METAL PLENUM ABOVE/BEHIND EACH DUCTED GRILLE OR REGISTER FOR MAKING A CONNECTION TO THE BRANCH DUCT. PAINT THE INSIDE OF ALL UNLINED PLENUMS FLAT BLACK.
2. COORDINATE THE GRID FACE DIMENSION OF ALL LAY-IN TYPE CEILING SUSPENSION SYSTEMS WITH THE GENERAL CONTRACTOR. PROVIDE NARROW TEE TYPE DEVICES WHERE REQUIRED.

LOUVER SCHEDULE

MANUFACTURER'S MODEL NUMBER BASED ON AIROLITE UNLESS OTHERWISE NOTED.

UNIT NO.	MODEL NUMBER	LOCATION	WIDTH (INCHES)	HEIGHT (INCHES)	DEPTH (INCHES)	FREE AREA (SF)	REMARKS
L-1	K6746	MECH. RM.	30	12	18"	0.32	(1)(2)

(1) OPENING IN WALL BY G.C. (2) PROVIDE WITH 70% KYNAR PVDF FINISH. COLOR SELECTION BY ARCHITECT.



LOUVER DETAIL

H1.2–24335.DWG

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ISSUE

NO.	DATE	DESCRIPTION
1	09/03/2025	BID/PERMIT

DATE	09.03.2025
JOB NO.	4265.00
DRAWN	PEA
CHECKED	PEA

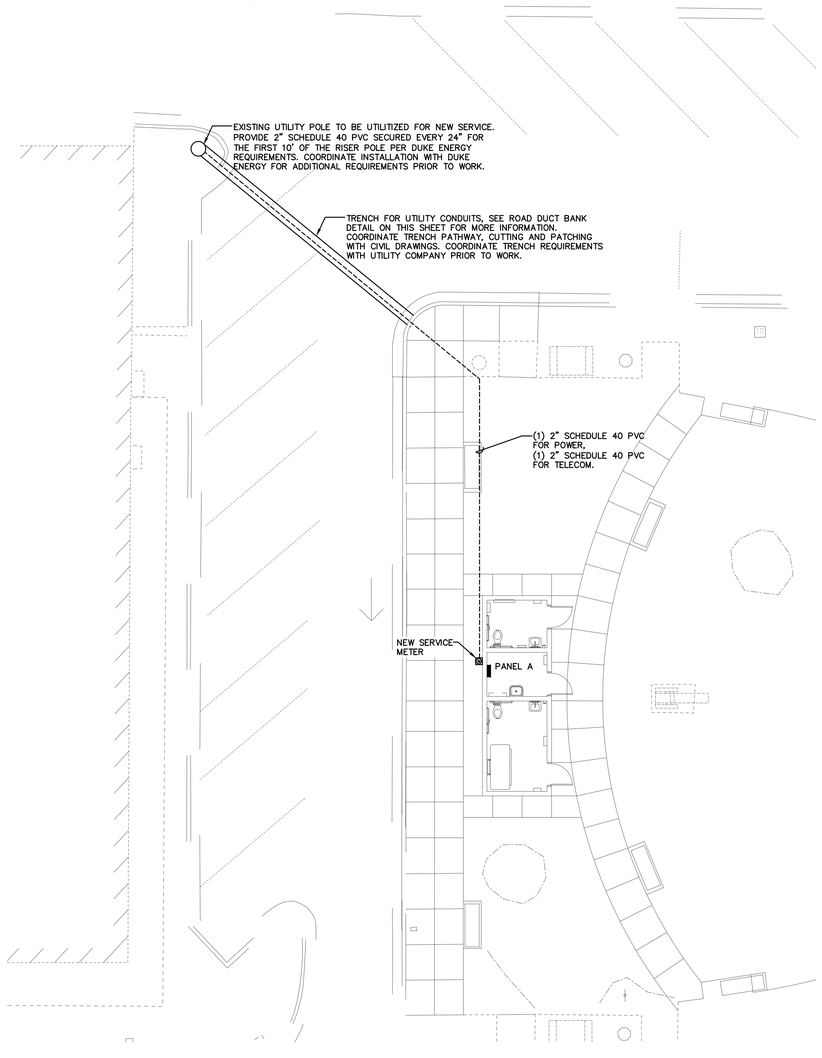
TITLE
HVAC SCHEDULES

SHEET NO.
H1.2

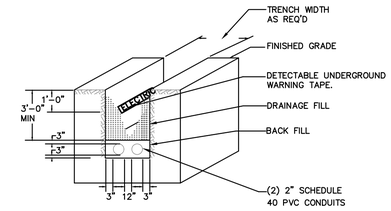
GENERAL NOTES

A. COORDINATE WITH ALL UTILITY COMPANIES DURING THE BIDDING PHASE. THE ELECTRICAL SITE PLAN IS DIAGRAMMATIC ONLY AND REPRESENTS GENERAL LOCATIONS OF EQUIPMENT AND UTILITY SPECIFICATIONS. COORDINATE WITH THE SEPARATE UTILITY COMPANIES TO REQUEST DETAILED SPECIFICATIONS AND EQUIPMENT SIZES.

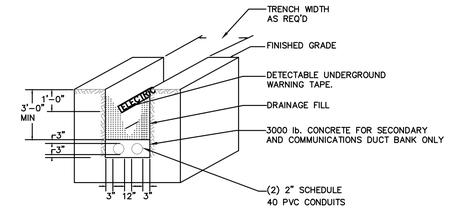
B. THE ELECTRICAL SITE PLAN DOES NOT SHOW ALL THE EXISTING UTILITIES OR EXISTING UNDERGROUND EQUIPMENT. THE ELECTRICAL CONTRACTOR SHALL COORDINATE WITH ALL TRADES, UTILITY COMPANY, EXISTING CONDITIONS, LOCATE ALL UNDERGROUND SERVICES AND CLEARLY INDICATE LOCATIONS PRIOR TO THE START OF EXCAVATING. ELECTRICAL CONTRACTOR SHALL ROUTE NEW UNDERGROUND ABOVE OR BELOW EXISTING UTILITIES AND EQUIPMENT AS ALLOWED PER N.E.C. REQUIREMENTS.



ELECTRICAL SITE PLAN
SCALE: 1"=10'-0"



DUCT BANK DETAIL
SCALE: NONE



ROAD DUCT BANK DETAIL
SCALE: NONE

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CHECKED	PEA

TITLE
ELECTRICAL SITE PLAN

SHEET NO.
E1.1

E1.1-24335.DWG

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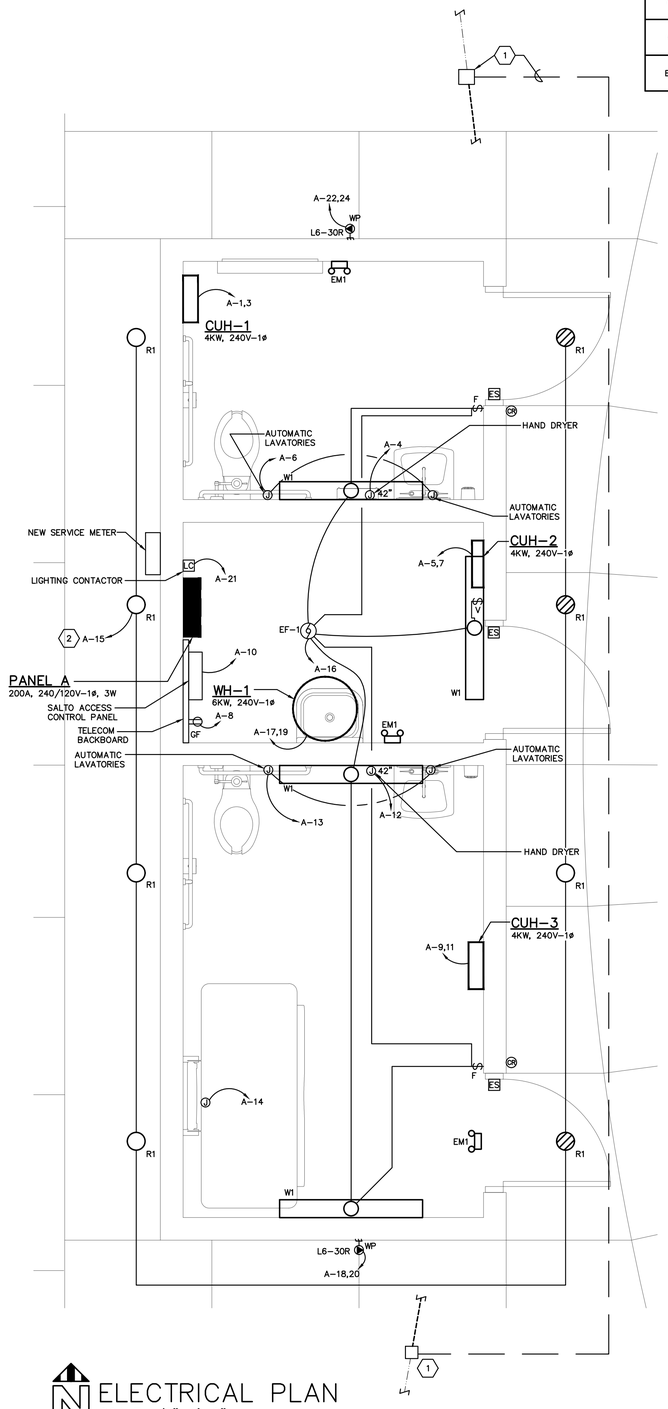
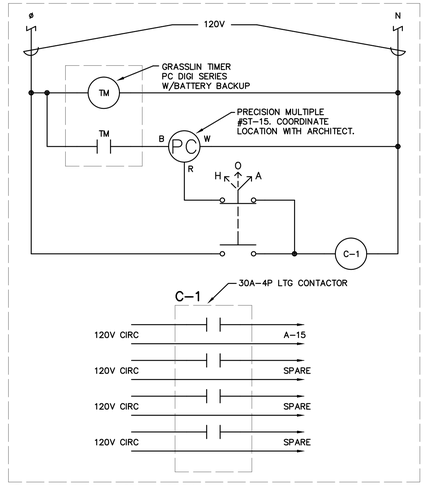


ELECTRICAL PLAN
SCALE: 1/2"=1'-0"

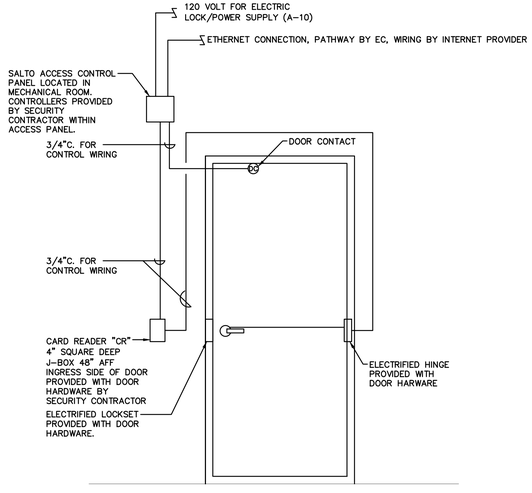
FIXTURE SCHEDULE

FIXTURE NUMBER	DESCRIPTION	MANUFACTURER	CATALOG NUMBER	LAMPS	REMARKS
W1	VANDAL RESISTANT 4' LED LINEAR, 2700LM, 3000K	LIFESHIELD (LITHONIA)	W3B4-TP-30-XW-SFA-ED-U	18.6W LED	MOUNT AT 6'-6" IN RESTROOMS, 7'-6" IN UTILITY ROOM.
R1	4" LED ADJUSTABLE DOWNLIGHT, WET LOCATION, 3000K, 700LM	DALS (CURRENT)	FQM4-3K-V-WH	9W LED	AIM FIXTURES AT GROUND AFTER INSTALLATION.
EM1	LED EMERGENCY WALL PACK	COMPASS (LITHONIIA)	CU2	<5W LED	--



NEMA 1 ENCLOSURE MOUNTED IN ELECTRICAL ROOM NEAR PANEL

EXTERIOR LIGHTING CONTROL DIAGRAM
SCALE: NONE



TYPICAL RESTROOM DOOR ACCESS CONTROL DOOR ELEVATION
SCALE: NONE

REFER TO ARCHITECTURAL SHEETS FOR DOOR LOCATIONS AND ROUGH-IN LOCATIONS.
NOTE: E.C. TO PROVIDE CONDUIT AND ROUGH-IN'S, SECURITY CONTRACTOR TO PROVIDE ACCESS CONTROL WIRING.

GENERAL NOTES

A. ALL EQUIPMENT, WIRING DEVICES, ETC. SHOWN ON THIS SHEET PLAN IN BOLD SOLID LINES ARE NEW UNLESS NOTED OTHERWISE.

B. ALL BRANCH CIRCUIT CONDUCTORS/RACEWAY SHALL BE NEW, BACK TO SOURCE PANELBOARD.

C. BRANCH CIRCUIT HOMERUNS TO BE IN EMT CONDUIT.

D. THE ELECTRICAL PLAN DOES NOT SHOW ALL THE EXISTING UTILITIES OR EXISTING UNDERGROUND EQUIPMENT. THE ELECTRICAL CONTRACTOR SHALL COORDINATE WITH ALL TRADES, EXISTING CONDITIONS, LOCATE ALL UNDERGROUND SERVICES AND CLEARLY INDICATE LOCATIONS PRIOR TO THE START OF EXCAVATING. ELECTRICAL CONTRACTOR SHALL ROUTE NEW UNDERGROUND ABOVE OR BELOW EXISTING UTILITIES AND EQUIPMENT AS ALLOWED PER N.E.C. REQUIREMENTS.

E. CONNECT EMERGENCY FIXTURES TO LOCAL LIGHTING CIRCUIT AND WIRE AHEAD OF SWITCHING TO MONITOR NORMAL LIGHTING. EMERGENCY FIXTURES SHALL FULLY ILLUMINATE UPON LOSS OF NORMAL UTILITY POWER.

F. PROVIDE EMERGENCY BACKUP BATTERY, ISOLITE E3U-36, OR APPROVED EQUAL FOR HATCHED LIGHT FIXTURES. FIXTURE TO BE CONTROLLED FROM LIGHTING CONTROL SYSTEM DURING NORMAL OPERATION (NORMAL POWER AVAILABLE). IN THE EVENT NORMAL POWER IS LOST, THE BATTERY SHALL PROVIDE POWER TO THE FIXTURE, BYPASSING THE LIGHTING CONTROL AND POWER THE FIXTURE AT FULL ILLUMINATION UNTIL NORMAL POWER RETURNS.

CODED NOTES ⬡

1. INTERCEPT EXISTING BRANCH CIRCUIT AND MAKE SAFE. PROVIDE QUAZITE ELECTRICAL PULLBOX EQUAL TO HUBBELL QUAZITE PG SERIES, 11"X18"X12" PULLBOX. PULLBOX SHALL HAVE HEAVY DUTY COVER WITH STAMPED LOGO "POWER". COORDINATE PULLBOX LOCATION WITH ARCHITECT PRIOR TO ROUGH-IN. DEMOLISH EXISTING BRANCH CIRCUIT UNDER NEW BUILDING FOOTPRINT. REROUTE CIRCUIT WITH NEW WIRING AND CONDUIT, MINIMUM #10 AWG AND #10 AWG GROUND, IN 1" SCHED. 40 PVC. COORDINATE ROUTING WITH ARCHITECT AND CIVIL PRIOR TO ROUGH-IN. COORDINATE DE-ENERGIZING OF BRANCH CIRCUIT WITH DUKE ENERGY PRIOR TO WORK.
2. RUN EXTERIOR LIGHTING CIRCUIT THROUGH EXTERIOR LIGHTING PHOTOCELL AND LIGHTING CONTACTOR FOR AUTOMATIC CONTROL OF EXTERIOR FIXTURES. PHOTOCELL EQUAL TO PRECISION #ST-15. MOUNT HIGH ON THE NORTH SIDE OF THE BUILDING FOR MAXIMUM EXPOSURE TO SUN AND OUT OF SITE FROM PUBLIC. COORDINATE FINAL LOCATION WITH THE ARCHITECT PRIOR TO ROUGH-IN. SEE EXTERIOR LIGHTING CONTROL DETAIL ON THIS SHEET FOR MORE INFORMATION.

LINE TYPE LEGEND

- LINE TYPE INDICATES EXISTING ELECTRICAL EQUIPMENT/DEVICES TO REMAIN.
- LINE TYPE INDICATES EXISTING, ELECTRICAL EQUIPMENT/DEVICES TO BE DEMOLISHED.
- LINE TYPE INDICATES NEW ELECTRICAL EQUIPMENT/DEVICES TO BE PROVIDED.
- LINE TYPE INDICATES BELOW GROUND ELECTRICAL WIRING

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TITLE
ELECTRICAL PLAN

SHEET NO.
E1.2

E1.2-24335.DWG

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LIGHTING CONTROL LEGEND

- WV — WALL MOUNTED SELF-ADJUSTING 2400 SQ. FT. SINGLE-CIRCUIT DUAL TECHNOLOGY (ULTRA/PIR) SENSOR WITH 180° FIELD OF VIEW – ACUITY CONTROLS MODEL #WSX-PDT-VA. SWITCH SHALL BE PROGRAMMED FOR MANUAL ON AND AUTO OFF.
- WF — WALL MOUNTED SELF-ADJUSTING 2400 SQ. FT. SINGLE-CIRCUIT DUAL TECHNOLOGY (ULTRA/PIR) SENSOR WITH 180° FIELD OF VIEW AND FAN CONTROL – ACUITY CONTROLS MODEL #WSX-2P-FAN. SWITCH SHALL BE PROGRAMMED FOR AUTO ON AND AUTO OFF.

NOTES:

1. REFER TO WIRING DIAGRAMS ON THIS SHEET.
2. SET SENSORS FOR MAXIMUM SENSITIVITY AND TIME DELAYS FOR 30 MINUTES. COORDINATE FINAL SETTINGS WITH OWNER/TENANT.
3. INSTALL PER MANUFACTURER'S WRITTEN INSTRUCTIONS.
4. APPROVED EQUALS SHALL BE BY NX CONTROLS, LEVITON, WATTSTOPPER DLM, LUTRON ENERGI TRI-PAK, LSI AIRLINK, & CRESTRON ZUM.

LIGHTING CONTROL NOTES

1. STRAIGHT LINES BETWEEN DEVICES/LUMINAIRES INDICATE SWITCHED CIRCUIT. ARCED LINES INDICATE UNSWITCHED CIRCUIT.
2. POWER PACKS & WIRING ARE SHOWN ON THE DRAWINGS FOR SPECIFIC CIRCUITING & SWITCHING, EXCEPT WHEN CONTROL INTENT IS CLEAR (EX.-BOUND BY A ROOM), ALL SWITCH CONTROLS & POWER PACKS SHALL BE FURNISHED & INSTALLED AS REQUIRED. IT IS THE INTENT OF THESE DOCUMENTS THAT A COMPLETE & FUNCTIONAL BRANCH CIRCUIT WIRING & CONTROL SYSTEM IS FURNSHED & INSTALLED.

ELECTRICAL LEGEND

SYMBOL	DESCRIPTION	MOUNTING HGT. TO CENTER UNLESS OTHERWISE NOTED
R1,a	LIGHT FIXTURE: TYPE "R1" SEE LIGHTING FIXTURE SCHEDULE; WIRED TO SWITCH "a"	
	EMERGENCY LIGHTING BATTERY PACK WITH INTEGRAL HEADS (TYPE AND MOUNTING AS NOTED; SEE LIGHTING FIXTURE SCHEDULE)	90"
	CEILING OR WALL MOUNTED LIGHTING FIXTURE TYPE SEE LIGHTING FIXTURE SCHEDULE	SEE DRAWINGS
$a	SINGLE POLE SWITCH; a = SWITCH "a"	42"
$2;3;4;K;P	SPECIAL SWITCH: 2-WAY; 3-WAY; 4-WAY; KEY OPERATED; SWITCH WITH PILOT LIGHT	42"
	DUPLEX RECEPTACLE; 3 WIRE GROUND TYPE	18"
GF	DUPLEX RECEPTACLE W/ GROUND FAULT INTERRUPTER	18"
WP	DUPLEX RECEPTACLE W/ WEATHERPROOF COVER	18"
	SPECIAL PURPOSE RECEPTACLE AS NOTED ON DRAWING	18"
J, JF	JUNCTION BOX; WALL / CEILING MOUNTED: FLOOR MOUNTED	SEE DRAWINGS
	ELECTRICAL PANEL – SURFACE MOUNT, FLUSH MOUNT	6'-0" TO TOP
	SAFETY DISCONNECT SWITCH	
ES	ELECTRIC STRIKE	
CR	CARD READER	
SJ	SECURITY JUNCTION BOX	

ELECTRICAL ABBREVIATIONS

AWG	AMERICAN WIRE GAUGE	G.C.	GENERAL CONTRACTOR
A	ABOVE COUNTER	GRD	GROUND
AFF	ABOVE FINISHED FLOOR	LTG	LIGHTING
CLG	CEILING	MECH	MECHANICAL
C	CONDUIT	PNL	PANEL
E.C.	ELECTRICAL CONTRACTOR	REC	RECEPTACLE
E	EXISTING TO REMAIN	TYP	TYPICAL
FIX	FIXTURE	WP	WEATHER PROOF

ELECTRICAL SPECIFICATIONS

A. GENERAL CONDITIONS: THE BIDDERS WILL EXAMINE ALL DRAWINGS AND READ ALL PARTS OF THE SPECIFICATIONS TO AVOID OMISSIONS, DUPLICATIONS, AND TO ENSURE COMPLETE EXECUTION OF ALL WORK FOR ELECTRICAL CONSTRUCTION.

B. GENERAL: THE WORK UNDER THIS CONTRACT SHALL INCLUDE ALL LABOR, MATERIALS AND EQUIPMENT AND INCIDENTAL COSTS NECESSARY TO FURNISH AND INSTALL ALL ELECTRICAL WORK, EQUIPMENT, LAMPS, ETC. INDICATED ON THE DRAWINGS AS SPECIFIED HEREIN, OR BOTH.

C. SCOPE: FURNISH LABOR, MATERIALS, TOOLS, EQUIPMENT, ETC. REQUIRED FOR A COMPLETE INSTALLATION OF ELECTRICAL SYSTEMS AND WORK IN ACCORDANCE WITH LOCAL CODES, AND GOVERNING BODIES HAVING JURISDICTION, AS SHOWN ON THE DRAWINGS, AND AS SPECIFIED.

D. APPLY FOR, SECURE AND PAY FOR ALL REQUIRED PERMITS, FEES, LICENSES AND ROYALTIES TO ACCOMPLISH THE WORK. APPLY FOR, SECURE AND PAY FOR ALL REQUIRED TESTS AND INSPECTIONS TO ACCOMPLISH THE WORK IN CONFORMANCE WITH ALL CODES AND JURISDICTIONS. COMPLY WITH RULES AND REGULATIONS OF JURISDICTIONAL AUTHORITIES AND/OR OWNER SPECIFICATIONS AND REPORT ANY DEVIATIONS ON DRAWINGS TO THE OWNER.

E. THE ELECTRICAL SUBCONTRACTOR SHALL FURNISH, WITHOUT EXTRA CHARGE, ANY ADDITIONAL MATERIALS AND LABOR THAT MAY BE REQUIRED FOR COMPLIANCE WITH ALL GOVERNING LAWS, RULES AND REGULATIONS, EVEN THOUGH THE WORK IS NOT MENTIONED IN THESE SPECIFICATIONS OR SHOWN ON THE DRAWINGS. NOTHING IN THE SPECIFICATIONS OR DRAWINGS SHALL BE DEEMED AS AUTHORITY TO VIOLATE ANY GOVERNING CODE.

F. FURNISH A WRITTEN CERTIFIED GUARANTEE, IN ACCEPTABLE FORM TO THE OWNER, AGAINST ANY DEFECTIVE WORKMANSHIP, MATERIAL AND OPERATING EQUIPMENT. THIS GUARANTEE SHALL BE IN FORCE AND EFFECTIVE FOR A PERIOD OF ONE (1) YEAR AFTER ACCEPTANCE OF THE INSTALLATION.

G. ALL WIRING 100 VOLTS AND OVER SHALL BE RUN CONCEALED IN EMT CONDUIT. MC CABLE MAY BE INSTALLED AT THE CONTRACTORS OPTION AS SPECIFIED BELOW. ALL RACEWAYS BELOW GRADE OR UNDER THE SLAB SHALL BE A MINIMUM OF 1", RIGID SCHEDULE 40 PVC OR GRC TYPE CONDUIT.

H. ALL CIRCUITS 100 VOLTS AND OVER SHALL INCLUDE A WIRED GROUND SIZED AS SHOWN ON THE DRAWINGS AND LISTED IN THE NEC.

I. WIRING SHALL BE STRANDED COPPER, XHHW, THHN, THWN OR THW #12 AWG MINIMUM, AND BE UL LABELED.

J. MC ARMORED CABLE MAY BE USED CONCEALED IN STUD WALLS AND ABOVE CEILINGS FOR LIGHTING, RECEPTACLES, MOTOR AND FIXED EQUIPMENT BRANCH CIRCUITS IN #12 AWG AND #10 AWG SIZES ONLY. MC CABLE SHALL NOT BE INSTALLED IN ANY EXPOSED AREAS INCLUDING BUT NOT LIMITED TO FINISHED AREAS, MECHANICAL, ELECTRICAL ROOMS, ETC. ALL MC TYPE ARMORED CABLE SHALL HAVE 600 VOLT INSULATION AND FULL SIZE INSULATED GROUND CONDUCTOR.

K. DUPLEX GROUNDING TYPE TAMPERPROOF RECEPTACLES SHALL BE HUBBELL #TR5352 OR EQUAL. OUTLETS SHALL NOT BE INSTALLED BACK TO BACK.

L. DUPLEX GFCI TAMPERPROOF RECEPTACLES SHALL BE HUBBELL #GFRTW20W OR EQUAL.

M. ALL PLATES SHALL BE STAINLESS STEEL WITH TAMPERPROOF FASTENERS.

N. WEATHERPROOF COVER PLATES SHALL BE HUBBELL #HBLSS263R OR EQUAL.

O. ALL RECEPTACLES SHALL BE TAMPERPROOF UNLESS NOTED OTHERWISE.

P. ALL EMPTY CONDUITS SHALL BE PROVIDED WITH PULL STRING.

Q. OUTLET, DEVICE, AND WIRING BOXES SHALL BE SHEET STEEL WITH STAMPED KNOCKOUTS, THREADED SCREW HOLES, AND ACCESSORIES FOR EACH LOCATION INCLUDING MOUNTING BRACKETS AND STRAPS, CABLE CLAMPS, EXTERIOR RINGS, AND FIXTURE STUDS. PULL BOXES AND JUNCTION BOXES SHALL BE HOT DIPPED GALVANIZED STEEL WITH WELDED SEAMS. BOXES SHALL HAVE SCREW-ON OR BOLT-ON COVERS.

R. BRANCH CIRCUIT PANELBOARD SHALL BE PROVIDED AS SHOWN ON THE DRAWINGS, SQUARE D QO (240/120V) OR EQUAL BY SIEMENS OR ABB. MINIMUM AIC SHALL BE 10 KAIC, PROVIDE WITH COPPER BUS AND SEPARATE COPPER GROUND AND NEUTRAL BUS BAR. CIRCUIT BREAKERS SHALL BE BOLT ON TYPE SIZED AS SHOWN ON THE PANELBOARD SCHEDULE. MOUNT PANELBOARDS SUCH THAT NO CIRCUIT BREAKERS ARE ABOVE 6'-0" AFF.

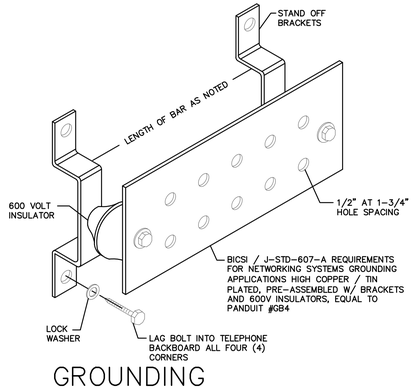
S. TELECOM BACKBOARD SHALL BE 3 FT WIDE X 4 FT HIGH X 3/4" THICK INTERIOR GRADE PLYWOOD. PAINT ALL BACKBOARDS WITH ONE COAT OF EXTERIOR WOOD PRIMER AND TWO COATS OF FIRE PROOFING LATEX FLAT EXTERIOR FINISH.

Panel ID: A | **Voltage: 240 / 120** | **Panel Type: LIGHTING AND POWER PANEL**
Location: ELECTRICAL ROOM | **Phase: 1** | **Enclosure: NEMA-1**
Mounting: SURFACE | **Wire: 3**
Main Type: MCB | **Main Size: 200 Amps**

All circuit breakers shall be standard bolt-on type, unless noted otherwise.
**** = Refer to one line diagram for wire sizes.**

GND SIZE	WIRE SIZE	BRANCH CIRCUIT DESCRIPTION	CKT BKR SIZE	CKT BKR OPTION	CONN. LOAD (KVA)	CKT NO.	PHASE	CKT NO.	CONN. LOAD (KVA)	CKT BKR OPTION	CKT BKR SIZE	BRANCH CIRCUIT DESCRIPTION	WIRE SIZE	GND SIZE
10	10	CUH-1	30/2	-	2.000	1	A	2	0.000	-	20/1	SPARE	-	-
-	10	-	-	-	2.000	3	B	4	1.500	-	20/1	HAND DRYER	12	12
10	10	CUH-2	30/2	-	2.000	5	A	6	0.100	-	20/1	LAVATORIES	12	12
-	10	-	-	-	2.000	7	B	8	0.180	-	20/1	GEN. REC	12	12
10	10	CUH-3	30/2	-	2.000	9	A	10	0.100	-	20/1	ACCESS CTRL PANEL	12	12
-	10	-	-	-	2.000	11	B	12	1.500	-	20/1	HAND DRYER	12	12
12	12	LAVATORIES	20/1	-	0.100	13	A	14	1.200	GF	20/1	CHANGING STATION	12	12
12	12	EXTERIOR LTG	20/1	-	0.100	15	B	16	0.100	-	20/1	INTERIOR LTG	12	12
10	8	WH-1	40/2	-	3.000	17	A	18	2.400	GF	30/2	SPECIAL EVENT REC	10	10
-	8	-	-	-	3.000	19	B	20	2.400	-	-	-	10	-
12	12	LIGHTING CONTACTOR	20/1	-	0.100	21	A	22	2.400	GF	30/2	SPECIAL EVENT REC	10	10
-	-	SPARE	20/1	-	0.000	23	B	24	2.400	-	-	-	10	-
-	-	SPARE	20/1	-	0.000	25	A	26	0.000	-	-	SPACE	-	-
-	-	SPACE	-	-	0.000	27	B	28	0.000	-	-	SPACE	-	-
-	-	SPACE	-	-	0.000	29	A	30	0.000	-	-	SPACE	-	-

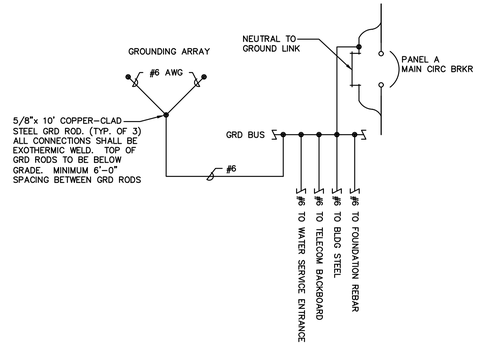
Demand Load Panel Summary		Connected Load Panel Summary		Breaker Options (If Used):
30.3 KVA	Phase A:	15.4 KVA	128.3 AMPS	TC - Time Clock Control
126.2 AMPS	Phase B:	17.2 KVA	143.2 AMPS	LO - Lock-On Device
				GF - GND Fault CKT Interrupter
	Total:	32.6 KVA	135.8 AMPS	E - Existing to Remain
				SH - Shunt Trip Breaker



GROUNDING BUS DETAIL TMGB & TGB

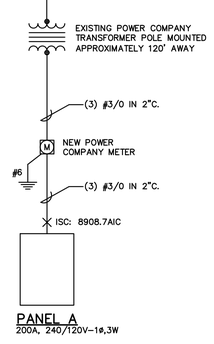
SCALE: NONE

TMGB – 1/4" X 4" X 24" W/16 1/2" HOLES, SPACED 1-3/4"
TGB – 1/4" X 4" X 12" W/7 1/2" HOLES, SPACED 1-3/4"



GROUNDING DETAIL

SCALE: NONE



ONE-LINE DIAGRAM

SCALE: NTS

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09/03/2025

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Restroom Facility
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ISSUE		
NO.	DATE	DESCRIPTION
1	09/03/2025	BID/PERMIT

DATE	09.03.2025
JOB NO.	4265.00
DRAWN	PEA
CHECKED	PEA

TITLE
ELECTRICAL DETAILS

SHEET NO.
E1.3

E1.3-24335.DWG

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DESIGNED BY	DRAWN BY	CHECKED BY	JOB NUM.
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