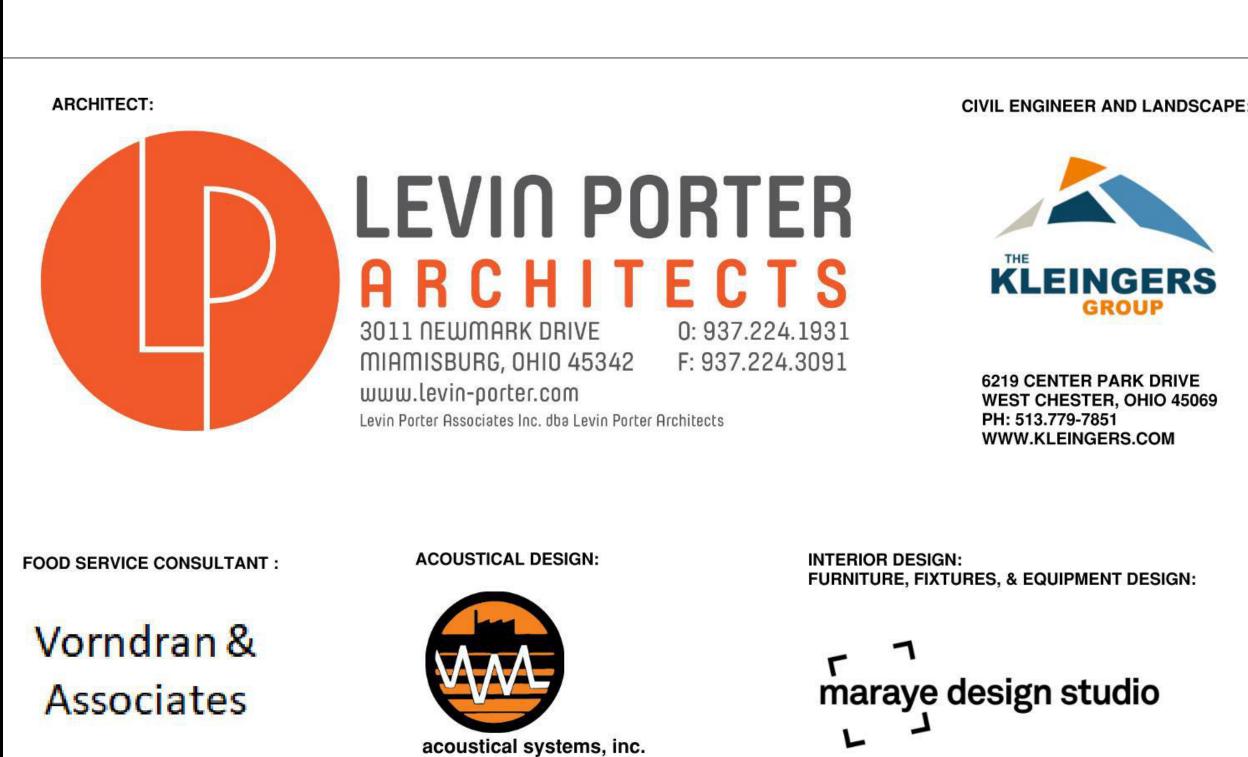


West Carrollton City Schools

NEW STORAGE BUILDING

3450 ALEX BELL ROAD WEST CARROLLTON, OH 45449



3000 E. MAIN STREET SUITE B170 COLUMBUS, OHIO 43209 PH: 614.231.3082 WWW.MARAYE.COM

3125 STERLING RIDGE COVE FORT WAYNE, INDIANA 46825 PH: 260.496.9992 WWW.VONDRANCONSULTING.COM 7089 CORPORATE WAY DAYTON, OHIO 45459 PH: 937.898.3198 WWW.ACOUSTICALSYSTEMS.COM

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GEOTECHNICAL ENGINEERING SPECIAL INSPECTIONS QA TESTING **ENVIRONMENTAL TESTING:**

associates inc ----Environmental, Geotechnical Engineering & Testing

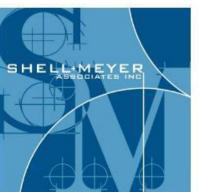
1915 N. 12TH STREET TOLEDO,OHIO 43604 PH: 419.324.2222 WWW.CTCONSULTANTS.COM LEED and ENERGY ANALYSIS:

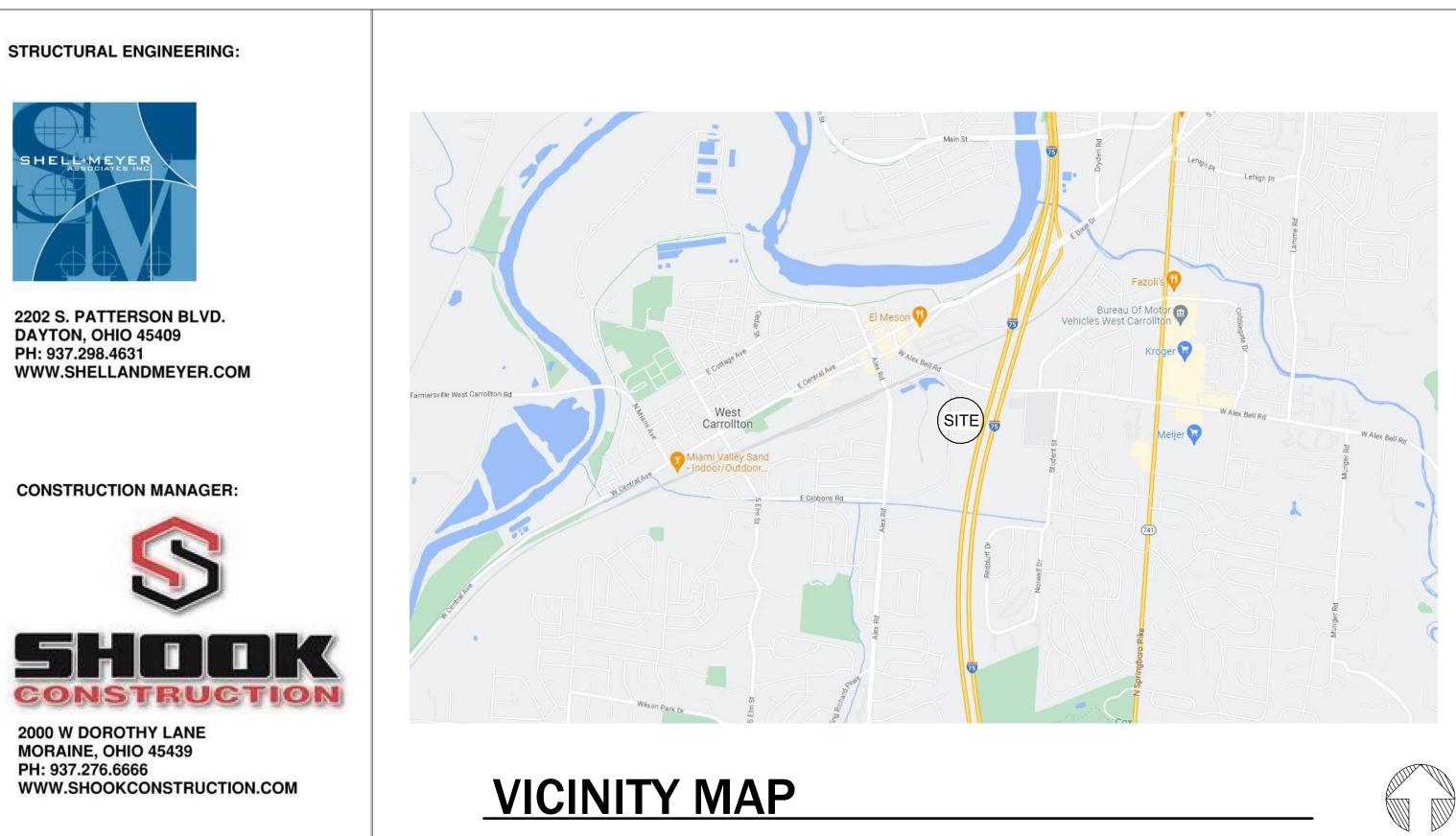


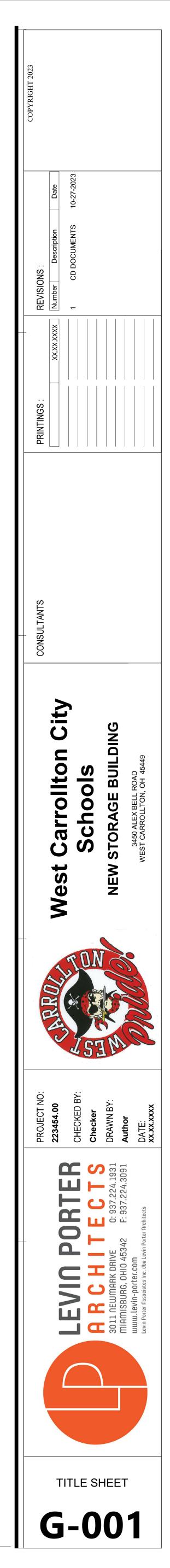
BC+E Engineering 204 S. LUDLOW ST SUITE 402 DAYTON, OHIO 45402 PH: 937.331.9204 WWW.BCE-ENGINEERING.COM

DRAWING INDEX

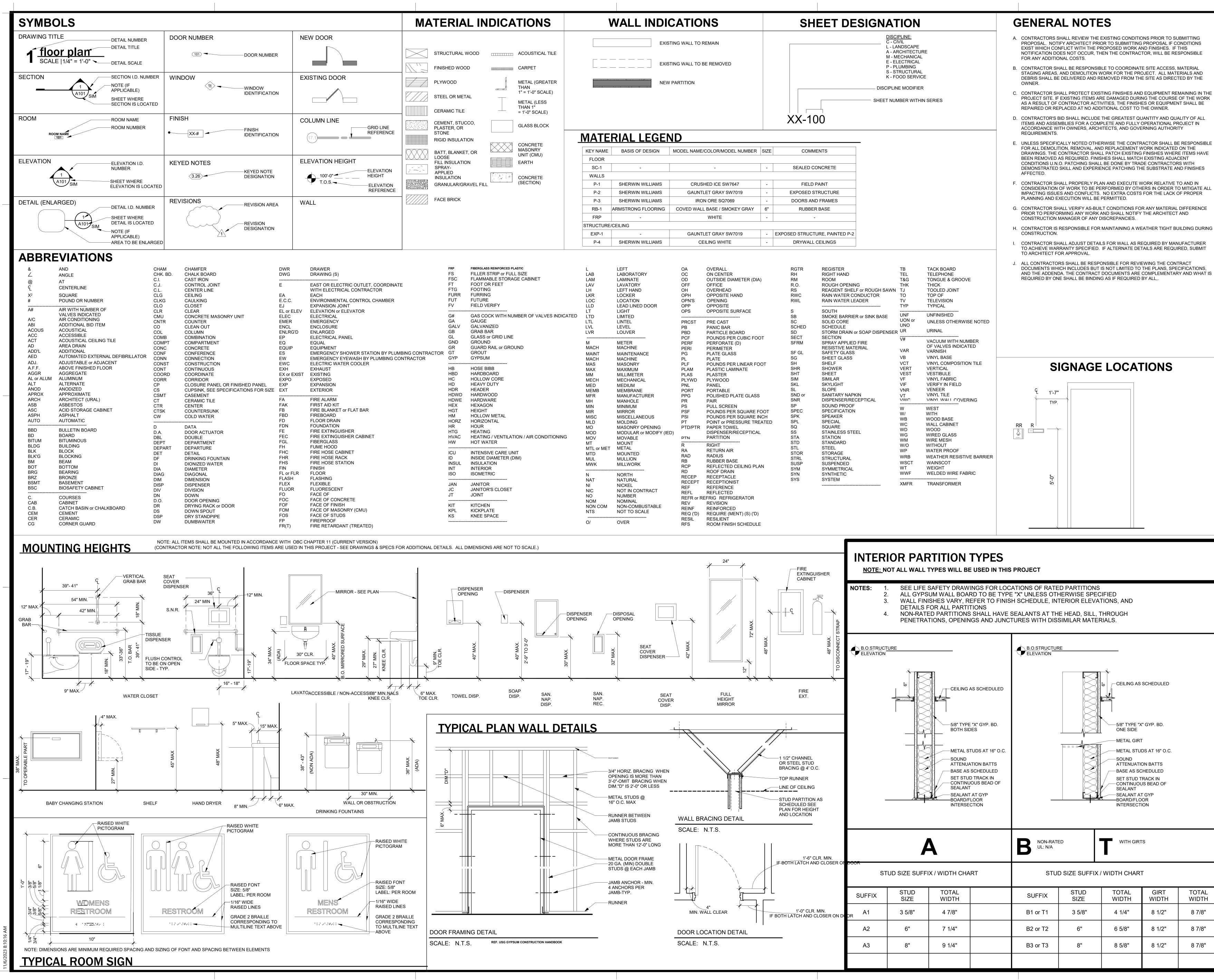
SHEET NO.	SHEET NAME						
GENERAL							
G-001	TITLE SHEET						
G-002	GENERAL NOTES AND SYMBOLS						
G-003	LIFE SAFETY PLAN						
CIVIL ENGINEERING							
C001	GENERAL NOTES AND DETAILS						
C002	EROSION CONTROL NOTES & DETAILS						
C110	SURVEY BASEMAP						
C120	DEMOLITION PLAN						
C130	LOCATION PLAN						
C140	UTILITY PLAN						
C141	UTILITY PROFILES						
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L100	LANDSCAPE PLAN						
STRUCTURAL	· ·						
S-001	STRUCTURAL NOTES						
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S-200	FOUNDATION SECTIONS						
ARCHITECTU	RAL						
A-101	FLOOR, CEILING AND ROOF PLANS						
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P001	LEGEND, GENERAL NOTES, & INDEX						
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E003	DETAILS						
E004	ELECTRICAL SITE PLAN						
E100	ELECTRICAL PLAN-PEMB BUILDING						

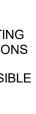


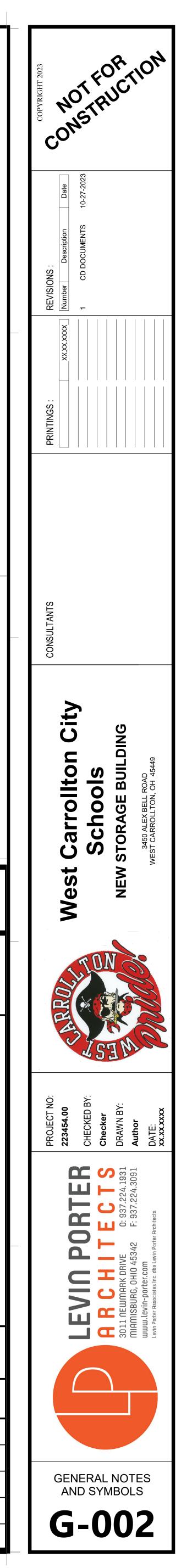




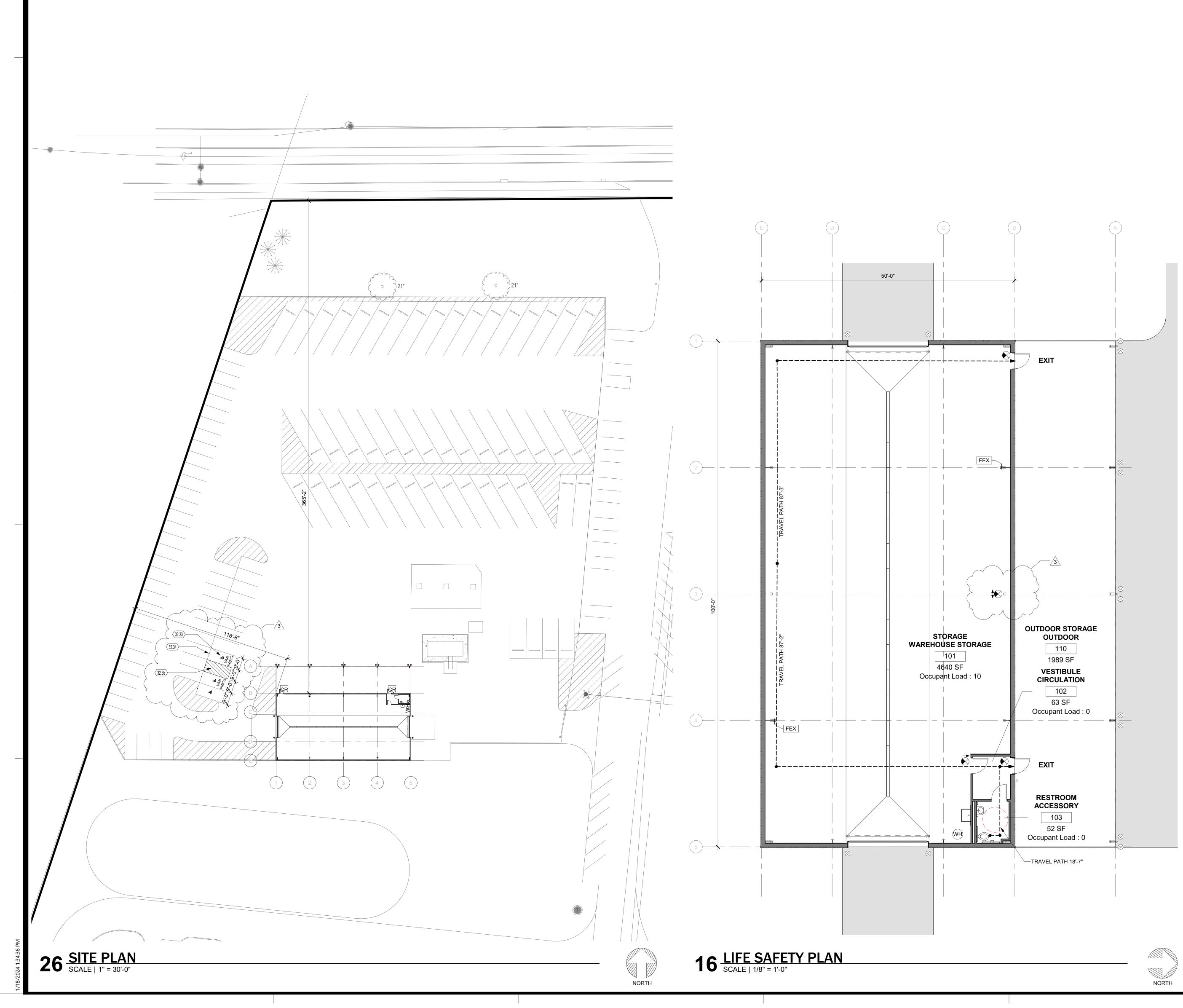
NORTH











CODE NOTES

2017 OHIO BUILDING CODE (WITH UPDATES) <u>Use and Occupancy Groups:</u> Storage Group S-2, Low Hazard (Section 311.3)

Construction Type: 2B (Section 602)

Allowable Building Height (Section 504) Per Table 504.3, 2B, S – the allowable building height in feet above grade plane as follows: Occupancy S-2: 55 feet (no suppression) Total Building Height: 20'-0"

<u>Allowable Number of Stories (Section 504)</u> Per Table 504.4, 2B, S – the allowable number of stories above grade plane are as follows:

Occupancy S-2: 3 stories (no suppression) Total Number of Stories: 1

Building Area (Section 506) Per Table 506.2, 2B, S-2: the following allowable areas are as follows: Occupancy S-2: 26,000 SF (no suppression)

Total Area of Building: 5,000 SF

Incidental Uses (Table 509) – N/A – none of the uses apply

Fire-Resistance Rating Requirements per Table 601, per 2B Primary Structural Frame – 0 Hours Bearing Walls – Exterior – 0 Hours Bearing Walls – Interior – 0 Hours Non-Bearing Walls – Exterior (per Table 602 – Group A, B, I, S-2) X < 5 ft – 1 hour 5 ft <= x < 10 ft – 1 hour 10 ft <= x < 30 ft – 0 hours x>= 30 ft – 0 hours Non-Bearing Walls Interior – 0 Hours

Floor Construction – 0 Hours Roof Construction – 0 Hours

<u>Combustible Materials in Types I and II Construction (Section 603)</u> Per Section 603.1, #7 Interior wall and ceiling finishes installed in accordance with Sections 801 and 803 are

permitted. Exposed plywood panels are permitted as an exposed finish. Refer to related section notes in this summary.

<u>Wall and Ceiling Finishes (Section 803)</u> Per Table 803.11, Non-sprinklered Rooms and Enclosed spaces in an S-Occupancy shall have a Class C rating. Per test data, Southern Pine Plywood has a Class B rating.

Automatic Sprinkler Systems (Section 903) This section is not applicable. A suppression system is not required for this project nor is one provided.

Portable Fire Extinguishers (Section 906) Portable Type ABC fire extinguishers will be provided. Refer to Life Safety Plan

Fire Alarm and Detection Systems (Section 907) This section is not applicable. An alarm system is not required for this project nor is one provided.

<u>Occupant Load (Section 1004)</u> Per Table 1004.1.2, the maximum floor area allowance per occupant are as follows:

Warehouse Storage 500 gross 5,000 SF / 500 = 10 occupants

Per Section 1005.3.2, the means of egress capacity size for components other than stairs is 0.2 inch per occupant. 10 occupants x 0.2 in = 1.6 inches. 32 inches provided Per Table 1006.3.1, the minimum number of exits per story for an occupant load of 1-500 is 2.

2 exits provided Per Table 1006.2.1, the maximum common path of egress travel distance (without a sprinkler system) is as follows: S-Occupancy – 100 feet for occupant loads less than 30 Per Table 1017.2, exit access travel distance without a sprinkler system is as follows: S-2-Occupancy – 300 feet

Special Inspections (Chapter 17) Refer to Structural Drawings for a listing of required Special Inspections.

Special Inspections performed by

TTL Testing & Drilling Services A subsidiary of CT Consultants, Inc. Attn. Brad Johnson, Associate Engineer 1915 North 12th Street

Toledo, OH 43604 bjohnson@ttl-testing.com 419-214-5159

Minimum Plumbing Facilities (Section 2902) Per 2902.3.2, facilities for men and women are located within the existing maintenance building, approximately 380' from the new storage building. This is less than the maximum permitted distance of 500'. The single restroom provided in this facility is for convenience only.

		ROOM	OCCUPANCY CHART		
Number	Name	Area	Room_Occupancy_Class	Room Area Per Occupant	OCCUP LOAI
		·			
101	STORAGE	4640 SF	WAREHOUSE STORAGE	500 SF	10
103	RESTROOM	52 SF	ACCESSORY	0 SF	
102	VESTIBULE	63 SF	CIRCULATION	0 SF	

LIFE SAFETY SCALE | 3/32" = 1'-0"

LIFE SAFETY ROOM TAG

W/ AREA:			
<u></u>		ROOM	NAME
Name		OCCUP	-
Room_Occupanc	cv Class	CLASSI	FICATION
101		ROOM	NUMBER
101		ROOM	AREA
150 SF - Occupant Load : Room	Occupant Load	OCCUPA	ANT LOAD
. –	• • —		

FIRE WALL SYMBOLS: EXIT SIGN / DIRECTION

■ ● ● ■ ● ● ■ 2 HOUR FIRE_____ • • • • • 1 HOUR FIRE _____

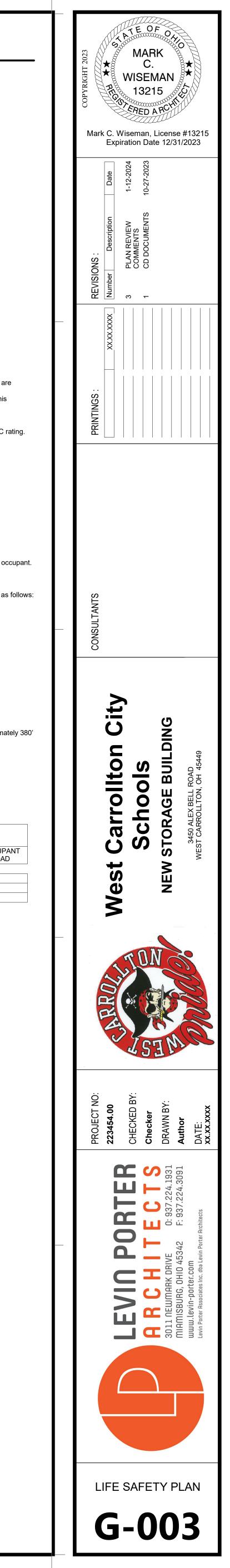
0 0 1 HOUR; SMOKE BARRIER

30 MINUTE SMOKE BARRIER *******

FIRE EXTINGUISHER

FEX

SMOKE RESISTIVE HAZARDOUS AREA



- 1. THE CITY OF WEST CARROLLTON, AND THE CURRENT EDITION OF THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS (ODOT CMS), INCLUDING ALL SUPPLEMENTS, SHALL GOVERN ALL MATERIALS AND WORKMANSHIP INVOLVED IN THE IMPROVEMENTS SHOWN ON THIS PLAN. IGNORE REFERENCES TO MEASUREMENT AND PAYMENT IN THE ODOT CMS UNLESS. NOTED OTHERWISE. IN THE CASE OF CONFLICTS BETWEEN THE ODOT CMS AND THE CITY OF WEST CARROLLTON REQUIREMENTS, THE CITY OF WEST CARROLLTON REQUIREMENTS SHALL PREVAIL.
- UTILITIES PROTECTION SERVICE AT LEAST 48 HOURS PRIOR TO WORK IN THE VICINITY OF THEIR UNDERGROUND LINES.
- WITH WRITTEN REPORTS.
- FROM ANY RESPONSIBILITY IN THE PERFORMANCE OF THE CONTRACT.
- INCLUDED IN THE PRICE BID FOR THE PROJECT.
- STORM DRAINAGE SYSTEM OR WATERCOURSE IS ILLEGAL AND PROHIBITED. 7. ANY WELL, WELL POINT, PIT, OR OTHER DEVICE INSTALLED FOR THE PURPOSE OF LOWERING THE GROUND WATER TO FACILITATE CONSTRUCTION OF THIS PROJECT SHALL BE PROPERLY ABANDONED IN OR HIS REPRESENTATIVE.
- REGISTRATION FORMS. PLEASE CONTACT: DIVISION OF WATER. OHIO DEPARTMENT OF NATURAL RESOURCES, FOUNTAIN SQUARE, COLUMBUS, OHIO 43224, (614)2656717.
- CONTROL DEVICES.
- 11. ALL EXISTING PAVEMENTS, WALKS, CURBS, ETC. SHALL BE SAWCUT BEFORE REMOVAL. IF, DURING DAMAGED AREA SHALL BE RECUT TO NEAT LINES AS DIRECTED BY THE ENGINEER. PAYMENT FOR SAWCUTTING SHALL BE INCLUDED IN THE PRICE BID FOR THE PROJECT.
- COST OF PAVEMENT REMOVAL AND DISPOSAL IN THE PRICE BID FOR THE PROJECT.

GRADING NOTES

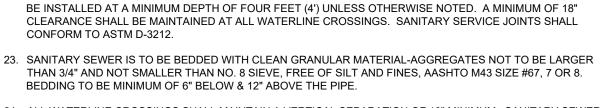
- 1. CONTRACTOR TO REMOVE TREES AND CLEAR AREAS AS NECESSARY TO PERFORM ALL SITE WORK INCLUDING GRADING AND UTILITY WORK.
- EXCAVATED MATERIALS WITHIN DRIP LINE, EXCESS FOOT OR VEHICULAR TRAFFIC, OR PARKING OF LEFT STANDING.
- 3. ALL ELEVATIONS SHOWN ARE FINISHED GRADE ELEVATIONS. 4. SITE BUILDING PAD EXCAVATION AND CONSTRUCTION TO BE PER GEOTECHNICAL ENGINEER'S AND ARCHITECT'S RECOMMENDATIONS. ALL BACKFILL MATERIAL MUST BE ACCEPTABLE TO THE GEOTECHNICAL ENGINEER.
- 5. ALL FILL UNDER PAVEMENT SHALL BE COMPACTED TO THE GEOTECHNICAL ENGINEER'S
- RECOMMENDATIONS.
- MANAGER. WEST CARROLLTON AND THE OHIO EPA.
- CONCEPTUAL PURPOSES ONLY.
- UTILITY NOTES

USE ODOT ITEM 659

- 1. ALL DRAIN TILE AND STORM SEWERS DAMAGED, DISTURBED OR REMOVED AS A RESULT OF THE OF THIS WORK TO BE INCLUDED IN THE PRICE BID FOR THE PROJECT.
- LOCATION. PRIOR TO THE BEGINNING OF CONSTRUCTION OR EARTH MOVING OPERATIONS, THE ARE NOT SHOWN.
- ANY UTILITIES AS REQUIRED BY THE PLAN WITH THE OWNER OF THE AFFECTED UTILITY.
- CONTROLLED, COMPACTED, AND INSPECTED BY AN APPROVED TESTING LABORATORY OR AN INSPECTOR FROM THE APPROPRIATE GOVERNMENTAL AGENCY.
- REMOVED ON THESE PLANS.
- CONFORM TO ADA REQUIREMENTS.
- THE REQUIREMENTS OF ODOT ITEM 611.
- STEPS. STEPS SHALL MEET THE REQUIREMENTS OF ODOT ITEM 611.
- NOTED. 11. IMMEDIATELY AFTER PLACEMENT OF ANY CONDUITS, THE CONTRACTOR SHALL CONSTRUCT THE END
- LIFT HOLES, ETC.
- MAINTAINED BY THE OWNER. EROSION CONTROL MEASURES MUST PROVIDE PROTECTION UNTIL COMPLETION OF THE PROJECT AND VEGETATIVE STABILIZATION.
- SEWER SYSTEMS ARE PROHIBITED.
- PVC PROFILE PIPE PER ODOT ITEM 707.43, HIGH DENSITY POLYETHYLENE PER ODOT ITEM 707.33, MANUFACTURER SPECIFIED FRICTION FACTOR OF 0.013 (N=0.013) OR LESS.
- HAVE 2, 4" PERFORATED UNDERDRAINS EXTENDING 10 LF FROM THE CATCH BASIN IN THE UPHILL DIRECTION AND CAPPED.
- 18. ALL YARD DRAINS SHALL BE ONE OF THE FOLLOWING: NYLOPLAST-ADS DRAIN BASIN, NDS DURACAST FABRICATED PVC CATCH BASIN, AGRI-DRAIN CATCH BASIN, OR APPROVED EQUAL. 19. ALL EXISTING INVERTS ALONG PROPOSED PIPE ALIGNMENTS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION OF THE SEWER.
- 20. ANY FIELD TILE CUT IN EXCAVATION WHICH DRAINS IN AN OFFSITE AREA MUST BE TIED INTO THE STORM DRAINAGE SYSTEM.
- 21. THE FLOW IN ALL SEWERS, DRAINS, FIELD TILES AND WATERCOURSES ENCOUNTERED SHALL BE MAINTAINED BY THE CONTRACTOR AT HIS OWN EXPENSE, AND WHENEVER SUCH WATERCOURSES AND DRAINS ARE DISTURBED OR DESTROYED DURING THE PROSECUTION OF THE WORK, THEY SHALL BE RESTORED BY THE CONTRACTOR AT HIS OWN EXPENSE TO A CONDITION SATISFACTORY TO THE ENGINEER.
- 22. SANITARY SEWER SHALL BE SDR-26 OR APPROVED EQUAL AND CONFORM TO THE STANDARDS AND SPECIFICATIONS OF MONTGOMERY COUNTY WATER AND SEWER. PIPE MUST MEET MINIMUM SLOPE CONFORM TO ASTM D-3212
- BEDDING TO BE MINIMUM OF 6" BELOW & 12" ABOVE THE PIPE.
- WATERLINE PIPE SHALL BE LOCATED AT ALL CROSSINGS TO ENABLE BOTH JOINTS TO BE LOCATED AS FAR FROM SEWER AS POSSIBLE. ALL WATER SHALL HAVE A MINIMUM OF 4' OF COVER.
- 25. WATERLINE SHALL BE TYPE K COPPER.

UNDERGROUND UTILITIES ARE PLOTTED FROM A

COMPILATION OF AVAILABLE RECORD INFORMATION AND SURFACE INDICATIONS OF UNDERGROUND STRUCTURES AND MAY NOT BE INCLUSIVE. PRECISE LOCATIONS AND THE EXISTENCE OR NON EXISTENCE OF UNDERGROUND UTILITIES CANNOT BE VERIFIED. PLEASE NOTIFY THE OHIO UTILITY PROTECTION SERVICE AT 811 OR 1-800-362-2764 BEFORE ANY PERIOD OF EXCAVATION OR CONSTRUCTION ACTIVITY.



SHALL BE LOCATED A MINIMUM OF 18" BELOW WATERLINE AT ALL CROSSINGS. WATERLINE SHALL BE LOCATED A MINIMUM OF 10' HORIZONTALLY FROM ANY SANITARY SEWER. ALL MEASUREMENTS SHALL BE TAKEN FROM OUTSIDE OF SEWER PIPE TO THE OUTSIDE OF WATERLINE PIPE. ONE FULL LENGTH OF

24. ALL WATERLINE CROSSINGS SHALL MAINTAIN A VERTICAL SEPARATION OF 18" MINIMUM. SANITARY SEWER

REQUIREMENTS OF MONTGOMERY COUNTY WATER AND SEWER AND OHIO EPA. SANITARY SEWER SHALL

FROM THE CATCH BASIN IN THE UPHILL DIRECTION AND CAPPED. ALL CATCH BASINS IN THE CURB ARE TO

706.02 CLASS IV. STORM SEWER PIPE LABELED "RCP" SHALL BE REINFORCED CONCRETE PIPE, ODOT ITEM 706.02 CLASS IV. ALL STORM IS TO BE INSTALLED PER ODOT ITEM 611. ALL STORM PIPE USED MUST HAVE A 17. ALL CATCH BASINS IN THE PAVEMENT ARE TO HAVE 4, 4" PERFORATED UNDERDRAINS EXTENDING 10 LF

15. ALL STORM STRUCTURES ARE ODOT TYPES UNLESS OTHERWISE INDICATED. 16. STORM SEWER PIPE LABELED "STM" SHALL BE ONE OF THE FOLLOWING: PVC SDR-35 PER ODOT ITEM 707.45. ALUMINIZED CORRUGATED METAL, ODOT ITEM 707.01, 707.02, OR REINFORCED CONCRETE PIPE, ODOT ITEM

13. THE CONTRACTOR IS TO CONSTRUCT CURBS, CATCH BASINS, DOWNSPOUTS, PIPING AND CONNECTIONS ETC. AS REQUIRED TO CONVEY THE ROOF AND PAVED SURFACE DRAINAGE TO THE DETENTION BASIN. 14. ROOF DRAINS, FOUNDATION DRAINS AND ALL OTHER CLEAR WATER CONNECTIONS TO THE SANITARY

TREATMENTS REQUIRED BY THE PLANS AT BOTH THE OUTLET AND INLET ENDS. THIS SHALL INCLUDE HEADWALLS, CONCRETE, RIP RAP, ROCK CHANNEL PROTECTION, SODDING, POURING BOTTOMS, MUDDING 12. ALL PROPOSED STORM SEWERS, SURFACE OR OTHER DRAINAGE FACILITIES ARE TO BE PRIVATE AND

10. DISTANCES SHOWN FOR BOTH SANITARY AND STORM SEWER PIPES ARE MEASURED FROM CENTER OF STRUCTURE. THE CONTRACTOR IS RESPONSIBLE FOR ACTUAL FIELD CUT LENGTH. COORDINATES FOR STORM AND SANITARY STRUCTURES ARE SHOWN TO THE CENTER OF STRUCTURE, UNLESS OTHERWISE

8. ALL CATCH BASINS WITH DEPTH GREATER THAN 4.5' SHALL BE PROVIDED WITH STEPS. STEPS SHALL MEET 9. ALL STORM AND SANITARY SEWER MANHOLES WITH A DEPTH GREATER THAN 4' SHALL BE PROVIDED WITH

6. ALL CATCH BASINS PLACED WITHIN THE PAVEMENT SHALL HAVE HEAVY DUTY FRAMES AND GRATES AND 7. ADJUST ALL EXISTING CASTINGS AND CLEANOUTS WITHIN PROJECT AREA TO GRADE AS REQUIRED.

5. CONTRACTOR TO REPLACE ANY PAVEMENT OR UTILITIES DAMAGED WHICH ARE NOT SPECIFIED TO BE

4. COMPACTED FILLS ARE TO BE MADE TO A MINIMUM OF THREE FEET ABOVE THE CROWN OF ANY PROPOSED SEWER PRIOR TO CUTTING OF TRENCHES FOR PLACEMENT OF SAID SEWERS. ALL FILLS SHALL BE

CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF THE UTILITIES SHOWN. THE CONTRACTOR IS ALSO RESPONSIBLE FOR THE PROTECTION AND/OR RELOCATION OF ANY UTILITIES THAT MAY EXIST AND 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE RELOCATION AND/OR PROTECTION OF

2. ALL EXISTING UTILITIES KNOWN TO EXIST HAVE BEEN SHOWN ON THESE PLANS IN THEIR APPROXIMATE

CONTRACTOR'S OPERATIONS SHALL BE REPLACED WITH THE SAME QUALITY PIPE OR BETTER, MAINTAINING THE SAME GRADIENT AS EXISTING. THE DRAIN TILE AND/OR STORM SEWER SHALL BE CONNECTED TO THE CURB SUBDRAIN, STORM SEWER SYSTEM OR OUTLETTED INTO THE ROADWAY DITCH AS APPLICABLE. REPLACED DRAIN TILE/STORM SEWER SHALL BE LAID ON COMPACTED BEDDING EQUAL IN DENSITY TO SURROUNDING STRATUM. REPLACEMENT SHALL BE DONE AT THE TIME OF THE BACKFILL OPERATION. COST

9. CONTRACTOR TO LAYOUT BUILDING BASED ON ARCHITECTURAL/FOUNDATION PLANS. SITE PLAN IS FOR

8. ALL GROUND SURFACE AREAS THAT HAVE BEEN EXPOSED OR LEFT BARE AS A RESULT OF CONSTRUCTION AND ARE TO FINAL GRADE AND ARE TO REMAIN SO, SHALL BE SEEDED AND MULCHED AS SOON AS PRACTICAL IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS. IF NO SPECIFICATIONS ARE SUPPLIED,

7. CONTRACTOR SHALL IMPLEMENT ALL SOIL AND EROSION CONTROL PRACTICES REQUIRED BY THE CITY OF

6. THE CONTRACTOR IS RESPONSIBLE FOR BALANCING THE SITE EARTHWORK ON SITE. THE CONTRACTOR IS RESPONSIBLE FOR BURY/BORROW PITS AS NEEDED TO BALANCE THE SITE. GEOTECH AND ENGINEER MUST APPROVE AREAS PRIOR TO BURY/BORROW OPERATIONS. AS-BUILT OF BURY/BORROW PIT WILL BE REQUIRED AT COMPLETION OF CONTRACTOR WORK AND MUST BE SUBMITTED TO THE CONSTRUCTION

RECOMMENDATIONS. BUILDING PAD PREPARATION SHALL BEGIN BY CLEARING & STRIPPING UNSUITABLE MATERIAL FROM PAD SITE. THEN PLACE & COMPACT BACKFILL MATERIAL AT GEOTECHNICAL ENGINEER'S

VEHICLES WITHIN DRIP LINE. PROVIDE TEMPORARY GUARDS TO PROTECT TREES AND VEGETATION TO BE

2. PROTECTION OF EXISTING TREES AND VEGETATION: PROTECT EXISTING TREES AND OTHER VEGETATION INDICATED TO REMAIN IN PLACE AGAINST UNNECESSARY CUTTING, BREAKING OR SKINNING OF ROOTS, SKINNING OR BRUISING OF BARK, SMOTHERING OF TREES BY STOCKPILING CONSTRUCTION MATERIALS OR

12. THE CONTRACTOR SHALL SAWCUT EXISTING PAVEMENT TO PROVIDE A SMOOTH VERTICAL FULL DEPTH BUTT JOINT BETWEEN THE EXISTING PAVEMENT OR CURB AND THE PROPOSED PAVEMENT. CONTRACTOR SHALL LOCATE SOUND PAVEMENT EDGE AND CUT AND TRIM PAVEMENT TO A NEAT LINE. INCLUDE THE

CONSTRUCTION, THE PAVEMENT, WALKWAY, CURB, ETC. IS DAMAGED BEYOND THE ORIGINAL SAWCUT, THE

9. ALL DIMENSIONS ARE TO THE EDGE OF PAVEMENT AND/OR FACE OF CURB, UNLESS OTHERWISE NOTED. 10. ALL SITE SIGNAGE, STRIPING COLOR AND WIDTH SHALL BE PER THE OHIO MANUAL OF UNIFORM TRAFFIC

8. ANY CONTRACTOR INSTALLING ANY WELL, WELL POINT, PIT, OR OTHER DEVICE USED FOR THE PURPOSE OF REMOVING GROUND WATER FROM AN AQUIFER SHALL COMPLETE AND FILE A WELL LOG AND DRILLING REPORT FORM WITH THE OHIO DEPARTMENT OF NATURAL RESOURCES (ODNR), DIVISION OF WATER, WITHIN 30 DAYS OF THE WELL COMPLETION IN ACCORDANCE WITH THE OHIO REVISED CODE SECTION 1521.01 AND 1521.05 IN ADDITION, ANY SUCH FACILITY IS COMPLETED IN ACCORDANCE WITH SECTION 1521.16 OF THE OHIO REVISED CODE. FOR COPIES OF THE NECESSARY WELL LOG, DRILLING REPORT, OR

ACCORDANCE WITH THE PROVISIONS OF SECTION 3745-9-10 OF THE OHIO ADMINISTRATIVE CODE OR IN ACCORDANCE WITH THE PROVISIONS OF THIS PLAN AS DIRECTED BY THE DIRECTOR OF PUBLIC UTILITIES

6. THE DIRECT OR INDIRECT DISCHARGE OR PUMPING OF UNFILTERED SEDIMENT-LADEN WATER INTO THE

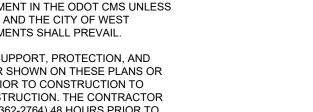
5. THE COST OF ALL DEWATERING REQUIRED FOR THE CONSTRUCTION OF THIS PROJECT SHALL BE

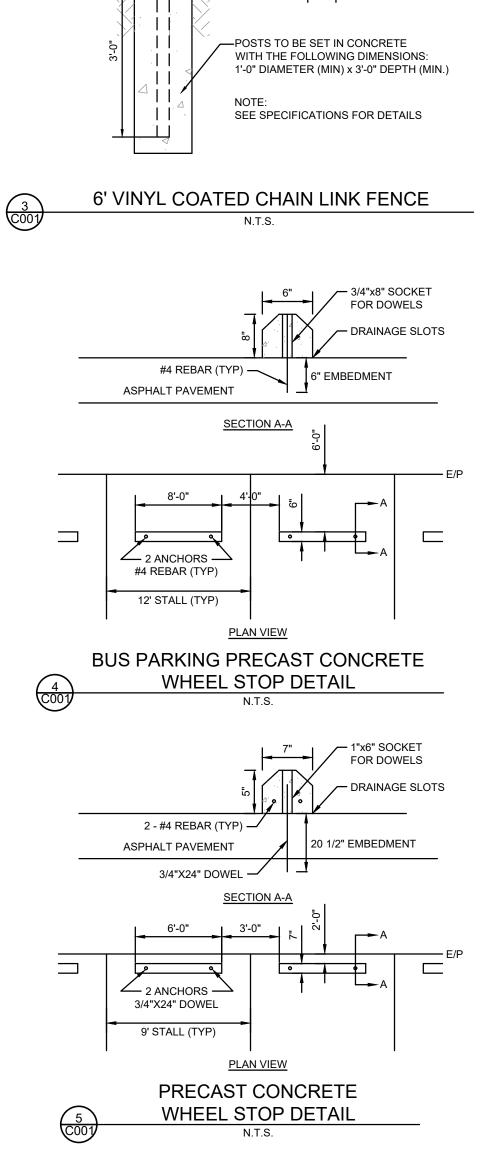
4. THE CONTRACTOR IS REQUIRED TO VISIT THE SITE AND FULLY INFORM THEMSELVES CONCERNING ALL CONDITIONS AFFECTING THE SCOPE OF THE WORK. FAILURE TO VISIT THE SITE SHALL NOT RELIEVE THEM

3. THE CONTRACTOR IS TO PERFORM ALL INSPECTIONS AS REQUIRED BY THE OHIO EPA FOR THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT AND FURNISH OWNERS REPRESENTATIVE

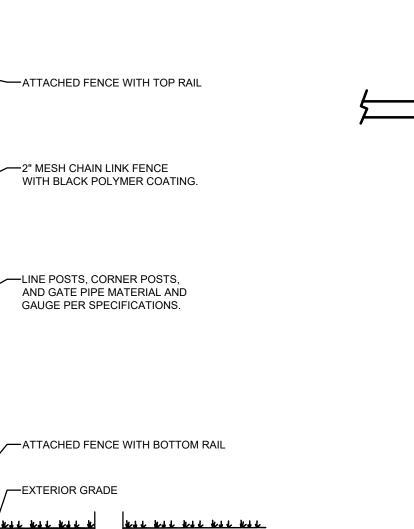
2. THE CONTRACTOR IS RESPONSIBLE FOR THE INVESTIGATION, LOCATION, SUPPORT, PROTECTION, AND RESTORATION OF ALL EXISTING UTILITIES AND APPURTENANCES WHETHER SHOWN ON THESE PLANS OR NOT. THE CONTRACTOR SHALL EXPOSE ALL UTILITIES OR STRUCTURES PRIOR TO CONSTRUCTION TO CONSTRUCTION AND SHALL NOTIFY ALL UTILITY COMPANIES WHO ARE NON-MEMBERS OF THE OHIO

VERIFY THE VERTICAL AND HORIZONTAL EFFECT ON THE PROPOSED CONSTRUCTION. THE CONTRACTOR SHALL CALL, TOLL FREE, THE OHIO UTILITIES PROTECTION SERVICE (1-800-362-2764) 48 HOURS PRIOR TO





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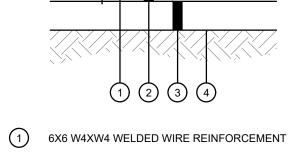




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SUBGRADE COMPACTION, REFERENCE ODOT ITEM (4)204, EARTHWORK SPECIFICATION 312000 AND

8" ODOT ITEM 451 NONREINFORCED PORTLAND CEMENT CONCRETE PAVEMENT, CLASS QC1P 6" ODOT ITEM 304 AGGREGATE BASE



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HEAVY DUTY ASPHALT PAVEMENT DETAIL N.T.S.

SUBGRADE COMPACTION, REFERENCE ODOT ITEM 204, EARTHWORK SPECIFICATION 312000 AND SOILS REPORT

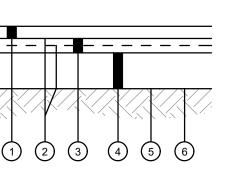
WOVEN GEOTEXTILE FABRIC, ODOT ITEM 712.09 5 TYPE D

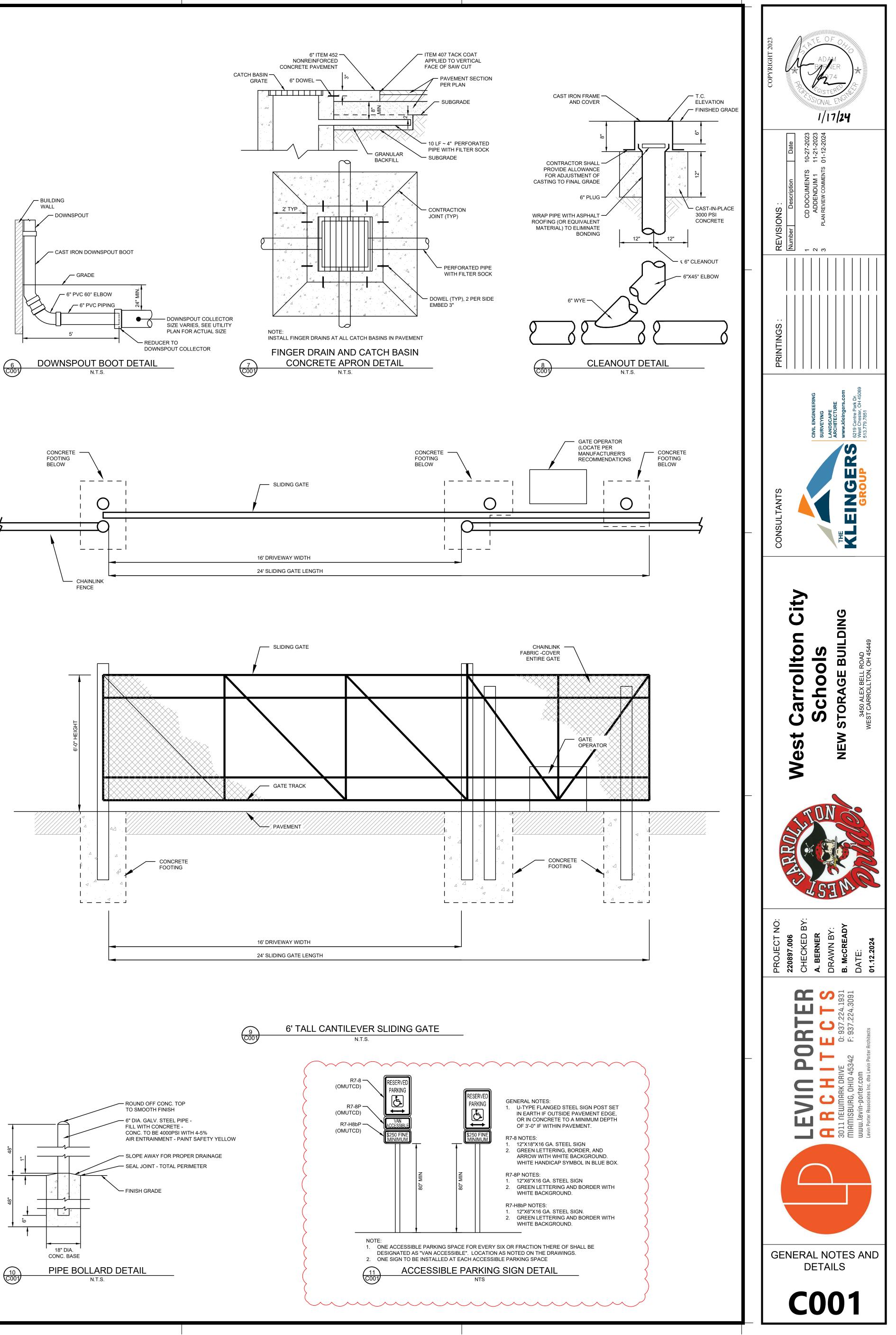
(4) 8" ODOT ITEM 304 AGGREGATE BASE

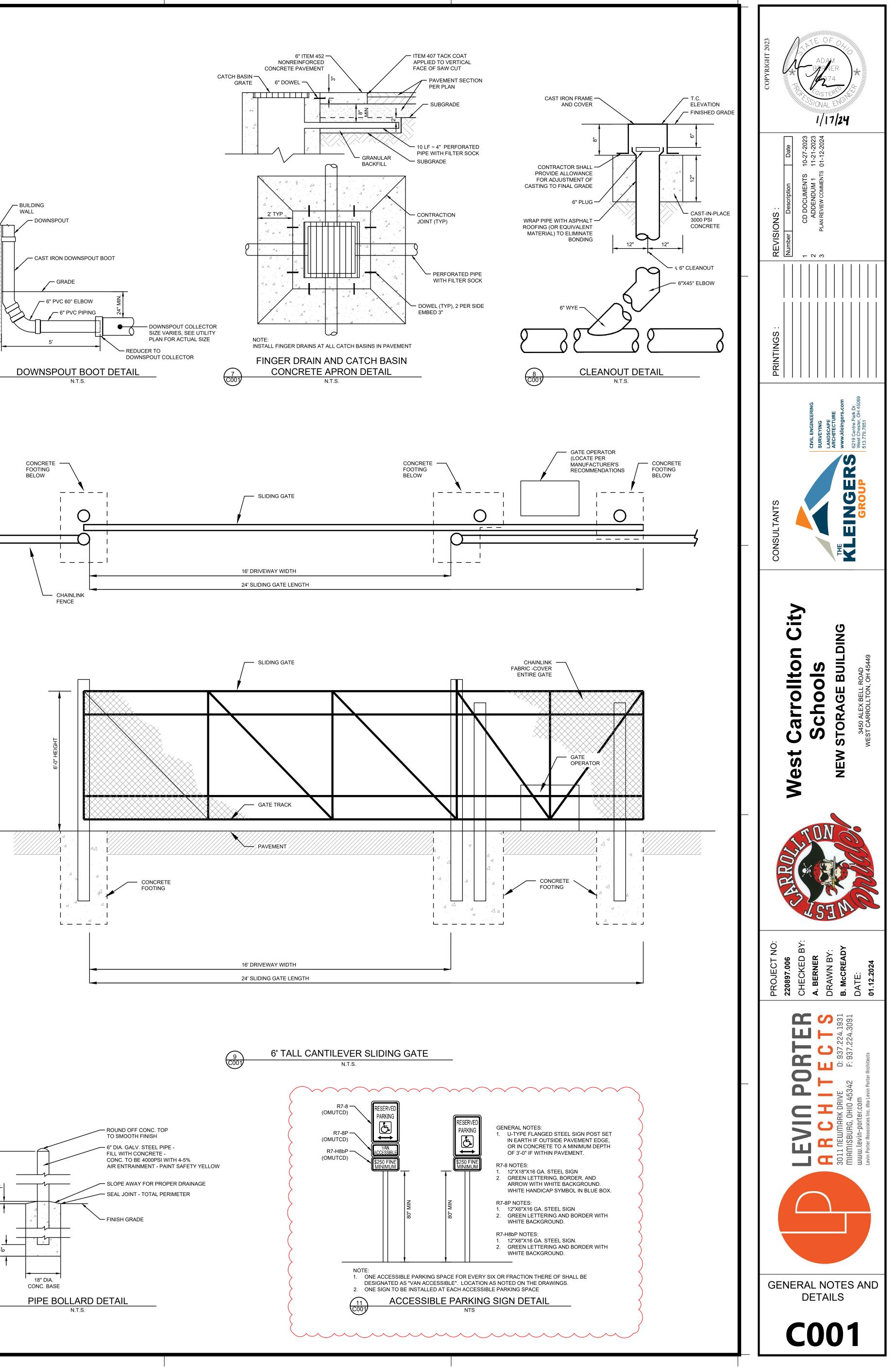
4" ODOT ITEM 441 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448) PLACE IN 2 - 2" LIFTS

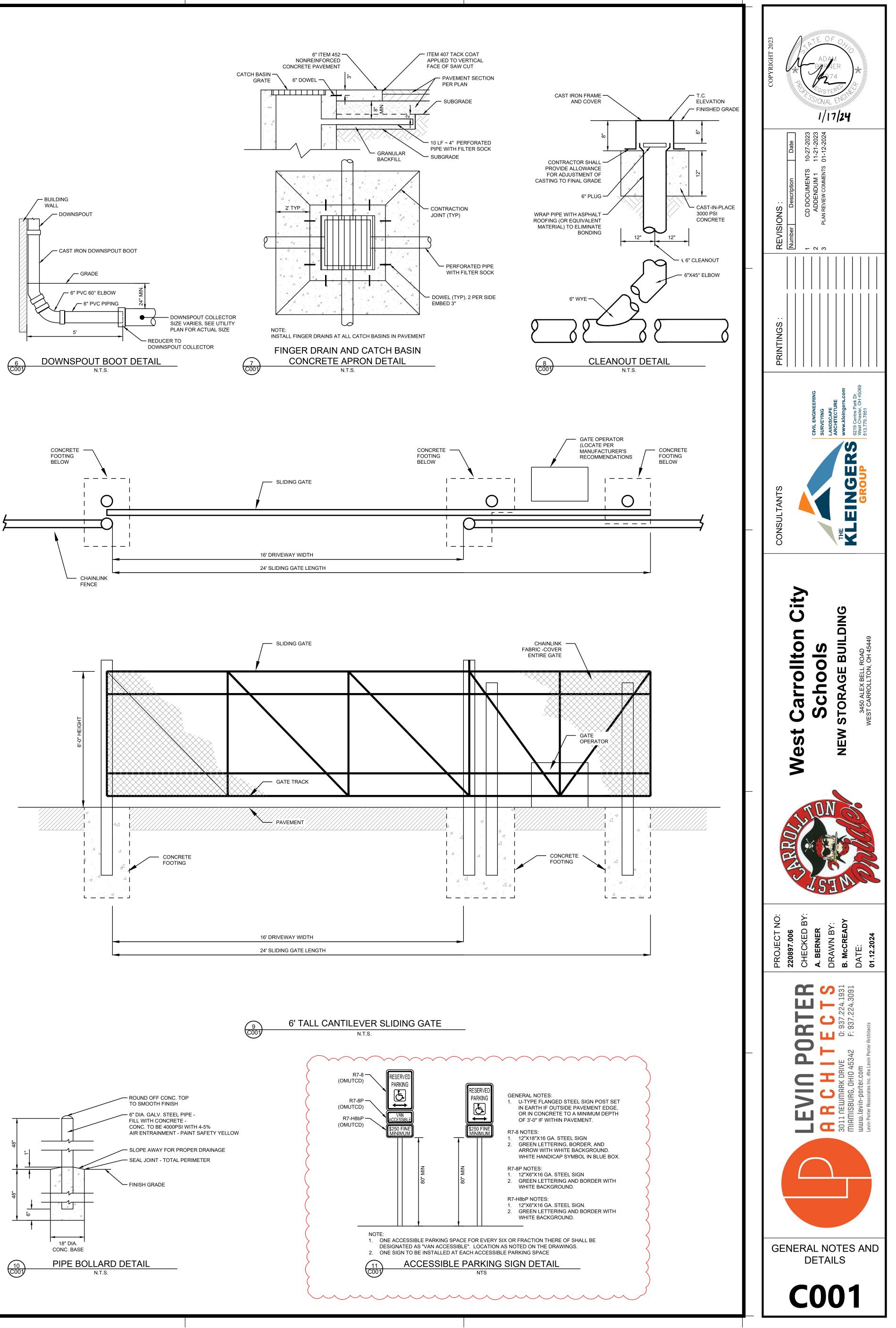
1 1/2" ODOT ITEM 441 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22 (2) ODOT ITEM 407 TACK COAT (0.06 GAL/SY)

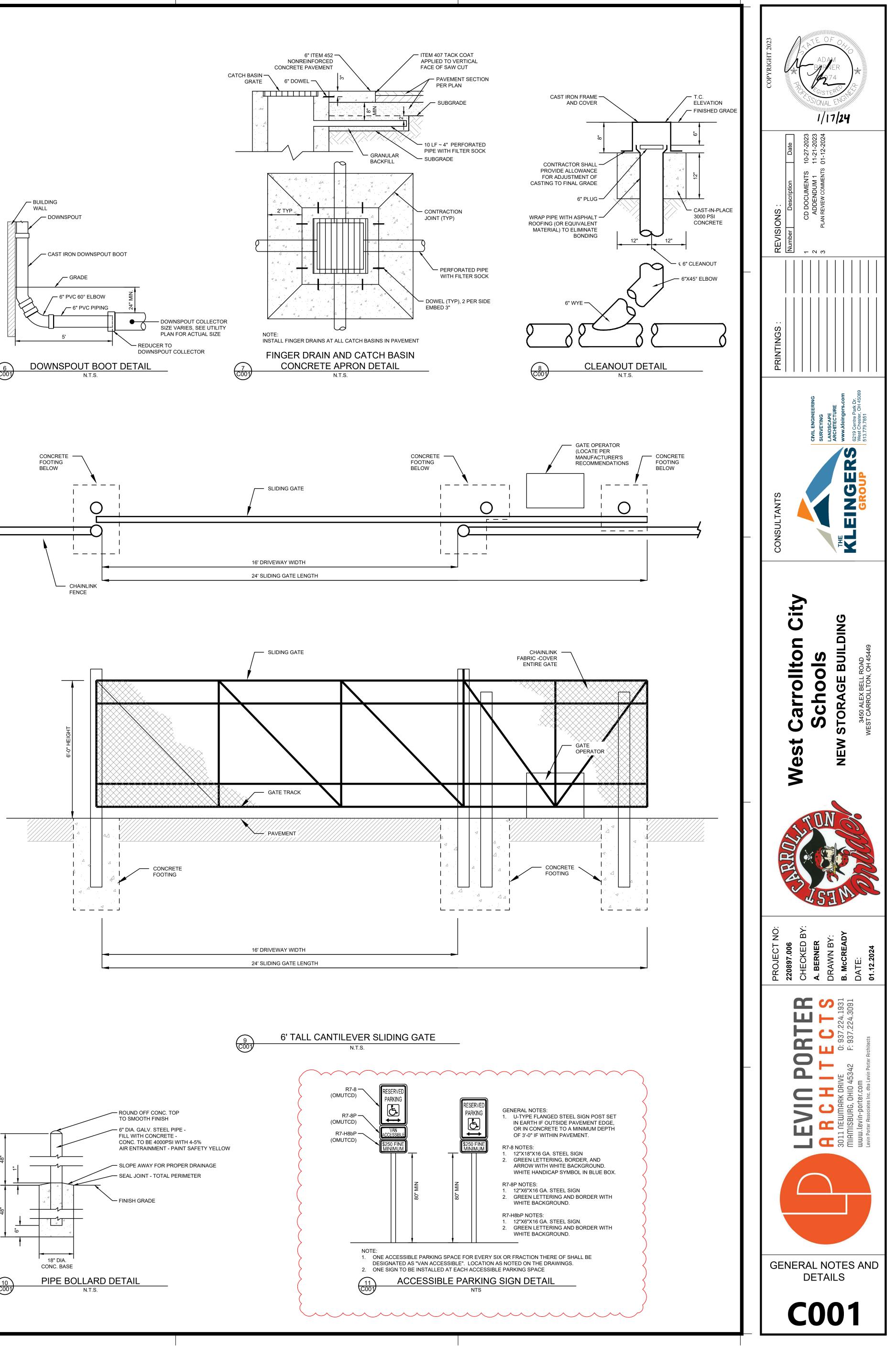
(1) (2) (3) (4) (5) (6)

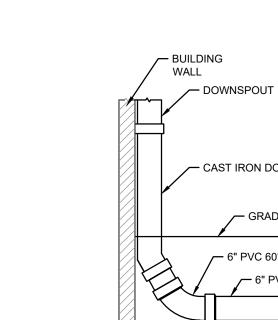












PROJECT DESCRIPTION CONSTRUCTION OF NEW BUS M	IAINTENANCE BUILE	DING, TO INCLUDE NEW HARDSCAPE AND UTILITY IMPROVEMENTS	IT IS PREFERRED WHEN POSSIBLE.
LATITUDE: LONGITUDE: ESTIMATED CONSTRUCTION DA	TES:	N 39°40'20.3" W 84°13'50.2" WINTER 2024 - SUMMER 2024	MOST TEMPORAF PERIODICALLY RE PROGRESSES. AN
TOTAL SITE AREA: TOTAL DISTURBED AREA:		2.73 ACRES 2.73 ACRES	ALL TEMPORARY PROGRESSES TO
EXISTING IMPERVIOUS AREA: PROPOSED IMPERVIOUS AREA: TOTAL IMPERVIOUS AREA AFTEI INCREASE IN IMPERVIOUS AREA	R CONSTRUCTION:	1.44 ACRES 0.88 ACRES 2.32 ACRES 61.11%	FUNCTIONING PR
PRE-CONSTRUCTION RUNOFF C	OEFFICIENT :	C=0.70 C=0.86	PRESERVATION O AREAS TO PROVI
IMMEDIATE RECEIVING WATER/N ULTIMATE RECEIVING STREAM:		LOCAL STORM SEWER SYSTEM GREAT MIAMI RIVER	"PERMANENT STA MATTING, SOD, R CONSTRUCTION
EXISTING LAND USE: SOILS:		PUBLIC SCHOOL OcA - OCKLEY SILT LOAM, SOUTHERN OHIO TILL PLAIN, 0 TO 2 PERCENT SLOPES Ud - UDORTHENTS	OFF-SITE TRACKI REDUCE VEHICLE EXCESS MUD, DIF
CONSTRUCTION SEQ	UENCE	UQ - ODORTHENTS	COVERED WITH A
CONTRACTOR'S WORK CREWS N STORAGE DURING THE PROPOS WORK AREAS. THE GENERAL CO A) INSTALL EROSION CON B) STRIP TOPSOIL AND AN C) INSTALL TEMPORARY D STRIPPING OPERATION D) IF U/G PIPE IS CALLED F E) AS PIPE INSTALLATION	WILL BE REQUIRED SED CONSTRUCTION ONSTRUCTION SEQ TROL ITEMS. IV UNSUITABLE MA DITCH CHECKS IN D I. FOR IN THIS PORTIC PROGRESSES, REF (POSED AREAS SHA	ION OF THE PROPOSED JOB IMPROVEMENTS, COORDINATION OF THE . THE EXISTING DITCHES WILL PERFORM TEMPORARY SEDIMENT CONTROL AND N. WORK WILL GENERALLY PROCEED FROM DOWNSTREAM TO UPSTREAM IN THESE UENCE IS AS FOLLOWS: TERIAL THROUGH THE INCREMENTAL WORK AREA. OWNSTREAM END OF EXISTING DITCH WITHIN 24 HOURS FOLLOWING THE ON OF WORK AREA, PIPE CREW WILL INSTALL PIPE AS WELL AS MANHOLES. PAIR OF THE ROADWAY WILL PROCEED BEHIND IT. ALL BE STABILIZED PER OEPA TEMPORARY AND PERMANENT STABILIZATION	STABILIZAT PERMANENT SEE OHIO EPA PERMI AREA ANY AREAS OR MORE ANY AREAS THE STATE ANY OTHEF TEMPORAR FORTH IN P
 MULCHING WATERING 			
EMERGENCY ACTION		VENTION PLAN LUDES EMERGENCY RESPONSE TO SPILLS, CONTAINMENT OF SPILLED LIQUIDS,	AREA F
EMERGENCY NOTIFICATION NUM	MBERS, AND SOIL E	XCAVATION FOR SPILL CLEAN-UP.	FOR ALL CC
SUPERVISOR IN CHARGE, OR O	THER INDIVIDUALS	AS LISTED BELOW.	AREAS THA DAYS BUT L FEET OF A S
<u>TITLE</u> SITE SUPERINTENDENT	<u>NAME</u> JARON DEVELBI	<u>PHONE NUMBER</u> SS 937-668-4174	
PROJECT ENGINEER			DISTURBED ALL TEMPORARY REACHED.
CONTAINMENT PROCEDURES TO DUTLETS USING THE FOLLOWIN 1) CLEAR PERSONNEL FRO 2) STOP THE SPILL. 3) USE SORBENT MATERIA 4) CONSTRUCT A TEMPOR	O PREVENT THE MA IG ACTIONS OR ANY OM THE SPILL AREA ALS, PLUG PUTTY, C RARY CONTAINMEN	E WILL BE DIRECTED BY THE SAFETY OFFICER, OR RESPONSIBLE PARTY TO START ATERIAL FROM REACHING THE STORM SEWERS, DRAINAGE DITCH, AND OTHER (OTHER MEANS NECESSARY WITHOUT COMPROMISING WORKER SAFETY: AND ROPE OFF AREA. OR HOLE PUTTY AS NECESSARY TO CONTROL THE SPILL AT THE SOURCE. T DIKE OF SORBENT MATERIALS OR DIRT TO CONTAIN SPILL. DESIGNATED ON THE SWPPP PLAN.	SEEDING & MULCH AND/OR (GRADING IF THE WHICH CAN BE E MULCH SHALL CO THREE BALES). T FOR UNIFORM DI 45-LB. BALES OF
REGULATORY PROCEDURES.	ONS, THE FOLLOWII	S, PROPER CLEAN-UP PROCEDURES WILL BE IMPLEMENTED IN ACCORDANCE WITH NG ORGANIZATIONS SHALL BE CONTACTED WITHIN 30 MINUTES OF THE INCIDENT: 24 HOUR PHONE NO.: 800-282-9378	MULCH SHALL BI FOR ANCHORING 1) MECHAN INTO TH 6 IN. 2) MULCH ANCHOR 3) SYNTHE
WEST CARROLLTON FIRE DEPAI		937-847-4645 NING COMMITEE 937-901-5112	TERRA SYNTHE STATE.
GENERAL NOTES			4) WOOD (APPLIEI MIXTUR
BY THE OHIO EPA SINCE MARCH	1 10, 2003 AND WITH	CTER POLLUTION CONTROL STANDARDS AND ENFORCEMENT HAVE BEEN IMPOSED A REVISION IN APRIL 2018. ALSO, MANY PRIVATE CITIZEN ENVIRONMENTAL EGAL ACTIONS, ARE PRESENT IN THE AREA AND OBSERVE ALL CONSTRUCTION	
THE CONTRACTOR SHALL INFOR SHALL DOCUMENT ALL SUCH NO		ACTORS OF THE REQUIREMENTS AND RESPONSIBILITIES OF THE SWPPP AND OR DISCUSSIONS.	PEREN TA ANNU
		PATE IN SEDIMENT AND EROSION CONTROL INSPECTIONS ON A WEEKLY BASIS AND LL BE KEPT ON FILE AT THE JOB SITE.	SMALL F
		ECIFICATIONS ESTABLISHED IN THE LATEST EDITION OF THE OEPA "RAINWATER ERN THE EROSION AND SEDIMENT CONTROL INSTALLATIONS SPECIFIED ON THIS	NOTE: OTH
MPORTANT THAT ALL TEMPORA	ARY SEDIMENT AND	TION PHASES AND SEQUENCING THROUGHOUT ITS LIFETIME. IT IS VERY EROSION CONTROL (S&EC) FIELD METHODS ALONG WITH THIS PLAN, ARE ONS, CURRENT WEATHER CONDITIONS AND SITE GRADE CHANGES. THE Y THIS PLAN AS NECESSARY.	STOCKPILE SILT FENCING SH AND/OR TEMPOF
THE CONTRACTOR WILL VOLUN AND THE OEPA.	TARILY SELF REPO	RT ANY POTENTIAL VIOLATIONS OF THE OEPA NPDES PERMIT TO THE ENGINEER	
THE CONTRACTOR SHALL REMO		JND COVER ONLY AS NECESSARY FOR THE PROJECT PHASE CURRENTLY UNDER	PRIOR TO CLEAF
CONSTRUCTION AND DEMOLITIC	OVE EXISTING GRO		PRIOR TO CLEAF FOR ALL AREAS WHERE CONSTR AND MULCH WIT LAST DISTURBAN
		BE PROPERLY DISPOSED OF ACCORDING TO OHIO EPA REQUIREMENTS.	PRIOR TO CLEAF FOR ALL AREAS WHERE CONSTR AND MULCH WIT LAST DISTURBAN PERMANENTLY I STABILIZED, THE
	ON DEBRIS SHALL E QUIRED TO BUILD SI		PRIOR TO CLEAF FOR ALL AREAS WHERE CONSTR AND MULCH WIT LAST DISTURBAN PERMANENTLY I STABILIZED, THE STABILIZATION PERMANENT S
	ON DEBRIS SHALL E QUIRED TO BUILD SI E EPA STANDARDS E SCHARGES TO SUR	BE PROPERLY DISPOSED OF ACCORDING TO OHIO EPA REQUIREMENTS. EDIMENT BASINS OR SEDIMENT TRAPS OR USE EQUAL METHODS TO DETAIN AND	PRIOR TO CLEAF FOR ALL AREAS WHERE CONSTR AND MULCH WIT LAST DISTURBAN PERMANENTLY I STABILIZED, THE STABILIZATION PERMANENT S DORMANT SEE
NATER MUST PASS THROUGH A	ON DEBRIS SHALL E QUIRED TO BUILD SI E EPA STANDARDS E SCHARGES TO SUR A SETTLING POND, F	BE PROPERLY DISPOSED OF ACCORDING TO OHIO EPA REQUIREMENTS. EDIMENT BASINS OR SEDIMENT TRAPS OR USE EQUAL METHODS TO DETAIN AND BEFORE RELEASING THE WATER BACK INTO THE STREAM. FACE WATERS, RESULTING FROM DEWATERING ACTIVITIES. SEDIMENT-LADEN	PRIOR TO CLEAF FOR ALL AREAS WHERE CONSTR AND MULCH WIT LAST DISTURBAN PERMANENTLY I STABILIZED, THE STABILIZATION PERMANENT S DORMANT SEE TEMPORARY S
WATER MUST PASS THROUGH A NO SOLID OR LIQUID WASTE SHA ALL PROCESS WASTEWATER (E	ON DEBRIS SHALL E QUIRED TO BUILD SI E EPA STANDARDS E SCHARGES TO SUR A SETTLING POND, F ALL BE DISCHARGE	BE PROPERLY DISPOSED OF ACCORDING TO OHIO EPA REQUIREMENTS. EDIMENT BASINS OR SEDIMENT TRAPS OR USE EQUAL METHODS TO DETAIN AND BEFORE RELEASING THE WATER BACK INTO THE STREAM. FACE WATERS, RESULTING FROM DEWATERING ACTIVITIES. SEDIMENT-LADEN FILTER BAG, OR OTHER COMPARABLE PRACTICE, PRIOR TO DISCHARGE. ED INTO STORM WATER RUNOFF.	PRIOR TO CLEAF FOR ALL AREAS WHERE CONSTR AND MULCH WIT LAST DISTURBAN PERMANENTLY I STABILIZED, THE STABILIZATION PERMANENT S DORMANT SEE TEMPORARY S SODDING MULCHING
WATER MUST PASS THROUGH A NO SOLID OR LIQUID WASTE SHA ALL PROCESS WASTEWATER (E DISPOSED OF AT A PUBLICLY ON ALL CONSTRUCTION ACTIVITIES	ON DEBRIS SHALL E QUIRED TO BUILD SI E EPA STANDARDS E SCHARGES TO SUR A SETTLING POND, I ALL BE DISCHARGE QUIPMENT WASHIN WNED TREATMENT	BE PROPERLY DISPOSED OF ACCORDING TO OHIO EPA REQUIREMENTS. EDIMENT BASINS OR SEDIMENT TRAPS OR USE EQUAL METHODS TO DETAIN AND BEFORE RELEASING THE WATER BACK INTO THE STREAM. FACE WATERS, RESULTING FROM DEWATERING ACTIVITIES. SEDIMENT-LADEN FILTER BAG, OR OTHER COMPARABLE PRACTICE, PRIOR TO DISCHARGE. ED INTO STORM WATER RUNOFF.	PRIOR TO CLEAF FOR ALL AREAS WHERE CONSTR AND MULCH WIT LAST DISTURBAN PERMANENTLY I STABILIZED, THE STABILIZATION PERMANENT S DORMANT SEE TEMPORARY S SODDING MULCHING ALL BMPS ON TH DESIGNATED RE EXCLUDING WEE RECORD OF THE
WATER MUST PASS THROUGH A NO SOLID OR LIQUID WASTE SH, ALL PROCESS WASTEWATER (E DISPOSED OF AT A PUBLICLY OV ALL CONSTRUCTION ACTIVITIES HEALTH REGULATIONS. OTHER EROSION CONTROL ITEM RESPONSIBLE FOR INSTALLATIO	ON DEBRIS SHALL E QUIRED TO BUILD SI E EPA STANDARDS E SCHARGES TO SUR A SETTLING POND, F ALL BE DISCHARGE QUIPMENT WASHIN WNED TREATMENT S MUST COMPLY WI	SE PROPERLY DISPOSED OF ACCORDING TO OHIO EPA REQUIREMENTS. EDIMENT BASINS OR SEDIMENT TRAPS OR USE EQUAL METHODS TO DETAIN AND BEFORE RELEASING THE WATER BACK INTO THE STREAM. FACE WATERS, RESULTING FROM DEWATERING ACTIVITIES. SEDIMENT-LADEN FILTER BAG, OR OTHER COMPARABLE PRACTICE, PRIOR TO DISCHARGE. ED INTO STORM WATER RUNOFF. IG, LEACHATE FROM ON-SITE WASTE DISPOSAL, ETC.) SHALL BE COLLECTED AND WORKS.	PRIOR TO CLEAF FOR ALL AREAS WHERE CONSTR AND MULCH WIT LAST DISTURBAN PERMANENTLY II STABILIZED, THE STABILIZATION PERMANENT S DORMANT SEE TEMPORARY S SODDING MULCHING INSPECTIO ALL BMPS ON TH DESIGNATED RE EXCLUDING WEE RECORD OF THE VIOLATIONS WIL LIMITS.
WATER MUST PASS THROUGH A NO SOLID OR LIQUID WASTE SH, ALL PROCESS WASTEWATER (E DISPOSED OF AT A PUBLICLY OV ALL CONSTRUCTION ACTIVITIES HEALTH REGULATIONS. OTHER EROSION CONTROL ITEM RESPONSIBLE FOR INSTALLATIO DISCRETION.	ON DEBRIS SHALL E QUIRED TO BUILD SI E EPA STANDARDS E SCHARGES TO SUR A SETTLING POND, F ALL BE DISCHARGE QUIPMENT WASHIN WNED TREATMENT S MUST COMPLY WI MS MAY BE NECESS ON AND IMPLEMENT	E PROPERLY DISPOSED OF ACCORDING TO OHIO EPA REQUIREMENTS. EDIMENT BASINS OR SEDIMENT TRAPS OR USE EQUAL METHODS TO DETAIN AND BEFORE RELEASING THE WATER BACK INTO THE STREAM. FACE WATERS, RESULTING FROM DEWATERING ACTIVITIES. SEDIMENT-LADEN FILTER BAG, OR OTHER COMPARABLE PRACTICE, PRIOR TO DISCHARGE. ED INTO STORM WATER RUNOFF. IG, LEACHATE FROM ON-SITE WASTE DISPOSAL, ETC.) SHALL BE COLLECTED AND WORKS. TH ALL LOCAL EROSION/SEDIMENT CONTROL, WASTE DISPOSAL, SANITARY AND	MULCHING INSPECTIO ALL BMPS ON TH DESIGNATED RE EXCLUDING WEE RECORD OF THE VIOLATIONS WIL

UNDERGROUND UTILITIES ARE PLOTTED FROM A COMPILATION OF AVAILABLE RECORD INFORMATION AND SURFACE INDICATIONS OF UNDERGROUND STRUCTURES AND MAY NOT BE INCLUSIVE, PRECISE LOCATIONS AND THE EXISTENCE OR NON EXISTENCE OF UNDERGROUND UTILITIES CANNOT BE VERIFIED. PLEASE NOTIFY THE OHIO UTILITY PROTECTION SERVICE AT 811 OR 1-800-362-2764 BEFORE ANY

PERIOD OF EXCAVATION OR CONSTRUCTION ACTIVITY.

#

S&EC METHODS, INCLUDING BUT NOT LIMITED TO, SILT FENCE AND DITCH CHECKS MAY ALL HAVE TO BE MOVED AND REPLACED, OR MOVED FROM THE EXISTING ROAD DITCH OR STRIPPED AREAS AS WORK Y CHANGES SHALL BE NOTED IN THE PLAN BY RED LINE AND DATED ON A CORRECTIVE ACTION LOG.

EDIMENT CONTROLS AND STORM WATER QUALITY METHODS WILL BE BUILT/INSTALLED AS THE PROJECT ELIMINATE UNNECESSARY DISTURBANCE AND REDUNDANCY. ALL TEMPORARY CONTROLS SHALL BE IN PLACE AND PERLY WHEN THREATENING WEATHER IS IMMINENT.

SILIZATION" MEANS THE ESTABLISHMENT OF TEMPORARY VEGETATION, MULCHING, GEOTEXTILES, SOD, EXISTING VEGETATION AND OTHER TECHNIQUES CAPABLE OF QUICKLY ESTABLISHING COVER OVER DISTURBED E EROSION CONTROL BETWEEN CONSTRUCTION OPERATIONS.

BILIZATION" MEANS THE ESTABLISHMENT OF PERMANENT VEGETATION, DECORATIVE LANDSCAPE MULCHING, P RAP AND LANDSCAPING TECHNIQUES TO PROVIDE PERMANENT EROSION CONTROL ON AREAS WHERE PERATIONS ARE COMPLETE OR WHERE NO FURTHER DISTURBANCE IS EXPECTED FOR AT LEAST A YEAR.

G OF SEDIMENTS SHALL BE MINIMIZED. A STABILIZED CONSTRUCTION ENTRANCE WILL BE PROVIDED TO HELP. TRACKING OF SEDIMENTS. ALL PAVED STREETS ADJACENT TO THE SITE WILL BE SWEPT DAILY TO REMOVE ANY FOR ROCK TRACKED FROM THE SITE. DUMP TRUCKS HAULING MATERIAL FROM THE CONSTRUCTION SITE WILL BE TARP.

ON PRACTICES

ING AND MULCHING STABILIZATION SHALL BE PROVIDED PER OEPA GUIDELINES AS SET FORTH IN PART II.B OF NO.: OHC000006. (SEE TABLE 1)

TABLE 1: PERMANENT STABILIZATION						
A REQUIRING PERMANENT STABILIZATION	TIME FRAME TO APPLY EROSION CONTROLS					
AS THAT WILL LIE DORMANT FOR ONE YEAR	WITHIN SEVEN DAYS OF THE MOST RECENT DISTURBANCE					
AS WITHIN 50 FEET OF A SURFACE WATER OF TE AND AT FINAL GRADE	WITHIN TWO DAYS OF REACHING FINAL GRADE					
ER AREAS AT FINAL GRADE	WITHIN SEVEN DAYS OF REACHING FINAL GRADE					

SEEDING AND MULCHING STABILIZATION SHALL BE PROVIDED PER OEPA GUIDELINES AS SET RT II.B OF OHIO EPA PERMIT NO.: OHC000006. (SEE TABLE 2)

TABLE 2: TEMPORARY STABILIZATION

A REQUIRING TEMPORARY STABILIZATIONTIME FRAME TO APPLY EROSION CONTROLS'URBED AREAS WITH 50 FEET OF A SURFACE OF THE STATE AND NOT AT FINAL GRADEWITHIN TWO DAYS OF THE MOST RECENT DISTURBANCE IF THE AREA WILL REMAIN IDLE FOR MORE THAN 14 DAYSCONSTRUCTION ACTIVITIES, ANY DISTURBED HAT WILL BE DORMANT FOR MORE THAN 14 T LESS THAN ONE YEAR, AND NOT WITHIN 50 A SURFACE WATER OF THE STATEWITHIN SEVEN DAYS OF THE MOST RECENT DISTURBANCE WITHIN THE AREAFOR RESIDENTIAL SUBDIVISIONS, DISTURBED AREAS MUST BE STABILIZED AT LEAST SEVEN DAYS PRIOR TO TRANSFER OF PERMIT COVERAGE FOR THE INDIVIDUAL LOT(S).ED AREAS THAT WILL BE IDLE OVER WINTERPRIOR TO THE ONSET OF WINTER WEATHER		
DISTURBANCE IF THE AREA WILL REMAIN IDLE FOR MORE THAN 14 DAYS CONSTRUCTION ACTIVITIES, ANY DISTURBED HAT WILL BE DORMANT FOR MORE THAN 14 T LESS THAN ONE YEAR, AND NOT WITHIN 50 A SURFACE WATER OF THE STATE FOR RESIDENTIAL SUBDIVISIONS, DISTURBED AREAS MUST BE STABILIZED AT LEAST SEVEN DAYS PRIOR TO TRANSFER OF PERMIT COVERAGE FOR THE INDIVIDUAL LOT(S).	A REQUIRING TEMPORARY STABILIZATION	TIME FRAME TO APPLY EROSION CONTROLS
HAT WILL BE DORMANT FOR MORE THAN 14 T LESS THAN ONE YEAR, AND NOT WITHIN 50 A SURFACE WATER OF THE STATE DISTURBANCE WITHIN THE AREA FOR RESIDENTIAL SUBDIVISIONS, DISTURBED AREAS MUST BE STABILIZED AT LEAST SEVEN DAYS PRIOR TO TRANSFER OF PERMIT COVERAGE FOR THE INDIVIDUAL LOT(S).		DISTURBANCE IF THE AREA WILL REMAIN IDLE FOR
ED AREAS THAT WILL BE IDLE OVER WINTER PRIOR TO THE ONSET OF WINTER WEATHER	HAT WILL BE DORMANT FOR MORE THAN 14 T LESS THAN ONE YEAR, AND NOT WITHIN 50	DISTURBANCE WITHIN THE AREA FOR RESIDENTIAL SUBDIVISIONS, DISTURBED AREAS MUST BE STABILIZED AT LEAST SEVEN DAYS PRIOR TO TRANSFER OF PERMIT COVERAGE
	ED AREAS THAT WILL BE IDLE OVER WINTER	PRIOR TO THE ONSET OF WINTER WEATHER

ROSION AND SEDIMENT CONTROL INSTALLATIONS SHALL BE REMOVED WHEN 70% VEGETATION HAS BEEN

MULCHING

HER APPROPRIATE VEGETATIVE PRACTICES SHALL BE APPLIED TO DISTURBED AREAS WITHIN 7 DAYS OF REA IS TO REMAIN DORMANT (UNDISTURBED) FOR MORE THAN 14 DAYS OR ON AREAS AND PORTIONS OF THE SITE OUGHT TO FINAL GRADE.

ISIST OF UNROTTED SMALL GRAIN STRAW APPLIED AT THE RATE OF 2 TONS/AC. OR 90 LB./1000 SQ. FT. (TWO TO E STRAW MULCH SHALL BE SPREAD UNIFORMLY BY HAND OR MECHANICALLY SO THE SOIL SURFACE IS COVERED. TRIBUTION OF HAND-SPREAD MULCH, DIVIDE AREA INTO APPROXIMATELY 1000-SQ.-FT. SECTIONS AND PLACE TWO TRAW IN EACH SECTION.

ANCHORED IMMEDIATELY TO MINIMIZE LOSS BY WIND OR RUNOFF. THE FOLLOWING ARE ACCEPTABLE METHODS

CAL-USE A DISK, CRIMPER, OR SIMILAR TYPE TOOL SET STRAIGHT TO PUNCH OR ANCHOR THE MULCH MATERIAL SOIL. STRAW MECHANICALLY ANCHORED SHALL NOT BE FINELY CHOPPED BUT BE LEFT GENERALLY LONGER THAN

TTINGS-USE ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS, FOLLOWING ALL PLACEMENT AND NG SUGGESTIONS. USE IN AREAS OF WATER CONCENTRATION AND STEEP SLOPES TO HOLD MULCH IN PLACE C BINDERS-FOR STRAW MULCH, SYNTHETIC BINDERS SUCH AS ACRYLIC DLR (AGRI-TAC), DCA-70, PETROSET, CK OR EQUAL MAY BE USED AT RATES RECOMMENDED BY THE MANUFACTURER. ALL APPLICATIONS OF C BINDERS MUST BE CONDUCTED IN SUCH A MANNER WHERE THERE IS NO CONTACT WITH WATERS OF THE

LLULOSE FIBER - WOOD CELLULOSE FIBER MAY BE USED FOR ANCHORING STRAW. THE FIBER BINDER SHALL BE AT A NET DRY WEIGHT OF 750 LB./ACRE. THE WOOD CELLULOSE FIBER SHALL BE MIXED WITH WATER AND THE SHALL CONTAIN A MAXIMUM OF 50 LB./100 GAL. OF WOOD CELLULOSE FIBER.

ORARY SEEDING & MULCHING FOR EROSION	

SEED TYPE	<u>PER 1,000 SQ FT</u>	PER ACRE				
INNIAL RYEGRASS TALL FESCUE NUAL RYEGRASS	1 POUND 1 POUND 1 POUND	40 POUNDS 40 POUNDS 40 POUNDS				
LL GRAIN STRAW	90 POUNDS	2 TONS				
FERTILIZER	6 POUNDS OF 10-10-10 OR 12-12-12	250 POUNDS OF 10-10-10 OR 12-12-12				

APPROVED SPECIES MAY BE SUBSTITUTED

LL BE INSTALLED AROUND TEMPORARY SPOIL STOCKPILES. THESE STOCKPILES SHALL BE STRAW MULCHED RILY SEEDED WITHIN 7 WORKING DAYS IF LEFT DORMANT FOR 14 DAYS OR LONGER.

ONTROLS/MEASURES

HE SEQUENCE OF MAJOR ACTIVITIES, CONSTRUCTION ENTRANCE(S) AND SILT FENCE WILL BE CONSTRUCTED IG OR GRADING OF ANY OTHER PORTIONS OF THE SITE. SEDIMENT CONTROL DEVICES SHALL BE IMPLEMENTED EMAINING DISTURBED LONGER THAN 14 DAYS AND/OR WITHIN 7 DAYS OF ANY GRUBBING ACTIVITIES. AREAS CTION ACTIVITY TEMPORARILY CEASES FOR MORE THAN 14 DAYS WILL BE STABILIZED WITH A TEMPORARY SEED N 2 DAYS OF THE LAST DISTURBANCE IF THE AREA IS WITHIN 50 FEET OF A STREAM, AND WITHIN 7 DAYS OF THE E IF THE AREA IS MORE THAN 50 FEET AWAY FROM A STREAM. ONCE CONSTRUCTION ACTIVITY CEASES AN AREA, THAT AREA WILL BE STABILIZED WITH PERMANENT SEED AND MULCH. AFTER THE ENTIRE SITE IS CCUMULATED SEDIMENT WILL BE REMOVED FROM THE BASIN.

	•	•	•	•	•	•	•	•	•	•	•	•	
			**	**	**	**	**	**	**				
SEEDING			•	•	•	*	*	*	•	•			** IRRIGATION NEEDED FO 2-3 WEEKS AFTER SOD APPLIED
EDING	•	•	•							•	•	•	
SEEDING			•	•	•	*	*	*	•	•			* IRRIGATION NEEDED
N TYPE	J	F	М	А	М	J	J	А	S	0	Ν	D	

SITE SHALL BE INSPECTED BY "QUALIFIED INSPECTION PERSONNEL" ASSIGNED BY THE CONTRACTOR OR RESENTATIVE AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND BY THE END OF THE NEXT CALENDAR DAY, ENDS AND HOLIDAYS UNLESS WORK IS SCHEDULED, AFTER A RAIN EVENT OF 0.5 INCHES PER 24 HOUR PERIOD. A INSPECTIONS SHALL BE MAINTAINED IN THE CONSTRUCTION OFFICE WITH THE SWPPP FOR PUBLIC VIEWING. ANY BE REPORTED THROUGH THE PROJECT PERSONNEL. A RAIN GAUGE WILL BE LOCATED WITHIN THE PROJECT

INSPECTION, A CHECKLIST MUST BE COMPLETED AND SIGNED BY THE QUALIFIED INSPECTION PERSONNEL AT A MINIMUM, THE INSPECTION REPORT SHALL INCLUDE: SPECTION DATE;

, TITLES, AND QUALIFICATIONS OF PERSONNEL MAKING THE INSPECTION;

IER INFORMATION FOR THE PERIOD SINCE THE LAST INSPECTION (OR SINCE COMMENCEMENT OF CONSTRUCTION TY IF THE FIRST INSPECTION) INCLUDING A BEST ESTIMATE OF THE BEGINNING OF EACH STORM EVENT, DURATION CH STORM EVENT, APPROXIMATE AMOUNT OF RAINFALL FOR EACH STORM EVENT (IN INCHES), AND WHETHER ANY ARGES OCCURRED;

ER INFORMATION AND A DESCRIPTION OF ANY DISCHARGES OCCURRING AT THE TIME OF THE INSPECTION; ON(S) OF DISCHARGES OF SEDIMENT OR OTHER POLLUTANTS FROM THE SITE; ON(S) OF BMPS THAT NEED TO BE MAINTAINED;

7. LOCATION(S) OF BMPS THAT FAILED TO OPERATE AS DESIGNED OR PROVED INADEQUATE FOR A PARTICULAR LOCATION; 8. LOCATION(S) WHERE ADDITIONAL BMPS ARE NEEDED THAT DID NOT EXIST AT THE TIME OF INSPECTION; AND 9. CORRECTIVE ACTION REQUIRED INCLUDING ANY CHANGES TO THE SWP3 NECESSARY AND IMPLEMENTATION DATES.

MAINTENANCE

ONGOING INSPECTION OF INSTALLATIONS WILL BE PERFORMED BY THE CONTRACTOR OR DESIGNATED REPRESENTATIVE.

ANY TRAPPED SEDIMENT OR DEBRIS REMOVED DURING CLEANING OF OR REMOVAL OF BMP INSTALLATIONS SHALL BE PLACED IN AREAS NOT SUBJECT TO EROSION AND PERMANENTLY STABILIZED.

DUST CONTROL

DUST CONTROL INVOLVES PREVENTING OR REDUCING DUST FROM EXPOSED SOILS OR OTHER SOURCES DURING LAND DISTURBING, DEMOLITION AND CONSTRUCTION ACTIVITIES TO REDUCE THE PRESENCE OF AIRBORNE SUBSTANCES WHICH MAY PRESENT HEALTH HAZARDS, TRAFFIC SAFETY PROBLEMS OR HARM ANIMAL OR PLANT LIFE.

THE FOLLOWING SPECIFICATIONS FOR DUST CONTROL SHALL BE FOLLOWED ONSITE VEGETATIVE COVER AND/MULCH - APPLY TEMPORARY OR PERMANENT SEEDING AND MULCH TO AREAS

- BE UTILIZED ACCORDING TO MANUFACTURERS INSTRUCTIONS. INSTRUCTIONS.

WATER DILUTION (ADHESIVE: WATER)	<u>NOZZLE</u> <u>TYPE</u>	APPLICATION RATE (GAL/AC)
12.5:1	FINE	235
4:1	FINE	300
7:1	COARSE	450
3.5:1	COARSE	350
	(ADHESIVE: WATER) 12.5:1 4:1 7:1	(ADHESIVE: WATER)TYPE12.5:1FINE4:1FINE7:1COARSE

SPILL PREVENTION

THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT WILL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES TO STORM WATER RUNOFF.

GOOD HOUSEKEEPING:

- 1. AN EFFORT WILL BE MADE TO STORE ONLY ENOUGH PRODUCT REQUIRED TO DO THE JOB.
- CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE.

- MANUFACTURERS' RECOMMENDATIONS FOR PROPER USE AND DISPOSAL WILL BE FOLLOWED.

HAZARDOUS PRODUCTS:

ONSITE.

- 1. PRODUCTS WILL BE KEPT IN ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE. 2. ORIGINAL LABELS AND MATERIAL SAFETY DATA WILL BE RETAINED; THEY CONTAIN IMPORTANT PRODUCT
- INFORMATION. METHODS FOR PROPER DISPOSAL WILL BE FOLLOWED.

SPILL CONTROL PRACTICES

IN ADDITION TO THE GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTIONS OF THIS PLAN, THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:

- THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES.
- FOR THIS PURPOSE.
- CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.
- OF THE STATE, MUST BE REPORTED TO THE OHIO EPA'S HOTLINE.
- DISPOSAL FACILITY (TSDF)
- WHAT CAUSED IT, AND THE CLEANUP MEASURES WILL ALSO BE INCLUDED. 7. THE SITE SUPERINTENDENT RESPONSIBLE FOR THE DAY-TO-DAY SITE OPERATIONS, WILL BE THE SPILL
- POSTED IN THE MATERIAL STORAGE AREA AND IN THE OFFICE TRAILER ONSITE.

PRODUCT SPECIFIC PRACTICES

PETROLEUM PRODUCTS

ALL ONSITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT SUBSTANCES USED ONSITE WILL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

FUEL STORAGE TANKS SHALL BE LOCATED AWAY FROM SURFACE WATERS AND STORM SEWER SYSTEM INLETS. FUEL TANKS SHALL BE STORED IN A DIKED AREA CAPABLE OF HOLDING 150% OF THE TANK CAPACITY

FERTILIZERS

FERTILIZERS USED WILL BE APPLIED ONLY IN THE MINIMUM AMOUNTS RECOMMENDED BY THE MANUFACTURER. ONCE APPLIED, FERTILIZER WILL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORM WATER. STORAGE WILL BE IN A COVERED SHED. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER WILL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.

PAINTS

ALL CONTAINERS WILL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT WILL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM BUT WILL BE PROPERLY DISPOSED OF ACCORDING TO MANUFACTURERS' INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.

CONCRETE WASH WATER/WASH OUTS

CONCRETE WASH WATER SHALL NOT BE ALLOWED TO FLOW TO STREAMS, DITCHES, STORM DRAINS, OR ANY OTHER WATER CONVEYANCE. A SUMP OR PIT WITH NO POTENTIAL FOR DISCHARGE SHALL BE CONSTRUCTED IF NEEDED TO CONTAIN CONCRETE WASH WATER. FIELD TILE OR OTHER SUBSURFACE DRAINAGE STRUCTURES WITHIN 10 FT. OF THE SUMP SHALL BE CUT AND PLUGGED. FOR SMALL PROJECTS, TRUCK CHUTES MAY BE RINSED ON THE LOT AWAY FROM ANY WATER CONVEYANCES.

THE CONTRACTOR SHALL MAINTAIN, REPAIR, OR REPLACE ALL EROSION CONTROL INSTALLATIONS AS NEEDED TO ENSURE THE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION. ALL REPAIRS TO BMPS SHALL BE MADE WITHIN 3 DAYS (OR SOONER IF POSSIBLE) OF NOTIFICATION OF DEFICIENCIES. IF THE CORRECTIONS ARE NOT MADE WITHIN THE 3 DAY PERIOD, LIQUIDATED DAMAGES MAY BE ASSESSED AS PER THE ODOT CMS SECTION 108.07.

THAT WILL REMAIN IDLE FOR OVER 14 DAYS. SAVING EXISTING TREES AND LARGE SHRUBS WILL ALSO REDUCE SOIL AND AIR MOVEMENT ACROSS DISTURBED AREAS. SEE TEMPORARY SEEDING; PERMANENT SEEDING; MULCHING PRACTICES; AND TREE AND NATURAL AREA PROTECTION PRACTICES. WATERING - SPRAY SITE WITH WATER UNTIL THE SURFACE IS WET BEFORE AND DURING GRADING AND REPEAT AS NEEDED, ESPECIALLY ON HAUL ROADS AND OTHER HEAVY TRAFFIC ROUTES. WATERING SHALL

BE DONE AT A RATE THAT PREVENTS DUST BUT DOES NOT CAUSE SOIL EROSION. WETTING AGENTS SHALL

SPRAY-ON ADHESIVES - APPLY ADHESIVE ACCORDING TO THE FOLLOWING TABLE OR MANUFACTURERS'

WATER DILUTION	NOZZLE	APPLICATION
ADHESIVE: WATER)	TYPE	RATE (GAL/AC)

2. ALL MATERIALS STORED ONSITE WILL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR APPROPRIATE 3. PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH THE ORIGINAL MANUFACTURER'S LABEL

4. SUBSTANCES WILL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER. 5. WHENEVER POSSIBLE, ALL OF A PRODUCT WILL BE USED UP BEFORE DISPOSING OF THE CONTAINER.

7. THE SITE SUPERINTENDENT WILL INSPECT DAILY TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS

3. IF SURPLUS PRODUCT MUST BE DISPOSED OF, MANUFACTURERS' OR LOCAL AND STATE RECOMMENDED

1. ALL SPILLS SHALL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY. MANUFACTURERS' RECOMMENDED METHODS FOR SPILL CLEANUP POSTED AND SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND 2. MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREA

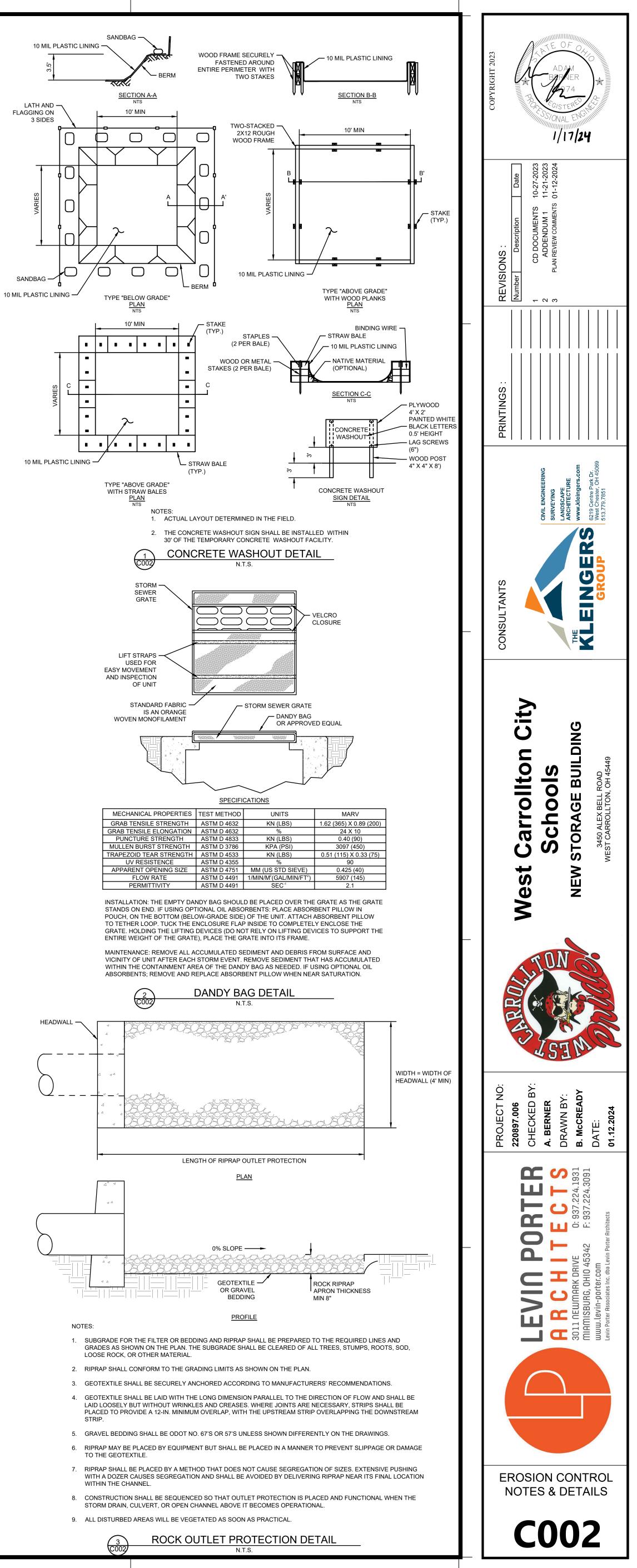
ONSITE. EQUIPMENT AND MATERIALS WILL INCLUDE BUT NOT BE LIMITED TO BROOMS, DUST PANS, MOPS, RAGS, GLOVES, GOGGLES, KITTY LITTER, SAND, SAWDUST, AND PLASTIC AND METAL TRASH CONTAINERS SPECIFICALLY 3. THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE

4. SPILLS OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY, REGARDLESS OF THE SIZE. SPILLS OF 25 OR MORE GALLONS OF PETROLEUM WASTE MUST BE REPORTED TO OHIO EPA (1-800-282-9378), THE LOCAL FIRE DEPARTMENT, AND THE LOCAL EMERGENCY PLANNING COMMITTEE WITHIN 30 MINUTES OF THE SPILL. ALL SPILLS, WHICH RESULT IN CONTACT WITH WATERS

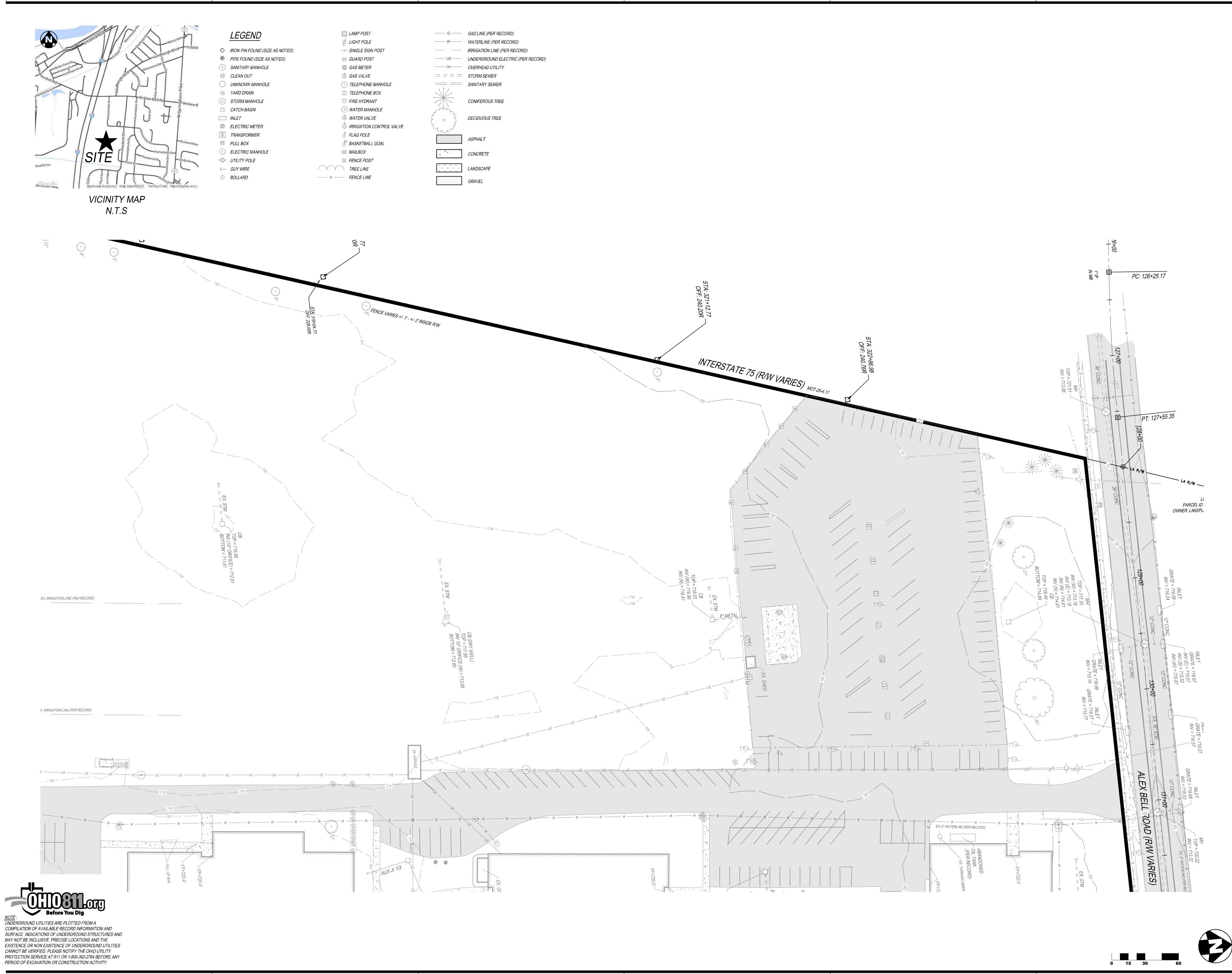
5. SOILS CONTAMINATED BY PETROLEUM OR OTHER CHEMICAL SPILLS MUST BE TREATED/DISPOSED AT AN OHIO EPA APPROVED SOLID WASTE MANAGEMENT FACILITY OR HAZARDOUS WASTE TREATMENT, STORAGE OR

6. THE SPILL PREVENTION PLAN WILL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT THIS TYPE OF SPILL FROM REOCCURRING AND HOW TO CLEAN UP THE SPILL IF THERE IS ANOTHER ONE. A DESCRIPTION OF THE SPILL.

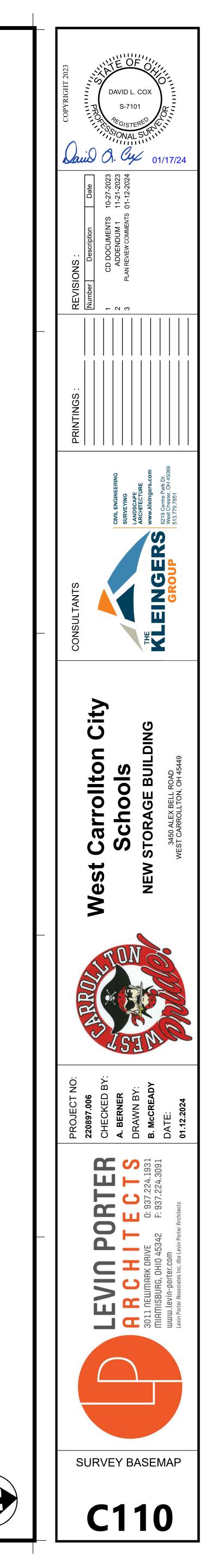
PREVENTION AND CLEANUP COORDINATOR. HE WILL DESIGNATE SITE PERSONNEL WHO WILL RECEIVE SPILL PREVENTION AND CLEANUP TRAINING. THESE INDIVIDUALS WILL EACH BECOME RESPONSIBLE FOR A PARTICULAR PHASE OF PREVENTION AND CLEANUP. THE NAMES OF RESPONSIBLE SPILL PERSONNEL WILL BE





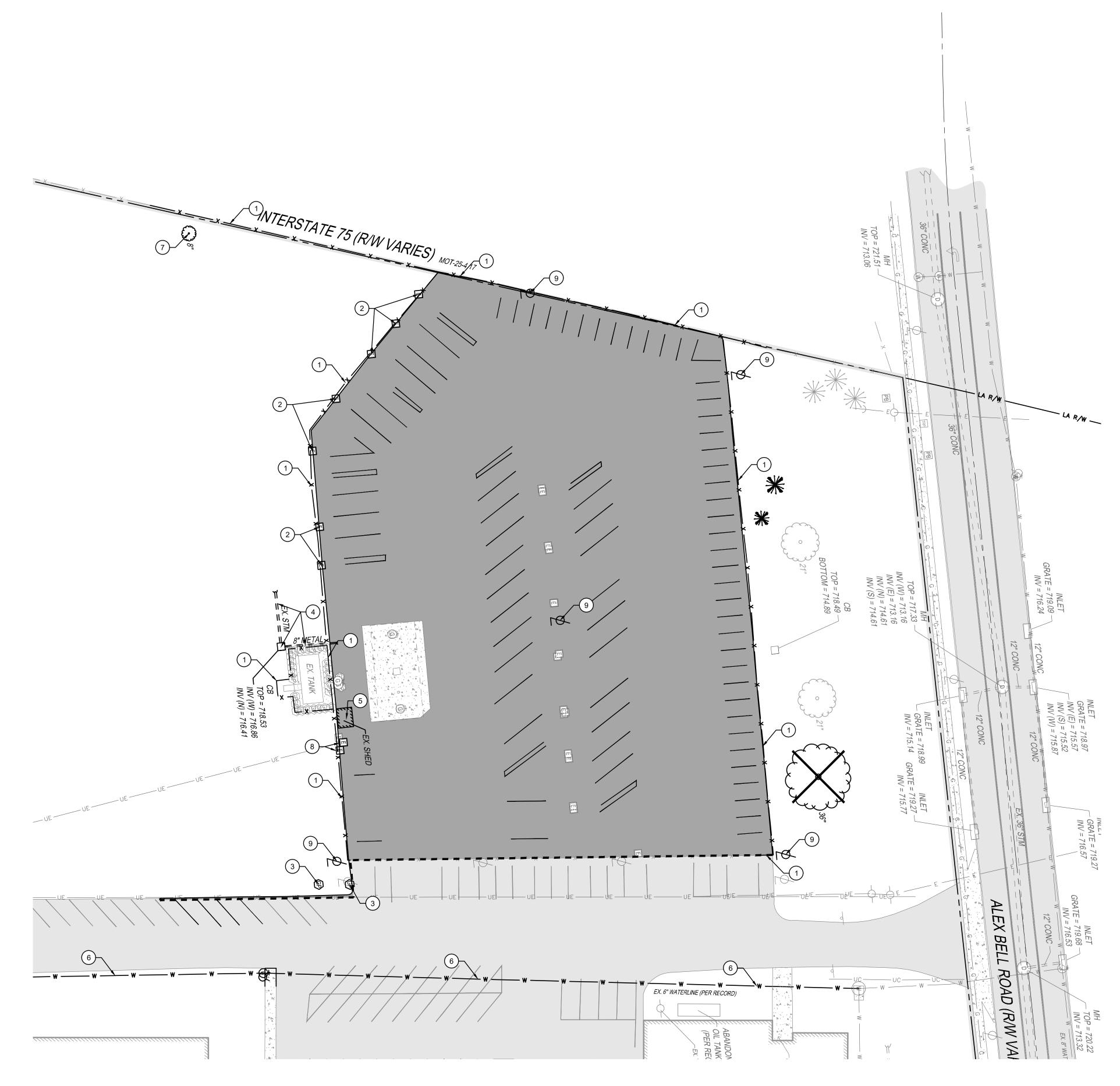


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هم. · · ·	CONCRETE





<u>NOTE</u> : UNDERGROUND UTILITIES ARE PLOTTED FROM A COMPILATION OF AVAILABLE RECORD INFORMATION AND SURFACE INDICATIONS OF UNDERGROUND STRUCTURES AND MAY NOT BE INCLUSIVE. PRECISE LOCATIONS AND THE EXISTENCE OR NON EXISTENCE OF UNDERGROUND UTILITIES CANNOT BE VERIFIED. PLEASE NOTIFY THE OHIO UTILITY PROTECTION SERVICE AT 811 OR 1-800-362-2764 BEFORE ANY PERIOD OF EXCAVATION OR CONSTRUCTION ACTIVITY.



DEMOLITION PLAN LEGEND

REMOVE CONCRETE

TREE PROTECTION PER DETAIL 3/C004

REMOVE ASPHALT PAVEMENT

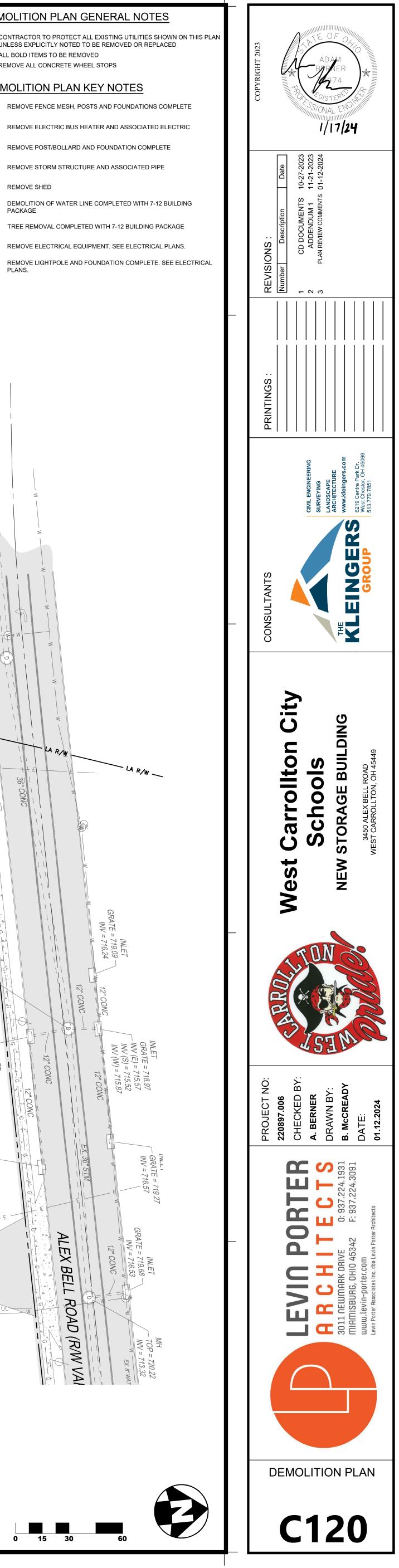
SAWCUT LINE

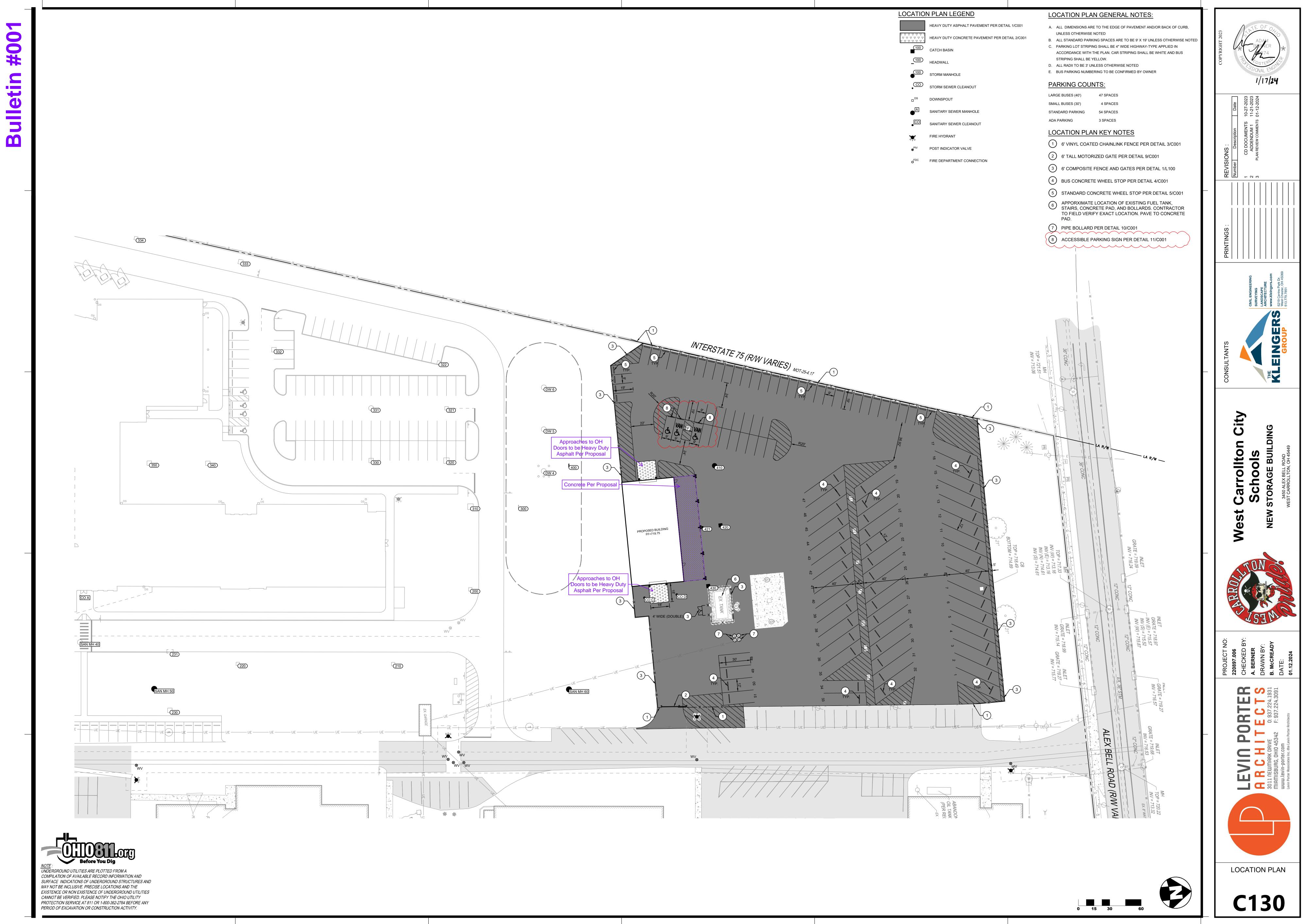
DEMOLITION PLAN GENERAL NOTES

- A. CONTRACTOR TO PROTECT ALL EXISTING UTILITIES SHOWN ON THIS PLAN UNLESS EXPLICITLY NOTED TO BE REMOVED OR REPLACED B. ALL BOLD ITEMS TO BE REMOVED
- C. REMOVE ALL CONCRETE WHEEL STOPS

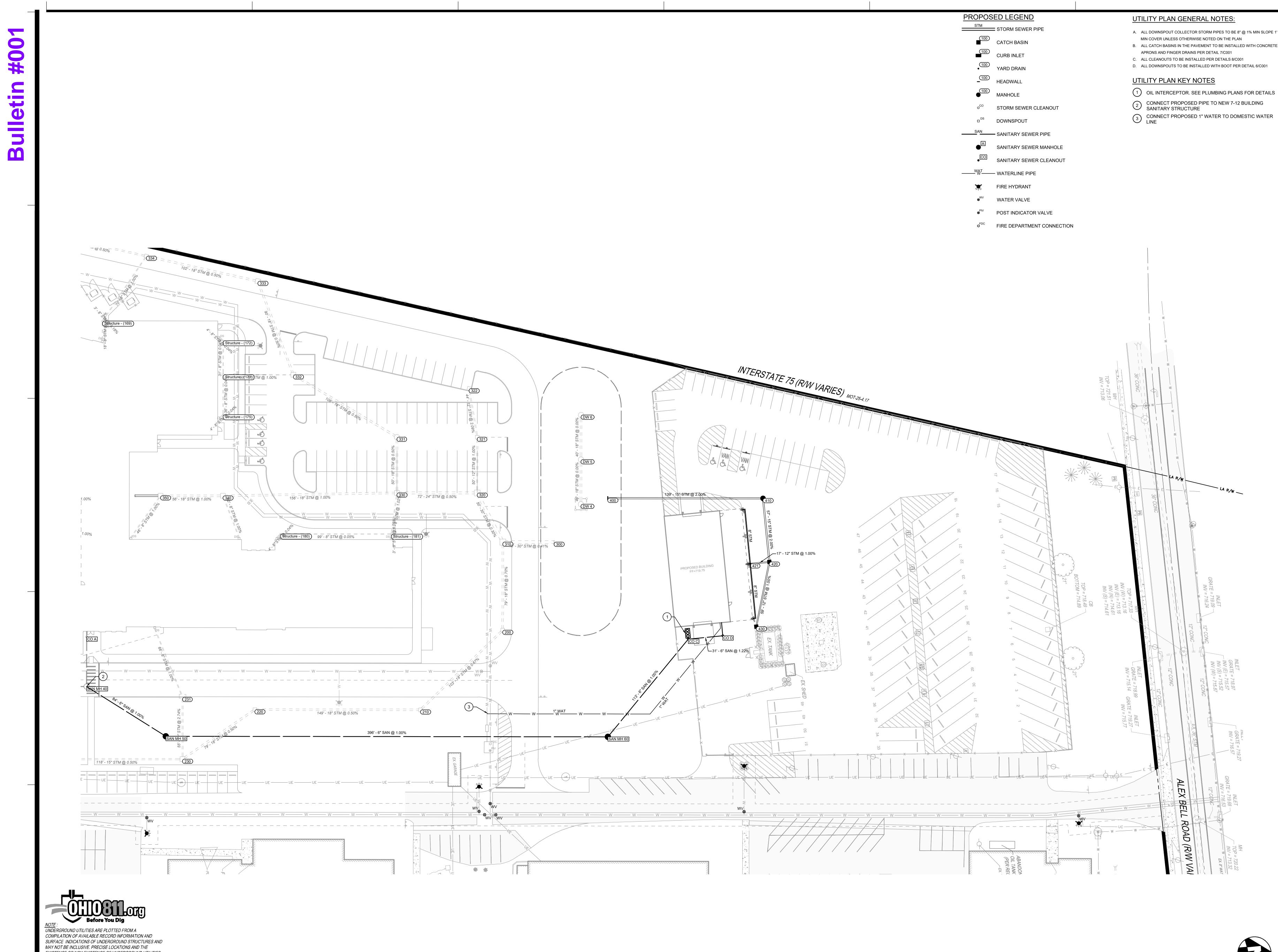
DEMOLITION PLAN KEY NOTES

- (1) REMOVE FENCE MESH, POSTS AND FOUNDATIONS COMPLETE
- 2 REMOVE ELECTRIC BUS HEATER AND ASSOCIATED ELECTRIC
- 3 REMOVE POST/BOLLARD AND FOUNDATION COMPLETE
- 4 REMOVE STORM STRUCTURE AND ASSOCIATED PIPE
- 5 REMOVE SHED
- 6 DEMOLITION OF WATER LINE COMPLETED WITH 7-12 BUILDING PACKAGE
- (7) TREE REMOVAL COMPLETED WITH 7-12 BUILDING PACKAGE
- 8 REMOVE ELECTRICAL EQUIPMENT. SEE ELECTRICAL PLANS.
- 9 REMOVE LIGHTPOLE AND FOUNDATION COMPLETE. SEE ELECTRICAL PLANS.

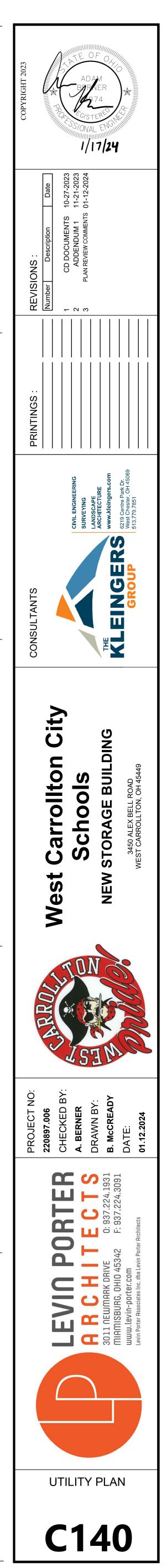




BUSES (40')	47 SPACES
BUSES (30')	4 SPACES
ARD PARKING	54 SPACES
RKING	3 SPACES



EXISTENCE OR NON EXISTENCE OF UNDERGROUND UTILITIES CANNOT BE VERIFIED. PLEASE NOTIFY THE OHIO UTILITY PROTECTION SERVICE AT 811 OR 1-800-362-2764 BEFORE ANY PERIOD OF EXCAVATION OR CONSTRUCTION ACTIVITY.

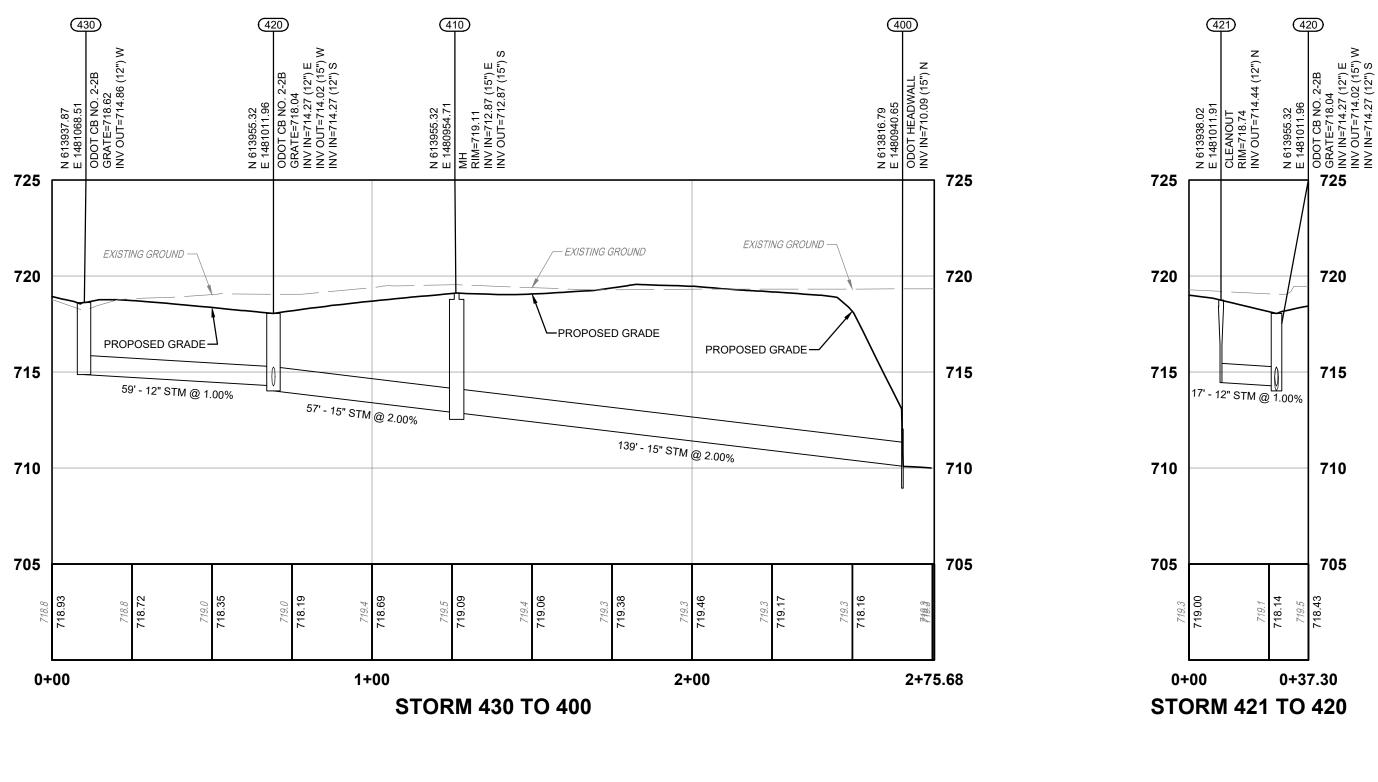


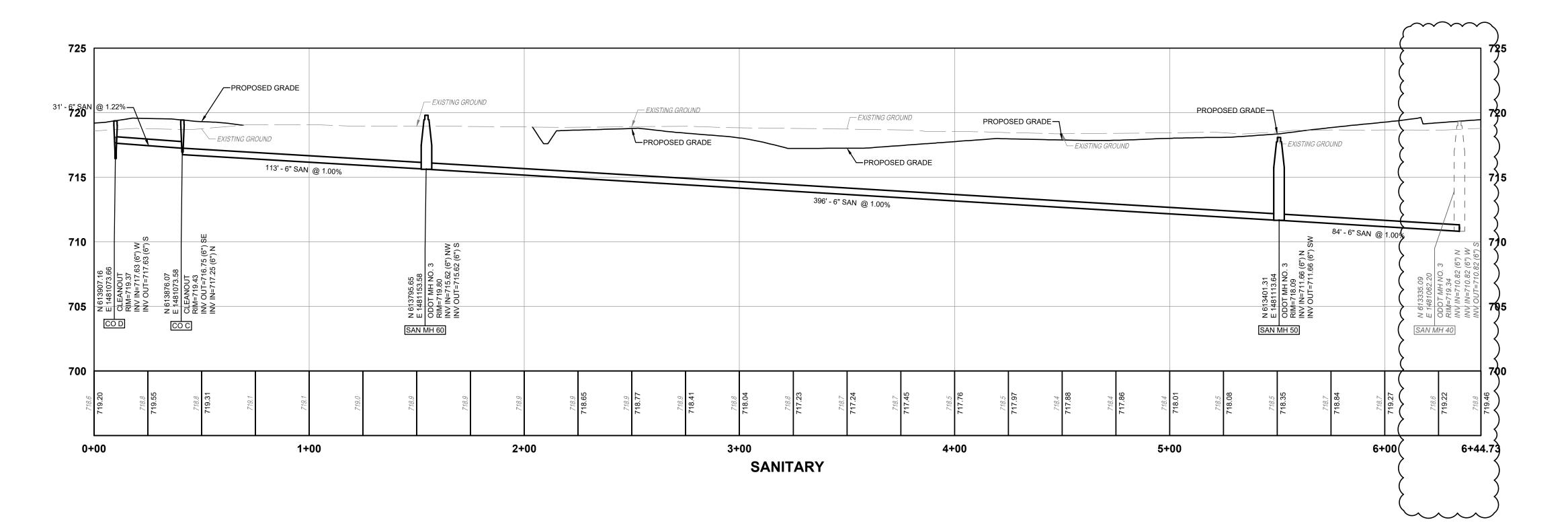


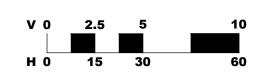
#001 Bulletin

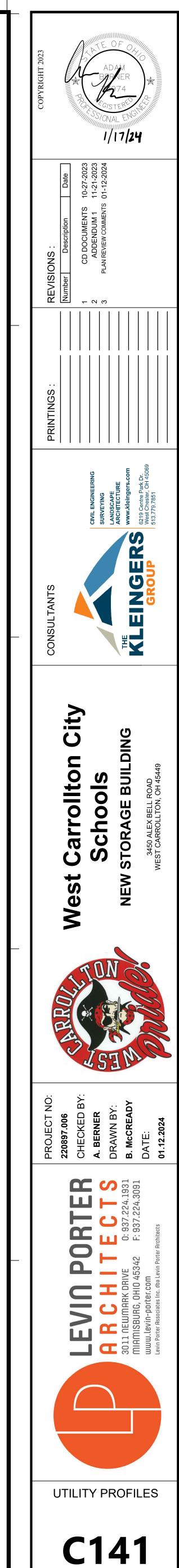


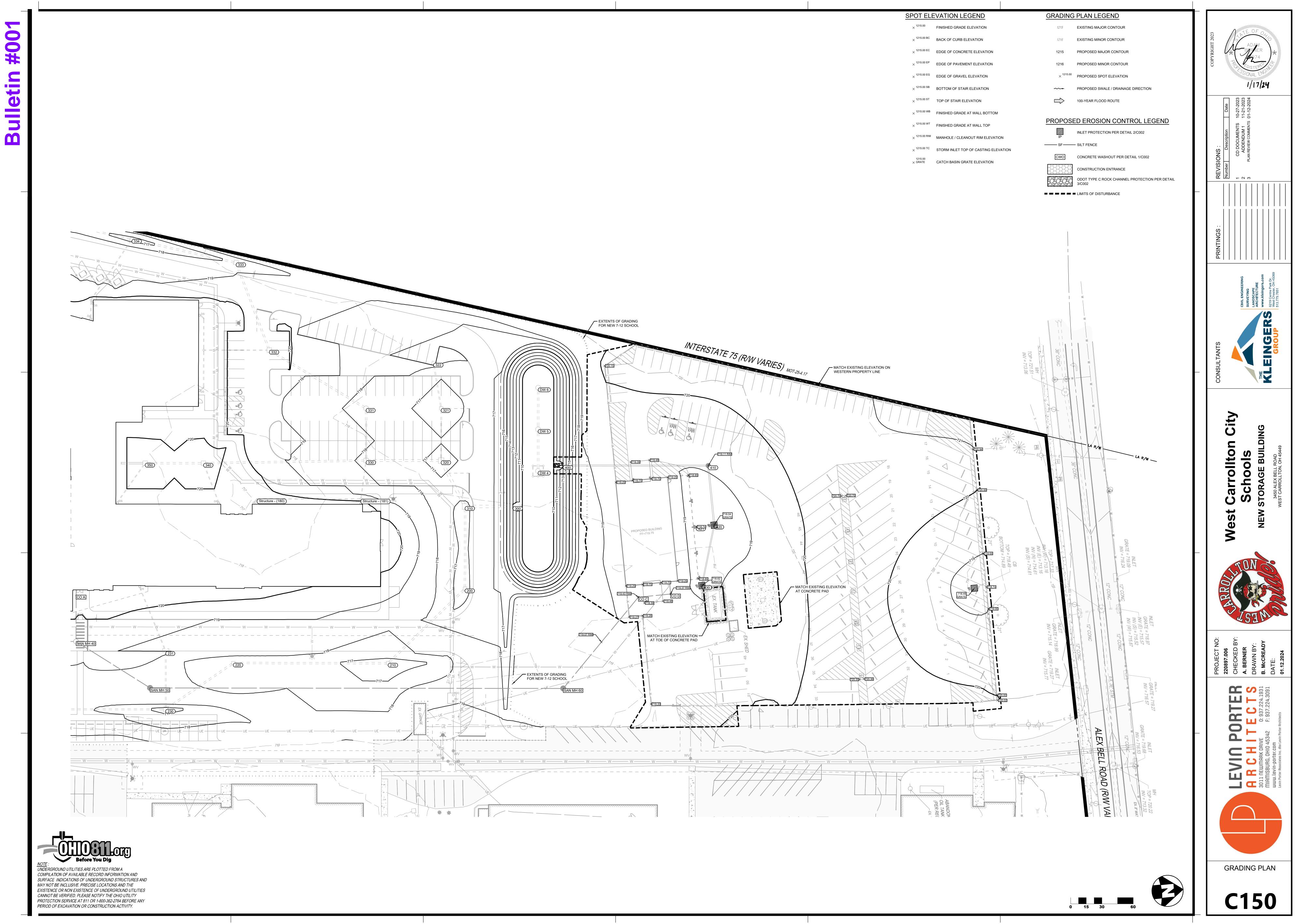
<u>NOTE</u> : UNDERGROUND UTILITIES ARE PLOTTED FROM A COMPILATION OF AVAILABLE RECORD INFORMATION AND SURFACE INDICATIONS OF UNDERGROUND STRUCTURES AND MAY NOT BE INCLUSIVE. PRECISE LOCATIONS AND THE EXISTENCE OR NON EXISTENCE OF UNDERGROUND UTILITIES CANNOT BE VERIFIED. PLEASE NOTIFY THE OHIO UTILITY PROTECTION SERVICE AT 811 OR 1-800-362-2764 BEFORE ANY PERIOD OF EXCAVATION OR CONSTRUCTION ACTIVITY.

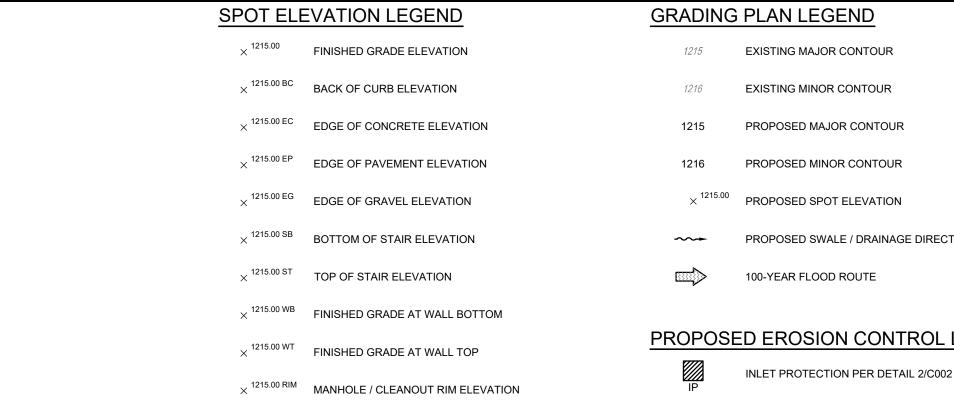






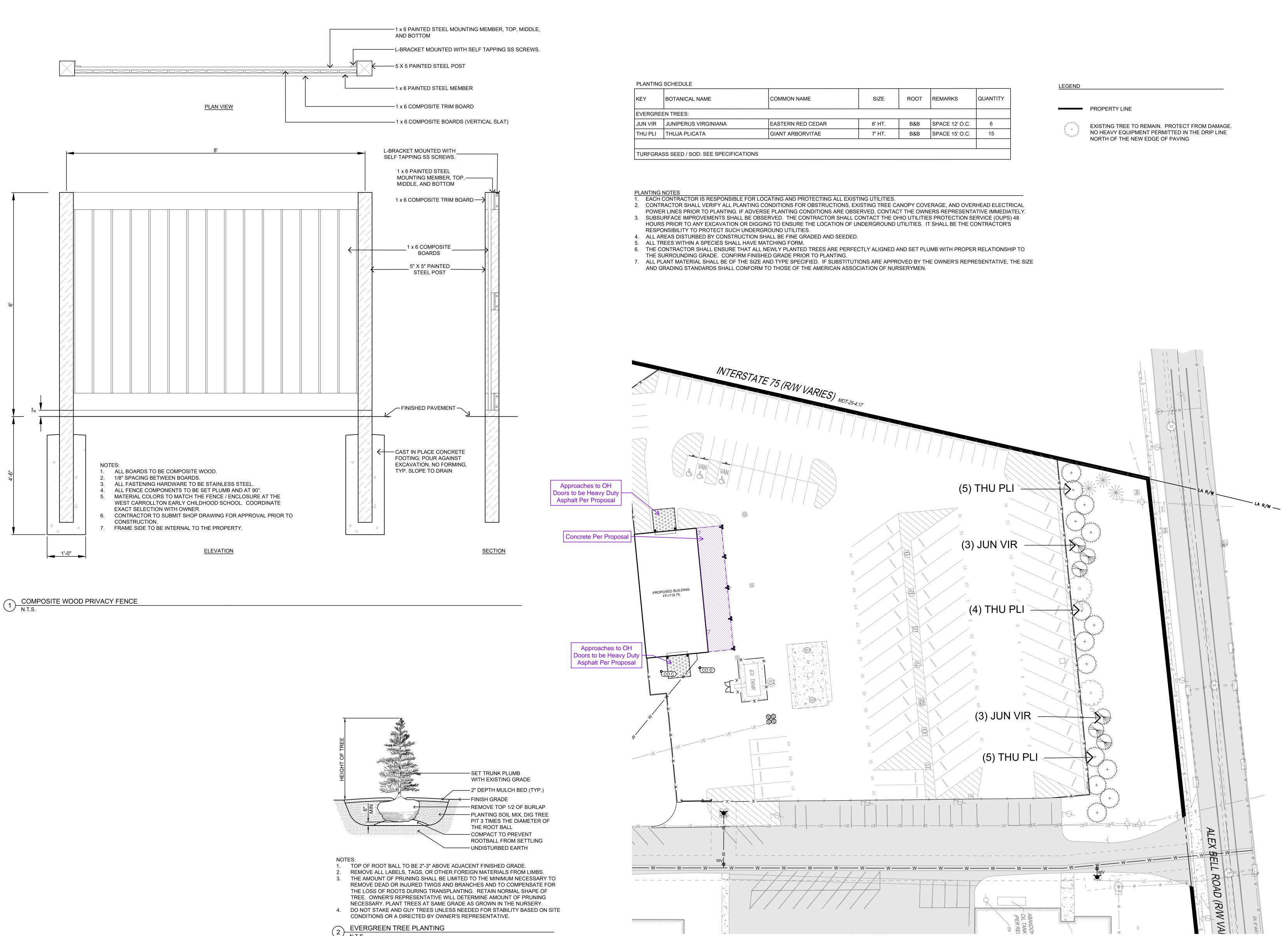






IP	
SF	- SILT FENCE
CWO	CONCRETE WASHOUT PER DETAIL 1/C002
	CONSTRUCTION ENTRANCE
	ODOT TYPE C ROCK CHANNEL PROTECTION PER D

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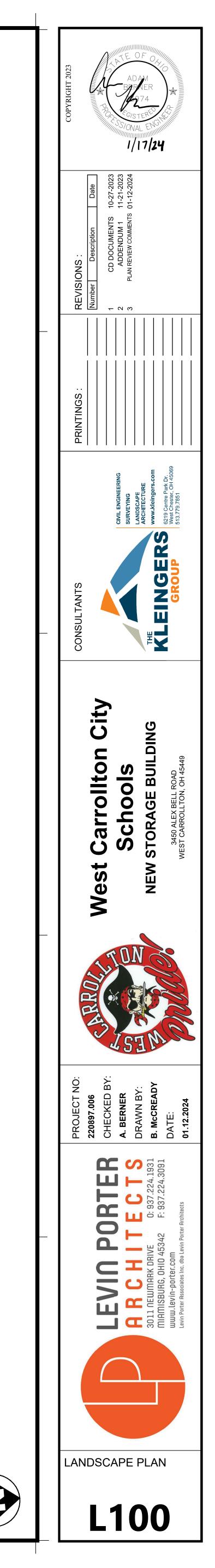




<u>NOTE</u> : UNDERGROUND UTILITIES ARE PLOTTED FROM A COMPILATION OF AVAILABLE RECORD INFORMATION AND SURFACE INDICATIONS OF UNDERGROUND STRUCTURES AND MAY NOT BE INCLUSIVE. PRECISE LOCATIONS AND THE EXISTENCE OR NON EXISTENCE OF UNDERGROUND UTILITIES CANNOT BE VERIFIED. PLEASE NOTIFY THE OHIO UTILITY PROTECTION SERVICE AT 811 OR 1-800-362-2764 BEFORE ANY PERIOD OF EXCAVATION OR CONSTRUCTION ACTIVITY.

2 EVERGREEN TREE PLANTING N.T.S.

	SIZE	ROOT	REMARKS	QUANTITY
.R	6' HT.	B&B	SPACE 12' O.C.	6
	7' HT.	B&B	SPACE 15' O.C.	15



SPECIAL INSPECTION NOTES

1 - The OWNER shall employ one or more special inspectors to provide inspections during construction on the types of work itemized below. 2 - Only the required STRUCTURAL Special Inspections have been listed on this sheet .

3 - 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 constr 4 - Upon request, Shell + Meyer can provide a list of local agencies providing these inspection services.

5 - Numbered and lowercase sublettered inspections indicate referenced OBC requirements 6 - Some numbered or lettered special inspection items may not be listed. These items are not required on this project.

7 - Additional information regarding inspections and tests may be found in the project specifications, on the drawings, and in the building code and referenced standards. 8 - The Special Inspections table and other contract documents indicate the special inspections anticipated at the time the documents were approved by the Building Official.

REQUIRED STRUCTURAL SPECIAL INSPECTIONS					
Soils - OBC Table 1705.6	Continuous	Periodic	Referenced Standard	Additional OBC Requirements	Remarks
		- criculo			Geotechnical Investigation shall include items of Special Inspection
A. Geotechnical Investigations				1803	and Testing as noted in OBC Section 1803
1. Verify materials below shallow foundations are adequate to achieve the					
design bearing capacity.	_	Х			Confirm bearing conforms to geotechnical report
2. Verify excavations are extended to proper depth and have reached					
proper material.	_	Х			
					Confirm structural fill materials meet specifications outlined in
3. Perform classification and testing of compacted fill materials.	_	Х		1803.5.1	geotechnical report.
4. Verify use of proper materials, densities and lift thicknesses during					Confirm structural fill materials meet specifications outlined in
placement and compaction of compacted fill.	X				geotechnical report.
5. Prior to placement of compacted fill, observe subgrade and verify that					Confirm that site requirements are met according to the geotechnic
site has been prepared properly.		Х			report, prior to placing structural fill.
			, 		
				Additional IBC	
Concrete Construction, Cast-In-Place - OBC Table 1705.3	Continuous	Periodic	Referenced Standard	Requirements	Remarks
					SPECIAL INSPECTIONS APPLY TO VERIFICATION OF
					DETAILED FABRICATION AND QUALITY CONTROL
					PROCEDURES INCLUDING REVIEW FOR COMPLETENESS AN
A. Fabricator Inspections	—	Х		1704.2.5	ADEQUACY RELATIVE TO THE CODE REQUIREMENTS
					Confirm size and spacing of bars. Tolerances and reinforcing
1. Inspect reinforcement and verify placements.	—	Х	ACI 318 Ch. 20, 25.2, 25.3, 26.6.1-26.6.3.	1908.4	placement per ACI 7.5; spacing limits for reinforcing ACI 7.6
3. Inspect anchors cast in concrete.	_	Х	ACI 318: 17.8.2	_	
					All bolts visually inspected.
					Post-installed anchors shall be qualified for use in cracked concrete
					and shall have passed the Simulated Seismic Tests in accordance
					with ACI 355.2. Special inspections apply to anchor product name
4. Inspect anchors post-installed in hardened concrete members.				_	type, and dimensions, hole dimensions, compliance with drill bit
a. Adhesive anchors installed horizontally or upwardly inclined orientations	X		ACI 318: 17.8.2.4		requirements, cleanliness of the hole and anchor, adhesive
to resist sustained tension loads.					expiration date, anchor/adhesive installation, anchor embedment,
b. Mechanical anchors and adhesive anchors not defined in 4.a.	_	х	ACI 318: 17.8.2		and tightening torque
				1904.1, 1904.2,	
5. Verify use of required design mix	_	Х	ACI 318:Ch.19, 26.4.3, 26.4.4	1908.2, 1908.3	Tests and submittals per specifications
6. Prior to concrete placement, fabricate specimens for strength tests,					
perform slump and air content tests, and determine the temperature of					
concrete.	X		ASTM C172, ASTM C31, ACI 318: 26.4, 26.12	1908.1	Tests per specifications
					Confirm products conform to approved shop drawings; confirm
8. Verify maintenance of specified curing temperature and techniques.		Х	ACI 318: 26.5.3-26.5.5	1908.9	curing performed per specifications
· · · · · ·					
				Additional OBC	
Metal Building System	Continuous	Periodic	Referenced Standard	Requirements	Remarks
A. Metal Building system including light gage purlins and girts, bracing,					
rafters, columns, and connections.		Х		1704.2.5	Refer to inspection of fabricator requirements
					i i i i i i i i i i i i i i i i i i i

struction or operation requiring special inspection.	

DESIGN CRITERIA NOTES

REFERENCED DESIGN CODE: OHIO BUILDING CODE (2017) ENVIRONMENTAL LOADS: ROOF SNOW LOAD: GROUND SNOW LOAD, Pg = 20 PSF FLAT ROOF SNOW LOAD,Pf = 20 PS'SNOW EXPOSURE FACTOR,Ce = 1.0SNOW LOAD IMPORTANCE FACTOR,Is = 1.0 Pf = 20 PSF THERMAL FACTOR, Ct = 1.0 WIND LOAD: BASIC WIND SPEED (3 SECOND GUST) = 115 MPH RISK CATEGORY = WIND EXPOSURE = INTERNAL PRESSURE COEFFICIENT = +/- 0.18 COMPONENT AND CLADDING TO BE USED FOR ALL ITEMS NOT SPECIFICALLY DESIGNED BY ENGINEER OF RECORD (0.6W, SERVICE) = ROOFS = +20 PSF / -45 PSF WALLS = +20 PSF / -24 PSF EARTHQUAKE LOAD: SEISMIC IMPORTANCE FACTOR, le = 1.0 MAPPED SPECTRAL ACCELERATION, Ss = 0.149 S1 = 0.072 SITE CLASS = DESIGN SPECTRAL ACCELERATION: Sds = 0.159 Sd1 = 0.116 SEISMIC DESIGN CATEGORY = B

> BASIC SEISMIC-FORCE-RESISTING SYSTEM (RESPONSE MODIFICATION FACTOR): SEE METAL BUILDING DRAWINGS FOR SEISMIC FORCE RESISTING SYSTEM, RESPONSE COEFFICIENT ANALYSIS PROCEDURE AND BASE SHEAR.

DESIGN UNIFORM LOADS: UNIFORM FLOOR LIVE LOAD: 200 PSF

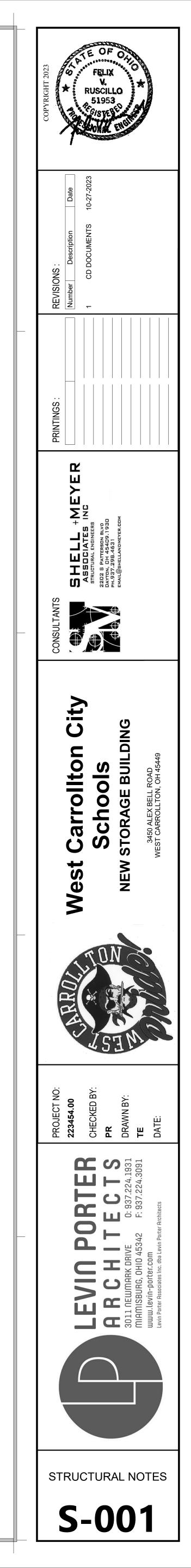
GENERAL STRUCTURAL NOTES

INSPECTIONS WILL BE REQUIRED FOR THIS PROJECT. SPECIAL INSP SHALL BE PERFORMED IN ACCORDANCE WITH THE "SPECIAL INSPEC REQUIREMENTS" SCHEDULE. ALL FABRICATORS SHALL SATISFY THE APPROVAL" PROVISIONS IN SECTION 1704.2.5.1 WHICH REQUIRES TH	ECTIONS TION FABRICATOR FABRICATOR DE FABRICATOR
 IN ACCORDANCE WITH SECTION 1704 OF THE OHIO BUILDING CODE, S INSPECTIONS WILL BE REQUIRED FOR THIS PROJECT. SPECIAL INSP SHALL BE PERFORMED IN ACCORDANCE WITH THE "SPECIAL INSPEC REQUIREMENTS" SCHEDULE. ALL FABRICATORS SHALL SATISFY THE APPROVAL" PROVISIONS IN SECTION 1704.2.5.1 WHICH REQUIRES TH 	ECTIONS TION FABRICATOR FABRICATOR DE FABRICATOR
INSPECTIONS WILL BE REQUIRED FOR THIS PROJECT. SPECIAL INSP SHALL BE PERFORMED IN ACCORDANCE WITH THE "SPECIAL INSPEC REQUIREMENTS" SCHEDULE. ALL FABRICATORS SHALL SATISFY THE APPROVAL" PROVISIONS IN SECTION 1704.2.5.1 WHICH REQUIRES TH	ECTIONS TION FABRICATOR FABRICATOR DE FABRICATOR
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APPROVAL" PROVISIONS IN SECTION 1704.2.5.1 WHICH REQUIRES TH	E FABRICATOR DE FABRICATOR
APPROVAL" PROVISIONS IN SECTION 1704.2.5.1 WHICH REQUIRES TH	E FABRICATOR DE FABRICATOR
	DE FABRICATOR
TO MAINTAIN AN AGREEMENT A BOARD RECOGNIZED INDUSTRY TRA	FABRICATOR
ASSOCIATION CERTIFICATION PROGRAM OR A BOARD RECOGNIZED	
INSPECTION AGENCY PER 4101:7-6-01 OF OHIO ADMINISTRATIVE COD	L .
2. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND REPOR	T ANY
CONDITIONS SUBSTANTIALLY DIFFERENT THAN THOSE SHOWN TO TI	HE ENGINEER.
3. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH TH	E DRAWINGS
AND SPECIFICATIONS OF ALL OTHER DISCIPLINES. THE CONTRACTO	R SHALL
VERIFY THE REQUIREMENTS OF OTHER TRADES AS TO SLEEVES, CH	
HANGERS, INSERTS, ANCHORS, HOLES, AND OTHER ITEMS TO BE PL	
IN THE STRUCTURAL WORK.	
4. THE STRUCTURAL DRAWINGS HEREIN REPRESENT THE FINISHED ST	
THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY GUYING AND BF	
REQUIRED TO ERECT AND HOLD THE STRUCTURE IN PROPER ALIGNI	MENT UNTIL
ALL STRUCTURAL WORK AND CONNECTIONS HAVE BEEN COMPLETE	D. THE
INVESTIGATION, DESIGN, SAFETY, ADEQUACY AND INSPECTION OF E	RECTION
BRACING, SHORING, TEMPORARY SUPPORTS, ETC. IS THE SOLE RES	PONSIBILITY
OF THE CONTRACTOR.	
SHELL + MEYER ASSOCIATES, INC. SHALL NOT BE RESPONSIBLE FOR	THE
METHODS, TECHNIQUES, AND SEQUENCES OF PROCEDURES TO PER	RFORM THE
WORK.	
6. FOR THE PURPOSES OF UL FIRE ASSEMBLY RATINGS E119 AND UL 2	
STRUCTURE SHALL BE CONSIDERED "UNRESTRAINED", UNLESS SPI	
NOTED IN THE CONSTRUCTION DOCUMENTS PER OBC SECTION 703.	2.3.
POST INSTALLED ANCHORS	
1. INSTALL ALL ANCHORS PER THE MANUFACTURER'S PUBLISHED INST	ALLATION
INSTRUCTIONS (MPII).	
2. WHERE NOT INDICATED ON THE DRAWINGS, POST-INSTALLED ANCHO	
CONSIST OF THE FOLLOWING ANCHOR TYPES AS PROVIDED BY HILTI	
3. CONCRETE SUBSTRATE - U.N.O. USE 3/4" DIAM. HILTI 'HAS' THREADED	
HIT-Z ANCHOR RODS WITH HIT-HY 200 SAFE SET SYSTEM, ICC ESR-31	87. MINIMUM
EMBEDMENT 0'-6 3/4".	
4. REINFORCING INTO CONCRETE - U.N.O. USE HILTI HIT-RE 500 V3 EPO>	KY, ICC
ESR-3814. MINIMUM EMBEDMENT INTO CONCRETE 44x BAR DIAMETE	
5. GROUTED CONCRETE MASONRY (INSTALLED IN WALL FACE) MIN. 8" C	
AROUND ALL ANCHORS - U.N.O. USE 3/4" DIAM. HILTI KWIK BOLT 3 ANG	CHORS, ICC-
ES ESR-1385. MINIMUM EMBEDMENT 0'-4 3/4".	
6. GROUTED CONCRETE MASONRY (INSTALLED VERTICALLY IN TOP CO	
WALL) - U.N.O. USE 3/4" DIAM. HILTI KWIK HUS EZ SCREW ANCHORS, I	CC-ES
ESR-3056. MINIMUM EMBEDMENT 0'-6 1/4".	
7. UNGROUTED CONCRETE MASONRY - USE THE HILTI HIT HY-270 ADHE	SIVE SYSTEM
ICC-ES ESR-2682. U.N.O. STEEL ANCHORS SHALL BE 1/2" DIAM. HILTI '	
CONTINUOUSLY THREADED ROD x 0'-2" MINIMUM EMBEDMENT. USE T	
APPROPRIATELY SIZED MESH SLEEVES PER ANCHOR.	
DIVISION 3 - FOUNDATIONS AND CONCRETE	

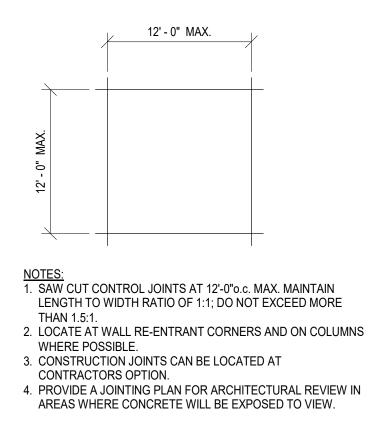
- 1.
 ALLOWABLE NET SOIL BEARING CAPACITY = 2,000 PSF ; REF. SOILS REPORT DATED JUNE 29, 2023

 BY CT CONSULTANTS REPORT NO. 2317301

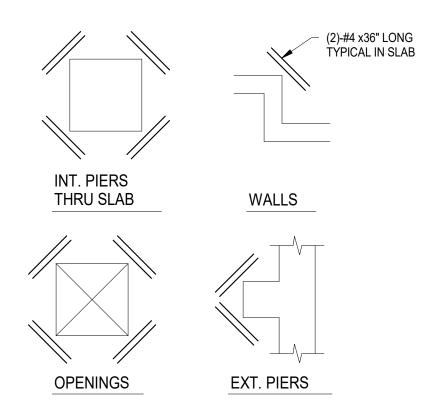
 2.
 ALL EXCAVATIONS SHALL BE INSPECTED BY A GEOTECHNICAL ENGINEER PRIOR TO PLACING
- CONCRETE. CONCRETE WORK SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE LATEST "AMERICAN CONCRETE INSTITUTE" INCLUDING THE REQUIREMENTS OF ACI 301, "SPECIFICATION FOR STRUCTURAL CONCRETE BUILDINGS". CONCRETE MIXES SHALL BE DESIGNED PER ACI 301, USING PORTLAND CEMENT CONFORMING TO ASTM C150 OR C595, AGGREGATE CONFORMING TO ASTM C33, AND ADMIXTURES CONFORMING TO ASTM C494, C1017, C618, C989 AND C260. CONCRETE SHALL BE READY-MIXED IN ACCORDANCE WITH ASTM C94. HOT WEATHER CONCRETING SHALL BE IN ACCORDANCE WITH ACI 305. COLD WEATHER 4
- CONCRETING SHALL BE IN ACCORDANCE WITH ACI 306. CONCRETE SHALL ATTAIN THE FOLLOWING ULTIMATE 28 DAY COMPRESSIVE STRENGTHS: 5. 3,000 P.S.I. FOR FOOTINGS AND DRILLED PIERS 3,500 P.S.I. FOR FLOOR SLABS ON DECK 4,000 P.S.I. FOR INT. SLABS ON GRADE, WALLS, WALL PIERS, BEAMS AND COLUMNS
- 4,500 P.S.I. FOR EXT. SLABS ON GRADE; SLUMP SHALL BE 4" ± 1" ALL CONCRETE TO BE PERMANENTLY EXPOSED TO WEATHER SHALL BE AIR ENTRAINED (4.5 TO 6
- 7.5%) WITH AN ADMIXTURE THAT CONFORMS TO ASTM C260. MAXIMUM W/C RATIO = 0.45 ALL REINFORCING STEEL SHALL CONFORM TO ASTM A615 OR ASTM A996, GRADE 60.
- TOP OF FOOTING ELEVATIONS SHALL BE AS SHOWN ON THE FOUNDATION PLAN. THESE ELEVATIONS ARE A MAXIMUM AND SHALL BE LOWERED AS REQUIRED TO OBTAIN THE REQUIRED DESIGN BEARING PRESSURE PER THE GEOTECHNICAL ENGINEER'S SPECIFICATION. REFER TO SCHEDULES AND DETAILS FOR MINMIMUM FOOTING THICKNESSES.



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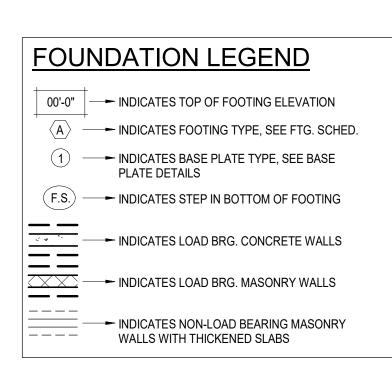
TYPICAL SLAB-ON-GRADE CONTROL JOINTS

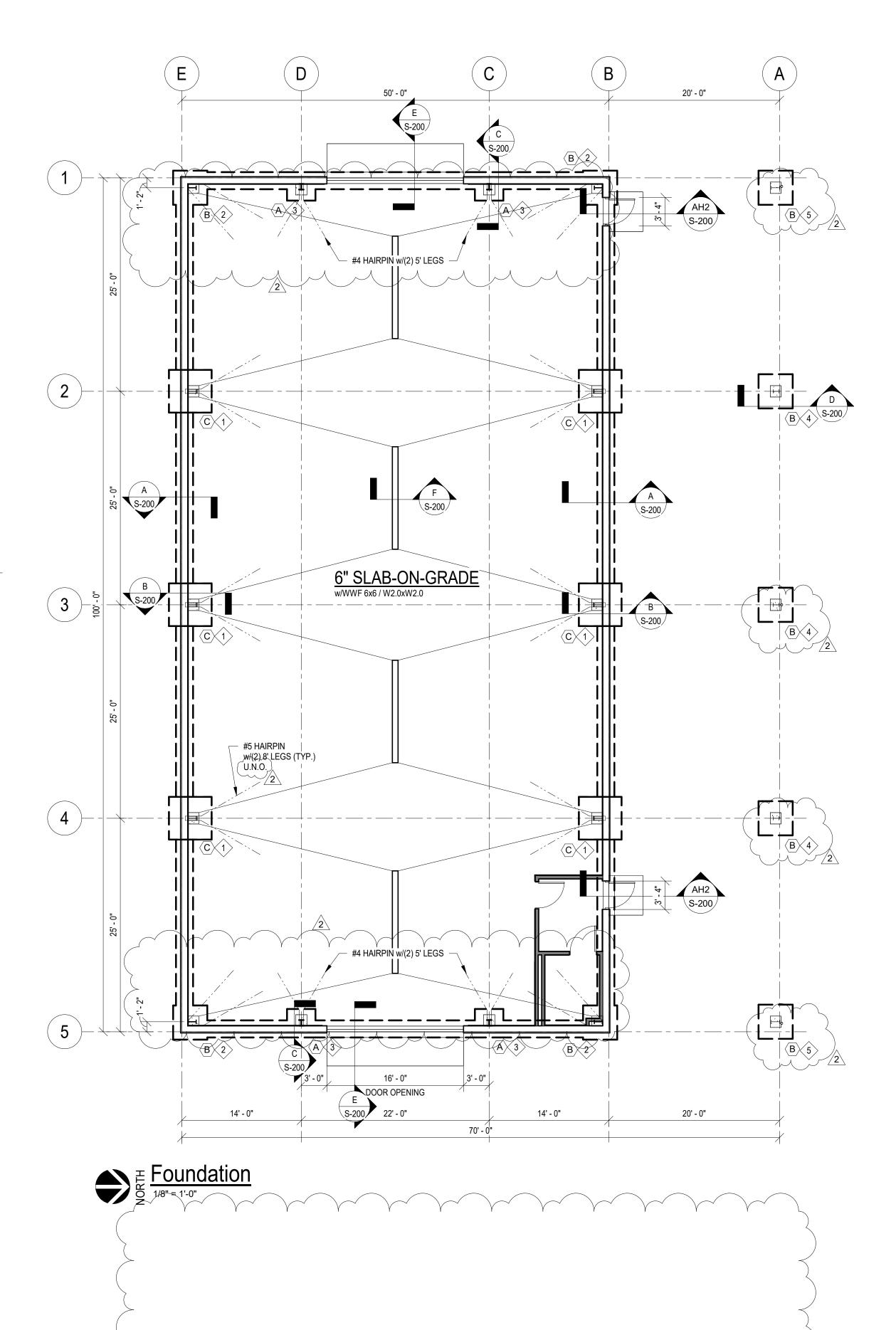


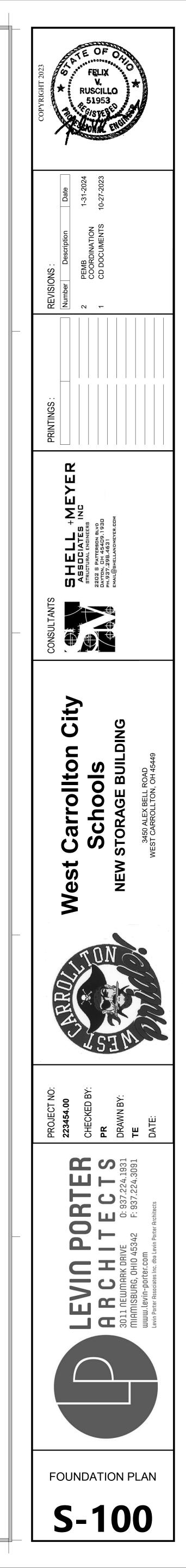
SLAB REINFORCING DETAILS AT REENTRANT CORNERS

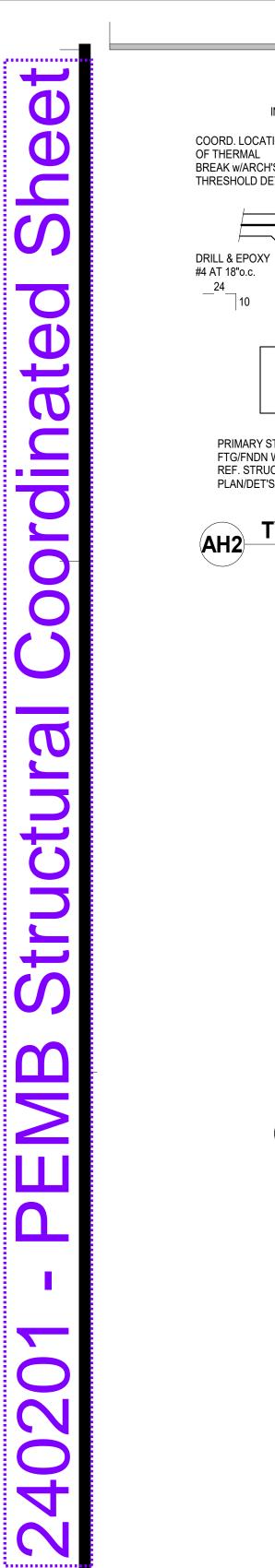
FOOTING SCHEDULE				
MARK	SIZE	REINFORCING	COLUMN REACTIONS	
$\langle A \rangle$	3'-4"SQ. x 12"	(4) - #5 E.W.	15k	
B	4'-0"SQ. x 12"	(5) - #5 E.W.	20k	
C	5'-0"SQ. x 16"	(6) - #5 E.W.	30k	
Footnote: Allowable Soil Bearing Capacity = 1500 PSF				

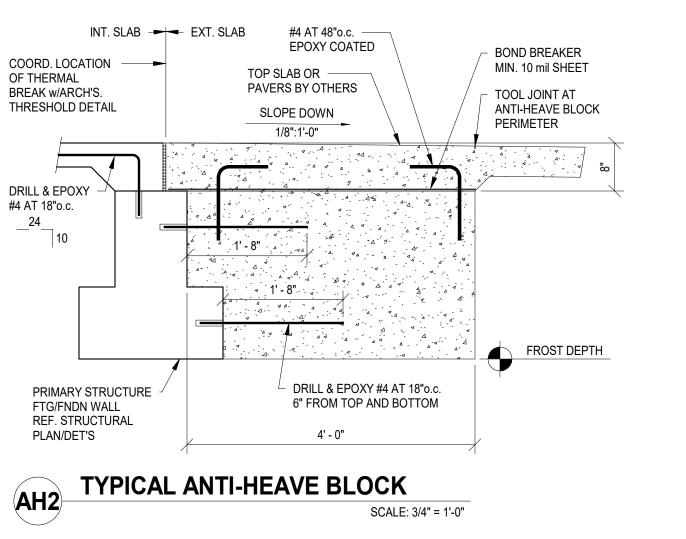
RAMMED AGGREGATE PIERS ARE ONLY REQUIRED UNDER COLUMN FOOTINGS

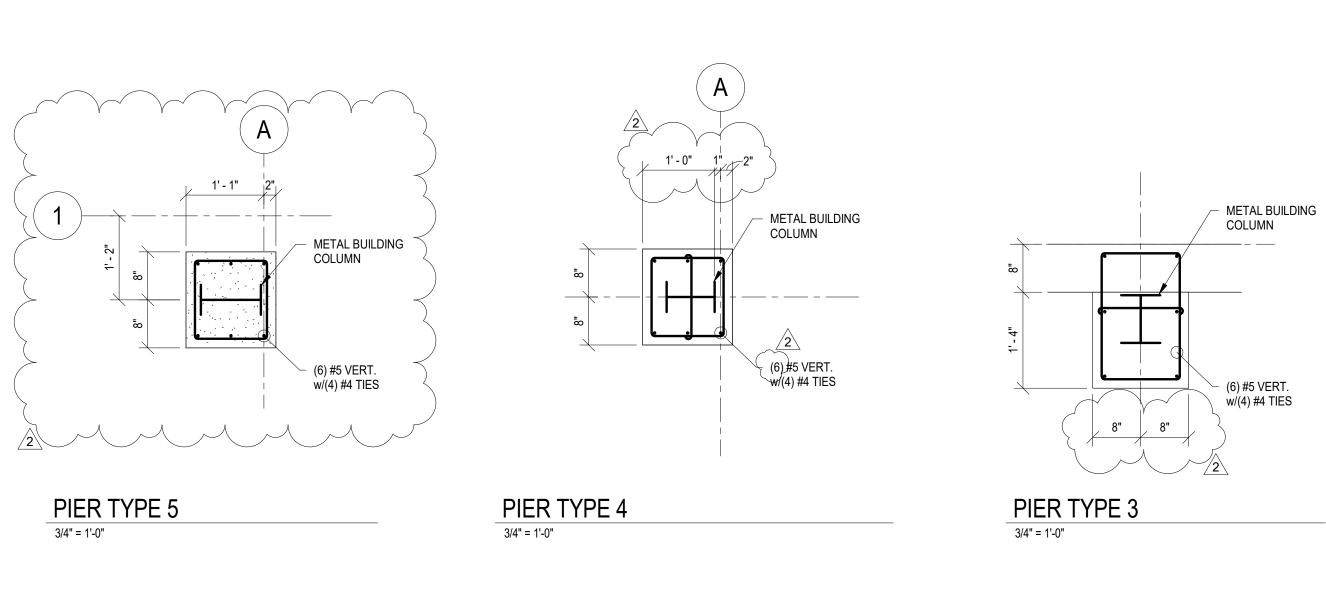




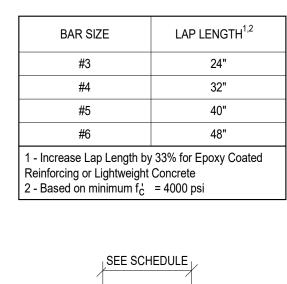


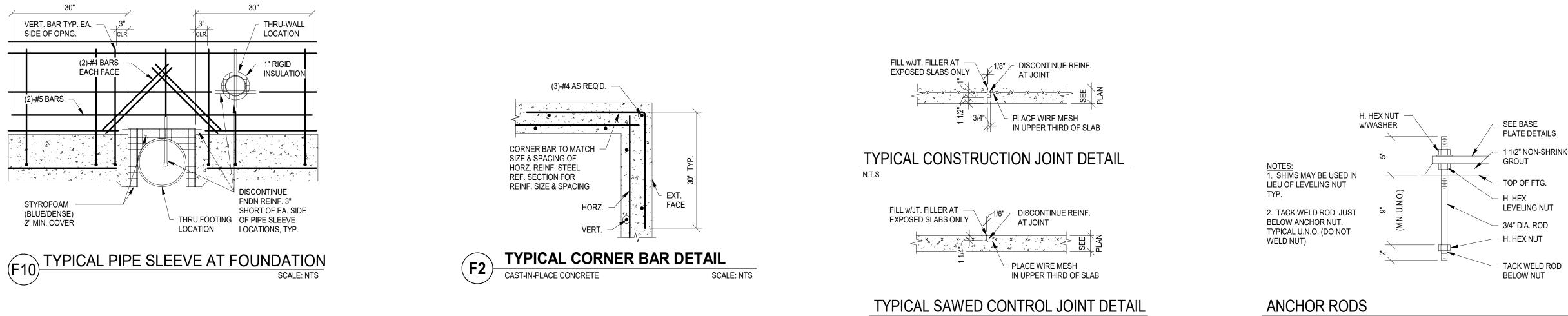






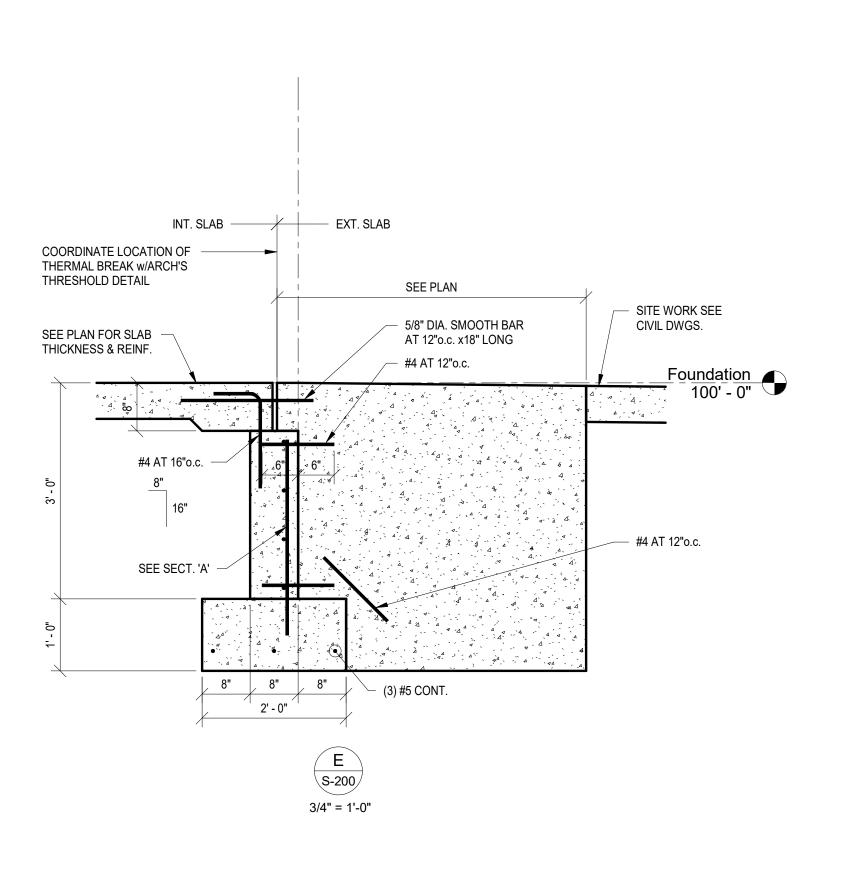
MINIMUM LAP SPLICE SCHEDULE

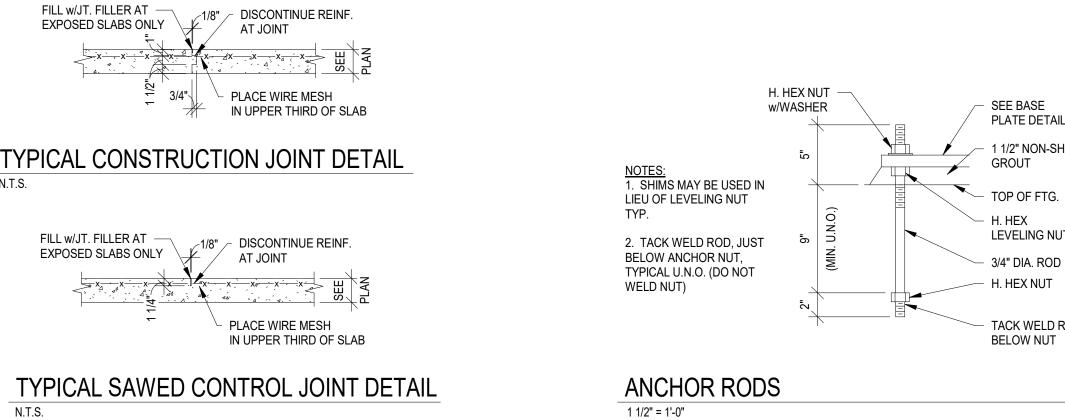


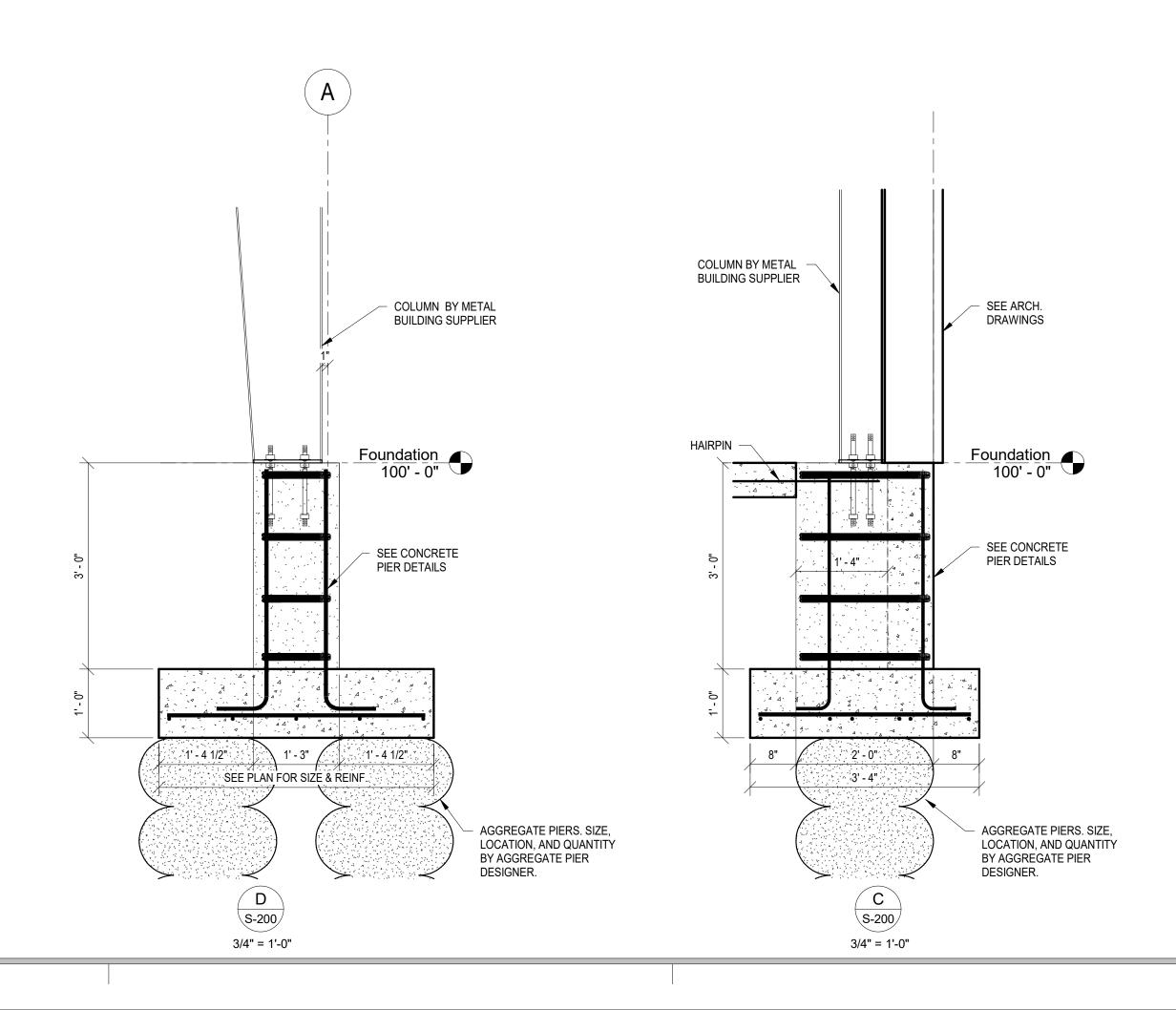


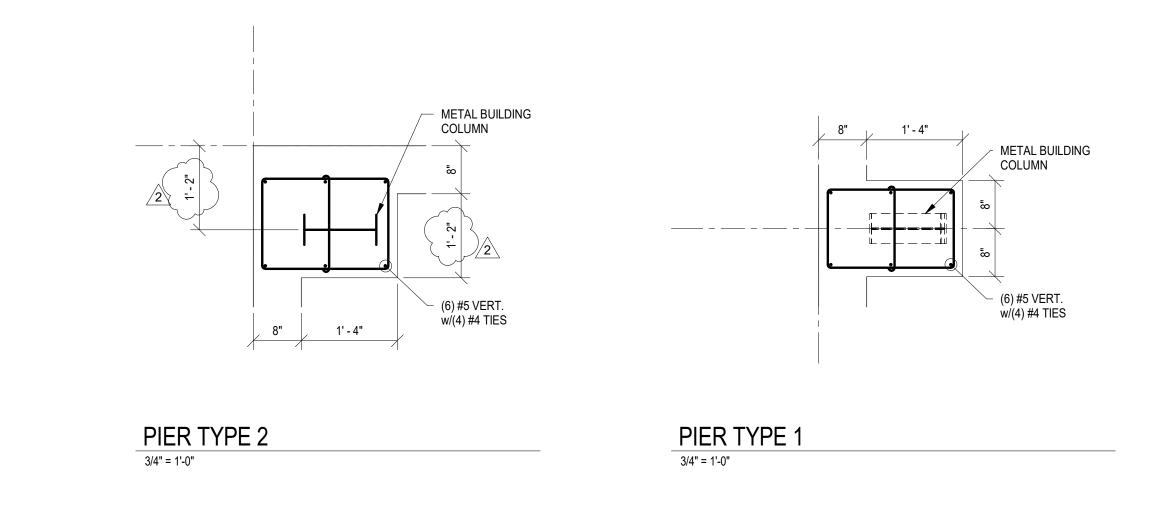


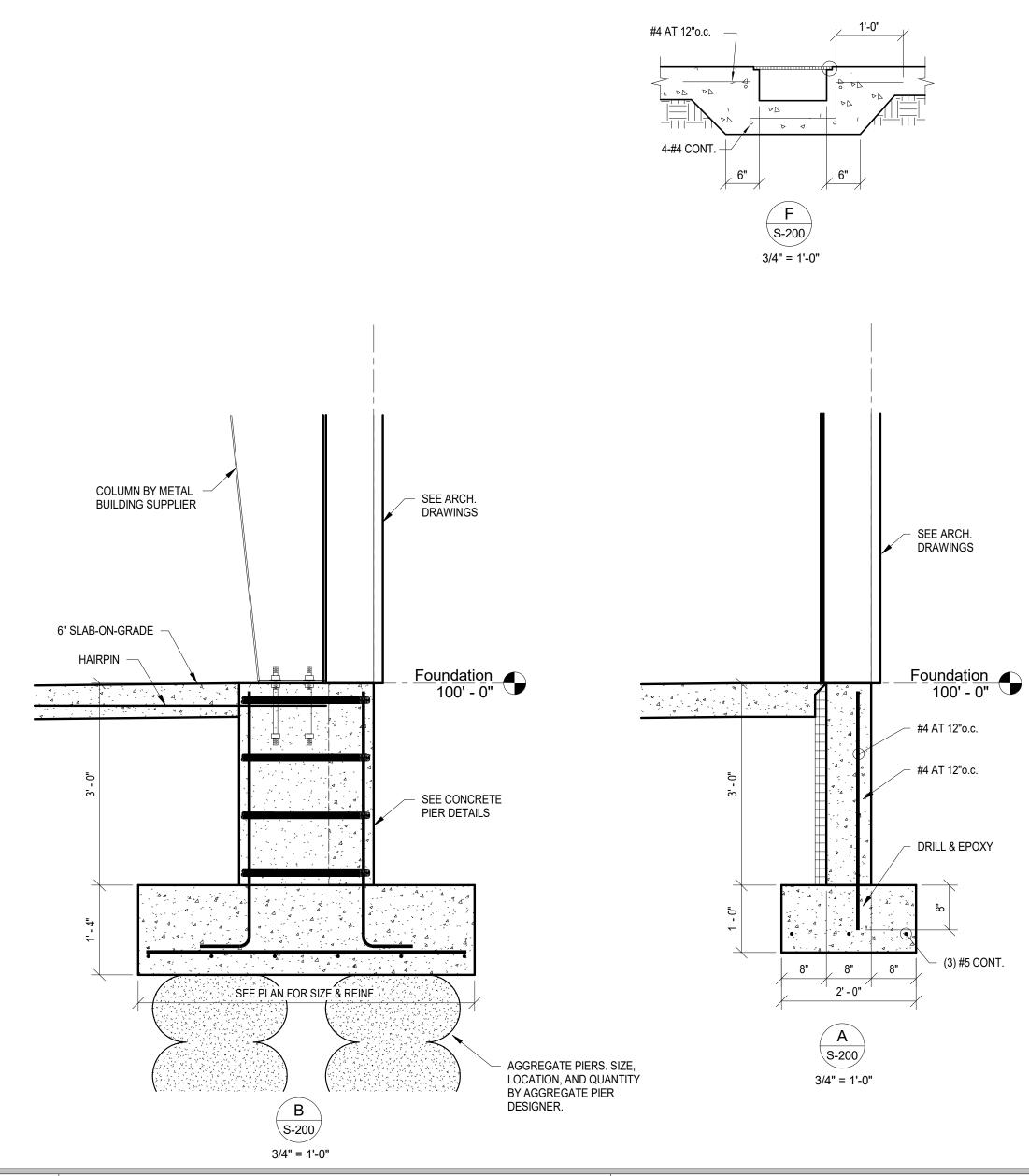
LAP SPLICE

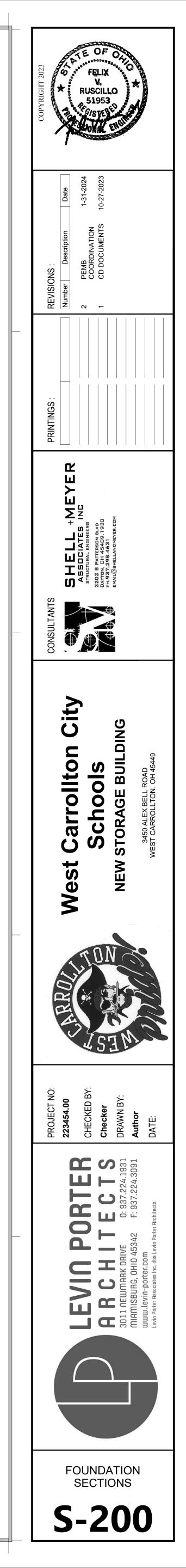




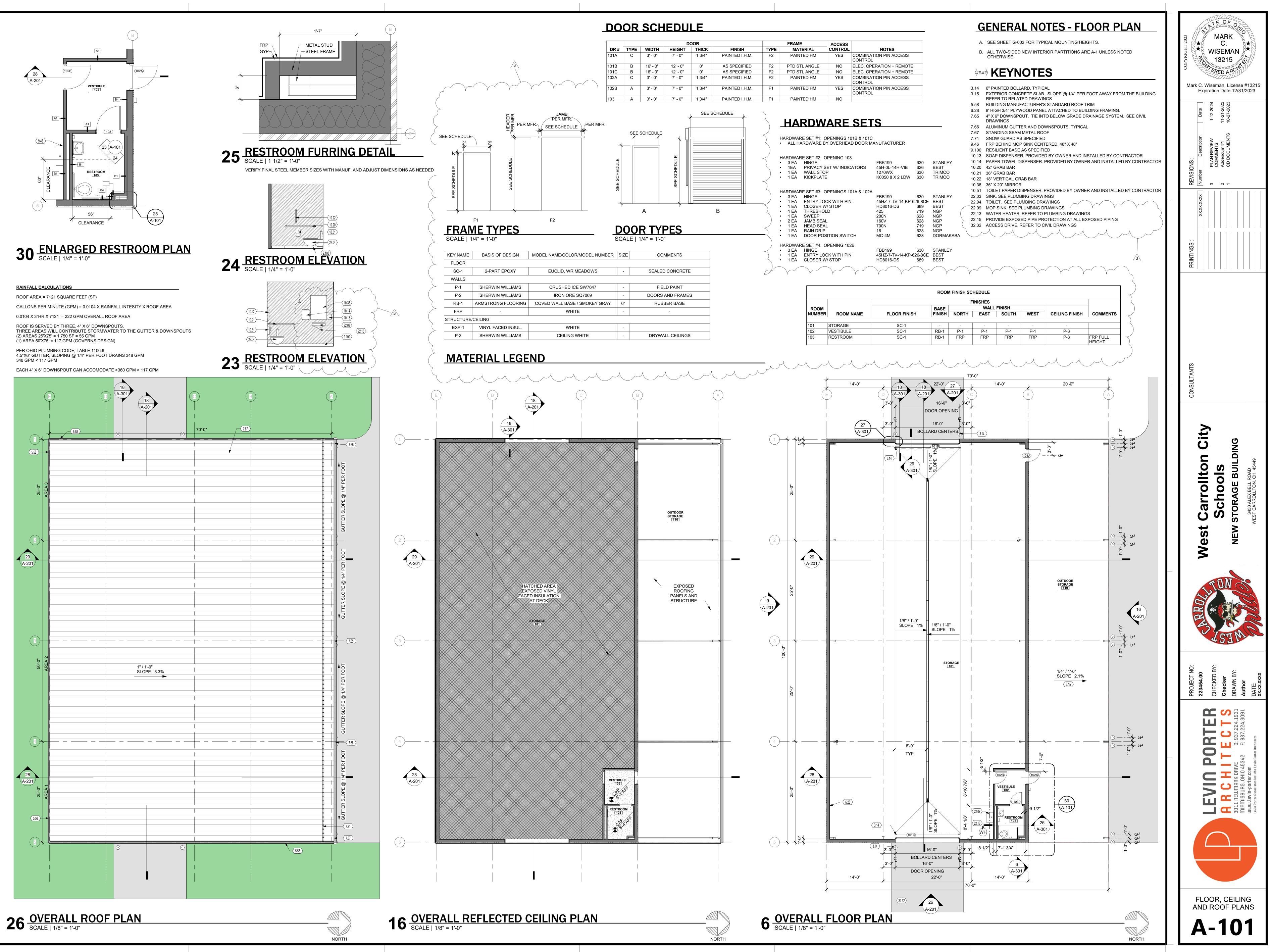




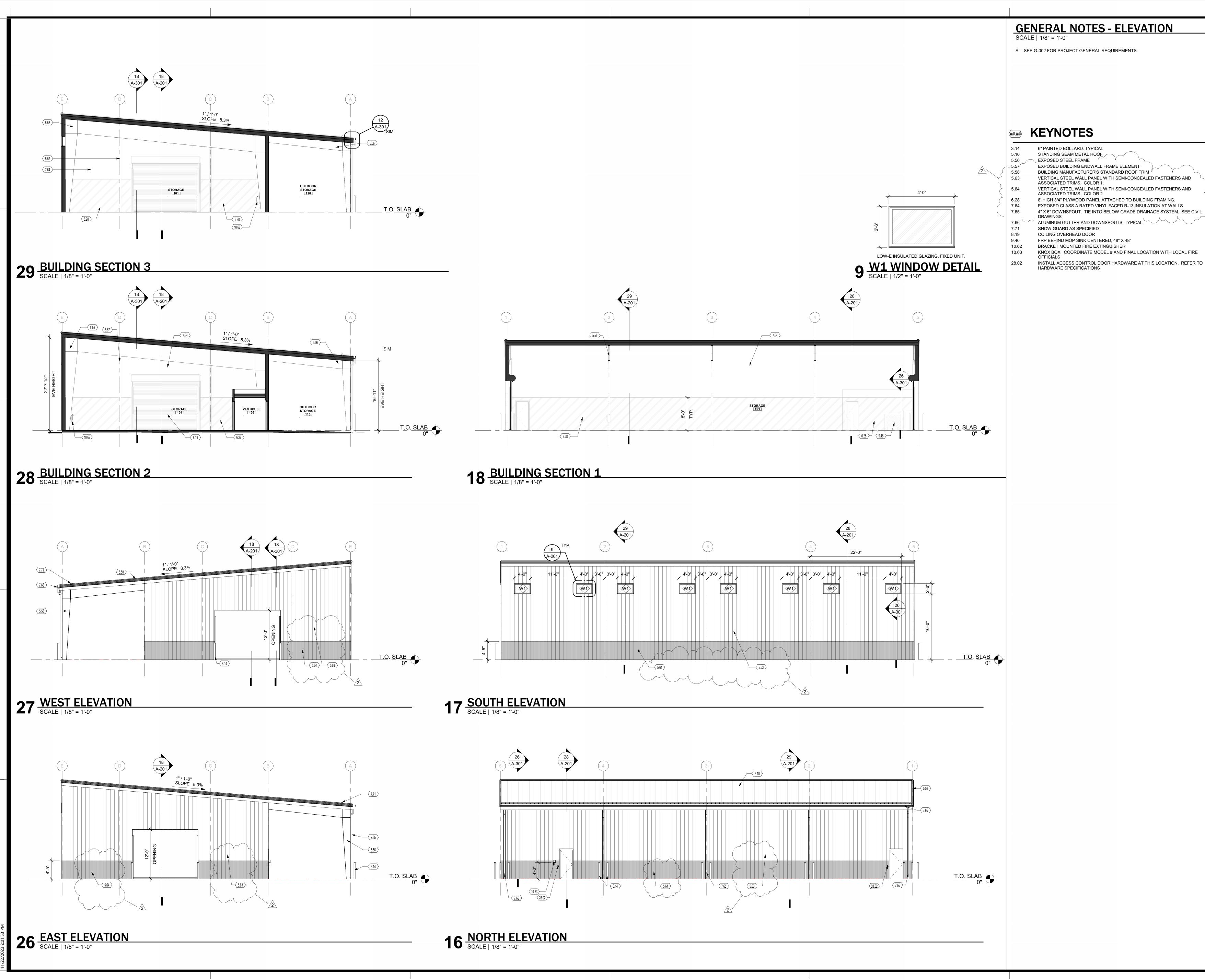


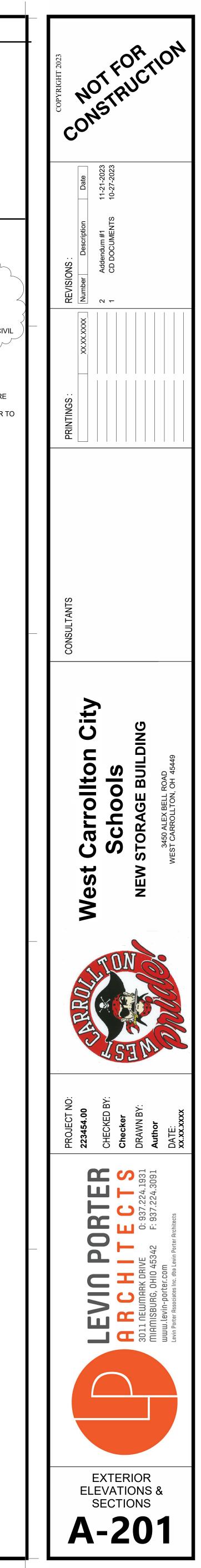


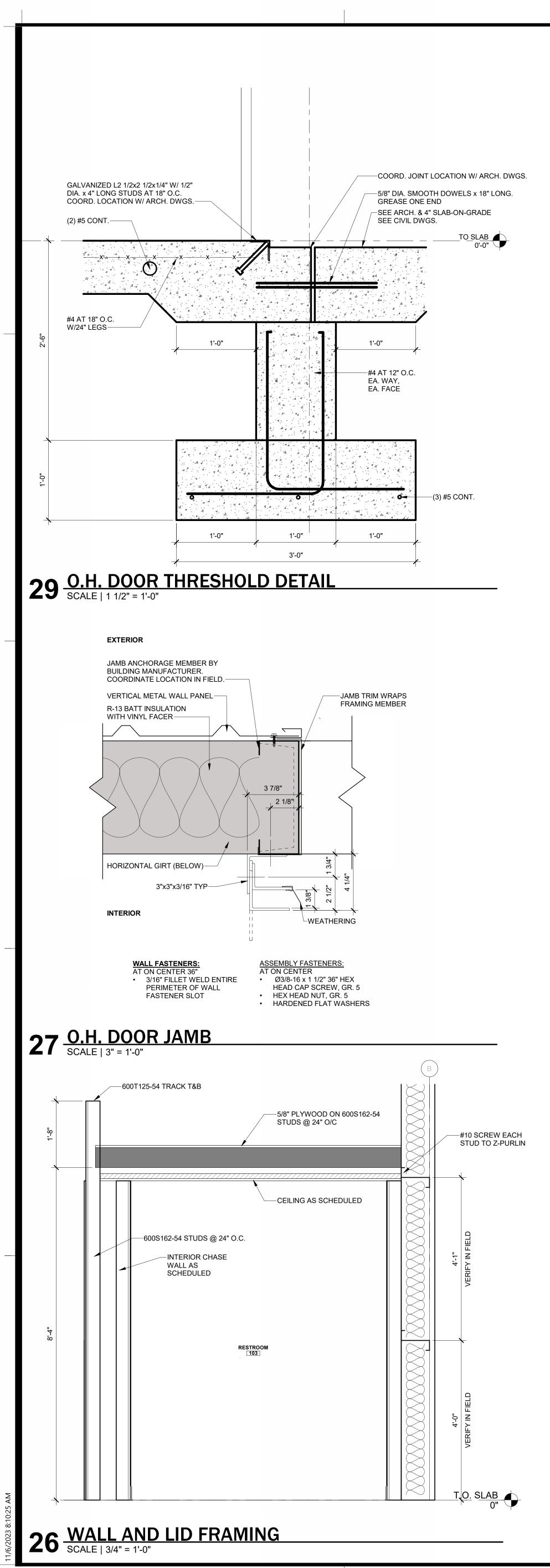
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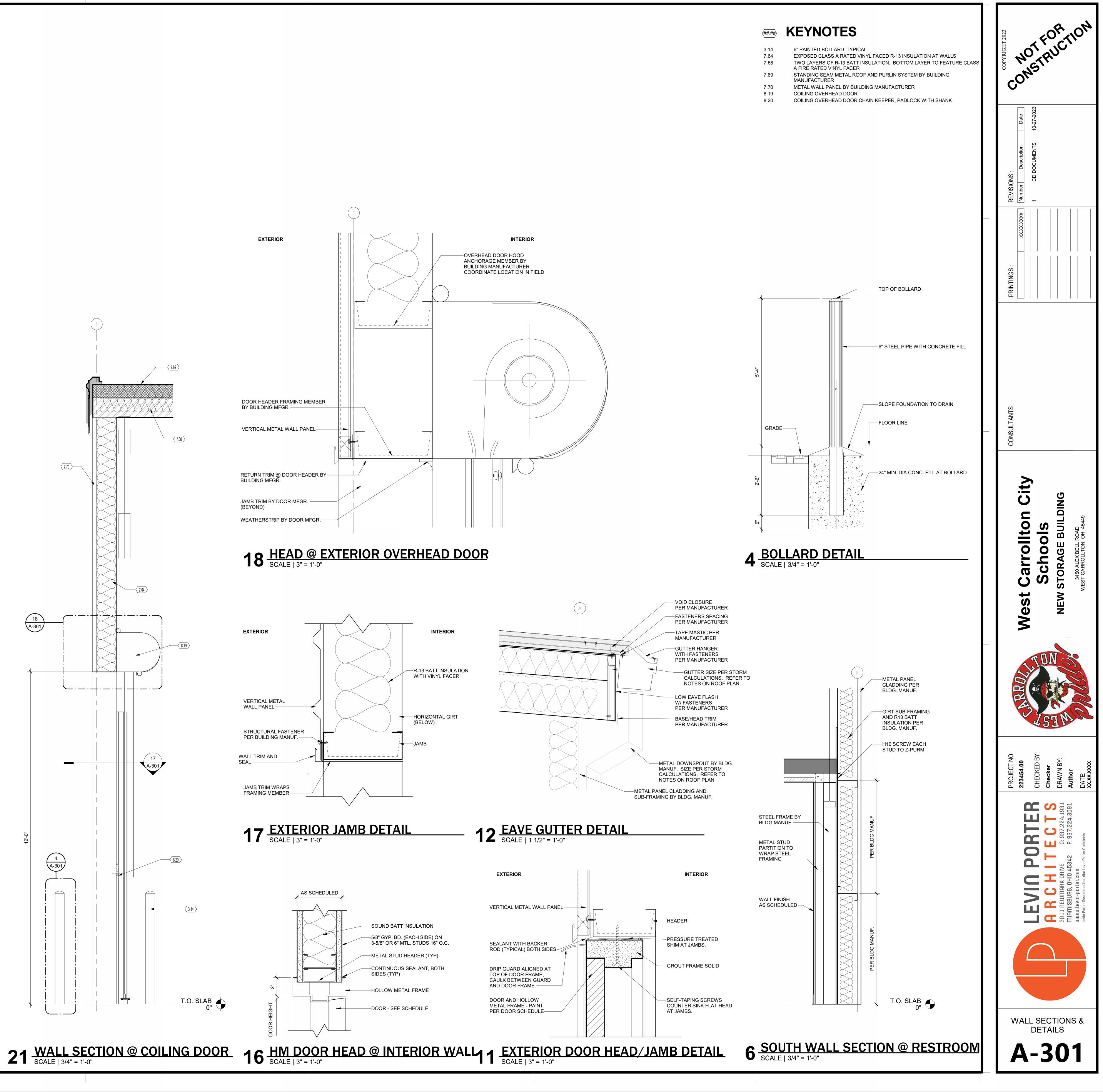


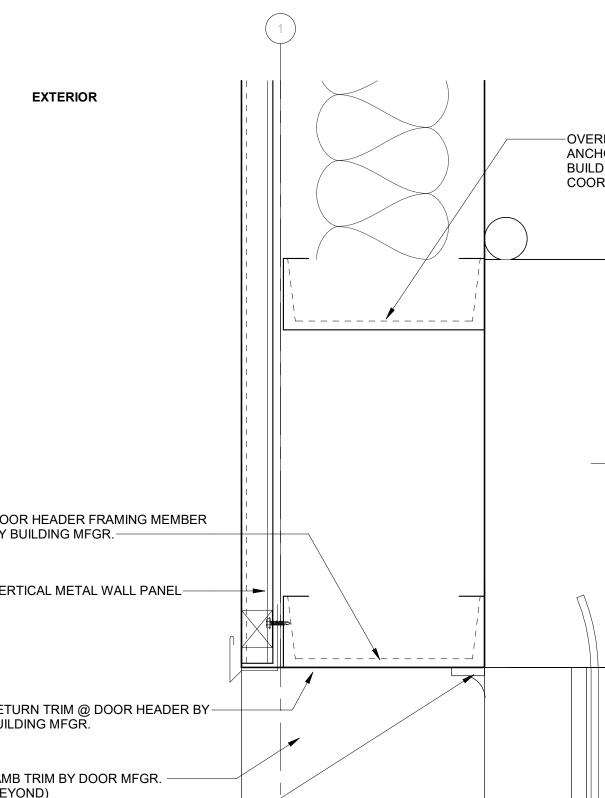
				F	INISHES				
ROOM			BASE WALL FINISH						
NUMBER	ROOM NAME	FLOOR FINISH	FINISH	NORTH	EAST	SOUTH	WEST	CEILING FINISH	COMMENTS
101	STORAGE	SC-1	-	-	-	-	-	-	
102	VESTIBULE	SC-1	RB-1	P-1	P-1	P-1	P-1	P-3	
103	RESTROOM	SC-1	RB-1	FRP	FRP	FRP	FRP	P-3	FRP FULL HEIGHT











VALVES AND FITTINGS

	CHECK VALVE
	SHUTOFF VALVE (REFER TO SPECIFICATIONS FOR REQUIRED TYPE BASED ON APPLICATIONS)
	CONCENTRIC PIPE REDUCER
	PRESSURE GAUGE
	TEMPERATURE GAUGE OR THERMOMETER
li	UNION
ı	CLEANOUT
— '>' —	STRAINER
	STRAINER WITH A BLOW DOWN VALVE AND HOSE CONNECTION
	DRAIN VALVE WITH HOSE END CONNECTION
	PRESSURE REGULATING VALVE
	PRESSURE AND TEMPERATURE SAFETY RELIEF VALVE. PIPE DISCHARGE AIR GAPPED TO FLOOR DRAIN UNLESS NOTED OTHERWISE.
P	PRESSURE AND TEMPERATURE TEST PLUG
O	CLEANOUT TO GRADE OR FINISHED FLOOR
	END CAP
<u>}_</u>	MIXING FAUCET
T	HOSE BIB
	WALL HYDRANT
	SHUTOFF VALVE AND BOX
	SHUTOFF VALVE ON RISER

PLUMBING AND FIRE SUPPRESSION **PIPING DESIGNATIONS**

	DOMESTIC COLD WATER
	DOMESTIC HOT WATER
	DOMESTIC HOT WATER RETURN
	EXISTING PIPE TO REMAIN
	EXISTING PIPE TO BE REMOVED
CA	COMPRESSED AIR PIPE
DS	SPRINKLER PIPE (DRY)
F	FIRE SUPPRESSION (STANDPIPE / SPRINKLER MAIN)
FS	FIRE SERVICE
G	NATURAL GAS PIPE
GD	GARAGE DRAINAGE PIPE
GS	GAS SERVICE
s	SPRINKLER PIPE (WET)
SAN	SANITARY DRAINAGE PIPE
SD	SPRINKLER DRAIN PIPE
STM	STORM DRAINAGE PIPE
TW	TEMPERED WATER PIPE
 V 	SANITARY SEWER VENT
WS	WATER SERVICE

GENERAL FLOOR PLAN NOTES

10" ELEV: 8' - 0"		APPROXIMATE DIMENSION ABOVE FINISHED FLOOR TO CENTERLINE OF PIPE, UNLESS NOTED OTHERWISE
TOE: 3' - 0" BOE: 0' - 6"		APPROXIMATE DIMENSION ABOVE FINISHED FLOOR TO TOP OR BOTTOM OF EQUIPMENT, UNLESS NOTED OTHERWISE
	2)	RISER OR STACK NUMBER
	B 22	DETAIL: B = DETAIL DESIGNATION P2 = SHEET WHERE DETAIL IS LOCATED
F	1	SECTION: 1 = SECTION DESIGNATION P2 = SHEET WHERE DETAIL IS LOCATED
		FIRE SUPPRESSION HAZARD CLASSIFICATION AND HAZARD CLASSIFICATION GROUP
P1	OR <u>P1</u>	EQUIPMENT REFERENCE. LETTER DESIGNATION VARIES. REFER TO SCHEDULES.
A	1	EQUIPMENT, DEVICE, OR PLUMBING FIXTURE MARK. LETTER DESIGNATIONS REFER TO SCHEDULES.
é	•	CONNECT TO EXISTING
\mathbf{O}		DEMOLISH TO POINT INDICATED
3		PLAN NOTE. APPLIES ONLY TO THE SHEET WHICH IT IS SHOWN UNLESS NOTED OTHERWISE.
	3)	DETAIL NOTE. APPLIES ONLY TO THE ASSOCIATED DETAIL.
(A1)		"UP TO" SYMBOL (ITEM ON FLOOR ABOVE)

FIRE SUPPRESSION SYMBOLS DOUBLE LINE SINGLE LINE

DOUBLE LINE	SINGLE LINE	
	©	CONCEALED PENDENT SPRINKLER
	<u> </u>	FIRE DEPARTMENT VALVE
	ď	FIRE HYDRANT
	FS	FLOW SWITCH
	Ă	GATE VALVE OS&Y
		INSTITUTIONAL PENDENT SPRINKLER
		PENDENT SPRINKLER
		POST INDICATOR VALVE
	®	RECESSED PENDENT SPRINKLER
	>	SIDE WALL SPRINKLER
		SUPERVISED VALVE
	——O——	UPRIGHT SPRINKLER

PIPING SYMBOLS

DOUBLE LINE	SINGLE LINE	
		BOTTOM CONNECTION (45°)
		BOTTOM CONNECTION (90°)
		BRANCH TEE CONNECTION (NOTE: BULLHEAD TEE'S ARE NOT PERMITTED)
		DIRECTION OF PITCH
	D	DROP
		ELBOW DOWN
P P	•	ELBOW UP
		EXISTING PIPE TO BE REMOVED
		EXISTING PIPE TO REMAIN
		FLOW DIRECTION DESIGNATION
		PIPE RISER
	\bigcirc	PUMP
R R	R	RISE
		TOP CONNECTION (45°)
		TOP CONNECTION (90°)

AAP	- AREA ALARM PANEL (MEDICAL GAS)	FOF	- FUEL OIL FLOW
AC	- AIR COMPRESSOR OR AIR CONDITIONER	FOG	- FUEL OIL GAUGE
ACC		FOR	
ACCU AD	- AIR COOLED CONDENSING UNIT - ACCESS DOOR OR AREA DRAIN	FOS FOT	- FUEL OIL SUPPLY - FLAT ON TOP
ADB	- ACID DILUTION BASIN	FPM	- FEET PER MINUTE
ADJ AFF		FR	
AFF AFG	- ABOVE FINISHED FLOOR - ABOVE FINISHED GRADE	FS FSC	
ALT	- ALTERNATE	FT	- FEET
AP	- ACCESS PANEL - APPROXIMATE	FTG	- FOOTING
APPROX	- APPROXIMATE - AIR RECEIVER OR ARGON	G	- GAS OR NATURAL GAS
ARCH	- ARCHITECT OR ARCHITECTURAL	GA	- GAUGE
ASSY AV	- ASSEMBLY - ACID VENT	GAL GALV	- GALLON - GALVANIZED
AW	- ACID VENT	GALV GC	- GENERAL TRADES CONTR
		GD	- GARAGE DRAINAGE
BDD BFP	- BACK DRAFT DAMPER - BACKFLOW PREVENTER	GPM GS	- GALLONS PER MINUTE - GAS SERVICE
BLDG	- BUILDING	GW	
BOB BOD	- BOTTOM OF BEAM - BOTTOM OF DUCT	H2	- HYDROGEN
BOE	- BOTTOM OF EQUIPMENT	HB	- HOSE BIBB
BOF	- BOTTOM OF FOOTING	HC	- HVAC CONTRACTOR (DIVI
BOG BOP	- BOTTOM OF GRILLE - BOTTOM OF PIPE	HD HE	- HUB DRAIN - HELIUM
BOF	- BOTTOM	HG	- REFRIGERANT HOT GAS
BT	- BATHTUB	HP	- HORSEPOWER OR HIGH F
btu Btuh	- BRITISH THERMAL UNIT - BRITISH THERMAL UNIT PER HOUR	HPC HPS	
BTWN	- BETWEEN	HPW	- HIGH PURITY WATER
CA CB	- COMPRESSED AIR - CATCH BASIN	HR HT	- HOSE REEL - HEAT TRACE
CBD	- COUNTER BALANCED BACKDRAFT DAMPER	HTR	- HEATER
CFCI	- CONTRACTOR FURNISHED CONTRACTOR	HVAC	- HEATING, VENTILATING, A
CFM	INSTALLED - CUBIC FEET PER MINUTE	HW	- HOT WATER
CHS	- CHILLED WATER SUPPLY	IA	- MEDICAL INSTRUMENT AIR
CHR CI	- CHILLED WATER RETURN - CAST IRON	ID INV	- INSIDE DIAMETER - INVERT ELEVATION
CK	- CLINICAL SINK	IN	- INCHES
CLG		IV	- INDIRECT VENT
CMU CO	- CONCRETE MASONRY UNIT - CLEAN OUT	IW	- INDIRECT WASTE
CO2	- MEDICAL CARBON DIOXIDE	JS	- JANITOR SINK
CONN CONTR	- CONNECT OR CONNECTION - CONTRACTOR	к	- KITCHEN WASTE
CORR	- CORRIDOR	KEC	- KITCHEN EQUIPMENT CON
CS	- CLINICAL SINK OR COLD SOFT WATER		
CTR CU	- CENTER - COPPER	L LA	- LENGTH - LABORATORY COMPRESS
CU CWS	- COMBINATION WATER SERVICE	I AV	- LAVATORY
CWR	OR CONDENSER WATER SUPPLY - CONDENSER WATER RETURN	LBS LCW	- POUNDS - LABORATORY COLD WATE
		LEC	- LABORATORY EQUIPMEN
D DCW DD	- DEPTH OR DRAIN LINE - DOMESTIC COLD WATER	LHW	- LABORATORY HOT WATER
DCW	- DOMESTIC COLD WATER - DECK DRAIN	LHW LHWR LPC	- LABORATORY HOT WATER - LOW PRESSURE CONDEN
DET	- DETAIL	LPS	- LOW PRESSURE STEAM S
DF	- DRINKING FOUNTAIN OR WATER COOLER OR DIESEL FUEL	LV LW	- LABORATORY VACUUM OI - LABORATORY WASTE
DFU	- DRAINAGE FIXTURE UNIT		
DFU DHW DHWR	- DOMESTIC HOT WATER - DOMESTIC HOT WATER RETURN	MA MAP	- MEDICAL COMPRESSED A
DHWR DI	- DOMESTIC HOT WATER RETURN - DEIONIZED WATER	MAP MAX	- MASTER ALARM PANEL (M - MAXIMUM
DIA	- DIAMETER	MB	- MOP BASIN
DIM DN	- DIMENSION - DOWN	MC MEZZ	- MECHANICAL CONTRACT(- MEZZANINE
DS	- DOWN SPOUT OR SPRINKLER (DRY)	MEZZ	- MEZZANINE - MANUFACTURER
DT		MH	- MANHOLE
DWG	- DRAWING	MIN MISC	- MINIMUM OR MINUTE - MISCELLANEOUS
EA	- EACH	MTD MTG	- MOUNTED
EC	- ELECTRICAL CONTRACTOR (DIVISION 26)	MTG	- MOUNTING
EEW EJ	- EMERGENCY EYE WASH - EXPANSION JOINT	MPC MPS	- MEDIUM PRESSURE CONE - MEDIUM PRESSURE STEA
ELEC	- ELECTRICAL	MU	- WATER MAKE-UP
ELEV	- ELEVATOR	MV	- MEDICAL SURGICAL VACU
eq Equip	- EQUAL - EQUIPMENT	N2	- MEDICAL NITROGEN
ET	- EXPANSION TANK	N/C	- NORMALLY CLOSED
ETR ES	- EXISTING TO REMAIN - EMERGENCY SHOWER	NG NIC	- GASOLINE (NON-LEAD) - NOT IN CONTRACT
es EQS	- EQUIPMENT SUPPLIER	N/O	- NORMALLY OPEN
EWC	- ELECTRICAL WATER COOLER	NO	- MEDICAL NITROUS OXIDE
EXH EXP	- EXHAUST AIR - EXPANSION	NOM NPW	- NOMINAL - NON-POTABLE WATER
EXT	- EXTERIOR	NPT	- NATIONAL PIPE THREAD
EX	- EXISTING	NTS	- NOT TO SCALE
F	- FIRE SUPPRESSION (STANDPIPE/SPRINKLER MAIN)	02	- MEDICAL OXYGEN
FCE	- FIRE CONTROL EQUIPMENT	OA	- OUTDOOR AIR
FCO FD	- FLOOR CLEANOUT - FLOOR DRAIN	OD OFCI	- OUTSIDE DIAMETER OR O - OWNER FURNISHED CON
FDC	- FIRE DEPARTMENT CONNECTION		INSTALLED
FDV FF	- FIRE DEPARTMENT VALVE - FINISHED FLOOR ELEVATION	OFOI	- OWNER FURNISHED OWN
FHC	- FIRE HOSE CABINET		
FLR			
FM FOB	- FORCE MAIN - FLAT ON BOTTOM		

ALL SYMBOLS OR ABBREVIATIONS MIGHT NOT NECESSARILY BE USED ON THIS PROJECT.

ABBREVIATIONS

	P	
	PC	- PLUMBING CONTRACTOR (DIVISIO
		OR PUMPED CONDENSATE RETUR
L OIL SUPPLY ON TOP	PD	- PUMP DISCHARGE OR PARAPET D
F PER MINUTE	PIV PLBG	- POST INDICATOR VALVE - PLUMBING
RISER	PLBG	- PRE-ACTION/DELUGE SPRINKLER
DR SINK OR FIRE SERVICE	PRESS	
SUPPRESSION CONTRACTOR (DIVISION 21)	PRV	
	PSF	- POUNDS PER SQUARE FOOT
TING	PSI	- POUNDS PER SQUARE INCH
	PSV	- PRESSURE SUSTAINING VALVE
OR NATURAL GAS	PSIG	- POUNDS PER SQUARE INCH GAUG
GE	PW	- PURE WATER
LON		
ANIZED	RA	- RETURN AIR
ERAL TRADES CONTRACTOR	RAD	- RADIUS
AGE DRAINAGE	RCP	- REINFORCED CONCRETE PIPE
LONS PER MINUTE	RD	- ROOF DRAIN
SERVICE	REC	- RECESSED
ASE WASTE	REQD	- REQUIRED
	RI	- ROUGH IN
ROGEN	RL	- REFRIGERANT LIQUID
E BIBB	ROS	
C CONTRACTOR (DIVISION 23)	ROR	- REVERSE OSMOSIS WATER RETU
DRAIN	RPM	- REVOLUTIONS PER MINUTE
UM	RS	- REFRIGERANT SUCTION
RIGERANT HOT GAS	RV	- RELIEF VALVE
SEPOWER OR HIGH POINT		
I PRESSURE CONDENSATE RETURN	S	- SPRINKLER (WET)
I PRESSURE STEAM SUPPLY	SA	- SHOCK ARRESTOR OR SUPPLY AI
I PURITY WATER	SAN	- SANITARY OR SANITARY DRAIN
I PURITY WATER RETURN	SCH	- SCHEDULE
EREEL	SCW	- SOFT COLD WATER
T TRACE	SD	- SPRINKLER DRAIN OR SUBSOIL DF
	SH	- SHOWER
TING, VENTILATING, AND AIR CONDITIONING	SHT	- SHEET
WATER	SK	
ICAL INSTRUMENT AIR	SPEC SQ	- SPECIFICATIONS - SQUARE
DE DIAMETER	SR	- SUPPLY RISER
RT ELEVATION	SS	- SANITARY STACK (SOIL OR WASTE
IES	33	STAINLESS STEEL
RECT VENT	STD	- STANDARD
RECT WASTE	STM	
	STRUC	
TOR SINK	SUC	
HEN WASTE	Т	- FUEL TANK VENT
HEN EQUIPMENT CONTRACTOR	TD	- TRENCH DRAIN
	TEMP	- TEMPERATURE
GTH	TOB	- TOP OF BEAM
DRATORY COMPRESSED AIR	TOD	- TOP OF DUCT
ATORY	TOE	- TOP OF EQUIPMENT
NDS	TOF	- TOP OF FOOTING
DRATORY COLD WATER	TOJ	- TOP OF JOIST
DRATORY EQUIPMENT CONTRACTOR	TOP	- TOP OF PIPE
DRATORY HOT WATER	TOS	- TOP OF SLAB OR TOP OF STEEL
DRATORY HOT WATER RETURN	TF	- TRAP FILLER
PRESSURE CONDENSATE RETURN	TP	- TRAP PRIMER OR TRAP PRIMER D
PRESSURE STEAM SUPPLY	TW	- TEMPERED WATER
DRATORY VACUUM OR LABORATORY VENT	TYP	- TYPICAL
DRATORY WASTE	IID	
ICAL COMPRESSED AIR	UR UNO	- URINAL - UNLESS NOTED OTHERWISE
TER ALARM PANEL (MEDICAL GAS)	UNU	
IER ALARM PANEL (MEDICAL GAS) IMUM	V	- VENT OR SANITARY SEWER VENT
BASIN	VAC	- VENT OR SANITART SEVER VENT - VACUUM
HANICAL CONTRACTOR (DIVISION 23)	VAC	- VACUUM CLEANING
ZANINE	VCV	- VACUUM CLEANING VALVE
UFACTURER	VEV	- VACUUM EXHAUST
HOLE	VEI	- VELOCITY

IUM PRESSURE CONDENSATE RETURN JM PRESSURE STEAM SUPPLY ER MAKE-UP ICAL SURGICAL VACUUM

NAL PIPE THREAD TO SCALE ICAL OXYGEN

OOR AIR SIDE DIAMETER OR OVERFLOW DRAIN ER FURNISHED CONTRACTOR IER FURNISHED OWNER INSTALLED

ANE GAS IBING CONTRACTOR (DIVISION 22) UMPED CONDENSATE RETURN DISCHARGE OR PARAPET DRAIN INDICATOR VALVE BING ACTION/DELUGE SPRINKLER SURE SURE REGULATING VALVE NDS PER SQUARE FOOT

NDS PER SQUARE INCH SURE SUSTAINING VALVE NDS PER SQUARE INCH GAUGE WATER JRN AIR

FORCED CONCRETE PIPE F DRAIN ESSED JIRED IGH IN RIGERANT LIQUID ERSE OSMOSIS WATER SUPPLY ERSE OSMOSIS WATER RETURN LUTIONS PER MINUTE

EDULE T COLD WATER NKLER DRAIN OR SUBSOIL DRAIN

FICATIONS YLY RISER TARY STACK (SOIL OR WASTE) OR VLESS STEEL IDARD

TANK VENT NCH DRAIN IPERATURE OF BEAM OF DUCT OF EQUIPMENT OF FOOTING OF JOIST OF PIPE

OF SLAB OR TOP OF STEEL FILLER P PRIMER OR TRAP PRIMER DISCHARGE PERED WATER

CUUM CLEANING CUUM CLEANING VALVE UUM EXHAUST - VELOCITY - VALVE IN BOX - VOLUME - VACUUM PUMP

VEL

VIB

VOL

VP

VS

VTR VR

W/

W/O W WAGD WC

WCO

WH

WIV

WS

YCO

- VENT STACK - VENT THROUGH ROOF - VENT RISER - WITH

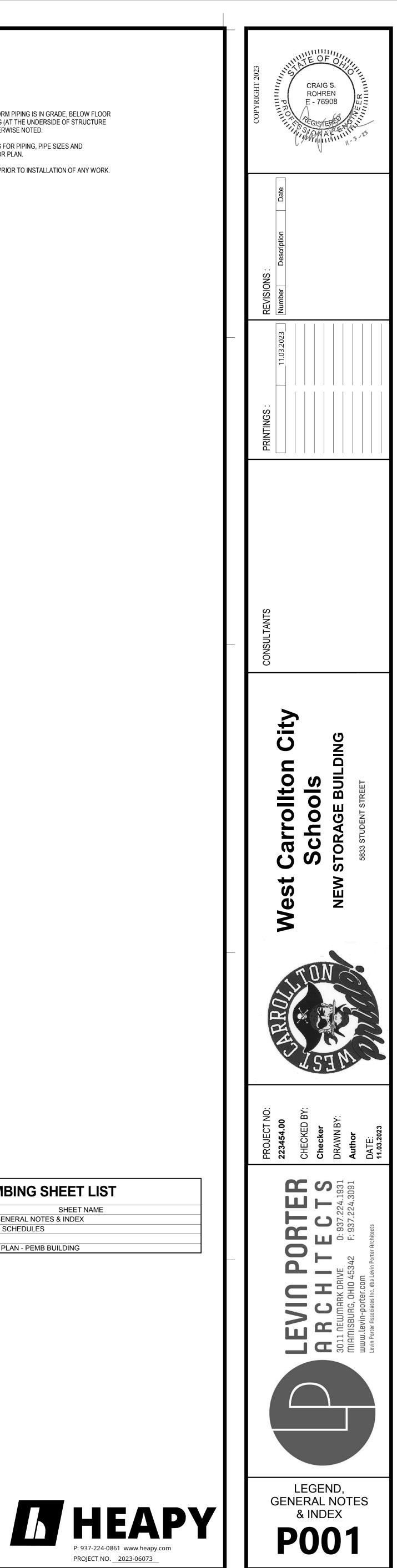
- WITHOUT - WASTE - WASTE ANESTHESIA GAS DISPOSAL - WATER CLOSET - WALL CLEANOUT - WALL HYDRANT OR WATER HEATER - WALL INDICATOR VALVE

- WATER SERVICE - YARD CLEANOUT

ZVC - ZONE VALVE CABINET

NOTE: ALL SYMBOLS AND ABBREVIATIONS ARE SUBJECT TO MODIFICATIONS ON OTHER DRAWINGS.

	PLUMBING SHEET LIST
SHEET NUMBER	SHEET NAME
P001	LEGEND, GENERAL NOTES & INDEX
P002	DETAILS & SCHEDULES
P003	SITE PLAN
P100	PLUMBING PLAN - PEMB BUILDING



GENERAL NOTES

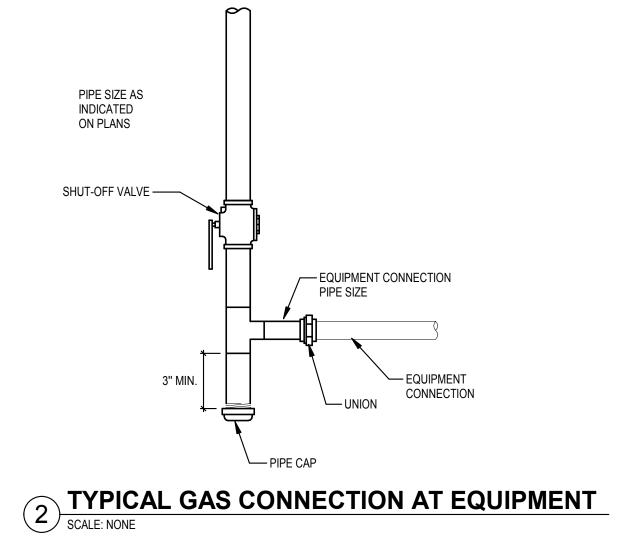
A. DOMESTIC WATER SERVICE, SANITARY AND STORM PIPING IS IN GRADE, BELOW FLOOR SLAB. ALL OTHER PIPING IS ABOVE THE CEILING (AT THE UNDERSIDE OF STRUCTURE IN EXPOSED STRUCTURE AREAS), UNLESS OTHERWISE NOTED.

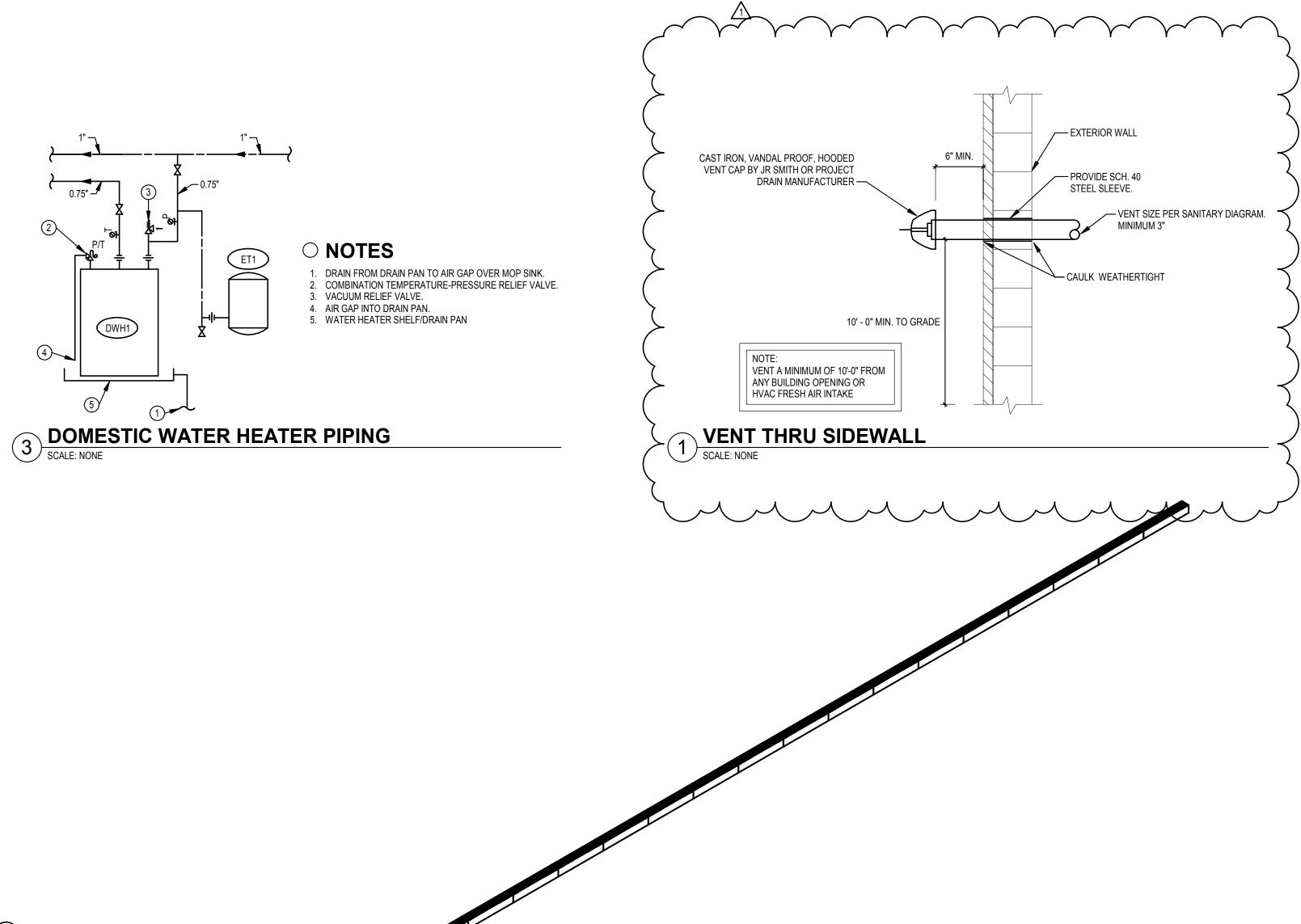
B. REFER TO SCHEDULES, DETAILS AND DIAGRAMS FOR PIPING, PIPE SIZES AND PIPELINE DEVICES NOT INDICATED ON THE FLOOR PLAN.

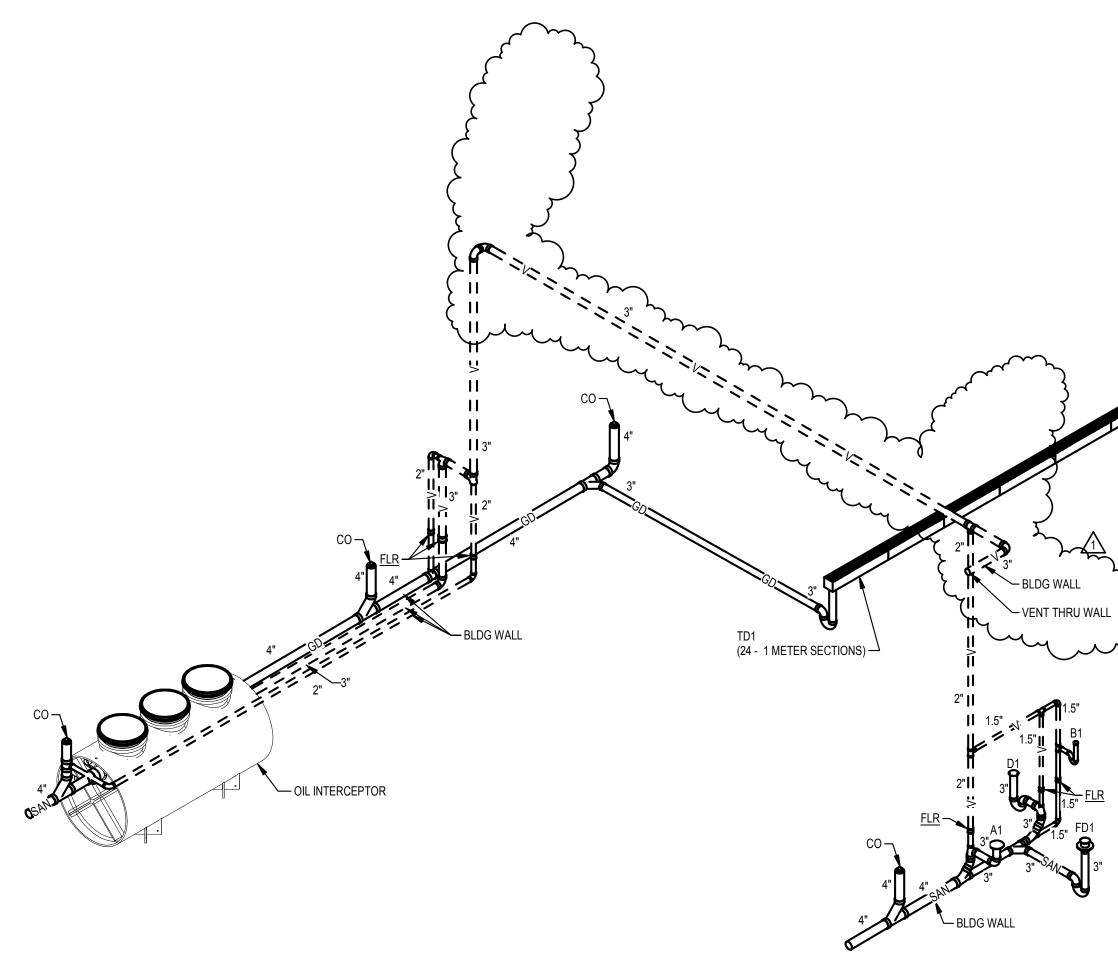
C. COORDINATION WITH ALL TRADES IS CRITICAL, PRIOR TO INSTALLATION OF ANY WORK.

	CATALOG NUMBERS INDICATED ARE THOSE OF THE FIRST NAMED MA <u>A. AMERICAN STD. (KOHLER, TOTO, ZURN)</u> <u>B. SLOAN "ROYAL" (ZURN "AQUAVANTAGE", DELANY)</u>	NUFACTURER IN EACH CATEGORY LISTE <u>E. T&S BRASS(CHICAGO, ZURN)</u> <u>F. GUY GRAY (OATEY, PLASTIC O</u>	
	C. BEMIS (BENEKE, KOHLER, AMERICAN STD.) D. SMITH (WADE, ZURN, JOSAM, WATTS)	G. McGUIRE (EBC, DEARBORN BR	
	SCHEDULE ABBREVIATIONS: ADA HANDICAP ACCESSIBLE QD QUICK DISCONNECT BO BACK OUTLET SB SINGLE BOWL BPW BED PAN WASHER SST STAINLESS STEEL DB DOUBLE BOWL UCM UNDER COUNTER MOUNT FS FLOOR SET VB VACUUM BREAKER FT FLUSH TANK VR VANDAL RESISTANT FV FLUSH VALVE WB WRIST BLADE GN GOOSENECK WH WALL HUNG HS HAND SHOWER HAND SHOWER HAND SHOWER	THE SIZES LISTED UNLESS NOT PIPE SIZE LARGER THAN THE IN SHALL BE LIMITED TO A MAXIMI	HEDULE ARE FIXTURE OR SUPPLY ST TED OTHERWISE OR LABELED ON THE NDICATED CONNECTION SIZE, OR SIZ UM 2 FEET IN DEVELOPED LENGTH AI FOR THE LENGTH OF THE PIPING CH
	NOTES: 1. PLUMBING FIXTURE AND INSTALLATION SHALL COMPLY WITH ALL ADA REQUIREMENTS FOR THE HANDICAPPED. 2. PROVIDE 0.5 GPM AERATOR. 3. PROVIDE ASSE # 1070 MIXING VALVE BELOW FIXTURE.		
		FLOW CONTR	INSOR
		GPM MOUNTING HEIGHT GPF GPF MANUAL METERING ELECTRIC	BATTERY COLD WATER HOT WATER TEMPERED NAT. GAS FIX. OUTLET
	MARK DESCRIPTION A1 WATER CLOSET / FT / FS / ADA	1.28	0.5" 3"
	B1 LAVATORY / WH / GN / WB / ADA D1 MOP BASIN / FS	34" TO RIM 0.5 36" TO FAUCET	0.5" 0.5" 1.5" 1
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	M		
	PVC SLEEVE CAULKED	√ 1.25" @ 11" W.C.	
	DIELECTRIC UNION		
	INLET PRESSURE: 5 PSI OUTLET PRESSURE: 11" W.C. FLOW: 150 CFH	BLDG. WALL	
	REGULATOR VENT TO DISCHARGE	ATTACH TO RISER	
	DOWN VALVE	ABOVE GRADE AT BUILDING WALL AND GAS METER.	
	ASPHALT	FLOOR SLAB	
		2" PVC SLEEVE THRU ASPHALT. FILL ANNULAR	
	1LB. MAGNESIUM ANODE	SPACE WITH PEA GRAVEL	
		#12 PLASTIC COATED COPPER WIRE WRAPPED AROUND PIPE (FROM	
	FITTING	METER SETTING).	
	PLASTIC STEEL		
	5 SCALE: NONE		

NG FIXTURES	DRAINS
RERS ARE LISTED IN PARENTHESIS J. ELKAY (JUST WITH LUG AND SCREW) N. IN-SINK ERATOR (OR APPROVED EQUAL) K. OASIS (ACORN, ELKAY, HAWS, HALSEY TAYLOR) O. GUARDIAN (BRADLEY, SPEAKMAN, HAWS) L. SYMMONS (POWERS, LEONARD) P. SPEAKMAN (CHICAGO) M. AQUARIUS (AQUA-BATH, KOHLER, COMFORT DESIGNS) Q. TRUEBRO (ZURN, PLUMBEREX)	GENERAL NOTES: 1. ALL DRAINS ARE MANUFACTURED BY J.R. SMITH UNLESS 3. ADDITIONAL ACCEPTABLE MANUFACTURERS ARE ZURN, SIOUX CHIEF, MIFAB, WATTS, WADE, AND JOSAM. 2. REFER TO SPECIFICATIONS FOR ADDITIONAL MANUFACTURERS. 3. ADDITIONAL ACCEPTABLE MANUFACTURERS ARE ZURN, SIOUX CHIEF, MIFAB, WATTS, WADE, AND JOSAM. NOTES: 1. PROVIDE 9870-478-MADA DUCTILE IRON GRATING BY J.R. SMITH FOR TRENCH SYSTEM. 3. ABCDEFGHIJKLMNOPQRSTUVWXYZ
	TYPE BODY OUTLET STRAINER / GRATE TOP FINISH ADDITIONAL FEATURES
OP CONNECTION SIZES. DOMESTIC COLD AND HOT WATER SUPPLY PIPE SIZES SERVING FIXTURES SHALL BE, AT A MINIMUM, FLOOR PLANS. DOMESTIC COLD WATER SUPPLY PIPE SIZES SERVING FLUSH VALVES SHALL BE AT MINIMUM ONE ED AS SHOWN ON THE FLOOR PLANS. PIPING AT THE FLUSH VALVE CONNECTION OF A SIZE EQUAL TO THE CONNECTION SIZE ID INCLUDE A MAXIMUM OF ONE 90 DEGREE ELBOW FITTING. FULL SIZE MANIFOLDS, WHERE INDICATED ON THE FLOOR PLANS, ASE AND TERMINATED WITH A FULL SIZE CAP.	Image: Figure
WASTE & VENT FIXTURE SUPPLY TRIM SUPPLY / STOP WASTE TRIM TRAP / FIX. DR. MISC.	TD1 9940 SERIES • • 6" 39 • • • • • 1,2
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	EQUIPMENT DATA DWH1 DOMESTIC WATER HEATER - ELECTRIC; STORAGE TYPE RECOVERY CAPACITY: 11 GPH AT 90°F TEMPERATURE RISE STORAGE CAPACITY: 19 GALLONS ELECTRIC: 2.5 KW 120 VOLT - 1 PHASE SET DISCHARGE TEMPERATURE TO 120°F BASIS OF DESIGN: AO SMITH EJCS-20 E1 THERMAL EXPANSION TANK - DOMESTIC HOT WATER - DIAPHRAGM TYPE CAPACITY: 2 GALLONS CAPACITY: 2 GALLONS



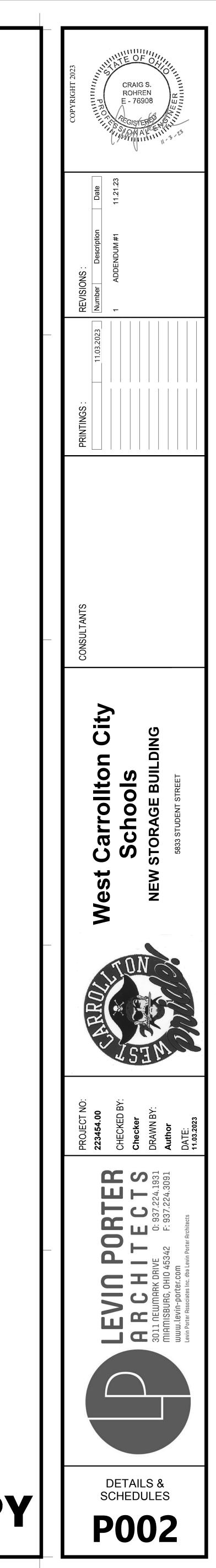


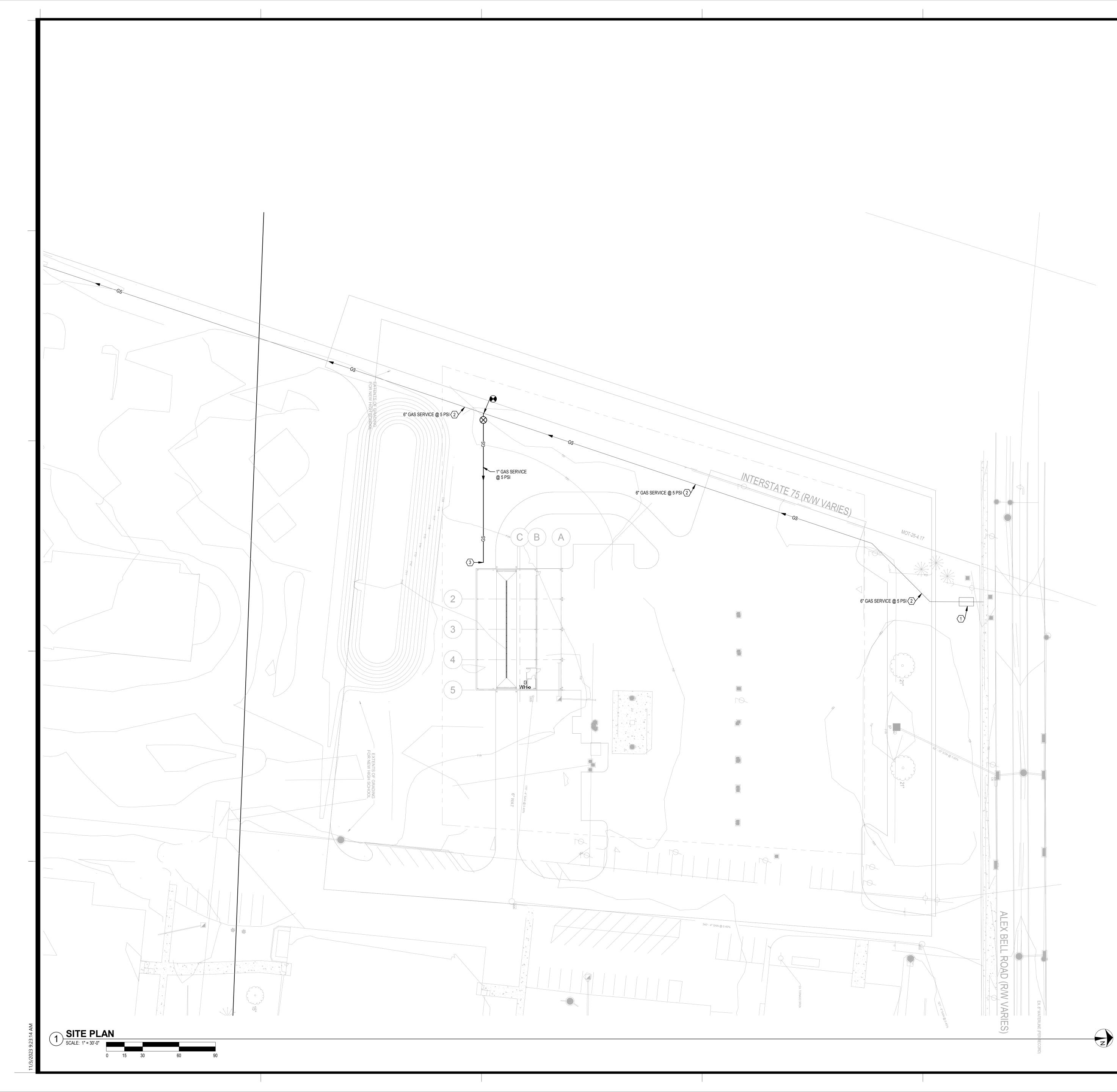


6 WASTE AND VENT SCALE: NONE

APPROXIMATE SIZE: 8" DIAMETER X 13" TALL BASIS OF DESIGN: AMTROL ST5.



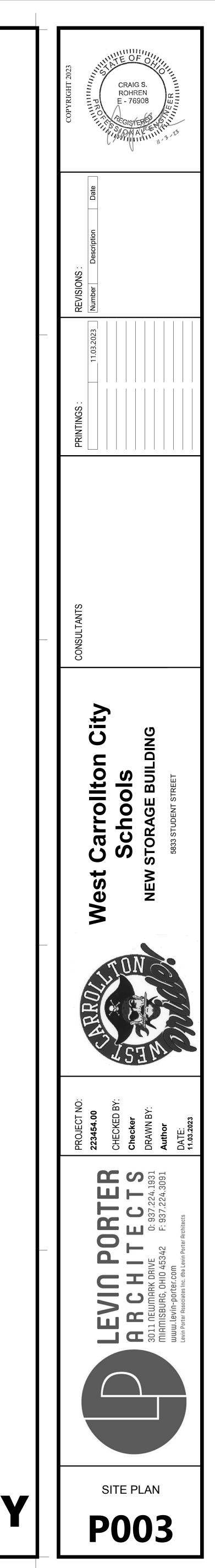


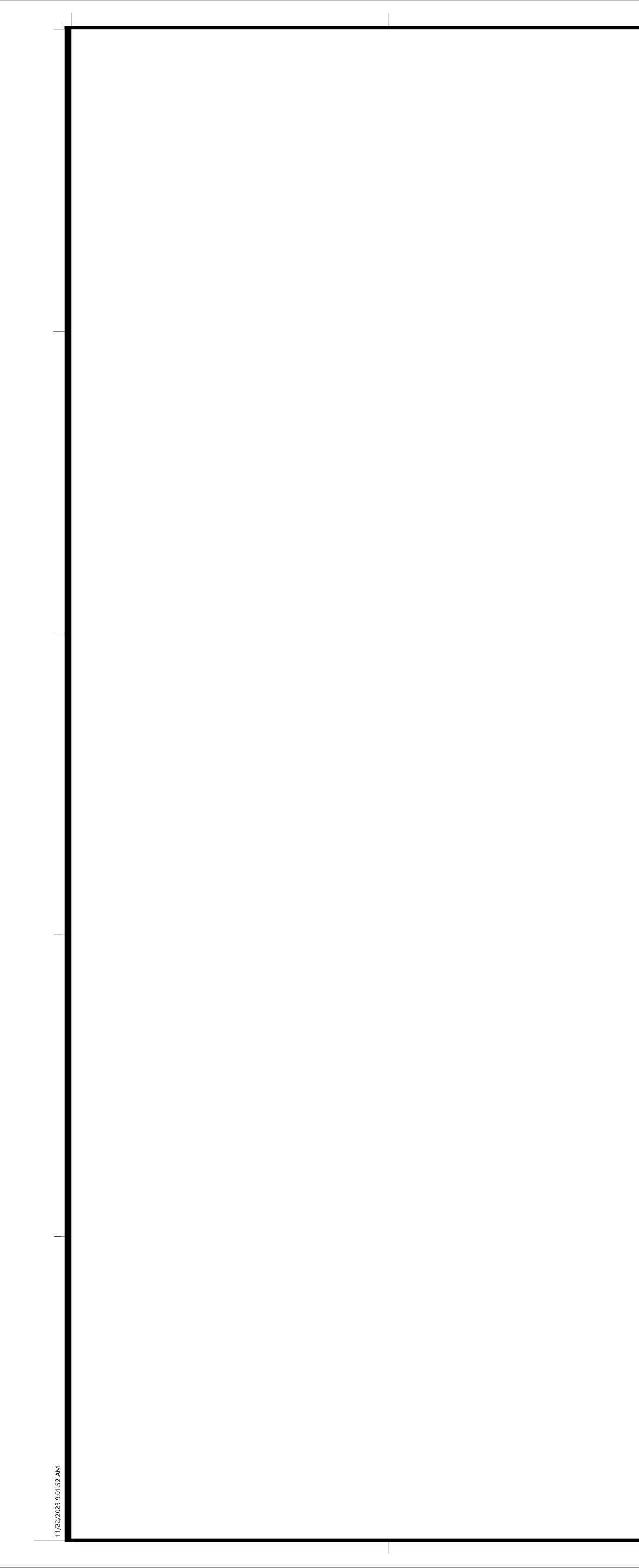


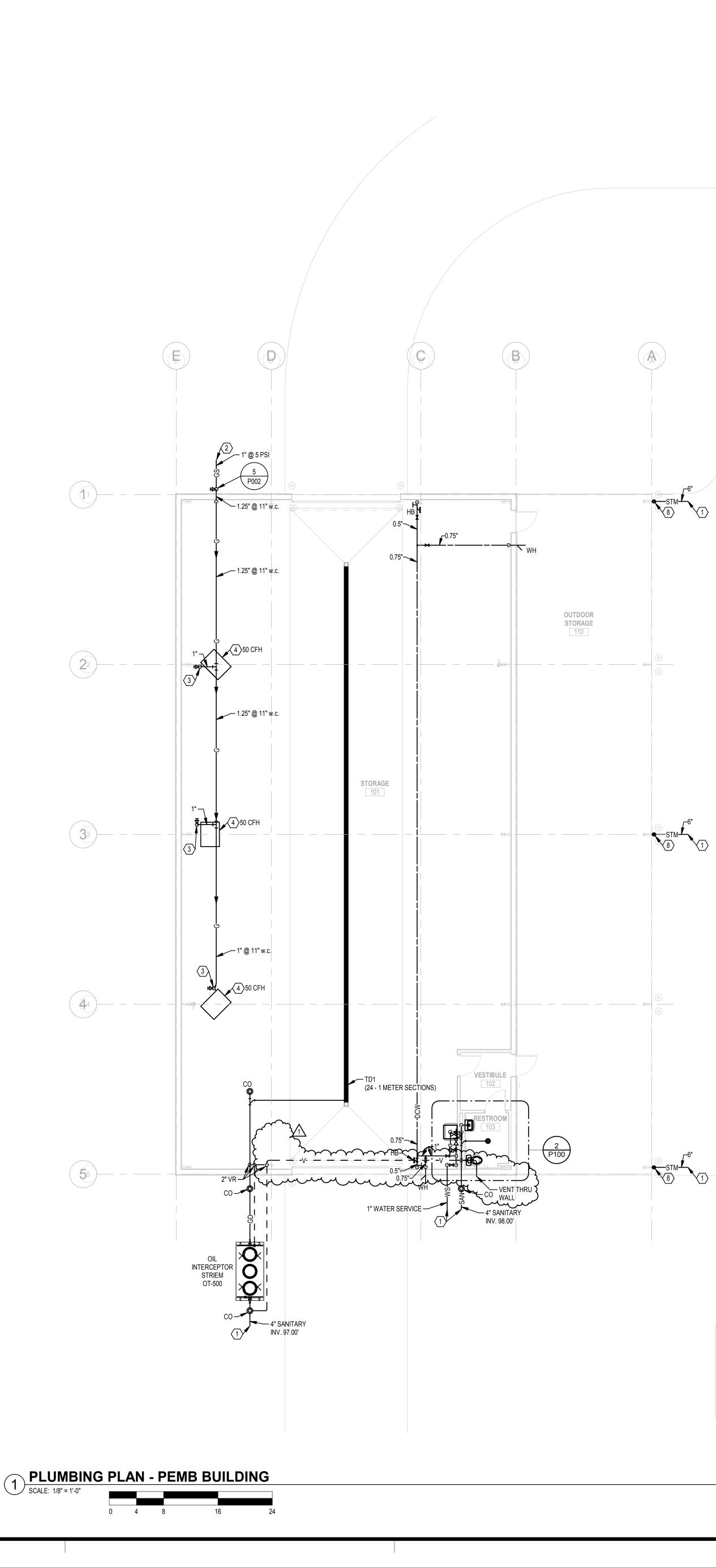
\bigcirc PLAN NOTES

- NATURAL GAS METER/REGULATOR SETTING PROVIDED IN HIGH SCHOOL SITE UTILITIES PACKAGE.
- 2 NATURAL GAS SERVICE PIPING PROVIDED IN HIGH SCHOOL SITE UTILITIES PAKCAKGE.
- 3 PIPING CONINUED ON PLUMBING FLOOR PLAN, SHEET P100.





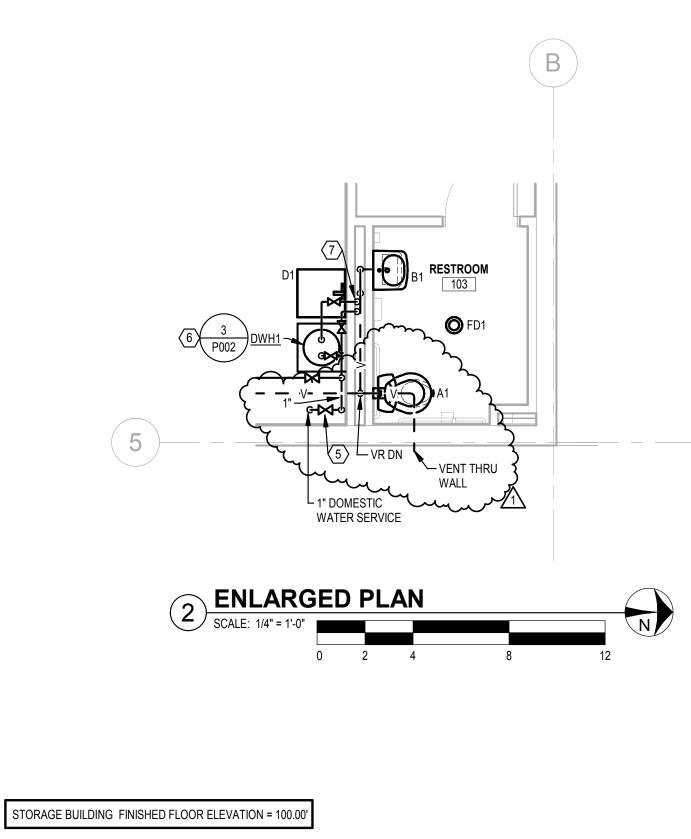




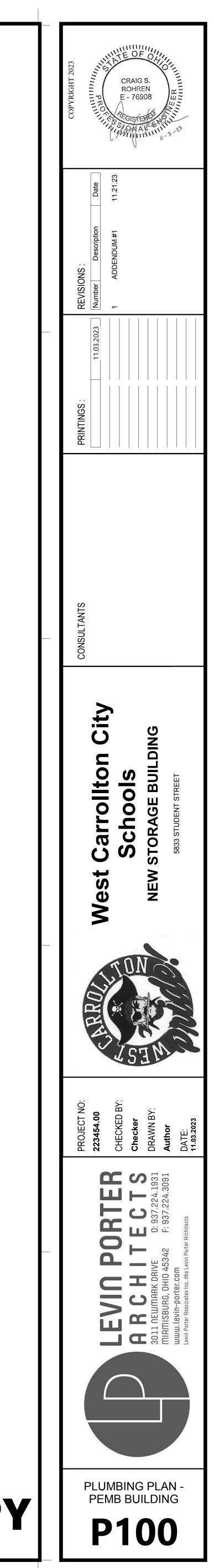
 $\sqrt{1}$

- 1 CONNECT TO PIPING PROVIDED BY SITE UTILITY CONTRACTOR.
- 2 PIPING CONTINUED ON SITE PLAN, SHEET P003.
- 3 PROVIDE VALVE, DIRT LEG, UNION AND CONNECT TO UNIT HEATER. SEE DETAIL 2 ON SHEET P002.
- 4 UNIT HEATER BY HC.
- 5. WATER SERVICE SHUT-OFF VLAVE. INSTALL 18" AFF. 6 WATER HEATER MOUNTED ON SHELF 7'-0" AFF.

7 1" DCW AND 0.75" DHW TO DROP IN CHASE. PROVIDE FULL SIZE MANIFOLDS AND SERVE EACH FIXTURE INDIVIDUALLY FROM MANIFOLD.
8 6" PVC STORM PIPING TO RISE TO 12" ABOVE GRADE. PROVIDE 4"x6" TO 6" ROUND PVC ADAPTER AND CONNECT TO DOWNSPOUT. Munnin







DUCTWORK S	SYMBOLS		
RECTANGULAR	ROUND / OVAL	1	
	CONICAL	ROUND BRANCH DUCTWORK	
ACOUSTIC	ACOUSTIC	RECTANGULAR BRANCH DUCTWORK	
		SQUARE TEE WITH TURNING VANES	
		NOTE: ALL SQUARE ELBOWS IN RECTANGULAR AND ROUND / OVAL DUCTWORK SHALL BE PROVIDED WITH TURNING VANES. REFER TO SPECIFICATIONS FOR ADDITIONAL DETAILS	
		RADIUS'D TEE	
		RADIUS'D BRANCH	
		UNLESS NOTED OTHERWISE ON DRAWING 15° MAX FOR DIVERGING, 30° MAX FOR CONVERGING TRANSITION	
		EXISTING DUCTWORK TO REMAIN	
		EXISTING DUCTWORK TO REMOVED RETURN AIR, RELIEF AIR, OR TRANSFER AIF DUCTWORK. (UP AND DOWN) RADIUSED OR SQUARE WITH TURNING VANES. SUPPLY AIR OR OUTDOOR AIR DUCTWORK (UP AND DOWN) RADIUSED OR SQUARE WITH TURNING VANES. EXHAUST AIR DUCTWORK. (UP AND DOWN RADIUSED OR SQUARE WITH TURNING	
		VANES. RECTANGULAR AND ROUND / OVAL DUCTWORK RISE / DROP WITH 90° RADIUSE OR SQUARE ELBOWS AND TURNING VANES	
		RADIUS ELBOW	
		90° SQUARE ELBOW (WITH TURNING VANES <u>NOTE</u> : ALL SQUARE ELBOWS IN RECTANGULAR AND ROUND DUCTWORK SHALL BE PROVIDED WITH TURNING VANES	
		SQUARE THROAT / RADIUS HEEL FITTINGS <u>NOT</u> ACCEPTABLE	
AD		ACCESS DOOR OR PANEL	
R	R→►	DUCTWORK RISE IN DIRECTION OF AIR FLOW	
		DUCTWORK DROP IN DIRECTION OF AIR FLOW	
		DUCTWORK WITH ACOUSTICAL LINER. LISTED DUCT SIZES ARE INSIDE CLEAR DIMENSIONS.	
		FLEXIBLE CONNECTION	
		DUCTWORK CONSTRUCTED OF SPECIAL MATERIAL AS NOTED	
		DIRECTION OF PITCH	
26	420	RECTANGULAR DUCTWORK DIMENSIONS (W x H)	
2	5ø	ROUND DUCTWORK DIMENSIONS (DIA)	
26x2	0 OV	OVAL DUCTWORK DIMENSIONS (W x H)	
	DEVICE SYMB	OLS	
A3 10ø 300	SCHEDULE FOR VARIOUS DE 10ø = NECK SIZE (IN INCHES) DISCHARGE 4-WAY UNLESS	. 300 = REQUIRED CFM. ALL AIR DEVICE NOTED WITH FLOW ARROWS. AIR DEVICE W. METHOD OF IDENTIFICATION ALSO APPLIES	
SG1 20x12 300 BOG: 9'-0"	WALL OR DUCTWORK MOUNTED AIR DEVICE. SG1 = DESIGNATION (REFER TO AIR DEVICE SCHEDULE). 20x12 = DUCT CONNECTION SIZE (IN INCHES). 300 = REQUIRED CFM. 9'-0" = MOUNTING HEIGHT FROM FLOOR TO BOTTOM OF GRILLE.		
	MANUAL BALANCING DAMPE	R WITH LOCKING DEVICE	
	BDD = BACK DRAFT DAMPER CBD = COUNTER-BALANCED BACK DRAFT DAMPER		
A-D	FIRE DAMPER A = TYPE (REFER TO FLOOR PLANS FOR VARIOUS TYPES) D OR S = DYNAMIC OR STATIC		
	SD = SMOKE DAMPER FS = COMBINATION FIRE - SMOKE DAMPER MDD = MOTORIZED DAMPER AFMS = AIR FLOW MEASURING STATION		
SD SD	DUCT MOUNTED SMOKE DETECTOR. COORDINATE LOCATION.		
	HUMIDITY SENSOR - DUCT MOUNTED		

STATIC PRESSURE SENSOR - DUCT MOUNTED

CARBON DIOXIDE SENSOR - DUCT MOUNTED

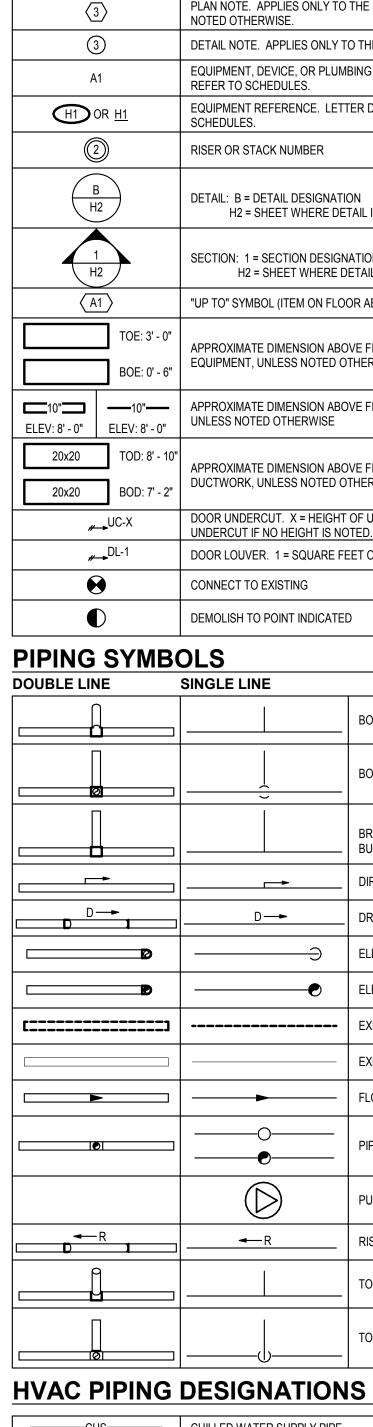
TEMPERATURE SENSOR - DUCT MOUNTED

VALVES AND FITTINGS

	CHECK VALVE
	SHUTOFF VALVE (REFER TO SPECIFICATIONS FOR REQUIRED TYPE BASED ON APPLICATIONS)
	COMBINATION SHUTOFF AND BALANCING VALVE (REFER TO SPECIFICATIONS FOR REQUIRED TYPE BASED ON APPLICATIONS)
	CONCENTRIC PIPE REDUCER
FOT	ECCENTRIC PIPE REDUCER
FOB P	PRESSURE GAUGE
<u> </u>	
	CLEANOUT
	STRAINER
	STRAINER WITH A BLOW DOWN VALVE AND HOSE CONNECTION
 	DRAIN VALVE WITH HOSE END CONNECTION
<u> </u>	AUTOMATIC FLOW CONTROLLER WITH P/T PLUG IN AND OUT
	EXPANSION JOINT
<u> </u>	MANUAL AIR VENT
Υ A	AUTOMATIC AIR VENT
	PRESSURE REDUCING VALVE
	MODULATING 2 PORT AUTOMATIC CONTROL VALVE
	2 PORT AUTOMATIC CONTROL VALVE, 2-POSITION UNLESS SPECIFIED OTHERWISE
	MODULATING 3 PORT AUTOMATIC CONTROL VALVE
	3 PORT AUTOMATIC CONTROL VALVE, 2-POSITION UNLESS SPECIFIED OTHERWISE
	AUTOMATIC PRESSURE INDEPENDENT CONTROL VALVE
	QUICK OPENING MANUAL VALVE
	SAFETY RELIEF VALVE. FOR HYDRONIC SYSTEMS PIPE DISCHARGE AIR GAPPED TO FLOOR DRAIN UNLESS NOTED OTHERWISE. FOR STEAM SYSTEMS PIPE DISCHARGE TO OUTDOORS.
₽-	VACUUM BREAKER
	NEEDLE VALVE
P	PRESSURE AND TEMPERATURE TEST PLUG
Ŷ	VACUUM GAUGE WITH STOP
]	END CAP
	GLOBE VALVE
-ONT VB	SHUTOFF VALVE AND BOX
	SHUTOFF VALVE ON RISER
	SOLENOID VALVE
	WATER METER
Ē —Õ—	FLOW METER
——————————————————————————————————————	BI-METALIC STEAM TRAP AND DRIP ASSEMBLY
	THERMODYNAMIC STEAM TRAP AND DRIP ASSEMBLY
	INVERTED BUCKET STEAM TRAP AND DRIP ASSEMBLY
	FLOAT AND THERMOSTATIC STEAM TRAP AND DRIP ASSEMBLY
	THERMOSTATIC STEAM TRAP AND DRIP ASSEMBLY
₽ ₽	PRESSURE GAUGE WITH COCK AND SIPHON LOOP
ISC SY	MBOLS
©	CARBON DIOXIDE SENSOR. WHEN WALL MOUNTED, MOUNTING HEIGHT 46" TO MEET ADA REQUIREMENTS. WHEN MOUNTED NEXT TO WALL SWITCH COORDINATE WITH ARCHITECT.
0	CARBON MONOXIDE SENSOR. WHEN WALL MOUNTED, MOUNTING HEIGHT 46" TO MEET ADA REQUIREMENTS. WHEN MOUNTED NEXT TO WALL SWITCH COORDINATE WITH ARCHITECT.

©	CARBON DIOXIDE SENSOR. WHEN WALL MOUNTED, MOUNTING HEIGHT 46" TO MEET ADA REQUIREMENTS. WHEN MOUNTED NEXT TO WALL SWITCH COORDINATE WITH ARCHITECT.
\odot	CARBON MONOXIDE SENSOR. WHEN WALL MOUNTED, MOUNTING HEIGHT 46" TO MEET ADA REQUIREMENTS. WHEN MOUNTED NEXT TO WALL SWITCH COORDINATE WITH ARCHITECT.
(DP)	DIFFERENTIAL PRESSURE SENSOR. WHEN WALL MOUNTED, MOUNTING HEIGHT 46" TO MEET ADA REQUIREMENTS. WHEN MOUNTED NEXT TO WALL SWITCH COORDINATE WITH ARCHITECT.
Ħ	HUMIDITY SENSOR. WHEN WALL MOUNTED, MOUNTING HEIGHT 46" TO MEET ADA REQUIREMENTS. WHEN MOUNTED NEXT TO WALL SWITCH COORDINATE WITH ARCHITECT.
\$	TEMPERATURE SENSOR. WHEN WALL MOUNTED, MOUNTING HEIGHT 46" TO MEET ADA REQUIREMENTS. WHEN MOUNTED NEXT TO WALL SWITCH COORDINATE WITH ARCHITECT.
\$	TEMPERATURE SENSOR MOUNTED IN CEILING PLENUM.
§P	STATIC PRESSURE SENSOR.
1	SPACE TEMPERATURE SENSOR / THERMOSTAT. WHEN WALL MOUNTED, MOUNTING HEIGHT 46" TO MEET ADA REQUIREMENTS. WHEN MOUNTED NEXT TO WALL SWITCH COORDINATE WITH ARCHITECT.
Ĥ	EMERGENCY SHUTOFF STATION. 46" MOUNTING HEIGHT UNLESS NOTED OTHERWISE.





CHS	CHILLED WATER SUPPLY PIPE
CHR	CHILLED WATER RETURN PIPE
CWS	CONDENSER WATER SUPPLY PIPE
CWR	CONDENSER WATER RETURN PIPE
CHGS	CHILLED WATER GLYCOL SOLUTION SUPPLY PIPE
CHGR	CHILLED WATER GLYCOL SOLUTION RETURN PIPE
D	DRAIN LINE. PITCH IN DIRECTION INDICATED
HWR	HEATING HOT WATER RETURN PIPE
HWS	HEATING HOT WATER SUPPLY PIPE
MU	WATER MAKE-UP PIPE
 _ 	VENT PIPE
ET	EXPANSION TANK PIPE
HG	REFRIGERANT HOT GAS LINE
RL	REFRIGERANT LIQUID LINE
RS	REFRIGERANT SUCTION LINE
	STEAM SUPPLY PIPE - NUMBER INDICATES P.S.I.G.
HPC	HIGH PRESSURE CONDENSATE RETURN PIPE
HPS-	HIGH PRESSURE STEAM SUPPLY PIPE
LPC	LOW PRESSURE CONDENSATE RETURN PIPE
LPS-	LOW PRESSURE STEAM SUPPLY PIPE
MPC	MEDIUM PRESSURE CONDENSATE RETURN PIPE
MPS	MEDIUM PRESSURE STEAM SUPPLY PIPE
PC	PUMPED CONDENSATE RETURN PIPE

OR PLAN NOTES			
PLAN NOTE. APPLIES ONLY TO THE SHEET WHICH IT IS SHOWN UNLESS NOTED OTHERWISE.			
DETAIL NOTE. APPLIES ONLY TO THE ASSOCIATED DETAIL.			
EQUIPMENT, DEVICE, OR PLUMBING FIXTURE MARK. LETTER DESIGNATIONS REFER TO SCHEDULES.			
EQUIPMENT REFERENCE. LETTER DESIGNATION VARIES. REFER TO SCHEDULES.			
RISER OR STACK NUMBER			
DETAIL: B = DETAIL DESIGNATIO H2 = SHEET WHERE DE			
SECTION: 1 = SECTION DESIGNATION H2 = SHEET WHERE DETAIL IS LOCATED			
"UP TO" SYMBOL (ITEM ON FLOO	OR ABOVE)		
APPROXIMATE DIMENSION ABO EQUIPMENT, UNLESS NOTED O	VE FINISHED FLOOR TO TOP OR BOTTOM OF THERWISE		
APPROXIMATE DIMENSION ABO UNLESS NOTED OTHERWISE	VE FINISHED FLOOR TO CENTERLINE OF PIPE,		
APPROXIMATE DIMENSION ABO DUCTWORK, UNLESS NOTED O	VE FINISHED FLOOR TO TOP OR BOTTOM OF THERWISE		
DOOR UNDERCUT. X = HEIGHT UNDERCUT IF NO HEIGHT IS NC	OF UNDERCUT IN INCHES; 0.75 INCH ITED. COORDINATE WITH GC.		
DOOR LOUVER. 1 = SQUARE FE	EET OF LOUVER.		
CONNECT TO EXISTING			
DEMOLISH TO POINT INDICATED			
LS			
INGLE LINE			
	BOTTOM CONNECTION (45°)		
Ĵ	BOTTOM CONNECTION (90°)		
	BRANCH TEE CONNECTION (NOTE: BULLHEAD TEE'S ARE NOT PERMITTED)		
D DROP			
ELBOW DOWN			
•	ELBOW UP		

	BOTTOM CONNECTION (90°)
	BRANCH TEE CONNECTION (NOTE: BULLHEAD TEE'S ARE NOT PERMITTED)
	DIRECTION OF PITCH
□	DROP
Э	ELBOW DOWN
•	ELBOW UP
	EXISTING PIPE TO BE REMOVED
	EXISTING PIPE TO REMAIN
	FLOW DIRECTION DESIGNATION
O	PIPE RISER
\bigcirc	PUMP
← R	RISE
	TOP CONNECTION (45°)
	TOP CONNECTION (90°)
ESIGNATION	\$

ABBREVIATIONS

-		
AC ACCU AD AFF AFG AFMS ALT AP APPROX ARCH ASSY ATC	 AIR COMPRESSOR OR AIR CONDITIONER AIR COOLED CONDENSING UNIT ACCESS DOOR OR AREA DRAIN ADJUSTABLE ABOVE FINISHED FLOOR ABOVE FINISHED GRADE AIR FLOW MEASURING STATION ALTERNATE ACCESS PANEL APPROXIMATE ARCHITECT OR ARCHITECTURAL ASSEMBLY AUTOMATIC TEMPERATURE CONTROL (SYNONYMOUS WITH BAS) 	ID INV IN KEC LAT LAV LBS LPC LPS LWT
BAS BDD BFP BLDG BOB BOD BOE BOF BOG BOP BOT	 BUILDING AUTOMATION SYSTEM BACK DRAFT DAMPER BACKFLOW PREVENTER BUILDING BOTTOM OF BEAM BOTTOM OF DUCT BOTTOM OF EQUIPMENT BOTTOM OF FOOTING BOTTOM OF GRILLE BOTTOM OF PIPE BOTTOM 	MAX MDD MEZZ MFR MH MIN MISC MTD MTG MPC MPS
BTU BTUH CBD CFCI CFCI CFM CHS	 BRITISH THERMAL UNIT BRITISH THERMAL UNIT PER HOUR COUNTER BALANCED BACKDRAFT DAMPER CONTRACTOR FURNISHED CONTRACTOR INSTALLED CUBIC FEET PER MINUTE CHILLED WATER SUPPLY 	MU N/C N/O NOM NPT NTS
CHR CHGR CHGS CLG CMU CO CO2	 CHILLED WATER RETURN CHILLED WATER GLYCOL SOLUTION RETURN CHILLED WATER GLYCOL SOLUTION SUPPLY CEILING CONCRETE MASONRY UNIT CLEAN OUT CARBON DIOXIDE 	OA OBD OD OFCI OFOI
CONN CONTR CTR CU CW CWR	- CONNECT OR CONNECTION - CONTRACTOR - CENTER - COPPER - COLD WATER - CONDENSER WATER RETURN	P PC PLBG PRES
CWS D DB DDC DI	- CONDENSER WATER SUPPLY - DRAIN LINE - DRY BULB - DIRECT DIGITAL CONTROLS - DEIONIZED WATER	PRV PSF PSI PSIG RA
DIA DIM DN DWG EA	- DIAMETER - DIMENSION - DOWN - DRAWING - EACH OR EXHAUST AIR	RAD RCP RD REC REQI RI
EAT EC EJ ELEC ELEV EQUIP ET ETR EQS EWT	 ENTERING AIR TEMPERATURE ELECTRICAL CONTRACTOR (DIVISION 26) EXPANSION JOINT ELECTRICAL ELEVATOR EQUIPMENT EXPANSION TANK EXISTING TO REMAIN EQUIPMENT SUPPLIER ENTERING WATER TEMPERATURE 	RL ROS ROR RPM RS S SA SAN SCH
EXH EXP EXT EX FD	- EXHAUST - EXPANSION - EXTERIOR - EXISTING - FLOOR DRAIN	SCW SHT SPEC SQ SR SRV
FF FLR FOB FOF FOG FOR	- FINISHED FLOOR ELEVATION - FLOOR - FLAT ON BOTTOM	SS STD STM STRL SUC
FOS FOT FPM FSC FT FTG	 FUEL OIL SUPPLY FLAT ON TOP FEET PER MINUTE FIRE SUPPRESSION CONTRACTOR (DIVISION 21) FEET FOOTING 	TEMF TOB TOD TOE TOF TOJ TOP
G GA GAL GALV GC GPM	- GAS OR NATURAL GAS - GAUGE - GALLON - GALVANIZED - GENERAL TRADES CONTRACTOR - GALLONS PER MINUTE	TOS TYP UNO V
HB HC HD HG HP	- HOSE BIBB - HVAC CONTRACTOR (DIVISION 23) - HUB DRAIN - REFRIGERANT HOT GAS - HORSEPOWER HIGH PRESSURE CONDENSATE RETURN	VAC VEL VFD VIB
HPC HPS HR HT HTR HVAC	 HIGH PRESSURE CONDENSATE RETURN HIGH PRESSURE STEAM SUPPLY HOUR HEAT TRACE HEATER HEATING, VENTILATING, AND AIR CONDITIONING 	VOL VTR VR W/ W/O
HW HWR HWS	- HOT WATER - HEATING HOT WATER RETURN - HEATING HOT WATER SUPPLY	WB WCO

KEC	- KITCHEN EQUIPMENT CONTRACTOR
L LAT LAV LBS LPC LPS LWT	- LENGTH - LEAVING AIR TEMPERATURE - LAVATORY - POUNDS - LOW PRESSURE CONDENSATE RETURN - LOW PRESSURE STEAM SUPPLY - LEAVING WATER TEMPERATURE
MAX MDD MEZZ MFR MH MIN MISC MTD MTG MPC MPS MU	 MAXIMUM MOTORIZED DAMPER MEZZANINE MANUFACTURER MANHOLE MINIMUM OR MINUTE MISCELLANEOUS MOUNTED MOUNTING MEDIUM PRESSURE CONDENSATE RETURN MEDIUM PRESSURE STEAM SUPPLY WATER MAKE-UP
N/C NIC N/O NOM NPT NTS	- NORMALLY CLOSED - NOT IN CONTRACT - NORMALLY OPEN - NOMINAL - NATIONAL PIPE THREAD - NOT TO SCALE
OA OBD OD OFCI OFOI	 OUTDOOR AIR OPPOSED BLADE DAMPER OUTSIDE DIAMETER OWNER FURNISHED CONTRACTOR INSTALLED OWNER FURNISHED OWNER INSTALLED
P PC	- PROPANE GAS - PLUMBING CONTRACTOR (DIVISION 22)
PLBG PRESS PRV PSF PSI PSIG	OR PUMPED CONDENSATE RETURN - PLUMBING - PRESSURE - PRESSURE REGULATING VALVE - POUNDS PER SQUARE FOOT - POUNDS PER SQUARE INCH - POUNDS PER SQUARE INCH GAUGE
RA RAD RCP RD REC REQD RI RL ROS ROR RPM RS	
S SA SAN SCH SCW SHT SPEC SQ SR SRV SS STD STM STRUC SUC	 SPRINKLER (WET) SUPPLY AIR SANITARY OR SANITARY DRAIN SCHEDULE SOFT COLD WATER SHEET SPECIFICATIONS SQUARE SUPPLY RISER SAFETY RELIEF VALVE STAINLESS STEEL STANDARD STORM OR STORM DRAINAGE STRUCTURAL OR STRUCTURE SITE UTILITY CONTRACTOR
TEMP TOB TOD TOE TOF TOJ TOP TOS TYP	
UNO	- UNLESS NOTED OTHERWISE
V VAC VEL VFD	- VENT - VACUUM - VELOCITY - VARIABLE FREQUENCY DRIVE

- INSIDE DIAMETER - INVERT ELEVATION

- INCHES

.L - VELOCITY FD - VARIABLE FREQUENCY DRIVE (ADJUSTABLE FREQUENCY MOTOR CONTROLLER) VIB - VALVE IN BOX VOL - VOLUME VTR - VENT THROUGH ROOF VR - VENT RISER

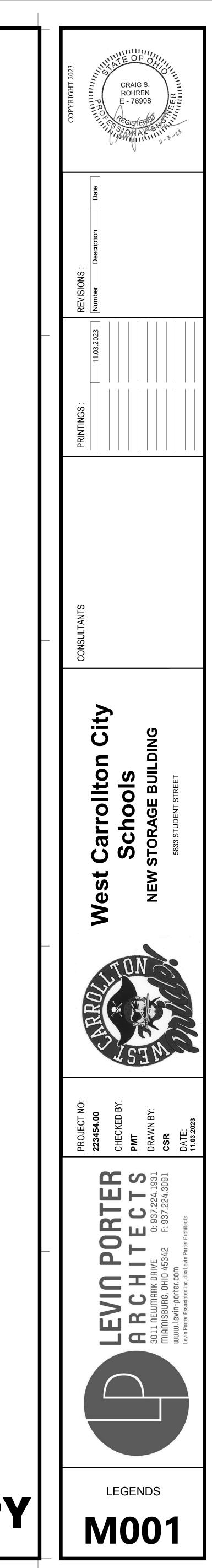
W/ - WITH G W/O - WITHOUT WB - WET BULB WCO - WALL CLEANOUT

<u>NOTE:</u> ALL SYMBOLS AND ABBREVIATIONS ARE SUBJECT TO MODIFICATIONS ON OTHER DRAWINGS.

ALL SYMBOLS OR ABBREVIATIONS MIGHT NOT NECESSARILY BE USED ON THIS PROJECT.

	MECHANICAL SHEET LIST
SHEET NUMBER	SHEET NAME
M001	LEGENDS
M002	SCHEDULES
M100	MECHANICAL PLAN - PEMB BUILDING





								FA	NS											
AND SI B. SONES C. MOTO	ANS SH HALL B S VALU R HOR	S: IALL BE A.M.C.A. 211 AND 311 PERFORMANCE CER BEAR THE A.M.C.A. LABEL. JES BASED ON A.M.C.A. 301 MEASURED AT 5 FT. SEPOWERS LISTED SHALL BE CONSIDERED MININ L OPENINGS ARE APPROX. VERIFY SIZE & COORL	ЛUМ.					ig arou 'All lint					REQU	IRED						
		E CONTROLLED BY AN ON/OFF SWITCH. WITH ELECTRICAL CONTRACTOR.		i				1							1			05		
										M	IOTOR	ł							EISMIC TRAINTS	BASIS OF
MARK	TYPE (REFER TO SPECS)	DESCRIPTION	SERVICE	FAN CFM	STATIC PRESSURE (IN. W.C.)	APPROX. WHEEL DIAMETER	MAXIMUM SONES	HORSEPOWER (HP)	VOLTAGE - PHASE	LECTRONICALLY	ECM MCA (AMPS, TOTAL)	ECM MOCP (AMPS, TOTAL)	VARIABLE FREQUENCY DRIVE	MINIMUM SCCR (AMPS)	APPROX. ROOF/WALL OPENING	APPROX. WEIGHT (LBS.)	VIBRATION ISOLATOR TYPE	REQUIRED	IMPORTANCE FACTOR	MANUFACTUREF
EF-1	F1	CEILING FAN	RESTROOM	50	0.25	8"	2	18W	115-1	-	-	-	-	5000	-	10	-	-	-	GREENHECK
EF-2	G1	WALL MOUNTED PROPELLER PANEL FAN	STORAGE	4000	0.5	24"	24	1	208-3	-	-	-	-	5000	32"x32"	100	-	-	-	GREENHECK

	HVAC	DESIGN	I DATA		
GENERAL NOTES: A. OUTDOOR DESIGN CONDIT 92°F DB SUMMER 74°F WB SUMMER 1°F DB WINTER	IONS:		B. DES	SIGN ALTITUD	E: 850 FT.
NOTES: 1. LISTED RH IS MAXIMUM AN DB TEMPERATURE. 2. "FLOATING" MEANS THERE 3. OUTDOOR AIR VENTILATION	IS NO ACTIVE				
		INTERIOR D	ESIGN DATA		
	SUM	MER	WIN	TER	
SPACE NAME / TYPE	°F DB	% RH (NOTE 1,3)	°F DB	% RH (NOTE 1)	SEE NOTE
ALL SPACES	-	FLOATING	55	FLOATING	2

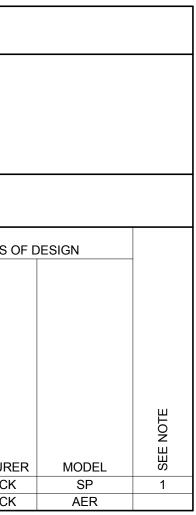
		AI	R	DI	ST	R	B	UT	ΓΙΟ)N	D	E\	/IC	E	S		
VERIFY B. FINISH "E.C.L."	- NOTES: AY-IN AIR DEVICES SHALL FIT IN 24"X2 Y GRID TYPE AND COORDINATE AIR I I KEY: "W.B.E." - WHITE BAKED ENAMI " - ETCHED CLEAR LACQUER OR ANC A." - CUSTOM COLOR SELECTED BY A	DEVI EL; DDIZI	CE C ED;	COM	PATI				IN D. P	IDIC. ROV	ATE IDE	D OT AUX	HEF	RWIS AME	RS SHALL BE 4-WAY BL E ON DRAWINGS. S FOR AIR DEVICES IN OR OTHER HARD SUR	PLASTER,	
		M	DUN	TINC	G TY	PE	MA	TER	IAL	F	INIS	H	ĸ	R	BASIS OF DI	ESIGN	
MARK	DESCRIPTION	LAY-IN	SURFACE	DUCT	SPLINE	SNAP-IN	STEEL	ALUMINUM	STAINLESS STEEL	W.B.E.	E.C.L.	C.C.B.A.	OPPOSED BLADE DAMPER	SQ-TO-RD NECK ADAPTOR	MANUFACTURER	MODEL	SEE NOTE
L1	LOUVER		•					•				•			GREENHECK	ESD-603	

											GA	S-FI	IRE	DU	NIT	HE	ATE	RS														
B. ELECTR ADEQUA SUPPLIE	NOTES: LIVERY PRESSURE IS 10" \ IC SERVICE - SINGLE POIN CY OF LISTED CIRCUIT SI R. COST FOR INCREASE (ENT SELECTED SHALL BE	IT POWER SERVICE (ZE MUST BE VERIFIE OR CHANGE OF ELE(D BY H.C. AND UN	IIT																												
1.			LOCATIO	N		TYPE				FA	N		E	ELECT	RICALS	SERVIC	E			D	DIMENSI	ONS			THER	MOST	AT	SI RES	EISMIC TRAINTS	BASIS OF D	ESIGN	
MARK	DESCRIPTION	MOUNTING	ROOM NAME	ROOM NUMBER	HORIZONTAL DISCHARGE VERTICAL DISCHARGE	ED COMBUSTIO	GRAVITY VENTED GAS INPLIT (CFH)				HIGH EXT. STA	ELECTRONICALLY COMMU	VOLTAGE - PHASE	FULL LOAD AMPS (FLA)	MIN CIRCUIT AMPS (MCA)	MAX OVER CURRENT PROTECTION (MOCP)	MINIMUM SCCR (AMPS)	GAS CONNECTION SIZE	VENT OUTLET SIZE	COMB. AIR INLET SIZE	WIDTH	HEIGHT	DEPTH	APPROX. OPERATING WEIGHT (LBS)	UNIT MOUNTED		24 VOLT VIBRATION ISOLATOR TYPE	REQUIRED	IMPORTANCE FACTOR	MANUFACTURER	MODEL	SEE NOTE
GFUH - 1	UNIT HEATER	SUSPENDED	STORAGE	101	• -	• -	- 50				1(2) -		115-1	10.8	11.5	15	5000	0.5"	2"	2"	43"	12"	33"	150	- •	-	• -	-	-	TRANE	HEGH	
GFUH - 2	UNIT HEATER	SUSPENDED	STORAGE	101	• -	• -	- 50				1(2) -		115-1		11.5	15	5000	0.5"	2"	2"	43"	12"	33"	150	- •	-	• -	-	-	TRANE	HEGH	
GFUH - 3	UNIT HEATER	SUSPENDED	STORAGE	101	• -	• -	- 50	0 48	.6 79	0 1/14	4(2) -	- 1	115-1	10.8	11.5	15	5000	0.5"	2"	2"	43"	12"	33"	150	- •		• -	-	-	TRANE	HEGH	

	MA	DESCRIPTIO	ON /	MOUI	NTING	ROOM NAME	RO	오
G	FUH - 1	UNIT HEATE	ER	SUSPI	ENDED	STORAGE	101	•
G	FUH - 2	UNIT HEATE	ER	SUSPI	ENDED	STORAGE	101	•
G	GFUH - 3	UNIT HEATE	ER	SUSPI	ENDED	STORAGE	101	•
TION DEVICES								
 C. SUPPLY AIR DIFFUSERS SHALL BE 4-WAY BI INDICATED OTHERWISE ON DRAWINGS. D. PROVIDE AUX. FRAMES FOR AIR DEVICES IN GYPSUM BOARD, TILE OR OTHER HARD SUF 	N PLASTEF			Ā	ELECTRI INTEGRA CIRCUIT COST FO	OTES: CAPACITY BASE C SERVICE - SING L CONTROLS TR SIZE MUST BE VE R INCREASE OR NT SELECTED S	GLE POIN ANSFOR RIFIED I CHANGE	nt po Mer By H E of

Α.	HEATING CAPACITY BASED ON 55°F ENT. AIR.
Β.	ELECTRIC SERVICE - SINGLE POINT POWER CONNECTION WITH
	INTEGRAL CONTROLS TRANSFORMER. ADEQUACY OF LISTED
	CIRCUIT SIZE MUST BE VERIFIED BY H.C. AND UNIT SUPPLIER.
	COST FOR INCREASE OR CHANGE OF ELECTRIC SERVICE FOR
	EQUIPMENT SELECTED SHALL BE BORNE BY H.C.
C.	ELECTRICAL SERVICE TO 3-PHASE UNITS SHALL BE
	3-WIRE UNLESS NOTED OTHERWISE.

				FAN			HEAT	ING			ELE		L SERVI	CE		APP	ROX. C/	ABINET	DIMENS	IONS			EISMIC TRAINTS	THERN	IOSTAT	
			5	TOR (HP/ WATTS)		PACITY (MBH)	(MIM)	(MAX)	STAGES	LTAGE - PHASE	ULL LOAD AMPS (FLA)	CIRCUIT AMPS (MCA)	X OVER CURRENT PROTECTION (MOCP)	MINIMUM SCCR (AMPS)	EGRAL DISCONNECT	WIDTH	E	HEIGHT	RECESS	MOUNTING HEIGHT (AFF, NOTE 1)	RATION ISOLATOR TYPE	REQUIRED	ORTANCE FACTOR	MOUNTED	WALL MOUNTED	
	DESCRIPTION	MOUNTING	CFM	.OW	🖬	CA	ΧŇ	≥	ST	.TON	L L	NIM	۲¢	Ξ	INTE	M	DEP.	""	L H	Ŭ Ŭ	VIBR	L H	Σ		M N	
I-1	CABINET UNIT HEATER	WALL MOUNTED	250	-	-	6.8	-	2.0	1	208-1		-		5000	•	16"	4"	21"	0"	0'-6"	-	-	-	•	-	
+	CABINET UNIT HEATER	WALL MOUNTED	250	-	-	6.8		2.0	1	208-1		<u> </u>		5000	•	16"	4"	21"	0"	0'-6"	-	_		•	-	+



DUCT CONS	TRUCI	TION	l, SI	EAI	LING, A	ND INS	ULATI	ON	
GENERAL NOTES: A. DUCT CONSTRUCTION AND SEALIN LATEST S.M.A.C.N.A. STANDARDS.	G SHALL BE	PER							
NOTES:									
	S.M.A	.C.N.A. (CLASS	S.					
				(AGE ASS			DOUBLE		
DUCT SYSTEM	S.P. CON- STRUCT.		RECT		INTERNALLY LINED	EXTERNAL INSULATION	WALL	NOT INSULATED	SEE NOTE
EXHAUST DUCTWORK	+1"	А	16	8	-	-	-	•	

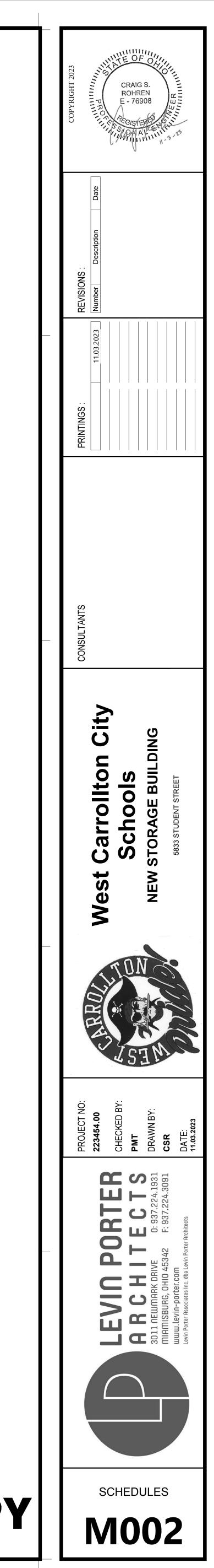
H. IF EC MOTORS ARE INDICATED OR SPECIFIED, EACH MOTOR SHALL BE PROVIDED WITH FACTORY DISCONNECTING MEANS, INTERNAL OVERLOAD PROTECTION, FIELD ADJUSTABLE SPEED CONTROL, AND REMOTE ANALOGUE SPEED CONTROL INPUT WHEN REMOTE CONTROL IS SPECIFIED, COORDINATED WITH THE BUILDING AUTOMATION SYSTEM.
I. WHEN APPLICABLE, REFER TO SPECIFICATIONS FOR VIBRATION ISOLATOR TYPES AND SEISMIC RESTRAINT REQUIREMENTS.

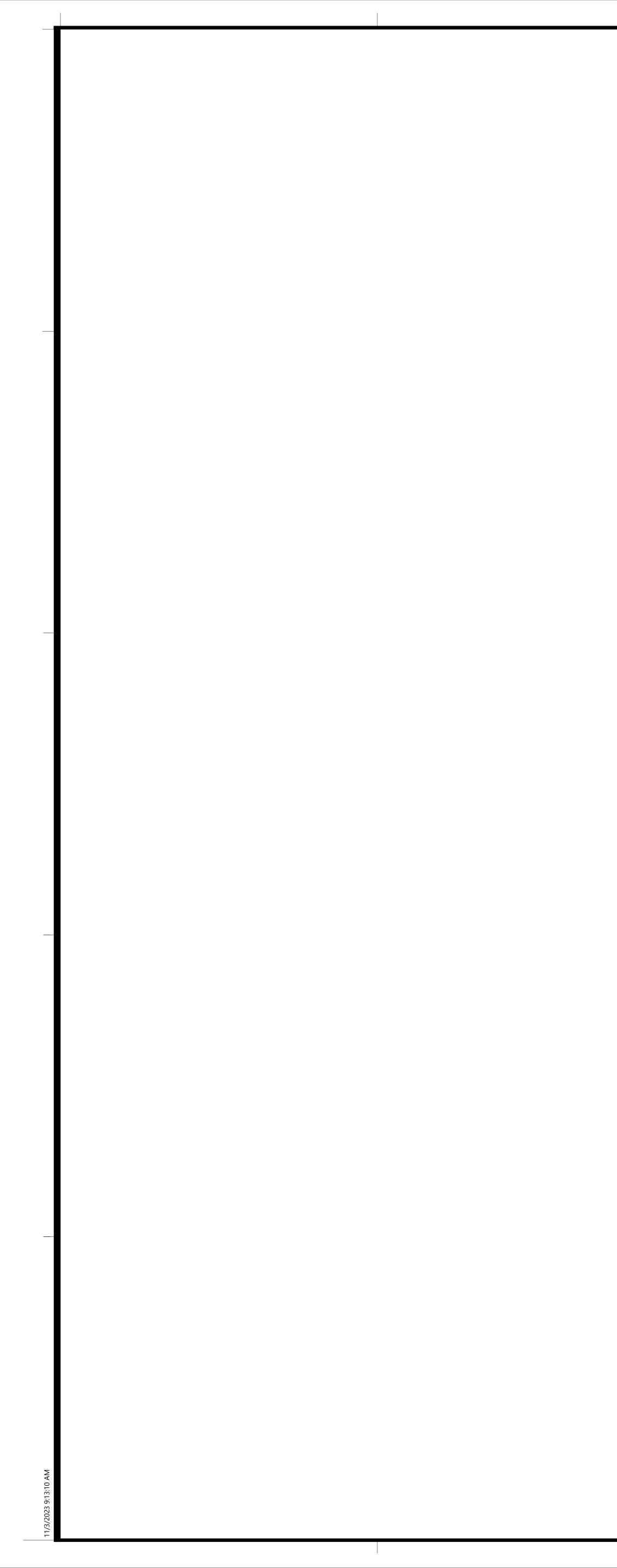
GAS-FIRED LINIT HEATERS

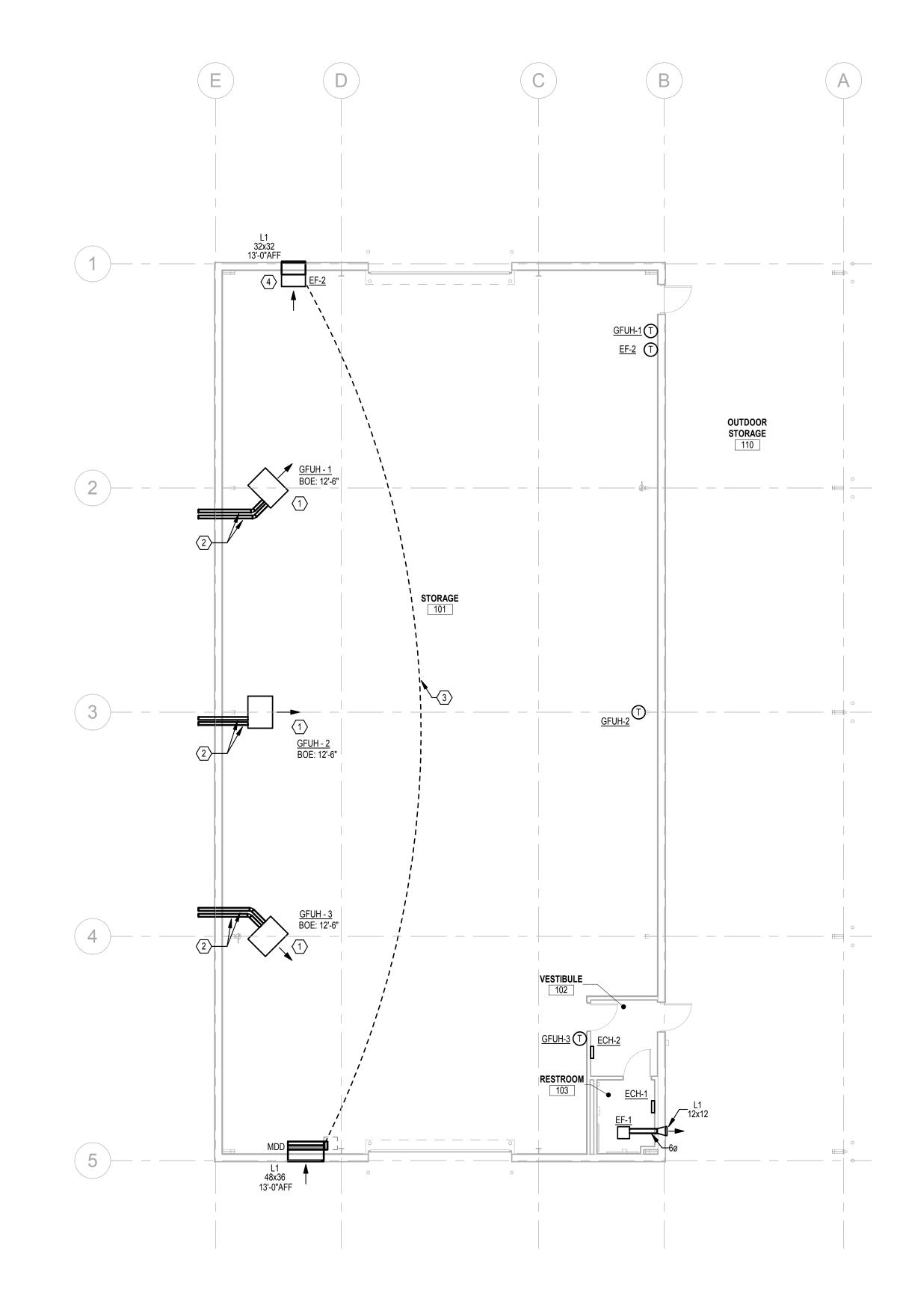
ELECTRIC UNIT HEATERS

- D. 3-PHASE COIL LOADS SHALL BE DIVIDED EVENLY ACROSS EACH PHASE.
 E. VERIFY / COORDINATE CABINET DIMENSIONS, MOUNTING & RECESS REQUIREMENTS PRIOR TO ORDERING.
 F. RECESSED UNITS SHALL HAVE FOUR(4) SIDE OVERLAP UNLESS NOTED OTHERWISE.
 G. COORDINATE LINTELS IN MASONRY WALLS FOR FULL & SEMI-RECESSED UNIT WALL OPENINGS.









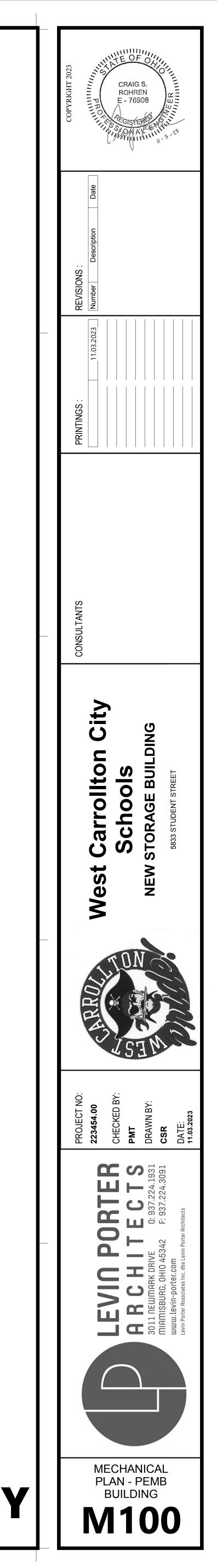
1 MECHANICAL PLAN - PEMB BUILDING SCALE: 1/8" = 1'-0"

GENERAL NOTES

A. COORDINATE ALL OPENINGS WITH PRE-ENGINEERED METAL BUILDING MANUFACTURER. COORDINATE PENETRATIONS WITH GIRTS.

- 1 NEW GAS FIRED UNIT HEATER. INSTALL PER MANUFACTURER'S RECOMENDATIONS.
- 2 ROUTE AND SIZE COMBUSTION AIR AND FLUE PER MANUFACTURER'S RECOMMENDATIONS. VENTING MATERIAL SHALL BE PVC/CPVC. VERIFY WITH MANUFACTURER DURING BIDDING. TERMINATE VENTING THROUGH WALL WITH CONCENTRIC VENT KIT FURNISHED BY MANUFACTURER.
- 3 INTERLOCK CONTROL DAMPER TO EXHAUST FAN OPERATION.
- 4 EXHAUST FAN SHALL BE CONTROLLED BY THERMOSTAT. WHEN TEMPERATURE IS ABOVE 85 DEG F THEN FAN SHALL BE ENABLED. FAN SHALL BE DISABLED WHEN TEMPERATURE IS BELOW 85 DEG F.
- 17 ROUTE AND SIZE COMBUSTION AIR AND FLUE PER MANUFACTURER'S RECOMMENDATIONS. VENTING MATERIAL SHALL BE PVC/CPVC. VERIFY WITH MANUFACTURER DURING BIDDING. TERMINATE VENTING THROUGH WALL WITH CONCENTRIC VENT KIT FURNISHED BY MANUFACTURER.





	ENERAL NOTES (APPLIES TO ALL DIVISION 26 SHEETS ALL CONDUCTORS WILL BE COPPER IN CONDUIT. SEE SPECIFICATIONS FOR EXCEPTIONS THAT WILL ALLOW ALUMINUM CONDUCT
	ALL WORK WILL BE DONE IN ACCORDANCE WITH THE NEC FOR A COMPLETE AND OPERATIONAL INSTALLATION.
	PROVIDE A SEPARATE NEUTRAL CONDUCTOR WITH EACH 20A., 120V. POWER CIRCUIT - GROUND TOTAL SYSTEM PER NEC 250. ALL 20 AMP, 120 VOLT POWER CIRCUITS SHALL CONSIST OF #12 AWG CONDUCTORS UNLESS INDICATED OTHERWISE.
	ALL EMPTY CONDUITS SHALL BE INSTALLED WITH PULLWIRE PER SPECIFICATIONS.
F.	ALL SURFACE PATCHING AND FINISHING WILL BE BY THE ELECTRICAL CONTRACTOR OR TO POINT CONSISTENT WITH G.C. RESPONSIBILITIES.
G.	ALL WIRING AND CONDUIT SHALL BE INSTALLED CONCEALED ABOVE ALL LAY-IN CEILING SYSTEMS. WHERE WIRING IS REQUIRED BE RUN EXPOSED ALONG WALLS AND CEILINGS, IT SHALL BE RUN IN METAL SURFACE RACEWAY (WIREMOLD UNLESS INDICATED OTHERWISE - COORDINATE EXACT SERIES NUMBER WITH OWNER AND PROVIDE ACCORDINGLY) MOUNTED TIGHT TO EXISTING SURFACE MATCHING CONTOUR OF BUILDING LINES AND PAINTED TO MATCH SURFACES ON WHICH THEY ARE MOUNTED. COORDINATE ALL LOCATIONS AND ROUTES WITH ENGINEER PRIOR TO ROUGH-IN.
	ALL ELECTRICAL SPLICES FOR WIRE SIZES 6 AWG AND LARGER SHALL BE HYDRAULIC CRIMP TYPE. E.C. IS RESPONSIBLE FOR REMOVALS/RELOCATIONS OF ALL SITE WIRING/CONDUIT, ETC., WHICH HAS COME INTO CONFLICT WITH NEW WORK. E.C. IS RESPONSIBLE FOR REMOVAL OF ALL BRANCH CIRCUITS AND FEEDERS SERVING SPECIFIC ITEMS OF MECH./M EQUIPMENT TO BE REMOVED BY OTHERS; COORDINATE WITH OTHER TRADES. NOT ALL REMOVAL WORK OR DEVICES ARE
J.	NECESSARILY SHOWN ON DRAWINGS. ALL EXPOSED CONDUIT ABOVE GRADE WILL BE RIGID GALVANIZED METALLIC WITH ALL STEEL FITTING, PAINTED TO MATCH SURFACES ON WHICH THEY ARE MOUNTED.
K.	ALL EXTERIOR MOUNTED CONDUIT SHALL BE SEALED WATER AND MOISTURE TIGHT. ALL EXTERIOR MOUNTED DEVICES SHALL BE
L.	WEATHERPROOF NEMA 3R, UNLESS OTHERWISE NOTED. PROVIDE NEW CONDUITS TO ALLOW FOR PROPER BENDING RADIUS OF ALL SYSTEMS CABLING AND WIRING INSTALLED UNDER TH CONTRACT AS RECOMMENDED BY MANUFACTURERS OF EACH CABLE TYPE.
	 WHERE EXISTING CONDUITS AND UNDERGROUND DUCTBANKS ARE UTILIZED, EXTREME CARE MUST BE TAKEN TO PROTECT CABLES DURING INSTALLATION. WHERE EXISTING ACCESSIBLE CONDUITS ARE UTILIZED, REPLACE EXISTING ELBOWS AND OTHER OFFSETS AS REQUIRED T MEET BENDING RADIUS REQUIREMENTS.
M.	E.C. IS RESPONSIBLE TO PROVIDE ALL LOW VOLTAGE WIRING TO ALL EXTERIOR MOUNTED FIXTURES AND INTERIOR MOUNTED FIXTURES THAT ARE INDICATED TO BE RUN THROUGH THE LIGHTING CONTROL SYSTEM OR INDICATED TO BE DIMMED. COORDIN/ EXACT WIRING REQUIREMENTS WITH MANUFACTURER PRIOR TO ROUGH-IN AND PROVIDE ACCORDINGLY.
N.	E.C. IS RESPONSIBLE TO PROVIDE CONCRETE PADS FOR ALL ELECTRIC EQUIPMENT ASSOCIATED WITH HIS WORK. NOT ALL CONCRETE PADS ARE NECESSARILY INDICATED OR SPECIFIED ON THE DRAWINGS AND SPECIFICATIONS. REFER TO SPEC SECTIO 03300. COORDINATE EXACT SIZE, REINFORCING AND OTHER SPECIFIC REQUIREMENTS WITH THE APPROPRIATE EQS AND PROVID ACCORDINGLY.
0.	ALL UNDERGROUND CONDUITS/DUCTBANKS SHALL BE SCHEDULE 40 PVC PER DETAIL(S) ON SHEET E003. ALL STUBS AND 90 DEGI ELBOWS SHALL BE FIBERGLASS OR RIGID GALVANIZED STEEL. LOCATE AND DIMENSION ALL ROUTES ON "AS-BUILTS" DRAWINGS ACCORDINGLY. METALLIC CONDUITS ARE TO BE UTILIZED ON RISERS. ALL EMPTY CONDUITS SHALL HAVE PULLWIRES. ALL CONDU TO BE DIRECT BURIED AT 36" BELOW GRADE UNLESS INDICATED OTHERWISE. PROVIDE CONCRETE ENCASEMENT WHERE INDICA ON PLAN.
P.	THIS CONTRACTOR SHALL LOCATE ALL EXISTING UNDERGROUND UTILITIES, MISCELLANEOUS CONDUITS AND PIPING PRIOR TO AN DIGGING. ANY DAMAGE TO ABOVE MENTIONED ITEMS SHALL BE HIS RESPONSIBILITY TO REPAIR.
Q.	COORDINATE EXACT ROUTE OF ALL UNDERGROUND CONDUITS AT SITE PRIOR TO EXCAVATION. UTILIZE LONG SWEEPING BENDS ALL UNDERGROUND CONDUITS.
	ALL OCCUPANCY SENSORS REQUIRING A POWER PACK AND POWER SHALL TAP THEIR POWER FEED AHEAD OF ANY/ALL SWITCHING NORRIDORS AND PUBLIC SPACES CONTROLLED BY THE LIGHTING AUTOMATION SYSTEM THE POWER PANEL SHALL BE FED FRUTHE NEAREST EMERGENCY EXIT LIGHT CIRCUIT (NON-SWITCHED).
	ALL WIRING AND CABLING MOUNTED ABOVE CEILINGS SHALL BE PLENUM RATED. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF ALL LIGHTING FIXTURES. WHERE REFLECTED CEILING PLANS INDICATE A LARGER QUANTITY OF LIGHTING FIXTURES THAN THAT SHOWN ON THE ELECTRICAL DRAWINGS FOR / PARTICULAR SPACE, THE REFLECTED CEILING PLANS SHALL BE FOLLOWED FOR THAT SPACE.
U.	VERIFY EXACT LOCATION OF ALL LIGHTING FIXTURES WITH REFLECTED CEILING PLAN AND/OR ARCHITECT PRIOR TO ROUGH-IN. COORDINATE LOCATIONS OF LIGHTING FIXTURES WITH MECHANICAL DUCTS AND SPRINKLER PIPES AND HEADS BEFORE ROUGH- TO PREVENT CONFLICTS.
V.	THE NOTES AND SYMBOLS SET DOWN ON THESE DRAWINGS ARE FOR THE GUIDANCE OF ALL TRADES INVOLVED IN THE PROJEC' AND MUST BE FOLLOWED TO EXECUTE THE WORK AS INTENDED.
W.	STAGGER RECEPTACLES AND OTHER RECESSED OUTLETS WHEN LOCATED ON OPPOSITE SIDES OF PARTITION TO ELIMINATE SC TRANSMISSION FROM ONE SPACE TO THE OTHER. CENTER DEVICES WHERE APPLICABLE IN EACH WALL SECTION.
X.	EXACT LOCATION OF ALL DEVICES SERVING EQUIPMENT TO BE VERIFIED AT SITE WITH OWNER'S REPRESENTATIVE AND/OR ARCHITECT PRIOR TO ROUGH-IN.
Y.	VERIFY EXACT LOCATION OF TELEPHONE, DATA AND RECEPTACLE OUTLETS FOR EACH DESK IN OFFICE SPACES WITH OWNER'S REPRESENTATIVE PRIOR TO ROUGH-IN.
Z.	COORDINATE EXACT LOCATION AND MOUNTING HEIGHT OF ALL NEW ELECTRICAL DEVICES WITH THE ARCHITECT PRIOR TO ROUG IN. DEVICES SHALL INCLUDE ALL NEW WORK INDICATED ON THE DRAWINGS; INCLUDING BUT NOT LIMITED TO POWER RECEPTACI TV OUTLET, LIGHTING CONTROLS AND SWITCHES, MOTOR CONTROLLERS, FA COMPONENTS, INTERCOM/PAGING COMPONENTS A SECURITY/CCTV EQUIPMENT.
AA.	DRAWINGS SHOW GENERAL LOCATIONS AND APPROXIMATE MOUNTING HEIGHTS FOR VOICE/DATA/VIDEO AND AV OUTLETS AND EQUIPMENT. E.C. SHALL COORDINATE EXACT LOCATIONS IN FIELD WITH CASEWORK AND WITH TECHNOLOGY CONTRACTOR PRICTOR OUGH INS. CEILING PROJECTOR OUTLET LOCATIONS SHALL BE COORDINATED WITH TECHNOLOGY CONTRACTOR TO ENSUR PROPER PLACEMENT OF PROJECTORS AND CLEARANCE FROM LIGHTING FIXTURES AND OCCUPANCY SENSORS. WALL FLAT PAN OUTLETS SHALL BE COORDINATED WITH TECH CONTRACTOR TO AVOID CONFLICTS WITH MOUNT.
	ALL RECEPTACLE AND DATA OUTLETS TO BE MOUNTED AT 18"M.H. UNLESS OTHERWISE NOTED. DATA OUTLETS LOCATED ADJAC TO DUPLEX AND DOUBLE DUPLEX RECEPTACLES SHALL BE MOUNTED AT THE SAME M.H. WITH THE RESPECTIVE RECEPTACLE. E.C. IS RESPONSIBLE TO COORDINATE ALL DEVICE LOCATIONS WITH CASEWORK DRAWINGS AND ARCHITECT PRIOR TO ROUGH- AVOID CONFLICTS. ANY DEVICE LOCATION NOT PROPERLY COORDINATED WITH CASEWORK, FURNITURE, WHITEBOARDS, ETC SH BE THE COST RESPONSIBILITY OF THE E.C. TO RELOCATE PROPERLY.
DD.	. BRANCH CIRCUIT WIRE SIZING CHART TO BE UTILIZED AS GUIDELINE FOR VOLTAGE DROP COMPENSATION, INCREASE CONDUIT SIZING PER WIRE SIZE. A) 20A-120V CIRCUITS B) 20A-208V CIRCUITS
	1) #12 WIRE - 60' LENGTH MAX. 1) #12 WIRE - 138' LENGTH MAX. 2) #10 WIRE - 94' LENGTH MAX. 2) #10 WIRE - 219' LENGTH MAX. 3) # 8 WIRE - 137' LENGTH MAX. 3) # 8 WIRE - 318' LENGTH MAX.
EE.	 4) # 6 WIRE - 218' LENGTH MAX. 4) # 6 WIRE - 504' LENGTH MAX. E.C. SHALL PROVIDE SINGLE POLE SWITCHING FOR MANUAL CONTROL OF LIGHTING FOR EACH SPACE THROUGH THE BUILDING UNLESS INDICATED OTHERWISE. INTENT IS FOR NEW LIGHTING TO BE CONTROLLED WITH VACANCY/OCCUPANCY SENSORS WITH VACANCY SENSORS WITH VACANCY/OCCUPANCY SENSORS WITH VACANCY SENSORS WITH VACANCY
FF.	MANUAL OVERRIDE. E.C. IS RESPONSIBLE TO WARRANTY WORK FOR A ONE YEAR PERIOD STARTING ON THE DATE OF SUBSTANTIAL COMPLETION. E. SHALL SCHEDULE A ONE YEAR WARRANTY WALK-THROUGH WITH THE OWNER AND ENGINEER 9 MONTHS FROM THE SUBSTANTIA COMPLETION DATE (3 MONTHS PRIOR TO END OF THE ONE YEAR WARRANTY PERIOD). E.C. IS RESPONSIBLE AT THAT TIME TO REPLACE/REPAIR ANY NON-WORKING EQUIPMENT OR DEVICES COVERED UNDER THE WARRANTY AS DESCRIBED IN THE CONTRA SPECIFICATIONS.
GG	. THE CONTRACTOR SHALL REFER TO ALL SPECIFICATIONS SECTIONS, AND ELECTRICAL DRAWINGS FOR DETAILS OF BUILDING CONSTRUCTION TO ENSURE SPACE AND SATISFACTORY ARRANGEMENT FOR THEIR WORK. THE VARIOUS DRAWINGS COMPRISIN THE SET ARE INTERDEPENDENT AND MUST BE USED JOINTLY AT ALL TIMES. EACH CONTRACTOR SHOULD REFER TO THE GENER REQUIREMENTS OF THE CONTRACT. THESE NOTES AND SYMBOLS SET DOWN ON THE DRAWINGS ARE FOR THE GUIDANCE OF AL TRADES INVOLVED IN THE PROJECT AND MUST BE FOLLOWED TO EXECUTE THE WORK AS INTENDED. IF DISCREPANCIES OCCUR
HH.	CONTACT THE CM FOR CLARIFICATION BEFORE PROCEEDING. . DRAWINGS INDICATE EQUIPMENT AND DEVICES BUT MINIMAL WIRING; E.C. IS RESPONSIBLE TO PROVIDE WIRING, BRANCH CIRCUITRY CABLING ETC TO EVERY ELECTRICAL DEVICE INDICATED ON THESE PLANS.
II.	IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE SOLELY AND COMPLETEI RESPONSIBLE FOR THE CONDITIONS ON THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. SEE SPECIFICATIONS FOR MORE SPECIFIC DETAILS ON RESPONSIBILITIES.
	FIELD VERIFY DIMENSIONAL INFORMATION PRIOR TO ORDERING EQUIPMENT. DO NOT SCALE DRAWINGS.
KK.	DIMENSIONS ARE TYPICALLY INDICATED TO THE FINISHED FACE OF WALLS OR PARTITIONS AND CENTER LINES OF COLUMNS UNL OTHERWISE INDICATED.
LL.	TITLES, CAPTIONS, HEADINGS, ETC. ARE INTENDED FOR GENERAL REFERENCE AND ARE NOT INTENDED TO LIMIT THE WORK REQUIRED IN ANY WAY.
	I. EACH CONTRACTOR SHALL COORDINATE HIS WORK WITH THE WORK OF OTHERS. HE SHALL KEEP HIMSELF INFORMED OF THE PROGRESS AND DETAIL DEVELOPMENT OF THE WORK OF OTHERS AND SHALL BE RESPONSIBLE FOR COORDINATING AND EXPEDITING HIS WORK WITH OTHERS SO THAT THE PROGRESS OF THE TOTAL WORK SHALL BE KEPT ON SCHEDULE.
	. ALL WORK SHALL BE PERFORMED IN COMPLETE COMPLIANCE WITH ALL GOVERNING CODES AND STANDARDS. . EACH CONTRACTOR AND/OR TRADE FITTING OR PLACING HIS WORK INTO OR ON THE WORK OF OTHERS DOES SO WITH THE UNDERSTANDING THAT THE INSTALLATION OF HIS WORK CONSTITUTES HIS ACCEPTANCE OF THE SUITABILITY OF THE WORK IN PLACE. IF THE WORK OF OTHERS IS NOT ACCEPTABLE, HE SHALL NOTIFY THE CM AND SUCH WORK SHALL BE CORRECTED. ANY I WORK INSTALLED IN UNSUITABLE EXISTING WORK SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR OR TRADE INSTALLING NEW WORK. NO CLAIMS FOR ADDITIONAL COMPENSATION FOR CORRECTING WORK INSTALLED IN UNSUITABLE EXISTING CONDITIONS WILL BE CONSIDERED.
PP.	ANY STRUCTURAL MECHANICAL, ELECTRICAL, FIRE PROTECTION, OR PLUMBING INFORMATION INDICATED ON THE ARCHITECTUR DRAWINGS IS FOR REFERENCE PURPOSES ONLY UNLESS OTHERWISE INDICATED.
	. FIRESTOPPING ASSEMBLIES SHALL BE PROVIDED AT PENETRATIONS OF CONDUITS AND OTHER ELECTRICAL ITEMS THRU FIRE R
QQ	FLOORS, FIRE RATED WALLS AND PARTITIONS AND FIRE RATED SHAFT WALLS AND PARTITIONS. ALL PENETRATIONS THROUGH 0-

ELECTRICAL SYMBOLS

	DASH SYMBOL INDICATES PARTICULAR OUTLET OR DEVICE TO BE REMOVED AND CIRCUITRY MADE CONTINUOUS WHERE REQUIRED.	FACP	FIRE ALARM CC	NTROL PANEL.
$\bigcirc 3$	EXISTING OUTLET OR DEVICE TO REMAIN. MAINTAIN EXISTING CIRCUITING.	RAP	REMOTE ANNU	NCIATOR PANEL.
	ELECTRICAL CONNECTION.	NAC		APPLIANCE CIRCUIT EXTENDER PANEL.
Φ	20A-125V DUPLEX RECEPTACLE, NEMA 5-20R (18" MH UNLESS NOTED OTHERWISE). WHEN 🕁 SHOWN, RECEPTACLE TO HAVE	ASSD 15		SMOKE DETECTOR BASE UNIT. EAKER & SIGNAL LIGHT (88" AFF). # WHEN SHOWN INDICATES CANDELA RATING (
Φ	"CONTROLLED" MARKINGS. 20A-125V SINGLE RECEPTACLE, NEMA 5-20R (18" MH UNLESS NOTED OTHERWISE).		SHOWN, THE S	TROBE SHALL BE RATED 15 CANDELA IN CORRIDORS AND 30 CANDELA FOR ALL O
\bigcirc	SPECIAL PURPOSE RECEPTACLE. REFER TO NOTE ON PLAN.	EX		LL & SIGNAL LIGHT (88" AFF). # WHEN SHOWN INDICATES CANDELA RATING OF ST TROBE SHALL BE RATED 15 CANDELA IN CORRIDORS AND 30 CANDELA FOR ALL O
1		15 F		IIME & SIGNAL LIGHT (88" AFF). # WHEN SHOWN INDICATES CANDELA RATING OF S TROBE SHALL BE RATED 15 CANDELA IN CORRIDORS AND 30 CANDELA FOR ALL O
•	20A-125V DOUBLE DUPLEX RECEPTACLE. NEMA 5-20R, (18" MH UNLESS NOTED OTHERWISE) TWO GANG ASSEMBLY. 20A-125V DUPLEX RECEPTACLE, NEMA 5-20R WITH BOTTOM OUTLET CONTROLLED BY WALL SWITCH. (18" MH UNLESS	15 .		TROBE SHALL BE RATED 15 CANDELA IN CORRIDORS AND 30 CANDELA FOR ALL O DRN & SIGNAL LIGHT (88" AFF). # WHEN SHOWN INDICATES CANDELA RATING OF S
11	NOTED OTHERWISE).	ĒŔĢ		TROBE SHALL BE RATED 15 CANDELA IN CORRIDORS AND 30 CANDELA FOR ALL O
•	20A-125V DUPLEX RECEPTACLE, NEMA 5-20R (46" MH UNLESS NOTED OTHERWISE).	EPW		LL (88" AFF UNLESS NOTED OTHERWISE). SUBSCRIPT "W" INDICATES EXTERIOR V
•	20A-125V DUPLEX RECEPTACLE, NEMA 5-20R WITH 2 INTEGRAL USB CHARGERS (18" MH UNLESS NOTED OTHERWISE).	$- \Phi_{\rm F}^{15}$	THE STROBE SI	GNAL LIGHT (88" AFF). # WHEN SHOWN INDICATES CANDELA RATING OF STROBE. HALL BE RATED 15 CANDELA IN CORRIDORS AND 30 CANDELA FOR ALL OTHER LO
● GF	20A-125V DUPLEX RECEPTACLE, NEMA 5-20R, WITH GROUND FAULT CIRCUIT INTERRUPTER (18" MH UNLESS NOTED OTHERWISE).	(S) 15 F		TED FIRE ALARM SPEAKER & SIGNAL LIGHT. # WHEN SHOWN INDICATES CANDELA DT SHOWN, THE STROBE SHALL BE RATED 15 CANDELA IN CORRIDORS AND 30 CA
Φ ^{WP}	20A-125V WEATHERPROOF DUPLEX RECEPTACLE, NEMA 5-20R (HORIZONTAL 18" MH UNLESS NOTED OTHERWISE) WITH TAYMAC #MM420G EXTRA DUTY GRAY COVER, VERTICAL MOUNT.		LOCATIONS.	TED FIRE ALARM HORN & SIGNAL LIGHT. # WHEN SHOWN INDICATES CANDELA RA
$\Phi^{WP/GF}$	20A-125V WEATHERPROOF DUPLEX RECEPTACLE, NEMA 5-20R WITH GROUND FAULT CIRCUIT INTERRUPTER (18" MH UNLESS NOTED OTHERWISE), WITH TAYMAC #MM420G EXTRA DUTY GRAY COVER, VERTICAL MOUNT.	(15) F	IS NOT SHOWN	, THE STROBE SHALL BE RATED 15 CANDELA IN CORRIDORS AND 30 CANDELA FOR
Φ^{EM}	20A-125V DUPLEX RECEPTACLE, NEMA 5-20R, ON EMERGENCY POWER (18" MH UNLESS NOTED OTHERWISE).	15 F		TED FIRE ALARM SIGNAL LIGHT. # WHEN SHOWN INDICATES CANDELA RATING OF TROBE SHALL BE RATED 15 CANDELA IN CORRIDORS AND 30 CANDELA FOR ALL O
ϕ^{T}	20A-125V POWERLOCK GROUNDING TYPE RECEPTACLE, HOSPITAL USE (66" MH UNLESS NOTED OTHERWISE).	S _F	CEILING MOUN	TED FIRE ALARM SPEAKER.
	20A-125V DUPLEX PEDESTAL TYPE FLOOR RECEPTACLE, NEMA 5-20R, IN HUBBELL BA-2527 FLOOR BOX WITH SA-2525 COVERPLATE AND SC-3091 HOUSING. PROVIDE CARPET FLANGE WHERE REQUIRED.	R S⊄	SURFACE MOU	NTED FIRE ALARM SPEAKER (88" AFF). SUBSCRIPT "R" INDICATES RECESSED MOU
#	FLOOR BOX, # INDICATES TYPE, REFER TO FLOOR BOX (FB) SCHEDULE. IF NO #, PROVIDE HUBBELL BA-2527 FLUSH FLOOR BOX WITH ROUND SA-3925 COVERPLATE AND ONE 20A-125V DUPLEX RECEPTACLE. PROVIDE CARPET FLANGE WHERE REQD.	Ēκ	FIRE ALARM MA	ANUAL STATION (46" MH UNLESS NOTED OTHERWISE). SUBSCRIPT "K" INDICATES I
) (#) _X	FIRE RATED POKE-THRU, # INDICATES TYPE, REFER TO POKE-THRU (PT) SCHEDULE. IF NO #, PROVIDE HUBBELL 6 INCH			TED SMOKE DETECTOR.
Φ^{IG}	RECESSED ACCESS POKE-THRU WITH TWO 20A-125V DUPLEX RECEPTACLES. PROVIDE CARPET FLANGE WHERE REQD. 20-125V DUPLEX RECEPTACLE, NEMA 5-20R, WITH ISOLATED GROUND (18" MH UNLESS NOTED OTHERWISE).			TED HEAT DETECTOR. D SMOKE DETECTOR. SUBSCRIPT "S" INDICATES SUPPLY. SUBSCRIPT "R" INDICA
Φ^{20A}				
Φ^{30A}		B→		
Φ Φ^{50A}		T/R		DR. SUBSCRIPT "T" INDICATES TRANSMITTER FUNCTION. SUBSCRIPT "R" INDICATE
				NETIC DOOR HOLDER.
\$20A		FS FS	WATER FLOW S	
Ø ^{30A}			VALVE SUPERV	
\$ ^{50A}	50A-250V-3PH-4W SINGLE RECEPTACLE, NEMA 15-50R (18" MH UNLESS NOTED OTHERWISE).	R W	CEILING MOUN WALL MOUNTEI	TED REMOTE TEST STATION AND ALARM INDICATOR LIGHT FOR DUCT DETECTOR. D.
J	JUNCTION BOX.	SD	SMOKE DAMPE	R.
	MULTI-OUTLET RECEPTACLES ASSEMBLY, NEMA 5-15R (SINGLE OUTLETS ON 18" CENTERS) (46" MH UNLESS NOTED OTHERWISE).			S TELEPHONE (60" MH UNLESS NOTED OTHERWISE).
	WIREMOLD RACEWAY, AS NOTED ON PLANS.		PRESSURE SW	NODULE. SUBSCRIPT "I" INDICATES INPUT. SUBSCRIPT "C" INDICATES CONTROL.
Н©	CLOCK HANGER OUTLET, SINGLE NEMA 5-15R RECESSED IN COVER PLATE (84" MH UNLESS NOTED OTHERWISE).	AM _{C/I}	POST INDICATO	
\$	SINGLE POLE SWITCH (46" MH UNLESS NOTED OTHERWISE).			MH UNLESS NOTED OTHERWISE). SUBSCRIPT "S" INDICATES SUPERVISED UNIT.
2 \$	TWO POLE WALL SWITCH (46" MH UNLESS NOTED OTHERWISE).	A S		SMOKE DETECTOR SAMPLING PORT.
# \$	MULTI-WAY WALL SWITCH, # INDICATES NUMBER OF WAYS (46" MH UNLESS NOTED OTHERWISE).			
P \$	SWITCH WITH NEON PILOT LIGHT. ONE-GANG ASSEMBLY (46" MH UNLESS NOTED OTHERWISE).	TECH	INOLOC	GY SYMBOLS WITH ELEC. REQUIR
К \$	KEY OPERATED WALL SWITCH (46" MH UNLESS NOTED OTHERWISE).		CONDUIT SLEE	VE / FIRE RATED SLEEVE ASSEMBLY THRU WALL (1-2" SLEEVE UNLESS NOTED OT
L \$	LOW-VOLTAGE MOMENTARY WALL SWITCH (46" MH UNLESS NOTED OTHERWISE).	X X		D DATA OUTLET (18" MH UNLESS NOTED OTHERWISE). BOX WITH CONDUIT(S) TO IV 26. JACKS, FACEPLATE AND CABLING PER DIV 27. SUBSCRIPT "X" DESIGNATES
DM \$	LIGHTING DIMMER SWITCH (46" MH UNLESS NOTED OTHERWISE) 1000 WATTS UNLESS OTHERWISE INDICATED.			R TO FACEPLATE DETAILS. D VOICE/DATA OUTLET (18" MH UNLESS NOTED OTHERWISE). BOX WITH CONDUIT
R \$	SWITCH WITH RECEPTACLE (46" MH UNLESS NOTED OTHERWISE) STANDARD TWO-GANG ASSEMBLY OF SWITCH AND RECEPTACLE.	XD/XV	CEILING PER D	IV 26. JACKS, FACEPLATE AND CABLING PER DIV 27. SUBSCRIPT "XD/XV" INDICATE R TO FACEPLATE DETAILS.
M S	FLUSH FRACTIONAL HORSEPOWER MOTOR STARTER WITH NEON PILOT LIGHT. ONE-GANG ASSEMBLY (46" MH UNLESS NOTED OTHERWISE).	w	WALL MOUNTE	D PHONE OUTLET (46" MH UNLESS NOTED OTHERWISE). BOX WITH CONDUIT TO A
H S	HP RATED WALL SWITCH (46" MH UNLESS NOTED OTHERWISE).			IV 26. JACKS, FACEPLATE AND CABLING PER DIV 27. SUBSCRIPT "W" INDICATES W TO FACEPLATE DETAILS.
	ELECTRICAL PANEL OR SWITCHBOARD PER DRAWINGS.			D WIRELESS ACCESS POINT (96" MH UNLESS NOTED OTHERWISE). BOX WITH COI EILING PER DIV 26. WAP AND CABLING PER DIV 27.
P/B	PULL BOX.			D AV OUTLET (18" MH UNLESS NOTED OTHERWISE). BOX WITH CONDUITS TO ABC
	DISCONNECT SWITCH.		ALTERNATE CO	
	MOTOR STARTER.			AND CONDUIT PER DIV 26, REFER TO PLANS. D AV OUTLET (84" MH UNLESS NOTED OTHERWISE). BOX WITH CONDUIT PER DIV
	COMBINATION MOTOR STARTER AND DISCONNECT SWITCH.	R X	DETAILS. JACK	S, FACEPLATE AND CABLING PER DIV 27. SUBSCRIPT "X" INDICATES ALTERNATE (
N	ELECTRIC MOTOR.	🗞	WALL MOUNTE DETAILS. JACK	D AV OUTLET (44" MH UNLESS NOTED OTHERWISE). BOX WITH CONDUIT PER DIV (S, FACEPLATE AND CABLING PER DIV 27. SUBSCRIPT "X" INDICATES ALTERNATE (
	UNIT HEATER.		CUSTOM OUTL PER DIV 27.	ET IN SURFACE RACEWAY. SURFACE RACEWAY PER DIV 26. OUTLET JACKS, FAC
	FAN COIL.		FLOOR BOX PE	R DIV 26. # INDICATES TYPE, REFER TO FLOOR BOX (FB) SCHEDULE. SUBSCRIPT
AC FC	AIR CONDITIONER.		(),	ER TO TECHNOLOGY DETAILS. R DIV 26. # INDICATES TYPE, REFER TO POKE-THRU (PT) SCHEDULE. SUBSCRIPT
	CONDENSING UNIT.	. €		ER TO TECHNOLOGY DETAILS.
	UNIT VENTILATOR.	LUMI	NAIRE S	SYMBOLS
© UV	CORD REEL.			LIGHTING FIXTURE. CAPITAL LETTER DENOTES FIXTURE TYPE, LOWER CA
P	POWER POLE.	┤ ┝───└		
	LINE VOLTAGE THERMOSTAT.	♀ ●		
	DUCT HEATER.		r de la companya de l	EXIT LIGHTING FIXTURE, ARROWS AS INDICATED, ON EMERGENCY BATTER UPON LOSS OF NORMAL POWER).
	ELECTRIC BASEBOARD HEATER.			
_{EB}	INTERCOM SYSTEM DESK MOUNTED MASTER CONTROL STATION. SUBSCRIPT "W" INDICATES WALL MOUNT (46" MH	ł		
	UNLESS NOTED OTHERWISE).			
	INTERCOM STAFF STATION (46" MH UNLESS NOTED OTHERWISE).		ΤΕ· ΔΙ	L SYMBOLS AND ABBREVIATIONS
	INTERCOM HORN TYPE SPEAKER (84° MH UNLESS NOTED OTHERWISE).			MODIFICATIONS ON OTHER DRAW
5				
	PUSHBUTTON (46" MH UNLESS NOTED OTHERWISE) EDWARDS 852 (120 VOLT).		LI SYM	IBOLS OR ABBREVIATIONS MIGHT
	BUZZER (90" MH UNLESS NOTED OTHERWISE) EDWARDS 340-A (120 VOLT).			ARILY BE USED ON THIS PROJECT
	4" DIAMETER (90" MH UNLESS NOTED OTHERWISE) EDWARDS "ADAPTABEL" (120 VOLT). ELAPSED TIME INDICATOR CLOCK (90" MH UNLESS NOTED OTHERWISE) WITH RESET SWITCH (46" MH UNLESS NOTED	╎└──╹		
	OTHERWISE).			
PC	PHOTOELECTRIC SENSOR.			
	LIGHTING CONTACTOR.			
	CEILING MOUNTED OCCUPANCY SENSOR.			
	WALL MOUNTED OCCUPANCY SENSOR.			
DS	CEILING MOUNTED DAYLIGHT SENSOR.			
OP	OCCUPANCY SENSOR POWER PACK.]		

FIRE ALARM SYMBOLS ABBREVIATIONS AAP - ACCESS ACC - ADJUSTABLE OR PANEL. ADJ AF ANCE CIRCUIT EXTENDER PANEL. AFCI AFF E DETECTOR BASE UNIT. AFG R & SIGNAL LIGHT (88" AFF). # WHEN SHOWN INDICATES CANDELA RATING OF STROBE. WHEN A # IS NOT ALT - ALTERNATE SHALL BE RATED 15 CANDELA IN CORRIDORS AND 30 CANDELA FOR ALL OTHER LOCATIONS. AP - ACCESS PANEL APPROX - APPROXIMATE IGNAL LIGHT (88" AFF). # WHEN SHOWN INDICATES CANDELA RATING OF STROBE. WHEN A # IS NOT E SHALL BE RATED 15 CANDELA IN CORRIDORS AND 30 CANDELA FOR ALL OTHER LOCATIONS. ASSY - ASSEMBLY SIGNAL LIGHT (88" AFF). # WHEN SHOWN INDICATES CANDELA RATING OF STROBE. WHEN A # IS NOT ATS - AUTOMATIC TRANSFER SWITCH E SHALL BE RATED 15 CANDELA IN CORRIDORS AND 30 CANDELA FOR ALL OTHER LOCATIONS. BLDG - BUILDING SIGNAL LIGHT (88" AFF). # WHEN SHOWN INDICATES CANDELA RATING OF STROBE. WHEN A # IS NOT BOE - BOTTOM OF EQUIPMENT SHALL BE RATED 15 CANDELA IN CORRIDORS AND 30 CANDELA FOR ALL OTHER LOCATIONS. BOT - BOTTOM BTWN - BETWEEN AFF UNLESS NOTED OTHERWISE). SUBSCRIPT "W" INDICATES EXTERIOR WEATHERPROOF UNIT. IGHT (88" AFF). # WHEN SHOWN INDICATES CANDELA RATING OF STROBE. WHEN A # IS NOT SHOWN, CFCI BE RATED 15 CANDELA IN CORRIDORS AND 30 CANDELA FOR ALL OTHER LOCATIONS. CKT - CIRCUIT RE ALARM SPEAKER & SIGNAL LIGHT. # WHEN SHOWN INDICATES CANDELA RATING OF STROBE. CLG - CEILING DWN, THE STROBE SHALL BE RATED 15 CANDELA IN CORRIDORS AND 30 CANDELA FOR ALL OTHER CMU CONN CONTR - CONTRACTOR IRE ALARM HORN & SIGNAL LIGHT. # WHEN SHOWN INDICATES CANDELA RATING OF STROBE. WHEN A # CORR - CORRIDOR STROBE SHALL BE RATED 15 CANDELA IN CORRIDORS AND 30 CANDELA FOR ALL OTHER LOCATIONS. CTR - CENTER IRE ALARM SIGNAL LIGHT. # WHEN SHOWN INDICATES CANDELA RATING OF STROBE. WHEN A # IS NOT E SHALL BE RATED 15 CANDELA IN CORRIDORS AND 30 CANDELA FOR ALL OTHER LOCATIONS. - DEPTH DET - DETAIL RE ALARM SPEAKER. - DIAMETER DIA - DIMENSION DIM FIRE ALARM SPEAKER (88" AFF). SUBSCRIPT "R" INDICATES RECESSED MOUNTING. DIV - DIVISION - DOWN DN STATION (46" MH UNLESS NOTED OTHERWISE). SUBSCRIPT "K" INDICATES KEY OPERATED. DWG - DRAWING MOKE DETECTOR. - EACH FA EAT DETECTOR. - EXPANSION JOINT EJ DKE DETECTOR. SUBSCRIPT "S" INDICATES SUPPLY. SUBSCRIPT "R" INDICATES RETURN. ELEC - ELECTRICAL ELEV - ELEVATION OR ELEVATOR T DETECTOR. SUBSCRIPT "S" INDICATES SUPPLY. SUBSCRIPT "R" INDICATES RETURN. - EMERGENCY EM - EQUAL EQ JBSCRIPT "T" INDICATES TRANSMITTER FUNCTION. SUBSCRIPT "R" INDICATES RECEIVER FUNCTION.

EMOTE TEST STATION AND ALARM INDICATOR LIGHT FOR DUCT DETECTOR. SUBSCRIPT "W" INDICATES PHONE (60" MH UNLESS NOTED OTHERWISE).

SYMBOLS WITH ELEC. REQUIREMENTS

RE RATED SLEEVE ASSEMBLY THRU WALL (1-2" SLEEVE UNLESS NOTED OTHERWISE) PER DIV 26. A OUTLET (18" MH UNLESS NOTED OTHERWISE). BOX WITH CONDUIT(S) TO ABOVE CORRIDOR JACKS, FACEPLATE AND CABLING PER DIV 27. SUBSCRIPT "X" DESIGNATES QUANTITY OF DATA

CE/DATA OUTLET (18" MH UNLESS NOTED OTHERWISE). BOX WITH CONDUIT(S) TO ABOVE CORRIDOR JACKS, FACEPLATE AND CABLING PER DIV 27. SUBSCRIPT "XD/XV" INDICATES QUANTITY OF DATA/VOICE

NE OUTLET (46" MH UNLESS NOTED OTHERWISE). BOX WITH CONDUIT TO ABOVE ACCESSIBLE JACKS, FACEPLATE AND CABLING PER DIV 27. SUBSCRIPT "W" INDICATES WALL PHONE MOUNTING

ELESS ACCESS POINT (96" MH UNLESS NOTED OTHERWISE). BOX WITH CONDUIT TO ABOVE PER DIV 26. WAP AND CABLING PER DIV 27. DUTLET (18" MH UNLESS NOTED OTHERWISE). BOX WITH CONDUITS TO ABOVE ACCESSIBLE CEILING O FACEPLATE DETAILS. JACKS, FACEPLATE AND CABLING PER DIV 27. SUBSCRIPT "X" INDICATES

CONDUIT PER DIV 26, REFER TO PLANS. OUTLET (84" MH UNLESS NOTED OTHERWISE). BOX WITH CONDUIT PER DIV 26. REFER TO FACEPLATE CEPLATE AND CABLING PER DIV 27. SUBSCRIPT "X" INDICATES ALTERNATE CONFIGURATION. OUTLET (44" MH UNLESS NOTED OTHERWISE). BOX WITH CONDUIT PER DIV 26. REFER TO FACEPLATE CEPLATE AND CABLING PER DIV 27. SUBSCRIPT "X" INDICATES ALTERNATE CONFIGURATION. SURFACE RACEWAY. SURFACE RACEWAY PER DIV 26. OUTLET JACKS, FACEPLATE AND CABLING

26. # INDICATES TYPE, REFER TO FLOOR BOX (FB) SCHEDULE. SUBSCRIPT "X" INDICATES TECHNOLOGY TECHNOLOGY DETAILS. 26. # INDICATES TYPE, REFER TO POKE-THRU (PT) SCHEDULE. SUBSCRIPT "X" INDICATES TECHNOLOGY TECHNOLOGY DETAILS.

LIGHTING FIXTURE. CAPITAL LETTER DENOTES FIXTURE TYPE, LOWER CASE LETTER DENOTES SWITCHING ARRANGEMENT.

LIGHTING FIXTURE ON EMERGENCY BATTERY PACK (RATED 90 MIN UPON LOSS OF NORMAL POWER). EXIT LIGHTING FIXTURE, ARROWS AS INDICATED, ON EMERGENCY BATTERY PACK (RATED 90 MIN UPON LOSS OF NORMAL POWER).

SYMBOLS AND ABBREVIATIONS ARE SUBJECT **ODIFICATIONS ON OTHER DRAWINGS.**

BOLS OR ABBREVIATIONS MIGHT NOT RILY BE USED ON THIS PROJECT.

- AREA ALARM PANEL - MEDICAL GAS - ARC FAULT CIRCUIT INTERRUPTER - ARC FAULT CIRCUIT INTERRUPTER - ABOVE FINISHED FLOOR TO BOTTOM OF ITEM - ABOVE FINISHED GRADE TO BOTTOM OF ITEM ARCH - ARCHITECT OR ARCHITECTURAL - CONTRACTOR FURNISHED CONTRACTOR INSTALLED - CONCRETE MASONRY UNIT - CONNECT OR CONNECTION - ELECTRICAL CONTRACTOR (DIVISION 26) - EQUIPMENT SUPPLIER EQS - EQUIPMENT EQUIP E/R - EXISTING TO BE RELOCATED - EXISTING TO REMAIN EX EXP - EXPANSION EXT - EXTERIOR - FIRE CONTROL EQUIPMENT FCE - FINISHED FLOOR ELEVATION FF FLR - FLOOR FSC - FIRE SUPPRESSION CONTRACTOR (DIVISION 21) FT - FEET FTG - FOOTING GC - GENERAL CONTRACTOR GF - GROUND FAULT CIRCUIT INTERRUPTER GFCI - GROUND FAULT CIRCUIT INTERRUPTER OR GOVERNMENT FURNISHED CONTRACTOR INSTALLED GFFT - GROUND FAULT FEED THRU

GENERAL FLOOR PLAN NOTES

B E2	DETAIL: B = DETAIL DESIGNATION E2 = SHEET WHERE DETAIL IS LOCATED
	SECTION: 1 = SECTION DESIGNATION E2 = SHEET WHERE SECTION IS LOCATED
T2 1	ELEVATION: 1 = ELEVATION DESIGNATION T2 = SHEET WHERE ELEVATION IS LOCATED
3	PLAN NOTE. APPLIES ONLY TO THE SHEET WHICH IT IS SHOWN.
3	DETAIL NOTE. APPLIES ONLY TO THE ASSOCIATED DETAIL.
\bigcirc	LIGHTING CONTROL DETAIL NOTE. APPLIES TO THE LIGHTING CONTROL SEQUENCE OF OPERATIONS SCHEDULE FOR ROOM CONTROL.
3	DEVICE QUANTITY - POWER NOTE. REFER TO DEVICE QUANTITIES - POWER SCHEDULE.
	LADDER TRAY, 12" x 4" DEEP UNLESS NOTED OTHERWISE.
	CABLE TRAY, 12" x 4" DEEP UNLESS NOTED OTHERWISE.
4"	WIRE & CONDUIT IN WALL OR ABOVE CEILING.
	WIRE & CONDUIT IN OR BELOW SLAB OR GRADE.
C=====:4"========	CONDUIT TO BE REMOVED.
EX	EXISTING WIRE & CONDUIT TO REMAIN.
DAT DAT	CONDUIT FOR DATA CIRCUITRY.
EM	WIRE & CONDUIT FOR EMERGENCY CIRCUITRY.
FA FA	WIRE & CONDUIT FOR FIRE ALARM CIRCUITRY.
W	WIRE RUN IN SURFACE WIREWAY.
CM	CABLE MANAGEMENT SYSTEM PATHWAY.
X - 1,2	EACH ARROWHEAD REPRESENTS ONE COMPLETE CIRCUIT; "X" DENOTES PANEL NAME; NUMBER(S) DENOTES CIRCUIT(S).

HP

ID

IN

LBS

MAX

MEZZ

MFR

MH

MIN

MISC

MTD

NIC

OD

OFCI

OFOI

PC

RAD

REC

RI

SC

SCH SHT

SMS

SQ

SS

STD

SUC

TEMP

TOE

TYP

VFD

VOL

W/

W/O

WP

TC

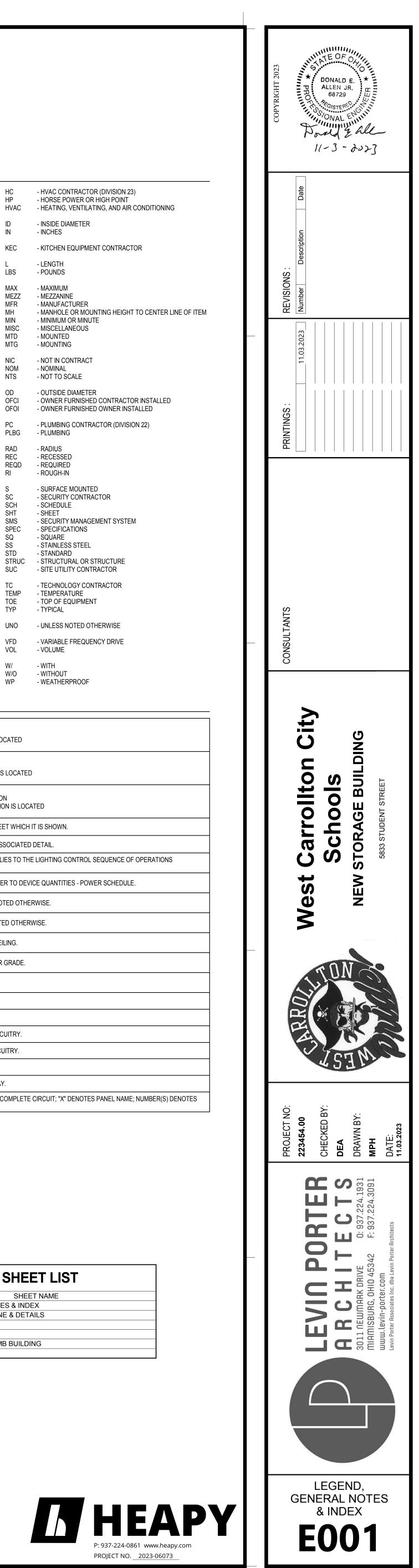
SPEC

REQD

NOM

MTG

	ELECTRICAL SHEET LIST
SHEET NUMBER	SHEET NAME
E001	LEGEND, GENERAL NOTES & INDEX
E002	SCHEDULES, SINGLE LINE & DETAILS
E003	DETAILS
E004	ELECTRICAL SITE PLAN
E100	ELECTRICAL PLAN - PEMB BUILDING
Total Count: 5	

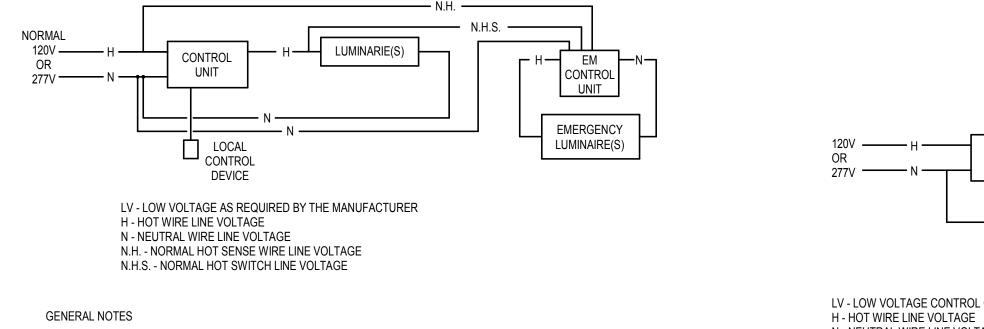


			LIGH	ITING C	ONT	ROL S	SEQUE	NCE C	of ope	ERAT	FION	S				
			OCCUPA	NCY SENSOF				ME CLOCK			WA	LL SWIT	ГСН	DAYLIGHT SENSOR		
CONTROL NUMBER	TYPICAL CONTROL TYPE OR SPACE NAME	VACANCY MODE (MANUAL ON)	OCCUPANCY MODE (AUTO ON)	SENSOR TIME OUT PERIOD (IN MINUTES)	HIGH / LOW OPERATION: OCCUPIED: 100% / VACANT: 30%	SCHEDULED ON AT	SCHEDULED OFF AT	OCCUPIED TIME START	UNOCCUPIED TIME START	AFTER HOURS OVERRIDE SWITCH (2 HOURS)	ON / OFF ONLY	DIMMER SWITCH	KEY SWITCH	EXTERIOR PHOTOCELL - ON / OFF	SEE NOTE	DETAI
1	EXTERIOR LIGHTING					6AM	12AM							•		2,4/E00
2	OCCUPANCY SENSING		•	30 MINS							•					3/E002

CONTROL NUMBER 1 2	TYPICAL CONTROL TYPE OR SPACE NAME EXTERIOR LIGHTING OCCUPANCY SENSING	VACANCY MODE	OCCUPANCY MO			HIGH / LOW OPEI	ACHEDNILED OF SCHEDULED ON 690 690 600 600 600 600 600 600 600 600	Л	OCCUPIED TIME			AFTER HOURS O	ON / OFF ONLY	DIMMER SWITCH	KEY SWITCH	EXTERIOR PHOT		SEE NOTE		DETAII NUMBE 2,4/E002 3/E002	R 2									
						МО	TORS, ST	ART	ĒR	S, DIS	CO	NN	EC	TS 8	. COI	NTR	OL	S												
				TOR						ST	ARTEI			N		T	DIS(/PE	CONNI	ECT N	IEANS LOCA				C	ONTR	OL	—	FEE	DER	_
	-		RACTE	RISTICS			JCATION	_		ITPE		LOG		N			(PE						(C	j l						
MARK	NAMEPLATE	HORSEPOWER (HP)	LOAD (KVA)	120V-1PH 208V-1PH	208V-3F	ROOM NUMBER	ROOM NAME	NEMA SIZE MANUAL	0	BUILT-IN MOTOR O/L 2-SPEED VFD	SEE NOTE	MOTOR CONT CENTER	EQUIP CONT PANEL			RECEPTACLE			FUSE SIZE	MOTOR CONT CENTER	PANELBOARD	SEE N	FURNISHED BY	WITH MUTURINU. BY E. STARTER		FUR	SEE NOTE NI IMBED OF CONDUCTORS	WIRE SIZE	GROUND SIZE CONDUIT SIZE	_
ECH-1,2	ELECTRIC UNIT HEATER		2 LOAD (•	208V-3F	NIES>	<varies></varies>	NEMA	MAGNETIC	DTOR		MOTOR CONT	CONT		C •	TACLE		30A	FUSE SIZE		PANELBOARD	SEE N	FURNISHED BY	WITH MUTURINU. BY E. STARTER		HC	SEE NOTE	NUMBER OF CONDUCTO	CONDUIT 15 CONDUIT 15 CONDUIT	
ECH-1,2 EF-1	ELECTRIC UNIT HEATER EXHAUST FAN 1	HORSE	2 0.03		3087-31 2087-31 1	₽ O Q RIES> I03	<varies> RESTROOM</varies>	MANU MANU	MAGNETIC	BUILT-IN MOTOR 2-SPEED VFD		MOTOR CONT	CONT		C •	TACLE		30A 30A	FUSE SIZE		PANELBOARD	SEE N	Heat Heat	WITH MUTURINU. BY E. STARTER		HC EC	SEE NOTE N N NI IMBER OF CONDLICTO	N NUMBER OF CONDUCTO	UNDANO 12 0.75 12 0.75	Ш З 5"
ECH-1,2	ELECTRIC UNIT HEATER EXHAUST FAN 1 EXHAUST FAN 2		2 LOAD (•	407-31 	NIES>	<varies></varies>	NEMA	WAGNETIC	BUILT-IN MOTOR 2-SPEED VFD		MOTOR CONT	CONT		C •	TACLE		30A	FUSE SIZE		PANELBOARD	SEE N	FURNISHED BY	WITH MUTURINU. BY E. STARTER		HC		2 2 2 MUMBER OF CONDOCTO 2 12 2 MIRE SIZE 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	CONDUIT 15 CONDUIT 15 CONDUIT	SEE 3"

LUMINAIRES

		LAMPS									TRIM	COLC	DR	MOUNTING			SIZE		
	QUANTITY	LINEAR FOOT		(VA) (H H H H H H H H H H H H H H H H H H H					Щ	BLACK	NZE	STANDARD	S-SURFACE R-RECESSED SM-STEM MTD WM-WALL MTD C-CHAIN MTD	DIAMETER	E	ЭТН	E	NOTE
MARK	L.E.D	VA /	COLOR	LOAD		CATALOG NO.	DESCRIPTION	OTHER ACCEPTABLE MANUFACTURERS	DIFFUSING MEDIA	WHITE	BLA(BRONZE	STAN	UC-UNDER CAB	DIAN	WIDTH	LENGTH	DEPTH	SEE
C1	Х	3000	3500K	25	120 LITHONIA	ZL1N-L48-3000LM-FST- MVOLT-35K-80CRI-WH	LED STRIP LIGHT	COLUMBIA, DAYBRITE	FROSTED LENS				•	SM-15'MH		4"	48"	4"	1,3,4,5,6,9
C2E	Х	5000	3500K	34	120 LITHONIA	ZL1N-L48-5000LM-FST- MVOLT-35K-80CRI-WH	LED STRIP LIGHT WITH EMERGENCY BATTERY PACK	COLUMBIA, DAYBRITE	FROSTED LENS				•	S		4"	48"	4"	1,2,4,5,9
C3	Х	7000	3500K	52	120 LITHONIA	ZL1N-L48-7000LM-FST- MVOLT-35K-80CRI-WH	LED STRIP LIGHT	COLUMBIA, DAYBRITE	FROSTED LENS				•	SM-15'MH		4"	48"	4"	1,3,4,5,6,9
C3E	Х	7000	3500K	52	120 LITHONIA	ZL1N-L48-7000LM-FST- MVOLT-35K-80CRI-WH	LED STRIP LIGHT WITH EMERGENCY BATTERY PACK	COLUMBIA, DAYBRITE	FROSTED LENS				•	SM-15'MH		4"	48"	4"	1,2,3,4,5,6,9
K1	Х	2310	4000K	20	120 HUBBELL	SG1-20-4K7-FT-UNV-C C	LED WALL PACK	LITHONIA, DAYBRITE	FORWARD THROW				•	WM-15'MH		12"	17.125"	6"	1,5,6,9,10,11
K1E	Х	2310	4000K	20	120 HUBBELL	SG1-20-4K7-FT-UNV-C C	LED WALL PACK WITH EMERGENCY BATTERY PACK	LITHONIA, DAYBRITE	FORWARD THROW				•	WM-8'MH		12"	17.125"	6"	1,2,5,6,9,10,11
PL1	Х	16,622	4000K	108	208 ILP		LED POLE LIGHT WITH 1 HEAD (REQUIRES BUG RATING OF [B2, U2, G2] OR LESS	LITHONIA, GE CURRENT	TYPE 4 WIDE					4" SQ, 20FT POLE		12"	17.125"	6"	1,9,10,11,12,13
PL2	Х	16,622/EACH	4000K	216	208 ILP		LED POLE LIGHT WITH 2 HEAD (REQUIRES BUG RATING OF [B2, U2, G2] OR LESS	LITHONIA, GE CURRENT	TYPE 4 WIDE					4" SQ, 20FT POLE		12"	17.125"	6"	1,9,10,11,12,13
WME	Х	4831	3500K	32	120 COLUMBIA	CWM4-35-ML-SM-FR-F A-EDU	LED LINEAR WALL MOUNT	LITHONIA, DAYBRITE	FROSTED RECTILINEAR				•	WM-7'MH		6"	48"	3"	1,2,5,6,9
X1	Х		RED	5	120 DUALLITE	EVC-U-R-W-I	LED EXIT SIGN	LSI, LITHONIA, LIGHTOLIER	STENCIL				•	WM/CS		9"	13"	2.375"	1,2,5,7,8,9



A INTENT OF DETAIL IS FOR THE EMERGENCY CONTROL UNIT TO CONTROL THE EMERGENCY BATTERY PACK LUMINARIES WITH THE NORMAL LUMINAIRES. THE EMERGENCY CONTROL UNIT SHALL BYPASS LOCAL CONTROL UPON LOSS OF POWER AND TURN EMERGENCY LUMINARIES ON.

B THE EMERGENCY CONTROL UNIT (ALCR) SHALL BE UL 924 LISTED. C DETAIL IS SCHEMATIC IN NATURE. REFER TO MANUFACTURERS SPECIFIC WIRING DIAGRAMS FOR EXACT WIRING INFORMATION.

D EQUIPMENT SUPPLIER/ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ANY ADDITIONAL COST FOR REVISIONS REQUIRES FROM DETAIL DUE TO A DIFFERENT SYSTEM SELECTION.

E MOUNT POWER PACK AND EMERGENCY CONTROL UNTIL ABOVE ACCESSIBLE CEILING AT LIGHT SWITCH LOCATION AT ENTRY.

G CONTRACTOR SHALL COORDINATE WITH MANUFACTURER FOR ANY ADDITIONAL COMPONENTS FOR A COMPLETE AND OPERABLE

SYSTEM. COORDINATE EXACT COMPONENT MOUNTING LOCATIONS FOR PROPER CLEARANCE AND ACCESSIBILITY PRIOR TO

F ALL EQUIPMENT SHALL BE MOUNTED IN AN ENCLOUSURE PER THE MANUFACTURERS DIRECTIONS.

EMERGENCY LIGHTING CONTROL

ROUGH-IN.

SCALE: NONE

OCCUPANCY SENSOR WITH OVERRIDE CONTROL

D DETAIL IS SCHEMATIC IN NATURE. REFER TO MANUFACTURER'S WIRING DIAGRAMS FOR EXACT WIRING INFORMATION.

C CONTRACTOR SHALL COORDINATE WITH MANUFACTURER FOR EXACT QUANTITY OF OCCUPANCY SENSORS (FOR COMPLETE ROOM COVERAGE) AND PROVIDE ANY ADDITIONAL COMPONENTS FOR A COMPLETE AND OPERABLE SYSTEM. COORDINATE COMPONENT MOUNTING LOCATIONS FOR PROPER CLEARANCE AND ACCESSIBILITY PRIOR TO ROUGH-IN. COORDINATE PROGRAMMING OF ZONES AND WALL STATION CONFIGURATIONS, AS SHOWN ON DRAWINGS, WITH

B CONTROL UNIT SHALL BE MOUNTED IN AN ENCLOSURE PER MANUFACTURER'S DIRECTION. MOUNT CONTROL UNIT ABOVE ACCESSIBLE CEILING AT ROOM ENTRY.

A OPERATION INTENT IS FOR OCCUPANCY SENSING ON/OFF WITH MANUAL OVERRIDE AND MULTIPLE ZONES OPERATION OF ALL LIGHTS. CONTROL UNIT SHALL PROVIDEAN ON/OFF FOR ALL ZONES. WALL STATION(S) TO PROVIDE ON/OFF AND SWITCHES. REFER TO PLANS FOR QUANTITY OF LIGHTING ZONES.

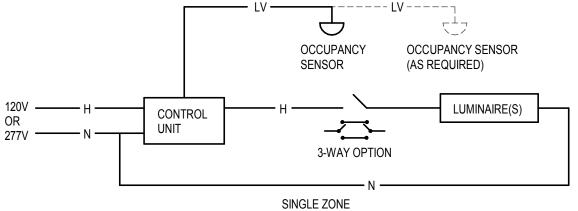
N - NEUTRAL WIRE LINE VOLTAGE

GENERAL NOTES

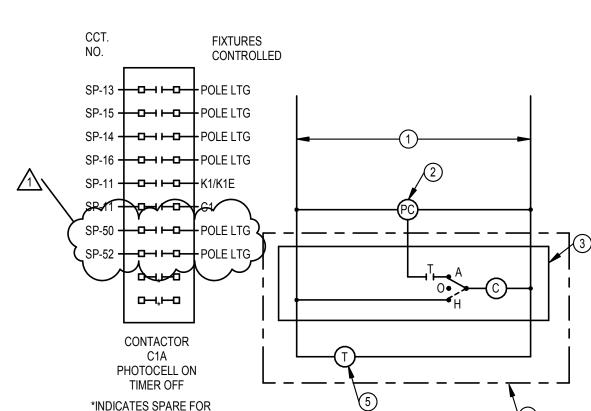
MANUFACTURER.

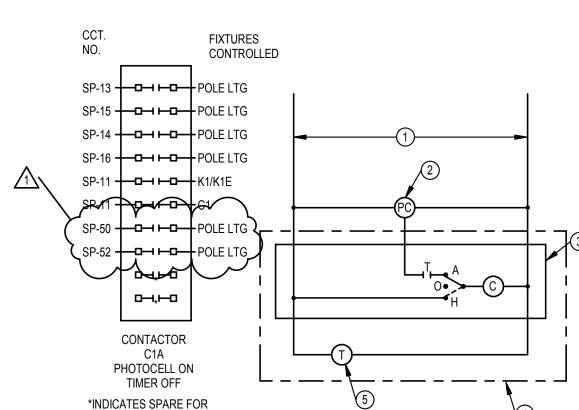
SCALE: NONE

LV - LOW VOLTAGE CONTROL CABLE AS REQUIRED BY MANUFACTURER









13. PROVIDE CONCRETE POLE BASE PER DETAIL D, SHEET E003.

UP ALL PAINT ON SITE AFTER INSTALLATION.

MATERIALS TO OBTAIN A COMPLETE INSTALLATION.

SWITCHING AND CONTROLS FOR CONTINUOUS OPERATION.

EXIT LIGHT FIXTURES UNLESS CONDITIONS DO NOT FACILITATE.

AS EMERGENCY ON PLANS.

SLOPE.

AESTHETICS.

FIXTURE.

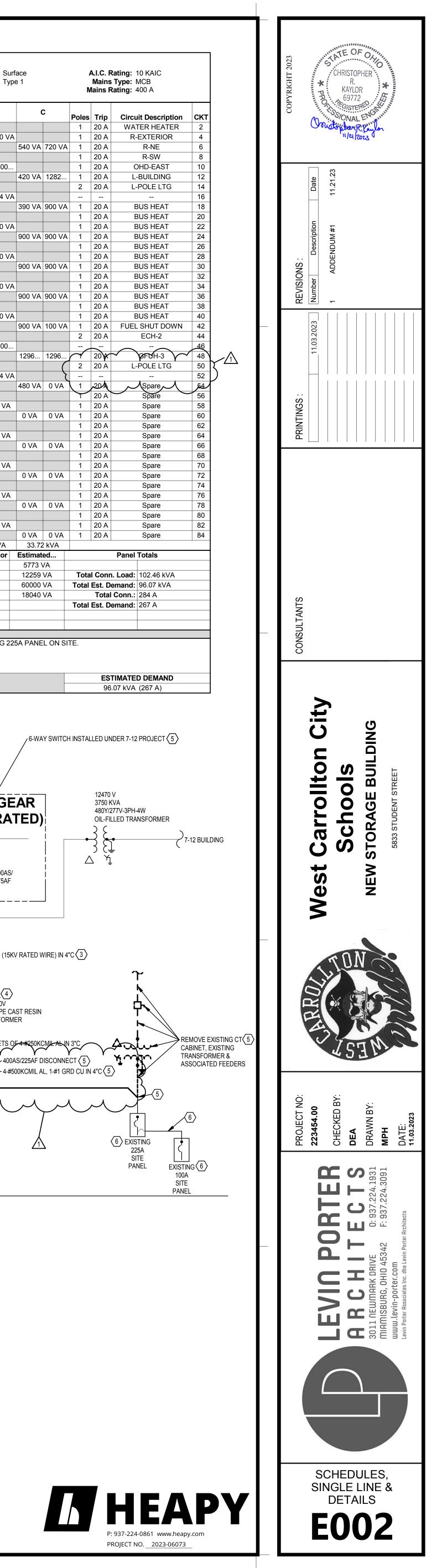
L	IGHTING SCHEDULE NOTES
1.	PROVIDE FIXTURE WITH UNIVERSAL VOLTAGE, DIMMABLE DRIVER.
2.	PROVIDE FIXTURE WITH EMERGENCY BATTERY BACKUP DRIVER WHERE INDICATED

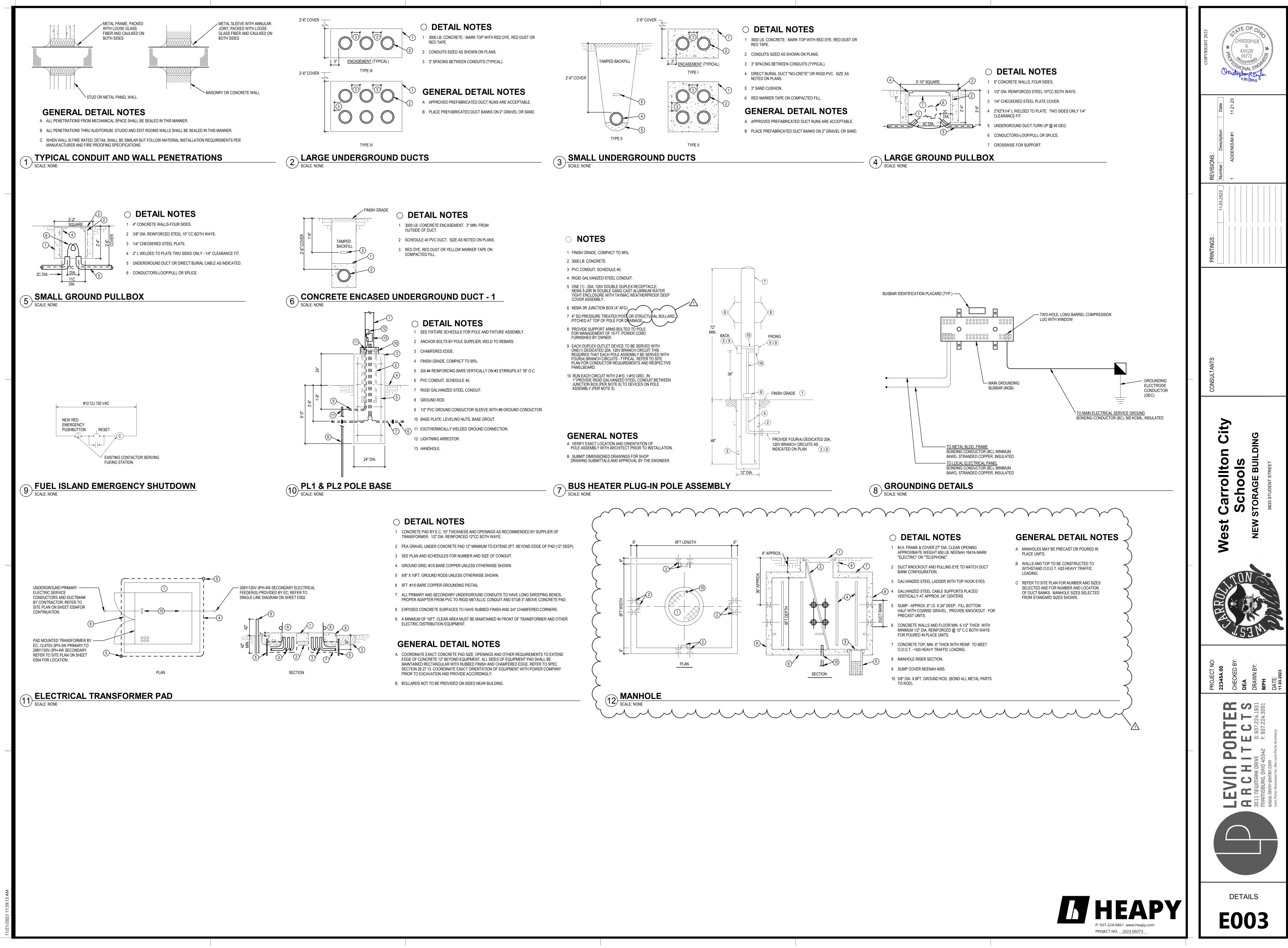
- 3. PROVIDE FIXTURE WITH HANGER SETS, LENGTHS OF STEMS TO ACCOMMODATE MOUNTING HEIGHTS AS INDICATED ON PLAN. PROVIDE ALL ACCESSORIES, FASTENERS, AND SUPPORTS FOR A COMPLETE INSTALLATION. COORDINATE MOUNTING WITH OTHER TRADES.
- 4. PROVIDE CEILING ADAPTERS FOR MOUNTING ON SLOPED AND FLAT CEILING SURFACES TO OBTAIN A NEAT AND FINISHED APPEARANCE. PROVIDE PROPER LENGTH SUPPORTS FOR LUMINAIRES TO OBTAIN M.H. AS INDICATED ON SCHEDULES/ PLANS. SCOPE INCLUDES ALL OUTLET BOXES, SUPPORT MEMBERS, CHAIN/ CABLE SUPPORTS, FITTINGS AND ALL OTHER LABOR AND
- 5. COORDINATE MOUNTING HARDWARE WITH CEILING/SURFACE TYPE AND ARCHITECTURAL DRAWINGS PRIOR TO ORDERING AND PROVIDE ACCORDINGLY. PROVIDE SLOPED CEILING ADAPTOR IN CEILING THAT
- INSTALL LUMINAIRE AT MOUNTING HEIGHT AS INDICATED ON SCHEDULE. VERIFY FINAL LOCATION WITH ARCHITECT PRIOR TO ROUGH-IN TO AVOID CONFLICT WITH EQUIPMENT AND ARCHITECTURAL
- WIRE EXIT LIGHTS TO BRANCH CIRCUITRY AS INDICATED ON PLANS. WIRE AHEAD OF ALL
- 8. PROVIDE ARROWS AS INDICATED ON PLANS. COORDINATE EXACT MOUNTING ARRANGEMENT WITH CEILING AND WALL CONSTRUCTION PRIOR TO ROUGH-IN. INTENT IS TO HAVE WALL MOUNTED
- 9. PROVIDE CUSTOM COLOR AS SELECTED BY ARCHITECT DURING SHOP DRAWING SUBMITTALS. 10. FIXTURE TO BE WET LISTED FOR EXTERIOR MOUNTING; PROVIDE ALL RECESSED BACK BOXES,
- WALL MOUNTING ACCESSORIES, FASTENERS AND SUPPORTS FOR PROPER MOUNTING OF
- 11. PROVIDE FIXTURE COMPLETE WITH LENS, FUSING, COLD WEATHER BALLAST/DRIVER. 12. EACH POLE SHALL BE SIZED TO ACCOMMODATE EPA OF COMPLETE LUMINAIRE/POLE ASSEMBLY FOR WIND VELOCITY OF 90 MPH AND GUSTING WIND EQUIVALENT OF 117 MPH. E.C. SHALL TOUCH
- 1. RUN #3/0 (CU) GROUI GROUND RODS, WAT 2. PANELBOARD TO BE 3. E.C. SHALL PROVIDE PAD TO EXISTING PL CABLING IN EXISTING TRANSFORMER. PR A COMPLETE AND O VOLTAGE TRANSFOR RESIN TRANSFORME 4. E.C. SHALL PROVIDE NEW MEDIUM-VOLTAGE 12470V-3PH TO 208Y/120V-3PH, DRY TYPE, PAD MOUNTED CAST RESIN TRANSFORMER ALONG WITH TRANSFORMER PAD. COORDINATE WITH MANUFACTURER FOR EXACT PAD REQUIREMENTS AND WITH ARCHITECT FOR EXACT LOCATION ON SITE PRIOR TO ROUGH-IN AND PROVIDE
- A COMPLETE AND OPERATIONAL INSTALLATION. 5. E.C. SHALL PROVIDE NEW WIRING AND CONDUIT FROM NEW PANEL "SP" TO EXISTING 225A PANEL ON SITE AND CONNECT UP. E.C. SHALL PROVIDE NEW 225A FUSED DISCONNECT TO FEED EXISTING PANEL. DISCONNECT AND REMOVE EXISTING CT CABINET, TRANSFORMER AND FEEDERS FEEDING 225A PANEL.

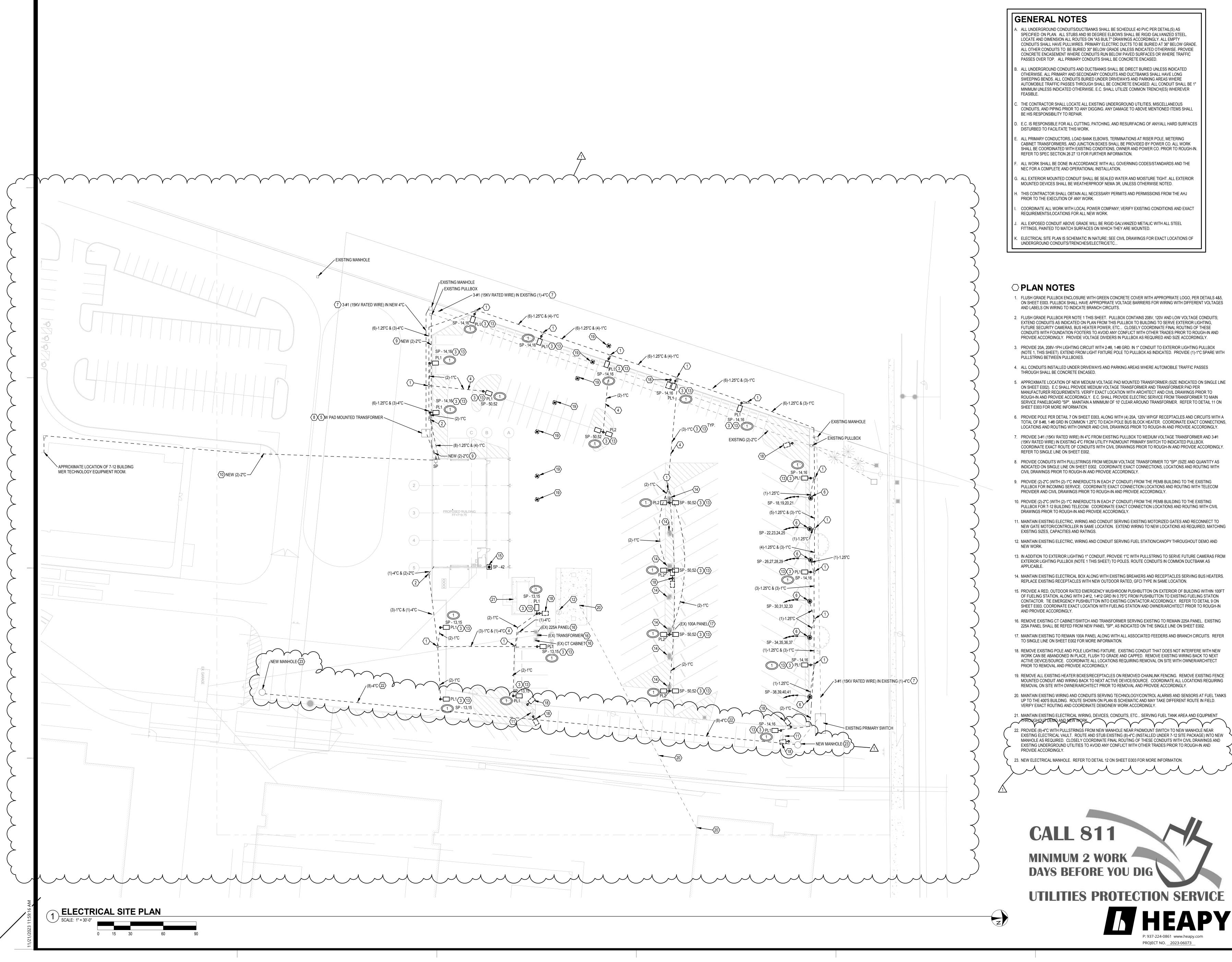
ACCORDINGLY. PROVIDE ALL THE NECESSARY COMPONENTS AND ACCESSORIES FOR

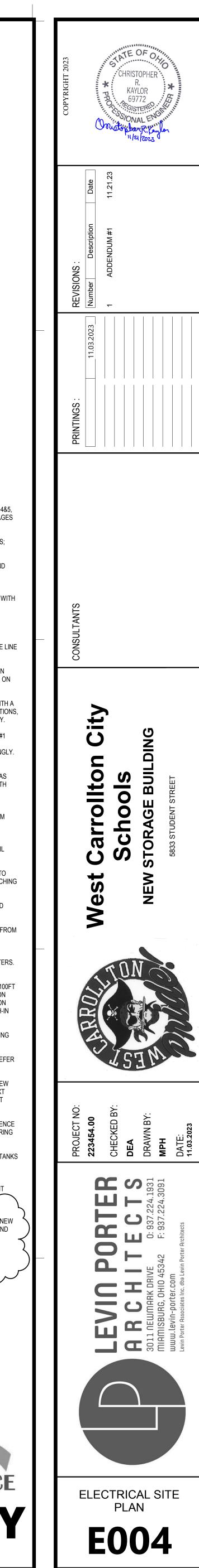
- 6. MAINTAIN EXISTING FEEDERS, BRANCH CIRCUITS AND PANELS DOWNSTREAM OF 225A PANEL.
- **ELECTRICAL SINGLE-LINE** 1 SCALE: NONE
- **O DETAIL NOTES**
- 1 20A 120V. CONTROL CCT.
- 2 PHOTOCELL INTERMATIC *K4136M (120/277V) OR EQUAL. 3 CONTACTOR C1A - MECHANICALLY HELD 10 POLE LIGHTING CONTACTOR. SQUARE D, LXG-1000R6 OR EQUAL WITH ONE H.O.A. SWITCH AND 120V. COIL. WIRE IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS. CONTACTOR C1A, TIMECLOCK AND H.O.A. SWITCH TO BE
- MOUNTED IN ONE NEMA 1 LOCKABLE ENCLOSURE WITH HINGED COVER.
- 5 TIMECLOCK: TORK DZS400BP (120V) OR EQUAL. ASTRONOMIC 7 DAY 2 CIRCUIT WITH 24 HOUR POWER BACKUP.
- **GENERAL NOTES** A PROVIDE SLACK IN LIGHTING CIRCUIT CONDUCTORS SO CIRCUIT CAN BE MOVED TO FURTHEST CONTACT IN

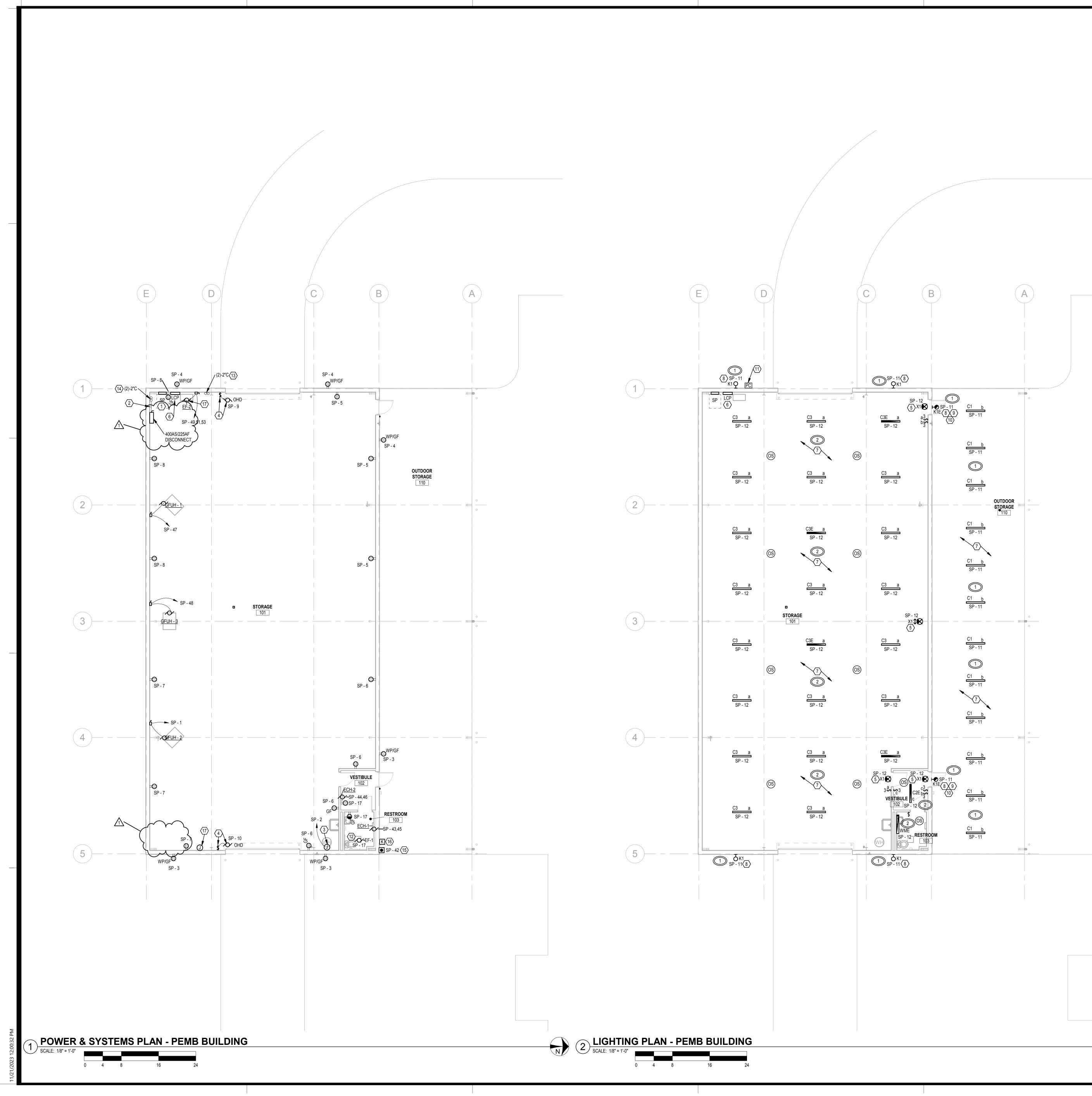
ENCLOSURE.

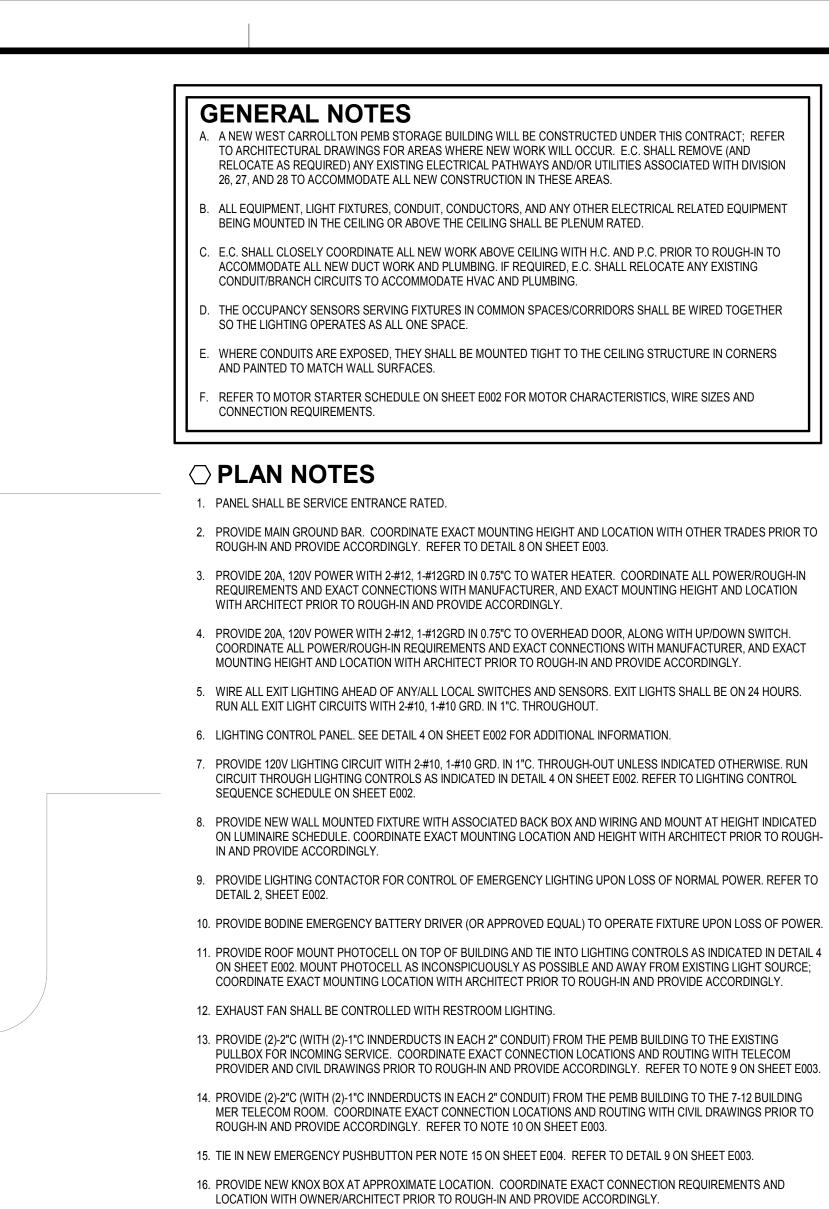












17. E.C. SHALL PROVIDE WIRING AND CONDUIT BETWEEN LINE VOLTAGE DAMPER AND EF-2 AS REQUIRED BY MANUFACTURER. COORDINATE EXACT CONNECTION REQUIREMENTS AND LOCATION WITH H.C. PRIOR TO ROUGH-IN AND PROVIDE ACCORDINGLY.



