



July 24, 2024

TO ALL HOLDERS OF BIDDING DOCUMENTS:

SUBJECT: ADMINISTRATION AND EARLY LEARNING CENTER ADDITIONS
ORCHARD FARM R-V SCHOOL DISTRICT
ST. CHARLES, MISSOURI
PROJECT # 23-09C

Enclosed please find one (1) electronic .pdf copy of Addendum No. 1, dated July 23, 2024, for the above-named project.

Addendum No. 1 is being EMAILED to the General Contractors, Subcontractors and Plan Rooms on the Plan Holders List at Hoener Associates.

BID DATE: The bids are due at 2:00 p.m. CDT, on Thursday, August 8, 2024.

BID LOCATION: Sealed bids will be received by the Orchard Farm R-V School District, Orchard Farm Administration Office, 3489 Boschertown Road, St. Charles, MO.

Please notify the appropriate subcontractors and/or suppliers of this addendum.

Sincerely,

HOENER ASSOCIATES, INC.

Matt McDermott, Project Manager

ORCHARD FARM R-V SCHOOL DISTRICT
ADMINISTRATION AND OFFICE ADDITIONS
ST. CHARLES, MISSOURI

JULY 23, 2024

The drawings and specifications are hereby supplemented and amended to include the following particulars:

ARCHITECTURAL

ITEM NO. 1 : ARCHITECTURAL SUPPLEMENTARY DRAWINGS

- A. **“Add”** Supplementary Drawings SD 5 (Sheet A1.2), SD 6 (Sheet A1.3A), SD 7 (Sheet A1.3B), SD 8 (DA 1.38), SD 9 (DA 1.34), and SD 10 (DA 1.35).

CIVIL DRAWINGS

ITEM NO. 2: CIVIL DRAWING C1.00

- A. **“ADD”** Supplementary Drawing No. SD 3, dated July 23, 2024 included with this Addendum, and hereby made a part of the Contract Documents that shows revised grading quantity and added general note 9 for pavement remediation included in base bid.

ITEM NO. 3: CIVIL DRAWING C7.00

- A. **“ADD”** Supplementary Drawing No. SD 4, dated July 23, 2024 included with this Addendum, and hereby made a part of the Contract Documents that shows added to pavement remediation detail.

MECHANICAL DRAWINGS

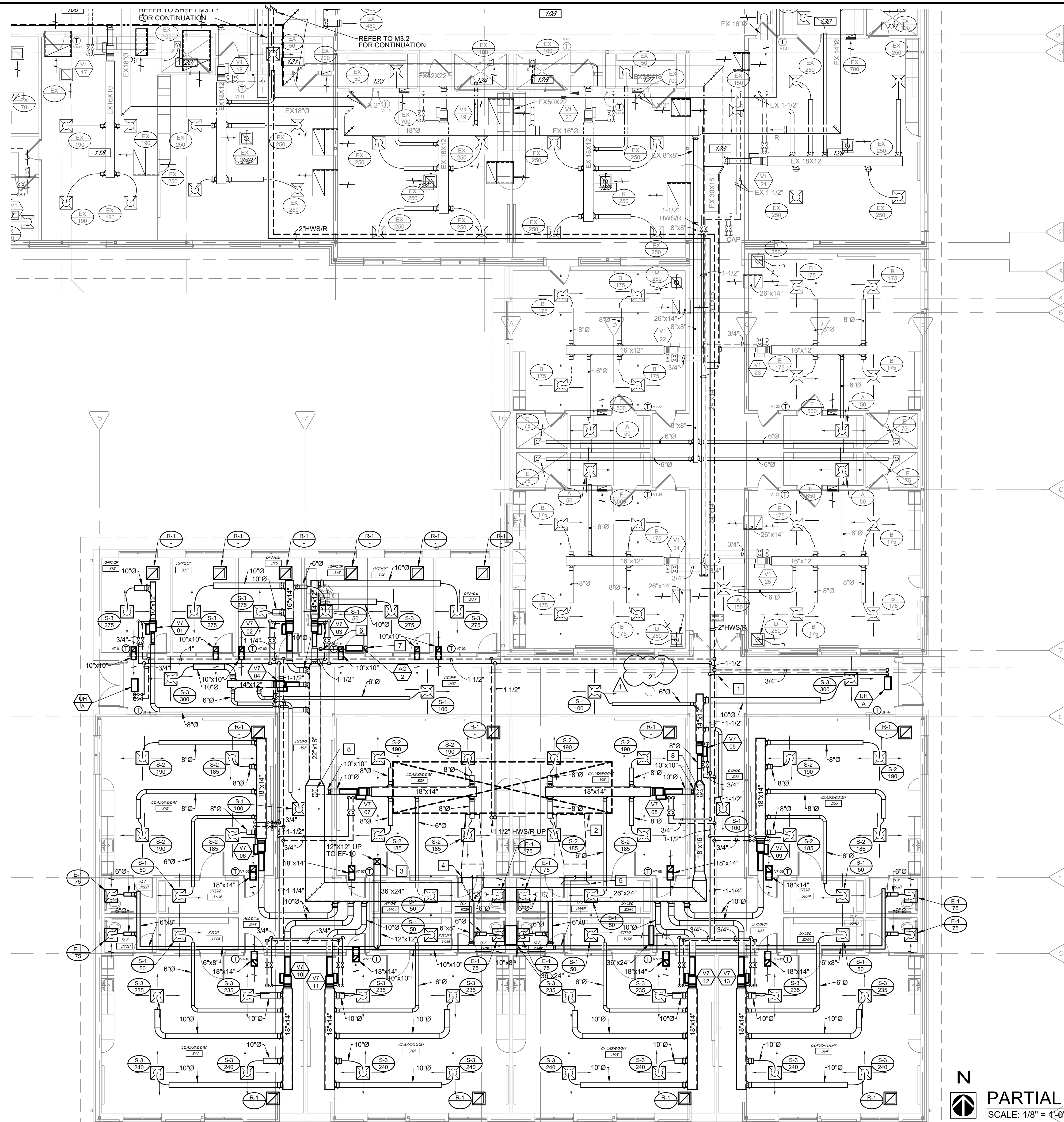
ITEM NO. 4 – MECHANICAL DRAWING SHEET M3.1 (SD-1)

- A. **“REVISE”** Heating water pipe sizing.

ITEM NO. 5 – MECHANICAL DRAWING SHEET M6.2 (SD-2)

- A. **“ADD”** Notes 13 & 14 to Packaged Rooftop Unit Schedule.
- B. **“REVISE”** Note 3 and Model No. for CV-RTU7

END OF ADDENDUM #1



KEYED NOTES

- 1 NEW 2" PIPING TO SERVE HW COIL AT RTU, UNIT HEATERS ABOVE ENTRY DOORS, AND VAV REHEAT COILS.
- 2 NEW RTU-7 ON ROOF ABOVE TO SERVE NEW ADDITION, INDICATED AS DASHED FOR REFERENCE.
- 3 NEW EXHAUST FAN SHALL BE PROVIDED FOR TOILET EXHAUST. REFER TO ROOF PLAN.
- 4 REFER TO SHEET M3.3 FOR SA/RA DUCT SIZING AND CONTINUATION ABOVE ROOF.
- 5 RETURN AIR INTAKE WITH BELLMOUTH OPENING ABOVE CEILING.
- 6 3/4" CONDENSATE DRAIN FROM AC-2 TO DRAIN.
- 7 GAS AND LIQUID REFRIGERANT PIPING FROM AC-2 UP TO CONDENSING UNIT ON ROOF.
- 8 TAP OFF BOTTOM OF DUCT MAIN WITH MITERED ELBOW, TRANSITION TO ROUND AND EXTEND INTO CLASSROOM SPACE ABOVE CEILING.



ALEX PUGH
LICENSE #2011015789
ENGINEERING CORP.
NO. 000087

ADDITIONS AND RENOVATIONS TO:
EARLY LEARNING CENTER
3489 BOSCHERTOWN ROAD and ISLAND HARBOR DRIVE
ORCHARD FARM R-V SCHOOL DISTRICT
ST. CHARLES COUNTY, MISSOURI

CONSULTING ENGINEERS:
BAX ENGINEERING
ASDG
McCLURE ENGINEERING
CIVIL/SURVEY
STRUCTURAL
MECH/ELEC/PLUMB

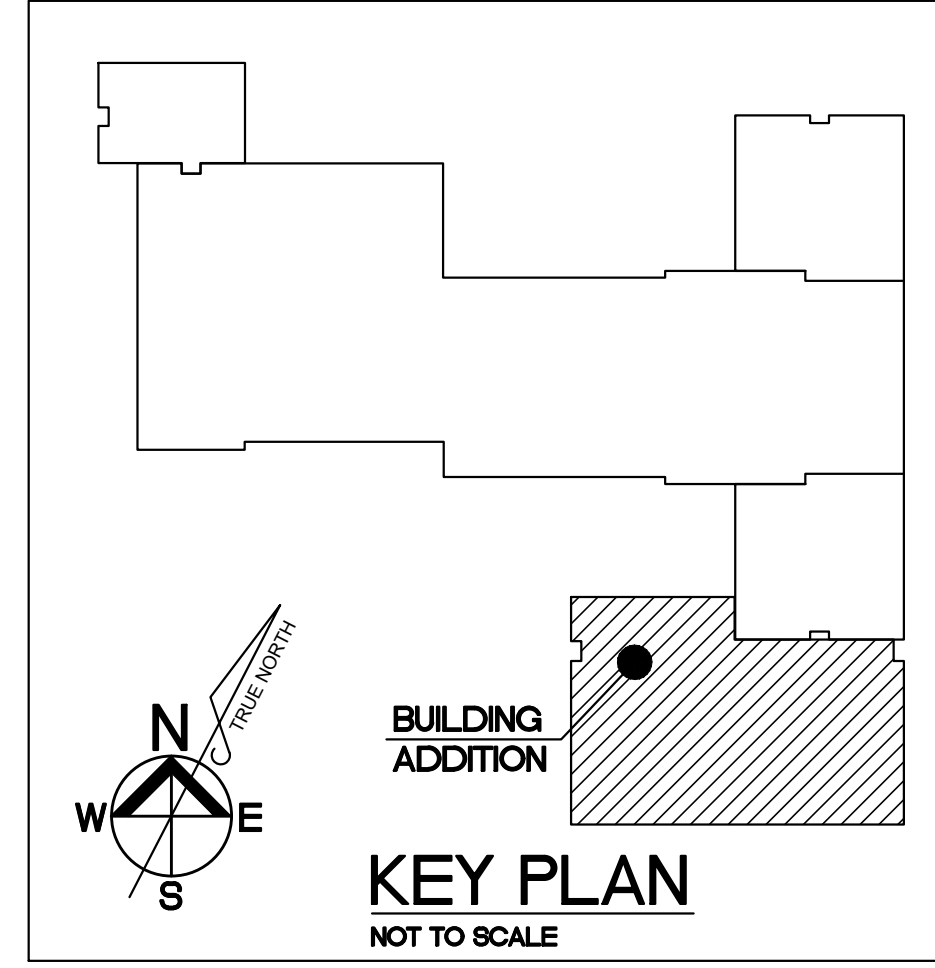
ARCHITECTS
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proj. no. 23-09C
date issued 07 02 2024
date revised
1 ADD#1 07/23/2024

drawn by JWS
checked by KG
sheet no.

M3.1
SD:1



PARTIAL HVAC NEW WORK PLAN
SCALE: 1/8" = 1'-0"
N

PACKAGED ROOFTOP UNIT SCHEDULE

UNIT MARK	LOCATION	MANUFACTURER & MODEL	TOTAL AIRFLOW (CFM)	MIN. OA (CFM)	NOM. TONS	FILTERS	COOLING COIL DATA					COMPRESSOR DATA			CONDENSER			HEATING COIL DATA							ELECTRICAL DATA				WEIGHT (LBS)	NOTES				
							AIRFLOW (CFM)	EAT (DB/WB °F)	LAT (DB/WB °F)	TOTAL CAP. (MBH)	SENSIBLE (MBH)	QTY.	TYPE	REFRIG. TYPE	AMBIENT DB (°F)	FAN QTY.	FLA (EA)	AIRFLOW (CFM)	MIN ROWS	MAX FPI	MIN AREA (SQ. FT.)	EAT (DB, °F)	LAT (DB, °F)	MIN. CAP. (MBH)	EWT (°F)	FLOW (GPM)	MAX APD (IN.)	MAX WPD (FT.)			VOLTS / PH	MCA	MOP	SCCR kA
RTU-7	ROOF - CLASS ADDITION	DAIKIN DPSA045	9,625	2,850	45	2" MERV 8 12" MERV 14	9,625	82.3 / 69.9	53.2 / 53.2	524	312	4	SCROLL	R32	95	6	2.1	9,625	2	8	24.0625	40	60	207.9	140	20.8	0.25	5	480/3	142.2	150	65	13,385	ALL

- NOTES:**
- PROVIDE UNIT WITH INTEGRAL FILTERS.
 - PROVIDE 14" SLOPED, INSULATED CURB FOR MOUNTING ON ROOF.
 - UNIT SHALL INCLUDE 0-100% DRY BULB ECONOMIZER.
 - PROVIDE UNIT WITH SINGLE POINT ELECTRICAL CONNECTION WITH FACTORY MOUNTED DISCONNECT.
 - PROVIDE UNIT WITH LOW AMBIENT OPERATION.
 - PROVIDE UNIT WITH HAIL GUARDS.
 - PROVIDE WITH SUPPLY AND EXHAUST FAN VFD FACTORY INSTALLED IN UNIT.

- PROVIDE UNIT WITH BACNET COMMUNICATIONS INTERFACE.
- STAINLESS STEEL COIL DRAIN PANS.
- UNIT SHALL HAVE SIDE SUPPLY AND RETURN CONNECTIONS AS SHOWN ON PLANS.
- PROVIDE WITH 2-WAY MODULATING HW CONTROL VALVE FACTORY WIRED TO UNIT CONTROLLER.
- PROVIDE 120V DOWNWIRE RECEPTACLE TO BE POWERED INDIVIDUALLY NOT OFF UNIT SINGLE POINT POWER CONNECTION.
- PROVIDE WITH VARIABLE SPEED LEAD COMPRESSOR. DIGITAL SCROLL NOT ACCEPTABLE.
- MANUFACTURER TO PROVIDE WITH TRUEFIT AIRFLOW MEASURING SYSTEM (OR EQUAL). SHIPPED LOOSE FOR FIELD INSTALLATION.

SCCR: SHORT CIRCUIT CURRENT RATING

PACKAGED ROOFTOP UNIT FAN SCHEDULE

UNIT MARK	SUPPLY FAN DATA						EXHAUST FAN DATA						NOTES
	AIRFLOW (CFM)	FAN TYPE	QTY.	ESP (IN. W.G.)	BHP (TOTAL)	MOTOR DATA (EA) HP FLA VFD	AIRFLOW (CFM)	FAN TYPE	QTY.	ESP (IN. W.G.)	MOTOR DATA (EA) HP FLA VFD		
RTU-7	9,625	PLENUM	6	2.00	8.59	2.2 2.8 ECM	8,900	PLENUM	2	1.50	6.1 8.2 ECM	ALL	

1. SEE NOTES ON RTU SCHEDULE.

UNIT HEATER SCHEDULE

UNIT DESIG.	LOCATION	MANUFACTURER & MODEL NO.	AIRFLOW (CFM)	EAT (°F)	MIN CAPACITY (MBH)	HEATING COIL DATA			THERMOSTAT TYPE / LOCATION	MOTOR		ELECTRICAL DATA				SCCR kA	NOTES
						FLOW (GPM)	EWT (°F)	WPD (FT.)		POWER (WATTS)	VOLTS/PH	FLA	MCA	MOP	UNIT CONTROL		
UH-A	EXT. CORRIDOR ENTRY	TRANE FFEB-020	200	60	6.5	1.0	140	5	WALL MOUNT	38W	120/1	2.2	2.75	15	TST (BY DW 25)	5	ALL

- NOTES:**
- PROVIDE UNIT MOUNTED FACTORY DISCONNECT SWITCH.
 - TEMPERATURE SENSOR SHALL BE PROVIDED AND INSTALLED BY CONTROLS CONTRACTOR IN J-BOX WITH STAINLESS STEEL COVER IN RECESSED WALL BOX.
 - REFER TO PLANS FOR UNIT HEATER QUANTITY AND LOCATIONS.
 - MANUFACTURER VALVE AND PIPING KITS MUST MEET ALL SPECIFIED REQUIREMENTS FOR INDIVIDUALLY PROVIDED COMPONENTS.
 - UNIT STYLE TO BE CEILING RECESSED WITH BOTTOM LOUVER INLET AND OUTLET.

SCCR: SHORT CIRCUIT CURRENT RATING

CONTROL VALVE SCHEDULE

UNIT DESIGNATION	LOCATION	SERVICE	WATER DATA			VALVE								NOTES
			FLOW (GPM)	MIN. CLOSEOFF ΔP (PSI)	ΔP (PSI)	PIPE SIZE (IN.)	SIZE (IN.)	Cv	VALVE TYPE	CONTROL SIGNAL	ACTUATOR TYPE	POWER SUPPLY	MANUFACTURER MODEL NO.	
CV-A	SEE PLANS	TERMINAL UNITS	1.5	125	3.5	0.75	0.50	0.80	BALL	MODULATING	NSR	24 VAC	BELIMO B209	1,2
CV-B	SEE PLANS	TERMINAL UNITS	2.1	125	3.1	0.75	0.50	1.20	BALL	MODULATING	NSR	24 VAC	BELIMO B210	1,2
CV-C	SEE PLANS	TERMINAL UNITS	3.3	125	3.2	1.00	0.50	1.90	BALL	MODULATING	NSR	24 VAC	BELIMO B211	1,2
CV-RTU7	RTU-7 CABINET	RTU-7	20	125	1.5	2.00	1.25	19.00	BALL	MODULATING	NO	24 VAC	BELIMO B223	1,3

- NOTES:**
- GPM FLOW COLUMN INDICATES THE MAXIMUM FLOW FOR A GIVEN Cv VALUE.
 - SEE PLANS AND FLOW DIAGRAMS FOR QUANTITY AND LOCATIONS.
 - VALVE TO BE PROVIDED WITH RTU.

ACTUATOR TYPE
 NO - SPRING RETURN OPEN
 NC - SPRING RETURN CLOSED
 NSR - NON SPRING RETURN

ARRESTOR SCHEDULE

DESIG.	MODEL NUMBER	FIXTURE UNIT RATING	REMARKS
ARR-A	J.R. SMITH HYDROTROL #5005	1-11	-
ARR-B	J.R. SMITH HYDROTROL #5010	12-32	-

BALANCING VALVE SCHEDULE

PLAN MARK	DESCRIPTION				NOTES
	DESCRIPTION	LOCATION	SIZE	ADJUSTED FLOW RATE	
BV-A	BALANCE VALVE	MULTIPLE	1/2"	0.5 GPM	1

- NOTES:**
- LEAD FREE

DRAIN SCHEDULE

UNIT DESIG.	FIXTURE DESCRIPTION	BODY	STRAINER / DOME	NOTES
FD-A	FLOOR DRAIN - FINISHED FLOOR	CAST IRON	NICKEL BRONZE	1
FD-B	FLOOR DRAIN - AC-2 CONDENSATE	STAINLESS STEEL	STAINLESS STEEL	1

- NOTES:**
- REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

PLUMBING FIXTURE SCHEDULE

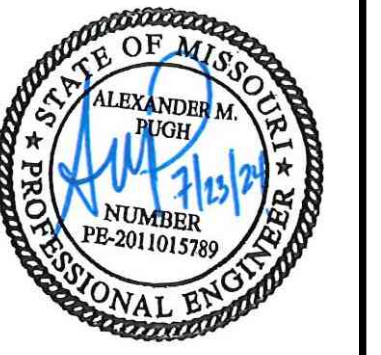
UNIT DESIG.	FIXTURE DESCRIPTION	ADA (YES/NO)	CARRIER (YES/NO)	TRIM	FLOW RATE	ACCESSORIES	TRAP SIZE (IN.)	VENT SIZE (IN.)	COLD WATER SUPPLY	HOT WATER SUPPLY	NOTES
RH-A	ROOF HYDRANT - EXTERIOR FREE STANDING ROOF MOUNTED PEDESTAL	-	-	SHUT-OFF VALVE	-	-	-	-	1	-	
S-A	SINK - SINGLE COMPARTMENT, COUNTERTOP, SIZE 1	YES	NO	SWING SPOUT, DUAL HANDLE	1.5 GPM	SEE SPECIFICATIONS	2"	2"	1/2"	1/2"	
WC-A	WATER CLOSET - WALL-HUNG	YES	YES	AUTOMATIC, HARDWIRED - VALVE MOUNTED	1.28 GPF	SEE SPECIFICATIONS	4"	2"	1-1/4"	-	

GENERAL: FIXTURE MOUNTING ELEVATIONS SHALL BE COORDINATED WITH ARCHITECT. SEE SPECIFICATIONS FOR APPROVED MANUFACTURERS AND MODELS.

SPLIT SYSTEM UNIT SCHEDULE

UNIT DESIGNATION	SERVICE	MAKER & MODEL NO.	SUPPLY CFM	RATED COOLING CAP (TONS)	ENTERING AIR (°F) dB / wB	UNIT DESIGNATION	LOCATION	MAKER & MODEL NO.	COMPRESSOR DATA			AMBIENT (DB)		POWER				SEER	NOTES	
									QTY.	TYPE	REFRIGERANT TYPE	LOW °F	HIGH °F	VOLT	PHASE	HZ	MCA			MOCP
AC-2	DATA 142	DAIKIN FTK24AXVJU	713-H	2	80/67	CU-2	ROOF	DAIKIN RK24AXVJU	1	SWING	R-410A	0	95	208	1	60	16.4	20	19	1,2,3,4,5,6

- NOTES:**
- PROVIDE WITH LOW AMBIENT WIND BAFFLE FOR OPERATION DOWN TO 0°F OUTSIDE AIR TEMPERATURE.
 - ALL UNITS SHALL BE PROVIDED WITH FIELD INSTALLED CONDENSATE PUMP CAPABLE OF A MINIMUM 5 FT RISE. PUMP SHALL BE INSTALLED WITHIN AND POWERED THROUGH THE WALL UNIT.
 - ALL UNITS SHALL BE PROVIDED WITH A WIRED REMOTE CONTROLLER KIT
 - ALL REFRIGERANT PIPING ON ROOF SHALL BE INSULATED AND INCLUDE A PROTECTIVE JACKET. REFER TO SPECIFICATIONS FOR PRODUCT INFORMATION.
 - ALL ROOF MOUNT CONDENSING UNITS SHALL BE MOUNTED ON EQUIPMENT RAILS ANCHORED TO ROOF DECK. RAILS SHALL BE A MINIMUM OF 18" IN HEIGHT.
 - PIPING SHALL PENETRATE ROOF WITH PIPE CURB PER DETAIL.



ALEX PUGH
 LICENSE #2011015789
 ENGINEERING CORP.
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 3489 BOSCHERTOWN ROAD and ISLAND HARBOR DRIVE
 ST. CHARLES COUNTY, MISSOURI
 ORCHARD FARM R-V SCHOOL DISTRICT

CONSULTING ENGINEERS:
 BAX ENGINEERING
 ASDG
 McCLURE ENGINEERING
 CIVIL/SURVEY STRUCTURAL MECH/ELEC/PLUMB
 HOENER ASSOCIATES, INC. - ARCHITECTS
 6707 PLAINVIEW AVENUE
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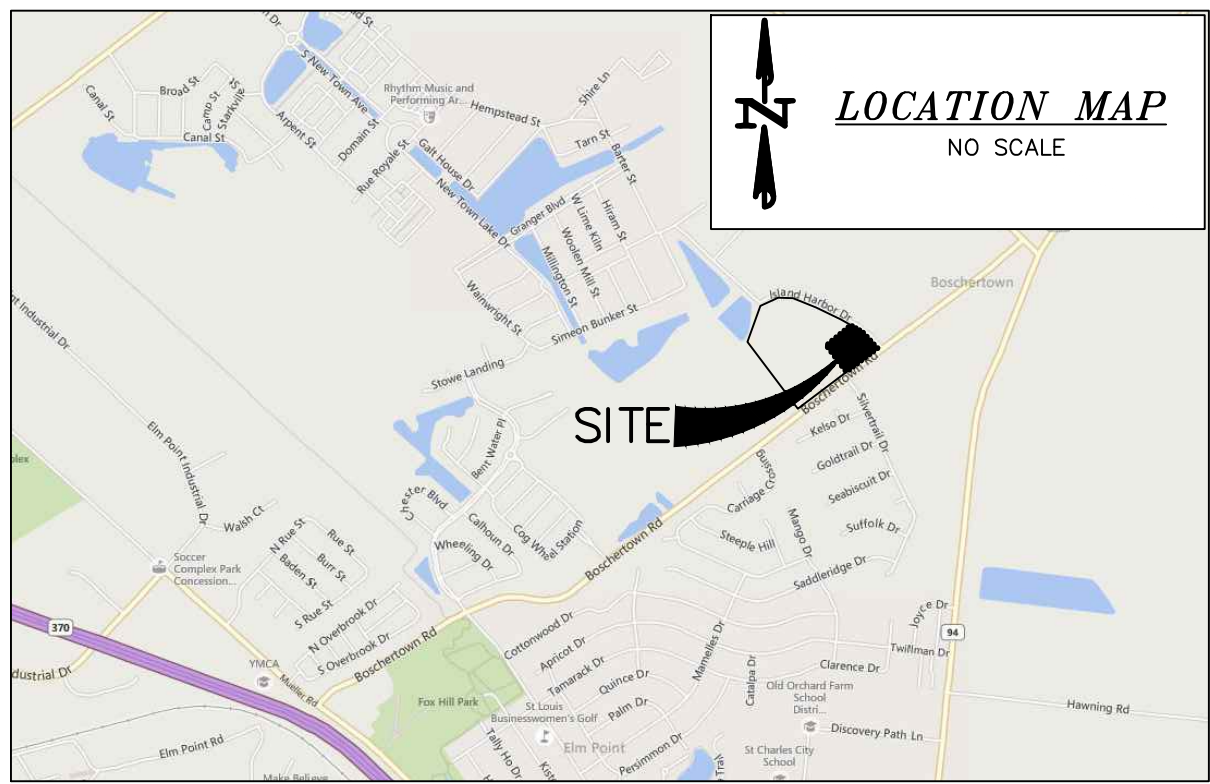
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 date issued
 07 02 2024
 date revised
 1 ADD#1 07/23/2024

drawn by JWS
 checked by KG
 sheet no.

M6.2
 SD:2

CITY OF SAINT CHARLES GENERAL NOTES:

- ALL IMPROVEMENTS CONSTRUCTED HEREIN SHALL COMPLY WITH THE CODE OF ORDINANCES OF THE CITY OF ST. CHARLES.
- IF PROPERTY IS GREATER THAN 1 ACRE, A LAND DISTURBANCE PERMIT FROM THE MISSOURI DEPARTMENT OF NATURAL RESOURCES IS REQUIRED PRIOR TO COMMENCING ANY DEMOLITION, CLEARING OR CONSTRUCTION ON SITE. PROVIDE COPY OF APPROVAL FROM THE DEPARTMENT OF NATURAL RESOURCES TO THE PUBLIC WORKS DEPARTMENT.
- SILTATION CONTROL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE IN ACCORDANCE WITH THE SWPPP PLAN. ADDITIONAL SILTATION CONTROL MAY BE REQUIRED AS DIRECTED BY THE CITY ENGINEER. (CODE SECTION 510.090.2)
- WHEN GRADING OPERATIONS ARE COMPLETED OR SUSPENDED FOR MORE THAN 30 DAYS, PERMANENT GRASS MUST BE ESTABLISHED TO CONTROL EROSION. (CODE SECTION 510.090.4.A)
- ALL MUD AND DEBRIS FROM CONSTRUCTION SITE TO BE KEPT OFF OF CITY MAINTAINED STREETS. STREETS SHALL BE SWEEPED TWICE DAILY. (CODE SECTION 510.090.5)
- HANDICAP SPACES CANNOT HAVE A GRADE IN EXCESS OF 2% IN ANY DIRECTION. (CODE SECTION 400.705.B.4)
- HANDICAP ACCESSIBLE ROUTES AND RAMPS CANNOT HAVE A CROSS SLOPE IN EXCESS OF 2% (CODE SECTION 400.705.B.4)
- ALL WATER MAIN CONSTRUCTION INCLUDING VALVES, SLEEVES, METERS, HYDRANTS AND FITTINGS MUST CONFORM TO CITY OF ST. CHARLES WATER SPECIFICATIONS.
- WHEN A SANITARY SEWER LATERAL CROSSES OVER A WATER LINE, A MINIMUM VERTICAL CLEARANCE OF 18" SHALL BE PROVIDED. IF THIS CLEARANCE IS NOT POSSIBLE, THEN EITHER THE WATER LINE OR THE SEWER LINE SHALL BE CONSTRUCTED OF MECHANICAL JOINT PIPE OR CASIED IN CONTINUOUS CASING UNTIL THERE IS A 10' HORIZONTAL CLEARANCE BETWEEN THE TWO LINES.
- ALL SANITARY SEWER CONSTRUCTION MUST CONFORM TO THE LATEST VERSION OF THE METROPOLITAN ST. LOUIS SEWER DISTRICT'S STANDARDS AND SPECIFICATIONS.
- ALL STREET AND SIDEWALK CONSTRUCTION IS TO BE PER THE LATEST ST. CHARLES CITY STANDARDS.
- FLOWABLE FILL BACKFILL SHALL BE USED FOR ALL BACKFILL ON SEWER TRENCHES THAT ARE UNDER CITY STREETS, FROM THE TOP OF THE BEDDING MATERIAL (6 INCHES ABOVE THE PIPE) TO THE SURFACE, OR TO WITHIN ONE FOOT OF GRADE IN LANDSCAPED AREAS. (CODE SECTION 510.280.4.A.1)
- EARTH BACKFILL (MEETING MSD STANDARDS) MAY BE USED OUTSIDE OF PAVED AREAS, FROM THE TOP OF THE BEDDING MATERIAL TO THE SURFACE. EARTH BACKFILL SHOULD BE PLACED IN A MAXIMUM 8-INCH LOOSE LIFTS AND SHALL BE MECHANICALLY COMPACTED TO A MINIMUM DENSITY OF 95% MAXIMUM DENSITY AS DETERMINED BY THE MODIFIED AASHTO T-180 COMPACTION TEST OR 90% OF MAXIMUM DENSITY AS DETERMINED BY THE STANDARD PROCTOR TEST AASHTO T-99.
- ALL STORM SEWER DESIGN IS TO CONFORM TO THE CITY OF ST. CHARLES DESIGN REQUIREMENTS. (CODE SECTION 510.290)
- ALL STORM SEWER CONSTRUCTION IS TO BE PER THE LATEST EDITION OF THE METROPOLITAN ST. LOUIS SEWER DISTRICT (MSD) STANDARD CONSTRUCTION SPECIFICATIONS FOR SEWERS AND DRAINAGE FACILITIES. (CODE SECTION 510.280)
- FOR NEW SUBDIVISIONS ONLY:
ALL JETTING SHALL BE PERFORMED WITH A PROBE ROUTE ON NOT GREATER THAN 7.5-FOOT CENTERS WITH THE JETTING PROBE CENTERED OVER AND PARALLEL WITH THE DIRECTION OF THE PIPE. TRENCH WIDTHS GREATER THAN 10 FEET WILL REQUIRE MULTIPLE PROBES EVERY 7.5-FOOT CENTERS. TRENCH BACKFILL DEPTHS LESS THAN 8 FEET IN DEPTH SHALL BE PROBED TO A DEPTH EXTENDING TO HALF OF THE TRENCH BACKFILL, BUT NOT LESS THAN 3 FEET. TRENCH BACKFILL GREATER THAN 8 FEET IN DEPTH SHALL BE PROBED TO HALF THE DEPTH OF THE TRENCH BACKFILL, BUT NOT LESS THAN 3 FEET. JETTING SHALL BE PERFORMED FROM THE LOW SURFACE TOPOGRAPHIC POINT AND PROCEED TOWARD THE HIGH POINT, AND FROM THE BOTTOM OF THE TRENCH BACKFILL TOWARDS THE SURFACE. THE FLOODING OF EACH JETTING PROBE SHALL BE STARTED SLOWLY ALLOWING SLOW SATURATION OF THE SOIL. WATER IS NOT TO BE ALLOWED TO FLOW AWAY FROM THE DITCH WITHOUT FIRST SATURATING THE DITCH. CONTRACTOR SHALL IDENTIFY THE LOCATIONS OF SURFACE BRIDGING (THE TENDENCY FOR THE UPPER BACKFILL CRUST TO ARCH OVER THE TRENCH RATHER THAN COLLAPSE AND CONSOLIDATE DURING THE JETTING PROCESS). THE CONTRACTOR SHALL BREAK DOWN THE BRIDGED AREAS USING AN APPROPRIATE METHOD SUCH AS THE WHEELS OR BUCKET OF A BACKHOE. WHEN THE SURFACE CRUST IS COLLAPSED, THE VOID SHALL BE BACKFILLED WITH THE SAME MATERIAL WITHIN THE SUNKEN/JETTED AREA SHALL BE COMPACTED SUCH THAT NO FURTHER SURFACE SUBSIDENCE OCCURS. (CODE SECTION 510.280)
- ALL SANITARY AND STORM PIPE JOINTS AND JOINTS ON NEW STRUCTURES SHALL USE CITY APPROVED RUBBER COMPRESSION TYPE JOINTS. WATER STOPS ARE REQUIRED AT ALL POINTS OF CONNECTION NOT USING RUBBER COMPRESSION TYPE JOINTS SUCH AS CONNECTIONS TO EXISTING STRUCTURES. (CODE SECTION 510.280.6)
- CONCRETE COVERS ON STRUCTURES WILL NOT BE ALLOWED. ONLY CAST IRON COVERS ARE PERMITTED. (CODE SECTION 510.280.5)
- BRICK STORM AND SANITARY STRUCTURES WILL NOT BE ALLOWED.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR/DEVELOPER TO PROVIDE TRAFFIC CONTROL PER THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
- ALL UTILITIES SHALL BE LOCATED UNDERGROUND.
- ALL FILLED PLACES UNDER PROPOSED STORM AND SANITARY SEWER AND/OR PAVED AREAS SHALL BE COMPACTED TO 90% OF MAXIMUM DENSITY AS DETERMINED BY THE MODIFIED AASHTO T-180 COMPACTION TEST OR 95% OF MAXIMUM DENSITY AS DETERMINED BY THE STANDARD PROCTOR TEST AASHTO T-99.
- ALL FILLED PLACES IN PROPOSED ROADS SHALL BE COMPACTED FROM THE BOTTOM OF THE FILL UP TO 90% MAXIMUM DENSITY AS DETERMINED BY THE MODIFIED AASHTO T-180 COMPACTION TEST OR 95% OF MAXIMUM DENSITY AS DETERMINED BY THE STANDARD PROCTOR TEST AASHTO T-99. ALL TESTS SHALL BE VERIFIED BY A SOILS ENGINEER CONCURRENT WITH GRADING AND BACKFILLING OPERATIONS.
- GRADES CANNOT EXCEED A 3:1 SLOPE. (CODE SECTION 510.090.1)
- CONSTRUCTION ACTIVITIES SHALL ABIDE BY THE NOISE RESTRICTIONS AS OUTLINES IN CODE CHAPTER 230.
- SHOP DRAWINGS AND SPECIFICATIONS FOR ALL STRUCTURES AND MATERIALS SHALL BE SUBMITTED TO THE PUBLIC WORKS DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO DELIVERY.
- FOR ALL SANITARY SEWERS WITHIN THE RIGHT OF WAY, A CLEAN OUT SHALL BE PROVIDED, IN THE RIGHT OF WAY, WITHIN ONE (1) FOOT OF THE PROPERTY SERVED, AND IN ADDITION TO ANY REQUIRED FOR ADHERENCE TO THE PLUMBING CODE. ALL WORK TO CONFORM TO CITY STANDARDS.



**SITE IMPROVEMENT PLANS FOR
ORCHARD FARM SCHOOL DISTRICT
EARLY LEARNING CENTER
BUILDING ADDITIONS
TOPOGRAPHIC DRAWING
PART OF LOT 2 OF
"CHARLESTOWNE CROSSING PLAT SIX"
DOCUMENT NO. 2021R-067523,
TOWNSHIP 47 NORTH RANGE 5 EAST,
CITY OF ST. CHARLES
ST. CHARLES COUNTY, MISSOURI**

SHEET INDEX

- C1.00 COVER SHEET
- C2.00 DEMOLITION PLAN
- C2.10 IRRIGATION PLAN
- C3.00 SITE PLAN
- C3.10 UTILITY PLAN
- C4.00 GRADING PLAN
- C5.00 PRE-DEVELOPED DRAINAGE AREA MAP
- C6.00 POST-DEVELOPED DRAINAGE AREA MAP
- C7.00 PROFILES/DETAILS
- C8.00 DETAILS
- C9.00 DETAILS
- C10.0 STORM WATER POLLUTION PREVENTION PLAN

GRADING/SEDIMENT & EROSION CONTROL NOTES

- ALL TRASH AND DEBRIS ON-SITE, EITHER EXISTING OR FROM CONSTRUCTION, MUST BE REMOVED AND PROPERLY DISPOSED OF OFF-SITE.
 - UPON COMPLETION OF STORM SEWERS, SILTATION CONTROL SHALL BE PROVIDED AROUND ALL OPEN SEWER INLETS AND SHALL REMAIN UNTIL THE DISTURBED DRAINAGE AREAS HAVE BEEN PROPERLY STABILIZED.
 - CONTRACTOR TO SUPPLY CITY OF ST. CHARLES INSPECTOR WITH COPIES OF THE COMPACTION TEST REPORTS.
 - THE CONTRACTOR SHALL ASSUME COMPLETE RESPONSIBILITY FOR CONTROLLING ALL SILTATION AND EROSION OF THE PROJECT AREA. THE CONTRACTOR SHALL USE WHATEVER MEANS NECESSARY TO CONTROL EROSION AND SILTATION INCLUDING, BUT NOT LIMITED TO, STAKED STRAW BALES AND/OR SILTATION FABRIC FENCES (POSSIBLE METHODS OF CONTROL ARE DETAILED IN THE PLAN). EROSION CONTROL SHALL COMMENCE WITH GRADING AND BE MAINTAINED THROUGHOUT THE PROJECT UNTIL ACCEPTANCE OF THE WORK BY THE OWNER AND/OR THE CITY OF ST. CHARLES. THE CONTRACTOR'S RESPONSIBILITIES INCLUDE ALL DESIGN AND IMPLEMENTATION AS REQUIRED TO PREVENT EROSION AND THE DEPOSITING OF SILT. THE OWNER AND/OR CITY OF ST. CHARLES MAY, AT THEIR OPTION, DIRECT THE CONTRACTOR IN HIS METHODS AS DEEMED FIT TO PROTECT PROPERTY AND IMPROVEMENTS. ANY DEPOSITING OF SILTS OR MUD ONTO NEW OR EXISTING PAVEMENT OR IN NEW OR EXISTING STORM SEWERS OR SWALES SHALL BE REMOVED AFTER EACH RAIN AND AFFECTED AREAS CLEANED TO THE SATISFACTION OF THE OWNER AND/OR THE CITY OF ST. CHARLES.
 - INSPECTION OF SILTATION CONTROL DEVICES SHALL TAKE PLACE ONCE EVERY SEVEN DAYS AND WITHIN 24 HOURS OF ANY ONE (1) INCH PER 24 HOUR RAIN EVENT.
 - ANY SILTATION CONTROL IN NEED OF REPAIR SHALL BE FIXED IMMEDIATELY.
 - SILT FENCES SHALL BE INSTALLED IMMEDIATELY AROUND EACH STORM SEWER STRUCTURE ONCE FINAL CONSTRUCTION OF EACH INDIVIDUAL STRUCTURE IS COMPLETE.
 - ALL SILTATION CONTROL DEVICES SHALL REMAIN IN PLACE UNTIL UPSLOPE AREAS HAVE BEEN PERMANENTLY STABILIZED.
- SILTATION CONTROL DEVICE MAINTENANCE
- SILT CONTROL MEASURES SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL.
 - CLOSE ATTENTION SHALL BE PAID TO THE REPAIR OF DAMAGED CONTROL.
 - NECESSARY REPAIRS TO BARRIERS OR REPLACEMENT OF SUCH SHALL BE ACCOMPLISHED PROMPTLY.
 - SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH RAINFALL.
 - REFER TO THE VEGETATIVE ESTABLISHMENT TABLE BELOW ON SEEDING RATES.

VEGETATIVE ESTABLISHMENT For Urban Development Sites APPENDIX A	
Seeding Rates:	
Permanent:	
Tall Fescue	30 lbs./ac.
Smooth Brome	20 lbs./ac.
Combined Fescue @ 15 lbs./ac. and Brome @ 10 lbs./ac.	
Temporary:	
Wheat or Rye	150 lbs./ac.
Oats	120 lbs./ac.
Seeding Periods:	
Fescue or Brome	March 1 to June 1
	August 1 to October 1
Wheat or Rye	March 15 to November 1
Oats	March 15 to September 15
Mulch Rates: 100 lbs. per 1,000 sq. feet (4,356 lbs. per acre)	
Fertilizer Rates:	
Nitrogen	30 lbs./ac.
Phosphate	30 lbs./ac.
Potassium	30 lbs./ac.
Lime	600 lbs./ac. ENM*
* ENM = effective neutralizing material as per State evaluation of quarried rock.	

ENGINEERING DESIGN STANDARDS:

- GENERAL:
 - o ARTICLE III. OF CHAPTER 405 IN TITLE IV OF THE ST. CHARLES CITY CODE
 - o CHAPTERS 505 AND 510 OF THE ST. CHARLES CITY CODE
 - o TITLE VII OF THE ST. CHARLES CITY CODE
 - o OTHER CITY CODES THAT MAY GOVERN ENGINEERING DESIGN
 - o CITY OF ST. CHARLES PUBLIC WORKS DEPARTMENT FINAL DESIGN CHECKLIST
- TRANSPORTATION:
 - o ST. LOUIS COUNTY HIGHWAY DEPARTMENT DESIGN CRITERIA MANUAL 2011
 - o AASHTO POLICY ON GEOMETRIC DESIGN 2011
 - o AASHTO ROADSIDE DESIGN GUIDE 2011
 - o MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES 2009 WITH 2012 REV. 1 & 2
 - o ADA STANDARDS FOR TRANSPORTATION FACILITIES 2006
- STORM WATER:
 - o MSD PLAN PREPARATION GUIDELINES 2006
 - o MSD STANDARD CONSTRUCTION SPECIFICATIONS 2009
 - o CITY OF ST. CHARLES PUMP STATION DESIGN STANDARDS 2014
- SANITARY
 - o MISSOURI DNR WASTEWATER DESIGN GUIDES 10CSR-20-8
 - o TEN STATES STANDARDS 2007
 - o CITY OF ST. CHARLES PUMP STATION DESIGN STANDARDS 2014
- WATER
 - o CITY OF ST. CHARLES STANDARD SPECIFICATIONS FOR CONSTRUCTION OF PUBLIC WATER MAINS 2014
 - o MISSOURI DNR MINIMUM DESIGN STANDARDS FOR MISSOURI COMMUNITY WATER SYSTEMS 2013
 - o TEN STATES STANDARDS 2007
 - o AWWA MANUALS OF WATER SUPPLY PRACTICES 2012

GRADING QUANTITIES:
5,000 C.Y. CUT (INCLUDES SUBGRADES)
1,513 C.Y. FILL (INCLUDES 8% SHRINKAGE)
3,487 C.Y. HEAVY

THE ABOVE GRADING QUANTITY IS APPROXIMATE ONLY, NOT FOR BIDDING PURPOSES. CONTRACTOR SHALL VERIFY QUANTITIES PRIOR TO CONSTRUCTION.

DIRT NUMBERS ABOVE INCLUDE BUILDING REMEDIATION AND 8% FILL COMPACTION. EXCESS MATERIAL SHALL BE HAULED TO NEW ELEMENTARY SCHOOL SITE AT 2525 HWY. B. STOCKPILE AS DIRECTED BY THE OWNER.

DEVELOPMENT NOTES:

- TOTAL AREA OF TRACT: 5.725 ACRES
DISTURBED AREA: 1.40 ACRES
CURRENT ZONING: PD-R PLANNED DEVELOPMENT RESIDENTIAL (CITY OF ST. CHARLES)
- EXISTING USE: EARLY CHILDHOOD DEVELOPMENT SCHOOL
- REQUIRED BUILDING & PARKING SETBACKS FOR PD-R ZONING:
FRONT YARD: 25 FEET BUFFER YARD
SIDE YARD: 25 FEET BUFFER YARD
REAR YARD: 25 FEET BUFFER YARD
BUILDING HEIGHT = 45 FEET
- PARKING REQUIREMENTS & PROVISIONS:
CLASSROOM = 2 SPACES PER CLASSROOM, 24 CLASSROOMS TOTAL
2 X 24 = 48 REQUIRED SPACES
FACULTY/STAFF = 1 PER INDIVIDUAL (31 INDIVIDUALS) = 31 REQUIRED SPACES
ASSEMBLY HALL 1 SPACE PER 4 SEATS (244 PROPOSED SEATS) 244/4 = 61 REQUIRED SPACES (MEETINGS ARE AFTER SCHOOL HOURS AND NO OVERLAP WHEN SCHOOL IS IN SESSION)
SCHOOL SPACES = 79 DURING SCHOOL HOURS; 61 AFTER SCHOOL HOURS
EXISTING SPACES = 133 (INCLUDING 5 ADA SPACES, TWO OF WHICH ARE LIFT VAN ONLY)
TOTAL SPACES ONSITE W/BUILDING ADDITIONS 140 (INCLUDES ALL 5 ADA SPACES).
- THIS PROPERTY IS SERVED BY THE FOLLOWING UTILITIES:
ELECTRIC COMPANY AMERENJE 636-925-3215
TELEPHONE COMPANY SOUTHWESTERN BELL 314-949-1315
GAS COMPANY SPIRE ENERGO 314-342-0500
SEWER DISTRICT CITY OF ST. CHARLES 636-940-4601
WATER DISTRICT CITY OF ST. CHARLES 636-940-4601
FIRE PROTECTION DISTRICT CITY OF ST. CHARLES 636-949-3387
- PROPERTY OWNER: ORCHARD FARM R-V SCHOOL DISTRICT
3489 BOSCHERTOWN ROAD
ST. CHARLES, MO 63301
636-925-5400
- ALL LANDSCAPING AREAS ARE TO BE IRRIGATED PER CITY REQUIREMENTS.
- ANY PROPOSED SIGNS TO BE APPROVED BY SEPARATE PERMIT.
- DETENTION ADDRESSED BY UNIVERSAL DETENTION FACILITY WITHIN NEW TOWN AND CONSTRUCTED AS PART OF THOSE PLANS. LOCATION FOR THE BASIN IS LOCATED NEAR THE NORTHWEST ALONG ISLAND HARBOR DRIVE.
- ALL UTILITY LINES SHALL BE INSTALLED UNDERGROUND PER CITY CODE 400.610.

BENCHMARK INFO:

REFERENCE BENCHMARK: THE ELEVATIONS SHOWN ON THIS DRAWING ARE REFERENCED FROM "THE MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION GLOBAL NAVIGATION SATELLITE REAL TIME NETWORK FOR CONTINUOUS OPERATING REFERENCE STATIONS", COMMONLY KNOWN AS "MODOT VRS". MODOT VRS UTILIZES A NETWORK OF REFERENCE SENSOR STATIONS FOUND THROUGHOUT THE STATE OF MISSOURI AND IS ADMINISTERED BY THE MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION (MHTC). MODOT VRS MOUNT POINTS PROVIDE CORRECTIONS CONSISTENT WITH NGS'S NAD83(2011) EPOCH 2010.00 ADJUSTMENT. MODOT VRS UTILIZES THE NAVD 88 AS A VERTICAL DATUM.

SITE BENCHMARK 1 (NAVD 88)- CUT SQUARE ON LIGHT STANDARD NEAR THE NORTHEAST LINE OF SUBJECT PROPERTY (ELEVATION=454.19) AND IS LOCATED AS SHOWN HEREON.

SITE BENCHMARK 2 (NAVD 88)- CUT SQUARE ON LIGHT STANDARD NEAR THE SOUTHEAST PARKING LOT OF THE SUBJECT PROPERTY (ELEVATION=454.31) AND IS LOCATED HEREON.

SITE BENCHMARK 3 (NAVD 88)- "O" IN OPEN ON A FIRE HYDRANT LOCATED ALONG THE NORTHWEST PARKING OF THE SUBJECT PROPERTY (ELEVATION=454.25) AND IS LOCATED HEREON.

FEMA FLOOD NOTES:

TO DETERMINE THE LOCATION OF FLOOD DESIGNATIONS AND BOUNDARIES, WE DETERMINED THE HORIZONTAL LOCATION OF THIS TRACT OF LAND BY SCALING THE FOLLOWING FLOOD INSURANCE RATE MAP (FIRM): ST. CHARLES COUNTY, MISSOURI AND INCORPORATED AREAS, MAP NUMBER 29183C0280H, WITH AN EFFECTIVE DATE OF MARCH 9, 2021.

COMMUNITY: CITY OF ST. CHARLES
NUMBER: 290316
PANEL: 0280
SUFFIX: H

BY EXPRESS REFERENCE TO THIS MAP AND ITS LEGEND, THIS TRACT OF LAND IS INDICATED TO BE WITHIN THE FOLLOWING ZONES:

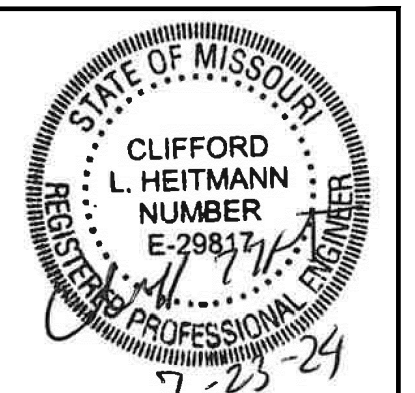
- ZONE X - AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

THE EVALUATION PROVIDED IN THIS NOTE IS RESTRICTED TO SIMPLY INDICATING THE APPARENT HORIZONTAL LOCATION OF THE PROPERTY WITH RESPECT TO THE FEATURES DISPLAYED ON THE MAP. NO FIELD STUDY OF THE DRAINAGE CHARACTERISTICS TO WHICH THIS PROPERTY MAY BE SUBJECT HAS BEEN CONDUCTED AND NO REPRESENTATION CONCERNING THE INSURABILITY OF THIS PROPERTY OR THE POTENTIAL SUCCESS OF THIS PROPERTY TO FLOODING HAS BEEN MADE. BAX ENGINEERING MAKES NO REPRESENTATION CONCERNING THE ACCURACY OF THE ABOVE REFERENCED FIRM MAP WHICH INCLUDES A NOTE THAT "THIS MAP IS FOR USE IN ADMINISTERING THE NATIONAL FLOOD INSURANCE PROGRAM. IT DOES NOT NECESSARILY IDENTIFY ALL AREA SUBJECT TO FLOODING, PARTICULARLY FROM LOCAL DRAINAGE SOURCES OF SMALL SIZE."

THIS FLOOD ZONE DETERMINATION AND THE FLOOD ZONE LIMITS SHOWN HEREON, IF ANY, WERE MADE USING FEMA INFORMATION WHICH WAS AVAILABLE ON THE DATE THIS SURVEY WAS SIGNED AND SEALED.

GENERAL NOTES

- UNDERGROUND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE INFORMATION AND THEREFORE THEIR LOCATIONS SHALL BE CONSIDERED APPROXIMATE ONLY. THE VERIFICATION OF THE LOCATION OF ALL UNDERGROUND UTILITIES, EITHER SHOWN OR NOT SHOWN ON THESE PLANS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, AND SHALL BE LOCATED PRIOR TO ANY GRADING OR CONSTRUCTION OF THE IMPROVEMENTS.
- ALL GRADES SHALL BE WITHIN 0.1 FEET OF THOSE SHOWN ON THE GRADING PLAN.
- ALL CONSTRUCTION AND MATERIALS USED SHALL CONFORM TO CURRENT CITY OF ST. CHARLES STANDARDS.
- ALL CONSTRUCTION METHODS AND PRACTICES SHALL CONFORM WITH CURRENT O.S.H.A. STANDARDS.
- ALL NECESSARY UTILITIES (PUBLIC AND PRIVATE) WILL BE AVAILABLE, FUNCTIONING, AND USABLE AT THE TIME ANY STAGE OF THE PROJECT OR THE TOTAL PROJECT IS READY FOR OCCUPANCY.
- ALL STORM SEWER PIPES SHALL BE GASKET O-RING TYPE.
- FORTY-EIGHT (48) HOURS NOTICE SHALL BE GIVEN TO THE CITY OF ST. CHARLES CITY ENGINEER BEFORE ANY GRADING OPERATIONS ARE TO BEGIN TO ALLOW SCHEDULING OF REQUIRED INSPECTIONS.
- FORTY-EIGHT (48) HOURS NOTICE SHALL BE GIVEN TO THE CITY OF ST. CHARLES CITY ENGINEER BEFORE ANY STORM SEWER CONSTRUCTION IS TO BEGIN TO ALLOW SCHEDULING OF REQUIRED INSPECTIONS.
- BASE BID TO INCLUDE PAVEMENT REMEDIATION UNDER ALL DRIVEWAYS. REMEDIATION SHALL EXTEND ONE FOOT OUTSIDE DRIVEWAY EDGES. SEE DETAIL ON SHEET C7.00.



CLIFFORD L. HEITMANN
LICENSE #E-29817
ENGINEERING CORP.
NO. 000655

**ADDITIONS AND RENOVATIONS TO:
EARLY LEARNING CENTER
3489 BOSCHERTOWN ROAD and ISLAND HARBOR DRIVE
ORCHARD FARM R-V SCHOOL DISTRICT
ST. CHARLES COUNTY, MISSOURI**

CONSULTING ENGINEERS:
BAX ENGINEERING
ASDC
McCLURE ENGINEERING

CIVIL/SURVEY
STRUCTURAL
MECH/ELEC/PLUMB

HOENER ASSOCIATES, INC. - ARCHITECTS
6707 PLAINVIEW AVENUE
ST. LOUIS, MISSOURI 63109
Ph. (314) 781-9855

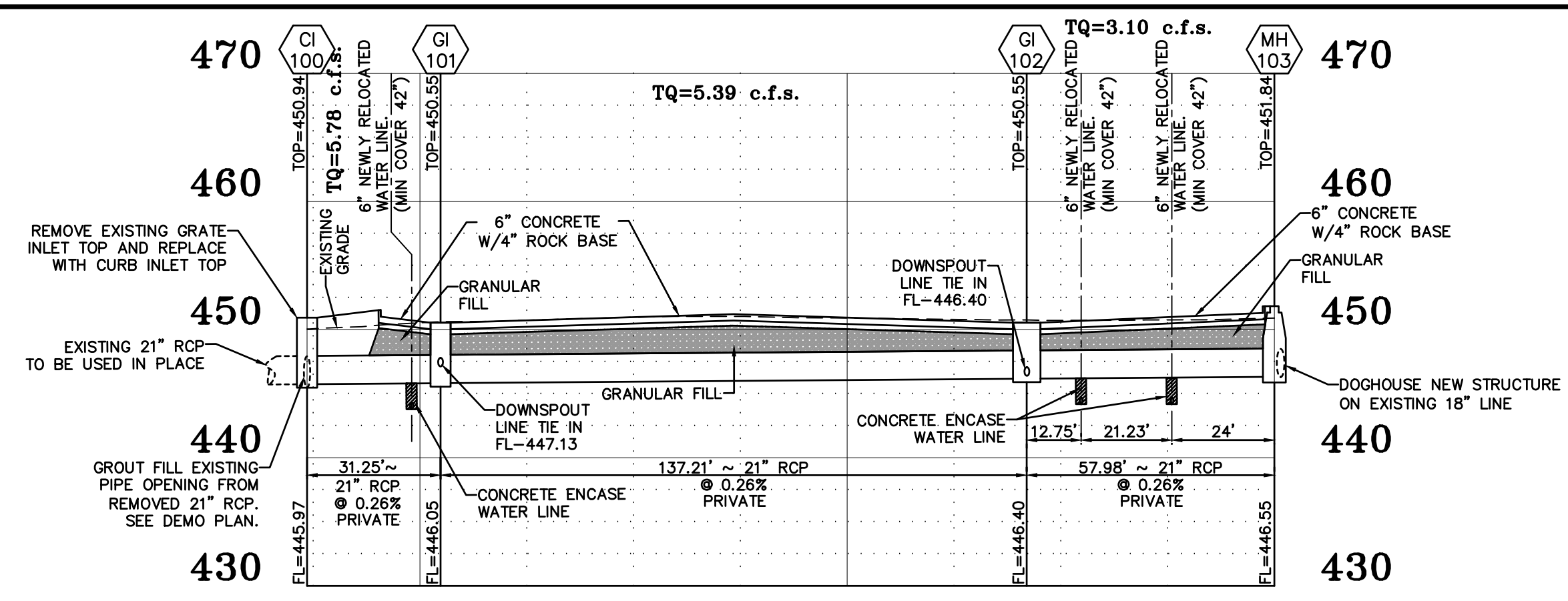
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date issued
7-2-24
date revised

1 7-23-24 ADDENDUM 1

drawn by **SWR**
checked by **CLH**
sheet no.

C1.00
SD-3



STORM PROFILE

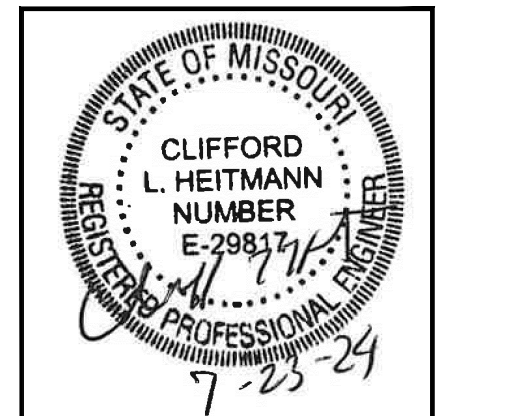
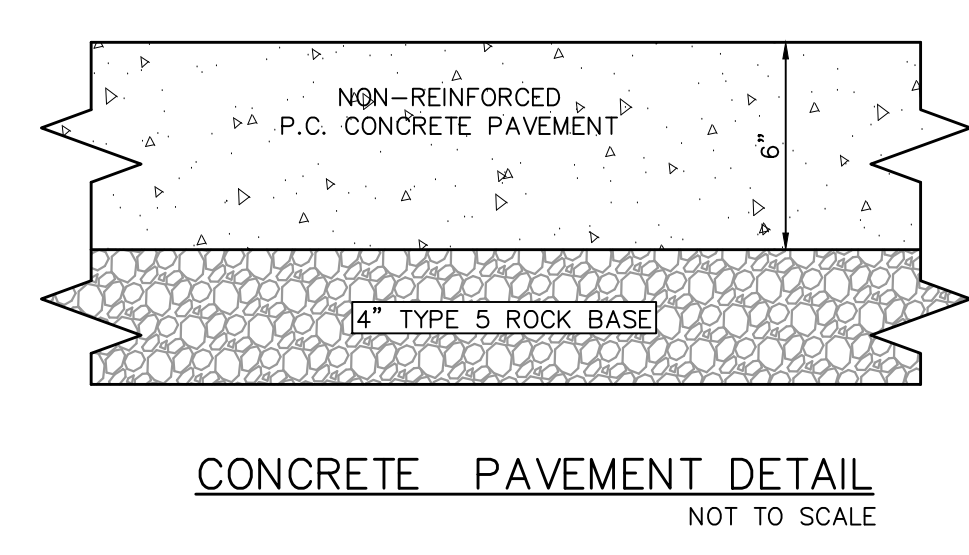
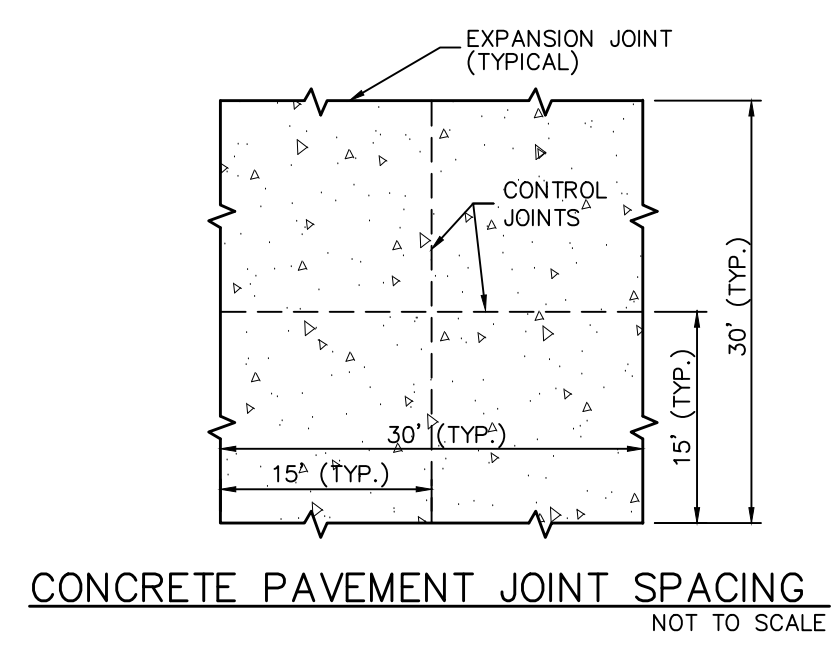
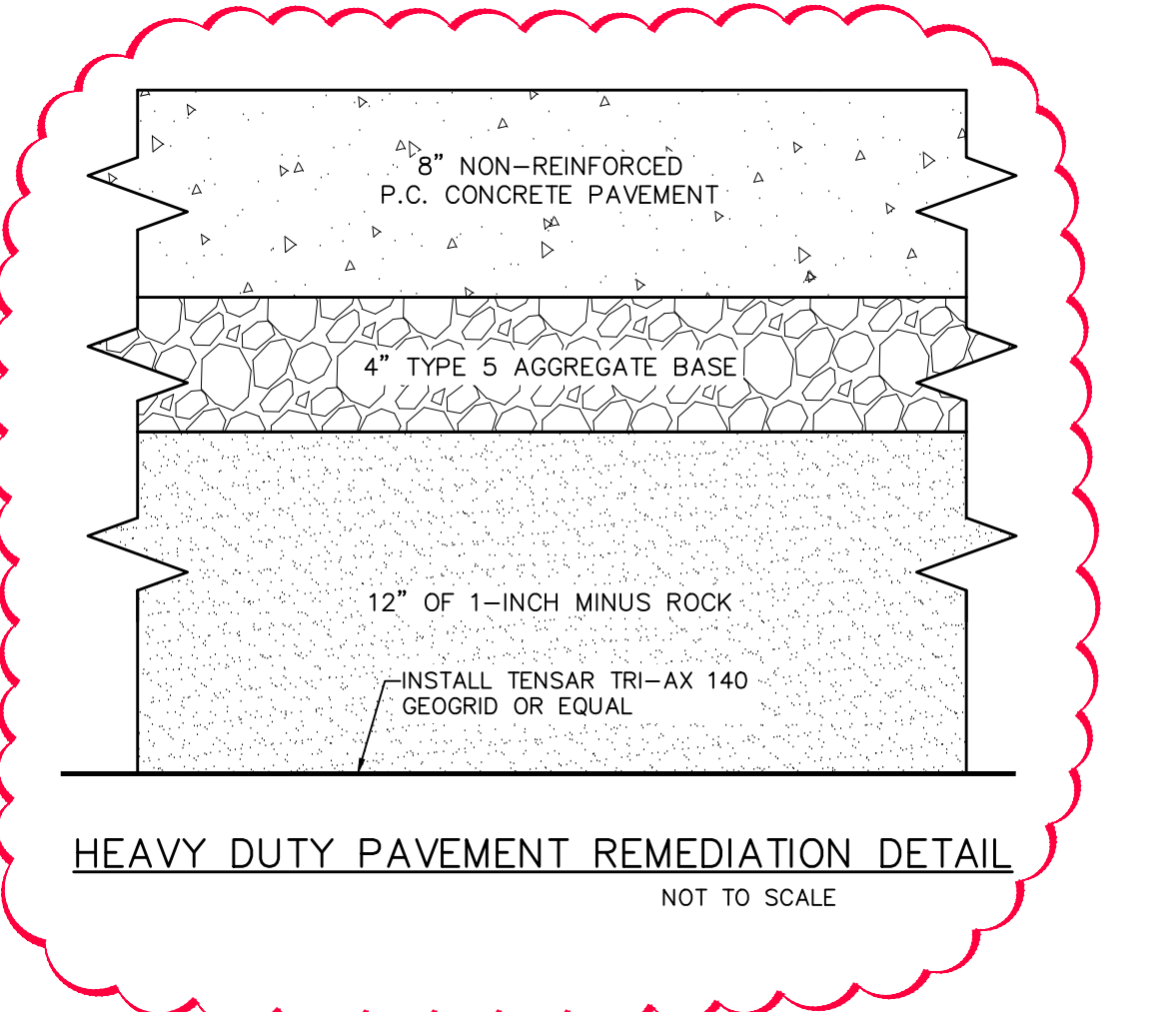
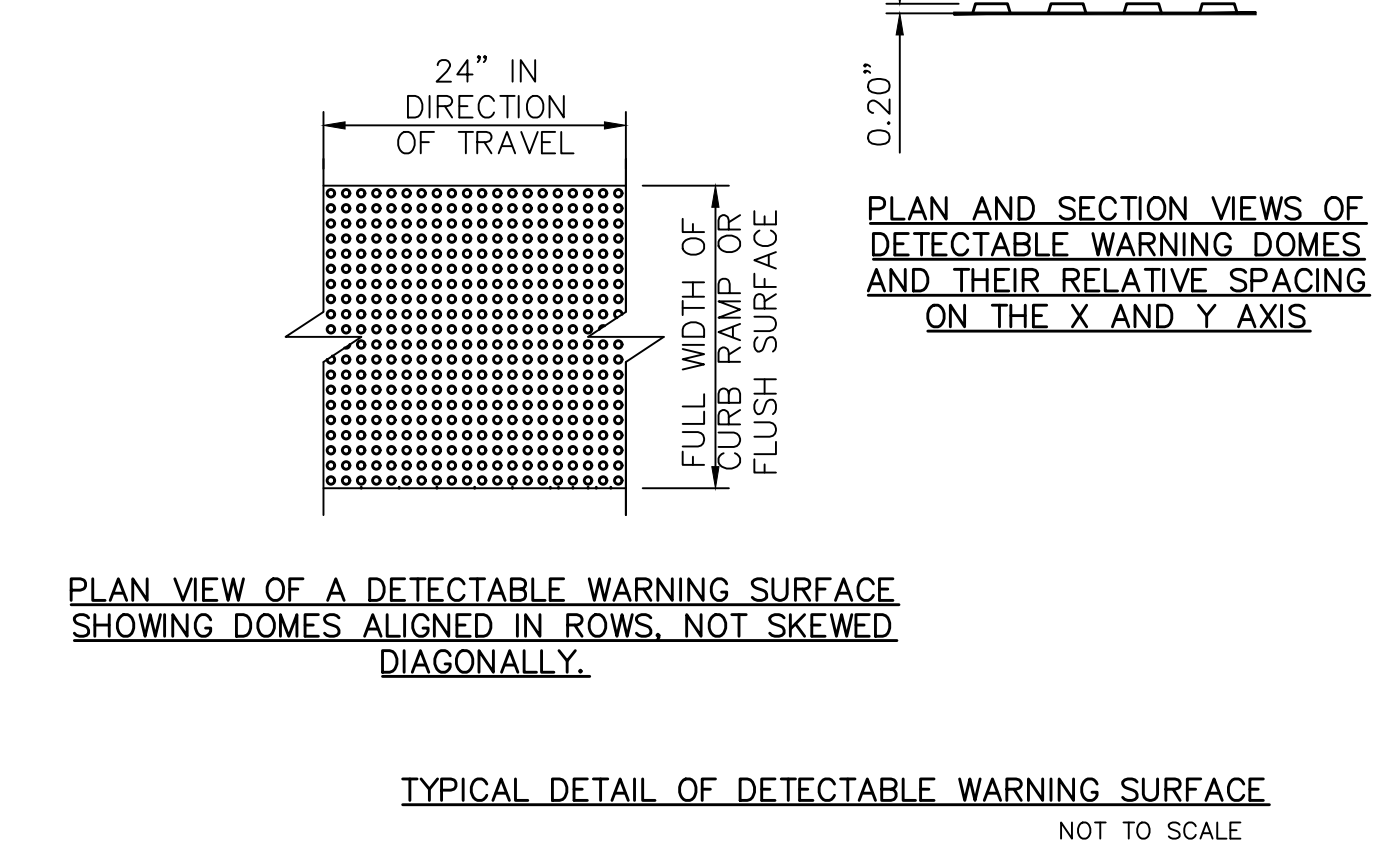
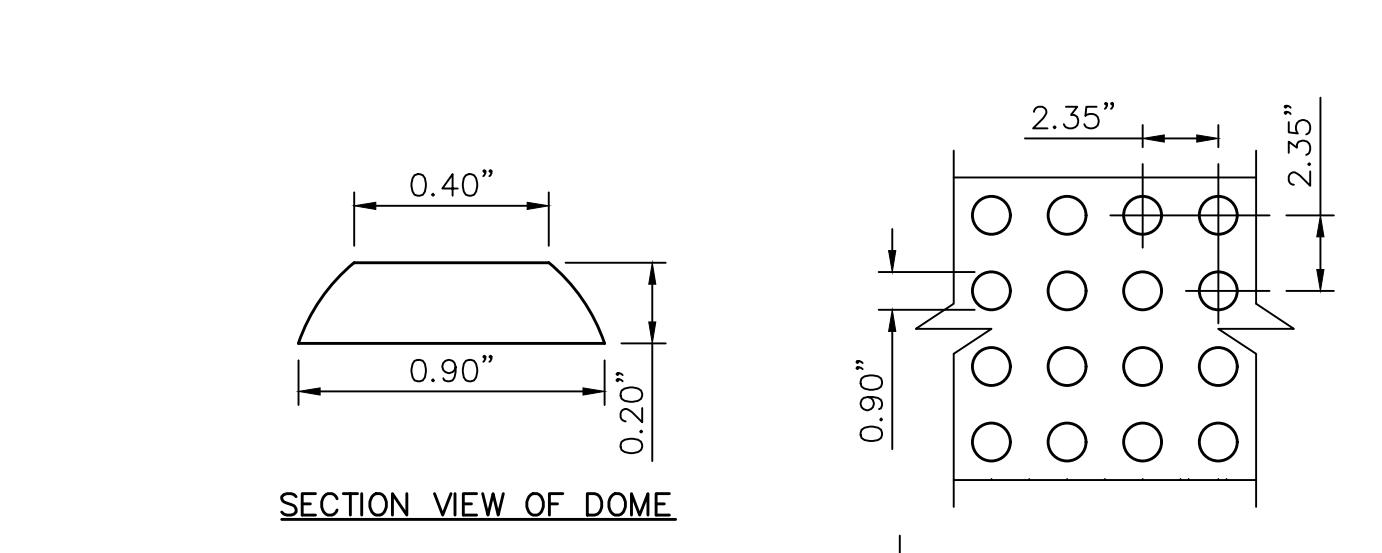
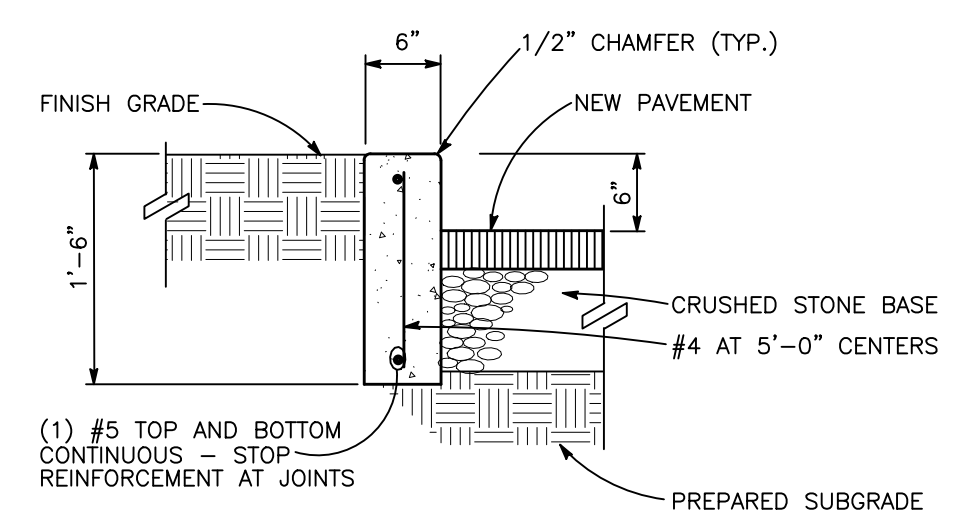
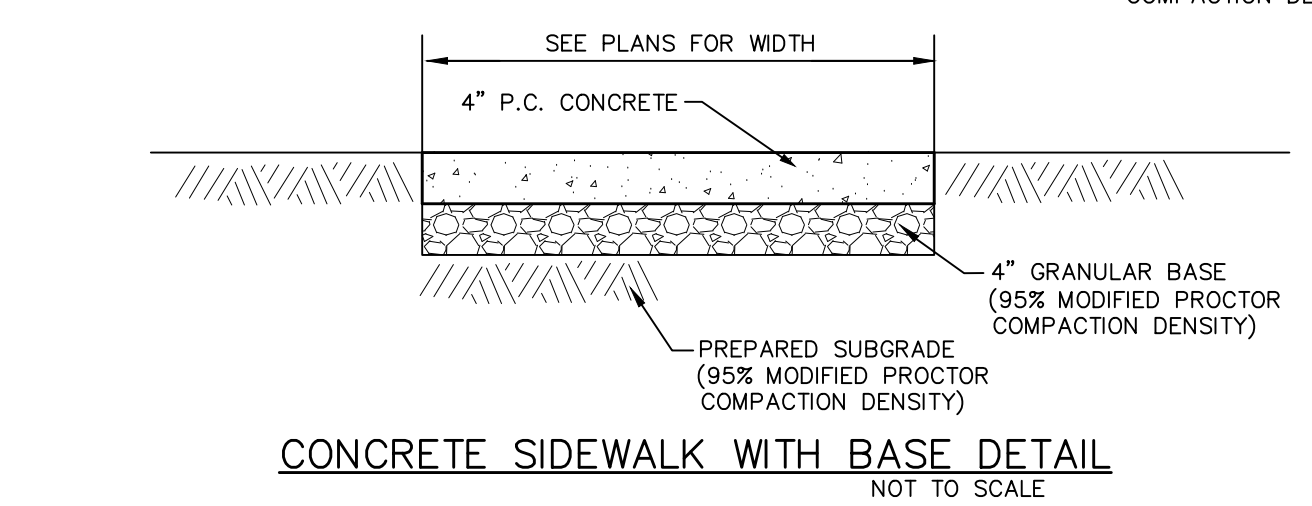
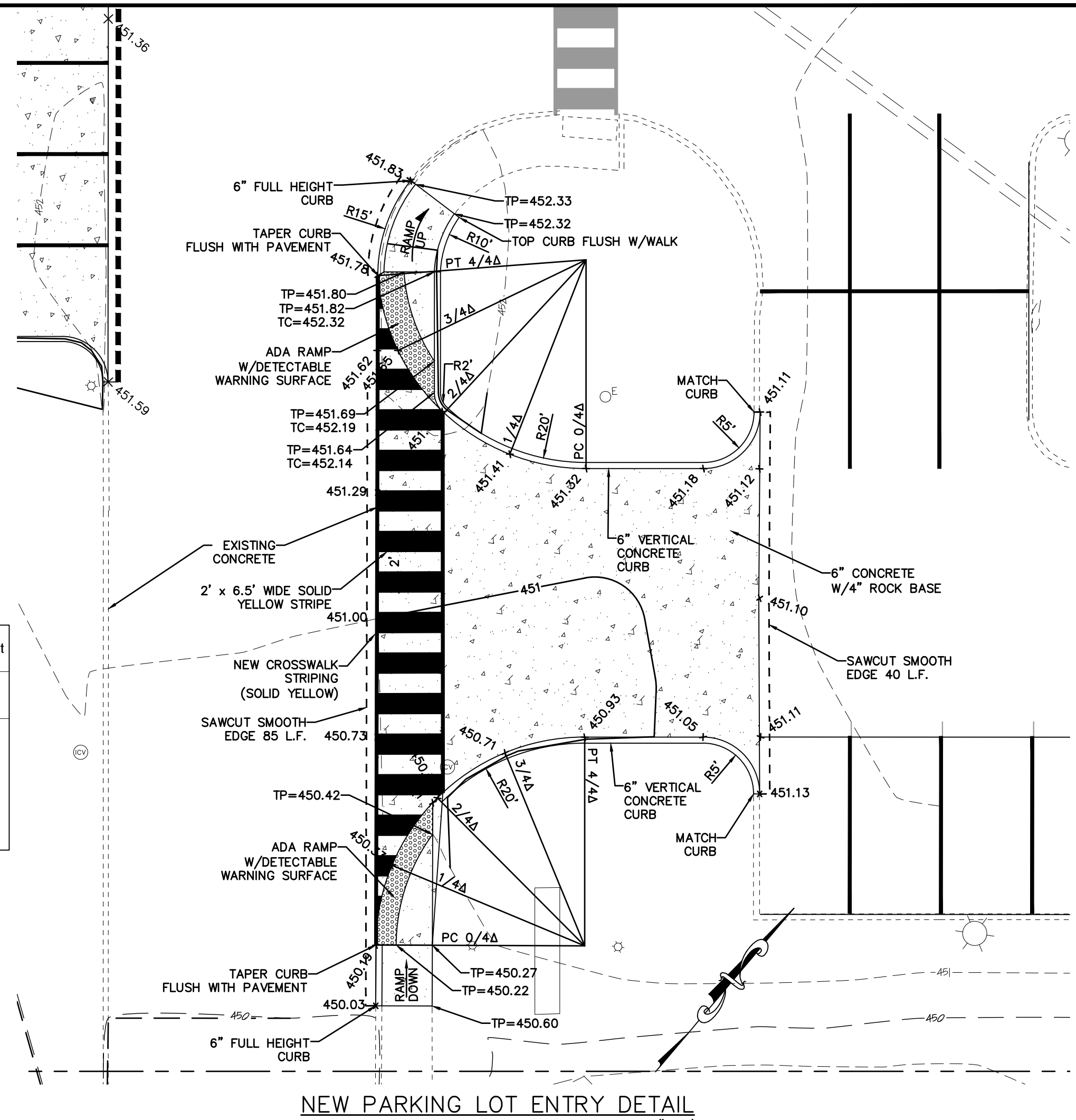
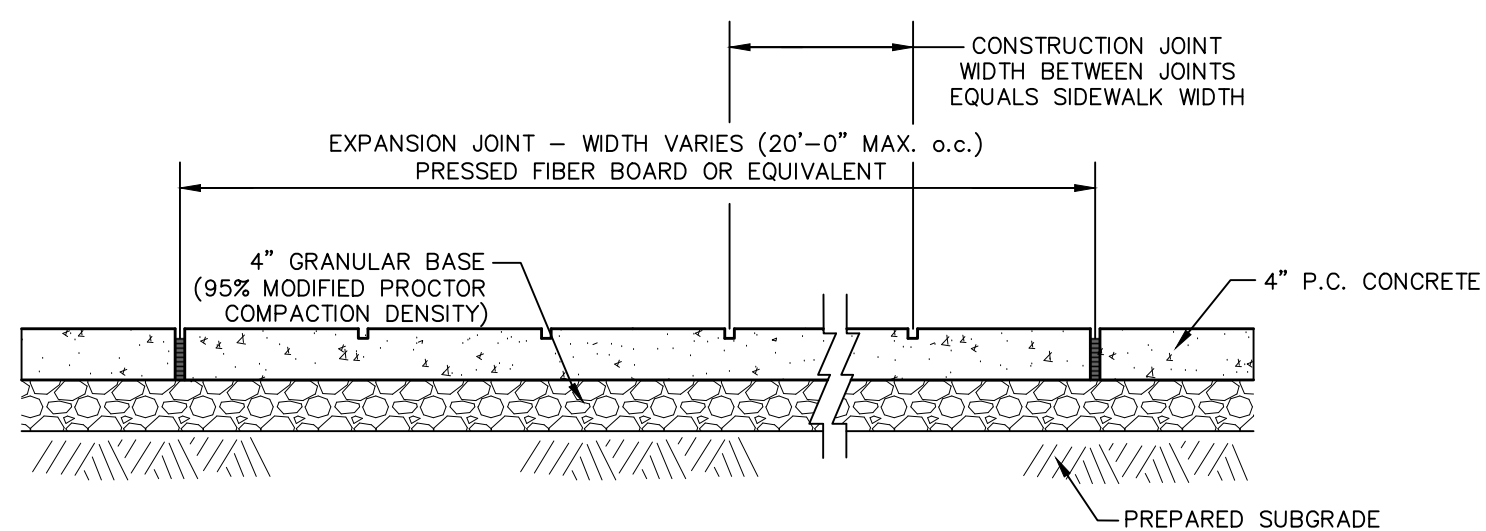
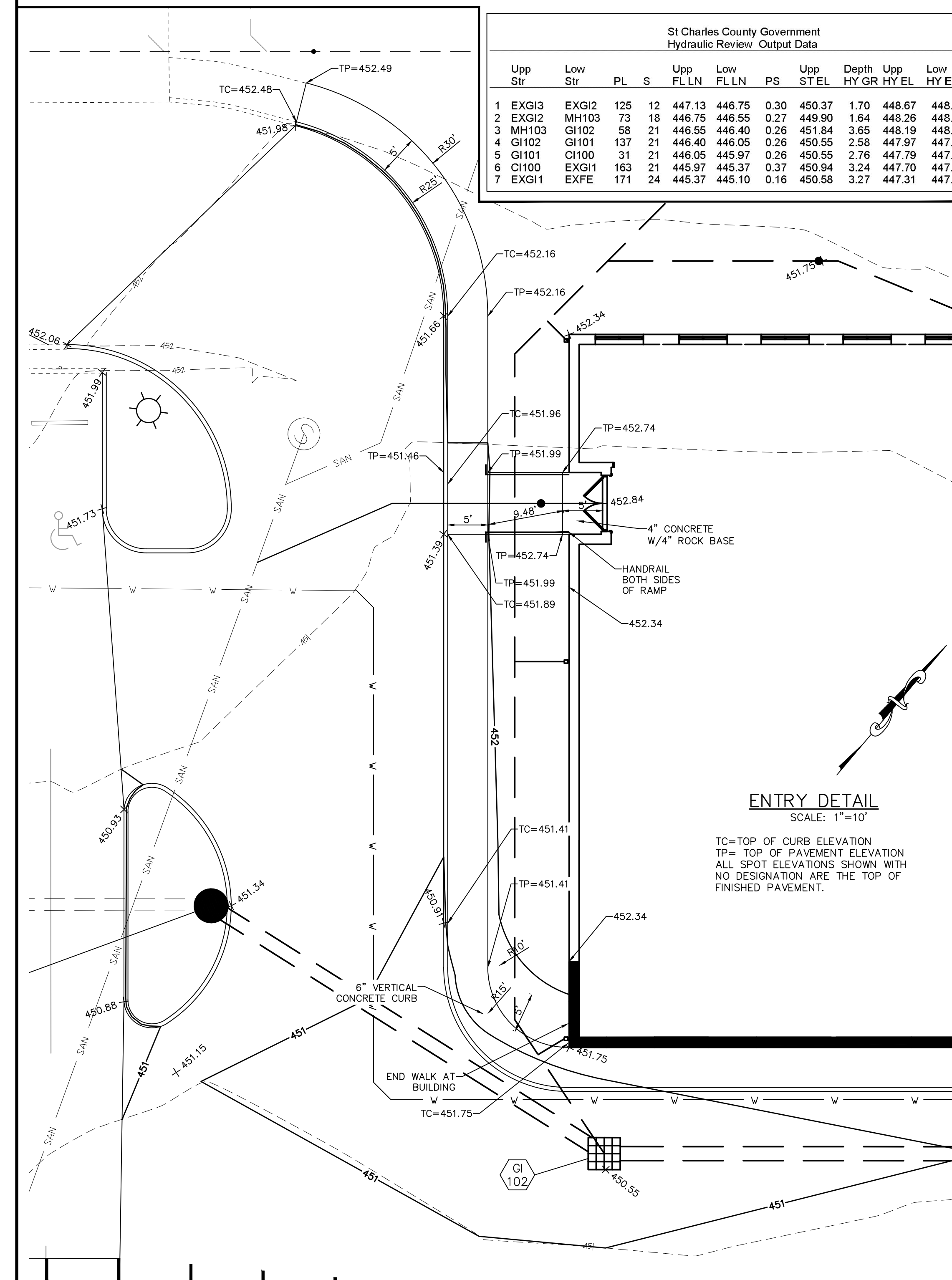
HORIZONTAL SCALE: 1"=30'
VERTICAL SCALE: 1"=10'

FOR ALL SEWERS WITH A DESIGN GRADE OF LESS THAN 1%, SLOPES SHALL BE VERIFIED PRIOR TO SURFACE RESTORATION

St Charles County Government Hydraulic Review Output Data

\\VAULTSERVER\FileFolders\16000\16041E Early Childhood OFSD\Engineering\Hydraulics\16041E HYDRAULIC ANALYSIS 2.txd 7/1/2024

Upp Str	Low Str	PL	S	Upp FLLN	Low FLLN	PS	Depth HY GR	Upp HY EL	Low HY EL	Hydr Grade	FR Head	VEL Head	Junc Loss	Turn Loss	Curve STR	Inl Grade	DR Area	P.I.	Q	TQ	Pipe Cap	Remarks
1	EXGI3	EXGI2	125	12	447.13	446.75	0.30	450.37	1.70	448.67	448.26	0.00260	0.33	2.33	0.08	0.08	0.00	0.00	1.83	1.83	1.95	
2	EXGI2	MH103	73	18	446.75	446.55	0.27	449.90	1.64	448.26	448.19	0.00090	0.07	1.75	0.05	0.00	0.00	0.00	1.27	3.10	5.46	
3	MH103	GI102	58	21	446.55	446.40	0.26	451.84	3.65	448.19	448.15	0.00400	0.02	1.29	0.03	0.00	0.02	0.00	0.00	3.10	8.08	
4	GI102	GI101	137	21	446.40	446.05	0.26	450.55	2.58	447.97	447.80	0.00120	0.16	2.24	0.08	0.00	0.01	0.00	2.29	5.39	8.08	
5	GI101	CI100	31	21	446.05	445.97	0.26	450.55	2.76	447.79	447.72	0.00130	0.04	2.40	0.09	0.00	0.03	0.00	0.39	5.78	8.08	
6	CI100	EXGI1	183	21	445.97	445.37	0.37	450.94	3.24	447.70	447.31	0.00200	0.33	2.93	0.13	0.00	0.06	0.00	1.26	7.04	9.64	
7	EXGI1	EXFE	171	24	445.37	445.10	0.16	450.58	3.27	447.31	447.10	0.00110	0.19	2.35	0.09	0.00	0.02	0.00	0.33	7.37	9.05	



CLIFFORD L. HEITMANN
LICENSE #E-29817
ENGINEERING CORP.
NO. 000655

ADDITIONS AND RENOVATIONS TO:
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ST. CHARLES COUNTY, MISSOURI

ORCHARD FARM R-V SCHOOL DISTRICT

HOENER ASSOCIATES, INC. - ARCHITECTS
6707 PLAINVIEW AVENUE
ST. LOUIS, MISSOURI 63109
Ph. (314) 781-9855

CONSULTING ENGINEERS:
CIVIL/SURVEY STRUCTURAL MECH/ELEC/PLUMB
ASDG ENGINEERING
McCLURE ENGINEERING

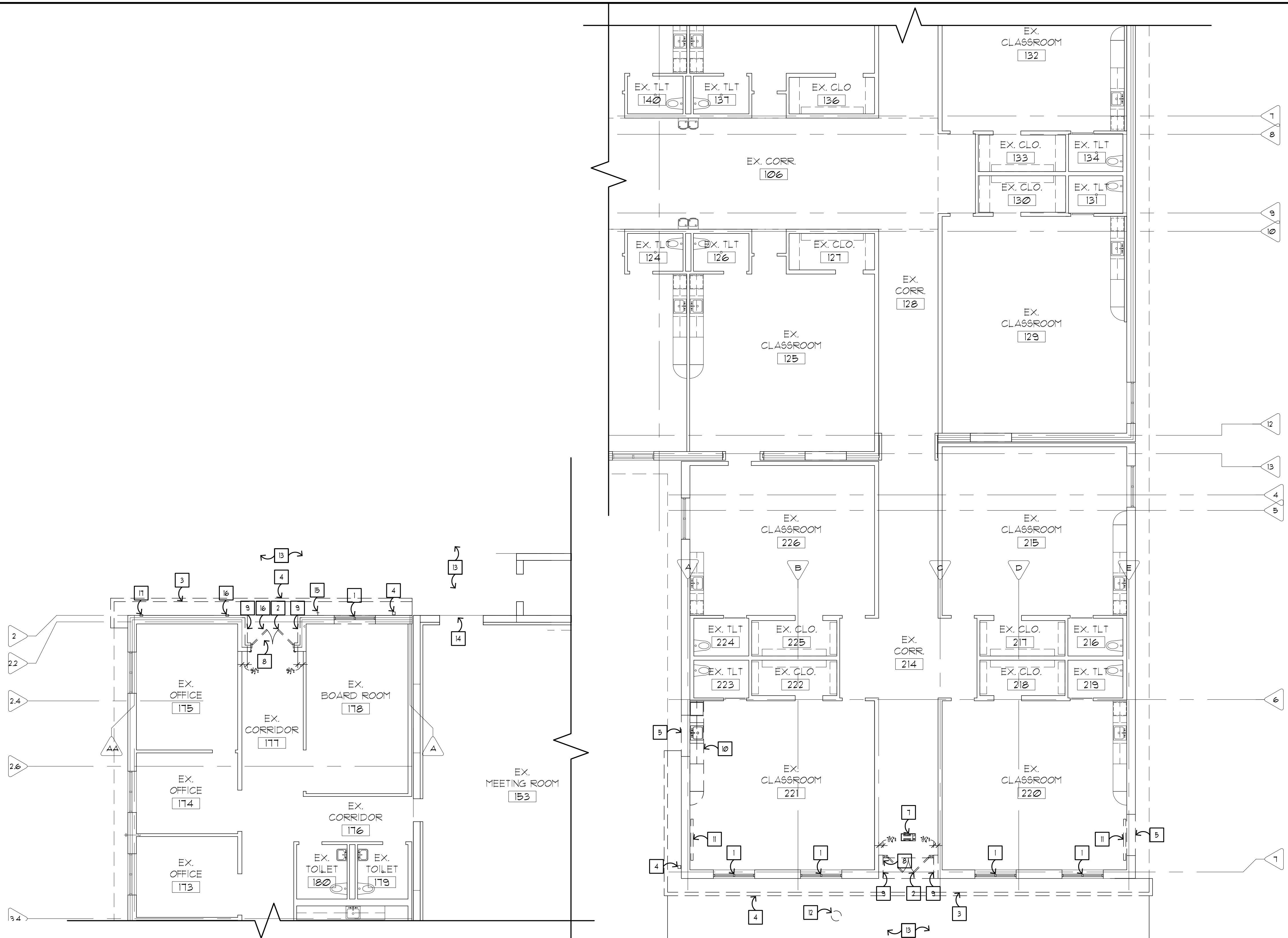
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date revised

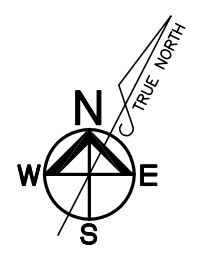
1 7-23-24 ADDENDUM 1

drawn by SWR
checked by CLH
sheet no.

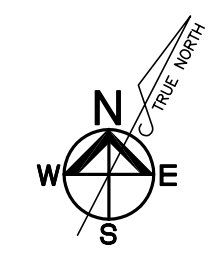
C7.00
SD-4



1/8" = 1'-0" PARTIAL DEMOLITION PLAN (ALTERNATE #1A - NORTHWEST)



1/8" = 1'-0" PARTIAL DEMOLITION PLAN (SOUTH)



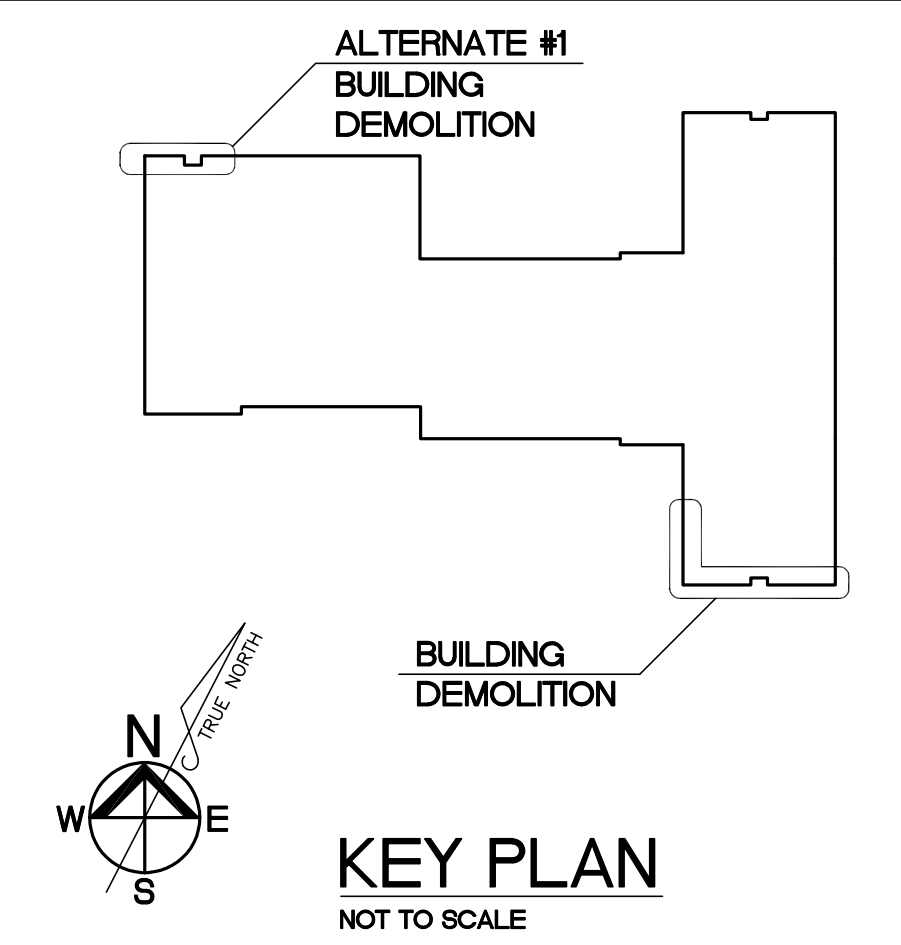
FIELD VERIFY ALL DIMENSIONS NOTED AS +/-

DEMOLITION GENERAL NOTES

- THE GENERAL CONTRACTOR IS RESPONSIBLE FOR THE FOLLOWING:
 - PROVIDING DUST, NOISE AND SAFETY BARRIERS.
 - CAPPING OFF ALL UTILITY SERVICES.
 - CAREFULLY REMOVING AND SAVING ITEMS THAT CAN BE REUSED OR RETURNED TO THE OWNER, AS REQUIRED BY THE ARCHITECT.
 - PROPERLY SHORING UP ALL STRUCTURES, WHETHER DIRECTED BY STRUCTURAL ENGINEER OR NOT.
 - PROTECTING ALL ITEMS AND FINISHES TO REMAIN, OR REPLACING SUCH ITEMS AND FINISHES DAMAGED DURING DEMOLITION AS REQUIRED BY THE ARCHITECT.
 - CLEANING UP ALL SURFACES ADJOINING DEMOLITION WORK TO PREPARE FOR NEW WORK BY OTHER TRADES, INCLUDING REMOVAL OF ALL ANCHORS, BRACKETS, FASTENERS, BLOCKING, ETC. THAT MAY INTERFERE WITH NEW WORK.
 - COORDINATING WITH OWNER TO AVOID OR SCHEDULE DISRUPTION TO SCHOOL ACTIVITIES.
 - MAINTAINING ACCESS TO AND EXITS FROM SCHOOL BUILDINGS AS REQUIRED BY OWNER AND CODE OFFICIALS.
 - MAINTAINING WATERPROOFING AND SECURITY OF SCHOOL BUILDINGS.
 - LEAVING ALL AREAS OF DEMOLITION READY FOR NEW WORK.
 - NOTIFYING ARCHITECT OF ANY ITEMS NOT NOTED FOR REMOVAL THAT WILL INTERFERE WITH NEW WORK.
- REFER TO MECH. ELEC. DRAWINGS FOR ADDITIONAL DEMOLITION INFORMATION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR CAUTION TAPE AND SIGNAGE THROUGHOUT CONSTRUCTION.
- NOTE: ABATEMENT WORK IS N.I.C. ANY REQUIRED ABATEMENT SHALL BE PERFORMED UNDER A SEPARATE CONTRACT, COORDINATE WITH OWNER.
- COORDINATE ALL DEMOLITION AND NEW CONSTRUCTION BEFORE BEGINNING WORK. SUBMIT PROPOSED WORK SCHEDULE TO OWNER FOR APPROVAL.
- ALL EXISTING FINISHES AND FIXTURES OUTSIDE OF DESIGNATED WORK AREAS ARE TO REMAIN EXCEPT FOR REMOVAL OR CUTTING AS MAY BE REQUIRED TO ACCOMMODATE NEW WORK.
- ALL OPENINGS IN WALLS, FLOORS, AND CEILINGS RESULTING FROM EQUIPMENT AND/OR PIPE REMOVAL SHALL BE INFILLED TO MATCH EXISTING SURROUNDING WALLS, FLOOR & CEILINGS AND TO MAINTAIN ANY APPLICABLE FIRE RATING REQUIREMENTS.
- THE CONTRACTOR SHALL REMOVE ALL EXISTING ELECTRICAL AND COMMUNICATION EQUIPMENT, SWITCHES, RECEPTACLES, IN AREAS OF WORK FROM WITHIN PARTITIONS AND ABOVE THE SCHEDULED CEILING. ALL WIRING SHALL BE REMOVED BACK TO ITS SOURCE PANEL. ALL ABANDONED ELECTRICAL DEVICES SHALL BE REMOVED. SEE ELECTRICAL DEMOLITION DRAWINGS.
- COORDINATE DEMOLITION OF ALL EQUIPMENT/WIRING WITH OWNER. VERIFY WHICH ITEMS WILL NEED TO BE RETAINED FOR RELOCATION AND/OR REMOVED.

DEMOLITION KEYED NOTES

- EX WINDOW TO BE COMPLETELY REMOVED AND FILLED WITH DRYWALL AND MTL STUDS PER FLOOR PLAN. STORE WINDOWS FOR REUSE IN NEW LOCATION - PROTECT FROM DAMAGE.
- REMOVE EXISTING DOOR AND METAL FRAMES. RETURN TO OWNER. PROTECT FROM DAMAGE. PATCH WALL AS REQUIRED FOR NEW WORK.
- REMOVE PORTION OF EXISTING ROOF OVER HANG, VENTED SOFFIT, LIGHTS, ETC. SEE ROOF PLAN.
- REMOVE EXISTING GUTTER AND DOWNSPOUT. RELOCATE AS SHOWN ON CIVIL DUGS.
- REMOVE PORTION OF EXISTING MASONRY / STUD WALL AS REQUIRED TO RECEIVE THE NEW WORK.
- REMOVE EX. SECURITY CAMERA. RETAIN FOR RELOCATION. SEE ELEC. DUGS.
- REMOVE CABINET UNIT HEATER. RETAIN FOR RELOCATION. SEE MECH. DUGS.
- REMOVE EXISTING MASONRY VENEER AS INDICATED INCLUDING RECEPTACLES, SWITCHES, FIXTURES, ETC. MAKE READY FOR NEW WORK. SEE ELEC. DUGS.
- REMOVE EXISTING FACE BRICK AS INDICATED INCLUDING RECEPTACLES, SWITCHES, FIXTURES, ETC. MAKE READY FOR NEW WORK.
- REMOVE CASEWORK, WALL CABINETS, COUNTER, SINK, FAUCET, PLUMBING AND ALL RELATED ITEMS. STORE FOR REUSE. REARRANGE TO INSTALL IN SAME ROOM IF POSSIBLE - SEE RENOVATION PLAN.
- SMART BOARD TO BE REMOVED BY OWNER. REMOVE ELECTRICAL AND CAP IN WALL OR ABOVE CEILING. COORDINATE WITH OWNER FOR NEW LOCATION.
- REMOVE SITE LIGHTING. SEE CIVIL AND ELECTRICAL DRAWINGS.
- REMOVE PORTION OF EXISTING CONCRETE SIDEWALK, CURBS, PAVING, ETC. SEE CIVIL PLAN.
- REMOVE EXISTING THRESHOLD FROM DOORWAY OPENING. PROTECT OPENING AND BUILDING FROM DAMAGE UNTIL NEW THRESHOLD IS INSTALLED.
- REMOVE EXISTING HOSE BIBB, CAP PLUMBING IN WALL. REINSTALL IN NEW LOCATION. SEE PLUMBING DRAWINGS.
- EXISTING ELECTRICAL JUNCTION BOX W/ COVER PLATE. SEE ELECTRICAL DRAWINGS.
- EXISTING FUTURE CAMERA ELECTRICAL JUNCTION BOX W/ COVER PLATE. SEE ELECTRICAL DRAWINGS.



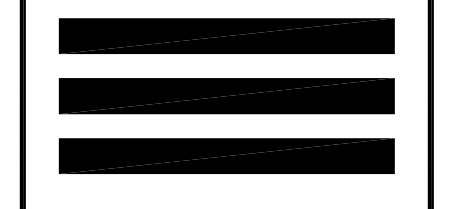
MARK A. REUTHER
LICENSE #006452

ARCHITECTURAL CORP.
NO. 000193

ADDITIONS AND RENOVATIONS TO:
EARLY LEARNING CENTER
3489 BOSCHERTOWN ROAD and ISLAND HARBOR DRIVE
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CONSULTING ENGINEERS:
BAX ENGINEERING
ASDG
MECH/ELEC/PLUMB

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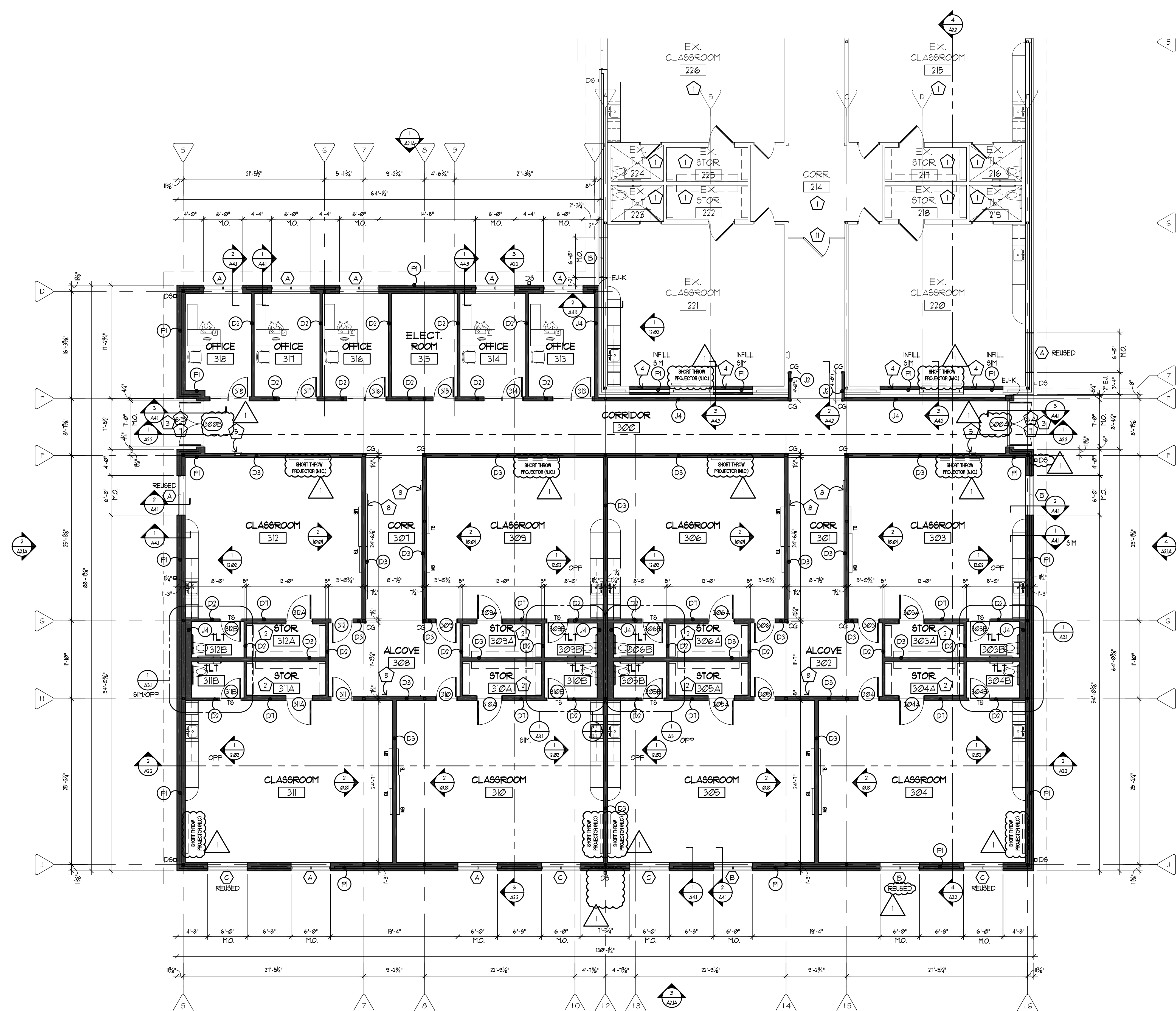


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date issued
JULY 02, 2024
date revised
ADD#1 07/23/24

drawn by BF
checked by MR
sheet no.

A1.2
SD-5



FLOOR PLAN GENERAL NOTES

- REFER TO DA: 112 FOR WALL PARTITION TYPES.
 - REFER TO DA: 130-138 THRU FOR COLUMN MATRIX AND DETAILS.
- WALL TYPE, SEE DA SHEETS
 - DOOR NUMBER, SEE DA SHEETS
 - KEYED NOTES
 - WINDOW NUMBER, SEE DA SHEETS (NEW AND REUSED)
 - BORROW LIGHT NUMBER, SEE DA SHEETS

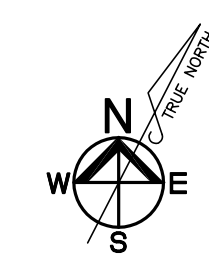
FLOOR PLAN LEGEND

- MASONRY DIMENSIONS ARE NOMINAL, SEE DA DETAILS FOR COLUMN & PLAN DETAILS.
- C.G. CORNER GUARDS, SEE SPECS
 - D.H.O. DOOR HOLD OPEN, SEE SPECS & ELEC. DRAWINGS
 - D9 DOWN SPOUT, SEE PLUMBING & CIVIL DRAWINGS
 - E.J. EXPANSION JOINT, SEE DA: 503
 - F.D. FLOOR DRAIN, SEE PLUMBING DRAWINGS
 - F.E.C. FIRE EXTINGUISHER CABINET SEE DA 101B
 - H.B. HOSE BIB, SEE PLUMBING DRAWINGS
 - M.B. MARKER BOARD, SEE DA MANUAL
 - N.I.C. NOT IN CONTRACT (BY OWNER) ITEMS
 - PROJ. CEILING MOUNTED PROJECTOR, SEE ELEC. DIAG.'S
 - S.B. SMART BOARD (BY OWNER), SEE ELEC.
 - T.B. TACK BOARD, SEE DA MANUAL
 - T.S. TRANSITION STRIP, SEE DA 928

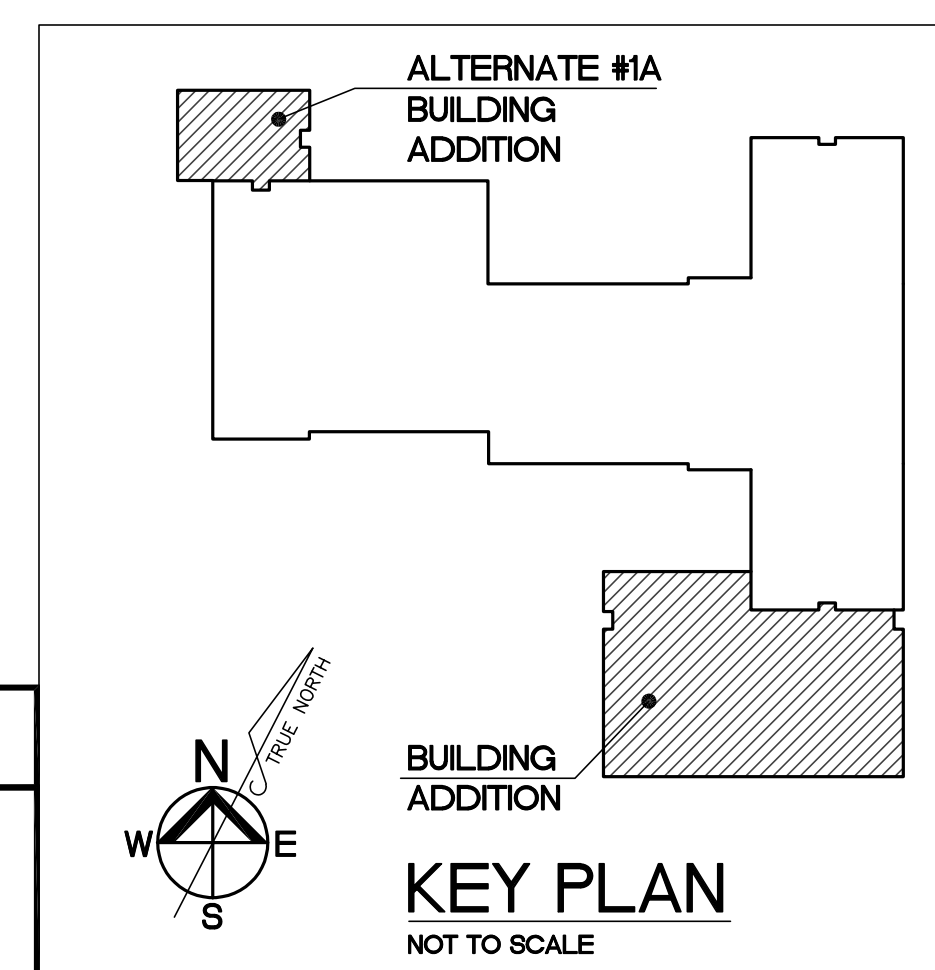
FLOOR PLAN KEYED NOTES:

- NO WORK UNLESS NOTED OTHERWISE - EXISTING CONDITIONS TO REMAIN. PROTECT AREA DURING DEMOLITION AND NEW CONSTRUCTION.
- ADJUSTABLE SHELVES, SEE DA:1203-1204
- NEW CONCRETE WALKWAY, SEE CIVIL DIAGS.
- INFILL & PAINT (FN. 9) EXISTING OPENING TO MATCH EXISTING ADJACENT WALL CONSTRUCTION (MASONRY/MTL. STUDS) WHERE WINDOWS HAVE BEEN REMOVED. SEE DA: 160
- FIRE EXTINGUISHER CABINET, SEE DA 101B
- RELOCATED CARD READER RETAINED FROM DEMOLITION, SEE ELEC.
- CARD READER TO MATCH EXISTING, SEE ELEC.
- CONCRETE DOOR STOOP, SEE DA 303
- PROVIDE (2) 8" LONG DISPLAY STRIPS, MOUNTED 6'-0" AFF, SEE SPECS
- CONCRETE FILLED STEEL PIPE BOLLARD, SEE DA 501
- INSTALL NEW ALUMINUM THRESHOLD IN EXISTING DOORWAY. SET IN BED OF CAULK
- TEMPORARY PARTITION BY G.C. DURING CONSTRUCTION W/ LOCKABLE DOOR

1/8" = 1'-0"
PARTIAL FLOOR PLAN
A1.3A SOUTH ADDITION



FIELD VERIFY ALL DIMENSIONS NOTED AS +/-
 SCHEDULES AND DETAILS ARE LOCATED ON SHEETS DESIGNATED 'DA' WHICH ARE BOUND SEPARATE FROM THE PROJECT SPECIFICATIONS.



MARK A. REUTHER
 LICENSE #006452

ARCHITECTURAL CORP.
 NO. 000793

ADDITIONS AND RENOVATIONS TO:
EARLY LEARNING CENTER
3489 BOSCHERTOWN ROAD and ISLAND HARBOR DRIVE
 ST. CHARLES COUNTY, MISSOURI

CONSULTING ENGINEERS:
 CIVIL/SURVEY STRUCTURAL MECH/ELEC/PLUMB
 BAX ENGINEERING
 ASDG
 MCCLURE ENGINEERING

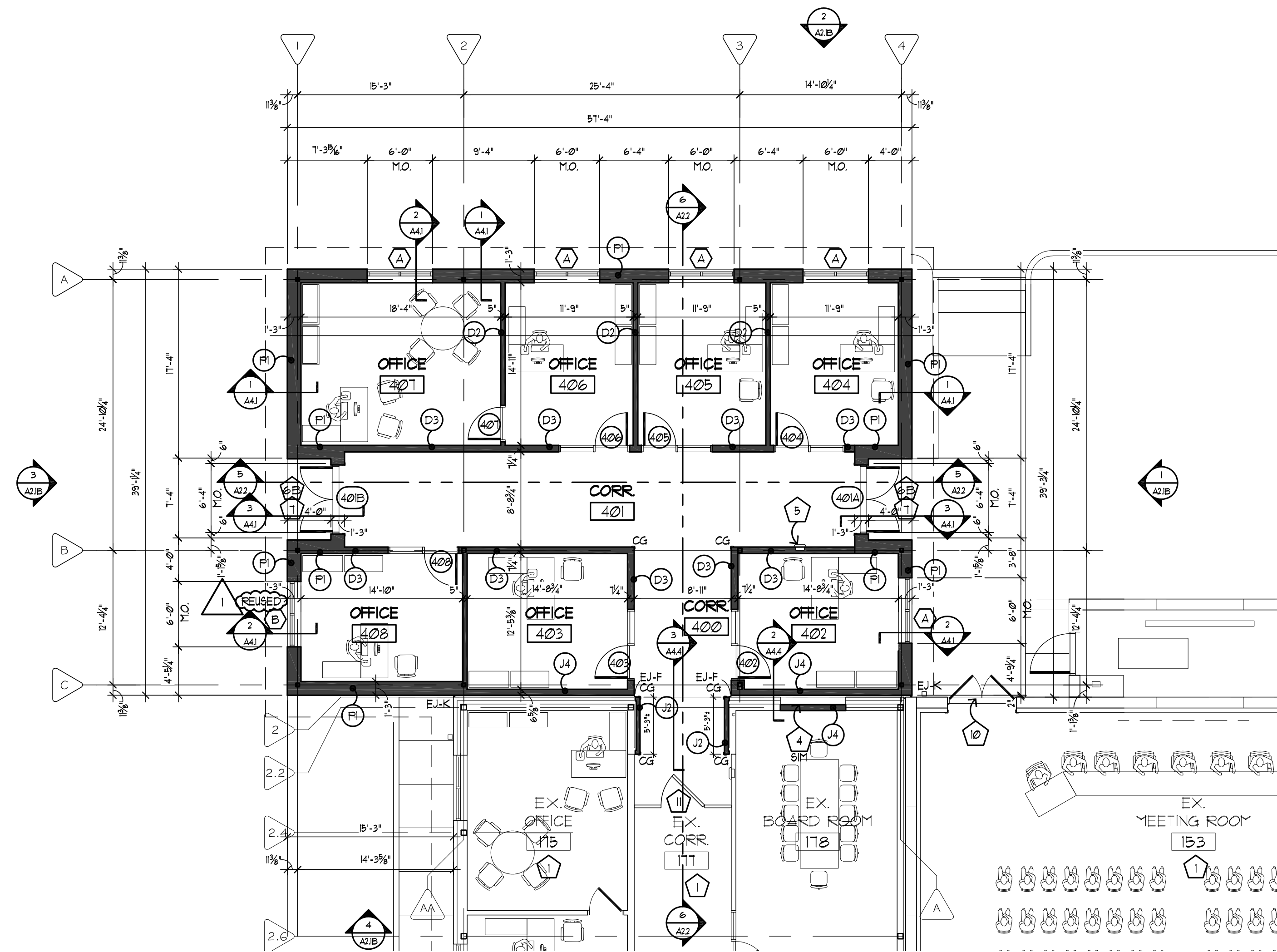
ARCHITECTS
HOENER ASSOCIATES, INC.
 6707 PLAINVIEW AVENUE
 ST. LOUIS, MISSOURI 63109
 Ph. (314) 781-9855

ALL DIMENSIONS MUST BE VERIFIED AT BUILDING BEFORE WORK IS EXECUTED. THIS DRAWING IS THE PROPERTY OF THE ARCHITECTS AND SHALL NOT BE COPIED OR DUPLICATED WITHOUT THEIR CONSENT.

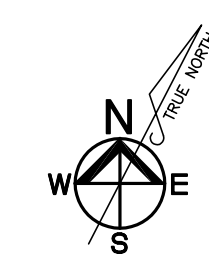
proj. no. 23-09C
 date issued
JULY 02, 2024
 date revised
 ADD#1 07/23/24

drawn by **EF**
 checked by **MR**
 sheet no.

A1.3A
 SD-6



1/8" = 1'-0"
1 PARTIAL FLOOR PLAN
A1.3B NORTH ADDITION - ALT. #1A



FLOOR PLAN GENERAL NOTES

- REFER TO DA: 112 FOR WALL, PARTITION TYPES.
- REFER TO DA: 130-138 THRU FOR COLUMN MATRIX AND DETAILS.

FLOOR PLAN LEGEND

MASONRY DIMENSIONS ARE NOMINAL, SEE DA DETAILS FOR COLUMN & PLAN DETAILS.

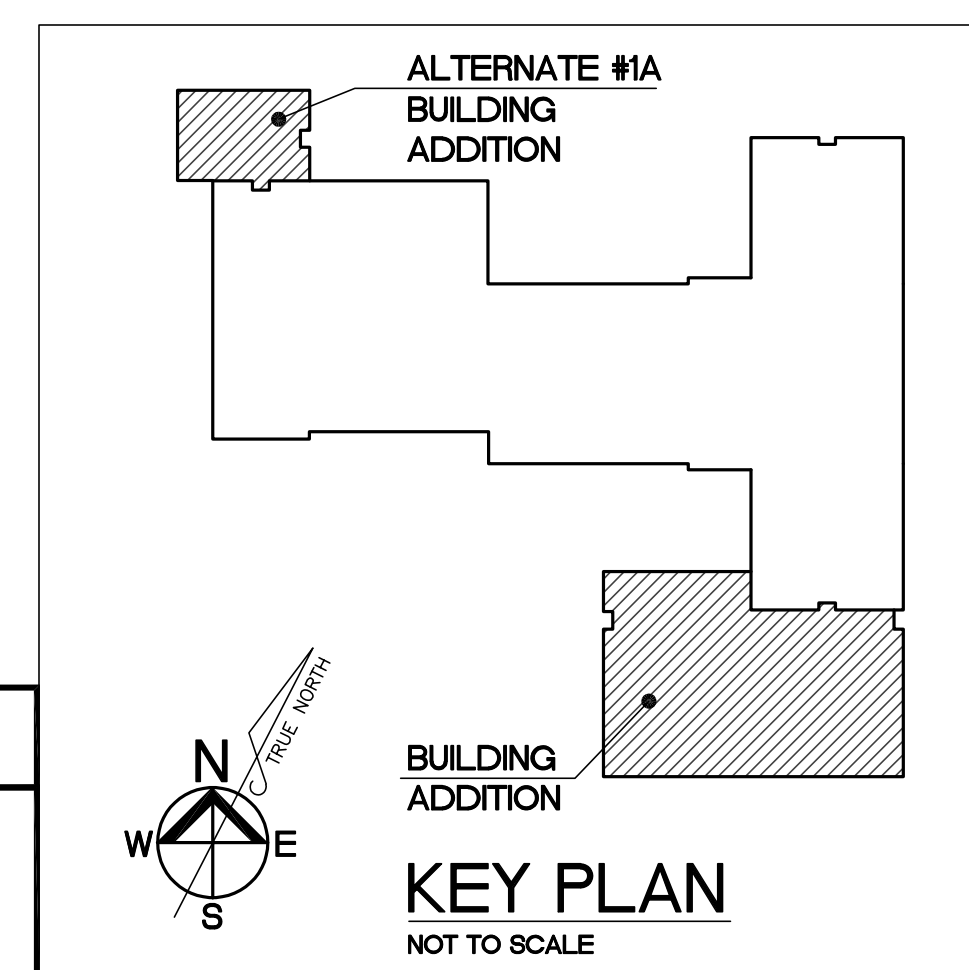
C.G. CORNER GUARDS, SEE SPECS
D.H.O. DOOR HOLD OPEN, SEE SPECS & ELEC. DRAWINGS
D.S. DOWN SPOUT, SEE PLUMBING & CIVIL DRAWINGS
E.J. EXPANSION JOINT, SEE DA: 503
F.D. FLOOR DRAIN, SEE PLUMBING DRAWINGS
F.E.C. FIRE EXTINGUISHER CABINET SEE DA 101B
H.B. HOSE BIB, SEE PLUMBING DRAWINGS
M.B. MARKER BOARD, SEE DA MANUAL
N.I.C. NOT IN CONTRACT (BY OWNER) ITEMS
PROJ. CEILING MOUNTED PROJECTOR, SEE ELEC. DIAG.'S
S.B. SMART BOARD (BY OWNER), SEE ELEC.
T.B. TACK BOARD, SEE DA MANUAL
T.S. TRANSITION STRIP, SEE DA 92B

FLOOR PLAN KEYED NOTES:

- NO WORK UNLESS NOTED OTHERWISE - EXISTING CONDITIONS TO REMAIN. PROTECT AREA DURING DEMOLITION AND NEW CONSTRUCTION.
- ADJUSTABLE SHELVES, SEE DA:12.04-12.05
- NEW CONCRETE WALKWAY, SEE DA 3.01 AND CIVIL DIAG.'S
- INFILL & PAINT (FIN. #3) EXISTING OPENING TO MATCH EXISTING ADJACENT WALL CONSTRUCTION (GYPSUM/MTL. STUDS) WHERE WINDOWS HAVE BEEN REMOVED. SEE DA: 160
- FIRE EXTINGUISHER CABINET, SEE DA 101B
- RELOCATED CARD READER RETAINED FROM DEMOLITION, SEE ELEC.
- CARD READER TO MATCH EXISTING, SEE ELEC.
- CONCRETE DOOR STOOP, SEE DA 3.03
- PROVIDE (2) 8" LONG DISPLAY STRIPS, MOUNTED 6'-0" AFF, SEE SPECS.
- CONCRETE FILLED STEEL PIPE BOLLARD, SEE DA 5.01
- INSTALL NEW ALUMINUM THRESHOLD IN EXISTING DOORWAY. SET IN BED OF CAULK.
- TEMPORARY PARTITION BY G.C. DURING CONSTRUCTION w/ LOCKABLE DOOR.

FIELD VERIFY ALL DIMENSIONS NOTED AS +/-

SCHEDULES AND DETAILS ARE LOCATED ON SHEETS DESIGNATED "DA" WHICH ARE BOUND SEPARATE FROM THE PROJECT SPECIFICATIONS.



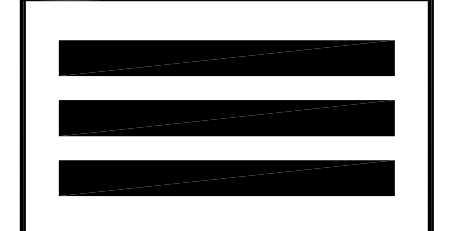
MARK A. REUTHER
LICENSE #006452

ARCHITECTURAL CORP.
NO. 000793

ADDITIONS AND RENOVATIONS TO:
EARLY LEARNING CENTER
3489 BOSCHERTOWN ROAD and ISLAND HARBOR DRIVE
ORCHARD FARM R-V SCHOOL DISTRICT ST. CHARLES COUNTY, MISSOURI

CONSULTING ENGINEERS:
HOENER ASSOCIATES, INC. - ARCHITECTS
6707 PLAINVIEW AVENUE
ST. LOUIS, MISSOURI 63109
Ph. (314) 781-9855

CIVIL/SURVEY
STRUCTURAL
MECH/ELEC/PLUMB
BAX ENGINEERING
ASDG
McCLURE ENGINEERING

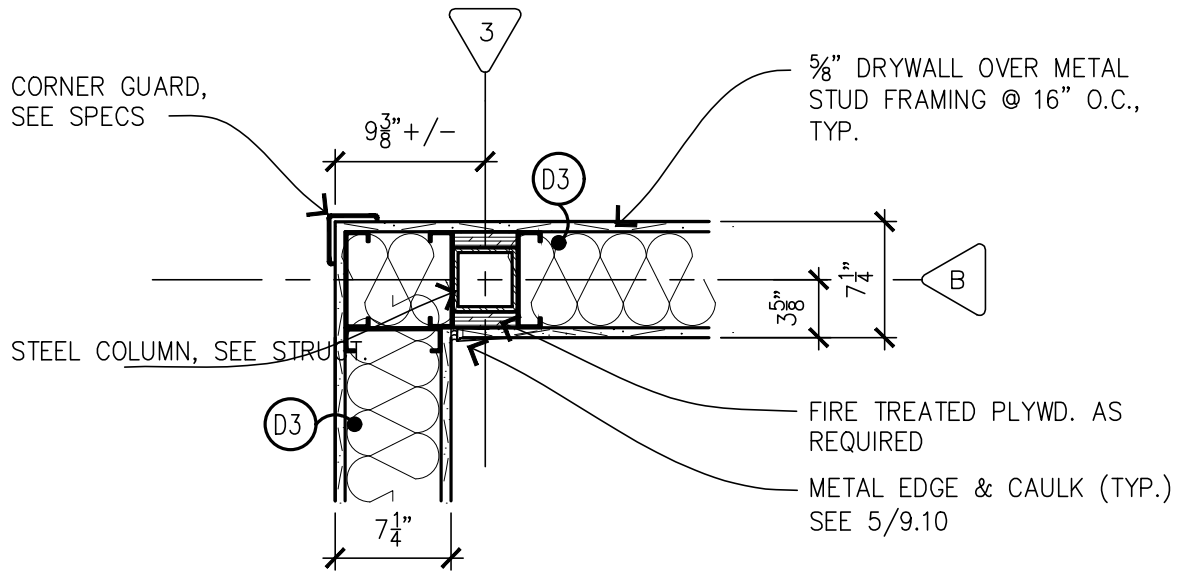


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proj. no. 23-09C
date issued
JULY 02, 2024
date revised
ADD#1 07/23/24

drawn by **BF**
checked by **MR**
sheet no.

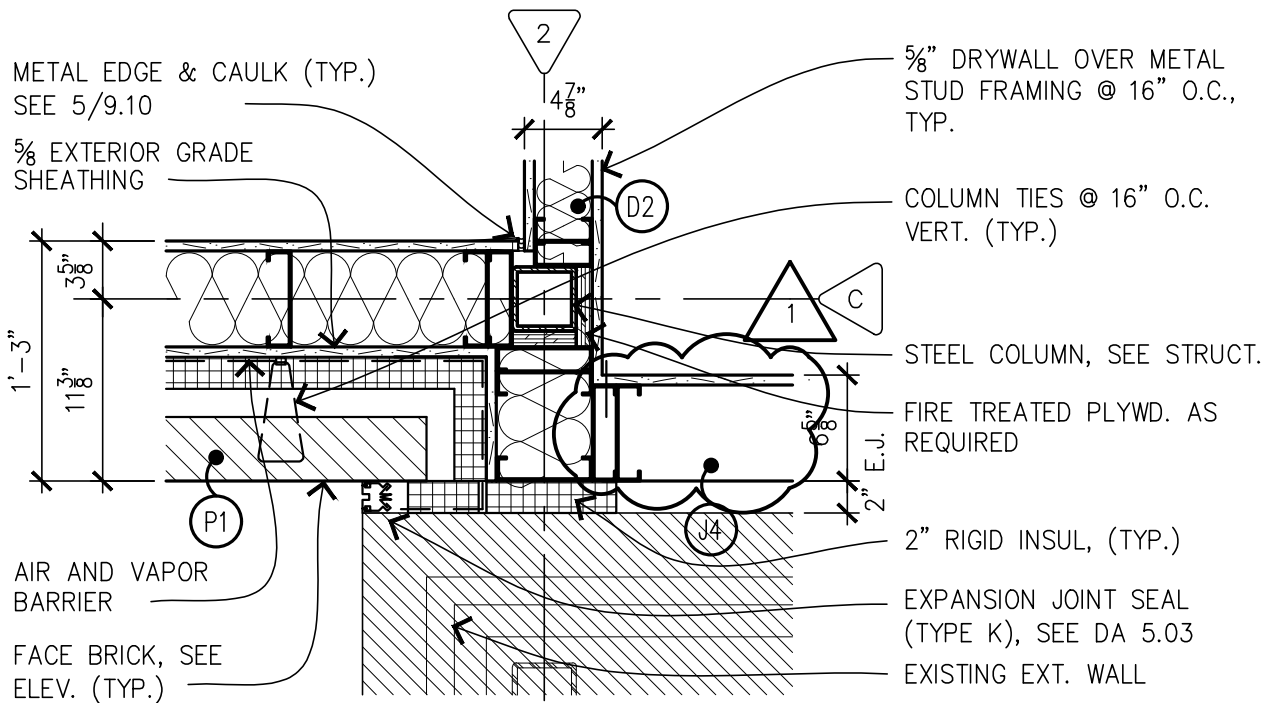
A1.3B
SD-7



1" = 1'-0"

1
1.33

COLUMN DETAIL B-3



1" = 1'-0"

2
1.33

COLUMN DETAIL C-2



HOENER ASSOCIATES, INC.

ARCHITECTS

ST. LOUIS, MISSOURI

MARK A. REUTHER
LICENSE #006452

ARCHITECTURAL CORP.
NO. 000193

PROJECT NO. 23-09C

BY: BF

DATE: 07/02/2024

REV.: SD-8

ADD#1 07/23/24

DA: 1.33

DOOR, SEE DOOR
DETAILS

DOOR FRAME, SEE
DOOR DETAILS

CORNER GUARD,
SEE SPECS

5/8" DRYWALL OVER
METAL STUD FRAMING
@ 16" O.C., TYP.

MTL CORNER BEAD,
SEE 3/9.11

5/8" DRYWALL OVER METAL
STUD FRAMING @ 16" O.C.,
TYP.

METAL EDGE & CAULK (TYP.)
SEE 5/9.10

EXPANSION JOINT COVER
(TYPE F), SEE DA 5.03

EXISTING EXT. WALL

1" = 1'-0"

1
1.34

COLUMN DETAIL C-3

5/8" DRYWALL OVER METAL
STUD FRAMING @ 16" O.C.,
TYP.

STEEL COLUMN, SEE
STRUCT.

2" RIGID INSUL, (TYP.)

5/8" EXTERIOR GRADE
SHEATHING

COLUMN TIES @ 16" O.C.
VERT. (TYP.)

FACE BRICK, SEE ELEV.

FIRE TREATED PLYWD. AS
REQUIRED

AIR AND VAPOR BARRIER

EXPANSION JOINT SEAL
(TYPE K), SEE DA 5.03

EXISTING EXT. WALL

1" = 1'-0"

2
1.34

COLUMN DETAIL C-4



HOENER ASSOCIATES, INC.

ARCHITECTS

ST. LOUIS, MISSOURI

MARK A. REUTHER
LICENSE #006452

ARCHITECTURAL CORP.
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PROJECT NO. 23-09C

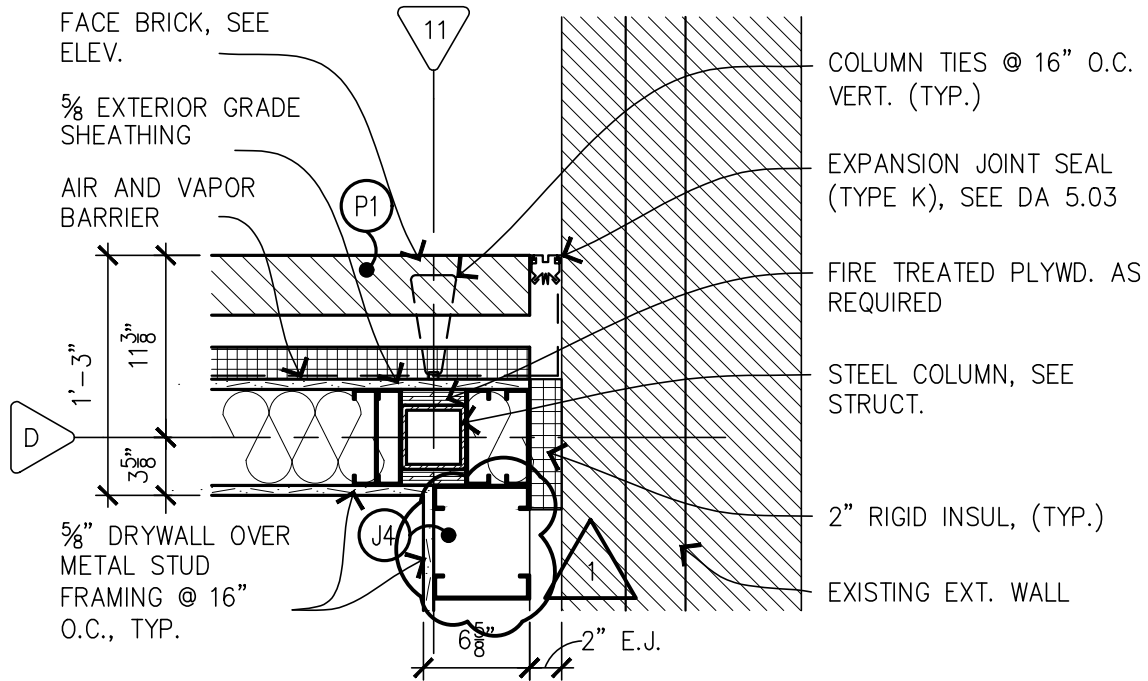
BY: BF

DATE: 07/02/2024

REV.: SD-9

ADD#1 07/23/24

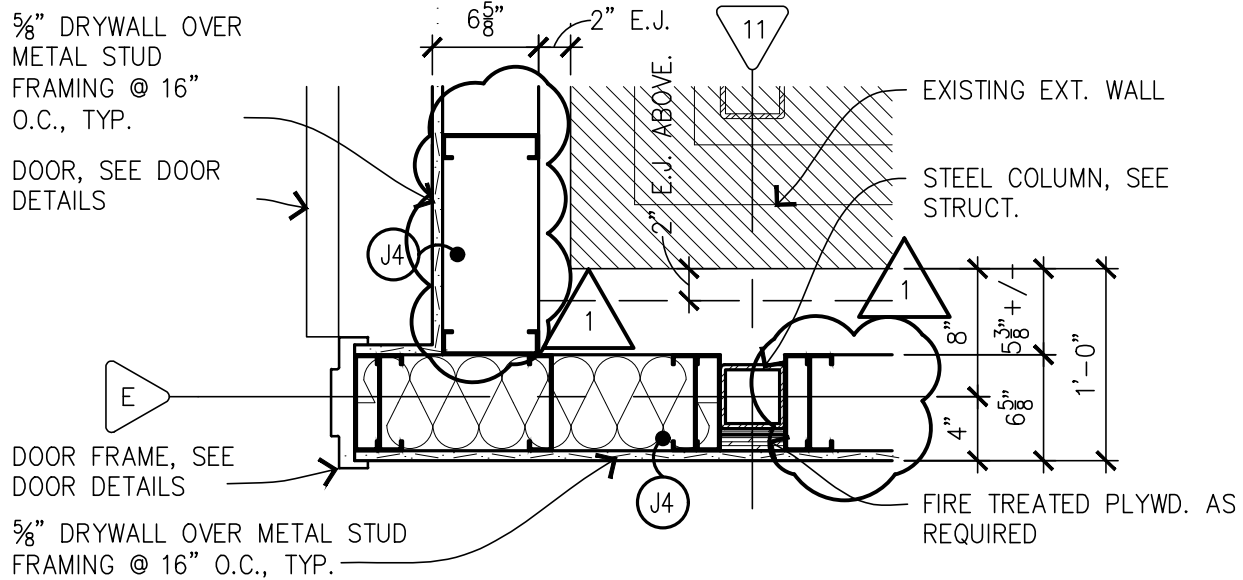
DA: 1.34



1" = 1'-0"

1
1.35

 COLUMN DETAIL D-11



1" = 1'-0"

2
1.35

 COLUMN DETAIL E-11

HOENER ASSOCIATES, INC.
ARCHITECTS
ST. LOUIS, MISSOURI

MARK A. REUTHER
LICENSE #006452

ARCHITECTURAL CORP.
NO. 000193

PROJECT NO. 23-09C

BY: BF

DATE: 07/02/2024

REV.: SD-10

1

 ADD#1 07/23/24

DA: 1.35