

PROJECT LOCATION

Contract Drawings For

# City of Lee's Summit, MO

## Water Utilities Facility & Parking Lot Expansion Final Development Plan

Project No. 10417754  
1200 SE Hamblen Rd, Lee's Summit, MO 64081

Date: 04/18/2025

**CITY GENERAL NOTES:**

- ALL CONSTRUCTION SHALL FOLLOW THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL AS ADOPTED BY ORDINANCE 5813. WHERE DISCREPANCIES EXIST BETWEEN THESE PLANS AND THE DESIGN AND CONSTRUCTION MANUAL, THE DESIGN AND CONSTRUCTION MANUAL SHALL PREVAIL.
- THE CONTRACTOR SHALL CONTACT THE CITY'S DEVELOPMENT SERVICES ENGINEERING INSPECTION TO SCHEDULE A PRE-CONSTRUCTION MEETING WITH A FIELD ENGINEERING INSPECTOR PRIOR TO ANY LAND DISTURBANCE WORK AT (816) 969-1200.



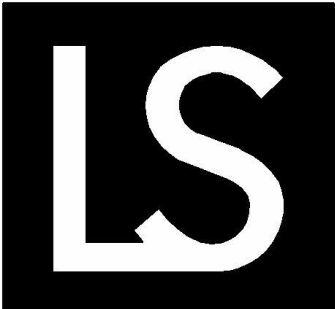
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1	04/18/2025	FDP WITH CITY COMMENTS INCORPORATED
0	03/07/2025	FINAL DEVELOPMENT PLAN
ISSUE	DATE	DESCRIPTION

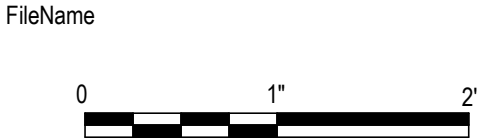
PROJECT MANAGER	K. PRINDS
CIVIL	M. WIEBELHAUS
ARCHITECTURAL	E. BUTTMAN
MECHANICAL	M. WARRICK
PROJECT NUMBER	10417754



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Water Utilities Facility & Parking Lot  
Expansion

SHEET INDEX

FILE NAME  
SCALE

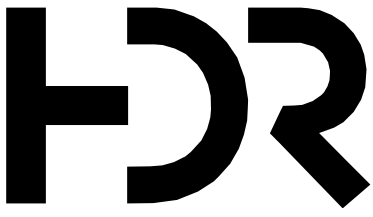


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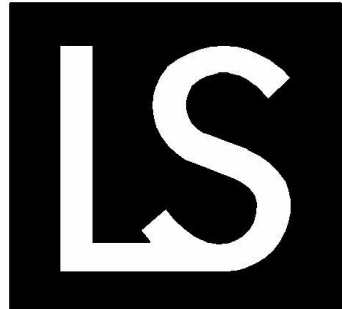
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A/C A/E A AB ABAN ABC ABT AC ACK ACP  ACST AD ADDL ADH ADJ AF AFF AFG AGGR AI A/C ALIG ALT ALUM AM AMB ANC AO AP APRX APVD ARCH ASSY AT ATC ATM AUX AVE AVG AWG AWT  B TO B BAL BBB BC  BD BE BF BITUM BKG BL BLDG BLK BLKG BM BOC BOD BOD BOL BOP BOR BOT BOU BP BRG BRGP BRKT BS BTU BTW BTWLD BU BUR BW BYP  CTOC C&G C CAB CAP CAT CAV CB CCB CCW CDF CE CER CF CFL CHBD CHD CHFR CHH CI CIP CIPB CIRC CJ CKT CL CLG CLKG CLR CMH CMP CMU CO COL COM COMB COMM COMP CON	CONC CONN CONST CONT COOR COPR CP CPLG CRL CSC CSK CSS CT CTJ CTR CTRL CVT CU CW CY  d D DB DBA DBL DC DEG DEG C DEG F DEMO DEP DEPT DET DI DIA DIAG DIFF DIM DISCH DIST DIV DL DMJ DMPF DN DO DP DPDT DPST DS DT DUP DWG DWL DWR  E EA EC ECC ED EDB EE EF EFF EHH EIFS EJ EL ELEC EMBD EMER ENH ENCL ENGR ENTR EOP EQ EQUIV ES ESEW EST EW EWC EWEF EWTB EXC EXH EXP EXT EXT  F TO F F&B FAB FB FBD FBG FBM FBO FC FCA FD FDC FDR FDTN FE FEC FES FEXT FF FG FH FIG FIN FJT FL	FV FLEX FLG FLOR FLR FLS FN FO FOB FOC FOF FOM FOS FOT FPT FR FRP FRTM FS FT FTG FUR FURN FUT FV FW FWD FWE FXTR  G GA GAL GALV GB GC GD GEN GFCI GFMU GG GJ GL GLB GND GP GR GRTG GSB GT GVL GW GWB GYP  H HB HBD HC  HD HDR HDW HEX HGR HH HID HM HORIZ HP HPC HPS HPT HR HS HSS HT HTG HV HVAC HWD HWL HYD HZ  ID IE IF IH IMP IN INC INF INSTR INSUL INT INTR INV IPS IPT IR IRR ISO  JB JCT JF JST JT  K KB KMIL KO KSI KIW	L LAD LAM LATL LB LCBT LDG LDR LE LF LFG LH LIN LIQ LLH LLV LMLU LNG LOC LP LPS LR LT LTD LTG LTL LTMG LV LVL LVR LW LWC LWL  MA MACH MAINT MAN MATL MAX MB MBR MC MCB MCJ MDMJ MECH MED MFR MH MIN MIR MISC MJ ML MLO MMB MO MOD MON MPT MROWB MS MSL MT MU MULL MV MW  N NA NAT NC NEG NF NIC NO NOM NPS NPT NS NTS NWL  O TO O OA OC OCPD OD OED OF OFCI OFOI OG OH OPNG OPP OPT OR ORD ORIG OVFL OVHG OZ  P PA PAR PB PBD PC PCC PCF PCT PE PED	PEN PERF PERM PERP PF PFMU PH PI PKG PL PLAS PLAT PLBG PLF PNEU POL PP PRC PREF PREFAB PRELIM PREP PRES PRI PROP PROT PS PSF PSI PSIA PSIG PREST PT PTN PVC PVMT PWD PWJ PZ  Q QT QTR QTY QUAL  R&R R&S RAD RA RB RCPT RD REC RECD RECT RED REF REINF REM REQD RESIL RET REV RF RFG RFL RGH RGS RGS-PVC RH RL RLFA RND RNG RO ROW RPM RR RSP RT RVT RY  S SA SAMU SAN SB SC SCH SCHEM SCN SE SEC SECT SEP SF SG SH SHT SHTG SIL SIM SJ SLD SLV SMLS SOG SP SPA SPEC SPLY SPST SPT SQ SR	SS SST ST STA STD STIF STIR STL STOR STR SUB SUC SUSP SY SYM SYMM SYN SYS  T&B T&G T TA TAN TBM TCE TEF TEMP THD THK TKBD TOB TOC TOD TOF TOG TOL TOM TOP TOPO TOE TOW TP TPD TPG TR TRANS TRD TYP  U UG ULT UNFN UNO UTIL  V VA VAC VAR VB VC VCP VCT VEL VENT VERT VERTS VG VIF VIN VOL VPC VPI VPT VS VTR VVC  W/ W/O W WB WC WD WF WG WH WI WL WLD WM WP WS WSCT WT WTHP WWF  XP XS XSECT XXS  YH YS	<div>GENERAL NOTES</div> <div><div>1.</div><div>THESE ABBREVIATIONS APPLY TO THE ENTIRE SET OF CONTRACT DRAWINGS.</div></div> <div><div>2.</div><div>LISTING OF ABBREVIATIONS DOES NOT IMPLY THAT ALL ABBREVIATIONS ARE USED IN THE CONTRACT DRAWINGS.</div></div> <div><div>3.</div><div>ABBREVIATIONS SHOWN ON THIS SHEET INCLUDE VARIATIONS OF A WORD. FOR EXAMPLE, "MOD" MAY MEAN MODIFY OR MODIFICATION, "INC" MAY MEAN INCLUDED OR INCLUDING, AND "REINF" MAY MEAN REINFORCE OR REINFORCING.</div></div> <div><div>4.</div><div>SEE INSTRUMENTATION AND GENERAL LEGEND SHEETS FOR PROJECT-SPECIFIC EQUIPMENT AND PIPING SYSTEM ABBREVIATIONS.</div></div>	



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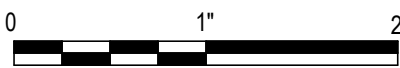


City of Lee's Summit, MO  
Water Utilities Facility & Parking Lot  
Expansion

ABBREVIATIONS

FILE NAME  
SCALE

File Name  
12" = 1'-0"



SHEET  
00G002



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MATERIALS IN PLAN/SECTION		GENERAL SYMBOLOGY		GENERAL TAGGING		SHEET NAMING CONVENTION		FIRE & LIFE SAFETY		GENERAL NOTES	
<p><b>FILLED REGIONS - MATERIALS</b> "MATERIAL" FILLED REGIONS ARE DRAFTING HATCH PATTERNS THAT REPRESENTS AN ACTUAL MATERIAL OR PRODUCT.</p> <div><div><div>MATERIAL - BITUMINOUS PAVING (ASPHALT)</div><div>MATERIAL - CONCRETE - ARCHITECTURE PRECAST WALL PANEL</div><div>MATERIAL - CONCRETE - ARCHITECTURAL PRECAST WALL PANEL</div><div>MATERIAL - CONCRETE - CAST-IN-PLACE</div><div>MATERIAL - CONCRETE - GLASS FIBER REINFORCED</div><div>MATERIAL - CONCRETE - LIGHTWEIGHT</div><div>MATERIAL - CONCRETE - STRUCTURAL</div><div>MATERIAL - EFIS</div><div>MATERIAL - FILL - COURSE - CRUSHED STONE</div><div>MATERIAL - FILL - FINE - GRAVEL</div><div>MATERIAL - FILL - FINE - SAND</div><div>MATERIAL - FILL - MEDIUM - GRAVEL</div><div>MATERIAL - FILTER POINT MAT - PLAN</div><div>MATERIAL - FIREPROOFING - MINERAL WOOL</div><div>MATERIAL - FIREPROOFING - SEALANT</div><div>MATERIAL - FIREPROOFING - SPRAY-APPLIED</div><div>MATERIAL - FLOOR - CARPET - STYLE 1</div><div>MATERIAL - FLOOR - CARPET - STYLE 2</div><div>MATERIAL - FLOOR - TERRAZZO - STYLE 1</div><div>MATERIAL - FLOOR - TERRAZZO - STYLE 2</div><div>MATERIAL - GLAZING</div><div>MATERIAL - GLAZING - SPANDREL</div><div>MATERIAL GRATING - PLAN</div><div>MATERIAL GRATING - SECTION</div><div>MATERIAL - GROUT</div><div>MATERIAL - GYPSUM - PLASTER</div><div>MATERIAL - GYPSUM - WALLBOARD</div><div>MATERIAL - INSULATION - BATTING - SECTION</div><div>MATERIAL - INSULATION - RIGID FOAM</div><div>MATERIAL - MASONRY - BRICK</div><div>MATERIAL - MASONRY - CMU</div><div>MATERIAL - MASONRY - DOLMITE</div><div>MATERIAL - MASONRY - MORTAR</div><div>MATERIAL - MASONRY - STRUCTURAL CLAY TILE</div><div>MATERIAL - METAL - ALUMINUM</div><div>MATERIAL - METAL - CHECKERED PLATE - PLAN</div><div>MATERIAL - METAL - ORNAMENTAL</div><div>MATERIAL - METAL - STEEL</div><div>MATERIAL - PLASTER STUCCO</div><div>MATERIAL - PLASTIC</div><div>MATERIAL - RESILIENT TILE</div><div>MATERIAL - RIPRAP - PLAN AND/OR SECTION</div><div>MATERIAL - SEALANT - ACOUSTICAL</div><div>MATERIAL - SEALANT - FIRE SEALANT</div><div>MATERIAL - SOD - SECTION</div></div></div> <div><div><div>MATERIAL - SOIL - COMPACTED - EARTH</div><div>MATERIAL - SOIL - COMPACTED - FINE</div><div>MATERIAL - SOIL - UNDISTURBED - FINE</div><div>MATERIAL - SOIL - UNDISTURBED - EARTH</div><div>MATERIAL - STONE - CAST</div><div>MATERIAL - STONE - CUT FINISHED</div><div>MATERIAL - SYSTEM - DRAINABLE EXTERIOR INSULATION AND FINISH</div><div>MATERIAL - TERRAZZO - 1</div><div>MATERIAL - TERRAZZO - 2</div><div>MATERIAL - TILE - PORCELAIN</div><div>MATERIAL - WEEP JOINT MORTAR PROTECTION SYSTEM - SECTION</div><div>MATERIAL - WOOD - FINISH - COURSE GRAIN</div><div>MATERIAL - WOOD - FINISH - FINE GRAIN</div><div>MATERIAL - WOOD FLOORING</div><div>MATERIAL - WOOD - GLULAM</div><div>MATERIAL - WOOD - MDF</div><div>MATERIAL - WOOD - PARTICLE BOARD</div><div>MATERIAL - WOOD - PLYWOOD</div><div>MATERIAL - WOOD - CONTINUOUS - SECTION</div><div>MATERIAL - WOOD - BLOCKING - SECTION</div></div><p><b>FILLED REGIONS - GRAPHICS</b> GRAPHIC FILLED REGIONS ARE DRAFTING HATCH PATTERNS THAT ARE A SIMPLE GRAPHIC PATTERN AND DOES NOT REPRESENT A MATERIAL OR PRODUCT.</p><div><div>GRAPHIC - CONTRACT LIMIT - NOT-IN-CONTRACT</div><div>GRAPHIC - DEMOLITION</div></div><p><b>FILLED REGIONS - SURFACE</b> SURFACE FILLED REGIONS ARE MODELING HATCH PATTERNS THAT REPRESENT A MATERIAL OR PRODUCT AS REPRESENTED ON A VERTICAL OR HORIZONTAL SURFACE.</p><p><b>CEILING TILES</b></p><div><div>SURFACE - CEILING TILE - 24" x 24"</div><div>SURFACE - CEILING TILE - 24" x 24" - DEMO</div><div>SURFACE - CEILING TILE - 24" x 48"</div><div>SURFACE - CEILING TILE - 24" x 48" - DEMO</div><div>SURFACE - CEILING TILE - 24" x 72"</div><div>SURFACE - CEILING TILE - 24" x 72" - DEMO</div><div>SURFACE - CEILING TILE - 48" x 48"</div><div>SURFACE - CEILING TILE - 48" x 48" - DEMO</div><div>SURFACE - CEILING - ACOUSTICAL TILE - SECTION</div></div><p><b>MASONRY</b></p><div><div>SURFACE - MASONRY - BRICK - MODULAR - RUNNING BOND</div><div>SURFACE - MASONRY - CMU - 8" x 16" - RUNNING BOND</div><div>SURFACE - MASONRY - CMU - 8" x 16" - STACKED BOND</div></div><p><b>METALS</b></p><div><div>SURFACE - ENTRANCE GRID - 65 MM</div></div></div>		<p>ARROW INDICATES DIRECTION OF TRUE NORTH</p> <p>LINE INDICATES DIRECTION OF PLAN NORTH</p> <p><b>NORTH ARROW</b></p> <p>MATCH LINE SEE XX/XXXXXXXXXX</p> <p>MATCH LINE</p> <p><b>PLAN</b> 1/4" = 1'-0"</p> <p>PLAN TITLE ON SHEET</p> <p>NOTE 1 1/4" = 1'-0"</p> <p><b>VIEW TITLE</b></p> <p>NOTE 2</p> <p><b>DETAIL</b> FOR REFERENCING DETAILS INCLUDED IN DRAWING SET. 1. DETAIL NUMBER 2. SHEET WHERE DETAIL IS LOCATED *</p> <p><b>SECTION</b> 1. SECTION LETTER 2. SHEET WHERE SECTION VIEW IS FIRST CUT *</p> <p><b>ELEVATION</b> 1. ELEVATION IDENTIFICATION NUMBER 2. SHEET WHERE POINT OF VIEW MARKER CAN BE FOUND *</p> <p><b>SECTION, DETAIL, ELEVATION TITLE</b></p> <p>DETAIL NUMBER SHEET WHERE DETAIL IS LOCATED *</p> <p><b>DETAIL CALLOUT</b></p> <p><b>FOR REFERENCING DETAILS INCLUDED IN DRAWING SET</b></p> <p>ARROW INDICATES DIRECTION OF SECTION CUT SECTION LETTER SHEET WHERE SECTION IS LOCATED</p> <p><b>FULL BUILDING SECTION CUT MARKER</b></p> <p>SECTION LETTER FLAG INDICATES DIRECTION OF SECTION CUT SHEET WHERE SECTION IS LOCATED</p> <p><b>SECTION CUT MARKER</b></p> <p>ARROW INDICATES POINT OF VIEW ELEVATION NUMBER INTERIOR EXTERIOR SHEET WHERE ELEVATION IS LOCATED *</p> <p><b>SINGLE ELEVATION OR PHOTO MARKER</b></p> <p>ARROW INDICATES POINT OF VIEW ELEVATION ELEVATION NUMBER INDICATES SHEET WHERE ELEVATION IS LOCATED</p> <p><b>MULTIPLE ELEVATION OR PHOTO MARKER</b></p> <p>TARGET ELEVATION</p> <p><b>TARGET ELEVATION MARKER</b></p> <p>* EXCEPTIONS WHERE SHEET NUMBER IS REPLACED BY A DASH (-)</p> <p>1. FOR COMMON DETAILS, SECTIONS, ELEVATIONS OR DETAILS THAT ARE CUT OR CALLED OUT ON MULTIPLE SHEETS. 2. SECTIONS, ELEVATIONS OR DETAILS THAT ARE LOCATED ON THE SAME SHEET THEY ARE CUT OR CALLED OUT ON.</p>	<p><b>ROOM/SPACE</b></p> <p><b>NAME</b> XX-XX ROOM OR SPACE XXX DOOR XXX XXX XXXX XXXX FIRE DOOR/STAIR</p> <p>DOOR MARK STAIR XXX XXX XXXX XXXX FIRE DOOR/STAIR</p> <p>A NEW COLUMN GRID BUBBLE A EXISTING COLUMN GRID BUBBLE X WALL TYPE X CURTAIN WALL X WINDOW TYPE X ACCESSORY, FURNITURE, AND MISCELLANEOUS EQUIPMENT IDENTIFIER X LOUVER TYPE X# SHEET KEYNOTE X# REVISION DELTA</p> <p><b>EQUIPMENT IDENTIFICATION</b> NOTE: THE BELOW EQUIPMENT TAG IS AN EXAMPLE ONLY. MODIFY FIELDS AS REQUIRED PER THE PROJECT STANDARD.</p> <p><b>FIGURE</b> SERVICE ABBREVIATION AREA DESIGNATION EQUIPMENT ABBREVIATION BUILDING OR STRUCTURE NUMBER EQUIPMENT NUMBER</p> <p><b>EXAMPLE</b> INDICATES NON-POTABLE WATER INDICATES PUMP BUILDING 20 PUMP 23</p> <p><b>PIPING</b> NOTE: THE BELOW PIPE TAG IS AN EXAMPLE ONLY. MODIFY FIELDS AS REQUIRED PER THE PROJECT STANDARD.</p> <p><b>FIGURE</b> LINE SIZE SERVICE</p> <p><b>EXAMPLE</b> 36"-PLE 36" PLANT EFFLUENT</p> <p><b>PIPING (ALTERNATE)</b></p> <p><b>FIGURE</b> LINE SIZE SERVICE</p> <p><b>EXAMPLE</b> 36"-PLE 36" PLANT EFFLUENT</p> <p><b>GENERAL LINE STYLES</b></p> <div><div>4-HOUR FIRE RATED WALL</div><div>3-HOUR FIRE RATED WALL</div><div>2-HOUR FIRE RATED WALL</div><div>1-HOUR FIRE RATED WALL</div><div>COLUMN GRID LINE</div><div>CENTERLINE</div><div>CONTRACT LIMIT</div><div>ELEVATION LINE</div><div>PROPERTY LINE</div></div>	<p><b>EXAMPLE:</b> 00 GENERAL 01 SITE PLANNING 10 MAINTENANCE BAY</p> <p><b>SINGLE DISCIPLINE DESIGNATOR &amp; DISCIPLINE ORDER*</b></p> <div><div>G X V B C L S A I Q F P D M E W T R U Y Z O</div><div>GENERAL DEMOLITION/HAZARDOUS MATERIAL SURVEYING/MAPPING GEOTECHNICAL CIVIL LANDSCAPE STRUCTURAL ARCHITECTURAL INTERIORS EQUIPMENT FIRE PROTECTION PLUMBING PROCESS MECHANICAL ELECTRICAL DISTRIBUTED ENERGY TELECOMMUNICATIONS RESOURCE UNIVERSAL/OTHER DISCIPLINES INSTRUMENTATION &amp; CONTROLS CONTRACTOR/SHOP DRAWINGS OPERATIONS</div></div> <p><b>SHEET TYPE DESIGNATOR</b></p> <div><div>0 1 2 3 4 5 6 7</div><div>GENERAL (SYMBOLS, LEGENDS) PLANS ELEVATIONS SECTIONS LARGE SCALE VIEWS DETAILS SCHEDULES AND DIAGRAMS OTHER VIEWS</div></div> <p>*NCS ALLOWS THE COMBINED USE OF BOTH SINGLE AND DOUBLE LETTER DISCIPLINE DESIGNATORS WITHIN A PROJECT.</p> <p><b>EXAMPLE 1 (WITH BUILDING SERIES, SINGLE LETTER DESIGNATOR)</b></p> <p>GRAVITY THICKENER STRUCTURAL FOUNDATION PLAN, DRAWING 01</p> <div><div>0 2</div><div>BUILDING OR AREA 02</div></div> <p>BUILDING OR AREA DESIGNATION</p> <div><div>S -</div><div>STRUCTURAL</div></div> <p>DISCIPLINE DESIGNATOR</p> <div><div>1</div><div>PLAN</div></div> <p>SHEET TYPE DESIGNATOR</p> <div><div>0 1</div><div>SHEET 01</div></div> <p>SHEET NUMBER</p> <div><div>0 2 S - 1 0 1</div><div>EXAMPLE</div></div>	<p>1. THIS IS A STANDARD SHEET SHOWING COMMON SYMBOLOGY. ALL SYMBOLS ARE NOT NECESSARILY USED ON THIS PROJECT. 2. SCREENING OR SHADING OF WORK IS USED TO INDICATE EXISTING COMPONENTS OR TO DE-EMPHASIZE PROPOSED IMPROVEMENTS TO HIGHLIGHT SELECTED TRADE WORK. REFER TO CONTEXT OF EACH SHEET FOR USAGE.</p>						



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CIVIL MAPPING SYMBOLOGY		UTILITY/CIVIL LINE SYMBOLOGY	
<div><div><div><div></div><div></div><div></div></div><div>EMBANKMENT SLOPE (CUT)</div></div><div><div><div><div></div><div></div><div></div></div><div>EMBANKMENT SLOPE (FILL)</div></div><div><div><div><div></div><div></div><div></div></div><div>EMBANKMENT SLOPE RIGHT ARROW RIGHT</div></div><div><div><div><div></div><div></div><div></div></div><div>EMBANKMENT SLOPE LEFT ARROW LEFT</div></div><div><div><div><div></div><div></div><div></div></div><div>SPOT ELEVATION/POINT #</div></div><div><div><div><div></div><div></div><div></div></div><div>SURVEY BENCHMARK</div></div><div><div><div><div></div><div></div><div></div></div><div>SURVEY CONTROL POINT</div></div><div><div><div><div></div><div></div><div></div></div><div>HORIZONTAL CONTROL POINT</div></div><div><div><div><div></div><div></div><div></div></div><div>VERTICAL CONTROL POINT</div></div><div><div><div><div></div><div></div><div></div></div><div>SECTION CORNER MONUMENT</div></div><div><div><div><div></div><div></div><div></div></div><div>SECTION CORNER NO MONUMENT</div></div><div><div><div><div></div><div></div><div></div></div><div>IDENTIFICATION AND APPROXIMATE LOCATION OF SOIL TEST HOLE</div></div><div><div><div><div></div><div></div><div></div></div><div>TEST PIT</div></div><div><div><div><div></div><div></div><div></div></div><div>SOIL BORING</div></div><div><div><div><div></div><div></div><div></div></div><div>BUOY</div></div><div><div><div><div></div><div></div><div></div></div><div>FLOW ARROW</div></div><div><div><div><div></div><div></div><div></div></div><div>WATER LEVEL IN SECTION/PROFILE</div></div><div><div><div><div></div><div></div><div></div></div><div>TIDE GAUGE</div></div><div><div><div><div></div><div></div><div></div></div><div>EXISTING UTILITY POLE</div></div><div><div><div><div></div><div></div><div></div></div><div>DOWNGUY</div></div><div><div><div><div></div><div></div><div></div></div><div>EXTERIOR UTILITY JUNCTION BOX</div></div><div><div><div><div></div><div></div><div></div></div><div>INTERSTATE HIGHWAY SYMBOL</div></div><div><div><div><div></div><div></div><div></div></div><div>US HIGHWAY SYMBOL</div></div><div><div><div><div></div><div></div><div></div></div><div>STATE HIGHWAY SYMBOL</div></div><div><div><div><div></div><div></div><div></div></div><div>HAY BALE SILT CHECK</div></div><div><div><div><div></div><div></div><div></div></div><div>TEMPORARY SEDIMENT TRAP</div></div><div><div><div><div></div><div></div><div></div></div><div>PIEZOMETER</div></div><div><div><div><div></div><div></div><div></div></div><div>RAIL SIGNAL</div></div><div><div><div><div></div><div></div><div></div></div><div>RAIL SWITCH</div></div><div><div><div><div></div><div></div><div></div></div><div>SIGN</div></div><div><div><div><div></div><div></div><div></div></div><div>TIRE TREDDLE</div></div><div><div><div><div></div><div></div><div></div></div><div>TRAFFIC ARM WITH CARD READER</div></div><div><div><div><div></div><div></div><div></div></div><div>TRAFFIC ARM MECHANICAL SWING</div></div></div></div><div><div><div><div></div><div></div><div></div></div><div>CLEANOUT</div></div><div><div><div><div></div><div></div><div></div></div><div>CULVERT END SYMBOL (WITH CULVERT SHOWN BETWEEN SYMBOLS)</div></div><div><div><div><div></div><div></div><div></div></div><div>FIRE HYDRANT</div></div><div><div><div><div></div><div></div><div></div></div><div>FUEL OIL METER</div></div><div><div><div><div></div><div></div><div></div></div><div>FUEL OIL MANHOLE</div></div><div><div><div><div></div><div></div><div></div></div><div>FUEL OIL VAULT</div></div><div><div><div><div></div><div></div><div></div></div><div>GREASE TRAP</div></div><div><div><div><div></div><div></div><div></div></div><div>GRIT CHAMBER</div></div><div><div><div><div></div><div></div><div></div></div><div>HEADWALL</div></div><div><div><div><div></div><div></div><div></div></div><div>INDUSTRIAL WASTE WATER METER</div></div><div><div><div><div></div><div></div><div></div></div><div>INDUSTRIAL WASTE WATER MANHOLE</div></div><div><div><div><div></div><div></div><div></div></div><div>NATURAL GAS METER</div></div><div><div><div><div></div><div></div><div></div></div><div>NATURAL GAS RECEIVER</div></div><div><div><div><div></div><div></div><div></div></div><div>NATURAL GAS TRAP</div></div><div><div><div><div></div><div></div><div></div></div><div>NATURAL GAS LINE VAULT</div></div><div><div><div><div></div><div></div><div></div></div><div>MONITORING WELL</div></div><div><div><div><div></div><div></div><div></div></div><div>POST INDICATOR VALVE</div></div><div><div><div><div></div><div></div><div></div></div><div>PUMP STATION</div></div><div><div><div><div></div><div></div><div></div></div><div>SANITARY MANHOLE</div></div><div><div><div><div></div><div></div><div></div></div><div>SEPTIC TANK</div></div><div><div><div><div></div><div></div><div></div></div><div>TANK BELOW GROUND</div></div><div><div><div><div></div><div></div><div></div></div><div>TANK HORIZONTAL ABOVE GROUND</div></div><div><div><div><div></div><div></div><div></div></div><div>TANK VERTICAL ABOVE GROUND</div></div></div></div><div><div><div><div></div><div></div><div></div></div><div>STORM CATCH BASIN</div></div><div><div><div><div></div><div></div><div></div></div><div>STORM ROUND CATCH BASIN</div></div><div><div><div><div></div><div></div><div></div></div><div>STORM DRAINAGE MANHOLE</div></div><div><div><div><div></div><div></div><div></div></div><div>WATER/AIR VENT</div></div><div><div><div><div></div><div></div><div></div></div><div>WATER BACKFLOW PREVENTER</div></div><div><div><div><div></div><div></div><div></div></div><div>WATER BLOWOFF</div></div><div><div><div><div></div><div></div><div></div></div><div>WATER METER</div></div><div><div><div><div></div><div></div><div></div></div><div>WATER SHUTOFF</div></div><div><div><div><div></div><div></div><div></div></div><div>WATER SOFTENER</div></div><div><div><div><div></div><div></div><div></div></div><div>WATER VALVE VAULT</div></div><div><div><div><div></div><div></div><div></div></div><div>VALVE</div></div></div></div><div><div><div><div></div><div></div><div></div></div><div>PIPELINE</div></div><div><div><div><div></div><div></div><div></div></div><div>LARGE PIPELINE</div></div><div><div><div><div></div><div></div><div></div></div><div>UTILITY BENEATH STRUCTURE</div></div><div><div><div><div></div><div></div><div></div></div><div>RAILROAD</div></div><div><div><div><div></div><div></div><div></div></div><div>CENTERLINE</div></div><div><div><div><div></div><div></div><div></div></div><div>BOTTOM OF DITCH</div></div><div><div><div><div></div><div></div><div></div></div><div>PROPERTY LINE</div></div><div><div><div><div></div><div></div><div></div></div><div>EASEMENT</div></div><div><div><div><div></div><div></div><div></div></div><div>LIMITS OF CONSTRUCTION</div></div><div><div><div><div></div><div></div><div></div></div><div>ROW</div></div><div><div><div><div></div><div></div><div></div></div><div>EXISTING CONTOUR (MINOR)</div></div><div><div><div><div></div><div></div><div></div></div><div>EXISTING CONTOUR W/ELEVATION (MAJOR)</div></div><div><div><div><div></div><div></div><div></div></div><div>EXISTING FENCE</div></div><div><div><div><div></div><div></div><div></div></div><div>EXISTING VEGETATION/BRUSH LINE</div></div><div><div><div><div></div><div></div><div></div></div><div>FENCE - BARB WIRE</div></div><div><div><div><div></div><div></div><div></div></div><div>FENCE - CHAIN LINK</div></div><div><div><div><div></div><div></div><div></div></div><div>FENCE - FIELD</div></div><div><div><div><div></div><div></div><div></div></div><div>FENCE - OTHER</div></div><div><div><div><div></div><div></div><div></div></div><div>FENCE - WOOD</div></div><div><div><div><div></div><div></div><div></div></div><div>FENCE - WOVEN WIRE</div></div><div><div><div><div></div><div></div><div></div></div><div>FLOOD LIMIT (25 YEAR)</div></div><div><div><div><div></div><div></div><div></div></div><div>FLOOD LIMIT (50 YEAR)</div></div><div><div><div><div></div><div></div><div></div></div><div>FLOOD LIMIT (100 YEAR)</div></div><div><div><div><div></div><div></div><div></div></div><div>FLOOD LIMIT (500 YEAR)</div></div><div><div><div><div></div><div></div><div></div></div><div>HIGHWAY GUARDRAIL</div></div><div><div><div><div></div><div></div><div></div></div><div>LEVEE TOP</div></div><div><div><div><div></div><div></div><div></div></div><div>LEVEE TOE</div></div><div><div><div><div></div><div></div><div></div></div><div>NEW CONTOUR (MINOR)</div></div><div><div><div><div></div><div></div><div></div></div><div>NEW CONTOUR (MAJOR)</div></div><div><div><div><div></div><div></div><div></div></div><div>ROCK BERM</div></div><div><div><div><div></div><div></div><div></div></div><div>SILT FENCE</div></div><div><div><div><div></div><div></div><div></div></div><div>LIMITS OF DISTURBANCE</div></div><div><div><div><div></div><div></div><div></div></div><div>TOE OF SLOPE</div></div><div><div><div><div></div><div></div><div></div></div><div>TOP OF SLOPE</div></div></div></div><div><div><div><div></div><div></div><div></div></div><div>FOFOFIBER OPTIC</div></div><div><div><div><div></div><div></div><div></div></div><div>FOSFOSFUEL OIL</div></div><div><div><div><div></div><div></div><div></div></div><div>GNATURAL GAS</div></div><div><div><div><div></div><div></div><div></div></div><div>IWINDUSTRIAL WASTE WATER</div></div><div><div><div><div></div><div></div><div></div></div><div>SSSANITARY SEWER</div></div><div><div><div><div></div><div></div><div></div></div><div>SDSDSTORM SEWER</div></div><div><div><div><div></div><div></div><div></div></div><div>WDOMESTIC WATER</div></div><div><div><div><div></div><div></div><div></div></div><div>NPWNPWDOMESTIC WATER NON-POTABLE</div></div></div></div><div><div><div><div></div><div></div><div></div></div><div>GENERAL NOTES:</div></div><div><div><div><div></div><div></div><div></div></div><div>1. THIS IS A STANDARD CIVIL SYMBOLOGY SHEET. ALL SYMBOLS ARE NOT NECESSARILY USED ON THIS PROJECT.</div></div><div><div><div><div></div><div></div><div></div></div><div>2. SCREENING OR SHADING OF WORK IS USED TO INDICATE EXISTING COMPONENTS OR TO DE-EMPHASIZE PROPOSED IMPROVEMENTS TO HIGHLIGHT SELECTED TRADE WORK. REFER TO CONTEXT OF EACH SHEET FOR USAGE.</div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div>			



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ISSUE	DATE	DESCRIPTION
1	04/18/2025	FDP WITH CITY COMMENTS INCORPORATED
0	03/07/2025	FINAL DEVELOPMENT PLAN

<b>PROJECT MANAGER</b>	K. PRINDS
CIVIL	M. WIEBELHAUS
ARCHITECTURAL	E. BUTTMAN
MECHANICAL	M. WARRICK
<b>PROJECT NUMBER</b>	10417754




**City of Lee's Summit, MO  
Water Utilities Facility & Parking Lot  
Expansion**

## MECHANICAL LEGEND

FILE NAME | FileName

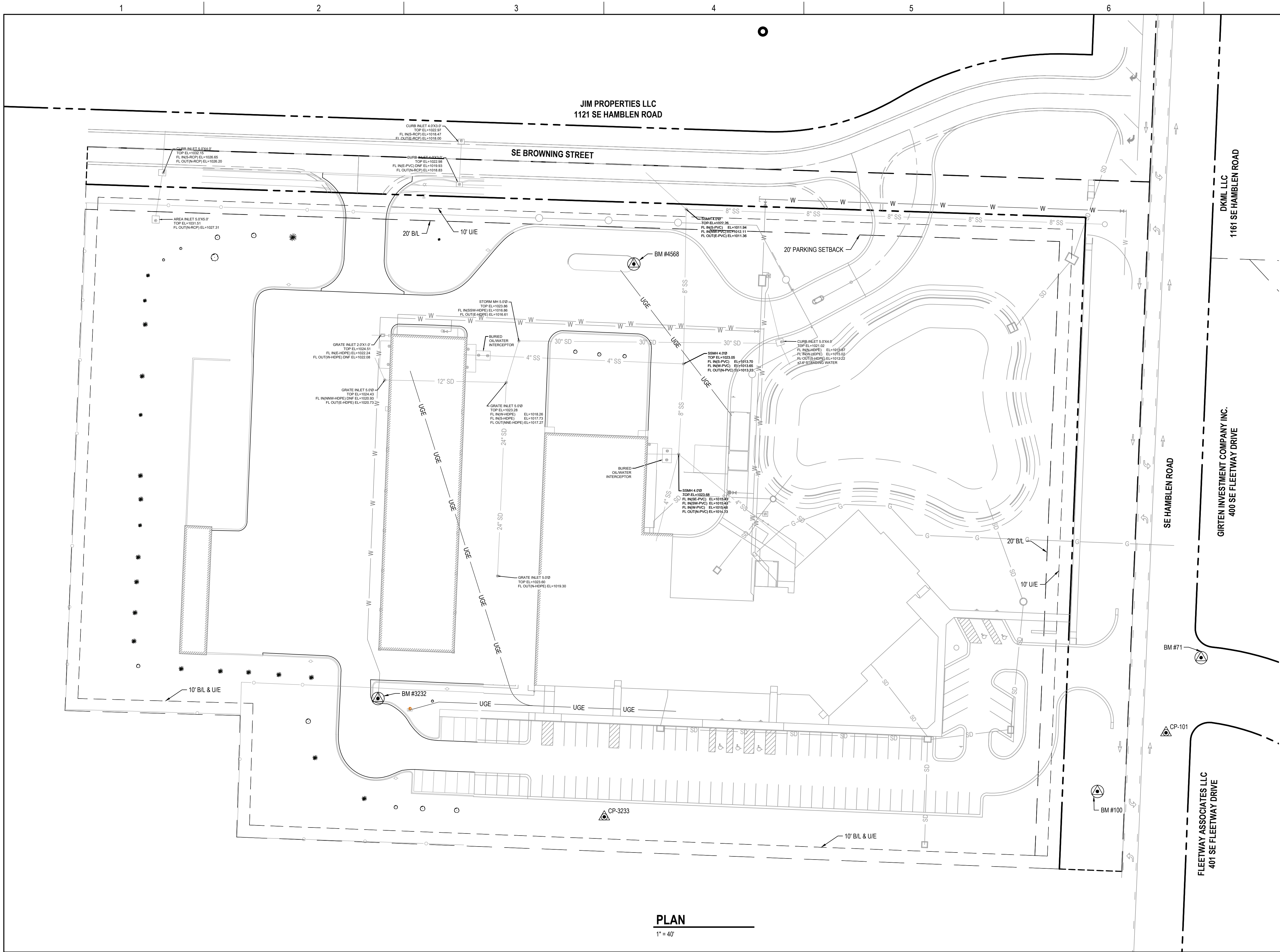
SCALE | 12" = 1'-0"

0 1" 2'

A horizontal graphic scale bar. It is divided into three main sections. The first section is labeled '0' at the left end and '1"' at the right end. This section contains two alternating black and white rectangular blocks. The second section is labeled '2'' at the right end and contains two more alternating black and white rectangular blocks. The total length of the bar represents 2 feet.



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PLAN

1" = 40'

GENERAL NOTES

- THE CURRENT EXISTING SURVEY DATA HAS BEEN COMPILED BY FIELD TOPOGRAPHIC SURVEY AND AS-BUILT INFORMATION. TOPOGRAPHICAL SURVEY DATA IS SHOWN IN BOLD LINE WORK. SUPPLEMENTAL AS-BUILT INFORMATION IS SHOWN AS GRAYSCALE FOR INFORMATIONAL PURPOSES ONLY.
- PROPERTY LINE AND RIGHT-OF-WAY MONUMENTS SHALL NOT BE DISTURBED BY CONSTRUCTION. IF DISTURBED, THEY SHALL BE RESET TO THEIR ORIGINAL LOCATIONS BY A REGISTERED LAND SURVEYOR AT THE CONTRACTOR'S EXPENSE.

HORIZONTAL AND VERTICAL CONTROL DATA

HORIZONTAL DATUM= MISSOURI STATE PLANE, WEST ZONE (NAD83)  
SCALED FROM 0,0 USING A FACTOR OF 0.9998972/1.000102811  
VERTICAL DATUM= NAVD88

CPT-101 (FND 1/2" REBAR)  
N=994220.95  
E=2827901.54  
ELEV=1018.71

Found 1/2" Iron Bar at the SE corner of Hamblen Rd and Fleetway Dr., 72.2' NE of a fire hydrant, 3.2' ESE of back of curb.

CPT-3233 (FND 1/2" REBAR)  
N=994153.68  
E=28274452.20  
ELEV=1028.64

Found 1/2" Iron Bar at the S side of S parking lot to W.U.F., approximately 166' E of the SW corner parking lot, 12' S of back of curb.

Benchmarks

BM-71 ELEV=1020.25  
Top center of Fire Hydrant Nut at the NE corner of Hamblen Rd and Fleetway Dr.

BM-100 ELEV=1021.44  
Found "+" cut at top SE flange bolt of a Fire Hydrant at W side Hamblen Rd, S of W.U.F. entrance.

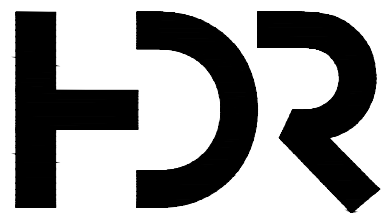
BM-3232 ELEV=1030.51  
Found "+" cut at top SSW flange bolt of a Fire Hydrant at N side cul-de-sac.

BM-4568 ELEV=1023.19  
Set square cut at E side nose of conc. island for fuel tanks, N side W.U.F.

Note:  
All Control Points shown have elevations established using standard surveying procedures and can be used as temporary benchmarks. When using a Control point as a temporary benchmark, it is recommended that checks be made to other control points or benchmarks to confirm elevations prior to use.

SURVEY NOTES

- ALL WATER LINES AND ELECTRICAL LINES SHOWN ARE BASED ON WATER UTILITIES FACILITY PLAN PROJECT #224935 DATED APRIL 15, 2016, MODIFIED JULY 26, 2017 UNLESS OTHERWISE NOTED.



HDR ENGINEERING, INC. | CA0443AE  
10450 HOLMES ROAD, SUITE 600  
KANSAS CITY, MO 64131  
(816) 360-2600  
MO CERTIFICATE OF AUTHORITY #: 000886

ISSUE	DATE	DESCRIPTION
1	04/18/2025	FDP WITH CITY COMMENTS INCORPORATED
0	03/07/2025	FINAL DEVELOPMENT PLAN

PROJECT MANAGER	K. PRINDS
CIVIL	M. WIEBELHAUS
ARCHITECTURAL	E. BUTTMAN
MECHANICAL	M. WARRICK
PROJECT NUMBER	10417754



City of Lee's Summit, MO  
Water Utilities Facility & Parking  
Lot Expansion

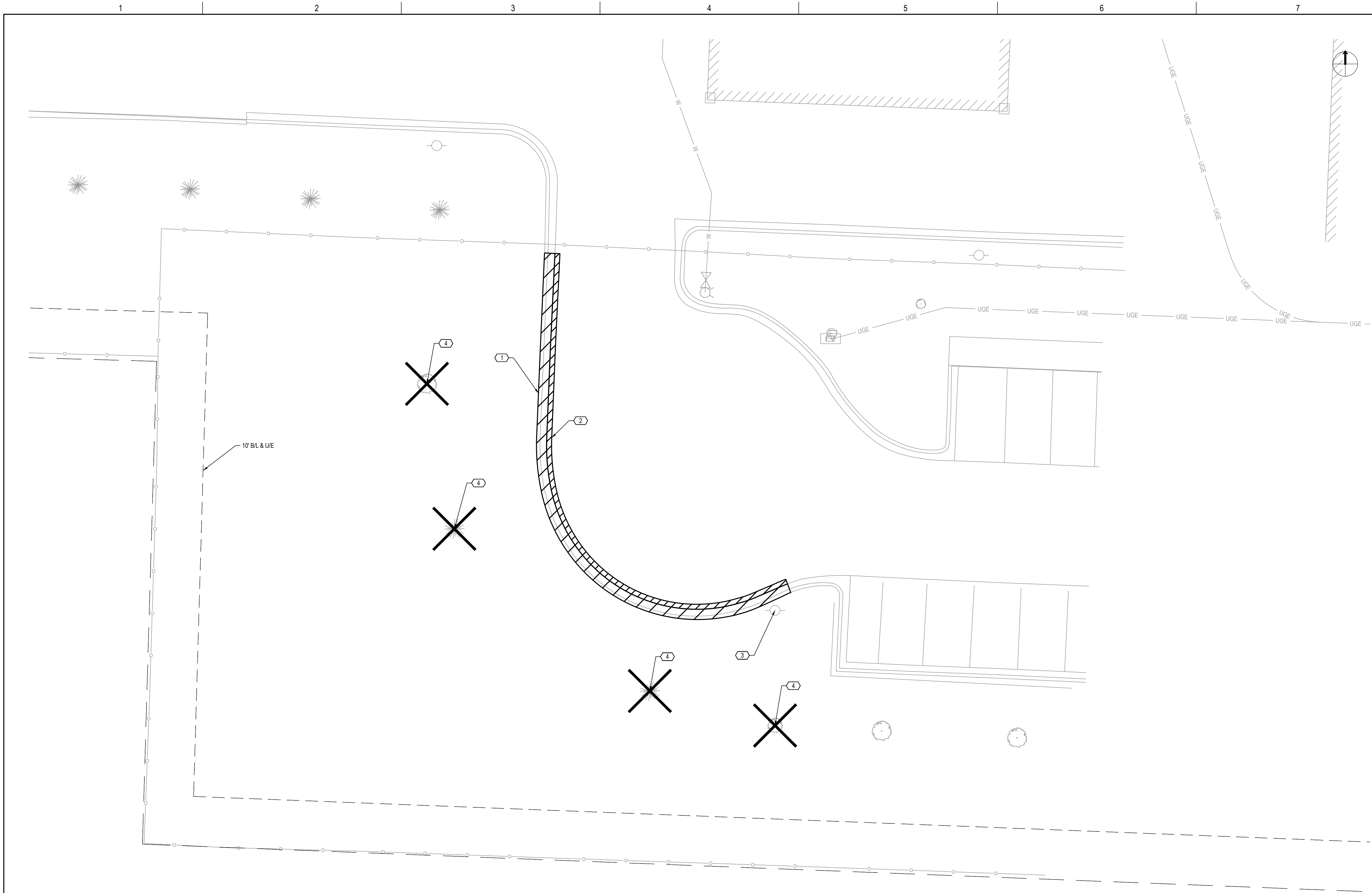
SURVEY CONTROL

FILE NAME 10417754-01V-101.DWG  
SCALE 1"=40'



SHEET #  
01V101

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PLAN

1" = 10'

### GENERAL NOTES

- ALL EXISTING PAVEMENT, ROAD BASE, CURB, AND SIDEWALKS NOT DESIGNATED TO BE REMOVED THAT ARE DAMAGED DURING CONSTRUCTION MUST BE REPAIRED OR REPLACED TO PRE-CONSTRUCTION CONDITION.
- REMOVAL OF MATERIALS FROM THE SITE SHALL BE IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS.

### KEYNOTES

- REMOVE CONCRETE CURB AND GUTTER.
- REMOVE PAVEMENT SURFACE.
- REMOVE AND LIGHT CONCRETE FOUNDATION AND SALVAGE LUMINAIRE AND POLE.
- REMOVE TREE.



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10450 HOLMES ROAD, SUITE 600  
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MO CERTIFICATE OF AUTHORITY #: 000856

ISSUE	DATE	DESCRIPTION
1	04/18/2025	FDP WITH CITY COMMENTS INCORPORATED
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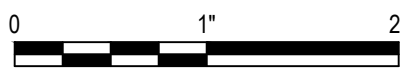
PROJECT MANAGER	K. PRINDS
CIVIL	M. WIEBELHAUS
ARCHITECTURAL	E. BUTTMAN
MECHANICAL	M. WARRICK
PROJECT NUMBER	10417754



City of Lee's Summit, MO  
Water Utilities Facility & Parking  
Lot Expansion

### DEMOLITION PLAN

FILE NAME 10417754-01CX-101.DWG  
SCALE 1"=10'



SHEET #  
**01X101**



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ISSUE	DATE	DESCRIPTION
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PROJECT MANAGER	K. PRINDS
CIVIL	M. WIEBELHAUS
ARCHITECTURAL	E. BUTTMAN
MECHANICAL	M. WARRICK
PROJECT NUMBER	10417754



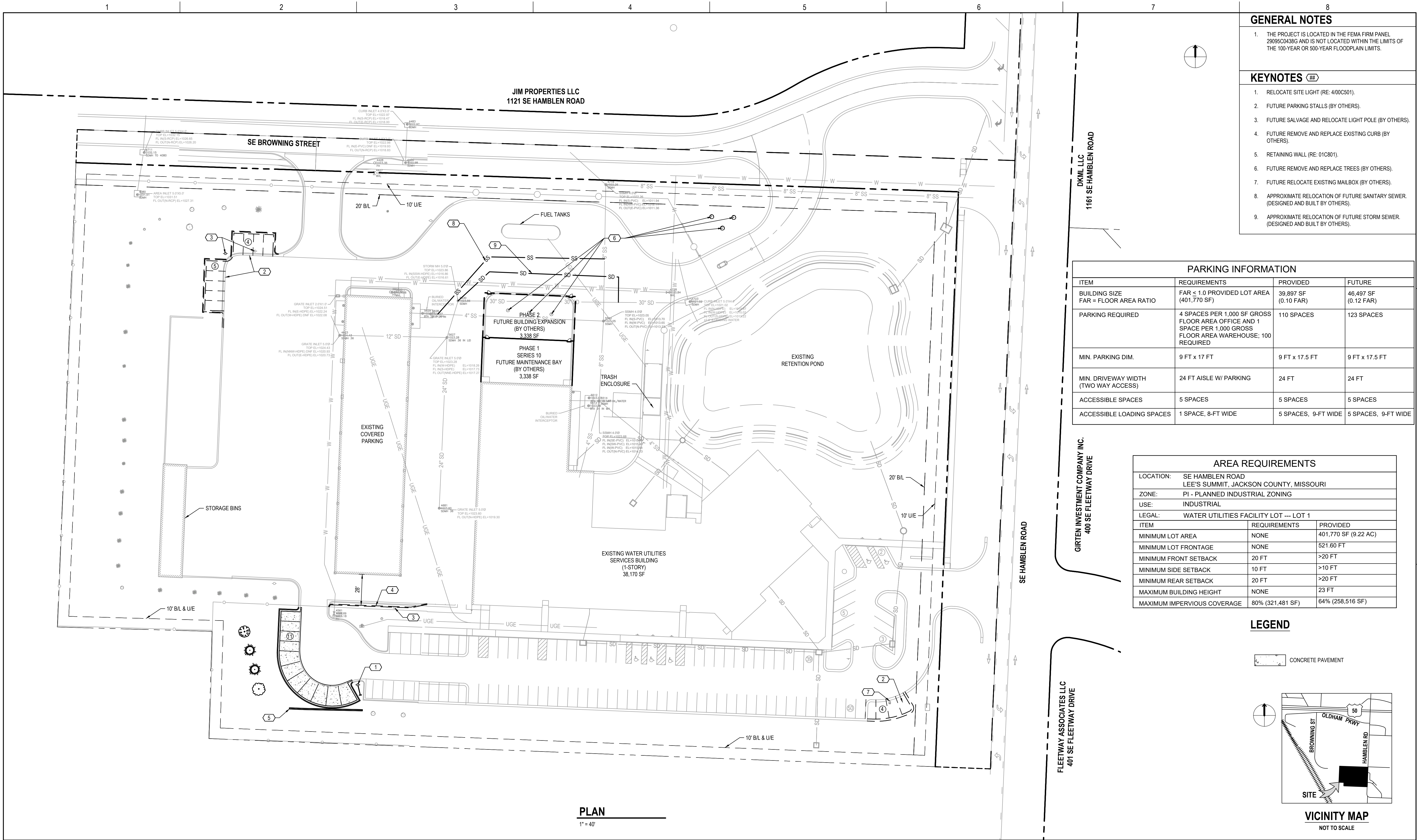
City of Lee's Summit, MO  
Water Utilities Facility & Parking  
Lot Expansion

FILE NAME 10417754-01C-101.DWG  
SCALE 1"=40'

OVERALL SITE PLAN



SHEET #  
01C101



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1

2

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4

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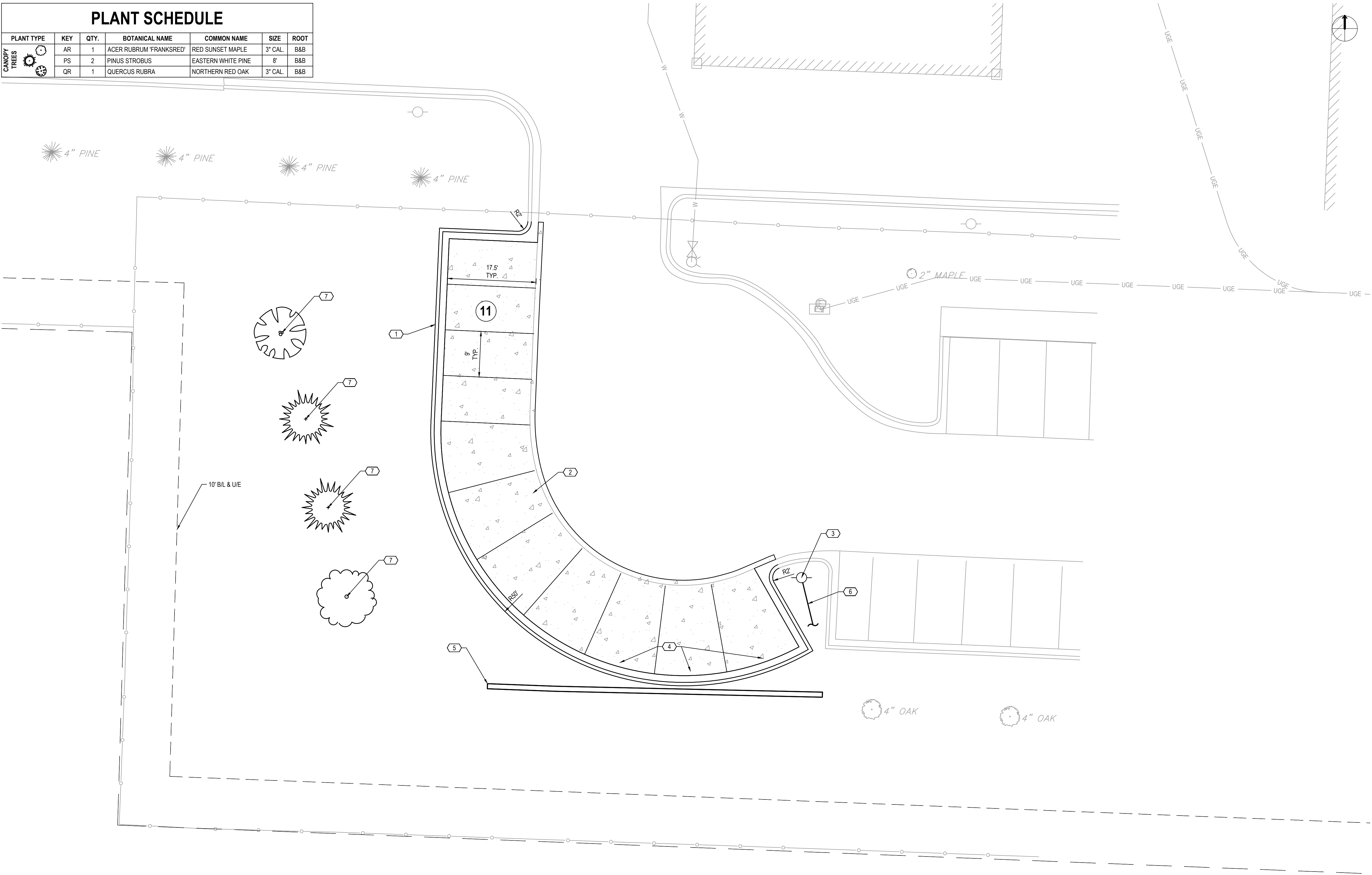
6

7

8

## PLANT SCHEDULE

PLANT TYPE	KEY	QTY.	BOTANICAL NAME	COMMON NAME	SIZE	ROOT
CANOPY TREES	AR	1	ACER RUBRUM 'FRANKSRED'	RED SUNSET MAPLE	3" CAL.	B&B
	PS	2	PINUS STROBUS	EASTERN WHITE PINE	8'	B&B
	QR	1	QUERCUS RUBRA	NORTHERN RED OAK	3" CAL.	B&B



PLAN

1" = 10'

## GENERAL NOTES

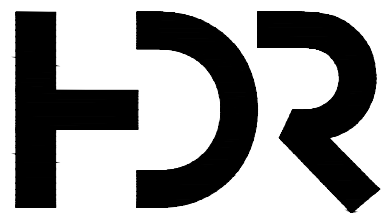
- ADJUST EXISTING MANHOLES, VALVE BOXES, AND STRUCTURES TO MATCH NEW GRADE THAT FALL WITHIN THE LIMITS OF THIS CONTRACT.
- THE LOCATION OF UNDERGROUND UTILITIES / PROCESS LINES ARE APPROXIMATE. NO EXCAVATION WILL BE PERMITTED UNTIL BURIED UTILITIES HAVE BEEN VISIBLY LOCATED BY THE CONTRACTOR.
- ALL SITE WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL, LEE'S SUMMIT UNIFIED DEVELOPMENT ORDINANCE (UDO), AND THESE PLANS.
- THE CONTRACTOR SHALL ADJUST TO GRADE ALL WATER AND PROCESS VALVE BOXES/MANHOLES THAT FALL WITHIN THE LIMITS OF THIS CONTRACT. THE CONTRACTOR SHALL KEEP ALL UTILITIES AND SEWERS FREE OF DEBRIS AND OPERABLE AT ALL TIMES DURING CONSTRUCTION.

## KEYNOTES

- CURB & GUTTER (CG-1 DRY) (RE: 5/00C501).
- LIGHT DUTY CONCRETE PARKING LOT SECTION (RE: 2/00C501).
- RELOCATE SITE LIGHT (RE: 4/00C501).
- INSTALL PRECAST CONCRETE WHEEL STOP (RE: 5/00C501).
- RETAINING WALL (RE: 01C801).
- RECONNECT RELOCATED LIGHT TO ITS ORIGINAL CIRCUIT. ROUTE OF UNDERGROUND CIRCUIT IS UNKNOWN. FIELD VERIFY UNDERGROUND CIRCUIT LOCATION PRIOR TO WORK AND NOTIFY ENGINEER. RE-USE EXISTING UNDERGROUND CONDUIT AND WIRE TO THE GREATEST EXTENT POSSIBLE. PROVIDE NEW CONDUIT AND WIRE, IF NECESSARY, AND MATCH EXISTING.
- PLANT NEW TREE (RE: PLANT SCHEDULE ON THIS SHEET).

## LEGEND

CONCRETE PAVEMENT



HDR ENGINEERING, INC. | CA0443AE  
10450 HOLMES ROAD, SUITE 600  
KANSAS CITY, MO 64131  
(816) 360-2600  
MO CERTIFICATE OF AUTHORITY #: 000856

ISSUE	DATE	DESCRIPTION
1	04/18/2025	FDP WITH CITY COMMENTS INCORPORATED
0	03/07/2025	FINAL DEVELOPMENT PLAN

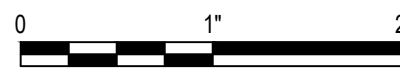
PROJECT MANAGER	K. PRINDS
CIVIL	M. WIEBELHAUS
ARCHITECTURAL	E. BUTTMAN
MECHANICAL	M. WARRICK
PROJECT NUMBER	10417754



City of Lee's Summit, MO  
Water Utilities Facility & Parking  
Lot Expansion

ENLARGED SITE PLAN

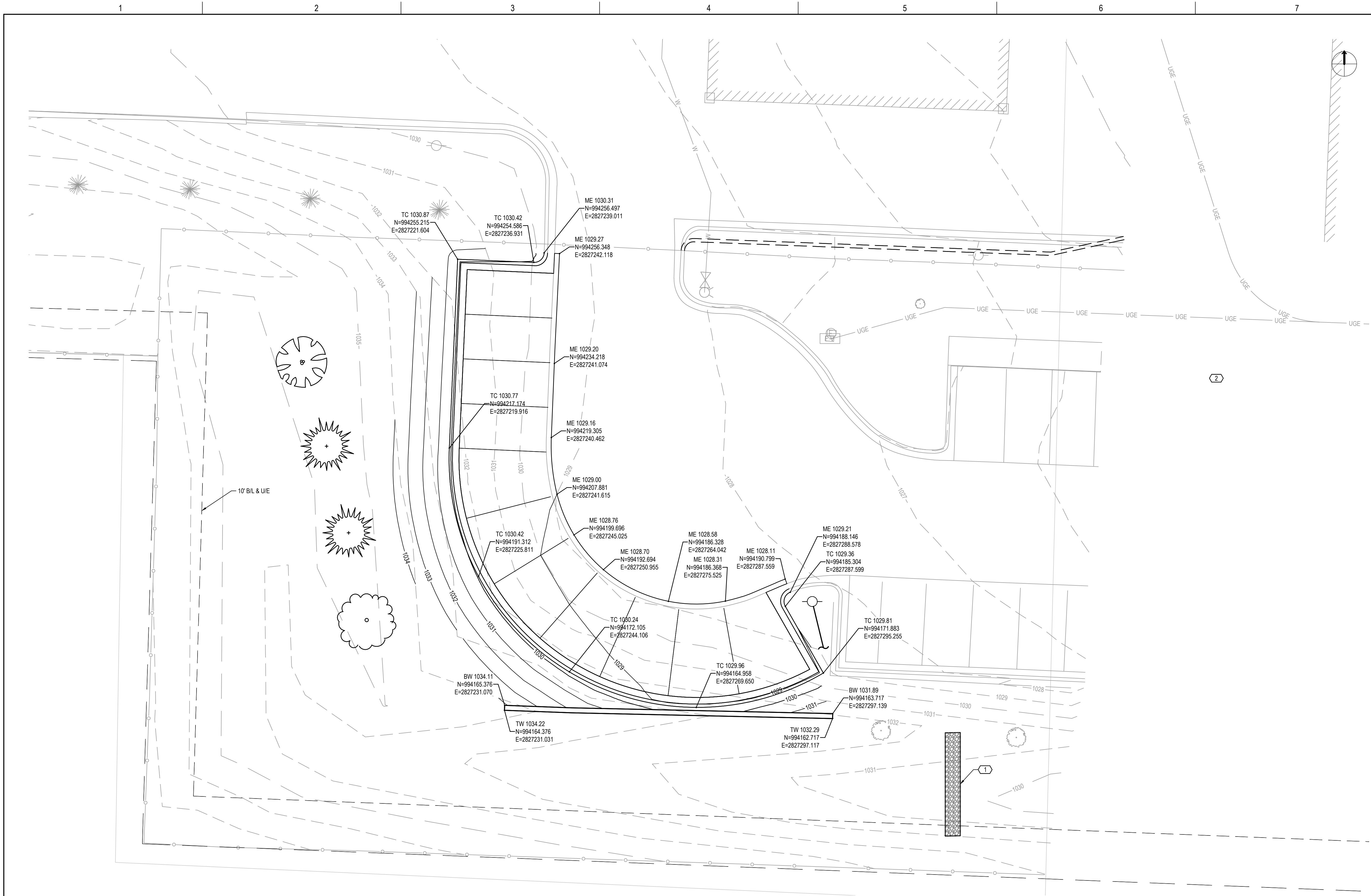
FILE NAME 10417754-01C-102.DWG  
SCALE 1"=10'



SHEET #  
01C102



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PLAN

1" = 10'

### GENERAL NOTES

1. GRADING ACTIVITIES SHALL CONFIRM TO THE REQUIREMENTS OF LEE'S SUMMIT SECTION 2100 - GRADING AND SITE PREPARATION AND SECTION 2150 - EROSION AND SEDIMENT CONTROL.
2. GRADED SLOPES SHALL NOT EXCEED 3:1.
3. VERIFY PARKING GRADES TO CONFIRM POSITIVE DRAINAGE IS MAINTAINED WITHOUT THE PRESENCE OF PONDING WATER.
4. THE FINISH GRADING AROUND BUILDINGS SHALL PROVIDE POSITIVE DRAINAGE AWAY AND AVOID PONDING WATER.
5. FINAL GRADING EXTENTS SHALL BE ADJUSTED AS NECESSARY TO ENSURE POSITIVE DRAINAGE.
6. OPEN AREAS NOT COVERED WITH OTHER MATERIALS SHALL BE SEEDED WITH NO MOW LAWN MIX, PRODUCT #50091, PRARUE NURSERY, WESTFIELD, WI TO MATCH THE EXISTING GRASS.

### KEYNOTES

1. ROCK DITCH CHECK (RE: 2/00C502).
2. INLET PROTECTION ON DOWNSTREAM COMBINATION GRATE INLET (RE: 3/00C501).

### LEGEND

TC-TOP OF CURB  
TP-TOP OF PAVEMENT  
TW-TOP OF WALL  
BW-BOTTOM OF WALL  
ME-MATCH EXISTING



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10450 HOLMES ROAD, SUITE 600  
KANSAS CITY, MO 64131  
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ISSUE	DATE	DESCRIPTION
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PROJECT MANAGER	K. PRINDS
CIVIL	M. WIEBELHAUS
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MECHANICAL	M. WARRICK
PROJECT NUMBER	10417754



City of Lee's Summit, MO  
Water Utilities Facility & Parking  
Lot Expansion

### GRADING & EROSION CONTROL PLAN

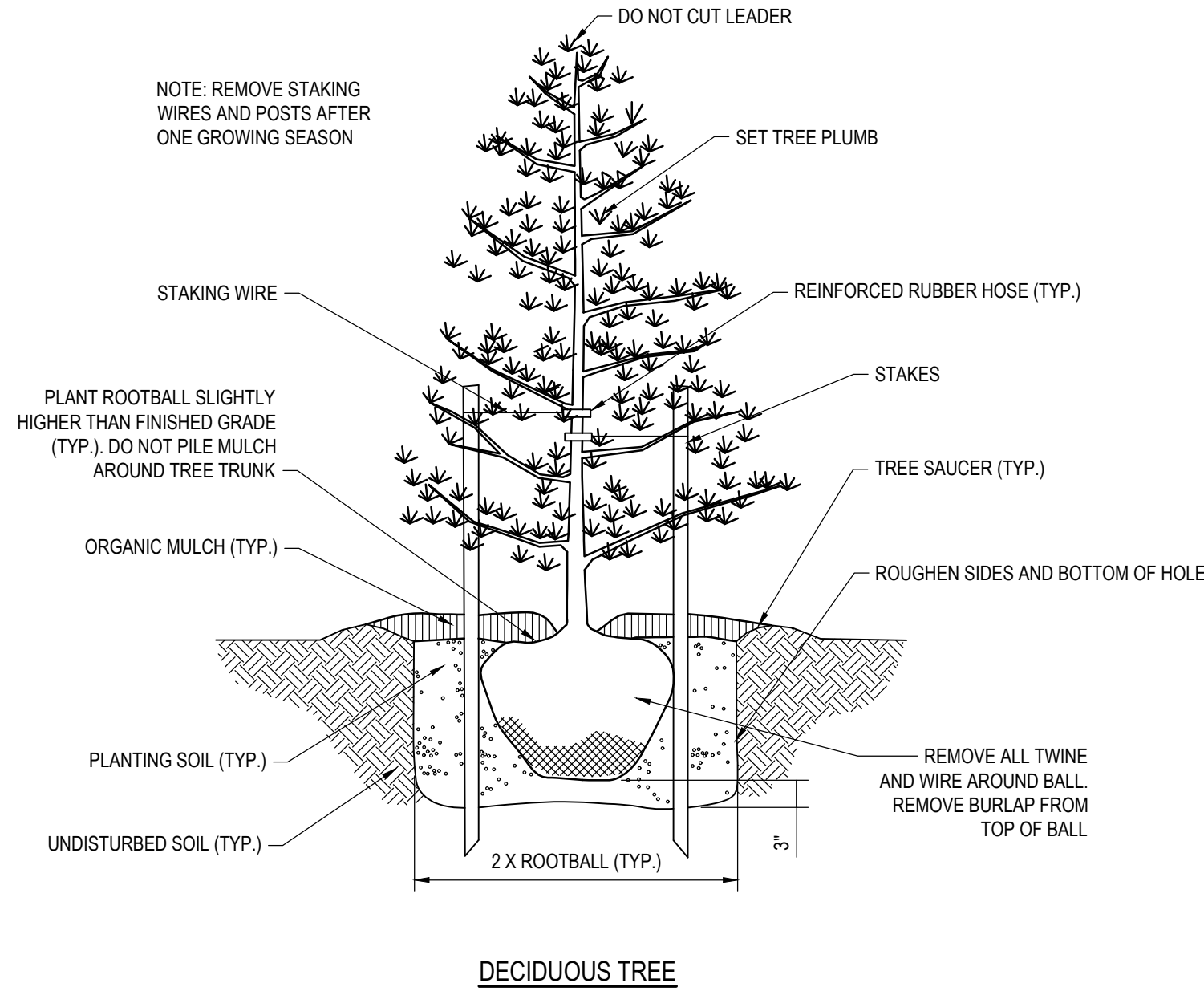
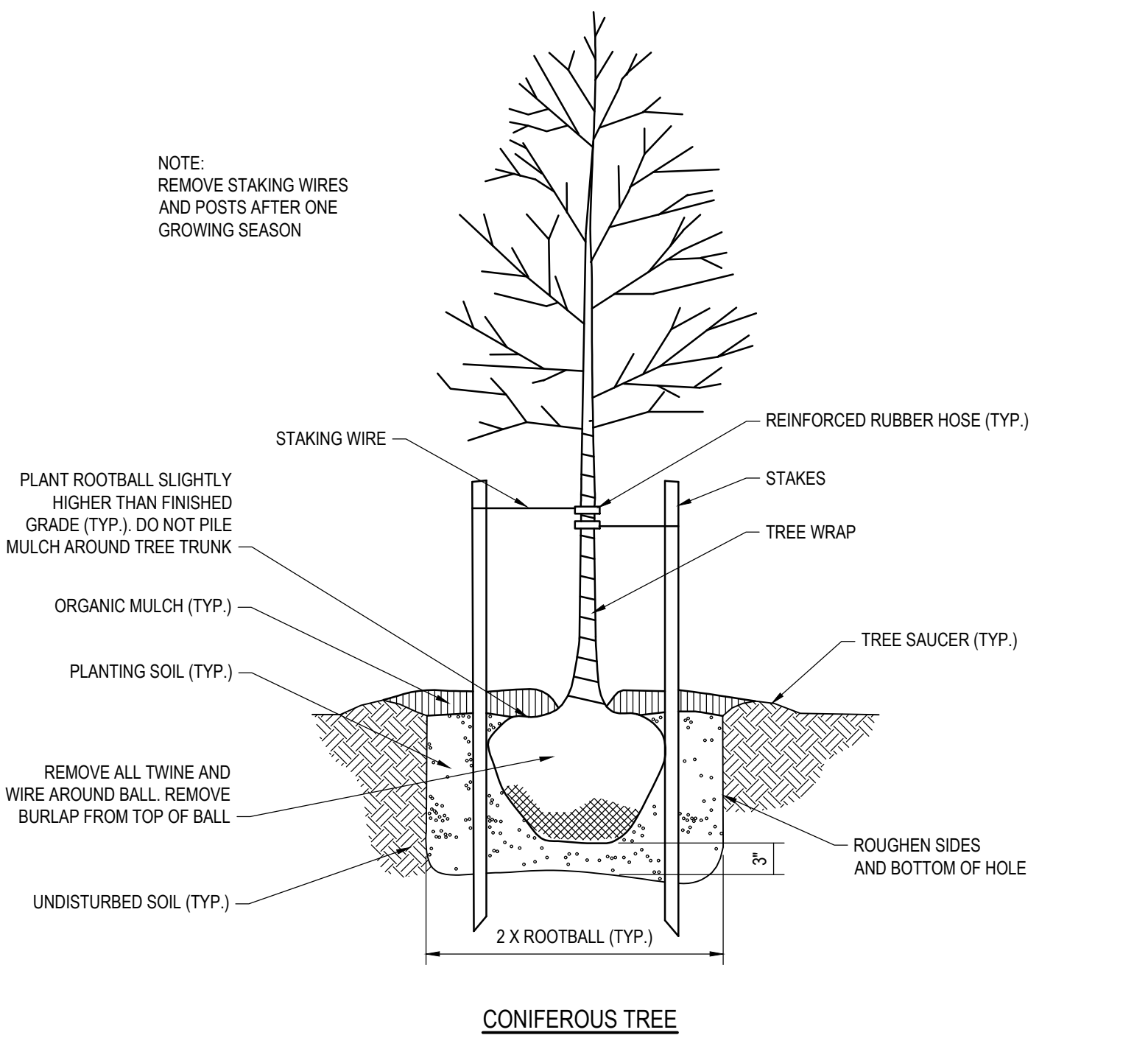
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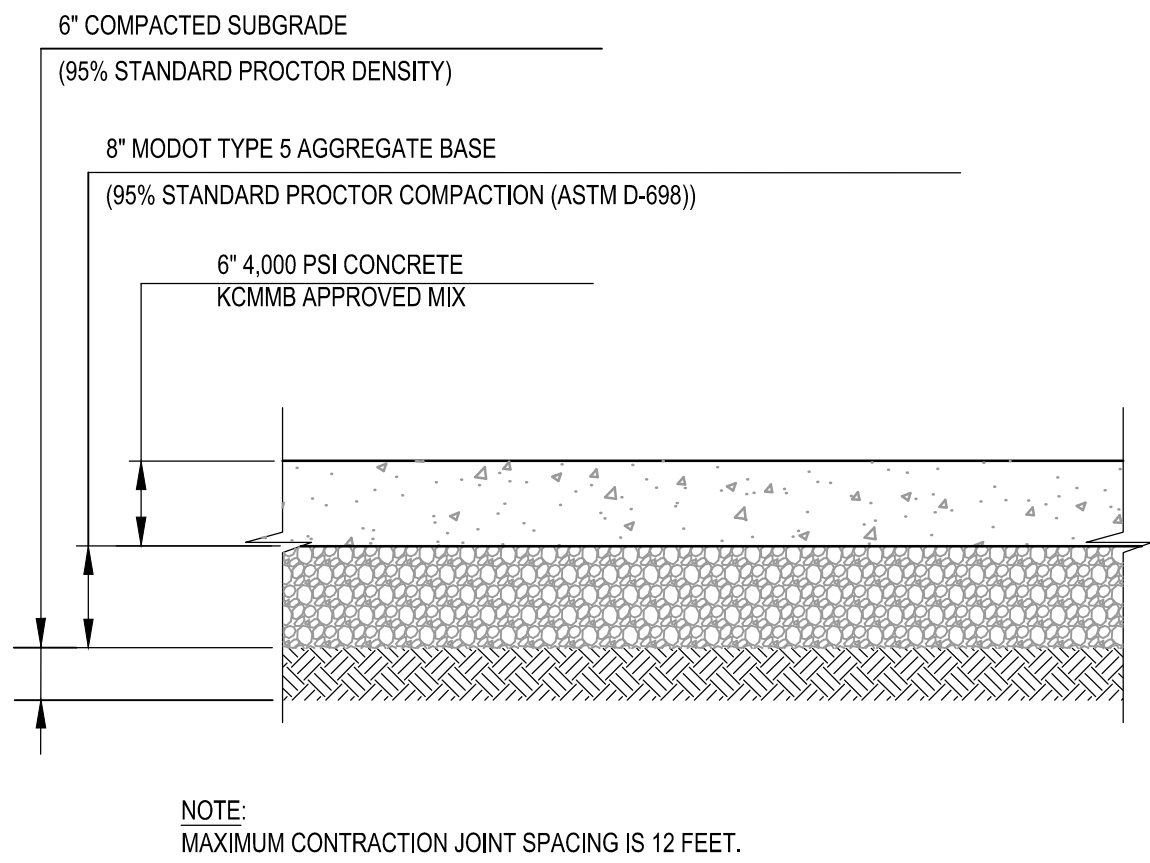
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01C103

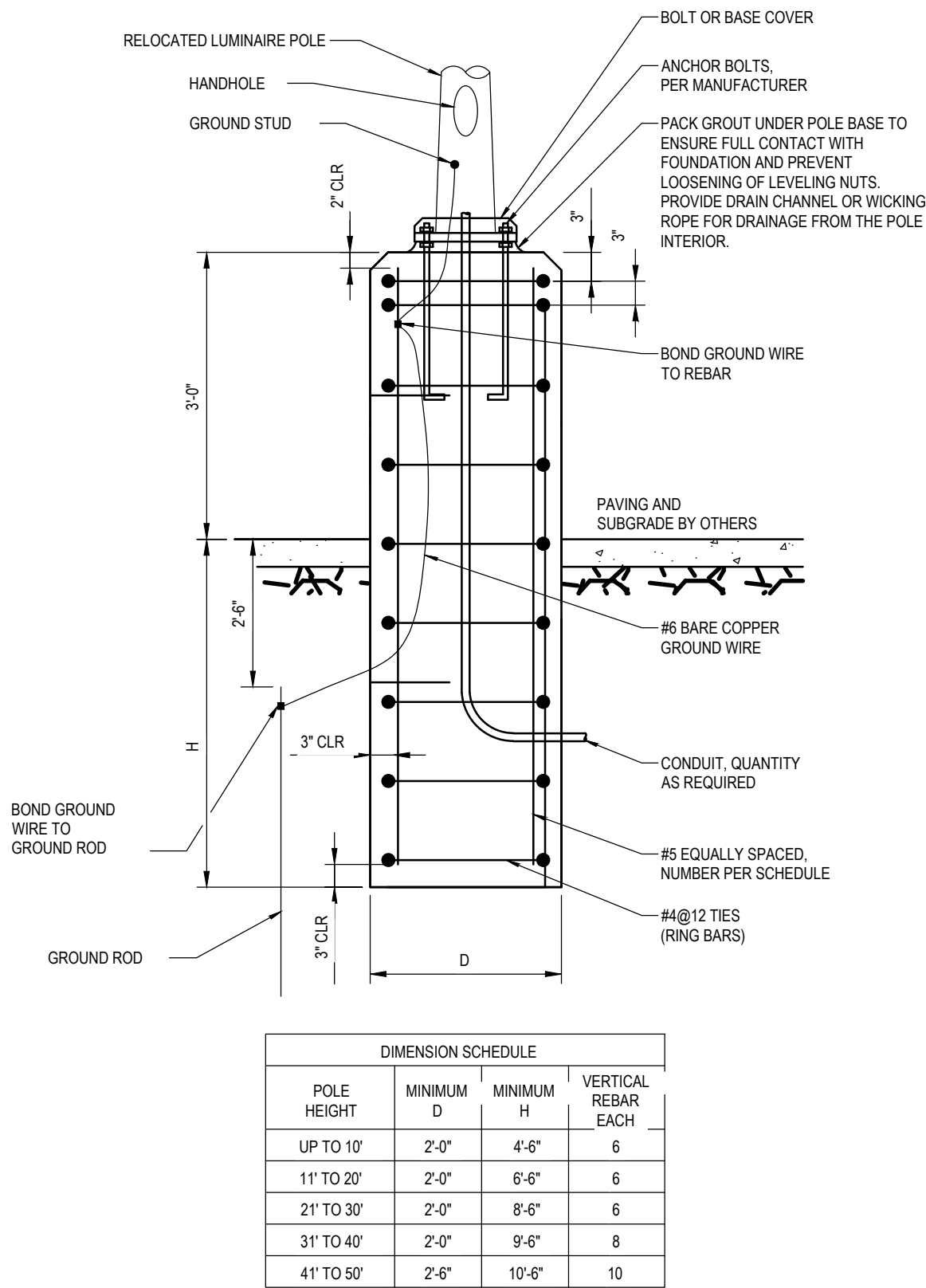




1 TREE PLANTING DETAIL  
NTS



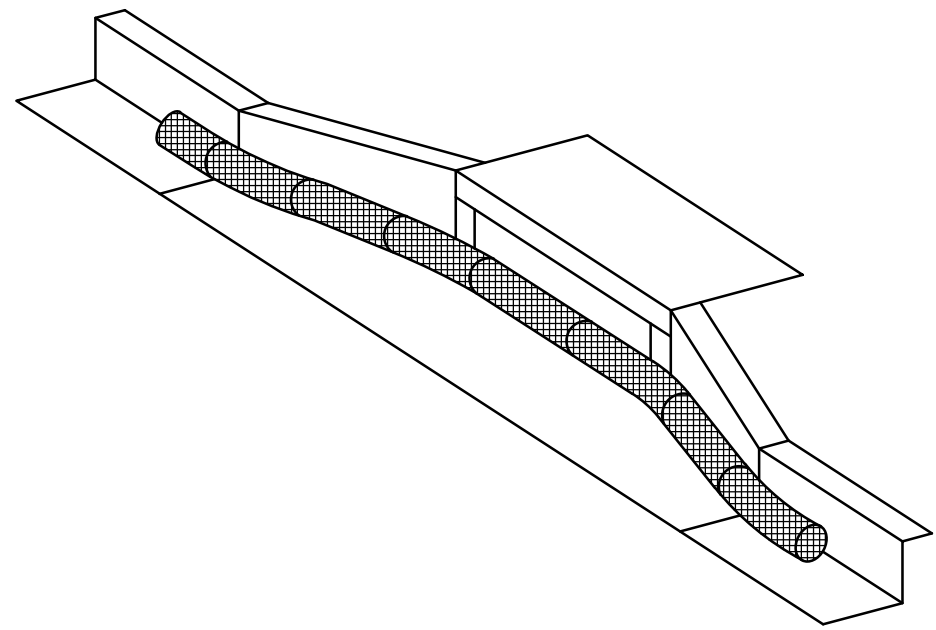
2 LIGHT DUTY CONCRETE PARKING LOT SECTION  
NTS



DIMENSION SCHEDULE				
POLE HEIGHT	MINIMUM D	MINIMUM H	VERTICAL REBAR EACH	
UP TO 10'	2'-0"	4'-6"	6	
11' TO 20'	2'-0"	6'-6"	6	
21' TO 30'	2'-0"	8'-6"	6	
31' TO 40'	2'-0"	9'-6"	8	
41' TO 50'	2'-6"	10'-6"	10	

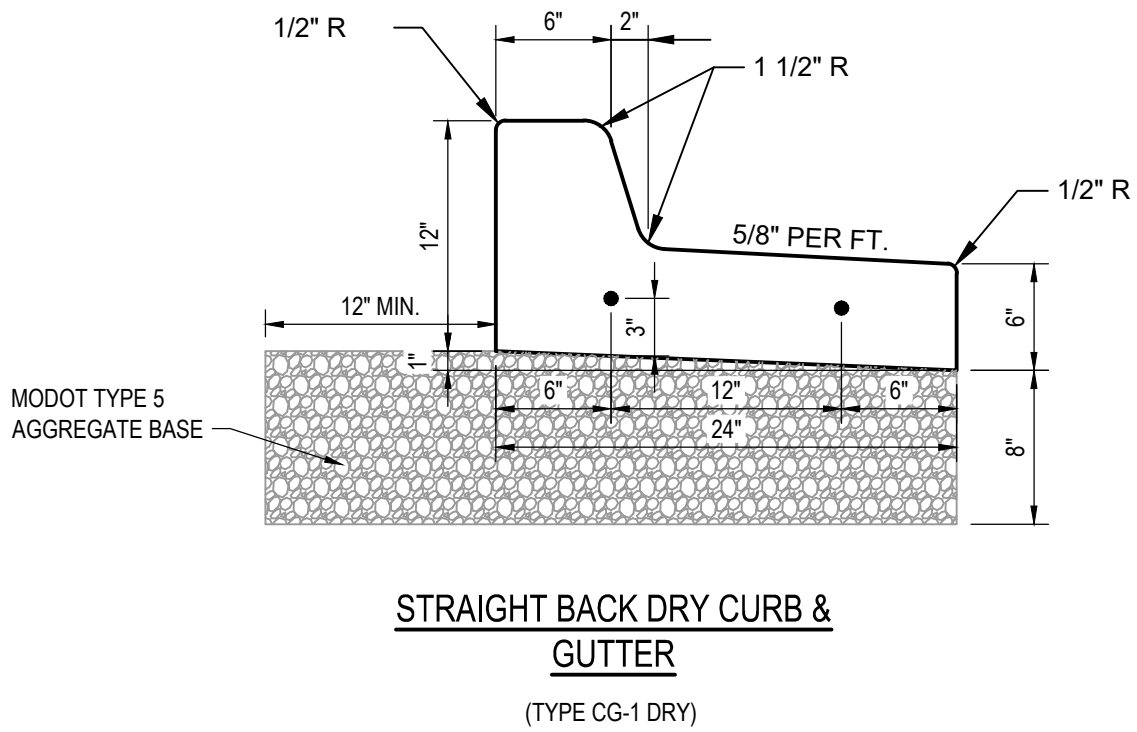
- NOTES:
- CONCRETE AND REINFORCING STEEL: SEE DIVISION 3.

4 36" POLE BASE FOUNDATION  
NTS



- NOTES:
- THE GUTTERBUDDY® OR APPROVED EQUAL SHALL BE A FILTER MANUFACTURED FROM RECYCLED SYNTHETIC FIBERS OR APPROVED ALTERNATIVE.
  - THE GUTTERBUDDY® WILL BE MANUFACTURED TO BE 9" IN DIAMETER AND SHALL HAVE A MINIMUM LENGTH OF 24" LONGER THAN THE CURB INLET OPENING. THIS WILL ALLOW FOR SUFFICIENT LENGTH TO COVER THE INLET WITH 12" BEYOND THE INLET ON BOTH ENDS.
  - THE GUTTERBUDDY® SHALL BE CLEANED IF A VISUAL INSPECTION SHOWS SILT AND DEBRIS BUILD UP AROUND THE GUTTERBUDDY®.
  - PONDING IS LIKELY IF SEDIMENT IS NOT REMOVED REGULARLY. INSPECTION OF GUTTERBUDDY® SHOULD BE ON A REGULAR BASIS AND IMMEDIATELY AFTER MAJOR RAIN EVENTS.

3 GUTTERBUDDY INLET PROTECTION  
NTS GRAVEL FILTER BAG CURB INLET SEDIMENT FILTER MAY BE USED IN LIEU OF GUTTERBUDDY INLET PROTECTION.



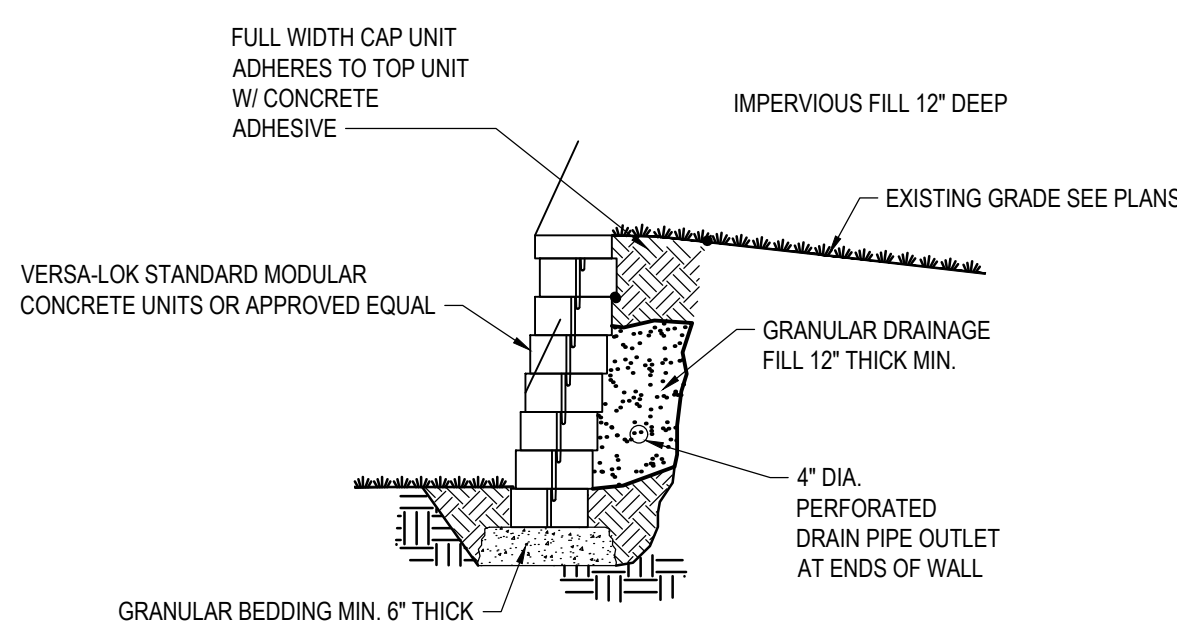
- GENERAL CURB NOTES:
- 3/4" ISOLATION JOINTS WITH 2 (#5 BAR) SMOOTH DOWELS SHALL BE PLACED AT RADIUS POINTS AND AT 150' INTERVALS. THESE DOWEL BARS SHALL BE GREASED AND WRAPPED ON ONE END WITH EXPANSION TUBES.
  - 3" DEEP CONTRACTION JOINTS SHALL BE INSTALLED AT APPROXIMATELY 10' INTERVALS. THESE JOINTS SHALL PASS ACROSS THE ENTIRE CURB SECTION.
  - CONCRETE FILL SHALL HAVE UNIFORM AND SMOOTH FINISH.
  - KCM MB 4K CONCRETE SHALL BE USED FOR ALL CURB.
  - ASPHALTIC CONCRETE SURFACE COURSE SHALL CONFORM TO STANDARD SPECIFICATIONS SECTION 2205.2.
  - CURBS FOR NEW STREETS SHALL BE BUILT ON ASPHALT OR AGGREGATE BASE AS SHOWN IN TYPICAL SECTION DETAIL.
  - WHITE CURING COMPOUND MUST BE APPLIED UNIFORMLY TO THE CONCRETE SURFACE IMMEDIATELY AFTER FINAL FINISHING.
  - ALL DOWELS & TIE BARS SHALL BE EPOXY COATED.

5 STRAIGHT BACK DRY CURB & GUTTER  
(TYPE CG-1 DRY)

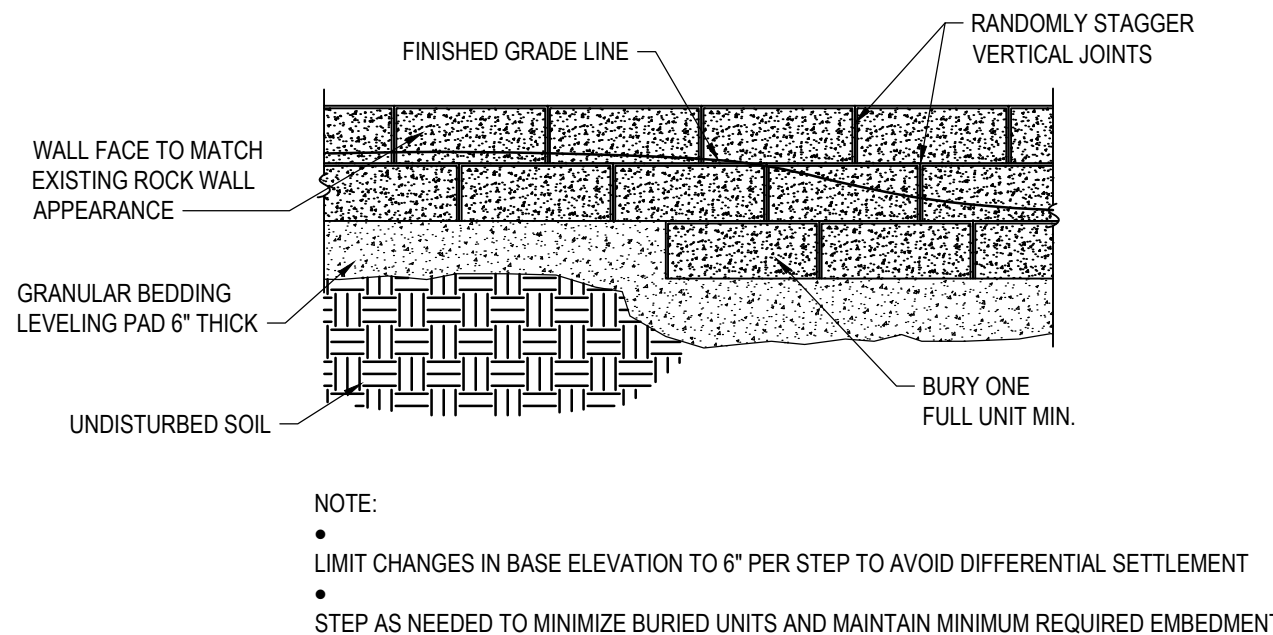
5 CURB AND GUTTER  
NTS

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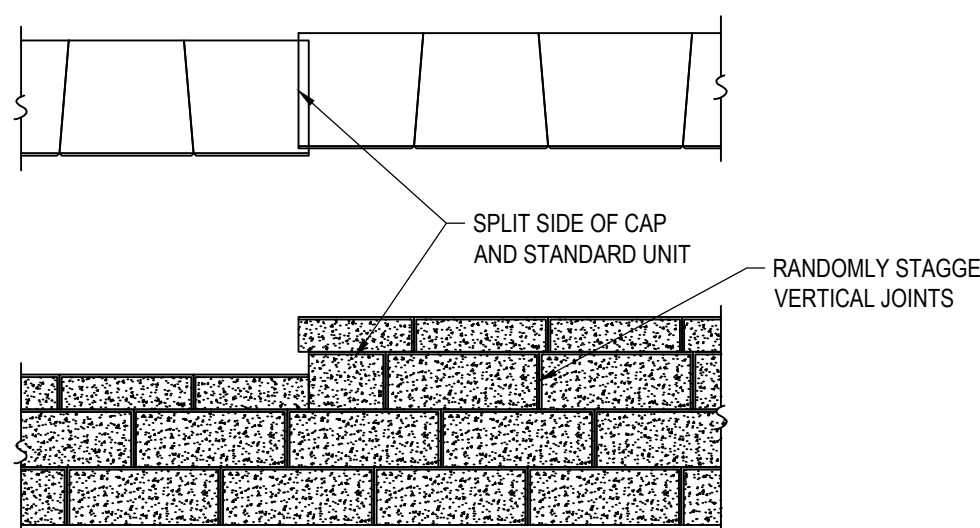




TYPICAL SECTION-UNREINFORCED RETAINING WALL



STEPPING BASE DETAIL



CAPPING DETAIL-PROFILE

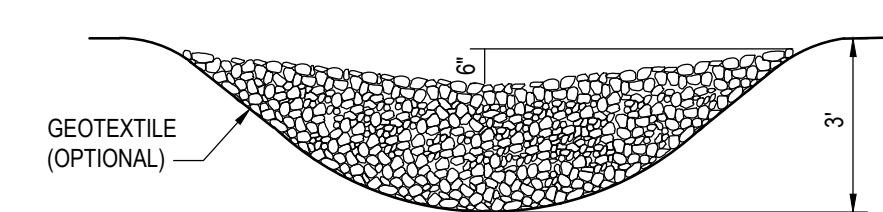


MATERIAL/COLOR-CHARCOAL BLEND

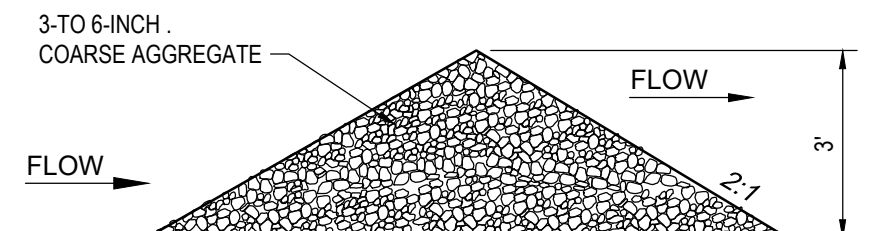
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MODULAR BLOCK RETAILING WALL DETAIL

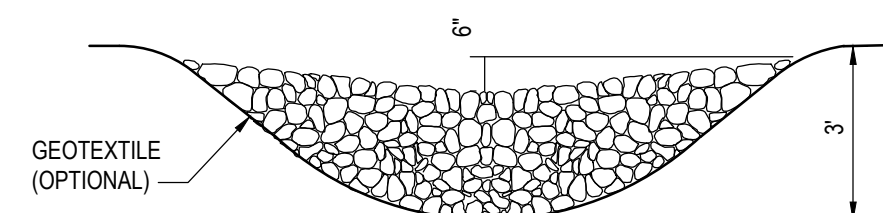
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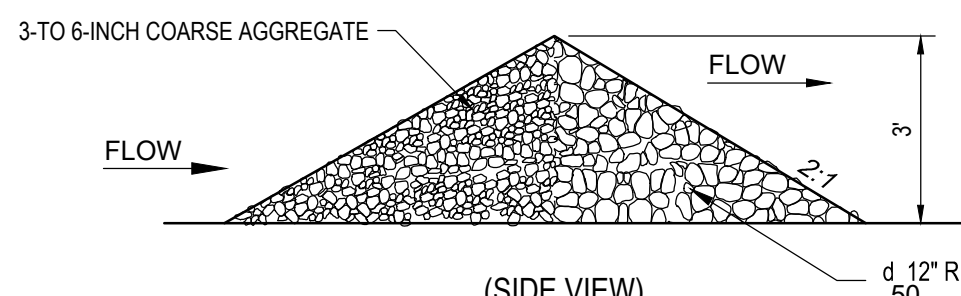
ROCK CHECK DAM  
2 ACRES OR LESS OF DRAINAGE AREA



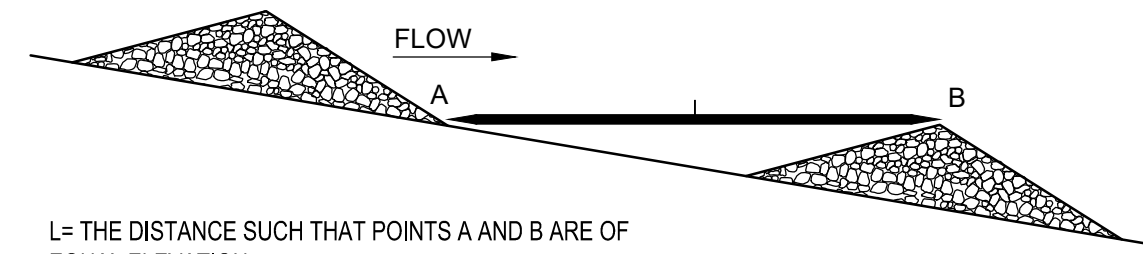
(SIDE VIEW)



ROCK CHECK DAM  
2-10 ACRES OF DRAINAGE AREA



(SIDE VIEW)



L= THE DISTANCE SUCH THAT POINTS A AND B ARE OF  
EQUAL ELEVATION.

SPACING BETWEEN CHECK DAMS

ROCK CHECK DAM NOTES:

- A) CONSTRUCTION SPECIFICATIONS & INSTALLATION:
1. THE DRAINAGE AREA OF THE DITCH OR SWALE BEING PROTECTED SHALL NOT EXCEED 2 ACRES WHEN A COARSE AGGREGATE IS USED ALONE AND SHALL NOT EXCEED 10 ACRES WHEN A COMBINATION OF CLASS I RIPRAP AND COARSE AGGREGATE IS USED. AN EFFORT SHOULD BE MADE TO EXTEND THE STONE TO THE TOP OF CHANNEL BANKS.
  2. THE MAXIMUM HEIGHT OF THE DAM SHALL BE 3 FEET. THE CENTER OF THE CHECK DAM IS AT THE SAME ELEVATION AS THE TOP OF THE OUTER EDGES.
  3. FOR ADDED STABILITY, THE BASE OF THE CHECK DAM CAN BE KEYED INTO THE SOIL APPROXIMATELY 6 INCHES.
  4. THE MAXIMUM SPACING BETWEEN DAMS SHOULD BE SUCH THAT THE TOE OF THE UPSTREAM DAM IS AT THE SAME ELEVATION AS THE TOP OF THE DOWNSTREAM DAM.
  5. STONE SHOULD BE PLACED ACCORDING TO THE CONFIGURATION TO THE LEFT. HAND OR MECHANICAL PLACEMENT WILL BE NECESSARY TO ACHIEVE COMPLETE COVERAGE OF THE DITCH OR SWALE AND TO INSURE THAT THE CENTER OF THE DAM IS LOWER THAN THE EDGES.
  6. GEOTEXTILE MAY BE USED UNDER THE STONE TO PROVIDE A STABLE FOUNDATION AND TO FACILITATE REMOVAL OF THE STONE.

B) INSPECTION AND MAINTENANCE:

1. CHECK DAMS SHOULD BE CHECKED FOR SEDIMENT ACCUMULATION AFTER EACH STORM EVENT OF 1/2-INCH OR GREATER. SEDIMENT SHALL BE REMOVED WHEN IT REACHES ONE HALF OF THE ORIGINAL HEIGHT OF THE DAM.
2. REGULAR INSPECTIONS SHOULD BE MADE TO ENSURE THAT THE CENTER OF THE DAM IS LOWER THAN THE EDGES. EROSION CAUSED BY HIGH FLOWS AROUND THE EDGES OF THE DAM SHALL BE CORRECTED.

C) REMOVAL OF PRACTICE:

1. UNLESS THEY ARE TO BE PERMANENT, CHECK DAMS MUST BE REMOVED WHEN THEIR USEFUL LIFE HAS BEEN COMPLETED. IN TEMPORARY DITCHES AND SWALES, CHECK DAMS SHOULD BE REMOVED AND THE DITCH FILLED WHEN THEY ARE NO LONGER NEEDED. IN PERMANENT STRUCTURES, CHECK DAMS SHOULD BE REMOVED WHEN A PERMANENT LINING CAN BE INSTALLED. IN THE CASE OF GRASS-LINED DITCHES, CHECK DAMS SHOULD BE REMOVED WHEN THE GRASS HAS MATURED SUFFICIENTLY TO PROTECT THE DITCH OR SWALE. THE AREA BENEATH THE CHECK DAMS SHOULD BE SEEDED AND MULCHED IMMEDIATELY AFTER THEY ARE REMOVED. THE USE OF FILTER CLOTH UNDERNEATH THE STONE WILL MAKE REMOVAL OF THE STONE EASIER.

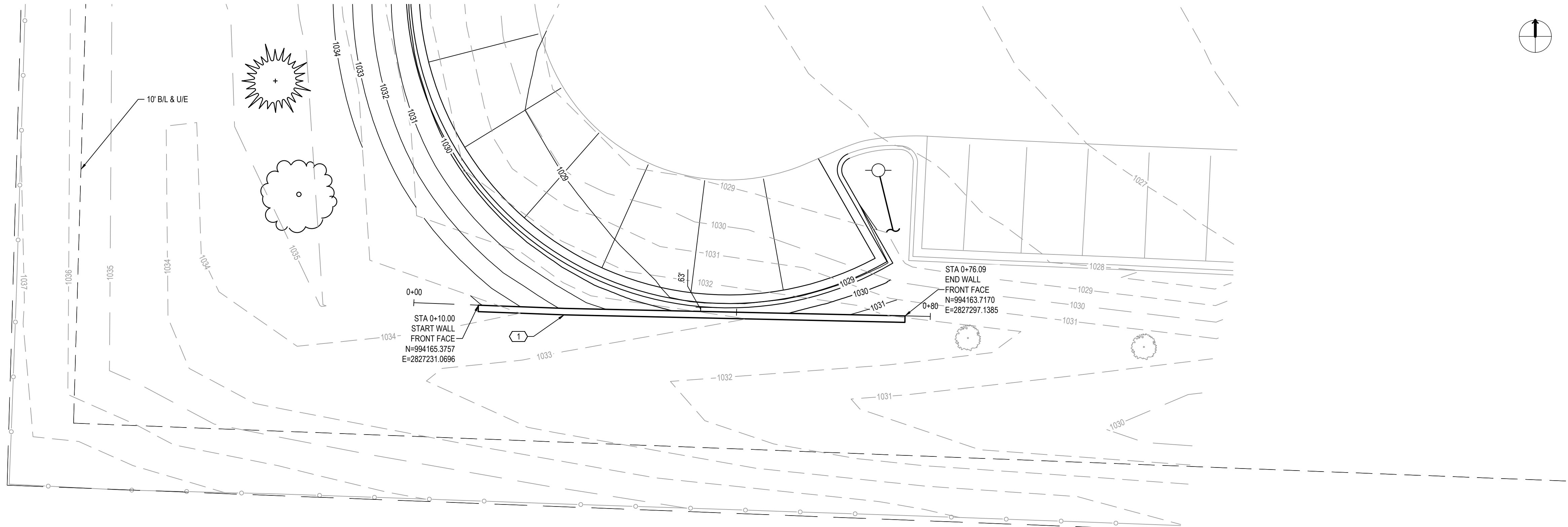
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ROCK DITCH CHECK INSTALLATION

NTS

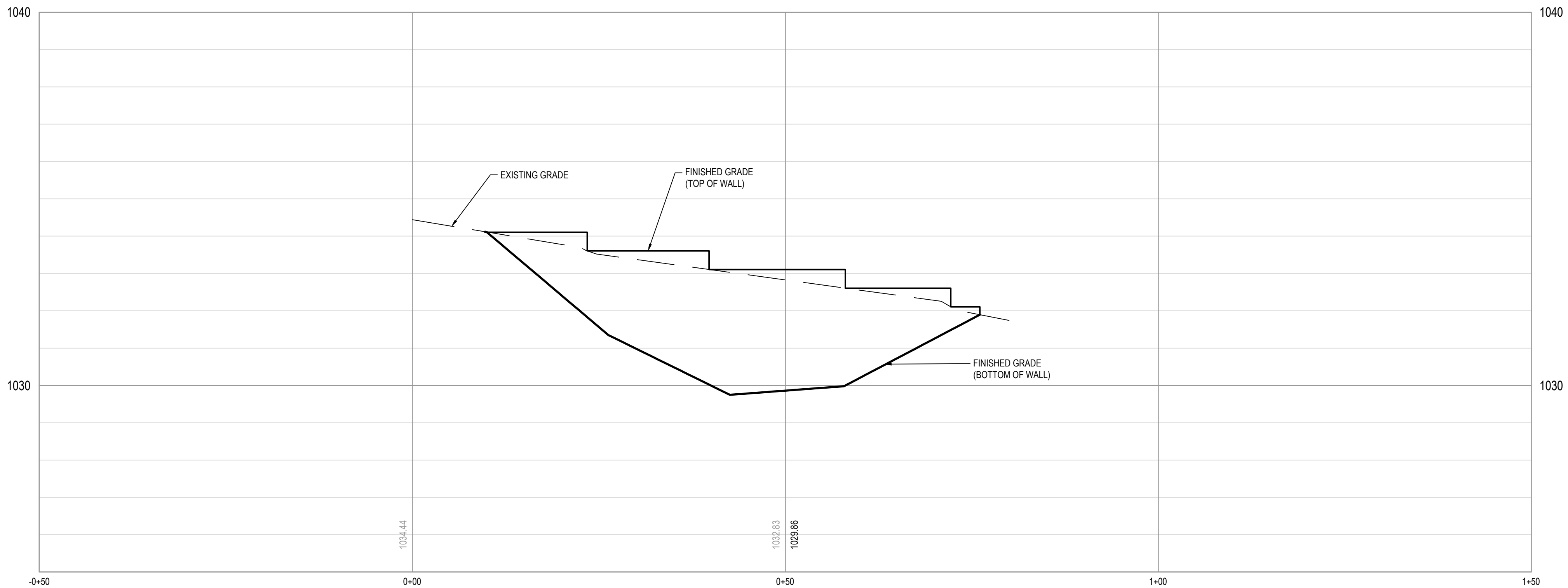


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PLAN

1" = 10'



PROFILE

1" = 10'

GENERAL NOTES

1. SPLIT FACE MODULAR CONCRETE BLOCK WALL.

KEYNOTES

1. MODULAR BLOCK WALL. WALL WIDTH AND BATTER TO MEET MANUFACTURES RECOMMENDATIONS (RE: 1/00CS02).



ISSUE	DATE	DESCRIPTION
1	04/18/2025	FDP WITH CITY COMMENTS INCORPORATED
0	03/07/2025	FINAL DEVELOPMENT PLAN

PROJECT MANAGER	K. PRINDS
CIVIL	M. WIEBELHAUS
ARCHITECTURAL	E. BUTTMAN
MECHANICAL	M. WARRICK
PROJECT NUMBER	10417754



City of Lee's Summit, MO  
Water Utilities Facility & Parking  
Lot Expansion

RETAINING WALL PROFILE

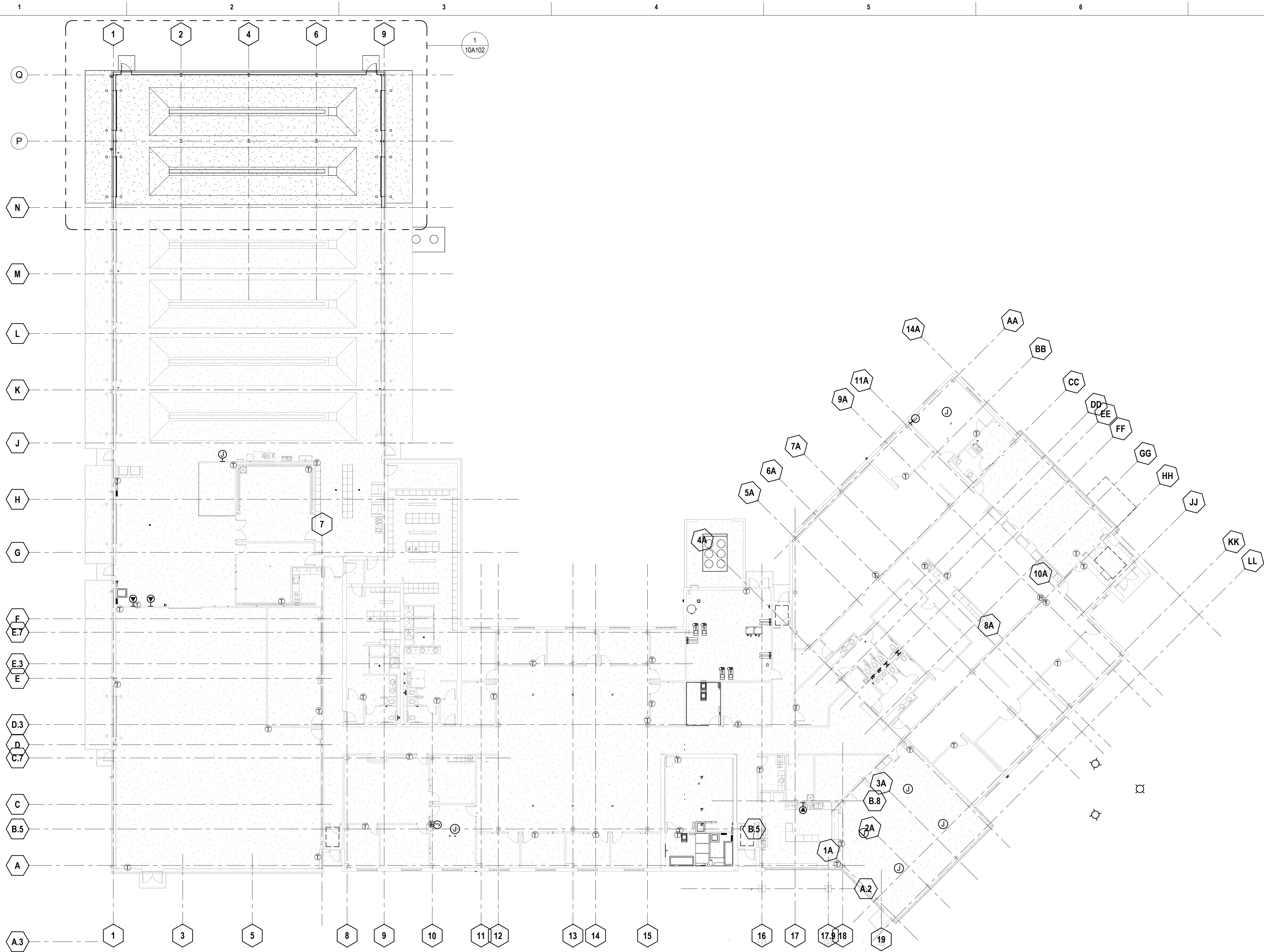
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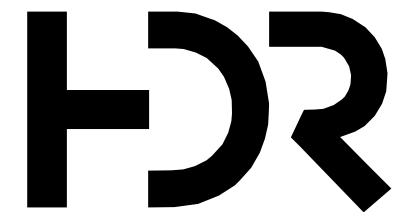


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## GENERAL NOTES

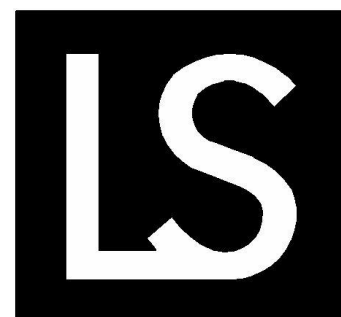
1. INFORMATION SHOWN IS PRELIMINARY AND IS NOT FOR CONSTRUCTION.



HDR  
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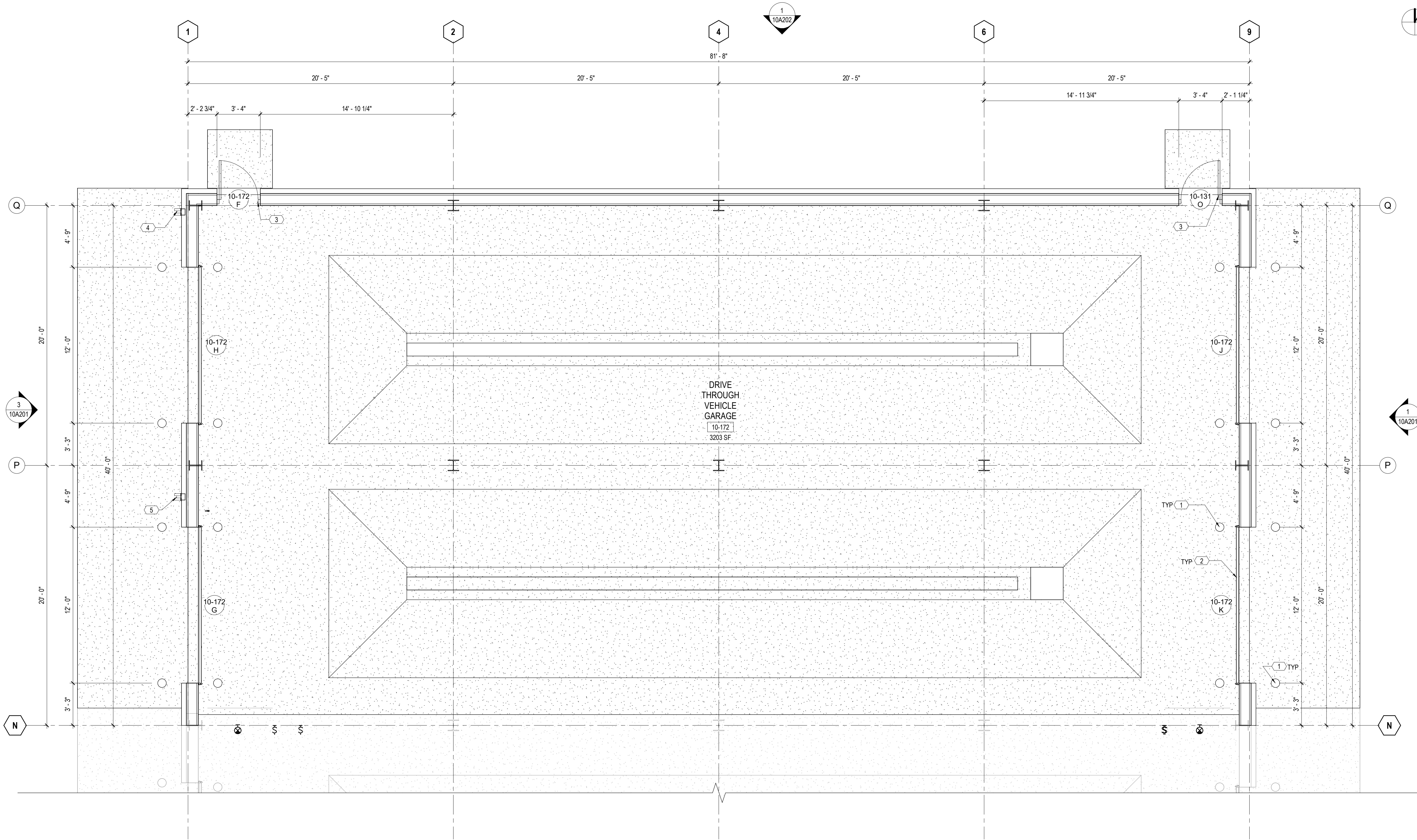
City of Lee's Summit, MO  
Water Utilities Facility & Parking Lot  
Expansion

ARCHITECTURE OVERALL PLAN  
(FUTURE BY OTHERS)

FILE NAME  
SCALE 1/16" = 1'-0"  
0 1" 2"

SHEET  
10A101

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**1** FIRST FLOOR - ENLARGED PLAN  
1/4" = 1'-0"

### GENERAL NOTES

1. INFORMATION SHOWN IS PRELIMINARY AND IS NOT FOR CONSTRUCTION.
2. ALL DIMENSIONS ARE TO EDGE OF OPENING, TO COLUMN CENTERLINE, OR TO GRIDLINE.

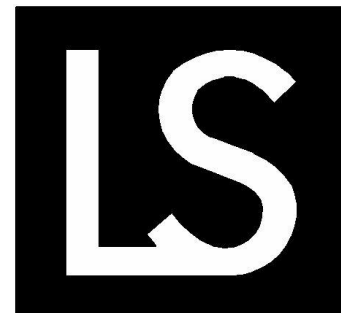
### KEYNOTES

1. BOLLARD. HEIGHT AND SIZE TO MATCH EXISTING.
2. OVERHEAD SECTIONAL DOOR. COLOR, SIZE, AND STYLE TO MATCH EXISTING.
3. REINSTALL SALVAGED EXISTING DOOR AND FRAME.
4. DOWNSPOUT. SIZE, FINISH, AND STYLE TO MATCH EXISTING.
5. REINSTALL SALVAGED EXISTING DOWNSPOUT.



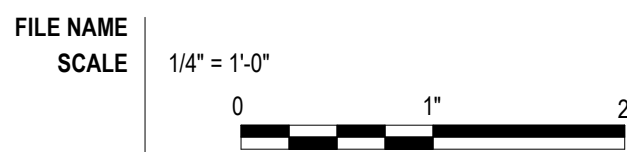
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## City of Lee's Summit, MO Water Utilities Facility & Parking Lot Expansion

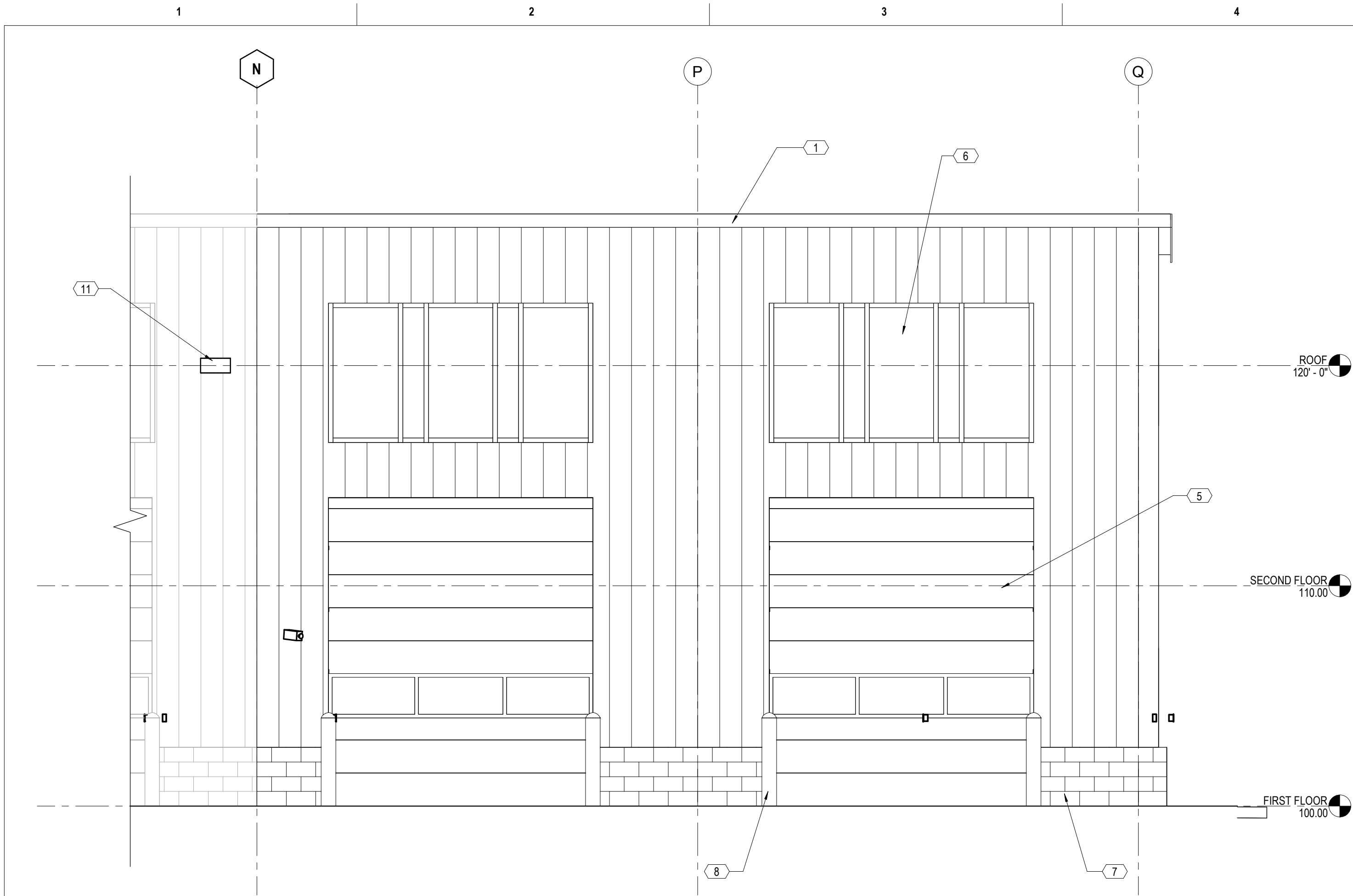
### ARCHITECTURE PLAN (FUTURE BY OTHERS)



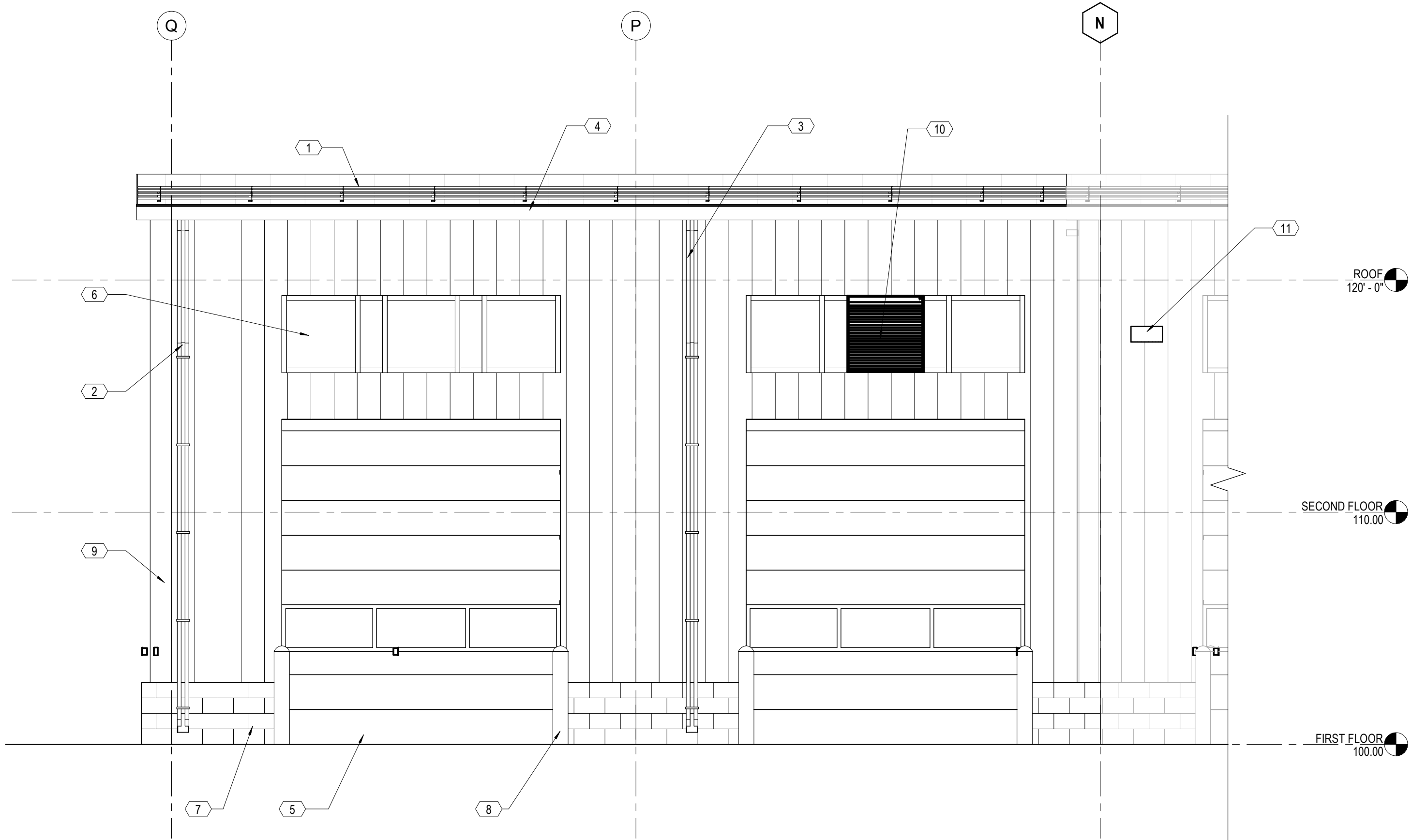
SHEET  
**10A102**



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1 EAST ELEVATION  
10A102 1/4" = 1'-0"



3 WEST ELEVATION  
10A102 1/4" = 1'-0"

## GENERAL NOTES

1. INFORMATION SHOWN IS PRELIMINARY AND IS NOT FOR CONSTRUCTION.

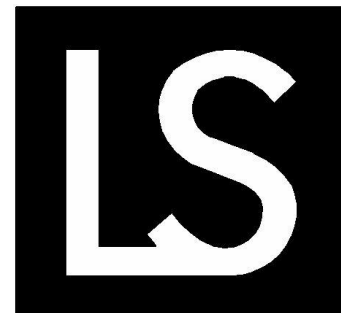
## KEYNOTES ##

1. STANDING SEAM METAL ROOF AND FASCIA. COLOR, PROFILE, AND STYLE TO MATCH EXISTING.
2. DOWNSPOUT. SIZE, FINISH, AND STYLE TO MATCH EXISTING.
3. REINSTALL SALVAGED EXISTING DOWNSPOUT.
4. EXTEND GUTTER. PROFILE AND COLOR TO MATCH EXISTING.
5. OVERHEAD SECTIONAL DOOR. COLOR, SIZE, AND STYLE TO MATCH EXISTING.
6. TRANSOM WINDOW. FRAME AND SIZE TO MATCH EXISTING.
7. SPLIT-FACE CMU WAINSCOT. COLOR AND TYPE TO MATCH EXISTING .
8. BOLLARD. HEIGHT AND SIZE TO MATCH EXISTING.
9. SIDING. COLOR TO MATCH EXISTING.
10. NEW MECHANICAL LOUVER.
11. NEW LIGHT FIXTURE.



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MECHANICAL	M. WARRICK
PROJECT NUMBER	10417754



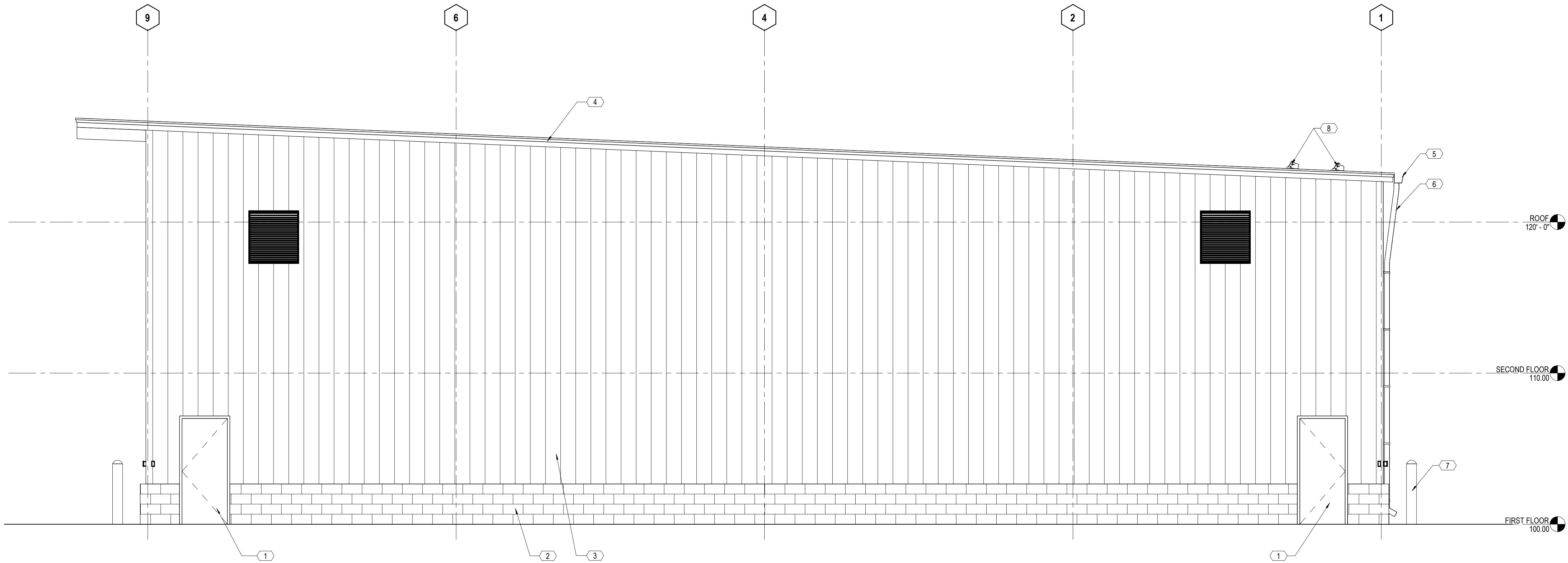
City of Lee's Summit, MO  
Water Utilities Facility & Parking Lot  
Expansion

ARCHITECTURE EXTERIOR ELEVATIONS  
(FUTURE BY OTHERS)

FILE NAME  
SCALE 1/4" = 1'-0"  
0 1" 2"

SHEET  
10A201

Autodesk Docs://10417754\_LSN0\_WUF\_Expansion\_Study\_2024/10417754\_A\_WUFE\_2024.rvt  
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1 NORTH ELEVATION  
10A102 1/4" = 1'-0"

## GENERAL NOTES

1. INFORMATION SHOWN IS PRELIMINARY AND IS NOT FOR CONSTRUCTION.

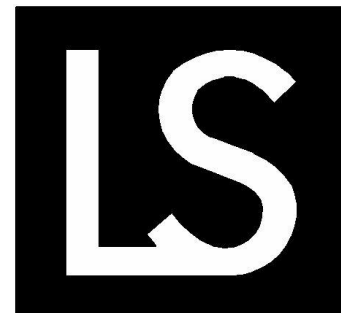
## KEYNOTES ##

- 1 REMOVE AND SALVAGE EXISTING DOOR AND FRAME.
- 2 SPLIT-FACE CMU WAINSCOT. COLOR AND TYPE TO MATCH EXISTING .
- 3 REMOVE AND SALVAGE EXISTING SIDING AND WALL GIRTS.
- 4 STANDING SEAM METAL ROOF AND FASCIA. COLOR, PROFILE, AND STYLE TO MATCH EXISTING.
- 5 EXTEND GUTTER. PROFILE AND COLOR TO MATCH EXISTING.
- 6 DOWNSPOUT. SIZE, FINISH, AND STYLE TO MATCH EXISTING.
- 7 BOLLARD. HEIGHT AND SIZE TO MATCH EXISTING.
- 8 SNOW RETENTION SYSTEM TO MATCH EXISTING.



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MECHANICAL	M. WARRICK
PROJECT NUMBER	10417754



City of Lee's Summit, MO  
Water Utilities Facility & Parking Lot  
Expansion

ARCHITECTURE EXTERIOR ELEVATIONS  
(FUTURE BY OTHERS)

FILE NAME	SCALE	1/4" = 1'-0"
0	1"	2"

SHEET  
10A202