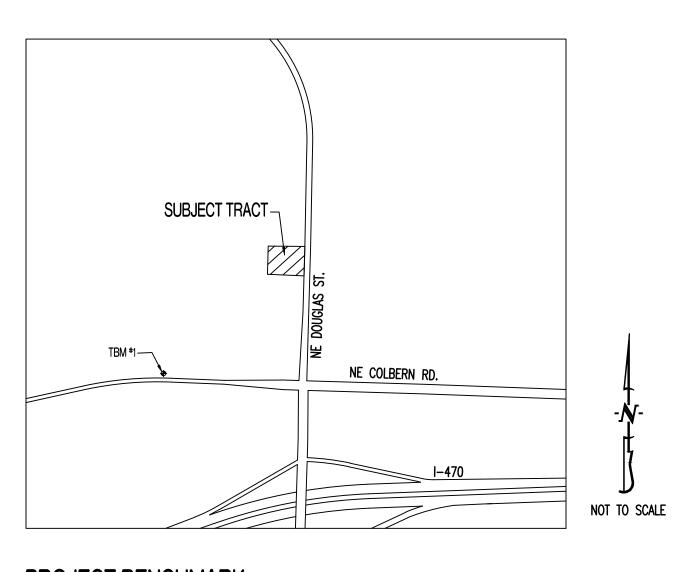
THE VILLAGE AT DISCOVERY PARK **LOT 13**

LOCATION MAP



TBM #1 - CONTROL POINT #50 SET BY OLSSON. 1/2" IMBEDDED CAP ON NORTH SIDE OF NW COLBERN RD. LOCATED AT 1ST FIELD ENTRANCE.

EASTING = 2822108.784

REFER TO "PRIVATE SITE DEVELOPMENT PLANS FOR THE VILLAGE AT DISCOVERY PARK ZONE 1" PLANS BY OLSSON DATED 10/18/2023 FOR MORE INFORMATION.

FLOOD PLAIN STATEMENT:

THIS LOT IS LOCATED IN ZONE X UNSHADED - AREAS DETERMINED TO BE OUTSIDE THE 1% ANNUAL CHANCE FLOOD AS SHOWN ON THE FEMA F.I.R.M. PANEL #29095C0409G. DATED JANUARY 20, 2017.

LEGAL DESCRIPTION:

VILLAGE AT DISCOVERY PARK. LOT 13. A SUBDIVISION IN JACKSON COUNTY, LEE'S SUMMIT, MISSOURI.

UTILITY COMPANIES:

LOCATES: MISSOURI ONE CALL INC. 1022 B NORTHEAST DRIVE





TELEPHONE:

1-800-344-7483

800-286-8313

NATURAL GAS: 314-342-0500

1200 S HAMBLEN RD LEE'S SUMMIT, MO 64081 816-969-1900 FIBER:

GOOGLE FIBER

877-454-6959

CITY OF LEE'S SUMMIT

WATER UTILITIES DEPARTMENT

ELECTRIC:

816-524-3223

WATER/SANITARY SEWER:

CABLE TELEVISION: 877-772-2253

GENERAL NOTES:

ALL STREET, STORM DRAIN, AND SANITARY SEWER CONSTRUCTION TO BE IN ACCORDANCE WITH THE CITY OF LEE'S SUMMIT "DESIGN AND CONSTRUCTION MANUAL" (CURRENT EDITION).

ANY CITY DETAILS SHOWN ON THIS SET OF PLANS ARE FOR REFERENCE ONLY. CONTRACTOR TO HAVE A COPY OF THE CITY'S LATEST EDITION OF SPECIFICATIONS AND STANDARDS FOR ALL STREET, STORM, AND SANITARY CONSTRUCTION ON SITE AT ALL TIMES DURING CONSTRUCTION. REFER TO https://cityofls.net/development-services/design/design-criteria/design-construction-manual-infrastructure

CONTRACTOR WILL BE RESPONSIBLE FOR PLACEMENT AND MAINTENANCE OF TRAFFIC CONTROL DEVICES NECESSARY TO COMPLETE THEIR PORTION OF WORK. THE DEVICES AND METHODS EMPLOYED WILL COMPLY WITH THE CURRENT VERSION OF THE MANUAL ON UNIFORM

ALL CONCRETE MATERIALS SHALL CONFORM TO KCMMB STANDARDS AND SPECIFICATIONS.

THIS PLAT CONTAINS APPROXIMATELY 1.14 ACRES.

THIS TRACT IS ZONED PMIX.

THE STORM SEWER NETWORK DESIGN FOR THIS PROJECT IS BASED ON OPEN CHANNEL FLOW; THEREFORE THE HYDRAULIC GRADE LINE IS AT OR LESS THAN THE CROWN OF THE PIPE.

EXISTING UTILITIES SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL COORDINATE LOCATES (HORIZONTAL AND VERTICAL) PRIOR TO

ALL EXCAVATION TO BE IN ACCORDANCE WITH SECTIONS 319.010-319.050, REVISED STATUTES OF THE STATE OF MISSOURI. SUCH COMPLIANCE SHALL NOT. HOWEVER. EXCUSE ANY PERSON MAKING ANY EXCAVATION FROM DOING SO IN A CAREFUL AND PRUDENT MANNER, NOR SHALL IT EXCUSE SUCH PERSON FROM LIABILITY FOR ANY DAMAGE OR INJURY TO UNDERGROUND UTILITIES RESULTING FROM THE EXCAVATION.

A GEOTECHNICAL EVALUATION OF THE SUBSURFACE SOIL, GROUNDWATER CONDITIONS, AND A SLOPE STABILITY ANALYSIS HAS NOT BEEN PERFORMED BY THIS ENGINEER. THE OWNER SHALL SATISFY THEMSELVES OF ALL GEOTECHNICAL CONDITIONS PRIOR TO ANY CONSTRUCTION.

ALL LAND DISTURBANCE ACTIVITIES SHALL BE IN ACCORDANCE WITH THE CITY OF LEE'S SUMMIT CODE OF ORDINANCES. REFER TO STORMWATER POLLUTION PREVENTION PLAN (SWPPP) FOR NARRATIVE REPORT AND BMP DESCRIPTIONS AND DETAILS.

ALL SLOPES ARE 3:1 OR FLATTER UNLESS OTHERWISE NOTED.

IT IS THE INTENT OF THESE PLANS TO COMPLY WITH THE REQUIREMENTS OF THE MoDNR CLEAN WATER COMMISSION.

ALL DISTURBED AREAS WITHIN THE "LIMITS OF DISTURBANCE" SHALL BE FINE GRADED, SEEDED, AND MULCHED.

THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL EROSION CONTROL DEVICES AND REMOVING THEM ONCE THE SITE IS

ALL HDPE PIPE SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. REFER TO DETAIL FOR PIPE BEDDING REQUIREMENTS.

IN ORDER TO TERMINATE A STATE OPERATING PERMIT THE MISSOURI DEPARTMENT OF NATURAL RESOURCES (MDNR) REQUIRES THAT THE PERMITTEE SUBMIT A COMPLETED FORM H (INCLUDED WITH THE APPROVAL PERMIT) TO THE MDNR. A PERMIT IS ELIGIBLE FOR AREAS THAT HAVE BEEN DISTURBED. VEGETATIVE COVER SHALL BE AT LEAST 70% OF FULLY ESTABLISHED PLANT DENSITY OVER 100% OF THE DISTURBED AREA. A COPY OF FORM H SHOULD BE SUBMITTED TO THE CITY AT WHICH TIME THE CITY WILL REMOVE THE

LAND DISTURBANCE SITES SHOULD BE INSPECTED AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 48 HOURS AFTER ANY STORM EVENT FOUAL TO OR GREATER THAN A 2-YEAR. 24-HOUR STORM HAS CEASED DURING A NORMAL WORK DAY OR WITHIN 72 HOURS IF THE RAIN EVENT CEASES DURING A NON-WORK DAY SUCH AS A WEEKEND OR HOLIDY. ANY DEFICIENCIES SHALL BE NOTED IN A WEEKLY REPORT OF THE INSPECTION AND CORRECTED WITHIN SEVEN CALENDAR DAYS OF THE REPORT. CONTRACTORS ARE REQUIRED TO SUBMIT TO CITY INSPECTION STAFF COPIES OF THEIR INSPECTION REPORTS REQUIRED BY THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) ON A MONTHLY BASIS IF REQUESTED

NO OIL AND GAS WELLS EXIST ON THIS TRACT ACCORDING TO THE MISSOURI DEPARTMENT OF NATURAL RESOURCES OIL AND GAS

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.

TOTAL DISTURBED AREA ON SITE = 1.22 AC.

MISSOURI DNR LAND DISTURBANCE PERMIT NUMBER MORA23630

DEVELOPER:

DISCOVERY PARK LEE'S SUMMIT, LLC. 4220 PHILLIPS FARM RD. COLUMBIA, MO 65201 573-615-2252

PRC0M20252507

SHEET LIST TABLE ORIGINAL REV #1 REV #2 REV #3 REV #4 SHEET NUMBER | SHEET TITLE 11/22/24 | 02/21/25 | 03/24/25 | 04/08/25 | 06/17/25 COVER SHEET PROJECT SPECIFICATIONS EROSION CONTROL PLAN EROSION CONTROL DETAILS OVERALL GRADING PLAN GRADING PLAN SHEET 1 GRADING PLAN SHEET 2 GRADING PLAN SHEET 3 UTILITY PLAN CE 5.1 STORM PROFILE & DETAILS 25-YEAR STORM CALCULATIONS 100-YEAR STORM CALCULATIONS CE 6.1 SITE PLAN DETAILS SHEET 1 DETAILS SHEET 2 LEE'S SUMMIT DETAILS 1 LEE'S SUMMIT DETAILS 2 LANDSCAPING PLAN

FINISHED FLOOR OF STRUCTURE

PROPOSED HEAVY DUTY PAVEMENT

LEGEND OF SYMBOLS:

= = = = Existing curb

	DDODGOED GUDD		
	PROPOSED CURB	(XXX.XX TC)	PROPOSED TOP OF CURB ELEVATION
	RIP RAP	XXX.XX TP	PROPOSED TOP OF PAVEMENT ELEVATION
	EXISTING STRUCTURE	(XXX.XX FG)	PROPOSED FINISHED GRADE ELEVATION
	EXISTING TREELINE	(XXX.XX TW)	PROPOSED TOP OF WALL
~~~~	PROPOSED TREELINE	XX	LOT NUMBER
000	EDGE OF WATERWAY		
— w — —	EXISTING WATERLINE	$\langle X \rangle$	STORM SEWER STRUCTURE LABEL
——— w ———	PROPOSED WATERLINE	V	CANITADY COMED CONTAINE LADEL
—— G ——	EXISTING GAS LINE	(X)	SANITARY SEWER STRUCTURE LABEL
G	PROPOSED GAS LINE	H.P.	HIGH POINT
T	EXISTING TELEPHONE	L.P.	LOW POINT
— — — F0 — — —	EXISTING FIBER OPTIC	<del></del>	EXISTING SIGNS
—— OE ——	EXISTING OVERHEAD ELECTRIC	Ø	EXISTING POWER POLE
UE	EXISTING UNDERGROUND ELECTRIC		EXISTING GAS VALVE
——— UE ———	PROPOSED UNDERGROUND ELECTRIC	^{GV} ⊠	EXISTING WATER VALVE
—— OETV ——	EXISTING OVERHEAD ELEC. & TV	©	EXISTING GAS METER
— — OETVT — —	EXISTING OVERHEAD ELEC., TV & TELE.	W	EXISTING WATER METER
—— s ——	EXISTING SANITARY SEWER	ά	EXISTING FIRE HYDRANT
—— s ——	PROPOSED SANITARY SEWER	©	MANHOLE
·····XXX·····	EXISTING MINOR CONTOUR	<b>- →</b>	EXISTING SANITARY SEWER LATERAL
XXX	EXISTING MAJOR CONTOUR		PROPOSED SANITARY SEWER LATERAL
XXX	PROPOSED MINOR CONTOUR	<b>1B</b> )	PROPOSED TRACER WIRE TEST STATION BO
XXX	PROPOSED MAJOR CONTOUR	AC	EXISTING AIR CONDITIONER
	100 YEAR FLOOD PLAIN	<u> </u>	EXISTING TELEPHONE PEDESTAL
$\overline{1}$	FLOODWAY	ET)	EXISTING FLEETRICAL TRANSFORMER
· · ·	ORDINARY HIGH WATER MARK	E	EXISTING ELECTRIC METER
	STREAM SIDE BUFFER	_	
	OUTER STREAM BUFFER	¤	EXISTING LIGHT POLE
	PROPOSED CONCRETE PAVEMENT	<del></del>	EXISTING GUY WIRE
	FINOFOSED CONTONEIE PAVEMENT		PROPOSED BUILDING FOOTPRINT

PROPOSED CONCRETE PAVEMENT

PIPE EMBEDMENT UNDER PAVEMENT

IN PARKING GARAGE

**RELEASED FOR CONSTRUCTION** 

**Development Services Department** Lee's Summit, Missouri 07/22/2025

As Noted on Plan Review

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY NATHAN THOMAS ECKHOFF

||REVISIONS:

MO LICENSE-2003014960

DRAWING INCLUDES:

**COVER SHEET** 

DESIGNED: DRAWN: NMD

PROJECT NO.: 230286

CE 1.0

CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL REQUIREMENTS REGARDING MATERIALS, METHODS OF WORK, AND DISPOSAL OF EXCESS WASTE MATERIALS.

ERECT BARRIERS TO PROTECT PERSONNEL, STRUCTURES AND UTILITIES REMAINING INTACT.

PROTECT ALL EXISTING OBJECTS INTENDED TO REMAIN. IN CASE OF DAMAGE, MAKE REPAIRS OR REPLACEMENTS NECESSARY AT NO ADDITIONAL COST TO THE OWNER.

MINIMIZE INTERFERENCE WITH ROADS, STREETS, DRIVEWAYS, SIDEWALKS, AND ADJACENT FACILITIES.

DO NOT CLOSE OR OBSTRUCT STREETS, SIDEWALKS, ALLEYS OR PASSAGEWAYS WITHOUT PERMISSION FROM AUTHORITIES HAVING JURISDICTION.

IF CLOSURE IS PERMITTED, PROVIDE SIGNAGE INDICATING CLOSURE AND SIGNAGE TO DIRECT TRAFFIC TO ALTERNATE ROUTE.

MOISTEN SURFACES AS REQUIRED TO PREVENT DUST FROM BEING A NUISANCE TO THE PUBLIC, NEIGHBORS, AND CONCURRENT PERFORMANCE OF OTHER WORK ON THE SITE.

PROVIDE THE OWNER'S REPRESENTATIVE A MINIMUM OF TWO BUSINESS DAYS' NOTICE PRIOR TO COMMENCING WORK OF THIS SECTION.

THE CONTRACTOR SHALL LOCATE EXISTING UTILITY LINES AND SERVICES TRAVERSING THE SITE AND DETERMINE THE REQUIREMENTS FOR THEIR PROTECTION. THE CONTRACTOR SHALL PRESERVE ACTIVE UTILITIES ON THE SITE THAT ARE DESIGNATED TO REMAIN.

BEFORE STARTING SITE OPERATIONS. THE CONTRACTOR SHALL DISCONNECT OR ARRANGE FOR THE DISCONNECTION OF ALL UTILITY SERVICES DESIGNATED TO BE REMOVED. THE CONTRACTOR SHALL PERFORM ALL SUCH WORK IN ACCORDANCE WITH THE REQUIREMENTS OF THE UTILITY

IN REMOVING PAVEMENT, CURB AND GUTTER, SIDEWALKS, ETC., WHERE A PORTION IS LEFT IN PLACE, REMOVAL SHALL BE TO AN EXISTING JOINT OR TO A JOINT SAWED TO A MINIMUM DEPTH OF 2" WITH A TRUE SAW LINE AND A VERTICAL FACE. REMOVE SUFFICIENT PAVEMENT TO PROVIDE FOR PROPER GRADE AND CONNECTIONS IN THE NEW WORK REGARDLESS OF ANY LIMITS INDICATED ON THE DRAWING.

EXISTING CASTINGS AND CULVERTS. IF SALVAGEABLE AND REMOVED INTACT. REMAIN THE PROPERTY OF THE CONTRACTOR.

ALL SEWERS AND DRAINAGE PIPES, WHICH HAVE BEEN OR ARE TO BE ABANDONED, SHALL BE PERMANENTLY SEALED AT THE ENDS WITH BULKHEADS CONSTRUCTED OF CONCRETE, HAVING A MINIMUM THICKNESS OF 8".

ABANDON STORM OR SANITARY SEWER STRUCTURES BY BREAKING THE CONCRETE BOTTOM OF THE STRUCTURE INTO PIECES NO LARGER THAN 12" IN ANY DIRECTION AND REMOVING THE TOP OF THE STRUCTURE TO 3" BELOW FINISHED GRADE. PLUG ALL PIPES WITH CONCRETE AND FILL STRUCTURE WITH 1" CLEAN GRAVEL.

ALL DEBRIS SHALL BE DISPOSED OF OFF-SITE

DO NOT STORE OR BURN MATERIALS ON-SITE UNLESS PERMITTED BY THE GOVERNING JURISDICTION.

ALL ASPHALT OR CONCRETE MATERIALS SHALL BE DISPOSED OF OFF-SITE.

MATERIAL ACQUIRED THROUGH DEMOLITION, OTHER THAN THOSE REQUIRED TO COMPLETE THE CONSTRUCTION PROJECT AND DESIGNATED FOR RETURN TO OWNER, WILL BECOME THE PROPERTY OF THE CONTRACTOR AND WILL BE REMOVED FROM THE SITE. THE MATERIAL WILL BE DISPOSED OF IN A

THE CONTRACTOR'S OPERATIONS SHALL BE RESTRICTED TO THOSE AREAS INSIDE THE CONSTRUCTION LIMITS INDICATED ON THE DRAWINGS. IF LIMITS ARE NOT INDICATED, RESTRICT WORK TO THE OWNER'S PROPERTY, EASEMENT, OR PUBLIC RIGHTS-OF-WAY.

COMPLETE WORK WITHIN PUBLIC RIGHTS-OF-WAY UNDER THE PERMISSION OF THE GOVERNING AGENCY.

IF ITEMS OUTSIDE THE LIMITS OF DISTURBANCE GET DAMAGED, OWNER COMPLETES THE REQUIRED REPAIRS AND CHARGES THE CONTRACTOR.

THE CONTRACTOR IS RESPONSIBLE FOR THE ADJUSTMENT OF ALL MANHOLES. CASTINGS. WATER VALVES IRRIGATION BOXES. CLEAN OUTS AND ETC. WITHIN THE GRADING LIMITS TO MATCH THE FINISHED SURFACE. ADJUSTMENTS SHALL BE COORDINATED WITH THE UTILITY COMPANIES AND THE COST FOR ALL ADJUSTMENTS SHALL BE INCIDENTAL TO CONSTRUCTION UNLESS NOTED AS A BID ITEM. THE CONTRACTOR SHALL REPAIR ANY DAMAGE TO UTILITY STRUCTURES AND APPURTENANCES THAT OCCURS DURING CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER.

CONTRACTOR TO SUBMIT MANUFACTURER'S PRODUCT DATA AND INSTALLATION INSTRUCTIONS FOR EACH MATERIAL AND PRODUCT USED.

TEST REPORTS: SUBMIT FOR APPROVAL TEST REPORTS, LIST OF MATERIALS AND GRADATIONS PROPOSED FOR USE. OBTAIN SAMPLES OF ANY PROPOSED FILL MATERIAL AND CONTRACTOR TO PROVIDE STANDARD PROCTOR TEST REPORTS TO ENGINEER.

COMPACTION REQUIREMENTS ARE AS FOLLOWS:

UNDER STEPS, PAVEMENTS, AND WALKWAYS, 95 PERCENT STANDARD PROCTOR MINIMUM DENSITY, ASTM D 698.

2. UNDER LAWNS OR UNPAVED AREAS, 85 PERCENT, ASTM D 698. GRADING TOLERANCES OUTSIDE BUILDING LINES ARE AS FOLLOWS:

1. LAWNS, UNPAVED AREAS, AND WALKS, PLUS OR MINUS 1 INCH.

PAVEMENTS, PLUS OR MINUS 1/2 INCH. 3. ALL ADA ROUTES AND PARKING ARE TO MEET ADA REQUIREMENTS AT ALL TIMES.

ALL ACTIVITIES WILL BE CONTAINED WITHIN CONSTRUCTION BOUNDARIES INDICATED ON SITE PLAN. SPECIFIED EXCAVATION REQUIREMENTS,

PRECAUTIONS, AND PROTECTIVE SYSTEMS WILL BE OBSERVED AT ALL TIMES. MOVEMENT OF TRUCKS AND EQUIPMENT ON OWNER'S PROPERTY WILL BE IN ACCORDANCE WITH OWNER'S INSTRUCTIONS.

TOPSOIL WILL BE STRIPPED FROM THE CONSTRUCTION SITE AND WILL BE DISPOSED OF LEGALLY OFF SITE.

TRENCHES WILL NOT BE BACKFILLED UNTIL ALL REQUIRED TESTS ARE COMPLETED AND THE UTILITY SYSTEMS, AS INSTALLED, CONFORM TO REQUIREMENTS SPECIFIED BY THE CONTRACT DOCUMENTS.

EXCAVATION IS UNCLASSIFIED AND INCLUDES EXCAVATION TO SUBGRADE REGARDLESS OF MATERIALS ENCOUNTERED. REPAIR EXCAVATIONS BEYOND

ELEVATIONS AND DIMENSIONS INDICATED AS FOLLOWS: AT STRUCTURE: CONCRETE OR COMPACTED STRUCTURAL FILL.

ELSEWHERE: BACKFILL AND COMPACT AS DIRECTED. MAINTAIN STABILITY OF EXCAVATIONS; CONTRACTOR TO BE RESPONSIBLE FOR DESIGN AND COORDINATION OF SHORING AND BRACING AS REQUIRED. PREVENT SURFACE AND SUBSURFACE WATER FROM ACCUMULATING IN EXCAVATIONS. STOCKPILE SATISFACTORY MATERIALS FOR REUSE, ALLOW FOR PROPER DRAINAGE AND DO NOT STOCKPILE MATERIALS WITHIN DRIP LINE OF TREES TO REMAIN.

COMPACT MATERIALS AT THE OPTIMUM MOISTURE CONTENT AS DETERMINED BY ASTM D 698 BY AERATION OR WETTING TO THE FOLLOWING

PERCENTAGES OF MAXIMUM DRY DENSITY: 1. STRUCTURE, PAVEMENT, WALKWAYS: SUBGRADE AND EACH FILL LAYER TO 95% (-2%+4%) OF STANDARD PROCTOR MAXIMUM DRY DENSITY TO SUITABLE DEPTH. COMPACTION TESTING SHALL BE PERFORMED IMMEDIATELY PRIOR TO THE PLACEMENT OF REINFORCING STEEL AND NEW PAVING MATERIALS. CONTRACTOR SHALL BE RESPONSIBLE FOR SCHEDULING TESTING WITH OWNERS DESIGNATED TESTING AGENCY.

UNPAVED AREAS: TOP 6" OF SUBGRADE AND EACH FILL LAYER TO 90% MAXIMUM DRY DENSITY. A PROOF-ROLL SHALL BE REQUIRED OF THE SUBGRADE PRIOR TO PLACEMENT OF THE BASE COURSE. PROOF ROLLING SHALL CONSIST OF PASSING A LOADED, 20-TON, TANDEM DUMP TRUCK OVER THE PREPARED SUBGRADE SOIL WITH A MAXIMUM ALLOWABLE DISPLACEMENT OF 1". ANY AREAS THAT DISPLACE MORE THAN 1" SHALL BE COMPACTED UNTIL THIS CRITERION IS MET, OR THOSE AREAS MAY BE EXCAVATED AND BACKFILLED WITH COMPACTED TYPE 1 AGGREGATE USED FOR BASE MATERIAL. ALL PROOF ROLLING SHALL BE PERFORMED IN THE PRESENCE OF THE OWNER'S REPRESENTATIVE.

4. CUT AREAS UNDER PROPOSED ASPHALT OR CONCRETE PAVEMENTS SHALL BE CUT AND COMPACTED. AFTER GRADING TO SUBGRADE ELEVATION, SCARIFY THE TOP SIX INCHES OF THE SUB-BASE AND COMPACT AS OUTLINED ABOVE.

PLACE ACCEPTABLE MATERIALS IN LAYERS NOT MORE THAN 8" LOOSE DEPTH FOR MATERIALS COMPACTED BY HEAVY EQUIPMENT AND NOT MORE THAN 4" LOOSE DEPTH FOR MATERIALS COMPACTED BY HAND EQUIPMENT TO SUBGRADES INDICATED AS FOLLOWS:

STRUCTURAL FILL: USE UNDER FOUNDATIONS, SLABS ON GRADE IN LAYERS AS INDICATED. DRAINAGE FILL: USE UNDER DESIGNATED BUILDING SLABS, AT FOUNDATION DRAINAGE AND ELSEWHERE AS INDICATED. LANDSCAPE AREA FILL:

3.1. ALL SUB-GRADE AREAS SHALL BE "RIPPED" TO A MINIMUM 6" DEEP AND A MAXIMUM OF 12" APART IN OPPOSITE DIRECTIONS WITH MINIMAL TIRE TRAFFIC TO FOLLOW.

CONTRACTOR TO LEAVE AREAS 6" OR 18" (PLANTER AREAS) BELOW FINISH GRADE. OWNER TO PLACE TOPSOIL AND ALL PLANTINGS. ANY FILL SOIL WITHIN 36" OF FINISHED GRADE IN LAWN AND PLANTER AREAS SHALL BE COHESIVE SOILS IN SOIL CLASSIFICATIONS GROUPS ML, CL, CH OR A COMBINATION THEREOF, FREE OF ROCK OR GRAVEL LARGER THAN 1" IN ANY DIMENSION, DEBRIS, WASTE, FROZEN MATERIAL, VEGETATION AND OTHER DELETERIOUS MATTER. 4. SUB-BASE MATERIAL: USE UNDER PAVEMENT, WALKS, STEPS, PIPING AND CONDUIT.

GRADE TO WITHIN 1/2" ABOVE OR BELOW REQUIRED SUBGRADE AND WITHIN A TOLERANCE OF 1/2" IN 10'.

PROTECT NEWLY GRADED AREAS FROM TRAFFIC AND EROSION. RECOMPACT AND REGRADE SETTLED, DISTURBED AND DAMAGED AREAS AS NECESSARY TO RESTORE QUALITY, APPEARANCE, AND CONDITION OF WORK

CONTROL EROSION TO PREVENT RUNOFF INTO SEWERS OR DAMAGE TO SLOPED OR SURFACED AREAS.

CONTROL DUST TO PREVENT HAZARDS TO ADJACENT PROPERTIES AND VEHICLES. IMMEDIATELY REPAIR OR REMEDY DAMAGE CAUSED BY DUST INCLUDING AIR FILTERS IN EQUIPMENT AND VEHICLES. CLEAN SOILED SURFACES.

DISPOSAL OF EXCAVATION WASTE AND UNSUITABLE MATERIALS SHALL BE THE RESPONSIBILITY OF THE SITE WORK CONTRACTOR. NO SPECIFIC OR PRE-APPROVED LOCATION IS BEING PROVIDED BY THE OWNER.

#### CONCRETE:

CONCRETE WORK SHALL CONFORM TO ALL REQUIREMENTS OF THE CURRENT ACI 301, SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS, ACI 318 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE, ACI 305 SPECIFICATIONS FOR HOT WATER CONCRETE, AND ACI 306 SPECIFICATIONS FOR COLD WEATHER CONCRETE, WITH THE FOLLOWING ADDITIONAL REQUIREMENTS:

1. CONCRETE SHALL DEVELOP THE FOLLOWING 28-DAY MINIMUM COMPRESSIVE STRENGTH: CAST-IN-PLACE WALLS 3 500 PSI FLOOR SLAB 4,000 PSI EXTERIOR SLABS, WALLS AND CURBS

4,000 PSI 2. ALL FOOTINGS SHALL BEAR ON UNDISTURBED SOIL OR ENGINEERED FILL.

3. CHLORIDE- BASED ADMIXTURES ARE PROHIBITED IN ALL CONCRETE. 4. REINFORCING STEEL SHALL CONFORM TO ASTM A615, A616, OR A617, GRADE 60.

5. ALL CONTINUOUS REINFORCING STEEL THAT MEETS AT A CORNER SHALL BE TIED TOGETHER WITH A CORNER BAR THAT HAS SUFFICIENT LAP DISTANCE IN EACH DIRECTION

6. CONTINUOUS REINFORCING BARS LAP LENGTH SHALL BE A MINIMUM OF 48 BAR DIAMETERS UNLESS NOTED OTHERWISE 7. CONCRETE SLUMP SHALL BE A MAXIMUM OF 4" +/- 1" (ASTM C- 143) AS DELIVERED IN THE FIELD. CONTRACTOR MAY USE CHEMICAL ADMIXTURES TO ATTAIN A MAXIMUM SLUMP OF 8 FOR WORKABILITY. NO WATER MAY BE ADDED TO THE CONCRETE MIX ON SITE UNLESS WATER IS WITHHELD AT THE BATCHING FACILITY. IF WATER IS WITHHELD AT THE BATCHING FACILITY IT SHOULD BE REFLECTED ON THE LOAD

TICKET. THE TOTAL AMOUNT OF WATER IN THE MIX SHALL NOT EXCEED WHAT IS NOTED ON THE APPROVED MIXED. THIS SHALL BE NOTED IN

THE SPECIAL INSPECTOR'S RECORDS. 8. CONCRETE EXPOSED TO WEATHER, VEHICLES, AND/OR DEICING CHEMICALS SHALL BE AIR-ENTRAINED WITH 6% (+/-) 1.5% ENTRAINED AIR BY VOLUME AT POINT OF DISCHARGE. DO NOT ALLOW AIR CONTENT OF TROWELED FINISHED FLOORS TO EXCEED 3%. 9. SUBMIT CONCRETE MIX PROPORTIONS PRIOR TO START OF WORK. DO NOT BEGIN CONCRETE PRODUCTION UNTIL MIXES HAVE BEEN REVIEWED

AND ARE ACCEPTABLE TO THE ENGINEER. 10. READY MIX CONCRETE SHALL COMPLY WITH REQUIREMENTS OF ASTM C94.

11. CONCRETE WORK EXECUTION A. CONSTRUCT FORMS TO CORRECT SIZE, SHAPE, ALIGNMENT, ELEVATION AND POSITION; AND TO SUPPORT VERTICAL AND LATERAL LOADS. B. POSITION, SUPPORT, AND SECURE REINFORCEMENT AGAINST DISPLACEMENT. MINIMUM CONCRETE COVER FOR REINFORCEMENT SHALL BE, UNLESS NOTED OTHERWISE ON THE DRAWINGS:

> CAST AGAINST AND EXPOSED TO EARTH.......3 INCHES EXPOSED TO EARTH OR WEATHER......2 INCHES

NOT EXPOSED TO WEATHER OR IN CONTACT WITH EARTH....... 1 1/2 INCHES C. PROVIDE CONTROL JOINTS IN SLABS-ON-GRADE AT NOT GREATER THAN 15 FEET ON CENTER IN EACH DIRECTION. SAW CUT CONTROL

JOINTS MINIMUM 1/4 OF SLAB DEPTH, AS SOON AFTER SLAB FINISHING WITHOUT DISLODGING AGGREGATE. D. STEEL TROWEL FINISH ALL INTERIOR CONCRETE SLABS, BROOM FINISH ALL EXTERIOR CONCRETE SLABS.

E. CURE ALL CONCRETE IN COMPLIANCE WITH ACI 301, USING A LIQUID TYPE MEMBRANE, NON-RESIDUAL, CURING COMPOUND COMPLYING WITH ASTM C309. ASSURE COMPATIBILITY WITH FINISH FLOOR COVERING.

12. FLINT AND CHERT WILL BE LIMITED TO 1% MAXIMUM, BY WEIGHT OF THE COURSE AGGREGATE, IN ALL EXPOSED CONCRETE (CAST-IN-PLACE OR PRECAST). LIGNITE WILL BE LIMITED TO 0.5%, BY WEIGHT OF THE FINE AGGREGATE IN ALL EXPOSED CONCRETE. SOME APPLICATIONS MAY BE REQUIRED TO BE LIGNITE FREE.

#### CONCRETE PAVING JOINT SEALANTS

DELIVER MATERIALS TO PROJECT SITE IN ORIGINAL UNOPENED CONTAINERS OR BUNDLES WITH LABELS INDICATING MANUFACTURER, PRODUCT NAME AND DESIGNATION, COLOR, EXPIRATION DATE, POT LIFE, CURING TIME, AND MIXING INSTRUCTIONS FOR MULTICOMPONENT MATERIALS.

STORE AND HANDLE MATERIALS TO COMPLY WITH MANUFACTURER'S WRITTEN INSTRUCTIONS TO PREVENT THEIR DETERIORATION OR DAMAGE DUE TO MOISTURE, HIGH OR LOW TEMPERATURES, CONTAMINANTS, OR OTHER CAUSES.

DO NOT PROCEED WITH INSTALLATION OF JOINT SEALANTS UNDER THE FOLLOWING CONDITIONS:

1. WHEN AMBIENT AND SUBSTRATE TEMPERATURE CONDITIONS ARE OUTSIDE LIMITS PERMITTED BY JOINT SEALANT MANUFACTURER OR ARE BELOW 40 DEG F.

2. WHEN JOINT SUBSTRATES ARE WET OR COVERED WITH FROST.

3. WHERE JOINT WIDTHS ARE LESS THAN THOSE ALLOWED BY JOINT-SEALANT MANUFACTURER FOR APPLICATIONS INDICATED.

4. WHERE CONTAMINANTS CAPABLE OF INTERFERING WITH ADHESION HAVE NOT YET BEEN REMOVED FROM JOINT SUBSTRATES.

PROVIDE JOINT SEALANTS, BACKING MATERIALS, AND OTHER RELATED MATERIALS THAT ARE COMPATIBLE WITH ONE ANOTHER AND WITH JOINT SUBSTRATES UNDER CONDITIONS OF SERVICE AND APPLICATION. AS DEMONSTRATED BY JOINT-SEALANT MANUFACTURER BASED ON TESTING

COLD-APPLIED JOINT SEALANTS ARE TO BE TYPE NS SILICONE SEALANT FOR CONCRETE: SINGLE-COMPONENT. LOW-MODULUS. NEUTRAL-CURING, NONSAG SILICONE SEALANT COMPLYING WITH ASTM D 5893 FOR TYPE NS. PRODUCTS ALLOWED ARE: CRAFCO INC.: ROADSAVER SILICONE, DOW CORNING CORPORATION; 888, PECORA NS 301, OR APPROVED EQUAL

CONTRACTOR TO PROVIDE JOINT-SEALANT BACKER MATERIALS THAT ARE NONSTAINING; ARE COMPATIBLE WITH JOINT SUBSTRATES, SEALANTS, PRIMERS, AND OTHER JOINT FILLERS; AND ARE APPROVED FOR APPLICATIONS INDICATED BY JOINT-SEALANT MANUFACTURER BASED ON FIELD EXPERIENCE AND LABORATORY TESTING. ROUND BACKER RODS FOR COLD-APPLIED SEALANTS: ASTM D 5249, TYPE 3, OF DIAMETER AND DENSITY REQUIRED TO CONTROL SEALANT DEPTHAND PREVENT BOTTOM-SIDE ADHESION OF SEALANT.

PRIOR TO JOINT INSTALLATION, CONTRACTOR IS TO EXAMINE JOINTS INDICATED TO RECEIVE JOINT SEALANTS, WITH INSTALLER PRESENT, FOR COMPLIANCE WITH REQUIREMENTS FOR JOINT CONFIGURATION, INSTALLATION TOLERANCES, AND OTHER CONDITIONS AFFECTING JOINT- SEALANT PERFORMANCE. PROCEED WITH INSTALLATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.

CLEAN OUT JOINTS IMMEDIATELY BEFORE INSTALLING JOINT SEALANTS TO COMPLY WITH JOINT-SEALANT MANUFACTURER'S WRITTEN INSTRUCTIONS.

COMPLY WITH JOINT-SEALANT MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS FOR PRODUCTS AND APPLICATIONS INDICATED, UNLESS MORE STRINGENT REQUIREMENTS APPLY.

COMPLY WITH RECOMMENDATIONS IN ASTM C 1193 FOR USE OF JOINT SEALANTS AS APPLICABLE TO MATERIALS, APPLICATIONS, AND CONDITIONS INDICATED.

INSTALL BACKER MATERIALS OF TYPE INDICATED TO SUPPORT SEALANTS DURING APPLICATION AND AT POSITION REQUIRED TO PRODUCE CROSS-SECTIONAL SHAPES AND DEPTHS OF INSTALLED SEALANTS RELATIVE TO JOINT WIDTHS THAT ALLOW OPTIMUM SEALANT MOVEMENT CAPABILITY. DO NOT LEAVE GAPS BETWEEN ENDS OF BACKER MATERIALS. DO NOT STRETCH, TWIST, PUNCTURE, OR TEAR BACKER MATERIALS. REMOVE ABSORBENT BACKER MATERIALS THAT HAVE BECOME WET BEFORE SEALANT APPLICATION AND REPLACE THEM WITH DRY MATERIALS.

INSTALL SEALANTS USING PROVEN TECHNIQUES THAT COMPLY WITH THE FOLLOWING AND AT THE SAME TIME BACKING ARE INSTALLED:

1. PLACE SEALANTS SO THEY DIRECTLY CONTACT AND FULLY WET JOINT SUBSTRATES.

2. COMPLETELY FILL RECESSES PROVIDED FOR EACH JOINT CONFIGURATION.

3. PRODUCE UNIFORM, CROSS-SECTIONAL SHAPES AND DEPTHS RELATIVE TO JOINT WIDTHS THAT ALLOW OPTIMUM SEALANT MOVEMENT

IMMEDIATELY AFTER SEALANT APPLICATION AND BEFORE SKINNING OR CURING BEGINS, TOOL SEALANTS ACCORDING TO REQUIREMENTS SPECIFIED BELOW TO FORM SMOOTH, UNIFORM BEADS OF CONFIGURATION INDICATED; TO ELIMINATE AIR POCKETS; AND TO ENSURE CONTACT AND ADHESION OF SEALANT WITH SIDES OF JOINT. REMOVE EXCESS SEALANTS FROM SURFACES ADJACENT TO JOINT.USE TOOLING AGENTS THAT ARE APPROVED IN WRITING BY JOINT-SEALANT MANUFACTURER AND THAT DO NOT DISCOLOR SEALANTS OR ADJACENT SURFACES.

PROVIDE JOINT CONFIGURATION TO COMPLY WITH JOINT-SEALANT MANUFACTURER'S WRITTEN INSTRUCTIONS, UNLESS OTHERWISE INDICATED.

PROVIDE RECESSED JOINT CONFIGURATION FOR SILICONE SEALANTS OF RECESS DEPTH AND AT LOCATIONS INDICATED.

CLEAN OFF EXCESS SEALANTS OR SEALANT SMEARS ADJACENT TO JOINTS AS THE WORK PROGRESSES BY METHODS AND WITH CLEANING MATERIALS APPROVED BY MANUFACTURERS OF JOINT SEALANTS AND OF PRODUCTS IN WHICH JOINTS OCCUR.

PROTECT JOINT SEALANTS DURING AND AFTER CURING PERIOD FROM CONTACT WITH CONTAMINATING SUBSTANCES AND FROM DAMAGE RESULTING FROM CONSTRUCTION OPERATIONS OR OTHER CAUSES SO SEALANTS ARE WITHOUT DETERIORATION OR DAMAGE AT TIME OF SUBSTANTIAL COMPLETION. IF, DESPITE SUCH PROTECTION, DAMAGE OR DETERIORATION OCCURS, CUT OUT AND REMOVE DAMAGED OR DETERIORATED JOINT SEALANTS IMMEDIATELY AND REPLACE WITH JOINT SEALANT SO INSTALLATIONS WITH REPAIRED AREAS ARE INDISTINGUISHABLE FROM THE ORIGINAL WORK.

#### PAVEMENT MARKING:

UNLESS NOTED OTHERWISE ON THE PLANS, PAINT SHALL BE WATERBORNE OR SOLVENT BORNE, COLORS AS SHOWN OR SPECIFIED HEREIN. WATERBORNE PAINT: PAINTS SHALL CONFORM TO FS TT-P-1952. SOLVENT BORNE PAINT: PAINT SHALL CONFORM TO FS A-A-2886 OR AASHTO M248. PAINT SHALL BE NON-BLEEDING, QUICK-DRYING AND ALKYD PETROLEUM BASE PAINT SUITABLE FOR TRAFFIC BEARING SURFACE AND BE MIXED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS BEFORE APPLICATION FOR COLORS WHITE, YELLOW, BLUE, AND RED. RETROFLECTIVE PAINT SHALL BE TYPE L GLASS BEADS PER SECTION 620 OF THE CURRENT MODOT STANDARD SPECIFICATIONS FOR HIGHWAY

PAINT SHALL BE APPLIED PER THE FOLLOWING COLOR CODE: WHITE FOR STANDARD PARKING SPACE LINES AND SIDEWALK CROSSINGS. BLUE FOR ACCESSIBLE PARKING STALL AND SYMBOLS AND ASSOCIATED CROSS—HATCHED AREAS

MATERIALS SHALL INCLUDE STANDARD COMMERCIAL GRADE MASKING MATERIALS, SCRAPERS, CLEANING SOLVENTS, AND OTHER MATERIALS REQUIRED FOR THE WORK. USE MATERIALS SPECIFIED BY MANUFACTURER'S DIRECTION LABEL ON CONTAINER.

DELIVER MATERIALS TO THE SITE IN ORIGINAL CONTAINERS WITH SEALS UNBROKEN AND LABELS INTACT. PROTECT ALL PAINT FROM FREEZING. DO NOT ALLOW PAINT TO SETTLE, CAKE, OR THICKEN IN THE CONTAINER. READILY STIR WITH A PADDLE TO A SMOOTH CONSISTENCY. PAINT SHALL ARRIVE ON THE JOB COLOR-MIXED EXCEPT FOR TINTING OF UNDERCOATS AND POSSIBLE THINNING.

PRIOR TO BEGINNING CLEANING OR PAINTING OPERATIONS. CONTRACTOR SHALL PROTECT ALL ITEMS OR SURFACES NOT INCLUDED IN AREA TO BE PAINTED. PROTECT VEHICLES, EQUIPMENT, STRUCTURES, OR OTHER ITEMS FROM PAINT SPATTERS, OVER SPRAY, OR DAMAGE.

CONTRACTOR SHALL PROVIDE BARRICADES AND ANY SIGNAGE NEEDED TO PROTECT ALL PAINTED AREAS FROM PEDESTRIAN AND VEHICULAR TRAFFIC UNTIL ACHIEVING SUFFICIENT DRYING TIME.

PERFORM PAINTING AS SOON AS FEASIBLE AND PRACTICAL AFTER THE FINISHING OF THE PAVEMENT OR AS DIRECTED BY THE OWNERS REPRESENTATIVE. ADEQUATE LIGHTING SHALL BE AVAILABLE AT THE TIME OF PAINTING. EXAMINE ALL SURFACES TO RECEIVE PAINT TO MAKE SURE THERE ARE NO DEFECTS IN THE SURFACE TO BE STRIPED. DO NOT PAINT OVER RUST, SCALE, GREASE, OIL, FUEL, DUST, WET PAVEMENT, OR OTHER CONDITIONS DETRIMENTAL TO PAINT ADHESION, REMOVE GREASE, OIL, OR FUEL ON ANY SURFACE BEFORE PAINTING. CORRECT ALL SURFACE DEFECTS BEFORE PAINTING. CONTRACTOR SHALL EXAMINE AREAS TO BE PAINTED. NOTIFY THE OWNERS REPRESENTATIVE IN WRITING OF CONDITIONS THAT MIGHT DELAY TIMELY COMPLETION OF THE WORK.

PAINTING SHALL NOT BE PERFORMED WHEN THE AMBIENT TEMPERATURE IS LESS THAN 55 DEGREES FAHRENHEIT AND NOT EXCEEDING 95 DEGREES FAHRENHEIT, OR WHILE THE SURFACE IS DAMP. THE SURFACE MUST BE FIVE DEGREES OR MORE ABOVE THE DEW POINT TEMPERATURE DURING PAINTING OPERATIONS AND WHILE PAINT IS DRYING.

AREAS TO BE PAINTED SHALL RECEIVE ONE COAT OF PAINT NOT LESS THAN 25 MILS THICKNESS WET PER MODOT 620.9 THROUGH 620.9.3.4.2. IN LOCATIONS REQUIRING MULTIPLE COATS, PRIOR COAT SHALL BE DRY TO MANUFACTURER'S RECOMMENDATIONS BEFORE APPLYING THE NEXT COAT. FINISHED WORK SHALL BE UNIFORM, OF APPROVED COLOR, FREE OF RUNS, DRIPS, DEFECTIVE BRUSHING, SPRAYING, AND CLOGGING. PARKING LINES AND SYMBOLS SHALL BE NEAT AND WELL DEFINED. ONLY SKILLED APPLICATORS SHALL APPLY PAINT. OWNERS REPRESENTATIVE SHALL APPROVE APPLICATION TECHNIQUES.

REMOVE PAINT SPLATTER FROM ADJACENT AREAS OR AREAS NOT DESIGNATED TO RECEIVE PAINT. CONTRACTOR SHALL REPAIR OR TOUCH UP ANY SURFACES IF EXPOSED TO VEHICULAR AND PEDESTRIAN TRAFFIC, TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE, AT NO ADDITIONAL COST TO THE OWNER. WHEN COLOR, DIRT, STAINS, EXISTING PAINT, ETC., SHOW THROUGH THE FINAL COAT, REPAINT THE SURFACE UNTIL THE FILM IS UNIFORM IN FINISH, COVERAGE, COLOR, AND APPEARANCE

#### RELEASED FOR CONSTRUCTION

As Noted on Plan Review

**Development Services Department** Lee's Summit, Missouri 07/22/2025

REVISIONS:

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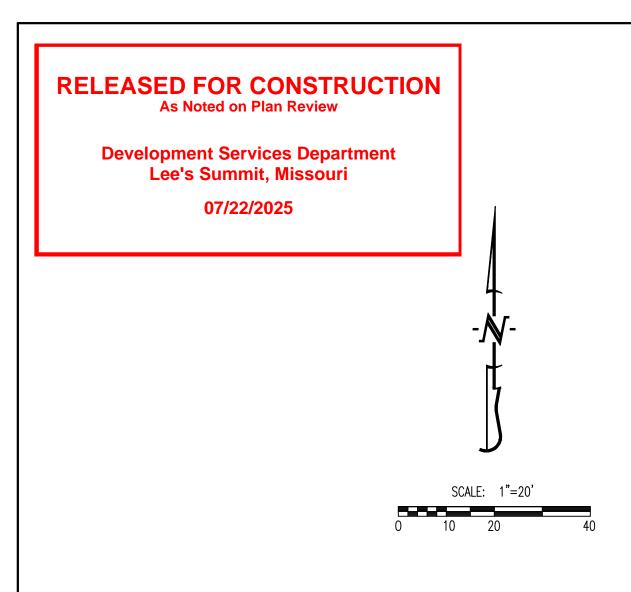
NATHAN THOMAS ECKHOFF MO LICENSE-2003014960

I DRAWING INCLUDES:

PROJECT SPECIFICATIONS

DESIGNED: NTE

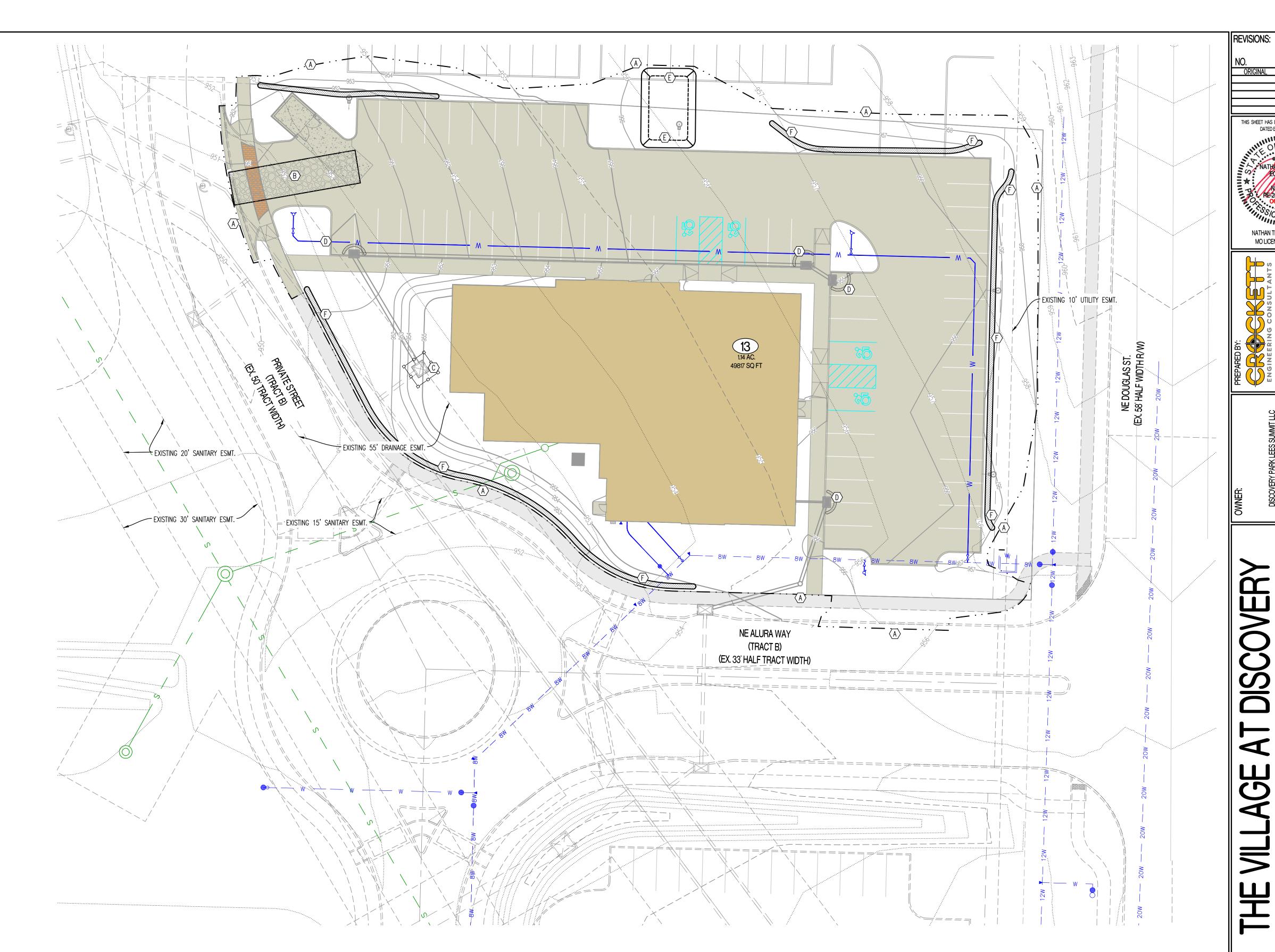
NMD PROJECT NO.: 230286



#### LEGEND OF LABELS:

- $\langle \overline{A} \rangle$  LIMITS OF DISTURBANCE.
- (B) INSTALL CRUSHED STONE CONSTRUCTION ENTRANCE. ALL CONSTRUCTION TRAFFIC SHALL LEAVE THE SITE VIA THIS EXIT. REFER TO ESC-01 ON CE 2.2.
- (C) INSTALL INLET PROTECTION AROUND THROAT OF INLET. REFER TO ESC-07 ON CE 2.2.
- (D) INSTALL 2" X 10" BOARD WRAPPED IN SILT FENCE AT THROAT OF INLET. REPLACE BOARD WITH GUTTERBUDDY (OR APPROVED EQUAL) AT THROAT OF INLET AFTER PAVING OPERATIONS ARE COMPLETE. REFER TO ESC-06 ON CE 2.2.
- (E) 20' X 30' X 3' MIN CONCRETE WASHOUT FACILITY.

  THE WASHOUT FACILITY IS TO BE LINED WITH A PLASTIC LINING MATERIAL (10 MIL POLYETHYLENE SHEETING MIN.) FREE OF HOLES, TEARS, OR OTHER DEFECTS THAT COULD COMPROMISE THE IMPERMEABILITY OF THE MATERIAL. WASHOUT FACILITIES MUST BE CLEANED, OR NEW FACILITIES MUST BE CONSTRUCTED AND READY FOR USE ONCE THE WASHOUT IS 75% FULL. A SIGN SHALL BE INSTALLED ADJACENT TO FACILITY TO INFORM CONCRETE EQUIPMENT OPERATORS TO UTILIZE THE PROPER FACILITIES. REFER TO ESC-01 ON CE 2.2 FOR CITY REQUIREMENTS.
- (F) INSTALL STRAW WATTLE AS SHOWN. REFER TO ESC-04 ON CE 2.2.



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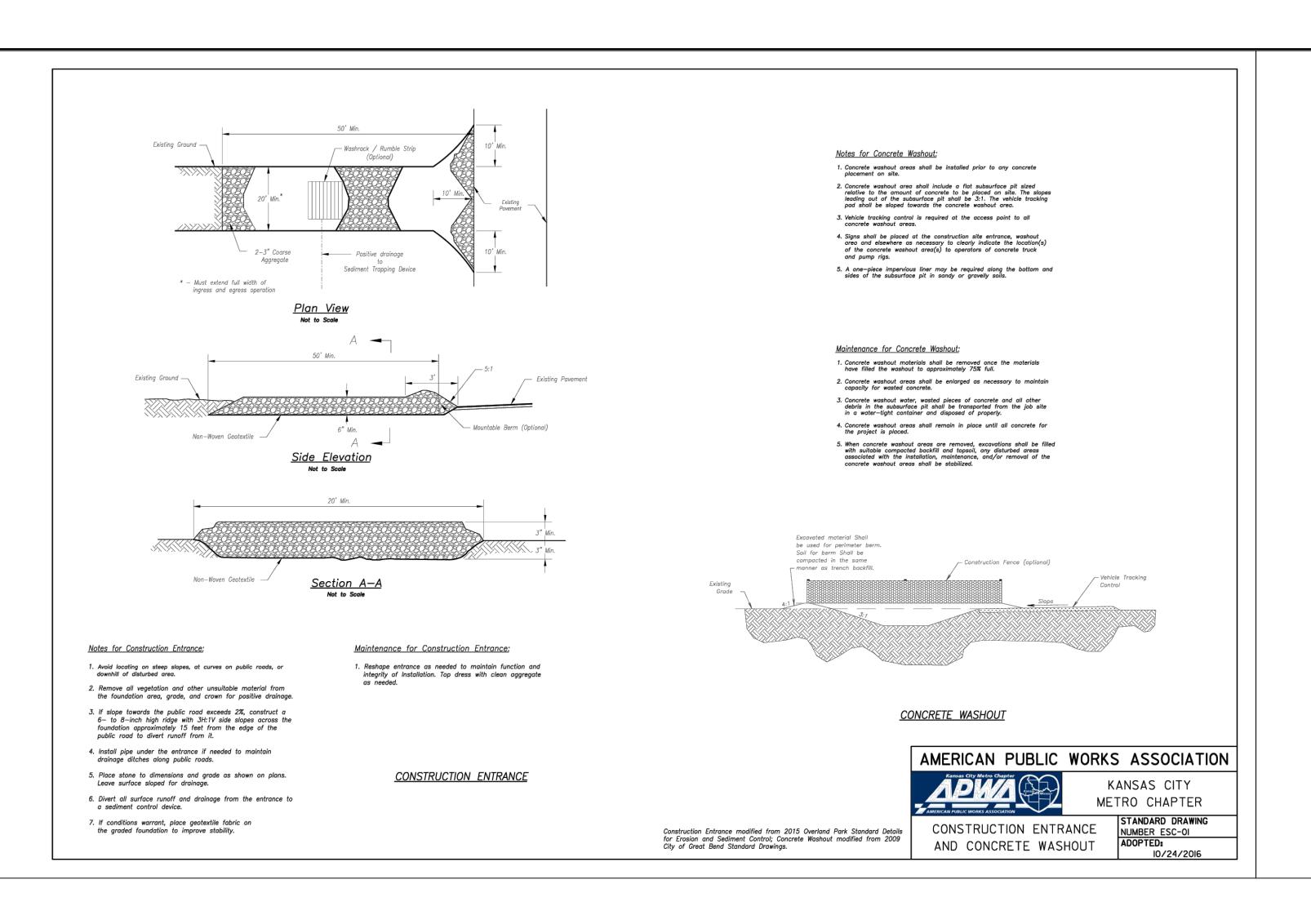
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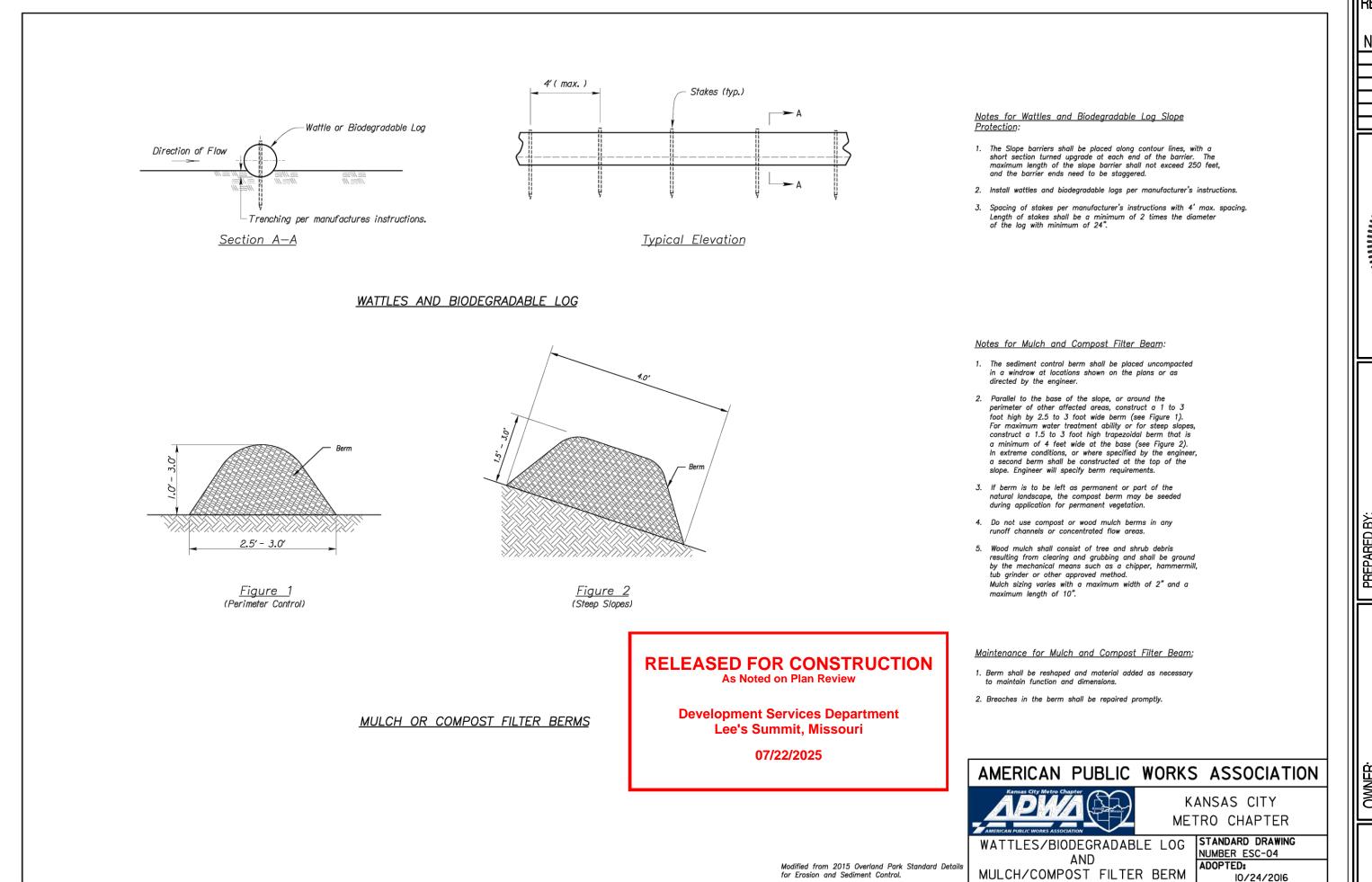
EROSION CONTROL PLAN

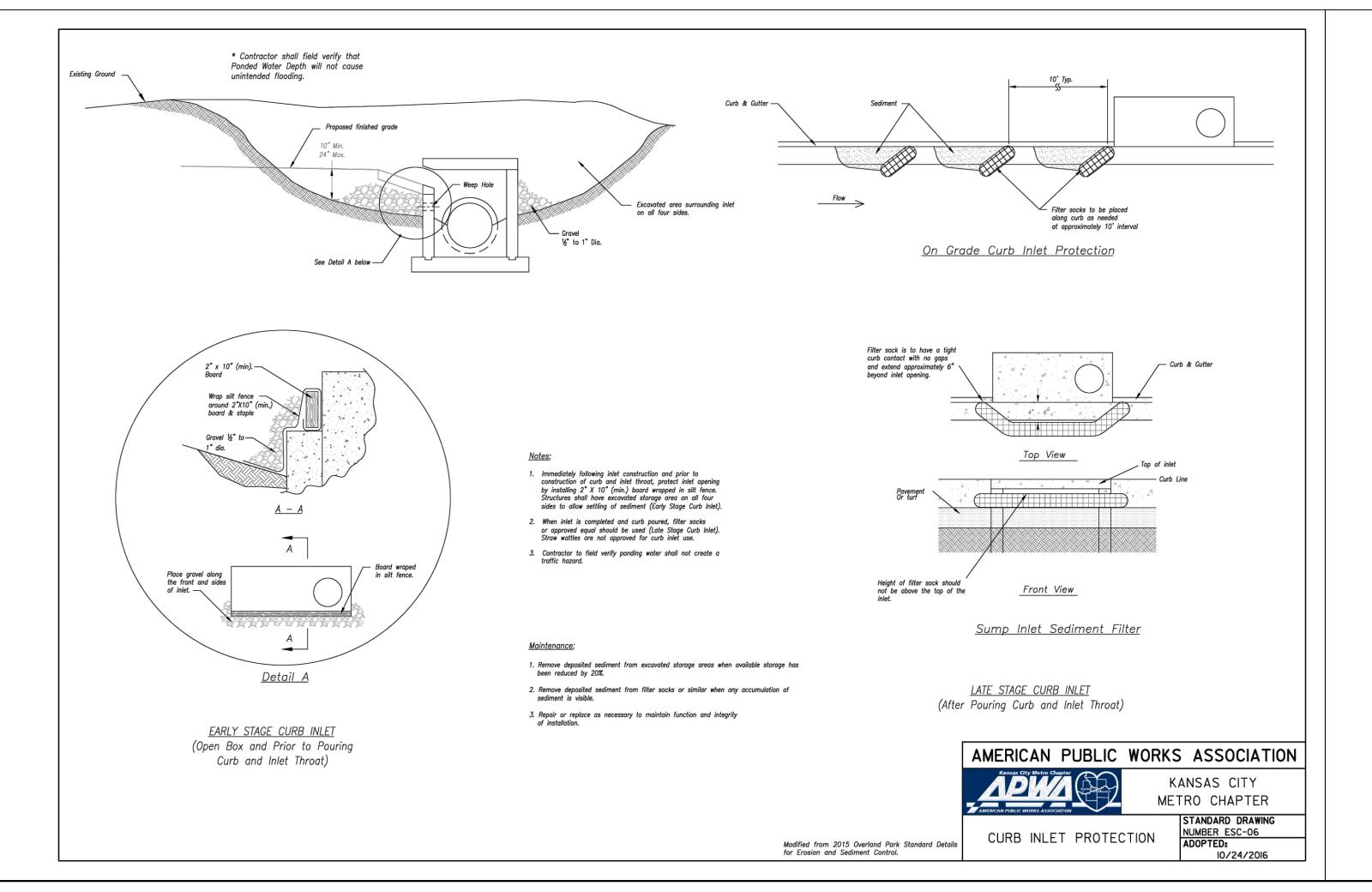
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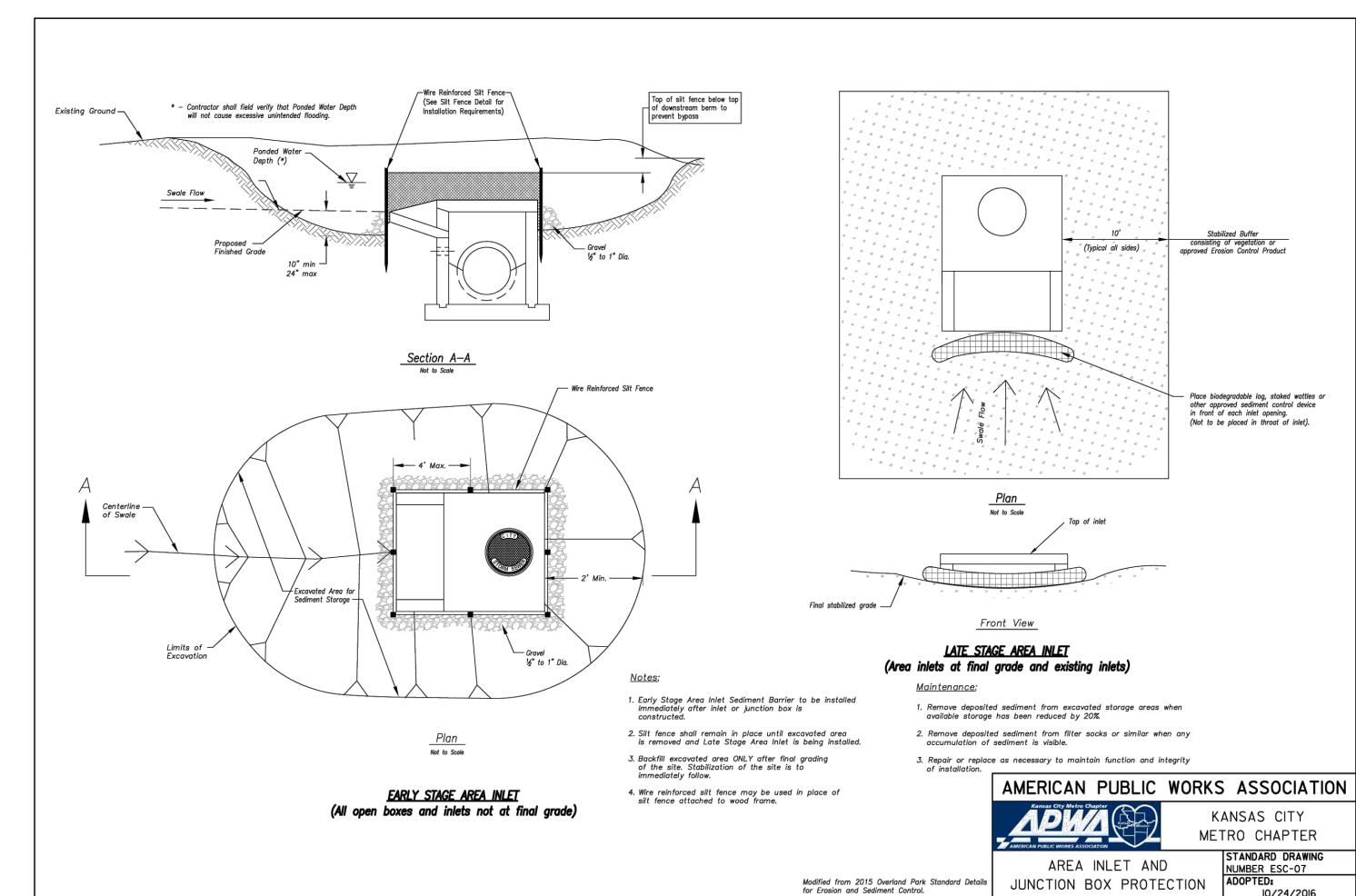
PROJECT NO.: 230286

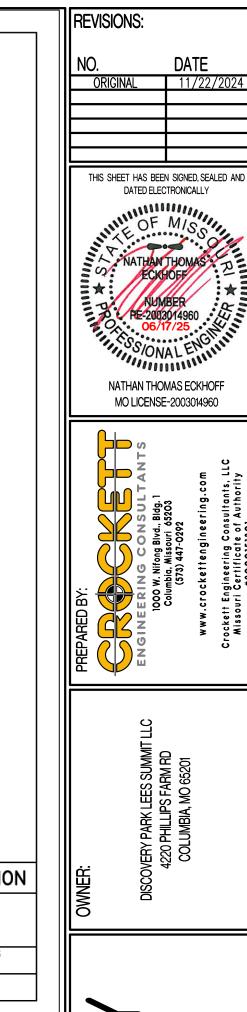
CE 2.1











HE VILLAGE AT DISCOVEF LOT 13 LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

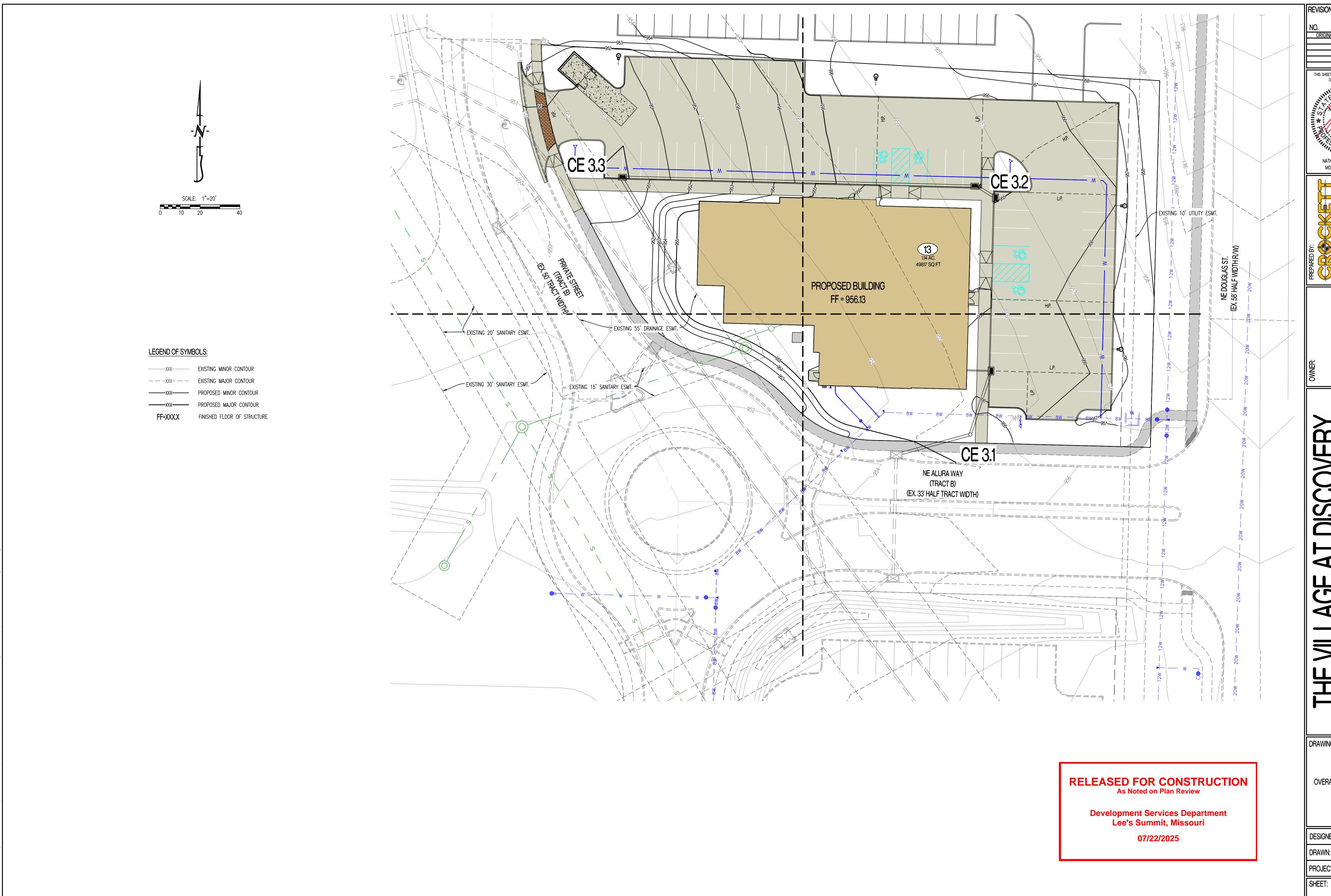
DRAWING INCLUDES:

EROSION CONTROL DETAILS

DESIGNED: NTE

DRAWN: NMD
PROJECT NO.: 230286

SHEET:



REVISIONS:

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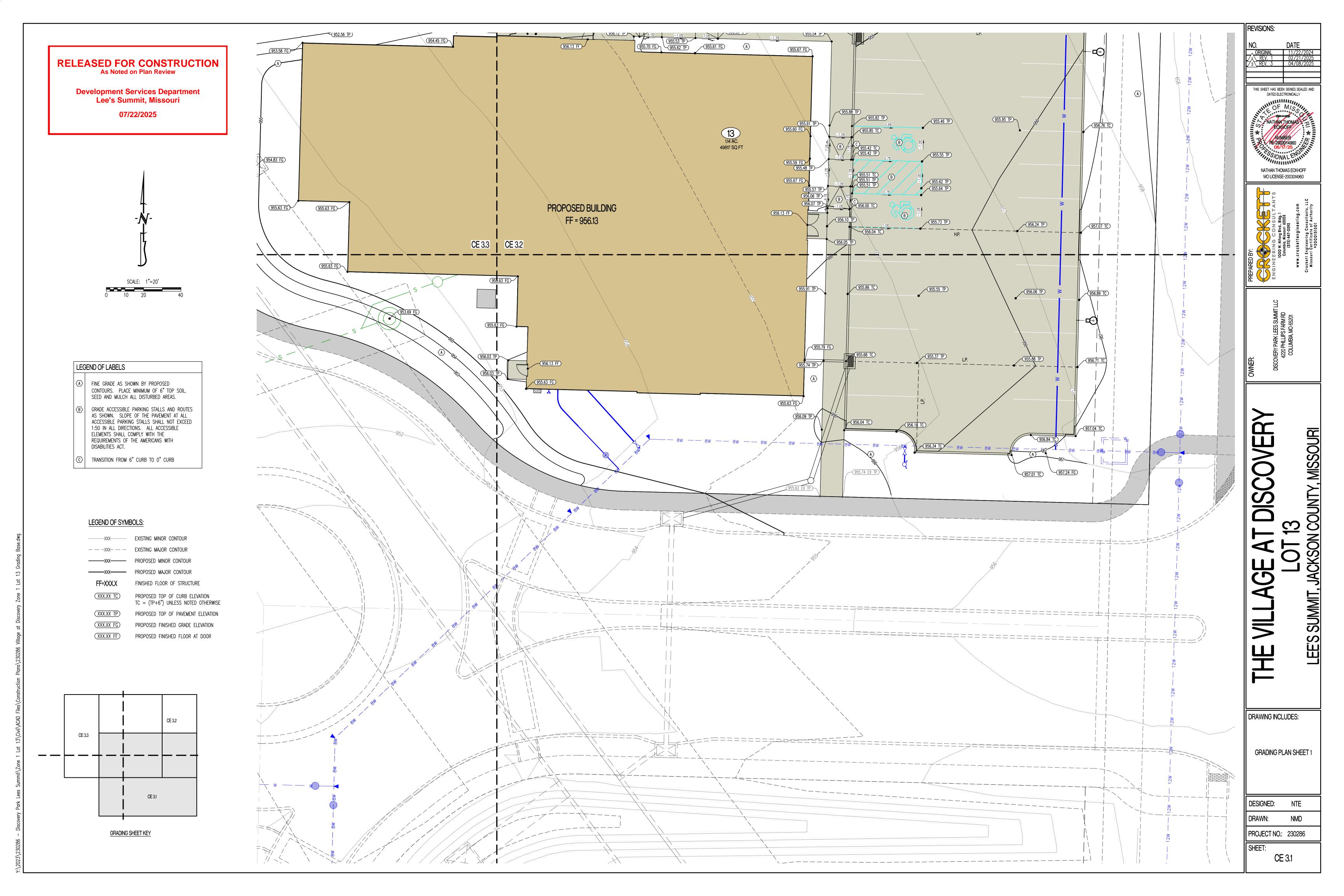
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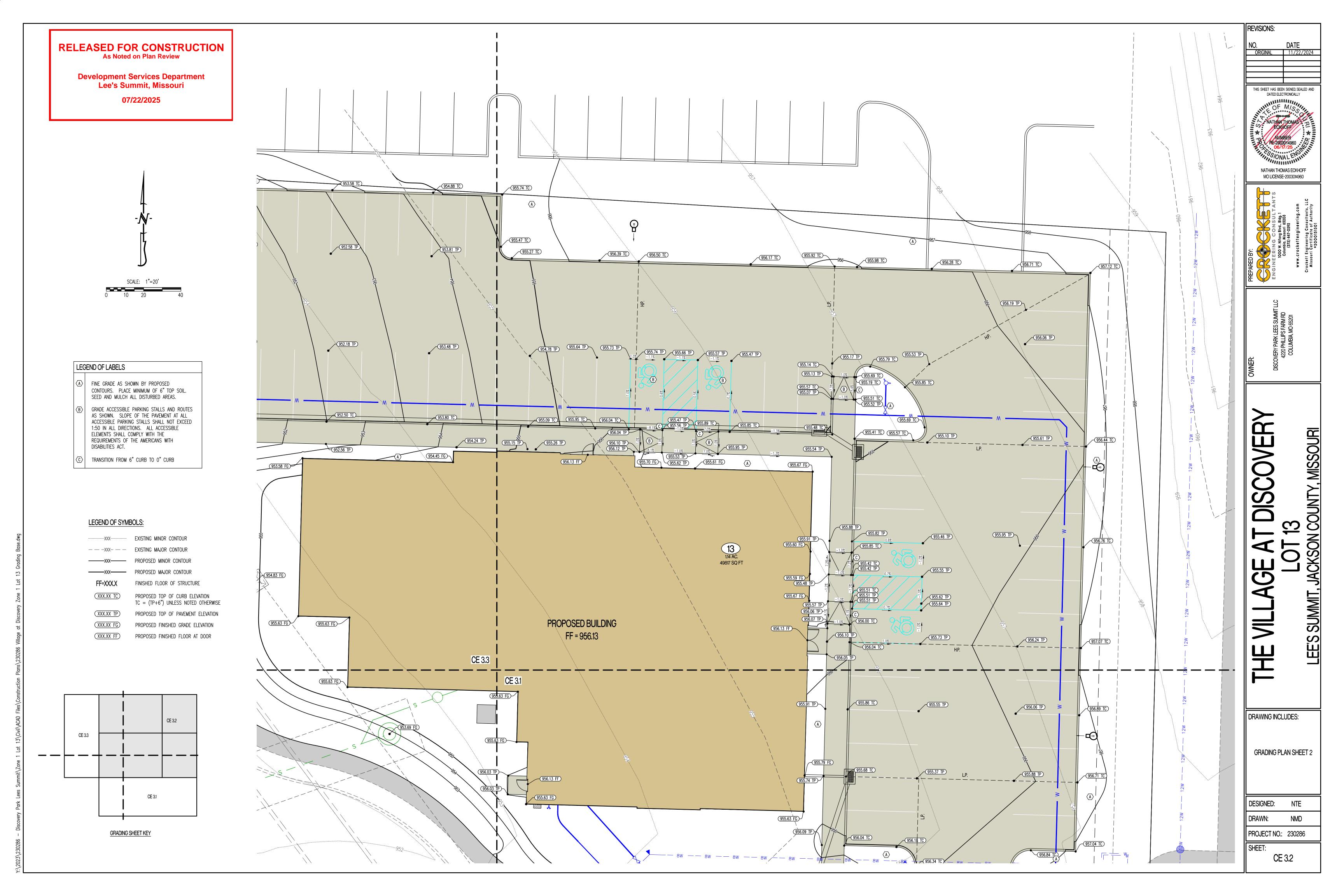
OVERALL GRADING PLAN

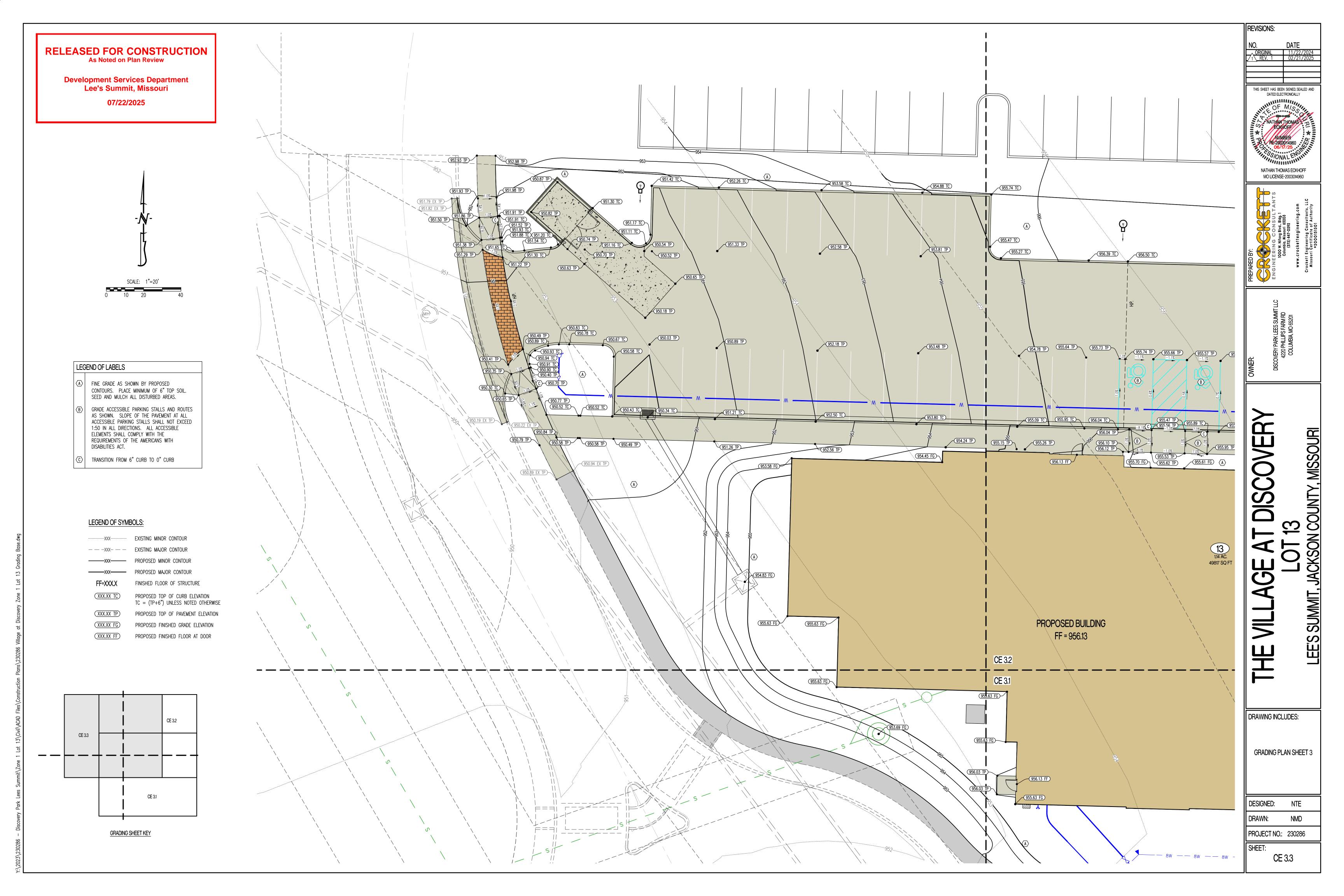
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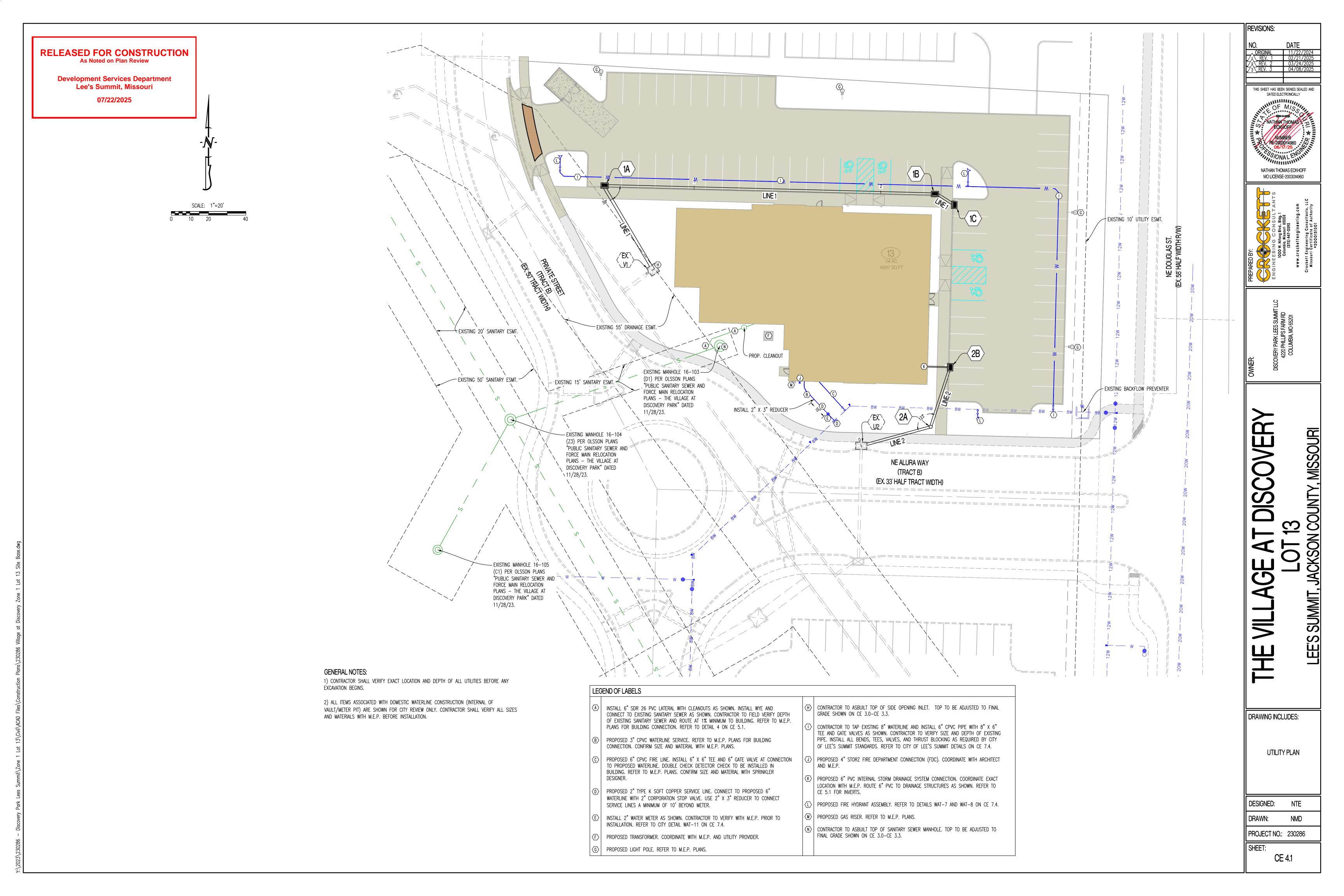
PROJECT NO.: 230286

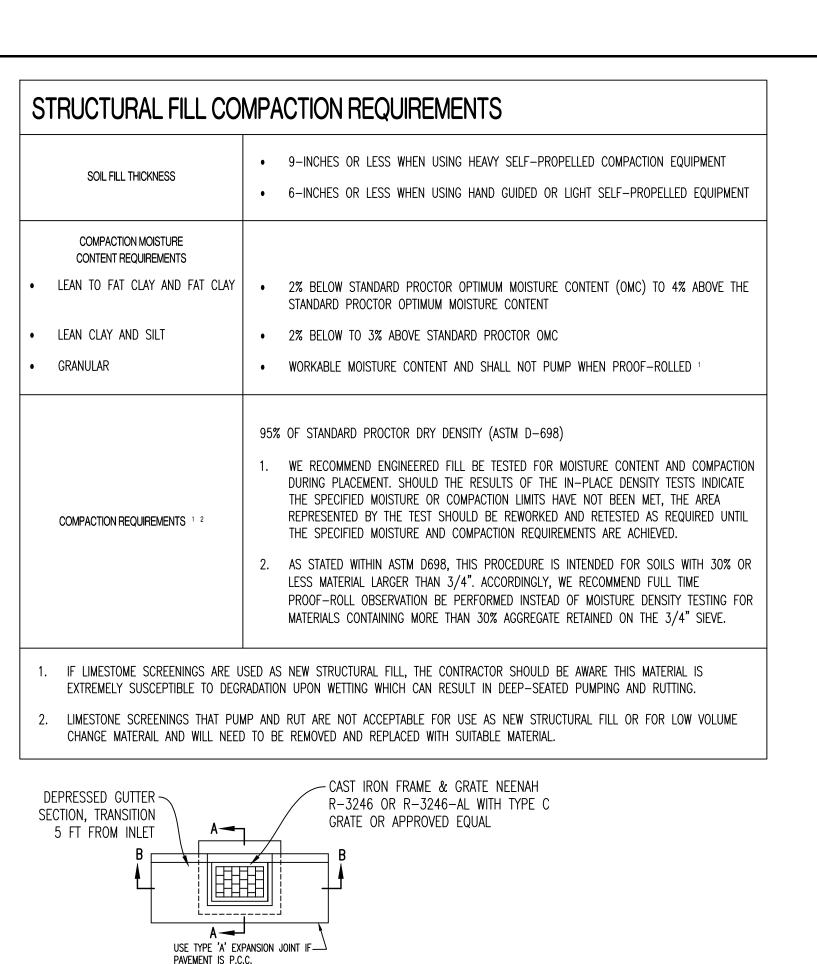
**CE** 3.0

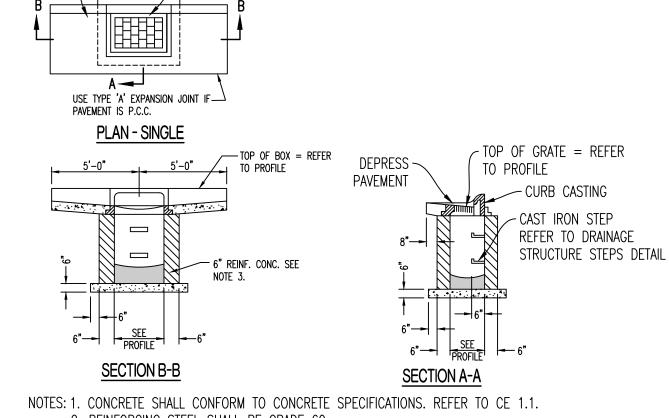






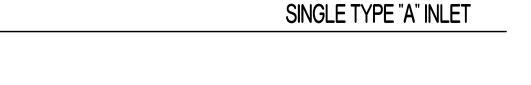






2. REINFORCING STEEL SHALL BE GRADE 60

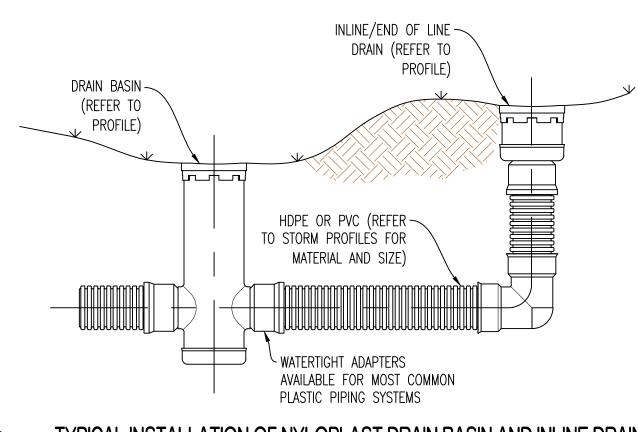
3. #4 BARS AT 12" CTRS, BOTH WAYS AND #4 BARS DIAGONAL AT PIPE OPENINGS 4. FOR BOX SIZES LARGER THAN THE GRATE, THE GRATE IS TO BE CENTERED ON THE BOX. 5. INSTALL WEEP HOLES PER DRAINAGE STRUCTURE WEEP HOLES DETAIL.



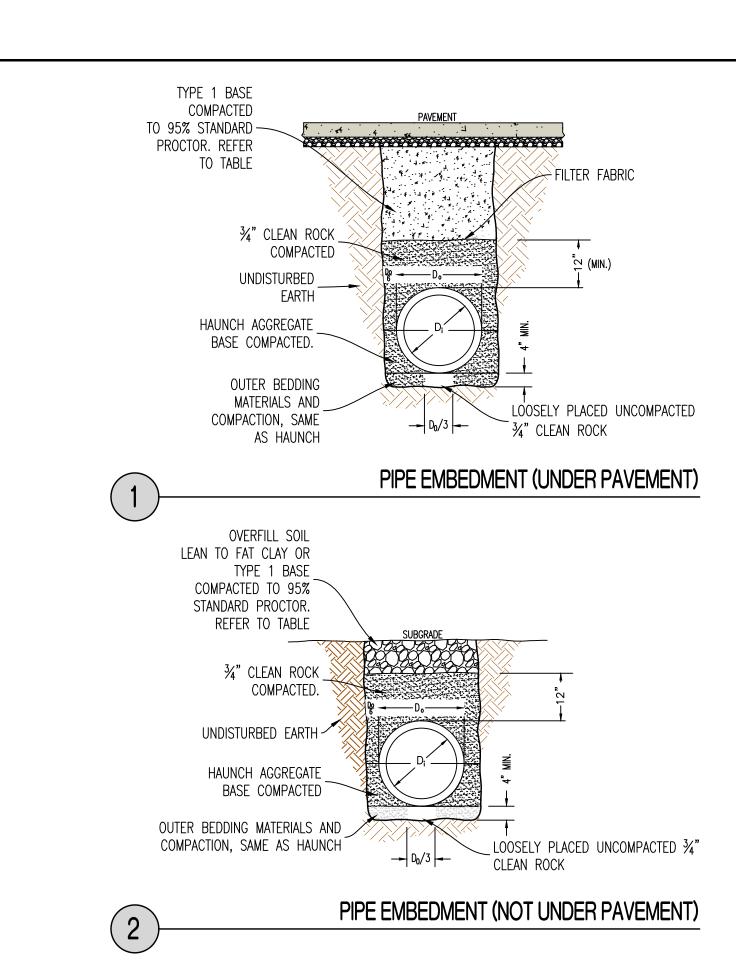
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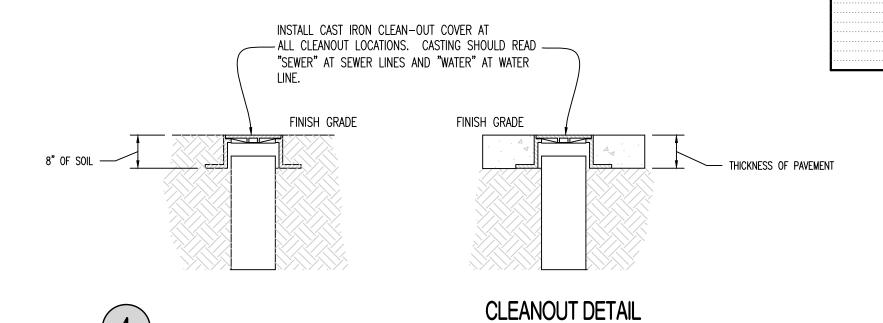
**Development Services Department** Lee's Summit, Missouri

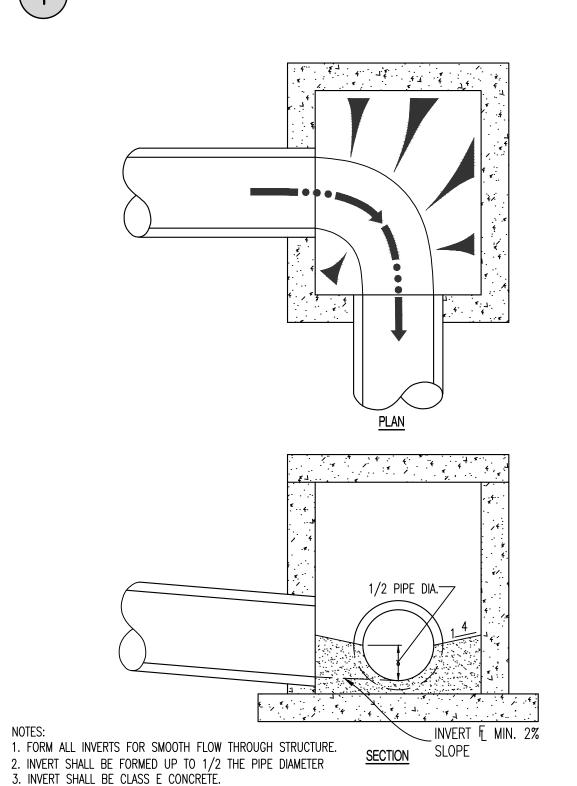
07/22/2025



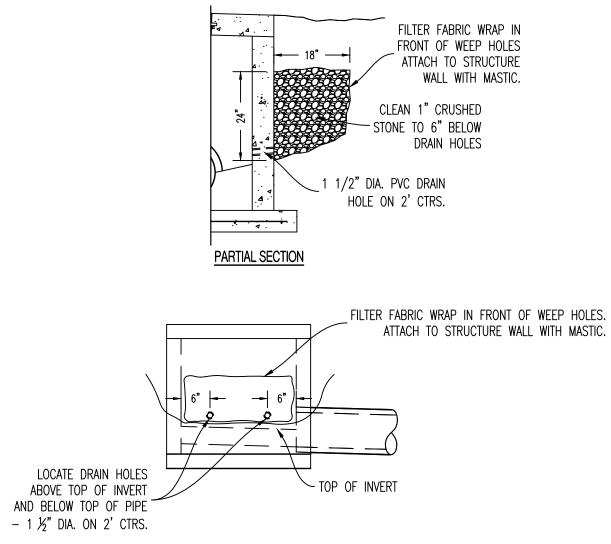
TYPICAL INSTALLATION OF NYLOPLAST DRAIN BASIN AND INLINE DRAIN







DRAINAGE STRUCTURE INVERT



LEGEND OF LABELS:

(A) REFER TO PIPE EMBEDMENT DETAIL (UNDER PAVEMENT).

REFER TO PIPE EMBEDMENT DETAIL (NOT UNDER PAVEMENT).

SEE DETAIL 1 ON CE 5.1.

SEE DETAIL 2 ON CE 5.1.

49.12' OF 15" HDPE @ 2.00%

교교

COMPACTED FILL

930

SCALE:

HORIZ 1" = 50'

**VERT 1" = 10'** 

1000

**GENERAL NOTES:** 

PROP. GRADE -

PROP. 4" WATER CROSSING -

MIN. 18" VERTICAL SEPARATION)

LINE 1

ABOVE STORM SEWER

1) ALL PORTIONS OF THIS STORM SEWER SHALL BE PRIVATE.

2) LENGTHS AND SLOPES OF PIPE ARE MEASURED FROM EDGE

3) COMPACTED FILL SHALL BE PLACED TO A MINIMUM 18" ABOVE

~ MIN. LIMITS OF

COMPACTED FILL

9.17' OF 12" HDPE @ 1.00%

1000

970

1000

990

970

940

930

920

MIN. LIMITS OF ---. COMPACTED FILL ...

35.19' OF 12" HDPE @ 1.00%

OF STRUCTURE TO EDGE OF STRUCTURE.

THE TOP OF THE PIPE PRIOR TO INSTALLATION. 🔯

25-YEAR STORM

100-YEAR STORM

HYDRAULIC GRADE LINE

HYDRAULIC GRADE LINE

STA C

=31.29' OF 12" HDPE @ 1.00%

- EX. 8" WATER CROSSING BELOW

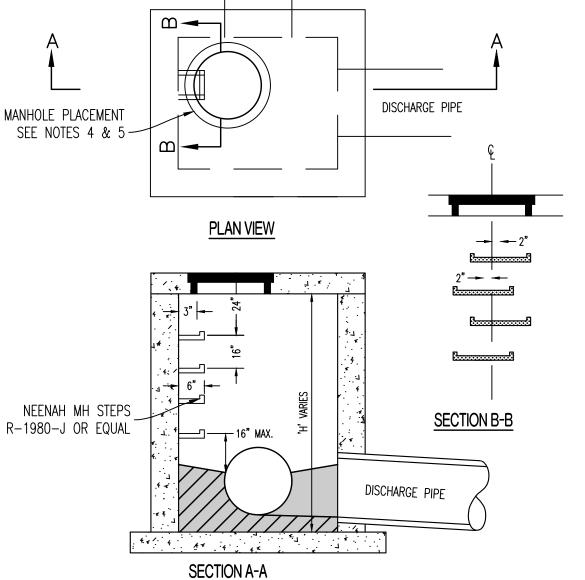
(MIN. 18" VERTICAL SEPARATION)

STORM SEWER

LINE 2

FRONT ELEVATION

1. PLACE WEEP HOLES ON UPSTREAM FACE OF ALL STRUCTURES AND ALSO ON ROADWAY FACE OF CURB INLET STRUCTURES. 2. WEEP HOLE FILTER FABRIC SHALL CONSIST OF A NON-WOVEN, POLYPROPYLENE TYPE FABRIC SUCH AS: AMOCO 4553 NON-WOVEN GEOTEXTILE FABRIC OR APPROVED EQUAL.



1. STEPS NOT REQUIRED WHERE H IS LESS THAN 4'. 2. CAST IRON STEPS STEPS SHALL BE AMERICAN ML-10-NCR OR EQUAL 3. STEPS SHALL BE PLACED ON VACANT WALL WHEN POSSIBLE 4. MANHOLE RING SHALL BE OFFSET TOWARD WALL WITH STEPS. 5. MANHOLE RING SHALL BE CENTERED ON CENTERLINE OF STEPS 6. STAGGER STEPS 2" EACH WAY FROM CENTERLINE OF MANHOLE RING. 7. TOP STEP 24" BELOW TOP OF LID 8. STEP SPACING TO BE 16", BOTTOM STEP TO BE NO HIGHER THAN 16" FROM INVERT.

DRAINAGE STRUCTURE STEPS

REVISIONS:

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ECKHOFF

NUMBER - 12003014960

S/ONALY

NATHAN THOMAS ECKHOFF MO LICENSE-2003014960

DRAWING INCLUDES:

STORM PROFILE & DETAILS

DESIGNED: NTE DRAWN: NMD

PROJECT NO.: 230286

SHEET: CE 5.1

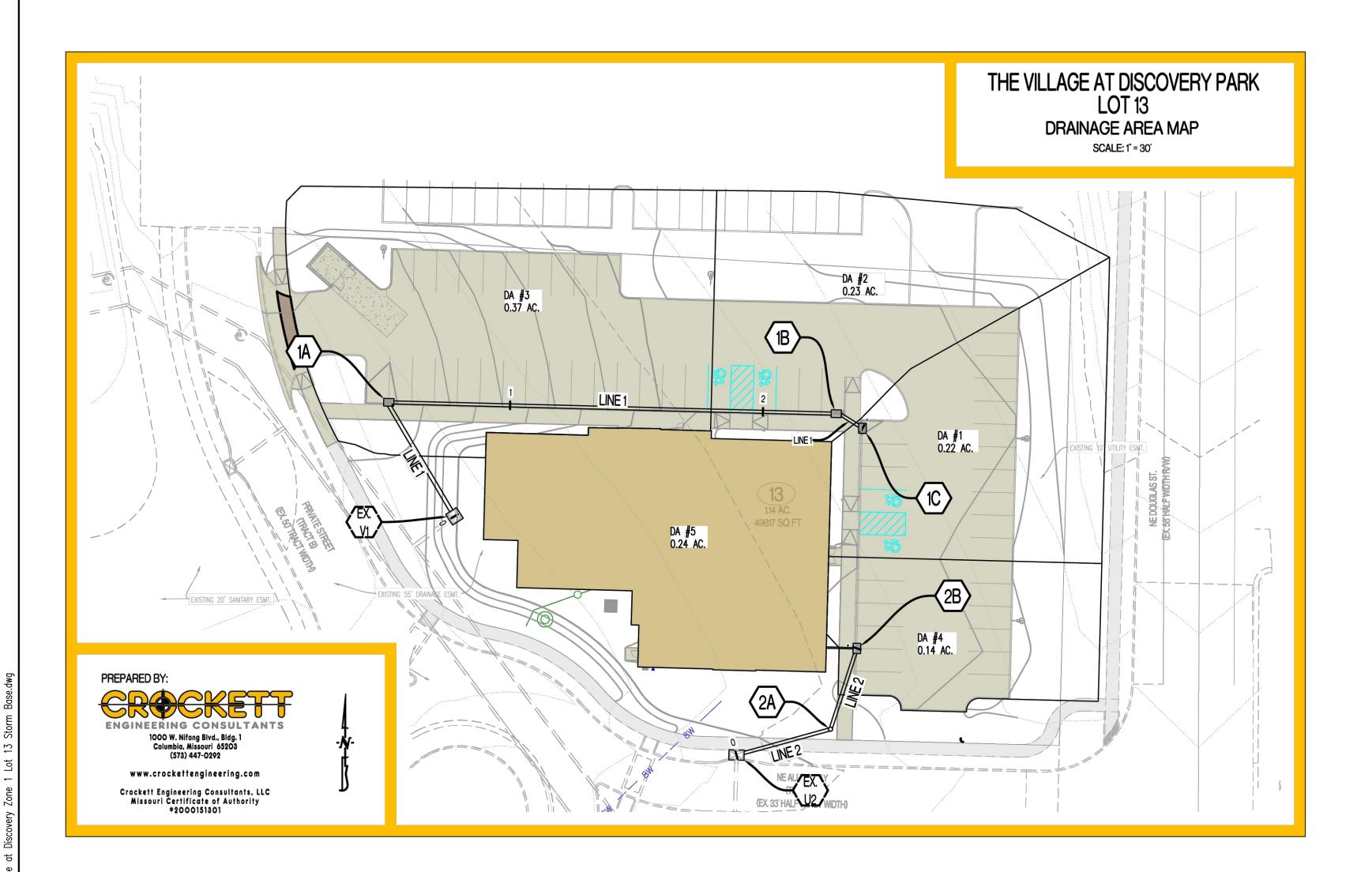
DRAINAGE STRUCTURE WEEP HOLES

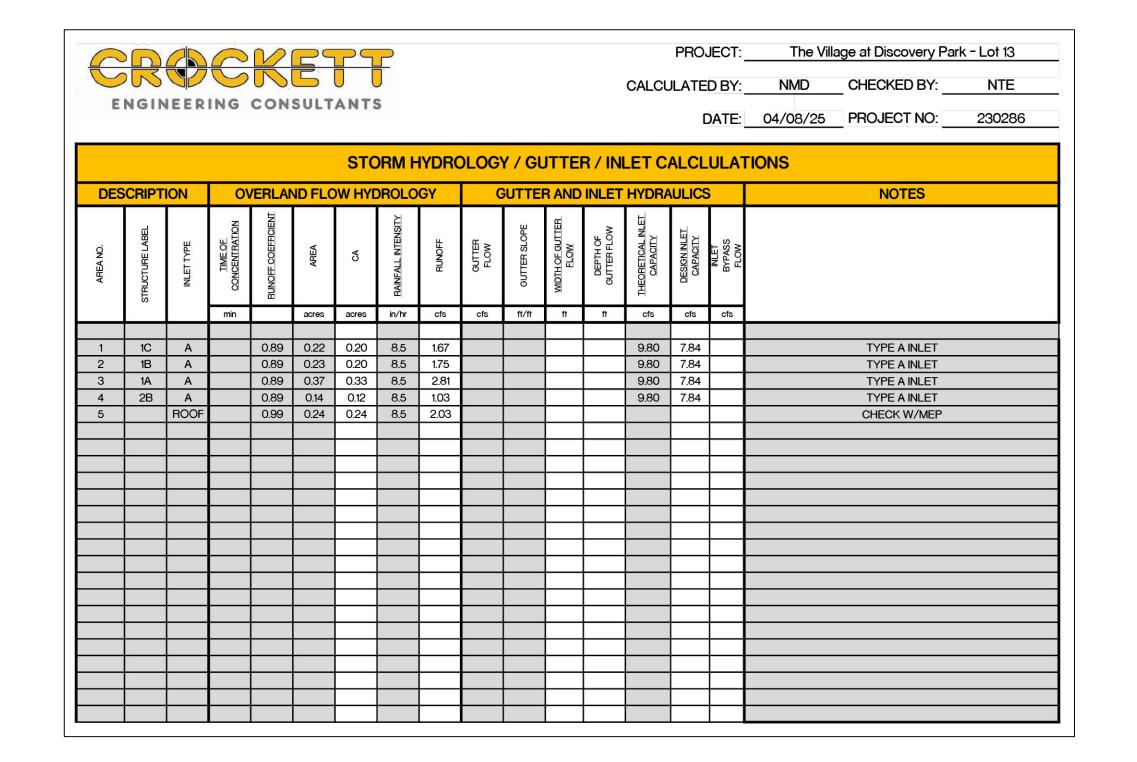
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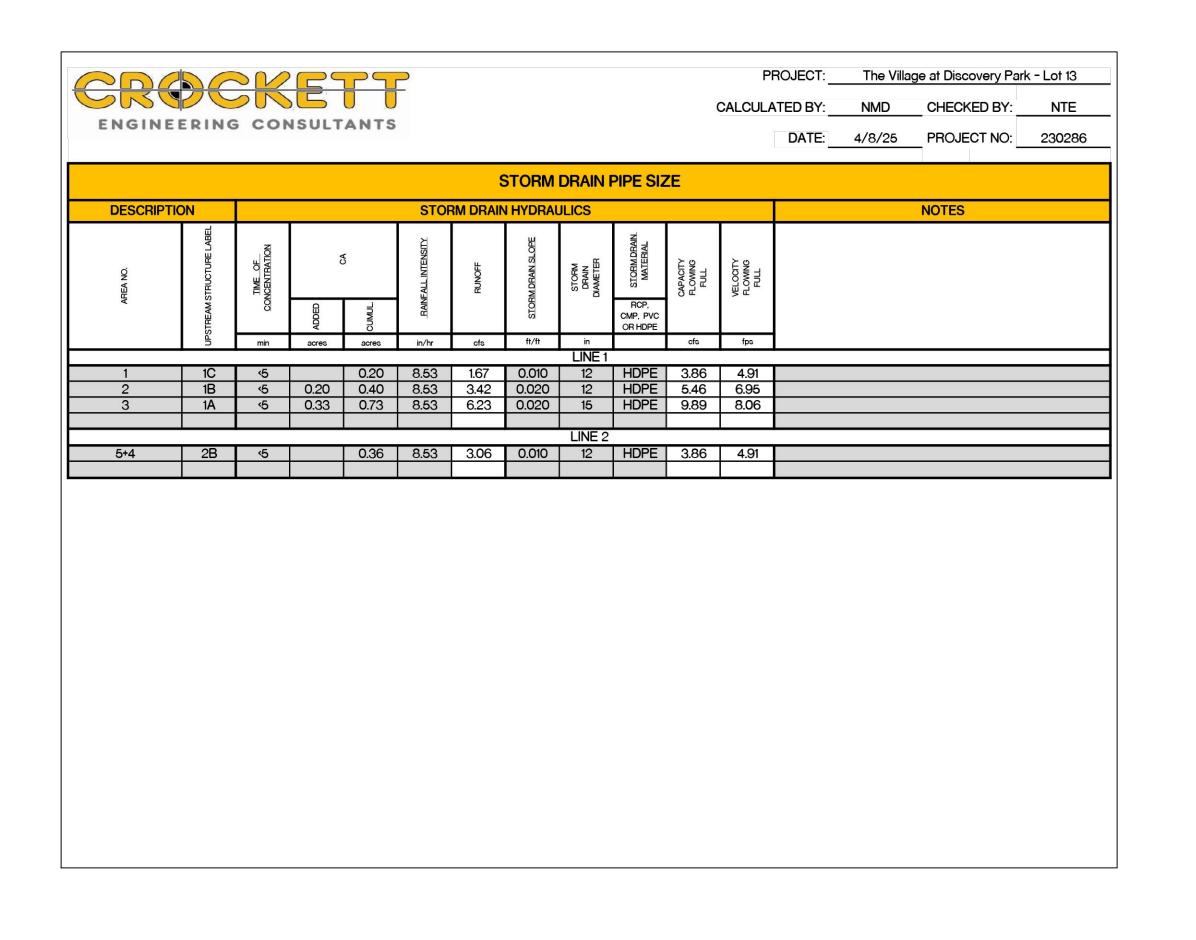
As Noted on Plan Review

Development Services Department Lee's Summit, Missouri

07/22/2025







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NO. DATE
ORIGINAL 11/22/2024
3 REV. 3 04/08/2025

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MO LICENSE-2003014960

INEERING CONSULTANTS
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Columbia, Missouri 65203
(573) 447-0292
www.crockettengineering.com

DISCOVERY PARK LEES SUMMIT LLC 4220 PHILLIPS FARM RD COLUMBIA, MO 65201

HE VILLAGE AT DISCOVER
LOT 13
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

DRAWING INCLUDES:

25-YEAR STORM CALCULATIONS

DESIGNED: NTE
DRAWN: NMD

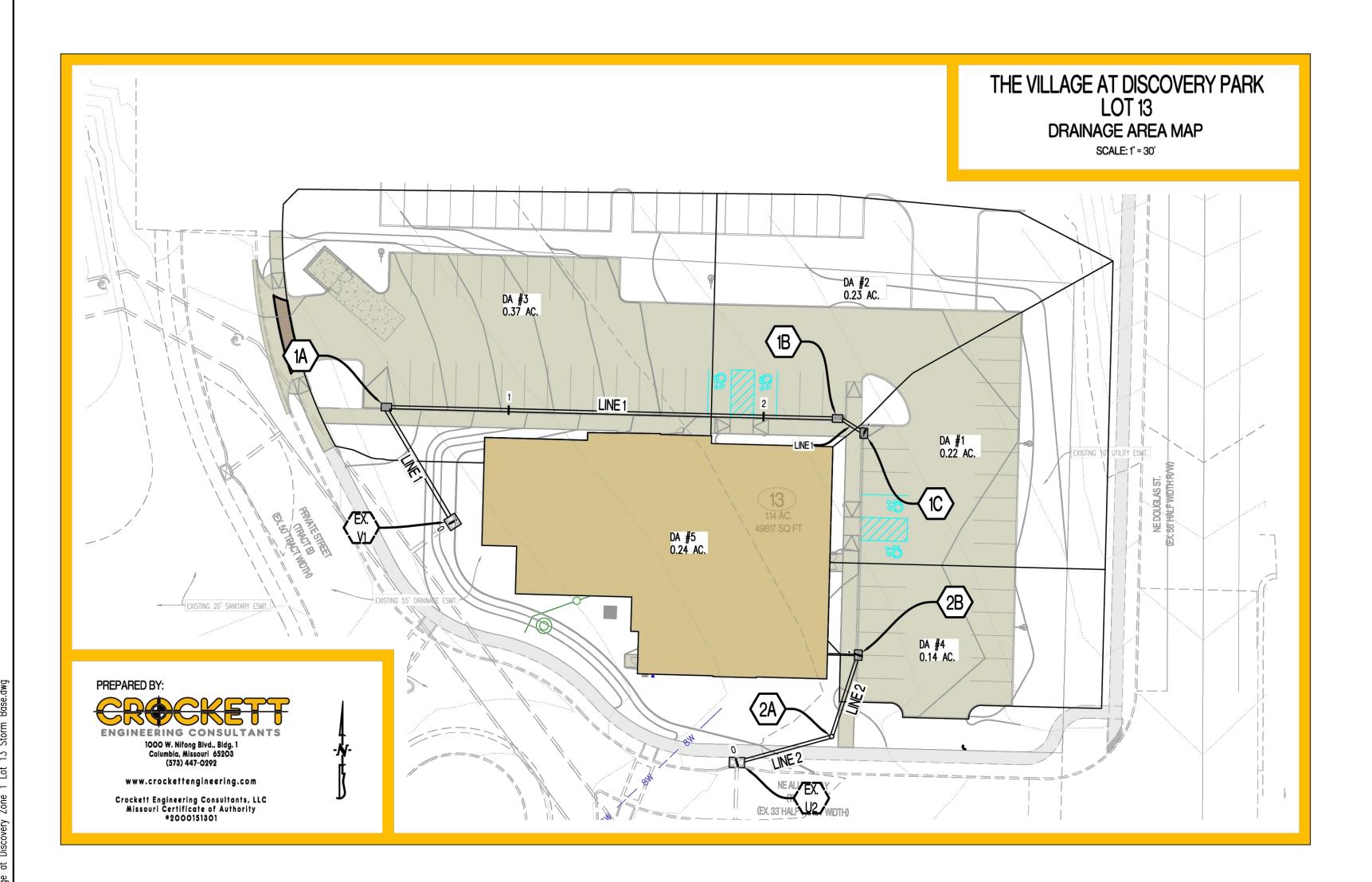
PROJECT NO.: 230286

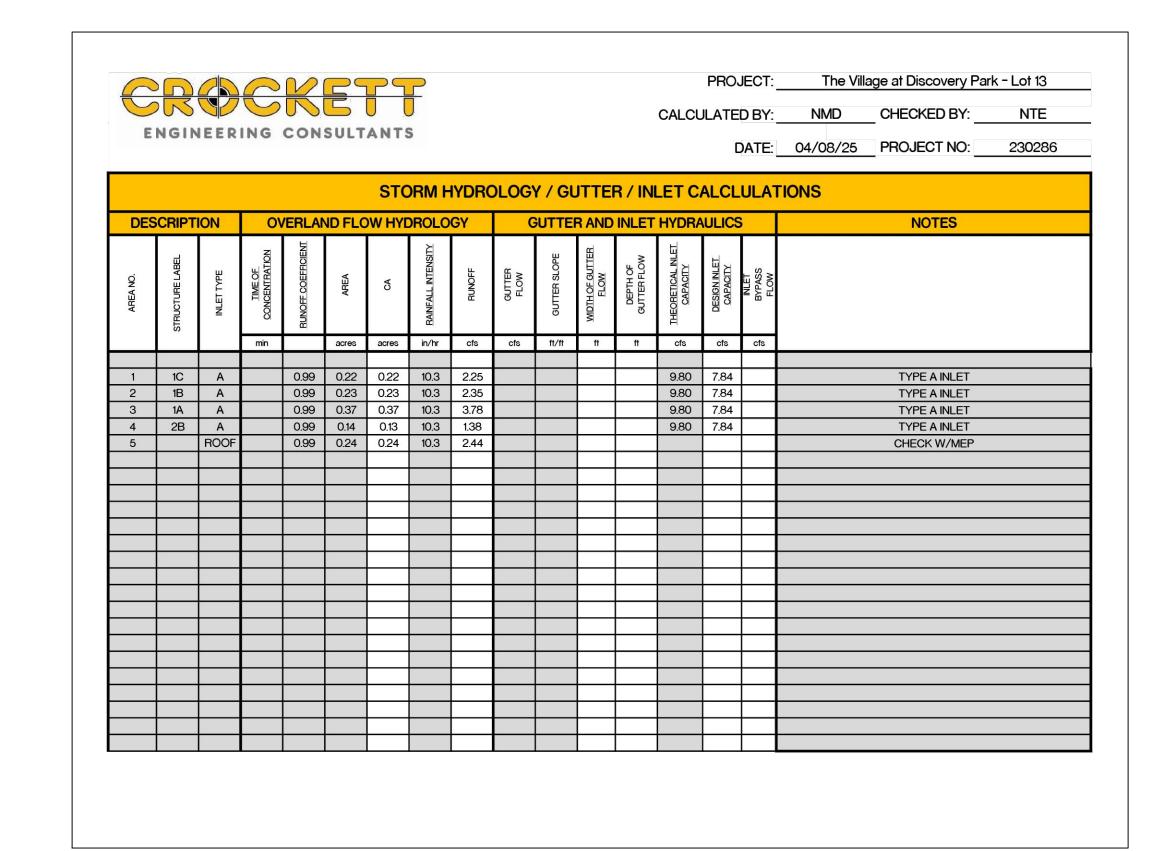
SHEET: CE 5.2

Y:\2023\230286 — Discovery Park Lees Summit\Zone 1 Lot 13\Civil\ACAD Files\Construction Plans\2302

# RELEASED FOR CONSTRUCTION As Noted on Plan Review

Development Services Department Lee's Summit, Missouri 07/22/2025





750			5	U							CALCULA	ATED BY:	NMD	CHECKED BY:	NTE
NGINE	ERING	CON	ISULT	ANTS								DATE:	4/8/25	PROJECT NO:	230286
						5	STORM	DRAIN	PIPE SIZ	ZE					
DESCRIPT	ION				STOF	RM DRAIN	N HYDRAU	JLICS						NOTES	
AREA NO.	UPSTREAM STRUCTURE LABEL	TIME OF CONCENTRATION	ADDED	CUMUL	RAINFALL INTENSITY	RUNOFF	STORM DRAIN SLOPE	STORM DRAIN DIAMETER	STORM DRAIN.  STORM DRAIN.  AG 'A MATERIAL.	CAPACITY FLOWING FULL	VELOGITY FLOWING FULL				
	UPST	min	acres	acres	in/hr	ofs	ft/ft	in	ON HUPE	cfs	fps				
1	1C	<b>√</b> 5		0.22	10.32	2.25	0.010	LINE 1	HDPE	3.86	4.91				
2	1B	<b>5</b>	0.23	0.45	10.32	4.60	0.020	12	HDPE	5.46	6.95				
3	1A	5	0.37	0.81	10.32	8.38	0.020	15	HDPE	9.89	8.06				
5+4	2B	<b>.</b> 5		0.37	10.32	3.82	0.010	LINE 2	HDPE	3.86	4.91				
514	20	Ç		0.37	10.32	3.62	0.010	12	HUFE	3.00	4.91				

REVISIONS:

NO. DATE

NO. DATE
ORIGINAL 11/22/2024
3 REV. 3 04/08/2025

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NATHAN THOMAS

PECKHOEF

NUMBER

NATHAN THOMAS ECKHOFF

MO LICENSE-2003014960

ERING CONSULTANTS

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Engineering Consultants, LLC

DISCOVERY PARK LEES SUMMIT LLC 4220 PHILLIPS FARM RD COLUMBIA, MO 65201

HES SUMMIT, JACKSON COUNTY, MISSOURI

DRAWING INCLUDES:

100-YEAR STORM CALCULATIONS

DESIGNED: NTE
DRAWN: NMD

PROJECT NO.: 230286
SHEET:

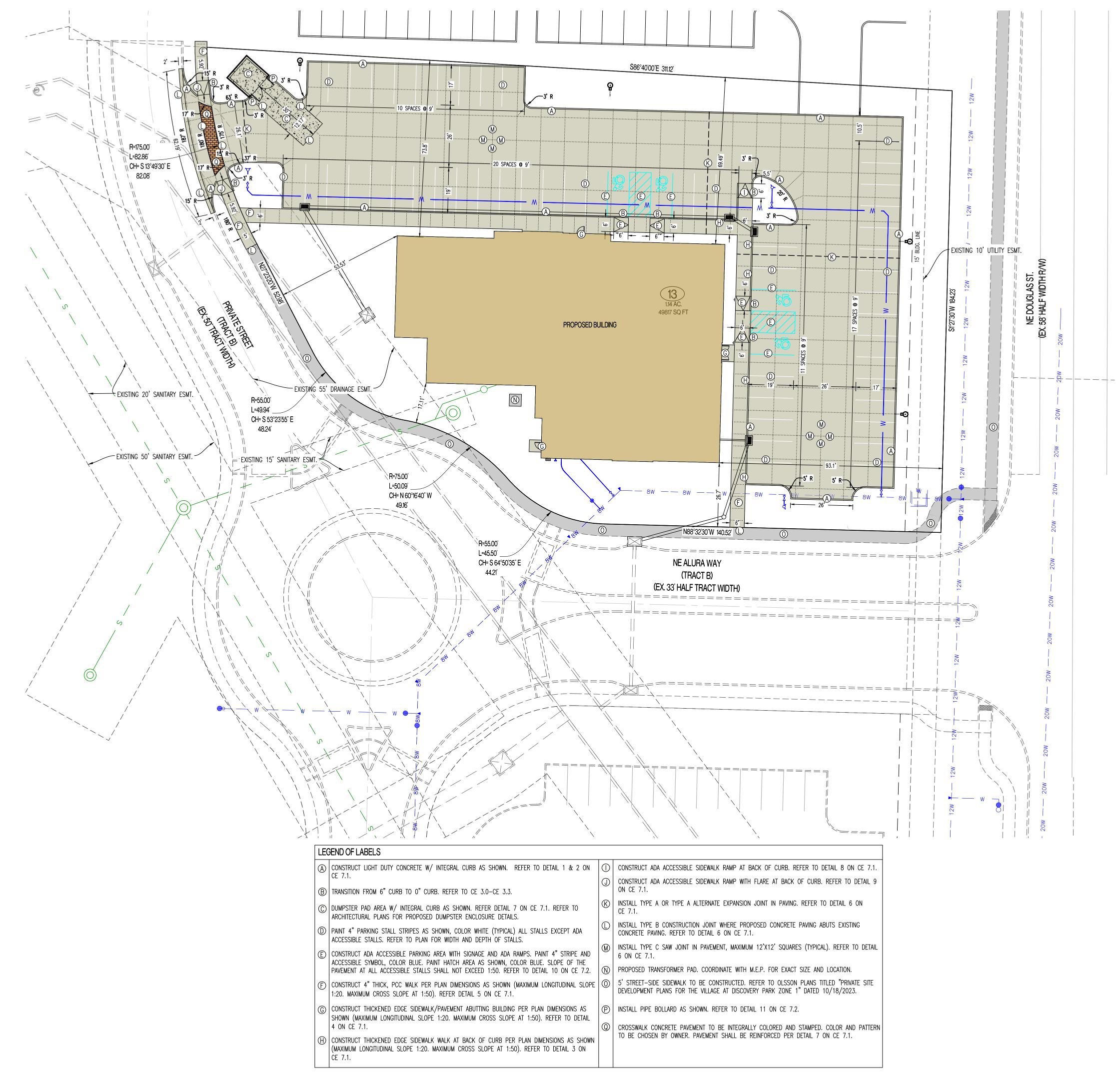
CE 5.3

#### **GENERAL NOTES:**

- 1) ALL ACCESSIBLE PARKING SHALL COMPLY WITH THE REQUIREMENTS OF THE FEDERAL AMERICANS WITH DISABILITIES ACT.
- 2) THE PAVEMENT JOINTS SHOWN ARE A GRAPHICAL REPRESENTATION OF A POSSIBLE JOINT CONTRACTOR TO PROVIDE SHOP DRAWINGS WITH JOINT LAYOUT FOR APPROVAL BY ENGINEER PRIOR TO POURING OF PAVEMENT.

PARKING CALCULATIONS	
PARKING SUMMARY (LOT 13):	
SPACES REQUIRED:	
INSTITUTIONAL AND OTHER : SUBDIVISION SWIMMING POOL/CLUBHOUSE (485 UNITS)  - 1 PER 16 LOTS (UNITS)  - MINIMUM OF 6	31 SPACES
GENERAL OFFICE (3,651 SQ. FT.) – 4 PER 1,000 SQ. FT.	15 SPACES
STANDARD SPACES REQUIRED: HANDICAP SPACES REQUIRED:	46 SPACES 3 SPACES
SPACES PROVIDED: STANDARD SPACES PROVIDED: HANDICAP SPACES PROVIDED:	58 SPACES 4 SPACES

LAND AREA:		
TOTAL LAND AREA:		1.15 AC
BUILDING DETAILS:		
1ST FLOOR:		10,540 SQ.FT.
ROOF AMENITY:		1,236 SQ.FT.
TOTAL S.F.		11,776 SQ.FT.
LOT COVERAGES:	ACTUAL	
NET LAND AREA:	49,890 SQ.FT.	100%
TOTAL IMPERVIOUS SURFACE AREA:	33,458 SQ.FT.	67%
TOTAL OPEN SPACE:	16,432 SQ.FT.	33%
FLOOR AREA RATIO:		24%



REVISIONS:

NO. DATE

NO. DATE
ORIGINAL 11/22/2024
REV. 1 02/21/2025
REV. 3 04/08/2025
A REV. 3 06/17/2025

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NATHAN THOMAS

OG/17/25

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SCOVERY PARK LEES SUMMIT LLC 4220 PHILLIPS FARM RD COLUMBIA, MO 65201

DISCOVERY PARK LEES
4220 PHILLIPS FA

LAGE A L DISCOVER LOT 13

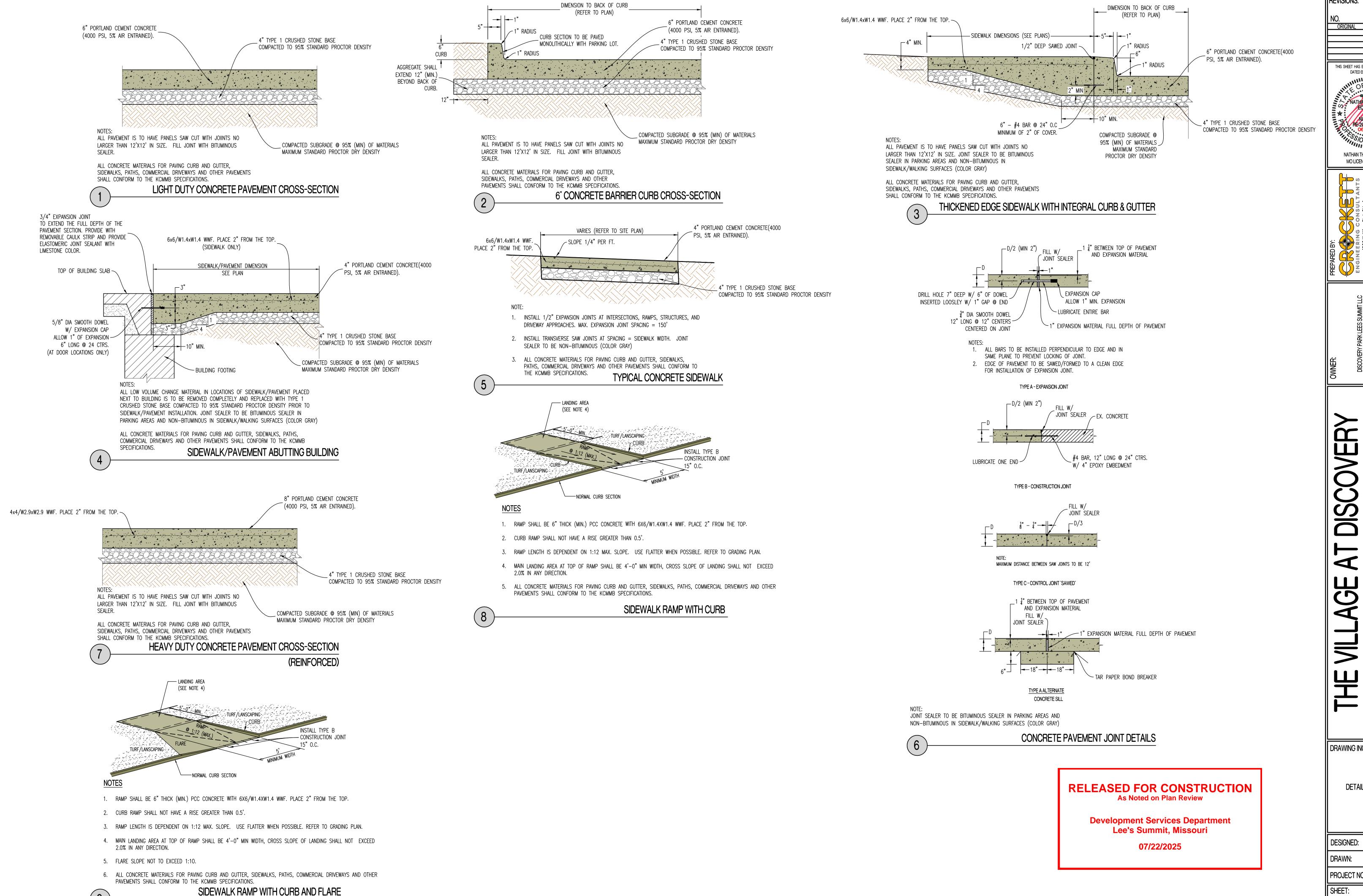
DRAWING INCLUDES:

SITE PLAN

DESIGNED: NTE

DRAWN: NMD
PROJECT NO.: 230286

SHEET: CE 6.1



REVISIONS: DATED ELECTRONICALLY

THIS SHEET HAS BEEN SIGNED, SEALED AND "SONALY NATHAN THOMAS ECKHOFF MO LICENSE-2003014960

DRAWING INCLUDES:

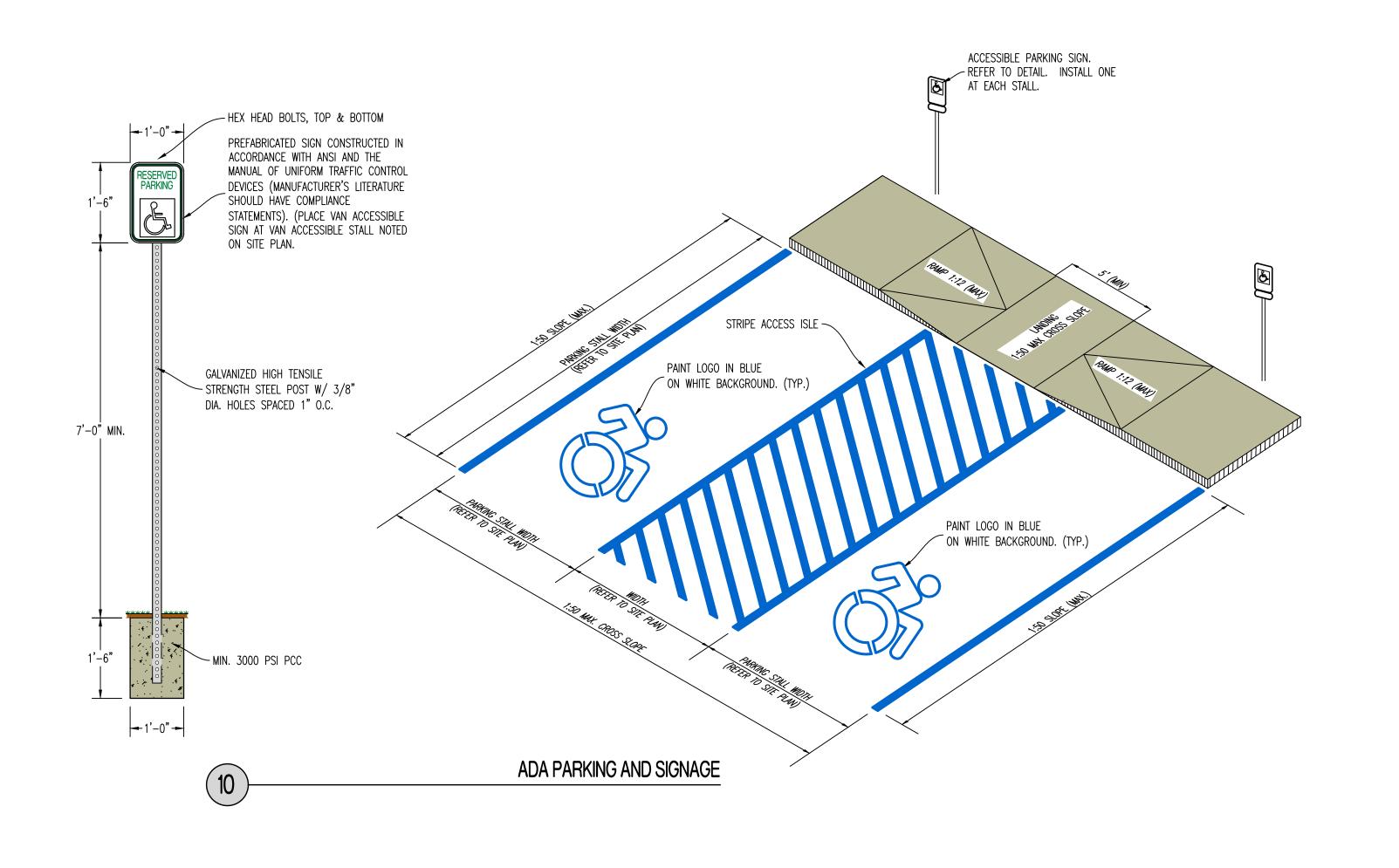
DETAILS SHEET 1

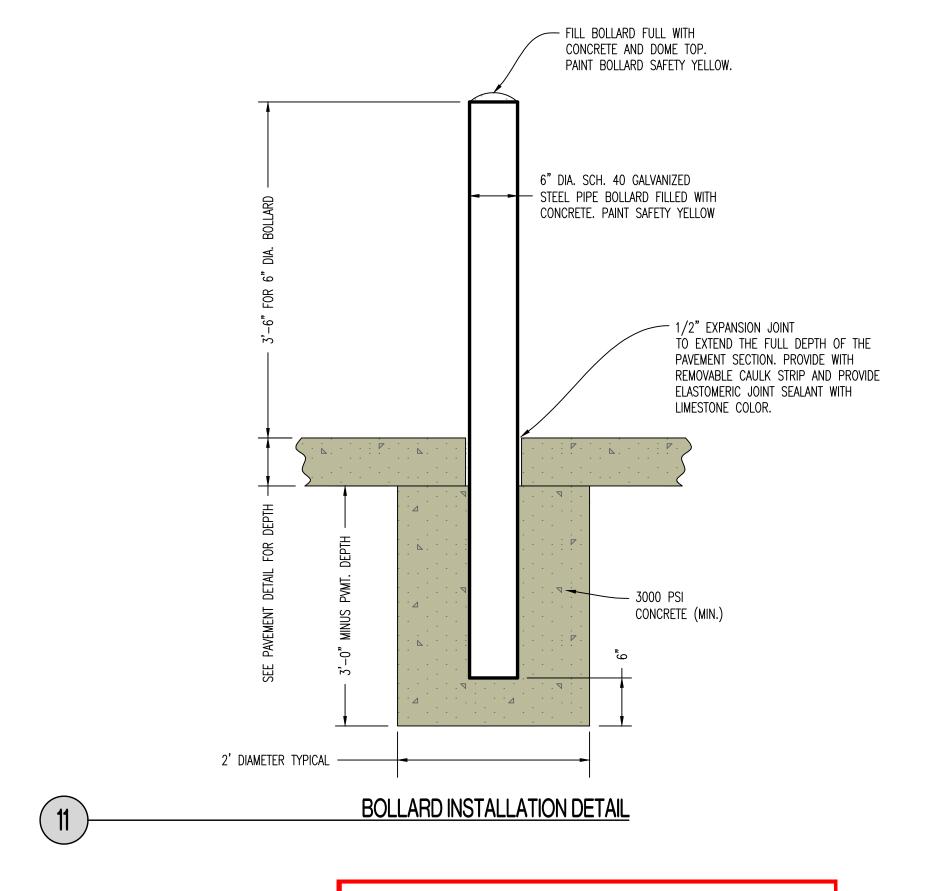
NTE

DRAWN: NMD PROJECT NO.: 230286

SHEET:

CE 7.1





### RELEASED FOR CONSTRUCTION

As Noted on Plan Review

Development Services Department Lee's Summit, Missouri

07/22/2025

REVISIONS:

NO. DATE

ORIGINAL 11/22/2024

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

OF M/S

NATHAN THOMAS

PECKHOFS

NATHAN THOMAS

NATHAN THOMAS

NATHAN THOMAS

NATHAN THOMAS ECKHOFF

MO LICENSE-2003014960

ENGINEERING CONSULTANTS
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www.crockettengineering.com
Crockett Engineering Consultants, LLC
Missouri Certificate of Authority

DISCOVERY PARK LEES SUMMIT LLC 4220 PHILLIPS FARM RD COLUMBIA, MO 65201

I HE VILLAGE A I DISCOVERY

LOT 13

LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

DRAWING INCLUDES:

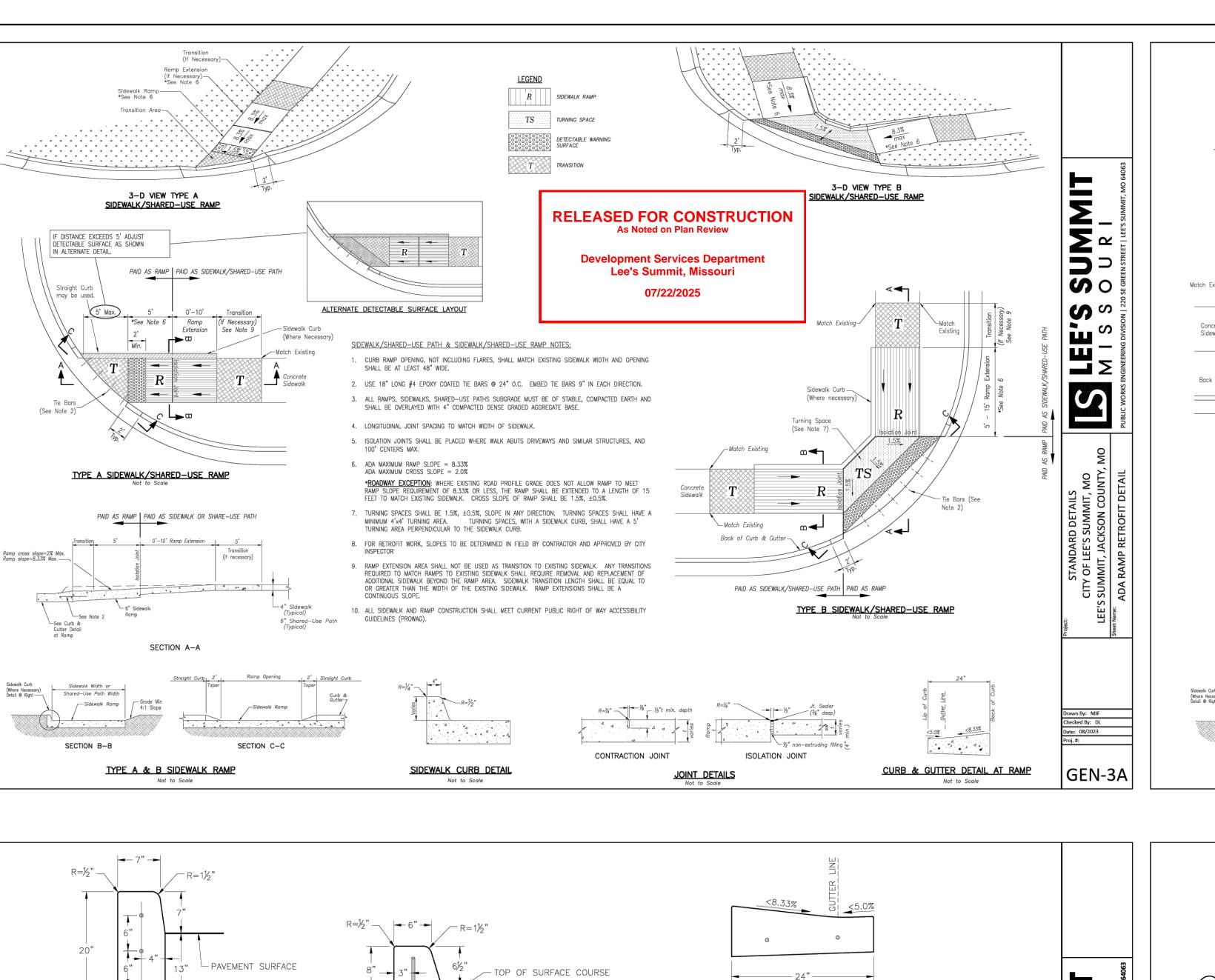
DETAILS SHEET 2

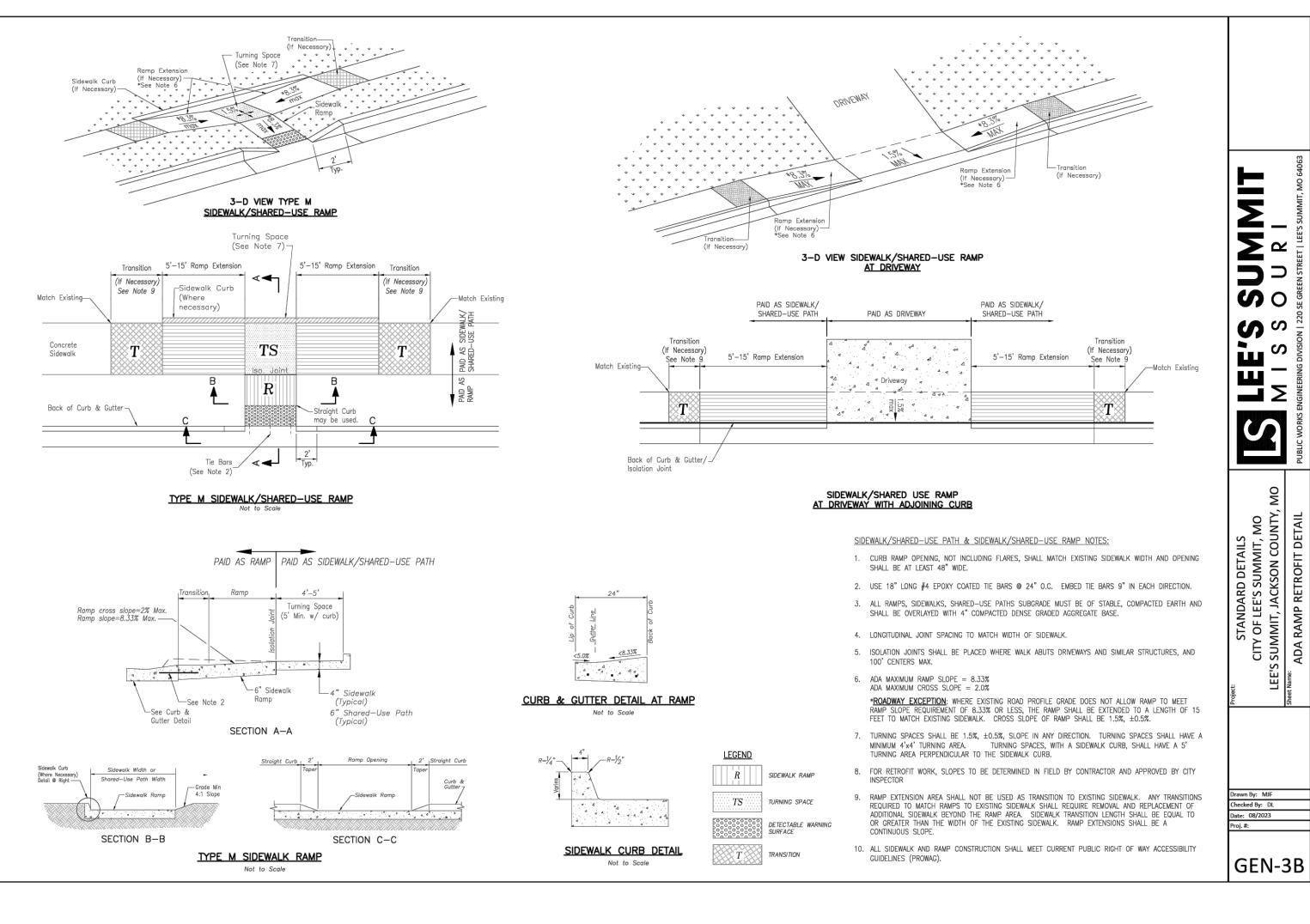
DESIGNED: NTE

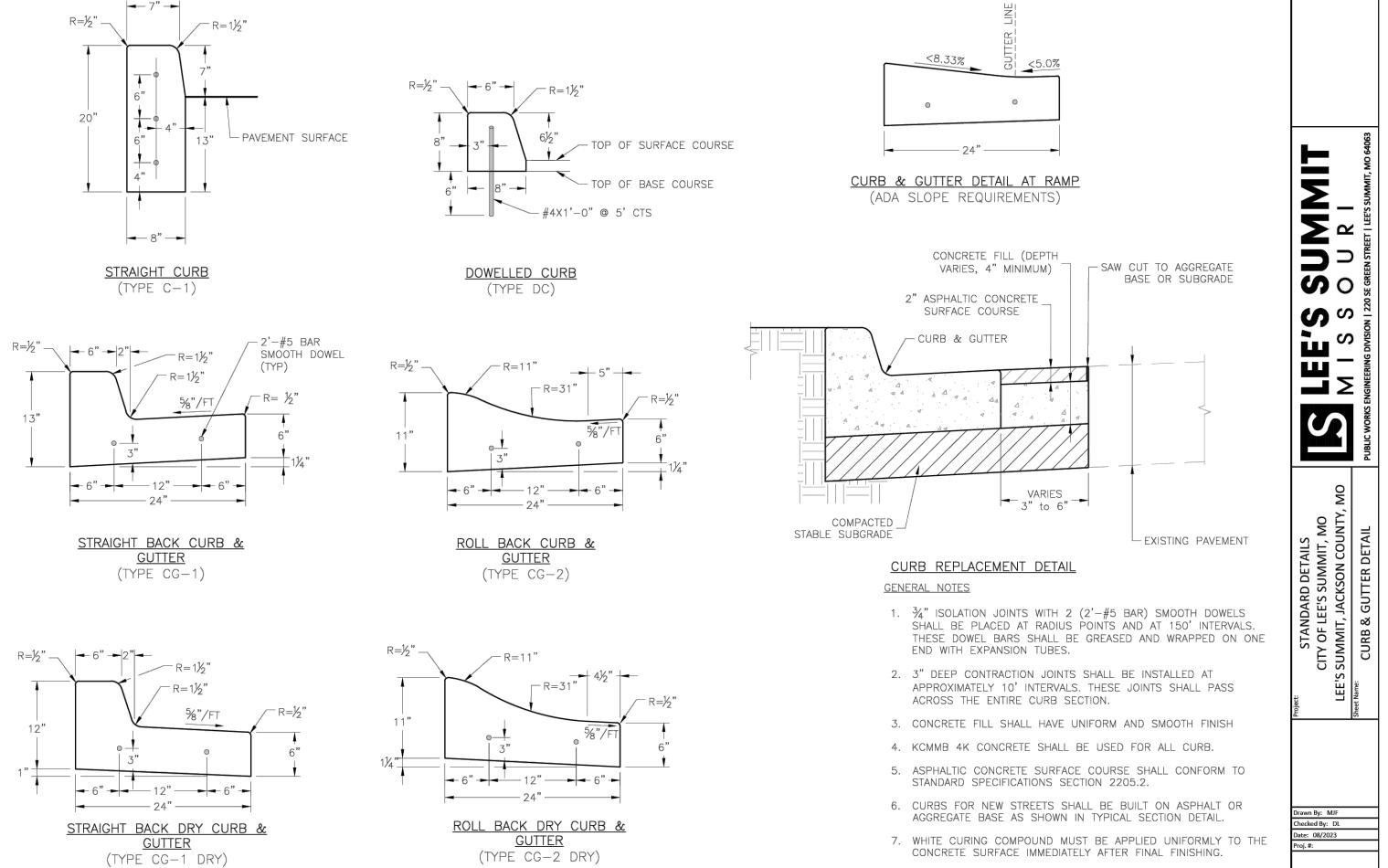
PROJECT NO.: 230286

EET: **CE** 7.2

.30286 — Discovery Park Lees Summit\Zone 1 Lot 13\Civil\ACAD Files\Construction Plans\230286 Village at Discovery Zone 1 L

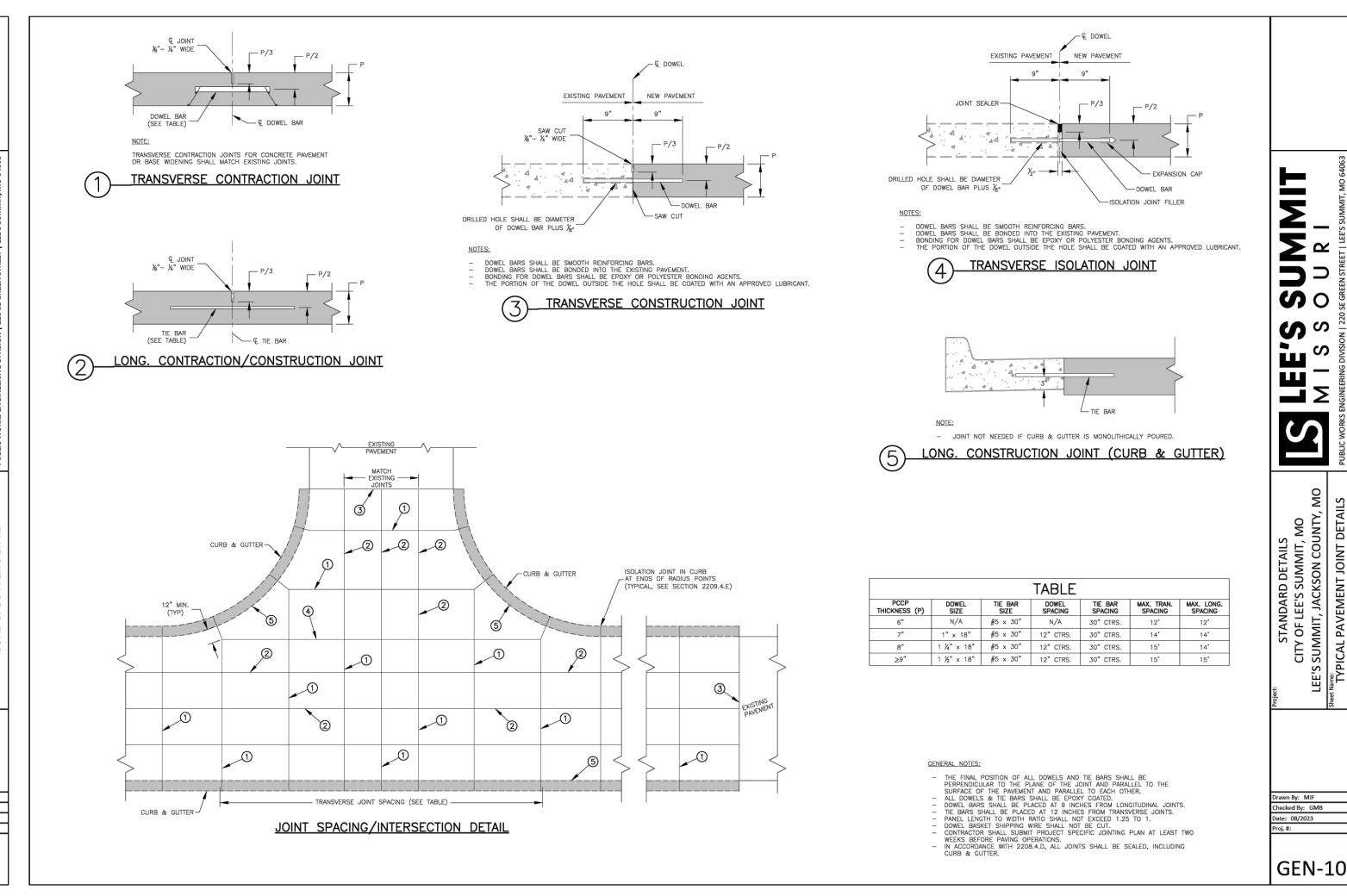






8. ALL DOWELS & TIE BARS SHALL BE EPOXY COATED.

GEN-4





DESIGNED:

SHEET:

PROJECT NO.: 230286

**CE** 7.3

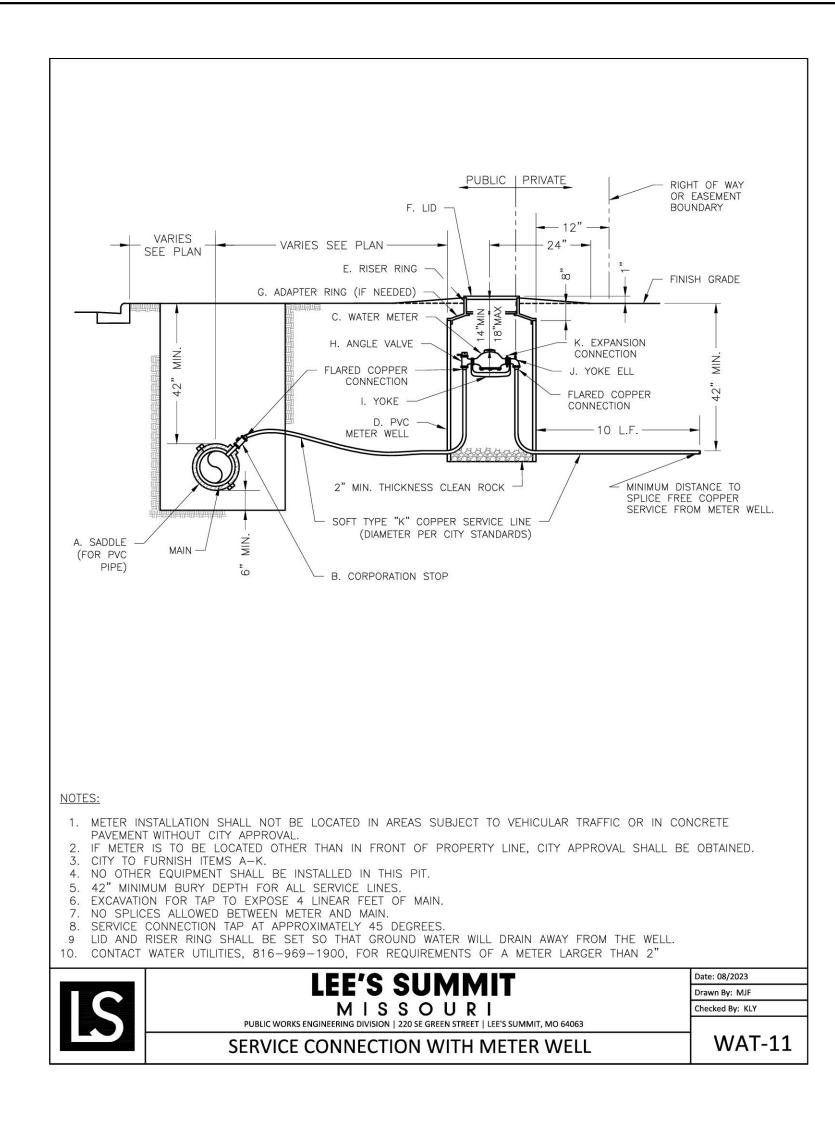
NMD

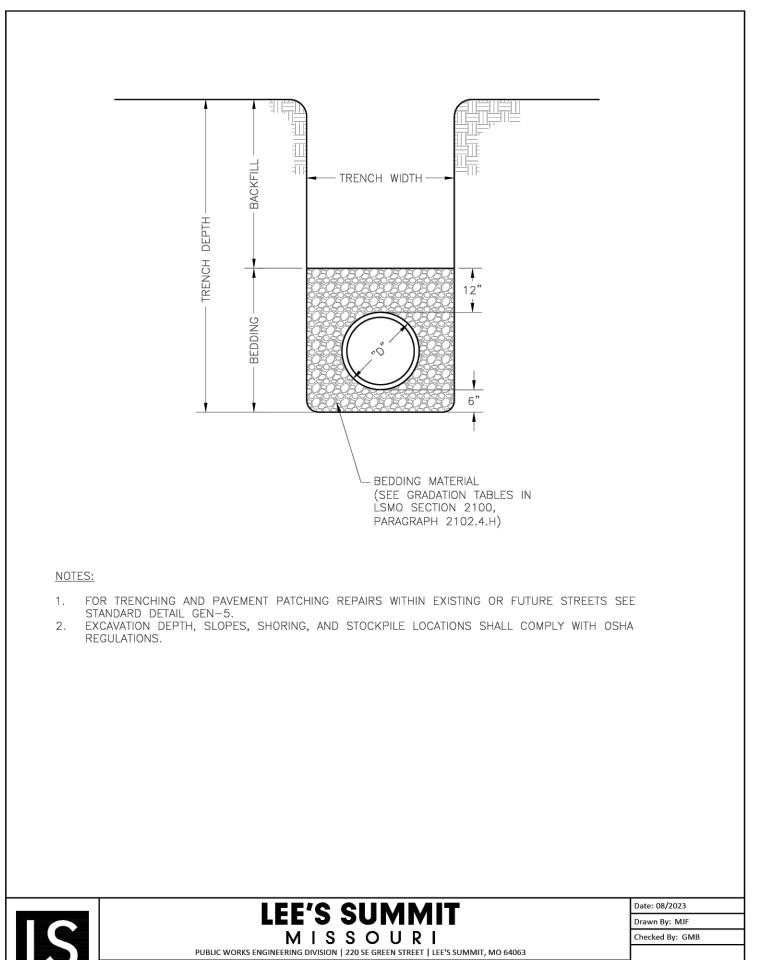
REVISIONS:

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NATHAN THOMAS ECKHOFF

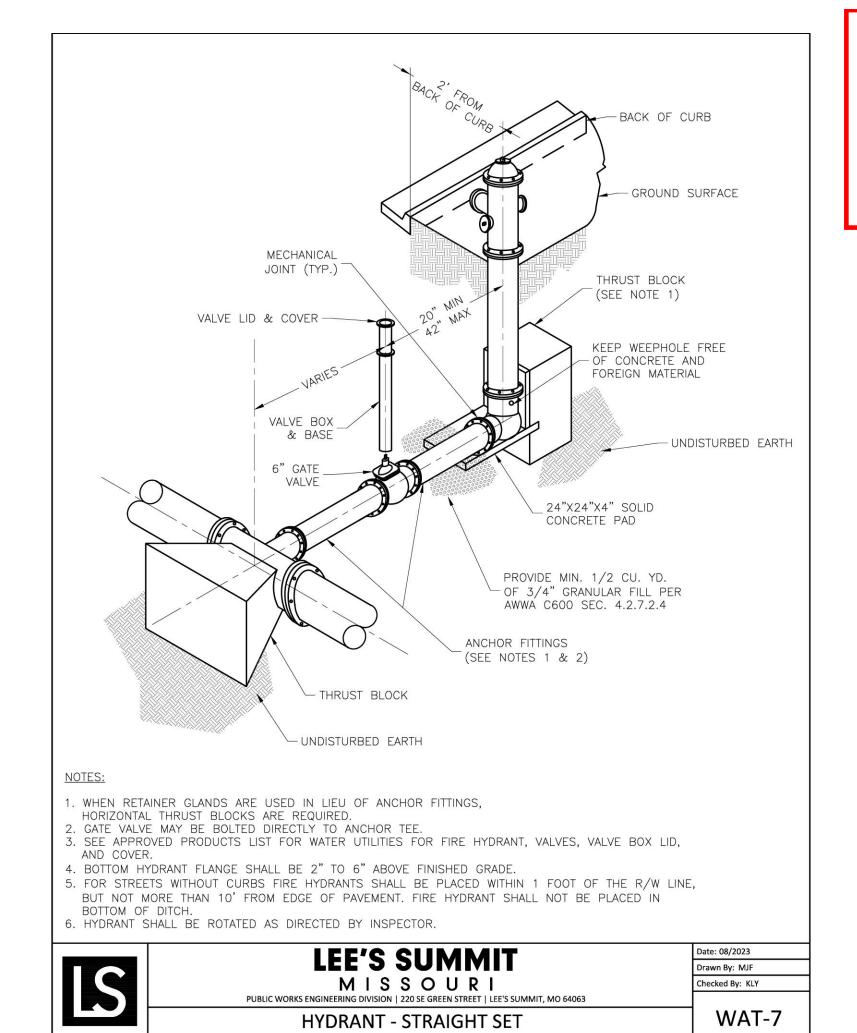
MO LICENSE-2003014960

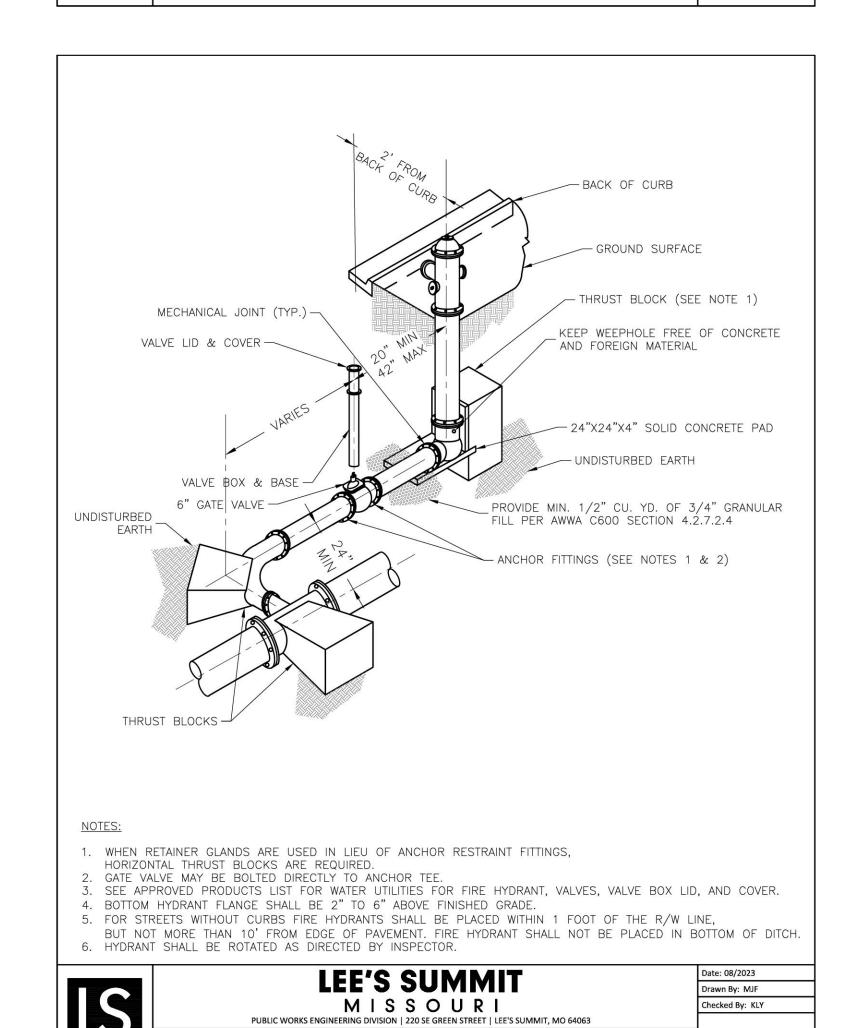




PIPE BEDDING DETAIL

GEN-6



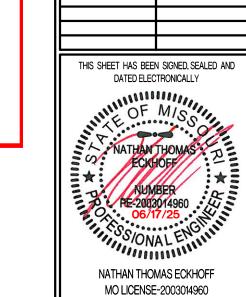


HYDRANT WITH 90 DEGREE BEND

WAT-8



**Development Services Department** Lee's Summit, Missouri 07/22/2025



|| REVISIONS:

DRAWING INCLUDES:

LEE'S SUMMIT DETAILS 2

DESIGNED: DRAWN: NMD

PROJECT NO.: 230286

CE 7.4

SHEET:

QUANTITY	SYMBOL	PLANT NAME	PLANT TYPE	SIZE
5	EF	ELM 'FRONTIER'	MEDIUM / LARGE TREE	3"
6	ZGV	ZELKOVA 'GREEN VASE'	MEDIUM / LARGE TREE	3"
4	MSS	MIYABI MAPLE 'STATE STREET'	MEDIUM / LARGE TREE	3"
5	MRP	MAPLE 'RED POINTE'	MEDIUM / LARGE TREE	3"
8	CST	CRABAPPLE 'SUGARTYME'	ORNAMENTAL TREE	2.5
6	NAJ	NINEBARK 'AMBER JUBILEE'	DECIDUOUS SHRUB	#5
8	HLL	HYDRANGEA 'LITTLE LIME'	DECIDUOUS SHRUB	#2
6	HRS	HYDRANGEA 'RUBY SLIPPERS'	DECIDUOUS SHRUB	#5
13	LMK	LILAC 'MISS KIM'	DECIDUOUS SHRUB	#5
10	BGV	BOXWOOD 'GREEN VELVET'	EVERGREEN SHRUB	#5
42	JSG	JUNIPER 'SEA GREEN'	EVERGREEN SHRUB	#5

- THE PLANT LIST IS PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR. THE CONTRACTOR SHALL VERIFY ALL PLANT COUNTS AND IF A DISCREPANCY EXISTS THE PLAN SHALL GOVERN.
- LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR BECOMING AWARE OF ALL UNDERGROUND UTILITIES, PIPES, AND STRUCTURES. THE LANDSCAPE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR CONTACTING ALL UTILITY COMPANIES FOR FIELD LOCATION OF ALL UNDERGROUND UTILITY LINES PRIOR TO ANY EXCAVATION.
- GRADE.

LANDSCAPE CONTRACTOR TO RECEIVE SITE GRADED TO  $\pm 10^{\circ}$  -0.10 FOOT OF FINISHED

- PLANTING BACK FILL MIX IS TO CONSIST OF 80% NATIVE TOPSOIL, AND 20% ORGANIC MATTER.
- SHRUB BEDS, BERMS, AND TREE WELLS ARE TO BE MULCHED WITH 3-4" DYED
- HARDWOOD MULCH. ALL BED AND LAWN AREAS SHALL BE IRRIGATED.
- ALL LAWN AREAS TO BE SODDED WITH TALL FESCUE SOD. LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF TWELVE MONTHS.
- ALL PLANTING BEDS AND TREE RINGS TO BE SEPERATED FROM TURF AREAS BY 'V' TRENCHING.
- ALL PLANT MATERIAL MUST MEET THE SPECIFICATIONS OF THE AMERICAN ASSOCIATION OF
- NURSERYMEN. PLANT LOCATIONS MAY BE ADJUSTED ONSITE TO AVOID UTILITIES, SITE FEATURES, ETC.
- ONLY ORNAMENTAL TREES AND SHRUBS MAY BE PLANTED IN ANY EASEMENTS.

PLANT CROWN OF BALL SLIGHTLY ABOVE FINISH

3" SHREDDED HARDWOOD MULCH

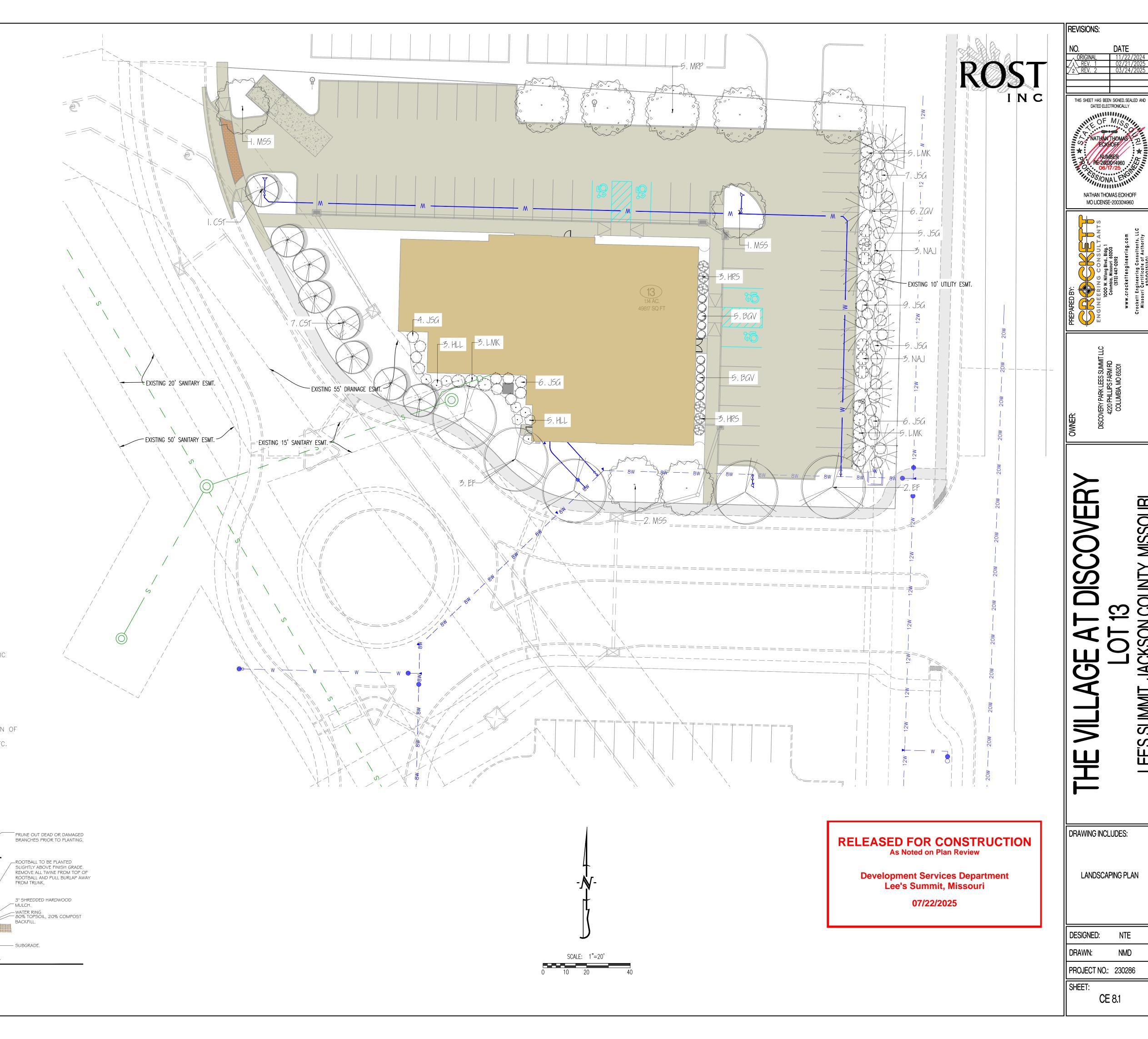
- 80% TOPSOIL, 20% COMPOST

COMPACTED SUBGRADE

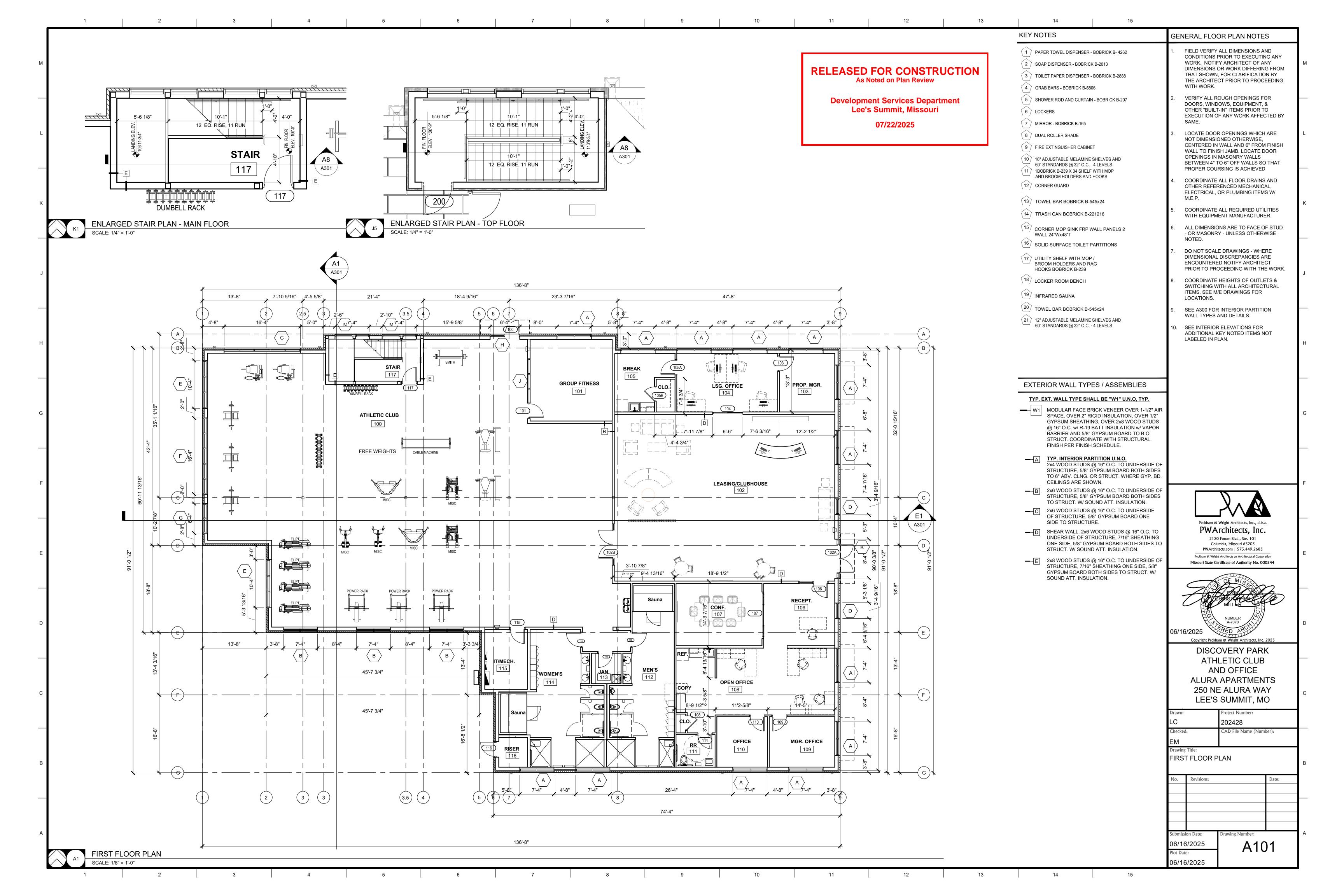
BACKFILL.

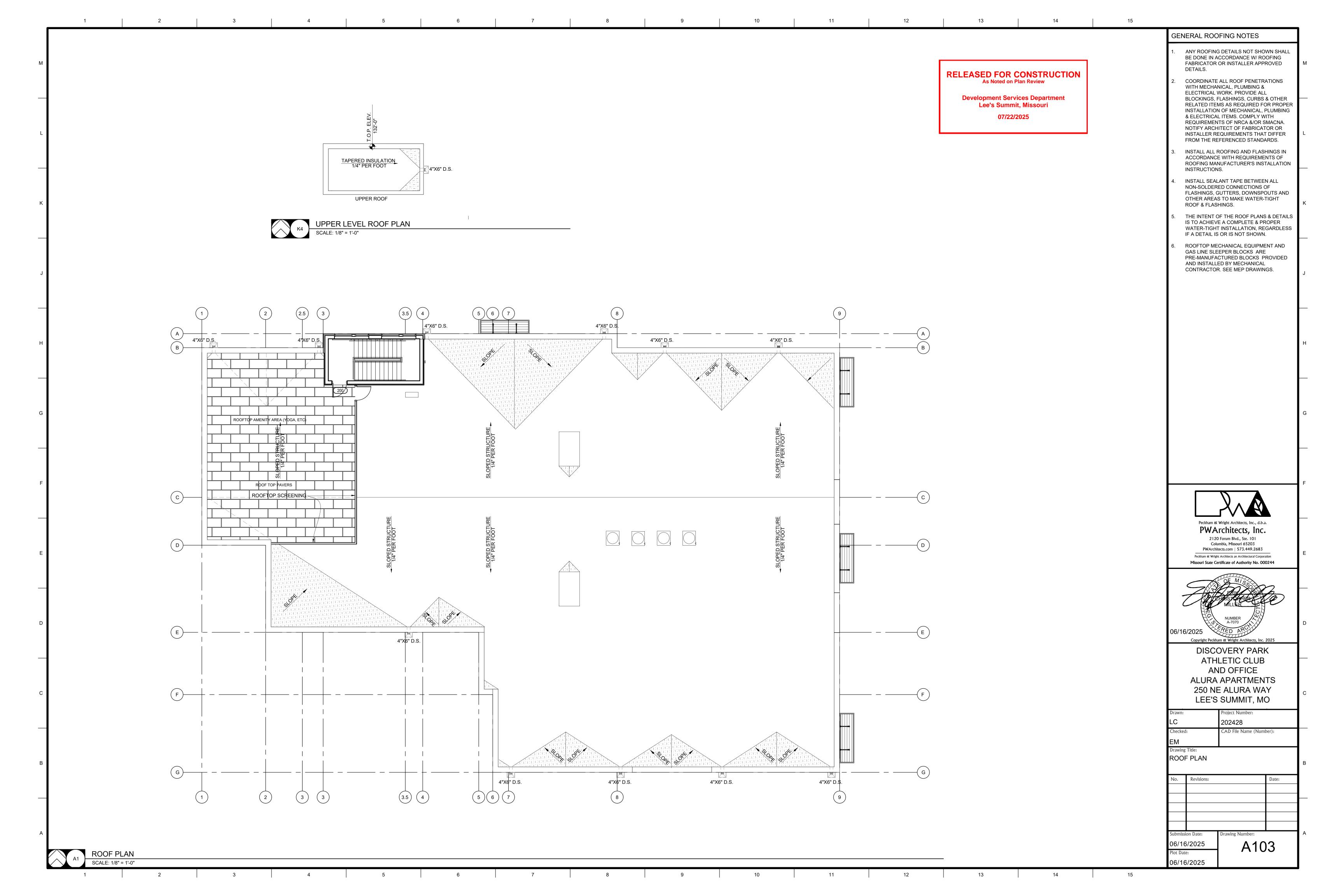
SHRUB / PERENNIAL PLANTING DETAIL

Not To Scale



NMD



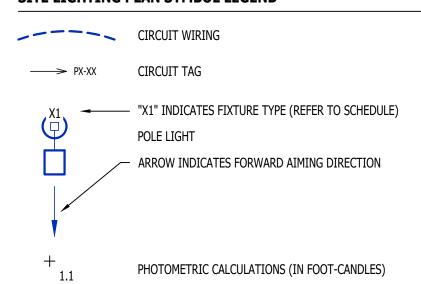




SITE LIGHTING CALCULATION SUMMARY								
AREA / LABEL	CALC TYPE	UNITS	AVG	MAX	MIN	AVG/MIN	MAX/MIN	
SITE	ILLUMINANCE	FC	2.04	4.6	0.7	2.9	6.6	
SPILL LIGHT	ILLUMINANCE	FC	0.12	1.6	0	N/A	N/A	
NOTES:								
1. PHOTOMETRIC CALCULATIONS DO NOT INCLUDE EXISTING LIGHTING								

SITE LIGHTING FIXTURE SCHEDULE										
TAG	MANUFACTURER (OR EQUAL)	MODEL NUMBER (OR EQUAL)	DESCRIPTION	MOUNTING	LUMEN OUTPUT	сст (°К)	CRI	VOLTS	WATTS	NOTES
PL1	MCGRAW-EDISON	PRV-XL-PA3A-740-U-T4W-HSS	LED POLE LIGHT	20' #SSS POLE ON 30" BASE	17,617	4000	70	208	172	WITH #MS/DIM-L40W MOTION SENSING DIMMING
NOTES:	NOTES:									
1. VERIF	Y LIGHT FIXTURE FINISHI	ES WITH OWNER / ARCHITECT PRIOR TO ORDERING.								!

#### SITE LIGHTING PLAN SYMBOL LEGEND



#### **SITE LIGHTING PLAN GENERAL NOTES:**

- SITE PHOTOMETRIC VALUES SHOWN HAVE BEEN CALCULATED PER SPECIFIED LIGHT FIXTURES AT INDICATED
  MOUNTING HEIGHTS. ANY CHANGES OR ALTERATIONS TO LIGHTING LAYOUT SHOWN WILL REQUIRE
  RECALCULATING SITE PHOTOMETRICS AND WILL THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR /
  EQUIPMENT SUPPLIER.
- 2. PHOTOMETRIC CALCULATIONS SHOWN DO NOT INCLUDE EXISTING LIGHT FIXTURE(S), ONLY NEW POLE LIGHT FIXTURE(S) SHOWN.
- 3. BUILDING-MOUNTED EXTERIOR LIGHTING IS NOT YET DESIGNED FOR PROPOSED BUILDING. ALL BUILDING-MOUNTED LIGHTING WILL BE INTENDED AS ACCENT LIGHTING AND NOT INTENDED TO PROVIDE GENERAL AREA LIGHTING. ALL BUILDING-MOUNTED LIGHTING SHALL COMPLY WITH CITY OF LEE'S SUMMIT UDO SECTIONS 8.220, 8.260, & 8.270.

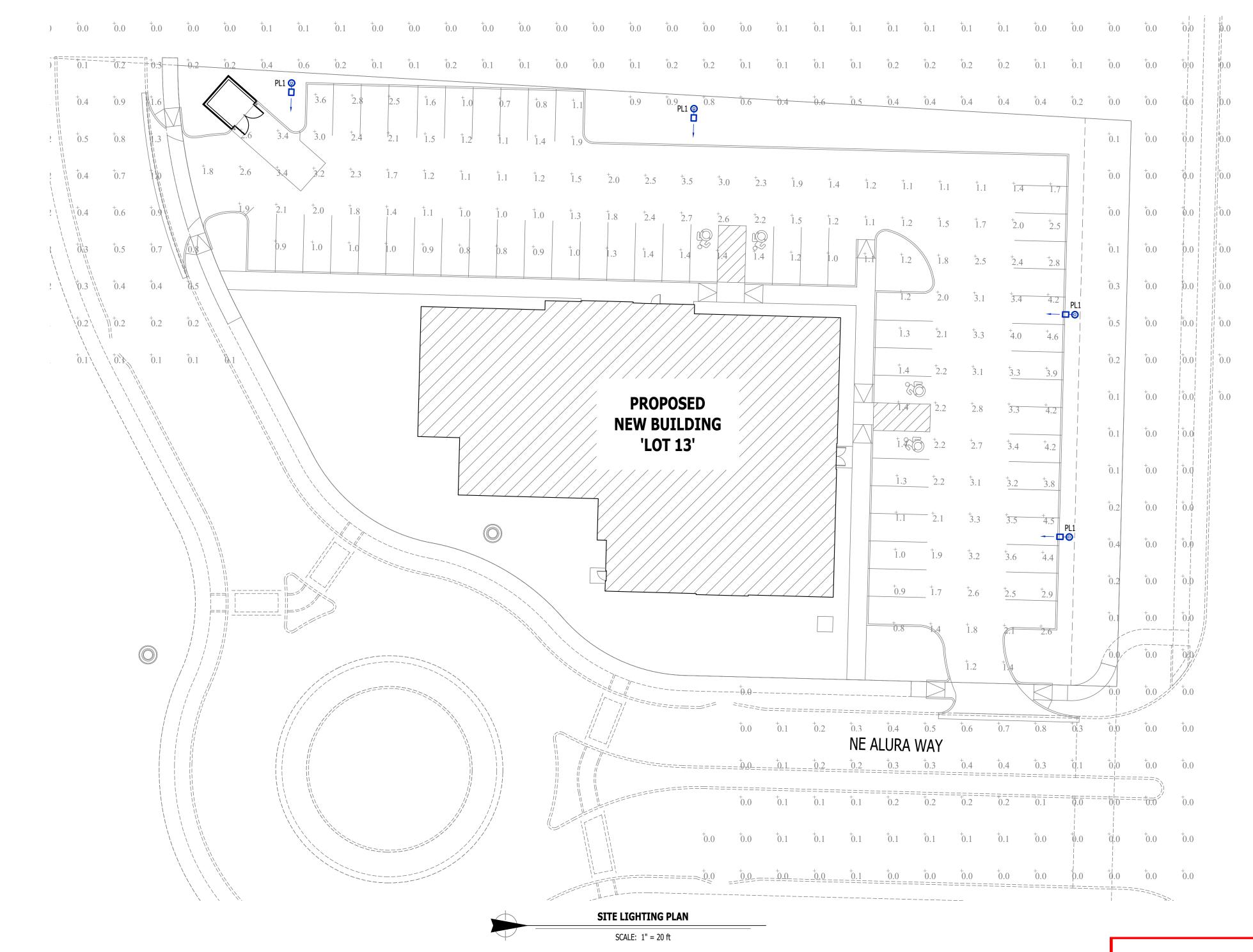
10ft - 14ft

POLE HEIGHT "X" DEPTH

4'-6"

	15ft - 20ft	6'-0"	
	21ft - 25ft	7'-0"	
	26ft - 30ft	8'-0"	J
POLE MUST MEET EPA RATING FOR 80MPH WIND (ASCE 7-93) WITH SPECIFIED HEAD CONFIGURATION -	_ ρ		- Handhole @ Cover Plate
PVC CONDUIT STUBBED UP ADJACENT TO HANDHOLE (NUMBER & SIZE REQUIRED) -			<ul> <li>POLE ANCHOR BOLTS PER</li> <li>MANUFACTURER RECOMMENDATIONS</li> </ul>
*			— ½" CHAMFER ALL EDGES
30"			24" MIN. TO CURB / PAVING
FINISH GRADE	Δ ·		\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
"X" DEPTH BELOW FINISH GRADE (SEE CHART)			CIRCUIT CONDUIT & CONDUCTORS TO POWER SOURCE / NEXT POLE  ATTACH COPPER EQUIPMENT GROUND CONDUCTOR TO INTERNAL LUG WELDED TO INTERIOR OF POLE  TYP. POLE BASE REINFORCING: #3 HORIZONTAL TIES (20") AT 12" O.C. w/ #4 VERTICAL BARS AT PERIMETER AT 6" O.C.
CONCRETE TO BE MIN. 3000psi	24	1"0	

TYPICAL LIGHT POLE DETAIL



RELEASED FOR CONSTRUCTION
As Noted on Plan Review

Development Services Department Lee's Summit, Missouri 07/22/2025 JAMES P. WATSON

NUMBER
PE-2015017071

James Watson, P.E. November 7, 2024 PE-2015017071 MO Certificate of Authority # 2018029680



## J-SQUARED ENGINEERING

2400 Bluff Creek Drive, Suite 101 Columbia, Missouri 65201 573.234.4492 www.j-squaredeng.com

J2 PROJECT No:	J21211
J2 DESIGN:	ACW
	_
ISSUE TITLE	DATE
FDP SUBMITTAL	11 - 07 - 2024

# awings for: rk Lot 13

# at Discovery Park SITE LIGHTING

Village

AHJ APPROVAL STAMP

SITE LIGHTING PLAN

SHEET NUM

SL1