- SIDEWALK

U/E

W/E

- TOP ELEVATION

CURB & GUTTER

TREELINE

—— P/L—— PROPERTY LINES

—— ROW —— RIGHT-OF-WAY

—— STO—— STORM SEWER

---- CATV<sub>x</sub> ---- CABLE TV - EXISTING

——Ty—— TELEPHONE LINE - EXIST.

WATERLINE

CLEANOUT

CURB & GUTTER - EXISTING

EXISTING PLAT LINES

SANITARY SEWER MAIN

STORM SEWER - EXISTING

ELECTRIC LINE - EXISTING

—— SANITARY SEWER MAIN - EXIST.

FIBER OPTIC CABLE - EXISTING

----- OHP<sub>x</sub> ----- OVERHEAD POWER LINE - EXIST

----- UGE<sub>x</sub> ----- UNDERGROUND ELECTRIC - EX.

WATERLINE - EXISTING

LIGHT - EXISTING

**EXISTING MANHOLE** 

EXISTING AREA INLET

**EXISTING CURB INLET** 

EXISTING GRATE INLET

**EXISTING JUNCTION BOX** 

**EXISTING STORM MANHOLE** 

**EXISTING SANITARY MANHOLE** 

PROPOSED SANITARY MANHOLE

GAS LINE - EXISTING

EXISTING LOT AND R/W LINES

- UTILITY EASEMENT

WATER SURFACE ELEVATION

**ASPHALT PAVEMENT - EXISTING** 

ASPHALT PAVEMENT - PROPOSED

**CONCRETE PAVEMENT - EXISTING** 

**ASPHALT PAVEMENT - EXISTING** 

CONCRETE SIDEWALK - EXISTING

CONCRETE SIDEWALK - PROPOSED

WATERLINE EASEMENT

# **UTILITY CONTACTS:**

MISSOURI DEPARTMENT OF TRANSPORTATION (MODOT) Steve Holloway 600 NE Colbern Road

Lee's Summit, MO 64086 (816) 607-2186

MISSOURI GAS ENERGY (MGE) **Brent Jones** 3025 SE Clover Drive

Lee's Summit, MO 64082 (816) 399-9633 brent.jones@spireenergy.com

KANSAS CITY POWER & LIGHT COMPANY (KCP&L) Ron Dejarnette 1300 SE Hamblin Road Lee's Summit, MO 64081

Office: (816) 347-4316 Cell: (816) 810-5234 ron.dejarnette@kcpl.com

CITY OF LEES SUMMIT PUBLIC WORKS Dena Mezger

220 SE Green Street Lee's Summit, MO 64063 (816) 969-1800

AT&T Mark Manion or Marty Loper Kansas City, MO 64106 (816) 275-2341 or (816) 275-1550

COMCAST CABLE John Meadows 4700 Little Blue Parkway Independence, MO 64057 (816) 795-2257

CITY OF LEE'S SUMMIT WATER UTILITIES

Mark Schaufler 1200 SE Hamblen Road Lee's Summit, MO 64081 (816) 969-1900



# WATER LINE PLANS RETREAT AT BAILEY FARMS, SECOND PLAT

# IN THE CITY OF LEE'S SUMMIT JACKSON COUNTY, MO

#### **GENERAL NOTES**

- ALL CONSTRUCTION TO FOLLOW THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL AS
- ALL WORKMANSHIP AND MATERIALS SHALL BE SUBJECT TO THE INSPECTION AND APPROVAL OF THE ENGINEERING DEPARTMENT OF THE CITY OF LEE'S SUMMIT, MISSOURI
- LINEAL FOOT MEASUREMENTS SHOWN ON THE PLANS ARE HORIZONTAL MEASUREMENTS. NOT SLOPE
- MEASUREMENTS. ALL PAYMENTS SHALL BE MADE ON HORIZONTAL MEASUREMENTS. NO GEOLOGICAL INVESTIGATION HAS BEEN PERFORMED ON THE SITE.
- THE UTILITY LOCATIONS SHOWN ON THESE PLANS ARE TAKEN FROM UTILITY COMPANY RECORDS AND APPARENT FIELD LOCATIONS. THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL UTILITIES
- THE CONTRACTOR SHALL ADHERE TO THE PROVISIONS OF THE SENATE BILL NUMBER 583, 78TH GENERAL ASSEMBLY OF THE STATE OF MISSOURI. THE BILL REQUIRES THAT ANY PERSON OR FIRM DOING EXCAVATION ON PUBLIC RIGHT OF WAY DO SO ONLY AFTER GIVING NOTICE TO, AND OBTAINING INFORMATION FROM, UTILITY COMPANIES. STATE LAW REQUIRES 48 HOURS ADVANCE NOTICE. THE CONTRACTOR MAY ALSO UTILIZE THE FOLLOWING TOLL FREE PHONE NUMBER PROVIDED BY "MISSOURI ONE CALL SYSTEM, INC.": 1-800-DIG-RITE. THIS PHONE NUMBER IS APPLICABLE ANYWHERE WITHIN THE STATE OF MISSOURI. PRIOR TO COMMENCEMENT OF WORK, THE CONTRACTOR SHALL NOTIFY ALL THOSE COMPANIES WHICH HAVE FACILITIES IN THE NEAR VICINITY OF THE CONSTRUCTION TO BE PERFORMED
- PRIOR TO ORDERING PRECAST STRUCTURES, SHOP DRAWING SHALL BE SUBMITTED TO THE DESIGN ENGINEER FOR APPROVAL. AFTER APPROVAL OF THE SHOP DRAWINGS, A COPY OF THE APPROVED AND SIGNED SHOP DRAWINGS SHALL BE PROVIDED TO THE CITY INSPECTOR UPON REQUEST.
- THE CONTRACTOR SHALL PROTECT ALL MAJOR TREES FROM DAMAGE. NO TREE SHALL BE REMOVED WITHOUT PERMISSION OF THE OWNER, UNLESS SHOWN OTHERWISE.
- CLEARING AND GRUBBING OPERATIONS AND DISPOSAL OF ALL DEBRIS THEREFROM SHALL BE PERFORMED
- BY THE CONTRACTOR IN STRICT ACCORDANCE WITH ALL LOCAL CODES AND ORDINANCES. ALL WASTE MATERIAL RESULTING FROM THE PROJECT SHALL BE DISPOSED OF OFF-SITE BY THE
- CONTRACTOR, OR AS DIRECTED BY THE OWNER. ALL EXCAVATIONS SHALL BE UNCLASSIFIED. NO SEPARATE PAYMENT WILL BE MADE FOR ROCK

THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD-LATEST EDITION)

- THE CONTRACTOR SHALL CONTROL THE EROSION AND SILTATION DURING ALL PHASED OF CONSTRUCTION, AND SHALL KEEP THE STREETS CLEAN OF MUD AND DEBRIS. ALL MANHOLES, CATCH BASINS, UTILITY VALVES AND METER PITS TO BE ADJUSTED OR REBUILT TO GRADE
- THE CONTRACTOR SHALL CONTACT DEVELOPMENT SERVICES INSPECTIONS AT: 816-969-1200 TO OBTAIN A
- DEVELOPMENT SERVICES CONSTRUCTION PERMIT. A MINIMUM 48 HOUR NOTICE SHALL BE GIVEN PRIOR TO THE CONTRACTOR SHALL CONTACT THE RIGHT OF WAY INSPECTOR AT 816-969-1800 PRIOR TO ANY LAND
- DISTURBANCE ACTIVITIES WITHIN THE RIGHT OF WAY. THESE ACTIVITIES MAY REQUIRE A PERMIT. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ALL TRAFFIC HANDLING MEASURES NECESSARY TO ENSURE THAT THE GENERAL PUBLIC IS PROTECTED AT ALL TIMES. TRAFFIC CONTROL SHALL CONFORM TO

#### **EARTHWORK**

- It is recommended that a Geotechnical Engineer observe and document all earthwork activities. Contours have been shown at 1-foot or 2-foot intervals, as indicated. Grading shall consist of completing the earthwork required to bring the physical ground elevations of the existing site to the finished grade (or sub-grade) elevations provided on the plans as spot grades, contours or others means as indicated on the plans.
- The existing site topography depicted on the plans by contouring has been established by aerial photography and field verified by g.p.s. observation near 02/24/2025. The contour elevations provided may not be exact ground elevations, but rather interpretations of such. Accuracy shall be considered to be such that not more than 10 percent of spot elevation checks shall be in error by more than one-half the contour interval provided, as defined by the National Map Accuracy Standards. Any quantities provided for earthwork volumes are established using this topography contour accuracy, and therefore the inherent accuracy of any earthwork quantity is assumed from the topography accuracy.
- Proposed contours are to approximate finished grade. Unless otherwise noted, payment for earthwork shall include backfilling of the curb and gutter, sidewalk and further manipulation of utility trench spoils. The site shall be left in a mowable condition and positive drainage maintained
- Unless otherwise noted, all earthwork is considered Unclassified. No additional compensation will be provided for rock or
- shale excavation, unless specifically stated otherwise. Prior to earthwork activities, pre-disturbance erosion and sediment control devices shall be in place per the Storm Water
- Pollution Prevention plan and/or the Erosion and Sediment Control Plan prepared for this site. All topsoil shall be stripped from all areas to be graded and stockpiled adjacent to the site at an area specified by the project owner or his appointed representative. Vegetation, trash, trees, brush, tree roots and limbs, rock fragments greater then 6-inches and other deleterious materials shall be removed and properly disposed of offsite or as directed by the owner
- Unless otherwise specified in the Geotechnical Report, all fills shall be placed in maximum 6-inch lifts and compacted to
- 95-percent of maximum density as defined using a standard proctor test (AASHTO T99/ASTM 698). Subgrade for pavements shall be proof-rolled prior to paving operations utilizing a fully loaded tandem axle dump truck. All areas exhibiting excessive pumping and heaving shall be removed, filled and compacted with suitable materials and retested until acceptable results are achieved and final approval has been obtained from the Geotechnical Engineer.
- 11. Subgrade for building pad shall include a minimum of 18-inches of Low Volume Change (LVC) material, or as identified in the site specific Geotechnical Report.
- Fill materials shall be per Geotechnical Report and shall not include organic matter, debris or topsoil. All fills placed on slopes greater than 6:1 shall be benched.
- 13. The Contractor shall be responsible for redistributing the topsoil over proposed turf and landscaped areas to a minimum
- depth of 6-inches below final grade. 14. All areas shall be graded for positive drainage. Unless noted otherwise the following grades shall apply:
- a. Turf Areas 2.5% Minimum, 4H:1V Maximum
- b. Paved Areas 1.2% Minimum, 5% Maximum
- 15. A.D.A. parking stalls shall not be sloped greater then 2% in any direction and constructed per A.D.A. requirements. 16. All disturbed areas shall be fertilized, seeded and mulched immediately after earthwork activities have ceased. Seeding shall be per the Erosion and Sediment Control Plan and/or Landscape Plan. If not specified seeding shall be per APWA Section 2400, latest edition. Unless otherwise noted, seeding shall be subsidiary to the contract price for earthwork and
- All disturbed areas in the right-of-way shall be sodded.
- 18. Underdrains are recommended for all paved areas adjacent to irrigated turf and landscaped beds.
- 19. Contractor shall adhere to the reporting requirements outlined in the Storm Water Pollution Prevention Plan (SWPPP) prepared for this project. Erosion and Sediment control devices shall be properly maintained and kept clean of silt and debris and in good working order. Additional erosion and sediment control measures shall be installed as required.

### UTILITIES:

- 1. Existing utilities have been shown to the greatest extent possible based upon information provided to the Engineer. The contractor is responsible for contacting the respective utility companies and field locating utilities prior to construction and identifying any potential conflicts. All conflicts shall immediately be brought to the attention of the Engineer.
- The contractor shall be responsible for coordinating any required utility relocations. Utilities damaged through the negligence of the contractor shall be repaired at the contractor's expense.
- Contractor shall verify flow-lines and structure tops prior to construction, and shall notify Engineer of any discrepancies. Provide shop drawings for all precast and manufactured utility structures for review by the Engineer prior to construction of
- 4. Utility Separation: Waterlines shall have a minimum of 10 feet horizontal and 2 feet vertical separation from all sanitary sewer lines, manholes, and sanitary sewer service laterals, as measured from edge to edge. If minimum separations can not be obtained, concrete encasement of the sanitary line shall be required 10 feet in each direction of the conflict.
- 5. Payment for trenching, backfilling, pipe embedment, flowable fill, backfill materials, clean up, seeding, sodding and any other items necessary for the construction of the utility line shall be included in the contract price for the utility installation. The Contractor shall be responsible for contacting respective utility companies 48-hours in advance for the inspection of
- any proposed utility main extension or service line or service connection to any existing main. Trench spoils shall be neatly placed onsite adjacent to the trench, and compacted to prevent saturation and excess sediment runoff. Unsuitable materials, excess rock and shale, asphalt, concrete, trees, brush etc. shall be properly
- disposed of offsite. Materials may be wasted onsite at the direction of the Owner or his appointed representative. 8. All excavation is considered unclassified, unless noted otherwise. Unclassified excavation for utility trenching is subsidiary to the unit price provided for the pipe. Any quantity provided for rock excavation is estimated based on the best information provided to the Project Engineer. The Engineer has the authority to identify and define the physical characteristics to determine the classification. Unit price quantities for rock excavation will be paid at a trench width of the nominal pipe diameter of the installed main plus 18 inches. Contractor is required to dispose of excess rock from their trenches by disposing it in areas as specified by the Project Engineer.

#### Sheet List Table Sheet Number Sheet Title **COVER SHEET** 2 GENERAL LAYOUT LINE 10 PLAN & PROFILE 3 LINE 12 PLAN & PROFILE WATER LINE DETAILS

# RELEASED FOR CONSTRUCTION

As Noted on Plan Review

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

07/30/2025

JAMES L.

PREPARED BY

SCHLAGEL & ASSOCIATES, P.A

**APPROVED BY** 

CITY ENGINEER APPROVED FOR ONE YEAR FROM THIS DATE

### OWNER/DEVELOPER:

CLAYTON PROPERTIES GROUP, INC., DBA SUMMIT HOMES **BRADLEY KEMPF** 120 SE 30TH STREET LEE'S SUMMIT, MO p (816) 246-6700

SUMMARY OF QUANTITIES QUANTITY | UNITS CONNECT TO EXISTING WATER LINE EΑ 2 FIRE HYDRANT ASSEMBLY EΑ REMOVE EXISTING FIRE HYDRANT EΑ 903 LF 4 8" C-900 PVC 5 8" 11.25° PVC BEND EΑ 6 8" 22.5° PVC BEND 3 EA

New City Requirements:

Flowable fill required per City specifications at all water structures.

> PRSUBD20252429 MP20250002429

### MISSOURI GEOGRAPHIC REFERENCE SYSTEM **BENCHMARK:**

BM JA-45, IS A KC METRO ALUMINUM GRS DISK SET IN CONCRETE AND ABOUT 3 INCHES BELOW THE PAVEMENT ON THE SHOULDER OF SE RANSON ROAD. IT IS STAMPED JA45, 1987.

ELEV. = 1046.25

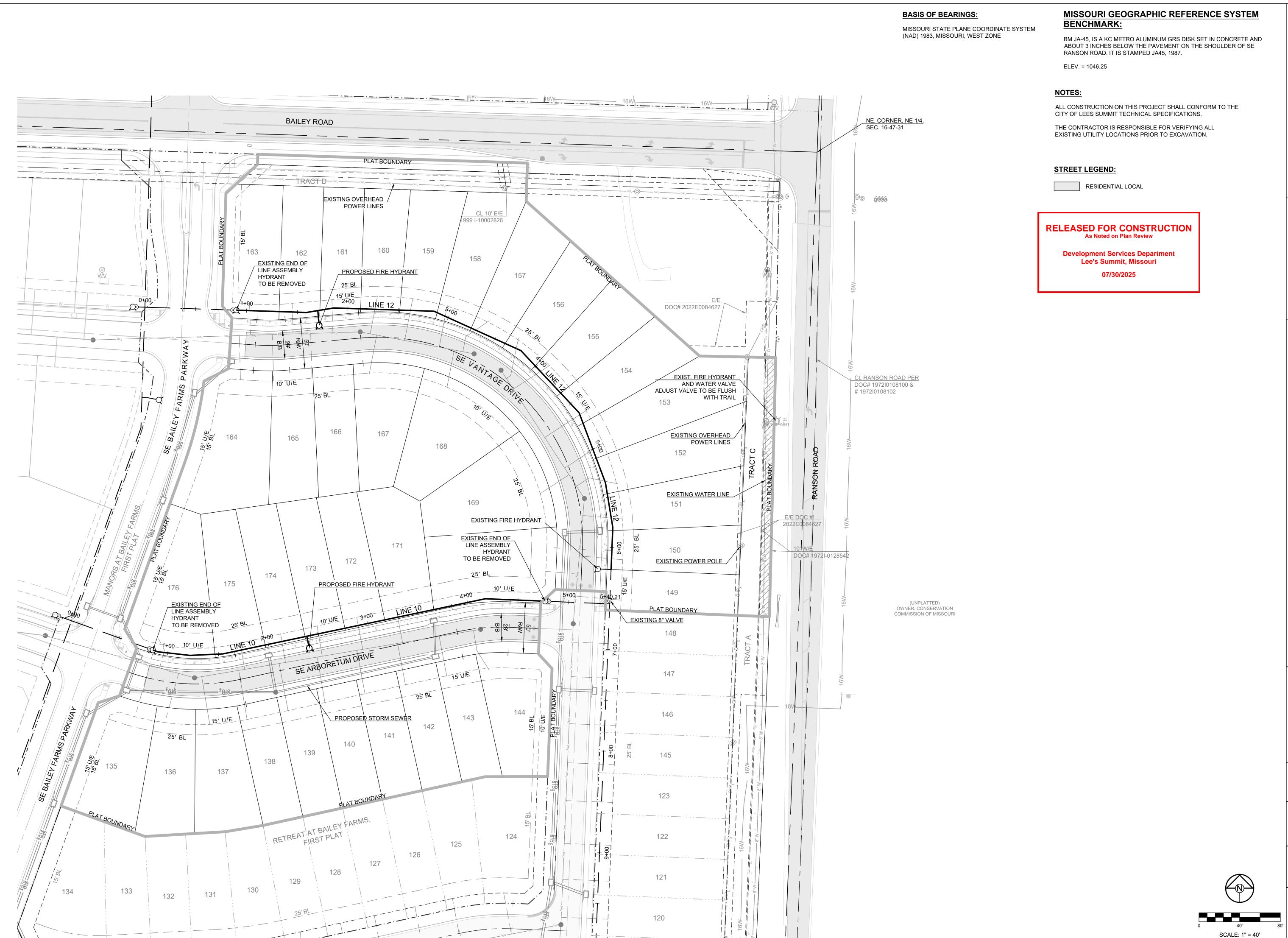
## PROJECT BENCHMARK:

Brass Disk at the Northeast Corner of the Northeast One-Quarter of Section 16, Township 47 N, Range 31 W. Intersection of SE. Bailey Road and SE. Ranson

ELEV. = 939.19

**COVER SHEET** 

SHEET



INEERS PLANNERS SURVEYORS LANDSCAPE ARCHITE(
14920 West 107th Street • Lenexa, Kansas 66215
(913) 492-5158 • Fax: (913) 492-8400
WWW.SCHLAGELASSOCIATES.COM
Missouri State Certificates of Authority
#E2002003800-F #LAC2001005237 #LS2002008859-F

PREPARED BY:

JAMES L.
LONG

NUMBER
PE-2014010495

SCHLAGEL & ASSOCIATES, P.A.

TER LINE PLANS
S PKWY & SE ARBORETUM DR
E'S SUMMIT, MO

E BAILEY FARMS PKWY & SE

GENERAL DATE PR 14/09

GENERAL LAYOUT

SHEET

2

#### MISSOURI STATE PLANE COORDINATE SYSTEM (NAD) 1983, MISSOURI, WEST ZONE 154 # 1972 153 166 *ш*/3/**8** 164 167 EXISTING OVERHEAD POWER LINES BAIL 165 168 152 STA. 4+76.71 LINE 10 = STA. 4+58.25, -27.00 L, SE ARBORETUM DRIVE REMOVE END OF LINE FIRE HYDRANT GATE VALVE TO REMAIN N 993042.4731 E 2833922.0484 EXISTING WATER LINE STA. 0+85.00 LINE 10 = STA. 0+60.54, -27.77 L, SE ARBORETUM DRIVE REMOVE END OF LINE FIRE HYDRANT GATE VALVE TO REMAIN N 992994.4734 E 2833536.5425 171 150 EXISTING POWER POLE / 1 √ STA. 2+38.62 LINE 10 = 174 STA. 2+27.26, -27.35 L, SE ARBORETUM DRIVE 175 INSTALL 1-FIRE HYDRANT ASSEMBLY 10' U/E N 993008.0368 E 2833687.8386 149 PLAT BOUNDARY SE ARBORETUM DRIVE STA. 4+17.90 LINE 10 = STA. 4+02.44, -28.31 L, SE ARBORETUM DRIVE INSTALL 1-8" 11.25° BEND W/ THRUST BLOCK N 993044.8771 E 2833863.2939 STA. 1+54.43 LINE 10 = 143 STA. 1+41.20, -27.70 L, SE ARBORETUM DRIVE INSTALL 1-8" 11.25° BEND W/ THRUST BLOCK N 992990.7360 E 2833605.4417 145 到 20/6/21 135 STA. 1+21.98 LINE 10 = STA. 1+03.45, -27.93 L, SE ARBORETUM DRIVE

124

123

# BASIS OF BEARINGS: MISSOURI GEOGRAPHIC REFERENCE SYSTEM

NATE SYSTEM BENCHMARK:

BM JA-45, IS A KC METRO ALUMINUM GRS DISK SET IN CONCRETE AND ABOUT 3 INCHES BELOW THE PAVEMENT ON THE SHOULDER OF SE RANSON ROAD. IT IS STAMPED JA45, 1987.

ELEV. = 1046.25

#### NOTES:

ALL CONSTRUCTION ON THIS PROJECT SHALL CONFORM TO THE CITY OF LEES SUMMIT TECHNICAL SPECIFICATIONS.

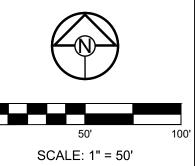
THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL EXISTING UTILITY LOCATIONS PRIOR TO EXCAVATION.

#### STREET LEGEND:

RESIDENTIAL LOCAL

RELEASED FOR CONSTRUCTION
As Noted on Plan Review

Development Services Department Lee's Summit, Missouri 07/30/2025



LINE 10 1" = 50' HORIZ. 1" = 10' VERT. 1070 EXISTING GRADE PROPOSED -GRADE ─8" Sanitary Sewer 4" Sanitary Sewer Stub FL=1021.81 LOT 175
4" Sanitary
Sewer Stub
FL=1019.48
4" Sanitary
Sewer Stub
FL=1020.13 LOT 172 4" Sanitary Sewer Stub FL=1021.18 LOT 173 4" Sanitary Sewer Stub FL=1020.56 392 LF 8" C-900 PVC PIPE 6+00 0+00 5+00 1+00 2+00 3+00 4+00

INSTALL 1-8" 11.25° BEND W/ THRUST BLOCK

RETREAT AT BAILEY FARMS,

N 992989.2084 E 2833573.0259

ETREAT AT BAILEY FARMS, SECOND PLAT WATER LINE PLANS

C

PREPARED BY:

JAMES L.

LONG

SCHLAGEL & ASSOCIATES, P.A.

DR

: ARBORETUM I MO

> ' FARMS PKWY LEE'S SUN

SE BAILEY

SION DATE DESCRIPTION
07/10/2025 CITY COMMENTS

CHECKED B.

JIL

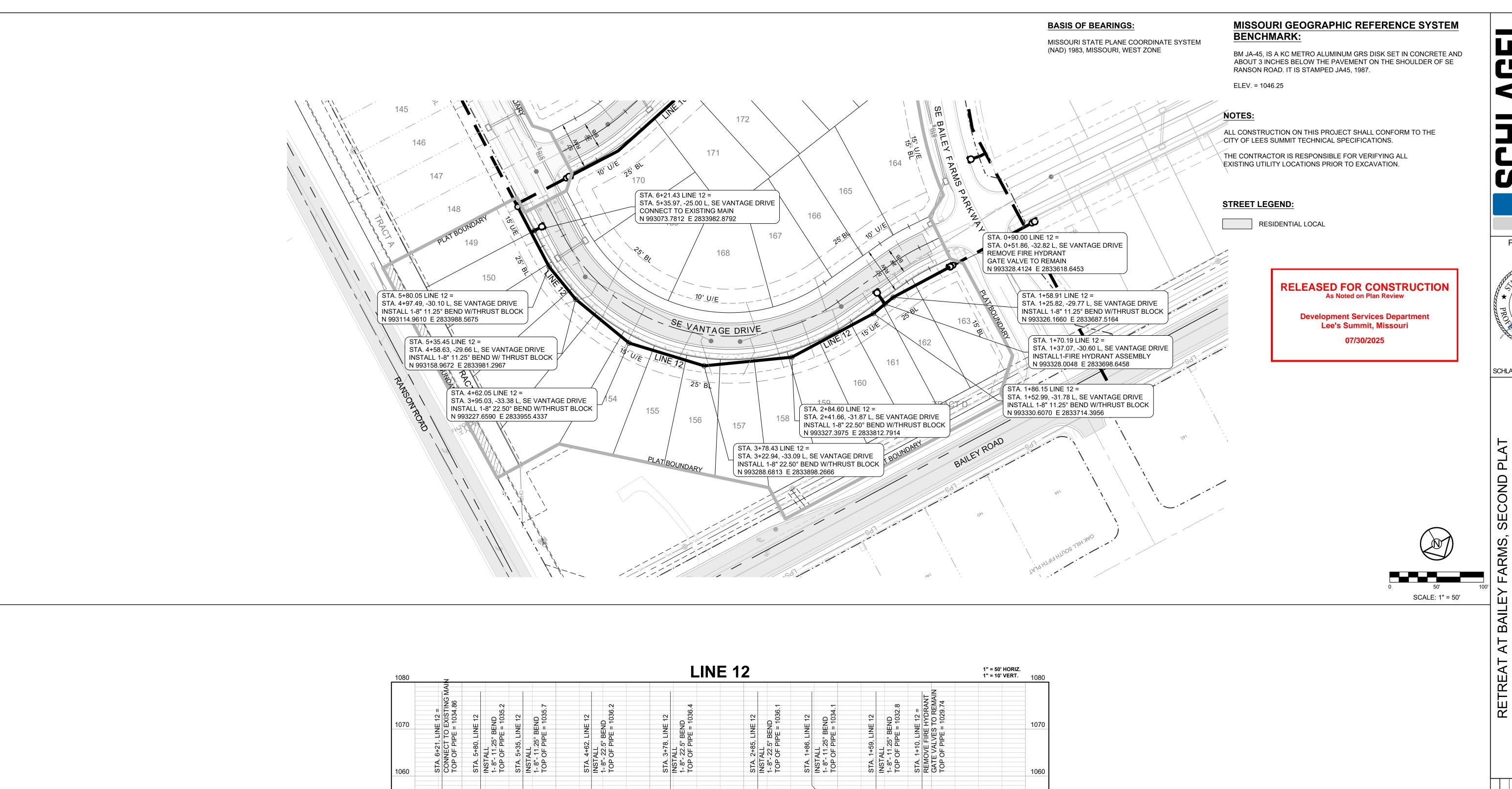
JATE PREPAR

04/09/2025

LINE 10 PLAN & PROFILE

SHEET

3



511 LF 8" C-900 PVC PIPE

3+00

2+00

4+00

1050

1040

1020

1010

6+50

6+00

5+00

1050 EXISTING GRADE PROPOSED -GRADE 1040 4" Sanitary \_/ Sewer Stub FL=1028.58 LOT 156 LOT 157

4" Sanitary Sewer Stub Sewer Stub FL=1028.60 Sewer Stub FL=1027.63 FL=1026.07

LOT 160

4" Sanitary Sewer Stub 4" Sanitary FL=1024.42 Sewer Stub FL=1026.07 LOT 153 4" Sanitary Sewer Stub FL=1028.89 LOT 154
4" Sanitary
Sewer Stub
FL=1029.47 1020 LOT 155 4" Sanitary \_ Sewer Stub FL=1029.97

1+00

1010

1000

PREPARED BY:

JAMES L. LONG

SCHLAGEL & ASSOCIATES, P.A.

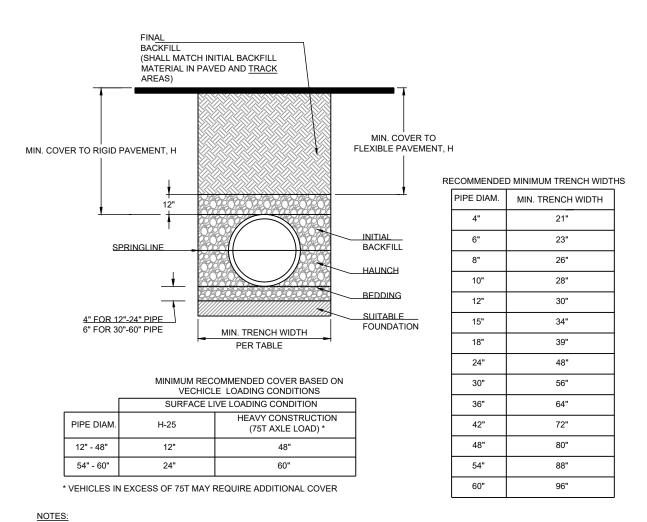
: ARBORETUM | MO

' FARMS PKWY LEE'S SUN

SE BAILEY

LINE 12 PLAN & PROFILE

SHEET



1. ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST EDITION

RIGID PAVEMENT.

2. MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.

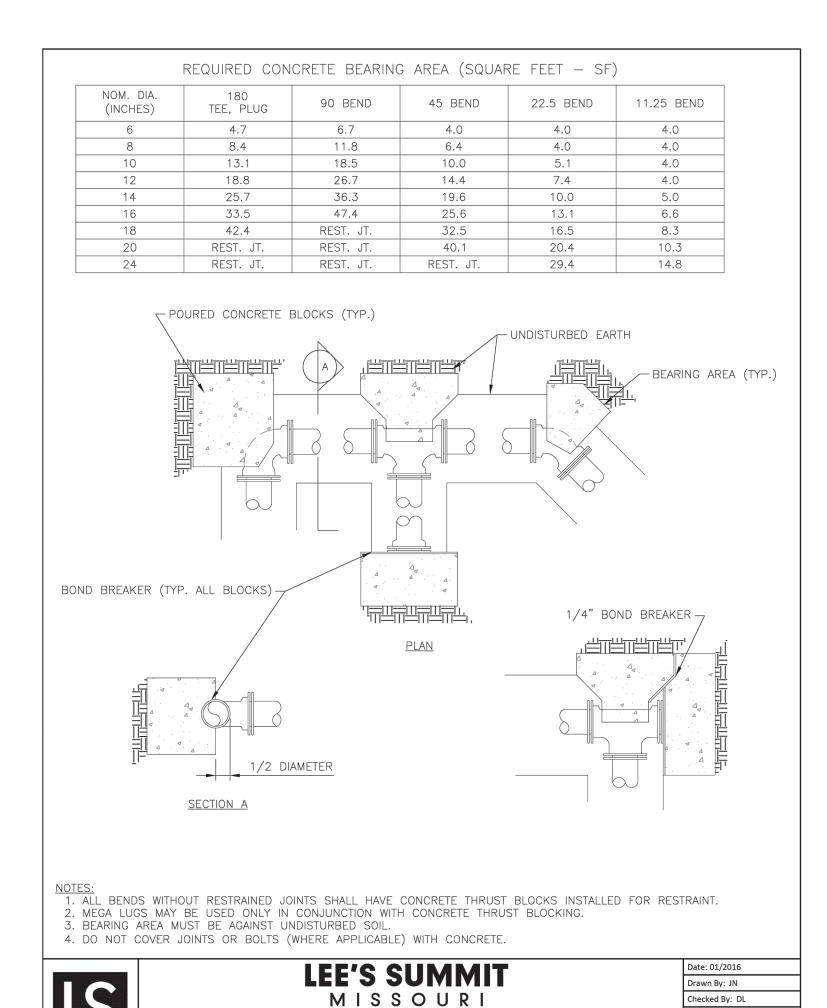
3. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.

4. <u>BEDDING:</u> SUITABLE MATERIAL SHALL BE CLASS I, II OR III. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" (100mm) FOR 4"-24" (100mm-600mm); 6" (150mm) FOR 30"-60" (750mm-900mm).

5. INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I, II OR III IN THE PIPE ZONE EXTENDING NOT LESS THAN 6" ABOVE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN

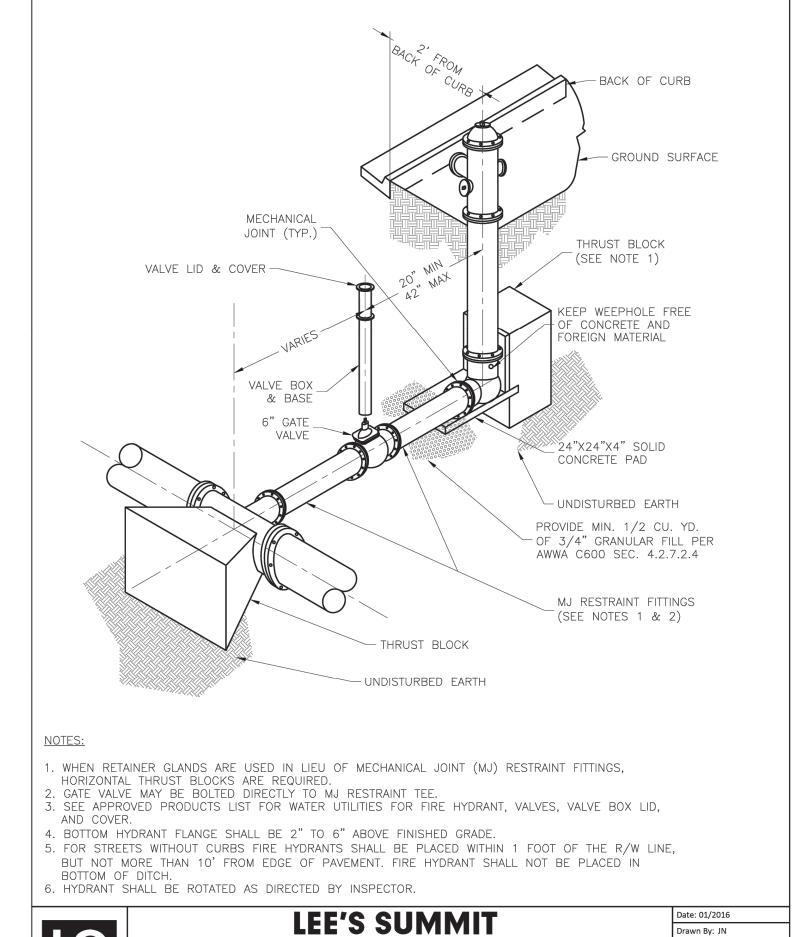
ASTM D2321, LATEST EDITION. 6. MINIMUM COVER: MINIMUM COVER, H, IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM THE TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER, H, IS 12" UP TO 48"

DIAMETER PIPE AND 24" OF COVER FOR 54"-60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF



HORIZONTAL THRUST BLOCK

WAT-1



MISSOURI

**HYDRANT - STRAIGHT SET** 

necked By: DL

WAT-7



**Development Services Department** Lee's Summit, Missouri 07/30/2025



JAMES L.

SCHLAGEL & ASSOCIATES, P.A.

WATER LINE **DETAILS** 

SHEET