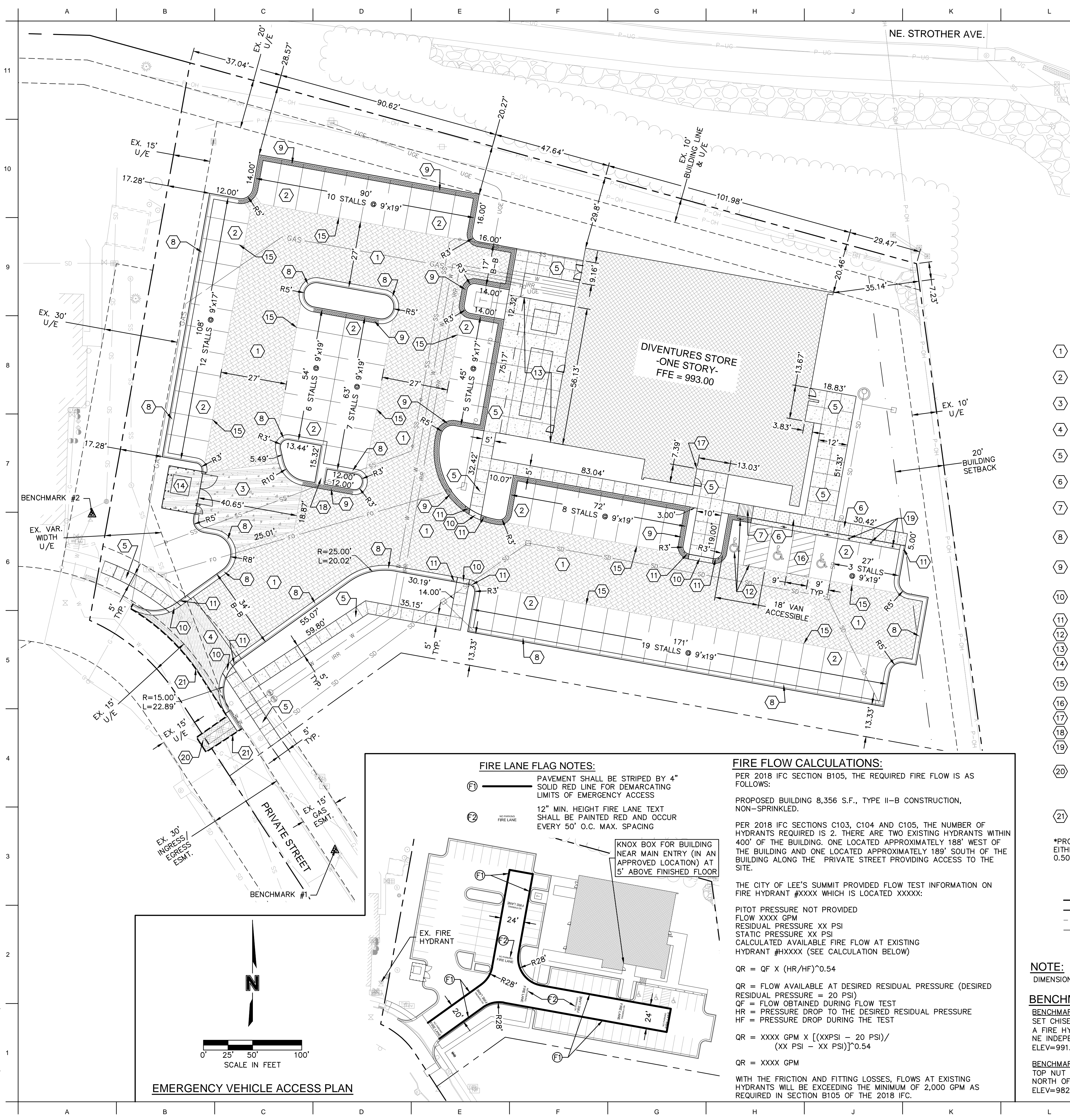


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- PAVEMENT MARKING NOTES:**
1. DO NOT APPLY PAVEMENT MARKING PAINT UNTIL LAYOUT, COLORS AND PLACEMENT HAVE BEEN VERIFIED WITH THE ARCHITECT.
 2. ALLOW CONCRETE PAVING TO AGE FOR 28 DAYS BEFORE MARKING.
 3. ALL PAVEMENT SURFACES SHALL BE CLEANED/CLEARED OF ANY DEBRIS OR CURING COMPOUNDS IN ACCORDANCE WITH MANUFACTURES REQUIREMENTS PRIOR TO ANY MARKING APPLICATIONS.
 4. DETAILS NOT SHOWN SHALL BE IN CONFORMITY WITH THE STATE STANDARDS FOR TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, AND SIMILAR REQUIREMENTS ESTABLISHED BY THE U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION.
 5. ALL PARKING LOT STRIPING SHALL BE SINGLE LINE 4" WIDE AS PER THE SITE PLANS.
 6. PAINT FOR MARKING PAVEMENT SHALL CONFORM TO FEDERAL HIGHWAY MARKING STANDARDS. USE SHERWIN WILLIAMS PROFESSIONAL FAST DRY ACRYLIC LATEX TRAFFIC MARKING PAINT OR EQUAL, USE WHITE, BLUE OR YELLOW, WHERE APPROPRIATE. UNLESS OTHERWISE DIRECTED, USE THE FOLLOWING:
A. BLACKTOP OR BITUMINOUS ASPHALT PAVING: USE YELLOW COLOR.
B. PORTLAND CEMENT CONCRETE PAVING: USE YELLOW COLOR.
C. ADA ACCESSIBLE PARKING AND ENTRYWAYS: USE BLUE COLOR.
D. PROVIDE PAINTED CURBS AT FIRE LANE DESIGNATIONS PER FIRE MARSHAL REQUIREMENTS.
 7. APPLY ALL MARKINGS USING APPROVED MECHANICAL EQUIPMENT (WITH PROVISIONS FOR CONSTANT AGITATION OF PAINT), CAPABLE OF APPLYING THE MARKING WIDTHS AS SHOWN. PROVIDE A MINIMUM WET FILM THICKNESS OF 15 MILS. USE PNEUMATIC SPRAY GUNS FOR HAND APPLICATION OF PAINT. ALL PAINTING EQUIPMENT AND OPERATIONS SHALL BE UNDER THE CONTROL OF EXPERIENCED TECHNICIANS THOROUGHLY FAMILIAR WITH EQUIPMENT AND MATERIALS AND MARKING LAYOUTS.
 8. DETAIL PAVEMENT MARKINGS SHALL BE THAT MARKING, EXCLUSIVE OF ACTUAL TRAFFIC LANE MARKING, AT EXIT AND ENTRANCE ISLANDS AND TURNOUTS, ON CURBS, AT CROSSWALKS, AT PARKING BAYS AND AT SUCH OTHER LOCATIONS AS SHOWN. ADA ACCESSIBLE PARKING SPACES SHALL BE MARKED BY THE INTERNATIONAL ACCESSIBLE SYMBOL AT INDICATED PARKING SPACES. USE A SUITABLE TEMPLATE THAT WILL PROVIDE A PAVEMENT MARKING WITH TRUE, SHARP EDGES AND ENDS.

- KEYNOTES:**
- 1. INSTALL HEAVY DUTY ASPHALT PAVEMENT (SEE SHEET C201)
 - 2. INSTALL LIGHT DUTY ASPHALT PAVEMENT (SEE SHEET C201)
 - 3. INSTALL HEAVY DUTY CONCRETE PAVEMENT (SEE SHEET C201)
 - 4. INSTALL 8" CONCRETE PAVEMENT COMMERCIAL DRIVE ENTRANCE (SEE C.O.L.S. STD. DETAIL GEN-1)
 - 5. INSTALL CONCRETE SIDEWALK
 - 6. CONSTRUCT CONCRETE SIDEWALK AND BANDING FLUSH WITH PAVEMENT
 - 7. CONSTRUCT CONCRETE CURB & SIDEWALK TRANSITION TO PAVEMENT. 6" TRANSITION UNLESS OTHERWISE NOTED ON PLANS - SLOPE AT 8.33% MAX.
 - 8. *CONSTRUCT STRAIGHT BACK CURB & GUTTER, TYPE CG-1 (SEE C.O.L.S. STD. DETAIL GEN-4)
 - 9. *CONSTRUCT STRAIGHT BACK DRY CURB & GUTTER, TYPE CG-1 (SEE C.O.L.S. STD. DETAIL GEN-4)
 - 10. *CONSTRUCT CONCRETE BANDING FLUSH WITH PAVEMENT
 - 11. PROVIDE CURB TRANSITION TO PAVEMENT. TRANSITION TO BE 2' UNLESS NOTED OTHERWISE
 - 12. LIFT VAN ACCESSIBLE STALL & BOLLARD MOUNTED SIGNAGE
 - 13. INSTALL SCREENING ENCLOSURE PER ARCH. PLANS & DETAILS
 - 14. TRASH ENCLOSURE PER ARCH. PLANS
 - 15. YELLOW 4" WIDE STRIPING PER MUTCD STANDARDS, TYP. (SEE PAVEMENT MARKING NOTES ON THIS SHEET)
 - 16. STRIPED AREA WITH YELLOW 4" SOLID DIAGONAL LINES SPACED @ 24" O.C.
 - 17. PROP. LOCATION OF KNOX BOX
 - 18. CONSTRUCT 36" WIDE CONC. FLUME (SEE DETAIL SHEET CXXX)
 - 19. INSTALL STATIONARY BOLLARD, CENTERED ON PARKING STALL (SEE DETAIL SHEET CXXX)
 - 20. PROPOSED PAVEMENT TO MATCH EXIST. SECTION MATERIALS & DEPTHS AND SHALL BE FLUSH WITH EXISTING PAVEMENT SURFACES
 - 21. CONTRACTOR SHALL SAWCUT & REMOVE EXISTING CONCRETE CURB, ASPHALT OR CONCRETE PAVEMENT AS NECESSARY TO PROVIDE A SMOOTH EDGE BETWEEN NEW & EXISTING CURB OR PAVEMENT. EXTENTS OF REMOVAL SHALL ACCOMMODATE NEW CONSTRUCTION SHOWN ON THESE PLANS
- *PROVIDE 5' MIN. TRANSITION BETWEEN DIFFERING CURB SECTIONS EITHER NEW OR EXISTING. MAINTAIN POSITIVE GUTTER FLOW OF 0.50% MIN. TO AVOID PONDING

FIRE LANE FLAG NOTES:

- F1 PAVEMENT SHALL BE STRIPED BY 4" SOLID RED LINE FOR DEMARCATING LIMITS OF EMERGENCY ACCESS
- F2 12" MIN. HEIGHT FIRE LANE TEXT SHALL BE PAINTED RED AND OCCUR EVERY 50' O.C. MAX. SPACING

FIRE FLOW CALCULATIONS:

PER 2018 IFC SECTION B105, THE REQUIRED FIRE FLOW IS AS FOLLOWS:

PROPOSED BUILDING 8,356 S.F., TYPE II-B CONSTRUCTION, NON-SPRINKLED.

PER 2018 IFC SECTIONS C103, C104 AND C105, THE NUMBER OF HYDRANTS REQUIRED IS 2. THERE ARE TWO EXISTING HYDRANTS WITHIN 400' OF THE BUILDING. ONE LOCATED APPROXIMATELY 188' WEST OF THE BUILDING AND ONE LOCATED APPROXIMATELY 189' SOUTH OF THE BUILDING ALONG THE PRIVATE STREET PROVIDING ACCESS TO THE SITE.

THE CITY OF LEE'S SUMMIT PROVIDED FLOW TEST INFORMATION ON FIRE HYDRANT #XXXX WHICH IS LOCATED XXXXX:

PITOT PRESSURE NOT PROVIDED
FLOW XXXX GPM
RESIDUAL PRESSURE XX PSI
STATIC PRESSURE XX PSI
CALCULATED AVAILABLE FIRE FLOW AT EXISTING HYDRANT #HXXXX (SEE CALCULATION BELOW)

$QR = QF \times (HR/HF)^{0.54}$

QR = FLOW AVAILABLE AT DESIRED RESIDUAL PRESSURE (DESIRED RESIDUAL PRESSURE = 20 PSI)
QF = FLOW OBTAINED DURING FLOW TEST
HR = PRESSURE DROP TO THE DESIRED RESIDUAL PRESSURE
HF = PRESSURE DROP DURING THE TEST

$QR = XXXX \text{ GPM} \times [(XX\text{PSI} - 20 \text{ PSI}) / (XX \text{ PSI} - XX \text{ PSI})]^{0.54}$

QR = XXXX GPM

WITH THE FRICTION AND FITTING LOSSES, FLOWS AT EXISTING HYDRANTS WILL BE EXCEEDING THE MINIMUM OF 2,000 GPM AS REQUIRED IN SECTION B105 OF THE 2018 IFC.

LEGEND

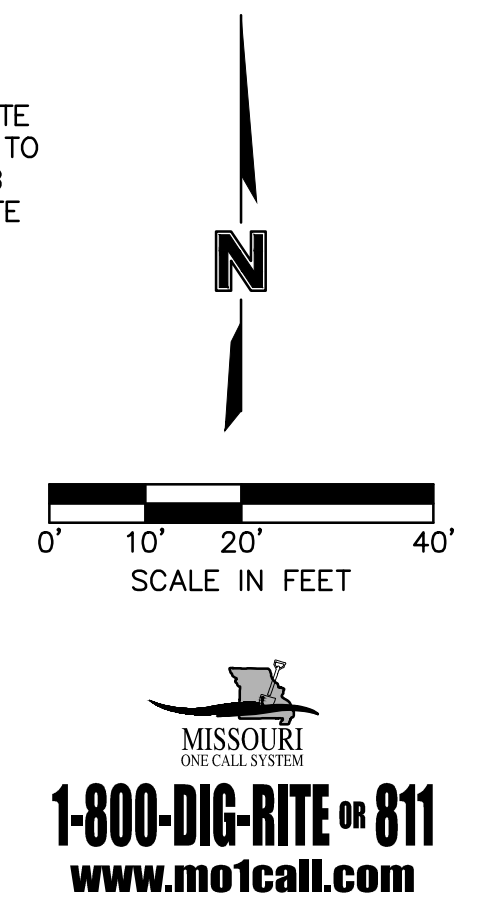
- RIGHT-OF-WAY LINE
- PROPERTY LINE
- UTILITY EASEMENT
- PROPOSED BUILDING SETBACK
- BENCHMARK

NOTE:
DIMENSIONS SHOWN ARE TO BACK OF CURB.

BENCHMARKS:

BENCHMARK #1:
SET CHISELED "X" CUT OF THE NW BONNET BOLT OF A FIRE HYDRANT, 270'± NORTHEAST OF THE C OF NE INDEPENDENCE AVE. ELEV=991.20' (NAVD 88)

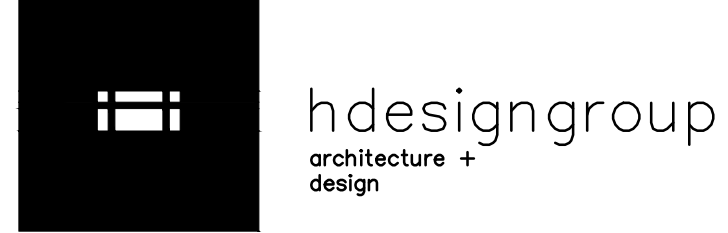
BENCHMARK #2:
TOP NUT OF FIRE HYDRANT APPROXIMATELY 43'± NORTH OF SOUTHWEST PROPERTY CORNER ELEV=982.25' (NAVD 88)



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REVISIONS		
NO.	DESCRIPTION	DATE

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DATE: 04.26.2024 REVIEWED BY: RVJ

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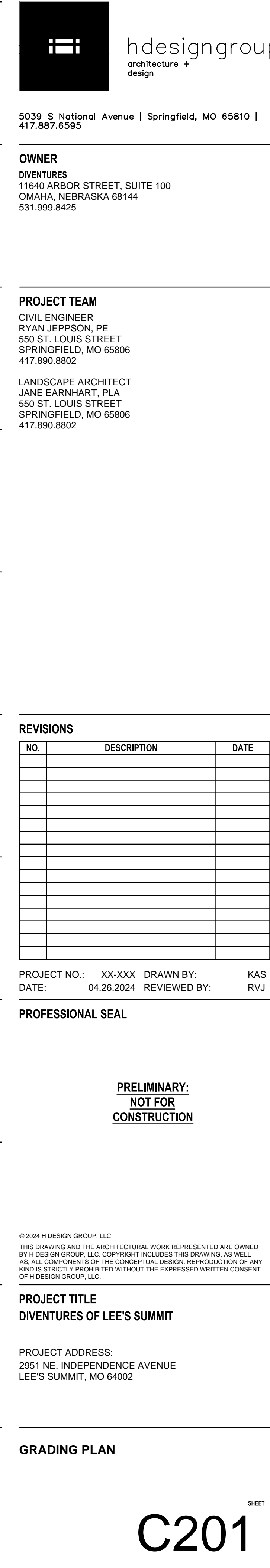
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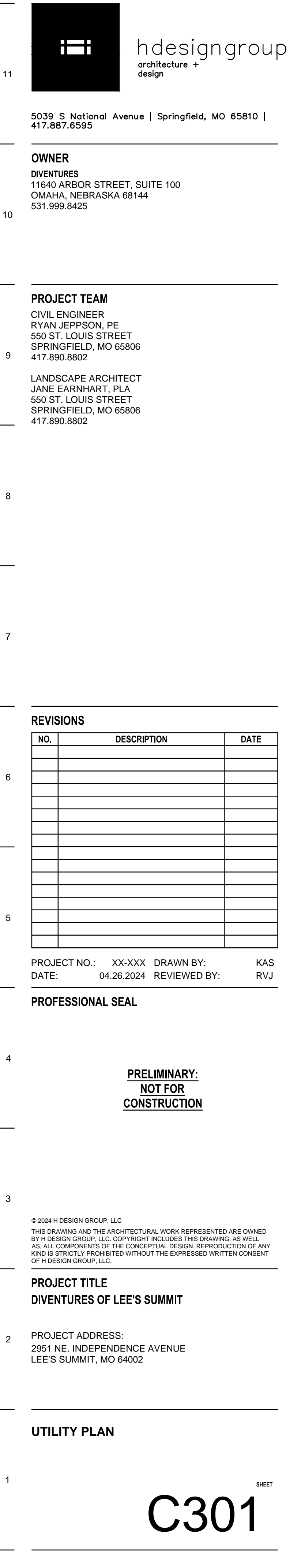
PROJECT TITLE
DIVENTURES OF LEE'S SUMMIT

PROJECT ADDRESS:
2951 NE. INDEPENDENCE AVENUE
LEE'S SUMMIT, MO 64002

SITE PLAN

C102



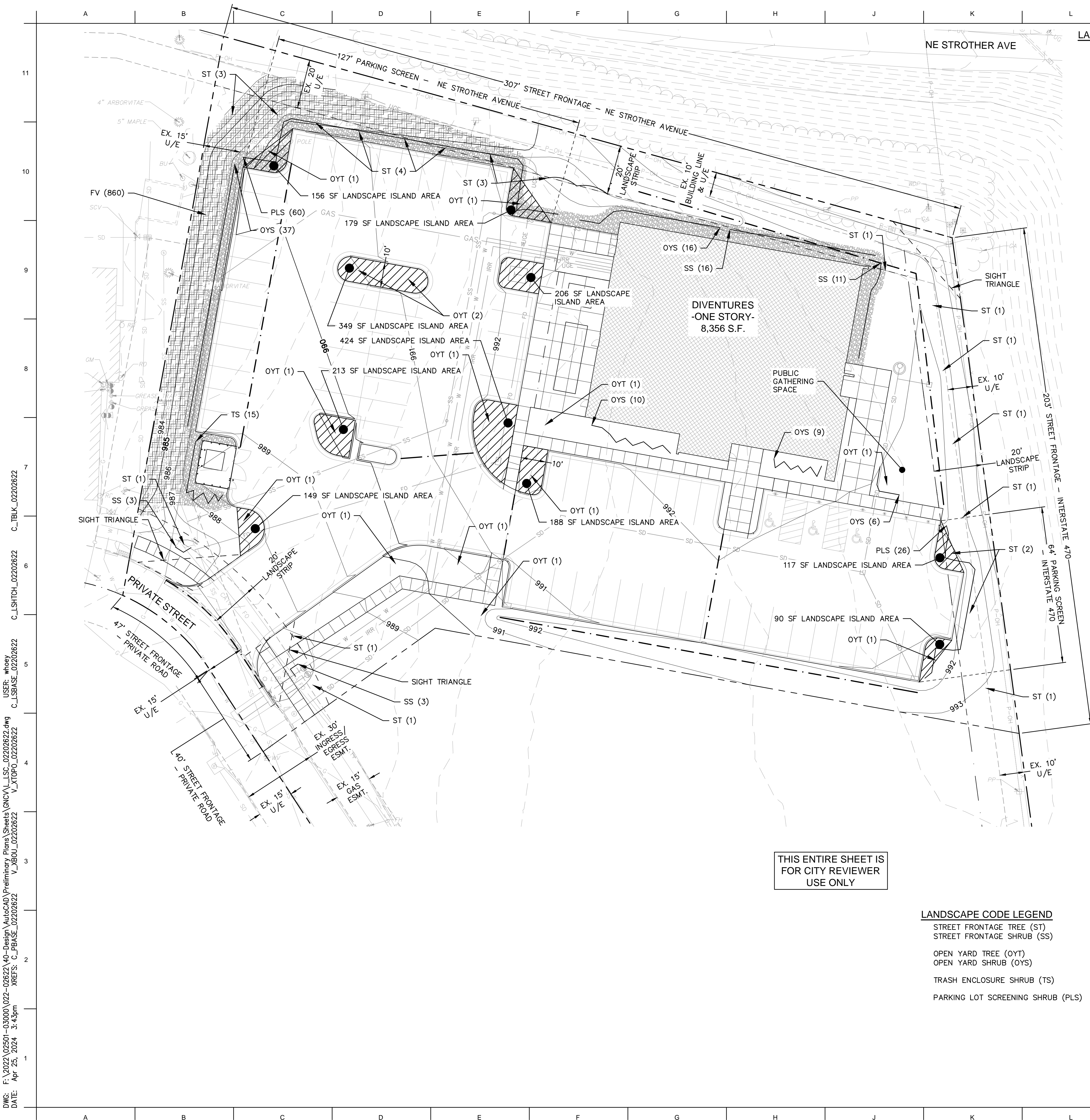


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L101



LANDSCAPE CALCULATIONS:

- A. STREET FRONTAGE
1. ONE TREE SHALL BE PLANTED FOR EACH 30 FEET OF STREET FRONTAGE, PUBLIC OR PRIVATE, WITHIN THE LANDSCAPE SETBACK ABUTTING SAID STREET FRONTAGE. A MINIMUM 20' WIDE LANDSCAPE STRIP SHALL BE PROVIDED ALONG THE FULL LENGTH OF ANY STREET FRONTAGE.
- NE STROTHER ROAD — 307 LF FRONTAGE
11 TREES REQUIRED
11 TREES PROVIDED
- INTERSTATE 470 — 203 LF FRONTAGE
7 TREES REQUIRED
7 TREES PROVIDED
- PRIVATE ROAD — 87 LF FRONTAGE
3 TREES REQUIRED
3 TREES PROVIDED
2. IN COMMERCIAL AND INDUSTRIAL DISTRICTS, 20' PARKING SETBACK (AND LANDSCAPE BUFFER)
3. ONE SHRUB SHALL BE PROVIDED FOR EACH 20 FEET OF STREET FRONTAGE, OR PORTION THEREOF, WITHIN THE LANDSCAPE SETBACK ABUTTING SUCH FRONTAGE. SUCH SHRUBS MAY BE CLUSTERED OR ARRANGED WITHIN THE SETBACK.
- NE STROTHER ROAD — 307 LF FRONTAGE
16 SHRUBS REQUIRED
16 SHRUBS PROVIDED
- INTERSTATE 470 — 203 LF FRONTAGE
11 SHRUBS REQUIRED
11 SHRUBS PROVIDED
- PRIVATE ROAD — 87 LF FRONTAGE
5 SHRUBS REQUIRED
5 SHRUBS PROVIDED

B. OPEN YARD AREAS

1. THE MINIMUM OPEN YARD AREA LANDSCAPING REQUIREMENTS SHALL BE TWO SHRUBS PER 5,000 SQUARE FEET OF TOTAL LOT AREA.

73,187 SF LOT, LESS 8,356 SF BUILDING = 64,831 SF DIVIDED BT 5,000 = $13 \times 2 = 26$
REQUIRED = 26 SHRUBS
PROVIDED = 78 SHRUBS
2. ALL PORTIONS OF THE SITE NOT COVERED WITH PAVING OR BUILDINGS SHALL BE LANDSCAPED. OPEN AREAS NOT COVERED WITH OTHER MATERIALS SHALL BE COVERED WITH SOD. GROUND COVER SHALL BE UTILIZED ON ALL SLOPES IN EXCESS OF 3:1 SLOPE.
3. IN ADDITION TO THE TREES REQUIRED BASED UPON STREET FRONTAGE, ADDITIONAL TREES SHALL BE REQUIRED AT A RATIO OF ONE TREE FOR EVERY 5,000 SQUARE FEET OF LOT AREA NOT COVERED BY BUILDING/STRUCTURES.

73,187 SF LOT, LESS 8,356 SF BUILDING = 64,831 SF DIVIDED BT 5,000 = 13
REQUIRED = 13 TREES
PROVIDED = 14 TREES

C. TRASH STORAGE CONTAINERS

1. A DETAILED DRAWING OF ENCLOSURE AND SCREENING METHODS TO BE USED IN CONNECTION WITH TRASH STORAGE CONTAINERS ON THE PROPERTY SHALL BE INCLUDED WITH THE LANDSCAPING PLAN.
- PROVIDED = 15 SHRUBS. REFER TO ARCHITECTURAL SHEETS FOR TRASH ENCLOSURE DETAILS.

D. PARKING LOT LANDSCAPING

1. LANDSCAPE ISLANDS, STRIPS OR OTHER PLANTING AREAS SHALL BE LOCATED WITHIN THE PARKING LOT AND CONSTITUTE AT LEAST 5% OF THE ENTIRE AREA DEVOTED TO PARKING SPACES, AISLES OR DRIVEWAYS.

31,116 SF TOTAL PARKING AREA
1,556 SF LANDSCAPE ISLAND AREA REQUIRED
2,071 SF LANDSCAPE ISLAND AREA PROVIDED (156+179+206+349+424+213+149+188+117+90)
2. SCREENING OF 12 SHRUBS PER 40 LF TO A HEIGHT OF 2.5 FEET MUST BE PROVIDED ALONG THE EDGE OF THE PARKING LOT OR LOADING AREA CLOSEST TO AND PARALLEL TO THE STREET RIGHT-OF-WAY.

NE STROTHER ROAD - 127 LF STREET RIGHT-OF-WAY DIVIDED BY 40 = $3.18 \times 12 = 39$
39 SHRUBS REQUIRED
60 SHRUBS PROVIDED

INTERSTATE 470 - 64 LF STREET RIGHT-OF-WAY DIVIDED BY 40 = $1.60 \times 12 = 20$
20 SHRUBS REQUIRED
26 SHRUBS PROVIDED

E. BUFFER/SCREEN

1. BUFFER/SCREEN BETWEEN DEVELOPMENT OF DIFFERING LAND USES ADJOINING ONE ANOTHER OR SEPARATED FROM ONE ANOTHER BY ONLY A STREET OR ALLEY SHALL COMPLY WITH TABLE 14.1.
- WESTERN BOUNDARY - NONE REQUIRED, COMMERCIAL ZONING
- NORTHERN BOUNDARY - NONE REQUIRED, COMMERCIAL ZONING
- EASTERN BOUNDARY - NONE REQUIRED
- SOUTHERN BOUNDARY - NONE REQUIRED, COMMERCIAL ZONING

LANDSCAPE CODE LEGEND

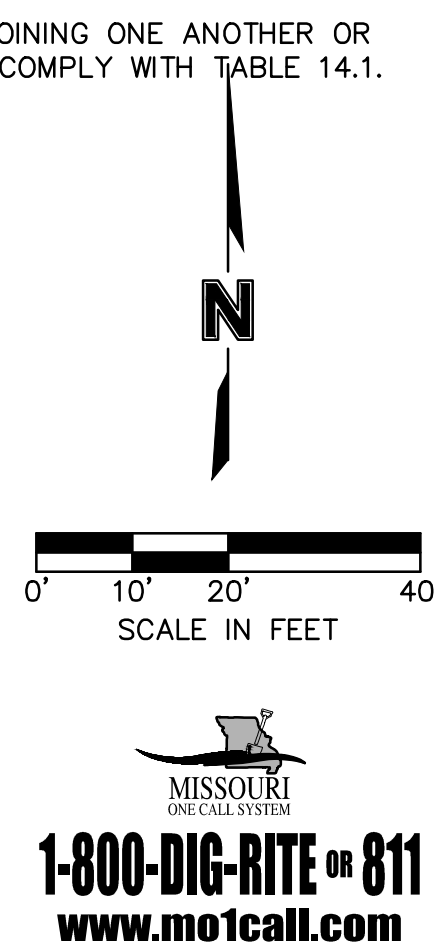
STREET FRONTAGE TREE (ST)
STREET FRONTAGE SHRUB (SS)

OPEN YARD TREE (OYT)
OPEN YARD SHRUB (OYS)

TRASH ENCLOSURE SHRUB (TS)

PARKING LOT SCREENING SHRUB (PLS)

LANDSCAPE CODE HATCH LEGEND

 LANDSCAPE ISLAND AREA

olsson

Olsson, INC. Engineering MO State Cert. of Authority #001592
Olsson, INC. Landscape Architecture MO State Cert. of Authority #2005000285
550 St. Louis St.
Springfield, MO 65806 TEL 417.890.8802 www.olsson.com
Olsson # 022-02622

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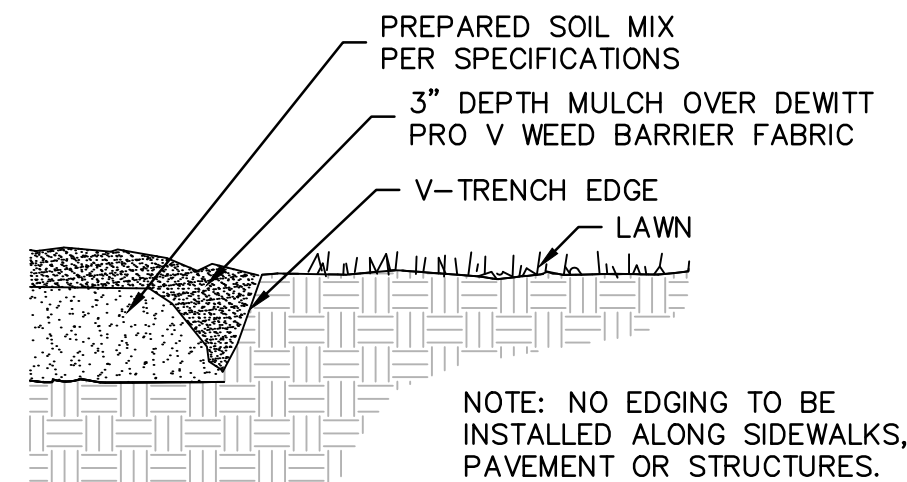
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DIVENTURES OF LEE'S SUMMIT

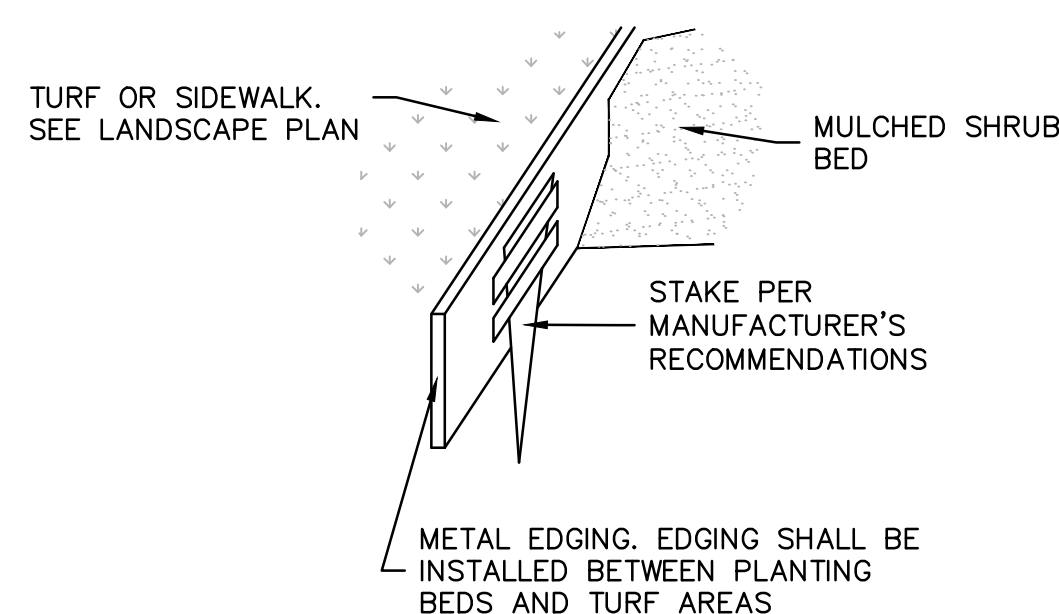
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LEE'S SUMMIT, MO 64002

LANDSCAPE CALCULATIONS

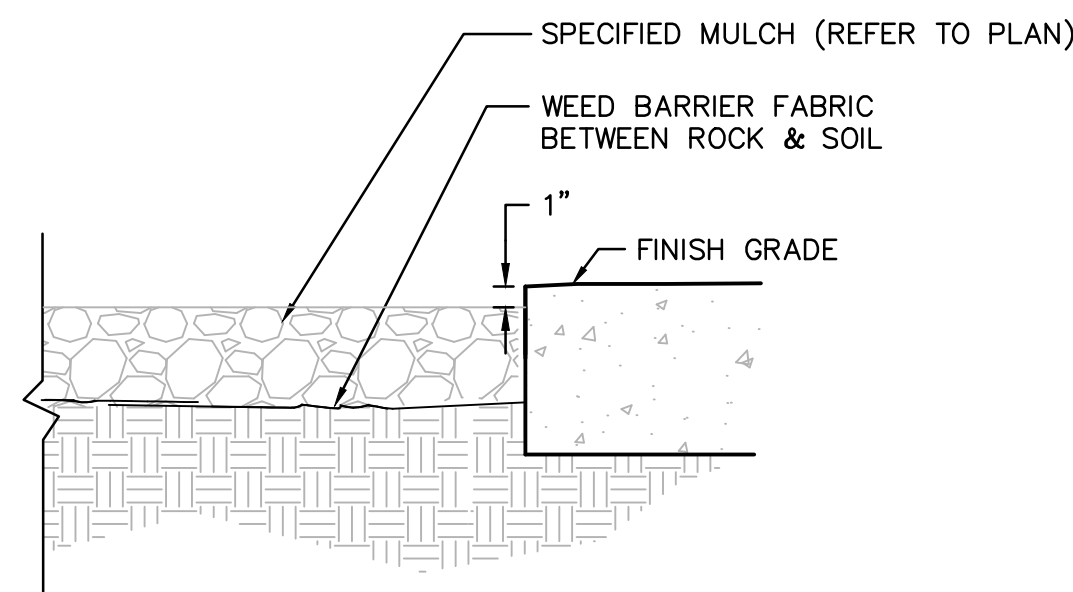
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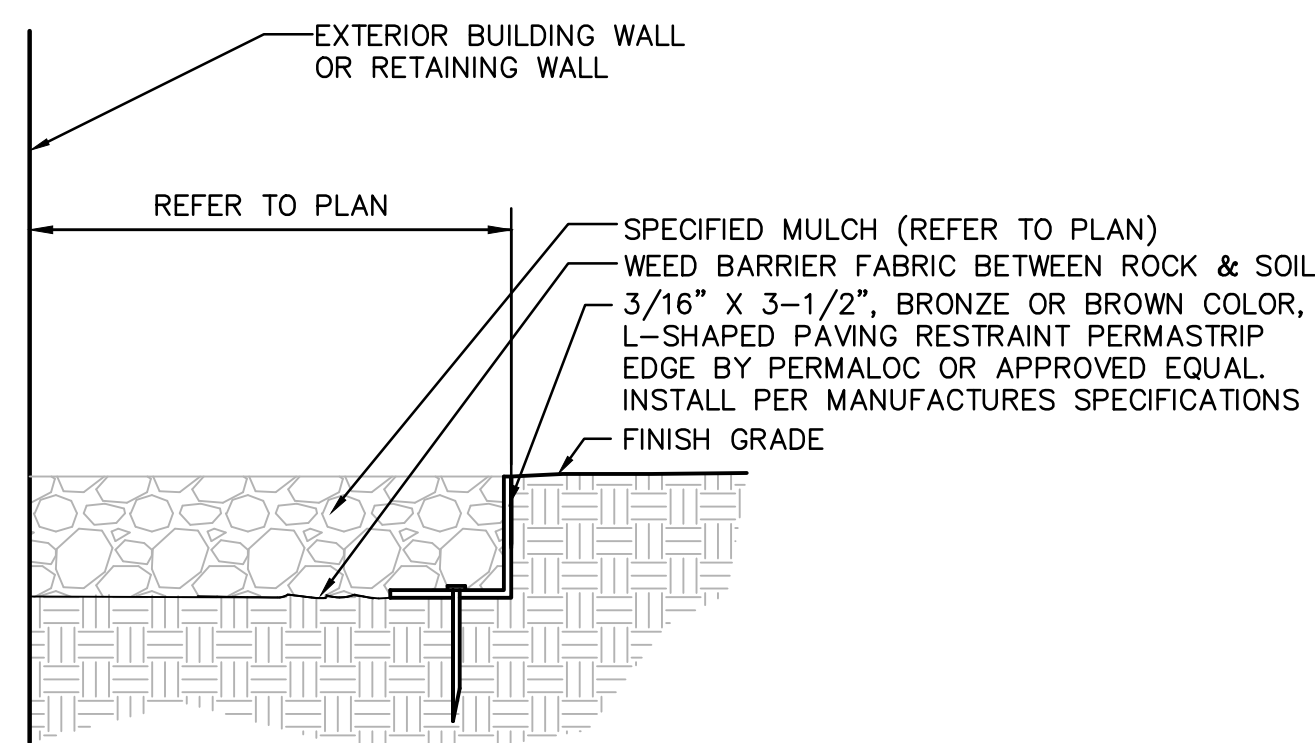
"V" TRENCH EDGING DETAIL
NOT TO SCALE



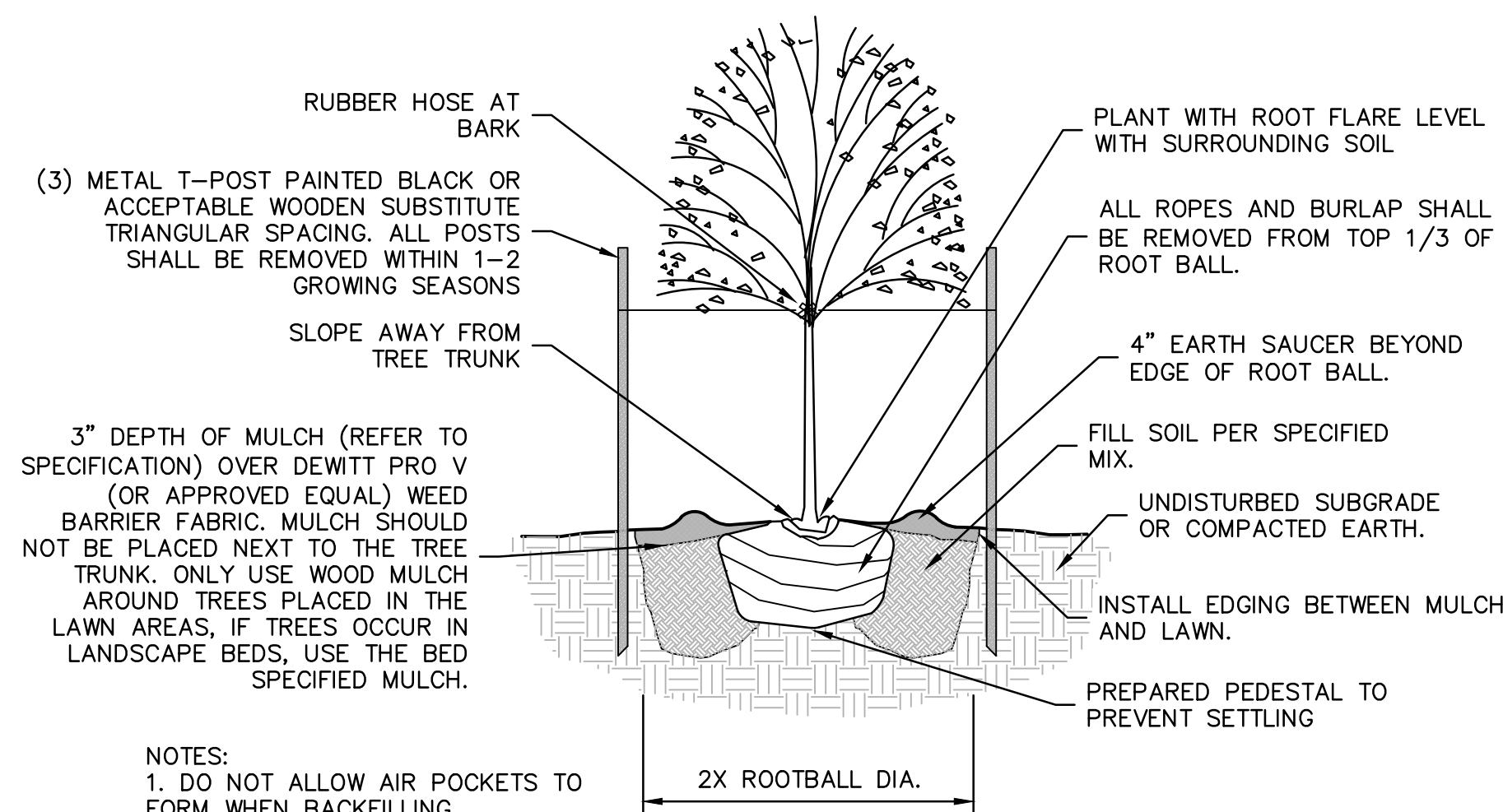
METAL EDGING DETAIL
NOT TO SCALE



ADJACENT TO PAVEMENT



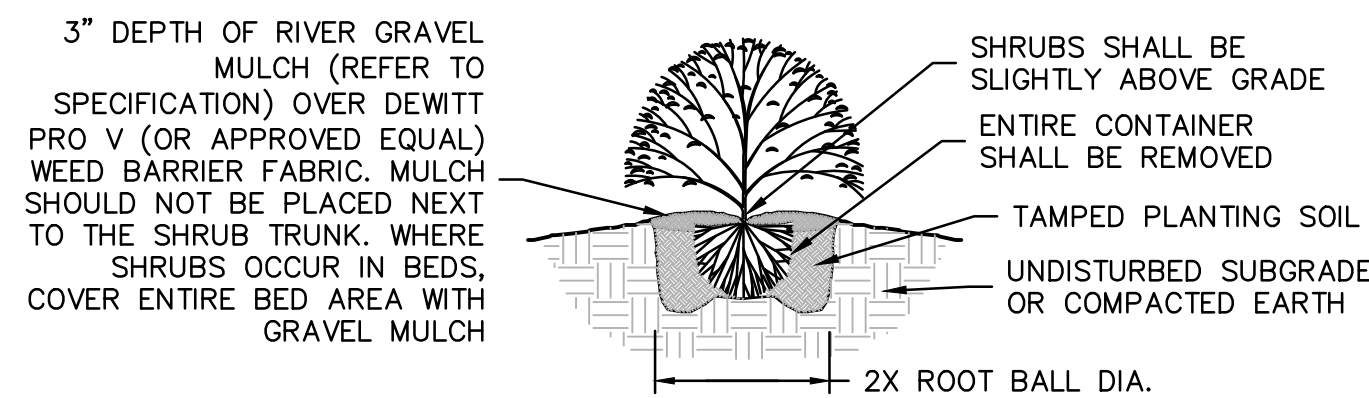
ROCK MULCH DETAIL
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NOTES:

1. DO NOT ALLOW AIR POCKETS TO FORM WHEN BACKFILLING
2. IN AREAS OF TURF, SURROUND BED WITH 6" DIAMETER OF MULCH

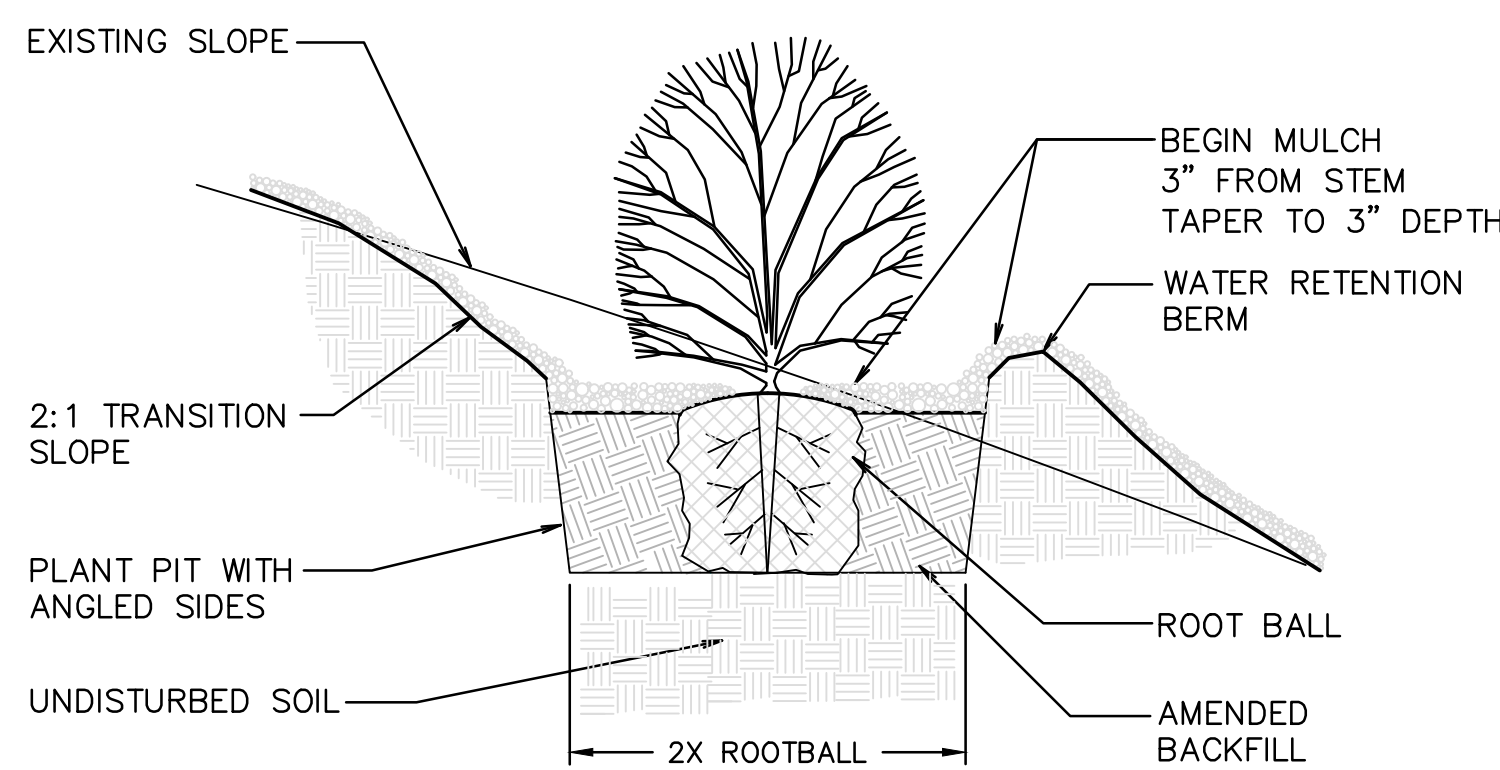
DECIDUOUS TREE PLANTING DETAIL
NOT TO SCALE



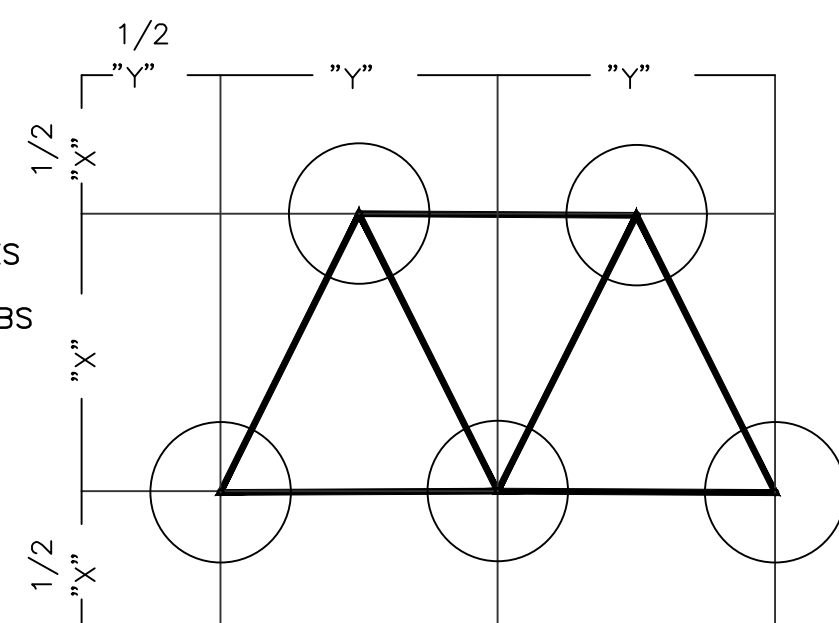
NOTES:

1. MINIMUM ROOT SPREAD TO BE IN ACCORDANCE WITH AAN STANDARDS
2. PRUNE DAMAGED LIMBS OR ROOTS AFTER INSTALLATION
3. MAKE SURE ROOTS DO NOT DRY OUT DURING INSTALLATION
4. SOAK GENEROUSLY TO COMPACT AND SETTLE

SHRUB PLANTING DETAIL
NOT TO SCALE

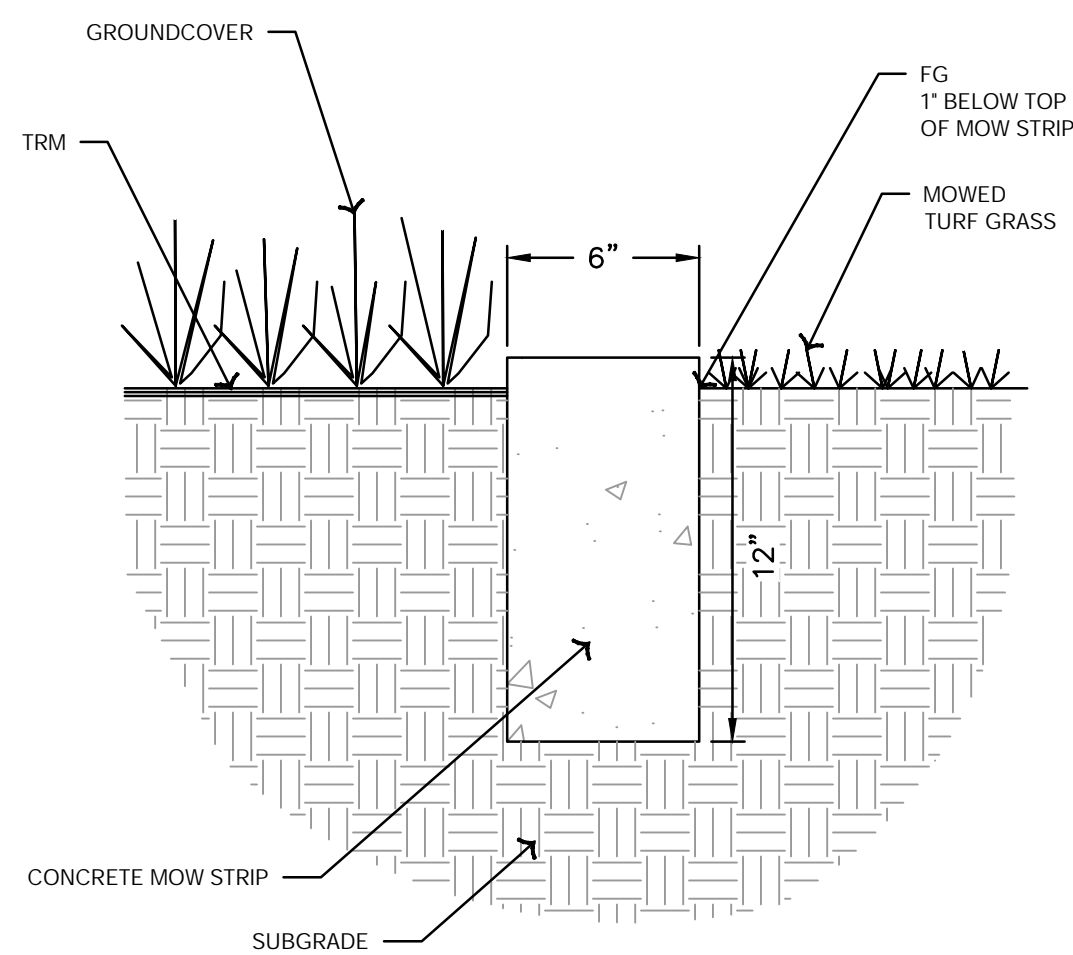


SLOPE PLANTING
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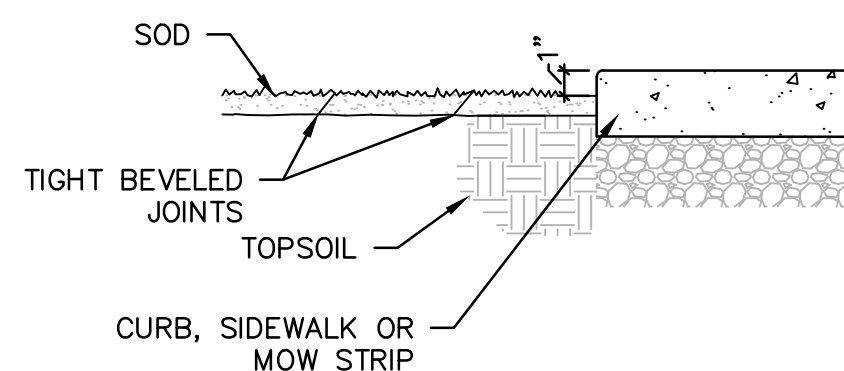


NOTE:
SPACING PATTERN APPLIES
TO ALL PERENNIALS,
GROUNDCOVERS AND BULBS
UNLESS OTHERWISE
SPECIFIED.
X= 24"
Y= 24"

GROUNDCOVER LAYOUT DETAIL
NOT TO SCALE



CONCRETE MOW STRIP
N.T.S.



SOD INSTALLATION
NOT TO SCALE



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DIVENTURES OF LEE'S SUMMIT

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LANDSCAPE DETAILS

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