

GENERAL NOTES

1. ALL MATERIALS, QUALITY CONTROL, AND CONSTRUCTION METHODS SHALL CONFORM TO APWA STANDARD SPECIFICATIONS, EXCEPT AS NOTED.
2. CONTRACTOR TO VERIFY THE LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO EXCAVATION. THE CONTRACTOR SHALL GIVE 48 HOUR ADVANCE NOTICE TO UTILITY COMPANIES PRIOR TO EXCAVATING WITHIN ANY PUBLIC RIGHT-OF-WAY, AS REQUIRED BY STATE STATUTE.

UTILITIES INVOLVED:	TELEPHONE NUMBER:
KANSAS ONE-CALL	811 OR 800-DIG-SAFE
EVERGY	888-471-5275
LANDEL WATER DISTRICT	913-727-3350
KANSAS GAS SERVICE	888-482-4950 (REPORT EMERGENCY)
AT&T	800-288-2020 (TECH SUPPORT)
SPECTRUM	800-676-4917
CITY OF LANSING	913-727-2400 (PUBLIC WORKS)

THE UTILITY LOCATIONS SHOWN ON THESE PLANS ARE BASED ON FIELD MARKINGS COORDINATED THROUGH THE KANSAS 811 CALL SYSTEM AND SHOULD BE CONSIDERED APPROXIMATE ONLY. THE LOCATIONS SHOWN DO NOT CONSTITUTE ACTUAL FIELD LOCATIONS UNLESS SPECIFICALLY NOTED ON THE PLANS. THE ENGINEER DOES NOT ASSUME RESPONSIBILITY FOR THE ACCURACY OF THESE LOCATIONS NOR FOR ANY ADDITIONAL UTILITIES NOT INDICATED ON THE PLANS. THE CONTRACTOR SHALL CALL THE VARIOUS UTILITY COMPANIES TO VERIFY DEPTH AND LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION.

3. LINEAL FOOT MEASUREMENTS SHOWN ON THE PLANS ARE HORIZONTAL MEASUREMENTS NOT SLOPE MEASUREMENTS.
4. NO GEOLOGICAL INFORMATION IS SHOWN ON THESE PLANS.
5. ALL WASTE MATERIALS FROM THIS PROJECT SHALL BE REMOVED FROM THE SITE AND DISPOSED IN PER STATE AND LOCAL REGULATIONS.
6. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ADJUST TO GRADE ANY EXISTING OR PROPOSED MANHOLE, JUNCTION BOX OR SPECIAL STRUCTURE, AS REQUIRED.
7. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT THE ADJACENT AND DOWNSTREAM PROPERTY OWNERS FROM STORM WATER, SILT AND EROSION DURING ALL PHASES OF CONSTRUCTION.
8. EROSION CONTROL PLANS AND PROCEDURES SHALL BE IN PLACE PRIOR TO ANY EXCAVATION OR GROUND SURFACE DISTURBANCE.
9. DRAINAGE FROM THE PROJECT SITE FLOWS TO SEVENMILE CREEK, A TRIBUTARY OF THE MISSOURI RIVER.
10. PRIOR TO ORDERING PRECAST STRUCTURES, SHOP DRAWINGS SHALL BE SUBMITTED TO THE DESIGN ENGINEER FOR APPROVAL.
11. SUBGRADE SOIL FOR ALL CONCRETE STRUCTURES, REGARDLESS OF THE TYPE OR LOCATION, SHALL BE FIRM, DENSE AND THOROUGHLY COMPACTED AND CONSOLIDATED; SHALL BE FREE FROM MUD AND MUCK; AND SHALL BE SUFFICIENTLY STABLE TO REMAIN FIRM AND INTACT UNDER THE FEET OF THE WORKMEN OR MACHINERY ENGAGED IN SUBGRADE SURFACING, LAYING REINFORCING STEEL, AND DEPOSITING CONCRETE THEREON.
12. COMPACTION WITHIN RIGHT-OF-WAY AREAS SHALL BE AT 95% OF OPTIMUM DENSITY AS DETERMINED BY THE STANDARD PROCTOR TEST.
13. THE CONTRACTOR SHALL BE REQUIRED TO KEEP ALL UTILITIES WITHIN RIGHT-OF-WAY OPERATIONAL DURING CONSTRUCTION.
14. CONTRACTOR SHALL PROVIDE EARTHWORK AND MATERIAL TESTING TO COMPLY WITH THE REQUIREMENTS OF THE PROJECT.

ELECTRONIC TRANSMITTAL STATEMENT
THIS DOCUMENT MUST BE COMPARED TO THE ORIGINAL HARD COPY ISSUED AT THE DATE OF THE ORIGINAL SIGNATURE AND SEAL TO ENSURE THE ACCURACY OF THE INFORMATION AND TO FURTHER ENSURE THAT NO CHANGES, ALTERATIONS OR MODIFICATIONS HAVE BEEN MADE. NO RELIANCE SHALL BE MADE ON A DOCUMENT TRANSMITTED BY COMPUTER OR OTHER ELECTRONIC MEANS UNLESS FIRST COMPARED TO THE ORIGINAL SEALED DOCUMENT.

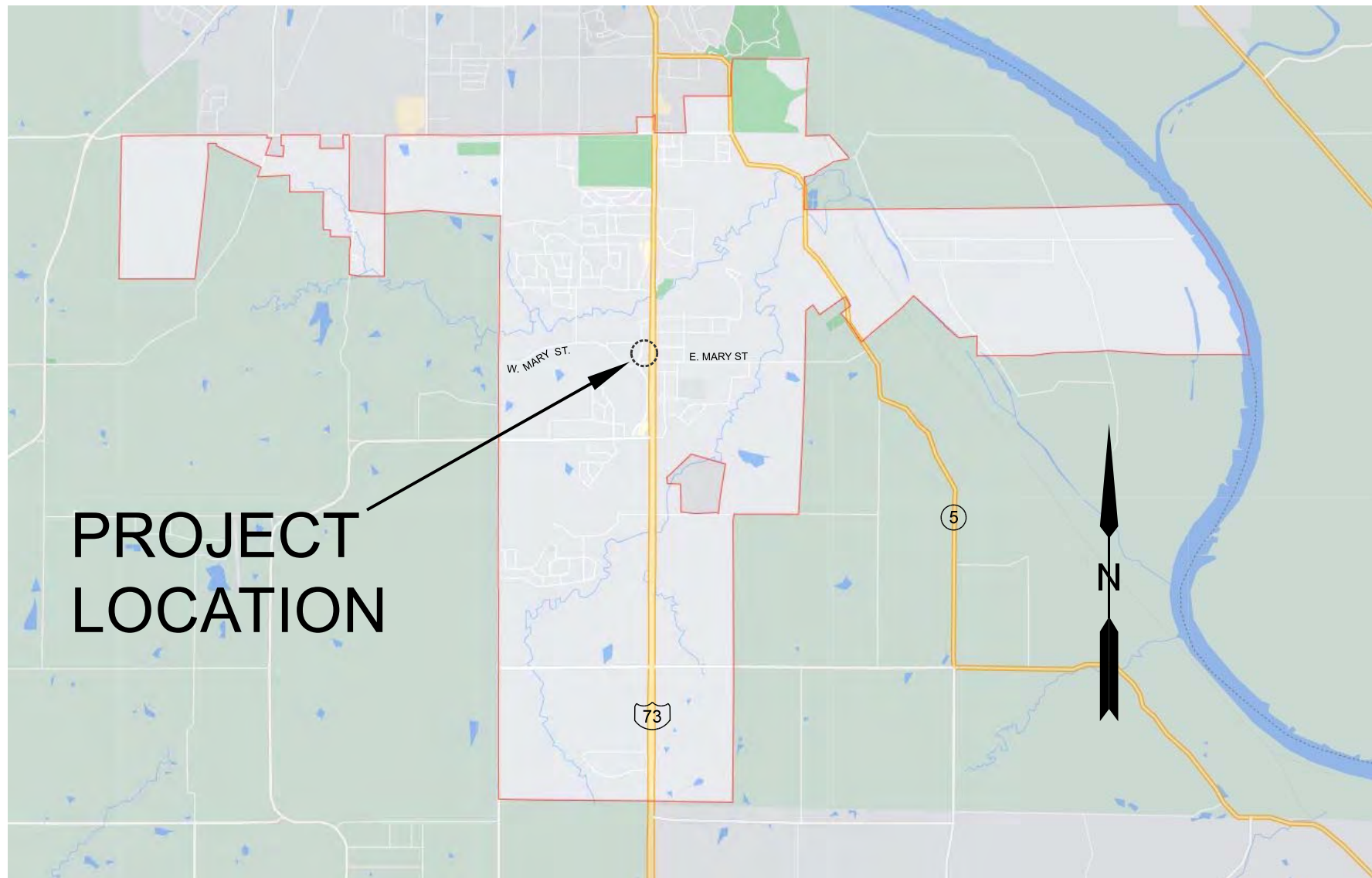


KANSAS 811
8100 E 22ND ST. N, BLDG 2300
WICHITA, KS 67226
CALL 811 OR 1-800-DIG-SAFE

UTILITY WARNING
THE LOCATIONS OF UNDERGROUND UTILITIES AS SHOWN HEREON ARE BASED ON THE ABOVE GROUND STRUCTURES AND RECORD DRAWINGS PROVIDED TO THE ENGINEER/SURVEYOR. LOCATIONS OF UNDERGROUND UTILITIES/STRUCTURES MAY VARY FROM LOCATIONS SHOWN HEREON. ADDITIONAL BURIED UTILITIES/STRUCTURES MAY BE ENCOUNTERED. BEFORE EXCAVATIONS ARE BEGUN, CONTACT UTILITY COMPANIES FOR VERIFICATION OF UTILITY TYPE AND FIELD LOCATIONS.

SITE CONSTRUCTION DRAWINGS
FOR
LANSING FAMILY EYE CENTER
LOT 2
LANSING TOWNE CENTER

LEAVENWORTH COUNTY
LANSING, KANSAS
SW 1/4, SEC 24, T9N, R22E



LOCATION MAP

NOT TO SCALE

Rip Rap Quantity
for Energy
Dissipation from
Discharge?

PROJECT QUANTITIES:

ITEM	UNIT	QUANTITY	AS-BUILT
CURB & GUTTER	LF	625	
COMMERCIAL ENTRANCE APRON	SF	770	
ENTRANCE ROAD & PARKING LOT PAVEMENT	SF	11,465	
SIDEWALK	SF	2,520	
DUMPSTER ENCLOSURE CONCRETE APRON	SF	300	
* PAVEMENT STRIPING (4" WIDTH) & ADA SYMBOL	LF	530	
6" SANITARY SERVICE W/CLEANOUTS	LF	220	
WATER SERVICE LINE W/METER SET	LF	80	
GAS SERVICE LINE	LF	100	
POWER SERVICE CONNECTION TO TRANSFORMER	LF	250	
18" RCP STORM PIPE	LF	56	
12" HDPE STORM PIPE	LF	268	
12" DROP-IN AREA INLETS	EA	2	
PARKING LOT GRATED AREA INLET	EA	1	
5'X3' CURB INLETS	EA	1	
EROSION CONTROL & SURFACE RESTORATION	LS	-----	
LANDSCAPING	LS	-----	

* - ADA SYMBOL NOT INCLUDED IN LF QUANTITY.

Reviewed By PW

11/19/2021 2:16:41 PM
By mspickelmier

ENGINEER:
SCHULTE ENGINEERING & CONSULTING, LLC
DOUG SCHULTE, PE
21 GATES DR
PLATTE CITY, MO 64079
(816) 260-3328

OWNER:
REDELLE HOLDINGS, LLC
JONATHAN REDELLE
2301 10TH AVE
LEAVENWORTH, KS 66048

SURVEYOR:
HERRING SURVEY
JOE HERRING, PLS
LEAVENWORTH, KS 66048
(913) 651-3858

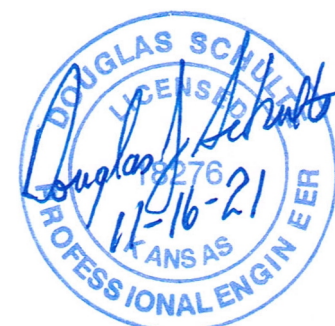
SHEET INDEX

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3. SITE LAYOUT
4-8. GRADING & DIMENSIONS
9. ROAD LAYOUT & PROFILE
10. STORM LAYOUT & PROFILE
11. SITE UTILITIES
12-14. TYPICAL DETAILS
15. LANDSCAPE PLAN
16. EROSION CONTROL PLAN

Reviewed By CED

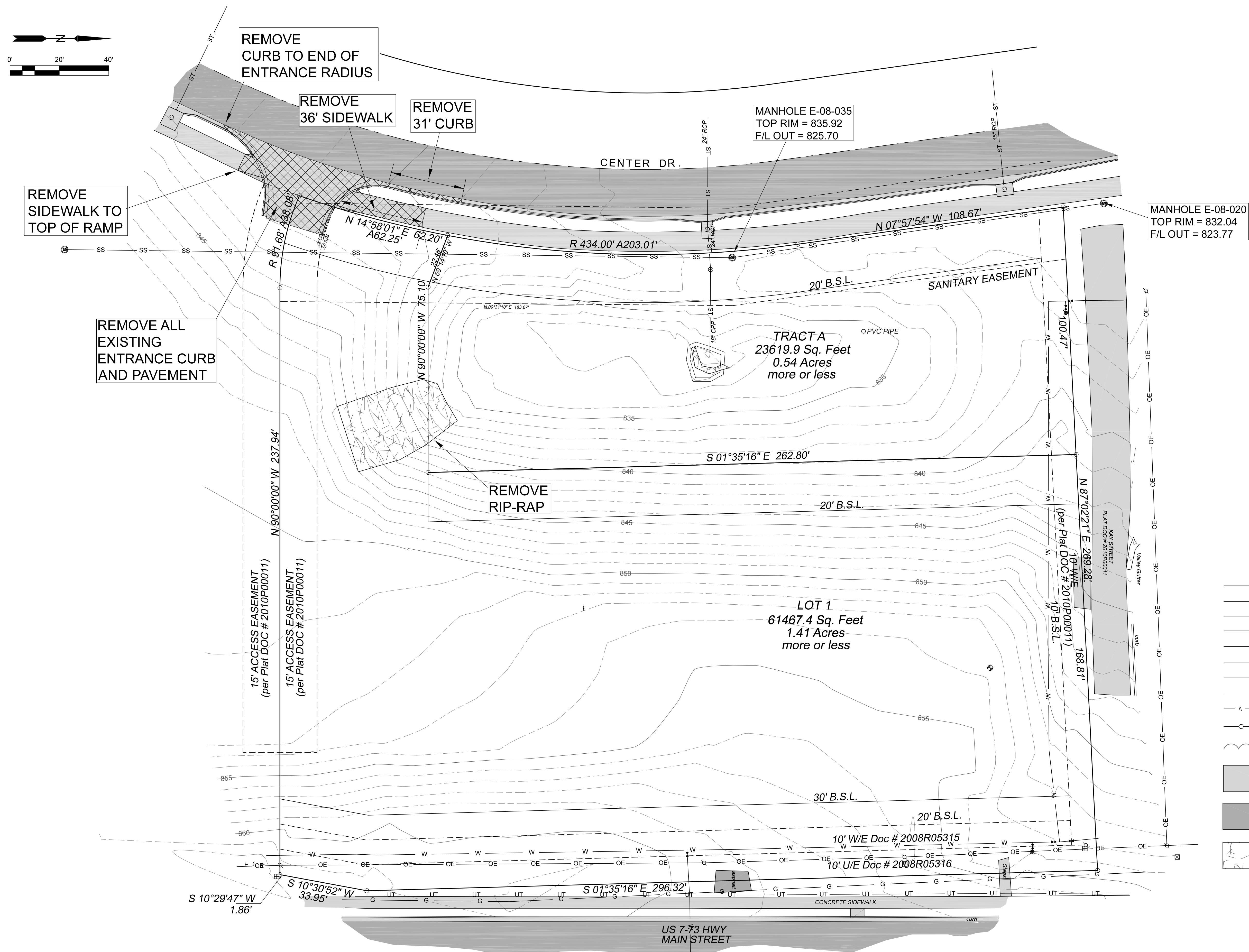
12/10/2021 3:14:35 PM
By mschmitz

Add Existing zoning designation



11X17 PRINTS ARE 1/2 SCALE

REV: 0		DRAWING NUMBER		LANSING FAMILY EYE CENTER LANSING, KS		CLIENT: REDDELL HOLDINGS, LLC LEAVENWORTH, KS		<div>Schulte Engineering & Consulting, LLC</div> <div>21 Gates Dr. Platte City, MO 64079 www.schulteengineering.com admin@schulteengineering.com PHONE: (816) 260-3328</div>		REV. 1 11-16-2021 DJS		BY		DESCRIPTION	



EXISTING SITE & DEMO

- = DENOTES 1/2" BAR & LC 000120 CAP SET
 ○ = DENOTES CALCULATED CORNER
 □ = DENOTES FOUND MONUMENT
 M = MEASURED DISTANCE
 R = RECORDED DISTANCE
 ▲ = CONTROL POINT
 = ELECTRIC BOX
 ◇ = TELEPHONE PEDESTAL
 ⊕ = BENCHMARK
 ○ = FIRE HYDRANT
 = SIGN
 ∅ = POWER POLE
 ⊗ = BOLLARD
 ⊙ = LIGHT POLE
 ☼ = TREE
 ○ = MANHOLE
 ⬮ = WATER VALVE
 PVC = POLYVINYL CHLORIDE FLEX
 HDPE = CORRUGATED PLASTIC PIPE
 F/L = FLOW LINE
 — W — = WATERLINE
 — SS — = SANITARY SEWER
 — ST — = STORM SEWER
 — OE — = OVERHEAD ELECTRIC
 — UE — = UNDERGROUND ELECTRIC
 — FO — = FIBER OPTIC LINE
 — G — = GAS LINE
 — UT — = UNDERGROUND TELEPHONE
 — || — = FENCE
 — ○ — = FENCE (VINYL)
 ~~~~~ = TREE LINE  
 [CONCRETE] = CONCRETE  
 [ASPHALT] = ASPHALT  
 [RIP-RAP] = RIP-RAP

LANSGING FAMILY EYE CENTER  
LANSGING, KS

REDELL HOLDINGS, LLC  
LEAVENWORTH, KS

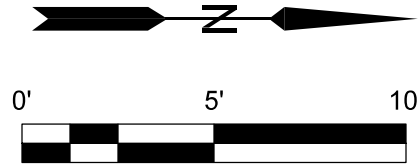
**Schulte Engineering & Consulting, LLC**  
21 Gateway Center  
Platte City, MO 64601

|                                                                                                                           |  |                                                                   |  |                                                  |  |                                    |  |
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| <div> <div> LANSING FAMILY EYE CENTER<br/>LANSING, KS </div> <div> REDELL HOLDINGS, LLC<br/>LEAVENWORTH, KS </div> </div> |  | <div> <div> DRAWN BY: </div> <div> DATE: 11-16-2021 </div> </div> |  | <div> <div> DJS </div> <div> SCALE </div> </div> |  | <div> <div> AS NOTED </div> </div> |  |
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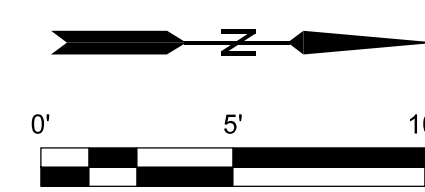
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GRADING & DIMENSIONS

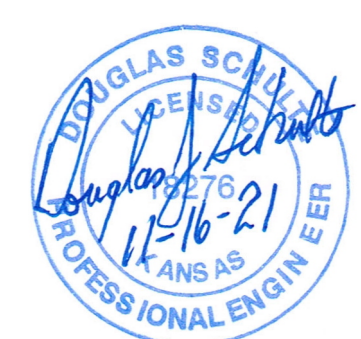
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| CLIENT: REDDELL HOLDINGS, LLC<br>LEAVENWORTH, KS                                                                                                                      |                |  | DRAWN BY: DJS<br>ELECTRONIC FILE NAME: |  |              | DATE: 11-16-2021<br>SCALE: AS NOTED |
| Schulte Engineering & Consulting, LLC<br>21 Gates Dr.<br>Platts City, MO 64079<br>www.schulteengineering.com<br>admin@schulteengineering.com<br>PHONE: (816) 260-3328 |                |  | 11-16-2021<br>BY: DJS                  |  |              | SUBMIT FOR CITY REVIEW              |
|                                                                                                                                                                       |                |  |                                        |  |              | DESCRIPTION                         |





 = CONCRETE

 = ASPHALT



## GRADING & DIMENSIONS

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| LANSING FAMILY EYE CENTER<br>LANSING, KS |  | CLIENT: REDDELL HOLDINGS, LLC<br>LEAVENWORTH, KS |  | <div><div>Schulte Engineering &amp; Consulting, LLC</div><div>21 Gates Dr.<br/>Platte City, MO 64079<br/>www.schultengineering.com<br/>admin@schultengineering.com<br/>PHONE: (816) 260-3328</div></div> |  |  |  | -                      | -          | -   | - |
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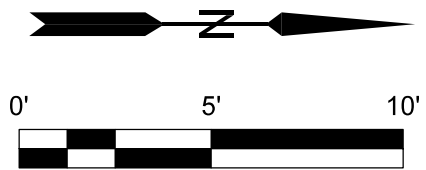














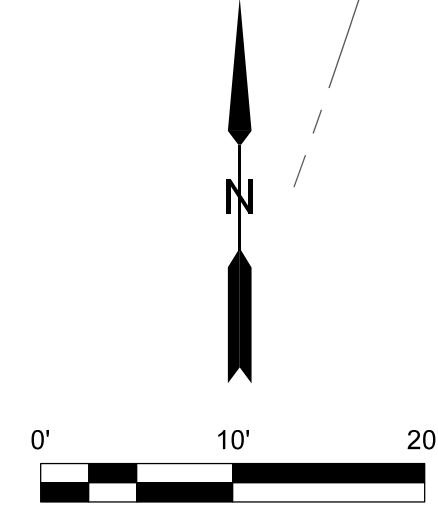
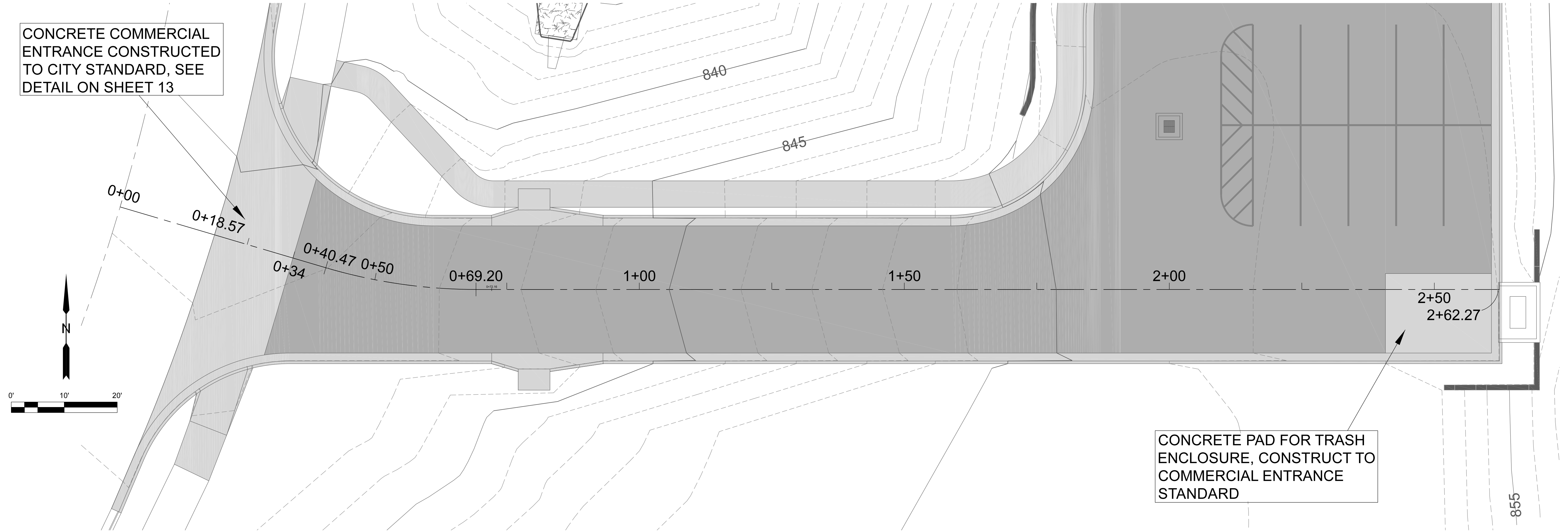
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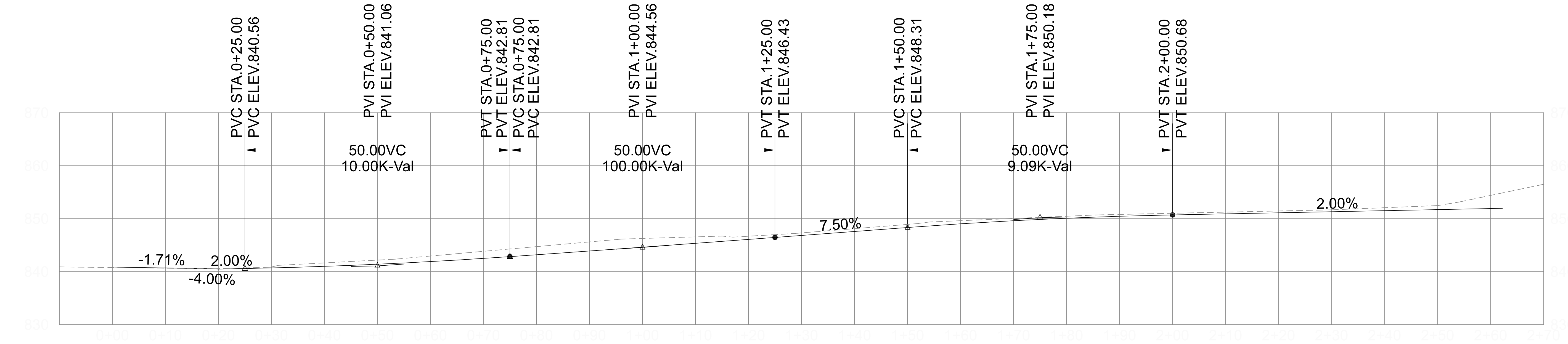


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| LANSING FAMILY EYE CENTER<br>LANSING, KS |                | REDELL HOLDINGS, LLC<br>LEAVENWORTH, KS |                      | CLIENT:          |              | <div>Schulte Engineering &amp; Consulting, LLC</div> <div>21 Gates Dr<br/>Platte City, MO 64079<br/>www.schulteengineering.com<br/>admin@schulteengineering.com<br/>PHONE: (816) 260-3328</div> |  |     |  |             |     |
| REV: 0                                   | DRAWING NUMBER |                                         | GRADING & DIMENSIONS |                  | SHT. 8 OF 16 |                                                                                                                                                                                                 |  |     |  |             |     |
|                                          |                | DRAWN BY: DJS                           |                      | DATE: 11-16-2021 |              |                                                                                                                                                                                                 |  |     |  |             |     |
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ENTRANCE ROAD LAYOUT



ENTRANCE ROAD PROFILE

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

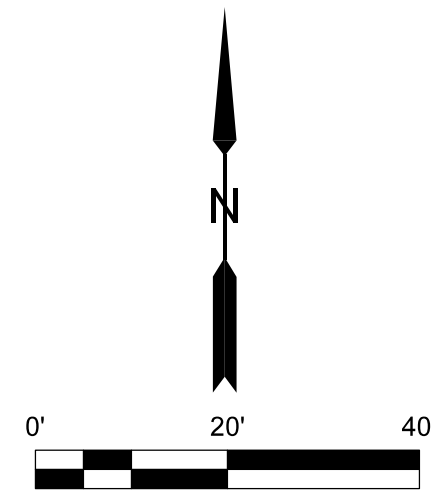


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| CLIENT: REDDELL HOLDINGS, LLC<br>LEAVENWORTH, KS                                                                             |                | DRAWN BY: DJS          |            | DATE: 11-16-2021 | SCALE: AS NOTED |             |
| LANSING FAMILY EYE CENTER<br>LANSING, KS                                                                                     |                | ELECTRONIC FILE NAME:  |            | DATE: 11-16-2021 | SCALE: AS NOTED |             |
| REV: 0                                                                                                                       | DRAWING NUMBER | ROAD LAYOUT & PROFILE  |            | SHT. 9           | OF 16           |             |
| Schulte Engineering & Consulting, LLC                                                                                        |                | 1                      | 11-16-2021 | DJS              | BY              | DESCRIPTION |
| 21 Gates Dr.<br>Platts City, MO 64079<br>www.schulteengineering.com<br>admin@schulteengineering.com<br>PHONE: (816) 260-3328 |                | SUBMIT FOR CITY REVIEW |            |                  |                 |             |



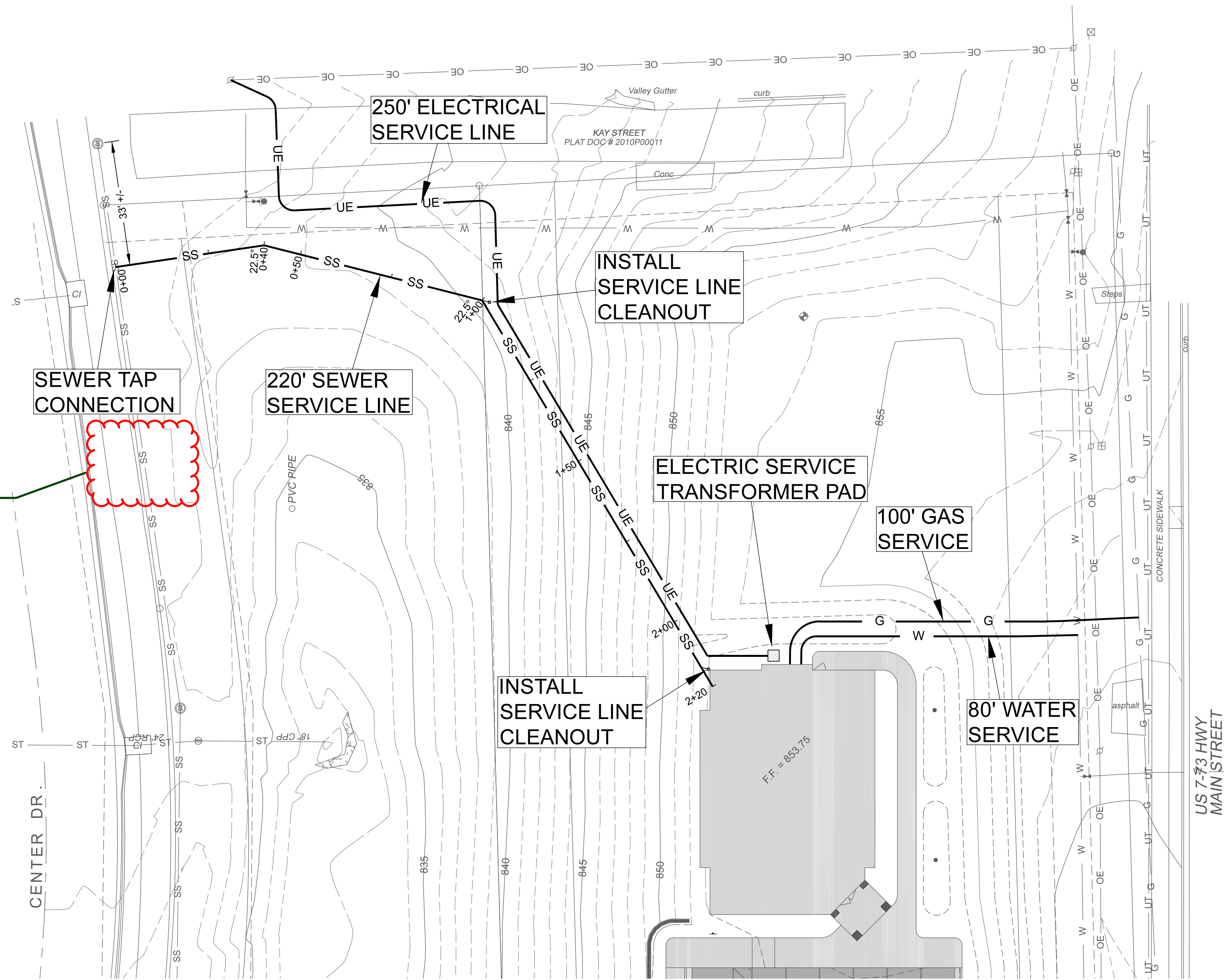




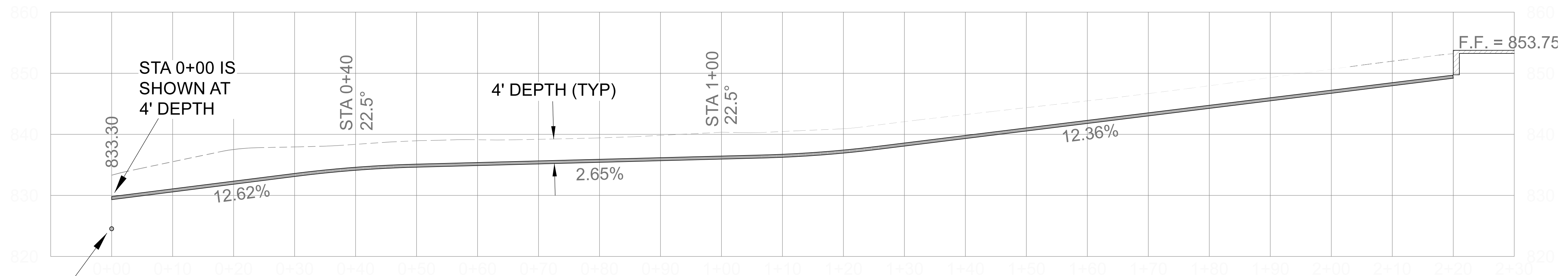


There is a verified sewer tap tee 100' north of manhole E-08-035. This tap was installed for this lot, and should be used, unless there's a compelling reason not to. It may save install costs as well.

I believe that a cleanout is required every 100' or at each change in direction. Please confirm with City plumbing codes.



UTILITY PLAN



CALCULATED ELEVATION OF EXISTING SEWER IS 824.20, FIELD VERIFY

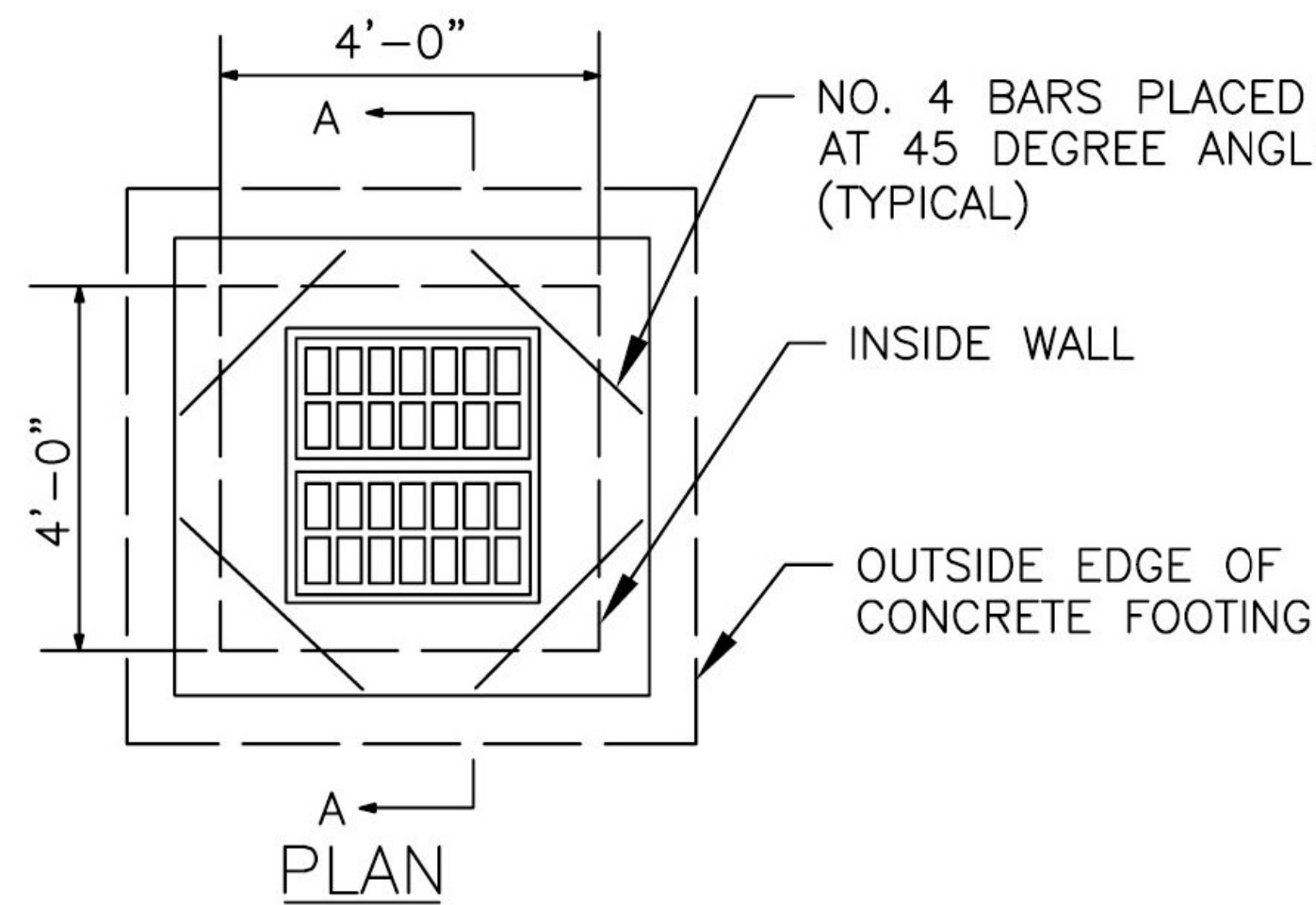
SEWER SERVICE PROFILE

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

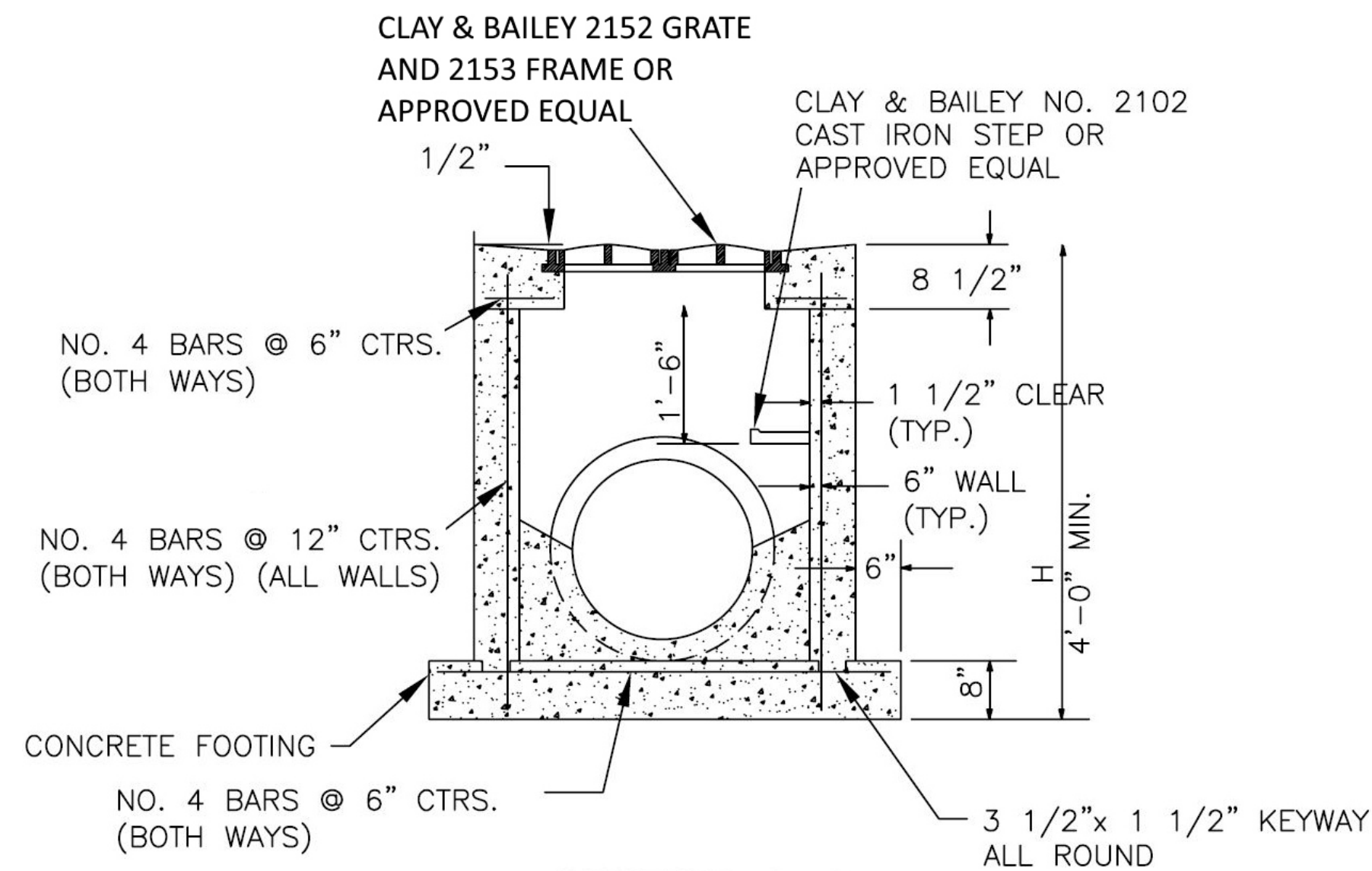


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| LANSING FAMILY EYE CENTER<br>LANSING, KS |   | REDDELL HOLDINGS, LLC<br>LEAVENWORTH, KS |  | Schulte Engineering & Consulting, LLC<br>21 Gates Dr.<br>Piette City, MO 64079<br>www.schulteengineering.com<br>admin@schulteengineering.com<br>PHONE: (816) 260-3328 |  | <div><div></div></div> |  |
| DRAWING NUMBER                           |   | DRAWN BY: DJS                            |  | DATE: 11-16-2021                                                                                                                                                      |  | SHT. 11 OF 16          |  |
|                                          |   | ELECTRONIC FILE NAME:                    |  | SCALE AS NOTED                                                                                                                                                        |  |                        |  |
| REV:                                     | 0 | UTILITY PLAN                             |  |                                                                                                                                                                       |  |                        |  |
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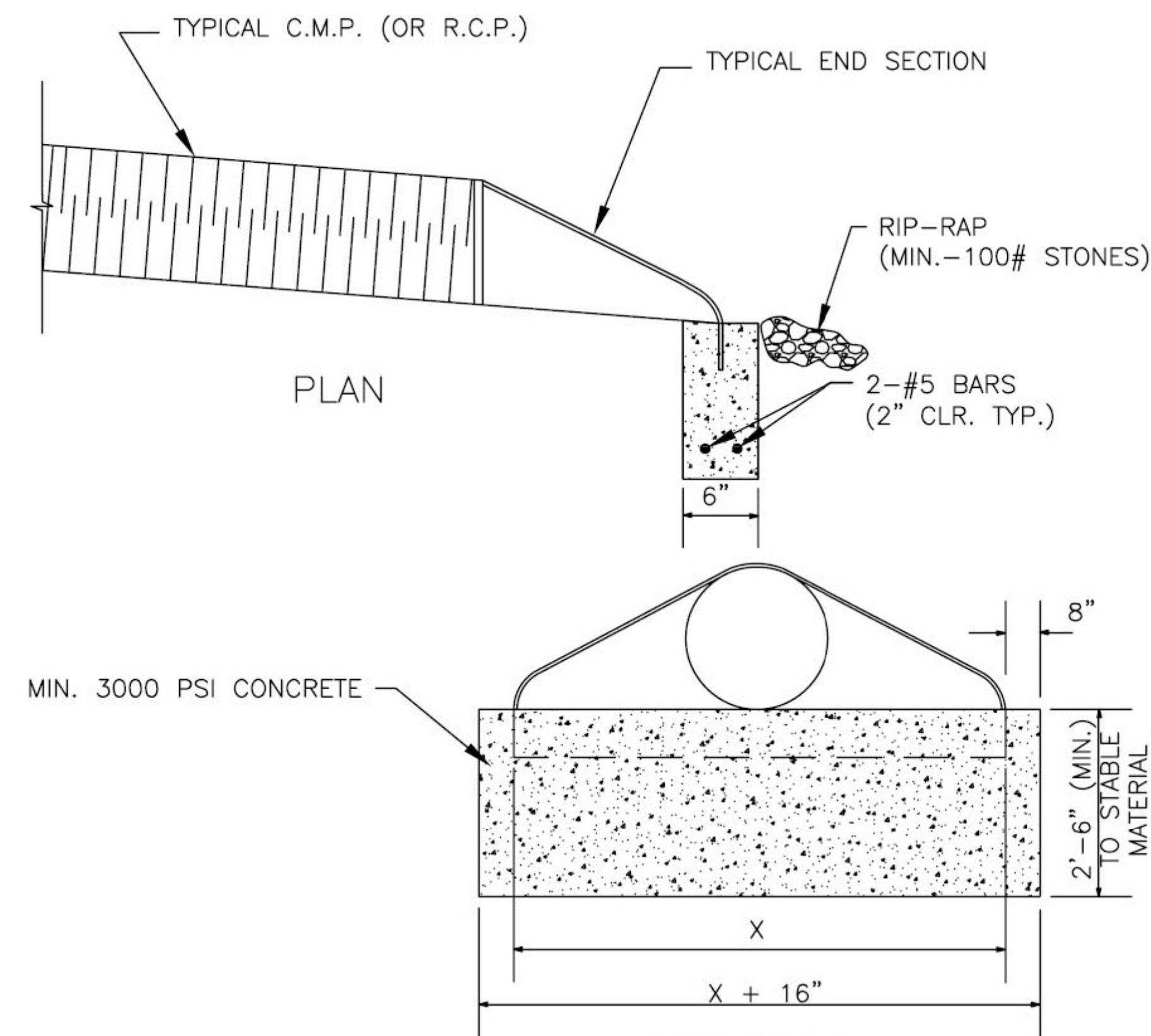




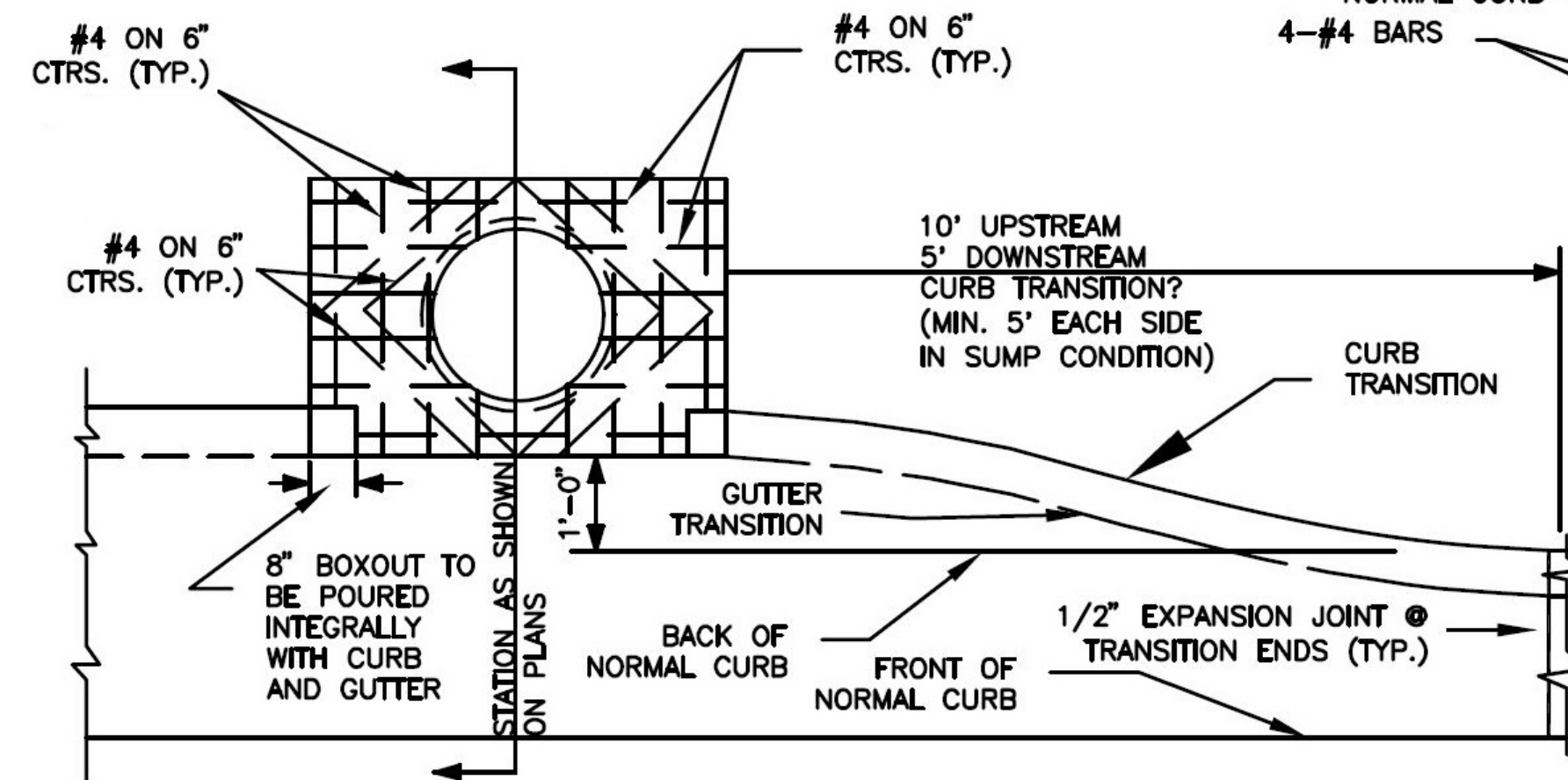
- NOTES:
1. USE CLASS "A" CONCRETE (AE) THROUGHOUT (4000 PSI).
  2. FLOOR OF INLET SHALL BE SHAPED WITH NON-REINFORCED CLASS "A" CONCRETE (AE) INVERT TO PROVIDE SMOOTH FLOW.
  3. CAST IRON STEPS SHALL BE SPACED AT 1'-4" O.C. VERTICALLY.
  4. BEVEL ALL EXPOSED EDGES WITH 3/4" TRIANGULAR MOUNDING.
  5. WALLS MAY EITHER BE POURED IN PLACE OR PRE-CAST.
  6. ALL CRUSHED STONE USED AS AGGREGATE FOR CONCRETE CONSTRUCTION SHALL BE OBTAINED FROM QUARRIES AND BEDS DESIGNATED BY THE KANSAS DEPARTMENT OF TRANSPORTATION AS MEETING DURABILITY REQUIREMENTS OF CLASS 1 OR CLASS 6, AS SHOWN ON FILE IN THE OFFICE OF THE CITY ENGINEER.



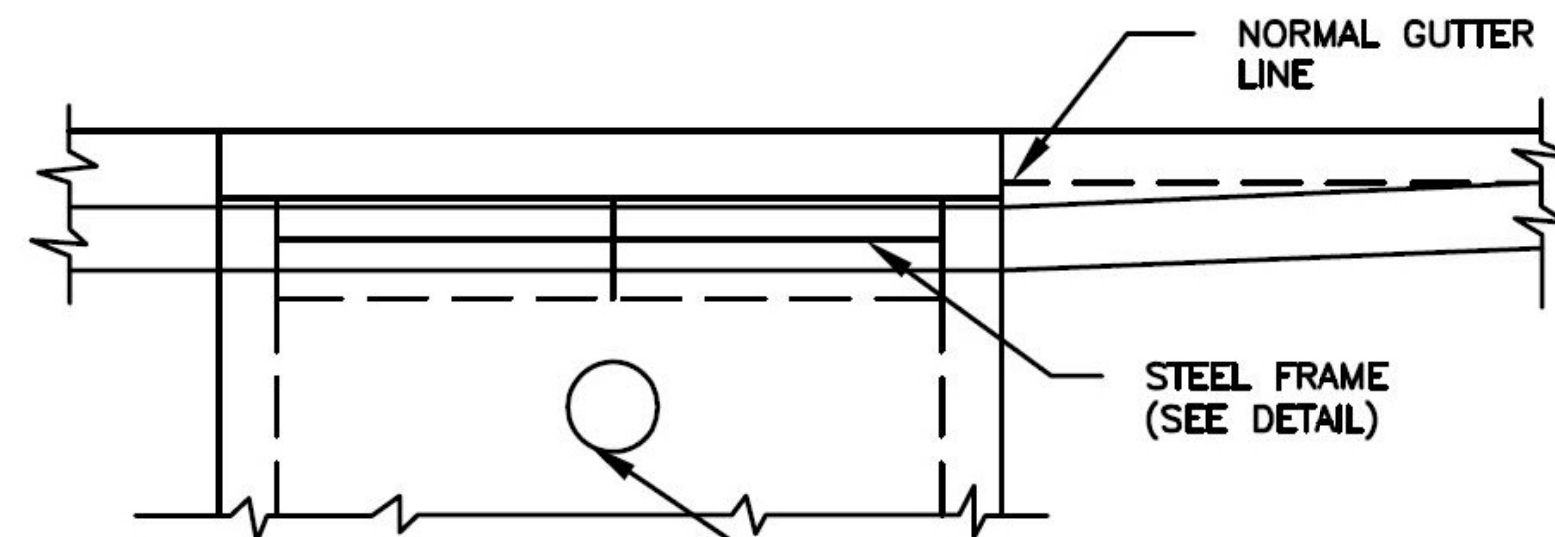
SECTION A-A  
GRADED INLET



FLARED END SECTION



PLAN VIEW



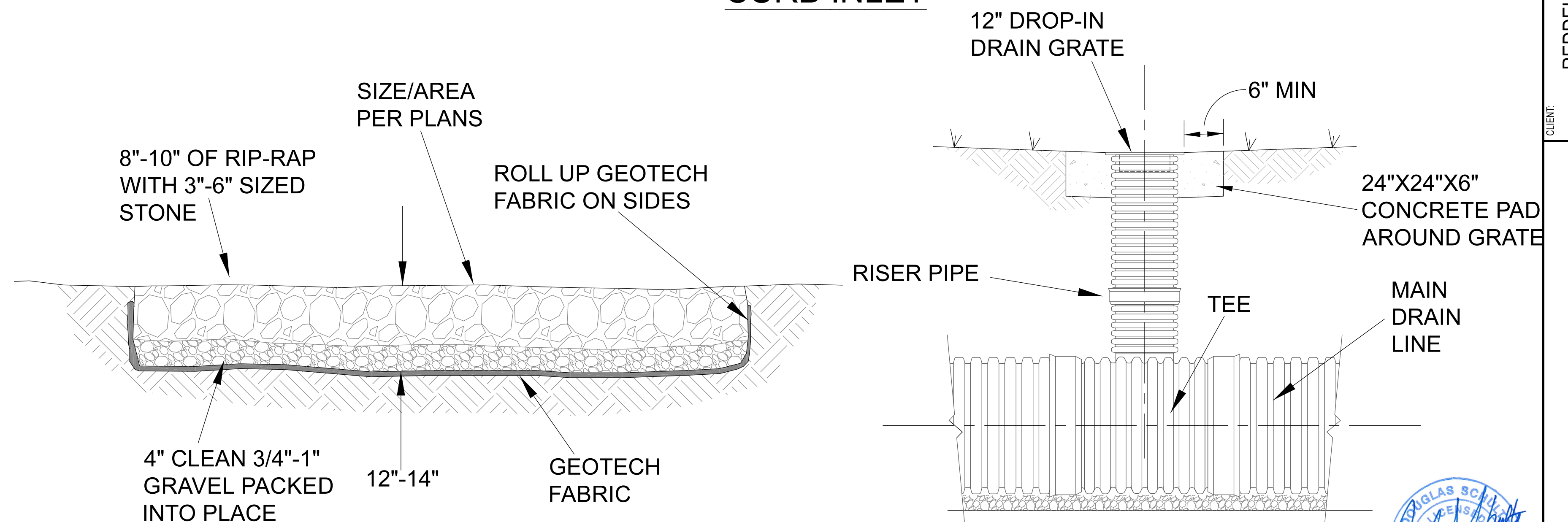
FRONT ELEVATION

4" FARM TILE  
W/GALVANIZED SCREEN, 18"  
BELOW FINISHED TOP  
(STREET SIDE ONLY)  
3/4" CLEAN AGGREGATE IN  
ALL DIRECTIONS ISOLATED  
FROM SOIL BY FILTER  
FABRIC.

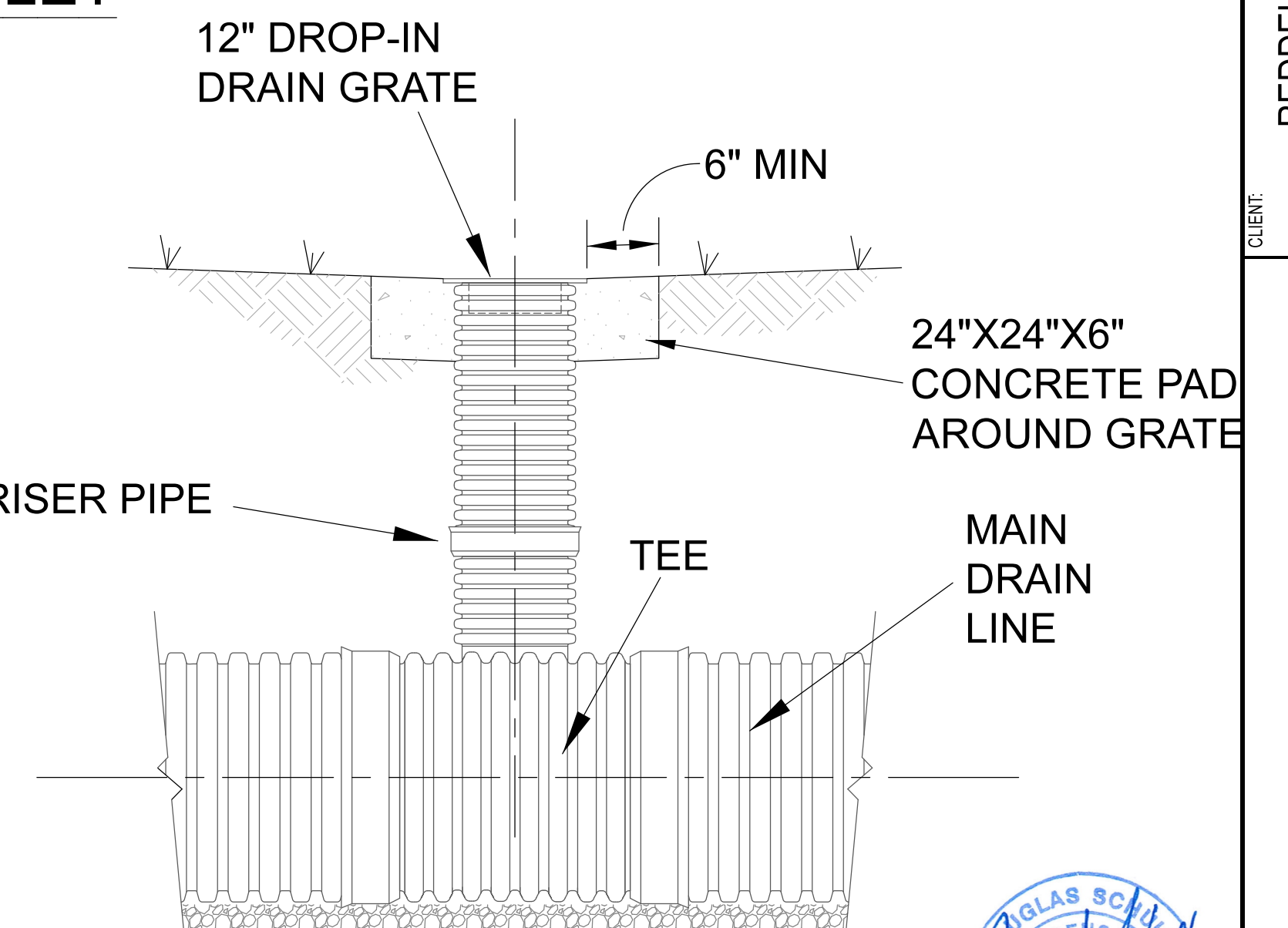
NOTES:

1. CONTRACTOR SHALL PROVIDE STEPS SPACED AT 1'-4" O.C. WHERE INLET OR MANHOLE DEPTH IS GRATER THAN 4'-0". STEPS SHALL BE M.A. INDUSTRIES, INC. MODEL PS-2-PF OR APPROVED EQUAL.
2. USE OF PRECAST CONCRETE REQUIRES DESIGN ENGINEER'S APPROVAL OF SHOP DRAWINGS.
3. MANHOLE RING AND LID SHALL BE CLAY & BAILEY NO. 2020, OR AN APPROVED EQUAL.
4. SPACER SHALL BE PLACED AT EQUAL INTERVALS ACCORDING TO THE FOLLOWING: L=7'-0", 2 SPACES; L=8'-0", 3 SPACES; L=10'-0", 3 SPACES.
5. THE FIRST DIMENSION IN THE PLAN NOTATIONS REFERS TO THE "L" DIMENSION.
6. THE SECOND DIMENSION IN THE PLAN NOTATIONS REFERS TO THE "W" DIMENSION.
7. "JUNCTION BOX" AS CALLED FOR IN THE PLANS, SHALL BE CONSTRUCTED TO CONFORM, WHERE APPLICABLE, WITH THE DIMENSIONS, THICKNESS AND DETAILS SHOWN.
8. ALL METAL SURFACES SHALL BE GALVANIZED.
9. CURB CONTRACTOR SHALL HAND FORM AND FINISH GUTTER WITHIN THE INLET THROAT TO THE REAR OF FRONT INLET WALL AT THE TIME THE FINISHING OF NORMAL CURB IS ACCOMPLISHED.
10. THE INVERT SHALL HAVE A TROWEL FINISH TO SECURE SMOOTH INVERT SLOPING TO OUTLET PIPE.
11. OUTLET OR INLET PIPE SHALL BE PLACED AS SPECIFIED OR AS DIRECTED BY THE ENGINEER. REINFORCING STEEL SHALL BE BENT AROUND PIPE.
12. USE KSS CLASS A (4000 PSI) CONCRETE FOR ALL STANDARD CATCH BASINS AND INLETS.
13. STORM SEWER PIPE SHALL BE CUT FLUSH WITH INSIDE WALLS OF INLET.

CURB INLET



RIP-RAP BLANKET

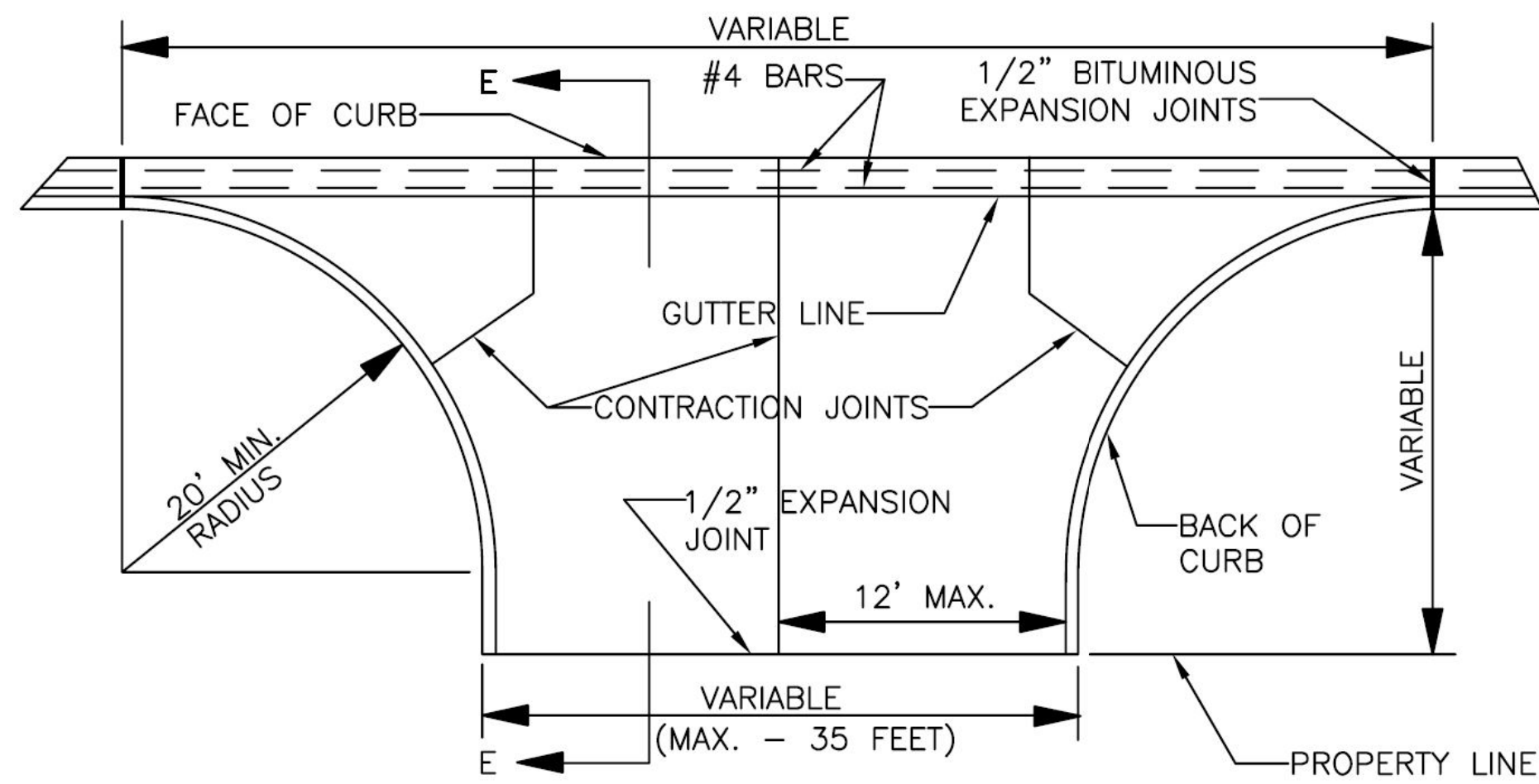


DROP-IN DRAIN



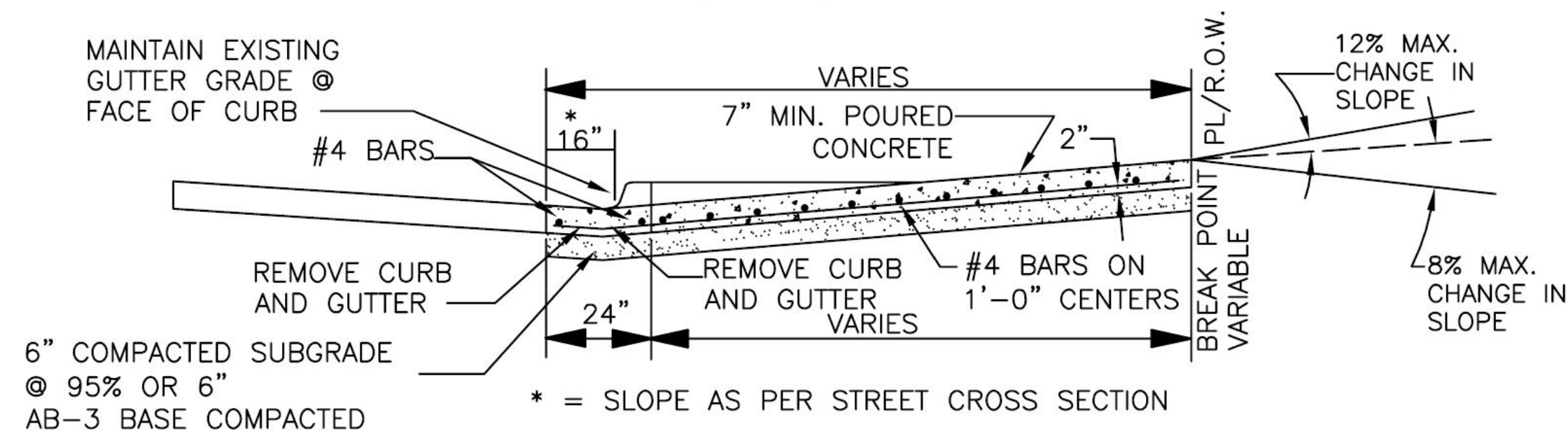
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|--------------------------------------------------|--|------------------|--|-----------------|--|
| CLIENT: REDDELL HOLDINGS, LLC<br>LEAVENWORTH, KS |  | DATE: 11-16-2021 |  | SCALE: AS NOTED |  |
| DRAWN BY: DJJ                                    |  | DATE: 11-16-2021 |  | SHEET: 12 OF 16 |  |
| SUBMIT FOR CITY REVIEW                           |  | BY: DJJ          |  | TYPICAL DETAILS |  |
| REV. 1                                           |  | DATE: 11-16-2021 |  | SHT. 12 OF 16   |  |
| DESCRIPTION                                      |  | BY: DJJ          |  | 0               |  |





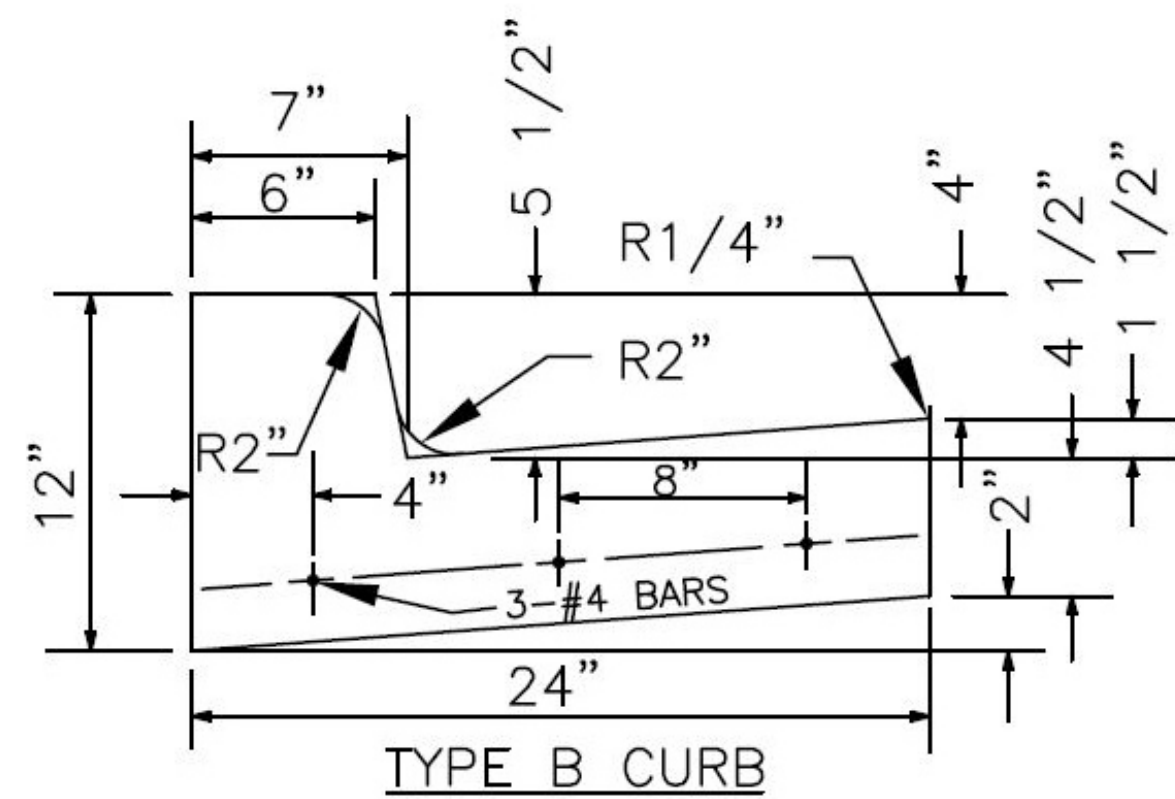
NOTE: ENTRANCE TO DRIVE TO BE POURED MONOLITHICALLY

### PLAN

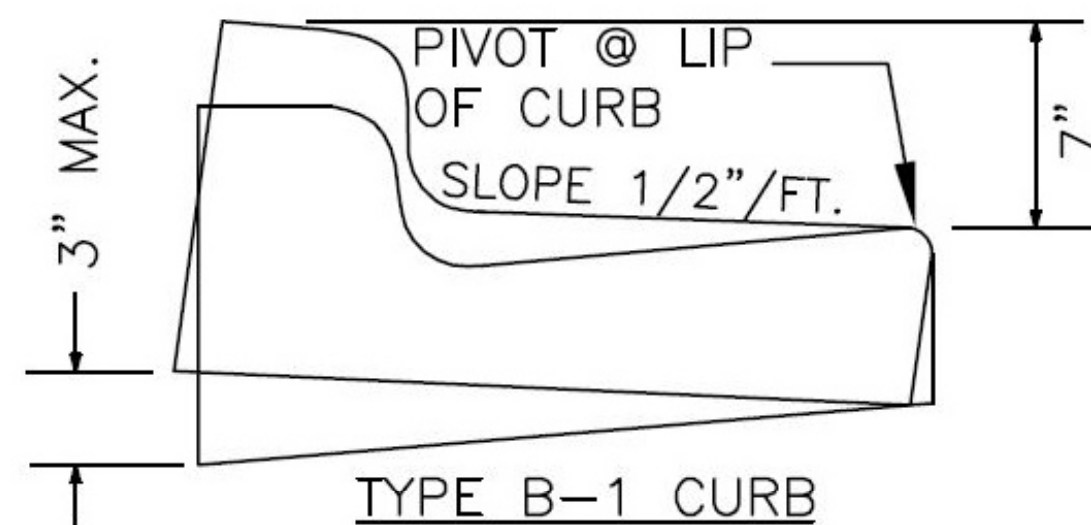


### SECTION E-E

## COMMERCIAL ENTRANCE



TYPE B CURB

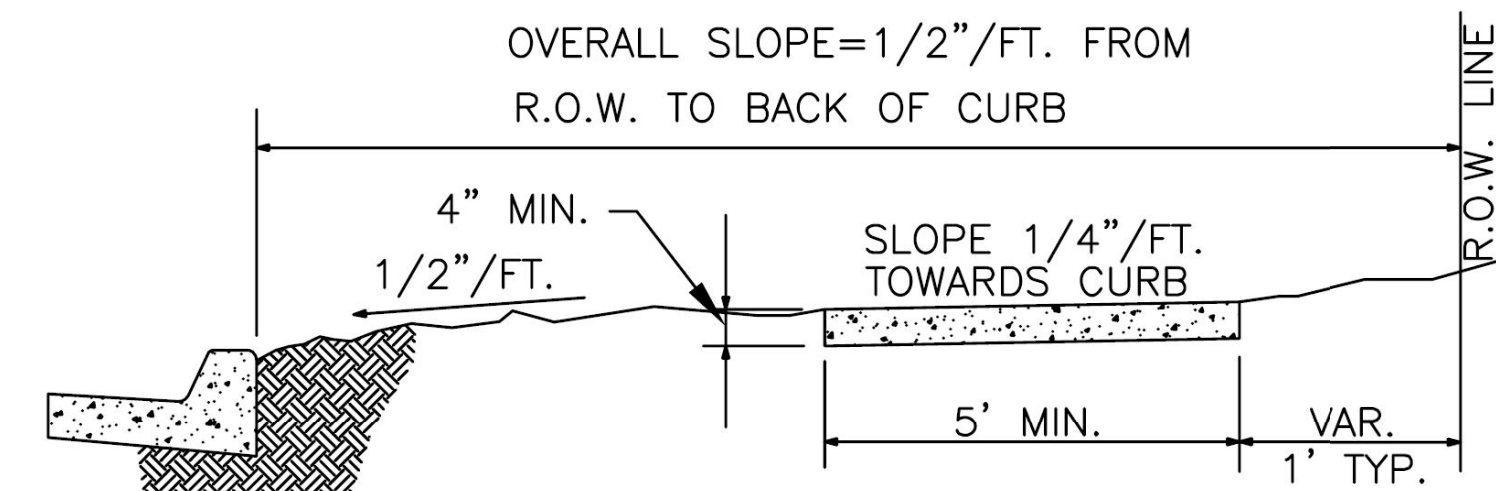


TYPE B-1 CURB

## TYPICAL CURB

- NOTES:
1. 1/2" PREMOLDED EXPANSION JOINTS SHALL BE PLACED AT POINTS OF CURVATURE, CURB INLETS, AND AT 100' CENTERS. CONTRACTION JOINTS SHALL BE A MIN OF 2" DEEP OR 1/3 TOTAL THICKNESS, A MAX. OF 3/8" WIDE AND PLACED AT 10' INTERVALS EQUALLY SPACED BETWEEN EXPANSION JOINTS. KANSAS CLASS A(AE) CONCRETE SHALL BE USED THROUGHOUT.
  2. ALL CRUSHED STONE USED AS AGGREGATE FOR CONCRETE CONSTRUCTION SHALL BE OBTAINED FROM QUARRIES AND BEDS DESIGNATED BY THE KANSAS DEPARTMENT OF TRANSPORTATION AS MEETING DURABILITY REQUIREMENTS OF CLASS 1 OR CLASS 6.
  3. NEW CURB PLACEMENT SHALL BE DOWELLED TO EXISTING OR PREVIOUS PLACEMENT IN ACCORDANCE WITH REINFORCING AS SHOWN ON THIS SHEET.
  4. REINFORCING NOT REQUIRED WHEN CURB IS PLACED ON ASPHALTIC CONCRETE BASE COURSE (COLLECTOR AND ARTERIAL STREETS).
  5. CONTRACTION JOINTS MUST ALIGN WITH CONCRETE PAVING JOINTS.

- NOTES:
1. JOINTS SHALL BE FORMED AT RIGHT ANGLES TO THE ALIGNMENT OF THE SIDEWALK AND TO THE DEPTHS INDICATED BELOW.
  2. THE SIDEWALK SHALL BE MARKED OFF INTO SQUARE STOMES BY CONTRACTION JOINTS. CONTRACTION JOINTS SHALL BE ONE-EIGHTH (1/8) INCH WIDE BY ONE (1) INCH DEEP AND MAY BE FORMED BY TOOLING OR BY USE OF A CONCRETE SAW.
  3. EXPANSION JOINTS SHALL BE FORMED BY A ONE-HALF (1/2) INCH THICK PERFORMED JOINT FILLER, EXTENDING THE FULL DEPTH OF THE SLAB, AND SECURED SO THAT THEY ARE NOT MOVED BY DEPOSITING AND COMPACTING THE CONCRETE AT THESE JOINTS.
  4. EXPANSION JOINTS SHALL BE PLACED WHERE SIDEWALK ABUTS OTHER STRUCTURES AND SHALL NOT BE SPACED MORE THAN 50 FEET APART ON STRAIGHT RUNS FOR HAND LAID SIDEWALKS AND NOT MORE THAN 100 FEET APART ON STRAIGHT RUNS FOR MACHINE LAID SIDEWALKS.

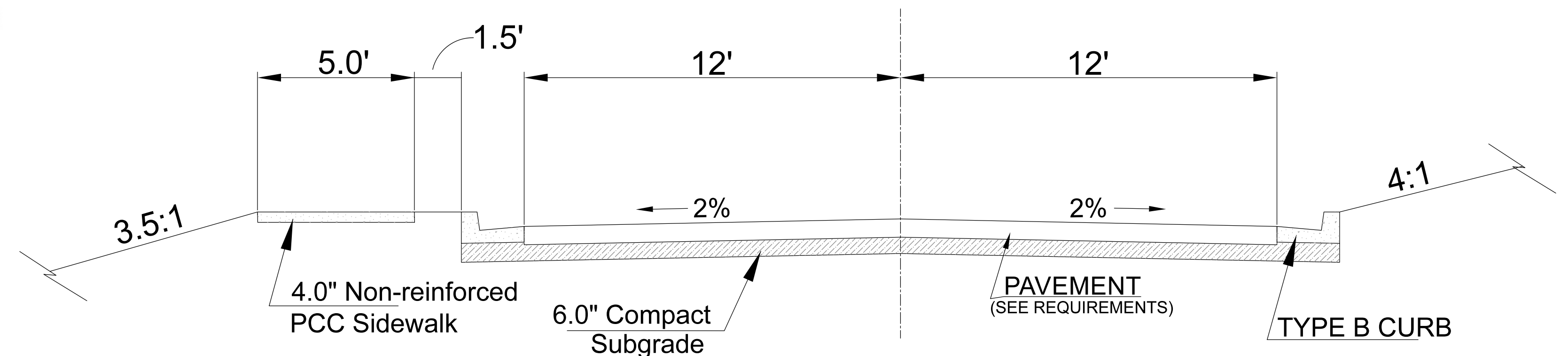


(RESIDENTIAL STREETS - ONE SIDE)  
(5'- COLLECTOR AND THOROUGHFARE STREETS BOTH SIDES)

KS CLASS A(AE) CONCRETE SHALL BE USED THROUGHOUT.

## TYPICAL SIDEWALK

- PAVEMENT REQUIREMENTS:  
PAVEMENT CROSS-SECTION FOR ENTRANCE ROAD AND PARKING LOT SHALL COMPLY WITH ONE OF THE FOLLOWING:
1. 4" (MIN) FULL DEPTH ASPHALTIC CONCRETE
  2. 2 1/2" (MIN) OF ASPHALTIC CONCRETE SURFACE OVER A 6" (MIN) CRUSHED ROCK BASE
  3. 5" (MIN) PORTLAND CEMENT CONCRETE PAVEMENT WITH 10 GAUGE WELDED WIRE MESH ON SIX (6) INCH CENTERS EACH WAY EMBEDDED TWO (2) INCHES FROM THE BOTTOM SURFACE OF THE SLAB



## ENTRANCE ROAD SECTION

NO SCALE



CLIENT: REDDELL HOLDINGS, LLC  
LEAVENWORTH, KS

LANSING FAMILY EYE CENTER  
LANSING, KS

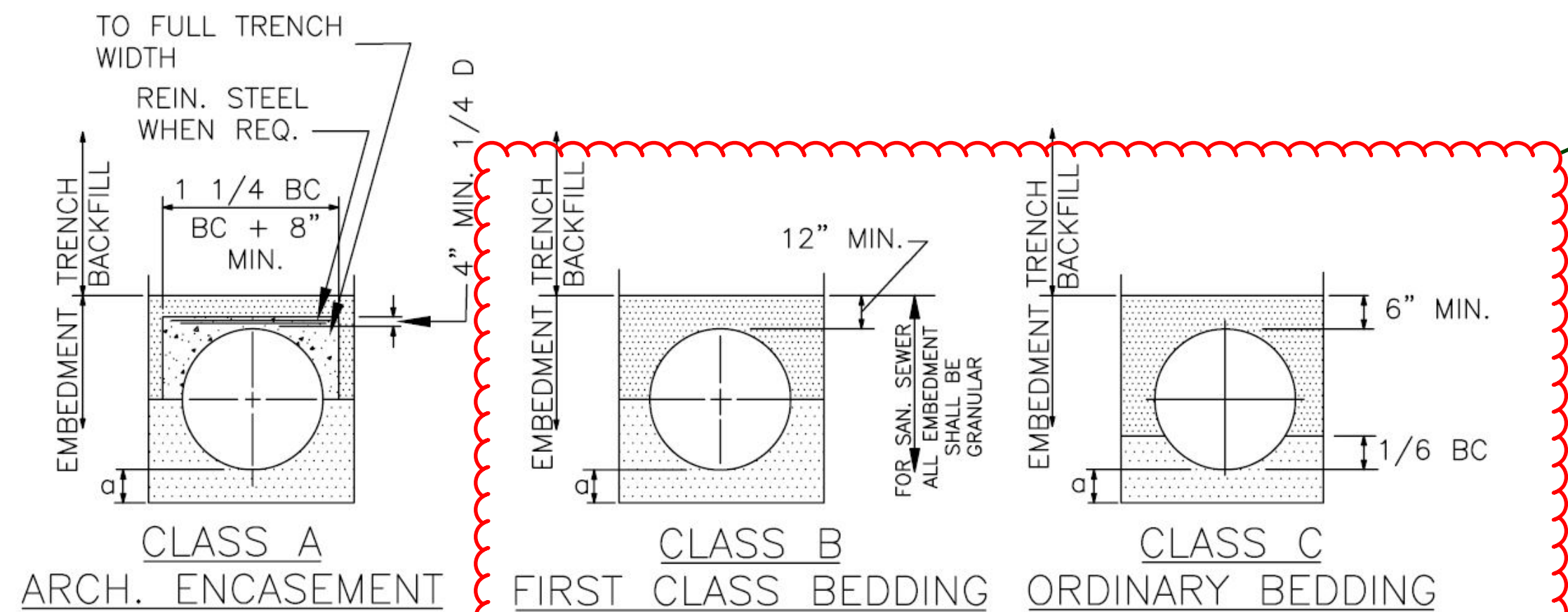
REV. 0 DRAWING NUMBER TYPICAL DETAILS SHT. 13 OF 16

DRAWN BY: DJIS DATE: 11-16-2021 SCALE: AS NOTED

Schulte Engineering & Consulting, LLC  
21 Gates Dr.  
Platts City, MO 64079  
www.schulteengineering.com  
admin@schulteengineering.com  
PHONE: (816) 260-3328

REV. 1 DATE: 11-16-2021 BY: DJIS DESCRIPTION: SUBMIT FOR CITY REVIEW



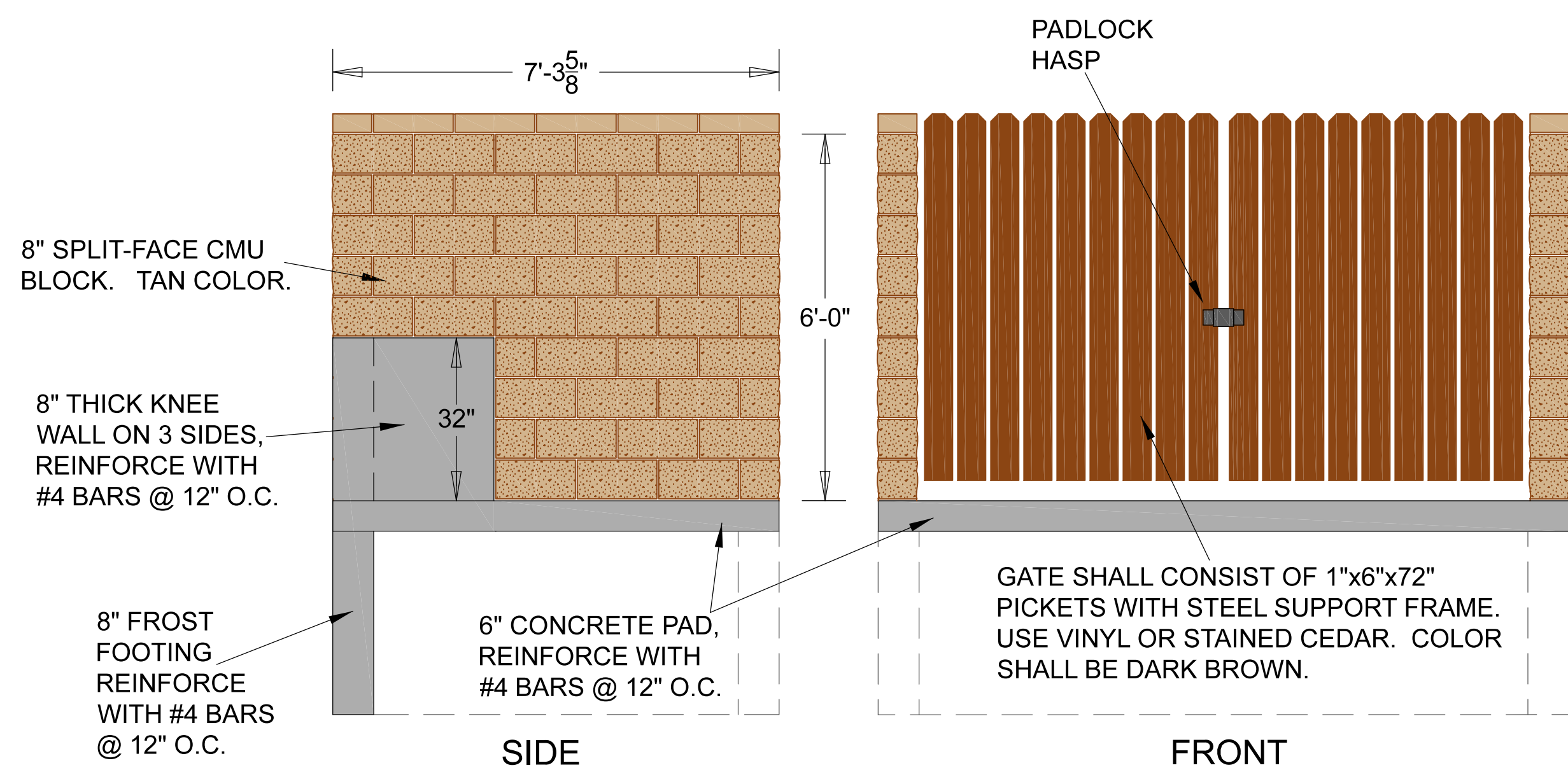


| TABLE OF EMBEDMENT DEPTH BELOW PIPE |           |           |
|-------------------------------------|-----------|-----------|
| D                                   | MIN. SOIL | MIN. ROCK |
| 27" AND SMALLER                     | 3"        | 6"        |
| 30" TO 60"                          | 4"        | 9"        |
| 66" AND LARGER                      | 6"        | 12"       |

LEGEND  
BC OUTSIDE DIA. OF PIPE  
H COVER ABOVE TOP OF PIPE  
D NOMINAL PIPE SIZE  
o EMBEDMENT BELOW PIPE  
HAND PLACED COMPACTED EMBEDMENT  
GRANULAR EMBEDMENT  
CONCRETE

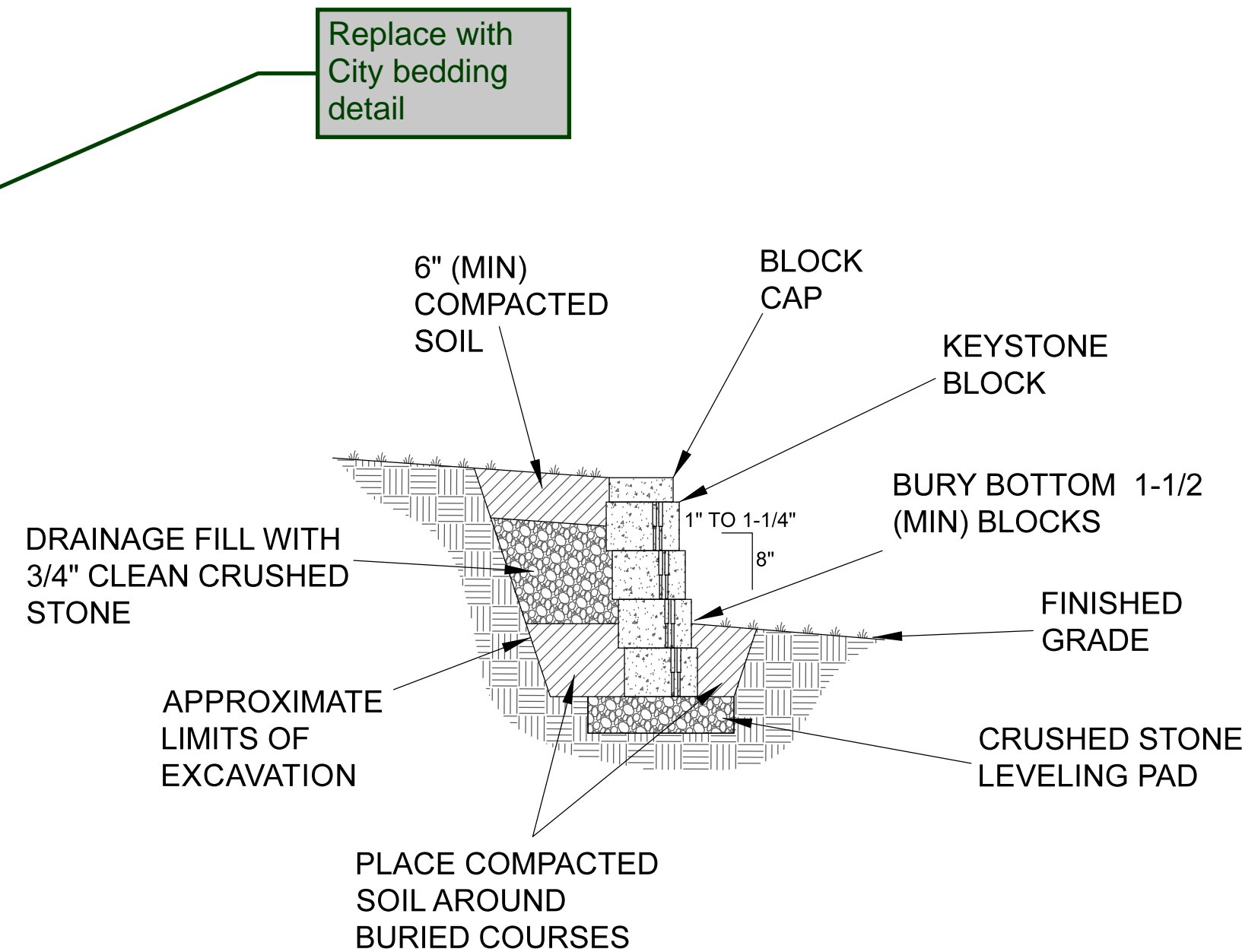
NOTES:  
GRANULAR EMBEDMENT SHALL BE KSS TYPE CA-5, TO BE PLACED IN NOT MORE THAN 6" LAYERS AND COMPACTED.  
HAND PLACED COMPACTED EMBEDMENT SHALL BE FINELY DIVIDED JOB EXCAVATED MATERIAL FREE FROM DEBRIS, ORGANIC MATERIAL, AND STONES, PLACED IN UNIFORM LAYERS NOT MORE THAN 8" THICK, AND COMPACTED TO THE REQUIREMENTS SPECIFIED IN SECTION 6018 "TRENCH BACKFILL" OF THIS SPEC. GRANULAR EMBEDMENT MAY BE SUBSTITUTED FOR ALL OR PART OF HAND PLACED COMPACTED EMBEDMENT.

## PIPE BEDDING NO PAVEMENT

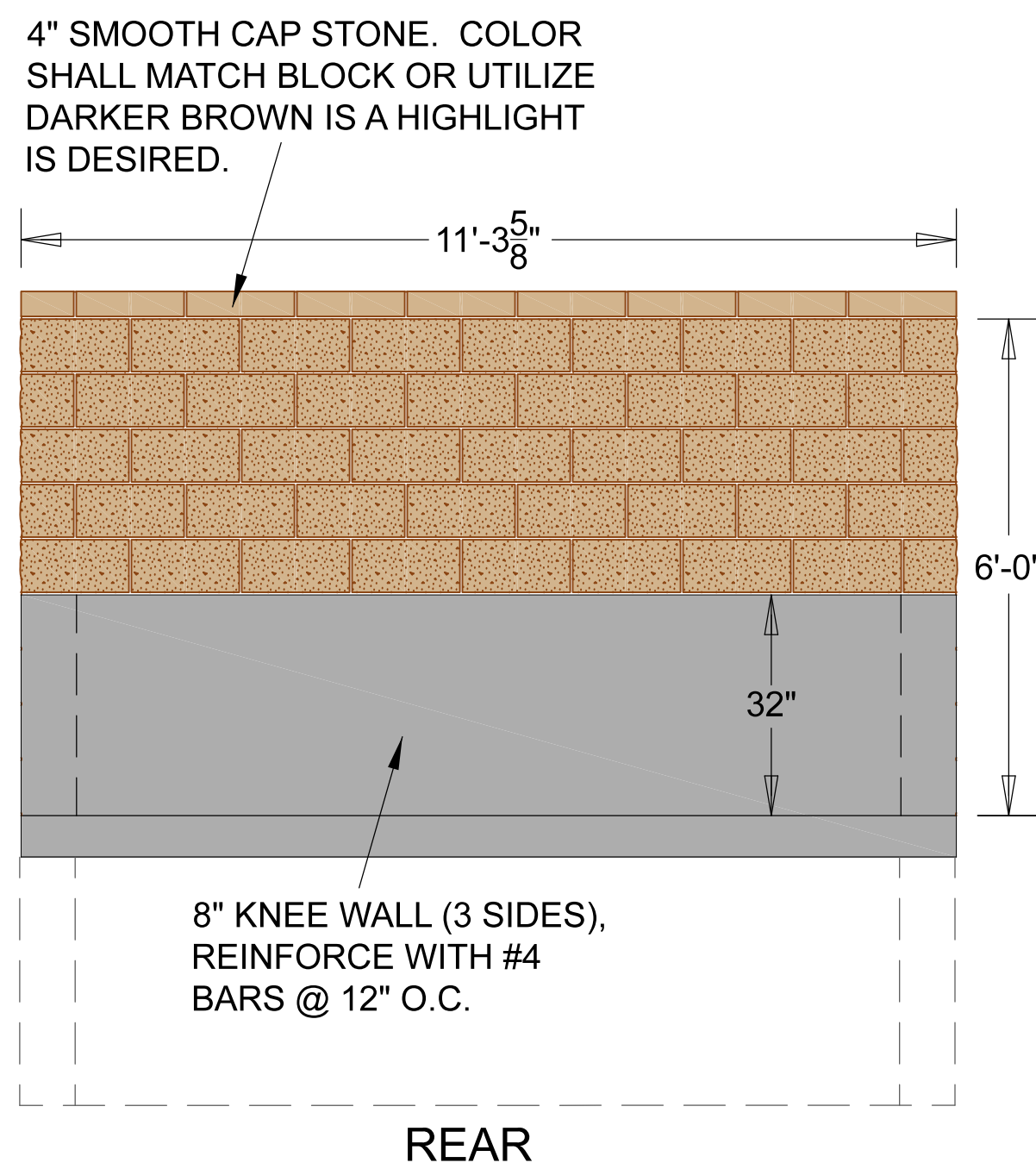


## TRASH ENCLOSURE\*\*

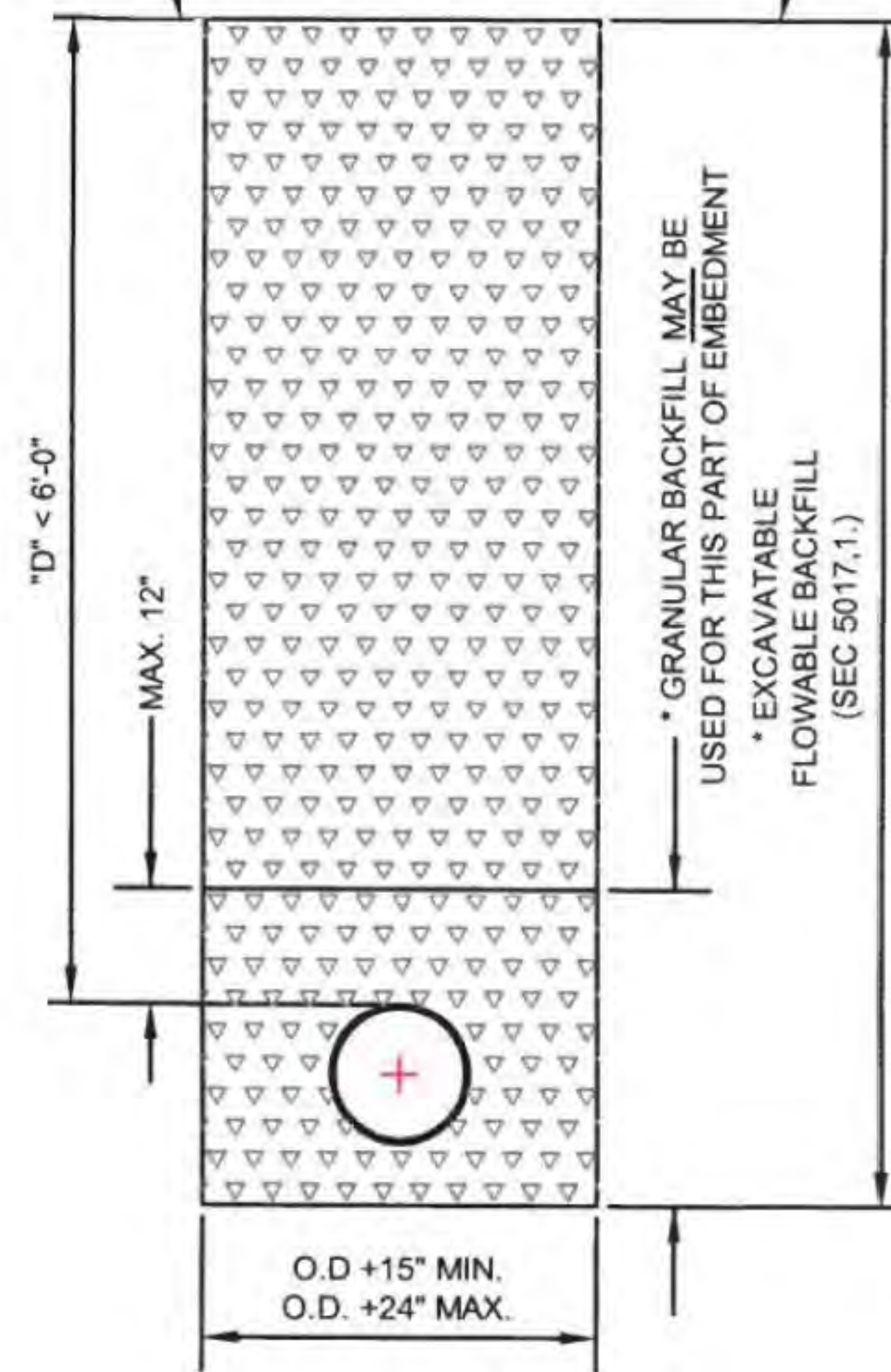
\*\* - ENCLOSURE IS SIZED FOR A 2 OR 4 YD DUMPSTER



## RETAINING WALL SECTION



BOTTOM OF 7" CONCRETE CAP FOR RESOTRATION OF SURFACE ON EXISTING STREETS (SEE S.D. 60-1)  
FINISH EARTHWORK GRADE OR ORIGINAL GRADE IN FILL SECTIONS IF INSTALLED PRIOR TO ROAD FILL.

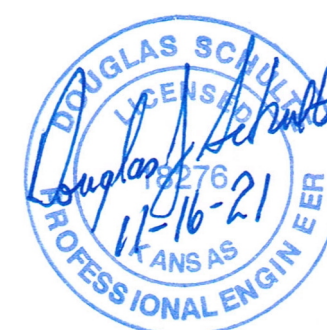


## PIPE BEDDING BENEATH PAVEMENT



12"x18" SIGN, MOUNT ON GLVANIZED POLE, LOCATE SIGN 12" BEHIND SIDEWALK AND CENTER ON PARKING STALL.

## ADA SIGNAGE

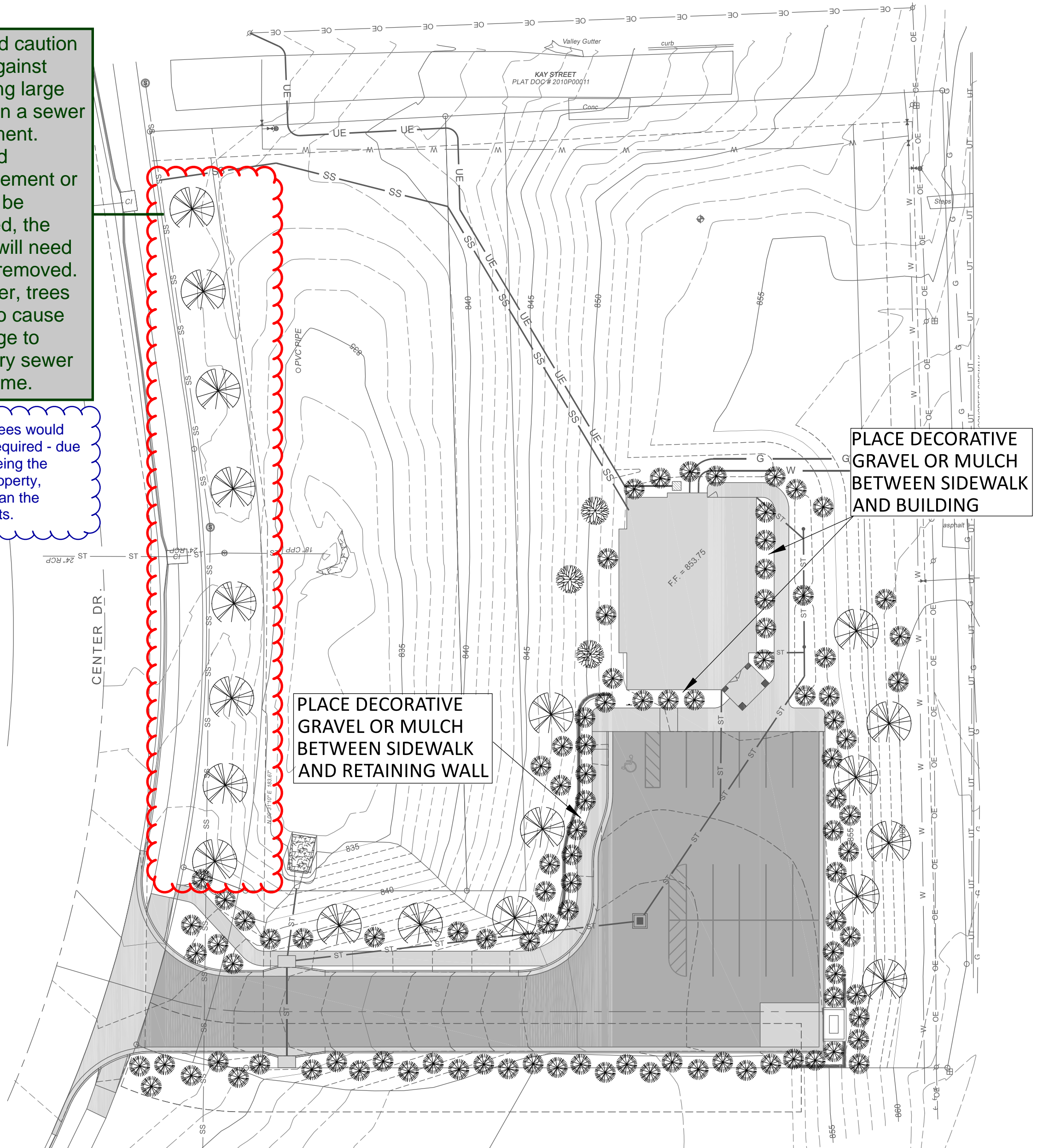


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|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------|--|----------------|--|
| CLIENT: REDDELL HOLDINGS, LLC<br>LEAVENWORTH, KS                                                                                                                      |  | DRAWN BY: DJS<br>DATE: 11-16-2021<br>ELECTRONIC FILE NAME: SCALE: AS NOTED |  | SHEET 14 OF 16 |  |
| LANSING FAMILY EYE CENTER<br>LANSING, KS                                                                                                                              |  | TYPICAL DETAILS                                                            |  | SHT. 14 OF 16  |  |
| Schulte Engineering & Consulting, LLC<br>21 Gates Dr.<br>Platts City, MO 64079<br>www.schulteengineering.com<br>admin@schulteengineering.com<br>PHONE: (816) 260-3328 |  | SUBMIT FOR CITY REVIEW<br>11-16-2021<br>DJS<br>BY: DATE                    |  | REV. 0         |  |



I would caution you against planting large trees in a sewer easement. Should replacement or repair be needed, the trees will need to be removed. Further, trees tend to cause damage to sanitary sewer over time.

These trees would not be required - due to this being the City's property, rather than the applicants.



LANDSCAPING LAYOUT

LANDSCAPING CALCULATIONS:  
LOT AREA = 1.41 Ac = 61,420 SF  
ROAD FRONTAGE = 313.50 Ft.  
BUILDING FRONTAGE = 66.75 Ft.  
PARKING SPACES PROVIDED = 17  
PARKING LOT PERIMETER = 410 Ft.

LARGE TREES  
ROAD FRONTAGE - 2 PER 40' FRONTAGE = 8  
PARKING - 1 PER 40' PARKING PERIMETER = 11

ORNAMENTAL TREES  
FDN - 1 PER 25' BUILDING FRONTAGE = 3

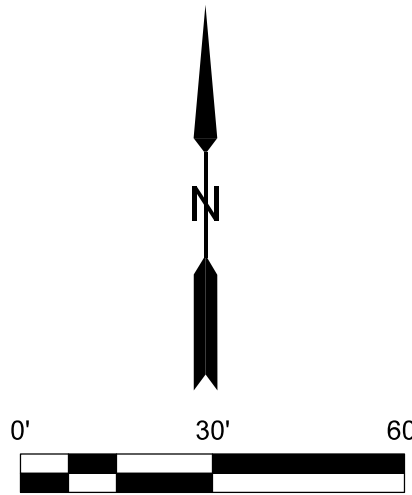
EVERGREENS  
FDN - MAY SUBSTITUTE UP TO 50% OF ORNAMENTAL AT 1 FOR 1  
PARKING - MAY SUBSTITUTE UP TO 50% OF ORNAMENTAL AT 2 FOR 1

SHRUBS  
FDN - 5 PER 25' BUILDING FRONTAGE = 13  
PARKING - 5 PER 25' PARKING PERIMETER = 82

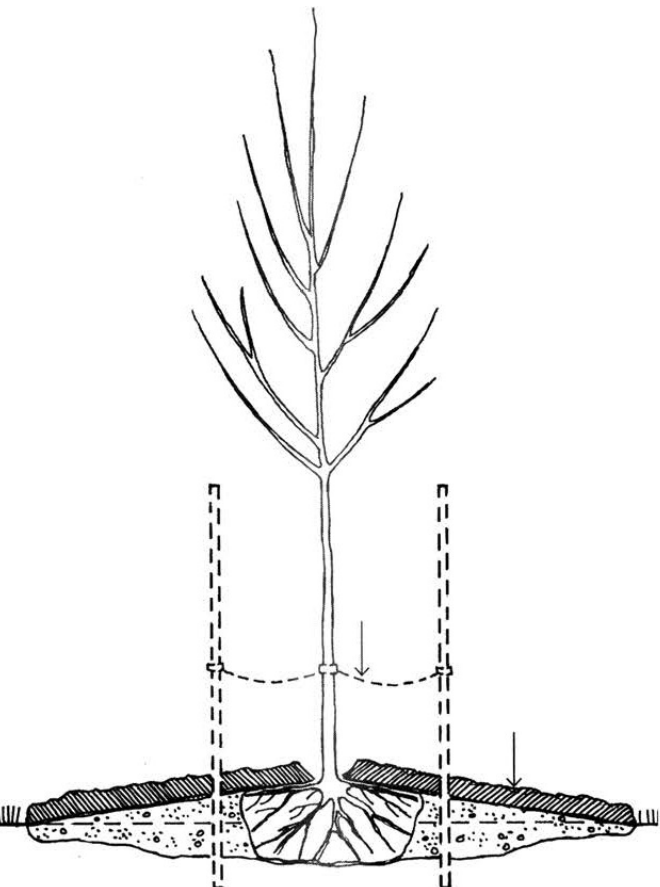
**LEGEND**

[Symbol] = NEW CONCRETE  
[Symbol] = NEW ASPHALT  
[Symbol] = NEW RETAINING WALL OR BLOCKS

[Symbol] = LARGE TREE  
[Symbol] = ORNAMENTAL  
[Symbol] = EVERGREEN  
[Symbol] = SHRUB



The area along the roadway would not be considered parking, so the amount of shrubs here can be reduced significantly. That being said, it would be nice to have a few trees of some sort along the entrance road. Perhaps the existing trees can be spread out to include some along the road itself.



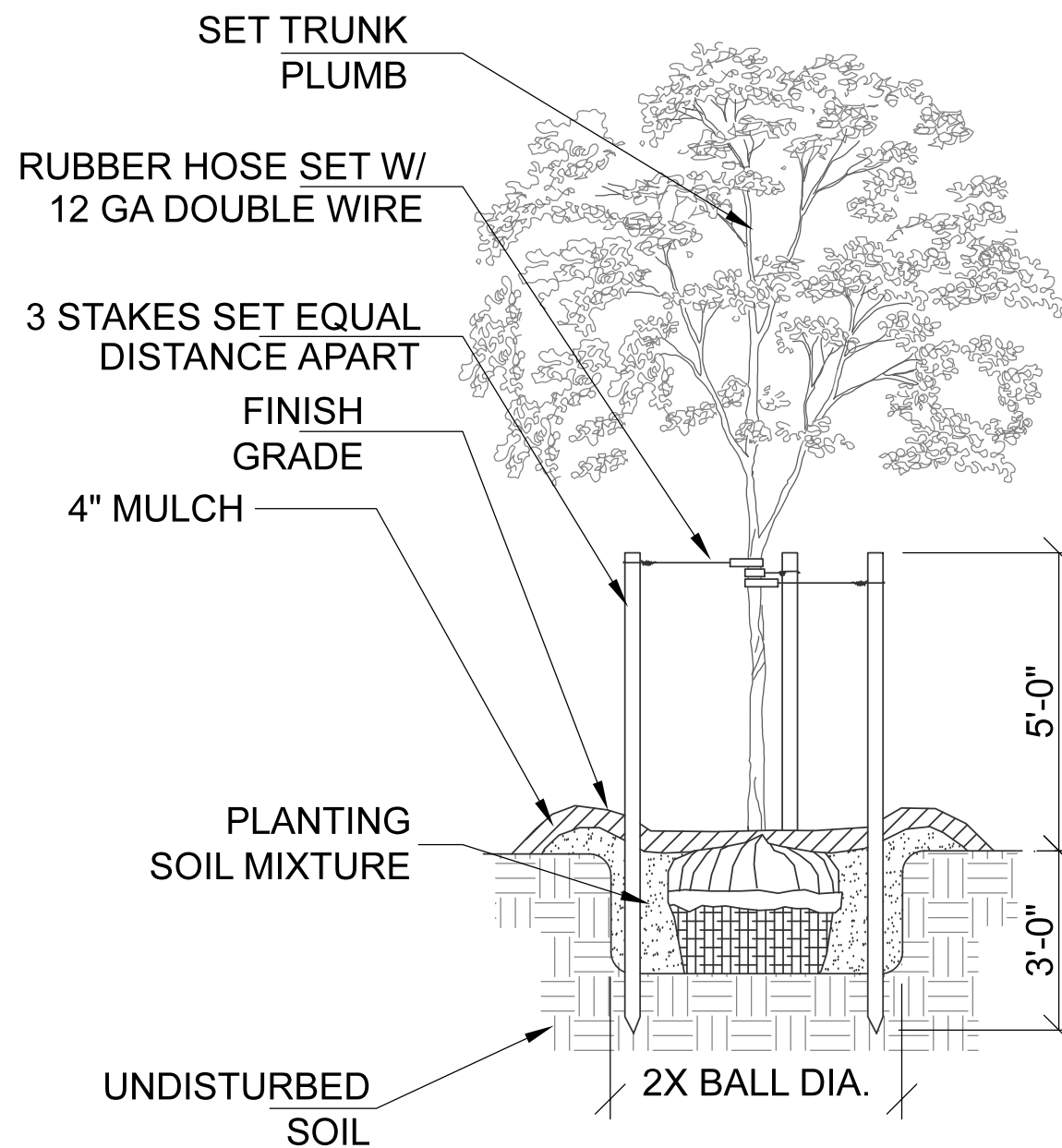
COMPACTED SOIL PLANTING DETAIL

COMPACTED SOIL PLANTING:  
TO TEST FOR COMPACTED SOIL, DO A SIMPLE PERCOLATION TEST. DIG A HOLE 12 INCHES TO 18 INCHES DEEP AND FILL IT WITH WATER. IF THE WATER IS STILL IN THE WHOLE 12 TO 18 HOURS LATER, THEN YOU HAVE COMPACTED OR HEAVY CLAY SOILS.

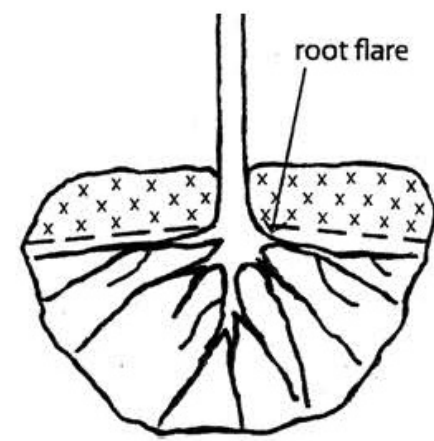
ROOTS NEED OXYGEN, SO DIG A WIDE SHALLOW HOLE THREE TO FOUR TIMES THE WIDTH OF THE ROOT BALL OR CONTAINER AND ONLY HALF AS DEEP. MOUND BACKFILL SOIL SLIGHTLY TO THE TOP OF THE ROOT FLARE, COVERING THE ENTIRE EXCAVATION. THIS CREATES A RAISED PLANTING BED, WHICH WILL IMPROVE THE TREE'S PERFORMANCE. SOILS THAT HOLD EXCESSIVE MOISTURE MAY NEED A SUBSURFACE DRAIN TUBE INSTALLED BELOW THE ROOT BALL.

LANDSCAPE NOTES:

1. LANDSCAPE PLAN IS PREPARED IN COMPLIANCE WITH CITY OF LANSING, KS REQUIREMENTS.
2. TREES / SHRUBS SELECTED FOR PLANTING MUST BE FREE FROM INJURY, DISEASE, PESTS, DEFECTS, ETC. TO ASSURE SURVIVABILITY.
3. ALL TREES TO BE BALLED AND BURLAPED FOR SHIPMENT TO THE SITE.
4. TREES SHALL HAVE A MINIMUM TRUNK DIAMETER OF 2-INCHES AS MEASURED 1-FOOT ABOVE THE GROUND AND HAVE A MINIMUM HEIGHT OF 5 FEET TALL.
5. ALL DISTURBED GROUND TO BE COVERED WITH MULCH, LANDSCAPING, OR SOD.
6. LANDSCAPE CONTRACTOR HAS DESIGN FLEXIBILITY WITH QUANTITIES, LAYOUT, AND SPECIES SELECTION THAT ARE AVAILABLE AT TIME OF CONSTRUCTION. CONSULT WITH OWNER FOR FINAL APPROVAL.
7. PLANTS SHALL MEET OR EXCEED THE QUALITY STANDARDS OF THE AMERICAN ASSOCIATION OF NURSERYMEN AND THE KC NURSERY AND LANDSCAPE ASSOCIATION.
8. PLANTS MUST BE NATIVE OR NATURALIZED SPECIES AND SUITED FOR LEAVENWORTH COUNTY, KS SEASONAL CYCLES.



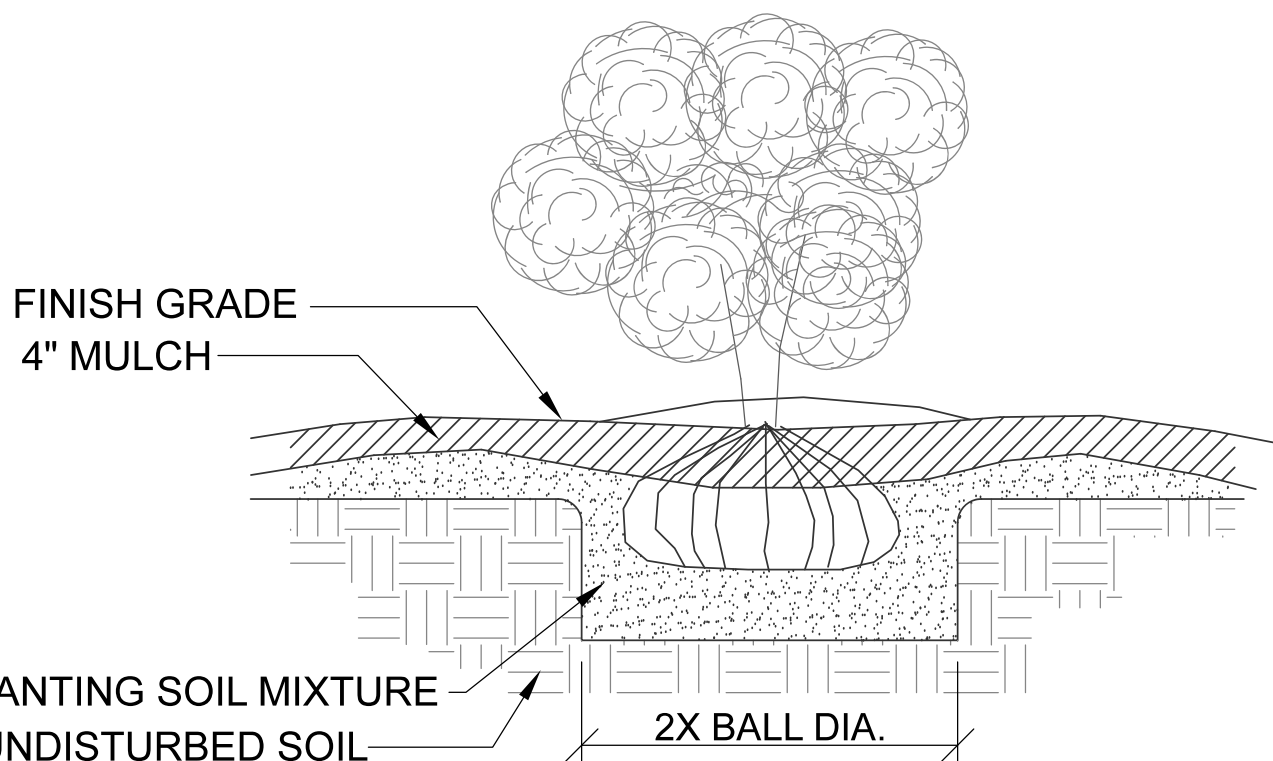
TREE PLANTING DETAIL



FINDING THE ROOT FLARE:  
FOR BALLED-AND-BURLAPPED TREES, PROBE THE TOP OF THE SOIL BALL CHOSE TO THE TRUNK TO FIND THE FIRST ROOTS. YOU CAN DO THIS WITH A STOUT WIRE. CHECK IN TWO OR MORE LOCATIONS TO MAKE SURE YOU'VE LOCATED THE TOP MAJOR ROOTS. LEAVE THE BURLAP IN PLACE TO MAKE MOVING THE TREE EASIER. MEASURE THE DISTANCE FROM THE TOP OF THE SOIL BALL TO THE ROOT FLARE. NEXT, SUBTRACT THAT DISTANCE FROM THE TOTAL DEPTH OF THE BURLAPPED SOIL BALL. THE DISTANCE FROM THE TOP-MOST BURIED ROOT TO THE BOTTOM OF THE BALL IS THE CORRECT DEPTH TO DIG THE PIT.

RECOMMENDED SHRUB SPECIES

- GOLD FLAME SPIREA
- LIMEMOUND SPIREA
- DWARF MAIDEN GRASS
- PAMPAS GRASS
- GOLDEN FORSYTHIA
- BUTTON BUSH
- EVERGREEN SHRUB



SHRUB PLANTING DETAIL

TREE PLACEMENT GUIDELINES

1. SPACE TREES 30 - 50 FEET APART.
2. PLACE TREES NO CLOSER THAN 15 FEET FROM STREET OR AREA LIGHTING.
3. PLACE TREES NO CLOSER THAN 8 FEET FROM A DRIVEWAY.
4. PLACE TREES NO CLOSER THAN 5 FEET FROM A FIRE HYDRANT.
5. PLACE TREES NO CLOSER THAN 5 FEET FROM A STORM BOX, GAS VALVE, WATER VALVE, CABLE BOX, OR ANY OTHER ABOVE GROUND UTILITY.

| Common Name            | Scientific Name                    | Height in Feet | Spread in Feet | Flower Color   | Fall Color              | Soil Moisture | Light Needed            | Yearly Growth Rate | Tree Type        |
|------------------------|------------------------------------|----------------|----------------|----------------|-------------------------|---------------|-------------------------|--------------------|------------------|
| Coffeetree, Kentucky   | Gymnocladus dioicus                | 60-75          | 40-60          | Greenish White | Yellow                  | Average       | Full sun                | Medium             | Large shade tree |
| Ginkgo                 | Ginkgo biloba                      | 50-60          | 30-40          | Not showy      | Bright yellow           | Average       | Full sun to light shade | Slow to medium     | Large shade tree |
| Hornbeam, European     | Carpinus betulus                   | 40-60          | 20-40          | Red            | Yellow-Green            | Average       | Full sun to light shade | Medium             | Large shade tree |
| Oak, English           | Quercus robur                      | 40-60          | 10-40          | Not showy      | Brown                   | Average       | Full sun                | Medium             | Large shade tree |
| Oak, Northern red      | Quercus rubra                      | 60-80          | 60-80          | Not showy      | Red                     | Average       | Full sun                | Medium to fast     | Large shade tree |
| Oak, scarlet           | Quercus coccinea                   | 60-80          | 30-50          | Not showy      | Russet to red           | Average       | Full sun                | Medium             | Large shade tree |
| Oak, white             | Quercus alba                       | 70-90          | 50-80          | Not showy      | Reddish-Purple          | Moist to dry  | Full sun                | Slow               | Large shade tree |
| Alder, European        | Alnus glutinosa                    | 40-60          | 20-30          | Red-Brown      | Green                   | Wide range    | Full sun to light shade | Fast               | Large shade tree |
| Black gum              | Nyssa sylvatica                    | 40-60          | 20-30          | Greenish White | Orange to scarlet       | Wide range    | Full sun to light shade | Slow               | Large shade tree |
| Honeylocust, thornless | Gleditsia triacanthos var. inermis | 30-60          | 25-50          | Not showy      | Yellow                  | Wide range    | Full sun                | Fast               | Large shade tree |
| Oak, bur               | Quercus macrocarpa                 | 70-80          | 70-80          | Not showy      | Yellow-Brown            | Wide range    | Full sun                | Slow               | Large shade tree |
| Beech, European        | Fagus sylvatica                    | 40-50          | 15-25          | Brown          | Yellow-Bronze           | Average       | Full sun to light shade | Slow               | Medium tree      |
| Hophornbeam            | Ostrya virginiana                  | 30-40          | 20-30          | Red-Brown      | Yellow                  | Average       | Full sun to light shade | Slow               | Medium tree      |
| Filbert, Turkish       | Corylus colurna                    | 40-50          | 20-25          | Not showy      | Yellow to purple to red | Wide range    | Full sun                | Medium             | Medium tree      |
| Hawthorn               | Crataegus species                  | 20-30          | 15-30          | White          | Scarlet                 | Average       | Full sun to light shade | Medium             | Small tree       |
| Lilac, Japanese tree   | Syringa reticulata                 | 20-30          | 15-25          | Creamy white   | Yellow                  | Wide range    | Full sun                | Medium             | Small tree       |
| Maple, Tatarian        | Acer species                       | 15-20          | 15-20          | Green-White    | Red and Reddish-Brown   | Wide range    | Full sun to light shade | Slow to medium     | Small tree       |
| Maple, Shantung        | Acer species                       | 20-30          | 20-25          | Green-Yellow   | Yellow to red           | Wide range    | Full sun to light shade | Slow               | Small tree       |

APPROVED TREE SPECIES

Schulte Engineering & Consulting, LLC

21 Gates Dr.  
Platts City, MO 64079  
www.schulteengineering.com  
admin@schulteengineering.com  
PHONE: (816) 260-3328

REDELL HOLDINGS, LLC  
LEAVENWORTH, KS

CLIENT

DRAWN BY: DJS  
ELECTRONIC FILE NAME:

DATE: 11-16-2021  
SCALE: AS NOTED

LANSING FAMILY EYE CENTER  
LANSING, KS

LANDSCAPE PLAN

REV: 0

SHT. 15 OF 16

| REV. | DATE       | BY  | DESCRIPTION            |
|------|------------|-----|------------------------|
| 1    | 11-16-2021 | DJS | SUBMIT FOR CITY REVIEW |



