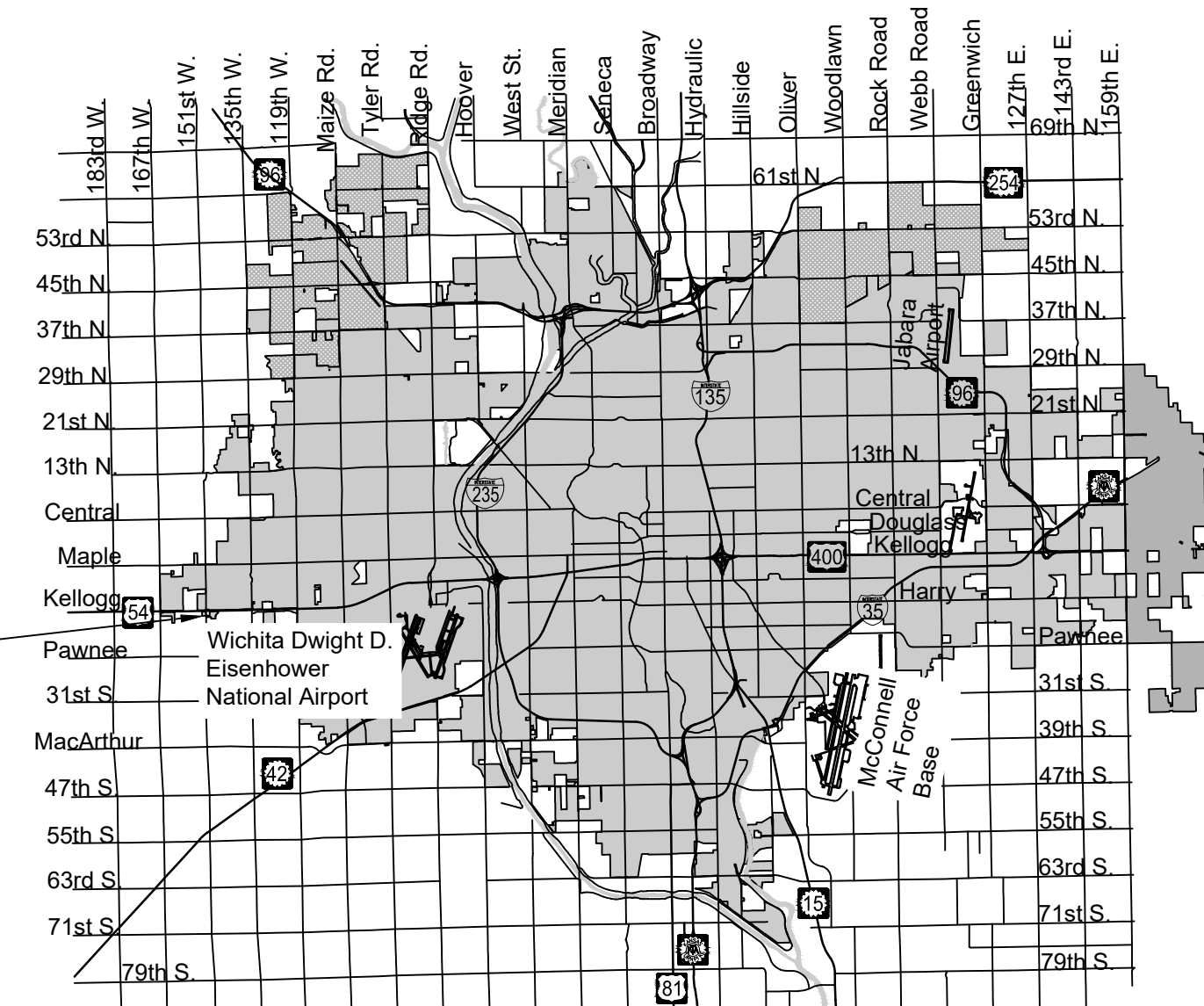


STORM WATER DRAIN #548 to serve OAK TREE ADDITION CITY OF WICHITA, KANSAS

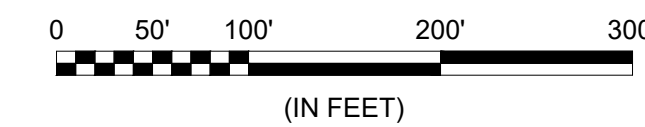
Paul Gunzelman, P.E. City Engineer
Project Number: 458-2025-085610
Org Code Number: 47316325
Munis Number: E5140

PROJECT
LOCATION



Vicinity Map

Developer: Bryan Lagaly Properties, LLC
Contact: Bryan Lagaly
Phone: 316-295-7782
Email: bryanlagaly@gmail.com



Sheet List Table

Sheet Number	Sheet Title
1	TITLE SHEET
2	GENERAL NOTES
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4	SITE GRADING (1 OF 2)
5	SITE GRADING (2 OF 2)
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7	POND WEIR DETAILS
8	HEADWALL DETAILS
9	HANDRAIL DETAILS
10	PRE-CAST SWS MH
11	MH FRAME & COVER
12	TYPE 1A CB INLET 5-10
13	GRATED DRIVEWAY INLET (SINGLE)
14	GRATED DRIVEWAY INLET (DOUBLE)
15	PAVEMENT UNDERDRAIN
16	BACKYARD INLET
17	SWS LINE 1
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23	SEEDING & TESTING NOTES
24	COORDINATE MAP - SWS
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26	EROSION CONTROL PLAN - SWS
27	BACK OF CURB PROTECTION DETAILS
28	SILT FENCE DETAILS
29	STRAW BALE DETAILS
30	STREET IMPROVEMENT PROJECTS
31	SUBDIVISION DEVELOPMENT PROCESS
32	FINAL PLAT - SWS

EARTHWORK QUANTITIES

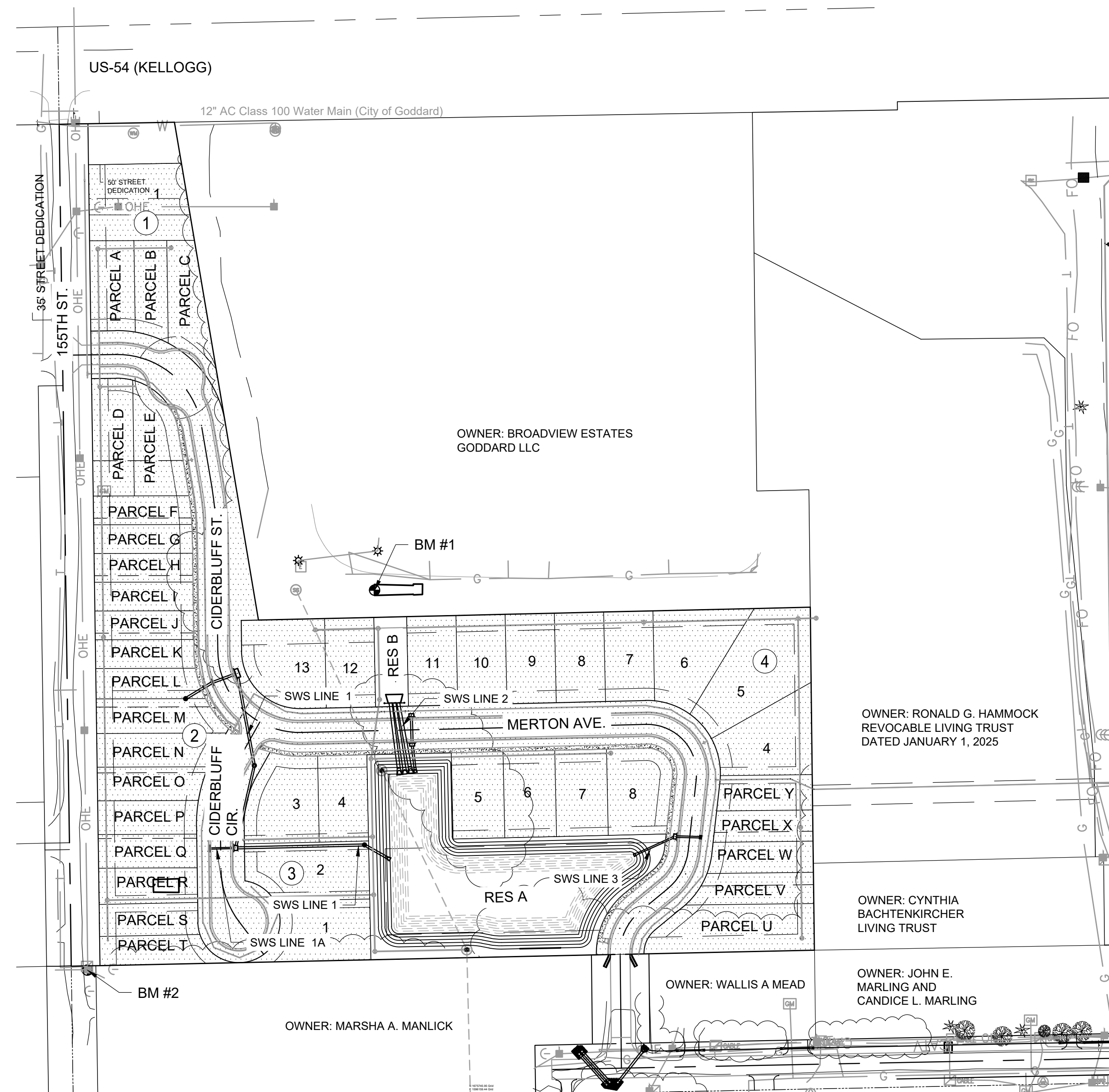
DESCRIPTION	CUT	FILL	NET
TOPSOIL REMOVAL (NON-STRUCTURAL)	8437		
MASS GRADING EXCAVATION (MINUS TOPSOIL) (STRUCTURAL)	11132		
STRUCTURAL FILL (BUILDING PADS & STREETS)		11377	
NON STRUCTURAL FILL		8060	
TOTAL SITE	19569	19437	132

TOPSOIL - STRIP AND REPLACE REQUIREMENTS FOR TOP SOIL SHALL BE 6". TOPSOIL MAY NOT BE USED AS STRUCTURAL FILL UNDER LOT PADS OR STREETS. IT MAY BE USED ANYWHERE ELSE.

Benchmarks

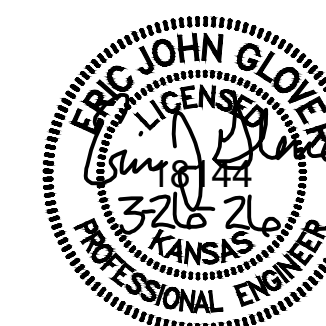
BENCHMARK #1: CHISELED SQUARE WITH PLUS CUT IN CENTER ON THE WEST END OF A STORM SHELTER, 695 FEET SOUTH OF CENTER OF US-54 HIGHWAY AND 376 FEET EAST OF 155TH STREET WEST
ELEVATION = 1401.71 (NAVD88, G18)

BENCHMARK #2: RAILROAD SPIKE IN WEST FACE OF POWER POLE, 1557 FEET SOUTH OF CENTER OF US-54 HIGHWAY AND 20 FEET EAST OF THE CENTERLINE OF 155TH STREET WEST,
ELEVATION = 1407.57 (NAVD88, G18)



IMPROVEMENT DISTRICT

NOTE: All coordinates listed are modified NAD83 Kansas State Plane Zone South unless otherwise noted. To convert listed coordinates to NAD83 Kansas State Plane Zone South coordinates multiply the northing and easting by the project scale factor of 0.99988402. Elevation datum is NAVD88 Geoid 12B unless otherwise noted.



MAR 2026

PLANS PREPARED BY



GARVER
1995 Midfield Rd.
Wichita, KS 67209
(316) 264-8008
www.GarverUSA.com
Project No. 2402708

GENERAL NOTES:

- The Contractor shall comply with all applicable safety regulations. All construction shall be completed following current City Standard Specifications and Special Provisions.
- Contractor will be required to provide notice to utility companies a minimum of seventy-two (72) hours prior to any excavation, as follows:

Kansas One-Call	687-2470
-----------------	----------

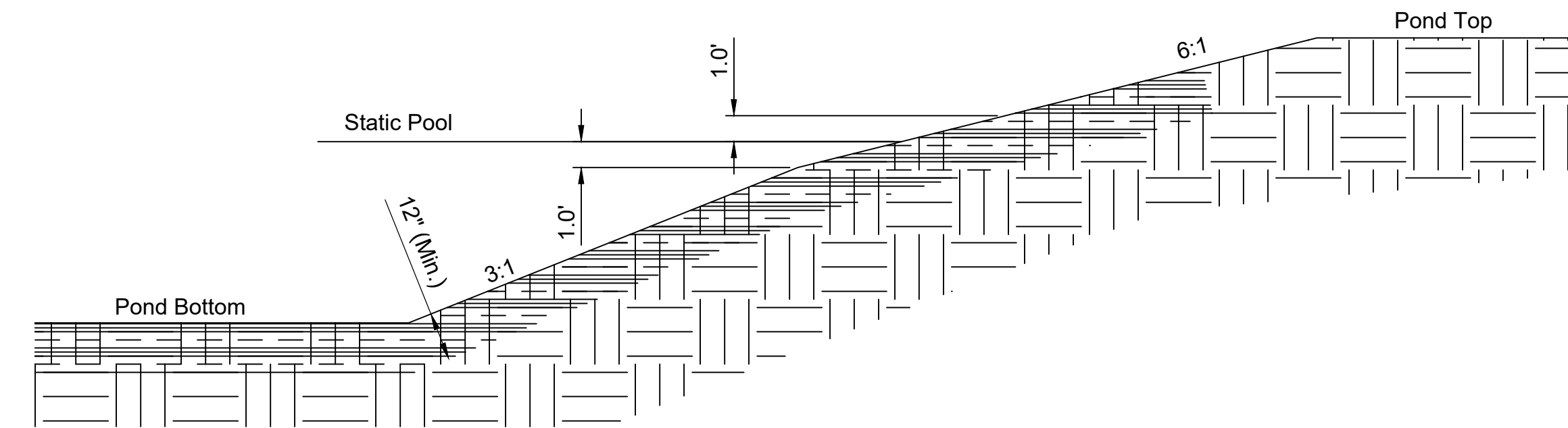
The Contractor must notify the following in case of an emergency:

AT&T	1-800-246-8464
Black Hills Energy	1-800-694-8989
City of Wichita Water & Sewer Dept.	1-316-219-8921
City of Wichita Stormwater	1-316-268-4090
City of Wichita Traffic	1-316-268-4034
Cox Communications	1-888-249-3530
Every	1-800-544-4857
Kansas Gas Service	1-888-482-4950
Southern Star Pipeline	1-888-816-3558
- Utility service lines, poles, etc. are to be adjusted as necessary by others prior to construction unless the plans specifically call for their adjustment by the Contractor or unless the plans specifically identify a utility to be adjusted by its owner during construction. Existing utilities and their location, as shown on the plans, represent the best information obtainable for design. The Contractor will be required to work around existing utilities within the right-of-way which do not conflict with proposed construction.
- Rubble from the removal of miscellaneous structures and excess excavation which is to be wasted shall be disposed of on sites to be provided by the Contractor. These sites shall be approved by the Engineer as to suitability, appearance and site location. Locations, in the opinion of the Engineer, that will leave an unsightly appearance will not be approved. All disposal sites must be approved by the Kansas Department of Health and Environment. Material either stockpiled or disposed of in a flood plain will require a Kansas State Board of Agriculture permit. Any material dumped in waters of the United States or wetlands is subject to U.S. Corps. of Engineers permitting regulations. Any material buried or stockpiled beyond approved construction limits will require additional archaeological investigations unless buried in a previously approved borrow location.
- Trees and shrubs in public right-of-way which are in direct conflict with proposed new construction shall be removed by the Contractor with the Engineer's approval. Trees and shrubs which are not in direct conflict with proposed new construction shall be saved and protected from damage.
- The Contractor shall give all property owners and/or tenants of developed property abutting the construction of this project a minimum of ten (10) days notice prior to start of construction.
- The Contractor shall be responsible for preserving property irons. The Contractor will be required to re-establish any property irons which are damaged or destroyed by his construction operations. Such irons shall be re-established by a licensed land surveyor in accordance with state laws.
- A traffic control plan must be submitted and approved by the City Traffic Engineer, at traffic@wichita.gov before construction can begin. The Contractor shall be responsible for all traffic control measures to facilitate construction. All construction zone markings and signage shall conform to the latest version of the Manual on Uniform Traffic Control Devices (MUTCD) as published by the US Dept. of Transportation, Federal Highway Administration. All costs associated with construction markings and signage shall be the Contractors responsibly.
- All elevations shown are NAVD 88.
- All areas disturbed during construction shall be reseeded with temporary seeding see sheet 23 for details.
- The Contractor shall protect from damage and support existing utilities through construction as approved by the utility owner and the Engineer at the contractors expense.
- Contractor shall limit the extent of trench openings overnight and weekends to less than 50 feet.
- No shrink or swell factors have been applied to the earthwork quantities shown on this project. All earthwork quantities are based on raw surface volume comparisons.
- All rubble, trash, dirt piles, and other debris on the site at the time of construction shall be the contractors responsibility to remove. Cost of disposal to be subsidiary to the bid item for "Site Clearing".
- Contractor to provide density testing for lots. One test per lot per 1' of fill. See sheet 6 for testing elevations. Cost for testing shall be subsidiary to the bid item for "Contractor Testing".

POND NOTES

The pond bottom and sides to the static pool) are to be lined with clay to a minimum depth of 1 foot, moisture conditioned and compacted to a minimum of 97% of standard proctor density (ASTM D-698) from minus 3 to plus 3 percent of optimum moisture content. Pond liner shall be clay soil with a minimum P.I. value of 30 or must be approved by a geotechnical engineer. On-site soils should be suitable for pond liner.

Over-excavation for the Pond Liner is incidental to the bid item 'Pond Liner, L.S.' Earthwork for the Pond Liner and associated over-excavation is not included in the Earthwork Estimate found on Sheet 1 of these Plans. Existing Soil above Static Pool to be Scarified, Moisture-Treated, and Re-Compacted is to be bid as 'Manipulation of Existing Soil, L.S.', and is not included in the Earthwork Estimate found on Sheet 1 of these Plans.



CLAY LINER INSTALLATION DETAIL



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1995 Midfield Road
Wichita, KS 67209
(316) 264-8008

REV.	DATE	DESCRIPTION	BY



CITY OF WICHITA
WICHITA, KANSAS

OAK TREE
STORM SEWER

GENERAL NOTES

JOB NO.: 2402708
DATE: MAR 2026
DESIGNED BY: EJJ
DRAWN BY: DWS

BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

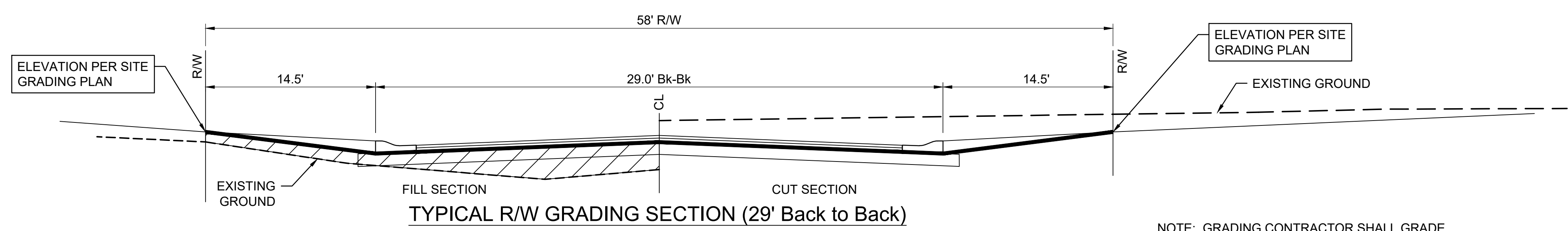
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Last plotted by: Sawyer, Drake W. Plot Style: --- Plot Scale: 1:2,5849 Plot Date: 3/26/2026 10:11 AM Plotter used: None



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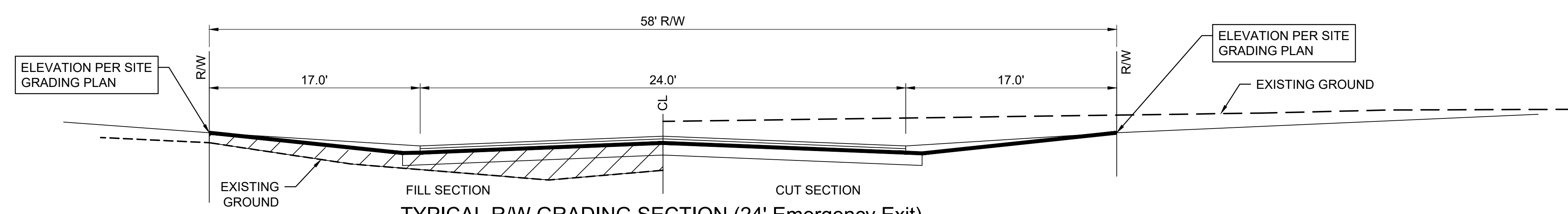
1995 Midfield Road
 Wichita, KS 67209
 (316) 264-8008



TYPICAL R/W GRADING SECTION (29' Back to Back)
 Roadway Section A-A

COMPACTED FILL. ALL FILL PLACED WITHIN THIS AREA SHALL BE COMPACTED TO 95% STANDARD DENSITY. COST SUBSIDIARY TO BID ITEM FOR COMPACTED FILL (95%).

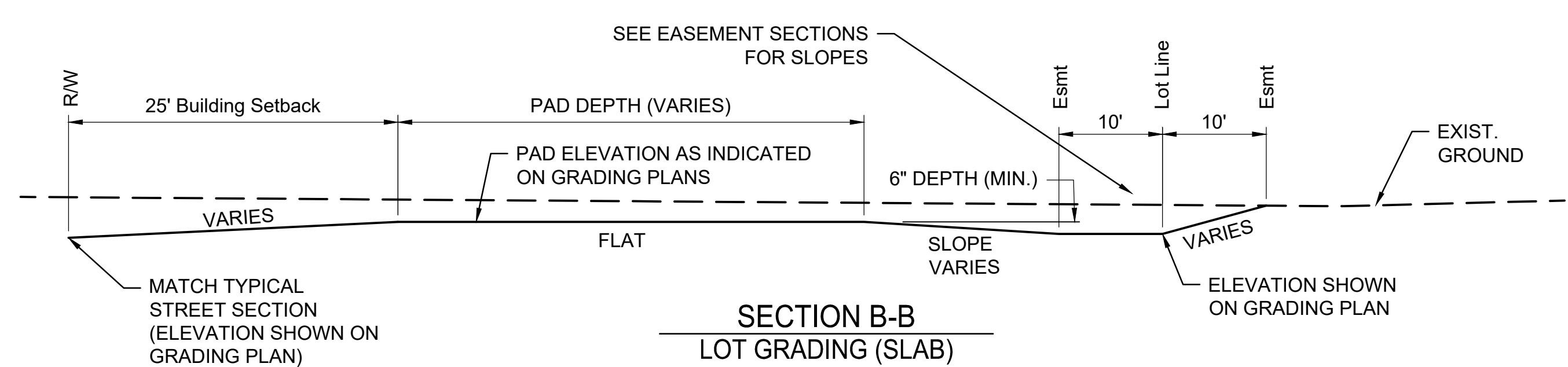
NOTE: GRADING CONTRACTOR SHALL GRADE TO THE SECTION SHOWN (+/-0.1') AND SHALL PERFORM COMPACTION AS INDICATED.



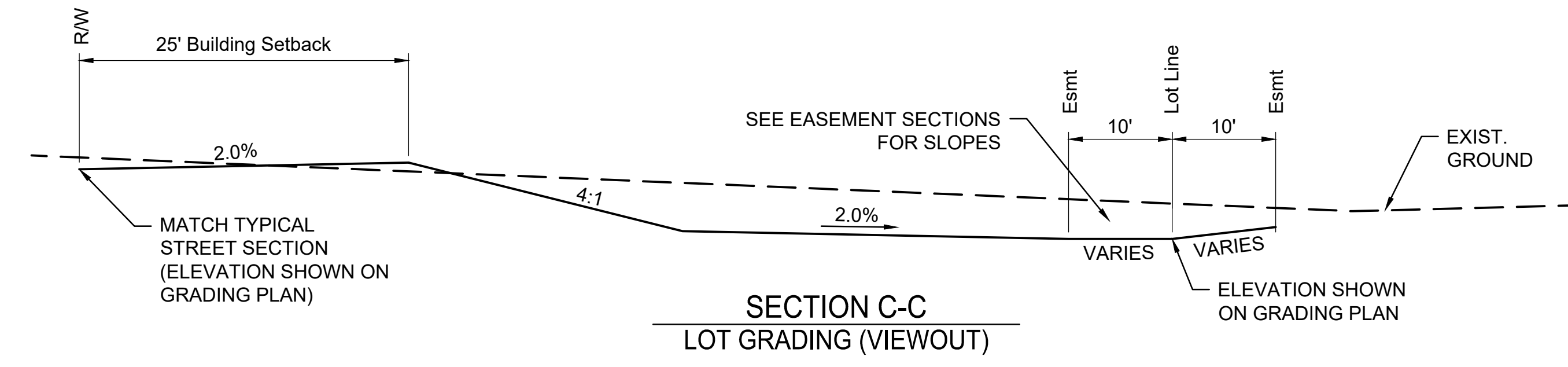
TYPICAL R/W GRADING SECTION (24' Emergency Exit)
 Roadway Section G-G

COMPACTED FILL. ALL FILL PLACED WITHIN THIS AREA SHALL BE COMPACTED TO 95% STANDARD DENSITY. COST SUBSIDIARY TO BID ITEM FOR COMPACTED FILL (95%).

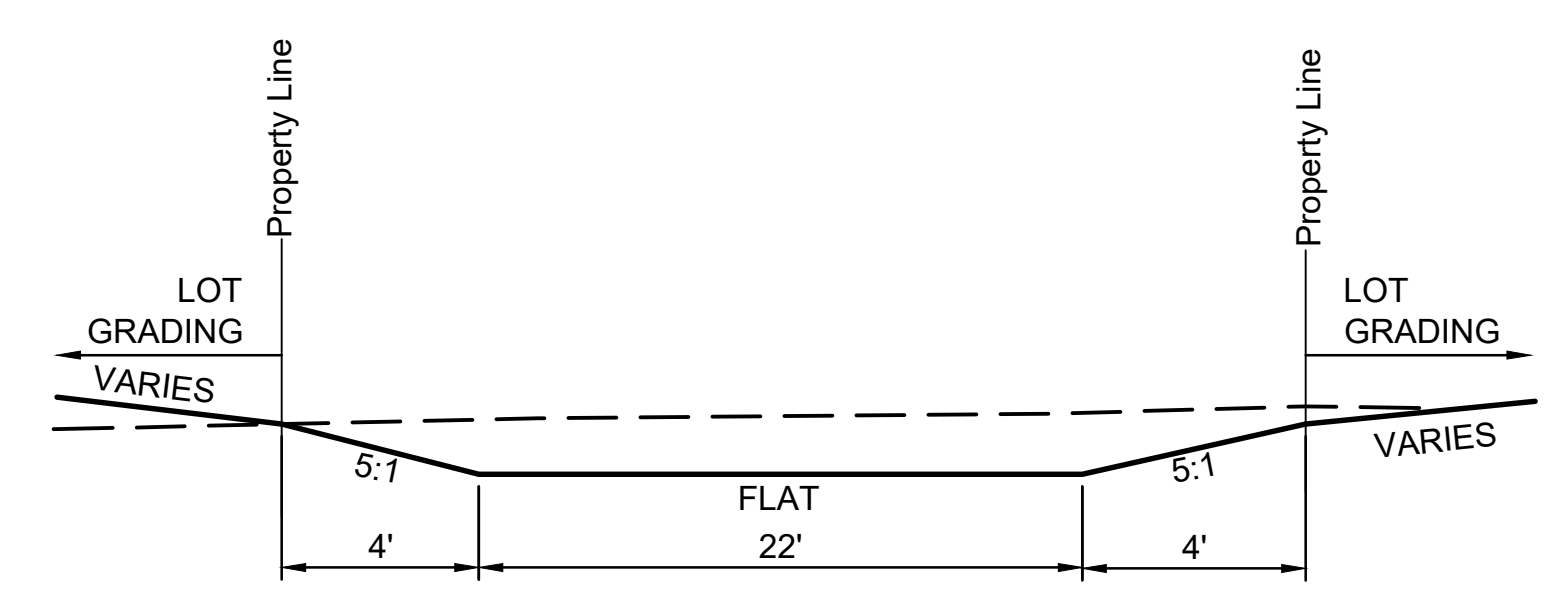
NOTE: GRADING CONTRACTOR SHALL GRADE TO THE SECTION SHOWN (+/-0.1') AND SHALL PERFORM COMPACTION AS INDICATED.



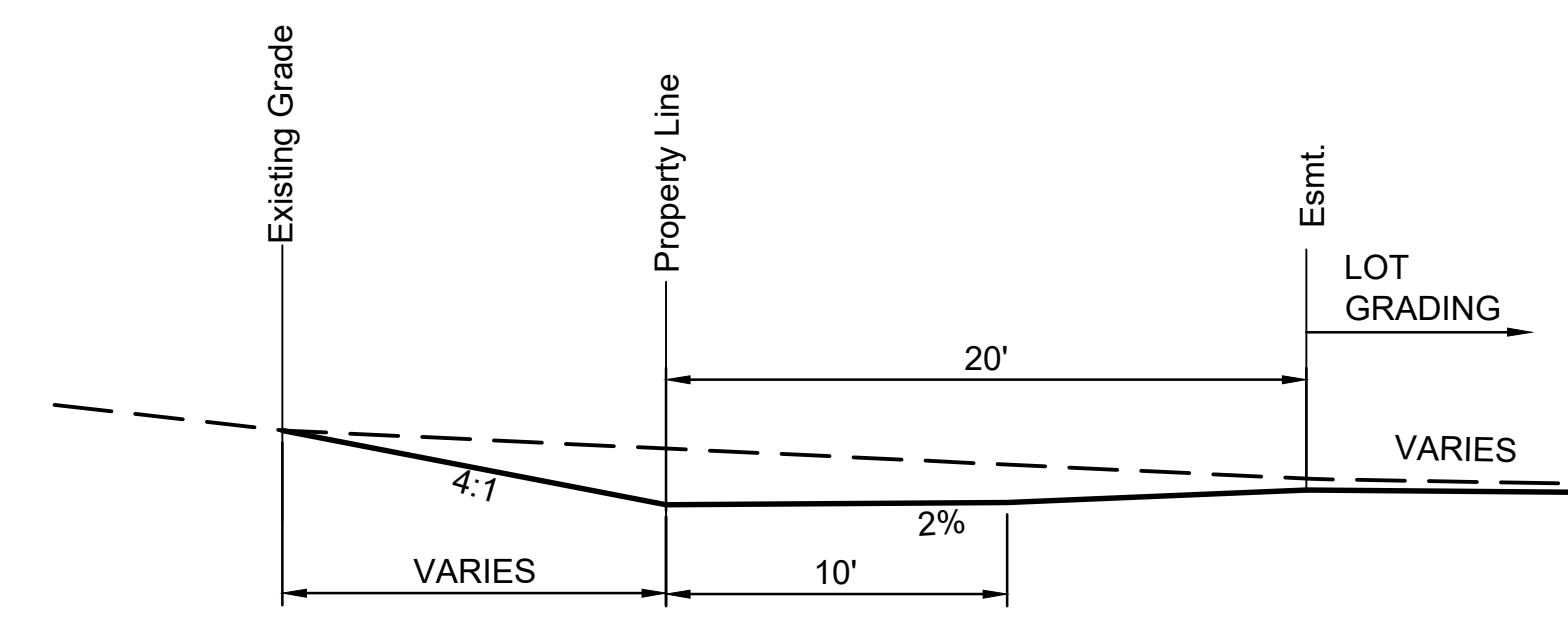
SECTION B-B
 LOT GRADING (SLAB)



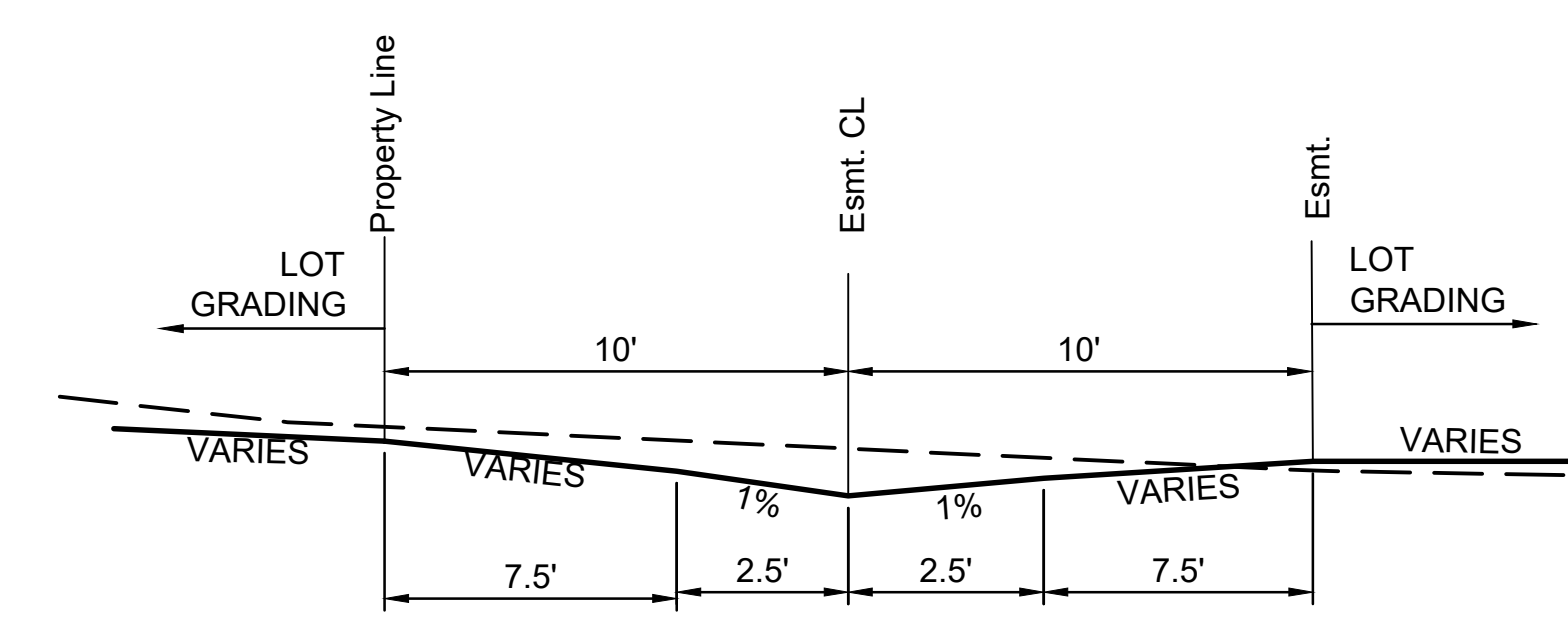
SECTION C-C
 LOT GRADING (VIEWOUT)



SECTION D-D
 RESERVE B GRADING



SECTION E-E
 EASEMENT GRADING



SECTION F-F
 EASEMENT GRADING

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REV.	DATE	DESCRIPTION	BY

CITY OF WICHITA
 WICHITA, KANSAS
 OAK TREE
 STORM SEWER

TYPICAL SECTIONS

JOB NO.: 2402708
 DATE: MAR 2026
 DESIGNED BY: EJG
 DRAWN BY: DWS

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DRAWING NUMBER

SHEET NUMBER **3** OF **32**



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 (316) 264-8008

REV.	DATE	DESCRIPTION	BY



CITY OF WICHITA
 WICHITA, KANSAS
 OAK TREE STORM SEWER

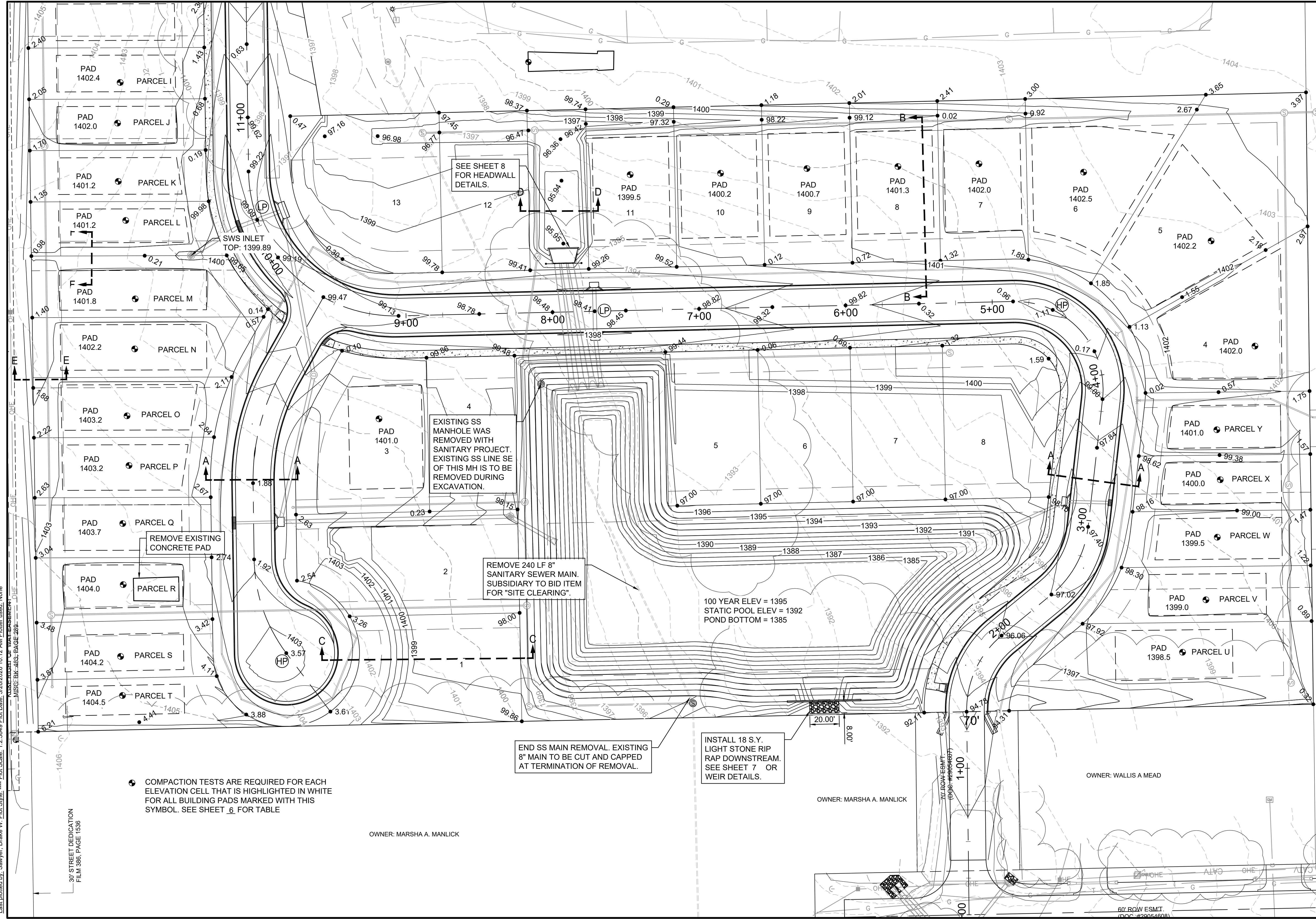
SITE GRADING (1 OF 2)

JOB NO.: 2402708
 DATE: MAR 2026
 DESIGNED BY: EJJ
 DRAWN BY: DWS

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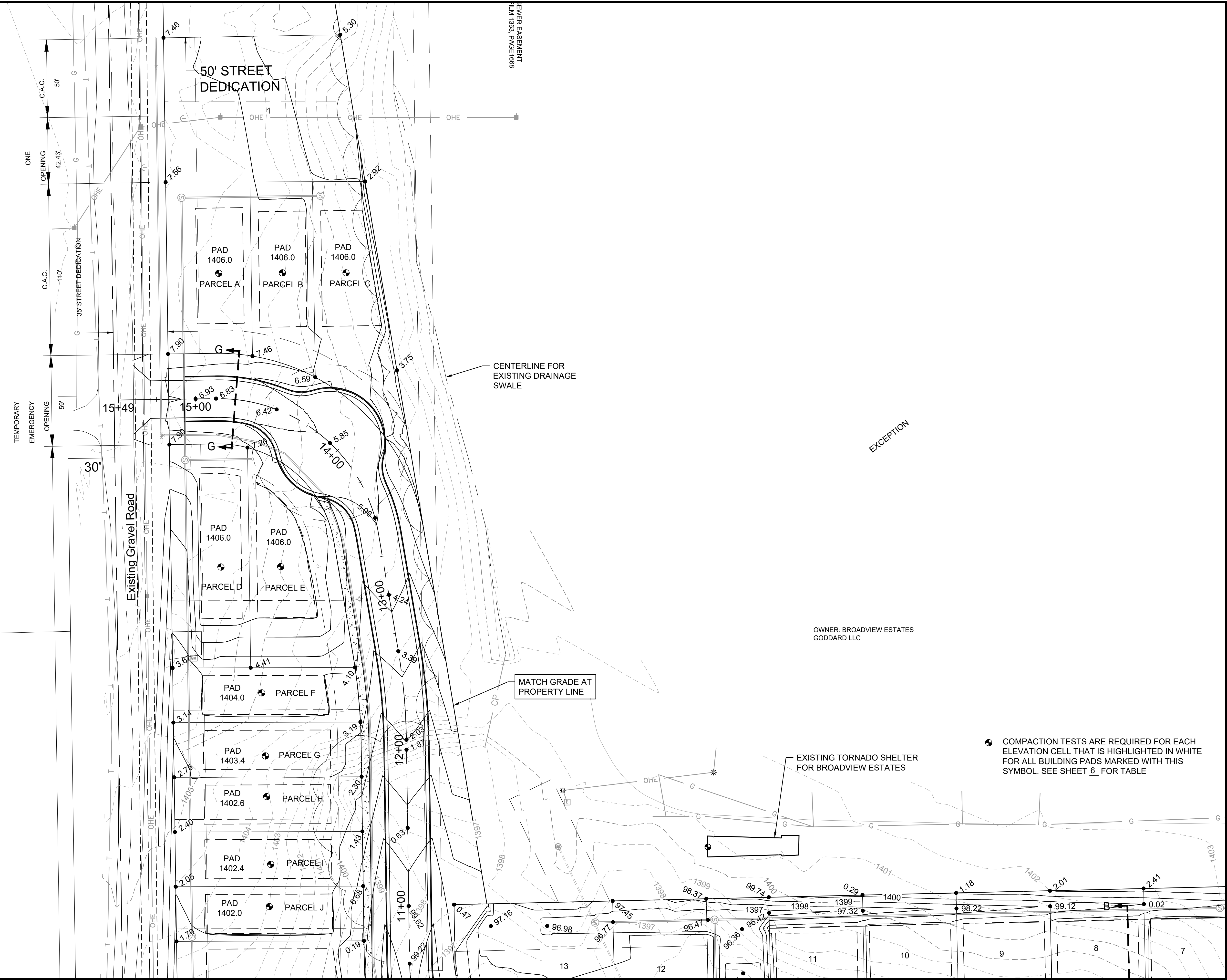


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 Last plotted by: Sawyer, Drake W. Plot Style: --- Plot Scale: 1:2,584.9 Plot Date: 3/26/2026 10:12 AM Plotter used: None

OWNER: RICK L STOCKETT
AND DIANAL STOCKETT

ALO KENNELS,
CORPORATION



SEWER EASEMENT
FILM 1393, PAGE 1688

CENTERLINE FOR
EXISTING DRAINAGE
SWALE

MATCH GRADE AT
PROPERTY LINE

OWNER: BROADVIEW ESTATES
GODDARD LLC

EXISTING TORNADO SHELTER
FOR BROADVIEW ESTATES

● COMPACTION TESTS ARE REQUIRED FOR EACH
ELEVATION CELL THAT IS HIGHLIGHTED IN WHITE
FOR ALL BUILDING PADS MARKED WITH THIS
SYMBOL. SEE SHEET 6 FOR TABLE

EXCEPTION

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(316) 264-8008

REV.	DATE	DESCRIPTION	BY



CITY OF WICHITA
WICHITA, KANSAS

OAK TREE
STORM SEWER

**SITE GRADING
(2 OF 2)**

JOB NO.: 2402708
 DATE: MAR 2026
 DESIGNED BY: EJG
 DRAWN BY: DWS

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SHEET
NUMBER **5** OF **32**



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		Oak Tree Addition																			
LOT	BLOCK	NORTHING	EASTING	EXIST. ELEV.	PROP. PAD		1394	1395	1396	1397	1398	1399	1400	1401	1402	1403	1404	1405	1406	1407	
PARCEL A	BLOCK 1	1676733.02	1595712.9	1406.40	1407.50																
PARCEL B	BLOCK 1	1676732.04	1595751.86	1405.43	1407.20																
PARCEL C	BLOCK 1	1676733.99	1595793.26	1403.93	1405.90																
PARCEL D	BLOCK 2	1676554.33	1595712.41	1405.64	1407.20																
PARCEL E	BLOCK 2	1676548.36	1595751.85	1404.43	1407.00																
PARCEL F	BLOCK 2	1676459.28	1595741.13	1403.82	1404.00																
PARCEL G	BLOCK 2	1676423.12	1595740.15	1400.96	1403.40																
PARCEL H	BLOCK 2	1676388.07	1595739.66	1400.33	1402.60																
PARCEL I	BLOCK 2	1676354.38	1595742.59	1400.10	1402.40																
PARCEL J	BLOCK 2	1676319.35	1595742.17	1400.60	1402.00																
PARCEL K	BLOCK 2	1676285.83	1595741.23	1399.78	1401.20																
PARCEL L	BLOCK 2	1676250.79	1595742.7	1399.28	1401.20																
PARCEL M	BLOCK 2	1676206.49	1595745.13	1398.94	1401.00																
PARCEL N	BLOCK 2	1676166.08	1595746.59	1399.72	1402.20																
PARCEL O	BLOCK 2	1676128.12	1595745.62	1400.96	1403.20																
PARCEL P	BLOCK 2	1676086.25	1595745.62	1402.00	1403.20																
PARCEL Q	BLOCK 2	1676045.85	1595746.1	1403.23	1403.70																
PARCEL R	BLOCK 2	1676003.01	1595745.13	1403.82	1404.00																
PARCEL S	BLOCK 2	1675958.61	1595748.52	1404.15	1404.20																
PARCEL T	BLOCK 2	1675926.48	1595748.52	1404.55	1404.50																
LOT 3	BLOCK 3	1676108.54	1595926.28	1397.90	1401.00																
PARCEL U	BLOCK 4	1675956.98	1596467.59	1396.91	1398.50																
PARCEL V	BLOCK 4	1675996.08	1596481.67	1398.23	1399.00																
PARCEL W	BLOCK 4	1676039.88	1596487.93	1399.21	1399.50																
PARCEL X	BLOCK 4	1676078.98	1596495.75	1400.15	1400.00																
PARCEL Y	BLOCK 4	1676114.17	1596497.32	1401.12	1401.00																
LOT 4	BLOCK 4	1676169.69	1596504.36	1401.85	1402.00																
LOT 5	BLOCK 4	1676241.64	1596473.06	1402.61	1402.20																
LOT 6	BLOCK 4	1676271.36	1596401.08	1402.37	1402.50																
LOT 7	BLOCK 4	1676277.61	1596332.23	1399.81	1402.00																
LOT 8	BLOCK 4	1676277.61	1596270.42	1398.51	1401.30																
LOT 9	BLOCK 4	1676277.61	1596213.3	1397.53	1400.70																
LOT 10	BLOCK 4	1676272.14	1596151.49	1395.74	1400.20																
LOT 11	BLOCK 4	1676272.92	1596095.94	1395.23	1399.50																

COMPACTON TESTS ARE REQUIRED FOR EACH ELEVATION CELL THAT IS HIGHLIGHTED IN WHITE FOR ALL BUILDING PADS MARKED WITH THIS SYMBOL.

BY			
DESCRIPTION			
DATE			
REV.			



CITY OF WICHITA
 WICHITA, KANSAS
 OAK TREE STORM SEWER

COMPACTED FILL TESTING TABLE

JOB NO.: 2402708
 DATE: MAR 2026
 DESIGNED BY: EJJ
 DRAWN BY: DWS

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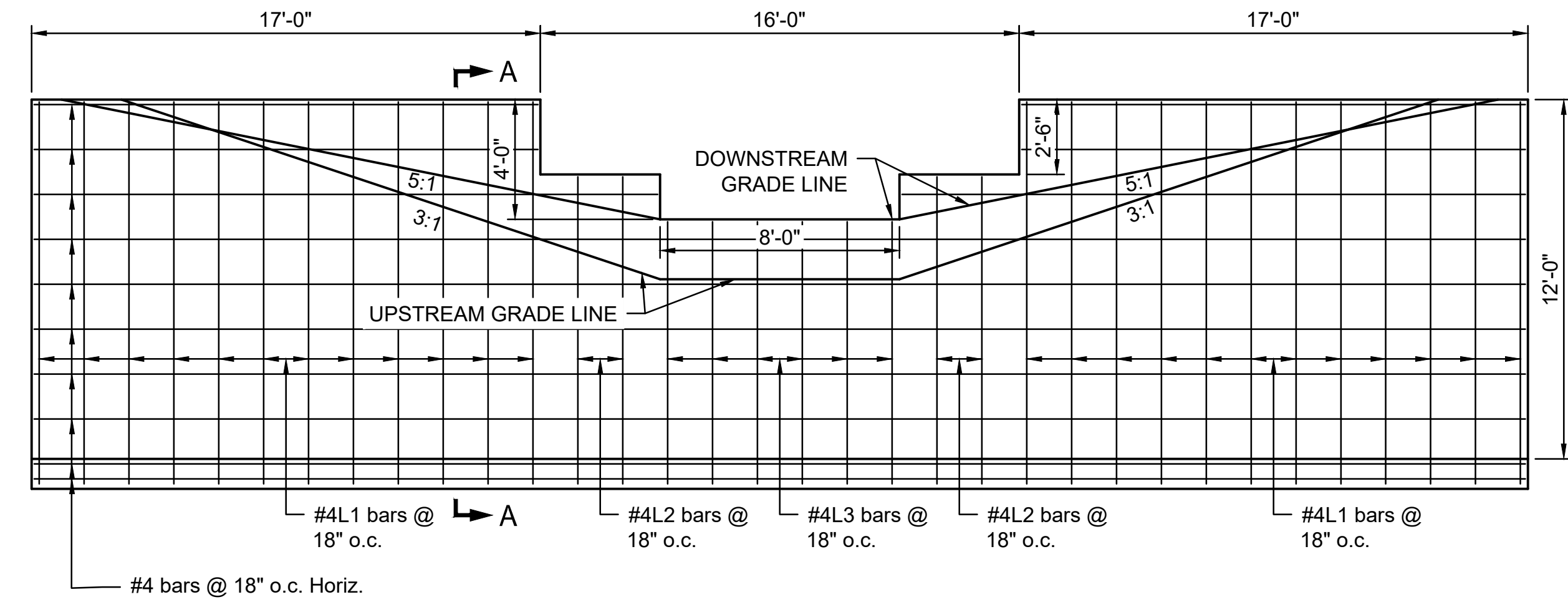
SHEET NUMBER 6 OF 32

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 Last plotted by: Sawyer, Drake W. Plot Style: --- Plot Scale: 1:2,584.9 Plot Date: 3/26/2026 10:12 AM Plotter used: None



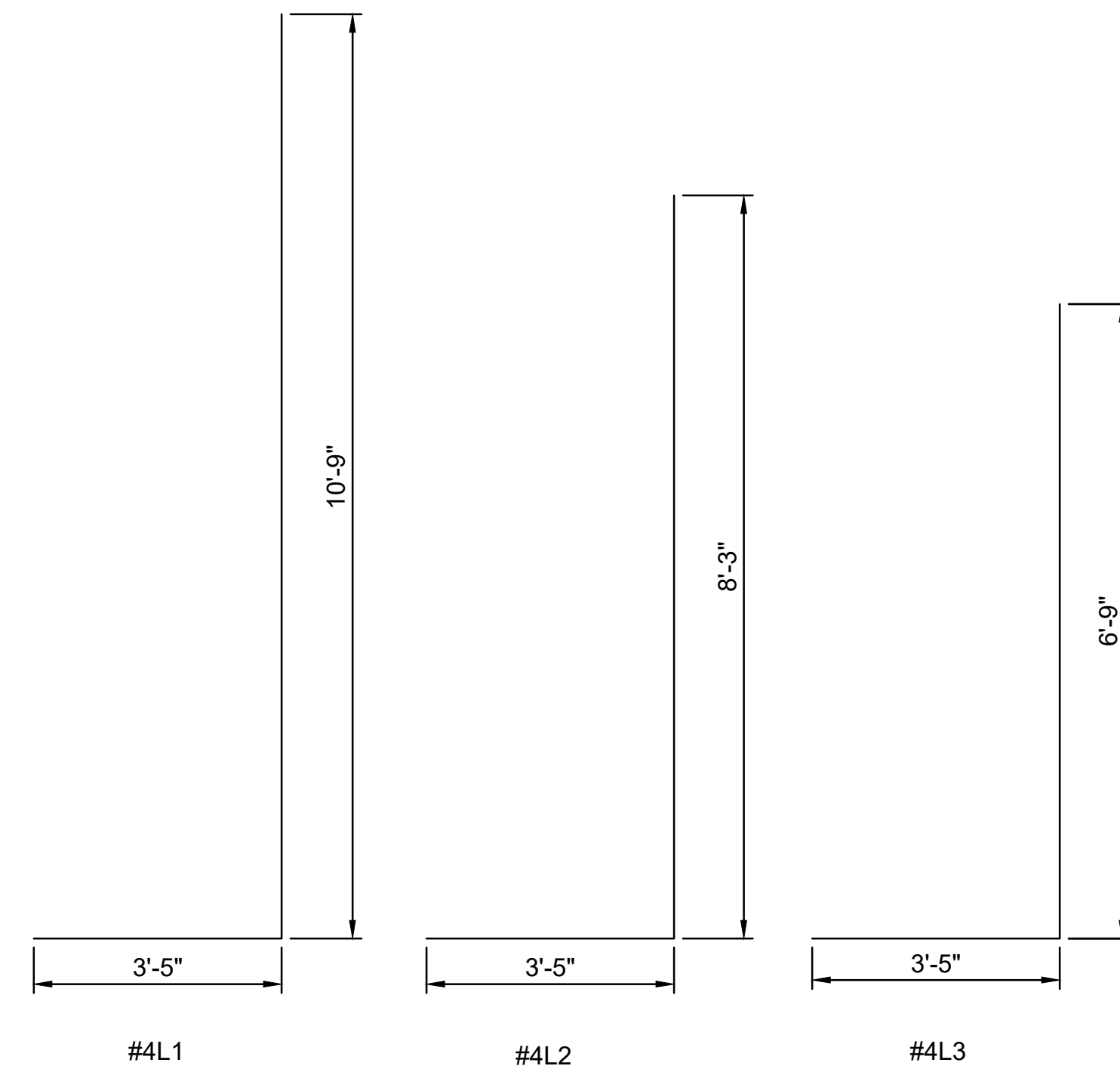
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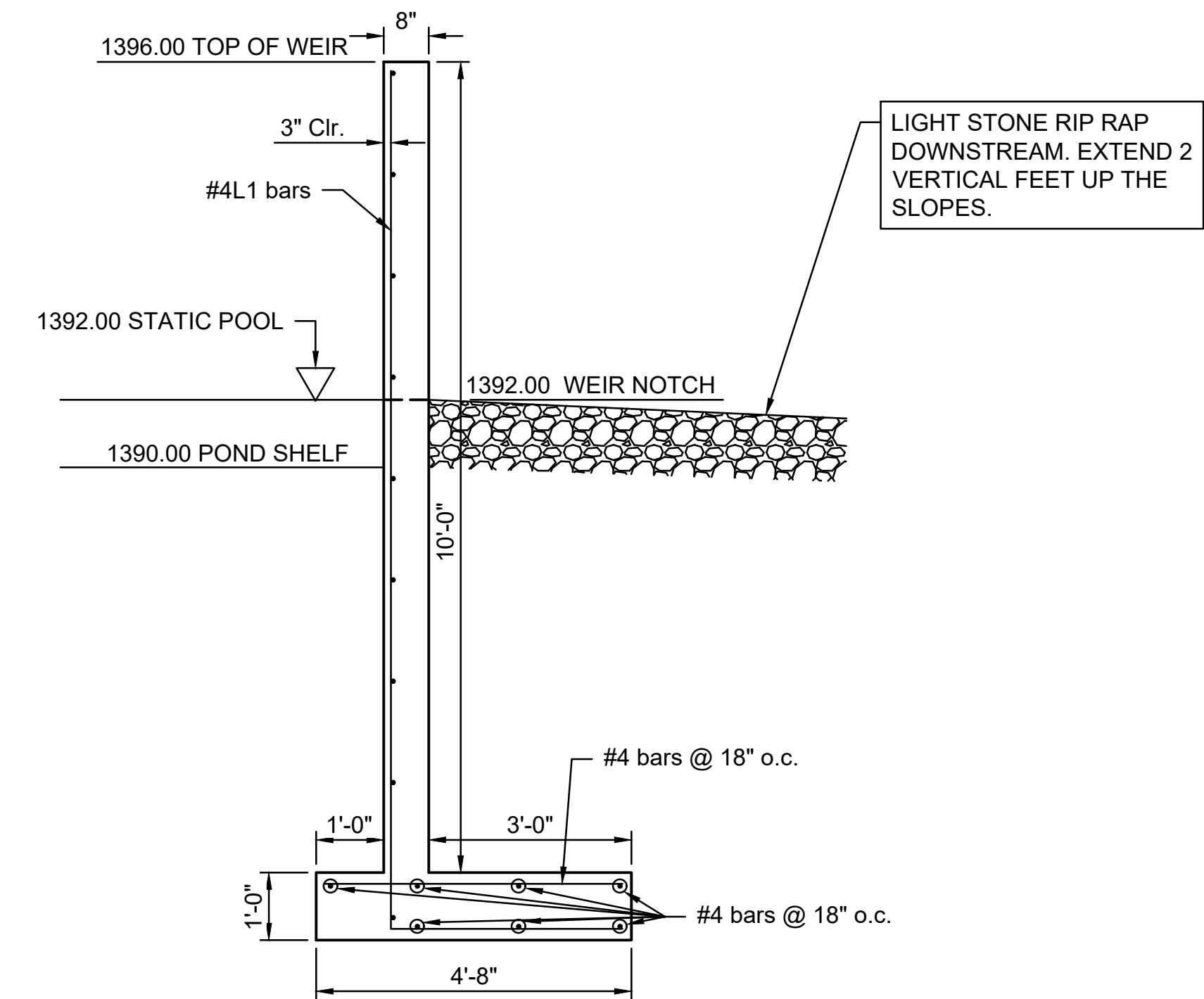


POND WEIR WALL DETAIL

Air Entrained Concrete: $f'_c = 4,000$ psi @ 28 days
 Reinforcing: $F_y = 60,000$ psi
 Cover over Reinforcing is 2" unless otherwise indicated.



BAR BENDING



WEIR WALL SECTION A-A

REV.	DATE	DESCRIPTION	BY



CITY OF WICHITA
 WICHITA, KANSAS
 OAK TREE
 STORM SEWER

JOB NO.:
 DATE:
 DESIGNED BY:
 DRAWN BY:

BAR IS ONE INCH ON ORIGINAL DRAWING
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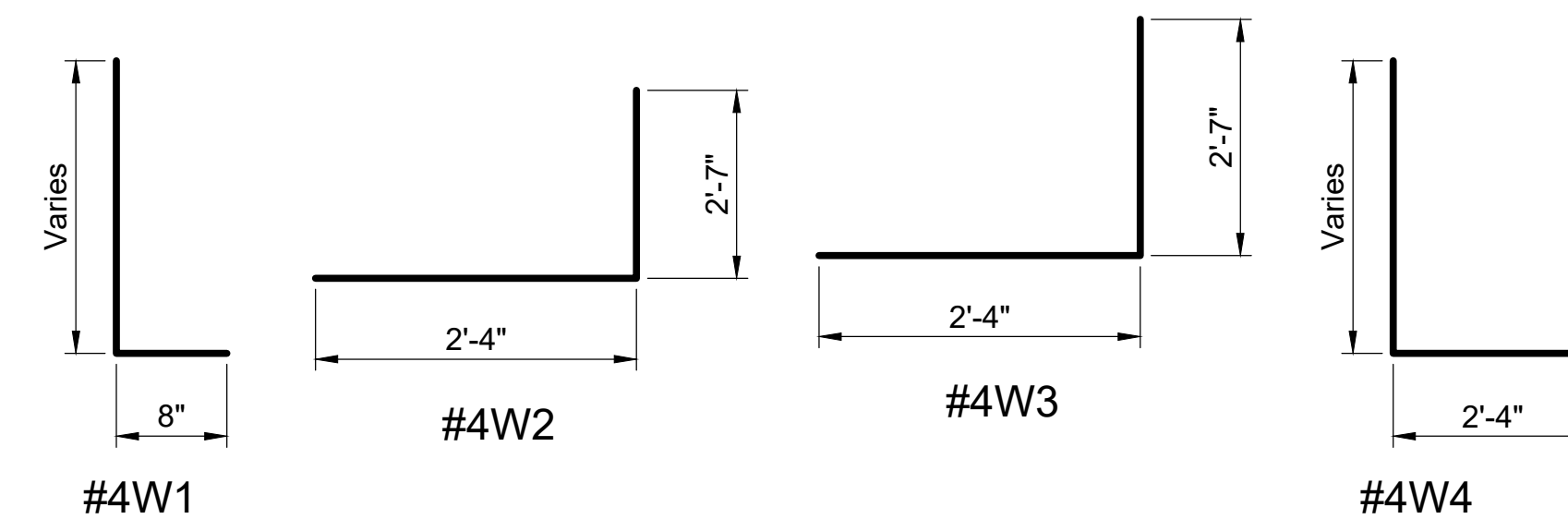
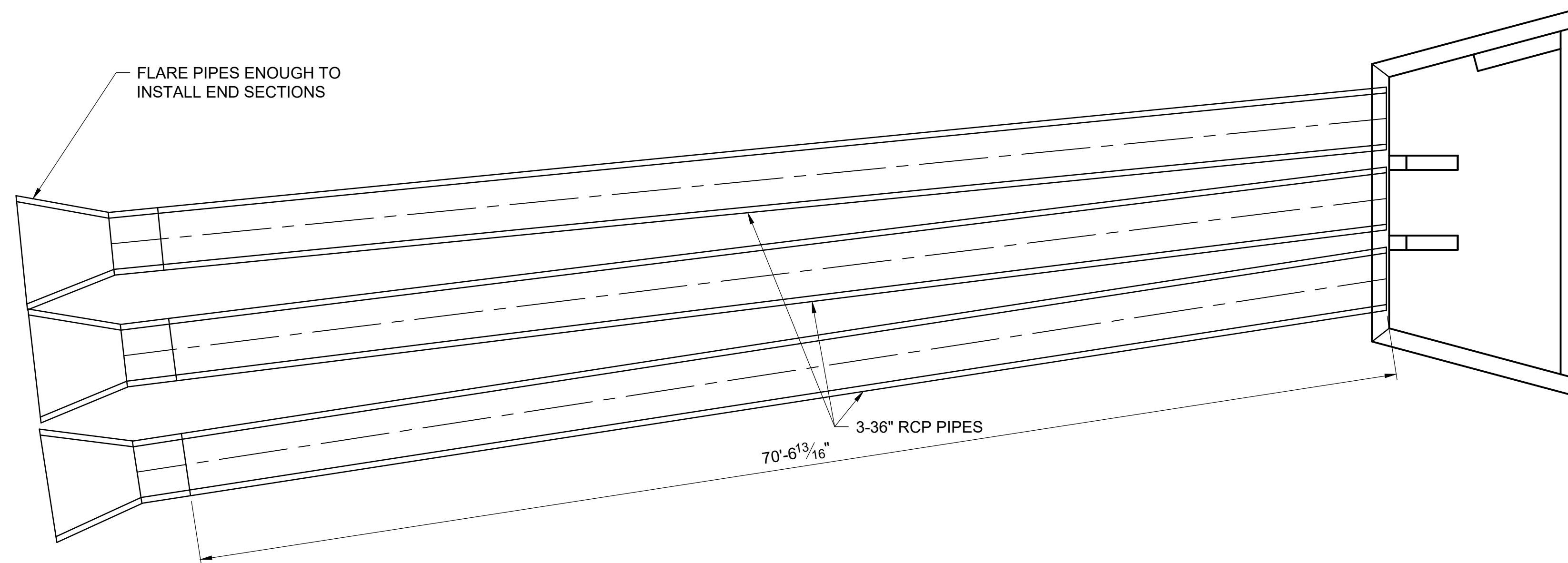
DRAWING NUMBER

SHEET NUMBER

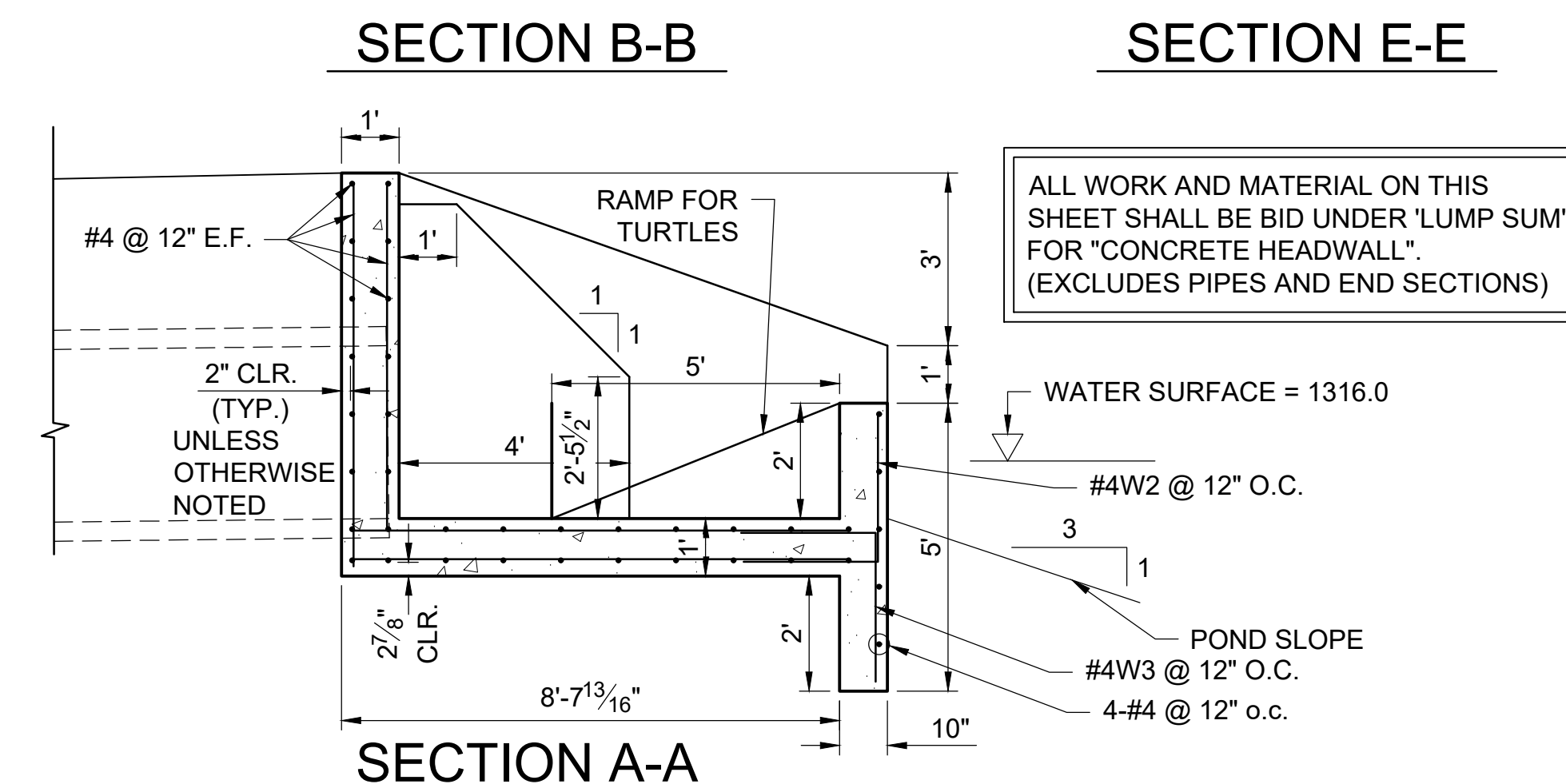
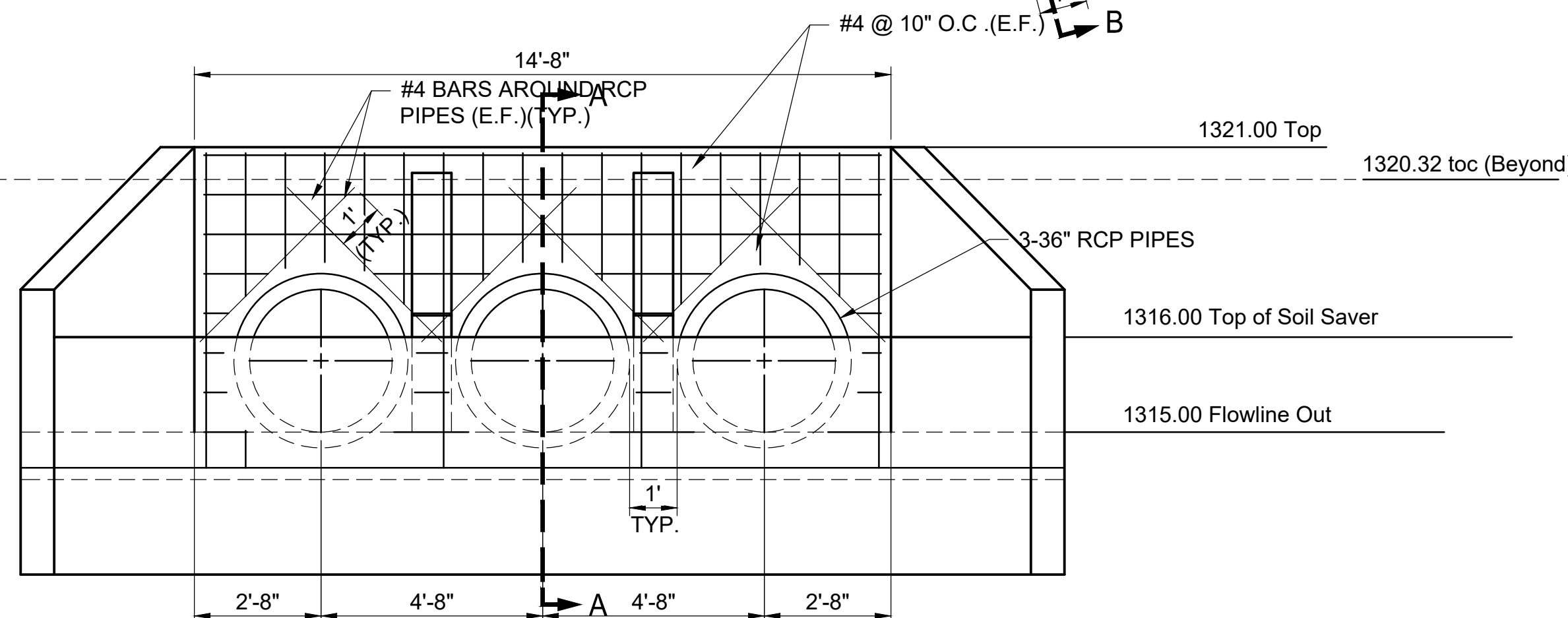
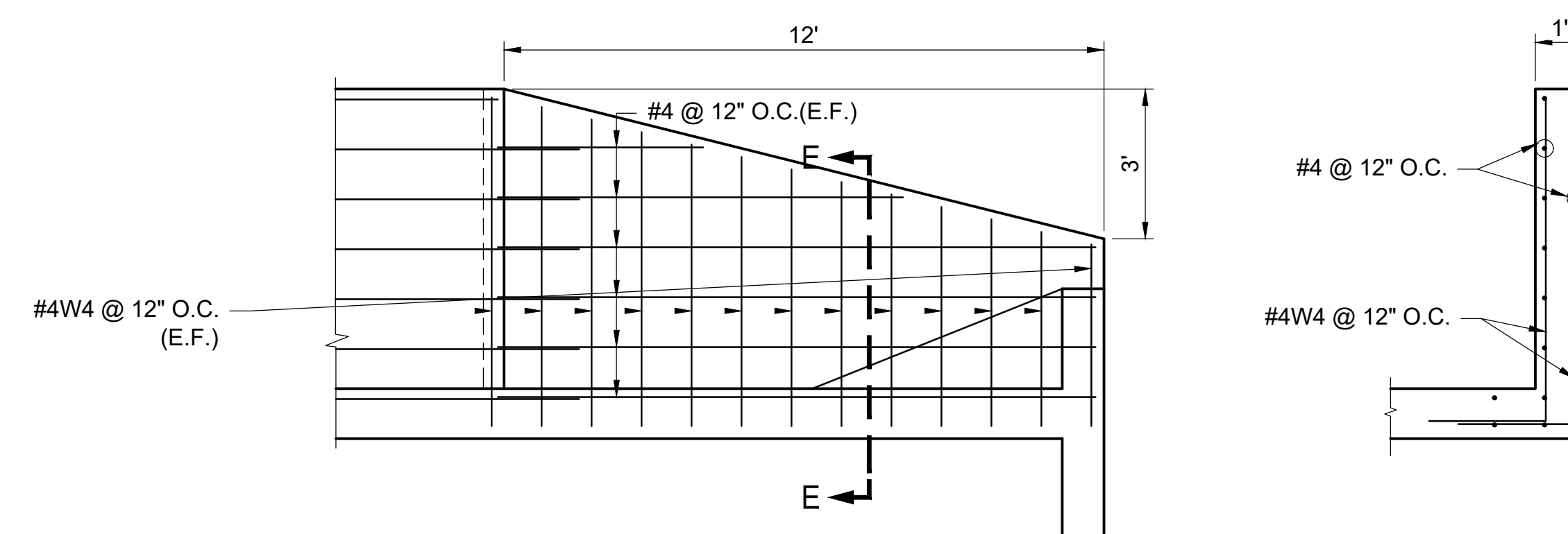
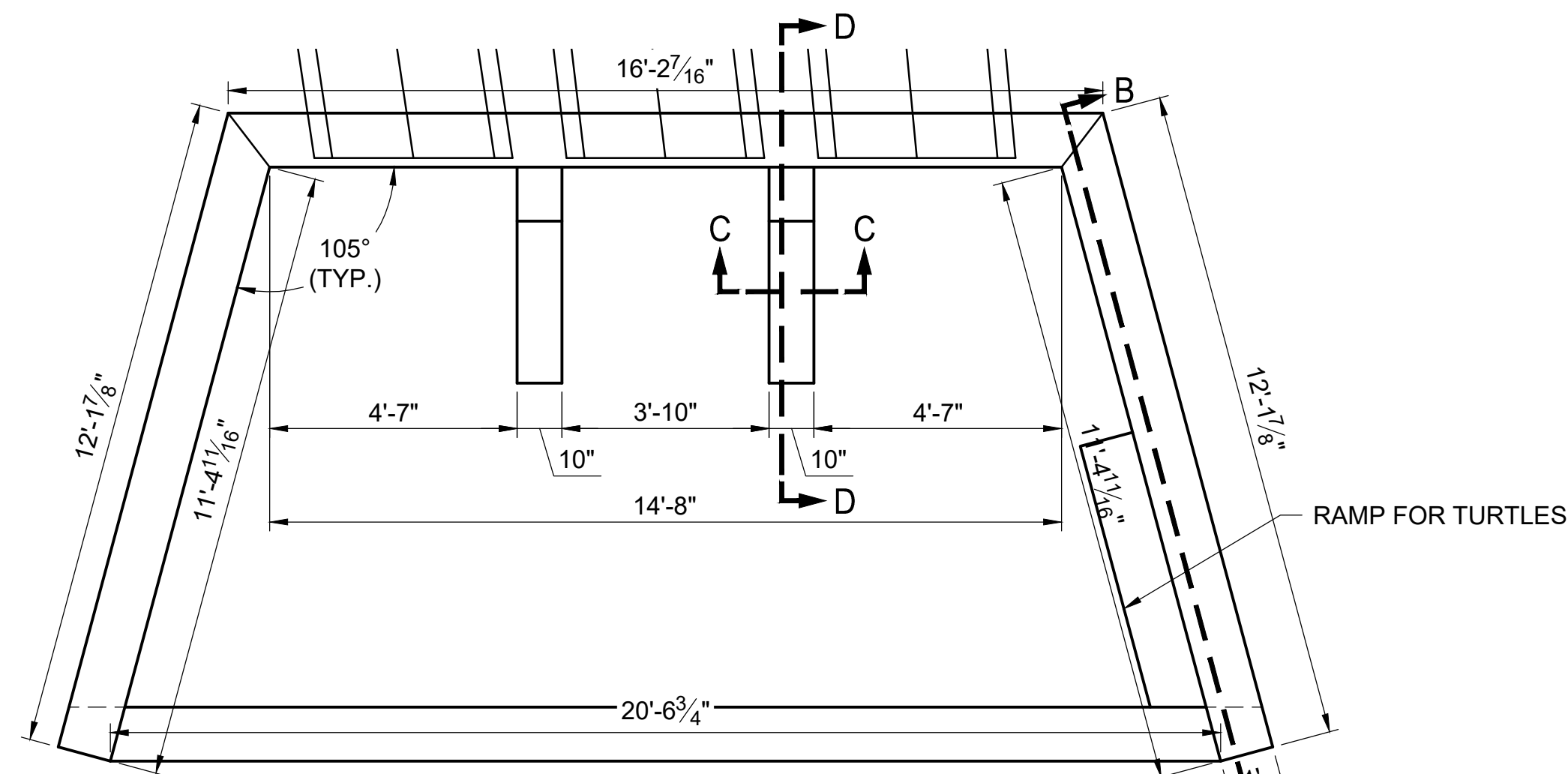
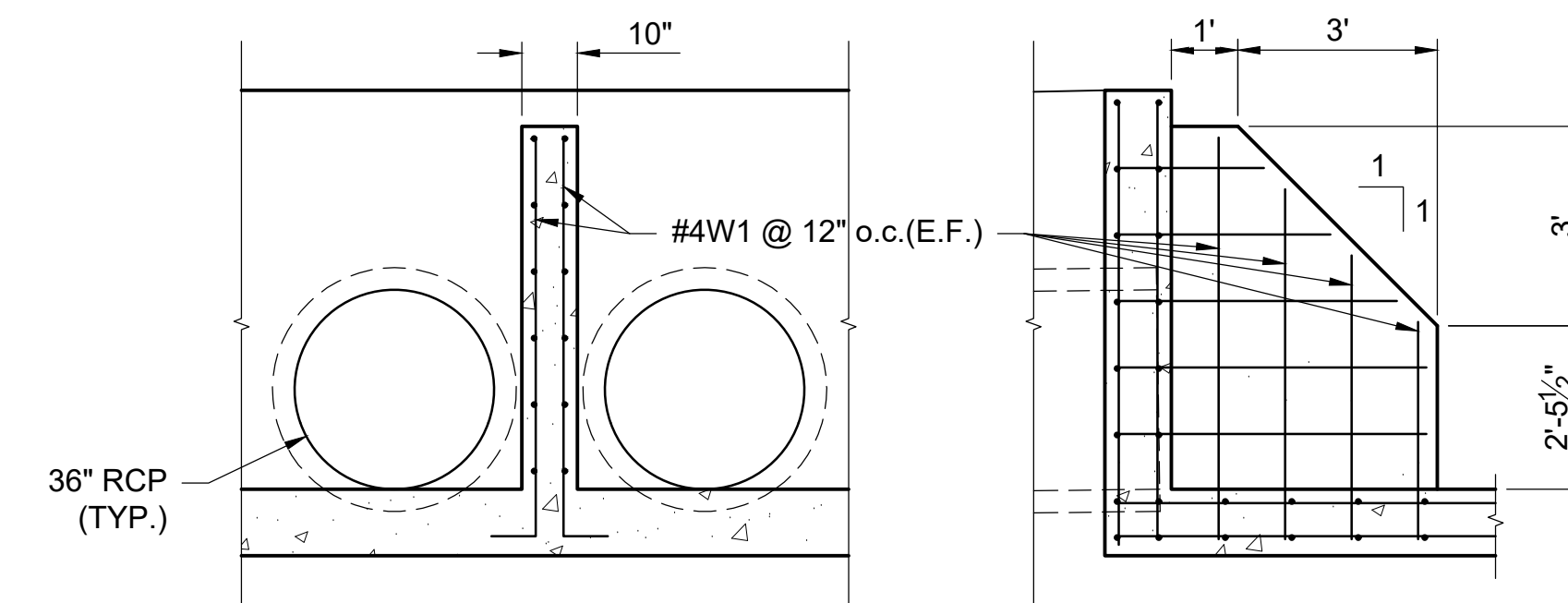


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1995 Midfield Road
 Wichita, KS 67209
 (316) 264-8008



UNIT STRESSES:
 Material Properties
 Concrete (Grade 4.0) $f_c = 4\text{ksi}$
 Reinforcing Steel (Grade 60) $F_y = 60\text{ksi}$



REV.	DATE	DESCRIPTION	BY



HEADWALL DETAILS

JOB NO.: 2402708
 DATE: MAR 2026
 DESIGNED BY: EJG
 DRAWN BY: DWS

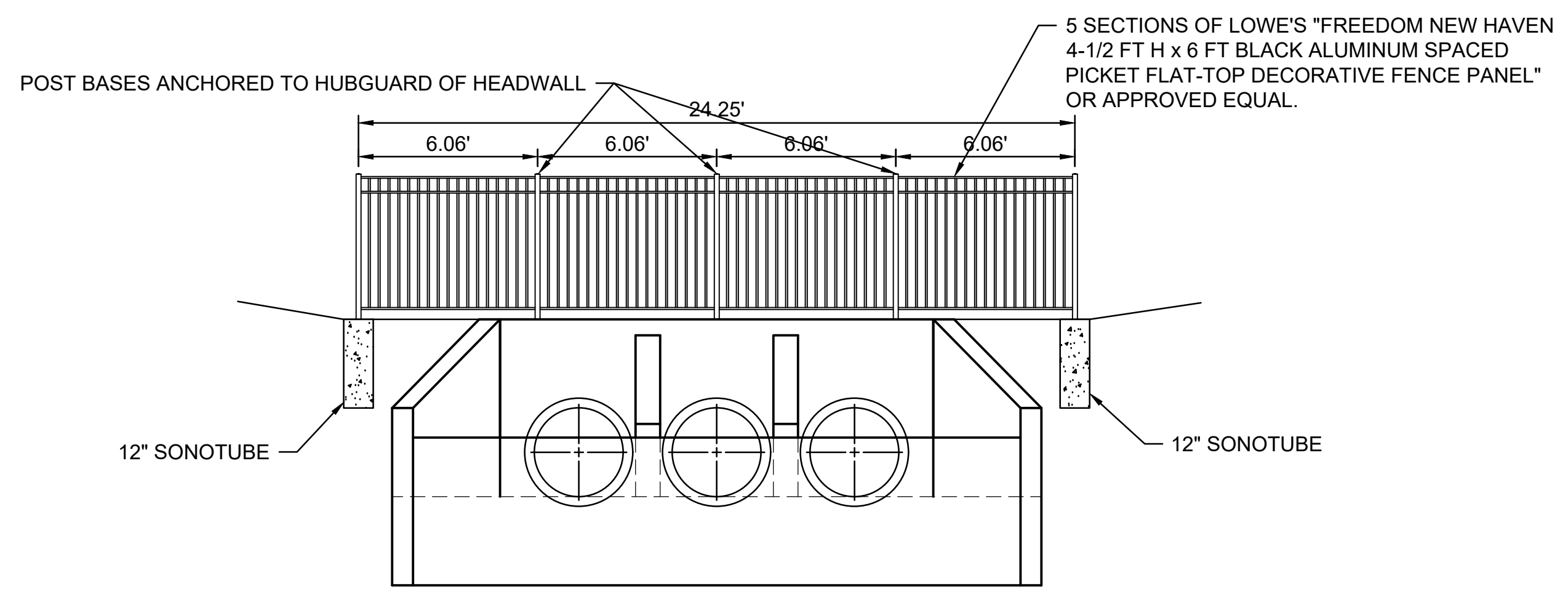
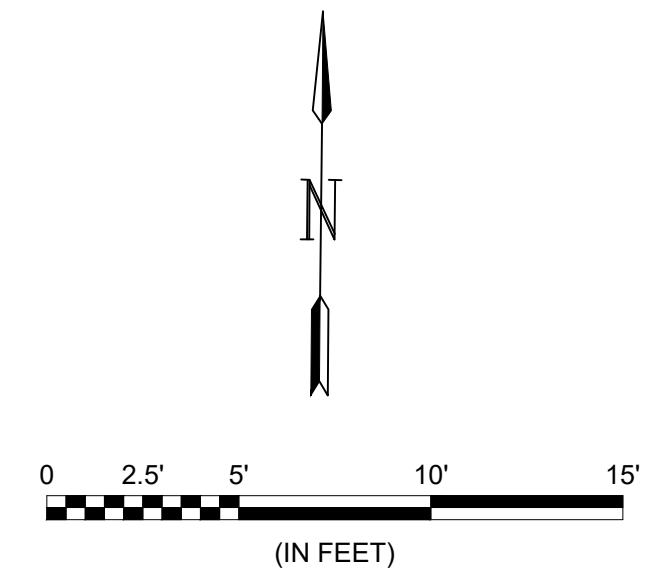
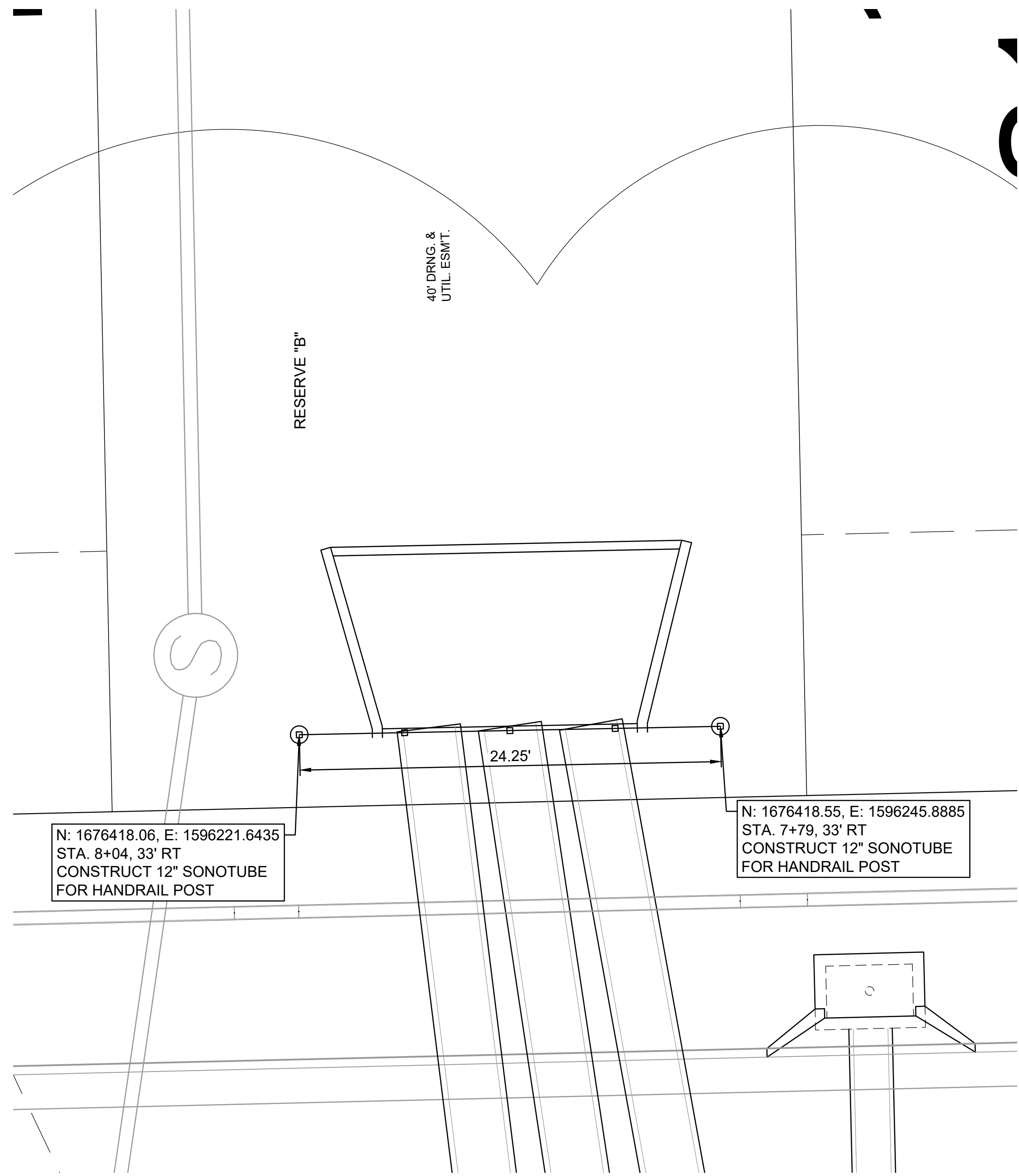
BAR IS ONE INCH ON ORIGINAL DRAWING
 IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

DRAWING NUMBER



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1995 Midfield Road
 Wichita, KS 67209
 (316) 264-8008



WEST SIDE HANDRAIL ELEVATION
 (LOOKING SOUTH)

File: L:\2024\141-2402708 - Oak Tree Engineering\Drawings\STORMHANDRAIL DETAILS.dwg Last Save: 1/30/2026 6:59 AM Last saved by: DWSawyer
 Last plotted by: Sawyer, Drake W. Plot Style: --- Plot Scale: 1:2,584.9 Plot Date: 3/26/2026 10:12 AM Plotter Used: None

REV.	DATE	DESCRIPTION	BY



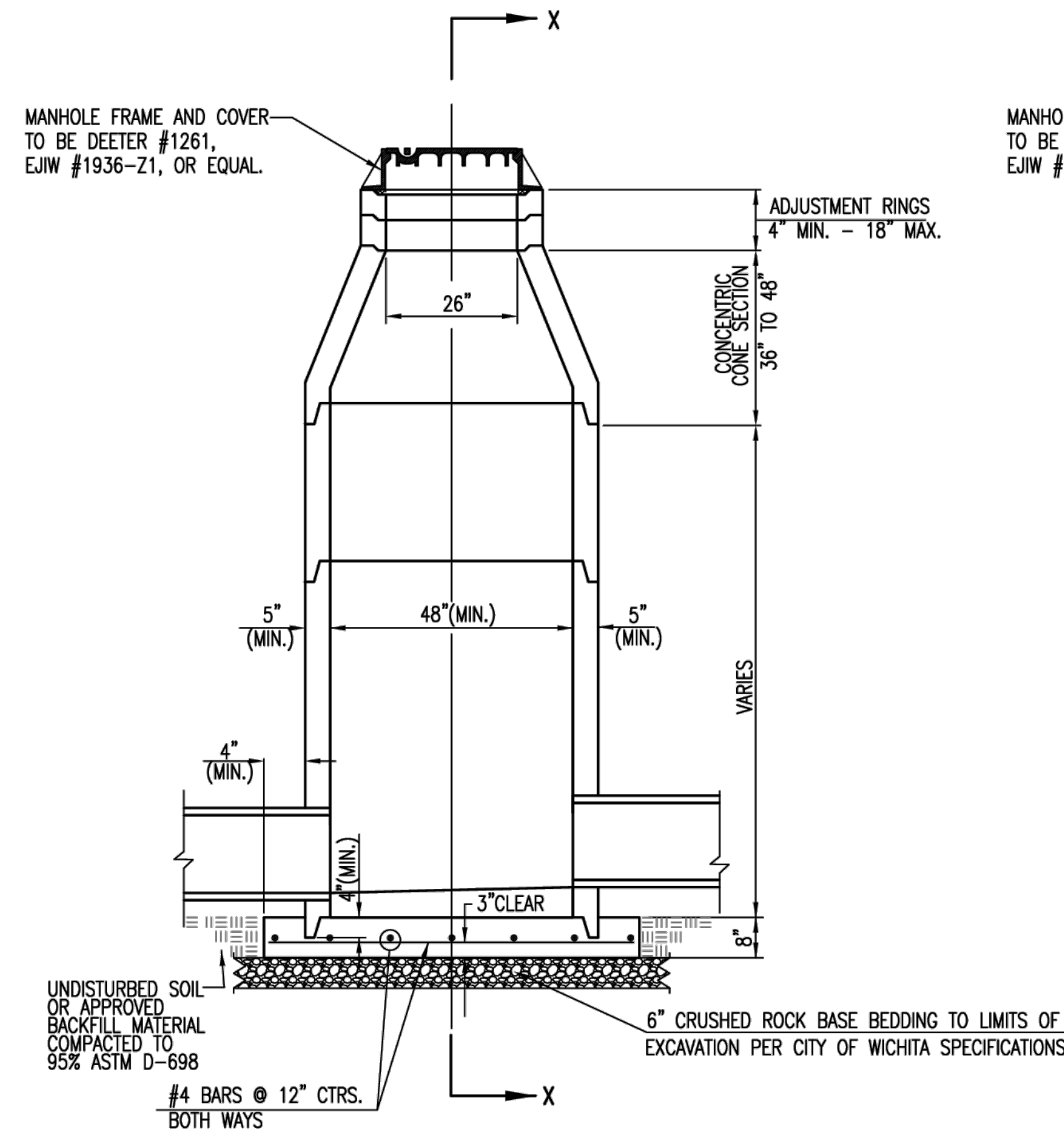
CITY OF WICHITA
 WICHITA, KANSAS
 OAK TREE
 STORM SEWER

**HANDRAIL
 DETAILS**

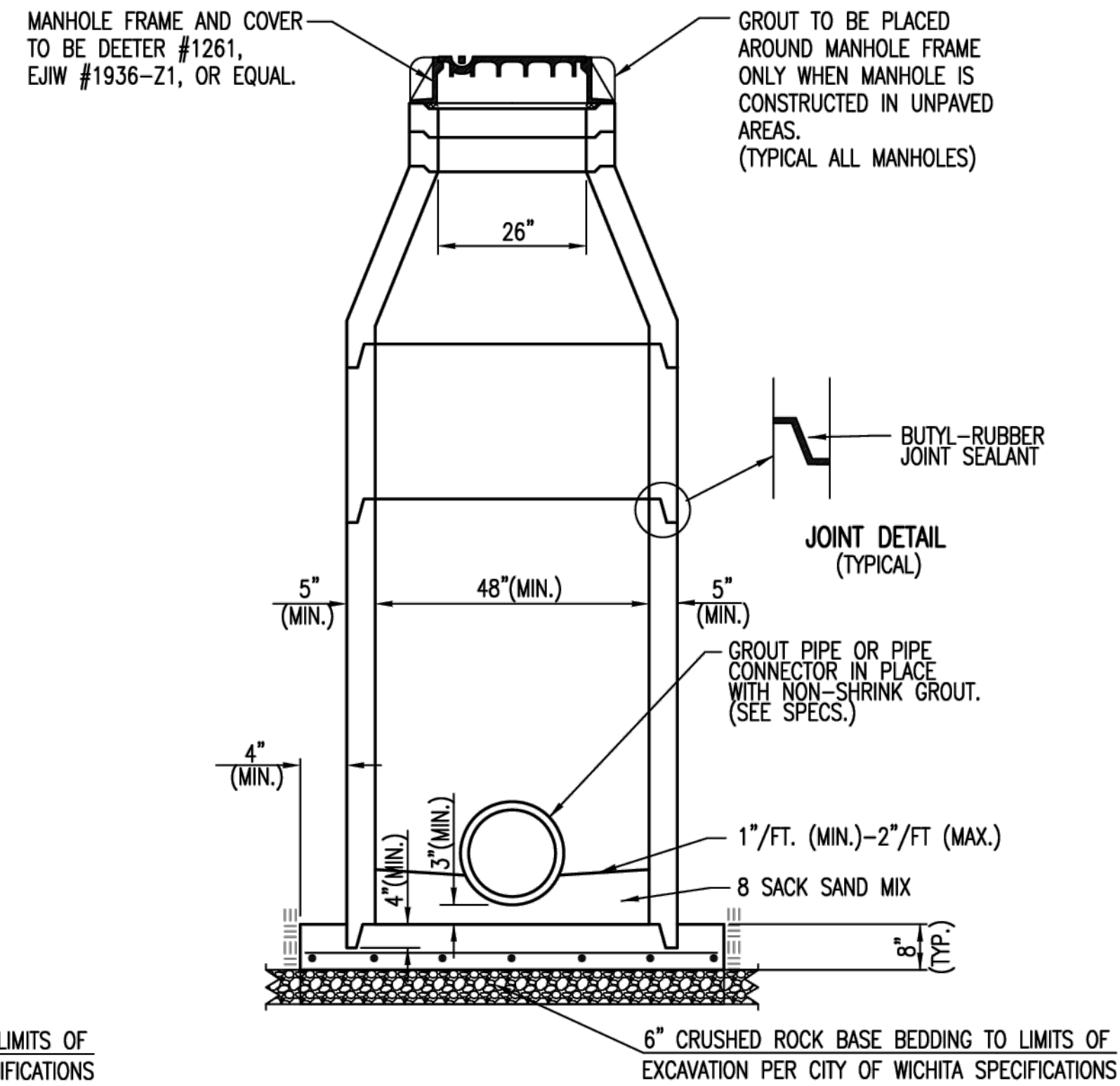
JOB NO.: 2402708
 DATE: MAR 2026
 DESIGNED BY: EJJ
 DRAWN BY: DWS

BAR IS ONE INCH ON ORIGINAL DRAWING
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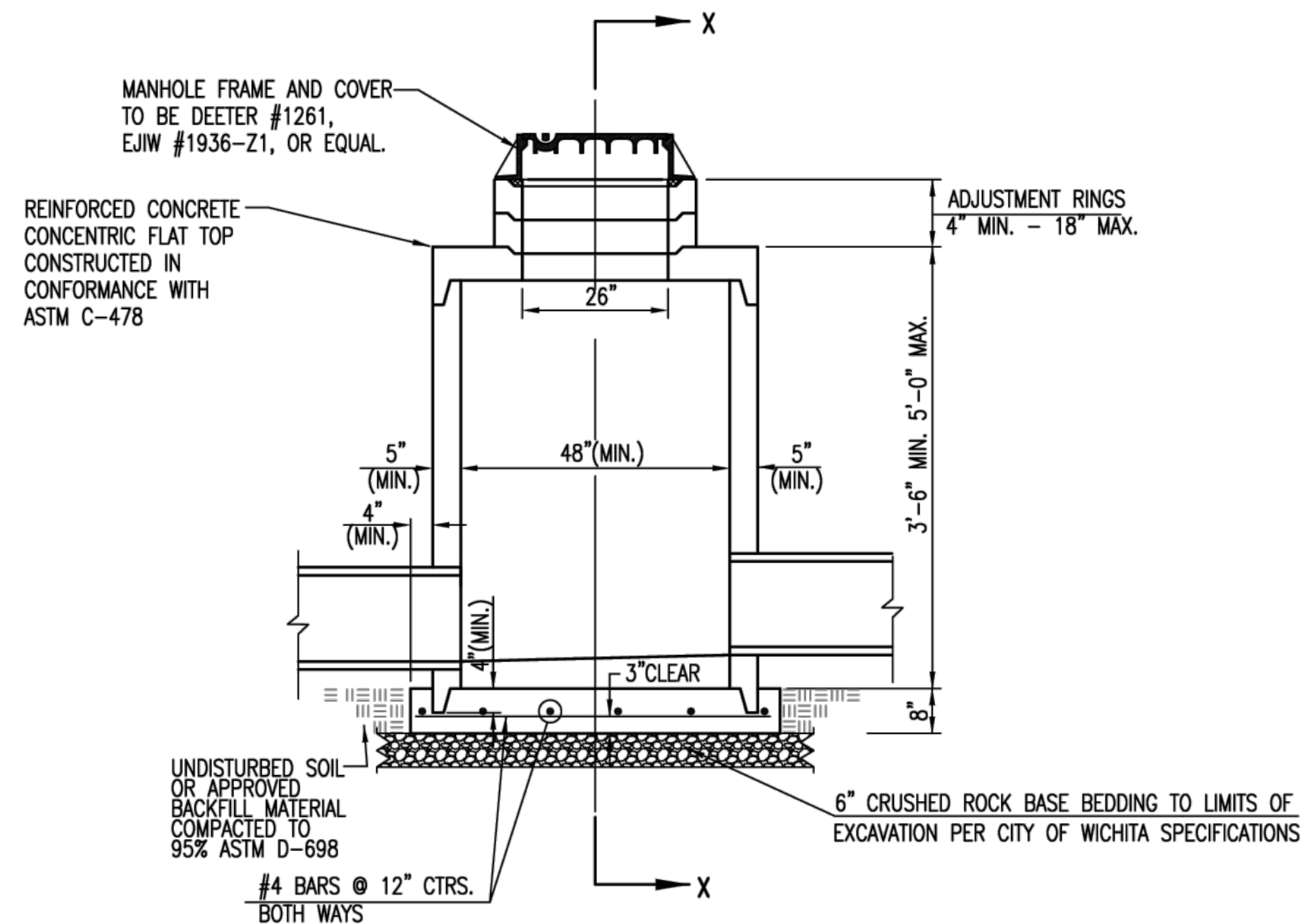
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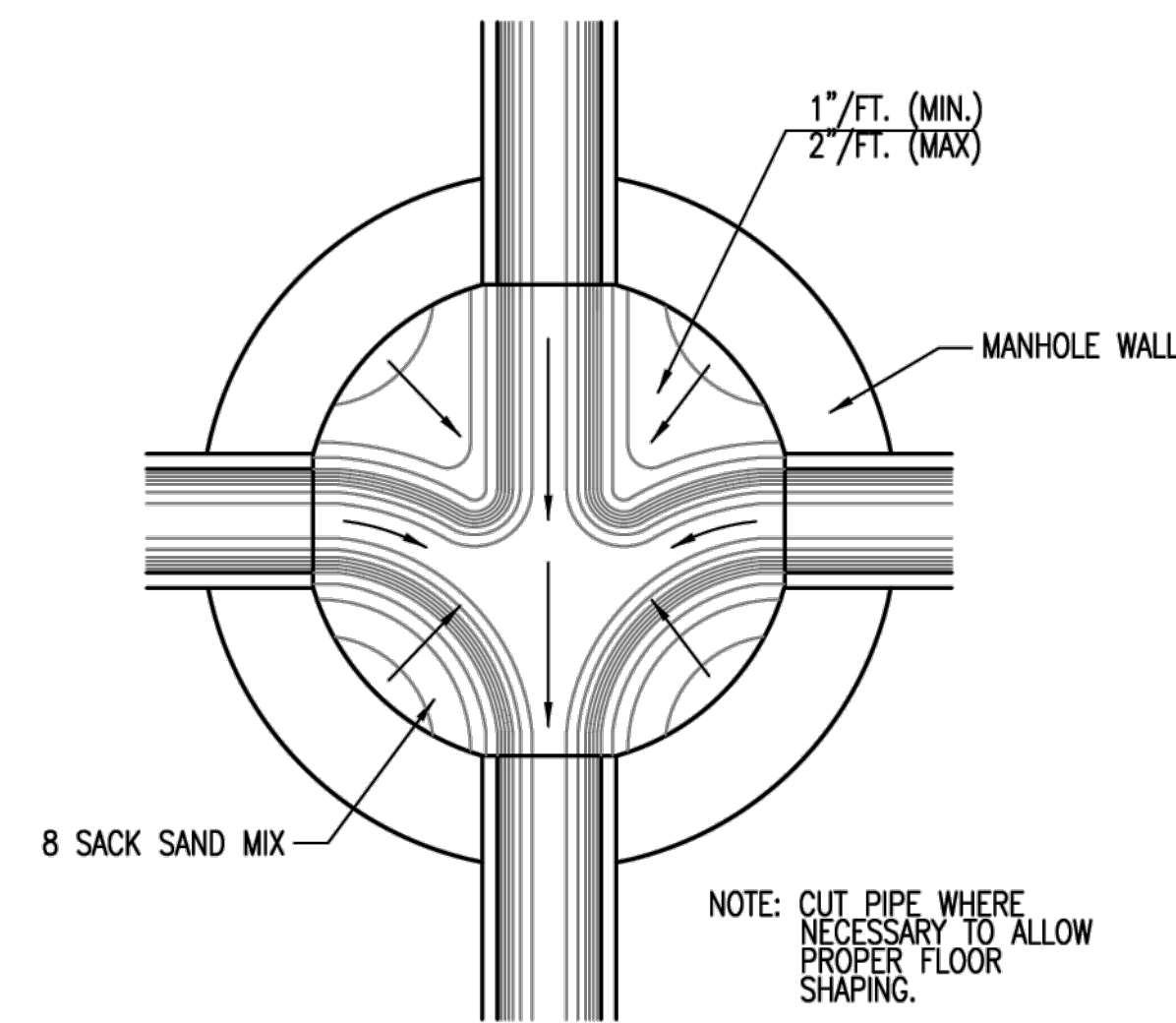
PRECAST STANDARD MANHOLE TYPE "A"



SECTION X-X (TYPICAL)



PRECAST SHALLOW MANHOLE TYPE "B"



TYPICAL MANHOLE FLOOR SHAPING

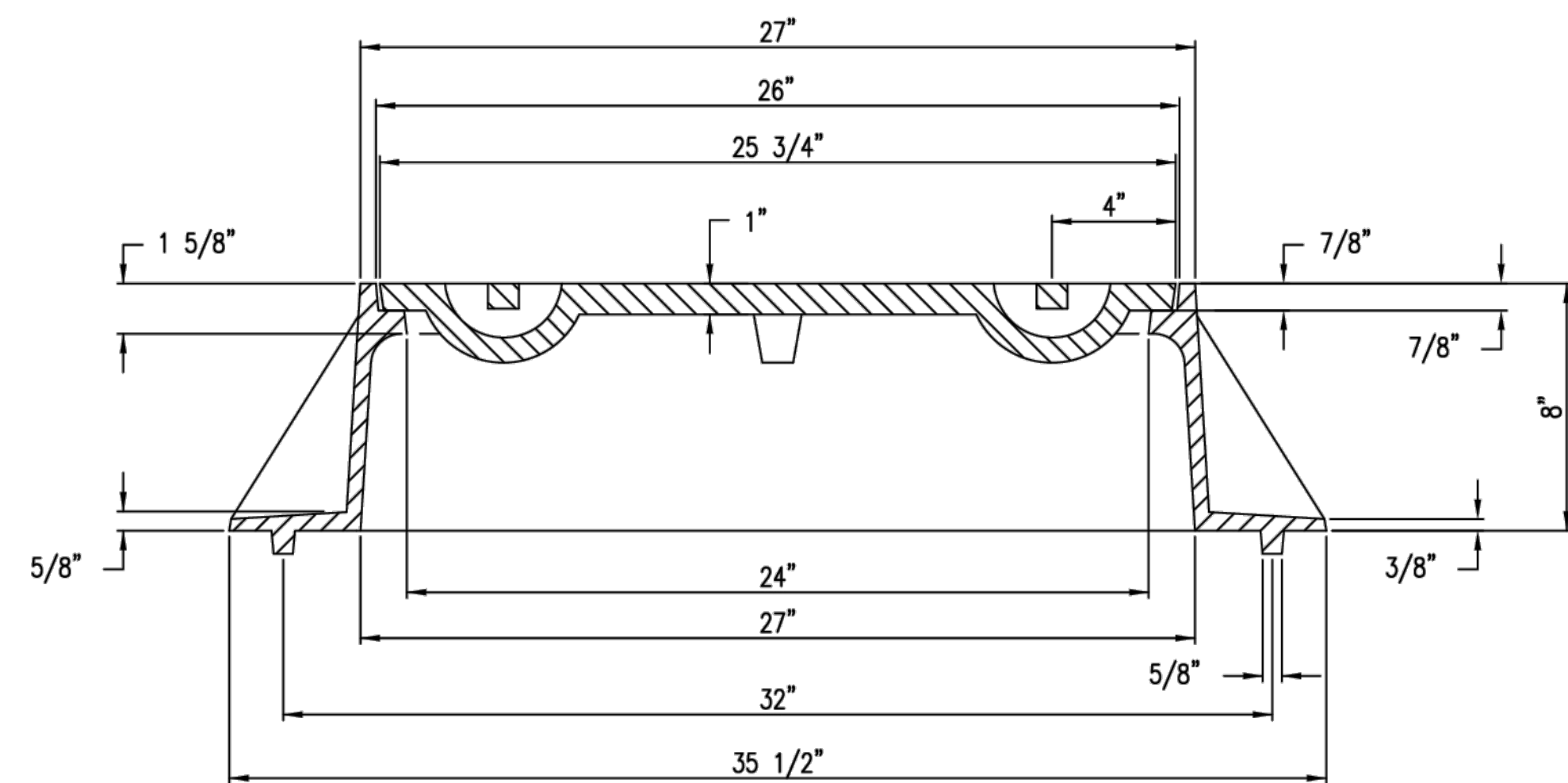
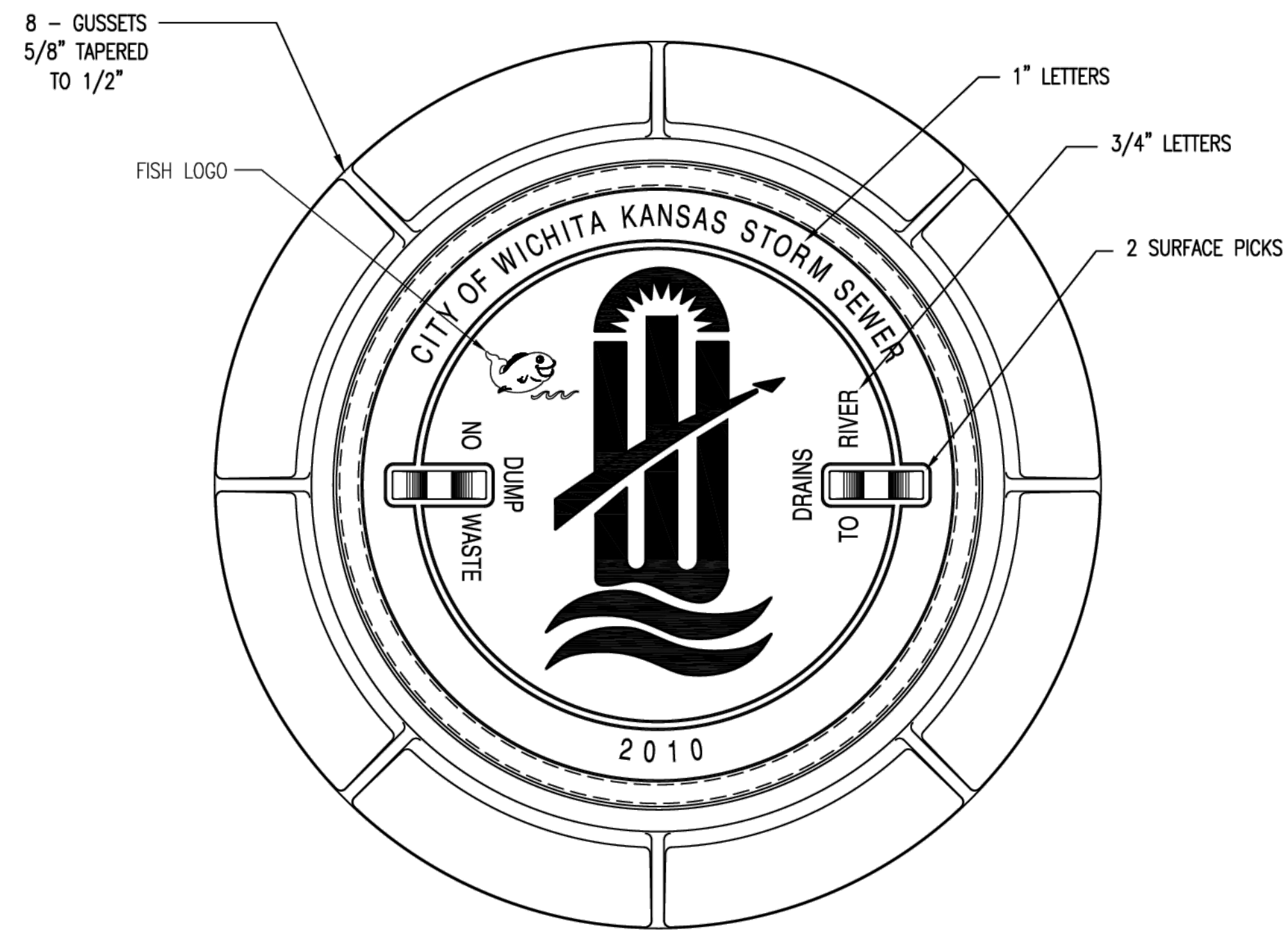
GENERAL NOTES

- IF, IN THE OPINION OF THE ENGINEER, THE MANHOLE SUBGRADE APPEARS UNSTABLE, THE CONTRACTOR WILL HAVE THE OPTION TO COMPACT SUBGRADE AS SHOWN OR INCREASE THE THICKNESS OF THE MANHOLE BASE AS DIRECTED BY THE ENGINEER.
- STEEL REINFORCING WILL BE REQUIRED IN ALL MANHOLE BASES.
- ALL MANHOLE CONSTRUCTION SHALL BE WATER TIGHT.
- TOP OF MANHOLE FLOOR SLAB SHALL BE AT LEAST 3 INCHES BELOW THE FLOW LINE OF THE OUTLET PIPE TO INSURE SUFFICIENT MINIMUM THICKNESS OF SHAPED INVERT.
- ALL PRECAST CONCRETE MANHOLE SECTIONS SHALL CONFORM TO THE LATEST REVISION OF ASTM C-478 AS MODIFIED BY THE SPECIFICATIONS.
- CONCRETE USED FOR MANHOLE CONSTRUCTION SHALL CONFORM TO CITY OF WICHITA SPECIFICATIONS FOR CONCRETE PAVEMENT MIX.
- PRECAST MANHOLES SHALL BE SET AT LEAST 4 INCHES INTO MANHOLE BASE.
- MANHOLES WITH PIPE SIZES 24" AND LARGER SHALL HAVE 5 FOOT INSIDE DIAMETER (MIN.)
- MANHOLES WITH PRECAST BASES MAY BE USED AT THE CONTRACTORS OPTION. THESE MANHOLES SHALL HAVE AN 8" MINIMUM BASE THICKNESS AND SHALL BE PLACED ON AN 8" MIN. CRUSHED ROCK BASE. PIPES SHALL BE ENCASED WITH CRUSHED ROCK TO AT LEAST 3 FEET FROM THE MANHOLE WALL.
- CONTRACTOR SHALL REMOVE LIFTING HOOKS AFTER INSTALLATION. RECESSES IN MANHOLE WALL SHALL BE GROUTED FLUSH TO THE MANHOLE WALL WITH HYDRAULIC CEMENT AFTER THE MANHOLE IS IN PLACE. LIFTING HOLES THRU THE MANHOLE WALL WILL NOT BE ACCEPTED.
- THE ENDS OF ALL PIPES IN MANHOLES SHALL BE CUT OFF FLUSH WITH THE INSIDE FACE OF THE MANHOLE WALL.
- MANHOLE INVERT SHALL BE SHAPED WITH 8 SACK SAND MIX CONCRETE TO CREATE FLOW CHANNELS AND TO INCREASE HYDRAULIC EFFICIENCY SUCH THAT THE MANHOLE WILL BE SELF CLEANING BETWEEN ALL INLET AND/OR OUTLET PIPES.
- MANHOLE FRAME AND COVER TO BE DEETER #1261, EJIW #1936-Z1, OR APPROVED EQUAL, SEE SW-303.
- FOR FLAT GRATED INLET APPLICATION, GRATE TO BE DEETER #1933, EJIW #1205 MDI, OR APPROVED EQUAL.
- FOR BEEHIVE GRATE APPLICATION, GRATE TO BE DEETER #4495, EJIW #120545, OR APPROVED EQUAL.

REVISED: MARCH 2015

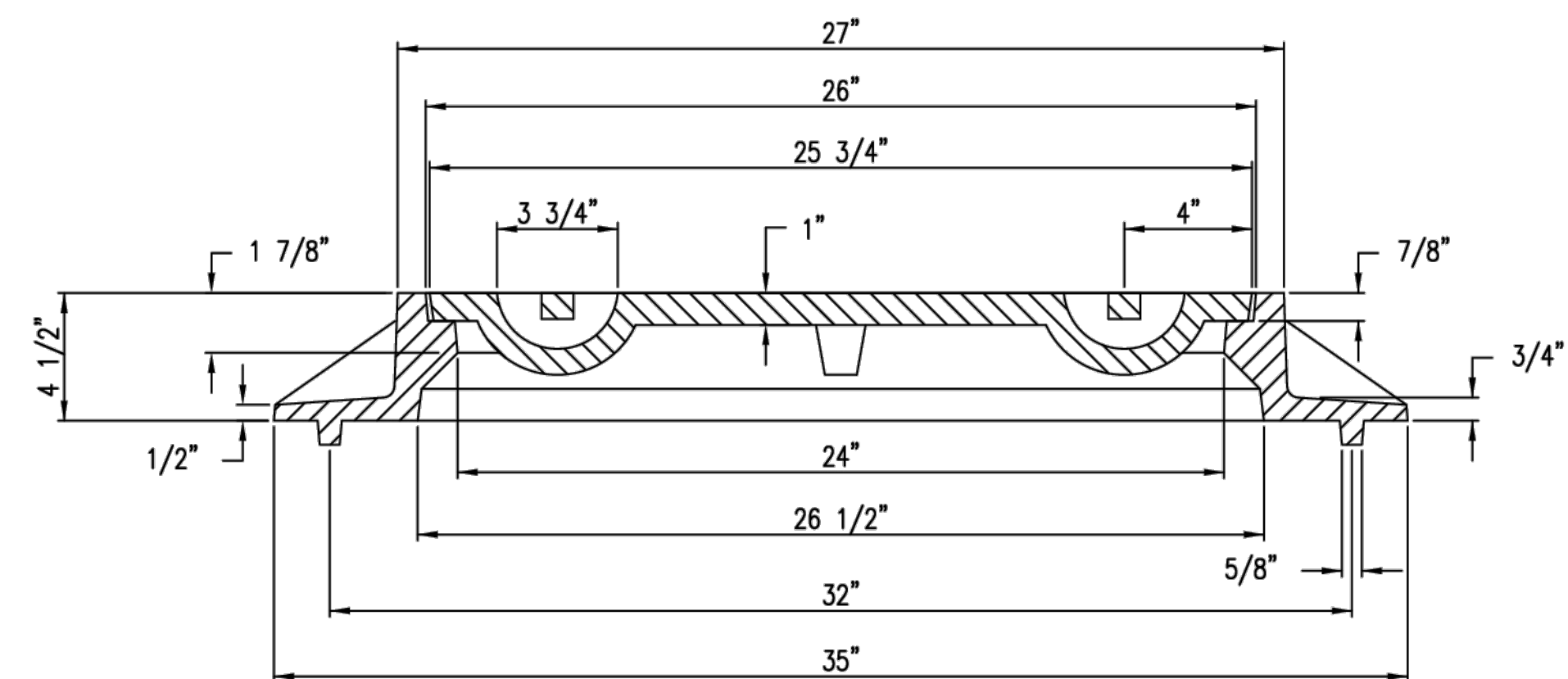
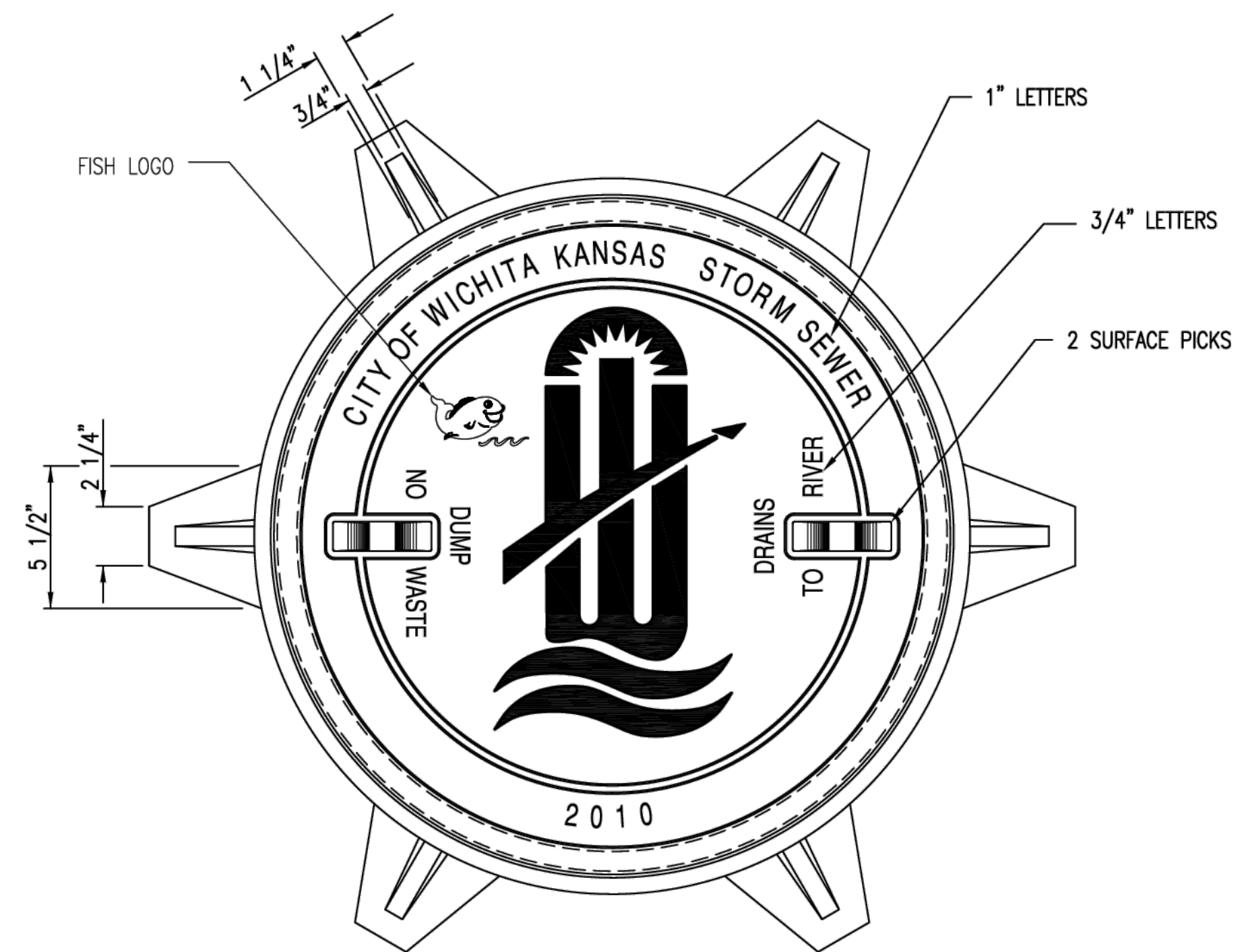
CITY OF WICHITA
PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

PRECAST CONCRETE MANHOLE (STORM SEWER)		
CITY ENGINEER GARY JANZEN, P.E.		
PROJECT NUMBER	OCA NUMBER	DATE
458-2025-085610		
CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		SHEET 10 32



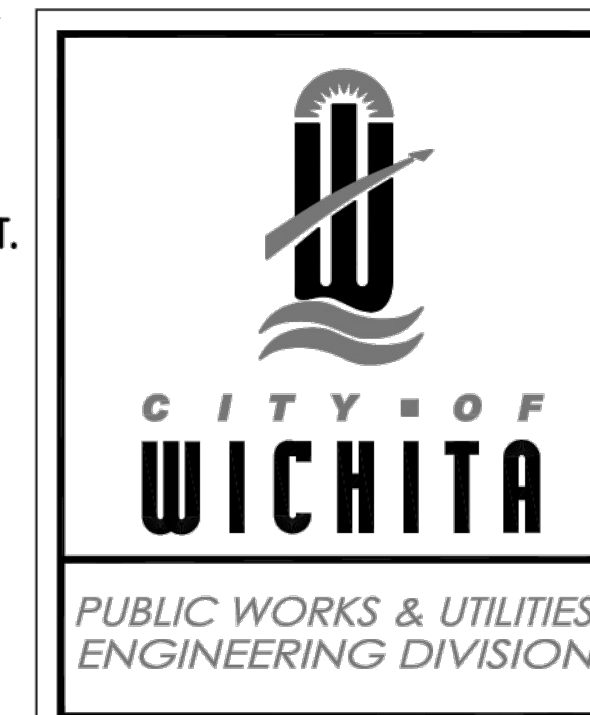
MANHOLE FRAME
DEETER #1261 OR EJIW #1936-Z1

- NOTE:
1. FURNISHED WITH MACHINED HORIZONTAL BEARING SURFACE.
 2. COVER TO BE DEETER #1261 OR EJIW #1936A.

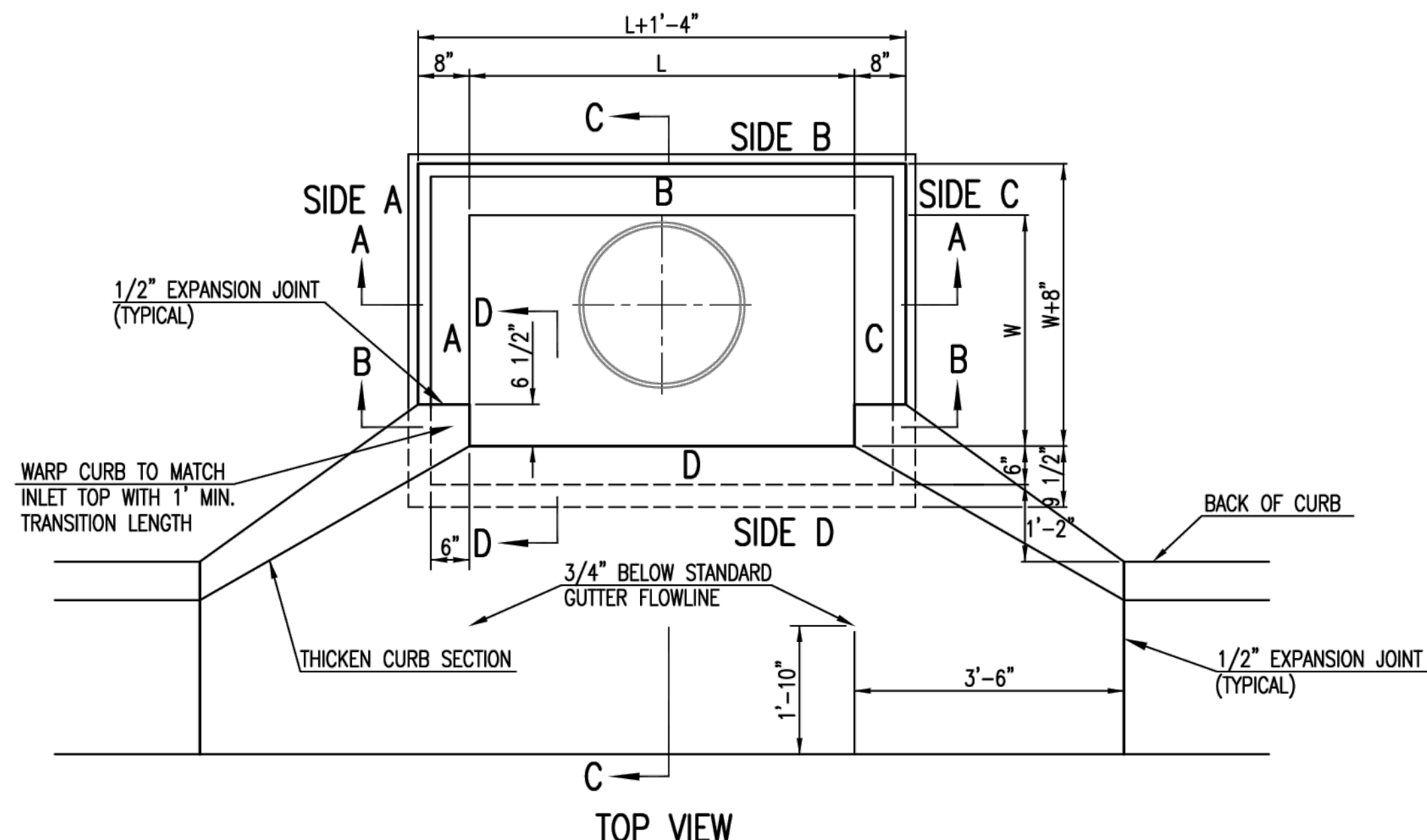


INLET FRAME
DEETER #2014 OR EJIW #1936-Z4

- NOTE:
1. FURNISHED WITH MACHINED HORIZONTAL BEARING SURFACES.
 2. NOT TO BE USED UNDER PAVEMENT.
 3. COVER TO BE DEETER #1261 OR EJIW #1936A.



MANHOLE/INLET FRAME AND COVER (STORM SEWER)		
CITY ENGINEER GARY JANZEN, P.E.		
PROJECT NUMBER 458-2025-085610	OCA NUMBER	DATE 11/2010
CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		SHEET 11 32

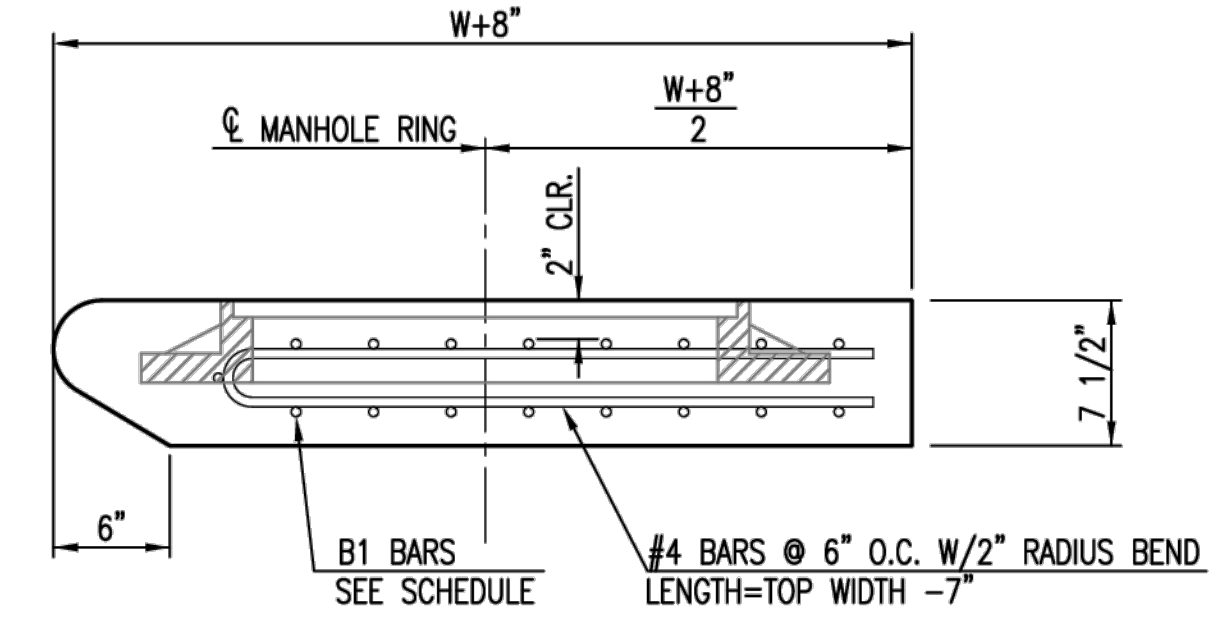
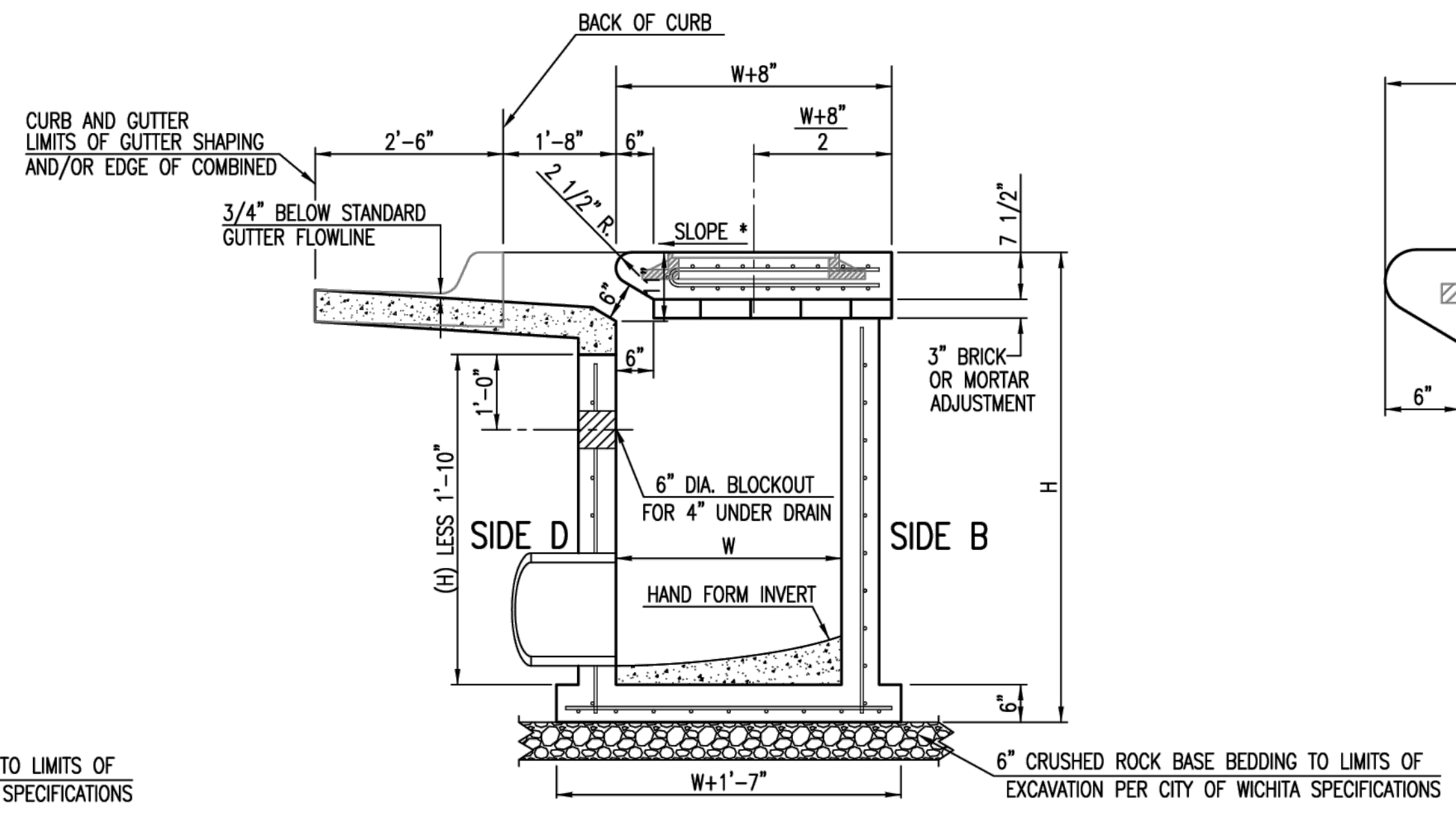
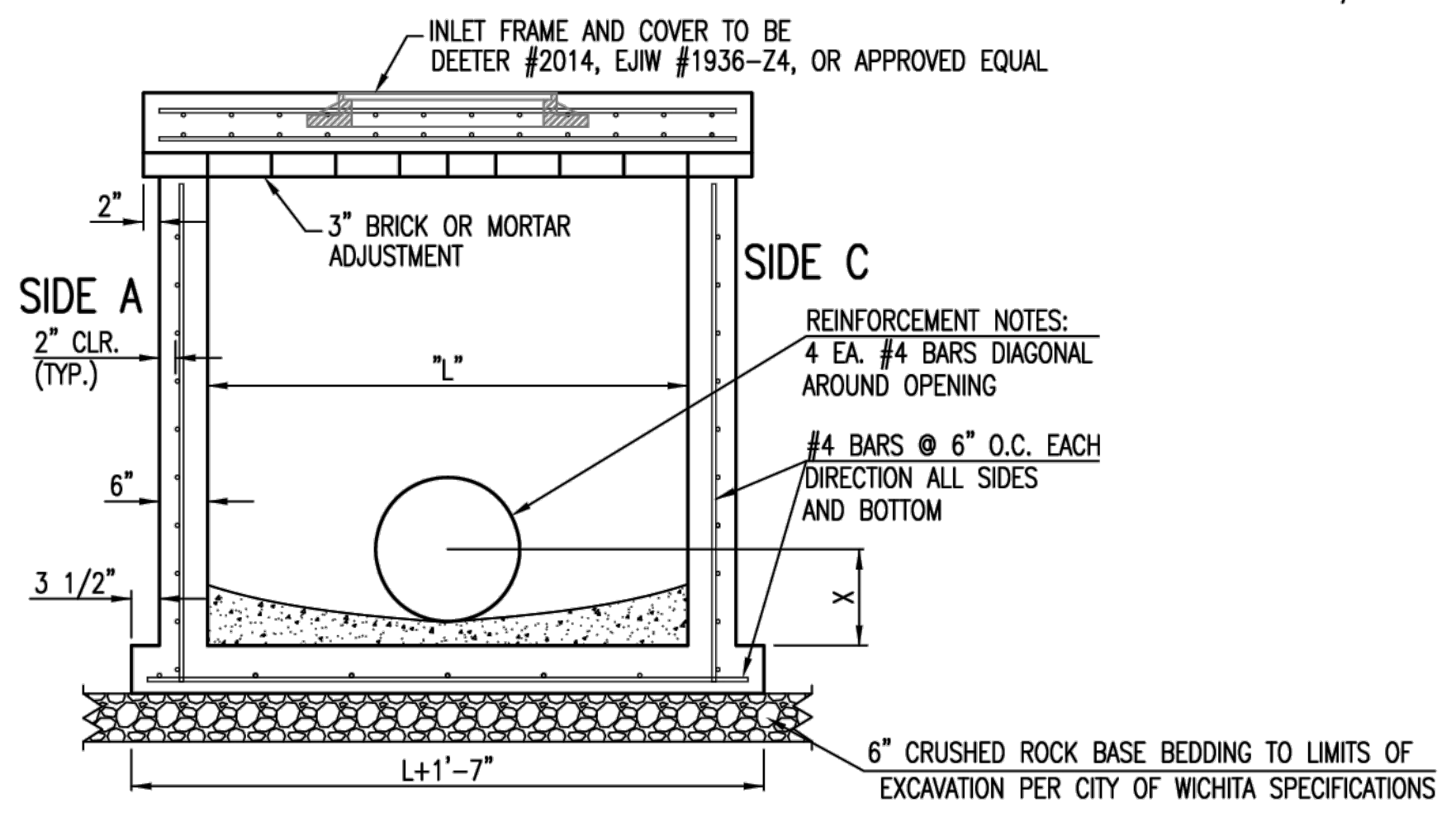


BAR SCHEDULE		
INLET OPENING	B1 BARS	SPACING
5'-0"	#4	4"
10'-0"	#6	3.5"

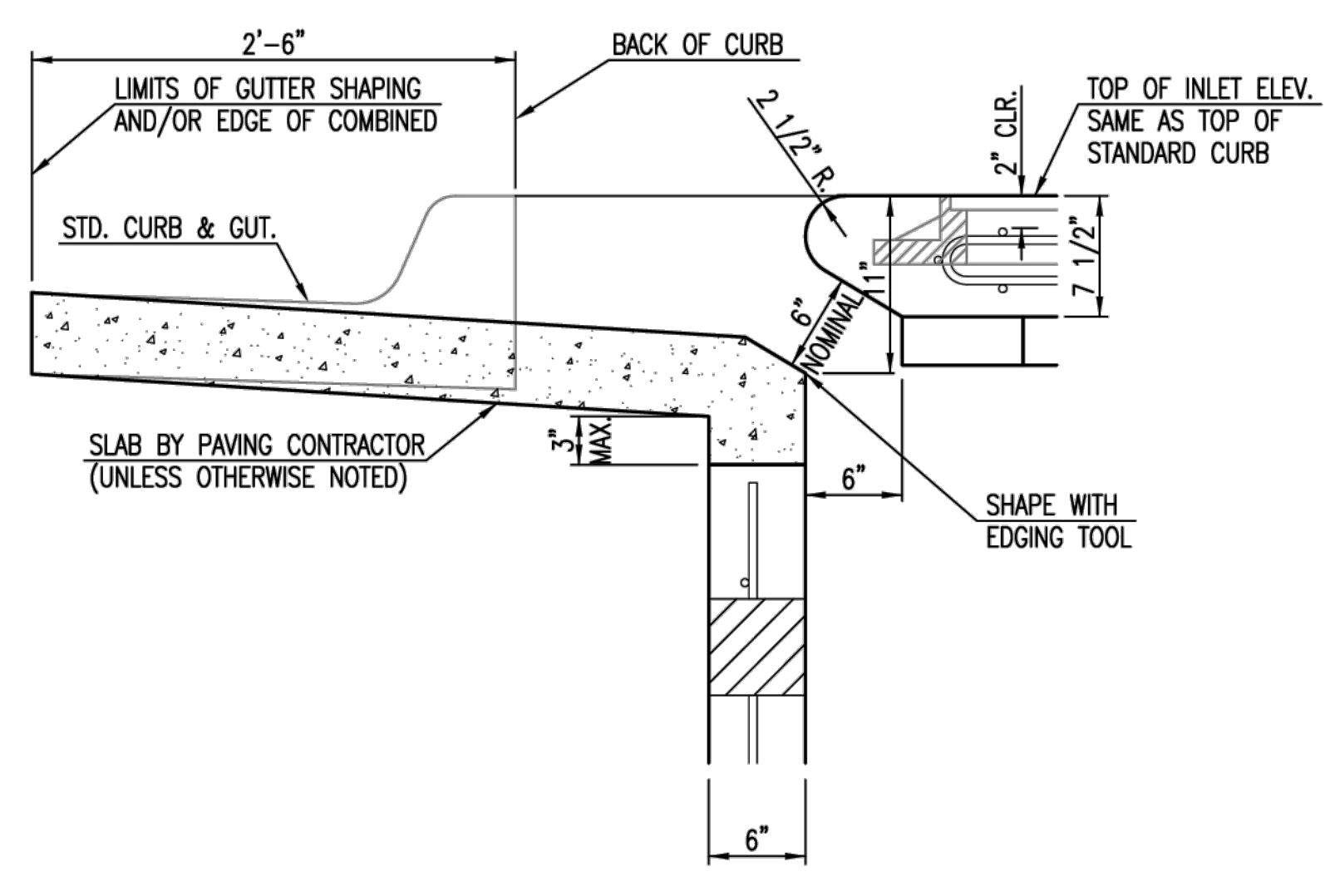
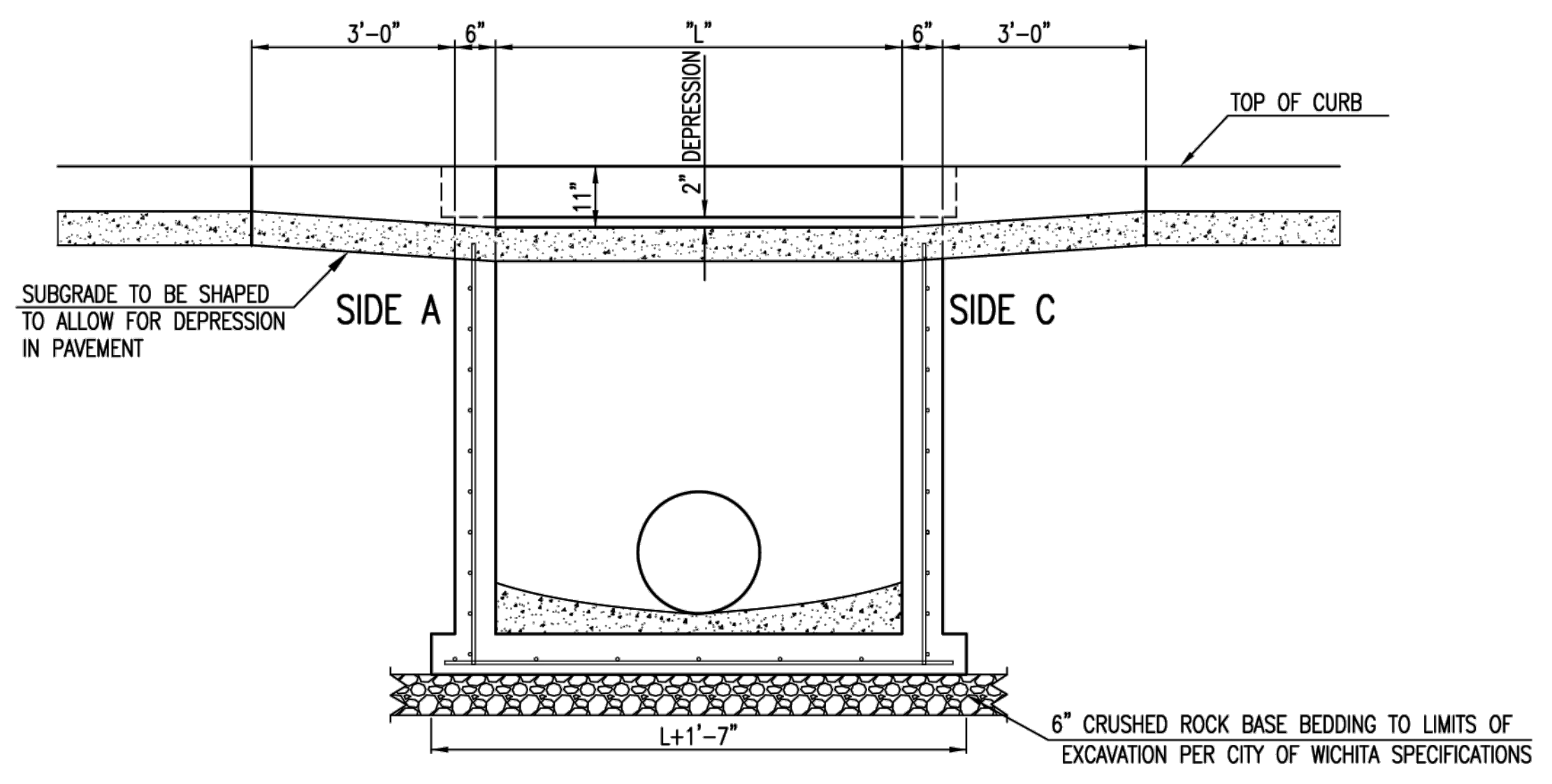
W	PRE-CAST TOP SIZE			PIPE DIA.**
	WIDTH	LENGTH	TOP	
3'-0"	W+8"	L+1'-4"	7 1/2"	21" & SMALLER
4'-0"	W+8"	L+1'-4"	7 1/2"	24" & 30"
5'-0"	W+8"	L+1'-4"	7 1/2"	36" & 42"
6'-0"	W+8"	L+1'-4"	7 1/2"	48" & 54"
7'-0"	W+8"	L+1'-4"	7 1/2"	60" & 66"


** FOR PIPES PERPENDICULAR TO INLET WALL

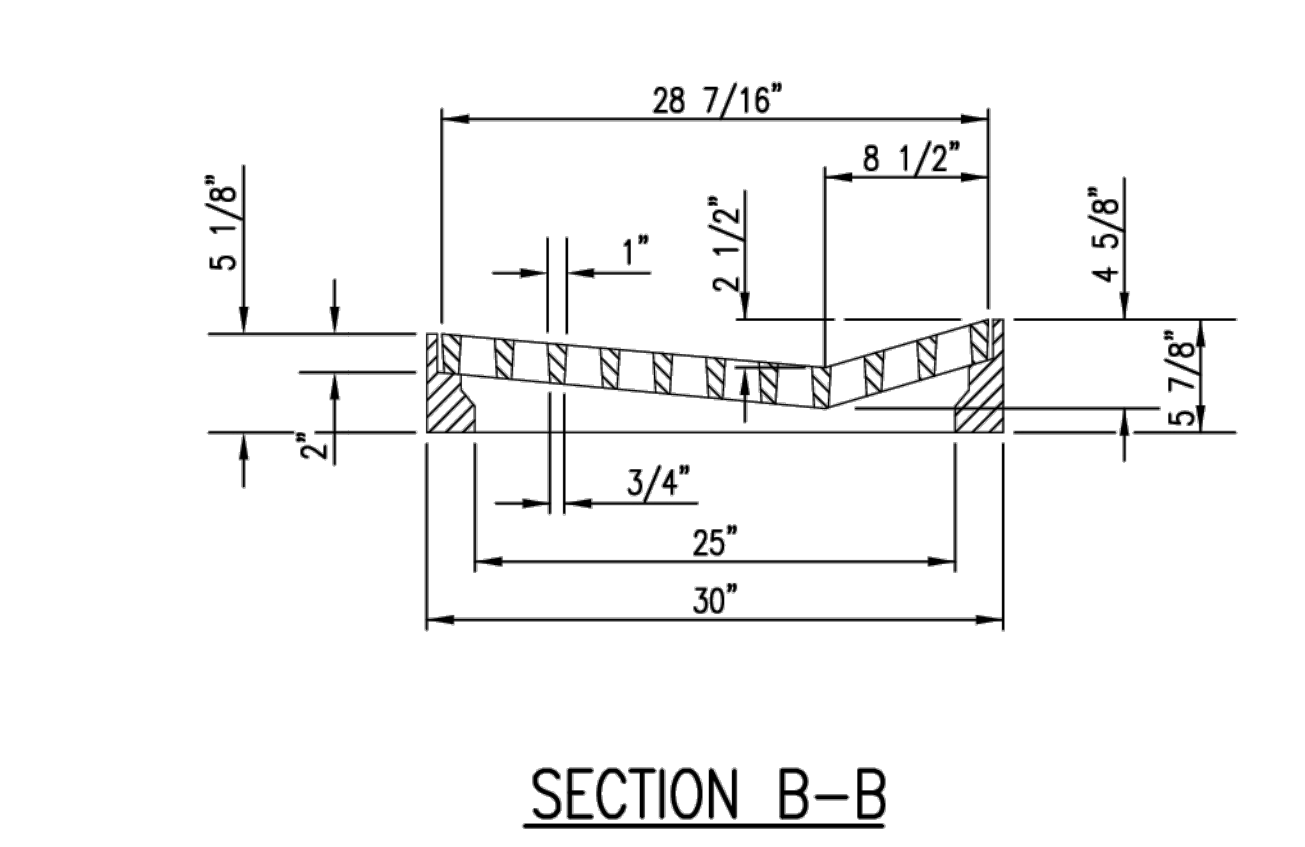
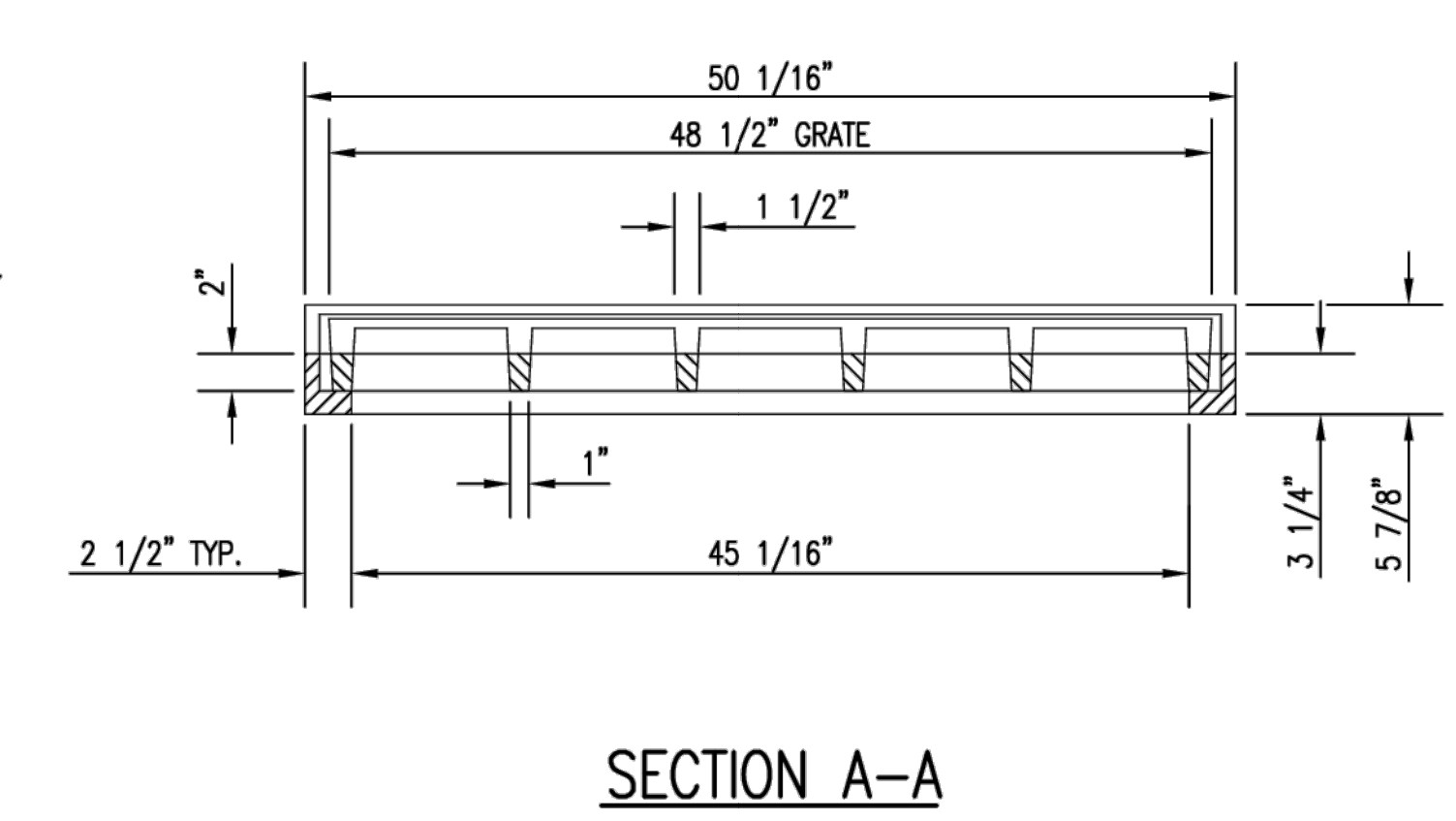
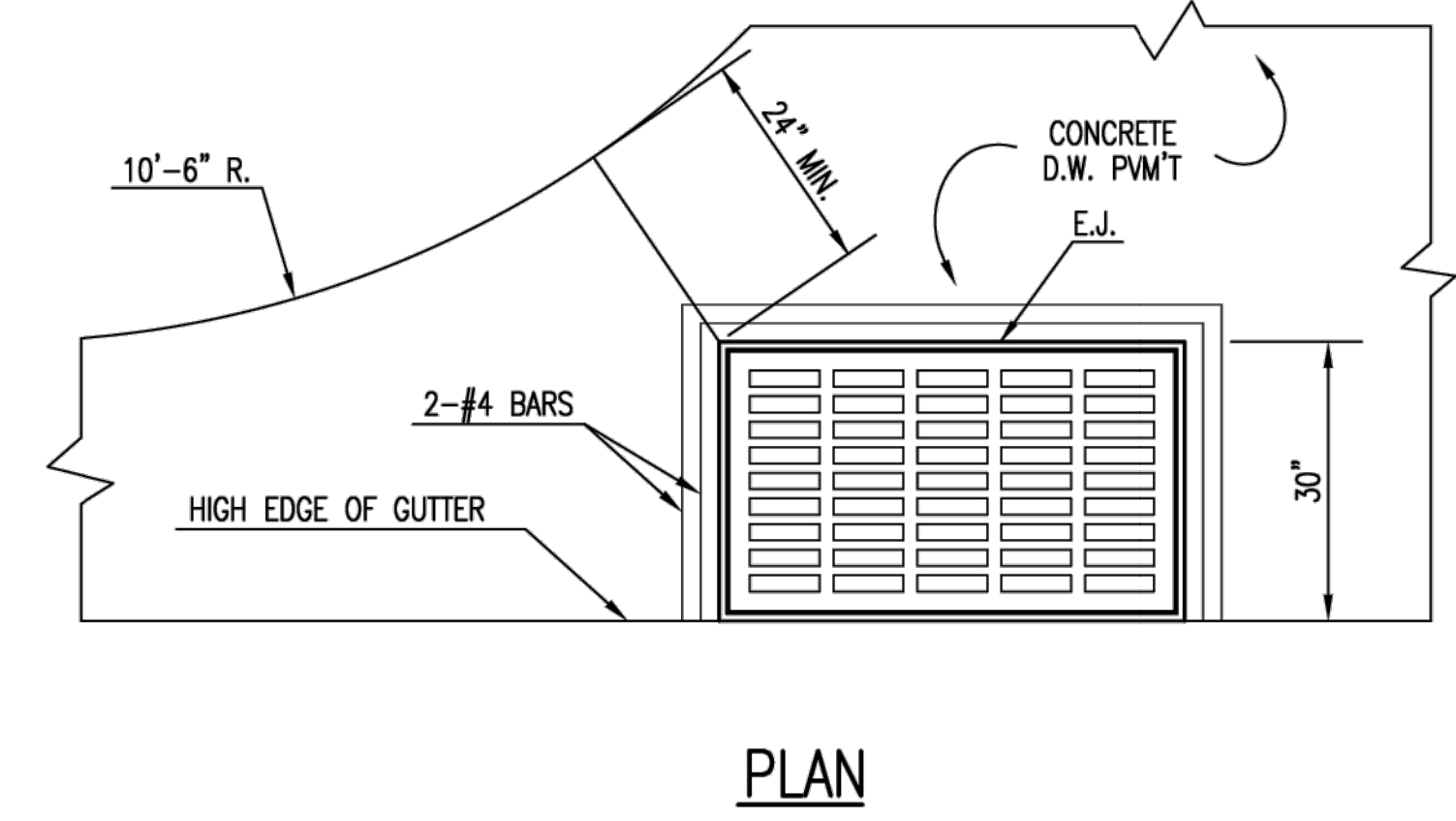
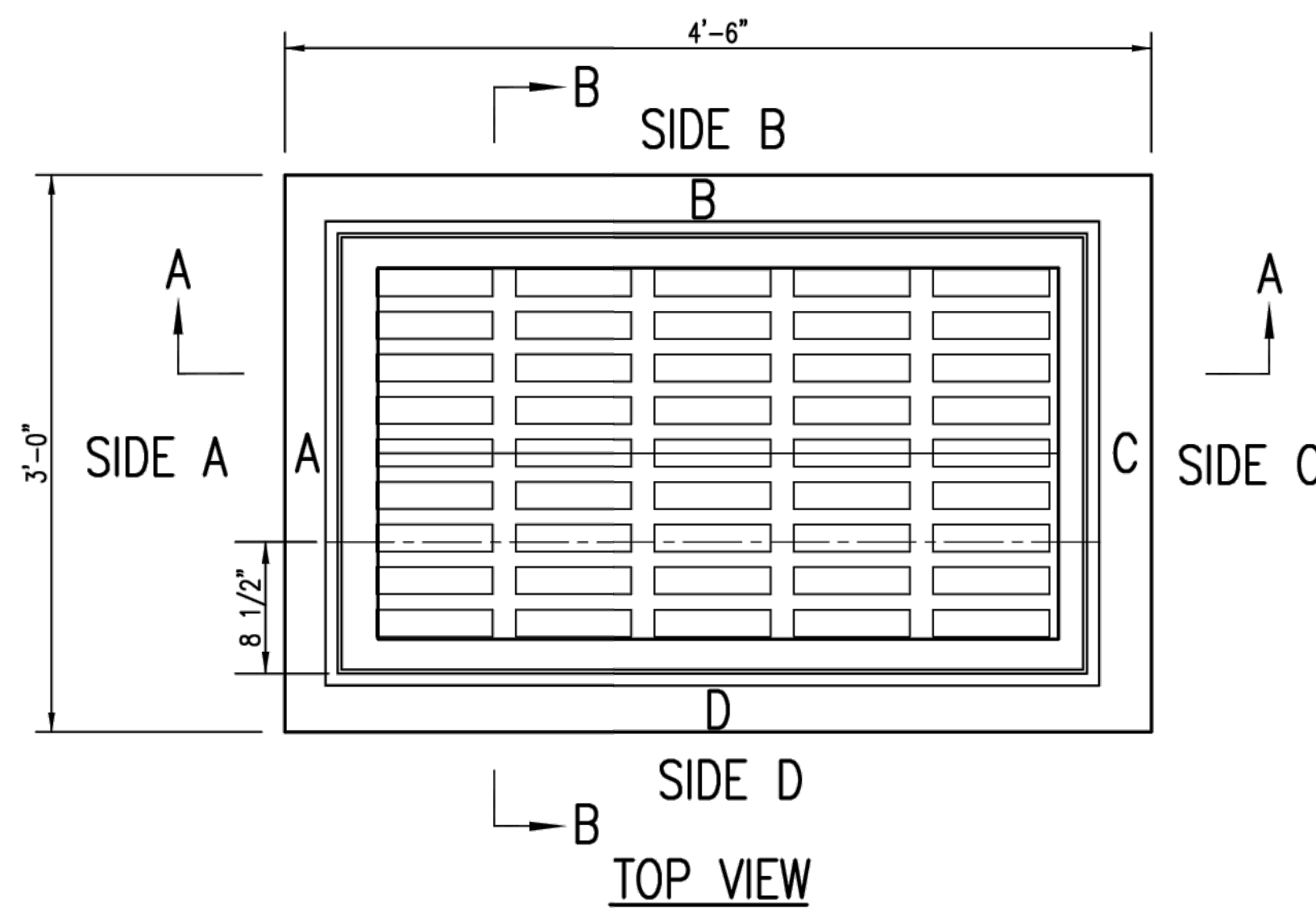
- GENERAL NOTES**
1. CONCRETE TOPS TO BE INSTALLED ON THIN MORTAR CUSHION TO INSURE FULL SUPPORT ALONG BRICK. CONCRETE TOPS MAY BE CAST IN PLACE OR PRECAST. CONCRETE USED FOR INLET CONSTRUCTION SHALL CONFORM TO CITY OF WICHITA SPECIFICATIONS FOR CONCRETE PAVEMENT MIX.
 2. CONTRACTOR SHALL HAVE THE OPTION OF CONSTRUCTING 8" BRICK MASONRY WALLS BETWEEN THE CONCRETE INLET BASE AND TOP OF THIS INLET WHEN W=5'-0" AND H=7'-0" OR LESS.
 3. INLET INVERT SHALL BE SHAPED WITH 8 SACK SAND MIX CONCRETE TO CREATE FLOW CHANNELS AND TO INCREASE HYDRAULIC EFFICIENCY SUCH THAT THE INLET WILL BE SELF CLEANING BETWEEN ALL INLET AND/OR OUTLET PIPES.
 4. THE ENDS OF ALL PIPES INSTALLED IN INLETS SHALL BE CUT OFF FLUSH WITH THE INSIDE FACE OF THE INLET WALL.
 5. INLET FRAME AND COVER TO BE DEETER #2014, EJIW #1936-Z4, OR APPROVED EQUAL, SEE SW-303.
 6. CONTRACTOR SHALL REMOVE LIFTING HOOKS AFTER INSTALLATION. RECESSES IN INLET WALL SHALL BE GROUTED FLUSH TO THE INLET WALL WITH HYDRAULIC CEMENT AFTER THE INLET IS IN PLACE. LIFTING HOLES THRU THE INLET WALL WILL NOT BE ACCEPTED.



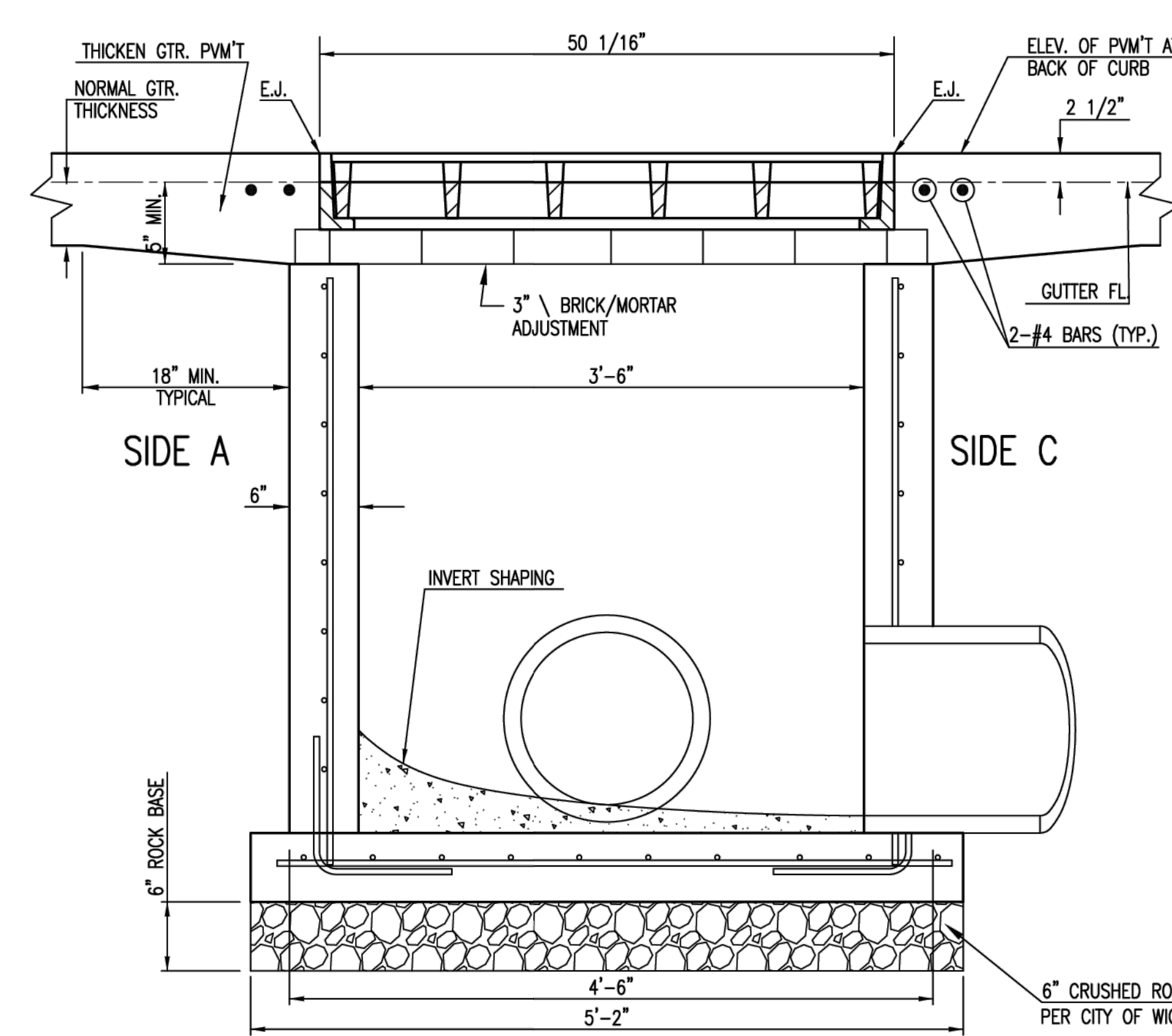
NOTES:
 * SLOPE OF INLET TOP TO MATCH SIDEWALK OR PARKING SLOPES WITHIN LIMITS INDICATED.



REVISION MAY 2017	UPDATED SET BACK DIMENSION ON TOP VIEW	
 CITY OF WICHITA PUBLIC WORKS & UTILITIES ENGINEERING DIVISION		
STANDARD TYPE 1A CURB INLET 5'-0" OR 10'-0" OPENING		
CITY ENGINEER GARY JANZEN, P.E.		
PROJECT NUMBER	OCA NUMBER	DATE
458-2025-085610		
CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		SHEET 12 32

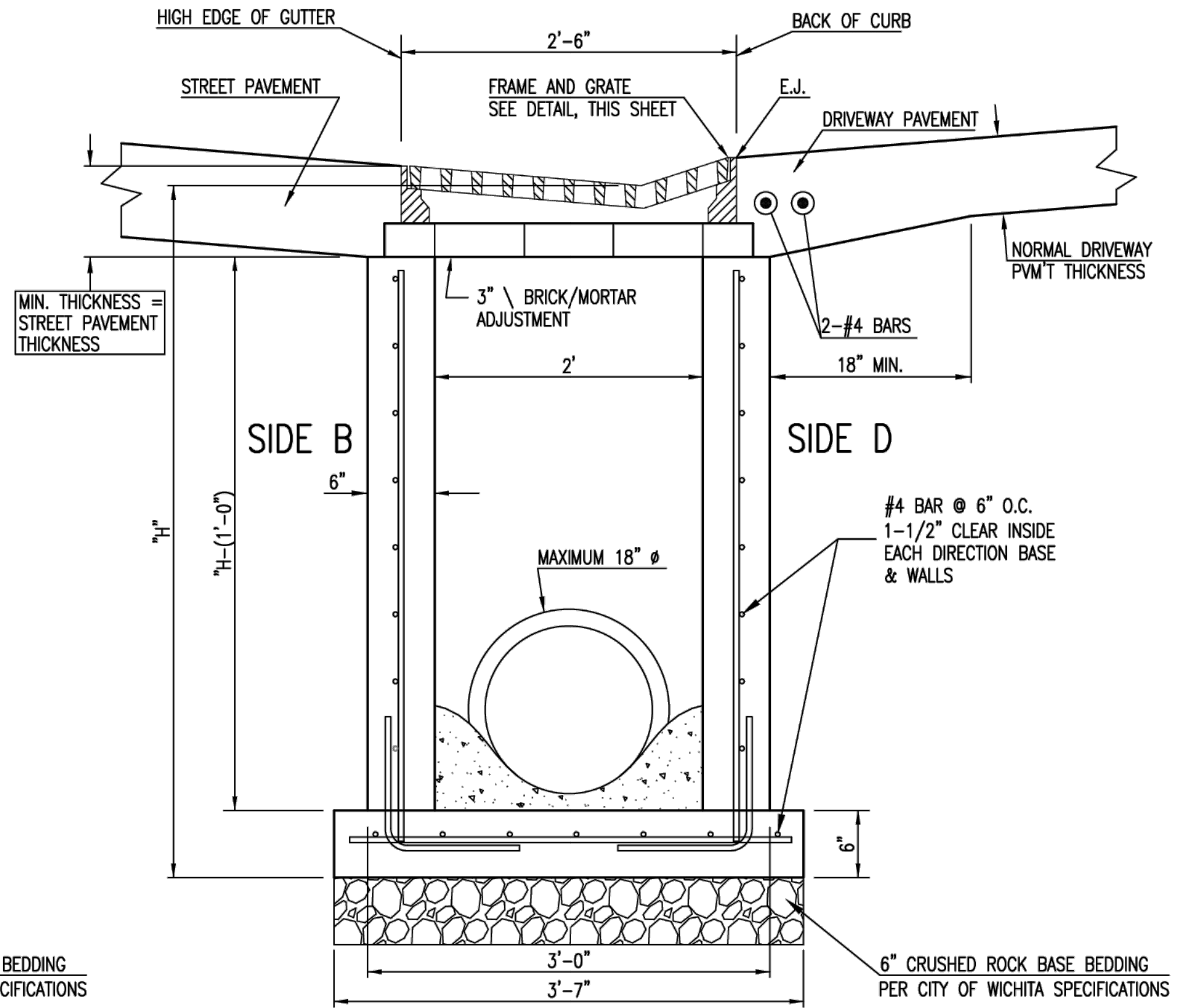


FRAME & GRATE
 DEETER #2095 TOTAL WEIGHT: 705 LBS.
 EJIW #7392 TOTAL WEIGHT: 675 LBS.

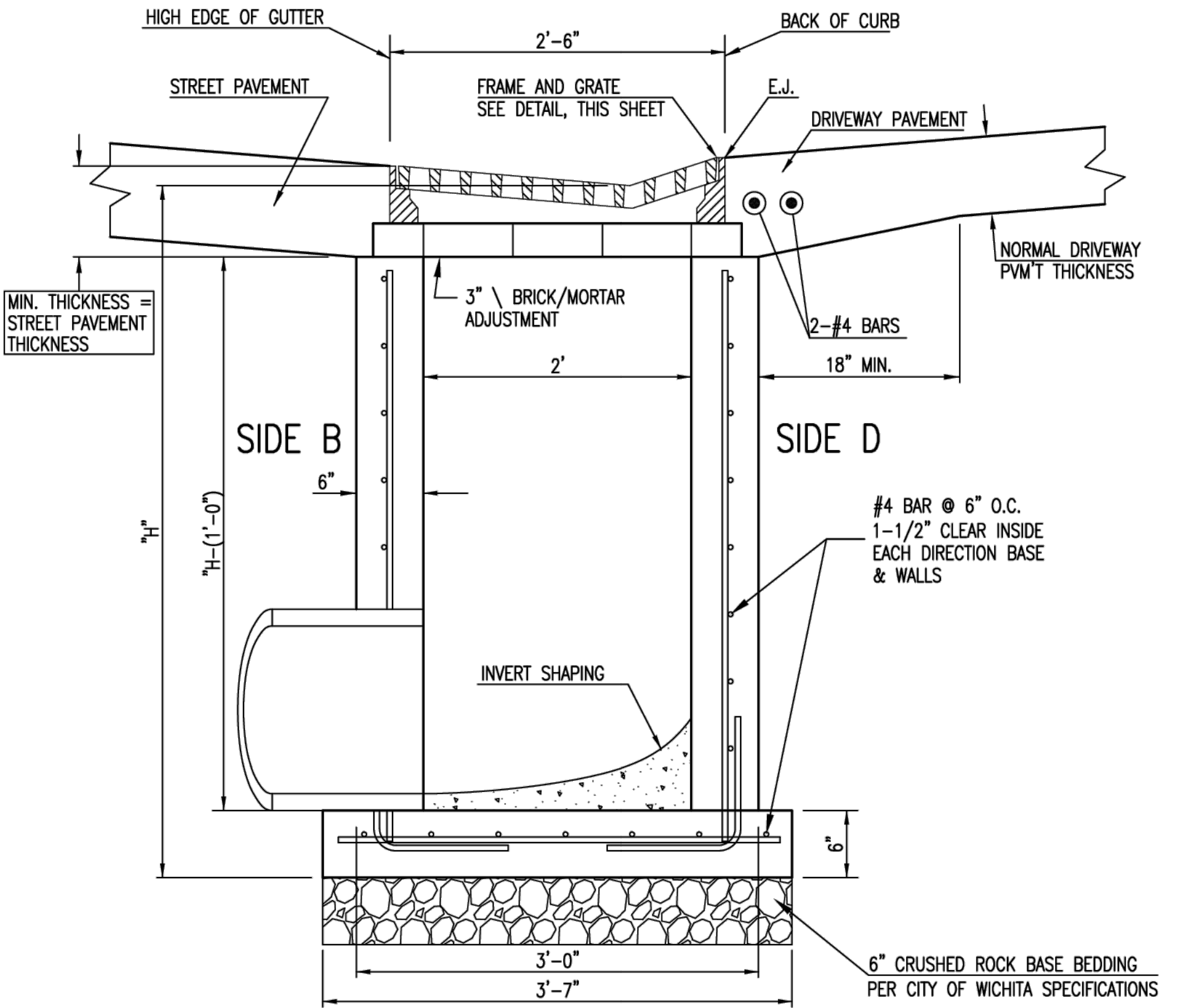


SECTION "A-A"

INCLUDE BLOCKOUT FOR INLET UNDERDRAIN PER CITY OF WICHITA DETAIL. SEE SHEET 15 FOR DETAIL.



SECTION "B-B" END OUTLET



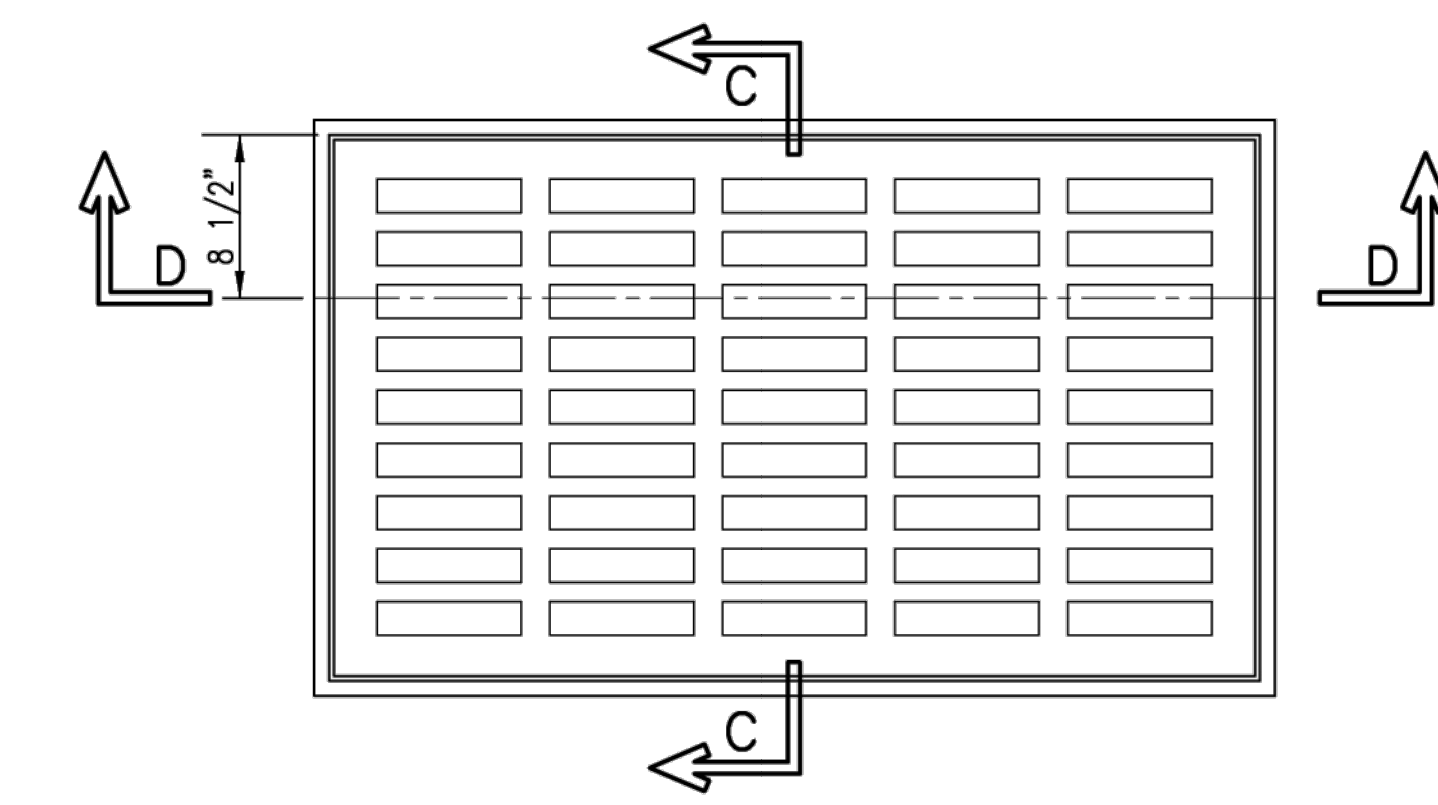
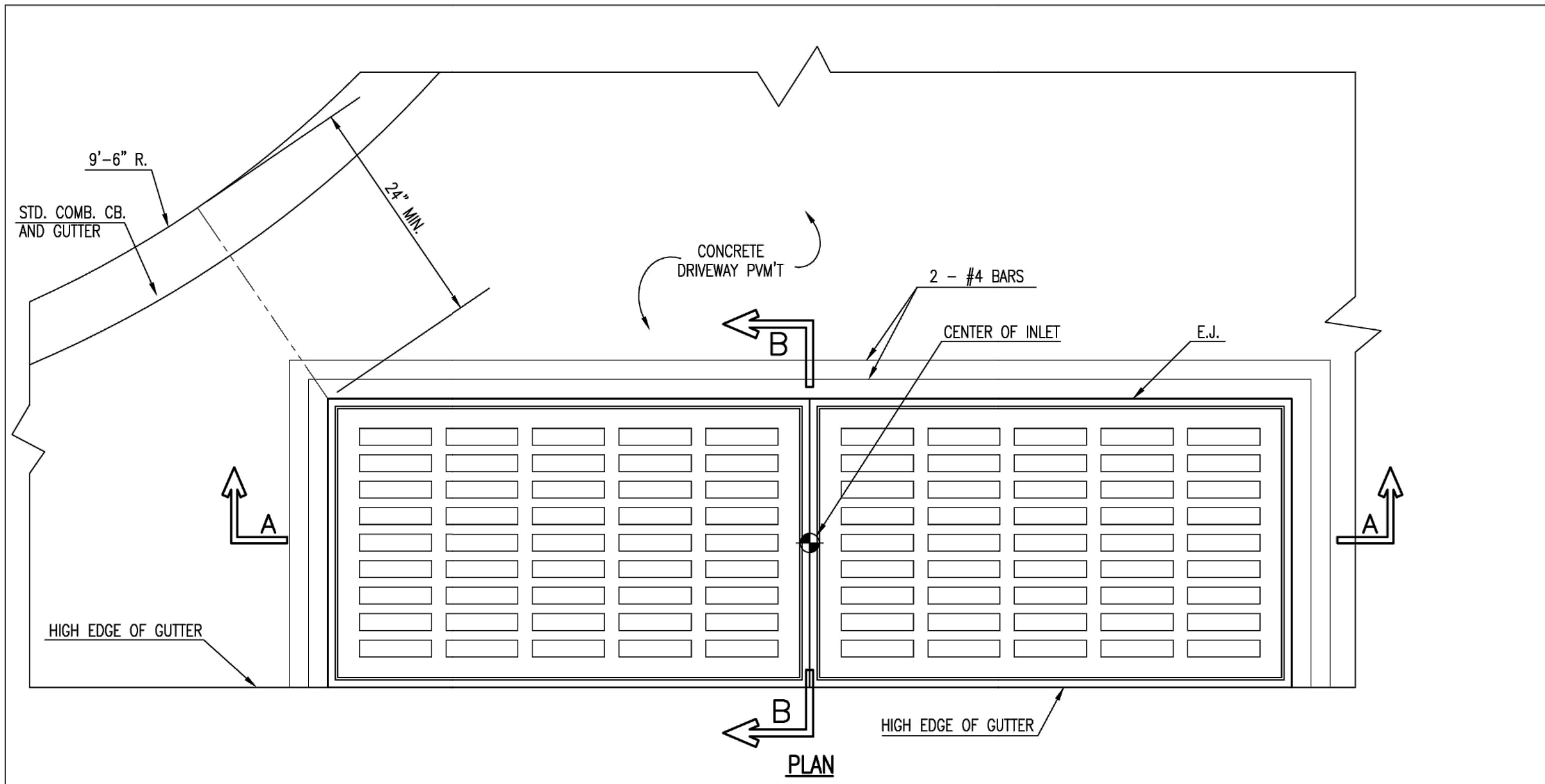
SECTION "B-B" SIDE OUTLET

GENERAL NOTES

1. GRATE FRAME TO BE INSTALLED ON THIN MORTAR CUSHION TO INSURE FULL SUPPORT ALONG BRICK. CONCRETE USED FOR INLET CONSTRUCTION SHALL CONFORM TO CITY OF WICHITA SPECIFICATIONS FOR CONCRETE PAVEMENT MIX.
2. CONTRACTOR SHALL HAVE THE OPTION OF CONSTRUCTING 8" BRICK MASONRY WALL BETWEEN THE CONCRETE INLET BASE AND TOP OF THIS INLET WHEN H=7'-0" OR LESS.
3. INLET INVERT SHALL BE SHAPED WITH 8 SACK SAND MIX CONCRETE TO CREATE FLOW CHANNELS AND TO INCREASE HYDRAULIC EFFICIENCY SUCH THAT THE INLET WILL BE SELF CLEANING BETWEEN ALL INLET AND/OR OUTLET PIPES.
4. THE ENDS OF ALL PIPES INSTALLED IN INLETS SHALL BE CUT OFF FLUSH WITH THE INSIDE FACE OF THE INLET WALL.
5. INLET FRAME AND GRATE TO BE DEETER #2095, EJIW #7392, OR APPROVED EQUAL.
6. CONTRACTOR SHALL REMOVE LIFTING HOOKS AFTER INSTALLATION. RECESSES IN INLET WALL SHALL BE GROUTED FLUSH TO THE INLET WALL WITH HYDRAULIC CEMENT AFTER THE INLET IS IN PLACE. LIFTING HOLES THRU THE INLET WALL WILL NOT BE ACCEPTED.

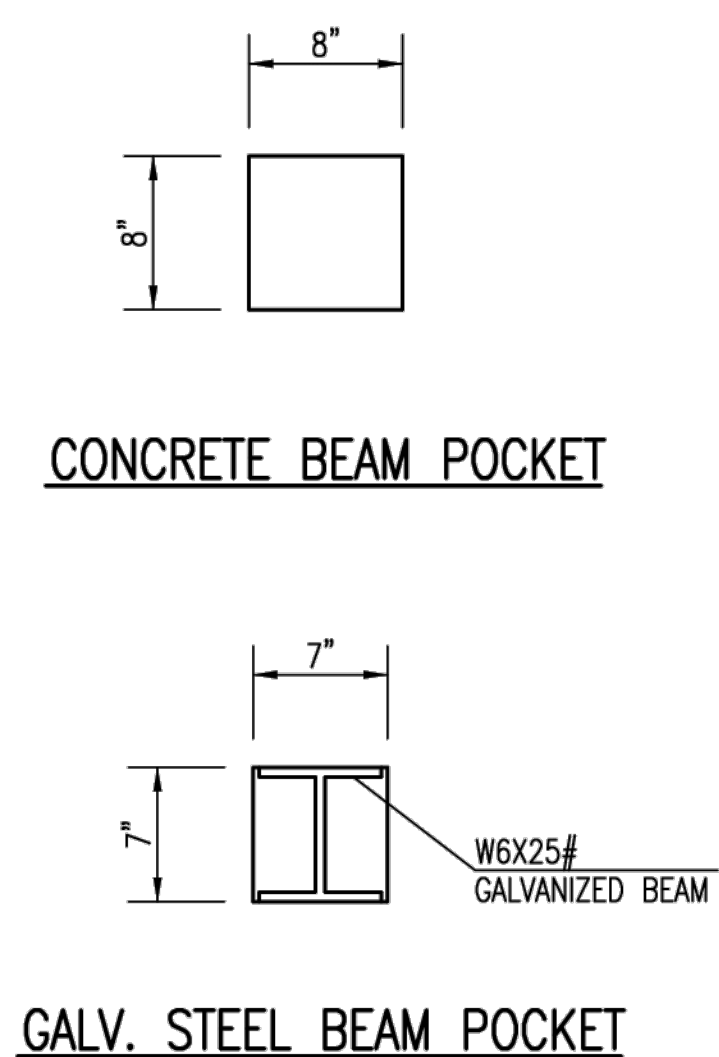
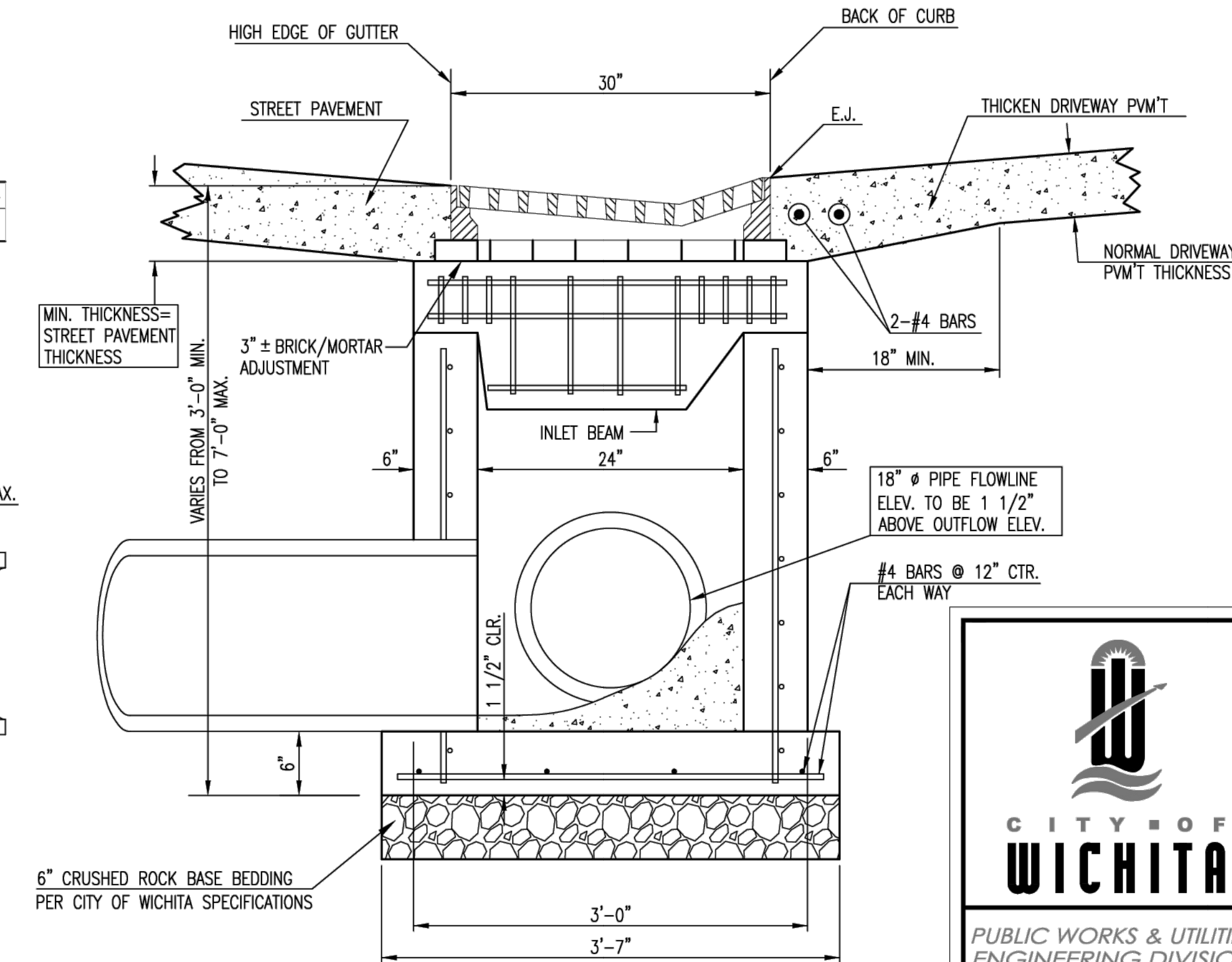
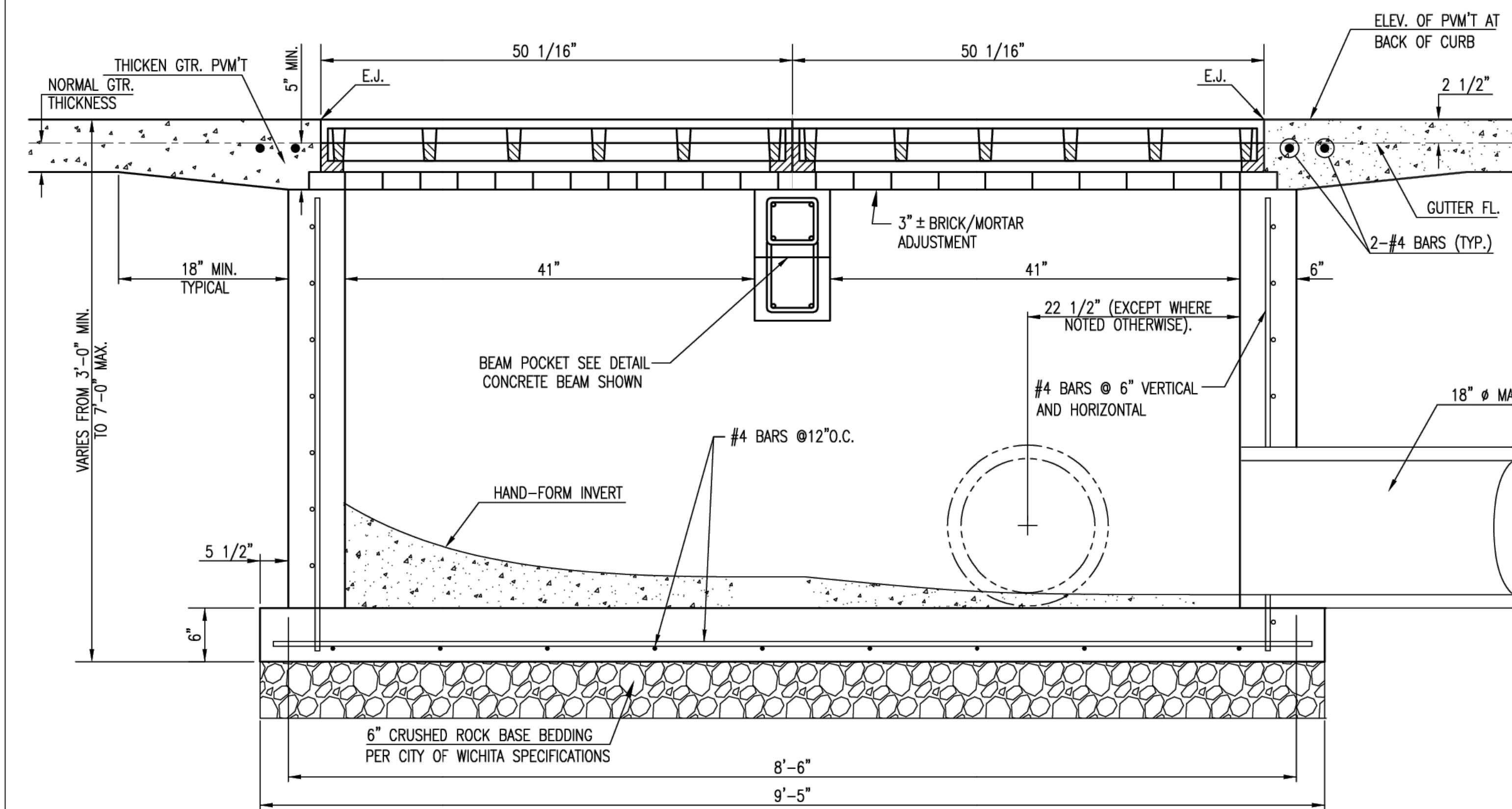
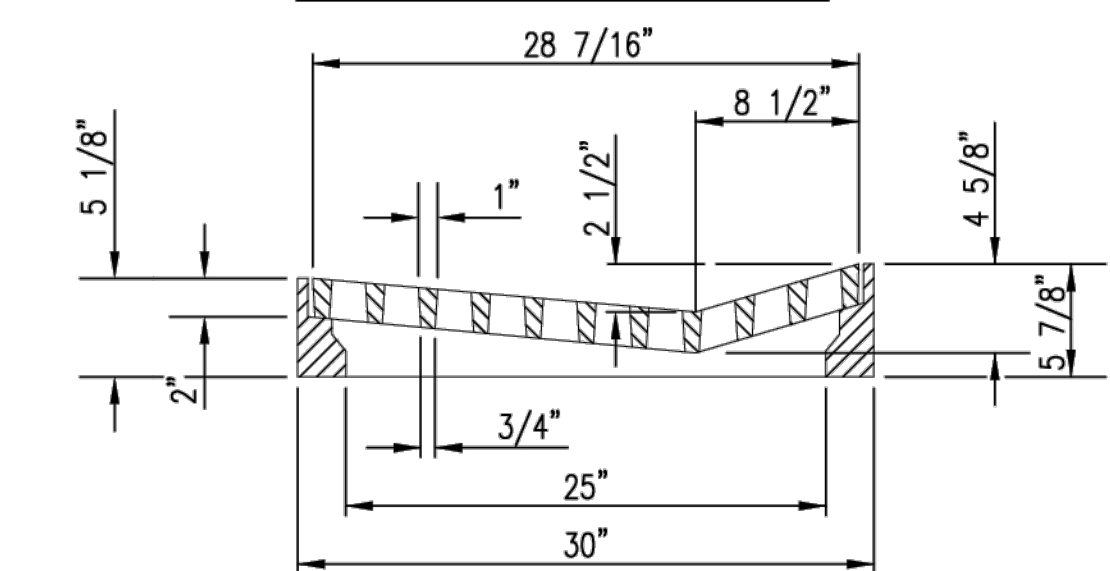
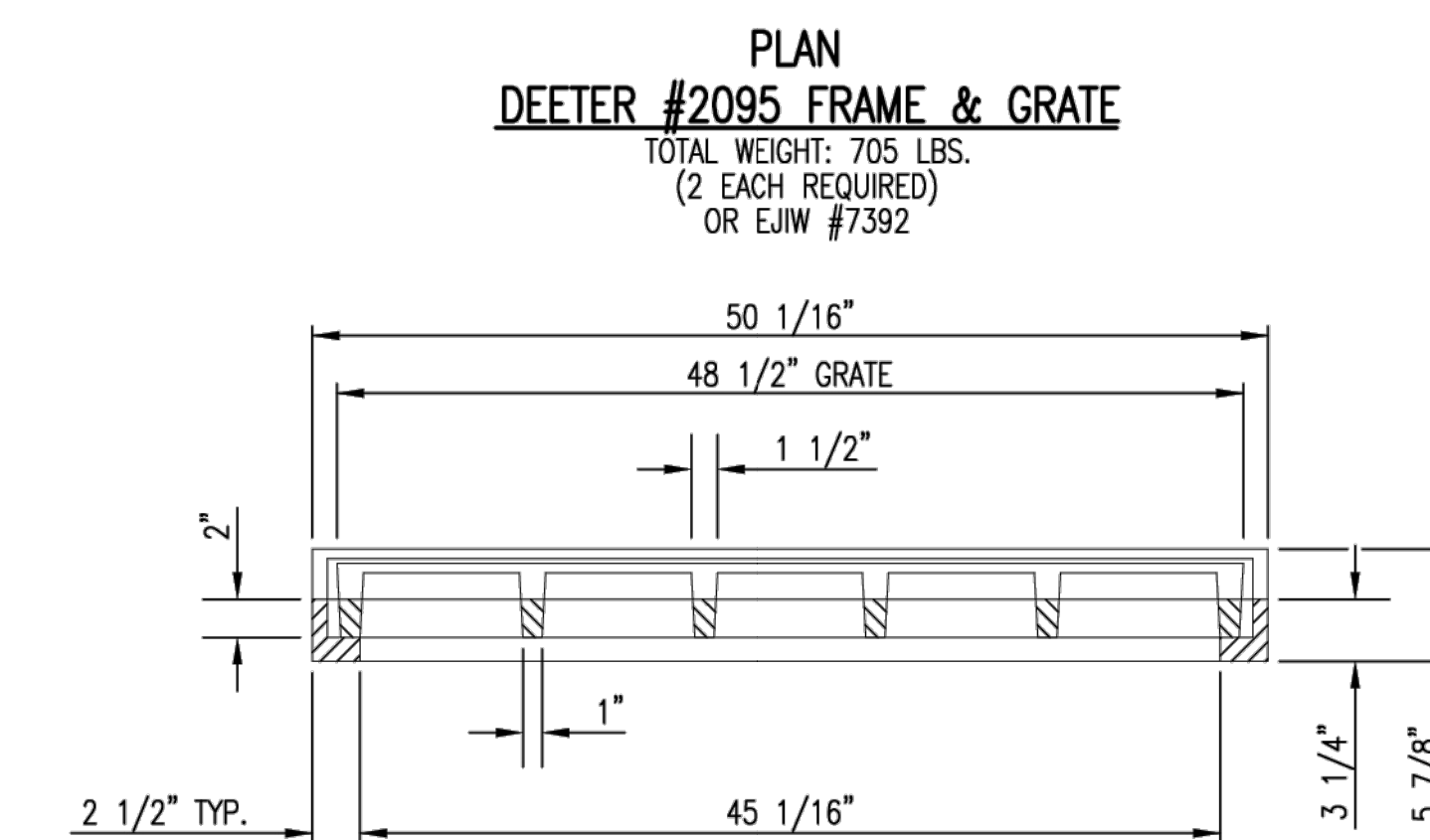


GRATED DRIVEWAY INLET (SINGLE)		
CITY ENGINEER GARY JANZEN, P.E.		
PROJECT NUMBER 458-2025-085610	OCA NUMBER	DATE 11/2010
CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		SHEET 13 32



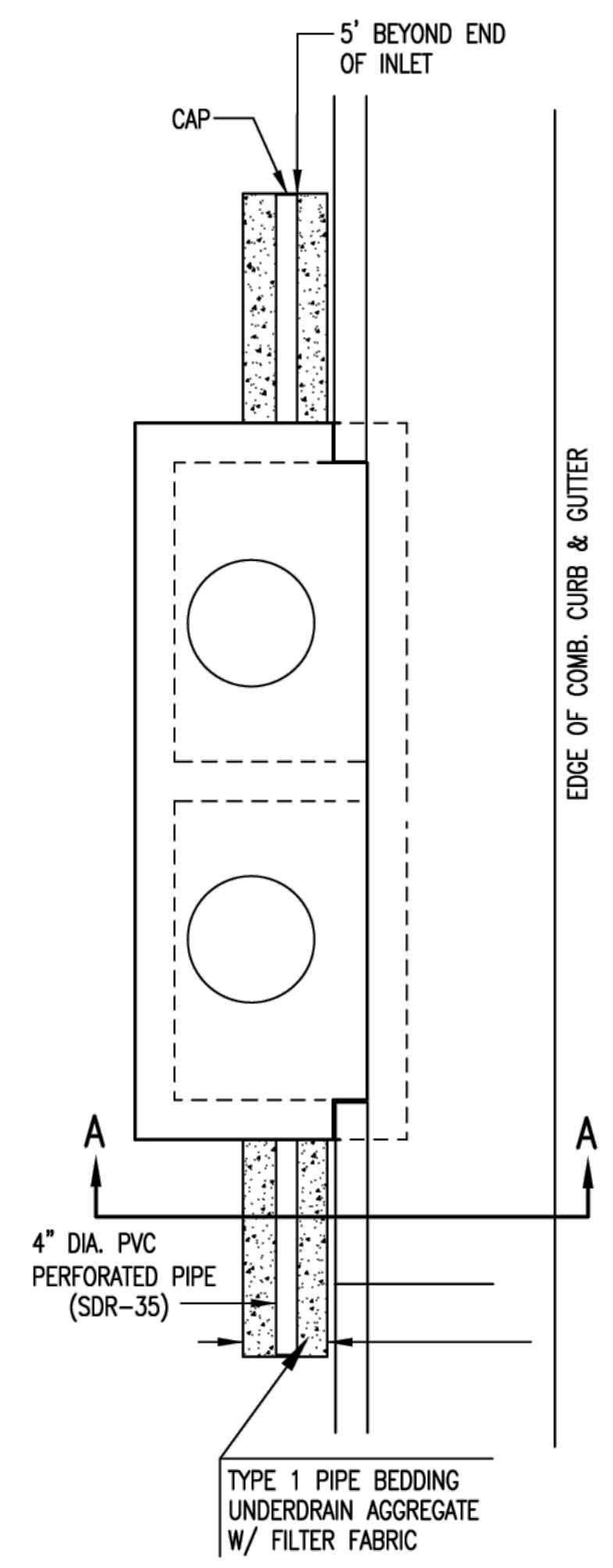
- GENERAL NOTES**
- GRATE FRAME TO BE INSTALLED ON THIN MORTAR CUSHION TO INSURE FULL SUPPORT ALONG BRICK. CONCRETE USED FOR INLET CONSTRUCTION SHALL CONFORM TO CITY OF WICHITA SPECIFICATIONS FOR CONCRETE PAVEMENT MIX.
 - CONTRACTOR SHALL HAVE THE OPTION OF CONSTRUCTING 8" BRICK MASONRY WALL BETWEEN THE CONCRETE INLET BASE AND TOP OF THIS INLET WHEN H=7'-0" OR LESS.
 - INLET INVERT SHALL BE SHAPED WITH 8 SACK SAND MIX CONCRETE TO CREATE FLOW CHANNELS AND TO INCREASE HYDRAULIC EFFICIENCY SUCH THAT THE INLET WILL BE SELF-CLEANING BETWEEN ALL INLET AND/OR OUTLET PIPES.
 - THE ENDS OF ALL PIPES INSTALLED IN INLETS SHALL BE CUT OFF FLUSH WITH THE INSIDE FACE OF THE INLET WALL.
 - INLET FRAME AND GRATE TO BE DEETER #2095, EJIW #7392, OR APPROVED EQUAL.
 - CONTRACTOR SHALL REMOVE LIFTING HOOKS AFTER INSTALLATION. RECESSES IN INLET WALL SHALL BE GROUTED FLUSH TO THE INLET WALL WITH HYDRAULIC CEMENT AFTER THE INLET IS IN PLACE. LIFTING HOLES THRU THE INLET WALL WILL NOT BE ACCEPTED.

INCLUDE BLOCKOUT FOR INLET UNDERDRAIN PER CITY OF WICHITA DETAIL. SEE SHEET 15 FOR DETAIL.

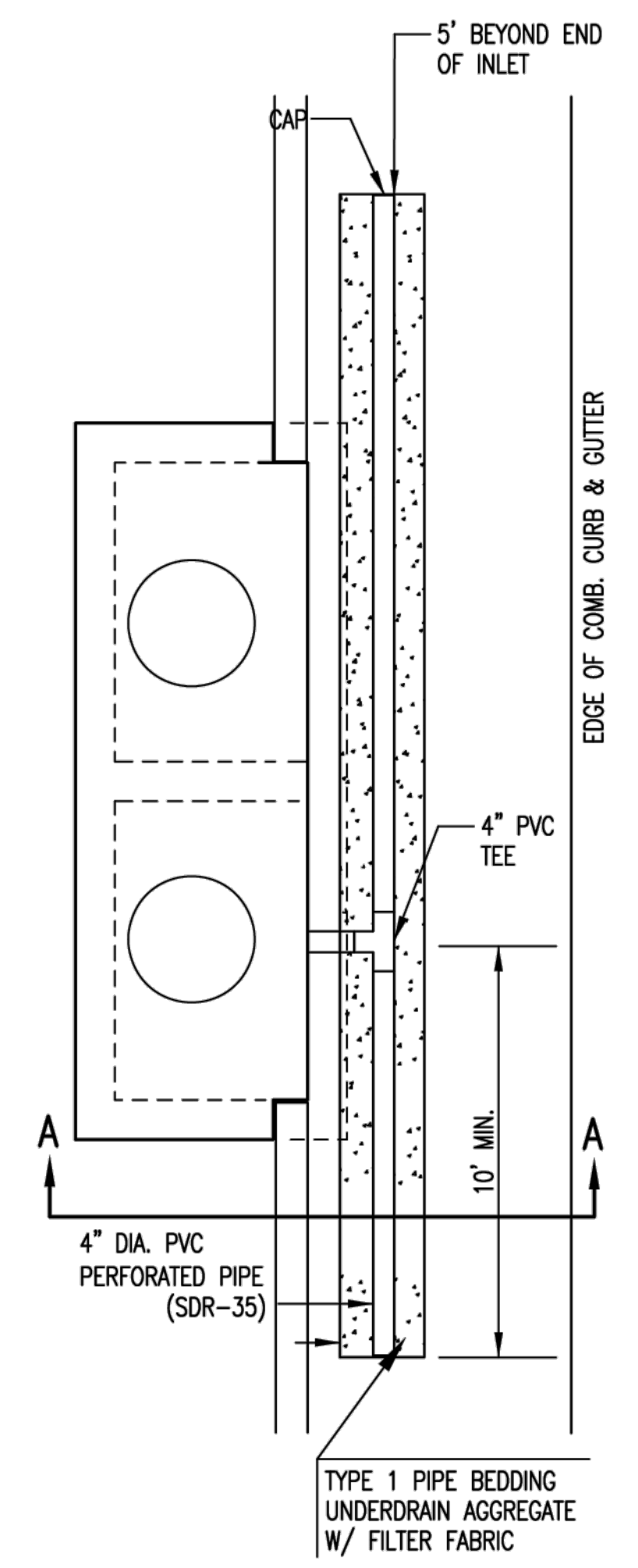


GRADED DRIVEWAY INLET (DOUBLE)		
CITY ENGINEER GARY JANZEN, P.E.		
PROJECT NUMBER 458-2025-085610	OCA NUMBER	DATE 05/2013
CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		SHEET 14 32

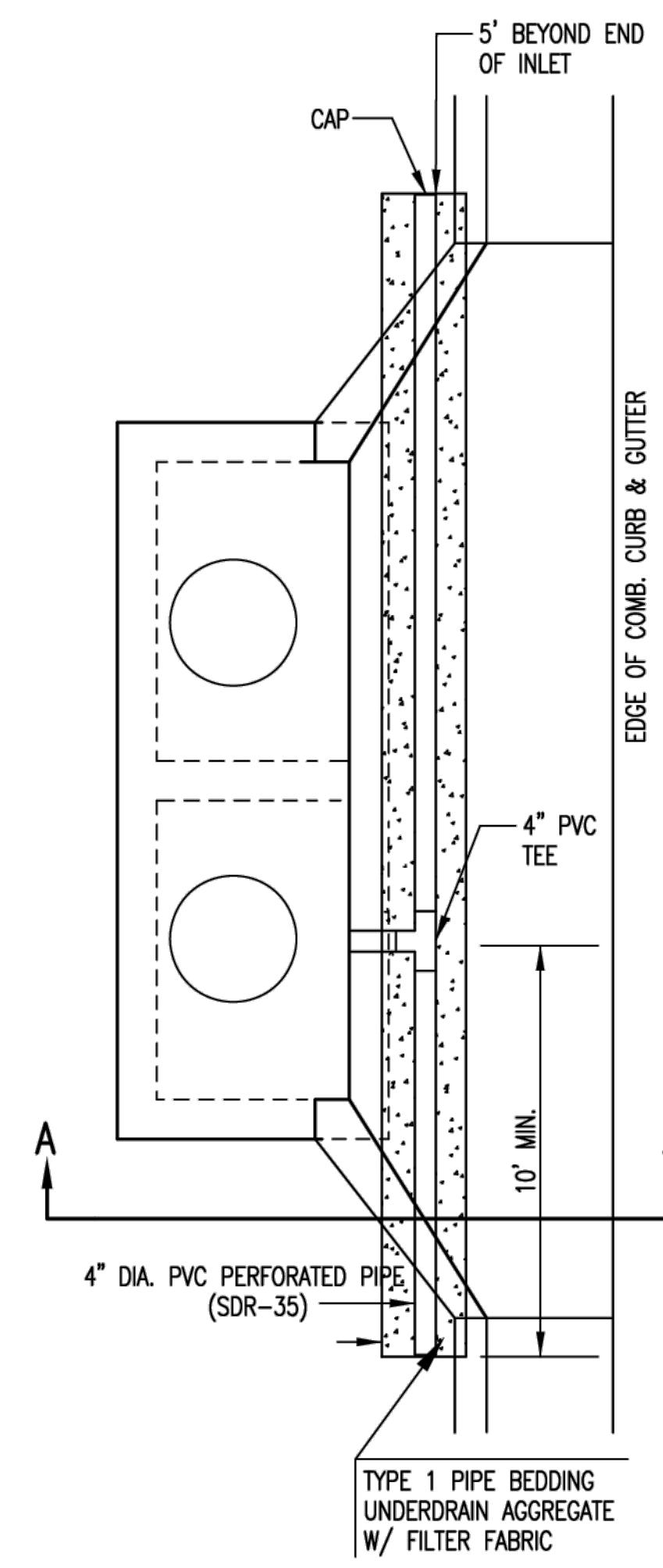
PAVEMENT UNDERDRAIN SHALL BE INSTALLED ON ALL CURB INLETS.



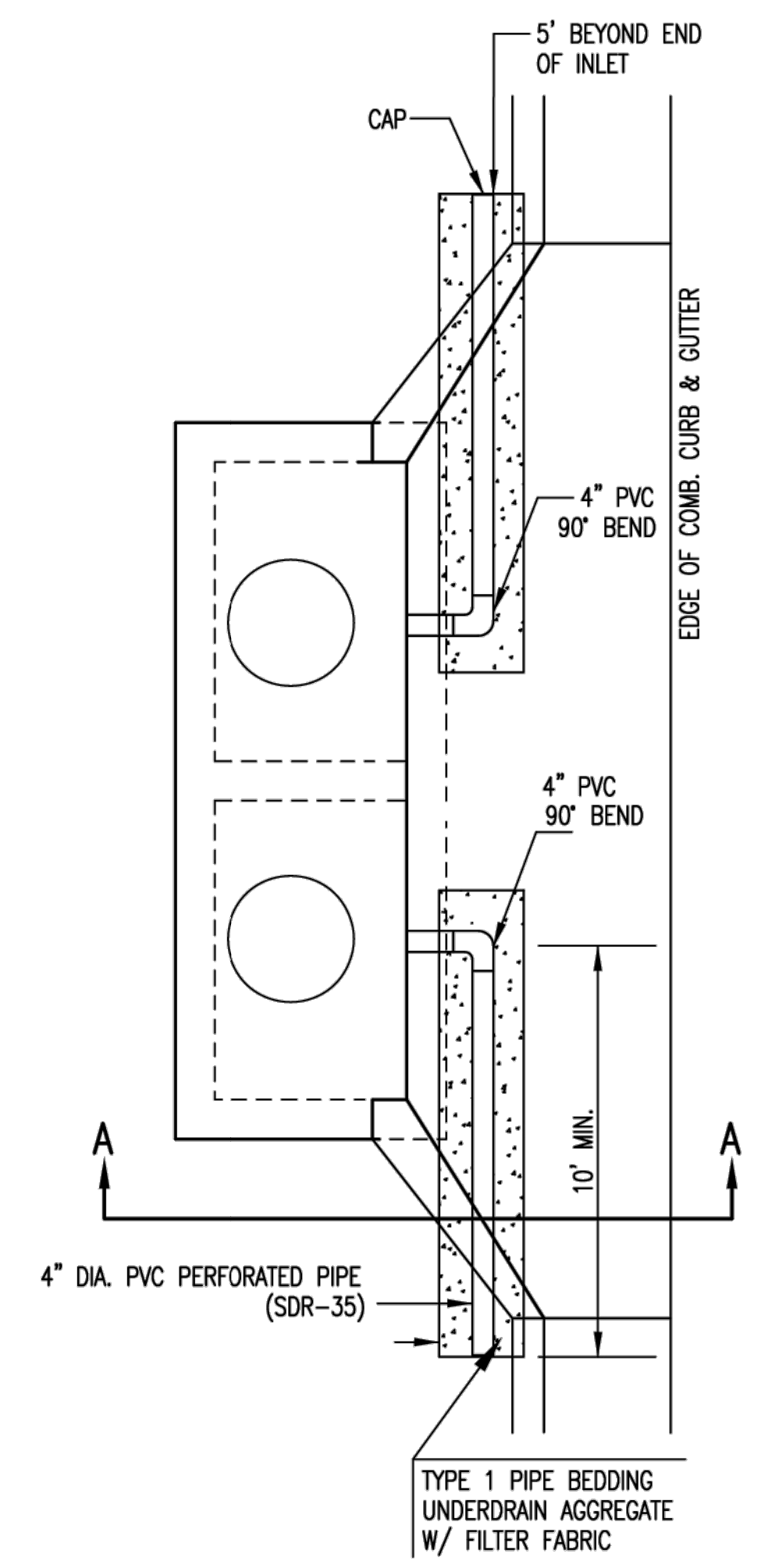
**TYPE 1
OPTION 1**



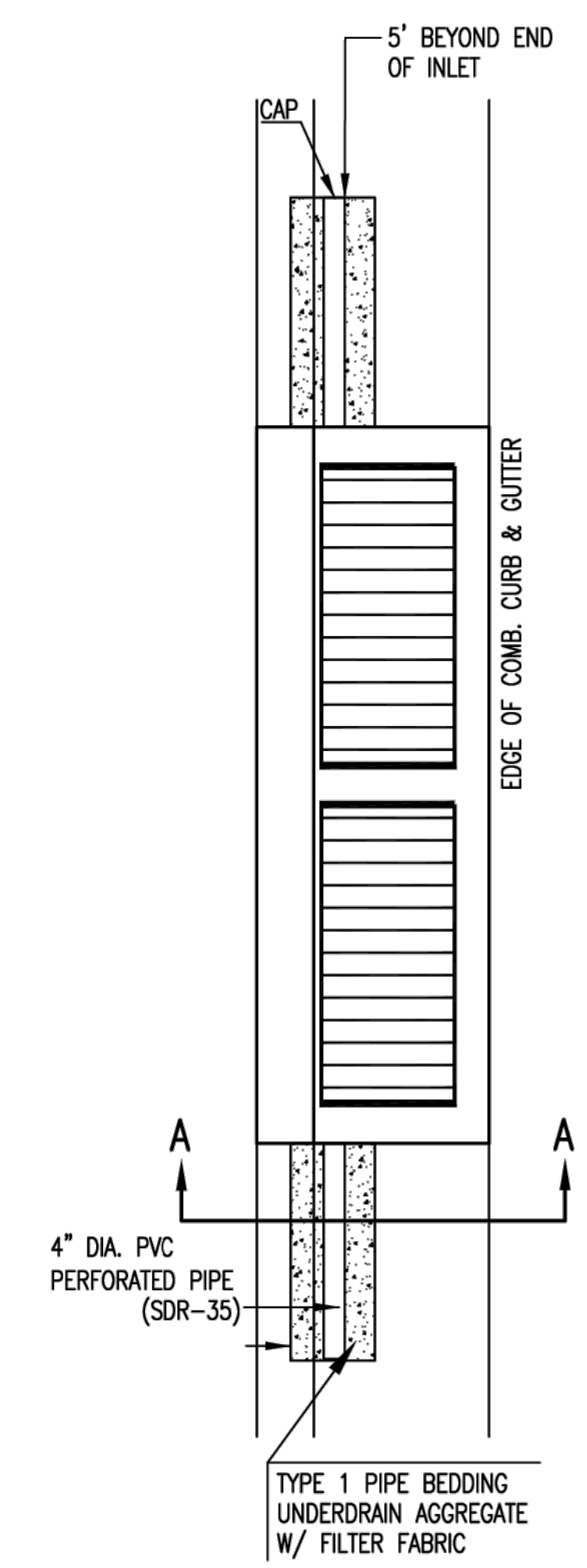
**TYPE 1
OPTION 2**



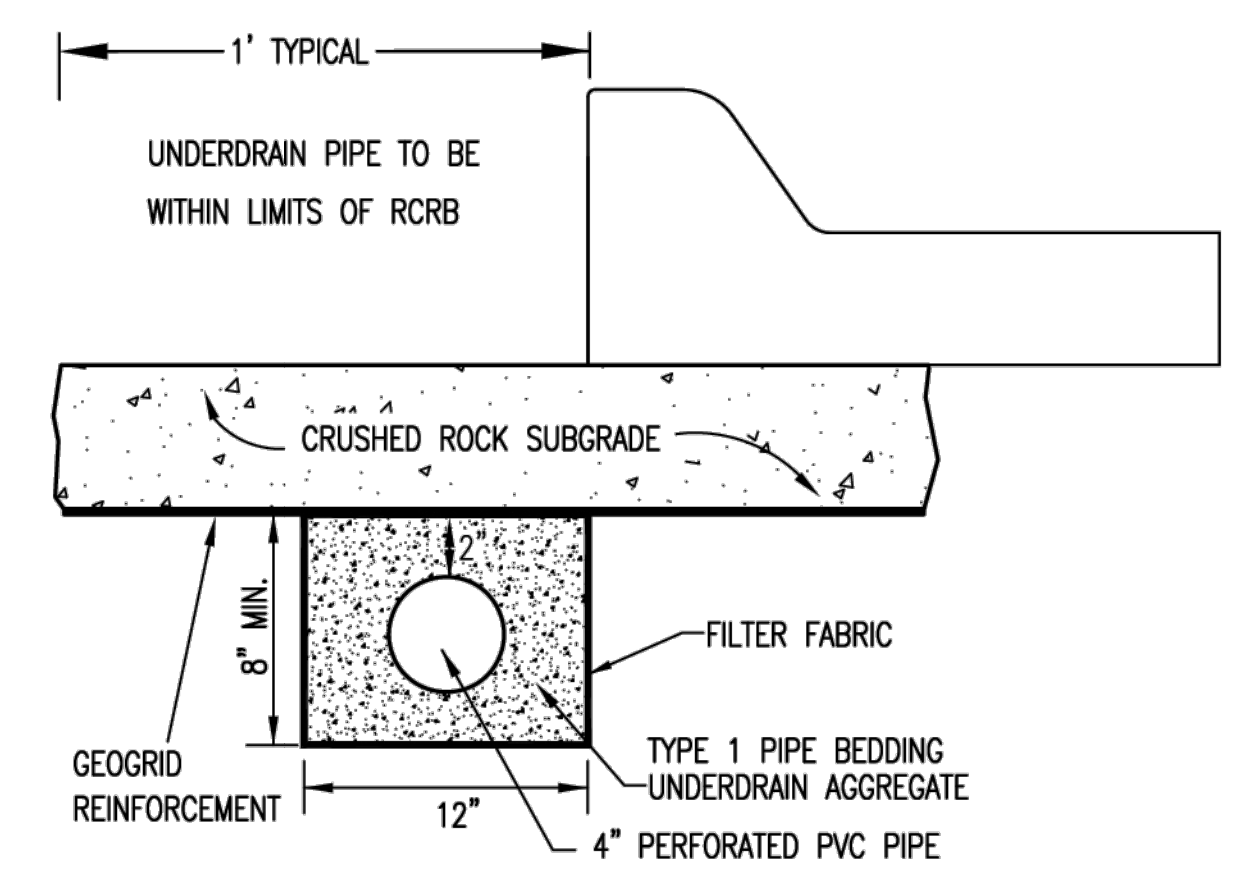
**TYPE 1-A INLET
OPTION 1**



**TYPE 1-A INLET
OPTION 2**



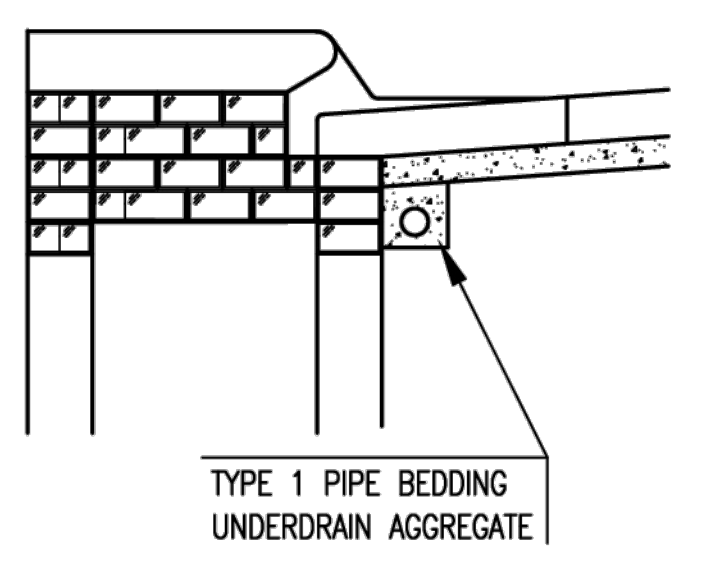
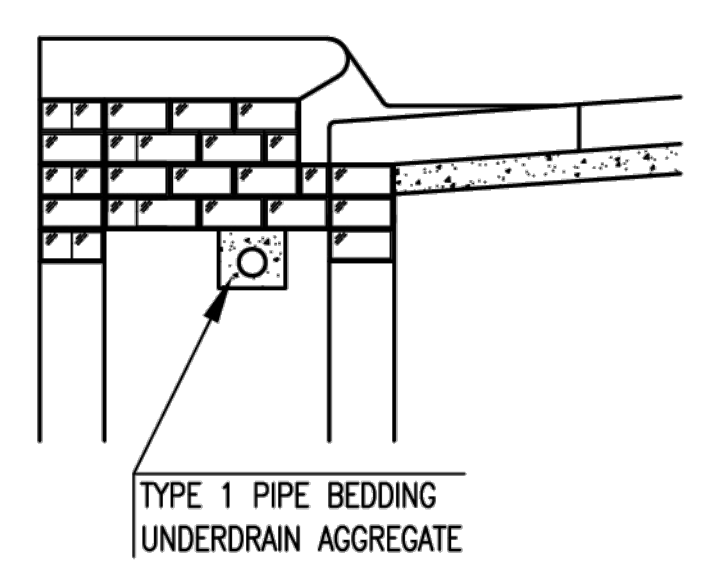
TYPE 2



SECTION A-A (TYPICAL)

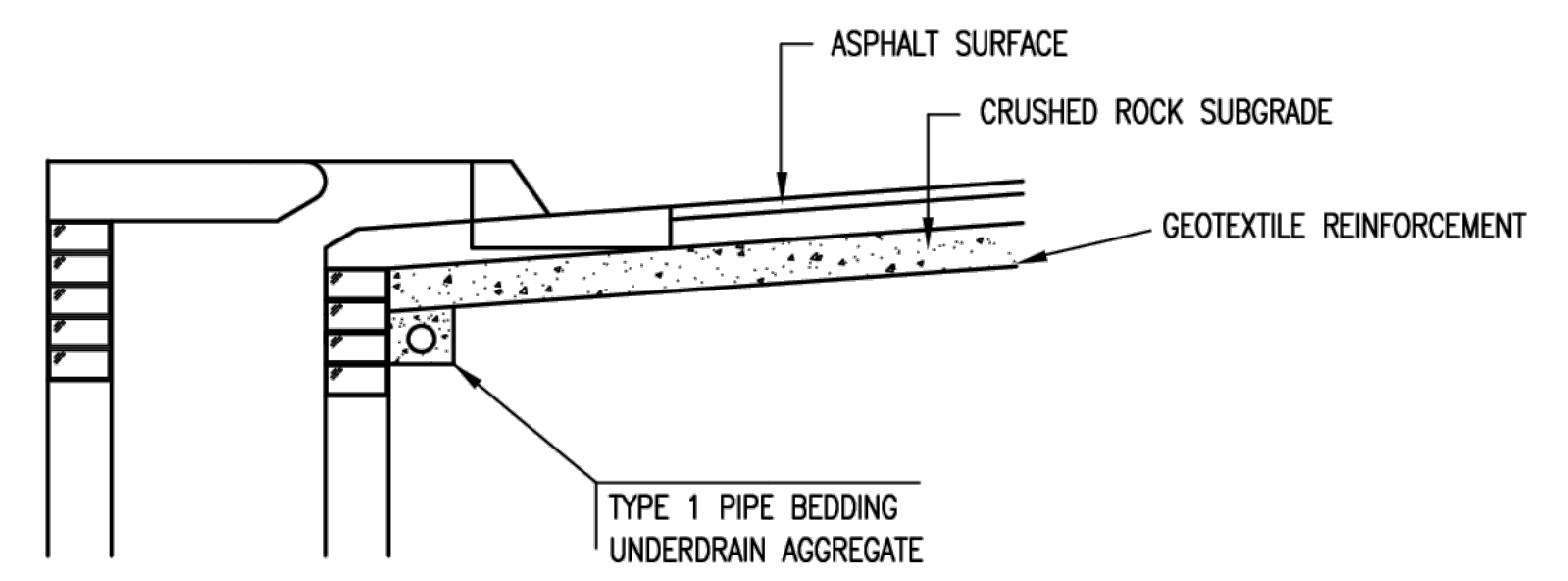
GENERAL NOTES

- PAVEMENT CONTRACTOR WILL BE REQUIRED TO INSTALL SDR 35, 4" PERFORATED DRAIN PIPE AND TEE AS INDICATED IN THE DETAILS.
- WHEN SWS CONSTRUCTED BY SEPARATE PROJECT, SWS CONTRACTOR SHALL INSTALL SDR 35, 4" DRAIN PIPE STUB ONLY THROUGH WALLS OF CURB INLETS AND CAP TO ALLOW FUTURE CONNECTION OF TEE AND ADDITIONAL DRAIN PIPE BY OTHERS.
- UNDERDRAIN PIPE SHALL BE PAID AS A MEASURED QUANTITY BY THE LINEAL FOOT.



(MIN. 16 PERFORATIONS PER LIN. FT. @ 1/4" DIA.)
PERFORATIONS TO BE ON BOTTOM HALF

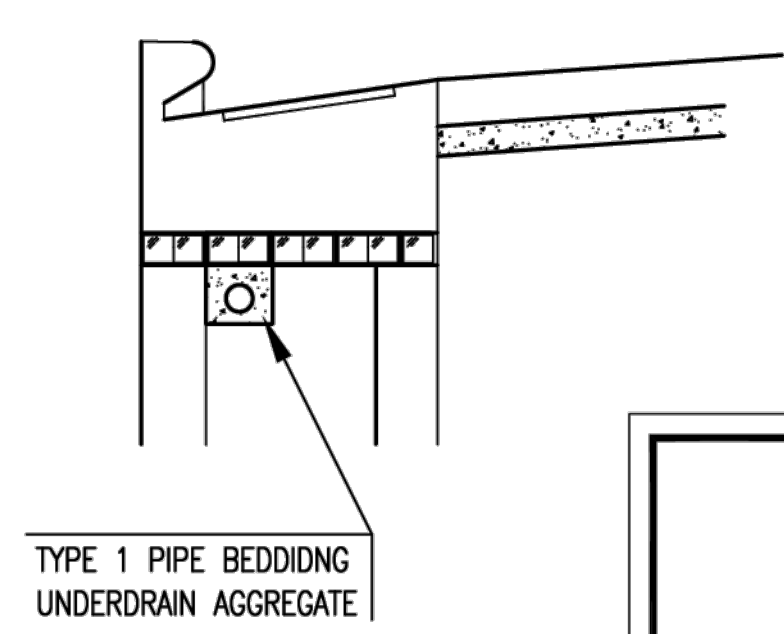
SECTION A-A



SECTION A-A

PAVEMENT UNDERDRAIN DETAIL

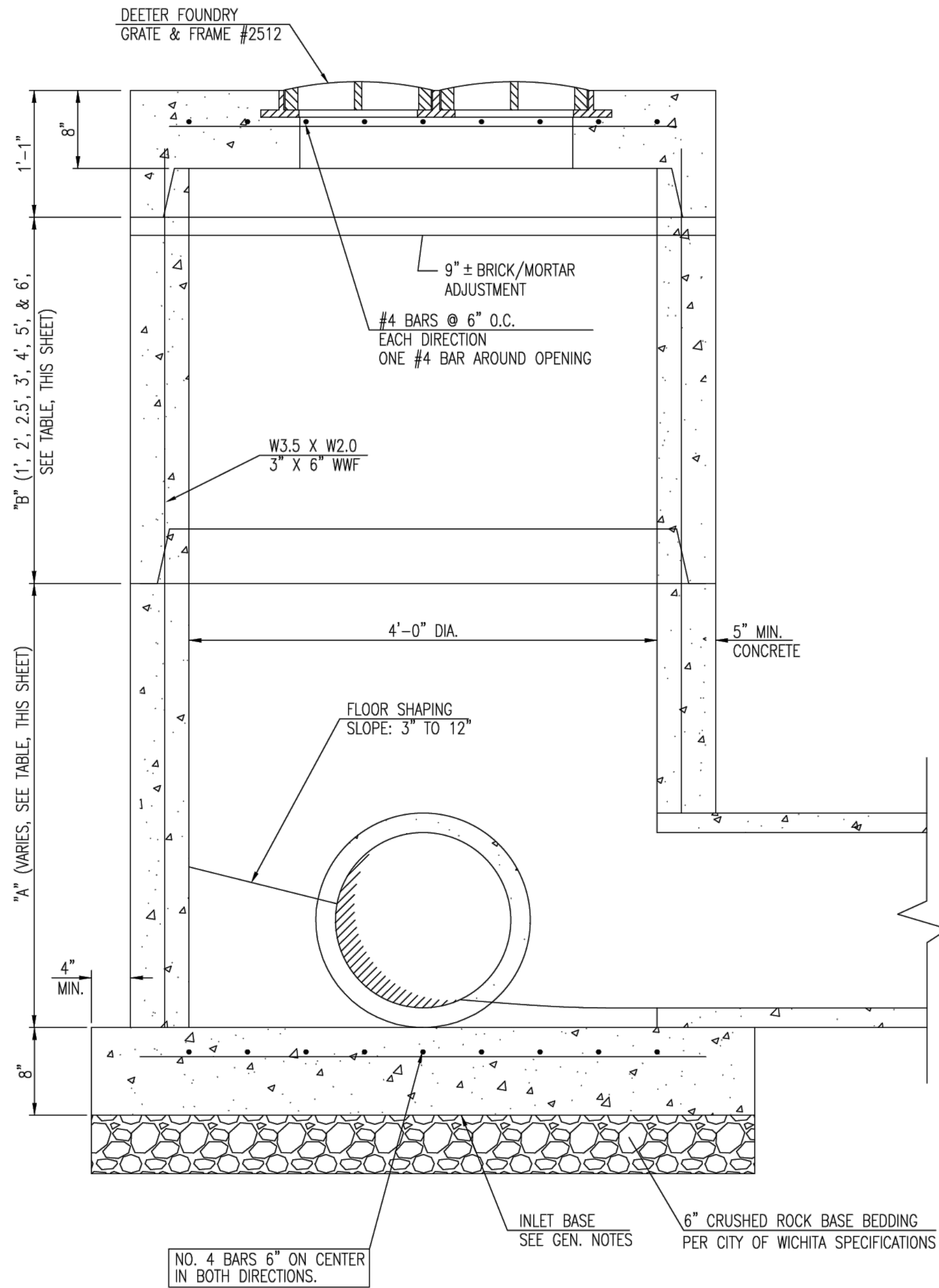
BID ITEM TO BE PROVIDED PER 4" PERFORATED UNDERDRAIN PIPE.



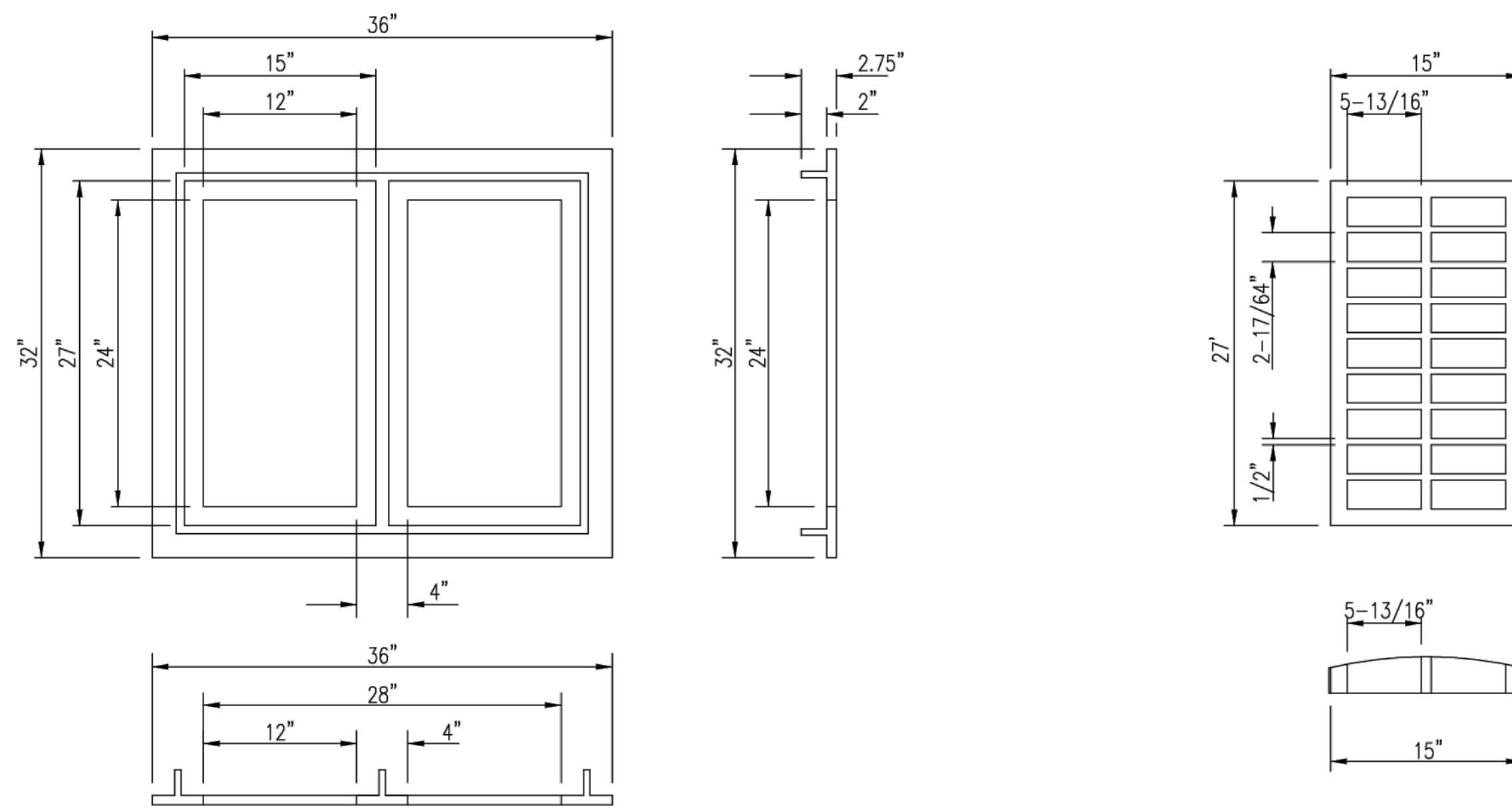
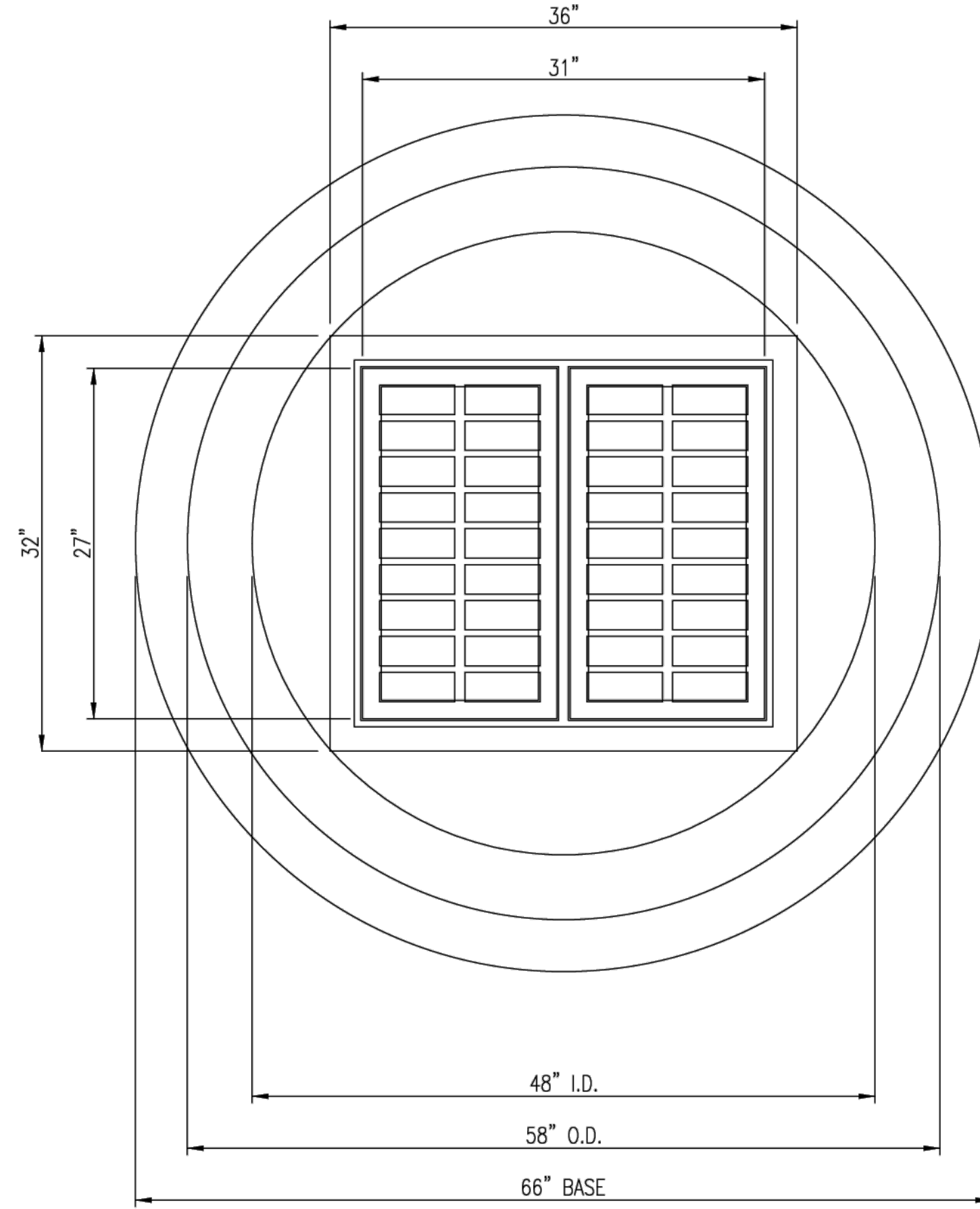
SECTION A-A

CITY OF WICHITA
PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

CURB INLET PAVEMENT UNDERDRAIN DETAIL		
CITY ENGINEER GARY JANZEN, P.E.		
PROJECT NUMBER 458-2025-085610	OCA NUMBER .	DATE 10/2012
CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		SHEET 15 32



BACKYARD INLETS SHALL NOT BE USED UNDER PAVEMENT



DEETER #2512 CATCH BASIN INLET GRATE & FRAME

GENERAL NOTES

- MORTAR USED IN MASONRY CONSTRUCTION SHALL CONTAIN 8 SACKS OF CEMENT PER CUBIC YARD. CONCRETE USED IN BACKYARD INLET BASES SHALL CONFORM TO THE REQUIREMENTS FOR CONCRETE PAVEMENT CONSTRUCTION AS SPECIFIED IN THE CITY STANDARD PAVING SPECIFICATIONS USING CITY CONCRETE CEMENT MIX WITHOUT AIR ENTRAINING.
- REINFORCING STEEL SHALL BE INSTALLED IN THE BACKYARD INLET BASES AND SHALL CONSIST OF NO. 4 BARS PLACED ON 6" CENTERS IN BOTH DIRECTIONS. THE BACKYARD INLET BASE REINFORCEMENT SHALL BE PLACED 6" ABOVE THE BOTTOM OF THE BACKYARD INLET BASE. ALL COSTS FOR FURNISHING AND INSTALLING REINFORCING STEEL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE BACKYARD INLET.
- THE FLOORS OF ALL BACKYARD INLET SHALL BE SHAPED WITH FLOW CHANNELS SUCH THAT THE INLETS WILL BE SELF CLEANING AND FREE OF AREAS WHERE SOLIDS COULD BE DEPOSITED. FLOW CHANNELS SHALL BE FORMED TO MATCH THE BOTTOM HALVES OF THE INFLOWING PIPES AND THE OUTFLOWING PIPE AS SHOWN BY THE DRAWINGS. INLET FLOORS SHALL HAVE SLOPES OF 3 INCHES PER FOOT IN THE AREAS OUTSIDE OF THE FLOW CHANNELS SLOPED TOWARD THE FLOW CHANNELS. PIPES LAID THROUGH INLETS SHALL HAVE THE TOP HALF REMOVED TO NEAT LINES FOR THE FULL INSIDE DIAMETER OF THE INLET. INLET FLOORS SHALL THEN BE SHAPED AROUND THE BOTTOM HALF OF THE PIPE WHICH FORMS THE FLOW CHANNEL.
- PIPES INSTALLED WITHIN THE EXCAVATION MADE FOR THE INLET SHALL BE CRADLED WITH CONCRETE TO THE LIMITS OF THE INLET EXCAVATION. WHEN CLAY PIPE IS USED, THE CRADLE SHALL EXTEND TO THE FIRST JOINT OUTSIDE THE INLET. THE CRADLE SHALL BE TERMINATED AT THE CLAY PIPE JOINT IN A MANNER WHICH WILL MAINTAIN THE FLEXIBILITY OF THE JOINT. COST OF CRADLE WITHIN INLET EXCAVATION OR TO CLAY PIPE JOINTS ADJACENT TO INLET SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE INLET.
- INLET GRATE CASTINGS AND INLET FRAME CASTINGS SHALL CONFORM TO THE REQUIREMENTS AS INDICATED IN THE STANDARD SPECIFICATIONS AND AS SHOWN IN THE STANDARD DETAIL DRAWING.
- THE CROWNS OF INFLOWING PIPES SHALL NEVER BE SET LOWER THAN THE CROWN OF THE OUTFLOWING PIPE.
- JOINTS BETWEEN INLET SECTIONS TO BE SEALED WITH TWO WRAPS OF EXTRUDED BUTYL RUBBER JOINT MASTIC MEETING CITY OF WICHITA TYPE "A" MANHOLE SPECIFICATIONS.
- BACKYARD INLETS SHALL BE PAID FOR AT THE UNIT PRICE BID PER EACH. ALL STANDARD BACKYARD INLET DIAMETERS WILL BE 4'.
- CONTRACTOR SHALL REMOVE LIFTING HOOKS AFTER INSTALLATION. RECESSES IN INLET WALL SHALL BE GROUTED FLUSH TO THE INLET WALL WITH HYDRAULIC CEMENT AFTER THE INLET IS IN PLACE. LIFTING HOLES THRU THE INLET WALL WILL NOT BE ACCEPTED.

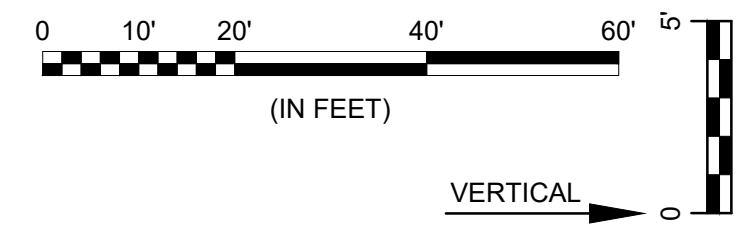
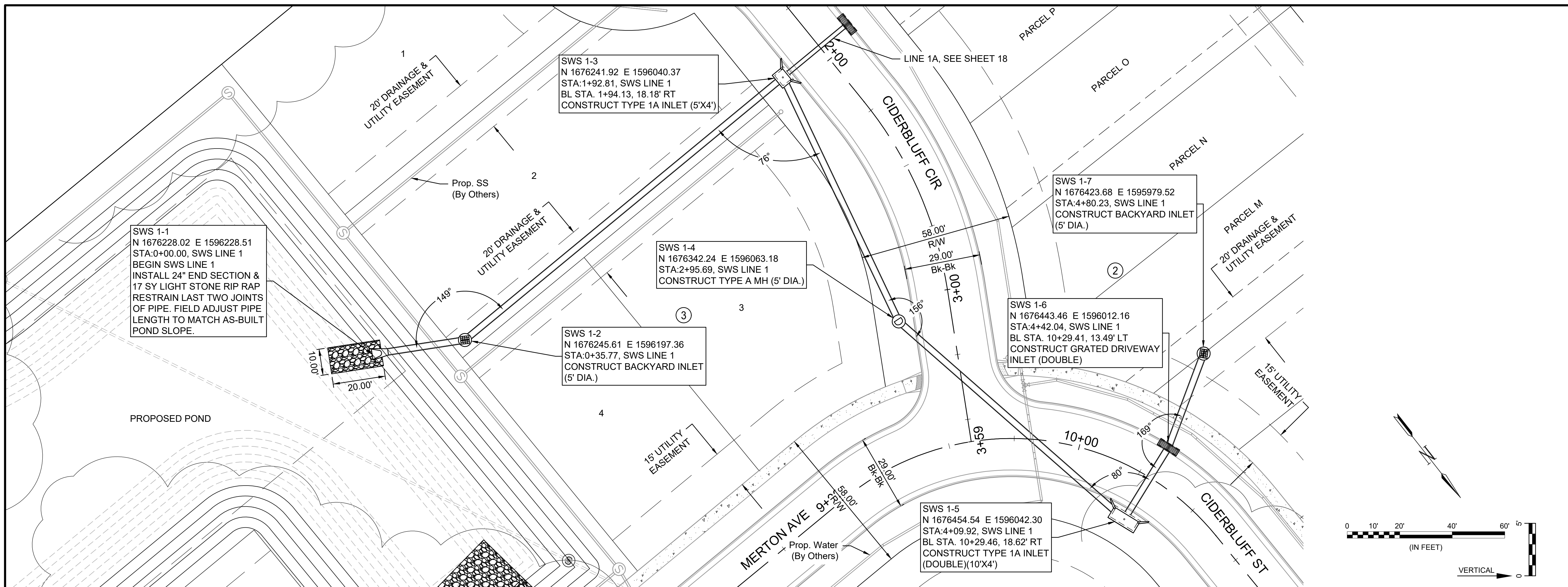


BACKYARD INLET		
CITY ENGINEER GARY JANZEN, P.E.		
PROJECT NUMBER 458-2025-085610	OCA NUMBER .	DATE 05/2011
CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		SHEET 16
		32



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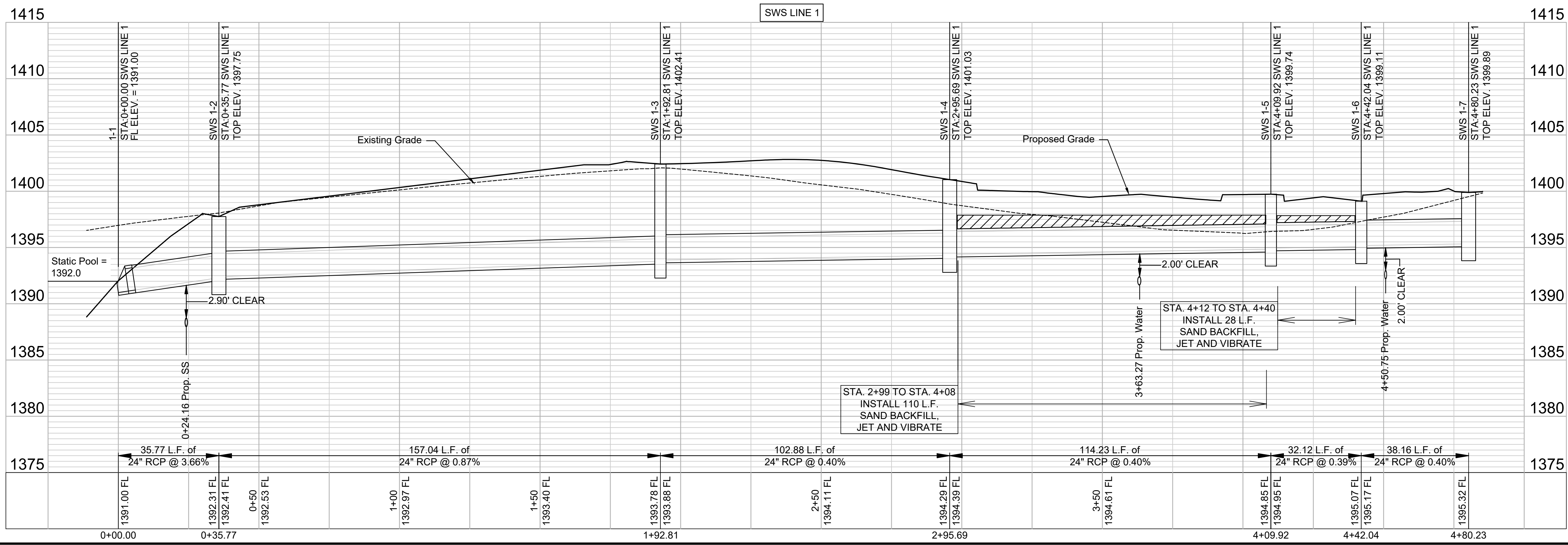


CITY OF WICHITA
 WICHITA, KANSAS
 OAK TREE STORM SEWER

SWS LINE 1
 JOB NO.: 2402708
 DATE: MAR 2026
 DESIGNED BY: EJG
 DRAWN BY: DWS

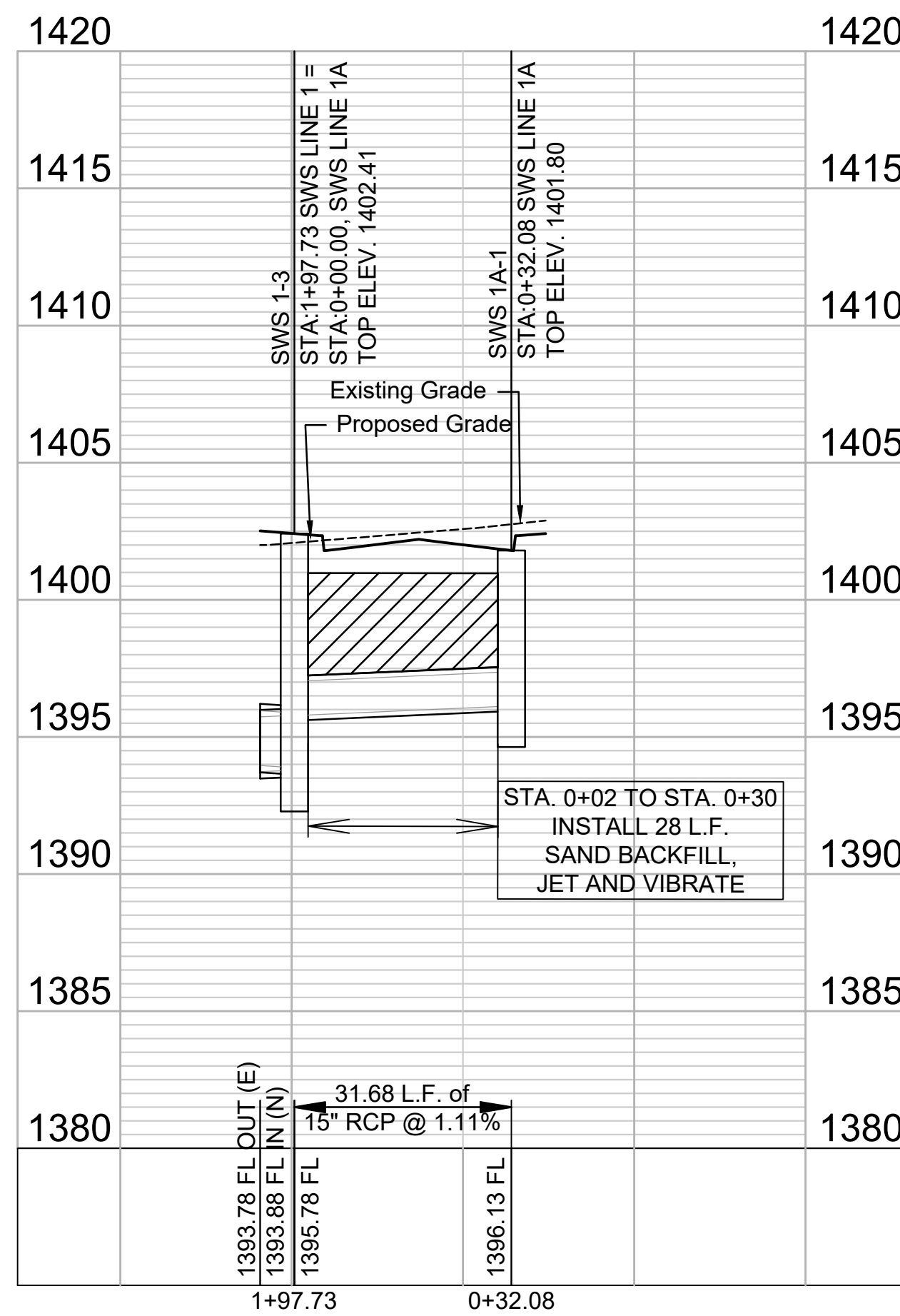
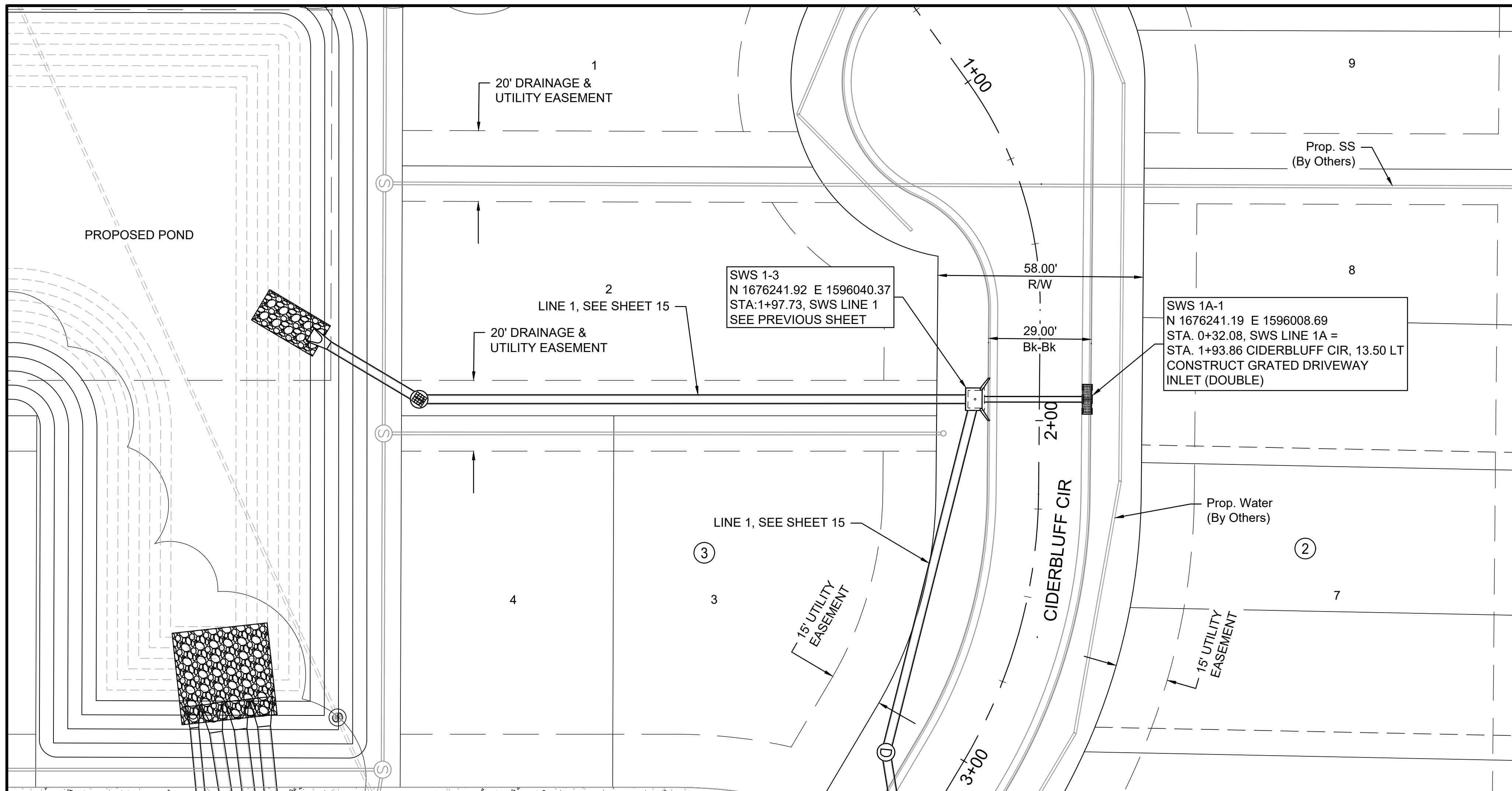
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DRAWING NUMBER
 SHEET NUMBER **17** OF **32**



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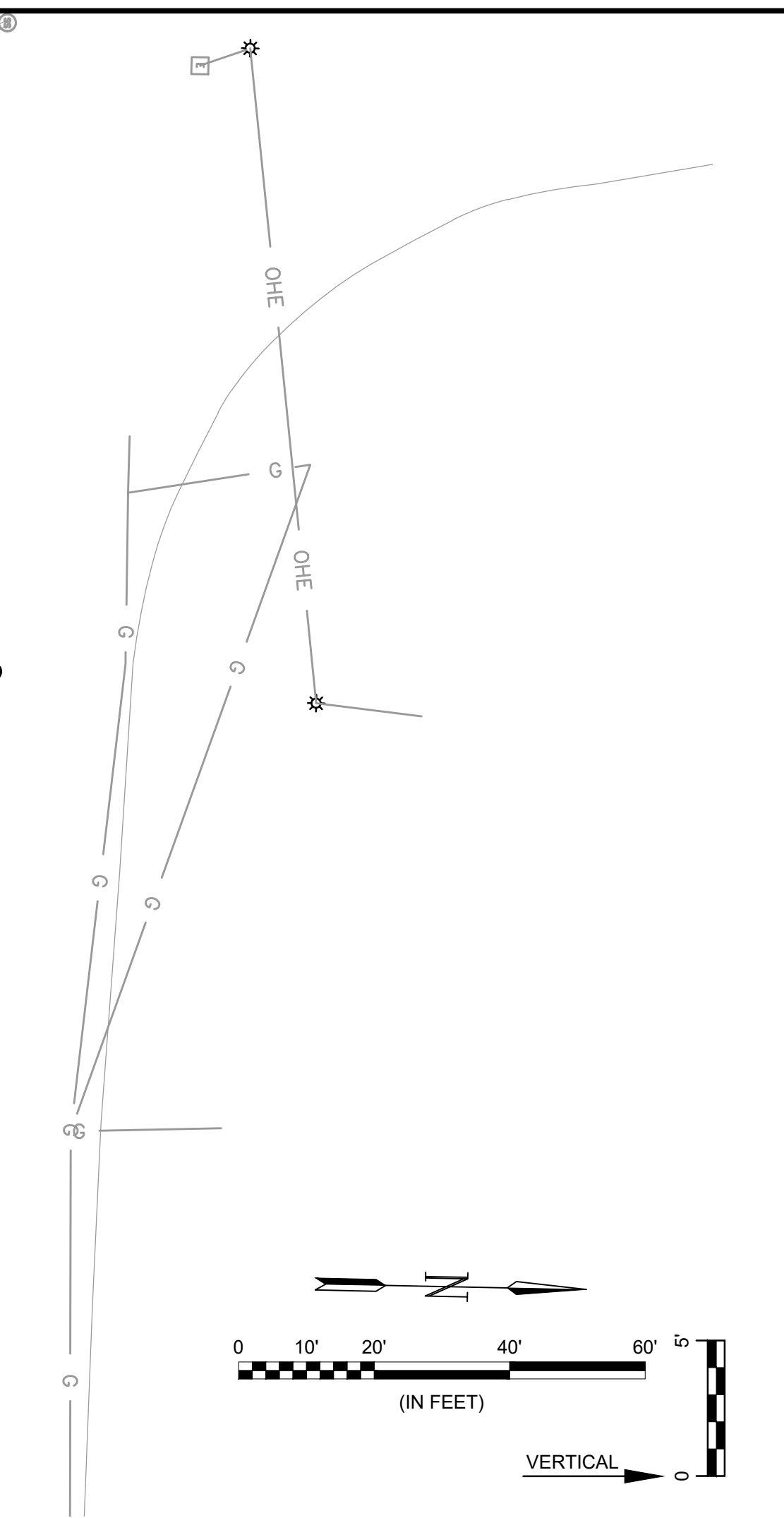
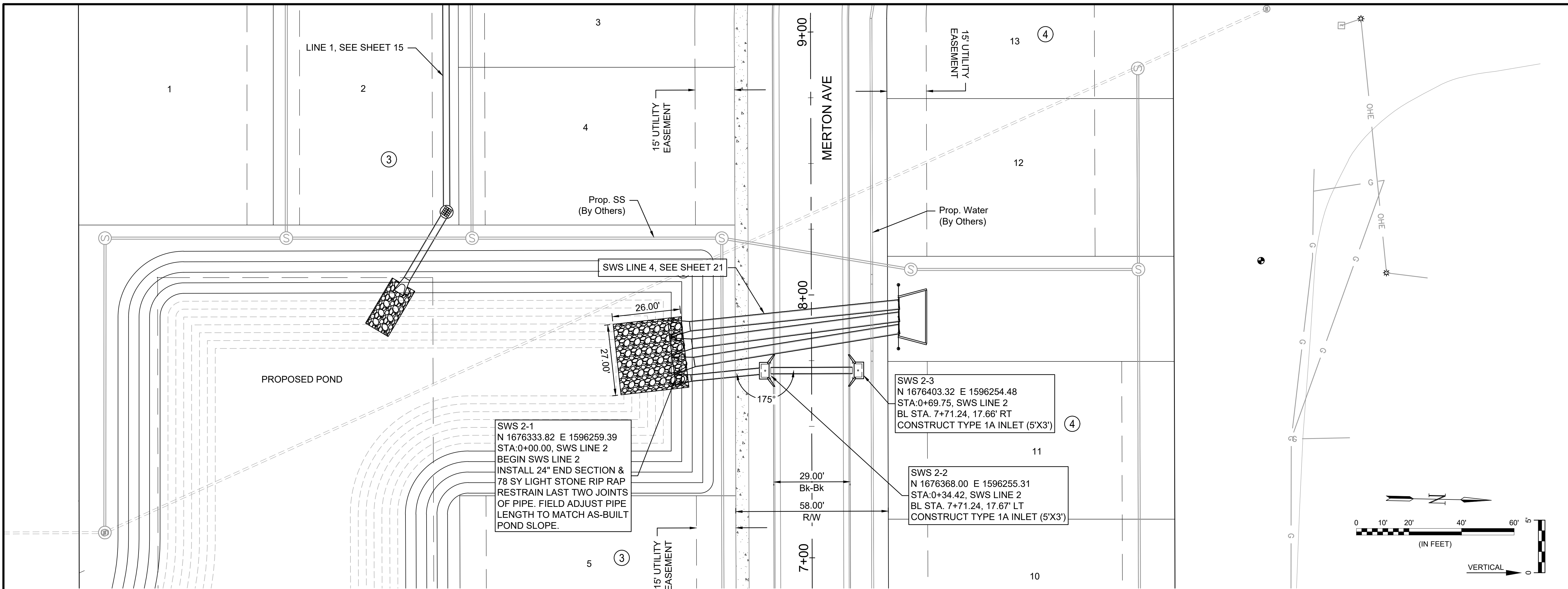
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CITY OF WICHITA
 WICHITA, KANSAS
OAK TREE
 STORM SEWER

SWS LINE 1A

JOB NO.: 2402708
 DATE: MAR 2026
 DESIGNED BY: EJJ
 DRAWN BY: DWS
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 SHEET NUMBER **18 OF 32**

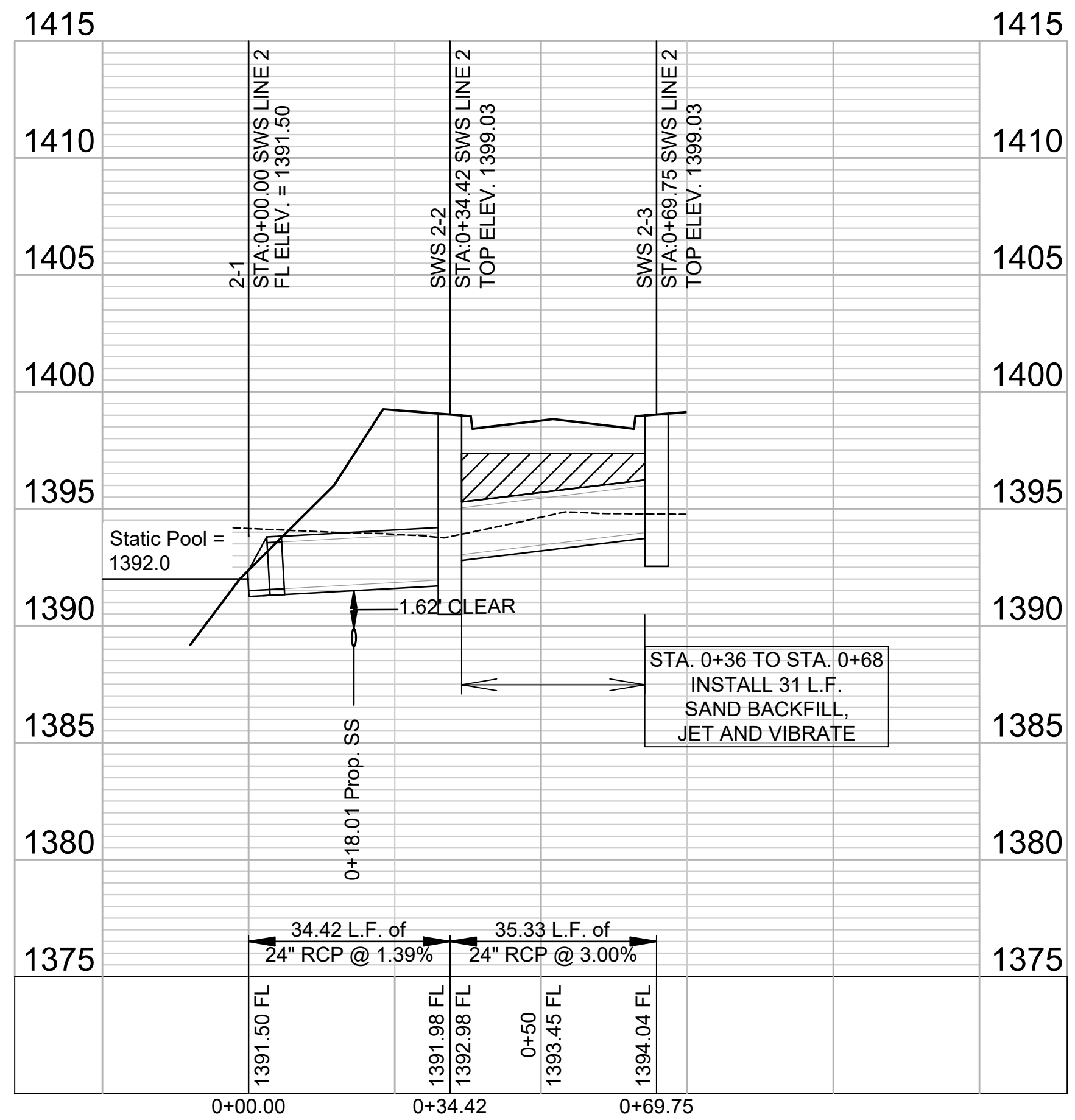
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SWS 2-1
 N 1676333.82 E 1596259.39
 STA:0+00.00, SWS LINE 2
 BEGIN SWS LINE 2
 INSTALL 24" END SECTION &
 78 SY LIGHT STONE RIP RAP
 RESTRAIN LAST TWO JOINTS
 OF PIPE. FIELD ADJUST PIPE
 LENGTH TO MATCH AS-BUILT
 POND SLOPE.

SWS 2-3
 N 1676403.32 E 1596254.48
 STA:0+69.75, SWS LINE 2
 BL STA. 7+71.24, 17.66' RT
 CONSTRUCT TYPE 1A INLET (5'X3')

SWS 2-2
 N 1676368.00 E 1596255.31
 STA:0+34.42, SWS LINE 2
 BL STA. 7+71.24, 17.67' LT
 CONSTRUCT TYPE 1A INLET (5'X3')



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CITY OF WICHITA
 WICHITA, KANSAS
 OAK TREE
 STORM SEWER

SWS LINE 2

JOB NO.: 2402708
 DATE: MAR 2026
 DESIGNED BY: EJJ
 DRAWN BY: DWS

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CITY OF WICHITA
 WICHITA, KANSAS
 OAK TREE
 STORM SEWER

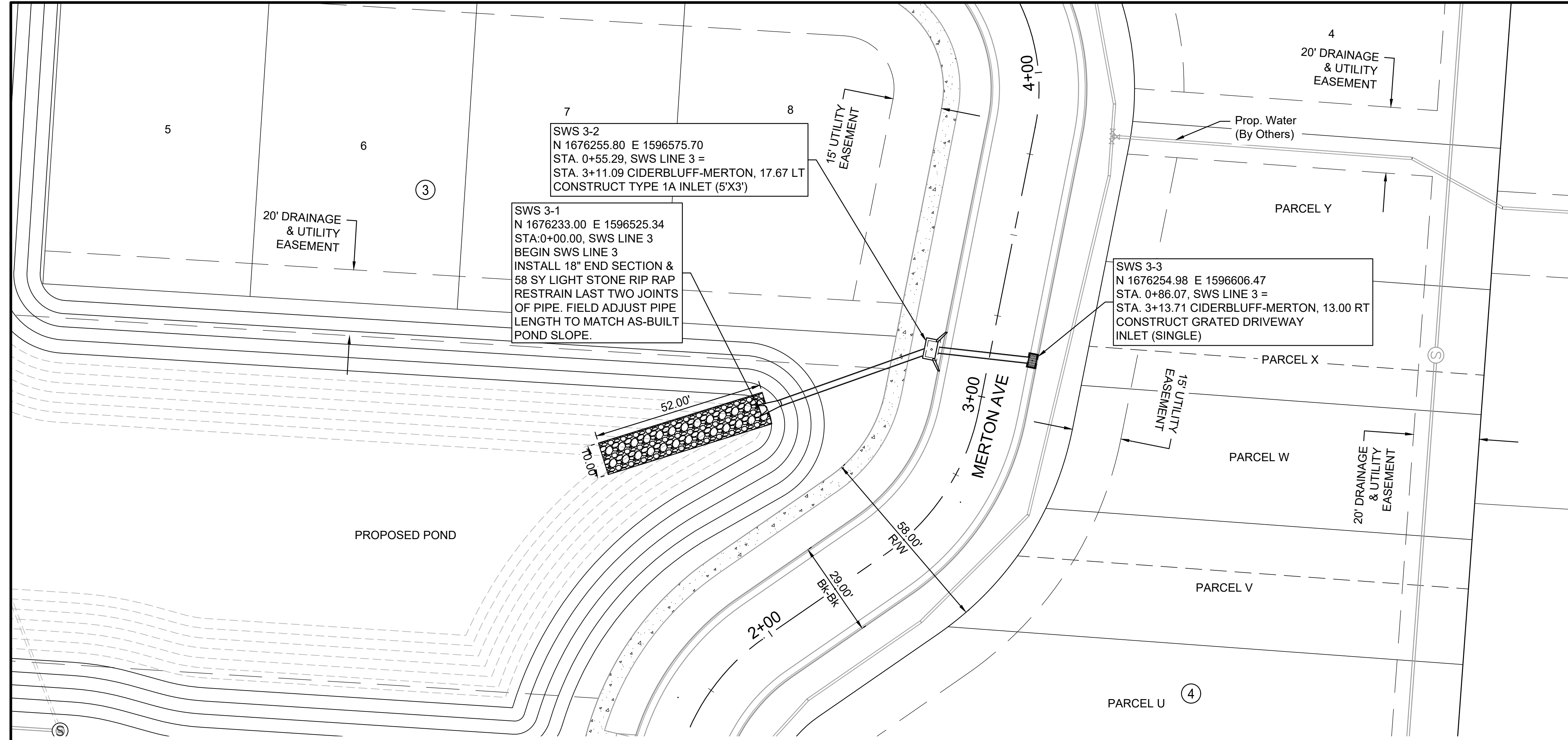
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JOB NO.: 2402708
 DATE: MAR 2026
 DESIGNED BY: EJJ
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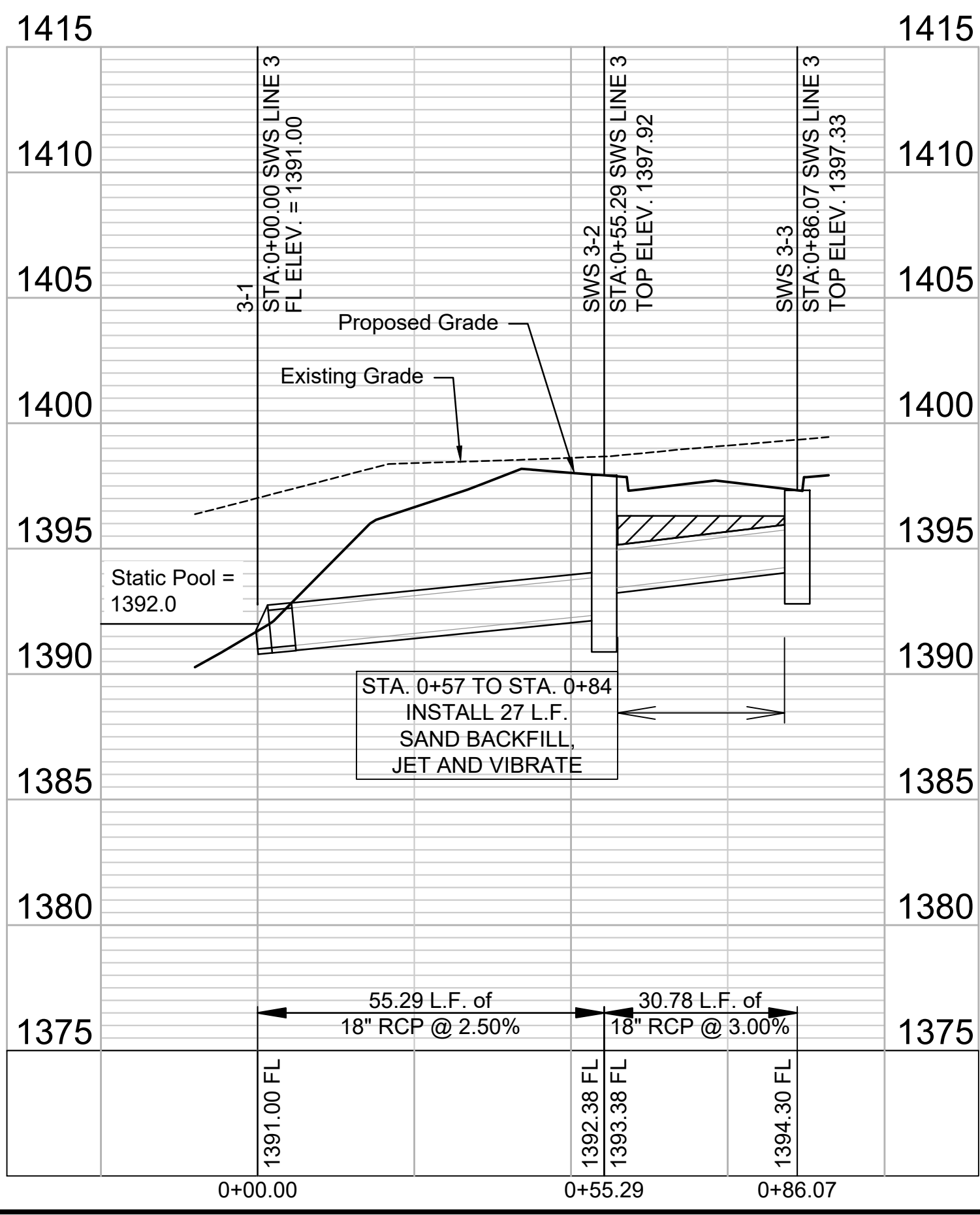
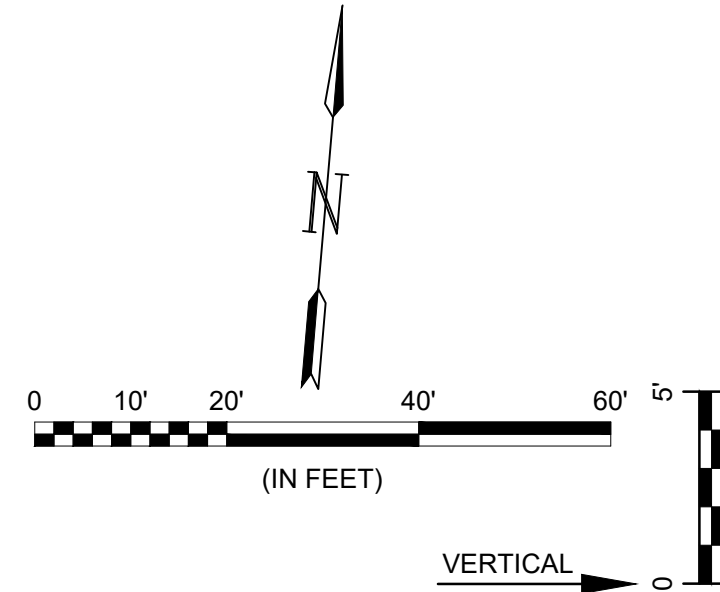
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SWS 3-2
 N 1676255.80 E 1596575.70
 STA. 0+55.29, SWS LINE 3 =
 STA. 3+11.09 CIDERBLUFF-MERTON, 17.67 LT
 CONSTRUCT TYPE 1A INLET (5'X3')

SWS 3-1
 N 1676233.00 E 1596525.34
 STA:0+00.00, SWS LINE 3
 BEGIN SWS LINE 3
 INSTALL 18" END SECTION &
 58 SY LIGHT STONE RIP RAP
 RESTRAIN LAST TWO JOINTS
 OF PIPE. FIELD ADJUST PIPE
 LENGTH TO MATCH AS-BUILT
 POND SLOPE.

SWS 3-3
 N 1676254.98 E 1596606.47
 STA. 0+86.07, SWS LINE 3 =
 STA. 3+13.71 CIDERBLUFF-MERTON, 13.00 RT
 CONSTRUCT GRATED DRIVEWAY
 INLET (SINGLE)



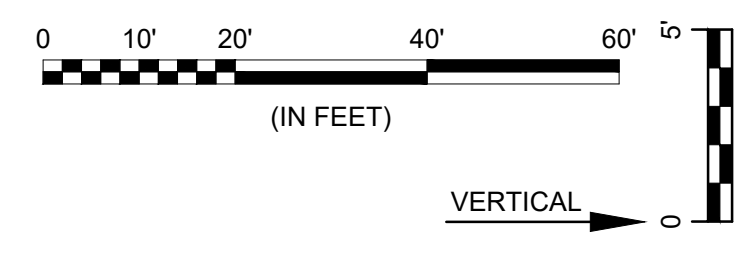
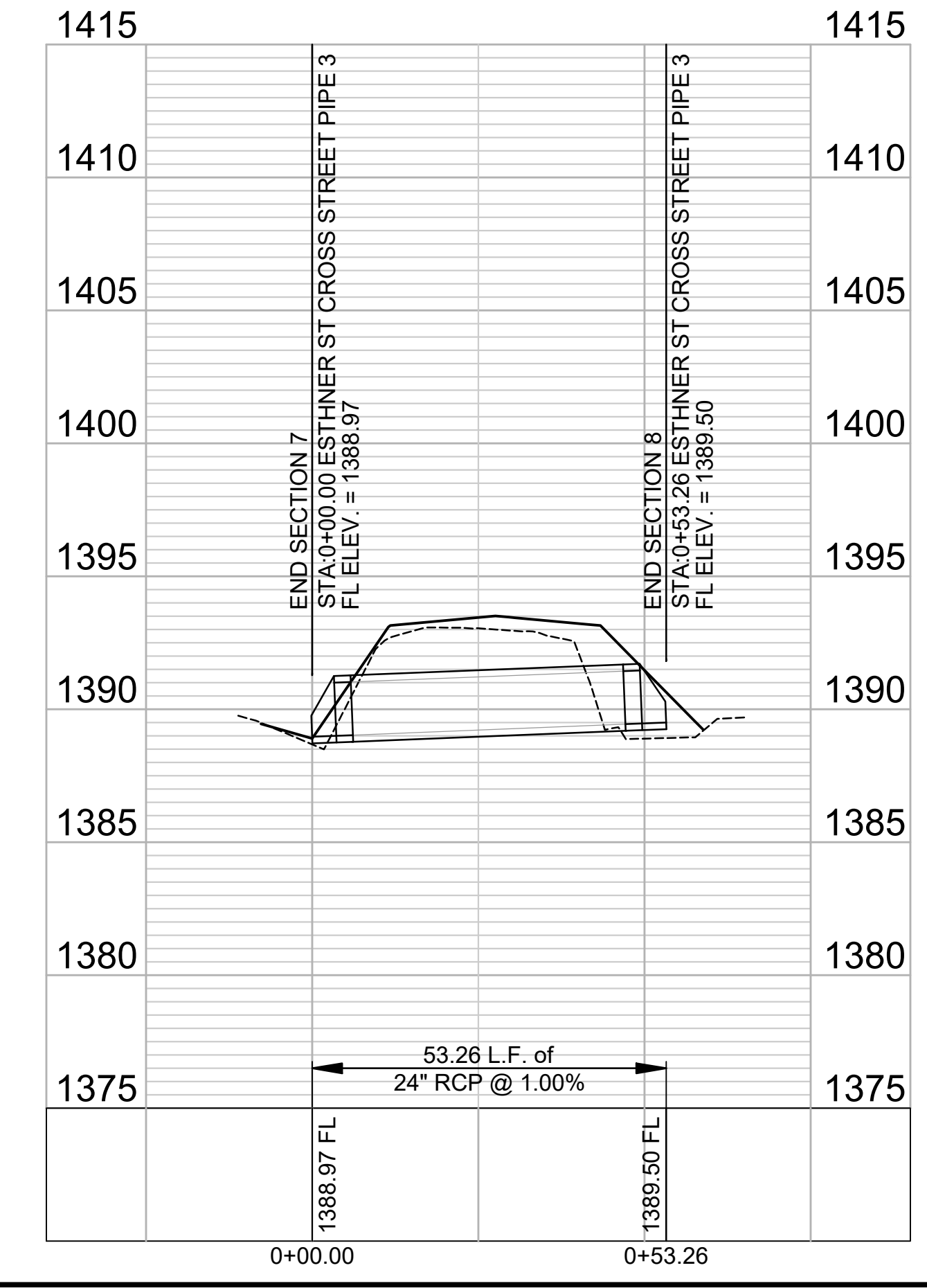
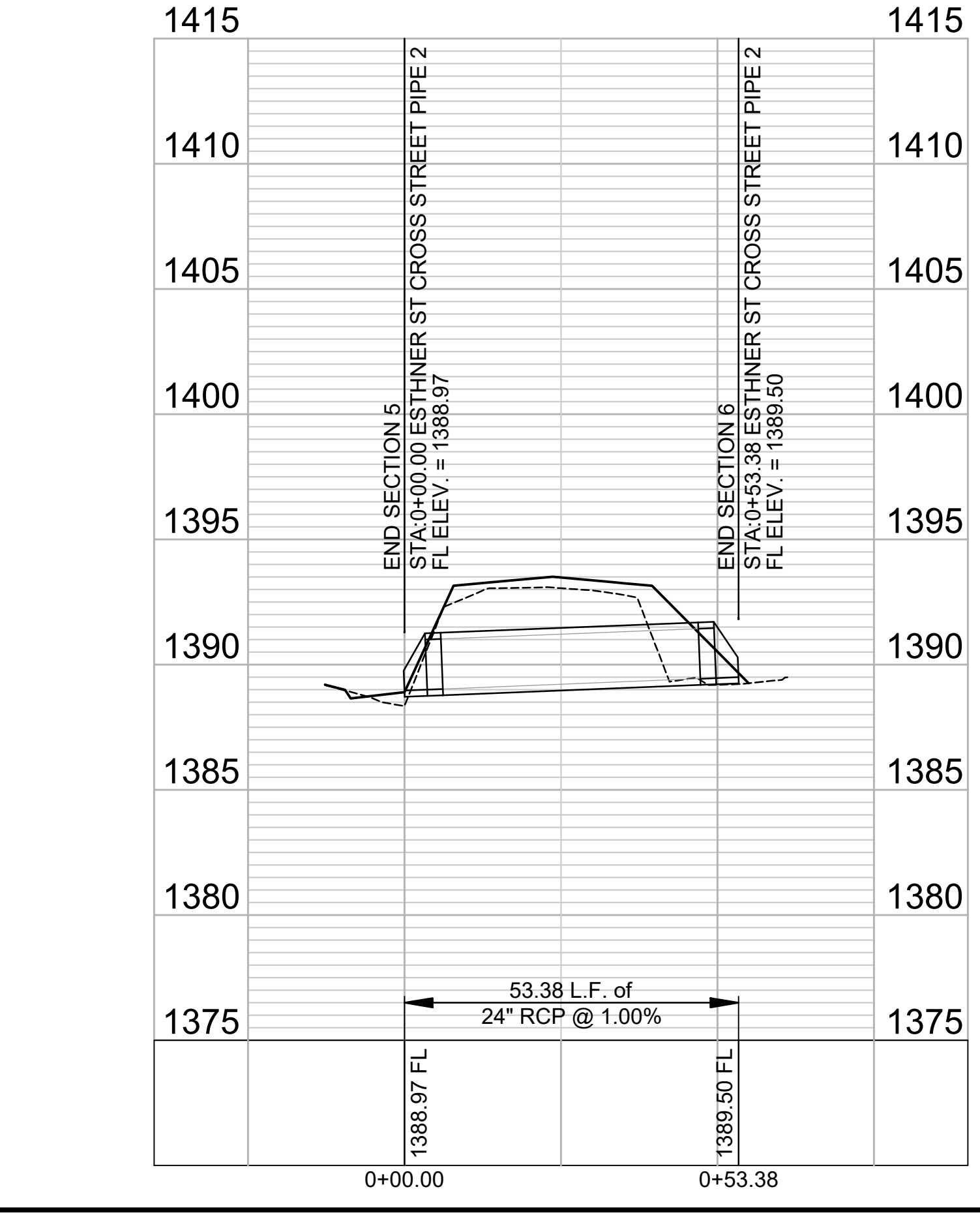
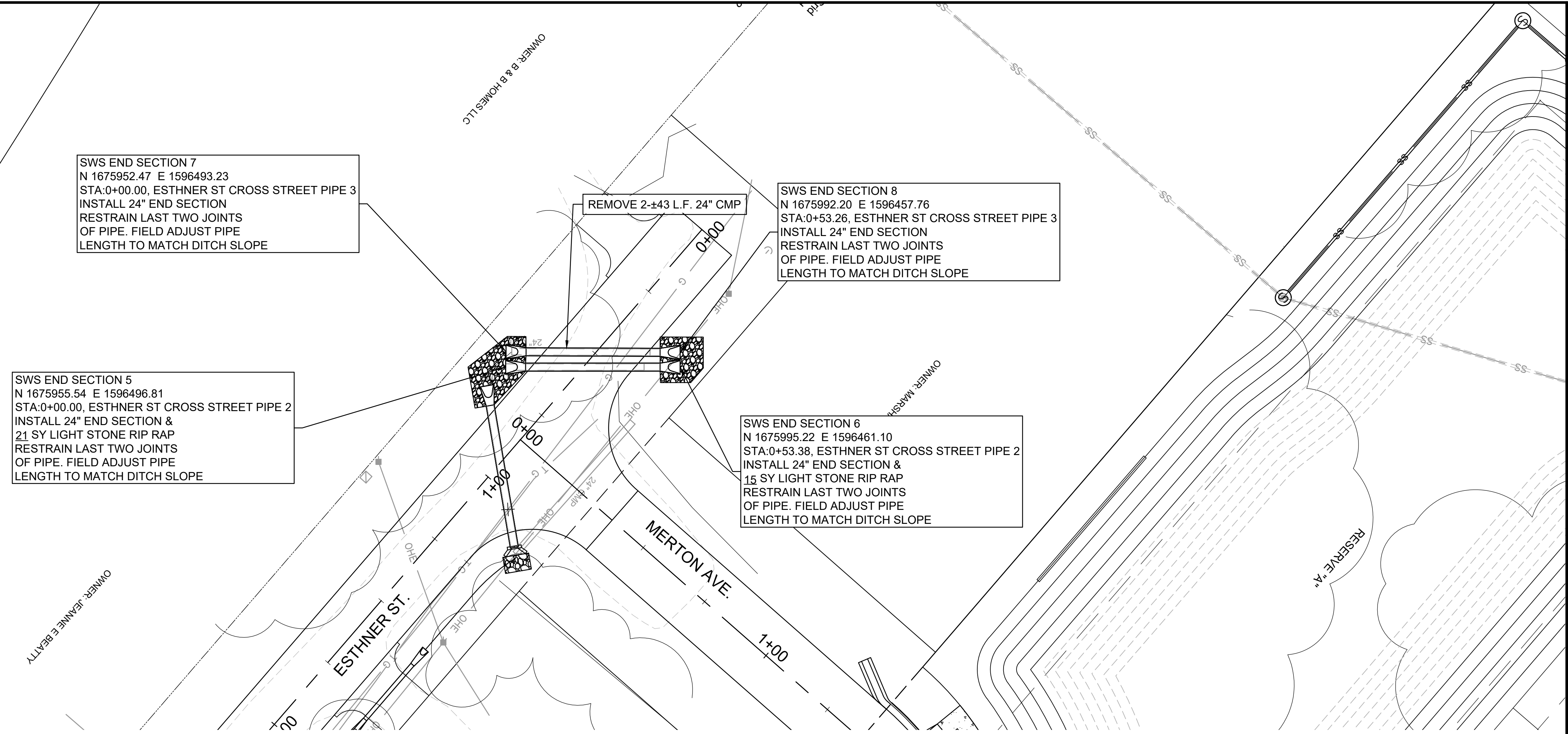
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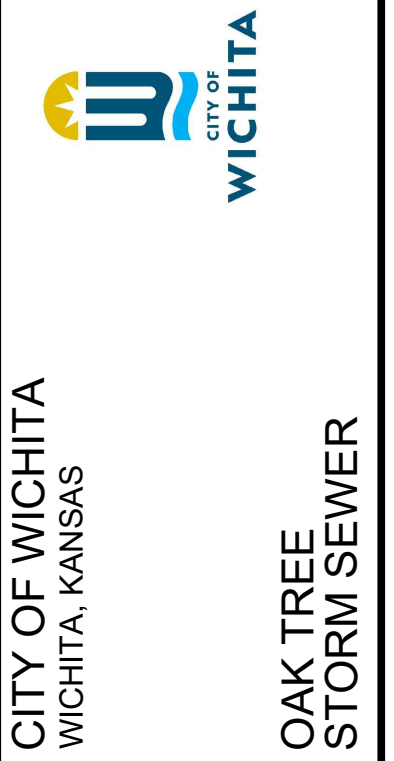
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ESTHNER CROSS STREET CULVERT

JOB NO.: 2402708
 DATE: MAR 2026
 DESIGNED BY: E.JG
 DRAWN BY: DWS

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GENERAL SEED NOTES FOR ALL MIXES

1. THE CONTRACTOR SHALL PROVIDE GRASS SEED OF THE VARIETY AND AT THE RATES AS REQUIRED TO PRODUCE THE LIVE SEED RATES SHOWN BELOW OR AS SPECIFIED ON THE PLANS. THE VENDOR'S CERTIFIED STATEMENT FOR EACH SPECIES OF GRASS AND GRASS MIXTURE STATING EACH VARIETY, PERCENTAGE BY WEIGHT, AND PERCENTAGES OF PURITY, GERMINATION, AND WEED SEED SHALL BE FURNISHED. LIVE SEED FOR EACH GRASS SPECIES IS THE PRODUCT OF THE PERCENTAGE OF PURITY AND THE PERCENTAGE OF GERMINATION.
- 1.1. THE SEED SHALL BE NEW-CROP SEED COMPLYING WITH AND LABELED IN ACCORDANCE WITH U.S. DEPARTMENT OF AGRICULTURE "RULES AND REGULATIONS UNDER THE FEDERAL SEED ACT" IN EFFECT AT DATE OF PURCHASE OF SEED. ALL SEED SHALL BE FURNISHED IN STANDARD CONTAINERS, SEED WHICH HAS BECOME MOLDY, WET, OR OTHERWISE DAMAGED IN TRANSIT OR STORAGE SHALL NOT BE ACCEPTED.
- 1.2. A CERTIFICATE SHALL BE FURNISHED TO THE ENGINEER SHOWING THE DATE THAT THE SEED WAS TREATED. THE TREATED SEED SHALL BE PLANTED WITHIN TWENTY-FOUR (24) MONTHS AFTER TREATMENT AND ANY TREATED BUFFALO GRASS SEED HELD BY THE CONTRACTOR OR SUPPLIED BEYOND THIS PERIOD SHALL NOT BE USED.
- 1.3. THE SEED SHALL BE STORED IN A COOL DRY PLACE UNTIL SEEDING TIME.
2. FERTILIZER.
 - 2.1. FERTILIZER SHALL BE PROPORTIONED AS SPECIFIED ON THE PLANS OR SHOWN BELOW AND SHALL BE OF COMMERCIAL GRADE, UNIFORM IN COMPOSITION, FREE-FLOWING AND SUITABLE FOR APPLICATION WITH APPROVED EQUIPMENT, DELIVERED TO THE SITE IN BAGS OR OTHER CONVENIENT CONTAINERS, EACH FULLY LABELED, CONFORMING TO THE APPLICABLE STATE FERTILIZER LAWS, AND BEARING THE SAME TRADE NAME OR TRADE MARK, ANALYSIS AND WARRANTY OF THE PRODUCER. FERTILIZER SHALL BE APPLIED AT THE RATE OF .5 POUNDS OF ACTUAL NITROGEN, 1.0 POUNDS OF ACTUAL PHOSPHORUS, AND .5 POUNDS OF ACTUAL POTASSIUM PER 1,000 SQUARE FEET.
 - 2.2. WHEN APPLYING FERTILIZER, THE CONTRACTOR SHALL AVOID APPLICATION PRIOR TO HEAVY RAIN OR INTENSE STORMS.
3. WATER.
 - 3.1. WATER SHALL NOT CONTAIN SUBSTANCES IN THE AMOUNTS CONSIDERED HARMFUL FOR THE NORMAL GROWTH OF VEGETATION. THE CONTRACTOR SHALL SUPPLY WATER AND WATERING EQUIPMENT AS REQUIRED FOR THE ESTABLISHMENT AND MAINTENANCE OF GRASSED AREAS.
4. SITE PREPARATION
 - 4.1. PROJECT COORDINATION. AFTER THE CONSTRUCTION HAS BEEN COMPLETED, (EXCEPT AS PROVIDED BELOW), THE SITE HAS BEEN BROUGHT TO FINAL GRADES AS SHOWN ON THE PLANS, AND OTHER PLANTINGS HAVE BEEN ACCOMPLISHED, THE CONTRACTOR SHALL PREPARE THE AREAS TO BE GRASSED AS SPECIFIED. WHEN SO DIRECTED OR PERMITTED BY THE ENGINEER, PORTIONS OF THE CONSTRUCTION SITE MAY BE GRASSED AT DIFFERENT PERIODS OF TIME PROVIDED THAT THE PLANTING OCCURS IN PROPER SEASONS AS SPECIFIED. ANY GRASSED AREAS DAMAGED BY SUBSEQUENT OPERATIONS OF THE CONTRACTOR SHALL BE REPLANTED AS DIRECTED BY THE ENGINEER AT NO ADDITIONAL COST TO THE OWNER.
 - 4.2. NO-TILL. IT IS PREFERRED FOR THE AREAS OUTSIDE OF THE GRADING LIMITS TO BE NO-TILLED INTO THE EXISTING STUBBLE. NO SITE PREPARATION IS REQUIRED BEFORE NO-TILL SEEDING. AREAS TO BE TILLED (WITHIN GRADING LIMITS) SHALL BE PREPARED PER THE FOLLOWING NOTES.
 - 4.3. TILLAGE. THE AREAS REQUIRED TO BE GRASSED SHALL BE PREPARED FOR PLANTING BY CULTIVATION, REMOVAL OF ALL OBJECTIONABLE MATERIAL, AND FILLING OF GULLIES OR DEPRESSIONS. THE SOIL PREPARATION SHALL BE ACCOMPLISHED BY DISKING, HARROWING AND FIRMSING. (FLOWING WILL ALSO BE REQUIRED IF SO INDICATED ON THE PLANS.) THE MINIMUM DEPTH OF SOIL PREPARATION SHALL BE THREE (3) INCHES. EXISTING WEED STUBBLE, SMALL WEEDS AND GRASS THAT CAN BE DISKED SHALL BE CUT BY THE DISK AND PARTIALLY INCORPORATED INTO THE SOIL.
 - 4.4. SEVERAL DISKINGS AND HARROWINGS OVER SOME AREAS MAY BE REQUIRED TO PROVIDE A SATISFACTORY SEEDBED. AREAS TOO STEEP OR OTHERWISE INACCESSIBLE FOR DISKING SHALL BE PREPARED BY HAND METHODS. THE MINIMUM DEPTH OF PREPARATION OF THE SEEDBED WHERE HAND METHODS MUST BE EMPLOYED SHALL BE TWO (2) INCHES. DISKING, HARROWING AND RAKING SHALL BE DONE LONGITUDINALLY ON SLOPE AREAS.
 - 4.5. THE SOIL PREPARATION ON ALL SLOPE AREAS SHALL BE PERFORMED WITH DISKS AND HARROWS UNLESS DEMONSTRATION SHOWS SUCH METHODS IMPRACTICABLE AND THAT HAND METHODS MUST BE USED.
 - 4.6. DURING THE PROCESS OF SOIL PREPARATION, EXTREME CARE SHALL BE EXERCISED TO AVOID INJURY TO ALL TREES THAT HAVE BEEN PLANTED OR DESIGNATED BY THE ENGINEER TO BE SAVED.
 - 4.7. THE ENGINEER MAY DESIGNATE LOCAL AREAS OF DESIRABLE NATIVE PERENNIAL GRASSES TO BE OMITTED DURING THE SOIL PREPARATION. AREAS OF ANNUAL GRASSES SUCH AS CHEAT, CRAB GRASS, TRIPLE-AWN, ETC., SHALL BE DESTROYED BY THOROUGH DISKING PRIOR TO SEEDING.
 - 4.8. APPLICATION OF FERTILIZER. FERTILIZER SHALL BE DISTRIBUTED UNIFORMLY AT RATES SHOWN IN THE SEED MIX NOTES ON THIS PAGE AND OVER THE AREA TO BE PLANTED, AND SHALL BE INCORPORATED INTO THE SOIL TO A DEPTH OF AT LEAST 2 INCHES BY DISKING, HARROWING OR OTHER METHODS APPROVED BY THE ENGINEER. DISTRIBUTION BY MEANS OF AN APPROVED SEED DRILL OR HYDRO SEEDER EQUIPPED TO SOW SEED AND DISTRIBUTE FERTILIZER AT THE SAME TIME WILL BE ACCEPTABLE UNLESS OTHERWISE NOTED ON THE PLANS.
 - 4.9. ADDITIONAL SOIL CONDITIONERS SHALL BE MIXED INTO THE SOIL BY DISKING, HARROWING, ETC., WHEN SPECIFIED ON THE PLANS, OR AS DIRECTED BY THE ENGINEER AND FURNISHED BY THE OWNER.
5. SEEDING
 - 5.1. TIME OF SEEDING. THE TWO GENERAL SEEDING SEASONS SHALL BE AS DEFINED FOR TEMPORARY AND PERMANENT SEEDING. THE PERMISSIBLE SEEDING PERIODS FOR VARIOUS SEEDS MAY BE EXTENDED A FEW DAYS IN SPECIAL CASES WHEN MULCHING IS SPECIFIED TO FOLLOW THE DRILLING OF SEEDS AND FERTILIZER.
 - 5.2. THE ENGINEER RESERVES THE RIGHT TO DELAY THE DRILLING OR SEEDING OF ANY SEEDS OR TO VARY THE PERMISSIBLE SEEDING SEASONS LISTED ABOVE DUE TO WEATHER OR SOIL CONDITIONS OR FOR OTHER CAUSES.
 - 5.3. SEED APPLICATION. SEEDS SHALL BE UNIFORMLY DISTRIBUTED WITH ACCEPTABLE DRILLS, HYDRAULIC SLURRY, OR OTHER EQUIPMENT APPROVED BY THE ENGINEER. BROADCASTING WITH A STANDARD GRASS SEEDER WILL BE REQUIRED ON AREAS WHERE IT IS IMPOSSIBLE TO OPERATE A DRILL AND THIS METHOD MAY ALSO BE REQUIRED FOR CERTAIN SMALL SEEDS.
 - 5.4. WHEN A STANDARD DRILL WITH FERTILIZER ATTACHMENT IS USED, CERTAIN MIXED SEEDS MAY BE PLACED IN THE SEED BOX AND THE FERTILIZER PLACED IN THE FERTILIZER COMPARTMENT. BOTH MAY BE APPLIED DURING ONE (1) OPERATION, UNLESS NOTES ON THE PLANS REQUIRE SEPARATE APPLICATIONS. FERTILIZER MAY BE DRILLED INTO THE SOIL OR APPLIED BY HYDRAULIC-SLURRY. BROADCASTING FERTILIZERS IS PERMISSIBLE ON ROUGH, ROCKY SLOPES WHERE DRILLS CANNOT OPERATE.
 - 5.5. ALL DRILLS SHALL BE FULLY ADJUSTABLE SO THAT THEY WILL DELIVER THE SEEDS AND FERTILIZER AT THE RATES SPECIFIED ON THE PLANS OR ORDERED BY THE ENGINEER. DRILLS THAT ARE IN POOR REPAIR OR THAT DO NOT DELIVER THE SEEDS AND FERTILIZER UNIFORMLY IN EACH DRILL FURROW, SHALL NOT BE USED. DRILLS SHALL BE ADJUSTABLE SO THAT THE SEEDS CAN BE PLANTED AND COVERED A MAXIMUM DEPTH OF 1/2 INCH.
 - 5.6. MOST OF THE SEEDS SHOULD BE DRILLED ABOUT ONE-HALF (1/2) INCH DEEP IN A WELL- PREPARED AND FIRM SEEDBED. WHEN THE FERTILIZING AND SEEDING OPERATIONS START ON AN AREA, THAT AREA SHALL BE COMPLETED AS SOON AS POSSIBLE. NO SEEDING SHALL BE DONE DURING WINDY WEATHER OR WHEN THE GROUND IS WET OR OTHERWISE NON-TILLABLE. THE GRASS SEED SHALL THEN BE COVERED, USING A FLEXIBLE TOOTHED WEEDER OR OTHER SUITABLE EQUIPMENT. AS SOON AS THIS COVERING OPERATION HAS BEEN COMPLETED, THE SEEDED AREA SHALL BE ROLLED AGAIN WITH THE CULTI-PACKER, THE CULTI-PACKER BEING RUN OVER THE AREA ONLY ONCE PARALLEL WITH THE CONTOURS OF THE GROUND.
6. MULCHING.
 - 6.1. APPLYING HAY MULCH - HAY MULCH SHALL BE THE REQUIRED MULCHING MATERIAL FOR PERMANENT SEEDING, UNLESS SPECIFIED OTHERWISE ON THE PLANS OR DIRECTED BY THE ENGINEER. THE HAY SHALL NOT CONTAIN AN EXCESSIVE QUANTITY OF NOXIOUS WEED SEEDS. THE MULCH SHALL BE A SHARP GRADE PRAIRIE HAY, SEDAN GRASS HAY OR BROOM SEDGE OR ANY OTHER TYPE OF NATIVE HAY OR GRASS. STRAW SHALL BE 8 INCHES MINIMUM; 50% SHALL BE 10 INCHES IN LENGTH OR LONGER.
 - 6.2. AFTER SEEDING OPERATIONS ARE COMPLETE THE MULCH SHALL BE SPACED UNIFORMLY BY HAND, MANURE SPREADER, OR OTHER SUITABLE EQUIPMENT. THE MULCH SHALL BE ANCHORED TO THE SOIL BY A V-TYPE WHEEL LAND PACKER, A DISK HARROW SET TO CUT SLIGHTLY, OR OTHER SUITABLE EQUIPMENT WHICH WILL SECURE THE MULCH FIRMLY INTO THE GROUND 2 INCHES OR MORE TO FORM A SOIL-BINDING MULCH AND PREVENT LOSS OR BUNCHING BY WIND. SPACING BETWEEN DISKS SHALL NOT EXCEED 8 INCHES. APPLY HAY MULCH AT THE RATE OF 2 TONS PER ACRE OR 90 LBS. PER 1000 SQ. FT.
 - 6.3. APPLYING WOOD CELLULOSE FIBER MULCH - WOOD CELLULOSE FIBER MULCH MAY BE USED IN LIEU OF HAY MULCH WHEN THE CONTRACTOR ELECTS TO USE A HYDRO SEEDER AND THE METHOD IS APPROVED BY THE ENGINEER. WOOD CELLULOSE FIBER MULCH SHALL BE APPLIED AT THE MINIMUM RATE OF 2500 POUNDS PER ACRE, UNLESS SPECIFIED OTHERWISE.
7. WATERING.
 - 7.1. THE CONTRACTOR SHALL WATER THE SEEDED AREAS AS REQUIRED TO ASSURE AN ACCEPTABLE STAND OF GRASS.
8. PROTECTION AND MAINTENANCE.
 - 8.1. THE GRASSED AREA SHALL BE PROTECTED AGAINST TRAFFIC OR OTHER USE IMMEDIATELY AFTER PLANTING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER CARE OF THE GRASSED AREA UNTIL ALL WORK ON THE ENTIRE CONTRACT HAS BEEN COMPLETED AND ACCEPTED, OR A MINIMUM PERIOD OF 30 DAYS, WHICHEVER IS THE LONGEST DURATION. THE CONTRACTOR WILL BE RELIEVED FROM WATERING GRASSED AREAS ACCEPTED BY THE ENGINEER AND THE OWNER.
 - 8.2. ALL PLANTED AREAS SHALL BE GROWING WHEN ACCEPTED. AREAS NOT SHOWING A STAND OF GRASS OR EVIDENCE OF GROWTH SHALL BE REPLANTED IN ACCORDANCE WITH THESE SPECIFICATIONS. ALL COSTS IN CONNECTION WITH REPLANTING GRASSED AREAS SHALL BE BORNE BY THE CONTRACTOR UNTIL AN ACCEPTABLE STAND OF GRASS IS OBTAINED, WITH NO ADDITIONAL COST TO THE PROJECT.
9. PAYMENT
 - 9.1. ALL SEEDING OPERATIONS THROUGHOUT THE ENTIRE COURSE OF THE PROJECT FOR TEMPORARY AND PERMANENT SEEDING, SOIL PREPARATION, FERTILIZER APPLICATION, MULCHING, WATERING, AND ALL OTHER ASSOCIATED WORK, DESCRIBED ON THE SEEDING SHEETS, SHALL BE PAID FOR AS THE BID ITEM "SEEDING, TEMPORARY". (L.S.) THIS BID ITEM INCLUDES ALL RE-SEEDING ACTIVITIES AND ANY ASSOCIATED WORK NECESSARY.
10. PLACEMENT OF TEMPORARY SEEDING
 - 10.1. CONTRACTOR TO PLACE TEMPORARY SEEDING IN ALL DISTURBED AREAS.

TEMPORARY SEEDING

TEMPORARY SEED NOTES

1. TEMPORARY SEEDING SHALL BE INSTALLED AS TEMPORARY COVER AFTER GRADING AND/OR CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED IN AN AREA OF THE PROJECT. TEMPORARY SEED SHALL BE INSTALLED WHEN:
 - 1.1. CONSTRUCTION ACTIVITY WILL CEASE FOR AT LEAST 28 DAYS; OR
 - 1.2. WITHIN 21 DAYS FROM THE LAST CONSTRUCTION ACTIVITY IN THAT AREA; OR,
 - 1.3. WHEN PERMANENT SEEDING CANNOT TAKE PLACE WITHIN THE SPECIFIED PLANTING WINDOW.
2. TEMPORARY SEEDING SHALL BE PLACED VIA APPROPRIATE SEED DRILL. THE TEMPORARY SEED MIX IS AS FOLLOWS:

ANNUAL RYE	20#/ ACRE
------------	-----------
3. TEMPORARY SEED MAY BE PLACED ANY TIME DURING CONSTRUCTION.
4. PROTECT SEEDED AREAS FROM EROSION BY SPREADING WEED-FREE STRAW MULCH TO FORM A CONTINUOUS BLANKET 1-1/2" LOOSE DEPTH AND CRIMP IN TO SOIL BY SUITABLE METHODS.
5. DO NOT SEED OR WORK SOIL WHEN THERE IS STANDING OR RUNNING WATER PRESENT IN DISTURBED AREAS.
6. SEEDING PROCESS: REFER TO SEEDING NOTES.

PERMANENT SEEDING (COOL SEASON GRASS)

1. PERMANENT SEEDING WITH THE FESCUE MIX SHALL BE INSTALLED AT THE COMPLETION OF CONSTRUCTION ACTIVITIES IN COORDINATION WITH PERMANENT EROSION CONTROL BMPs, AS DEFINED IN THE NOTES IN THIS SECTION, WITHIN THE PLANS AND SPECIFICATIONS.
2. FESCUE MIX SHALL BE KANSAS PREMIUM FESCUE BLEND SEED CONTAINING LOCALLY AVAILABLE VARIETIES. SEED AT A RATE OF 8 TO 10 LBS/ 1000 S.F. FOR NEW INSTALLATIONS OR 4 TO 6 LBS/ 1000 S.F. FOR OVERSEEDING/ REPAIR.
3. APPLY 10-20-10 FERTILIZER AT A RATE OF 40 LBS/ ACRE.4.
4. PROTECT SEEDED AREAS FROM EROSION BY SPREADING WEED-FREE STRAW MULCH TO FORM A CONTINUOUS BLANKET 1-1/2" LOOSE DEPTH AND CRIMP IN TO SOIL BY SUITABLE METHODS.
4. PERMANENT SEEDING SHALL BE DONE OCTOBER 15- JUNE 1.
5. COOL SEASON GRASS MIX SEED MIXTURE SHALL BE FRESH, CLEAN NEW CROP SEED. LANDSCAPE CONTRACTOR SHALL PROVIDE LANDSCAPE ARCHITECT WITH DEALER'S GUARANTEED STATEMENT OF COMPOSITION OF MIXTURE AND PERCENTAGE OF PURITY AND GERMINATION OF SEED USED.
6. SEEDING PROCESS: REFER TO SEEDING NOTES.

TESTING REQUIREMENTS FOR THIS PROJECT

- * TV TESTING
- * COMPACTION TESTING (STREET R/W, LOT COMPACTION)

File: L:\2024\141-2402708 - Oak Tree Engineering\Drawings\STORM\Seeding Notes.dwg Last Save: 3/26/2026 8:06 AM Last saved by: DWSawyer
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Wichita, KS 67209
(316) 264-8008

REV.	DATE	DESCRIPTION	BY



CITY OF WICHITA
WICHITA, KANSAS

OAK TREE
STORM SEWER

SEEDING & TESTING NOTES

JOB NO.: 2402708
DATE: MAR 2026
DESIGNED BY: EJG
DRAWN BY: DWS

BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
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DRAWING NUMBER

SHEET NUMBER **23** OF **32**



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REV.	DATE	DESCRIPTION	BY



CITY OF WICHITA
 WICHITA, KANSAS

OAK TREE
 STORM SEWER

COORDINATE
 MAP - SWS

JOB NO.: 2402708
 DATE: MAR 2026
 DESIGNED BY: EJJ
 DRAWN BY: DWS

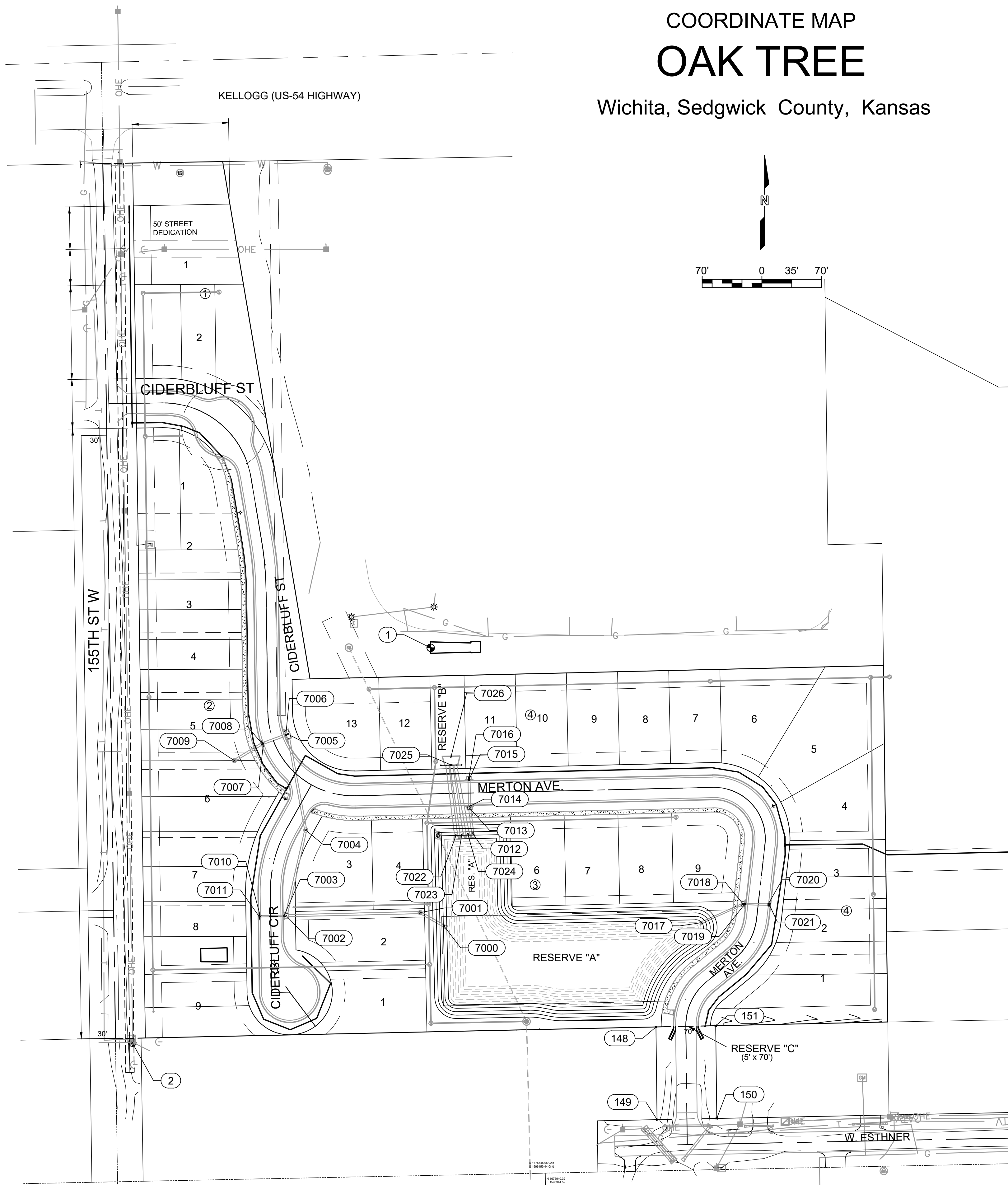
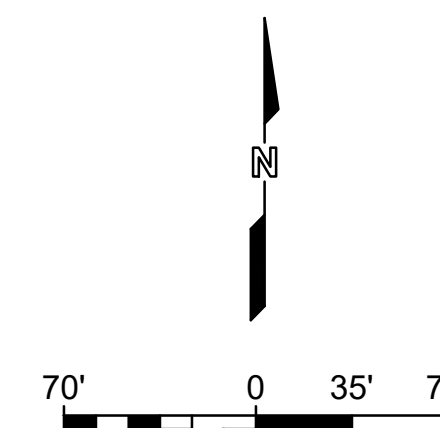
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DRAWING NUMBER

SHEET NUMBER **24** OF **32**

COORDINATE MAP OAK TREE

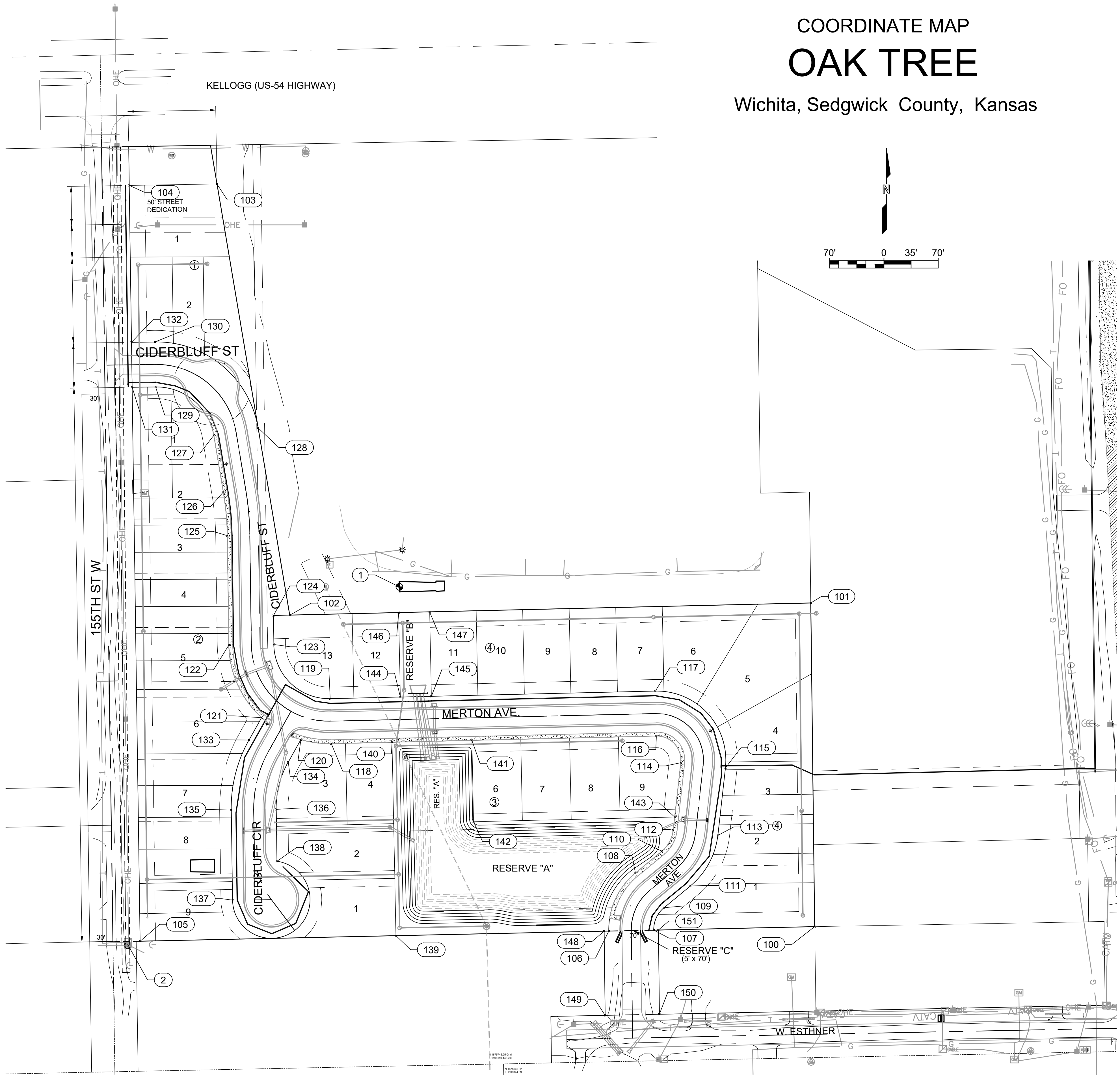
Wichita, Sedgwick County, Kansas



Point Table						
Point #	Northing	Easting	Grid Northing	Grid Easting	Elevation	Description
1	1676555.78	1596209.67	1676361.33	1596024.54	0.00	BM #1
2	1676093.14	1595859.93	1675898.75	1595674.84	0.00	BM #2
7000	1676229.93	1596225.14	1676035.52	1596040.01	0.00	END SEC LINE 1
7001	1676245.61	1596197.36	1676051.20	1596012.23	0.00	MH LINE 1
7002	1676241.92	1596040.37	1676047.51	1595855.26	1402.41	TYPE 1A CENTER LINE 1
7003	1676241.86	1596037.69	1676047.45	1595852.58	0.00	TYPE 1A INSIDE FF LINE 1
7004	1676342.24	1596063.18	1676147.81	1595878.07	0.00	MH LINE 1
7005	1676454.70	1596042.27	1676260.26	1595857.16	0.00	TYPE 1A CENTER LINE 1
7006	1676453.69	1596039.88	1676259.26	1595854.78	0.00	TYPE 1A INSIDE FF LINE 1
7007	1676443.97	1596013.56	1676249.53	1595828.46	0.00	DOUBLE DRIVEWAY INLET INSIDE FF LINE 1
7008	1676443.44	1596012.11	1676249.00	1595827.01	0.00	DOUBLE DRIVEWAY INLET CENTER LINE 1
7009	1676423.68	1595979.52	1676229.25	1595794.42	0.00	BACKYARD INLET LINE 1
7010	1676241.21	1596010.02	1676046.80	1595824.91	0.00	SINGLE DRIVEWAY INLET INSIDE FF LINE 1A
7011	1676241.19	1596008.51	1676046.78	1595823.41	0.00	SINGLE DRIVEWAY INLET CENTER LINE 1A
7012	1676338.78	1596258.80	1676144.36	1596073.67	0.00	END SEC LINE 2
7013	1676368.00	1596255.31	1676173.57	1596070.17	0.00	TYPE 1A CENTER LINE 2
7014	1676370.16	1596255.25	1676175.73	1596070.12	0.00	TYPE 1A INSIDE FF LINE 2
7015	1676401.15	1596254.53	1676206.72	1596069.40	0.00	TYPE 1A INSIDE FF LINE 2
7016	1676403.32	1596254.48	1676208.89	1596069.34	0.00	TYPE 1A CENTER LINE 2
7017	1676233.75	1596527.19	1676039.34	1596342.02	0.00	END SEC LINE 3
7018	1676255.80	1596575.70	1676061.39	1596390.53	0.00	SINGLE DRIVEWAY INLET CENTER LINE 3
7019	1676255.73	1596577.87	1676061.32	1596392.70	0.00	SINGLE DRIVEWAY INLET INSIDE FF LINE 3
7020	1676255.02	1596604.93	1676060.61	1596419.76	0.00	TYPE 1A INSIDE FF LINE 3
7021	1676254.98	1596606.39	1676060.57	1596421.21	0.00	TYPE 1A CENTER LINE 3
7022	1676336.00	1596239.39	1676141.58	1596054.26	0.00	END SEC LINE 4
7023	1676336.95	1596246.10	1676142.53	1596060.97	0.00	END SEC LINE 4
7024	1676337.92	1596253.12	1676143.50	1596067.98	0.00	END SEC LINE 4
7025	1676418.56	1596233.76	1676224.13	1596048.63	0.00	HEADWALL CENTER LINE 4
7026	1676428.29	1596233.56	1676233.86	1596048.43	0.00	SOIL SAVER LINE 4

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 Last plotted by: Sawyer, Drake W. Plot Date: 3/26/2026 10:16 AM Plotter used: None

Point Table						
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100	1676117.42	1596745.16	1675923.02	1596559.97	0.00	ADDITION CORNER
101	1676535.05	1596740.17	1676340.61	1596554.98	0.00	ADDITION CORNER
102	1676519.32	1596068.21	1676324.88	1595883.10	0.00	ADDITION CORNER
103	1677075.63	1595974.36	1676881.13	1595789.26	0.00	ADDITION CORNER
104	1677073.70	1595861.19	1676879.19	1595676.10	0.00	ADDITION CORNER
105	1676098.66	1595875.23	1675904.27	1595690.14	0.00	ADDITION CORNER
106	1676111.69	1596479.67	1675917.30	1596294.51	0.00	PC
107	1676112.94	1596537.66	1675918.55	1596352.49	0.00	PC
108	1676186.63	1596514.03	1675992.23	1596328.87	0.00	PT
109	1676141.88	1596550.92	1675947.48	1596365.76	0.00	PT
110	1676214.68	1596548.05	1676020.28	1596362.89	0.00	PC
111	1676169.93	1596584.95	1675975.53	1596399.78	0.00	PC
112	1676241.73	1596562.72	1676047.32	1596377.55	0.00	PT
113	1676235.25	1596620.35	1676040.84	1596435.18	0.00	PT
114	1676328.89	1596572.53	1676134.47	1596387.35	0.00	PC
115	1676322.40	1596630.16	1676127.98	1596444.98	0.00	PC
116	1676363.35	1596540.99	1676168.92	1596355.83	0.00	PT
117	1676421.33	1596539.64	1676226.90	1596354.47	0.00	PT
118	1676353.53	1596121.75	1676159.11	1595936.63	0.00	PC
119	1676411.51	1596120.39	1676217.08	1595935.27	0.00	PC
120	1676358.68	1596082.52	1676164.26	1595897.40	0.00	BLOCK COR
121	1676387.06	1596031.93	1676192.64	1595846.83	0.00	BLOCK COR
122	1676480.64	1595989.74	1676286.20	1595804.64	0.00	PT
123	1676481.47	1596047.74	1676287.03	1595862.63	0.00	PT
124	1676518.83	1596047.20	1676324.39	1595862.09	0.00	BLOCK COR
125	1676621.89	1595987.71	1676427.43	1595802.61	0.00	PC
126	1676678.26	1595982.58	1676483.80	1595797.48	0.00	PT
127	1676751.22	1595970.27	1676556.75	1595785.17	0.00	PC
128	1676760.86	1596027.46	1676566.39	1595842.35	0.00	PC
129	1676813.73	1595895.23	1676619.25	1595710.14	0.00	PT
130	1676871.72	1595894.40	1676677.24	1595709.31	0.00	PT
131	1676813.29	1595864.94	1676618.82	1595679.85	0.00	BLOCK COR
132	1676871.29	1595864.10	1676676.80	1595679.02	0.00	BLOCK COR
133	1676358.10	1596015.68	1676163.67	1595830.58	0.00	PC
134	1676329.72	1596066.26	1676135.29	1595881.15	0.00	PC
135	1676267.93	1595992.81	1676073.52	1595807.70	0.00	PT
136	1676268.77	1596050.80	1676074.35	1595865.69	0.00	PT
137	1676151.60	1595994.48	1675957.20	1595809.38	0.00	BLOCK COR
138	1676201.79	1596051.77	1676007.38	1595866.66	0.00	BLOCK COR
139	1676105.77	1596205.19	1675911.38	1596020.06	0.00	RESERVE COR
140	1676355.37	1596200.14	1676160.94	1596015.01	0.00	RESERVE COR
141	1676357.78	1596303.11	1676163.35	1596117.97	0.00	RESERVE COR
142	1676252.80	1596305.24	1676058.39	1596120.10	0.00	RESERVE COR
143	1676258.87	1596564.65	1676064.46	1596379.48	0.00	RESERVE COR
144	1676413.63	1596210.86	1676219.20	1596025.73	0.00	RESERVE COR
145	1676414.57	1596250.85	1676220.14	1596065.72	0.00	RESERVE COR
146	1676522.61	1596208.66	1676328.17	1596023.53	0.00	RESERVE COR
147	1676523.55	1596248.65	1676329.10	1596063.52	0.00	RESERVE COR
148	1676111.56	1596473.67	1675917.17	1596288.51	0.00	ROW CORNER
149	1676003.03	1596474.94	1675808.65	1596289.78	0.00	ROW CORNER
150	1676004.45	1596544.92	1675810.07	1596359.75	0.00	ROW CORNER
151	1676113.07	1596543.65	1675918.68	1596358.49	0.00	ROW CORNER



COORDINATE MAP
OAK TREE
 Wichita, Sedgwick County, Kansas

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 (316) 264-8008

REV.	DATE	DESCRIPTION	BY



CITY OF WICHITA
 WICHITA, KANSAS
 OAK TREE
 STORM SEWER

COORDINATE
 MAP - SWS
 ADDITION
 POINTS

JOB NO.: 2402708
 DATE: MAR 2026
 DESIGNED BY: EJG
 DRAWN BY: DWS

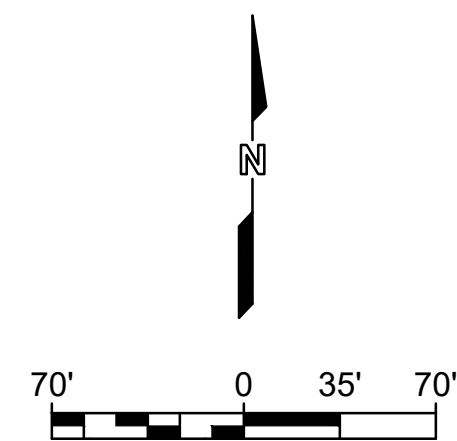
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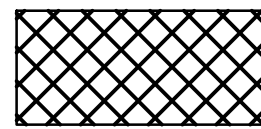


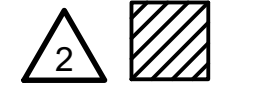

EROSION CONTROL PLAN

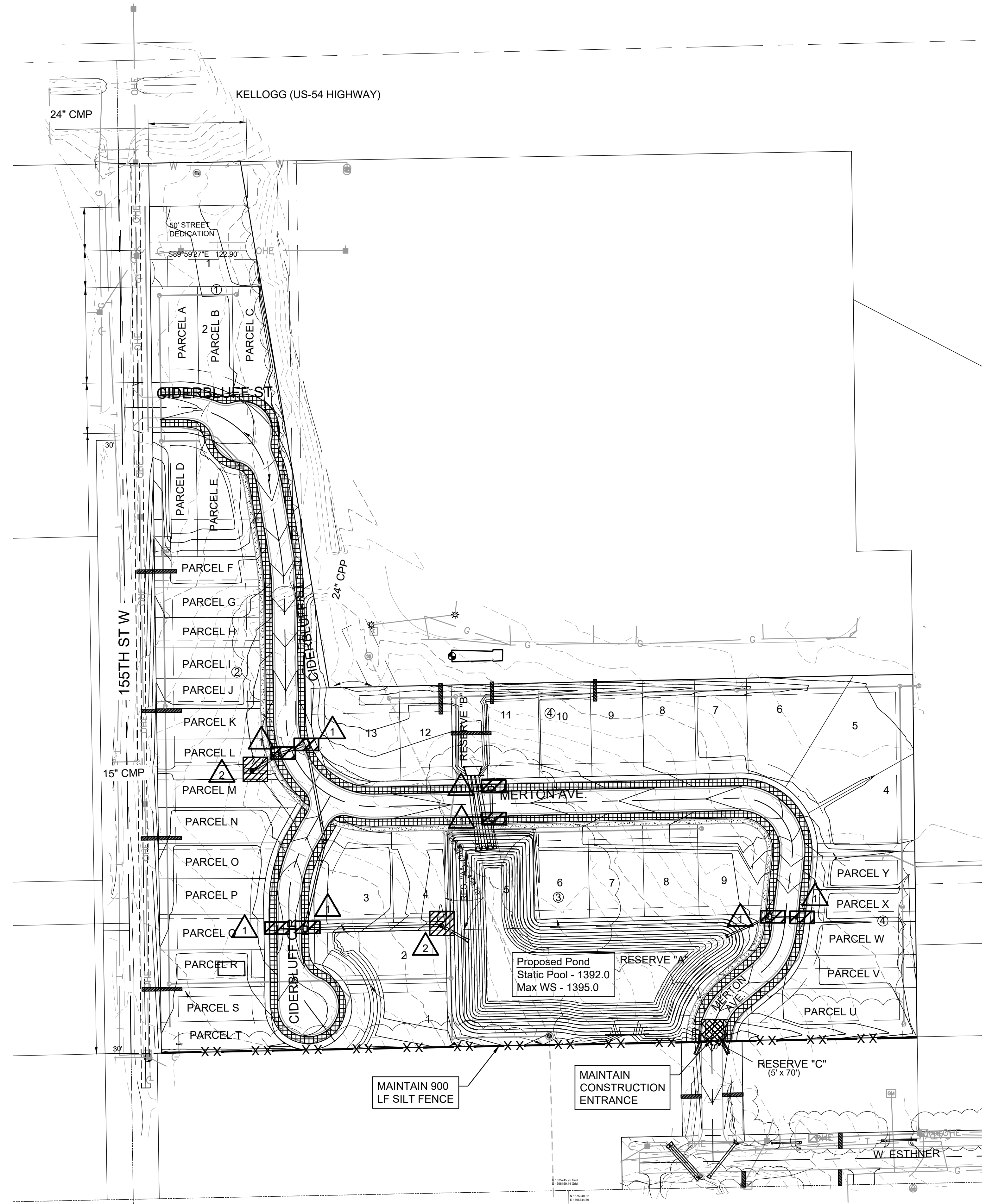
OAK TREE

Wichita, Sedgwick County, Kansas



LEGEND

-  MAINTAIN CONSTRUCTION ENTRANCE (1 EACH)
-  INSTALL BACK OF CURB PROTECTION (CURLEX) (2910 S.Y.)
-  MAINTAIN SILT FENCE (900 LIN. FT.)
-  INSTALL & MAINTAIN CURB INLET PROTECTION (8 EACH)
-  INSTALL & MAINTAIN DROP INLET PROTECTION (2 EACH)
-  MAINTAIN LINEAR SEDIMENT BARRIER (8 TOTAL)



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REV.	DATE	DESCRIPTION	BY



CITY OF WICHITA
 WICHITA, KANSAS
 OAK TREE
 STORM SEWER

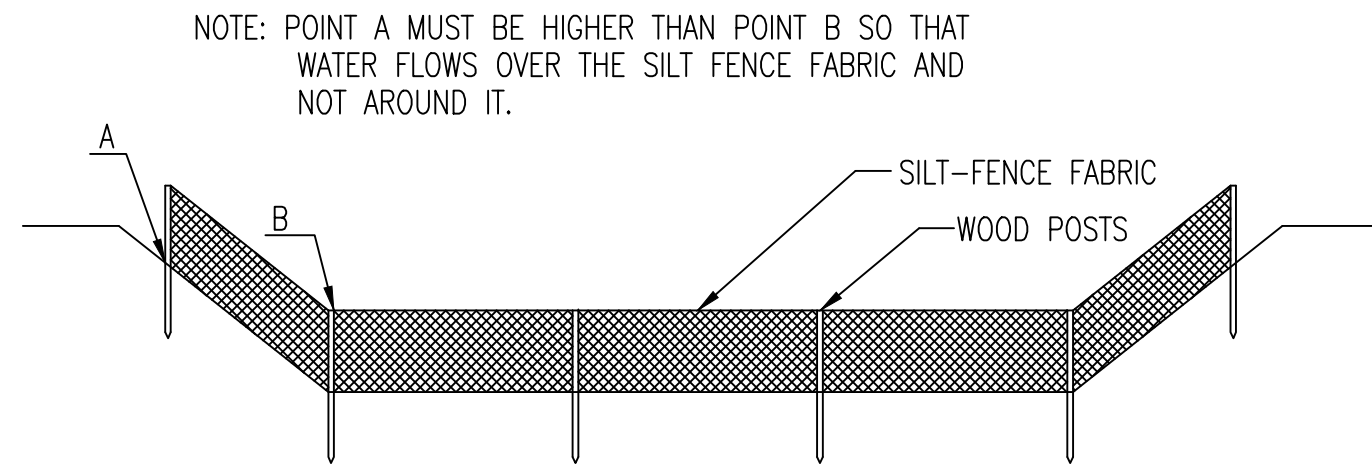
EROSION CONTROL PLAN - SWS

JOB NO.: 2402708
 DATE: MAR 2026
 DESIGNED BY: EJJ
 DRAWN BY: DWS

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DRAWING NUMBER

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 Last plotted by: Sawyer, Drake W. Plot Date: 3/26/2026 10:17 AM Plotter used: None



ELEVATION
SILT FENCE DITCH CHECKS
(STREAM PROTECTION)

MATERIAL SPECIFICATION:

SILT FENCE FABRIC SHOULD CONFORM TO THE AASHTO M288 96 SILT FENCE SPECIFICATION. THE POSTS USED TO SUPPORT THE SILT FENCE FABRIC SHOULD BE A HARDWOOD MATERIAL WITH THE FOLLOWING MINIMUM DIMENSIONS: 2" SQUARE (NOMINAL) BY 4' LONG. SILT FENCE FABRIC SHOULD BE ATTACHED TO THE WOODEN POSTS WITH STAPLES, WIRE, ZIP TIES, OR NAILS.

PLACEMENT:

PLACE SILT FENCE IN DITCHES WHERE IT IS UNLIKELY THAT IT WILL BE OVERTOPPED. WATER SHOULD FLOW THROUGH A SILT FENCE DITCH CHECK, NOT OVER IT. SILT FENCE DITCH CHECKS OFTEN FAIL WHEN OVERTOPPED. SILT FENCE DITCH CHECKS SHOULD BE PLACED PERPENDICULAR TO THE FLOWLINE OF THE DITCH. THE SILT FENCE SHOULD EXTEND FAR ENOUGH SO THAT THE GROUND LEVEL AT THE ENDS OF THE FENCE IS HIGHER THAN THE TOP OF THE LOW POINT OF THE FENCE. THIS PREVENTS WATER FROM FLOWING AROUND THE CHECK. SILT FENCE DITCH CHECKS SHOULD NOT BE PLACED IN DITCHES WHERE HIGH FLOWS ARE EXPECTED. ROCK CHECKS SHOULD BE USED INSTEAD. SILT FENCE SHOULD BE PLACED IN DITCHES WITH SLOPES OF 6% OR LESS. FOR SLOPES STEEPER THAN 6%, ROCK CHECKS SHOULD BE USED.

THE FOLLOWING TABLE PROVIDES CHECK SPACING FOR A GIVEN DITCH GRADE:

DITCH CHECK DITCH GRADE (%)	SPACING CHECK SPACING (FEET)
0.5	200
1.0	200
2.0	100
3.0	65
4.0	50
5.0	40
6.0	30

PROPER INSTALLATION METHOD:

EXCAVATE A TRENCH PERPENDICULAR TO THE DITCH FLOWLINE THAT IS AT LEAST 12" DEEP BY 6" WIDE. EXTEND THE TRENCH IN A STRAIGHT LINE ALONG THE ENTIRE LENGTH OF THE PROPOSED DITCH CHECK. PLACE THE SOIL ON THE UPSTREAM SIDE OF THE TRENCH FOR LATER USE. ROLL OUT A CONTINUOUS LENGTH OF SILT FENCE FABRIC ON THE DOWNSLOPE SIDE OF THE TRENCH. PLACE THE EDGE OF THE FABRIC IN THE TRENCH STARTING AT THE TOP UPSTREAM EDGE OF THE TRENCH. LINE TWO SIDES OF THE TRENCH WITH THE FABRIC AS SHOWN ON DETAIL. BACKFILL OVER THE FABRIC IN THE TRENCH WITH THE EXCAVATED SOIL AND COMPACT. AFTER FILLING THE TRENCH, APPROXIMATELY 24" TO 36" OF SILT FENCE FABRIC SHOULD REMAIN EXPOSED. LAY THE EXPOSED SILT FENCE ON THE UPSLOPE SIDE OF THE TRENCH TO CLEAR AN AREA FOR DRIVING IN THE POSTS. JUST DOWNSLOPE OF THE TRENCH, DRIVE POSTS INTO THE GROUND TO A DEPTH OF AT LEAST 24". PLACE POSTS NO MORE THAN 4' APART. ATTACH THE SILT FENCE TO THE ANCHORED POST WITH STAPLES, WIRE, ZIP TIES, OR NAILS.

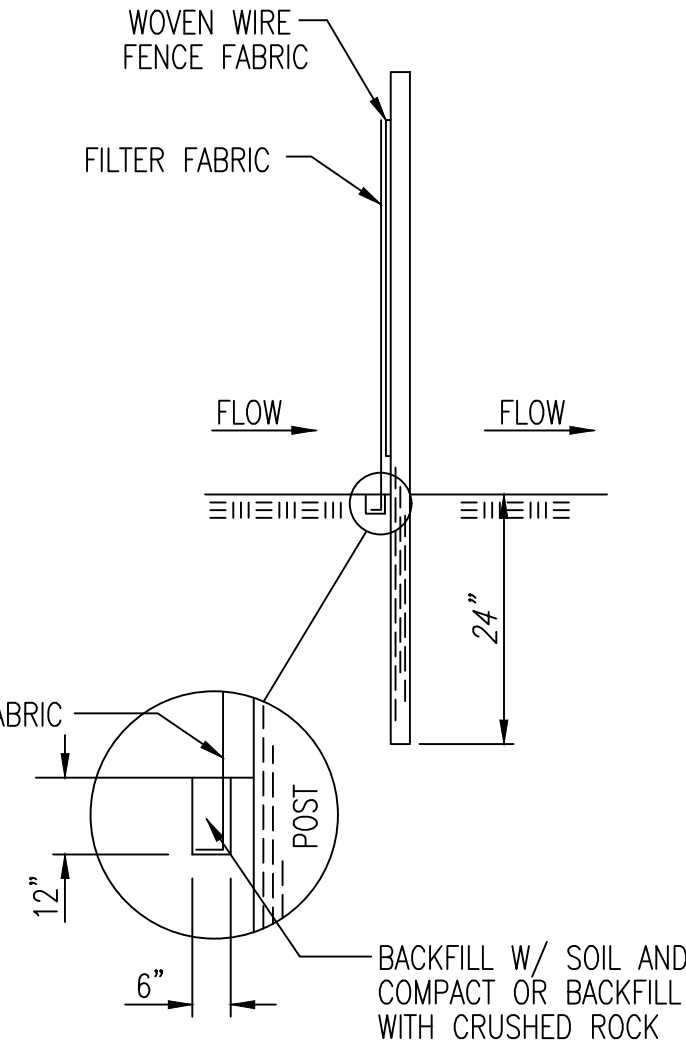
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

WATER SHOULD FLOW THROUGH A SILT FENCE DITCH CHECK—NOT OVER IT. PLACE SILT FENCE IN DITCHES WHERE IT IS UNLIKELY THAT IT WILL BE OVERTOPPED. SILT FENCE INSTALLATIONS QUICKLY DETERIORATE WHEN WATER OVERTOPS THEM. DO NOT PLACE SILT FENCE POSTS ON THE UPSLOPE SIDE OF THE SILT FENCE FABRIC. IN THIS CONFIGURATION, THE FORCE OF THE WATER IS NOT RESTRICTED BY THE POSTS, BUT ONLY BY THE STAPLES (WIRE, ZIP TIES, NAILS, ETC.). THE SILT FENCE WILL RIP AND FAIL. DO NOT PLACE A SILT FENCE DITCH CHECK DIRECTLY IN FRONT OF A CULVERT OUTLET. IT WILL NOT STAND UP TO THE CONCENTRATED FLOW. DO NOT PLACE SILT FENCE DITCH CHECKS IN DITCHES THAT WILL LIKELY EXPERIENCE HIGH FLOWS. THEY WILL NOT STAND UP TO CONCENTRATED FLOW. FOLLOW PRESCRIBED DITCH CHECK SPACING GUIDELINES. IF SPACING GUIDELINES ARE EXCEEDED, EROSION WILL OCCUR BETWEEN THE DITCH CHECKS. DO NOT ALLOW WATER TO FLOW AROUND THE DITCH CHECK. MAKE SURE THAT THE DITCH CHECK IS LONG ENOUGH SO THAT THE GROUND LEVEL AT THE ENDS OF THE FENCE IS HIGHER THAN THE LOW POINT ON THE TOP OF THE FENCE. DO NOT PLACE SILT FENCE DITCH CHECKS IN CHANNELS WITH SHALLOW SOILS UNDERLAIN BY ROCK. IF THE CHECK IS NOT ANCHORED SUFFICIENTLY, IT WILL WASH OUT.

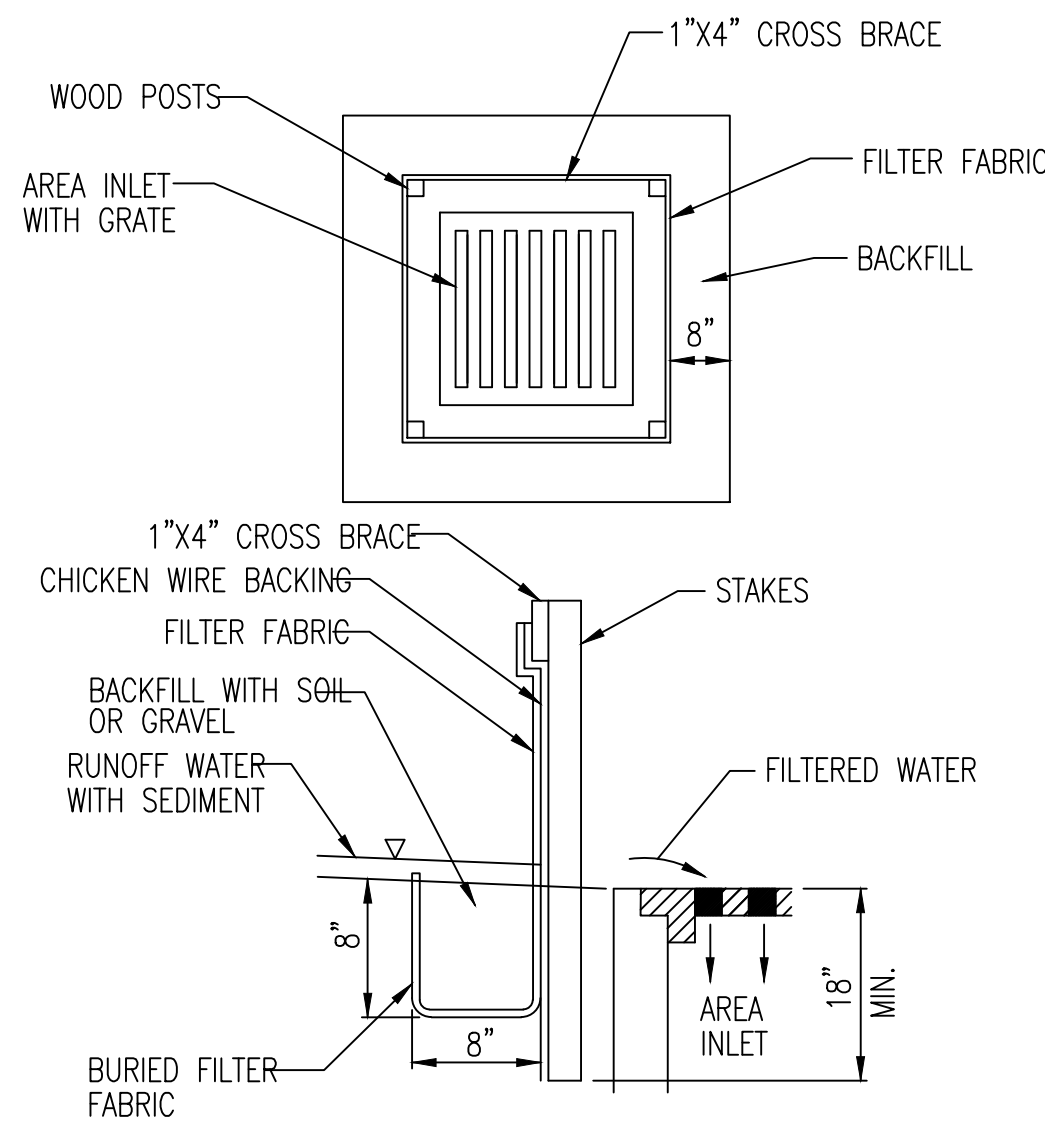
INSPECTION AND MAINTENANCE:

SILT FENCE DITCH CHECKS SHOULD BE INSPECTED EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL OF 1/2" OR MORE. THE FOLLOWING IS A LIST OF QUESTIONS THAT SHOULD BE ADDRESSED DURING EACH INSPECTION:

- DOES WATER FLOW AROUND THE DITCH CHECK?
- DOES WATER FLOW UNDER THE DITCH CHECK?
- DOES THE SILT FENCE SAG EXCESSIVELY?
- HAS THE SILT FENCE TORN OR BECOME DETACHED FROM THE POSTS?
- DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE DITCH CHECK?



ANCHOR TRENCH DETAIL



SILT FENCE BARRIERS FOR AREA INLETS
(INLET PROTECTION)

MATERIAL SPECIFICATION:

SILT FENCE FABRIC SHOULD CONFORM TO THE AASHTO M288 96 SILT FENCE SPECIFICATION. THE WIRE OR POLYMERIC MESH BACKING USED TO HELP SUPPORT THE SILT FENCE FABRIC SHOULD CONFORM TO THE AASHTO M288 96 SILT FENCE SPECIFICATION. THE POSTS USED TO SUPPORT THE SILT FENCE FABRIC SHOULD BE A HARDWOOD MATERIAL WITH THE FOLLOWING MINIMUM DIMENSIONS: 2" SQUARE (NOMINAL) BY 4' LONG. THE MATERIAL USED TO FRAME THE TOPS OF THE POSTS SHOULD BE 1" BY 4" BOARDS. SILT FENCE FABRIC AND SUPPORT BACKING SHOULD BE ATTACHED TO THE WOODEN POSTS AND FRAME WITH STAPLES, WIRE, ZIP TIES, OR NAILS.

PLACEMENT:

PLACE A SILT FENCE DROP INLET BARRIER IN A LOCATION WHERE IT IS UNLIKELY TO BE OVERTOPPED. WATER SHOULD FLOW THROUGH SILT FENCE, NOT OVER IT. SILT FENCE BARRIERS FOR AREA INLETS OFTEN FAIL WHEN REPEATEDLY OVERTOPPED. WHEN USED AS A BARRIER FOR AREA INLETS, SILT FENCE FABRIC AND POSTS MUST BE SUPPORTED AT THE TOP BY A WOODEN FRAME. WHEN A SILT FENCE BARRIER FOR AREA INLETS IS LOCATED NEAR AN INLET THAT HAS STEEP APPROACH SLOPES, THE STORAGE CAPACITY BEHIND THE BARRIER IS DRASTICALLY REDUCED. TIMELY REMOVAL OF SEDIMENT MUST OCCUR FOR A BARRIER TO OPERATE PROPERLY IN THIS LOCATION.

PROPER INSTALLATION METHOD:

EXCAVATE A TRENCH AROUND THE PERIMETER OF THE AREA INLET THAT IS AT LEAST 8" DEEP BY 8" WIDE. DRIVE POSTS TO A DEPTH OF AT LEAST 18" AROUND THE PERIMETER OF THE AREA INLET. THE DISTANCE BETWEEN POSTS SHOULD BE 4' OR LESS. IF THE DISTANCE BETWEEN TWO ADJACENT CORNER POSTS IS MORE THAN 4', ADD ANOTHER POST(S) BETWEEN THEM. CONNECT THE TOPS OF ALL THE POSTS WITH A WOODEN FRAME MADE OF 1" BY 4" BOARDS. USE NAILS OR SCREWS FOR FASTENING. ATTACH THE WIRE OR POLYMERIC-MESH BACKING TO THE OUTSIDE OF THE POST/FRAME STRUCTURE WITH STAPLES, WIRE, ZIP TIES, OR NAILS. ROLL OUT A CONTINUOUS LENGTH OF SILT FENCE FABRIC LONG ENOUGH TO WRAP AROUND THE PERIMETER OF THE AREA INLET. ADD MORE LENGTH FOR OVERLAPPING THE FABRIC JOINT. PLACE THE EDGE OF THE FABRIC IN THE TRENCH, STARTING AT THE OUTSIDE EDGE OF THE TRENCH. LINE ALL THREE SIDES OF THE TRENCH WITH THE FABRIC. BACKFILL OVER THE FABRIC IN THE TRENCH WITH THE EXCAVATED SOIL AND COMPACT. AFTER FILLING THE TRENCH, APPROXIMATELY 24" TO 36" OF SILT FENCE FABRIC SHOULD REMAIN EXPOSED. ATTACH THE SILT FENCE TO THE OUTSIDE OF THE POST/FRAME STRUCTURE WITH STAPLES, WIRE, ZIP TIES, OR NAILS. THE JOINT SHOULD BE OVERLAPPED TO THE NEXT POST.

NOTE: WHEN A SILT FENCE BARRIER FOR AREA INLET IS PLACED IN A SHALLOW MEDIAN DITCH, MAKE SURE THAT THE TOP OF THE BARRIER IS NOT HIGHER THAN THE PAVED ROAD. IN THIS CONFIGURATION, WATER MAY SPREAD ONTO THE ROADWAY CAUSING A HAZARDOUS CONDITION.

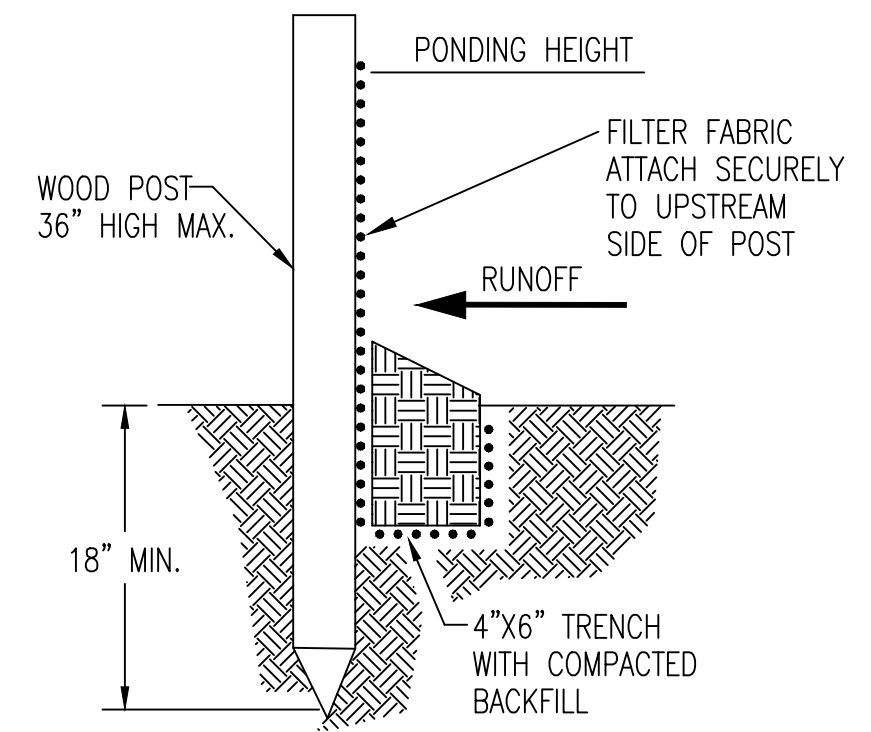
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

WATER SHOULD FLOW THROUGH A SILT FENCE BARRIER FOR AREA INLET—NOT OVER IT. PLACE A SILT FENCE BARRIER FOR AREA INLET IN A LOCATION WHERE IT IS UNLIKELY TO BE OVERTOPPED. SILT FENCE BARRIER FOR AREA INLETS OFTEN FAIL WHEN REPEATEDLY OVERTOPPED. DO NOT PLACE POSTS ON THE OUTSIDE OF THE SILT FENCE BARRIER FOR AREA INLET. IN THIS CONFIGURATION, THE FORCE OF THE WATER IS NOT RESTRICTED BY THE POSTS, BUT ONLY BY THE STAPLES (WIRE, ZIP TIES, NAILS, ETC.). THE SILT FENCE WILL RIP AND FAIL. DO NOT INSTALL SILT FENCE BARRIER FOR AREA INLETS WITHOUT FRAMING THE TOP OF THE POSTS. THE CORNER POSTS AROUND AREA INLETS ARE STRESSED IN TWO DIRECTIONS WHEREAS A NORMAL SILT FENCE IS ONLY STRESSED IN ONE DIRECTION. THIS ADDED STRESS REQUIRES MORE SUPPORT.

INSPECTION AND MAINTENANCE:

SILT FENCE BARRIER FOR AREA INLETS SHOULD BE INSPECTED EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL OF 1/2" OR MORE. THE FOLLOWING IS A LIST OF QUESTIONS THAT SHOULD BE ADDRESSED DURING EACH INSPECTION:

- DOES WATER FLOW UNDER THE SILT FENCE?
- DOES THE SILT FENCE SAG EXCESSIVELY?
- HAS THE SILT FENCE TORN OR BECOME DETACHED FROM THE POSTS?
- DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE AREA INLET BARRIER?



SILT FENCE BARRIERS

MATERIAL SPECIFICATION:

SILT FENCE FABRIC SHOULD CONFORM TO THE AASHTO M288 96 SILT FENCE SPECIFICATION. THE POSTS USED TO SUPPORT THE SILT FENCE FABRIC SHOULD BE A HARDWOOD MATERIAL WITH THE FOLLOWING MINIMUM DIMENSIONS: 2" SQUARE (NOMINAL) BY 4' LONG. SILT FENCE FABRIC SHOULD BE ATTACHED TO THE WOODEN POSTS WITH STAPLES, WIRE, ZIP TIES, OR NAILS.

PLACEMENT:

A SLOPE BARRIER SHOULD BE USED AT THE TOE OF A SLOPE WHEN A DITCH DOES NOT EXIST. THE SLOPE BARRIER SHOULD BE PLACED ON NEARLY LEVEL GROUND 5' TO 10' AWAY FROM THE TOE OF A SLOPE. THE BARRIER IS PLACED AWAY FROM THE TOE OF THE SLOPE TO PROVIDE ADEQUATE STORAGE FOR SETTLING OUT SEDIMENT. WHEN PRACTICABLE, SILT FENCE SLOPE BARRIERS SHOULD BE PLACED ALONG CONTOURS TO AVOID A CONCENTRATION OF FLOW. SILT FENCE SLOPE BARRIERS CAN ALSO BE PLACED ALONG RIGHT-OF-WAY FENCE LINES TO KEEP SEDIMENT FROM CROSSING ONTO ADJACENT PROPERTY. WHEN PLACED IN THIS MANNER, THE SLOPE BARRIER WILL NOT LIKELY FOLLOW CONTOURS.

PROPER INSTALLATION METHOD:

EXCAVATE A TRENCH THE LENGTH OF THE PLANNED SLOPE BARRIER THAT IS 6" DEEP BY 4" WIDE. MAKE SURE THAT THE TRENCH IS EXCAVATED ALONG A SINGLE CONTOUR. WHEN PRACTICABLE, SLOPE BARRIERS SHOULD BE PLACED ALONG CONTOURS TO AVOID A CONCENTRATION OF FLOW. PLACE THE SOIL ON THE UPSLOPE SIDE OF THE TRENCH FOR LATER USE. ROLL OUT A CONTINUOUS LENGTH OF SILT FENCE FABRIC ON THE DOWNSLOPE SIDE OF THE TRENCH. PLACE THE EDGE OF THE FABRIC IN THE TRENCH STARTING AT THE TOP UPSLOPE EDGE. LINE ALL THREE SIDES OF THE TRENCH WITH THE FABRIC. BACKFILL OVER THE FABRIC IN THE TRENCH WITH THE EXCAVATED SOIL AND COMPACT. AFTER FILLING THE TRENCH, APPROXIMATELY 24" TO 36" OF SILT-FENCE FABRIC SHOULD REMAIN EXPOSED. LAY THE EXPOSED SILT FENCE UPSLOPE OF THE TRENCH TO CLEAR AN AREA FOR DRIVING IN THE POSTS. JUST DOWNSLOPE OF THE TRENCH, DRIVE POSTS INTO THE GROUND TO A DEPTH OF AT LEAST 18". PLACE POSTS NO MORE THAN 4' APART. ATTACH THE SILT FENCE TO THE ANCHORED POST WITH STAPLES, WIRE, ZIP TIES, OR NAILS.

LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

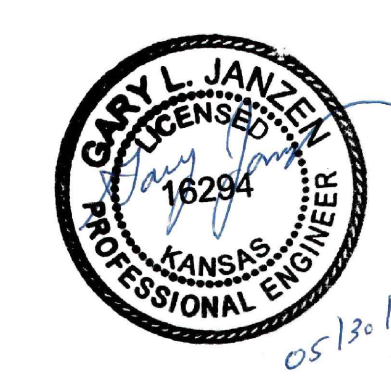
WHEN PRACTICABLE, DO NOT PLACE SILT FENCE SLOPE BARRIERS ACROSS CONTOURS. SLOPE BARRIERS SHOULD BE PLACED ALONG CONTOURS TO AVOID A CONCENTRATION OF FLOW. WHEN THE FLOW CONCENTRATES, IT OVERTOPS THE BARRIER AND THE SILT FENCE SLOPE BARRIER QUICKLY DETERIORATES. DO NOT PLACE SILT-FENCE POSTS ON THE UPSLOPE SIDE OF THE SILT FENCE FABRIC. IN THIS CONFIGURATION, THE FORCE OF THE WATER IS NOT RESTRICTED BY THE POSTS, BUT ONLY BY THE STAPLES (WIRE, ZIP TIES, NAILS, ETC.). THE SILT FENCE WILL RIP AND FAIL. DO NOT PLACE SILT FENCE SLOPE BARRIERS IN AREAS WITH SHALLOW SOILS UNDERLAIN BY ROCK. IF THE BARRIER IS NOT SUFFICIENTLY ANCHORED, IT WILL WASH OUT. SILT FENCE SLOPE BARRIERS MUST BE DUG INTO THE GROUND—SILT FENCE AT GROUND LEVEL DOES NOT WORK BECAUSE WATER WILL FLOW UNDERNEATH.

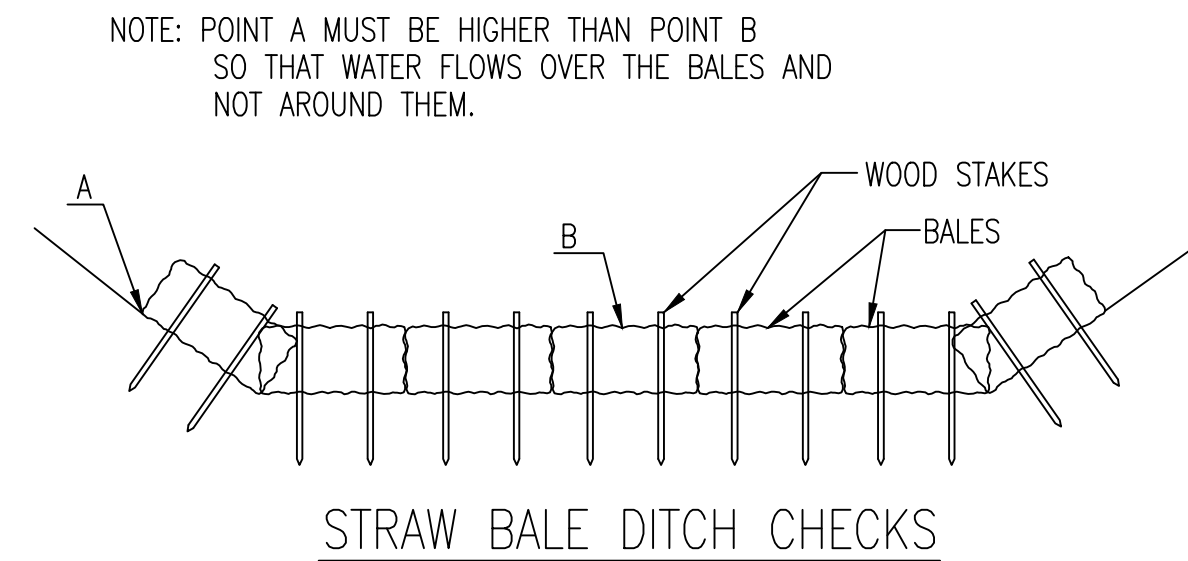
INSPECTION AND MAINTENANCE:

SILT FENCE SLOPE BARRIERS SHOULD BE INSPECTED EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL OF 1/2" OR MORE. THE FOLLOWING IS A LIST OF QUESTIONS THAT SHOULD BE ADDRESSED DURING EACH INSPECTION:

- ARE THERE ANY POINTS ALONG THE SLOPE BARRIER WHERE WATER IS CONCENTRATING?
- DOES WATER FLOW UNDER THE SLOPE BARRIER?
- DO THE SILT FENCES SAG EXCESSIVELY?
- HAS THE SILT FENCE TORN OR BECOME DETACHED FROM THE POSTS?
- DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE SLOPE BARRIER?

<p>CITY OF WICHITA</p> <p>PUBLIC WORKS & UTILITIES ENGINEERING DIVISION</p>	<p>SILT FENCE DITCH CHECK AND BARRIER DETAILS</p>		
	<p>CITY ENGINEER GARY JANZEN, P.E.</p>		
	<p>PROJECT NUMBER 458-2025-085610</p>	<p>OCA NUMBER .</p>	<p>DATE 11/2010</p>
<p>CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501</p>		<p>SHEET 27</p>	<p>32</p>





MATERIAL SPECIFICATION:

BALE DITCH CHECKS MAY BE CONSTRUCTED OF WHEAT STRAW, OAT STRAW, PRAIRIE HAY, OR BROMEGRASS HAY THAT IS FREE OF WEEDS DECLARED NOXIOUS BY THE KANSAS STATE BOARD OF AGRICULTURE. THE STAKES USED TO ANCHOR THE BALES SHOULD BE A HARDWOOD MATERIAL WITH THE FOLLOWING MINIMUM DIMENSIONS: 2" SQUARE (NOMINAL) BY 4' LONG. OPTIONAL: THE DOWNSTREAM SCOUR APRON SHOULD BE CONSTRUCTED OF A DOUBLE-NETTED STRAW EROSION-CONTROL BLANKET AT LEAST 6' WIDE. OPTIONAL: THE METAL LANDSCAPE STAPLES USED TO ANCHOR THE EROSION-CONTROL BLANKET SHOULD BE AT LEAST 8" LONG.

PLACEMENT:

BALE DITCH CHECKS SHOULD BE PLACED PERPENDICULAR TO THE FLOWLINE OF THE DITCH. THE DITCH CHECK SHOULD EXTEND FAR ENOUGH SO THAT THE GROUND LEVEL AT THE ENDS OF THE CHECK IS HIGHER THAN THE TOP OF THE LOWEST CENTER BALE. THIS PREVENTS WATER FROM FLOWING AROUND THE CHECK. STRAW BALE DITCH CHECKS SHOULD NOT BE PLACED IN DITCHES WHERE HIGH FLOWS ARE EXPECTED. ROCK CHECKS SHOULD BE USED INSTEAD. BALES SHOULD BE PLACED IN DITCHES WITH SLOPES OF 6% OR LESS. FOR SLOPES STEEPER THAN 6%, ROCK CHECKS SHOULD BE USED. THE FOLLOWING TABLE PROVIDES CHECK SPACING FOR A GIVEN DITCH GRADE:

DITCH GRADE (%)	CHECK SPACING (FEET)
0.5	200
1.0	200
2.0	100
3.0	65
4.0	50
5.0	40
6.0	30

PROPER INSTALLATION METHOD:

EXCAVATE A TRENCH PERPENDICULAR TO THE DITCH FLOWLINE THAT IS 4" DEEP AND A BALE'S WIDTH WIDE. EXTEND THE TRENCH IN A STRAIGHT LINE ALONG THE ENTIRE LENGTH OF THE PROPOSED DITCH CHECK. PLACE THE SOIL ON THE UPSTREAM SIDE OF THE TRENCH-IT WILL BE USED LATER. OPTIONAL: ON THE DOWNSTREAM SIDE OF THE TRENCH, ROLL OUT A LENGTH OF EROSION-CONTROL BLANKET (SCOUR APRON) EQUAL TO THE LENGTH OF THE TRENCH. PLACE THE UPSTREAM EDGE OF THE EROSION-CONTROL BLANKET ALONG THE BOTTOM UPSTREAM EDGE OF THE TRENCH. THE EROSION CONTROL BLANKET SHOULD BE ANCHORED IN THE TRENCH WITH ONE ROW OF 8" LANDSCAPE STAPLES PLACED ON 18" CENTERS. THE REMAINDER OF THE EROSION-CONTROL BLANKET (THE PORTION THAT IS NOT LYING IN THE TRENCH) WILL SERVE AS THE DOWNSTREAM SCOUR APRON. THIS SECTION OF THE BLANKET SHOULD BE ANCHORED TO THE GROUND WITH 8" LANDSCAPE STAPLES PLACED AROUND THE PERIMETER OF THE BLANKET ON 18" CENTERS. THE REMAINDER OF THE BLANKET SHOULD BE ANCHORED USING TWO EVENLY SPACED ROWS OF 8" LANDSCAPE STAPLES ON 18" CENTERS PLACED PERPENDICULAR TO THE FLOWLINE OF THE DITCH. PLACE THE BALES IN THE TRENCH, MAKING SURE THAT THEY ARE BUTTED TIGHTLY. TWO STAKES SHOULD BE DRIVEN THROUGH EACH BALE ALONG THE CENTERLINE OF THE DITCH CHECK, APPROXIMATELY 6" TO 8" IN FROM THE BALE ENDS. STAKES SHOULD BE DRIVEN AT LEAST 12" INTO THE GROUND. ONCE ALL THE BALES HAVE BEEN INSTALLED AND ANCHORED, PLACE THE EXCAVATED SOIL AGAINST THE UPSTREAM SIDE OF THE CHECK AND COMPACT IT. THE COMPACTED SOIL SHOULD BE NO MORE THAN 3" TO 4" DEEP AND EXTEND UPSTREAM NO MORE THAN 24".

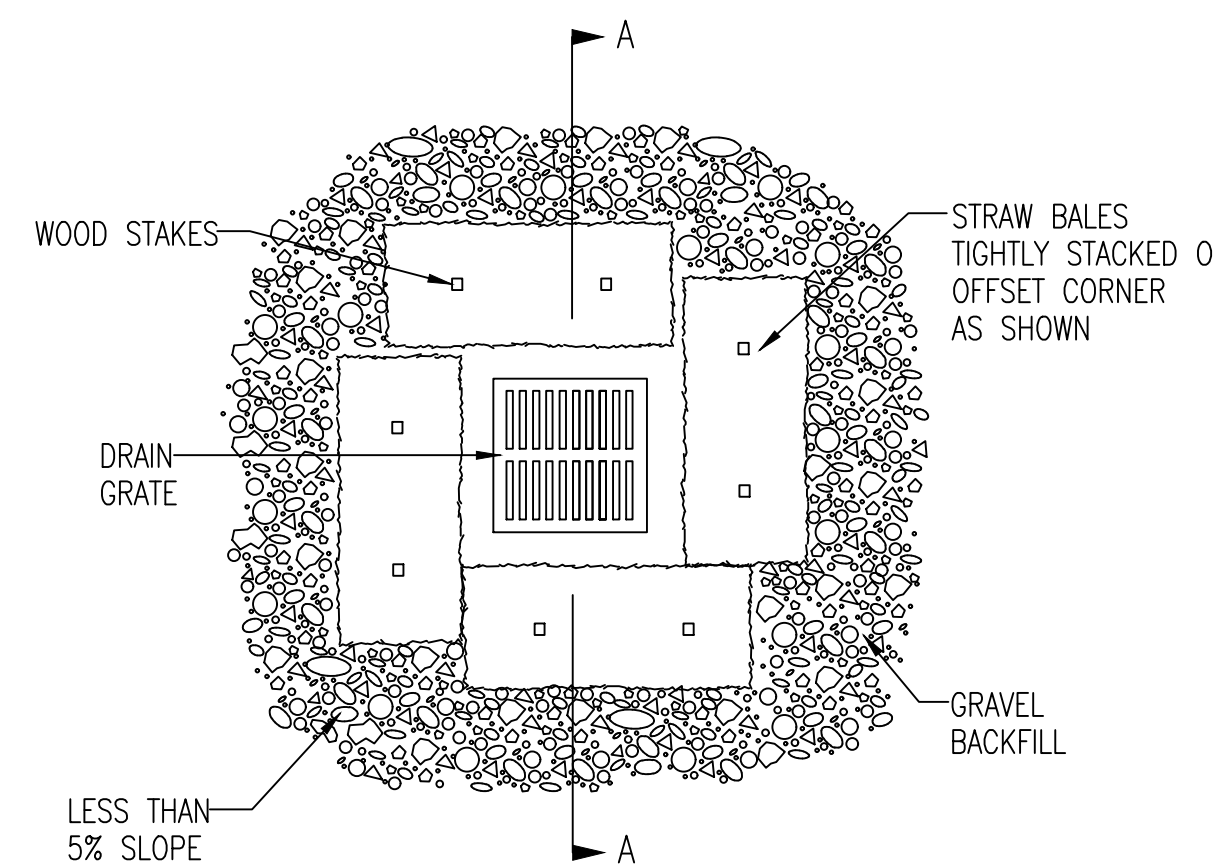
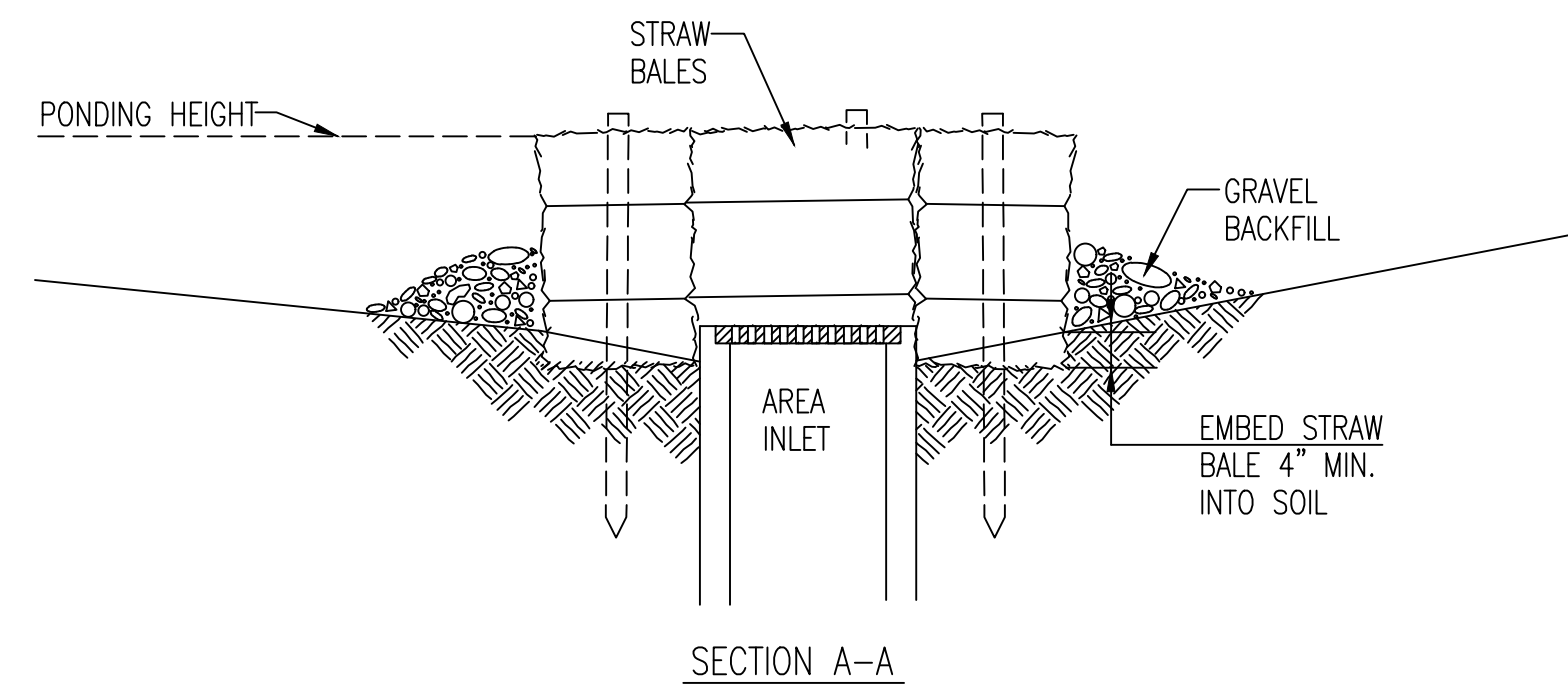
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

DO NOT PLACE A BALE DITCH CHECK DIRECTLY IN FRONT OF A CULVERT OUTLET. IT WILL NOT STAND UP TO THE CONCENTRATED FLOW. DO NOT PLACE BALE DITCH CHECKS IN DITCHES THAT WILL LIKELY EXPERIENCE HIGH FLOWS. THEY WILL NOT STAND UP TO CONCENTRATED FLOW. FOLLOW PRESCRIBED DITCH-CHECK SPACING GUIDELINES. IF SPACING GUIDELINES ARE EXCEEDED, EROSION WILL OCCUR BETWEEN THE DITCH CHECKS. DO NOT ALLOW WATER TO FLOW AROUND THE DITCH CHECK. MAKE SURE THAT THE DITCH CHECK IS LONG ENOUGH SO THAT THE GROUND LEVEL AT THE ENDS OF THE CHECK IS HIGHER THAN THE TOP OF THE LOWEST CENTER BALE. DO NOT PLACE BALE DITCH CHECKS IN CHANNELS WITH SHALLOW SOILS UNDERLAIN BY ROCK. IF THE CHECK IS NOT ANCHORED SUFFICIENTLY, IT WILL WASH OUT. BALE DITCH CHECKS MUST BE DUG INTO THE GROUND. BALES AT GROUND LEVEL DO NOT WORK BECAUSE THEY ALLOW WATER TO FLOW UNDER THE CHECK.

INSPECTION AND MAINTENANCE:

BALE DITCH CHECKS SHOULD BE INSPECTED EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL OF 1/2" OR MORE. THE FOLLOWING IS A LIST OF QUESTIONS THAT SHOULD BE ADDRESSED DURING EACH INSPECTION:

- DOES WATER FLOW AROUND THE DITCH CHECK?
- DOES WATER FLOW UNDER THE DITCH CHECK?
- DOES WATER FLOW THROUGH SPACES BETWEEN ABUTTING BALES?
- ARE ANY BALES AND/OR SCOUR APRONS (OPTIONAL) DISLODGED?
- ARE BALES DECOMPOSING DUE TO AGE AND/OR WATER DAMAGE?
- DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE DITCH CHECK?



STRAW BALE BARRIERS FOR AREA INLETS (INLET PROTECTION)

MATERIAL SPECIFICATION:

BALE AREA INLET BARRIERS SHOULD BE CONSTRUCTED OF WHEAT STRAW, OAT STRAW, PRAIRIE HAY, OR BROMEGRASS HAY THAT IS FREE OF WEEDS DECLARED NOXIOUS BY THE KANSAS STATE BOARD OF AGRICULTURE. THE STAKES USED TO ANCHOR THE BALES SHOULD BE A HARDWOOD MATERIAL WITH THE FOLLOWING MINIMUM DIMENSIONS: 2" SQUARE (NOMINAL) BY 4' LONG. TWINE SHOULD BE USED TO BIND BALES. THE USE OF WIRE BINDING IS PROHIBITED BECAUSE IT DOES NOT BIODEGRADE READILY.

PLACEMENT:

BALE AREA INLET BARRIERS SHOULD BE PLACED DIRECTLY AROUND THE PERIMETER OF A DROP INLET. WHEN A BALE AREA INLET BARRIER IS LOCATED NEAR AN INLET THAT HAS STEEP APPROACH SLOPES, THE STORAGE CAPACITY BEHIND THE BARRIER IS DRASTICALLY REDUCED. TIMELY REMOVAL OF SEDIMENT MUST OCCUR FOR A BARRIER TO OPERATE PROPERLY IN THIS LOCATION.

PROPER INSTALLATION METHOD:

EXCAVATE A TRENCH AROUND THE PERIMETER OF THE AREA INLET THAT IS AT LEAST 4" DEEP BY A BALE'S WIDTH WIDE. PLACE THE BALES IN THE TRENCH, MAKING SURE THAT THEY ARE BUTTED TIGHTLY. SOME BALES MAY NEED TO BE SHORTENED TO FIT INTO THE TRENCH AROUND THE AREA INLET. TWO STAKES SHOULD BE DRIVEN THROUGH EACH BALE, APPROXIMATELY 6" TO 8" IN FROM THE BALE ENDS. STAKES SHOULD BE DRIVEN AT LEAST 12" INTO THE GROUND. ONCE ALL THE BALES HAVE BEEN INSTALLED AND ANCHORED, PLACE THE EXCAVATED SOIL AGAINST THE RECEIVING SIDE OF THE BARRIER AND COMPACT IT. THE COMPACTED SOIL SHOULD BE NO MORE THAN 3" TO 4" DEEP. NOTE: WHEN A BALE AREA INLET BARRIER IS PLACED IN A SHALLOW MEDIAN DITCH, MAKE SURE THAT THE TOP OF THE BARRIER IS NOT HIGHER THAN THE PAVED ROAD. IN THIS CONFIGURATION, WATER MAY SPREAD ONTO THE ROADWAY CAUSING A HAZARDOUS CONDITION.

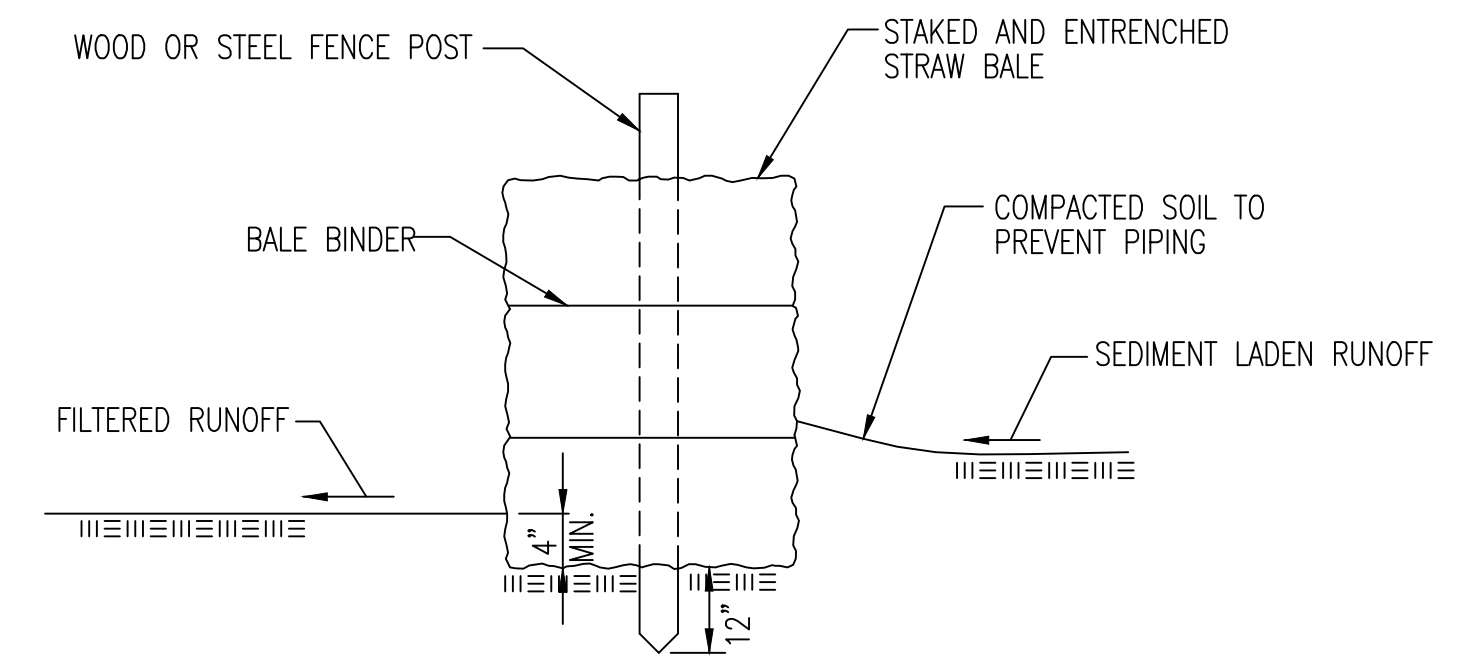
LIST OF COMMON PLACEMENT INSTALLATION MISTAKES TO AVOID:

BALES SHOULD BE PLACED DIRECTLY AGAINST THE PERIMETER OF THE AREA INLET. THIS ALLOWS OVERTOPPING WATER TO FLOW DIRECTLY INTO THE INLET INSTEAD OF ONTO NEARBY SOIL CAUSING SCOUR. BALE AREA INLET BARRIERS MUST BE DUG INTO THE GROUND. BALES AT GROUND LEVEL DO NOT WORK BECAUSE THEY ALLOW WATER TO FLOW UNDER THE BARRIER.

INSPECTION AND MAINTENANCE:

BALE AREA INLET BARRIERS SHOULD BE INSPECTED EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL 1/2" OR MORE. THE FOLLOWING IS A LIST OF QUESTIONS THAT SHOULD BE ADDRESSED DURING EACH INSPECTION:

- DOES WATER FLOW UNDER THE AREA INLET BARRIER?
- DOES WATER FLOW THROUGH SPACES BETWEEN ABUTTING BALES?
- ARE ANY BALES DISLODGED?
- ARE BALES DECOMPOSING DUE TO AGE AND/OR WATER DAMAGE?
- DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE AREA INLET BARRIER?



STRAW BALE BARRIERS

MATERIAL SPECIFICATION:

BALE SLOPE BARRIERS MAY BE CONSTRUCTED OF WHEAT STRAW, OAT STRAW, PRAIRIE HAY, OR BROMEGRASS HAY THAT IS FREE OF WEEDS DECLARED NOXIOUS BY THE KANSAS STATE BOARD OF AGRICULTURE. THE STAKES USED TO ANCHOR THE BALES SHOULD BE A HARDWOOD MATERIAL WITH THE FOLLOWING MINIMUM DIMENSIONS: 2" SQUARE (NOMINAL) BY 4' LONG. TWINE SHOULD BE USED TO BIND BALES. THE USE OF WIRE BINDING IS PROHIBITED BECAUSE IT DOES NOT BIODEGRADE READILY.

PLACEMENT:

A SLOPE BARRIER SHOULD BE USED AT THE TOE OF A SLOPE WHEN A DITCH DOES NOT EXIST. THE SLOPE BARRIER SHOULD BE PLACED ON NEARLY LEVEL GROUND 5' TO 10' AWAY FROM THE TOE OF A SLOPE. THE BARRIER IS PLACED AWAY FROM THE TOE OF THE SLOPE TO PROVIDE ADEQUATE STORAGE FOR SETTLING OUT SEDIMENT. WHEN PRACTICABLE, BALE SLOPE BARRIERS SHOULD BE PLACED ALONG CONTOURS TO AVOID A CONCENTRATION OF FLOW. BALE SLOPE BARRIERS CAN ALSO BE PLACED ALONG RIGHT-OF-WAY FENCE LINES TO KEEP SEDIMENT FROM CROSSING ONTO ADJACENT PROPERTY. WHEN PLACED IN THIS MANNER, THE SLOPE BARRIER WILL NOT LIKELY FOLLOW CONTOURS.

PROPER INSTALLATION METHOD:

EXCAVATE A TRENCH THE LENGTH OF THE PLANNED SLOPE BARRIER THAT IS 4" DEEP AND A BALE'S WIDTH WIDE. MAKE SURE THAT THE TRENCH IS EXCAVATED ALONG A SINGLE CONTOUR. WHEN PRACTICABLE, SLOPE BARRIERS SHOULD BE PLACED ALONG CONTOURS TO AVOID A CONCENTRATION OF FLOW. PLACE THE SOIL ON THE UPSLOPE SIDE OF THE TRENCH FOR LATER USE. PLACE THE BALES IN THE TRENCH, MAKING SURE THAT THEY ARE BUTTED TIGHTLY. TWO STAKES SHOULD BE DRIVEN THROUGH EACH BALE ALONG THE CENTERLINE OF THE DITCH CHECK, APPROXIMATELY 6" TO 8" IN FROM THE BALE ENDS. STAKES SHOULD BE DRIVEN AT LEAST 12" INTO THE GROUND. ONCE ALL THE BALES HAVE BEEN INSTALLED AND ANCHORED, PLACE THE EXCAVATED SOIL AGAINST THE UPSLOPE SIDE OF THE CHECK AND COMPACT IT. THE COMPACTED SOIL SHOULD BE NO MORE THAN 3" TO 4" DEEP.

LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:


WHEN PRACTICAL, DO NOT PLACE BALE SLOPE BARRIERS ACROSS CONTOURS. SLOPE BARRIERS SHOULD BE PLACED ALONG CONTOURS TO AVOID A CONCENTRATION OF FLOW. CONCENTRATED FLOW OVER A SLOPE BARRIER CREATES A SCOUR HOLE ON THE DOWNSLOPE SIDE OF THE BARRIER. THE SCOUR HOLE EVENTUALLY UNDERMINES THE BALES AND THE BARRIER FAILS. DO NOT PLACE BALE SLOPE BARRIERS IN AREAS WITH SHALLOW SOILS UNDERLAIN BY ROCK. IF THE BARRIER IS NOT ANCHORED SUFFICIENTLY, IT WILL WASH OUT. BALE SLOPE BARRIERS MUST BE DUG INTO THE GROUND. BALES AT GROUND LEVEL DO NOT WORK BECAUSE THEY ALLOW WATER TO FLOW UNDER THE BARRIER.

INSPECTION AND MAINTENANCE:

BALE SLOPE BARRIERS SHOULD BE INSPECTED EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL OF 1/2" OR MORE. THE FOLLOWING IS A LIST OF QUESTIONS THAT SHOULD BE ADDRESSED DURING EACH INSPECTION:

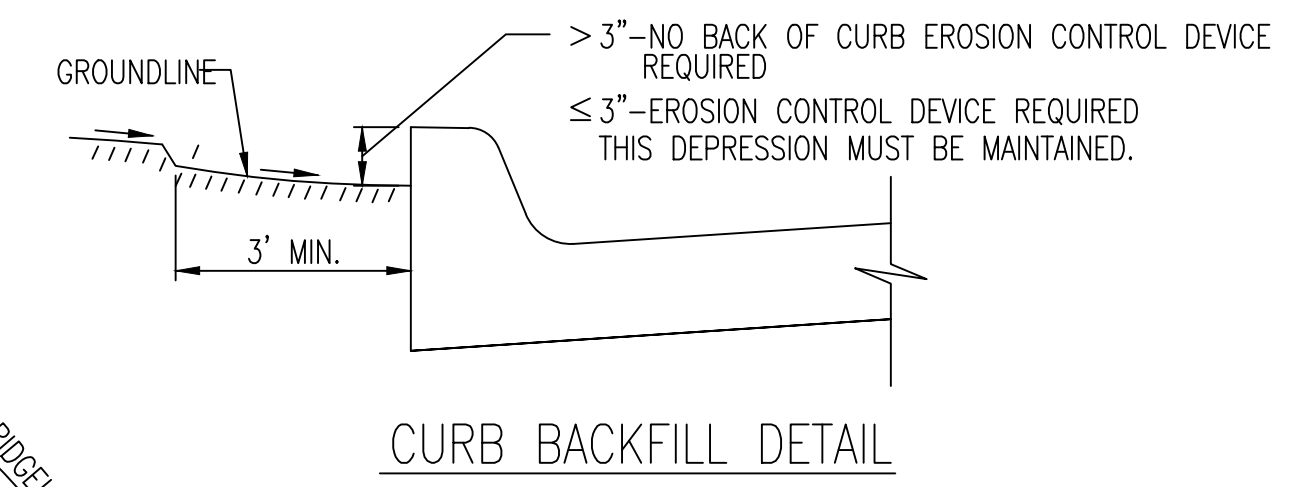
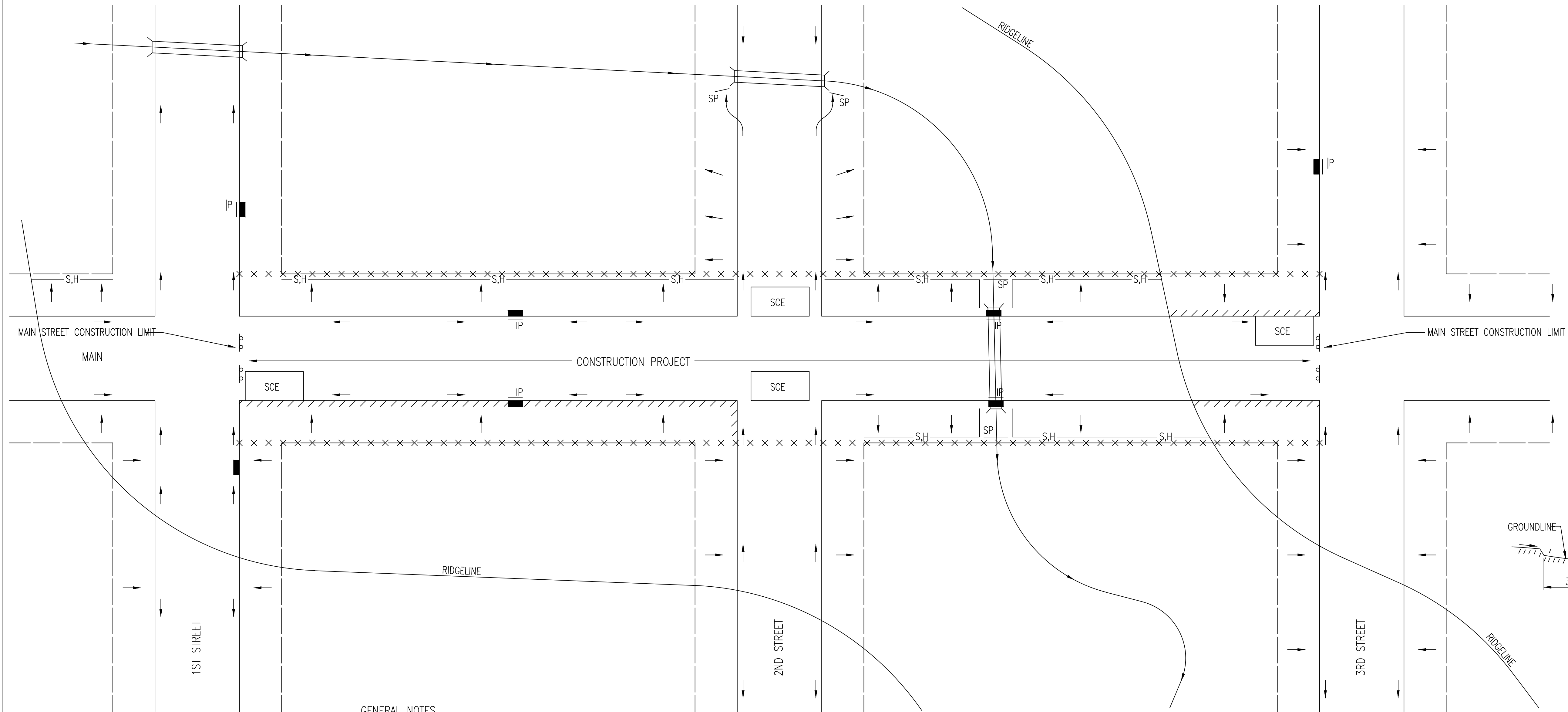
- ARE THERE ANY POINTS ALONG THE SLOPE BARRIER WHERE WATER IS CONCENTRATING?
- DOES WATER FLOW UNDER THE SLOPE BARRIER?
- DOES WATER FLOW THROUGH SPACES BETWEEN ABUTTING BALES?
- ARE ANY BALES DISLODGED?
- ARE BALES DECOMPOSING DUE TO AGE AND/OR WATER DAMAGE?
- DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE SLOPE BARRIER?



 CITY OF WICHITA PUBLIC WORKS & UTILITIES ENGINEERING DIVISION			STRAW BALE DITCH CHECK AND BARRIER DETAILS		
CITY ENGINEER GARY JANZEN, P.E.					
PROJECT NUMBER		OCA NUMBER		DATE	
458-2025-085610				11/2010	
CITY ENGINEER'S OFFICE				SHEET	
CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501				28	
				32	

GENERAL NOTES

- THIS SHEET IS INTENDED TO PROVIDE GUIDELINES AS TO WHAT TYPES OF EROSION CONTROL DEVICES WILL BE INSTALLED DURING THE CONSTRUCTION PROCESS. CONTRACTORS ARE EXPECTED TO BID PROJECTS ACCORDINGLY.
- EROSION CONTROL DEVICES MUST BE MAINTAINED BY THE CONTRACTOR THROUGHOUT THE CONSTRUCTION PROCESS AND UNTIL THE DISTURBED EARTH IS RESTABILIZED.
- IF THE PROJECT WILL DISTURB 1 ACRE OR MORE, A FEDERAL/STATE NPDES STORMWATER PERMIT IS REQUIRED. A DETAILED STORMWATER POLLUTION PREVENTION PLAN, IS REQUIRED. THE EROSION CONTROL DEVICES SHOWN ON THIS SHEET ARE CONSIDERED TO BE THE MINIMUM TO BE SHOWN IN THE POLLUTION PREVENTION PLAN.
- FOR PROJECTS DISTURBING LESS THAN 1 ACRE, CONTRACTORS ARE ENCOURAGED TO PREPARE STORMWATER POLLUTION PREVENTION PLANS PRIOR TO CONSTRUCTION. EROSION CONTROL DEVICES MUST BE USED ON ALL PROJECTS.
- FAILURE TO USE AND MAINTAIN EROSION CONTROL DEVICES IS A VIOLATION OF SECTION 16.32 OF THE CITY CODE AND WILL SUBJECT THE CONTRACTOR TO THE PENALTIES PROVIDED FOR THEREIN.
- THE APPLICATION OF EROSION CONTROL DEVICES SHOWN ON THIS SHEET IS FOR SITUATIONS NORMALLY ENCOUNTERED. FROM TIME TO TIME, SITUATIONS WILL ARISE THAT MAY REQUIRE A DIFFERENT DEVICE OTHER THAN THOSE SHOWN. EROSION CONTROL DEVICES, OTHER THAN THOSE SHOWN, MAY BE UTILIZED AS LONG AS THEY ARE EFFECTIVE AND MAINTAINED.



THIS IS A TEMPORARY MEASURE ONLY, WHEN APPROVED BY THE PROJECT ENGINEER. THE DIRT GRADE BEHIND THE CURB SHALL BE BROUGHT TO THE TOP OF CURB, WITH TEMPORARY EROSION CONTROL MAT OR PERMANENT VEGETATION PLACED, PRIOR TO THE COMPLETION OF ALL PROJECTS.

LEGEND

- R-0-W LIMITS
- DRAINAGE FLOW PATH
- × × × × × R/W LIMIT WITHIN CONSTRUCTION LIMIT
- STORM WATER INLETS
- IP INLET PROTECTION
- S,H— SILT FENCE OR HAY BALE BARRIER
- SP STREAM PROTECTION
- SCE STABILIZED CONSTRUCTION ENTRANCE
- ////// BACK OF CURB PROTECTION

GENERAL NOTES

- THE INTENT OF ALL EROSION CONTROL DEVICES IS TO KEEP ALL SEDIMENT CONFINED TO THE CONSTRUCTION SITE, AND OUT OF ALL UNDERGROUND PIPES, DITCHES, LAKES, AND OTHER DRAINAGE FACILITIES, AND OFF OF STREETS.
- THE POINT OF COMPLIANCE IS GENERALLY THE RIGHT-OF-WAY LINES WITHIN THE LIMITS OF CONSTRUCTION.
- EROSION CONTROL DEVICES WILL BE REQUIRED AT ALL POINTS ALONG THE PROJECT WHERE DISTURBED EARTH CAN DRAIN ONTO PRIVATE PROPERTY.
- INLET PROTECTION DEVICES WILL BE REQUIRED WHEREVER WATER CAN DRAIN OFF THE PROJECT SITE INTO AN INLET, INCLUDING ANY SIDE STREET INLETS.
- EROSION CONTROL DEVICES SHALL BE INSTALLED AT CREEK CROSSINGS SO AS TO PREVENT SEDIMENT FROM ENTERING THEREIN.
- STABILIZED CONSTRUCTION ENTRANCES SHALL BE PROVIDED, AS NEEDED, TO PREVENT MUD FROM TRACKING ONTO STREETS NOT UNDER CONSTRUCTION AND ON STREETS WITHIN THE PROJECT LIMITS IF TRAFFIC IS BEING MAINTAINED THROUGH THE PROJECT.
- ANY MUD TRACKED ONTO STREETS MUST BE REMOVED AT THE END OF EACH WORK DAY.
- THE CONTRACTOR WILL BE REQUIRED TO PLACE EROSION CONTROL DEVICES BACK OF CURB, WHENEVER WATER CAN DRAIN OVER CURB, TO KEEP ERODED SOIL OUT OF THE GUTTERLINES, IN ACCORDANCE WITH THE FOLLOWING:
 - THE DEVICE REQUIRED WILL BE APPROVED EROSION CONTROL MAT LISTED ON THE CITY'S APPROVED MATERIAL LIST. SAID BLANKET SHALL BE PLACED OVER THE APPROPRIATE SEED AND FERTILIZER, AS SPECIFIED IN THE PROJECT SPECIFICATIONS. (SEE SOIL EROSION BMPs - BACK OF CURB SEDIMENT BARRIER DETAILS)
 - THIS DEVICE SHALL BE INSTALLED IMMEDIATELY WHENEVER THE CURB IS BACKFILLED TO WITHIN 3" OF THE TOP OF CURB. (SEE CURB BACKFILL DETAIL) OTHER BMP'S MAY BE REQUIRED AT LOCATIONS WHERE CONCENTRATED FLOW CARRIES SEDIMENT OVER THE CURB.
 - ADDITIONALLY, OTHER EROSION CONTROL DEVICES (HAY BALES, SILT FENCE, ETC.) WILL BE INSTALLED AT LOCATIONS OF CONCENTRATED FLOW RESULTING IN SEDIMENT OVERRUNNING THE MAT.
 - SHOULD THE PROJECT PLANS SPECIFY THAT THE RIGHT-OF-WAY IS TO BE SODDED, THE EXCELSIOR MAT WILL NOT BE REQUIRED SO LONG AS THE SOD IS PLACED WITHIN 48 HOURS AFTER CURB BACKFILL REACHES A HEIGHT OF 3" OR LESS FROM TOP OF CURB. (SEE CURB BACKFILL DETAIL)

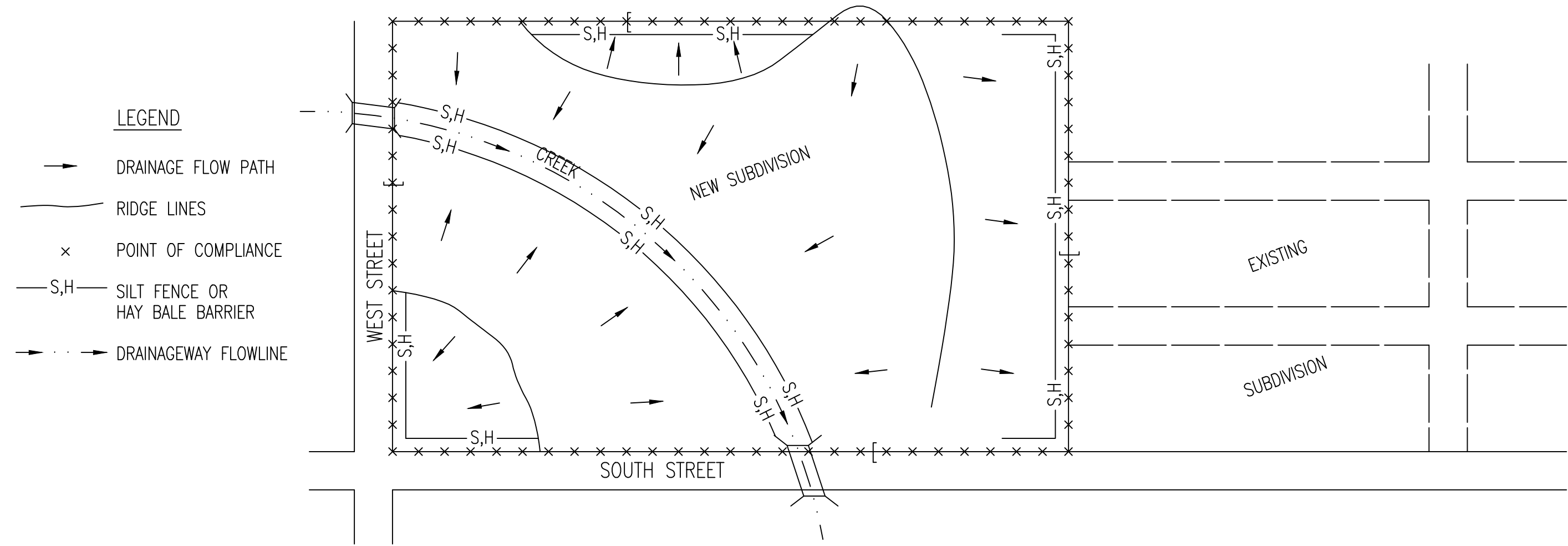


REVISION: JUNE 2015

CITY OF WICHITA
PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

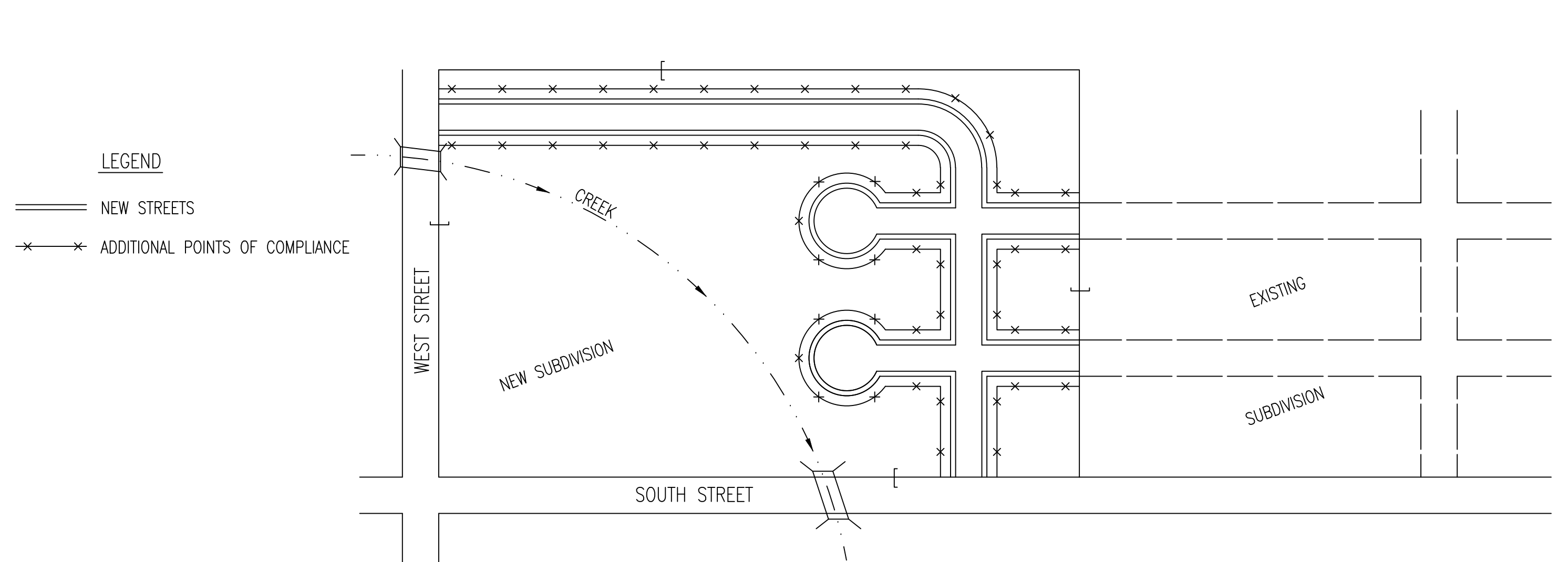
STREET IMPROVEMENT PROJECTS		
CITY ENGINEER GARY JANZEN, P.E.		
PROJECT NUMBER 458-2025-085610	OCA NUMBER .	DATE
CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		SHEET 29 32

PHASE 1 - INITIAL EARTHWORK AND UTILITIES (EXCEPT STORM SEWER)



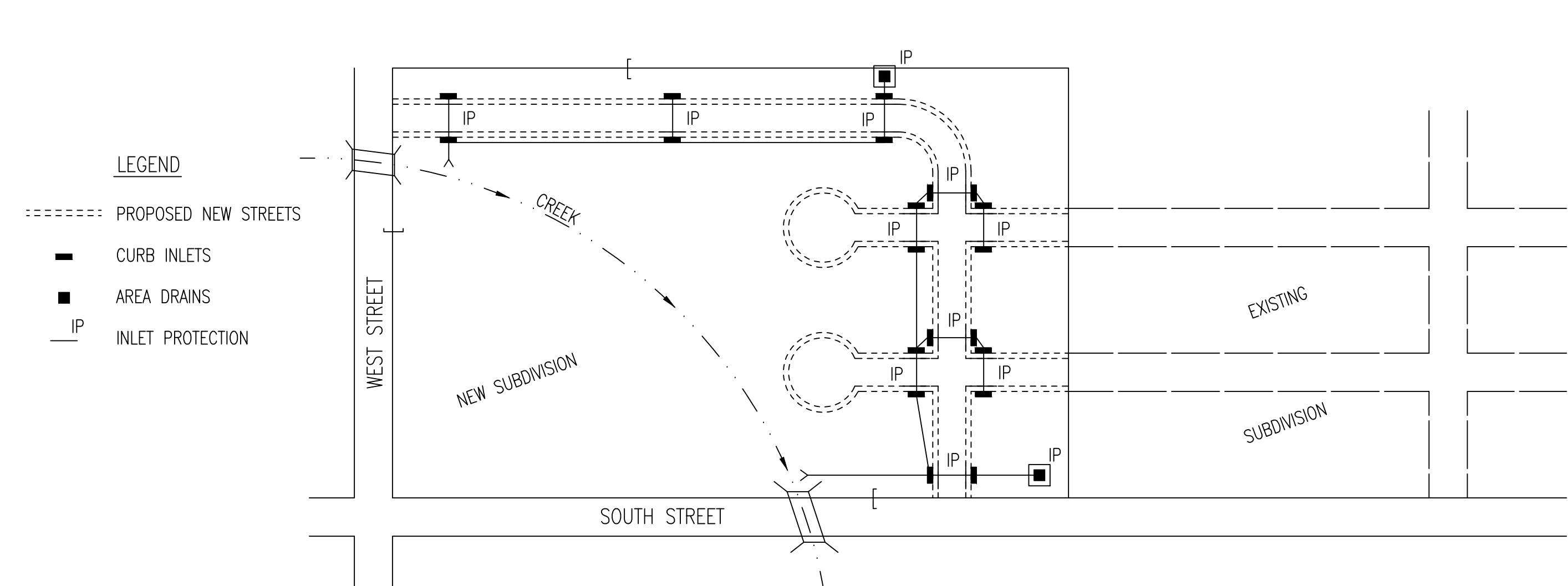
1. DURING THIS PHASE OF SUBDIVISION CONSTRUCTION, THE POINTS OF COMPLIANCE ARE THE PERIMETER BOUNDARIES AND ANY DRAINAGE WAYS OR STORM SEWERS DRAINING THROUGH OR FROM THE SITE. SHOULD LAKES BE CONSTRUCTED WITHIN THE SUBDIVISION THAT WILL DISCHARGE DURING STORMS, THEY ARE ALSO A POINT OF COMPLIANCE.
2. HAY BALES OR SILT FENCE MUST BE CONSTRUCTED ALONG THE PROPERTY LINE WHERE ON SITE WATER CAN DRAIN OFF THE PROPERTY. THESE EROSION CONTROL DEVICES WILL ALSO BE INSTALLED ALONG ANY DRAINAGE DITCH OR LAKE THAT CAN DISCHARGE.
3. SHOULD SILT OR SEDIMENT ENTER THE DITCHES OR STREETS ON THE ADJACENT BOUNDARY STREETS, APPROPRIATE EROSION CONTROL DEVICES WILL BE PLACED WITHIN THE SUBDIVISION TO PREVENT THIS.
4. ANY MUD TRACKED ONTO ADJACENT STREETS WILL BE REMOVED WITHIN 48 HOURS OR BY FRIDAY AT 6:00 PM, WHICHEVER IS EARLIER.
5. CONTRACTORS WORKING WITHIN THE SITE WILL NOT BE REQUIRED TO USE INDIVIDUAL EROSION CONTROL DEVICES AS LONG AS THOSE SPECIFIED ABOVE ARE IN PLACE AND EFFECTIVE. CONTRACTORS WORKING ON THE BOUNDARY LINE STREETS OR ON ADJACENT PROPERTIES TO EXTEND UTILITIES ARE EXPECTED TO USE EROSION CONTROL DEVICES AT THEIR WORK LOCATIONS, AS NEEDED.
6. UTILIZE STABILIZED CONSTRUCTION ENTRANCE AT ENTRANCE AND EXIT ONTO ANY EXISTING PUBLIC STREETS.
7. IF THE INITIAL EARTH WORK AND UTILITIES ARE DONE AS PART OF A PUBLIC IMPROVEMENT PROJECT, THESE EROSION CONTROL DEVICES WILL BE INSTALLED BY THE CONTRACTOR AS SPECIFIED IN THE INDIVIDUAL PROJECT CONTRACTS. THE CONTRACTOR WILL MAINTAIN THE DEVICES UNTIL COMPLETION OF THE CONTRACT, AT WHICH TIME THE DEVELOPER WILL ASSUME MAINTENANCE RESPONSIBILITIES. IF THESE CONTRACTS ARE NOT PUBLIC IMPROVEMENT PROJECTS, THE DEVELOPER WILL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING THESE DEVICES.
8. WITHIN 14 DAYS OF COMPLETION OF EARTHWORK ACTIVITIES IN ANY GIVEN AREA, THAT AREA SHALL BE TEMPORARILY OR PERMANENTLY SEEDED AND MULCHED.

PHASE 3 - STREET CONSTRUCTION



1. DURING THIS PHASE OF SUBDIVISION CONSTRUCTION, NEW STREETS ARE INSTALLED. ALL EROSION CONTROL DEVICES INSTALLED DURING PHASE 1 AND 2 MUST STILL BE MAINTAINED. THE POINT OF COMPLIANCE NOW SHIFTS TO THE BACK OF CURB ALONG EACH STREET.
2. CURB OPENING INLET PROTECTION:
 - A. SUMP AREAS - INLET PROTECTION SHALL BE PROVIDED WHEN STREET SUBGRADE WORK IS COMPLETED.
 - B. NON-SUMP LOCATIONS - PROVIDE INLET PROTECTION AS SOON AS BASE COURSE ASPHALT IS INSTALLED, BEFORE THE SURFACE COURSE LIFT.
3. EROSION CONTROL DEVICES WILL BE REQUIRED BACK OF CURB WHEREVER WATER CAN FLOW OVER THE CURB AND THE CURB HAS BEEN BACKFILLED TO WITHIN 3" OR LESS OF THE TOP OF CURB (SEE CURB BACKFILL DETAIL). FOR CURBS NOT YET ENTIRELY BACKFILLED (3" OR MORE BELOW TOP OF CURB), ADDITIONAL DEVICES WILL BE REQUIRED AT POINTS WHERE WATER BREAKS OVER CURB WHICH COULD RESULT IN THE PLACEMENT OF SEDIMENT IN THE GUTTER.
4. SEE DETAIL SHEET FOR BACK OF CURB PROTECTION.
5. THE BACK OF CURB PROTECTION SPECIFIED ON THIS PLAN MAY HAVE TO BE SUPPLEMENTED WITH HAY BALE OR SILT FENCE EROSION CONTROL DEVICES AT LOCATIONS WHERE CONCENTRATED FLOW RESULTS IN SEDIMENT BEING CARRIED OVER THE EXCELSIOR MATS.
6. THE STREET CONTRACTOR WILL BE RESPONSIBLE FOR INSTALLING BACK OF CURB EROSION CONTROL DEVICES.
7. THE INDIVIDUAL LOT OWNERS WILL BE RESPONSIBLE FOR MAINTAINING THE BACK OF CURB EROSION CONTROL DEVICES IN FRONT OF THEIR LOTS UNTIL SUCH TIME AS ADJACENT DISTURBED EARTH IS STABILIZED WITH GRASS OR SOD.

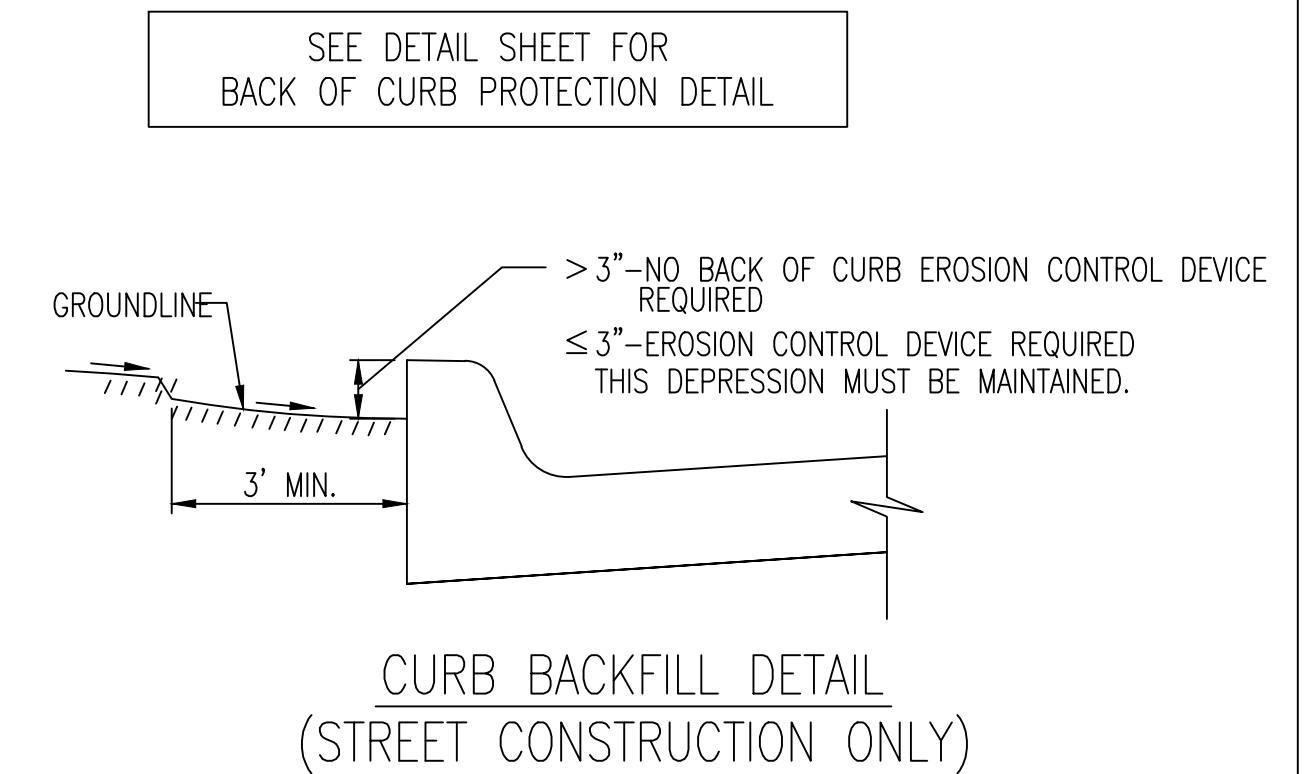
PHASE 2 - INSTALLATION OF STORM SEWER



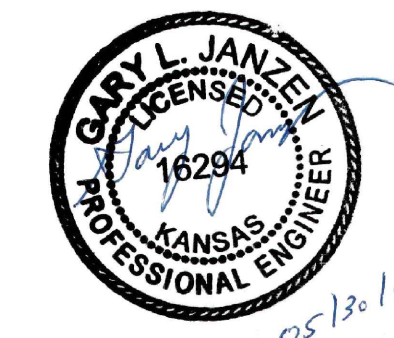
1. DURING THIS PHASE OF SUBDIVISION DEVELOPMENT, ALL EROSION CONTROL DEVICES REQUIRED IN PHASE 1 SHALL REMAIN IN PLACE AND BE MAINTAINED.
2. AS NEW STORM SEWERS, WITH INLETS, ARE INSTALLED, THE STORM SEWERS MUST NOW BE PROTECTED SO ALL NEW INLETS BECOME POINTS OF COMPLIANCE.
3. AREA DRAINS - AS SOON AS WATER CAN FLOW INTO THESE DRAINS, HAY BALE OR SILT FENCE PROTECTION WILL BE INSTALLED AROUND THEM.
4. CURB OPENING INLETS - AS SOON AS WATER CAN FLOW INTO THESE DRAINS, INLET PROTECTION DEVICES MUST BE INSTALLED. IF WATER CANNOT FLOW INTO CURB INLETS UNTIL STREET CONSTRUCTION IS COMPLETE, THEN STREET CONTRACTOR WILL INSTALL INLET PROTECTION. SEE PHASE 3 - STREET CONSTRUCTION.
5. THE STORM SEWER CONTRACTOR WILL BE RESPONSIBLE FOR INSTALLING THESE DEVICES.
6. THE SUBDIVISION DEVELOPER WILL MAINTAIN THESE EROSION CONTROL DEVICES ONCE INSTALLED.
7. ALL DISTURBED GROUND WILL BE FINAL GRADED AND TEMPORARILY OR PERMANENTLY SEEDED WITHIN 14 DAYS IF COMPLETION OF WORK IN ANY GIVEN PART OF THE SUBDIVISION.
8. ONCE ALL DISTURBED GROUND DRAINING TO AN INLET HAS BEEN RESTABILIZED WITH GRASS OR SOD, THE SUBDIVISION DEVELOPER WILL BE RESPONSIBLE FOR PERMANENTLY REMOVING THE INLET PROTECTION.

GENERAL NOTES

1. THE INTENT OF ALL EROSION CONTROL DEVICES IS TO PREVENT ERODED SOIL FROM ENTERING DITCHES, STORM SEWERS, LAKES, STREETS OR ANY OTHER OTHER DRAINAGE FEATURE.
2. THIS SHEET IS INTENDED TO PROVIDE GUIDELINES AS TO WHAT TYPE OF EROSION CONTROL DEVICES WILL BE INSTALLED DURING THE CONSTRUCTION PROCESS. CONTRACTORS ARE EXPECTED TO BID PROJECTS ACCORDINGLY.
3. EROSION CONTROL DEVICES SHALL BE MAINTAINED DURING THE CONSTRUCTION PROCESS TO REMAIN EFFECTIVE. MAINTENANCE SHALL BE AS INDICATED ON SOIL EROSION BMP'S DETAIL SHEETS.
4. PERSONS DESTROYING EROSION CONTROL DEVICES SHALL BE RESPONSIBLE FOR IMMEDIATELY REPAIRING THEM OR INSTALLING SUITABLE REPLACEMENT DEVICES.
5. THE DEVELOPMENT OF ANY SUBDIVISION THAT DISTURBS 1 ACRE OR MORE WILL REQUIRE A FEDERAL/STATE NPDES STORMWATER PERMIT. THE PREPARATION OF A STORMWATER POLLUTION PREVENTION PLAN IS REQUIRED. EROSION CONTROL DEVICES ARE REQUIRED. THE DETAILS SHOWN ON THIS SHEET ARE THE MINIMUM STANDARDS TO BE SHOWN ON POLLUTION PREVENTION PLANS.
6. FOR SUBDIVISIONS SMALLER THAN 1 ACRE, SOIL EROSION DEVICES ARE REQUIRED. ALSO, DEVELOPERS AND CONTRACTORS ARE ENCOURAGED TO DEVELOP POLLUTION PREVENTION PLANS FOR EACH PROJECT PRIOR TO CONSTRUCTION.
7. FAILURE TO USE AND MAINTAIN SOIL EROSION DEVICES IS A VIOLATION OF SECTION 16.32 OF THE CITY CODE AND WILL SUBJECT THE SUBDIVISION DEVELOPER AND CONTRACTORS TO THE PENALTIES PROVIDED THEREIN.
8. THE APPLICATION OF EROSION CONTROL DEVICES SHOWN ON THIS SHEET IS FOR SITUATIONS NORMALLY ENCOUNTERED. FROM TIME TO TIME, SITUATIONS WILL ARISE THAT MAY REQUIRE DEVICES OTHER THAN THAT SHOWN. EROSION CONTROL DEVICES, OTHER THAN THOSE SHOWN, MAY BE UTILIZED SO LONG AS THEY ARE EFFECTIVE AND MAINTAINED.
9. A STABILIZED EARTH SURFACE IS DEFINED AS ONE THAT IS HARD SURFACED WITH CONCRETE, ASPHALT, OR THE LIKE, OR ONE ON WHICH 70% OF THE GRASS HAS GERMINATED ON THE ENTIRE SURFACE.

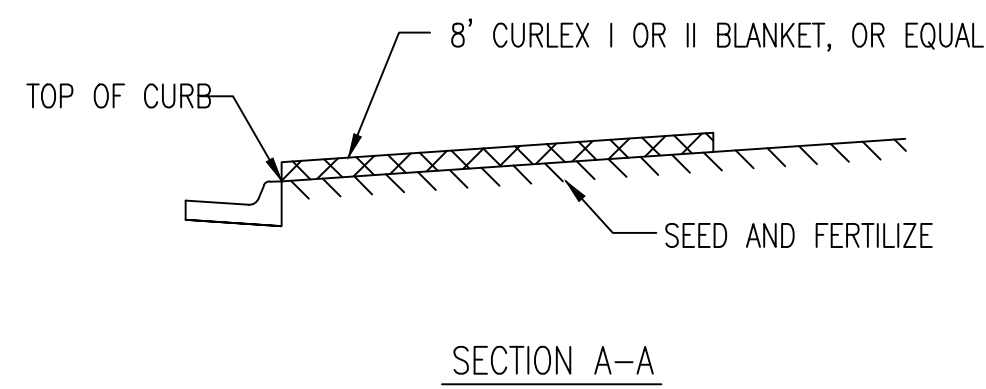
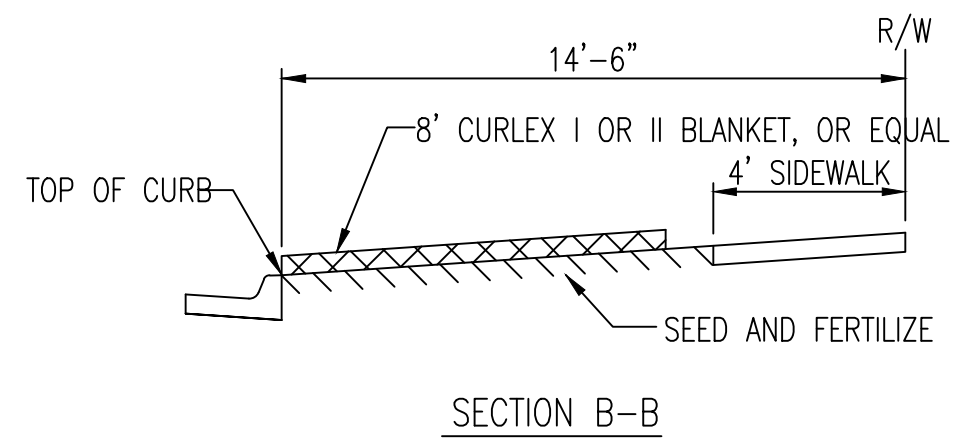


THIS IS A TEMPORARY MEASURE ONLY, WHEN APPROVED BY THE PROJECT ENGINEER. THE DIRT GRADE BEHIND THE CURB SHALL BE BROUGHT TO THE TOP OF CURB, WITH TEMPORARY EROSION CONTROL MAT OR PERMANENT VEGETATION PLACED, PRIOR TO THE COMPLETION OF ALL PROJECTS.

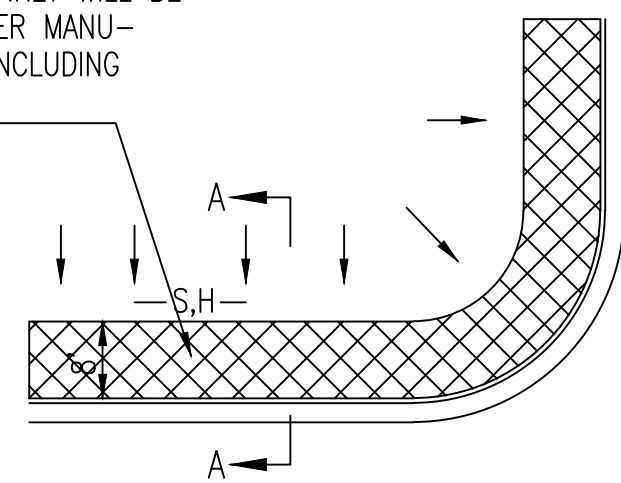


CITY OF WICHITA
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ENGINEERING DIVISION

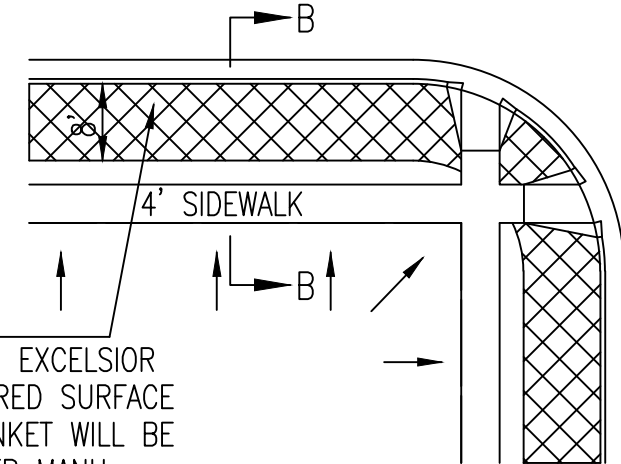
SUBDIVISION DEVELOPMENT PROCESS		
CITY ENGINEER GARY JANZEN, P.E.		
PROJECT NUMBER 458-2025-085610	OCA NUMBER .	DATE 08/2012
CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		SHEET 30 32



INSTALL 8' WIDE CURLEX I OR II EXCELSIOR BLANKET, OR EQUAL, ON PREPARED SURFACE BACK OF CURB. EDGE OF BLANKET WILL BE AT BACK OF CURB. INSTALL PER MANUFACTURERS RECOMMENDATION, INCLUDING STAPLES. (SEE DETAIL)



SOUTH STREET

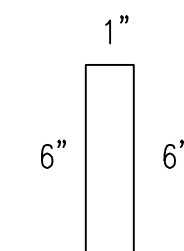
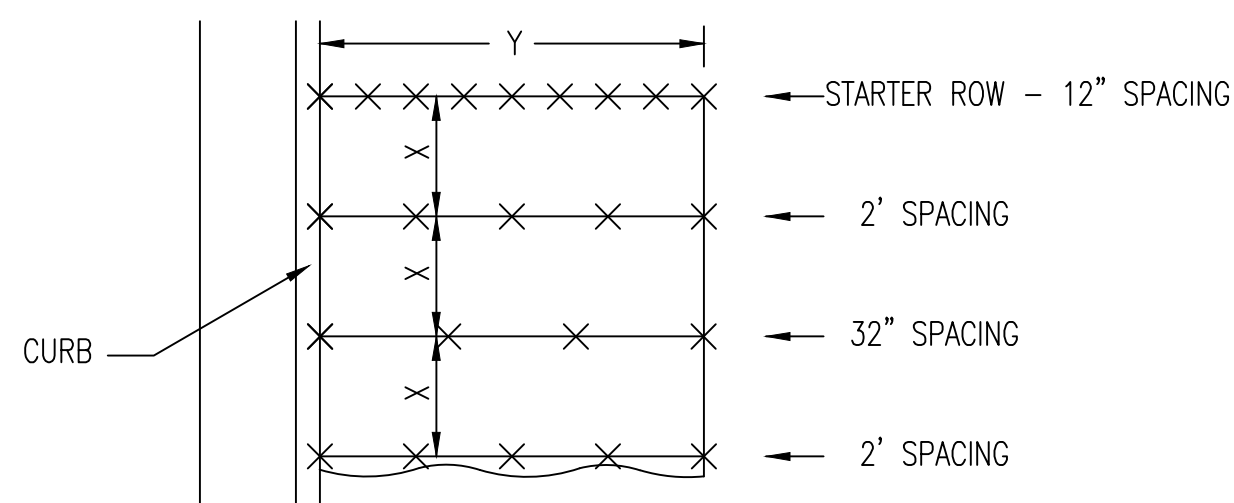


INSTALL 8' WIDE CURLEX I OR II EXCELSIOR BLANKET, OR EQUAL, ON PREPARED SURFACE BACK OF CURB. EDGE OF BLANKET WILL BE AT BACK OF CURB. INSTALL PER MANUFACTURERS RECOMMENDATION, INCLUDING STAPLES. (SEE DETAIL)

GENERAL NOTES

- EXCELSIOR MAT TO BE INSTALLED WHEN SOD IS NOT SPECIFIED ON PROJECT.
- EXCELSIOR BLANKET TO BE INSTALLED OVER SEED AND FERTILIZER, AS SPECIFIED IN THE PROJECT SPECIFICATIONS.
- AFTER INSTALLATION OF EXCELSIOR BLANKET, AT LOCATIONS WHERE CONCENTRATED FLOW CARRIES SEDIMENT OVER THE CURB AND INTO THE GUTTER, SUPPLEMENTAL EROSION CONTROL DEVICES WILL BE INSTALLED BY THE CONTRACTOR AS NEEDED, TO FIX THE PROBLEM.

BACK OF CURB PROTECTION DETAIL



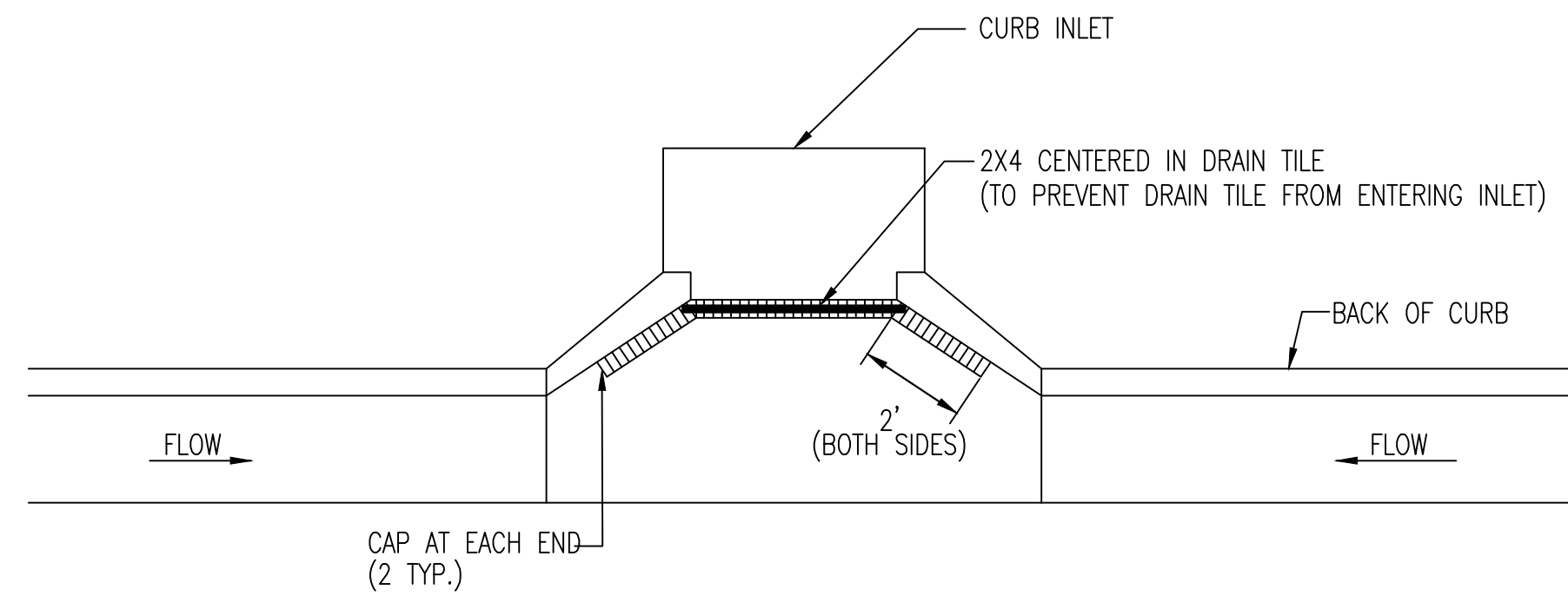
11 GA. WIRE

STAPLE

STAPLE PATTERN

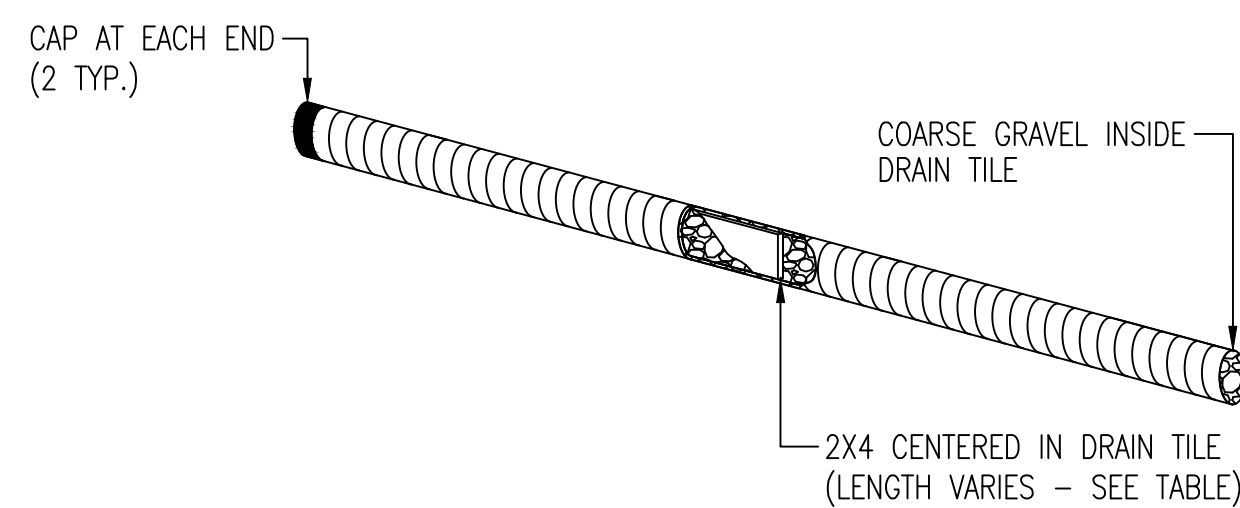
NOTES: USE 6" SEAM OVERLAP
(X & Y = RECOMMENDED BY MANUFACTURE)

DETAILS FOR APPROVED EROSION CONTROL MAT



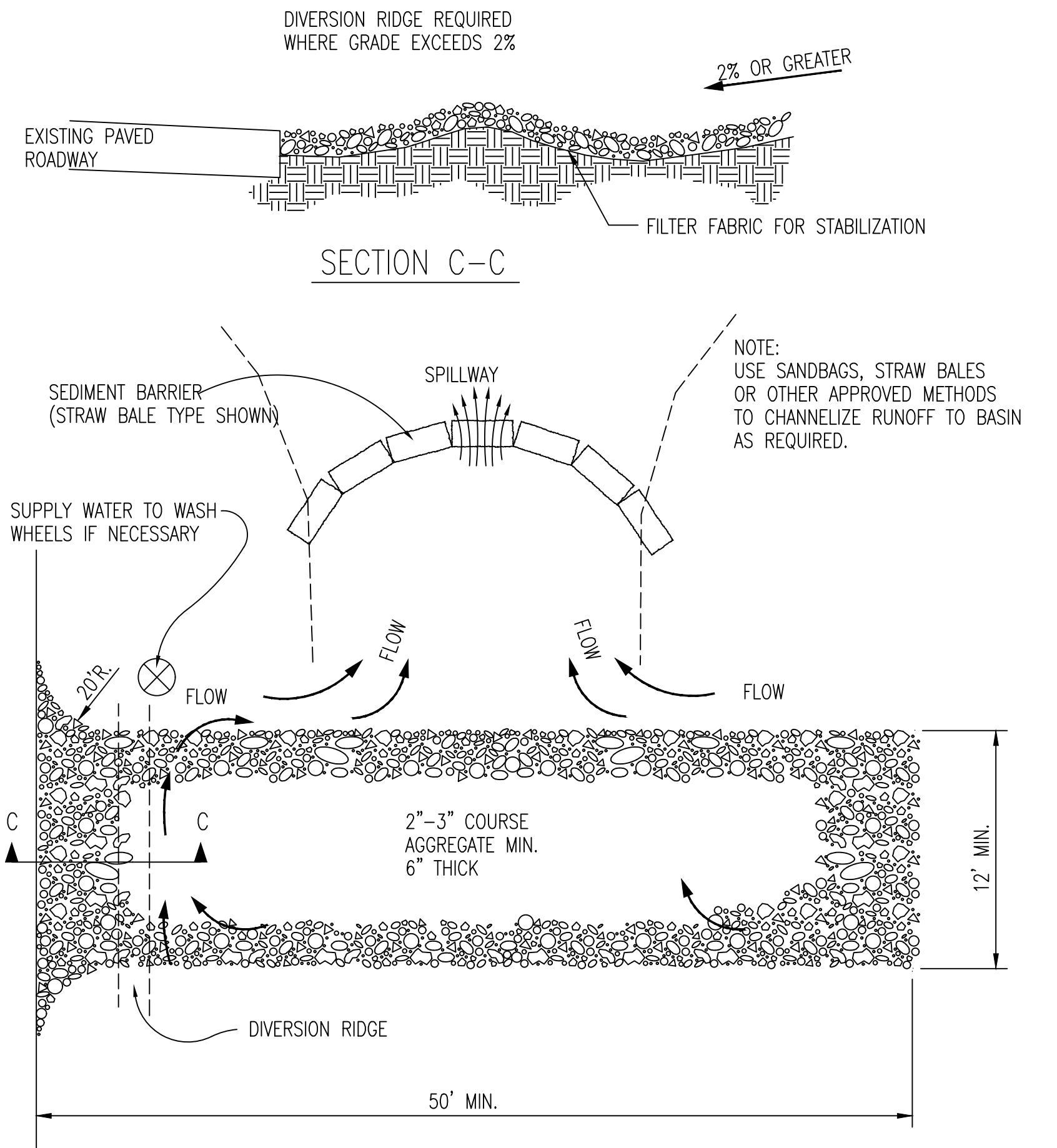
NOTE:
PLACE 4" PERFORATED PVC PIPE, FILLED WITH 1/2"-1" DIA. GRAVEL, IN FRONT OF CURB INLET AS SHOWN.

2X4 LENGTH	INLET TYPE	INLET OPENING
5'-6"	1-A	5'-0"
10'-6"	1-A	10'-0"
15'-6"	1-A	15'-0"



CURB INLET PROTECTION

4" PERFORATED PIPE W/ GRAVEL



STABILIZED CONSTRUCTION ENTRANCE

GENERAL NOTES

- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
- WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
- WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN, AS SHOWN ABOVE.
- DRIVE ENTRANCES ONTO RESIDENTIAL LOTS WILL NOT BE REQUIRED TO HAVE THE SEDIMENT BARRIER SHOWN, BUT WHEEL WASHING MAY BE REQUIRED IF STABILIZED ENTRANCE IS NOT SUFFICIENT TO KEEP MUD FROM BEING TRACKED ONTO ADJACENT STREET. ENTRANCE SHALL EXTEND FROM BACK OF CURB TO DWELLING.

REVISION DATE: MAY 2013

CITY OF WICHITA
PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

BACK OF CURB PROTECTION,
CURB INLET PROTECTION AND
CONSTRUCTION ENTRANCE

CITY ENGINEER
GARY JANZEN, P.E.

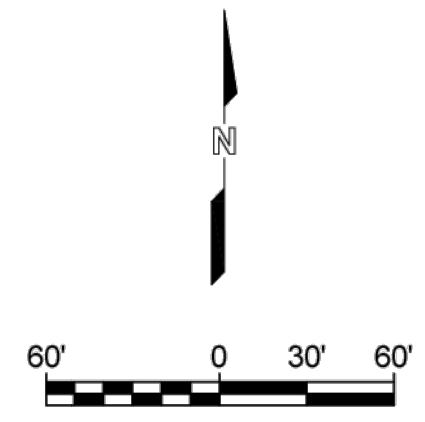
PROJECT NUMBER	OCA NUMBER	DATE
458-2025-085610	.	

CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501	SHEET 31 32
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OAK TREE

Wichita, Sedgwick County, Kansas



(BASIS) = Basis of Bearings = Kansas Coordinate System of 1983 South Zone Grid Bearing

M = Measured
C = Calculated
D = Described
C.A.C. = Complete Access Control

SURVEY MARKER LEGEND

- 1/2" REBAR (FOUND - ORIGIN UNKNOWN)
- ⊗ 1/2" REBAR W/ABBOTT LS 1340 CAP (FOUND)
- ⊗ 3/4" IRON PIPE (FOUND - ORIGIN UNKNOWN)
- ⊗ 5/8" REBAR (FOUND - ORIGIN UNKNOWN)
- ⊗ 5/8" REBAR IN THIMBLE (FOUND - ORIGIN UNKNOWN)
- ⊗ 5/8" REBAR IN UNREADABLE CAP (FOUND - ORIGIN UNKNOWN)
- ⊗ PK NAIL (FOUND - ORIGIN UNKNOWN)
- ⊗ 1/2" REBAR W/GARVER CAP (SET)
- MONUMENT TO BE SET WITH STREET CONSTRUCTION PROJECT BY THE STREET DESIGNER
- ⊙ BENCHMARK

BENCH MARKS

BENCH MARK POINT #100: CHISELED SQUARE WITH PLUS CUT IN CENTER ON THE WEST END OF A STORM SHELTER, 695 FEET SOUTH OF CENTER OF US-54 HIGHWAY AND 376 FEET EAST OF 155TH STREET WEST. ELEVATION = 1401.71 (NAVD88, G18)

BENCH MARK POINT #103: RAILROAD SPIKE IN WEST FACE OF POWER POLE, 1557 FEET SOUTH OF CENTER OF US-54 HIGHWAY AND 20 FEET EAST OF THE CENTERLINE OF 155TH STREET WEST. ELEVATION = 1407.57 (NAVD88, G18)

MINIMUM BUILDING PAD ELEVATION FOR LOWEST OPENING INTO STRUCTURES		
BLOCK	LOT NO.	ELEVATION (NAVD88)
3	1, 2, 3, 4, 5, 6, 7, 8	1397.0

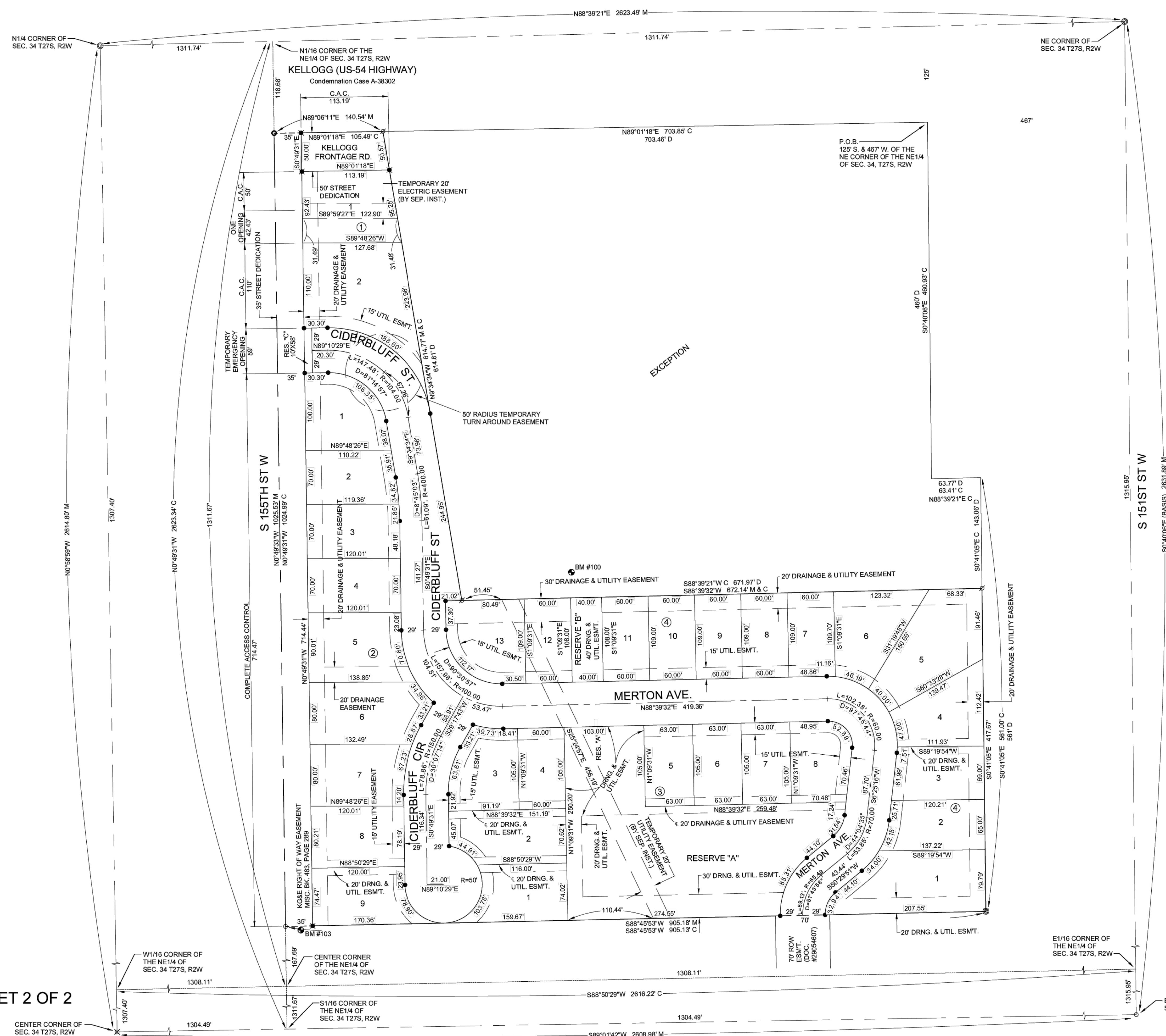
Parcel Area Table	
PARCEL	AREA SQ. FT.
B1L1	11231
B1L2	17494
B2L1	9463
B2L2	8074
B2L3	8396
B2L4	8401
B2L5	11207
B2L6	11749
B2L7	9871
B2L8	9504
B2L9	9472
B3L1	8715
B3L2	10063
B3L3	8796
B3L4	6300
B3L5	6615
B3L6	6615
B3L7	6615
B3L8	7853
B4L1	14269

Parcel Area Table	
PARCEL	AREA SQ. FT.
B4L2	8190
B4L3	7999
B4L4	9311
B4L5	13756
B4L6	10055
B4L7	6543
B4L8	6540
B4L9	6540
B4L10	6540
B4L11	6540
B4L12	6540
B4L13	9994
RESERVE A	56477
RESERVE B	4360

FOR INFORMATION ONLY



DWG FILE: T41-2401413 SURVEY BASE
PROJECT NO. T41-2401413
APRIL 7, 2025



SHEET 2 OF 2

CENTER CORNER OF SEC. 34 T27S, R2W

W1/16 CORNER OF THE NE1/4 OF SEC. 34 T27S, R2W

CENTER CORNER OF THE NE1/4 OF SEC. 34 T27S, R2W

S1/16 CORNER OF THE NE1/4 OF SEC. 34 T27S, R2W

S88°50'29"W 2616.22' C

S89°01'42"W 2608.98' M

E1/16 CORNER OF THE NE1/4 OF SEC. 34 T27S, R2W

E1/4 CORNER OF SEC. 34 T27S, R2W