PAVING IMPROVEMENTS

to serve

BUFFALO PINES ADDITION
PHASE 1

CITY OF WICHITA, KANSAS

Paul Gunzelman, P.E. City Engineer
Project Number: 472-2023-085956
Org Code Number: E4034
Munis Number: 47475224

Stormwater Certification

New Development or Redevelopment (Circle One)

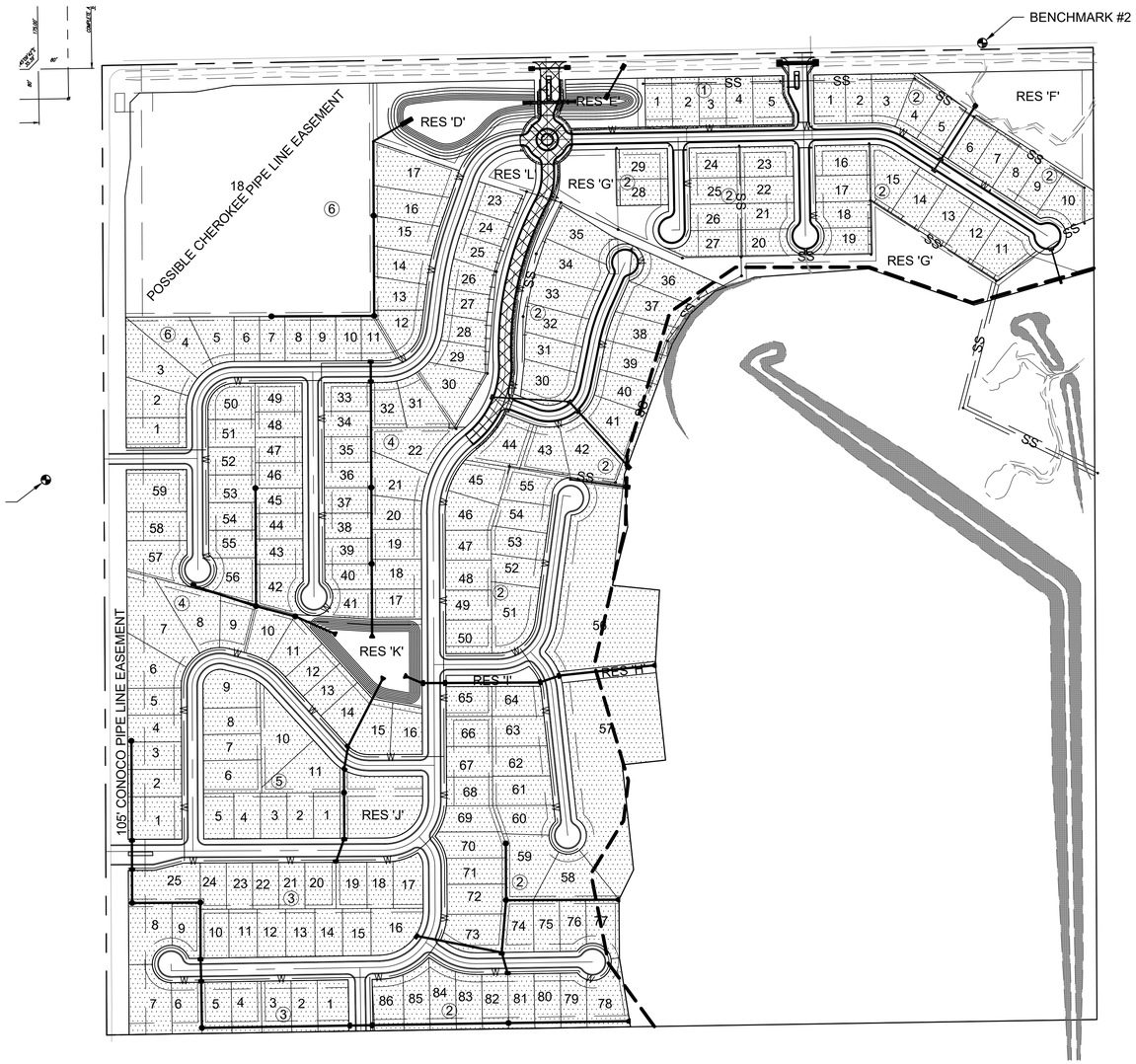
Stormwater Permit #:
NOI Permit #: S-WA20-0148

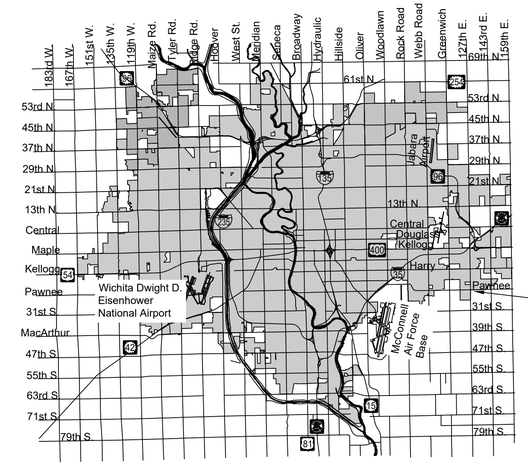
These construction plans were prepared in accordance with the current Stormwater Management Regulations as set forth in the City of Wichita's Stormwater Management Ordinance 16.32 and the policies/guidelines presented in the Wichita/Sedgwick County Stormwater Manual

Site Area (Acres): 27.7
Disturbed Area (Acres): 26.9
Water Quality Treatment: Wet Pond
Downstream Channel Protection:
Detention: Detention
The BMP used for this development is: Wet Pond

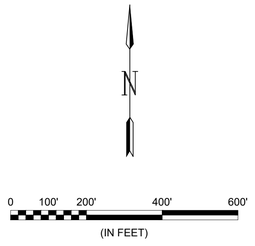
EARTHWORK QUANTITIES	
Description	Cu. Yds.
Cut	27,020
Fill	27,340
Net (Fill)	320

DEVELOPER'S CONTACT INFORMATION
Organization: Double Down Developers, LLC
Name: Philip Ruffo
Email: lipllc316@gmail.com
Phone: (316) 734-4152





Vicinity Map



Sheet Index

IMPROVEMENT DISTRICT

AREA TO BE PAVED

CALEB JUREY
LICENSED
22002
3/14/25
KANSAS
PROFESSIONAL ENGINEER

March 2025

PLANS PREPARED BY

GARVER
8535 E. 21st Street N.
Suite 130
Wichita, KS 67206
(316) 264-8008
www.GarverUSA.com
Project No. 22T41007

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 0.99994705. Elevation datum is NAVD88 Geoid 18 unless otherwise noted.

GENERAL NOTES:

1. The Contractor shall comply with all applicable safety regulations. All construction shall be completed following current City Standard Specifications and Special Provisions.

2. 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
Butler Rural Electric	1-800-464-0060
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
Evergy	1-800-544-4857
Kansas Gas Service	1-888-482-4950
Phillips 66 Pipeline	1-877-267-2290
USD 259	1-316-793-2700

3. 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.

4. 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 would 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 would require additional archaeological investigations unless buried in a previously approved borrow location.

5. 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.

6. 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.

7. 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.

8. The Water Distribution Division shall field locate water valves one time during construction when requested by the Contractor. It shall be the Contractor's responsibility to preserve such field locations during the construction process. Water valves, valve boxes or fire hydrants damaged during construction shall be repaired by the Contractor at his own expense. Valve boxes and water meters within the project limits shall be adjusted to match field grades.+

9. If traffic is impacted by construction, 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 responsibility.

10. All elevations shown are NAVD 88.

11. All areas disturbed during construction that will not be under proposed pavement shall be restored to match existing conditions.

12. All existing pavement and curb and gutter within the construction limits shall be saw cut, full depth, to the lines shown on the plans, or to the nearest joint, and removed, unless otherwise noted. If removal limits are within three feet of a joint, remove to the joint.

13. All traffic control devices in the work zone (including markings and signs) and their installation and maintenance shall comply with the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD). All traffic control devices in the traveled way or clear zone shall be crashworthy (NCHRP Report 350 or MASH compliant).

http://safety.fhwa.dot.gov/roadway dept/policy guide/road hardware/wzd

14. The Contractor shall protect from damage and support existing utilities through constructions as approved by the utility owner and the Engineer at the contractors expense.

15. All construction equipment, including vehicles, materials, and debris, shall be stored outside of the clear zone. Where this cannot be achieved the contractor shall place appropriate signs, object identifiers, and/or barricades in compliance with the MUTCD.

13. Contractor shall limit the extent of trench openings overnight and weekends to less than 50 feet.

14. Except when required for safety, traffic control shall not block any lanes or sidewalks when work is not being performed.

15. 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.

16. Subdivision Benchmark - (1 flat survey marker No. 8134-08 3" top diameter) in top of curb adjacent to each Fire Hydrant. Cost shall be incidental to L.F. Concrete C&G, Comb. Type 2 (3 5/8").

17. All street ROW and Reserves shall be permanent seeding, all other areas may be temporary seeding (see Sheet 36). All seeding per City of Wichita Specifications.

18. City of Wichita to provide soil testing within ROW and Pond.

19. Borrow for this site is located near the northwest corner of Casa Bella 2nd Addition, see Sheet 4.

20. Contractor to provide density testing for lots. See below for testing requirements.

TESTING REQUIREMENTS

1. Moisture / Density shall be done at the following intervals: Two tests per lift on all lots. One moisture density test per 500 L.F. of roadway. Proof rolling on every lift in paving.

2. Crushed Concrete Base: Gradation / Depth Checks (Field Observer to perform), Proof Roll (Contractor to perform / Field Observer to observe). One sample will be pulled from the project for a gradation check.

3. Curb & Gutter / Valley Gutter Concrete: Concrete testing Air / Slump / Temp / Unit Weight & 4 cylinders made each day of production or every 100 C.Y.

4. Asphalt Paving: Marshall / Densities on Base & Surface (every 500 L.F.) / Cores (x4) / % Asphalt. Contractor to provide copies of Plant QCQA testing reports performed by material producer.

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

CALEB JUREY
LICENSED
22002
3/14/25
KANSAS
PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION	BY

CITY OF WICHITA

CITY OF WICHITA
WICHITA, KANSAS

BUFFALO PINES
ADDITION PAVING &
DRAINAGE

GENERAL NOTES

JOB NO.: 22T41007
DATE: MAR 2025
DESIGNED BY: CDJ
DRAWN BY: CDJ

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

DRAWING NUMBER

SHEET NUMBER 2 OF 44

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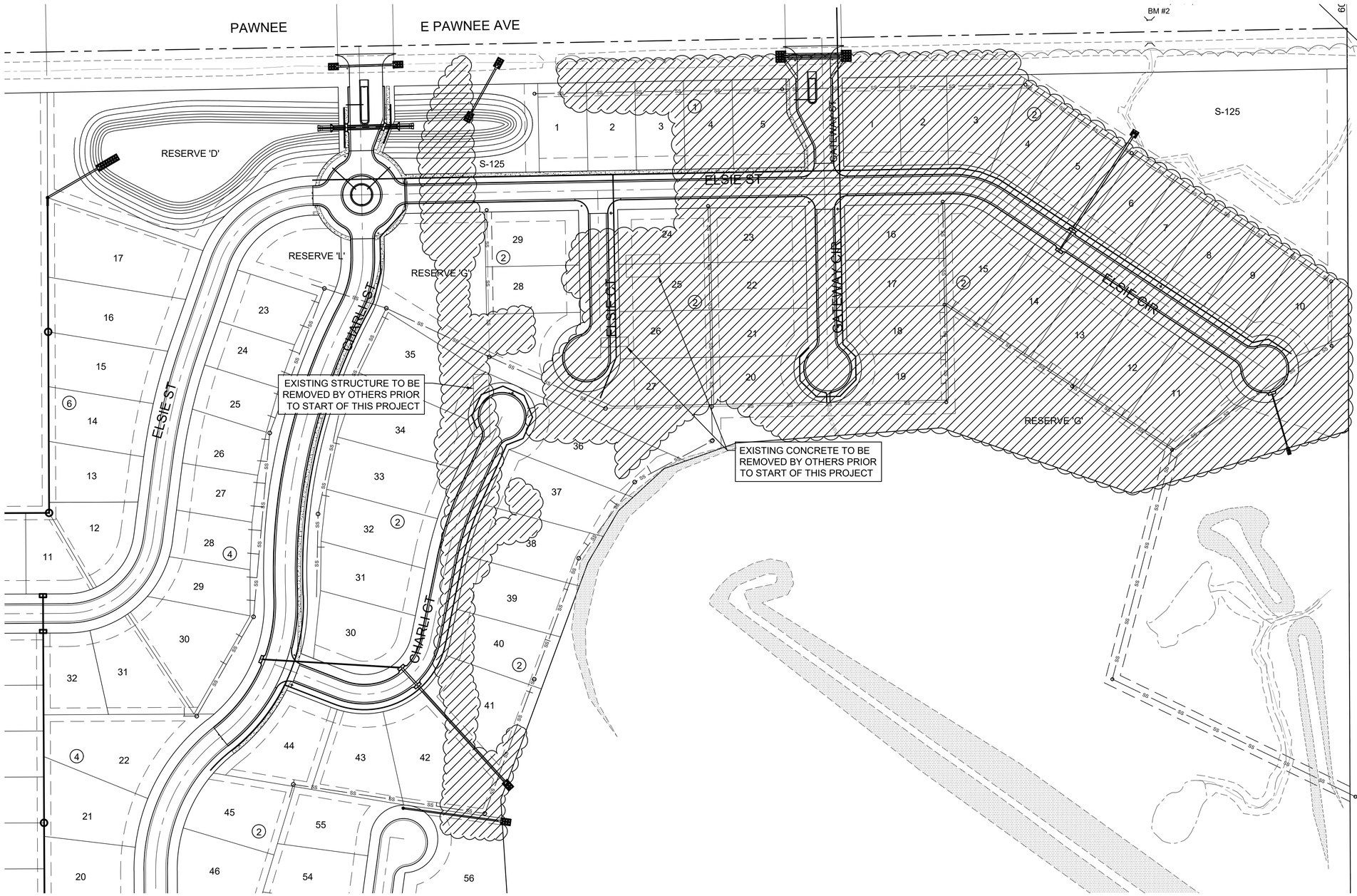

TRIM OR REMOVE VEGETATION (14.6 ACRE)

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Wichita, KS 67209
(316) 264-8008

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22002
3/14/25
KANSAS
PROFESSIONAL ENGINEER

REV	DATE	DESCRIPTION	BY

CITY OF WICHITA
WICHITA, KANSAS

BUFFALO PINES ADDITION
SANITARY SEWER EXTENSION

SITE CLEARING PLAN

JOB NO.: 22T41007
DATE: MAR 2025
DESIGNED BY: CDJ
DRAWN BY: CDJ

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

DRAWING NUMBER

SHEET NUMBER 3 OF 44

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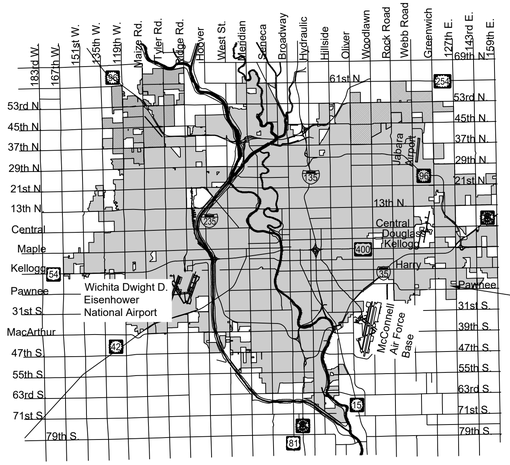
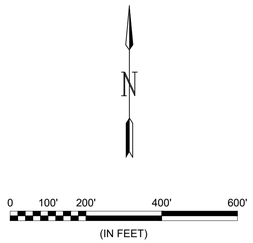


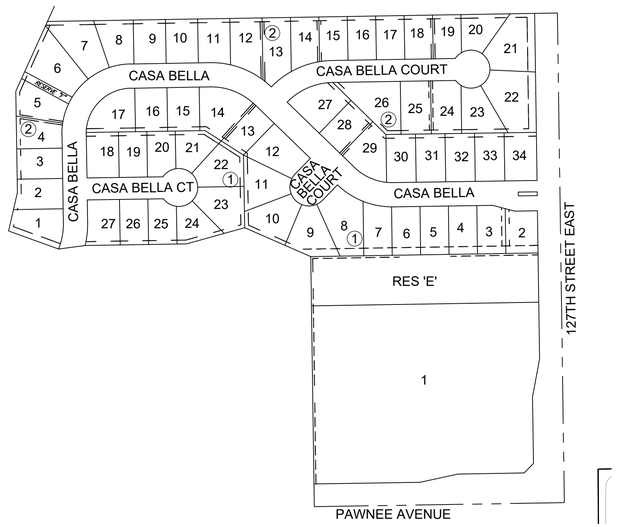
Vicinity Map

STOCKPILE LOCATION



NOTE:
CONTRACTOR SHALL IMPORT FILL FROM THE STOCKPILES INDICATED ON THIS SHEET. THE CONTRACTOR SHALL EXHAUST ALL STOCKPILES INDICATED ON THIS SHEET PRIOR TO IMPORTING FILL FROM OTHER SOURCES.

EXISTING STOCKPILE LOCATIONS



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CALEB JUREY
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22002
3/14/25
KANSAS
PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION	BY

CITY OF WICHITA

CITY OF WICHITA
WICHITA, KANSAS

BUFFALO PINES ADDITION PAVING & DRAINAGE

STOCKPILE LOCATION EXHIBIT

JOB NO.: 22T41007
DATE: MAR 2025
DESIGNED BY: CDJ
DRAWN BY: CDJ

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

DRAWING NUMBER

SHEET NUMBER 4 OF 44

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Last plotted by: Jurey, Caleb D. Plot Style: ---- Plot Scale: 1:2.585 Plot Date: 3/14/2025 1:12 PM Plotter used: None

BUILDING PAD ELEVATIONS							
LOT	BLK	HOUSE			GARAGE		
		ELEV	WIDTH	LENGTH	ELEV	WIDTH	LENGTH
24	2	1337.4	60.0'	55.3'	1336.8	46.0'	23.0'
25	2	1338.7	60.0'	54.2'	1338.1	43.0'	25.0'
26	2	1339.7	60.0'	54.2'	1339.1	43.0'	25.0'
27	2	1339.9	60.0'	54.2'	1339.3	43.0'	25.0'
28	2	1338.7	60.0'	54.2'	1338.1	43.0'	25.0'
29	2	1337.4	60.0'	55.3'	1336.8	46.0'	23.0'

0 25' 50' 100' 150'
(IN FEET)

NOTES:
TOPSOIL ON THE SITE SHALL BE STRIPPED AND STOCKPILED AT AN ON-SITE LOCATION COORDINATED WITH THE FIELD ENGINEER. FOLLOWING GRADING OPERATIONS, A MINIMUM OF 4" OF TOPSOIL SHALL BE PLACED IN ALL EASEMENT AND RESERVE AREAS OF THE SITE. REMAINING TOPSOIL SHALL REMAIN IN THE STOCKPILE FOR PLACEMENT IN LOTS AND STREET AREAS BY OTHERS AT A FUTURE DATE.

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THE CONTRACTOR FOR THIS PROJECT SHALL BURN ALL TREE PILES OR DEBRIS THAT REMAINS FROM THE SANITARY SEWER AND WATER LINE PROJECTS. TREE TRIMMING AND BURNING/REMOVAL SHALL BE SUBSIDIARY TO THE BID ITEM 'SITE CLEARING, L.S.'

LOTS 1-5, BLOCK 1 AND LOTS 1-29, BLOCK 2 ARE BUILDING PAD LOTS. SEE SHEET 8 FOR BUILDING PAD DIMENSIONS AND ELEVATIONS.

AN ELECTRONIC MODEL OF THE FINAL SURFACE WILL BE PROVIDED TO THE CONTRACT WINNER. THE ELECTRONIC MODEL IS A DESIGN AID ONLY. THESE STAMPED PLANS SUPERCEDE ANY DISCREPANCIES WITH THE MODEL.

GARVER

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

CALEB JUREY
LICENSED
22002
3/14/25
KANSAS
PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION	BY

CITY OF WICHITA
WICHITA, KANSAS

BUFFALO PINES ADDITION PAVING & DRAINAGE

GRADING (SOUTH)

JOB NO.: 22T41007
DATE: MAR 2025
DESIGNED BY: CDJ
DRAWN BY: CDJ

BAR IS ONE INCH ON ORIGINAL DRAWING
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DRAWING NUMBER

SHEET NUMBER 5 OF 44

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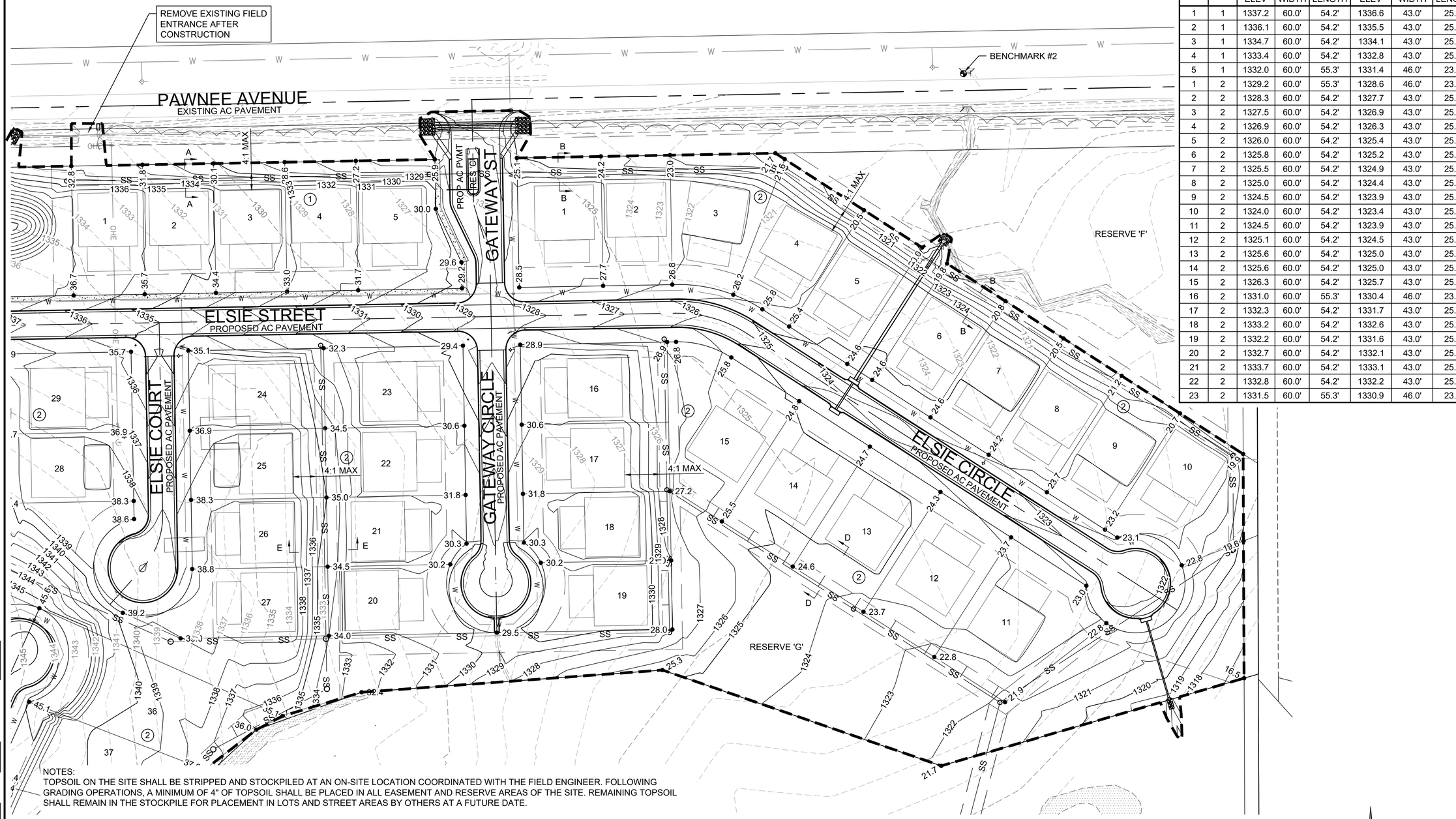

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BUILDING PAD ELEVATIONS

LOT	BLK	HOUSE			GARAGE		
		ELEV	WIDTH	LENGTH	ELEV	WIDTH	LENGTH
1	1	1337.2	60.0'	54.2'	1336.6	43.0'	25.0'
2	1	1336.1	60.0'	54.2'	1335.5	43.0'	25.0'
3	1	1334.7	60.0'	54.2'	1334.1	43.0'	25.0'
4	1	1333.4	60.0'	54.2'	1332.8	43.0'	25.0'
5	1	1332.0	60.0'	55.3'	1331.4	46.0'	23.0'
1	2	1329.2	60.0'	55.3'	1328.6	46.0'	23.0'
2	2	1328.3	60.0'	54.2'	1327.7	43.0'	25.0'
3	2	1327.5	60.0'	54.2'	1326.9	43.0'	25.0'
4	2	1326.9	60.0'	54.2'	1326.3	43.0'	25.0'
5	2	1326.0	60.0'	54.2'	1325.4	43.0'	25.0'
6	2	1325.8	60.0'	54.2'	1325.2	43.0'	25.0'
7	2	1325.5	60.0'	54.2'	1324.9	43.0'	25.0'
8	2	1325.0	60.0'	54.2'	1324.4	43.0'	25.0'
9	2	1324.5	60.0'	54.2'	1323.9	43.0'	25.0'
10	2	1324.0	60.0'	54.2'	1323.4	43.0'	25.0'
11	2	1324.5	60.0'	54.2'	1323.9	43.0'	25.0'
12	2	1325.1	60.0'	54.2'	1324.5	43.0'	25.0'
13	2	1325.6	60.0'	54.2'	1325.0	43.0'	25.0'
14	2	1325.6	60.0'	54.2'	1325.0	43.0'	25.0'
15	2	1326.3	60.0'	54.2'	1325.7	43.0'	25.0'
16	2	1331.0	60.0'	55.3'	1330.4	46.0'	23.0'
17	2	1332.3	60.0'	54.2'	1331.7	43.0'	25.0'
18	2	1333.2	60.0'	54.2'	1332.6	43.0'	25.0'
19	2	1332.2	60.0'	54.2'	1331.6	43.0'	25.0'
20	2	1332.7	60.0'	54.2'	1332.1	43.0'	25.0'
21	2	1333.7	60.0'	54.2'	1333.1	43.0'	25.0'
22	2	1332.8	60.0'	54.2'	1332.2	43.0'	25.0'
23	2	1331.5	60.0'	55.3'	1330.9	46.0'	23.0'

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

CALEB JUREY LICENSED 22002 3/14/25 KANSAS PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION	BY

CITY OF WICHITA
WICHITA, KANSAS

BUFFALO PINES ADDITION PAVING & DRAINAGE

GRADING (NORTH)

JOB NO.: 22T41007
DATE: MAR 2025
DESIGNED BY: CDJ
DRAWN BY: CDJ

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

DRAWING NUMBER

SHEET NUMBER 6 OF 44

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(IN FEET)

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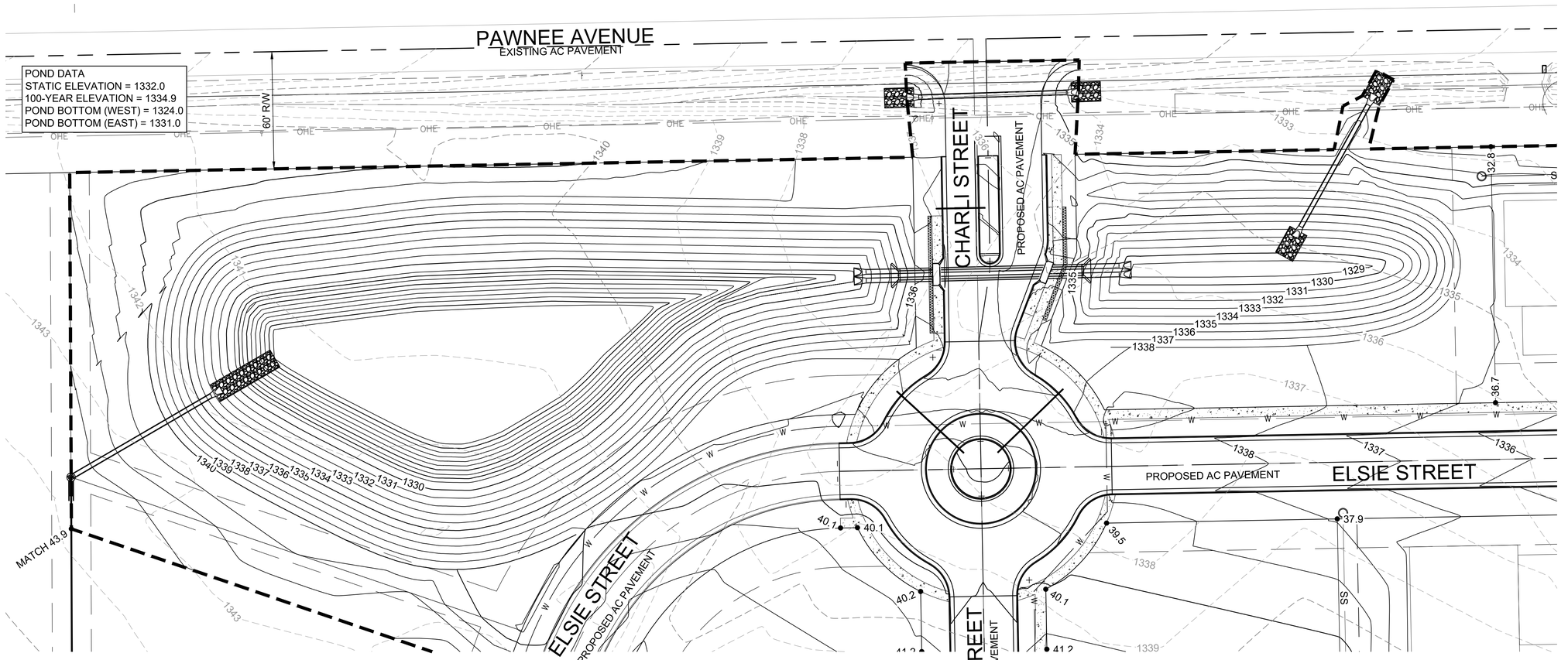

NOTES

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POND SOIL NOTES

1) CONTRACTOR SHALL CONSTRUCT AN EARTHEN LINER WITH A TOTAL THICKNESS OF AT LEAST 12 INCHES ALONG THE BOTTOM AND SIDES OF THE PROPOSED POND UP TO ONE (1) FOOT ABOVE THE PROPOSED STATIC POOL ELEVATION OF 1332.0 (CONSTRUCT LINER UP TO ELEVATION 1333.0)

2) ON-SITE COHESIVE SOILS ARE SUITABLE FOR CONSTRUCTING THE EMBANKMENTS AND EARTHEN LINER FOR THE PROPOSED POND, PROVIDED THE SOILS USED TO CONSTRUCT THE LINER HAVE A MINIMUM PLASTICITY INDEX OF 35. FIELD MOISTURE AND DENSITY TESTING AND ATTERBERG LIMITS TESTING SHALL BE CONDUCTED TO EVALUATE THE SUITABILITY OF THE PROPOSED LINER MATERIALS. TESTING IS SUBSIDIARY TO THE BID ITEM 'POND LINER, C.Y.'

3) THE 12-INCH THICK CLAY LINER WITHIN THE POND SHALL BE CONSTRUCTED OF NATIVE SOILS THAT ARE FREE OF ORGANICS AND DELETERIOUS MATERIALS, PLACED IN LOOSE LIFTS NOT TO EXCEED 9 INCHES IN THICKNESS. THE SOIL USED TO CONSTRUCT THE CLAY LINER IN POND SHOULD BE WETTED TO MOISTURE CONTENT AT LEAST 4 PERCENTAGE POINTS OVER THE OPTIMUM MOISTURE AND COMPACTED TO AT LEAST 97% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D698). EACH LIFT OF FILL SHALL BE TESTED FOR DENSITY, MOISTURE CONTENT, AND PLASTICITY INDEX IN THE POND AREA.

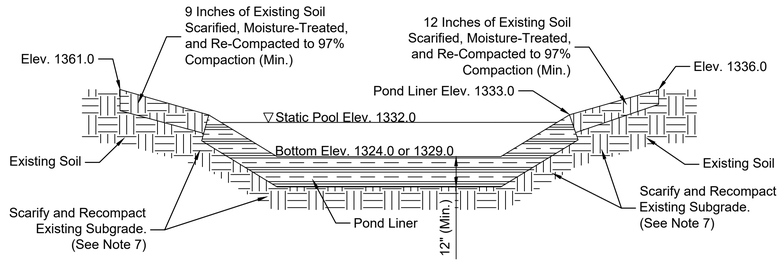
4) HORIZONTAL JOINTS BETWEEN OVERLYING AND UNDERLYING FILL LIFTS SHALL BE STAGGERED AT LEAST 2 FEET LATERALLY.

5) THE CONTRACTOR SHALL OVEREXCAVATE THE POND AREA TO ALLOW THE INSTALLATION OF THE CLAY LINER. THE UPPER 9 INCHES OF RESULTING EXPOSED SUBGRADE SHALL BE COMPACTED TO AT LEAST 95% OF ITS MAXIMUM DRY DENSITY BY ASTM D698 AT MOISTURE CONTENTS ABOVE ITS OPTIMUM MOISTURE CONTENT. WORK IS SUBSIDIARY TO THE BID ITEM 'POND LINER, C.Y.'

6) SLOPES SHALL BE NO STEEPER THAN 3:1.

7) POND SLOPES ABOVE THE STATIC POOL SHALL BE SCARIFIED AND RECOMPACTED TO A DEPTH OF 9" TO AT LEAST 97% OF STANDARD PROCTOR DENSITY. WORK IS SUBSIDIARY TO THE BID ITEM 'POND LINER, C.Y.'

Note:
Over-excavation for the Pond Liner is incidental to the bid item 'Pond Liner, C.Y.' Earthwork for the Pond Liner and associated over-excavation is not included in the Earthwork Estimate found on Sheet 1 of these Plans.



Typical Pond Section
Not to Scale

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

CALEB JUREY LICENSED 22002 3/14/25 KANSAS PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION	BY

CITY OF WICHITA
WICHITA, KANSAS

BUFFALO PINES ADDITION PAVING & DRAINAGE

GRADING (POND)

JOB NO.: 22T41007
DATE: MAR 2025
DESIGNED BY: CDJ
DRAWN BY: CDJ

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

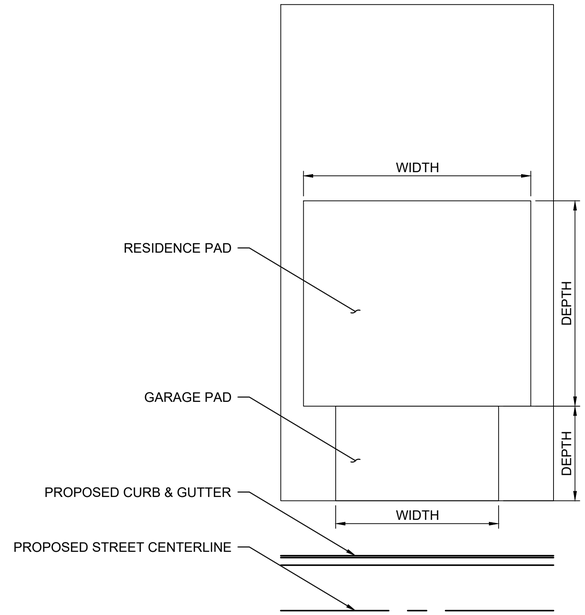
DRAWING NUMBER

SHEET NUMBER 7 OF 44

File: L:\2022\22T41007 - Buffalo Pines Phase 1\Drawings\IPAVING & DRAINAGE SHEETS\GRADING PLAN.dwg Last Save: 3/12/2025 1:48 PM Last saved by: CDJUREY
Last plotted by: Jurey, Caleb D. Plot Style: ---- Plot Scale: 1:2.5849 Plot Date: 3/14/2025 1:13 PM Plotter used: None

PAD DIMENSIONS AND ELEVATIONS

BLOCK NO.	LOT NO.	RESIDENCE			GARAGE		
		WIDTH	DEPTH	ELEVATION	WIDTH	DEPTH	ELEVATION
1	1	60.0'	54.2'	1336.7	43.0'	25.0'	1336.6
1	2	60.0'	54.2'	1335.6	43.0'	25.0'	1335.5
1	3	60.0'	54.2'	1334.2	43.0'	25.0'	1334.1
1	4	60.0'	54.2'	1332.9	43.0'	25.0'	1332.8
1	5	60.0'	55.3'	1331.5	46.0'	23.0'	1331.4
2	1	60.0'	55.3'	1328.7	46.0'	23.0'	1328.6
2	2	60.0'	54.2'	1327.8	43.0'	25.0'	1327.7
2	3	60.0'	54.2'	1327.0	43.0'	25.0'	1326.9
2	4	60.0'	54.2'	1326.4	43.0'	25.0'	1326.3
2	5	60.0'	54.2'	1325.5	43.0'	25.0'	1325.4
2	6	60.0'	54.2'	1325.3	43.0'	25.0'	1325.2
2	7	60.0'	54.2'	1325.0	43.0'	25.0'	1324.9
2	8	60.0'	54.2'	1324.5	43.0'	25.0'	1324.4
2	9	60.0'	54.2'	1324.0	43.0'	25.0'	1323.9
2	10	60.0'	54.2'	1323.5	43.0'	25.0'	1323.4
2	11	60.0'	54.2'	1324.0	43.0'	25.0'	1323.9
2	12	60.0'	54.2'	1324.6	43.0'	25.0'	1324.5
2	13	60.0'	54.2'	1325.1	43.0'	25.0'	1325.0
2	14	60.0'	54.2'	1325.1	43.0'	25.0'	1325.0
2	15	60.0'	54.2'	1325.8	43.0'	25.0'	1325.7
2	16	60.0'	55.3'	1330.6	46.0'	23.0'	1330.5
2	17	60.0'	54.2'	1331.8	43.0'	25.0'	1331.7
2	18	60.0'	54.2'	1332.2	43.0'	25.0'	1332.1
2	19	60.0'	54.2'	1330.7	43.0'	25.0'	1330.6
2	20	60.0'	54.2'	1330.7	43.0'	25.0'	1330.6
2	21	60.0'	54.2'	1332.2	43.0'	25.0'	1332.1
2	22	60.0'	54.2'	1331.8	43.0'	25.0'	1331.7
2	23	60.0'	55.3'	1330.6	46.0'	23.0'	1330.5
2	24	60.0'	55.3'	1336.8	46.0'	23.0'	1336.7
2	25	60.0'	54.2'	1338.1	43.0'	25.0'	1338.0
2	26	60.0'	54.2'	1339.2	43.0'	25.0'	1339.1
2	27	60.0'	54.2'	1339.5	43.0'	25.0'	1339.4
2	28	60.0'	54.2'	1338.1	43.0'	25.0'	1338.0
2	29	60.0'	55.3'	1336.8	46.0'	23.0'	1336.7



TYPICAL PAD

NOT TO SCALE

COMPACTION TESTING TABLE

LOT	BLOCK	NORTHING	EASTING	EXIST. ELEV.	PROP. PAD		1323	1324	1325	1326	1327	1328	1329	1330	1331	1332	1333	1334	1335	1336	1337	1338	1339	1340
LOT 1	BLOCK 1	1673103.175	1693297.317	1333.50	1336.70		■	■	■	■	■	■	■	■	■	■	■				■	■	■	■
LOT 2	BLOCK 1	1673104.488	1693369.305	1332.20	1335.60		■	■	■	■	■	■	■	■						■	■	■	■	■
LOT 3	BLOCK 1	1673105.801	1693441.293	1330.40	1334.20		■	■	■	■	■	■	■	■					■	■	■	■	■	■
LOT 4	BLOCK 1	1673107.114	1693513.281	1328.70	1332.90		■	■	■	■	■	■					■	■	■	■	■	■	■	■
LOT 5	BLOCK 1	1673107.011	1693585.296	1327.30	1331.50		■	■	■	■	■		■			■	■	■	■	■	■	■	■	■
LOT 1	BLOCK 2	1673110.184	1693759.266	1325.40	1328.70		■	■	■			■	■	■	■	■	■	■	■	■	■	■	■	■
LOT 2	BLOCK 2	1673112.931	1693832.228	1323.80	1327.80		■					■	■	■	■	■	■	■	■	■	■	■	■	■
LOT 3	BLOCK 2	1673110.499	1693912.602	1321.70	1327.00							■	■	■	■	■	■	■	■	■	■	■	■	■
LOT 4	BLOCK 2	1673079.406	1693996.325	1321.10	1326.40						■	■	■	■	■	■	■	■	■	■	■	■	■	■
LOT 5	BLOCK 2	1673040.123	1694057.407	1321.60	1325.50					■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
LOT 6	BLOCK 2	1672985.983	1694141.619	1323.20	1325.30		■			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
LOT 7	BLOCK 2	1672948.129	1694200.501	1322.10	1325.00					■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
LOT 8	BLOCK 2	1672910.274	1694259.383	1321.50	1324.50				■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
LOT 9	BLOCK 2	1672872.42	1694318.264	1321.70	1324.00				■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
LOT 10	BLOCK 2	1672852.233	1694388.504	1320.80	1323.50			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
LOT 11	BLOCK 2	1672694.648	1694206.11	1323.20	1324.00		■		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
LOT 12	BLOCK 2	1672740.614	1694134.611	1324.00	1324.60		■		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
LOT 13	BLOCK 2	1672786.58	1694063.112	1324.20	1325.10		■	■		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
LOT 14	BLOCK 2	1672832.546	1693991.612	1325.20	1325.10		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
LOT 15	BLOCK 2	1672876.218	1693923.681	1325.40	1325.80		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
LOT 16	BLOCK 2	1672933.041	1693790.178	1326.40	1330.60		■	■	■	■					■	■	■	■	■	■	■	■	■	■
LOT 17	BLOCK 2	1672862.079	1693792.89	1327.60	1331.80		■	■	■	■	■						■	■	■	■	■	■	■	■
LOT 18	BLOCK 2	1672792.33	1693807.266	1327.40	1332.20		■	■	■	■	■							■	■	■	■	■	■	■
LOT 19	BLOCK 2	1672722.48	1693816.157	1326.60	1330.70		■	■	■	■					■	■	■	■	■	■	■	■	■	■
LOT 20	BLOCK 2	1672717.892	1693564.576	1331.60	1330.70		■	■	■	■	■	■	■		■	■	■	■	■	■	■	■	■	■
LOT 21	BLOCK 2	1672788.019	1693570.914	1331.40	1332.20		■	■	■	■	■	■	■	■	■		■	■	■	■	■	■	■	■
LOT 22	BLOCK 2	1672858.246	1693582.748	1331.30	1331.80		■	■	■	■	■	■	■	■		■	■	■	■	■	■	■	■	■
LOT 23	BLOCK 2	1672929.26	1693582.86	1330.40	1330.60		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
LOT 24	BLOCK 2	1672926.914	1693454.234	1334.80	1336.80		■	■	■	■	■	■	■	■	■	■	■	■				■	■	■
LOT 25	BLOCK 2	1672855.952	1693456.946	1334.60	1338.10		■	■	■	■	■	■	■	■	■	■	■	■					■	■
LOT 26	BLOCK 2	1672785.964	1693458.222	1334.60	1339.20		■	■	■	■	■	■	■	■	■	■	■	■						■
LOT 27	BLOCK 2	1672715.974	1693459.445	1334.70	1339.50		■	■	■	■	■	■	■	■	■	■	■	■						■
LOT 28	BLOCK 2	1672852.119	1693246.804	1340.70	1338.10		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■		■	■
LOT 29	BLOCK 2	1672923.133	1693246.915	1338.90	1336.80		■	■	■	■	■	■	■	■	■	■	■	■	■		■	■	■	■

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

CALEB JUREY 22002 3/17/25 KANSAS PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION	BY

CITY OF WICHITA
WICHITA, KANSAS

BUFFALO PINES ADDITION PAVING & DRAINAGE

PAD TABLE

JOB NO.: 22T41007
DATE: MAR 2025
DESIGNED BY: CDJ
DRAWN BY: CDJ

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

DRAWING NUMBER

SHEET NUMBER 8 OF 44

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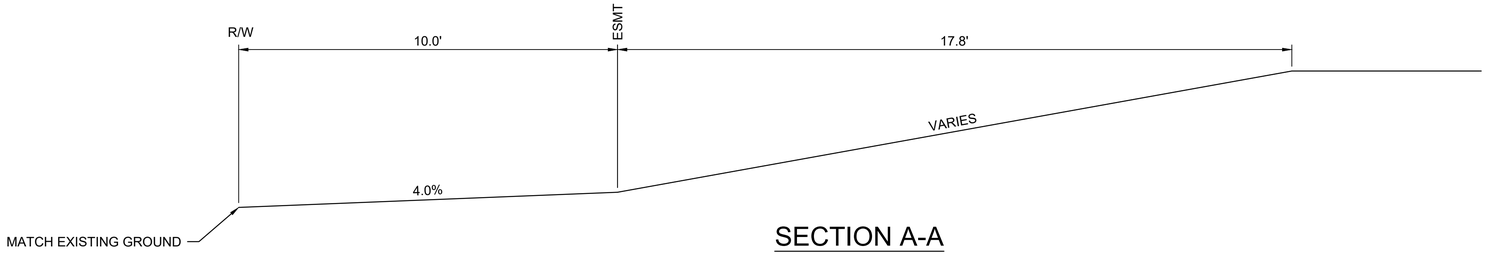
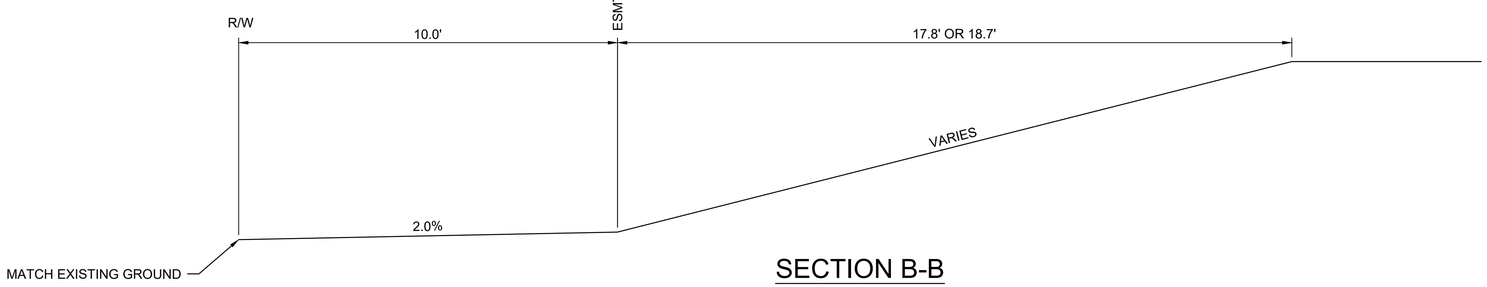
Last plotted by: Jurey, Caleb D. Plot Style: ---- Plot Scale: 1:2.5849 Plot Date: 3/17/2025 12:21 PM Plotter used: None



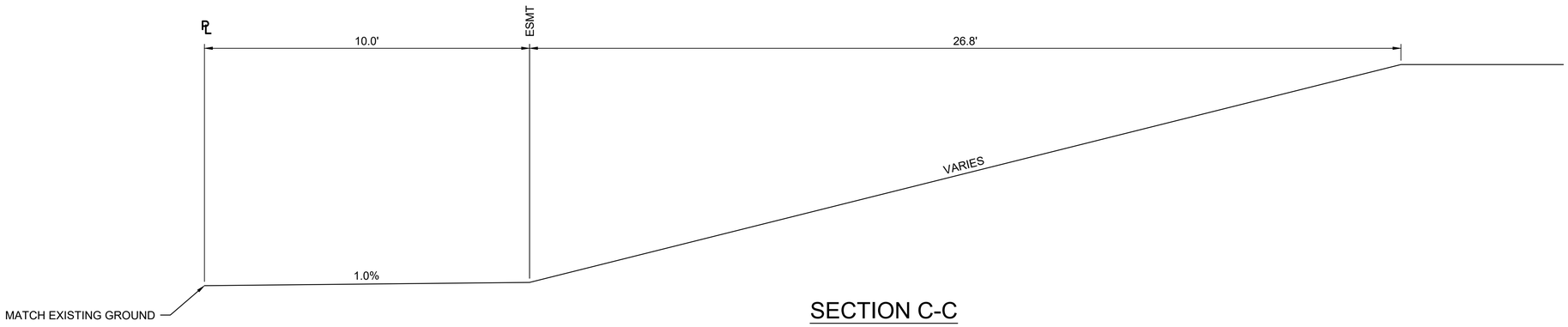
SECTION A-A

BLOCK 1, LOTS 1-5



SECTION B-B

BLOCK 2, LOTS 1-2



SECTION C-C

BLOCK 2, LOTS 5-9

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

CALEB JUREY
STATE OF KANSAS
20002
3/14/25
PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION	BY

CITY OF WICHITA
WICHITA, KANSAS

BUFFALO PINES ADDITION PAVING & DRAINAGE

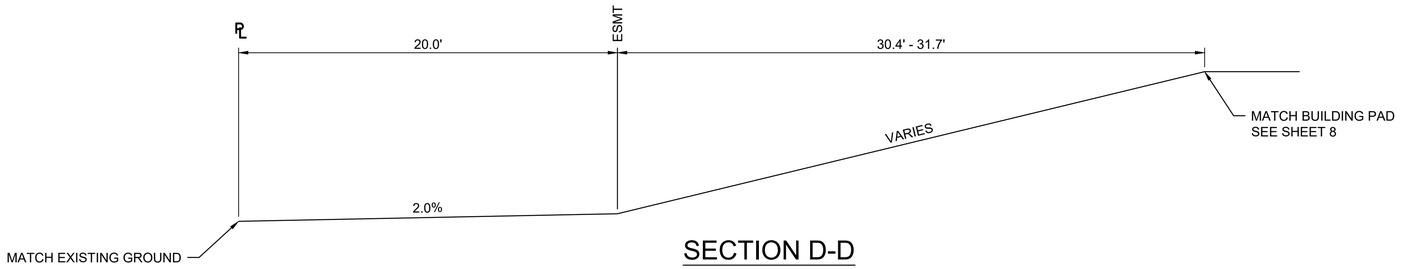
GRADING SECTIONS (1 OF 2)

JOB NO.: 22T41007
DATE: MAR 2025
DESIGNED BY: CDJ
DRAWN BY: CDJ

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

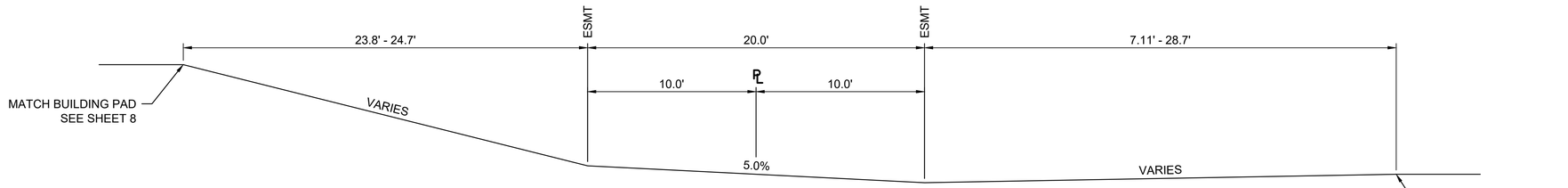
DRAWING NUMBER

SHEET NUMBER 9 OF 44



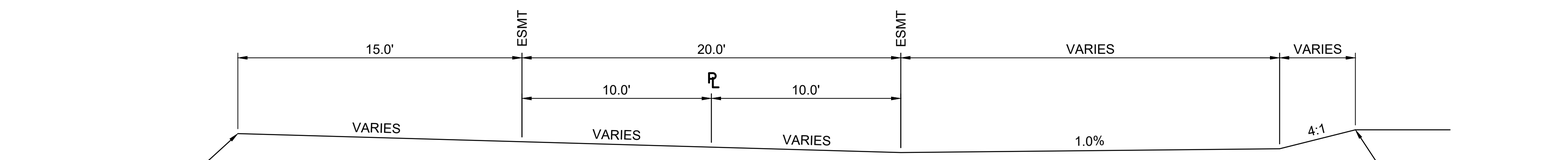
SECTION D-D

BLOCK 2, LOTS 11-15



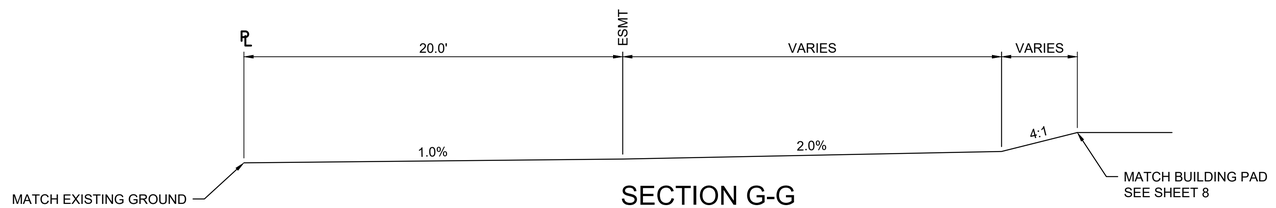
SECTION E-E

BLOCK 2, LOTS 20-27



SECTION F-F

BLOCK 2, LOTS 42-44



SECTION G-G

BLOCK 2, LOTS 37-41

GARVER

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

CALEB JUREY
20002
3/14/25
KANSAS
PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION	BY

CITY OF WICHITA
WICHITA, KANSAS

BUFFALO PINES ADDITION PAVING & DRAINAGE

GRADING SECTIONS (2 OF 2)

JOB NO.: 22T41007
DATE: MAR 2025
DESIGNED BY: CDJ
DRAWN BY: CDJ

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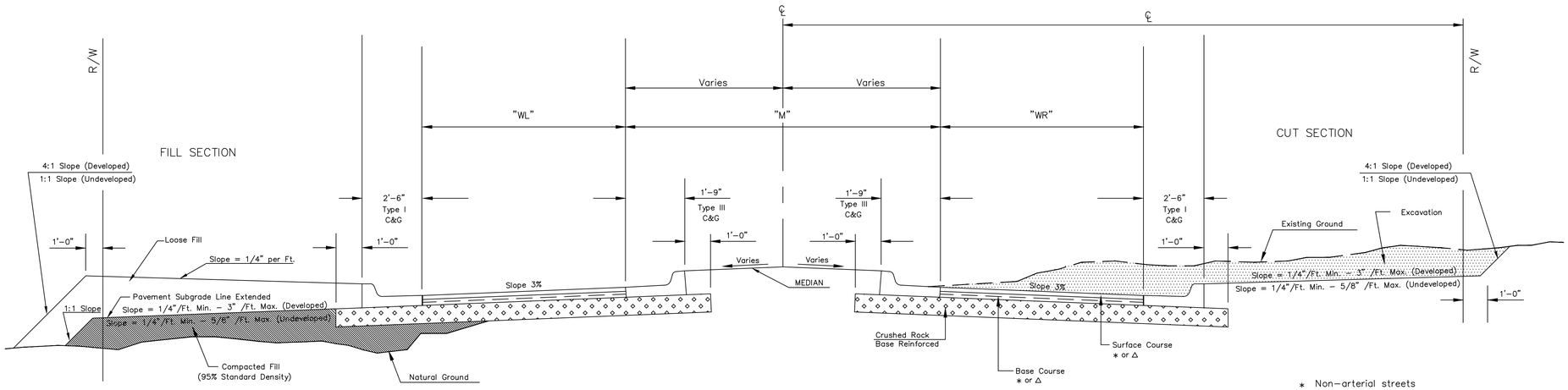
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

DRAWING NUMBER

SHEET NUMBER 10 OF 44

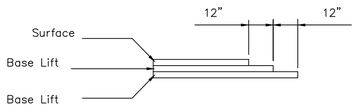
TYPICAL SECTION



* Non–arterial streets
BC–1, SC–1 AND PG 64–22

Δ Arterial streets
BM–2 PG 64–22(Base) PG 70–28(Surface)

Base Course thicker than 4" shall be installed in two lifts



TRANSVERSE CONSTRUCTION JOINTS

Transverse construction joints shall be constructed in flexible base pavement at locations where pavement joins existing flexible base pavement as show by the detail. All costs associated with the construction of the transverse joint shall be included in the bid price for Square Yards of pavement.

GENERAL NOTES

Fabric base reinforcement shall be an approved grid. Fabric base reinforcement shall be installed in accordance with manufacturer's recommendations. Crushed rock shall be uniformly graded from 1 – $\frac{1}{2}$" maximum size to not more than 10% passing a No. 200 sieve. Rock quality shall be the same as specified for coarse aggregate for concrete mixes.

Rock base is to be compacted and smoothed with a steel faced roller prior to placement of asphalt. Tack coat will not be applied to rock base.

A tack coat of emulsified asphalt (SC–1H or CSS–1H) shall be applied to an approximate rate of 0.05 gallons per square yard between each lifts of asphaltic material.

Bituminous base and asphaltic concrete wearing surface shall be placed with a laydown machine having automatic controls for line and grade.

Construction joints in each lift shall be staggered a minimum distance of one (1) foot from joints in preceding lifts and placed so that a join will be constructed on the centerline of the top lift.

The asphaltic concrete pavement between the combined curb and gutter shall be paid as square yards of of pavement.

STREET NAME	"WL"	"M"	"WR"	STATION	CENTER LINE	ROW DIMENSION	MEDIAN DESCRIPTION	SLOPE	ROCK THICKNESS	PAVEMENT THICKNESS	COMMENTS
CHARLI STREET	15'	0'	15'	0+00.00 - 7+86.29	32'	32' L&R	NONE	3%	5"	6"	

REVISED: OCTOBER 2015

CITY OF WICHITA
PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

ASPHALT PAVING DETAIL

CITY ENGINEER
GARY JANZEN, P.E.

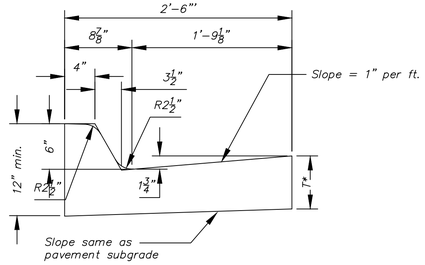
PROJECT NUMBER	OCA NUMBER	DATE

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

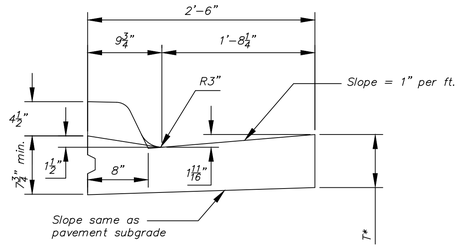
SHEET 11 / 44

PV–147

TYPE 1
(Arterial curb)

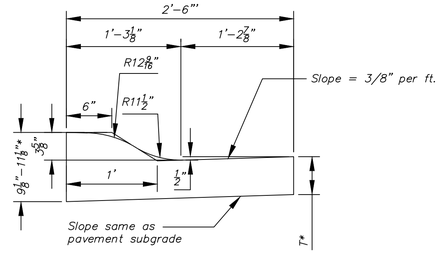


Combined Curb & Gutter (6")

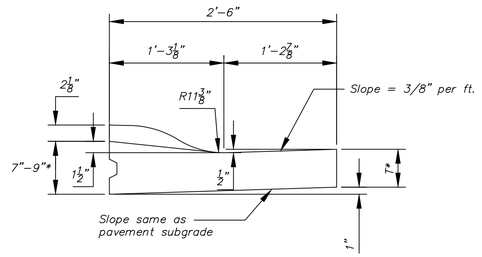


Combined Curb & Gutter (1 1/2")

TYPE 2
(Roll curb)

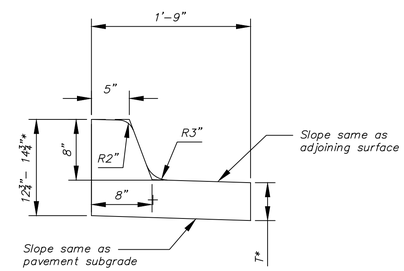


Combined Curb & Gutter (3 5/8")

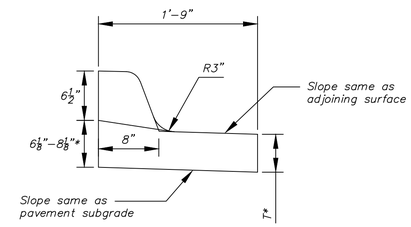


Combined Curb & Gutter (1 1/2")

TYPE 3
(Median curb)

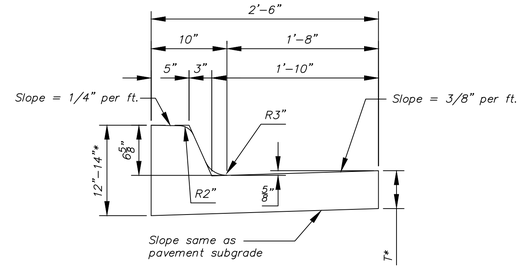


Combined Curb & Gutter (8")

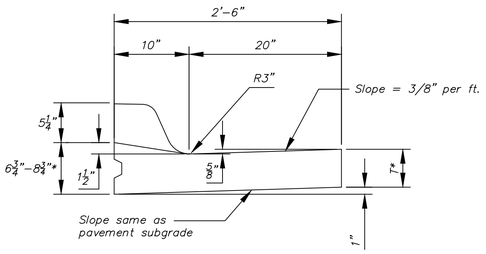


Combined Curb & Gutter (1 1/2")

TYPE 4
(Residential curb)

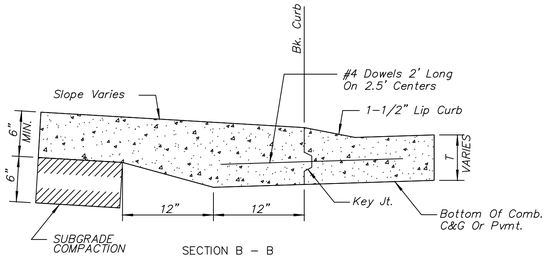


Combined Curb & Gutter (6 5/8")

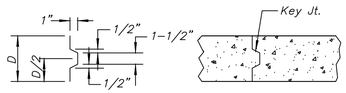


Combined Curb & Gutter (1 1/2")

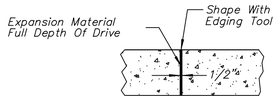
T* = Thickness of curb to adjust with pavement thickness



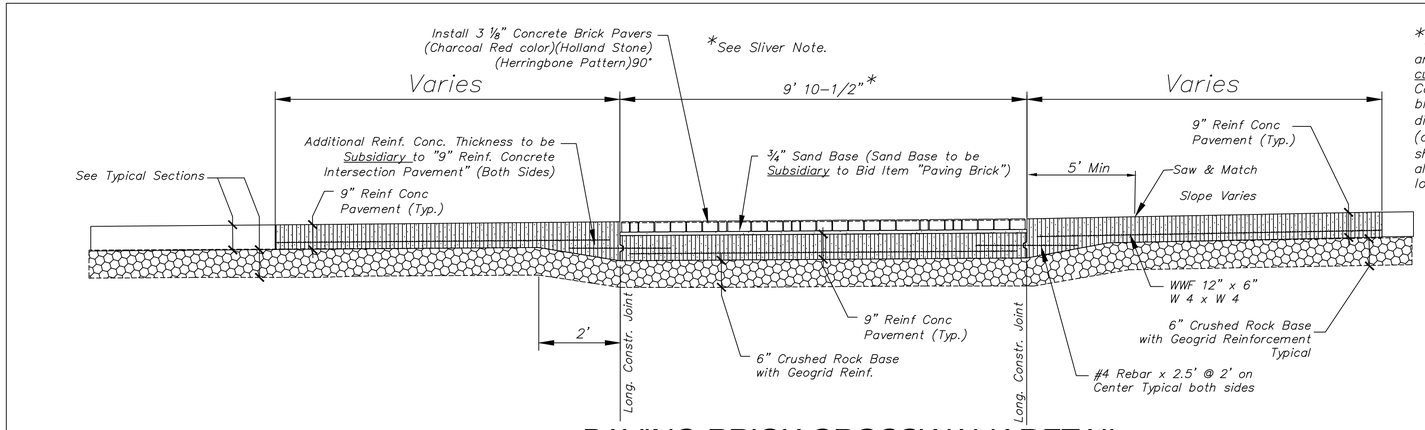
BACK OF CURB DETAIL



ALT. LONGITUDINAL CONSTRUCTION JOINT



EXPANSION JOINT (E.J.)



PAVING BRICK CROSSWALK DETAIL

*Brick Pavers to be installed in crosswalk and/or median locations shall be custom cut to match final concrete dimensions. Contractor shall construct crosswalk blockouts to match nominal paver width dimensions. Fill in with "brick slivers" (defined as pieces smaller than 1/2 of the shortest paver dimension) shall not be allowed, except at the end of crosswalk locations.

GENERAL NOTES

1. Expansion (isolation) joints shall be constructed a maximum of 300' apart and at all PIs, PCs, cul-de-sac quadrants, and ends of returns.

2. Contraction joints shall be constructed a minimum of 12' apart.

3. Joint sealer shall be required at all joints on arterial and industrial streets and at intersections on residential streets.

REVISED: OCTOBER 2015

CITY OF WICHITA
PUBLIC WORKS & UTILITIES ENGINEERING DIVISION

CURB & GUTTER & PAVING BRICK CROSSWALK DETAILS

CITY ENGINEER
GARY JANZEN, P.E.

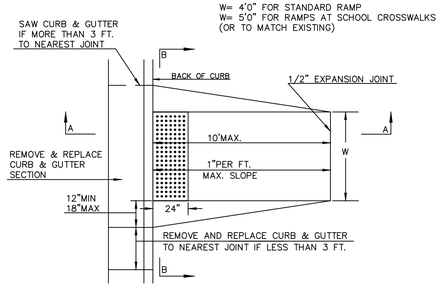
PROJECT NUMBER	OCA NUMBER	DATE
----	———	

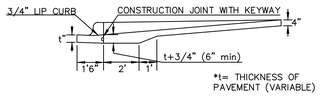
CITY ENGINEER'S OFFICE
CITY HALL - SEVENTH FLOOR
455 NORTH MAIN STREET
WICHITA, KANSAS 67202-1620
(316) 268-4501

SHEET 12 / 44

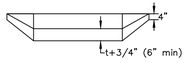
PV-101

STANDARD WHEELCHAIR RAMP CONSTRUCTION DETAIL FOR STREETS WITH COMBINED CURB & GUTTER (TYPE A)



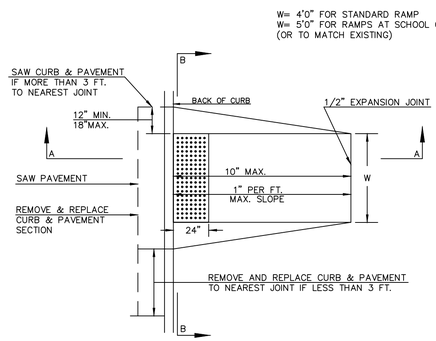


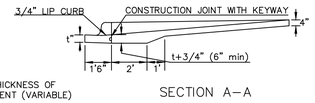
SECTION A–A



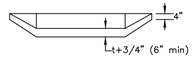
SECTION B–B

STANDARD WHEELCHAIR RAMP CONSTRUCTION DETAIL FOR CONCRETE STREETS WITH MONOLITHIC CURB (TYPE A)



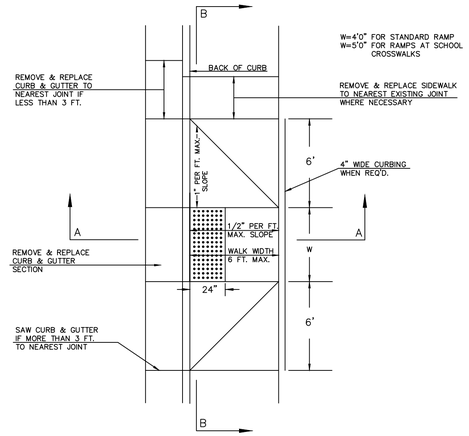


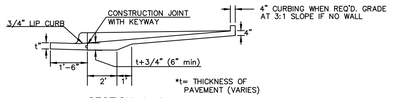
SECTION A–A



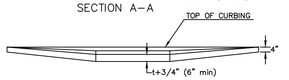
SECTION B–B

STANDARD WHEELCHAIR RAMP CONSTRUCTION DETAIL FOR STREETS WITH COMBINED CURB & GUTTER AND FULL WALK (TYPE B)



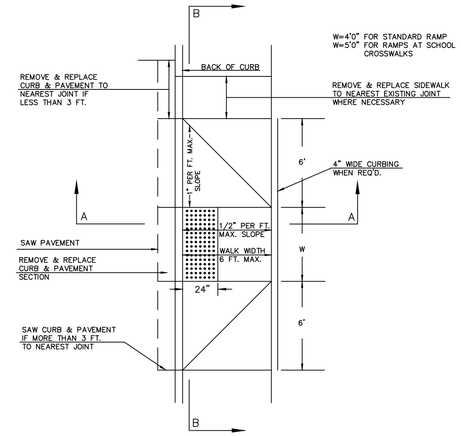


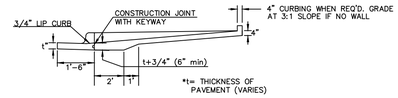
SECTION A–A



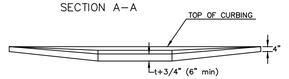
SECTION B–B

STANDARD WHEELCHAIR RAMP CONSTRUCTION DETAIL FOR STREETS WITH MONOLITHIC CURB AND FULL WALK (TYPE B)



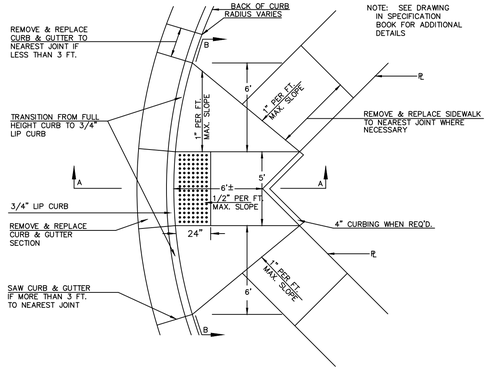


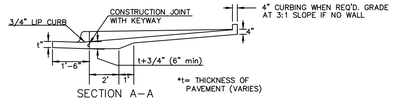
SECTION A–A



SECTION B–B

STANDARD WHEELCHAIR RAMP CONSTRUCTION DEAIL FOR STREET WITH COMBINED CURB AND GUTTER ON RADIUS WITH 6'± FROM BACK OF CURB TO PROPERTY CORNER (TYPE C)

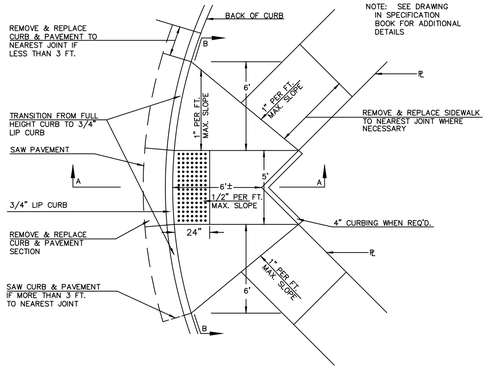


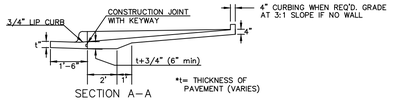


SECTION A–A

SECTION B–B

STANDARD WHEELCHAIR RAMP CONSTRUCTION DETAIL FOR STREET WITH MONOLITHIC CURB ON RADIUS WITH 6'± FROM BACK OF CURB TO PROPERTY CORNER (TYPE C)

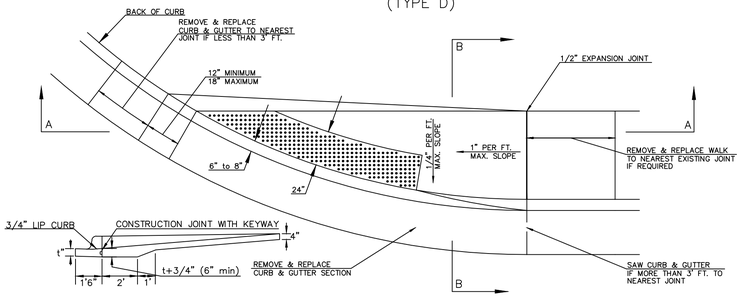




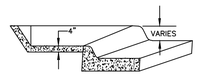
SECTION A–A

SECTION B–B

STANDARD WHEELCHAIR RAMP CONSTRUCTION DETAIL FOR STREETS WITH COMBINED CURB & GUTTER WITH ONE FULL SIDEWALK (TYPE D)

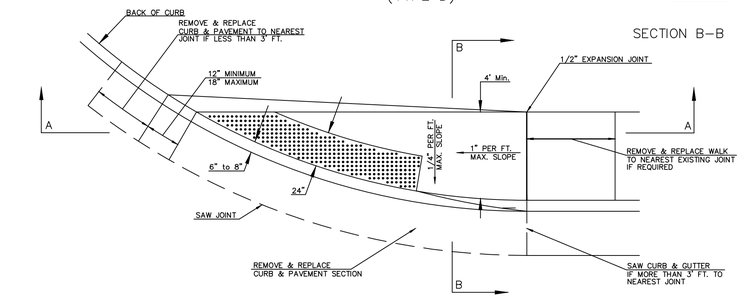


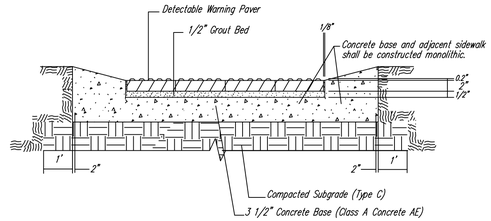
SECTION A–A



SECTION B–B

STANDARD WHEELCHAIR RAMP CONSTRUCTION DETAIL FOR STREETS WITH MONOLITHIC CURB WITH ONE FULL SIDEWALK (TYPE D)

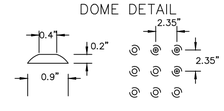




TYPICAL SECTION DETECTABLE WARNING PAVER SECTION A–A

NOTE: HANOVER DETECTABLE WARNING PAVERS (OR AN APPROVED ALTERNATE) SHALL BE USED IN ALL WHEELCHAIR RAMPS. THE 11 3/4" "RED 15" PAVER SHALL BE USED IN ALL APPLICATIONS.
HANOVER ARCHITECTURAL PRODUCTS
240 BENDER ROAD
HANOVER, PA 17331
1-717-637-0500
www.hanoverpovers.com

DOME DETAIL



CITY OF WICHITA
PUBLIC WORKS & UTILITIES ENGINEERING DIVISION

WHEELCHAIR RAMP DETAILS WITH DETECTABLE WARNING

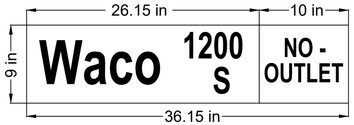
CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER	OCA NUMBER	DATE
----	_____	

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

SHEET 13 / 44

High Intensity Prismatic Yellow
Black Letters

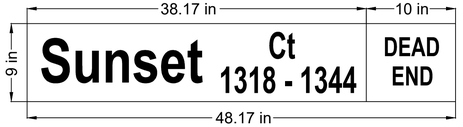


3 INCH TEXT HWY D FONT

3 INCH TEXT HWY D FONT

4.5 inch lower case text HWY D font
6 INCH UPPER CASE TEXT HWY D FONT

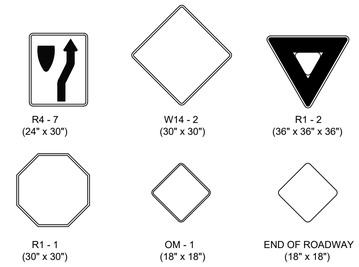
High Intensity Prismatic Yellow
Black Letters



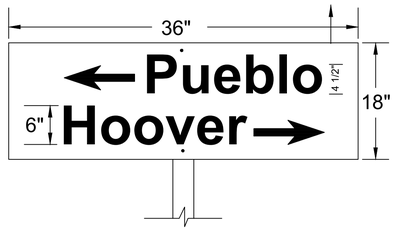
3 INCH TEXT HWY D FONT

3 INCH TEXT HWY D FONT

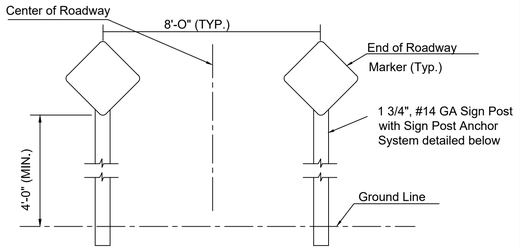
4.5 inch lower case text HWY D font
6 INCH UPPER CASE TEXT HWY D FONT



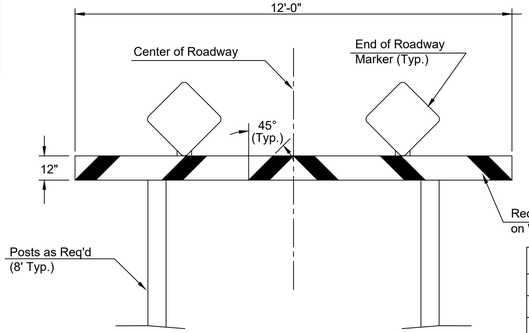
* IN NO CASE SHALL THE SPECIFICATIONS BE LESS THAN REQUIRED BY THE CURRENT MUTCD.



FLAT PLATE STREET NAME SIGN

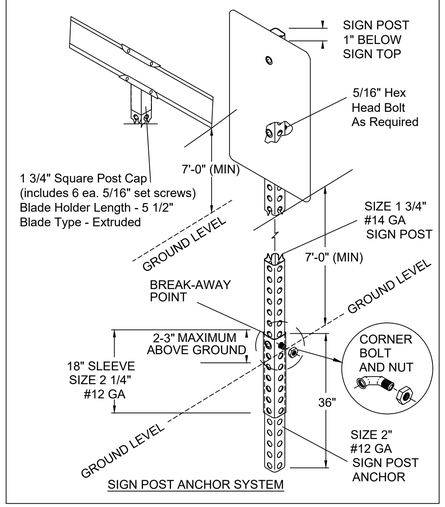


TYPICAL END OF ROADWAY SIGN MOUNTING INSTALLATION

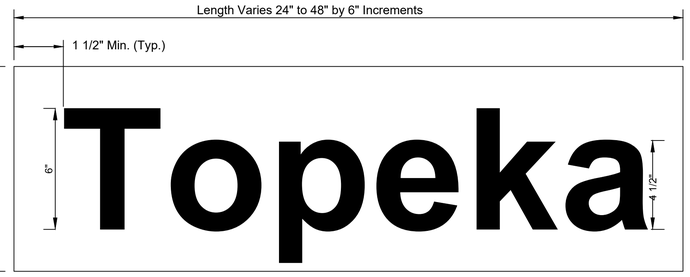


TYPE I BARRICADE DETAIL W/ E.O.R. MARKERS

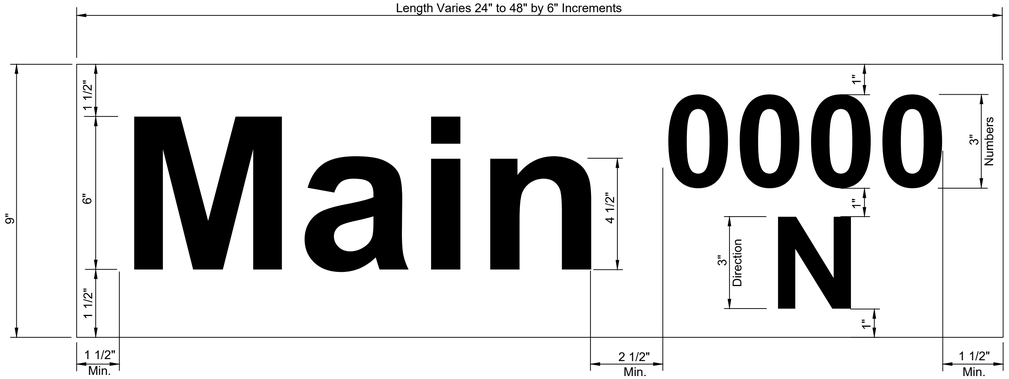
PERFORATED TUBE SIGN POST INSTALLATION



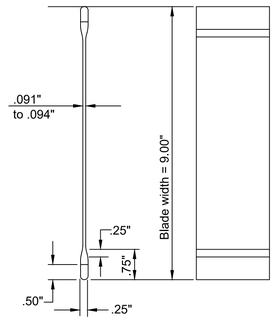
SIGN POST ANCHOR SYSTEM



DETAIL A
9" STANDARD



DETAIL B
9" METRO



STREET NAME SIGN
BLADE DETAILS

SIGN ASSEMBLY TABLE			
STATION	OFFSET	SIGN	QUANTITY*
-0+01	4' LT & RT	EOR	2
7+86	20' RT	R1-2	1
7+86	20' RT	W2-6	1
7+94	24' RT	SNS	2
8+38	0'	R4-7b	1
8+38	0'	OM-1	1
8+52	14' LT & RT	R4-7b	2
8+52	14' LT & RT	OM-1	2
8+66	0'	R4-7b	1
8+66	0'	OM-1	1
9+09	24' LT	SNS	1
9+16	20' LT	R1-2	1
9+58	0'	R4-7	1
9+58	0'	OM-1	1
10+11	0'	R4-7	1
10+11	0'	OM-1	1
10+39	24' LT	SNS	1
10+39	30' RT	R1-1	1

STREET NAME TABLE		
STREET NAME	NO. BLADES REQUIRED	
	9" STD.	9" METRO
CHARLI ST	3	
ELSIE ST	2	
PAWNEE AVE	1	

NOTE: REFERENCES BELOW TO "STANDARD SPECIFICATIONS" DENOTE "STANDARD SPECIFICATION FOR STATE ROAD AND BRIDGE CONSTRUCTION EDITION 2015" BY THE KANSAS DEPARTMENT OF TRANSPORTATION.

1. ***FABRICATION AND INSTALLATION OF ALL SIGNS SHALL CONFORM TO THE LATEST EDITION OF THE MUTCD.***

1a. POST ANCHORS: POSTS SHALL BE ANCHORED WITH A YIELDING BASE POST SUPPORT AS DETAILED.

2. POSTS FOR TRAFFIC CONTROL SIGNS: POSTS SHALL BE GALVANIZED AND CONFORM TO THE REQUIREMENTS OF SUBSECTION 1620 OF THE STANDARD SPECIFICATIONS, EXCEPT THAT ALL POSTS SHALL WEIGH 3 LBS./FT. MINIMUM.

3. POSTS FOR STREET NAME SIGNS (SNS): POSTS SHALL BE 9 FEET LONG, CONSTRUCTED FROM #14 GALVANIZED STEEL PIPE AND SHALL BE 1 3/4" SQUARE WEIGHING A MINIMUM OF 3 LBS/FT. POSTS SHALL BE POSITIONED SO THAT THE BOTTOM BLADE IS 7 FEET ABOVE GRADE.

4. POSTS FOR END OF ROADWAY SIGN TO BE 8' LONG AND INSTALLED A MINIMUM OF 4' FROM ROADWAY TO BOTTOM OF SIGN.

5. SIGN BLANKS FOR TRAFFIC CONTROL SIGNS: SIGN BLANKS SHALL BE FABRICATED FROM 0.080" ALUMINUM ALLOY 6063-T6 CONFORMING TO THE REQUIREMENTS OF SUBSECTION 1627 OF THE STANDARD SPECIFICATIONS.

6. SIGN BLADES FOR STREET NAME SIGNS: EXTRUDED ALUMINUM BLADES SHALL BE ALUMINUM ALLOY CONFORMING TO 6063-T6 OR 5052-H38 (ASTM SPECIFICATION B221, LATEST ISSUE). BLADES SHALL HAVE AN ALODINE OR PHOSPHATE ETCHED FINISH. BLADES SHALL HAVE SQUARE CORNERS AND NO HOLES.
MINIMUM BLADE LENGTH SHALL BE 24". MAXIMUM BLADE LENGTH SHALL BE 48". LENGTH VARIES BY INCREMENTS OF 6".
BLADES BEARING THE STREET NAMES SHALL BE FIRMLY ATTACHED TO THE MOUNTING BRACKETS USING ALLEN-TYPE CONICAL SET SCREWS. THE BLADES SHALL BE ORIENTED PARALLEL TO THE STREET.

7. MOUNTING BRACKETS FOR SIGNS: DIE-CAST ALUMINUM BRACKETS SHALL BE ALUMINUM ALLOY 360 HAVING A TENSILE STRENGTH OF 44,000 PSI. THE BRACKETS SHALL BE SMOOTHLY FINISHED FREE OF PITS, BURRS, AND FLAWS. EACH BRACKET SHALL BE TAPPED AND DRILLED FOR 5/16" ZINC-PLATED ALLEN-TYPE SET SCREWS HAVING SELF-LOCKING SAW-TOOTH ENDS.

8. FASTENERS: ALL STEEL FASTENERS FOR TRAFFIC CONTROL SIGNS SHALL BE GALVANIZED AND SHALL CONFORM TO THE REQUIREMENTS OF SUBSECTION 1614 OF THE STANDARD SPECIFICATIONS.

9. REFLECTIVE SHEETING: REFLECTIVE SHEETING SHALL BE A MINIMUM OF HIGH INTENSITY PRISMATIC.

10. PROCESS INK: ALL PROCESS INK SHALL CONFORM TO THE REQUIREMENTS OF SUBSECTION 2202 OF THE STANDARD SPECIFICATIONS.

11. DETAILS - SNS: THE REFLECTIVE SHEETING FOR THE 9" STANDARD SIZE SNS IS TO BE THE HIGHWAY GREEN BACKGOUND WITH SILVER-WHITE #2 COPY WITH 6" UPPER CASE AND 4 1/2" LOWER CASE PRIMARY COPY AND SUFFIX COPY. BOTH SERIES "C".
FACES TO TRIM TO A 8 1/2". (SEE DETAIL A.)
THE REFLECTIVE SHEETING FOR THE 9" METRO SIZE SNS IS TO BE THE HIGHWAY GREEN BACKGROUND WITH SILVERWHITE #2 COPY WITH 6" UPPER CASE AND 4 1/2" LOWER CASE PRIMARY COPY AND SUFFIX COPY, BOTH SERIES "C". THE CARDINAL DIRECTION CENTERED DIRECTLY BELOW THE BLOCK NUMBER SHALL BE AN UPPER CASE, 3" SERIES "C" LETTER. FACES TO TRIM TO A 8 1/2" WIDTH. (SEE DETAIL B.)
FOR CUL-DE-SAC STREETS, A 9" METRO SIZE BLADE SHALL BE USED WITH THE BLOCK NUMBERS DISPLAYED BENEATH THE STREET NAME.
IF BLOCK NUMBERS ARE NOT SHOWN ON THE PLANS THE CONTRACTOR SHALL CONTACT THE TRAFFIC ENGINEER AT 268-4501 PRIOR TO MANUFACTURING THE SIGN.
SHOP DRAWINGS OF LAYOUT FOR SNS SHALL BE SUBMITTED TO THE TRAFFIC ENGINEERING DIVISION OF THE CITY OF WICHITA FOR APPROVAL PRIOR TO FABRICATION. THE FINISHED SIGNS AS SUPPLIED SHALL BE OF GOOD APPEARANCE, FREE FROM RAGGED EDGES, CRACKS SCALES OR BLISTERS AND SHALL BE CLEAN-CUT. SIGNS SHALL BE PACKED IN SUCH MANNER AS TO PREVENT DAMAGE OR DEFACEMENT DURING SHIPMENT OR STORAGE.

12. PERMANENT TRAFFIC CONTROL AND SNS: PERMANENT TRAFFIC CONTROL AND SNS SHALL BE MEASURED AND PAID FOR AT THE LUMP SUM PRICE FOR SIGNING. THE PAYMENT AS SET FORTH ABOVE SHALL BE CONSIDERED FULL COMPENSATION FOR ALL EXCAVATION, BACKFILLING. POSTS, ANCHORS, FASTENERS, MATERIALS, LABOR, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THIS WORK.

REVISED: December 2018 | TM | Updated Edition year and Subsection Number in Notes

CITY OF WICHITA
PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

SIGN DETAILS

TRAFFIC ENGINEER
Mike Armour P.E.

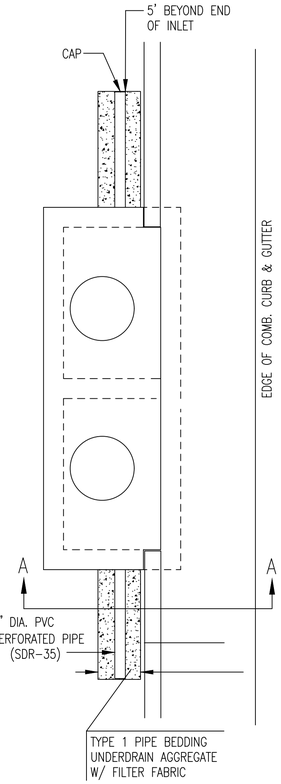
PROJECT NUMBER	OCA NUMBER	DATE
----	_____	

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

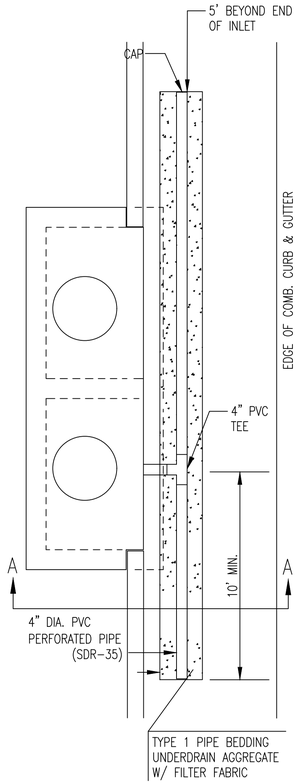
SHEET 14 / 44

TR-106

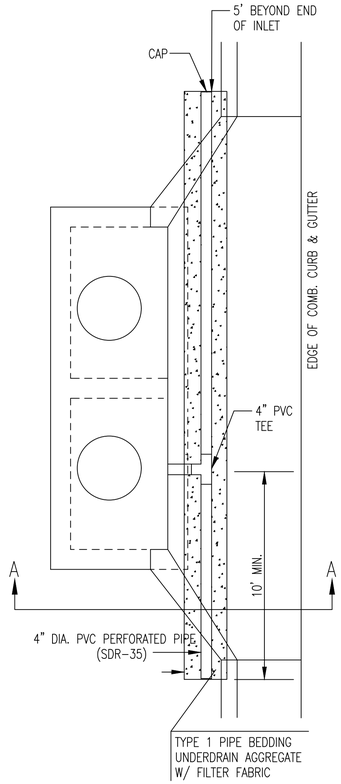
PAVEMENT UNDERDRAIN SHALL BE INSTALLED ON ALL CURB INLETS.



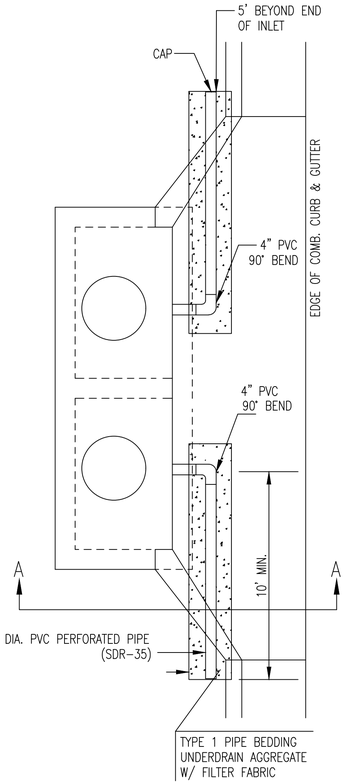
TYPE 1
OPTION 1



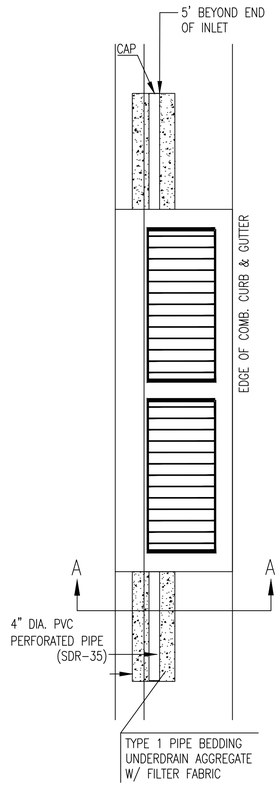
TYPE 1
OPTION 2



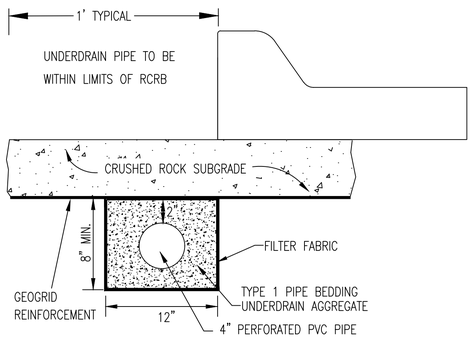
TYPE 1-A INLET
OPTION 1



TYPE 1-A INLET
OPTION 2



TYPE 2



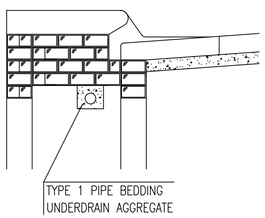
SECTION A-A (TYPICAL)

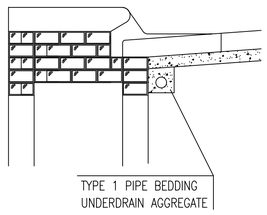
GENERAL NOTES

1. PAVEMENT CONTRACTOR WILL BE REQUIRED TO INSTALL SDR 35, 4" PERFORATED DRAIN PIPE AND TEE AS INDICATED IN THE DETAILS.

2. 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.

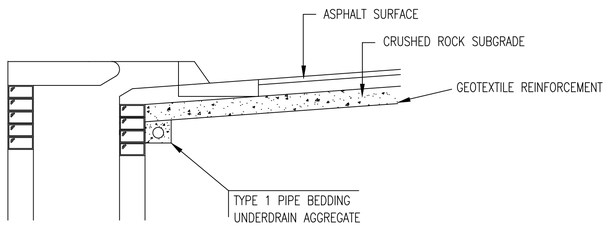
2. UNDERDRAIN PIPE SHALL BE PAID AS A MEASURED QUANTITY BY THE LINEAL FOOT.





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

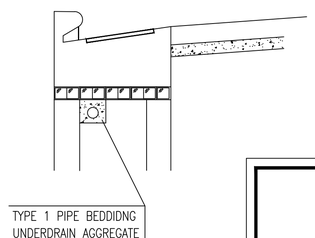
SECTION A-A



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

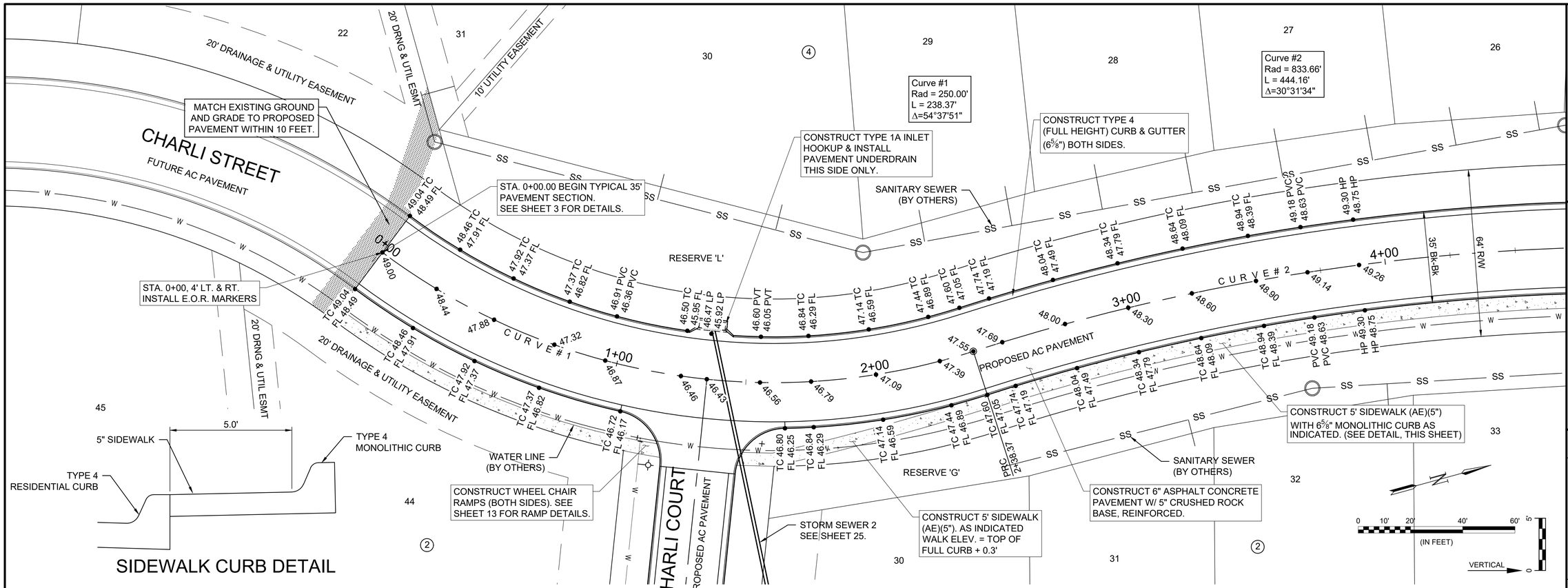
CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER	OCA NUMBER	DATE
----	_____	10/2012

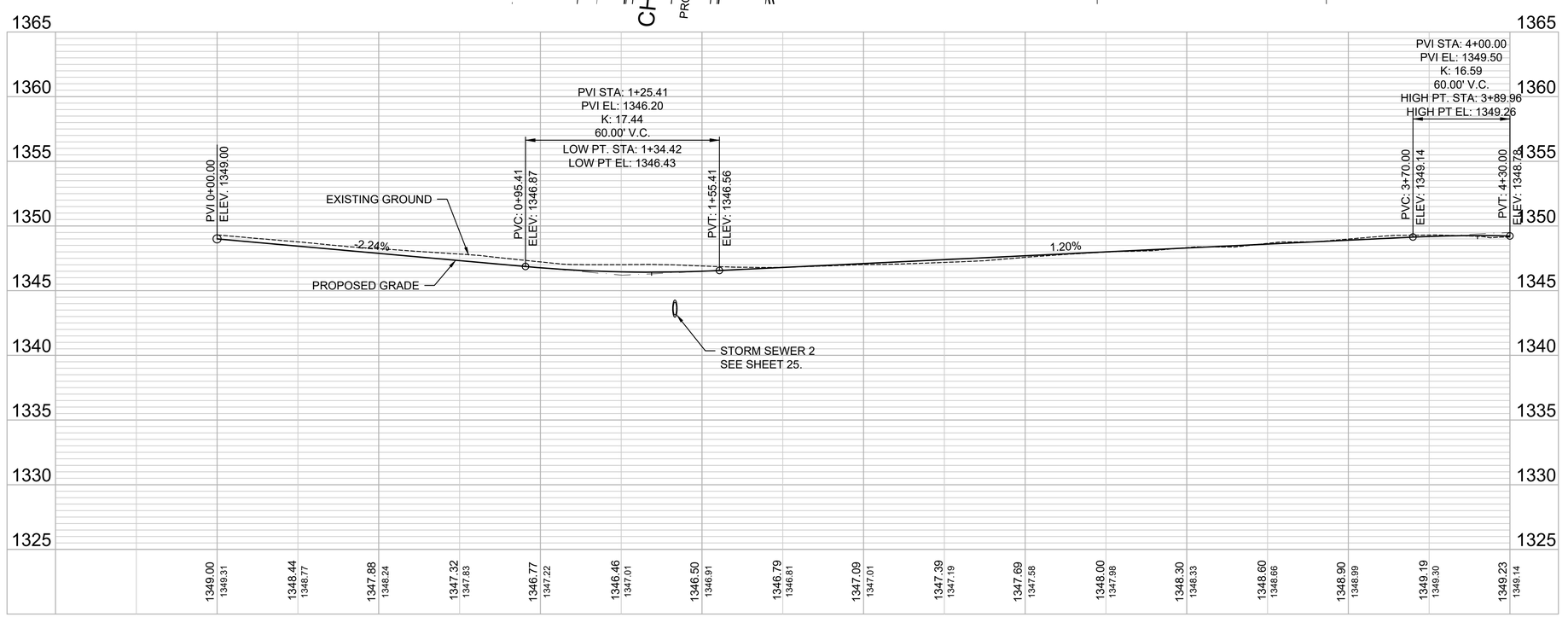
CITY ENGINEER'S OFFICE
CITY HALL - SEVENTH FLOOR
455 NORTH MAIN STREET
WICHITA, KANSAS 67202-1620
(316) 268-4501

SHEET 15 / 44

SW-111



SIDEWALK CURB DETAIL



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

CALEB JUREY 22002 3/14/25 KANSAS PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION	BY

CITY OF WICHITA
WICHITA, KANSAS

BUFFALO PINES ADDITION PAVING & DRAINAGE

CHARLI STREET P&P (1 OF 3)

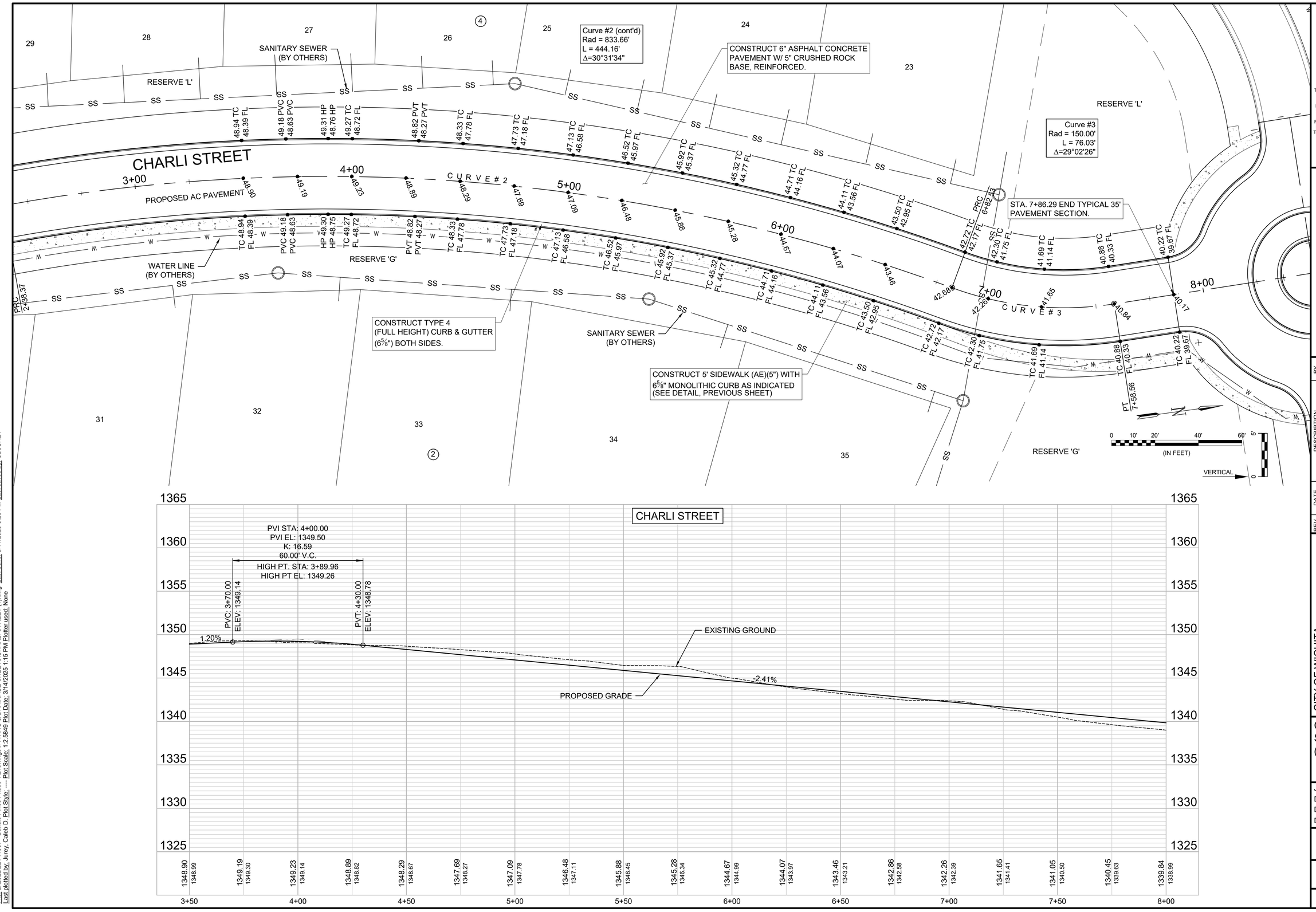
JOB NO.: 22T41007
DATE: MAR 2025
DESIGNED BY: CDJ
DRAWN BY: CDJ

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

DRAWING NUMBER

SHEET NUMBER 16 OF 44

File: L:\2022\22T41007 - Buffalo Pines Phase 1\Drawings\PAVING & DRAINAGE SHEETS\CHARLI STREET.dwg Last Save: 3/13/2025 9:10 AM Last saved by: CDJUREY
Last plotted by: Jurey, Caleb D. Plot Style: ---- Plot Scale: 1:2.5849 Plot Date: 3/14/2025 1:14 PM Plotter used: None



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

CALEB JUREY
20002
3/14/25
KANSAS
PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION	BY

CITY OF WICHITA
WICHITA, KANSAS

BUFFALO PINES ADDITION PAVING & DRAINAGE

CHARLI STREET P&P (2 OF 3)

JOB NO.: 22T41007
DATE: MAR 2025
DESIGNED BY: CDJ
DRAWN BY: CDJ

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

SHEET NUMBER 17 OF 44

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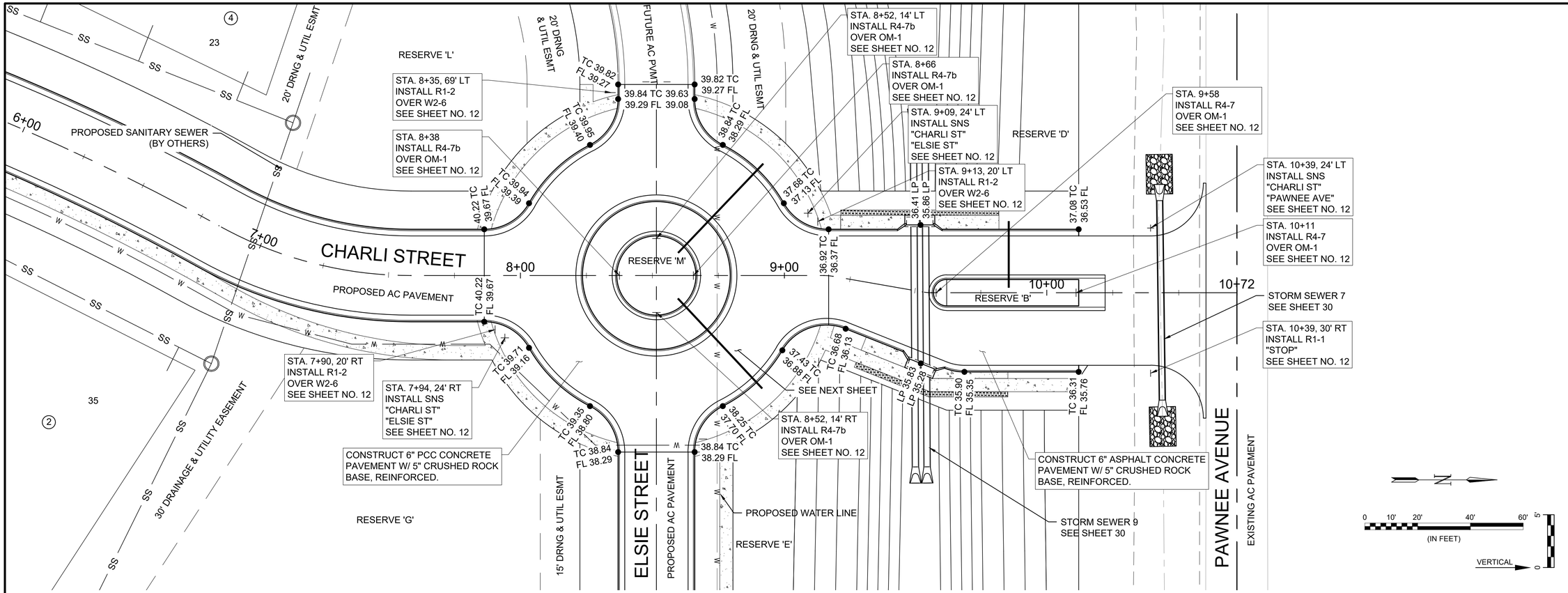

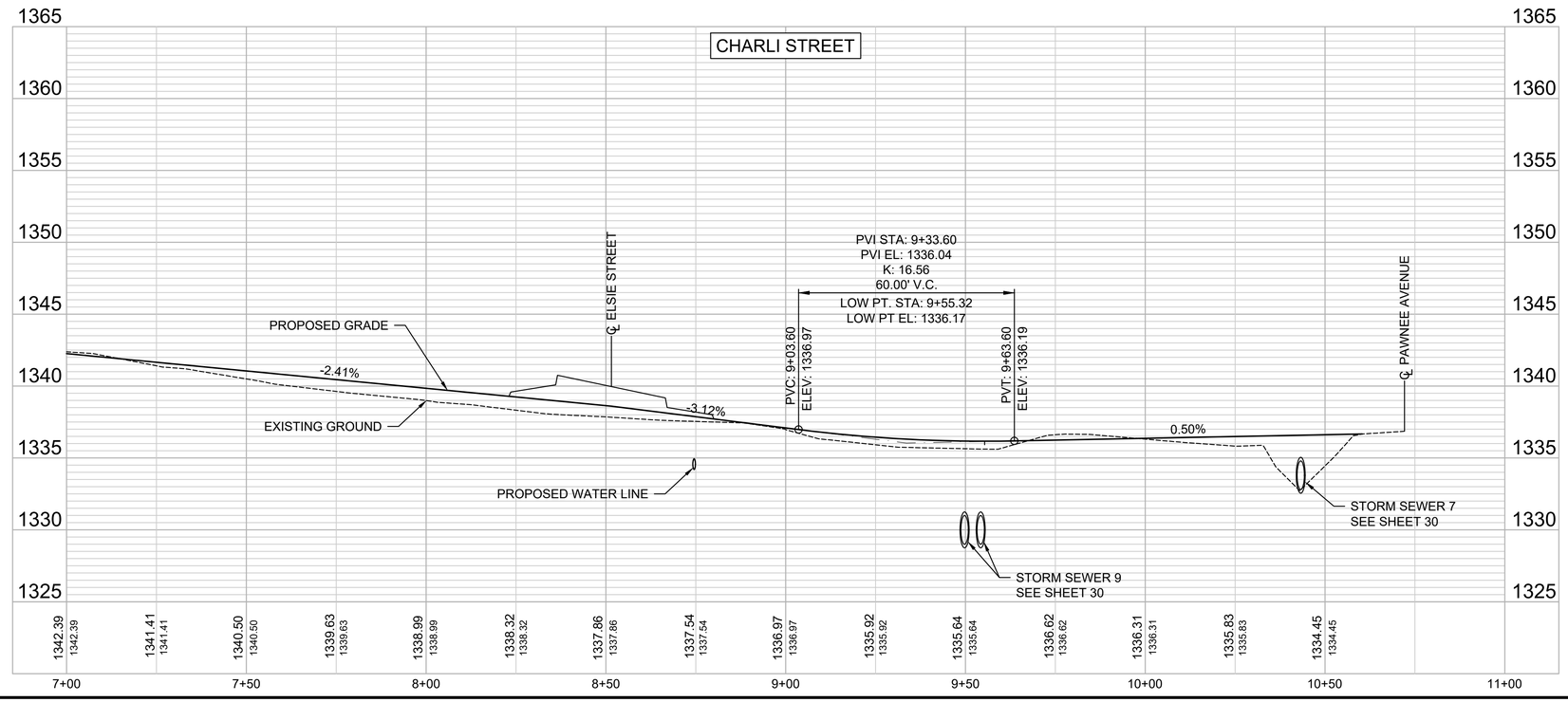

1995 Midfield Rd
Wichita, KS 67209
(316) 264-8008

CALEB JUREY 25002 3/14/25 KANSAS PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION	BY

CITY OF WICHITA
WICHITA, KANSAS

BUFFALO PINES ADDITION PAVING & DRAINAGE

CHARLI STREET P&P (3 OF 3)

JOB NO.: 22T41007
DATE: MAR 2025
DESIGNED BY: CDJ
DRAWN BY: CDJ

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

DRAWING NUMBER

SHEET NUMBER 18 OF 44

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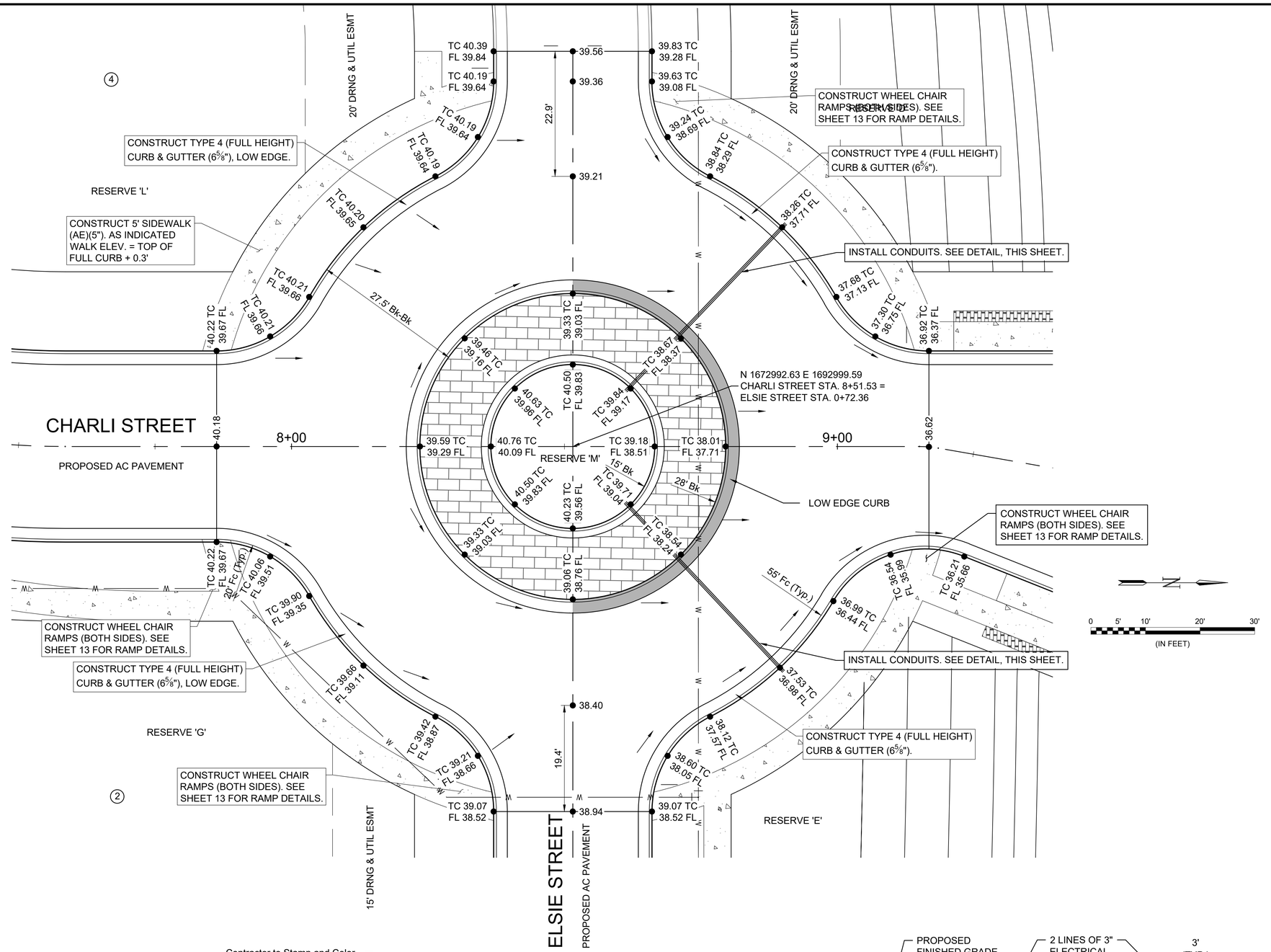
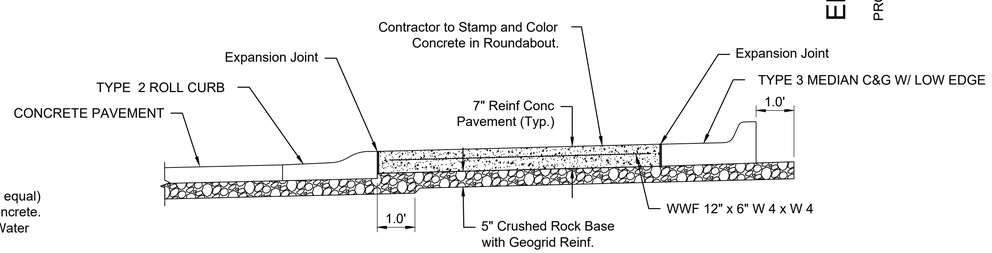


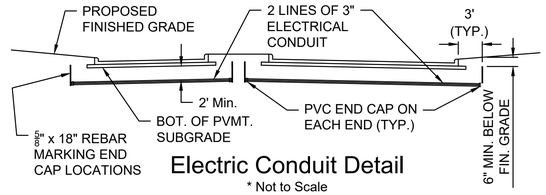
CONSTRUCT WHEEL CHAIR RAMPS (BOTH SIDES). SEE SHEET 13 FOR RAMP DETAILS.

CONSTRUCT TYPE 4 (FULL HEIGHT) CURB & GUTTER (6⅝"), LOW EDGE.

CONSTRUCT WHEEL CHAIR RAMPS (BOTH SIDES). SEE SHEET 13 FOR RAMP DETAILS.

Stamped & Colored Concrete
Color: Rustic Brown w/ Dark Gray color release
Pattern: English Yorkstone from Scofield Systems (or approved equal)
Contractor shall apply sealer and water repellant to stamped concrete.
Decra-Seal Natural Water Based Enhance and WR Meadows Water Repellant (or approved equals)





Electric Conduit Detail
* Not to Scale

GARVER

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

CALEB JUREY
LICENSED
27002
3/14/25
KANSAS
PROFESSIONAL ENGINEER

REV	DATE	DESCRIPTION	BY

CITY OF WICHITA
WICHITA, KANSAS

BUFFALO PINES ADDITION PAVING & DRAINAGE

ROUNDABOUT

JOB NO.: 22T41007
DATE: MAR 2025
DESIGNED BY: CDJ
DRAWN BY: CDJ

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

DRAWING NUMBER

SHEET NUMBER 19 OF 44

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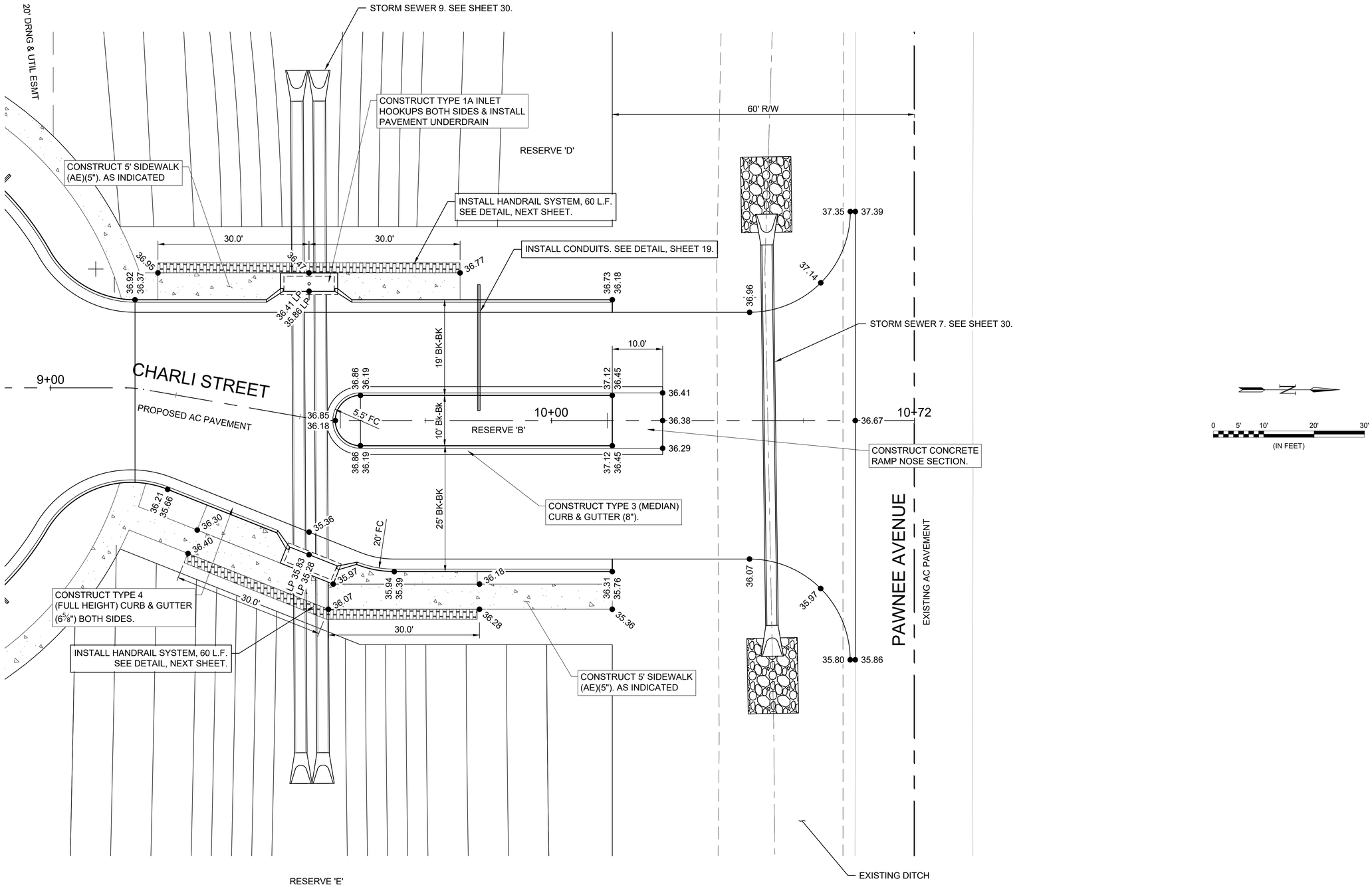


1995 Midfield Rd
Wichita, KS 67209
(316) 264-8008

CALEB JUREY
27002
3/14/25
PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION	BY

CITY OF WICHITA
WICHITA, KANSAS

BUFFALO PINES ADDITION PAVING & DRAINAGE

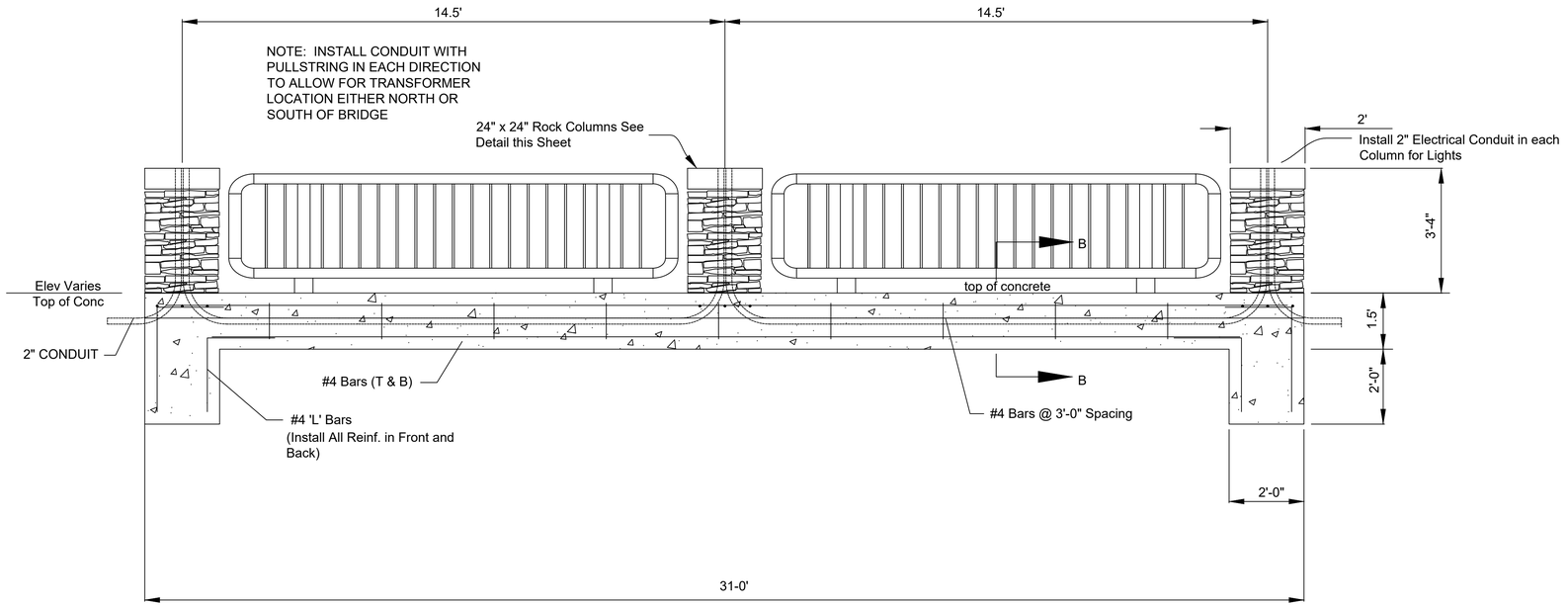
ENTRYWAY

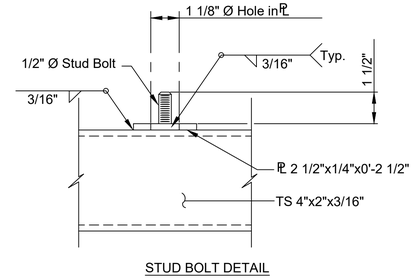
JOB NO.: 22T41007
DATE: MAR 2025
DESIGNED BY: CDJ
DRAWN BY: CDJ

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

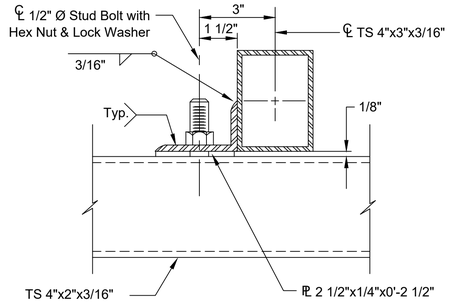
DRAWING NUMBER

SHEET NUMBER 20 OF 44

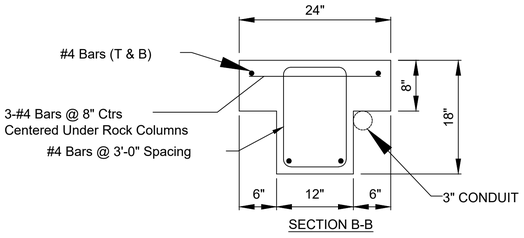




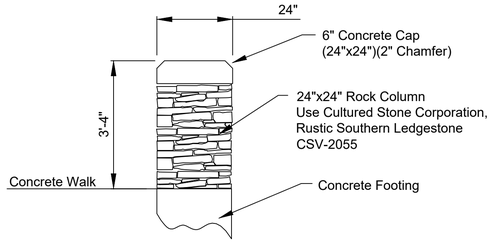
STUD BOLT DETAIL



RAIL CONNECTION DETAIL

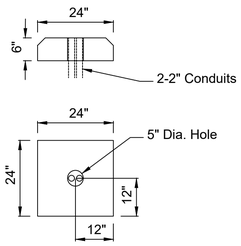


SECTION B-B



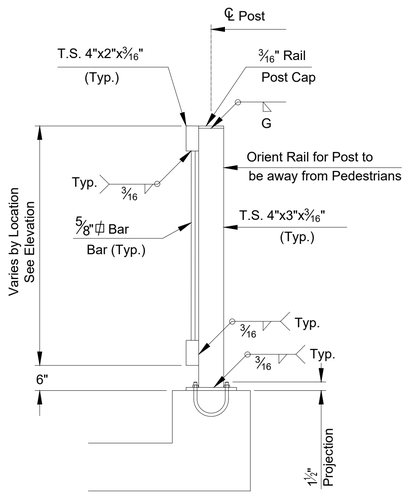
BRICK COLUMN DETAIL

Contractor shall submit sample prior to construction.

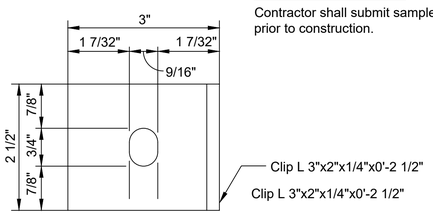


CONCRETE CAP DETAIL

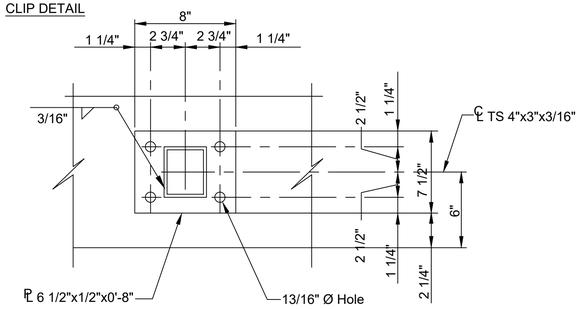
Use Style 100 Pier Cap manufactured by Architectural Cast Stone, or approved alternative.



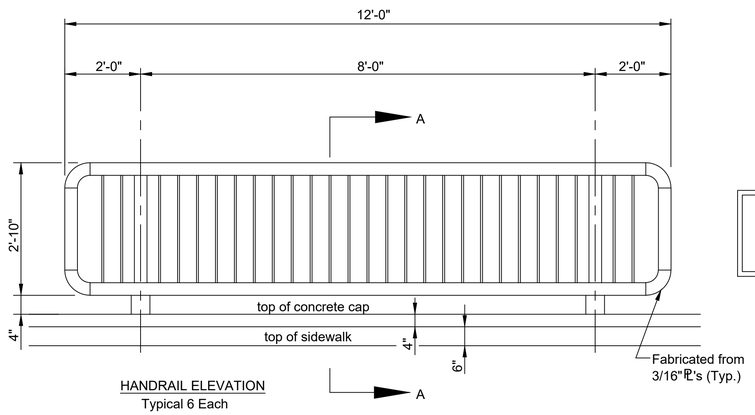
TYPICAL HUBGUARD POST
Not to Scale



CLIP DETAIL



BASE PLATE DETAIL



HANDRAIL ELEVATION
Typical 6 Each

RAIL CONNECTION DETAIL

BRIDGE HANDRAIL NOTES:

The rail members shall conform to ASTM Designation A36 or equivalent.

Rail shall be fabricated in lengths to include a minimum of two and a maximum of three panels. Posts shall be set vertical. Shims may be used between concrete and base plates of posts.

All parts of Bridge Handrail shall be painted. Shop and field coats shall conform to organic or inorganic Zinc for primer and "High-Build Polyurethane Finish Coat" at the Standard Specifications for State Road and Bridge Construction, 1990 Edition, Kansas Department of Transportation.

All materials, equipment and labor necessary for the installation of the Handrail on the bridge shall be subsidiary to the bid item, "Handrail".

Handrail shall be Black in color. Contractor to submit color chart to Engineer for approval.

Touch Up: All bolts, nuts and studs and other small areas of damaged paint (10 S.F. or less) requiring touch up will be prepared and painted w/approved alluminum epoxy mastic primer.

ALL WORK AND MATERIAL ON THIS SHEET SHALL BE BID UNDER 'LUMP SUM' FOR "HANDRAIL SYSTEM CONSTRUCTION".

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

CALEB JUREY
LICENSED
27002
3/14/25
KANSAS
PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION	BY

CITY OF WICHITA
WICHITA, KANSAS

BUFFALO PINES ADDITION PAVING & DRAINAGE

ENTRYWAY DETAILS

JOB NO.: 22T41007
DATE: MAR 2025
DESIGNED BY: CDJ
DRAWN BY: CDJ

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

DRAWING NUMBER

SHEET NUMBER 21 OF 44

File: L:\2022\22T41007 - Buffalo Pines Phase 1\Drawings\PAVING & DRAINAGE SHEETS\ENTRYWAY.dwg Last Save: 3/12/2025 10:47 AM Last saved by: CDJUREY
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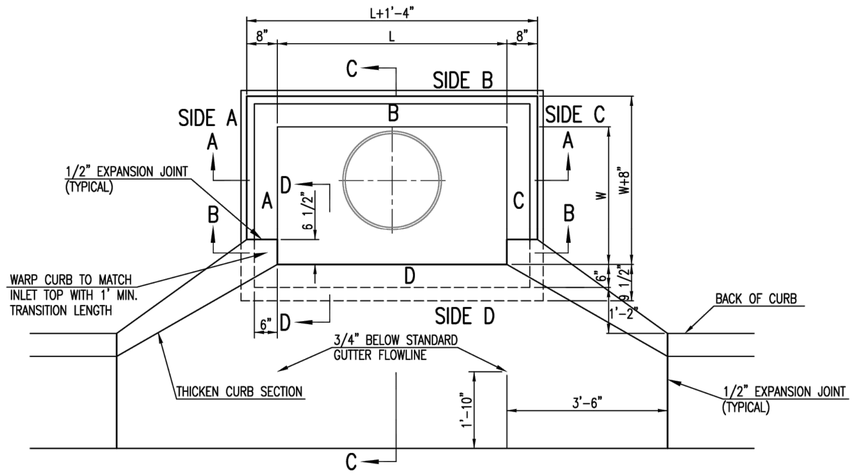


TOP VIEW

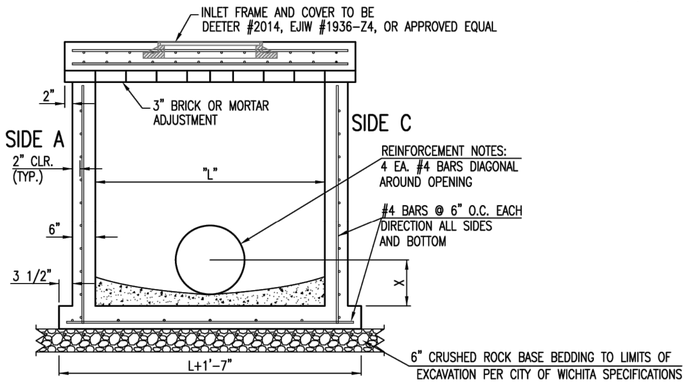
BAR SCHEDULE		
INLET OPENING	B1 BARS	SPACING
5'-0"	#4	4"
10'-0"	#6	3.5"

PRECAST CURB INLET WIDTHS				
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"

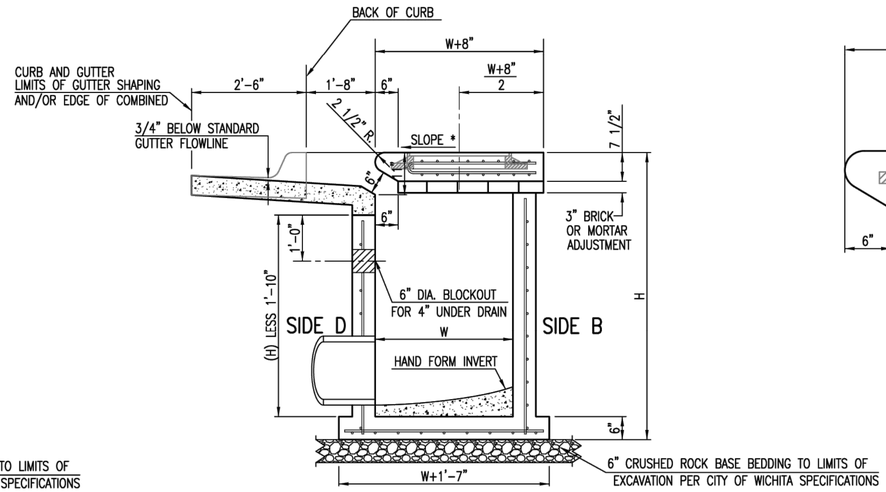
** FOR PIPES PERPENDICULAR TO INLET WALL

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.

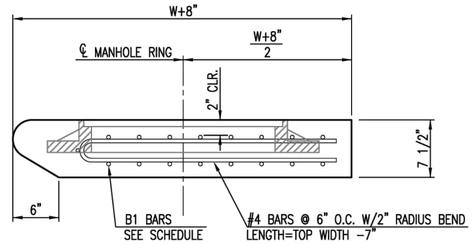


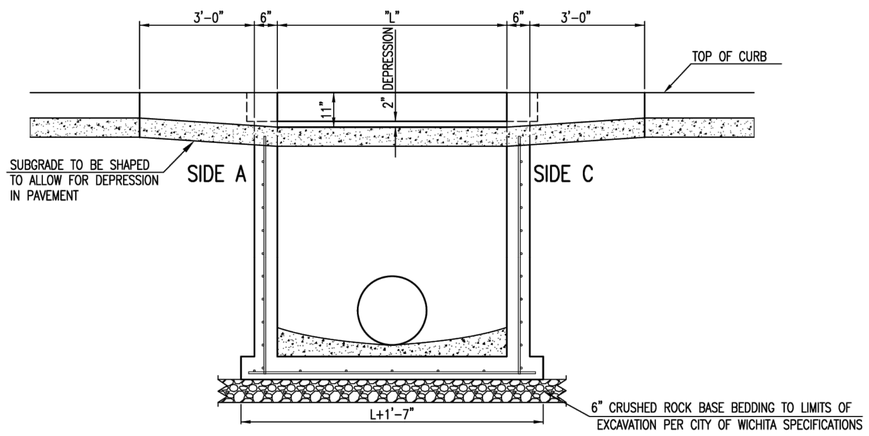
SECTION "A-A"



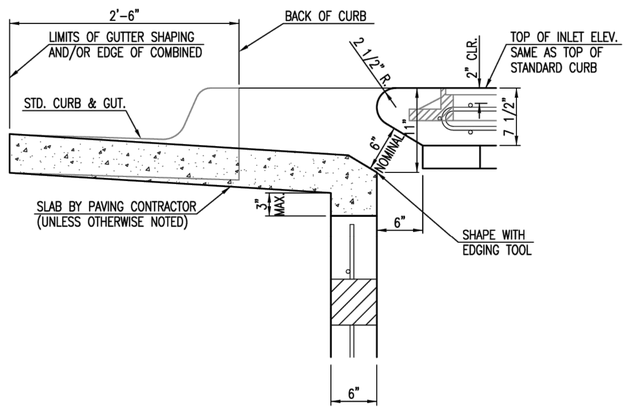
SECTION "C-C"

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





SECTION "B-B"



SECTION "D-D"

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

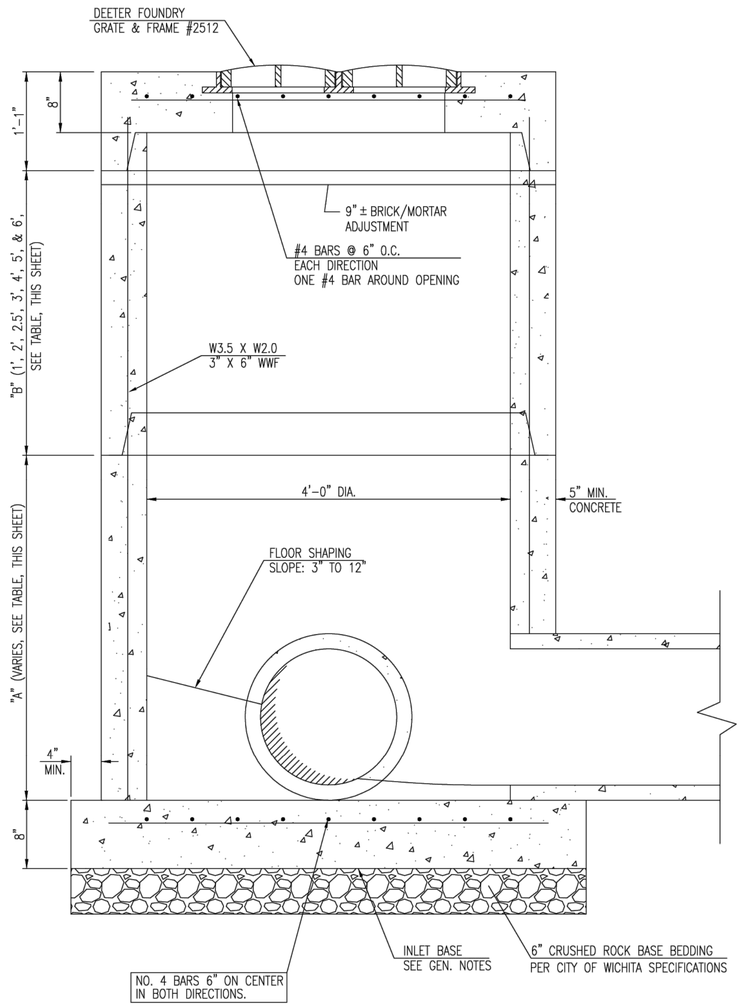
CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER	OCA NUMBER	DATE

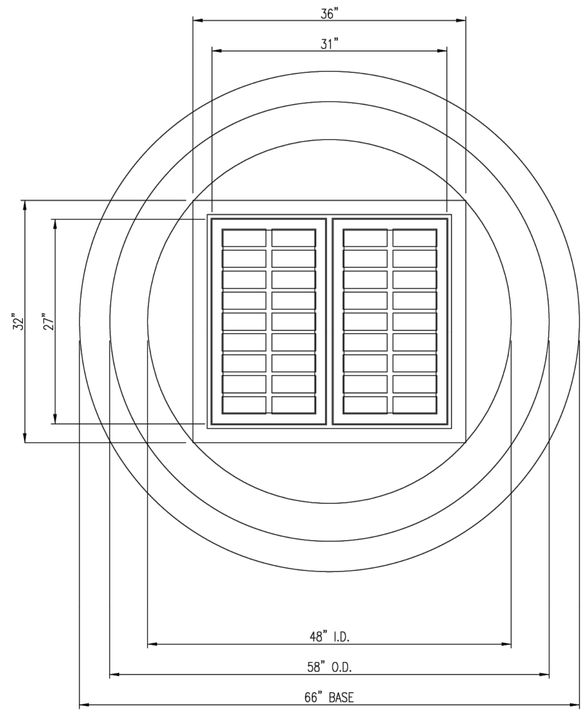
CITY ENGINEER'S OFFICE
CITY HALL - SEVENTH FLOOR
455 NORTH MAIN STREET
WICHITA, KANSAS 67202-1620
(316) 268-4501

SHEET 22 / 44

SW-103



BACKYARD INLETS SHALL NOT BE USED UNDER PAVEMENT



GENERAL NOTES

1. 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.

2. 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.

3. 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.

4. 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.

5. 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.

6. THE CROWNS OF INFLOWING PIPES SHALL NEVER BE SET LOWER THAN THE CROWN OF THE OUTFLOWING PIPE.

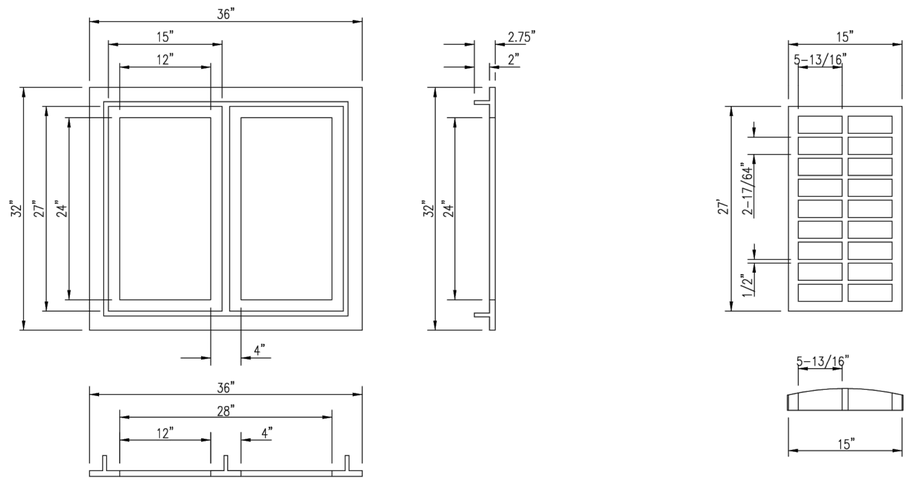
7. JOINTS BETWEEN INLET SECTIONS TO BE SEALED WITH TWO WRAPS OF EXTRUDED BUTYL RUBBER JOINT MASTIC MEETING CITY OF WICHITA TYPE "A" MANHOLE SPECIFICATIONS.

8. BACKYARD INLETS SHALL BE PAID FOR AT THE UNIT PRICE BID PER EACH. ALL STANDARD BACKYARD INLET DIAMETERS WILL BE 4'.

9. 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 INLETS

LINE #	STA.	DIAMETER	TOP OF INLET	INLET FLOW	"A"	"B"



DEETER #2512 CATCH BASIN INLET GRATE & FRAME

CITY OF WICHITA
PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

BACKYARD INLET

CITY ENGINEER
GARY JANZEN, P.E.

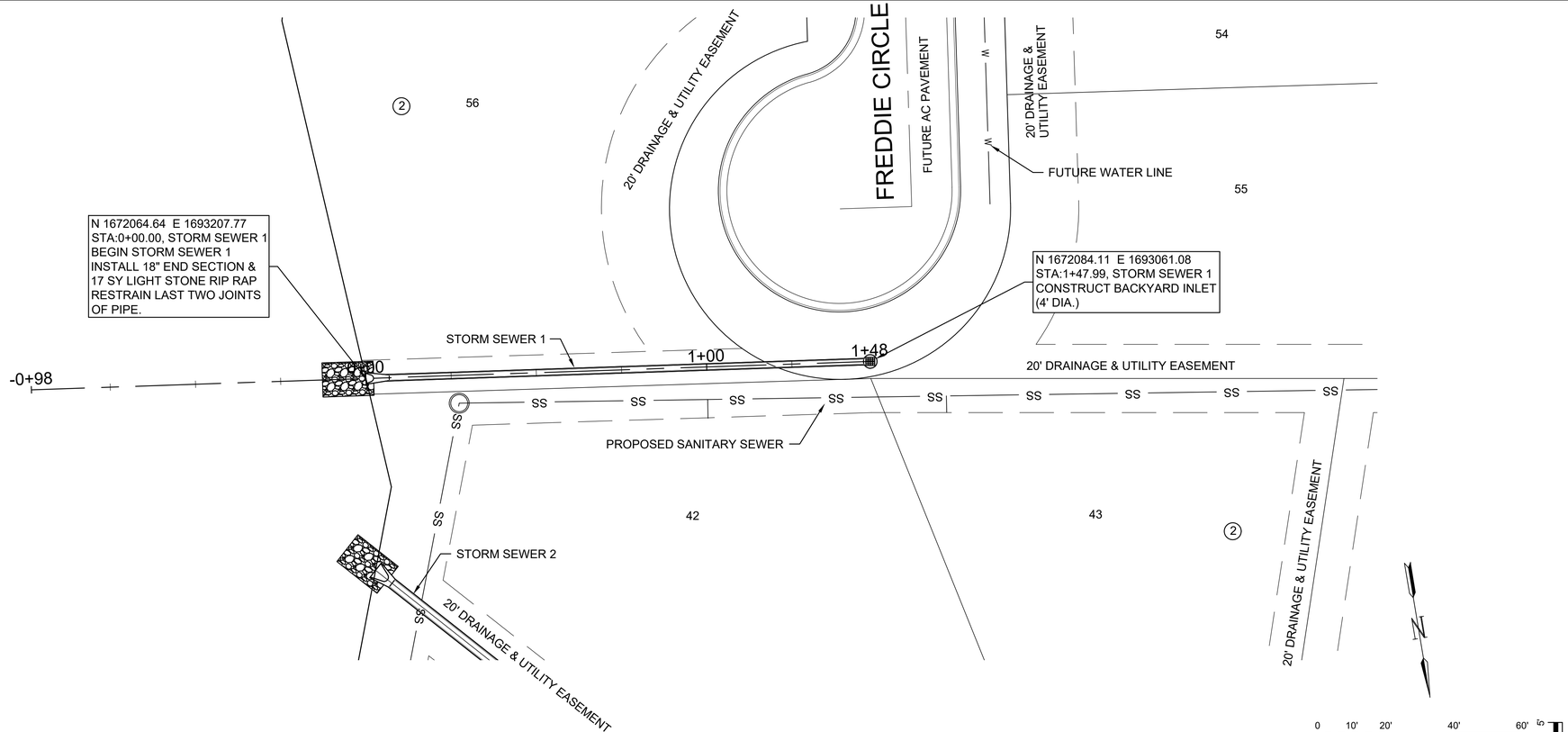
PROJECT NUMBER	OCA NUMBER	DATE
----	____	05/2011

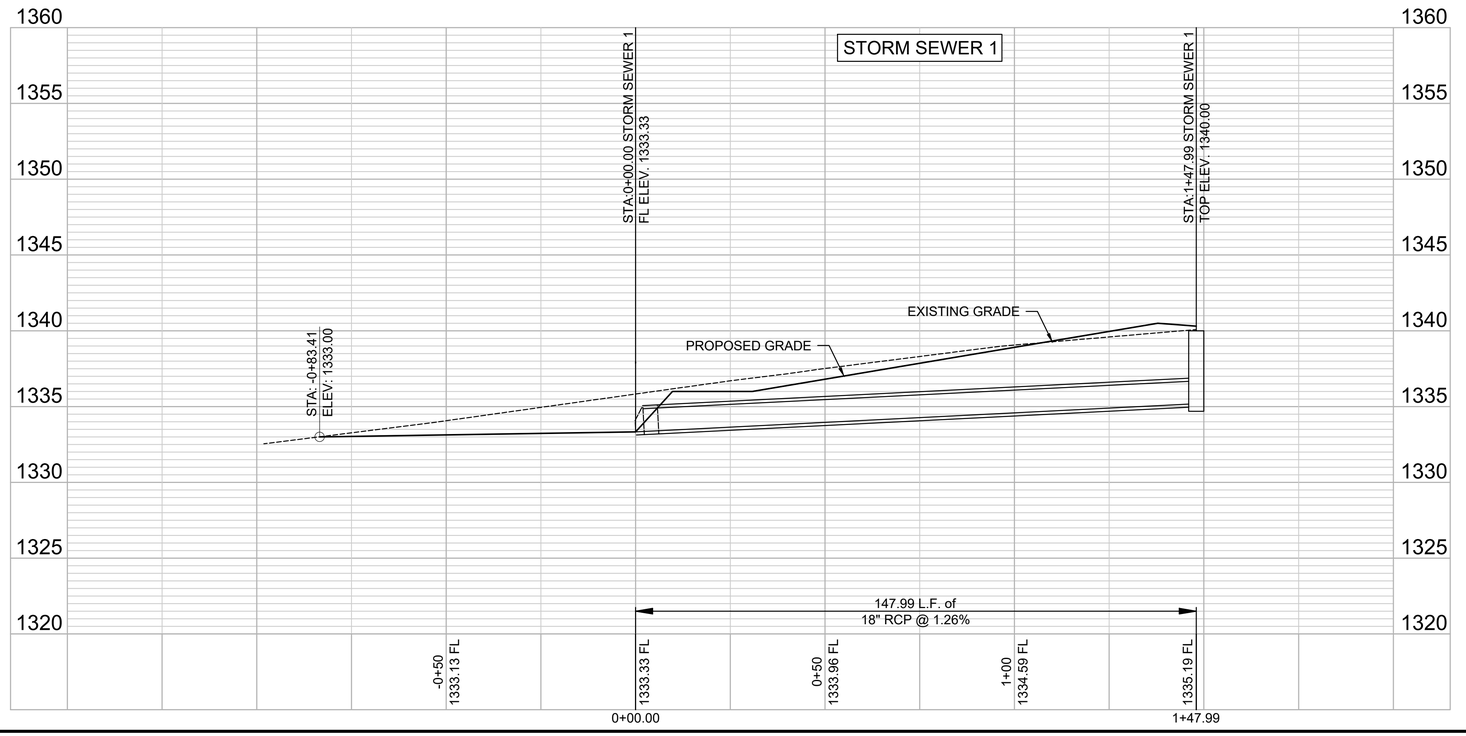
CITY ENGINEER'S OFFICE
CITY HALL - SEVENTH FLOOR
455 NORTH MAIN STREET
WICHITA, KANSAS 67202-1620
(316) 268-4501

SHEET
23
44

SW-203

Xref R:\Transportation\Local Governments\Cities\Kansas\ICT Blocks\ICT-NP-BORDER-34x22.dwg





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

CALEB JUREY
27002
3/4/25
LICENSED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION	BY

CITY OF WICHITA
WICHITA, KANSAS

BUFFALO PINES ADDITION PAVING & DRAINAGE

STORM SEWER 1 (P&P)

JOB NO.: 22T41007
DATE: MAR 2025
DESIGNED BY: CDJ
DRAWN BY: CDJ

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

DRAWING NUMBER

SHEET NUMBER 24 OF 44

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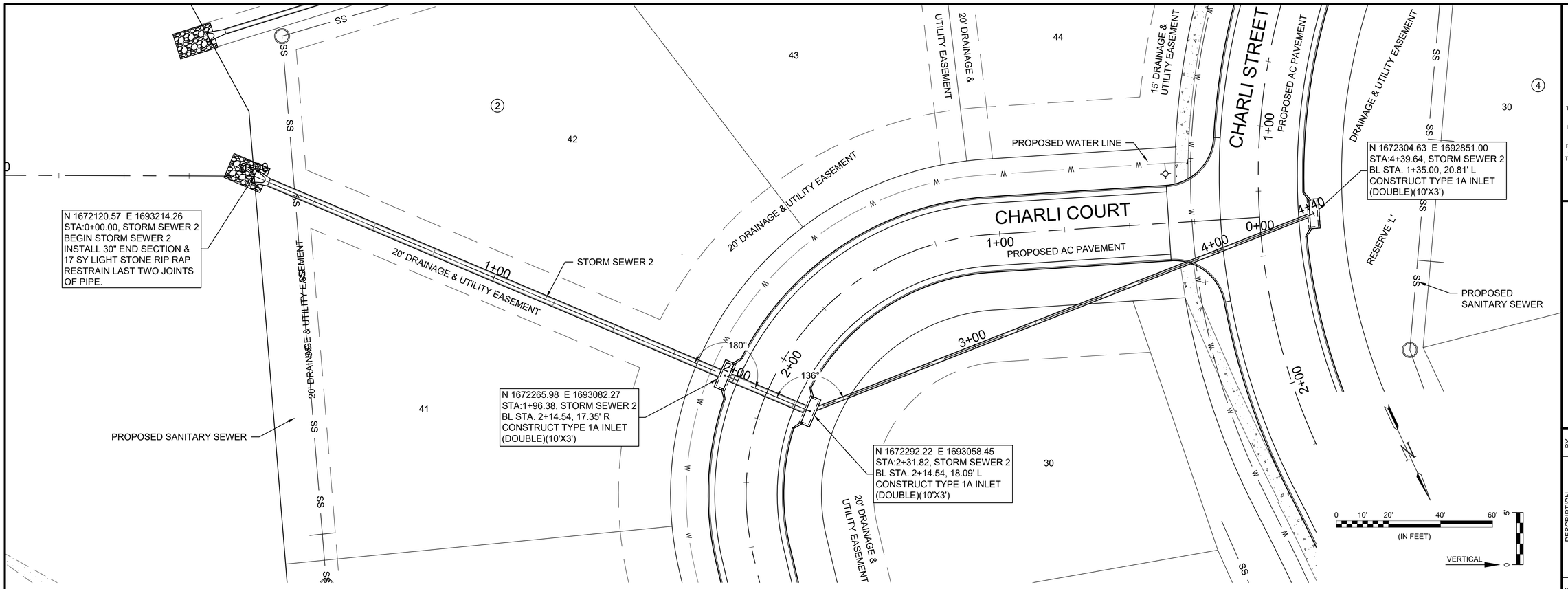
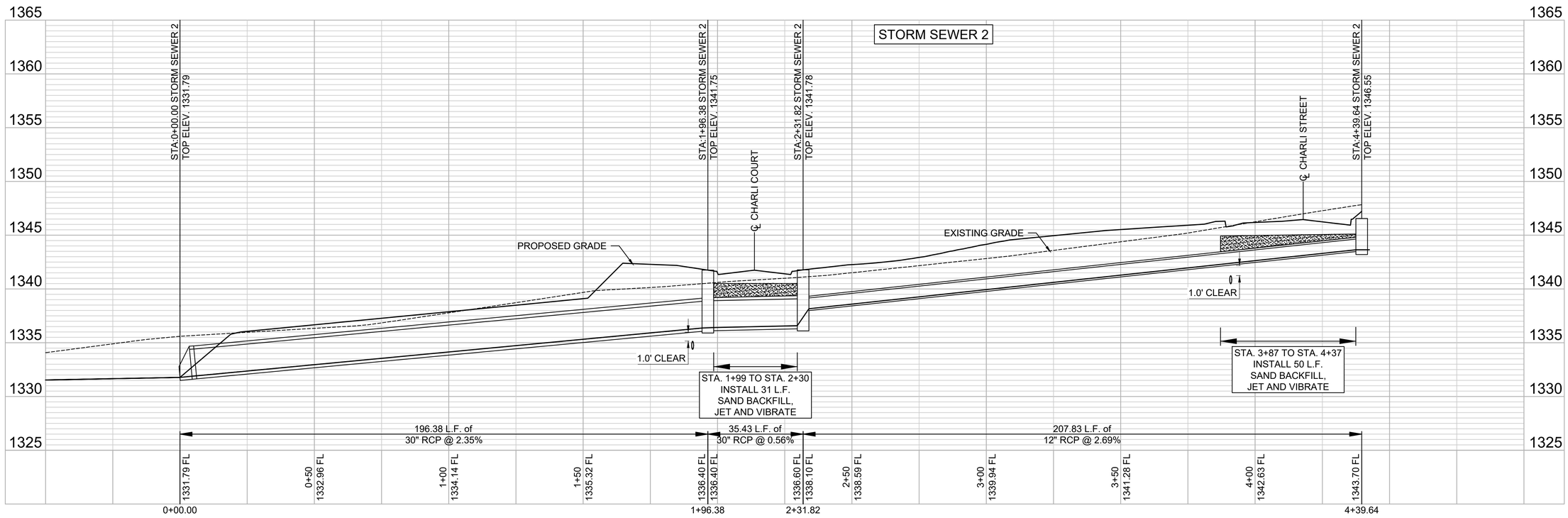
Last plotted by: Jurey, Caleb D Plot Style: ---- Plot Scale: 1:2.5849 Plot Date: 3/14/2025 1:18 PM Plotter used: None





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

CALEB JUREY
LICENSED
22002
3/14/25
KANSAS
PROFESSIONAL ENGINEER

REV	DATE	DESCRIPTION	BY

CITY OF WICHITA

CITY OF WICHITA
WICHITA, KANSAS

BUFFALO PINES
ADDITION PAVING &
DRAINAGE

STORM
SEWER 2
(P&P)

JOB NO.: 22T41007
DATE: MAR 2025
DESIGNED BY: CDJ
DRAWN BY: CDJ

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SHEET NUMBER 25 OF 44

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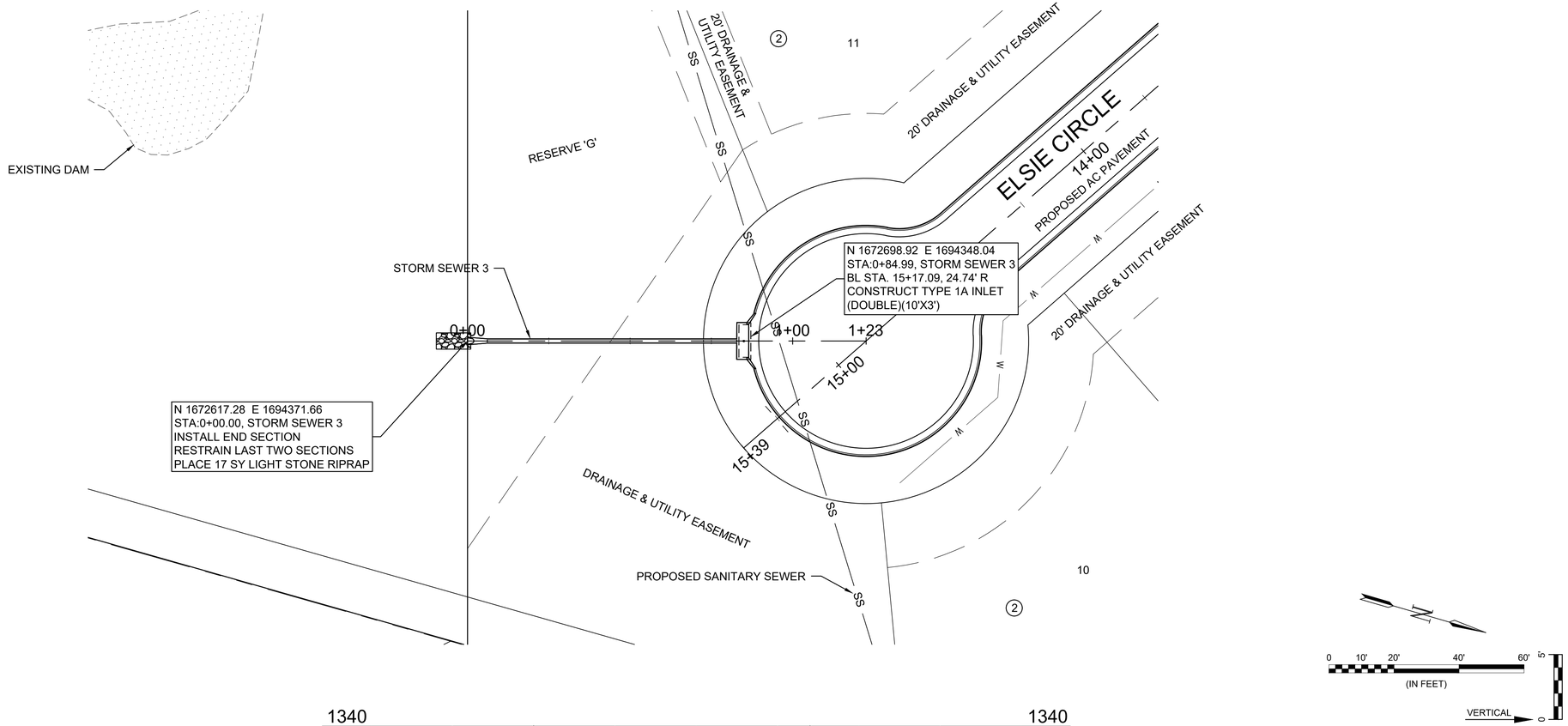

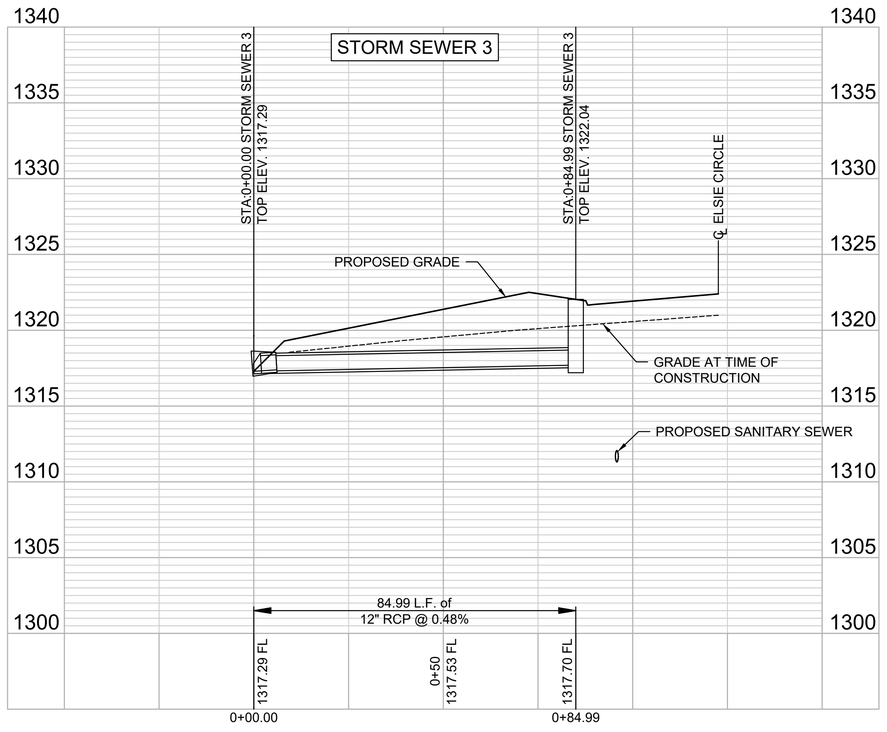

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Wichita, KS 67209
(316) 264-8008

CALEB JUREY
27002
3/14/25
KANSAS
PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION	BY

CITY OF WICHITA
WICHITA, KANSAS

BUFFALO PINES
ADDITION PAVING &
DRAINAGE

STORM
SEWER 3
(P&P)

JOB NO.: 22T41007
DATE: MAR 2025
DESIGNED BY: CDJ
DRAWN BY: CDJ

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0 1"
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DRAWING NUMBER

SHEET NUMBER 26 OF 44

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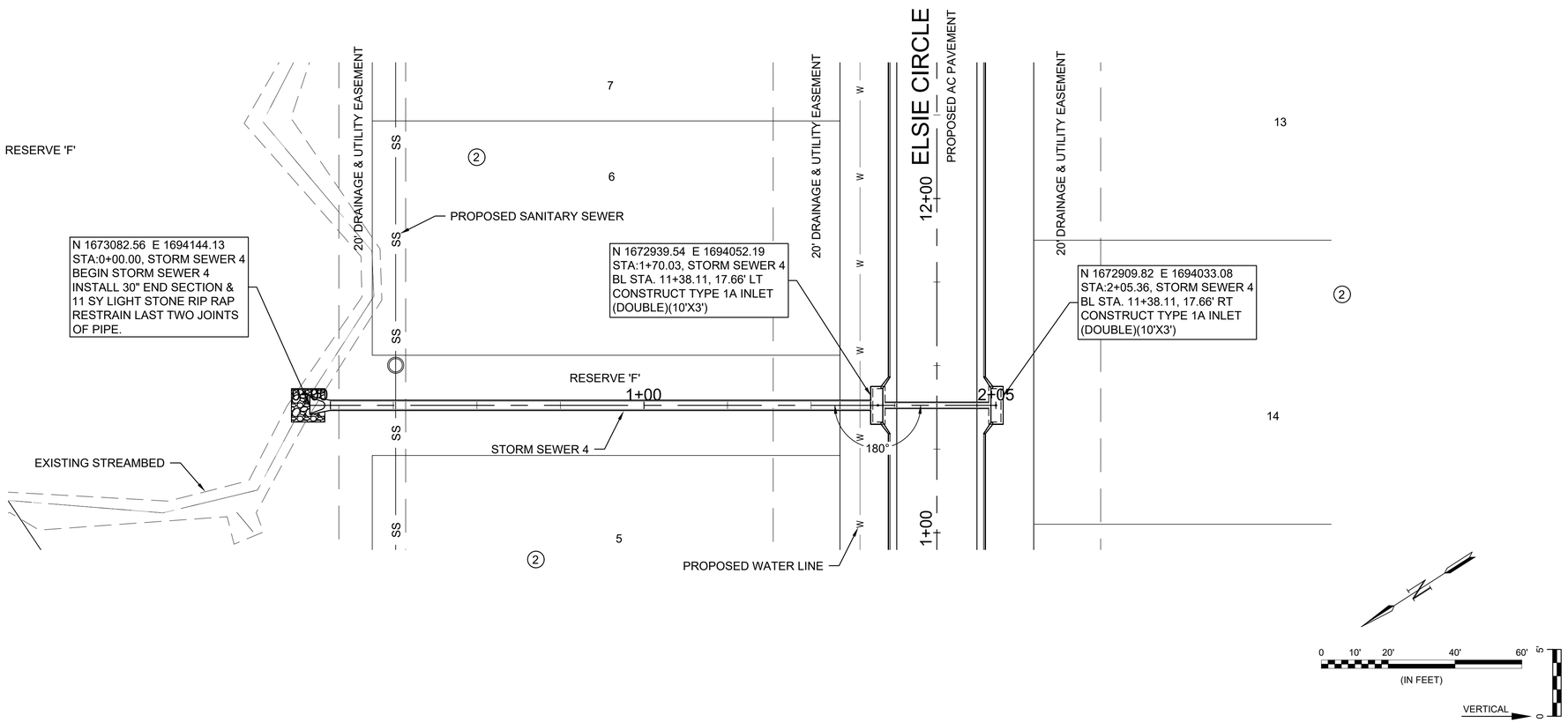

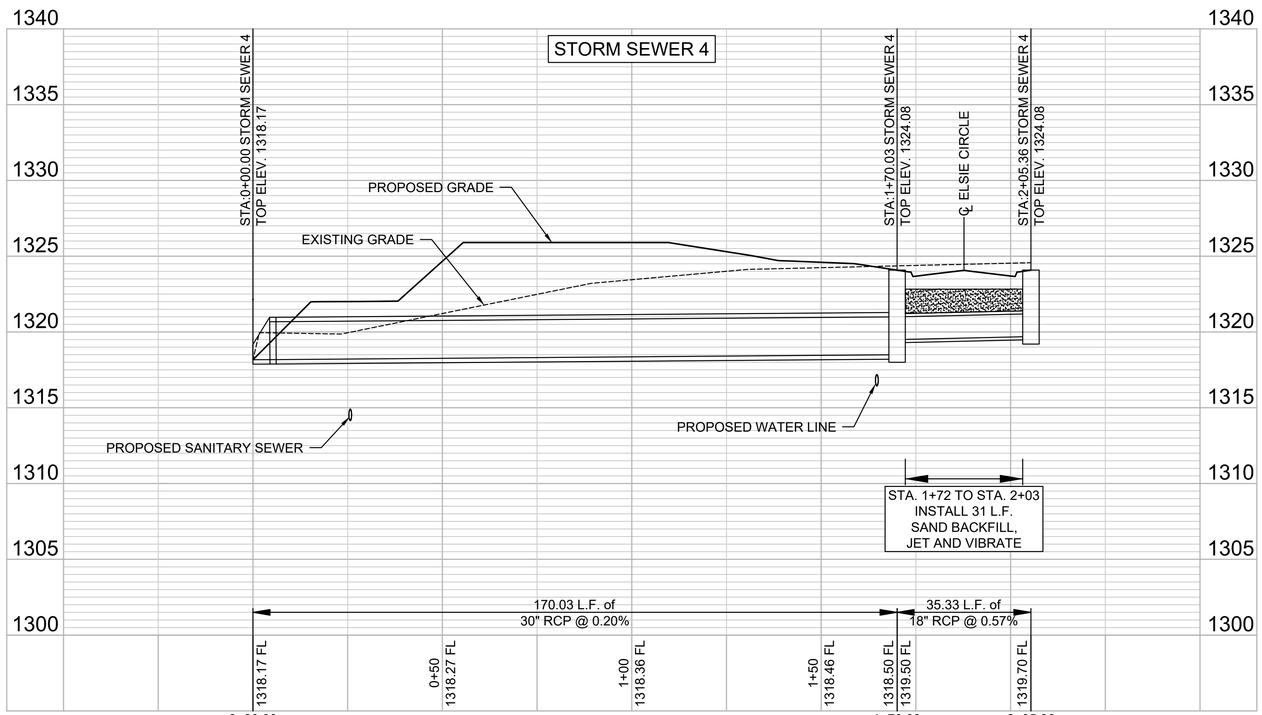

GARVER

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

CALEB JUREY
27002
3/14/25
KANSAS
PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION	BY

CITY OF WICHITA
WICHITA, KANSAS

BUFFALO PINES ADDITION PAVING & DRAINAGE

STORM SEWER 4 (P&P)

JOB NO.: 22T41007
DATE: MAR 2025
DESIGNED BY: CDJ
DRAWN BY: CDJ

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0 1"
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DRAWING NUMBER

SHEET NUMBER 27 OF 44

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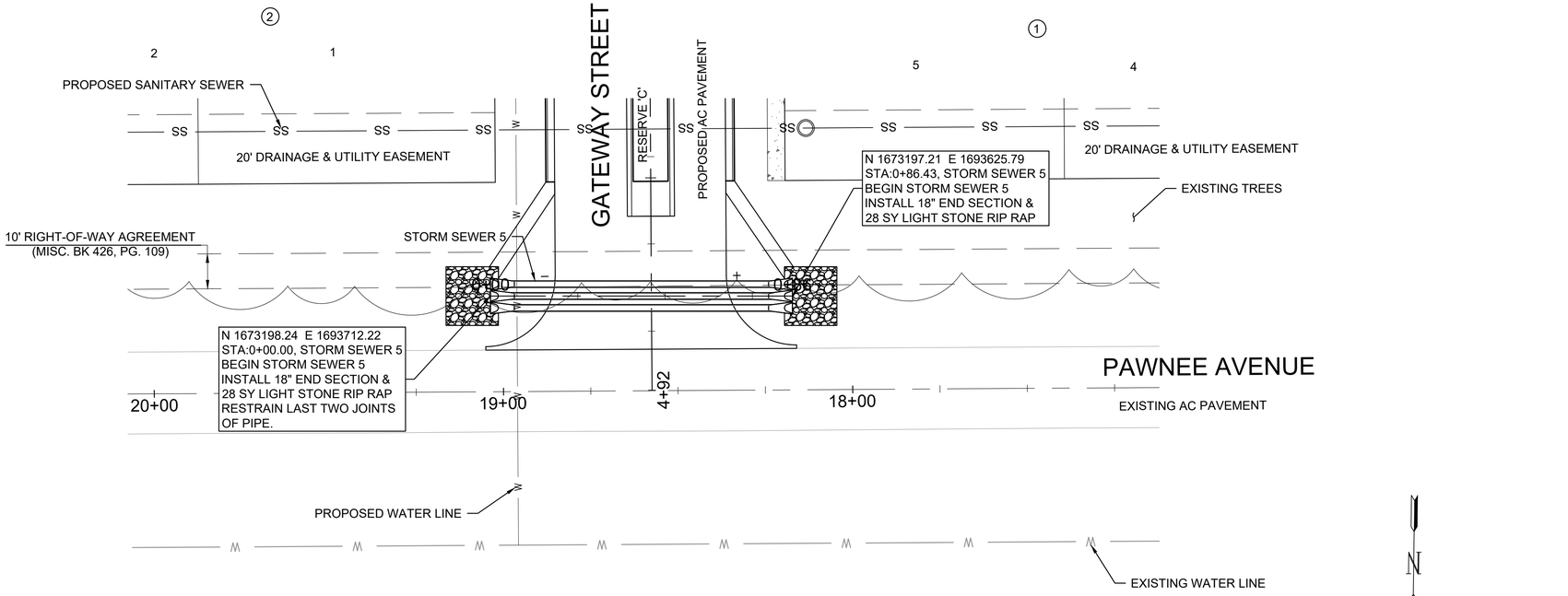
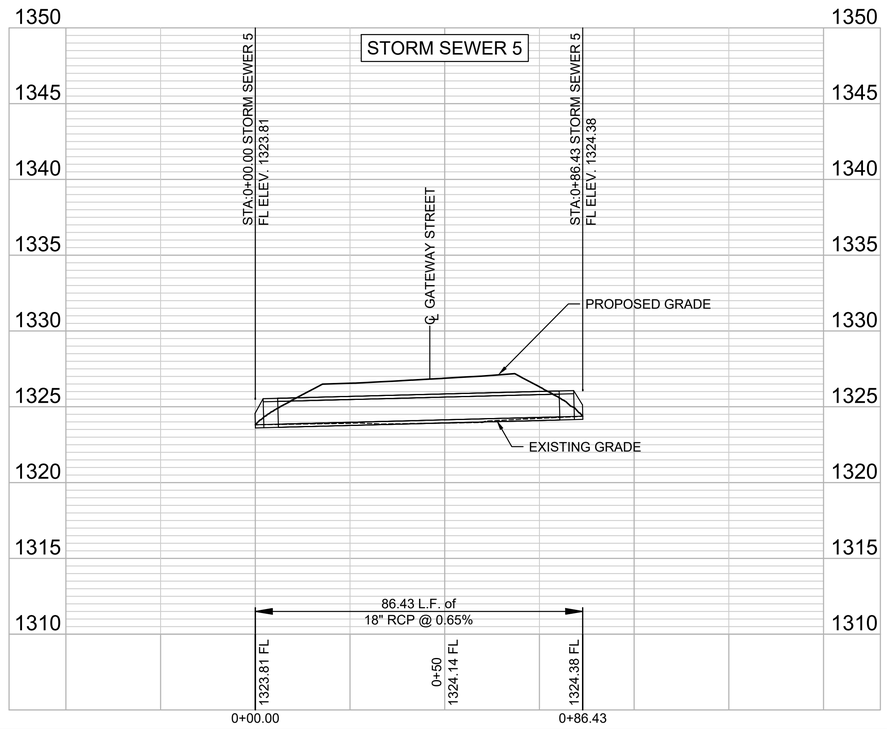
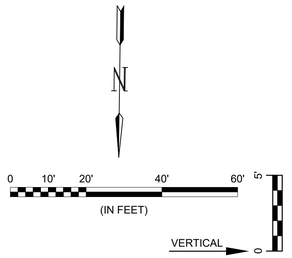
Last plotted by: Jurey, Caleb D. Plot Style: ---- Plot Scale: 1:2.5849 Plot Date: 3/14/2025 1:20 PM Plotter used: None







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Wichita, KS 67209
(316) 264-8008

CALEB JUREY
21002
3/14/25
KANSAS
PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION	BY

CITY OF WICHITA
WICHITA, KANSAS

BUFFALO PINES
ADDITION PAVING &
DRAINAGE

STORM
SEWER 5
(P&P)

JOB NO.: 22T41007
DATE: MAR 2025
DESIGNED BY: CDJ
DRAWN BY: CDJ

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DRAWING NUMBER

SHEET
NUMBER 28 OF 44

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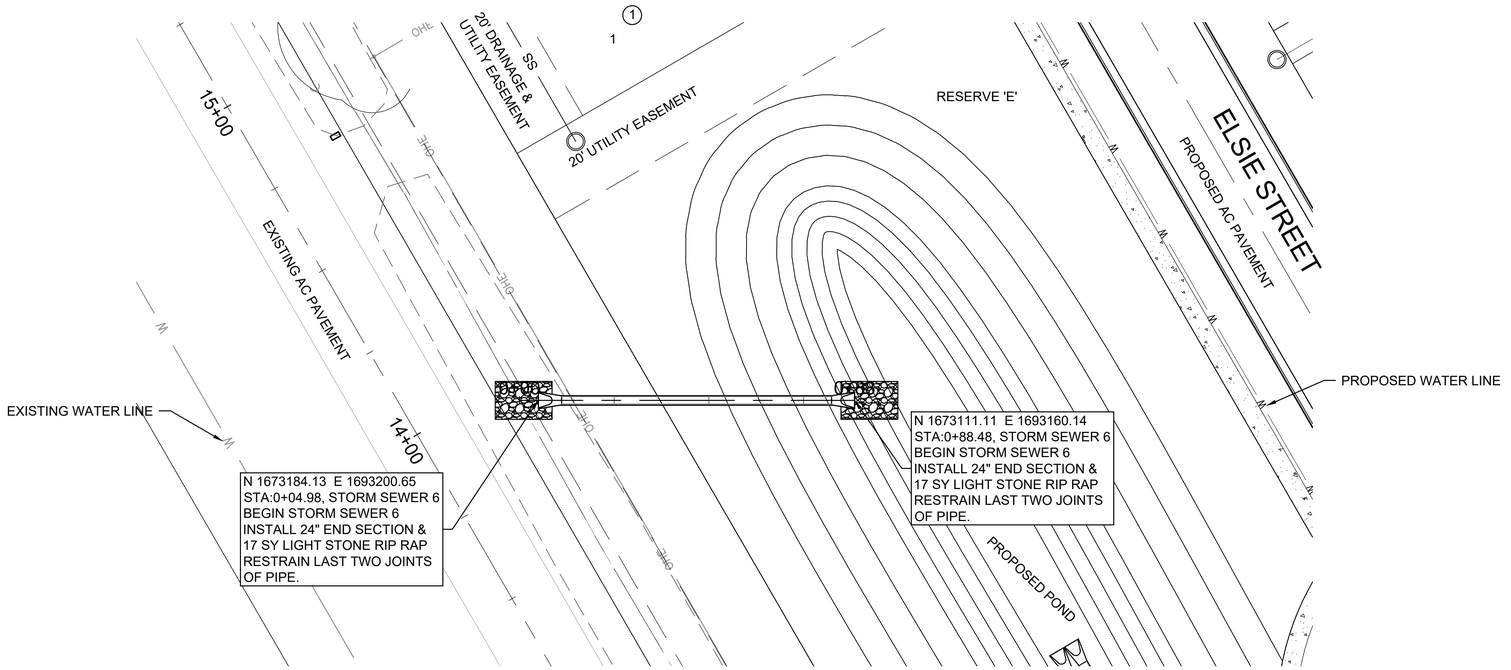

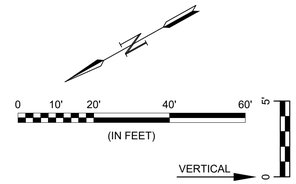

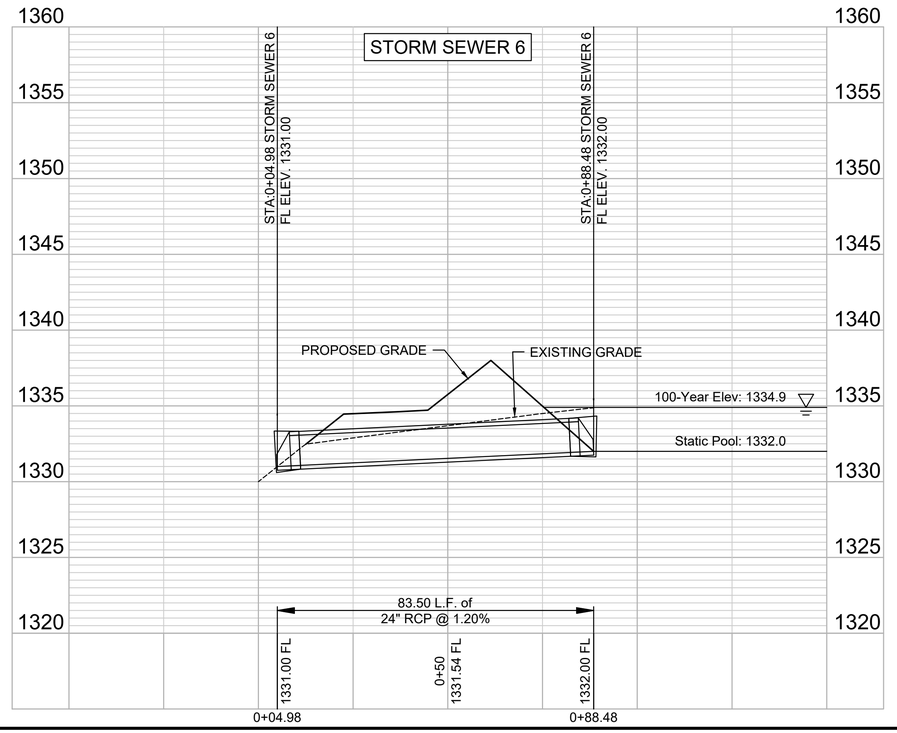

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(316) 264-8008

CALEB JUREY
21002
3/14/25
KANSAS
PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION	BY

CITY OF WICHITA
WICHITA, KANSAS

BUFFALO PINES
ADDITION PAVING &
DRAINAGE

STORM
SEWER 6
(P&P)

JOB NO.: 22T41007
DATE: MAR 2025
DESIGNED BY: CDJ
DRAWN BY: CDJ

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0 1"
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DRAWING NUMBER

SHEET NUMBER 29 OF 44

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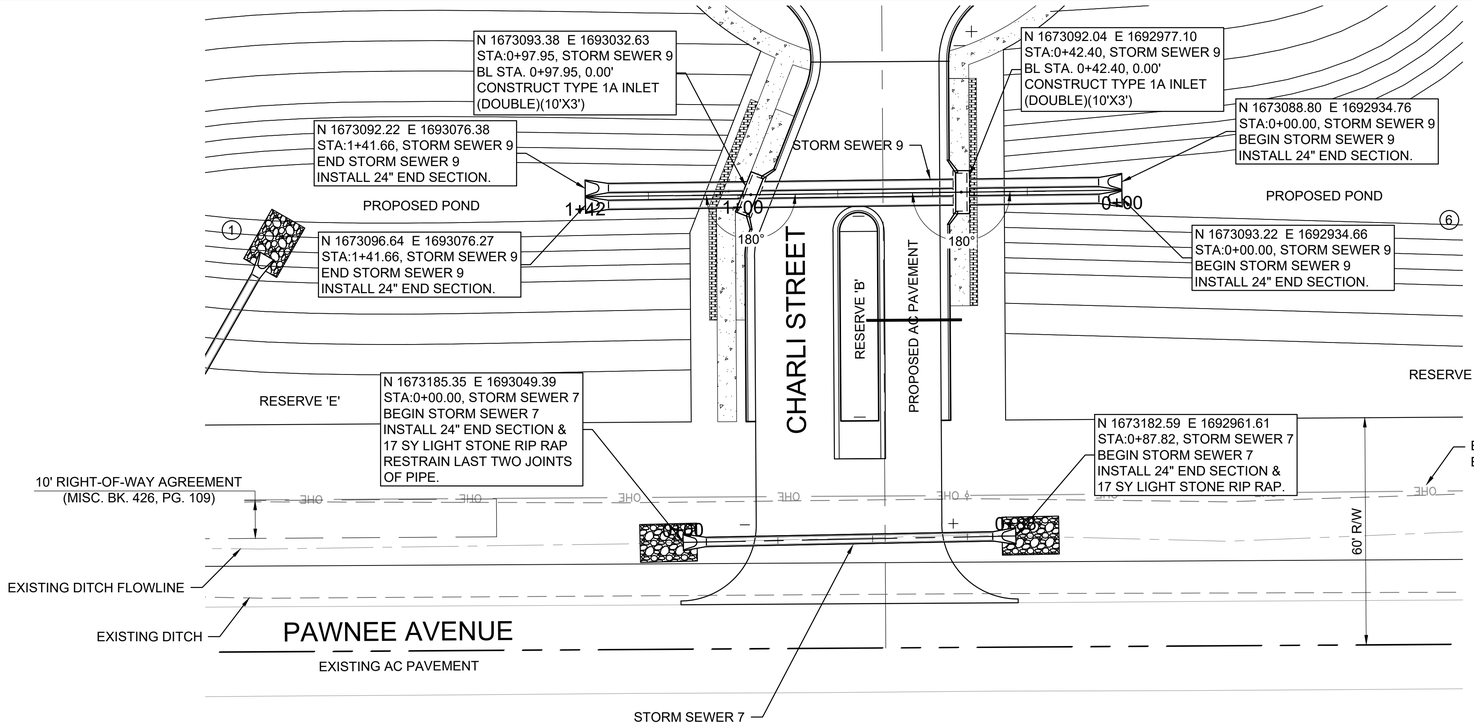

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Wichita, KS 67209
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CALEB JUREY
21002
3/14/25
KANSAS
PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION	BY

CITY OF WICHITA
WICHITA, KANSAS

BUFFALO PINES
ADDITION PAVING &
DRAINAGE

STORM
SEWERS 7 & 9
(P&P)

JOB NO.: 22T41007
DATE: MAR 2025
DESIGNED BY: CDJ
DRAWN BY: CDJ

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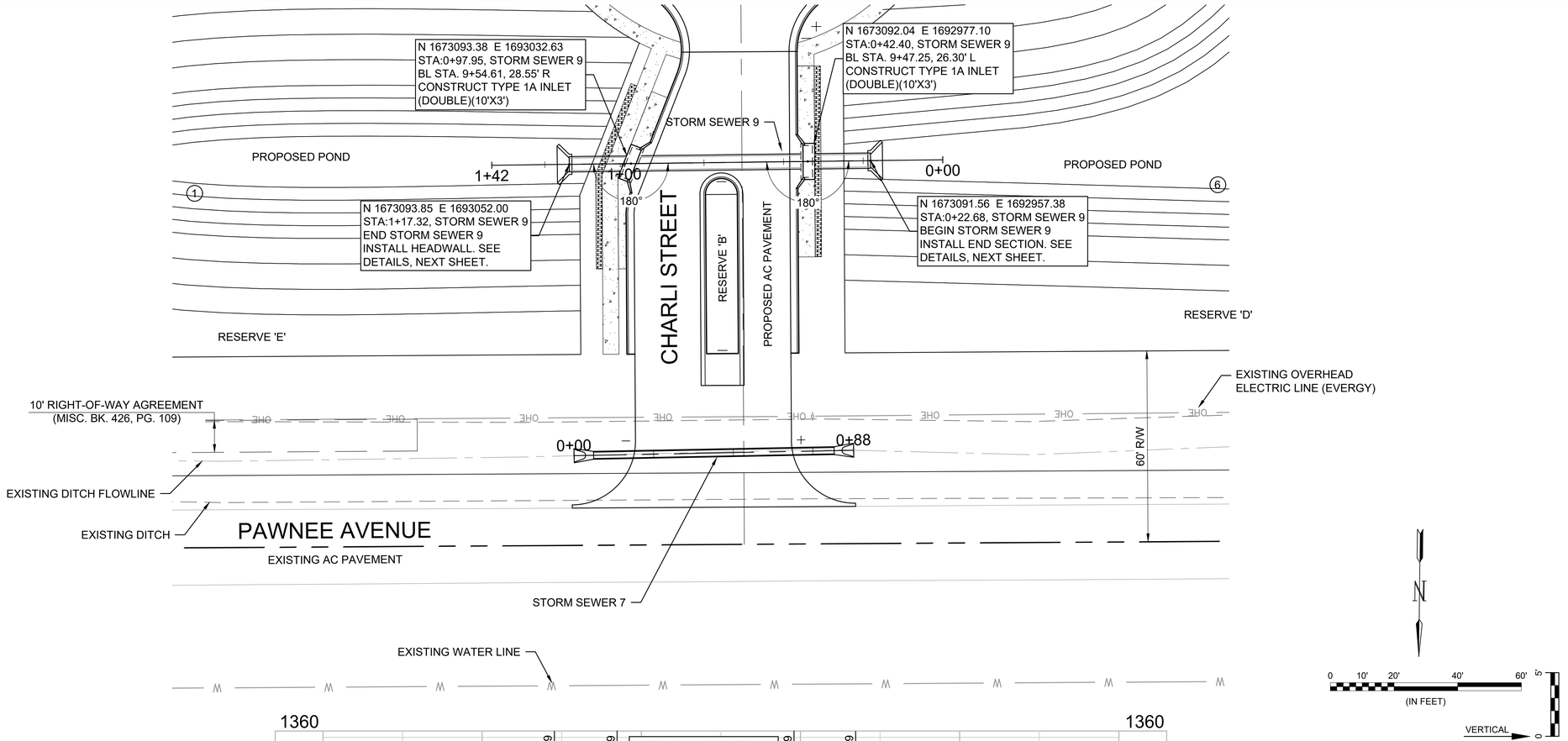
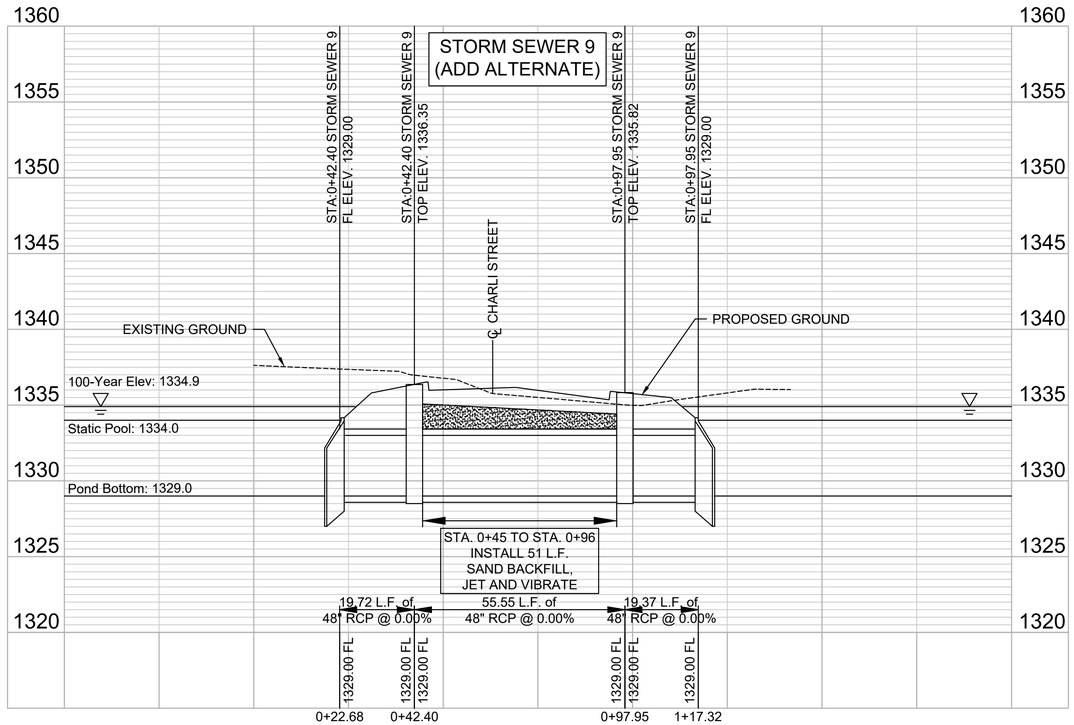
DRAWING NUMBER

SHEET NUMBER 30 OF 44





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Wichita, KS 67209
(316) 264-8008

CALEB JUREY
21002
3/14/25
KANSAS
PROFESSIONAL ENGINEER

REV	DATE	DESCRIPTION	BY

CITY OF WICHITA

CITY OF WICHITA
WICHITA, KANSAS

BUFFALO PINES
ADDITION PAVING &
DRAINAGE

ADD
ALTERNATE

JOB NO.: 22T41007
DATE: MAR 2025
DESIGNED BY: CDJ
DRAWN BY: CDJ

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0 1"
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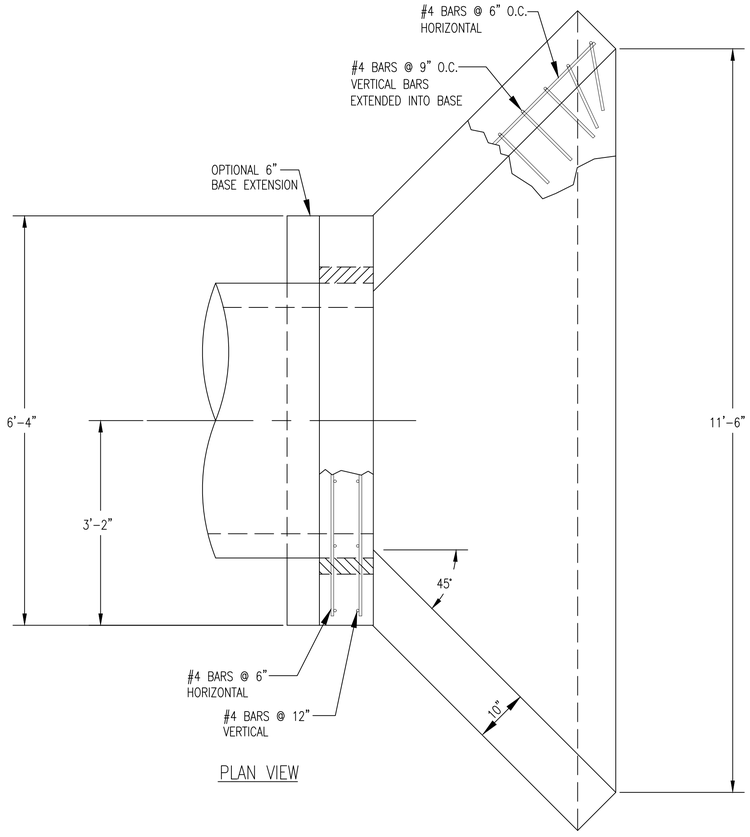
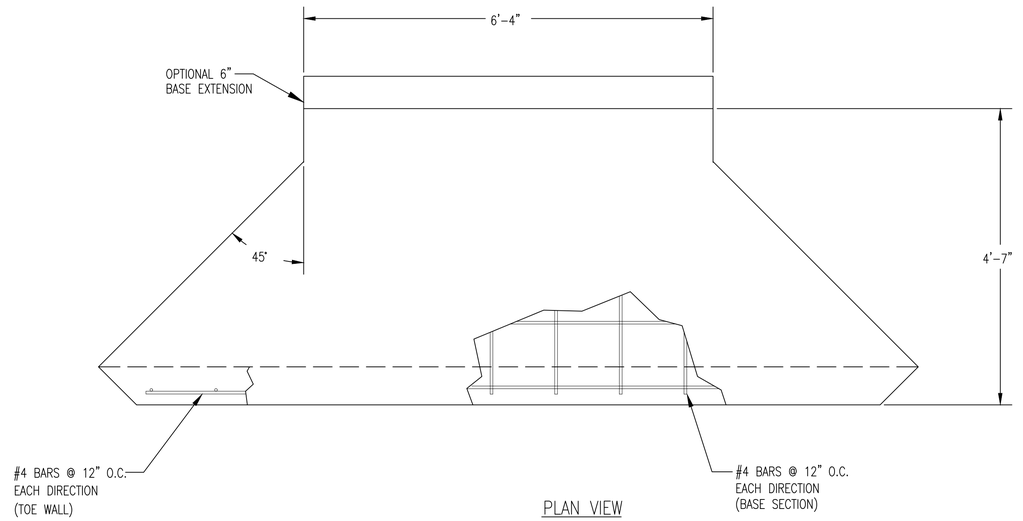
DRAWING NUMBER

SHEET NUMBER 30A OF 44

File: L:\2022\22T41007 - Buffalo Pines Phase 1\Drawings\PAVING & DRAINAGE SHEETS\ADD ALTERNATE.dwg Last Save: 2/28/2025 1:27 PM Last saved by: CDJUREY
Last plotted by: Jurey, Caleb D Plot Style: ---- Plot Scale: 1:2.5849 Plot Date: 3/14/2025 1:22 PM Plotter used: None

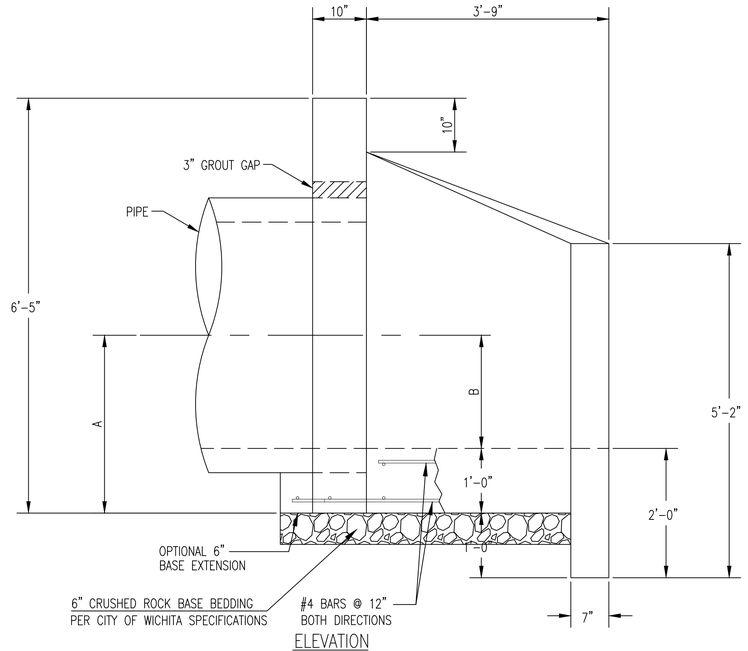


PLAN VIEW

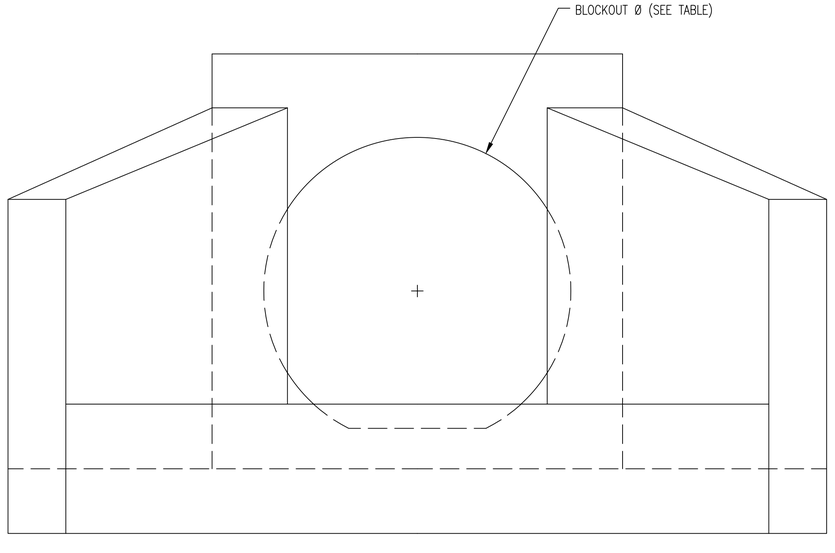


PLAN VIEW
BASE

PIPE Ø	A	B	BLOCKOUT Ø
42"	2'-9"	1'-9"	4'-9"
48"	3'-0"	2'-0"	5'-4"



ELEVATION



FRONT VIEW

HEADWALLS, AS SHOWN, WILL NOT SUPPORT FLAP GATE.

CITY OF WICHITA
PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

HEADWALL DETAILS FOR 42" AND 48" PIPE

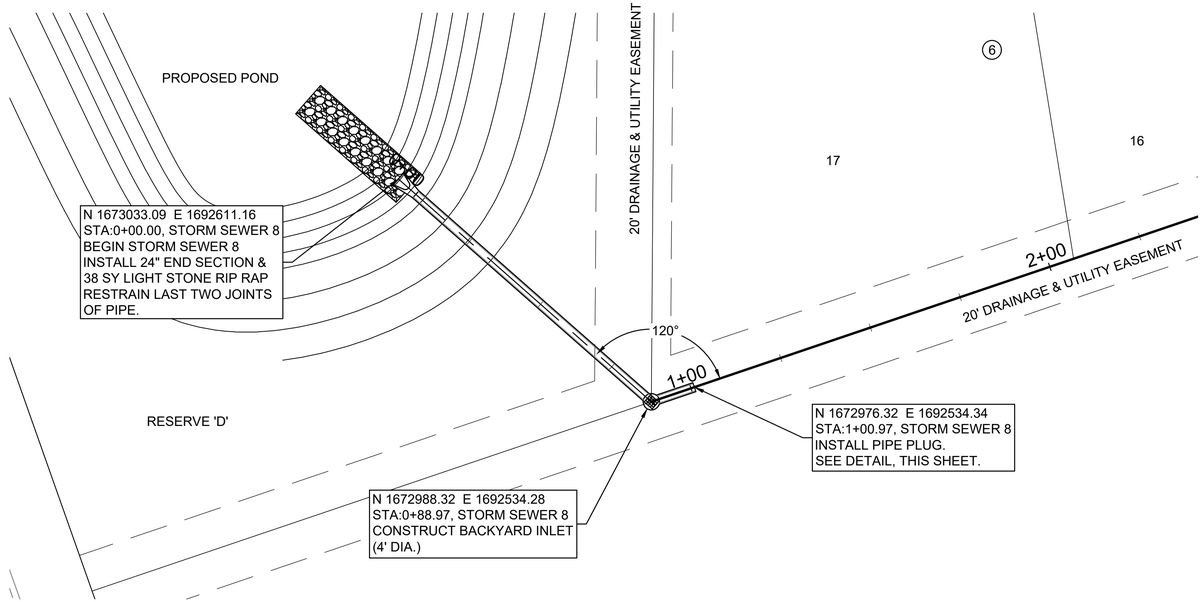
CITY ENGINEER
GARY JANZEN, P.E.

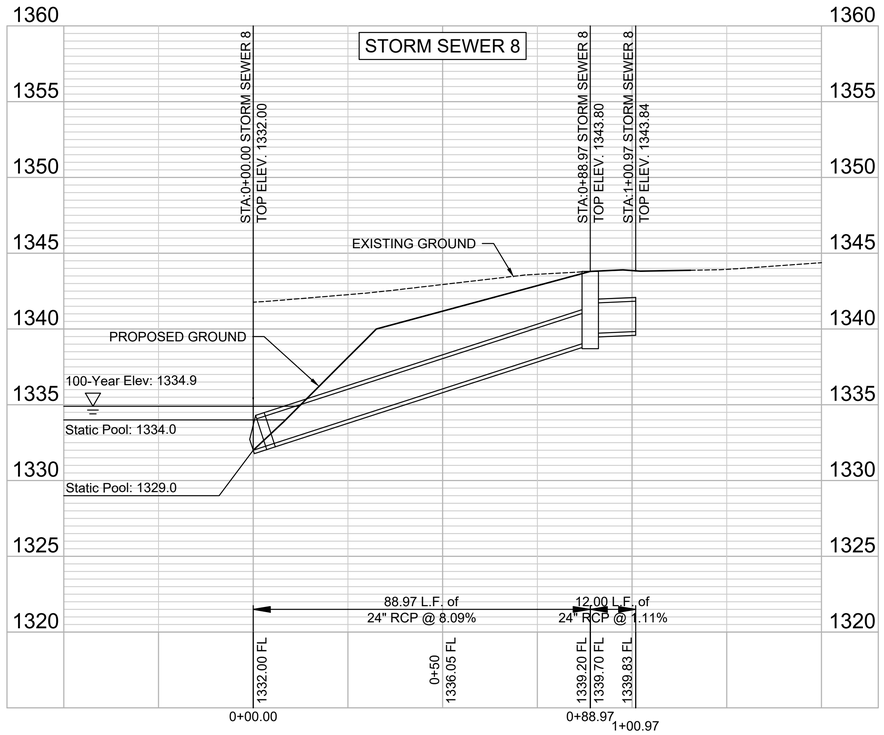
PROJECT NUMBER	OCA NUMBER	DATE
		11/2010

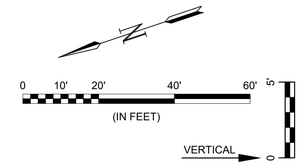
CITY ENGINEER'S OFFICE
CITY HALL - SEVENTH FLOOR
455 NORTH MAIN STREET
WICHITA, KANSAS 67202-1620
(316) 268-4501

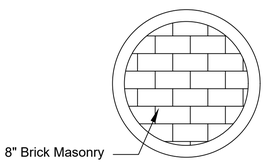
SHEET

SW-404









PIPE PLUG DETAIL

1. Mortar used in plug construction shall be in accordance with standard specifications.
2. All brick used in stack construction shall meet Grade ASTM C32 for MM and MS.
3. Pipe plugs shall be Subsidiary to the bid item " 24" Reinforced Concrete Pipe, L.F."

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

CALEB JUREY
21002
3/14/25
KANSAS
PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION	BY

CITY OF WICHITA
WICHITA, KANSAS

BUFFALO PINES
ADDITION PAVING &
DRAINAGE

STORM
SEWER 8
(P&P)

JOB NO.: 22T41007
DATE: MAR 2025
DESIGNED BY: CDJ
DRAWN BY: CDJ

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0 1"
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SHEET NUMBER 31 OF 44

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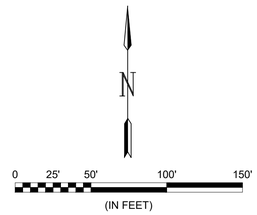


1995 Midfield Rd
Wichita, KS 67209
(316) 264-8008

CALEB JUREY
LICENSED
21002
3/14/25
KANSAS
PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION	BY

CITY OF WICHITA
WICHITA, KANSAS

BUFFALO PINES ADDITION PAVING & DRAINAGE

COORDINATE MAP (SOUTH)

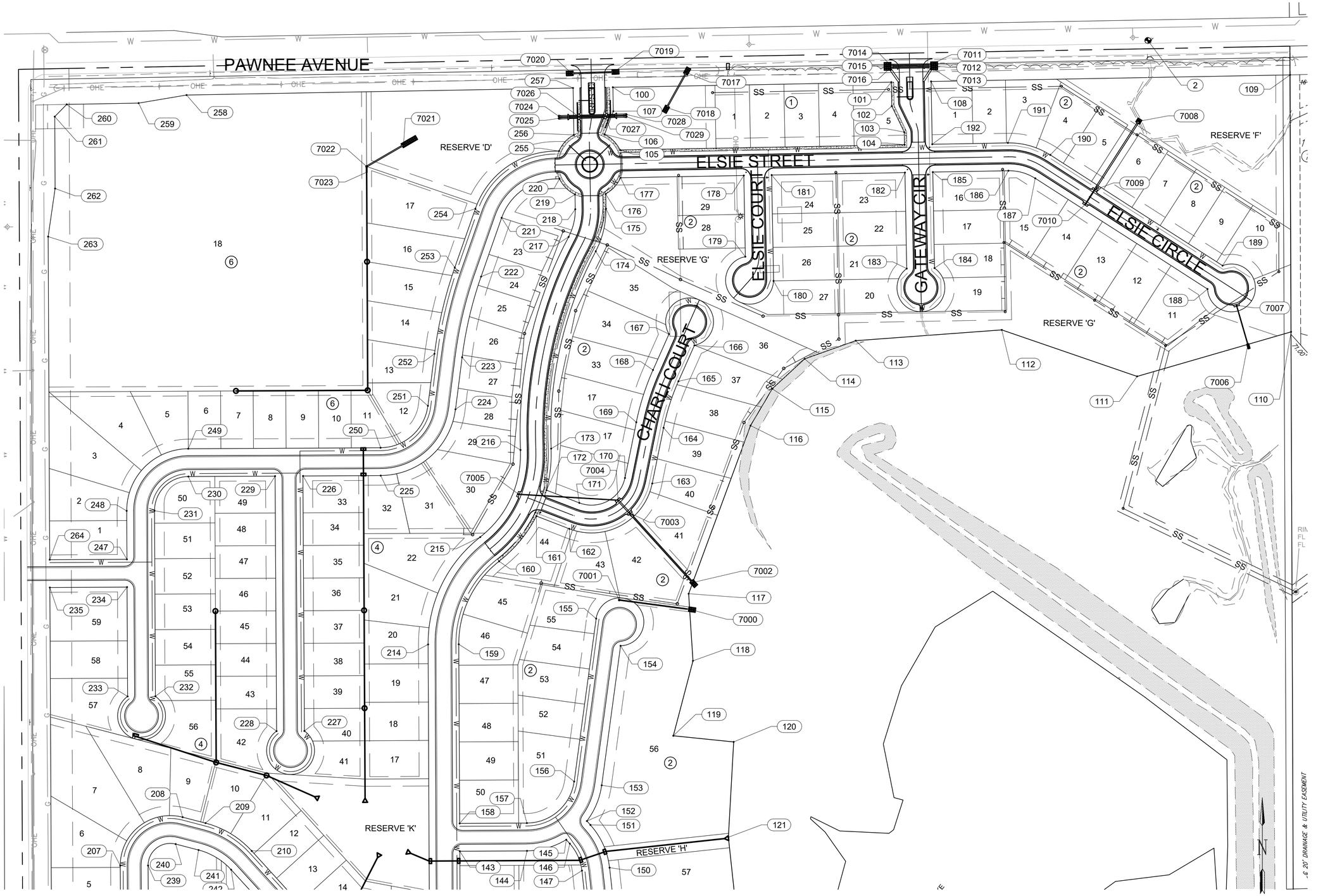
JOB NO.: 22T41007
DATE: MAR 2025
DESIGNED BY: CDJ
DRAWN BY: CDJ

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

DRAWING NUMBER

SHEET NUMBER 32 OF 44

File: L:\2022\22T41007 - Buffalo Pines Phase 1\Drawings\IPAVING & DRAINAGE SHEETS\COORDINATE MAP.dwg Last Save: 2/5/2025 1:24 PM Last saved by: CDJurey
Last plotted by: Jurey, Caleb D Plot Style: ---- Plot Scale: 1:2.5849 Plot Date: 3/14/2025 1:23 PM Plotter used: None



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

CALEB JUREY
21002
3/14/25
KANSAS
PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION	BY

CITY OF WICHITA

CITY OF WICHITA
WICHITA, KANSAS

BUFFALO PINES ADDITION PAVING & DRAINAGE

COORDINATE MAP (NORTH)

JOB NO.: 22T41007
DATE: MAR 2025
DESIGNED BY: CDJ
DRAWN BY: CDJ

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

DRAWING NUMBER

SHEET NUMBER 33 OF 44

File: L:\2022\22T41007 - Buffalo Pines Phase 1\Drawings\IPAVING & DRAINAGE SHEETS\COORDINATE MAP.dwg Last Save: 2/5/2025 1:24 PM Last saved by: CDJurey
Last plotted by: Jurey, Caleb D Plot Style: ---- Plot Scale: 1:2.5849 Plot Date: 3/14/2025 1:23 PM Plotter used: None

Storm Water Point Table					
Point #	Northing	Easting	Grid Northing	Grid Easting	Description
1	1672083.15	1691658.60	1671994.61	1691569.03	BENCHMARK #1
2	1673250.96	1694163.26	1673162.36	1694073.56	BENCHMARK #2
100	1673153.54	1693047.66	1673064.94	1692958.02	BLK 1 CNR
101	1673164.13	1693628.26	1673075.53	1693538.58	BLK 1 CNR
102	1673114.14	1693629.17	1673025.54	1693539.50	BLK 1 CNR
103	1673060.06	1693655.16	1672971.47	1693565.48	BLK 1 CNR
104	1673033.60	1693655.65	1672945.02	1693565.97	BLK 1 CNR
105	1673022.79	1693062.76	1672934.20	1692973.11	BLK 1 CNR
106	1673055.47	1693030.45	1672966.88	1692940.80	BLK 1 CNR
107	1673103.55	1693048.58	1673014.96	1692958.93	BLK 1 CNR
108	1673165.64	1693711.25	1673077.05	1693621.57	BLK 2 CNR
109	1673179.29	1694459.71	1673090.70	1694369.99	BLK 2 CNR
110	1672643.36	1694461.83	1672554.80	1694372.11	BLK 2 CNR
111	1672550.49	1694140.77	1672461.93	1694051.06	BLK 2 CNR
112	1672647.41	1693858.62	1672558.85	1693768.93	BLK 2 CNR
113	1672624.94	1693554.12	1672536.38	1693464.45	BLK 2 CNR
114	1672587.06	1693447.63	1672498.50	1693357.96	BLK 2 CNR
115	1672524.71	1693380.12	1672436.15	1693290.46	BLK 2 CNR
116	1672447.85	1693334.72	1672359.29	1693245.06	BLK 2 CNR
117	1672097.19	1693205.65	1672008.66	1693116.00	BLK 2 CNR
118	1671957.22	1693214.77	1671868.69	1693125.11	BLK 2 CNR
119	1671800.91	1693173.79	1671712.39	1693084.14	BLK 2 CNR
120	1671788.16	1693299.60	1671699.64	1693209.94	BLK 2 CNR
121	1671589.33	1693288.50	1671500.82	1693198.84	BLK 2 CNR
122	1671333.65	1693316.10	1671245.16	1693226.44	BLK 2 CNR
123	1671321.13	1693200.03	1671232.63	1693110.37	BLK 2 CNR
124	1671040.17	1693230.35	1670951.69	1693140.69	BLK 2 CNR
125	1670960.48	1693191.43	1670872.01	1693101.77	BLK 2 CNR
126	1670805.24	1693192.19	1670716.77	1693102.54	BLK 2 CNR
127	1670620.73	1693221.93	1670532.27	1693132.27	BLK 2 CNR
128	1670609.81	1692533.18	1670521.35	1692443.56	BLK 2 CNR
129	1670747.16	1692531.00	1670658.69	1692441.38	BLK 2 CNR
130	1670747.51	1692552.59	1670659.05	1692462.97	BLK 2 PC
131	1670805.75	1692683.09	1670717.28	1692593.46	BLK 2 CNR
132	1670790.19	1692706.44	1670701.72	1692616.81	BLK 2 PC
133	1670760.19	1692808.51	1670671.72	1692718.87	BLK 2 PT
134	1670764.50	1693080.28	1670676.04	1692990.63	BLK 2 CNR
135	1670822.50	1693079.36	1670734.03	1692989.71	BLK 2 CNR
136	1670818.18	1692807.59	1670729.71	1692717.95	BLK 2 PC
137	1670838.46	1692738.59	1670749.99	1692648.96	BLK 2 PT
138	1670854.02	1692715.24	1670765.55	1692625.61	BLK 2 CNR
139	1670930.38	1692731.62	1670841.91	1692641.99	BLK 2 PT
140	1671051.43	1692731.03	1670962.95	1692641.40	BLK 2 PC
141	1671129.89	1692699.70	1671041.41	1692610.07	BLK 2 CNR
142	1671225.92	1692730.17	1671137.43	1692640.54	BLK 2 PT
143	1671560.11	1692728.53	1671471.60	1692638.90	BLK 2 CNR
144	1671560.80	1692868.67	1671472.29	1692779.03	BLK 2 PC
145	1671584.16	1692950.57	1671495.65	1692860.93	BLK 2 CNR
146	1671575.99	1692957.96	1671487.48	1692868.32	BLK 2 PC
147	1671519.64	1692983.22	1671431.14	1692893.58	BLK 2 PT

Storm Water Point Table					
Point #	Northing	Easting	Grid Northing	Grid Easting	Description
148	1671169.41	1693021.02	1671080.92	1692931.37	BLK 2 CNR
149	1671175.63	1693078.68	1671087.14	1692989.03	BLK 2 CNR
150	1671525.87	1693040.88	1671437.36	1692951.24	BLK 2 PC
151	1671614.90	1693000.97	1671526.39	1692911.33	BLK 2 PT
152	1671623.07	1692993.59	1671534.55	1692903.94	BLK 2 CNR
153	1671697.66	1693024.47	1671609.14	1692934.83	BLK 2 PT
154	1671988.54	1693063.74	1671900.01	1692974.09	BLK 2 CNR
155	1672045.21	1693012.87	1671956.68	1692923.22	BLK 2 PT
156	1671705.42	1692966.99	1671616.90	1692877.35	BLK 2 PC
157	1671618.80	1692868.38	1671530.29	1692778.75	BLK 2 PT
158	1671618.11	1692728.24	1671529.60	1692638.61	BLK 2 CNR
159	1671991.75	1692726.40	1671903.22	1692636.77	BLK 2 PC
160	1672164.85	1692810.49	1672076.31	1692720.85	BLK 2 PRC
161	1672259.07	1692888.38	1672170.52	1692798.74	BLK 2 CNR
162	1672232.57	1692956.83	1672144.03	1692867.19	BLK 2 PC
163	1672327.12	1693129.80	1672238.57	1693040.15	BLK 2 PT
164	1672443.27	1693153.47	1672354.71	1693063.82	BLK 2 PC
165	1672540.27	1693184.47	1672451.71	1693094.81	BLK 2 PT
166	1672615.24	1693217.73	1672526.67	1693128.07	BLK 2 CNR
167	1672638.76	1693164.72	1672550.20	1693075.06	BLK 2 CNR
168	1672563.79	1693131.45	1672475.23	1693041.80	BLK 2 PC
169	1672454.85	1693096.64	1672366.29	1693006.99	BLK 2 PT
170	1672338.70	1693072.97	1672250.15	1692983.32	BLK 2 PC
171	1672286.66	1692977.77	1672198.11	1692888.13	BLK 2 PT
172	1672313.15	1692909.32	1672224.61	1692819.68	BLK 2 CNR
173	1672399.82	1692918.99	1672311.27	1692829.35	BLK 2 PRC
174	1672811.51	1693012.01	1672722.94	1692922.37	BLK 2 PRC
175	1672900.27	1693033.28	1672811.69	1692943.63	BLK 2 PT
176	1672930.97	1693032.72	1672842.39	1692943.07	BLK 2 CNR
177	1672964.80	1693063.82	1672876.22	1692974.17	BLK 2 CNR
178	1672969.49	1693320.76	1672880.90	1693231.10	BLK 2 CNR
179	1672800.19	1693323.85	1672711.61	1693234.19	BLK 2 CNR
180	1672749.58	1693382.73	1672661.01	1693293.06	BLK 2 PT
181	1672970.54	1693378.75	1672881.96	1693289.09	BLK 2 CNR
182	1672975.61	1693656.70	1672887.03	1693567.02	BLK 2 CNR
183	1672775.38	1693660.36	1672686.81	1693570.68	BLK 2 CNR
184	1672776.44	1693718.35	1672687.86	1693628.66	BLK 2 CNR
185	1672976.67	1693714.69	1672888.09	1693625.01	BLK 2 CNR
186	1672979.55	1693872.44	1672890.96	1693782.75	BLK 2 PC
187	1672963.68	1693928.34	1672875.10	1693838.65	BLK 2 PT
188	1672732.69	1694287.64	1672644.12	1694197.93	BLK 2 CNR
189	1672781.48	1694319.01	1672692.91	1694229.30	BLK 2 CNR
190	1673012.47	1693959.71	1672923.88	1693870.01	BLK 2 PC
191	1673037.54	1693871.38	1672948.95	1693781.69	BLK 2 PT
192	1673034.66	1693713.64	1672946.08	1693623.95	BLK 2 CNR
193	1670746.12	1692467.01	1670657.65	1692377.39	BLK 3 CNR
194	1670738.43	1691994.07	1670649.96	1691904.48	BLK 1 PC
195	1670803.20	1692041.02	1670714.73	1691951.43	BLK 1 CNR
196	1670811.50	1692551.55	1670723.03	1692461.92	BLK 3 PC
197	1670930.07	1692667.62	1670841.59	1692578.00	BLK 3 PT

Storm Water Point Table					
Point #	Northing	Easting	Grid Northing	Grid Easting	Description
198	1671051.11	1692667.03	1670962.63	1692577.40	BLK 3 PC
199	1671086.04	1692653.08	1670997.55	1692563.46	BLK 3 CNR
200	1671061.12	1692566.98	1670972.63	1692477.36	BLK 3 PT
201	1671058.46	1692026.59	1670969.98	1691936.99	BLK 3 CNR
202	1671039.08	1691948.97	1670950.60	1691859.38	BLK 3 CNR
203	1671038.73	1691878.97	1670950.25	1691789.39	BLK 3 CNR
204	1670599.46	1691881.11	1670511.00	1691791.52	BLK 3 CNR
205	1670608.79	1692469.18	1670520.33	1692379.57	BLK 3 CNR
206	1671122.44	1692022.57	1671033.95	1691932.97	BLK 4 CNR
207	1671529.99	1692020.58	1671441.49	1691930.99	BLK 4 PC
208	1671631.17	1692150.67	1671542.66	1692061.07	BLK 4 PT
209	1671618.81	1692198.39	1671530.29	1692108.79	BLK 4 PC
210	1671560.72	1692294.65	1671472.21	1692205.04	BLK 4 PT
211	1671371.40	1692466.97	1671282.90	1692377.36	BLK 4 PC
212	1671348.20	1692519.83	1671259.70	1692430.21	BLK 4 PT
213	1671348.91	1692665.56	1671260.41	1692575.94	BLK 4 CNR
214	1671991.44	1692662.40	1671902.91	1692572.78	BLK 4 PC
215	1672215.35	1692771.17	1672126.80	1692681.54	BLK 4 PRC
216	1672396.99	1692855.05	1672308.44	1692765.41	BLK 4 PRC
217	1672841.56	1692955.50	1672752.98	1692865.86	BLK 4 PRC
218	1672899.10	1692969.29	1672810.52	1692879.65	BLK 4 PT
219	1672929.80	1692968.73	1672841.22	1692879.09	BLK 4 CNR
220	1672962.48	1692936.42	1672873.89	1692846.78	BLK 4 CNR
221	1672881.26	1692815.76	1672792.69	1692726.12	BLK 4 PT
222	1672758.53	1692772.86	1672669.96	1692683.22	BLK 4 PC
223	1672590.46	1692733.34	1672501.90	1692643.71	BLK 4 PT
224	1672481.80	1692719.62	1672393.24	1692629.99	BLK 4 PC
225	1672343.59	1692563.64	1672255.04	1692474.02	BLK 4 PT
226	1672342.79	1692401.67	1672254.24	1692312.06	BLK 4 CNR
227	1671810.94	1692404.51	1671722.42	1692314.89	BLK 4 CNR
228	1671810.61	1692346.51	1671722.08	1692256.90	BLK 4 CNR
229	1672342.51	1692343.45	1672253.96	1692253.84	BLK 4 CNR
230	1672341.62	1692162.63	1672253.07	1692073.03	BLK 4 PC
231	1672270.27	1692091.98	1672181.73	1692002.38	BLK 4 PT
232	1671883.28	1692093.86	1671794.75	1692004.27	BLK 4 CNR
233	1671883.00	1692035.86	1671794.47	1691946.27	BLK 4 CNR
234	1672110.99	1692034.76	1672022.45	1691945.16	BLK 4 CNR
235	1672110.21	1691873.76	1672021.67	1691784.17	BLK 4 CNR
236	1671121.73	1691878.57	1671033.25	1691788.98	BLK 4 CNR
237	1671125.12	1692566.66	1671036.63	1692477.04	BLK 5 PT
238	1671122.72	1692080.57	1671034.24	1691990.97	BLK 5 CNR
239	1671530.28	1692078.58	1671441.77	1691988.99	BLK 5 PC
240	1671575.03	1692136.12	1671486.52	1692046.52	BLK 5 PT
241	1671562.66	1692183.84	1671474.15	1692094.24	BLK 5 PC
242	1671521.67	1692251.76	1671433.17	1692162.15	BLK 5 PT
243	1671332.36	1692424.08	1671243.86	1692334.47	BLK 5 PC
244	1671290.20	1692520.11	1671201.70	1692430.49	BLK 5 PT
245	1671290.91	1692665.85	1671202.42	1692576.22	BLK 5 CNR
246	1671225.61	1692666.17	1671137.11	1692576.54	BLK 5 PC
247	1672168.99	1692034.47	1672080.45	1691944.88	BLK 6 CNR

Storm Water Point Table					
Point #	Northing	Easting	Grid Northing	Grid Easting	Description
248	1672269.99	1692033.98	1672181.44	1691944.39	BLK 6 PC
249	1672399.62	1692162.35	1672311.06	1692072.75	BLK 6 PT
250	1672401.59	1692563.36	1672313.03	1692473.74	BLK 6 PC
251	1672489.06	1692662.08	1672400.50	1692572.45	BLK 6 PT
252	1672597.73	1692675.80	1672509.16	1692586.17	BLK 6 PC
253	1672777.67	1692718.10	1672689.09	1692628.48	BLK 6 PT
254	1672900.40	1692761.01	1672811.82	1692671.37	BLK 6 PC
255	1673020.47	1692935.36	1672931.88	1692845.72	BLK 6 CNR
256	1673054.30	1692966.46	1672965.71	1692876.82	BLK 6 CNR
257	1673152.02	1692964.68	1673063.43	1692875.04	BLK 6 CNR
258	1673137.33	1692158.76	1673048.73	1692069.16	BLK 6 CNR
259	1673120.50	1692058.84	1673031.91	1691969.25	BLK 6 CNR
260	1673117.77	1691908.85	1673029.17	1691819.26	BLK 6 CNR
261	1673092.31	1691883.98	1673003.72	1691794.39	BLK 6 CNR
262	1672942.30	1691884.71	1672853.71	1691795.12	BLK 6 CNR
263	1672842.01	1691870.20	1672753.44	1691780.61	BLK 6 CNR
264	1672168.21	1691873.47	1672079.67	1691783.89	BLK 6 CNR
7000	1672064.64	1693207.77	1671976.11	1693118.12	SWS 1 FES 0+00
7001	1672084.11	1693061.08	1671995.57	1692971.43	SWS 1 BACKYARD INLET X+XX
7002	1672120.57	1693214.26	1672032.03	1693124.60	SWS 2 END SECTION 0+00
7003	1672265.98	1693082.27	1672177.43	1692992.62	SWS 2 TYPE 1A INLET X+XX
7004	1672292.22	1693058.45	1672203.67	1692968.81	SWS 2 TYPE 1A INLET X+XX
7005	1672304.63	1692851.00	1672216.09	1692761.36	SWS 2 TYPE 1A INLET X+XX
7006	1672617.28	1694371.66	1672528.71	1694281.94	SWS 3 END SECTION 0+00
7007	1672698.92	1694348.04	1672610.35	1694258.33	SWS 3 TYPE 1A INLET X+XX
7008	1673082.56	1694144.13	1672993.97	1694054.43	SWS 4 END SECTION 0+00
7009	1672939.54	1694052.19	1672850.96	1693962.49	SWS 4 TYPE 1A INLET X+XX
7010	1672909.82	1694033.08	1672821.24	1693943.38	SWS 4 TYPE 1A INLET X+XX
7011	1673201.66	1693712.18	1673113.07	1693622.50	SWS 5 END SECTION 0+00
7012	1673198.24	1693712.22	1673109.65	1693622.54	SWS 5 END SECTION 0+00
7013	1673194.82	1693712.26	1673106.23	1693622.58	SWS 5 END SECTION 0+00
7014	1673200.63	1693625.75	1673112.03	1693536.07	SWS END SECTION X+XX
7015	1673197.21	1693625.79	1673108.61	1693536.11	SWS END SECTION X+XX
7016	1673193.79	1693625.83	1673105.19	1693536.15	SWS END SECTION X+XX
7017	1673184.13	1693200.65	1673095.54	1693111.00	SWS 6 END SECTION 0+00
7018	1673111.11	1693160.14	1673022.52	1693070.49	SWS 6 END SECTION X+XX
7019	1673185.35	1693049.39	1673096.76	1692959.74	SWS 7 END SECTION 0+00
7020	1673182.59	1692961.61	1673094.00	1692871.97	SWS 7 END SECTION X+XX
7021	1673033.09	1692611.16	1672944.51	1692521.54	SWS 8 END SECTION 0+00
7022	1672988.32	1692534.28	1672899.73	1692444.66	SWS 8 BACKYARD INLET X+XX
7023	1672976.32	1692534.34	1672887.74	1692444.72	SWS 8 PLUG X+XX
7024	1673093.22	1692934.66	1673004.63	1692845.02	SWS 9 END SECTION 0+00
7025	1673088.80	1692934.76	1673000.21	1692845.12	SWS 9 END SECTION 0+00
7026	1673092.04	1692977.10	1673003.45	1692887.46	SWS 9 TYPE 1A INLET X+XX
7027	1673093.38	1693032.63	1673004.79	1692942.99	SWS 9 TYPE 1A INLET X+XX
7028	1673096.64	1693076.27	1673008.05	1692986.62	SWS 9 END SECTION X+XX
7029	1673092.22	1693076.38	1673003.63	1692986.73	SWS 9 END SECTION X+XX

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

CALEB JUREY
NUMBER
21002
3/14/25
KANSAS
PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION	BY

CITY OF WICHITA
WICHITA, KANSAS

BUFFALO PINES ADDITION PAVING & DRAINAGE

COORDINATE TABLES

JOB NO.: 22T41007
DATE: MAR 2025
DESIGNED BY: CDJ
DRAWN BY: CDJ

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

DRAWING NUMBER

SHEET NUMBER 34 OF 44

File: L:\2022\22T41007 - Buffalo Pines Phase 1\Drawings\PAVING & DRAINAGE SHEETS\COORDINATE MAP.dwg Last Save: 2/5/2025 1:24 PM Last saved by: CDJurey
Last plotted by: Jurey, Caleb D. Plot Style: ---- Plot Scale: 1:2.5849 Plot Date: 3/14/2025 1:23 PM Plotter used: None

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 FIRMING. (PLOWING 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 "PROJECT SEEDING, L.S." THIS BID ITEM INCLUDES ALL RE-SEEDING ACTIVITIES AND ANY ASSOCIATED WORK NECESSARY.

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.

PERMANENT SEEDING (WARM SEASON GRASS)

1. PERMANENT SEEDING WITH THE PRAIRIE 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. PRAIRIE SEED MIX SHALL BE A WARM SEASON GRASS MIX SEED CONTAINING LOCALLY AVAILABLE VARIETIES, AS SPECIFIED BELOW. SEED AT A RATE OF 4.5# PLS/ ACRE.

Botanical Name	Common Name	PLS Oz./Acre
BOUTELOUA DACTYLOIDES	BUFFALOGRASS (TEXOKA, SHRP'S IMPROVED, ISON, PLAINS, OR CODY)	
BOUTELOUA GRACILIS	BLUE GRAMA	
BOUTELOUA CURTIPENDULA	SIDEOATS GRAMA	

3. APPLY 10-20-10 FERTILIZER AT A RATE OF 40 LBS/ ACRE.
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. PERMANENT SEEDING SHALL BE DONE OCTOBER 15- JUNE 1.
6. WARM 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.
7. SEEDING PROCESS: REFER TO SEEDING NOTES.

PERMANENT SEEDING (WATER QUALITY MIX)

1. PERMANENT SEEDING WITH THE WATER QUALITY 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. WATER QUALITY SEED MIX SHALL BE A WARM SEASON GRASS MIX SEED CONTAINING LOCALLY AVAILABLE VARIETIES, AS SPECIFIED BELOW. SEED AT A RATE OF 12.34# PLS/ ACRE.

Botanical Name	Common Name	PLS Oz./Acre
PERMANENT GRASSES		
Andropogon gerardii	Big Bluestem	12.00
Bouteloua curtipendula	Side Oats Grama	16.00
Carex bicknellii	Bicknell's Sedge	1.50
Carex molesta	Field Oval Sedge	1.50
Elymus canadensis	Canada Wild Rye	24.00
Panicum virgatum	Switch Grass	2.50
Schizachyrium scoparium	Little Bluestem	28.00
Sorghastrum nutans	Indian Grass	12.00
	Total	97.50
TEMPORARY GRASS		
Lolium multiflorum	Annual Rye	100.00

3. APPLY PURE NITROGEN FERTILIZER AT A RATE OF 2 LBS/ 1000 SF.
4. PERMANENT SEEDING SHALL BE DONE OCTOBER 15- JUNE 1.
5. WATER QUALITY 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.

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

CALEB JUREY 27002 STATE OF KANSAS PROFESSIONAL ENGINEER 3/14/25

REV.	DATE	DESCRIPTION	BY

CITY OF WICHITA
WICHITA, KANSAS

BUFFALO PINES ADDITION PAVING & DRAINAGE

SEEDING & TESTING NOTES

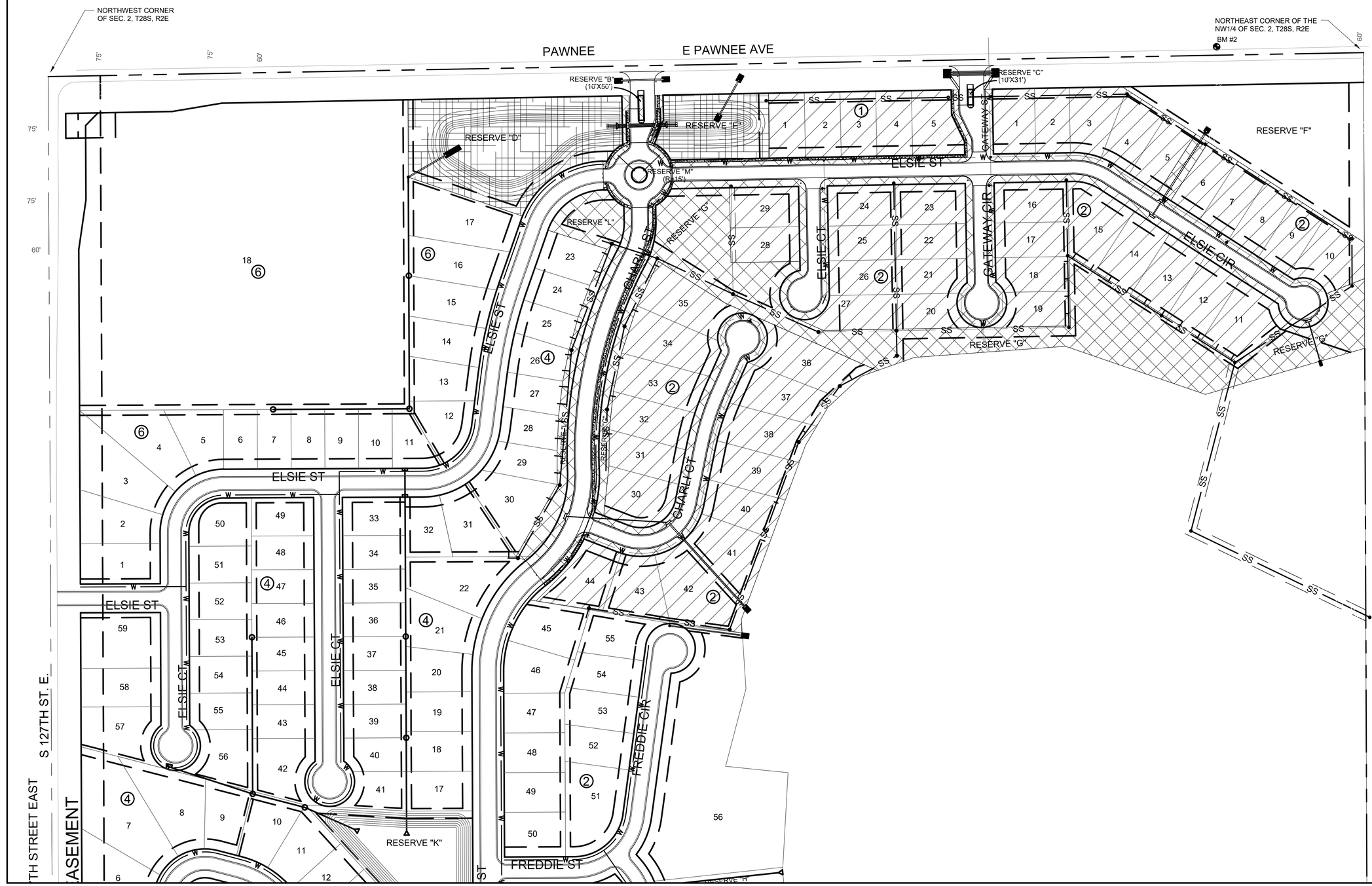
JOB NO.: 22T41007
DATE: MAR 2025
DESIGNED BY: CDJ
DRAWN BY: CDJ

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

DRAWING NUMBER

SHEET NUMBER 35 OF 44

File: L:\2022\22T41007 - Buffalo Pines Phase 1\Drawings\PAVING & DRAINAGE SHEETS\SEEDING NOTES.dwg Last Save: 2/5/2025 1:29 PM Last saved by: CDJurey
Last plotted by: Jurey, Caleb D Plot Style: ---- Plot Scale: 1:2.5849 Plot Date: 3/14/2025 1:23 PM Plotter used: None



GARVER

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

CALEB JUREY
21002
3/14/25
KANSAS
PROFESSIONAL ENGINEER

REV	DATE	DESCRIPTION	BY

CITY OF WICHITA
WICHITA, KANSAS

BUFFALO PINES
ADDITION PAVING &
DRAINAGE

SEEDING
PLAN

JOB NO.: 22T41007
DATE: MAR 2025
DESIGNED BY: CDJ
DRAWN BY: CDJ

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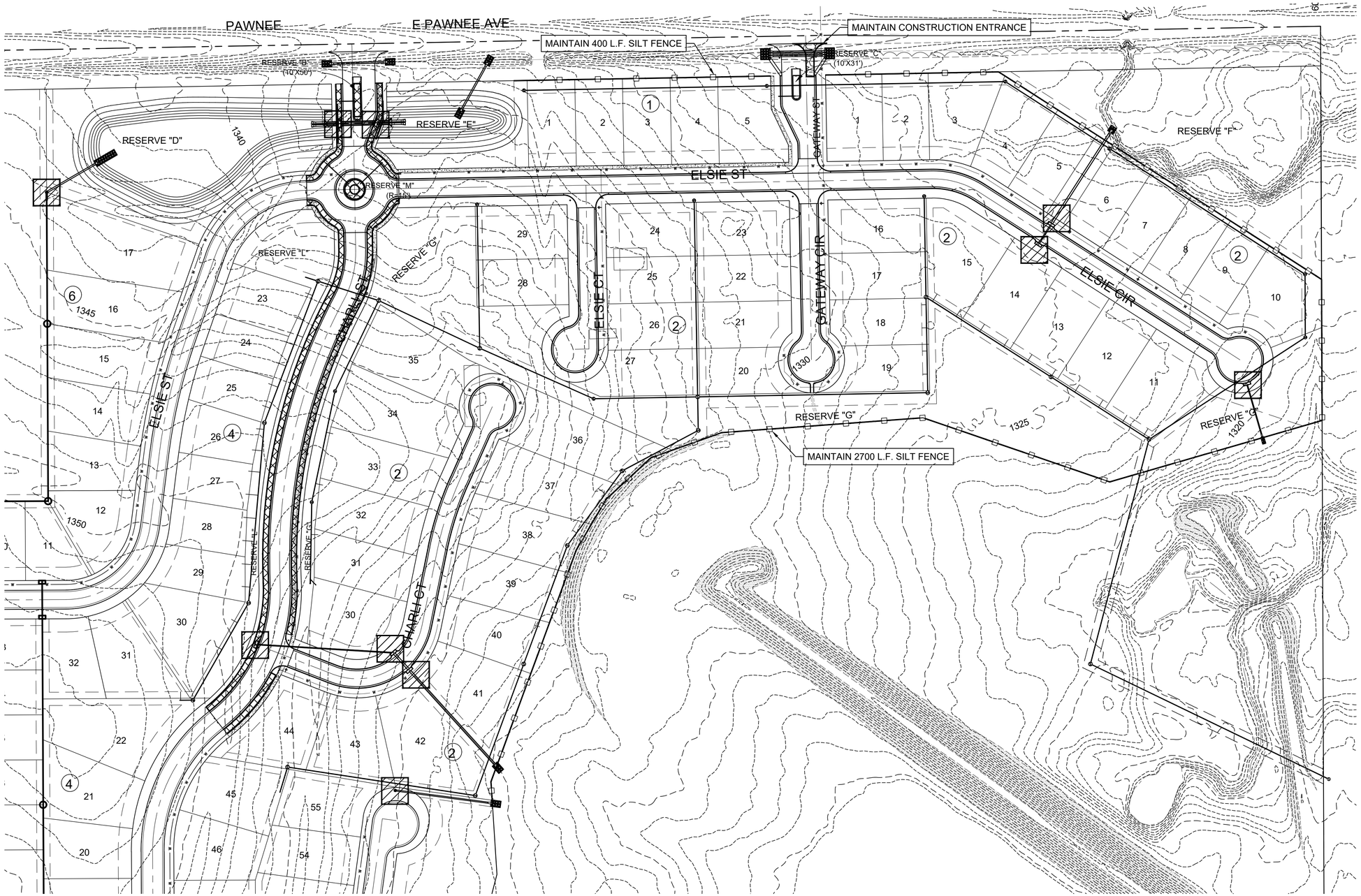
IF NOT ONE INCH ON THIS SHEET,
ADJUST SCALES ACCORDINGLY

DRAWING NUMBER

SHEET
NUMBER 36 OF 44



MAINTAIN SILT FENCE (3100 L.F.)

MAINTAIN CONSTRUCTION ENTRANCE (1 EA.)

INSTALL INLET PROTECTION (10 EA.)

INSTALL CURLEX BLANKET (45 S.Y.)

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Wichita, KS 67209
(316) 264-8008

CALEB JUREY
27002
3/14/25
KANSAS
PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION	BY

CITY OF WICHITA
WICHITA, KANSAS

BUFFALO PINES ADDITION
SANITARY SEWER EXTENSION

EROSION CONTROL PLAN

JOB NO.: 22T41007
DATE: MAR 2025
DESIGNED BY: CDJ
DRAWN BY: CDJ

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IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

DRAWING NUMBER

SHEET NUMBER **37** OF **44**

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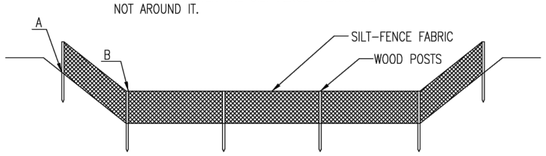
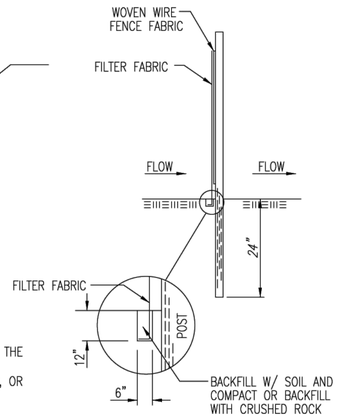
Last plotted by: Jurey, Caleb D. Plot Style: ---- Plot Scale: 1:2.5849 Plot Date: 3/14/2025 1:23 PM Plotter used: None

NOTE: POINT A MUST BE HIGHER THAN POINT B SO THAT WATER FLOWS OVER THE SILT FENCE FABRIC AND NOT AROUND IT.



ELEVATION

SILT FENCE DITCH CHECKS
(STREAM PROTECTION)



ANCHOR TRENCH DETAIL

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 DOWNSTREAM 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 UPSTREAM SIDE OF THE TRENCH TO CLEAR AN AREA FOR DRIVING IN THE POSTS. JUST DOWNSTREAM 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.

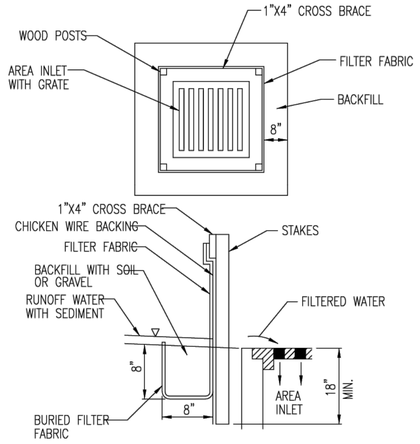
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

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 UPSTREAM 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?



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.

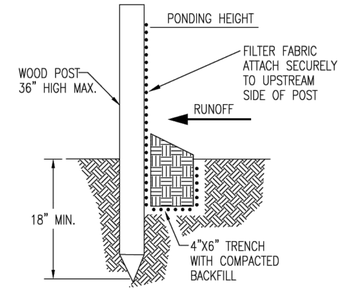
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

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 RESISTED 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?

CITY OF WICHITA
PUBLIC WORKS & UTILITIES ENGINEERING DIVISION

SILT FENCE DITCH CHECK AND BARRIER DETAILS

CITY ENGINEER
GARY JANZEN, P.E.

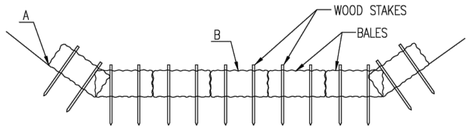
PROJECT NUMBER	OCA NUMBER	DATE
----	####	11/2010

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

SHEET 38 / 44

SW–502

NOTE: POINT A MUST BE HIGHER THAN POINT B
SO THAT WATER FLOWS OVER THE BALES AND
NOT AROUND THEM.



STRAW BALE DITCH CHECKS

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".

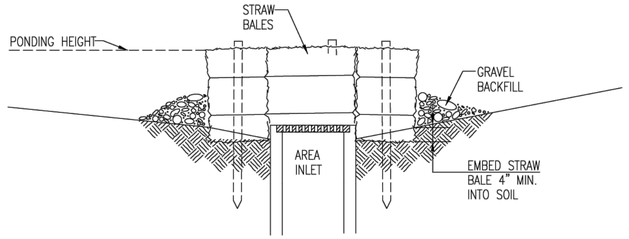
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

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.

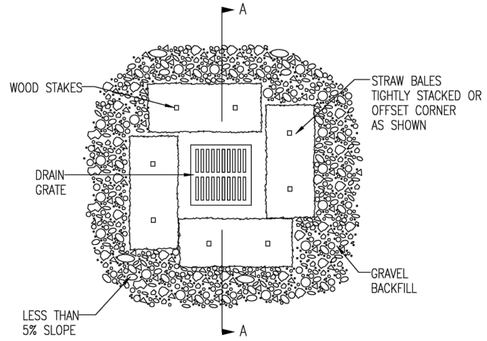
INSPECTION AND MAINTENANCE:

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?



SECTION A-A



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.

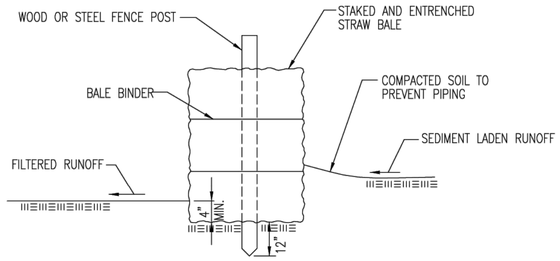
LIST OF COMMON PLACEMENT INSTALLATION MISTAKES TO AVOID:

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 OF 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
----	####	11/2010

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

SHEET 39 / 44

SW-503

GENERAL NOTES

1. 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.

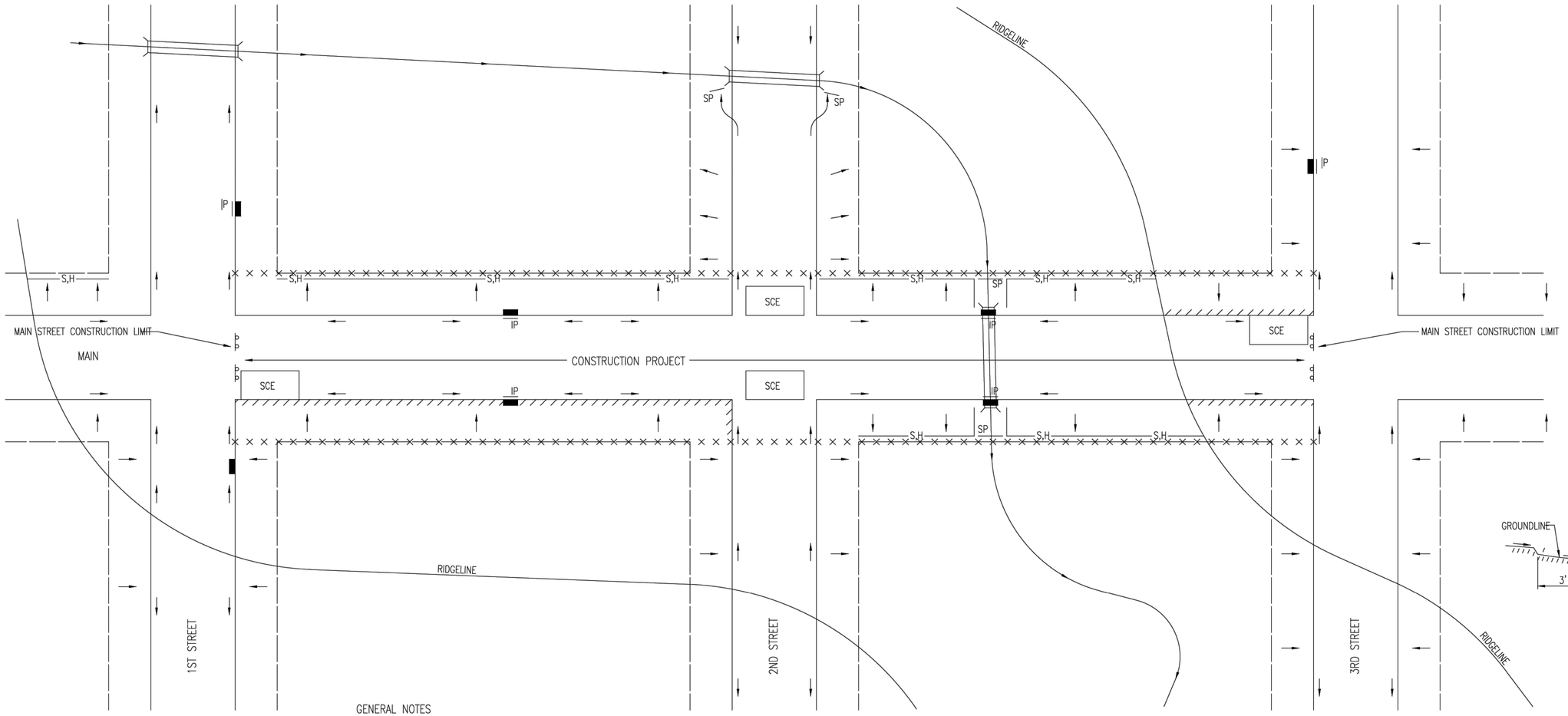
2. EROSION CONTROL DEVICES MUST BE MAINTAINED BY THE CONTRACTOR THROUGHOUT THE CONSTRUCTION PROCESS AND UNTIL THE DISTURBED EARTH IS RESTABILIZED.

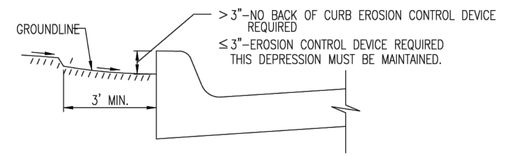
3. IF THE PROJECT WILL DISTURB 1 ACRE OR MORE, A FEDERAL/STATE NPDES STORMWATER PERMIT IS REQUIRED. A DETAILED STORMWATER POLLUTION PREVENTION PLAN, IS REQUIRED. THE EROSION CONTROL DEVICES SHOWN ON THIS SHEET ARE CONSIDERED TO BE THE MINIMUM TO BE SHOWN IN THE POLLUTION PREVENTION PLAN.

4. 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.

5. 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.

6. 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.





CURB BACKFILL DETAIL

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–O–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

1. 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.

2. THE POINT OF COMPLIANCE IS GENERALLY THE RIGHT–OF–WAY LINES WITHIN THE LIMITS OF CONSTRUCTION.

3. EROSION CONTROL DEVICES WILL BE REQUIRED AT ALL POINTS ALONG THE PROJECT WHERE DISTURBED EARTH CAN DRAIN ONTO PRIVATE PROPERTY.

4. INLET PROTECTION DEVICES WILL BE REQUIRED WHEREVER WATER CAN DRAIN OFF THE PROJECT SITE INTO AN INLET, INCLUDING ANY SIDE STREET INLETS.

5. EROSION CONTROL DEVICES SHALL BE INSTALLED AT CREEK CROSSINGS SO AS TO PREVENT SEDIMENT FROM ENTERING THEREIN.

6. 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.

7. ANY MUD TRACKED ONTO STREETS MUST BE REMOVED AT THE END OF EACH WORK DAY.

8. THE CONTACTOR 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:
   A. 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)
   B. 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.
   C. ADDITIONALLY, OTHER EROSION CONTROL DEVICES (HAY BALES, SILT FENCE, ETC.) WILL BE INSTALLED AT LOCATIONS OF CONCENTRATED FLOW RESULTING IN SEDIMENT OVERRUNNING THE MAT.
   D. 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)

GARY L. JANZEN LICENSED 16294 KANSAS PROFESSIONAL ENGINEER
05/30/13

REVISION: JUNE 2015

CITY OF WICHITA
PUBLIC WORKS & UTILITIES ENGINEERING DIVISION

STREET IMPROVEMENT PROJECTS

CITY ENGINEER
GARY JANZEN, P.E.

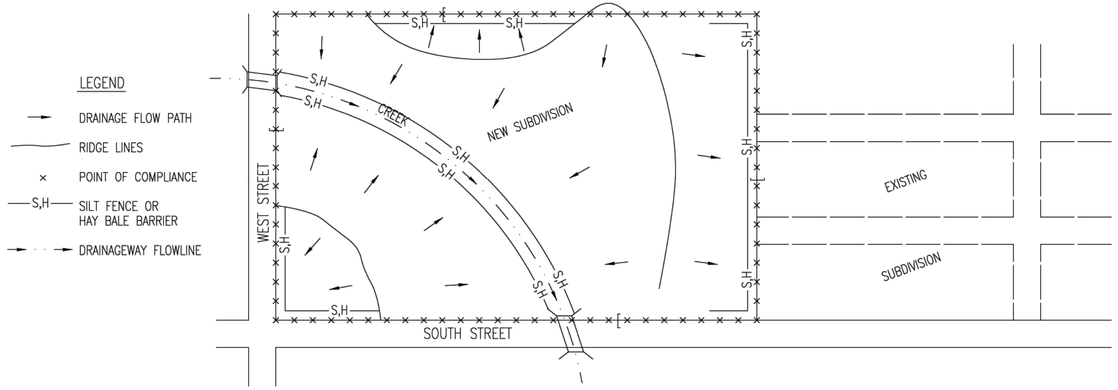
PROJECT NUMBER	OCA NUMBER	DATE
----	#####	

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

SHEET 40 / 44

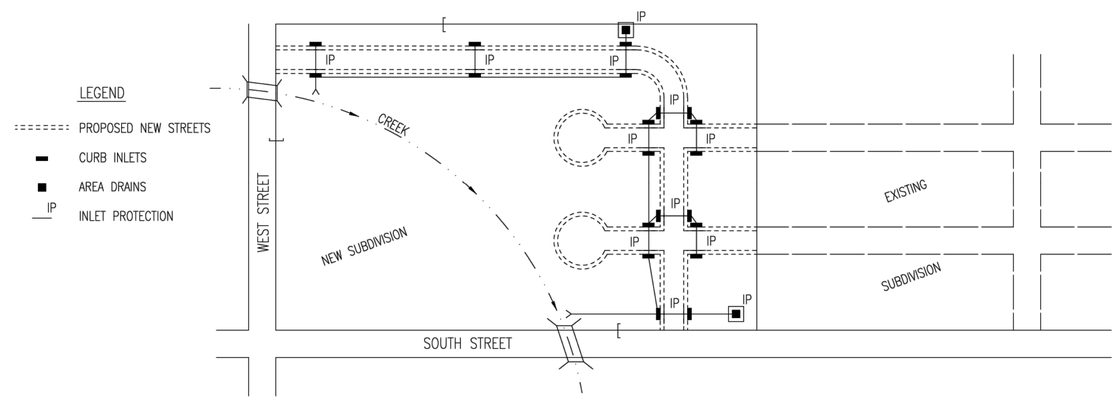
SW–504

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



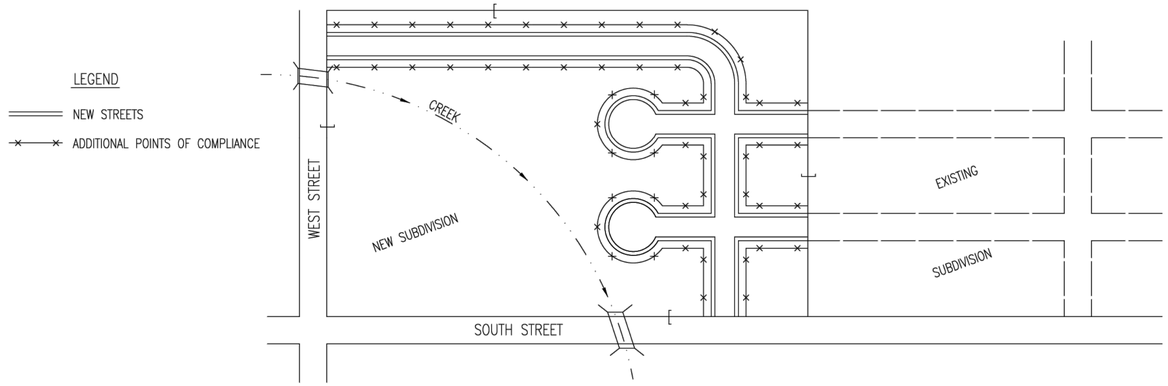
1. DURING THIS PHASE OF SUBDIVISION CONSTRUCTION, THE POINTS OF COMPLIANCE ARE THE PERIMETER BOUNDARIES AND ANY DRAINAGE WAYS OR STORM SEWERS DRAINING THROUGH OR FROM THE SITE. SHOULD LAKES BE CONSTRUCTED WITHIN THE SUBDIVISION THAT WILL DISCHARGE DURING STORMS, THEY ARE ALSO A POINT OF COMPLIANCE.
2. 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 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.

PHASE 3 – STREET CONSTRUCTION



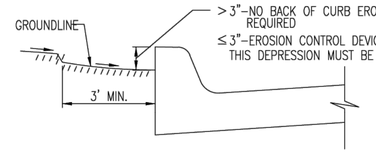
1. DURING THIS PHASE OF SUBDIVISION CONSTRUCTION, NEW STREETS ARE INSTALLED. ALL EROSION CONTROL DEVICES INSTALLED DURING PHASE 1 AND 2 MUST STILL BE MAINTAINED. THE POINT OF COMPLIANCE NOW SHIFTS TO THE BACK OF CURB ALONG EACH STREET.
2. CURB OPENING INLET PROTECTION:
   A. SUMP AREAS – INLET PROTECTION 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.

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.

GARY L. JANZEN LICENSED 16294 KANSAS PROFESSIONAL ENGINEER
05/30/13

SEE DETAIL SHEET FOR BACK OF CURB PROTECTION DETAIL



CURB BACKFILL DETAIL (STREET CONSTRUCTION ONLY)

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
PUBLIC WORKS & UTILITIES ENGINEERING DIVISION

SUBDIVISION DEVELOPMENT PROCESS

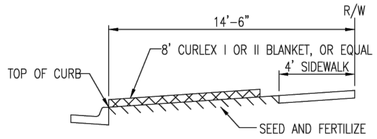
CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER	OCA NUMBER	DATE
----	####	08/2012

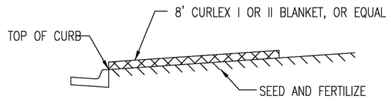
CITY ENGINEER'S OFFICE
CITY HALL - SEVENTH FLOOR
455 NORTH MAIN STREET
WICHITA, KANSAS 67202-1620
(316) 268-4501

SHEET 41 / 44

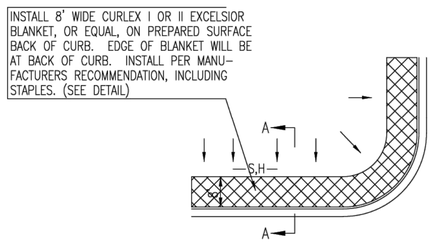
SW–505

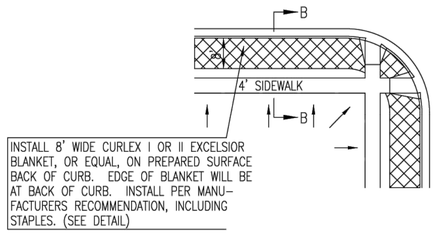


SECTION B–B



SECTION A–A

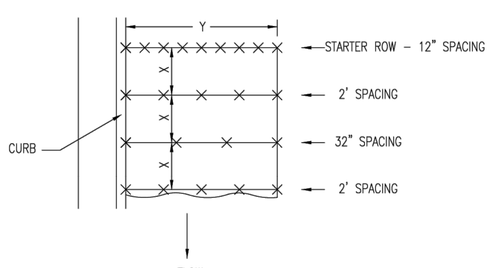


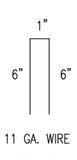


GENERAL NOTES

1. EXCELSIOR MAT TO BE INSTALLED WHEN SOD IS NOT SPECIFIED ON PROJECT.
2. EXCELSIOR BLANKET TO BE INSTALLED OVER SEED AND FERTILIZER, AS SPECIFIED IN THE PROJECT SPECIFICATIONS.
3. 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

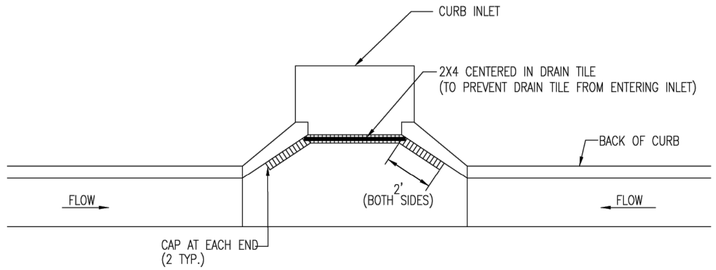




STAPLE PATTERN

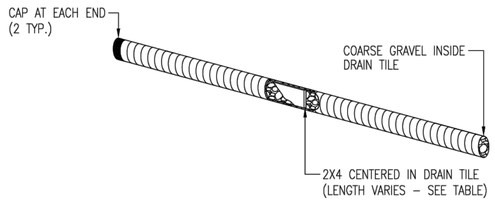
NOTES: USE 6" SEAM OVERLAP
(X & Y = RECOMMENDED BY MANUFACTURE)

DETAILS FOR APPROVED EROSION CONTROL MAT



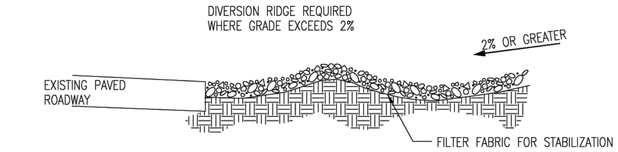
NOTE:
PLACE 4" PERFORATED PVC PIPE, FILLED WITH 1/2"–1" DIA. GRAVEL, IN FRONT OF CURB INLET AS SHOWN.

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

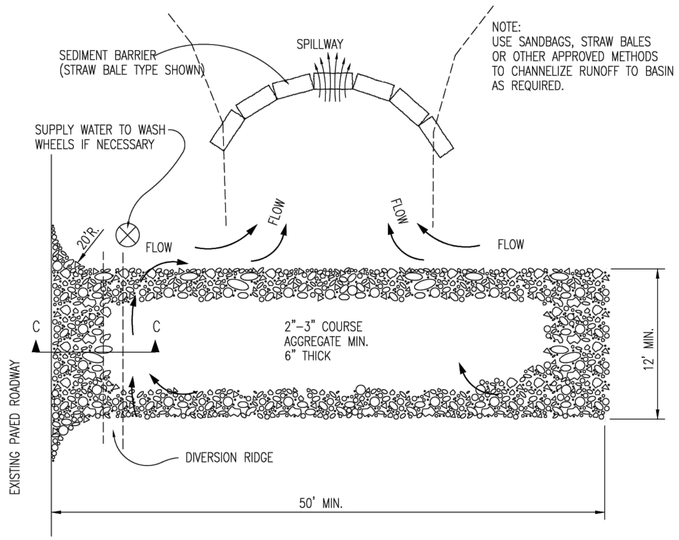


CURB INLET PROTECTION

4" PERFORATED PIPE W/ GRAVEL



SECTION C–C



STABILIZED CONSTRUCTION ENTRANCE

GENERAL NOTES

1. 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.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT–OF–WAY.
3. 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.
4. 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

GARY L. JANZEN LICENSED 16294 KANSAS PROFESSIONAL ENGINEER
05/13/13

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
----	#####	

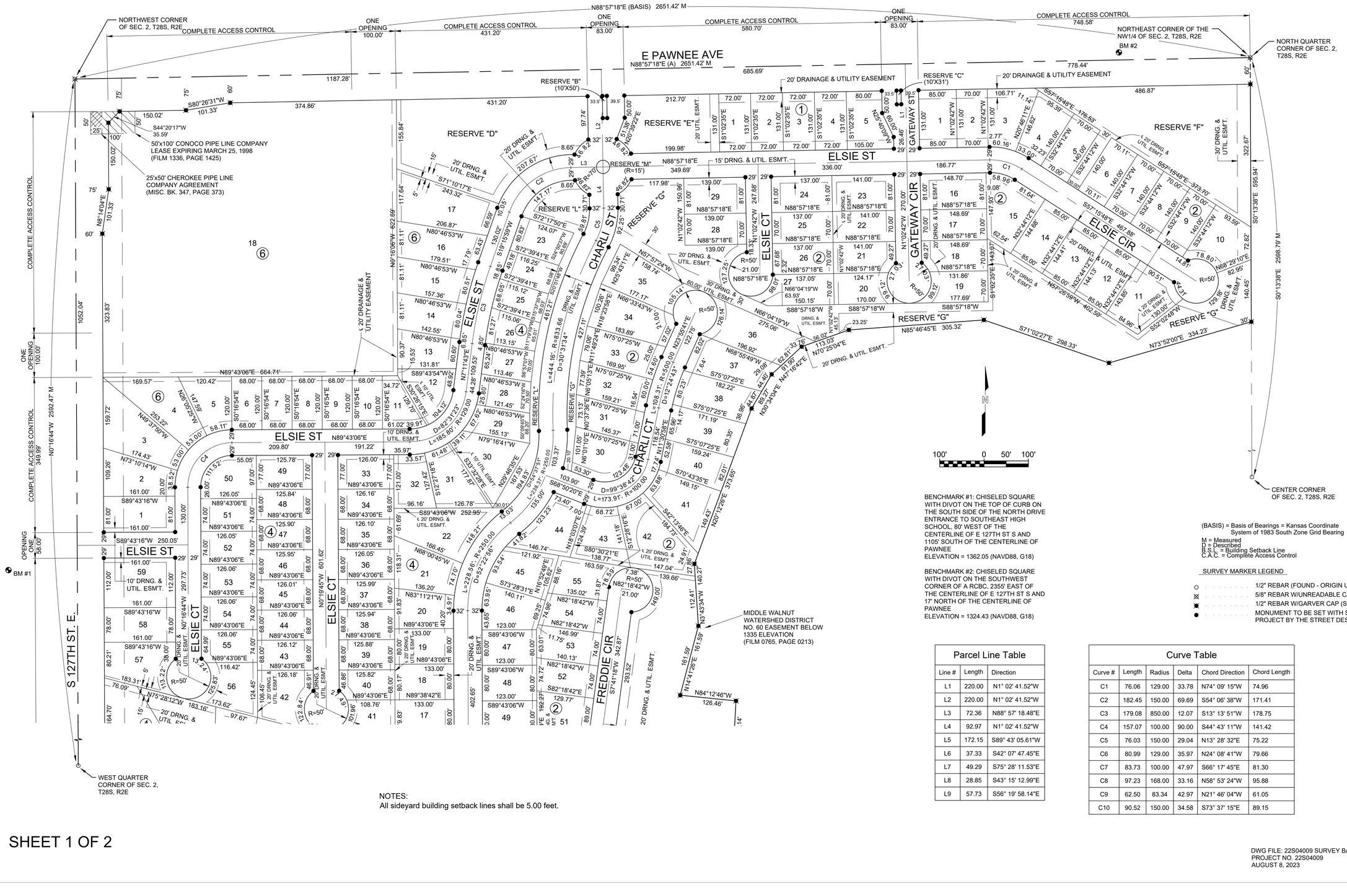
CITY ENGINEER'S OFFICE
CITY HALL - SEVENTH FLOOR
455 NORTH MAIN STREET
WICHITA, KANSAS 67202-1620
(316) 268-4501

SHEET 42 / 44

SW–501

BUFFALO PINES

Wichita, Sedgwick County, Kansas



BENCHMARK #1: CHISELED SQUARE WITH DIVOT ON THE TOP OF CURB ON THE SOUTH SIDE OF THE NORTH DRIVE ENTRANCE TO SOUTHEAST HIGH SCHOOL, 80' WEST OF THE CENTERLINE OF E 127TH ST S AND 1105' SOUTH OF THE CENTERLINE OF PAWNEE
ELEVATION = 1362.05 (NAVD88, G18)

BENCHMARK #2: CHISELED SQUARE WITH DIVOT ON THE SOUTHWEST CORNER OF A RCBC, 2355' EAST OF THE CENTERLINE OF E 127TH ST S AND 17' NORTH OF THE CENTERLINE OF PAWNEE
ELEVATION = 1324.43 (NAVD88, G18)

(BASIS) = Basis of Bearings = Kansas Coordinate System of 1983 South Zone Grid Bearing
M = Measured
D = Described
B.S.L. = Building Setback Line
C.A.C. = Complete Access Control

SURVEY MARKER LEGEND

- ○ 1/2" REBAR (FOUND - ORIGIN UNKNOWN)
- ⊠ 5/8" REBAR W/UNREADABLE CAP (FOUND - ORIGIN UNKNOWN)
- ▣ 1/2" REBAR W/GARVER CAP (SET)
- ● MONUMENT TO BE SET WITH STREET CONSTRUCTION PROJECT BY THE STREET DESIGNER

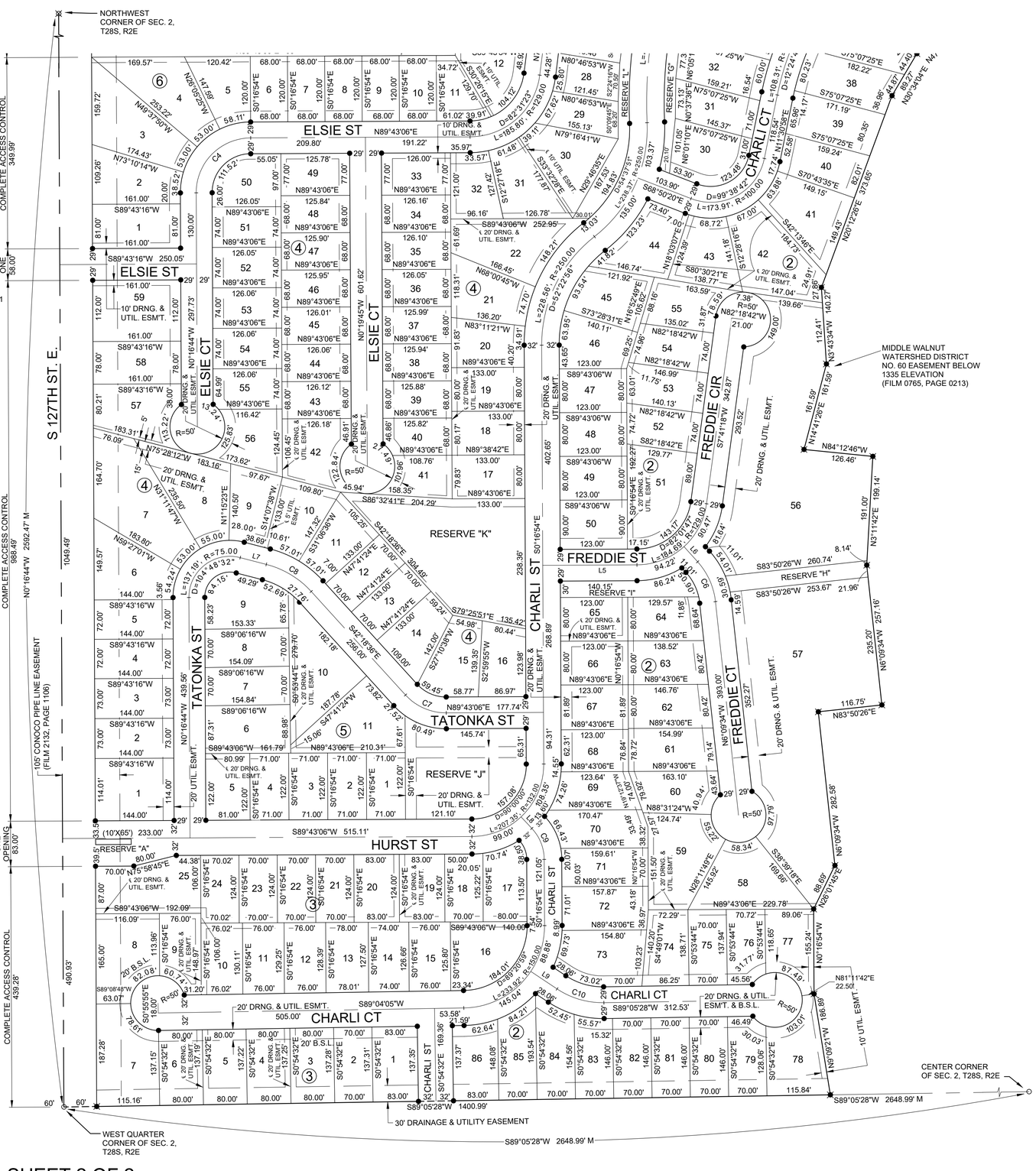
Parcel Line Table		
Line #	Length	Direction
L1	220.00	N1° 02' 41.52"W
L2	220.00	N1° 02' 41.52"W
L3	72.36	N88° 57' 18.48"E
L4	92.97	N1° 02' 41.52"W
L5	172.15	S89° 43' 05.61"W
L6	37.33	S42° 07' 47.45"E
L7	49.29	S75° 28' 11.53"E
L8	28.85	S43° 15' 12.99"E
L9	57.73	S56° 19' 58.14"E

Curve Table					
Curve #	Length	Radius	Delta	Chord Direction	Chord Length
C1	76.06	129.00	33.78	N74° 09' 15"W	74.96
C2	182.45	150.00	69.69	S54° 06' 38"W	171.41
C3	179.08	850.00	12.07	S13° 13' 51"W	178.75
C4	157.07	100.00	90.00	S44° 43' 11"W	141.42
C5	76.03	150.00	29.04	N13° 28' 32"E	75.22
C6	80.99	129.00	35.97	N24° 08' 41"W	79.66
C7	83.73	100.00	47.97	S66° 17' 45"E	81.30
C8	97.23	168.00	33.16	N58° 53' 24"W	95.88
C9	62.50	83.34	42.97	N21° 46' 04"W	61.05
C10	90.52	150.00	34.58	S73° 37' 15"E	89.15

NOTES:
All sideyard building setback lines shall be 5.00 feet.

GARVER
1995 MIDFIELD RD.
Wichita, KS 67209
(316) 264-8008
www.GarverUSA.com

DWG FILE: 22S04009 SURVEY BASE
PROJECT NO. 22S04009
AUGUST 8, 2023



SHEET 2 OF 2

State of Kansas)
SS
Sedgwick County)

We, Garver, LLC, Land Surveyors in aforesaid county and state, do hereby certify that, under the supervision of the undersigned, we have surveyed and platted "BUFFALO PINES", Wichita, Sedgwick County, Kansas, and that the accompanying plat is a true and correct exhibit of the property surveyed, described as follows:

The NW1/4 of Section 2, T28S, R2E of the 6th P.M., Sedgwick County, Kansas, EXCEPT that part described as beginning at the Center of said Section 2; thence S89°05'28"W along the south line of said NW1/4, 1248.00 feet; thence N09°09'21"W, 186.89 feet; thence N01°16'54"W, 155.24 feet; thence N26°01'45"E, 88.69 feet; thence N06°09'34"W, 282.58 feet; thence N83°50'26"E, 116.75 feet; thence N06°09'34"W, 257.16 feet; thence N03°11'42"E, 199.14 feet; thence N84°12'46"W, 126.46 feet; thence N14°41'26"E, 161.59 feet; thence N03°43'34"W, 140.27 feet; thence N20°12'26"E, 373.65 feet; thence N30°34'04"E, 89.27 feet; thence N47°16'42"E, 91.90 feet; thence N70°25'04"E, 113.03 feet; thence N85°46'45"E, 305.32 feet; thence S71°02'27"E, 298.33 feet; thence N73°52'00"E, 334.23 feet to the east line of said NW1/4; thence S00°13'38"E along said east line, 2002.85 feet to the place of beginning, AND EXCEPT the South 430 feet of the North 470 feet of the East 10 feet of the West 40 feet of the NW1/4 of Section 2, Township 28 South, Range 2 East of the 6th P.M., Sedgwick County, Kansas, written by William K. Clevenger, PS-1437 on 3/29/2023.

All public easements and dedications are hereby vacated by virtue of K.S.A. 12-512b, as amended.

Garver, LLC

_____ Land Surveyor
William K. Clevenger, PS #1437

Know all men by these presents that we, the undersigned, have caused the land described in the surveyor's certificate to be platted into Lots, Blocks, Reserves, and Streets, to be known as "BUFFALO PINES", Wichita, Sedgwick County, Kansas. The utility easements are hereby granted to the public as indicated for the construction and maintenance of all public utilities. No signs, light poles, private drainage systems, berms, walls, masonry trash enclosures or other structures shall be located within public utility easements unless permitted by the City of Wichita Department of Engineering and that they do not inhibit the conveyance of surface drainage. The drainage and utility easements are hereby granted to the public as indicated for drainage purposes and for the construction and maintenance of all public utilities. Access Controls as indicated are hereby granted to the appropriate governing body. The streets are hereby dedicated to and for the use of the public. No obstructions shall be constructed or placed within street stub providing future access to adjacent properties. Reserves "A", "B" and "C" are hereby reserved for signage, irrigation, landscaping, entry features, and utilities confined to easements. irrigation, walls, signage, landscaping and berms. Reserves "D", "E" and "K" are hereby reserved for irrigation, walls, signage, walks, lighting, landscaping, berms, lakes, drainage, drainage structures, and utilities confined to easements. Reserves "F" and "G" are hereby reserved for signage, irrigation, landscaping, walks, berms, park improvements, playground equipment, club house, parking, ponds, drainage, drainage systems, and utilities confined to easements. Reserve "J" is hereby reserved for signage, irrigation, landscaping, walks, park improvements, playground equipment, club house, swimming pool, parking, drainage, and utilities confined to easements. Reserves "H" and "I" are hereby reserved for signage, irrigation, landscaping, walks, berms, drainage, drainage systems, and utilities. Reserve "L" is hereby reserved for signage, irrigation, landscaping, walks, berms, drainage, drainage systems, and utilities confined to easements. The Reserves are to be owned and maintained by the Home Owners Association for the addition, their successors and/or assigns. Compliance with any platted restrictions and applicable restrictive covenants affecting said Reserves shall be binding on any owners, successors, heirs or assigns. No regrading within abutting rights-of-way shall be allowed with the construction of the berms allowed within Reserves A, B, C, D, E, F, G, H, I and K. The berms cannot impact access to or bury manholes, water valves and/or water meters.

FEMA floodplain and regulatory floodway boundaries are subject to periodic change, and such change may affect the intended land use within the subdivision. No private drainage systems shall be located within public drainage easements unless a Residential Drainage Relief Permit is obtained from the City of Wichita Public Works & Utilities Department. A master drainage plan has been developed for this plat. All drainage easements, rights of way and reserves shall remain at established grades (unless modified with the approval of the City Engineer) and shall be unobstructed to allow for the conveyance of stormwater in accordance with the Stormwater Manual. The maintenance of all drainageways and drainage facilities in backyard easements and reserves shall be the responsibility of the property owner, and shall be enforced by the Homeowners' Association and be provided for in the Homeowners' Association covenants."

Double Down Developers, LLC

_____ Member
Philip Ruffo

State of Kansas)
SS
Sedgwick County)

The foregoing instrument acknowledged before me, this ____ day of _____, 2023, by Philip Ruffo , Member, on behalf of Double Down Developers, LLC.

_____ Notary Public
Marsha R. Bishop

My appointment expires _____ .

BUFFALO PINES

Wichita, Sedgwick County, Kansas

We the undersigned, holders of a mortgage on a portion of the above described property, do hereby consent to this plat of "BUFFALO PINES", Wichita, Sedgwick County, Kansas.

Legacy Bank, N.A.

_____ Executive Vice President
Rex Reynolds

State of Kansas)
SS
Sedgwick County)

The foregoing instrument acknowledged before me this ____ day of _____ , 2023, by Rex Reynolds, Executive Vice President of Legacy Bank, N.A., on behalf of the Bank.

_____ , Notary Public

My appointment expires _____ .

This plat of "BUFFALO PINES", Wichita, Sedgwick County, Kansas, has been submitted to and approved by the Wichita-Sedgwick County Metropolitan Area Planning Commission, Wichita, Kansas.

Dated this ____ day of _____ , 2023.

Wichita-Sedgwick County Metropolitan Area Planning Commission

_____ Chair
Robert Dool

_____ Secretary
Scott A. Wadle

This plat approved and all dedications shown hereon accepted by the City Council of the City of Wichita, Kansas, this ____ day of _____ , 2024.

At the Direction of the City Council

_____ Mayor
Lily Wu

_____ City Clerk
Jamie Buster

Reviewed in accordance with K.S.A. 58-2005 on this ____ day of _____ , 2023.

Deputy County Surveyor
_____ Sedgwick County Kansas
Tricia L. Robello, PS #1246

Entered on transfer record this ____ day of _____ , 2024.

_____ County Clerk
Kelly B. Arnold

State of Kansas)
SS
Sedgwick County)

This is to certify that this plat has been filed for record in the office of the Register of Deeds, this ____ day of _____ , 2024, at ____ o'clock __ M, and is duly recorded.

_____ Register of Deeds
Tonya Buckingham

_____ Deputy
Kenly Zehring

DWG FILE: 22S04009 SURVEY BASE
PROJECT NO. 22S04009
AUGUST 8, 2023

GARVER
1995 MIDFIELD RD.
Wichita, KS 67209
(316) 264-8008
www.GarverUSA.com