CONSTRUCTION PLANS FOR PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

TO SERVE

SWANEY FARM ADDITION-PHASE 2

CITY OF WICHITA ENGINEERING PROJECT NO. 472-2024-086027
ORG CODE: 47479625, MUNIS NO.: E5131

CITY OF WICHITA, KS

PAUL GUNZELMAN, P.E. - CITY ENGINEER

DEVELOPER CONTACT
MR. ERIC GILBERT
ARTISTIC BUILDERS
11100 FREMONT CIRCLE
MULVANE, KS 67110
316-650-7536
EMGILBERT13@GMAIL.COM

LOCATION MAP

PROJECT LOCATION
SWANEY FARM ADDITION-PHASE 2

Sheet List Table

SHEET	SHEET NUMBER	SHEET TITLE
1	CP001	TITLE SHEET
2	CP002	HORIZONTAL & VERTICAL CONTROL AND KEY MAP
3	CP003	GENERAL NOTES
4	CP004	TYPICAL SECTIONS
5	CP101	COORDINATE GEOMETRY PLAN
6	CP102	COORDINATE GEOMETRY TABLES
7	CP103	COORDINATE GEOMETRY CURVE PLAN
8	CP104	COORDINATE GEOMETRY CURVE TABLES
9	CP201	61ST STREET SOUTH-PLAN
10	CP202	61ST STREET SOUTH-PLAN
11	CP203	61ST STREET SOUTH-PLAN
12	CP204	BLUFF STREET-PLAN
13	CP205	BLUFF STREET-PLAN
14	CP206	BLUFF STREET NORTH-PLAN
15	CP207	WILLIS STREET-PLAN
16	CP208	WILLIS STREET-PLAN
17	CP209	WILLIS COURT-PLAN
18	CP301	CUL-DE-SAC & VALLEY GUTTER PLAN
19	CP302	VALLEY GUTTER PLANS
20	CP303	VALLEY GUTTER DETAILS
21	CP304	CURB AND GUTTER DETAILS
22	CP305	WHEELCHAIR RAMP DETAILS
23	CP306	SIGN DETAILS
24	CP401	PLAN AND PROFILE-SWS LINE 1
25	CP402	PLAN AND PROFILE-SWS LINE 1
26	CP403	PLAN AND PROFILE-SWS LINE 2
27	CP404	PLAN AND PROFILE-SWS LINES 2 AND 2A
28	CP405	PLAN AND PROFILE-SWS LINE 3
29	CP406	PLAN AND PROFILE-SWS LINE 3
30	CP407	PLAN AND PROFILE-SWS LINE 4
31	CP408	PLAN AND PROFILE-SWS LINE 4
32	CP409	PLAN AND PROFILE-SWS LINE 4
33	CP410	PLAN AND PROFILE-SWS LINE 4
34	CP411	PLAN AND PROFILE-SWS LINES 4A AND 4B
35	CP412	PLAN AND PROFILE-SWS LINE 5
36	CP413	PLAN AND PROFILE-SWS LINE 5
37	CP501	STD. TYPE 1A CURB INLET DETAILS
38	CP502	PRECAST CONCRETE MANHOLE DETAILS
39	CP503	GRATED DRIVEWAY INLET-SINGLE
40	CP504	BACKYARD INLET
41	CP505	PAVEMENT UNDERDRAIN DETAILS
42	CP506	BEDDING AND BACKFILL DETAILS
43	CP507	MANHOLE-INLET FRAME AND COVER DETAILS
44	CP508	RIPRAP DETAILS
45	CG101	BACK YARD DRAINAGE PLAN
46	CG102	EROSION CONTROL PLAN
47	CG501	BACK OF CURB AND CURB INLET PROTECTION
48	CG502	SILT FENCE DITCH CHECK
49	CG503	STRAW BALE DITCH CHECK
50	CG504	STREET IMPROVEMENT PROJECTS SUBDIVISION
51	CG505	DEVELOPMENT PROCESS
52-57	CX601-CX606	CROSS SECTIONS-61ST STREET
58-61	CX607-CX610	CROSS SECTIONS-BLUFF STREET
62	CX611	CROSS SECTIONS-BLUFF STREET N
63-67	CX612-CX616	CROSS SECTIONS-WILLIS STREET
68-69	CX617-CX618	CROSS SECTIONS-WILLIS COURT

SUBDIVISION BENCH MARKS (SBM)

NO.	STREET AND STATION	FROM CL	DESCRIPTION	ELEVATION
1	61ST ST. SOUTH, STA. 12+57.19	17.50' RT.	E. END, NORTHEAST CURB RETURN, 61ST STREET S.	
2	61ST ST. SOUTH, STA. 19+06.98	17.50' LT.	E. END, NORTHEAST CURB RETURN, 61ST STREET S.	
3	WILLIS ST., STA. 43+74.88	14.50' LT.	S. END, SOUTHEAST CURB RETURN, WILLIS ST.	
4	WILLIS ST., STA. 50+10.70	14.50' LT.	W. END, NORTHWEST CURB RETURN, WILLIS ST.	

THE COST OF THE BENCH MARK DISC, INCLUDING INSTALLATION, SHALL BE INCIDENTAL TO THE CURB.

NOVEMBER 2025

PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 11/06/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

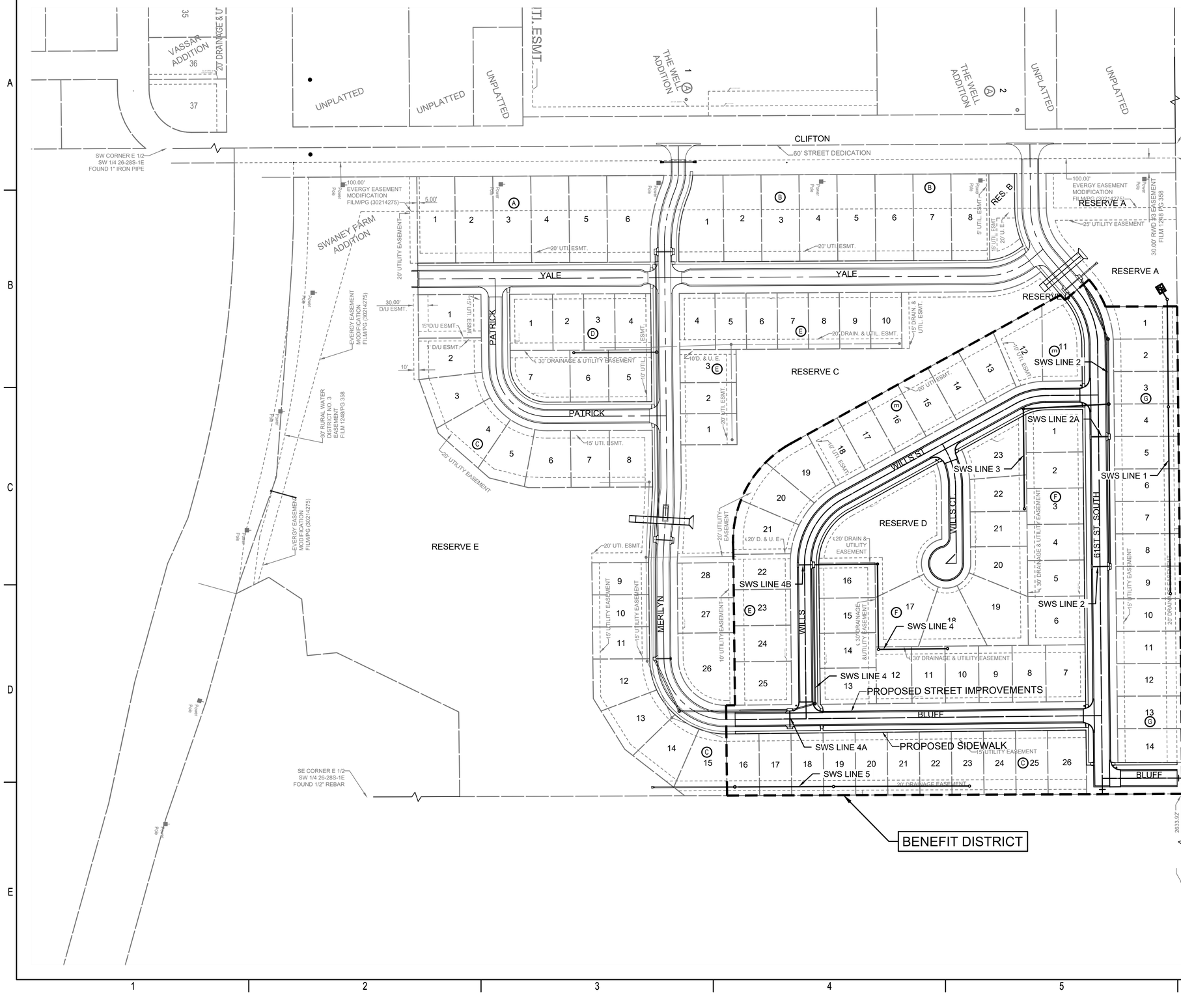
Issue:		

JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

TITLE SHEET

CP001
1 OF 69

SAVED 9/23/2025 2:24:49 PM BY KEVIN.GRAHAM
PLOTTED 11/6/2025 12:28:41 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\1-200605-009-CP001 TITLE SHEET.DWG



0' 100' 200'

1 INCH = 100 FEET

HORIZONTAL DATUM/COORDINATE SYSTEM:
KRCS ZONE 17-WICHITA

BENCH MARKS

BM-201
ELEV: 1,265.03 (NAVD 88)
T- POST ON THE EAST SIDE OF CLIFTON ROAD, 1650' NORTH OF 63RD STREET, 28' SOUTH OF CP-101

BM-202
ELEV: 1,259.36 (NAVD 88)
CHISELED X ON CURB STORM DRAIN ON THE SE SIDE OF CLIFTON AND 63RD

BM-203
ELEV: 1,265.85 (NAVD 88)
CHISELED SQUARE ON THE SOUTH CENTER OF CURB STOM DRAIN LOCATED ON THE NORTH SIDE OF 63RD, JUST EAST OF THE BRIDGE

HORIZONTAL CONTROL POINTS

CP-101
N: 333,433.9305 E: 17,559,720.6200
1/2 BAR WITH PEC CAP
1. 10' E TO EAST EDGE OF ROAD
2. 108' S TO CENTER OF FIELD ENTRANCE TO WEST
3. 52.20' WSW TO TOP CENTER OF TELEPHONE PEDESTAL

CP-102
N: 332,672.8610 E: 17,559,679.7500
1/2 BAR WITH PEC CAP
1. 116' S TO TOP CENTER OF TELEPHONE MARKER POST
2. 8' E TO WEST EDGE OF ROAD
3. 257' N TO TOP CENTER OF FIRE HYDRANT

CP-103
N: 331,714.2766 E: 17,559,747.7300
1/2 BAR WITH PEC CAP
1. 34.17' NW TO BENCHMARK 202 (CHISELED SQUARE ON SDC)
2. 3.45' NW TO POWER POLE
3. 43.55' N TO CENTER OF ROAD

CP-104
N: 331,728.4226 E: 17,560,371.0300
1/2 BAR WITH PEC CAP
1. 30.4' ESE TO TOP CENTER OF TELEPHONE PEDESTAL
2. 8.6' S TO BACK OF CURB
3. 34.23' NE TO TOP END OF RCP

CP-105
N: 331,530.9404 E: 17,560,836.2700
1/2 BAR WITH PEC CAP
1. 6' N TO SOUTH BACK OF CURB
2. 45.25' E TO NO PARKING SIGN
3. 35' N TO TO CENTERLINE OF ROAD

PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 11/06/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

Issue:		

JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

HORIZONTAL & VERTICAL CONTROL AND KEY MAP

CP002
2 OF 69

SAVED 7/3/2025 3:01:44 PM BY BILL.SEXSON
PLOTTED 11/6/2025 12:28:48 PM BY KEVIN GRAHAM
U:\WICHITA-CIV\IL2020\200605009\2PD4_PLANS\030\PAVINGV2-200605-009-CP002 HORIZONTIAL & VERTICAL CONTROL AND KEY MAP.DWG

GENERAL NOTES

1. ALL CONSTRUCTION AND MATERIALS TO COMPLY WITH CITY OF WICHITA STANDARD CONSTRUCTION SPECIFICATIONS AND DETAILS, UNLESS OTHERWISE INCLUDED IN THE CONTRACT DOCUMENTS.

2. EACH BIDDER SHALL VISIT THE SITE OF THE PROJECT BEFORE SUBMITTING THE PROPOSAL FOR THIS WORK SO THAT THEY WILL BE FULLY INFORMED OF THE EXISTING FIELD CONDITIONS AND THE OBSTACLES WHICH MIGHT BE ENCOUNTERED. UPON AWARD OF THE CONTRACT THE CONTRACTOR WILL NOT BE GRANTED ANY ADDITIONAL COMPENSATION WITH REGARDS TO TIME AND MONEY FOR CONDITIONS THAT MAY HAVE BEEN EVALUATED DURING ANY INSPECTION OF THE SITE.

3. AT LEAST 72 HOURS PRIOR TO BEGINNING ANY EXCAVATION (EXCLUDING WEEKENDS AND HOLIDAYS), THE CONTRACTOR SHALL CONTACT THE KANSAS ONE-CALL SYSTEM, A UTILITY LOCATION SERVICE, AT (316)-687-2470 OR 811 TO REQUEST THE LOCAL UTILITY COMPANIES TO LOCATE ANY EXISTING LINES WITHIN THE PROJECT AREA.

4. THE CONTRACTOR MUST NOTIFY THE FOLLOWING IN CASE OF AN EMERGENCY:

EMERGENCY DISPATCH:	911
COX COMMUNICATIONS:	888-249-3530
EVERGY:	800-383-1183
AT&T:	800-286-8313
KANSAS GAS SERVICE:	888-482-4950

5. THE CONTRACTOR SHALL GIVE ALL PROPERTY OWNERS AND/OR TENANTS OF DEVELOPED PROPERTY DIRECTLY ABUTTING THE CONSTRUCTION OF THIS PROJECT A MINIMUM OF SEVEN (7) DAYS ADVANCE NOTICE PRIOR TO THE START OF CONSTRUCTION.

6. THE CONTRACTOR SHALL NOT START WORK ON THE PROJECT UNTIL THE PROJECT INSPECTOR IS ASSIGNED AND IS PRESENT ON THE SITE. ANY WORK DONE WITHOUT INSPECTION WILL BE REQUIRED TO BE UNCOVERED FOR INSPECTION AT THE CONTRACTORS EXPENSE.

7. ALL ELEVATIONS SHOWN ARE NAVD88 DATUM. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL RE-ESTABLISH CONTROL POINTS AND BENCH MARKS AND VERIFY THEIR ACCURACY.

8. EXISTING UTILITIES AND THEIR LOCATION, AS SHOWN ON THE DRAWINGS, REPRESENT THE BEST INFORMATION OBTAINABLE FOR DESIGN. LOCATION INFORMATION HAS BEEN OBTAINED FROM THE VARIOUS UTILITY COMPANIES AND IS EITHER FROM COMPANY RECORD DRAWINGS OR COMPANY PROVIDED FIELD LOCATIONS. IT SHOULD BE NOTED THAT OTHER BURIED LINES AND CABLES MAY EXIST WHICH ARE NOT SHOWN ON THESE DRAWINGS. THE CONTRACTOR SHALL HAVE ALL BURIED LINES LOCATED AND FLAGGED IN THE FIELD PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL CONTACT THE ENGINEER AND REVIEW ANY BURIED LINES LOCATED IF CONFLICTS EXIST. THE CONTRACTOR WILL BE REQUIRED TO WORK AROUND EXISTING UTILITIES WITHIN THE RIGHT-OF-WAY WHICH DO NOT CONFLICT WITH PROPOSED CONSTRUCTION. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION DURING TRENCHING OPERATIONS TO AVOID DAMAGING THESE LINES. ANY LINES DAMAGED SHALL BE REPLACED OR REPAIRED IMMEDIATELY AS DIRECTED BY THE ENGINEER AT THE CONTRACTOR'S EXPENSE.

9. THE CONTRACTOR SHALL EXPOSE AND VERIFY THE VERTICAL AND HORIZONTAL LOCATION OF EXISTING UTILITIES THAT ARE IN POTENTIAL CONFLICT WITH THE PROPOSED IMPROVEMENTS. THE UTILITY LOCATES SHALL BE PERFORMED PRIOR TO THE START OF CONSTRUCTION AND ANY DISCREPANCIES SHALL BE REPORTED IMMEDIATELY TO THE ENGINEER.

10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY IRONS AND SECTION CORNERS. THE CONTRACTOR SHALL BE REQUIRED TO RE-ESTABLISH ANY PROPERTY IRONS WHICH ARE DAMAGED OR DESTROYED BY CONSTRUCTION OPERATIONS. SUCH IRONS SHALL BE RE-ESTABLISHED BY A LICENSED LAND SURVEYOR IN ACCORDANCE WITH STATE LAWS.

11. EASEMENTS AND RIGHTS-OF-WAY PROVIDED BY THE OWNER FOR THE PROJECT ARE SHOWN ON THE DRAWINGS. IF NECESSARY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE ACQUISITION OF ANY ADDITIONAL TEMPORARY EASEMENTS OR RIGHTS-OF-WAY DESIRED TO USE IN COMPLETING THE WORK.

12. THE CONTRACTOR SHALL CONTAIN THEIR OPERATIONS TO PERMIT LOCAL AND EMERGENCY TRAFFIC THROUGH AND ACROSS CONSTRUCTION AT ALL TIMES. THE CONTRACTOR SHALL UTILIZE WARNING SIGNS, FLASHING LIGHTS, BARRICADES, AND FLAGMEN IN COMPLIANCE WITH THE LATEST VERSION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

13. RUBBLE FROM THE REMOVAL OF MISCELLANEOUS STRUCTURES INCLUDING ANY TREES REMOVED, TREE TRIMMINGS, AND EXCESS EXCAVATION WHICH IS TO BE WASTED SHALL BE DISPOSED OF ON SITES PROVIDED BY THE CONTRACTOR. THESE SITES SHALL ALSO BE APPROVED BY THE ENGINEER AS TO SUITABILITY, APPEARANCE, AND SITE LOCATION. LOCATIONS THAT, IN THE OPINION OF THE ENGINEER, WILL LEAVE AN UNSIGHTLY APPEARANCE WILL NOT BE APPROVED. ALL DISPOSAL SITES MUST BE APPROVED BY THE KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT. MATERIAL EITHER STOCKPILED OR DISPOSED OF IN A FLOOD PLAIN WILL REQUIRE A KANSAS STATE BOARD OF AGRICULTURE PERMIT. ANY MATERIAL DUMPED IN WATERS OF THE UNITED STATES, FLOODWAYS, OR WETLANDS IS SUBJECT TO U.S. CORPS OF ENGINEERS PERMITTING REGULATIONS. ANY MATERIAL BURIED OR STOCKPILED BEYOND APPROVED CONSTRUCTION LIMITS MAY REQUIRE ARCHAEOLOGICAL INVESTIGATIONS UNLESS BURIED IN A PREVIOUSLY APPROVED DISPOSAL LOCATION.

14. THE CONTRACTOR SHALL AVOID REMOVAL OR TRIMMING OF ANY TREES OR SHRUBS WHERE POSSIBLE. WHERE THE CONTRACTOR BELIEVES THE REMOVAL OR TRIMMING IS UNAVOIDABLE, THIS WORK SHALL BE COORDINATED WITH THE ENGINEER. TREE TRIMMING/REMOVAL SHALL BE COMPLETED IN ACCORDANCE WITH U.S FISH AND WILDLIFE SERVICE AND KANSAS DEPARTMENT OF WILDLIFE, PARKS, AND TOURISM RESTRICTIONS.

15. THE CONTRACTOR SHALL RESTORE ALL DITCHES, SWALES, ROAD SHOULDERS, AND BANKS TO THEIR ORIGINAL SLOPES AND GRADES EXCEPT AS SHOWN OTHERWISE. WHERE EXISTING ENTRANCE PIPE, DRAINAGE PIPE, SIGNS, FENCES, LANDSCAPING, ETC., CONFLICT WITH THE PROPOSED WORK HEREIN, THEY SHALL BE REMOVED AND REPLACED OR RESET, UNLESS OTHERWISE NOTED ON THE DRAWINGS.

16. THE CONTRACTOR SHALL INSTALL AND/OR MAINTAIN EROSION CONTROL METHODS AS SPECIFIED ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING EROSION CONTROL THROUGH THE COMPLETION OF THIS PROJECT. INSTALLATION OF THESE EROSION CONTROL DEVICES DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF ABATING SOIL EROSION.

17. THE CONTRACTOR SHALL TAKE CARE TO PREVENT SILT AND DEBRIS FROM ENTERING ANY STORM DRAINAGE SYSTEM DURING CONSTRUCTION. PIPES OR STRUCTURES WHICH CONTAIN MATERIALS FROM THE CONTRACTORS ACTIVITIES SHALL BE THOROUGHLY CLEANED BY THE CONTRACTOR, AT THEIR OWN EXPENSE, PRIOR TO THE FINAL INSPECTION.

18. RECONSTRUCTION OF EROSION CONTROL MEASURES WHICH ARE DESTROYED BY WIND, FLOOD, FIRE, OR BY THE ACTIONS OF THE CONTRACTOR OR OTHERS SHALL BE PERFORMED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER AT NO ADDITIONAL COST. WHERE ADJUSTMENTS IN QUANTITIES ARE REQUIRED BY FIELD CONDITIONS, THERE SHALL BE NO ADJUSTMENT IN UNIT PRICE.

19. ALL GRASSED AREAS DISTURBED BY CONSTRUCTION OF THE PROPOSED IMPROVEMENTS SHALL BE REPLANTED WITH GRASS AND FERTILIZED IN ACCORDANCE WITH THE CITY OF WICHITA SPECIFICATIONS. EXISTING GRASSED AREAS DISTURBED BY CONSTRUCTION SHALL BE REPLANTED WITH THE SAME TYPE OF GRASS AS WAS REMOVED, UNLESS OTHERWISE SPECIFIED.

20. THE CONTRACTOR SHALL SEED ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES WITH TEMPORARY RYE GRASS. RYE GRASS SEED SHALL BE PLANTED AT A MINIMUM RATE OF SIX (6) POUNDS PER ONE THOUSAND (1,000) SQUARE FEET. THIS TEMPORARY SEEDING MAY BE OMITTED ONLY IF PERMANENT SEEDING/SODDING IS APPLIED. TEMPORARY SEEDING OR PERMANENT SEEDING/SODDING SHALL BE APPLIED WITHIN 14 DAYS AFTER THE AREA HAS BEEN DISTURBED. REFER TO SEEDING PLAN IN STORM WATER DRAIN IMPROVEMENTS PROJECT (458-2024-085570).

21. IF APPLICABLE, CONTRACTOR SHALL MAINTAIN UNINTERRUPTED UTILITY SERVICE TO ADJACENT FACILITIES DURING CONSTRUCTION, UNLESS OTHERWISE APPROVED BY OWNER.

22. WRITTEN REQUEST TO THE UTILITY OWNER WILL BE REQUIRED 72 HOURS PRIOR TO A SCHEDULED UTILITY OUTAGE. THE FIRE DEPARTMENT MUST BE NOTIFIED OF ANY FIRE HYDRANTS OR WATER MAINS TAKEN OUT OF SERVICE.

23. ALL RCB, STORM SEWER, WATERLINE AND SANITARY SEWER EXCAVATION UNDER PROPOSED PAVEMENT SHALL BE SAND FILLED AND FLUSHED (JETTED AND VIBRATED) WITH WATER PER THE REQUIREMENTS LISTED IN THE STANDARD SPECIFICATIONS FOR THE CITY OF WICHITA, UNLESS FLOWABLE FILL OR OTHER IMPROVED BACKFILL MATERIAL IS OTHERWISE SPECIFIED. THE SAND FILL SHALL START AT THE TOP OF IMPROVED BEDDING (PER STANDARD SPECIFICATIONS) AND BE BROUGHT UP UNIFORMLY TO AN ELEVATION 12 INCHES ABOVE THE TOP OF PIPE OR 2 FEET BELOW THE BOTTOM OF PROPOSED PAVEMENT, WHICHEVER IS HIGHER. HOWEVER, IN NO INSTANCE SHALL THE SAND FILL BE BROUGHT UP TO LESS THAN 6 INCHES BELOW THE PAVEMENT SUB-BASE MATERIAL. STORM SEWER ADJACENT TO THE BACK OF CURB SHALL ALSO BE SAND FILLED PER THIS PROVISION, TO WITHIN 2 FEET OF FINAL GRADE.

24. IF TRAFFIC WILL BE IMPACTED BY CONSTRUCTION, A TRAFFIC CONTROL PLAN MUST BE SUBMITTED AND APPROVED BY THE CITY TRAFFIC ENGINEER, 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.

TRAFFIC HANDLING/CONSTRUCTION SCHEDULE

THE CONTRACTOR SHALL INSTALL THE STORM SEWER IMPROVEMENTS PRIOR TO ASPHALT PAVING OPERATIONS. DEMOLITION WORK CAN BE DONE CONCURRENTLY.

THE CONTRACTOR SHALL PROVIDE A DETAILED CONSTRUCTION SEQUENCING AND TRAFFIC CONTROL PLAN FOR ENGINEER REVIEW AND APPROVAL PRIOR TO START OF CONSTRUCTION.

THE CONTRACTOR SHALL PROVIDE DAILY VEHICULAR ACCESS TO PROPERTIES WITHIN THE PROJECT AREA THROUGHOUT CONSTRUCTION. CONTRACTOR SHALL ALSO NOTIFY PROPERTY OWNERS SEVENTY-TWO (72) HOURS IN ADVANCE BEFORE PAVING DRIVEWAYS.

PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 11/06/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

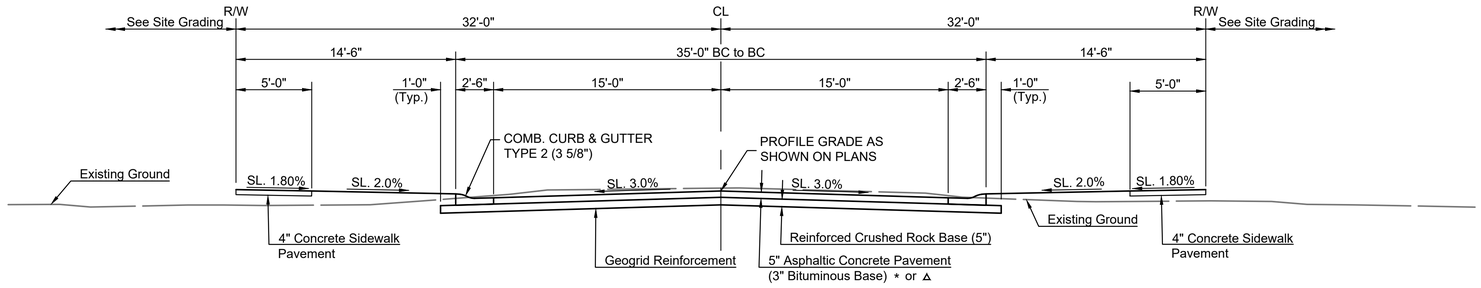
Issue:		

JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

GENERAL NOTES

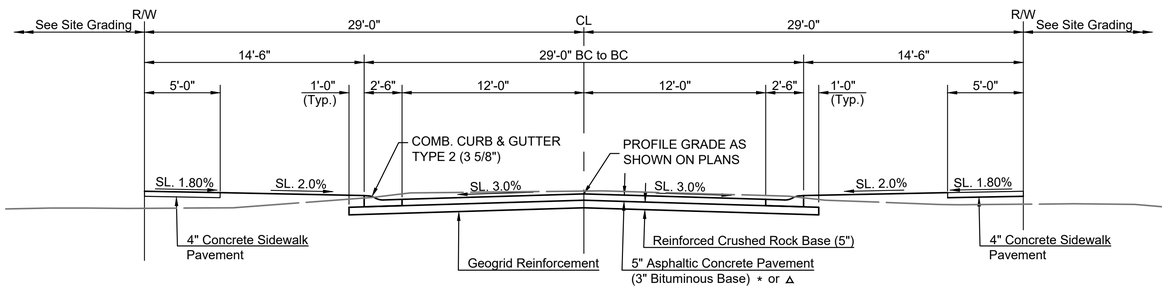
CP003
3 OF 69

SAVED 4/29/2025 11:10:52 AM BY BILL.SEXSON
PLOTTED 11/6/2025 12:28:51 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030PAVING\3-200605-009-CP003 GENERAL NOTES.DWG



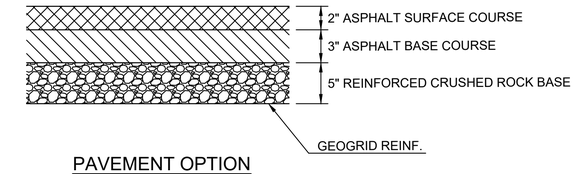
TYPICAL SECTION

61st St. South Sta. 10+10.00 to Sta. 20+15.22
Bluff St. (N) Sta. 30+36.75 to Sta. 31+51.78



TYPICAL SECTION

Bluff Street Sta. 20+00.00 to Sta. 27+06.00
Willis Street Sta. 40+37.00 to Sta. 50+10.70
Willis Court Sta. 50+39.11 to Sta. 51+93.89



PAVEMENT OPTION
ASPHALTIC CONCRETE PAVEMENT

EARTHWORK SUMMARY (C.Y.)		
	Excavation	Compacted Fill (95%)
Street R/W	1,675 CY	1,675 CY

NO SHRINKAGE FACTOR HAS BEEN APPLIED.

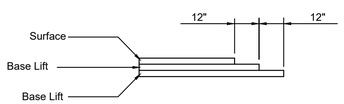
THE QUANTITIES SHOWN FOR "EXCAVATION" ARE MEASURED FROM THE BOTTOM OF SUBGRADE LINE TO THE FINISHED SUBGRADE LINE (ROCK BASE THICKNESS). THIS MATERIAL IS INTENDED TO BE PLACED AS BACKFILL BETWEEN THE BACK OF CURB AND THE EDGE OF THE STREET RIGHT-OF-WAY.

ANY DOUBLE-HANDLING AND/OR STOCKPILING OF EXCAVATED MATERIAL WHICH MAY BE REQUIRED WILL NOT BE MEASURED OR PAID FOR SEPARATELY, BUT SHALL BE SUBSIDIARY TO THE PROJECT.

* 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 shown 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:
Geogrid reinforcement and aggregate base to comply with Sec. 404 of the City of Wichita Standard Specifications for the Construction of Public Projects. Geogrid 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.

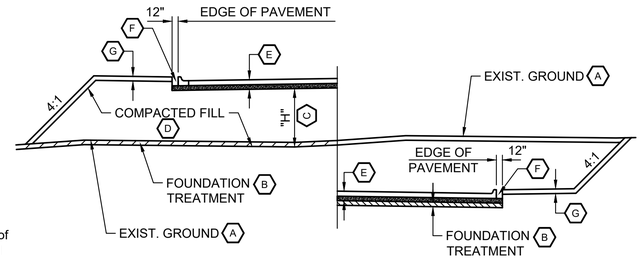
Rock base is to be compacted and smoothed with a steel faced roller prior to placement of asphalt. Tack coat will not be applied to rock base.

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 joint 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.



FOUNDATION TREATMENT & COMPACTION DIAGRAM

1" = 1'

A. STRIP TOPSOIL.
B. SCARIFY AND COMPACT (6 INCHES) TO 95% ASTM D698.
C. "H" EQUALS FULL EMBANKMENT HEIGHT.
D. COMPACT TO 95% ASTM D698.
E. PAVEMENT SECTION, SEE TYPICAL SECTIONS THIS SHEET.
F. BACKFILL WITH SATISFACTORY SOIL. COMPACT TO 95% ASTM D698.
G. PLACE TOPSOIL.

FOUNDATION TREATMENT & COMPACTION SHALL BE CONSIDERED SUBSIDIARY TO THE BID ITEM "EXCAVATION".

PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 11/06/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

Issue:		

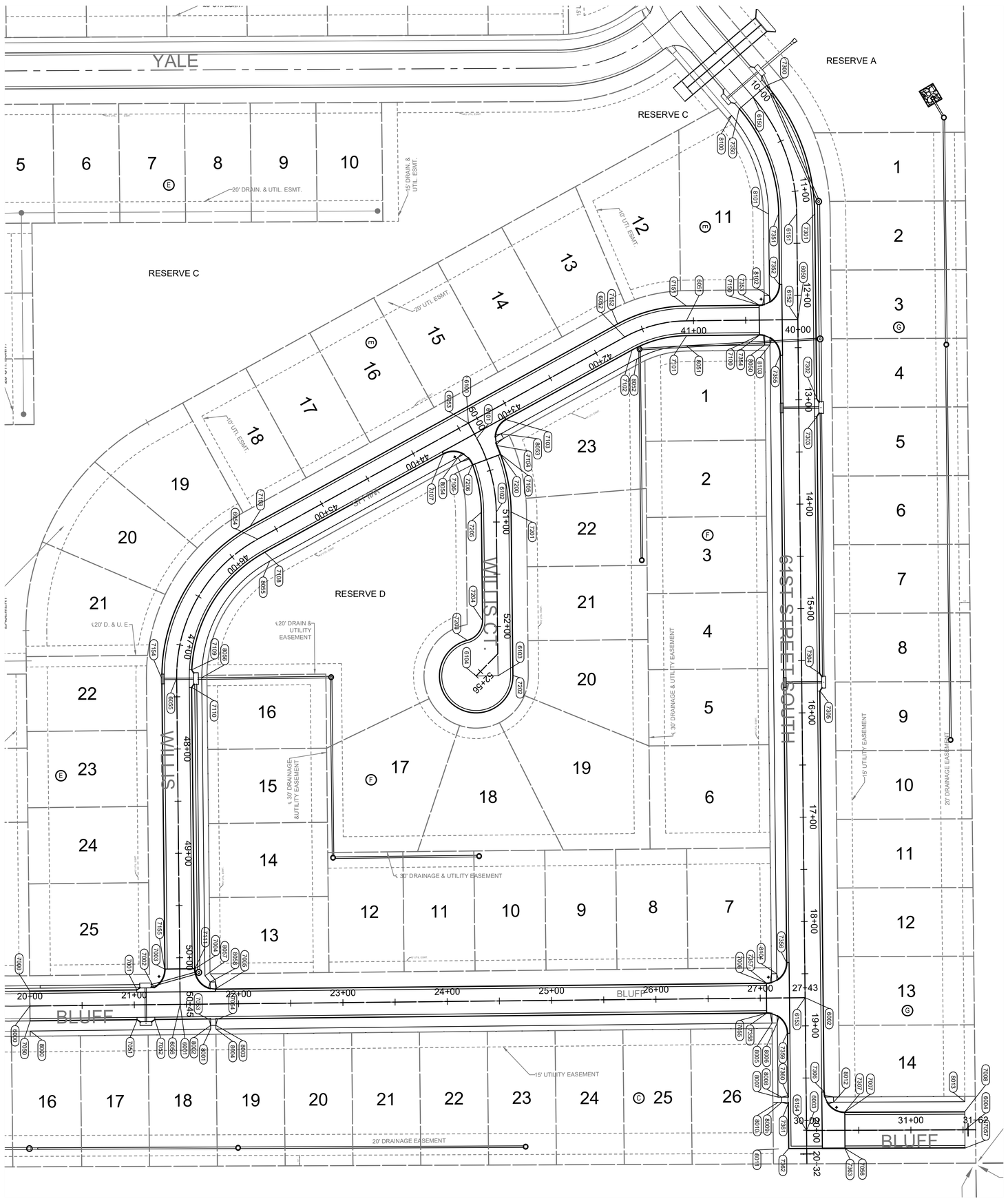
JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

TYPICAL SECTIONS

CP004
4 OF 69

SAVED 9/17/2025 3:17:05 PM BY KEVIN.GRAHAM
PLOTTED 11/6/2025 12:28:56 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\4-200605-009-CP004 TYPICAL SECTIONS.DWG

SAVED 9/23/2025 10:21:57 AM BY KEVIN.GRAHAM
PLOTTED 11/6/2025 12:29:02 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\5-200605-009-CP101 COORDINATE GEOMETRY PLAN.DWG



CP101	5 OF 69
COORDINATE GEOMETRY PLAN	
JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB
Issue	

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

KEVIN P. GRAHAM 27806 REGISTERED PROFESSIONAL ENGINEER 11/6/2025 KANSAS

CITY OF WICHITA

PEC PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec-1.com

CENTERLINE-BLUFF

COORDINATE LIST		
POINT	NORTHING	EASTING
6000	332,713.1969	17,560,879.7477
6001	332,857.1889	17,560,878.2011
6002	333,456.1540	17,560,871.7677
6003	333,457.5206	17,560,999.0021
6004	333,609.3024	17,560,998.4273

CENTERLINE-WILLIS

COORDINATE LIST		
POINT	NORTHING	EASTING
6050	333,449.1750	17,560,222.0113
6051	333,342.2609	17,560,223.1596
6052	333,283.3109	17,560,238.6544
6053	333,133.4213	17,560,321.1876
6054	332,931.4694	17,560,432.3877
6055	332,853.8290	17,560,565.3964
6056	332,857.1889	17,560,878.2011

CENTERLINE-WILLIS CT.

COORDINATE LIST		
POINT	NORTHING	EASTING
6100	333,133.4213	17,560,321.1876
6101	333,141.5481	17,560,335.9467
6102	333,160.1412	17,560,406.6259
6103	333,161.8238	17,560,563.2771
6104	333,140.8250	17,560,563.5027

CENTERLINE-61ST ST. SOUTH

COORDINATE LIST		
POINT	NORTHING	EASTING
6150	333,406.2502	17,560,008.8470
6151	333,448.0850	17,560,120.5223
6152	333,449.1750	17,560,222.0113
6153	333,456.1540	17,560,871.7677
6154	333,457.5206	17,560,999.0021

BACK OF CURB LT.-BLUFF

COORDINATE LIST		
POINT	NORTHING	EASTING
7000	332,713.0411	17,560,865.2486
7001	332,815.5894	17,560,864.1471
7002	332,831.9447	17,560,861.8046
7003	332,842.3245	17,560,844.3588
7004	332,871.3228	17,560,844.0473
7005	332,891.0312	17,560,863.3368
7006	333,419.0004	17,560,857.6659
7007	333,494.1987	17,560,981.3629
7008	333,609.2351	17,560,980.9211

BACK OF CURB RT.-BLUFF

COORDINATE LIST		
POINT	NORTHING	EASTING
7050	332,713.3526	17,560,894.2469
7051	332,815.9008	17,560,893.1454
7052	332,832.8998	17,560,892.9628
7053	332,884.8430	17,560,892.4049
7054	332,892.8425	17,560,892.3190
7055	333,419.3119	17,560,886.6642
7056	333,494.3331	17,561,016.3626
7057	333,609.3695	17,561,015.9208

BACK OF CURB LT.-WILLIS

COORDINATE LIST		
POINT	NORTHING	EASTING
7100	333,412.3329	17,560,236.9078
7101	333,342.4167	17,560,237.6588
7102	333,290.3049	17,560,251.3562
7103	333,169.4970	17,560,317.8762
7104	333,161.0185	17,560,342.7303
7105	333,164.3977	17,560,351.1310
7106	333,137.2052	17,560,361.2090
7107	333,109.5149	17,560,350.9039
7108	332,938.4633	17,560,445.0895
7109	332,868.4634	17,560,557.5615
7110	332,868.4283	17,560,574.5629
7111	332,871.3228	17,560,844.0473

BACK OF CURB RT.-WILLIS

COORDINATE LIST		
POINT	NORTHING	EASTING
7150	333,412.0214	17,560,207.9095
7151	333,342.1052	17,560,208.6605
7152	333,276.3170	17,560,225.9526
7153	332,924.4755	17,560,419.6859
7154	332,839.3299	17,560,565.5513
7155	332,842.3245	17,560,844.3588

BACK OF CURB-WILLIS CT.

COORDINATE LIST		
POINT	NORTHING	EASTING
6100	333,133.4213	17,560,321.1876
6101	333,141.5481	17,560,335.9467
6102	333,160.1412	17,560,406.6259
6103	333,161.8238	17,560,563.2771
6104	333,140.8250	17,560,563.5027

BACK OF CURB LT.-61ST ST.

COORDINATE LIST		
POINT	NORTHING	EASTING
7300	333,419.5658	17,559,997.4915
7301	333,465.5840	17,560,120.3343
7302	333,467.4901	17,560,297.8008
7303	333,467.6727	17,560,314.7999
7304	333,470.3166	17,560,560.9517
7305	333,470.4992	17,560,577.9507
7306	333,474.6250	17,560,962.0724
7307	333,494.1987	17,560,981.3629

BACK OF CURB RT.-61ST ST.

COORDINATE LIST		
POINT	NORTHING	EASTING
7350	333,392.9347	17,560,020.2025
7351	333,430.5860	17,560,120.7102
7352	333,431.3109	17,560,188.2012
7353	333,412.0214	17,560,207.9095
7354	333,412.3329	17,560,236.9078
7355	333,432.0412	17,560,256.1973
7356	333,438.2899	17,560,837.9576
7357	333,419.0004	17,560,857.6659
7358	333,419.3119	17,560,886.6642
7359	333,439.0202	17,560,905.9537
7360	333,439.6605	17,560,965.5722
7361	333,439.7465	17,560,973.5719
7362	333,440.2083	17,561,016.5705
7363	333,494.3331	17,561,016.3626

FACE OF SIDEWALK-BLUFF

COORDINATE LIST		
POINT	NORTHING	EASTING
8000	332,713.4546	17,560,903.7463
8001	332,886.4449	17,560,901.8883
8002	332,886.4074	17,560,898.3885
8003	332,891.4071	17,560,898.3348
8004	332,891.4447	17,560,901.8346
8005	333,424.4136	17,560,896.1100
8006	333,429.4133	17,560,896.0563
8007	333,430.1765	17,560,967.1086
8008	333,433.6766	17,560,967.0952
8009	333,433.7303	17,560,972.0950
8010	333,430.2302	17,560,972.1084
8011	333,430.7089	17,561,016.6725
8012	333,483.4217	17,560,971.9042
8013	333,609.1986	17,560,971.4212

FACE OF SIDEWALK-WILLIS

COORDINATE LIST		
POINT	NORTHING	EASTING
8050	333,417.4347	17,560,246.3536
8051	333,342.5187	17,560,247.1582
8052	333,294.8871	17,560,259.6780
8053	333,164.6705	17,560,331.3787
8054	333,123.5058	17,560,354.0451
8055	332,943.0461	17,560,453.4110
8056	332,877.8277	17,560,565.1386
8057	332,880.8953	17,560,850.7438
8058	332,885.9600	17,560,856.7389

FACE OF SIDEWALK-61ST ST.

COORDINATE LIST		
POINT	NORTHING	EASTING
8100	333,385.7063	17,560,026.3669
8101	333,421.0865	17,560,120.8123
8102	333,421.9266	17,560,199.0369
8103	333,422.4344	17,560,246.2999
8104	333,428.9058	17,560,848.7997

PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 11/06/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

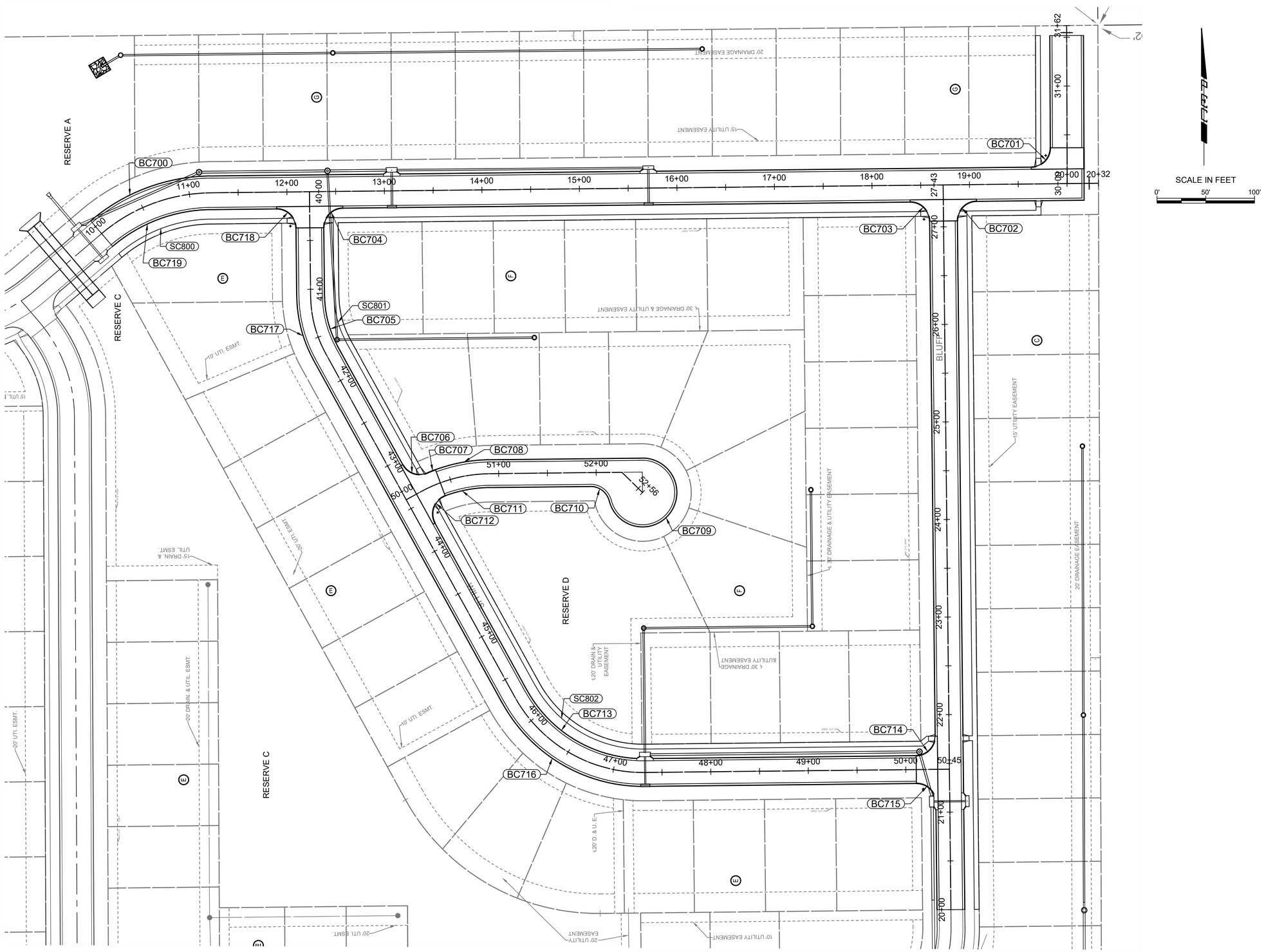
Issue:		

JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

COORDINATE GEOMETRY TABLES

CP102
6 OF 69

SAVED 4/25/2025 3:36:45 PM BY BILL.SEXSON
PLOTTED 11/6/2025 12:29:08 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\6-200605-009-CP102 COORDINATE GEOMETRY TABLES.DWG



SAVED 7/1/2025 9:08:18 AM BY KEVIN.GRAHAM
PLOTTED 11/6/2025 12:29:12 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\7-200605-009-CP103 COORDINATE GEOMETRY CURVE PLAN.DWG

PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM
LICENSED
27806
11/06/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

Issue:

JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

COORDINATE GEOMETRY CURVE PLAN

CP103
7 OF 69

CURVE DATA								
CURVE #	DELTA	RADIUS (FT.)	T (FT.)	LENGTH (FT.)	P.C. NORTHING	P.C. EASTING	P.T. NORTHING	P.T. EASTING
BC700	039°50'32"	192.50	69.76	133.86	333,465.5840	17,560,120.3343	333,419.5658	17,559,997.4915
BC701	089°36'17"	19.50	19.37	30.50	333,474.6250	17,560,962.0724	333,494.1987	17,560,981.3629
BC702	090°00'00"	19.50	19.50	30.63	333,439.0202	17,560,905.9537	333,419.3119	17,560,886.6642
BC703	090°00'00"	19.50	19.50	30.63	333,419.0004	17,560,857.6659	333,438.2899	17,560,837.9576
BC704	090°00'00"	19.50	19.50	30.63	333,432.0412	17,560,256.1973	333,412.3329	17,560,236.9078
BC705	028°13'23"	110.50	27.78	54.43	333,342.4167	17,560,237.6588	333,290.3049	17,560,251.3562
BC706	084°39'05"	19.50	17.76	28.81	333,169.4970	17,560,317.8762	333,161.0185	17,560,342.7303
BC707	003°09'15"	164.50	4.53	9.06	333,164.3977	17,560,351.1310	333,161.0185	17,560,342.7303
BC708	019°41'49"	164.50	28.56	56.55	333,174.6403	17,560,406.4643	333,164.3977	17,560,351.1310
BC709	256°19'56"	35.50	45.17	158.82	333,132.0641	17,560,529.1007	333,176.3229	17,560,563.1187
BC710	076°19'41"	19.50	15.33	25.98	333,132.0641	17,560,529.1007	333,146.7506	17,560,509.9944
BC711	019°41'49"	135.50	23.52	46.58	333,145.6421	17,560,406.7875	333,137.2052	17,560,361.2090
BC712	098°30'10"	19.50	22.63	33.52	333,137.2052	17,560,361.2090	333,109.5149	17,560,350.9039
BC713	058°31'44"	135.50	75.93	138.42	332,938.4633	17,560,445.0895	332,868.4634	17,560,557.5615
BC714	090°00'00"	19.50	19.50	30.63	332,871.3228	17,560,844.0473	332,891.0312	17,560,863.3368
BC715	062°57'52"	19.50	11.94	21.43	332,831.8753	17,560,861.8412	332,842.3245	17,560,844.3588
BC716	061°46'37"	164.50	98.41	177.37	332,924.4755	17,560,419.6859	332,839.3299	17,560,565.5521
BC717	028°13'23"	139.50	35.07	68.72	333,342.1052	17,560,208.6605	333,276.3170	17,560,225.9526
BC718	090°00'00"	19.50	19.50	30.63	333,412.0214	17,560,207.9095	333,431.3109	17,560,188.2012
BC719	039°50'32"	157.50	57.08	109.52	333,430.5860	17,560,120.7102	333,392.9347	17,560,020.2025

CURVE DATA								
CURVE #	DELTA	RADIUS (FT.)	T (FT.)	LENGTH (FT.)	P.C. NORTHING	P.C. EASTING	P.T. NORTHING	P.T. EASTING
SC800	039°50'32"	148.00	53.64	102.92	333,385.7063	17,560,026.3669	333,421.0865	17,560,120.8123
SC801	028°13'23"	101.00	25.39	49.75	333,342.5187	17,560,247.1582	333,294.8871	17,560,259.6780
SC802	061°46'38"	126.00	75.38	135.86	332,943.0461	17,560,453.4110	332,877.8277	17,560,565.1386

PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 11/06/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

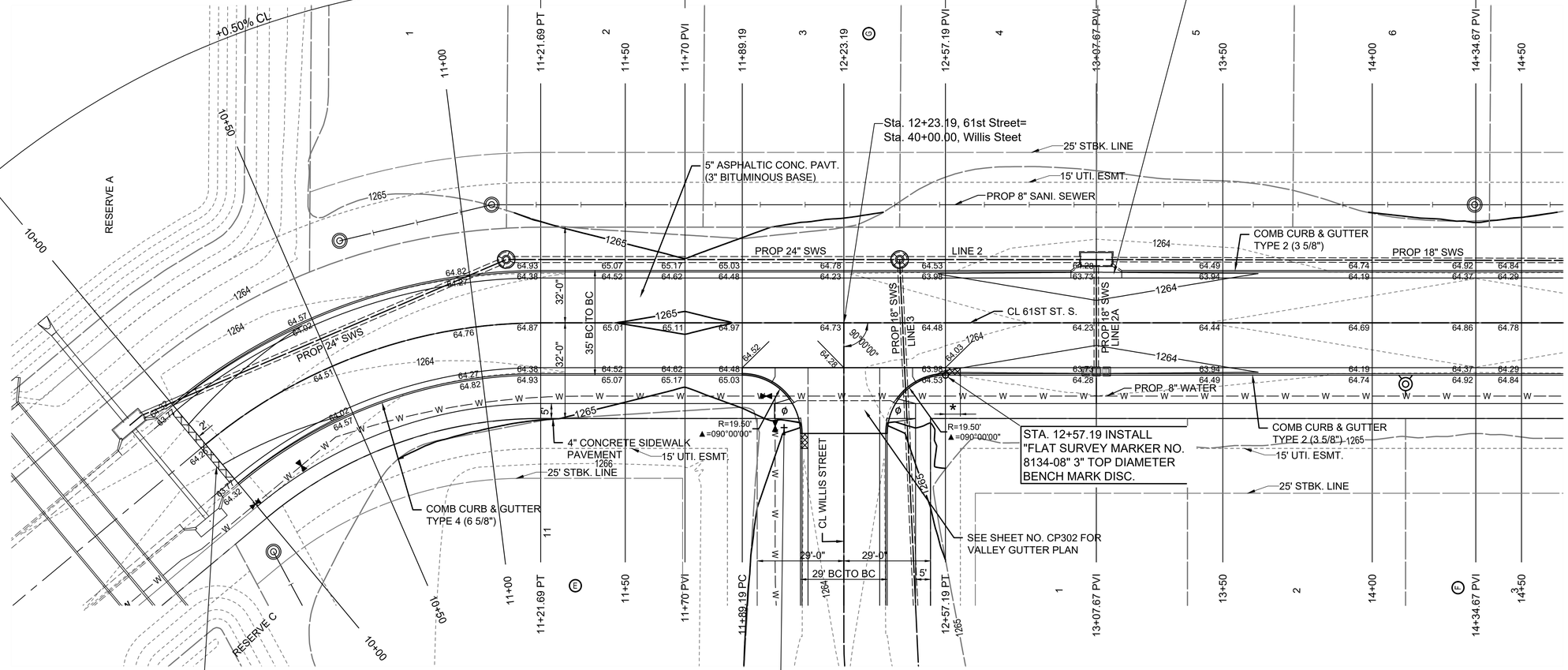
Issue:		

JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

COORDINATE GEOMETRY CURVE TABLES

CP104
8 OF 69

SAVED 4/25/2025 3:37:07 PM BY BILL.SEXSON
PLOTTED 11/6/2025 12:29:18 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\6-200605-009-CP104 COORDINATE GEOMETRY CURVE TABLES.DWG



SAW CUT, REMOVE & REPLACE PAVEMENT AS NECESSARY TO PROVIDE NEAT LINE. THIS WORK SHALL BE SUBSIDIARY TO THE PROJECT.

CL STA. 12+03, 35.0' RT.
INSTALL STREET NAME SIGN
(WILLIS ST/61ST S)
SEE SHEET NO. CP306

WATER VALVE NOTE:
CONTRACTOR TO ADJUST WATER VALVE LIDS TO MATCH PROPOSED FINISHED GRADE. COST IS SUBSIDIARY TO PROJECT.

UNLESS OTHERWISE NOTED: THIS STREET TO BE CONSTRUCTED WITH ROLL-TYPE CURB. TOP OF CURB ELEVATIONS GIVEN ARE FOR FULL HEIGHT CURB.

* ▨ 5' TRANSITION FROM CURB AND GUTTER MONOLITHIC (6 5/8") TO COMBINED CURB AND GUTTER TYPE 2 (3 5/8"). TO BE BID AND PAID FOR AS "COMBINED CURB AND GUTTER TYPE 2 (3 5/8")

ø Construct Std. Sidewalk Ramp with Detectable Warning, See Sheet No. CP305

PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM
LICENSED
27806
11/06/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

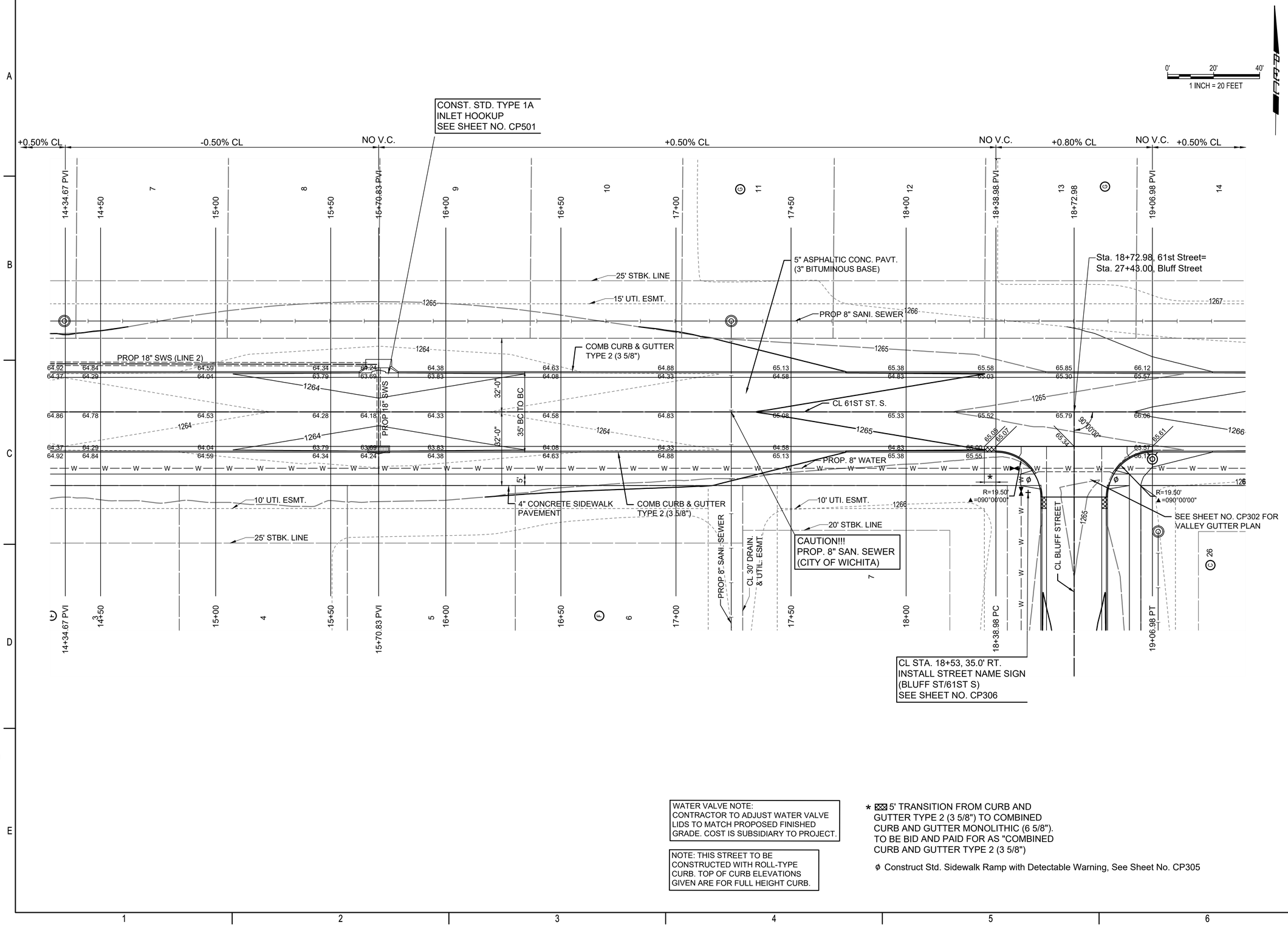
Issue:		

JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

61ST STREET SOUTH-PLAN

CP201
9 OF 69

SAVED 9/23/2025 10:31:14 AM BY KEVIN.GRAHAM
PLOTTED 11/6/2025 12:29:36 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\9-200605-009-CP201 61ST STREET SOUTH-PLAN.DWG



WATER VALVE NOTE:
CONTRACTOR TO ADJUST WATER VALVE LIDS TO MATCH PROPOSED FINISHED GRADE. COST IS SUBSIDIARY TO PROJECT.

NOTE: THIS STREET TO BE CONSTRUCTED WITH ROLL-TYPE CURB. TOP OF CURB ELEVATIONS GIVEN ARE FOR FULL HEIGHT CURB.

* ▨ 5' TRANSITION FROM CURB AND GUTTER TYPE 2 (3 5/8") TO COMBINED CURB AND GUTTER MONOLITHIC (6 5/8"). TO BE BID AND PAID FOR AS "COMBINED CURB AND GUTTER TYPE 2 (3 5/8")

ϕ Construct Std. Sidewalk Ramp with Detectable Warning, See Sheet No. CP305

PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM
LICENSED
27806
11/06/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

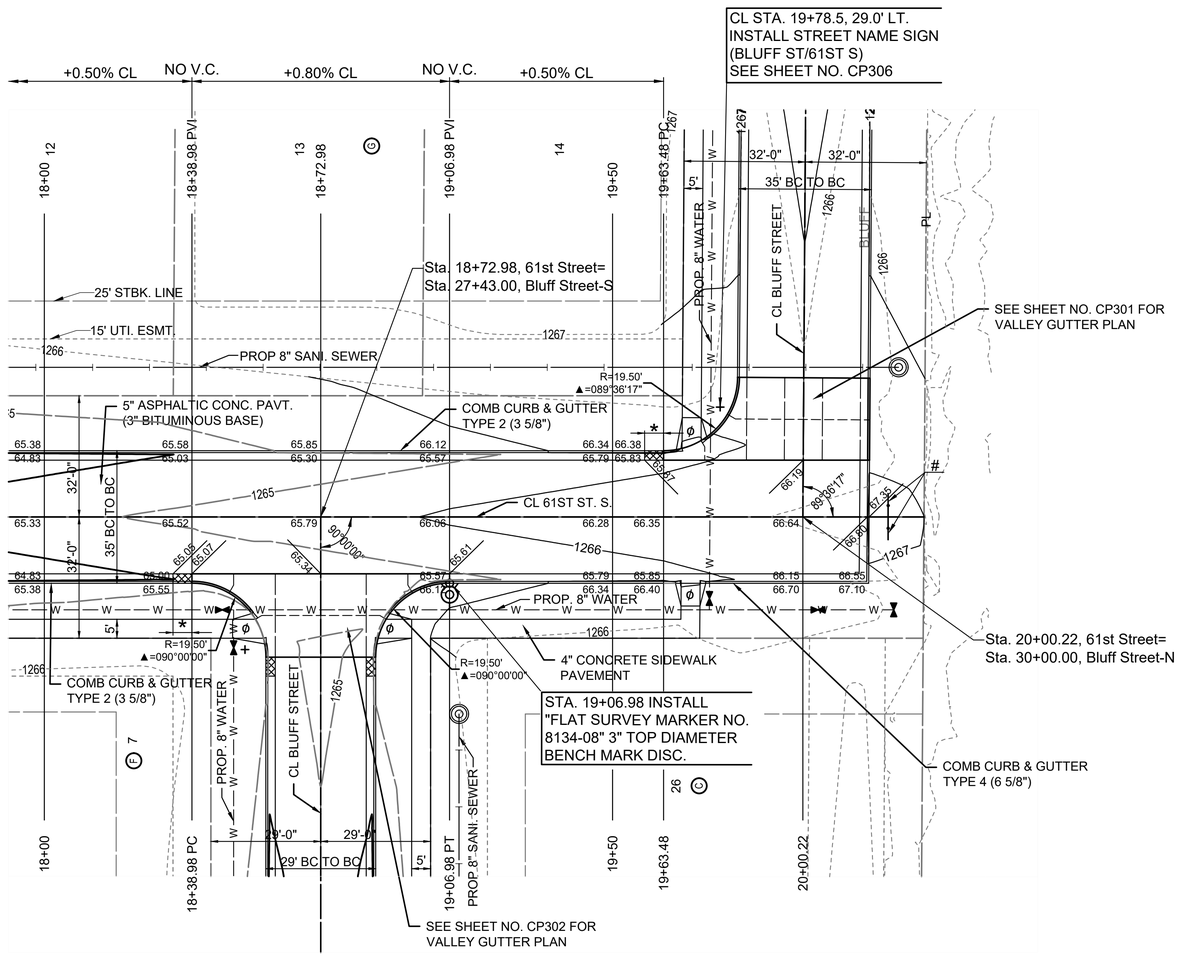
Issue:		

JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

61ST STREET SOUTH-PLAN

CP202
10 OF 69

SAVED 9/23/2025 10:32:45 AM BY KEVIN.GRAHAM
PLOTTED 11/6/2025 12:29:56 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\10-200605-009-CP202 61ST STREET SOUTH-PLAN.DWG



0' 20' 40'
1 INCH = 20 FEET

WATER VALVE NOTE:
CONTRACTOR TO ADJUST WATER VALVE LIDS TO MATCH PROPOSED FINISHED GRADE. COST IS SUBSIDIARY TO PROJECT.

UNLESS OTHERWISE NOTED: THIS STREET TO BE CONSTRUCTED WITH ROLL-TYPE CURB. TOP OF CURB ELEVATIONS GIVEN ARE FOR FULL HEIGHT CURB.

* ⊠ 5' TRANSITION FROM CURB AND GUTTER TYPE 2 (3 5/8") TO COMBINED CURB AND GUTTER MONOLITHIC (6 5/8"). TO BE BID AND PAID FOR AS "COMBINED CURB AND GUTTER TYPE 2 (3 5/8")

ϕ Construct Std. Sidewalk Ramp with Detectable Warning, See Sheet No. CP305

Install Type OM4-3 (End of Roadway Marker) See Sheet No. CP306

PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM
LICENSED
27806
11/06/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

Issue:		

JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

61ST STREET SOUTH-PLAN

CP203
11 OF 69

SAVED 9/23/2025 10:38:51 AM BY KEVIN.GRAHAM
PLOTTED 11/6/2025 12:30:18 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\11-200605-009-CP203 61ST STREET SOUTH-PLAN.DWG

1 INCH = 20 FEET

-0.60% CL | NO V.C. | +0.70% CL | NO V.C. | +0.50% CL

CL STA. 21+24, 27.0' LT.
INSTALL STREET NAME SIGN
(BLUFF ST/WILLIS)
SEE SHEET NO. CP306

CONST. STD. TYPE 1A
INLET HOOKUP
SEE SHEET NO. CP501

COMB CURB & GUTTER
TYPE 4 (6 5/8")

PROP 30" SWS

PROP 15" SWS

PROP. 8" WATER

PROP 24" SWS

PROP 8" SANI. SEWER

GL WILLIS ST.

CL BLUFF ST.

29' BC TO BC

29'-0"

5'

2'

R=19.50'
▲=062°57'52"

R=19.50'
▲=090°00'00"

90°00'00"

SEE SHEET NO. CP302 FOR
VALLEY GUTTER PLAN

15' STBK. LINE

10' UTIL. ESMT.

25' STBK. LINE

Sta. 21+44.00, Bluff Street=
Sta. 50+44.70, Willis Steet

5" ASPHALTIC CONC. PAVT.
(3" BITUMINOUS BASE)

4" CONCRETE SIDEWALK
PAVEMENT

COMB CURB & GUTTER
TYPE 2 (3 5/8")

SAW CUT, REMOVE & REPLACE
PAVEMENT AS NECESSARY TO
PROVIDE NEAT LINE. THIS WORK
SHALL BE SUBSIDIARY TO THE
PROJECT.

CONST. STD. TYPE 1A
INLET HOOKUP
SEE SHEET NO. CP501

REMOVE 606 S.Y.
REINFORCED CRUSHED
ROCK BASE

BLUFF

WATER VALVE NOTE:
CONTRACTOR TO ADJUST WATER VALVE LIDS TO MATCH PROPOSED FINISHED GRADE. COST IS SUBSIDIARY TO PROJECT.

UNLESS OTHERWISE NOTED: THIS STREET TO BE CONSTRUCTED WITH ROLL-TYPE CURB. TOP OF CURB ELEVATIONS GIVEN ARE FOR FULL HEIGHT CURB.

ϕ Construct Std. Sidewalk Ramp with Detectable Warning, See Sheet No. CP305

PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 11/06/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

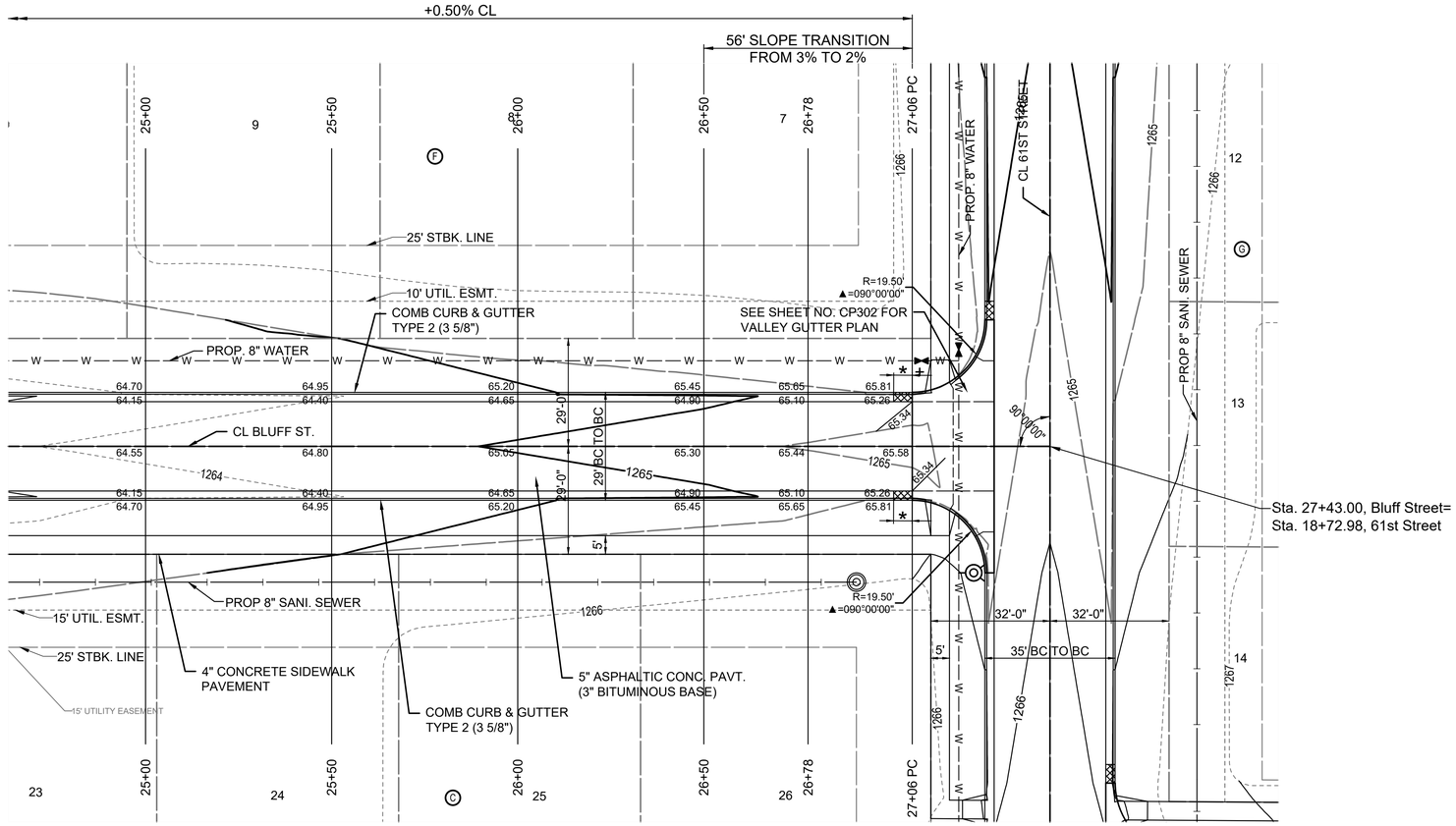
Issue:		

JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

BLUFF STREET-PLAN

CP204
12 OF 69

SAVED 9/23/2025 12:18:06 PM BY KEVIN.GRAHAM
PLOTTED 11/6/2025 12:30:38 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\12-200605-009-CP204 BLUFF STREET-PLAN.DWG



WATER VALVE NOTE:
CONTRACTOR TO ADJUST WATER VALVE LIDS TO MATCH PROPOSED FINISHED GRADE. COST IS SUBSIDIARY TO PROJECT.

NOTE: THIS STREET TO BE CONSTRUCTED WITH ROLL-TYPE CURB. TOP OF CURB ELEVATIONS GIVEN ARE FOR FULL HEIGHT CURB.

* ⊠ 5' TRANSITION FROM CURB AND GUTTER TYPE 2 (3 5/8") TO COMBINED CURB AND GUTTER MONOLITHIC (6 5/8"). TO BE BID AND PAID FOR AS "COMBINED CURB AND GUTTER TYPE 2 (3 5/8")

0' 20' 40'
1 INCH = 20 FEET

PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 11/06/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

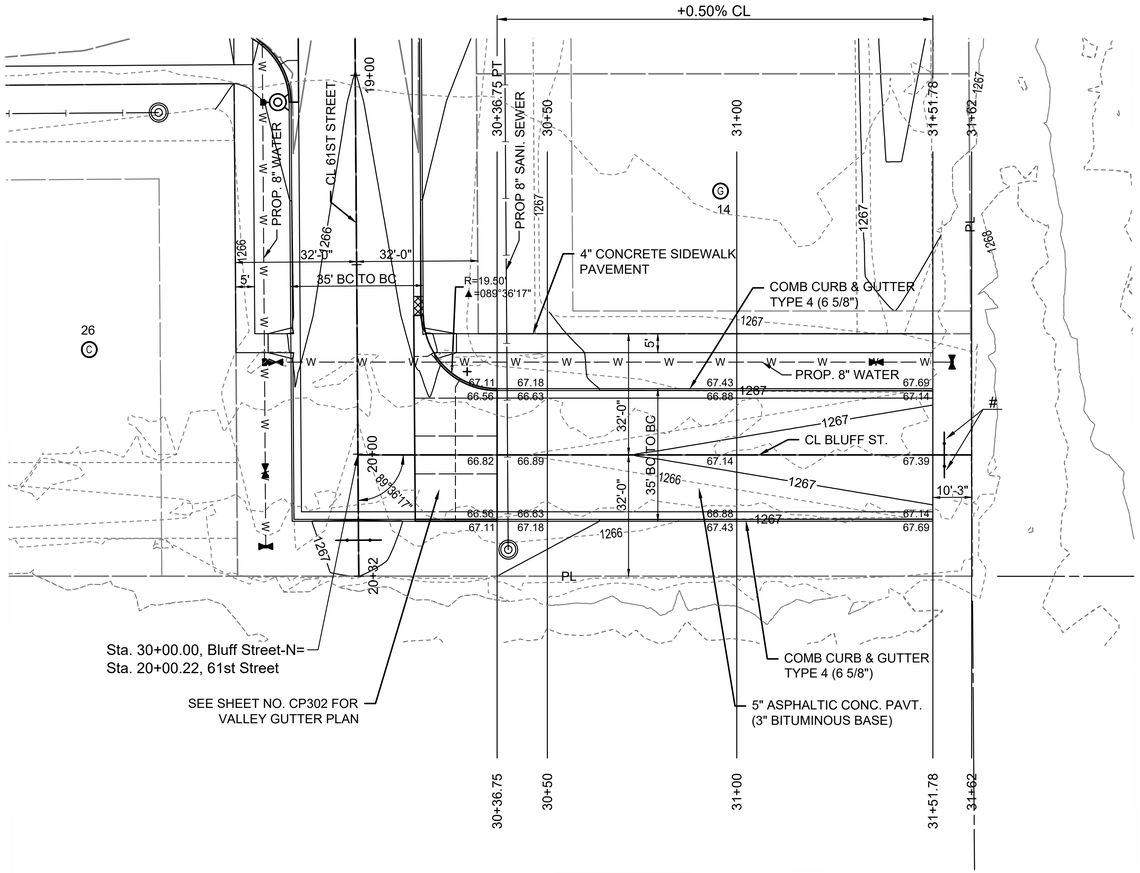
Issue:		

JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

BLUFF STREET-PLAN

CP205
13 OF 69

SAVED 9/23/2025 12:16:30 PM BY KEVIN.GRAHAM
PLOTTED 11/6/2025 12:30:58 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\13-200605-009-CP205 BLUFF STREET-PLAN.DWG



TREES WHICH ARE IN DIRECT CONFLICT WITH PROPOSED NEW CONSTRUCTION SHALL BE REMOVED BY THE CONTRACTOR WITH THE ENGINEER'S APPROVAL. TREE REMOVAL SHALL BE SUBSIDIARY TO "SITE CLEARING"

WATER VALVE NOTE:
CONTRACTOR TO ADJUST WATER VALVE LIDS TO MATCH PROPOSED FINISHED GRADE. COST IS SUBSIDIARY TO PROJECT.

UNLESS OTHERWISE NOTED: THIS STREET TO BE CONSTRUCTED WITH ROLL-TYPE CURB. TOP OF CURB ELEVATIONS GIVEN ARE FOR FULL HEIGHT CURB.

* 5' TRANSITION FROM CURB AND GUTTER TYPE 2 (3 5/8") TO COMBINED CURB AND GUTTER MONOLITHIC (6 5/8"). TO BE BID AND PAID FOR AS "COMBINED CURB AND GUTTER TYPE 2 (3 5/8")

\# Install Type OM4-3 (End of Roadway Marker) See Sheet No. CP306

0' 20' 40'
1 INCH = 20 FEET

PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 11/06/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

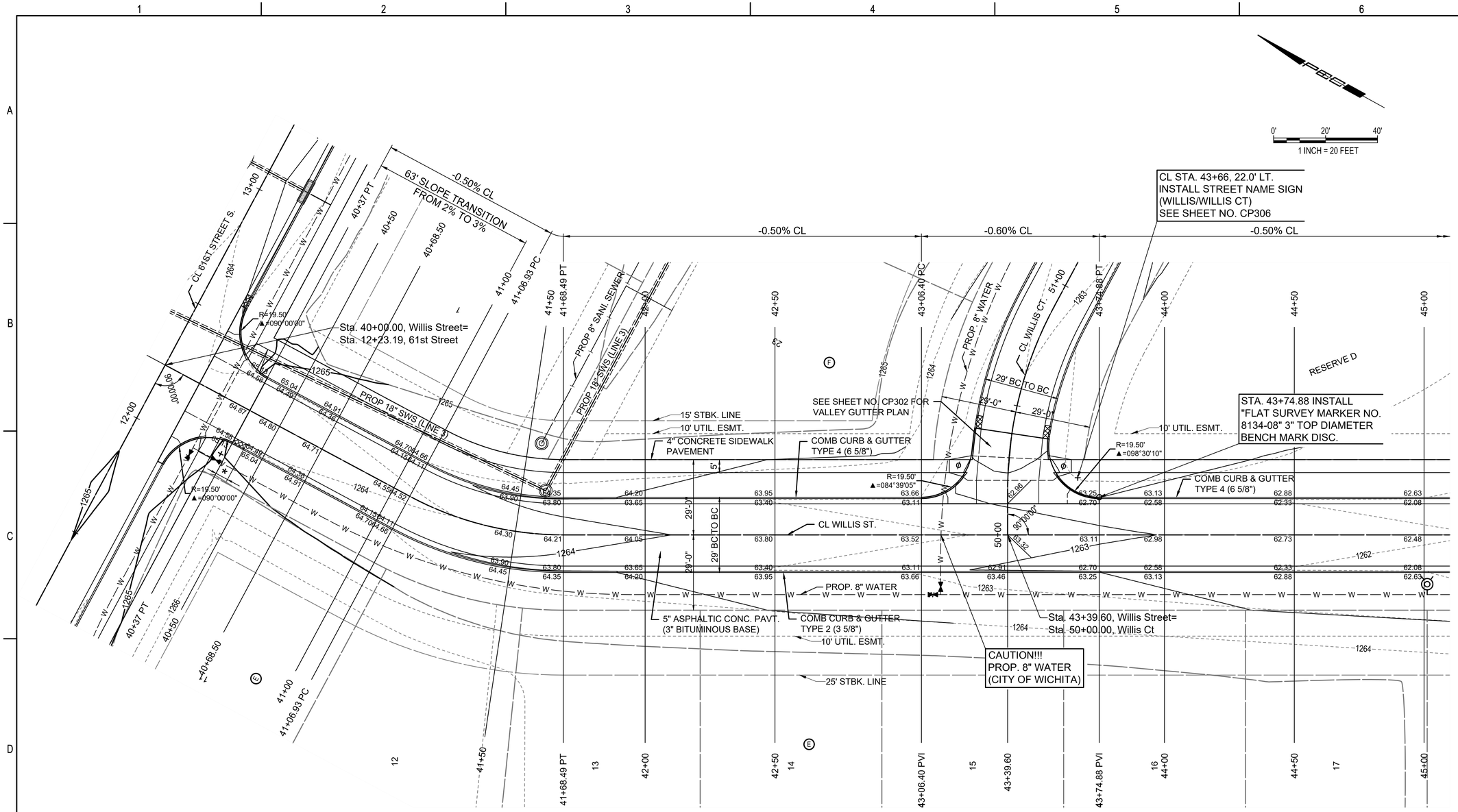
Issue:		

JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

BLUFF STREET NORTH-PLAN

CP206
14 OF 69

SAVED 9/23/2025 12:19:25 PM BY KEVIN.GRAHAM
PLOTTED 11/6/2025 12:31:15 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\02PD4_PLANS\030IPAVING\14-200605-009-CP206 BLUFF STREET NORTH-PLAN.DWG



WATER VALVE NOTE:
CONTRACTOR TO ADJUST WATER VALVE LIDS TO MATCH PROPOSED FINISHED GRADE. COST IS SUBSIDIARY TO PROJECT.

UNLESS OTHERWISE NOTED: THIS STREET TO BE CONSTRUCTED WITH ROLL-TYPE CURB. TOP OF CURB ELEVATIONS GIVEN ARE FOR FULL HEIGHT CURB.

* ⊠ 5' TRANSITION FROM CURB AND GUTTER MONOLITHIC (6 5/8") TO COMBINED CURB AND GUTTER TYPE 2 (3 5/8"). TO BE BID AND PAID FOR AS "COMBINED CURB AND GUTTER TYPE 2 (3 5/8")

ϕ Construct Std. Sidewalk Ramp with Detectable Warning, See Sheet No. CP305

PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 11/06/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

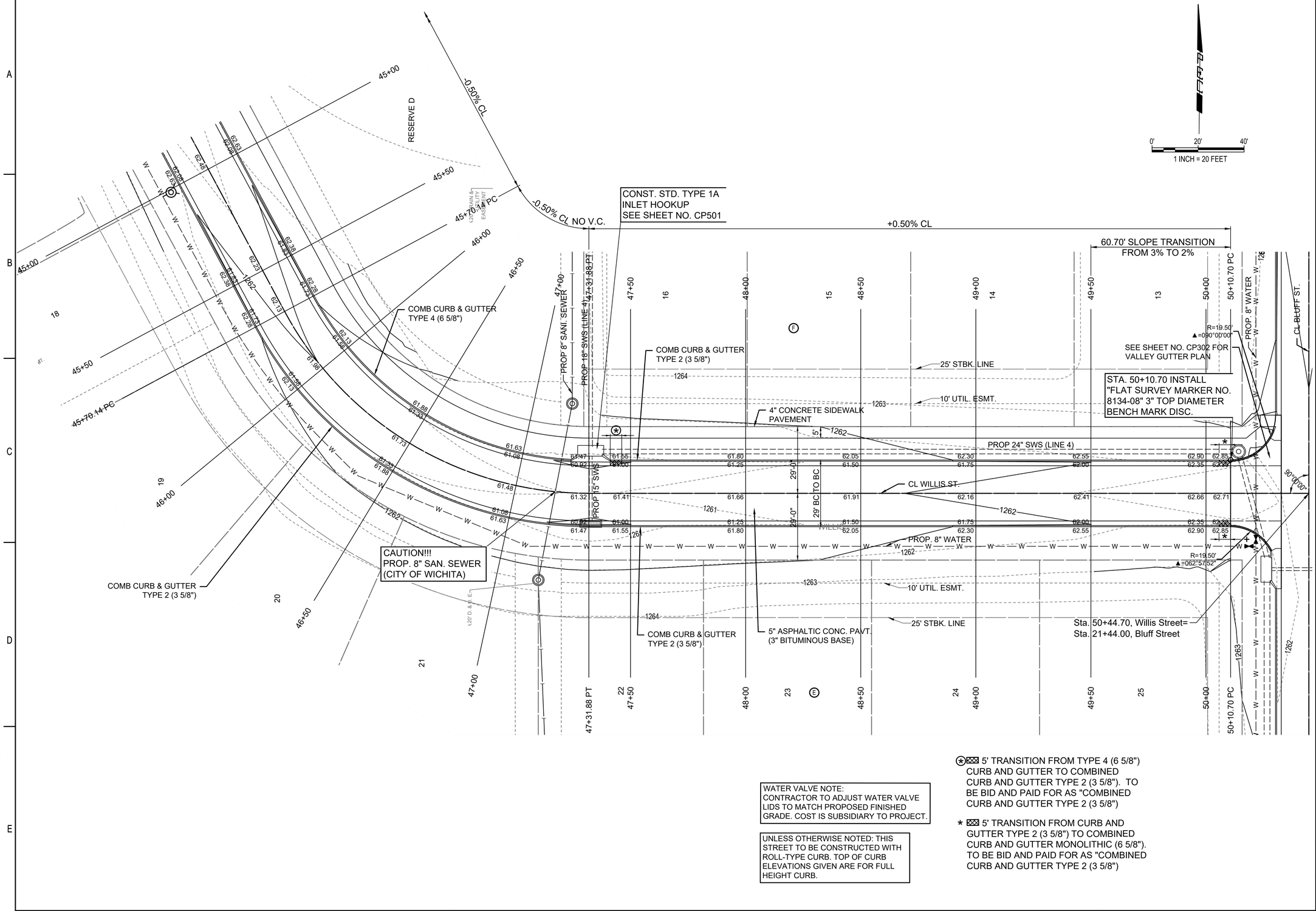
Issue:		

JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

WILLIS STREET-PLAN

CP207
15 OF 69

SAVED 9/23/2025 12:30:46 PM BY KEVIN.GRAHAM
PLOTTED 11/6/2025 12:31:39 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\15-200605-009-CP207 WILLIS STREET-PLAN.DWG



WATER VALVE NOTE:
CONTRACTOR TO ADJUST WATER VALVE LIDS TO MATCH PROPOSED FINISHED GRADE. COST IS SUBSIDIARY TO PROJECT.

UNLESS OTHERWISE NOTED: THIS STREET TO BE CONSTRUCTED WITH ROLL-TYPE CURB. TOP OF CURB ELEVATIONS GIVEN ARE FOR FULL HEIGHT CURB.

⊛ 5' TRANSITION FROM TYPE 4 (6 5/8") CURB AND GUTTER TO COMBINED CURB AND GUTTER TYPE 2 (3 5/8"). TO BE BID AND PAID FOR AS "COMBINED CURB AND GUTTER TYPE 2 (3 5/8")

* 5' TRANSITION FROM CURB AND GUTTER TYPE 2 (3 5/8") TO COMBINED CURB AND GUTTER MONOLITHIC (6 5/8"). TO BE BID AND PAID FOR AS "COMBINED CURB AND GUTTER TYPE 2 (3 5/8")

PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM
LICENSED
27806
11/06/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

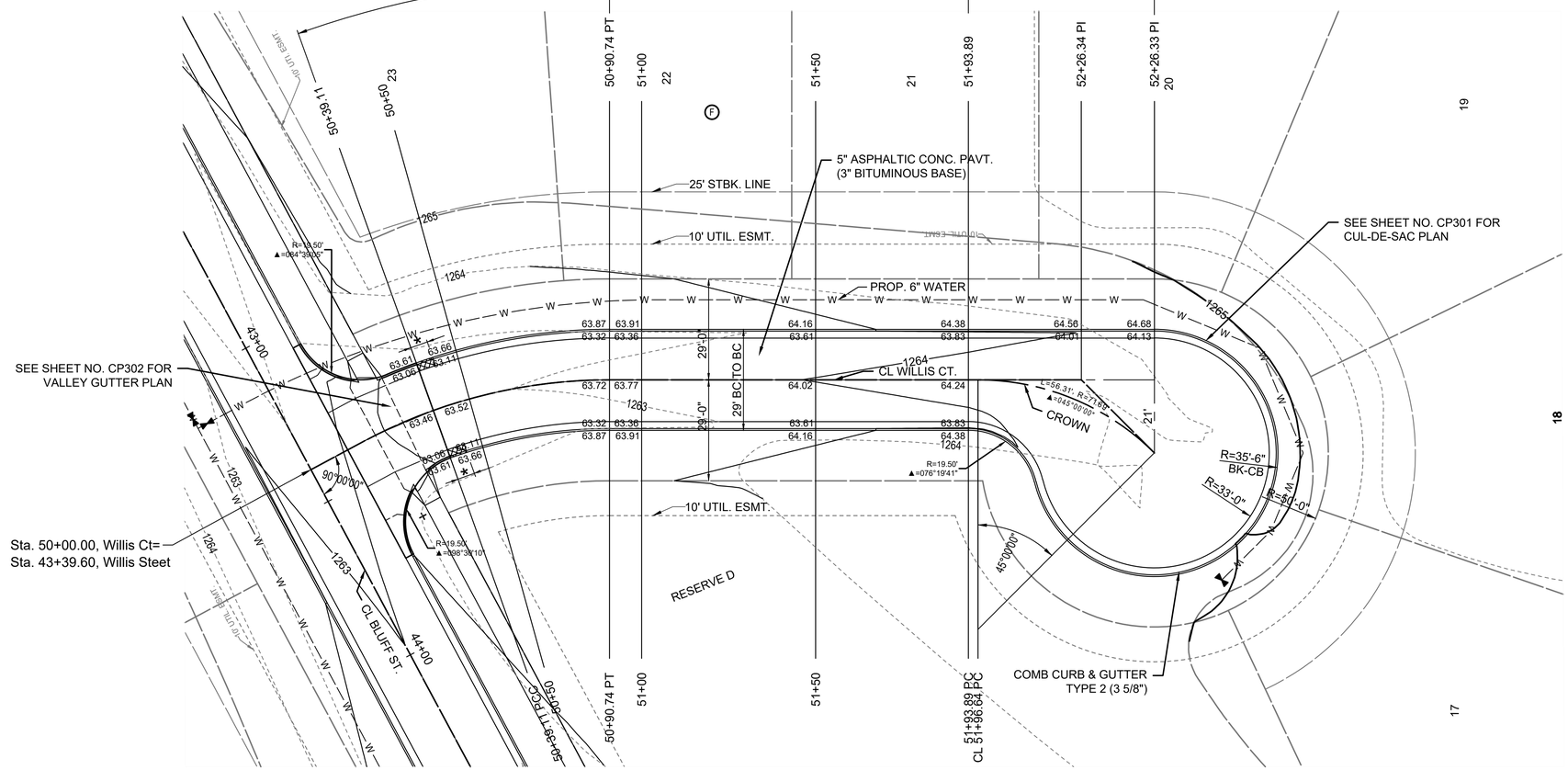
Issue:		

JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

WILLIS STREET-PLAN

CP208
16 OF 69

SAVED 9/23/2025 12:29:04 PM BY KEVIN.GRAHAM
PLOTTED 11/6/2025 12:32:05 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\16-200605-009-CP208 WILLIS STREET-PLAN.DWG



WATER VALVE NOTE:
CONTRACTOR TO ADJUST WATER VALVE LIDS TO MATCH PROPOSED FINISHED GRADE. COST IS SUBSIDIARY TO PROJECT.

NOTE: THIS STREET TO BE CONSTRUCTED WITH ROLL-TYPE CURB. TOP OF CURB ELEVATIONS GIVEN ARE FOR FULL HEIGHT CURB.

* ▨ 5' TRANSITION FROM CURB AND GUTTER MONOLITHIC (6 5/8") TO COMBINED CURB AND GUTTER TYPE 2 (3 5/8"). TO BE BID AND PAID FOR AS "COMBINED CURB AND GUTTER TYPE 2 (3 5/8")

0' 20' 40'
1 INCH = 20 FEET

PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM
LICENSED
27806
11/06/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

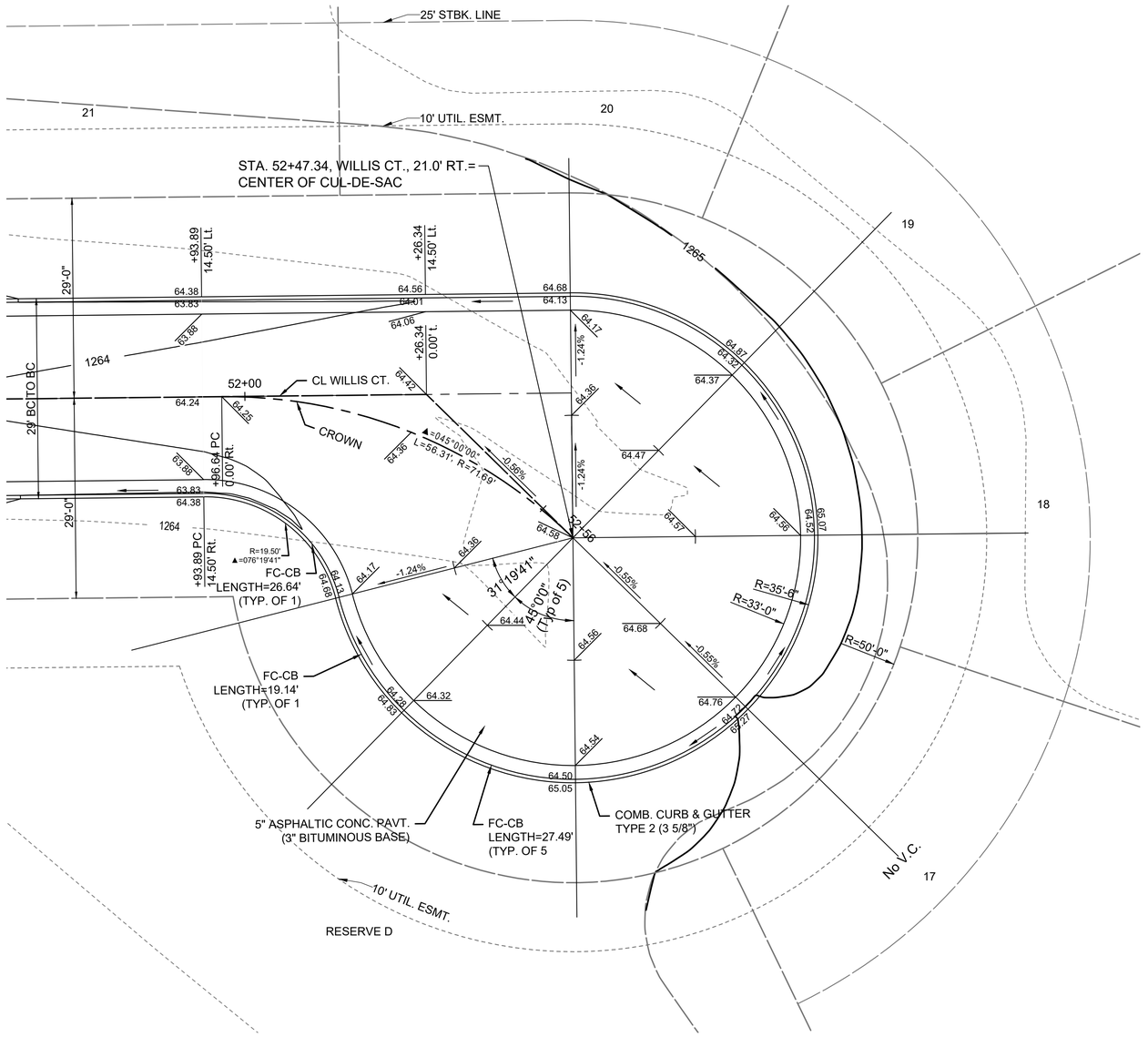
Issue:		

JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

WILLIS COURT-PLAN

CP209
17 OF 69

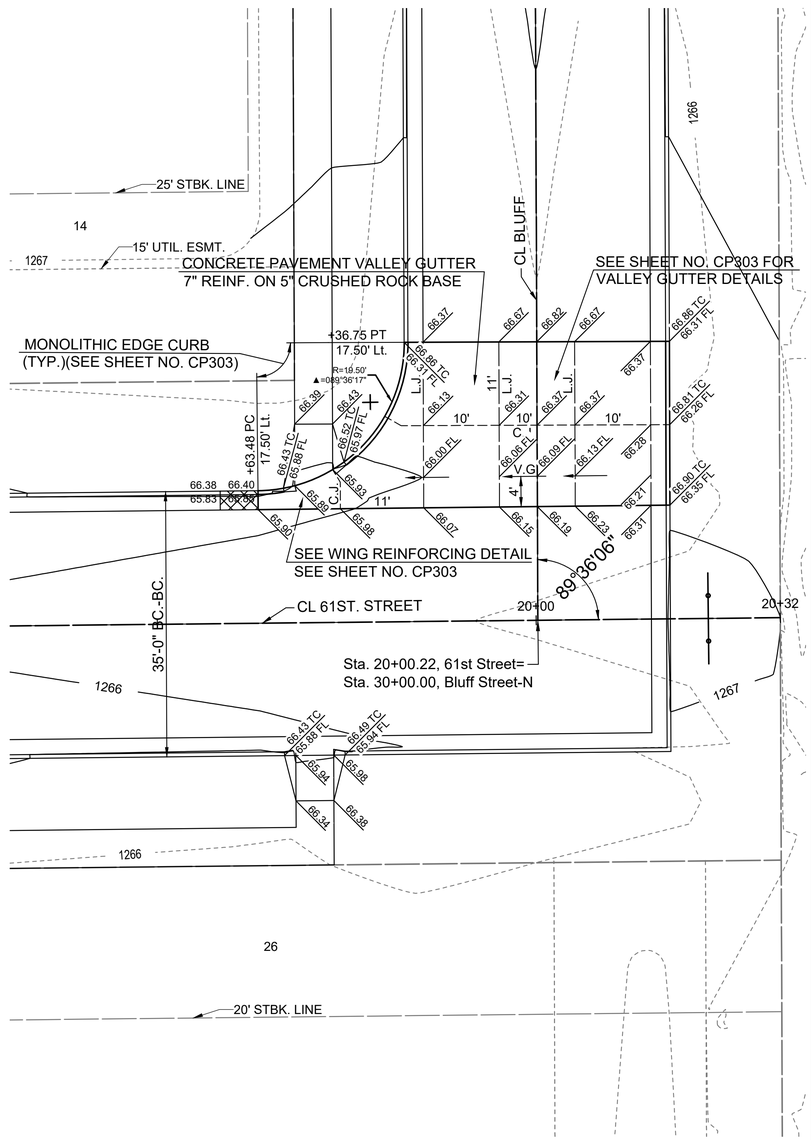
SAVED 9/23/2025 12:32:36 PM BY KEVIN.GRAHAM
PLOTTED 11/6/2025 12:32:46 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\17-200605-009-CP209 WILLIS COURT-PLAN.DWG



CUL0DE-SAC PLAN

UNLESS OTHERWISE NOTED: THIS STREET TO BE CONSTRUCTED WITH ROLL-TYPE CURB. TOP OF CURB ELEVATIONS GIVEN ARE FOR FULL HEIGHT CURB.

0' 10' 20'
1 INCH = 10 FEET



VALLEY GUTTER PLAN

0' 10' 20'
1 INCH = 10 FEET

PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM
LICENSED
27806
11/06/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

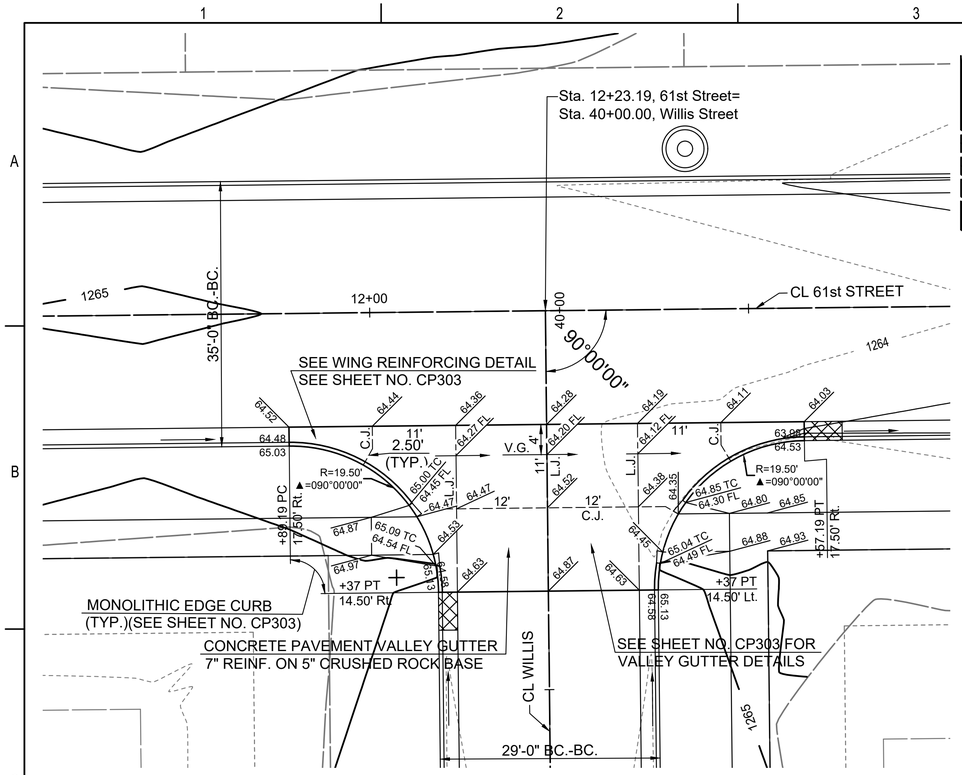
Issue:		

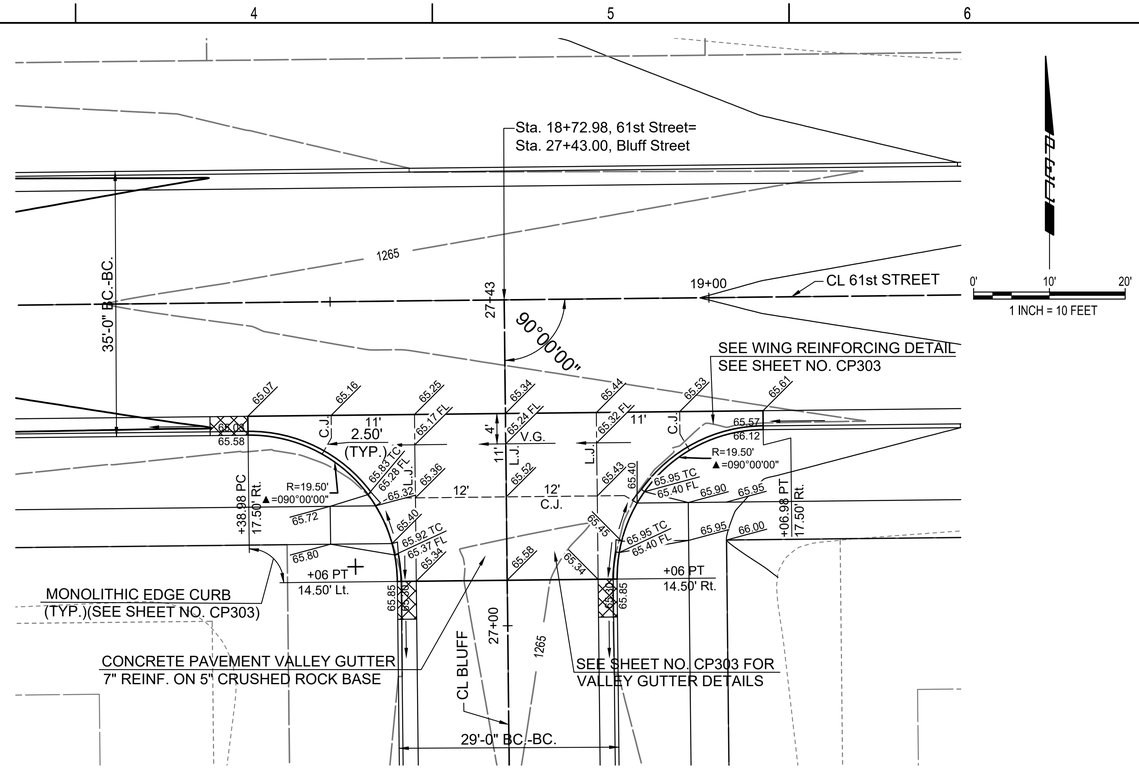
JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

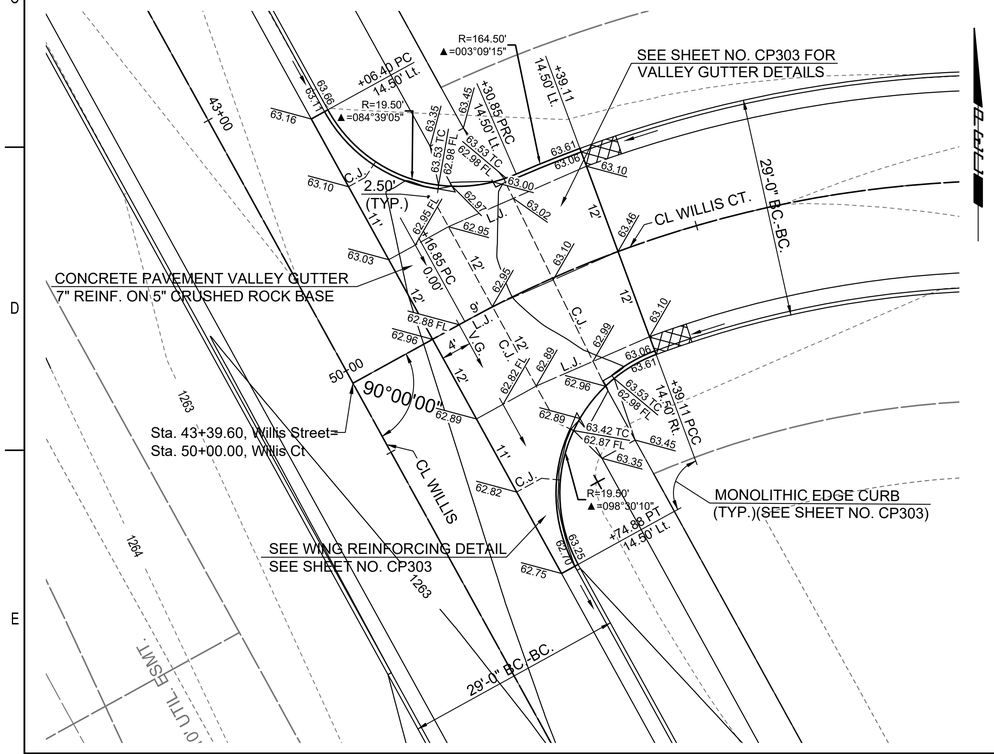
CUL-DE-SAC & VALLEY GUTTER PLAN

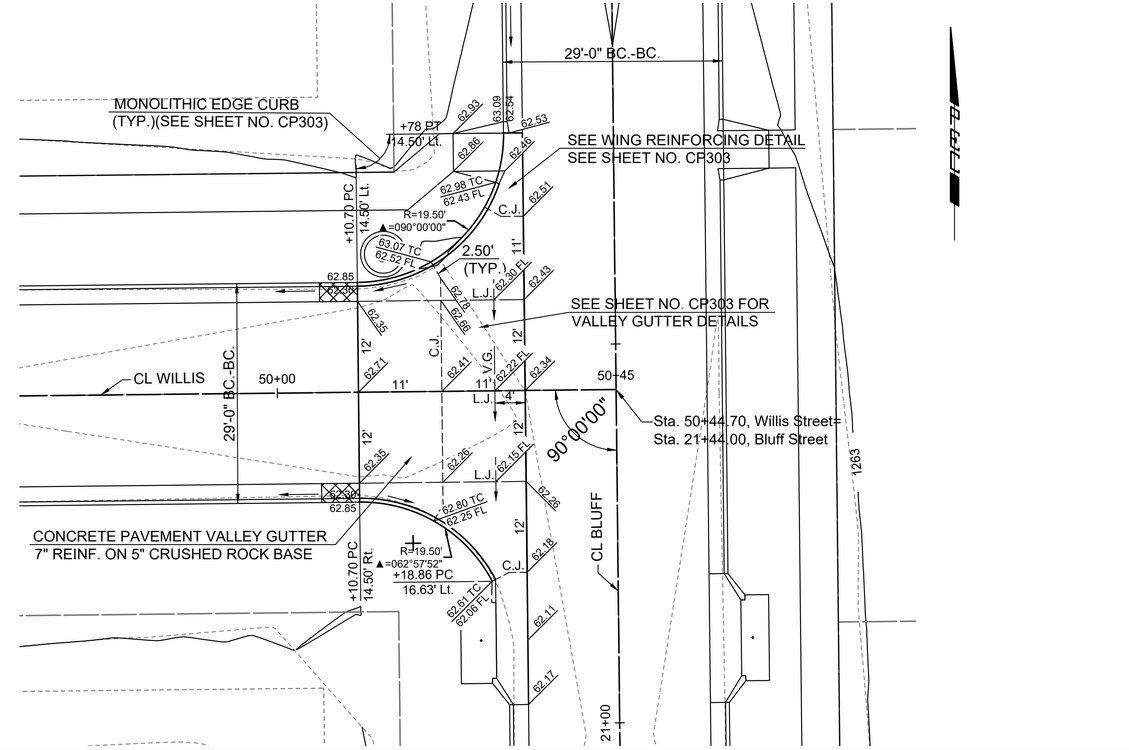
CP301
18 OF 69

SAVED 9/18/2025 8:49:01 AM BY KEVIN.GRAHAM
PLOTTED 11/6/2025 12:33:01 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\18-200605-009-CP301 CUL-DE-SAC AND VAL GUT PLAN.DWG









PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 11/06/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

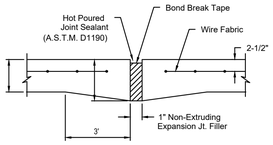
Issue:		

JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

VALLEY GUTTER PLANS

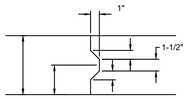
CP302
19 OF 69

SAVED 6/24/2025 9:13:47 AM BY BILL.SEXSON
PLOTTED 11/6/2025 12:33:53 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\19-200605-009-CP302 VALLEY GUTTER PLANS.DWG

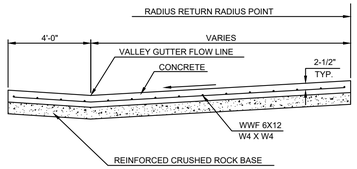


EXPANSION JOINT

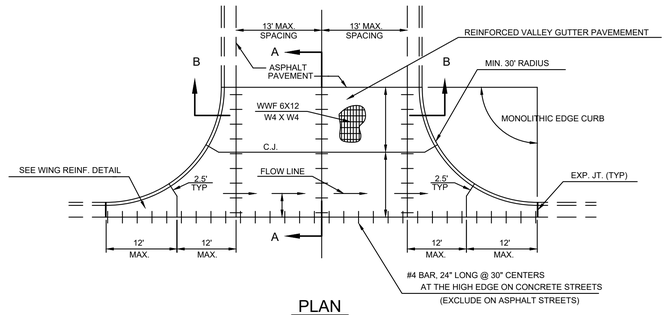
NOTE: Extra Thickness to be Subsidiary to Price of Square Yards Pavement



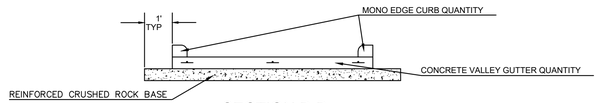
KEYWAY DETAIL



SECTION A-A

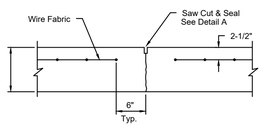


PLAN

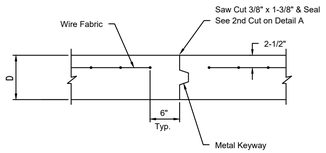


SECTION B-B

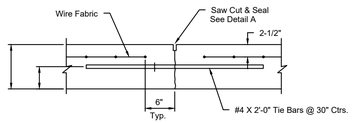
REINFORCED VALLEY GUTTER DETAIL



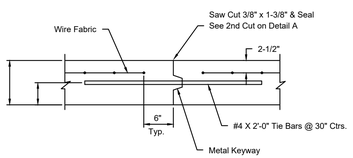
CONTRACTION JOINT DETAIL (C.J.)



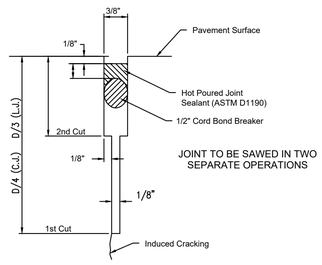
OPTIONAL CONTRACTION JOINT



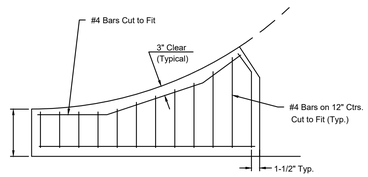
LONGITUDINAL JOINT DETAIL (L.J.)



OPTIONAL LONGITUDINAL JOINT DETAIL (L.J.)



SAW JOINT DETAIL
(DETAIL A)



WING REINFORCING DETAIL

REVISION MAY 2017	SECTION B-B, ROCK EXTENDED ONE FOOT BEYOND PAVEMENT

CITY OF WICHITA
PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

VALLEY GUTTER DETAILS

CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER	OCA NUMBER	DATE
472-2024-086027		

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

SHEET
20 of 69

PV-109

PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM
LICENSED
27806
11/06/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION
PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

Issue:		

JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

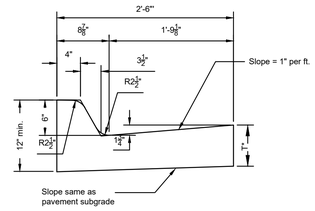
VALLEY GUTTER DETAILS

CP303
20 OF 69

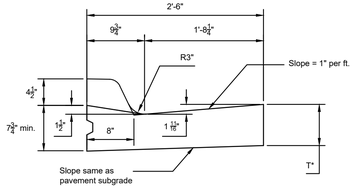
Saved: 06-24-2025 9:44:51 AM by BILL.SEXSON
Plotted: 11-6-2025 12:33:57 PM by KEVIN.GRAHAM
U:\Wichita-Civil\2020\200605\009\2PD4_Plans\030\PAVING\20-200605-009-CP303 VALLEY GUTTER DETAILS

SAVED 6/24/2025 9:44:51 AM BY BILL.SEXSON
PLOTTED 11/6/2025 12:33:57 PM BY KEVIN.GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\20-200605-009-CP303 VALLEY GUTTER DETAILS.DWG

TYPE 1
(Arterial curb)

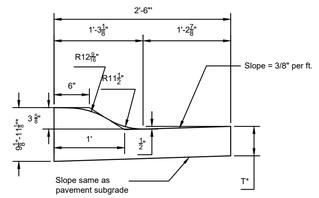


Combined Curb & Gutter (6")

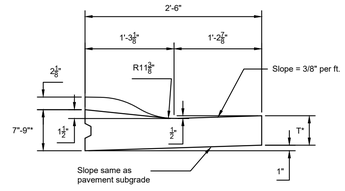


Combined Curb & Gutter (1 1/2")

TYPE 2
(Roll curb)

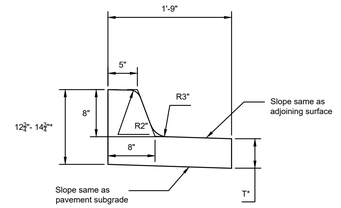


Combined Curb & Gutter (3 5/8")

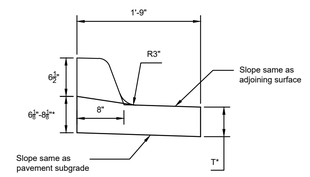


Combined Curb & Gutter (1 1/2")

TYPE 3
(Median curb)

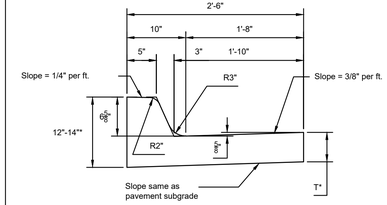


Combined Curb & Gutter (8")

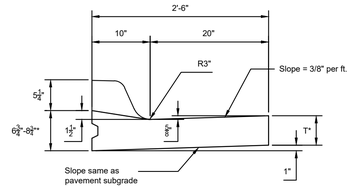


Combined Curb & Gutter (1 1/2")

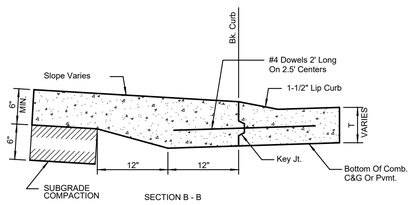
TYPE 4
(Residential curb)



Combined Curb & Gutter (6 5/8")



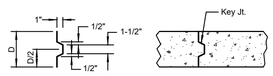
Combined Curb & Gutter (1 1/2")



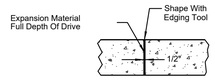
SECTION B - B

BACK OF CURB DETAIL

T* = Thickness of curb to adjust with pavement thickness



ALT. LONGITUDINAL CONSTRUCTION JOINT



EXPANSION JOINT (E.J.)

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
472-2024-086027	———	

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

SHEET
21 of 69

PV-101

PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM
LICENSED
27806
11/06/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION
PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

Issue:		

JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

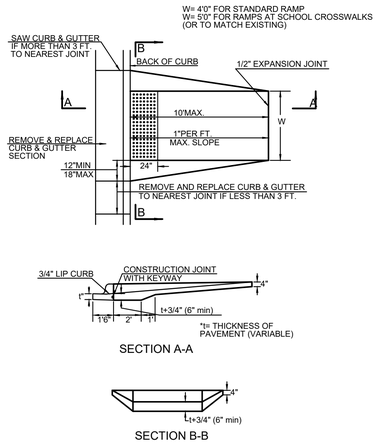
CURB AND GUTTER DETAILS

CP304
21 OF 69

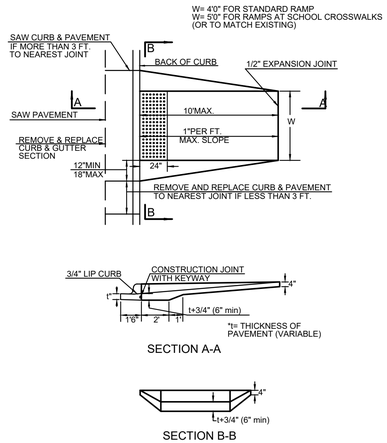
Saved 06-24-2025 9:49:30 AM By BILL.SEXSON
Plotted 11-06-2025 12:34:03 PM By KEVIN.GRAHAM
U:\Wichita-Civil\2020\200605\009\2PD4_PLANS\030\PAVING\21-200605-009-CP304 CURB AND GUTTER DETAILS.DWG

SAVED 6/24/2025 9:49:30 AM BY BILL.SEXSON
PLOTTED 11/6/2025 12:34:03 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\21-200605-009-CP304 CURB AND GUTTER DETAILS.DWG

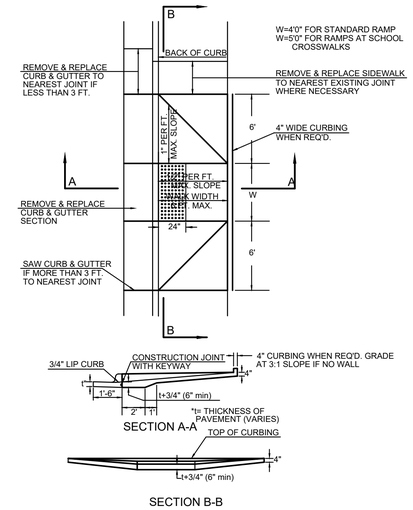
STANDARD WHEELCHAIR RAMP CONSTRUCTION DETAIL FOR STREETS WITH COMBINED CURB & GUTTER (TYPE A)



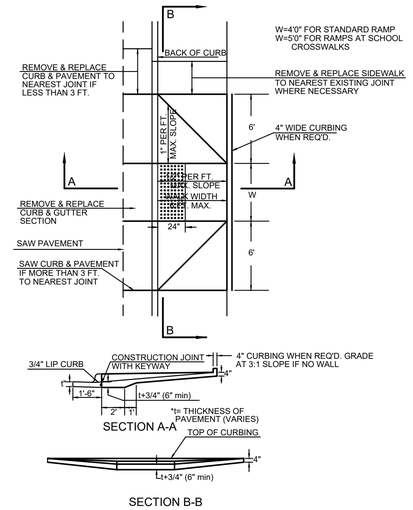
STANDARD WHEELCHAIR RAMP CONSTRUCTION DETAIL FOR CONCRETE STREETS WITH MONOLITHIC CURB (TYPE A)



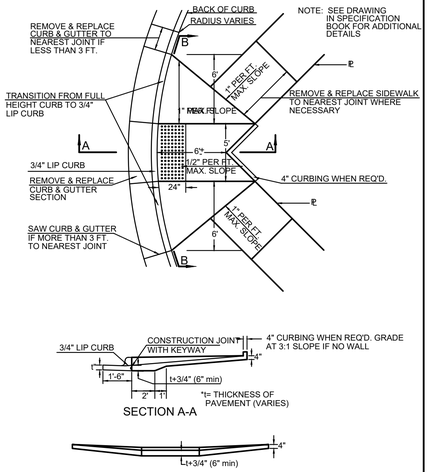
STANDARD WHEELCHAIR RAMP CONSTRUCTION DETAIL FOR STREETS WITH COMBINED CURB & GUTTER AND FULL WALK (TYPE B)



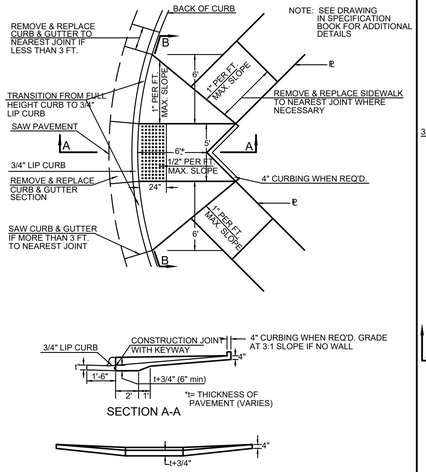
STANDARD WHEELCHAIR RAMP CONSTRUCTION DETAIL FOR STREETS WITH MONOLITHIC CURB AND FULL WALK (TYPE B)



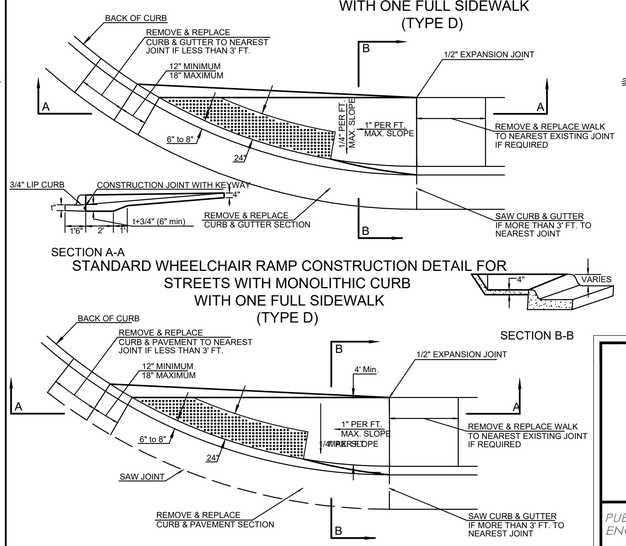
STANDARD WHEELCHAIR RAMP CONSTRUCTION DEAIL FOR STREET WITH COMBINED CURB AND GUTTER ON RADIUS WITH 6'\ FROM BACK OF CURB TO PROPERTY CORNER (TYPE C)



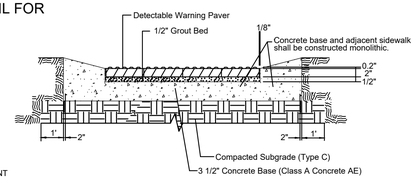
STANDARD WHEELCHAIR RAMP CONSTRUCTION DETAIL FOR STREET WITH MONOLITHIC CURB ON RADIUS WITH 6'\ FROM BACK OF CURB TO PROPERTY CORNER (TYPE C)



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



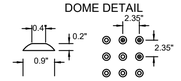
STANDARD WHEELCHAIR RAMP CONSTRUCTION DETAIL FOR STREETS WITH MONOLITHIC CURB WITH ONE FULL SIDEWALK (TYPE D)



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.hanoverpavers.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
472-2024-086027	———	08/2013

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

SHEET
22 of 69

PV-110

PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 11/06/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

Issue:		

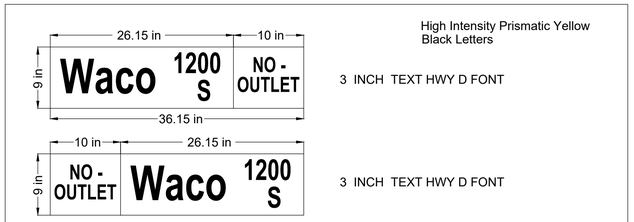
JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

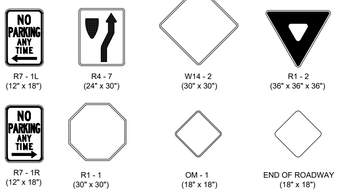
WHEELCHAIR RAMP DETAILS

CP305
22 OF 69

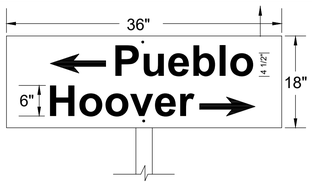
Saved 06--24--2025, 9:50:11 AM by BILL.SEXSON
Plotted 11/6/2025 12:34:07 PM by KEVIN GRAHAM
U:\Wichita-Civil\2020\200605\009\PD4_Plans\030\PAVING\22-200605-009-CP305 WHEELCHAIR RAMP DETAILS.DWG

SAVED 6/24/2025 9:50:11 AM BY BILL.SEXSON
PLOTTED 11/6/2025 12:34:07 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\PD4_PLANS\030\PAVING\22-200605-009-CP305 WHEELCHAIR RAMP DETAILS.DWG

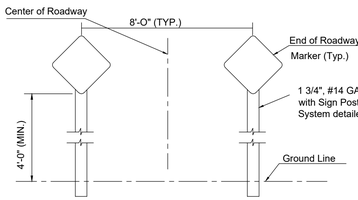




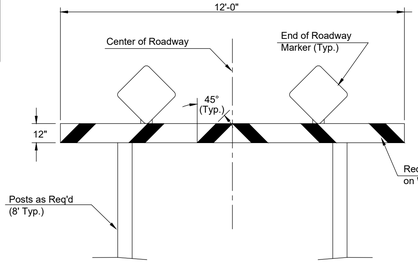
* IN NO CASE SHALL THE SPECIFICATIONS BE LESS THAN REQUIRED BY THE CURRENT MUTCD.



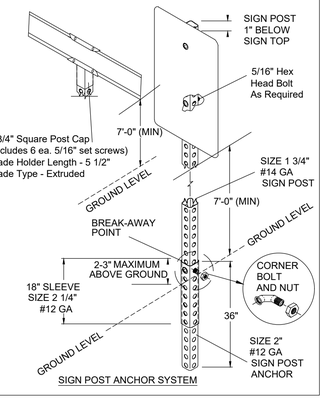
FLAT PLATE STREET NAME SIGN



TYPICAL END OF ROADWAY SIGN MOUNTING INSTALLATION



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



SIGN ASSEMBLY TABLE			
STATION	OFFSET	SIGN	QUANTITY*
12+03	RT.	STREET NAME SIGN	1
18+53	RT.	STREET NAME SIGN	1
19+78.5	LT.	STREET NAME SIGN	1
20+22	CL	(OM4-3)(END OF ROADWAY)	2
21+24	LT	STREET NAME SIGN	1
31+55	CL	(OM4-3)(END OF ROADWAY)	2
43+66	LT.	STREET NAME SIGN	1
TOTAL			7

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.

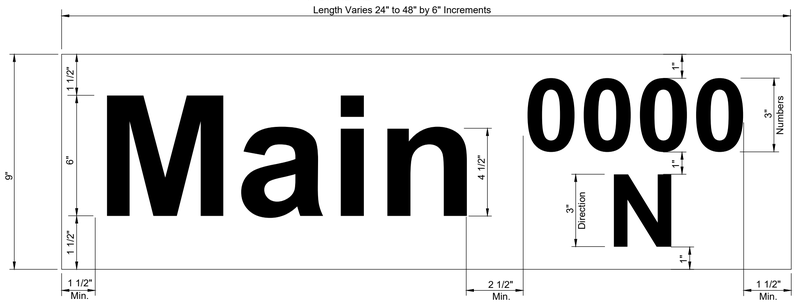
9. REFLECTIVE SHEETING: REFLECTIVE SHEETING SHALL BE A MINIMUM OF HIGH INTENSITY PRISMATIC.

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

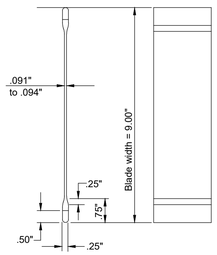
11. DETAILS - SNS: THE REFLECTIVE SHEETING FOR THE 9" STANDARD SIZE SNS IS TO BE THE HIGHWAY GREEN BACKGOUND WITH SILVER-WHITE #2 COPY WITH 6" UPPER CASE AND 4 1/2" LOWER CASE PRIMARY COPY AND SUFFIX COPY. BOTH SERIES "C". FACES TO TRIM TO A 8 1/2". (SEE DETAIL A.)
THE REFLECTIVE SHEETING FOR THE 9" 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.

DETAIL A
9" STANDARD



DETAIL B
9" METRO



STREET NAME SIGN
BLADE DETAILS

STREET NAME	NO. BLADES REQ'D		
	9" STD.	9" METRO	FLAT PLATE
Willis Ct #		1	
Willis	3		
Bluff	3		
61st St S	3		

CALL TRAFFIC ENGINEERING (268-4276) BEFORE ORDERING SIGNS.

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

CITY OF WICHITA
PUBLIC WORKS & UTILITIES ENGINEERING DIVISION

TRAFFIC SIGNAL INSTALLATION DETAIL SHEET

TRAFFIC ENGINEER
MIKE ARMOUR, P.E.

PROJECT NUMBER	ORG NUMBER	DATE
472-2024-086027		

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

SHEET 23 of 69

TR-106

TR-106

PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 11/06/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

Issue:		

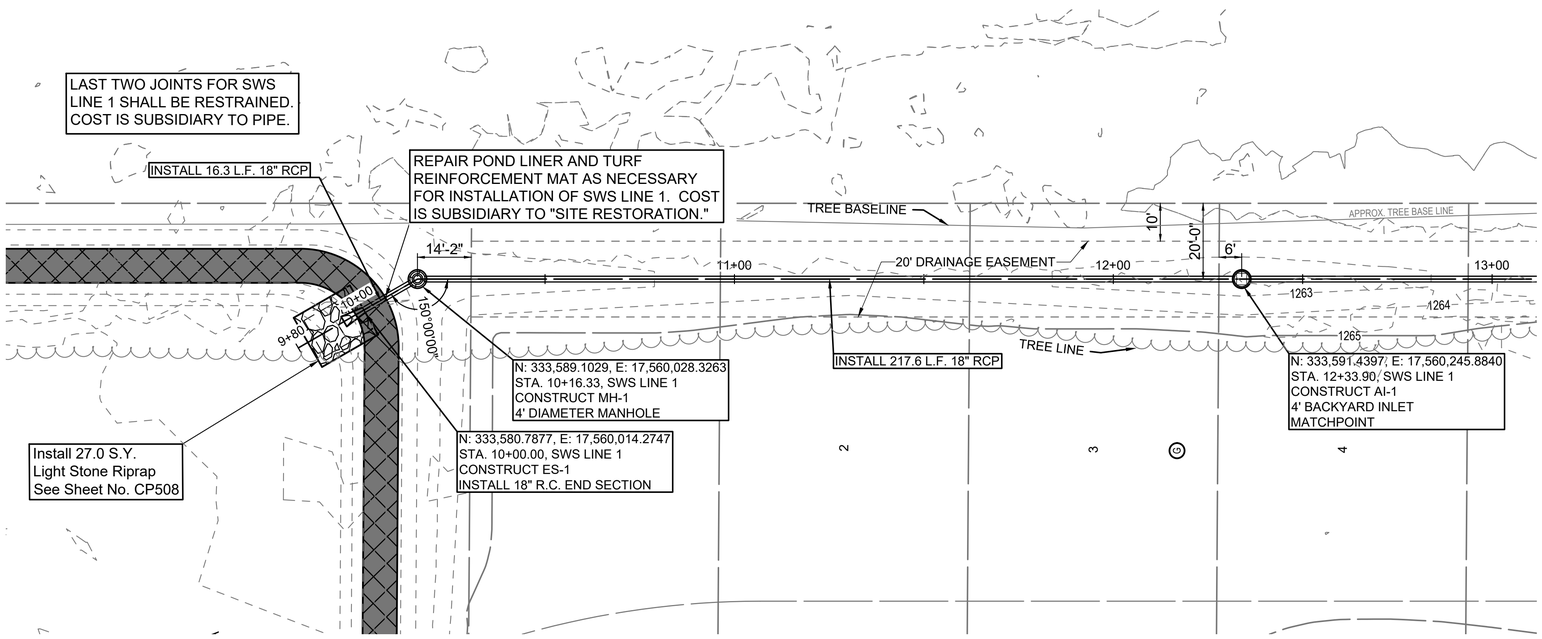
JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

SIGN DETAILS

CP306
23 OF 69

Saved: 09-17-2025, 3:46:03 PM By: KEVIN.GRAHAM
Plotted: 11-6-2025, 12:34:13 PM By: KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\23-200605-009-CP306 SIGN DETAILS.DWG

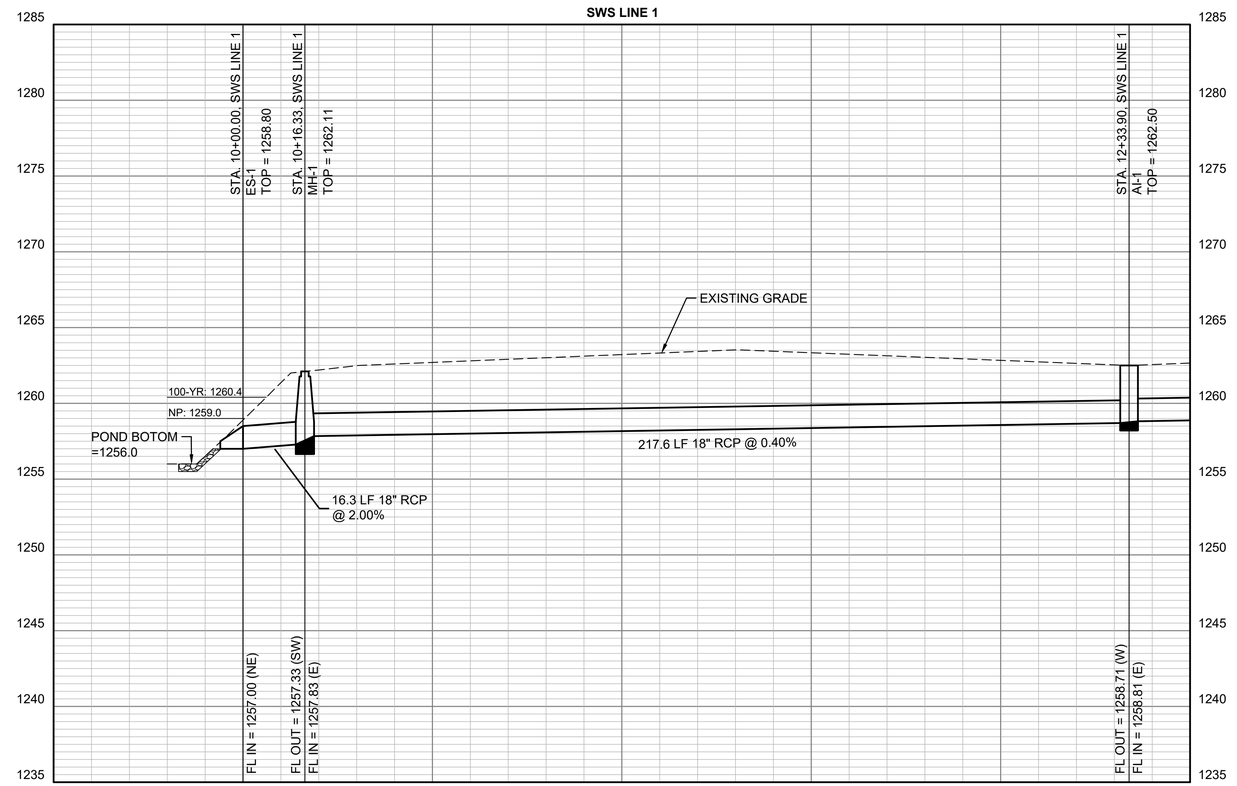
SAVED 9/17/2025 3:46:03 PM BY KEVIN.GRAHAM
PLOTTED 11/6/2025 12:34:13 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\23-200605-009-CP306 SIGN DETAILS.DWG



TREES WHICH ARE IN DIRECT CONFLICT WITH PROPOSED NEW CONSTRUCTION SHALL BE REMOVED BY THE CONTRACTOR WITH THE ENGINEER'S APPROVAL. TREE REMOVAL SHALL BE SUBSIDIARY TO "SITE CLEARING".

SEE SHEET NOS. CP501 THRU CP507 FOR STRUCTURE DETAILS

SCALE IN FEET
0' 10' 20' 40'
PLAN: LAT. & LONG.
PROFILE: HORIZ. SAME AS ABOVE
VERT:
0' 5'



PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 11/06/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

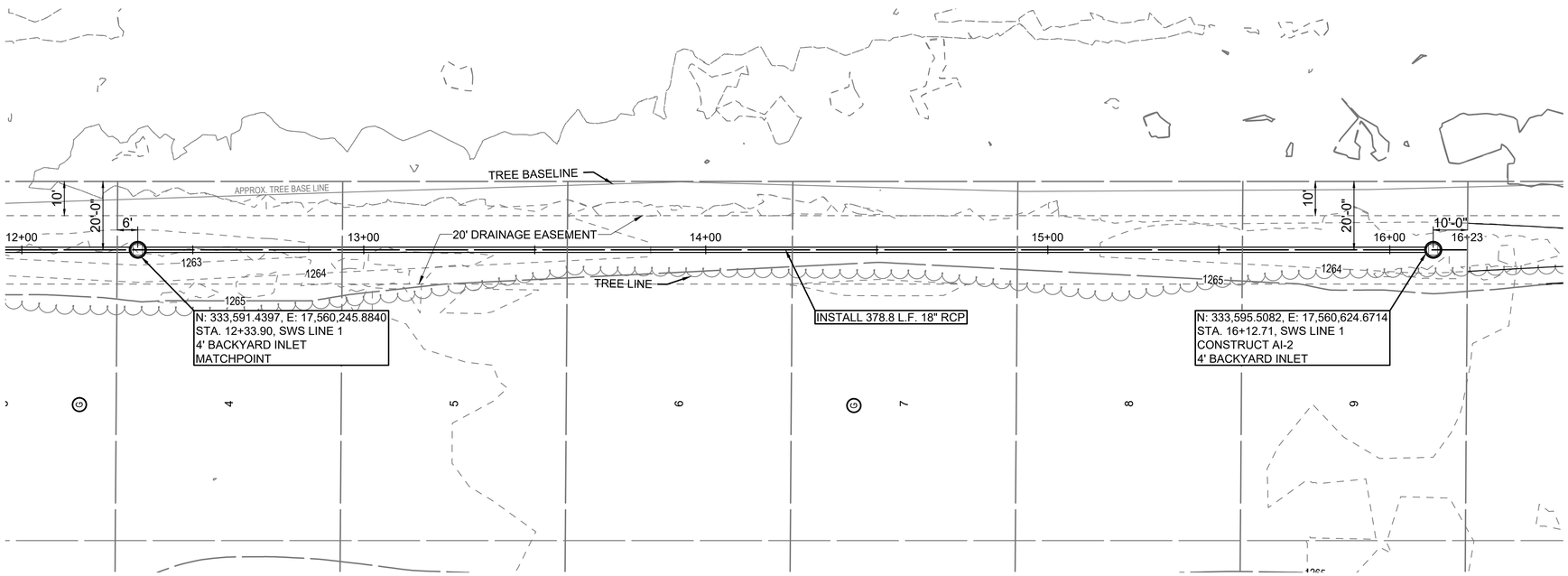
Issue:		

JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

PLAN AND PROFILE-SWS LINE 1

CP401
24 OF 69

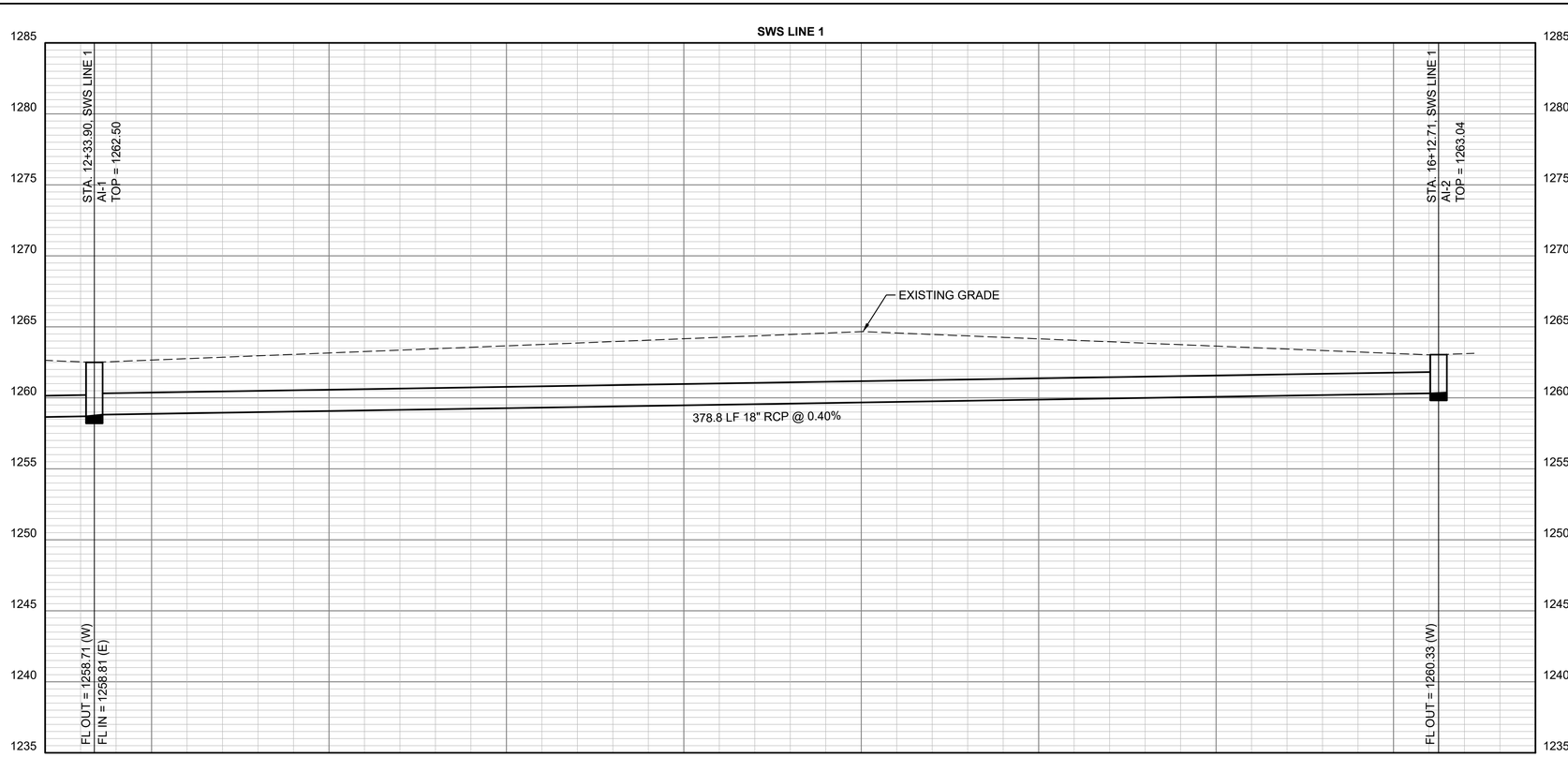
SAVED 9/18/2025 9:28:03 AM BY KEVIN.GRAHAM
PLOTTED 11/6/2025 1:17:08 PM BY KEVIN.GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\24-200605-009-CP401 PLAN AND PROFILE-SWS LINE 1.DWG



TREES WHICH ARE IN DIRECT CONFLICT WITH PROPOSED NEW CONSTRUCTION SHALL BE REMOVED BY THE CONTRACTOR WITH THE ENGINEER'S APPROVAL. TREE REMOVAL SHALL BE SUBSIDIARY TO "SITE CLEARING".

SEE SHEET NOS. CP501 THRU CP507 FOR STRUCTURE DETAILS

SCALE IN FEET
0' 10' 20' 40'
PLAN: LAT. & LONG.
PROFILE: HORIZ. SAME AS ABOVE
VERT:
0' 5'



PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 11/06/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

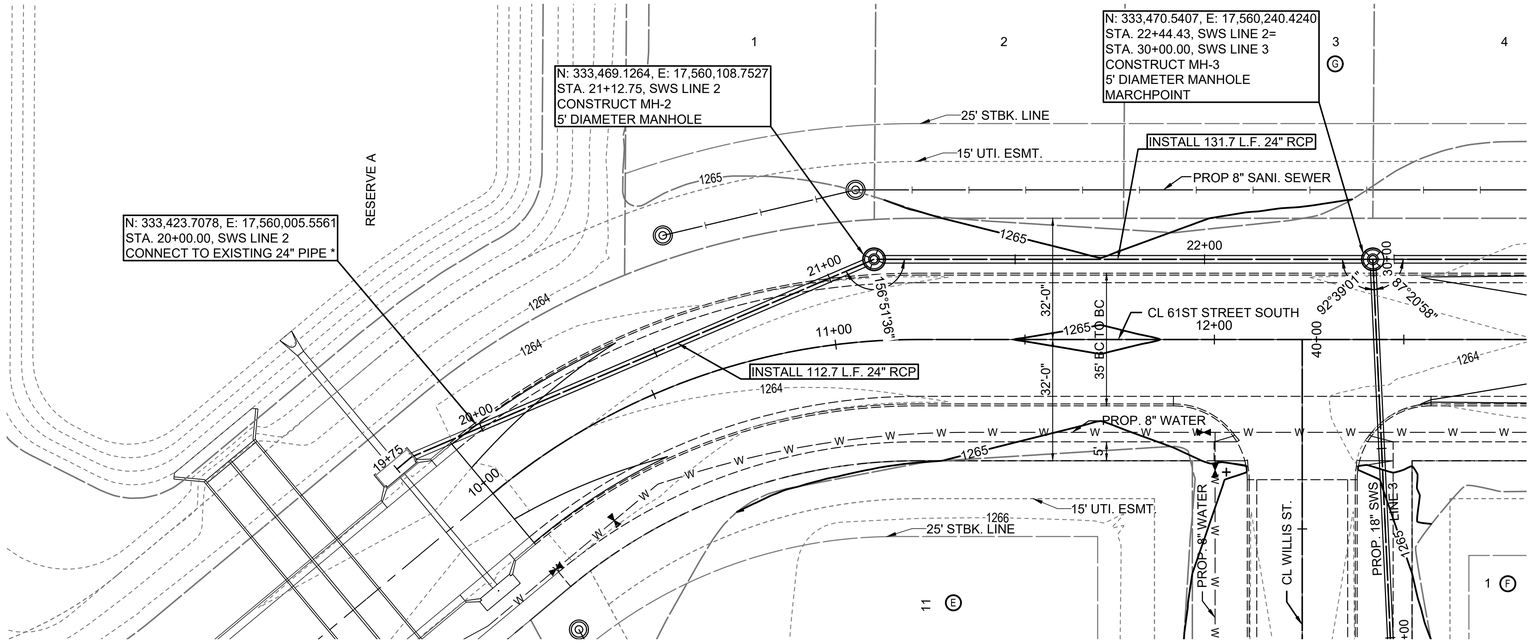
Issue:		

JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

PLAN AND PROFILE-SWS LINE 1

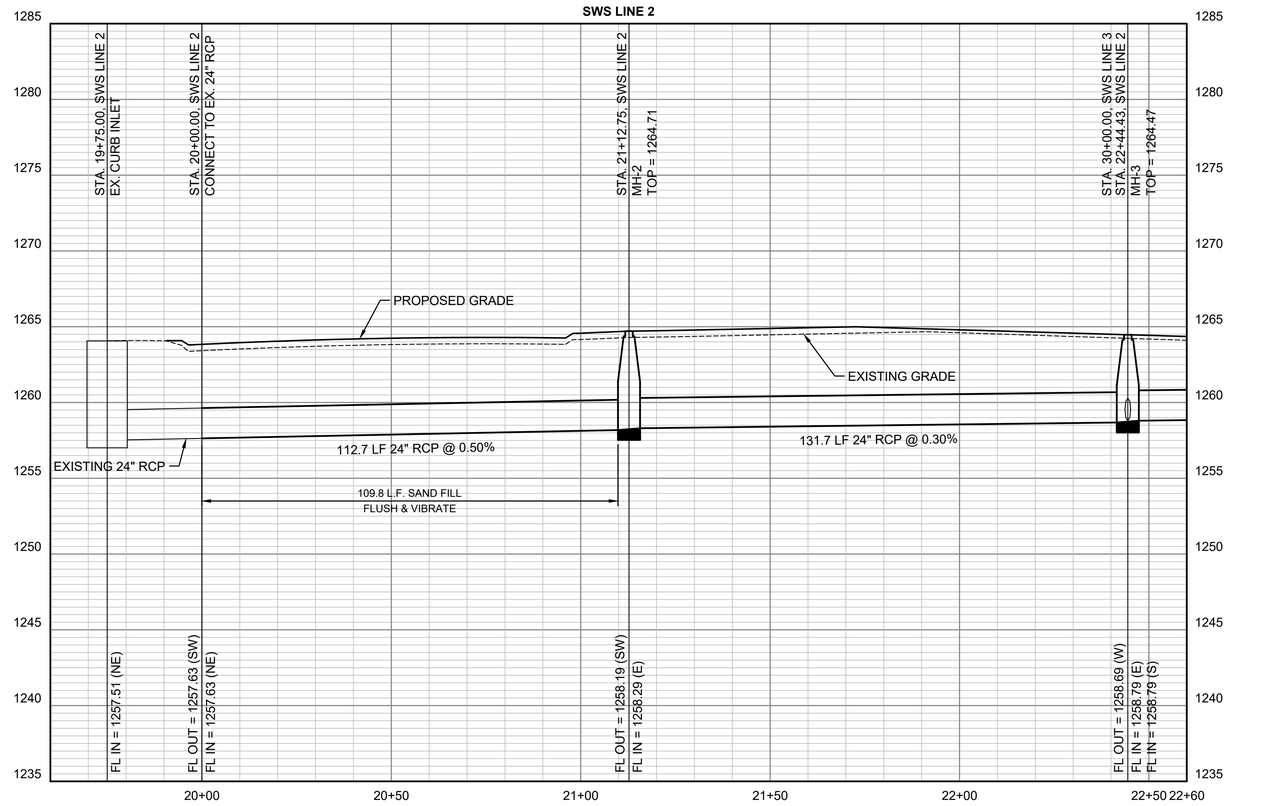
CP402
25 OF 69

SAVED 9/18/2025 9:28:46 AM BY KEVIN GRAHAM
PLOTTED 11/6/2025 12:35:31 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\25-200605-009-CP402 PLAN AND PROFILE-SWS LINE 1.DWG



*PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE THE EXISTING PIPE TO VERIFY PIPE SIZE, TYPE, FITTINGS, AND HORIZONTAL AND VERTICAL LOCATION. THE CONTRACTOR SHALL REPORT HIS FINDINGS TO THE ENGINEER SO THAT ANY NECESSARY PLAN MODIFICATIONS CAN BE MADE. ANY ADDITIONAL LABOR OR MATERIALS NECESSARY TO COMPLETE THE CONNECTION SHALL BE CONSIDERED SUBSIDIARY TO THE PROJECT.

SEE SHEET NOS. CP501 THRU CP507 FOR STRUCTURE DETAILS



PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 11/06/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

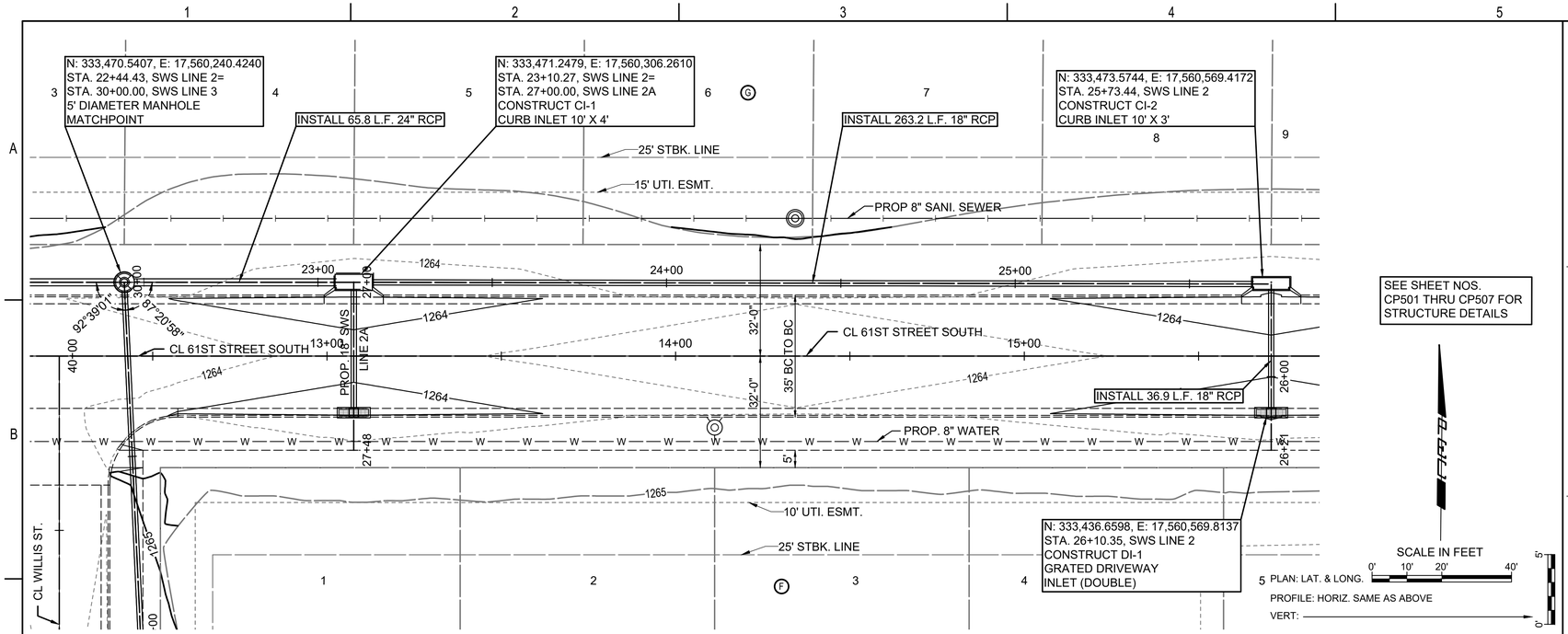
Issue:		

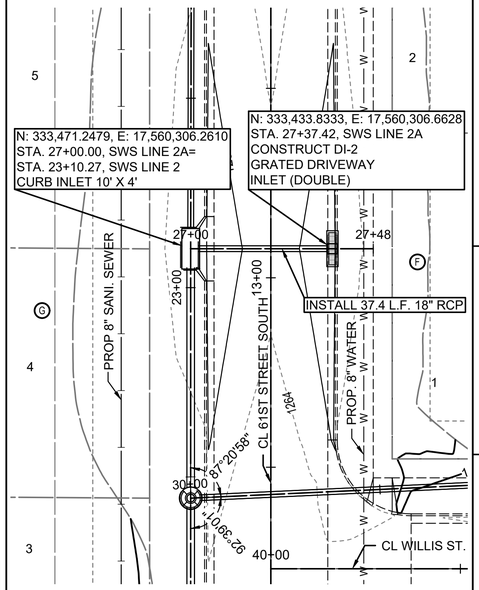
JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

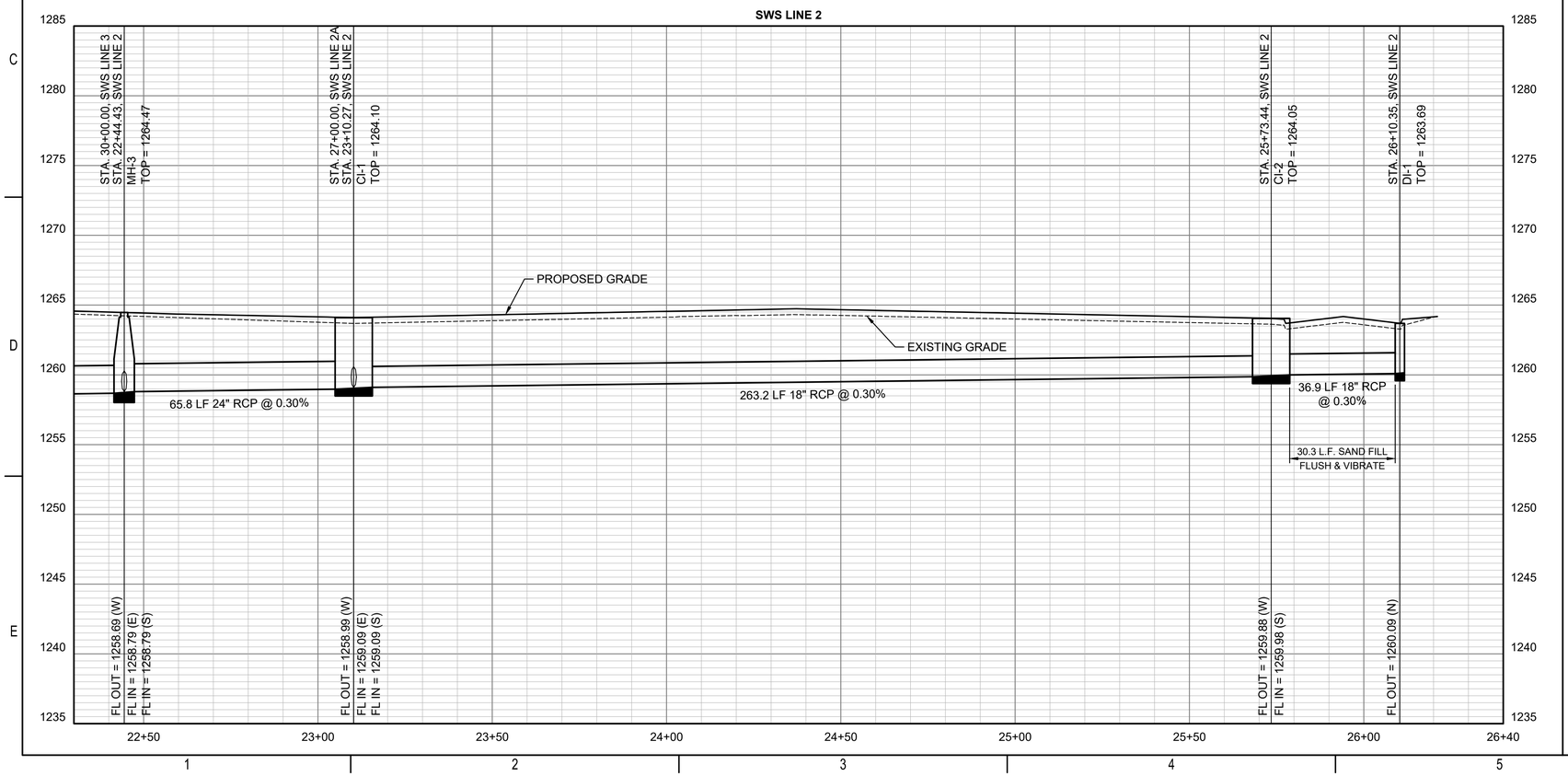
PLAN AND PROFILE-SWS LINE 2

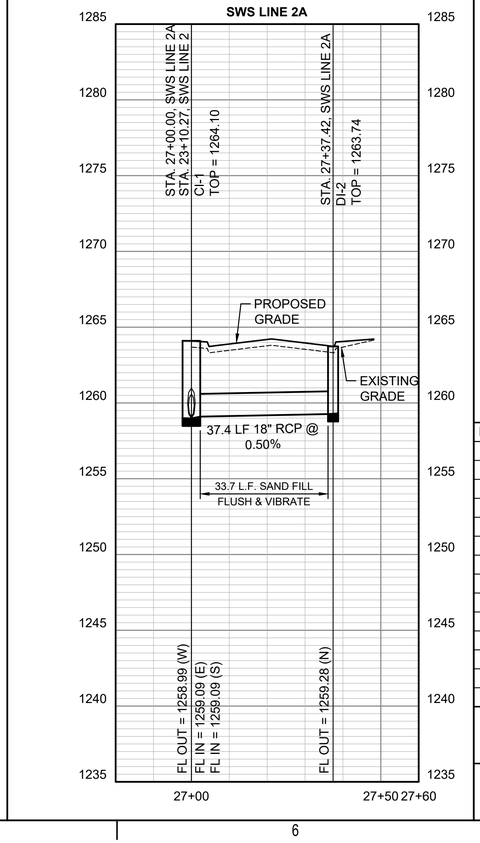
CP403
26 OF 69

SAVED 9/18/2025 9:22:09 AM BY KEVIN.GRAHAM
PLOTTED 11/6/2025 1:23:41 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\26-200605-009-CP403 PLAN AND PROFILE-SWS LINE 2.DWG









PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 11/06/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

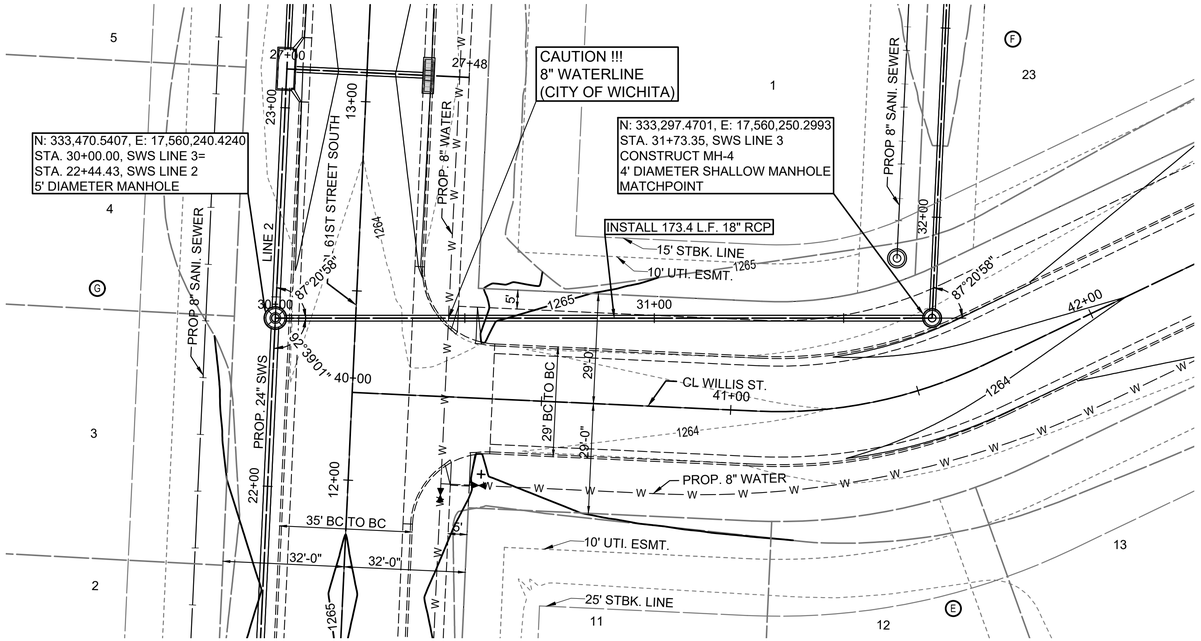
Issue:		

JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

PLAN AND PROFILE-SWS LINES 2 AND 2A

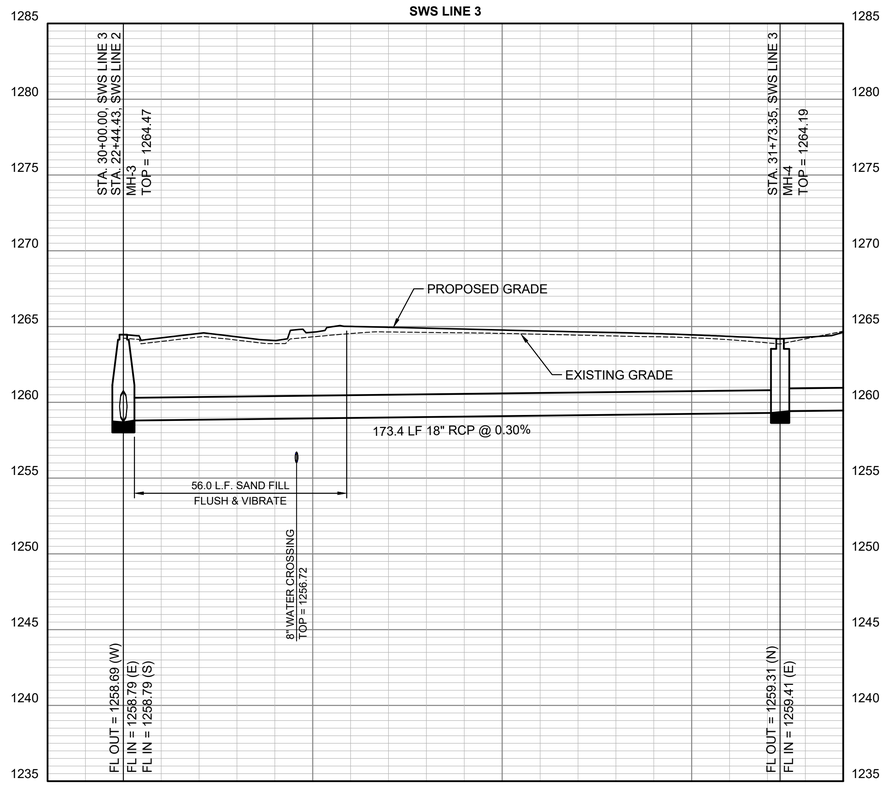
CP404
27 OF 69

SAVED 9/18/2025 9:23:46 AM BY KEVIN.GRAHAM
PLOTTED 11/6/2025 12:36:52 PM BY KEVIN GRAHAM
U:\WICHITA-C\VIL\2020\200605\009\2PD4_PLANS\030\PAVING\27-200605-009-CP404 PLAN AND PROFILE-SWS LINES 2 AND 2A.DWG



SEE SHEET NOS. CP501 THRU CP507 FOR STRUCTURE DETAILS

SCALE IN FEET
0' 10' 20' 40'
PLAN: LAT. & LONG.
PROFILE: HORIZ. SAME AS ABOVE
VERT:



PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 11/06/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

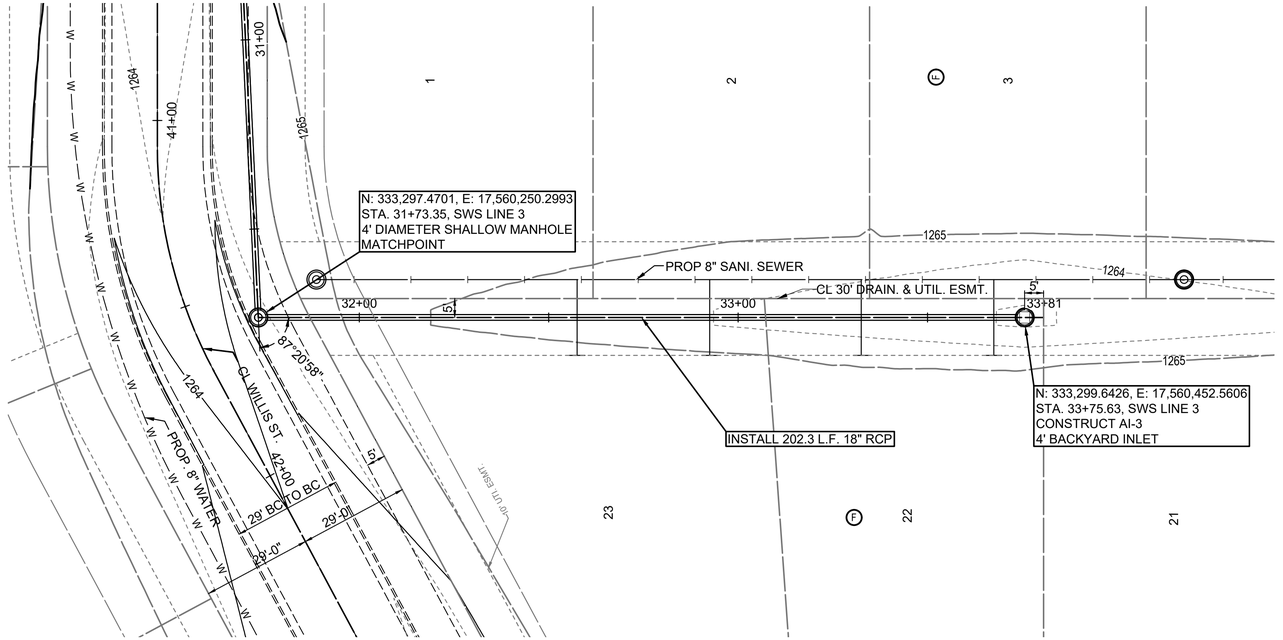
Issue:		

JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

PLAN AND PROFILE-SWS LINE 3

CP405
28 OF 69

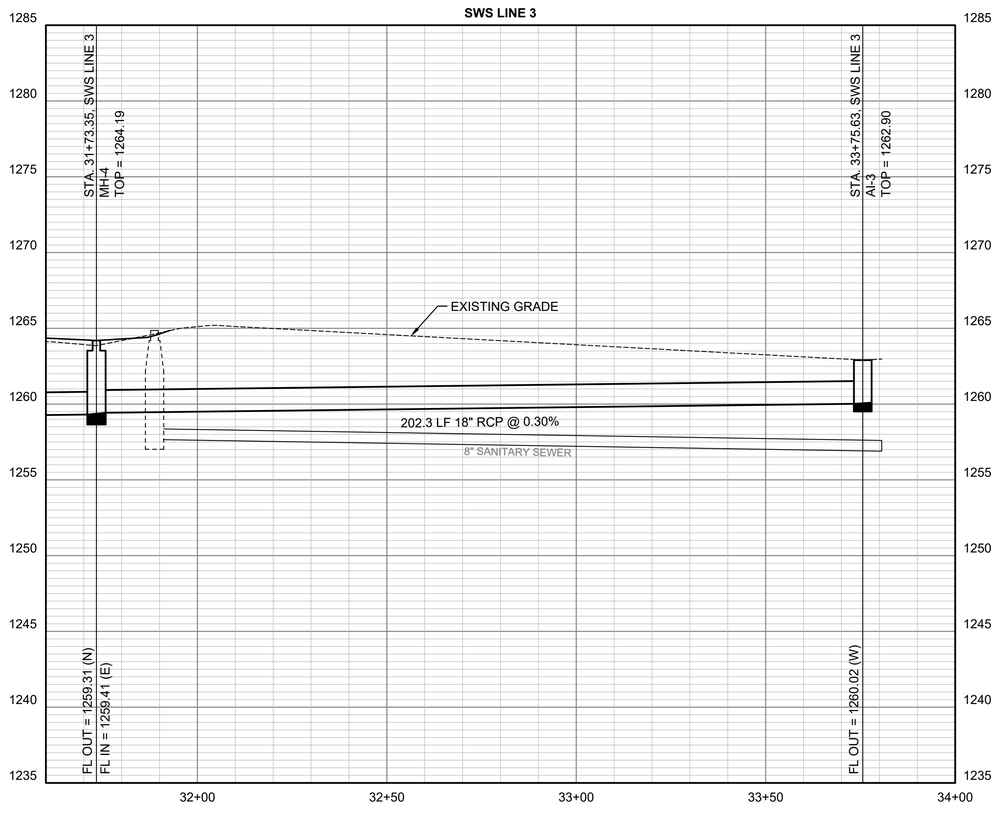
SAVED 9/18/2025 9:25:30 AM BY KEVIN GRAHAM
PLOTTED 11/6/2025 12:37:22 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\28-200605-009-CP405 PLAN AND PROFILE-SWS LINE 3.DWG



SEE SHEET NOS. CP501 THRU CP507 FOR STRUCTURE DETAILS

SCALE IN FEET
0' 10' 20' 40'

PLAN: LAT. & LONG.
PROFILE: HORIZ. SAME AS ABOVE
VERT:
0' 5'



PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 11/06/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

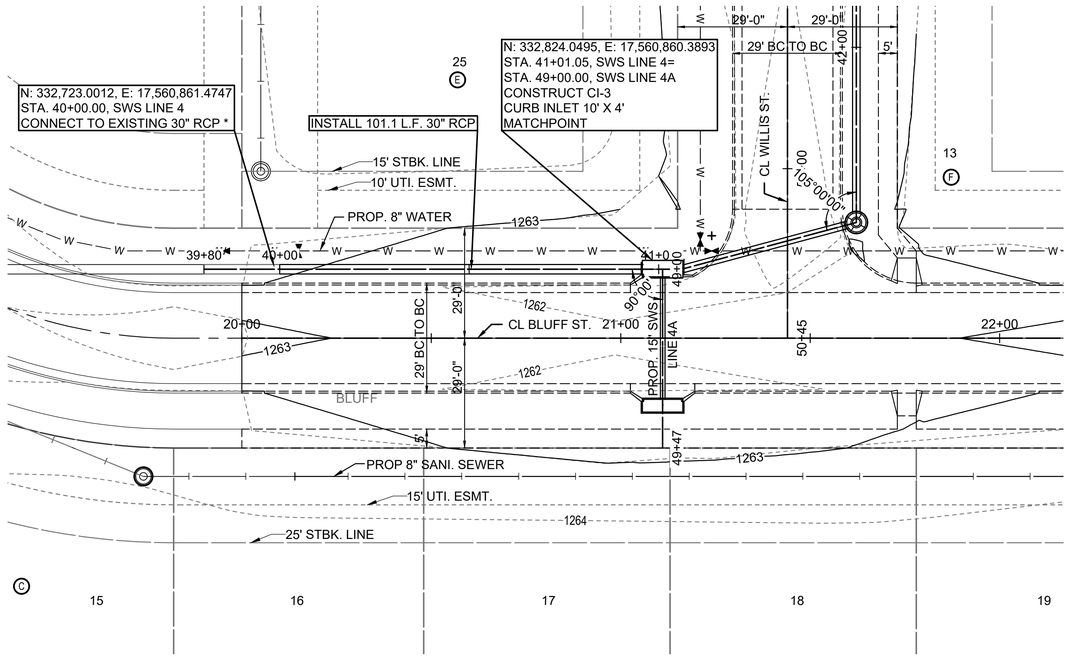
Issue:		

JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

PLAN AND PROFILE-SWS LINE 3

CP406
29 OF 69

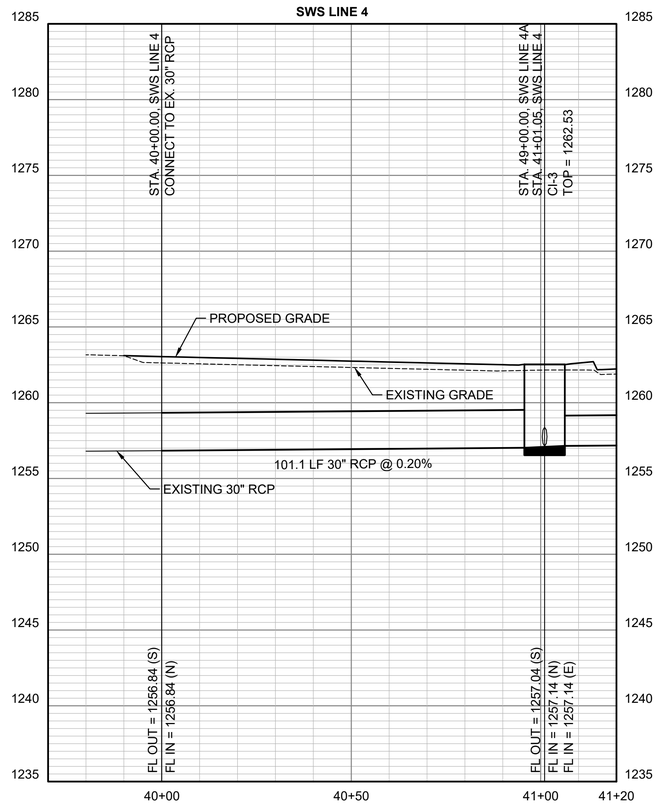
SAVED 9/18/2025 9:31:22 AM BY KEVIN.GRAHAM
PLOTTED 11/6/2025 12:37:51 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\29-200605-009-CP406 PLAN AND PROFILE-SWS LINE 3.DWG



*PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE THE EXISTING PIPE TO VERIFY PIPE SIZE, TYPE, FITTINGS, AND HORIZONTAL AND VERTICAL LOCATION. THE CONTRACTOR SHALL REPORT HIS FINDINGS TO THE ENGINEER SO THAT ANY NECESSARY PLAN MODIFICATIONS CAN BE MADE. ANY ADDITIONAL LABOR OR MATERIALS NECESSARY TO COMPLETE THE CONNECTION SHALL BE CONSIDERED SUBSIDIARY TO THE PROJECT.

SEE SHEET NOS. CP501 THRU CP507 FOR STRUCTURE DETAILS

SCALE IN FEET
0' 10' 20' 40'
PLAN: LAT. & LONG.
PROFILE: HORIZ. SAME AS ABOVE
VERT:
0' 5'



PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 11/06/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

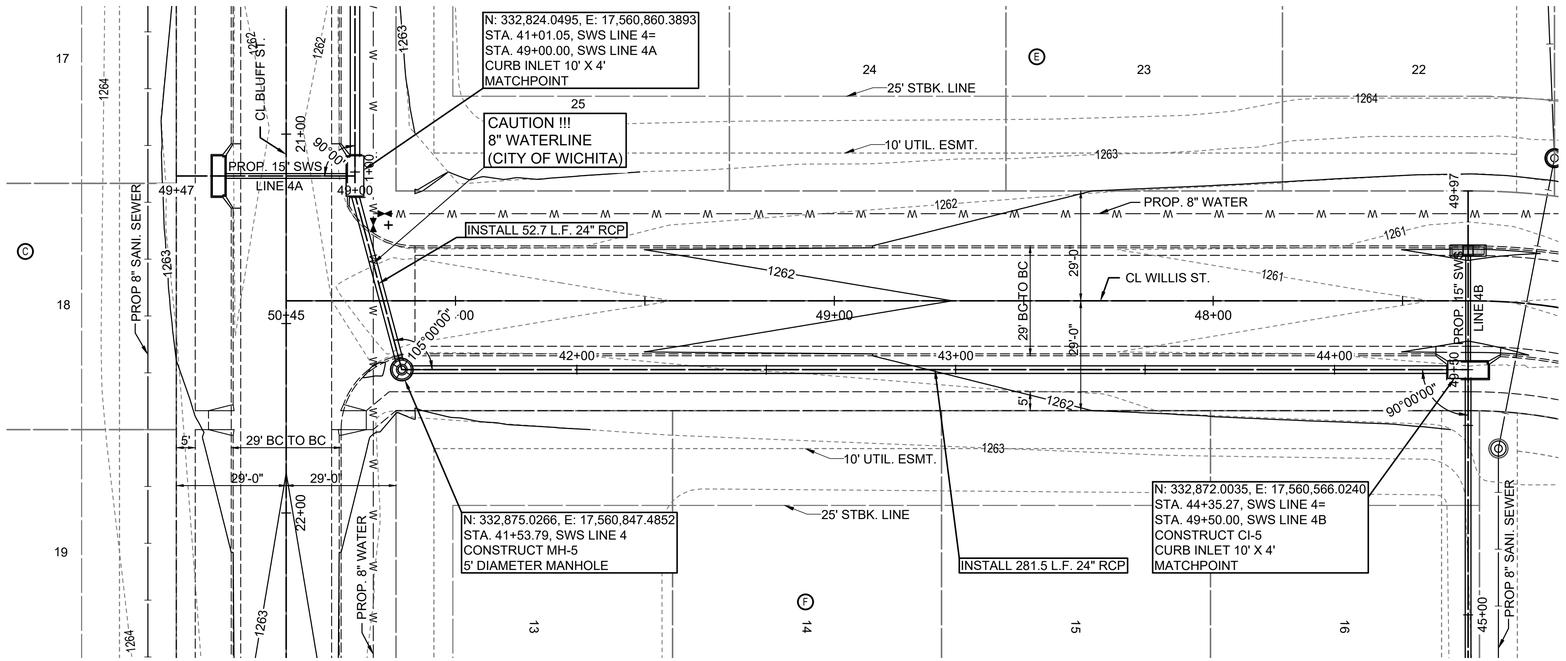
Issue:		

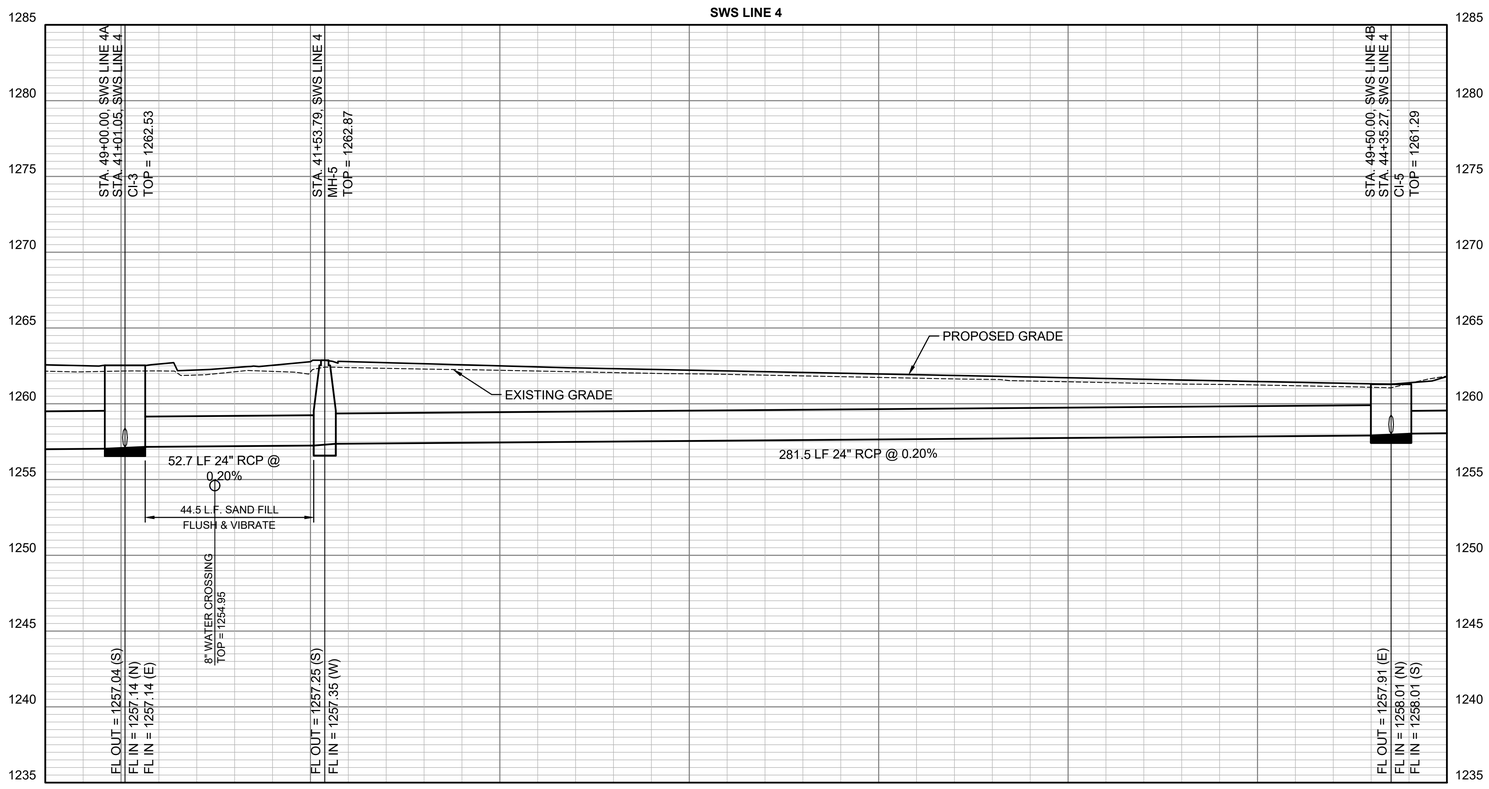
JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

PLAN AND PROFILE-SWS LINE 4

CP407
30 OF 69

SAVED 9/18/2025 9:09:09 AM BY KEVIN.GRAHAM
PLOTTED 11/6/2025 12:38:20 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\30-200605-009-CP407 PLAN AND PROFILE-SWS LINE 4.DWG





PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM
LICENSED
27806
11/06/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

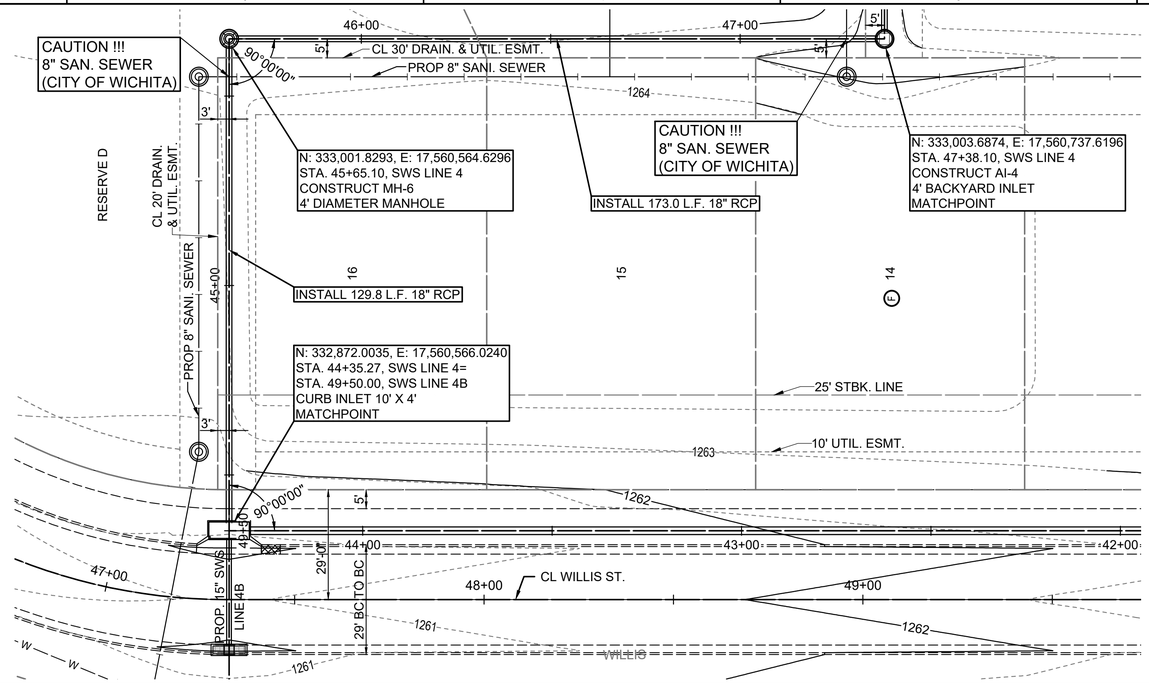
Issue:		

JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

PLAN AND PROFILE-SWS LINE 4

CP408
31 OF 69

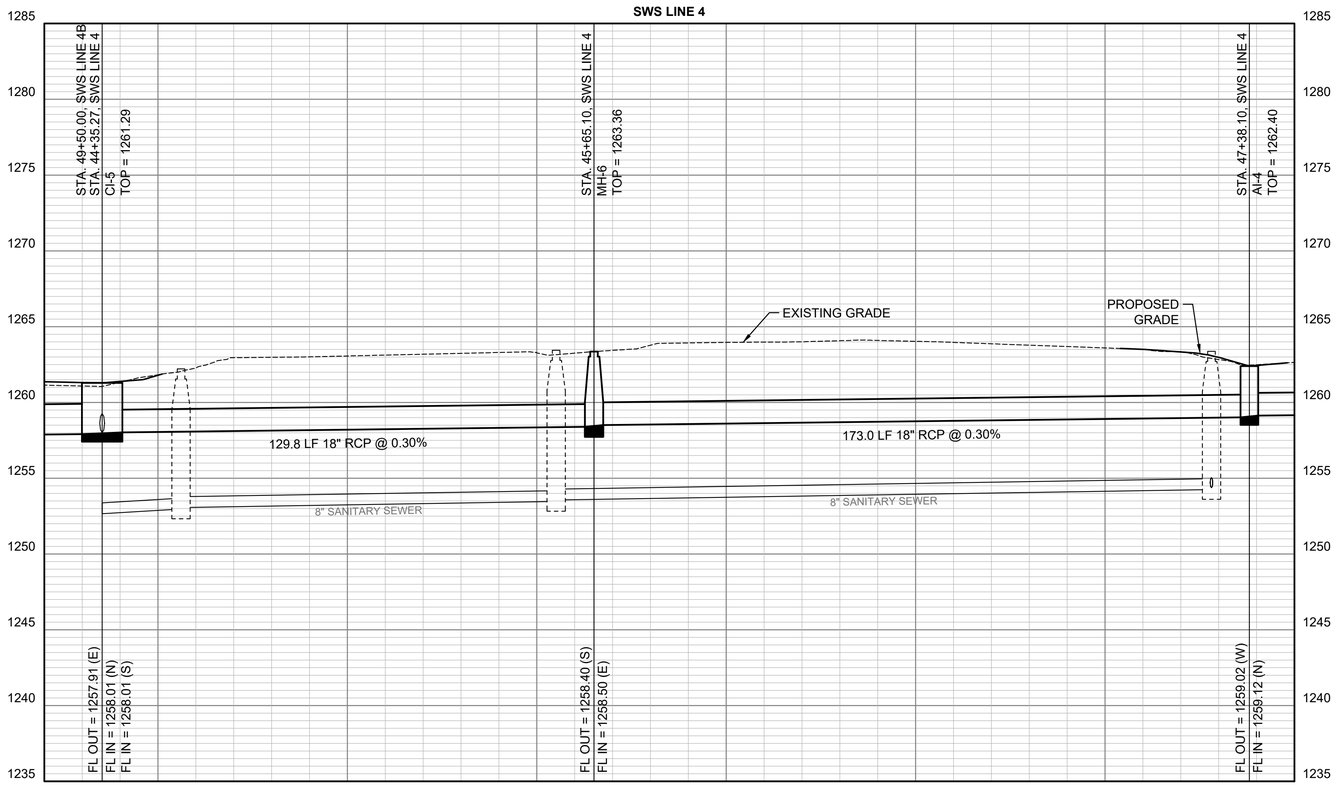
SAVED 9/18/2025 9:22:14 AM BY KEVIN.GRAHAM
PLOTTED 11/6/2025 1:28:42 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\31-200605-009-CP408 PLAN AND PROFILE-SWS LINE 4.DWG



SEE SHEET NOS. CP501 THRU CP507 FOR STRUCTURE DETAILS

SCALE IN FEET
0' 10' 20' 40'

PLAN: LAT. & LONG.
PROFILE: HORIZ. SAME AS ABOVE
VERT:



PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 11/06/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

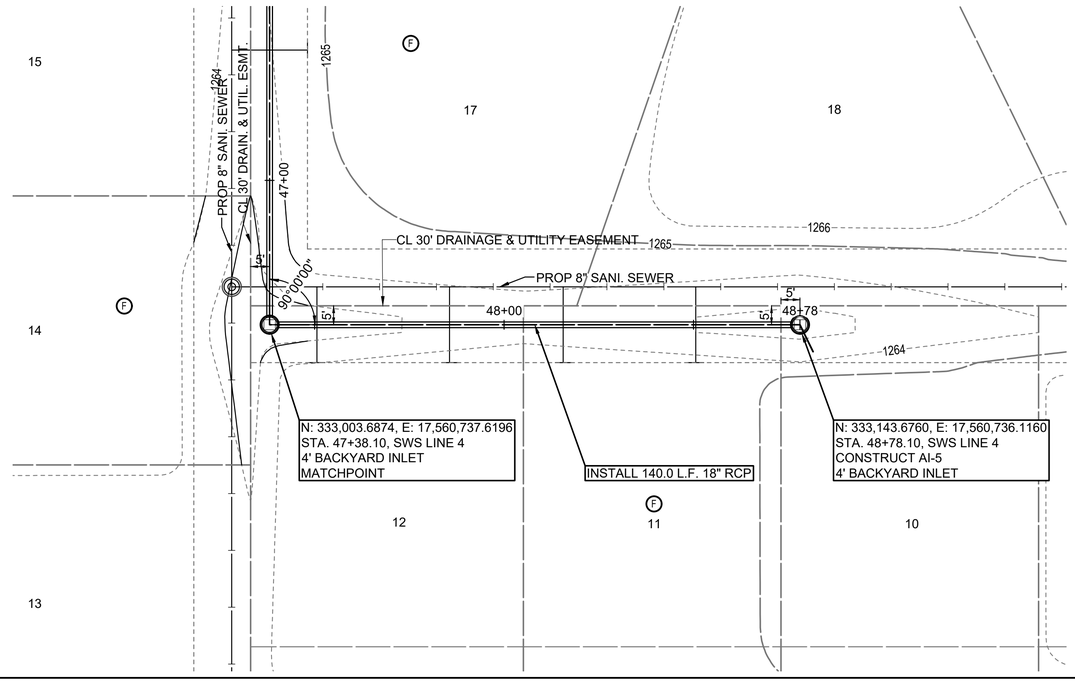
Issue:		

JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

PLAN AND PROFILE-SWS LINE 4

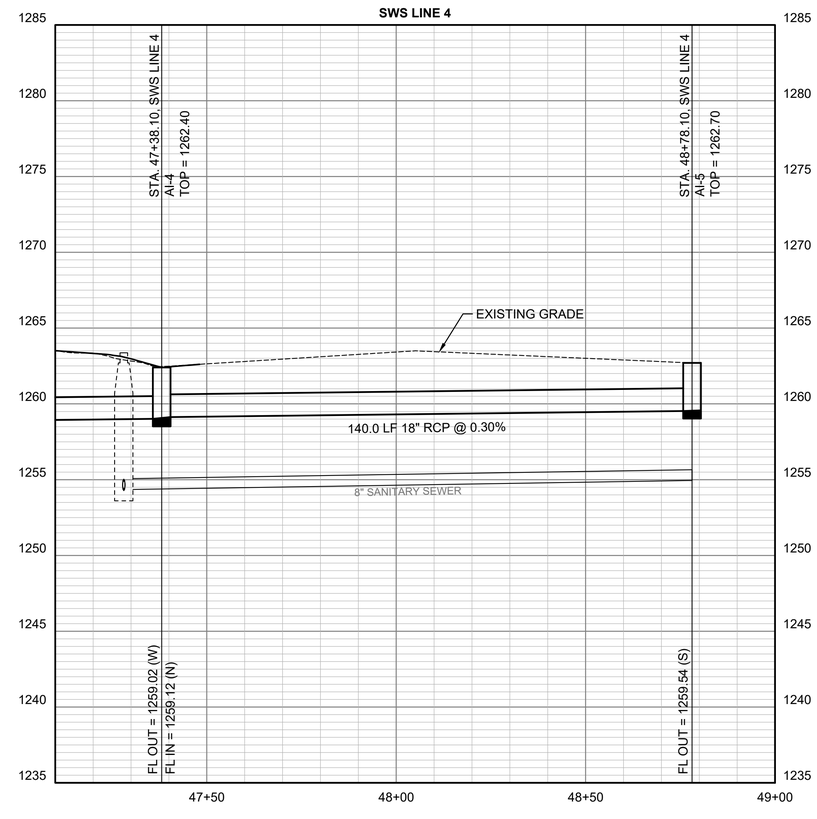
CP409
32 OF 69

SAVED 9/18/2025 9:31:29 AM BY KEVIN.GRAHAM
PLOTTED 11/6/2025 12:39:13 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\32-200605-009-CP409 PLAN AND PROFILE-SWS LINE 4.DWG



SEE SHEET NOS. CP501 THRU CP507 FOR STRUCTURE DETAILS

SCALE IN FEET
0' 10' 20' 40'
PLAN: LAT. & LONG.
PROFILE: HORIZ. SAME AS ABOVE
VERT: 0' 5'



PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 11/06/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

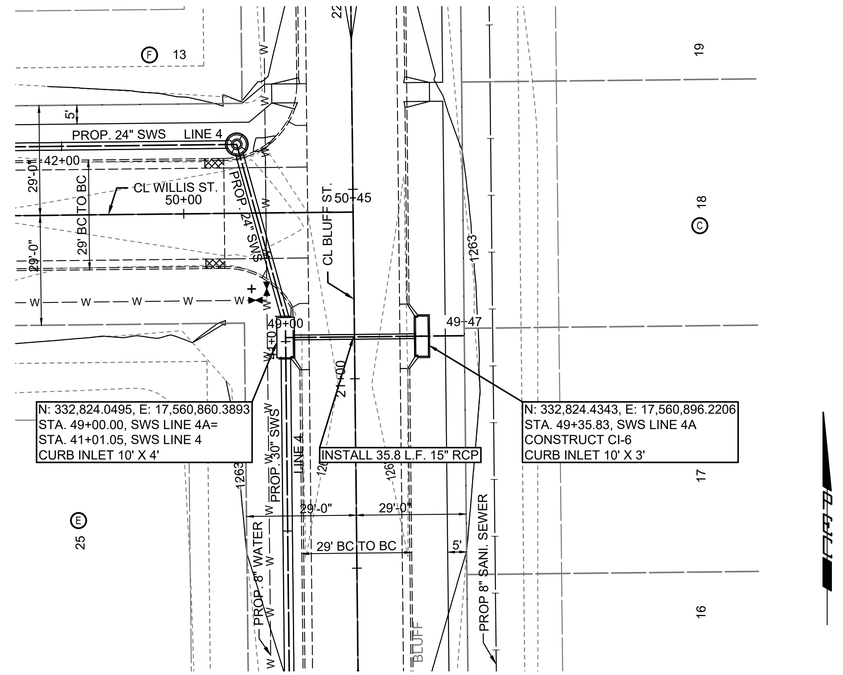
Issue:		

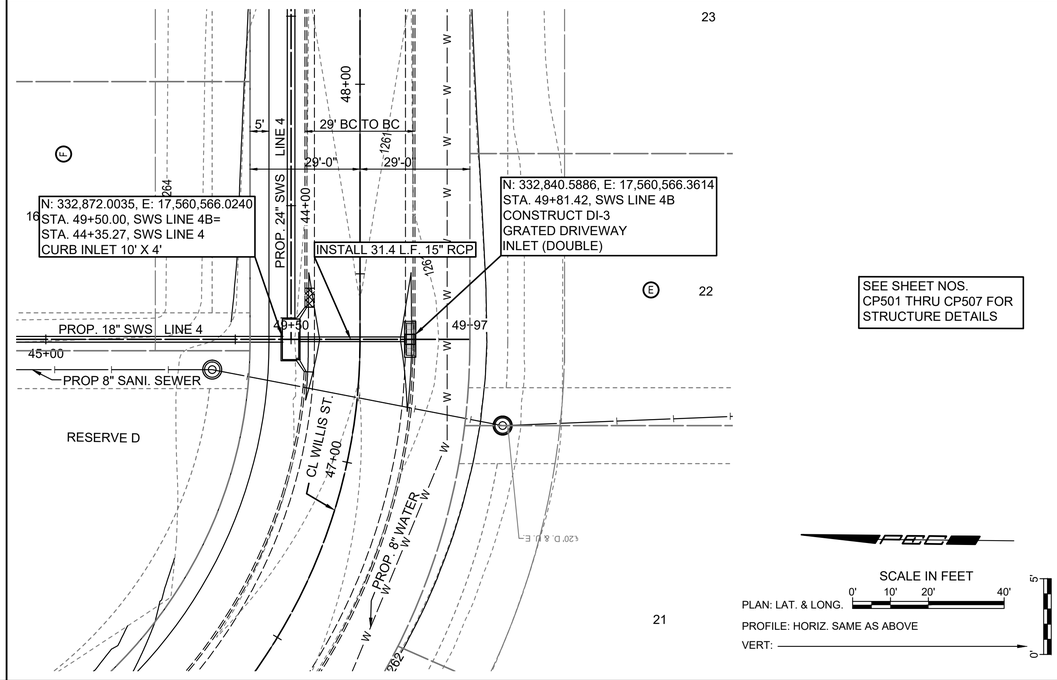
JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

PLAN AND PROFILE-SWS LINE 4

CP410
33 OF 69

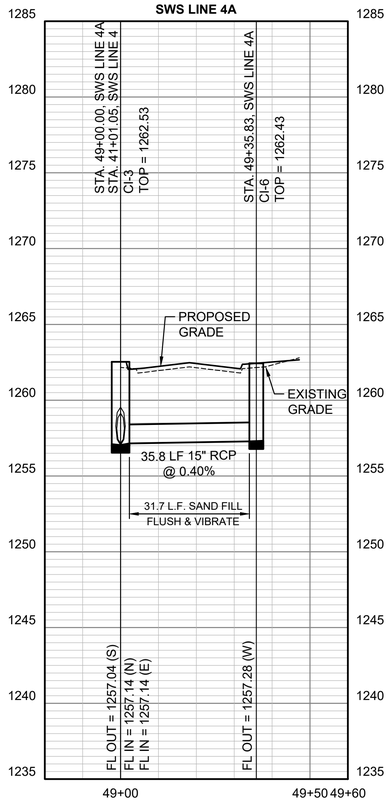
SAVED 9/18/2025 9:31:05 AM BY KEVIN.GRAHAM
PLOTTED 11/6/2025 12:39:44 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\33-200605-009-CP410 PLAN AND PROFILE-SWS LINE 4.DWG

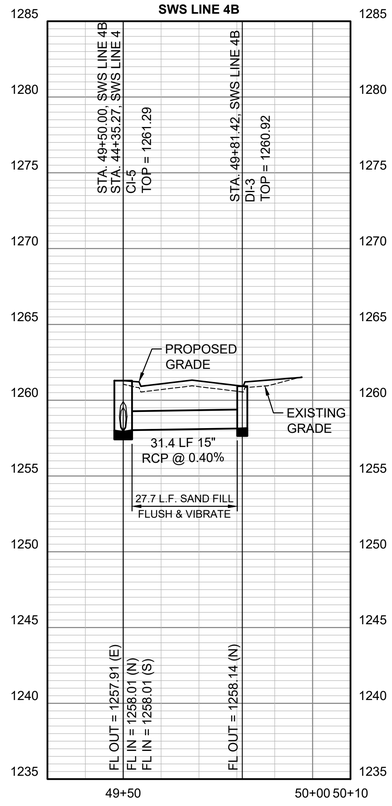




SEE SHEET NOS. CP501 THRU CP507 FOR STRUCTURE DETAILS

SCALE IN FEET
0' 10' 20' 40'
PLAN: LAT. & LONG.
PROFILE: HORIZ. SAME AS ABOVE
VERT:





PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 11/06/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

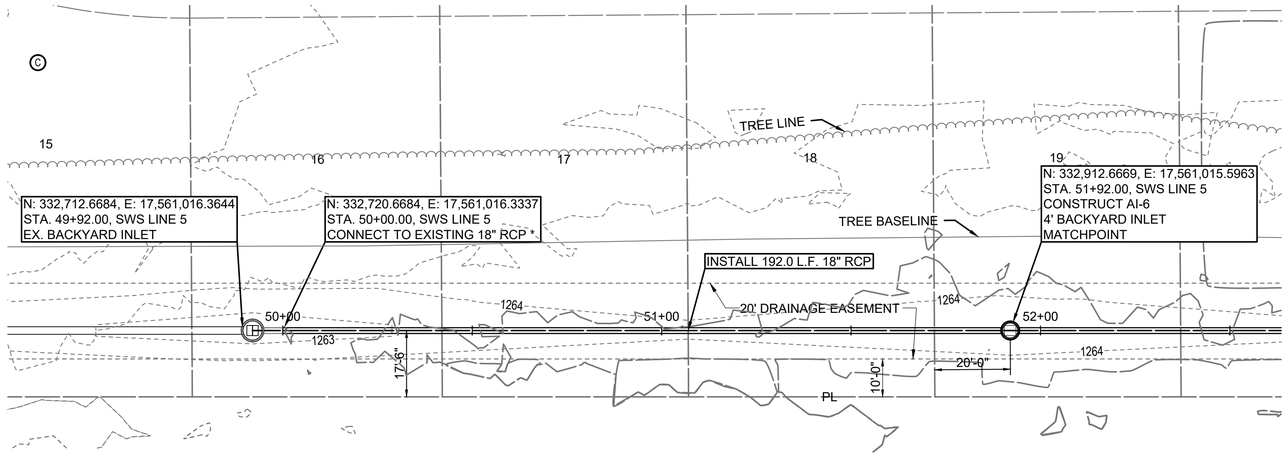
Issue:		

JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

PLAN AND PROFILE-SWS LINES 4A AND 4B

CP411
34 OF 69

SAVED 9/18/2025 9:31:44 AM BY KEVIN.GRAHAM
PLOTTED 11/6/2025 12:40:32 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\34-200605-009-CP411 PLAN AND PROFILE-SWS LINES 4A AND 4B.DWG

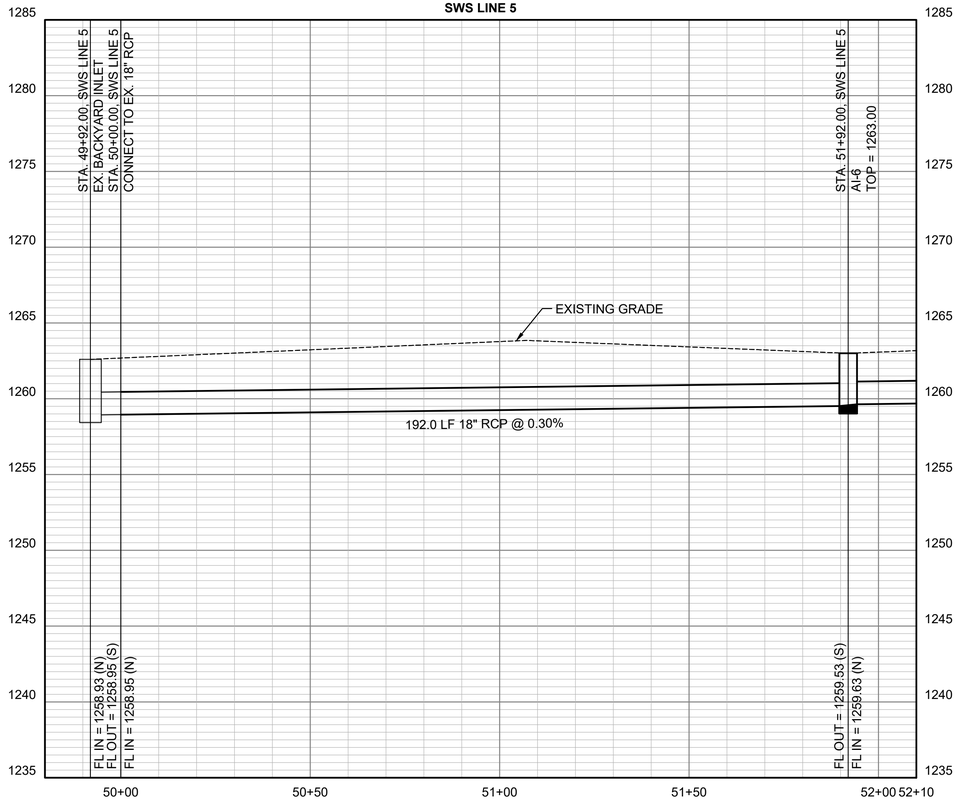


*PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE THE EXISTING PIPE TO VERIFY PIPE SIZE, TYPE, FITTINGS, AND HORIZONTAL AND VERTICAL LOCATION. THE CONTRACTOR SHALL REPORT HIS FINDINGS TO THE ENGINEER SO THAT ANY NECESSARY PLAN MODIFICATIONS CAN BE MADE. ANY ADDITIONAL LABOR OR MATERIALS NECESSARY TO COMPLETE THE CONNECTION SHALL BE CONSIDERED SUBSIDIARY TO THE PROJECT.

TREES WHICH ARE IN DIRECT CONFLICT WITH PROPOSED NEW CONSTRUCTION SHALL BE REMOVED BY THE CONTRACTOR WITH THE ENGINEER'S APPROVAL. TREE REMOVAL SHALL BE SUBSIDIARY TO "SITE CLEARING".

SEE SHEET NOS. CP501 THRU CP507 FOR STRUCTURE DETAILS

SCALE IN FEET
0' 10' 20' 40'
PLAN: LAT. & LONG.
PROFILE: HORIZ. SAME AS ABOVE
VERT:



PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 11/06/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

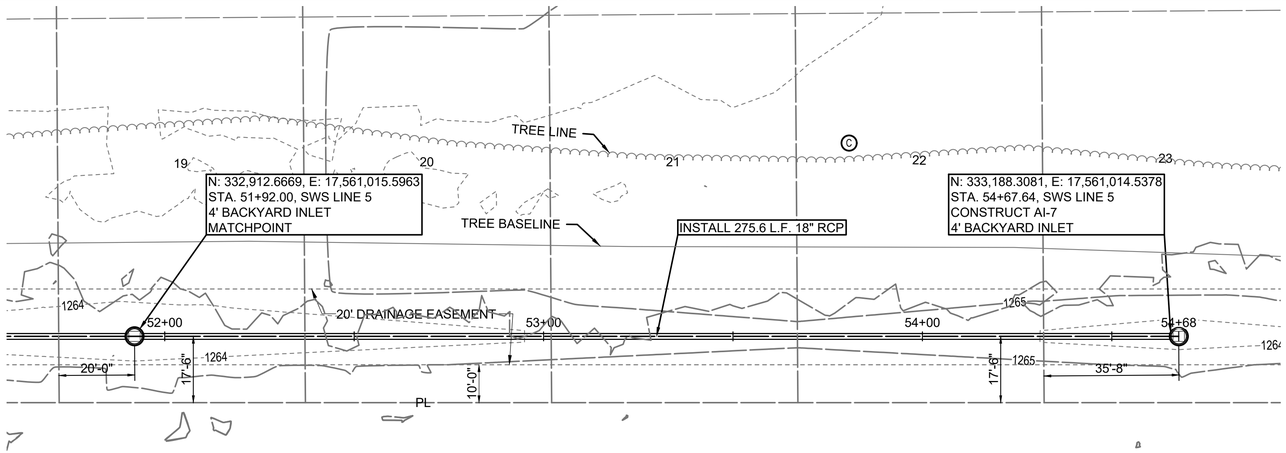
Issue:		

JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

PLAN AND PROFILE-SWS LINE 5

CP412
35 OF 69

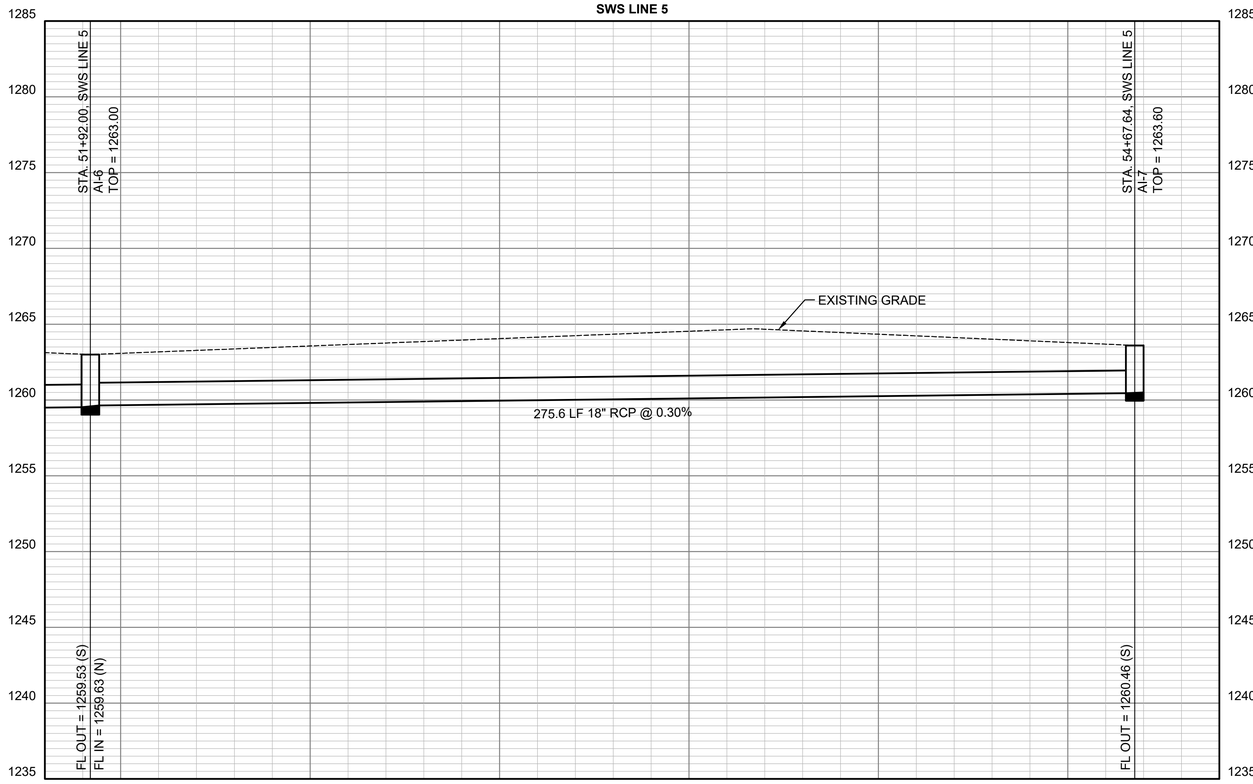
SAVED 9/18/2025 9:33:25 AM BY KEVIN GRAHAM
PLOTTED 11/6/2025 12:41:13 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\35-200605-009-CP412 PLAN AND PROFILE-SWS LINE 5.DWG



TREES WHICH ARE IN DIRECT CONFLICT WITH PROPOSED NEW CONSTRUCTION SHALL BE REMOVED BY THE CONTRACTOR WITH THE ENGINEER'S APPROVAL. TREE REMOVAL SHALL BE SUBSIDIARY TO "SITE CLEARING".

SEE SHEET NOS. CP501 THRU CP507 FOR STRUCTURE DETAILS

SCALE IN FEET
0' 10' 20' 40'
PLAN: LAT. & LONG.
PROFILE: HORIZ. SAME AS ABOVE
VERT:



PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM
LICENSED
27806
11/06/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

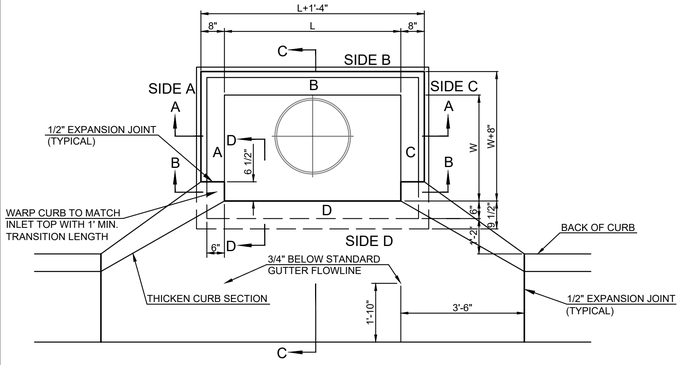
Issue:		

JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

PLAN AND PROFILE-SWS LINE 5

CP413
36 OF 69

SAVED 9/18/2025 9:34:17 AM BY KEVIN.GRAHAM
PLOTTED 11/6/2025 12:41:51 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\36-200605-009-CP413 PLAN AND PROFILE-SWS LINE 5.DWG



TOP VIEW

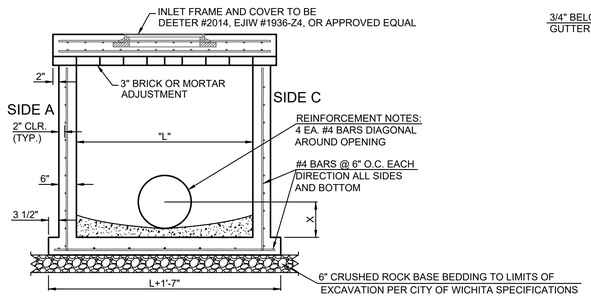
BAR SCHEDULE		
INLET OPENING	B1 BARS	SPACING
5'-0"	#4	4"
10'-0"	#6	3.5"

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"

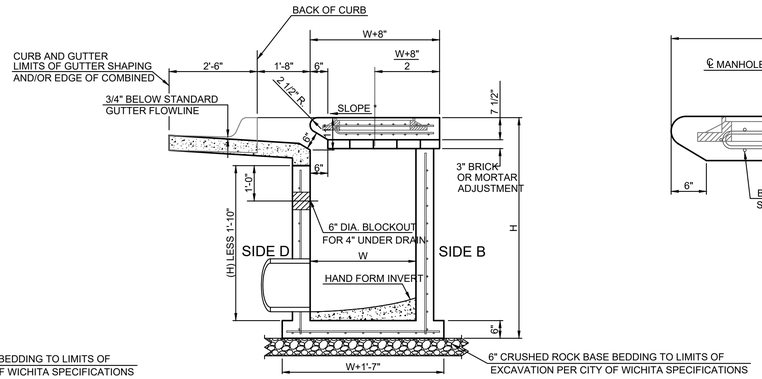
*** FOR PIPES PERPENDICULAR TO INLET WALL

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.

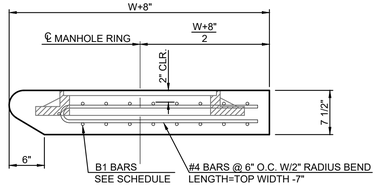


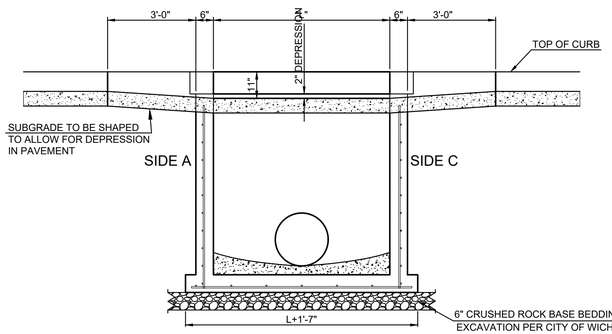
SECTION "A-A"



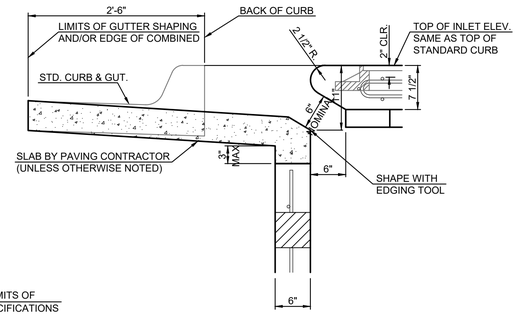
SECTION "C-C"

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
472-2024-086027	———	

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

SHEET
37 of 69

SW-103

PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 11/06/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION
PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

Issue:		

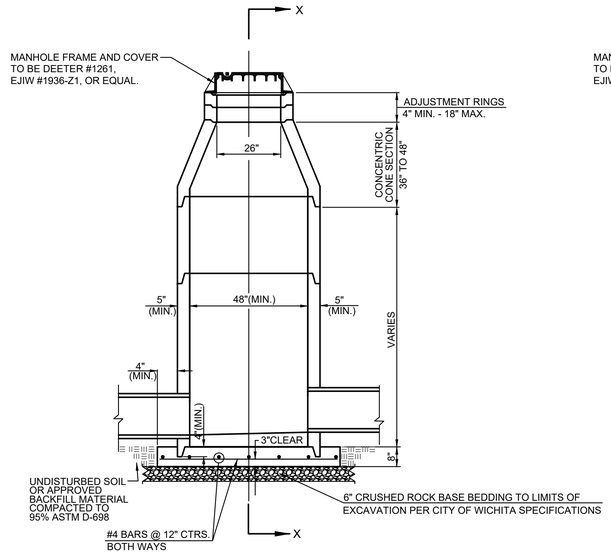
JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

STD. TYPE 1A CURB INLET DETAILS

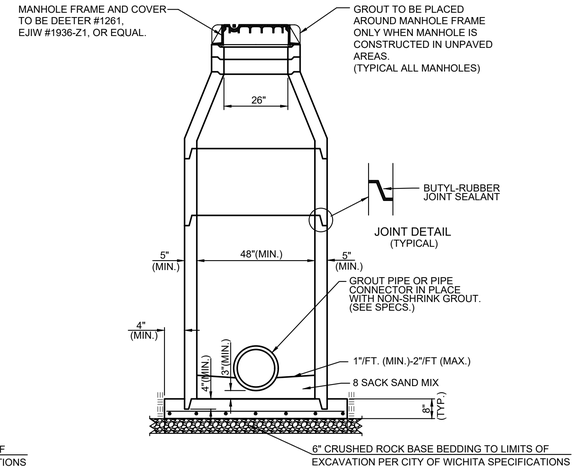
CP501
37 OF 69

Saved 06-24-2025 9:56:25 AM by BILL.SEXSON
Plot Scale=1:1 / Plot Date=11/06/2025 12:41:58 PM By KEVIN.GRAHAM
U:\Wichita-Civil\2020\200605\009\2PD4_PLANS\030\PAVING\37-200605-009-CP501 STD. TYPE 1A CURB INLET DETAILS.DWG

SAVED 6/24/2025 9:56:25 AM BY BILL.SEXSON
PLOTTED 11/6/2025 12:41:58 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\37-200605-009-CP501 STD. TYPE 1A CURB INLET DETAILS.DWG



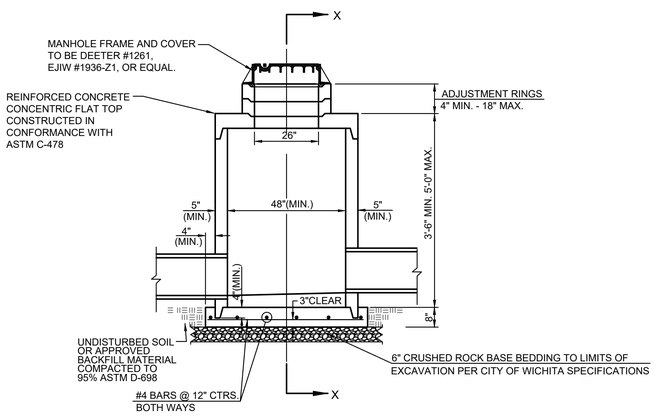
PRECAST
STANDARD MANHOLE
TYPE "A"



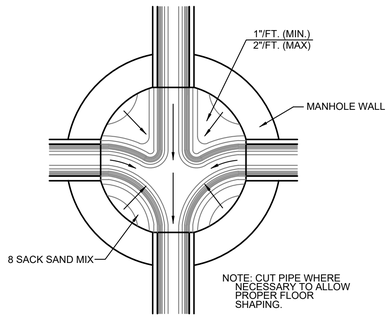
SECTION X-X
(TYPICAL)

GENERAL NOTES

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



PRECAST
SHALLOW MANHOLE
TYPE "B"



TYPICAL MANHOLE
FLOOR SHAPING

REVISED: MARCH 2015

CITY OF WICHITA
PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

PRECAST CONCRETE MANHOLE (STORM SEWER)

CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER	OCA NUMBER	DATE
472-2024-086027	———	

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

SHEET
38 of 69

SW-301

PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 11/06/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

Issue:		

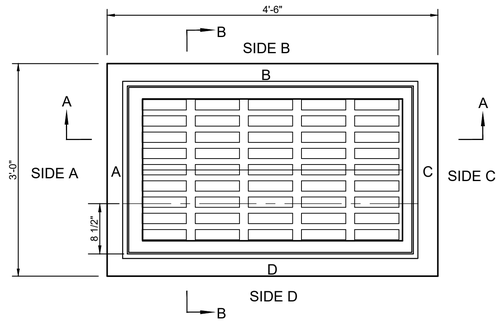
JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

PRECAST CONCRETE MANHOLE DETAILS

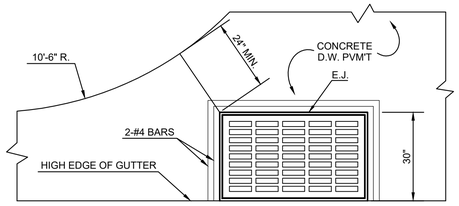
CP502
38 OF 69

Saved 06-24-2025, 9:55:34 AM by BILL.SEXSON
Plotted 11-06-2025, 12:42:04 PM by KEVIN.GRAHAM
U:\Wichita-Civil\2020\200605\009\2PD4_Plans\030\PAVING\38-200605-009-CP502 PRECAST CONCRETE MANHOLE DETAILS

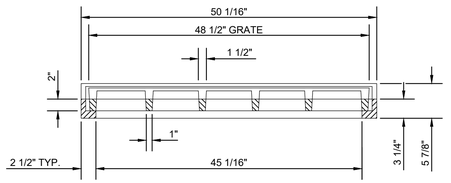
SAVED 6/24/2025 9:55:34 AM BY BILL.SEXSON
PLOTTED 11/6/2025 12:42:04 PM BY KEVIN.GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\38-200605-009-CP502 PRECAST CONCRETE MANHOLE DETAILS.DWG



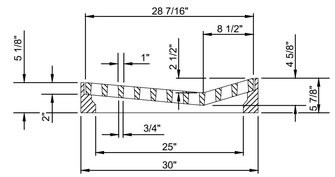
TOP VIEW



PLAN



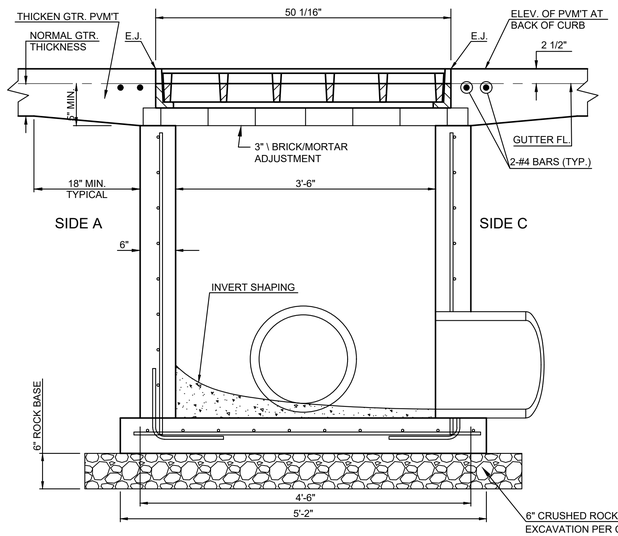
SECTION A-A



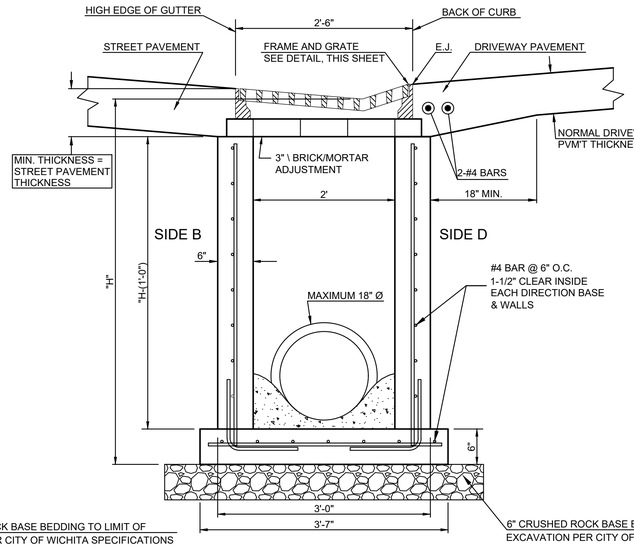
SECTION B-B

FRAME & GRATE

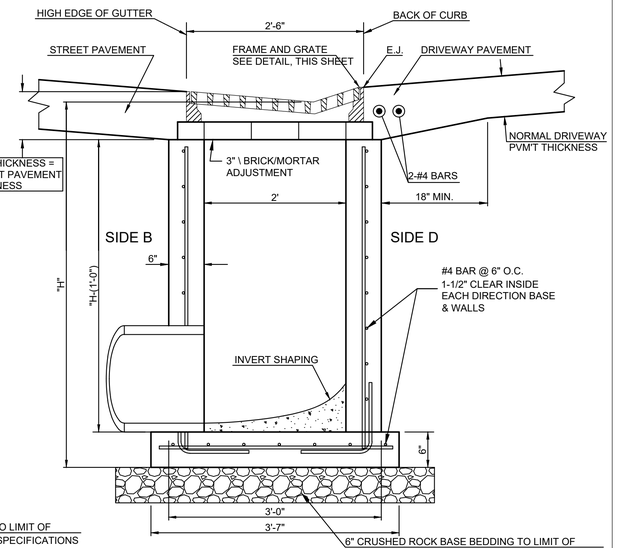
DEETER #2095 TOTAL WEIGHT: 705 LBS.
EJIW #7392 TOTAL WEIGHT: 675 LBS.



SECTION "A-A"



SECTION "B-B"
END OUTLET



SECTION "B-B"
SIDE OUTLET

6" CRUSHED ROCK BASE BEDDING TO LIMIT OF EXCAVATION PER CITY OF WICHITA SPECIFICATIONS

GENERAL NOTES

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

REVISED: MARCH 2015

CITY OF WICHITA
PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

GRATED DRIVEWAY INLET (SINGLE)

CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER	OCA NUMBER	DATE
472-2024-086027		

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

SHEET
39 of 69

SW-108

PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 11/06/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

Issue:		

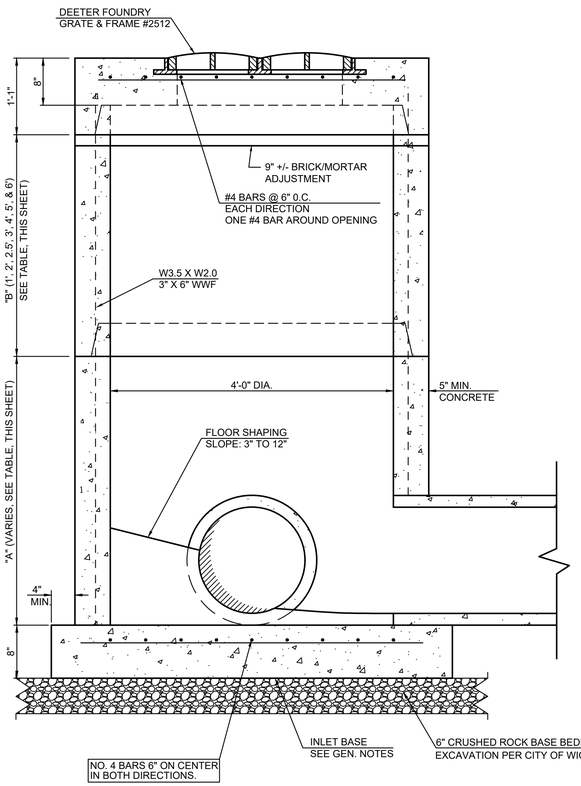
JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

GRATED DRIVEWAY INLET-SINGLE

CP503
39 OF 69

Saved 06-24-2025 9:58:43 AM by BILLSEXSON
Plotted 11-06-2025 12:42:08 PM by KEVIN GRAHAM
U:\Wichita-Civil\2020\200605\009\2PD4_Plans\030\PAVING\39-200605-009-CP503 GRATED DRIVEWAY INLET-SINGLE

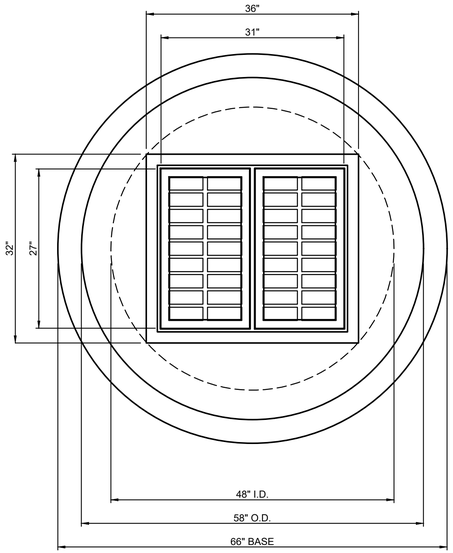
SAVED 6/24/2025 9:58:43 AM BY BILL SEXSON
PLOTTED 11/6/2025 12:42:08 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\39-200605-009-CP503 GRATED DRIVEWAY INLET-SINGLE.DWG

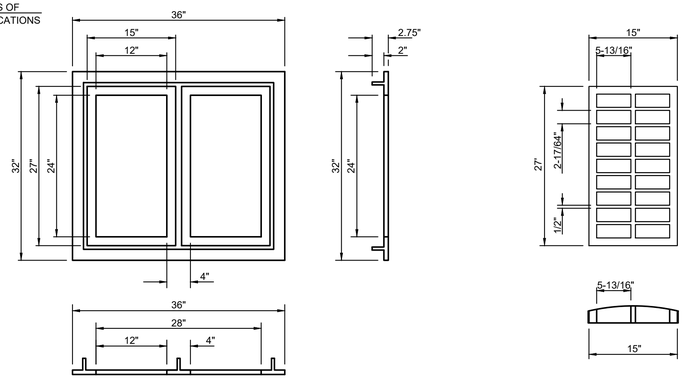


BACKYARD INLET

LINE #	STA.	TOP OF INLET	INLET FLOW	"A"	"B"
1	12+33.90	1262.50	1258.71	1.92'	1.0'
1	16+12.71	1263.04	1260.33	2.92'	--
3	33+75.63	1262.90	1260.02	3.09'	--
4	47+28.10	1262.30	1258.99	3.52'	--
4	48+78.10	1262.70	1259.54	3.37'	--
5	51+92.00	1263.00	1259.53	3.68'	--
5	54+67.64	1263.60	1260.46	3.35'	--

BACKYARD INLETS SHALL NOT BE USED UNDER PAVEMENT





DEETER #2512 CATCH BASIN INLET GRATE & FRAME

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.

REVISED: MARCH 2015

CITY OF WICHITA
PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

BACKYARD INLET

CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER	OCA NUMBER	DATE
472-2024-086027		

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

SHEET
40 of 69

SW-203

PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 11/06/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

Issue:		

JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

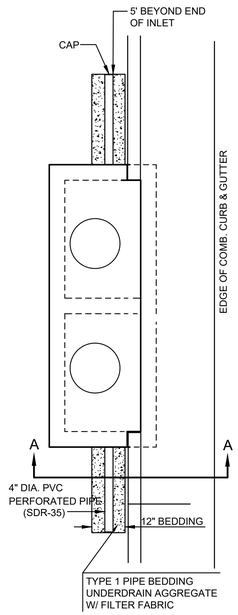
BACKYARD INLET

CP504
40 OF 69

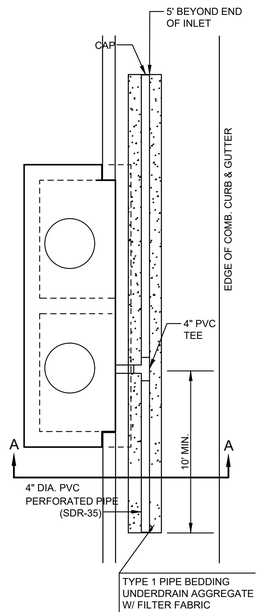
Saved: 06-27-2025 3:02:32 PM by: BILL.SEXSON
Plotted: 11-06-2025 12:42:14 PM by: KEVIN.GRAHAM
U:\Wichita-Civil\2020\200605\009\2PD4_Plans\030\PAVING\40-200605-009-CP504 BACKYARD INLET

SAVED 6/27/2025 3:02:32 PM BY BILL.SEXSON
PLOTTED 11/6/2025 12:42:14 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\40-200605-009-CP504 BACKYARD INLET.DWG

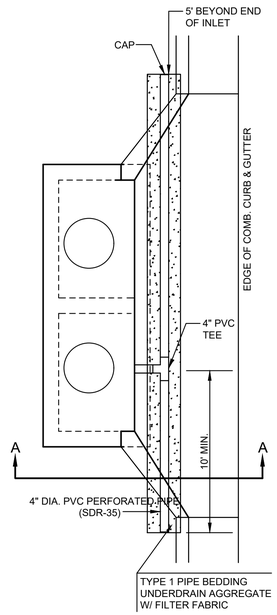
PAVEMENT UNDERDRAIN SHALL BE INSTALLED ON ALL CURB INLETS.



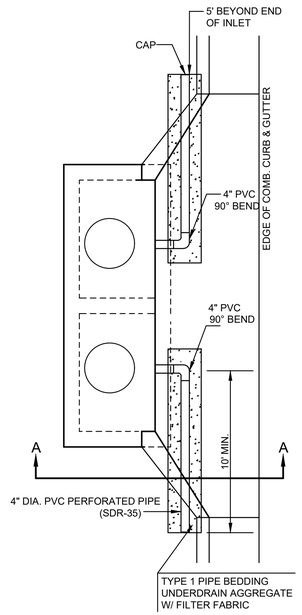
TYPE 1
OPTION 1



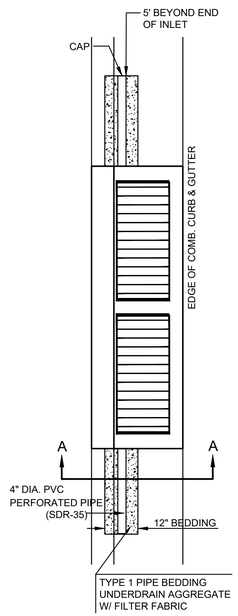
TYPE 1
OPTION 2



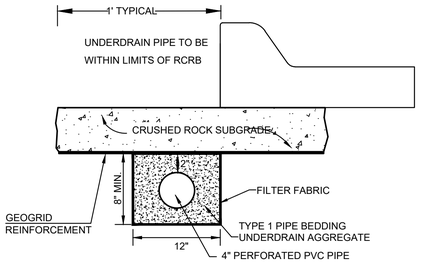
TYPE 1-A INLET
OPTION 1



TYPE 1-A INLET
OPTION 2



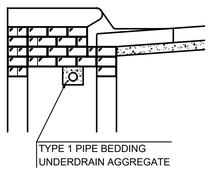
TYPE 2

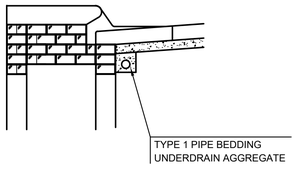


SECTION A-A (TYPICAL)

GENERAL NOTES

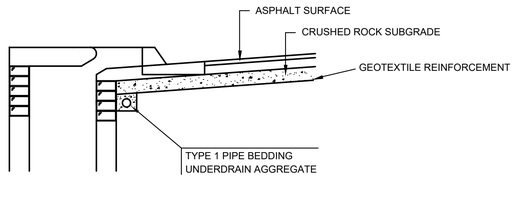
1. PAVEMENT CONTRACTOR WILL BE REQUIRED TO INSTALL SDR 35, 4" PERFORATED DRAIN PIPE AND TEE AS INDICATED IN THE DETAILS.
2. WHEN SWS CONSTRUCTED BY SEPARATE PROJECT, SWS CONTRACTOR SHALL INSTALL SDR 35, 4" DRAIN PIPE STUB ONLY THROUGH WALLS OF CURB INLETS AND CAP TO ALLOW FUTURE CONNECTION OF TEE AND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



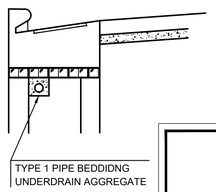


(MIN. 16 PERFORATIONS PER LIN. FT. @ 1/4" DIA.)
PERFORATIONS TO BE ON BOTTOM HALF

SECTION A-A



SECTION A-A



SECTION A-A

PAVEMENT UNDERDRAIN DETAIL

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

CITY OF WICHITA
PUBLIC WORKS & UTILITIES ENGINEERING DIVISION

CURB INLET PAVEMENT UNDERDRAIN DETAIL

CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER	OCA NUMBER	DATE
472-2024-086027	———	10/2012

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

SHEET 41 of 69

PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 11/06/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

Issue:		

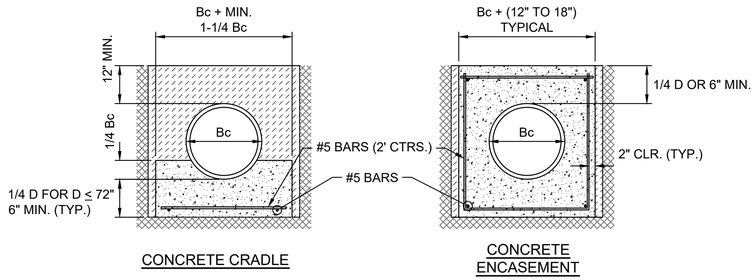
JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

PAVEMENT UNDERDRAIN DETAILS

CP505
41 OF 69

Saved: 06-24-2025 10:12:02 AM by BILL.SEXSON
Plotted: 11-06-2025 12:42:18 PM by KEVIN.GRAHAM
U:\Wichita-Civil\2020\200605009\02PD4_PLANS\030\PAVING\41-200605-009-CP505 PAVEMENT UNDERDRAIN DETAILS.DWG

SAVED 6/24/2025 10:12:02 AM BY BILL.SEXSON
PLOTTED 11/6/2025 12:42:18 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605009\02PD4_PLANS\030\PAVING\41-200605-009-CP505 PAVEMENT UNDERDRAIN DETAILS.DWG



CLASS A
NOT TO SCALE

Bc = OUTSIDE PIPE DIAMETER

H = BACKFILL FROM TOP OF PIPE TO EXISTING GROUND

D = INSIDE PIPE DIAMETER

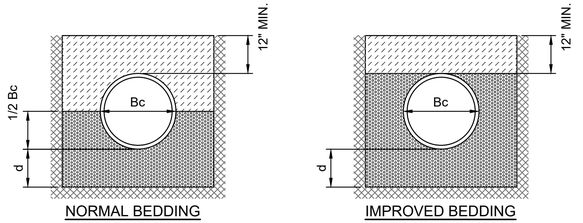
d = DEPTH OF BEDDING MATERIAL BELOW PIPE

GRANULAR BEDDING MATERIAL OR SAND-GRAVEL BEDDING

COMPACTED EMBEDMENT

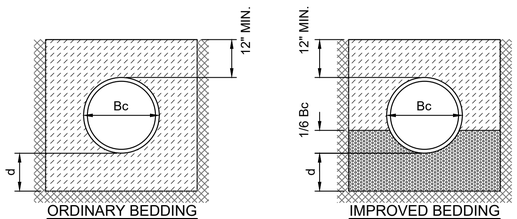
CONCRETE

DEPTH OF BEDDING MATERIAL BELOW PIPE		
D	d (MIN) SOIL	d (MIN) ROCK
27" & SMALLER	4"	6"
30" TO 60"	5"	9"
66" & LARGER	6"	12"



CLASS B
NOT TO SCALE

IMPROVED BEDDING



CLASS C
NOT TO SCALE

PIPE ZONE BACKFILLING
NOT TO SCALE

GRANULAR BEDDING MATERIAL SHALL BE AN APPROVED MATERIAL CONSISTING OF DURABLE CRUSHED ROCK CONFORMING WITH THE REQUIREMENTS OF THE LATEST REVISION OF ASTM C-33 SIZE NO. 67 (3/4" TO NO. 4); TO BE PLACED IN NOT MORE THAN 6" LAYERS AND COMPACTED BY SLICING WITH A SHOVEL OR VIBRATING. SOUNDNESS, ABRASION, AND ABSORPTION LIMITS SHALL BE AS REQUIRED FOR COARSE AGGREGATES IN 03 30 00 CAST-IN-PLACE CONCRETE IN THE SPECIFICATIONS.

SAND-GRAVEL BEDDING MATERIAL - SAND-GRAVEL MIX MEETING TYPE UD-1 OF THE 2015 KANSAS STANDARD SPECIFICATIONS FOR STATE ROAD AND BRIDGE CONSTRUCTION.

COMPACTED EMBEDMENT SHALL BE AN APPROVED SAND MATERIAL FREE FROM DEBRIS, ORGANIC MATERIAL, AND STONES WITH 100% PASSING THE 3/4" SIEVE TO BE PLACED IN UNIFORM LAYERS NOT MORE THAN 6" THICK AND COMPACTED TO 95 PERCENT MAXIMUM DENSITY AS DETERMINED BY ASTM D698. GRANULAR BEDDING MATERIAL MAY BE SUBSTITUTED FOR ALL OR PART OF COMPACTED EMBEDMENT MATERIALS.

CLASS A "CONCRETE CRADLE" AND/OR CLASS A "CONCRETE ENCASEMENT" IS NOT REQUIRED UNLESS SPECIFIED ON THE PLANS. HOWEVER, WHERE UNEXPECTED TRENCH CONDITIONS EXIST OR IMPROPER TRENCHING IS PERFORMED CLASS A BEDDING MAY BE REQUIRED AS DETERMINED BY THE ENGINEER.

CLASS B BEDDING SHALL BE USED FOR ALL FLEXIBLE PIPE.

A. CLASS B NORMAL BEDDING SHALL BE USED FOR PVC PIPE UNLESS WET CONDITIONS ARE ENCOUNTERED.

B. CLASS B IMPROVED BEDDING SHALL BE USED FOR OTHER FLEXIBLE PIPE, AND FOR PVC PIPE IN WET CONDITIONS.

CLASS C BEDDING SHALL BE USED FOR ALL RIGID PIPE.

A. CLASS C ORDINARY BEDDING SHALL BE USED FOR ALL RIGID PIPE UNLESS WET CONDITIONS ARE ENCOUNTERED.

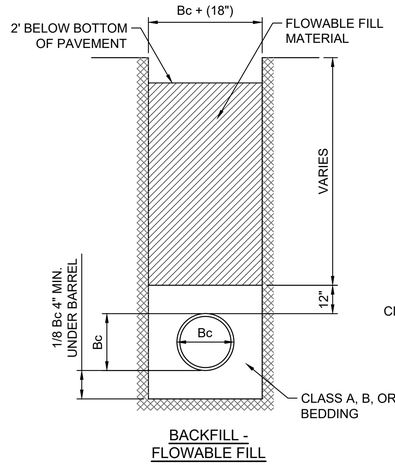
B. CLASS C IMPROVED BEDDING SHALL BE USED FOR WET CONDITIONS EXISTING IN THE TRENCH, AS DIRECTED BY THE ENGINEER, AT NO ADDITIONAL COST TO THE OWNER. THE DIMENSIONS SHALL BE EQUAL TO THAT REQUIRED FOR "ROCK" EXCAVATION (SEE SPECIFICATIONS).

Bc = OUTSIDE PIPE DIAMETER

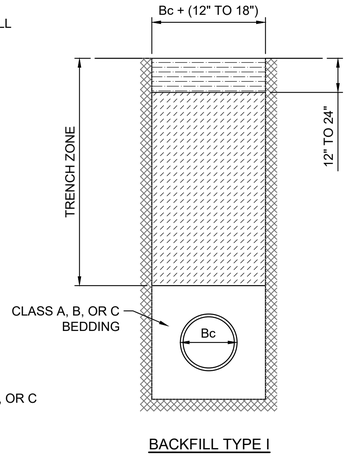
COMPACTED GRANULAR BACKFILL

UNCOMPACTED EARTH BACKFILL

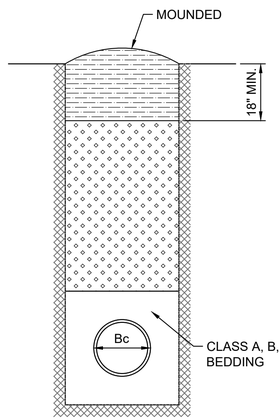
COMPACTED EARTH BACKFILL



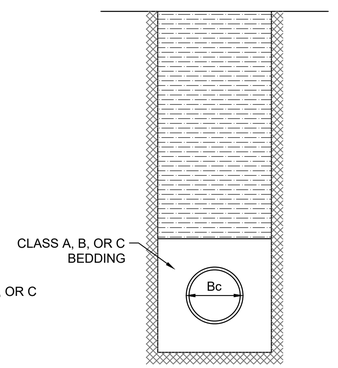
BACKFILL -
FLOWABLE FILL



BACKFILL TYPE I



BACKFILL TYPE II



BACKFILL TYPE III

TRENCH ZONE BACKFILLING
NOT TO SCALE

PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 11/06/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

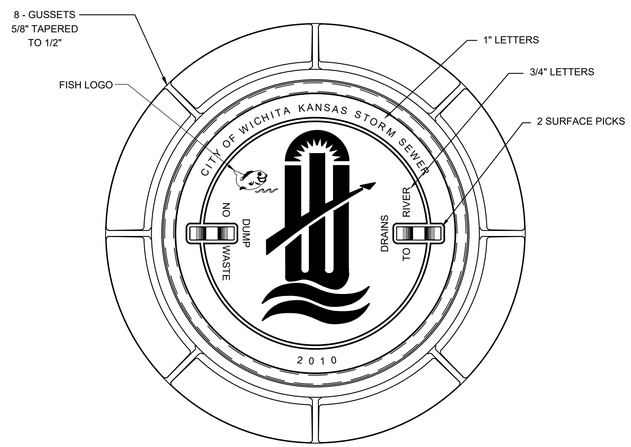
Issue:		

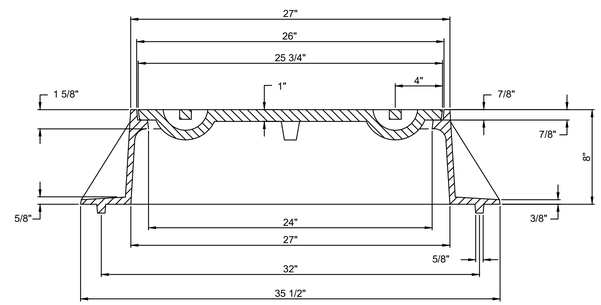
JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

BEDDING AND BACKFILL DETAILS

CP506
42 OF 69

SAVED 6/24/2025 10:12:42 AM BY BILL SEXSON
PLOTTED 11/6/2025 12:42:24 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\42-200605-009-CP506 BEDDING AND BACKFILL DETAILS.DWG

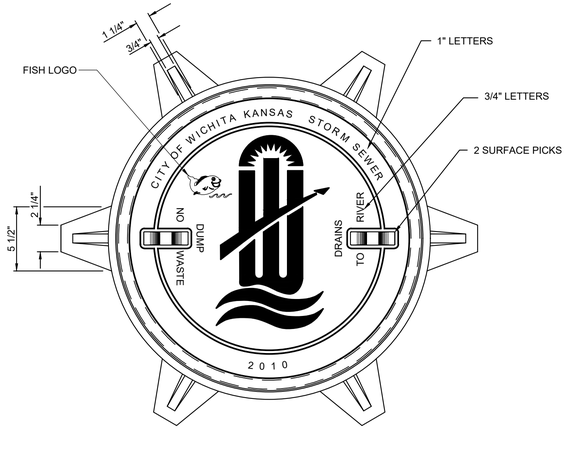


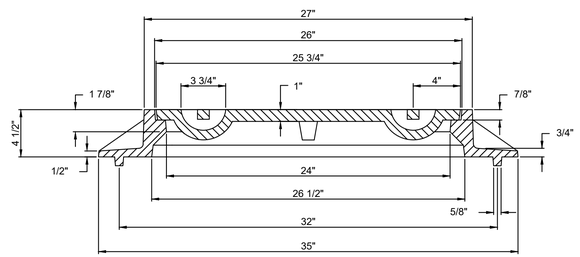


MANHOLE FRAME

DEETER #1261 OR EJIW #1936-Z1

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





INLET FRAME

DEETER #2014 OR EJIW #1936-Z4

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

CITY OF WICHITA
PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

MANHOLE/INLET FRAME AND COVER (STORM SEWER)

CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER	OCA NUMBER	DATE
472-2024-086027	———	11/2010

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

SHEET
43 of 69

SW-303

PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 11/06/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

Issue:		

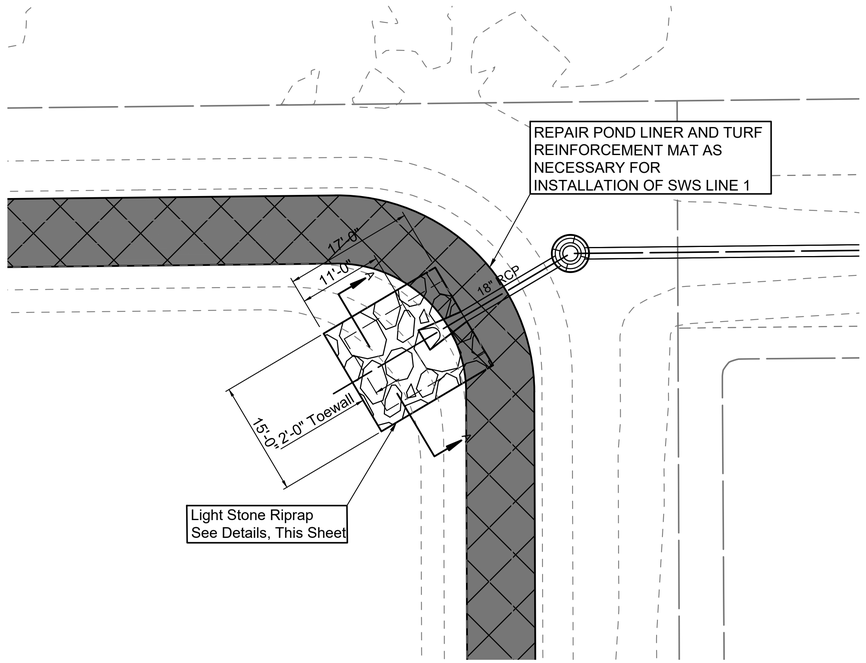
JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

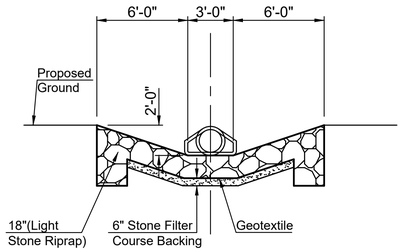
MANHOLE-INLET FRAME AND COVER DETAILS

CP507
43 OF 69

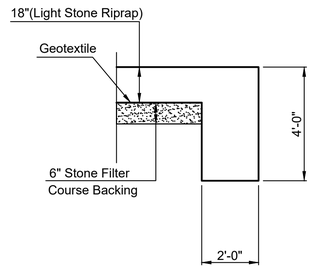
Saved: 06-24-2025 10:15:34 AM By: BILL.SEXSON
Plotted: 11-06-2025 12:42:28 PM By: KEVIN.GRAHAM
U:\Wichita-Civil\2020\200605\009\2PD4_Plans\030\PAVING\43-200605-009-CP507 MANHOLE-INLET FRAME AND COVER DETAILS.DWG

SAVED 6/24/2025 10:15:34 AM BY BILL.SEXSON
PLOTTED 11/6/2025 12:42:28 PM BY KEVIN GRAHAM
U:\WICHITA-CIV\L2020\200605\009\2PD4_PLANS\030\PAVING\43-200605-009-CP507 MANHOLE-INLET FRAME AND COVER DETAILS.DWG





SECTION A-A



TYPICAL SECTION THRU TOEWALL

NO SCALE

NOTES

1. ALL RIPRAP FOR THIS PROJECT SHALL BE NATURAL STONE. NEITHER BROKEN CONCRETE, FABRIC ENVELOPE, NOR PREMIXED DRY PACKAGED CONCRETE BAG ALTERNATES WILL BE ALLOWED.
2. TOEWALLS SHALL BE INSTALLED ALONG ALL EDGES OF STONE RIPRAP OR AS SHOWN ON PLANS.
3. GROUTING OF THE SURFACE OF THE RIPRAP SHALL NOT BE PERFORMED. GROUTING OF THE TOEWALLS SHALL BE PERFORMED PER SPECIFICATIONS.

PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM
LICENSED
27806
11/06/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

Issue:		

JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

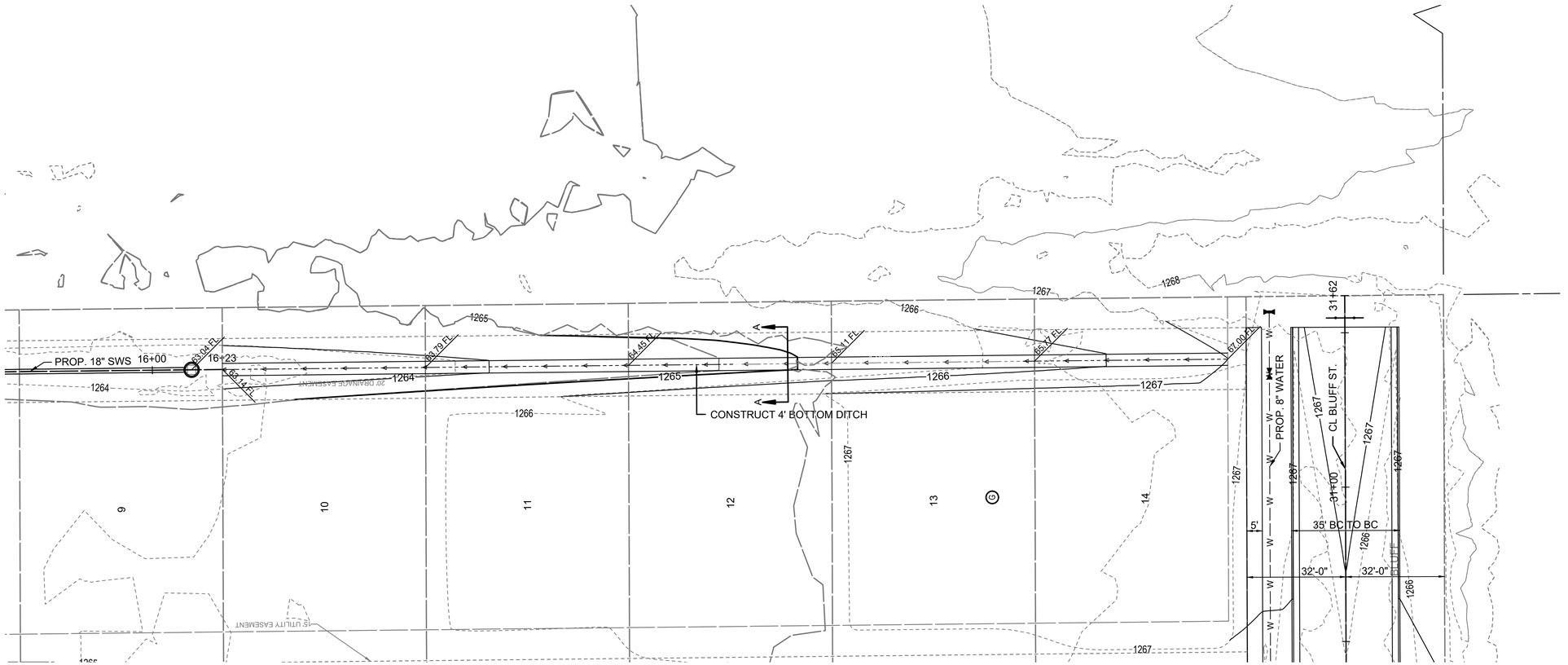
RIPRAP DETAILS

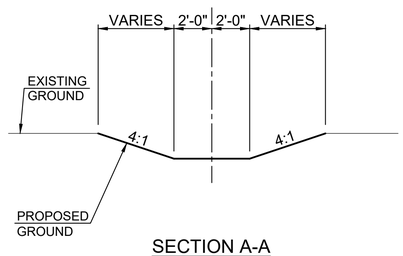
CP508
44 OF 69

SAVED 5/1/2025 3:50:36 PM BY BILL.SEXSON
PLOTTED 11/6/2025 1:12:43 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\44-200604-009-CP508 RIPRAP DETAILS.DWG

TREES WHICH ARE IN DIRECT CONFLICT WITH PROPOSED NEW CONSTRUCTION SHALL BE REMOVED BY THE CONTRACTOR WITH THE ENGINEER'S APPROVAL. TREE REMOVAL SHALL BE SUBSIDIARY TO "SITE CLEARING".

SCALE IN FEET
0' 20' 40'





SECTION A-A

PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 11/06/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

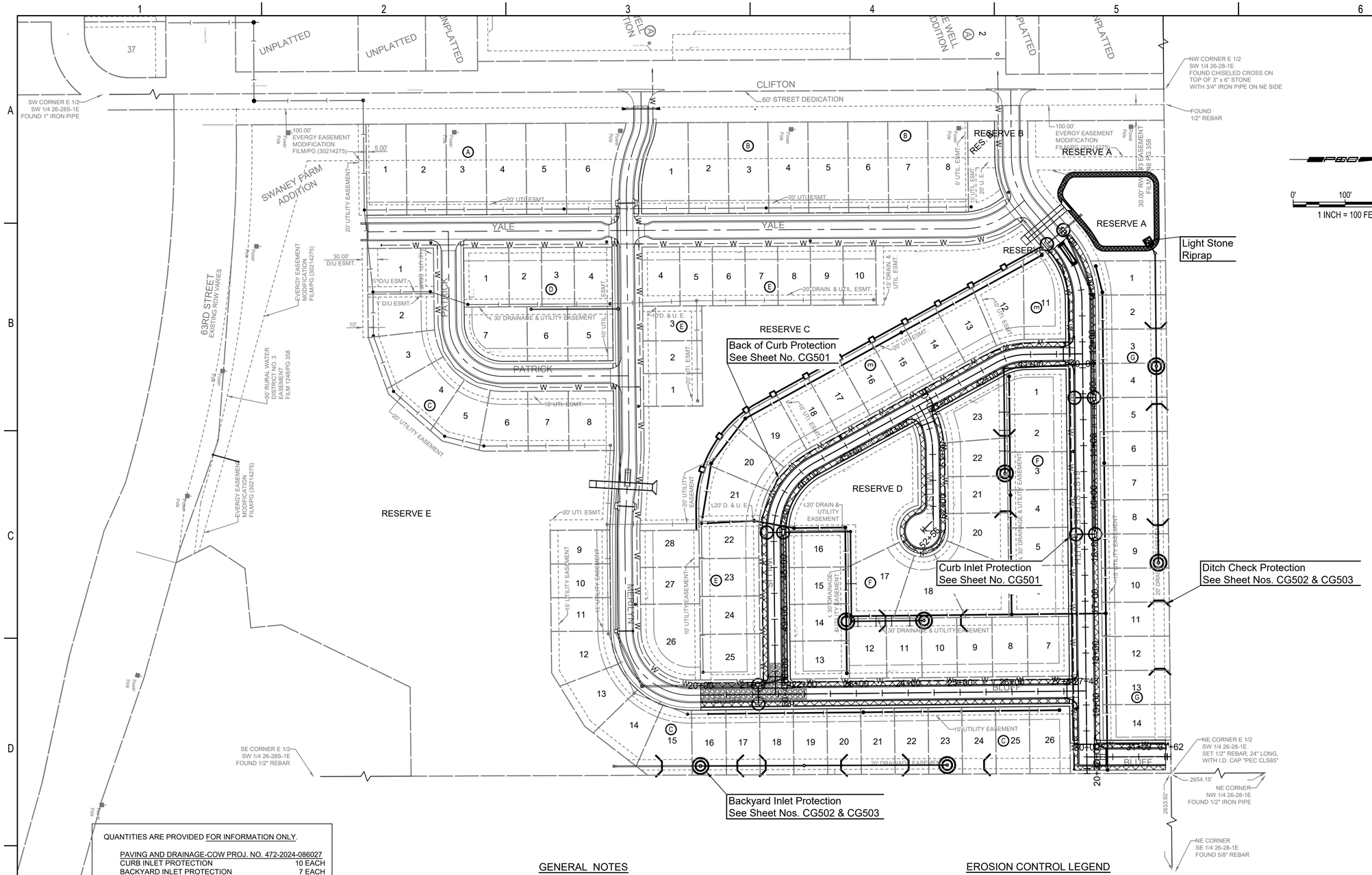
Issue:		

JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

BACKYARD DRAINAGE PLAN

CG101
45 OF 69

SAVED 9/18/2025 9:11:49 AM BY KEVIN.GRAHAM
PLOTTED 11/6/2025 12:43:17 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\45-200605-009-CG101 BACKYARD DRAINAGE PLAN.DWG



QUANTITIES ARE PROVIDED FOR INFORMATION ONLY.

PAVING AND DRAINAGE-COW PROJ. NO. 472-2024-086027	
CURB INLET PROTECTION	10 EACH
BACKYARD INLET PROTECTION	7 EACH
BACK OF CURB PROTECTION	6,069 L.F.
LIGHT STONE RIPRAP	27 S.Y.
DITCH CHECK PROTECTION	15 EACH
SILT FENCE PROTECTION	914 L.F.
WATER-COW PROJ. NO. 448-2024-007799	
STABILIZED CONSTRUCTION ENTRANCE	1 EACH

GENERAL NOTES

1. CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION PROTECTION THROUGHOUT THE ENTIRE PROJECT. THE QUANTITIES LISTED ON THIS SHEET ARE PROVIDED FOR INFORMATION ONLY.
2. THE EROSION CONTROL DEVICES SHOWN ON THIS SHEET ARE CONSIDERED MINIMUM STANDARDS. WHENEVER SEDIMENT ENTERS THE STREETS, STORM SEWERS, DITCHES, OR PONDS, CONTRACTOR WILL INSTALL ADDITIONAL DEVICES, AS NEEDED, TO CORRECT THE PROBLEM.
3. THE EROSION CONTROL DEVICES SHOWN HEREON MUST BE IN PLACE AT ALL TIMES DURING CONSTRUCTION UNTIL SUCH TIME AS THE SITE IS REESTABLISHED WITH PAVING OR GRASS. TEMPORARY OR PERMANENT SEEDING AND MULCH WILL BE INSTALLED WHEN EARTHWORK ACTIVITIES CEASE IN AN AREA FOR 14 DAYS OR MORE.
4. ANY MUD INADVERTENTLY TRACKED ONTO ANY STREET SHALL BE CLEANED UP BY THE CONTRACTOR, AT THE END OF EACH DAY'S WORK, OR AS DIRECTED BY THE FIELD ENGINEER.
5. CONTRACTOR TO FURNISH A TRUCK WASH-OUT PIT TO BE PLACED AT A CONVENIENT LOCATION THAT DOES NOT CONFLICT WITH CONSTRUCTION. CONTRACTOR SHALL CLEAN OUT AND BACKFILL PIT PRIOR TO FINAL INSPECTION. LOCATION SHALL BE APPROVED BY THE FIELD ENGINEER.

EROSION CONTROL LEGEND

- PROPOSED SILT FENCE (WATERLINE & SANITARY SEWER)
- PROPOSED SILT FENCE (SWD)
- PROPOSED CURB INLET PROTECTION
- PROPOSED BACKYARD INLET PROTECTION
- PROPOSED DITCH CHECK
- PROPOSED LIGHT STONE RIP-RAP
- PROPOSED STABILIZED CONSTRUCTION ENTRANCE
- PROPOSED BACK OF CURB PROTECTION

PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM
LICENSED
27806
11/06/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

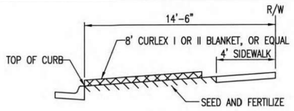
Issue:		

JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

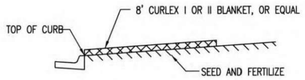
EROSION CONTROL PLAN

CG102
46 OF 69

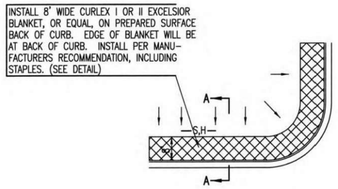
SAVED 7/3/2025 10:27:27 AM BY BILL.SEXSON
PLOTTED 11/6/2025 12:43:39 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\46-200605-009-CG102 EROSION CONTROL PLAN.DWG



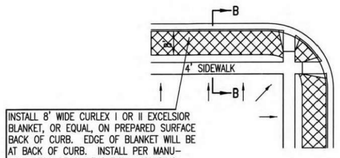
SECTION B–B



SECTION A–A



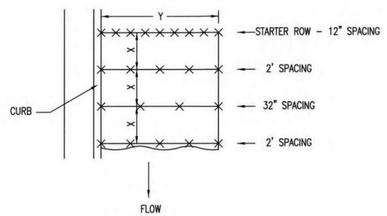
SOUTH STREET

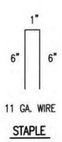


GENERAL NOTES

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



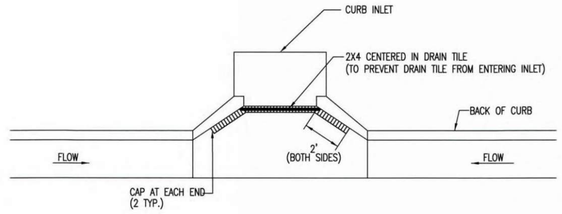


STAPLE

STAPLE PATTERN

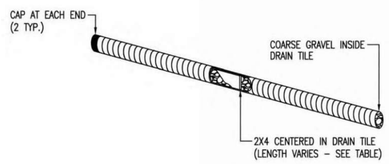
NOTES: USE 6" SEAM OVERLAP
(X & Y = RECOMMENDED BY MANUFACTURE)

DETAILS FOR APPROVED EROSION CONTROL MAT

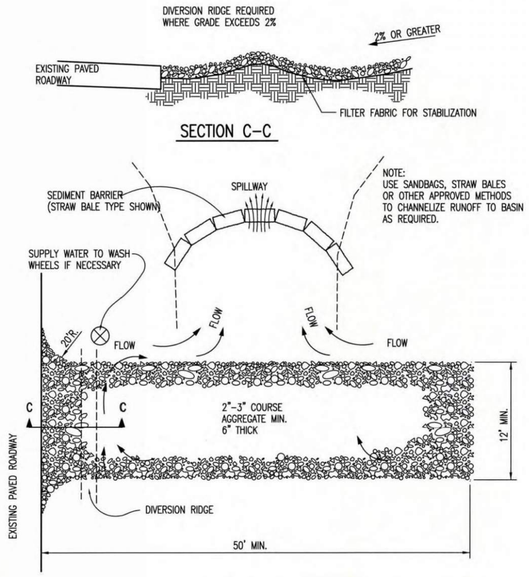


NOTE:
PLACE 4" PERFORATED PVC PIPE, FILLED WITH 1/2"–1" DIA. GRAVEL, IN FRONT OF CURB INLET AS SHOWN.

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 PROFESSIONAL ENGINEER KANSAS
05/2/13

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
472-2024-086027	____	

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

SHEET
47 of 69

SW-501

PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 11/06/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

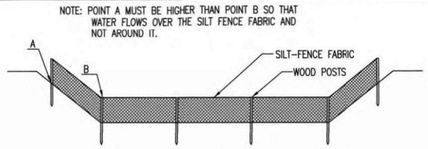
Issue:		

JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

BACK OF CURB AND CURB INLET PROTECTION

CG501
47 OF 69

SAVED 6/24/2025 10:20:55 AM BY BILL.SEXSON
PLOTTED 11/6/2025 12:43:44 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\47-200605-009-CG501 BACK OF CURB AND CURB INLET PROTECTION.DWG



ELEVATION

SILT FENCE DITCH CHECKS
(STREAM PROTECTION)

MATERIAL SPECIFICATION:

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

PLACEMENT:

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

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

DITCH 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.

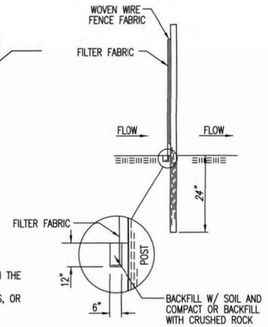
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

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.

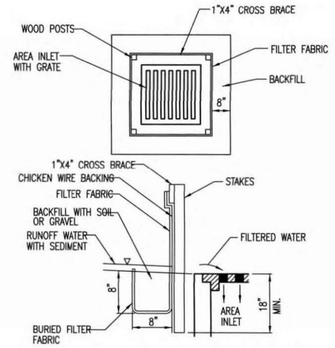
INSPECTION AND MAINTENANCE:

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?



ANCHOR TRENCH DETAIL



SILT FENCE BARRIERS FOR AREA INLETS
(INLET PROTECTION)

MATERIAL SPECIFICATION:

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

PLACEMENT:

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

PROPER INSTALLATION METHOD:

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

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

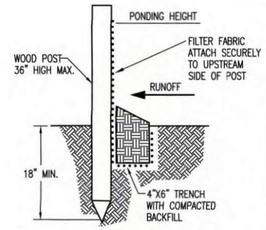
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

WATER SHOULD FLOW THROUGH A SILT FENCE BARRIER FOR AREA INLET--NOT OVER IT. PLACE A SILT FENCE BARRIER FOR AREA INLET IN A LOCATION WHERE IT IS UNLIKELY TO BE OVERTOPPED. SILT FENCE BARRIER FOR AREA INLETS OFTEN FAIL WHEN REPEATEDLY OVERTOPPED.
DO NOT PLACE POSTS ON THE OUTSIDE OF THE SILT FENCE BARRIER FOR AREA INLET. IN THIS CONFIGURATION, THE FORCE OF THE WATER IS NOT 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?

REVISION DATE: MAY 2013

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
472-2024-086027	——	

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

SHEET
48 of 69

SW-502

GARY L. JANZEN LICENSED PROFESSIONAL ENGINEER KANSAS 05/24/25

PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRIVNA LICENSED 27806 11/06/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

Issue:		

JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

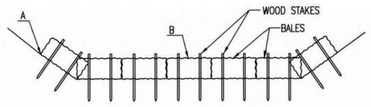
SILT FENCE DITCH CHECK

CG502
48 OF 69

SAVED 6/24/2025 10:22:26 AM BY BILL.SEXSON
PLOTTED 11/6/2025 12:43:49 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\48-200605-009-CG502 SILT FENCE DITCH CHECK.DWG

Saved: 06-24-2025, 10:22:26 AM by BILL.SEXSON
Plotted: 11-06-2025, 12:43:49 PM by KEVIN GRAHAM
U:\Wichita-Civil\2020\200605\009\2PD4_Plans\030\PAVING\48-200605-009-CG502 SILT FENCE DITCH CHECK

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".

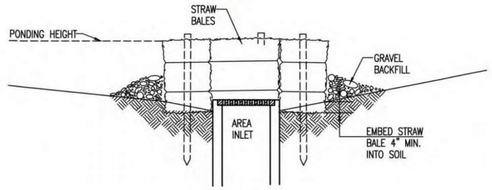
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

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.

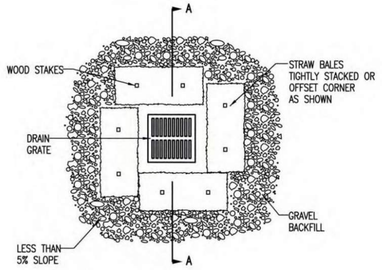
INSPECTION AND MAINTENANCE:

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.

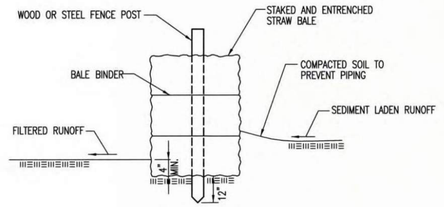
LIST OF COMMON PLACEMENT INSTALLATION MISTAKES TO AVOID:

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 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?

REVISION DATE: MAY 2013

GARY L. JANZEN LICENSED 16294 KANSAS PROFESSIONAL ENGINEER 05/16/13

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
472-2024-086027		

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

SHEET
49 of 69

SW-503

Saved 06-24-2025 10:23:42 AM by BILL.SEXSON
Plot Scale 1:1 11-06-2025 12:43:54 PM by KEVIN GRAHAM
U:\Wichita-civil\2020\200605\009\PD4_Plans\030\PAVING\49-200605-009-CG503 STRAW BALE DITCH CHECK

SAVED 6/24/2025 10:23:42 AM BY BILL.SEXSON
PLOTTED 11/6/2025 12:43:54 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\PD4_PLANS\030\PAVING\49-200605-009-CG503 STRAW BALE DITCH CHECK.DWG

PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 11/06/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

Issue:		

JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

STRAW BALE DITCH CHECK

CG503
49 OF 69

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.

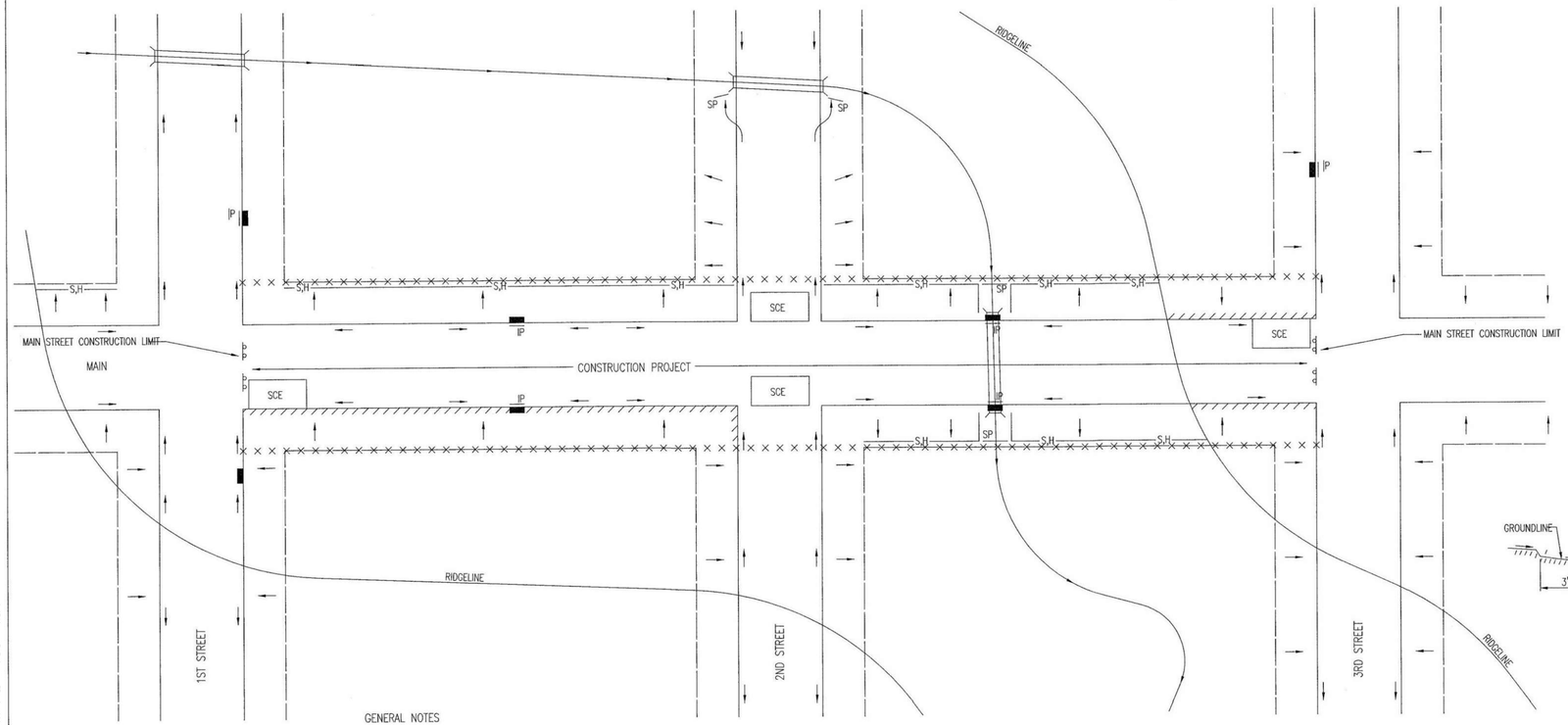
2. EROSION CONTROL DEVICES MUST BE MAINTAINED BY THE CONTRACTOR THROUGHOUT THE CONSTRUCTION PROCESS AND UNTIL THE DISTURBED EARTH IS RESTABILIZED.

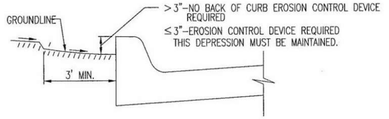
3. IF THE PROJECT WILL DISTURB 1 ACRE OR MORE, A FEDERAL/STATE NPDES STORMWATER PERMIT IS REQUIRED. A DETAILED STORMWATER POLLUTION PREVENTION PLAN, IS REQUIRED. THE EROSION CONTROL DEVICES SHOWN ON THIS SHEET ARE CONSIDERED TO BE THE MINIMUM TO BE SHOWN IN THE POLLUTION PREVENTION PLAN.

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 — 16294 — REGISTERED — KANSAS — PROFESSIONAL ENGINEER — 06/05/25

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
472-2024-086027		

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

SHEET
50 of 69

SW-504

Saved 06-24-2025 10:28:24 AM by BILL.SEXSON
Plot Scale 1:1 11-06-2025 12:43:58 PM by #########
U:\Wichita-Civil\2020\200605\009\2PH4_Plans\030\PAVING\60-200605-009-CG504 STREET IMPROVEMENT PROJECTS

SAVED 6/24/2025 10:28:24 AM BY BILL.SEXSON
PLOTTED 11/6/2025 12:43:58 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\60-200605-009-CG504 STREET IMPROVEMENT PROJECTS.DWG

PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM — LICENSED — 27806 — 11/06/2025 — KANSAS — PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION
PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

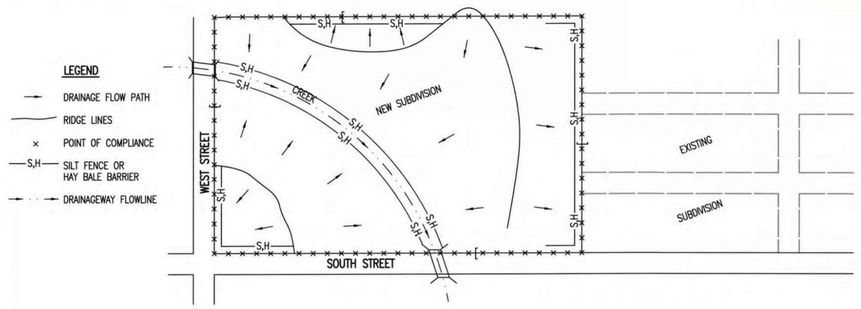
Issue:		

JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

STREET IMPROVEMENT PROJECTS

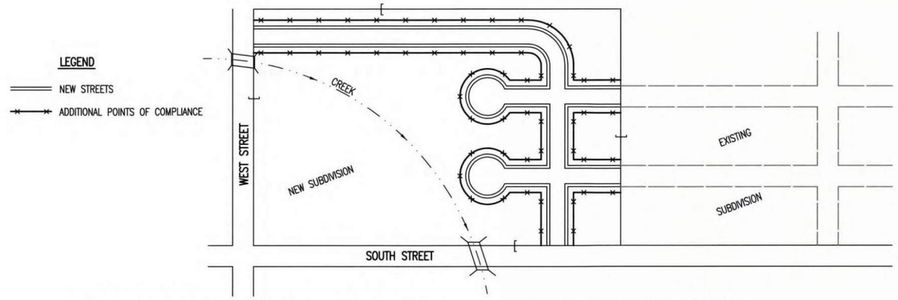
CG504
50 OF 69

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



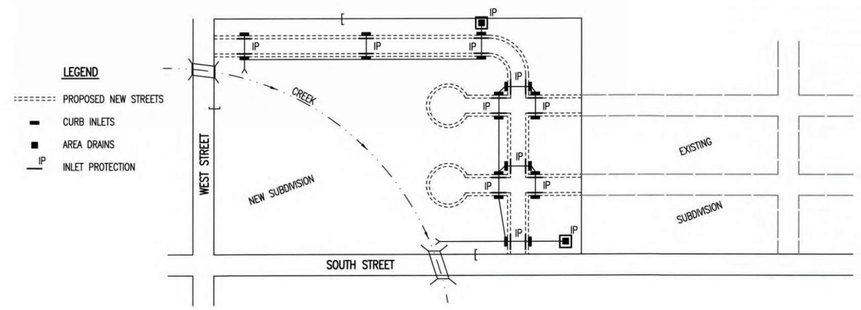
1. DURING THIS PHASE OF SUBDIVISION CONSTRUCTION, THE POINTS OF COMPLIANCE ARE THE PERIMETER BOUNDARIES AND ANY DRAINAGE WAYS OR STORM SEWERS DRAINING THROUGH OR FROM THE SITE. SHOULD LAKES BE CONSTRUCTED WITHIN THE SUBDIVISION THAT WILL DISCHARGE DURING STORMS, THEY ARE ALSO A POINT OF COMPLIANCE.
2.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

PHASE 3 – STREET CONSTRUCTION



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

PHASE 2 – INSTALLATION OF STORM SEWER

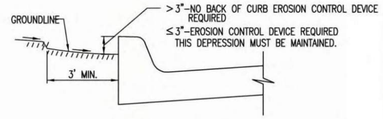


1. DURING THIS PHASE OF SUBDIVISION DEVELOPMENT, ALL EROSION CONTROL DEVICES REQUIRED IN PHASE 1 SHALL REMAIN IN PLACE AND BE MAINTAINED.
2. AS NEW STORM SEWERS, WITH INLETS, ARE INSTALLED, THE STORM SEWERS MUST NOW BE PROTECTED SO ALL NEW INLETS BECOME POINTS OF COMPLIANCE.
3. AREA DRAINS – AS SOON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

GENERAL NOTES

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

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.

REVISION DATE: MAY 2013

GARY L. JANZEN LICENSED 16294 PROFESSIONAL ENGINEER KANSAS 03-12-13

CITY OF WICHITA
PUBLIC WORKS & UTILITIES ENGINEERING DIVISION

SUBDIVISION DEVELOPMENT PROCESS

CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER	OCA NUMBER	DATE
472-2024-086027	———	

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

SHEET
51 of 69

SW–505

Saved 06-24-2025 10:30:37 AM by BILL.SEXSON
Plot Scale 1:1 11-06-2025 12:44:05 PM by ###
U:\Wichita-Civil\2020\200605\009\2PD4_Plans\03\PAVING\51-200605-009-CG505 SUBDIVISION DEVELOPMENT PROCESS

SAVED 6/24/2025 10:30:37 AM BY BILL SEXSON
PLOTTED 11/6/2025 12:44:05 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\03\PAVING\51-200605-009-CG505 SUBDIVISION DEVELOPMENT PROCESS.DWG

PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 11/06/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

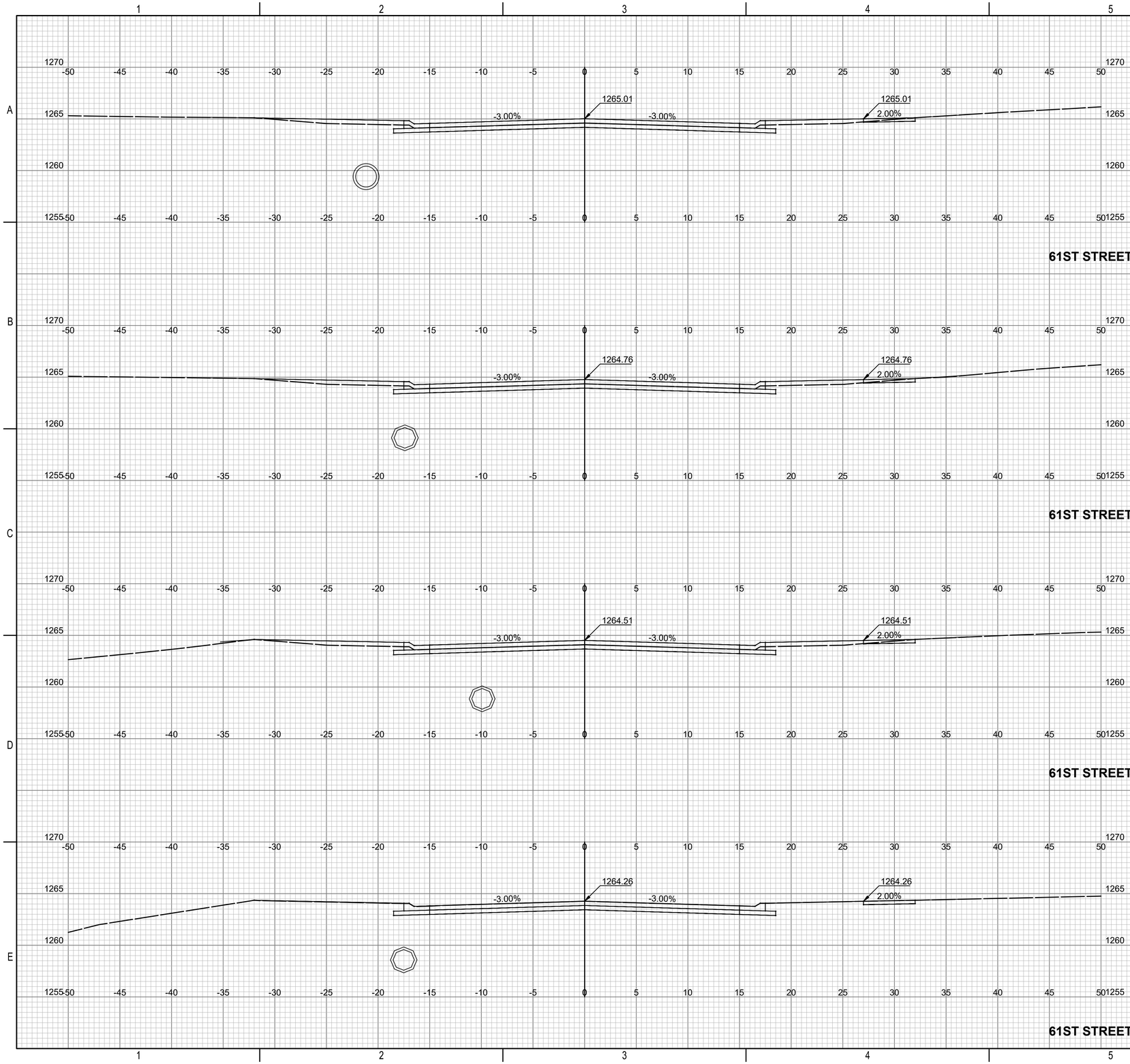
PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

Issue:		

JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

SUBDIVISION DEVELOPMENT PROCESS

CG505
51 OF 69



PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 11/06/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

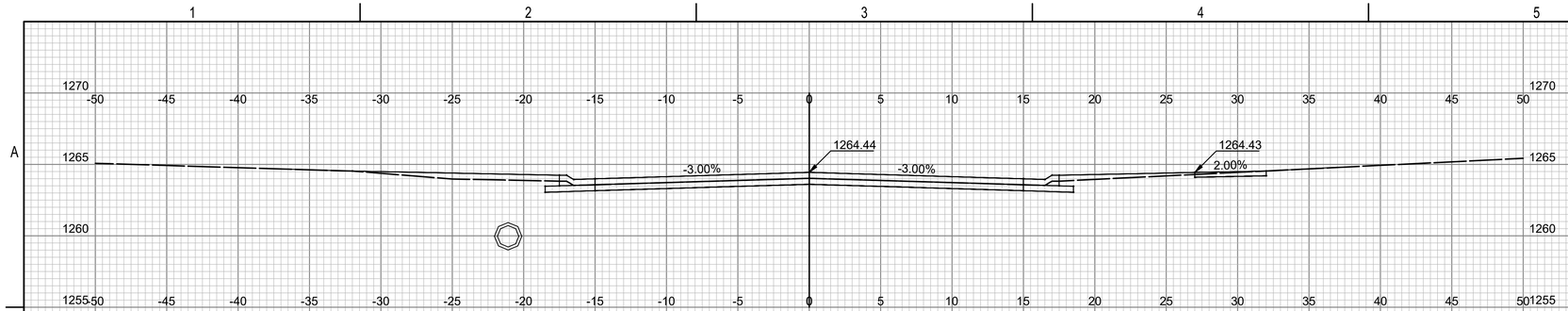
Issue:		

JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

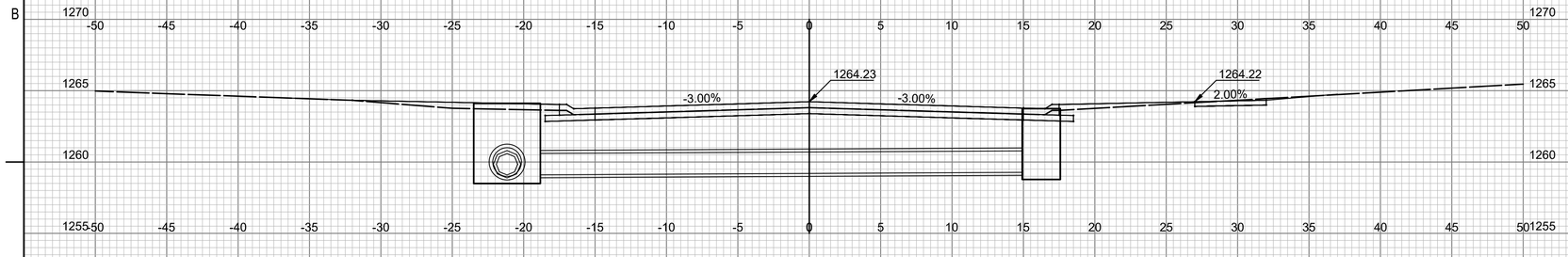
CROSS SECTIONS-61ST STREET

CX601
52 OF 69

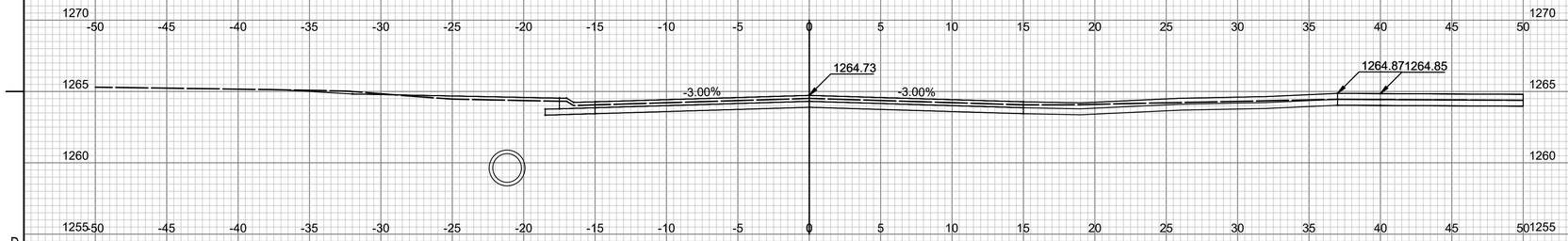
SAVED 5/28/2025 11:08:03 AM BY BILL.SEXSON
PLOTTED 11/6/2025 12:44:20 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\52-200605-009-CX601 CROSS SECTIONS-61ST STREET.DWG



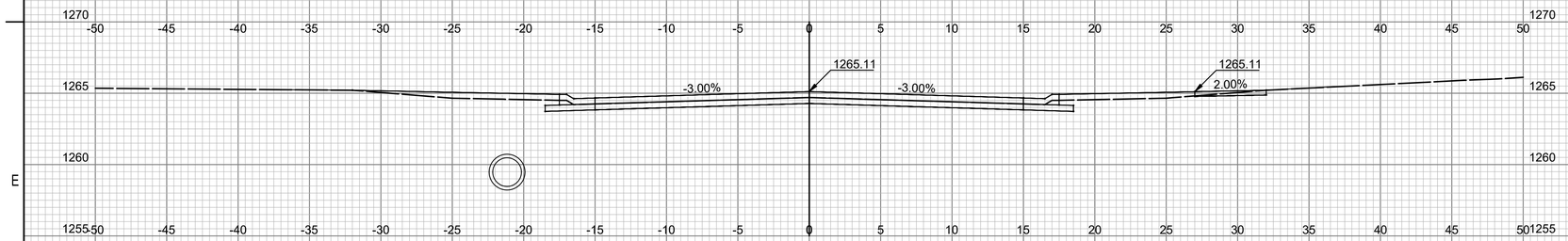
61ST STREET 13+50.00



61ST STREET 13+07.67



61ST STREET 12+23.19



61ST STREET 11+70.00

PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM
LICENSED
27806
11/06/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

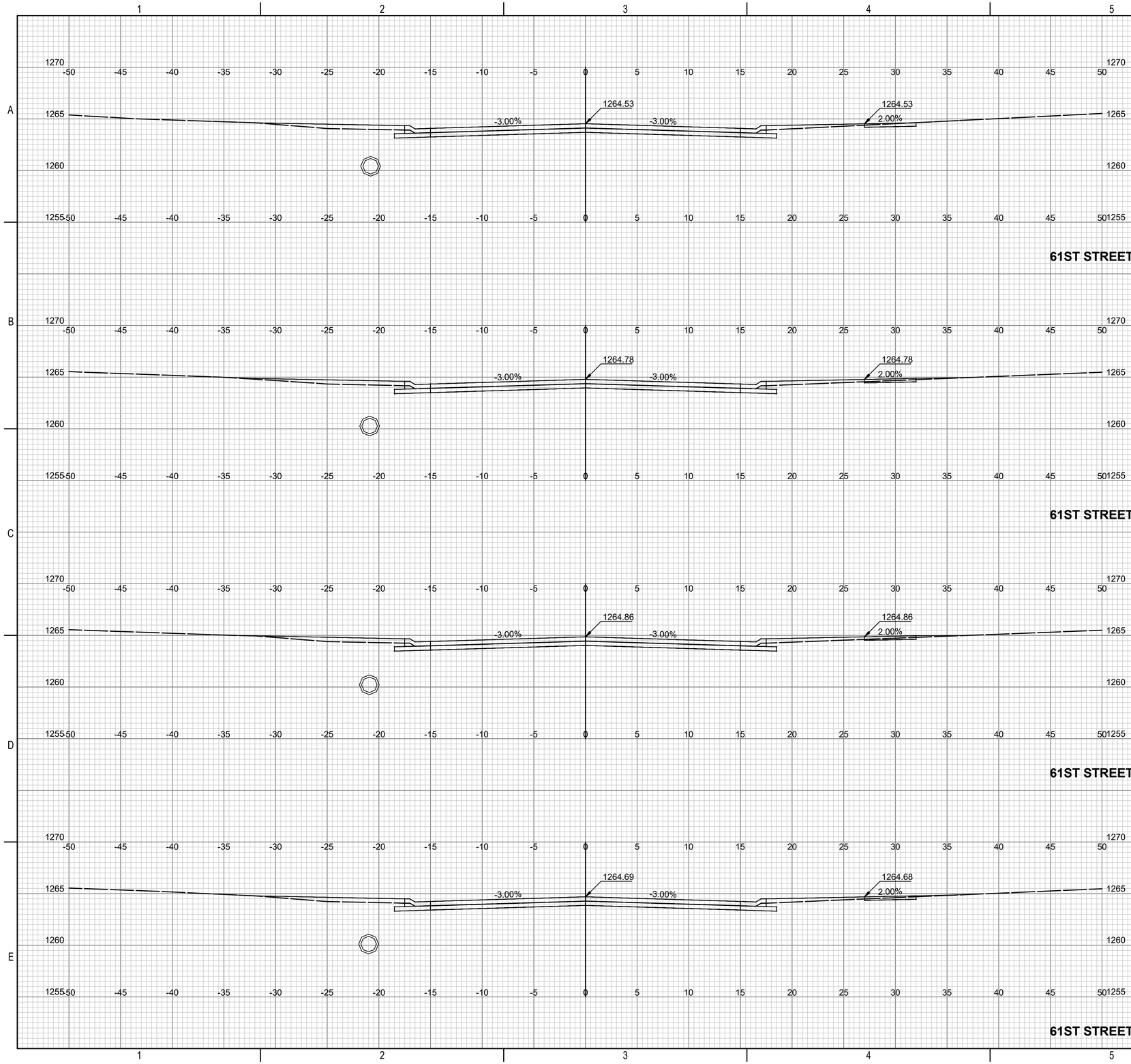
Issue:		

JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

CROSS SECTIONS-61ST STREET

CX602
53 OF 69

SAVED 5/28/2025 9:21:57 AM BY BILL.SEXSON
PLOTTED 11/6/2025 12:44:40 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\53-200605-009-CX602 CROSS SECTIONS-61ST STREET.DWG



PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM
LICENSED
27806
11/06/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

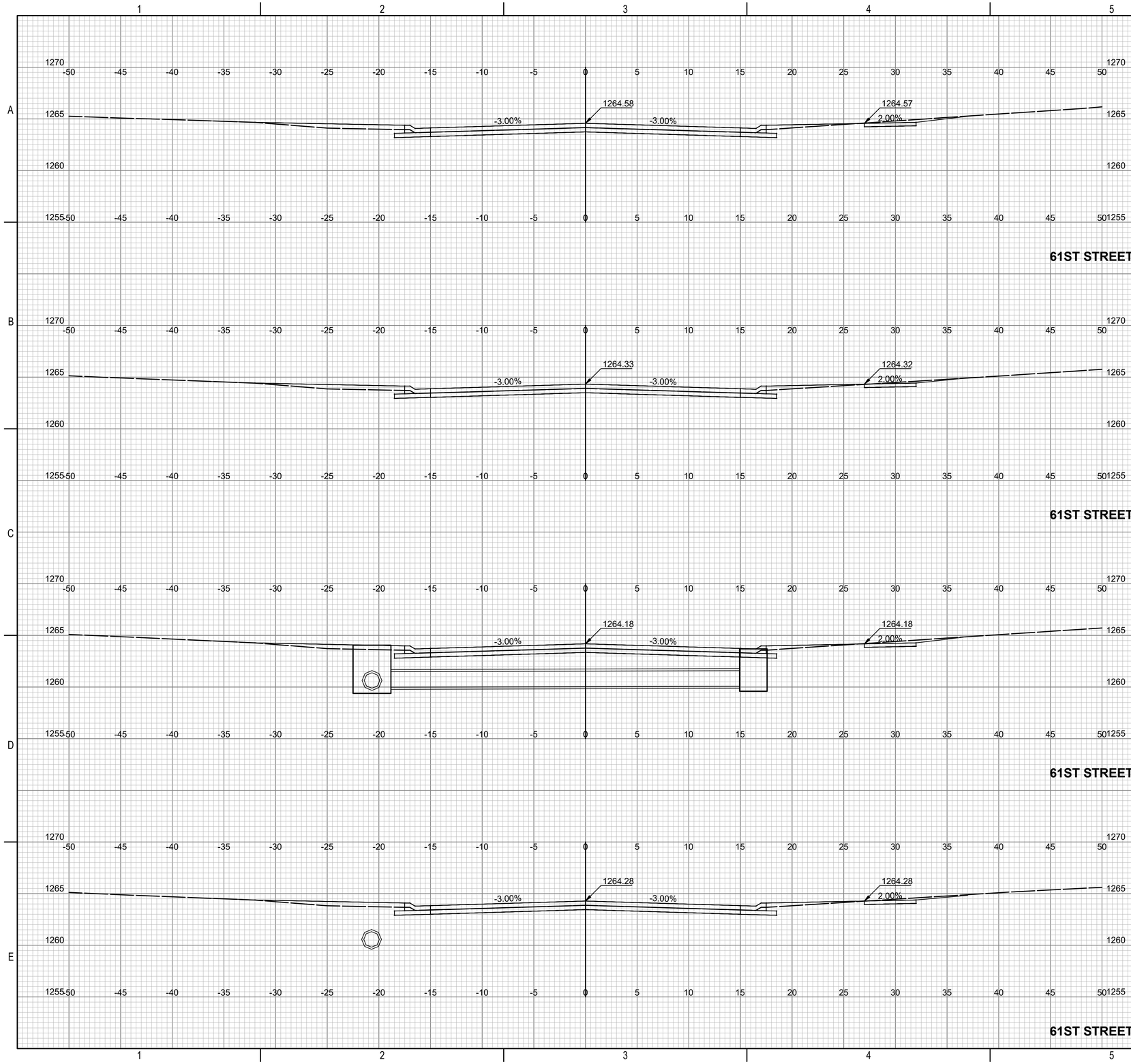
Issue:		

JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

CROSS SECTIONS-61ST STREET

CX603
54 OF 69

SAVED 5/28/2025 9:26:12 AM BY BILL.SEXSON
PLOTTED 11/6/2025 12:44:54 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\54-200605-009-CX603 CROSS SECTIONS-61ST STREET.DWG



PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM
LICENSED
27806
11/06/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

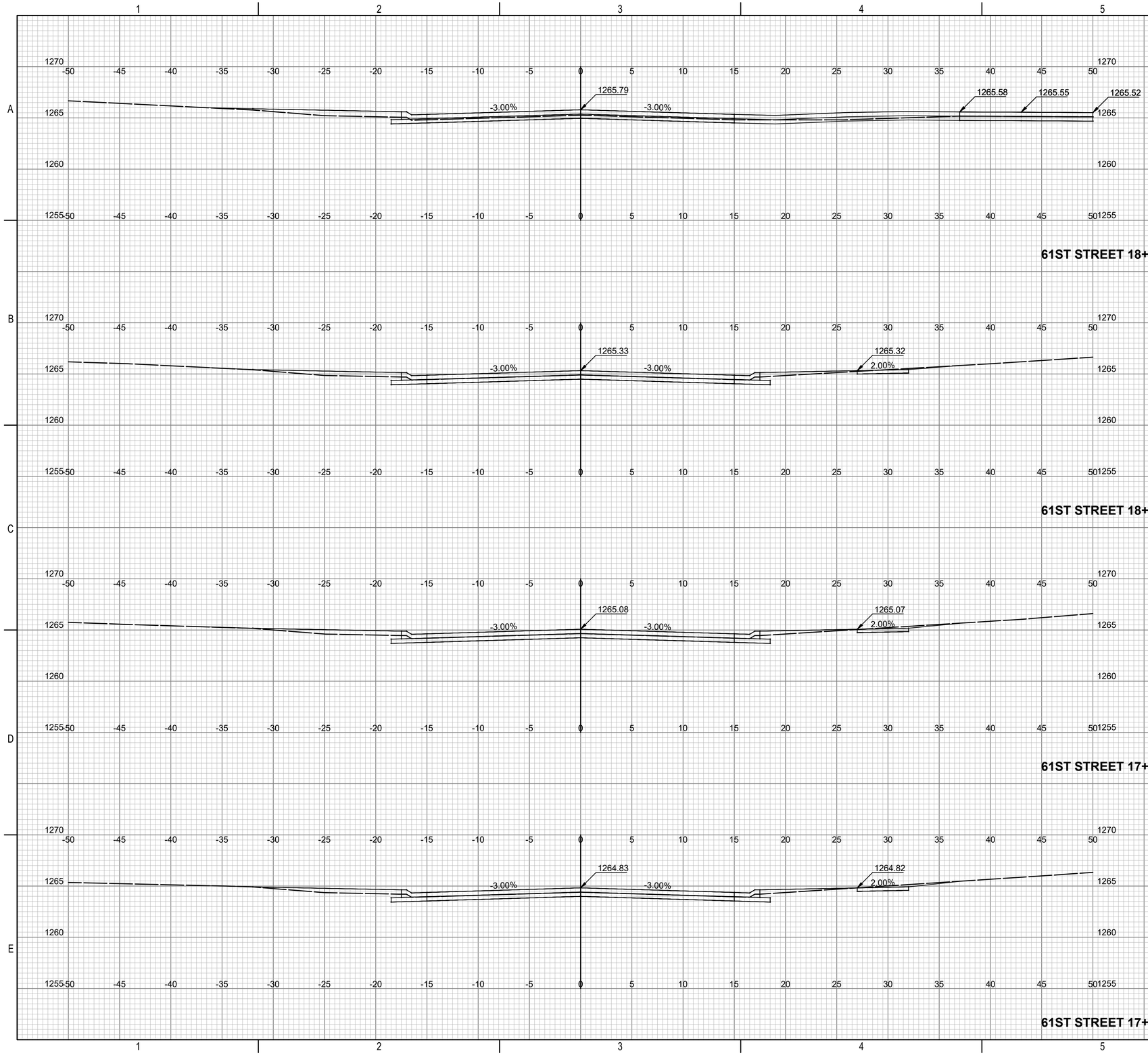
Issue:		

JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

CROSS SECTION-61ST STREET

CX604
55 OF 69

SAVED 5/28/2025 11:03:23 AM BY BILL.SEXSON
PLOTTED 11/6/2025 12:45:07 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\55-200605-009-CX604 CROSS SECTION-61ST STREET.DWG



PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM
LICENSED
27806
11/06/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

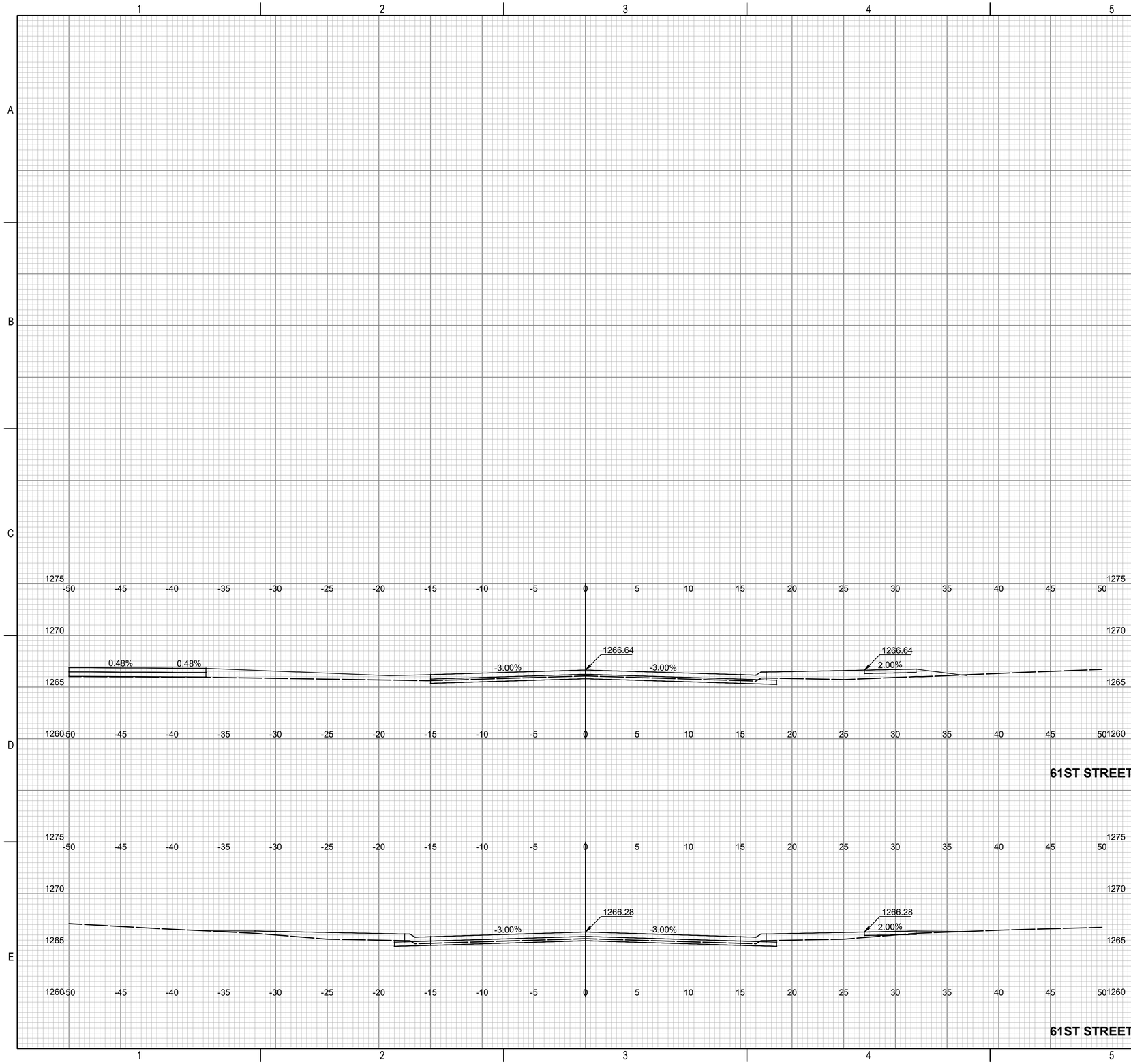
Issue:		

JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

CROSS SECTIONS-61ST STREET

CX605
56 OF 69

SAVED 5/28/2025 11:03:25 AM BY BILL.SEXSON
PLOTTED 11/6/2025 12:45:26 PM BY KEVIN.GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\56-200605-009-CX605 CROSS SECTIONS-61ST STREET.DWG



PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 11/06/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

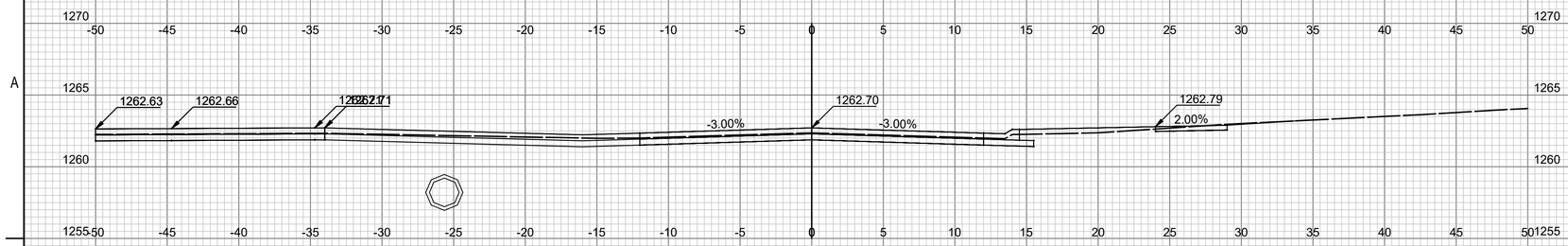
Issue:		

JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

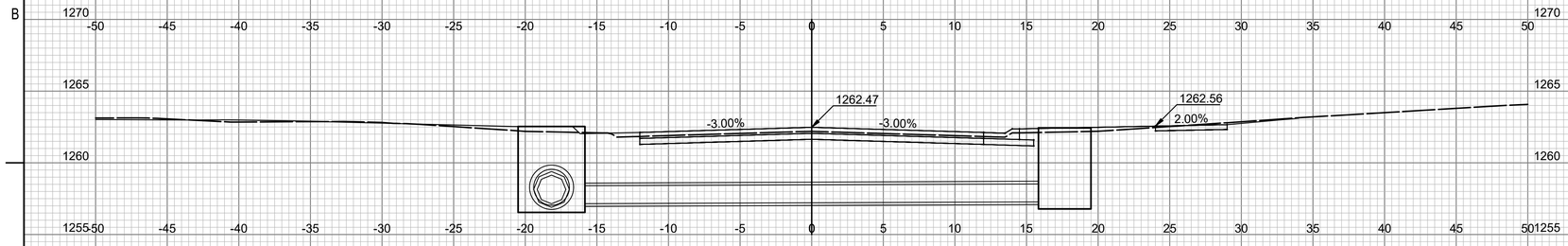
CROSS SECTIONS-61ST STREET

CX606
57 OF 69

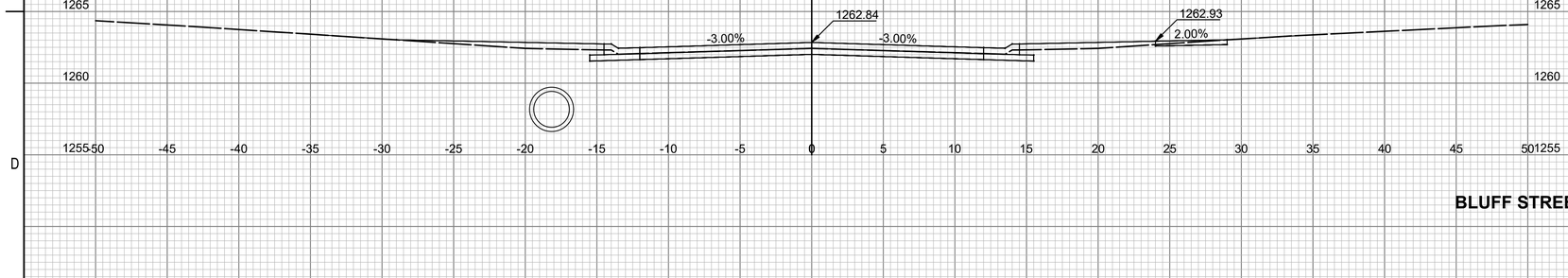
SAVED 5/28/2025 11:03:30 AM BY BILL.SEXSON
PLOTTED 11/6/2025 12:45:45 PM BY KEVIN.GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\57-200605-009-CX606 CROSS SECTIONS-61ST STREET.DWG



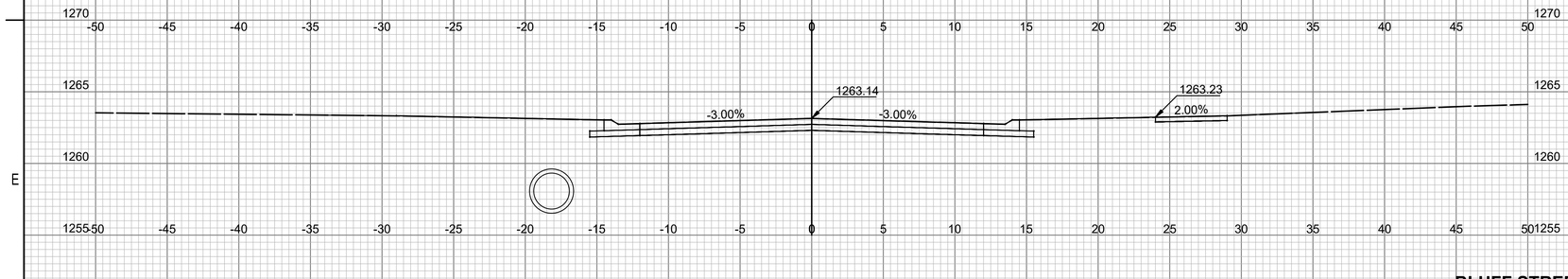
BLUFF STREET 21+44.00



BLUFF STREET 21+11.05



BLUFF STREET 20+50.00



BLUFF STREET 20+00.00

PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 11/06/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

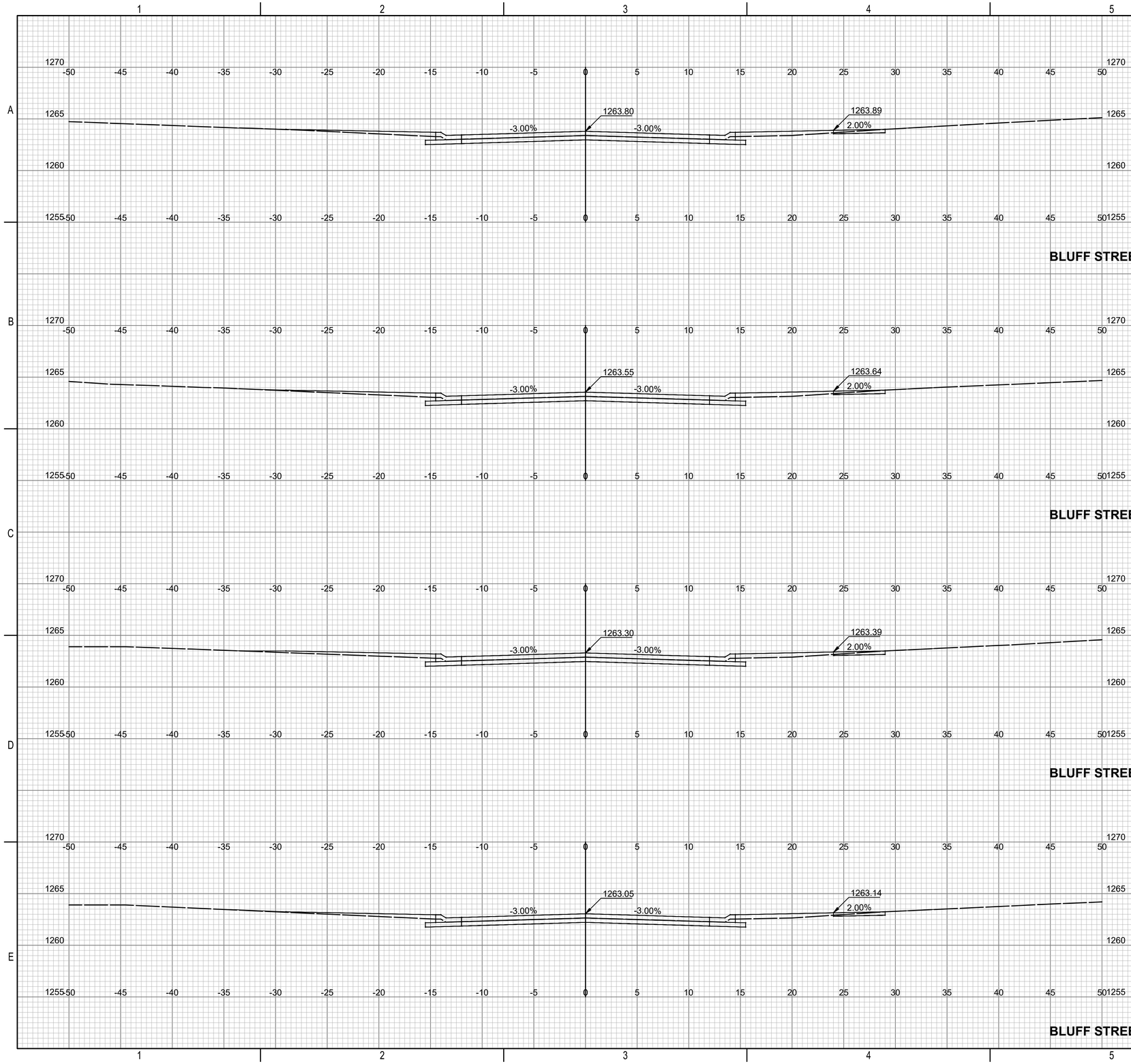
Issue:		

JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

CROSS SECTIONS-BLUFF STREET

CX607
58 OF 69

SAVED 5/28/2025 9:48:49 AM BY BILL.SEXSON
PLOTTED 11/6/2025 12:45:58 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\58-200605-009-CX607 CROSS SECTIONS-BLUFF STREET.DWG



PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 11/06/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

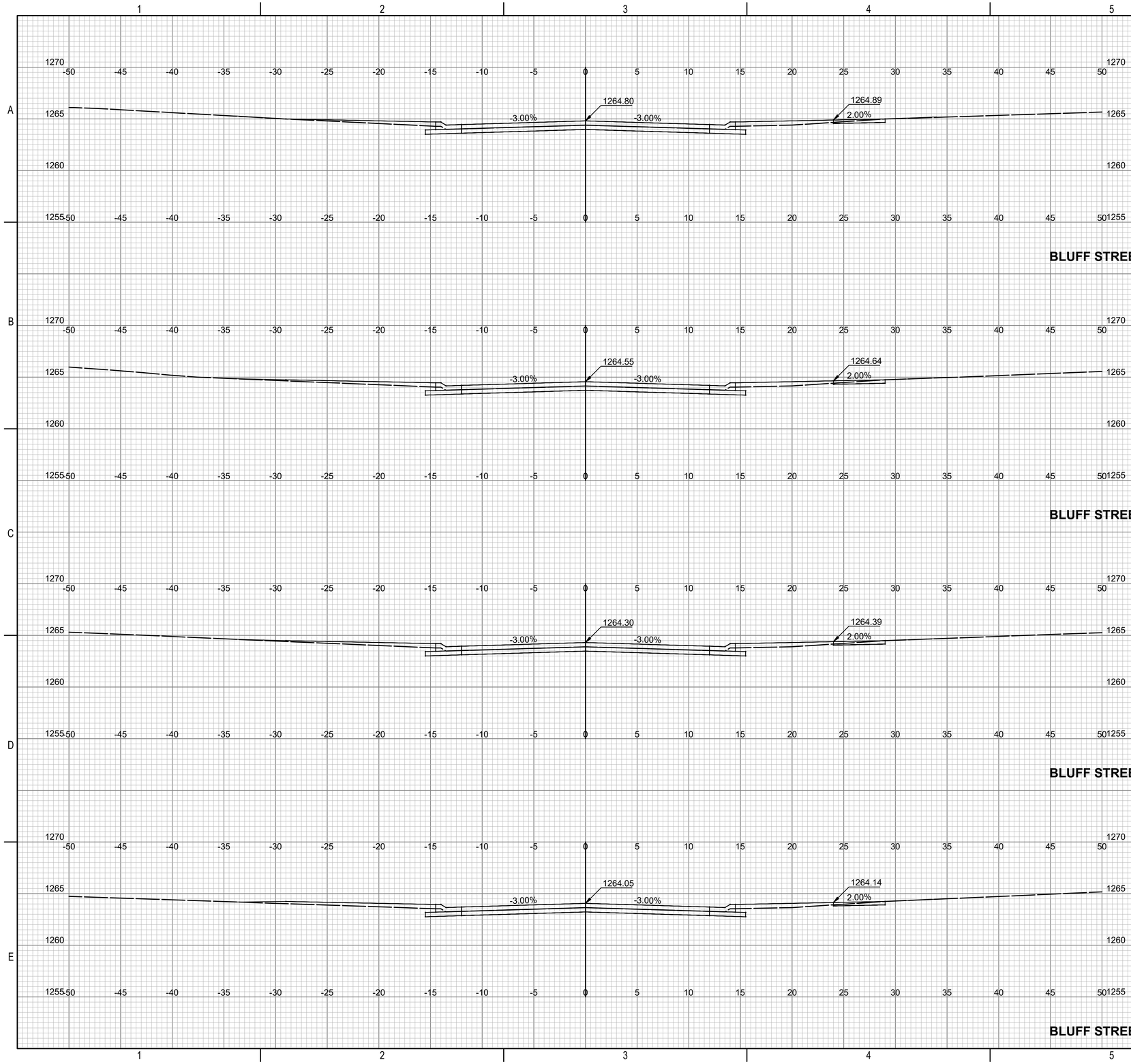
Issue:		

JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

CROSS SECTIONS-BLUFF STREET

CX608
59 OF 69

SAVED 5/28/2025 9:54:28 AM BY BILL.SEXSON
PLOTTED 11/6/2025 12:46:15 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\59-200605-009-CX608 CROSS SECTIONS-BLUFF STREET.DWG



PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 11/06/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

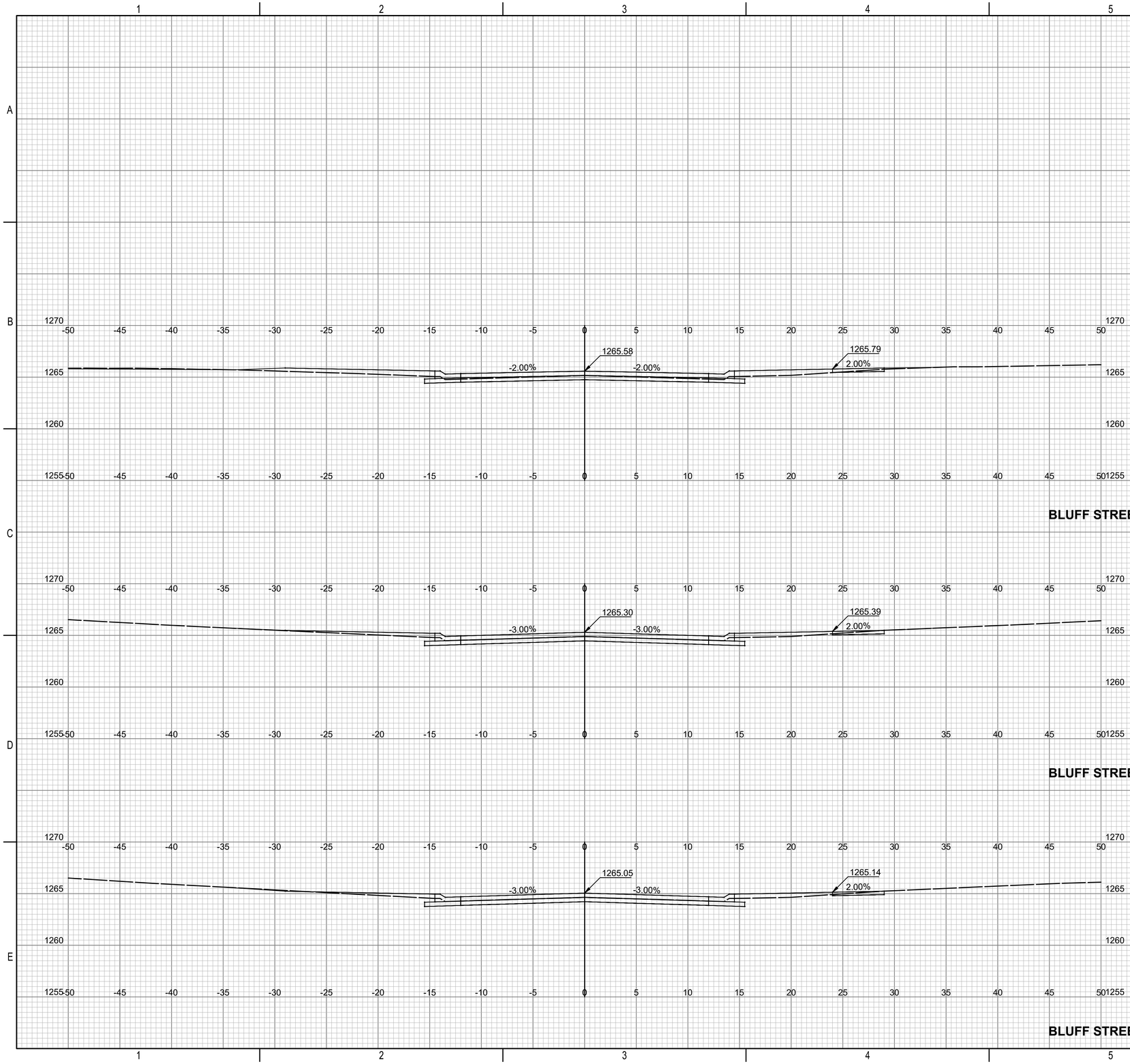
Issue:		

JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

CROSS SECTIONS-BLUFF STREET

CX609
60 OF 69

SAVED 5/28/2025 10:00:08 AM BY BILL.SEXSON
PLOTTED 11/6/2025 12:46:27 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\60-200605-009-CX609 CROSS SECTIONS-BLUFF STREET.DWG



PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM
LICENSED
27806
11/06/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

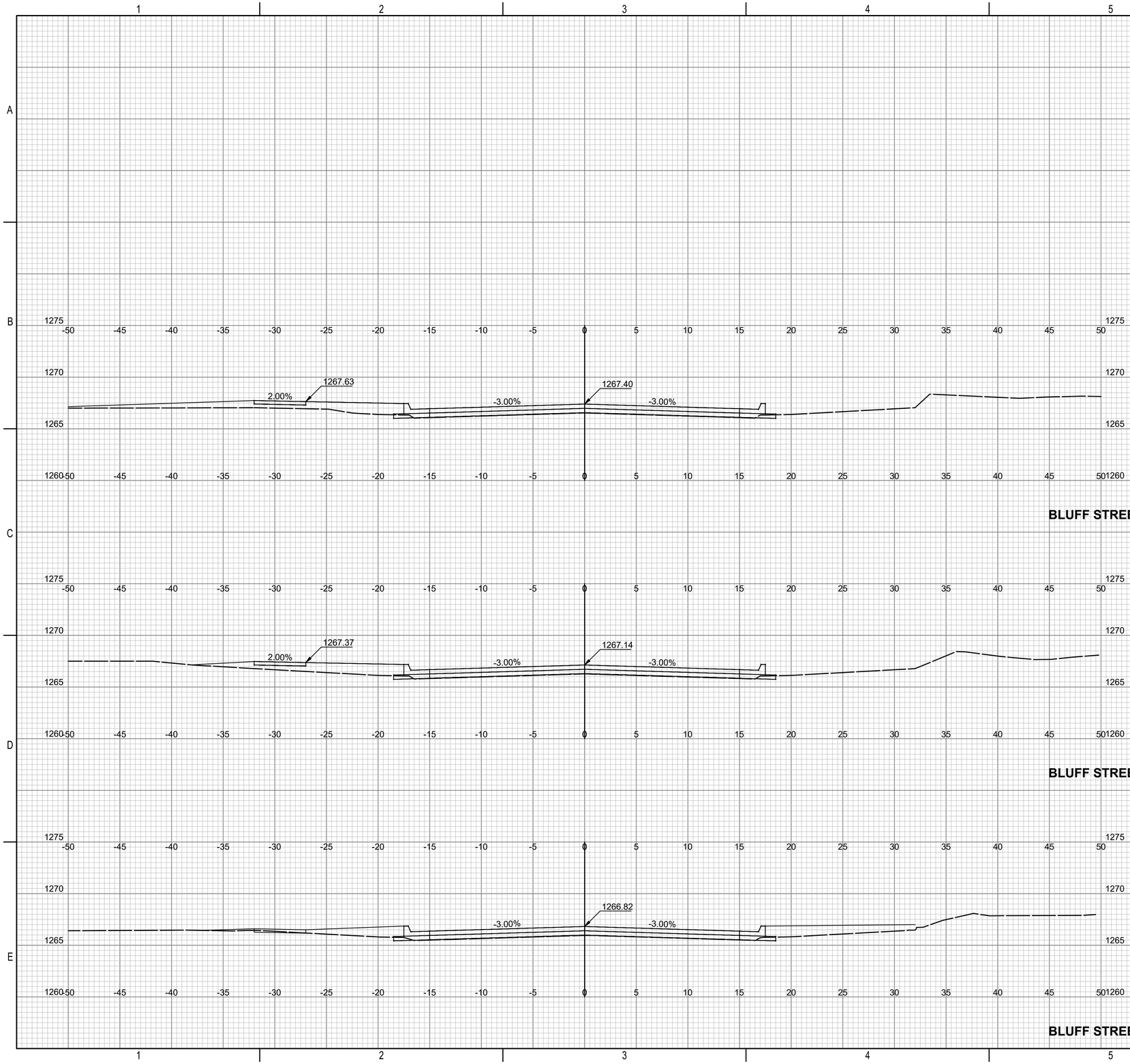
Issue:		

JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

CROSS SECTIONS-BLUFF STREET

CX610
61 OF 69

SAVED 5/28/2025 10:10:35 AM BY BILL.SEXSON
PLOTTED 11/6/2025 12:46:45 PM BY KEVIN.GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\61-200605-009-CX610 CROSS SECTIONS-BLUFF STREET.DWG



PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM
LICENSED
27806
11/06/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

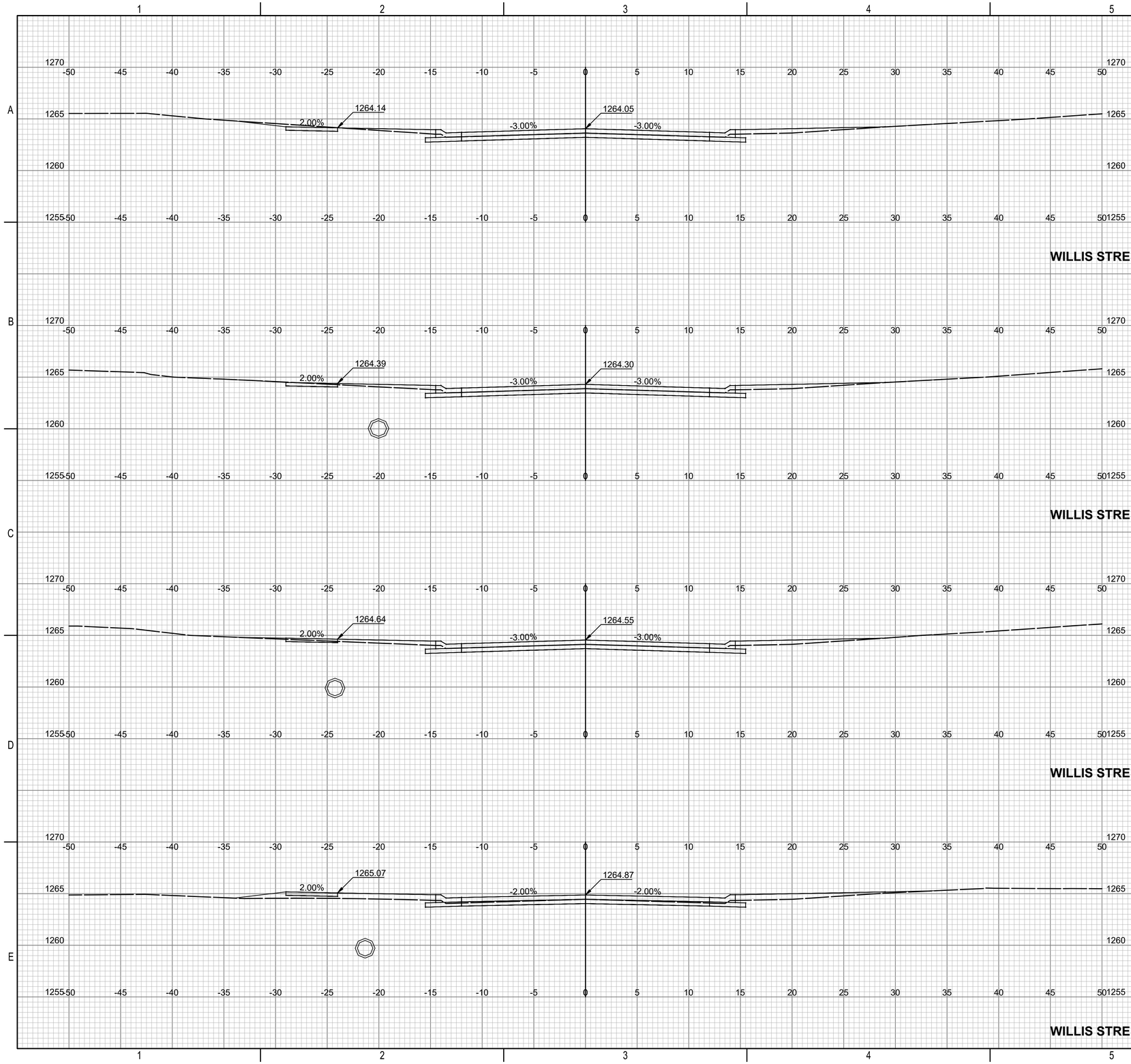
Issue:		

JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

CROSS SECTIONS-BLUFF STREET N

CX611
62 OF 69

SAVED 5/28/2025 10:18:17 AM BY BILL.SEXSON
PLOTTED 11/6/2025 12:46:57 PM BY KEVIN.GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\62-200605-009-CX611 CROSS SECTIONS-BLUFF STREET N.DWG



PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM
LICENSED
27806
11/06/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

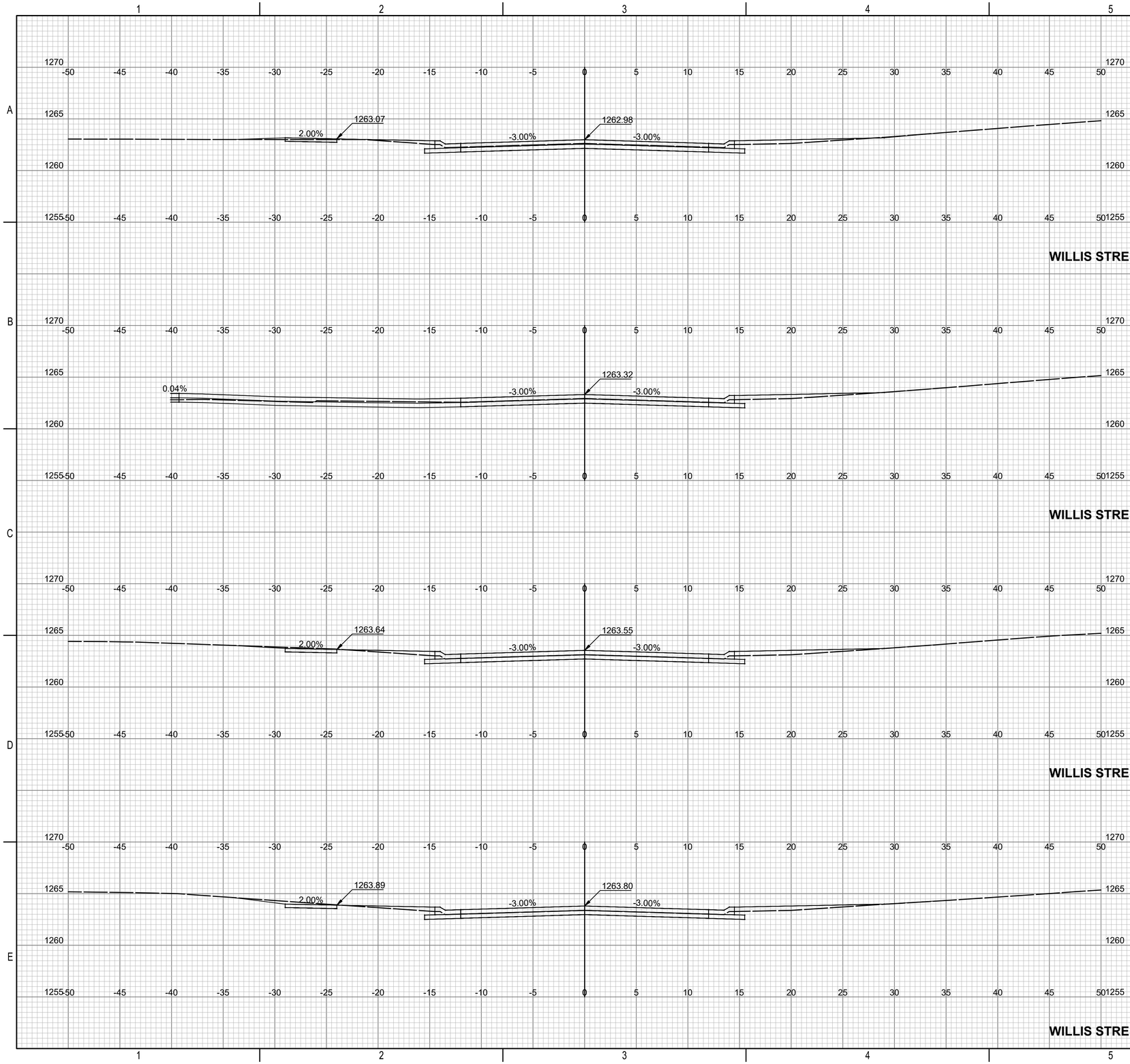
Issue:		

JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

CROSS SECTIONS-WILLIS STREET

CX612
63 OF 69

SAVED 5/28/2025 10:24:09 AM BY BILL.SEXSON
PLOTTED 11/6/2025 12:47:14 PM BY KEVIN.GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\63-200605-009-CX612 CROSS SECTIONS-WILLIS STREET.DWG



PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM
LICENSED
27806
11/06/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

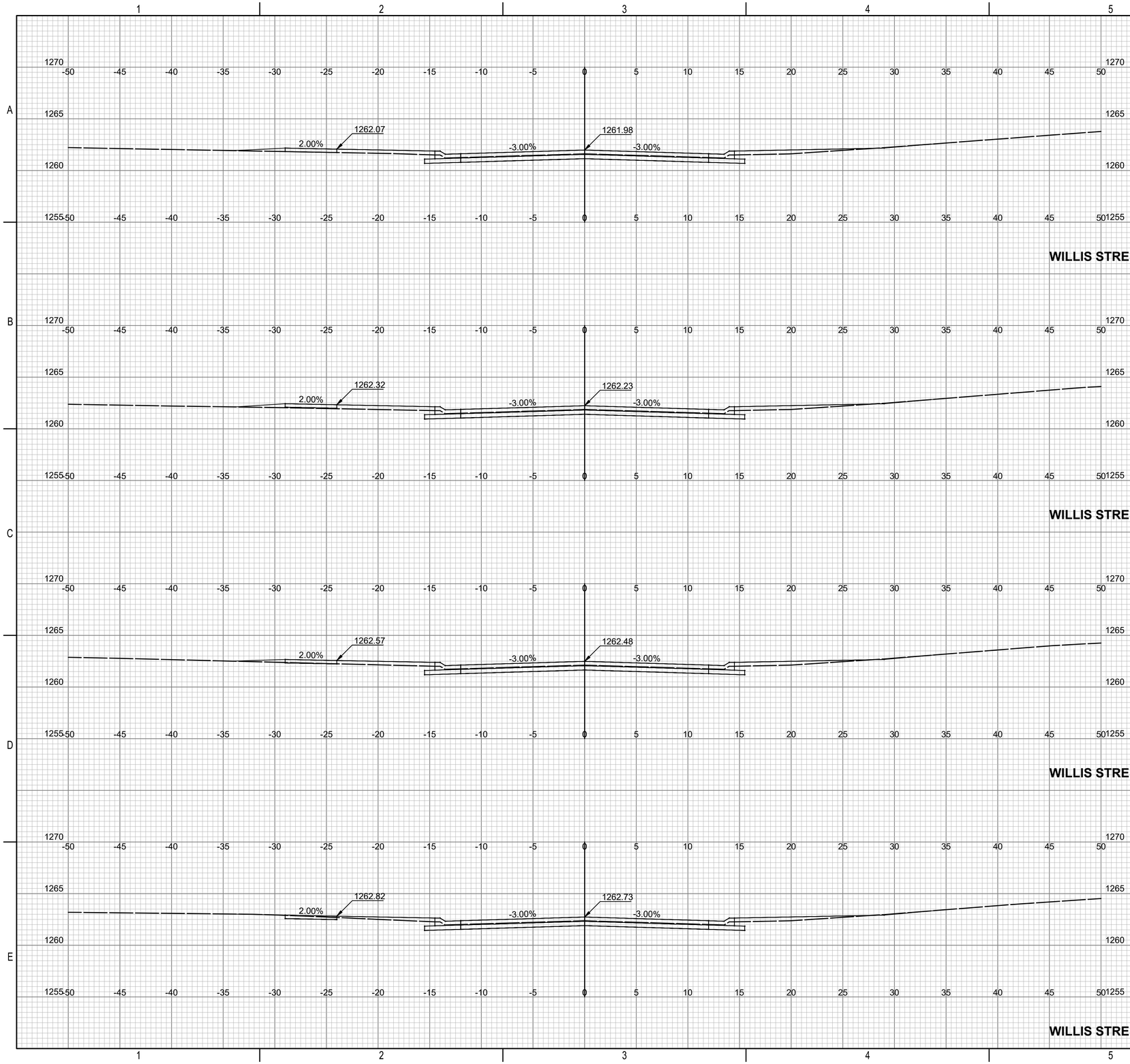
Issue:		

JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

CROSS SECTIONS-WILLIS STREET

CX613
64 OF 69

SAVED 5/28/2025 10:29:38 AM BY BILL.SEXSON
PLOTTED 11/6/2025 12:47:28 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\64-200605-009-CX613 CROSS SECTIONS-WILLIS STREET.DWG



PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM
LICENSED
27806
11/06/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

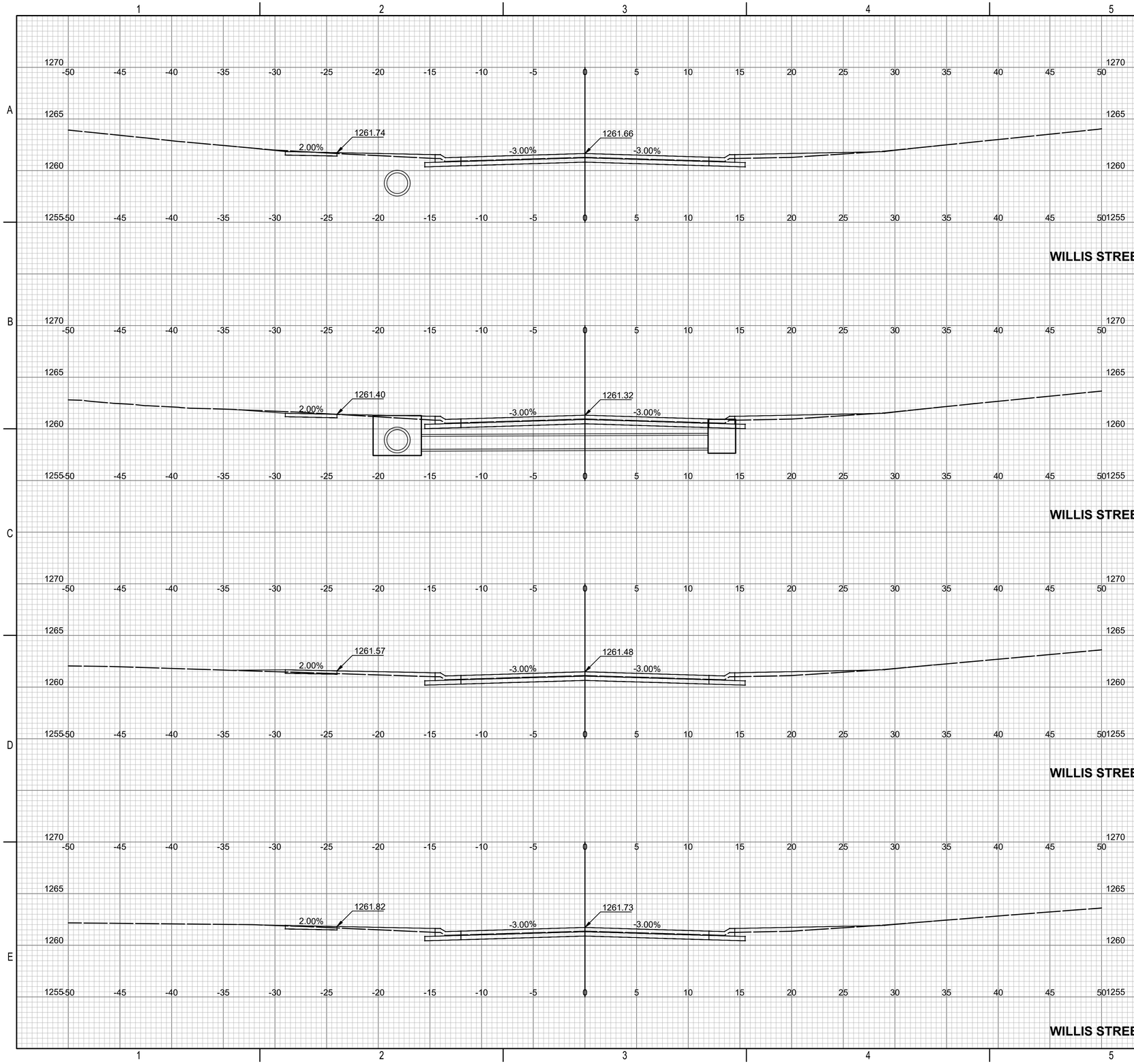
Issue:		

JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

CROSS SECTIONS-WILLIS STREET

CX614
65 OF 69

SAVED 5/28/2025 10:36:09 AM BY BILL.SEXSON
PLOTTED 11/6/2025 12:47:44 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\65-200605-009-CX614 CROSS SECTIONS-WILLIS STREET.DWG



PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 11/06/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

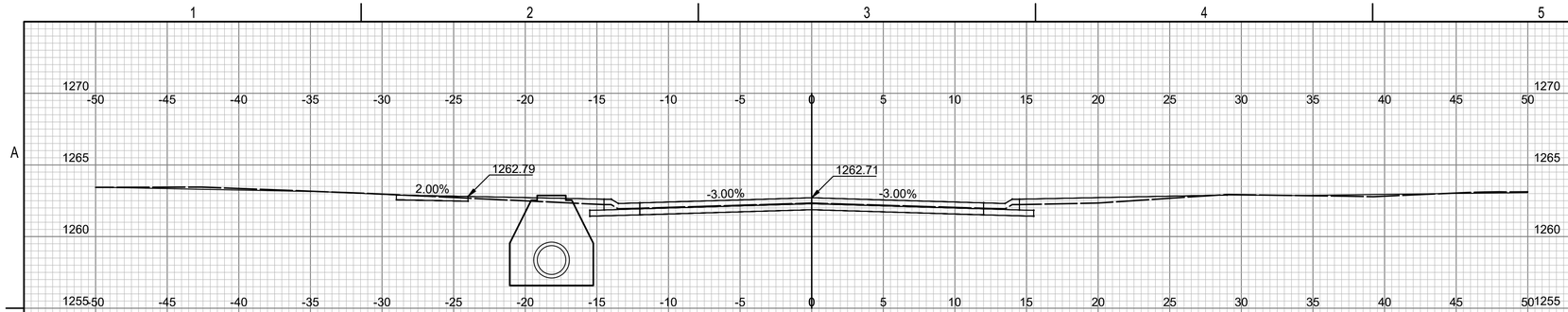
Issue:		

JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

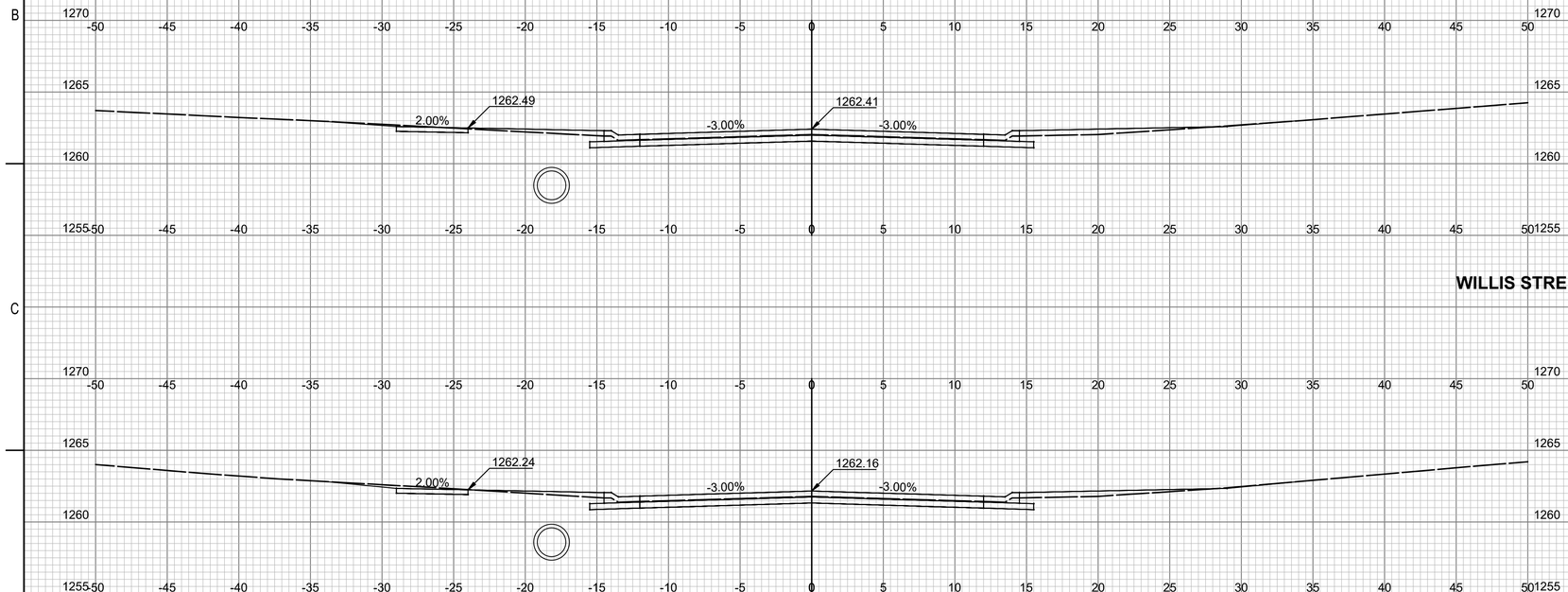
CROSS SECTIONS-WILLIS STREET

CX615
66 OF 69

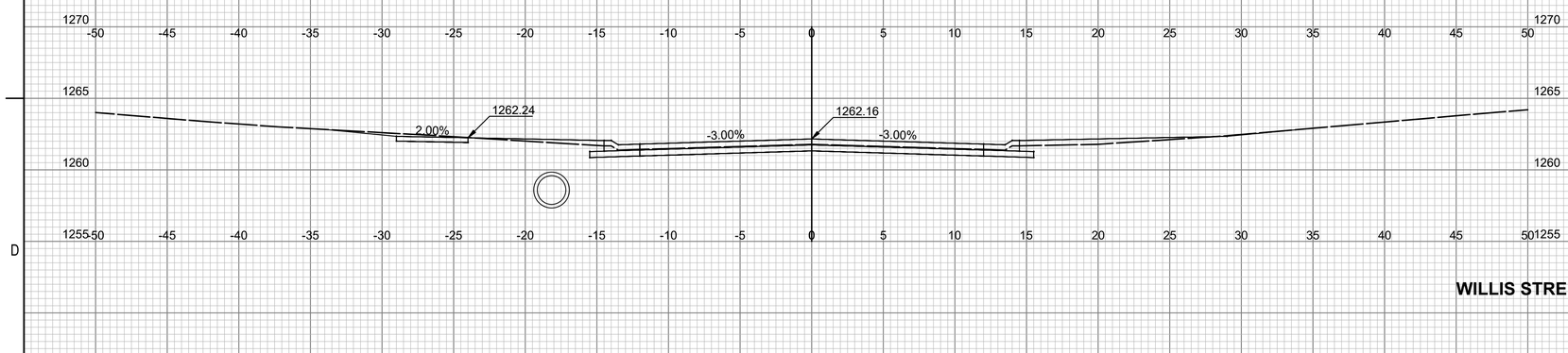
SAVED 5/28/2025 10:42:33 AM BY BILL.SEXSON
PLOTTED 11/6/2025 12:47:58 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\66-200605-009-CX615 CROSS SECTIONS-WILLIS STREET.DWG



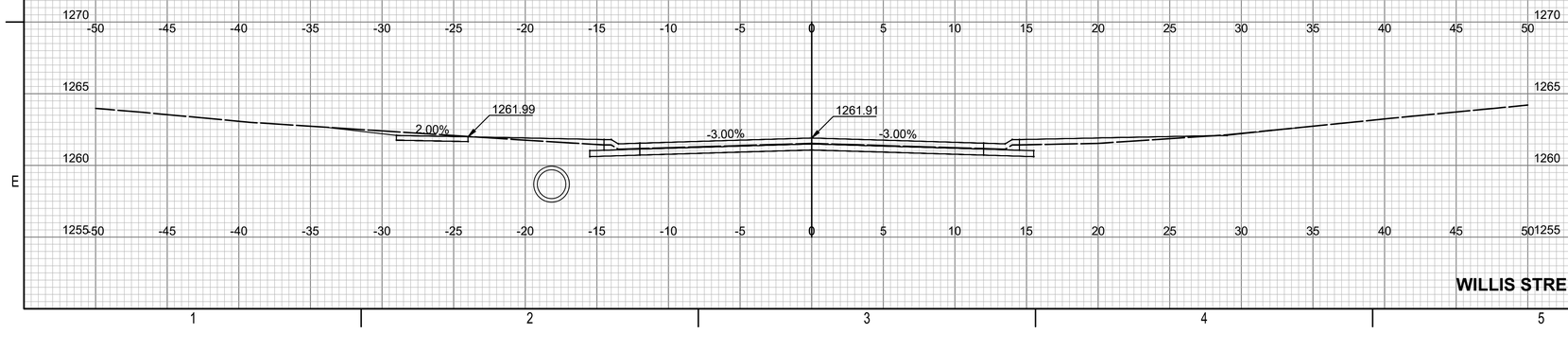
WILLIS STREET 50+10.70



WILLIS STREET 49+50.00



WILLIS STREET 49+00.00



WILLIS STREET 48+50.00

PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM
LICENSED
27806
11/06/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

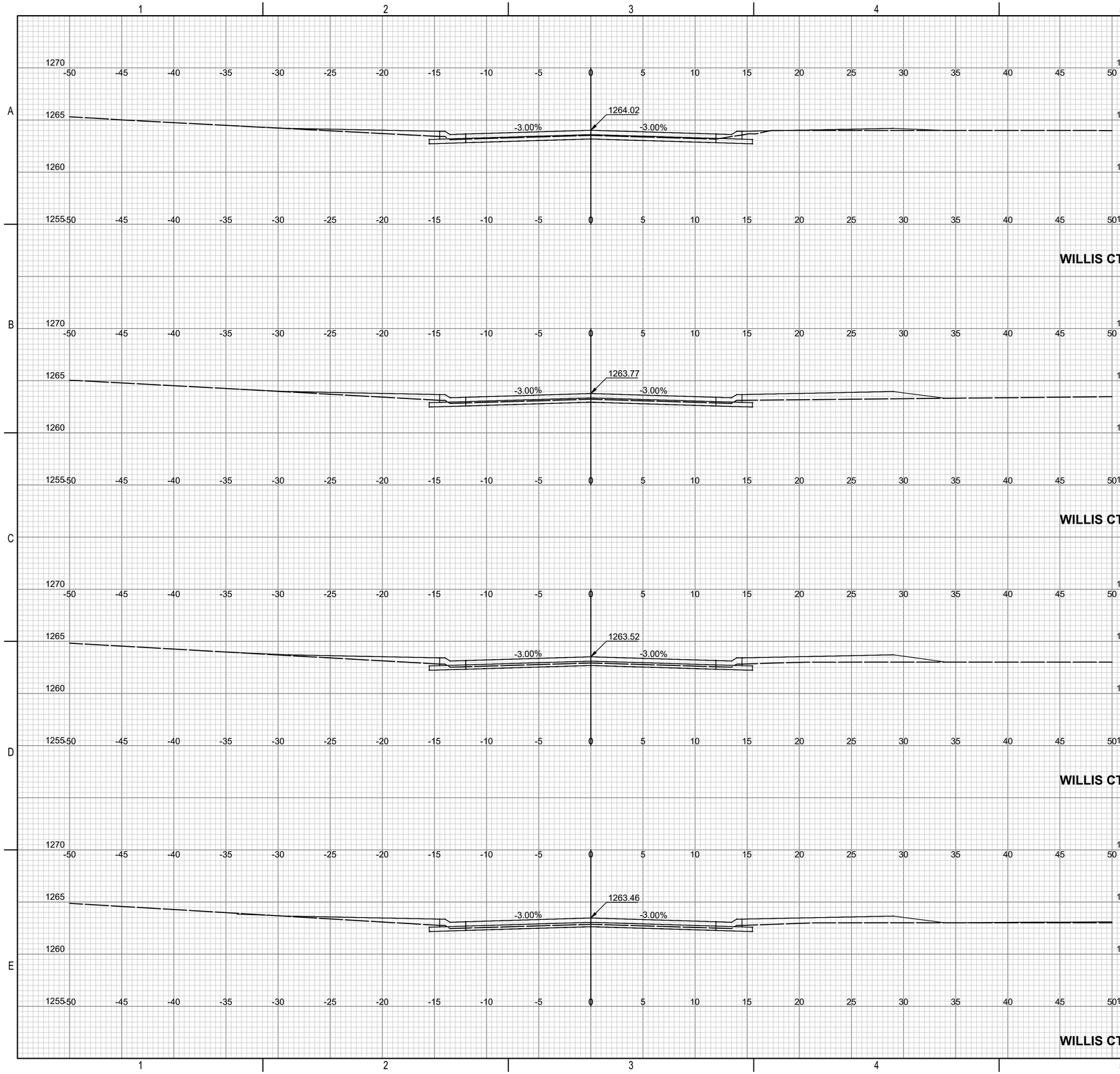
Issue:		

JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

CROSS SECTIONS-WILLIS STREET

CX616
67 OF 69

SAVED 5/28/2025 10:47:10 AM BY BILL.SEXSON
PLOTTED 11/6/2025 12:48:14 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\67-200605-009-CX616 CROSS SECTIONS-WILLIS STREET.DWG



PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM
LICENSED
27806
11/06/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

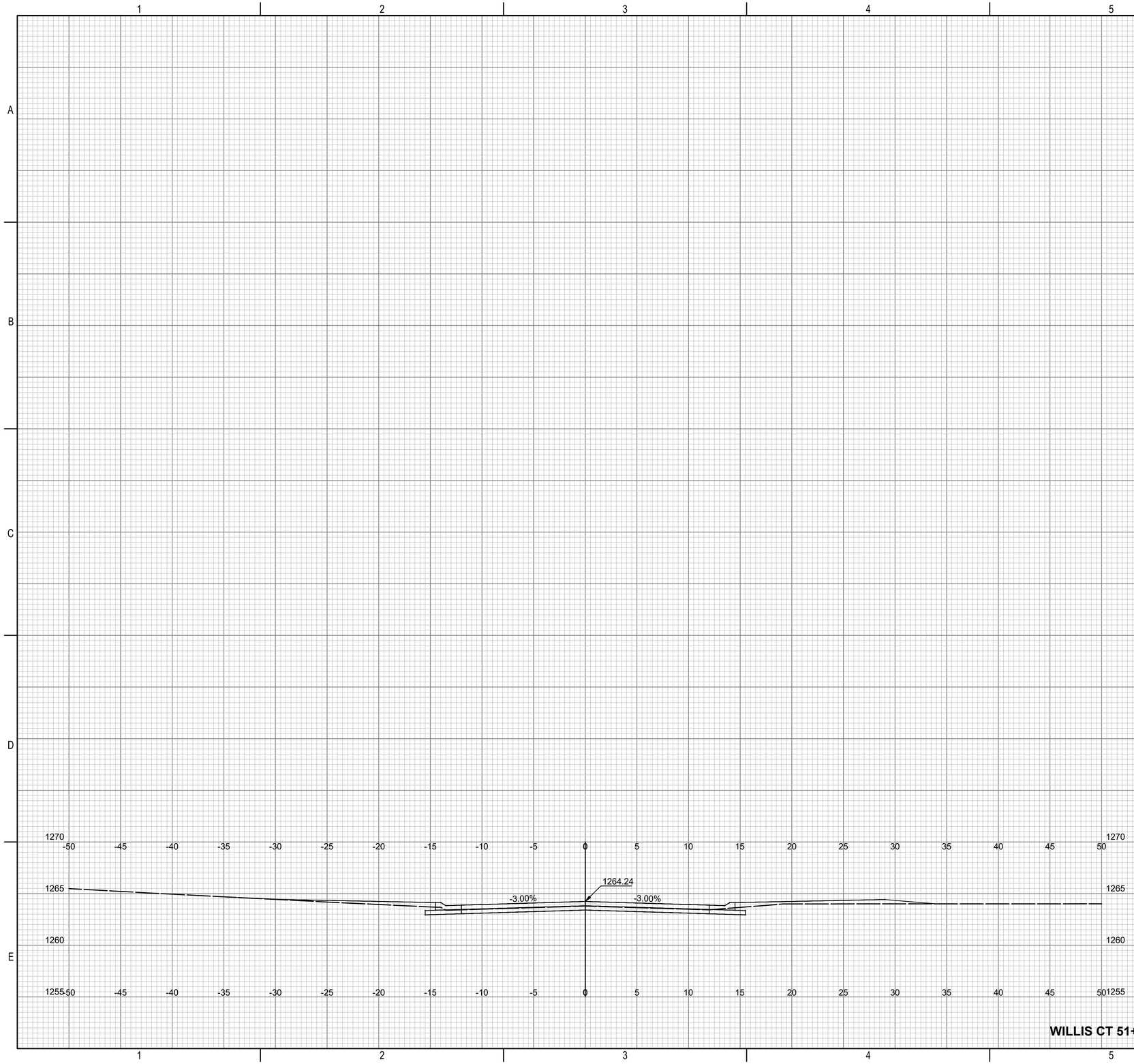
Issue:		

JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

CROSS SECTIONS-WILLIS COURT

CX617
68 OF 69

SAVED 5/28/2025 10:51:39 AM BY BILL.SEXSON
PLOTTED 11/6/2025 12:48:27 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\68-200605-009-CX617 CROSS SECTIONS-WILLIS COURT.DWG



PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

KEVIN P. GRAHAM
LICENSED
27806
11/06/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

Issue:		

JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

CROSS SECTIONS-WILLIS COURT

CX618
69 OF 69

SAVED 5/28/2025 10:59:51 AM BY BILL.SEXSON
PLOTTED 11/6/2025 12:48:44 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\69-200605-009-CX618 CROSS SECTIONS-WILLIS COURT.DWG