CONSTRUCTION PLANS FOR
WATER DISTRIBUTION IMPROVEMENTS

TO SERVE

SWANEY FARM ADDITION - PHASE 1

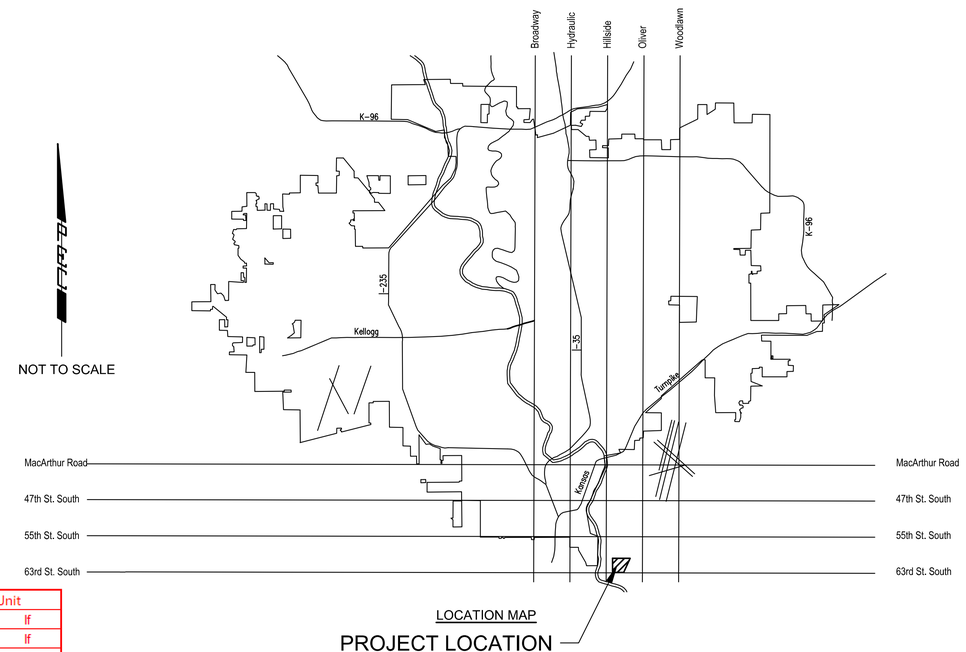
CITY OF WICHITA ENGINEERING PROJECT NO. 448-2024-007798
ORG CODE: 47124124, MUNIS NO.: E4079

CITY OF WICHITA, KS

PAUL GUNZELMAN, P.E. - CITY ENGINEER

RED LINE - FIELD SET

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

SHEET INDEX

SHEET NUMBER	SHEET TITLE
CU001	COVER SHEET
CU002	GENERAL NOTES
CU003	PLAT BUBBLE MAP
CU100	WATER LINE KEY MAP & BUBBLE MAP
CU101	WATER LINE NO. 1
CU102	WATER LINE NO. 1
CU103	WATER LINE NO. 1
CU104	WATER LINE NO. 1
CU105	WATER LINE NO. 2
CU106	WATER LINE NO. 2
CU107	WATER LINE NO. 3
CU108	WATER LINE NO. 3
CU109	WATER LINE NO. 3
CU110	WATER LINE NO. 4
CU111	WATER LINE NO. 4
CU112	WATER LINE NO. 4
CU501	STANDARD WATER ASSEMBLY DETAIL
CU502	MISCELLANEOUS WATER DETAILS
CU503	EROSION CONTROL PLAN
CU504	BACK OF CURB & CURB INLET PROTECTION & CONSTRUCTION ENTRANCE
CU505	SILT FENCE DITCH CHECK AND BARRIER DETAILS
CU506	STRAW BALE DITCH CHECK AND BARRIER DETAILS
CU507	STREET IMPROVEMENT PROJECTS
CU508	SUBDIVISION DEVELOPMENT PROCESS

INSPECTOR	PEC	TIGER WILLIAMS
	PEC	BRANDON DELANEY
CONTRACTOR	NOWAK CONSTRUCTION	DAVE STARECK
	NOWAK CONSTRUCTION	JIM NOWAK
CLIENT	CITY OF WICHITA	EVER VILLALOBOS

Item	Manufacturer	Qty	Unit
Pipe, WL 4"	Sanderson	94	lf
Pipe, WL 6"	Sanderson	594	lf
Pipe, WL DICL 6"	American Cast Iron Pipe Company	15	lf
Pipe, WL 8"	Sanderson	2,590	lf
Pipe, WL 8" RJ, Directional Drill	Westlake	123	lf
Pipe, WL DICL 8"	American Cast Iron Pipe Company	102	lf
Fire Hydrant Assembly	American Darling	4	ea
Valve Assembly, 6"	American Flow Control (AFC)	2	ea
Valve Assembly, 8"	American Flow Control (AFC)	7	ea
Valve Assembly, Blowoff	American Flow Control (AFC)	3	ea
Waterline Fittings	SIP		
Restrained Joint Fittings	SIP		

MAY 2025

RED LINE - FIELD SET
08/17/2026 - cjr
Prepared By: Tiger Williams
Brandon Delaney
Date: JULY 2025
PEC FIELD SERVICES

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

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 05/27/2025 KANSAS PROFESSIONAL ENGINEER

WATER DISTRIBUTION IMPROVEMENTS
SWANEY FARM ADDITION
PHASE 1
PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007798

Issue:		

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-008
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

COVER SHEET

CU001

SAVED 12/23/2024 11:28:46 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 8:28:58 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\0042\PD3_PLANS\030_WATER PHASE 1\200605-008-C001.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 HORIZONTAL AND VERTICAL CONTROL POINTS 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 AND SECTION CORNERS WHICH ARE DAMAGED OR DESTROYED BY CONSTRUCTION OPERATIONS. SUCH IRONS AND SECTION CORNERS 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. THE CONTRACTOR SHALL BE RESPONSIBLE FOR 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 FOR STATE OWNED/OPERATED PROPERTY: FOR OTHER PROPERTIES: LOCAL FLOODPLAIN ADMINISTRATOR 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 AND PARKS 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 PROJECT 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.

21. CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION STAKING. STAKING AND BENCH MARKS DESTROYED DURING CONSTRUCTION OPERATIONS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

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

23. WRITTEN REQUEST TO THE 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.

24. THE CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATION, TYPE, SIZE AND CLASS OF EXISTING WATERLINES PRIOR TO MAKING CONNECTIONS. EXISTING WATERLINE LOCATIONS AS SHOWN ON THE DRAWINGS ARE APPROXIMATE, CONTRACTOR SHALL MAKE ADJUSTMENTS AS REQUIRED, PROVISION AND INSTALLATION OF PIPE ADAPTORS, SHORT SECTION OF PIPE, AND COUPLERS SHALL BE AT NO ADDITIONAL COST TO THE PROJECT.

25. THE CONTRACTOR MUST SCHEDULE THE CONNECTIONS TO THE EXISTING WATER DISTRIBUTION SYSTEM WITH THE CITY SUCH THAT THERE IS MINIMUM DISRUPTION TO THE SYSTEM.

26. AS REQUIRED, THE CONTRACTOR SHALL INSTALL A TEMPORARY BLOW OFF AND/OR TEMPORARY CONNECTION TO THE EXISTING WATERLINE/SYSTEM PER AWWA C651 RECOMMENDATIONS TO FILL AND TEST THE NEW WATERLINE. AT THE CONTRACTOR'S OPTION, THE CONTRACTOR CAN INSTALL A TEMPORARY MAINLINE VALVE AT THE POINT OF CONNECTION. FOLLOWING ACCEPTANCE OF THE NEW WATERLINE, THE TEMPORARY CONNECTION/VALVE SHALL BE FULLY REMOVED AND THE FINAL CONNECTION TO THE EXISTING WATERLINE SHALL BE CONSTRUCTED. WATERLINE MATERIALS AT TIE-INS SHALL BE CONSTRUCTED WITH CLEAN, SWABBED PIPE AND FLUSHED UPON COMPLETION OF TIE-INS. ALL COSTS FOR TEMPORARY CONNECTIONS SHALL BE CONSIDERED SUBSIDIARY TO THE PROJECT.

27. WATERLINES SHALL HAVE A MINIMUM DEPTH OF BURY OF 42 INCHES, UNLESS SHOWN OTHERWISE.

28. FIRE HYDRANT BURY DEPTHS ARE BASED ON THE TOP ELEVATION OF THE PROPOSED WATER MAIN AND THE APPROXIMATE GROUND ELEVATION AT THE LOCATION OF THE FIRE HYDRANT. THE CONTRACTOR SHALL VERIFY THESE ELEVATIONS PRIOR TO INSTALLING FIRE HYDRANTS. ANY MODIFICATIONS REQUIRED TO THE FIRE HYDRANT BURY DEPTH DUE TO THE CONTRACTOR'S FIELD ADJUSTMENTS TO THE WATER MAIN PROFILE SHALL BE MADE BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. PROPOSED ADJUSTMENTS MUST BE APPROVED BY THE RESIDENT INSPECTOR OR ENGINEER PRIOR TO CONSTRUCTION.

29. THE CONTRACTOR SHALL NOT BURY VALVE BOXES OR FIRE HYDRANTS THAT HAVE ELEVATIONS WHICH ARE LOWER THAN EXISTING GROUND. AS DIRECTED BY THE ENGINEER THE CONTRACTOR SHALL ADJUST VALVE BOXES AND FIRE HYDRANTS TO MATCH EXISTING GROUND OR PROVIDE DRAINAGE AWAY FROM THESE VALVE BOXES AND FIRE HYDRANTS BY SLOPING THE GROUND AS REQUIRED. ALL COSTS FOR THIS WORK SHALL BE CONSIDERED SUBSIDIARY TO THE PROJECT.

30. THE CONTRACTOR SHALL LIMIT THE EXTENT OF TRENCH TO REMAIN OPEN OVERNIGHT AND WEEKENDS TO LESS THAN 50 FEET.

31. CONCRETE THRUST BLOCKING SHALL BE INSTALLED AT ALL HORIZONTAL AND VERTICAL DEFLECTIONS OF 11 1/4 DEGREES OR MORE, UNLESS OTHERWISE SPECIFIED. THRUST BLOCKING SHALL BE SIZED AS SHOWN IN THE DETAILS, OR OTHERWISE SPECIFIED. COSTS FOR CONCRETE THRUST BLOCKING SHALL BE CONSIDERED SUBSIDIARY TO THE PROJECT.

32. CONTRACTOR SHALL ABANDON THE EXISTING WATER MAIN TO THE LIMITS SHOWN ON THE PLAN SHEETS. ALL WATERLINES TO BE ABANDONED SHALL BE CUT AND CAPPED/PLUGGED AS APPROVED BY THE ENGINEER. ANY VALVES/FITTINGS TO BE ABANDONED IN PLACE SHALL BE PROPERLY PLUGGED.

33. CONTRACTOR SHALL FIELD VERIFY ALL SANITARY SEWER ELEVATIONS PRIOR TO WATERLINE CONSTRUCTION. SEWER CROSSINGS SHALL MEET SEPARATION REQUIREMENTS PER PROJECT SPECIFICATIONS.

34. THE CONTRACTOR SHALL MINIMIZE SERVICE DISRUPTION TO PROPERTY OWNERS AND SHALL PROVIDE 48 HOURS WRITTEN NOTICE TO ANY PROPERTY OWNERS THAT WILL HAVE A DISRUPTION OF SERVICE.

35. THE CONTRACTOR SHALL MAINTAIN EXISTING WATERLINES IN SERVICE UNTIL THE NEW LINE IS DISINFECTED AND ALL TESTING IS COMPLETE AND APPROVED. ALL SERVICES SHALL THEN BE CONNECTED TO THE NEWLY INSTALLED WATERLINE PRIOR TO ABANDONING THE EXISTING WATERLINE.

36. OPENING AND CLOSING WATER VALVES SHALL BE DONE SLOWLY TO PREVENT DAMAGE TO THE WATER DISTRIBUTION SYSTEM FROM WATER HAMMER. ALL VALVES CLOSED FOR CONSTRUCTION MUST BE REOPENED AS NEW CONSTRUCTION PERMITS. WATERLINE VALVES AND FIRE HYDRANTS ARE ONLY TO BE OPERATED BY AUTHORIZED EMPLOYEES OF THE CITY OF WICHITA OR BY THE CONTRACTOR ONLY IF AN AUTHORIZED WATER DEPARTMENT REPRESENTATIVE IS ON-SITE.

37. THE WATERLINE PIPE LENGTHS REPRESENT TRUE PIPE LENGTHS AND DO NOT INCLUDE FITTINGS/APPURTENANCES. THE PIPE LENGTHS DO NOT DIRECTLY CORRESPOND WITH ALIGNMENT STATIONING. THE COST OF FITTINGS IS CONSIDERED SUBSIDIARY TO PIPE.

38. 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. THE FOLLOWING QUANTITIES ARE ESTIMATED, AND SHOULD BE CONSIDERED THE MINIMUM EFFORT REQUIRED.

39. ALL LAWN/TURF AREAS DISTURBED BY CONSTRUCTION OF THE PROPOSED IMPROVEMENTS SHALL BE RESTORED WITH THE SAME GRASS/SOD AS EXISTING. RESTORATION OF DISTURBED AREAS SHALL INCLUDE, BUT NOT BE LIMITED TO, TOP SOIL PREPARATION, SEEDING, MULCHING, AND/OR RE-SEEDING. ALL SEEDING/SODDING WORK SHALL BE IN ACCORDANCE WITH THE CITY OF WICHITA STANDARD SPECIFICATIONS AND THE CITY OF WICHITA ADMINISTRATIVE REGULATION NO. AR6.5 WHICH GOVERNS CLEANUP AND RESTORATION OR REPLACEMENT FOLLOWING CONSTRUCTION. ALL COSTS FOR THIS WORK SHALL BE SUBSIDIARY TO "SITE RESTORATION".

40. OPENING AND CLOSING WATER VALVES SHALL BE DONE SLOWLY TO PREVENT DAMAGE TO THE WATER DISTRIBUTION SYSTEM FROM WATER HAMMER. ALL VALVES CLOSED BY THE CONTRACTOR MUST BE REOPENED AS NEW CONSTRUCTION PERMITS. PROJECT INSPECTOR MUST ASCERTAIN THAT ANY VALVE CLOSED BY THE CONTRACTOR IS REOPENED. CONTRACTOR WILL BE PERMITTED TO OPERATE WATER VALVES ONLY WHEN THE PROJECT INSPECTOR ASSIGNED TO THE PROJECT IS PRESENT.

41. NO SERVICES WILL BE INSTALLED AS PART OF THIS PROJECT.

42. THE CONTRACTOR SHALL RESTRAIN ALL BENDS, VALVES, AND TEES THROUGH THE USE OF A RESTRAINED JOINT PIPE AS SPECIFIED, AT THE MINIMUM LENGTHS AS SHOWN IN THE PLANS. OTHER METHODS OF RESTRAINT MAY BE SUBMITTED FOR APPROVAL AT LEAST 14 DAYS PRIOR TO BIDDING. RESTRAINED JOINT DUCTILE IRON PIPE SHALL BE U.S. PIPE TR FLEX, AMERICAN FLEX RING, OR APPROVED EQUAL, IN ACCORDANCE WITH CITY OF WICHITA STANDARD SPECIFICATIONS. RESTRAINED JOINT PVC PIPE SHALL BE WESTLAKE CERTA-LOK PIPE, OR APPROVED EQUAL, IN ACCORDANCE WITH CITY OF WICHITA STANDARD SPECIFICATIONS. THE CONTRACTOR MAY USE SIGMA PV-LOK SERIES PWM OR APPROVED EQUAL FOR RESTRAINT OF FITTINGS ON THE PROJECT. CLAMPING RING SHALL BE OF HIGH STRENGTH DUCTILE IRON AND SHALL CONFORM TO ASTM A536, GRADE 65-45-12. SIDE CLAMPING BOLT AND HEX NUTS SHALL BE A HIGH STRENGTH, LOW ALLOY STEEL AND SHALL CONFORM TO AWWA/ANSI C111/A21.11 AND PRORATE A MINIMUM 45,000 PSI YIELD AND 60,000 PSI TENSILE STRENGTH.

43. MAINTAIN A MINIMUM OF 10-FOOT HORIZONTAL SEPARATION BETWEEN ALL WATER LINES (MAINS, SERVICES, AND FIRE HYDRANTS) AND ALL SANITARY SEWER LINES (MAINS, SERVICES, AND MANHOLES). ALL SEPARATIONS DISTANCES ARE TO BE MEASURED FROM EDGE-TO-EDGE, AT THE CLOSEST POINT.

44. MAINTAIN A MINIMUM OF 2-FOOT VERTICAL SEPARATION BETWEEN ALL WATER LINES (MAIN AND SERVICES) AND ALL GRAVITY SANITARY SEWER LINES (MAINS, SERVICES, AND MANHOLES) AT CROSSINGS. ALL SEPARATION DISTANCES ARE TO BE MEASURED FROM EDGE-TO-EDGE, AT THE CLOSEST POINT.

45. MAINTAIN A MINIMUM OF 2-FOOT VERTICAL SEPARATION BETWEEN ALL WATER LINES (MAIN AND SERVICES) AND ALL PRESSURIZED SANITARY SEWER LINES (FORCE MAINS AND SERVICES) AT CROSSINGS. WATER LINES MUST ALWAYS BE PLACED ABOVE PRESSURIZED SANITARY SEWER LINES WHERE THEY CROSS. ALL SEPARATION DISTANCES ARE TO BE MEASURED FROM EDGE-TO-EDGE, AT THE CLOSEST POINT.

46. 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. FULL TREE REMOVAL SHALL BE NOTED ON THE PLANS AND SHALL BE BID AS "TREE REMOVED, LARGE", "TREE REMOVED, SMALL", OR "TREE ROW REMOVED".

UTILITY CONTACTS

DEB ARY
WICHITA SANITARY SEWER
7TH FLOOR - CITY HALL
455 N. MAIN
WICHITA, KS 67202
316-268-4614

GREG LOLLEY
WICHITA WATER
8TH FLOOR - CITY HALL
455 N. MAIN
WICHITA, KS 67202
316-268-4334

JOE HICKLE
WICHITA STORM SEWER
7TH FLOOR - CITY HALL
455 N. MAIN
WICHITA, KS 67202
316-268-4307

JAMES WALBURN
COX COMMUNICATIONS
ENGINEERING DEPARTMENT
901 GEORGE WASHINGTON BLVD.
WICHITA, KS 67211
316-260-7491

KEVIN RIESCHICK
EVERGY
1900 E. CENTRAL (3RD FLOOR)
P.O. BOX 208
WICHITA, KS 67201
785-410-2986

JASON EDWARDS
AT&T WICHITA CENTRAL UNIT
154 N. BROADWAY, ROOM 210
WICHITA, KS 67202
316-268-2008

ANDREA FOUST
KANSAS GAS SERVICE
1021 E. 26TH ST. NORTH
WICHITA, KS 67219
316-832-3126

SUZETTE WILSON & CHRIS KELLY
BLACK HILLS ENERGY
2330 N. HOOVER ROAD
WICHITA, KS 67205
SUZETTE WILSON 316-941-1631
CHRIS KELLY 316-941-1633

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

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 05/27/2025 KANSAS PROFESSIONAL ENGINEER

WATER DISTRIBUTION IMPROVEMENTS

SWANEY FARM ADDITION
PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007798

Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-008
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

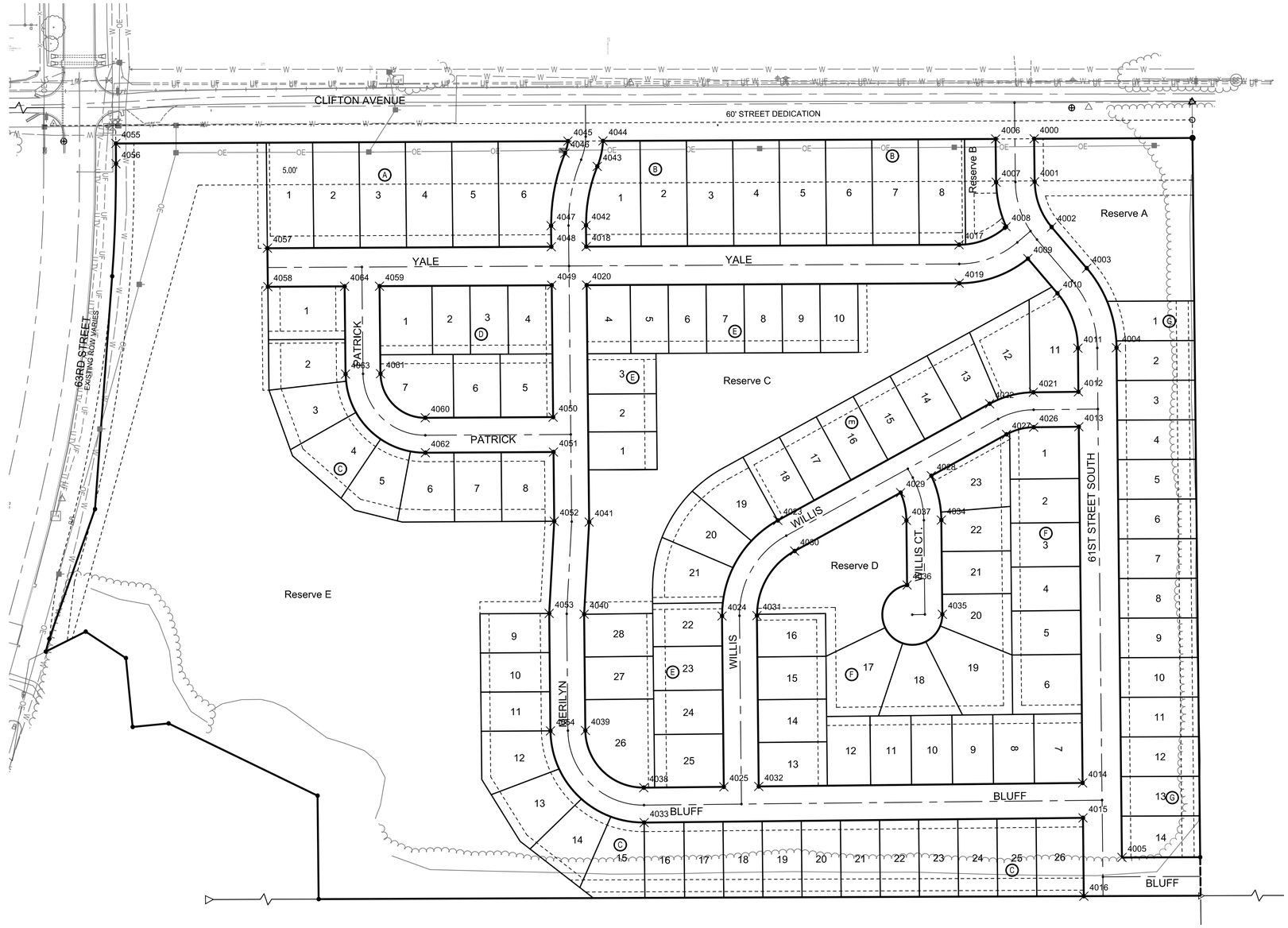
GENERAL NOTES

CU002

SAVED 8/12/2024 8:43:36 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 8:29:03 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\0042\2PD3_PLANS\030_WATER PHASE 1\200605-008-C002.DWG

SWANEY FARM ADDITION

CITY OF WICHITA, SEDGWICK COUNTY, KANSAS



COORDINATE LIST		
POINT	NORTHING	EASTING
4000	333,343.3466	17,559,773.0152
4001	333,344.1138	17,559,844.4466
4002	333,372.3226	17,559,919.7478
4003	333,430.5986	17,559,988.0827
4004	333,480.0831	17,560,120.1786
4005	333,489.1775	17,560,966.8820
4006	333,279.3464	17,559,773.3402
4007	333,280.1175	17,559,845.1339
4008	333,296.6557	17,559,919.0071
4009	333,332.8977	17,559,972.1487
4010	333,381.9019	17,560,029.6113
4011	333,416.0868	17,560,120.8660
4012	333,416.8654	17,560,193.3566
4013	333,417.4884	17,560,251.3533
4014	333,423.8444	17,560,843.1131
4015	333,424.4673	17,560,901.1097
4016	333,425.8638	17,561,031.1256
4017	333,218.6228	17,559,948.9809
4018	332,599.2274	17,559,952.1265
4019	333,218.9479	17,560,012.9800
4020	332,599.9148	17,560,016.1239
4021	333,341.9495	17,560,194.1613
4022	333,269.3231	17,560,213.2509
4023	332,917.4815	17,560,406.9842
4024	332,824.8307	17,560,565.7078
4025	332,827.8791	17,560,849.5143
4026	333,342.5724	17,560,252.1580
4027	333,297.2988	17,560,264.0580
4028	333,172.4510	17,560,332.8025
4029	333,121.4698	17,560,360.8741
4030	332,945.4578	17,560,457.7909
4031	332,882.8274	17,560,565.0849
4032	332,885.8757	17,560,848.8913
4033	332,695.5094	17,560,908.9394
4034	333,189.1402	17,560,406.3752
4035	333,190.8221	17,560,562.9656
4036	333,132.2953	17,560,514.2356
4037	333,131.1435	17,560,406.9982
4038	332,694.8864	17,560,850.9427
4039	332,597.8609	17,560,755.9793
4040	332,595.7860	17,560,562.8014
4041	332,604.1418	17,560,409.6721
4042	332,598.8484	17,559,916.8443
4043	332,617.6067	17,559,818.9041
4044	332,627.0807	17,559,776.6528
4045	332,568.9094	17,559,776.9483
4046	332,563.9446	17,559,796.8954
4047	332,540.8518	17,559,917.4672
4048	332,541.2272	17,559,952.4211
4049	332,541.9146	17,560,016.4184

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

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 05/27/2025 KANSAS PROFESSIONAL ENGINEER

WATER DISTRIBUTION IMPROVEMENTS

SWANEY FARM ADDITION
PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007798

Issue:		
	08/17/2026 - cjr	

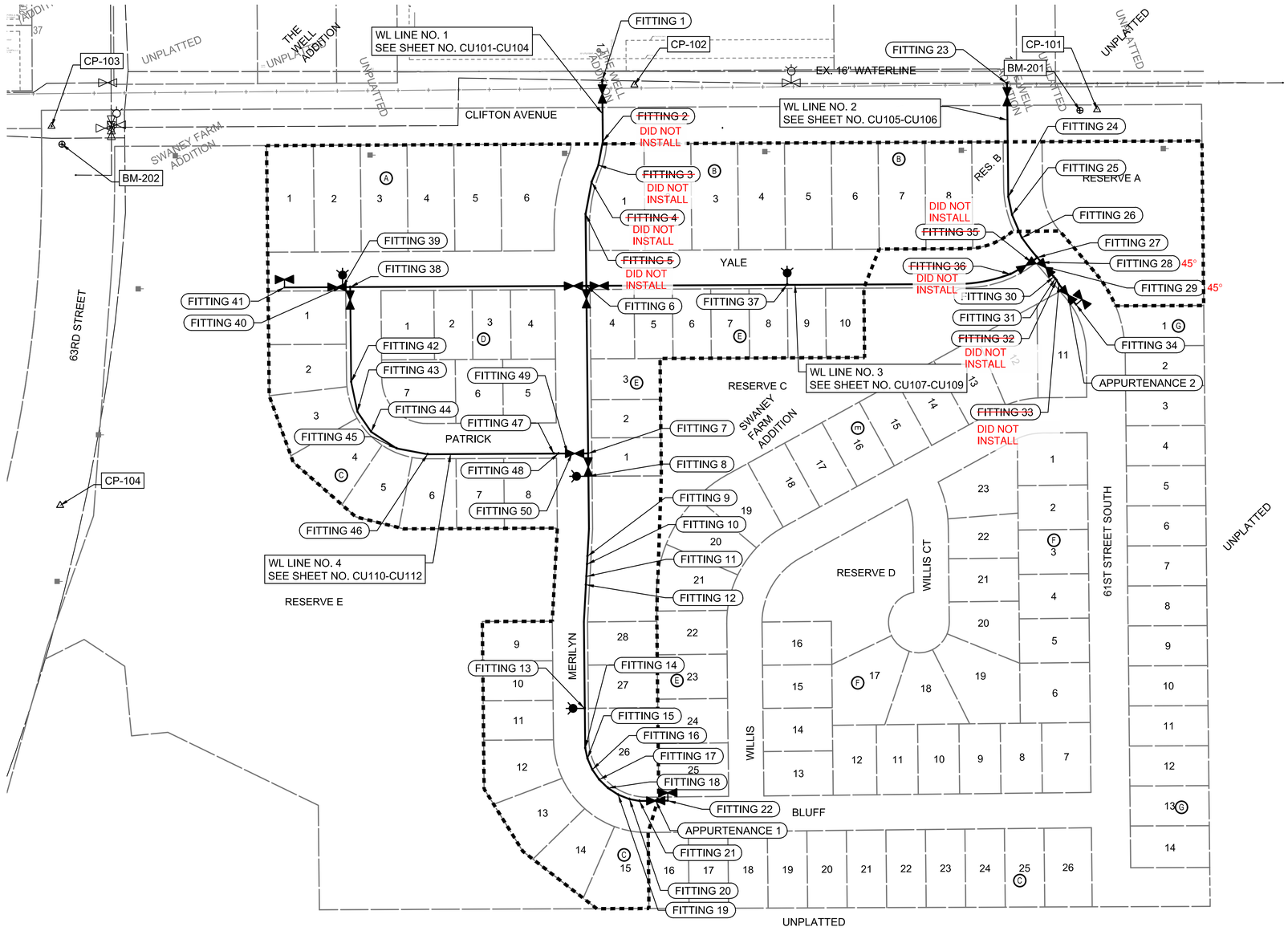
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-008
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

PLAT BUBBLE MAP

CU003

SAVED 8/2/2024 12:17:23 PM BY ARIC.HERMANN
PLOTTED 5/27/2025 8:29:11 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_WATER PHASE 1\200605-008-C003.DWG



HORIZONTAL DATUM/COORDINATE SYSTEM:
KRCS ZONE 17 - WICHITA

BENCHMARKS
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 AVENUE AND 63RD STREET.

BM-203 (NOT SHOWN)
ELEV: 1,265.85 (NAVD 88)
CHISELED SQUARE ON THE SOUTH CENTER OF CURB STORM DRAIN LOCATED ON THE NORTH SIDE OF 63RD STREET, 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 (NOT SHOWN)
N: 331,530.9404 E: 17,560,836.2700
1/2 BAR WITH PEC PAC
1. 6' N TO SOUTH BACK OF CURB
2. 45.25' E TO NO PARKING SIGN
3. 35' N TO CENTERLINE OF ROAD

CP-106 (NOT SHOWN)
N: 331,485.8918 E: 17,559,660.4146
1/2 BAR
1. 17.5' E TO NW CORNER OF PRIVACY FENCE
2. 15' SSW TO CEDAR TREE
3. 23' N TO CENTERLINE OF ROAD

LEGEND

- EXISTING WATER MAIN
- PROPOSED WATER MAIN
- EXISTING WATER VALVE
- PROPOSED WATER VALVE
- EXISTING FIRE HYDRANT
- PROPOSED FIRE HYDRANT
- EXISTING BLOW OFF
- PROPOSED BLOW OFF

WATER BENEFIT DISTRICT
LOTS 1 THRU 6, BLOCK A,
LOTS 1 THRU 8, BLOCK B,
LOTS 1 THRU 15, BLOCK C,
LOTS 1 THRU 7, BLOCK D,
LOTS 1 THRU 10, BLOCK E, &
LOTS 26 THRU 28, BLOCK E,
IN THE SWANEY FARM ADDITION TO WICHITA,
SEDGWICK CO, KANSAS.

FITTING TABLE

ID	ALIGNMENT	STATION	COORDINATES	DESCRIPTION
Fitting 1	WL NO. 1	10+00.0	N: 332,619.9589 E: 17,559,672.2356	TEE 16"X08"
Fitting 2	WL NO. 1	11+00.0	N: 332,621.0329 E: 17,559,772.2298	BEND 08" 11.25°
Fitting 3	WL NO. 1	11+40.0	N: 332,613.6511 E: 17,559,811.5428	BEND 08" 11.25°
Fitting 4	WL NO. 1	11+70.0	N: 332,602.4689 E: 17,559,839.3008	BEND 08" 11.25°
Fitting 5	WL NO. 1	12+23.8	N: 332,592.5816 E: 17,559,892.0372	BEND 08" 11.25°
Fitting 6	WL NO. 1	13+41.7	N: 332,593.8503 E: 17,560,010.1546	CROSS 08"X08"
Fitting 7	WL NO. 1	16+17.2	N: 332,596.8093 E: 17,560,285.6431	TEE 08"X06"
Fitting 8	WL NO. 1	16+54.7	N: 332,597.2125 E: 17,560,323.1790	HYDRANT TEE 08"X06"
Fitting 9	WL NO. 1	17+86.3	N: 332,595.6767 E: 17,560,454.6852	BEND 08" 22.5°

FITTING TABLE

ID	ALIGNMENT	STATION	COORDINATES	DESCRIPTION
Fitting 10	WL NO. 1	17+99.6	N: 332,594.9533 E: 17,560,467.9427	BEND 08" 22.5°
Fitting 11	WL NO. 1	18+19.6	N: 332,593.8646 E: 17,560,487.8943	BEND 08" 22.5°
Fitting 12	WL NO. 1	18+33.2	N: 332,593.1208 E: 17,560,501.5231	BEND 08" 22.5°
Fitting 13	WL NO. 1	20+36.7	N: 332,591.3115 E: 17,560,704.8577	HYDRANT TEE 08"X06"
Fitting 14	WL NO. 1	21+01.9	N: 332,592.0121 E: 17,560,770.0844	BEND 08" 11.25°
Fitting 15	WL NO. 1	21+19.3	N: 332,595.6621 E: 17,560,787.0882	BEND 08" 11.25°
Fitting 16	WL NO. 1	21+39.3	N: 332,603.5940 E: 17,560,805.4481	BEND 08" 11.25°
Fitting 17	WL NO. 1	21+59.3	N: 332,614.9553 E: 17,560,821.9078	BEND 08" 11.25°
Fitting 18	WL NO. 1	21+79.3	N: 332,629.3094 E: 17,560,835.8347	BEND 08" 11.25°

FITTING TABLE

ID	ALIGNMENT	STATION	COORDINATES	DESCRIPTION
Fitting 19	WL NO. 1	21+99.3	N: 332,646.1047 E: 17,560,846.6937	BEND 08" 11.25°
Fitting 20	WL NO. 1	22+19.3	N: 332,664.6958 E: 17,560,854.0674	BEND 08" 11.25°
Fitting 21	WL NO. 1	22+36.1	N: 332,681.1904 E: 17,560,857.0902	BEND 08" 11.25°
Fitting 22	WL NO. 1	22+82.8	N: 332,727.9490 E: 17,560,856.5879	BLOWOFF ASSEMBLY 08"
Fitting 23	WL NO. 2	10+00.0	N: 333,285.8110 E: 17,559,676.9037	TEE 16"X08"
Fitting 24	WL NO. 2	11+86.9	N: 333,287.8180 E: 17,559,863.7606	BEND 08" 11.25°
Fitting 25	WL NO. 2	12+16.9	N: 333,293.9864 E: 17,559,893.1196	BEND 08" 11.25°
Fitting 26	WL NO. 2	12+57.9	N: 333,310.1125 E: 17,559,930.8986	BEND 08" 11.25°
Fitting 27	WL NO. 2	12+99.2	N: 333,335.3599 E: 17,559,963.4776	TEE 08"X08"

FITTING TABLE

ID	ALIGNMENT	STATION	COORDINATES	DESCRIPTION
Fitting 28	WL NO. 2	13+09.4	N: 333,342.0156 E: 17,559,971.2821	BEND 08" ~~22.5°~~ 45°
Fitting 29	WL NO. 2	13+19.3	N: 333,348.4465 E: 17,559,978.8230	BEND 08" ~~22.5°~~ 45°
Fitting 30	WL NO. 2	13+41.2	N: 333,362.6285 E: 17,559,995.4530	BEND 08"45°
Fitting 31	WL NO. 2	13+45.1	N: 333,365.1822 E: 17,559,998.4474	BEND 08"45°
Fitting 32	WL NO. 2	13+48.7	N: 333,367.4687 E: 17,560,001.1286	BEND 08" 11.25°
Fitting 33	WL NO. 2	13+56.4	N: 333,371.2207 E: 17,560,007.8396	BEND 08" 11.25°
Fitting 34	WL NO. 2	13+99.8	N: 333,399.4449 E: 17,560,040.9358	BLOWOFF ASSEMBLY 08"
Fitting 35	WL NO. 3	10+12.0	N: 333,326.2293 E: 17,559,971.2645	BEND 08" 11.25°
Fitting 36	WL NO. 3	10+52.0	N: 333,291.3150 E: 17,559,990.7893	BEND 08" 11.25°

FITTING TABLE

ID	ALIGNMENT	STATION	COORDINATES	DESCRIPTION
Fitting 37	WL NO. 3	14+21.0	N: 332,924.2153 E: 17,560,008.4768	HYDRANT TEE 08"X06"
Fitting 38	WL NO. 3	21+39.9	N: 332,205.3491 E: 17,560,012.1276	TEE 08"X06"
Fitting 39	WL NO. 3	21+52.3	N: 332,192.9113 E: 17,560,012.1908	HYDRANT TEE 08"X06"
Fitting 40	WL NO. 3	21+54.4	N: 332,190.8551 E: 17,560,012.2013	REDUCER 08"X04"
Fitting 41	WL NO. 3	22+47.9	N: 332,097.3489 E: 17,560,012.6761	BLOWOFF ASSEMBLY 04"
Fitting 42	WL NO. 4	11+56.0	N: 332,207.0246 E: 17,560,168.1186	BEND 06" 11.25°
Fitting 43	WL NO. 4	12+06.0	N: 332,217.3052 E: 17,560,217.0503	BEND 06" 22.5°
Fitting 44	WL NO. 4	12+46.0	N: 332,239.8840 E: 17,560,250.0685	BEND 06" 22.5°
Fitting 45	WL NO. 4	12+96.0	N: 332,281.7534 E: 17,560,277.3989	BEND 06" 22.5°

FITTING TABLE

ID	ALIGNMENT	STATION	COORDINATES	DESCRIPTION
Fitting 46	WL NO. 4	13+47.9	N: 332,332.7999 E: 17,560,286.9839	BEND 06" 11.25°
Fitting 47	WL NO. 4	15+55.7	N: 332,540.5550 E: 17,560,285.9288	BEND 06" 22.5°
Fitting 48	WL NO. 4	15+63.3	N: 332,548.1386 E: 17,560,285.8903	BEND 06" 22.5°
Fitting 49	WL NO. 4	15+78.3	N: 332,563.1365 E: 17,560,285.8141	BEND 06" 22.5°
Fitting 50	WL NO. 3	17+76.1	N: 332,570.5658 E: 17,560,285.7764	BEND 06" 22.5°

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

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 05/27/2025 KANSAS PROFESSIONAL ENGINEER

WATER DISTRIBUTION IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007798

Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-008
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

WATER LINE KEY MAP & BUBBLE MAP

CU100

SAVED 8/2/2024 12:55:48 PM BY ARIC.HERMANN
PLOTTED 5/27/2025 8:29:52 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_WATER PHASE 1\200605-008-CU100.DWG

REFERENCE POINT (RP) CENTERLINE OF MERILYN (E-W) AND YALE (N-S)

1 @ 45 Bend (Vertical) (RJ FITTING)(SIP)
25' West of Clifton Centerline and
23' North of Merilyn Centerline

1 @ 45 Bend (Vertical) (RJ FITTING)(SIP)
22' West of Clifton Centerline and
23' North of Merilyn Centerline

The 2 @ 45 Degree Bends Were Installed to Achieve 2' Clearance (Vertical) from Existing 6" Sanitary Sewer Line.

1 @ 16"x8" Tapping Sleeve and 8" Valve (COW Provided)
28' West of Clifton Centerline and
23' North of Merilyn Centerline

N: 332,619.9589, E: 17,559,672.2356
STA. 10+00.00, WL NO. 1
CONNECT TO EX. 16" WATERLINE *
CITY TO INSTALL TAPPING SLEEVE, 8" VALVE, AND VALVE BOX. CONTRACTOR TO SET FINAL VALVE BOX ELEVATION TOP VALVE BOX ELEV. = ME

8" V 53568

ORSHIP CENTER CHURCH

CAUTION !!!
EXISTING FIBER (AT&T)

CAUTION !!!
EXISTING TELEPHONE (AT&T)

CAUTION !!!
6" SANITARY SEWER

CAUTION !!!
PROPOSED 12" STORM SEWER (BY OTHERS)

DID NOT INSTALL Per EOR
N: 332,621.0329, E: 17,559,772.2298
STA. 11+00.00, WL NO. 1
INSTALL 8" 11.25° BEND
DEFL. = 11°15'00"

CAUTION !!! HIGH VOLTAGE OVERHEAD ELECTRIC (EVERGY)

DID NOT INSTALL Per EOR
N: 332,613.6511, E: 17,559,811.5428
STA. 11+40.00, WL NO. 1=
MERILYN, STA. 56+04.73, 23' L
INSTALL 8" 11.25° BEND
DEFL. = 11°15'00"

DID NOT INSTALL Per EOR
N: 332,602.4689, E: 17,559,839.3808
STA. 11+70.00, WL NO. 1=
MERILYN, STA. 56+35.85, 22' L
INSTALL 8" 11.25° BEND
DEFL. = 11°15'00"

DID NOT INSTALL Per EOR
N: 332,592.5816, E: 17,559,892.0372
STA. 12+23.58, WL NO. 1=
MERILYN, STA. 56+94.03, 22' L
INSTALL 8" 11.25° BEND
DEFL. = 11°15'00"

100' EASEMENT

39.71 L.F. 8" PIPE

34.74 L.F. 8" PIPE

53.28 L.F. 8" PIPE

29.71 L.F. 8" PIPE

64.15 L.F. 8" RJ PIPE BY DIRECTIONAL DRILL

117.48 L.F. 8" PIPE

57.80 L.F. 8" PIPE

PROPOSED 12" STORM

PROPOSED 18" STORM

PROPOSED SIDEWALK

PROPOSED PAVEMENT LIMITS

R/W LINE

CL CLIFTON

CL MERILYN

MERILYN

YALE

CAUTION !!!
PROPOSED 8" SANITARY SEWER

PROPOSED WATERLINE NO. 3
SEE SHEET CU108

PROPOSED WATERLINE NO. 3
SEE SHEET CU108

N: 332,593.8503, E: 17,560,010.1546
STA. 13+41.70, WL NO. 1=
WL NO. 3, STA. 17+51.40, 0'
INSTALL 8"x8" CROSS
3-8" VALVE ASSEMBLIES (N, E & S)
(MJ GATE VALVES)
TOP VALVE BOX EL. = 1261.0 (N, E & S)

25.8' East and 23' North to 8"x8" DIMJ Cross(SIP)

25.8' East and 26' North to 8" Valve Assembly (N) (AFC)

28.8' East and 23' North to 8" Valve Assembly (E) (AFC)

25.8' East and 20' North to 8" Valve Assembly (S) (AFC)

8" V 56581 (N)
8" V 56580 (E)
8" V 56582 (S)

RP

N: 332594.4765, E: 17560068.4504
WL NO. 1, STA. 14+00.00=
MERILYN, STA. 58+72.60, 23' L
MATCHPOINT

100' EVERGY EASEMENT

20' UTILITY EASEMENT

10' UTILITY EASEMENT

* PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE THE EXISTING 16" WATERLINE AT STATION 10+00.00 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.

UNLESS NOTED OTHERWISE, ELEVATIONS SHOWN ARE TOP OF PIPE.

DICL MJ FITTINGS WITH PCC THRUSTBLOCKS INSTALLED SITEWIDE UNLESS OTHERWISE CALLED OUT

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

WL NO. 1

16"x8" MJ TEE
STA. 10+06.26
EX. FIBER
DEPTH UNKNOWN
STA. 10+09.55
EX. TELE
DEPTH UNKNOWN
STA. 10+13.34
EX. SANI.
DEPTH UNKNOWN
VERTICAL DEFLECTION
23" STORM SEWER
℄ = 1257.33
8" MJ BEND
8" MJ BEND
8" MJ BEND
8" MJ BEND
8" SANITARY SEWER
℄ = 1248.70
8"x8" MJ CROSS
MATCHPOINT

DIRECTIONAL DRILL

PROPOSED GRADE
EXISTING GRADE
TOP OF PROPOSED WATER MAIN

Top of existing 6" Sanitary Sewer is 0.9' above proposed 16" Water Line. Per EOR due to conflict (Teams message)

Restrained Joint(SIP)

2' CLEAR (MIN)

+00.00 1253.59
+65.11 1253.54
+00.00 1255.45
+40.00 1256.60
+70.00 1256.67
+23.58 1256.80
1256.74
1256.99
+41.70 1257.09
+00.00 1257.24

1280 1275 1270 1265 1260 1255 1250 1245 1240 1235 1230

10+00 11+00 12+00 13+00 14+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
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

WATER DISTRIBUTION IMPROVEMENTS

SWANEY FARM ADDITION
PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007798

Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-008
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

WATER LINE NO. 1

CU101

SAVED 8/2/2024 9:19:28 AM BY ARIC.HERMANN
PLOTTED 5/27/2025 8:30:38 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\0042\PD3_PLANS\030_WATER PHASE 1\200605-008-CU101.DWG

REFERENCE POINT CENTERLINE OF MERILYN (E-W) AND PATRICK (N-S)

N: 332594.4765, E: 17560068.4504
WL NO. 1, STA. 14+00.00=
MERILYN, STA. 58+72.60, 23' L
MATCHPOINT

CAUTION !!!
PROPOSED 8"
SANITARY SEWER

21' East and 23' North to 8"x6" DICL Tee (SIP)
24' East and 23' North to 8" Valve Assembly (E) (AFC)
21' East and 19' North to 6" Valve Assembly (S) (AFC)

8" V 56586 (E)
8" V 56587 (S)

N: 332,596.8093, E: 17,560,285.6431
STA. 16+17.21, WL NO. 1=
WL NO. 4, STA. 16+11.95, 0'
INSTALL 8" x 6" TEE
1- 8" VALVE ASSEMBLY (E)
1- 6" VALVE ASSEMBLY (S)
(GATE VALVES)
TOP VALVE BOX ELEV. = 1262.0 (E & S)

RESERVE C

FH 17567
6" V 56583

N: 332598.1401, E: 17560409.5408
WL NO. 1, STA. 17+41.11=
MERILYN, STA. 62+12.96', 23' L
1- 3° 44' 20" DEFLECTION

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

190' East and 21'9" North to 8" 22.5° Bend (SIP)

N: 332,595.6767, E: 17,560,454.6852
STA. 17+86.32, WL NO. 1=
MERILYN, STA. 62+57.42, 23' L
INSTALL 8" 22.50° BEND (VERTICAL)

N: 332,597.2125, E: 17,560,323.1790
STA. 16+54.74, WL NO. 1=
MERILYN, STA. 61+27.34, 23' L
INSTALL FIRE HYDRANT ASSEMBLY
L = 4'
TOP VALVE BOX ELEV. = 1262.2
TOP OF BURY ELEV. = 1262.2

59' East and 19' North to Fire Hydrant
Fire Hydrant (American Darling)
59' East and 21' North to FH Valve (AFC)
*Fire Hydrant Valve is 2' North of Hydrant
59' East and 23' North to Tee (SIP)

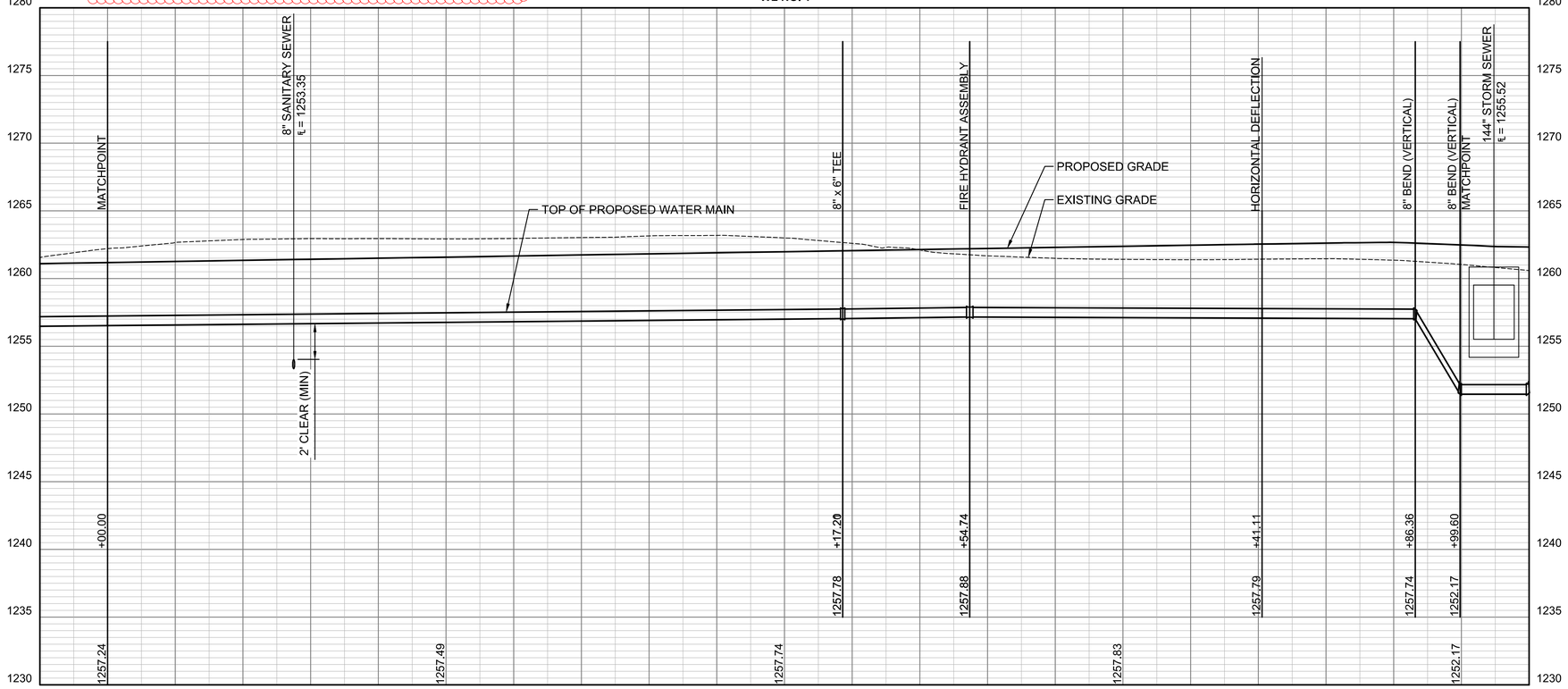
N: 332,594.9533, E: 17,560,467.9427
STA. 17+99.60, WL NO. 1=
MERILYN, STA. 62+70.70, 23' L
INSTALL 8" 22.50° BEND (VERTICAL)
MATCHPOINT

203' East and 21' North to 8" 22.5° Bend (SIP)

20' DRAINAGE & UTILITY EASEMENT
10' DRAINAGE & UTILITY EASEMENT
R/W LINE
PROPOSED PAVEMENT LIMITS
6.00'
216.79 L.F. 8" PIPE
36.37 L.F. 8" PIPE
85.62 L.F. 8" PIPE
45.00 L.F. 8" PIPE
12.89 L.F. 8" DI PIPE
MERILYN
CL MERLYN
RP
PROPOSED WATERLINE NO. 4
SEE SHEET CU112
PROPOSED 24" STORM
PROPOSED SIDEWALK
PROPOSED 8" SANITARY SEWER
PROPOSED 144" X 48" STORM
PROPOSED 36" STORM
10' UTILITY EASEMENT
15' UTILITY EASEMENT
20' UTILITY EASEMENT
CL PATRICK
PATRICK
RESERVE E

UNLESS NOTED OTHERWISE, ELEVATIONS SHOWN ARE TOP OF PIPE.

DICL MJ FITTINGS WITH PCC THRUSTBLOCKS INSTALLED SITEWIDE UNLESS OTHERWISE CALLED OUT



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

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 05/27/2025 KANSAS PROFESSIONAL ENGINEER

WATER DISTRIBUTION IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007798

Issue:	
	08/17/2026 - cjr

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-008
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

WATER LINE NO. 1

CU102

SAVED 8/12/2024 7:21:41 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 8:31:21 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_WATER PHASE 1\200605-008-CU102.DWG

REFERENCE POINT CENTERLINE OF MERILYN (E-W) AND PATRICK (N-S)

441' East and 18' North to Fire Hydrant
Fire Hydrant (American Darling)

441' East and 21' North to FH Valve (AFC)
*Fire Hydrant Valve is 3' North of Hydrant

441' East and 22' North to Tee (SIP)

506' East and 22' North to 8" 11.25° DIMJ Bend (SIP)

N: 332,592.0121, E: 17,560,770.0844
STA. 21+01.89, WL NO. 1=
MERILYN, STA. 65+77.55, 22' L
INSTALL 8" 11.25° BEND
DEFL. = 11°15'00"
MATCHPOINT

N: 332,591.3115, E: 17,560,704.8577
STA. 20+36.66, WL NO. 1=
MERILYN, STA. 65+09.26, 23' L
INSTALL FIRE HYDRANT ASSEMBLY
L = 4'
TOP OF VALVE BOX ELEV. = 1262.6
TOP OF BURY ELEV. = 1262.6

FH 17568
6" V 56584

224' East and 19' North to
8" 22.5° Bend (SIP)

N: 332,593.8646, E: 17,560,487.8943
STA. 18+19.58, WL NO. 1=
MERILYN, STA. 62+90.68, 23' L
INSTALL 8" 22.50° BEND (VERTICAL)

CAUTION !!!
PROPOSED 12' X 4'
STORM SEWER

N: 332,594.9533, E: 17,560,467.9427
STA. 17+99.60, WL NO. 1=
MERILYN, STA. 62+70.70, 23' L
8" 22.50° BEND (VERTICAL)
MATCHPOINT

204' East and 20' North to
8" 22.5° DIMJ Bend (SIP)

N: 332,593.1208, E: 17,560,501.5231
STA. 18+33.23, WL NO. 1=
MERILYN, STA. 63+04.33, 23' L
INSTALL 8" 22.50° BEND (VERTICAL)

237' East and 23' North to
8" 22.5° DIMJ Bend (SIP)

N: 332589.7818, E: 17560562.6699
WL NO. 1, STA. 18+94.47=
MERILYN, STA. 63+65.57, 23' L
HORIZONTAL DEFLECTION = 3° 44' 20"

CAUTION !!!
PROPOSED 8"
SANITARY SEWER

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

RESERVE C
RESERVE E
20' UTILITY EASEMENT
R/W LINE
MERILYN
CL MERILYN
PROPOSED SIDEWALK
PROPOSED PAVEMENT LIMITS
PROPOSED 8" SANITARY
15' UTILITY EASEMENT
PROPOSED 36" STORM
PROPOSED 144" X 48" STORM
PROPOSED 18" STORM
PROPOSED 30" STORM
PROPOSED 8" STORM
PROPOSED 8" SANITARY
6.00'
TS
PREVIOUS SHEET
RP

19.56 L.F. 8" DI PIPE
13.26 L.F. 8" DICL PIPE
61.03 L.F. 8" PIPE
141.45 L.F. 8" PIPE
64.33 L.F. 8" PIPE

17+00 18+00 19+00 20+00 21+00 22+00
62+00 63+00 64+00 65+00 66+00 67+00

UNLESS NOTED OTHERWISE,
ELEVATIONS SHOWN ARE TOP OF PIPE.

DICL MJ FITTINGS WITH PCC THRUSTBLOCKS INSTALLED
SITEWIDE UNLESS OTHERWISE CALLED OUT

WL NO. 1

8" BEND (VERTICAL) +86.36 1257.74
8" BEND (VERTICAL) MATCHPOINT +99.60 1252.17
12" STORM SEWER ℄ = 1255.52
8" BEND (VERTICAL) +19.60 1252.17
8" BEND (VERTICAL) +33.21 1257.89
8" SANITARY SEWER ℄ = 1251.57
HORIZONTAL DEFLECTION +94.47 1258.02
1258.03
TOP OF PROPOSED WATER MAIN
PROPOSED GRADE
EXISTING GRADE
2.0'
2' CLEAR (MIN)
1258.23
FIRE HYDRANT ASSEMBLY +36.66 1258.30
8" BEND MATCHPOINT +01.89 1258.24
1258.24

1280 1275 1270 1265 1260 1255 1250 1245 1240 1235 1230

18+00 19+00 20+00 21+00

SAVED 10/29/2024 10:22:57 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 8:32:09 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_WATER PHASE 1\200605-008-CU103.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 05/27/2025 KANSAS PROFESSIONAL ENGINEER

WATER DISTRIBUTION IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007798

Issue:		
	08/17/2026 - cjr	

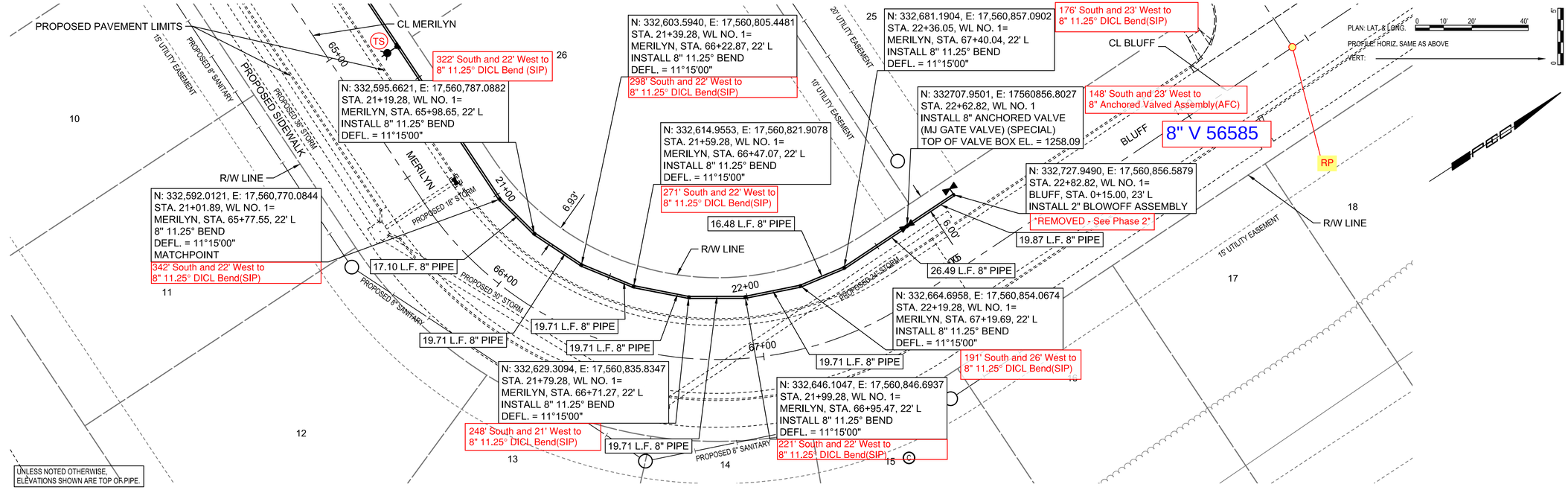
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-008
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

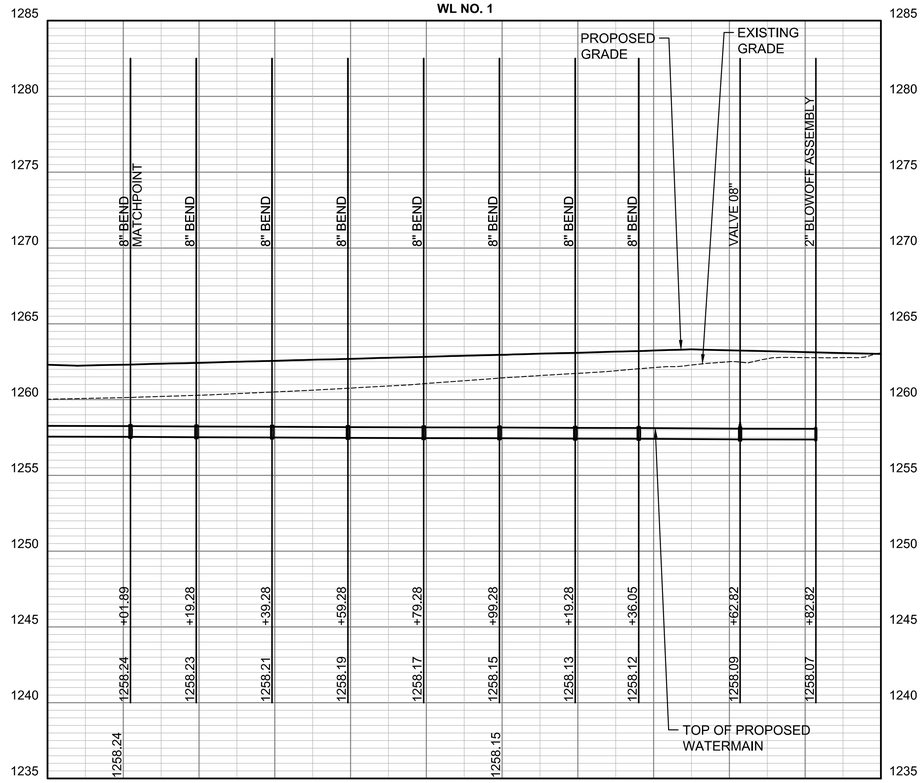
WATER LINE NO. 1

CU103

REFERENCE POINT (RP) CENTERLINE OF BLUFF /MARILYN (N-S) AND WILLIS (E-W)
(Measured along CL of Bluff/Merilyn from RP)



DICL MJ FITTINGS WITH PCC THRUSTBLOCKS INSTALLED SITEWIDE UNLESS OTHERWISE CALLED OUT



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

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 05/27/2025 KANSAS PROFESSIONAL ENGINEER

WATER DISTRIBUTION IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007798

Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-008
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

WATER LINE NO. 1

CU104

SAVED 5/27/2025 8:26:32 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 8:32:56 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\0042\PD3_PLANS\030_WATER PHASE 1\200605-008-CU104.DWG

REFERENCE POINT CENTERLINE OF 61ST ST SOUTH (E-W) AND YALE (N-S)

20' West of Centerline of Clifton and
24' South of Centerline of 61st St. South to
16"x 8" Tapping Sleeve and 8" Valve Assembly
Sleeve and Valve Supplied by COW

1 @ 45 Degree Bend (Vertical) (RJ FITTING) (SIP)
17' West of Clifton Centerline and
24' South of 61st St. South Centerline

1 @ 45 Degree Bend (Vertical) (RJ FITTING) (SIP)
14' West of Clifton Centerline and
24' South of 61st St. South Centerline

The 2 @ 45 Degree Bends Were Installed to Achieve 2' Clearance (Vertical) from Existing 6" Sanitary Sewer Line.

8" V 55752

71' West and 25' South to
8" 11.25° DICL Bend(SIP)

N: 333,285.8110, E: 17,559,676.9037
STA. 10+00.00, WL NO. 2
CONNECT TO EX. 16" WATERLINE *
CITY TO INSTALL TAPPING SLEEVE, 8" VALVE, AND VALVE BOX. CONTRACTOR TO SET FINAL VALVE BOX ELEVATION TOP VALVE BOX ELEV. = ME

N: 333290.5182, E: 17559876.6123
WL NO. 2, STA. 12+00.00=
61ST STREET, STA. 11+73.47, 25' R
MATCHPOINT

N: 333,287.8180, E: 17,559,863.7606
STA. 11+86.87, WL NO. 2=
61ST STREET, STA. 11+62.24, 25' R
INSTALL 8" 11.25° BEND
DEFL. = 11°15'00"

CAUTION !!!
EXISTING FIBER
(AT&T)

CAUTION !!!
SANITARY SEWER

CAUTION !!!
EXISTING TELEPHONE
(AT&T)

58.18 L.F. 8" RJ PIPE BY DIRECTIONAL DRILL

127.58 L.F. 8" PIPE

12.99 L.F. 8" PIPE

CAUTION !!!
PROPOSED 8" SANITARY
(BY OTHERS)

CAUTION !!! HIGH VOLTAGE
OVERHEAD ELECTRIC
(EVERGY)

PROPOSED SIDEWALK

RESERVE A

RESERVE B

RESERVE C

BOUNDARY LINE

CL 61ST STREET SOUTH

61ST STREET SOUTH

CL YALE

R/W LINE

PROPOSED PAVEMENT LIMITS

RP

15' UTILITY EASEMENT

25' UTILITY EASEMENT

20' UTILITY EASEMENT

5' UTILITY EASEMENT

100' EVERGY EASEMENT

PROPOSED 8" SANITARY

UNPLATTED

THE WELL ADDITION

10+00

11+00

12+00

3+00

11+00

6.91'

7.50'

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

* PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE THE EXISTING WATERLINE AT STATION 10+00.00 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.

UNLESS NOTED OTHERWISE,
ELEVATIONS SHOWN ARE TOP OF PIPE.

DICL MJ FITTINGS WITH PCC THRUSTBLOCKS INSTALLED SITEWIDE UNLESS OTHERWISE CALLED OUT

WL NO. 2

DIRECTIONAL DRILL

16"x8" TEE

VERTICAL DEFLECTION

TOP OF PROPOSED WATERMAIN

PROPOSED GRADE

EXISTING GRADE

8" BEND

MATCHPOINT

2' CLEAR (MIN)

1260.15 +00.00

1260.00 +59.14

1260.09

1260.28 +86.87

1260.31 +00.00

1285 1280 1275 1270 1265 1260 1255 1250 1245 1240 1235

10+00 11+00 12+00

Existing 6" Sanitary Sewer
In Conflict with Proposed
WL. WL lowered per EOR

Restrained Joint (SIP)

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

CITY OF WICHITA

KEVIN P. GRAHAM
LICENSED
27806
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

WATER DISTRIBUTION IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007798

Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-008
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

WATER LINE NO. 2

CU105

SAVED 8/26/2024 2:07:59 PM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 8:33:51 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_WATER PHASE 1\200605-008-CU105.DWG

REFERENCE POINT CENTERLINE OF 61ST ST SOUTH (E-W) AND YALE (N-S)

RESERVE A

37' East and 24' South to 8" 45° Bend (Vertical)(SIP)
N: 333,342.0156, E: 17,559,971.2821
STA. 13+09.44, WL NO. 2=
61ST STREET, STA. 12+70.07, 25' R
~~INSTALL 8" 22.50° BEND (VERTICAL)~~

52' East and 11' South to 8" 45° DICL Bend (SIP)
N: 333,348.4465, E: 17,559,978.8230
STA. 13+19.35, WL NO. 2=
61ST STREET, STA. 12+79.98, 25' R
~~INSTALL 8" 22.50° BEND (VERTICAL)~~

69' East and 25' South to 8" 45° DICL Bend (SIP)
N: 333,362.6285, E: 17,559,995.4530
STA. 13+41.21, WL NO. 2=
61ST STREET, STA. 13+01.84, 25' R
INSTALL 8" 45° BEND (VERTICAL)

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

N: 333,310.1125, E: 17,559,930.8986
STA. 12+57.94, WL NO. 2=
61ST STREET, STA. 12+23.12, 25' R
INSTALL 8" 11.25° BEND
DEFL. = 11°15'00"
PC POINT

10' West and 25' South and 8" 11.25° DICL Bend(SIP)

N: 333,365.1822, E: 17,559,998.4474
STA. 13+45.14, WL NO. 2=
61ST STREET, STA. 13+05.77, 25' R
INSTALL 8" 45° BEND (VERTICAL)

72' East and 25' South to 8" 45° DICL Bend(SIP)

Did not Install Bend
N: 333,367.4687, E: 17,560,001.1286
STA. 13+48.66, WL NO. 2=
61ST STREET, STA. 13+09.29, 25' R
INSTALL 8" 11.25° BEND
DEFL. = 11°15'00"

Did not Install Bend

8" V56590

99' East and 26' South to
8" Anchored Valve MJ GATE SPECIAL(AFC)
N: 333385.9140, E: 17560025.0693
STA. 13+79.00, WL NO. 2=
61ST STREET, STA. 13+39.48, 26' R
INSTALL 8" ANCHOR VALVE
(MJ GATE VALVE) (SPECIAL)
TOP OF VALVE BOX EL. = 1264.23

N: 333,293.9864, E: 17,559,893.1196
STA. 12+16.87, WL NO. 2=
61ST STREET, STA. 11+87.92, 25' R
INSTALL 8" 11.25° BEND
DEFL. = 11°15'00"

45' West and 25' South to
8" 11.25° Bend DICL (SIP)

PROPOSED SANITARY SEWER
PROPOSED PAVEMENT LIMITS
PROPOSED SIDEWALK
PROPOSED 96" x 72" STORM
PROPOSED 24" STORM
PROPOSED 16" STORM
15' UTILITY EASEMENT
R/W LINE

RP
61ST STREET SOUTH
375.00' R.
CL 61ST STREET SOUTH

35'.00 L.F. 8" PIPE
22.37 L.F. 8" PIPE
7.40 L.F. 8" DI PIPE
3.09 L.F. 8" DI PIPE
3.52 L.F. 8" DI PIPE
21.36 L.F. 8" DI PIPE
9.53 L.F. 8" DI PIPE
9.51 L.F. 8" DI PIPE
16.72 L.F. 8" PIPE
40.79 L.F. 8" PIPE
40.55 L.F. 8" PIPE
20.72 L.F. 8" PIPE
32.77 8" PIPE

N: 333290.5182, E: 17559876.6123
WL NO. 2, STA. 12+00.00=
61ST STREET, STA. 11+73.47, 25' R
MATCHPOINT

N: 333333.2975, E: 17559961.0592
WL NO. 2, STA. 12+96.00
PT POINT

N: 333,399.4449, E: 17,560,040.9358
STA. 13+99.85, WL NO. 2=
61ST STREET, STA. 13+63.68, 25' R
2" BLOWOFF ASSEMBLY
REMOVED - See Phase 2 tie in

N: 333,335.3599, E: 17,559,963.4776
STA. 12+99.18, WL NO. 2=
WL NO. 3, STA. 10+00.00, 0'
INSTALL 8"x8" TEE
2- 8" VALVE ASSEMBLIES (NE & SE)
(MJ GATE VALVES)
TOP VALVE BOX ELEV. = 1264.6 (NE)
TOP VALVE BOX ELEV. = 1264.7 (SE)

PROPOSED PAVEMENT LIMITS
PROPOSED SIDEWALK

RESERVE C
PROPOSED WATERLINE NO. 3
SEE SHEET CU107

20' UTILITY EASEMENT
CL YALE
YALE

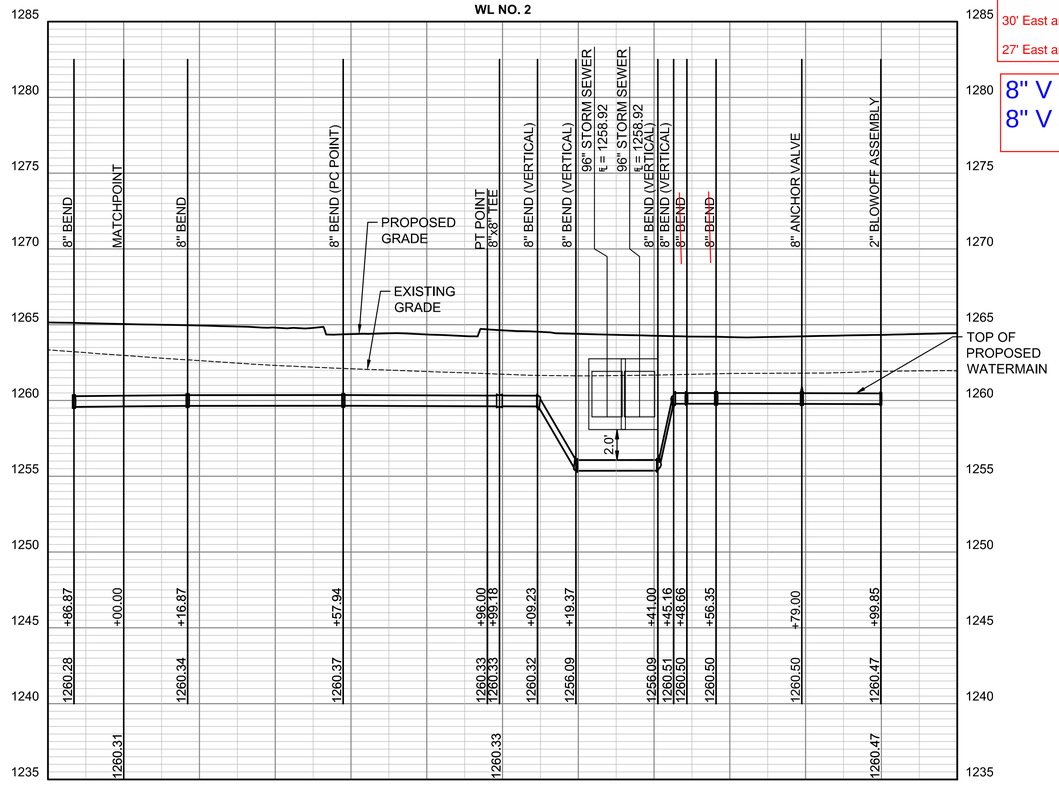
UNLESS NOTED OTHERWISE, ELEVATIONS SHOWN ARE TOP OF PIPE.

DICL MJ FITTINGS WITH PCC THRUSTBLOCKS TYPICAL INSTALLATION UNLESS OTHERWISE CALLED OUT

27' East and 25' South to 8"x8" Tee DICL (SIP)
30' East and 25' South to 8" Valve Assembly (NE) (AFC)
27' East and 28' South to 8" Valve Assembly (SE)(AFC)

8" V 56588 (E)
8" V 56589 (S)

WL NO. 2



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

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 05/27/2025 KANSAS PROFESSIONAL ENGINEER

WATER DISTRIBUTION IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007798

Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-008
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

WATER LINE NO. 2

CU106

SAVED 5/27/2025 8:27:09 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 8:34:41 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\0042\2PD3_PLANS\030_WATER PHASE 1\200605-008-CU106.DWG

REFERENCE POINT CENTERLINE OF 61ST ST SOUTH (E-W) AND YALE (N-S)

27' East and 25' South to 8"x8" Tee DICL (SIP)

N: 333,335.3599, E: 17,559,963.4776
STA. 12+99.18, WL NO. 2=
WL NO. 3, STA. 10+00.00
8"x8" TEE

N: 333,326.2293, E: 17,559,971.2643
STA. 10+12.00, WL NO. 3=
YALE, STA. 37+45.92, 27' R
INSTALL 8" 11.25° BEND
DEFL. = 11°15'00"

DID NOT INSTALL 11.25° BEND per EOR

N: 333,291.3150, E: 17,559,990.7833
STA. 10+52.00, WL NO. 3=
YALE, STA. 37+11.87, 26' R
INSTALL 8" 11.25° BEND
DEFL. = 11°15'00"
PC POINT

N: 333202.8469, E: 17560007.0617
WL NO. 3, STA. 11+42.39=
YALE, STA. 36+32.06, 26' R
PT POINT

N: 332945.2431, E: 17560008.3700
WL NO. 3, STA. 14+00.00=
YALE, STA. 33+74.45, 26' R
MATCHPOINT

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

RESERVE C

15' DRAINAGE & UTILITY EASEMENT

PROPOSED 8" SANITARY

R/W LINE

PROPOSED PAVEMENT LIMITS

6.00'

6.59'

RADIUS = 250.00'

13.16 L.F. 8" PIPE

77.09 L.F. 8" PIPE

39.71 L.F. 8" PIPE

11.31 L.F. 8" PIPE

257.61 L.F. 8" PIPE

CL YALE

YALE

TS

PROPOSED WATERLINE NO. 2
SEE SHEET CU106

61ST STREET SOUTH

8" V 56588 (E)
8" V 56589 (S)

UNLESS NOTED OTHERWISE, ELEVATIONS SHOWN ARE TOP OF PIPE.

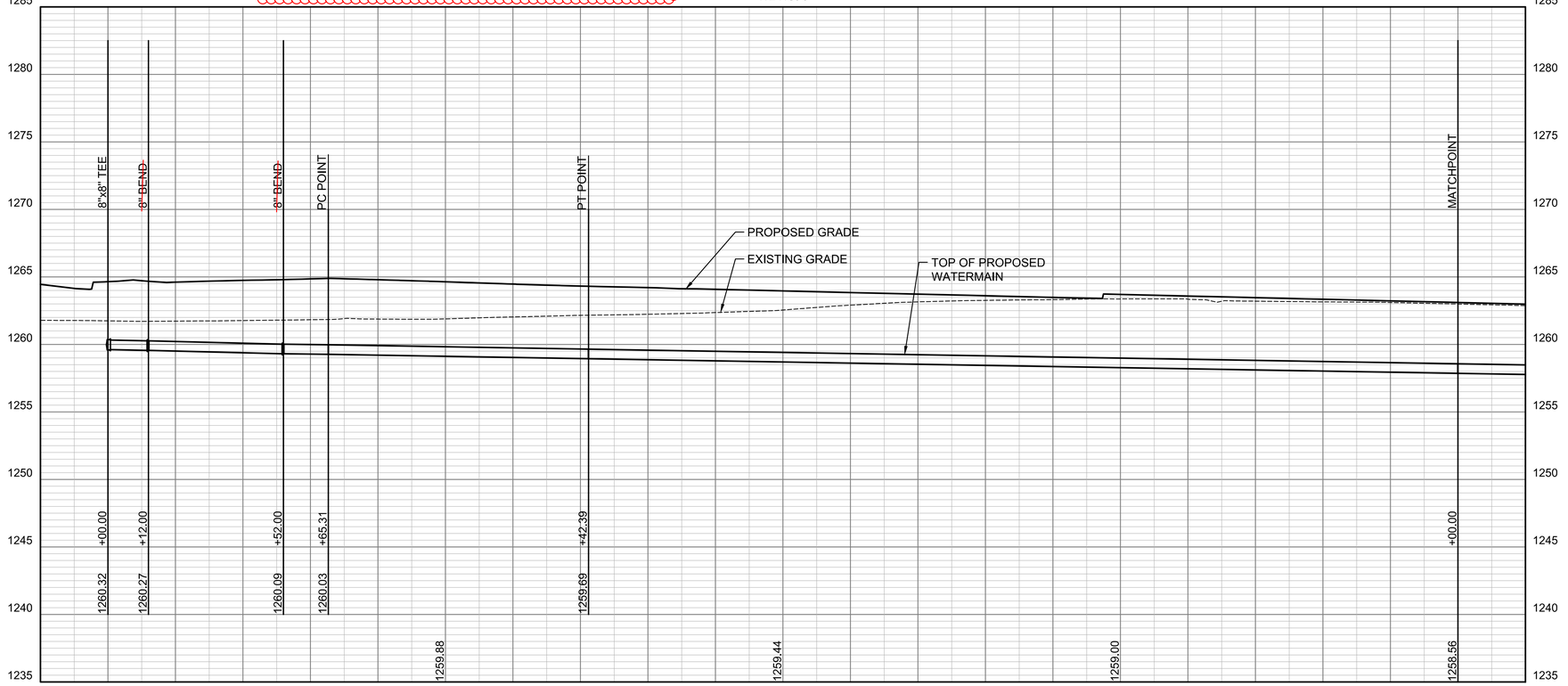
DICL MJ FITTINGS WITH PCC THRUSTBLOCKS TYPICAL INSTALLATION UNLESS OTHERWISE CALLED OUT

PROPOSED SIDEWALK

PROPOSED 8" SANITARY

5' UTILITY EASEMENT

20' UTILITY EASEMENT



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

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 05/27/2025 KANSAS PROFESSIONAL ENGINEER

WATER DISTRIBUTION IMPROVEMENTS

SWANEY FARM ADDITION
PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007798

Issue:	
	08/17/2026 - cjr

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-008
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

WATER LINE NO. 3

CU107

SAVED 8/26/2024 2:14:26 PM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 8:35:30 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_WATER PHASE 1\200605-008-CU107.DWG

REFERENCE POINT CENTERLINE OF MERILYN (E-W) AND YALE (N-S)

N: 332945.2431, E: 17560008.3700
WL NO. 3, STA. 14+00.00=
YALE, STA. 33+74.45, 26' R
MATCHPOINT

N: 332,924.2153, E: 17,560,008.4768
STA. 14+21.03, WL NO. 3=
YALE, STA. 33+53.42, 26' R
INSTALL FIRE HYDRANT ASSEMBLY
L = 4'
TOP OF VALVE BOX ELEV. = 1263.0
TOP OF BURY ELEV. = 1263.0

353' North and 22' East to Fire Hydrant
Fire Hydrant (American Darling)

353' North and 23' East to FH Valve
*Fire Hydrant Valve is 3' East of Hydrant

353' North and 26' East to Tee

FH 17570
6" V 56591

PROPOSED WATERLINE NO.1
SEE SHEET CU101

CL MERILYN

23' North and 26' East to 8"x8" Cross DICL (SIP)

N: 332,593.8503, E: 17,560,010.1546
STA. 13+41.70, WL NO. 1=
WL NO. 3, STA. 17+51.40, 0'
8"x8" CROSS

8" V 56581 (N)
8" V 56580 (E)
8" V 56582 (S)

PROPOSED PAVEMENT LIMITS

R/W LINE

6.00'

MERILYN

10.00 L.F. 8" PIPE

PROPOSED 18" STORM

PROPOSED SIDEWALK

10' UTILITY EASEMENT

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

20.28 L.F. 8" PIPE

329.12 L.F. 8" PIPE

YALE

CL YALE

38.10 L.F. 8" PIPE

RP

CAUTION !!!
STORM SEWER

N: 332545.2482, E: 17560010.3777
WL NO. 3, STA. 18+00.00=
YALE, STA. 29+74.45, 26' R
MATCHPOINT

PROPOSED SIDEWALK

PROPOSED 8" SANITARY

20' UTILITY EASEMENT

PROPOSED 18" STORM

UNLESS NOTED OTHERWISE, ELEVATIONS SHOWN ARE TOP OF PIPE.

DICL MJ FITTINGS WITH PCC THRUSTBLOCKS TYPICAL INSTALLATION UNLESS OTHERWISE CALLED OUT

WL NO. 3

MATCHPOINT
FIRE HYDRANT ASSEMBLY
TOP OF PROPOSED WATERMAIN
EXISTING GRADE
PROPOSED GRADE
8"x8" CROSS
VERTICAL DEFLECTION
24" STORM SEWER
℄ = 1256.83
MATCHPOINT

1258.56 1258.47 1258.14 1257.72 1257.30 1257.09 1254.50 1254.56 1254.65

+00.00 +21.03 +51.40 +90.00 +00.00 +13.36

14+00 15+00 16+00 17+00 18+00

1280 1275 1270 1265 1260 1255 1250 1245 1240 1235 1230

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

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 05/27/2025 KANSAS PROFESSIONAL ENGINEER

WATER DISTRIBUTION IMPROVEMENTS

SWANEY FARM ADDITION
PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007798

Issue:
08/17/2026 - cjr

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-008
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

WATER LINE NO. 3

CU108

SAVED 8/26/2024 2:16:42 PM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 8:36:14 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_WATER PHASE 1\200605-008-CU108.DWG

REFERENCE POINT CENTERLINE OF YALE (N-S) AND PATRICK (E-W)

R/W LINE

PROPOSED PAVEMENT LIMITS

PROPOSED SIDEWALK

PROPOSED 18" STORM

10' UTILITY EASEMENT

N: 332545.2483, E: 17560010.4014
WL NO. 3, STA. 18+00.00=
YALE, STA. 29+74.45, 26' R
MATCHPOINT

8" V 56594 (E)
8" V 56593 (S)

21' South and 26' East to 8"x6" Tee(SIP)

24' South and 26' East to 8" Valve(S)(AFC)

21' South and 29' East to 6" Valve (E)(AFC)

PROPOSED WATERLINE NO.4
SEE SHEET CU110

PROPOSED PAVEMENT LIMITS

N: 332,205.3491, E: 17,560,012.1276
STA. 21+39.90, WL NO. 3=
WL NO. 4, STA. 10+00.00, 0'
8" x 6" TEE
1- 8" VALVE (S)
1- 6" VALVE (E)
(GATE VALVES)
TOP VALVE BOX ELEV. = 1261.3 (E & S)

PATRICK

N: 332,192.9113, E: 17,560,012.1908
STA. 21+52.34, WL NO. 3=
YALE, STA. 26+22.11, 26' R
INSTALL 8" x 6" FIRE HYDRANT ASSEMBLY
L = 4'
TOP VALVE BOX ELEV. = 1261.2
TOP OF BURY ELEV. = 1261.2

34' South and 22' East to Fire Hydrant
8"x6" Fire Hydrant Assembly (American Darling)

34' South and 25' East to Fire Hydrant Valve (AFC)
*Fire Hydrant Valve is 3' East of Hydrant

34' South and 26' East to Tee DICL (SIP)

36' South and 26' East to 8"x4" DICL Reducer (SIP)

N: 332,190.8551, E: 17,560,012.2013
STA. 21+54.40, WL NO. 3=
YALE, STA. 26+20.06, 26' R
INSTALL 8"x4" REDUCER

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

N: 332,097.3489, E: 17,560,012.6761
STA. 22+47.91, WL NO. 3=
YALE, STA. 25+26.55, 26' R
INSTALL 2" BLOWOFF ASSEMBLY

2" BO 56592

129' South and 27' to 2" Blowoff Valve (AFC)

339.49 L.F. 8" PIPE

1.10 L.F. 8" DI PIPE

11.27 L.F. 8" PIPE

93.30 L.F. 4" PIPE

CL PATRICK

CL YALE

CL MERILYN

YALE

MERILYN

RP

FH 17571
6" V 56595

PROPOSED SIDEWALK

PROPOSED 8" SANITARY

20' UTILITY EASEMENT

R/W LINE

UNLESS NOTED OTHERWISE,
ELEVATIONS SHOWN ARE TOP OF PIPE.

DICL MJ FITTINGS WITH PCC THRUSTBLOCKS TYPICAL INSTALLATION UNLESS OTHERWISE CALLED OUT

WL NO. 3

VERTICAL DEFLECTION

MATCHPOINT

TOP OF PROPOSED WATERMAIN

PROPOSED GRADE

EXISTING GRADE

2.1'

8" x 6" TEE

FIRE HYDRANT ASSEMBLY

8"x4" REDUCER

2" BLOWOFF ASSEMBLY

+90.00 1254.50
+00.00 1254.56
1255.19
1255.83
1256.46
+39.90 1256.71
+52.34 1256.75
+54.40 1256.76
1256.88
+47.80 1257.01

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

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 05/27/2025 KANSAS PROFESSIONAL ENGINEER

WATER DISTRIBUTION IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007798

Issue:

08/17/2026 - cjr

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-008
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

WATER LINE NO. 3

CU109

SAVED 8/12/2024 8:43:25 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 8:37:01 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\0042\PD3_PLANS\030_WATER PHASE 1\200605-008-CU109.DWG

REFERENCE POINT (RP) CENTERLINE OF YALE (N-S) AND PATRICK (E-W)

PROPOSED PAVEMENT LIMITS
R/W LINE
PROPOSED SIDEWALK
100' EVERGY EASEMENT
20' UTILITY EASEMENT
PROPOSED 8" SANITARY
YALE
CL YALE
CL PATRICK
PATRICK
RP
27+00
26+00
22+00
21+00
60+00
61+00
62+00
13+00
12+00
11+00
10+00

231' East and 23' South to 6" 22.50° Bend DICL (SIP)

N: 332,217.3052, E: 17,560,217.0503
STA. 12+06.00, WL NO. 4=
PATRICK, STA. 62+22.40, 24' R
INSTALL 6" 22.50° BEND
DEFL. = 22°30'00"
MATCHPOINT

182' East 22' South and to 6" 11.25° Bend DICL (SIP)

N: 332,207.0246, E: 17,560,168.1186
STA. 11+56.00, WL NO. 4=
PATRICK, STA. 61+81.14, 22' R
INSTALL 6" 11.25° BEND
DEFL. = 11°15'00"

N: 332,205.3491, E: 17,560,012.1276
STA. 10+00.00, WL NO. 4=
WL NO. 3, STA. 21+39.90, 0'
8" x 6" TEE

26' EAST AND 22' SOUTH TO 8"X6" TEE DICL (SIP)

PROPOSED WATERLINE NO.3
SEE SHEET CU109

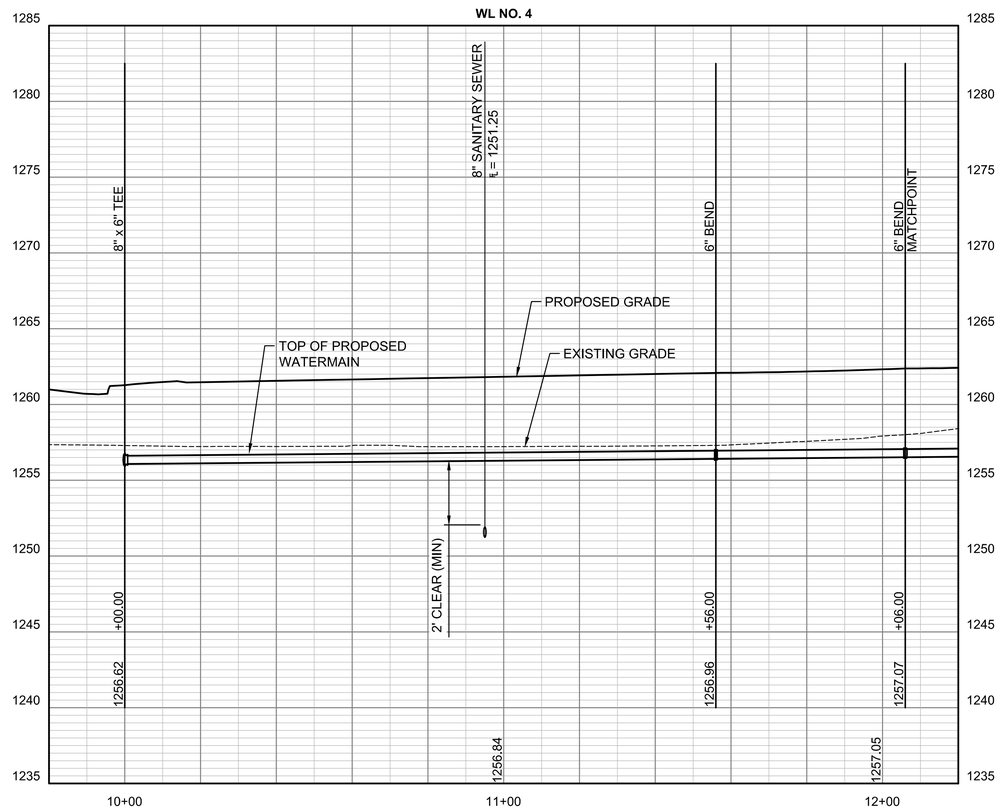
8" V 56594 (E)
8" V 56593 (S)

30' DRAINAGE & UTILITY EASEMENT
PROPOSED 8" SANITARY
7.50'
12 LF
155.33 L.F. 6" PIPE
CAUTION !!! SANITARY SEWER
49.71 L.F. 6" PIPE
8.38'
15' UTILITY EASEMENT
RESERVE E

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

UNLESS NOTED OTHERWISE, ELEVATIONS SHOWN ARE TOP OF PIPE.

DICL MJ FITTINGS WITH PCC THRUSTBLOCKS TYPICAL INSTALLATION UNLESS OTHERWISE CALLED OUT



PLAN: LAT. & LONG. 0 10' 20' 40'
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 05/27/2025 KANSAS PROFESSIONAL ENGINEER

WATER DISTRIBUTION IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007798

Issue:	
	08/17/2026 - cjr

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-008
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

WATER LINE NO. 4

CU110

SAVED 8/26/2024 2:20:13 PM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 8:37:49 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_WATER PHASE 1\200605-008-CU110.DWG

REFERENCE POINT CENTERLINE OF YALE(E-W) AND PATRICK (N-S)

255' East and 23' South to 6" 22.5° DICL Bend(SIP)

222' East 23' South to 6" 22.5° DICL Bend(SIP)

N: 332,239.8840, E: 17,560,250.0685
STA. 12+46.00, WL NO. 4=
PATRICK, STA. 62+55.07, 24' R
INSTALL 6" 22.50° BEND
DEFL. = 22°30'00"

N: 332,217.3052, E: 17,560,217.0503
STA. 12+06.00, WL NO. 4=
PATRICK, STA. 62+22.40, 24' R
6" 22.50° BEND
DEFL. = 22°30'00"
MATCHPOINT

N: 332,281.7534, E: 17,560,277.3989
STA. 12+96.00, WL NO. 4=
PATRICK, STA. 62+96.21, 22' R
INSTALL 6" 22.50° BEND
DEFL. = 22°30'00"

284 South of Marilyn Centerline
23' East of Patrick Centerline
1 6" 22.5° DICL Bend (SIP)

N: 332,332.7999, E: 17,560,286.9839
STA. 13+47.94, WL NO. 4=
PATRICK, STA. 63+39.49, 22' R
INSTALL 6" 11.25° BEND
DEFL. = 11°14'50"
MATCHPOINT

241' South of Marylin Centerline
and 22' East of Patrick Centerline
1-6" 11.25° Bend DICL (SIP)

PROPOSED 8" SANITARY

30' DRAINAGE & UTILITY EASEMENT

20' DRAINAGE & UTILITY EASEMENT

15' UTILITY EASEMENT

20' UTILITY EASEMENT

R/W LINE

PROPOSED SIDEWALK

PATRICK

CL PATRICK

PROPOSED PAVEMENT LIMITS

11+00 12+00 13+00 14+00

62+00 63+00 64+00

39.67 L.F. 6" PIPE

6.80'

8.32'

49.67 L.F. 6" PIPE

9.64'

51.65 L.F. 6" PIPE

PLAN: LAT. & LONG. 0 10' 20' 40'

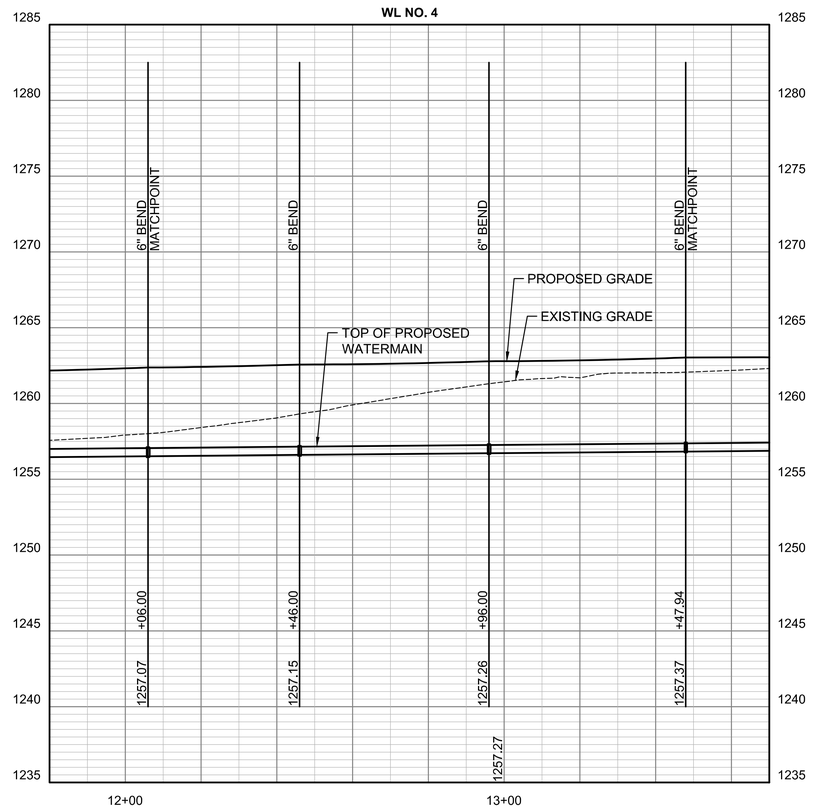
PROFILE: HORIZ. SAME AS ABOVE

VERT: 0 5'

RESERVE E

UNLESS NOTED OTHERWISE, ELEVATIONS SHOWN ARE TOP OF PIPE.

DICL MJ FITTINGS WITH PCC THRUSTBLOCKS TYPICAL INSTALLATION UNLESS OTHERWISE CALLED OUT



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

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 05/27/2025 KANSAS PROFESSIONAL ENGINEER

WATER DISTRIBUTION IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007798

Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

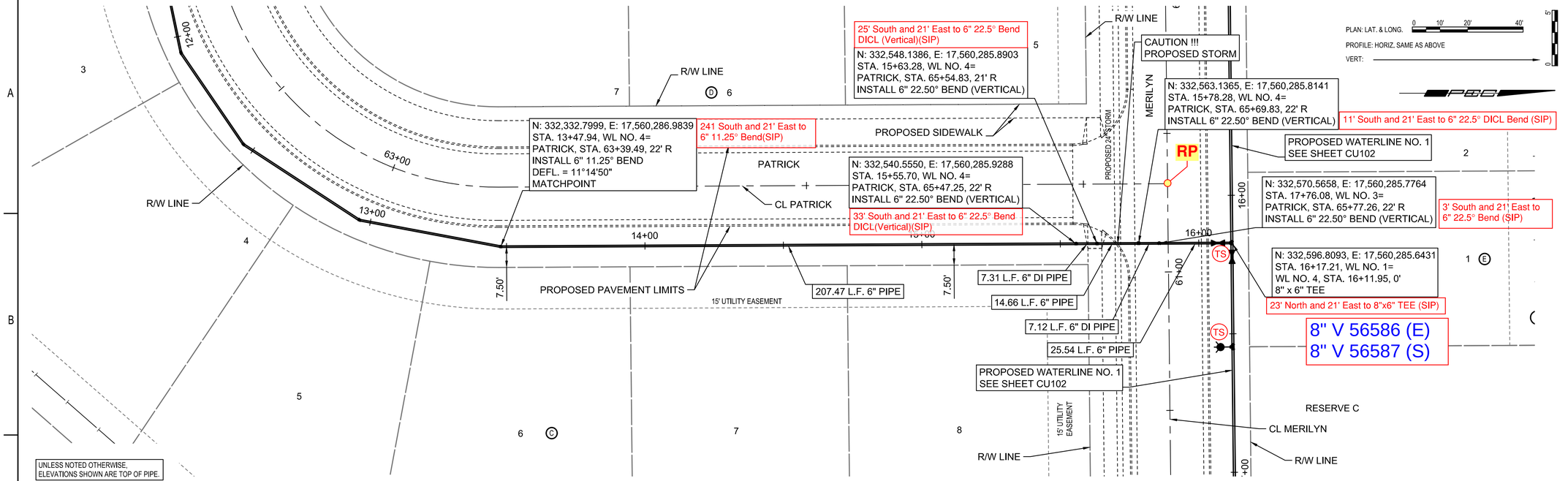
JOB NO.	200605-008
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

WATER LINE NO. 4

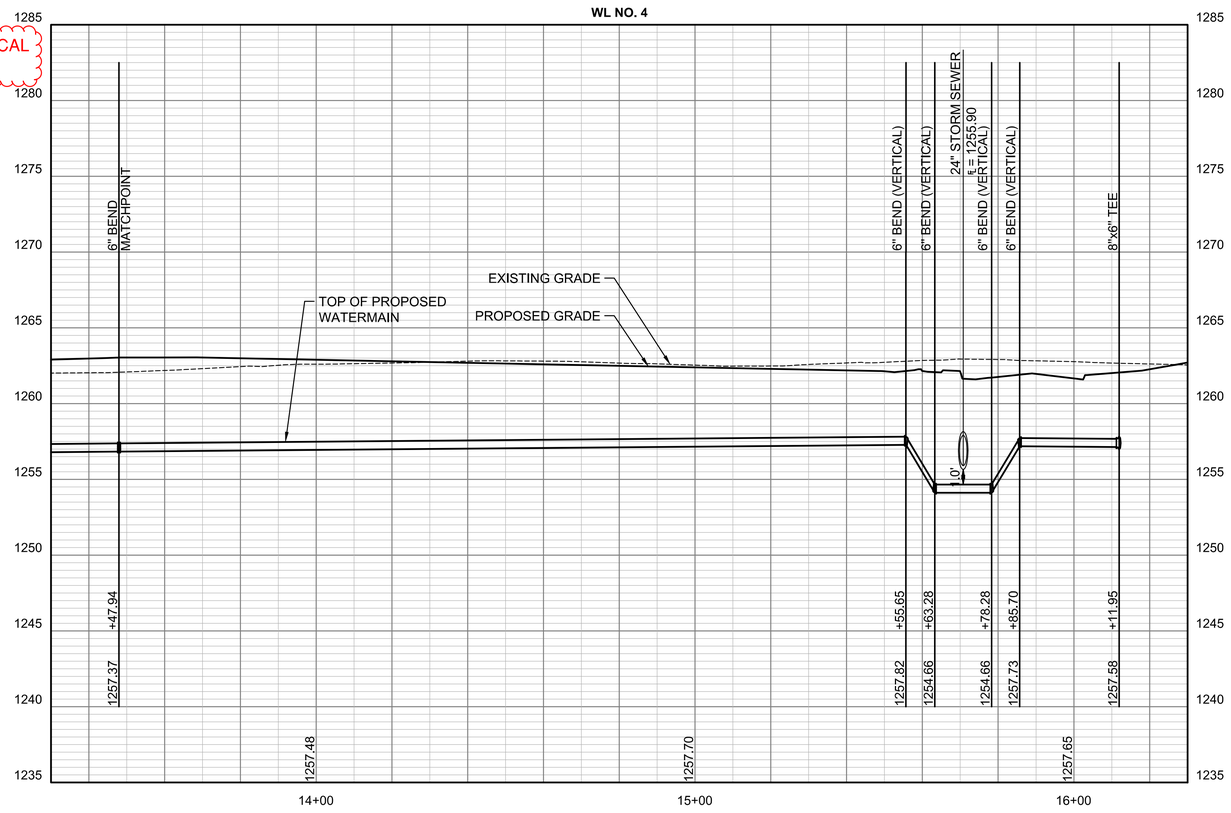
CU111

SAVED 8/2/2024 11:50:00 AM BY ARIC.HERMANN
PLOTTED 5/27/2025 8:38:33 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_WATER PHASE 1\200605-008-CU111.DWG

REFERENCE POINT (RP) CENTERLINE OF MERILYN AND PATRICK



DICL MJ FITTINGS WITH PCC THRUSTBLOCKS TYPICAL INSTALLATION UNLESS OTHERWISE CALLED OUT



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

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 05/27/2025 KANSAS PROFESSIONAL ENGINEER

WATER DISTRIBUTION IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007798

Issue:	
	08/17/2026 - cjr

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

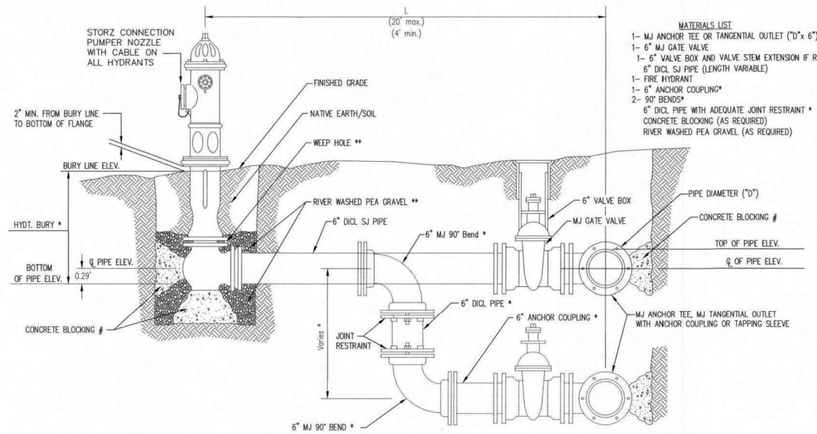
JOB NO.	200605-008
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

WATER LINE NO. 4

CU112

SAVED 10/29/2024 10:22:11 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 8:39:19 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\0301_WATER PHASE 1\200605-008-CU112.DWG

FIRE HYDRANTS REQUIRED				
STATION	BURY LINE ELEVATION	TOP OF PIPE ELEVATION	FIRE HYDRANT BURY REQUIRED*	VALVE STEM EXT. REQUIRED (ft)*
16+54.74, WL1	1262.21	1257.88	4.5	N/A
20+36.66, WL 1	1262.63	1258.30	4.5	N/A
14+21.03, WL3	1262.98	1258.47	5.0	N/A
21+52.34, WL3	1261.16	1256.75	5.0	N/A



MATERIALS LIST
1- MJ ANCHOR TEE OR TANGENTIAL OUTLET ("D"x 6")
1- 6" MJ GATE VALVE
1- 6" VALVE BOX AND VALVE STEM EXTENSION IF REQUIRED *
6" DICL SJ PIPE (LENGTH VARIABLE)
1- FIRE HYDRANT
1- 6" ANCHOR COUPLING*
2- 90° BENDS*
6" DICL PIPE WITH ADEQUATE JOINT RESTRAINT *
CONCRETE BLOCKING (AS REQUIRED)
RIVER WASHED PEA GRAVEL (AS REQUIRED)

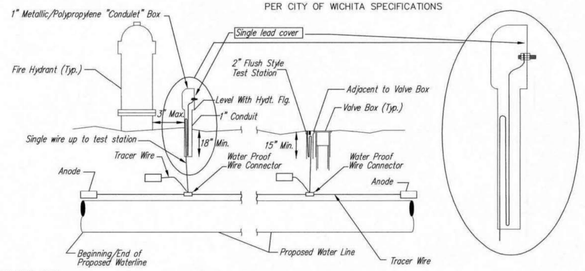
* IF THE REQUIRED HYDRANT BURY IS IN EXCESS OF 5', BUT LESS THAN 7', CONTRACTOR SHALL USE STANDARD 5' HYDRANT BURY AND HYDRANT BARREL EXTENSIONS AS NECESSARY. IF THE REQUIRED HYDRANT BURY IS GREATER THAN 7', CONTRACTOR SHALL USE 5' HYDRANT BURY, 2-MJ 90° BENDS, 6" ANCHOR COUPLING AND 6" DICL PIPE AS NECESSARY FOR VERTICAL ADJUSTMENT. THE CONTRACTOR SHALL PROVIDE ADEQUATE THRUST BLOCKING AT HYDRANT AND MEGALUGS, OR SIMILAR RESTRAINT BETWEEN 90° BENDS TO SECURE ALL FITTINGS DURING TESTING AND OPERATION. THE CONTRACTOR SHALL PROVIDE A VALVE STEM EXTENSION PER DETAIL THIS SHEET.

** CAUTION: WEEP HOLES TO BE KEPT CLEAR DURING CONSTRUCTION AND BACKFILL. CONCRETE FOR THRUST BLOCKING SHALL NOT OBSTRUCT WEEP HOLES. PLACE 1 CUBIC FOOT OF RIVER WASHED PEA GRAVEL AROUND EACH WEEP HOLE.

\# CONCRETE THRUST BLOCKING SHALL BE KEPT CLEAR OF BOLTS, NUTS, AND MJ ACCESSORIES.

FIRE HYDRANT ASSEMBLY

PER CITY OF WICHITA SPECIFICATIONS



TRACER WIRE
Conductive type pipe locator/tracer wire shall be install to locate all waterline pipe regardless of pipe material. The wire shall extend the entire length of the proposed pipe. The wire shall be taped to the waterline and pulled with the pipe. A waterproof connector shall be used at splice locations. A complete list of approved tracer wire and waterproof connectors can be found on the City of Wichita's website at www.wichita.gov.

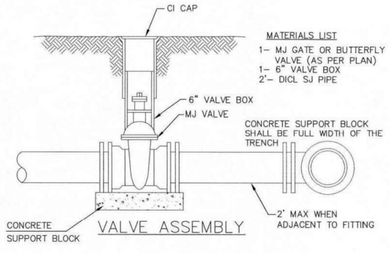
WIRE
The tracer wire shall be Blue No. 12 AWG CCS with 45 mil HDPE insulation. To allow for grade adjustment, a minimum of 12" of excess wire shall be coiled at the bottom of the test station for all wires. Wire connectors shall be installed per manufacturer recommendations. Contractor shall attach wire being installed with proposed water main to any tracer wire installed with adjacent waterline projects.

TEST STATIONS
*The test station for fire hydrant application shall be a 1" "conduiet" style station as manufactured by AGRA Industries with a removable solid cover having a single lead extending from the face or approved equal. The "conduit" style test station shall be attached to a 1" rigid galvanized conduit with a minimum length of 36" and plastic end bushing. The flush style shall have the word "WATER" stamped or molded into the lid. The test station for valve applications shall be a 2" flush style test station with wire connector on lid. Model # T2PH7B1LP Handley Industries or CD14*TP SnakePit as manufactured by Copperhead Industries or approved equal. The flush style shall have the word "WATER" stamped or molded into the lid. All test stations shall be manufactured using molded blue tops or sufficiently coated with blue enamel paint. The tracer wire and the anode wire shall be install to allow 12" of wire within the test station. The location of all test stations shall be recorded, and shown in the as-built drawings. Flush style test stations shall not be installed in pavement or sidewalk unless approved by the Engineer. Contractor shall extend tracer wire & move flush mount test station to nearest location out of pavement or sidewalk.*

ANODES
The anodes shall be 3 lb. bare zinc or magnesium. The anodes shall be buried at the same elevation as the waterline at each test station. The anodes shall be connected to 12 AWG CCS which shall be extended to the test station.

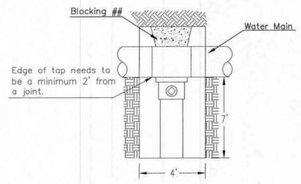
TRACER WIRE DETAIL

COST IS SUBSIDIARY TO PIPE INSTALLATION



MATERIALS LIST
1- MJ GATE OR BUTTERFLY VALVE (AS PER PLAN)
1- 6" VALVE BOX
2'- DICL SJ PIPE

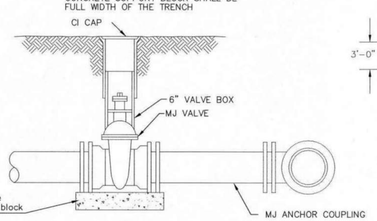
VALVE ASSEMBLY



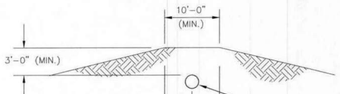
CITY TAP

When the City of Wichita makes tap, blocking is to be done by Contractor

MATERIALS LIST
1-MJ GATE OR BUTTERFLY VALVE (AS PER PLAN)
1-MJ ANCHOR COUPLING (12" OR SMALLER)
1-6" VALVE BOX
CONCRETE SUPPORT BLOCK SHALL BE FULL WIDTH OF THE TRENCH

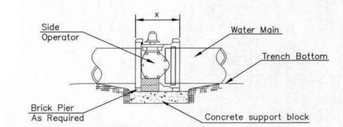


ANCHORED VALVE ASSEMBLY



PROTECTIVE FILL DETAIL

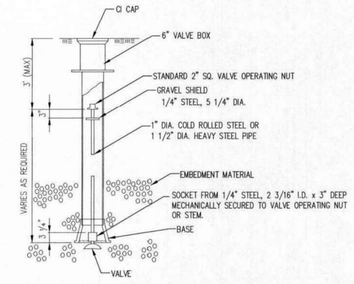
MINIMUM PROTECTIVE FILL SHALL BE PROVIDED IN ALL INSTANCES WHERE COVER OVER THE PROP. WATER LINE IS LESS THAN 3'. (COST SUBSIDIARY TO PIPE INSTALLATION)



NOTES

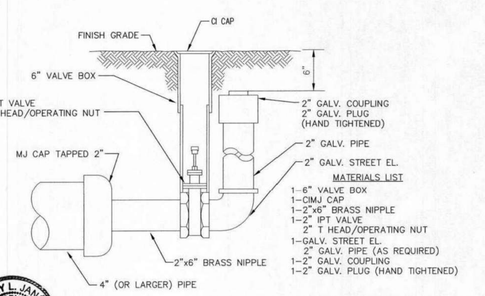
1. This detail covers Butterfly Valve installation, inclusive, regardless of type of pipe or joint used. 24" and larger lines to be detailed on plans.
2. 6" Valve Box and Cover required per City of Wichita Std. Specifications.
3. Conc. Support Block to be full width of trench.

CONCRETE SUPPORT BLOCKING FOR BUTTERFLY VALVE INSTALLATION



VALVE STEM EXTENSION DETAIL

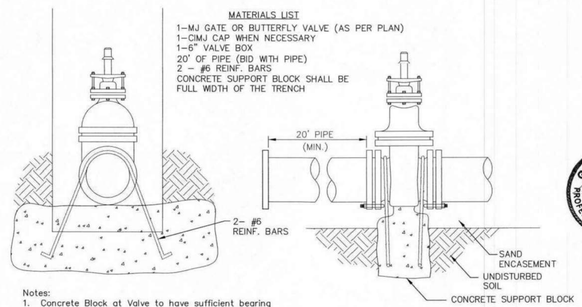
NOTE: ONE VALVE STEM EXTENSION FOR EACH VALVE BURIED GREATER THAN 5'.



MATERIALS LIST
1-6" VALVE BOX
1-CIMJ CAP
1-2"x6" BRASS NIPPLE
1-2" IPT VALVE
2" T HEAD/OPERATING NUT
1-GALV. STREET EL.
2" GALV. PIPE (AS REQUIRED)
1-2" GALV. COUPLING
1-2" GALV. PLUG (HAND TIGHTENED)

2" BLOWOFF ASSEMBLY





MATERIALS LIST
1-MJ GATE OR BUTTERFLY VALVE (AS PER PLAN)
1-CIMJ CAP WHEN NECESSARY
1-6" VALVE BOX
20' OF PIPE (BID WITH PIPE)
2 - #6 REINF. BARS
CONCRETE SUPPORT BLOCK SHALL BE FULL WIDTH OF THE TRENCH

Notes:
1. Concrete Block at Valve to have sufficient bearing in undisturbed soil to prevent thrust movement as shown in table at right. Field Engineer to determine thrust loading of undisturbed soil and final size of thrust block.
2. The thrust block shall be constructed such that bolts, nuts, and other MJ accessories are kept clear of concrete.
3. All valves at dead ends and at other locations as called out on the plans shall be blocked as shown here.

THRUST AT VALVES

VALVE	THRUST AT 150 #/in²
4"	1809 lbs.
6"	4245 lbs.
8"	7540 lbs.
12"	16965 lbs.

ANCHORED VALVE ASSEMBLY, SPECIAL

REVISED: OCTOBER 2016

CITY OF WICHITA
PUBLIC WORKS & UTILITIES ENGINEERING DIVISION

STANDARD WATER ASSEMBLY DETAIL

CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER	OCA NUMBER	DATE

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

SHEET

WL-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 05/27/2025 KANSAS PROFESSIONAL ENGINEER

WATER DISTRIBUTION IMPROVEMENTS

SWANEY FARM ADDITION
PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007798

Issue:		
	08/17/2026 - cjr	

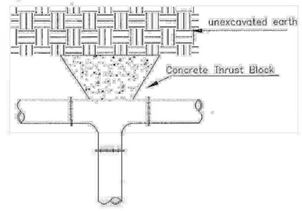
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-008
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

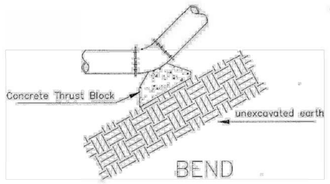
STANDARD WATER ASSEMBLY DETAIL

CU501

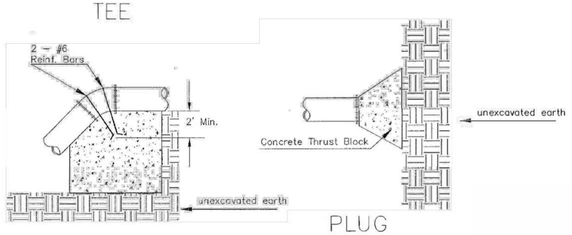
SAVED 8/12/2024 8:43:12 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 8:39:24 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\0004\2PD3_PLANS\030_WATER PHASE 1\200605-008-CU501.DWG



TEE



BEND

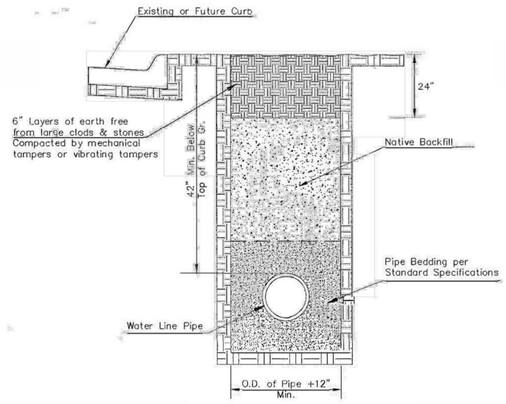


VERTICAL BEND

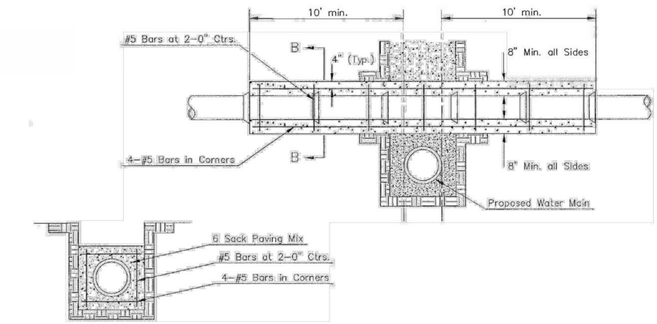
PLUG

PIPE SIZE	THRUST AT FITTINGS IN TONS–AT 150#/IN^{2}P					
	PLUG	90°	45°	22 1/2°	11 1/4°	TEE
6"	2.8	3.95	2.15	1.09	.55	2.8
8"	4.9	6.95	3.75	1.90	.96	4.9
12"	11.4	16.1	8.75	4.45	2.25	11.4
16"	20.15	28.5	15.4	7.85	3.95	20.15
20"	31.15	44.0	23.85	12.15	6.10	31.15
24"	44.55	63.0	34.1	17.4	8.75	44.55

TYPICAL THRUST BLOCKS



TRENCH COMPACTION IN ROAD RIGHT–OF–WAY

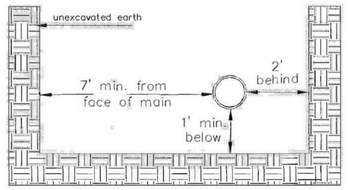


SECTION B–B

Note: Encasement to begin and end at a Bell on Sanitary Sewer Pipe.

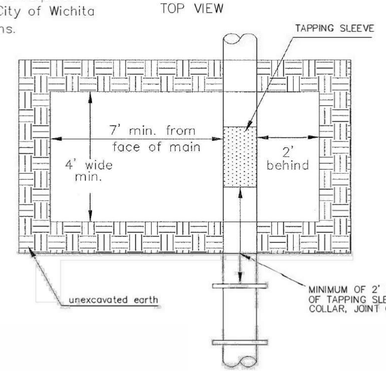
REINFORCED CONCRETE ENCASEMENT OF SANITARY SEWER

SIDE VIEW

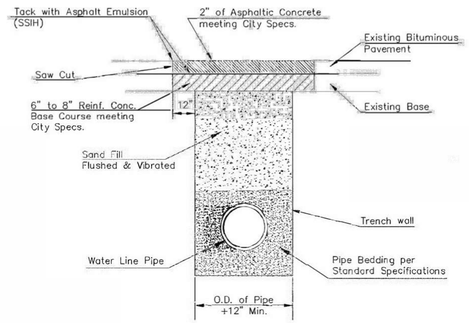


Note: When shoring is required it is to be per The City of Wichita Standard Specifications.

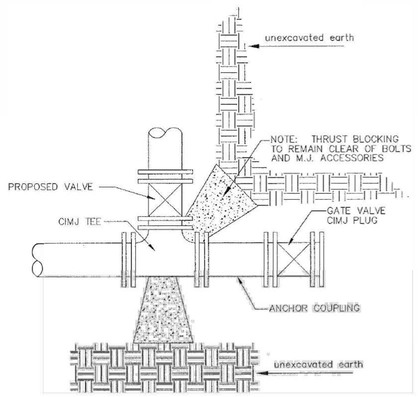
TOP VIEW



EXCAVATION FOR WET TAP



PAVEMENT REPLACEMENT & TRENCH COMPACTION UNDER EXISTING AND PROPOSED CITY ROADS



KEY BLOCK DETAIL

* PLANS GOVERN UNLESS OTHERWISE NOTED ON PLANS

REVISED: JULY 2015

CITY OF WICHITA
PUBLIC WORKS & UTILITIES ENGINEERING DIVISION

MISCELLANEOUS WATER DETAILS

CITY ENGINEER
GARY JANZEN, P.E..

PROJECT NUMBER	OCA NUMBER	DATE

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

SHEET

WL-104

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

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 05/27/2025 KANSAS PROFESSIONAL ENGINEER

WATER DISTRIBUTION IMPROVEMENTS

SWANEY FARM ADDITION
PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007798

Issue:

08/17/2026 - cjr

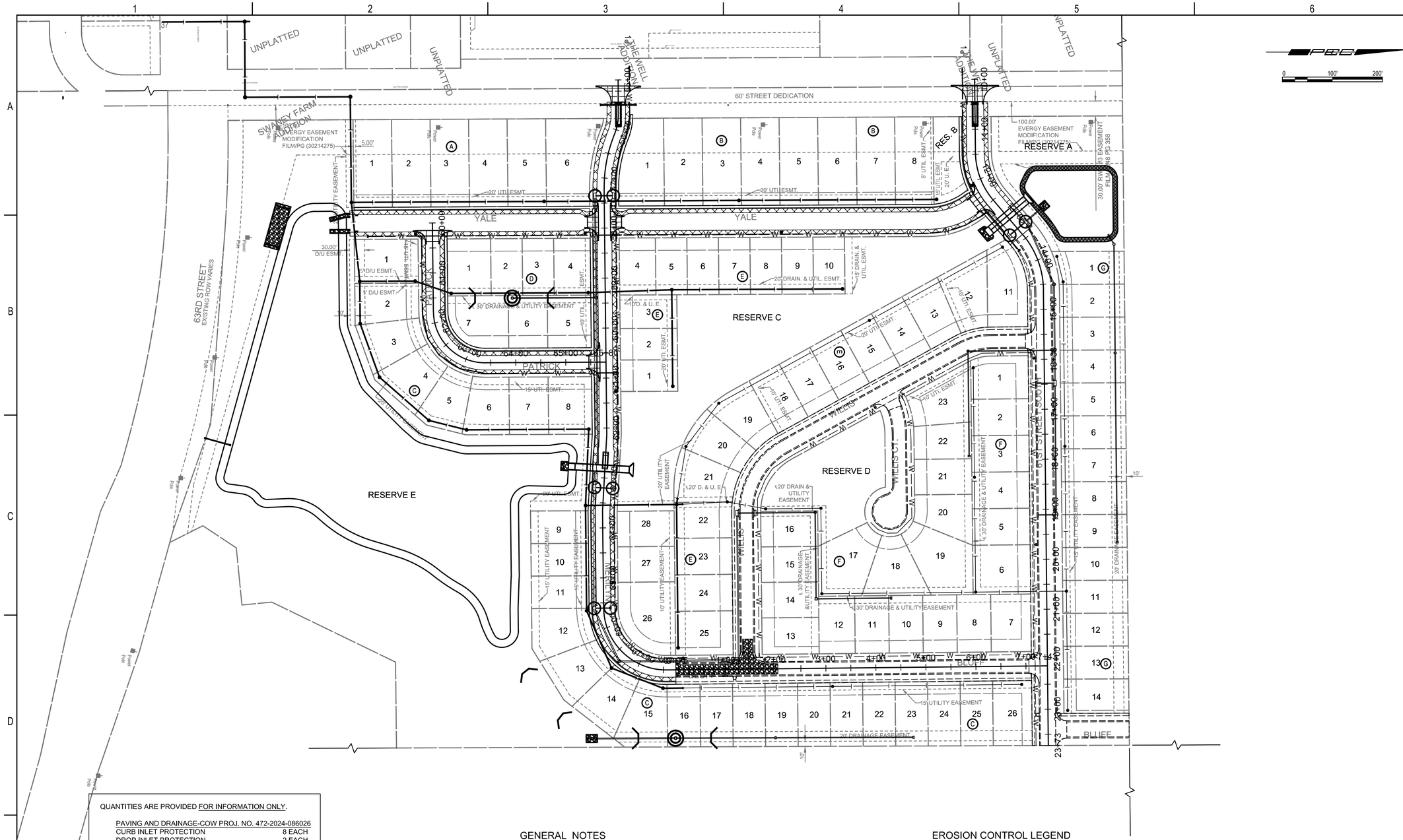
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-008
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

MISCELLANEOUS WATER DETAILS

CU502

SAVED 4/16/2024 2:21:25 PM BY ARIC.HERMANN
PLOTTED 5/27/2025 8:39:30 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\0042PD3_PLANS\030_WATER PHASE 1\200605-008-CU504.DWG



PEC
0 100' 200'

QUANTITIES ARE PROVIDED FOR INFORMATION ONLY.

PAVING AND DRAINAGE-COW PROJ. NO. 472-2024-086026

CURB INLET PROTECTION	8 EACH
DROP INLET PROTECTION	2 EACH
BACK OF CURB PROTECTION	6,293 L.F.
LIGHT STONE RIPRAP	136 S.Y.

SWD-COW PROJ. NO. 526-458-085570

DITCH CHECK PROTECTION	6 EACH
SILT FENCE PROTECTION	1,935 L.F.
LIGHT STONE RIPRAP	70 S.Y.
HEAVY STONE RIPRAP	310 S.Y.
TURF REINFORCEMENT MAT	5,325 S.Y.

SANITARY SEWER-COW PROJ. NO. 468-2024-007800

WATER-COW PROJ. NO. 448-2024-007798

STABILIZED CONSTRUCTION ENTRANCE	2 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 AREA 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 05/27/2025 KANSAS PROFESSIONAL ENGINEER

WATER DISTRIBUTION IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007798

Issue:

08/17/2026 - cjr

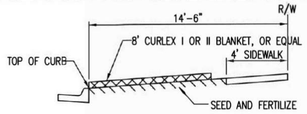
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-008
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

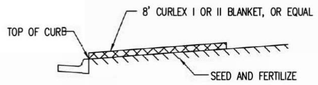
EROSION CONTROL PLAN

CU503

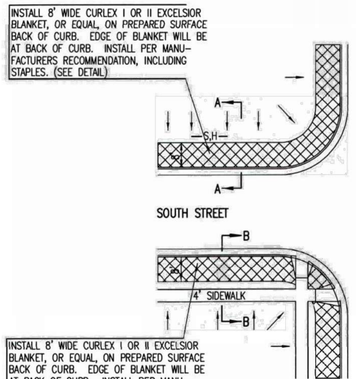
SAVED 4/26/2024 11:05:46 AM BY ARIC.HERMANN
PLOTTED 5/27/2025 8:39:41 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_WATER PHASE 1\200605-008-CU506.DWG



SECTION B–B



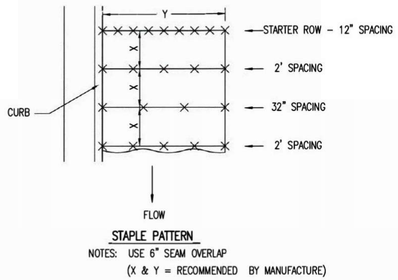
SECTION A–A

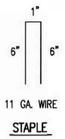


GENERAL NOTES

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

BACK OF CURB PROTECTION DETAIL

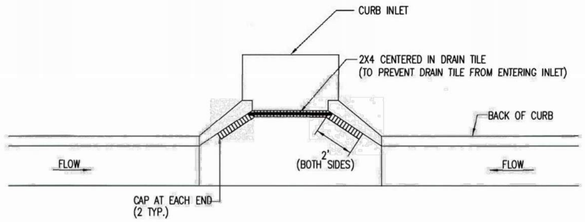




STAPLE PATTERN

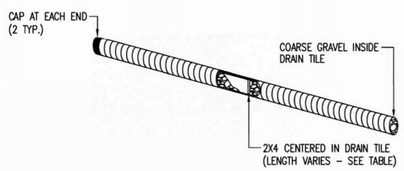
NOTES: USE 6" SEAM OVERLAP
(X & Y = RECOMMENDED BY MANUFACTURE)

DETAILS FOR APPROVED EROSION CONTROL MAT

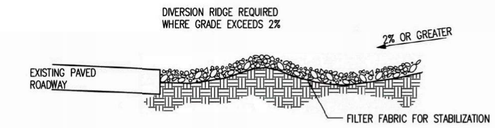


NOTE:
PLACE 4" PERFORATED PVC PIPE, FILLED WITH 1/2"–1" DIA. GRAVEL, IN FRONT OF CURB INLET AS SHOWN.

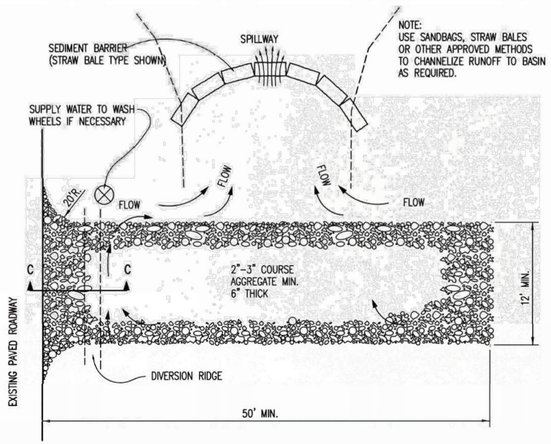
2X4 LENGTH	INLET TYPE	INLET OPENING
5'–6"	1–A	5'–0"
10'–6"	1–A	10'–0"
15'–6"	1–A	15'–0"



CURB INLET PROTECTION
4" PERFORATED PIPE W/ GRAVEL



SECTION C–C



STABILIZED CONSTRUCTION ENTRANCE

GENERAL NOTES

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

REVISION DATE: MAY 2013

GARY L. JANZEN — LICENSED PROFESSIONAL ENGINEER — KANSAS
05/12, 13

CITY OF WICHITA
PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

BACK OF CURB PROTECTION, CURB INLET PROTECTION AND CONSTRUCTION ENTRANCE

CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER	OCA NUMBER	DATE

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

SHEET

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 — 05/27/2025 — KANSAS — PROFESSIONAL ENGINEER

WATER DISTRIBUTION IMPROVEMENTS

SWANEY FARM ADDITION
PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007798

Issue:		
	08/17/2026 - cjr	

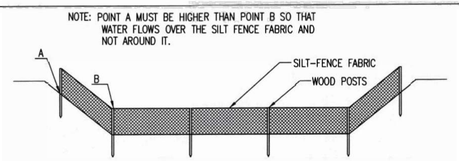
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-008
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

BACK OF CURB & CURB INLET PROTECTION & CONSTRUCTION ENTRANCE

CU504

SAVED 4/26/2024 11:19:21 AM BY ARIC.HERMANN
PLOTTED 5/27/2025 8:39:49 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_WATER PHASE 1\200605-008-CU507.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.

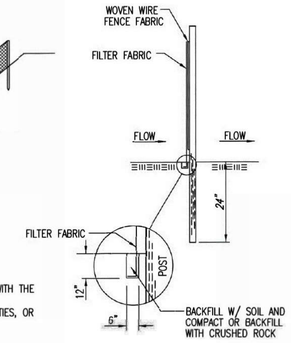
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

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.

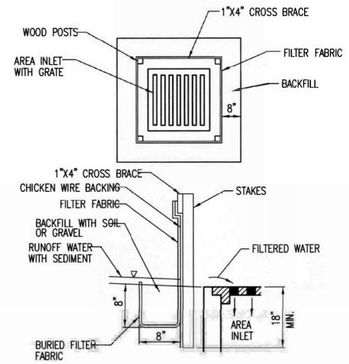
INSPECTION AND MAINTENANCE:

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.

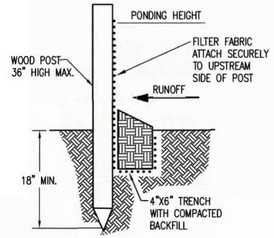
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

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

GARY L. JANZEN CERTIFIED 16294 KANSAS PROFESSIONAL ENGINEER
05/21/13

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

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

SHEET

SW-502

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

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 05/27/2025 KANSAS PROFESSIONAL ENGINEER

WATER DISTRIBUTION IMPROVEMENTS

SWANEY FARM ADDITION
PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007798

Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

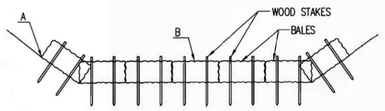
JOB NO.	200605-008
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

SILT FENCE DITCH CHECK AND BARRIER DETAILS

CU505

SAVED 5/24/2024 11:49:04 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 8:39:53 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\0042\PD3_PLANS\030_WATER PHASE 1\200605-008-CU508.DWG

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".

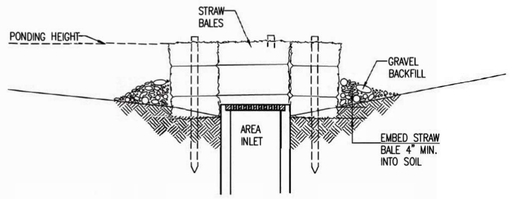
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

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.

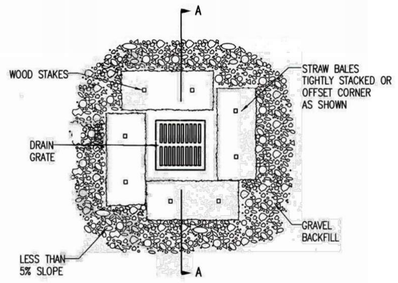
INSPECTION AND MAINTENANCE:

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.

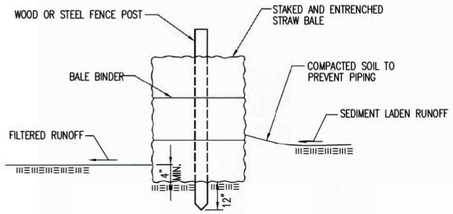
LIST OF COMMON PLACEMENT INSTALLATION MISTAKES TO AVOID:

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 16264 KANSAS PROFESSIONAL ENGINEER 05/29/13

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

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

SHEET

SW-503

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

CITY OF WICHITA

KEVIN R. GRAHAM LICENSED 27806 05/27/2025 KANSAS PROFESSIONAL ENGINEER

WATER DISTRIBUTION IMPROVEMENTS

SWANEY FARM ADDITION
PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007798

Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-008
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

STRAW BALE DITCH CHECK AND BARRIER DETAILS

CU506

SAVED 5/24/2024 11:49:16 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 8:39:58 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\00412\PD3_PLANS\030_WATER PHASE 1\200605-008-CU509.DWG

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.

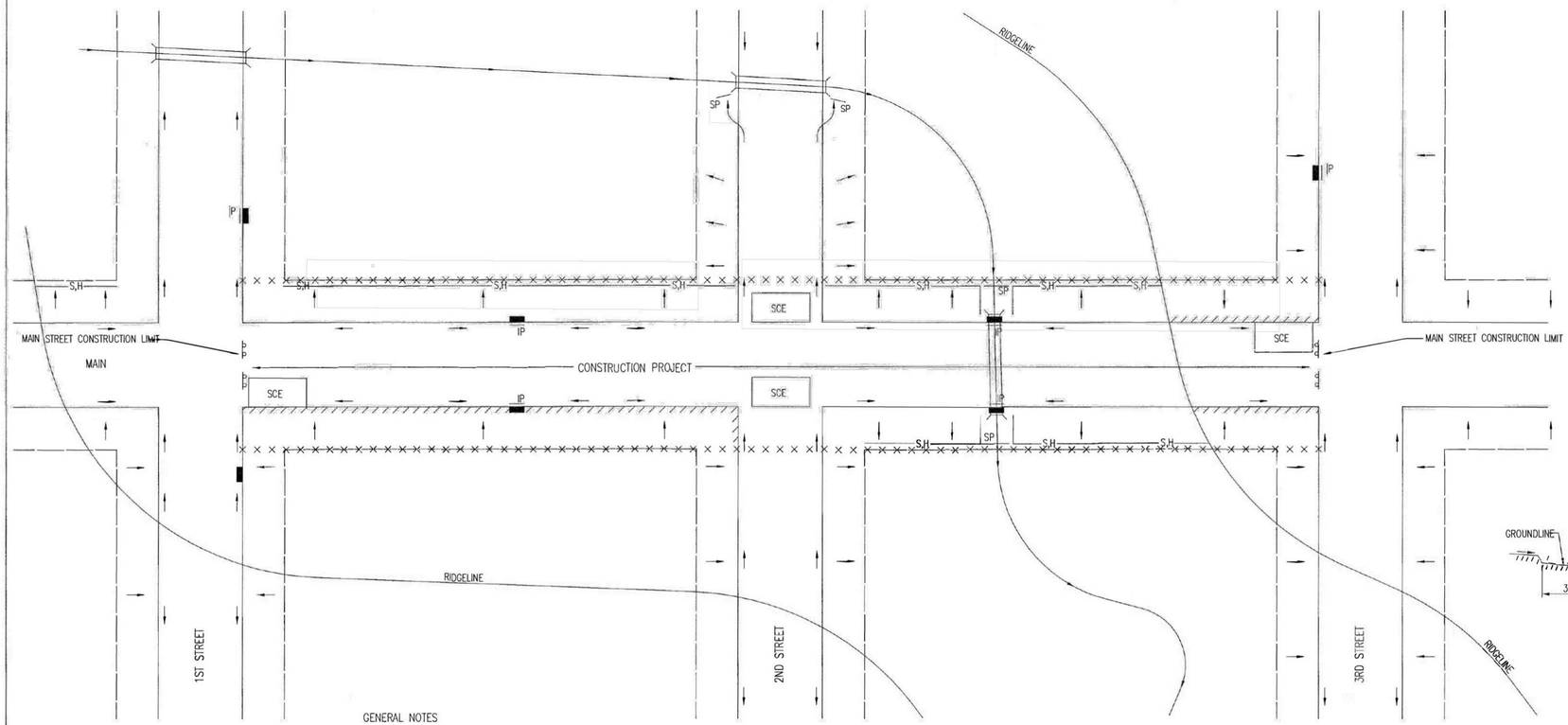
2. EROSION CONTROL DEVICES MUST BE MAINTAINED BY THE CONTRACTOR THROUGHOUT THE CONSTRUCTION PROCESS AND UNTIL THE DISTURBED EARTH IS RESTABILIZED.

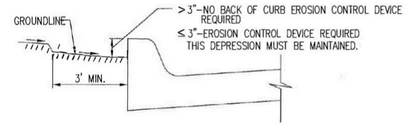
3. IF THE PROJECT WILL DISTURB 1 ACRE OR MORE, A FEDERAL/STATE NPDES STORMWATER PERMIT IS REQUIRED. A DETAILED STORMWATER POLLUTION PREVENTION PLAN, IS REQUIRED. THE EROSION CONTROL DEVICES SHOWN ON THIS SHEET ARE CONSIDERED TO BE THE MINIMUM TO BE SHOWN IN THE POLLUTION PREVENTION PLAN.

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 LICENSED PROFESSIONAL ENGINEER KANSAS 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

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

SHEET

SW-504

SAVED 5/24/2024 11:47:21 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 8:40:03 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\0042PD3_PLANS\030_WATER PHASE 1\200605-008-CU510.DWG

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

CITY OF WICHITA

KEVIN R. GRAHAM LICENSED 27806 05/27/2025 KANSAS PROFESSIONAL ENGINEER

WATER DISTRIBUTION IMPROVEMENTS

SWANEY FARM ADDITION
PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007798

Issue:		
	08/17/2026 - cjr	

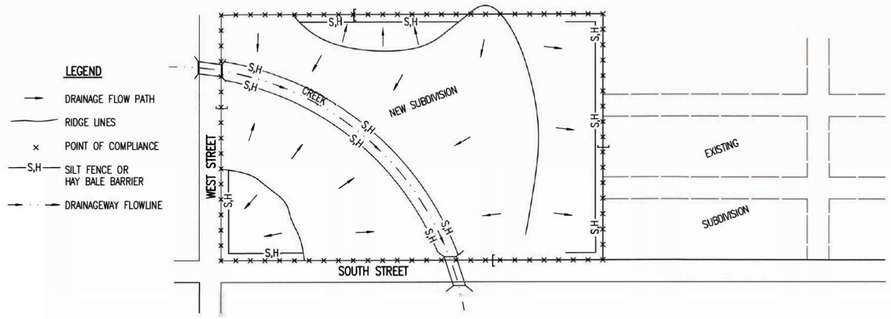
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-008
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

STREET IMPROVEMENT PROJECTS

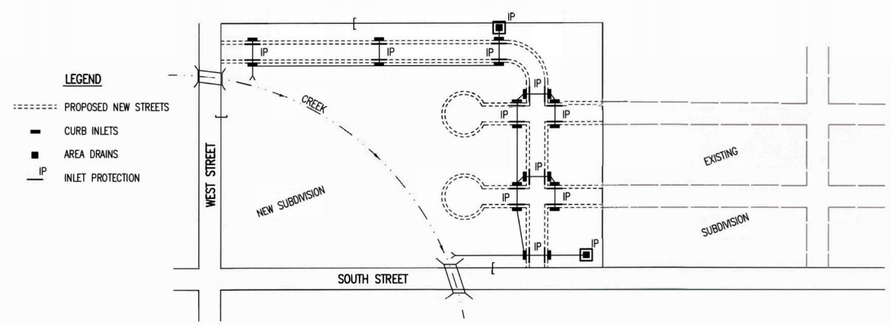
CU507

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



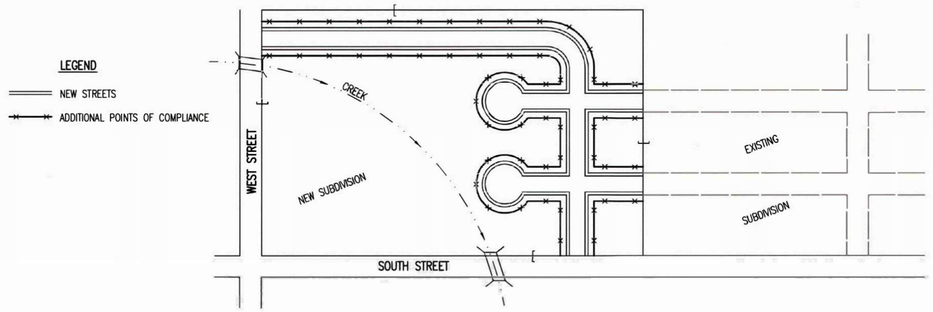
1. DURING THIS PHASE OF SUBDIVISION CONSTRUCTION, THE POINTS OF COMPLIANCE ARE THE PERIMETER BOUNDARIES AND ANY DRAINAGE WAYS OR STORM SEWERS DRAINING THROUGH OR FROM THE SITE. SHOULD LAKES BE CONSTRUCTED WITHIN THE SUBDIVISION THAT WILL DISCHARGE DURING STORMS, THEY ARE ALSO A POINT OF COMPLIANCE.
2.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

PHASE 2 – INSTALLATION OF STORM SEWER



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

PHASE 3 – STREET CONSTRUCTION

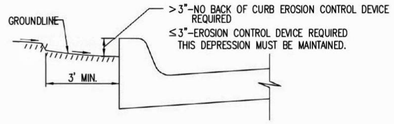


1. DURING THIS PHASE OF SUBDIVISION CONSTRUCTION, NEW STREETS ARE INSTALLED. ALL EROSION CONTROL DEVICES INSTALLED DURING PHASE 1 AND 2 MUST STILL BE MAINTAINED. THE POINT OF COMPLIANCE NOW SHIFTS TO THE BACK OF CURB ALONG EACH STREET.
2. CURB OPENING INLET PROTECTION:
   A. SUMP AREAS – INLET PROTECTION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

GENERAL NOTES

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

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 KANSAS PROFESSIONAL ENGINEER

c,s 1,2, 1,3

CITY OF WICHITA
PUBLIC WORKS & UTILITIES ENGINEERING DIVISION

SUBDIVISION DEVELOPMENT PROCESS

CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER	OCA NUMBER	DATE

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

SHEET

SW-505

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

CITY OF WICHITA

KEVIN R. GRAHAM LICENSED 27806 05/27/2025 KANSAS PROFESSIONAL ENGINEER

WATER DISTRIBUTION IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007798

Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-008
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

SUBDIVISION DEVELOPMENT PROCESS

CU508

SAVED 5/24/2024 11:47:03 AM BY KEVIN GRAHAM
PLOTTED 5/27/2025 8:40:09 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\00412PD3_PLANS\030_WATER PHASE 1\200605-008-CU511.DWG

CONSTRUCTION PLANS FOR
STORM WATER DRAIN NO. 526 IMPROVEMENTS

TO SERVE

SWANEY FARM ADDITION

CITY OF WICHITA ENGINEERING PROJECT NO. 458-2024-085570
ORG CODE: 47313924, MUNIS NO.: E4083

CITY OF WICHITA, KS

PAUL GUNZELMAN, P.E. - CITY ENGINEER

RED LINE - FIELD SET

INSPECTOR	PEC	TIGER WILLIAMS
	PEC	BRANDON DELANEY
CONTRACTOR	NOWAK CONSTRUCTION	DAVE STARECK
	NOWAK CONSTRUCTION	JIM NOWAK
COMPANY	CITY OF WICHITA	EVER VILLALOBOS

Item	Manufacturer	Qty	Unit
Pipe, SWS, RCBC (12'x4')	Wichita Concrete Pipe	109	lf
Pipe, SWS, RCBC (Double 8'x3')	Wichita Concrete Pipe	94	lf
Pipe, SWS 15"	Wichita Concrete Pipe	42	lf
Pipe, End Section 24"	Wichita Concrete Pipe	2	ea
Pipe, End Section 14"x23" HERCP	Wichita Concrete Pipe	2	ea
Pipe, SWS 15"	Wichita Concrete Pipe	69	lf
Pipe, SWS 18"	Wichita Concrete Pipe	254	lf
Pipe, SWS 24"	Wichita Concrete Pipe	766	lf
Pipe, SWS 30"	Wichita Concrete Pipe	241	lf
Pipe, SWS 36"	Wichita Concrete Pipe	275	lf
Pipe, SWS, HERCP, 14"x23"	Wichita Concrete Pipe	60	lf
Pipe, Plug	Wichita Concrete Pipe	3	ea

DEVELOPER CONTACT

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

Stormwater Certification:

New Development or Redevelopment (Circle One)

Stormwater Permit # _____

NOI Permit # S-AR94-1904

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

Site Area (Acres): 50.4

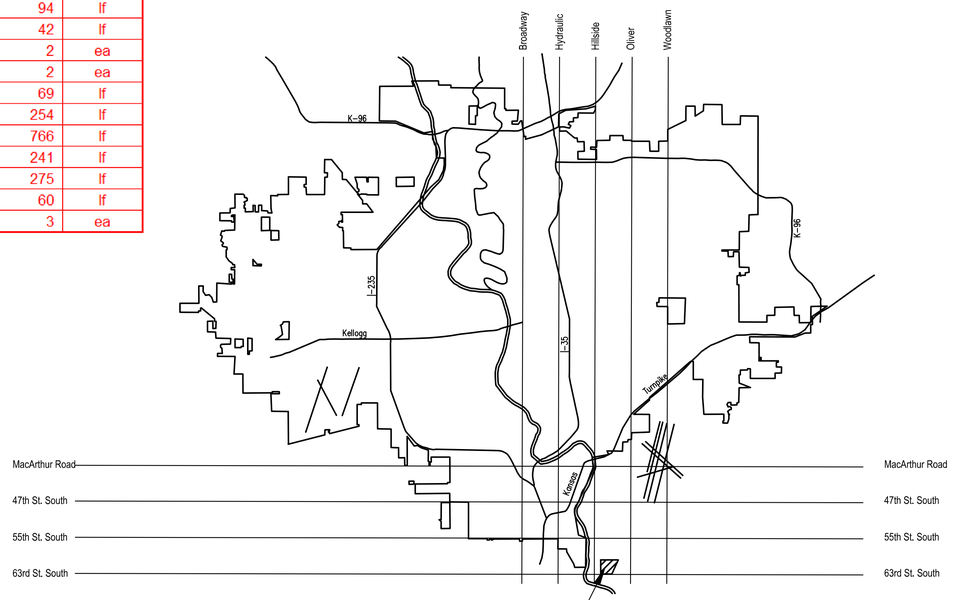
Disturbed Area (Acres): 45.1

Water Quality Treatment: Offsite BMP Program

Downstream Channel Protection: N/A

Detention: Onsite Ponds - Drainage Plan for "Swaney Farm Addition"

The BMP used for this development is Offsite BMP Program



LOCATION MAP

PROJECT LOCATION
SWANEY FARM ADDITION

SHEET INDEX

01	CP001	TITLE SHEET
02	CP002	HORIZONTAL & VERTICAL CONTROL AND KEY MAP
03	CP003	GENERAL NOTES
04	CG101	FOUR CORNER GRADING PLAN-PHASE 1
05	CG102	COORDINATE GEOMETRY PLAN-RESERVE E
06	CG103	COORDINATE GEOMETRY PLAN-RESERVES A&C
07	CG104	POND GRADING PLAN
08	CG105	POND TYPICAL SECTIONS
09	CG106	RIPRAP AND MAT DETAILS
10	CG107	RIPRAP OUTFALL DETAILS
11	CG108	OVERALL GRADING PLAN
12	CG109	GRADING PLAN-AREA 1
13	CG110	GRADING PLAN-AREA 2
14	CG111	GRADING PLAN-AREA 3
15	CG112	GRADING PLAN-AREA 4
16	CG113	GRADING PLAN-AREA 5
17	CG114	GRADING PLAN-AREA 6
18	CG115	GRADING PLAN-AREA 7
19	CG116	GRADING PLAN-AREA 8
20	CG117	GRADING PLAN-AREA 9
21	CG118	GRADING PLAN-AREA 10
22	CG119	GRADING PLAN-AREA 11
23	CG120	GRADING PLAN-AREA 12
24	CG121	GRADING PLAN-AREA 13
25	CG122	GRADING PLAN-AREA 14
26	CG123	GRADING PLAN-AREA 15
27	CG124	COMPACTION TABLES
28	CG201	PLAN AND PROFILE-SWS LINE 1
29	CG202	PLAN AND PROFILE-SWS LINE 8
30	CG203	PLAN AND PROFILE-SWS LINE 11
31	CG301	SINGLE 12 FT X 4 FT RFB-SWS LINE 1
32	CG302	FLARED WINGWALLS-4 FT RISE-SWS LINE 1
33	CG303	STRAIGHT WINGWALLS-4 FT RISE-SWS LINE 1
34	CG304	DOUBLE 8 FT X 3 FT RCB-SWS LINE 8
35	CG305	FLLARED WINGWALLS-3 FT RISE-SWS LINE 8
36	CG306	STRAIGHT WINGWALLS-3 FT RISE-SWS LINE 8
37	CG401	SEEDING PLAN
38	CG402	EROSION CONTROL PLAN
39	CG403	BACK OF CURB AND CURB INLET PROTECTION
40	CG404	SILT FENCE DITCH CHECK
41	CG405	STRAW BALE DITCH CHECK
42	CG406	STREET IMPROVEMENT PROJECTS
43	CG407	SUBDIVISION DEVELOPMENT PROCESS
44	CP701	FINAL PLAT

RED LINE - FIELD SET
08/17/2026 - cjr
Prepared By: Tiger Williams
Brandon Delaney
Date: JULY 2025
PEC

MAY 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
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

STORM WATER DRAIN NO. 526
IMPROVEMENTS

SWANEY FARM ADDITION

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 458-2024-085570

Issue:		

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-005
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

TITLE SHEET

CP001
1 OF 44

SAVED 5/27/2025 9:26:58 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 10:53:18 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_SWD\01-200605-005-CP001 TITLE SHEET.DWG

BENEFIT DISTRICT

PROPOSED STREET IMPOVEMENTS

PROPOSED SANITARY SEWER (BY OTHERS)
PROPOSED SWD IMPOVEMENTS

PROPOSED WATERLINE (BY OTHERS)

PROPOSED SIDEWALK

RESERVE C
PROPOSED POND

RESERVE D

RESERVE E
PROPOSED POND

PROPOSED SWD IMPOVEMENTS

PROPOSED SWD IMPOVEMENTS

PROPOSED STORM WATER SEWER

UNPLATTED

SWANEY FARM ADDITION

THE WELL ADDITION

STREET DEDICATION

20' UTL ESMT.

36' DRAINAGE & UTILITY ESMT.

63RD STREET

YALE

PATRICK

BLUFF

CP-101

CP-102

CP-103

CP-104

CP-105

BM-201

BM-202

BM-203

SCALE IN FEET
0' 100' 200'

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: 333,443.9305 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
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

STORM WATER DRAIN NO. 526
IMPROVEMENTS

SWANEY FARM ADDITION

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 458-2024-085570

Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-005
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

HORIZONTAL & VERTICAL CONTROL AND KEY MAP

CP002
2 OF 44

SAVED 5/27/2025 9:47:00 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 10:53:56 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_SWD\02-200605-005-CP002 HORIZONTAL & 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 AT NO ADDITIONAL COST. 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. 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 BY THE CONTRACTOR. 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.

13. 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.

14. 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.

15. 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.

16. 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.

17. 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.

18. 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.

19. 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, CG401.

20. 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.

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

CITY OF WICHITA

KEVIN P. C. GRAHAM
LICENSED
27806
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

STORM WATER DRAIN NO. 526 IMPROVEMENTS

SWANEY FARM ADDITION

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 458-2024-085570

Issue:		
	08/17/2026 - cjr	

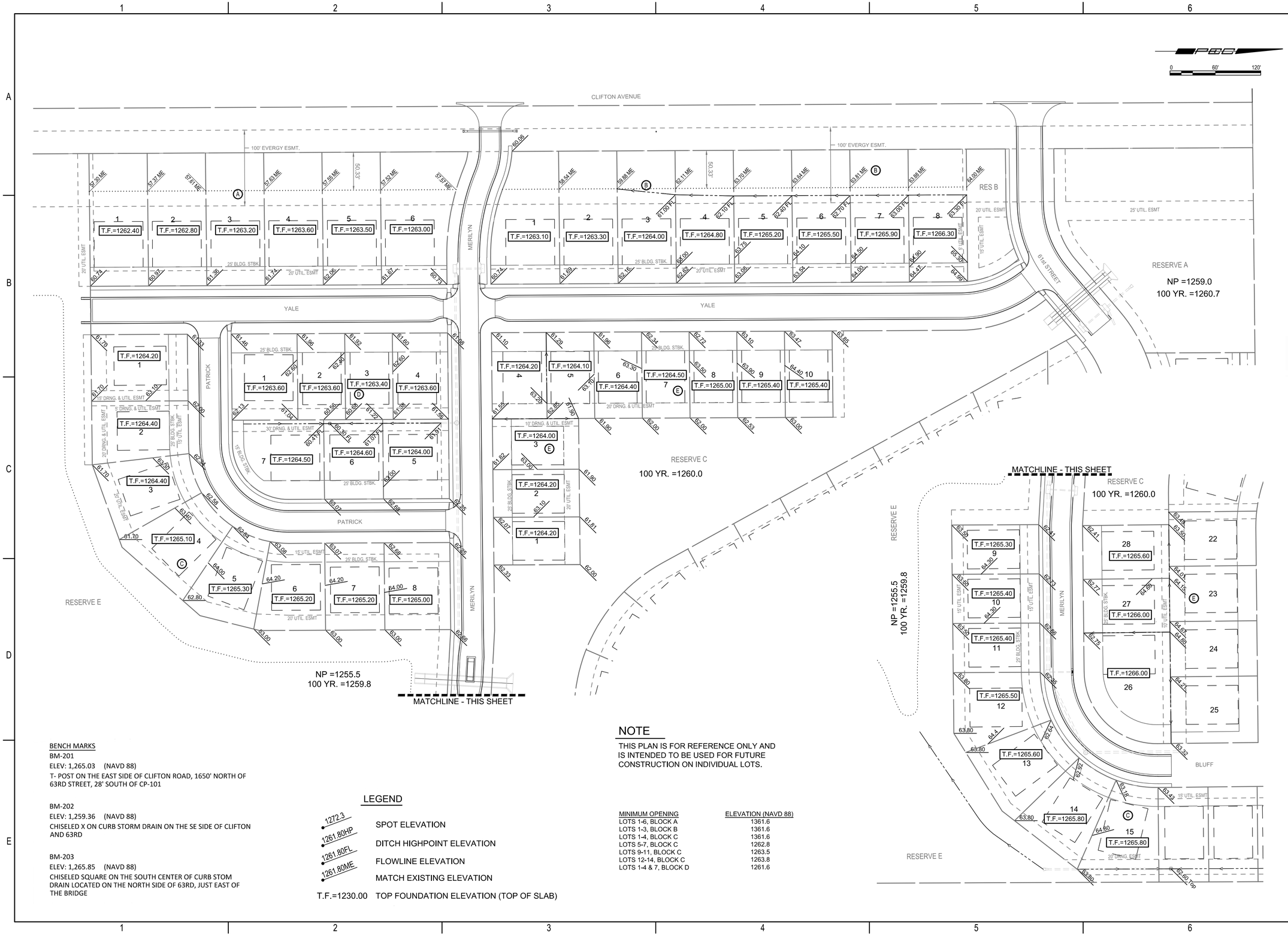
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-005
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

GENERAL NOTES

CP003
3 OF 44

SAVED 8/13/2024 2:18:23 PM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 10:53:59 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_SWD\03-200605-005-CP004 GENERAL NOTES.DWG



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

LEGEND

1272.3	SPOT ELEVATION
1261.80HP	DITCH HIGHPOINT ELEVATION
1261.80FL	FLOWLINE ELEVATION
1261.80ME	MATCH EXISTING ELEVATION
T.F.=1230.00	TOP FOUNDATION ELEVATION (TOP OF SLAB)

NOTE

THIS PLAN IS FOR REFERENCE ONLY AND IS INTENDED TO BE USED FOR FUTURE CONSTRUCTION ON INDIVIDUAL LOTS.

MINIMUM OPENING	ELEVATION (NAVD 88)
LOTS 1-6, BLOCK A	1361.6
LOTS 1-3, BLOCK B	1361.6
LOTS 1-4, BLOCK C	1361.6
LOTS 5-7, BLOCK C	1262.8
LOTS 9-11, BLOCK C	1263.5
LOTS 12-14, BLOCK C	1263.8
LOTS 1-4 & 7, BLOCK D	1261.6

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

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 05/27/2025 KANSAS PROFESSIONAL ENGINEER

STORM WATER DRAIN NO. 526 IMPROVEMENTS

SWANEY FARM ADDITION

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 458-2024-085570

Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET

U:\Wichita-Civil 200605-012

JOB NO.	200605-005
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

FOUR CORNER GRADING PLAN-PHASE 1

CG101

4 OF 44

SAVED 9/4/2024 7:53:05 AM BY BILL.SEXSON
PLOTTED 5/27/2025 10:54:34 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\00412PD3_PLANS\030_SWD\04-200605-005-CG101 FOUR CORNER GRADING PLAN-PHASE 1.DWG

POND ELEVATION 1255-RESERVE E

COORDINATE LIST		
POINT	NORTHING	EASTING
5000	331,944.5641	17,559,996.0218
5001	331,962.4075	17,559,970.0439
5002	331,992.2412	17,559,959.8860
5003	332,022.4846	17,559,959.6587
5004	332,036.0541	17,559,965.9371
5005	332,041.5083	17,559,979.8584
5006	332,043.7001	17,560,185.9220
5007	332,044.3988	17,560,194.5737
5008	332,046.4505	17,560,203.0077
5009	332,082.2381	17,560,302.4225
5010	332,087.6559	17,560,313.6251
5011	332,095.5095	17,560,323.2777
5012	332,165.4840	17,560,393.1587
5013	332,167.1447	17,560,394.8010
5014	332,168.8373	17,560,396.4104
5015	332,189.3630	17,560,414.3395
5016	332,198.6023	17,560,420.6337
5017	332,209.0234	17,560,424.6811
5018	332,273.8475	17,560,440.8293
5019	332,286.0638	17,560,443.5807
5020	332,298.5395	17,560,444.6602
5021	332,454.7301	17,560,443.8732
5022	332,461.0314	17,560,443.5851

COORDINATE LIST		
POINT	NORTHING	EASTING
5023	332,467.3050	17,560,442.9283
5024	332,490.9651	17,560,439.4638
5025	332,499.0990	17,560,441.5896
5026	332,502.8155	17,560,449.1307
5027	332,499.7169	17,560,506.4589
5028	332,496.5542	17,560,513.3486
5029	332,489.4934	17,560,516.1083
5030	332,423.3680	17,560,514.6195
5031	332,397.2886	17,560,523.8802
5032	332,385.6579	17,560,548.9924
5033	332,387.1037	17,560,686.2440
5034	332,387.1158	17,560,692.7719
5035	332,386.8903	17,560,699.2959
5036	332,384.9969	17,560,752.2011
5037	332,384.8519	17,560,757.7271
5038	332,384.8999	17,560,763.2548
5039	332,385.3401	17,560,801.5694
5040	332,370.8796	17,560,820.9722
5041	332,348.3039	17,560,812.2592
5042	332,339.7047	17,560,794.1225
5043	332,333.0040	17,560,775.2019
5044	332,316.3515	17,560,742.2128
5045	332,289.5089	17,560,716.8147

COORDINATE LIST		
POINT	NORTHING	EASTING
5046	332,263.4885	17,560,701.0365
5047	332,238.8012	17,560,683.2446
5048	332,207.4844	17,560,661.7126
5049	332,173.0251	17,560,645.6836
5050	332,114.8512	17,560,627.0686
5051	332,059.9137	17,560,605.1397
5052	332,011.5912	17,560,571.0230
5053	331,978.6440	17,560,548.1584
5054	331,939.3413	17,560,540.1832
5055	331,896.5516	17,560,541.9385
5056	331,888.4205	17,560,540.1744
5057	331,881.7445	17,560,535.2087
5058	331,867.2065	17,560,521.9141
5059	331,848.7415	17,560,515.0481
5060	331,818.8535	17,560,510.7967
5061	331,808.7834	17,560,503.7493
5062	331,807.3438	17,560,491.5428

CONST. EARTHEN WEIR
SEE SHEET NO. CP501

RESERVE E

63RD STREET

SCALE IN FEET
0' 40' 80'

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

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 05/27/2025 KANSAS PROFESSIONAL ENGINEER

STORM WATER DRAIN NO. 526
IMPROVEMENTS

SWANEY FARM ADDITION

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 458-2024-085570

Issue:		
	08/17/2026 - cjr	

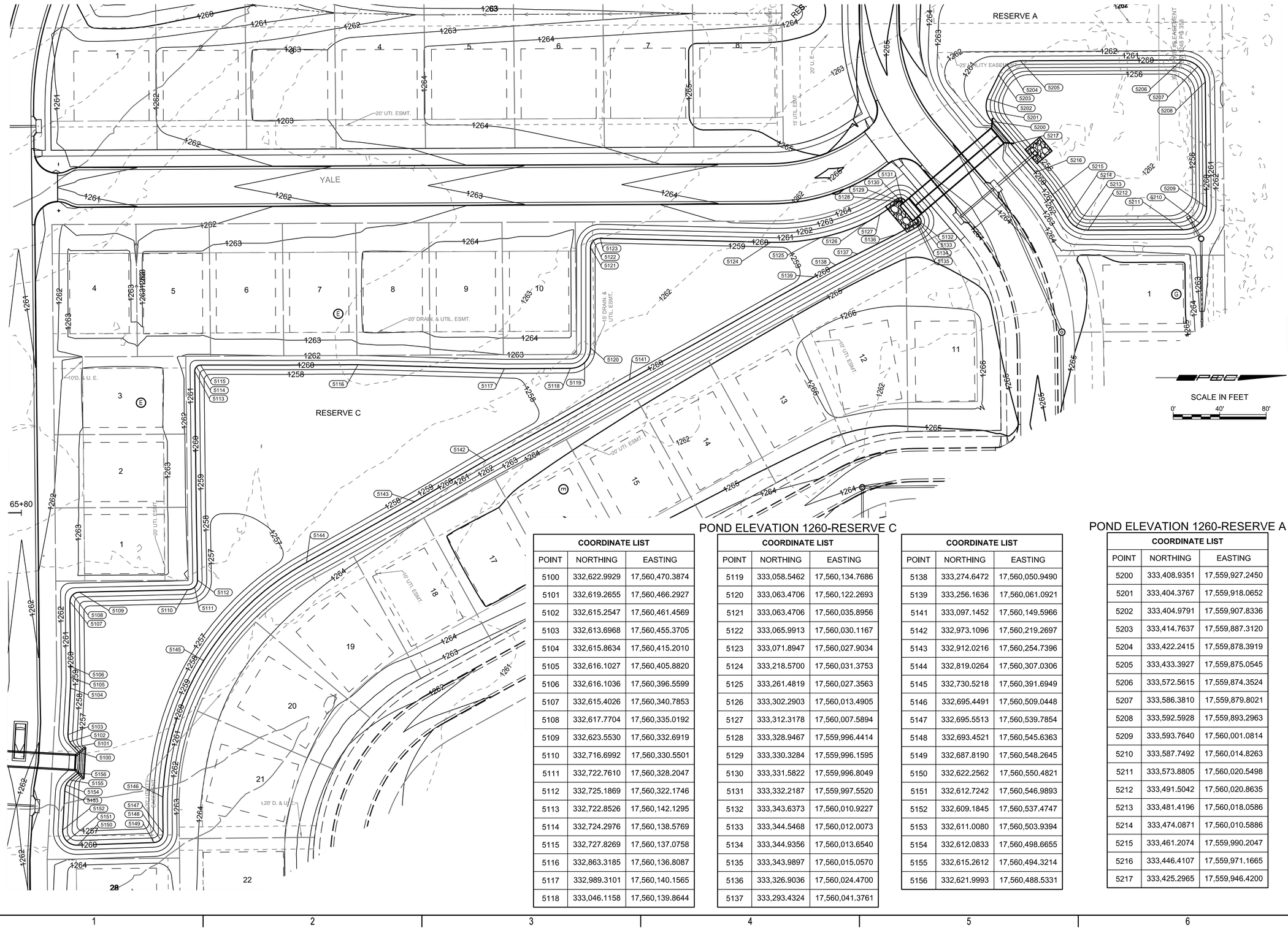
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-005
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

COORDINATE GEOMETRY
PLAN-RESERVE E

CG102
5 OF 44

SAVED 5/27/2025 9:50:23 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 10:55:08 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\00402PD3_PLANS\030_SWD\05-200605-005-CG102 COORDINATE GEOMETRY PLAN-RESERVE E.DWG



POND ELEVATION 1260-RESERVE C

COORDINATE LIST		
POINT	NORTHING	EASTING
5100	332,622.9929	17,560,470.3874
5101	332,619.2655	17,560,466.2927
5102	332,615.2547	17,560,461.4569
5103	332,613.6968	17,560,455.3705
5104	332,615.8634	17,560,415.2010
5105	332,616.1027	17,560,405.8820
5106	332,616.1036	17,560,396.5599
5107	332,615.4026	17,560,340.7853
5108	332,617.7704	17,560,335.0192
5109	332,623.5530	17,560,332.6919
5110	332,716.6992	17,560,330.5501
5111	332,722.7610	17,560,328.2047
5112	332,725.1869	17,560,322.1746
5113	332,722.8526	17,560,142.1295
5114	332,724.2976	17,560,138.5769
5115	332,727.8269	17,560,137.0758
5116	332,863.3185	17,560,136.8087
5117	332,989.3101	17,560,140.1565
5118	333,046.1158	17,560,139.8644

COORDINATE LIST		
POINT	NORTHING	EASTING
5119	333,058.5462	17,560,134.7686
5120	333,063.4706	17,560,122.2693
5121	333,063.4706	17,560,035.8956
5122	333,065.9913	17,560,030.1167
5123	333,071.8947	17,560,027.9034
5124	333,218.5700	17,560,031.3753
5125	333,261.4819	17,560,027.3563
5126	333,302.2903	17,560,013.4905
5127	333,312.3178	17,560,007.5894
5128	333,328.9467	17,559,996.4414
5129	333,330.3284	17,559,996.1595
5130	333,331.5822	17,559,996.8049
5131	333,332.2187	17,559,997.5520
5132	333,343.6373	17,560,010.9227
5133	333,344.5468	17,560,012.0073
5134	333,344.9356	17,560,013.6540
5135	333,343.9897	17,560,015.0570
5136	333,326.9036	17,560,024.4700
5137	333,293.4324	17,560,041.3761

COORDINATE LIST		
POINT	NORTHING	EASTING
5138	333,274.6472	17,560,050.9490
5139	333,256.1636	17,560,061.0921
5141	333,097.1452	17,560,149.5966
5142	332,973.1096	17,560,219.2697
5143	332,912.0216	17,560,254.7396
5144	332,819.0264	17,560,307.0306
5145	332,730.5218	17,560,391.6949
5146	332,695.4491	17,560,509.0448
5147	332,695.5513	17,560,539.7854
5148	332,693.4521	17,560,545.6363
5149	332,687.8190	17,560,548.2645
5150	332,622.2562	17,560,550.4821
5151	332,612.7242	17,560,546.9893
5152	332,609.1845	17,560,537.4747
5153	332,611.0080	17,560,503.9394
5154	332,612.0833	17,560,498.6655
5155	332,615.2612	17,560,494.3214
5156	332,621.9993	17,560,488.5331

POND ELEVATION 1260-RESERVE A

COORDINATE LIST		
POINT	NORTHING	EASTING
5200	333,408.9351	17,559,927.2450
5201	333,404.3767	17,559,918.0652
5202	333,404.9791	17,559,907.8336
5203	333,414.7637	17,559,887.3120
5204	333,422.2415	17,559,878.3919
5205	333,433.3927	17,559,875.0545
5206	333,572.5615	17,559,874.3524
5207	333,586.3810	17,559,879.8021
5208	333,592.5928	17,559,893.2963
5209	333,593.7640	17,560,001.0814
5210	333,587.7492	17,560,014.8263
5211	333,573.8805	17,560,020.5498
5212	333,491.5042	17,560,020.8635
5213	333,481.4196	17,560,018.0586
5214	333,474.0871	17,560,010.5886
5215	333,461.2074	17,559,990.2047
5216	333,446.4107	17,559,971.1665
5217	333,425.2965	17,559,946.4200

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

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 05/27/2025 KANSAS PROFESSIONAL ENGINEER

STORM WATER DRAIN NO. 526 IMPROVEMENTS

SWANEY FARM ADDITION

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 458-2024-085570

Issue:
08/17/2026 - cjr

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-005
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

COORDINATE GEOMETRY
PLAN-RESERVES A&C

CG103
6 OF 44

SAVED 5/27/2025 9:50:12 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 10:55:44 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\0042\PD3_PLANS\030_SWDV06-200605-005-CG103 COORDINATE GEOMETRY PLAN-RESERVES A&C.DWG

SCALE IN FEET
0' 80' 160'

Install 310 S.Y.
Heavy Stone Riprap
See Sheet No. CG107

Install 556 S.Y.
Turf Reinforcement Mat
See Sheet No. CG105

Install 40 S.Y.
Light Stone Riprap
See Sheet No. CG106

RESERVE A
Proposed Pond
100 YR. =1260.4
NP =1259.0
BTM =1256.0

See Sheet No. CG105
for Typical Sections

Storm Water Sewer and Riprap
are Part of the Paving Proj. No.
200605-004 and City of Wichita
Project No.472-2024-086026

RESERVE C
See Sheet No. CG105 for
Typical Sections

POND 100 YR. =1260.0

POND BOTTOM ELEV=1250.0
POND 100 YR. =1259.90
NP =1255.5

Install 30 S.Y.
Light Stone Riprap
See Sheet No. CG106

RESERVE E

See Sheet No. CG105 for
Typical Sections

Proposed Pond

RESERVE D

Install 4,769 S.Y.
Turf Reinforcement Mat
See Sheet No. CG105

Storm Water Sewer and Riprap
are Part of the Paving Proj. No.
200605-004 and City of Wichita
Project No.472-2024-086026

SWANEY FARM ADDITION
63RD STREET
YALE
PATRICK
WILLIS
BLUFF
63RD STREET SOUTH
60' STREET DEDICATION
EASEMENT FILM 1246/PG 358
SE CORNER SW 1/4 26-28S-1E FOUND 1/2" REBAR

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

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 05/27/2025 KANSAS PROFESSIONAL ENGINEER

STORM WATER DRAIN NO. 526
IMPROVEMENTS

SWANEY FARM ADDITION

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 458-2024-085570

Issue:	
	08/17/2026 - cjr

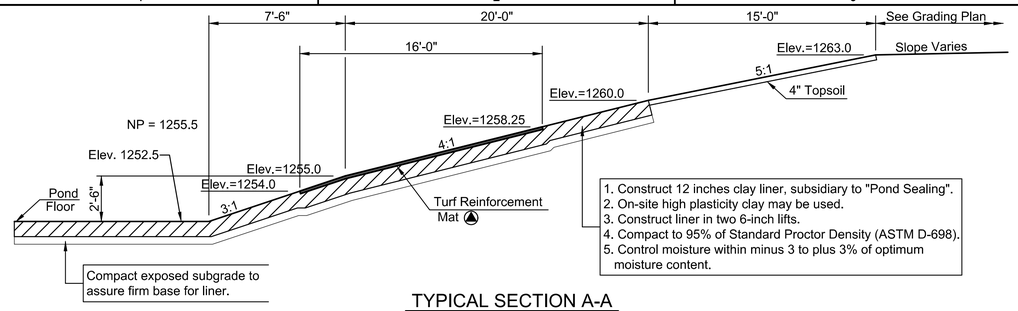
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-005
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

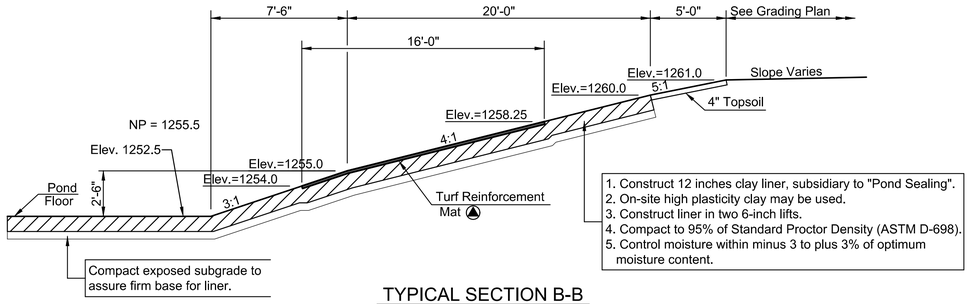
POND GRADING PLAN

CG104
7 OF 44

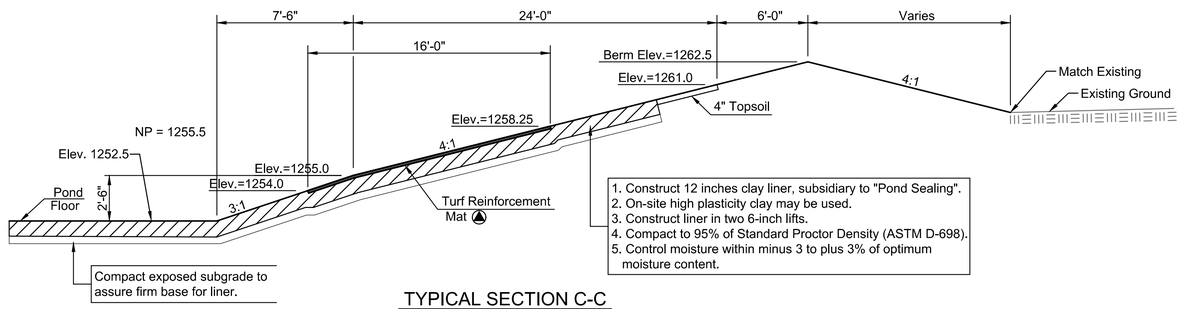
SAVED 5/27/2025 9:50:00 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 10:56:38 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_SWD\07-200605-005-CG104 POND GRADING PLAN.DWG



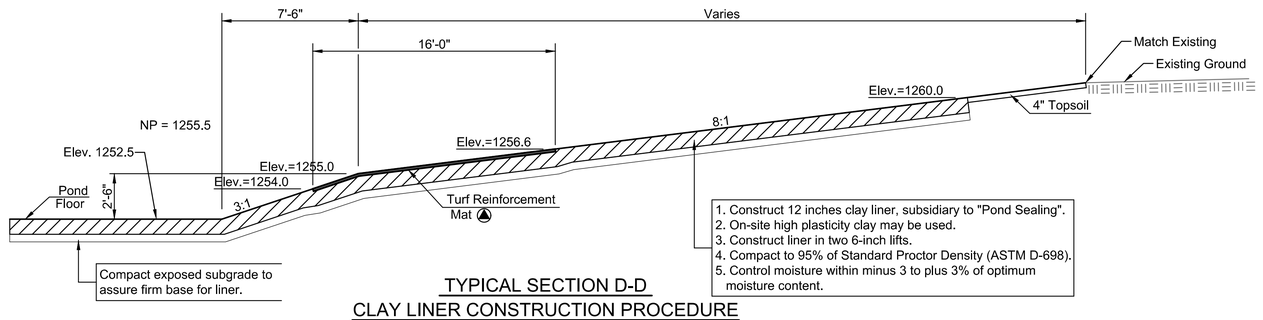
TYPICAL SECTION A-A
CLAY LINER CONSTRUCTION PROCEDURE
FOR POND SEALING



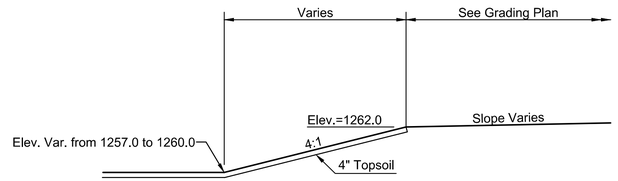
TYPICAL SECTION B-B
CLAY LINER CONSTRUCTION PROCEDURE
FOR POND SEALING



TYPICAL SECTION C-C
CLAY LINER CONSTRUCTION PROCEDURE
FOR POND SEALING



TYPICAL SECTION D-D
CLAY LINER CONSTRUCTION PROCEDURE
FOR POND SEALING

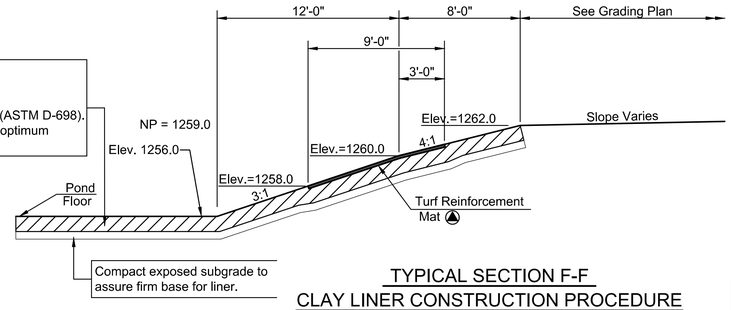


TYPICAL SECTION E-E

1. Construct 12 inches clay liner.
2. On-site high plasticity clay may be used.
3. Construct liner in two 6-inch lifts.
4. Compact to 95% of Standard Proctor Density (ASTM D-698).
5. Control moisture within minus 3 to plus 3% of optimum moisture content.

TURF REINFORCEMENT MAT SHALL BE EAST COAST EROSION "ECSC-3" OR APPROVED EQUIVALENT. EQUIVALENT MUST INCLUDE PRODUCT WARRANTY EQUAL TO THAT OF EAST COAST EROSION. INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.

PAID FOR AS S.Y. "TURF REINFORCEMENT MAT" AS INDICATED ON POND GRADING PLAN. THE BID PRICE SHALL BE CONSIDERED FULL COMPENSATION FOR ALL MATERIALS, LABOR, EQUIPMENT, TOOLS, AND INCIDENTS NECESSARY TO COMPLETE WORK.



TYPICAL SECTION F-F
CLAY LINER CONSTRUCTION PROCEDURE
FOR POND SEALING

POND SEALING NOTES:

THE POND AREAS INDICATED FOR CLAY LINER SHALL BE OVEREXCAVATED TO A DEPTH OF 12" BELOW THE FINAL POND SURFACE. THE OVEREXCAVATED MATERIAL SHALL BE STOCKPILED FOR RE-USE, UTILIZED IN PROJECT EMBANKMENTS, OR STOCKPILED ON SITE. BACKFILL OVEREXCAVATED AREA WITH PROJECT AREA CLAY MATERIAL AND COMPACTED TO PROVIDE AN IMPERVIOUS SURFACE. NO SHALE PERMITTED IN THIS ZONE. PROVIDE QUALITY CONTROL TESTING AS OUTLINED BELOW:

1. POND BOTTOM ELEVATIONS SHOWN IN THESE PLANS IS THE FINISHED GRADE ELEVATION.
2. CONSTRUCT 12" THICK POND LINER IN 6" THICK LIFTS.
3. MATERIAL INTENDED FOR POND LINER CONSTRUCTION SHOULD BE SUBMITTED TO A 3RD PARTY TESTING AGENCY FOR LABORATORY TESTING PRIOR TO THE START OF CONSTRUCTION.
4. LIFTS SHOULD BE COMPACTED TO THE MAXIMUM DRY DENSITY REQUIRED TO ACHIEVE A MINIMUM HYDRAULIC CONDUCTIVITY OF 1X10-7 CM/SEC OR LESS.
5. MAXIMUM DRY DENSITY SHOULD BE DETERMINED BY A GEOTECHNICAL TESTING LABORATORY.
6. MOISTURE CONTENT SHOULD BE DETERMINED BY A GEOTECHNICAL TESTING LABORATORY.
7. POND LINER DENSITY TESTING FREQUENCY SHALL BE EVERY 400' ALONG POND SIDES PER LIFT AND AT 2 LOCATIONS ALONG THE POND BOTTOM IN EACH POND (4 TOTAL ALONG POND BOTTOM).
8. AFTER CONSTRUCTION OF THE POND LINER, CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING MOISTURE CONTENT OF THE LINER AT OR ABOVE OPTIMUM TO PREVENT SHRINKAGE CRACKING UNTIL THE POND IS FILLED.
9. THE CONTRACTOR MAY ELECT TO PLACE A 6" TOPSOIL CAP ABOVE THE CLAY POND LINER. THE BOTTOM OF THE POND SHALL BE OVEREXCAVATED AN ADDITIONAL 6" SO THAT THE POND BOTTOM ELEVATION DOES NOT CHANGE. THE COST OF A 6" TOPSOIL CAP SHALL BE SUBSIDIARY TO "POND SEALING".

POND SEALING, AS DESCRIBED HEREIN, SHALL BE MEASURED AND PAID FOR AS FOLLOWS: THE OVEREXCAVATION WILL BE PAID FOR UNDER THE LUMP SUM BID ITEM "POND SEALING". THIS SHALL BE CONSIDERED FULL COMPENSATION FOR ALL OVEREXCAVATION, STOCKPILING, AND DOUBLE HANDLING OF EARTHWORK (IF NECESSARY).

REQUIRED PHYSICAL PROPERTIES OF CLAY LINER MATERIAL

PROPERTY	TEST METHOD	TEST VALUE
MIN. % PASSING #200 SIEVE	ASTM D1140	80
MIN. LIQUID LIMIT	ASTM D4318	40
MIN. PLASTICITY INDEX	ASTM D4318	30

POND GRADING NOTES:

CONTRACTOR SHALL PERFORM GRADING AS SHOWN BY CONTOURS AND COORDINATES ON SHEET NOS. CG102 AND CG103.

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

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 05/27/2025 KANSAS PROFESSIONAL ENGINEER

STORM WATER DRAIN NO. 526 IMPROVEMENTS

SWANEY FARM ADDITION

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 458-2024-085570

Issue:		
	08/17/2026 - cjr	

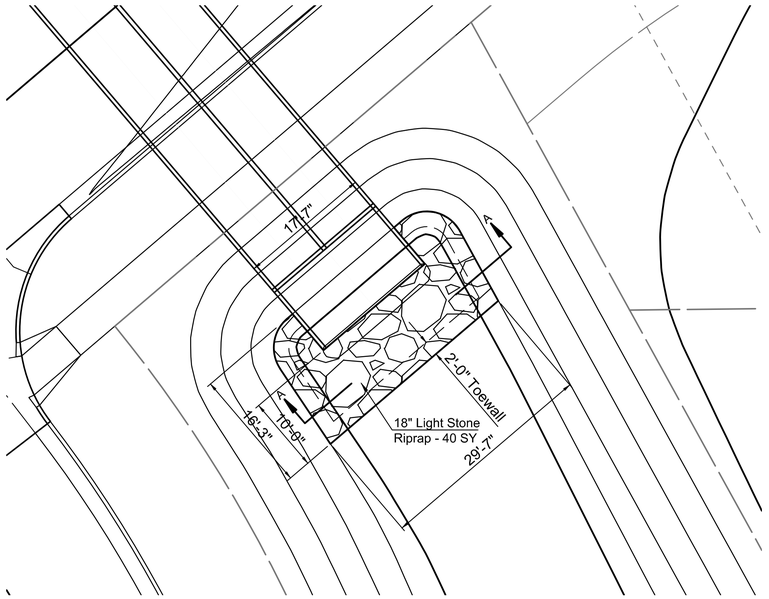
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-005
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

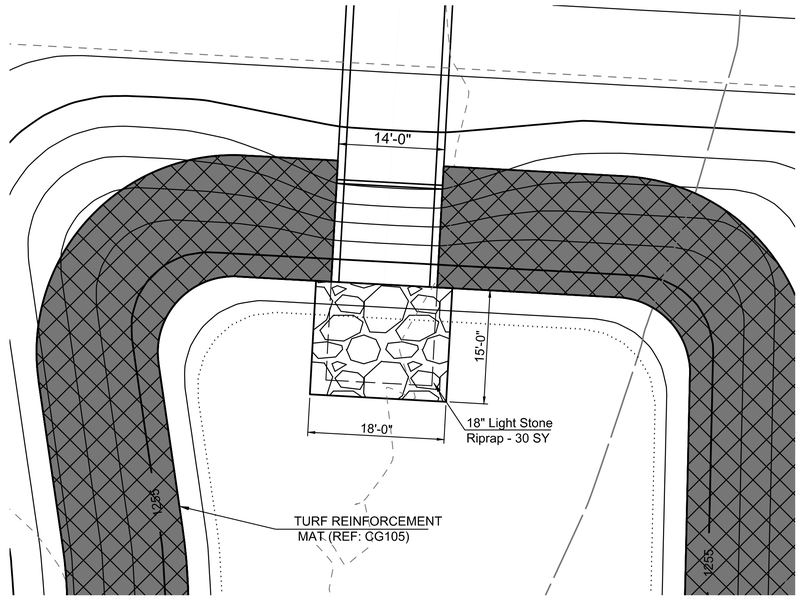
POND TYPICAL SECTIONS

CG105
8 OF 44

SAVED 5/27/2025 10:31:01 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 10:56:51 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\0042\PD3_PLANS\030_SWD\08-200605-005-CG105 POND TYPICAL SECTIONS.DWG

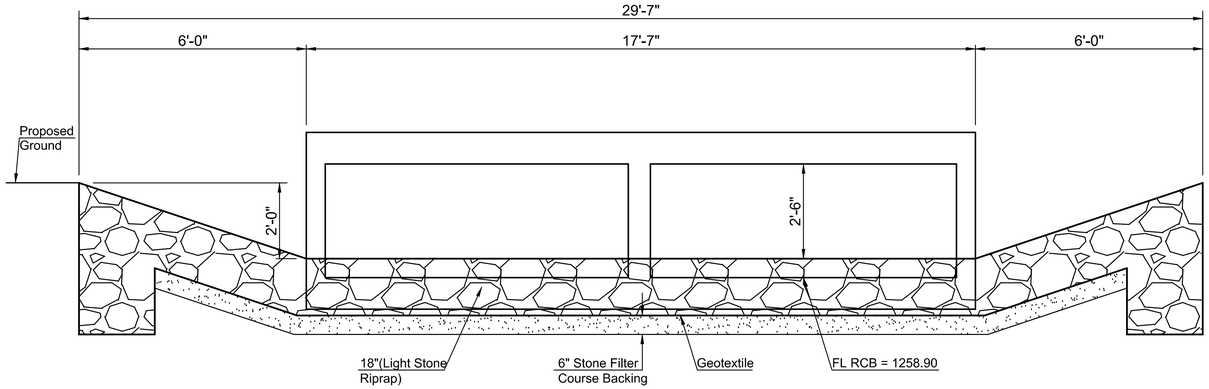


SWS LINE NO. 8

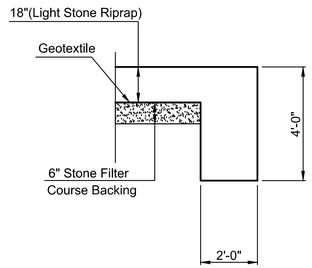


SWS LINE NO. 1





SECTION A-A
SWS LINE NO. 8



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 05/27/2025 KANSAS PROFESSIONAL ENGINEER

STORM WATER DRAIN NO. 526
IMPROVEMENTS

SWANEY FARM ADDITION

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 458-2024-085570

Issue:		
	08/17/2026 - cjr	

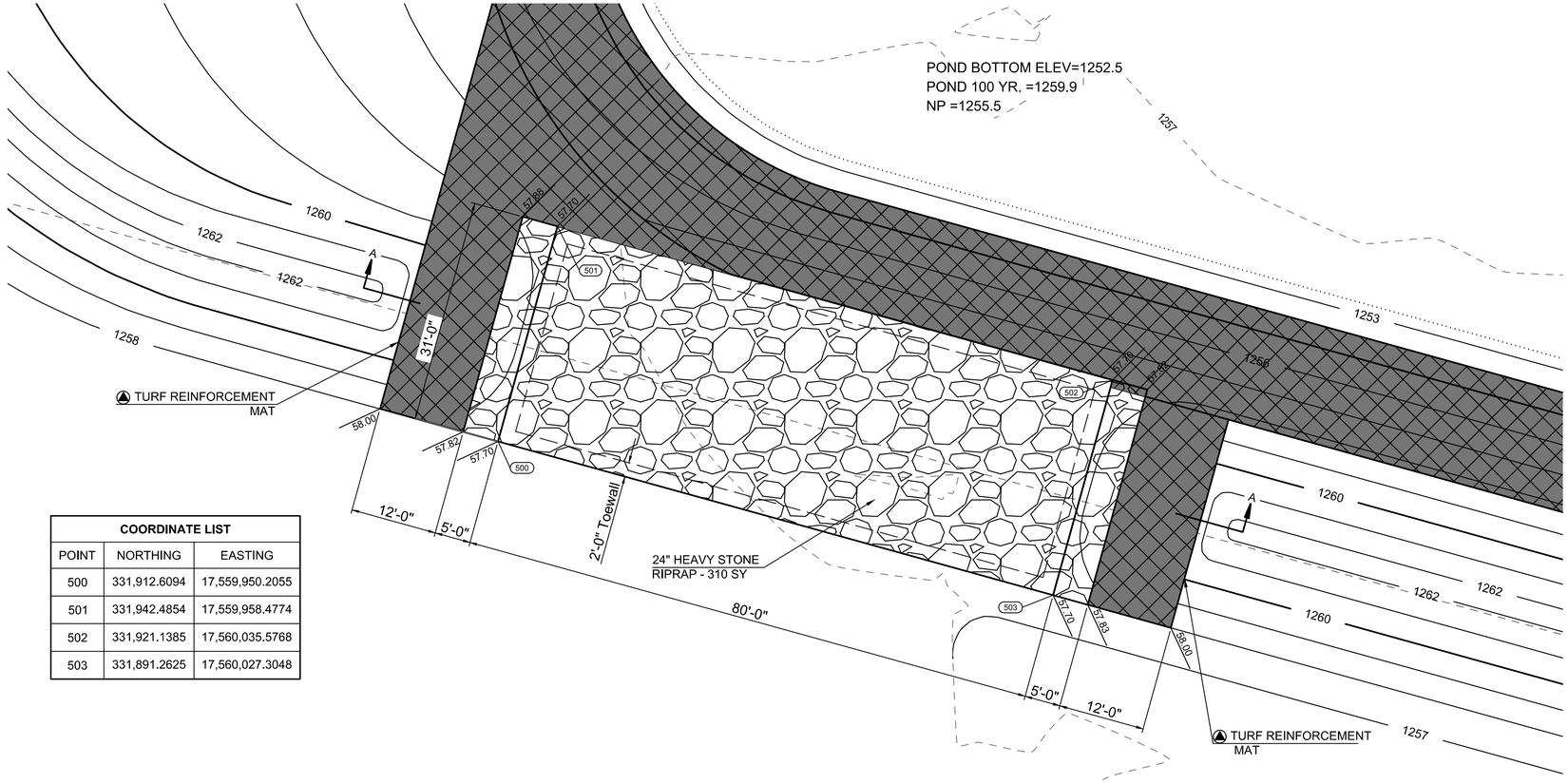
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-005
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

RIPRAP AND MAT DETAILS

CG106
9 OF 44

SAVED 5/27/2025 9:46:25 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 10:58:14 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_SWD\09-200605-005-CG106 RIPRAP AND MAT DETAILS.DWG

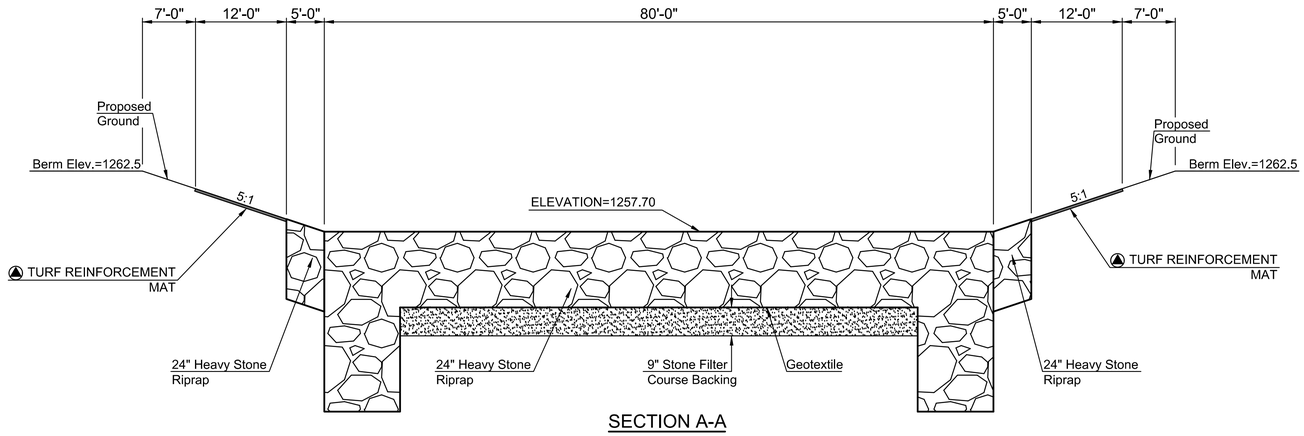


COORDINATE LIST		
POINT	NORTHING	EASTING
500	331,912.6094	17,559,950.2055
501	331,942.4854	17,559,958.4774
502	331,921.1385	17,560,035.5768
503	331,891.2625	17,560,027.3048

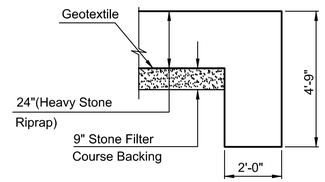
SCALE IN FEET
0 10 20

TURF REINFORCEMENT MAT SHALL BE EAST COAST EROSION "ECSC-3" OR APPROVED EQUIVALENT. EQUIVALENT MUST INCLUDE PRODUCT WARRANTY EQUAL TO THAT OF EAST COAST EROSION. INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.

PAID FOR AS S.Y. "TURF REINFORCEMENT MAT" AS INDICATED ON POND GRADING PLAN. THE BID PRICE SHALL BE CONSIDERED FULL COMPENSATION FOR ALL MATERIALS, LABOR, EQUIPMENT, TOOLS, AND INCIDENTS NECESSARY TO COMPLETE WORK.



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 05/27/2025 KANSAS PROFESSIONAL ENGINEER

STORM WATER DRAIN NO. 526 IMPROVEMENTS

SWANEY FARM ADDITION

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 458-2024-085570

Issue:		
	08/17/2026 - cjr	

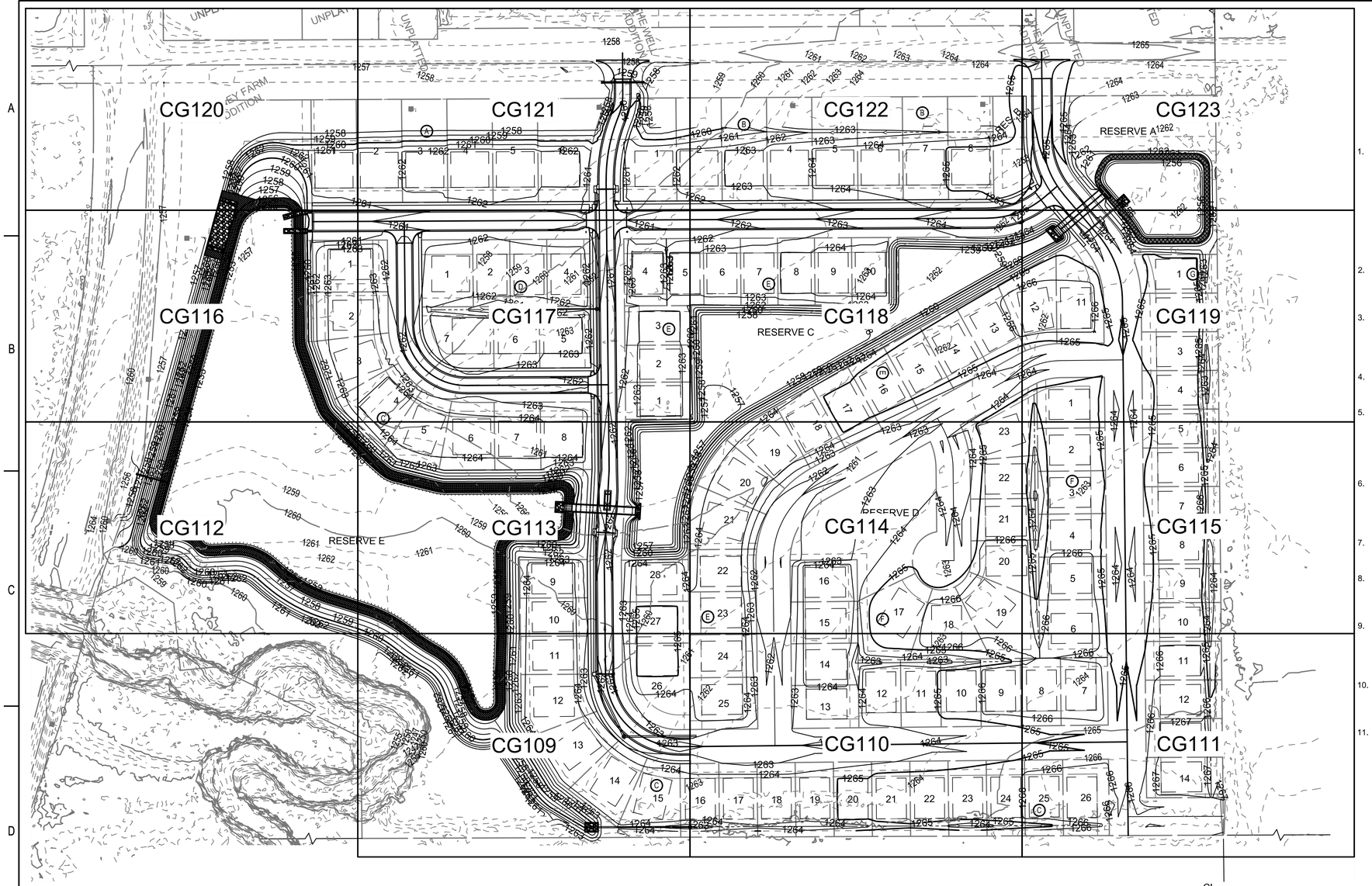
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-005
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

RIPRAP OUTFALL DETAILS

CG107
10 OF 44

SAVED 5/27/2025 9:46:43 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 10:59:01 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_SWD\10-200605-005-CG107 RIPRAP OUTFALL DETAILS.DWG



SCALE IN FEET

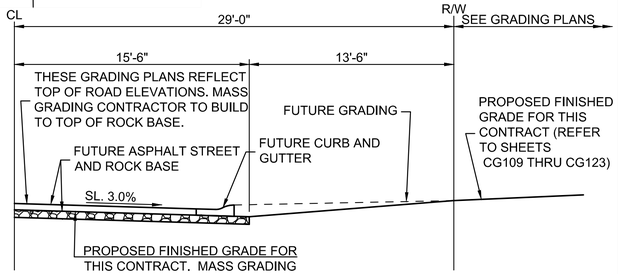
0' 100' 200'

SITE GRADING NOTES

1. FOR AREAS OF FILL, THE CONTRACTOR SHALL STRIP MINIMUM 6" OF EXISTING TOPSOIL/ORGANIC MATERIAL PRIOR TO PLACEMENT OF FILL. CONTRACTOR SHALL PROOF ROLL SUBGRADE AFTER STRIPPING TOPSOIL PRIOR TO PLACEMENT OF FILL. WHERE EXISTING TOPSOIL/ORGANIC MATERIAL EXCEEDS 6", CONTRACTOR SHALL STRIP ADDITIONAL DEPTH AS NEEDED PRIOR TO PLACEMENT OF FILL. CONTRACTOR SHALL APPLY TOPSOIL TO RESERVES AND DRAINAGE DITCHES PRIOR TO SEEDING. THE TOP 6" OF MATERIAL SHALL BE SOIL WHICH IS SUITABLE FOR GROWTH OF VEGETATION.
2. ONLY APPROVED MATERIALS SHALL BE USED IN PLACEMENT OF SITE FILL. THIS MATERIAL SHALL BE FREE OF ANY ORGANIC MATTER, LARGE STONES, AND DEBRIS.
3. ALL FILL PLACED ONSITE (INCLUDING STOCKPILE LOCATIONS) SHALL BE COMPACTED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT. ALL FILL SHALL BE PLACED IN LIFTS AND COMPACTED TO THE DENSITY REQUIREMENTS, EXCEPT TOPSOILING.
4. NO WASTE MATERIAL SHALL BE PLACED IN ANY STREET RIGHT-OF-WAY.
5. THE LUMP SUM BID ITEMS "EXCAVATION" AND "FILL, COMPACTED" SHALL INCLUDE TOPSOIL STRIPPING AND PLACING, GRADING, AND COMPACTING OF SOIL MATERIAL TO THE REQUIREMENTS OF THIS GRADING PLAN; AND FOR ALL EQUIPMENT, LABOR, TOOLS, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK.
6. ANY DOUBLE-HANDLING AND/OR STOCKPILING OF EXCAVATED MATERIAL WHICH MAY BE REQUIRED, INCLUDING REMOVAL AND REPLACEMENT OF TOPSOIL, WILL NOT BE MEASURED OR PAID FOR SEPARATELY.
7. THE ACTUAL EXCAVATION OF MATERIAL FOR SITE GRADING IS INCLUDED IN THE BID ITEM "EXCAVATION".
8. COMPACTION ON THE LOTS AND WITHIN THE PUBLIC RIGHT-OF-WAY SHALL BE 95% STANDARD DENSITY. COMPACTION IN RESERVES SHALL BE AT 90% STANDARD DENSITY.
9. A DENSITY TEST FOR EVERY LOT PER EACH FOOT OF FILL MATERIAL PLACED SHALL BE PERFORMED ON ALL LOTS. TESTING EXPENSES WILL BE COVERED BY THE CONTRACTOR. TESTING COORDINATION SHALL BE BY THE CONTRACTOR.
10. THE "SOIL PAD" ELEVATIONS SHOWN ON SHEETS CG109 - CG123 REPRESENT THE REQUIRED FINISHED GRADE WITHIN THE LIMITS SHOWN ON EACH INDIVIDUAL LOT.
11. ANY EXCESS MATERIAL SHALL BE ONSITE AT A LOCATION TO BE COORDINATED WITH THE ENGINEER AND OWNER. MATERIAL SHALL BE BLADED SMOOTH AND SLOPED TO DRAIN.

EARTHWORK SUMMARY (C.Y.)		
	Unclassified Excavation	Compacted Fill (95%)
Mass Grading	79,000	79,000
Utility Spoils (From WTR, SS, PAV)		4,400
Owner Provided Material (General)		18,500
Owner Provided Material (Clay)		12,500
GRAND TOTAL	79,000	114,400

1. EARTHWORK QUANTITIES ARE MEASURED FROM EXISTING GROUND TO THE TOP OF PAVEMENT SUBGRADE (SEE DETAIL, THIS SHEET). FINAL GRADING WITHIN THE STREET RIGHT-OF-WAY IS INCLUDED AS PART OF THE PAVING PROJECT (472-2024-086026). THE CONTRACTOR SHALL SATISFY THEMSELVES WITH THE EARTHWORK QUANTITIES AND NO CHANGE ORDER FOR EARTHWORK WILL BE APPROVED.
2. FILL QUANTITIES ARE BASED ON A 10% COMPACTION LOSS FACTOR.
3. UTILITY SPOILS FROM THE WATER (448-2024-007798), SANITARY SEWER (468-2024-007800), OFFSITE SANITARY SEWER MAIN (468-2024-007803) AND PAVING (472-2024-086026) PROJECTS ARE TO BE UTILIZED IN THE MASS GRADING OF THE SITE.
4. OWNER PROVIDED MATERIAL TO BE STOCKPILED ON THE SITE PRIOR TO THE START OF CONSTRUCTION.
5. THE INTENT IS FOR THE OWNER PROVIDED CLAY MATERIAL TO BE UTILIZED FOR THE POND LINER.



GENERAL PAVEMENT SECTION
5" THICK ASPHALT ON ALL STREETS

TYPICAL ROAD CROSS SECTION DETAIL

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

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 05/27/2025 KANSAS PROFESSIONAL ENGINEER

STORM WATER DRAIN NO. 526 IMPROVEMENTS

SWANEY FARM ADDITION

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 458-2024-085570

Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-005
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

OVERALL GRADING PLAN

CG108
11 OF 44

SAVED 5/27/2025 10:51:28 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 10:60:69 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\0042\PD3_PLANS\0301_SWD\11-200605-005-CG108 OVERALL GRADING PLAN.DWG

POND BOTTOM ELEV=1252.5
POND 100 YR. =1259.90
NP =1255.5

SCALE IN FEET
0' 20' 40'

SOIL PAD=1264.40
11

SOIL PAD=1264.50
12

SOIL PAD=1264.60
13

SOIL PAD=1264.80
14

SOIL PAD=1264.80
15

SOIL PAD=1265.00
26

CL MERLYN STREET

15' UTILITY EASEMENT

DITCH FLOWLINE

57.00 FL

59.04 FL

59.76 FL

63.76 ME

CONTOURS SHOWN WITHIN THE STREET PAVEMENT SECTION REPRESENT THE FINISHED PAVEMENT GRADE.

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

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 05/27/2025 KANSAS PROFESSIONAL ENGINEER

STORM WATER DRAIN NO. 526
IMPROVEMENTS

SWANEY FARM ADDITION

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 458-2024-085570

Issue:		
	08/17/2026 - cjr	

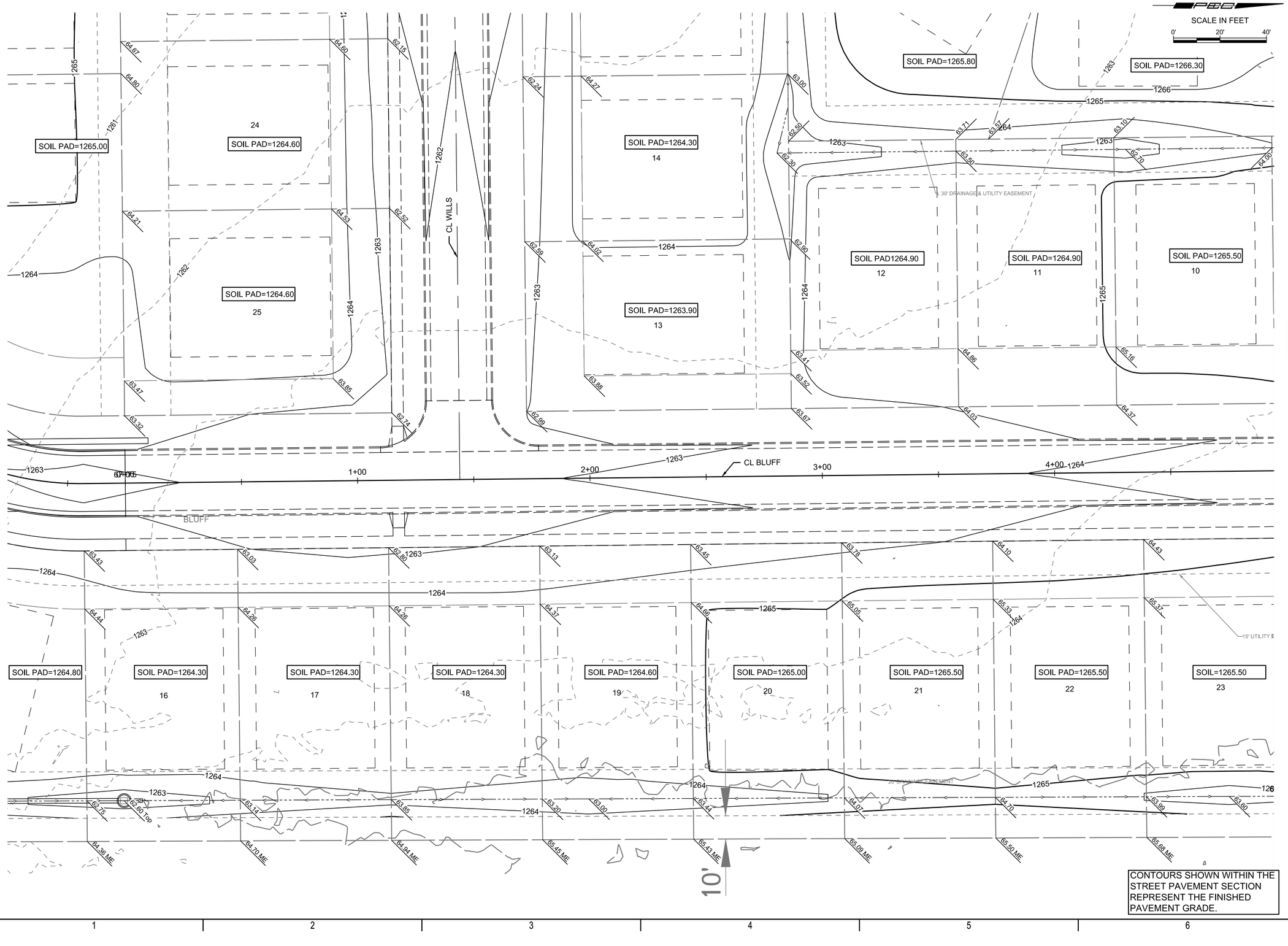
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-005
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

GRADING PLAN-AREA 1

CG109
12 OF 44

SAVED 5/27/2025 9:59:33 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 11:01:06 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\00412PD3_PLANS\030_SWD\12-200605-005-CG109 GRADING PLAN-AREA 1.DWG



CONTOURS SHOWN WITHIN THE STREET PAVEMENT SECTION REPRESENT THE FINISHED PAVEMENT GRADE.

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

CITY OF WICHITA

KEVIN P. G. GRAHAM
LICENSED
27806
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

STORM WATER DRAIN NO. 526
IMPROVEMENTS

SWANEY FARM ADDITION

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 458-2024-085570

Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-005
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

GRADING PLAN-AREA 2

CG110
13 OF 44

SAVED 12/23/2024 2:44:45 PM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 11:01:53 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\0042\PD3_PLANS\030_SWD\13-200605-005-CG110 GRADING PLAN-AREA 2.DWG

SCALE IN FEET
0' 20' 40'

SOIL PAD=1266.50
SOIL PAD=1266.90
SOIL PAD=1265.50
SOIL PAD=1266.00
11
SOIL PAD=1266.30
9
SOIL PAD=1266.80
8
SOIL PAD=1266.80
7
SOIL PAD=1266.50
12
SOIL PAD=1267.10
13
SOIL PAD=1267.50
14
SOIL PAD=1265.90
24
SOIL PAD=1266.40
25
SOIL PAD=1266.80
26

CL 61ST ST. SOUTH
CL BLUFF
BLUFF
UTILITY EASEMENT
20' DRAIN
5+00
6+00
7+00
7+43
21+00
22+00
23+00
23+73

CONTOURS SHOWN WITHIN THE STREET PAVEMENT SECTION REPRESENT THE FINISHED PAVEMENT GRADE.

SAVED 12/23/2024 2:46:05 PM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 11:02:54 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\00042PD3_PLANS\030_SWD\14-200605-005-CG111 GRADING PLAN-AREA 3.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 05/27/2025 KANSAS PROFESSIONAL ENGINEER

STORM WATER DRAIN NO. 526
IMPROVEMENTS

SWANEY FARM ADDITION

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 458-2024-085570

Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-005
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

GRADING PLAN-AREA 3

CG111
14 OF 44

SCALE IN FEET
0' 20' 40'

POND BOTTOM ELEV=1252.5
POND 100 YR. =1259.90
NP =1255.5

SEE SHEET CG203

RESERVE E

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

CITY OF WICHITA

KEVIN P. GRAHAM
LICENSED
27806
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

STORM WATER DRAIN NO. 526
IMPROVEMENTS

SWANEY FARM ADDITION

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 458-2024-085570

Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-005
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

GRADING PLAN-AREA 4

CG112
15 OF 44

SAVED 5/27/2025 9:59:47 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 11:03:52 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\00\42PD3_PLANS\030_SWD\15-200605-005-CG112 GRADING PLAN-AREA 4.DWG

SOIL PAD=1264.10
©
SOIL PAD=1264.30
5
SOIL PAD=1264.20
6
SOIL PAD=1264.20
7
SOIL PAD=1264.00
8
SOIL PAD=1263.20
SOIL PAD=1264.30
9
SOIL PAD=1264.40
10
SOIL PAD=1264.60
28
SOIL PAD=1265.00
27
20' UTI. ESMT.
CL MERILYN
62+00
64+00
MERILYN
SCALE IN FEET
0' 20' 40'
POND BOTTOM ELEV=1250.0
POND 100 YR. =1259.90
NP =1255.5
CONTOURS SHOWN WITHIN THE STREET PAVEMENT SECTION REPRESENT THE FINISHED PAVEMENT GRADE.

SAVED 5/27/2025 9:59:20 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 11:04:49 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_SWD\16-200605-005-CG113 GRADING PLAN-AREA 5.DWG

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

CITY OF WICHITA

KEVIN P. G. GRAHAM
LICENSED
27806
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

STORM WATER DRAIN NO. 526
IMPROVEMENTS

SWANEY FARM ADDITION

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 458-2024-085570

Issue:	
	08/17/2026 - cjr

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-005
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

GRADING PLAN-AREA 5

CG113
16 OF 44

SCALE IN FEET
0' 20' 40'

SOIL PAD=1265.00
SOIL PAD=1265.20
SOIL PAD=1264.60
18
SOIL PAD=1264.30
19
SOIL PAD=1264.20
20
SOIL PAD=1264.10
21
SOIL PAD=1264.10
22
SOIL PAD=1264.60
SOIL PAD=1264.60
23
SOIL PAD=1265.00
SOIL PAD=1264.30
16
SOIL PAD=1264.30
15
SOIL PAD=1265.80
17
SOIL PAD=1266.50
SOIL PAD=1266.30
18

RESERVE D

CL WILLIS
CL WILLIS CT.
WILLIS
WILLIS CT.

10' UTILITY EASEMENT
20' UTILITY EASEMENT
20' D. & U. E.
20' DRAIN & UTILITY EASEMENT
30' DRAINAGE &UTILITY EASEMENT

CONTOURS SHOWN WITHIN THE STREET PAVEMENT SECTION REPRESENT THE FINISHED PAVEMENT GRADE.

SAVED 12/23/2024 2:54:46 PM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 11:05:48 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_SWD\17-200605-005-CG114 GRADING PLAN-AREA 6.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 05/27/2025 KANSAS PROFESSIONAL ENGINEER

STORM WATER DRAIN NO. 526
IMPROVEMENTS

SWANEY FARM ADDITION

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 458-2024-085570

Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-005
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

GRADING PLAN-AREA 6

CG114
17 OF 44

SCALE IN FEET
0' 20' 40'

SOIL PAD=1265.20
23
SOIL PAD=1265.90
SOIL PAD=1265.80
2
SOIL PAD=1265.20
22
SOIL PAD=1265.80
3
SOIL PAD=1265.70
21
SOIL PAD=1265.90
4
SOIL PAD=1266.50
20
SOIL PAD=1266.30
5
SOIL PAD=1266.50
19
SOIL PAD=1266.90
6
SOIL PAD=1265.30
5
SOIL PAD=1265.80
6
SOIL PAD=1265.80
7
SOIL PAD=1265.40
8
SOIL PAD=1265.40
9
SOIL PAD=1265.50
10

61ST STREET SOUTH
CL 61ST ST. SOUTH

CONTOURS SHOWN WITHIN THE STREET PAVEMENT SECTION REPRESENT THE FINISHED PAVEMENT GRADE.

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

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 05/27/2025 KANSAS PROFESSIONAL ENGINEER

STORM WATER DRAIN NO. 526
IMPROVEMENTS

SWANEY FARM ADDITION

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 458-2024-085570

Issue:		
	08/17/2026 - cjr	

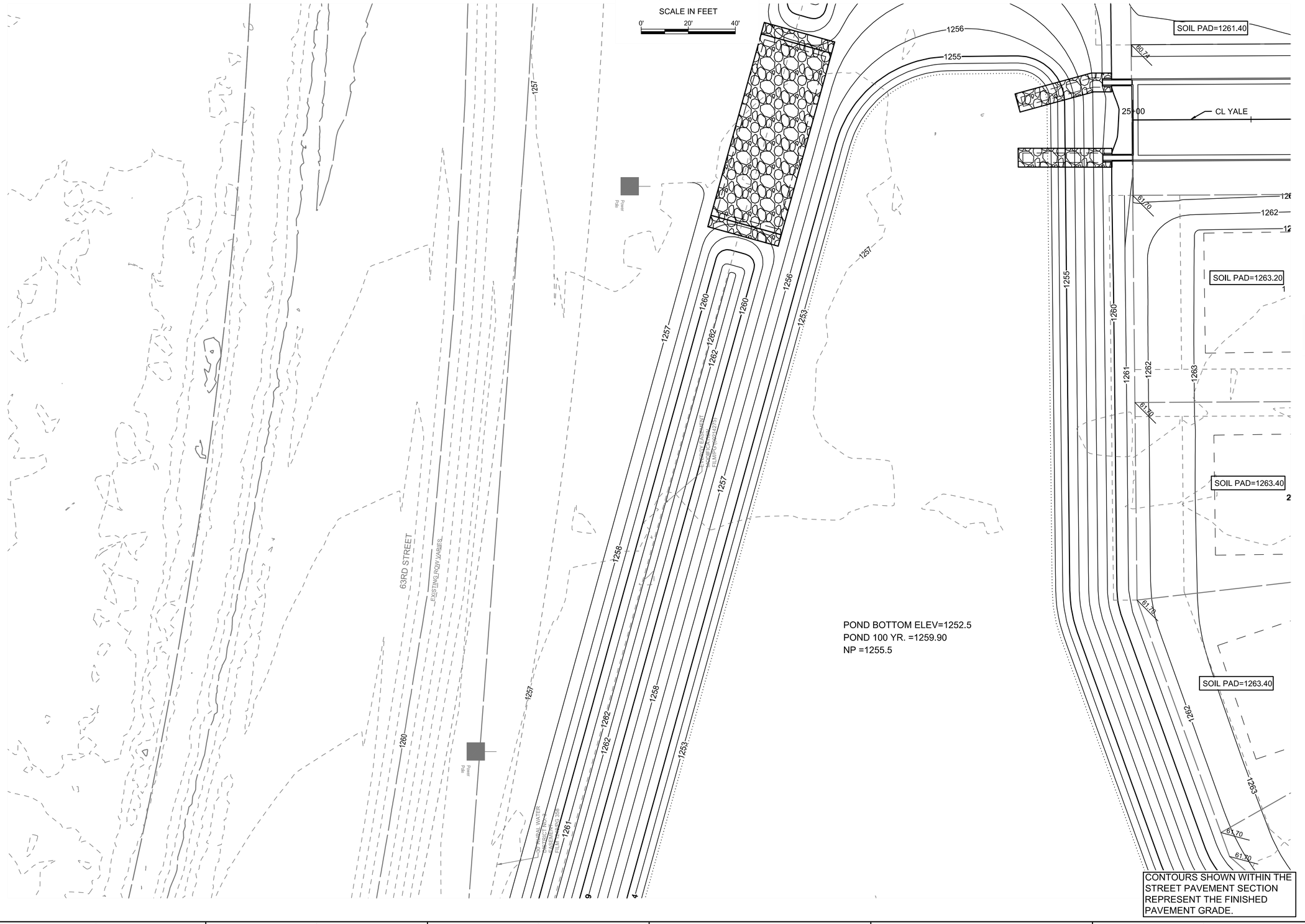
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-005
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

GRADING PLAN-AREA 7

CG115
18 OF 44

SAVED 12/23/2024 2:55:21 PM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 11:06:55 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\0042\PD3_PLANS\030_SWD\18-200605-005-CG115 GRADING PLAN-AREA 7.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
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

STORM WATER DRAIN NO. 526
IMPROVEMENTS

SWANEY FARM ADDITION

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 458-2024-085570

Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-005
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

GRADING PLAN-AREA 8

CG116
19 OF 44

SAVED 5/27/2025 9:59:00 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 11:07:47 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_SWD\19-200605-005-CG116 GRADING PLAN-AREA 8.DWG

SOIL PAD=1261.80 | SOIL PAD=1262.20 | SOIL PAD=1262.60 | SOIL PAD=1262.50 | SOIL PAD=1262.00 | SOIL PAD=1261.80

SCALE IN FEET
0' 20' 40'

26+00 | 27+00 | YALE | 28+00 | CL YALE | 29+00 | 30+00 | 58+00 | 59+00 | 60+00 | 61+00 | 62+00 | 63+00 | 64+00 | 65+00 | 65+80

CL PATRICK | PATRICK | CL MERILYN

SOIL PAD=1263.20 1
SOIL PAD=1262.60 1
SOIL PAD=1262.60 2
SOIL PAD=1262.40 3
SOIL PAD=1262.60 4
SOIL PAD=1263.20
SOIL PAD=1263.40 2
SOIL PAD=1263.50 7
SOIL PAD=1263.60 6
SOIL PAD=1263.00 5
SOIL PAD=1263.00 3
SOIL PAD=1263.40 3
SOIL PAD=1263.20 2
SOIL PAD=1264.10 4
SOIL PAD=1263.20 1
SOIL PAD=1264.30
SOIL PAD=1264.20
SOIL PAD=1264.20
SOIL PAD=1264.00

15' D/U ESMT.
5' D/U ESMT.
30' DRAINAGE & UTILITY EASEMENT
10' UTIL. ESMT.
10'D. & U. E.

CONTOURS SHOWN WITHIN THE STREET PAVEMENT SECTION REPRESENT THE FINISHED PAVEMENT GRADE.

SAVED 5/27/2025 9:58:41 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 11:08:44 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\00042PD3_PLANS\030_SWDV20-200605-005-CG117 GRADING PLAN-AREA 9.DWG

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

CITY OF WICHITA

KEVIN P. G. GRAHAM LICENSED 27806 05/27/2025 KANSAS PROFESSIONAL ENGINEER

STORM WATER DRAIN NO. 526 IMPROVEMENTS

SWANEY FARM ADDITION

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 458-2024-085570

Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-005
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

GRADING PLAN-AREA 9

CG117
20 OF 44

SOIL PAD=1261.80 | SOIL PAD=1262.20 | SOIL PAD=1263.00 | SOIL PAD=1263.80 | SOIL PAD=1264.20 | SOIL PAD=1264.50 | SOIL PAD=1264.90 | SOIL PAD=1265.30

SCALE IN FEET
0' 20' 40'

31+00 32+00 YALE 33+00 CL YALE 34+00 35+00

SOIL PAD=1263.10 5
SOIL PAD=1263.40 6
SOIL PAD=1263.50 7
SOIL PAD=1264.00 8
SOIL PAD=1264.40 9
SOIL PAD=1264.40 10

20' DRAIN. & UTIL. ESMT.
15' DRAIN. & UTIL. ESMT.
20' UTI. ESMT.

RESERVE C

POND 100 YR. =1260.0

SOIL PAD=1263.00 E
SOIL PAD=1263.20
SOIL PAD=1263.20
SOIL PAD=1265.70 14
SOIL PAD=1265.50 15
SOIL PAD=1265.20 16
SOIL PAD=1265.00 17
SOIL PAD=1264.60

CL WILLIS

CONTOURS SHOWN WITHIN THE STREET PAVEMENT SECTION REPRESENT THE FINISHED PAVEMENT GRADE.

SAVED 5/27/2025 9:58:17 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 11:09:23 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_SWD\21-200605-005-CG118 GRADING PLAN-AREA 10.DWG

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

CITY OF WICHITA

KEVIN P. G. GRAHAM LICENSED 27806 05/27/2025 KANSAS PROFESSIONAL ENGINEER

STORM WATER DRAIN NO. 526
IMPROVEMENTS

SWANEY FARM ADDITION

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 458-2024-085570

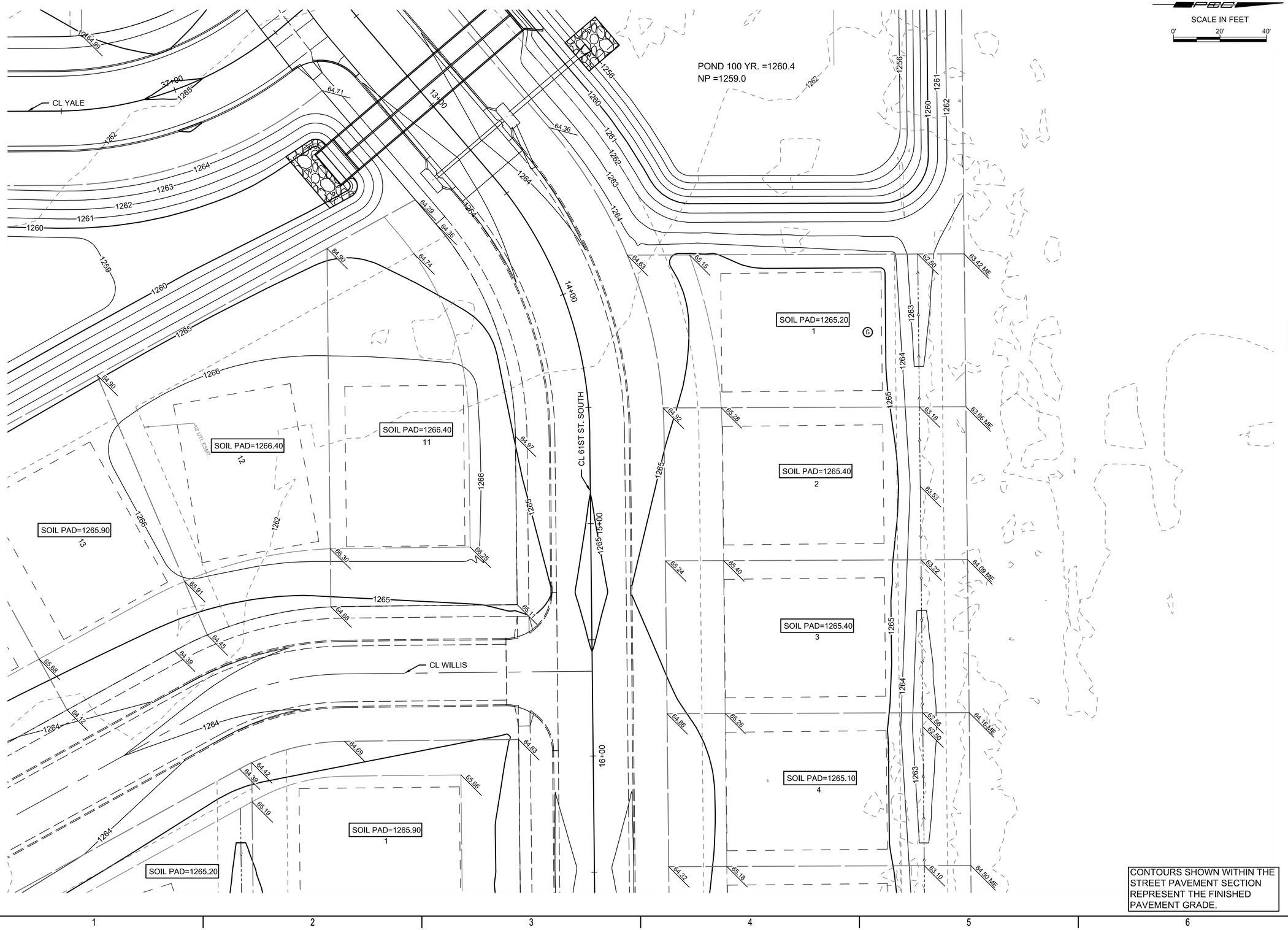
Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-005
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

GRADING PLAN-AREA 10

CG118
21 OF 44



CONTOURS SHOWN WITHIN THE STREET PAVEMENT SECTION REPRESENT THE FINISHED PAVEMENT GRADE.

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

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 05/27/2025 KANSAS PROFESSIONAL ENGINEER

STORM WATER DRAIN NO. 526 IMPROVEMENTS

SWANEY FARM ADDITION

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 458-2024-085570

Issue:		
	08/17/2026 - cjr	

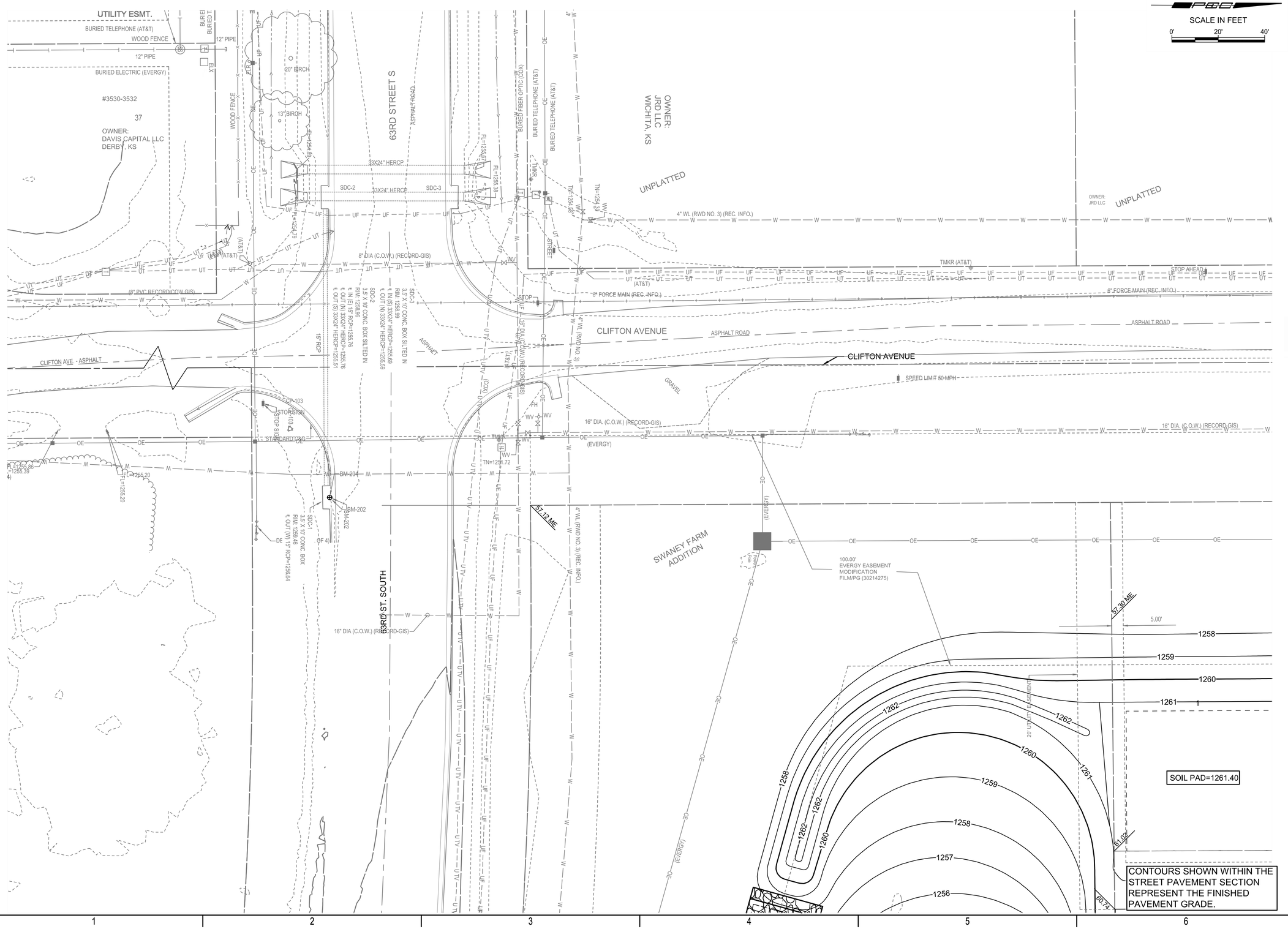
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-005
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

GRADING PLAN-AREA 11

CG119
22 OF 44

SAVED 12/23/2024 2:58:12 PM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 11:09:56 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\00042\PD3_PLANS\030_SWD\22-200605-005-CG119 GRADING PLAN-AREA 11.DWG



SAVED 12/23/2024 2:58:55 PM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 11:10:26 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_SWD\23-200605-005-CG120 GRADING PLAN-AREA 12.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
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

STORM WATER DRAIN NO. 526
IMPROVEMENTS

SWANEY FARM ADDITION

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 458-2024-085570

Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-005
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

GRADING PLAN-AREA 12

CG120
23 OF 44

SCALE IN FEET
0' 20' 40'

20' UTI. ESMT.

THE WELL ADDITION 1

OWNER: WELL WORSHIP CENTER CHURCH

UNPLATTED

OWNER: LINDA K. HOWELL

DRIVEWAY GRAVEL

4" WL (RWD NO. 3) (REC. INFO.)

16" DIA. (C.O.W.) (RECORD-GIS)

TMKR (AT&T)

(AT&T)

6" FORCE MAIN (REC. INFO.)

MB

CLIFTON AVENUE

ASPHALT

30' (EVERGY)

PROTECT EX. EVERGY POLE TO REMAIN

CL MERILYN

55+00

56+00

57+00

SOIL PAD=1261.80

SOIL PAD=1262.20

SOIL PAD=1262.60

SOIL PAD=1262.50

SOIL PAD=1262.00

SOIL PAD=1261.80

CONTOURS SHOWN WITHIN THE STREET PAVEMENT SECTION REPRESENT THE FINISHED PAVEMENT GRADE.

SAVED 12/23/2024 2:59:48 PM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 11:11:00 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\0042\PD3_PLANS\030_SWD\24-200605-005-CG121 GRADING PLAN-AREA 13.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
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

STORM WATER DRAIN NO. 526
IMPROVEMENTS

SWANEY FARM ADDITION

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 458-2024-085570

Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-005
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

GRADING PLAN-AREA 13

CG121
24 OF 44

SCALE IN FEET
0' 20' 40'

CONTOURS SHOWN WITHIN THE STREET PAVEMENT SECTION REPRESENT THE FINISHED PAVEMENT GRADE.

50' ACCESS ESMT.

20' UTI. ESMT.

CLIFTON AVENUE

ASPHALT

60' STREET DEDICATION

16" DIA. (C.O.W.) (RECORD-GIS)

TMKR (AT&T)

FH WV

(AT&T)

(EVERGY)

Power Pole

SOIL PAD=1261.80

SOIL PAD=1262.20

SOIL PAD=1263.00

SOIL PAD=1263.80

SOIL PAD=1264.20

SOIL PAD=1264.50

SOIL PAD=1264.90

SOIL PAD=1265.30

50.33'

58.54 ME

59.88 ME

62.11 ME

61.50 FL

63.70 ME

62.10 FL

63.64 ME

62.00 FL

63.81 ME

62.70 FL

63.86 ME

63.00 FL

61.69

62.01

62.16

62.64

62.62

63.44

63.08

64.02

63.54

64.36

64.00

64.72

64.47

65.12

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

CITY OF WICHITA

KEVIN P. GRAHAM
LICENSED
27806
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

STORM WATER DRAIN NO. 526
IMPROVEMENTS

SWANEY FARM ADDITION

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 458-2024-085570

Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-005
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

GRADING PLAN-AREA 14

CG122
25 OF 44

SAVED 5/27/2025 9:57:22 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 11:11:38 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_SWD\25-200605-005-CG122 GRADING PLAN-AREA 14.DWG

SCALE IN FEET
0' 20' 40'

THE WELL ADDITION 1
UNPLATTED
DRIVEWAY
GRAVEL
4" WL (RWD NO. 3) (REC. INFO.)
16" DIA. (C.O.W.) (RECORD-GIS)
6" FORCE MAIN (REC. INFO.)
TMKR (AT&T)
PRESSURE SEWER PIPELINE IN AREA
NW CORNER E 1/2 SW 1/4 26-28-1E FOUND CHISELED CROSS ON TOP OF 3" x 6" STONE WITH 3/4" IRON PIPE ON NE SIDE
16" DIA. (C.O.W.) (RECORD-C
(AT&T)
CLIFTON AVENUE
ASPHALT
10+00
SCR
BM=205
CP-106
CL-101
1265
1264
1263
1262
1261
1260
1256
FOUND 1/2" REBAR
64.98 ME
(EVERGY)
100.00' EVERGY EASEMENT MODIFICATION FILM/PG (30214275)
CL 61ST ST. SOUTH
11+00
12+00
RESERVE A
64.04 ME
63.30 FL
RES. 'B'
5' UTIL ESMT
65.78
65.74
65.35
64.47
65.27
64.09
37.82
64.73
20' U. E.
15' UTIL ESMT
25' UTILITY EASEMENT
30.00' EVERGY EASEMENT BOOK 1248 PG 358
SOIL PAD=1265.30
POND 100 YR. =1260.4
NP =1259.0
CONTOURS SHOWN WITHIN THE STREET PAVEMENT SECTION REPRESENT THE FINISHED PAVEMENT GRADE.

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

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 05/27/2025 KANSAS PROFESSIONAL ENGINEER

STORM WATER DRAIN NO. 526 IMPROVEMENTS

SWANEY FARM ADDITION

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 458-2024-085570

Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-005
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

GRADING PLAN-AREA 15

CG123
26 OF 44

SAVED 12/23/2024 2:35:38 PM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 11:12:12 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_SWD\26-200605-005-CG123 GRADING PLAN-AREA 15.DWG

	Location		Exc.	Fill	Compaction % and Test Elevation												
Lot	Northing	Easting	Elev.	Elev.	1256	1257	1258	1259	1260	1261	1262	1263	1264	1265	1266	1267	1268
1A	332107.08	17559899.46	1257.0	1261.4	X	X					X	X	X	X	X	X	X
2A	332184.08	17559899.07	1257.1	1261.8	X	X					X	X	X	X	X	X	X
3A	332261.49	17559898.68	1257.2	1262.2	X	X						X	X	X	X	X	X
4A	332338.08	17559898.29	1257.1	1262.6	X	X						X	X	X	X	X	X
5A	332415.49	17559897.89	1256.9	1262.5	X	X						X	X	X	X	X	X
6A	332492.07	17559897.51	1257.2	1262.0	X	X					X	X	X	X	X	X	X
1B	332651.14	17559896.70	1258.7	1261.8	X	X	X				X	X	X	X	X	X	X
2B	332727.99	17559896.33	1260.4	1262.2	X	X	X	X	X			X	X	X	X	X	X
3B	332804.99	17559895.94	1262.5	1263.0	X	X	X	X	X	X	X	X	X	X	X	X	X
4B	332881.99	17559895.55	1263.1	1263.8	X	X	X	X	X	X	X	X	X	X	X	X	X
5B	332958.99	17559895.16	1263.2	1264.2	X	X	X	X	X	X	X	X		X	X	X	X
6B	333035.98	17559894.77	1263.2	1264.5	X	X	X	X	X	X	X	X		X	X	X	X
7B	333112.98	17559894.38	1263.8	1264.9	X	X	X	X	X	X	X	X		X	X	X	X
8B	333189.98	17559893.98	1263.3	1265.3	X	X	X	X	X	X	X	X			X	X	X
1C	332135.42	17560059.89	1256.5	1263.2	X								X	X	X	X	X
2C	332139.74	17560145.71	1256.5	1263.4	X								X	X	X	X	X
3C	332147.34	17560223.16	1256.8	1263.4	X								X	X	X	X	X
4C	332193.45	17560295.35	1258.8	1264.1	X	X	X							X	X	X	X
5C	332261.23	17560340.99	1259.2	1264.3	X	X	X	X						X	X	X	X
6C	332341.49	17560352.68	1259.8	1264.2	X	X	X	X						X	X	X	X
7C	332419.41	17560355.85	1260.7	1264.2	X	X	X	X	X					X	X	X	X
8C	332496.98	17560357.18	1260.9	1264.0	X	X	X	X	X	X			X	X	X	X	X
9C	332477.97	17560594.24	1259.3	1264.3	X	X	X	X						X	X	X	X
10C	332478.87	17560658.90	1259.8	1264.4	X	X	X	X						X	X	X	X
11C	332479.81	17560724.00	1259.9	1264.4	X	X	X	X	X					X	X	X	X
12C	332481.33	17560803.17	1259.8	1264.5	X	X	X	X						X	X	X	X
13C	332519.65	17560879.44	1260.0	1264.6	X	X	X	X	X					X	X	X	X
14C	332582.30	17560938.90	1260.8	1264.8	X	X	X	X	X					X	X	X	X
15C	332649.32	17560964.40	1261.8	1264.8	X	X	X	X	X	X				X	X	X	X
16C	332730.10	17560968.51	1262.9	1264.3	X	X	X	X	X	X	X			X	X	X	X
17C	332794.87	17560968.06	1263.4	1264.3	X	X	X	X	X	X	X	X		X	X	X	X
18C	332859.43	17560967.53	1263.5	1264.3	X	X	X	X	X	X	X	X		X	X	X	X
19C	332924.99	17560967.54	1263.3	1264.6	X	X	X	X	X	X	X	X		X	X	X	X
20C	332989.92	17560968.74	1263.7	1265.0	X	X	X	X	X	X	X	X		X	X	X	X
21C	333054.91	17560968.05	1263.7	1265.5	X	X	X	X	X	X	X	X			X	X	X
22C	333119.91	17560967.35	1263.7	1265.5	X	X	X	X	X	X	X	X			X	X	X
23C	333184.91	17560966.65	1264.1	1265.5	X	X	X	X	X	X	X	X	X		X	X	X
24C	333249.90	17560965.95	1264.7	1265.9	X	X	X	X	X	X	X	X	X		X	X	X
25C	333314.90	17560965.25	1265.4	1266.4	X	X	X	X	X	X	X	X	X	X		X	X
26C	333379.47	17560965.95	1266.1	1266.8	X	X	X	X	X	X	X	X	X	X	X	X	X
1D	332305.55	17560075.60	1257.1	1262.6	X	X						X	X	X	X	X	X
2D	332375.71	17560076.76	1258.1	1262.6	X	X	X					X	X	X	X	X	X
3D	332438.72	17560076.44	1259.1	1262.4	X	X	X	X				X	X	X	X	X	X
4D	332501.72	17560076.12	1260.0	1262.6	X	X	X	X	X			X	X	X	X	X	X
5D	332496.22	17560180.81	1262.6	1263.0	X	X	X	X	X	X	X	X	X	X	X	X	X
6D	332418.70	17560181.21	1261.8	1263.6	X	X	X	X	X	X			X	X	X	X	X
7D	332340.70	17560181.60	1259.7	1263.5	X	X	X	X					X	X	X	X	X
1E	332662.27	17560291.25	1261.7	1263.2	X	X	X	X	X	X			X	X	X	X	X
2E	332661.77	17560229.11	1262.3	1263.2	X	X	X	X	X	X	X		X	X	X	X	X
3E	332660.75	17560165.28	1262.3	1263.0	X	X	X	X	X	X	X	X	X	X	X	X	X
4E	332640.69	17560075.56	1262.2	1263.2	X	X	X	X	X	X	X		X	X	X	X	X
5E	332704.11	17560075.56	1262.2	1263.1	X	X	X	X	X	X	X		X	X	X	X	X
6E	332766.84	17560074.79	1262.0	1263.4	X	X	X	X	X	X	X		X	X	X	X	X
7E	332829.94	17560074.40	1262.2	1263.5	X	X	X	X	X	X	X		X	X	X	X	X

	Location		Exc.	Fill	Compaction % and Test Elevation												
Lot	Northing	Easting	Elev.	Elev.	1256	1257	1258	1259	1260	1261	1262	1263	1264	1265	1266	1267	1268
12E	333300.23	17560136.76	1261.5	1266.4	X	X	X	X	X	X						X	X
13E	333227.36	17560165.83	1261.3	1265.9	X	X	X	X	X	X					X	X	X
14E	333163.17	17560202.28	1261.4	1265.7	X	X	X	X	X	X					X	X	X
15E	333102.26	17560235.41	1261.3	1265.5	X	X	X	X	X	X					X	X	X
16E	333039.63	17560268.47	1261.1	1265.2	X	X	X	X	X	X					X	X	X
17E	332978.93	17560302.30	1260.9	1265.0	X	X	X	X	X					X	X	X	X
18E	332914.91	17560336.98	1260.1	1264.6	X	X	X	X	X					X	X	X	X
19E	332851.96	17560375.95	1259.8	1264.3	X	X	X	X						X	X	X	X
20E	332802.40	17560427.52	1259.8	1264.2	X	X	X	X						X	X	X	X
21E	332772.43	17560496.94	1259.4	1264.1	X	X	X	X						X	X	X	X
22E	332764.91	17560581.81	1260.1	1264.1	X	X	X	X	X					X	X	X	X
23E	332765.60	17560652.31	1260.4	1264.6	X	X	X	X	X					X	X	X	X
24E	332766.17	17560725.72	1261.1	1264.6	X	X	X	X	X	X				X	X	X	X
25E	332767.05	17560799.71	1261.9	1264.6	X	X	X	X	X	X				X	X	X	X
26E	332657.12	17560733.61	1259.9	1265.0	X	X	X	X	X					X	X	X	X
27E	332656.41	17560667.40	1259.6	1265.0	X	X	X	X						X	X	X	X
28E	332655.65	17560596.14	1259.5	1264.6	X	X	X	X						X	X	X	X
1F	333357.74	17560297.63	1261.9	1265.9	X	X	X	X	X	X	X				X	X	X
2F	333358.59	17560375.08	1262.1	1265.8	X	X	X	X	X	X	X				X	X	X
3F	333359.27	17560447.52	1262.5	1265.8	X	X	X	X	X	X	X				X	X	X
4F	333360.28	17560519.52	1262.6	1265.9	X	X	X	X	X	X	X				X	X	X
5F	333361.13	17560593.76	1263.0	1266.3	X	X	X	X	X	X	X	X				X	X
6F	333361.41	17560678.73	1263.1	1266.9	X	X	X	X	X	X	X	X				X	X
7F	333377.26	17560783.04	1263.6	1266.8	X	X	X	X	X	X	X	X				X	X
8F	333310.65	17560784.20	1263.4	1266.8	X	X	X	X	X	X	X	X				X	X
9F	333240.65	17560784.84	1263.2	1266.3	X	X	X	X	X	X	X	X				X	X
10F	333174.01	17560785.59	1262.9	1265.5	X	X	X	X	X	X	X				X	X	X
11F	333105.53	17560786.13	1262.6	1264.9	X	X	X	X	X	X	X				X	X	X
12F	333037.40	17560787.18	1262.4	1264.9	X	X	X	X	X	X	X				X	X	X
13F	332944.93	17560807.24	1262.3	1263.9	X	X	X	X	X	X	X			X	X	X	X
14F	332944.21	17560740.21	1261.8	1264.3	X	X	X	X	X	X					X	X	X
15F	332943.46	17560670.54	1261.3	1264.3	X	X	X	X	X	X					X	X	X
16F	332942.71	17560600.29	1261.2	1264.3	X	X	X	X	X	X					X	X	X
17F	333071.63	17560652.32	1262.0	1265.8	X	X	X	X	X	X	X					X	X
18F	333149.04	17560674.41	1262.5	1266.3	X	X	X	X	X	X	X					X	X
19F	333223.72	17560636.52	1262.5	1266.5	X	X	X	X	X	X	X					X	X
20F	333250.66	17560563.80	1262.6	1266.5	X	X	X	X	X	X	X					X	X
21F	333249.88	17560496.54	1262.2	1265.7	X	X	X	X	X	X	X				X	X	X
22F	333249.24	17560424.48	1261.9	1265.2	X	X	X	X	X	X	X				X	X	X
23F	333242.94	17560348.13	1261.7	1265.2	X	X	X	X	X	X					X	X	X
1G	333539.22	17560076.02	1261.7	1265.2	X	X	X	X	X	X					X	X	X
2G	333540.00	17560141.82	1261.9	1265.4	X	X	X	X	X	X	X				X	X	X
3G	333540.71	17560207.62	1262.1	1265.4	X	X	X	X	X	X	X				X	X	X
4G	333541.41	17560273.42	1262.4	1265.1	X	X	X	X	X	X	X				X	X	X
5G	333542.12	17560339.21	1262.5	1265.3	X	X	X	X	X	X	X				X	X	X
6G	333542.83	17560405.01	1262.7	1265.8	X	X	X	X	X	X	X				X	X	X
7G	333543.53	17560470.81	1262.9	1265.8	X	X	X	X	X	X	X	X			X	X	X
8G	333543.08	17560536.87	1263.2	1265.4	X	X	X	X	X	X	X	X			X	X	X
9G	333544.95	17560602.41	1263.5	1265.4	X	X	X	X	X	X	X	X			X	X	X
10G	333545.65	17560668.20	1263.6	1265.5	X	X	X	X	X	X	X	X			X	X	X
11G	333546.36	17560734.00	1263.9	1266.0	X	X	X	X	X	X	X	X	X		X	X	X
12G	333547.07	17560799.80	1264.4	1266.5	X	X	X	X	X	X	X	X	X			X	X
13G	333547.77	17560865.60	1265.0	1267.1	X	X	X	X	X	X	X	X	X	X			X
14G	333548.48	17560931.39	1265.5	1267.5	X	X	X	X	X	X	X	X	X	X			X

EXCAVATION ELEVATION INCLUDES TOP SOIL STRIPPING.

COMPACTION TEST REQUIRED

X COMPACTION TEST NOT REQUIRED

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

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 05/27/2025 KANSAS PROFESSIONAL ENGINEER

STORM WATER DRAIN NO. 526
IMPROVEMENTS

SWANEY FARM ADDITION

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 458-2024-085570

Issue:		
	08/17/2026 - cjr	

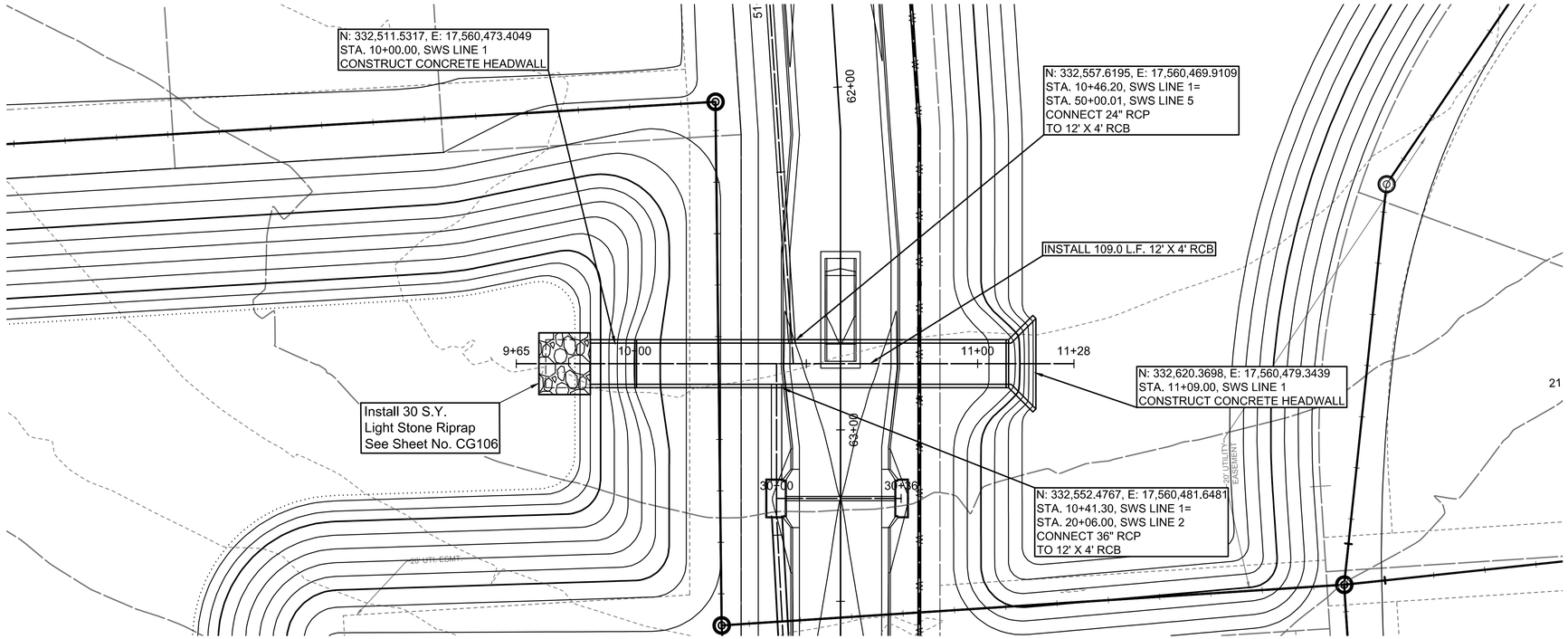
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-005
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

COMPACTION TABLES

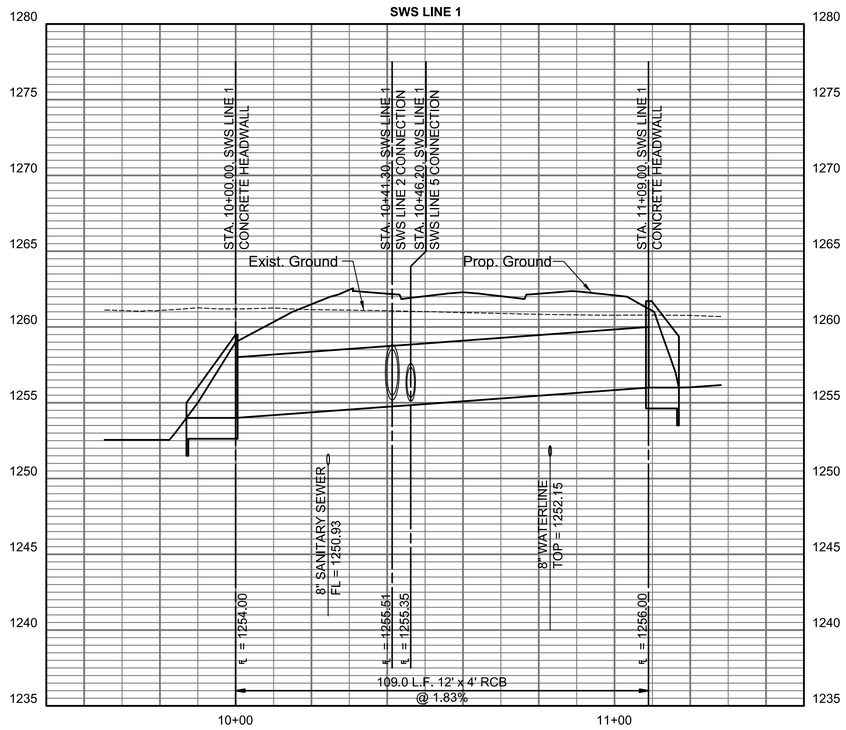
CG124
27 OF 44

SAVED 9/5/2024 7:23:26 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 11:12:16 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\00412PD3_PLANS\030_SWDI200605-005-CG124 COMPACTION TABLES.DWG



SEE SHEET NOS. CG301 THRU CG306 FOR STRUCTURE DETAILS

SCALE IN FEET
PLAN: LAT. & LONG. 0' 10' 20' 40'
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 05/27/2025 KANSAS PROFESSIONAL ENGINEER

STORM WATER DRAIN NO. 526
IMPROVEMENTS

SWANEY FARM ADDITION

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 458-2024-085570

Issue:	
	08/17/2026 - cjr

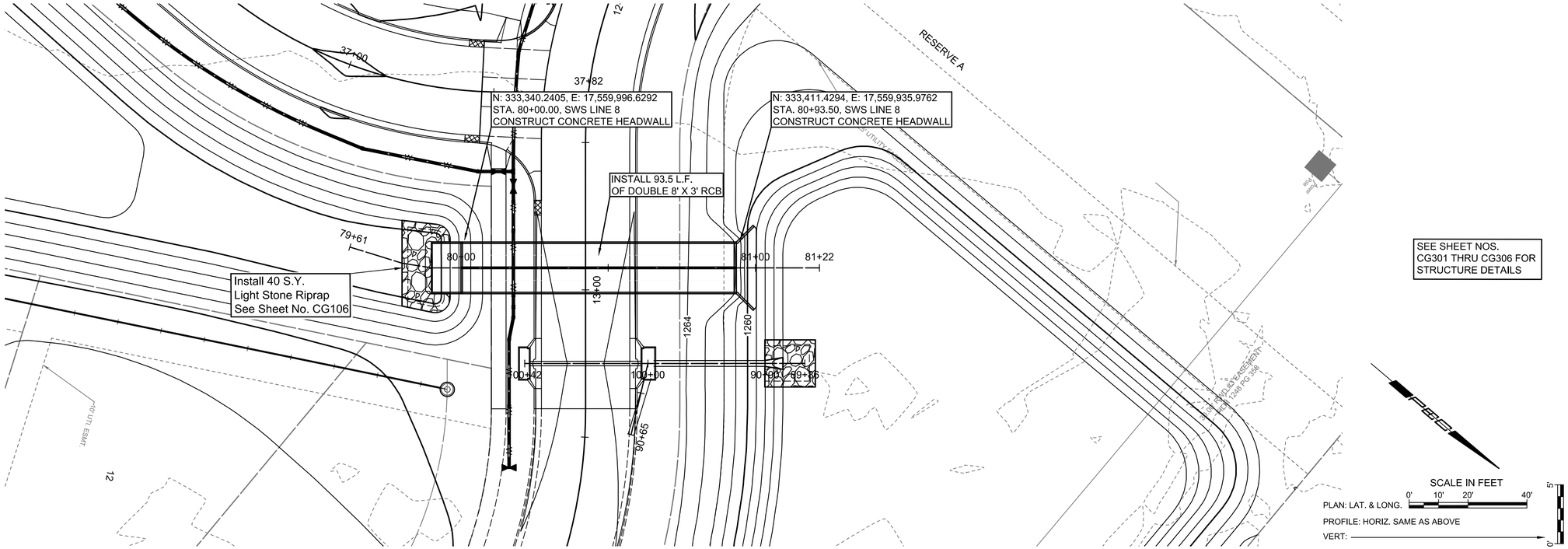
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

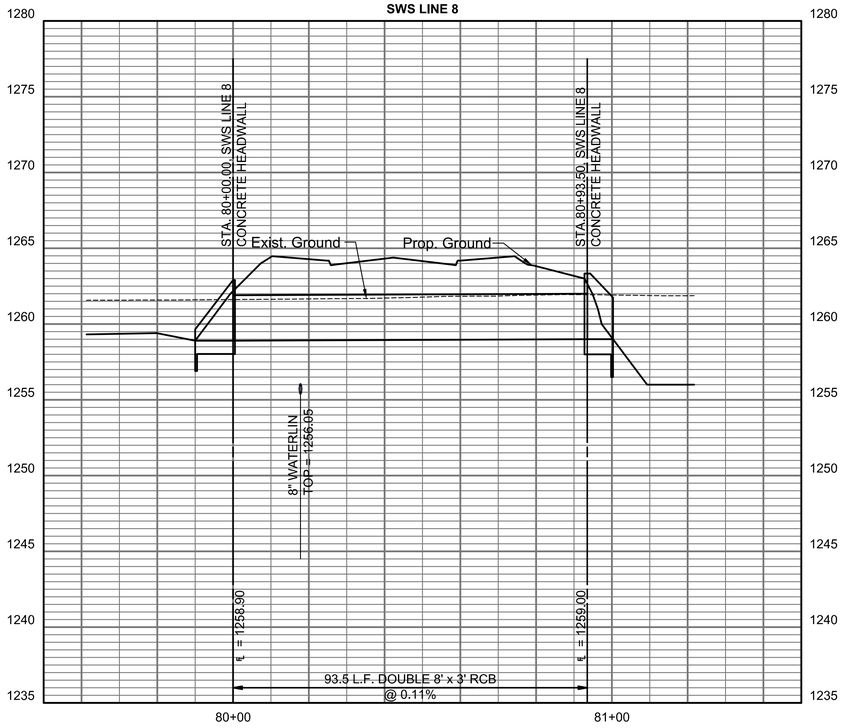
JOB NO.	200605-005
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

PLAN AND PROFILE - SWS LINE 1

CG201
28 OF 44

SAVED 5/27/2025 10:02:57 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 11:13:04 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\0042\2PD3_PLANS\030_SWD\27-200605-005-CG201 PLAN AND PROFILE-SWS LINE 1.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
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

STORM WATER DRAIN NO. 526
IMPROVEMENTS

SWANEY FARM ADDITION

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 458-2024-085570

Issue:		
	08/17/2026 - cjr	

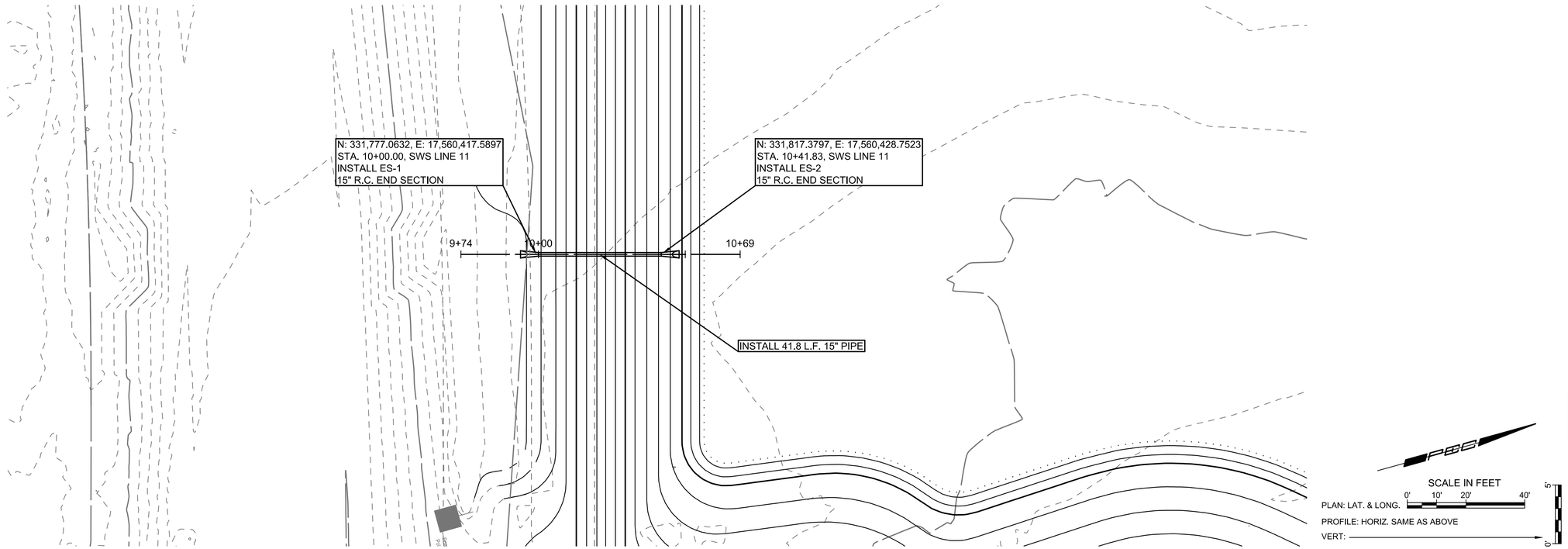
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

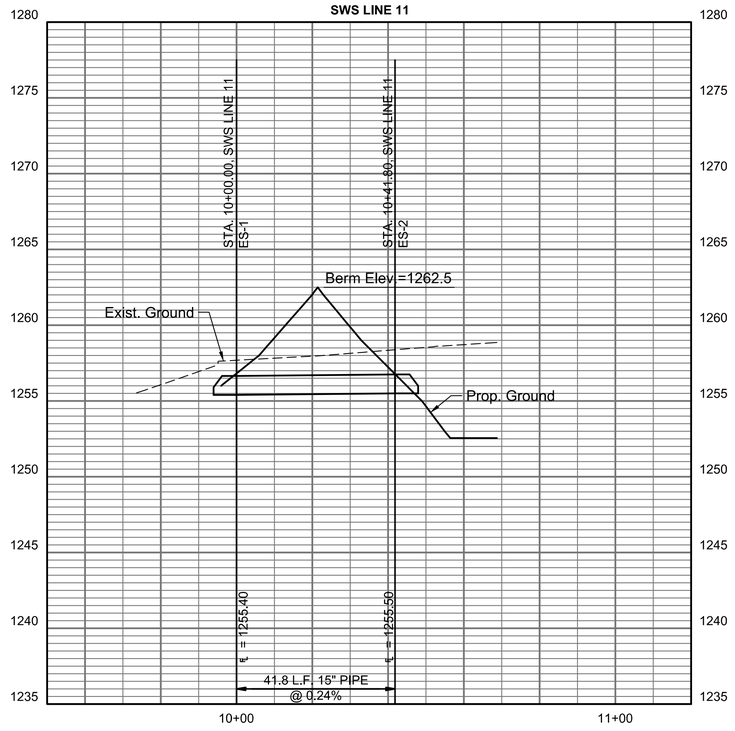
JOB NO.	200605-005
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

PLAN AND PROFILE -
SWS LINE 8

CG202
29 OF 44

SAVED 5/27/2025 10:02:45 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 11:13:52 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\00412PD3_PLANS\030_SWD\28-200605-005-CG202 PLAN AND PROFILE-SWS LINE 8.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
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

STORM WATER DRAIN NO. 526 IMPROVEMENTS

SWANEY FARM ADDITION

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 458-2024-085570

Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

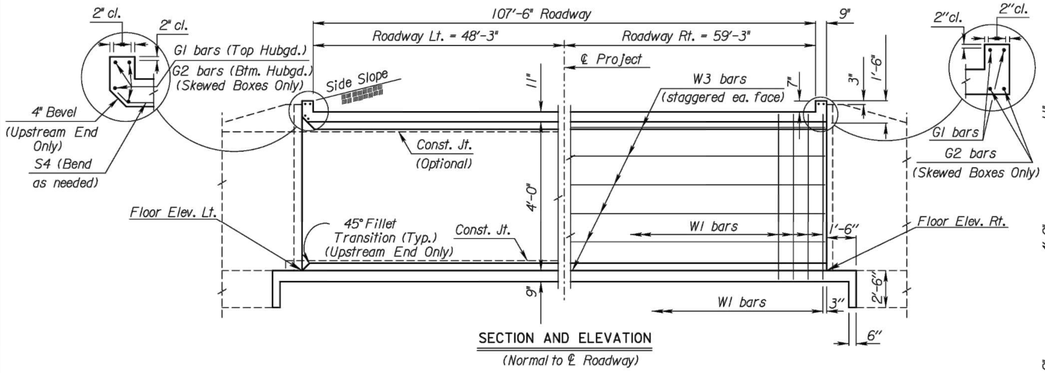
JOB NO.	200605-005
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

PLAN AND PROFILE - SWS LINE 11

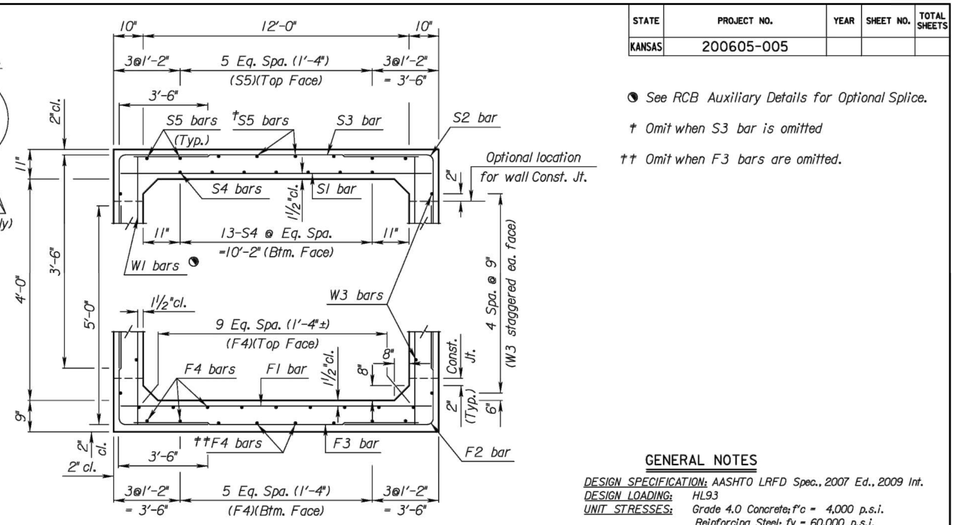
CG203
30 OF 44

SAVED 3/27/2025 1:34:20 PM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 11:14:38 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\00412PD3_PLANS\030_SWD\29-200605-005-CG203 PLAN AND PROFILE-SWS LINE 11.DWG

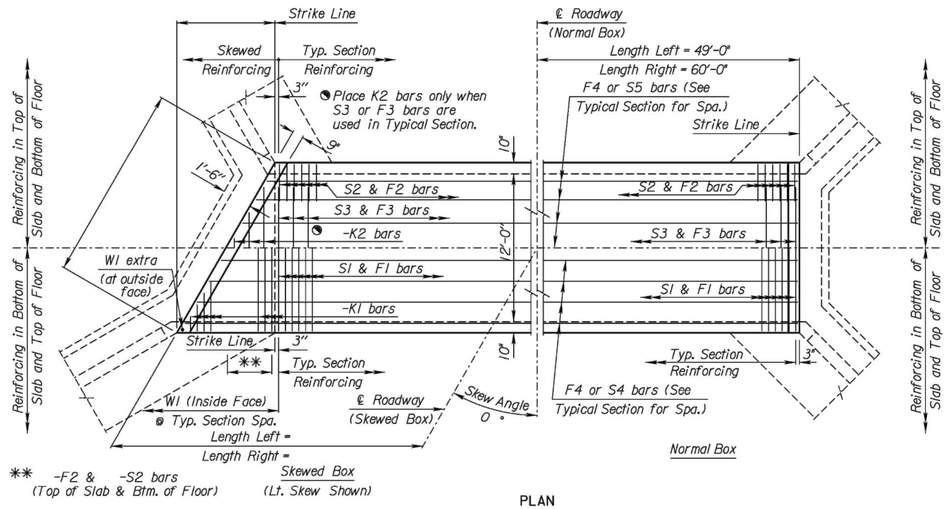
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	200605-005			



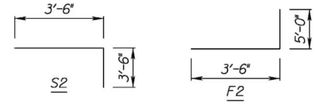
SECTION AND ELEVATION
(Normal to ℄ Roadway)



TYPICAL SECTION



PLAN



BENDING DIAGRAM
All Dimensions are out to out of bars.

See RCB Auxiliary Details for Optional Splice.

† Omit when S3 bar is omitted

†† Omit when F3 bars are omitted.

GENERAL NOTES

DESIGN SPECIFICATION: AASHTO LRFD Spec., 2007 Ed., 2009 Int.
DESIGN LOADING: HL93
UNIT STRESSES: Grade 4.0 Concrete: f'c = 4,000 p.s.i.
Reinforcing Steel, fy = 60,000 p.s.i.
FILL HEIGHT: Unless otherwise noted, the Design Fill Height is measured from the riding surface at the culvert and shall include the surfacing.
CONCRETE: Grade 4.0 Concrete shall be used throughout. Bevel all exposed edges with a ¾inch triangular moulding. Where Grade 4.0 Concrete (AE) is specified, it shall be placed in the top slab above the Construction Joint.
REINFORCING: All reinforcing shall conform to ASTM A615, Grade 60. All dimensions relative to reinforcing steel shall be to centerline of bar unless otherwise noted.
EXCAVATION: Excavation for culverts less than bridge length shall not be paid for directly but shall be subsidiary to Grade 4.0 Concrete. Excavation for RCB Bridges shall be paid for as Class III Excavation.
SEAL COURSE: A Seal Course may be required by the Engineer. The Seal Course shall be unreinforced Concrete (Commercial Grade) to a minimum depth of 3 inches or as determined by the Engineer. Concrete for the seal course shall be paid for at the unit price set for Concrete for Seal Course.
FOUNDATION STABILIZATION: The Foundation Stabilization quantity has been calculated to the limits shown on the "RCB Auxiliary Details" sheet. The depth may be increased by the Engineer. The Contractor may underrun Foundation Stabilization under the barrel if founded on firm material and with the Engineer's approval. Use Foundation Stabilization on all wingwalls unless founded on rock or granular material.
QUANTITIES: The quantities shown in the Culvert Summary include apron and/or soil saver quantities when their construction is required by the plans. Payment for additional quantities that result from including seal course and/or floating apron, as a change in original plans, shall be made at the Unit Price bid for the various items involved.
GRANULAR BACKFILL (WINGWALLS): See the "Auxiliary Details" sheet.
STRIKE LINE: Wingwalls and that portion of the RCB outside the Strike Line shall be constructed level. Footing for wingwalls shall be constructed with the culvert floor. See wingwall detail sheet.
BRIDGE BACKWALL PROTECTION SYSTEM: For structures with this bid item in the Summary of Quantities. See the "Auxiliary Details" sheet.

⧗ For design purposes ONLY. Do NOT use for Construction

CULVERT SUMMARY

● includes any welded wire fabric

Floor Elev. Lt.	Floor Elev. Rt.	Crown Gr. Elev.	⧗ Design Fill Ht.	Skew	Left Wings	Right Wings	Scour Apron	Soil Saver	Concrete Barrel (Cu.Yds.)	Concrete Wings (Cu.Yds.)	Concrete Total (Cu.Yds.)	Reinf. Steel (Gr. 60) Barrel (Lbs.)	Reinf. Steel (Gr. 60) ●Wings (Lbs.)	Reinf. Steel (Gr. 60) Total (Lbs.)	LRFR RATING FACTORS HL-93 Loading Inventory	LRFR RATING FACTORS HL-93 Loading Operating
1256.00	1254.00	1262.30	0	0	Flared	Straight	No	No	122.86	10.37	133.23	26196	973	27169	2.45	3.17

△ Epoxy Coated Bars
✳ See Bending Diagram

BAR SCHEDULE

△ F1 Size	Spa.	No.	Length	△ F2 ✳ Size	Spa.	No.	Length	△ F3 Size	Spa.	No.	Length	△ F4 Size	Spa.	No.	Length	△ S1 Size	Spa.	No.	Length	△ S2 ✳ Size	Spa.	No.	Length	△ S3 Size	Spa.	No.	Length	△ S4 Size	Spa.	No.	Length	△ S5 Size	Spa.	No.	Length
6	6½"	201	13'-4"	7	6"	436	8'-6"	N/A	N/A	N/A	N/A	4	48	37'-2"		7	6½"	201	13'-4"	5	6"	436	7'-0"	4	1'-0"	110	13'-4"	5	26	55'-3"		4	30	37'-2"	

△ K1 Size	Spa.	No.	Length	△ K2 Size	Spa.	No.	Length	△ W1 Size	Spa.	No.	Length	△ W2 Size	Spa.	No.	Length	△ W3 Size	No.	Length	△ W4 Size	Spa.	No.	Length	△ G1 Size	No.	Length	△ G2 Size	No.	Length	Size	Spa.	No.	Length
N/A	N/A	N/A		N/A	N/A	N/A		4	1'-1"	202	5'-4"	N/A	N/A	N/A	N/A	4	30	37'-2"	N/A	N/A	N/A	N/A	5	4	13'-4"	N/A	N/A	N/A				

Minimum Splice Lengths	
#4	1'-5"
#5	1'-9"

SUMMARY OF QUANTITIES

Concrete (Grade 4.0)	74.8 C.Y.
Concrete (Grade 4.0)(AE)	58.4 C.Y.
Bridge Backwall Protection System	187 S.Y.
Reinforcing Steel (Gr. 60)	970 Lbs.
Reinforcing Steel (Gr.60)(Epoxy Coated)	26200 Lbs.
Class III Excavation	C.Y.
Foundation Stabilization	42 C.Y.
Concrete for Seal Course (Set)	1 C.Y.
Granular Backfill (Wingwalls)	12 C.Y.

NO.	DATE	REVISIONS	BY	APP'D

KANSAS DEPARTMENT OF TRANSPORTATION
Serial No.(000) Sta. 0
SINGLE 12 ft x 4 ft RFB

BR 1.12.4 F Sedgwick Co.

FHWA APPROVAL	10-20-10	APP'D	Terry L. Fleck
DESIGNED	DETAILED	QUANTITIES	CADD
DESIGN CK.	DETAIL CK.	QUAN. CK.	CADD CK.

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

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 05/27/2025 KANSAS PROFESSIONAL ENGINEER

STORM WATER DRAIN NO. 526 IMPROVEMENTS

SWANEY FARM ADDITION

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 458-2024-085570

Issue:
08/17/2026 - cjr

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-005
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

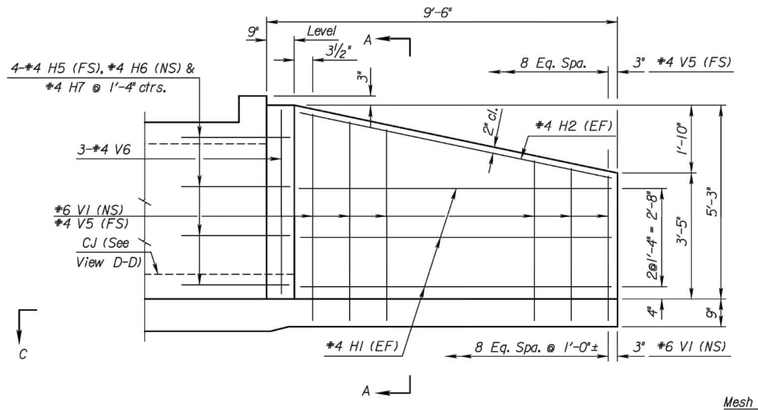
SINGLE 12 FT X 4 FT RFB-SWS LINE 1

CG301
31 OF 44

06	SYSTEM PART	VERSION/ID
	CADD MSA	10/5/2000
	DATABASE	5/4/2000
	RCB PROGRAM	7.427
	KDOT MODEL ID	738
	CELL LIBRARY	12/8/2023

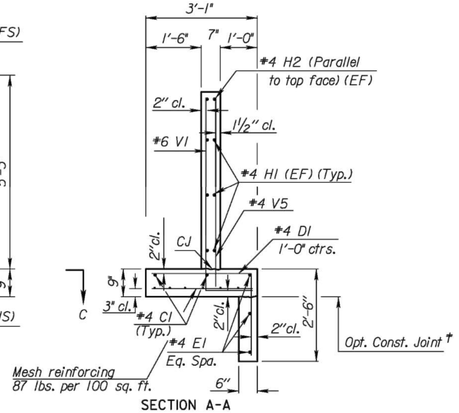
Plot Location:
Plotted By: darris
File: 2024-11-14_200605-005_I-12x4.dgn
Plot Date: 14-NOV-2024 09:01

SAVED 11/14/2024 9:40:20 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 11:14:43 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\0042\PD3_PLANS\030_SWD\30-2005-005-CG301 SINGLE 12 FT X 4 FT RFB-SWS LINE 1.DWG



ELEVATION OF WINGWALL

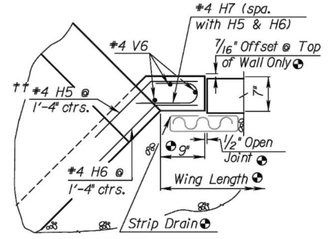
(Backface Shown)



SECTION A-A

See "RCB Aux. Details" sheet for additional requirements.

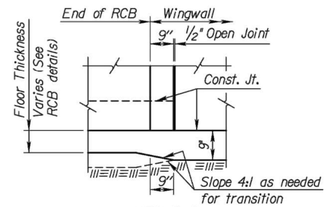
Typical both wings



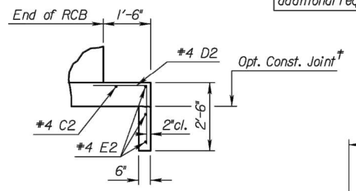
WINGWALL JOINT DETAIL

(Plan View)

† NOTE: Const. Jt. may be used at Contractor's option when approved by the Engineer. DI bars or mesh may be spliced thus: Minimum overlap shall be 1'-3". No increase in quantities or cost shall be allowed when Contractor elects this option.

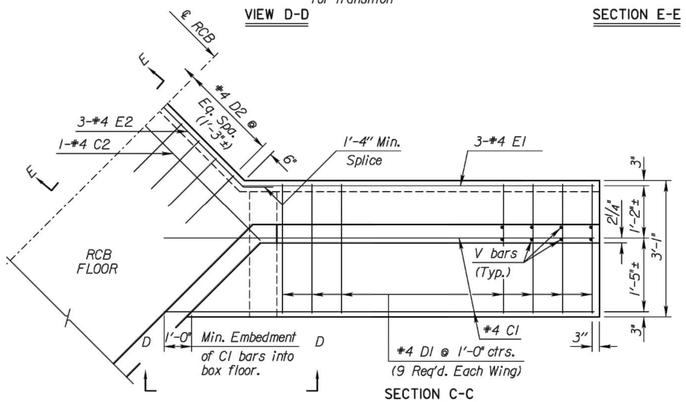


VIEW D-D

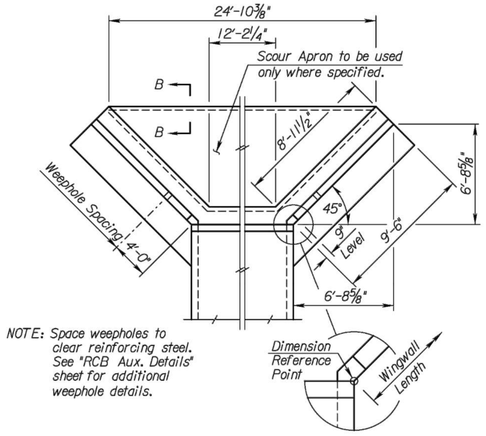


SECTION E-E

NOTE:
EF = Each Face
NS = Near Side
FS = Far Side
CJ = Const. Joint



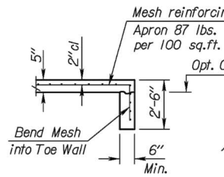
SECTION C-C



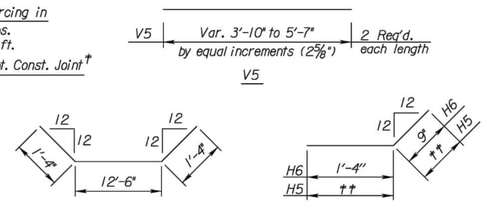
NOTE: Space weepholes to clear reinforcing steel. See "RCB Aux. Details" sheet for additional weephole details.

WING DIMENSIONS FOR NORMAL BOX

(3½:1 Embankment Slope)



SECTION B-B



BENDING DIAGRAM

(All dimensions are out to out of bars.)

†† Bend in Field

Quantities listed below are included in the Summary of Quantities shown on the RCB details.

WINGWALL QUANTITIES (One End Only)				
	Foundation Stabilization		Concrete (Gr. 4.0)	
Wingwalls	1.80	(C.Y.)	5.07	(C.Y.)
Apron	0.00	(C.Y.)	0.00	(C.Y.)
Soil Saver	0.00	(C.Y.)	0.00	(C.Y.)
Reinforcing Steel (Gr. 60)			556	Lbs.
Welded Wire Fabric (Wings)			51	Lbs.
Welded Wire Fabric (Apron)			0	Lbs.
Granular Backfill (Wingwalls)			12.00	C.Y.
Filter Fabric (subsidiary)			18.00	S.Y.

NOTE: Reinforcing Bar List is for both wings at one end of box only.

✳ See Bending Diagram

0° Skew		#4C1	#4D1	#4E1	#4C2	#4D2	#4E2	#6V1	#4H1	#4H2	#4H5	#4H6	#4H7	#4V5	#4V6
	No.	4	18✳	6	1	10 ✳	3✳	18	12	4	8 ✳	8✳	8✳	18	6
	Length	11'-7"	4'-11"	8'-9"	13'-4"	5'-2"	15'-2"	✳	8'-4"	8'-6"	1'-10"	2'-1"	1'-9"	✳	5'-0"

GENERAL NOTES

DESIGN SPECIFICATION: AASHTO LRFD Spec., 2007 Ed., 2009 Int.
DESIGN LOADING: HL93
UNIT STRESSES: Grade 4.0 Concrete; f'c = 4,000 p.s.i.
Reinforcing Steel; fy = 60,000 p.s.i.
CONCRETE: Grade 4.0 Concrete shall be used throughout. Bevel all exposed edges with a ¾" triangular mouilding.
REINFORCING: All reinforcing shall conform to ASTM A615, Grade 60. Welded Wire Reinforcement shall conform to ASTM A185. All dimensions relative to reinforcing steel shall be to centerline of bar unless otherwise nated. Welded Wire Reinforcement shall be classified as pounds of reinforcing and included in the total quantity for the bid item Reinforcing Steel (Gr. 60).
QUANTITIES: Wingwall Quantities include all quantities outside the neat lines of the box, excluding the hubguard.
APRON: A 5" concrete slab shall be constructed between the downstream wings in locations subject to scour only when specified on the plans or by the Engineer.
BACKFILL MATERIAL: Use Granular Backfill material meeting the requirements of SB-1, SB-2, SCA-1, SCA-2. Backfill all wings to limits shown on the "RCB Auxiliary Sheet".
FILTER FABRIC: Separate in-situ material from granular backfill with approved filter fabric complying with Section 1710. Filter Fabric is subsidiary to "Granular Backfill".
FOUNDATION STABILIZATION: Use Foundation Stabilization on all wingwalls unless founded on rock or granular material.

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	200605-005			

NO.	DATE	REVISIONS	BY	APP'D
3				
2				
1				

KANSAS DEPARTMENT OF TRANSPORTATION
Serial No.(000) Sta. 0
FLARED WINGWALLS
4 ft Rise (0°SKEW)
BR 10.00.04 Sedgwick Co.

FHWA APPROVAL	10-20-10	APP'D	Terry L. Fleck
DESIGNED	DETAILED	QUANTITIES	CADD
DESIGN CK.	DETAIL CK.	QUAN. CK.	CADD CK.

CADconform Certify This File

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

CITY OF WICHITA

KEVIN P. GRAHAM
LICENSED
27806
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

STORM WATER DRAIN NO. 526
IMPROVEMENTS

SWANEY FARM ADDITION

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 458-2024-085570

Issue:
08/17/2026 - cjr

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

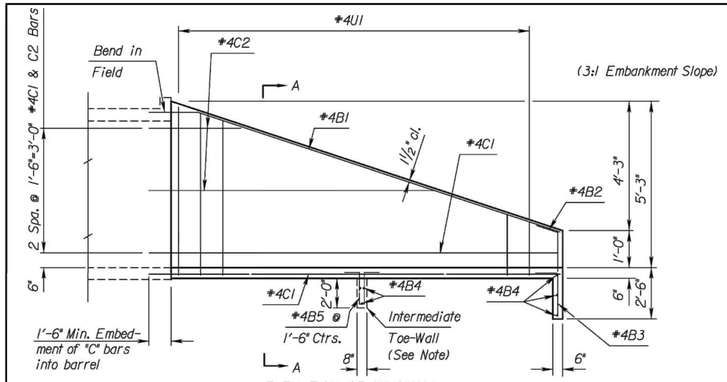
JOB NO.	200605-005
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

FLARED WINGWALLS-4 FT RISE-SWS LINE 1

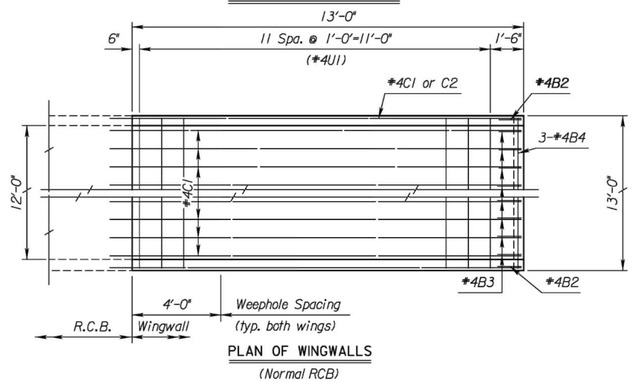
CG302
32 OF 44

Plotted By: darrins
Plot Location:
File: 2024-11-14 200605-005_I-12x4.dgn
Plot Date: 14-NOV-2024 08:01

SAVED 11/14/2024 9:40:15 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 11:14:47 AM BY KEVIN.GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_SWD\31-200605-005-CG302 FLARED WINGWALLS-4 FT RISE-SWS LINE 1.DWG

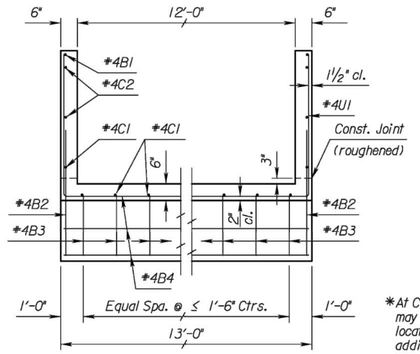


ELEVATION OF WINGWALL

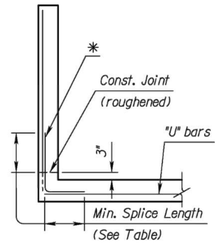


PLAN OF WINGWALLS

(Normal RCB)



Section A-A

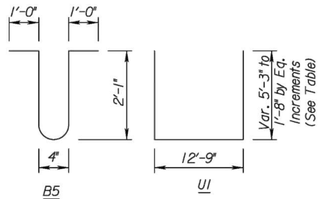


*At Contractors option, straight bars and bent bars may be substituted for "U" bars and spliced at locations shown. No allowance will be made for additional steel required. See table for required lap length.

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	200605-005			

GENERAL NOTES

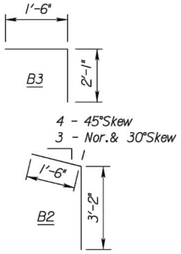
DESIGN SPECIFICATION: AASHTO LRFD Spec., 2007 Ed., 2009 Int.
DESIGN LOADING: HL93
UNIT STRESSES: Grade 4.0 Concrete; f'c = 4,000 p.s.i.
Reinforcing Steel; fy = 60,000 p.s.i.
CONCRETE: Grade 4.0 Concrete shall be used throughout. Bevel all exposed edges with a ¾inch triangular moulding.
REINFORCING: All reinforcing shall conform to ASTM A615, Grade 60. Welded wire fabric shall conform to ASTM A185. Wire fabric shall be electrically welded and shall be composed of 6x6-W1.4xW1.4 welded wire fabric and shall be classified as pounds of reinforcing.
QUANTITIES: Wingwall Quantities include all quantities outside the neat lines of the box, excluding the hubguard.
BACKFILL MATERIAL: Soils judged as high plasticity clays, fat clays, expansive clays, or organic clays are unsuitable for backfill material for wingwalls and will not be used. Where these conditions exist, use Granular Backfill (Wingwalls).
FOUNDATION STABILIZATION: Use Foundation Stabilization on all wingwalls unless founded on rock or granular material.
INTERMEDIATE TOE-WALL: When the length of wingwalls and width of apron both exceed 15'-0", an intermediate toe-wall shall be constructed at mid-length of wingwall as shown on "Elevation of Wingwall".



SKEW	INCREMENT
0°	4"
30°	3½"±
45°	3"±

Normal	Var. 6'-5" to 11'-0" by 4'-7" Increments
30° Skew	Var. 7'-2" to 12'-6" by 5'-4" Increments
45° Skew	Var. 8'-5" to 14'-9" by 6'-4" Increments

C2
(Cut two each length)



BENDING DIAGRAMS

All dimensions are out to out of bars.

NOTE:
Wingwall floor and toewall shall be constructed with the RCB floor. Wingwalls to be constructed with RCB walls.

NOTE:
Space Weepholes to clear reinforcing steel. See "RCB Auxiliary Details" sheet for additional weephole details.

* See Bending Diagram

NOTE: Reinforcing Bar List is for both wings at one end of box only.	*4 B1		*4 B2 *		*4 B3 *		*4 B4		*4 B5 *		*4C1		*4C2				*4U1 *					
	No.	Length	No.	Length	No.	Length	No.	Length	No.	Length	No.	Length	No.	Length	No.	Length	No.	Length	No.	Length	No.	Length
*Skew	2	15'-0"	2	4'-8"	9	3'-7"	3	13'-4"		6'-4"	11	14'-4"	4	*			12	*				

WINGWALL QUANTITIES (One End Only)	
Concrete (Grade 4.0)	5.30 CY.
Reinforcing Steel	365 Lbs.
Foundation Stabilization	3.94 CY.

Quantities listed are included in the Summary of Quantities shown on the RCB.

NO.	DATE	REVISIONS	BY	APP'D
3				
2				
1				

KANSAS DEPARTMENT OF TRANSPORTATION
Serial No.(000) Sta. 0
STRAIGHT WINGWALLS
4 ft Rise (0°Skew)
BR II.00.04 Sedgwick Co.

FHWA APPROVAL		10-20-10 APP'D	Terry L. Fleck
DESIGNED	DETAILED	QUANTITIES	CADD
DESIGN CK.	DETAIL CK.	QUAN. CK.	CADD CK.

Plotted By: darrins
File: 2024-11-14_200605-005_I-12x4.dgn
Plot Date: 14-NOV-2024 09:01
Plot Location:

SAVED 11/14/2024 9:39:38 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 11:14:53 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\00402PD3_PLANS\030_SWD\32-200605-005-CG303 STRAIGHT WINGWALLS-4 FT RISE-SWS LINE 1.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 05/27/2025 KANSAS PROFESSIONAL ENGINEER

STORM WATER DRAIN NO. 526 IMPROVEMENTS

SWANEY FARM ADDITION

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 458-2024-085570

Issue:		
	08/17/2026 - cjr	

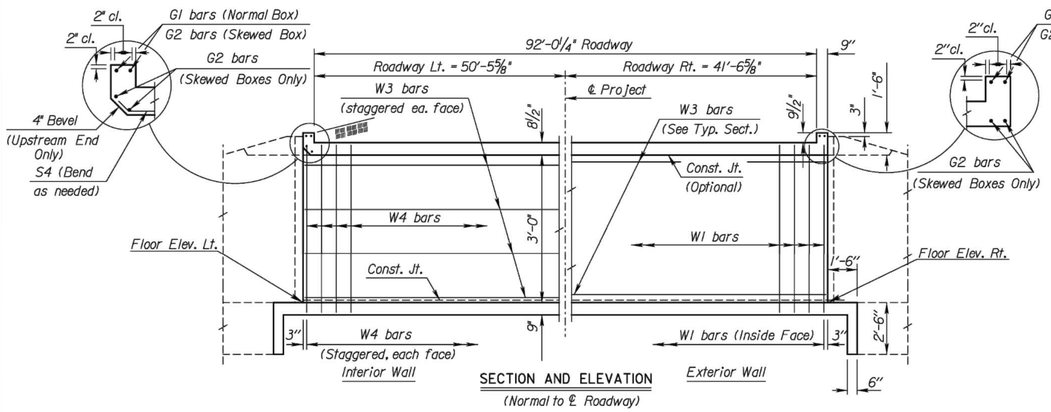
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

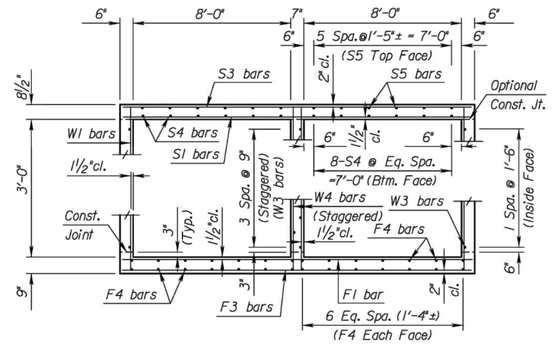
JOB NO.	200605-005
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

STRAIGHT WINGWALLS-4 FT RISE-SWS LINE 1

CG303
33 OF 44

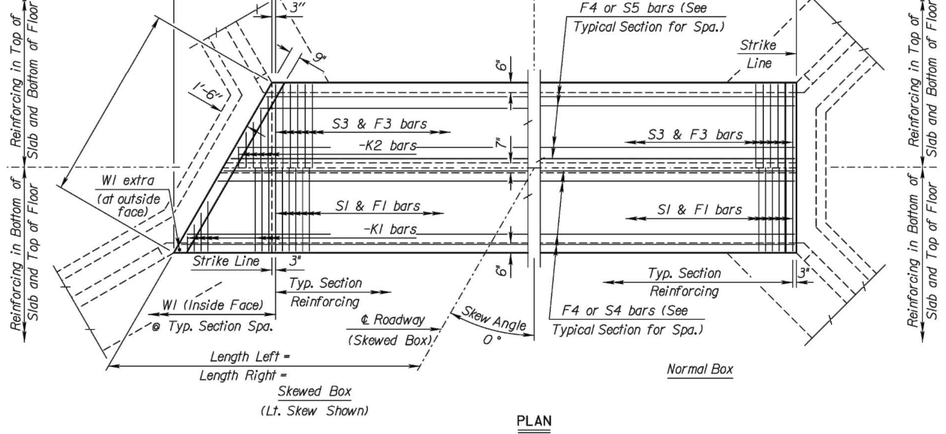
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	200605			



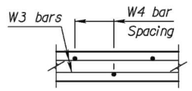


GENERAL NOTES

DESIGN SPECIFICATION: AASHTO LRFD Spec., 2007 Ed., 2009 Int.
DESIGN LOADING: HL93
UNIT STRESSES: Grade 4.0 Concrete f'c = 4,000 p.s.i.
Reinforcing Steel fy = 60,000 p.s.i.
FILL HEIGHT: Unless otherwise noted, the Design Fill Height is measured from the riding surface at the culvert and includes the surfacing.
CONCRETE: Use concrete conforming to Grade 4.0 Concrete. Bevel all exposed edges with a ¾" triangular molding. Where Grade 4.0(AE) is specified, place this concrete in the top slab above the Construction Joint.
REINFORCING: Use reinforcing steel conforming to ASTM A615, Grade 60. All dimensions relative to reinforcing steel are to the centerline of the bar unless otherwise noted.
EXCAVATION: Excavation for culverts less than bridge length shall not be paid for directly but shall be subsidiary to Grade 4.0 Concrete. Excavation for RCB bridges shall be paid for as Class III Excavation.
SEAL COURSE: The Engineer may require a seal course. The seal course shall be unreinforced Concrete(Commercial Grade) with a minimum depth of 3 inches or as determined by the Engineer. Concrete for the seal course shall be paid for at the unit price set for Concrete for Seal Course.
FOUNDATION STABILIZATION: The Foundation Stabilization quantity has been calculated to the limits shown on the "RCB Auxiliary Details" sheet. The depth may be increased by the Engineer. The Contractor may underrun Foundation Stabilization under the barrel if founded on firm material and with the Engineer's approval. Use Foundation Stabilization on all wingwalls unless founded on rock or granular material.
QUANTITIES: The quantities shown in the Culvert Summary include apron and/or soil saver quantities when they are required by the plans. Payment for additional quantities that result from including a seal course and/or a floating apron, as a change in the original plans, shall be made at the unit price bid for the various items involved.
GRANULAR BACKFILL (WINGWALLS): See the "Auxiliary Details" sheet.
STRIKE LINE: Construct the wingwalls and that portion of the RCB outside the Strike Line level. Construct the wingwall footings with the culvert floor. See the wingwall detail sheets.
BRIDGE BACKWALL PROTECTION SYSTEM: For structures with this bid item in the Summary of Quantities. See the "Auxiliary Details" sheet.



PLAN



PLAN OF INTERIOR WALL

⧗For design purposes ONLY. Do NOT use for Construction			CULVERT SUMMARY						◔includes any welded wire fabric					LRFR RATING FACTORS	
Floor Elev. Lt.	Floor Elev. Rt.	Crown Gr. Elev.	⧗Design Fill Ht.	Skew	Left Wings	Right Wings	Scour Apron	Soil Saver	Concrete Barrel (Cu.Yds.)	Concrete Wings (Cu.Yds.)	Concrete Total (Cu.Yds.)	Reinf. Steel (Gr. 60) Barrel (Lbs.)	Reinf. Steel (Gr. 60) ◔Wings (Lbs.)	Reinf. Steel (Gr. 60) Total (Lbs.)	HL-93 Loading Inventory	HL-93 Loading Operating
1259.00	1258.90	1264.33	2	0	Flared	Straight	No	No	106.01	9.15	115.16	22072	792	22863	1.22	1.56

△ Epoxy Coated Bars

BAR SCHEDULE

△ F1				△ F3				△ F4				△ S1				△ S3				△ S4				△ S5			
Size	Spa.	No.	Length	Size	Spa.	No.	Length	Size	Spa.	No.	Length	Size	No.	Length		Size	Spa.	No.	Length	Size	Spa.	No.	Length	Size	No.	Length	
6	6½"	173	17'-3"	N/A	N/A	N/A	N/A	5	5½"	204	17'-3"	4	84	32'-1"		6	6½"	173	17'-3"	N/A	N/A	N/A	N/A	5	5½"	204	17'-3"
5	32	47'-6"	4	36	32'-1"																						

△ K1				△ K2				△ W1				△ W2				△ W3				△ W4				△ G1			△ G2				
Size	Spa.	No.	Length	Size	Spa.	No.	Length	Size	Spa.	No.	Length	Size	Spa.	No.	Length	Size	No.	Length		Size	Spa.	No.	Length	Size	No.	Length	Size	No.	Length	Size	Spa.	No.	Length
N/A	N/A	N/A		N/A	N/A	N/A		4	9"	250	4'-1"	N/A	N/A	N/A	N/A	4	24	32'-1"		4	9"	125	4'-1"	5	4	17'-3"	N/A	N/A	N/A				

Minimum Splice Lengths	
#4	1'-5"
#5	1'-9"

SUMMARY OF QUANTITIES	
Concrete (Grade 4.0)	71.3 C.Y.
Concrete (Grade 4.0)(AE)	43.9 C.Y.
Bridge Backwall Protection System	200 S.Y.
Reinforcing Steel (Gr. 60)	790 Lbs.
Reinforcing Steel (Gr. 60)(Epoxy Coated)	22070 Lbs.
Class III Excavation	C.Y.
Foundation Stabilization	43 C.Y.
Concrete for Seal Course (Set)	1 C.Y.
Granular Backfill (Wingwalls)	8 C.Y.

NO.	DATE	REVISIONS	BY	APP'D

KANSAS DEPARTMENT OF TRANSPORTATION
Serial No.(000) Sta.0
DOUBLE 8 ft x 3 ft RCB

BR 2.8.3 P Sedgwick Co.

FHWA APPROVAL		10-20-10	APP'D	Terry L. Fleck
DESIGNED	DETAILED		QUANTITIES	CADD
DESIGN CK.	DETAIL CK.		QUAN. CK.	CADD CK.

VERSION/ID	
06	
SYSTEM PART	
CADD MSA	10.5/2000
DATABASE	5.4/1000
ROB PROGRAM	TL22.7
MSHA MODEL ID	1604
CELL LIBRARY	10/8/2023

Plot Location:
Plotted By: darris
File: 2024-3-14_200605_2-8x3.dgn
Plot Date: 14-MAR-2024 13:30

SAVED 8/9/2024 11:08:21 AM BY BILL.SEXSON
PLOTTED 5/27/2025 11:14:58 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\0042PD3_PLANS\030_SWD\33-200605-005-CG304 DOUBLE 8 FT X 3 FT RCB-SWS LINE 8.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 05/27/2025 KANSAS PROFESSIONAL ENGINEER

STORM WATER DRAIN NO. 526 IMPROVEMENTS
SWANEY FARM ADDITION
PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 458-2024-085570

Issue:
08/17/2026 - cjr

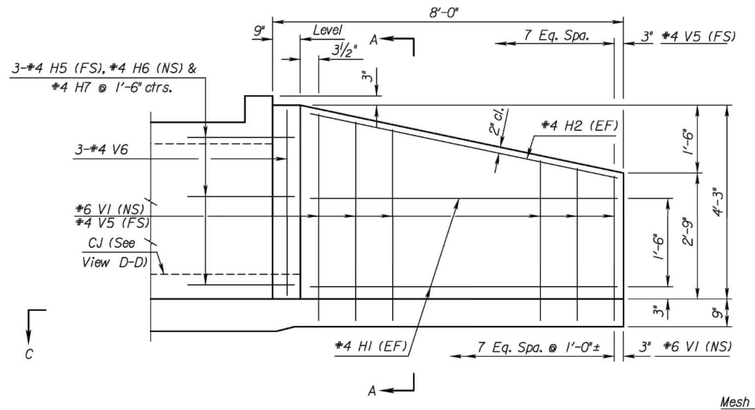
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-005
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

DOUBLE 8 FT X 3 FT RCB-SWS LINE 8

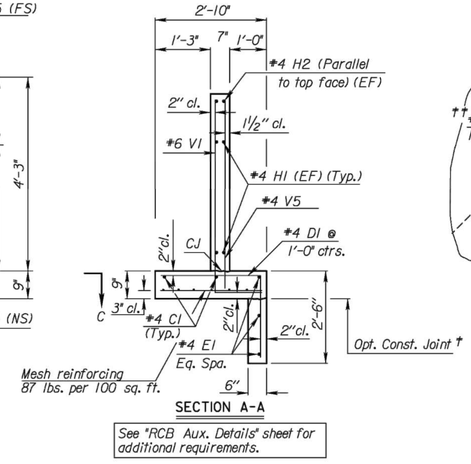
CG304
34 OF 44

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	200605			



ELEVATION OF WINGWALL

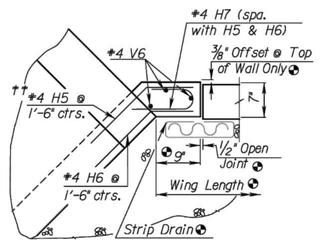
(Backface Shown)



SECTION A-A

See "RCB Aux. Details" sheet for additional requirements.

Typical both wings



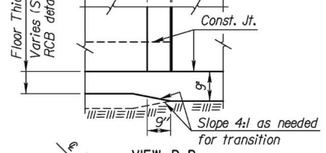
WINGWALL JOINT DETAIL

(Plan View)

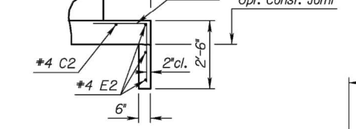
† NOTE: Const. Jt. may be used at Contractor's option when approved by the Engineer. D1 bars or mesh may be spliced thus: Minimum overlap shall be 1'-3". No increase in quantities or cost shall be allowed when Contractor elects this option.

GENERAL NOTES

DESIGN SPECIFICATION: AASHTO LRFD Spec., 2007 Ed., 2009 Int.
DESIGN LOADING: HL93
UNIT STRESSES: Grade 4.0 Concrete; f'c = 4,000 p.s.i.
Reinforcing Steel; fy = 60,000 p.s.i.
CONCRETE: Grade 4.0 Concrete shall be used throughout. Bevel all exposed edges with a ¾" triangular mouilding.
REINFORCING: All reinforcing shall conform to ASTM A615, Grade 60. Welded Wire Reinforcement shall conform to ASTM A185. All dimensions relative to reinforcing steel shall be to centerline of bar unless otherwise noted. Welded Wire Reinforcement shall be classified as pounds of reinforcing and included in the total quantity for the bid item Reinforcing Steel (Gr. 60).
QUANTITIES: Wingwall Quantities include all quantities outside the neat lines of the box, excluding the hubguard.
APRON: A 5" concrete slab shall be constructed between the downstream wings in locations subject to scour only when specified on the plans or by the Engineer.
BACKFILL MATERIAL: Use Granular Backfill material meeting the requirements of SB-1, SB-2, SCA-1, SCA-2. Backfill all wings to limits shown on the "RCB Auxiliary Sheet".
FILTER FABRIC: Separate in-situ material from granular backfill with approved filter fabric complying with Section 1710. Filter Fabric is subsidiary to "Granular Backfill".
FOUNDATION STABILIZATION: Use Foundation Stabilization on all wingwalls unless founded on rock or granular material.

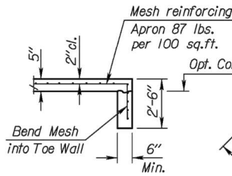


VIEW D-D

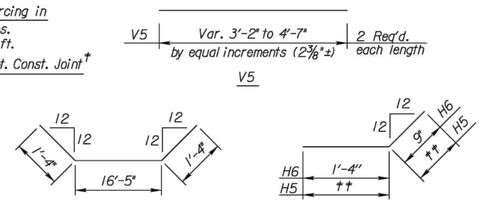


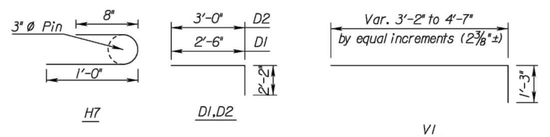
SECTION E-E

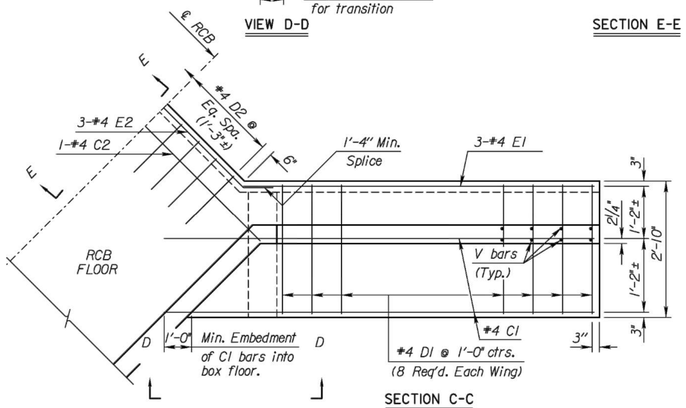
NOTE:
EF = Each Face
NS = Near Side
FS = Far Side
CJ = Const. Joint



SECTION B-B

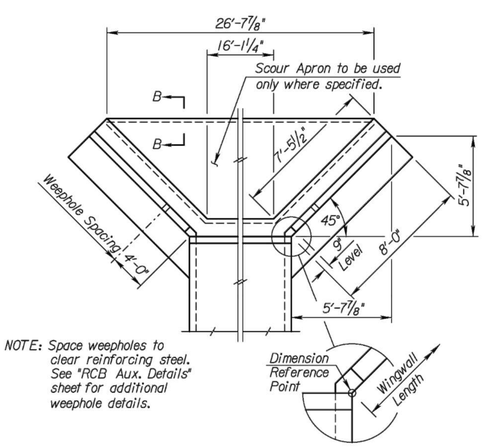






SECTION C-C

(Plan of Footing)



NOTE: Space weepholes to clear reinforcing steel. See "RCB Aux. Details" sheet for additional weephole details.

WING DIMENSIONS FOR NORMAL BOX

(3½:1 Embankment Slope)

NOTE: Reinforcing Bar List is for both wings at one end of box only.

* See Bending Diagram

		#4C1	#4D1	#4E1	#4C2	#4D2	#4E2	#6V1	#4H1	#4H2	#4H5	#4H6	#4H7	#4V5	#4V6
0° Skew	No.	4	16*	6	1	13 *	3*	16	8	4	6*	6 *	6 *	16	6
	Length	9'-10"	4'-8"	7'-3"	17'-3"	5'-2"	19'-1"	*	6'-10"	7'-0"	1'-10"	2'-1"	1'-9"	*	4'-0"

Quantities listed below are included in the Summary of Quantities shown on the RCB details.

WINGWALL QUANTITIES (One End Only)				
	Foundation Stabilization		Concrete (Gr. 4.0)	
Wingwalls	1.44	(C.Y.)	4.27	(C.Y.)
Apron	0.00	(C.Y.)	0.00	(C.Y.)
Soil Saver	0.00	(C.Y.)	0.00	(C.Y.)
Reinforcing Steel (Gr. 60)			458	Lbs.
Welded Wire Fabric (Wings)			39	Lbs.
Welded Wire Fabric (Apron)			0	Lbs.
Granular Backfill (Wingwalls)			8.00	C.Y.
Filter Fabric (subsidiary)			14.00	S.Y.

BENDING DIAGRAM

(All dimensions are out to out of bars.)

†† Bend in Field

NO.	DATE	REVISIONS	BY	APP'D
3				
2				
1				

KANSAS DEPARTMENT OF TRANSPORTATION
Serial No.(000) Sta. 0
FLARED WINGWALLS
3 ft Rise (0°SKEW)
BR 10.00.03 Sedgwick Co.

FHWA APPROVAL		10-20-10	APP'D	Terry L. Fleck
DESIGNED	DETAILED	QUANTITIES	CADD	
DESIGN CK.	DETAIL CK.	QUAN. CK.	CADD CK.	

CADconform Certify This File

Plotted By: darrins | Plot Location:
File: 2024-3-14_200605_2-8x3.dgn
Plot Date: 14-MAR-2024 13:30

SAVED 8/9/2024 11:08:30 AM BY BILL.SEXSON
PLOTTED 5/27/2025 11:15:03 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\00A\2PD3_PLANS\030_SWD\34-200605-005-CG305 FLLARED WINGWALLS-3 FT RISE-SWS LINE 8.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 05/27/2025 KANSAS PROFESSIONAL ENGINEER

STORM WATER DRAIN NO. 526 IMPROVEMENTS

SWANEY FARM ADDITION

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 458-2024-085570

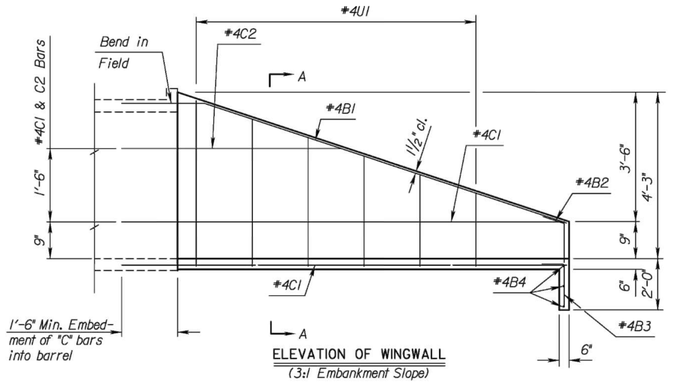
Issue:
08/17/2026 - cjr

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

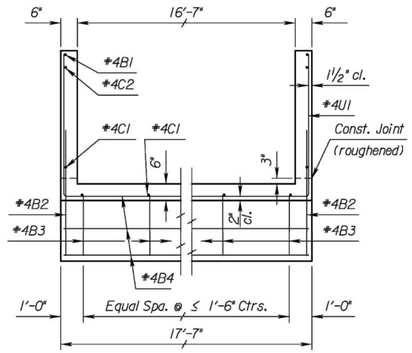
JOB NO.	200605-005
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

FLLARED WINGWALLS-3 FT RISE-SWS LINE 8

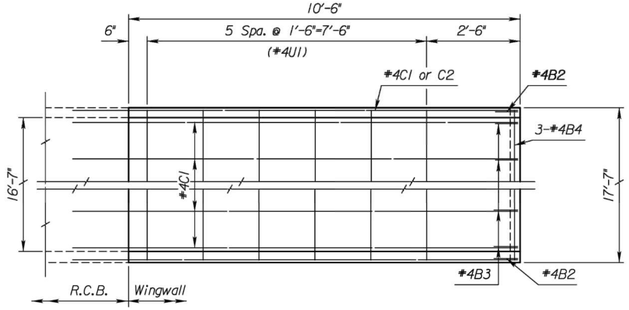
CG305
35 OF 44



ELEVATION OF WINGWALL
(3:1 Embankment Slope)

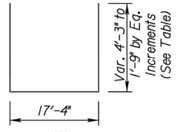


Section A-B

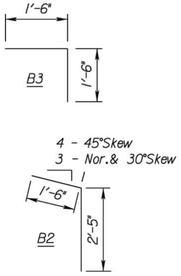


PLAN OF WINGWALLS
(Normal RCB)

NOTE:
Wingwall floor and toewall shall be constructed with the RCB floor. Wingwalls to be constructed with RCB walls.



SKEW	INCREMENT
0°	6"
30°	5"
45°	4"



BENDING DIAGRAMS
All dimensions are out to out of bars.

NOTE:
Space Weepholes to clear reinforcing steel. See "RCB Auxiliary Details" sheet for additional weephole details.

* See Bending Diagram

NOTE: Reinforcing Bar List is for both wings at one end of box only.	*4 B1		*4 B2 *		*4 B3 *		*4 B4			*4C1		*4C2			*4U1 *				
	No.	Length	No.	Length	No.	Length	No.	Length	No.	Length	No.	Length	No.	Length	No.	Length	No.	Length	No.	Length
*Skew	2	12'-6"	2	3'-11"	12	3'-0"	3	17'-3"		0"	14	11'-10"	2	7'-2"			6	*		

WINGWALL QUANTITIES (One End Only)	
Concrete (Grade 4.0)	4.88 CY.
Reinforcing Steel	294 Lbs.
Foundation Stabilization	4.00 CY.

Quantities listed are included in the Summary of Quantities shown on the RCB.

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	200605			

GENERAL NOTES

DESIGN SPECIFICATION: AASHTO LRFD Spec., 2007 Ed., 2009 Int.
DESIGN LOADING: HL93
UNIT STRESSES: Grade 4.0 Concrete; f'c = 4,000 p.s.i.
Reinforcing Steel; fy = 60,000 p.s.i.
CONCRETE: Grade 4.0 Concrete shall be used throughout. Bevel all exposed edges with a ¾inch triangular moulding.
REINFORCING: All reinforcing shall conform to ASTM A615, Grade 60. Welded wire fabric shall conform to ASTM A185. Wire fabric shall be electrically welded and shall be composed of 6x6-W1.4xW1.4 welded wire fabric and shall be classified as pounds of reinforcing.
QUANTITIES: Wingwall Quantities include all quantities outside the neat lines of the box, excluding the hubguard.
BACKFILL MATERIAL: Soils judged as high plasticity clays, fat clays, expansive clays, or organic clays are unsuitable for backfill material for wingwalls and will not be used. Where these conditions exist, use Granular Backfill (Wingwalls).
FOUNDATION STABILIZATION: Use Foundation Stabilization on all wingwalls unless founded on rock or granular material.
INTERMEDIATE TOE-WALL: When the length of wingwalls and width of apron both exceed 15'-0", an intermediate toe-wall shall be constructed at mid-length of wingwall as shown on "Elevation of Wingwall".

NO.	DATE	REVISIONS	BY	APP'D
3				
2				
1				

KANSAS DEPARTMENT OF TRANSPORTATION
Serial No.(000) Sta. 0
STRAIGHT WINGWALLS
3 ft Rise (0°Skew)
BR 11.00.03 Sedgwick Co.

FHWA APPROVAL		6-5-91	APP'D	Terry L. Fleck
DESIGNED	DETAILED	QUANTITIES	CADD	
DESIGN CK.	DETAIL CK.	QUAN. CK.	CADD CK.	

Plotted By: darrins
File: 2024-3-14_200605_2-8x3.dgn
Plot Date: 14-MAR-2024 13:30
Plot Location:

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

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 05/27/2025 KANSAS PROFESSIONAL ENGINEER

STORM WATER DRAIN NO. 526 IMPROVEMENTS

SWANEY FARM ADDITION

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 458-2024-085570

Issue:
08/17/2026 - cjr

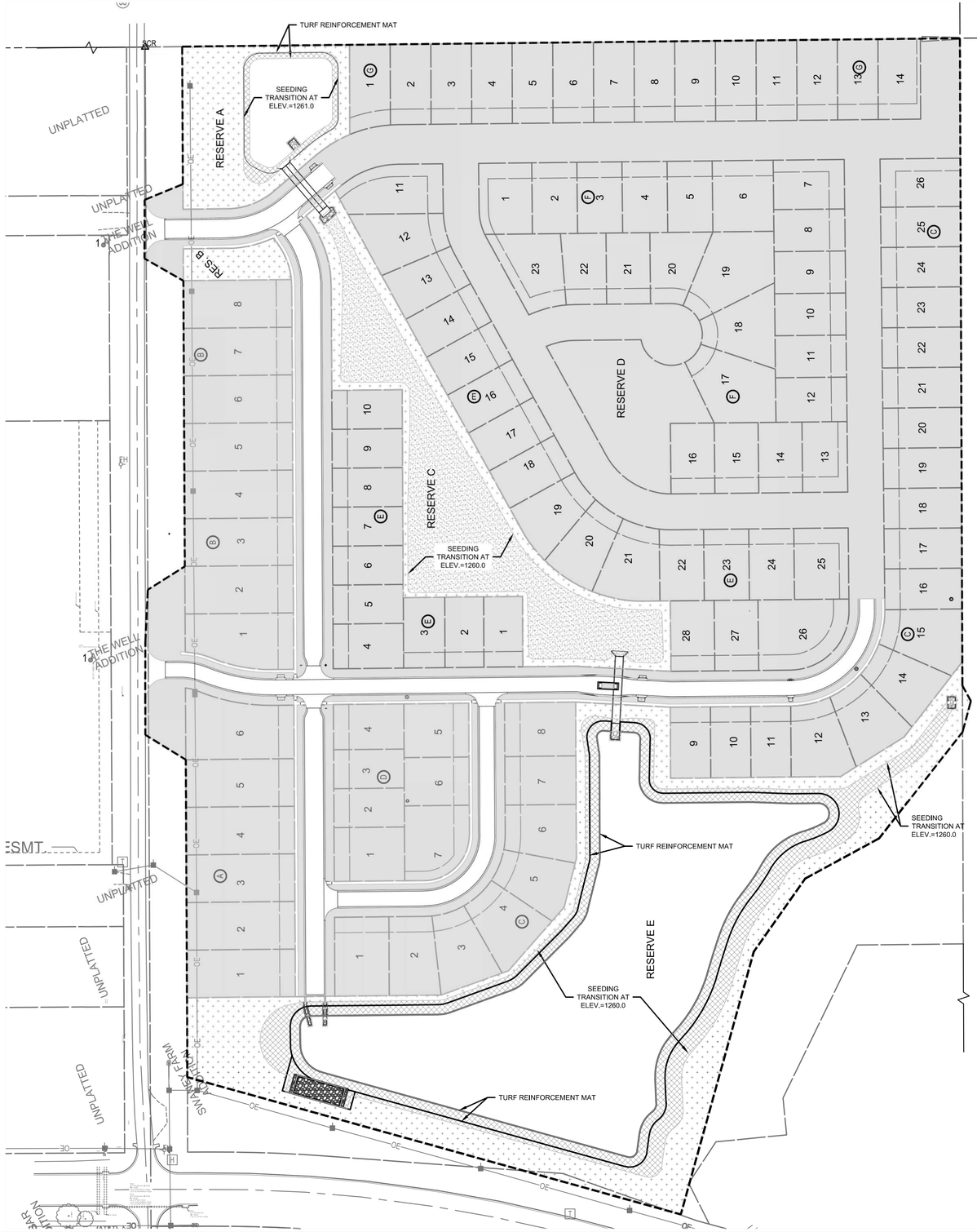
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-005
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

STRAIGHT WINGWALLS-3 FT RISE-SWS LINE 8

CG306
36 OF 44

SAVED 8/9/2024 11:10:52 AM BY BILL.SEXSON
PLOTTED 5/27/2025 11:15:07 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\00412PD3_PLANS\030_SWD\35-200605-005-CG306 STRAIGHT WINGWALLS-3 FT RISE-SWS LINE 8.DWG



LEGEND

- APPROXIMATE LIMITS OF GRADING
- TEMPORARY RYE SEEDING PER CITY OF WICHITA SPECIFICATIONS 31.8 +/- ACRES
- WET ZONE SEEDING MIX - PERMANENT 2.1 +/- ACRES
- DRY POND SEEDING MIX - PERMANENT 1.9 +/- ACRES
- DRY ZONE SEEDING MIX - PERMANENT 4.2 +/- ACRES

SCALE IN FEET
0' 100' 200'

WET ZONE SEEDING MIX (CUSTOM) - 10 PLS lb/ac

COMMON NAME	TYPE	PLS lb/ac
TUSSOCK SEDGE	SEED	1.50
FOX SEDGE	SEED	1.50
PICKEREL WEED	SEED	1.00
SPIKE RUSH	SEED	1.00
SWAMP MILKWEED	SEED	1.00
SOFT RUSH	SEED	1.00
BLUE LOBELIA	SEED	1.00
BLUE VERVAIN	SEED	1.00
BLUE FLAG	SEED	1.00
	TOTAL	10.00

DRY POND SEEDING MIX (CUSTOM) - 7 PLS lb/ac

COMMON NAME	TYPE	PLS lb/ac	COMMON NAME	TYPE	PLS lb/ac
FOX SEDGE	SEED	1.00	THREE SQUARE RUSH	SEED	0.08
BARNYARD GRASS	SEED	1.55	FOWL MANNAGRASS	SEED	0.08
FOWL BLUEGRASS	SEED	0.80	NODDING BUR MARIGOLD	SEED	0.08
SOFT STEM BULRUSH	SEED	0.60	SWAMP MILKWEED	SEED	0.05
MUD PLANTAIN	SEED	0.57	BALTIC RUSH	SEED	0.05
DARK GREEN BULRUSH	SEED	0.40	GREAT ANGELICA	SEED	0.05
HARDSTEM BULRUSH	SEED	0.40	RICE CUTGRASS	SEED	0.02
PRAIRIE CORDGRASS	SEED	0.40	AMERICAN MANNA GRASS	SEED	0.02
GIANT BUR REED	SEED	0.40	BRISTLY SEDGE	SEED	0.02
SNEEZEWEED	SEED	0.15	BLUE FLAG IRIS	SEED	0.02
PORCUPINE SEDGE	SEED	0.16	TUSSOCK SEDGE	SEED	0.02
AMERICAN SLOUGHGRASS	SEED	0.08		TOTAL	7.00

DRY ZONE SEEDING MIX
VALLEY PREMIUM SHORT NATIVE MIX
- Drilled @ 15 PLS lbs/ac
STOCK SEED FARMS - ANNUAL WILDFLOWER MIX
- Drilled @ 10 PLS lbs/ac

SEEDING NOTES:

1. QUANTITIES SHOWN ON THIS PLAN ARE FOR REFERENCE ONLY AND ARE APPROXIMATE. CONTRACTOR TO VERIFY ALL QUANTITIES.
2. ALL CUSTOM SEED MIXES ARE AVAILABLE FROM VALLEY FEED AND SEED, WICHITA, KS.
3. ANY AREA DISTURBED BEYOND THE DEPICTED LIMITS OF GRADING SHALL BE SEEDED WITH TEMPORARY RYE SEED MIX.
4. SEED PLACEMENT IS IMPORTANT AND SHOULD BE PLANTED NO MORE THAN ¼" DEEP. TO ENSURE ACCURATE PLACEMENT OF SEED, IT IS PREFERRED THAT SEED IS PLACED WITH A 'SEED DRILL; OR 'NO-TILL DRILL'. WHEN THIS METHOD IS NOT PRACTICAL, THE SEED BED CAN BE PREPATED WITH A CULTIPACKER, THEN BROADCAST SEED AND ROLL AGAIN.
5. GENERALLY, FERTILIZING IS NOT REQUIRED OR RECOMMENDED FOR NATIVE GRASS OR WILDFLOWER ESTABLISHMENT AS IT WOULD PROMOTE WEED GROWTH. FOR THIS PROJECT, A ONE-TIME APPLICATION OF A GRANULAR FERTILIZER IS RECOMMENDED DURING ESTABLISHMENT. ALL WEEDS SHALL BE KILLED PRIOR TO PLANTING.

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

CITY OF WICHITA

KEVIN P. G. GRAHAM LICENSED 27806 05/27/2025 KANSAS PROFESSIONAL ENGINEER

STORM WATER DRAIN NO. 526 IMPROVEMENTS

SWANEY FARM ADDITION

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 458-2024-085570

Issue:		
	08/17/2026 - cjr	

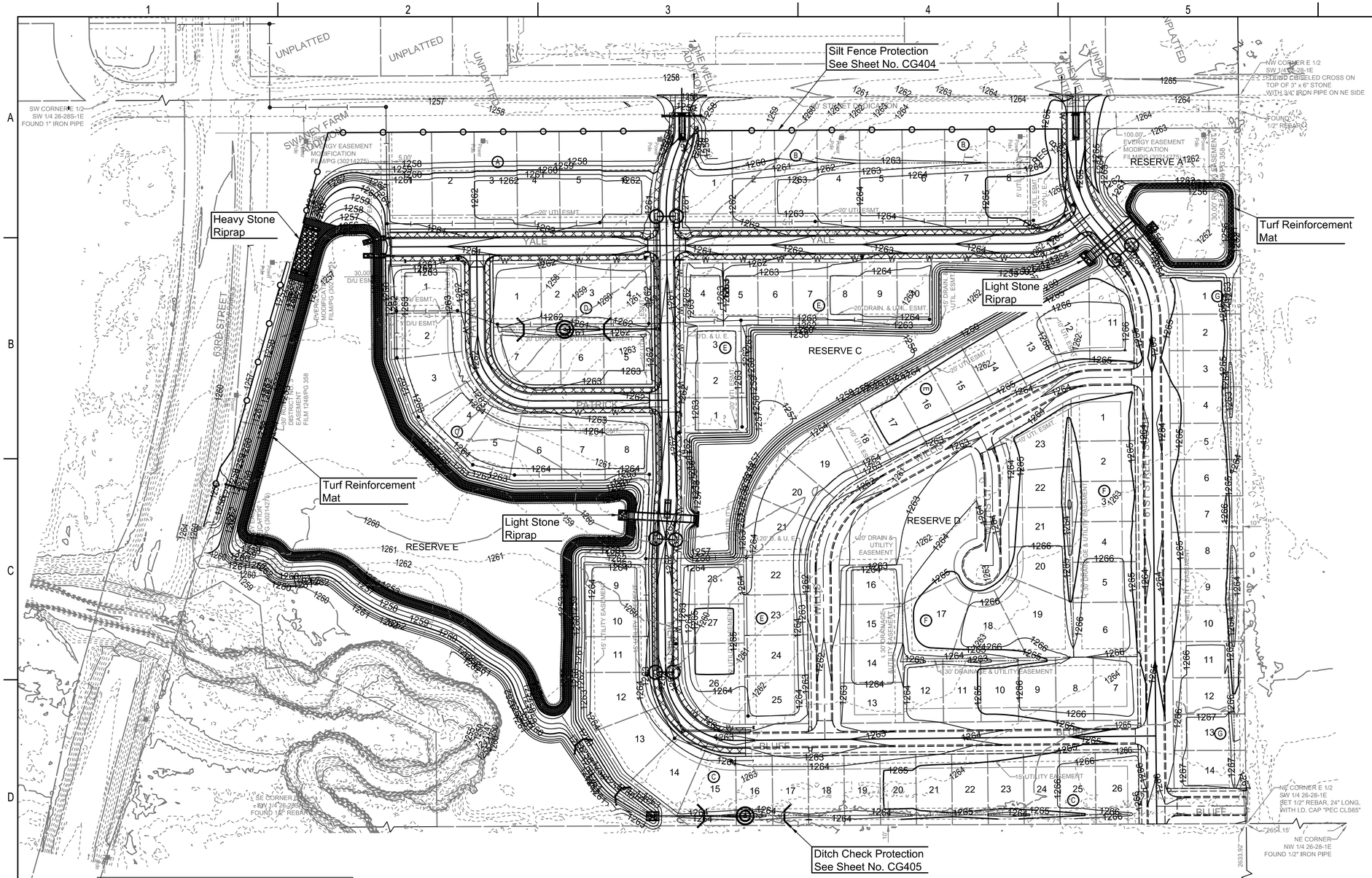
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-005
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

SEEDING PLAN

CG401
37 OF 44

SAVED 12/24/2024 8:07:05 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 11:15:30 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_SWD\36-200605-005-CG401 SEEDING PLAN.DWG



QUANTITIES ARE PROVIDED FOR INFORMATION ONLY.

PAVING AND DRAINAGE-COW PROJ. NO. 472-2024-086026	
CURB INLET PROTECTION	8 EACH
DROP INLET PROTECTION	2 EACH
BACK OF CURB PROTECTION	6,293 L.F.
LIGHT STONE RIPRAP	136 S.Y.
SWD-COW PROJ. NO. 526-458-085570	
DITCH CHECK PROTECTION	6 EACH
SILT FENCE PROTECTION	1,935 L.F.
LIGHT STONE RIPRAP	70 S.Y.
HEAVY STONE RIPRAP	310 S.Y.
TURF REINFORCEMENT MAT	5,325 S.Y.
SANITARY SEWER-COW PROJ. NO. 468-2024-007800	
WATER-COW PROJ. NO. 448-2024-007798	
STABILIZED CONSTRUCTION ENTRANCE	2 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 AREA 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
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

STORM WATER DRAIN NO. 526
IMPROVEMENTS

SWANEY FARM ADDITION

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 458-2024-085570

Issue:		
	08/17/2026 - cjr	

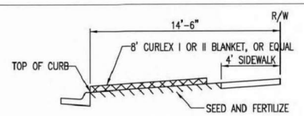
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-005
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

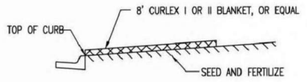
EROSION CONTROL PLAN

CG402
38 OF 44

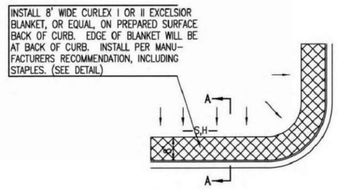
SAVED 5/27/2025 10:02:32 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 11:16:08 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\0042\PD3_PLANS\030_SWD\37-200605-005-CG402 EROSION CONTROL PLAN.DWG



SECTION B–B



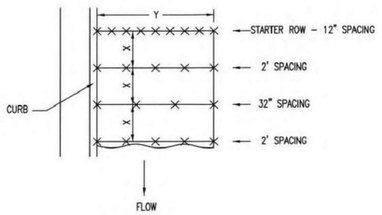
SECTION A–A

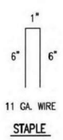


GENERAL NOTES

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

BACK OF CURB PROTECTION DETAIL



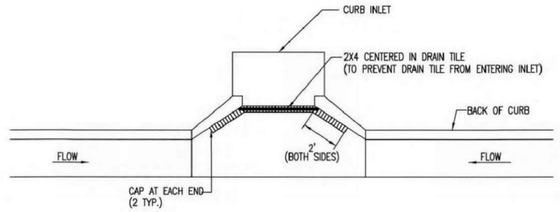


STAPLE

STAPLE PATTERN

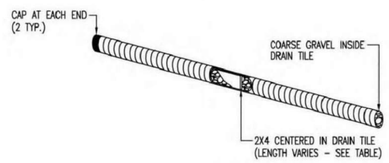
NOTES: USE 6" SEAM OVERLAP
(X & Y = RECOMMENDED BY MANUFACTURE)

DETAILS FOR APPROVED EROSION CONTROL MAT

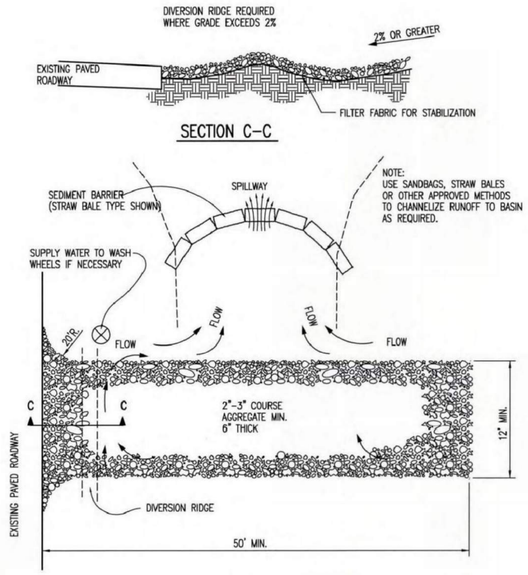


NOTE:
PLACE 4" PERFORATED PVC PIPE, FILLED WITH 1/2"–1" DIA. GRAVEL, IN FRONT OF CURB INLET AS SHOWN.

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 — 19014 — KANSAS — 05/12/13

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
472-2024-086026	____	

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

SHEET
---- of __

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 — 05/27/2025 — KANSAS — PROFESSIONAL ENGINEER

STORM WATER DRAIN NO. 526
IMPROVEMENTS

SWANEY FARM ADDITION

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 458-2024-085570

Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-005
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

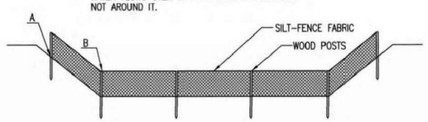
BACK OF CURB AND CURB INLET PROTECTION

CG403
39 OF 44

SAVED 8/9/2024 11:11:00 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 11:16:12 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\00402\PD3_PLANS\030_SWD\38-200605-005-CG403 BACK OF CURB & CURB INLET PROT.DWG

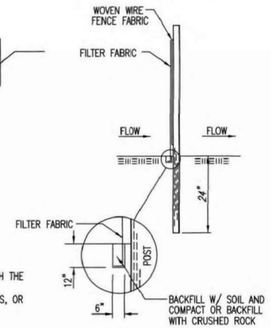
SAVED 8/9/2024 11:11:00 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 11:16:12 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\00402\PD3_PLANS\030_SWD\38-200605-005-CG403 BACK OF CURB & CURB INLET PROT.DWG

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



ELEVATION

SILT FENCE DITCH CHECKS
(STREAM PROTECTION)



ANCHOR TRENCH DETAIL

MATERIAL SPECIFICATION:

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

PLACEMENT:

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

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

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

PROPER INSTALLATION METHOD:

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

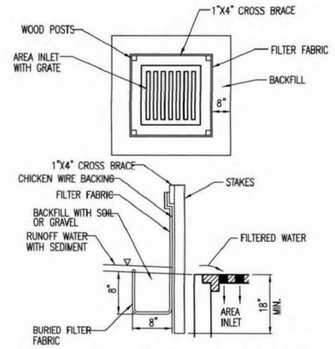
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

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

INSPECTION AND MAINTENANCE:

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

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



SILT FENCE BARRIERS FOR AREA INLETS
(INLET PROTECTION)

MATERIAL SPECIFICATION:

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

PLACEMENT:

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

PROPER INSTALLATION METHOD:

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

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

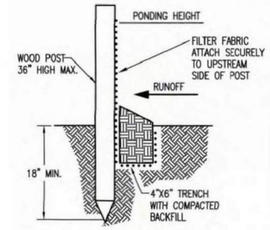
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

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

INSPECTION AND MAINTENANCE:

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

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



SILT FENCE BARRIERS

MATERIAL SPECIFICATION:

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

PLACEMENT:

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

PROPER INSTALLATION METHOD:

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

LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

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

INSPECTION AND MAINTENANCE:

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

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

REVISION DATE: MAY 2013

GARY L. JANZEN LICENSED 19294 KANSAS PROFESSIONAL ENGINEER
05/26/25

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-	____	

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

SHEET 2 of __

SW-502

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

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 05/27/2025 KANSAS PROFESSIONAL ENGINEER

STORM WATER DRAIN NO. 526 IMPROVEMENTS

SWANEY FARM ADDITION

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 458-2024-085570

Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-005
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

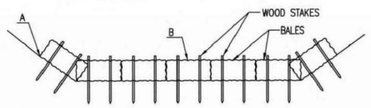
SILT FENCE DITCH CHECK

CG404
40 OF 44

Saved: 08-09-2024 11:11:13 AM by KEVIN.GRAHAM
Plotted: 05-27-2025 11:16:17 AM by KEVIN GRAHAM
U:\Wichita-Civil\2020\200605\004\2PD3_Plans\030_SWD\39-200605-005-CG404 SILT FENCE DITCH CHECK

SAVED 8/9/2024 11:11:13 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 11:16:17 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_SWD\39-200605-005-CG404 SILT FENCE DITCH CHECK.DWG

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'.

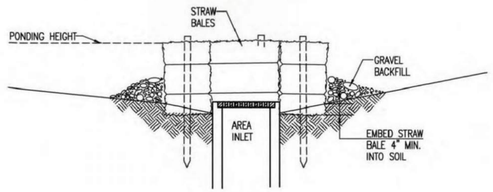
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

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.

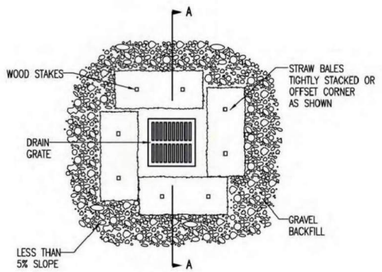
INSPECTION AND MAINTENANCE:

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.

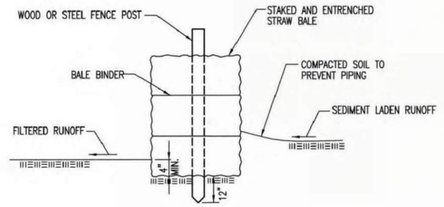
LIST OF COMMON PLACEMENT INSTALLATION MISTAKES TO AVOID:

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 PROFESSIONAL ENGINEER KANSAS 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-	____	

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

SHEET
---- of __

SW-503

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

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 05/27/2025 KANSAS PROFESSIONAL ENGINEER

STORM WATER DRAIN NO. 526
IMPROVEMENTS

SWANEY FARM ADDITION

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 458-2024-085570

Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-005
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

STRAW BALE DITCH CHECK

CG405
41 OF 44

Saved 08-09-2024 11:11:25 AM by KEVIN.GRAHAM
Plot Scale: 1:1 05-27-2025 11:16:22 AM by ###
U:\Wichita-Civil\2020\200605\004\2PD3_Plans\030_SWD\40-200605-005-CG405 STRAW BALE DITCH CHECK

SAVED 8/9/2024 11:11:25 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 11:16:22 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_SWD\40-200605-005-CG405 STRAW BALE DITCH CHECK.DWG

GENERAL NOTES

1. THIS SHEET IS INTENDED TO PROVIDE GUIDELINES AS TO WHAT TYPES OF EROSION CONTROL DEVICES WILL BE INSTALLED DURING THE CONSTRUCTION PROCESS. CONTRACTORS ARE EXPECTED TO BID PROJECTS ACCORDINGLY.

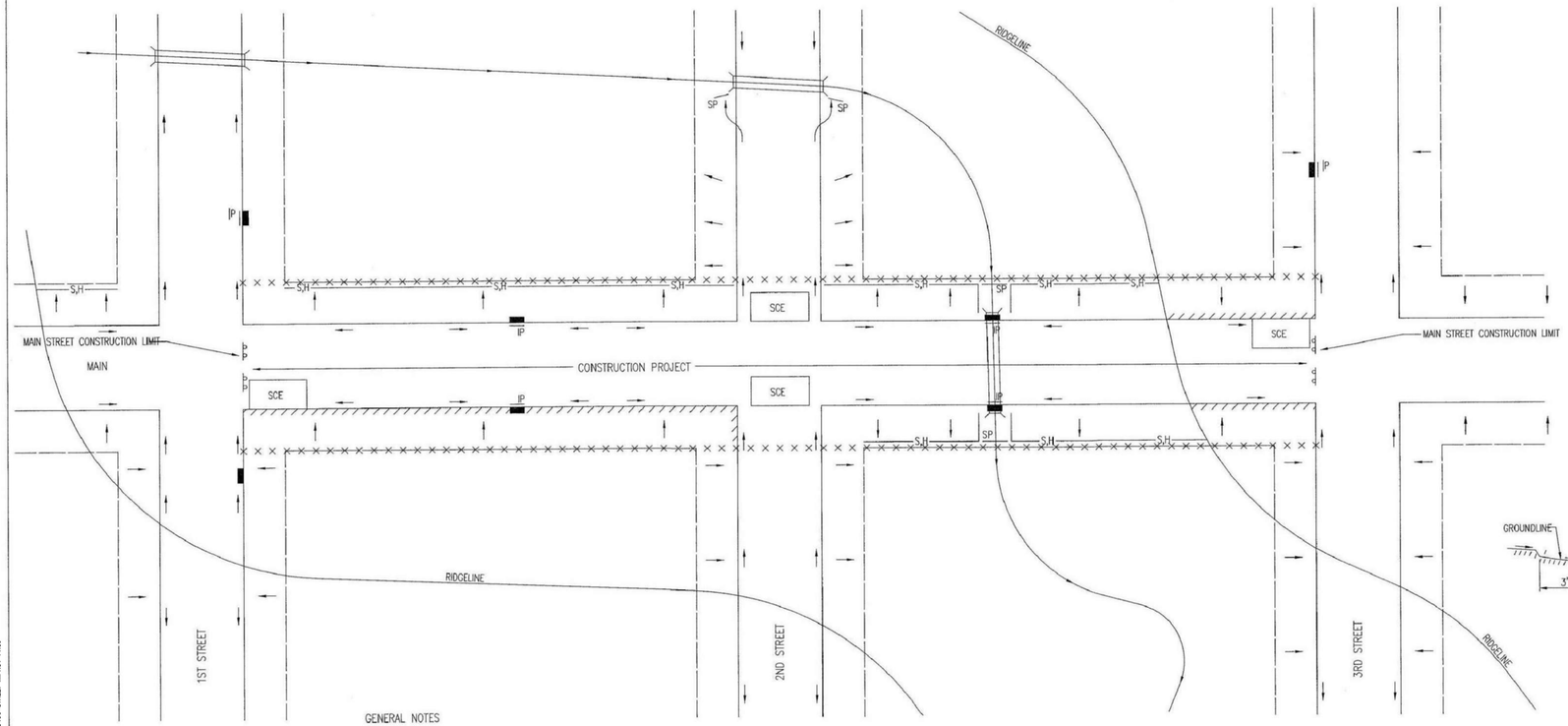
2. EROSION CONTROL DEVICES MUST BE MAINTAINED BY THE CONTRACTOR THROUGHOUT THE CONSTRUCTION PROCESS AND UNTIL THE DISTURBED EARTH IS RESTABILIZED.

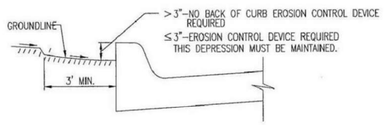
3. IF THE PROJECT WILL DISTURB 1 ACRE OR MORE, A FEDERAL/STATE NPDES STORMWATER PERMIT IS REQUIRED. A DETAILED STORMWATER POLLUTION PREVENTION PLAN, IS REQUIRED. THE EROSION CONTROL DEVICES SHOWN ON THIS SHEET ARE CONSIDERED TO BE THE MINIMUM TO BE SHOWN IN THE POLLUTION PREVENTION PLAN.

4. FOR PROJECTS DISTURBING LESS THAN 1 ACRE, CONTRACTORS ARE ENCOURAGED TO PREPARE STORMWATER POLLUTION PREVENTION PLANS PRIOR TO CONSTRUCTION. EROSION CONTROL DEVICES MUST BE USED ON ALL PROJECTS.

5. FAILURE TO USE AND MAINTAIN EROSION CONTROL DEVICES IS A VIOLATION OF SECTION 16.32 OF THE CITY CODE AND WILL SUBJECT THE CONTRACTOR TO THE PENALTIES PROVIDED FOR THEREIN.

6. THE APPLICATION OF EROSION CONTROL DEVICES SHOWN ON THIS SHEET IS FOR SITUATIONS NORMALLY ENCOUNTERED. FROM TIME TO TIME, SITUATIONS WILL ARISE THAT MAY REQUIRE A DIFFERENT DEVICE OTHER THAN THOSE SHOWN. EROSION CONTROL DEVICES, OTHER THAN THOSE SHOWN, MAY BE UTILIZED AS LONG AS THEY ARE EFFECTIVE AND MAINTAINED.





CURB BACKFILL DETAIL

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

LEGEND

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

GENERAL NOTES

1. THE INTENT OF ALL EROSION CONTROL DEVICES IS TO KEEP ALL SEDIMENT CONFINED TO THE CONSTRUCTION SITE, AND OUT OF ALL UNDERGROUND PIPES, DITCHES, LAKES, AND OTHER DRAINAGE FACILITIES, AND OFF OF STREETS.

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

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

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

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

6. STABILIZED CONSTRUCTION ENTRANCES SHALL BE PROVIDED, AS NEEDED, TO PREVENT MUD FROM TRACKING ONTO STREETS NOT UNDER CONSTRUCTION AND ON STREETS WITHIN THE PROJECT LIMITS IF TRAFFIC IS BEING MAINTAINED THROUGH THE PROJECT.

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

8. THE CONTACTOR WILL BE REQUIRED TO PLACE EROSION CONTROL DEVICES BACK OF CURB, WHENEVER WATER CAN DRAIN OVER CURB, TO KEEP ERODED SOIL OUT OF THE GUTTERLINES, IN ACCORDANCE WITH THE FOLLOWING:
   A. THE DEVICE REQUIRED WILL BE APPROVED EROSION CONTROL MAT LISTED ON THE CITY'S APPROVED MATERIAL LIST. SAID BLANKET SHALL BE PLACED OVER THE APPROPRIATE SEED AND FERTILIZER, AS SPECIFIED IN THE PROJECT SPECIFICATIONS. (SEE SOIL EROSION BMPs – BACK OF CURB SEDIMENT BARRIER DETAILS)
   B. THIS DEVICE SHALL BE INSTALLED IMMEDIATELY WHENEVER THE CURB IS BACKFILLED TO WITHIN 3" OF THE TOP OF CURB. (SEE CURB BACKFILL DETAIL) OTHER BMP'S MAY BE REQUIRED AT LOCATIONS WHERE CONCENTRATED FLOW CARRIES SEDIMENT OVER THE CURB.
   C. ADDITIONALLY, OTHER EROSION CONTROL DEVICES (HAY BALES, SILT FENCE, ETC.) WILL BE INSTALLED AT LOCATIONS OF CONCENTRATED FLOW RESULTING IN SEDIMENT OVERRUNNING THE MAT.
   D. SHOULD THE PROJECT PLANS SPECIFY THAT THE RIGHT-OF-WAY IS TO BE SODDED, THE EXCELSIOR MAT WILL NOT BE REQUIRED SO LONG AS THE SOD IS PLACED WITHIN 48 HOURS AFTER CURB BACKFILL REACHES A HEIGHT OF 3" OR LESS FROM TOP OF CURB. (SEE CURB BACKFILL DETAIL)

GARY L. JANZEN — LICENSED — 18294 — PROFESSIONAL ENGINEER — KANSAS — 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-		

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

SHEET 4

SW-504

Saved: 08-09-2024 11:11:42 AM by KEVIN.GRAHAM
Plot Scale: 1:1 05-27-2025 11:16:27 AM by JUSTIS.DRAFT
U:\Wichita-Civil\2020\200605\004\2PD3_Plans\030_SWD41-200605-005-CG406 STREET IMPROV PROJ

SAVED 8/9/2024 11:11:42 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 11:16:27 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_SWD41-200605-005-CG406 STREET IMPROV PROJ.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 — 05/27/2025 — KANSAS — PROFESSIONAL ENGINEER

STORM WATER DRAIN NO. 526
IMPROVEMENTS

SWANEY FARM ADDITION

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 458-2024-085570

Issue:		
	08/17/2026 - cjr	

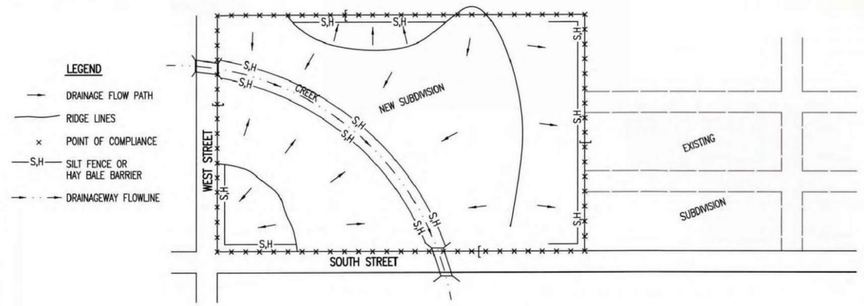
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-005
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

STREET IMPROVEMENT PROJECTS

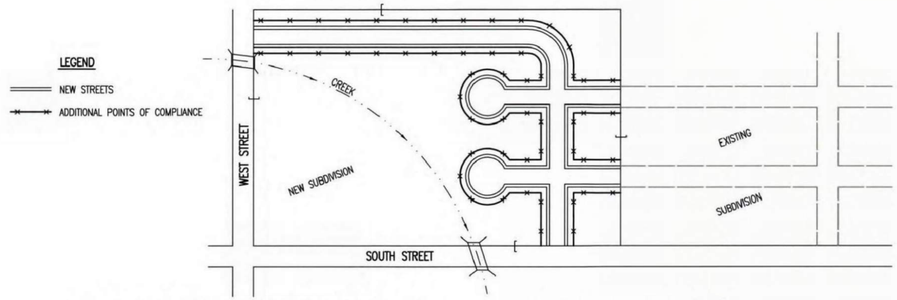
CG406
42 OF 44

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



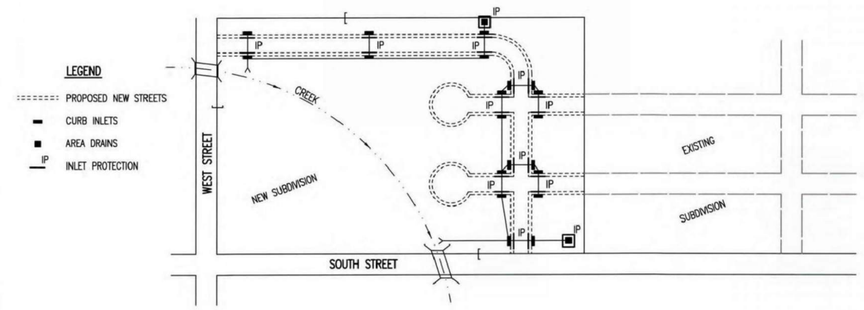
1. DURING THIS PHASE OF SUBDIVISION CONSTRUCTION, THE POINTS OF COMPLIANCE ARE THE PERIMETER BOUNDARIES AND ANY DRAINAGE WAYS OR STORM SEWERS DRAINING THROUGH OR FROM THE SITE. SHOULD LAKES BE CONSTRUCTED WITHIN THE SUBDIVISION THAT WILL DISCHARGE DURING STORMS, THEY ARE ALSO A POINT OF COMPLIANCE.
2.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

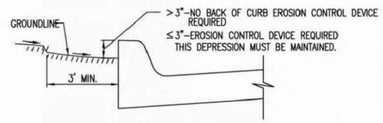


1. DURING THIS PHASE OF SUBDIVISION DEVELOPMENT, ALL EROSION CONTROL DEVICES REQUIRED IN PHASE 1 SHALL REMAIN IN PLACE AND BE MAINTAINED.
2. AS NEW STORM SEWERS, WITH INLETS, ARE INSTALLED, THE STORM SEWERS MUST NOW BE PROTECTED SO ALL NEW INLETS BECOME POINTS OF COMPLIANCE.
3. AREA DRAINS – AS SOON 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 05.12.25

CITY OF WICHITA
PUBLIC WORKS & UTILITIES ENGINEERING DIVISION

SUBDIVISION DEVELOPMENT PROCESS

CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER	OCA NUMBER	DATE
472-	____	

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

SHEET 5 of __

SW-505

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

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 05/27/2025 KANSAS PROFESSIONAL ENGINEER

STORM WATER DRAIN NO. 526
IMPROVEMENTS

SWANEY FARM ADDITION

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 458-2024-085570

Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-005
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

SUBDIVISION DEVELOPMENT PROCESS

CG407
43 OF 44

Saved 08-09-2024 11:12:21 AM by KEVIN.GRAHAM
Plot Scale 1:1 05-27-2025 11:16:32 AM by KEVIN.GRAHAM
U:\Wichita-Civil\2020\200605\00412PD3_Plans\030_SWD42-200605-005-CG407 SUBDIVISION DEVELOPMENT PROCESS

SAVED 8/9/2024 11:12:21 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 11:16:32 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\00412PD3_PLANS\030_SWD42-200605-005-CG407 SUBDIVISION DEVELOPMENT PROCESS.DWG

SWANEY FARM ADDITION

CITY OF WICHITA, SEDGWICK COUNTY, KANSAS

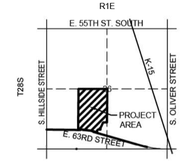
FINAL PLAT

MINIMUM PAD TABLE

LOCATION	MINIMUM OPENING (BFE + 2')
BLOCK A, LOTS 1-6	1261.6
BLOCK B, LOTS 1-3	1261.6
BLOCK C, LOTS 1-4	1261.6
BLOCK C, LOTS 5-7	1262.8
BLOCK C, LOTS 9-11	1263.5
BLOCK C, LOTS 12-14	1263.8
BLOCK D, LOTS 1-4. 7	1261.6
BLOCK E, LOTS 11-12	1264.9
BLOCK E, LOTS 13-14	1264.7
BLOCK E, LOT 15	1264.4
BLOCK E, LOT 16	1264.4
BLOCK E, LOT 17	1264.0
BLOCK E, LOT 18	1263.8
BLOCK E, LOT 19	1263.7
BLOCK E, LOT 20	1263.6
BLOCK E, LOTS 21-23	1263.5
BLOCK F, LOT 1	1264.9
BLOCK F, LOT 23	1264.7
BLOCK F, LOTS 15-16	1264.3
BLOCK F, LOTS 17-18	1264.8
BLOCK G, LOTS 1-3	1265.0

BENCH MARK

BENCHMARK 202 - CHISELED X ON CURB STORM DRAIN ON THE SE SIDE OF CLIFTON AND 63RD.
ELEV.= 1259.36 (NAVD88)
THENCE N00°17'28"W AT DISTANCE 86.56'
THENCE N89°39'36"E AT DISTANCE 3.86'
TO THE SOUTHWEST CORNER OF SWANEY FARM ADDITION



VICINITY MAP

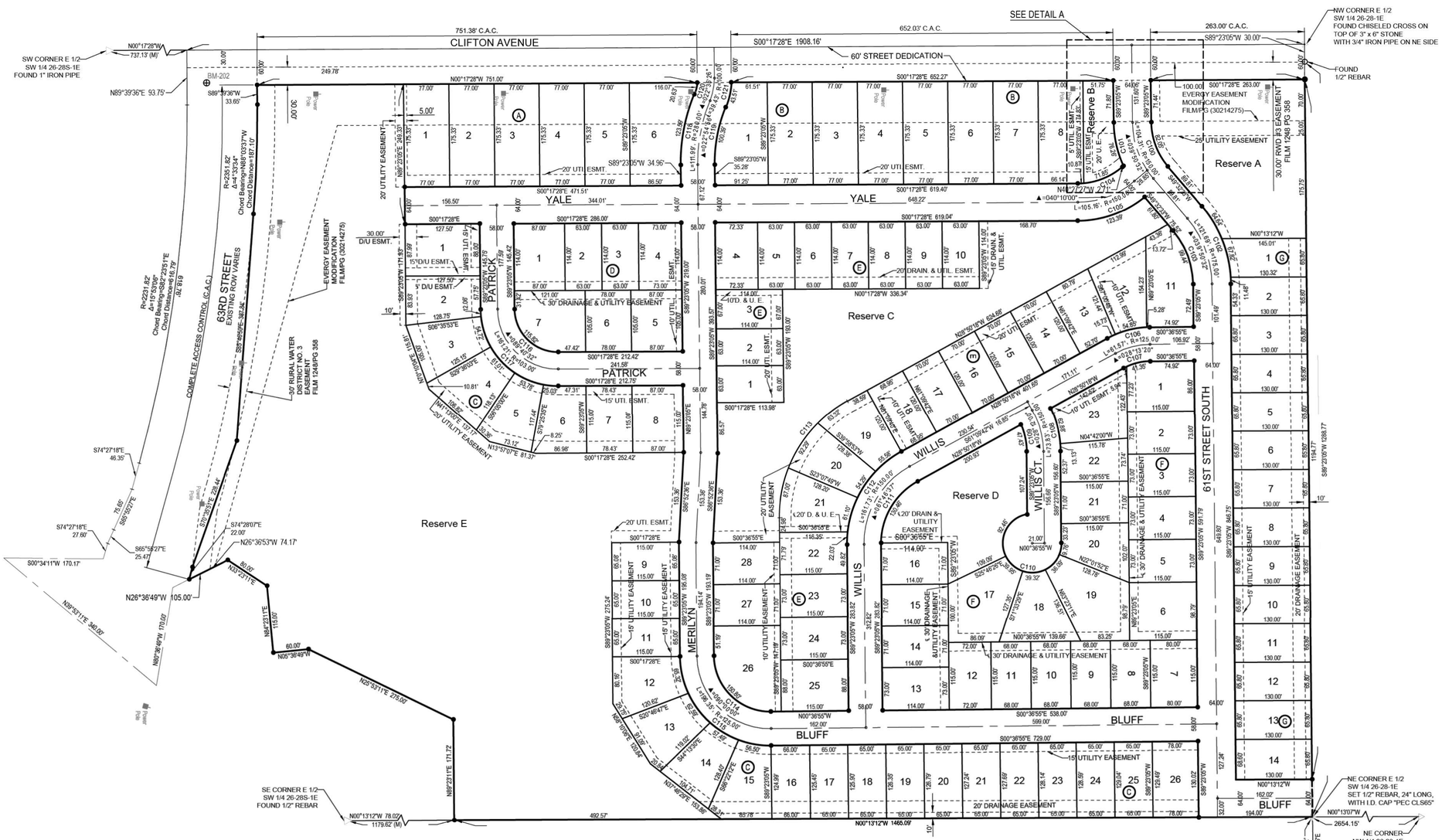
0' 100' 200'

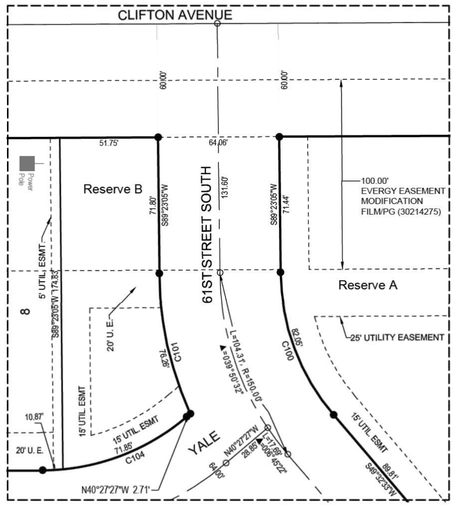
1 INCH =100 FEET

PLAT LEGEND

△ SECTION CORNER AS N

● SET 1/2" REBAR, 24" LO WITH I.D. CAP "PEC CLS





DETAIL A
1 INCH =40 FEET

CURVE TABLE					
CURVE NO.	RADIUS	DELTA	LENGTH	CHORD LENGTH	CHORD BEARING
C100	118.00'	39°50'32"	82.05	80.41'	N69° 27' 48"E
C101	182.00'	24°00'25"	76.26	75.70'	N77° 22' 52"E
C102	207.00'	39°50'32"	143.94	141.06'	S69° 27' 49"W
C103	143.00'	39°50'32"	99.44	97.45'	S69° 27' 49"W
C104	118.00'	40°10'00"	82.72	81.04'	N20° 22' 27"W
C105	182.00'	38°50'46"	123.39	121.04'	N19° 42' 50"W
C106	154.00'	28°13'23"	75.86	75.09'	S14° 43' 37"E
C107	96.00'	28°13'23"	47.29	46.81'	S14° 43' 37"E
C108	179.00'	24°19'50"	76.01	75.44'	S77° 13' 10"W
C109	121.00'	22°27'34"	47.43	47.13'	S78° 09' 18"W
C111	121.00'	61°46'37"	130.46	124.24'	S59° 43' 37"E
C112	179.00'	61°46'37"	193.00	183.79'	
C113	225.00'	61°46'37"	242.60	231.02'	
C114	96.00'	90°00'00"	150.80	135.76'	N44° 23' 05"E
C115	154.00'	90°00'00"	241.90	217.79'	N44° 23' 05"E
C116	74.00'	89°40'32"	115.82	104.36'	N44° 32' 49"E
C117	132.00'	89°40'32"	206.60	186.15'	N44° 32' 49"E
C118	309.00'	22°54'56"	123.59	122.76'	S79° 09' 27"E
C119	251.00'	22°54'56"	100.39	99.72'	S79° 09' 27"E
C120	71.00'	16°38'48"	20.63	20.56'	N76° 01' 23"W
C121	129.00'	19°19'25"	43.51	43.30'	N77° 21' 41"W

08/17/2026 - cjr

RED LINE - FIELD SET

U:\Wichita-Civil 200605-012

08/17/2026 2:26:23 PM BY BILL.SEXSON
U:\WICHITA-CIVIL\200605\001\PEC\DRAWINGS\PLAT\200605-001 SWANEY FARM ADDITION-2-22-2023.DWG
08/17/2026 2:26:44 PM BY BILL SEXSON

CONSTRUCTION PLANS FOR
SANITARY SEWER IMPROVEMENTS

TO SERVE

SWANEY FARM ADDITION - PHASE 1

CITY OF WICHITA ENGINEERING PROJECT NO. 468-2024-007800
ORG CODE: 47272024, MUNIS NO.: E4082

CITY OF WICHITA, KS

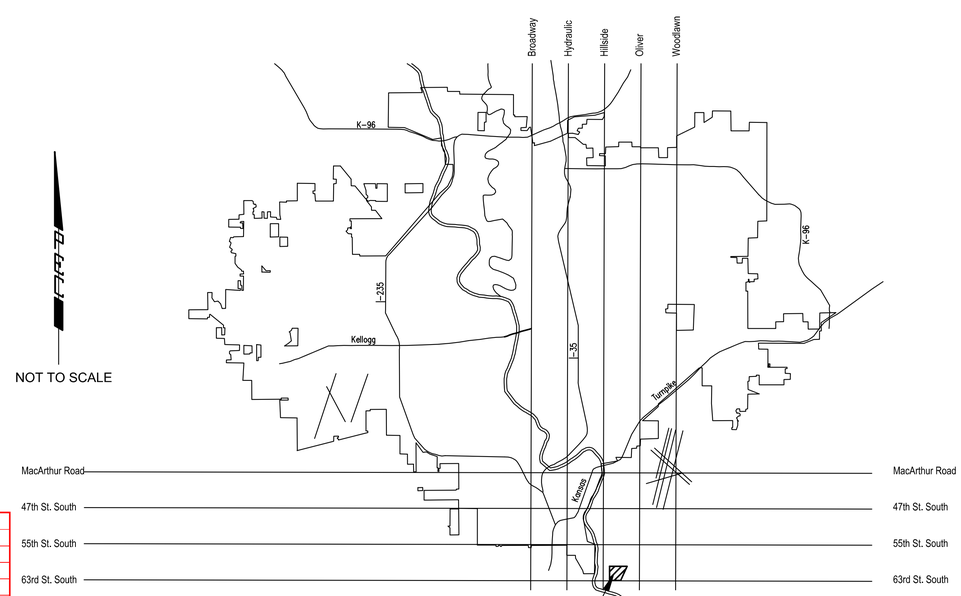
PAUL GUNZELMAN, P.E. - CITY ENGINEER

RED LINE - FIELD SET

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

INSPECTOR	PEC	TIGER WILLIAMS
	PEC	BRANDON DELANEY
CONTRACTOR	NOWAK CONSTRUCTION	DAVE STARECK
	NOWAK CONSTRUCTION	JIM NOWAK
COMPANY	CITY OF WICHITA	EVER VILLALOBOS

Item	Manufacturer	Qty	Unit
Pipe, End Section 15"	Diamond	2	ea
Pipe, SS 8"	Diamond	4,486	lf
Pipe Plug, 8"	Diamond	3	ea
Pipe, SS 8"	Diamond	362	lf
Pipe, SS 12"	Diamond	185	lf
Pipe Stub, 8"	Diamond	1	ea
Pipe, SWS, RCBC (12'x4')	Wichita Concrete Pipe	109	lf
Pipe, SWS, RCBC (Double 8'x3')	Wichita Concrete Pipe	94	lf
Pipe, SWS 15"	Wichita Concrete Pipe	42	lf
Pipe, End Section 24"	Wichita Concrete Pipe	2	ea
Pipe, End Section 14"x23" HERCP	Wichita Concrete Pipe	2	ea
Pipe, SWS 15"	Wichita Concrete Pipe	69	lf
Pipe, SWS 18"	Wichita Concrete Pipe	254	lf
Pipe, SWS 24"	Wichita Concrete Pipe	766	lf
Pipe, SWS 30"	Wichita Concrete Pipe	241	lf
Pipe, SWS 36"	Wichita Concrete Pipe	275	lf
Pipe, SWS, HERCP, 14"x23"	Wichita Concrete Pipe	60	lf
Pipe, Plug	Wichita Concrete Pipe	3	ea



NOT TO SCALE

LOCATION MAP

PROJECT LOCATION
SWANEY FARM ADDITION

SHEET INDEX

SHEET NUMBER	SHEET TITLE
CU001	TITLE SHEET
CU002	GENERAL NOTES
CU003	PLAT BUBBLE MAP 1
~~CU100~~	SANITARY SEWER KEY MAP AND BUBBLE MAP 1
CU101	SANITARY SEWER LINE NO. 1
CU102	SANITARY SEWER LINE NO. 1
CU103	SANITARY SEWER LINE NO. 1
CU104	SANITARY SEWER LINE NO. 1
CU105	SANITARY SEWER LINE NO. 1
CU106	SANITARY SEWER LINE NO. 2
CU107	SANITARY SEWER LINE NO. 2
CU108	SANITARY SEWER LINE NO. 2
CU109	SANITARY SEWER LINE NO. 3
CU110	SANITARY SEWER LINE NO. 3
CU111	SANITARY SEWER LINE NO. 3
CU112	SANITARY SEWER LINE NO. 4
CU113	SANITARY SEWER LINE NO. 5
CU114	SANITARY SEWER LINE NO. 5
CU501	PRECAST SANITARY SEWER MANHOLE
CU502	MANHOLE FRAME AND COVER (SANITARY SEWER)
CU503	VERTICAL RISER ASSEMBLY SEWER DETAIL
CU504	CLEANOUT RISER ASSEMBLY DETAIL
CU505	EROSION CONTROL PLAN
CU506	BACK OF CURB & CURB INLET PROTECTIONS & CONSTRUCTION ENTRANCE
CU507	SILT FENCE DITCH CHECK AND BARRIER DETAILS
CU508	STRAW BALE DITCH CHECK AND BARRIER DETAILS
CU509	STREET IMPROVEMENT PROJECTS
CU510	SUBDIVISION DEVELOPMENT PROCESS
CU601	PLAT

CU100R

RED LINE - FIELD SET
08/17/2026 - cjr
Prepared By: Tiger Williams
Brandon Delaney
Date: JULY 2025
PEC FIELD SERVICES

MAY 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
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

SANITARY SEWER IMPROVEMENTS
SWANEY FARM ADDITION PHASE 1
PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007800

Issue:

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-007
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

TITLE SHEET

CU001

SAVED 5/27/2025 8:07:47 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 8:09:33 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\0004\2PD3_PLANS\030_SANITARY PHASE 1\200605-007-C001.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 HORIZONTAL AND VERTICAL CONTROL POINTS 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 AND SECTION CORNERS WHICH ARE DAMAGED OR DESTROYED BY CONSTRUCTION OPERATIONS. SUCH IRONS AND SECTION CORNERS 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. THE CONTRACTOR SHALL BE RESPONSIBLE FOR 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 FOR STATE OWNED/ OPERATED PROPERTY: FOR OTHER PROPERTIES: LOCAL FLOODPLAIN ADMINISTRATOR 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 AND PARKS 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 PROJECT 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.

21. CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION STAKING. STAKING AND BENCH MARKS DESTROYED DURING CONSTRUCTION OPERATIONS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

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

23. WRITTEN REQUEST TO THE 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.

24. THE CONTRACTOR SHALL LIMIT THE EXTENT OF TRENCH TO REMAIN OPEN OVERNIGHT AND WEEKENDS TO LESS THAN 50 FEET.

25. THE CONTRACTOR SHALL NOT BURY MANHOLES OR CLEANOUTS THAT HAVE TOP ELEVATIONS WHICH ARE LOWER THAN EXISTING GROUND. THE GROUND AROUND SUCH MANHOLES AND CLEANOUTS AND ALONG THE SEWER ALIGNMENT SHALL BE BACKFILLED TO THE APPROXIMATE ELEVATION OF THE PROPOSED GROUND ELEVATION SHOWN ON THE PLAN/PROFILE SHEETS. THE CONTRACTOR SHALL PROVIDE DRAINAGE AWAY FROM THESE MANHOLES OR CLEANOUTS AND SEWER LINES BY CONSTRUCTION OF TEMPORARY DITCHES OR SLOPING THE GROUND AS REQUIRED.

26. THE CONTRACTOR SHALL PROVIDE MOUNDED EARTH AT MANHOLES AND CLEANOUTS THAT HAVE TOP ELEVATIONS GREATER THAN 1 FOOT ABOVE FINISHED GRADE, AS SHOWN ON THE DRAWINGS.

27. THE CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE AWAY FROM ALL MANHOLE COVERS.

28. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING CONTINUOUS FLOW OF SEWAGE THROUGH CONSTRUCTION. CONTRACTOR'S PROPOSED METHOD FOR MAINTAINING SEWAGE FLOW SHALL BE SUBMITTED AND APPROVED BY THE ENGINEER PRIOR TO STARTING AND BY-PASSING OF SEWAGE FLOWS.

29. THE CONTRACTOR SHALL PREVENT ANY CONSTRUCTION DEBRIS FROM ENTERING THE EXISTING SANITARY SEWER DURING CONSTRUCTION.

30. CONTRACTOR SHALL NOT DIVERT ANY SEWAGE FLOW THROUGH NEW PIPE OR MANHOLES UNTIL TESTING HAS BEEN COMPLETED AND ACCEPTED.

31. CONTRACTOR SHALL POTHOLE ALL UTILITY CROSSINGS A MINIMUM OF 200 FT AHEAD OF THE EXCAVATION FOR OPEN CUT AND 500 FT AHEAD OF HDD INSTALLATION. CONTRACTOR TO NOTIFY RPR AND ENGINEER OF ANY CONFLICTS.

32. 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. THE FOLLOWING QUANTITIES ARE ESTIMATED, AND SHOULD BE CONSIDERED THE MINIMUM EFFORT REQUIRED.

33. ALL LAWN/TURF AREAS DISTURBED BY CONSTRUCTION OF THE PROPOSED IMPROVEMENTS SHALL BE RESTORED WITH THE SAME GRASS/SOD AS EXISTING. RESTORATION OF DISTURBED AREAS SHALL INCLUDE, BUT NOT BE LIMITED TO, TOP SOIL PREPARATION, SEEDING, MULCHING, AND/OR RE-SEEDING. ALL SEEDING/SODDING WORK SHALL BE IN ACCORDANCE WITH THE CITY OF WICHITA STANDARD SPECIFICATIONS AND THE CITY OF WICHITA ADMINISTRATIVE REGULATION NO. AR6.5 WHICH GOVERNS CLEANUP AND RESTORATION OR REPLACEMENT FOLLOWING CONSTRUCTION. ALL COSTS FOR THIS WORK SHALL BE SUBSIDIARY TO "SITE RESTORATION".

34. OPENING AND CLOSING WATER VALVES SHALL BE DONE SLOWLY TO PREVENT DAMAGE TO THE WATER DISTRIBUTION SYSTEM FROM WATER HAMMER. ALL VALVES CLOSED BY THE CONTRACTOR MUST BE REOPENED AS NEW CONSTRUCTION PERMITS. PROJECT INSPECTOR MUST ASCERTAIN THAT ANY VALVE CLOSED BY THE CONTRACTOR IS REOPENED. CONTRACTOR WILL BE PERMITTED TO OPERATE WATER VALVES ONLY WHEN THE PROJECT INSPECTOR ASSIGNED TO THE PROJECT IS PRESENT.

35. WHERE INDICATED IN THE DRAWINGS, THE SANITARY SEWER EXCAVATION 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 MPROVED BACKFILL MATERIAL IS OTHERWISE SPECIFIED. ALL COSTS FOR SAND FILLING AND FLUSHING SHALL BE INCLUDED IN THE UNIT PRICE BID FOR "JETTED SAND BACKFILL".

36. MAINTAIN A MINIMUM OF 10-FOOT HORIZONTAL SEPARATION BETWEEN ALL WATER LINES (MAINS, SERVICES, AND FIRE HYDRANTS) AND ALL SANITARY SEWER LINES (MAINS, SERVICES, AND MANHOLES). ALL SEPARATIONS DISTANCES ARE TO BE MEASURED FROM EDGE-TO-EDGE, AT THE CLOSEST POINT.

37. MAINTAIN A MINIMUM OF 2-FOOT VERTICAL SEPARATION BETWEEN ALL WATER LINES (MAIN AND SERVICES) AND ALL GRAVITY SANITARY SEWER LINES (MAINS, SERVICES, AND MANHOLES) AT CROSSINGS. ALL SEPARATION DISTANCES ARE TO BE MEASURED FROM EDGE-TO-EDGE, AT THE CLOSEST POINT.

38. 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. FULL TREE REMOVAL SHALL BE NOTED ON THE PLANS AND SHALL BE BID AS "TREE REMOVED, LARGE", "TREE REMOVED, SMALL", OR "TREE ROW REMOVED".

UTILITY CONTACTS

DEB ARY
WICHITA SANITARY SEWER
7TH FLOOR - CITY HALL
455 N. MAIN
WICHITA, KS 67202
316-268-4614

GREG LOLLEY
WICHITA WATER
8TH FLOOR - CITY HALL
455 N. MAIN
WICHITA, KS 67202
316-268-4334

JOE HICKLE
WICHITA STORM SEWER
7TH FLOOR - CITY HALL
455 N. MAIN
WICHITA, KS 67202
316-268-4307

JAMES WALBURN
COX COMMUNICATIONS
ENGINEERING DEPARTMENT
901 GEORGE WASHINGTON BLVD.
WICHITA, KS 67211
316-260-7491

KEVIN RIESCHICK
EVERGY
1900 E. CENTRAL (3RD FLOOR)
P.O. BOX 208
WICHITA, KS 67201
785-410-2986

JASON EDWARDS
AT&T WICHITA CENTRAL UNIT
154 N. BROADWAY, ROOM 210
WICHITA, KS 67202
316-268-2008

ANDREA FOUST
KANSAS GAS SERVICE
1021 E. 26TH ST. NORTH
WICHITA, KS 67219
316-832-3126

SUZETTE WILSON & CHRIS KELLY
BLACK HILLS ENERGY
2330 N. HOOVER ROAD
WICHITA, KS 67205
SUZETTE WILSON
316-941-1631
CHRIS KELLY 316-941-1633

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

CITY OF WICHITA

KEVIN P. GRAHAM
LICENSED
27806
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

SANITARY SEWER IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007800

Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-007
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

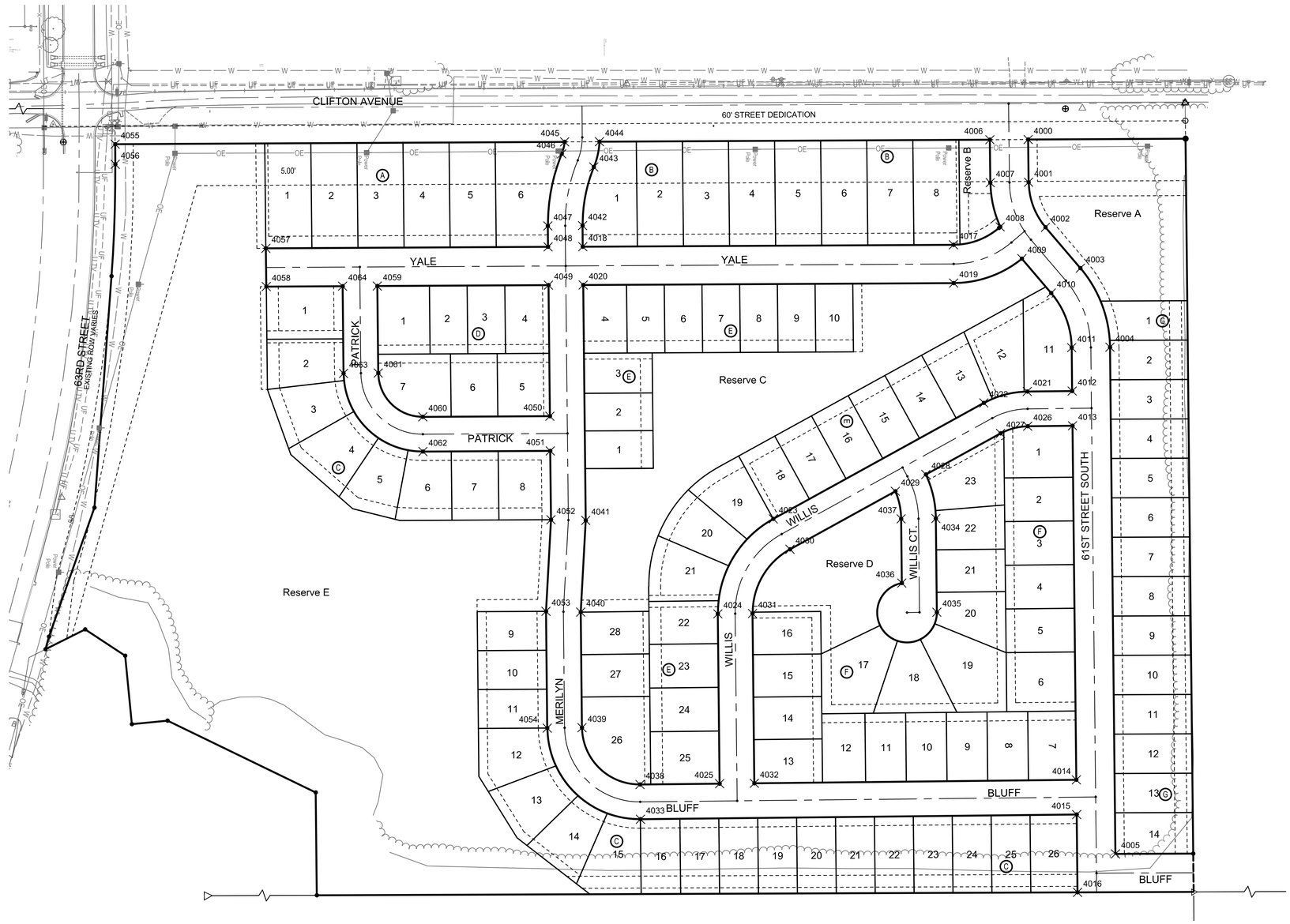
GENERAL NOTES

CU002

SAVED 5/6/2025 1:23:45 PM BY DUSTIN.LOHMANN
PLOTTED 5/27/2025 8:09:38 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_SANITARY PHASE 1\200605-007-C002.DWG

SWANEY FARM ADDITION

CITY OF WICHITA, SEDGWICK COUNTY, KANSAS



COORDINATE LIST		
POINT	NORTHING	EASTING
4000	333,343.3466	17,559,773.0152
4001	333,344.1138	17,559,844.4466
4002	333,372.3226	17,559,919.7478
4003	333,430.5986	17,559,988.0827
4004	333,480.0831	17,560,120.1786
4005	333,489.1775	17,560,966.8820
4006	333,279.3464	17,559,773.3402
4007	333,280.1175	17,559,845.1339
4008	333,296.6557	17,559,919.0071
4009	333,332.8977	17,559,972.1487
4010	333,381.9019	17,560,029.6113
4011	333,416.0868	17,560,120.8660
4012	333,416.8654	17,560,193.3566
4013	333,417.4884	17,560,251.3533
4014	333,423.8444	17,560,843.1131
4015	333,424.4673	17,560,901.1097
4016	333,425.8638	17,561,031.1256
4017	333,218.6228	17,559,948.9809
4018	332,599.2274	17,559,952.1265
4019	333,218.9479	17,560,012.9800
4020	332,599.9148	17,560,016.1239
4021	333,341.9495	17,560,194.1613
4022	333,269.3231	17,560,213.2509
4023	332,917.4815	17,560,406.9842
4024	332,824.8307	17,560,565.7078
4025	332,827.8791	17,560,849.5143
4026	333,342.5724	17,560,252.1580
4027	333,297.2988	17,560,264.0580
4028	333,172.4510	17,560,332.8025
4029	333,121.4698	17,560,360.8741
4030	332,945.4578	17,560,457.7909
4031	332,882.8274	17,560,565.0849
4032	332,885.8757	17,560,848.8913
4033	332,695.5094	17,560,908.9394
4034	333,189.1402	17,560,406.3752
4035	333,190.8221	17,560,562.9656
4036	333,132.2953	17,560,514.2356
4037	333,131.1435	17,560,406.9982
4038	332,694.8864	17,560,850.9427
4039	332,597.8609	17,560,755.9793
4040	332,595.7860	17,560,562.8014
4041	332,604.1418	17,560,409.6721
4042	332,598.8484	17,559,916.8443
4043	332,617.6067	17,559,818.9041
4044	332,627.0807	17,559,776.6528
4045	332,568.9094	17,559,776.9483
4046	332,563.9446	17,559,796.8954
4047	332,540.8518	17,559,917.4672
4048	332,541.2272	17,559,952.4211
4049	332,541.9146	17,560,016.4184
4050	332,544.2668	17,560,235.4093
4051	332,544.8897	17,560,293.4069
4052	332,546.1249	17,560,408.4021
4053	332,537.7690	17,560,561.5314
4054	332,539.8643	17,560,756.6023
4055	331,817.9201	17,559,780.7622
4056	331,818.1197	17,559,814.4100
4057	332,069.7266	17,559,954.9006
4058	332,070.4131	17,560,018.8130
4059	332,255.9138	17,560,017.8778
4060	332,331.8471	17,560,236.4881
4061	332,257.4756	17,560,163.2907
4062	332,332.1417	17,560,294.4874
4063	332,199.4790	17,560,163.9137
4064	332,197.9136	17,560,018.1724

0 100' 200'

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

CITY OF WICHITA

KEVIN P. GRAHAM
LICENSED
27806
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

SANITARY SEWER IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007800

Issue:		
	08/17/2026 - cjr	

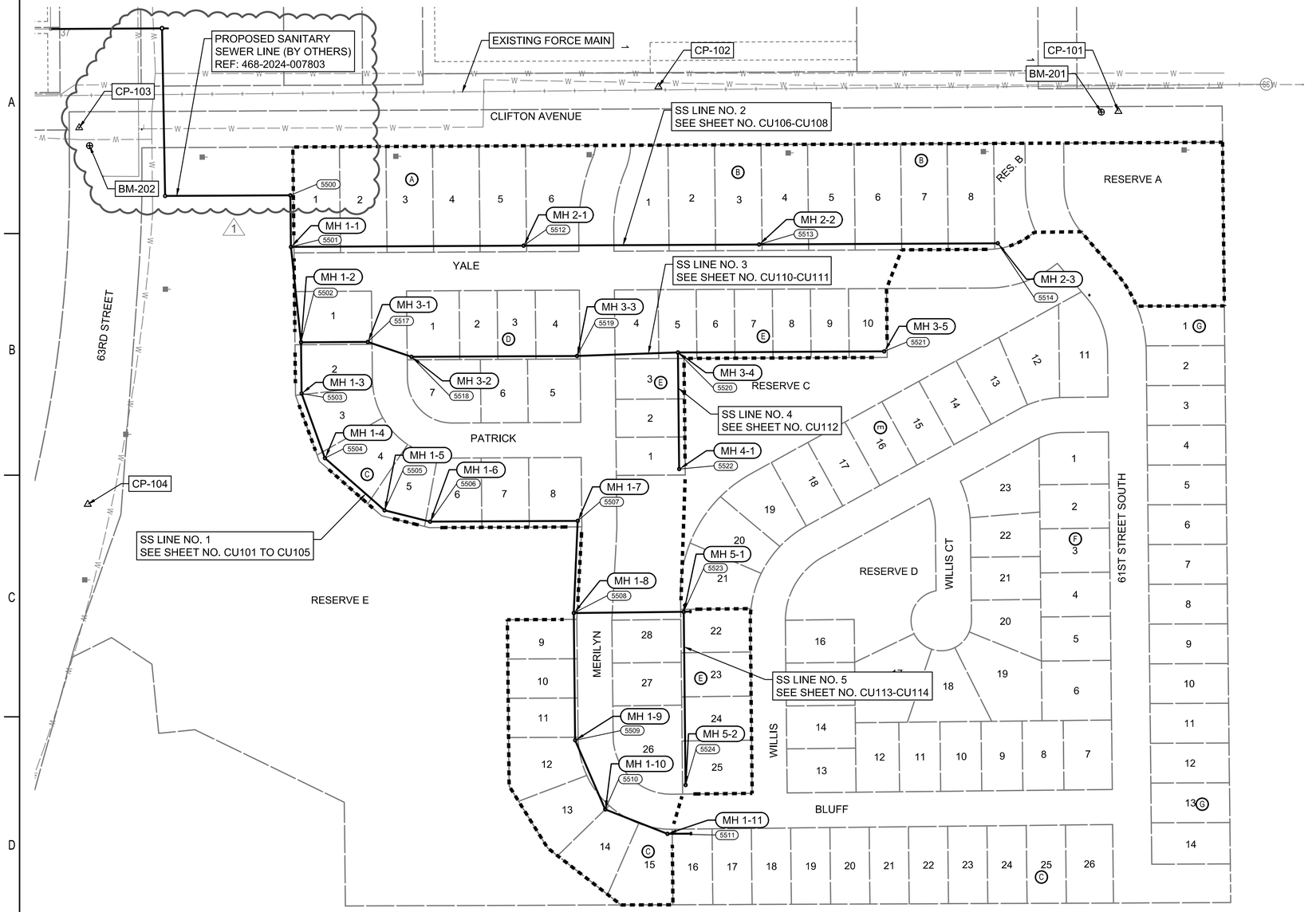
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-007
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

PLAT BUBBLE MAP 1

CU003

SAVED 5/6/2025 1:23:34 PM BY DUSTIN.LOHMANN
PLOTTED 5/27/2025 8:09:45 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\00412PD3_PLANS\030_SANITARY PHASE 1\200605-007-C003.DWG



PBS

0 100' 200'

HORIZONTAL DATUM/COORDINATE SYSTEM:
KRCS ZONE 17 - WICHITA

BENCHMARKS
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 AVENUE AND 63RD STREET.

BM-203 (NOT SHOWN)
ELEV: 1,265.85 (NAVD 88)
CHISELED SQUARE ON THE SOUTH CENTER OF CURB STORM DRAIN LOCATED ON THE NORTH SIDE OF 63RD STREET, 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 (NOT SHOWN)
N: 331,530.9404 E: 17,560,836.2700
1/2 BAR WITH PEC PAC
1. 6' N TO SOUTH BACK OF CURB
2. 45.25' E TO NO PARKING SIGN
3. 35' N TO CENTERLINE OF ROAD

CP-106 (NOT SHOWN)
N: 331,485.8918 E: 17,559,660.4146
1/2 BAR
1. 17.5' E TO NW CORNER OF PRIVACY FENCE
2. 15' SSW TO CEDAR TREE
3. 23' N TO CENTERLINE OF ROAD

SANITARY SEWER LINE NO. 1

STRUCTURE TABLE

ID	STATION	COORDINATES	DESCRIPTION
MH 1-1	12+11.3 SS LINE 1	N: 332,064.6183 E: 17,559,944.8415	4' DIAMETER MANHOLE
MH 1-2	13+70.1 SS LINE 1	N: 332,081.3110 E: 17,560,102.7587	4' DIAMETER MANHOLE
MH 1-3	14+54.8 SS LINE 1	N: 332,082.2246 E: 17,560,187.4171	4' DIAMETER MANHOLE
MH 1-4	15+68.7 SS LINE 1	N: 332,120.8592 E: 17,560,294.5399	4' DIAMETER MANHOLE
MH 1-5	16+99.8 SS LINE 1	N: 332,219.5000 E: 17,560,380.9439	4' DIAMETER MANHOLE
MH 1-6	17+77.5 SS LINE 1	N: 332,294.9071 E: 17,560,399.6778	4' DIAMETER MANHOLE
MH 1-7	20+21.8 SS LINE 1	N: 332,539.1574 E: 17,560,398.4374	4' DIAMETER MANHOLE
MH 1-8	21+74.4 SS LINE 1	N: 332,532.6554 E: 17,560,550.9788	4' DIAMETER MANHOLE
MH 1-9	23+85.1 SS LINE 1	N: 332,534.9180 E: 17,560,761.6282	4' DIAMETER MANHOLE
MH 1-10	25+09.9 SS LINE 1	N: 332,584.7553 E: 17,560,876.0522	4' DIAMETER MANHOLE
MH 1-11	26+20.4 SS LINE 1	N: 332,687.5904 E: 17,560,916.5249	4' DIAMETER MANHOLE
MH A-4	10+00.0 SS LINE 1	N: 332,063.7041 E: 17,559,859.5150	4' DIAMETER MANHOLE

SANITARY SEWER LINE NO. 2

STRUCTURE TABLE

ID	STATION	COORDINATES	DESCRIPTION
MH 1-1	12+11.3 SS LINE 1	N: 332,064.6183 E: 17,559,944.8415	4' DIAMETER MANHOLE
MH 2-1	13+85.0 SS LINE 2	N: 332,449.6196 E: 17,559,942.8862	4' DIAMETER MANHOLE
MH 2-2	17+74.8 SS LINE 2	N: 332,839.3706 E: 17,559,940.9068	4' DIAMETER MANHOLE
MH 2-3	21+69.8 SS LINE 2	N: 333,234.3717 E: 17,559,938.9008	4' DIAMETER MANHOLE

SANITARY SEWER LINE NO. 3

STRUCTURE TABLE

ID	STATION	COORDINATES	DESCRIPTION
MH 1-2	13+70.1 SS LINE 1	N: 332,081.3110 E: 17,560,102.7587	4' DIAMETER MANHOLE
MH 3-1	11+10.5 SS LINE 3	N: 332,191.8157 E: 17,560,102.1975	4' DIAMETER MANHOLE
MH 3-2	11+86.9 SS LINE 3	N: 332,264.0844 E: 17,560,126.8308	4' DIAMETER MANHOLE
MH 3-3	14+60.9 SS LINE 3	N: 332,538.0854 E: 17,560,125.4393	4' DIAMETER MANHOLE
MH 3-4	16+27.9 SS LINE 3	N: 332,705.0095 E: 17,560,119.5915	4' DIAMETER MANHOLE
MH 3-5	19+69.2 SS LINE 3	N: 333,046.3633 E: 17,560,117.8579	4' DIAMETER MANHOLE

SANITARY SEWER LINE NO. 4

STRUCTURE TABLE

ID	STATION	COORDINATES	DESCRIPTION
MH 3-4	16+27.9 SS LINE 3	N: 332,705.0095 E: 17,560,119.5915	4' DIAMETER MANHOLE
MH 4-1	11+93.0 SS LINE 4	N: 332,707.0824 E: 17,560,312.5836	4' DIAMETER MANHOLE

SANITARY SEWER LINE NO. 5

STRUCTURE TABLE

ID	STATION	COORDINATES	DESCRIPTION
MH 1-8	21+74.4 SS LINE 1	N: 332,532.6554 E: 17,560,550.9788	4' DIAMETER MANHOLE
MH 5-1	11+82.0 SS LINE 5	N: 332,714.6449 E: 17,560,549.0241	4' DIAMETER MANHOLE
MH 5-2	14+68.7 SS LINE 5	N: 332,717.7240 E: 17,560,835.6966	4' DIAMETER MANHOLE

LEGEND

- EXISTING SANITARY SEWER WITH MANHOLE
- PROPOSED SANITARY SEWER WITH MANHOLE
- BENEFIT DISTRICT

SANITARY SEWER BENEFIT DISTRICT
LOTS 1 THRU 6, BLOCK A,
LOTS 1 THRU 8, BLOCK B,
LOTS 1 THRU 15, BLOCK C,
LOTS 1 THRU 7, BLOCK D,
LOTS 1 THRU 10, BLOCK E, &
LOTS 22 THRU 28, BLOCK E,
IN THE SWANEY FARM ADDITION TO WICHITA,
SEDGWICK CO, KANSAS.

SEE SHEET NO. CU601 FOR PLAT COORDINATES.

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

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 10/08/2025 KANSAS PROFESSIONAL ENGINEER

SANITARY SEWER IMPROVEMENTS
SWANEY FARM ADDITION PHASE 1
PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007800

Issue:		
1	ADDENDUM 1	10/08/25
	08/17/2026 - cjr	

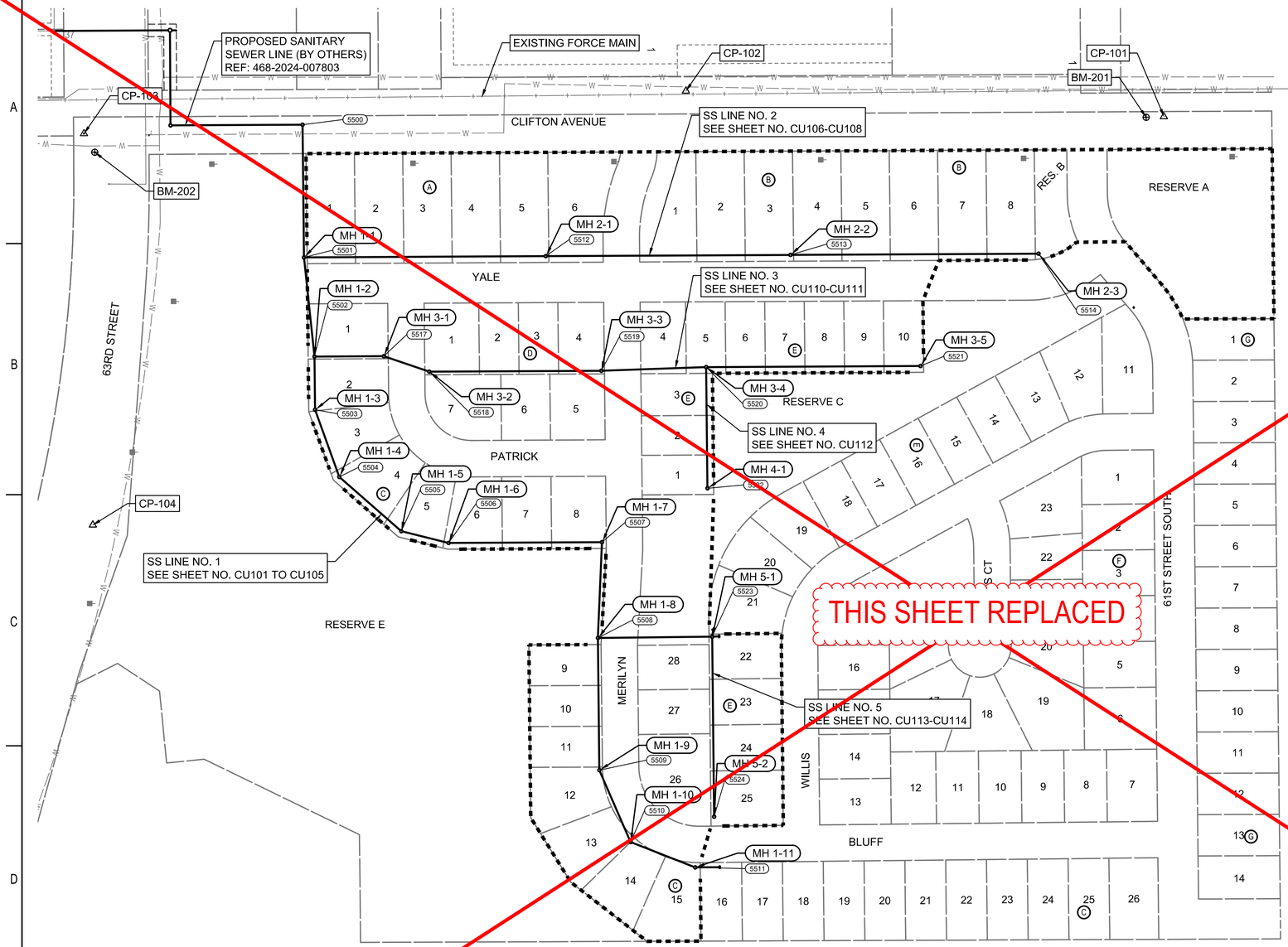
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-007
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

SANITARY SEWER KEY MAP AND BUBBLE MAP 1

CU100 R

SAVED 7/9/2025 2:04:34 PM BY BILL.SEXSON
PLOTTED 10/8/2025 3:49:27 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_SANITARY PHASE 1\200605-007-CU100.DWG



0 100' 200'

HORIZONTAL DATUM/COORDINATE SYSTEM:
KRCS ZONE 17 - WICHITA

BENCHMARKS
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 AVENUE AND 63RD STREET.

BM-203 (NOT SHOWN)
ELEV: 1,265.85 (NAVD 88)
CHISELED SQUARE ON THE SOUTH CENTER OF CURB STORM DRAIN LOCATED ON THE NORTH SIDE OF 63RD STREET, 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 (NOT SHOWN)
N: 331,530.9404 E: 17,560,836.2700
1/2 BAR WITH PEC PAC
1. 6' N TO SOUTH BACK OF CURB
2. 45.25' E TO NO PARKING SIGN
3. 35' N TO CENTERLINE OF ROAD

CP-106 (NOT SHOWN)
N: 331,485.8918 E: 17,559,660.4146
1/2 BAR
1. 17.5' E TO NW CORNER OF PRIVACY FENCE
2. 15' SSW TO CEDAR TREE
3. 23' N TO CENTERLINE OF ROAD

SANITARY SEWER LINE NO. 1

STRUCTURE TABLE

ID	STATION	COORDINATES	DESCRIPTION
MH 1-1	12+11.3 SS LINE 1	N: 332,064.6183 E: 17,559,944.8415	4' DIAMETER MANHOLE
MH 1-2	13+70.1 SS LINE 1	N: 332,081.3110 E: 17,560,102.7587	4' DIAMETER MANHOLE
MH 1-3	14+54.8 SS LINE 1	N: 332,082.2246 E: 17,560,187.4171	4' DIAMETER MANHOLE
MH 1-4	15+68.7 SS LINE 1	N: 332,120.8592 E: 17,560,294.5399	4' DIAMETER MANHOLE
MH 1-5	16+99.8 SS LINE 1	N: 332,219.5000 E: 17,560,380.9439	4' DIAMETER MANHOLE
MH 1-6	17+77.5 SS LINE 1	N: 332,294.9071 E: 17,560,399.6778	4' DIAMETER MANHOLE
MH 1-7	20+21.0 SS LINE 1	N: 332,539.1574 E: 17,560,398.4374	4' DIAMETER MANHOLE
MH 1-8	21+74.4 SS LINE 1	N: 332,532.6554 E: 17,560,550.9788	4' DIAMETER MANHOLE
MH 1-9	23+85.1 SS LINE 1	N: 332,534.9180 E: 17,560,761.6282	4' DIAMETER MANHOLE
MH 1-10	25+09.9 SS LINE 1	N: 332,584.7553 E: 17,560,876.0522	4' DIAMETER MANHOLE
MH 1-11	26+20.4 SS LINE 1	N: 332,687.5904 E: 17,560,916.5249	4' DIAMETER MANHOLE
MH A-4	10+00.0 SS LINE 1	N: 332,062.3542 E: 17,559,733.5203	4' DIAMETER MANHOLE

SANITARY SEWER LINE NO. 2

STRUCTURE TABLE

ID	STATION	COORDINATES	DESCRIPTION
MH 1-1	12+11.3 SS LINE 1	N: 332,064.6183 E: 17,559,944.8415	4' DIAMETER MANHOLE
MH 2-1	13+85.0 SS LINE 2	N: 332,449.6196 E: 17,559,942.8862	4' DIAMETER MANHOLE
MH 2-2	17+74.8 SS LINE 2	N: 332,839.3706 E: 17,559,940.6988	4' DIAMETER MANHOLE
MH 2-3	21+69.8 SS LINE 2	N: 333,234.3717 E: 17,559,938.9008	4' DIAMETER MANHOLE

SANITARY SEWER LINE NO. 3

STRUCTURE TABLE

ID	STATION	COORDINATES	DESCRIPTION
MH 1-2	13+70.1 SS LINE 1	N: 332,081.3110 E: 17,560,102.7587	4' DIAMETER MANHOLE
MH 3-1	11+10.5 SS LINE 3	N: 332,191.8157 E: 17,560,102.1975	4' DIAMETER MANHOLE
MH 3-2	11+86.9 SS LINE 3	N: 332,264.0844 E: 17,560,126.8308	4' DIAMETER MANHOLE
MH 3-3	14+60.9 SS LINE 3	N: 332,538.0854 E: 17,560,125.4393	4' DIAMETER MANHOLE
MH 3-4	16+27.9 SS LINE 3	N: 332,705.0095 E: 17,560,119.5915	4' DIAMETER MANHOLE
MH 3-5	19+69.2 SS LINE 3	N: 333,046.3633 E: 17,560,117.8579	4' DIAMETER MANHOLE

SANITARY SEWER LINE NO. 4

STRUCTURE TABLE

ID	STATION	COORDINATES	DESCRIPTION
MH 3-4	16+27.9 SS LINE 3	N: 332,705.0095 E: 17,560,119.5915	4' DIAMETER MANHOLE
MH 4-1	11+93.0 SS LINE 4	N: 332,707.0824 E: 17,560,312.5836	4' DIAMETER MANHOLE

SANITARY SEWER LINE NO. 5

STRUCTURE TABLE

ID	STATION	COORDINATES	DESCRIPTION
MH 1-8	21+74.4 SS LINE 1	N: 332,532.6554 E: 17,560,550.9788	4' DIAMETER MANHOLE
MH 5-1	11+82.0 SS LINE 5	N: 332,714.6449 E: 17,560,549.0241	4' DIAMETER MANHOLE
MH 5-2	14+68.7 SS LINE 5	N: 332,717.7240 E: 17,560,835.6966	4' DIAMETER MANHOLE

LEGEND

- EXISTING SANITARY SEWER WITH MANHOLE
- PROPOSED SANITARY SEWER WITH MANHOLE
- BENEFIT DISTRICT

SANITARY SEWER BENEFIT DISTRICT
LOTS 1 THRU 6, BLOCK A,
LOTS 1 THRU 8, BLOCK B,
LOTS 1 THRU 15, BLOCK C,
LOTS 1 THRU 7, BLOCK D,
LOTS 1 THRU 10, BLOCK E, &
LOTS 22 THRU 28, BLOCK E,
IN THE SWANEY FARM ADDITION TO WICHITA,
SEDGWICK CO, KANSAS.

SEE SHEET NO. CU601 FOR PLAT COORDINATES.

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

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 05/27/2025 KANSAS PROFESSIONAL ENGINEER

SANITARY SEWER IMPROVEMENTS
SWANEY FARM ADDITION PHASE 1
PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007800

Issue:		
	08/17/2026 - cjr	

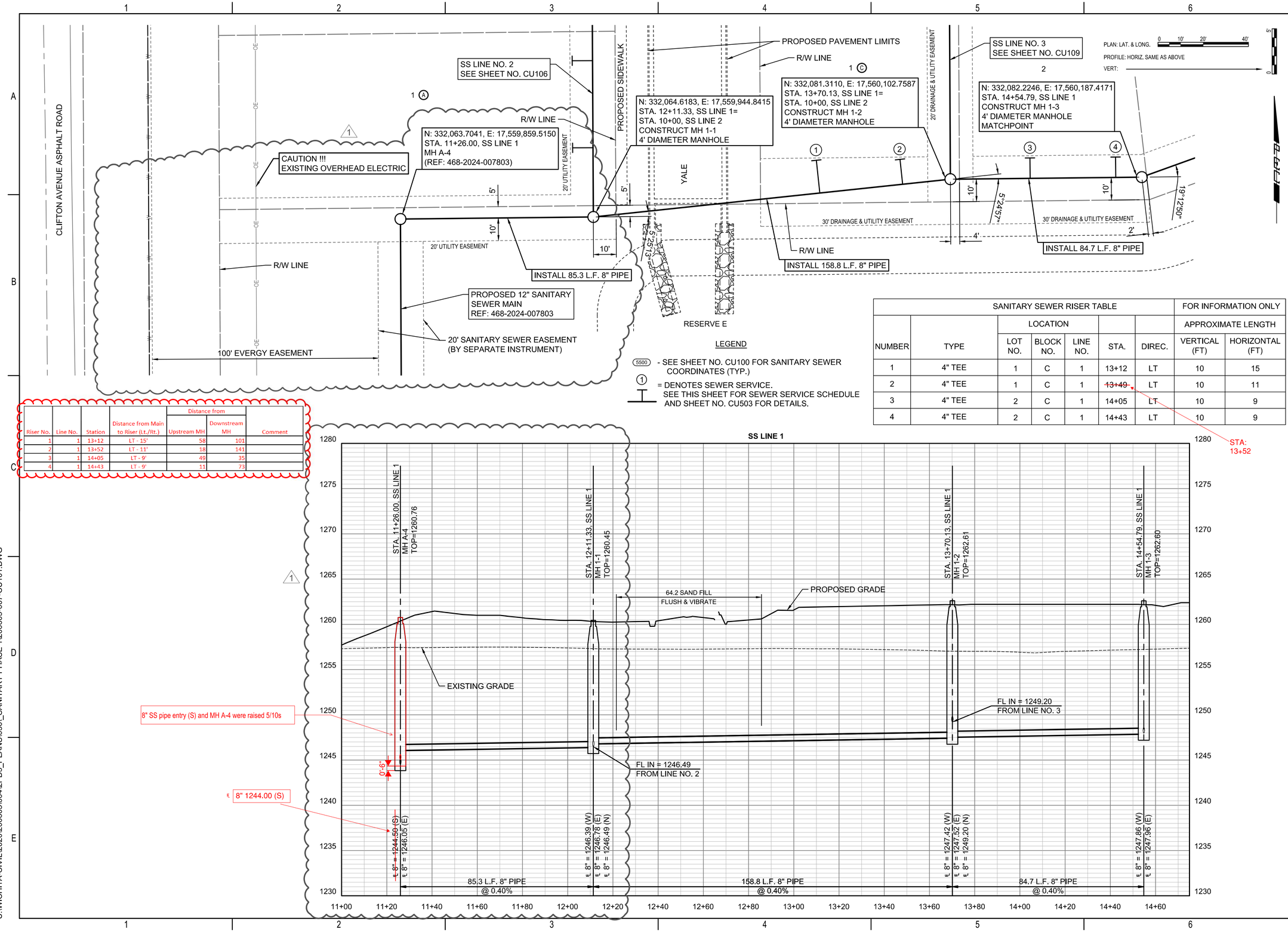
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-007
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

SANITARY SEWER KEY MAP AND BUBBLE MAP 1

CU100

SAVED 5/27/2025 7:37:36 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 8:48:54 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\0042\2PD3_PLANS\030_SANITARY PHASE 1\200605-007-CU100.DWG



LEGEND

(5500) - SEE SHEET NO. CU100 FOR SANITARY SEWER COORDINATES (TYP.)

(1) = DENOTES SEWER SERVICE. SEE THIS SHEET FOR SEWER SERVICE SCHEDULE AND SHEET NO. CU503 FOR DETAILS.

SANITARY SEWER RISER TABLE							FOR INFORMATION ONLY	
		LOCATION					APPROXIMATE LENGTH	
NUMBER	TYPE	LOT NO.	BLOCK NO.	LINE NO.	STA.	DIREC.	VERTICAL (FT)	HORIZONTAL (FT)
1	4" TEE	1	C	1	13+12	LT	10	15
2	4" TEE	1	C	1	~~13+49~~	LT	10	11
3	4" TEE	2	C	1	14+05	LT	10	9
4	4" TEE	2	C	1	14+43	LT	10	9

STA: 13+52

Riser No.	Line No.	Station	Distance from Main to Riser (Lt./Rt.)	Distance from Upstream MH	Distance from Downstream MH	Comment
1	1	13+12	LT - 15'	58	101	
2	1	13+52	LT - 11'	18	141	
3	1	14+05	LT - 9'	49	35	
4	1	14+43	LT - 9'	11	73	

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

CITY OF WICHITA

KEVIN P. GRAHAM
LICENSED
27806
10/08/2025
KANSAS
PROFESSIONAL ENGINEER

SANITARY SEWER IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007800

Issue:		
1	ADDENDUM 1	10/08/25
	08/17/2026 - cjr	

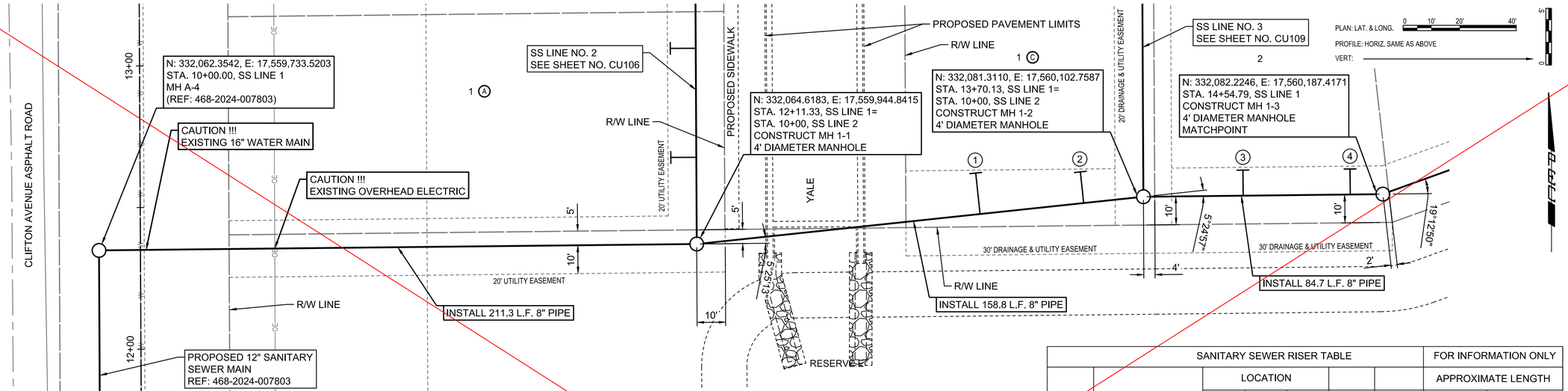
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-007
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

SANITARY SEWER LINE NO. 1

CU101

SAVED 5/27/2025 9:25:08 AM BY KEVIN.GRAHAM
PLOTTED 10/8/2025 4:00:11 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\0042PD3_PLANS\030_SANITARY PHASE 1\200605-007-CU101.DWG

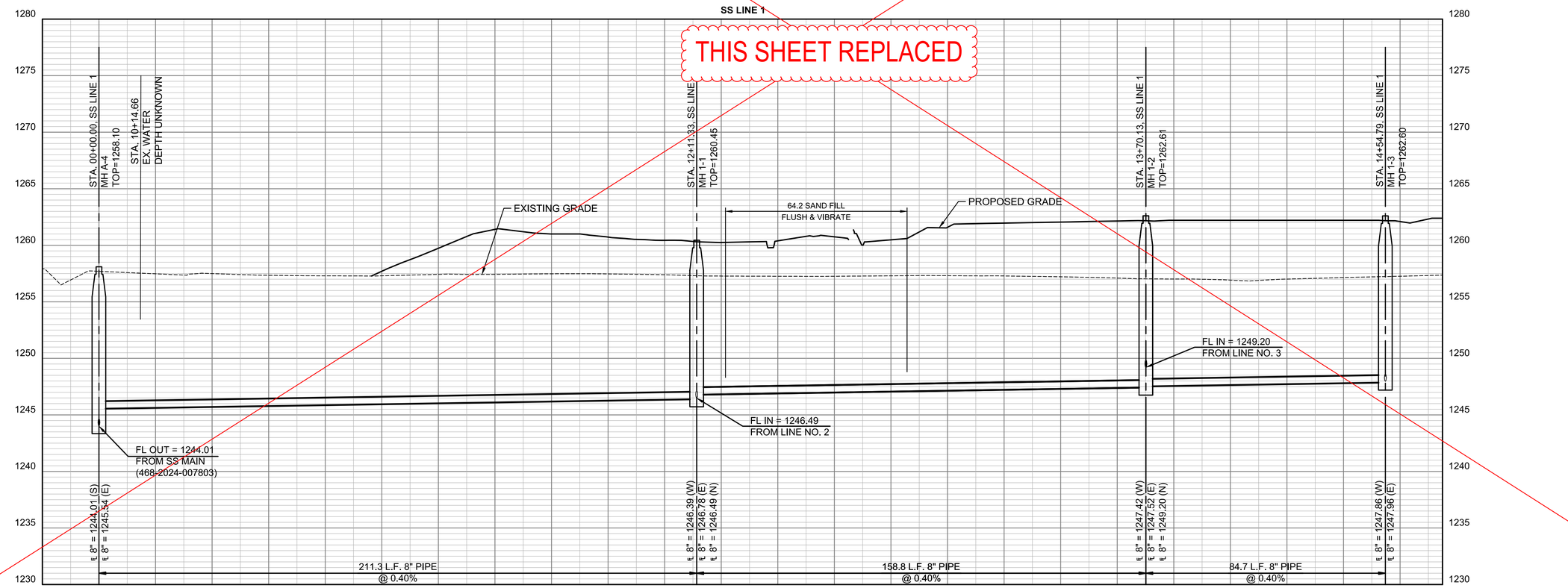


SANITARY SEWER RISER TABLE							FOR INFORMATION ONLY	
		LOCATION					APPROXIMATE LENGTH	
NUMBER	TYPE	LOT NO.	BLOCK NO.	LINE NO.	STA.	DIREC.	VERTICAL (FT)	HORIZONTAL (FT)
1	4" TEE	1	C	1	13+12	LT	10	15
2	4" TEE	1	C	1	13+49	LT	10	11
3	4" TEE	2	C	1	14+05	LT	10	9
4	4" TEE	2	C	1	14+43	LT	10	9

LEGEND

(5500) - SEE SHEET NO. CU100 FOR SANITARY SEWER COORDINATES (TYP.)

(1) = DENOTES SEWER SERVICE. SEE THIS SHEET FOR SEWER SERVICE SCHEDULE AND SHEET NO. CU503 FOR DETAILS.



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

CITY OF WICHITA

KEVIN P. GRAHAM
KS LICENSED
27806
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

SANITARY SEWER IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007800

Issue:		
	08/17/2026 - cjr	

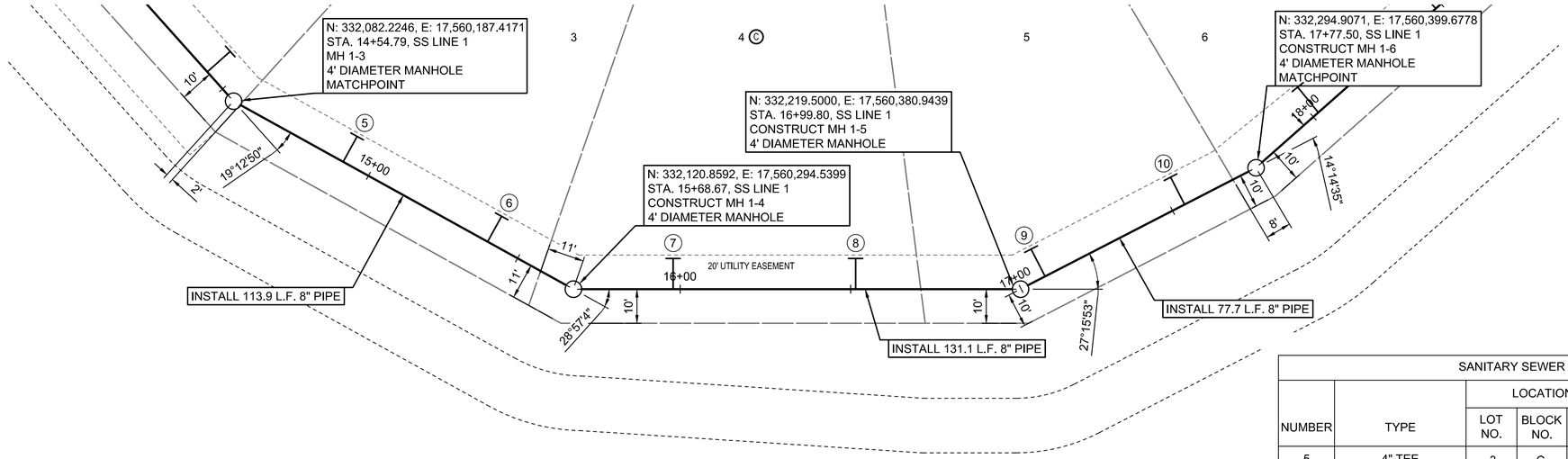
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-007
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

SANITARY SEWER LINE NO. 1

CU101

SAVED 5/27/2025 8:57:28 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 9:24:51 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_SANITARY PHASE 1\200605-007-CU101.DWG



PLAN: LAT. & LONG. 0 10' 20' 40'

PROFILE: HORIZ. SAME AS ABOVE

VERT:

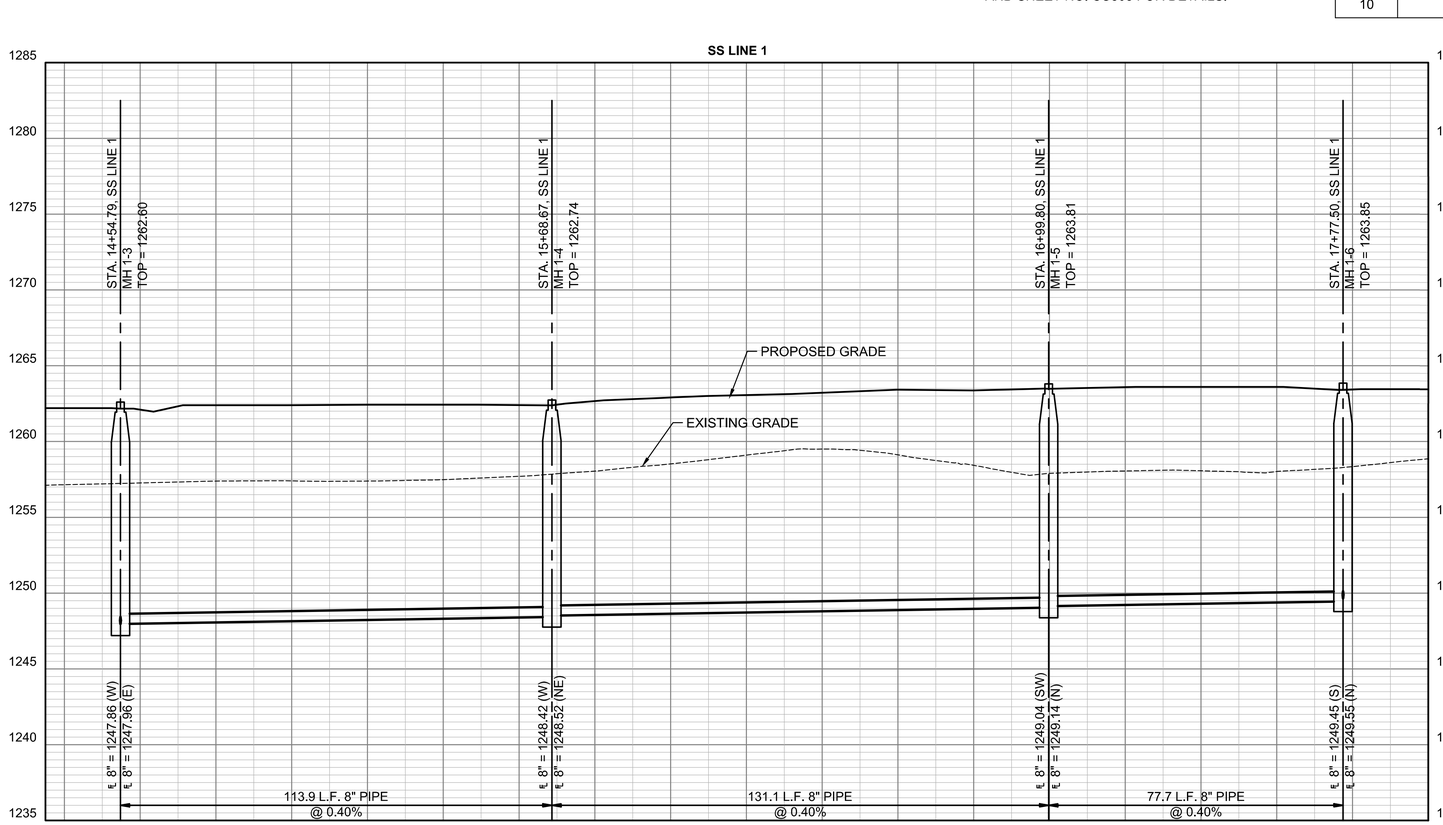
RESERVE E

LEGEND

(5500) - SEE SHEET NO. CU100 FOR SANITARY SEWER COORDINATES (TYP.)

(1) = DENOTES SEWER SERVICE. SEE THIS SHEET FOR SEWER SERVICE SCHEDULE AND SHEET NO. CU503 FOR DETAILS.

SANITARY SEWER RISER TABLE							FOR INFORMATION ONLY	
		LOCATION					APPROXIMATE LENGTH	
NUMBER	TYPE	LOT NO.	BLOCK NO.	LINE NO.	STA.	DIREC.	VERTICAL (FT)	HORIZONTAL (FT)
5	4" TEE	3	C	1	~~14+92~~	LT	10	9
6	4" TEE	3	C	1	~~15+40~~	LT	9	9
7	4" TEE	4	C	1	~~15+98~~	LT	10	9
8	4" TEE	4	C	1	~~16+51~~	LT	10	9
9	4" TEE	5	C	1	~~17+08~~	LT	10	9
10	4" TEE	5	C	1	17+54	LT	9	9



STA:
#5 - 14+88
#6 - 15+35
#7 - 15+95
#8 - 16+49
#9 - 17+10

Riser No.	Line No.	Station	Distance from Main to Riser (Lt./Rt.)	Distance from Upstream MH	Distance from Downstream MH	Comment
5	1	14+88	LT - 9'	80	34	
6	1	15+35	LT - 9'	33	81	
7	1	15+95	LT - 9'	104	27	
8	1	16+49	LT - 9'	50	81	
9	1	17+10	LT - 9'	67	11	
10	1	17+54	LT - 9'	23	55	

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

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 05/27/2025 KANSAS PROFESSIONAL ENGINEER

SANITARY SEWER IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007800

Issue:		
	08/17/2026 - cjr	

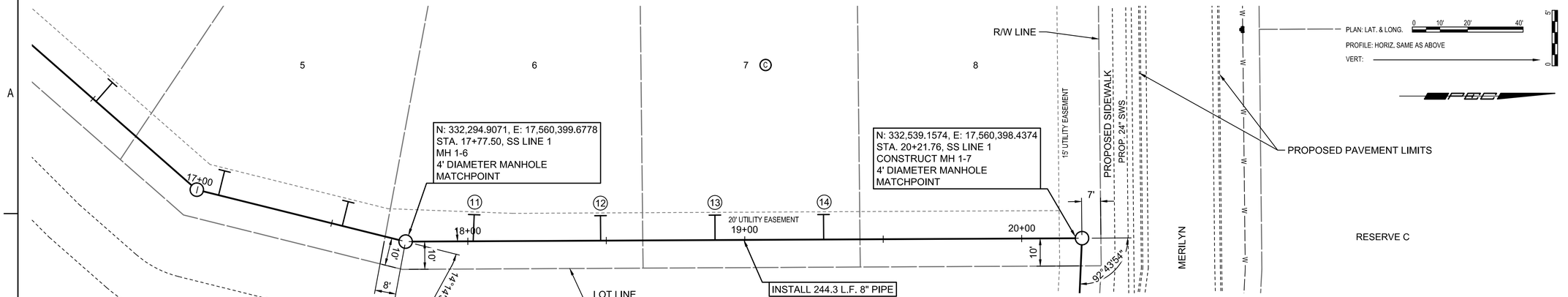
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-007
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

SANITARY SEWER LINE NO. 1

CU102

SAVED 5/27/2025 7:43:00 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 8:11:21 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_SANITARY PHASE 1\200605-007-CU102.DWG



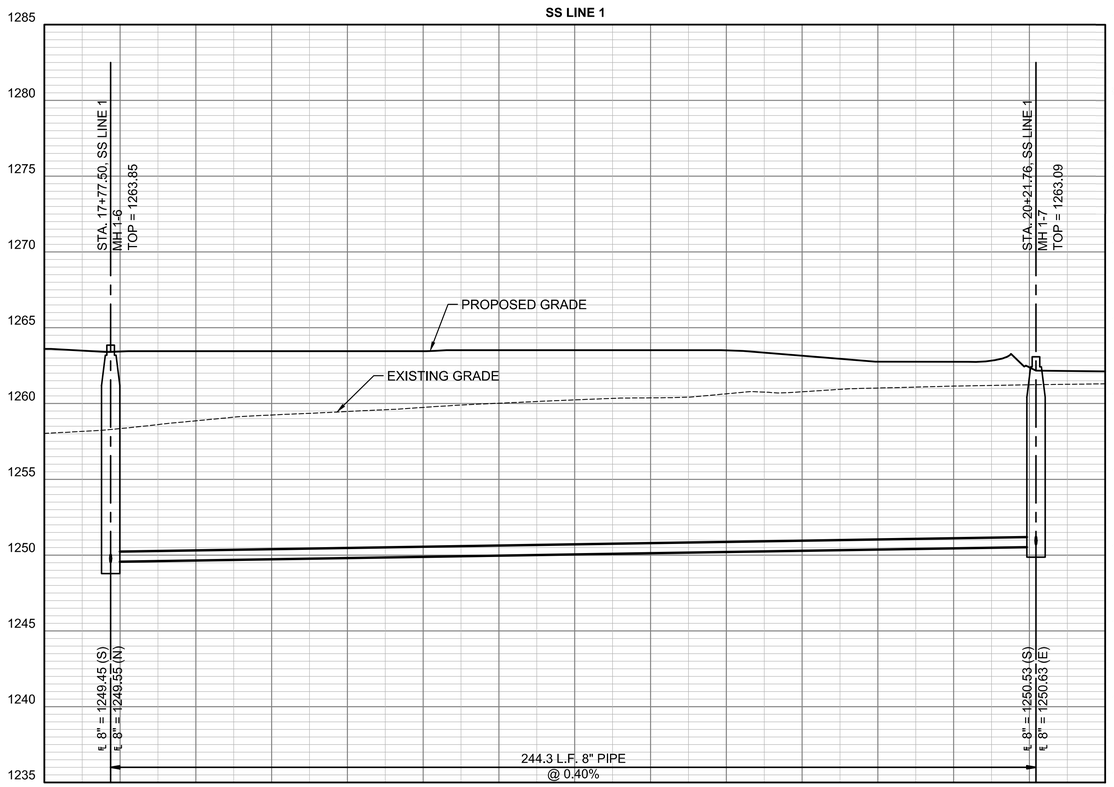
LEGEND

(5500) - SEE SHEET NO. CU100 FOR SANITARY SEWER COORDINATES (TYP.)

(1) = DENOTES SEWER SERVICE. SEE THIS SHEET FOR SEWER SERVICE SCHEDULE AND SHEET NO. CU503 FOR DETAILS.

SANITARY SEWER RISER TABLE							FOR INFORMATION ONLY	
		LOCATION					APPROXIMATE LENGTH	
NUMBER	TYPE	LOT NO.	BLOCK NO.	LINE NO.	STA.	DIREC.	VERTICAL (FT)	HORIZONTAL (FT)
11	4" TEE	6	C	1	18+02	LT	9	10
12	4" TEE	6	C	1	18+48	LT	9	9
13	4" TEE	7	C	1	~~18+89~~	LT	9	9
14	4" TEE	7	C	1	~~19+28~~	LT	9	9

STA:
#13 - 18+91
#14 - 19+30



Riser No.	Line No.	Station	Distance from Main to Riser (Lt./Rt.)	Distance from Upstream MH	Distance from Downstream MH	Comment
11	1	18+02	LT - 10'	219	25	
12	1	18+48	LT - 9'	173	71	
13	1	18+91	LT - 9'	130	114	
14	1	19+30	LT - 9'	91	153	

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

CITY OF WICHITA

KEVIN P. GRAHAM
LICENSED
27806
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

SANITARY SEWER IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007800

Issue:		
	08/17/2026 - cjr	

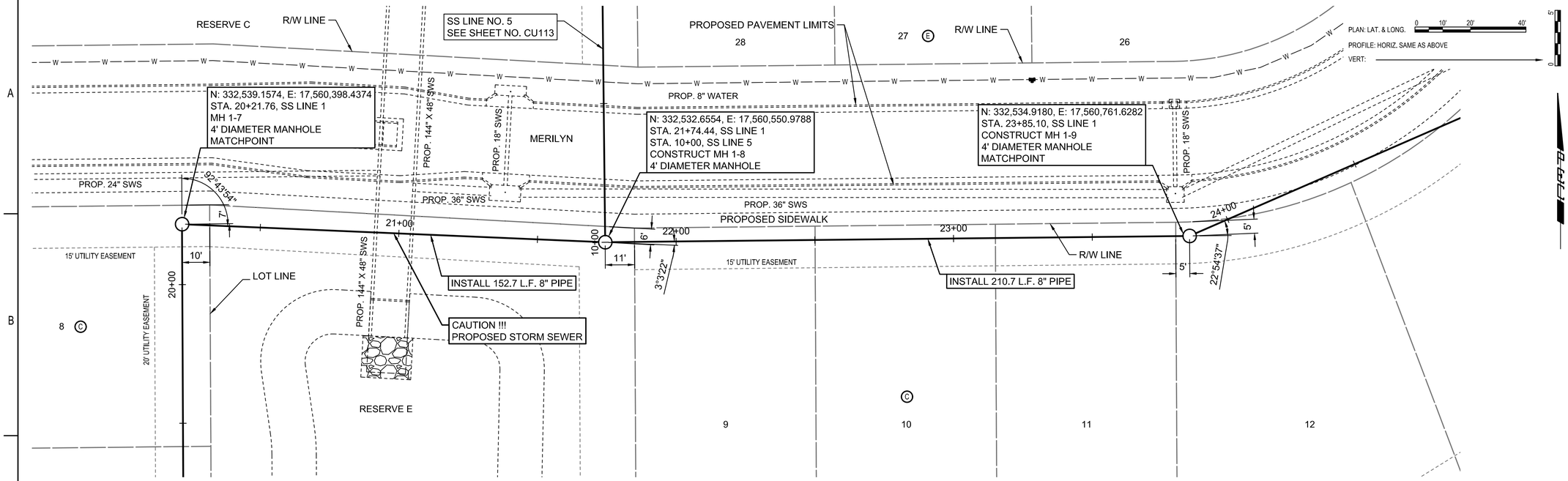
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

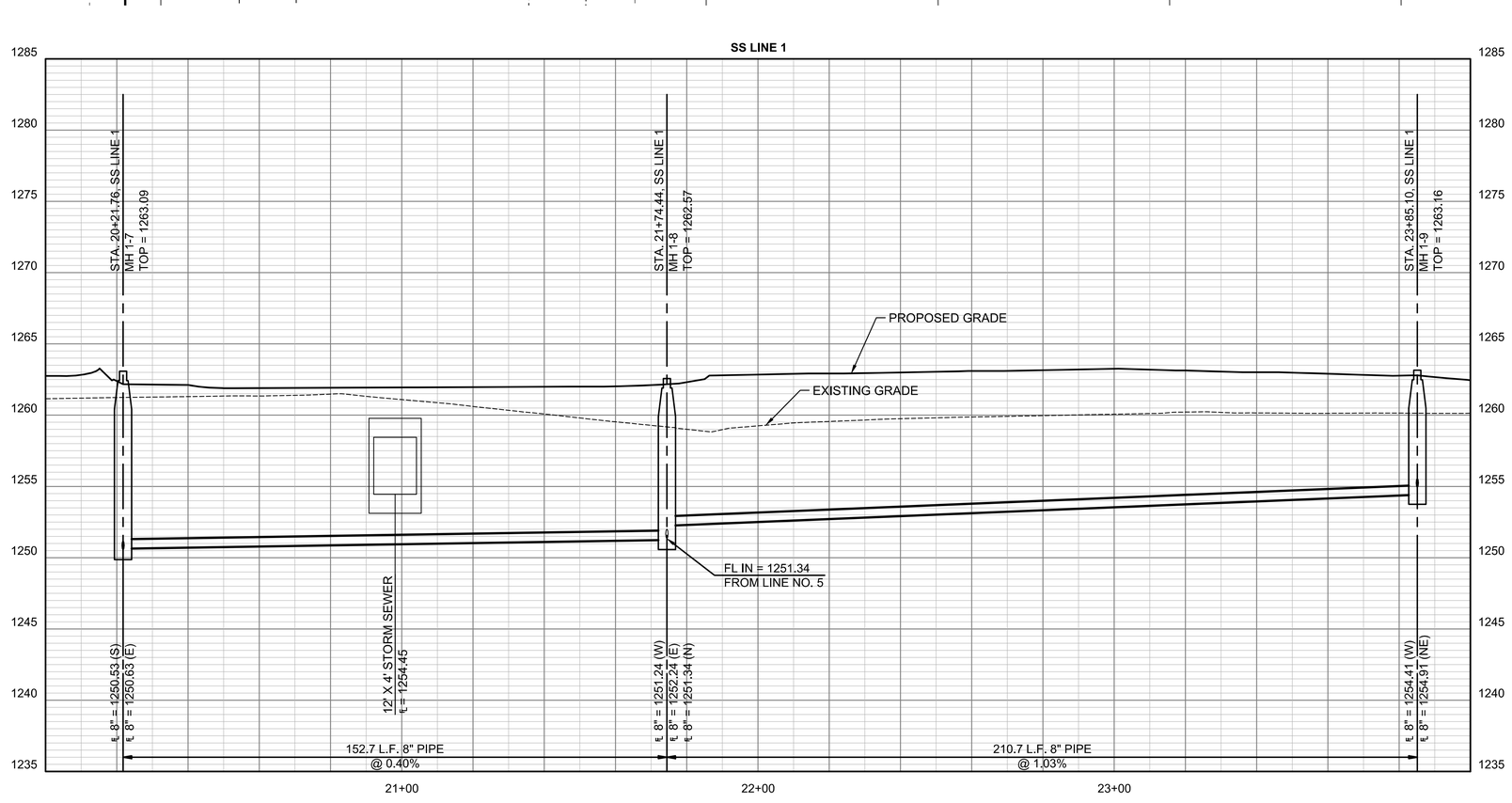
JOB NO.	200605-007
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

SANITARY SEWER LINE NO. 1

CU103

SAVED 5/27/2025 7:49:00 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 8:11:57 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_SANITARY PHASE 1\200605-007-CU103.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
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

SANITARY SEWER IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007800

Issue:		
	08/17/2026 - cjr	

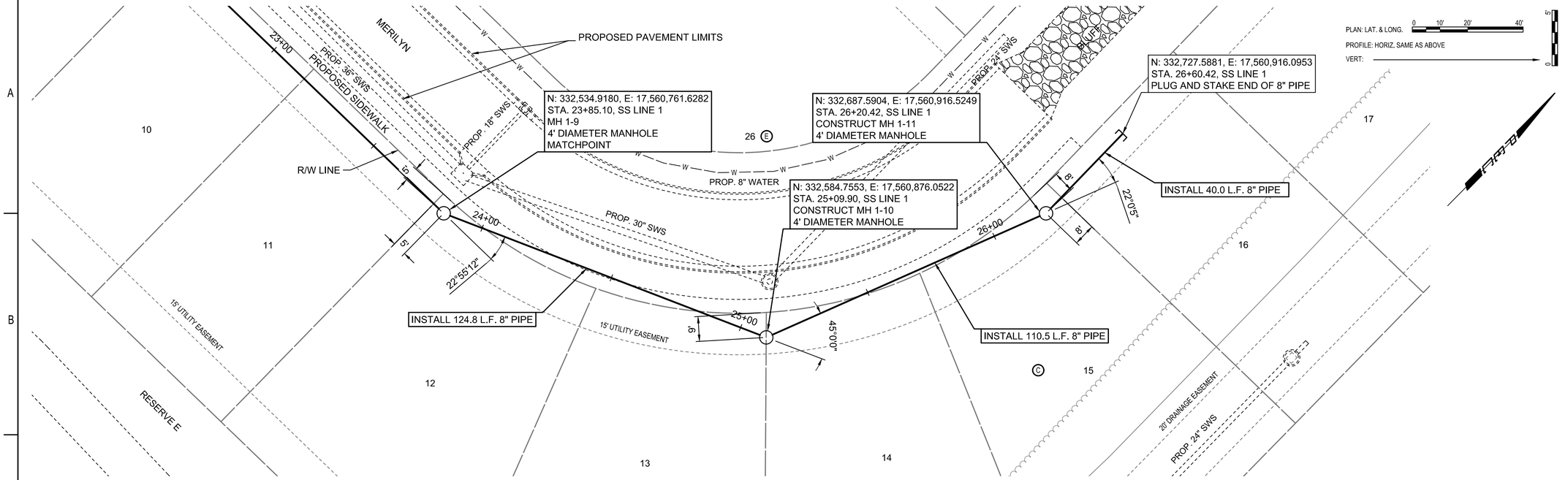
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

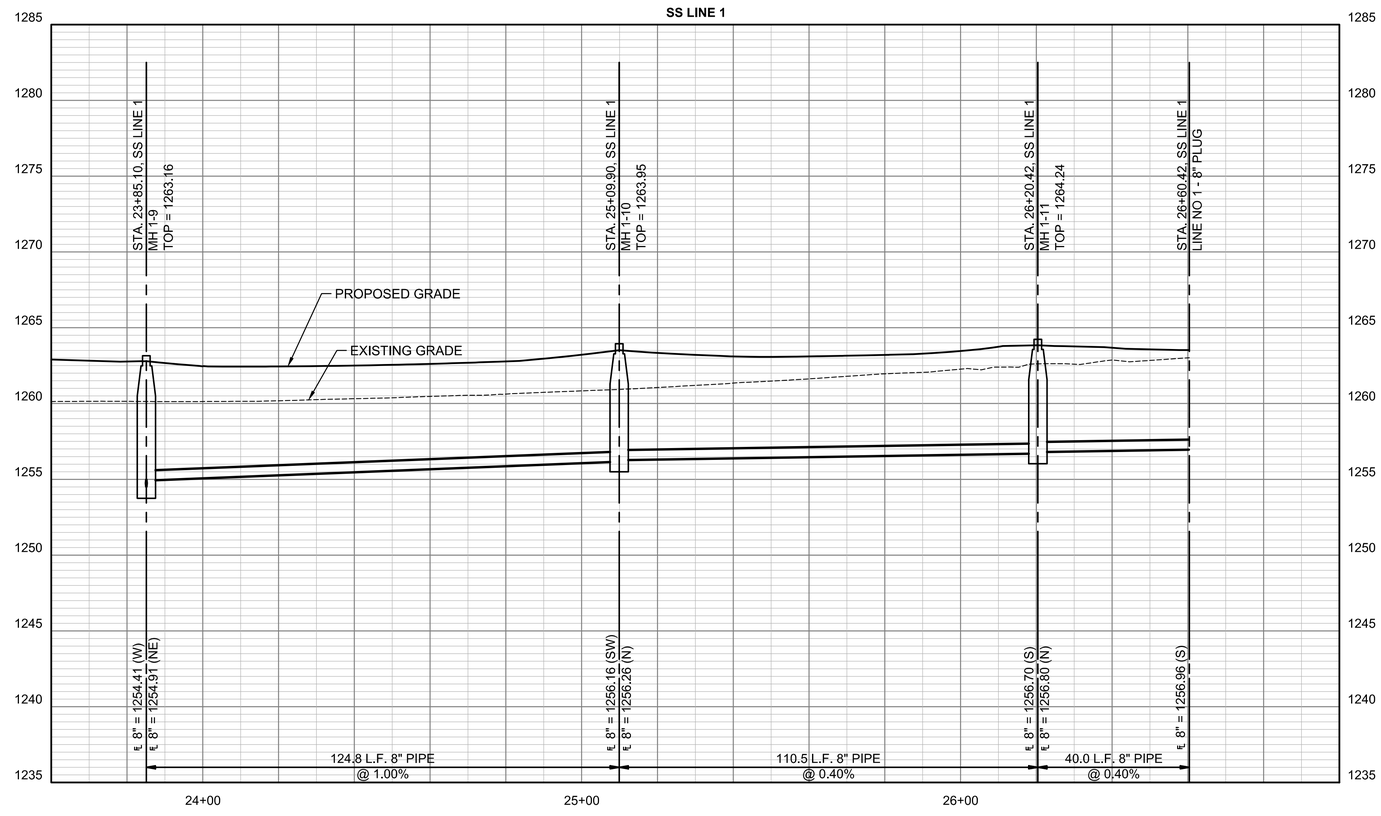
JOB NO.	200605-007
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

SANITARY SEWER LINE NO. 1

CU104

SAVED 5/9/2025 10:41:17 AM BY DUSTIN.LOHMANN
PLOTTED 5/27/2025 8:12:33 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_SANITARY PHASE 1\200605-007-CU104.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
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

SANITARY SEWER IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007800

Issue:	
	08/17/2026 - cjr

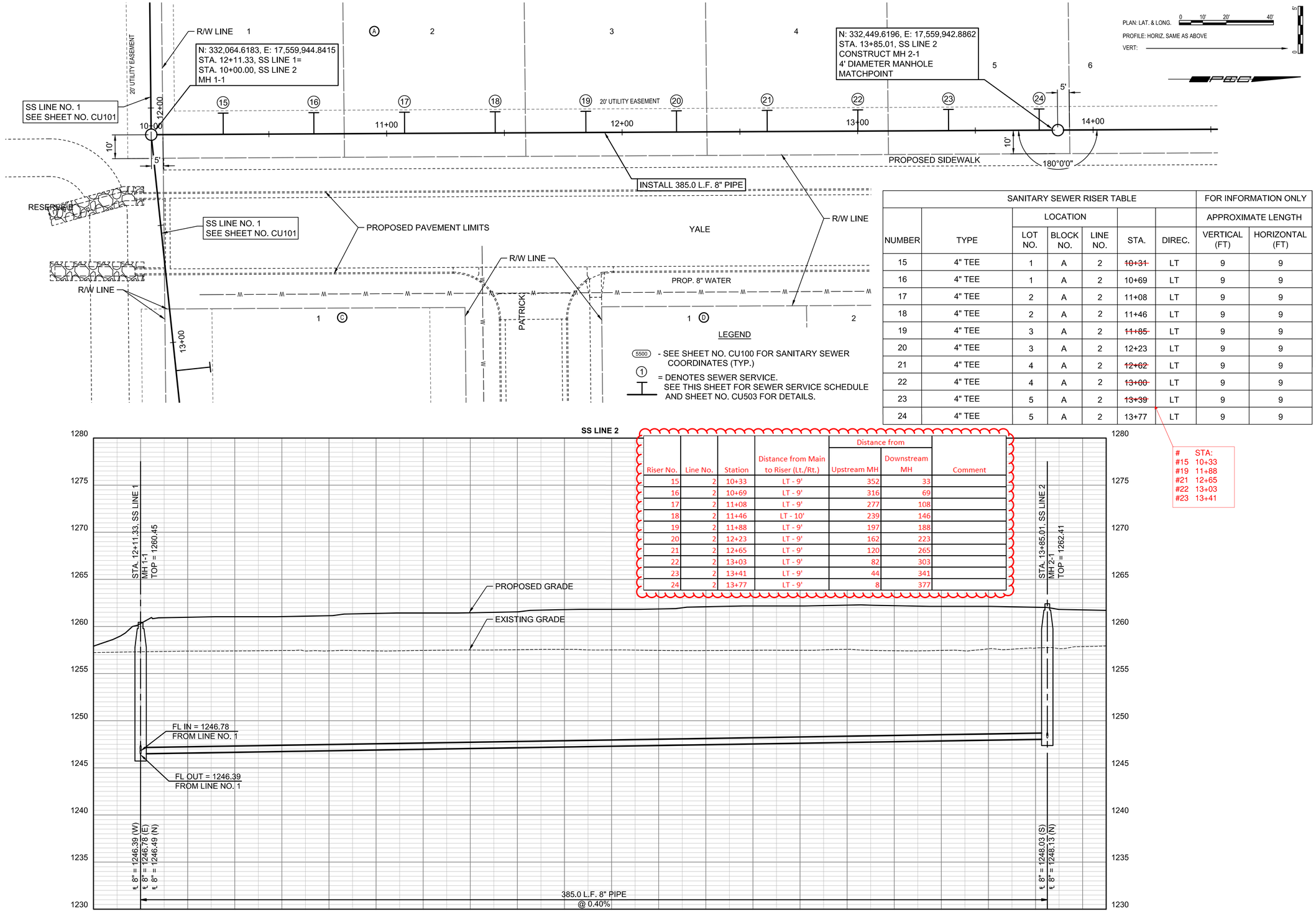
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-007
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

SANITARY SEWER LINE NO. 1

CU105

SAVED 5/8/2025 1:13:28 PM BY DUSTIN.LOHMANN
PLOTTED 5/27/2025 8:13:07 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_SANITARY PHASE 1\200605-007-CU105.DWG



SANITARY SEWER RISER TABLE							FOR INFORMATION ONLY	
		LOCATION					APPROXIMATE LENGTH	
NUMBER	TYPE	LOT NO.	BLOCK NO.	LINE NO.	STA.	DIREC.	VERTICAL (FT)	HORIZONTAL (FT)
15	4" TEE	1	A	2	~~10+31~~	LT	9	9
16	4" TEE	1	A	2	10+69	LT	9	9
17	4" TEE	2	A	2	11+08	LT	9	9
18	4" TEE	2	A	2	11+46	LT	9	9
19	4" TEE	3	A	2	~~11+85~~	LT	9	9
20	4" TEE	3	A	2	12+23	LT	9	9
21	4" TEE	4	A	2	~~12+62~~	LT	9	9
22	4" TEE	4	A	2	~~13+00~~	LT	9	9
23	4" TEE	5	A	2	~~13+39~~	LT	9	9
24	4" TEE	5	A	2	13+77	LT	9	9

Riser No.	Line No.	Station	Distance from Main to Riser (Lt./Rt.)	Distance from Upstream MH	Distance from Downstream MH	Comment
15	2	10+33	LT - 9'	352	33	
16	2	10+69	LT - 9'	316	69	
17	2	11+08	LT - 9'	277	108	
18	2	11+46	LT - 10'	239	146	
19	2	11+88	LT - 9'	197	188	
20	2	12+23	LT - 9'	162	223	
21	2	12+65	LT - 9'	120	265	
22	2	13+03	LT - 9'	82	303	
23	2	13+41	LT - 9'	44	341	
24	2	13+77	LT - 9'	8	377	

#	STA:
#15	10+33
#19	11+88
#21	12+65
#22	13+03
#23	13+41

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

CITY OF WICHITA

KEVIN P. GRAHAM
LICENSED
27806
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

SANITARY SEWER IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007800

Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-007
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

SANITARY SEWER LINE NO. 2

CU106

SAVED 5/27/2025 7:55:44 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 8:13:41 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\0042PD3_PLANS\030_SANITARY PHASE 1\200605-007-CU106.DWG

PROPOSED PAVEMENT LIMITES

CAUTION !!!
PROPOSED STORM SEWER

N: 332,449.6196, E: 17,559,942.8862
STA. 13+85.01, SS LINE 2
MH 2-1
MATCHPOINT

MERILYN

PROP. 8" WATERMAIN

PROPOSED SIDEWALK

CAUTION !!!
PROPOSED 8" WATERLINE

N: 332,839.3706, E: 17,559,940.9068
STA. 17+74.76, SS LINE 2
CONSTRUCT MH 2-2
4' DIAMETER MANHOLE
MATCHPOINT

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

180°0'0"

20' UTILITY EASEMENT

PROP. 18" SWS

14+00 15+00 16+00 17+00 18+00

10'

5'

PROPOSED SIDEWALK

R/W LINE

INSTALL 389.8 L.F. 8" PIPE

PROPOSED PAVEMENT LIMITES

YALE

PROP. 18" SWS

PROP. 8" WATERMAIN

10' UTILITY EASEMENT

LEGEND

5500 - SEE SHEET NO. CU100 FOR SANITARY SEWER COORDINATES (TYP.)

SS LINE 2

STA. 13+85.01, SS LINE 2
MH 2-1
TOP = 1262.41

8" WATERLINE
TOP= 1256.93

12.5 SAND FILL
FLUSH & VIBRATE

12.5 SAND FILL
FLUSH & VIBRATE

PROPOSED GRADE

EXISTING GRADE

STA. 17+74.76, SS LINE 2
MH 2-2
TOP = 1263.16

24" STORM SEWER
℄ = 1247.03

STA. 14+89 TO STA. 15+22
PLACE 33 L.F. OF EXCAVATABLE
FLOWABLE FILL FROM TOP OF PIPE
BEDDING TO ELEV.= 1257

℄ 8" = 1248.03 (S)
℄ 8" = 1248.13 (N)

389.8 L.F. 8" PIPE
@ 0.40%

℄ 8" = 1249.69 (S)
℄ 8" = 1249.79 (N)

1280 1275 1270 1265 1260 1255 1250 1245 1240 1235 1230

14+00 15+00 16+00 17+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
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

SANITARY SEWER IMPROVEMENTS
SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007800

Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-007
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

SANITARY SEWER LINE NO. 2

CU107

SAVED 5/27/2025 7:56:22 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 8:14:16 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\0042\PD3_PLANS\0301_SANITARY PHASE 1\200605-007-CU107.DWG

N: 332,839.3706, E: 17,559,940.9068
STA. 17+74.76, SS LINE 2
MH 2-2
MATCHPOINT

180°17'28"

N: 333,234.3717, E: 17,559,938.9008
STA. 21+69.77, SS LINE 2
CONSTRUCT MH 2-3
4' DIAMETER MANHOLE
MATCHPOINT

RESERVE B

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

0 10' 20' 40'

5' UTILITY EASEMENT
15' UTILITY EASEMENT
15' UTILITY EASEMENT
20' UTILITY EASEMENT

18+00 19+00 20+00 21+00

10'
5'
5'
6'

PROPOSED SIDEWALK

INSTALL 395.0 L.F. 8" PIPE

R/W LINE
PROPOSED PAVEMENT LIMITS
YALE
PROP. 8" WATER
15' DRAINAGE & UTILITY EASEMENT

LEGEND

(5500) - SEE SHEET NO. CU100 FOR SANITARY SEWER COORDINATES (TYP.)

(1) = DENOTES SEWER SERVICE. SEE THIS SHEET FOR SEWER SERVICE SCHEDULE AND SHEET NO. CU503 FOR DETAILS.

Riser No.	Line No.	Station	Distance from Main to Riser (Lt./Rt.)	Distance from Upstream MH	Distance from Downstream MH	Comment
25	2	18+05	LT - 9'	364	31	
26	2	18+44	LT - 9'	325	70	
27	2	18+84	LT - 9'	285	110	
28	2	19+21	LT - 9'	248	147	
29	2	19+61	LT - 9'	208	187	
30	2	20+00	LT - 9'	169	226	
31	2	20+40	LT - 9'	129	266	
32	2	20+75	LT - 9'	94	301	
33	2	21+12	LT - 9'	57	338	
34	2	21+48	LT - 9'	21	374	

SANITARY SEWER RISER TABLE

NUMBER	TYPE	LOCATION LOT NO.	LOCATION BLOCK NO.	LOCATION LINE NO.	STA.	DIREC.	FOR INFORMATION ONLY APPROXIMATE LENGTH VERTICAL (FT)	FOR INFORMATION ONLY APPROXIMATE LENGTH HORIZONTAL (FT)
25	4" TEE	4	B	2	18+05	LT	9	9
~~28~~	4" TEE	4	B	2	18+44	LT	9	9
27	4" TEE	5	B	2	~~18+82~~	LT	9	9
28	4" TEE	5	B	2	19+21	LT	9	9
29	4" TEE	6	B	2	~~19+59~~	LT	9	9
30	4" TEE	6	B	2	~~19+98~~	LT	9	9
31	4" TEE	7	B	2	~~20+36~~	LT	9	10
32	4" TEE	7	B	2	20+75	LT	9	9
33	4" TEE	8	B	2	21+12	LT	9	9
34	4" TEE	8	B	2	21+48	LT	9	9

26

STA:
#27 18+84
#29 19+61
#30 20+00
#31 20+40

SS LINE 2

STA. 17+74.76, SS LINE 2
MH 2-2
TOP = 1283.16

STA. 21+69.77, SS LINE 2
MH 2-3
TOP = 1265.58

EXISTING GRADE
PROPOSED GRADE

℄ 8" = 1249.69 (S)
℄ 8" = 1249.79 (N)
℄ 8" = 1251.37 (S)

395.0 L.F. 8" PIPE
@ 0.40%

1280 1275 1270 1265 1260 1255 1250 1245 1240 1235 1230

18+00 19+00 20+00 21+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
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

SANITARY SEWER IMPROVEMENTS
SWANEY FARM ADDITION
PHASE 1
PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007800

Issue:		
	08/17/2026 - cjr	

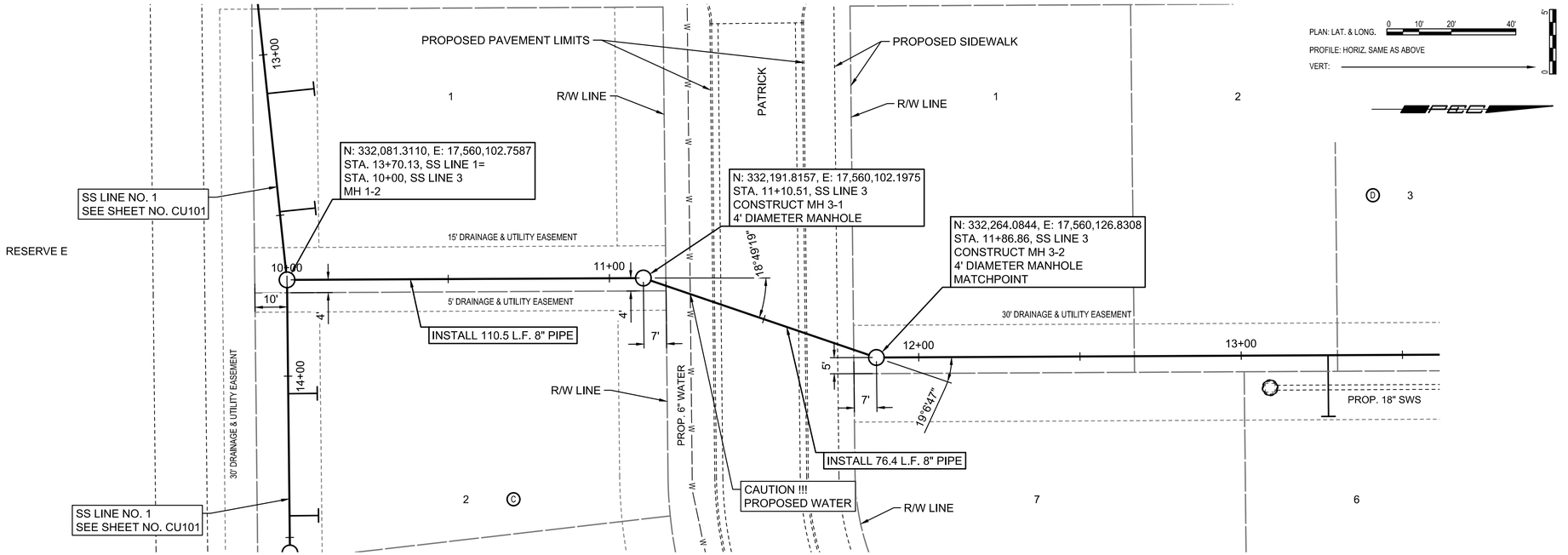
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

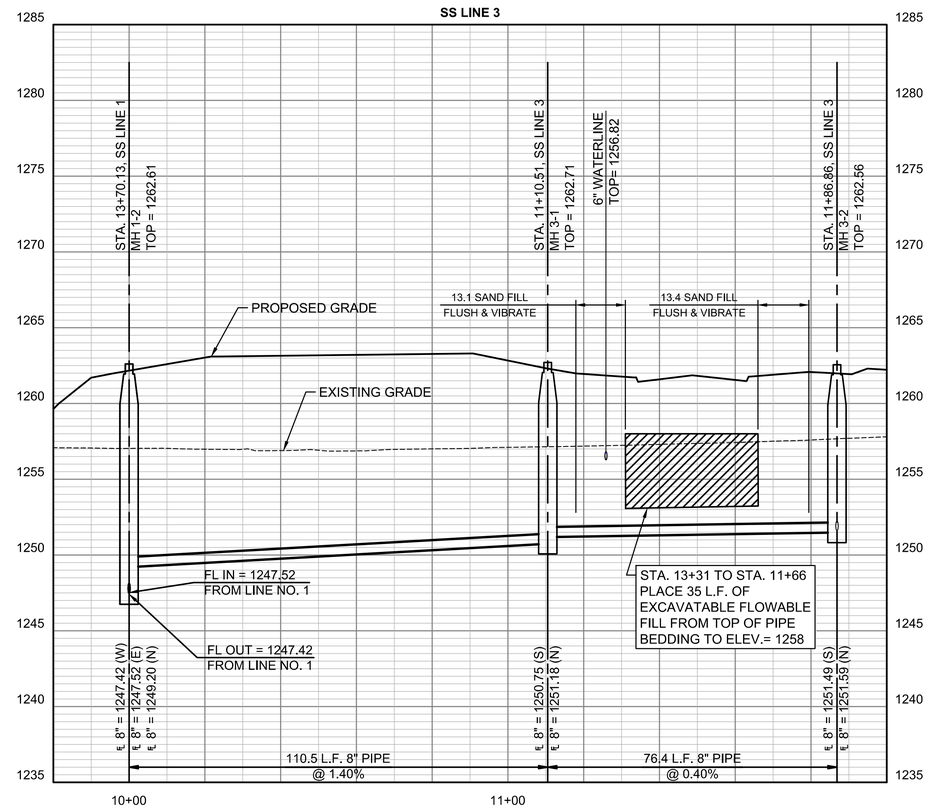
JOB NO.	200605-007
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

SANITARY SEWER LINE NO. 2

CU108

SAVED 5/27/2025 8:00:36 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 8:14:50 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_SANITARY PHASE 1\200605-007-CU108.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
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

SANITARY SEWER IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007800

Issue:		
	08/17/2026 - cjr	

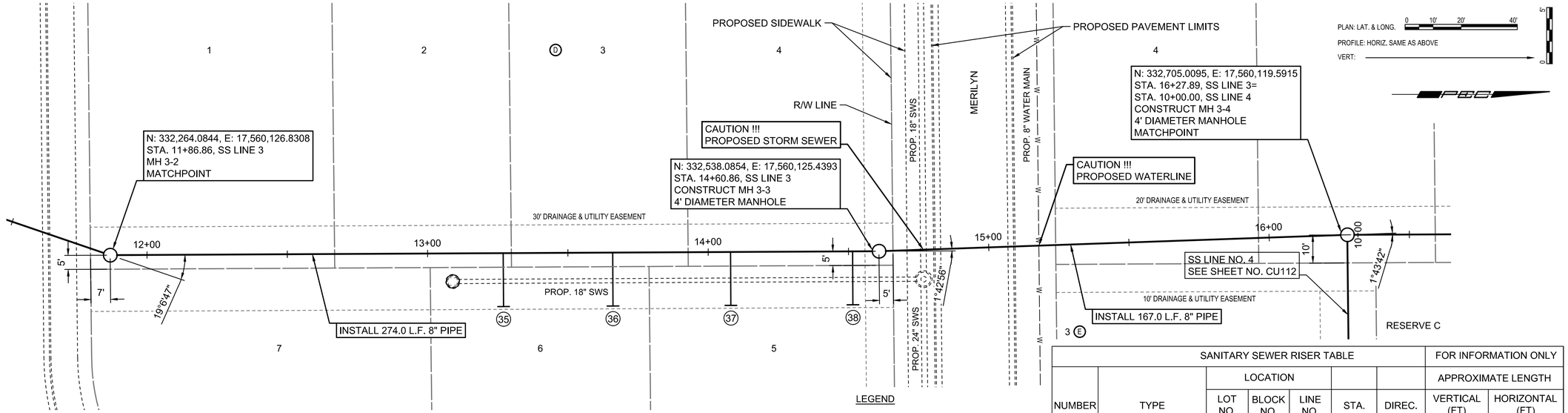
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-007
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

SANITARY SEWER LINE NO. 3

CU109

SAVED 5/27/2025 8:03:51 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 8:49:12 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\0301_SANITARY PHASE 1\200605-007-CU109.DWG



LEGEND

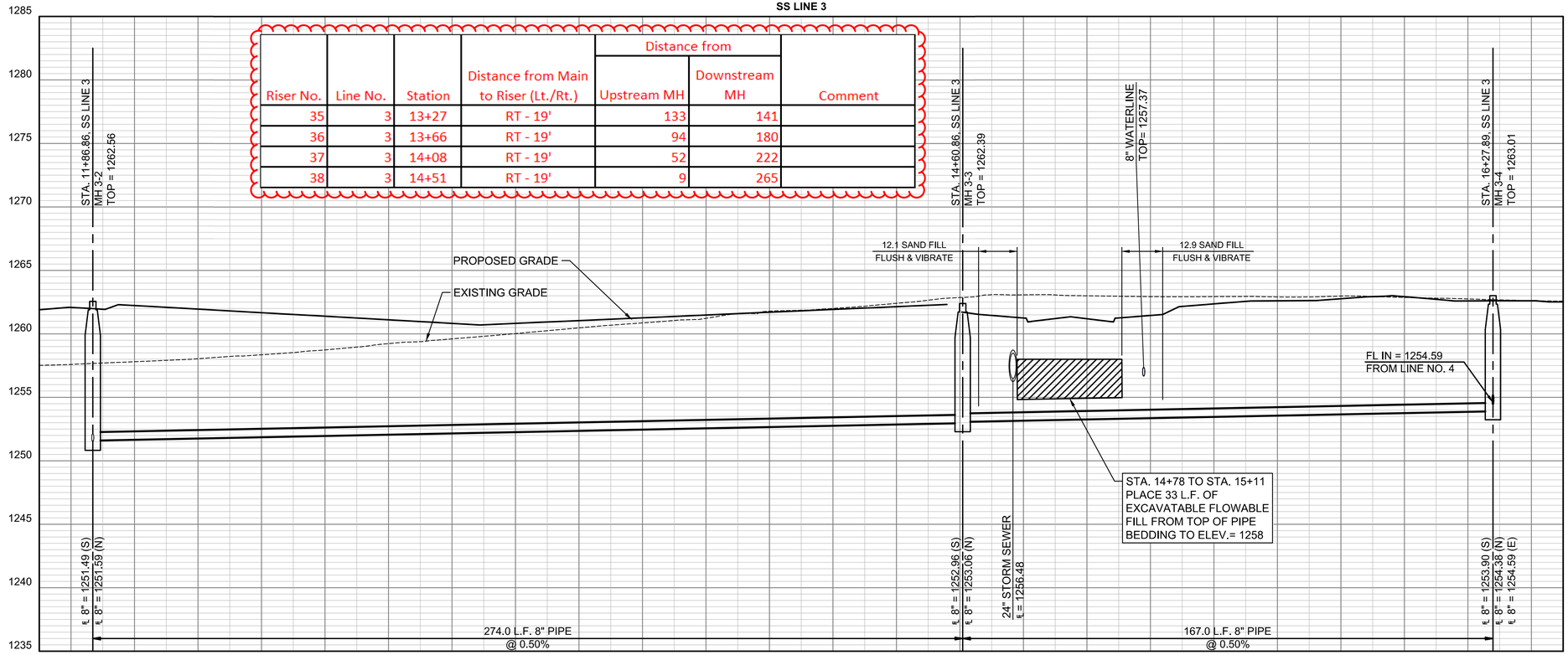
(5500) - SEE SHEET NO. CU100 FOR SANITARY SEWER COORDINATES (TYP.)

(1) = DENOTES SEWER SERVICE. SEE THIS SHEET FOR SEWER SERVICE SCHEDULE AND SHEET NO. CU503 FOR DETAILS.

SANITARY SEWER RISER TABLE							FOR INFORMATION ONLY	
		LOCATION					APPROXIMATE LENGTH	
NUMBER	TYPE	LOT NO.	BLOCK NO.	LINE NO.	STA.	DIREC.	VERTICAL (FT)	HORIZONTAL (FT)
35	4" TEE	6	D	3	13+27	RT	-	19
36	4" TEE	6	D	3	13+66	RT	-	19
37	4" TEE	5	D	3	14+08	RT	-	19
38	4" TEE	5	D	3	14+51	RT	-	19

SS LINE 3

Riser No.	Line No.	Station	Distance from Main to Riser (Lt./Rt.)	Distance from Upstream MH	Distance from Downstream MH	Comment
35	3	13+27	RT - 19'	133	141	
36	3	13+66	RT - 19'	94	180	
37	3	14+08	RT - 19'	52	222	
38	3	14+51	RT - 19'	9	265	



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

CITY OF WICHITA

KEVIN P. GRAHAM
LICENSED
27806
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

SANITARY SEWER IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007800

Issue:	
	08/17/2026 - cjr

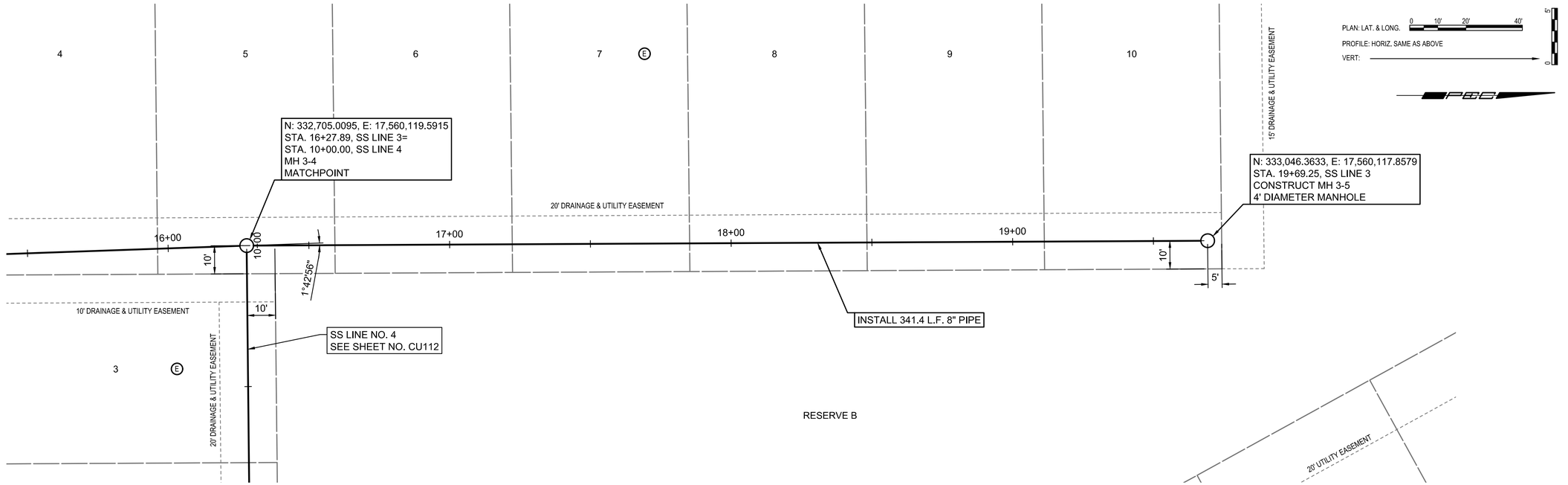
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-007
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

SANITARY SEWER LINE NO. 3

CU110

SAVED 5/27/2025 8:07:31 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 8:16:02 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\0042PD3_PLANS\030_SANITARY PHASE 1\200605-007-CU110.DWG



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

CITY OF WICHITA

KEVIN P. J. GRAHAM
LICENSED
27806
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

SANITARY SEWER IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007800

Issue:	
	08/17/2026 - cjr

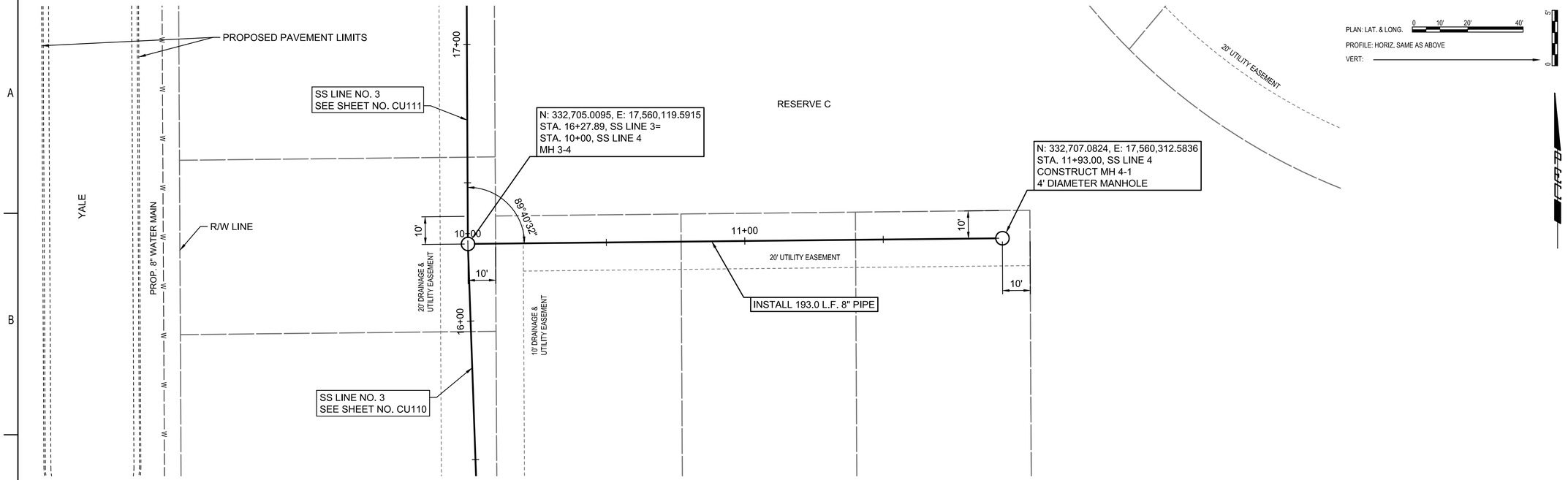
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

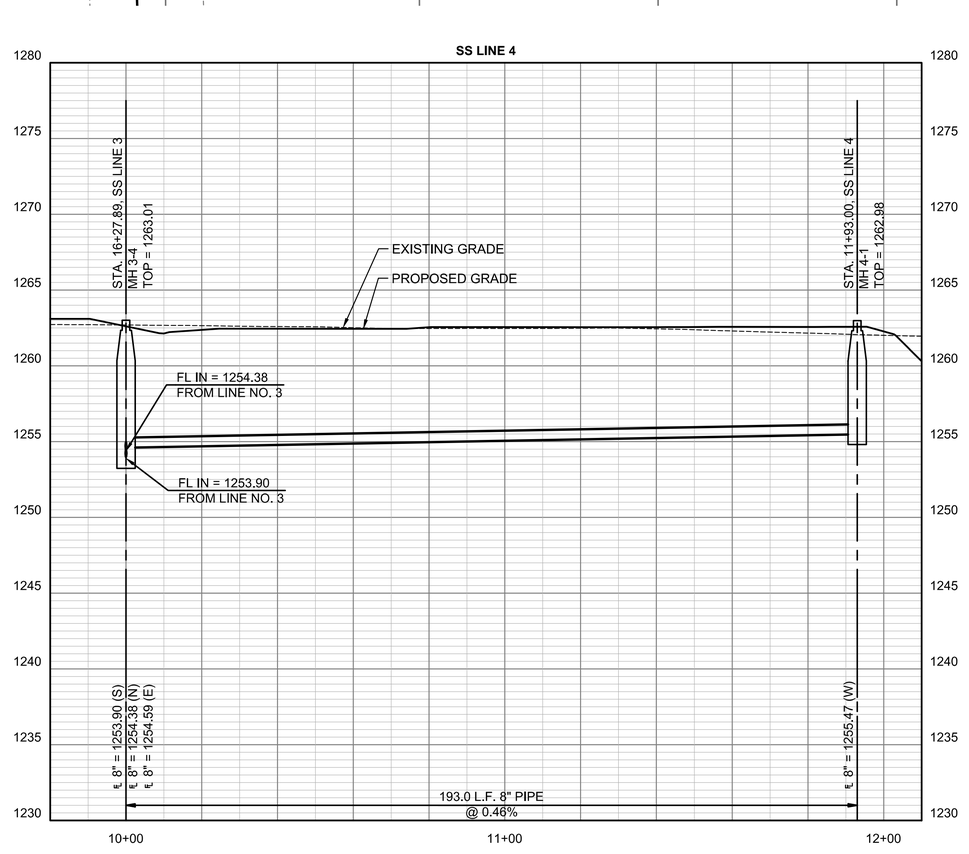
JOB NO.	200605-007
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

SANITARY SEWER LINE NO. 3

CU111

SAVED 5/9/2025 10:34:10 AM BY DUSTIN.LOHMANN
PLOTTED 5/27/2025 8:16:36 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_SANITARY PHASE 1\200605-007-CU111.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
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

SANITARY SEWER IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007800

Issue:		
	08/17/2026 - cjr	

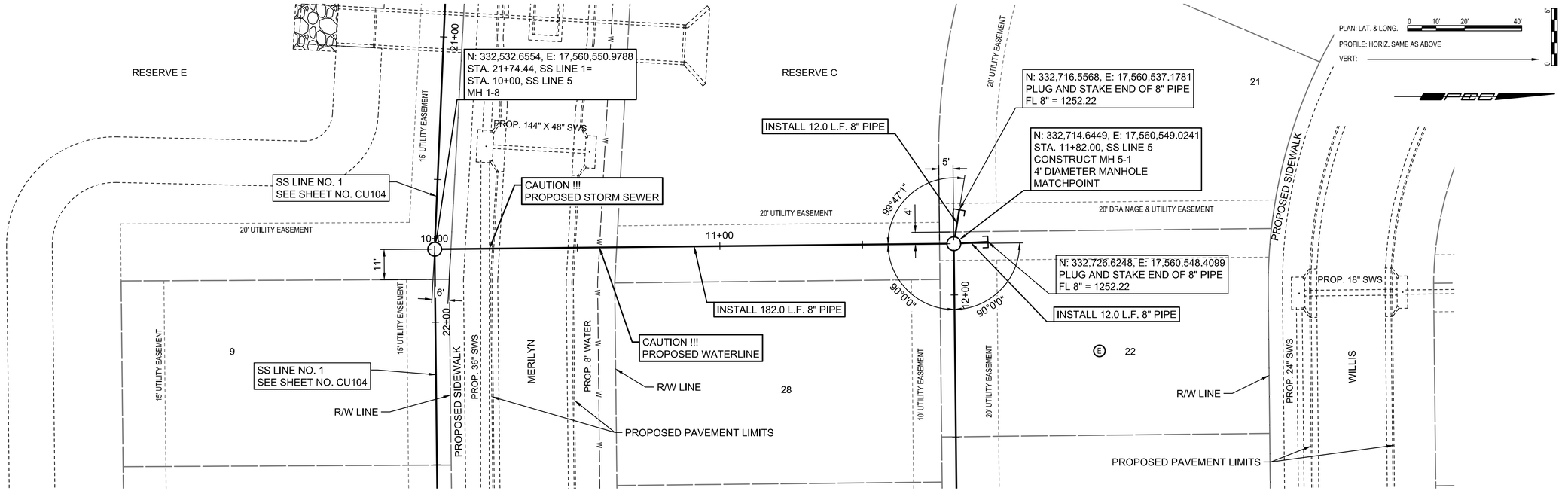
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

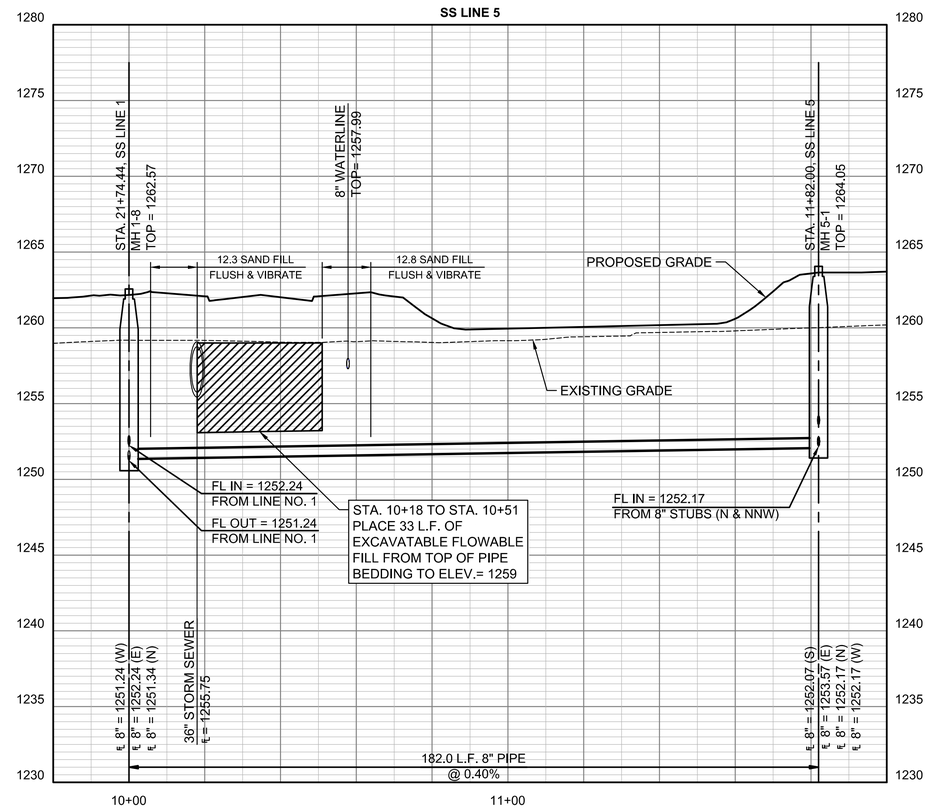
JOB NO.	200605-007
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

SANITARY SEWER LINE NO. 4

CU112

SAVED 5/9/2025 10:34:01 AM BY DUSTIN.LOHMANN
PLOTTED 5/27/2025 8:17:11 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\0042\PD3_PLANS\0301_SANITARY PHASE 1\200605-007-CU112.DWG





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

CITY OF WICHITA

KEVIN P. J. GRAHAM
LICENSED
27806
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

SANITARY SEWER IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007800

Issue:		
	08/17/2026 - cjr	

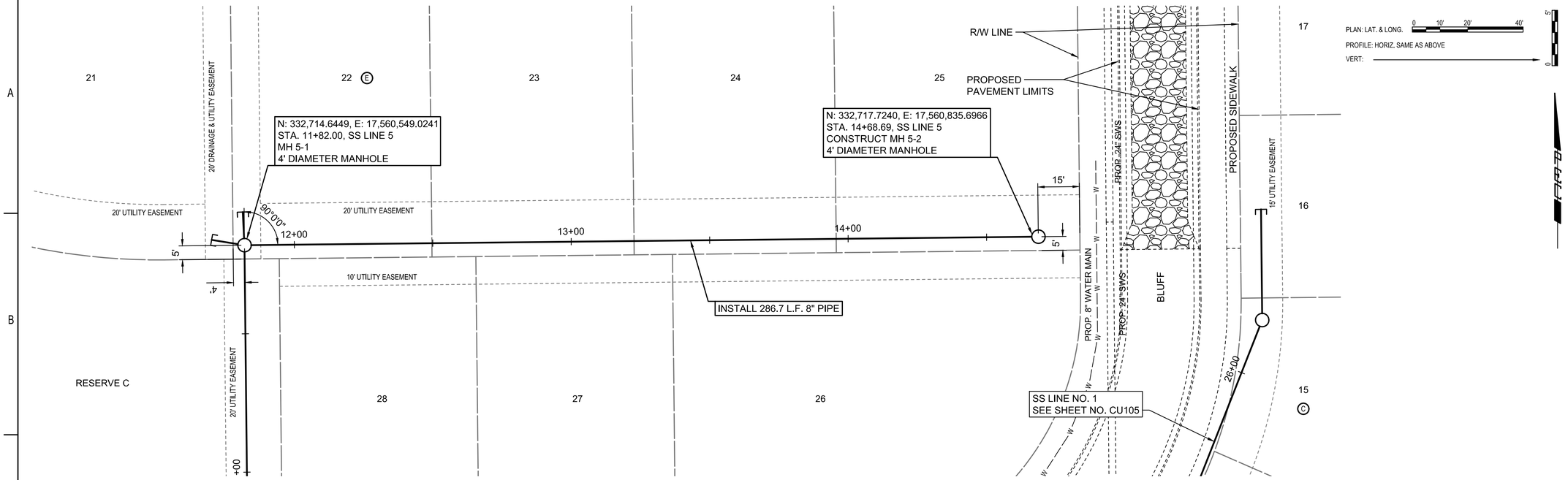
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

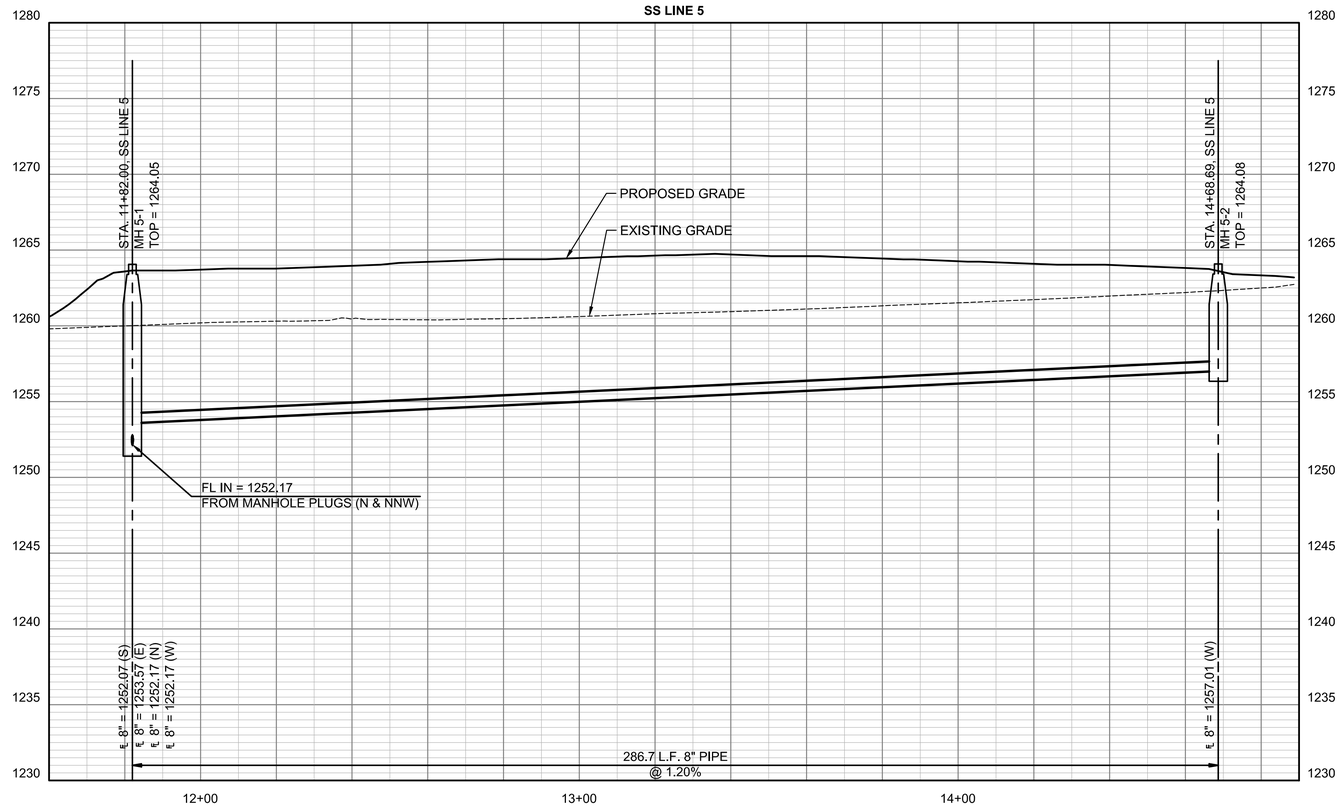
JOB NO.	200605-007
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

SANITARY SEWER LINE NO. 5

CU113

SAVED 5/9/2025 10:33:48 AM BY DUSTIN.LOHMANN
PLOTTED 5/27/2025 8:17:47 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\0042\PD3_PLANS\0301_SANITARY PHASE 1\200605-007-CU113.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
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

SANITARY SEWER IMPROVEMENTS
SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007800

Issue:		
	08/17/2026 - cjr	

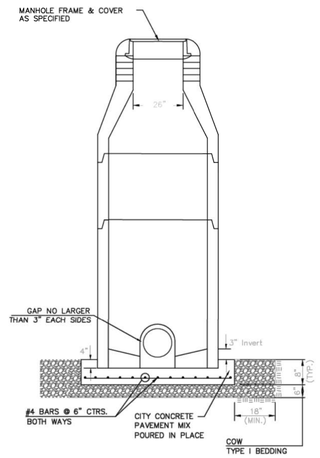
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-007
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

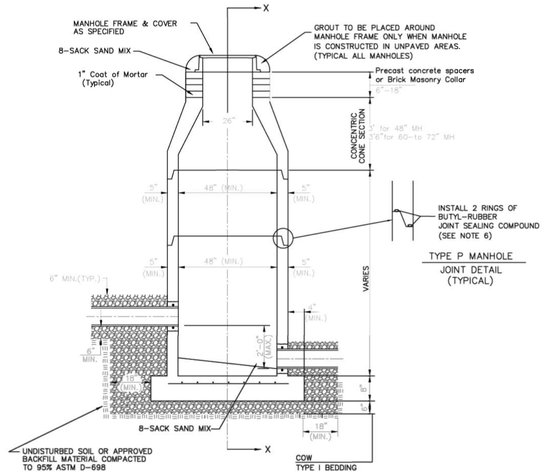
SANITARY SEWER LINE NO. 5

CU114

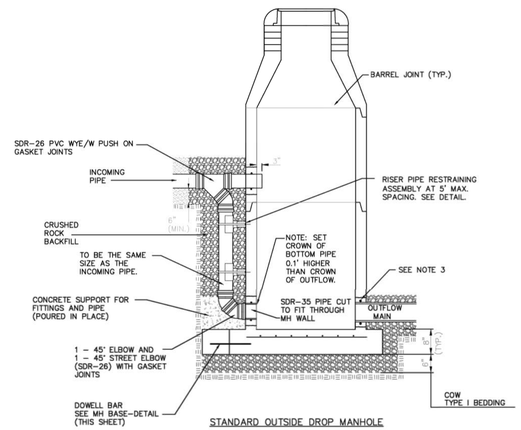
SAVED 5/9/2025 10:33:23 AM BY DUSTIN.LOHMANN
PLOTTED 5/27/2025 8:18:22 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_SANITARY PHASE 1\200605-007-CU114.DWG



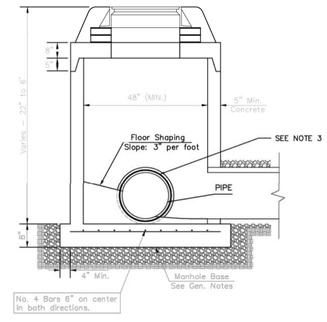
DOG HOUSE MANHOLE
(OVER EXISTING PIPE)
Not to Scale



STANDARD MANHOLE
Not to Scale

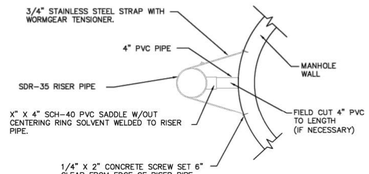


STANDARD OUTSIDE DROP MANHOLE
Not to Scale



SHALLOW MANHOLE
Not to Scale

= COW TYPE I BEDDING = UNDISTURBED SOIL



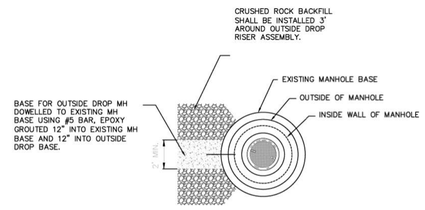
RISER PIPE RESTRAINING ASSEMBLY
Not to Scale

SANITARY SEWER MANHOLE DIAMETERS

DIAMETER	DEPTH	PIPE SIZE
4'	0'-15'	8"-18"
5'	>15'-30'	21"-30"
6'	>30'	36"-60"

PRECAST MANHOLE GENERAL NOTES

1. ALL PRECAST CONCRETE MANHOLE SECTIONS SHALL CONFORM TO THE LATEST REVISIONS OF A.S.T.M. C478 AS MODIFIED BY THE SPECIFICATIONS.
2. NON-SHRINK GROUT SHALL BE NON-METALLIC TYPE.
3. APPROVED FLEXIBLE WATERSTOP SHALL BE INSTALLED TO JOIN THE SEWER PIPE TO THE MANHOLE WALL. THE SEWER PIPE SHALL BE SUPPORTED WITH CRUSHED ROCK A MINIMUM OF 3 FEET FROM THE MANHOLE WALL AND TO THE FIRST JOINT FOR V.C.P. SUCH THAT THE JOINT REMAINS FLEXIBLE.
4. ALL INSIDE SURFACES OF THE CONCRETE MANHOLE WHICH WOULD BE EXPOSED TO SEWER GAS SHALL BE COATED PER SECTION 804.4 OF STANDARD SPECIFICATIONS.
5. EXTERIOR MANHOLE WALLS SHALL BE COATED PER SECTION 804.4 OF STANDARD SPECIFICATIONS.
6. JOINT SEALING COMPOUND SHALL BE PER 804.4 OF STANDARD SPECIFICATIONS.
7. ALL MANHOLE SECTION JOINTS THAT WILL BE IN GROUNDWATER OR GREATER THAN 12' DEEP SHALL BE WRAPPED WITH AN EXTERNAL JOINT SEAL PER SECTION 804.4 OF STANDARD SPECIFICATIONS. AS INDICATED BY THE PLANS.
8. PRECAST MANHOLES SHALL BE SET AT LEAST 4 INCHES INTO THE MANHOLE BASE FOR DOG HOUSE MANHOLES.
9. 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.
10. LIFTING HOLES SHALL BE FILLED WITH NON-SHRINK GROUT AND THE INTERIOR SURFACE COATED AS SPECIFIED.
11. MORTAR USED IN MASONRY CONSTRUCTION SHALL CONTAIN 8 SACKS OF CEMENT PER CUBIC YARD. CONCRETE USED IN MANHOLE BASES SHALL CONFORM TO THE REQUIREMENTS OF CONCRETE FOR CONCRETE PAVEMENT CONSTRUCTION AS SPECIFIED IN THE CITY STANDARD PAVING SPECIFICATIONS USING CITY CONCRETE PAVEMENT MIX WITHOUT AIR ENTRAINING ADMIXTURE. MORTAR SHALL BE PLACE AROUND THE MANHOLE RING AS SHOWN ON THE DRAWINGS WHEN MANHOLES ARE CONSTRUCTED IN UNPAVED AREAS. COMPLETED MANHOLE SHALL BE WITHOUT LEAKS AND WATER TIGHT.
12. REINFORCING STEEL SHALL BE INSTALLED IN THE MANHOLE BASES AND SHALL CONSIST OF NO.4 BARS PLACED ON 6" CENTERS IN BOTH DIRECTIONS. THE MANHOLE BASE REINFORCEMENT SHALL BE PLACED AT LEAST 3" ABOVE THE BOTTOM OF THE MANHOLE BASE. ALL COSTS FOR FURNISHING AND INSTALLING REINFORCING STEEL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE MANHOLE.
13. WALL THICKNESS SHALL BE 1" GREATER THAN MANHOLE DIAMETER IN FEET.
14. OPENINGS SHALL BE CORE DRILLED INTO THE MANHOLE WALL WHEN OUTSIDE DROPS ARE CONSTRUCTED ON EXISTING MANHOLES. SUCH OPENINGS DRILLED INTO EXISTING MANHOLES SHALL BE AS SMALL AS PRACTICAL TO FACILITATE INSTALLING AND GROUTING THE NEW PIPE IN PLACE. WATERSTOP GASKETS SHALL BE USED WITH P.V.C. PIPE. THE NEW PIPE SHALL BE GROUTED INTO THE OPENING USING AN APPROVED NONSHRINK GROUT FOR THE FULL MANHOLE WALL THICKNESS. THE EXTERIOR OF THE COMPLETED CONNECTION SHALL BE SEALED WITH AN APPROVED BITUMINOUS COATING SUCH THAT THE CONNECTION WILL BE WATER TIGHT. FLOOR OF MANHOLE SHALL BE MODIFIED TO FORM NEW FLOW CHANNEL FOR THE NEW CONNECTION AS INDICATED BY THE DRAWING. THIS WORK, INCLUDING MODIFICATION OF MANHOLE FLOOR, SHALL BE PAID FOR AT THE UNIT PRICE BID FOR OUTSIDE DROP STACK CONSTRUCTED ON EXISTING MANHOLE.
15. THE FLOORS OF ALL MANHOLES SHALL BE SHAPED WITH FLOW CHANNELS SUCH THAT THE MANHOLES WILL BE SELF CLEANING AND FREE OF AREAS WHERE SOLIDS COULD BE DEPOSITED AS SEWAGE FLOWS THROUGH THE MANHOLE FROM ALL INLET PIPES TO THE OUTLET PIPE. FLOW CHANNELS SHALL BE FORMED TO MATCH THE BOTTOM HALVES OF THE INFLOWING PIPES AND THE OUTFLOWING PIPE AS SHOWN BY THE DRAWINGS. MANHOLE 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 MANHOLES SHALL HAVE THE TOP HALF REMOVED TO NEAT LINES FOR THE FULL INSIDE DIAMETER OF THE MANHOLE. MANHOLE FLOORS SHALL THEN BE SHAPED AROUND THE BOTTOM HALF OF THE PIPE WHICH FORMS THE FLOW CHANNEL.
16. MANHOLE COVER CASTINGS AND MANHOLE FRAME CASTINGS SHALL CONFORM TO THE REQUIREMENTS AS INDICATED IN THE STANDARD SPECIFICATIONS AND AS SHOWN IN THE STANDARD DETAIL DRAWING.
17. THE VERTICAL DROP IN STANDARD MANHOLES SHALL NOT EXCEED 2' REGARDLESS OF PIPE SIZE. THE CROWNS OF INFLOWING PIPES SHALL NEVER BE SET LOWER THAN THE CROWN OF THE OUTFLOWING PIPE.
18. STANDARD MANHOLES SHALL BE BID AS STANDARD MANHOLES FOR THE TYPE AND DIAMETER INDICATED. OUTSIDE DROP MANHOLES SHALL BE BID AS STANDARD OUTSIDE DROP MANHOLES FOR THE TYPE AND DIAMETER INDICATED. ALL MANHOLE DIAMETERS WILL BE 4' UNLESS INDICATED OTHERWISE.
19. PRECAST CONCRETE SPACERS OR BRICK MASONRY COLLAR SHALL BE INSTALLED BETWEEN THE CAST IRON FRAME AND THE CONCENTRIC CONE. THE COLLAR WILL HAVE 8" WALLS AND A VERTICAL HEIGHT OF 6" MINIMUM AND 18" MAXIMUM. A 1" COAT OF MORTAR WILL BE PLASTERED ON THE OUTSIDE OF THE COLLAR. THE USE OF PRE-CAST CONCRETE SPACERS FOR MANHOLE TOP ADJUSTMENT IS ALSO ALLOWED.
20. THE FULL DIAMETER OF THE MANHOLE SHALL EXTEND THE ENTIRE DEPTH OF THE MANHOLE TO THE CONE SECTION. NO REDUCTION IN MANHOLE DIAMETER WILL BE ALLOWED.



MH BASE DETAIL
Not to Scale

REVISION NOVEMBER 2019	RISER PIPE RETAINING ASSEMBLY REVISED ON MANHOLE DRAWING

CITY OF WICHITA
PUBLIC WORKS & UTILITIES ENGINEERING DIVISION

PRECAST SANITARY SEWER MANHOLE

CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER	OCA NUMBER	DATE

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

SHEET

SS-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 05/27/2025 KANSAS PROFESSIONAL ENGINEER

SANITARY SEWER IMPROVEMENTS
SWANEY FARM ADDITION PHASE 1
PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007800

Issue:		
	08/17/2026 - cjr	

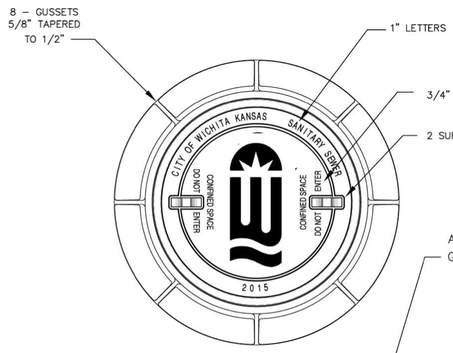
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-007
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

PRECAST SANITARY SEWER MANHOLE

CU501

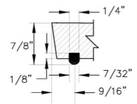
SAVED 5/6/2025 1:19:48 PM BY DUSTIN.LOHMANN
PLOTTED 5/27/2025 8:18:30 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\0042\PD3_PLANS\0301_SANITARY PHASE 1\200605-007-CU501.DWG



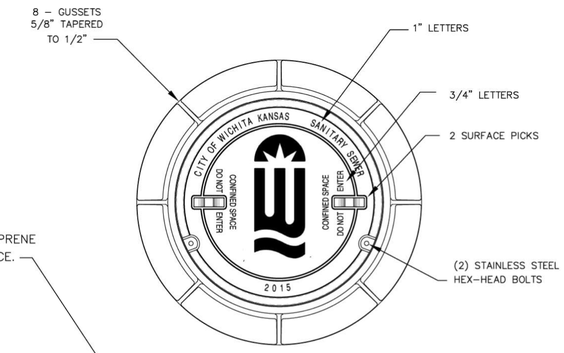
STANDARD MANHOLE FRAME & COVER

DEETER #1261 OR EJIW #1936–Z1

NOTE:
1. FURNISHED WITH MACHINED HORIZONTAL BEARING SURFACE.



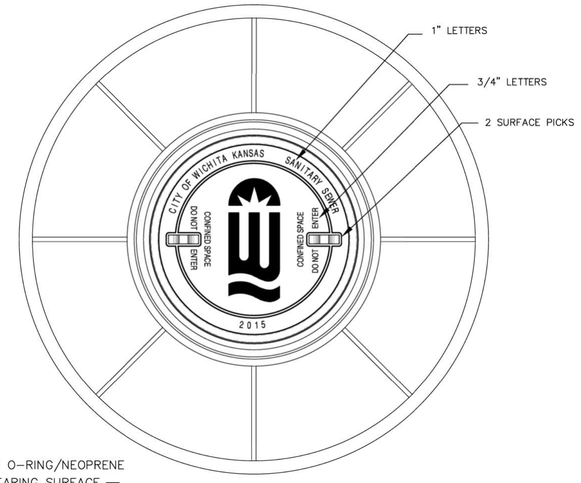
O–RING DETAIL

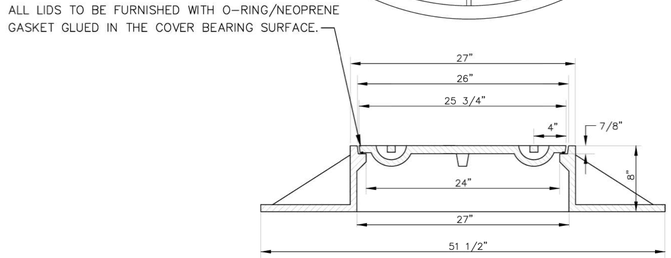


BOLT DOWN MANHOLE FRAME & COVER

DEETER #1261 OR EJIW #1936–Z1

NOTE:
1. FURNISHED WITH MACHINED HORIZONTAL BEARING SURFACE.





WIDE FLANGED FRAME & COVER

DEETER #1261A

NOTE:
1. FURNISHED WITH MACHINED HORIZONTAL BEARING SURFACE.

GENERAL NOTES

1. MANHOLE CASTINGS SHALL BE MANUFACTURED USING GOOD QUALITY GRAY IRON CONFORMING TO CLASS 30 OF A.S.T.M. DESIGNATION A–48. DIMENSIONS SHOWN ON THE DETAILED DRAWINGS SHALL BE CONSIDERED AS MINIMUM REQUIREMENTS AND ANY DEVIATIONS FROM THE DIMENSIONS SHOWN MUST BE SPECIFICALLY APPROVED. THE FINISHED CASTINGS SHALL BE OF UNIFORM QUALITY, FREE FROM BLOWHOLES, POROSITY, HARD SPOTS, SHRINKAGE DISTORTIONS OR OTHER DEFECTS.

2. MANHOLE CASTINGS SHALL BE MANUFACTURED SUCH THAT A COVER MANUFACTURED BY ANY ONE FOUNDARY WILL FIT INTERCHANGEABLY INTO A FRAME MANUFACTURED BY ANOTHER FOUNDRY AND STILL MEET ALLOWABLE CLEARANCES AND NON–ROCKING REQUIREMENTS. THIS WILL REQUIRE MANUFACTURING OF THE MATCHING FACES ON THE COVER AND THE FRAME TO CLOSE TOLERANCES.

3. THE OUTSIDE CIRCUMFERENCE OF THE VERTICAL FACE OF THE COVER AND THE INSIDE CIRCUMFERENCE OF THE VERTICAL FACE IN THE FRAME RECESS SHALL BE MANUFACTURED TO TOLERANCES SUCH THAT THE CLEARANCE BETWEEN THE COVER AND FRAME WILL NOT EXCEED 1/8" AT ANY POINT AROUND THE CIRCUMFERENCE OF THE COVER. THE SEATING SURFACES BETWEEN THE COVER AND FRAME SHALL BE MACHINED SUCH THAT THESE SEATING SURFACES SHALL MAKE FULL CONTACT FOR THEIR FULL CIRCUM–FERENCE TO PRECLUDE THE COVER FROM ROCKING IN THE FRAME.

4. THE MANHOLE FRAME AND COVER SHALL BE MARKED WITH LETTERING INDICATING THE NAME OF THE MANUFACTURER AND THE YEAR WHEN THE COVER OR FRAME WAS CAST. THE COVER SHALL BE FURTHER IDENTIFIED WITH REGARDS TO OWNERSHIP USING LETTERS AT LEAST 1"IIN HEIGHT. THIS IDENTIFICATION SHALL BE "CITY OF WICHITA SANITARY SEWER".
THE TOP SURFACE OF THE COVER SHALL BE MANUFACTURED IN WITH CITY OF WICHITA DESIGN AS INDICATED ON THE DRAWINGS. SMOOTH BLOCKOUTS SHALL BE UTILIZED TO HIGHLIGHT THE LETTERING ON THE COVER SURFACE. THE TOTAL AREA OF SMOOTH SURFACE BLOCKOUT SHALL NOT EXCEED THE AREA AS INDICATED ON THE DRAWING. POSITIONING OF SMOOTH BLOCKOUTS AND LETTERING MAY VARY FROM THAT SHOWN ON THE DETAILED DRAWING.

REVISED: MARCH 2016

CITY OF WICHITA
PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

MANHOLE
FRAME AND COVER
(SANITARY SEWER)

CITY ENGINEER
GARY JANZEN, P.E

PROJECT NUMBER	OCA NUMBER	DATE

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

SHEET

SS-102

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

CITY OF WICHITA

KEVIN P. GRAHAM
LICENSED
27806
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

SANITARY SEWER IMPROVEMENTS

SWANEY FARM ADDITION
PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007800

Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-007
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

MANHOLE FRAME AND COVER (SANITARY SEWER)

CU502

SAVED 5/6/2025 1:19:30 PM BY DUSTIN.LOHMANN
PLOTTED 5/27/2025 8:18:39 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\00412PD3_PLANS\030_SANITARY PHASE 1\200605-007-CU502.DWG

GENERAL NOTES

1. APPLICATION. Risers shall be installed to serve all lots or tracts where the sanitary sewer main is below the water table, where the sanitary sewer main depth is greater than 12' below the proposed ground elevation, where the main is adjacent to a pond or wherever service lines would have to cross under storm sewer pipe. Installation of risers because of field conditions shall be as approved by the City Engineer. The location of the risers to serve developed property shall be approved by the property owner and the Construction Engineer.

2. MANHOLE STUB RISERS. Manhole stub risers be installed in manholes where locations of manholes will provide satisfactory service connection as determined by the Construction Engineer. The vertical distance between the flowline of the manhole stub and the flowline of the sanitary sewer line out of the manhole shall not exceed 2'. Risers shall be utilized at manholes as indicated in Note 1. Manhole stub riser shall be set such that the top of the stub is not lower than the top of the sanitary sewer line.

3. SIZING. Risers shall be sized according to the plans and riser table where risers are indicated by the plans. Where risers are required because of field conditions, the risers shall be 6" diameter for commercial or industrial properties and 4" or 6" diameter for residential properties, based on lot size and sanitary sewer main depth. Sizing of risers shall be approved by the construction Engineer prior to installation.

4. RISER MATERIAL. Risers shall be constructed of Schedule 40 PVC Pipe, meeting the requirement of the latest revision of A.S.T.M.. All pipe joints shall be solvent welded. Full body tee shall be SDR 26 PVC pipe.

5. ROCK ENCASEMENT. Riser connection to clay pipe sanitary sewers shall be rock encased both ways from the riser centerline. The rock encasement shall extend three feet from the riser centerline or stop at the first sanitary sewer pipe joint within three feet of the riser centerline. Riser connections to PVC Sanitary sewer mains shall be rock encased one foot each way from the riser centerline. Crushed rock shall conform to ASTM C-33, Gradation No. 67, and shall meet all requirements for Portland Cement Concrete pavement Coarse Aggregate, Section 406.2, City of Wichita Standard Specifications.

6. BEDDING. Beyond the limits of the rock encasement, bedding around the sanitary sewer riser shall be compacted Pipe Bedding Type 1 or 2. The bedding shall be placed and compacted from the depth of the sanitary sewer main to the top of the sanitary sewer riser pipe. Compacted Pipe Bedding Type 1 or 2 shall be required for all risers whether constructed in vertical wall or sloped wall trenches. Bedding material and construction practices shall be approved by the Construction Engineer prior to installation.

7. SUPPORT OF RISERS. Sanitary sewer riser pipe shall be supported during trench backfill. The riser pipe shall be held in a vertical position at all times until trench backfill and compaction has been completed. Contractor's methods for supporting and back filling the riser pipe shall be approved by the Construction Engineer.

8. PLUGGING. The ends of the riser pipes and manhole stubs shall be plugged using an airtight solvent welded cap or plug. Cap or plug fittings shall be approved by the Construction Engineer prior to installation. Caps or plugs which do not provide an airtight seal will not be accepted.

9. TOP OF THE RISER PIPE. The top elevation of the sanitary sewer riser pipe shall be built per plan elevations, unless otherwise directed by the Construction Engineer. where riser elevations are not shown on the plans, the top of the risers shall be set at an elevation four feet below t he proposed ground surface. If ground water is encountered, the top of the riser pipe shall be set at an elevation 2' (min.) above the maximum water table elevation, regardless of the riser elevation shown on the plans.

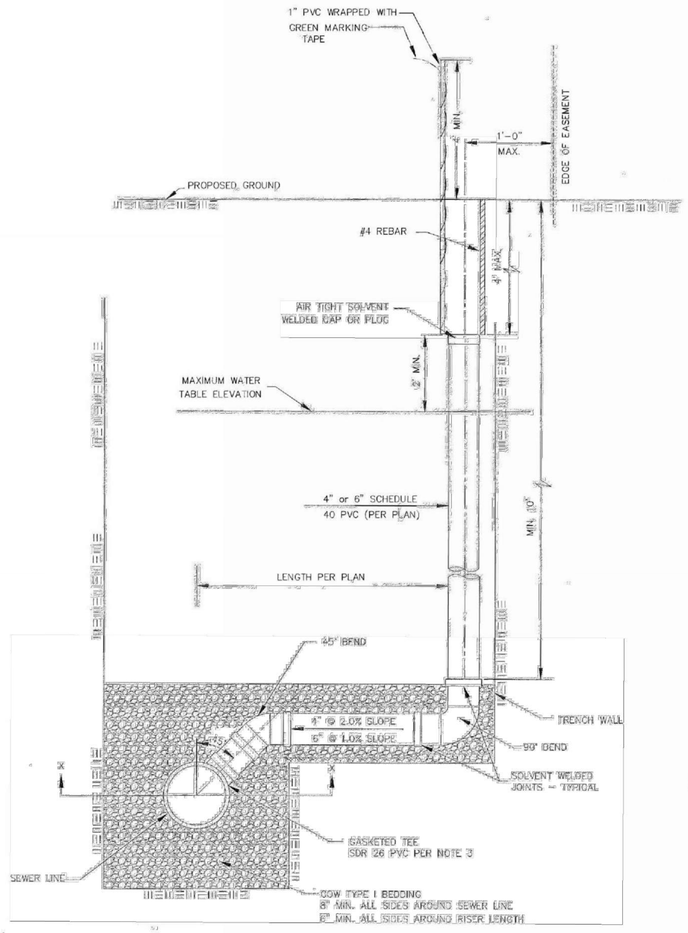
10. MARKING. Locations of the ends of the sanitary sewer riser pipe shall be marked by installing 1" PVC from the top of the riser to a minimum of 4' above the top of finished grade. No. 4 rebar shall be placed centered over the riser from the cap to the existing ground. The 1" PVC pipe shall be wrapped with green colored plastic tape, for the full length above ground surface. The green tape shall be 4 mil Polyethylene film with a minimum width of three inches, specifically manufactured for the purpose of identification of underground sewers.

11. LOCATION MEASURES. The project inspector shall record and document the location of all risers constructed as measured from the nearest manhole, indicate the direction from the manhole, the direction and distance from the main, riser size, and elevation of the top of the riser in tabular format.

12. RISER LOCATION. the riser shall be located per plan if shown. If not shown on the plan, the riser shall be located at the center of the lot, within one foot of the property side of the easement for the lot being served. All riser locations shall be approved by the Construction Engineer prior to installation.

13. PAYMENT. "Riser Assembly, Vertical " shall be paid for at the contract unit price per each, which shall be full compensation for all pipe, fittings, marking tape, length of backfill, labor, site restoration, and any other items necessary to complete the work.

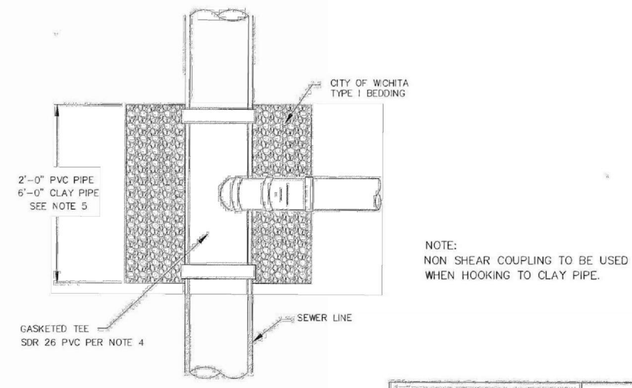
"Riser Assembly, Manhole Stub" shall be paid for at the contract unit price per each, which shall be full compensation for all labor material and incidentals necessary to complete the work including all pipe, fittings, rock encasement, and all other items as required and listed for "Riser Assembly, Vertical "



NOTE: RISER PIPE REQUIREMENTS AT MANHOLE CONNECTION SHALL BE SIMILAR TO THOSE SHOWN ABOVE.

SANITARY SEWER RISER TABLE							FOR INFORMATION ONLY	
		LOCATION					APPROXIMATE LENGTH	
NUMBER	TYPE	LOT NO.	BLOCK NO.	LINE NO.	STATION	DIRECTION	VERTICAL (FT)	HORIZONTAL (FT)
1	4" MANHOLE CONNECTION							
2	6" MANHOLE CONNECTION							
3	4" TEE							
4	6" TEE							

NOTE: TABLE FOR REFERENCE ONLY AND SHOULD BE ON EACH APPLICABLE PLAN SHEET.



NOTE:
NON SHEAR COUPLING TO BE USED WHEN HOOKING TO CLAY PIPE.

TYPICAL SECTION X-X

07/21/15

REVISED: JULY 2015

CITY OF WICHITA

PUBLIC WORKS & UTILITIES ENGINEERING DIVISION

VERTICAL RISER ASSEMBLY SEWER DETAIL

CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER	OCA NUMBER	DATE

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

SHEET

SS-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 05/27/2025 KANSAS PROFESSIONAL ENGINEER

SANITARY SEWER IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007800

Issue:		
	08/17/2026 - cjr	

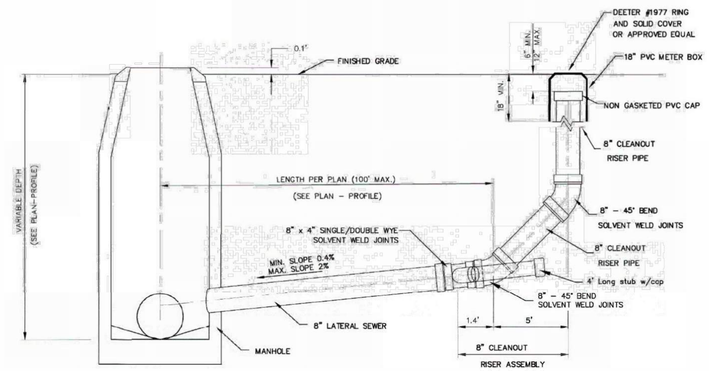
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

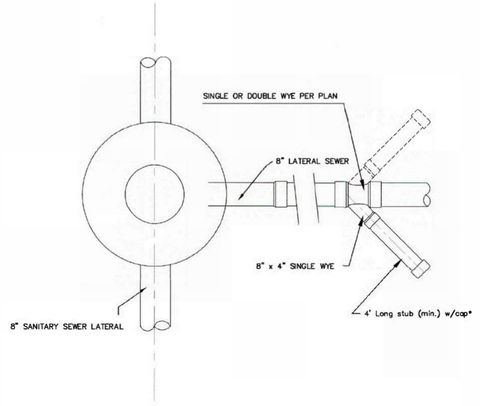
JOB NO.	200605-007
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

VERTICAL RISER ASSEMBLY SEWER DETAIL

CU503

SAVED 5/6/2025 1:17:20 PM BY DUSTIN.LOHMANN
PLOTTED 5/27/2025 8:18:44 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\00042PD3_PLANS\030_SANITARY PHASE 1\200605-007-CU503.DWG





CLEANOUT RISER ASSEMBLY DETAIL
W/ MANHOLE CONNECTION

* 4" BRANCH (EACH SIDE) TO SERVE AS 4" STUB TEMPORARY CAP UNTIL SERVICE CONNECTION IS REQUIRED. SINGLE OR DOUBLE WYE TO BE USED WHERE INDICATED ON PLAN. WHEN IN GROUNDWATER 4" STUB NEEDS VERTICAL RISER.

** 8" LATERAL TO BE AIR-TESTED UP TO THE TOP OF PVC PIPE, PER STANDARD SPECIFICATIONS.

GENERAL NOTES:

TAPS: NO TAPS ARE PERMITTED BETWEEN THE MANHOLE/TEE AND THE CLEANOUT RISER.
BEDDING: BEDDING AROUND THE SANITARY SEWER RISER SHALL BE COMPACTED PIPE BEDDING TYPE 2. (TYPE 1 IN GROUNDWATER).
MATERIAL: RISER AND LATERALS SHALL BE CONSTRUCTED OF SDR-35 PVC PIPE. TEES SHALL BE SDR-26 PIPE, 4" STUBS SHALL BE SCHEDULE 40.
CONNECTIONS: ALL SERVICE CONNECTIONS MUST BE MADE TO THE WYE PROVIDED.

GARY L. JANZEN LICENSED 16294 KANSAS PROFESSIONAL ENGINEER 04/30/13

CITY OF WICHITA
PUBLIC WORKS & UTILITIES ENGINEERING DIVISION

CLEANOUT RISER ASSEMBLY DETAIL
CITY ENGINEER
GARY JANZEN, P.E.
PROJECT NUMBER | OCA NUMBER | DATE 12/2011
CITY ENGINEER'S OFFICE
CITY HALL - SEVENTH FLOOR
455 NORTH MAIN STREET
WICHITA, KANSAS 67202-1620
(316) 268-4501
SHEET

SS-104

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

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 05/27/2025 KANSAS PROFESSIONAL ENGINEER

SANITARY SEWER IMPROVEMENTS
SWANEY FARM ADDITION PHASE 1
PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007800

Issue:		
	08/17/2026 - cjr	

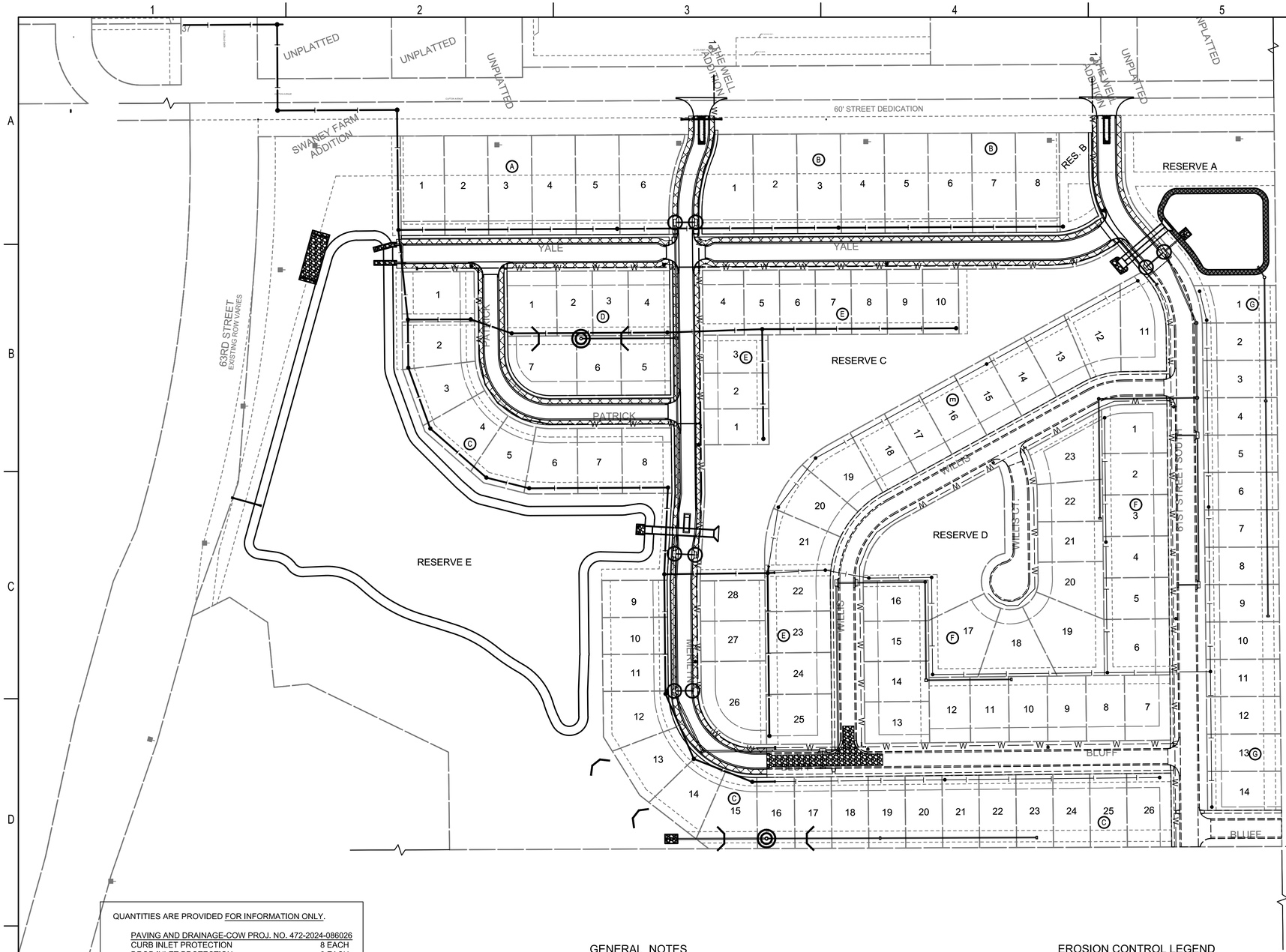
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-007
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

CLEANOUT RISER ASSEMBLY DETAIL

CU504

SAVED 5/6/2025 1:17:02 PM BY DUSTIN.LOHMANN
PLOTTED 5/27/2025 8:18:49 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\00412PD3_PLANS\030_SANITARY PHASE 1\200605-007-CU504.DWG



PEC
0 100' 200'

QUANTITIES ARE PROVIDED FOR INFORMATION ONLY.

PAVING AND DRAINAGE-COW PROJ. NO. 472-2024-086026

CURB INLET PROTECTION	8 EACH
DROP INLET PROTECTION	2 EACH
BACK OF CURB PROTECTION	6,293 L.F.
LIGHT STONE RIPRAP	136 S.Y.

SWD-COW PROJ. NO. 526-458-085570

DITCH CHECK PROTECTION	6 EACH
SILT FENCE PROTECTION	1,935 L.F.
LIGHT STONE RIPRAP	70 S.Y.
HEAVY STONE RIPRAP	310 S.Y.
TURF REINFORCEMENT MAT	5,325 S.Y.

SANITARY SEWER-COW PROJ. NO. 468-2024-007800

WATER-COW PROJ. NO. 448-2024-007798

STABILIZED CONSTRUCTION ENTRANCE	2 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 AREA 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 05/27/2025 KANSAS PROFESSIONAL ENGINEER

SANITARY SEWER IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007800

Issue:		
	08/17/2026 - cjr	

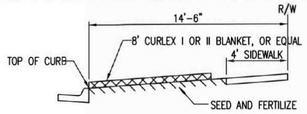
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-007
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

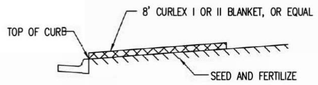
EROSION CONTROL PLAN

CU505

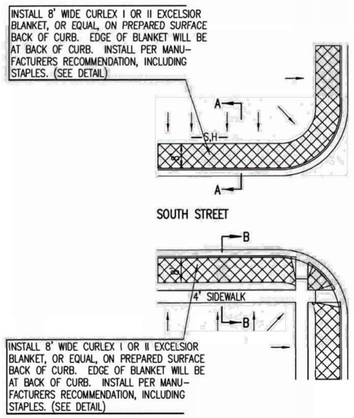
SAVED 5/6/2025 1:16:19 PM BY DUSTIN.LOHMANN
PLOTTED 5/27/2025 8:19:03 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_SANITARY PHASE 1\200605-007-CU507.DWG



SECTION B–B



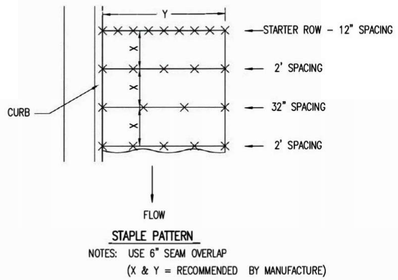
SECTION A–A

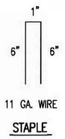


GENERAL NOTES

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

BACK OF CURB PROTECTION DETAIL



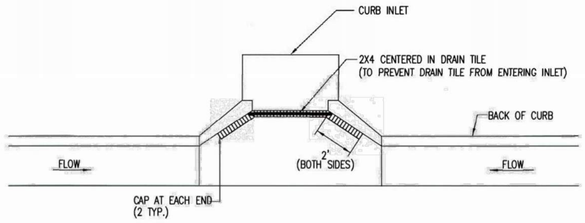


STAPLE

STAPLE PATTERN

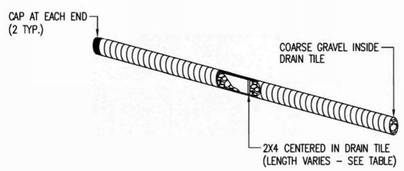
NOTES: USE 6" SEAM OVERLAP
(X & Y = RECOMMENDED BY MANUFACTURE)

DETAILS FOR APPROVED EROSION CONTROL MAT

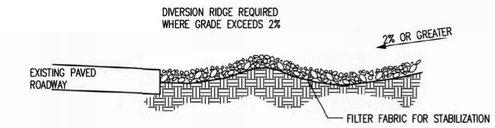


NOTE:
PLACE 4" PERFORATED PVC PIPE, FILLED WITH 1/2"–1" DIA. GRAVEL, IN FRONT OF CURB INLET AS SHOWN.

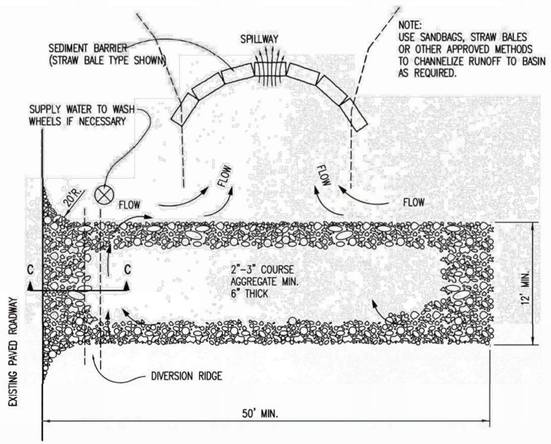
2X4 LENGTH	INLET TYPE	INLET OPENING
5'–6"	1–A	5'–0"
10'–6"	1–A	10'–0"
15'–6"	1–A	15'–0"



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
05/12/13

CITY OF WICHITA
PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

BACK OF CURB PROTECTION, CURB INLET PROTECTION AND CONSTRUCTION ENTRANCE

CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER	OCA NUMBER	DATE

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

SHEET

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 — 05/27/2025 — KANSAS — PROFESSIONAL ENGINEER

SANITARY SEWER IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007800

Issue:		
	08/17/2026 - cjr	

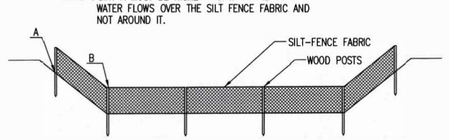
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-007
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

BACK OF CURB & CURB INLET PROTECTIONS & CONSTRUCTION ENTRANCE

CU506

SAVED 5/6/2025 1:22:06 PM BY DUSTIN.LOHMANN
PLOTTED 5/27/2025 8:19:08 AM BY KEVIN.GRAHAM
U:\WICHITA-CIVIL\2020\200605\0042\PD3_PLANS\030_SANITARY PHASE 1\200605-007-CU508.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.

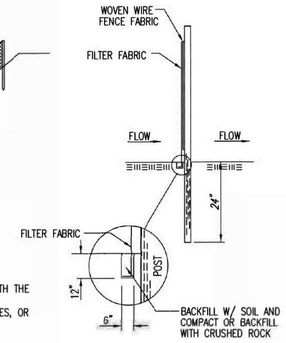
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

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.

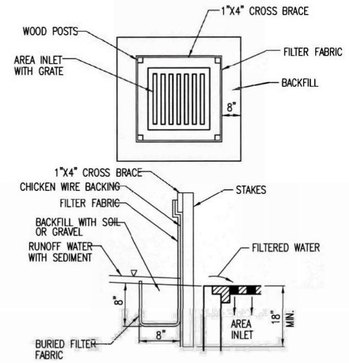
INSPECTION AND MAINTENANCE:

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.

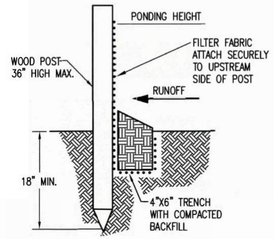
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

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

GARY L. JANZEN 16294 LICENSED PROFESSIONAL ENGINEER KANSAS 05/12/25

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

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

SHEET

SW-502

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

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 05/27/2025 KANSAS PROFESSIONAL ENGINEER

SANITARY SEWER IMPROVEMENTS
SWANEY FARM ADDITION PHASE 1
PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007800

Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

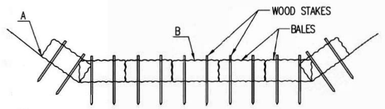
JOB NO.	200605-007
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

SILT FENCE DITCH CHECK AND BARRIER DETAILS

CU507

SAVED 5/6/2025 1:21:51 PM BY DUSTIN.LOHMANN
PLOTTED 5/27/2025 8:19:13 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_SANITARY PHASE 1\200605-007-CU509.DWG

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



STRAW BALE DITCH CHECKS

MATERIAL SPECIFICATION:

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

PLACEMENT:

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

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

PROPER INSTALLATION METHOD:

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

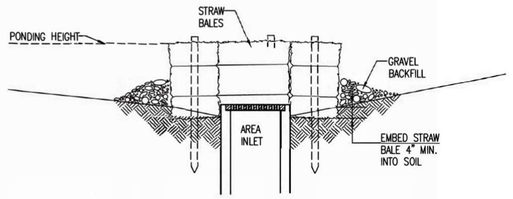
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

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

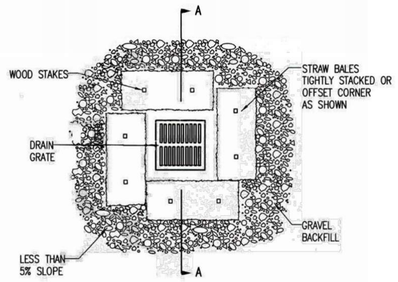
INSPECTION AND MAINTENANCE:

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

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



SECTION A-A



STRAW BALE BARRIERS FOR AREA INLETS
(INLET PROTECTION)

MATERIAL SPECIFICATION:

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

PLACEMENT:

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

PROPER INSTALLATION METHOD:

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

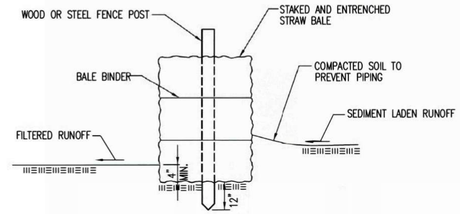
LIST OF COMMON PLACEMENT INSTALLATION MISTAKES TO AVOID:

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

INSPECTION AND MAINTENANCE:

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

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



STRAW BALE BARRIERS

MATERIAL SPECIFICATION:

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

PLACEMENT:

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

PROPER INSTALLATION METHOD:

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

LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

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

INSPECTION AND MAINTENANCE:

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

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

REVISION DATE: MAY 2013

GARY L. JANZEN LICENSED 16294 PROFESSIONAL ENGINEER KANSAS 6/13/13

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

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

SHEET

SW-503

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

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 05/27/2025 KANSAS PROFESSIONAL ENGINEER

SANITARY SEWER IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007800

Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-007
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

STRAW BALE DITCH CHECK AND BARRIER DETAILS

CU508

SAVED 5/6/2025 1:21:38 PM BY DUSTIN.LOHMANN
PLOTTED 5/27/2025 8:19:18 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\0042\PD3_PLANS\030_SANITARY PHASE 1\200605-007-CU510.DWG

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.

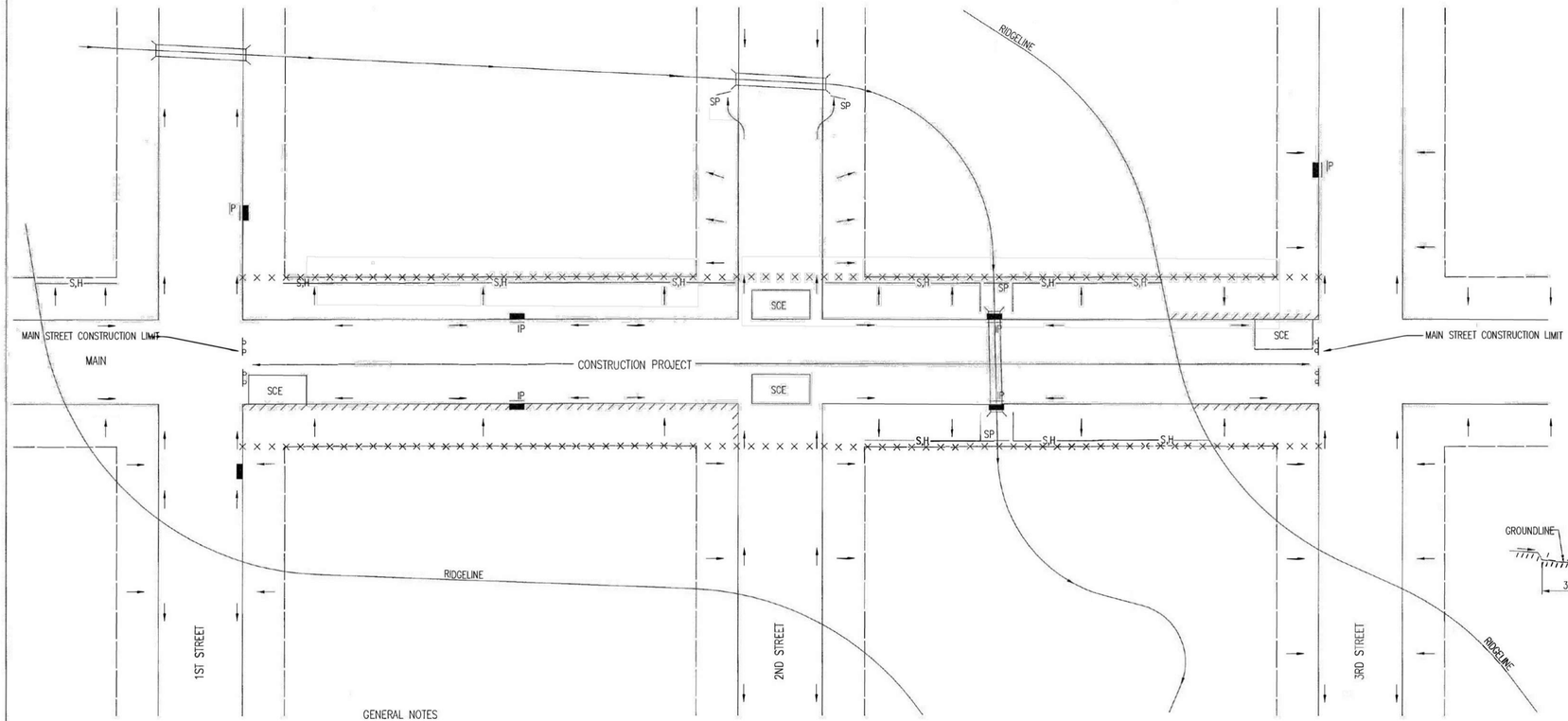
2. EROSION CONTROL DEVICES MUST BE MAINTAINED BY THE CONTRACTOR THROUGHOUT THE CONSTRUCTION PROCESS AND UNTIL THE DISTURBED EARTH IS RESTABILIZED.

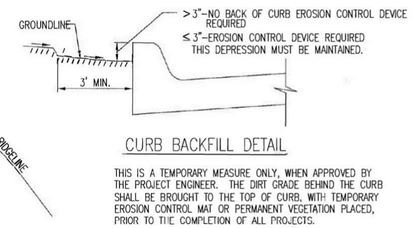
3. IF THE PROJECT WILL DISTURB 1 ACRE OR MORE, A FEDERAL/STATE NPDES STORMWATER PERMIT IS REQUIRED. A DETAILED STORMWATER POLLUTION PREVENTION PLAN, IS REQUIRED. THE EROSION CONTROL DEVICES SHOWN ON THIS SHEET ARE CONSIDERED TO BE THE MINIMUM TO BE SHOWN IN THE POLLUTION PREVENTION PLAN.

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)

KEVIN L. JANZEN LICENSED 16294 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

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

SHEET

SW-504

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

CITY OF WICHITA

KEVIN P. J. GRAHAM LICENSED 27806 05/27/2025 KANSAS PROFESSIONAL ENGINEER

SANITARY SEWER IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007800

Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

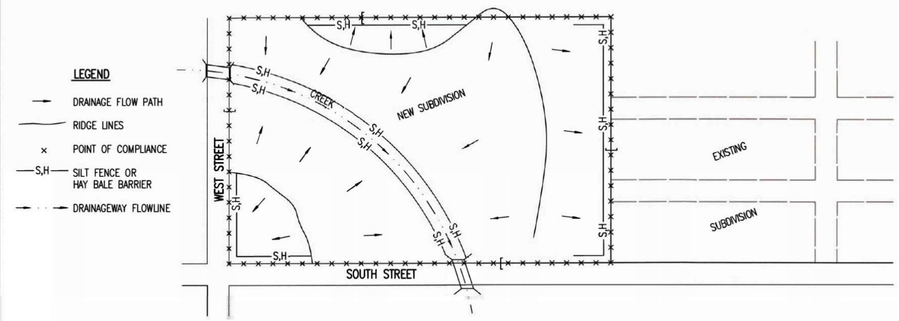
JOB NO.	200605-007
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

STREET IMPROVEMENT PROJECTS

CU509

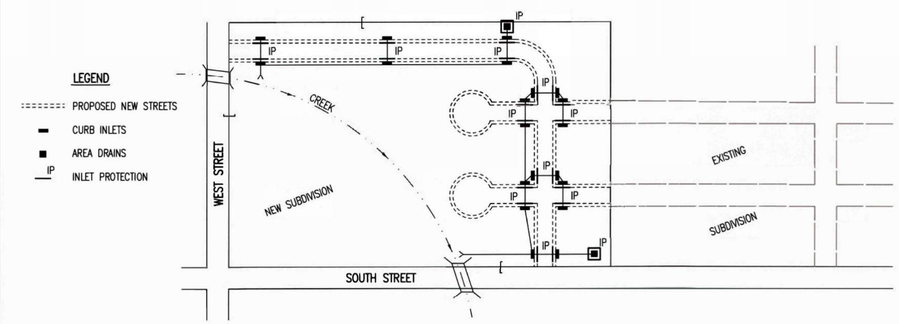
SAVED 5/6/2025 1:21:25 PM BY DUSTIN.LOHMANN
PLOTTED 5/27/2025 8:19:23 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\0042PD3_PLANS\030_SANITARY PHASE 1\200605-007-CU511.DWG

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



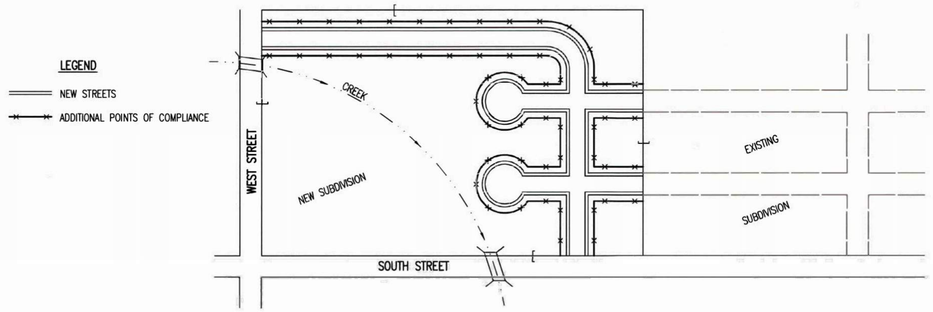
1. DURING THIS PHASE OF SUBDIVISION CONSTRUCTION, THE POINTS OF COMPLIANCE ARE THE PERIMETER BOUNDARIES AND ANY DRAINAGE WAYS OR STORM SEWERS DRAINING THROUGH OR FROM THE SITE. SHOULD LAKES BE CONSTRUCTED WITHIN THE SUBDIVISION THAT WILL DISCHARGE DURING STORMS, THEY ARE ALSO A POINT OF COMPLIANCE.
2.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

PHASE 2 – INSTALLATION OF STORM SEWER



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

PHASE 3 – STREET CONSTRUCTION

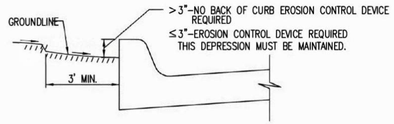


1. DURING THIS PHASE OF SUBDIVISION CONSTRUCTION, NEW STREETS ARE INSTALLED. ALL EROSION CONTROL DEVICES INSTALLED DURING PHASE 1 AND 2 MUST STILL BE MAINTAINED. THE POINT OF COMPLIANCE NOW SHIFTS TO THE BACK OF CURB ALONG EACH STREET.
2. CURB OPENING INLET PROTECTION:
   A. SUMP AREAS – INLET PROTECTION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

GENERAL NOTES

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

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

CITY OF WICHITA
PUBLIC WORKS & UTILITIES ENGINEERING DIVISION

SUBDIVISION DEVELOPMENT PROCESS

CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER	OCA NUMBER	DATE

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

SHEET

SW-505

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

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 05/27/2025 KANSAS PROFESSIONAL ENGINEER

SANITARY SEWER IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007800

Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-007
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

SUBDIVISION DEVELOPMENT PROCESS

CU510

SAVED 5/6/2025 1:21:11 PM BY DUSTIN.LOHMANN
PLOTTED 5/27/2025 8:19:28 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\0042PD3_PLANS\030_SANITARY PHASE 1\200605-007-CU512.DWG

SAVED 5/6/2025 1:20:53 PM BY DUSTIN.LOHMANN
PLOTTED 5/27/2025 8:19:34 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\00412PD3_PLANS\030_SANITARY PHASE 1\200605-007-CU601.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
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

SANITARY SEWER IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007800

Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-007
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

PLAT

CU601

CONSTRUCTION PLANS FOR
OFFSITE SANITARY SEWER MAIN IMPROVEMENTS

TO SERVE

SWANEY FARM ADDITION

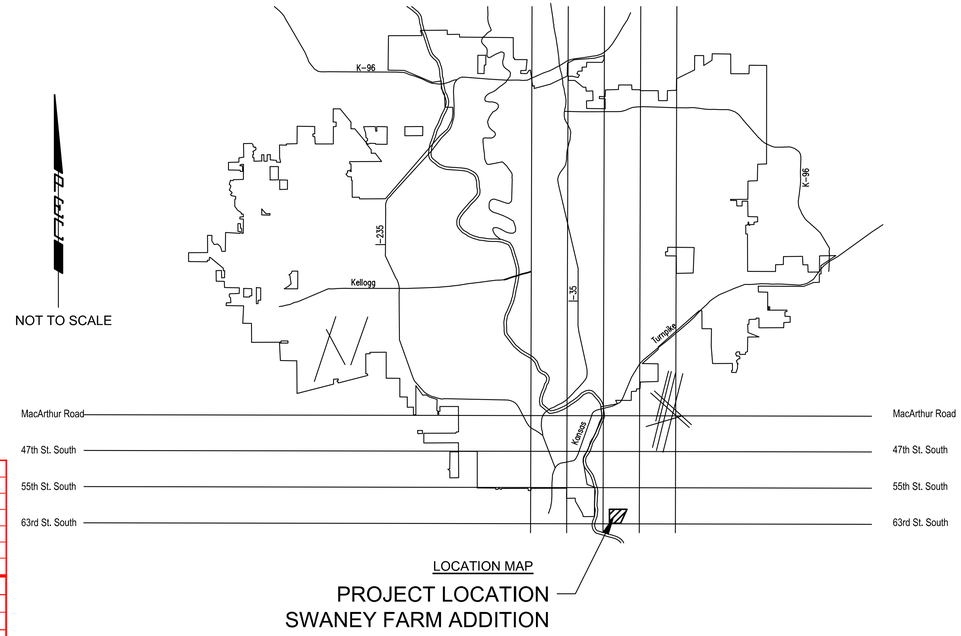
CITY OF WICHITA ENGINEERING PROJECT NO. 468-2024-007803
ORG CODE: 47271924, MUNIS NO.: E4078

CITY OF WICHITA, KS

PAUL GUNZELMAN, P.E. - CITY ENGINEER

RED LINE - FIELD SET

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



NOT TO SCALE

LOCATION MAP

PROJECT LOCATION
SWANEY FARM ADDITION

SHEET INDEX

SHEET NUMBER	SHEET TITLE
CU001	TITLE SHEET
CU002	GENERAL NOTES
CU003	PLAT BUBBLE MAP
CU100R	~~CU100~~ SANITARY SEWER KEY MAP AND BUBBLE MAP
CU101	SANITARY SEWER LINE MAIN A
CU102R	~~CU102~~ SANITARY SEWER LINE MAIN A
CU103R	~~CU103~~ SANITARY SEWER LINE MAIN A
CU501	PRECAST SANITARY SEWER MANHOLE
CU502	MANHOLE FRAME AND COVER (SANITARY SEWER)
CU503	BACK OF CURB & CURB INLET PROTECTIONS & CONSTRUCTION ENTRANCE
CU504	SILT FENCE DITCH CHECK AND BARRIER DETAILS
CU505	STRAW BALE DITCH CHECK AND BARRIER DETAILS
CU506	STREET IMPROVEMENT PROJECTS

INSPECTOR	PEC	TIGER WILLIAMS
	PEC	BRANDON DELANEY
CONTRACTOR	NOWAK CONSTRUCTION	DAVE STARECK
	NOWAK CONSTRUCTION	JIM NOWAK
COMPANY	CITY OF WICHITA	EVER VILLALOBOS

Item	Manufacturer	Qty	Unit
Pipe, End Section 15"	Diamond	2	ea
Pipe, SS 8"	Diamond	4,486	lf
Pipe Plug, 8"	Diamond	3	ea
Pipe, SS 8"	Diamond	362	lf
Pipe, SS 12"	Diamond	185	lf
Pipe Stub, 8"	Diamond	1	ea
Pipe, SWS, RCBC (12'x4')	Wichita Concrete Pipe	109	lf
Pipe, SWS, RCBC (Double 8'x3')	Wichita Concrete Pipe	94	lf
Pipe, SWS 15"	Wichita Concrete Pipe	42	lf
Pipe, End Section 24"	Wichita Concrete Pipe	2	ea
Pipe, End Section 14"x23" HERCP	Wichita Concrete Pipe	2	ea
Pipe, SWS 15"	Wichita Concrete Pipe	69	lf
Pipe, SWS 18"	Wichita Concrete Pipe	254	lf
Pipe, SWS 24"	Wichita Concrete Pipe	766	lf
Pipe, SWS 30"	Wichita Concrete Pipe	241	lf
Pipe, SWS 36"	Wichita Concrete Pipe	275	lf
Pipe, SWS, HERCP, 14"x23"	Wichita Concrete Pipe	60	lf
Pipe, Plug	Wichita Concrete Pipe	3	ea

MAY 2025

RED LINE - FIELD SET
08/17/2026 - cjr
Prepared By: Tiger Williams
Brandon Delaney
Date: JULY 2025
PEC FIELD SERVICES

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

CITY OF WICHITA

KEVIN P. GRAHAM
LICENSED
27806
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

OFFSITE SANITARY SEWER MAIN IMPROVEMENTS

SWANEY FARM ADDITION

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007803

Issue:		

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-006
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

TITLE SHEET

CU001

SAVED 5/9/2025 8:06:57 AM BY DUSTIN.LOHMANN
PLOTTED 5/27/2025 7:10:05 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\0042\2PD3_PLANS\030_OFFSITE SANITARY\200605-006-CU001.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 HORIZONTAL AND VERTICAL CONTROL POINTS 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 AND SECTION CORNERS WHICH ARE DAMAGED OR DESTROYED BY CONSTRUCTION OPERATIONS. SUCH IRONS AND SECTION CORNERS 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. THE CONTRACTOR SHALL BE RESPONSIBLE FOR 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 FOR STATE OWNED/ OPERATED PROPERTY: FOR OTHER PROPERTIES: LOCAL FLOODPLAIN ADMINISTRATOR 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 AND PARKS 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 PROJECT 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.

21. CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION STAKING. STAKING AND BENCH MARKS DESTROYED DURING CONSTRUCTION OPERATIONS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

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

23. WRITTEN REQUEST TO THE 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.

24. THE CONTRACTOR SHALL LIMIT THE EXTENT OF TRENCH TO REMAIN OPEN OVERNIGHT AND WEEKENDS TO LESS THAN 50 FEET.

25. THE CONTRACTOR SHALL NOT BURY MANHOLES OR CLEANOUTS THAT HAVE TOP ELEVATIONS WHICH ARE LOWER THAN EXISTING GROUND. THE GROUND AROUND SUCH MANHOLES AND CLEANOUTS AND ALONG THE SEWER ALIGNMENT SHALL BE BACKFILLED TO THE APPROXIMATE ELEVATION OF THE PROPOSED GROUND ELEVATION SHOWN ON THE PLAN/PROFILE SHEETS. THE CONTRACTOR SHALL PROVIDE DRAINAGE AWAY FROM THESE MANHOLES OR CLEANOUTS AND SEWER LINES BY CONSTRUCTION OF TEMPORARY DITCHES OR SLOPING THE GROUND AS REQUIRED.

26. THE CONTRACTOR SHALL PROVIDE MOUNDED EARTH AT MANHOLES AND CLEANOUTS THAT HAVE TOP ELEVATIONS GREATER THAN 1 FOOT ABOVE FINISHED GRADE, AS SHOWN ON THE DRAWINGS.

27. THE CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE AWAY FROM ALL MANHOLE COVERS.

28. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING CONTINUOUS FLOW OF SEWAGE THROUGH CONSTRUCTION. CONTRACTOR'S PROPOSED METHOD FOR MAINTAINING SEWAGE FLOW SHALL BE SUBMITTED AND APPROVED BY THE ENGINEER PRIOR TO STARTING AND BY-PASSING OF SEWAGE FLOWS.

29. THE CONTRACTOR SHALL PREVENT ANY CONSTRUCTION DEBRIS FROM ENTERING THE EXISTING SANITARY SEWER DURING CONSTRUCTION.

30. CONTRACTOR SHALL NOT DIVERT ANY SEWAGE FLOW THROUGH NEW PIPE OR MANHOLES UNTIL TESTING HAS BEEN COMPLETED AND ACCEPTED.

31. CONTRACTOR SHALL POTHOLE ALL UTILITY CROSSINGS A MINIMUM OF 200 FT AHEAD OF THE EXCAVATION FOR OPEN CUT AND 500 FT AHEAD OF HDD INSTALLATION. CONTRACTOR TO NOTIFY RPR AND ENGINEER OF ANY CONFLICTS.

32. 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. THE FOLLOWING QUANTITIES ARE ESTIMATED, AND SHOULD BE CONSIDERED THE MINIMUM EFFORT REQUIRED.

33. ALL LAWN/TURF AREAS DISTURBED BY CONSTRUCTION OF THE PROPOSED IMPROVEMENTS SHALL BE RESTORED WITH THE SAME GRASS/SOD AS EXISTING. RESTORATION OF DISTURBED AREAS SHALL INCLUDE, BUT NOT BE LIMITED TO, TOP SOIL PREPARATION, SEEDING, MULCHING, AND/OR RE-SEEDING. ALL SEEDING/SODDING WORK SHALL BE IN ACCORDANCE WITH THE CITY OF WICHITA STANDARD SPECIFICATIONS AND THE CITY OF WICHITA ADMINISTRATIVE REGULATION NO. AR6.5 WHICH GOVERNS CLEANUP AND RESTORATION OR REPLACEMENT FOLLOWING CONSTRUCTION. ALL COSTS FOR THIS WORK SHALL BE SUBSIDIARY TO "SITE RESTORATION".

34. OPENING AND CLOSING WATER VALVES SHALL BE DONE SLOWLY TO PREVENT DAMAGE TO THE WATER DISTRIBUTION SYSTEM FROM WATER HAMMER. ALL VALVES CLOSED BY THE CONTRACTOR MUST BE REOPENED AS NEW CONSTRUCTION PERMITS. PROJECT INSPECTOR MUST ASCERTAIN THAT ANY VALVE CLOSED BY THE CONTRACTOR IS REOPENED. CONTRACTOR WILL BE PERMITTED TO OPERATE WATER VALVES ONLY WHEN THE PROJECT INSPECTOR ASSIGNED TO THE PROJECT IS PRESENT.

35. WHERE INDICATED IN THE DRAWINGS, THE SANITARY SEWER EXCAVATION 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 MPROVED BACKFILL MATERIAL IS OTHERWISE SPECIFIED. ALL COSTS FOR SAND FILLING AND FLUSHING SHALL BE INCLUDED IN THE UNIT PRICE BID FOR "JETTED SAND BACKFILL".

36. MAINTAIN A MINIMUM OF 10-FOOT HORIZONTAL SEPARATION BETWEEN ALL WATER LINES (MAINS, SERVICES, AND FIRE HYDRANTS) AND ALL SANITARY SEWER LINES (MAINS, SERVICES, AND MANHOLES). ALL SEPARATIONS DISTANCES ARE TO BE MEASURED FROM EDGE-TO-EDGE, AT THE CLOSEST POINT.

37. MAINTAIN A MINIMUM OF 2-FOOT VERTICAL SEPARATION BETWEEN ALL WATER LINES (MAIN AND SERVICES) AND ALL GRAVITY SANITARY SEWER LINES (MAINS, SERVICES, AND MANHOLES) AT CROSSINGS. ALL SEPARATION DISTANCES ARE TO BE MEASURED FROM EDGE-TO-EDGE, AT THE CLOSEST POINT.

38. 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. FULL TREE REMOVAL SHALL BE NOTED ON THE PLANS AND SHALL BE BID AS "TREE REMOVED, LARGE", "TREE REMOVED, SMALL", OR "TREE ROW REMOVED".

UTILITY CONTACTS

DEB ARY
WICHITA SANITARY SEWER
7TH FLOOR - CITY HALL
455 N. MAIN
WICHITA, KS 67202
316-268-4614

GREG LOLLEY
WICHITA WATER
8TH FLOOR - CITY HALL
455 N. MAIN
WICHITA, KS 67202
316-268-4334

JOE HICKLE
WICHITA STORM SEWER
7TH FLOOR - CITY HALL
455 N. MAIN
WICHITA, KS 67202
316-268-4307

JAMES WALBURN
COX COMMUNICATIONS
ENGINEERING DEPARTMENT
901 GEORGE WASHINGTON BLVD.
WICHITA, KS 67211
316-260-7491

KEVIN RIESCHICK
EVERGY
1900 E. CENTRAL (3RD FLOOR)
P.O. BOX 208
WICHITA, KS 67201
785-410-2986

JASON EDWARDS
AT&T WICHITA CENTRAL UNIT
154 N. BROADWAY, ROOM 210
WICHITA, KS 67202
316-268-2008

ANDREA FOUST
KANSAS GAS SERVICE
1021 E. 26TH ST. NORTH
WICHITA, KS 67219
316-832-3126

SUZETTE WILSON & CHRIS KELLY
BLACK HILLS ENERGY
2330 N. HOOVER ROAD
WICHITA, KS 67205
SUZETTE WILSON
316-941-1631
CHRIS KELLY 316-941-1633

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

CITY OF WICHITA

KEVIN P. O'HAIR LICENSED 27806 05/27/2025 KANSAS PROFESSIONAL ENGINEER

OFFSITE SANITARY SEWER MAIN IMPROVEMENTS

SWANEY FARM ADDITION

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007803

Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-006
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

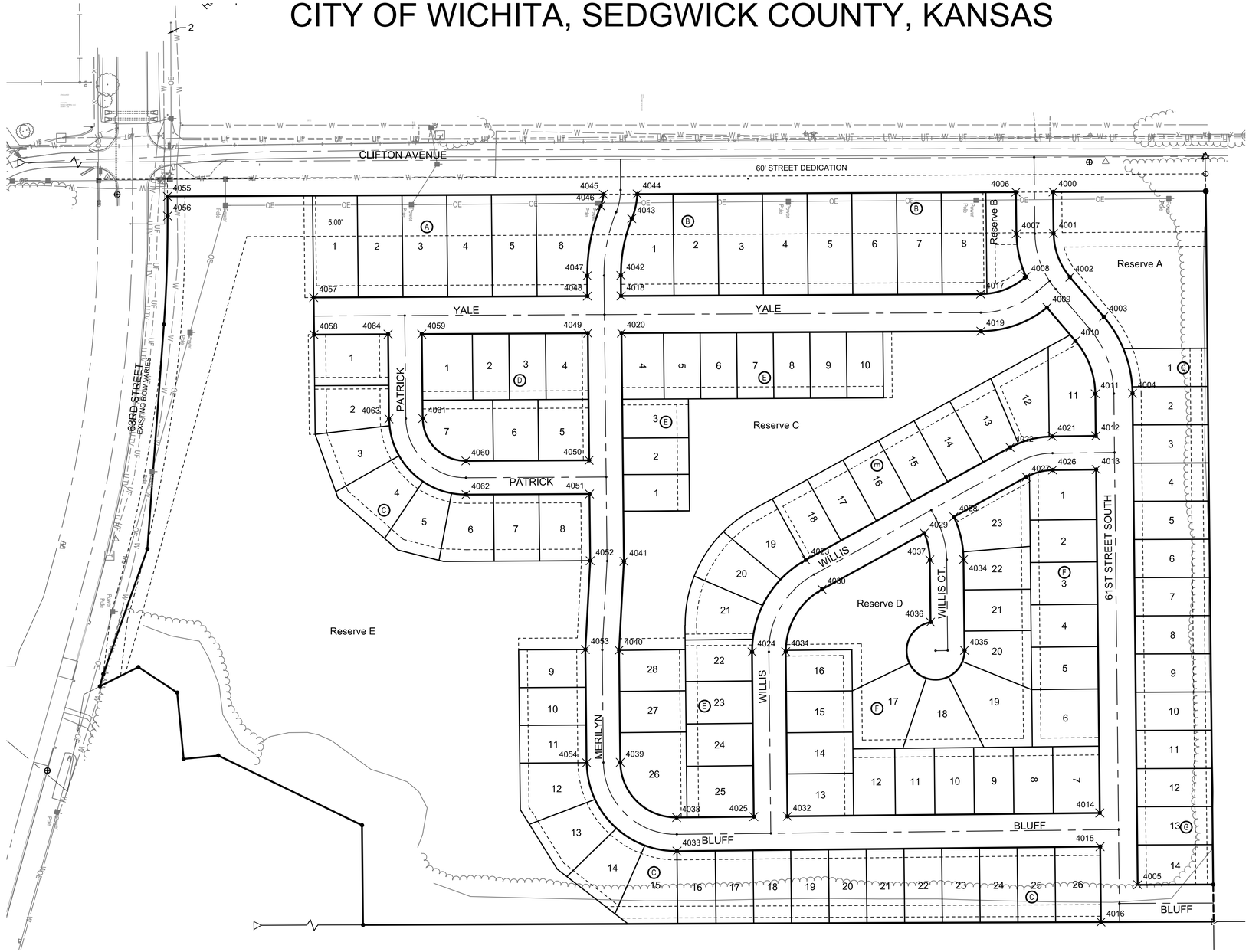
GENERAL NOTES

CU002

SAVED 5/9/2025 8:07:16 AM BY DUSTIN.LOHMANN
PLOTTED 5/27/2025 7:10:10 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_OFFSITE SANITARY\200605-006-CU002.DWG

SWANEY FARM ADDITION

CITY OF WICHITA, SEDGWICK COUNTY, KANSAS



COORDINATE LIST		
POINT	NORTHING	EASTING
4000	333,343.3466	17,559,773.0152
4001	333,344.1138	17,559,844.4466
4002	333,372.3226	17,559,919.7478
4003	333,430.5986	17,559,988.0827
4004	333,480.0831	17,560,120.1786
4005	333,489.1775	17,560,966.8820
4006	333,279.3464	17,559,773.3402
4007	333,280.1175	17,559,845.1339
4008	333,296.6557	17,559,919.0071
4009	333,332.8977	17,559,972.1487
4010	333,381.9019	17,560,029.6113
4011	333,416.0868	17,560,120.8660
4012	333,416.8654	17,560,193.3566
4013	333,417.4884	17,560,251.3533
4014	333,423.8444	17,560,843.1131
4015	333,424.4673	17,560,901.1097
4016	333,425.8638	17,561,031.1256
4017	333,218.6228	17,559,948.9809
4018	332,599.2274	17,559,952.1265
4019	333,218.9479	17,560,012.9800
4020	332,599.9148	17,560,016.1239
4021	333,341.9495	17,560,194.1613
4022	333,269.3231	17,560,213.2509
4023	332,917.4815	17,560,406.9842
4024	332,824.8307	17,560,565.7078
4025	332,827.8791	17,560,849.5143
4026	333,342.5724	17,560,252.1580
4027	333,297.2988	17,560,264.0580
4028	333,172.4510	17,560,332.8025
4029	333,121.4698	17,560,360.8741
4030	332,945.4578	17,560,457.7909
4031	332,882.8274	17,560,565.0849
4032	332,885.8757	17,560,848.8913
4033	332,695.5094	17,560,908.9394
4034	333,189.1402	17,560,406.3752
4035	333,190.8221	17,560,562.9656
4036	333,132.2953	17,560,514.2356
4037	333,131.1435	17,560,406.9982
4038	332,694.8864	17,560,850.9427
4039	332,597.8609	17,560,755.9793
4040	332,595.7860	17,560,562.8014
4041	332,604.1418	17,560,409.6721
4042	332,598.8484	17,559,916.8443
4043	332,617.6067	17,559,818.9041
4044	332,627.0807	17,559,776.6528
4045	332,568.9094	17,559,776.9483
4046	332,563.9446	17,559,796.8954
4047	332,540.8518	17,559,917.4672
4048	332,541.2272	17,559,952.4211
4049	332,541.9146	17,560,016.4184
4050	332,544.2668	17,560,235.4093
4051	332,544.8897	17,560,293.4069
4052	332,546.1249	17,560,408.4021
4053	332,537.7690	17,560,561.5314
4054	332,539.8643	17,560,756.6023
4055	331,817.9201	17,559,780.7622
4056	331,818.1197	17,559,814.4100
4057	332,069.7266	17,559,954.9006
4058	332,070.4131	17,560,018.8130
4059	332,255.9138	17,560,017.8778
4060	332,331.8471	17,560,236.4881
4061	332,257.4756	17,560,163.2907
4062	332,332.1417	17,560,294.4874
4063	332,199.4790	17,560,163.9137
4064	332,197.9136	17,560,018.1724

PEC
0 100' 200'

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

CITY OF WICHITA

KEVIN P. GRAHAM
LICENSED
27806
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

OFFSITE SANITARY SEWER MAIN IMPROVEMENTS

SWANEY FARM ADDITION

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007803

Issue:		
	08/17/2026 - cjr	

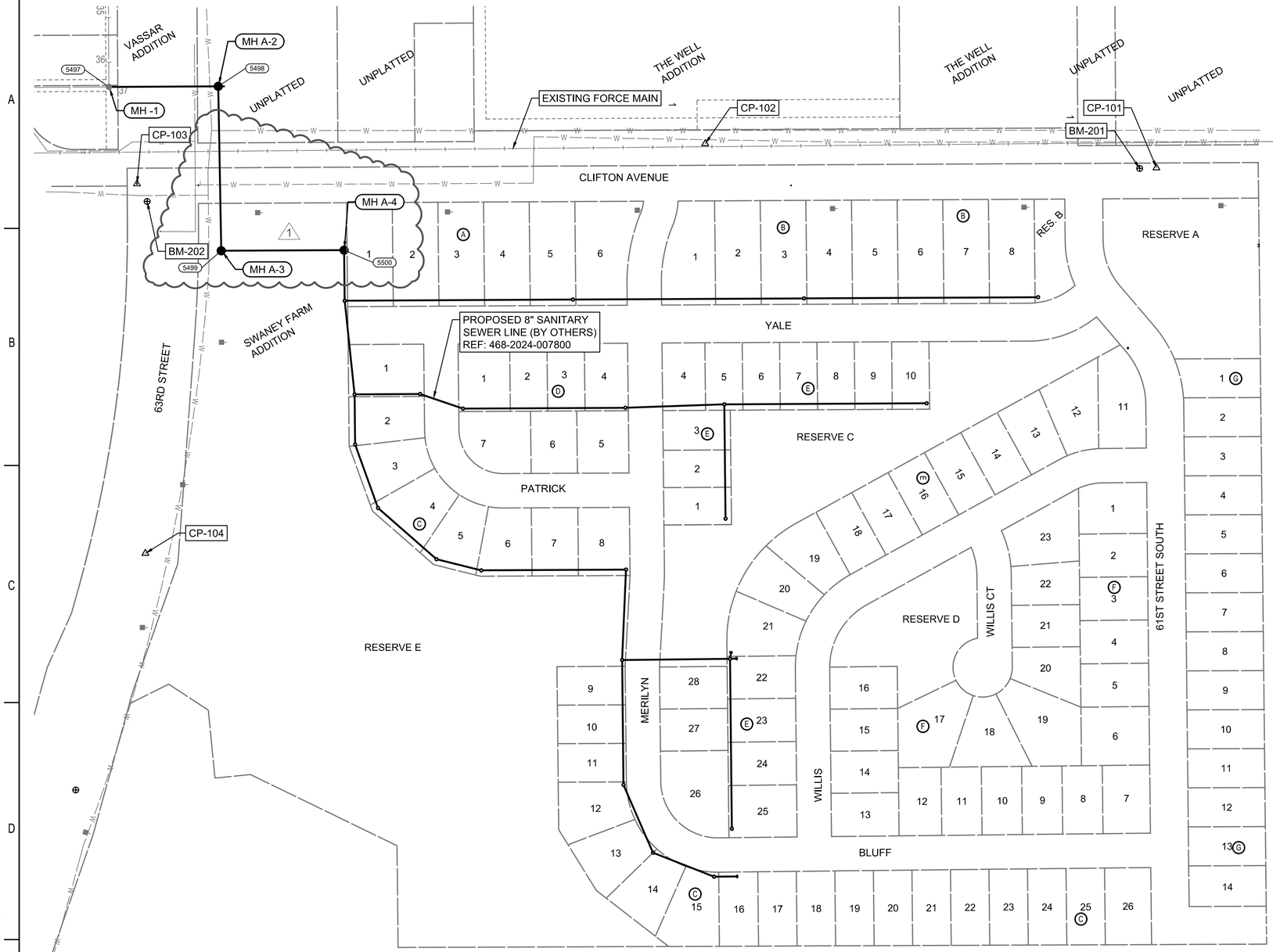
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-006
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

PLAT BUBBLE MAP

CU003

SAVED 5/9/2025 8:07:23 AM BY DUSTIN.LOHMANN
PLOTTED 5/27/2025 7:10:18 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\0042\PD3_PLANS\030_OFFSITE SANITARY\200605-006-CU003.DWG



STRUCTURE TABLE			
ID	STATION	COORDINATES	DESCRIPTION
MH -1	10+00.0 SS MAIN A	N: 331,666.9080 E: 17,559,584.2400	4' DIAMETER MANHOLE
MH A-2	11+84.4 SS MAIN A	N: 331,851.2669 E: 17,559,583.1533	5' DIAMETER MANHOLE
MH A-3	14+61.8 SS MAIN A	N: 331,856.3943 E: 17,559,860.5679	4' DIAMETER MANHOLE
MH A-4	16+69.1 SS MAIN A	N: 332,063.7041 E: 17,559,859.5150	4' DIAMETER MANHOLE

1

SEE SHEET NO. CU003
FOR PLAT COORDINATES.

PEC
0 100' 200'

HORIZONTAL DATUM/COORDINATE SYSTEM:
KRCS ZONE 17 - WICHITA

BENCHMARKS
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 AVENUE AND 63RD STREET.

BM-203 (NOT SHOWN)
ELEV: 1,265.85 (NAVD 88)
CHISELED SQUARE ON THE SOUTH CENTER OF CURB STORM DRAIN LOCATED ON THE NORTH SIDE OF 63RD STREET, 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 (NOT SHOWN)
N: 331,530.9404 E: 17,560,836.2700
1/2 BAR WITH PEC PAC
1. 6' N TO SOUTH BACK OF CURB
2. 45.25' E TO NO PARKING SIGN
3. 35' N TO CENTERLINE OF ROAD

CP-106 (NOT SHOWN)
N: 331,485.8918 E: 17,559,660.4146
1/2 BAR
1. 17.5' E TO NW CORNER OF PRIVACY FENCE
2. 15' SSW TO CEDAR TREE
3. 23' N TO CENTERLINE OF ROAD

LEGEND

EXISTING SANITARY SEWER WITH MANHOLE

PROPOSED SANITARY SEWER WITH MANHOLE

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

CITY OF WICHITA

KEVIN P. GRAHAM
LICENSED
27806
10/08/2025
KANSAS
PROFESSIONAL ENGINEER

OFFSITE SANITARY SEWER MAIN IMPROVEMENTS

SWANEY FARM ADDITION

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007803

Issue:		
1	ADDENDUM 1	10/08/25
	08/17/2026 - cjr	

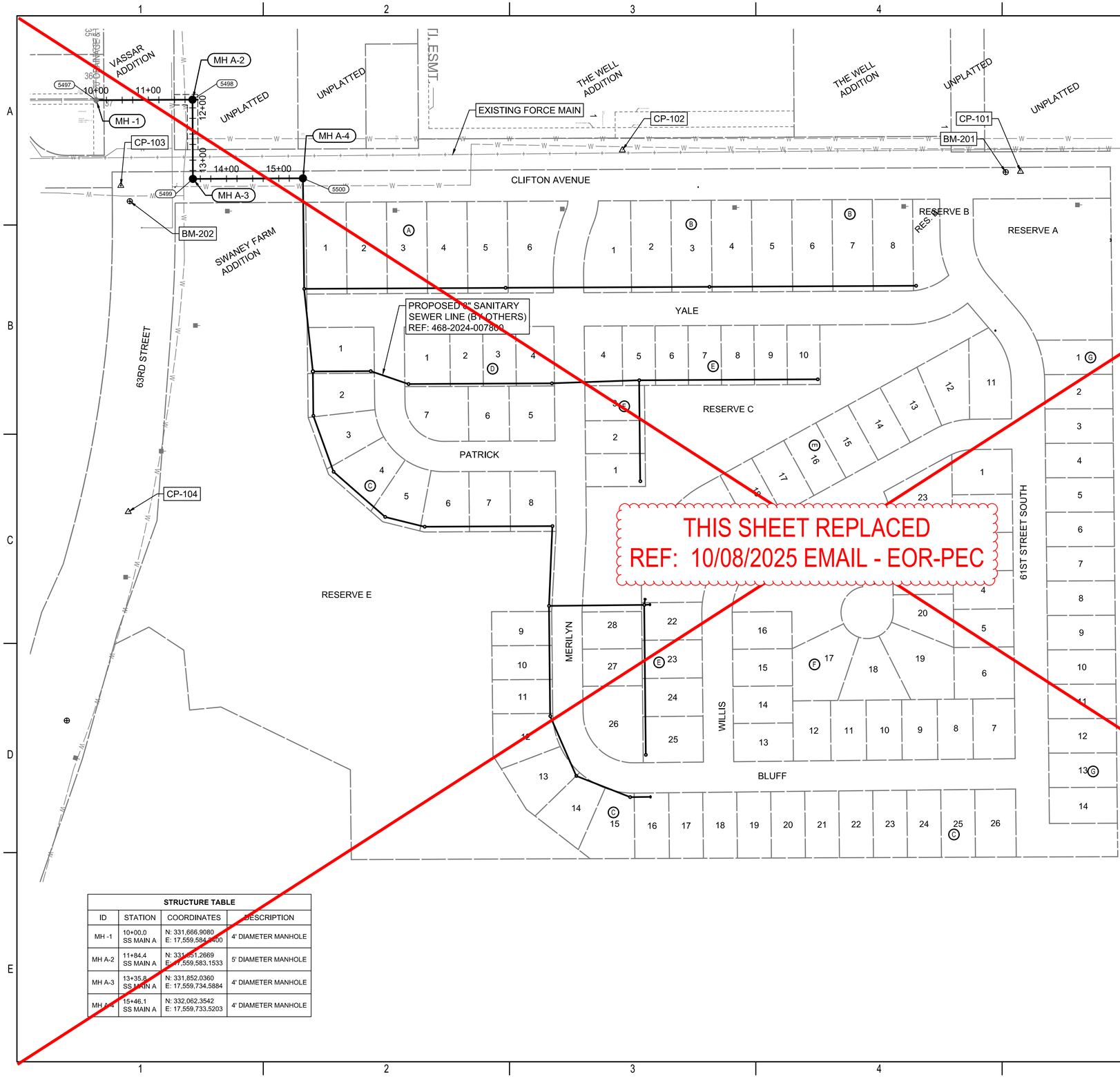
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-006
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

SANITARY SEWER KEY MAP AND BUBBLE MAP

CU100 R

SAVED 5/16/2025 11:49:40 AM BY KEVIN.GRAHAM
PLOTTED 10/8/2025 3:26:30 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_OFFSITE SANITARY\200605-006-CU100.DWG



STRUCTURE TABLE			
ID	STATION	COORDINATES	DESCRIPTION
MH -1	10+00.0 SS MAIN A	N: 331,666.9080 E: 17,559,584.3400	4' DIAMETER MANHOLE
MH A-2	11+84.4 SS MAIN A	N: 331,851.2669 E: 17,559,583.1533	5' DIAMETER MANHOLE
MH A-3	13+35.8 SS MAIN A	N: 331,852.0360 E: 17,559,734.5884	4' DIAMETER MANHOLE
MH A-4	15+46.1 SS MAIN A	N: 332,062.3542 E: 17,559,733.5203	4' DIAMETER MANHOLE

SEE SHEET NO. CU003
FOR PLAT COORDINATES.

PEC
0 100' 200'

HORIZONTAL DATUM/COORDINATE SYSTEM:
KRCS ZONE 17 - WICHITA

BENCHMARKS
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 AVENUE AND 63RD STREET.

BM-203 (NOT SHOWN)
ELEV: 1,265.85 (NAVD 88)
CHISELED SQUARE ON THE SOUTH CENTER OF CURB STORM DRAIN LOCATED ON THE NORTH SIDE OF 63RD STREET, 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 (NOT SHOWN)
N: 331,530.9404 E: 17,560,836.2700
1/2 BAR WITH PEC PAC
1. 6' N TO SOUTH BACK OF CURB
2. 45.25' E TO NO PARKING SIGN
3. 35' N TO CENTERLINE OF ROAD

CP-106 (NOT SHOWN)
N: 331,485.8918 E: 17,559,660.4146
1/2 BAR
1. 17.5' E TO NW CORNER OF PRIVACY FENCE
2. 15' SSW TO CEDAR TREE
3. 23' N TO CENTERLINE OF ROAD

LEGEND
EXISTING SANITARY SEWER WITH MANHOLE
PROPOSED SANITARY SEWER WITH MANHOLE

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

CITY OF WICHITA

KEVIN P. GRAHAM
LICENSED
27806
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

OFFSITE SANITARY SEWER MAIN IMPROVEMENTS

SWANEY FARM ADDITION

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007803

Issue:	
	08/17/2026 - cjr

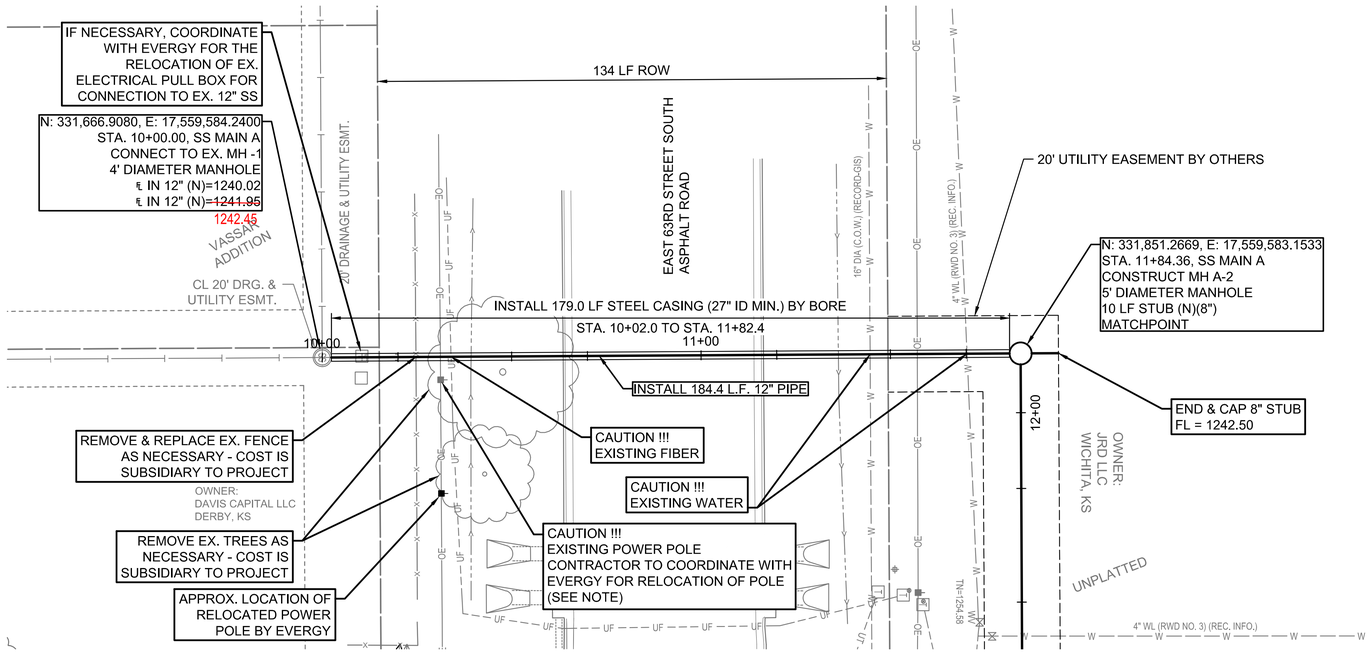
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

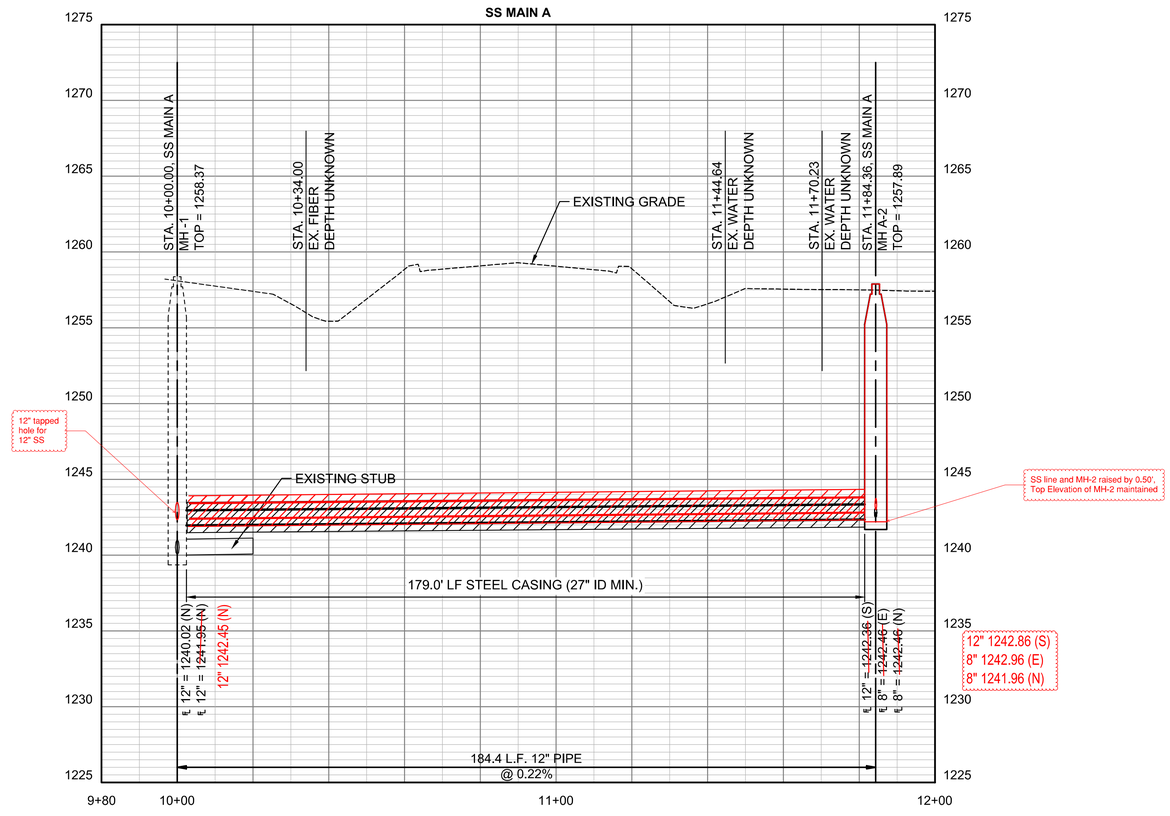
JOB NO.	200605-006
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

SANITARY SEWER KEY MAP AND BUBBLE MAP

CU100

SAVED 5/16/2025 11:49:40 AM BY DUSTIN.LOHMANN
PLOTTED 5/27/2025 7:10:48 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\00412PD3_PLANS\030_OFFSITE SANITARY\200605-006-CU100.DWG





PLAN: LAT. & LONG. 0 10' 20' 40'

PROFILE: HORIZ. SAME AS ABOVE

VERT:

EVERGY RELOCATION NOTES

1. CONTRACTOR SHALL BE RESPONSIBLE FOR CONTRACTING WITH EVERGY FOR THE RELOCATION OF THE EXISTING POWER POLE.
2. ALL COSTS FOR THE POWER POLE RELOCATION INCLUDING TRENCHING TO BE SUBSIDIARY TO "EVERGY UTILITY RELOCATIONS".
3. CONTRACTOR TO COORDINATE WITH KEVIN RIESCHICK AT EVERGY FOR DESIGN AND PRICING FOR RELOCATION OF EX. POWER POLE.
   KEVIN.RIESCHICK@EVERGY.COM
   785-410-2986

LEGEND

(5500) - SEE SHEET NO. CU100 FOR SANITARY SEWER COORDINATES (TYP.)

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

CITY OF WICHITA

KEVIN P. OR A HAM LICENSED 27806 05/27/2025 KANSAS PROFESSIONAL ENGINEER

OFFSITE SANITARY SEWER MAIN IMPROVEMENTS

SWANEY FARM ADDITION

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007803

Issue:		
	08/17/2026 - cjr	

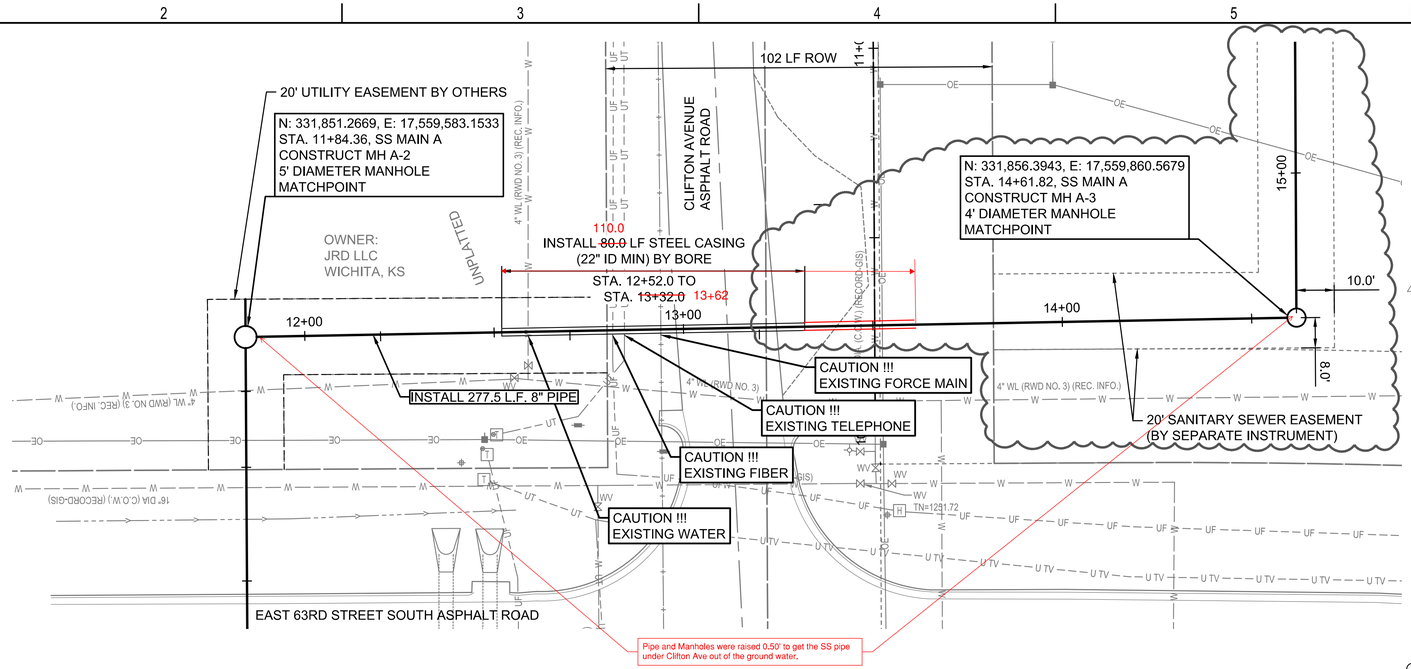
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-006
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

SANITARY SEWER LINE MAIN A

CU101

SAVED 5/16/2025 1:16:10 PM BY DUSTIN.LOHMANN
PLOTTED 5/27/2025 7:11:23 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_OFFSITE SANITARY\200605-006-CU101.DWG



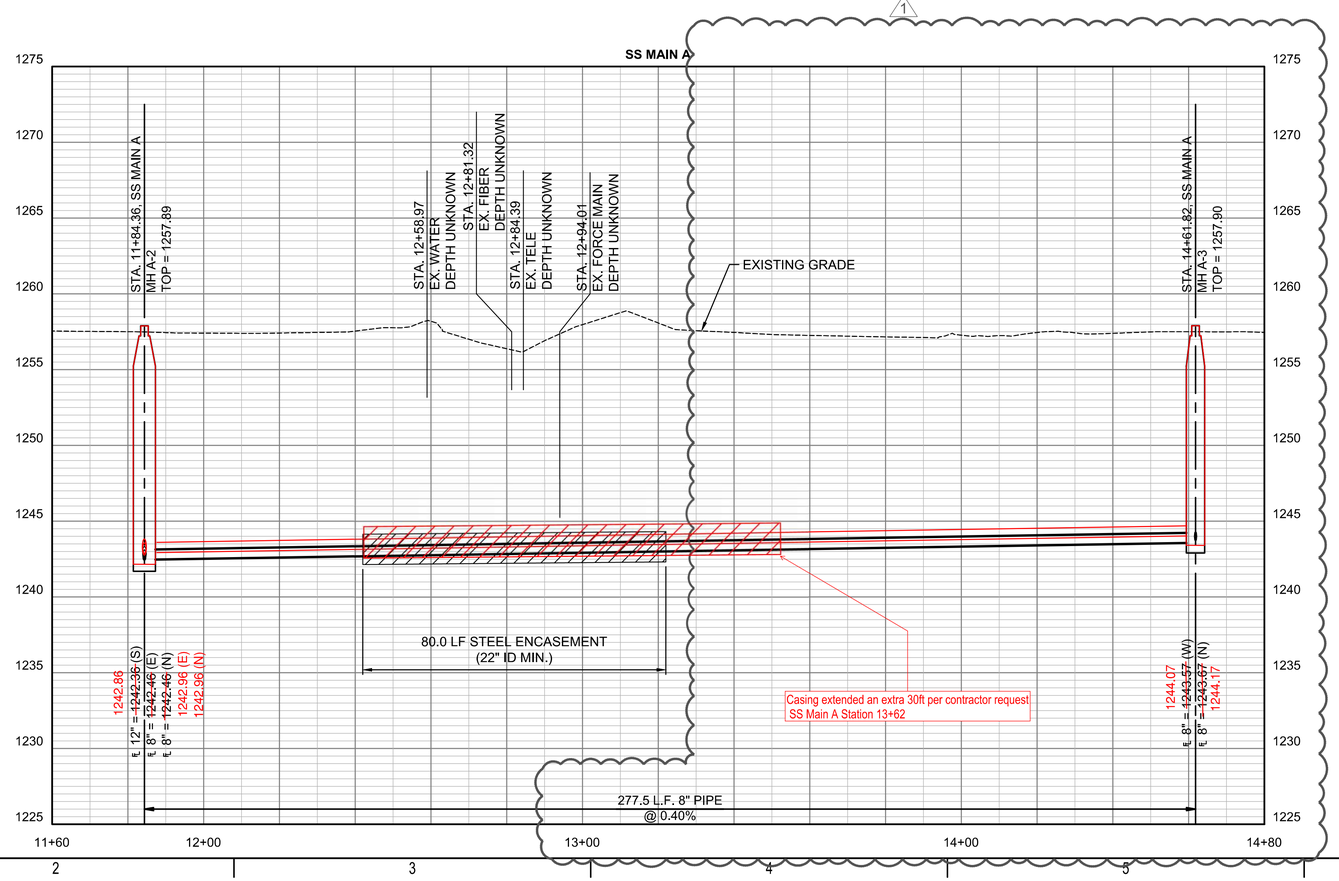
PLAN: LAT. & LONG. 0 10' 20' 40'

PROFILE: HORIZ. SAME AS ABOVE

VERT:

LEGEND

(5500) - SEE SHEET NO. CU100 FOR SANITARY SEWER COORDINATES (TYP.)



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

CITY OF WICHITA

KEVIN P. GRAHAM
LICENSED
27806
10/08/2025
KANSAS
PROFESSIONAL ENGINEER

OFFSITE SANITARY SEWER MAIN IMPROVEMENTS

SWANEY FARM ADDITION

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007803

Issue:		
1	ADDENDUM 1	10/08/25
	08/17/2026 - cjr	

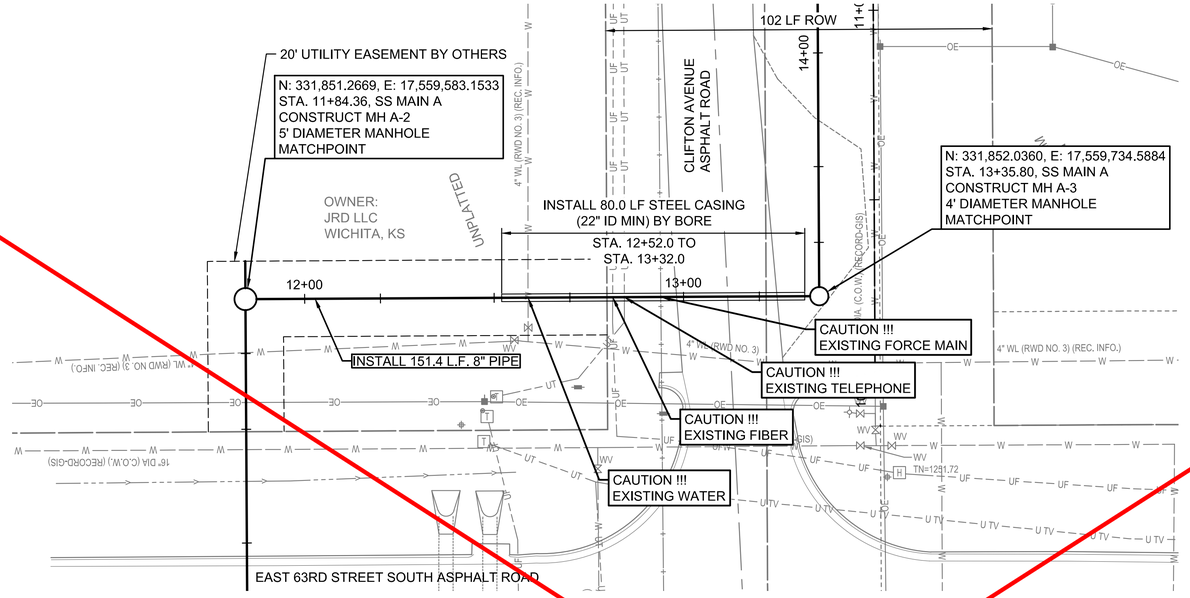
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

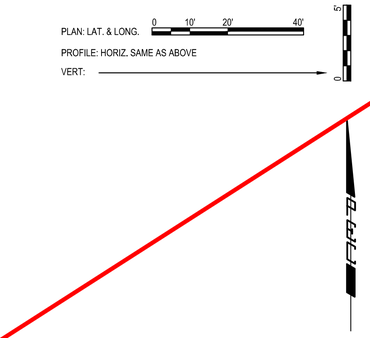
JOB NO.	200605-006
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

SANITARY SEWER LINE
MAIN A

CU102R

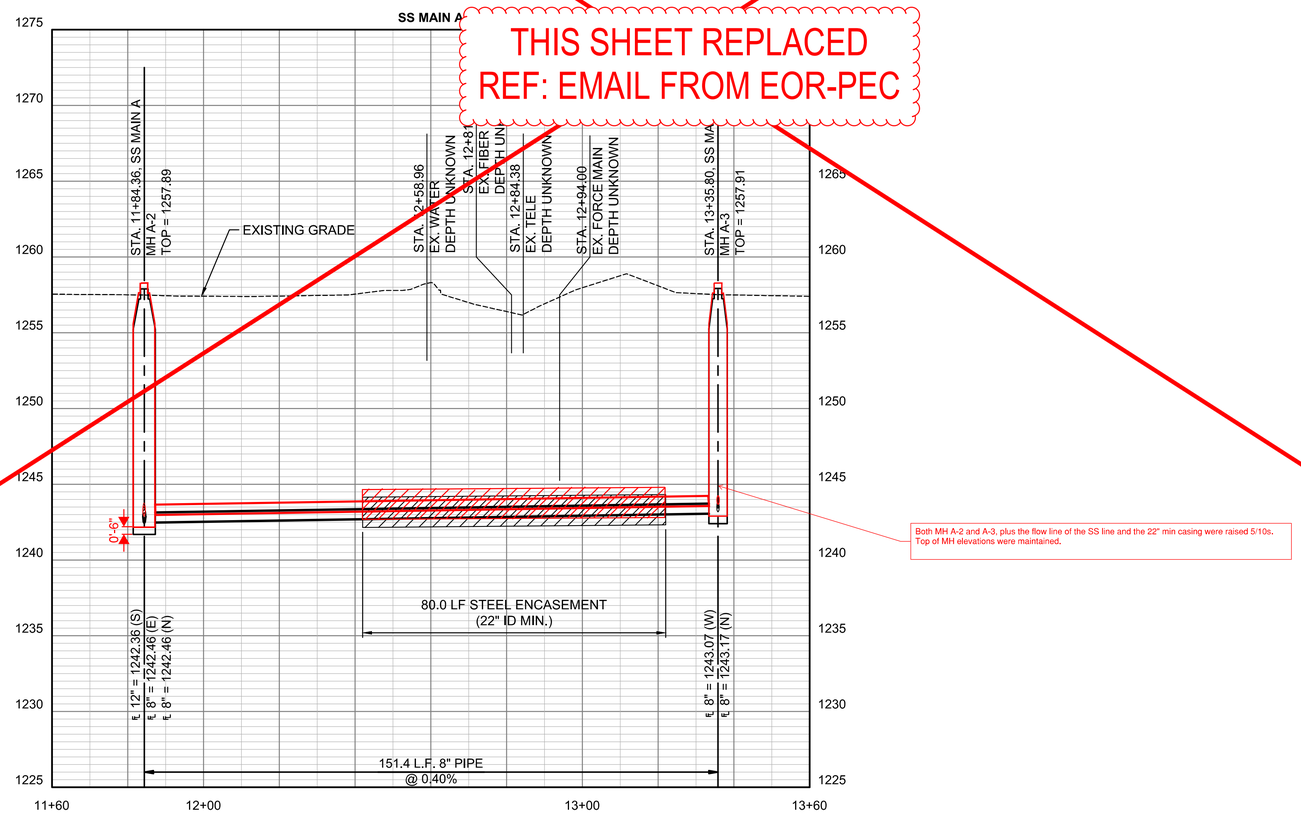
SAVED 10/8/2025 3:19:57 PM BY KEVIN.GRAHAM
PLOTTED 10/8/2025 3:34:18 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_OFFSITE SANITARY\200605-006-CU102.DWG





LEGEND

(5500) - SEE SHEET NO. CU100 FOR SANITARY SEWER COORDINATES (TYP.)



THIS SHEET REPLACED
REF: EMAIL FROM EOR-PEC

Both MH A-2 and A-3, plus the flow line of the SS line and the 22" min casing were raised 5/10s. Top of MH elevations were maintained.

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

CITY OF WICHITA

KEVIN P. GRAHAM
LICENSED
27806
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

OFFSITE SANITARY SEWER MAIN IMPROVEMENTS

SWANEY FARM ADDITION

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007803

Issue:	
	08/17/2026 - cjr

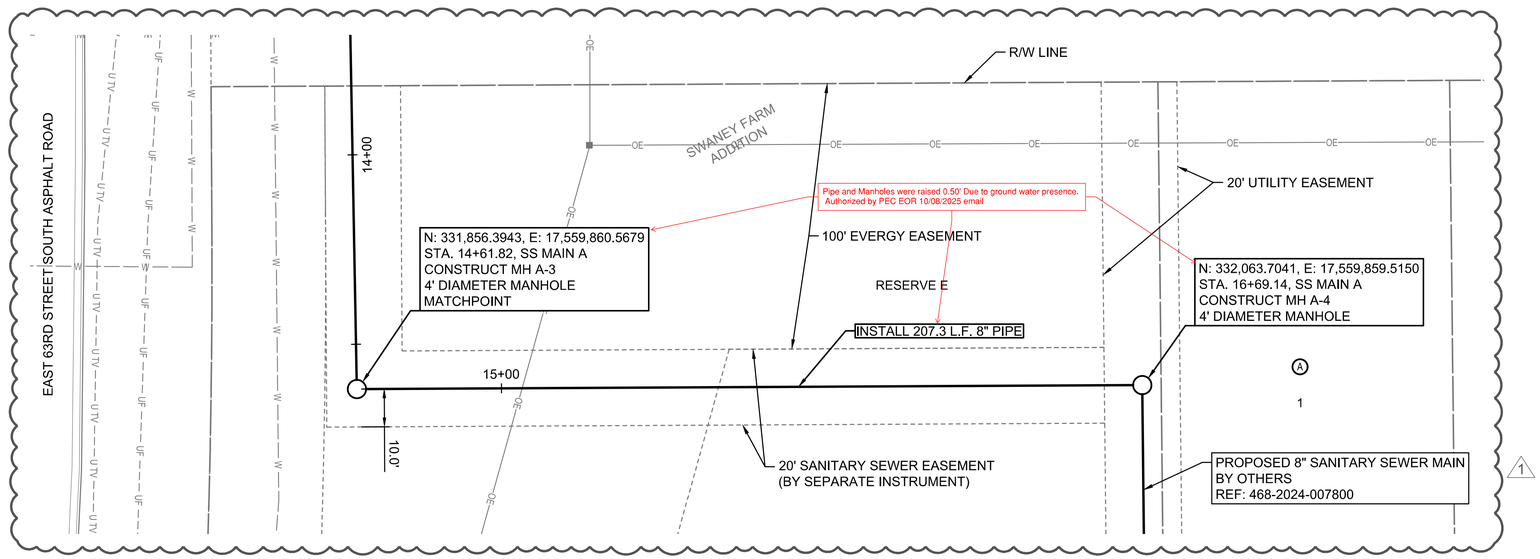
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-006
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

SANITARY SEWER LINE
MAIN A

CU102

SAVED 5/16/2025 12:21:49 PM BY DUSTIN.LOHMANN
PLOTTED 5/27/2025 7:11:58 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\00402\PD3_PLANS\030_OFFSITE SANITARY\200605-006-CU102.DWG



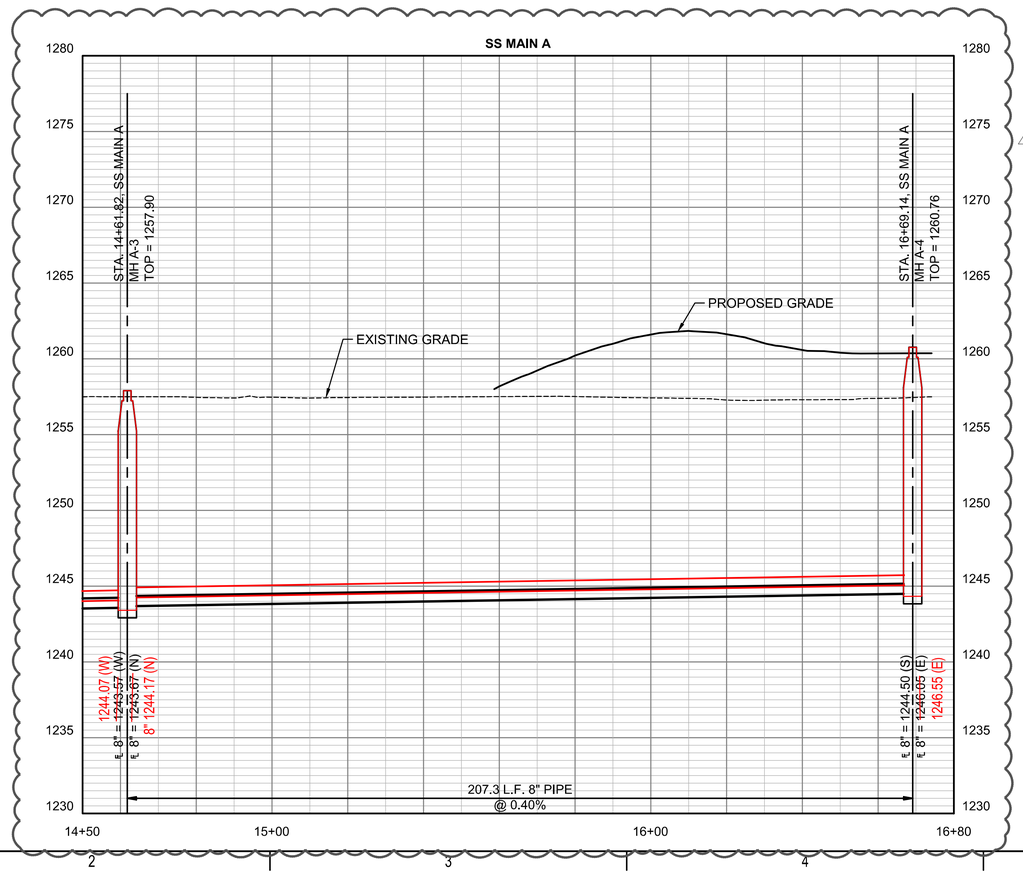
PLAN: LAT. & LONG. 0 10' 20' 40'

PROFILE: HORIZ. SAME AS ABOVE

VERT:

LEGEND

(5500) - SEE SHEET NO. CU100 FOR SANITARY SEWER COORDINATES (TYP.)



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

CITY OF WICHITA

KEVIN P. GRAHAM
LICENSED
27806
10/08/2025
KANSAS
PROFESSIONAL ENGINEER

OFFSITE SANITARY SEWER MAIN IMPROVEMENTS

SWANEY FARM ADDITION

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007803

Issue:		
1	ADDENDUM 1	10/08/25
	08/17/2026 - cjr	

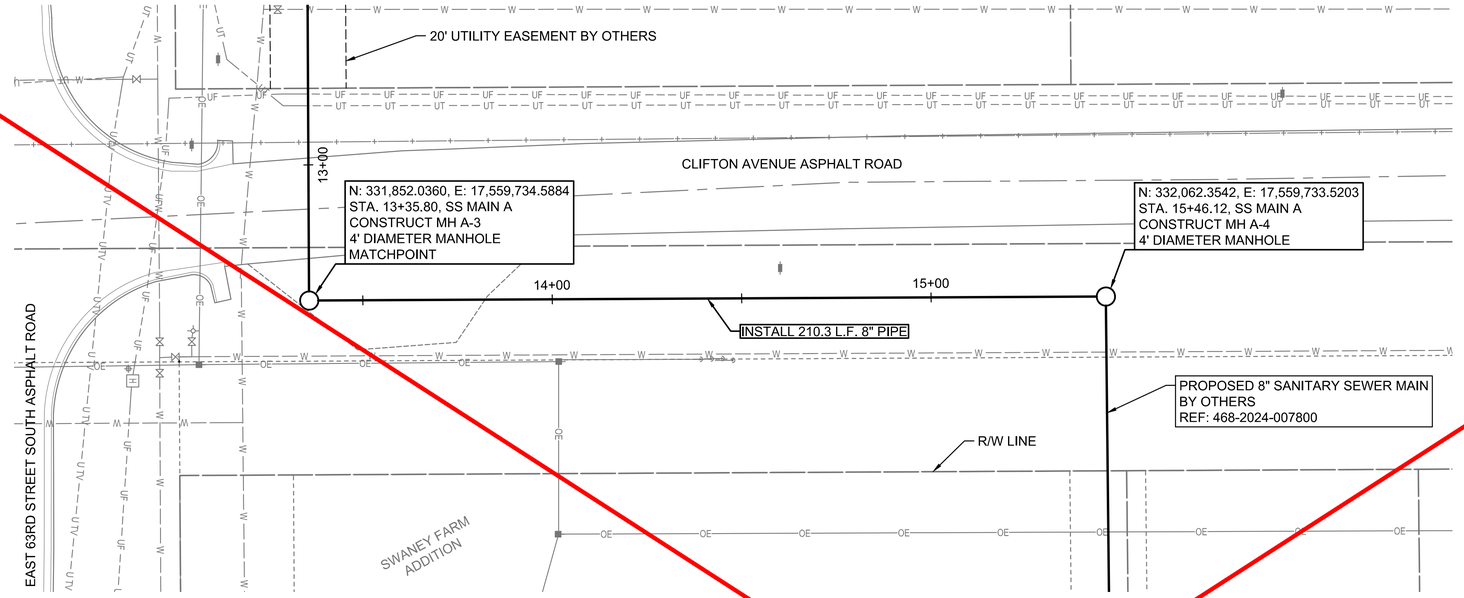
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-006
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

SANITARY SEWER LINE MAIN A

CU103 R

SAVED 5/16/2025 12:22:18 PM BY KEVIN.GRAHAM
PLOTTED 10/8/2025 3:37:12 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_OFFSITE SANITARY\200605-006-CU103.DWG



PLAN: LAT. & LONG. 0 10' 20' 40'

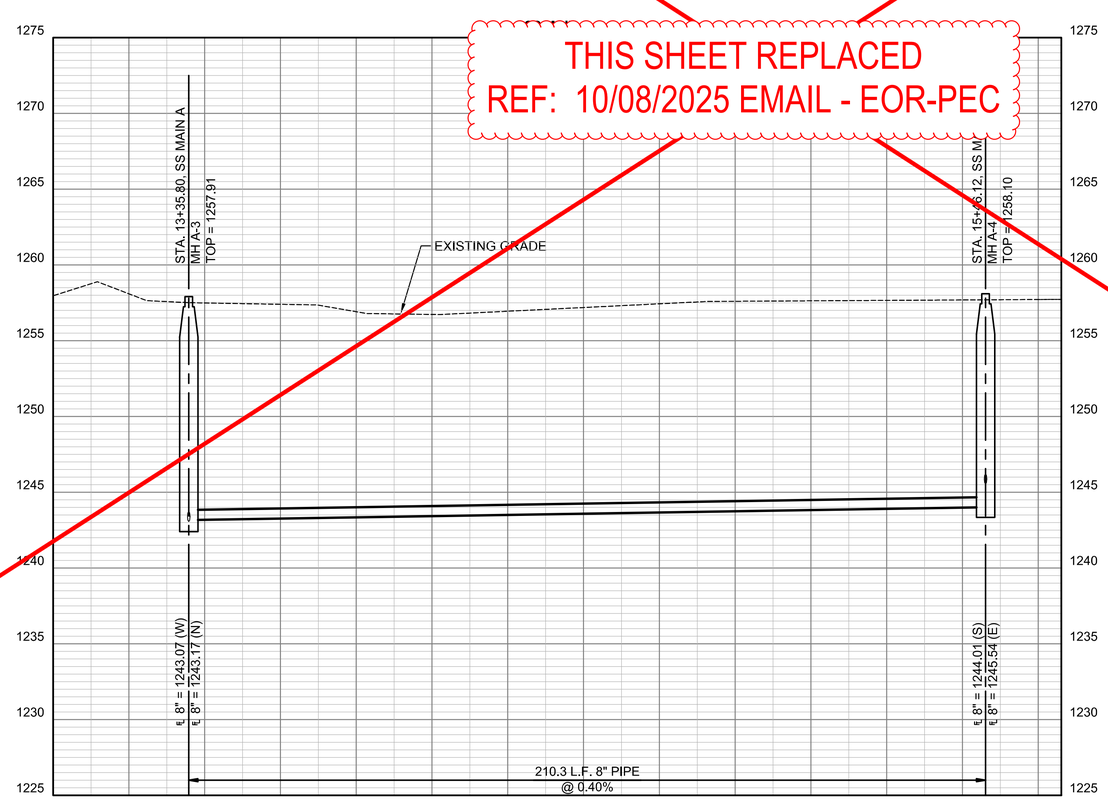
PROFILE: HORIZ. SAME AS ABOVE

VERT: 0 5 10

LEGEND

(5500) - SEE SHEET NO. CU100 FOR SANITARY SEWER COORDINATES (TYP.)

THIS SHEET REPLACED
REF: 10/08/2025 EMAIL - EOR-PEC



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

CITY OF WICHITA

KEVIN P. GRAHAM
LICENSED
27806
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

OFFSITE SANITARY SEWER MAIN IMPROVEMENTS

SWANEY FARM ADDITION

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007803

Issue:	
	08/17/2026 - cjr

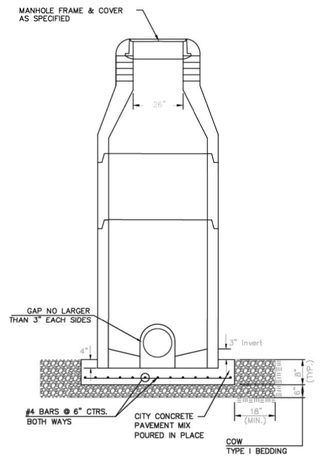
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-006
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

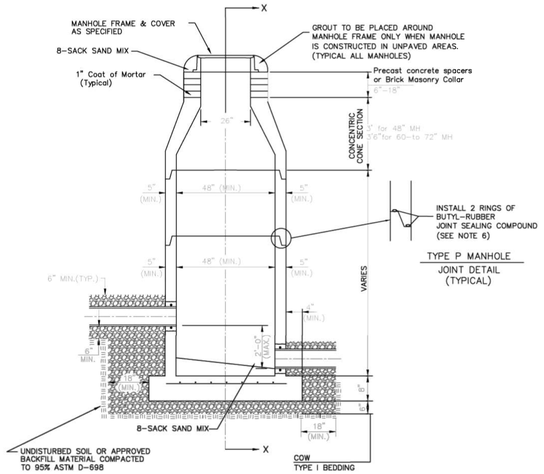
SANITARY SEWER LINE
MAIN A

CU103

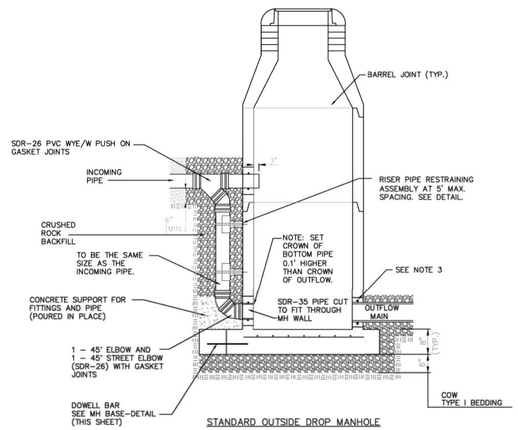
SAVED 5/16/2025 12:22:18 PM BY DUSTIN.LOHMANN
PLOTTED 5/27/2025 7:12:34 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_OFFSITE SANITARY\200605-006-CU103.DWG



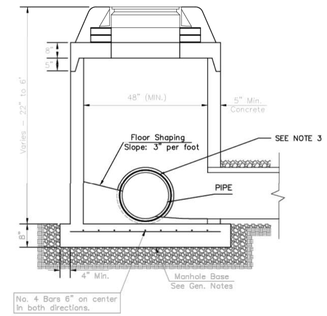
DOG HOUSE MANHOLE
(OVER EXISTING PIPE)
Not to Scale



STANDARD MANHOLE
Not to Scale

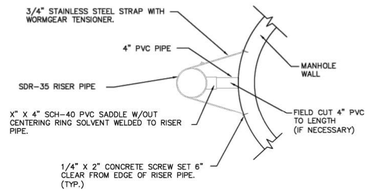


STANDARD OUTSIDE DROP MANHOLE
Not to Scale



SHALLOW MANHOLE
Not to Scale

= COW TYPE I BEDDING = UNDISTURBED SOIL



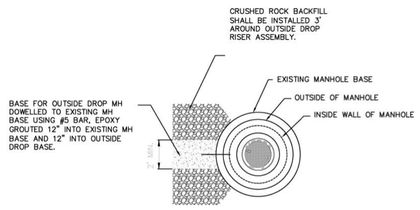
RISER PIPE RESTRAINING ASSEMBLY
Not to Scale

SANITARY SEWER MANHOLE DIAMETERS

DIAMETER	DEPTH	PIPE SIZE
4'	0'-15'	8"-18"
5'	>15'-30'	21"-30"
6'	>30'	36"-60"

PRECAST MANHOLE GENERAL NOTES

1. ALL PRECAST CONCRETE MANHOLE SECTIONS SHALL CONFORM TO THE LATEST REVISIONS OF A.S.T.M. C478 AS MODIFIED BY THE SPECIFICATIONS.
2. NON-SHRINK GROUT SHALL BE NON-METALLIC TYPE.
3. APPROVED FLEXIBLE WATERSTOP SHALL BE INSTALLED TO JOIN THE SEWER PIPE TO THE MANHOLE WALL. THE SEWER PIPE SHALL BE SUPPORTED WITH CRUSHED ROCK A MINIMUM OF 3 FEET FROM THE MANHOLE WALL AND TO THE FIRST JOINT FOR V.C.P. SUCH THAT THE JOINT REMAINS FLEXIBLE.
4. ALL INSIDE SURFACES OF THE CONCRETE MANHOLE WHICH WOULD BE EXPOSED TO SEWER GAS SHALL BE COATED PER SECTION 804.4 OF STANDARD SPECIFICATIONS.
5. EXTERIOR MANHOLE WALLS SHALL BE COATED PER SECTION 804.4 OF STANDARD SPECIFICATIONS.
6. JOINT SEALING COMPOUND SHALL BE PER 804.4 OF STANDARD SPECIFICATIONS.
7. ALL MANHOLE SECTION JOINTS THAT WILL BE IN GROUNDWATER OR GREATER THAN 12' DEEP SHALL BE WRAPPED WITH AN EXTERNAL JOINT SEAL PER SECTION 804.4 OF STANDARD SPECIFICATIONS. AS INDICATED BY THE PLANS.
8. PRECAST MANHOLES SHALL BE SET AT LEAST 4 INCHES INTO THE MANHOLE BASE FOR DOG HOUSE MANHOLES.
9. 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.
10. LIFTING HOLES SHALL BE FILLED WITH NON-SHRINK GROUT AND THE INTERIOR SURFACE COATED AS SPECIFIED.
11. MORTAR USED IN MASONRY CONSTRUCTION SHALL CONTAIN 8 SACKS OF CEMENT PER CUBIC YARD. CONCRETE USED IN MANHOLE BASES SHALL CONFORM TO THE REQUIREMENTS OF CONCRETE FOR CONCRETE PAVEMENT CONSTRUCTION AS SPECIFIED IN THE CITY STANDARD PAVING SPECIFICATIONS USING CITY CONCRETE PAVEMENT MIX WITHOUT AIR ENTRAINING ADMIXTURE. MORTAR SHALL BE PLACE AROUND THE MANHOLE RING AS SHOWN ON THE DRAWINGS WHEN MANHOLES ARE CONSTRUCTED IN UNPAVED AREAS. COMPLETED MANHOLE SHALL BE WITHOUT LEAKS AND WATER TIGHT.
12. REINFORCING STEEL SHALL BE INSTALLED IN THE MANHOLE BASES AND SHALL CONSIST OF NO.4 BARS PLACED ON 6" CENTERS IN BOTH DIRECTIONS. THE MANHOLE BASE REINFORCEMENT SHALL BE PLACED AT LEAST 3" ABOVE THE BOTTOM OF THE MANHOLE BASE. ALL COSTS FOR FURNISHING AND INSTALLING REINFORCING STEEL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE MANHOLE.
13. WALL THICKNESS SHALL BE 1" GREATER THAN MANHOLE DIAMETER IN FEET.
14. OPENINGS SHALL BE CORE DRILLED INTO THE MANHOLE WALL WHEN OUTSIDE DROPS ARE CONSTRUCTED ON EXISTING MANHOLES. SUCH OPENINGS DRILLED INTO EXISTING MANHOLES SHALL BE AS SMALL AS PRACTICAL TO FACILITATE INSTALLING AND GROUTING THE NEW PIPE IN PLACE. WATERSTOP GASKETS SHALL BE USED WITH P.V.C. PIPE. THE NEW PIPE SHALL BE GROUTED INTO THE OPENING USING AN APPROVED NONSHRINK GROUT FOR THE FULL MANHOLE WALL THICKNESS. THE EXTERIOR OF THE COMPLETED CONNECTION SHALL BE SEALED WITH AN APPROVED BITUMINOUS COATING SUCH THAT THE CONNECTION WILL BE WATER TIGHT. FLOOR OF MANHOLE SHALL BE MODIFIED TO FORM NEW FLOW CHANNEL FOR THE NEW CONNECTION AS INDICATED BY THE DRAWING. THIS WORK, INCLUDING MODIFICATION OF MANHOLE FLOOR, SHALL BE PAID FOR AT THE UNIT PRICE BID FOR OUTSIDE DROP STACK CONSTRUCTED ON EXISTING MANHOLE.
15. THE FLOORS OF ALL MANHOLES SHALL BE SHAPED WITH FLOW CHANNELS SUCH THAT THE MANHOLES WILL BE SELF CLEANING AND FREE OF AREAS WHERE SOLIDS COULD BE DEPOSITED AS SEWAGE FLOWS THROUGH THE MANHOLE FROM ALL INLET PIPES TO THE OUTLET PIPE. FLOW CHANNELS SHALL BE FORMED TO MATCH THE BOTTOM HALVES OF THE INFLOWING PIPES AND THE OUTFLOWING PIPE AS SHOWN BY THE DRAWINGS. MANHOLE 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 MANHOLES SHALL HAVE THE TOP HALF REMOVED TO NEAT LINES FOR THE FULL INSIDE DIAMETER OF THE MANHOLE. MANHOLE FLOORS SHALL THEN BE SHAPED AROUND THE BOTTOM HALF OF THE PIPE WHICH FORMS THE FLOW CHANNEL.
16. MANHOLE COVER CASTINGS AND MANHOLE FRAME CASTINGS SHALL CONFORM TO THE REQUIREMENTS AS INDICATED IN THE STANDARD SPECIFICATIONS AND AS SHOWN IN THE STANDARD DETAIL DRAWING.
17. THE VERTICAL DROP IN STANDARD MANHOLES SHALL NOT EXCEED 2' REGARDLESS OF PIPE SIZE. THE CROWNS OF INFLOWING PIPES SHALL NEVER BE SET LOWER THAN THE CROWN OF THE OUTFLOWING PIPE.
18. STANDARD MANHOLES SHALL BE BID AS STANDARD MANHOLES FOR THE TYPE AND DIAMETER INDICATED. OUTSIDE DROP MANHOLES SHALL BE BID AS STANDARD OUTSIDE DROP MANHOLES FOR THE TYPE AND DIAMETER INDICATED. ALL MANHOLE DIAMETERS WILL BE 4' UNLESS INDICATED OTHERWISE.
19. PRECAST CONCRETE SPACERS OR BRICK MASONRY COLLAR SHALL BE INSTALLED BETWEEN THE CAST IRON FRAME AND THE CONCENTRIC CONE. THE COLLAR WILL HAVE 8" WALLS AND A VERTICAL HEIGHT OF 6" MINIMUM AND 18" MAXIMUM. A 1" COAT OF MORTAR WILL BE PLASTERED ON THE OUTSIDE OF THE COLLAR. THE USE OF PRE-CAST CONCRETE SPACERS FOR MANHOLE TOP ADJUSTMENT IS ALSO ALLOWED.
20. THE FULL DIAMETER OF THE MANHOLE SHALL EXTEND THE ENTIRE DEPTH OF THE MANHOLE TO THE CONE SECTION. NO REDUCTION IN MANHOLE DIAMETER WILL BE ALLOWED.



MH BASE DETAIL
Not to Scale

REVISION NOVEMBER 2019	RISER PIPE RETAINING ASSEMBLY REVISED ON MANHOLE DRAWING

CITY OF WICHITA
PUBLIC WORKS & UTILITIES ENGINEERING DIVISION

PRECAST SANITARY SEWER MANHOLE

CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER	OCA NUMBER	DATE

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

SHEET

SS-101

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

CITY OF WICHITA

KEVIN P. D'GRADY LICENSED 27806 05/27/2025 KANSAS PROFESSIONAL ENGINEER

OFFSITE SANITARY SEWER MAIN IMPROVEMENTS

SWANEY FARM ADDITION

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007803

Issue:		
	08/17/2026 - cjr	

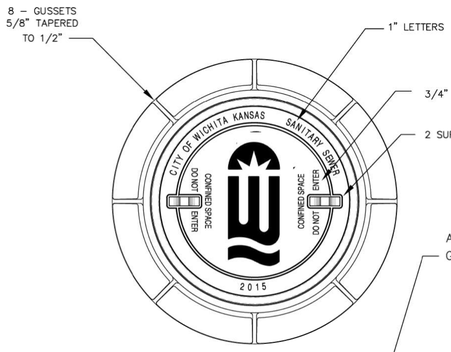
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-006
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

PRECAST SANITARY SEWER MANHOLE

CU501

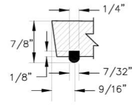
SAVED 6/5/2024 3:21:00 PM BY ARIC.HERMANN
PLOTTED 5/27/2025 7:12:43 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\0042\PD3_PLANS\030_OFFSITE SANITARY\200605-006-CU501.DWG



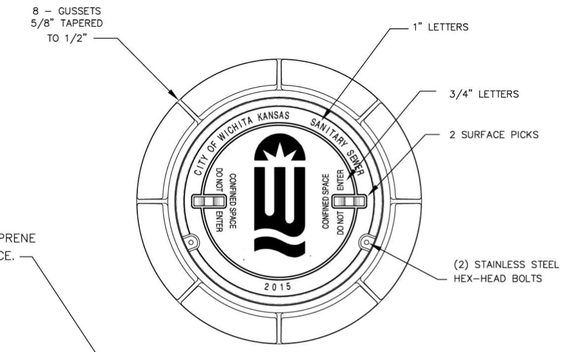
STANDARD MANHOLE FRAME & COVER

DEETER #1261 OR EJIW #1936–Z1

NOTE:
1. FURNISHED WITH MACHINED HORIZONTAL BEARING SURFACE.



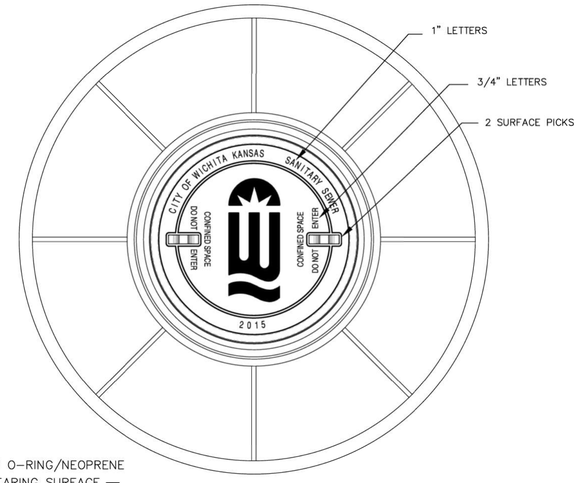
O–RING DETAIL



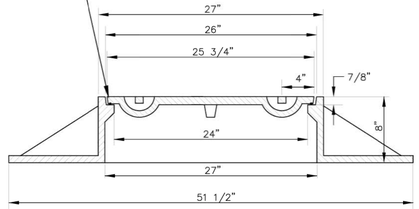
BOLT DOWN MANHOLE FRAME & COVER

DEETER #1261 OR EJIW #1936–Z1

NOTE:
1. FURNISHED WITH MACHINED HORIZONTAL BEARING SURFACE.



ALL LIDS TO BE FURNISHED WITH O–RING/NEOPRENE GASKET GLUED IN THE COVER BEARING SURFACE.



WIDE FLANGED FRAME & COVER

DEETER #1261A

NOTE:
1. FURNISHED WITH MACHINED HORIZONTAL BEARING SURFACE.

GENERAL NOTES

1. MANHOLE CASTINGS SHALL BE MANUFACTURED USING GOOD QUALITY GRAY IRON CONFORMING TO CLASS 30 OF A.S.T.M. DESIGNATION A–48. DIMENSIONS SHOWN ON THE DETAILED DRAWINGS SHALL BE CONSIDERED AS MINIMUM REQUIREMENTS AND ANY DEVIATIONS FROM THE DIMENSIONS SHOWN MUST BE SPECIFICALLY APPROVED. THE FINISHED CASTINGS SHALL BE OF UNIFORM QUALITY, FREE FROM BLOWHOLES, POROSITY, HARD SPOTS, SHRINKAGE DISTORTIONS OR OTHER DEFECTS.

2. MANHOLE CASTINGS SHALL BE MANUFACTURED SUCH THAT A COVER MANUFACTURED BY ANY ONE FOUNDARY WILL FIT INTERCHANGEABLY INTO A FRAME MANUFACTURED BY ANOTHER FOUNDRY AND STILL MEET ALLOWABLE CLEARANCES AND NON–ROCKING REQUIREMENTS. THIS WILL REQUIRE MANUFACTURING OF THE MATCHING FACES ON THE COVER AND THE FRAME TO CLOSE TOLERANCES.

3. THE OUTSIDE CIRCUMFERENCE OF THE VERTICAL FACE OF THE COVER AND THE INSIDE CIRCUMFERENCE OF THE VERTICAL FACE IN THE FRAME RECESS SHALL BE MANUFACTURED TO TOLERANCES SUCH THAT THE CLEARANCE BETWEEN THE COVER AND FRAME WILL NOT EXCEED 1/8" AT ANY POINT AROUND THE CIRCUMFERENCE OF THE COVER. THE SEATING SURFACES BETWEEN THE COVER AND FRAME SHALL BE MACHINED SUCH THAT THESE SEATING SURFACES SHALL MAKE FULL CONTACT FOR THEIR FULL CIRCUM–FERENCE TO PRECLUDE THE COVER FROM ROCKING IN THE FRAME.

4. THE MANHOLE FRAME AND COVER SHALL BE MARKED WITH LETTERING INDICATING THE NAME OF THE MANUFACTURER AND THE YEAR WHEN THE COVER OR FRAME WAS CAST. THE COVER SHALL BE FURTHER IDENTIFIED WITH REGARDS TO OWNERSHIP USING LETTERS AT LEAST 1"IIN HEIGHT. THIS IDENTIFICATION SHALL BE "CITY OF WICHITA SANITARY SEWER".
THE TOP SURFACE OF THE COVER SHALL BE MANUFACTURED IN WITH CITY OF WICHITA DESIGN AS INDICATED ON THE DRAWINGS. SMOOTH BLOCKOUTS SHALL BE UTILIZED TO HIGHLIGHT THE LETTERING ON THE COVER SURFACE. THE TOTAL AREA OF SMOOTH SURFACE BLOCKOUT SHALL NOT EXCEED THE AREA AS INDICATED ON THE DRAWING. POSITIONING OF SMOOTH BLOCKOUTS AND LETTERING MAY VARY FROM THAT SHOWN ON THE DETAILED DRAWING.

REVISED: MARCH 2016

CITY OF WICHITA
PUBLIC WORKS & UTILITIES ENGINEERING DIVISION

MANHOLE FRAME AND COVER (SANITARY SEWER)

CITY ENGINEER
GARY JANZEN, P.E

PROJECT NUMBER	OCA NUMBER	DATE

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

SHEET

SS-102

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

CITY OF WICHITA

KEVIN P. O'GRADY LICENSED 27806 05/27/2025 KANSAS PROFESSIONAL ENGINEER

OFFSITE SANITARY SEWER MAIN IMPROVEMENTS

SWANEY FARM ADDITION

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007803

Issue:		
	08/17/2026 - cjr	

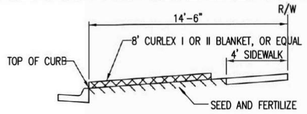
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-006
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

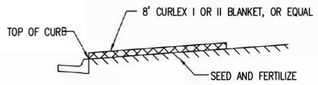
MANHOLE FRAME AND COVER (SANITARY SEWER)

CU502

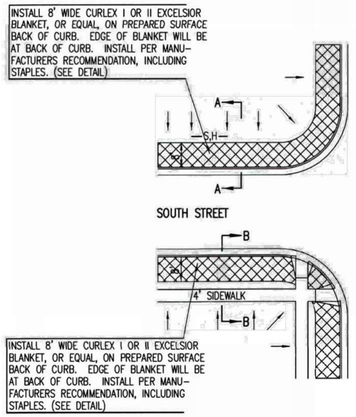
SAVED 6/5/2024 3:00:49 PM BY ARIC.HERMANN
PLOTTED 5/27/2025 7:12:51 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\00412PD3_PLANS\030_OFFSITE SANITARY\200605-006-CU502.DWG



SECTION B–B



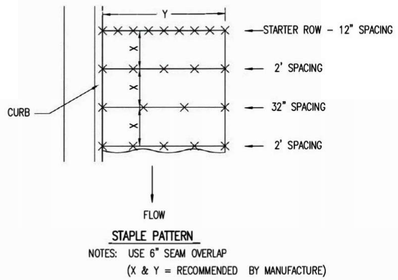
SECTION A–A

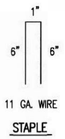


GENERAL NOTES

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

BACK OF CURB PROTECTION DETAIL



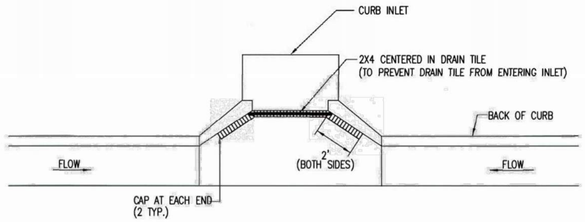


STAPLE

STAPLE PATTERN

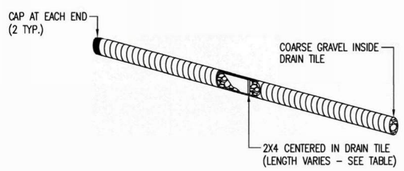
NOTES: USE 6" SEAM OVERLAP
(X & Y = RECOMMENDED BY MANUFACTURE)

DETAILS FOR APPROVED EROSION CONTROL MAT

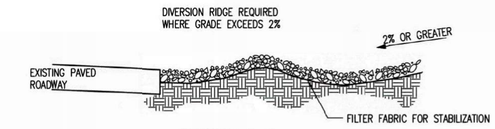


NOTE:
PLACE 4" PERFORATED PVC PIPE, FILLED WITH 1/2"–1" DIA. GRAVEL, IN FRONT OF CURB INLET AS SHOWN.

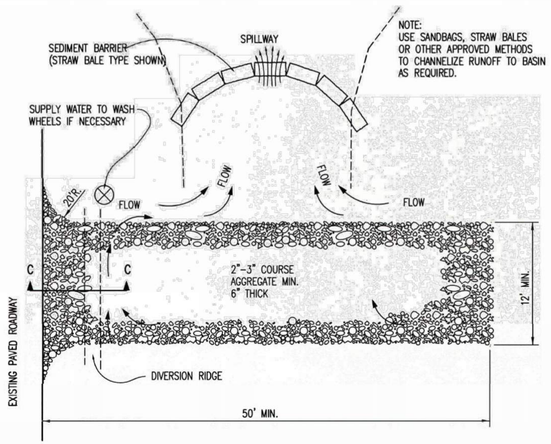
2X4 LENGTH	INLET TYPE	INLET OPENING
5'–6"	1–A	5'–0"
10'–6"	1–A	10'–0"
15'–6"	1–A	15'–0"



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
05/12/13

CITY OF WICHITA
PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

BACK OF CURB PROTECTION, CURB INLET PROTECTION AND CONSTRUCTION ENTRANCE

CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER	OCA NUMBER	DATE

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

SHEET

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 05/27/2025 KANSAS PROFESSIONAL ENGINEER

OFFSITE SANITARY SEWER MAIN IMPROVEMENTS

SWANEY FARM ADDITION

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007803

Issue:		
	08/17/2026 - cjr	

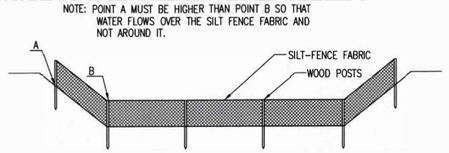
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-006
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

BACK OF CURB & CURB INLET PROTECTIONS & CONSTRUCTION ENTRANCE

CU503

SAVED 6/6/2024 11:32:53 AM BY ARIC.HERMANN
PLOTTED 5/27/2025 7:12:55 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\0042\PD3_PLANS\030_OFFSITE SANITARY\200605-006-CU503.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.

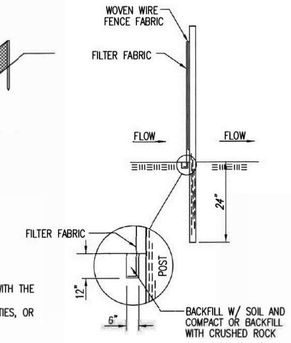
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

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.

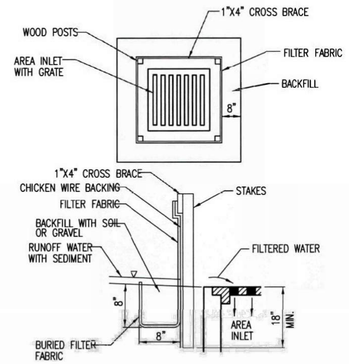
INSPECTION AND MAINTENANCE:

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.

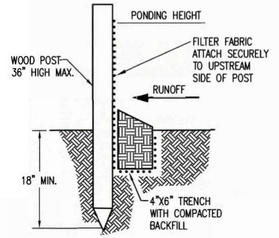
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

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

GARY L. JANZEN — 16294 — KANSAS — PROFESSIONAL ENGINEER — 05/21/25

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

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

SHEET

SW-502

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

CITY OF WICHITA

KEVIN P. CRAHAN — LICENSED — 27806 — 05/27/2025 — KANSAS — PROFESSIONAL ENGINEER

OFFSITE SANITARY SEWER MAIN IMPROVEMENTS

SWANEY FARM ADDITION

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007803

Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

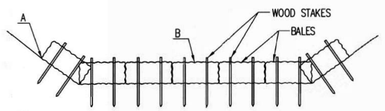
JOB NO.	200605-006
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

SILT FENCE DITCH CHECK AND BARRIER DETAILS

CU504

SAVED 6/6/2024 11:33:18 AM BY ARIC.HERMANN
PLOTTED 5/27/2025 7:13:00 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\0042\PD3_PLANS\030_OFFSITE SANITARY\200605-006-CU504.DWG

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



STRAW BALE DITCH CHECKS

MATERIAL SPECIFICATION:

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

PLACEMENT:

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

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

PROPER INSTALLATION METHOD:

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

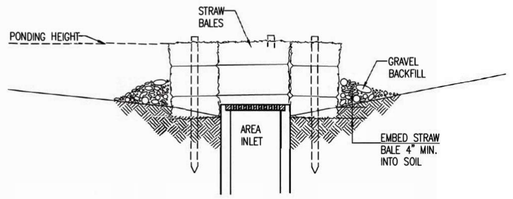
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

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

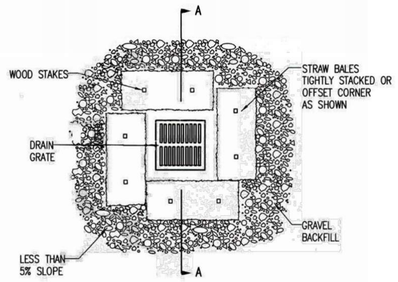
INSPECTION AND MAINTENANCE:

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

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



SECTION A-A



STRAW BALE BARRIERS FOR AREA INLETS
(INLET PROTECTION)

MATERIAL SPECIFICATION:

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

PLACEMENT:

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

PROPER INSTALLATION METHOD:

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

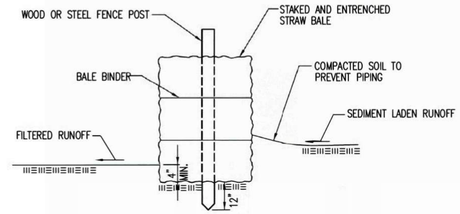
LIST OF COMMON PLACEMENT INSTALLATION MISTAKES TO AVOID:

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

INSPECTION AND MAINTENANCE:

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

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



STRAW BALE BARRIERS

MATERIAL SPECIFICATION:

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

PLACEMENT:

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

PROPER INSTALLATION METHOD:

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

LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

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

INSPECTION AND MAINTENANCE:

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

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

REVISION DATE: MAY 2013

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

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

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

SHEET

SW-503

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

CITY OF WICHITA

KEVIN P. CRAHAM LICENSED 27806 05/27/2025 KANSAS PROFESSIONAL ENGINEER

OFFSITE SANITARY SEWER MAIN IMPROVEMENTS

SWANEY FARM ADDITION

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007803

Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-006
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

STRAW BALE DITCH CHECK AND BARRIER DETAILS

CU505

SAVED 6/6/2024 11:34:38 AM BY ARIC.HERMANN
PLOTTED 5/27/2025 7:13:05 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\0042\PD3_PLANS\030_OFFSITE SANITARY\200605-006-CU505.DWG

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.

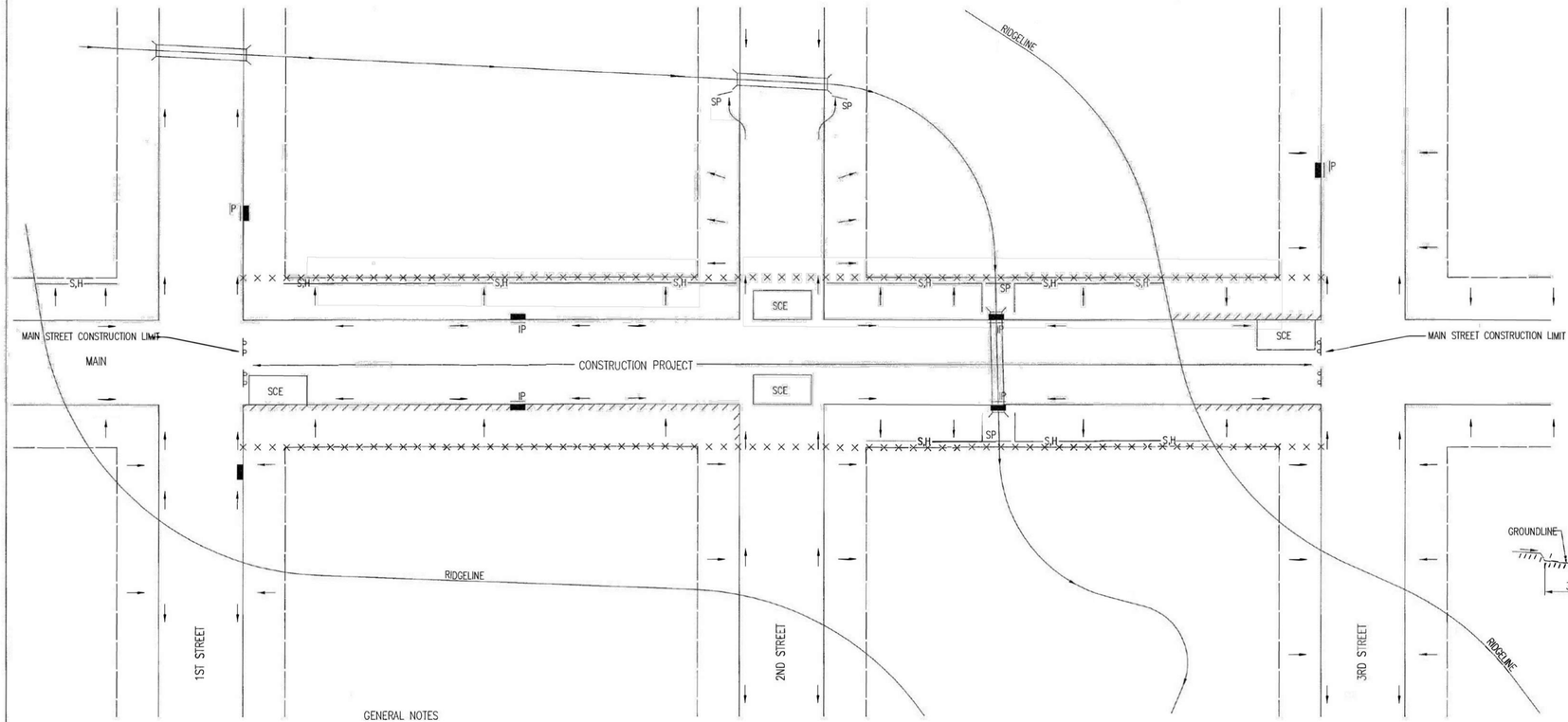
2. EROSION CONTROL DEVICES MUST BE MAINTAINED BY THE CONTRACTOR THROUGHOUT THE CONSTRUCTION PROCESS AND UNTIL THE DISTURBED EARTH IS RESTABILIZED.

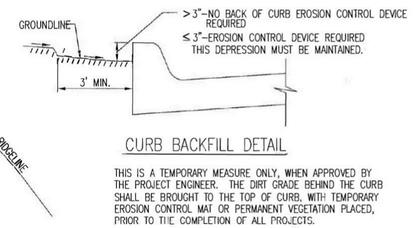
3. IF THE PROJECT WILL DISTURB 1 ACRE OR MORE, A FEDERAL/STATE NPDES STORMWATER PERMIT IS REQUIRED. A DETAILED STORMWATER POLLUTION PREVENTION PLAN, IS REQUIRED. THE EROSION CONTROL DEVICES SHOWN ON THIS SHEET ARE CONSIDERED TO BE THE MINIMUM TO BE SHOWN IN THE POLLUTION PREVENTION PLAN.

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)

KEVIN P. GRAHAM LICENSED 27806 05/27/2025 KANSAS PROFESSIONAL ENGINEER

GARY L. JANZEN LICENSED 16294 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

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

SHEET

SW-504

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

CITY OF WICHITA

OFFSITE SANITARY SEWER MAIN IMPROVEMENTS

SWANEY FARM ADDITION

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007803

Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-006
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	AJH
CHECKED BY	TBK

STREET IMPROVEMENT PROJECTS

CU506

SAVED 6/6/2024 11:33:47 AM BY ARIC.HERMANN
PLOTTED 5/27/2025 7:13:10 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\0042PD3_PLANS\030_OFFSITE SANITARY\200605-006-CU506.DWG

CONSTRUCTION PLANS FOR PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

TO SERVE

SWANEY FARM ADDITION - PHASE 1

CITY OF WICHITA ENGINEERING PROJECT NO. 472-2024-086026
ORG CODE: 47476424, MUNIS NO.: E4081

CITY OF WICHITA, KS

PAUL GUNZELMAN, P.E. - CITY ENGINEER

RED LINE - FIELD SET

INSPECTOR	PEC	TIGER WILLIAMS
	PEC	BRANDON DELANEY
CONTRACTOR	APAC	GARY HELMERS
	APAC	ETHAN BEIMER
COMPANY	CITY OF WICHITA	EVER VILLALOBOS

Concrete	Pearson Mix WE4013
Asphalt Base Course	APAC BM-4 COW 35% RAP
Asphalt Surface Course	APAC SC-1 15% RAP WM

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

SHEET INDEX

01	CP001	TITLE SHEET
02	CP002	HORIZONTAL & VERTICAL CONTROL AND KEY MAP
03	CP003	GENERAL NOTES
04	CP004	TYPICAL SECTIONS
05	CP101	COORDINATE GEOMTRY PLAN
06	CP102	CORDINATE GEOMETRY TABLES
07	CP103	COORDINATE GEOMETRY CURVE PLAN
08	CP104	COORDINATE GEOMETRY CURVE TABLES
09	CP201	61ST STREET SOUTH PLAN
10	CP202	YALE STREET PLAN
11	CP203	YALE STREET PLAN
12	CP204	YALE STREET PLAN
13	CP205	MERILYN PLAN
14	CP206	MERILYN PLAN
15	CP207	MERILYN PLAN
16	CP208	PATRICK STREET PLAN
17	CP209	PATRICK STREET PLAN
18	CP301	MEDIAN AREA
19	CP302	VALLEY GUTTER PLANS
20	CP303	VALLEY GUTTER PLANS
21	CP304	VALLEY GUTTER DETAILS
22	CP305	CURB AND GUTTER DETAILS
23	CP306	WHEELCHAIR RAMP DETAILS
24	CP307	SIGN DETAILS
25	CP401	PLAN AND PROFILE-SWS LINE 2
26	CP402	PLAN AND PROFILE-SWS LINE 2
27	CP403	PLAN AND PROFILE-SWS LINES 3 AND 4
28	CP404	PLAN AND PROFILE-SWS LINE 5
29	CP405	PLAN AND PROFILE-SWS LINE 5
30	CP406	PLAN AND PROFILE-SWS LINE 6
31	CP407	PLAN AND PROFILE-SWS LINE 7
32	CP408	PLAN AND PROFILE-SWS LINES 9 AND 10
33	CP409	PLAN AND PROFILE-CULVERT A
34	CP501	STD. TYPE 1A CURB INLET DETAILS
35	CP502	PRECAST CONCRETE MANHOLE DETAILS
36	CP503	GRATED DRIVEWAY INLET-SINGLE
37	CP504	DOUBLE DOUBLE DROP INLET
38	CP505	INLET BEAM DETAILS
39	CP506	PAVEMENT UNDERDRAIN DETAILS
40	CP507	BEDDING AND BACKFILL DETAILS
41	CP508	MANHOLE-INLET FRAME AND COVER DETAILS
42	CP509	RIPRAP AND MAT DETAILS
43	CG101	EROSION CONTROL PLAN
44	CG501	BACK OF CURB AND CURB INLET PROTECTION
45	CG502	SILT FENCE DITCH CHECK
46	CG503	STRAW BALE DITCH CHECK
47	CG504	STREET IMPROVEMENT PROJECTS
48	CG505	SUBDIVISION DEVELOPMENT PROCESS
49-70	CX601-CX622	CROSS SECTIONS
71	CP701	FINAL PLAT

SUBDIVISION BENCH MARKS (SBM)

NO.	STREET AND STATION	FROM CL	DESCRIPTION	ELEVATION
1	YALE ST., STA. 36+48.13	17.50' RT.	P.C. TOP OF CURB, YALE ST.	
2	MERILYN ST., STA. 58+20.17	14.50' LT.	E. END, NORTHEAST CURB RETURN, MERILYN ST.	
3	MERILYN ST., STA. 63+05.03	14.50' LT.	P.I. TOP OF CURB, MERILYN ST.	
4	BLUFF ST., STA. 67+56.80	14.50' LT.	N. END, P.T. TOP OF CURB, BLUFF ST.	
5	PATRICK ST., STA. 30+37.19	14.50' RT.	E. END, SOUTHEAST CURB RETURN, PATRICK ST.	

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

MAY 2025

RED LINE - FIELD SET
08/17/2026 - cjr
Prepared By: Tiger Williams
Brandon Delaney
Date: JULY 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
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS
SWANEY FARM ADDITION PHASE 1
PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:		

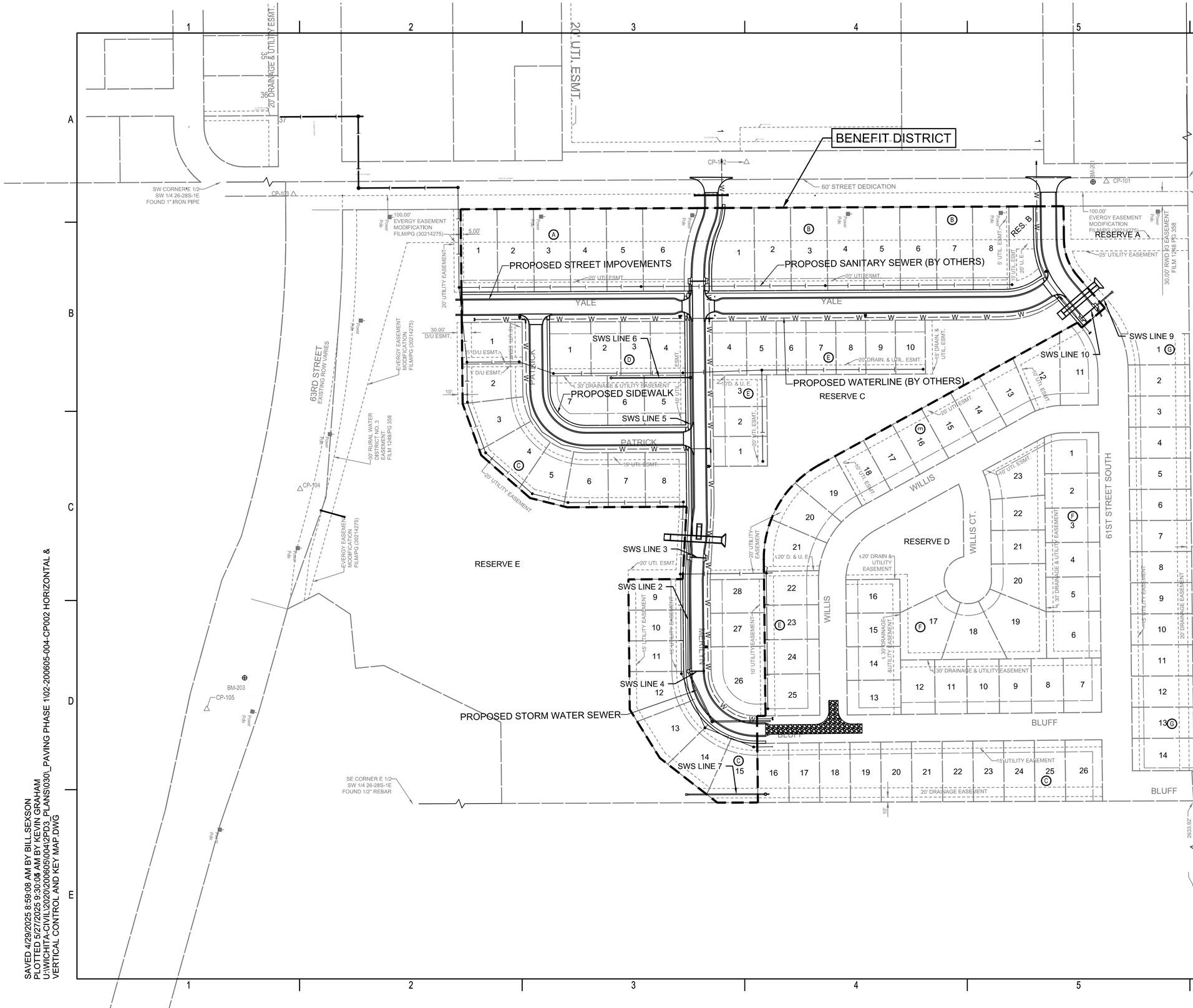
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

TITLE SHEET

CP001
01 OF 71

SAVED 5/27/2025 9:28:19 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 9:29:49 AM BY KEVIN.GRAHAM
U:\WICHITA-CIVIL\2020\200605\0042PD3_PLANS\030_PAVING PHASE 1\01-200605-004-CP001 TITLE SHEET.DWG



SCALE IN FEET

0' 100' 200'

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
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

HORIZONTAL & VERTICAL CONTROL AND KEY MAP

CP002
02 OF 71

SAVED 4/29/2025 8:59:08 AM BY BILL.SEXSON
PLOTTED 5/27/2025 9:30:08 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_PAVING PHASE 1\02-200605-004-CP002 HORIZONTAL & 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 05/27/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:		
	08/17/2026 - cjr	

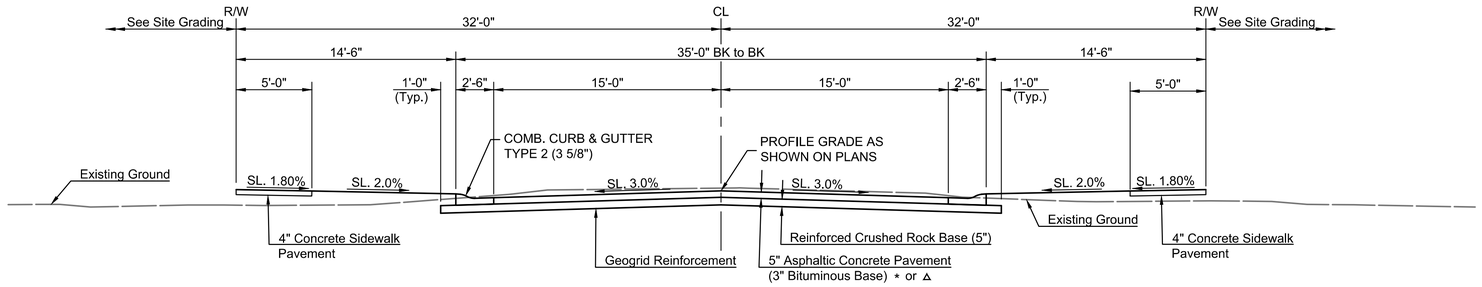
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

GENERAL NOTES

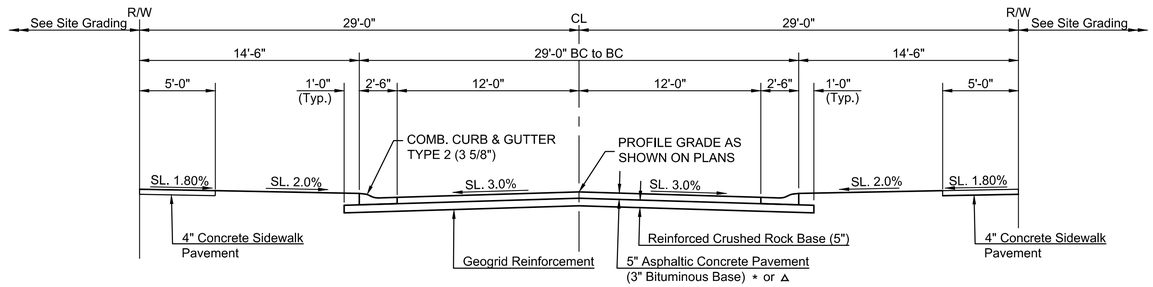
CP003
03 OF 71

SAVED 8/12/2024 12:20:56 PM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 9:30:09 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_PAVING PHASE 1\03-200605-004-CP004 GENERAL NOTES.DWG



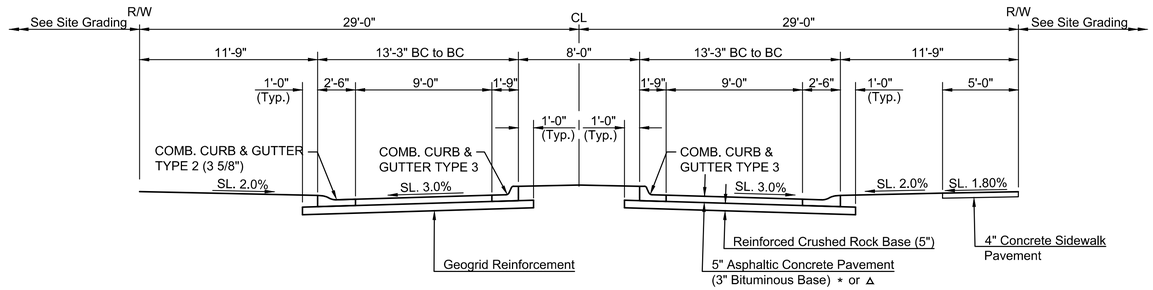
TYPICAL SECTION

61st St. South Sta. 10+44.87 to Sta. 13+40.33
Yale Sta. 25+00.00 to Sta. 29+46.36
Yale Sta. 30+53.45 to Sta. 37+45.91



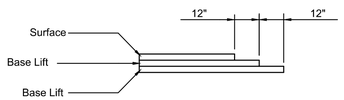
TYPICAL SECTION

Merilyn Street Sta. 55+44.46 to Sta. 62+12.96
Merilyn Street Sta. 63+05.03 to Sta. 67+74.80
Patrick Sta. 60+37.19 to Sta. 65+46.19



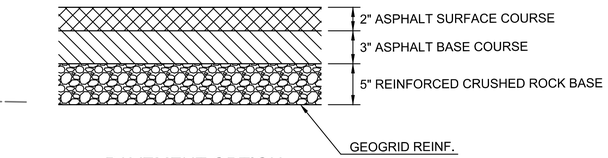
TYPICAL SECTION

Merilyn Street Sta. 62+12.96 to Sta. 63+05.03



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.



PAVEMENT OPTION
ASPHALTIC CONCRETE PAVEMENT

EARTHWORK SUMMARY (C.Y.)		
	Excavation	Compacted Fill (95%)
Yale	702 CY	702 CY
Merilyn	618 CY	618 CY
Patrick	266 CY	266 CY
61st. St.	196 CY	196 CY
GRAND TOTAL	1,782 CY	1,782 CY

NO SHRINKAGE FACTOR HAS BEEN APPLIED.

REFER TO STORM WATER DRAIN PLANS FOR SWANEY FARM ADDITION FOR MASS GRADING (458-2024-085570).

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

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 - 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.

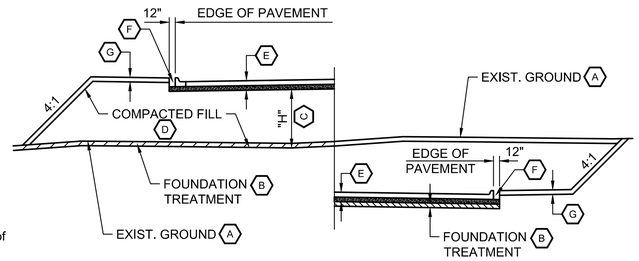
Rock base is to be compacted and smoothed with a steel faced roller prior to placement of asphalt. Tack coat will not be applied to rock base.

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.



IN FILL IN CUT

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
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

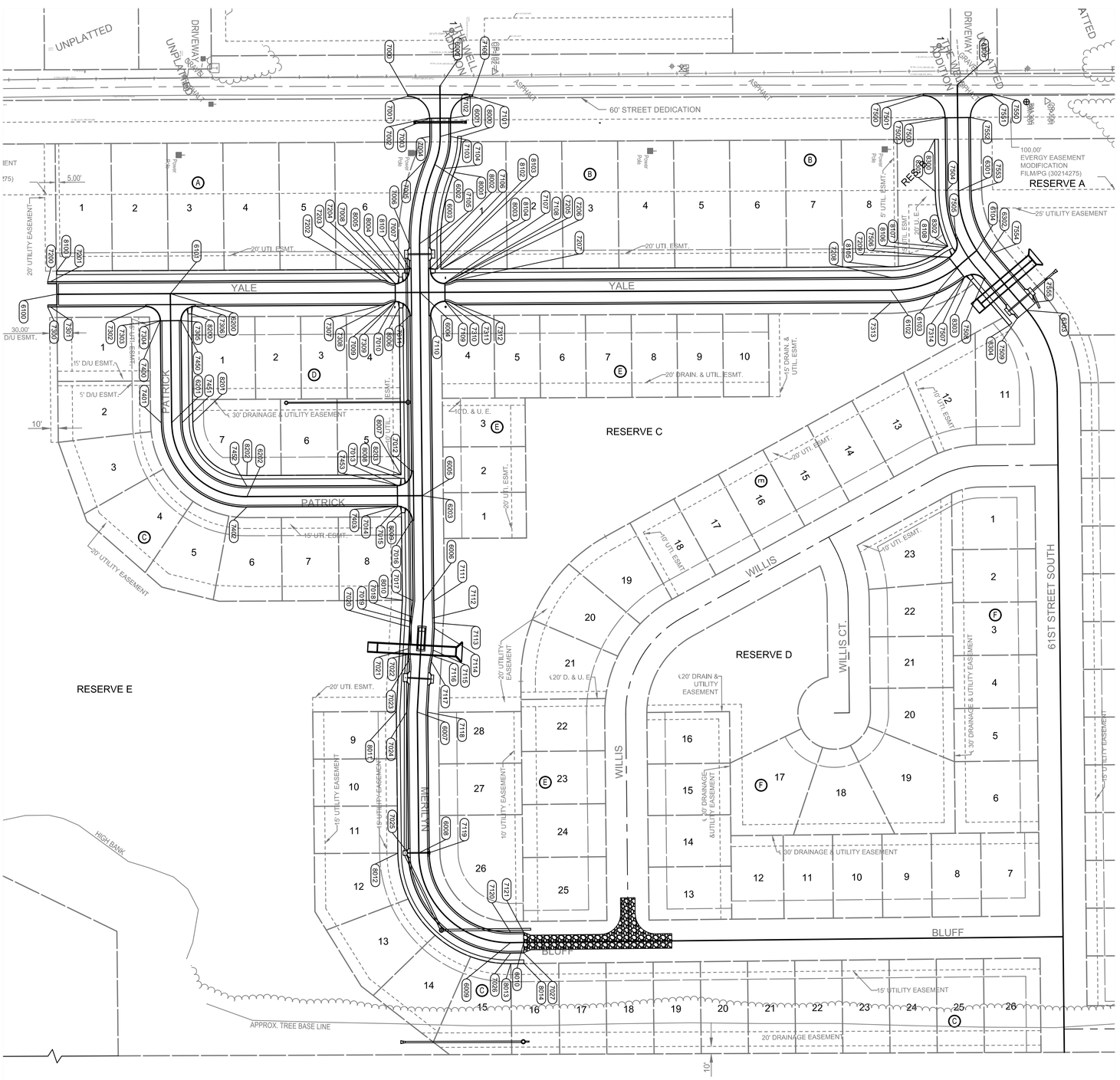
JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

TYPICAL SECTIONS

CP004
04 OF 71

SAVED 3/27/2025 7:55:44 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 11:25:06 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_PAVING PHASE 1\04-200605-004-CP005 TYPICAL SECTIONS.DWG

SAVED 12/6/2024 8:30:15 AM BY BILL.SEXSON
PLOTTED 5/27/2025 9:30:30 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_PAVING PHASE 1\05-200605-004-CP101 COORDINATE GEOMTRY PLAN.DWG



CP101
05 OF 71

COORDINATE GEOMTRY PLAN

JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

Issue: 080127/2026 - CP

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

PROFESSIONAL ENGINEER 27806 KEVIN M. GRAHAM 08/27/2026

CITY OF WICHITA

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

CENTERLINE-MERILYN

COORDINATE LIST		
POINT	NORTHING	EASTING
6000	332,597.9654	17,559,699.8139
6001	332,598.2550	17,559,769.4471
6002	332,590.7756	17,559,807.8998
6003	332,569.8501	17,559,917.1558
6004	332,570.5710	17,559,984.2725
6005	332,573.5783	17,560,264.2608
6006	332,575.1333	17,560,409.0371
6007	332,566.7775	17,560,562.1664
6008	332,568.8626	17,560,756.2908
6009	332,695.1979	17,560,879.9410
6010	332,713.1969	17,560,879.7477

CENTERLINE-YALE

COORDINATE LIST		
POINT	NORTHING	EASTING
6100	332,070.0694	17,559,986.8143
6101	332,226.5699	17,559,986.0195
6102	333,218.7854	17,559,980.9805
6103	333,315.3563	17,559,945.1154
6104	333,337.3071	17,559,926.3957

CENTERLINE-PATRICK

COORDINATE LIST		
POINT	NORTHING	EASTING
6200	332,226.5699	17,559,986.0195
6201	332,228.4772	17,560,163.5953
6202	332,331.9944	17,560,265.4877
6203	332,573.5751	17,560,264.2608

CENTERLINE-61ST ST. SOUTH

COORDINATE LIST		
POINT	NORTHING	EASTING
6300	333,310.1160	17,559,698.5808
6301	333,312.1157	17,559,844.7902
6302	333,347.9743	17,559,940.5122
6303	333,406.2502	17,560,008.8470

BACK OF CURB RT.-MERILYN

COORDINATE LIST		
POINT	NORTHING	EASTING
7000	332,553.5353	17,559,711.9508
7001	332,553.5409	17,559,713.9508
7002	332,583.6249	17,559,743.7987
7003	332,583.6276	17,559,744.3466
7004	332,583.7552	17,559,769.5206
7005	332,577.3605	17,559,802.3966
7006	332,555.3509	17,559,917.3126
7007	332,555.7111	17,559,950.8475
7008	332,536.3262	17,559,971.9462
7009	332,536.4532	17,559,996.9459
7010	332,536.8155	17,559,996.9441
7011	332,556.4135	17,560,016.2344
7012	332,558.7119	17,560,230.2255
7013	332,539.3121	17,560,249.9347
7014	332,539.4593	17,560,278.9343
7015	332,539.8444	17,560,278.9323
7016	332,559.4423	17,560,298.2226
7017	332,560.6291	17,560,408.7196
7018	332,559.4144	17,560,430.9800
7019	332,557.8943	17,560,437.5342
7020	332,556.1404	17,560,445.0967
7021	332,554.5058	17,560,475.0521
7022	332,555.4265	17,560,482.7606
7023	332,556.2243	17,560,489.4412
7024	332,552.2733	17,560,561.8489
7025	332,554.3634	17,560,756.4465
7026	332,695.3536	17,560,894.4402
7027	332,713.3526	17,560,894.2469

BACK OF CURB LT.-MERILYN

COORDINATE LIST		
POINT	NORTHING	EASTING
7100	332,642.7456	17,559,712.0479
7101	332,642.7382	17,559,714.0479
7102	332,612.6273	17,559,744.1997
7103	332,612.7548	17,559,769.3737
7104	332,604.1907	17,559,813.4029
7105	332,584.3493	17,559,916.9990
7106	332,584.7112	17,559,950.7002
7107	332,604.3264	17,559,971.6009
7108	332,604.6888	17,559,971.5991
7109	332,604.8158	17,559,996.5987
7110	332,585.4159	17,560,016.3079
7111	332,589.6376	17,560,409.3546
7112	332,588.3713	17,560,432.5601
7113	332,589.1692	17,560,439.2408
7114	332,590.0899	17,560,446.9492
7115	332,588.4553	17,560,476.9046
7116	332,586.7014	17,560,484.4671
7117	332,585.1813	17,560,491.0213
7118	332,581.2818	17,560,562.4839
7119	332,583.3617	17,560,756.1351
7120	332,695.0422	17,560,865.4419
7121	332,713.0411	17,560,865.2486

BACK OF CURB LT.-YALE

COORDINATE LIST		
POINT	NORTHING	EASTING
7200	332,057.4307	17,559,969.3783
7201	332,061.4306	17,559,969.3580
7202	332,516.9362	17,559,967.0447
7203	332,526.8736	17,559,969.5567
7204	332,536.3262	17,559,971.9462
7205	332,604.6888	17,559,971.5991
7206	332,614.1167	17,559,969.1136
7207	332,624.0281	17,559,966.5008
7208	333,218.6965	17,559,963.4807
7209	333,298.9398	17,559,935.9053

BACK OF CURB RT.-YALE

COORDINATE LIST		
POINT	NORTHING	EASTING
7300	332,057.6084	17,560,004.3779
7301	332,061.6084	17,560,004.3575
7302	332,192.8682	17,560,003.6909
7303	332,212.4661	17,560,022.9812
7304	332,212.4702	17,560,023.3662
7305	332,241.4685	17,560,023.0548
7306	332,260.8684	17,560,003.3456
7307	332,517.1139	17,560,002.0442
7308	332,527.0253	17,559,999.4313
7309	332,536.4532	17,559,996.9459
7310	332,604.8158	17,559,996.5987
7311	332,614.2684	17,559,998.9883
7312	332,624.2058	17,560,001.5003
7313	333,218.8742	17,559,998.4802
7314	333,320.3139	17,559,963.6208

BACK OF CURB RT.-PATRICK

COORDINATE LIST		
POINT	NORTHING	EASTING
7400	332,212.4702	17,560,023.3662
7401	332,213.9781	17,560,163.7510
7402	332,332.0680	17,560,279.9875
7403	332,539.4593	17,560,278.9343

BACK OF CURB LT.-PATRICK

COORDINATE LIST		
POINT	NORTHING	EASTING
7450	332,241.4685	17,560,023.0548
7451	332,242.9764	17,560,163.4396
7452	332,331.9207	17,560,250.9879
7453	332,539.3121	17,560,249.9347

BACK OF CURB LT.-61ST ST.

COORDINATE LIST		
POINT	NORTHING	EASTING
7550	333,358.5404	17,559,710.9368
7551	333,358.5394	17,559,712.9368
7552	333,328.5262	17,559,743.2590
7553	333,329.6147	17,559,844.6023
7554	333,361.2897	17,559,929.1566
7555	333,419.5658	17,559,997.4915

BACK OF CURB RT.-61ST ST.

COORDINATE LIST		
POINT	NORTHING	EASTING
7500	333,263.5952	17,559,710.7308
7501	333,263.5903	17,559,712.7308
7502	333,293.5150	17,559,742.4085
7503	333,293.5282	17,559,743.6349
7504	333,294.6167	17,559,844.9782
7505	333,308.4524	17,559,909.8614
7506	333,298.9398	17,559,935.9053
7507	333,320.3139	17,559,963.6208
7508	333,347.0596	17,559,966.4090
7509	333,392.9347	17,560,020.2025

BACK OF SIDEWALK-MERILYN

COORDINATE LIST		
POINT	NORTHING	EASTING
8000	332,627.2546	17,559,769.3002
8001	332,617.6067	17,559,818.9041
8002	332,598.8484	17,559,916.8443
8003	332,599.2274	17,559,952.1265
8004	332,541.2809	17,559,957.4209
8005	332,541.3423	17,559,963.1328
8006	332,541.7989	17,560,005.6501
8007	332,544.2668	17,560,235.4093
8008	332,544.2921	17,560,240.4092
8009	332,544.7994	17,560,287.6386
8010	332,546.1249	17,560,408.4021
8011	332,537.7690	17,560,561.5314
8012	332,539.8643	17,560,756.6023
8013	332,695.5094	17,560,908.9394
8014	332,713.5083	17,560,908.7460

BACK OF SIDEWALK-YALE

COORDINATE LIST		
POINT	NORTHING	EASTING
8100	332,070.0060	17,559,954.8143
8101	332,549.0751	17,559,952.3812
8102	332,591.3795	17,559,952.1664
8103	332,594.2274	17,559,952.1519
8104	332,599.2274	17,559,952.1265
8105	333,218.6228	17,559,948.9809
8106	333,286.9044	17,559,926.7918
8107	333,294.2189	17,559,922.3527
8108	333,297.4517	17,559,920.7203

BACK OF SIDEWALK-PATRICK

COORDINATE LIST		
POINT	NORTHING	EASTING
8200	332,255.8703	17,560,013.8304
8201	332,257.4756	17,560,163.2838
8202	332,331.8471	17,560,236.4881
8203	332,544.2668	17,560,235.4093

BACK OF SIDEWALK-61ST ST.

COORDINATE LIST		
POINT	NORTHING	EASTING
8300	333,279.3463	17,559,773.3402
8301	333,280.1175	17,559,845.1339
8302	333,297.4517	17,559,920.7203
8303	333,329.0573	17,559,967.6454
8304	333,381.9019	17,560,029.6113

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

CITY OF WICHITA

KEVIN P. GRAHAM
LICENSED
27806
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:		
	08/17/2026 - cjr	

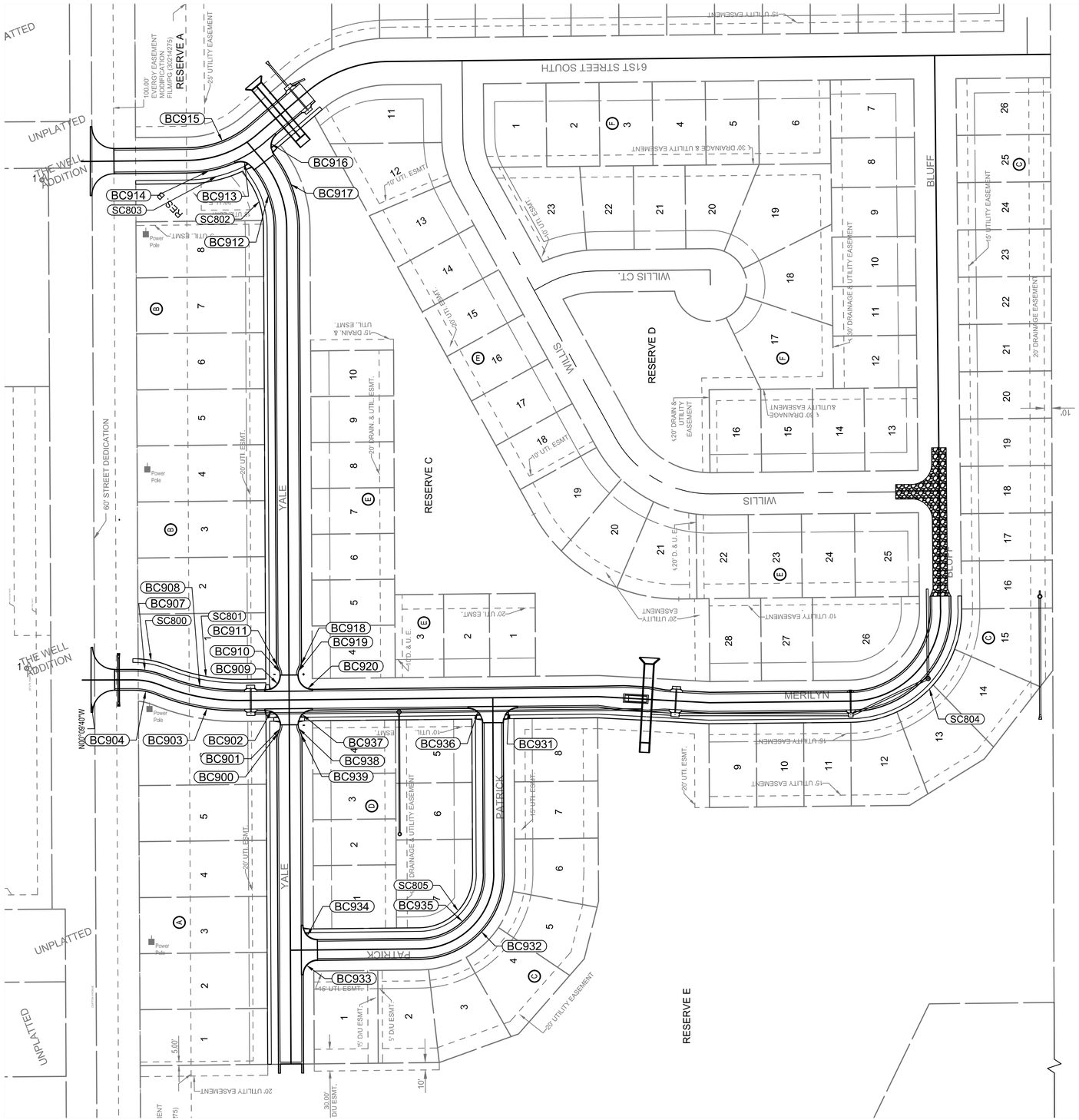
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

CORDINATE GEOMETRY TABLES

CP102
06 OF 71

SAVED 8/9/2024 3:49:44 PM BY BILL.SEXSON
PLOTTED 5/27/2025 9:30:35 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_PAVING PHASE 1\06-200605-004-CP102 CORDINATE GEOMETRY TABLES.DWG



SCALE IN FEET
0' 80' 160'

SAVED 8/12/2024 4:23:05 PM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 9:30:48 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_PAVING PHASE 1\07-200605-004-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
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

COORDINATE GEOMETRY CURVE PLAN

CP103
07 OF 71

CURVE DATA								
CURVE #	DELTA	RADIUS (FT.)	T (FT.)	LENGTH (FT.)	P.C. NORTHING	P.C. EASTING	P.T. NORTHING	P.T. EASTING
BC900	028°57'18"	20.50	5.29	10.36	332,526.8736	17,559,969.5567	332,516.9362	17,559,967.0447
BC901	028°57'18"	19.50	5.03	9.85	332,526.8736	17,559,969.5567	332,536.3262	17,559,971.9462
BC902	090°19'28"	19.50	19.61	30.74	332,536.3262	17,559,971.9462	332,555.7261	17,559,952.2371
BC903	022°55'27"	294.40	59.69	117.79	332,577.3605	17,559,802.3966	332,555.3509	17,559,917.3126
BC904	022°35'41"	85.48	17.08	33.71	332,577.3605	17,559,802.3966	332,583.7552	17,559,769.5206
BC907	022°35'41"	114.48	22.87	45.15	332,604.1907	17,559,813.4029	332,612.7548	17,559,769.3737
BC908	022°55'27"	265.40	53.81	106.19	332,604.1907	17,559,813.4029	332,584.3493	17,559,916.9990
BC909	089°40'32"	19.50	19.39	30.52	332,584.7285	17,559,952.3106	332,604.3264	17,559,971.6009
BC910	028°57'18"	19.50	5.03	9.85	332,604.6888	17,559,971.5991	332,614.1167	17,559,969.1136
BC911	028°57'18"	20.50	5.29	10.36	332,624.0281	17,559,966.5008	332,614.1167	17,559,969.1136
BC912	037°20'54"	132.50	44.78	86.37	333,218.6965	17,559,963.4807	333,298.9398	17,559,935.9053
BC913	073°31'19"	19.50	14.57	25.02	333,303.0824	17,559,932.5759	333,308.4524	17,559,909.8614
BC914	022°50'39"	167.50	33.84	66.78	333,294.6167	17,559,844.9782	333,308.4524	17,559,909.8614
BC915	039°50'32"	132.50	48.02	92.14	333,329.6147	17,559,844.6023	333,361.2897	17,559,929.1566
BC916	087°10'54"	19.50	18.56	29.67	333,347.0596	17,559,966.4090	333,320.3139	17,559,963.6208
BC917	037°20'54"	167.50	56.61	109.19	333,218.8742	17,559,998.4802	333,320.3139	17,559,963.6208
BC918	028°57'18"	20.50	5.29	10.36	332,614.2684	17,559,998.9883	332,624.2058	17,560,001.5003
BC919	028°57'18"	19.50	5.03	9.85	332,614.2684	17,559,998.9883	332,604.8158	17,559,996.5987
BC920	090°19'28"	19.50	19.61	30.74	332,604.8158	17,559,996.5987	332,585.4159	17,560,016.3079
BC931	089°40'32"	19.50	19.39	30.52	332,559.4423	17,560,298.2226	332,539.8444	17,560,278.9323

CURVE DATA								
CURVE #	DELTA	RADIUS (FT.)	T (FT.)	LENGTH (FT.)	P.C. NORTHING	P.C. EASTING	P.T. NORTHING	P.T. EASTING
BC932	089°40'32"	117.50	116.84	183.90	332,213.9781	17,560,163.7510	332,332.0680	17,560,279.9875
BC933	089°40'32"	19.50	19.39	30.52	332,212.4661	17,560,022.9812	332,192.8682	17,560,003.6909
BC934	090°19'28"	19.50	19.61	30.74	332,260.8684	17,560,003.3456	332,241.4685	17,560,023.0548
BC935	089°40'32"	88.50	88.00	138.51	332,242.9764	17,560,163.4396	332,331.9207	17,560,250.9879
BC936	090°19'28"	19.50	19.61	30.74	332,539.3121	17,560,249.9347	332,558.7119	17,560,230.2255
BC937	089°40'32"	19.50	19.39	30.52	332,556.4135	17,560,016.2344	332,536.8155	17,559,996.9441
BC938	028°57'18"	19.50	5.03	9.85	332,536.4532	17,559,996.9459	332,527.0253	17,559,999.4313
BC939	028°57'18"	20.50	5.29	10.36	332,517.1139	17,560,002.0442	332,527.0253	17,559,999.4313

CURVE DATA								
CURVE #	DELTA	RADIUS (FT.)	T (FT.)	LENGTH (FT.)	P.C. NORTHING	P.C. EASTING	P.T. NORTHING	P.T. EASTING
SC800	022°35'41"	128.98	25.77	50.86	332,617.6059	17,559,818.9061	332,627.2546	17,559,769.3002
SC801	022°55'27"	250.90	50.87	100.38	332,617.6059	17,559,818.9061	332,598.8484	17,559,916.8422
SC802	035°25'22"	118.00	37.68	72.95	333,218.6228	17,559,948.9809	333,286.9044	17,559,926.7918
SC803	026°10'34"	177.00	41.15	80.86	333,285.1172	17,559,845.0802	333,304.1074	17,559,922.9609
SC804	090°00'00"	154.00	154.00	241.90	332,539.8643	17,560,756.6023	332,695.5094	17,560,908.9394
SC805	089°40'32"	74.00	73.58	115.82	332,257.4756	17,560,163.2838	332,331.8471	17,560,236.4881

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

CITY OF WICHITA

KEVIN P. GRAHAM
LICENSED
27806
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:		
	08/17/2026 - cjr	

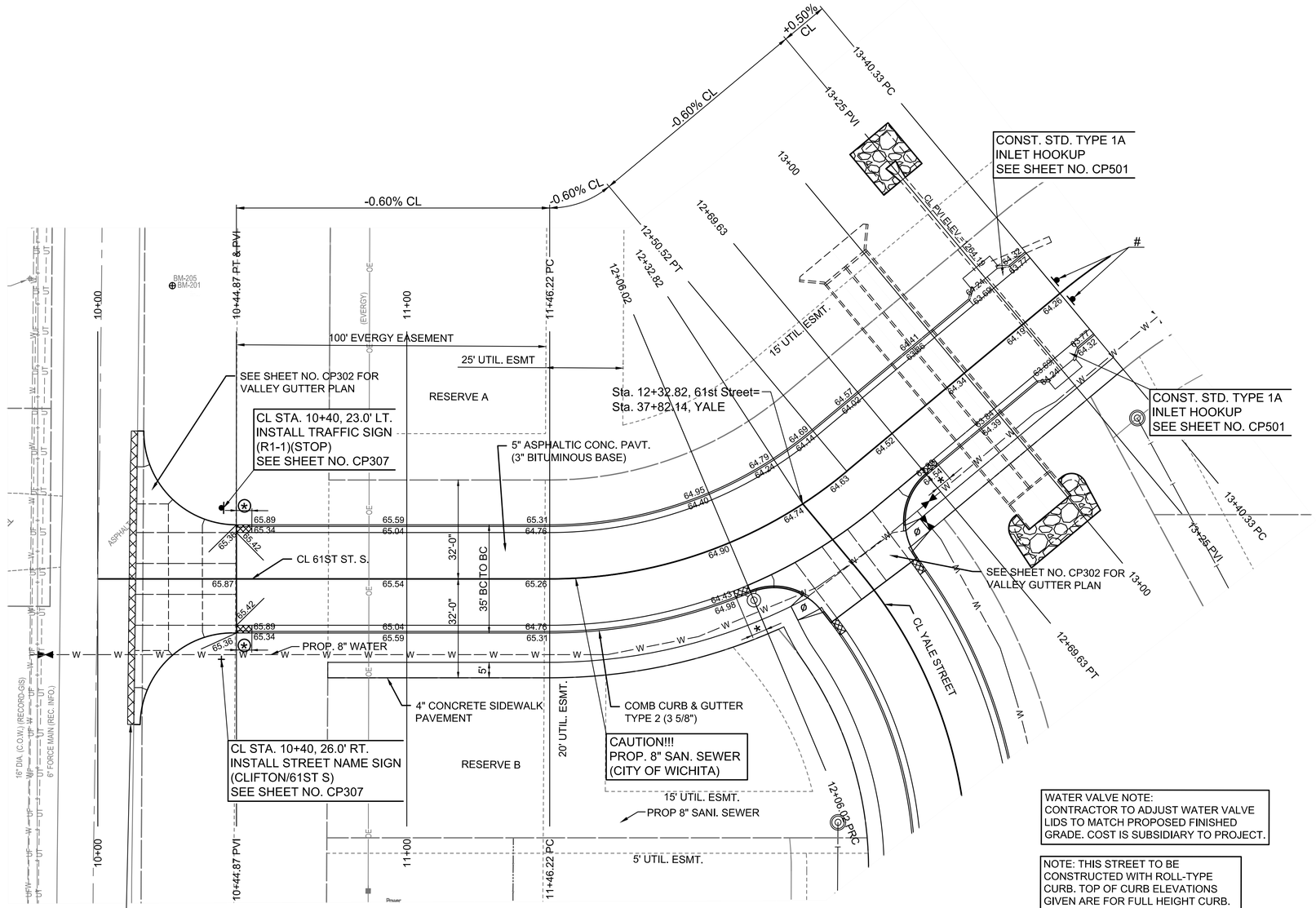
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

COORDINATE GEOMETRY CURVE TABLES

CP104
08 OF 71

SAVED 6/12/2024 6:58:39 AM BY BILL.SEXSON
PLOTTED 5/27/2025 9:31:02 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_PAVING PHASE 1\08-200605-004-CP104 COORDINATE GEOMETRY CURVE TABLES.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 NO 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")

\# Install Type OM4-3 (End of Roadway Marker) See Sheet No. CP307

ø Construct Std. Sidewalk Ramp with Detectable Warning, 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
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:		
	08/17/2026 - cjr	

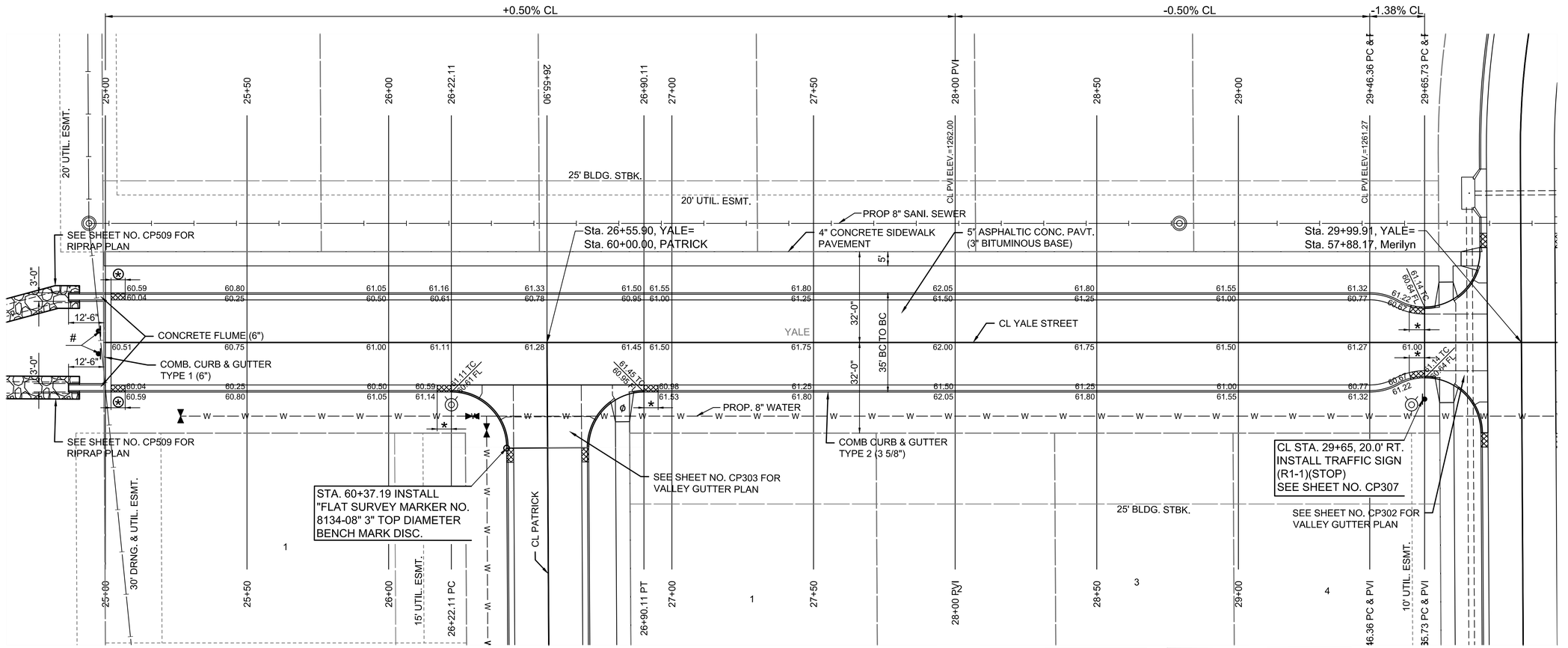
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

61ST STREET SOUTH PLAN

CP201
09 OF 71

SAVED 12/24/2024 9:14:21 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 9:31:37 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_PAVING PHASE 1\09-200605-004-CP201 61ST STREET SOUTH.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 COMBINED CURB AND GUTTER TYPE 2 (3 5/8") TO CONCRETE FLUME (6"). 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")

ϕ Construct Std. Sidewalk Ramp with Detectable Warning, See Sheet No. CP306

\# 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 05/27/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

YALE STREET PLAN

CP202
10 OF 71

SAVED 12/24/2024 9:08:28 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 9:32:00 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_PAVING PHASE 1\10-200605-004-CP202 YALE STREET PLAN.DWG

SCALE IN FEET
0 20 40

+0.89% CL | +0.60% CL | +0.60% CL

30+34.09 PC &
30+53.45 PT &
31+00 | 31+50 | 32+00 | 32+50 | 33+00 | 33+50 | 34+00 | 34+50 | 35+00

CL PVI ELEV.=1261.20
CL PVI ELEV.=1262.68

25' BLDG. STBK.
20' UTIL. ESMT.

CL STA. 30+35, 20.0' LT.
INSTALL TRAFFIC SIGN
(R1-1)(STOP)
SEE SHEET NO. CP307

PROP 8" SANI. SEWER
4" CONCRETE SIDEWALK
PAVEMENT
5" ASPHALTIC CONC. PAVT.
(3" BITUMINOUS BASE)
5'

61.26 | 61.53 | 61.83 | 62.13 | 62.43 | 62.73 | 63.03 | 63.33 | 63.63 | 63.93
60.71 | 60.98 | 61.28 | 61.58 | 61.88 | 62.18 | 62.48 | 62.78 | 63.08 | 63.38

YALE

32'-0" | 35' BC TO BC | 32'-0"

CL YALE STREET

61.00 | 61.20 | 61.48 | 61.78 | 62.08 | 62.38 | 62.68 | 62.98 | 63.28 | 63.58 | 63.88
60.71 | 60.98 | 61.26 | 61.58 | 61.88 | 62.18 | 62.48 | 62.78 | 63.08 | 63.38
61.26 | 61.53 | 61.83 | 62.13 | 62.43 | 62.73 | 63.03 | 63.33 | 63.63 | 63.93

PROP. 8" WATER

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

CL MERILYN

CL STA. 30+35, 20.0' RT.
INSTALL STREET NAME SIGN
(MERILYN/YALE)
SEE SHEET NO. CP307

SEE SHEET NO. CP302 FOR
VALLEY GUTTER PLAN

Sta. 29+99.91, YALE=
Sta. 57+88.17, Merilyn

25' BLDG. STBK.

15' UTIL. ESMT.

30+34.09 PC & PVI
30+53.45 PT & PVI
31+00 | 31+50 | 32+00 | 32+50 | 33+00 | 33+50 | 34+00 | 34+50 | 35+00

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.

△ WARPING CROSS SLOPE FROM 3.5% AT STA. 30+34.09 TO 3.0% AT STA. 30+53.45

* 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
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

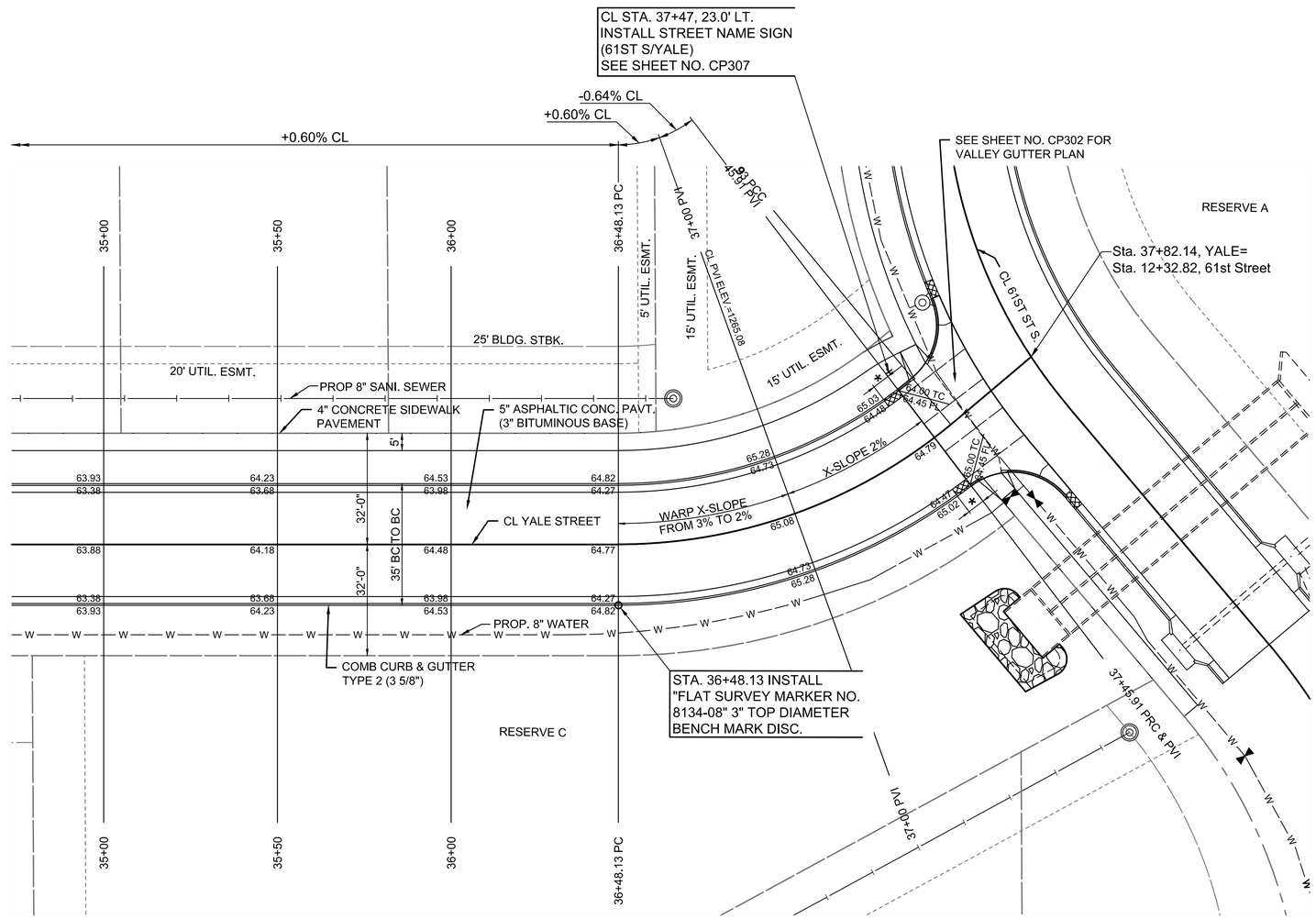
JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

YALE STREET PLAN

CP203
11 OF 71

SAVED 12/24/2024 9:11:36 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 9:32:30 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_PAVING PHASE 1\111-200605-004-CP203 YALE STREET PLAN.DWG

SCALE IN FEET
0 20 40



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")

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

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 05/27/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:		
	08/17/2026 - cjr	

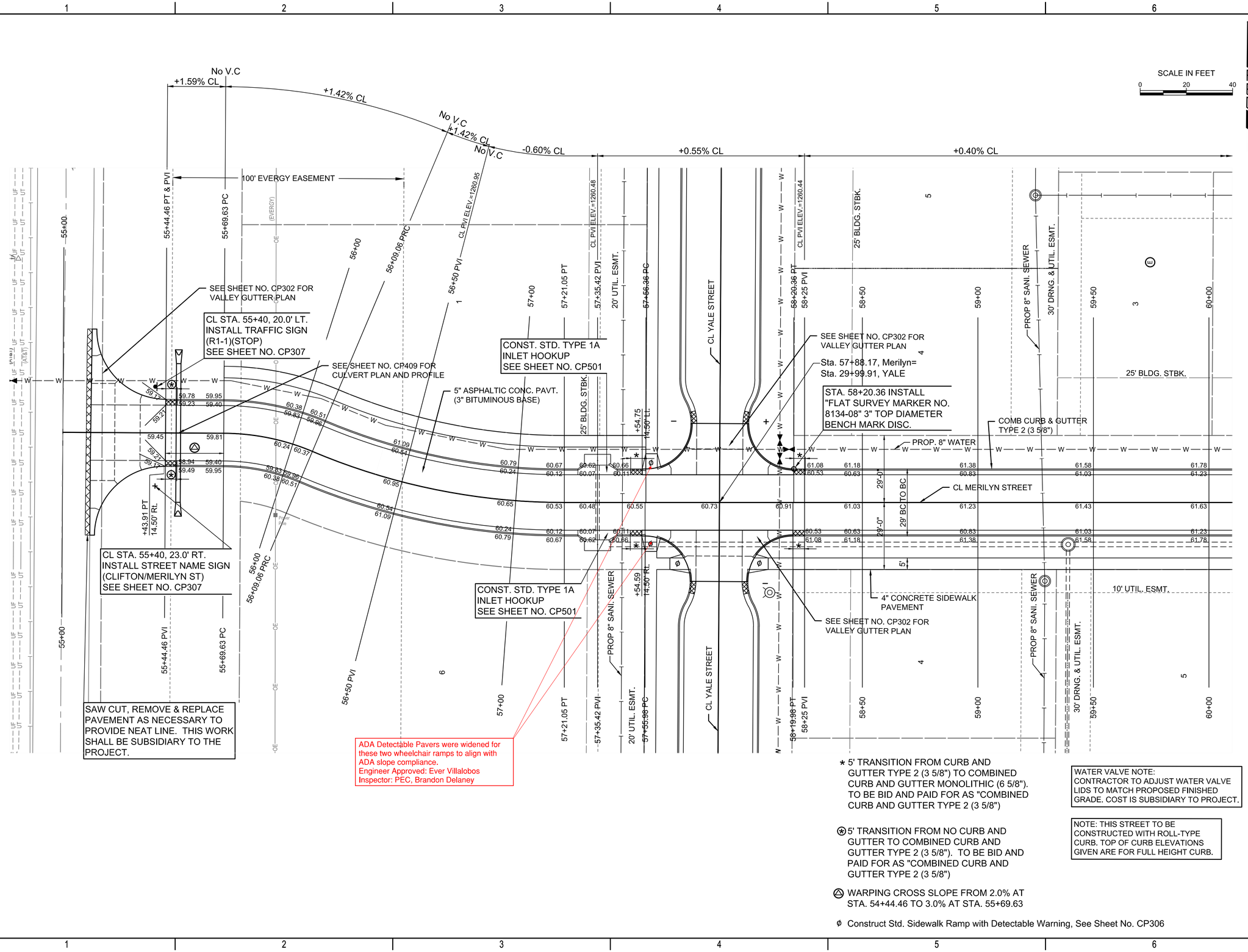
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

YALE STREET PLAN

CP204
12 OF 71

SAVED 12/24/2024 9:11:30 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 9:33:09 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\00042PD3_PLANS\030_PAVING PHASE 1\12-200605-004-CP204 YALE STREET PLAN.DWG



SAVED 12/24/2024 9:34:26 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 9:33:43 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\0042PD3_PLANS\030_PAVING PHASE 1\13-200605-004-CP205 MERILYN 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
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

MERILYN PLAN

CP205
13 OF 71

SCALE IN FEET
0 20 40

+0.40% CL | +0.40% CL | +0.86% CL | -0.75% CL | +0.50% CL | -0.78% CL

SEE SHEET NO. CP301

60+00 | 60+33.98 | 60+68.17 | 1 | 61+01.98 | 61+50 | 62+00 | 62+12.96 PI | 62+35.73 PVI | 62+50 PVI | 62+55 PVI | 62+75 PVI | 62+80 PVI | 63+05.03 PI | 63+20 PIV | 63+50 | 63+66.32 PI | 28 | 64+00 | 64+50 | 27 | 64+80 PVI | 65+00

CL PVI ELEV.=1261.91 | CL PVI ELEV.=1262.58 | CL PVI ELEV.=1262.70 | CL PVI ELEV.=1262.30 | CL PVI ELEV.=1262.00 | CL PVI ELEV.=1262.80

25' BLDG. STBK.

RESERVE C

Sta. 60+68.17, Merilyn=
Sta. 65+80.38, PATRICK

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

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

PROP. 8" WATER

CL MERILYN STREET

29'-0" BC TO BC

STA. 63+05.03 INSTALL "FLAT SURVEY MARKER NO. 8134-08" 3" TOP DIAMETER BENCH MARK DISC.

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

MERILYN

4" CONCRETE SIDEWALK PAVEMENT

SEE SHEET NO. CP303 FOR VALLEY GUTTER PLAN

PROP 8" SANI. SEWER

CL PATRICK STREET

20' UTIL. ESMT.

15' UTIL. ESMT.

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

RESERVE E

60+00 PC | 61+01.98 PT

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 NO 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")

ϕ Construct Std. Sidewalk Ramp with Detectable Warning, 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 05/27/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

MERILYN PLAN

CP206
14 OF 71

SAVED 12/24/2024 9:30:46 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 9:34:18 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_PAVING PHASE 1\14-200605-004-CP206 MERILYN PLAN.DWG

CONST. GRATED DRIVEWAY INLET HOOKUP SEE SHEET NO. CP503

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

STA. 67+56.80 INSTALL "FLAT SURVEY MARKER NO. 8134-08" 3" TOP DIAMETER BENCH MARK DISC.

CL STA. 66+64, 22.0' RT. INSTALL FLAT PLATE STREET NAME SIGN (MERILYN/BLUFF) SEE SHEET NO. CP307

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

REINFORCED CRUSHED ROCK BASE (6")

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.

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

SCALE IN FEET
0 20 40

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

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 05/27/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:		
	08/17/2026 - cjr	

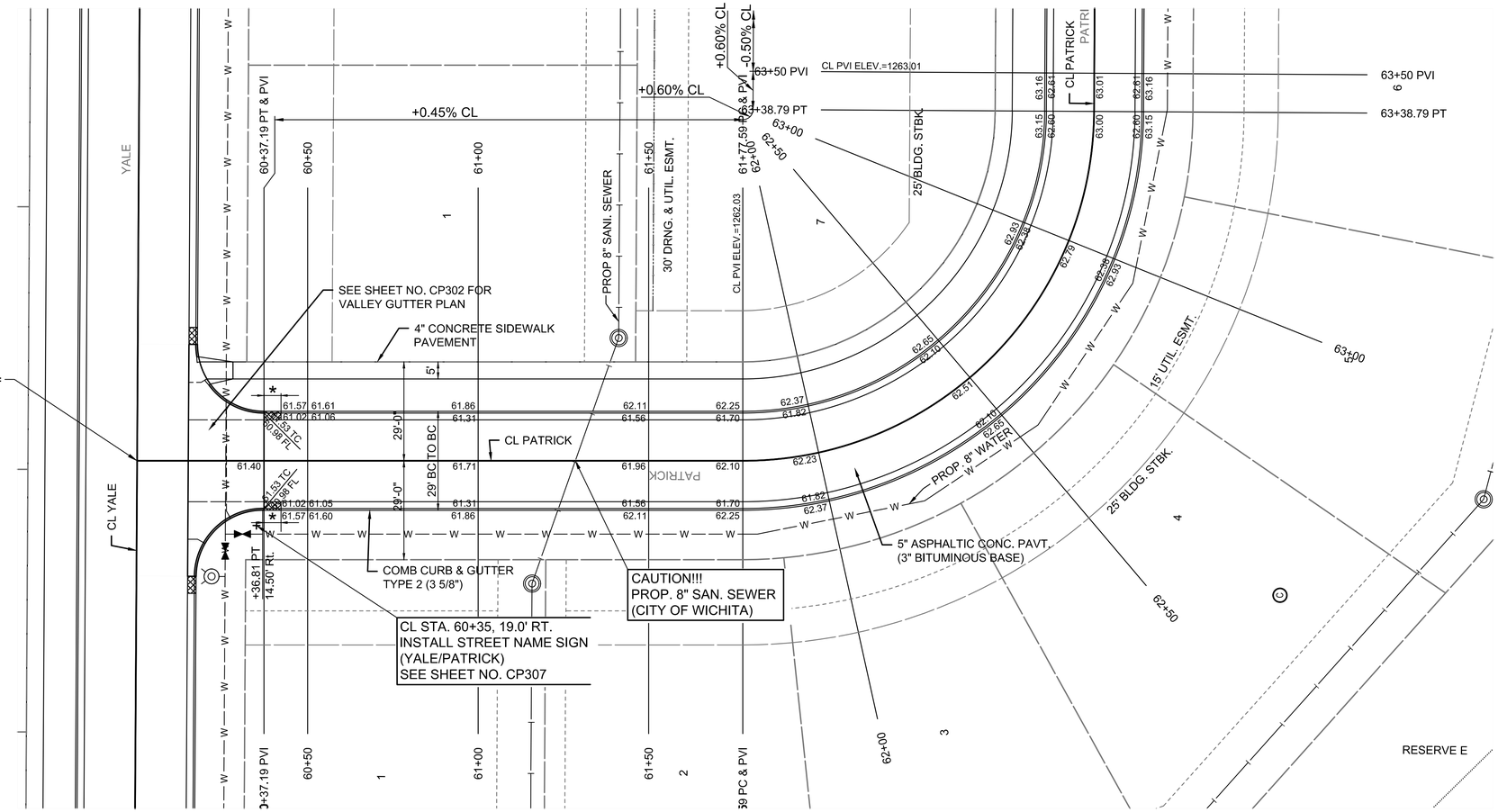
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

MERILYN PLAN

CP207
15 OF 71

SAVED 12/24/2024 9:28:17 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 9:34:46 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\00402PD3_PLANS\030_PAVING PHASE 1\15-200605-004-CP207 MERILYN 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")

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

CITY OF WICHITA

KEVIN P. GRAHAM
LICENSED
27806
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:		
	08/17/2026 - cjr	

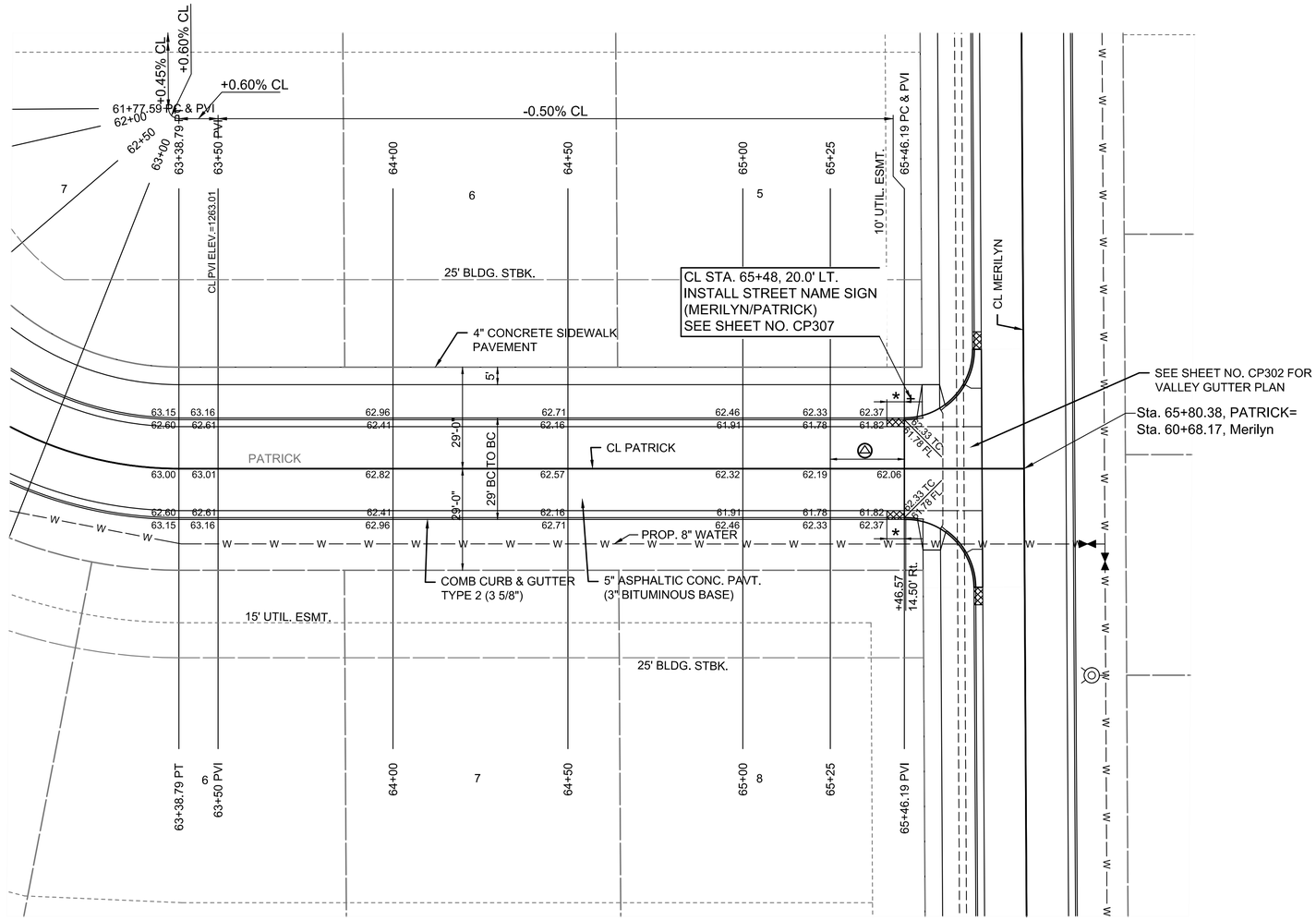
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

PATRICK STREET PLAN

CP208
16 OF 71

SAVED 12/24/2024 9:25:59 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 9:35:18 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\0042\2PD3_PLANS\030_PAVING PHASE 1\116-200605-004-CP208 PATRICK 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.

△ WARPING CROSS SLOPE FROM 3.0% AT STA. 65+25.00 TO 2.0% AT STA. 65+46.19

* 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 05/27/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

PATRICK STREET PLAN

CP209
17 OF 71

SAVED 12/24/2024 9:23:21 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 9:35:48 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_PAVING PHASE 1\17-200605-004-CP209 PATRICK PLAN.DWG

SCALE IN FEET
0' 5' 10'

CL STA. 61+98, 19.5' LT.
INSTALL TRAFFIC SIGN
(R7-1R)(NO PARKING)(12"x18")
SEE SHEET NO. CP307

CL STA. 63+32, 19.5' LT.
INSTALL TRAFFIC SIGN
(R7-1L)(NO PARKING)(12"x18")
SEE SHEET NO. CP307

CL STA. 62+72, 2.0' LT.
INSTALL TRAFFIC SIGN
(R4-7)(KEEP RIGHT)(24"x30")
SEE SHEET NO. CP307

PROP. 8" WATER

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

COMB CURB & GUTTER TYPE 3 (8")

CL MERILYN STREET

MEDIAN CONCRETE RAMP NOSE

29'-0" BC TO BC

11'-9"

13'-3"

8'

12' X 4' RCB

5'-0"

4" CONCRETE SIDEWALK PAVEMENT

PROP 8" SANI. SEWER

CL STA. 61+98, 20.5' RT.
INSTALL TRAFFIC SIGN
(R7-1L)(NO PARKING)(12"x18")
SEE SHEET NO. CP307

CL STA. 62+56, 2.0' RT.
INSTALL TRAFFIC SIGN
(R4-7)(KEEP RIGHT)(24"x30")
SEE SHEET NO. CP307

CL STA. 63+32, 22.0' RT.
INSTALL TRAFFIC SIGN
(R7-1R)(NO PARKING)(12"x18")
SEE SHEET NO. CP307

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.

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

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 05/27/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:		
	08/17/2026 - cjr	

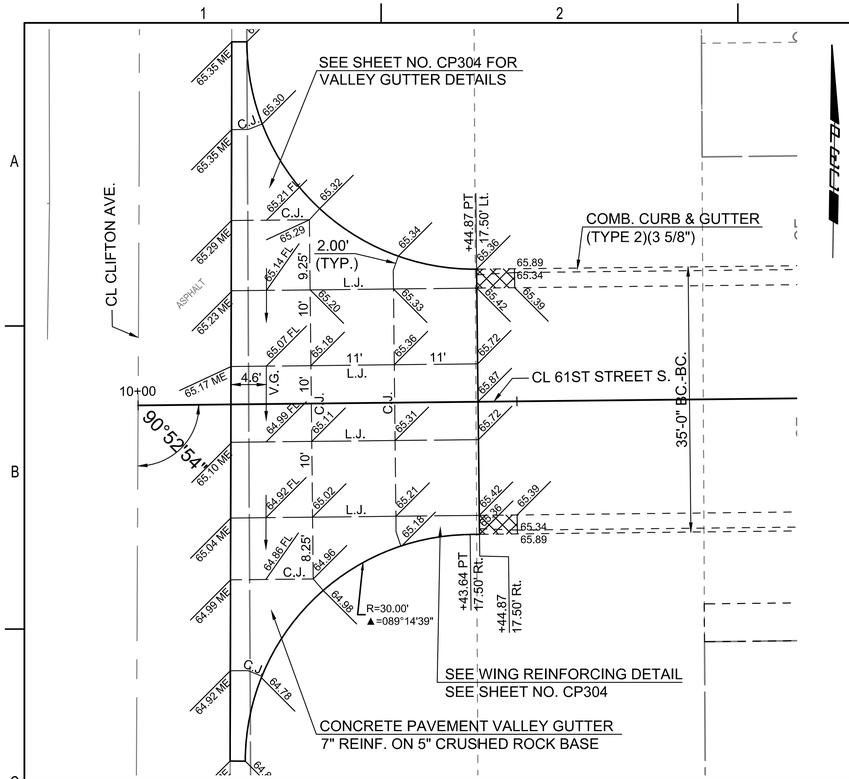
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

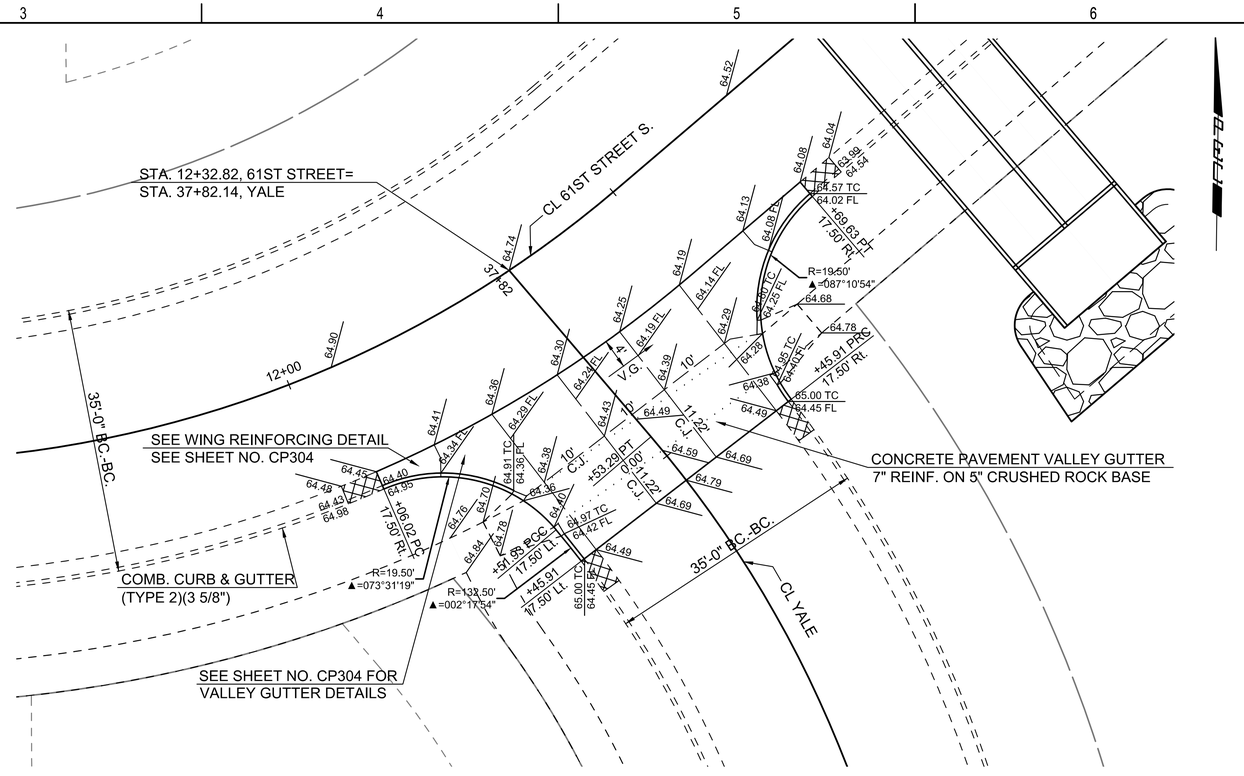
JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

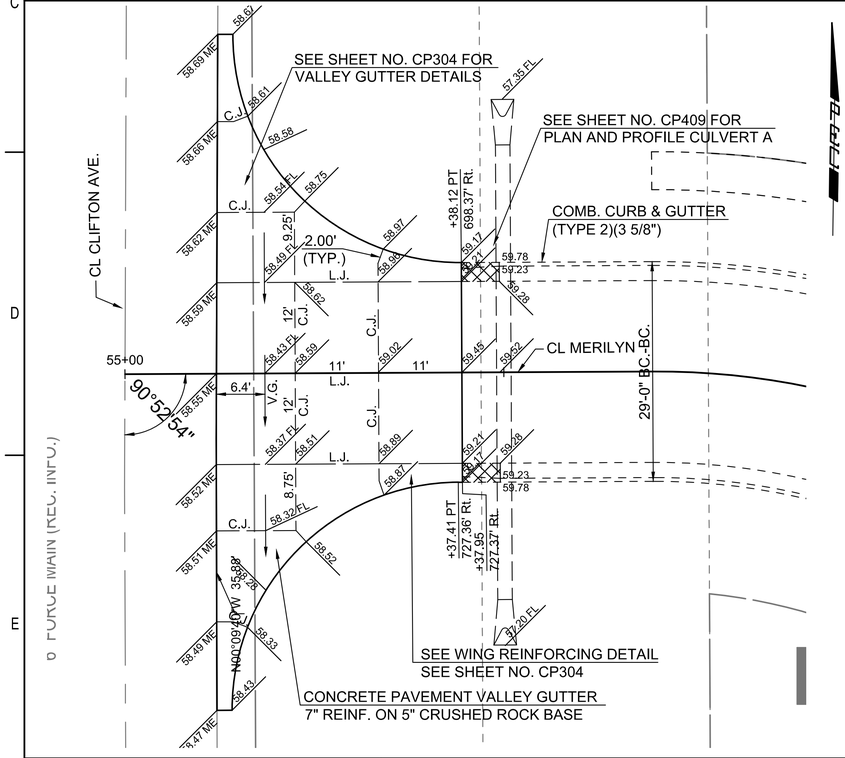
MEDIAN AREA

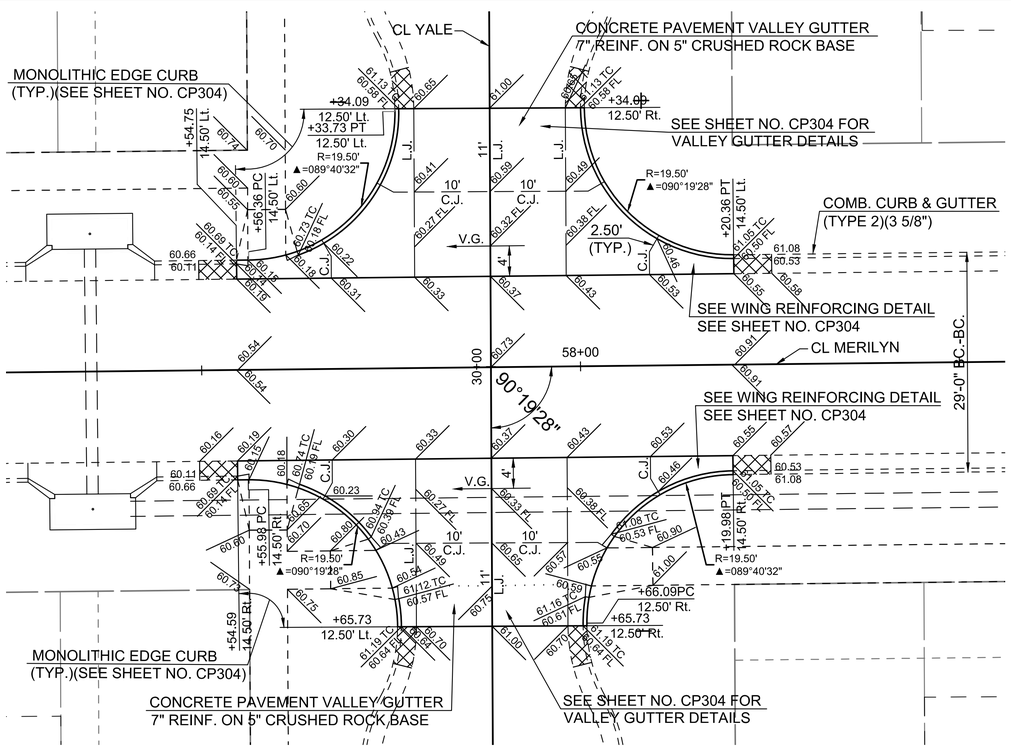
CP301
18 OF 71

SAVED 5/27/2025 11:23:51 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 11:27:58 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605004\2PD3_PLANS\030_PAVING PHASE 1\18-200605-004-CP301 MEDIAN AREA.DWG









SCALE IN FEET
0 10 20

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

CITY OF WICHITA

KEVIN P. GRAHAM
LICENSED
27806
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:		
	08/17/2026 - cjr	

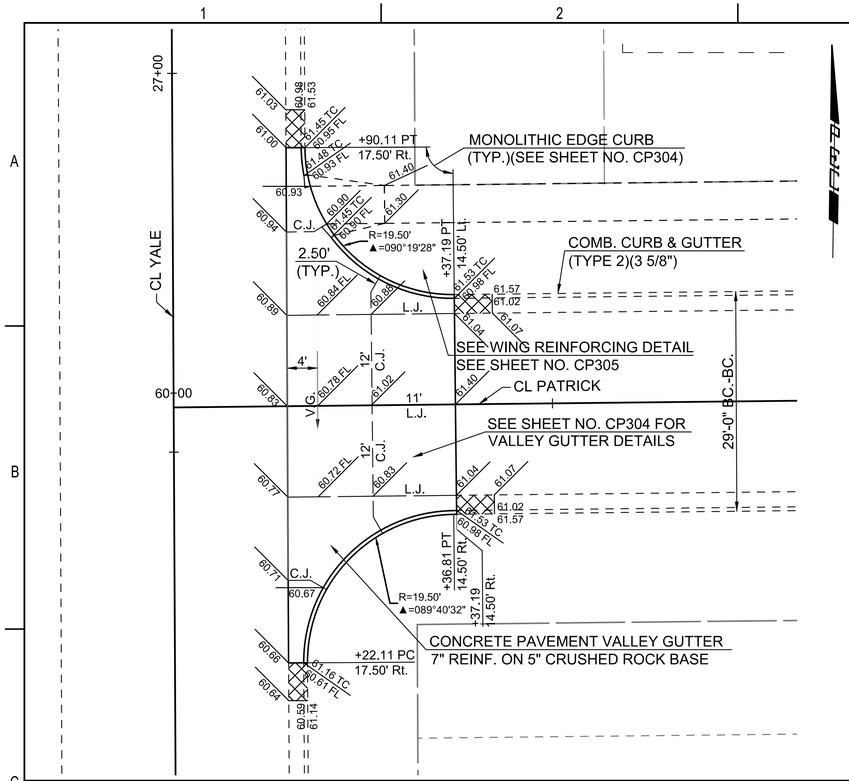
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

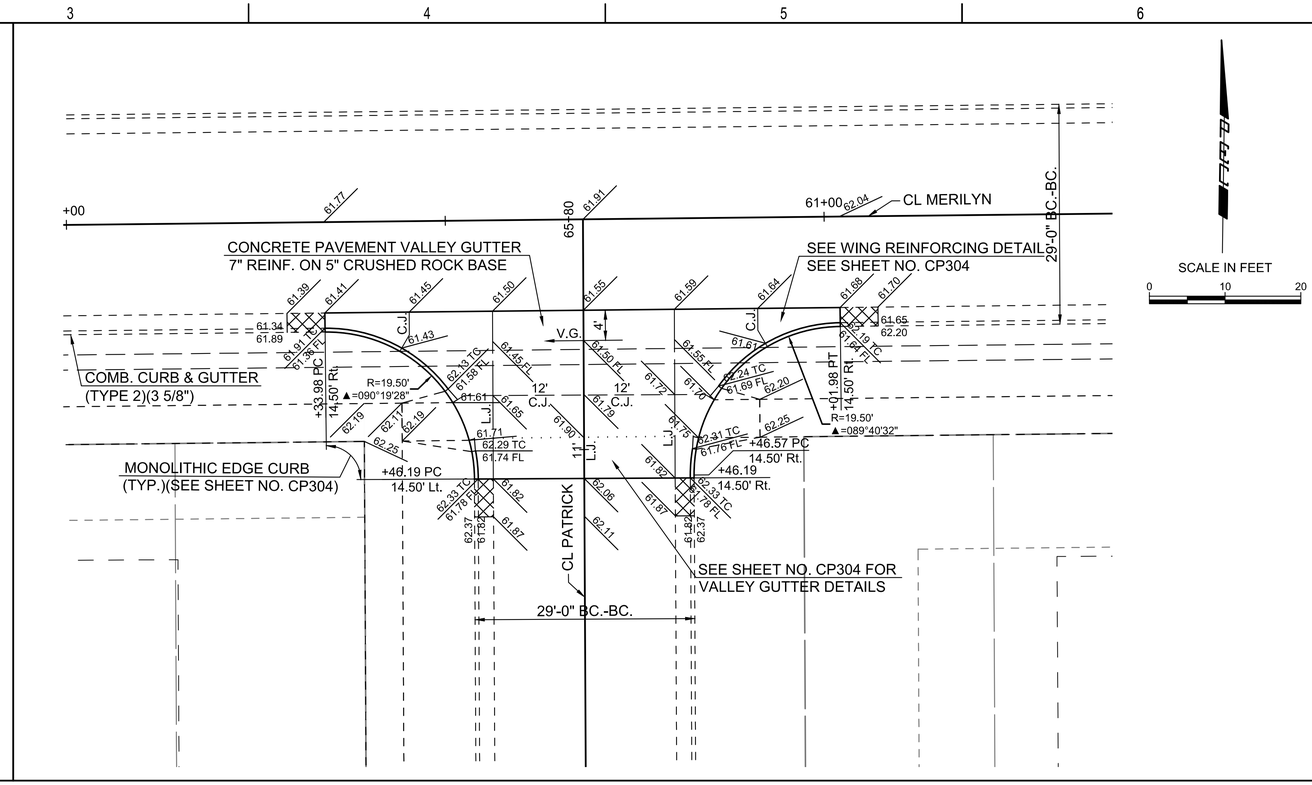
JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

VALLEY GUTTER PLANS

CP302
19 OF 71

SAVED 9/4/2024 9:01:52 AM BY BILL.SEXSON
PLOTTED 5/27/2025 9:36:42 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\00\42PD3_PLANS\030_PAVING PHASE 1\19-200605-004-CP302 VALLEY GUTTER PLANS.DWG





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

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

CITY OF WICHITA

KEVIN P. GRAHAM
LICENSED
27806
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:		
	08/17/2026 - cjr	

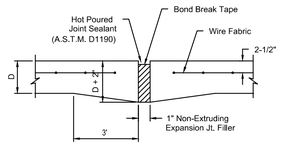
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

VALLEY GUTTER PLANS

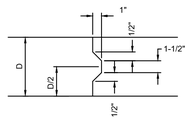
CP303
20 OF 71

SAVED 8/14/2024 10:24:30 AM BY BILL.SEXSON
PLOTTED 5/27/2025 9:37:03 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_PAVING PHASE 1\20-200605-004-CP303 VALLEY GUTTER PLANS.DWG

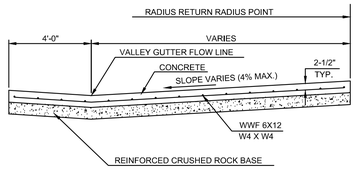


EXPANSION JOINT

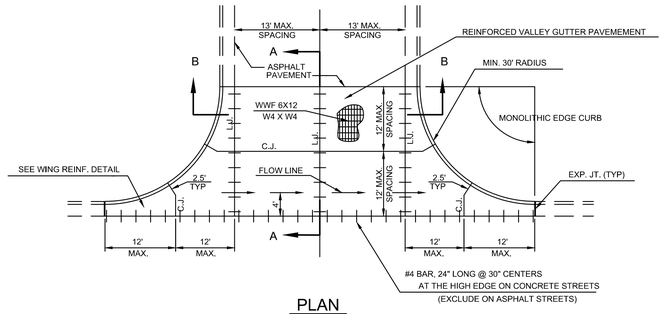
NOTE: Extra Thickness to be Subsidiary to Price of Square Yards Pavement



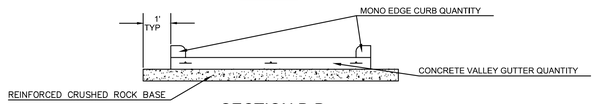
KEYWAY DETAIL



SECTION A-A

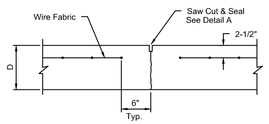


PLAN

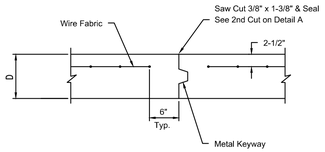


SECTION B-B

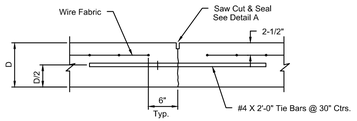
REINFORCED VALLEY GUTTER DETAIL



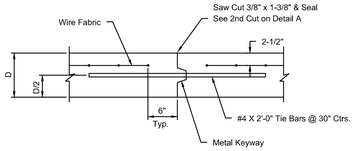
CONTRACTION JOINT DETAIL (C.J.)



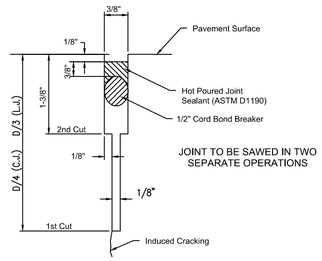
OPTIONAL CONTRACTION JOINT



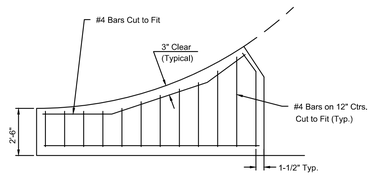
LONGITUDINAL JOINT DETAIL (L.J.)



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
___-___	_____	

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

SHEET
_ of _

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
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION
PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

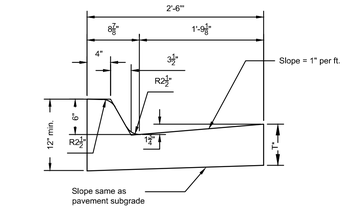
JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

VALLEY GUTTER DETAILS

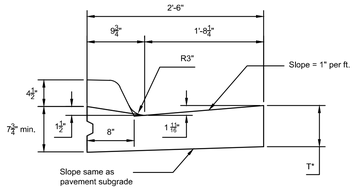
CP304
21 OF 71

Saved: 06-12-2024, 6:55:08 AM By: BILL.SEXSON
Plotted: 05-27-2025, 9:37:10 AM By: KEVIN.GRAHAM
U:\Wichita-Civil\2020\200605\004\2PD3_PLANS\0300_PAVING PHASE 1\21-200605-004-CP304 VALLEY GUTTER DETAILS.DWG

TYPE 1
(Arterial curb)

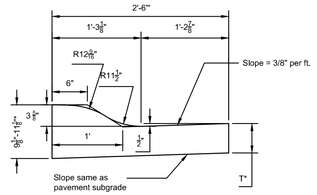


Combined Curb & Gutter (6")

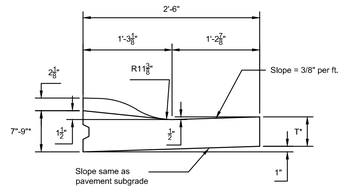


Combined Curb & Gutter (1 1/2")

TYPE 2
(Roll curb)

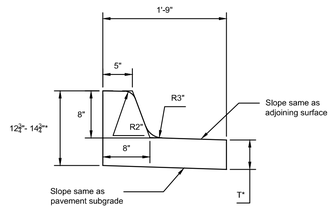


Combined Curb & Gutter (3 5/8")

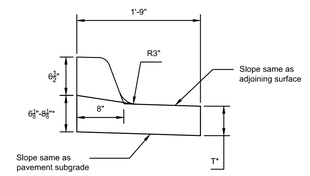


Combined Curb & Gutter (1 1/2")

TYPE 3
(Median curb)

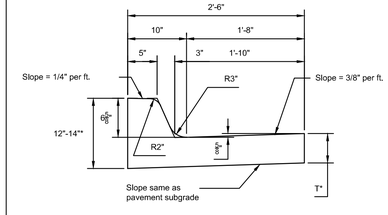


Combined Curb & Gutter (8")

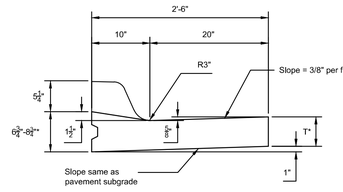


Combined Curb & Gutter (1 1/2")

TYPE 4
(Residential curb)

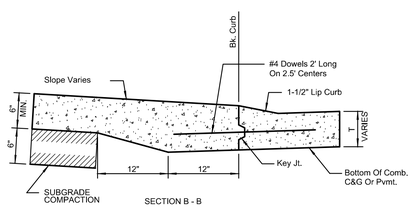


Combined Curb & Gutter (6 5/8")



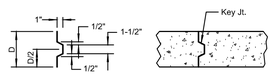
Combined Curb & Gutter (1 1/2")

T* = Thickness of curb to adjust with pavement thickness

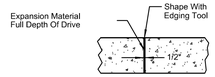


SECTION B - B

BACK OF CURB DETAIL



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
____-_____	_____	

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

SHEET
_ of _

PV-101

Saved 06-12-2024 6:54:45 AM by BILL.SEXSON
Plotted 5/27/2025 9:37:14 AM by KEVIN GRAHAM
U:\Wichita-Civil\2020\200605\004\PD3_PLANS\030_PAVING PHASE 1\22-200605-004-CP305 CURB AND GUTTER DETAILS.DWG

SAVED 6/12/2024 6:54:45 AM BY BILL.SEXSON
PLOTTED 5/27/2025 9:37:14 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\PD3_PLANS\030_PAVING PHASE 1\22-200605-004-CP305 CURB AND GUTTER DETAILS.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
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION
PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:		
	08/17/2026 - cjr	

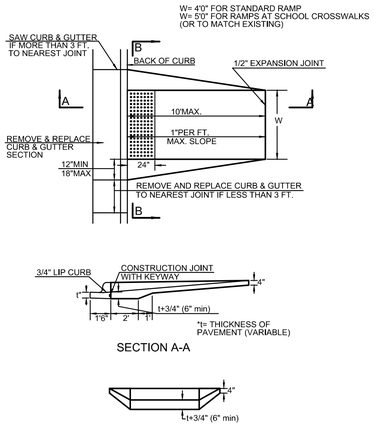
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

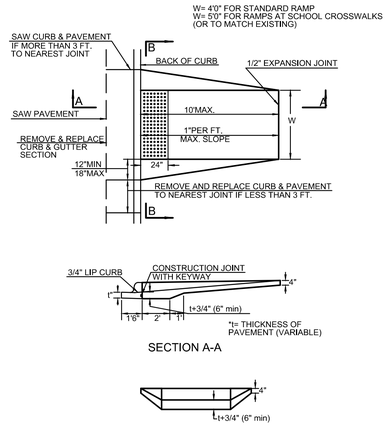
CURB AND GUTTER DETAILS

CP305
22 OF 71

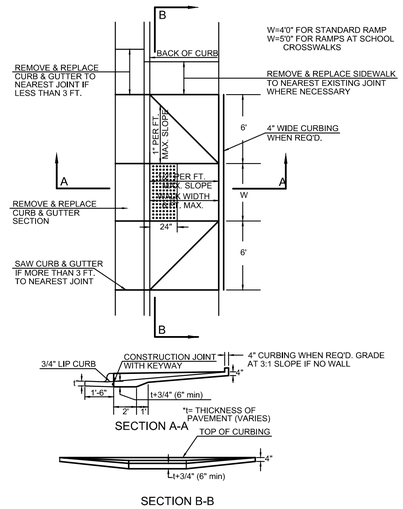
STANDARD WHEELCHAIR RAMP CONSTRUCTION DETAIL FOR STREETS WITH COMBINED CURB & GUTTER (TYPE A)



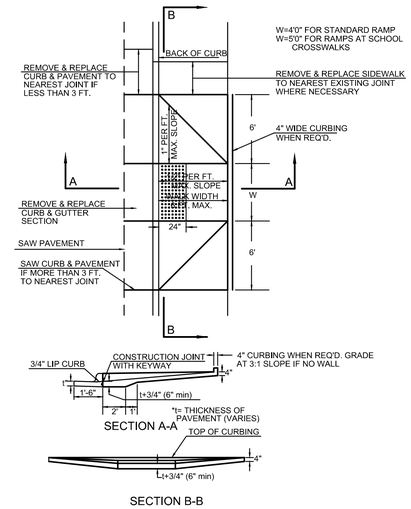
STANDARD WHEELCHAIR RAMP CONSTRUCTION DETAIL FOR CONCRETE STREETS WITH MONOLITHIC CURB (TYPE A)



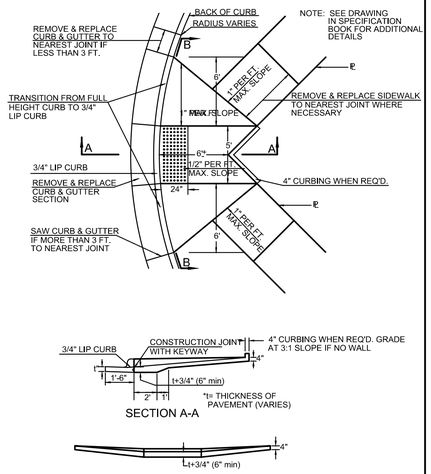
STANDARD WHEELCHAIR RAMP CONSTRUCTION DETAIL FOR STREETS WITH COMBINED CURB & GUTTER AND FULL WALK (TYPE B)



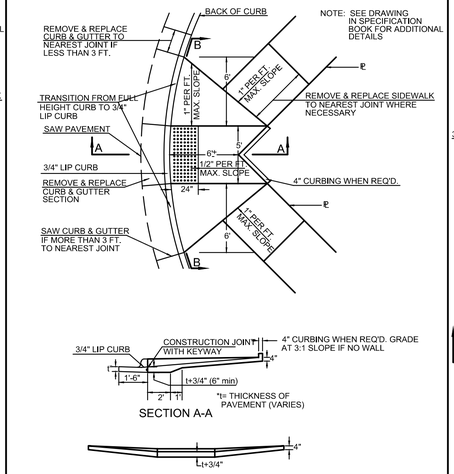
STANDARD WHEELCHAIR RAMP CONSTRUCTION DETAIL FOR STREETS WITH MONOLITHIC CURB AND FULL WALK (TYPE B)



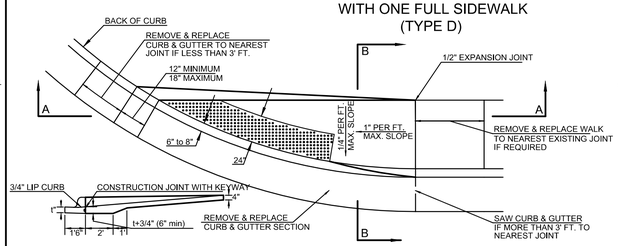
STANDARD WHEELCHAIR RAMP CONSTRUCTION DEAIL FOR STREET WITH COMBINED CURB AND GUTTER ON RADIUS WITH 6'\ FROM BACK OF CURB TO PROPERTY CORNER (TYPE C)



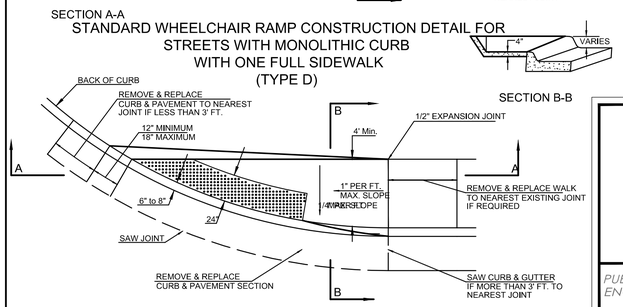
STANDARD WHEELCHAIR RAMP CONSTRUCTION DETAIL FOR STREET WITH MONOLITHIC CURB ON RADIUS WITH 6'\ FROM BACK OF CURB TO PROPERTY CORNER (TYPE C)

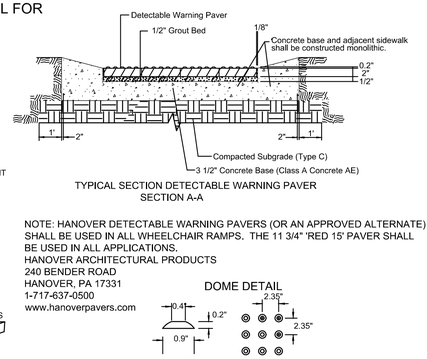


STANDARD WHEELCHAIR RAMP CONSTRUCTION DETAIL FOR STREETS WITH COMBINED CURB & GUTTER WITH ONE FULL SIDEWALK (TYPE D)



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
____-__	_____	*08/2013*

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

SHEET
_ of _

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
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:		
	08/17/2026 - cjr	

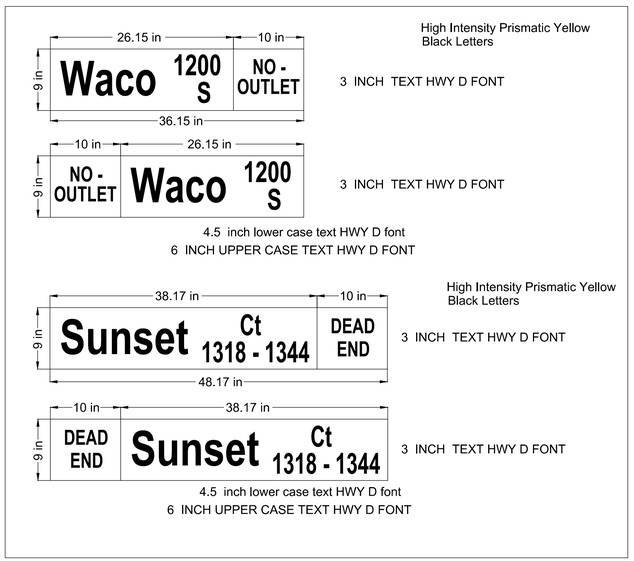
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

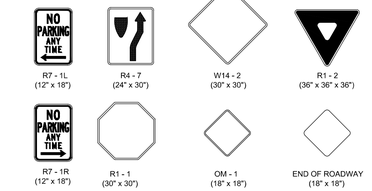
JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

WHEELCHAIR RAMP DETAILS

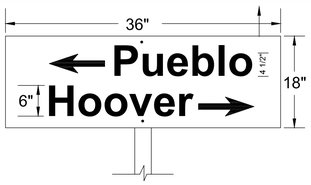
CP306
23 OF 71

Saved 06-12-2024 6:54:32 AM by BILL.SEXSON
Plotted 05-27-2025 9:37:20 AM by KEVIN GRAHAM
U:\Wichita-Civil\2020\200605\004\PD3_PLANS\030_PAVING PHASE 1\23-200605-004-CP306 WHEELCHAIR RAMP DETAILS.DWG

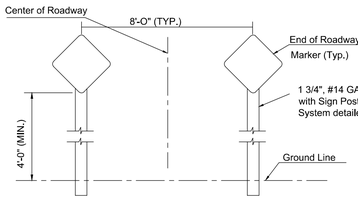




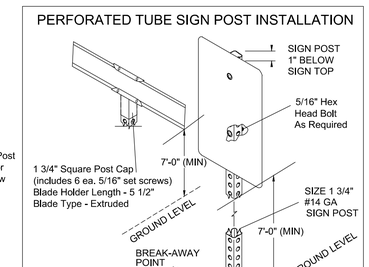
* IN NO CASE SHALL THE SPECIFICATIONS BE LESS THAN REQUIRED BY THE CURRENT MUTCD.



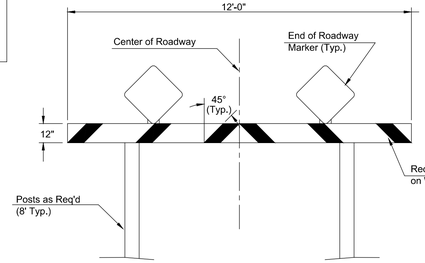
FLAT PLATE STREET NAME SIGN



TYPICAL END OF ROADWAY SIGN MOUNTING INSTALLATION

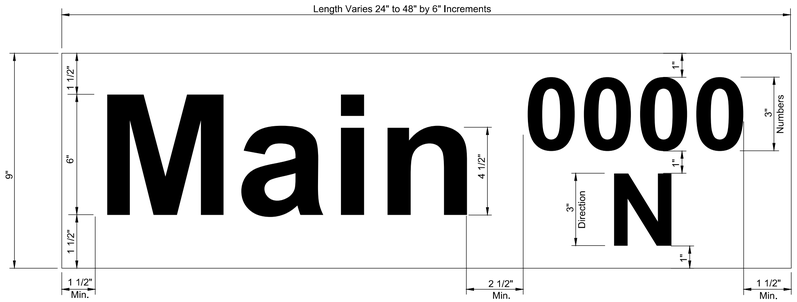


SIGN POST ANCHOR SYSTEM

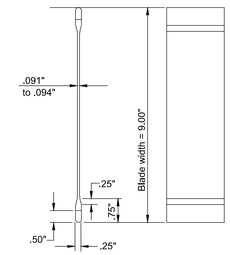


TYPE I BARRICADE DETAIL W/ E.O.R. MARKERS

DETAIL A
9" STANDARD



DETAIL B
9" METRO



STREET NAME SIGN
BLADE DETAILS

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.

SIGN ASSEMBLY TABLE

STATION	OFFSET	SIGN	QUANTITY*
10+40	LT.	(R1-1)(STOP)	1
10+40	RT.	STREET NAME SIGN	1
13+42	CL	(OM4-3)(END OF ROADWAY)	2
24+97.5	CL	(OM4-3)(END OF ROADWAY)	2
29+65	RT.	(R1-1)(STOP)	1
30+35	LT.	(R1-1)(STOP)	1
30+35	RT.	STREET NAME SIGN	1
37+47	LT.	STREET NAME SIGN	1
55+40	LT.	(R1-1)(STOP)	1
55+40	RT.	STREET NAME SIGN	1
66+64	RT.	FLAT PLATE (SNS)	1
69+80	CL	(OM4-3)(END OF ROADWAY)	2
60+35	RT.	STREET NAME SIGN	1
65+48	LT.	STREET NAME SIGN	1
61+98	LT.	(R7-1R)(NO PARKING)	1
61+98	RT.	(R7-1L)(NO PARKING)	1
63+32	LT.	(R7-1L)(NO PARKING)	1
63+32	RT.	(R7-1R)(NO PARKING)	1
62+56	RT.	(R4-7)(KEEP RIGHT)	1
62+72	LT.	(R4-7)(KEEP RIGHT)	1
TOTAL			23

STREET NAME	NO. BLADES REQ'D		
	9" STD.	9" METRO	FLAT PLATE
Clifton Ave #		2	
61st St S #		1	
Merilyn #		1	
61st St S	1		
Merilyn	2		
Yale	3		
Patrick	2		
Merilyn/Bluff			1

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
472-2024-086026		

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

SHEET _ of _

TR-112

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
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS
SWANEY FARM ADDITION
PHASE 1
PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

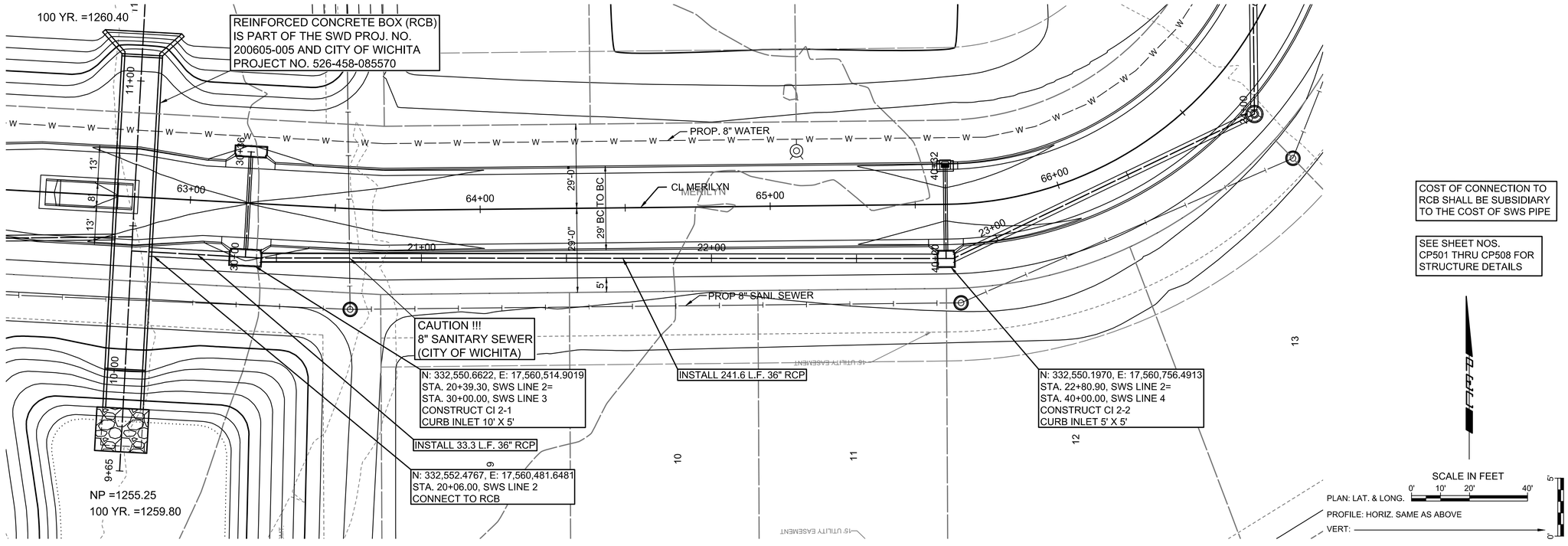
JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

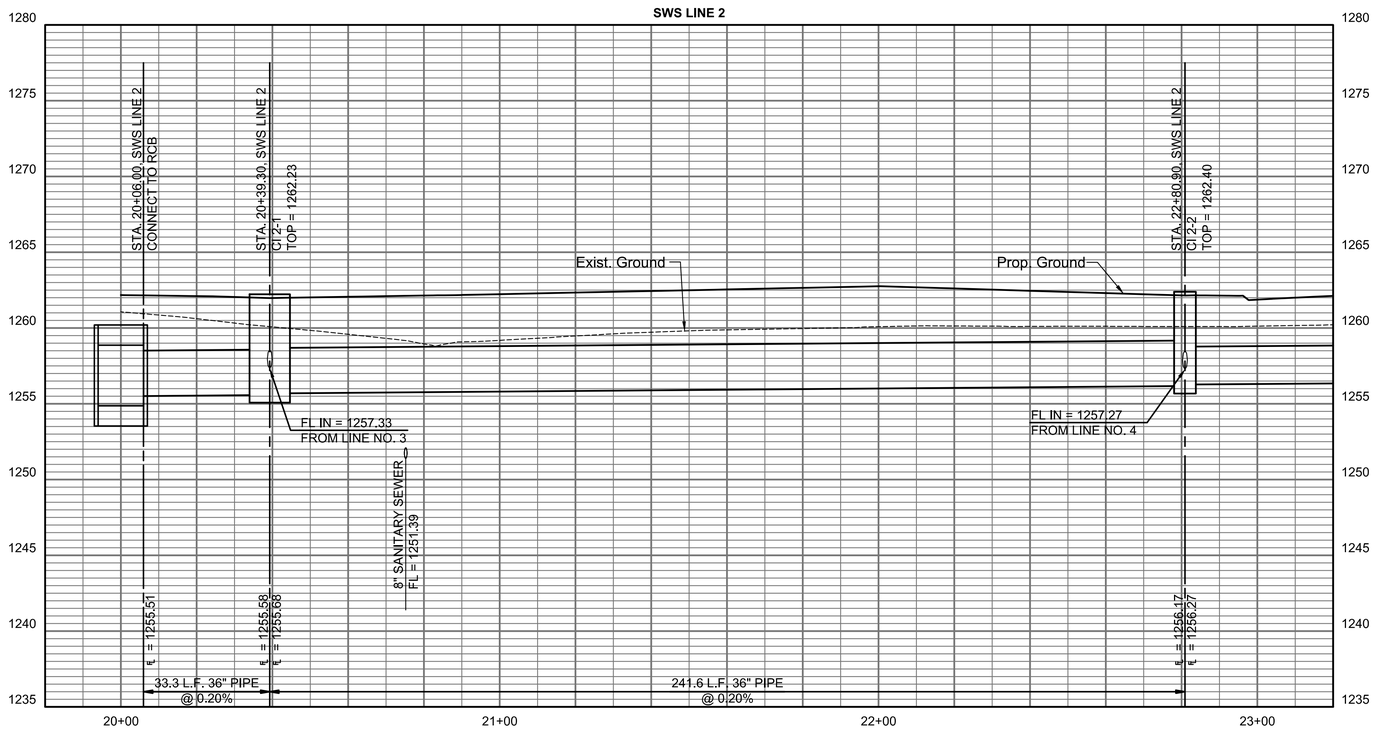
SIGN DETAILS

CP307
24 OF 71

Saved 08-14-2024 3:00:25 PM by BILL.SEXSON
Plotted 08-15-2024 10:05:25 AM by KEVIN GRAHAM
U:\Wichita-Civil\2020\200605\004\PD3_PLANS\030_PAVING PHASE 1\24-200605-004-CP307 SIGN DETAILS.DWG

SAVED 8/14/2024 3:00:25 PM BY BILL.SEXSON
PLOTTED 5/27/2025 9:37:25 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_PAVING PHASE 1\24-200605-004-CP307 SIGN DETAILS.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
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:		
	08/17/2026 - cjr	

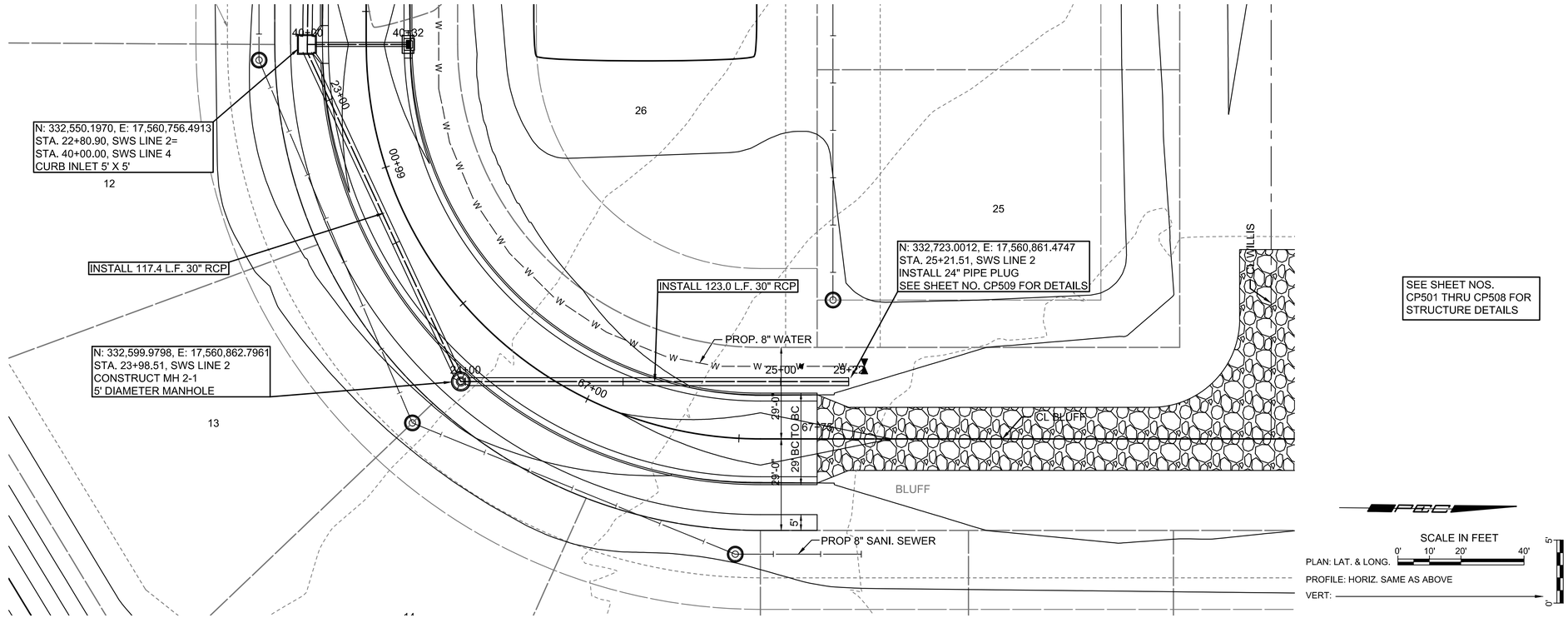
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

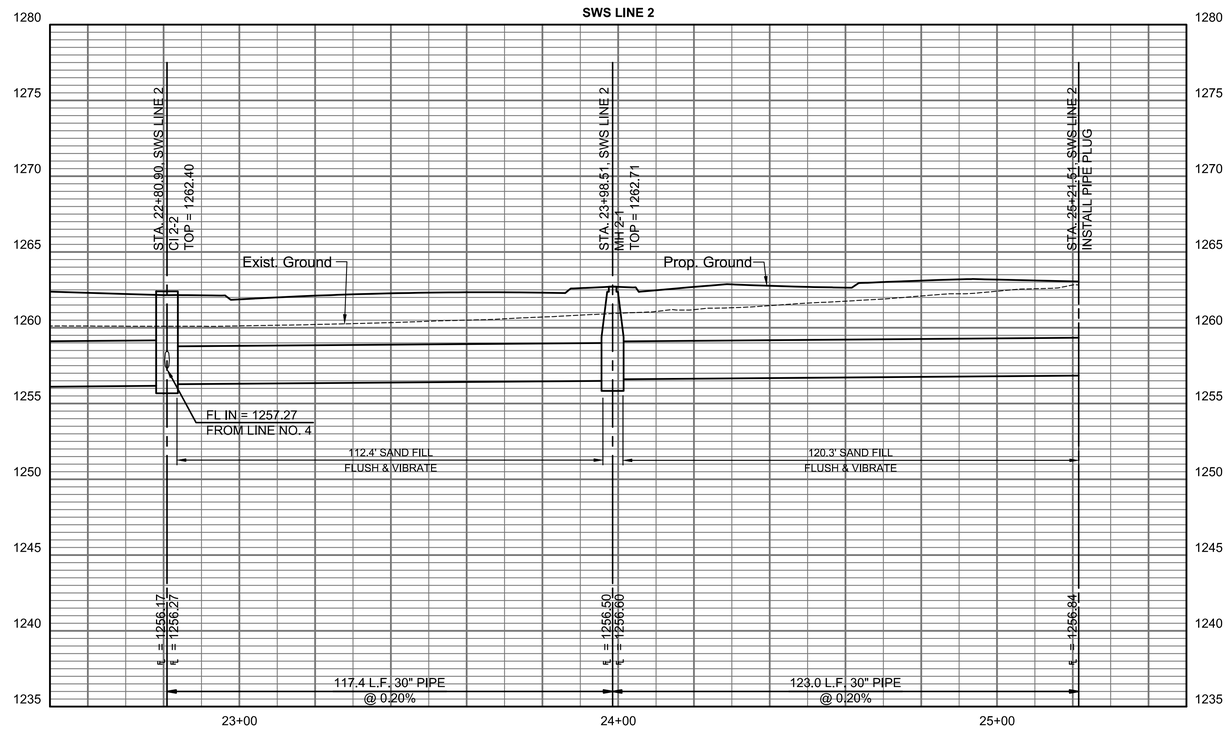
JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

PLAN AND PROFILE-SWS
LINE 2

CP401
25 OF 71

SAVED 8/26/2024 11:24:35 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 9:38:12 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_PAVING PHASE 1\25-200605-004-CP401 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
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:		
	08/17/2026 - cjr	

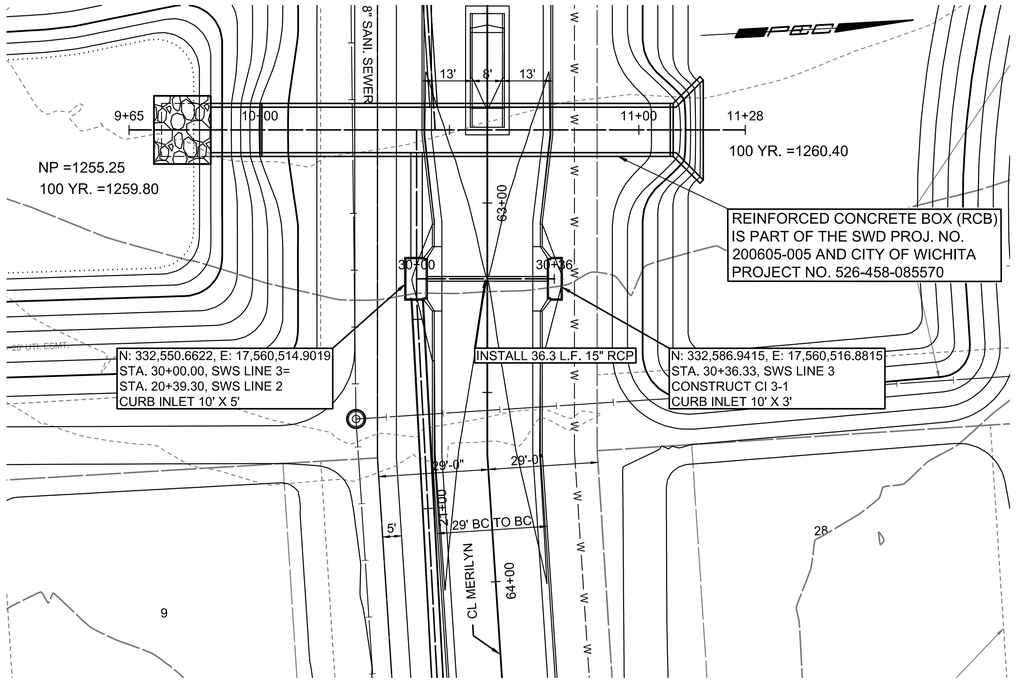
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

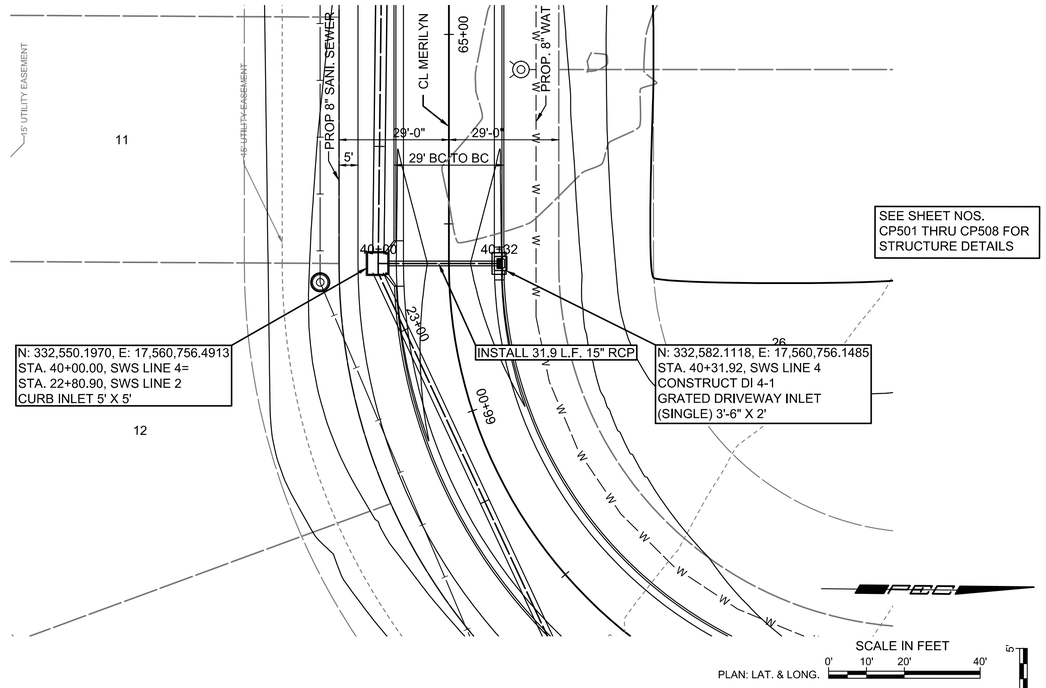
JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

PLAN AND PROFILE-SWS LINE 2

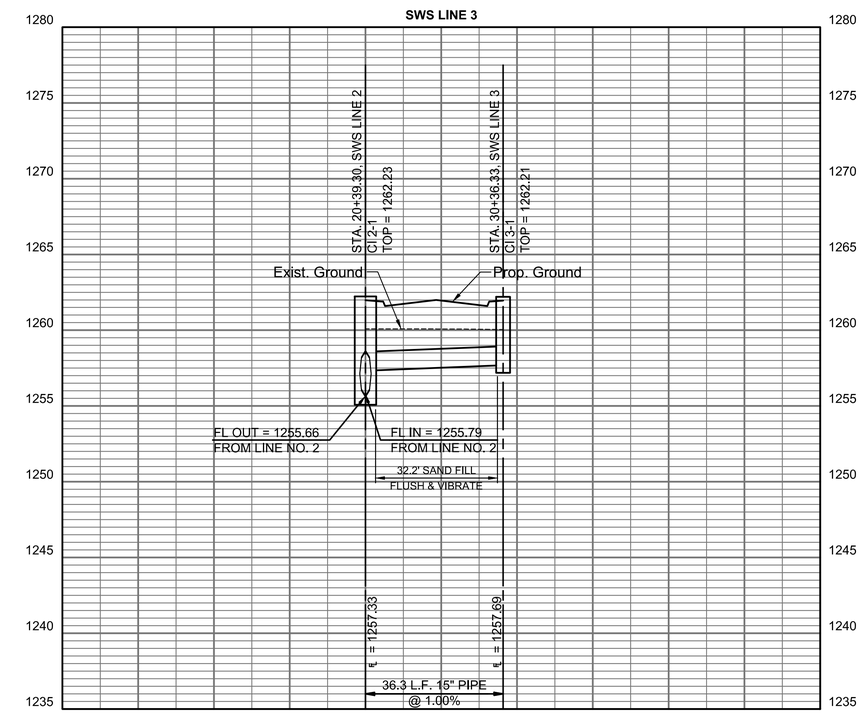
CP402
26 OF 71

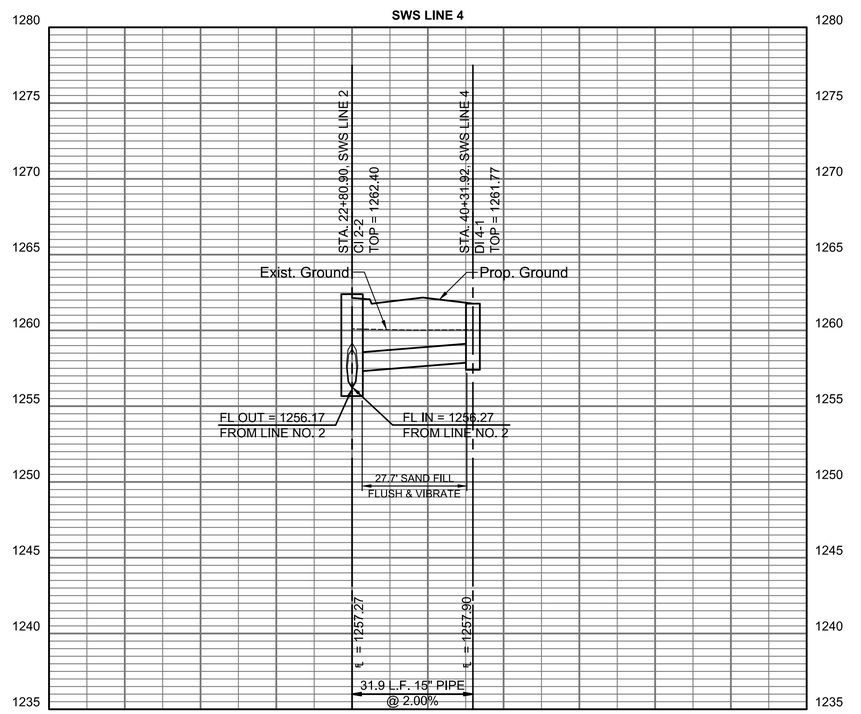
SAVED 8/26/2024 11:24:29 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 9:39:01 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\0042\PD3_PLANS\030_PAVING PHASE 1\26-200605-004-CP402 PLAN AND PROFILE-SWS LINE 2.DWG





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





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

CITY OF WICHITA

KEVIN P. GRAHAM
LICENSED
27806
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:		
	08/17/2026 - cjr	

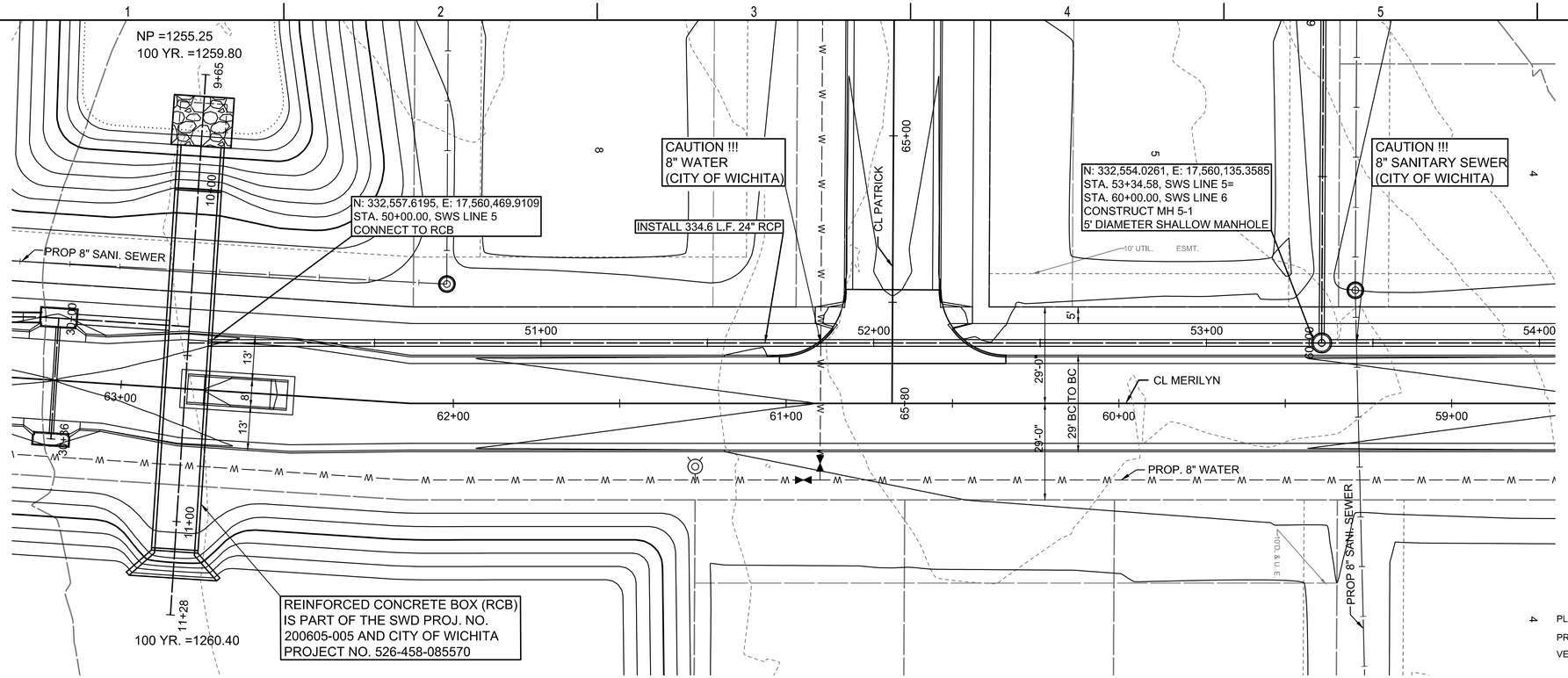
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

PLAN AND PROFILE-SWS
LINES 3 AND 4

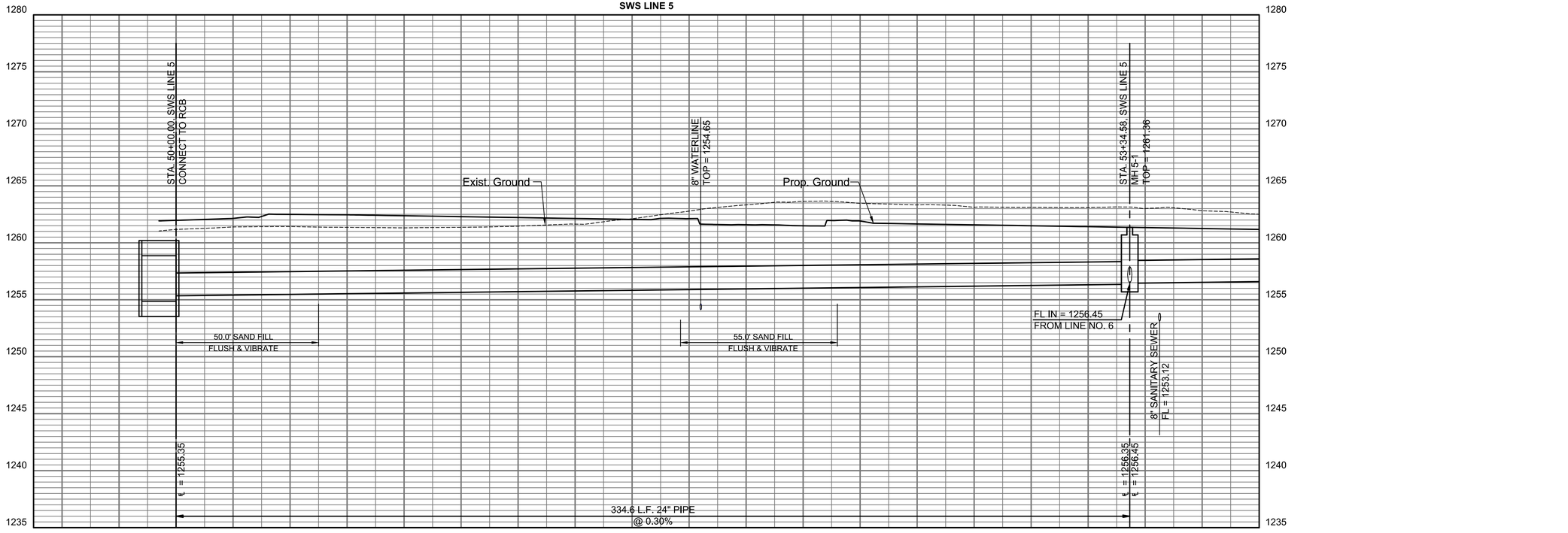
CP403
27 OF 71

SAVED 6/12/2024 6:53:35 AM BY BILL.SEXSON
PLOTTED 5/27/2025 9:39:50 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_PAVING PHASE 1\27-200605-004-CP403 PLAN AND PROFILE-SWS LINES 3 AND 4.DWG



COST OF CONNECTION TO RCB SHALL BE SUBSIDIARY TO THE COST OF SWS PIPE

SEE SHEET NOS. CP501 THRU CP508 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
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:		
	08/17/2026 - cjr	

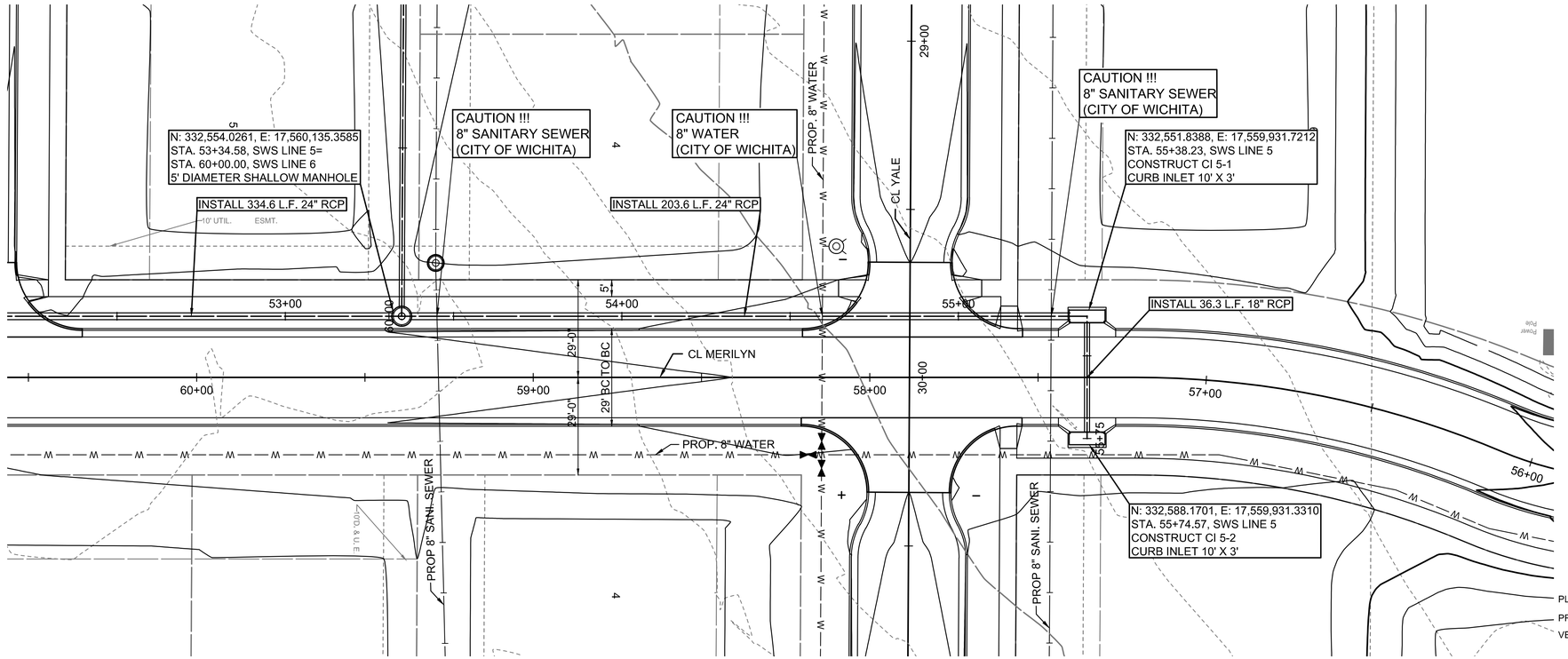
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

PLAN AND PROFILE-SWS LINE 5

CP404
28 OF 71

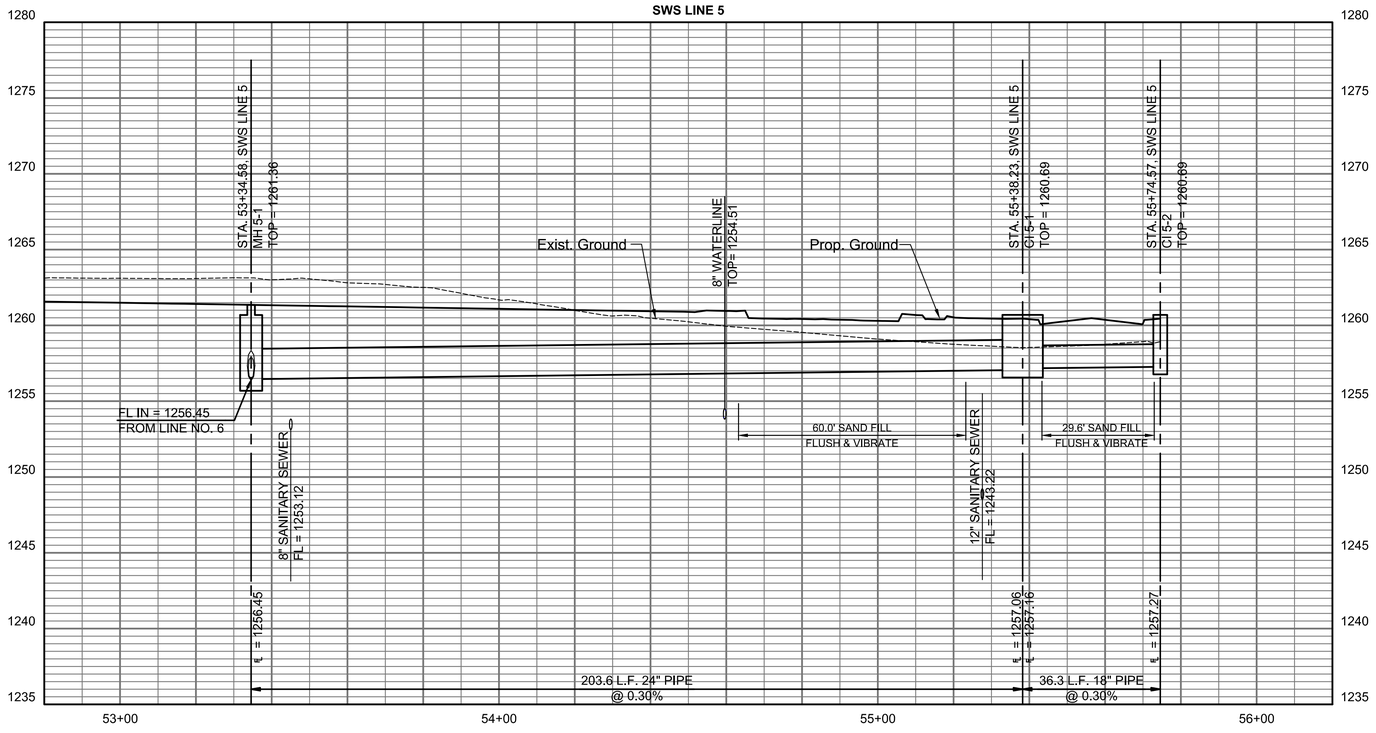
SAVED 8/26/2024 11:39:12 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 9:40:35 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_PAVING PHASE 1\28-200605-004-CP404 PLAN AND PROFILE-SWS LINE 5.DWG



SEE SHEET NOS.
CP501 THRU CP508 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
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:		
	08/17/2026 - cjr	

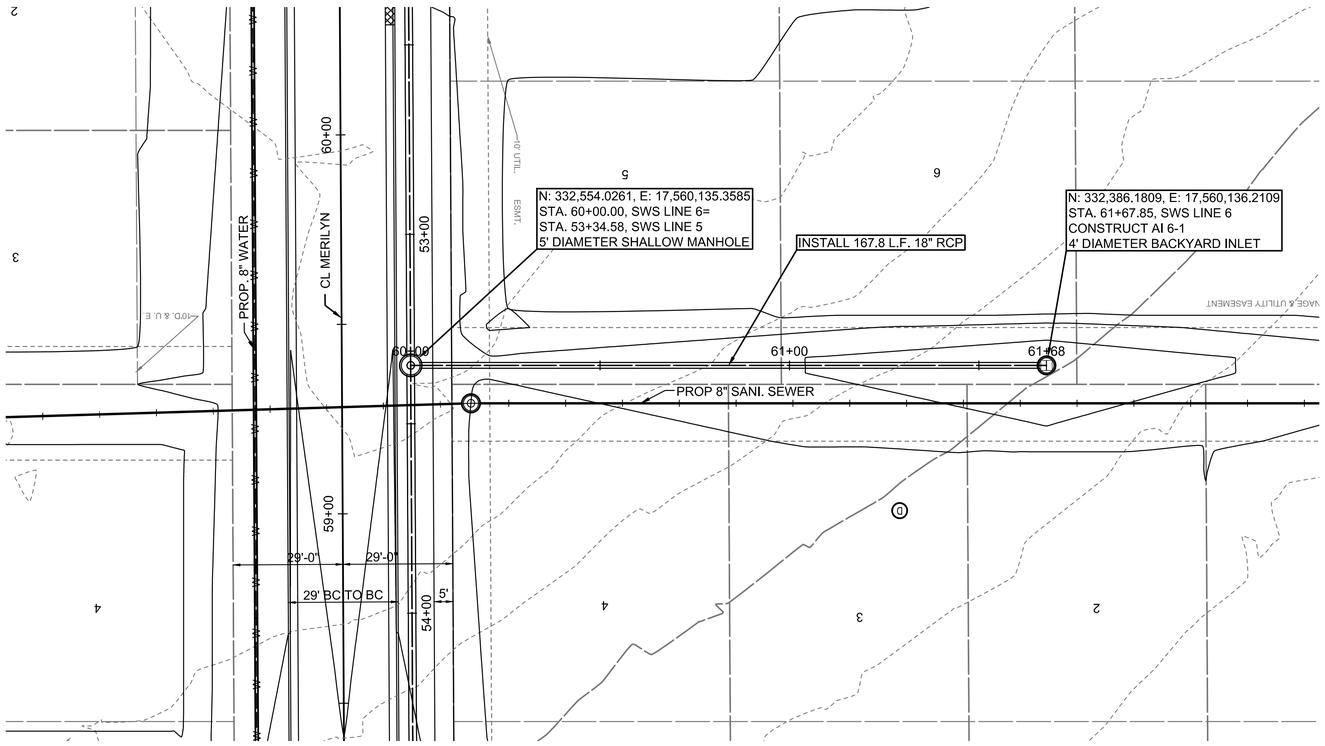
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

PLAN AND PROFILE-SWS LINE 5

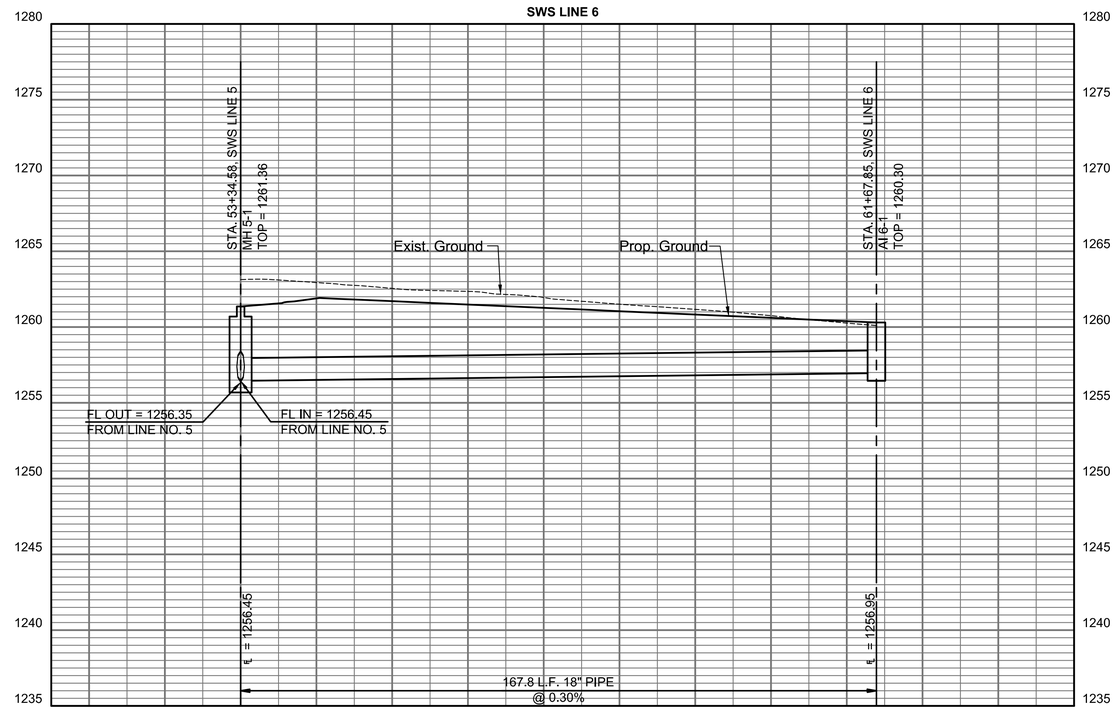
CP405
29 OF 71

SAVED 8/26/2024 11:39:02 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 9:41:23 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_PAVING PHASE 1\29-200605-004-CP405 PLAN AND PROFILE-SWS LINE 5.DWG



SEE SHEET NOS. CP501 THRU CP508 FOR STRUCTURE DETAILS

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



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

CITY OF WICHITA

KEVIN P. GRAHAM
LICENSED
27806
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:		
	08/17/2026 - cjr	

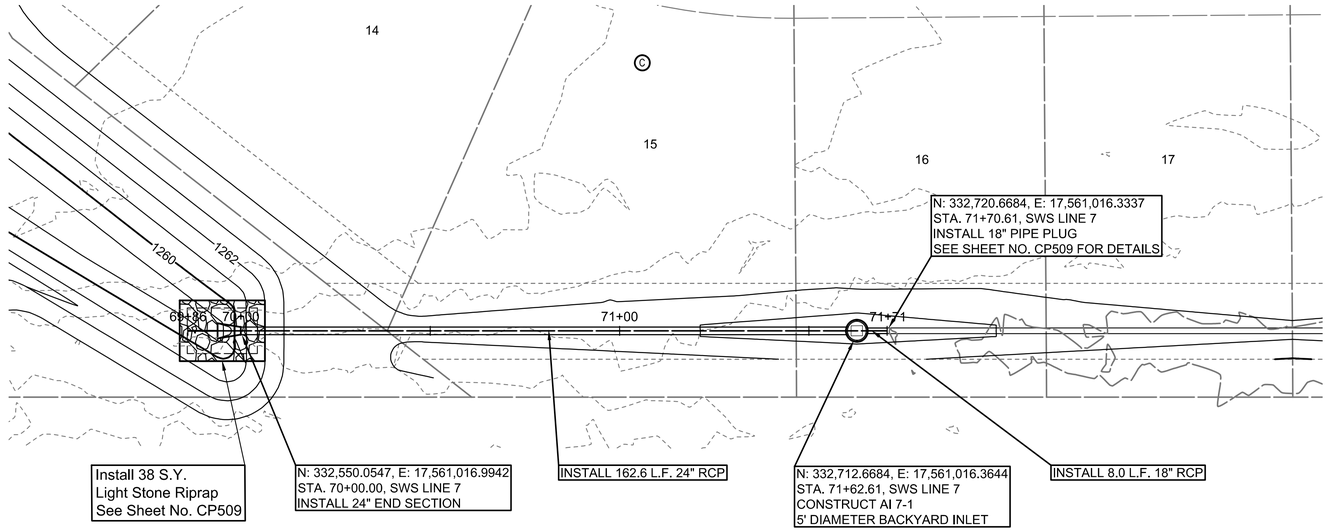
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

PLAN AND PROFILE-SWS LINE 6

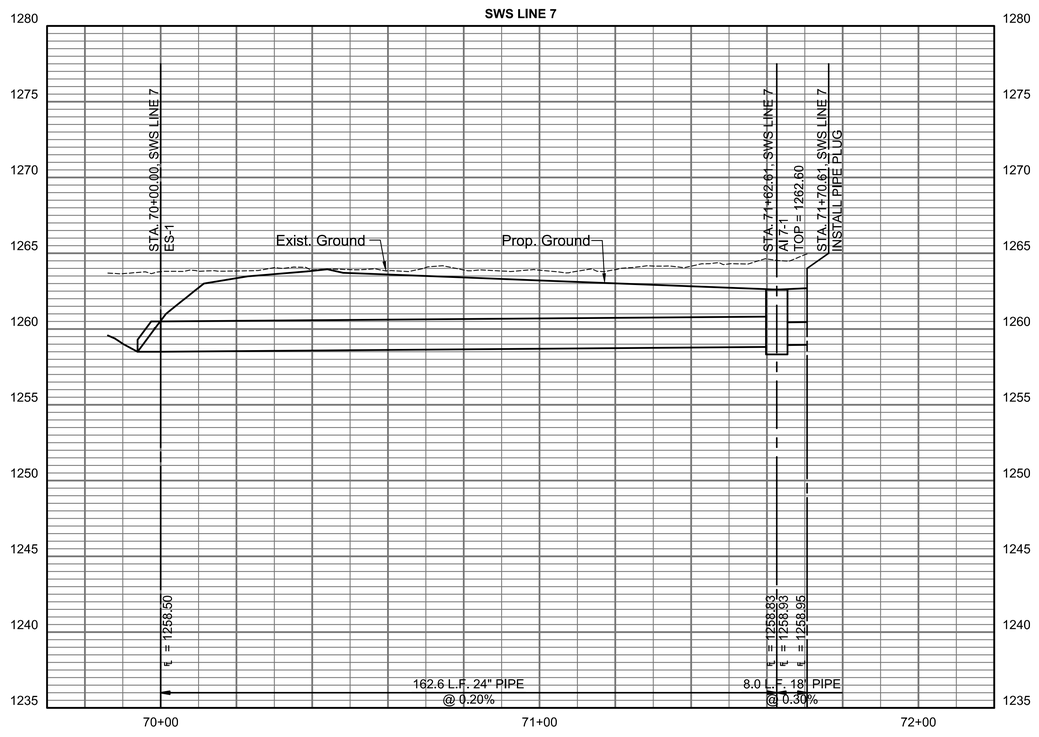
CP406
30 OF 71

SAVED 8/26/2024 11:49:29 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 9:42:10 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\00412PD3_PLANS\030_PAVING PHASE 1\30-200605-004-CP406 PLAN AND PROFILE-SWS LINE 6.DWG



SEE SHEET NOS.
CP501 THRU CP508 FOR
STRUCTURE DETAILS

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



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

CITY OF WICHITA

KEVIN P. GRAHAM
LICENSED
27806
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:		
	08/17/2026 - cjr	

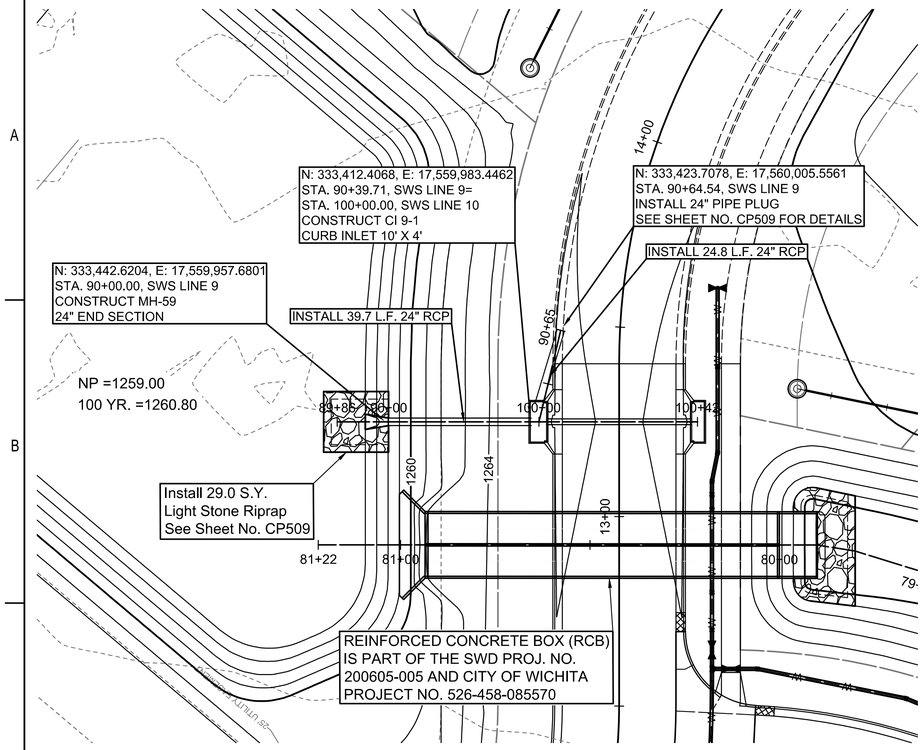
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

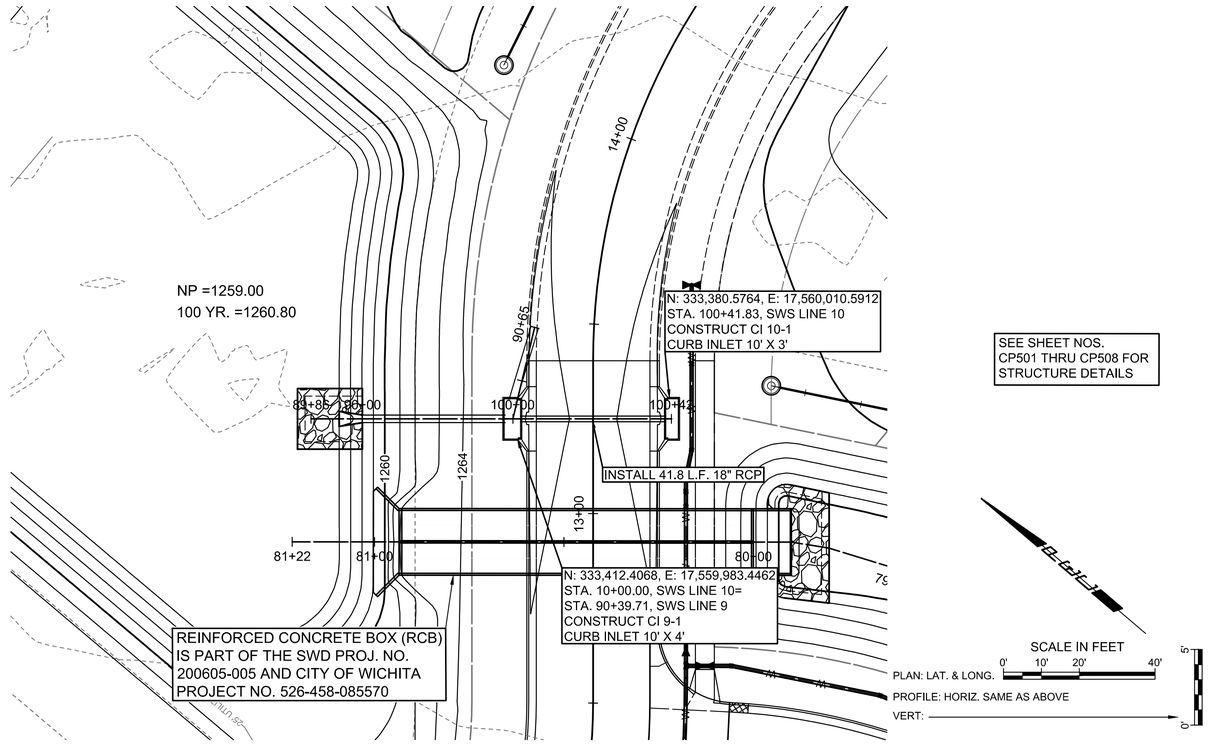
JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

PLAN AND PROFILE-SWS LINE 7

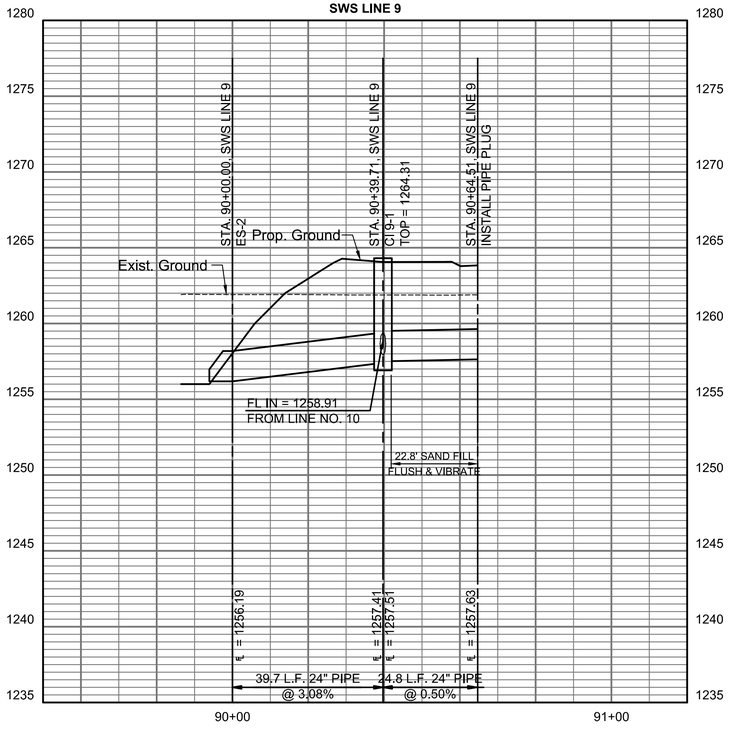
CP407
31 OF 71

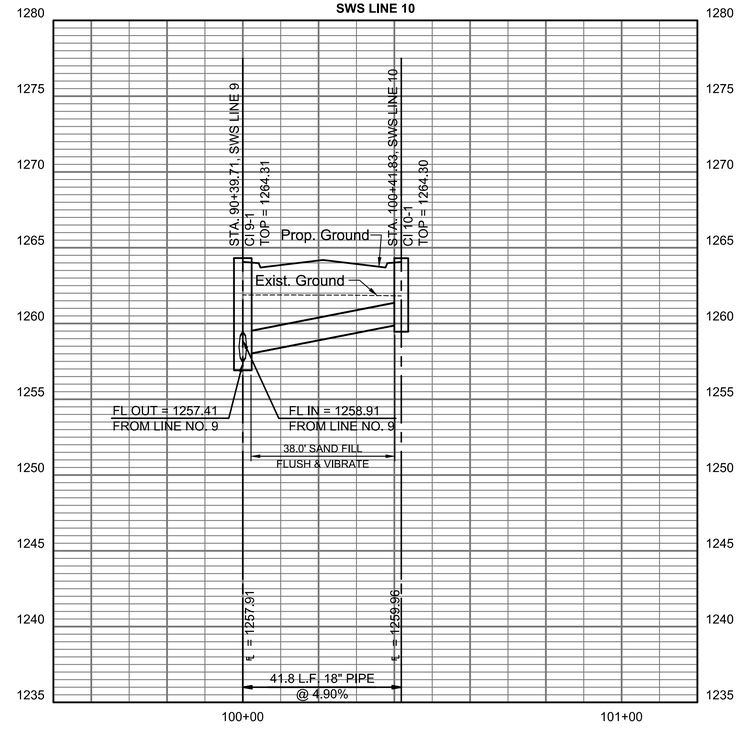
SAVED 9/3/2024 11:43:31 AM BY BILL.SEXSON
PLOTTED 5/27/2025 9:42:55 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_PAVING PHASE 1\31-200605-004-CP407 PLAN AND PROFILE-SWS LINE 7.DWG





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





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

CITY OF WICHITA

KEVIN P. GRAHAM
LICENSED
27806
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:		
	08/17/2026 - cjr	

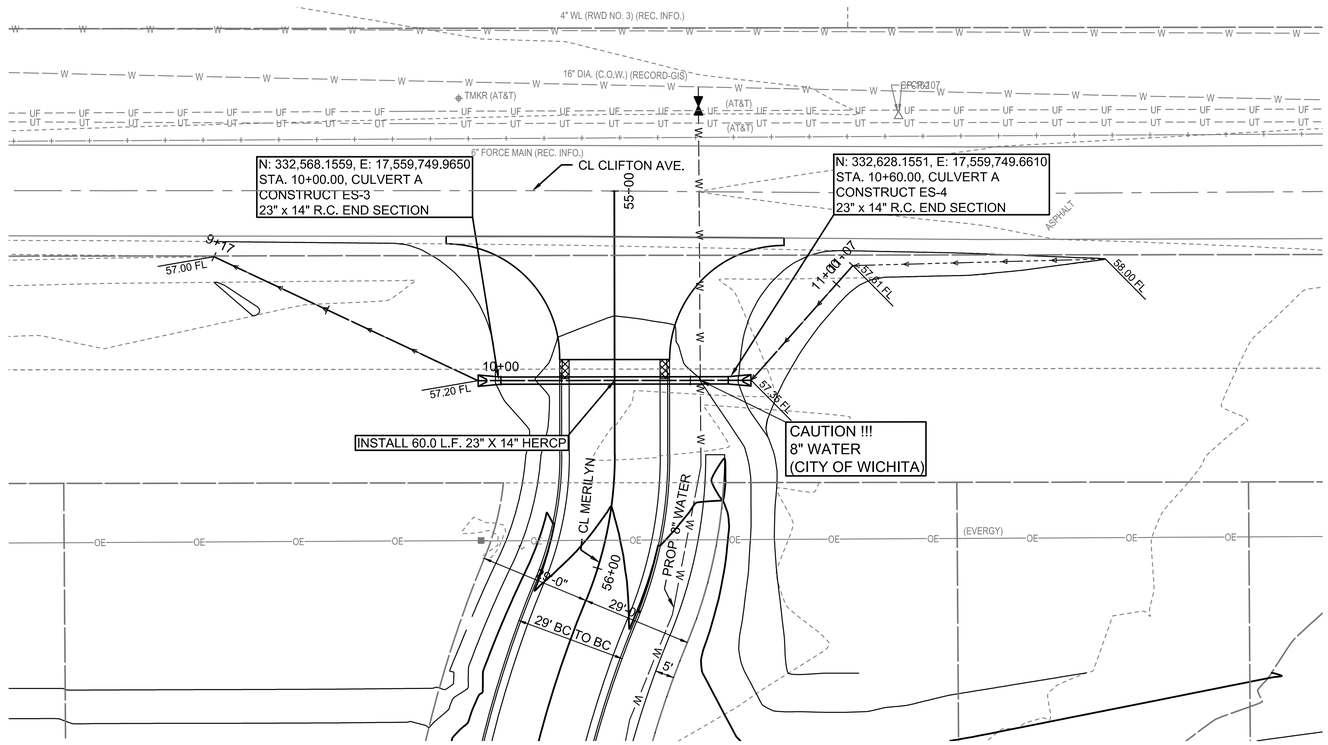
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

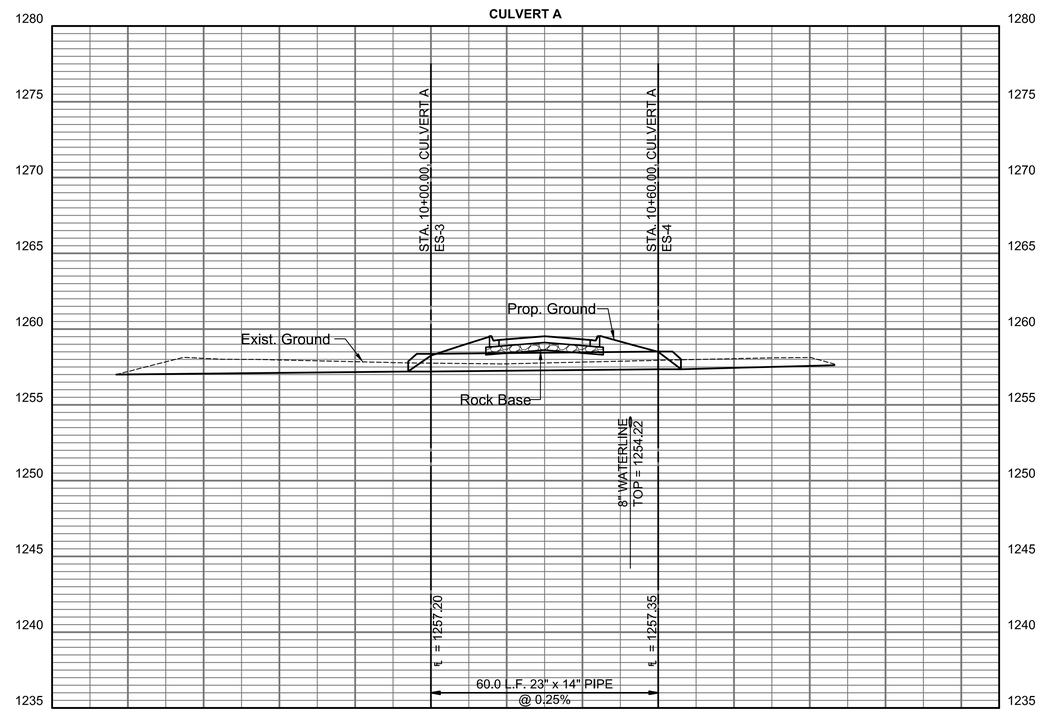
PLAN AND PROFILE-SWS
LINES 9 AND 10

CP408
32 OF 71

SAVED 9/3/2024 11:44:55 AM BY BILL.SEXSON
PLOTTED 5/27/2025 9:43:33 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\0042PD3_PLANS\030_PAVING PHASE 1\32-200605-004-CP408 PLAN AND PROFILE-SWS LINES 9 AND 10.DWG



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
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:		
	08/17/2026 - cjr	

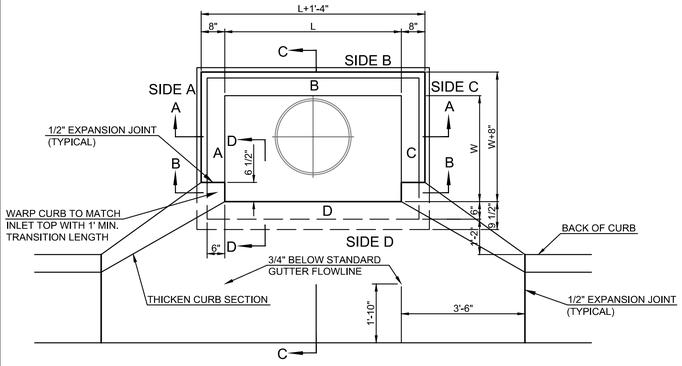
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

PLAN AND PROFILE-CULVERT A

CP409
33 OF 71

SAVED 8/23/2024 8:50:36 AM BY BILL.SEXSON
PLOTTED 5/27/2025 9:44:17 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_PAVING PHASE 1\33-200605-004-CP409 PLAN AND PROFILE-CULVERT A.DWG



TOP VIEW

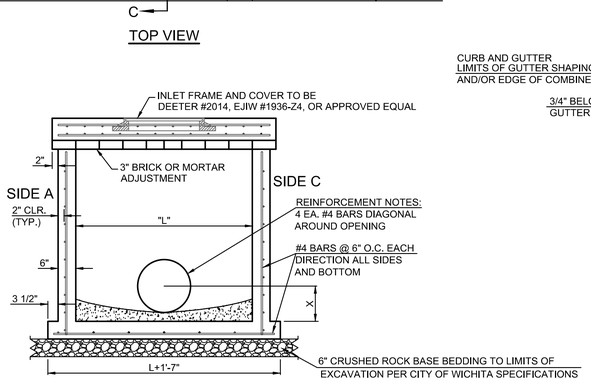
BAR SCHEDULE		
INLET OPENING	B1 BARS	SPACING
5'-0"	#4	4"
10'-0"	#6	3.5"

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"

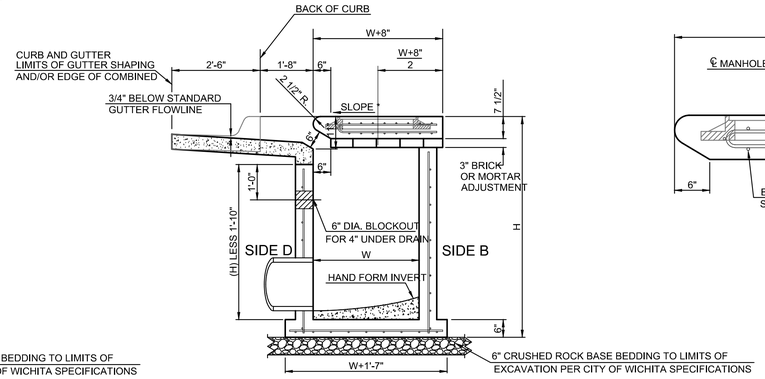
*** FOR PIPES PERPENDICULAR TO INLET WALL

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.

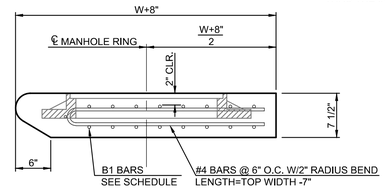


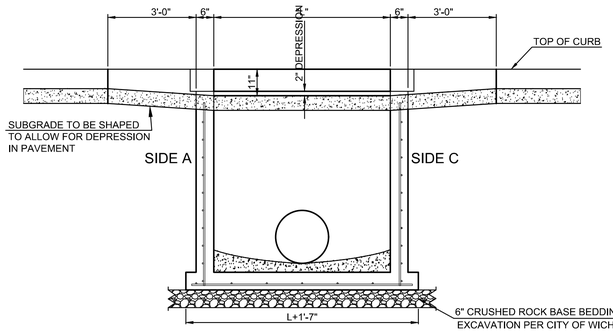
SECTION "A-A"



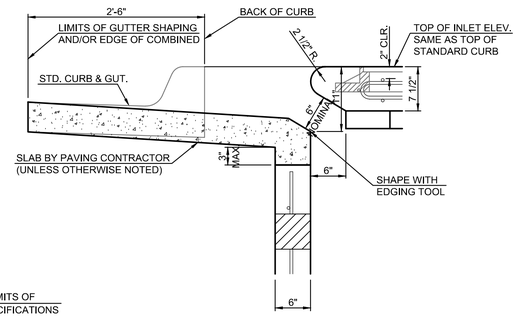
SECTION "C-C"

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
___-___	_____	

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

SHEET
_ of _

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
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION
PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:		
	08/17/2026 - cjr	

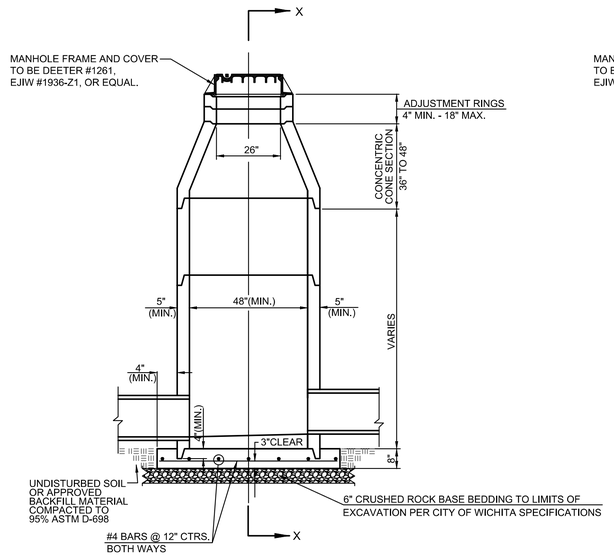
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

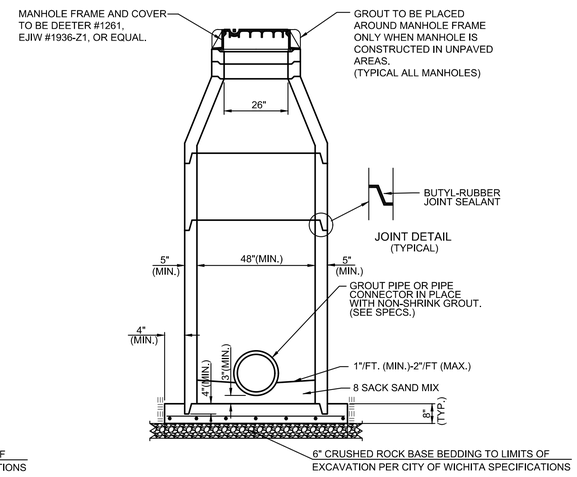
STD. TYPE 1A CURB INLET DETAILS

CP501
34 OF 71

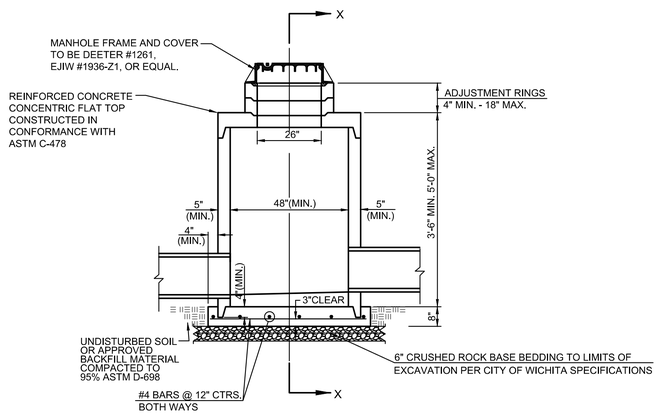
Saved 08-01-2024 10:56:58 AM by BILL.SEXSON
Plotted 5/27/2025 9:44:20 AM by KEVIN GRAHAM
U:\Wichita-Civil\2020\200605\0042PD3_PLANS\030_PAVING PHASE 1\34-200605-004-CP501 STD. TYPE 1A CURB INLET DETAILS.DWG



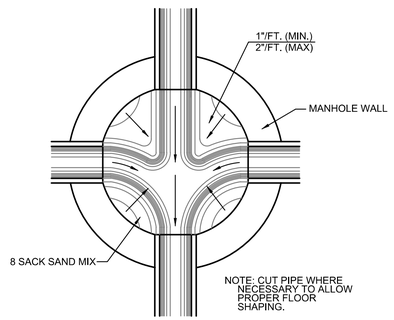
PRECAST
STANDARD MANHOLE
TYPE "A"



SECTION X-X
(TYPICAL)



PRECAST
SHALLOW MANHOLE
TYPE "B"



TYPICAL MANHOLE
FLOOR SHAPING

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.

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
___-___	_____	

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

SHEET
_ of _

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
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION
PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

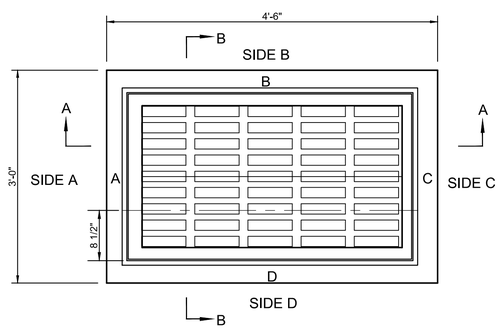
JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

PRECAST CONCRETE MANHOLE DETAILS

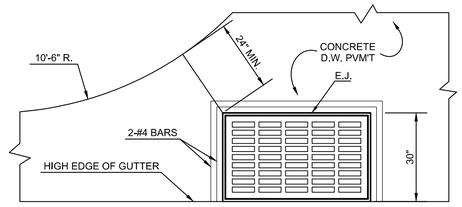
CP502
35 OF 71

Saved: 08-01-2024, 10:57:10 AM By: BILL.SEXSON
Plotted: 11-05-2025, 10:40:26 AM By: KEVIN.GRAHAM
U:\Wichita-Civil\2020\200605\004\2PD3_Plans\030_PAVING PHASE 1\35-200605-004-CP502 PRECAST CONCRETE MANHOLE DETAILS.DWG

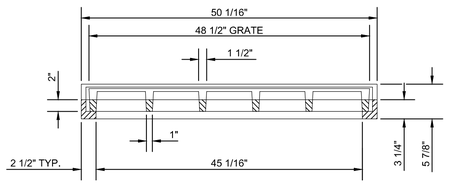
SAVED 8/1/2024 10:57:10 AM BY BILL.SEXSON
PLOTTED 5/27/2025 9:44:26 AM BY KEVIN.GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_PAVING PHASE 1\35-200605-004-CP502 PRECAST CONCRETE MANHOLE DETAILS.DWG



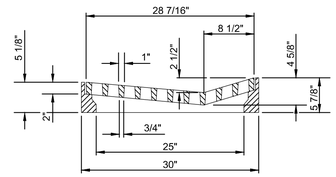
TOP VIEW



PLAN



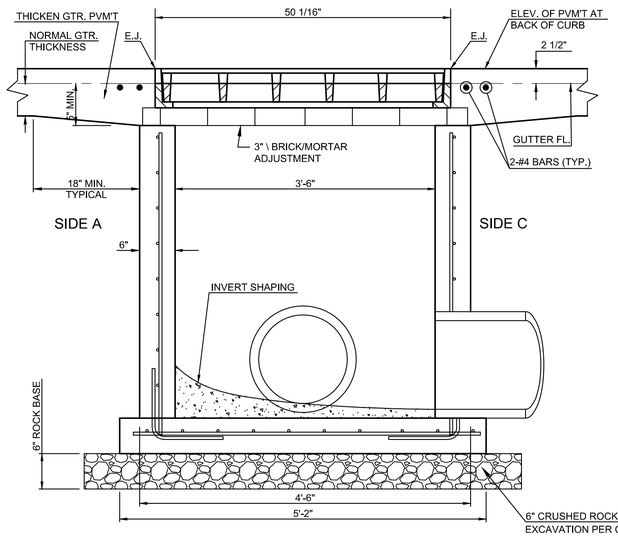
SECTION A-A



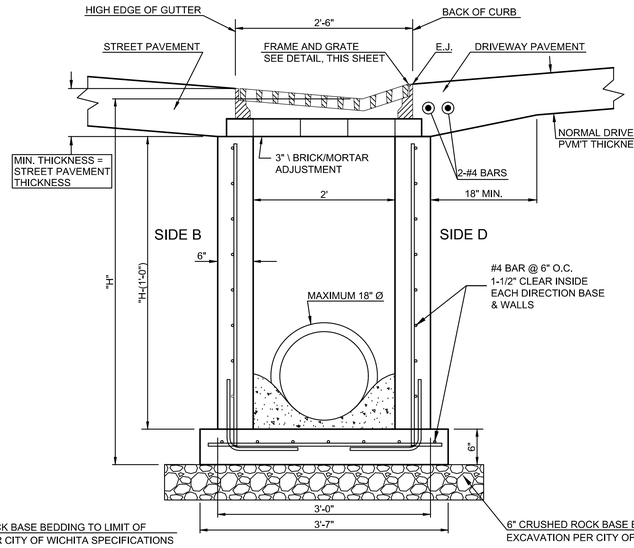
SECTION B-B

FRAME & GRATE

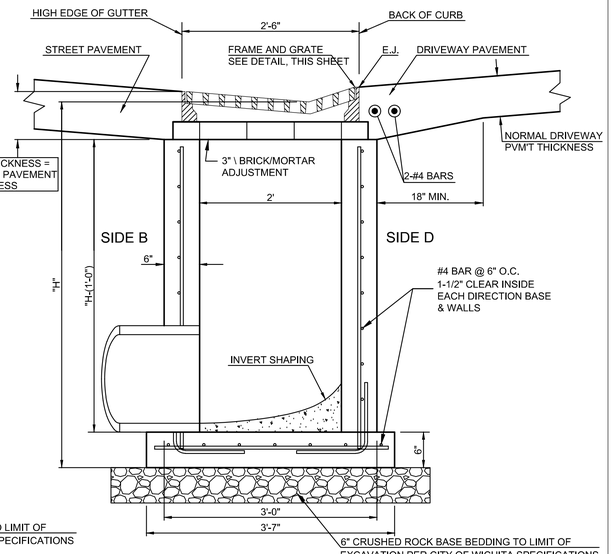
DEETER #2095 TOTAL WEIGHT: 705 LBS.
EJIW #7392 TOTAL WEIGHT: 675 LBS.



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
___-___	____	

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

SHEET
_ of _

SW-108

Saved 08-01-2024 10:57:22 AM by BILL.SEXSON
Plotted 05-27-2025 9:44:31 AM by KEVIN.GRAHAM
U:\Wichita-Civil\2020\200605\004\2PD3_PLANS\030_PAVING PHASE 1\36-200605-004-CP503 GRATED DRIVEWAY INLET-SINGLE.DWG

SAVED 8/1/2024 10:57:22 AM BY BILL.SEXSON
PLOTTED 5/27/2025 9:44:31 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_PAVING PHASE 1\36-200605-004-CP503 GRATED DRIVEWAY INLET-SINGLE.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
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

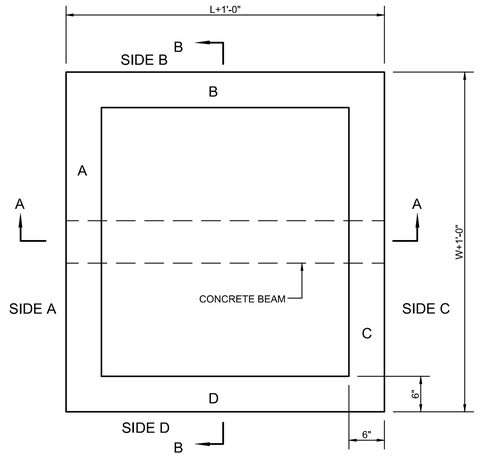
Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

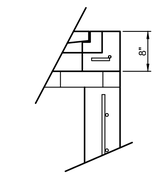
JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

GRATED DRIVEWAY INLET-SINGLE

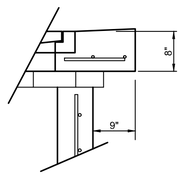
CP503
36 OF 71



TOP VIEW

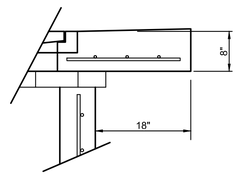


FLUSH STYLE TOP
NO APRON



9" APRON

* APRON TO EXTEND ON ALL 4 SIDES OF INLET. DESIGNER TO DESIGNATE APRON SIZE.

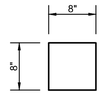


18" APRON

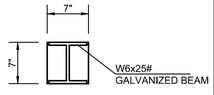
W=4'-4" and L=4' for DOUBLE DROP INLET

The structure(s) on this detail sheet are designed for HS-20 loading at these specific dimensions only. If larger dimensions are required, the ENGINEER shall provide a project specific structure design for approval by the City Engineer's office.

BEAM REQUIRED FOR THIS INLET



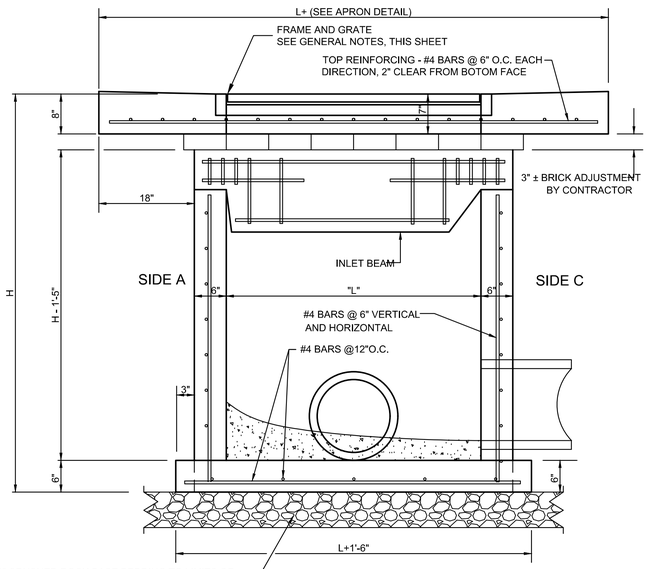
CONCRETE BEAM POCKET



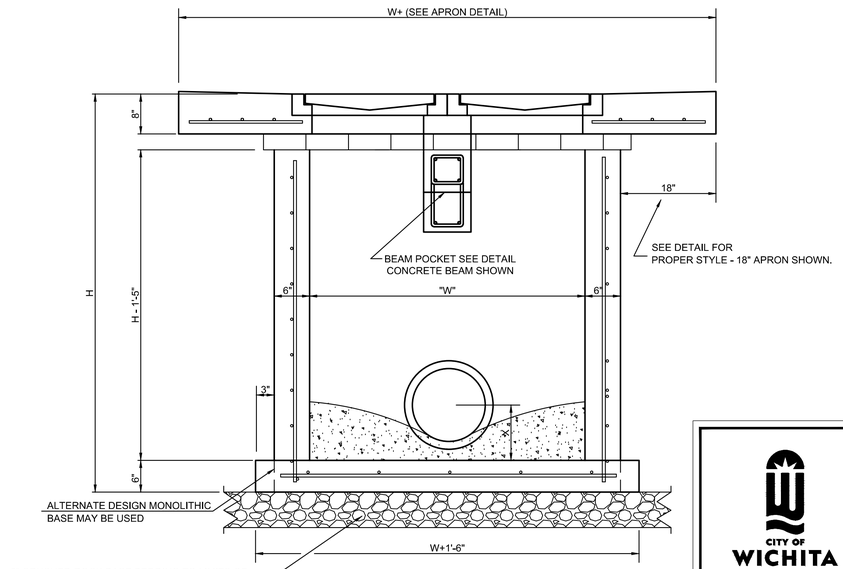
GALV. STEEL BEAM POCKET

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. 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.
3. THE ENDS OF ALL PIPES INSTALLED IN INLETS SHALL BE CUT OFF FLUSH WITH THE INSIDE FACE OF THE INLET WALL.
4. INLET FRAME AND GRATE TO BE DEETER #2433, EJIW #5391-Z1 OR APPROVED EQUAL FOR 2'x2' SINGLE DROP INLET AND DEETER #2434, EJIW #5391 Z3 OR APPROVED EQUAL FOR 2'x4' DOUBLE DROP INLET.
5. 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 "B-B"

REVISED: MARCH 2015

CITY OF WICHITA
PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

DOUBLE DOUBLE DROP INLET WITH BEAM

CITY ENGINEER
GARY JANZEN, P.E..

PROJECT NUMBER	OCA NUMBER	DATE
___-___	_____	

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

SHEET
_ of _

SW-202

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

CITY OF WICHITA

KEVIN P. GRAHAM
LICENSED
27806
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION
PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

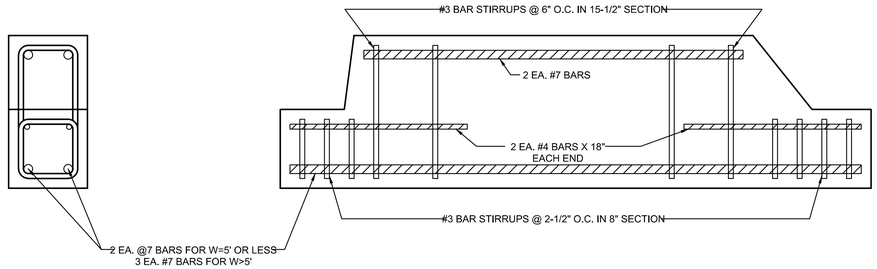
JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

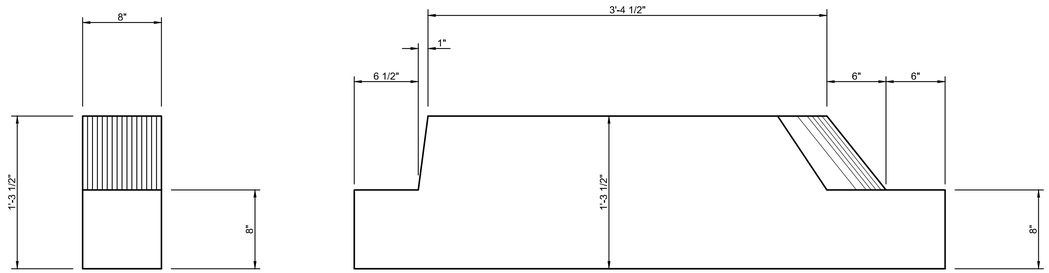
DOUBLE DOUBLE DROP INLET

CP504
37 OF 71

Saved 08-01-2024 10:37:35 AM by BILL.SEXSON
Plotted 08-01-2024 10:40:36 AM by KEVIN.GRAHAM
U:\Wichita-Civil\2020\200605\0042PD3_PLANS\030_PAVING PHASE 1\37-200605-004-CP504 DOUBLE DOUBLE DROP INLET

SAVED 8/1/2024 10:57:35 AM BY BILL.SEXSON
PLOTTED 5/27/2025 9:44:36 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\0042PD3_PLANS\030_PAVING PHASE 1\37-200605-004-CP504 DOUBLE DOUBLE DROP INLET.DWG





Saved 08-01-2024 10:57:45 AM By BILL.SEXSON
Plot Date 5/27/2025 9:44:41 AM By KEVIN GRAHAM
U:\Wichita-Civil\2020\200605\004\2PD3_Plans\030_PAVING PHASE 1\38-200605-004-CP505 INLET BEAM DETAILS

SW-110

CITY OF WICHITA
PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

INLET BEAM

CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER	OCA NUMBER	DATE
___-_____	_____	11/2010

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

SHEET
_ of _

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

CITY OF WICHITA

KEVIN P. GRAHAM
LICENSED
27806
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

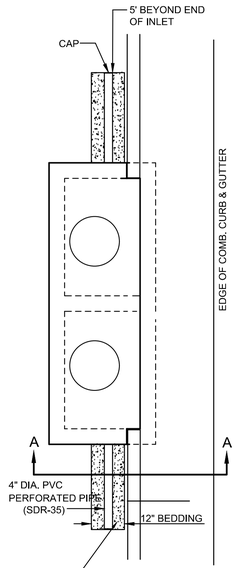
JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

INLET BEAM DETAILS

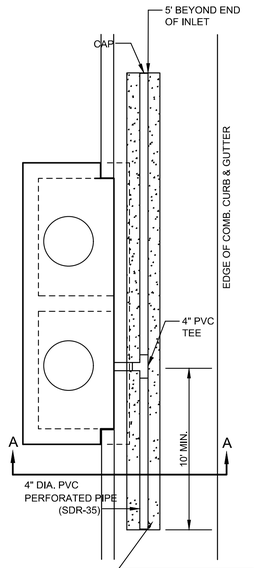
CP505
38 OF 71

SAVED 8/1/2024 10:57:45 AM BY BILL.SEXSON
PLOTTED 5/27/2025 9:44:41 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_PAVING PHASE 1\38-200605-004-CP505 INLET BEAM DETAILS.DWG

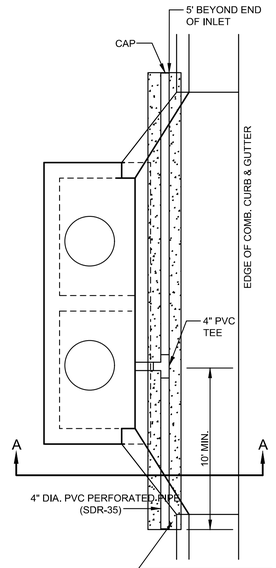
PAVEMENT UNDERDRAIN SHALL BE INSTALLED ON ALL CURB INLETS.



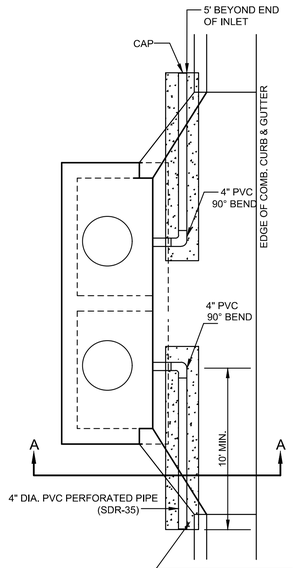
TYPE 1
OPTION 1



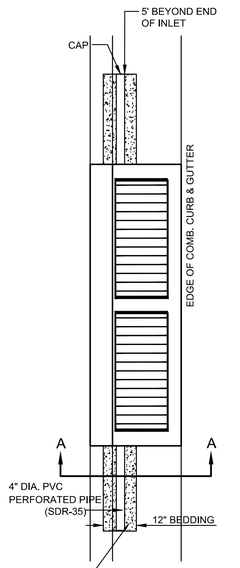
TYPE 1
OPTION 2



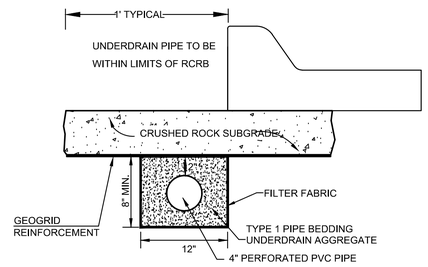
TYPE 1-A INLET
OPTION 1



TYPE 1-A INLET
OPTION 2



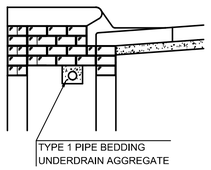
TYPE 2

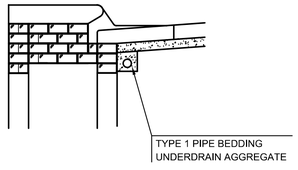


SECTION A-A (TYPICAL)

GENERAL NOTES

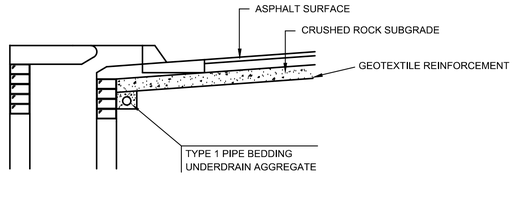
1. PAVEMENT CONTRACTOR WILL BE REQUIRED TO INSTALL SDR 35, 4" PERFORATED DRAIN PIPE AND TEE AS INDICATED IN THE DETAILS.
2. WHEN SWS CONSTRUCTED BY SEPARATE PROJECT, SWS CONTRACTOR SHALL INSTALL SDR 35, 4" DRAIN PIPE STUB ONLY THROUGH WALLS OF CURB INLETS AND CAP TO ALLOW FUTURE CONNECTION OF TEE AND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



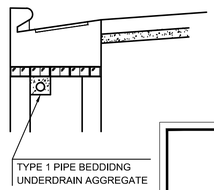


(MIN. 16 PERFORATIONS PER LIN. FT. @ 1/4" DIA.)
PERFORATIONS TO BE ON BOTTOM HALF

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
___-___	_____	10/2012

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

SHEET
_ of _

SW-???

Saved 08-01-2024 10:57:57 AM by BILL.SEXSON
Plotted 05-27-2025 9:44:47 AM by KEVIN GRAHAM
U:\Wichita-Civil\2020\200605\004\2PD3_PLANS\030_PAVING PHASE 1\39-200605-004-CP506 PAVEMENT UNDERDRAIN DETAILS

SAVED 8/1/2024 10:57:57 AM BY BILL.SEXSON
PLOTTED 5/27/2025 9:44:47 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_PAVING PHASE 1\39-200605-004-CP506 PAVEMENT UNDERDRAIN DETAILS.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 05/27/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

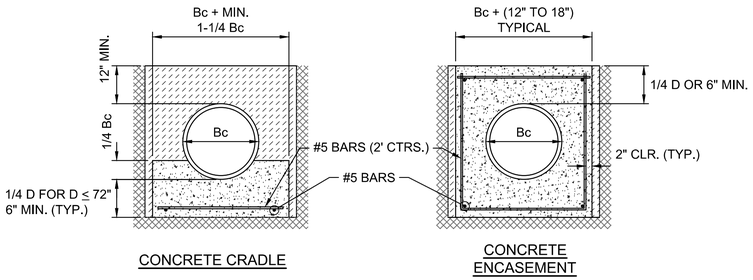
Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

PAVEMENT UNDERDRAIN DETAILS

CP506
39 OF 71



CLASS A
NOT TO SCALE

Bc = OUTSIDE PIPE DIAMETER

H = BACKFILL FROM TOP OF PIPE TO EXISTING GROUND

D = INSIDE PIPE DIAMETER

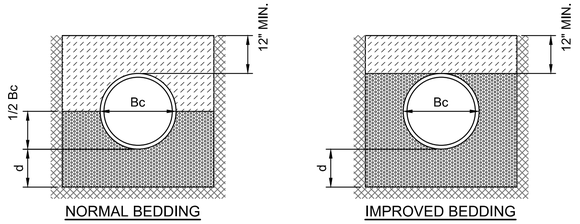
d = DEPTH OF BEDDING MATERIAL BELOW PIPE

GRANULAR BEDDING MATERIAL OR SAND-GRAVEL BEDDING

COMPACTED EMBEDMENT

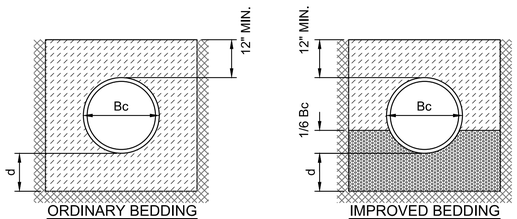
CONCRETE

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"



IMPROVED BEDDING

CLASS B
NOT TO SCALE



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.

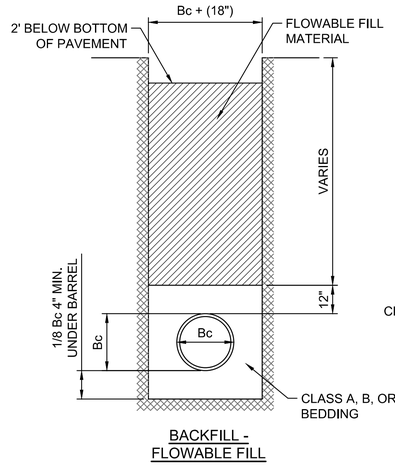
B. CLASS C IMPROVED BEDDING SHALL BE USED FOR WET CONDITIONS EXISTING IN THE TRENCH, AS DIRECTED BY THE ENGINEER, AT NO ADDITIONAL COST TO THE OWNER. THE DIMENSIONS SHALL BE EQUAL TO THAT REQUIRED FOR "ROCK" EXCAVATION (SEE SPECIFICATIONS).

Bc = OUTSIDE PIPE DIAMETER

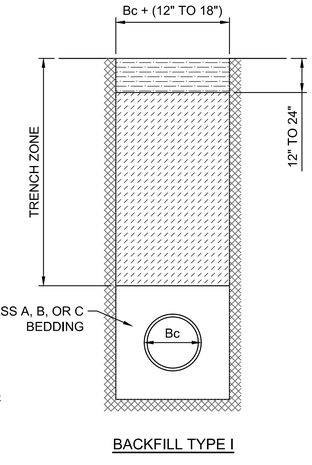
COMPACTED GRANULAR BACKFILL

UNCOMPACTED EARTH BACKFILL

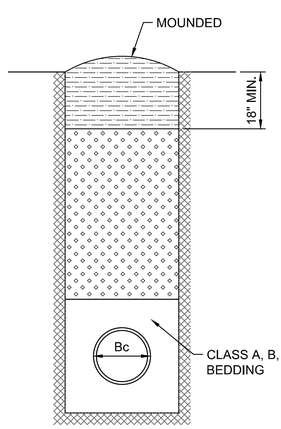
COMPACTED EARTH BACKFILL



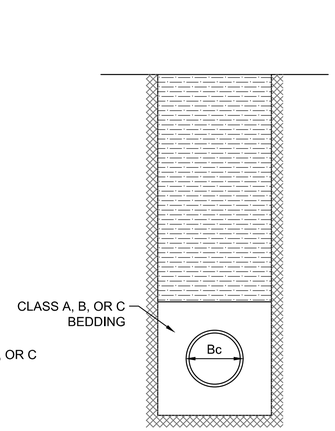
BACKFILL -
FLOWABLE FILL



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 05/27/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:		
	08/17/2026 - cjr	

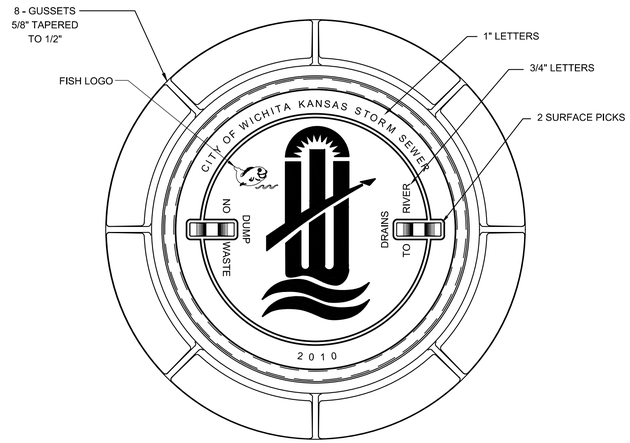
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

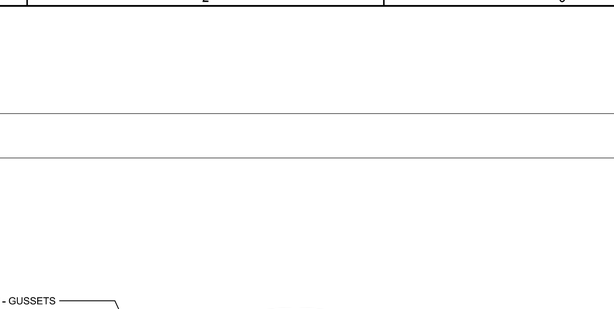
JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

BEDDING AND BACKFILL DETAILS

CP507
40 OF 71

SAVED 8/1/2024 10:58:09 AM BY BILL.SEXSON
PLOTTED 5/27/2025 9:44:51 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_PAVING PHASE 1\40-200605-004-CP507 BEDDING AND BACKFILL DETAILS.DWG

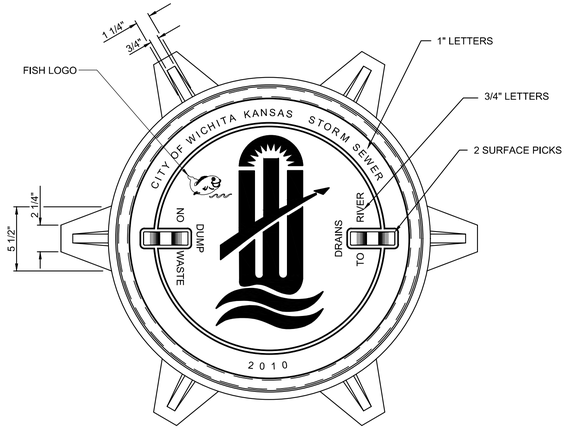


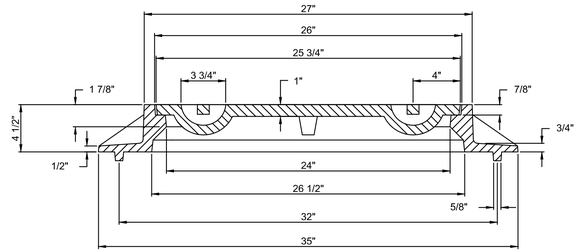


MANHOLE FRAME

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
___-_____	_____	11/2010

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

SHEET
_ of _

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 05/27/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION
PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

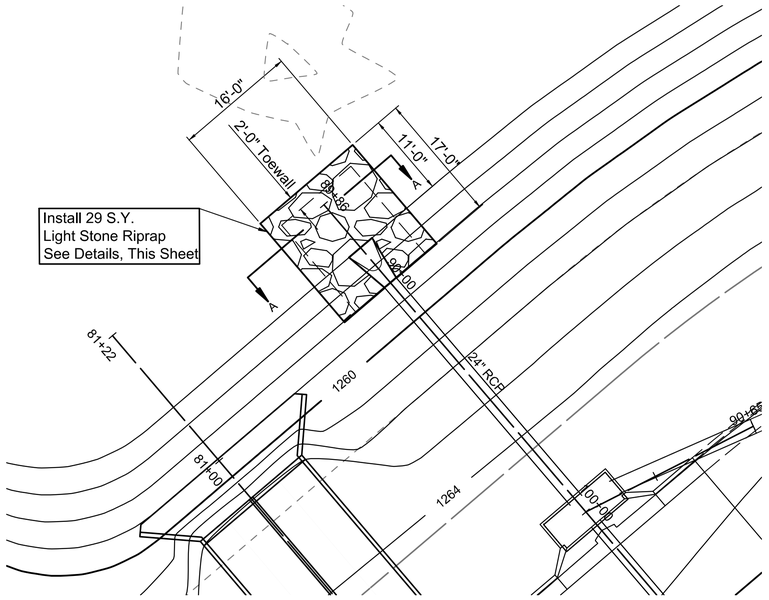
JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

MANHOLE-INLET FRAME AND COVER DETAILS

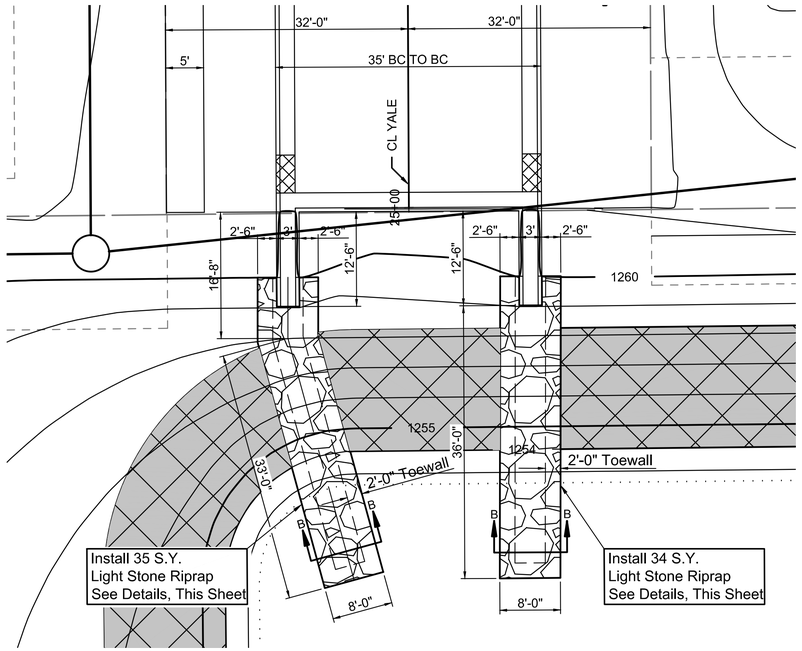
CP508
41 OF 71

Saved: 08-01-2024 10:58:20 AM By: BILL.SEXSON
Plotted: 05-27-2025 9:44:56 AM By: KEVIN.GRAHAM
U:\Wichita-Civil\2020\200605\004\2PD3_Plans\030_PAVING PHASE 1\41-200605-004-CP508 MANHOLE-INLET FRAME AND COVER DETAILS.DWG

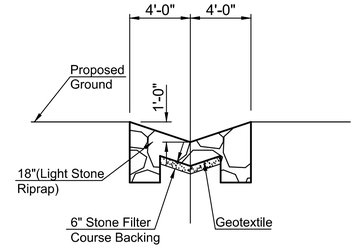
SAVED 8/1/2024 10:58:20 AM BY BILL.SEXSON
PLOTTED 5/27/2025 9:44:56 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_PAVING PHASE 1\41-200605-004-CP508 MANHOLE-INLET FRAME AND COVER DETAILS.DWG



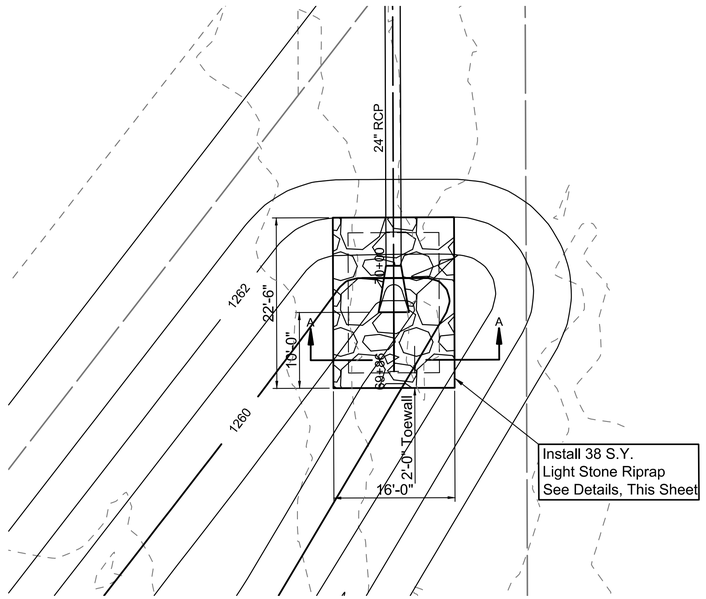
PLAN



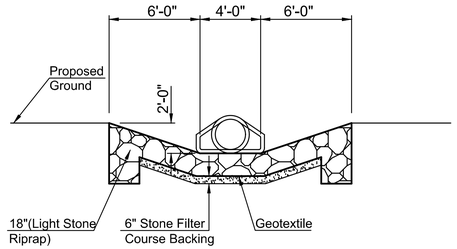




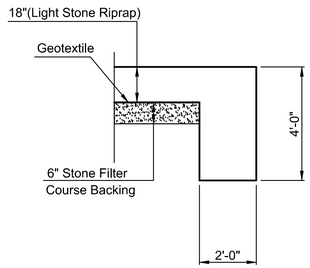
SECTION B-B



PLAN



SECTION A-A

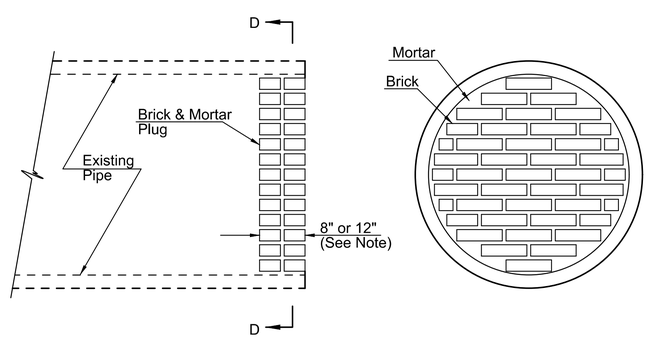


TYPICAL SECTION THRU TOEWALL

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.



ELEVATION

SECTION D-D

PIPE PLUGGING DETAIL

NOTE: PIPE PLUGS SHALL BE CONSTRUCTED OF BRICK MASONRY, WITH CONSTRUCTION REQUIREMENTS AND MATERIALS CONFORMING TO THE SAME REQUIREMENTS AS SPECIFIED FOR MANHOLE CONSTRUCTION ON SH. NO. 13. PIPES HAVING DIAMETERS OF 18" OR SMALLER SHALL BE PLUGGED WITH 8" THICK PLUGS. PIPES HAVING DIAMETERS LARGER THAN 18" SHALL BE PLUGGED WITH 12" THICK PLUGS. THE CONSTRUCTION OF PIPE PLUGS SHALL NOT BE PAID FOR DIRECTLY, BUT SHALL BE CONSTRUCTED SUBSIDIARY.

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

CITY OF WICHITA

KEVIN P. GRAHAM
LICENSED
27806
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:		
	08/17/2026 - cjr	

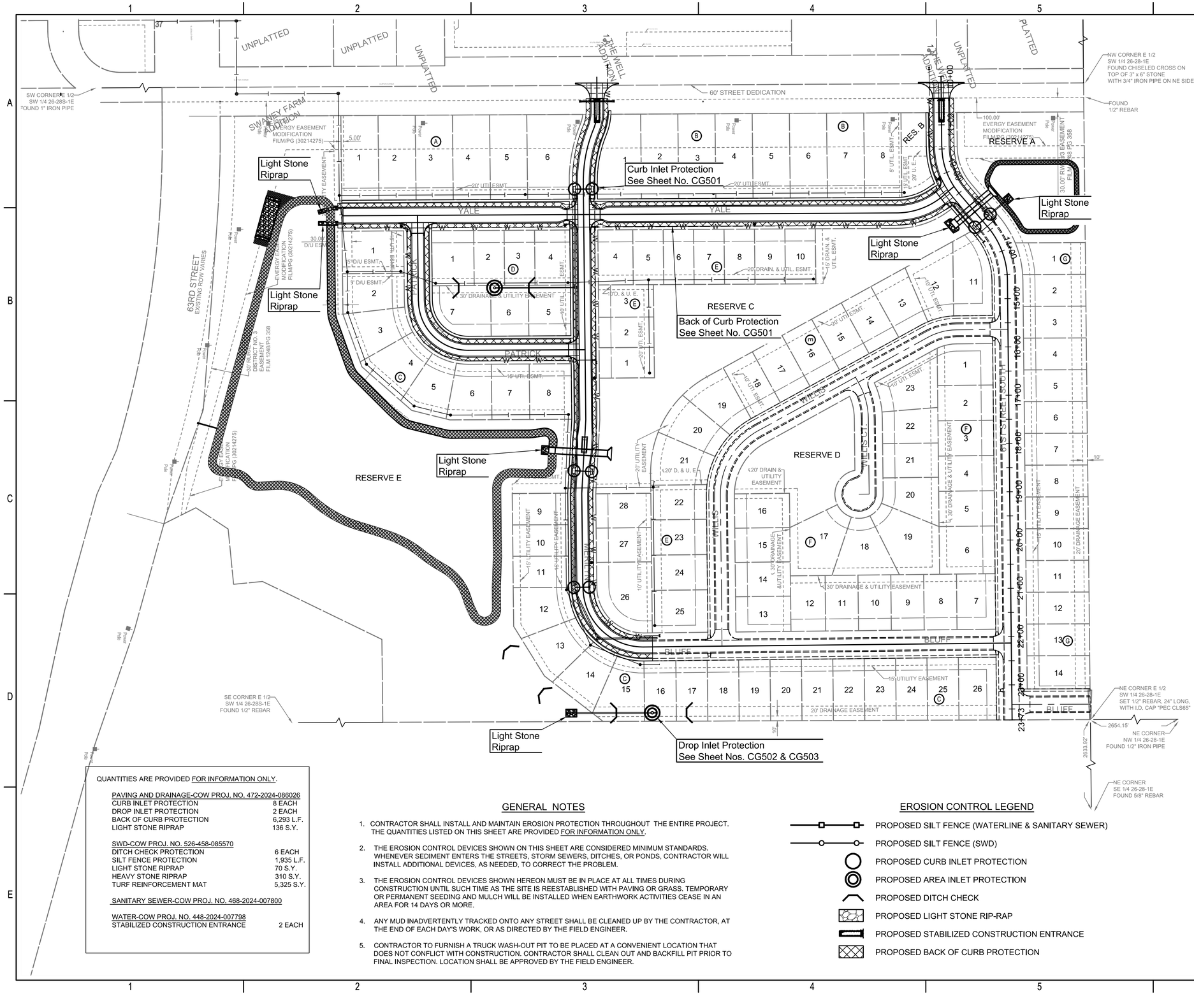
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

RIPRAP AND MAT DETAILS

CP509
42 OF 71

SAVED 9/3/2024 11:45:16 AM BY BILL.SEXSON
PLOTTED 5/27/2025 9:45:30 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\0042\PD3_PLANS\030_PAVING PHASE 1\42-200605-004-CP509 RIPRAP AND MAT DETAILS.DWG



QUANTITIES ARE PROVIDED FOR INFORMATION ONLY.

PAVING AND DRAINAGE-COW PROJ. NO. 472-2024-086026

CURB INLET PROTECTION	8 EACH
DROP INLET PROTECTION	2 EACH
BACK OF CURB PROTECTION	6,293 L.F.
LIGHT STONE RIPRAP	136 S.Y.

SWD-COW PROJ. NO. 526-458-085570

DITCH CHECK PROTECTION	6 EACH
SILT FENCE PROTECTION	1,935 L.F.
LIGHT STONE RIPRAP	70 S.Y.
HEAVY STONE RIPRAP	310 S.Y.
TURF REINFORCEMENT MAT	5,325 S.Y.

SANITARY SEWER-COW PROJ. NO. 468-2024-007800

WATER-COW PROJ. NO. 448-2024-007798

STABILIZED CONSTRUCTION ENTRANCE	2 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 AREA 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 05/27/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:		
	08/17/2026 - cjr	

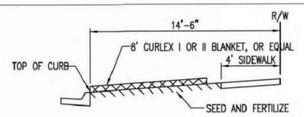
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

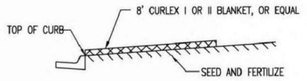
EROSION CONTROL PLAN

CG101
43 OF 71

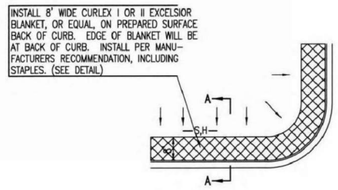
SAVED 9/5/2024 7:27:10 AM BY KEVIN.GRAHAM
PLOTTED 5/27/2025 9:45:42 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_PAVING PHASE 1\43-200605-004-CG101 EROSION CONTROL PLAN.DWG



SECTION B–B



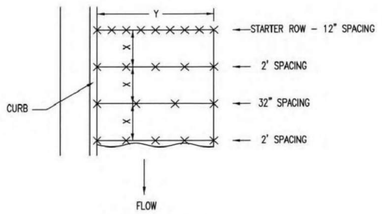
SECTION A–A



GENERAL NOTES

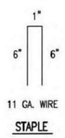
1. EXCELSIOR MAT TO BE INSTALLED WHEN SOD IS NOT SPECIFIED ON PROJECT.
2. EXCELSIOR BLANKET TO BE INSTALLED OVER SEED AND FERTILIZER, AS SPECIFIED IN THE PROJECT SPECIFICATIONS.
3. AFTER INSTALLATION OF EXCELSIOR BLANKET, AT LOCATIONS WHERE CONCENTRATED FLOW CARRIES SEDIMENT OVER THE CURB AND INTO THE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

BACK OF CURB PROTECTION DETAIL



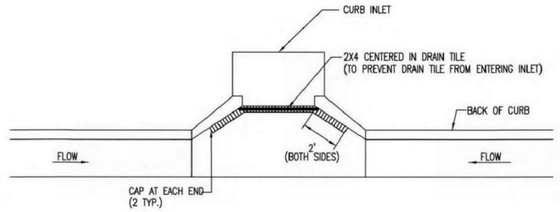
STAPLE PATTERN

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



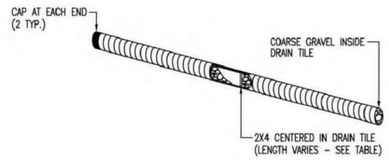
STAPLE

DETAILS FOR APPROVED EROSION CONTROL MAT

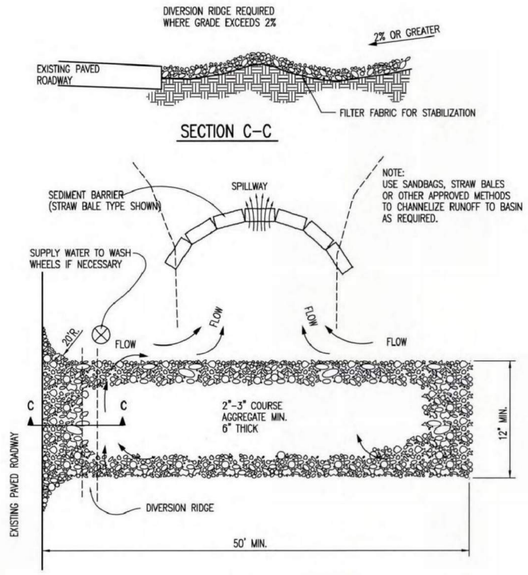


NOTE:
PLACE 4" PERFORATED PVC PIPE, FILLED WITH 1/2"–1" DIA. GRAVEL, IN FRONT OF CURB INLET AS SHOWN.

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 — 19201 — 05/12/13

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-	____	

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

SHEET
---- of __

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 — 05/27/2025 — KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

PINEWAY ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-085958

Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

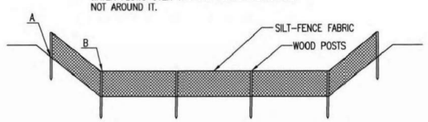
JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

BACK OF CURB AND CURB INLET PROTECTION

CG501
44 OF 71

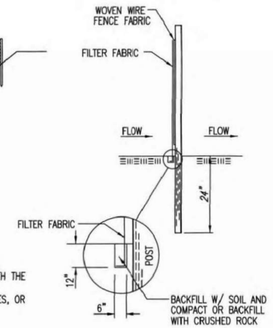
SAVED 8/1/2024 10:59:11 AM BY BILL.SEXSON
PLOTTED 5/27/2025 9:45:46 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\2006050040\2PD3_PLANS\030_PAVING PHASE 1\44-200605-004-CG501 BACK OF CURB & CURB INLET PROT.DWG

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



ELEVATION

SILT FENCE DITCH CHECKS
(STREAM PROTECTION)



ANCHOR TRENCH DETAIL

MATERIAL SPECIFICATION:

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

PLACEMENT:

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

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

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

PROPER INSTALLATION METHOD:

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

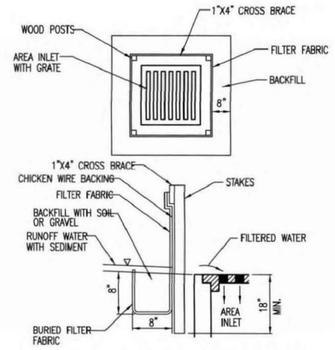
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

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

INSPECTION AND MAINTENANCE:

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

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



SILT FENCE BARRIERS FOR AREA INLETS
(INLET PROTECTION)

MATERIAL SPECIFICATION:

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

PLACEMENT:

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

PROPER INSTALLATION METHOD:

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

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

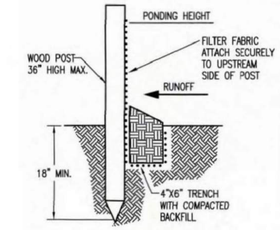
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

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

INSPECTION AND MAINTENANCE:

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

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



SILT FENCE BARRIERS

MATERIAL SPECIFICATION:

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

PLACEMENT:

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

PROPER INSTALLATION METHOD:

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

LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

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

INSPECTION AND MAINTENANCE:

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

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

REVISION DATE: MAY 2013

GARY L. JANZEN LICENSED 19294 KANSAS PROFESSIONAL ENGINEER
05/27/25

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
472-2024-086026	____	

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

SHEET 2 of __

SW-502

Sent 08-01-2024 10:59:20 AM By BILL SEXSON
Path: U:\Wichita-Civil\2020\200605\004\2PD3_Plans\030_PAVING PHASE 1\45-200605-004-CG502 SILT FENCE DITCH CHECK

SAVED 8/1/2024 10:59:20 AM BY BILL.SEXSON
PLOTTED 5/27/2025 9:45:51 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_PAVING PHASE 1\45-200605-004-CG502 SILT FENCE 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 05/27/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

PINEWAY ADDITION
PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-085958

Issue:		
	08/17/2026 - cjr	

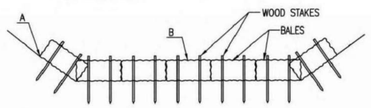
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

SILT FENCE DITCH CHECK

CG502
45 OF 71

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".

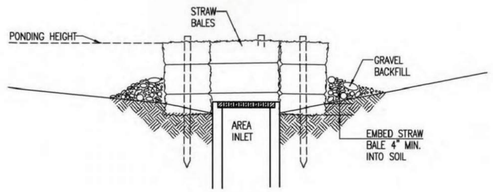
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

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.

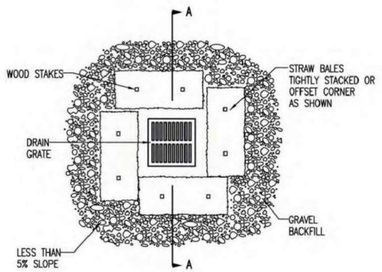
INSPECTION AND MAINTENANCE:

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.

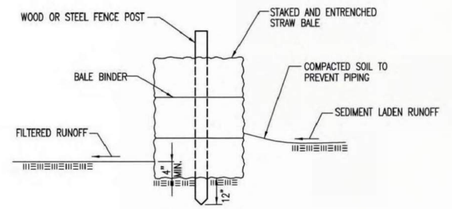
LIST OF COMMON PLACEMENT INSTALLATION MISTAKES TO AVOID:

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 PROFESSIONAL ENGINEER KANSAS 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
472-2024-086026	____	

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

SHEET
---- of __

SW-503

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

CITY OF WICHITA

KEVIN P. GRAHAM LICENSED 27806 05/27/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

PINEWAY ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-085958

Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

STRAW BALE DITCH CHECK

CG503
46 OF 71

Saved 08-01-2024 10:59:35 AM by BILL.SEXSON
Plot Scale: 1:1 05-27-2025 9:45:55 AM by ##
U:\Wichita-Civil\2020\200605\004\2PD3_PLANS\030_PAVING PHASE 1\46-200604-004-CG503 STRAW BALE DITCH CHECK.DWG

SAVED 8/1/2024 10:59:35 AM BY BILL.SEXSON
PLOTTED 5/27/2025 9:45:55 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_PAVING PHASE 1\46-200604-004-CG503 STRAW BALE DITCH CHECK.DWG

GENERAL NOTES

1. THIS SHEET IS INTENDED TO PROVIDE GUIDELINES AS TO WHAT TYPES OF EROSION CONTROL DEVICES WILL BE INSTALLED DURING THE CONSTRUCTION PROCESS. CONTRACTORS ARE EXPECTED TO BID PROJECTS ACCORDINGLY.

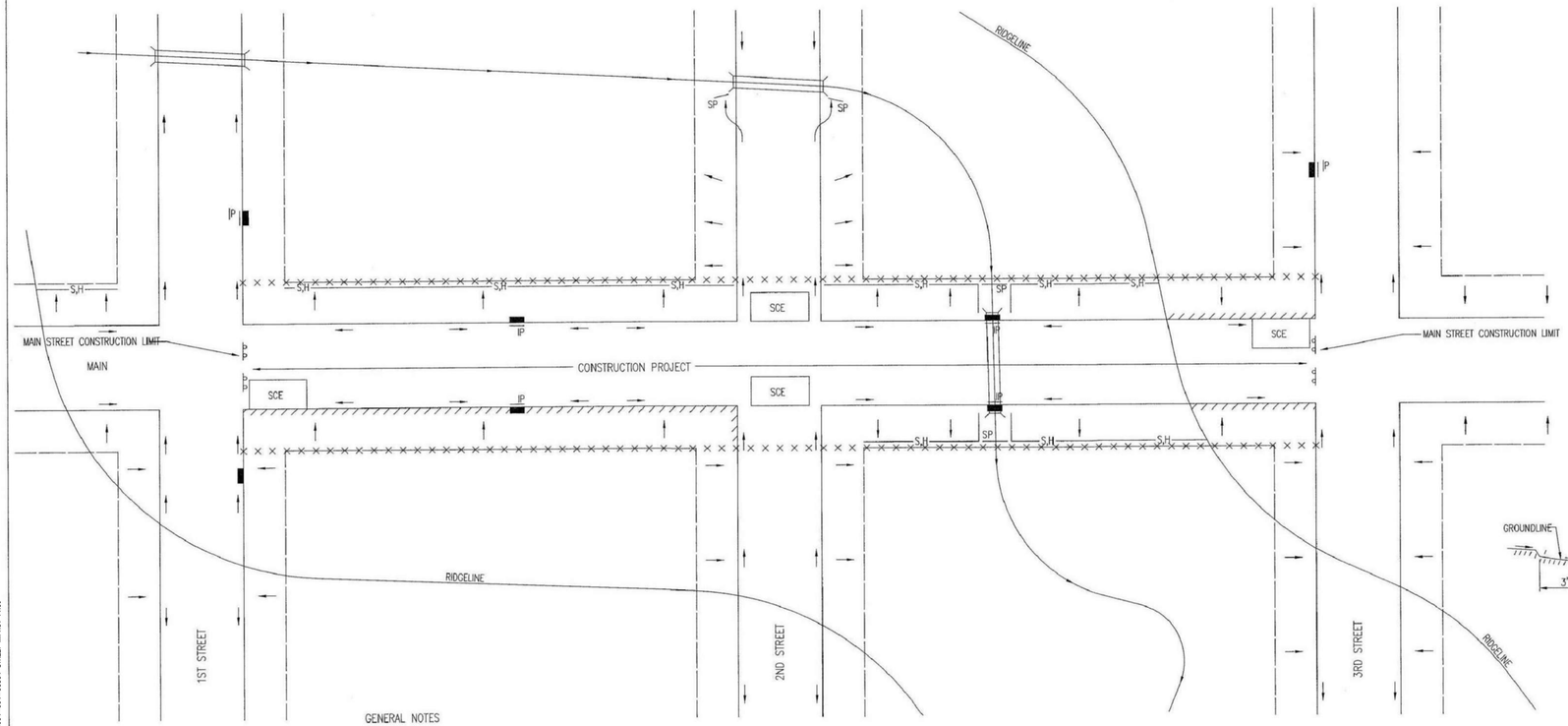
2. EROSION CONTROL DEVICES MUST BE MAINTAINED BY THE CONTRACTOR THROUGHOUT THE CONSTRUCTION PROCESS AND UNTIL THE DISTURBED EARTH IS RESTABILIZED.

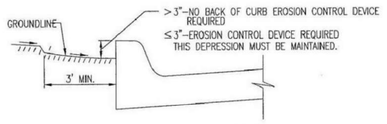
3. IF THE PROJECT WILL DISTURB 1 ACRE OR MORE, A FEDERAL/STATE NPDES STORMWATER PERMIT IS REQUIRED. A DETAILED STORMWATER POLLUTION PREVENTION PLAN, IS REQUIRED. THE EROSION CONTROL DEVICES SHOWN ON THIS SHEET ARE CONSIDERED TO BE THE MINIMUM TO BE SHOWN IN THE POLLUTION PREVENTION PLAN.

4. FOR PROJECTS DISTURBING LESS THAN 1 ACRE, CONTRACTORS ARE ENCOURAGED TO PREPARE STORMWATER POLLUTION PREVENTION PLANS PRIOR TO CONSTRUCTION. EROSION CONTROL DEVICES MUST BE USED ON ALL PROJECTS.

5. FAILURE TO USE AND MAINTAIN EROSION CONTROL DEVICES IS A VIOLATION OF SECTION 16.32 OF THE CITY CODE AND WILL SUBJECT THE CONTRACTOR TO THE PENALTIES PROVIDED FOR THEREIN.

6. THE APPLICATION OF EROSION CONTROL DEVICES SHOWN ON THIS SHEET IS FOR SITUATIONS NORMALLY ENCOUNTERED. FROM TIME TO TIME, SITUATIONS WILL ARISE THAT MAY REQUIRE A DIFFERENT DEVICE OTHER THAN THOSE SHOWN. EROSION CONTROL DEVICES, OTHER THAN THOSE SHOWN, MAY BE UTILIZED AS LONG AS THEY ARE EFFECTIVE AND MAINTAINED.





CURB BACKFILL DETAIL

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

LEGEND

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

GENERAL NOTES

1. THE INTENT OF ALL EROSION CONTROL DEVICES IS TO KEEP ALL SEDIMENT CONFINED TO THE CONSTRUCTION SITE, AND OUT OF ALL UNDERGROUND PIPES, DITCHES, LAKES, AND OTHER DRAINAGE FACILITIES, AND OFF OF STREETS.

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

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

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

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

6. STABILIZED CONSTRUCTION ENTRANCES SHALL BE PROVIDED, AS NEEDED, TO PREVENT MUD FROM TRACKING ONTO STREETS NOT UNDER CONSTRUCTION AND ON STREETS WITHIN THE PROJECT LIMITS IF TRAFFIC IS BEING MAINTAINED THROUGH THE PROJECT.

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

8. THE CONTACTOR WILL BE REQUIRED TO PLACE EROSION CONTROL DEVICES BACK OF CURB, WHENEVER WATER CAN DRAIN OVER CURB, TO KEEP ERODED SOIL OUT OF THE GUTTERLINES, IN ACCORDANCE WITH THE FOLLOWING:
   A. THE DEVICE REQUIRED WILL BE APPROVED EROSION CONTROL MAT LISTED ON THE CITY'S APPROVED MATERIAL LIST. SAID BLANKET SHALL BE PLACED OVER THE APPROPRIATE SEED AND FERTILIZER, AS SPECIFIED IN THE PROJECT SPECIFICATIONS. (SEE SOIL EROSION BMPs – BACK OF CURB SEDIMENT BARRIER DETAILS)
   B. THIS DEVICE SHALL BE INSTALLED IMMEDIATELY WHENEVER THE CURB IS BACKFILLED TO WITHIN 3" OF THE TOP OF CURB. (SEE CURB BACKFILL DETAIL) OTHER BMP'S MAY BE REQUIRED AT LOCATIONS WHERE CONCENTRATED FLOW CARRIES SEDIMENT OVER THE CURB.
   C. ADDITIONALLY, OTHER EROSION CONTROL DEVICES (HAY BALES, SILT FENCE, ETC.) WILL BE INSTALLED AT LOCATIONS OF CONCENTRATED FLOW RESULTING IN SEDIMENT OVERRUNNING THE MAT.
   D. SHOULD THE PROJECT PLANS SPECIFY THAT THE RIGHT-OF-WAY IS TO BE SODDED, THE EXCELSIOR MAT WILL NOT BE REQUIRED SO LONG AS THE SOD IS PLACED WITHIN 48 HOURS AFTER CURB BACKFILL REACHES A HEIGHT OF 3" OR LESS FROM TOP OF CURB. (SEE CURB BACKFILL DETAIL)

GARY L. JANZEN — LICENSED — 18294 — PROFESSIONAL ENGINEER — KANSAS — 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
472-2024-086026		

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

SHEET 4

SW-504

Saved 08-01-2024 10:59:58 AM by BILL.SEXSON
Plot Scale: 1:1 05-27-2025 9:46:00 AM by KEVIN.GRAHAM
U:\Wichita-Civil\2020\200605\004\2PD3_Plans\030_PAVING PHASE 1\47-200604-004-CG504 STREET IMPROV PROJ

SAVED 8/1/2024 10:59:58 AM BY BILL.SEXSON
PLOTTED 5/27/2025 9:46:01 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_PAVING PHASE 1\47-200604-004-CG504 STREET IMPROV PROJ.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 — 05/27/2025 — KANSAS — PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

PINEWAY ADDITION
PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-085958

Issue:		
	08/17/2026 - cjr	

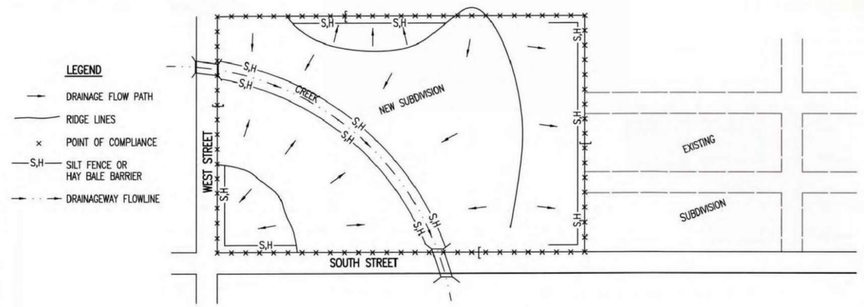
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

STREET IMPROVEMENT PROJECTS

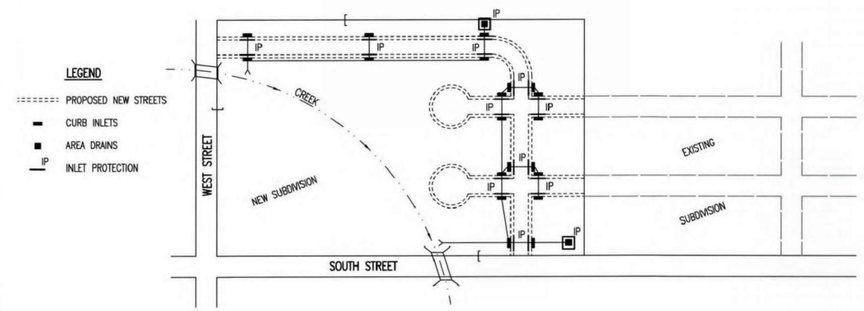
CG504
47 OF 71

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



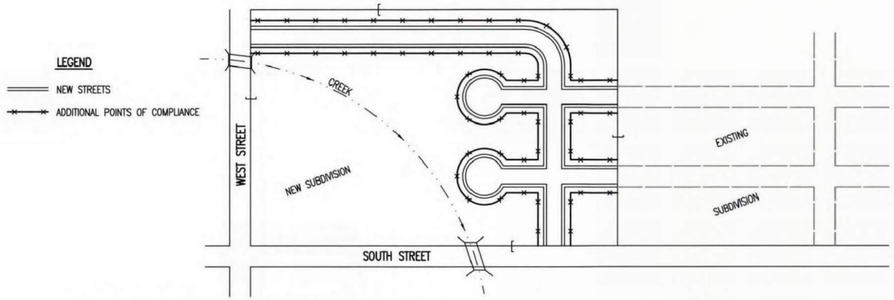
1. DURING THIS PHASE OF SUBDIVISION CONSTRUCTION, THE POINTS OF COMPLIANCE ARE THE PERIMETER BOUNDARIES AND ANY DRAINAGE WAYS OR STORM SEWERS DRAINING THROUGH OR FROM THE SITE. SHOULD LAKES BE CONSTRUCTED WITHIN THE SUBDIVISION THAT WILL DISCHARGE DURING STORMS, THEY ARE ALSO A POINT OF COMPLIANCE.
2.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

PHASE 2 – INSTALLATION OF STORM SEWER



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

PHASE 3 – STREET CONSTRUCTION

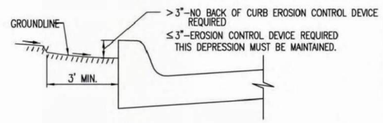


1. DURING THIS PHASE OF SUBDIVISION CONSTRUCTION, NEW STREETS ARE INSTALLED. ALL EROSION CONTROL DEVICES INSTALLED DURING PHASE 1 AND 2 MUST STILL BE MAINTAINED. THE POINT OF COMPLIANCE NOW SHIFTS TO THE BACK OF CURB ALONG EACH STREET.
2. CURB OPENING INLET PROTECTION:
   A. SUMP AREAS – INLET PROTECTION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

GENERAL NOTES

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

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 REGISTERED 16294 PROFESSIONAL ENGINEER KANSAS
05-13-25

CITY OF WICHITA
PUBLIC WORKS & UTILITIES ENGINEERING DIVISION

SUBDIVISION DEVELOPMENT PROCESS

CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER	OCA NUMBER	DATE
472-2024-086026	____	

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

SHEET 5 of __

SW-505

Saved 08-01-2024 11:00:11 AM by BILL.SEXSON
Plot Scale 1:1 05-27-2025 9:46:05 AM by KEVIN GRAHAM
U:\Wichita-Civil\2020\200605\004\2PD3_Plans\030_PAVING PHASE 1\48-200604-004-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 05/27/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

PINEWAY ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-085958

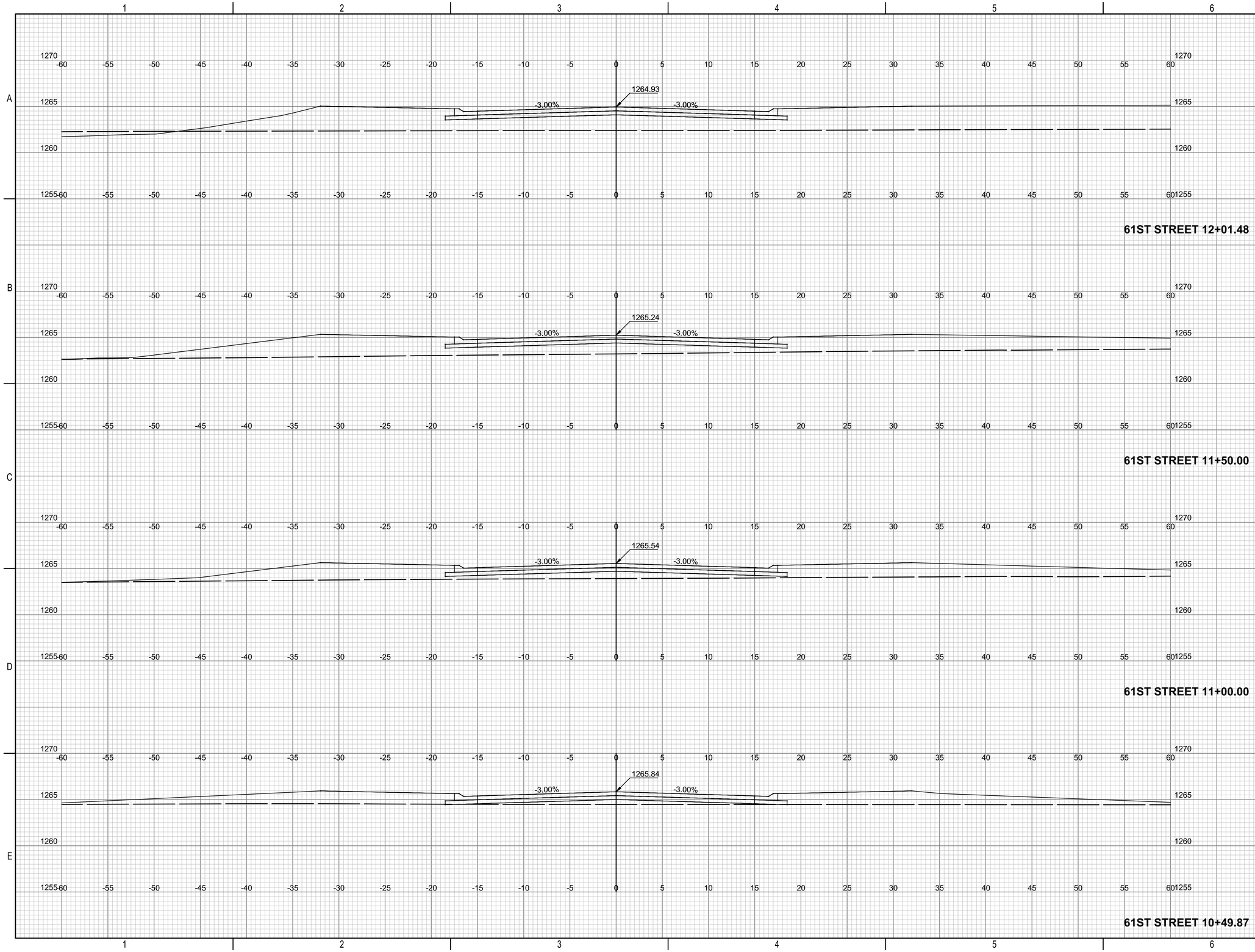
Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

SUBDIVISION DEVELOPMENT PROCESS

CG505
48 OF 71



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

CITY OF WICHITA

KEVIN P. GRAHAM
LICENSED
27806
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:		
	08/17/2026 - cjr	

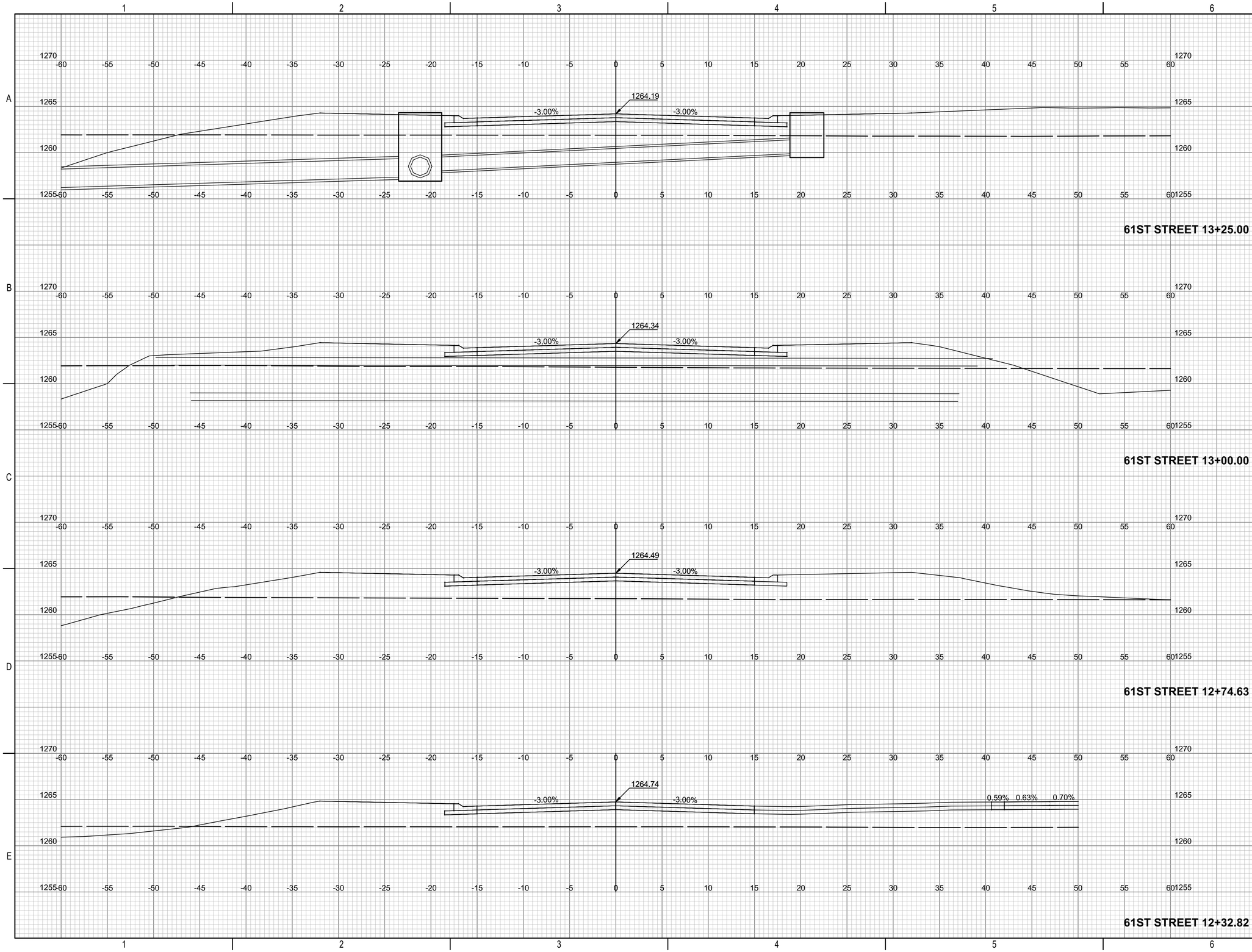
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

CROSS SECTIONS-61ST ST SOUTH

CX601
49 OF 71

SAVED 8/1/2024 11:06:58 AM BY BILL.SEXSON
PLOTTED 5/27/2025 9:46:33 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_PAVING PHASE 1\49-221170-004-CX601 CROSS SECTIONS-61ST ST SOUTH.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
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:		
	08/17/2026 - cjr	

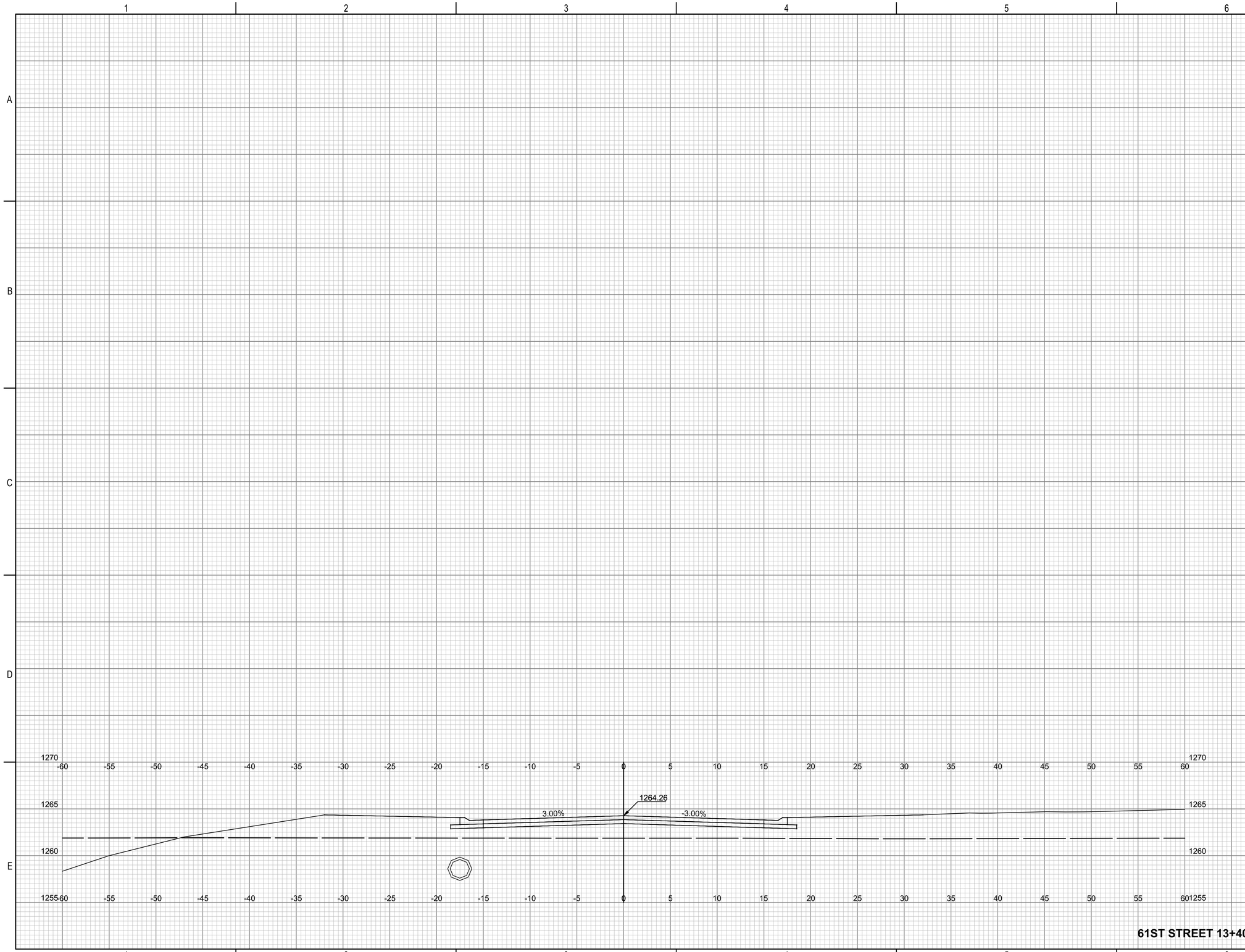
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

CROSS SECTIONS-61ST ST SOUTH

CX602
50 OF 71

SAVED 8/1/2024 11:07:11 AM BY BILL.SEXSON
PLOTTED 5/27/2025 9:46:56 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_PAVING PHASE 1\50-200605-004-CX602 CROSS SECTIONS-61ST ST SOUTH.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
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:		
	08/17/2026 - cjr	

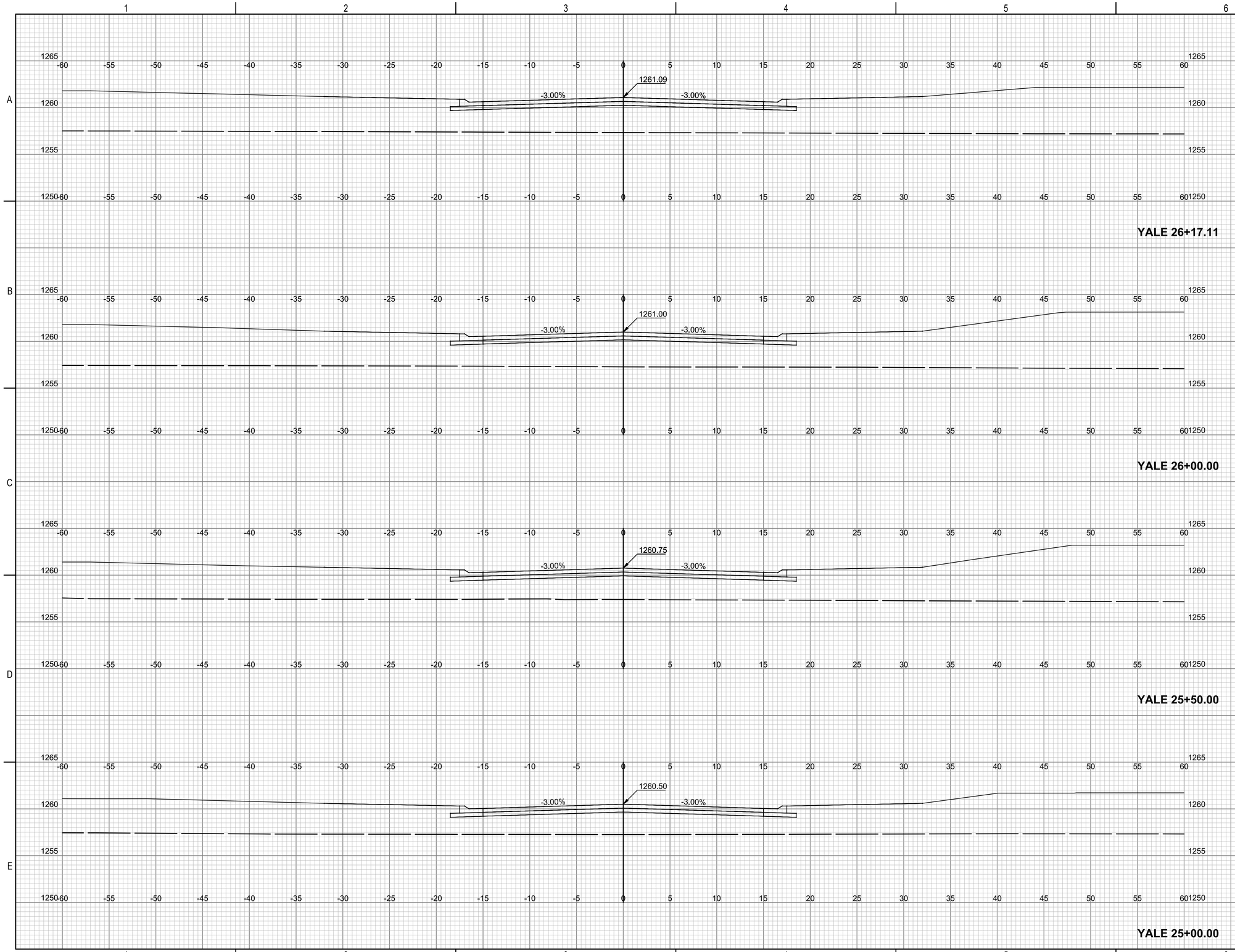
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

CROSS SECTIONS-61ST ST SOUTH

CX603
51 OF 71

SAVED 8/1/2024 11:07:27 AM BY BILL.SEXSON
PLOTTED 5/27/2025 9:47:19 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_PAVING PHASE 1\51-200605-004-CX603 CROSS SECTIONS-61ST ST SOUTH.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
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:		
	08/17/2026 - cjr	

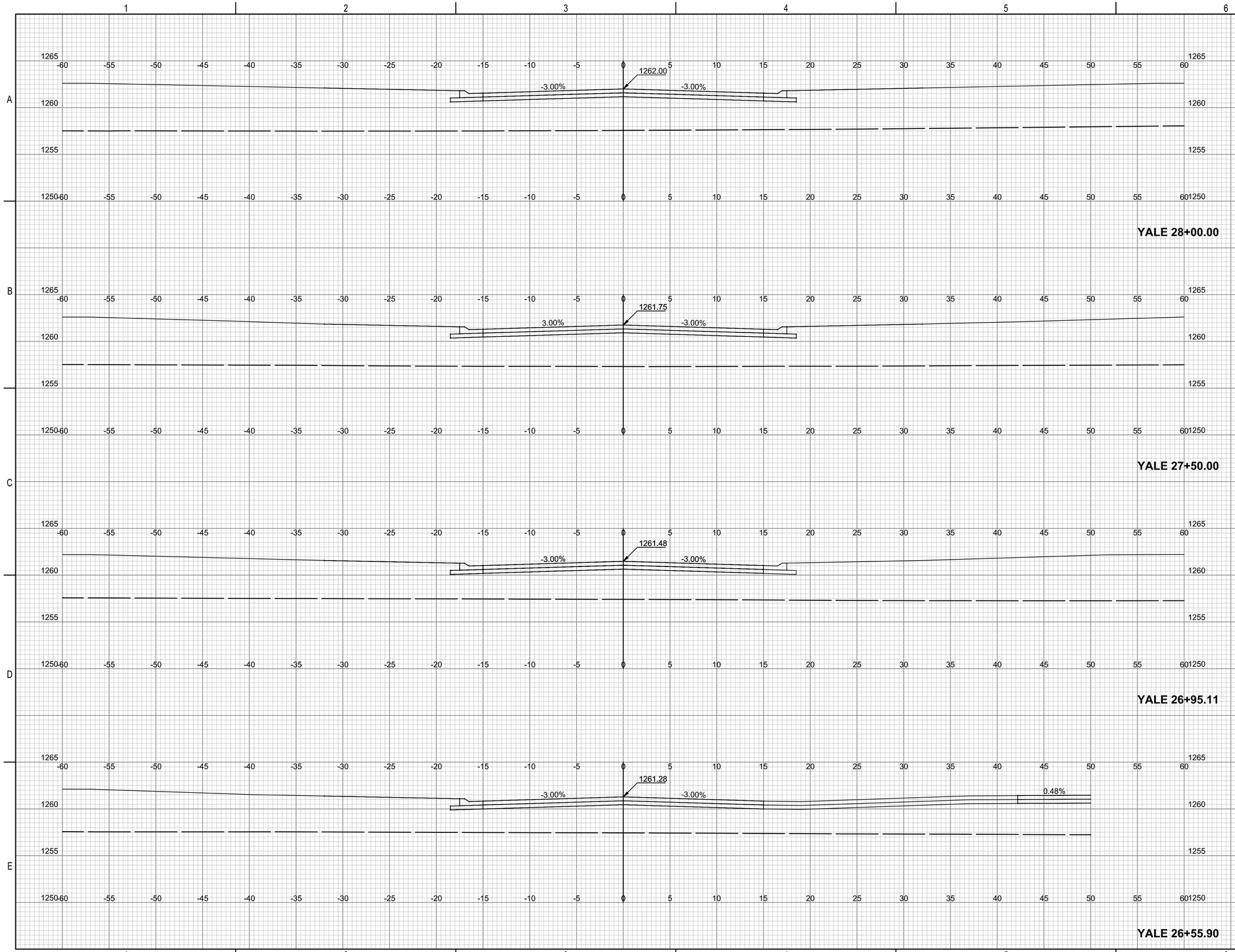
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

CROSS SECTIONS-YALE

CX604
52 OF 71

SAVED 8/1/2024 11:07:38 AM BY BILL.SEXSON
PLOTTED 5/27/2025 9:47:46 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_PAVING PHASE 1\52-200605-004-CX604 CROSS SECTIONS-YALE.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
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:		
	08/17/2026 - cjr	

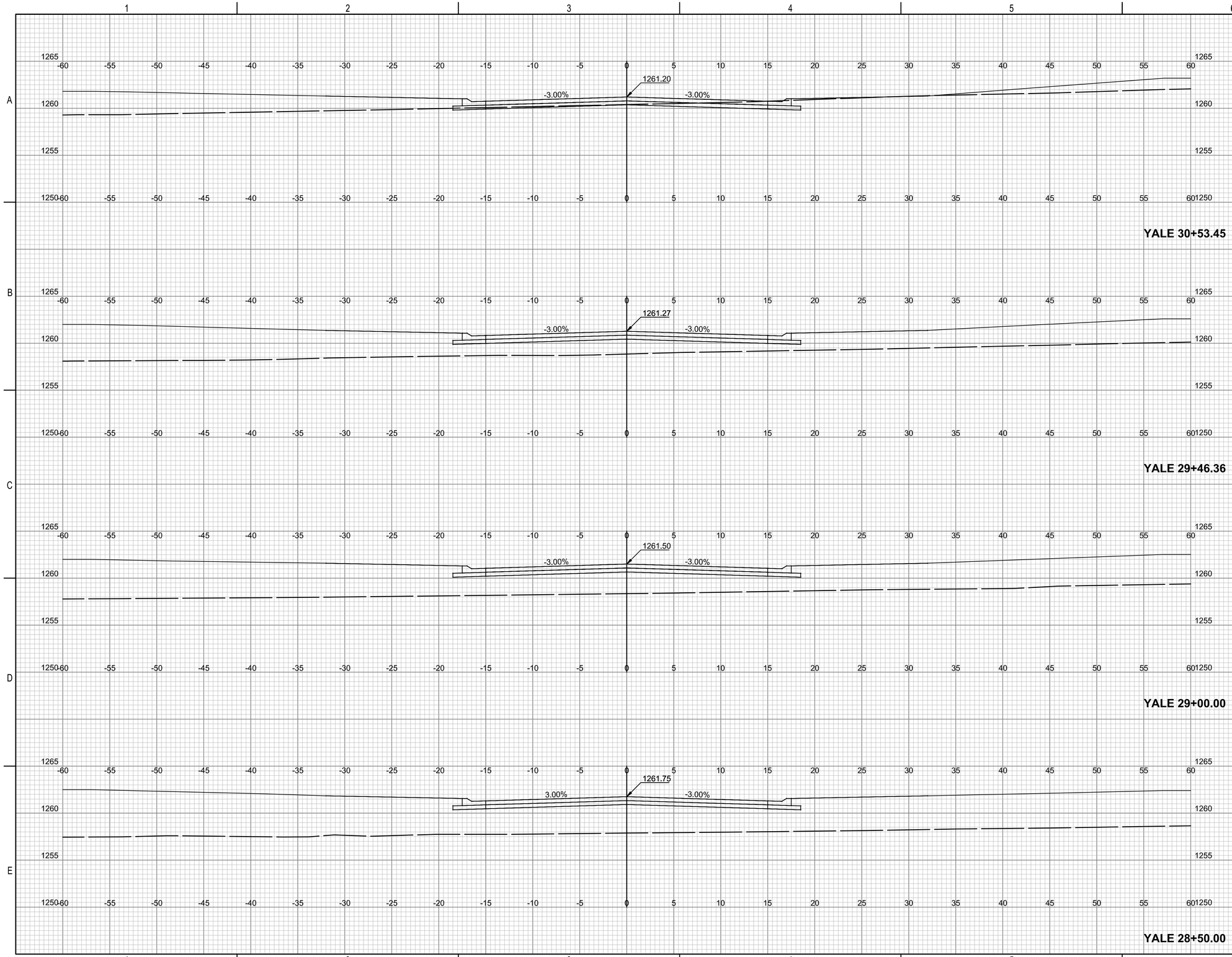
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

CROSS SECTIONS-YALE

CX605
53 OF 71

SAVED 8/1/2024 11:07:51 AM BY BILL.SEXSON
PLOTTED 5/27/2025 9:48:17 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_PAVING PHASE 1\53-200605-004-CX605 CROSS SECTIONS-YALE.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 05/27/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:	
08/17/2026 - cjr	

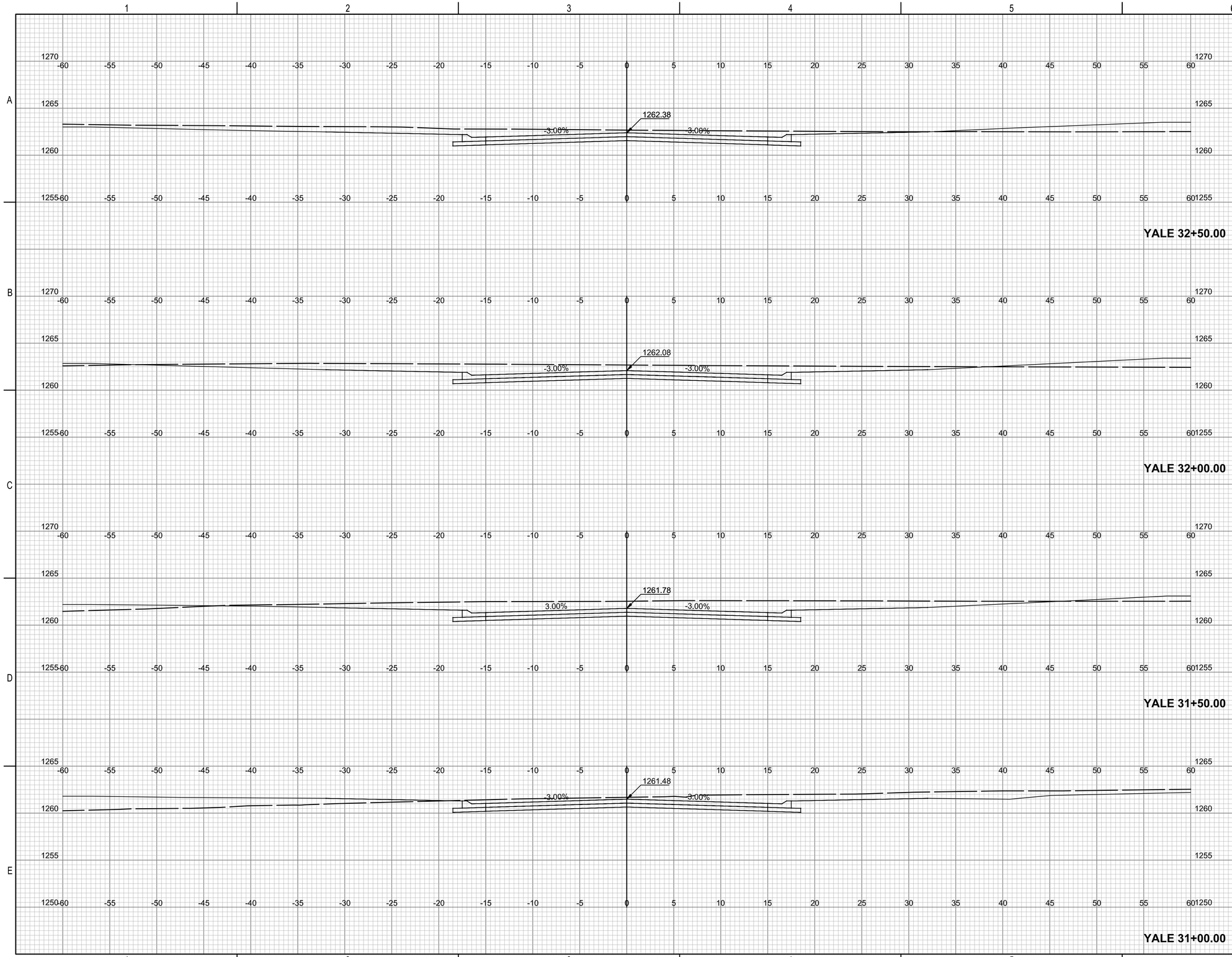
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

CROSS SECTIONS-YALE

CX606
54 OF 71

SAVED 8/1/2024 11:08:02 AM BY BILL.SEXSON
PLOTTED 5/27/2025 9:48:39 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_PAVING PHASE 1\54-200605-004-CX606 CROSS SECTIONS-YALE.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
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:		
	08/17/2026 - cjr	

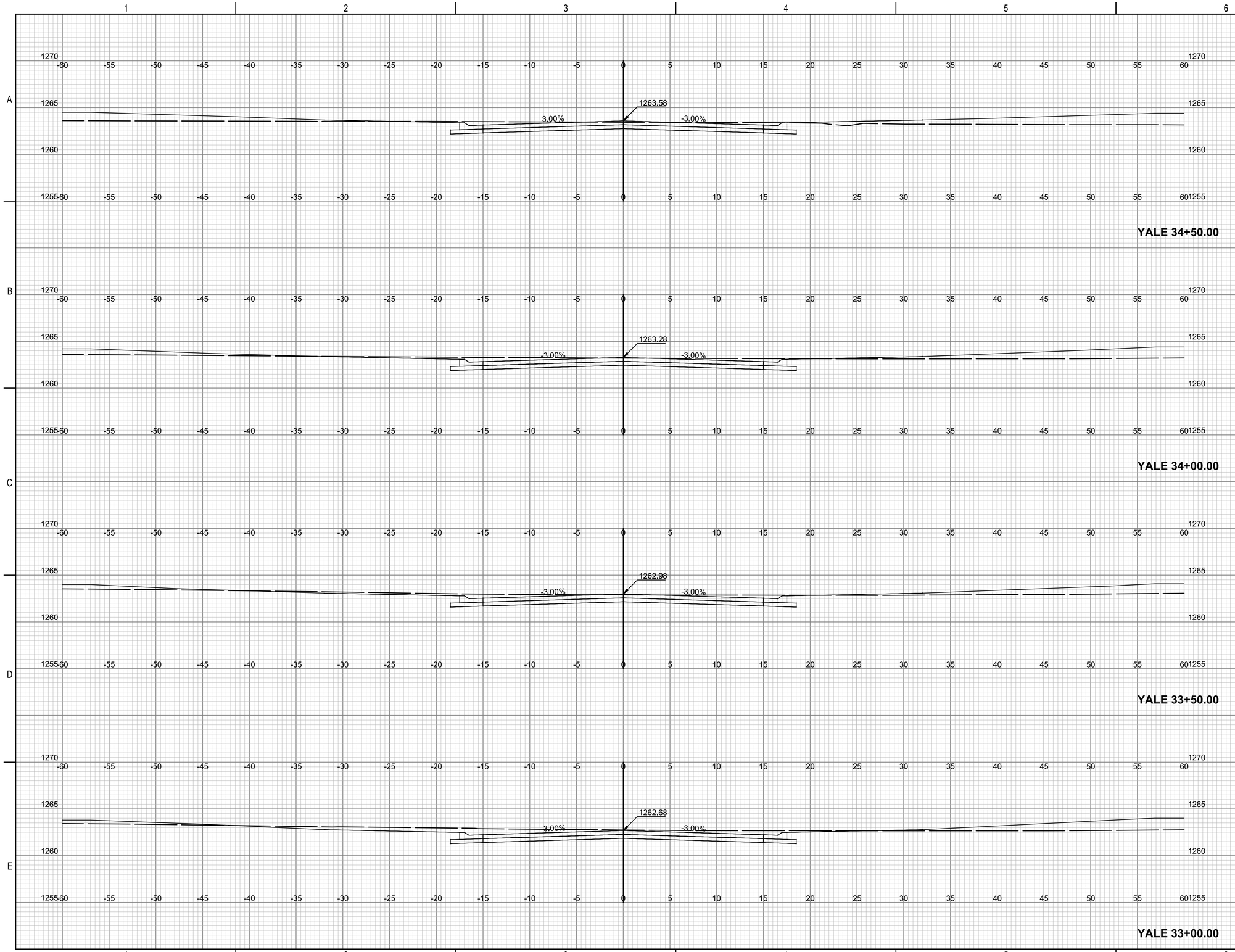
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

CROSS SECTIONS-YALE

CX607
55 OF 71

SAVED 8/1/2024 11:08:13 AM BY BILL.SEXSON
PLOTTED 5/27/2025 9:49:11 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\0042\PD3_PLANS\030_PAVING PHASE 1\55-200605-004-CX607 CROSS SECTIONS-YALE.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
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:		
	08/17/2026 - cjr	

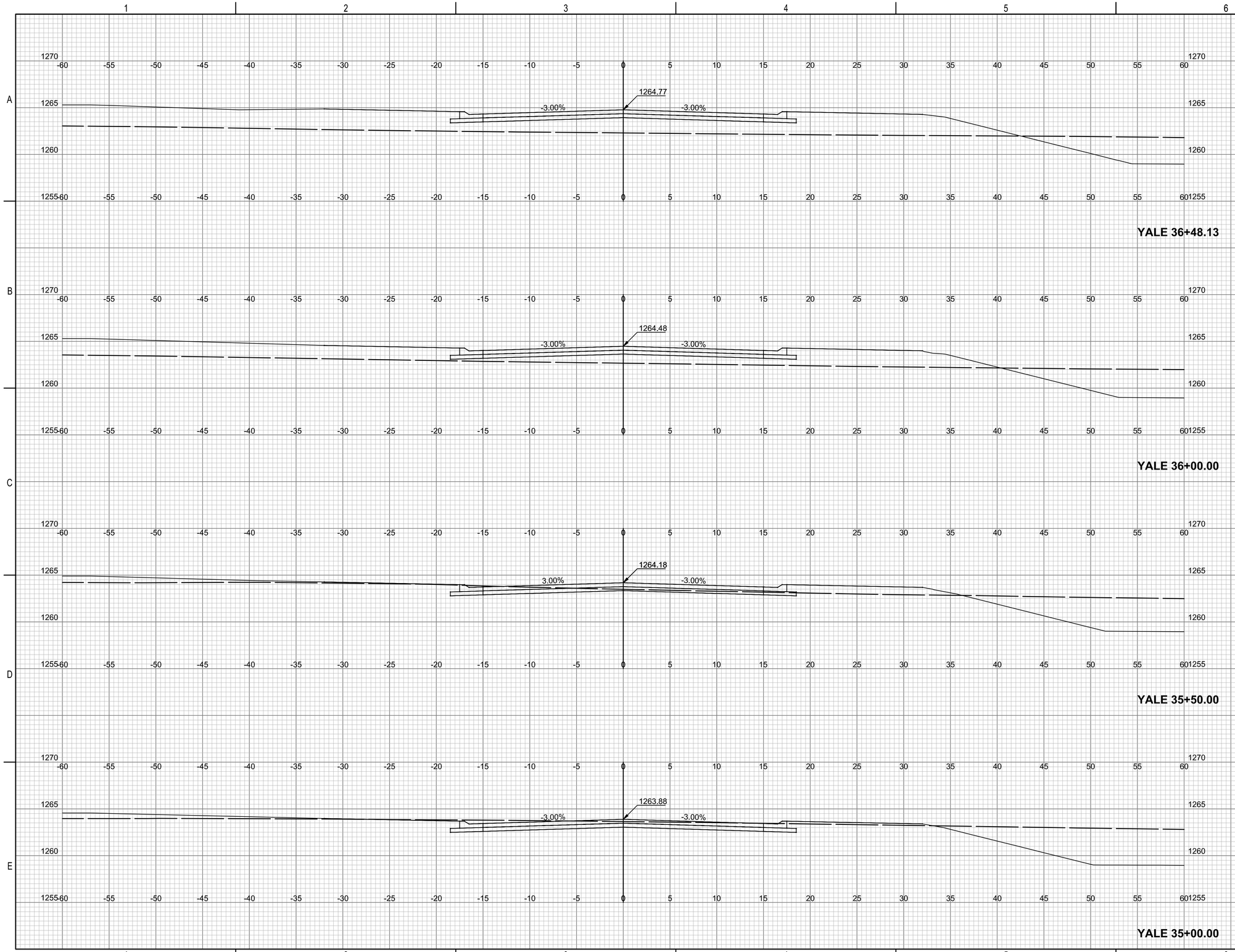
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

CROSS SECTIONS-YALE

CX608
56 OF 71

SAVED 8/1/2024 11:08:25 AM BY BILL.SEXSON
PLOTTED 5/27/2025 9:49:45 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_PAVING PHASE 1\56-200605-004-CX608 CROSS SECTIONS-YALE.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 05/27/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:	
08/17/2026 - cjr	

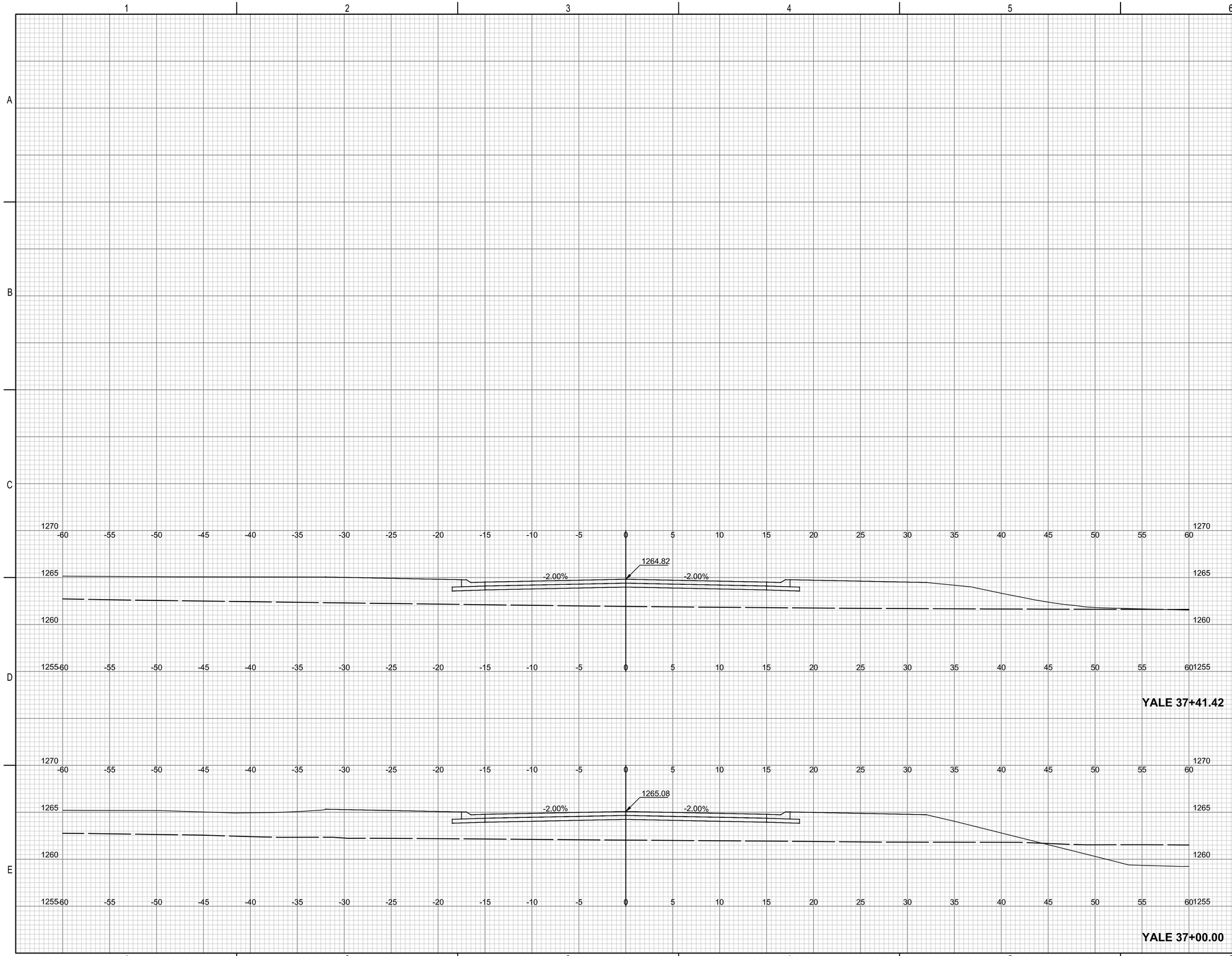
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

CROSS SECTIONS-YALE

CX609
57 OF 71

SAVED 8/1/2024 11:08:38 AM BY BILL.SEXSON
PLOTTED 5/27/2025 9:50:05 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_PAVING PHASE 1\57-200605-004-CX609 CROSS SECTIONS-YALE.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
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:		
	08/17/2026 - cjr	

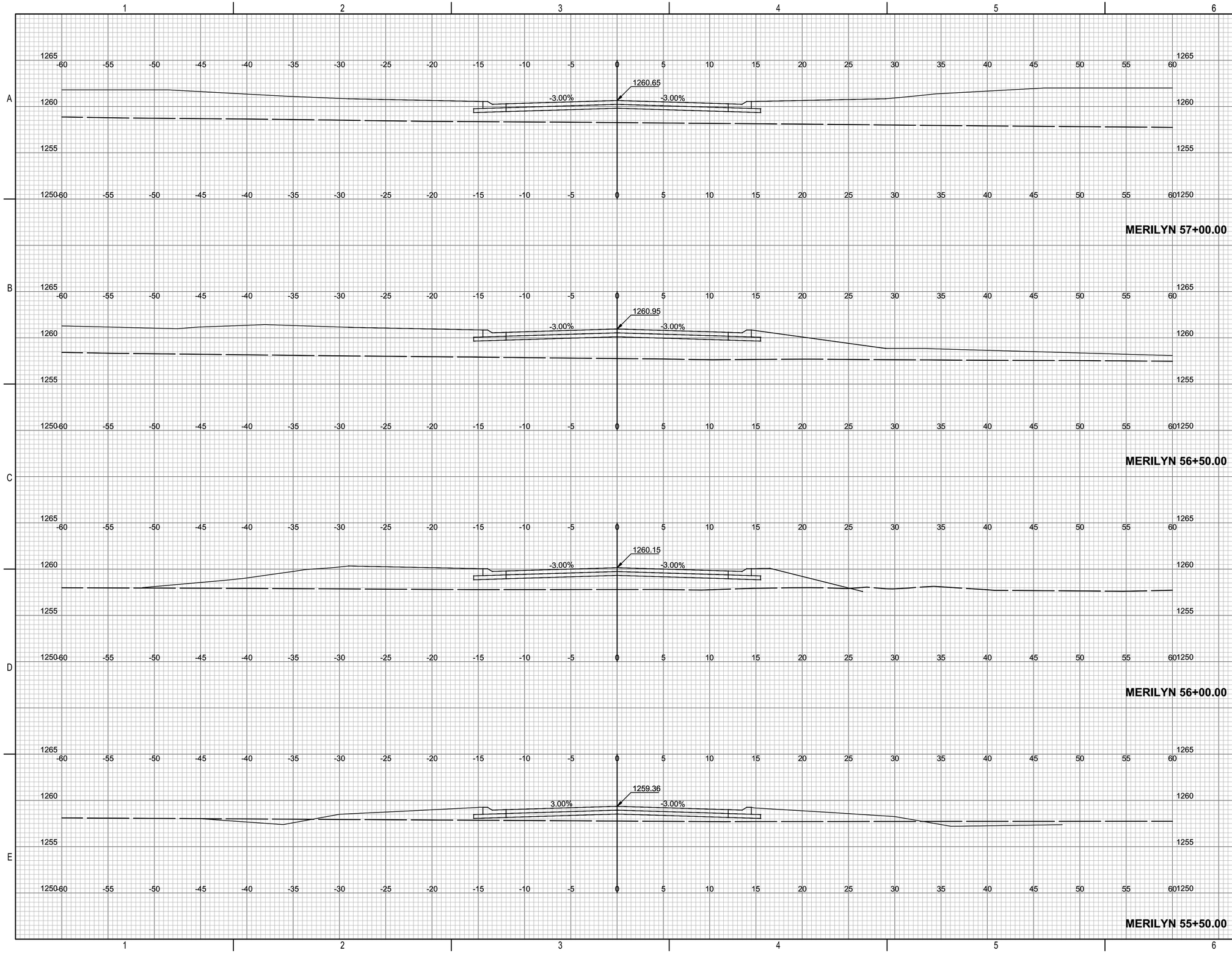
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

CROSS SECTIONS-YALE

CX610
58 OF 71

SAVED 8/1/2024 11:08:51 AM BY BILL.SEXSON
PLOTTED 5/27/2025 9:50:32 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_PAVING PHASE 1\58-200605-004-CX610 CROSS SECTIONS-YALE.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 05/27/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:		
	08/17/2026 - cjr	

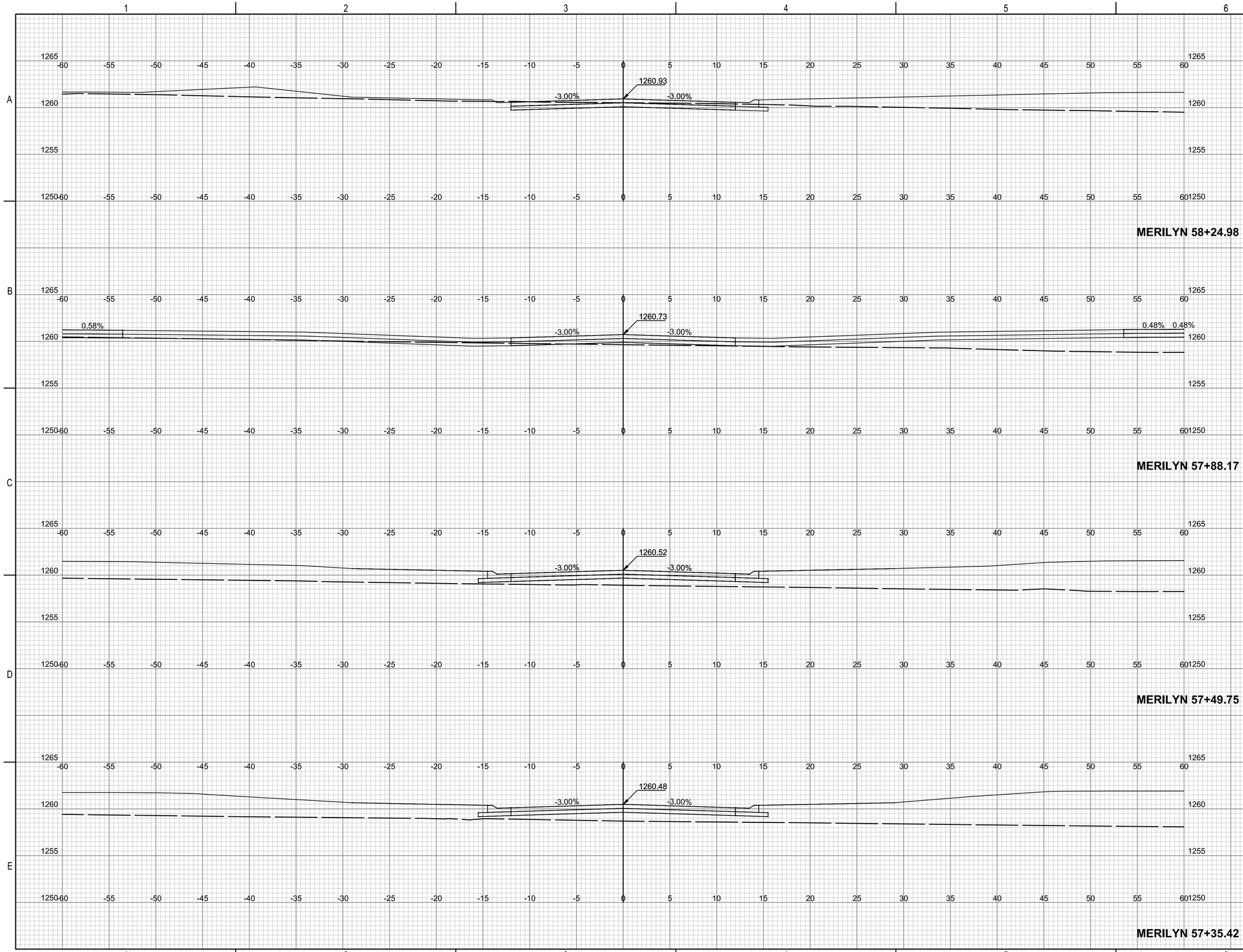
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

CROSS SECTIONS-MERILYN

CX611
59 OF 71

SAVED 8/1/2024 11:09:03 AM BY BILL.SEXSON
PLOTTED 5/27/2025 9:51:00 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_PAVING PHASE 1\59-200605-004-CX611 CROSS SECTIONS-MERILYN.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
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:		
	08/17/2026 - cjr	

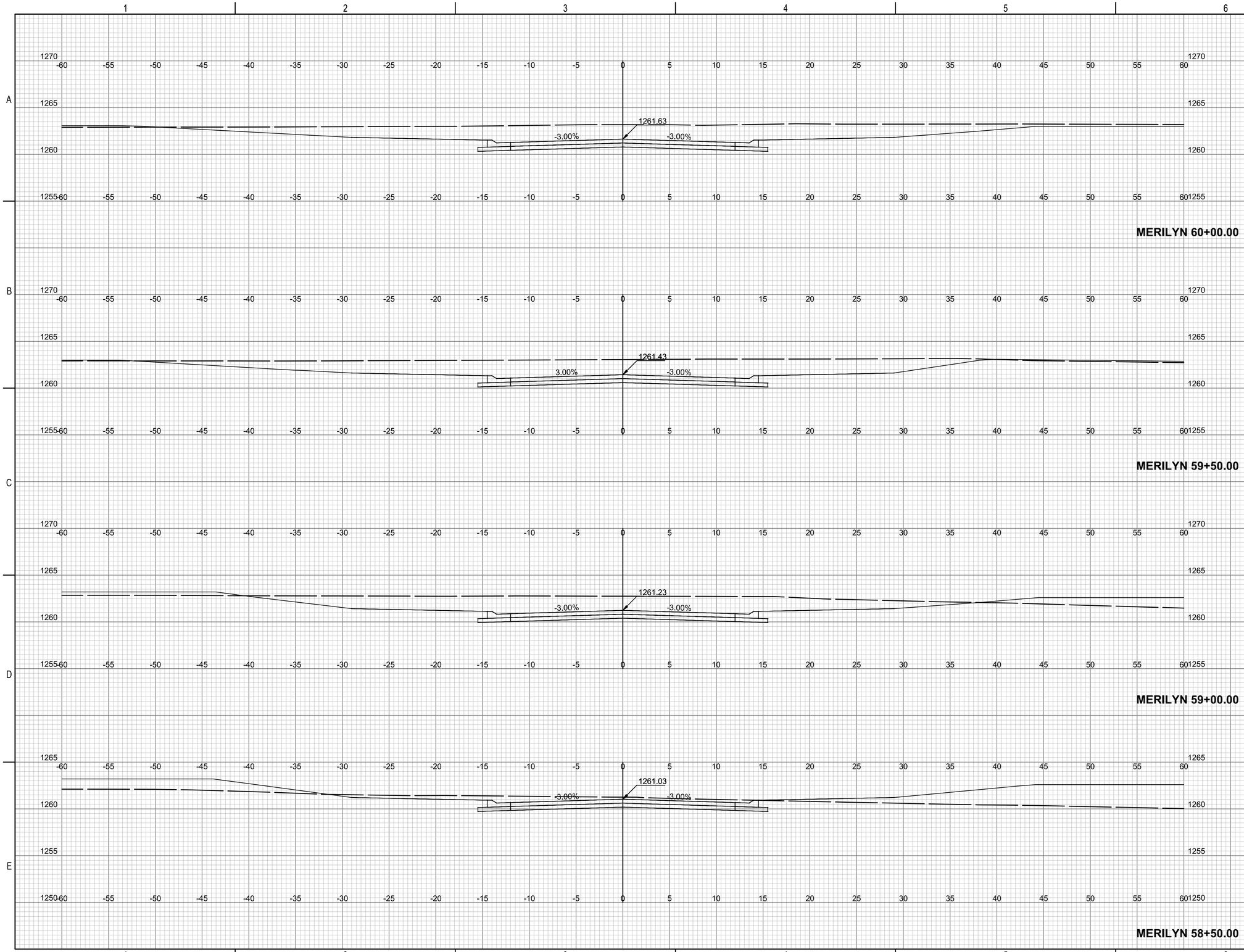
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

CROSS SECTIONS-MERILYN

CX612
60 OF 71

SAVED 8/1/2024 11:09:15 AM BY BILL.SEXSON
PLOTTED 5/27/2025 9:51:17 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_PAVING PHASE 1\60-200605-004-CX612 CROSS SECTIONS-MERILYN.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 05/27/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:

08/17/2026 - cjr

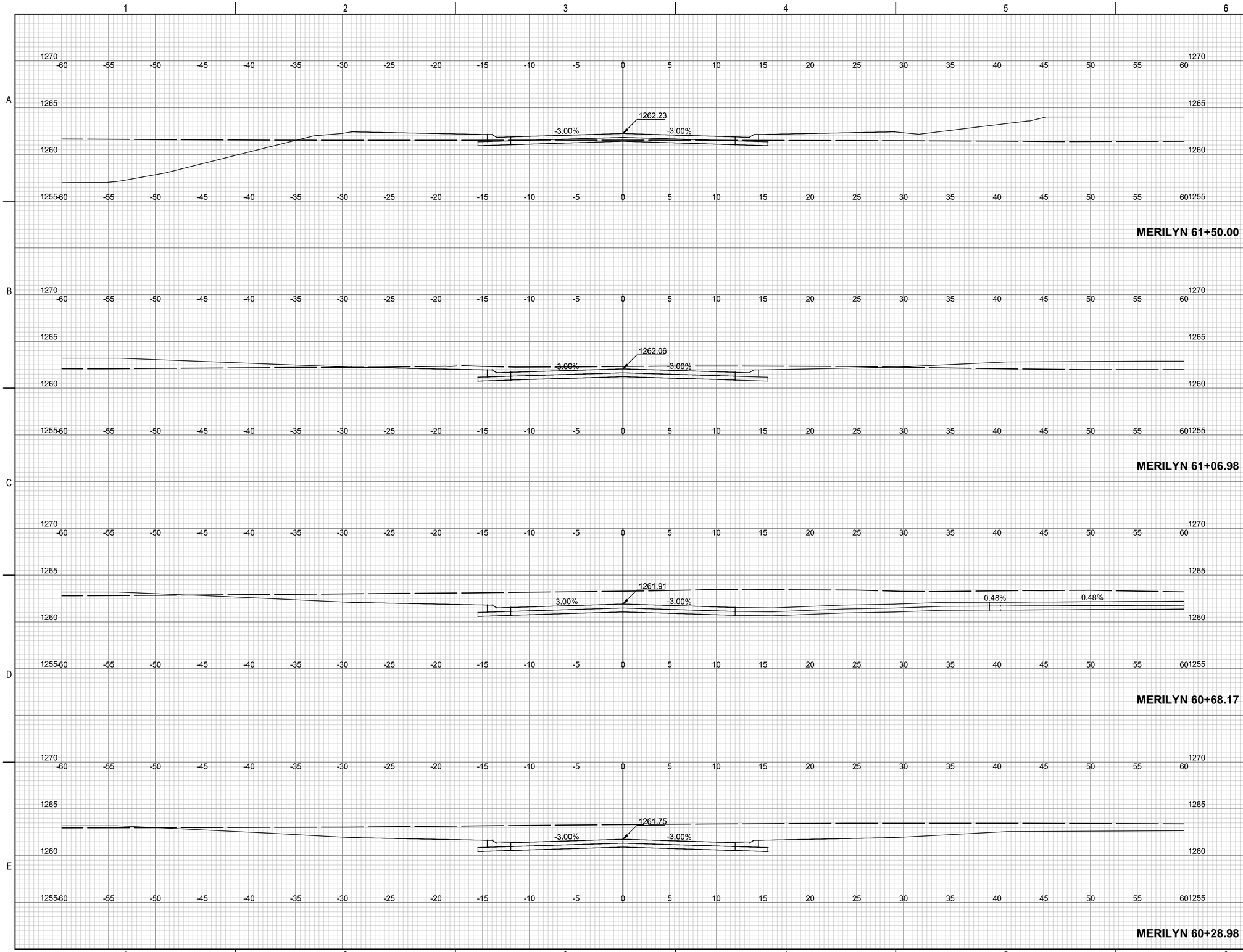
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

CROSS SECTIONS-MERILYN

CX613
61 OF 71

SAVED 8/1/2024 11:09:27 AM BY BILL.SEXSON
PLOTTED 5/27/2025 9:51:35 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_PAVING PHASE 1\61-200605-004-CX613 CROSS SECTIONS-MERILYN.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
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:		
	08/17/2026 - cjr	

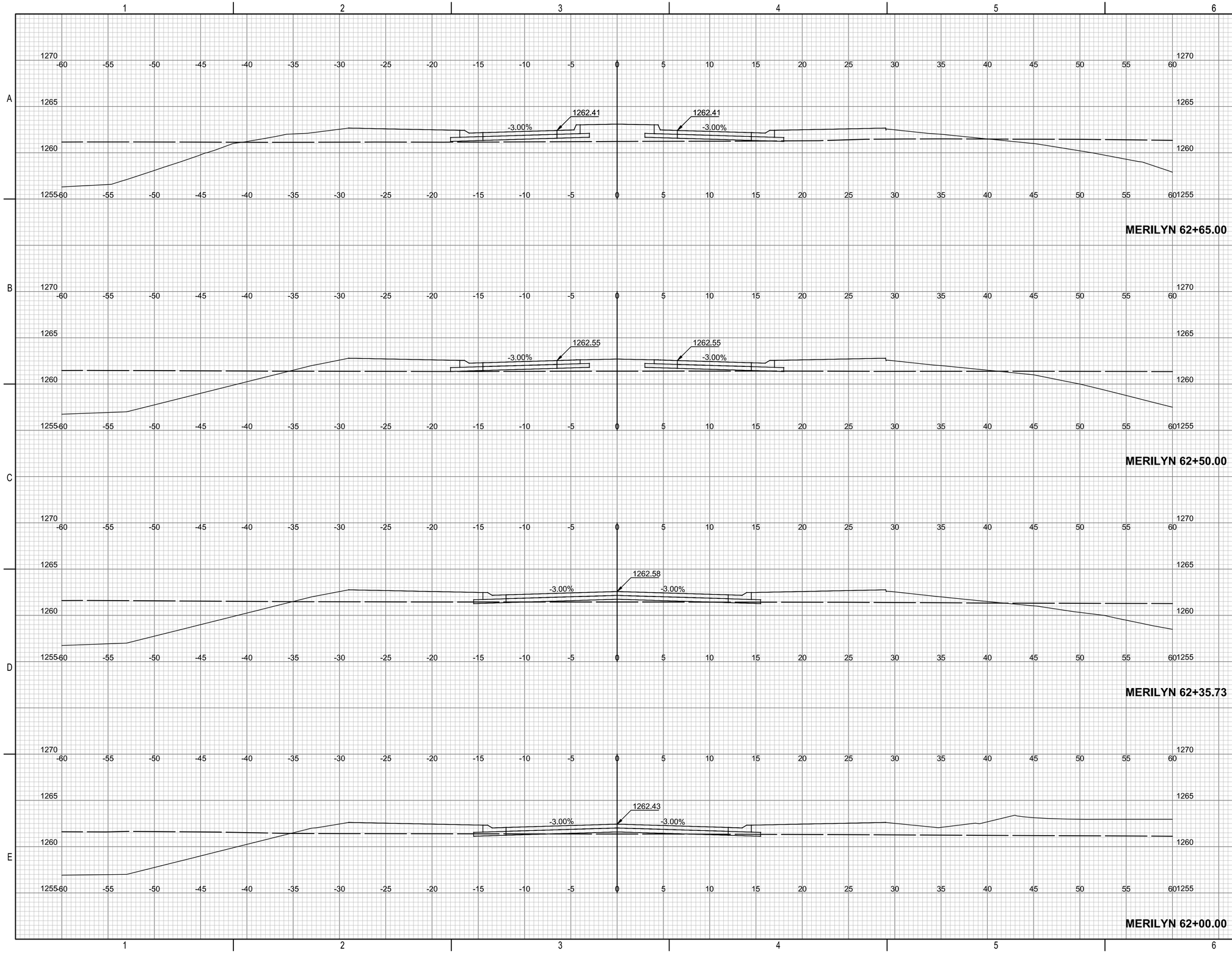
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

CROSS SECTIONS-MERILYN

CX614
62 OF 71

SAVED 8/1/2024 11:09:42 AM BY BILL.SEXSON
PLOTTED 5/27/2025 9:52:17 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_PAVING PHASE 1\62-200605-004-CX614 CROSS SECTIONS-MERILYN.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
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:	
08/17/2026 - cjr	

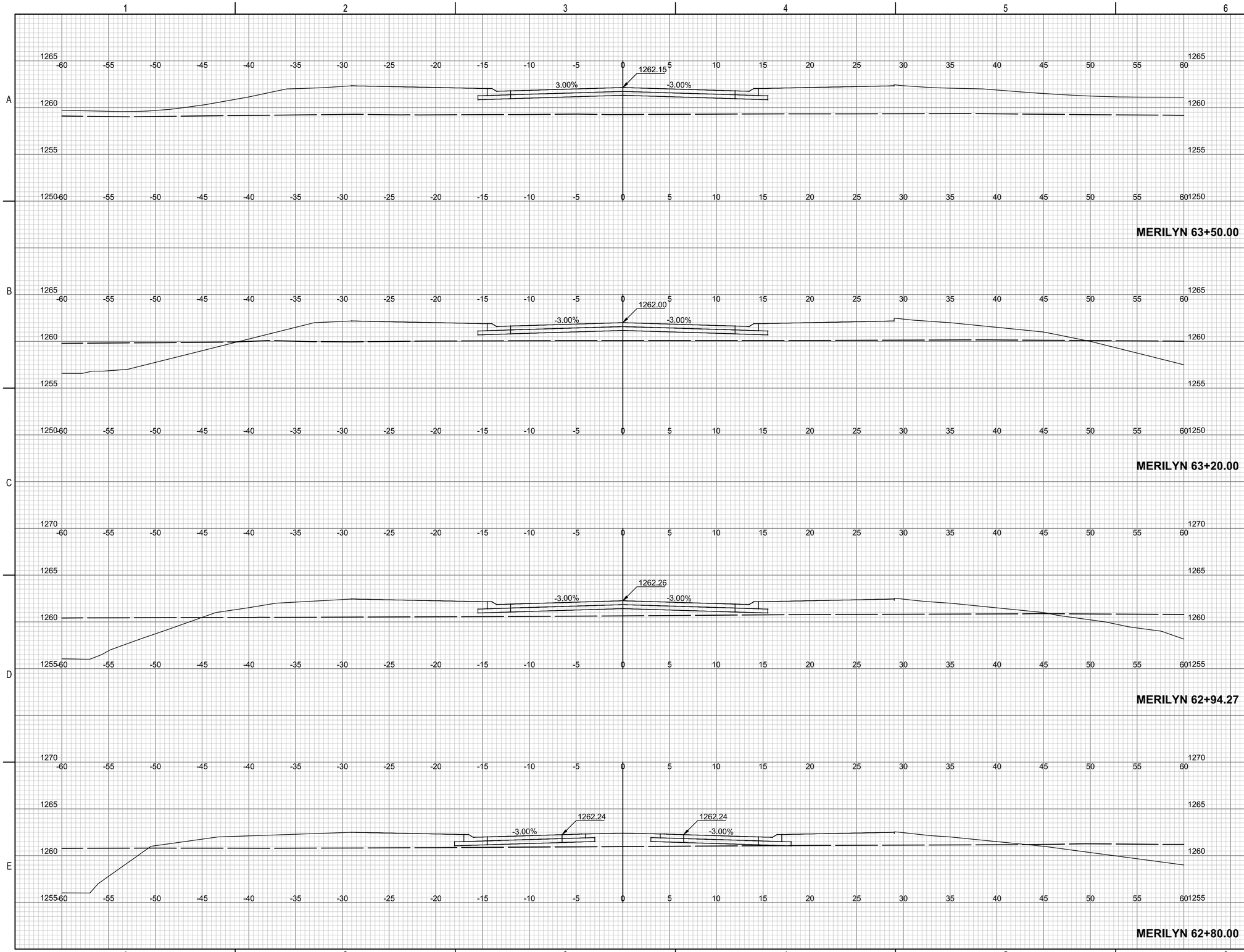
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

CROSS SECTIONS-MERILYN

CX615
63 OF 71

SAVED 8/1/2024 11:09:57 AM BY BILL.SEXSON
PLOTTED 5/27/2025 9:52:33 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_PAVING PHASE 1\63-200605-004-CX615 CROSS SECTIONS-MERILYN.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
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:	
08/17/2026 - cjr	

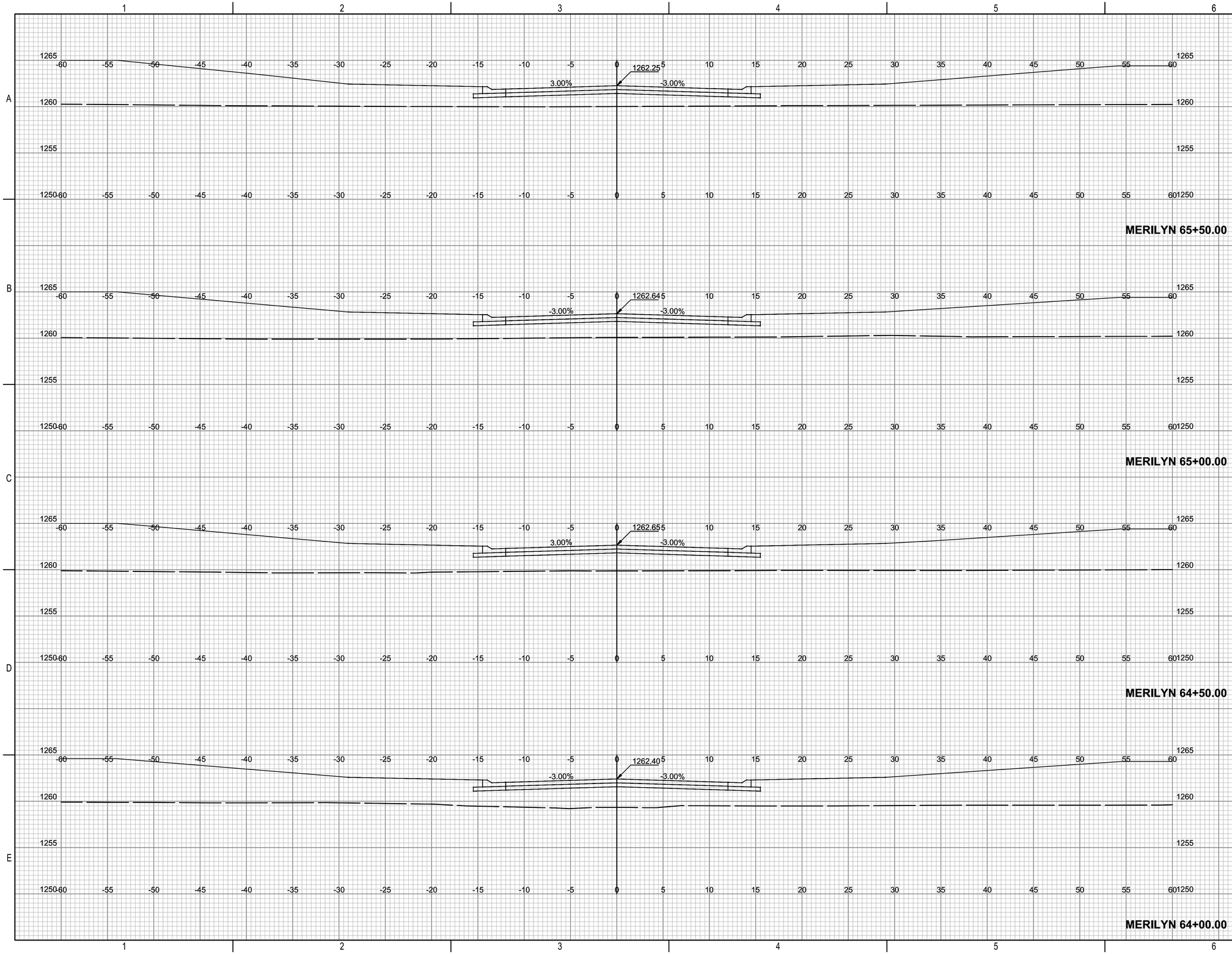
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

CROSS SECTIONS-MERILYN

CX616
64 OF 71

SAVED 8/1/2024 11:10:10 AM BY BILL.SEXSON
PLOTTED 5/27/2025 9:53:02 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_PAVING PHASE 1\64-200605-004-CX616 CROSS SECTIONS-MERILYN.DWG



SAVED 8/1/2024 11:10:20 AM BY BILL.SEXSON
PLOTTED 5/27/2025 9:53:29 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_PAVING PHASE 1\65-200605-004-CX617 CROSS SECTIONS-MERILYN.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
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

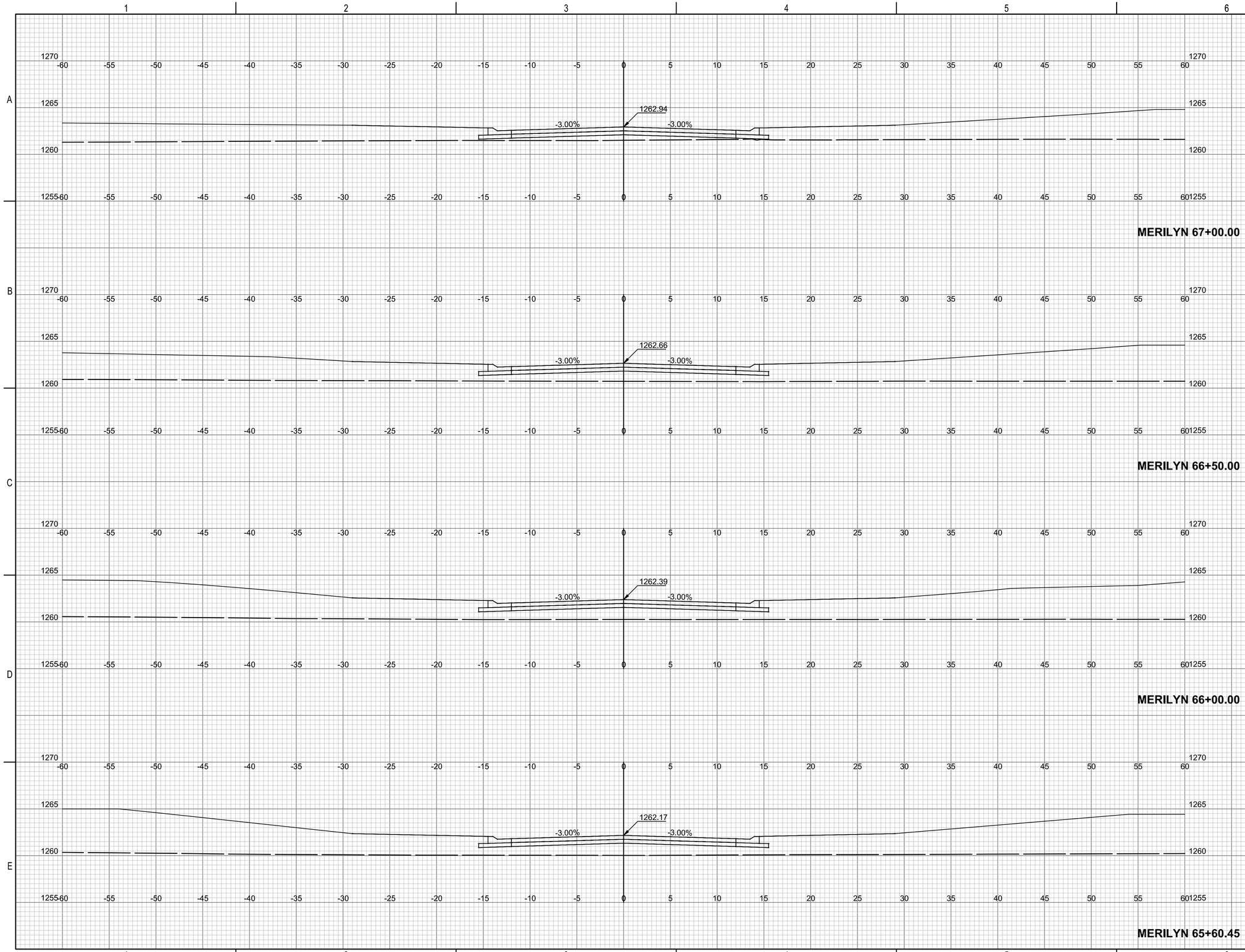
Issue:		
	08/17/2026 - cjr	

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

CROSS SECTIONS-MERILYN

CX617
65 OF 71



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

CITY OF WICHITA

KEVIN P. GRAHAM
LICENSED
27806
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:		
	08/17/2026 - cjr	

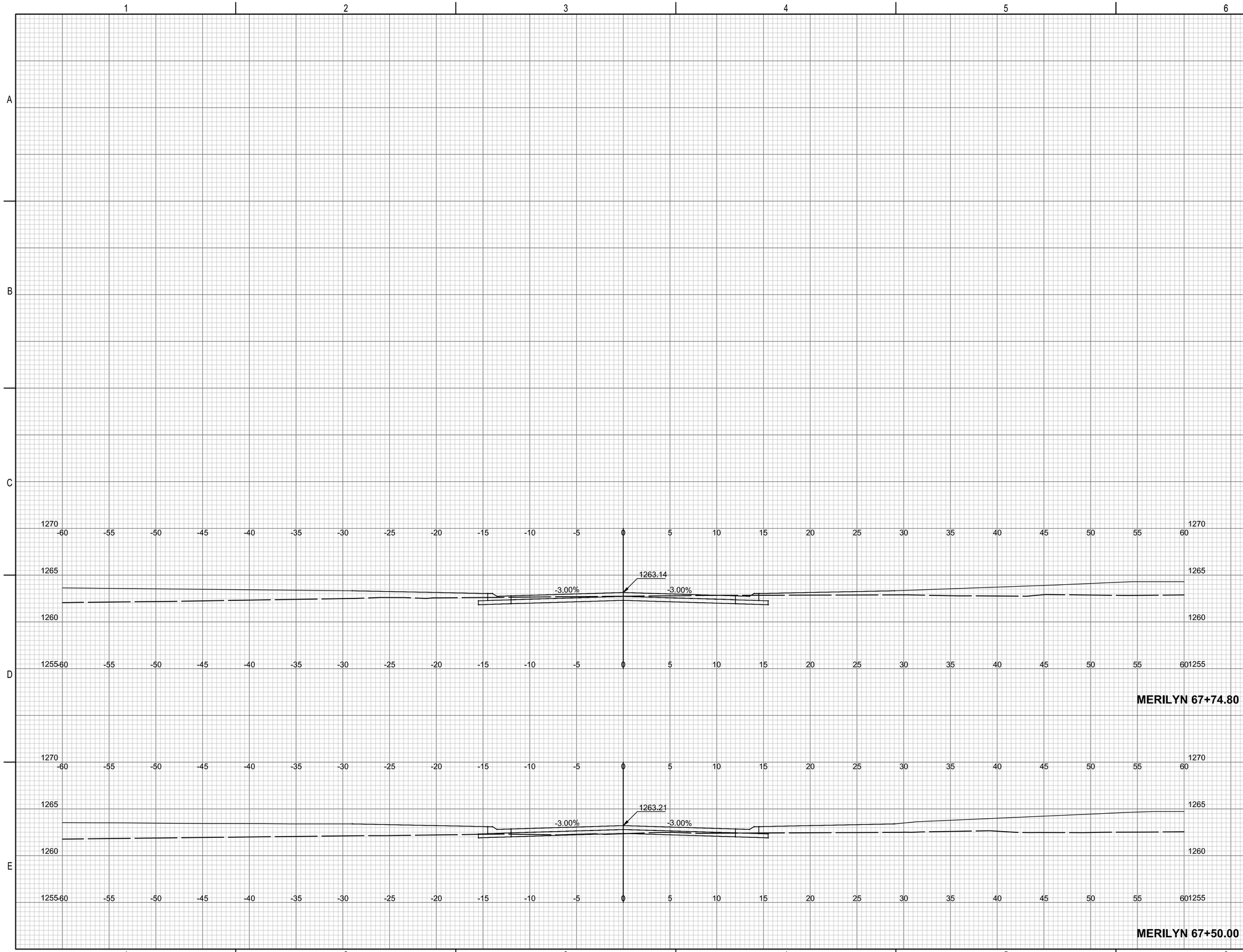
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

CROSS SECTIONS-MERILYN

CX618
66 OF 71

SAVED 8/1/2024 11:10:57 AM BY BILL.SEXSON
PLOTTED 5/27/2025 9:53:57 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_PAVING PHASE 1\66-200605-004-CX618 CROSS SECTIONS-MERILYN.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
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:		
	08/17/2026 - cjr	

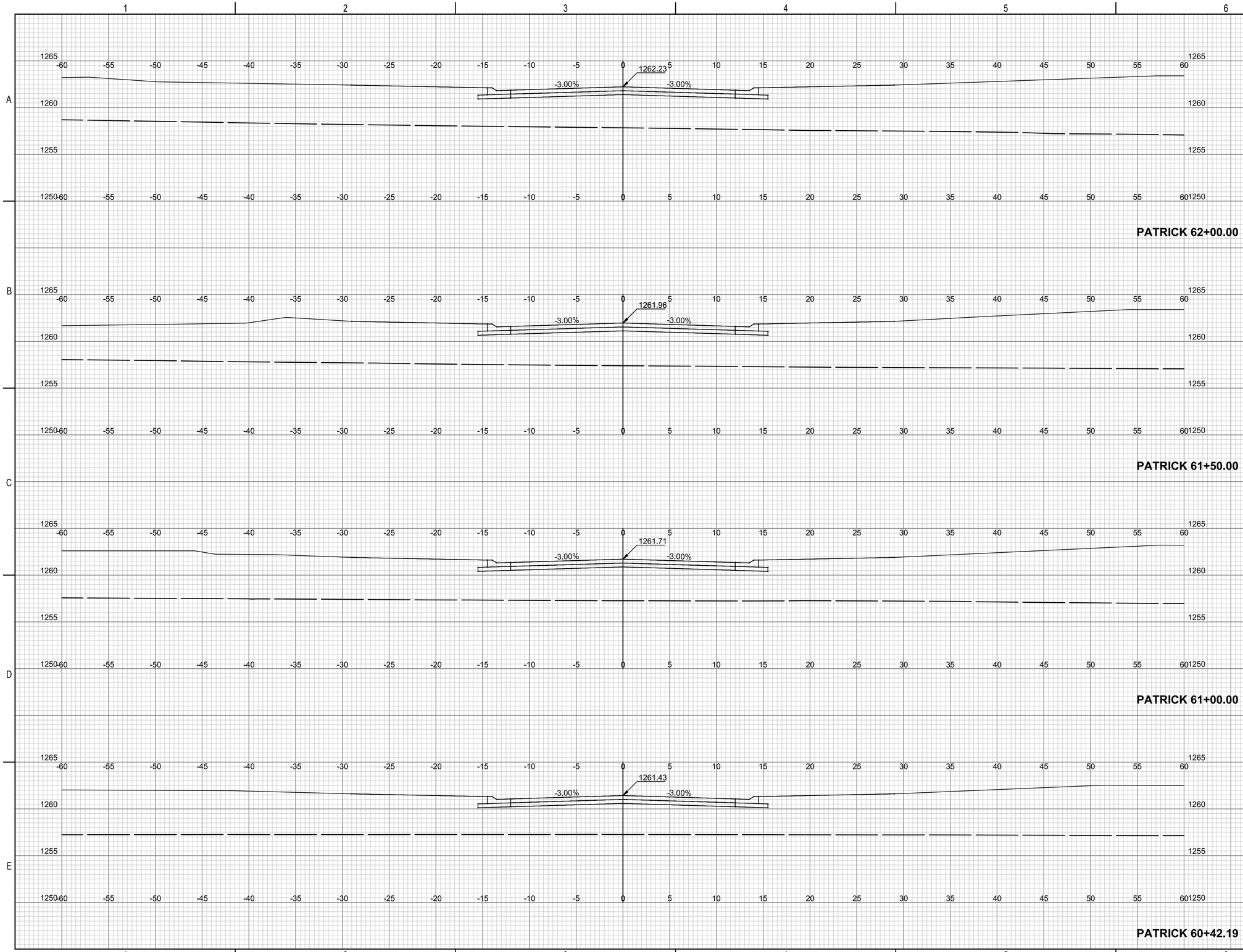
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

CROSS SECTIONS-MERILYN

CX619
67 OF 71

SAVED 8/1/2024 11:11:00 AM BY BILL.SEXSON
PLOTTED 5/27/2025 9:54:16 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_PAVING PHASE 1\67-200605-004-CX619 CROSS SECTIONS-MERILYN.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
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:		
	08/17/2026 - cjr	

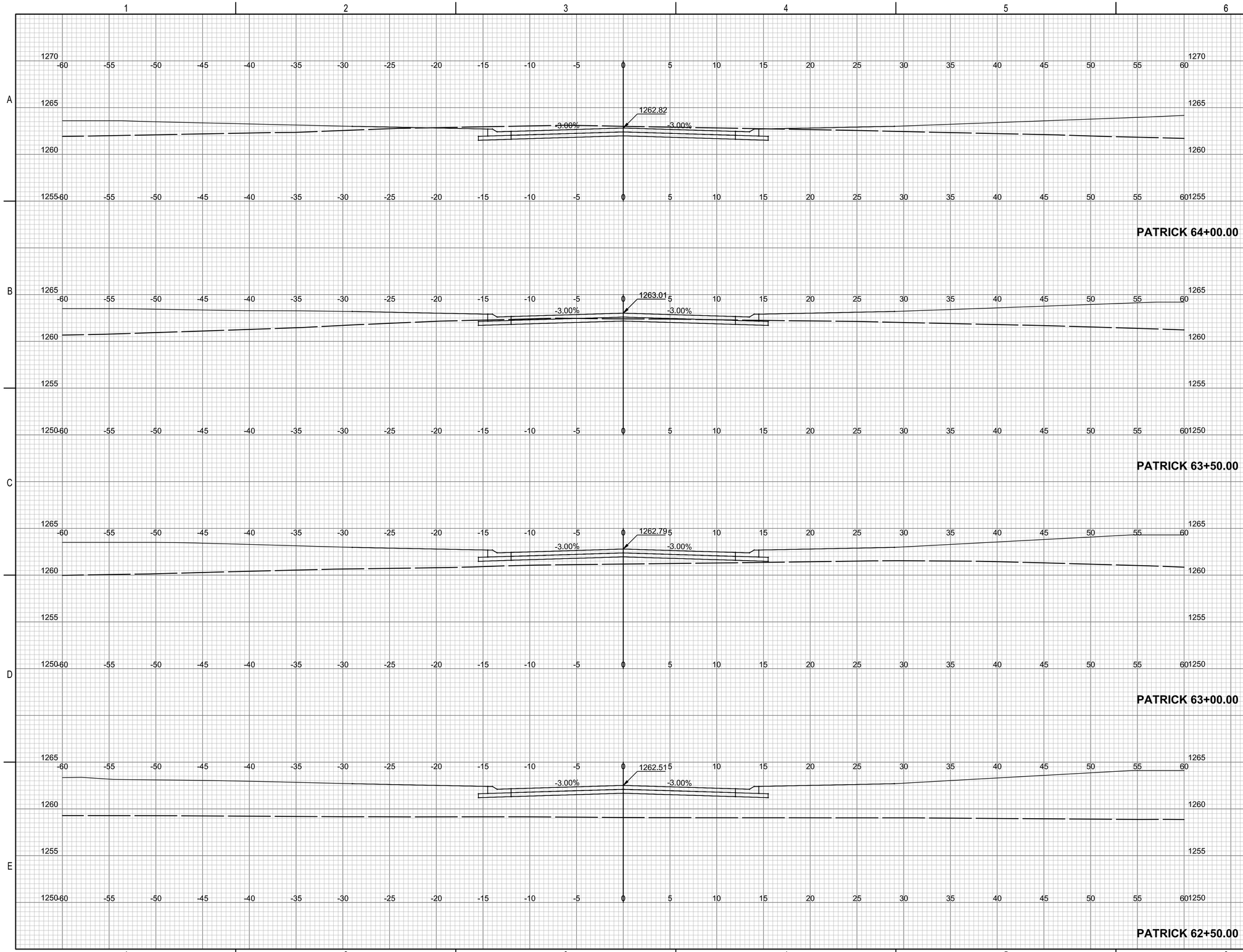
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

CROSS SECTIONS-PATRICK

CX620
68 OF 71

SAVED 8/1/2024 11:11:10 AM BY BILL.SEXSON
PLOTTED 5/27/2025 9:54:41 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_PAVING PHASE 1\68-200605-004-CX620 CROSS SECTIONS-PATRICK.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
05/27/2025
KANSAS
PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:		
	08/17/2026 - cjr	

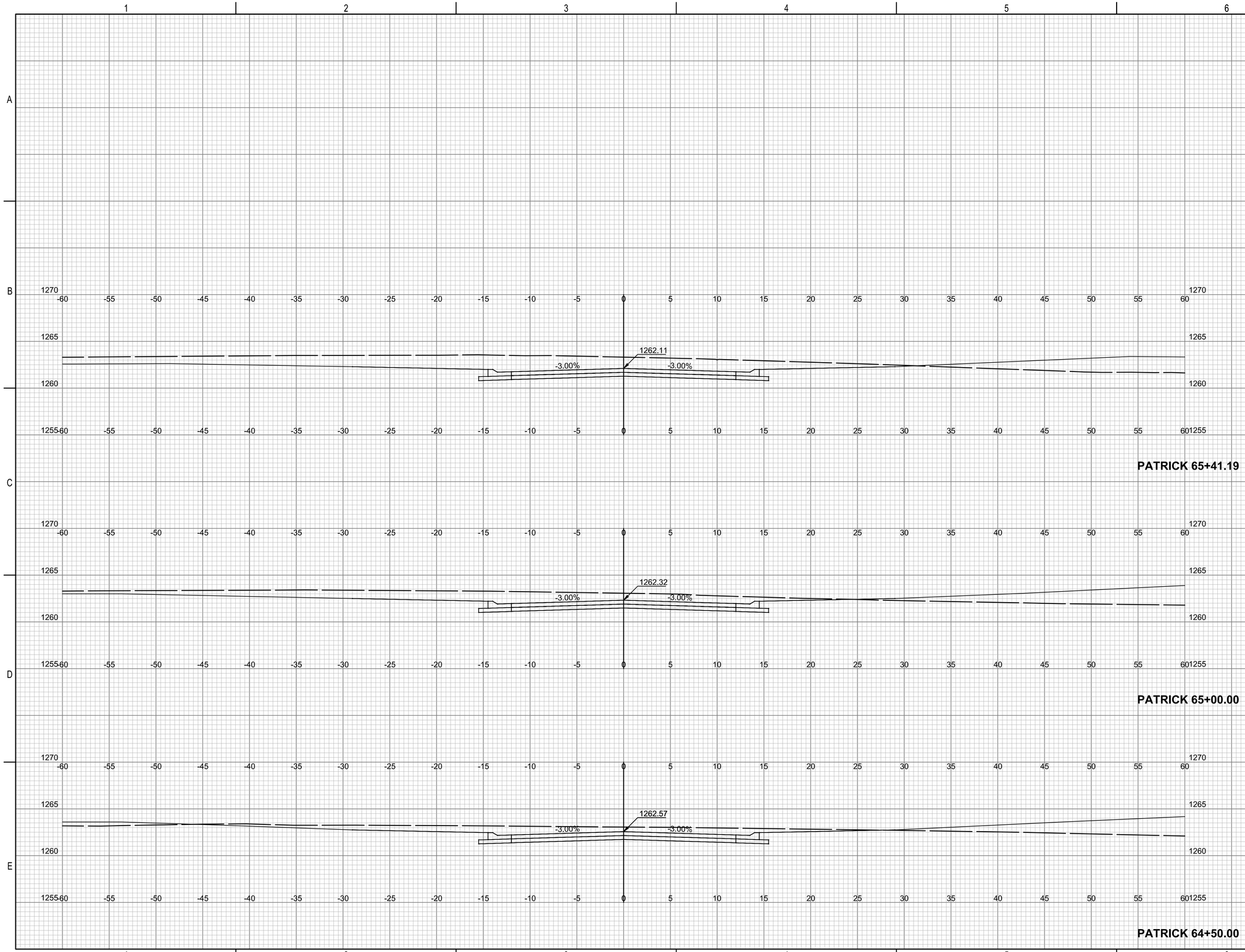
RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

CROSS SECTIOINS-PATRICK

CX621
69 OF 71

SAVED 8/1/2024 11:11:26 AM BY BILL.SEXSON
PLOTTED 5/27/2025 9:54:55 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_PAVING PHASE 1\69-200605-004-CX621 CROSS SECTIOINS-PATRICK.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 05/27/2025 KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 1

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086026

Issue:	
	08/17/2026 - cjr

RED LINE - FIELD SET
U:\Wichita-Civil 200605-012

JOB NO.	200605-004
DATE	MAY 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	KMS

CROSS SECTIONS-PATRICK

CX622
70 OF 71

SAVED 8/1/2024 11:16:36 AM BY BILL.SEXSON
PLOTTED 5/27/2025 9:55:22 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\004\2PD3_PLANS\030_PAVING PHASE 1\71-200605-004-CX622 CROSS SECTIONS-PATRICK.DWG

SWANEY FARM ADDITION

CITY OF WICHITA, SEDGWICK COUNTY, KANSAS

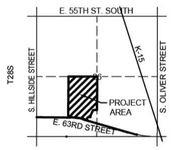
FINAL PLAT

BENCH MARK

BENCHMARK 202 - CHISELED X ON CURB STORM DRAIN ON THE SE SIDE OF CLIFTON AND 63RD.
ELEV.= 1259.36 (NAVD88)
THENCE N00°17'28"W AT DISTANCE 86.56'
THENCE N89°39'36"E AT DISTANCE 3.86'
TO THE SOUTHWEST CORNER OF SWANEY FARM ADDITION

MINIMUM PAD TABLE

LOCATION	MINIMUM OPENING (BFE + 2')
BLOCK A, LOTS 1-6	1261.6
BLOCK B, LOTS 1-3	1261.6
BLOCK C, LOTS 1-4	1261.6
BLOCK C, LOTS 5-7	1262.8
BLOCK C, LOTS 9-11	1263.5
BLOCK C, LOTS 12-14	1263.8
BLOCK D, LOTS 1-4. 7	1261.6
BLOCK E, LOTS 11-12	1264.9
BLOCK E, LOTS 13-14	1264.7
BLOCK E, LOT 15	1264.4
BLOCK E, LOT 16	1264.4
BLOCK E, LOT 17	1264.0
BLOCK E, LOT 18	1263.8
BLOCK E, LOT 19	1263.7
BLOCK E, LOT 20	1263.6
BLOCK E, LOTS 21-23	1263.5
BLOCK F, LOT 1	1264.9
BLOCK F, LOT 23	1264.7
BLOCK F, LOTS 15-16	1264.3
BLOCK F, LOTS 17-18	1264.8
BLOCK G, LOTS 1-3	1265.0



VICINITY MAP

1 INCH =100 FEET

PLAT LEGEND

△ SECTION CORNER AS N

● SET 1/2" REBAR, 24" LO WITH I.D. CAP "PEC CLS

SEE DETAIL A

NW CORNER E 1/2 SW 1/4 26-28-1E FOUND CHISELED CROSS ON TOP OF 3" x 6" STONE WITH 3/4" IRON PIPE ON NE SIDE

FOUND 1/2" REBAR

SW CORNER E 1/2 SW 1/4 26-28S-1E FOUND 1" IRON PIPE

SE CORNER E 1/2 SW 1/4 26-28S-1E FOUND 1/2" REBAR

NE CORNER E 1/2 SW 1/4 26-28-1E SET 1/2" REBAR, 24" LONG, WITH I.D. CAP "PEC CLS65"

NE CORNER NW 1/4 26-28-1E FOUND 1/2" IRON PIPE

NE CORNER SE 1/4 26-28-1E FOUND 5/8" REBAR

CLIFTON AVENUE

63RD STREET EXISTING ROW VARIES

61ST STREET SOUTH

PATRICK

YALE

WILLIS

WILLIS CT

MERLIN

BLUFF

Reserve A

Reserve B

Reserve C

Reserve D

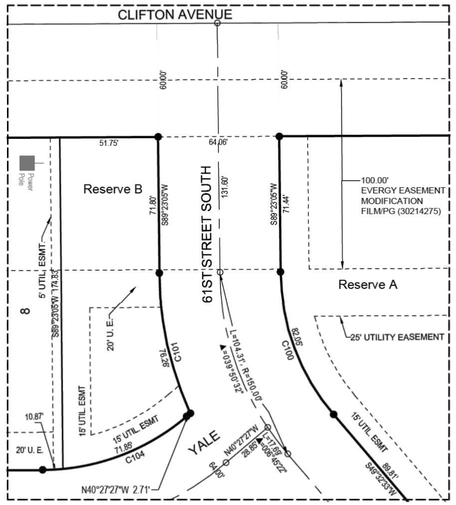
Reserve E

COMPLETE ACCESS CONTROL (C.A.C.)

EVERGY EASEMENT MODIFICATION FILM/PG (30214275)

30' RURAL WATER DISTRICT NO. 3 EASEMENT FILM 1248/PG 358

30.00' RWD #3 EASEMENT FILM 1248 PG 358



DETAIL A
1 INCH =40 FEET

CURVE TABLE

CURVE NO.	RADIUS	DELTA	LENGTH	CHORD LENGTH	CHORD BEARING
C100	118.00'	39°50'32"	82.05	80.41'	N69° 27' 48"E
C101	182.00'	24°00'25"	76.26	75.70'	N77° 22' 52"E
C102	207.00'	39°50'32"	143.94	141.06'	S69° 27' 49"W
C103	143.00'	39°50'32"	99.44	97.45'	S69° 27' 49"W
C104	118.00'	40°10'00"	82.72	81.04'	N20° 22' 27"W
C105	182.00'	38°50'46"	123.39	121.04'	N19° 42' 50"W
C106	154.00'	28°13'23"	75.86	75.09'	S14° 43' 37"E
C107	96.00'	28°13'23"	47.29	46.81'	S14° 43' 37"E
C108	179.00'	24°19'50"	76.01	75.44'	S77° 13' 10"W
C109	121.00'	22°27'34"	47.43	47.13'	S78° 09' 18"W
C111	121.00'	61°46'37"	130.46	124.24'	S59° 43' 37"E
C112	179.00'	61°46'37"	193.00	183.79'	S59° 43' 37"E
C113	225.00'	61°46'37"	242.60	231.02'	S59° 43' 37"E
C114	96.00'	90°00'00"	150.80	135.76'	N44° 23' 05"E
C115	154.00'	90°00'00"	241.90	217.79'	N44° 23' 05"E
C116	74.00'	89°40'32"	115.82	104.36'	N44° 32' 49"E
C117	132.00'	89°40'32"	206.60	186.15'	N44° 32' 49"E
C118	309.00'	22°54'56"	123.59	122.76'	S79° 09' 27"E
C119	251.00'	22°54'56"	100.39	99.72'	S79° 09' 27"E
C120	71.00'	16°38'48"	20.63	20.56'	N76° 01' 23"W
C121	129.00'	19°19'25"	43.51	43.30'	N77° 21' 41"W

08/17/2026 - cjr

RED LINE - FI

U:\Wichita-Civil

08/17/2026 2:26:23 PM BY BILL.SEXSON
U:\WICHITA-CIVIL\2020\2006051001\PEC\DRAWINGS\PLAT\200605-001 SWANEY FARM ADDITION-2-22-2023.DWG