CONSTRUCTION PLANS FOR
WATER DISTRIBUTION IMPROVEMENTS

TO SERVE

SWANEY FARM ADDITION - PHASE 2

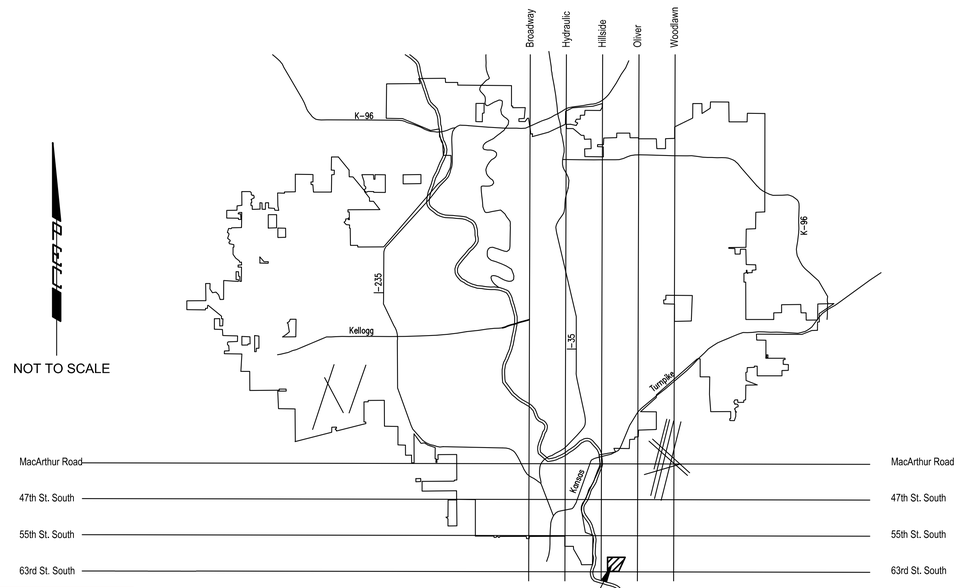
CITY OF WICHITA ENGINEERING PROJECT NO. 448-2024-007799
ORG CODE: 47127625, MUNIS NO.: E5133

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
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NOT TO SCALE

LOCATION MAP

PROJECT LOCATION
SWANEY FARM ADDITION

SHEET NUMBER	SHEET TITLE
01	COVER SHEET
02	GENERAL NOTES
03	PLAT BUBBLE MAP
04	WATER LINE KEY MAP & BUBBLE MAP
05 - 07	WATER LINE NO. 1
08 - 09	WATER LINE NO. 2
10 - 12	WATER LINE NO. 3
13	WATER LINE NO. 4
14	WATER LINE NO. 5
15	STANDARD WATER ASSEMBLY DETAIL
16	MISCELLANEOUS WATER DETAILS
17	EROSION CONTROL PLAN
18 - 22	EROSION CONTROL DETAILS

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 8"	Sanderson	3,269	lf
Pipe, WL DICL 8"	McWane	16	lf
Pipe, Connect to Existing	Sanderson	2	ea
Fire Hydrant Assembly	CLOW	4	ea
Valve Assembly, 8"	American Flow Control (AFC)	8	ea
Valve Assembly, Anchored 8" Special	American Flow Control (AFC)	2	ea
Valve Assembly, Blowoff	American Flow Control (AFC)	3	ea
Waterline Fittings	Sigma Corp		
Restrained Joint Fittings	Sigma Corp		

NOVEMBER 2025

RED LINE - FIELD SET
08/18/2026 - cjr
Prepared By: TIGER WILLIAMS
BRANDON DELANEY
Date: AUGUST 2026

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CITY OF WICHITA

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

WATER DISTRIBUTION IMPROVEMENTS TO SERVE
SWANEY FARM ADDITION PHASE 2
PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 448-2024-007799

Issue:		

RED LINE - FIELD SET PEC
U:\Wichita-Civil 200605-018

JOB NO.	200605-011
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	DML
CHECKED BY	TBK

COVER SHEET

01
01 OF 22

SAVED 9/22/2025 3:55:14 PM BY KEVIN.GRAHAM
PLOTTED 11/6/2025 12:11:29 PM BY KEVIN GRAHAM
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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".

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CITY OF WICHITA

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

WATER DISTRIBUTION IMPROVEMENTS TO SERVE
SWANEY FARM ADDITION PHASE 2
PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 448-2024-007799

Issue:		
	08/18/2026 - cjr	

RED LINE - FIELD SET PEC
U:\Wichita-Civil 200605-018

JOB NO.	200605-011
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	DML
CHECKED BY	TBK

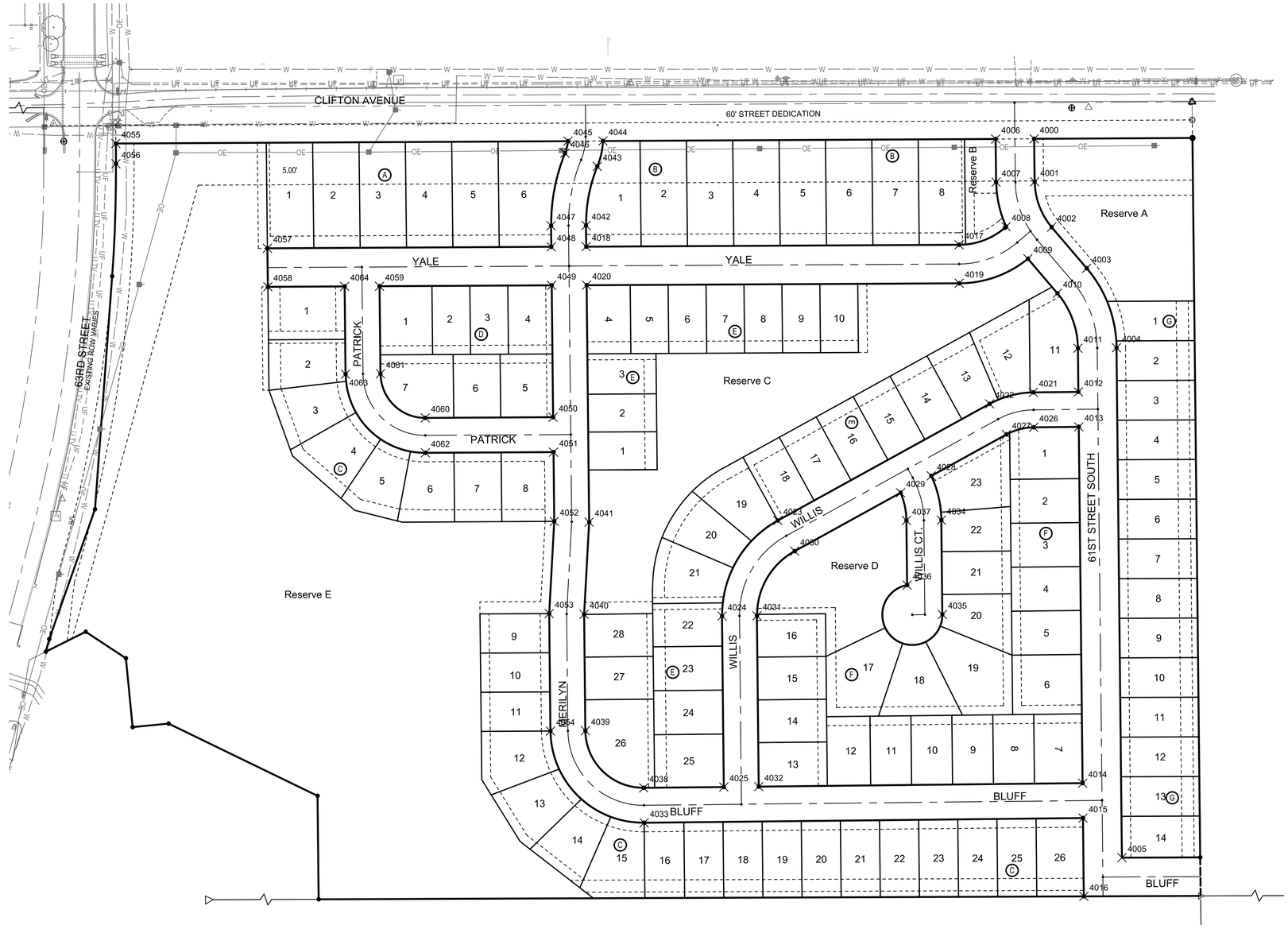
GENERAL NOTES

02
02 OF 22

SAVED 7/24/2025 7:19:45 AM BY BILL.SEXSON
PLOTTED 11/6/2025 12:11:40 PM BY KEVIN GRAHAM
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SWANEY FARM ADDITION

CITY OF WICHITA, SEDGWICK COUNTY, KANSAS



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POINT	NORTHING	EASTING
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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

0' 100' 200'

1 INCH =100 FEET

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303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

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

WATER DISTRIBUTION IMPROVEMENTS TO SERVE

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 448-2024-007799

Issue:		
	08/18/2026 - cjr	

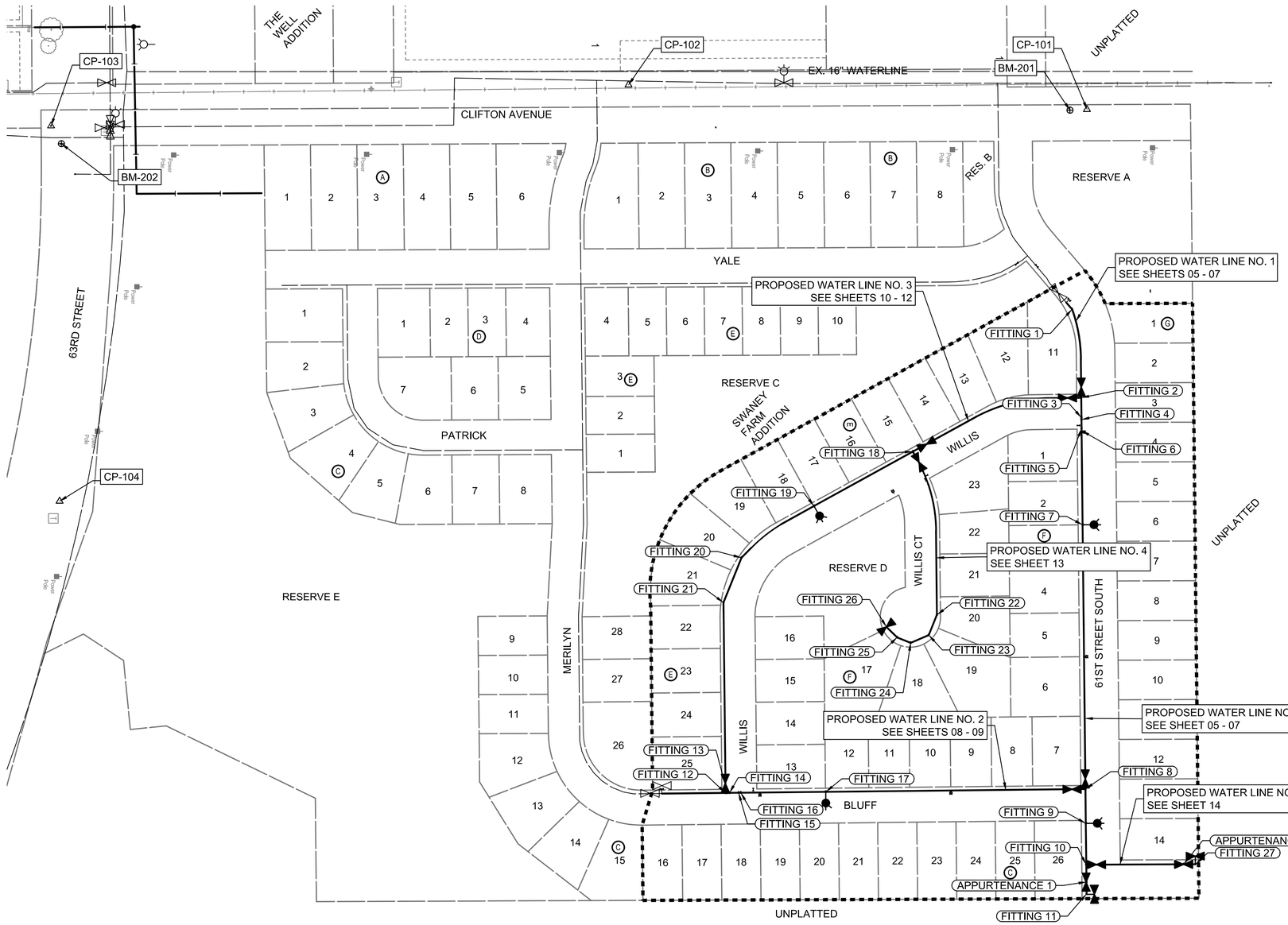
RED LINE - FIELD SET PEC
U:\Wichita-Civil 200605-018

JOB NO.	200605-011
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	DML
CHECKED BY	TBK

PLAT BUBBLE MAP

03
03 OF 22

SAVED 9/22/2025 12:41:31 PM BY KEVIN.GRAHAM
PLOTTED 11/6/2025 12:11:49 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\WATER\200605-009-03-PLAT BUBBLE MAP.DWG



PEC

0' 100' 200'

1 INCH =100 FEET

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 16 THRU 26, BLOCK C,
LOTS 11 THRU 25, BLOCK E,
LOTS 1 THRU 23, BLOCK F,
LOTS 1 THRU 14, BLOCK G,
IN THE SWANEY FARM ADDITION TO WICHITA,
SEDGWICK CO, KANSAS.

),77,1* 7$%/(

ID	ALIGNMENT	STATION	COORDINATES	DESCRIPTION
Fitting 1	WL NO. 1	10+15.0	N: 333,409.1782 E: 17,560,052.3491	8" 22.5° BEND
Fitting 2	WL NO. 1	11+63.6	N: 333,424.4237 E: 17,560,199.2944	8" X 8" TEE
Fitting 3	WL NO. 1	11+96.5	N: 333,424.7816 E: 17,560,232.1698	8" 45° ~~11.25°~~ BEND
Fitting 4	WL NO. 1	11+99.9	N: 333,424.8194 E: 17,560,235.5814	8" 45° ~~11.25°~~ BEND
Fitting 5	WL NO. 1	12+14.8	N: 333,424.9849 E: 17,560,250.5370	8" 45° ~~11.25°~~ BEND
Fitting 6	WL NO. 1	12+18.2	N: 333,425.0161 E: 17,560,253.8889	8" 45° ~~11.25°~~ BEND
Fitting 7	WL NO. 1	13+74.6	N: 333,426.6956 E: 17,560,410.2639	8" X 6" TEE
Fitting 8	WL NO. 1	18+13.4	N: 333,431.4084 E: 17,560,849.0322	8" X 8" TEE
Fitting 9	WL NO. 1	18+70.4	N: 333,432.0206 E: 17,560,906.0289	8" X 6" TEE

),77,1* 7$%/(

ID	ALIGNMENT	STATION	COORDINATES	DESCRIPTION
Fitting 10	WL NO. 1	19+39.0	N: 333,432.7571 E: 17,560,974.5988	8" X 8" TEE
Fitting 11	WL NO. 1	19+87.7	N: 333,433.2798 E: 17,561,023.3164	2" BLOWOFF ASSEMBLY
Fitting 12	WL NO. 2	11+06.0	N: 332,833.9431 E: 17,560,855.4411	8" X 8" TEE
Fitting 13	WL NO. 2	11+09.0	N: 332,836.9625 E: 17,560,855.4084	8" 45° ~~11.25°~~ BEND
Fitting 14	WL NO. 2	11+12.5	N: 332,840.4736 E: 17,560,855.3705	8" 45° ~~11.25°~~ BEND
Fitting 15	WL NO. 2	11+27.6	N: 332,855.5467 E: 17,560,855.2074	8" 45° ~~11.25°~~ BEND
Fitting 16	WL NO. 2	11+31.2	N: 332,859.1087 E: 17,560,855.1688	8" 45° ~~11.25°~~ BEND
Fitting 17	WL NO. 2	12+72.4	N: 333,000.3501 E: 17,560,853.6529	8" X 6" TEE
Fitting 18	WL NO. 3	12+99.6	N: 333,144.9066 E: 17,560,288.6073	8" X 8" TEE

),77,1* 7$%/(

ID	ALIGNMENT	STATION	COORDINATES	DESCRIPTION
Fitting 19	WL NO. 3	14+87.0	N: 332,980.7738 E: 17,560,378.9832	8" X 6" TEE
Fitting 20	WL NO. 3	16+36.0	N: 332,860.3447 E: 17,560,465.0073	8" 22.5° BEND
Fitting 21	WL NO. 3	17+16.0	N: 332,830.5221 E: 17,560,539.2634	8" 22.5° BEND
Fitting 22	WL NO. 4	12+78.4	N: 333,184.7943 E: 17,560,559.8307	8" 22.5° BEND
Fitting 23	WL NO. 4	13+14.6	N: 333,171.2855 E: 17,560,593.4497	8"45° BEND
Fitting 24	WL NO. 4	13+47.2	N: 333,141.2845 E: 17,560,606.2554	8"45° BEND
Fitting 25	WL NO. 4	13+71.4	N: 333,118.8110 E: 17,560,597.2275	8" 22.5° BEND
Fitting 26	WL NO. 4	13+96.4	N: 333,100.9445 E: 17,560,579.7407	2" BLOWOFF ASSEMBLY
Fitting 27	WL NO. 5	11+81.5	N: 333,614.2480 E: 17,560,973.8801	2" BLOWOFF ASSEMBLY

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CITY OF WICHITA

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

WATER DISTRIBUTION IMPROVEMENTS TO SERVE

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 448-2024-00799

Issue:		
	08/18/2026 - cjr	

RED LINE - FIELD SET PEC
U:\Wichita-Civil 200605-018

JOB NO.	200605-011
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	DML
CHECKED BY	TBK

WATER LINE KEY MAP & BUBBLE MAP

04
04 OF 22

SAVED 9/22/2025 3:22:57 PM BY KEVIN.GRAHAM
PLOTTED 11/6/2025 12:12:25 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\WATER\200605-009-04-WATER LINE KEY MAP & BUBBLE MAP.DWG

REFERENCE POINT CENTERLINE OF 61ST ST SOUTH AND WILLIS

8" V 56596 (W)
8" V 56597 (S)

23' West and 24' South to 8"x8" tee DICL (Sigma)
25' West and 24' South to 8" Valve Assembly (W)(AFC)
23' West and 36' South to 8" Valve Assembly (S)(AFC)

183' West and 22" South to 8" 22.5° DICL Bend (Sigma)

N: 333,411.5652, E: 17,560,059.7141
WL NO. 1, STA. 10+22.74
61ST STREET, STA. 10+49.18, 23.00' RT.
PC POINT

N: 333,409.1782, E: 17,560,052.3491
WL NO. 1, STA. 10+15.00
61ST STREET, STA. 10+40.38, 22' R
INSTALL 8" 22.5° BEND

N: 333,424.4237, E: 17,560,199.2944
WL NO. 1, STA. 11+63.60
WL NO. 3, STA. 10+00.01
61ST STREET, STA. 12+00.20, 25' R
INSTALL 8" x 8" TEE
2-8" VALVE ASSEMBLIES (W & S)
(MJ GATE VALVES)
TOP VALVE BOX EL=1264.90 (W)
TOP VALVE BOX EL=1264.09 (S)

10' East and 24' South to
8" 45° Bend DICL (Sigma)

CAUTION!!!
PROPOSED 18"
STORM SEWER

31' East and 24' South to 8" 45° Bend(Sigma)

N: 333,425.0161, E: 17,560,253.8889
WL NO. 1, STA. 12+18.20
61ST STREET, STA. 12+54.80, 24' R
INSTALL 8" ~~11.25°~~ 45° BEND (VERTICAL)

N: 333,424.9849, E: 17,560,250.5370
WL NO. 1, STA. 12+14.85
61ST STREET, STA. 12+51.45, 24' R
INSTALL 8" ~~11.25°~~ BEND (VERTICAL) 45°

N: 333,426.6956, E: 17,560,410.2639
WL NO. 1, STA. 13+74.58
61ST STREET, STA. 14+11.19, 25' R
INSTALL FIRE HYDRANT ASSEMBLY
L=4'
TOP OF VALVE BOX ELEV. = 1264.7
TOP OF BURY ELEV. = 1264.7
MATCHPOINT

188' East and 23' South to Fire Hydrant
Fire Hydrant (CLOW)

188' East and 26' South to FH Valve
Fire Hydrant Valve is 3' South of Hydrant

188' East and 27' South to Tee DICL (Sigma)

N: 333,424.8194, E: 17,560,235.5814
WL NO. 1, STA. 11+99.89
61ST STREET, STA. 12+36.49, 25' R
INSTALL 8" ~~11.25°~~ BEND (VERTICAL) 45°

N: 333,423.7295, E: 17,560,134.1072
WL NO. 1, STA. 10+98.41
61ST STREET, STA. 11+35.01, 24.5' R
PT POINT

13' East and 24' South to
8" 45° Bend DICL (Sigma)

28' East and 24' South to
8" 45° Bend DICL (Sigma)

N: 333,399.4449, E: 17,560,040.9358
WL NO. 1, STA. 10+00.00
CONNECTOR TO REMOVE
EXISTING 2" BLOWOFF ASSEMBLY

PROPOSED WATER LINE NO. 3
SEE SHEET 10

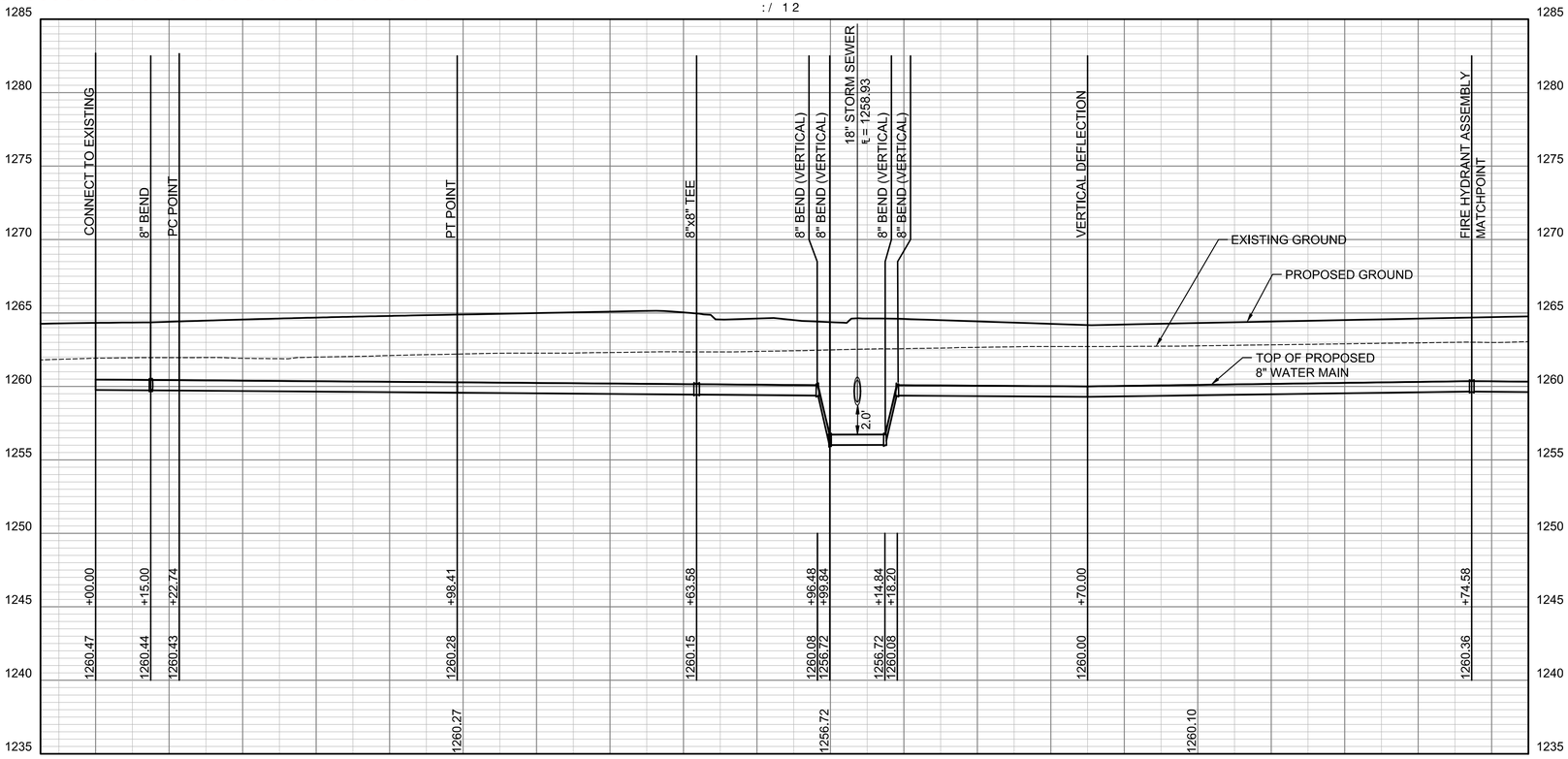
CL 61ST STREET SOUTH
61ST STREET SOUTH
PROPOSED SIDEWALK
R/W LINE
PROPOSED 18" STORM
15' UTILITY EASEMENT
PROPOSED 8" SANITARY
PROPOSED 18" STORM
R250.00'
157°30'0"
64.60 L.F. 8" PIPE
83.26 L.F. 8" PIPE
14.79 L.F. 8" PIPE
32.19 L.F. 8" PIPE
51.65 L.F. 8" PIPE
104.17 L.F. 8" PIPE
3.13 L.F. 8" DICL PIPE
3.07 L.F. 8" DICL PIPE
14.66 L.F. 8" PIPE
RP
TS
7.50'
10+00
11+00
12+00
13+00
14+00
40+00
41+00
9+85

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

* PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE THE EXISTING 8" 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 @ ALL FITTINGS UNLESS OTHERWISE CALLED OUT



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CITY OF WICHITA

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

WATER DISTRIBUTION IMPROVEMENTS TO SERVE

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 448-2024-007799

Issue:	
	08/18/2026 - cjr

RED LINE - FIELD SET PEC
U:\Wichita-Civil 200605-018

JOB NO.	200605-011
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	DML
CHECKED BY	TBK

WATER LINE NO. 1

05
05 OF 22

SAVED 9/22/2025 3:54:31 PM BY KEVIN.GRAHAM
PLOTTED 11/6/2025 12:12:54 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\0300\WATER\200605-009-05-WATER LINE NO.1.DWG

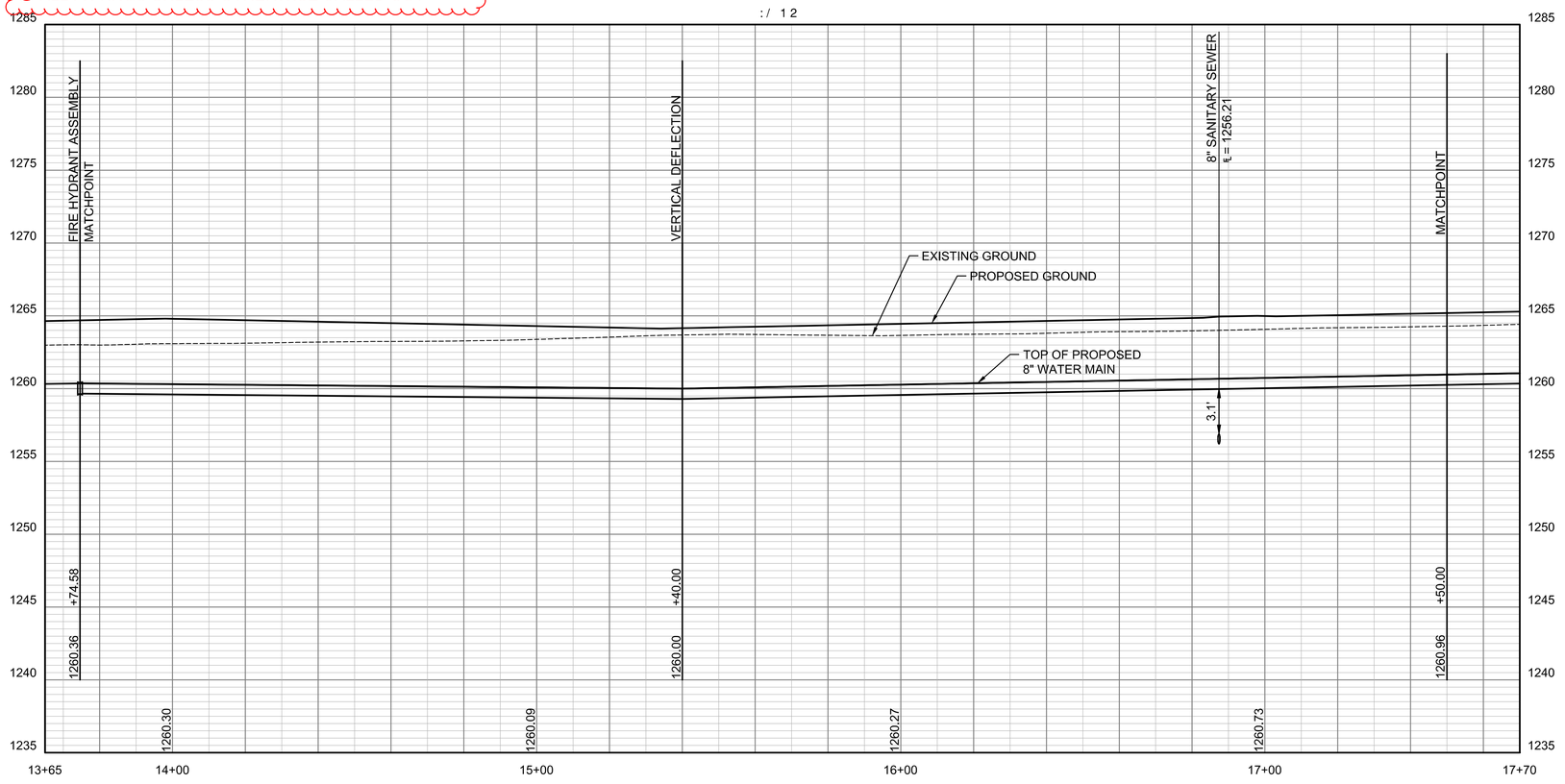
REFERENCE POINT CENTERLINE 61ST ST SOUTH AND WILLIS

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

15' UTILITY EASEMENT
PROPOSED 8" SANITARY
R/W LINE
PROPOSED 18" STORM
PROPOSED 18" STORM
RP FROM WILLIS
CL 61ST STREET SOUTH
14+00
15+00
16+00
17+00
18+00
61ST STREET SOUTH
CAUTION!!!
PROPOSED 8"
SANITARY SEWER
MATCHPOINT
WL NO. 1, STAS. 17+50
13+00
14+00
15+00
16+00
17+00
18+00
PROPOSED SIDEWALK
TS
7.50'
R/W LINE
165.00 L.F. 8" PIPE
210.00 L.F. 8" PIPE
7.50'
N: 333,426.6956, E: 17,560,410.2639
WL NO. 1, STA. 13+74.58
61ST STREET, STA. 14+11.19, 25' R
FIRE HYDRANT ASSEMBLY
MATCHPOINT
188' East and 21' South to Fire Hydrant (CLOW)
188' East and 25' South to Valve (AFC)
*FH Valve is 3' South of Hydrant
188' East and 25' South to Tee (SIGMA)
FH 17572
6" V 56598
30' UTILITY EASEMENT
PROPOSED 8" SANITARY
F
2
3
4
5
6
7

UNLESS NOTED OTHERWISE,
ELEVATIONS SHOWN ARE TOP OF PIPE.

DICL MJ FITTINGS WITH PCC THRUSTBLOCKS INSTALLED
@ ALL FITTINGS UNLESS OTHERWISE CALLED OUT



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CITY OF WICHITA

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

WATER DISTRIBUTION IMPROVEMENTS TO SERVE

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 448-2024-007799

Issue:		
	08/18/2026 - cjr	

RED LINE - FIELD SET PEC
U:\Wichita-Civil 200605-018

JOB NO.	200605-011
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	DML
CHECKED BY	TBK

WATER LINE NO. 1

06
06 OF 22

SAVED 9/22/2025 1:42:34 PM BY KEVIN.GRAHAM
PLOTTED 11/6/2025 12:13:20 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\0300\WATER\200605-009-06-WATER LINE NO.1.DWG

REFERENCE POINT CENTERLINE OF 61ST ST SOUTH AND BLUFF

26' South and 23' West to 8"x8" Tee DICL (Sigma Corp)
26' South and 27' West to 8" Valve Assembly (W)(AFC)
36' South and 23' West to 8" Valve Assembly (S)(AFC)

8" V 56599 (W)
8" V 56600 (S)

34' East and 21' South to Fire Hydrant (CLOW)
34' East and 24' South to FH Valve (AFC)
*Fire Hydrant Valve is 3' South of Hydrant
34' East and 25' South to FH Tee DICL (SIGMA)

FH 17573
6" V 56601

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

15' UTILITY EASEMENT

N: 333,431.4084, E: 17,560,849.0322
WL NO. 1, STA. 18+13.38
WL NO. 2, STA. 17+03.50
61ST STREET, STA. 18+49.98, 25' R
INSTALL 8" x 8" TEE
2-8" VALVE ASSEMBLIES (W & S)
(MJ GATE VALVES)
TOP VALVE BOX EL=1265.66 (W)
TOP VALVE BOX EL=1265.78 (S)

N: 333,432.0206, E: 17,560,906.0289
WL NO. 1, STA. 18+70.38
61ST STREET, STA. 19+06.98, 25' R
INSTALL FIRE HYDRANT ASSEMBLY
L = 4'
TOP OF VALVE BOX ELEV. = 1265.80
TOP OF BURY ELEV. = 1265.80

BLUFF

PROPOSED WATERLINE NO. 5
SEE SHEET 14

N: 333433.0624, E: 17561003.2738
WL NO. 1, STA. 19+67.63
61ST STREET, STA. 20+04.23, 25' R
INSTALL 8" ANCHORED VALVE
(MJ GATE VALVE) (SPECIAL)
TOP OF VALVE BOX ELEV. = 1266.20

8" V 56603

131' East and 24' South to 8" Anchored Valve (AFC)

61ST STREET SOUTH
RP
17+00 18+00 19+00 20+00 20+32
27+43
30+00
67.62 L.F. 8" PIPE
19.91 L.F. 8" PIPE
56.04 L.F. 8" PIPE
62.84 L.F. 8" PIPE
MATCHPOINT
WL NO. 1, STA. 17+50
CL 61ST STREET SOUTH
PROPOSED SIDEWALK
R/W LINE
7.50'
17+03
27+00
Bluff
10+00
19+93
28.00 L.F. 8" PIPE

N: 333,433.2798, E: 17,561,023.3164
WL NO. 1, STA. 19+87.67
61ST STREET, STA. 20+24.27, 25' R
INSTALL 2" BLOWOFF ASSEMBLY

151' East and 24' South to 2" Blowoff Valve (AFC)

2" BO 56604

PROPOSED 8" SANITARY
30' UTILITY EASEMENT
PROPOSED SIDEWALK
15' UTILITY EASEMENT

N: 333,432.7571, E: 17,560,974.5988
WL NO. 1, STA. 19+38.95
WL NO. 5, STA. 10+00.00
61ST STREET, STA. 19+75.55, 24' R
INSTALL 8" x 8" TEE
1-8" VALVE ASSEMBLY
(MJ GATE VALVE)
TOP VALVE BOX EL=1266.37 (N)

7 F
26 C

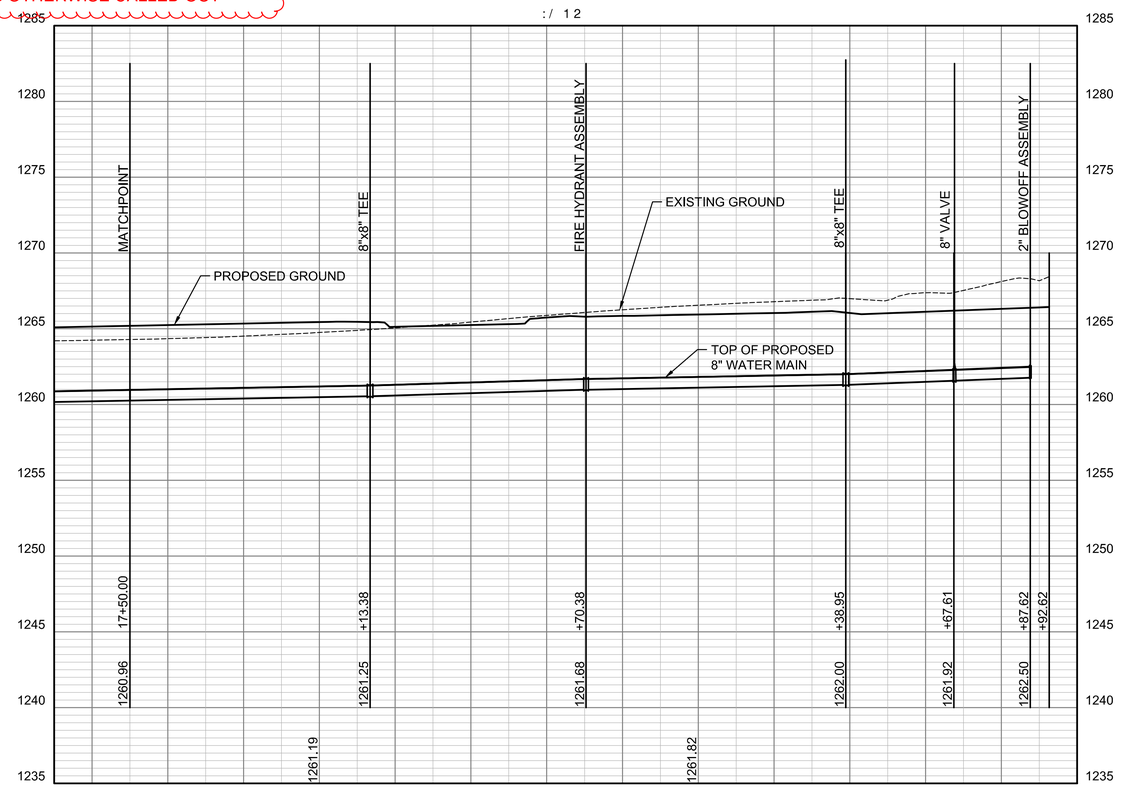
PROPOSED WATERLINE NO. 2
SEE SHEET 09

103' East and 22' South to 8"x8" Tee DICL (Sigma)
103' East and 20' South to 8" Valve (AFC)

8" V 56602

UNLESS NOTED OTHERWISE,
ELEVATIONS SHOWN ARE TOP OF PIPE.

DICL MJ FITTINGS WITH PCC THRUSTBLOCKS INSTALLED
@ ALL FITTINGS UNLESS OTHERWISE CALLED OUT



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WATER DISTRIBUTION IMPROVEMENTS TO SERVE

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 448-2024-007799

Issue:

08/18/2026 - cjr

RED LINE - FIELD SET PEC
U:\Wichita-Civil 200605-018

JOB NO.	200605-011
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	DML
CHECKED BY	TBK

WATER LINE NO. 1

07
07 OF 22

SAVED 9/22/2025 1:47:53 PM BY KEVIN.GRAHAM
PLOTTED 11/6/2025 12:13:45 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\0300\WATER\200605-009-07-WATER LINE NO.1.DWG

REFERENCE POINT CENTERLINE OF BLUFF AND WILLIS

23' South and 23' West to 8"x8" Tee DICL (SIGMA)
23' South and 24' West to 8" Valve (W)(AFC)

PROPOSED WATERLINE NO. 3
SEE SHEET 10

8" V 56607

3.23 L.F. 8" DICL PIPE

N: 332,833.9431, E: 17,560,855.4411
WL NO. 2, STA. 11+06.00
WL NO. 3, STA. 20+32.18
BLUFF STREET, STA. 21+21.00, 23' L
INSTALL 8" x 8" TEE
1-8" VALVE ASSEMBLY (W)
(MJ GATE VALVE)
TOP VALVE BOX EL=1262.75 (W)

EX. ANCHOR VALVE

N: 332,727.9490, E: 17,560,856.5879
WL NO. 2, STA. 10+00.00
CONNECT TO EX. 8" WATERLINE*
CONTRACTOR TO REMOVE
EXISTING 2" BLOWOFF ASSEMBLY

144 South and 23' West to Tie in Point

105.46 L.F. 8" PIPE

2.33 L.F. 8" DICL PIPE

CL BLUFF

N: 332,840.4736, E: 17,560,855.3705
WL NO. 2, STA. 11+12.53
BLUFF STREET, STA. 21+27.53, 23' L
INSTALL 8" ~~11.25° BEND~~ 45° BEND

N: 332,836.9625, E: 17,560,855.4084
WL NO. 2, STA. 11+09.02
BLUFF STREET, STA. 21+24.02, 23' L
INSTALL 8" ~~11.25° BEND~~ 45° BEND

19' South and 23' West to 8" 45° Bend (Vertical) DICL (Sigma)

1' South and 23' West to
8" 45° Bend (Vertical) DICL (Sigma)

CAUTION!!!
PROPOSED 18"
STORM SEWER

14.78 L.F. 8" PIPE

2' North and 23' West to
8" 45° Bend (Vertical) DICL (Sigma)

N: 332,855.5467, E: 17,560,855.2074
WL NO. 2, STA. 11+27.61
BLUFF STREET, STA. 21+42.61, 23' L
INSTALL 8" ~~11.25° BEND~~ 45° BEND

3.28 L.F. 8" DICL PIPE

N: 332,859.1087, E: 17,560,855.1688
WL NO. 2, STA. 11+31.17
BLUFF STREET, STA. 21+46.17, 23' L
INSTALL 8" ~~11.25° BEND~~ 45° BEND

16' South and 23' West to 8" 45° Bend (Vertical) DICL (Sigma)

140.69 L.F. 8" PIPE

143' North and 19' West to Fire Hydrant (CLOW)
6" Extension Installed on FH

143' North and 22' West to FH Valve
*Fire Hydrant Valve is 3' West of Hydrant

143' North and 23' West to Tee DICL (SIGMA)

N: 333,000.3501, E: 17,560,853.6529
WL NO. 2, STA. 12+72.42
BLUFF STREET, STA. 22+87.42, 23' L
INSTALL FIRE HYDRANT ASSEMBLY
L=4'
TOP OF VALVE BOX ELEV. = 1263.6
TOP OF BURY ELEV. = 1263.6

127.17 L.F. 8" PIPE

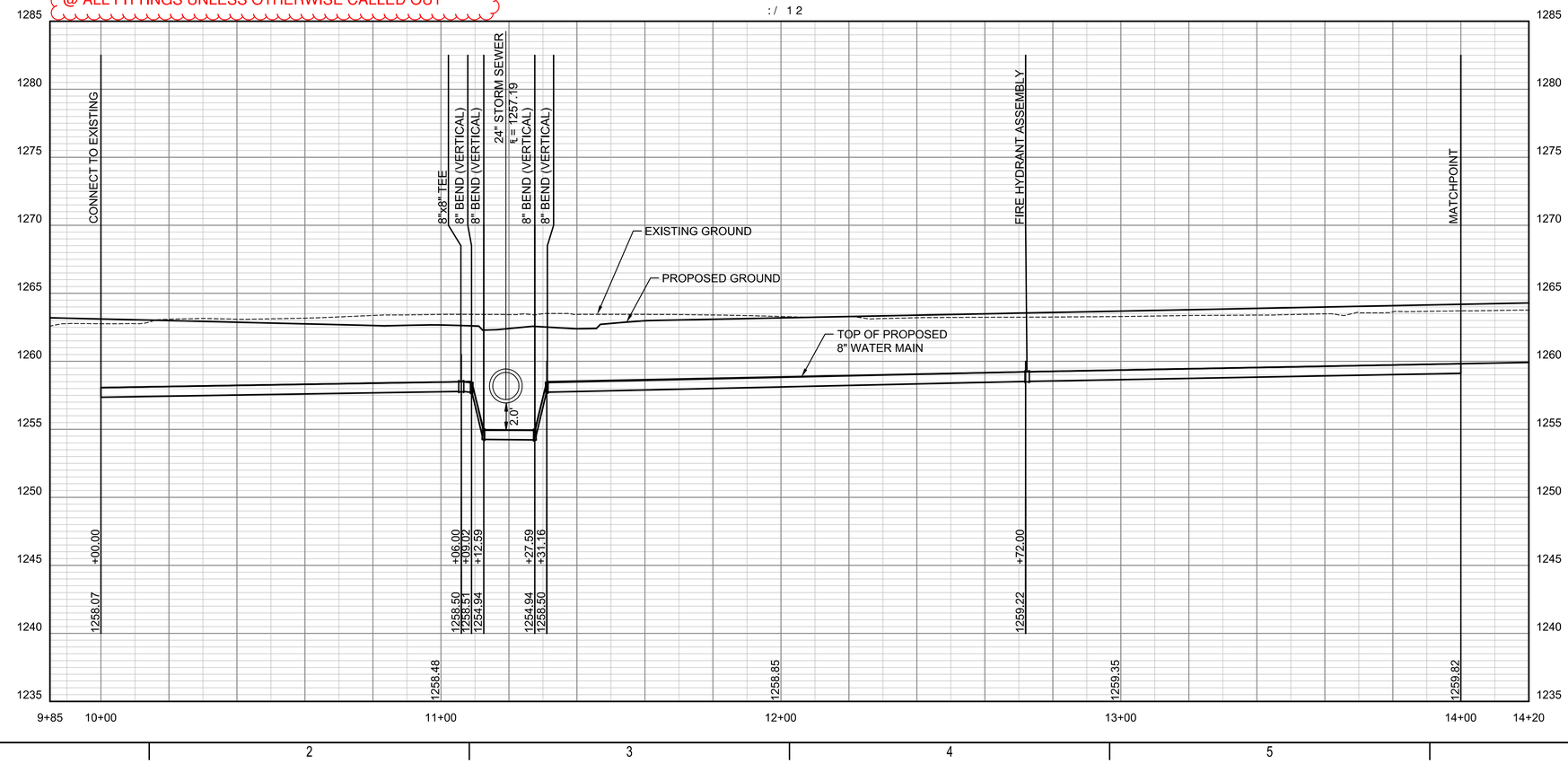
MATCHPOINT
WL NO. 2, STA. 14+00.0

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

* PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE THE EXISTING 8" 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
@ ALL FITTINGS UNLESS OTHERWISE CALLED OUT



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CITY OF WICHITA

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

WATER DISTRIBUTION IMPROVEMENTS TO SERVE

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 448-2024-007799

Issue:		
	08/18/2026 - cjr	

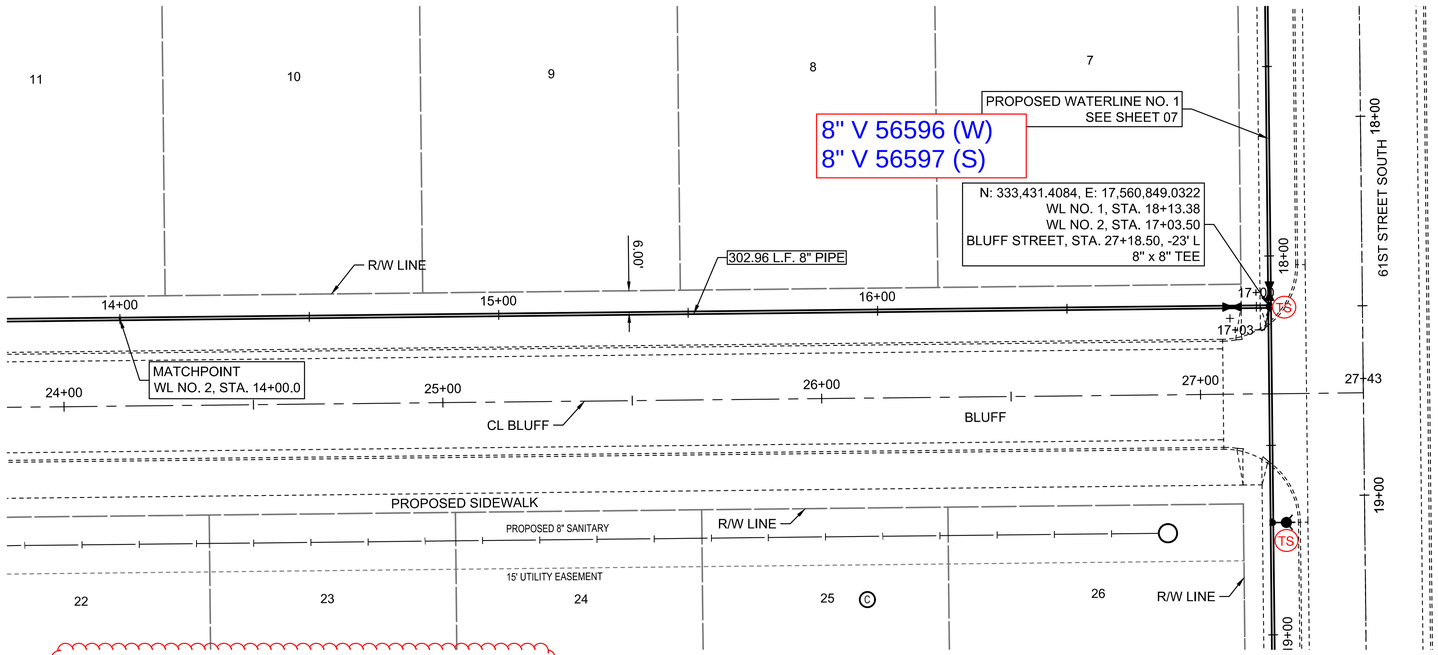
RED LINE - FIELD SET PEC
U:\Wichita-Civil 200605-018

JOB NO.	200605-011
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	DML
CHECKED BY	TBK

WATER LINE NO. 2

08
08 OF 22

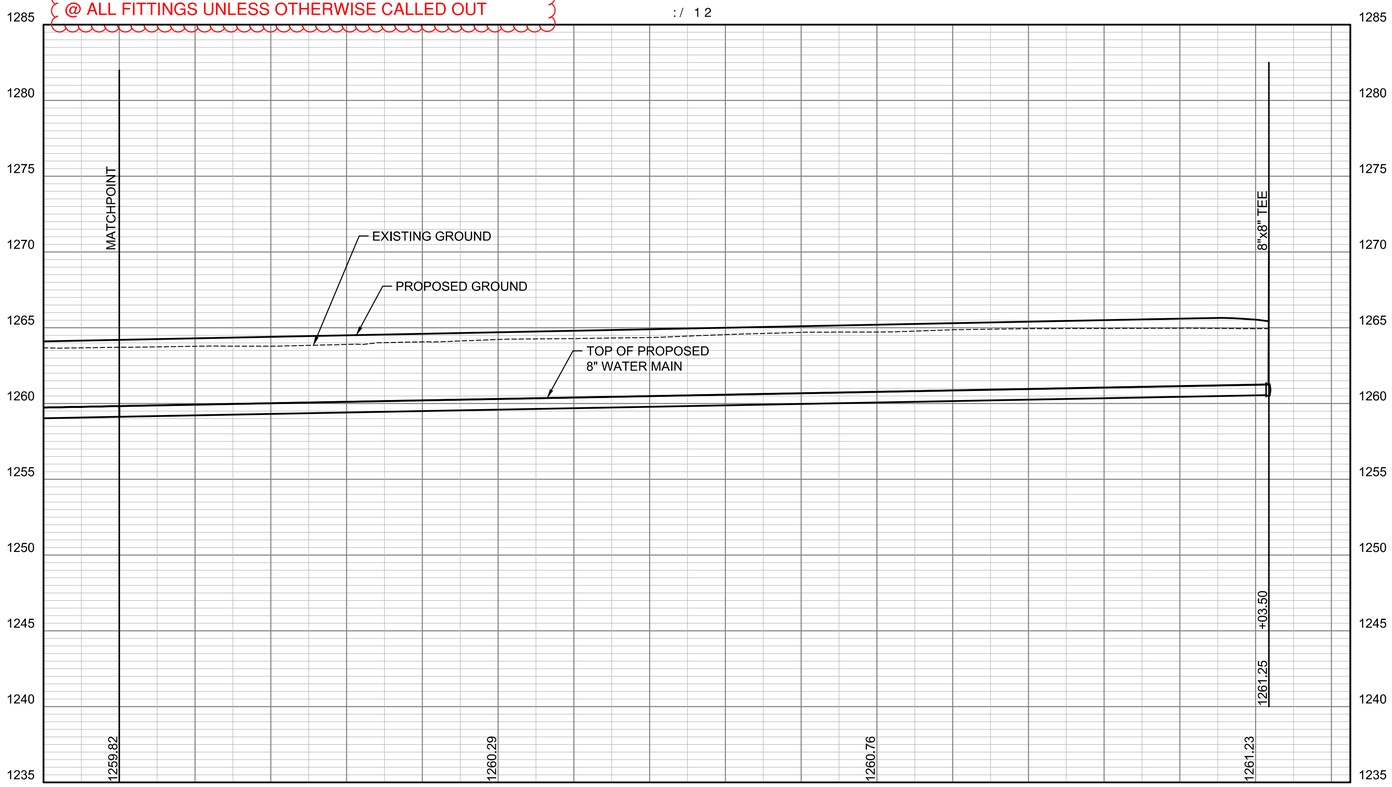
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U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\WATER\200605-009-08-WATER LINE NO.2.DWG



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

UNLESS NOTED OTHERWISE,
ELEVATIONS SHOWN ARE TOP OF PIPE.

DICL MJ FITTINGS WITH PCC THRUSTBLOCK INSTALLED
@ ALL FITTINGS UNLESS OTHERWISE CALLED OUT



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RED LINE - FIELD SET PEC
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JOB NO.	200605-011
DATE	NOVEMBER 2025
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WATER LINE NO. 2

09
09 OF 22

SAVED 9/22/2025 2:12:10 PM BY KEVIN.GRAHAM
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U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\WATER\200605-009-09-WATER LINE NO.2.DWG

REFERENCE POINT CENTERLINE OF WILLIS AND WILLIS CT

23' West of 61st CL and 24' South of Willis CL to 8"x8" tee DICL (Sigma)
25' West of 61st CL and 24' South of Willis CL to 8" Valve Assembly (W)(AFC)
23' West of 61st CL and 36' South of Willis CL to 8" Valve Assembly (S)(AFC)

8" V 56596 (W)
8" V 56597 (S)

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

61ST STREET SOUTH

N: 333,424.4237, E: 17,560,199.2944
WL NO. 1, STA. 11+63.60
WL NO. 3, STA. 10+00.01
WILLIS STREET, STA. 40+24.51, 23' R
8" x 8" TEE

PROPOSED 8" SANITARY

PROPOSED WATERLINE NO. 4
SEE SHEET 13

WILLIS CT

10' UTILITY EASEMENT

R/W LINE

PROPOSED SIDEWALK

56.37 L.F. 8" PIPE

PROPOSED 18" STORM

R/W LINE

6.00'

R250.00'

WILLIS

CL WLLIS

N: 333,367.5117, E: 17,560,199.9140
WL NO. 3, STA. 10+56.78
WILLIS, STA. 40+81.43, 23' R
PC POINT

122.71 L.F. 8" PIPE

119.29 L.F. 8" PIPE

99.84 L.F. 8" PIPE

PROPOSED WATERLINE NO. 1
SEE SHEET 05

N: 333,249.8806, E: 17,560,230.8059
WL NO. 3, STA. 11+79.92
WILLIS, STA. 41+94.00, 23' R
PT POINT

8" V 56608 (N)
8" V 56609 (E)

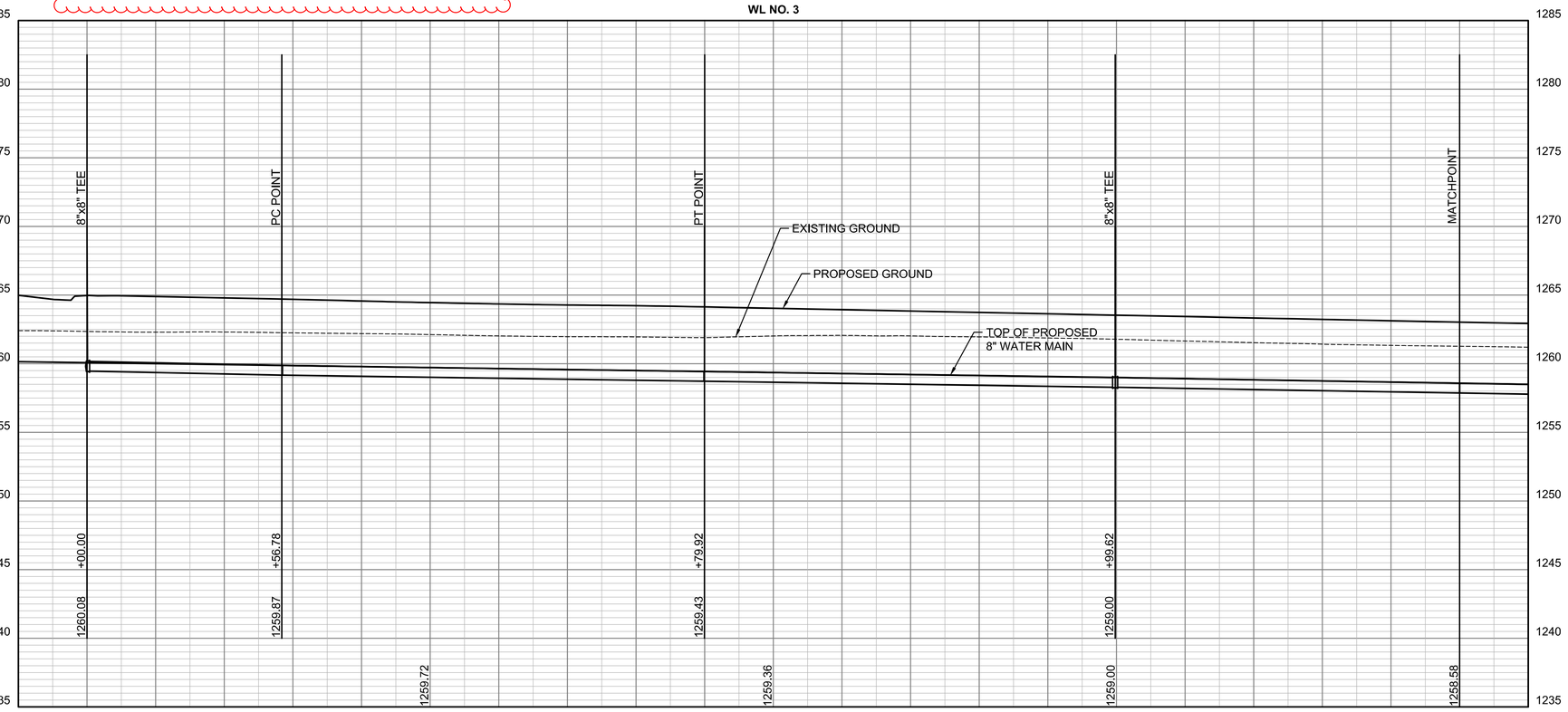
N: 333,144.9066, E: 17,560,288.6073
WL NO. 3, STA. 12+99.62
WL NO. 4, STA. 10+00.00
WILLIS STREET, STA. 43+13.83, 23' R
INSTALL 8" x 8" TEE
2-8" VALVE ASSEMBLIES (NW)(NE)
(MJ GATE VALVES)
TOP VALE BOX EL=1263.56 (NW)
TOP VALVE BOX EL=1263.48 (NE)

26' Northwest and 23' Southwest to 8"x8" Tee(Sigma Corp)
28' Northwest and 23' Southwest and to 8" Valve Assembly (NW)(AFC)
26' Northwest 21' Southwest to 8" Valve Assembly (NE) (AFC)

R/W LINE
MATCHPOINT
WL NO. 3, STA. 14+00.0

UNLESS NOTED OTHERWISE,
ELEVATIONS SHOWN ARE TOP OF PIPE.

DICL MJ FITTINGS WITH PCC THRUSTBLOCKS INSTALLED
@ ALL FITTINGS UNLESS OTHERWISE CALLED OUT



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CITY OF WICHITA

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

WATER DISTRIBUTION IMPROVEMENTS TO SERVE
SWANEY FARM ADDITION PHASE 2
PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 448-2024-007799

Issue:
08/18/2026 - cjr

RED LINE - FIELD SET PEC
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JOB NO.	200605-011
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	DML
CHECKED BY	TBK

WATER LINE NO. 3

10
10 OF 22

SAVED 9/22/2025 2:46:32 PM BY KEVIN.GRAHAM
PLOTTED 11/6/2025 12:35:29 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\WATER\200605-009-10-WATER LINE NO.3.DWG

REFERENCE POINT CENTERLINE OF WILLIS AND WILLIS CT

<-- RP = Willis Ct. CL Sta. 43+40 -->

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

R/W LINE
RESERVE D
CL WILLIS
PROPOSED SIDEWALK
R/W LINE
44+00
14+00
45+00
15+00
46+00
16+00
47+00
17+00
48+00
18+00
WILLIS
PROPOSED 8" SANITARY
PROPOSED 15" STORM
20' D & U E
PROPOSED 24" STORM
PROPOSED 18" STORM
20' D & U E
PROPOSED 8" SANITARY
R/W LINE
6.00'
6.00'

MATCHPOINT
WL NO. 3, STA. 14+00.0

86.57 L.F. 8" PIPE
62.45 L.F. 8" PIPE
62.93 L.F. 8" PIPE
22.99 L.F. 8" PIPE
79.60 L.F. 8" PIPE
60.02 L.F. 8" PIPE
23.78 L.F. 8" PIPE

160' South of Willis Ct. CL and 19' West of Willis CL to Fire Hydrant (CLOW)

160' South of Willis Ct. CL and 22' West of Willis CL to FH Valve (AFC)
*Fire Hydrant Valve is 3' West of Hydrant

160' South of Willis Ct. and 23' West of Willis CL to DICL Tee (Sigma)

FH 17575
6" V 56610

N: 332,980.7738, E: 17,560,378.9832
WL NO. 3, STA. 14+86.99
WILLIS STREET, STA. 45+01.20, 23' R
INSTALL FIRE HYDRANT ASSEMBLY
L=4'
TOP OF VALVE BOX ELEV. = 1262.6
TOP OF BURY ELEV. = 1262.6

N: 332,934.5740, E: 17,560,404.4220
WL NO. 3, STA. 15+39.73,
WILLIS STREET, STA. 45+53.9, 23.00' RT.
PC POINT

N: 332,876.4939, E: 17,560,448.5502
WL NO. 3, STA. 16+12.93
WILLIS STREET, STA. 46+19.93, 21.73' RT.
PT POINT

N: 332,860.3447, E: 17,560,465.0073
WL NO. 3, STA. 16+35.99
WILLIS STREET, STA. 46+39.83, 24' R
INSTALL 8" 22.5° BEND

N: 332,830.5221, E: 17,560,539.2634
WL NO. 3, STA. 17+15.99
WILLIS STREET, STA. 47+09.18, 25' R
INSTALL 8" 22.5° BEND

PT POINT
157° 30'
157° 30'
12.2'

CAUTION!!!
PROPOSED 8"
SANITARY SEWER

10' UTILITY EASEMENT

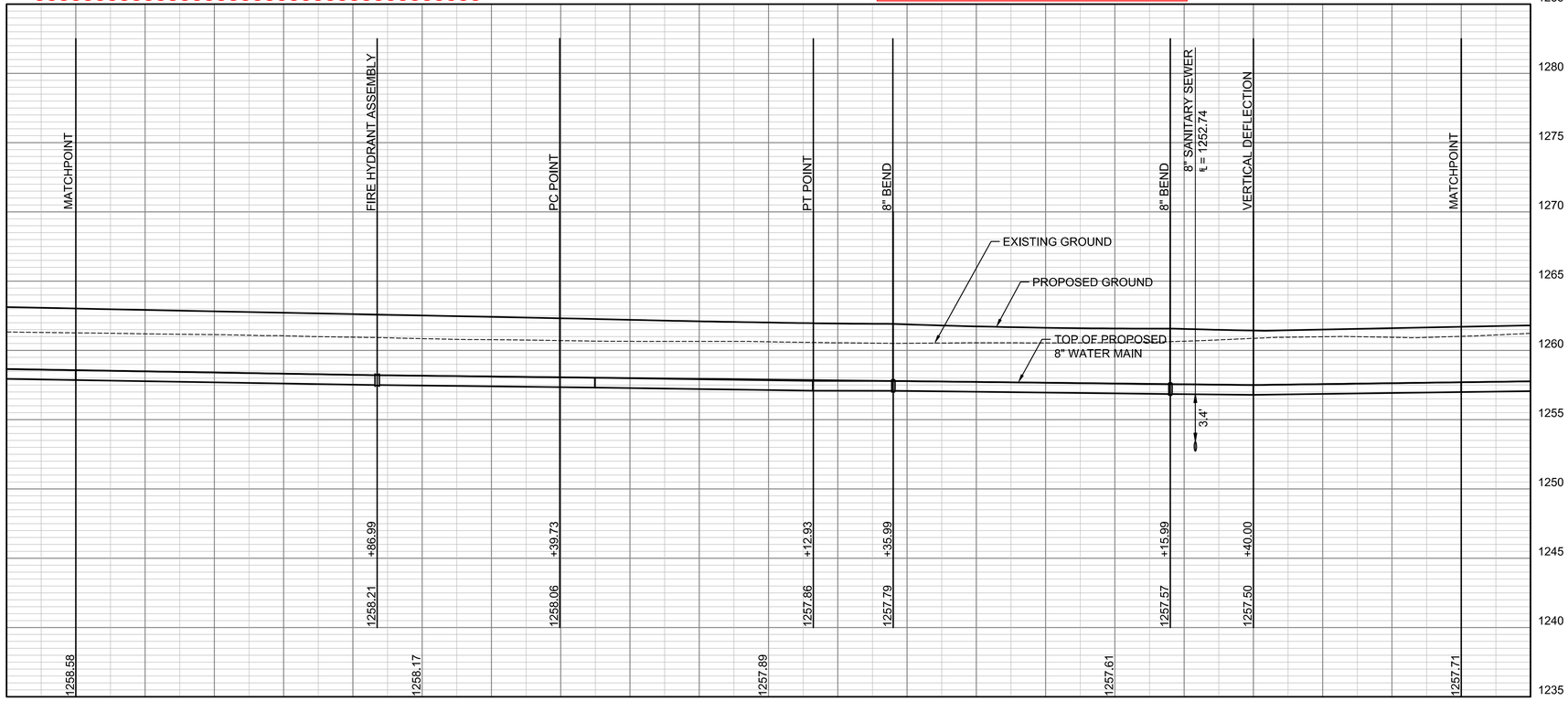
UNLESS NOTED OTHERWISE,
ELEVATIONS SHOWN ARE TOP OF PIPE.

DICL MJ FITTINGS WITH PCC THRUSTBLOCKS INSTALLED
@ ALL FITTINGS UNLESS OTHERWISE CALLED OUT

300' South of Willis Ct. CL and
24' West of Willis CL to
8" 22.5° DICL Bend (Sigma)

300' South of Willis Ct. CL (measured along Willis CL) and
24' West of Willis CL (measured perpendicular) to
8" 22.5° DICL Bend (Sigma)

16 17 18 20 21 22 23



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

WATER DISTRIBUTION IMPROVEMENTS TO SERVE

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 448-2024-007799

Issue:		
	08/18/2026 - cjr	

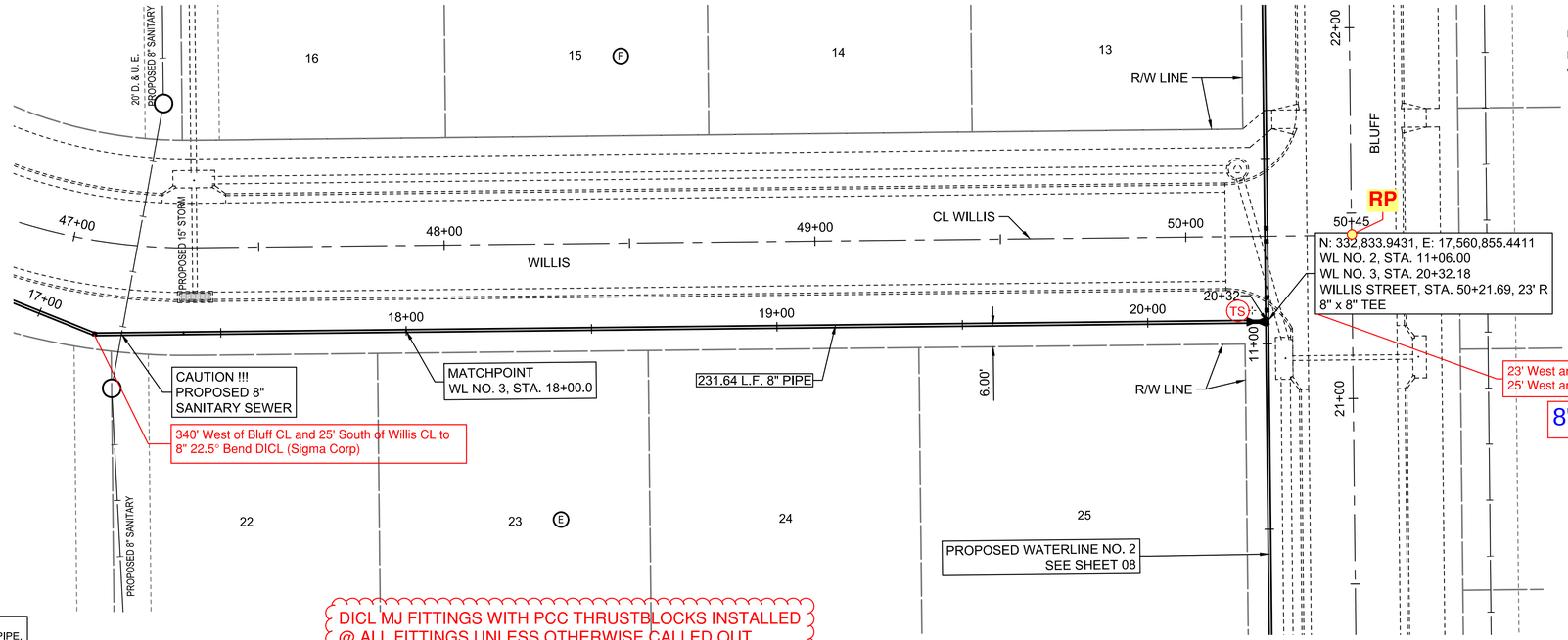
RED LINE - FIELD SET PEC
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JOB NO.	200605-011
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	DML
CHECKED BY	TBK

WATER LINE NO. 3

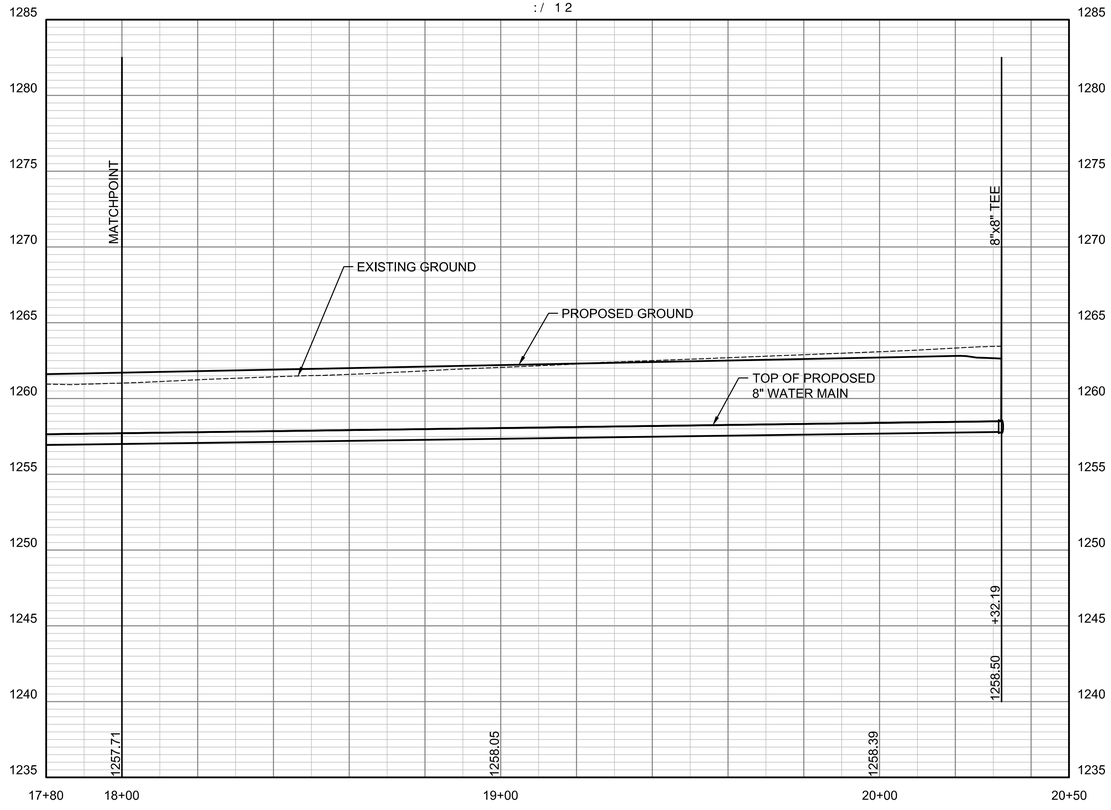
REFERENCE POINT CENTERLINE OF WILLIS AND BLUFF

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



UNLESS NOTED OTHERWISE,
ELEVATIONS SHOWN ARE TOP OF PIPE.

DICL MJ FITTINGS WITH PCC THRUSTBLOCKS INSTALLED
@ ALL FITTINGS UNLESS OTHERWISE CALLED OUT



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CITY OF WICHITA

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

WATER DISTRIBUTION IMPROVEMENTS TO SERVE SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 448-2024-007799

Issue:		
	08/18/2026 - cjr	

RED LINE - FIELD SET PEC
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JOB NO.	200605-011
DATE	NOVEMBER 2025
PM	KPG
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DRAWN BY	DML
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WATER LINE NO. 3

12
12 OF 22

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PLOTTED 11/6/2025 12:15:53 PM BY KEVIN GRAHAM
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REFERENCE POINT CENTERPOINT OF WILLIS CT.

N: 333,152.2958, E: 17,560,302.0269
WL NO. 3, STA. 10+15.32
WILLIS CT., STA. 49+92.32, 25.78' LT.
PC POINT

N: 333,183.2854, E: 17,560,419.9269
WL NO. 4, STA. 11+38.47
WILLIS CT., STA. 51+04.22, 23.00' LT.
PT POINT

N: 333,184.7943, E: 17,560,559.8307
WL NO. 4, STA. 12+78.38
INSTALL 8" 22.5° BEND

2' West and 44' and North to 8" 22.5° Bend DICL (Sigma Corp)

32' East and 31' North to 8" 45° Bend DICL (Sigma Corp)

N: 333,171.2855, E: 17,560,593.4497
WL NO. 4, STA. 13+14.61
INSTALL 8" 45° BEND

N: 333,141.2845, E: 17,560,606.2554
WL NO. 4, STA. 13+47.23
INSTALL 8" 45° BEND

43' East and 0' South to 8" 45° Bend DICL (Sigma Corp)

N: 333,118.8110, E: 17,560,597.2275
WL NO. 4, STA. 13+71.44
INSTALL 8" 22.5° BEND

34' East and 22' South to 8" 22.5° Bend(Sigma Corp)

N: 333,100.9445, E: 17,560,579.7407
WL NO. 4, STA. 13+96.44
INSTALL 2" BLOWOFF ASSEMBLY

16' East and 40' South to 2" Blowoff Valve (AFC)

N: 333,144.9066, E: 17,560,288.6073
WL NO. 3, STA. 12+99.62
WL NO. 4, STA. 10+00.00
WILLIS STREET, STA. 43+13.83, 23' R
8" x 8" TEE

*See Sheet 10 for Location

PROPOSED WATERLINE NO. 3
SEE SHEET 10

WILLIS

10' UTILITY EASEMENT

WILLIS CT

CL WILLIS CT

RP

R/W LINE

R250'

14.78 L.F. 8" PIPE
44.68 L.F. 8" PIPE
78.47 L.F. 8" PIPE
35.73 L.F. 8" PIPE
32.04 L.F. 8" PIPE
23.72 L.F. 8" PIPE
24.79 L.F. 8" PIPE
139.70 L.F. 8" PIPE

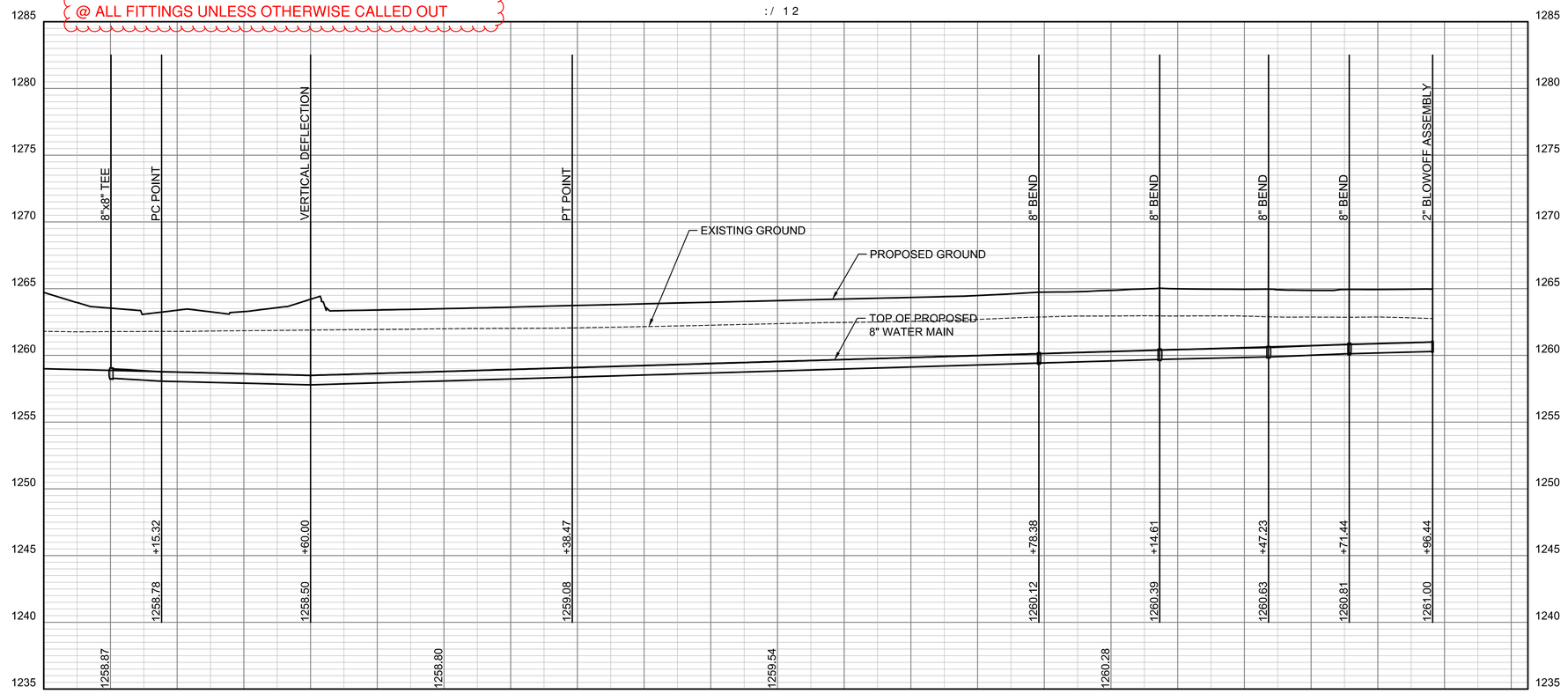
RESERVE D

10+09.32
11+00
12+00
13+00
43+00
44+00
50+00
51+00
52+00
53+56
13+96

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

UNLESS NOTED OTHERWISE,
ELEVATIONS SHOWN ARE TOP OF PIPE.

DICL MJ FITTINGS WITH PCC THRUSTBLOCKS INSTALLED
@ ALL FITTINGS UNLESS OTHERWISE CALLED OUT



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WATER DISTRIBUTION IMPROVEMENTS TO SERVE

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 448-2024-007799

Issue:		
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RED LINE - FIELD SET PEC
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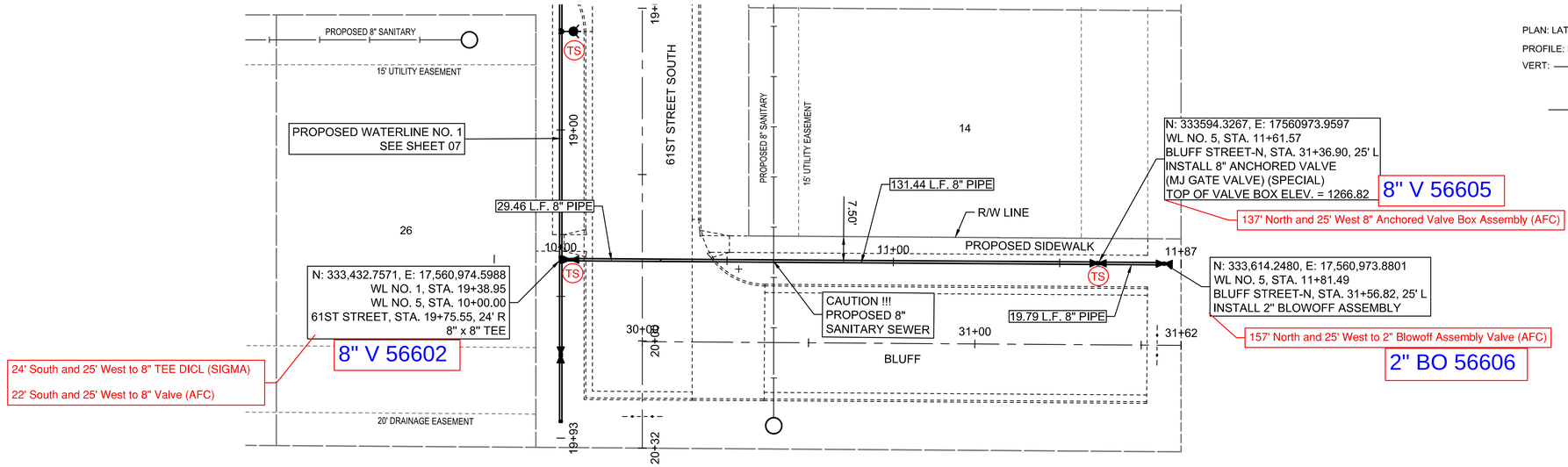
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DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	DML
CHECKED BY	TBK

WATER LINE NO. 4

13
13 OF 22

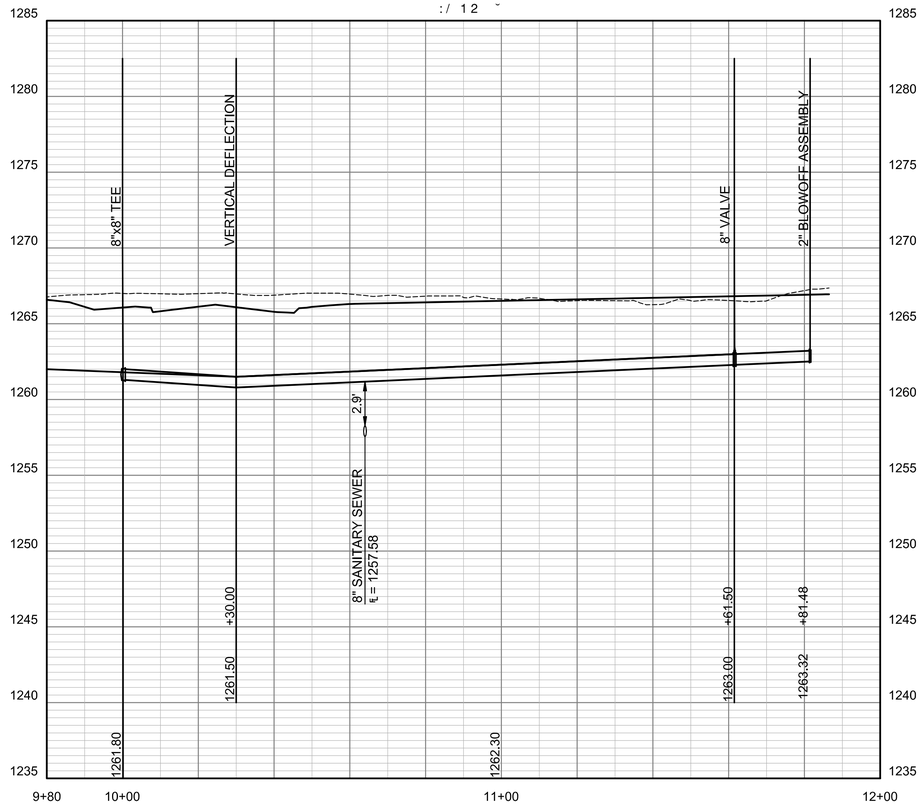
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REFERENCE POINT CENTERLINE OF 61ST ST SOUTH AND BLUFF



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

DICL MJ FITTINGS WITH PCC THRUSTBLOCKS INSTALLED
@ ALL FITTINGS UNLESS OTHERWISE CALLED OUT



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SWANEY FARM ADDITION PHASE 2

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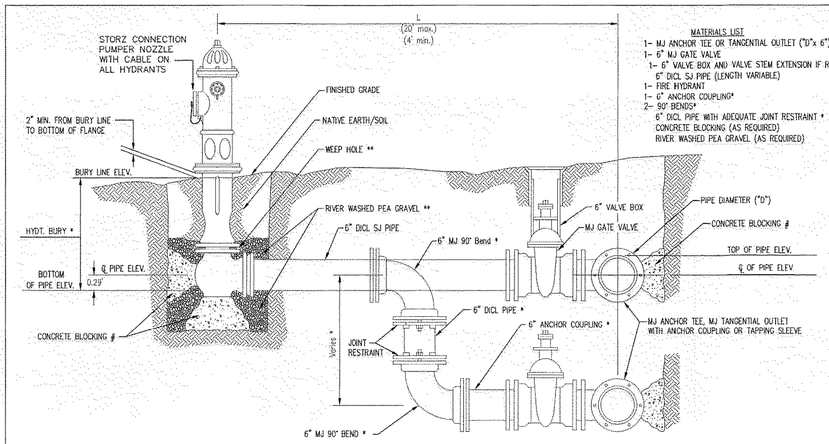
RED LINE - FIELD SET PEC
U:\Wichita-Civil 200605-018

JOB NO.	200605-011
DATE	NOVEMBER 2025
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DESIGNED BY	KPG
DRAWN BY	DML
CHECKED BY	TBK

WATER LINE NO. 5

14
14 OF 22

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PLOTTED 11/6/2025 12:16:46 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\0300\WATER\200605-009-14-WATER LINE NO.5.DWG



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)

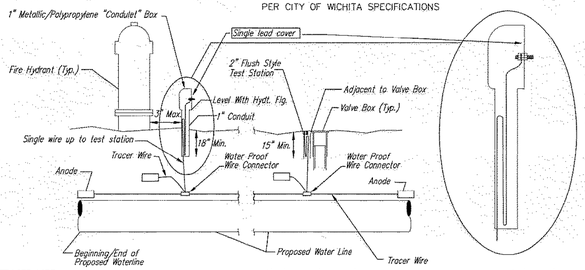
* IF THE REQUIRED HYDRANT BURY IS IN EXCESS OF 5', BUT LESS THAN 7', CONTRACTOR SHALL USE STANDARD 5' HYDRANT BURY AND HYDRANT BARREL EXTENSIONS AS NECESSARY. IF THE REQUIRED HYDRANT BURY IS GREATER THAN 7', CONTRACTOR SHALL USE 5' HYDRANT BURY, 2-MJ 90° BENDS, 6" ANCHOR COUPLING AND 6" DICL PIPE AS 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 ACRA 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 # T2FH7BTLP 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

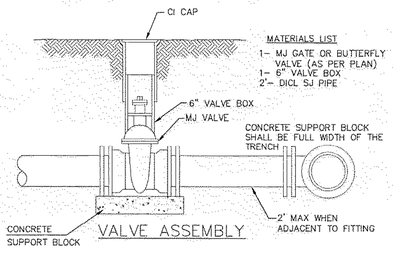
The anodes shall be 3 lb. bare zinc or magnesium. The anodes shall be buried at the same elevation as the waterline at each test station. The anodes shall be connected to 12 AWG CCS which shall be extended to the test station.

TRACER WIRE DETAIL

COST IS SUBSIDIARY TO PIPE INSTALLATION

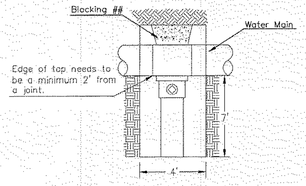
FIRE HYDRANTS REQUIRED

STATION	BURY LINE ELEVATION	TOP OF PIPE ELEVATION	FIRE HYDRANT BURY REQUIRED*	VALVE STEM EXT. REQUIRED (ft)*
WL1, 13+74.58	1264.70	1260.36	4.5	N/A
WL1, 18+70.38	1265.80	1261.68	4.5	N/A
WL2, 12+72.24	1263.60	~~1259.22~~ 1258.72	~~4.5~~ 5.0	N/A
WL3, 14+86.99	1262.60	1258.21	4.5	N/A



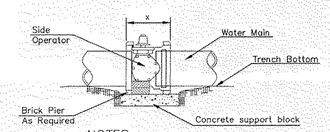
MATERIALS LIST
1- MJ GATE OR BUTTERFLY VALVE (AS PER PLAN)
1- 6" VALVE BOX
2'- DICL SJ PIPE

VALVE ASSEMBLY



CITY TAP

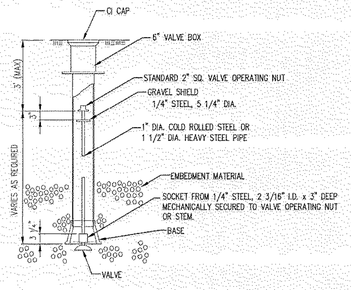
When the City of Wichita makes top, blocking is to be done by Contractor



NOTES

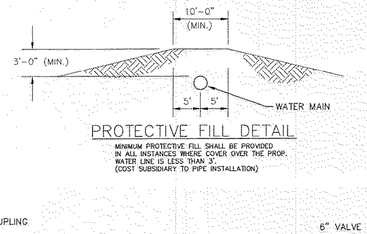
1. This detail covers Butterfly Valve installation, inclusive, regardless of type of pipe or joint used. 24" and larger lines to be detailed on plans.
2. 6" Valve Box and Cover required per City of Wichita Std. Specifications.
3. Conc. Support Block to be full width of trench.

CONCRETE SUPPORT BLOCKING FOR BUTTERFLY VALVE INSTALLATION



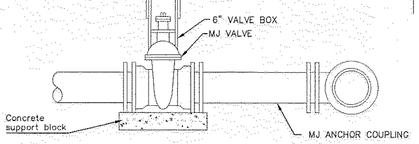
VALVE STEM EXTENSION DETAIL

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

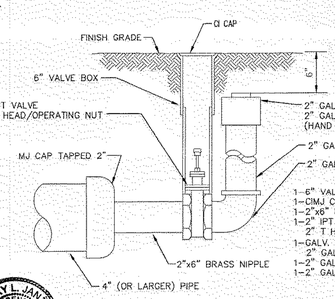


PROTECTIVE FILL DETAIL

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)

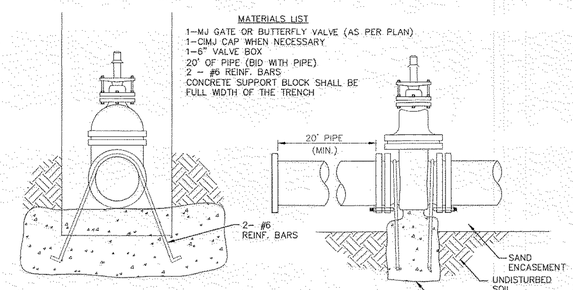


ANCHORED VALVE ASSEMBLY



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

GARY L. JANZEN LICENSED PROFESSIONAL ENGINEER 16294 KANSAS 10/27/16

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 11/06/2025 KANSAS PROFESSIONAL ENGINEER

WATER DISTRIBUTION IMPROVEMENTS TO SERVE

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 448-2024-007799

Issue:		
	08/18/2026 - cjr	

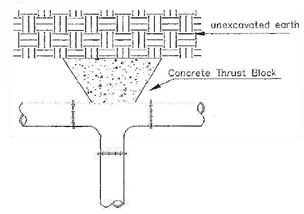
RED LINE - FIELD SET PEC
U:\Wichita-Civil 200605-018

JOB NO.	200605-011
DATE	NOVEMBER 2025
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DESIGNED BY	KPG
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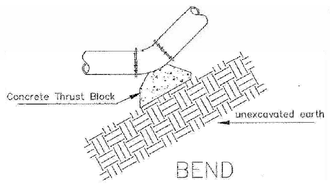
STANDARD WATER ASSEMBLY DETAIL

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15 OF 22

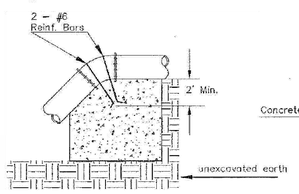
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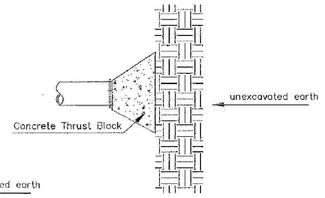
TEE



BEND



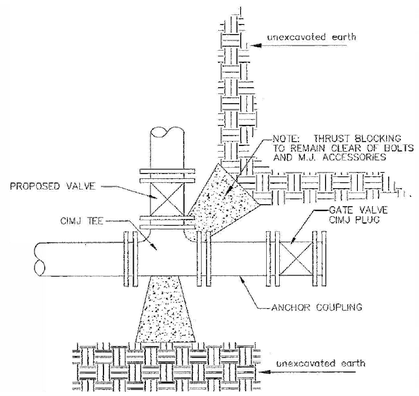
VERTICAL BEND



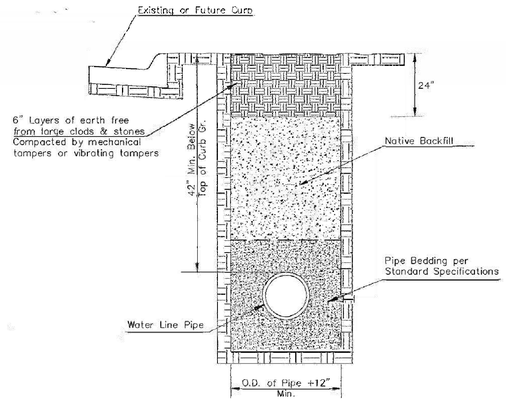
PLUG

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

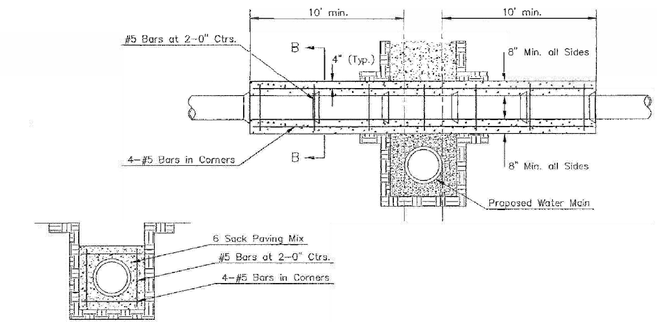
TYPICAL THRUST BLOCKS



KEY BLOCK DETAIL



TRENCH COMPACTION IN ROAD RIGHT–OF–WAY

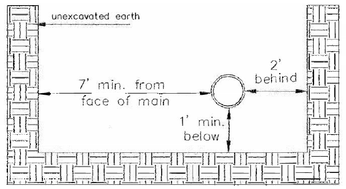


SECTION B–B

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

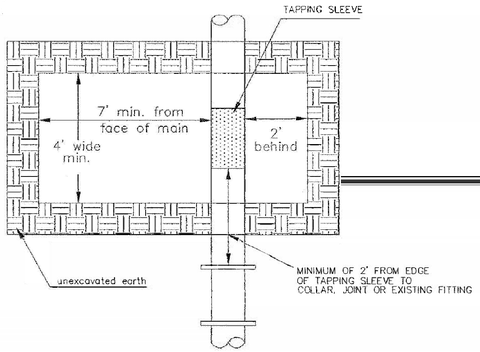
REINFORCED CONCRETE ENCASEMENT OF SANITARY SEWER

SIDE VIEW

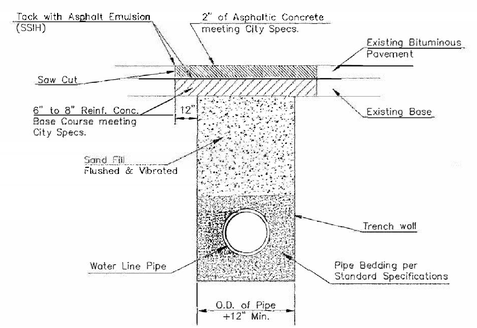


Note: When shoring is required it is to be per The City of Wichita Standard Specifications

TOP VIEW



EXCAVATION FOR WET TAP



PAVEMENT REPLACEMENT & TRENCH COMPACTION UNDER EXISTING AND PROPOSED CITY ROADS

* PLANS COVERN 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

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316-262-2691 www.pec1.com

CITY OF WICHITA

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

WATER DISTRIBUTION IMPROVEMENTS TO SERVE
SWANEY FARM ADDITION PHASE 2
PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 448-2024-007799

Issue:		
	08/18/2026 - cjr	

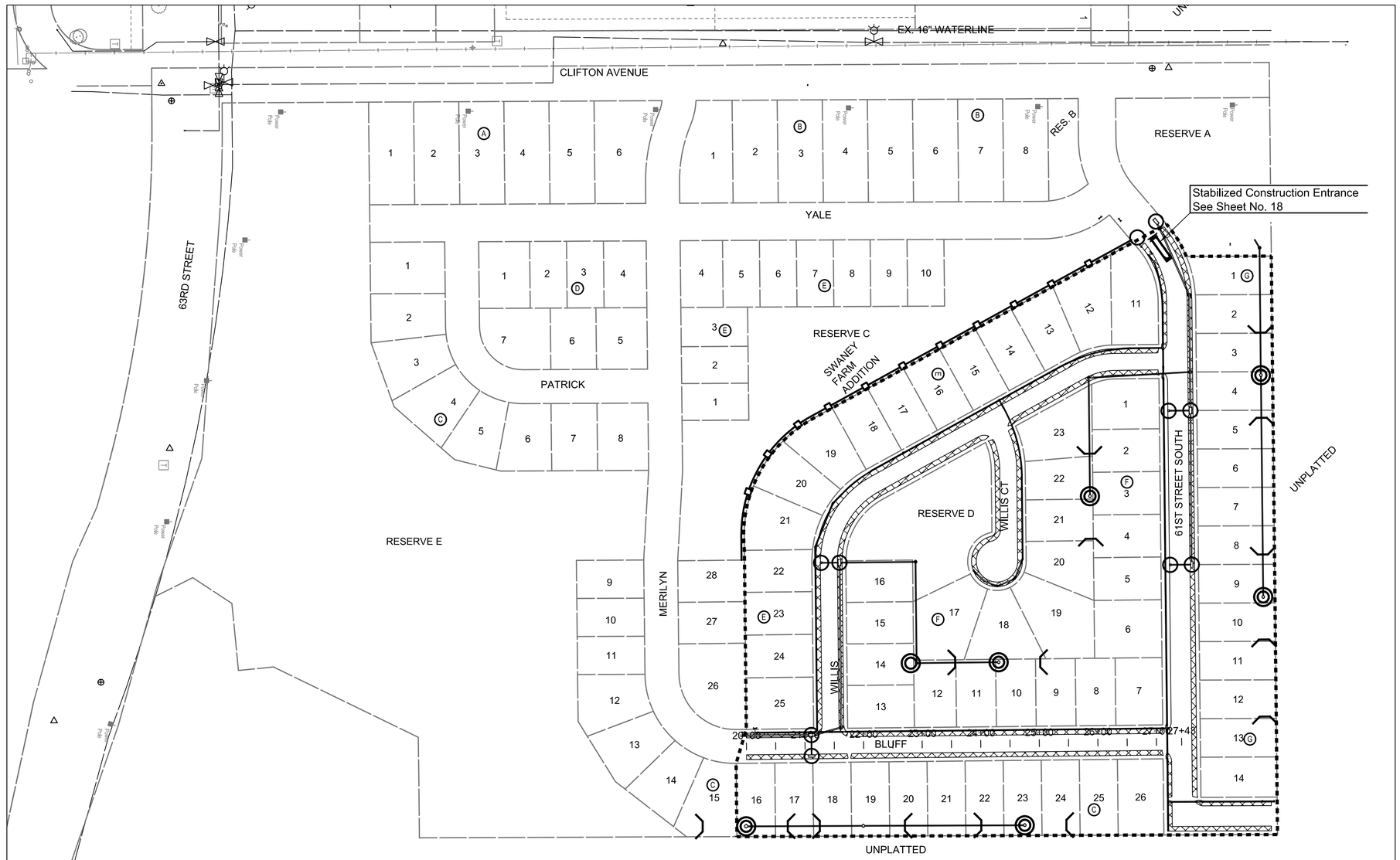
RED LINE - FIELD SET PEC
U:\Wichita-Civil 200605-018

JOB NO.	200605-011
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DRAWN BY	DML
CHECKED BY	TBK

MISCELLANEOUS WATER DETAILS

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16 OF 22

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PEC
0' 100' 200'
1 INCH =100 FEET

QUANTITIES ARE PROVIDED FOR INFORMATION ONLY.

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

GENERAL NOTES

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

EROSION CONTROL LEGEND

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

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CITY OF WICHITA

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

WATER DISTRIBUTION IMPROVEMENTS TO SERVE
SWANEY FARM ADDITION PHASE 2
PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 448-2024-007799

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	08/18/2026 - cjr	

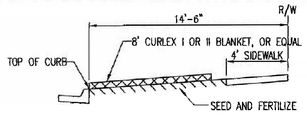
RED LINE - FIELD SET PEC
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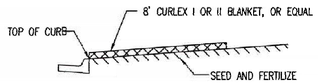
EROSION CONTROL PLAN

17
17 OF 22

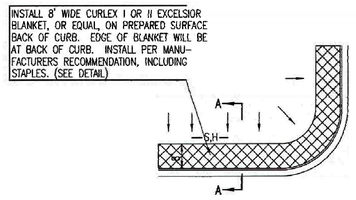
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SECTION B-B



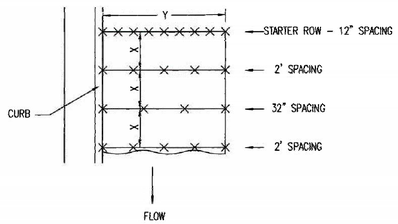
SECTION A-A



GENERAL NOTES

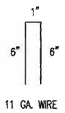
1. EXCELSIOR MAT TO BE INSTALLED WHEN SOD IS NOT SPECIFIED ON PROJECT.
2. ~~EXCELSIOR BLANKET TO BE INSTALLED OVER SEED AND FERTILIZER,~~ AS SPECIFIED IN THE PROJECT SPECIFICATIONS.
3. AFTER INSTALLATION OF EXCELSIOR BLANKET, AT LOCATIONS WHERE CONCENTRATED FLOW CARRIES SEDIMENT OVER THE CURB AND INTO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

BACK OF CURB PROTECTION DETAIL



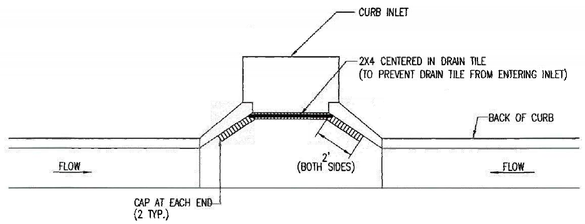
STAPLE PATTERN

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



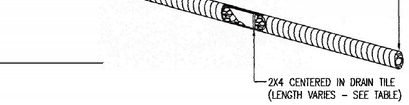
STAPLE

DETAILS FOR APPROVED EROSION CONTROL MAT

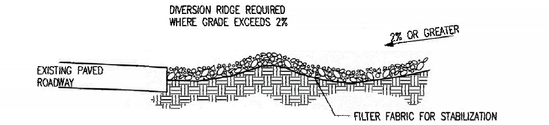


NOTE:
PLACE 4" PERFORATED PVC PIPE, FILLED WITH 1/2"-1" DIA. GRAVEL, IN FRONT OF CURB INLET AS SHOWN.

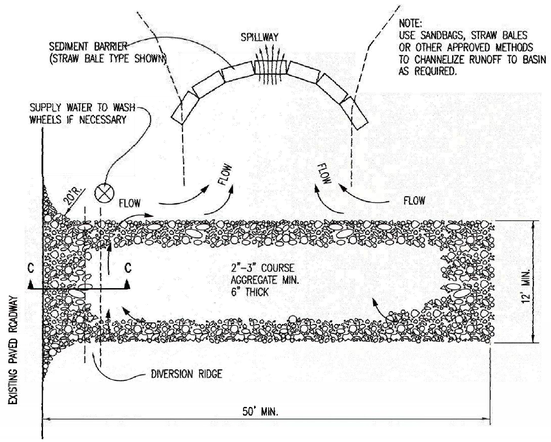
2X4 LENGTH	INLET TYPE	INLET OPENING
5'-6"	1-A	5'-0"
10'-6"	1-A	10'-0"
15'-6"	1-A	15'-0"



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
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
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SHEET

SW-501

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WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

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

WATER DISTRIBUTION IMPROVEMENTS TO SERVE
SWANEY FARM ADDITION PHASE 2
PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 448-2024-007799

Issue:		
	08/18/2026 - cjr	

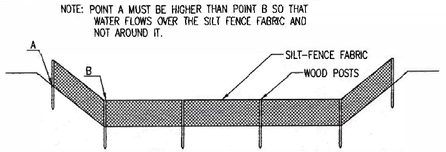
RED LINE - FIELD SET PEC
U:\Wichita-Civil 200605-018

JOB NO.	200605-011
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	DML
CHECKED BY	TBK

BACK OF CURB & CURB INLET PROTECTION & CONSTRUCTION ENTRANCE

18
18 OF 22

SAVED 7/24/2025 7:48:00 AM BY BILL.SEXSON
PLOTTED 11/6/2025 12:17:47 PM BY KEVIN GRAHAM
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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.

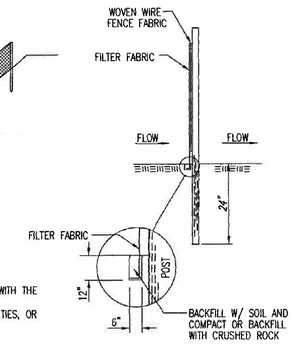
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

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.

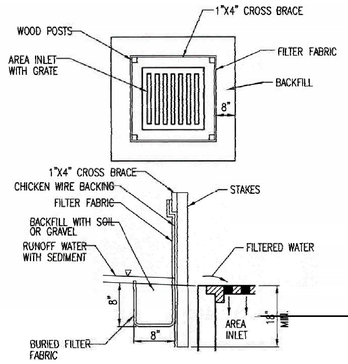
INSPECTION AND MAINTENANCE:

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.

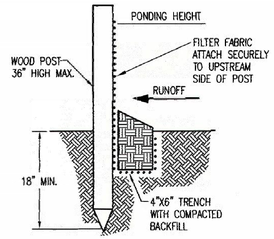
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

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 SILT FENCE 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 16294 PROFESSIONAL ENGINEER KANSAS
05/12/13

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
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SW-502

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303 SOUTH TOPEKA
WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

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

WATER DISTRIBUTION IMPROVEMENTS TO SERVE
SWANEY FARM ADDITION PHASE 2
PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 448-2024-007799

Issue:		
	08/18/2026 - cjr	

RED LINE - FIELD SET PEC
U:\Wichita-Civil 200605-018

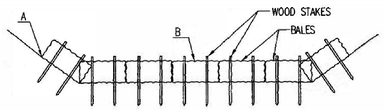
JOB NO.	200605-011
DATE	SEPTEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	DML
CHECKED BY	TBK

SILT FENCE DITCH CHECK & BARRIER DETAILS

19
19 OF 22

SAVED 7/24/2025 7:52:54 AM BY BILL.SEXSON
PLOTTED 11/6/2025 12:17:52 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\WATER\200605-009-19-BMP.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".

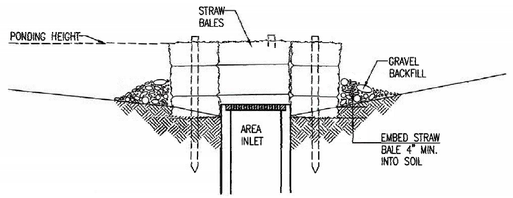
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

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.

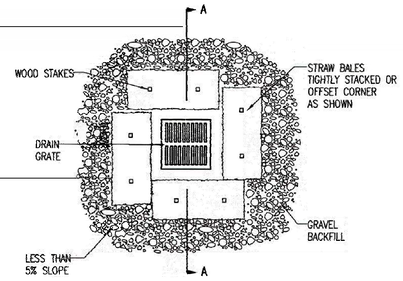
INSPECTION AND MAINTENANCE:

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.

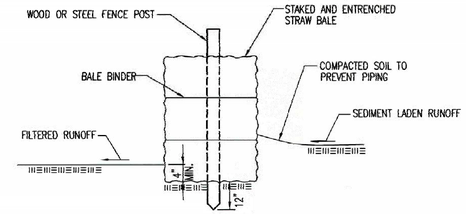
LIST OF COMMON PLACEMENT INSTALLATION MISTAKES TO AVOID:

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 19284 PROFESSIONAL ENGINEER KANSAS 05/12/13

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 11/06/2025 KANSAS PROFESSIONAL ENGINEER

WATER DISTRIBUTION IMPROVEMENTS TO SERVE
SWANEY FARM ADDITION PHASE 2
PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 448-2024-007799

Issue:		
	08/18/2026 - cjr	

RED LINE - FIELD SET PEC
U:\Wichita-Civil 200605-018

JOB NO.	200605-011
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	DML
CHECKED BY	TBK

STRAW BALE DITCH CHECK & BARRIER DETAILS

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20 OF 22

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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.

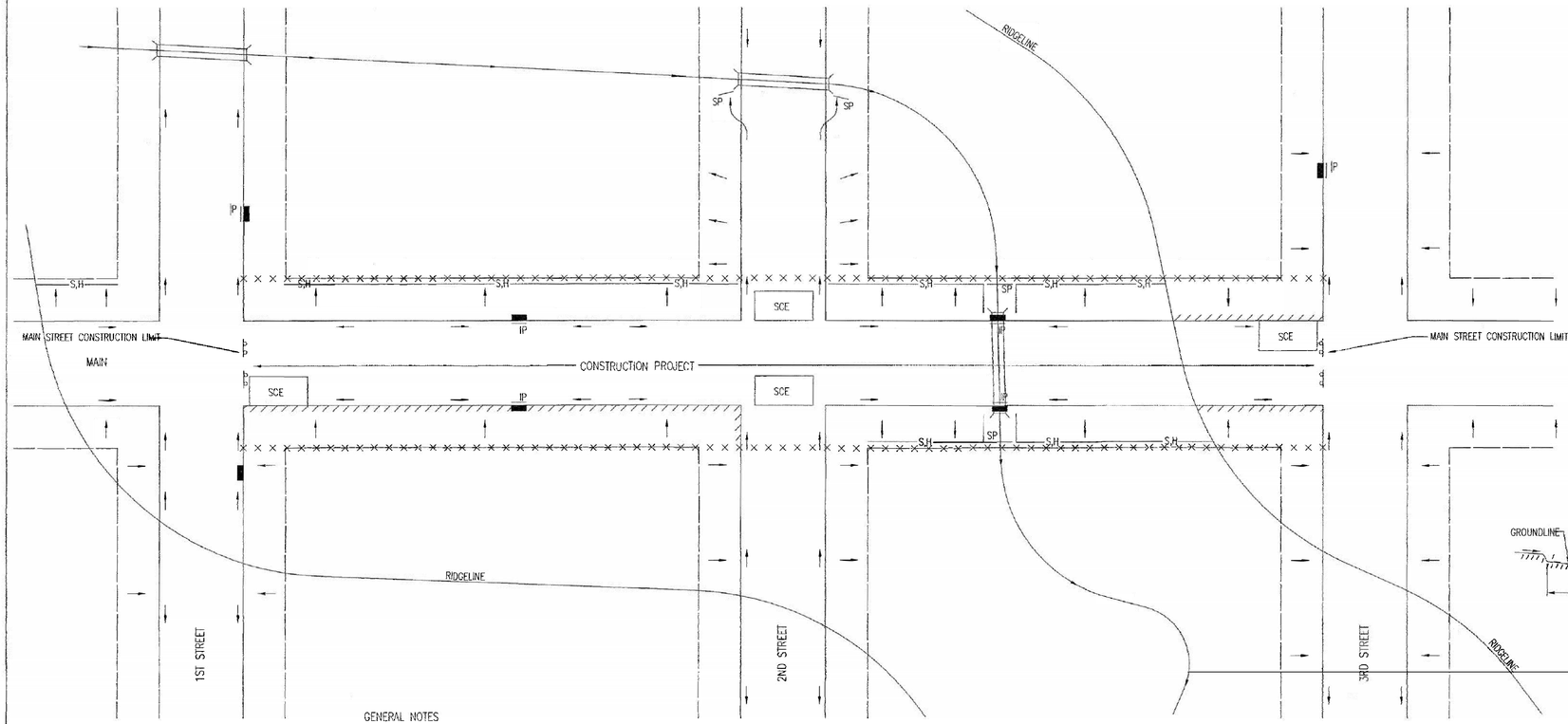
2. EROSION CONTROL DEVICES MUST BE MAINTAINED BY THE CONTRACTOR THROUGHOUT THE CONSTRUCTION PROCESS AND UNTIL THE DISTURBED EARTH IS RESTABILIZED.

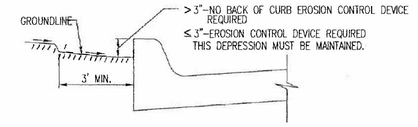
3. IF THE PROJECT WILL DISTURB 1 ACRE OR MORE, A FEDERAL/STATE NPDES STORMWATER PERMIT IS REQUIRED. A DETAILED STORMWATER POLLUTION PREVENTION PLAN, IS REQUIRED. THE EROSION CONTROL DEVICES SHOWN ON THIS SHEET ARE CONSIDERED TO BE THE MINIMUM TO BE SHOWN IN THE POLLUTION PREVENTION PLAN.

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

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WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

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

WATER DISTRIBUTION IMPROVEMENTS TO SERVE

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 448-2024-007799

Issue:		
	08/18/2026 - cjr	

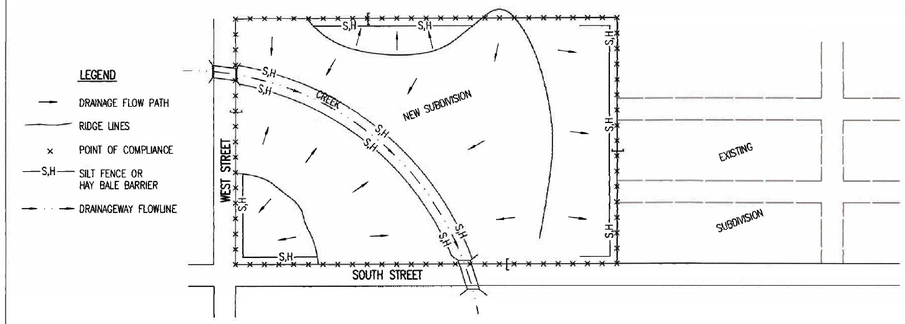
RED LINE - FIELD SET PEC
U:\Wichita-Civil 200605-018

JOB NO.	200605-011
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DESIGNED BY	KPG
DRAWN BY	DML
CHECKED BY	TBK

STREET IMPROVEMENT PROJECTS

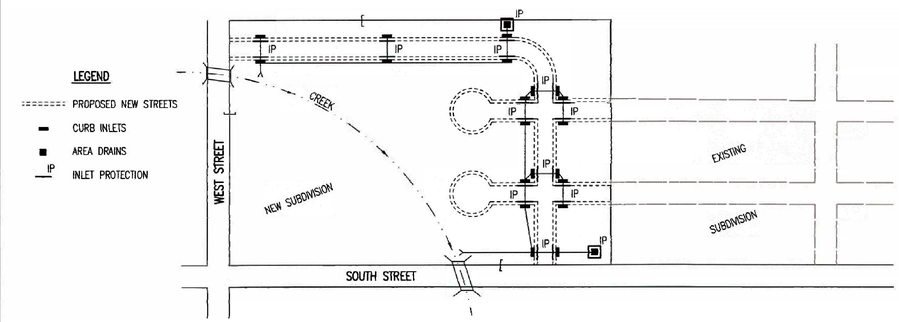
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PHASE 1 – INITIAL EARTHWORK AND UTILITIES (EXCEPT STORM SEWER)



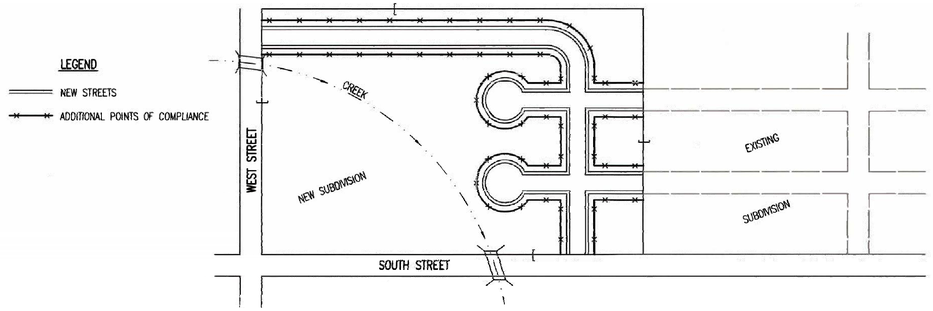
1. DURING THIS PHASE OF SUBDIVISION CONSTRUCTION, THE POINTS OF COMPLIANCE ARE THE PERIMETER BOUNDARIES AND ANY DRAINAGE WAYS OR STORM SEWERS DRAINING THROUGH OR FROM THE SITE. SHOULD LAKES BE CONSTRUCTED WITHIN THE SUBDIVISION THAT WILL DISCHARGE DURING STORMS, THEY ARE ALSO A POINT OF COMPLIANCE.
2.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

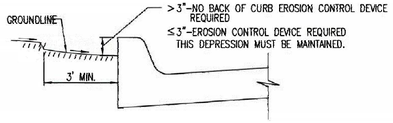


1. DURING THIS PHASE OF SUBDIVISION CONSTRUCTION, NEW STREETS ARE INSTALLED. ALL EROSION CONTROL DEVICES INSTALLED DURING PHASE 1 AND 2 MUST STILL BE MAINTAINED. THE POINT OF COMPLIANCE NOW SHIFTS TO THE BACK OF CURB ALONG EACH STREET.
2. CURB OPENING INLET PROTECTION:
   A. SUMP AREAS – INLET PROTECTION 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
05.12.13

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 11/06/2025 KANSAS PROFESSIONAL ENGINEER

WATER DISTRIBUTION IMPROVEMENTS TO SERVE

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 448-2024-007799

Issue:		
	08/18/2026 - cjr	

RED LINE - FIELD SET PEC
U:\Wichita-Civil 200605-018

JOB NO.	200605-011
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	DML
CHECKED BY	TBK

SUBDIVISION DEVELOPMENT PROCESS

22
22 OF 22

SAVED 8/1/2025 4:20:27 PM BY BILL.SEXSON
PLOTTED 11/6/2025 12:18:22 PM BY KEVIN GRAHAM
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CONSTRUCTION PLANS FOR
SANITARY SEWER IMPROVEMENTS

TO SERVE

SWANEY FARM ADDITION - PHASE 2

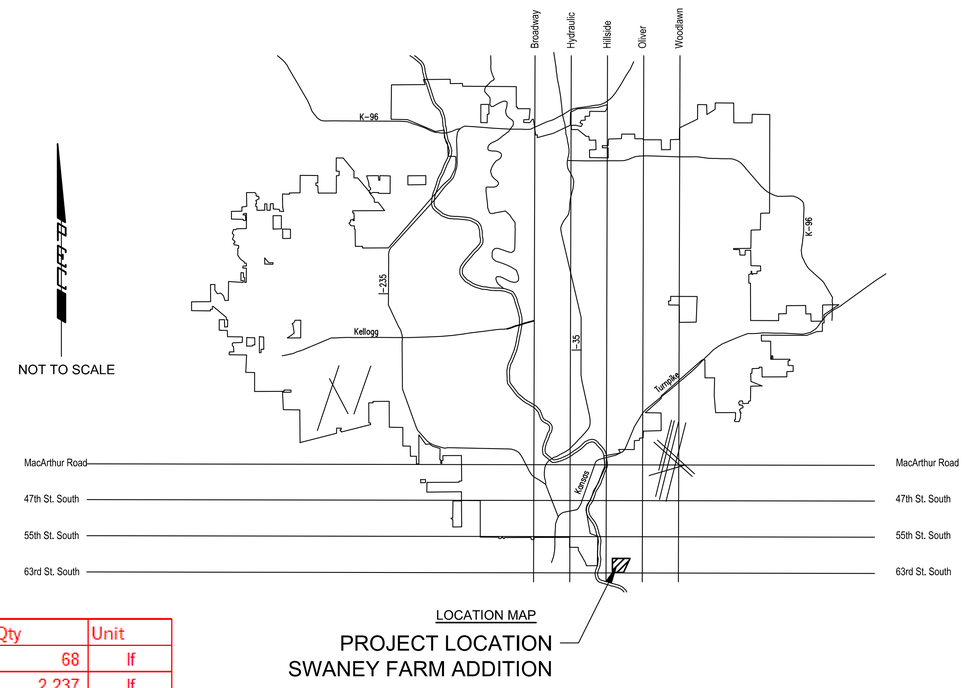
CITY OF WICHITA ENGINEERING PROJECT NO. 468-2024-007801
ORG CODE: 47274925, MUNIS NO.: E5132

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 NUMBER	SHEET TITLE
01	TITLE SHEET
02	GENERAL NOTES
03	PLAT BUBBLE MAP
04	SANITARY SEWER KEY MAP
05 - 07	SANITARY SEWER LINE NO. 1
08 - 09	SANITARY SEWER LINE NO. 2
10	SANITARY SEWER LINE NO. 3
11 - 12	SANITARY SEWER LINE NO. 4
13	SANITARY SEWER LINE NO. 5
14 - 15	SANITARY SEWER LINE NO. 6
16	SANITARY SEWER LINE NO. 7
17	PRECAST SANITARY SEWER MANHOLE
18	MANHOLE FRAME AND COVER (SS)
19	VERTICAL RISER ASSEMBLY SEWER DETAILS
20	CLEANOUT RISER ASSEMBLY DETAILS
21	EROSION CONTROL PLAN
22 - 26	EROSION CONTROL DETAILS

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, SWS 15"	Wichita Concrete Pipe	68	lf
Pipe, SWS 18"	Wichita Concrete Pipe	2,237	lf
Pipe, SWS 24"	Wichita Concrete Pipe	645	lf
Pipe, SWS 30"	Wichita Concrete Pipe	102	lf

Item	Manufacturer	Qty	Unit
Pipe, SS 8"	Diamond	4,023	lf
Pipe, Connect to Existing	Diamond	3	ea

NOVEMBER 2025

RED LINE - FIELD SET 08/18/2026 - cjr
Prepared By: TIGER WILLIAMS
BRANDON DELANEY
Date: AUGUST 2026

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CITY OF WICHITA

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

SANITARY SEWER IMPROVEMENTS
SWANEY FARM ADDITION PHASE 2
PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007801

Issue:		

RED LINE - FIELD SET PEC
U:\Wichita-Civil 200605-018

JOB NO.	200605-010
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

TITLE SHEET

01
01 OF 26

SAVED 9/22/2025 11:30:43 AM BY KEVIN.GRAHAM
PLOTTED 11/6/2025 11:46:24 AM BY KEVIN GRAHAM
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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

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WICHITA, KS 67202
316-268-4614

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WICHITA, KS 67202
316-268-4334

JOE HICKLE
WICHITA STORM SEWER
7TH FLOOR - CITY HALL
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JAMES WALBURN
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CITY OF WICHITA

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

SANITARY SEWER IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007801

Issue:		
	08/18/2026 - cjr	

RED LINE - FIELD SET PEC
U:\Wichita-Civil 200605-018

JOB NO.	200605-010
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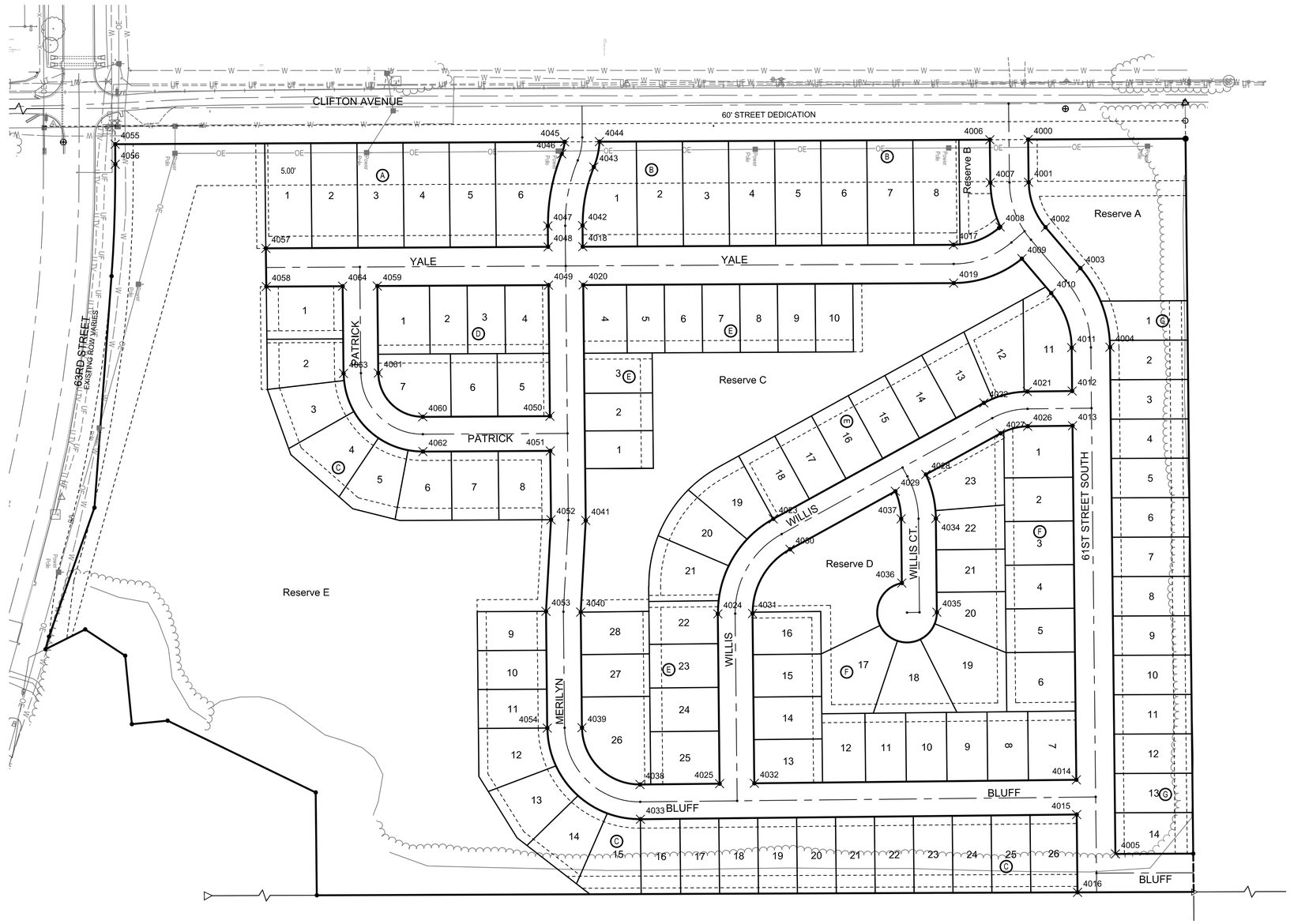
GENERAL NOTES

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SAVED 8/1/2025 4:30:57 PM BY BILL.SEXSON
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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'

1 INCH = 100 FEET

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CITY OF WICHITA

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

SANITARY SEWER IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007801

Issue:		
	08/18/2026 - cjr	

RED LINE - FIELD SET PEC
U:\Wichita-Civil 200605-018

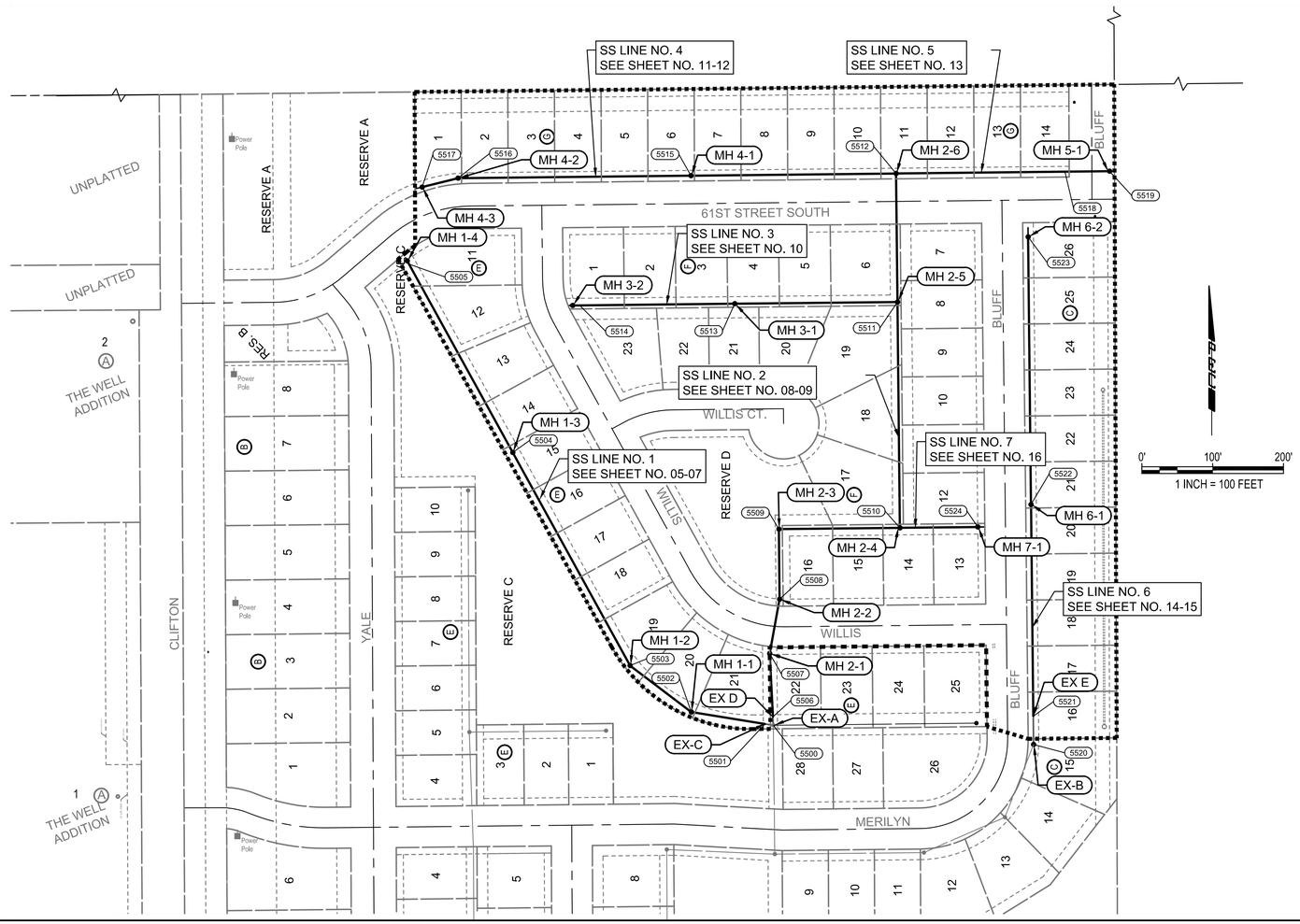
JOB NO.	200605-010
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

PLAT BUBBLE MAP

03
03 OF 26

SAVED 7/2/2025 12:03:07 PM BY BILL.SEXSON
PLOTTED 11/6/2025 11:46:49 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\SAN SEWER\3-200605-010-CU003-PLAT BUBBLE MAP.DWG

COORDINATE LIST		
POINT	NORTHING	EASTING
5500	332,714.6449	17,560,549.0241
5501	332,716.5568	17,560,537.1781
5502	332,733.3550	17,560,433.0962
5503	332,799.0448	17,560,346.6255
5504	333,100.0191	17,560,180.9011
5505	333,366.2059	17,560,034.3316
5506	332,726.6248	17,560,548.4099
5507	332,815.9487	17,560,543.8310
5508	332,892.7497	17,560,557.8007
5509	332,991.7440	17,560,556.7374
5510	333,307.7416	17,560,275.5237
5511	333,490.9400	17,560,432.6714
5512	333,312.5619	17,560,724.3014
5513	333,494.0514	17,560,722.3520
5514	333,310.0939	17,560,494.5211
5515	333,487.4064	17,560,103.6826
5516	333,474.8221	17,560,052.9304
5517	333,496.6132	17,560,960.8534
5518	333,497.2898	17,561,023.8498
5519	332,687.5904	17,560,916.5249
5520	332,727.5881	17,560,916.0953
5521	333,026.5708	17,560,912.8839
5522	333,404.5490	17,560,908.8241
5523	332,994.7620	17,560,837.7212
5524		



STRUCTURE TABLE			
ID	STATION	COORDINATES	DESCRIPTION
EX-A	9+88.0 SS LINE 1	N: 332,714.6449 E: 17,560,549.0241	4' DIAMETER MANHOLE
EX-B	59+60.0 SS LINE 6	N: 332,687.5904 E: 17,560,916.5249	4' DIAMETER MANHOLE
EX-C	10+00.0 SS LINE 1	N: 332,716.5568 E: 17,560,537.1781	CONNECT TO EX. SS
EX D	20+00.0 SS LINE 2	N: 332,726.6248 E: 17,560,548.4099	CONNECT TO EX. SS
EX E	60+00.0 SS LINE 6	N: 332,727.5881 E: 17,560,916.0953	CONNECT TO EX. SS
MH 1-1	11+05.4 SS LINE 1	N: 332,733.3550 E: 17,560,433.0962	4' DIAMETER MANHOLE
MH 1-2	12+14.0 SS LINE 1	N: 332,799.0448 E: 17,560,346.6255	4' DIAMETER MANHOLE
MH 1-3	15+57.6 SS LINE 1	N: 333,100.0191 E: 17,560,180.9011	4' DIAMETER MANHOLE

STRUCTURE TABLE			
ID	STATION	COORDINATES	DESCRIPTION
MH 1-4	18+66.5 SS LINE 1	N: 333,370.5858 E: 17,560,031.9199	4' DIAMETER MANHOLE
MH 2-1	20+89.4 SS LINE 2	N: 332,815.9487 E: 17,560,543.8310	4' DIAMETER MANHOLE
MH 2-2	21+67.5 SS LINE 2	N: 332,892.7497 E: 17,560,557.8007	4' DIAMETER MANHOLE
MH 2-3	22+66.5 SS LINE 2	N: 332,991.7440 E: 17,560,556.7374	4' DIAMETER MANHOLE
MH 2-4	24+37.5 SS LINE 2	N: 332,993.5806 E: 17,560,727.7276	4' DIAMETER MANHOLE
MH 2-5	27+56.5 SS LINE 2	N: 333,312.5619 E: 17,560,724.3014	4' DIAMETER MANHOLE
MH 2-6	29+38.0 SS LINE 2	N: 333,494.0514 E: 17,560,722.3520	4' DIAMETER MANHOLE
MH 3-1	32+29.8 SS LINE 3	N: 333,310.0939 E: 17,560,494.5211	4' DIAMETER MANHOLE

STRUCTURE TABLE			
ID	STATION	COORDINATES	DESCRIPTION
MH 3-2	34+58.8 SS LINE 3	N: 333,307.6342 E: 17,560,265.5243	4' DIAMETER MANHOLE
MH 4-1	42+89.7 SS LINE 4	N: 333,490.9400 E: 17,560,432.6714	4' DIAMETER MANHOLE
MH 4-2	46+18.7 SS LINE 4	N: 333,487.4064 E: 17,560,103.6826	4' DIAMETER MANHOLE
MH 4-3	46+71.0 SS LINE 4	N: 333,474.8221 E: 17,560,052.9304	4' DIAMETER SHALLOW MANHOLE
MH 5-1	53+01.5 SS LINE 5	N: 333,497.2898 E: 17,561,023.8498	4' DIAMETER MANHOLE
MH 6-1	62+99.0 SS LINE 6	N: 333,026.5708 E: 17,560,912.8839	4' DIAMETER MANHOLE
MH 6-2	66+77.0 SS LINE 6	N: 333,404.5490 E: 17,560,908.8241	4' DIAMETER MANHOLE
MH 7-1	71+10.0 SS LINE 7	N: 332,994.7620 E: 17,560,837.7212	4' DIAMETER MANHOLE

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 DATUM/COORDINATE SYSTEM:
KRCS ZONE 17 - WICHITA

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

SEE SHEET NO. 03 FOR PLAT COORDINATES.

LEGEND
- EXISTING SANITARY SEWER WITH MANHOLE
- PROPOSED SANITARY SEWER WITH MANHOLE
- BENEFIT DISTRICT

SANITARY SEWER BENEFIT DISTRICT
LOTS 16 THRU 26, BLOCK C,
LOTS 11 THRU 21, BLOCK E,
LOTS 1 THRU 23, BLOCK F,
LOTS 1 THRU 14, BLOCK G
SWANEY FARM ADDITION TO WICHITA,
SEDGWICK CO, KANSAS.

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CITY OF WICHITA

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SANITARY SEWER IMPROVEMENTS
SWANEY FARM ADDITION PHASE 2
PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007801

Issue:		
	08/18/2026 - cjr	

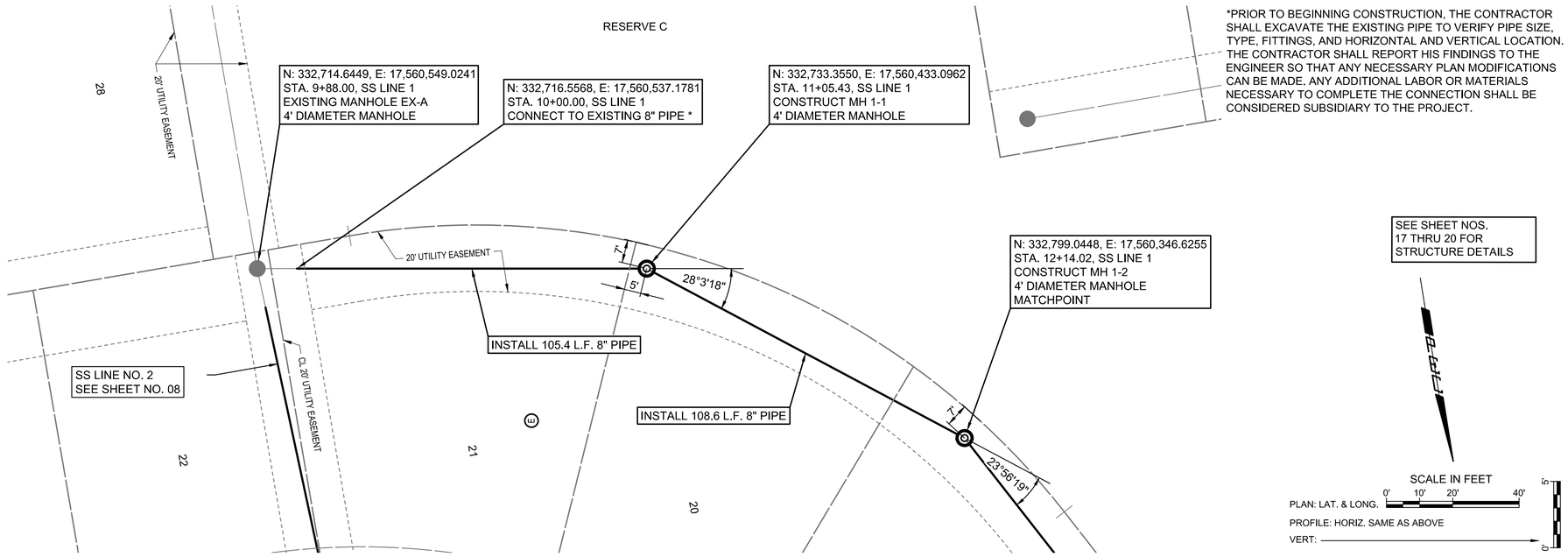
RED LINE - FIELD SET PEC
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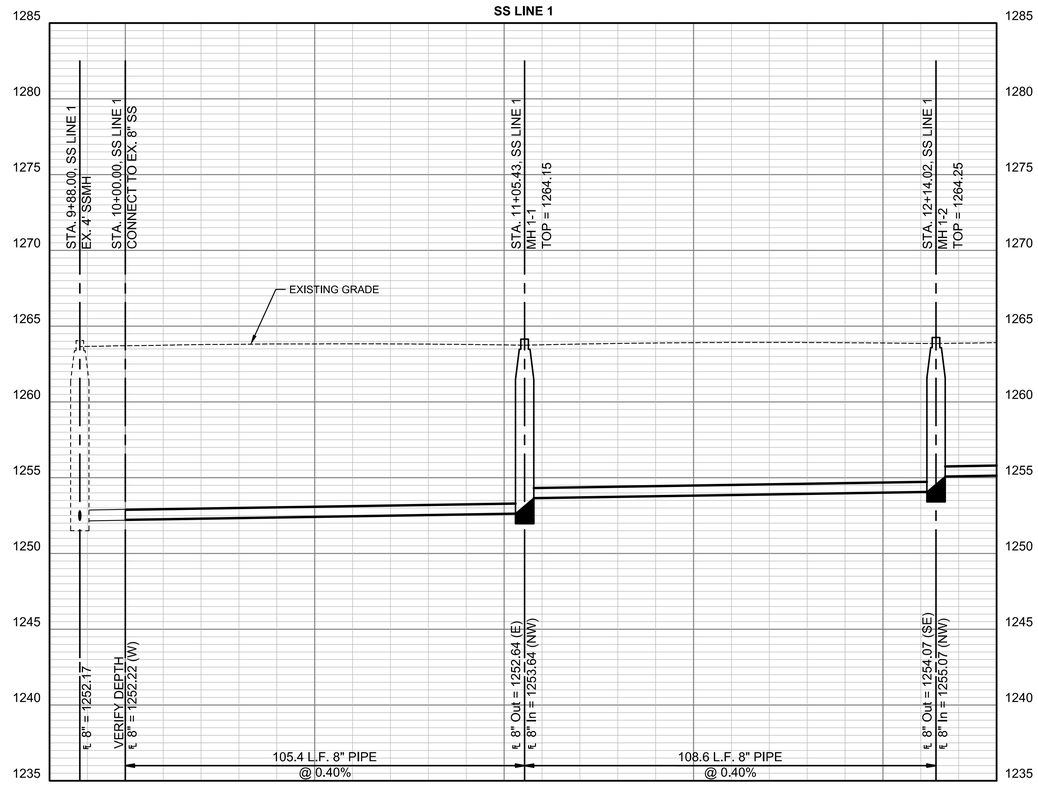
JOB NO.	200605-010
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

SANITARY SEWER KEY MAP

04
04 OF 26

SAVED 8/1/2025 9:02:45 AM BY BILL.SEXSON
PLOTTED 11/6/2025 11:47:10 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\SAN SEWER\4-200605-010-CU100 SANITARY SEWER KEY MAP.DWG





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SANITARY SEWER IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007801

Issue:		
	08/18/2026 - cjr	

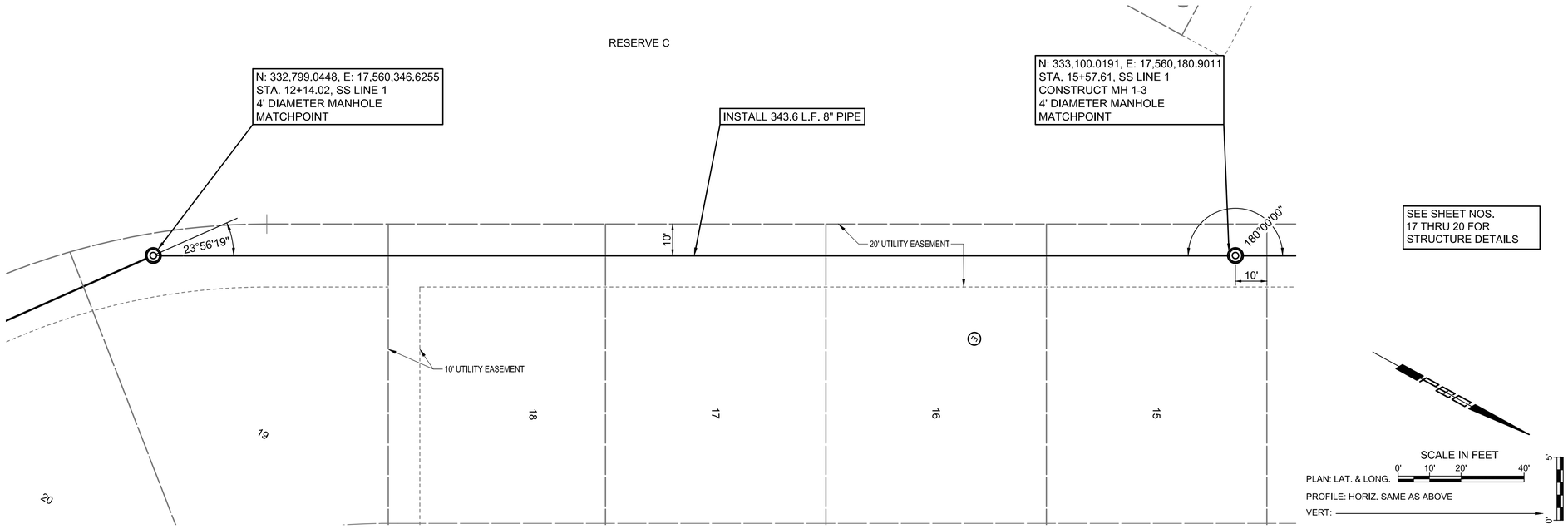
RED LINE - FIELD SET PEC
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JOB NO.	200605-010
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

SANITARY SEWER LINE NO. 1

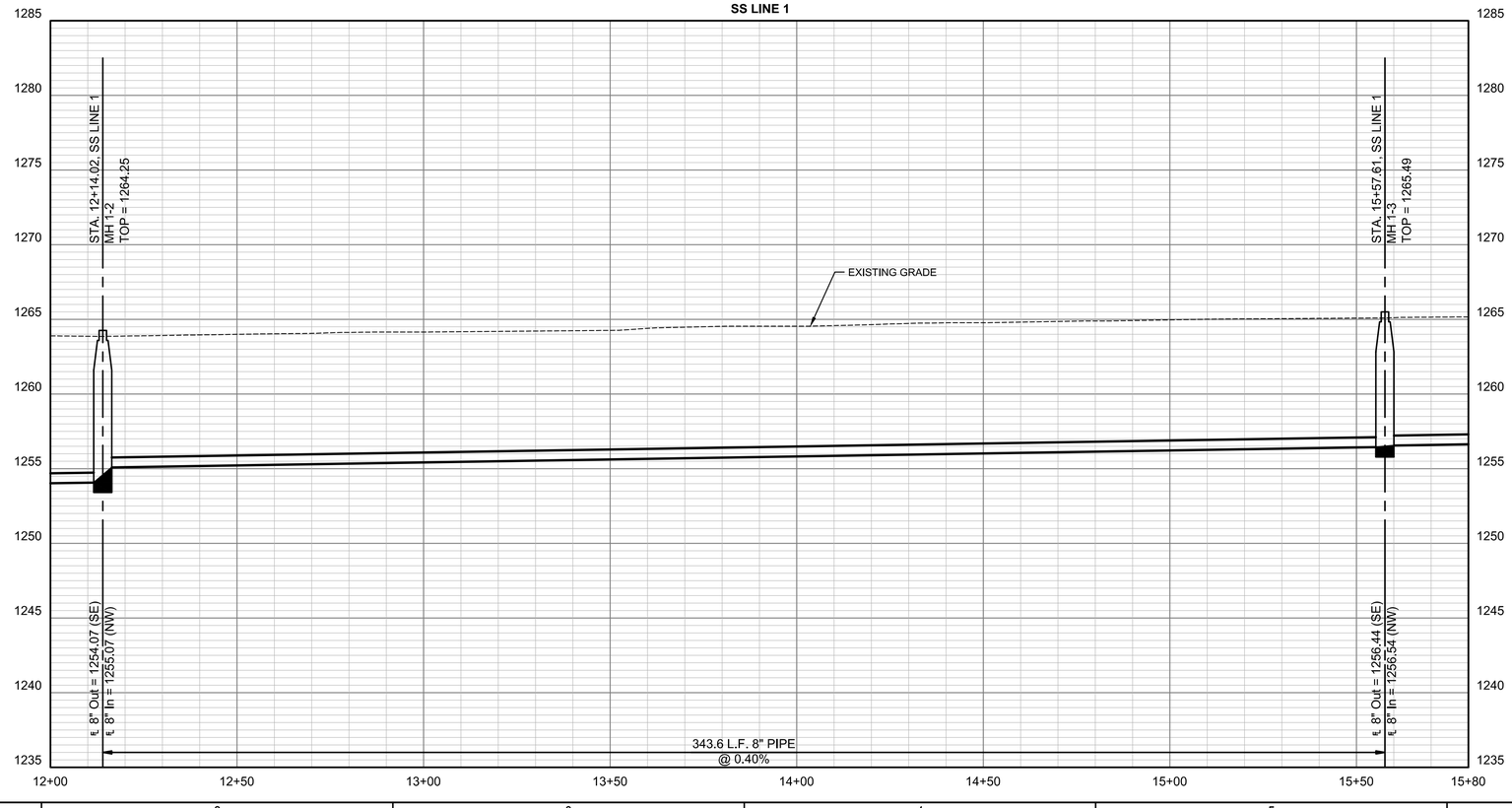
05
05 OF 26

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U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\SAN SEWER\5-200605-010-CU101 SANITARY SEWER LINE NO. 1.DWG



SEE SHEET NOS. 17 THRU 20 FOR STRUCTURE DETAILS

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



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SANITARY SEWER IMPROVEMENTS
SWANEY FARM ADDITION PHASE 2
PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007801

Issue:		
	08/18/2026 - cjr	

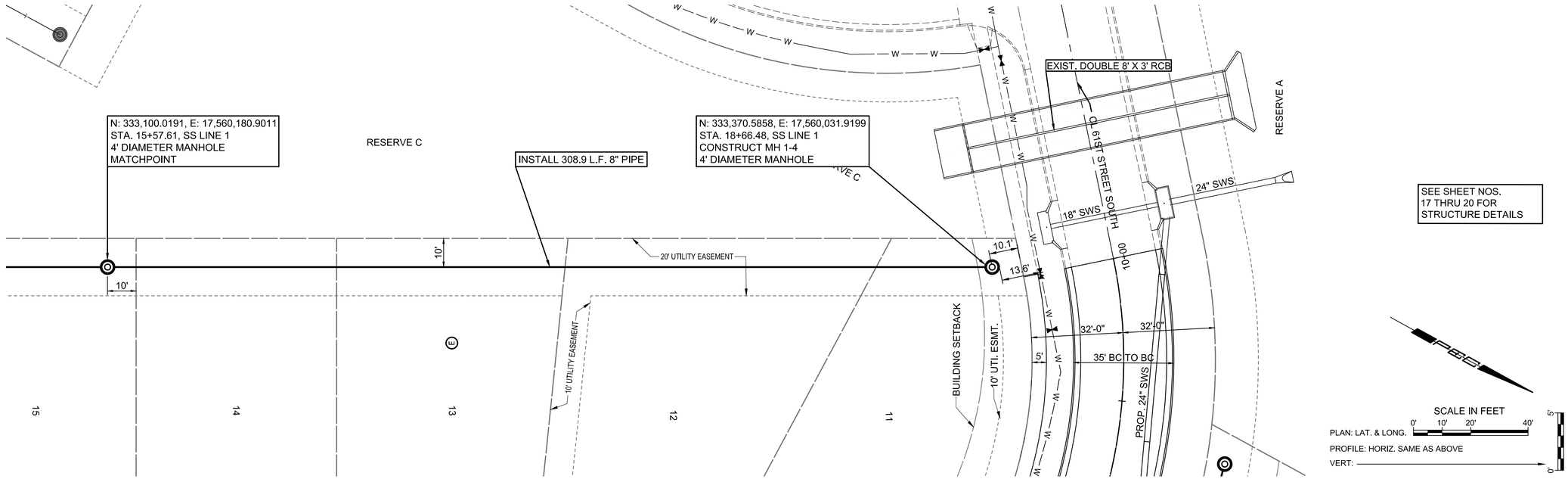
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JOB NO.	200605-010
DATE	NOVEMBER 2025
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SANITARY SEWER LINE NO. 1

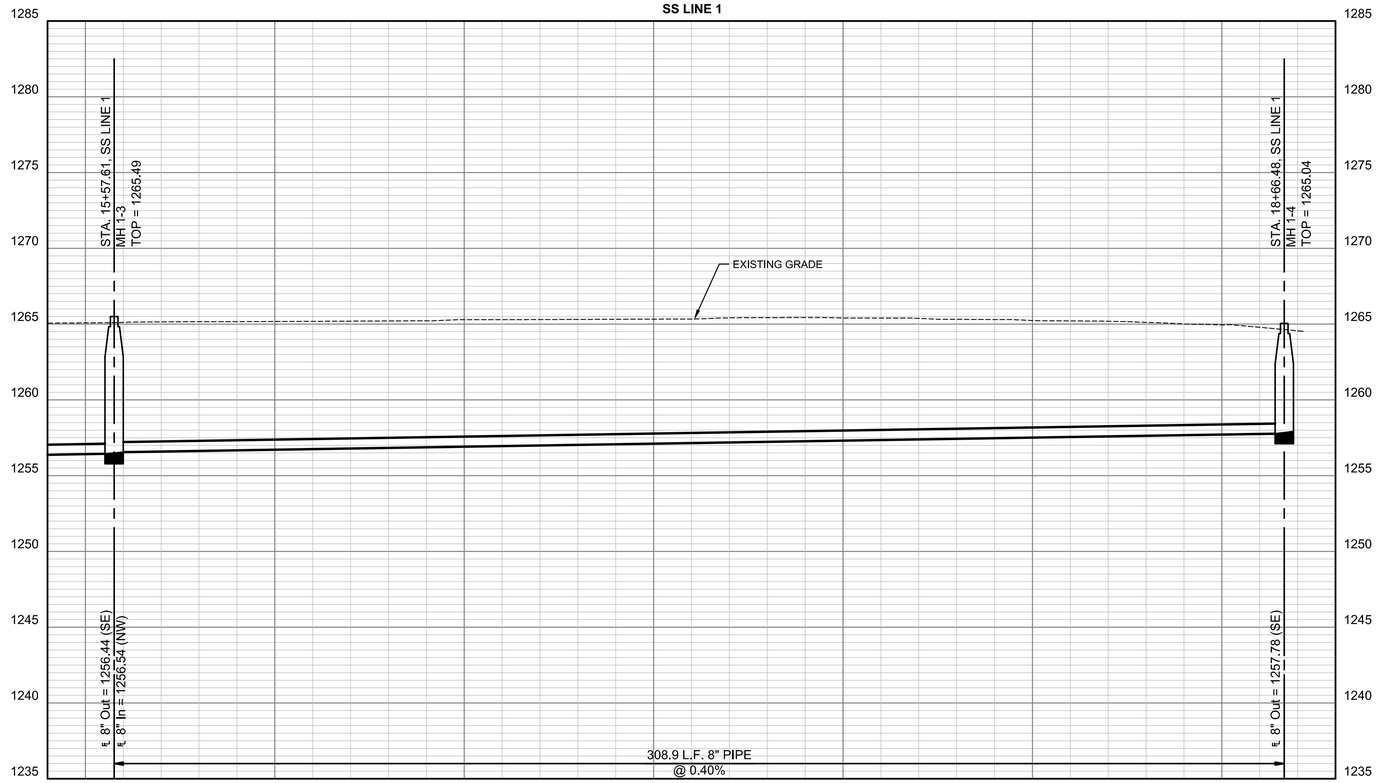
06
06 OF 26

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U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\SAN SEWER\6-200605-010-CU102 SANITARY SEWER LINE NO. 1.DWG



SEE SHEET NOS. 17 THRU 20 FOR STRUCTURE DETAILS

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



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SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007801

Issue:		
	08/18/2026 - cjr	

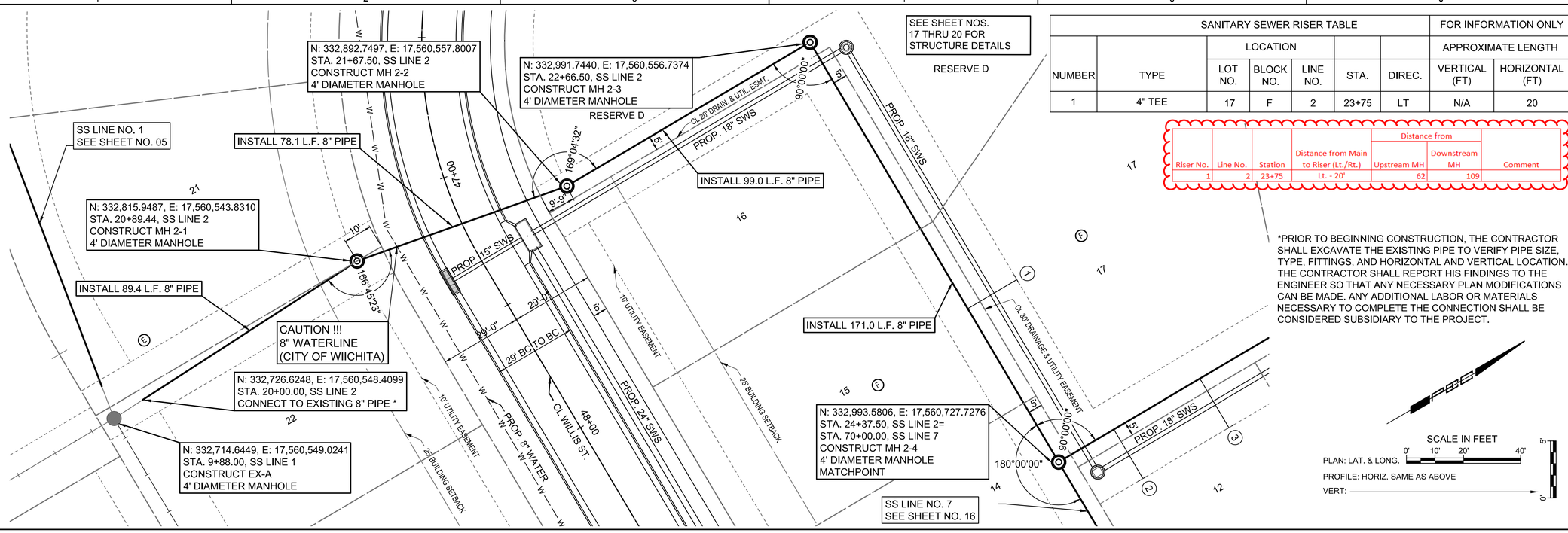
RED LINE - FIELD SET PEC
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JOB NO.	200605-010
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
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CHECKED BY	CSB

SANITARY SEWER LINE NO. 1

07
07 OF 26

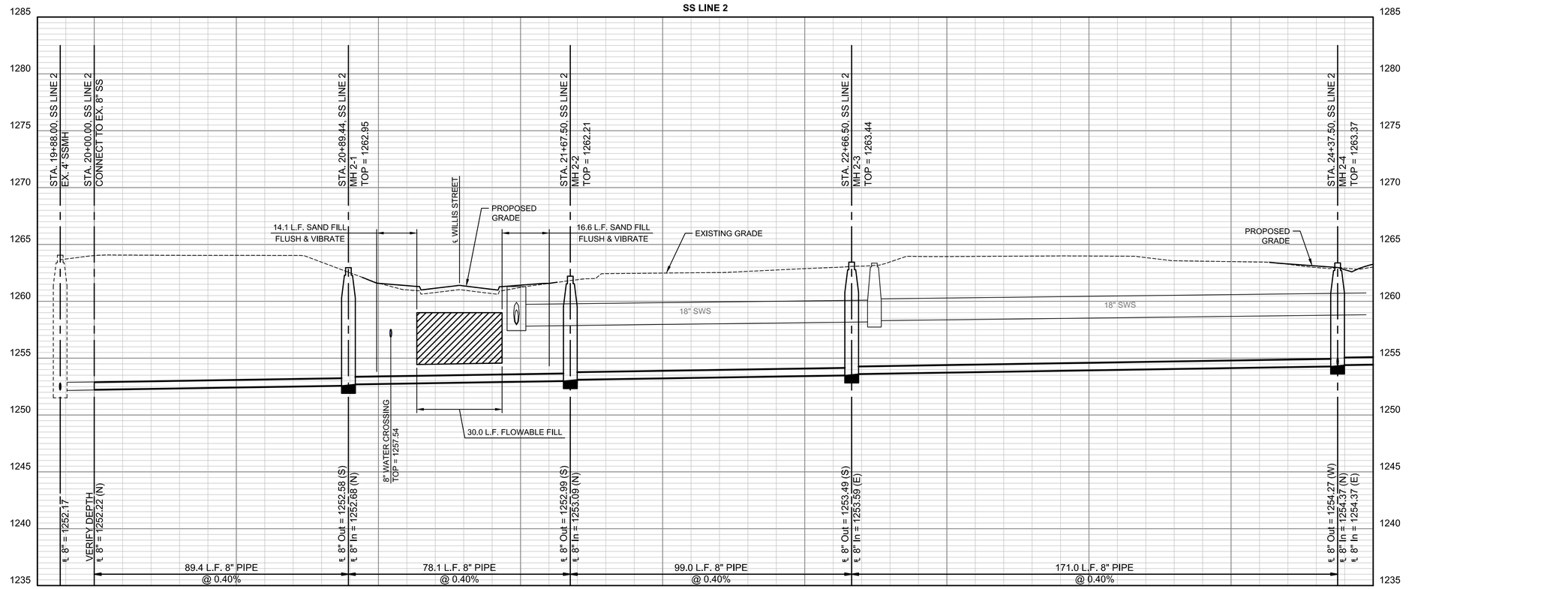
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U:\WICHITA-CIVIL\2020\200605\0091\2PD4_PLANS\030\SAN SEWER\7-200605-010-CU103 SANITARY SEWER LINE NO. 1.DWG



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	17	F	2	23+75	LT	N/A	20

				Distance from		
Riser No.	Line No.	Station	Distance from Main to Riser (Lt./Rt.)	Upstream MH	Downstream MH	Comment
1	2	23+75	Lt. - 20'	62	109	

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



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CITY OF WICHITA

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SANITARY SEWER IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007801

Issue:		
	08/18/2026 - cjr	

RED LINE - FIELD SET PEC
U:\Wichita-Civil 200605-018

JOB NO.	200605-010
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
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CHECKED BY	CSB

SANITARY SEWER LINE NO. 2

08
08 OF 26

SAVED 9/17/2025 9:37:14 AM BY KEVIN.GRAHAM
PLOTTED 11/6/2025 11:48:19 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\0091\2PD4_PLANS\030\SAN SEWER\8-200605-010-CU104 SANITARY SEWER LINE NO. 2.DWG

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

SANITARY SEWER RISER TABLE							FOR INFORMATION ONLY	
		LOCATION					APPROXIMATE LENGTH	
NUMBER	TYPE	LOT NO.	BLOCK NO.	LINE NO.	STA.	DIREC.	VERTICAL (FT)	HORIZONTAL (FT)
2	4" TEE	12	F	2	24+60	RT	N/A	20
3	4" TEE	12	F	2	24+95	RT	N/A	20
4	4" TEE	11	F	2	25+25	RT	N/A	20
5	4" TEE	11	F	2	25+60	RT	N/A	20

SEE SHEET NOS. 17 THRU 20 FOR STRUCTURE DETAILS

N: 332,993.5806, E: 17,560,727.7276
STA. 24+37.50, SS LINE 2=
STA. 70+00.00, SS LINE 7
4' DIAMETER MANHOLE
MATCHPOINT

INSTALL 319.0 L.F. 8" PIPE

N: 333,312.5619, E: 17,560,724.3014
STA. 27+56.50, SS LINE 2=
STA. 30+00.00, SS LINE 3
CONSTRUCT MH 2-5
4' DIAMETER MANHOLE

INSTALL 181.5 L.F. 8" PIPE

N: 333,494.0514, E: 17,560,722.3520
STA. 29+38.00, SS LINE 2=
STA. 40+00.00, SS LINE 4=
STA. 50+00.00, SS LINE 5
CONSTRUCT MH 2-6
4' DIAMETER MANHOLE

SS LINE NO. 3
SEE SHEET NO. 10

SS LINE NO. 4
SEE SHEET NO. 11

SS LINE NO. 5
SEE SHEET NO. 13

SS LINE NO. 7
SEE SHEET NO. 16

CAUTION !!!
8" WATERLINE
(CITY OF WICHITA)

CL 30' DRAINAGE & UTILITY EASEMENT
PROP. 18" SWS
PROP. 8" WATER
CL 61ST STREET SOUTH
17+00
25' BUILDING SETBACK
10' UTILITY EASEMENT
15' UTILITY EASEMENT
20' BUILDING SETBACK
32'-0"
35' BC TO BC
90°00'00"
180°00'00"

SS LINE 2

Riser No.	Line No.	Station	Distance from Main to Riser (Lt./Rt.)	Distance from Upstream MH	Distance from Downstream MH	Comment
2	2	24+60	Rt. - 20'	296	23	
3	2	24+95	Rt. - 20'	261	58	
4	2	25+25	Rt. - 20'	231	88	
5	2	25+60	Rt. - 20'	196	123	

STA. 24+37.50, SS LINE 2
MH 2-4
TOP = 1263.37
℄ 8" Out = 1254.27 (W)
℄ 8" In = 1254.37 (N)
℄ 8" In = 1254.37 (E)

STA. 30+00.00, SS LINE 3=
STA. 27+56.50, SS LINE 2
MH 2-5
TOP = 1266.67
℄ 8" Out = 1255.64 (S)
℄ 8" In = 1255.74 (N)
℄ 8" In = 1255.74 (W)

STA. 40+00.00, SS LINE 4=
STA. 50+00.00, SS LINE 5=
STA. 29+38.00, SS LINE 2
MH 2-6
TOP = 1265.74
℄ 8" Out = 1256.47 (S)
℄ 8" In = 1256.57 (W)
℄ 8" In = 1256.57 (E)

℄ 61st STREET

PROPOSED GRADE
EXISTING GRADE
18" SWS
14.5 L.F. SAND FILL
FLUSH & VIBRATE
35.0 L.F. FLOWABLE FILL
8" WATER CROSSING
TOP = 1260.68

319.0 L.F. 8" PIPE
@ 0.40%
181.5 L.F. 8" PIPE
@ 0.40%

1285 1280 1275 1270 1265 1260 1255 1250 1245 1240 1235
24+30 24+50 25+00 25+50 26+00 26+50 27+00 27+50 28+00 28+50 29+00 29+50

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CITY OF WICHITA

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

SANITARY SEWER IMPROVEMENTS
SWANEY FARM ADDITION PHASE 2
PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007801

Issue:
08/18/2026 - cjr
RED LINE - FIELD SET
U:\Wichita-Civil 200605-018

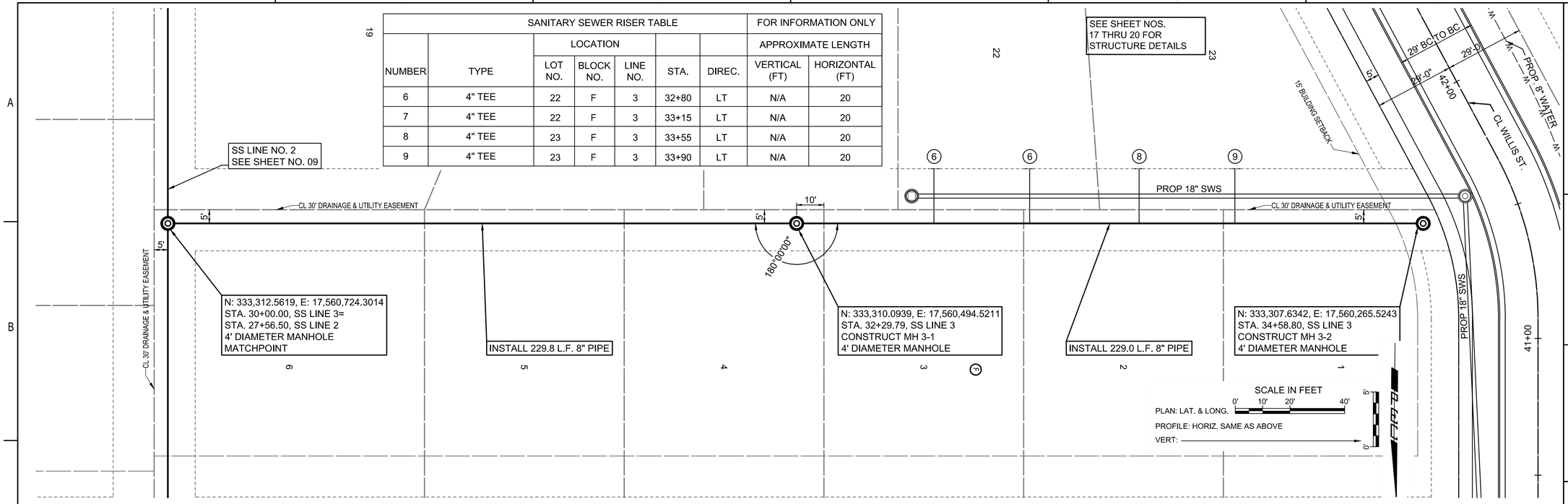
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DATE	NOVEMBER 2025
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DRAWN BY	BJS
CHECKED BY	CSB

SANITARY SEWER LINE NO. 2

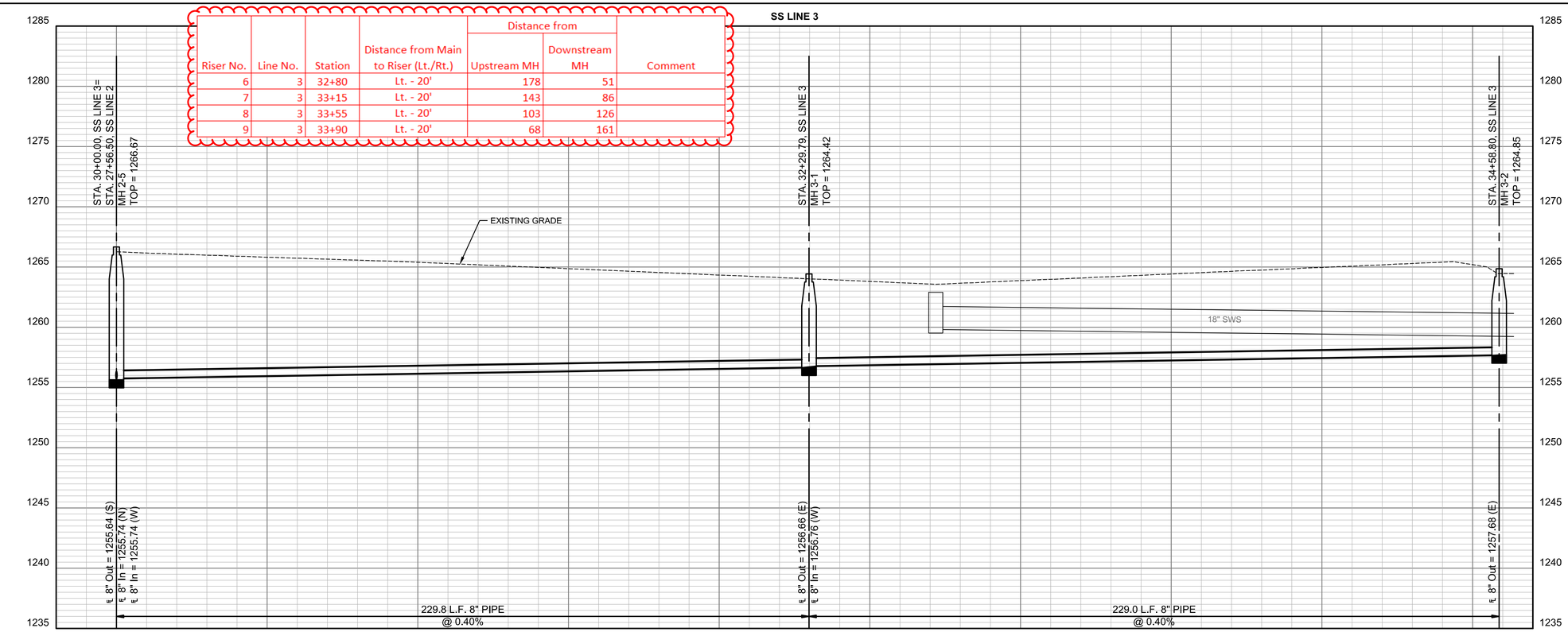
09
09 OF 26

SAVED 9/17/2025 9:37:49 AM BY KEVIN.GRAHAM
PLOTTED 11/6/2025 11:48:39 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\SAN SEWER\9-200605-010-CU105 SANITARY SEWER LINE NO. 2.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)
6	4" TEE	22	F	3	32+80	LT	N/A	20
7	4" TEE	22	F	3	33+15	LT	N/A	20
8	4" TEE	23	F	3	33+55	LT	N/A	20
9	4" TEE	23	F	3	33+90	LT	N/A	20



Riser No.	Line No.	Station	Distance from Main to Riser (Lt./Rt.)	Distance from Upstream MH	Distance from Downstream MH	Comment
6	3	32+80	Lt. - 20'	178	51	
7	3	33+15	Lt. - 20'	143	86	
8	3	33+55	Lt. - 20'	103	126	
9	3	33+90	Lt. - 20'	68	161	



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SANITARY SEWER IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007801

Issue:

08/18/2026 - cjr

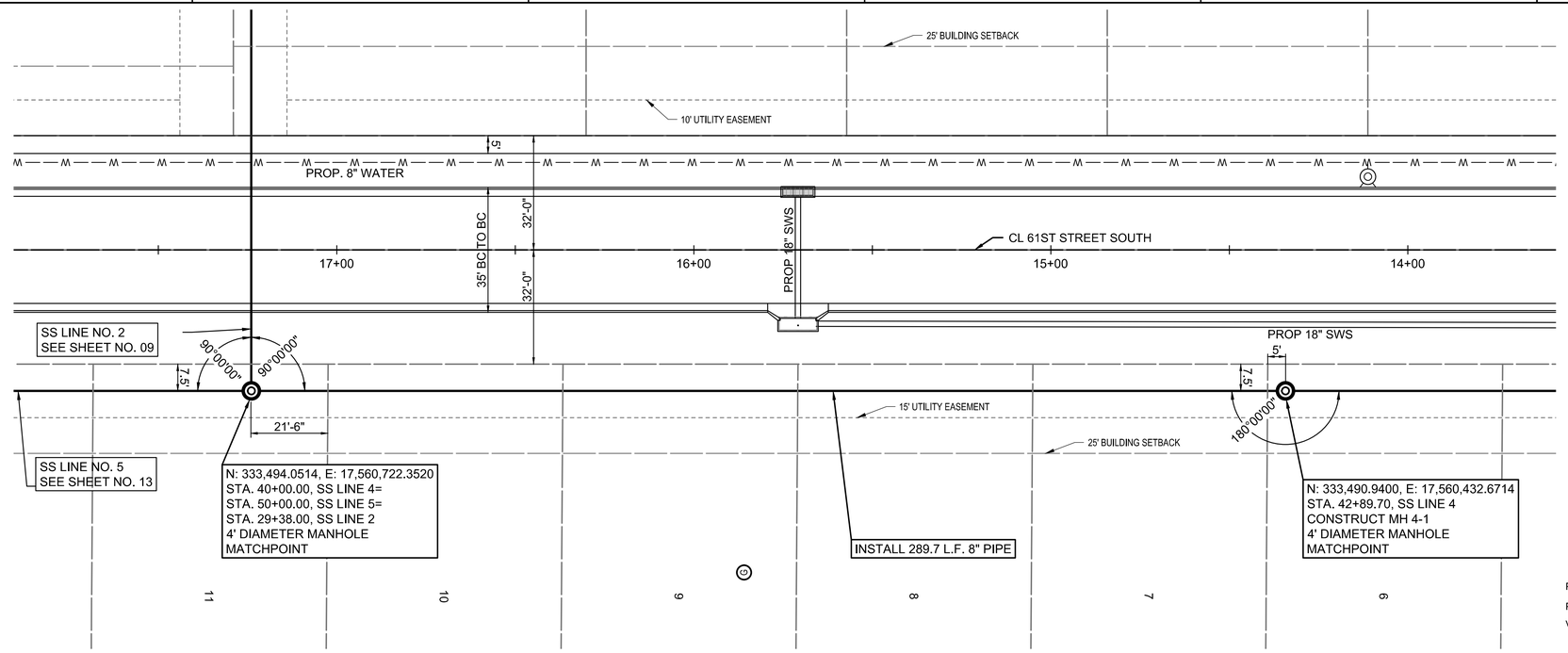
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JOB NO.	200605-010
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
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SANITARY SEWER LINE NO. 3

10
10 OF 26

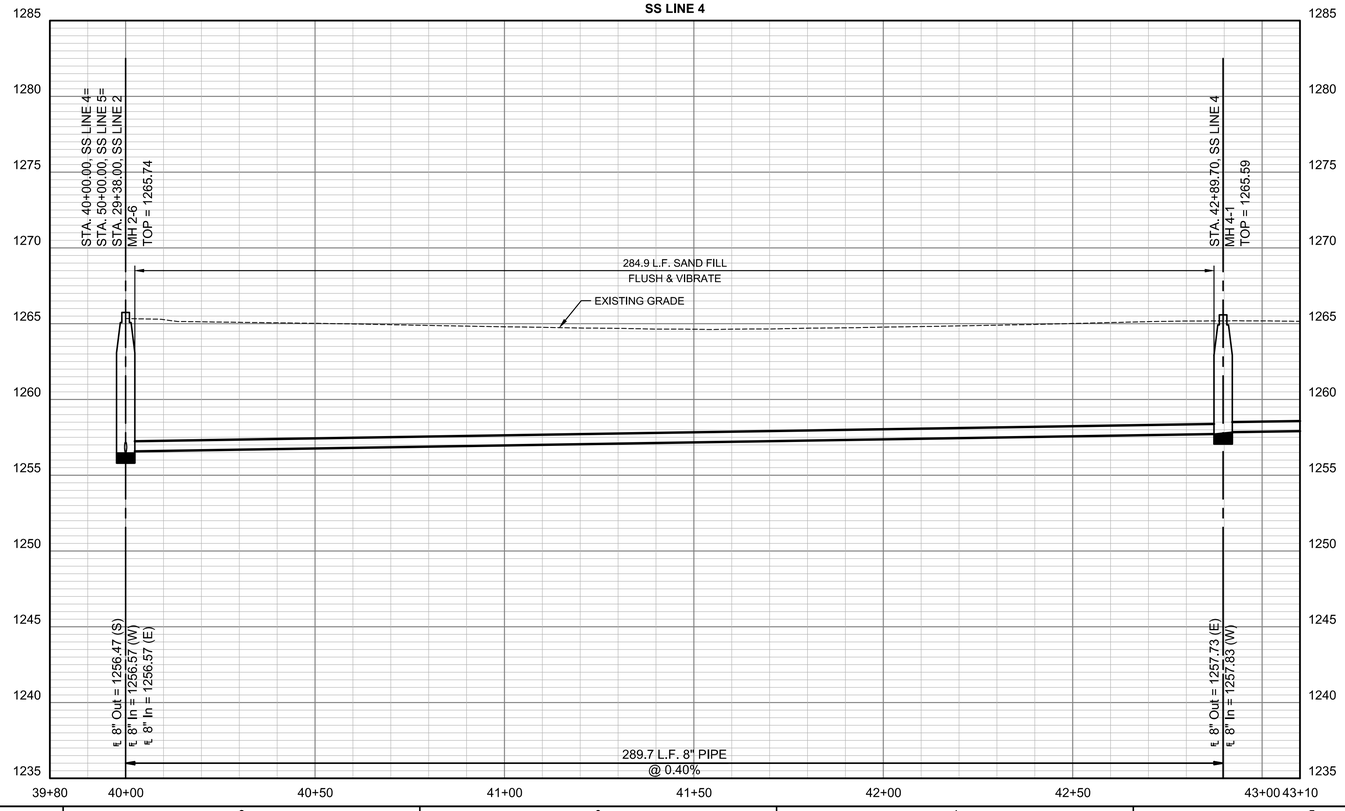
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U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\SAN SEWER\10-200605-010-CU106 SANITARY SEWER LINE NO. 3.DWG



SEE SHEET NOS. 17 THRU 20 FOR STRUCTURE DETAILS

SCALE IN FEET
0' 10' 20' 40'

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



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PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007801

Issue:		
	08/18/2026 - cjr	

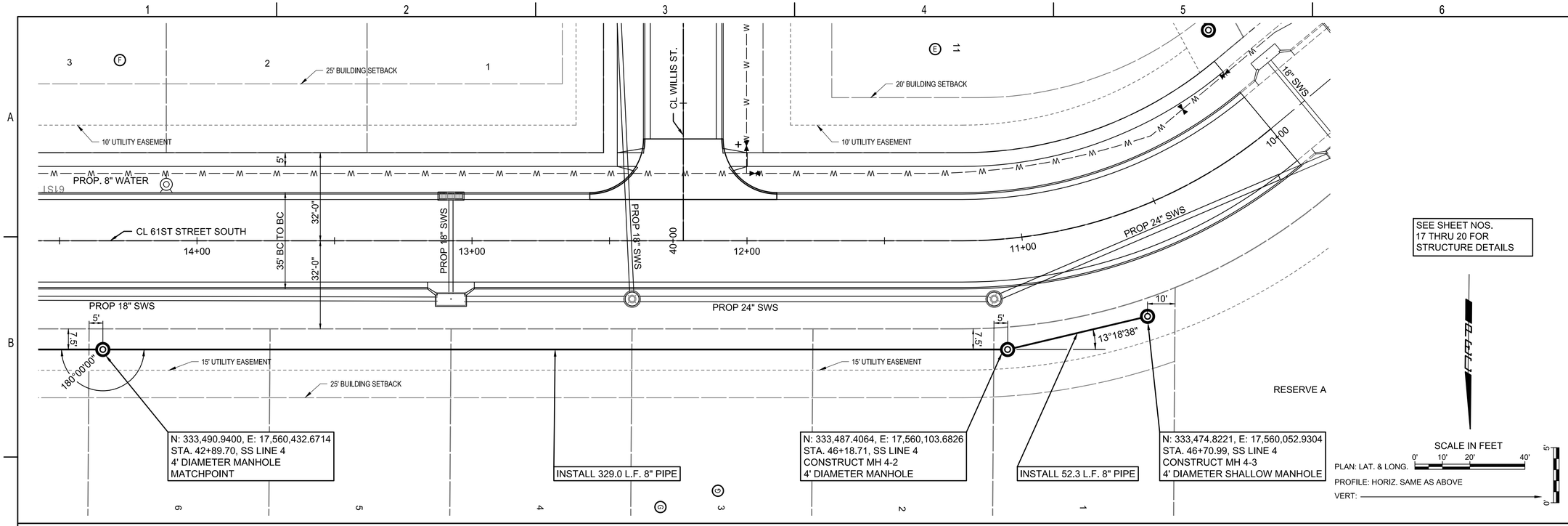
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JOB NO.	200605-010
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

SANITARY SEWER LINE NO. 4

11
11 OF 26

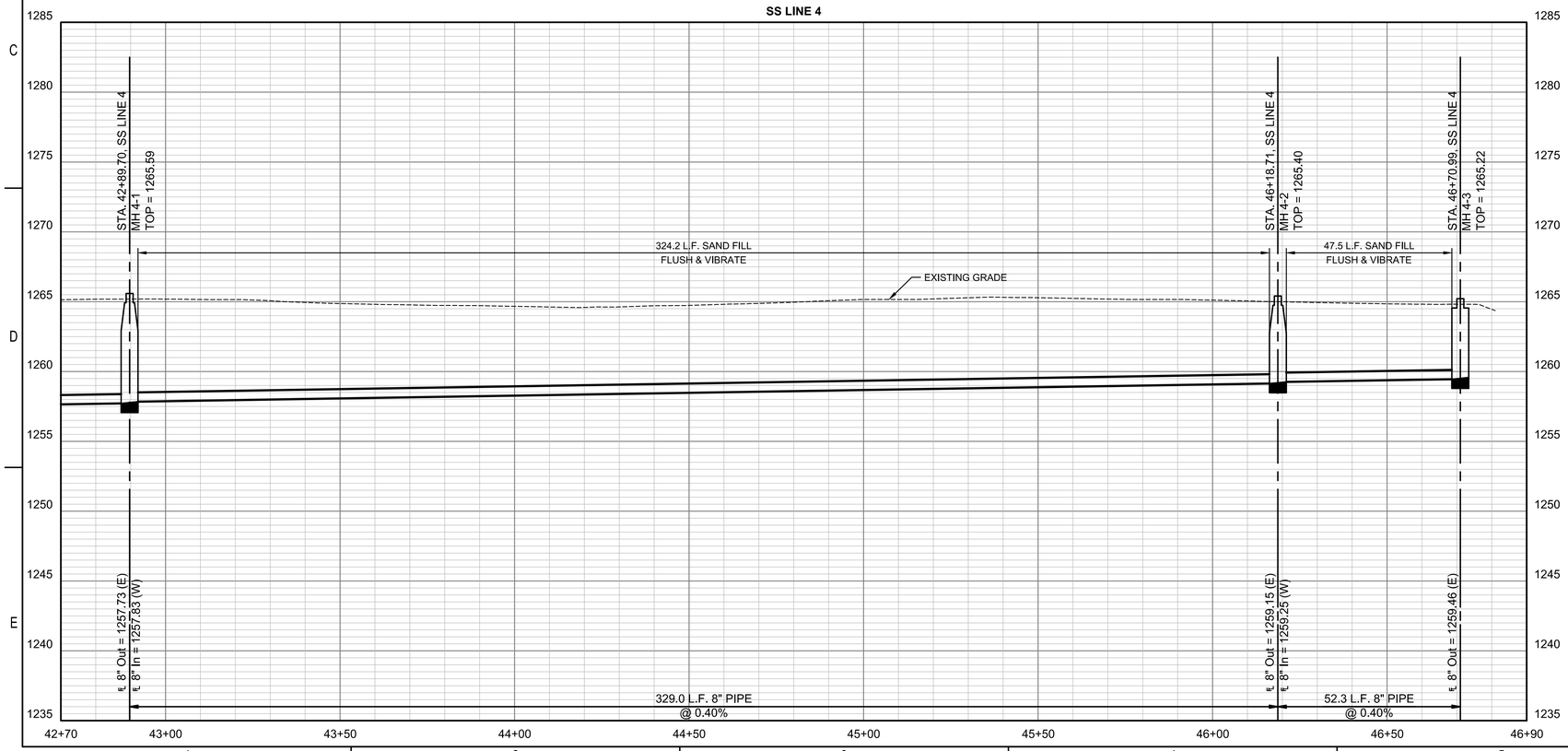
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U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\SAN SEWER\11-200605-010-CU107 SANITARY SEWER LINE NO. 4.DWG



SEE SHEET NOS. 17 THRU 20 FOR STRUCTURE DETAILS

SCALE IN FEET
0' 10' 20' 40'

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



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SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007801

Issue:		
	08/18/2026 - cjr	

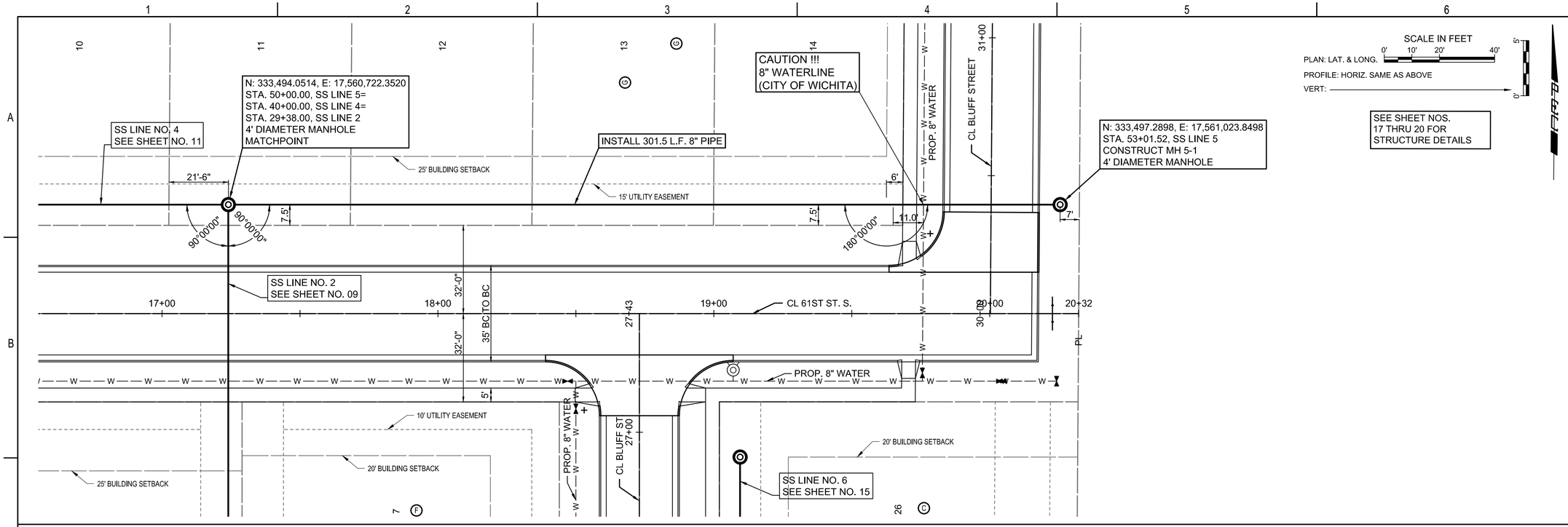
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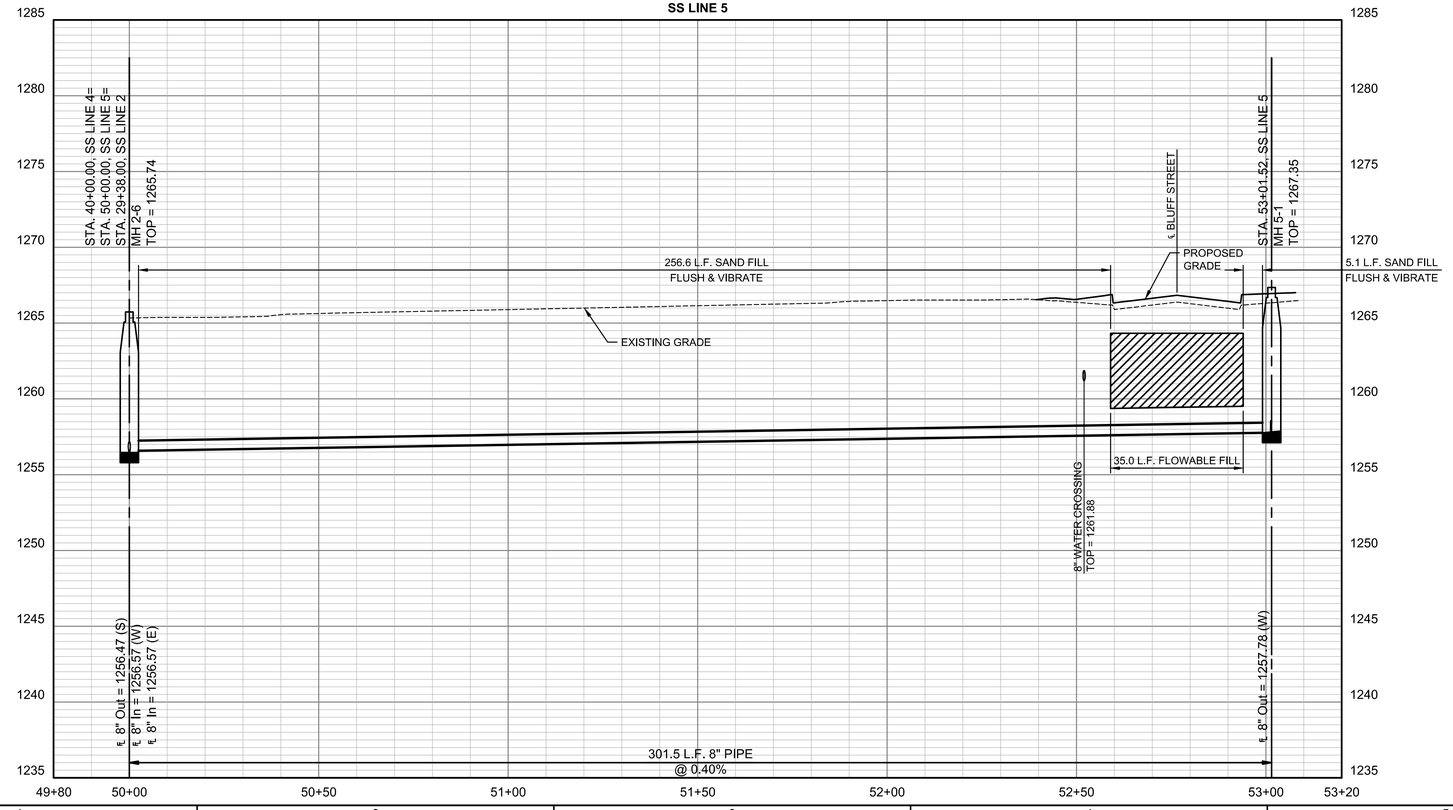
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DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

SANITARY SEWER LINE NO. 4

12
12 OF 26

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PLOTTED 11/6/2025 11:49:22 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\SAN SEWER\12-200605-010-CU108 SANITARY SEWER LINE NO. 4.DWG





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SANITARY SEWER IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007801

Issue:		
	08/18/2026 - cjr	

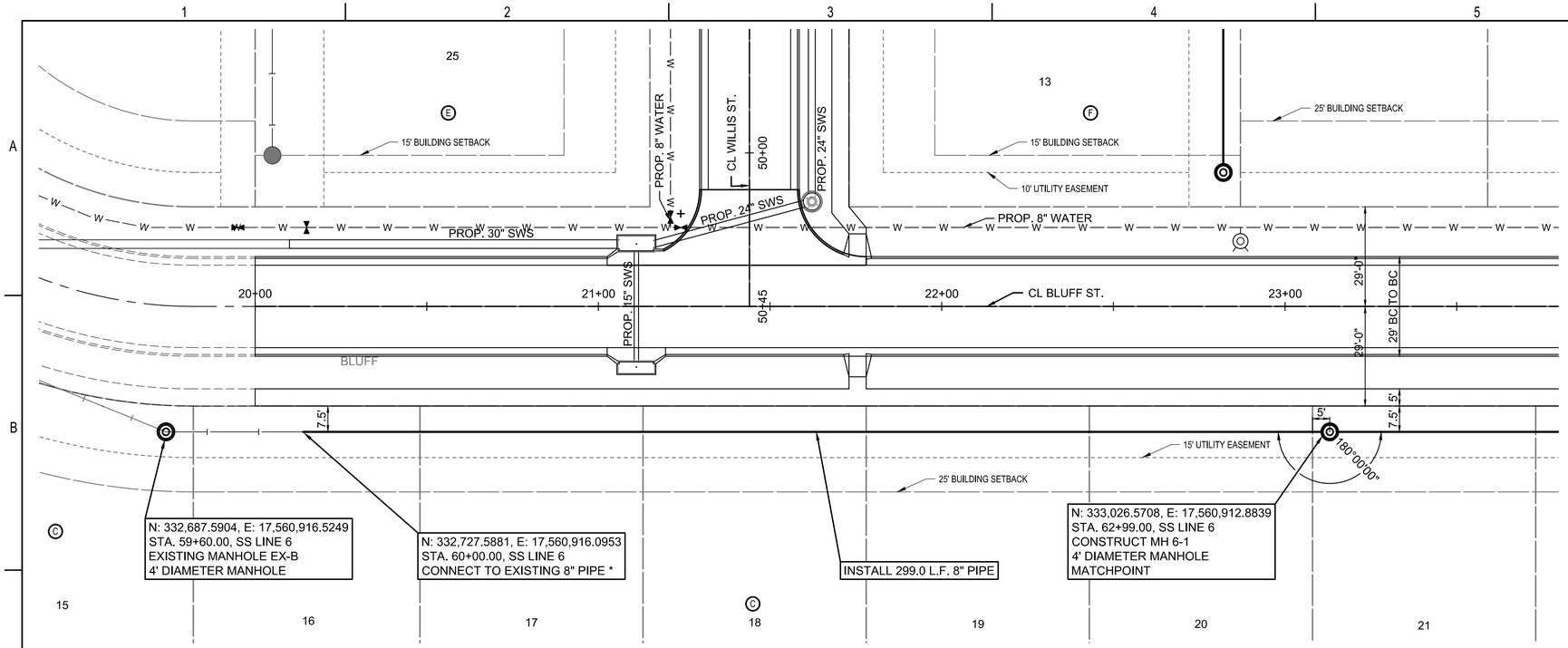
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JOB NO.	200605-010
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

SANITARY SEWER LINE NO. 5

13
13 OF 26

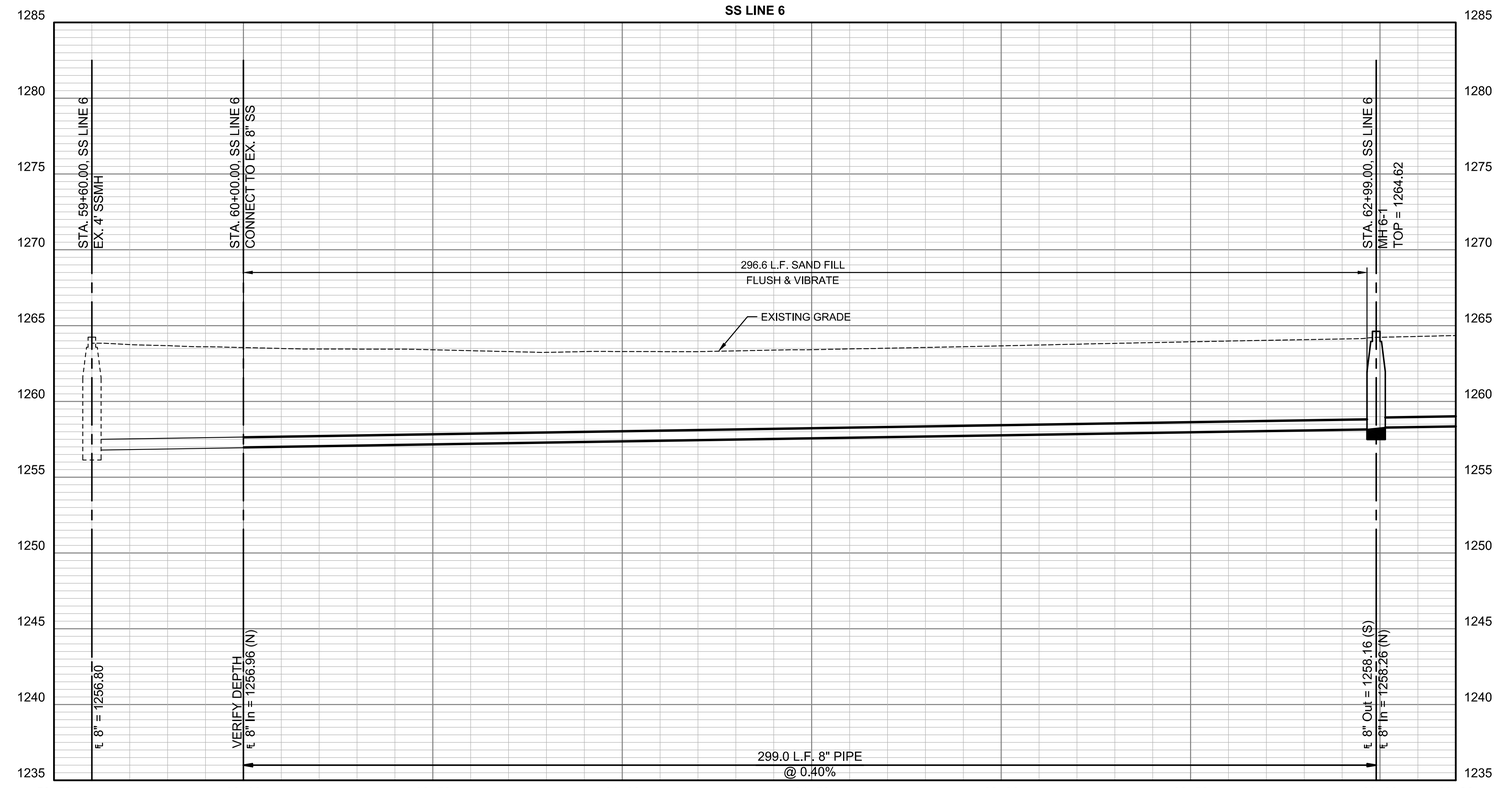
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*PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE THE EXISTING PIPE TO VERIFY PIPE SIZE, TYPE, FITTINGS, AND HORIZONTAL AND VERTICAL LOCATION. THE CONTRACTOR SHALL REPORT HIS FINDINGS TO THE ENGINEER SO THAT ANY NECESSARY PLAN MODIFICATIONS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

SEE SHEET NOS. 17 THRU 20 FOR STRUCTURE DETAILS

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



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SANITARY SEWER IMPROVEMENTS
SWANEY FARM ADDITION PHASE 2
PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007801

Issue:		
	08/18/2026 - cjr	

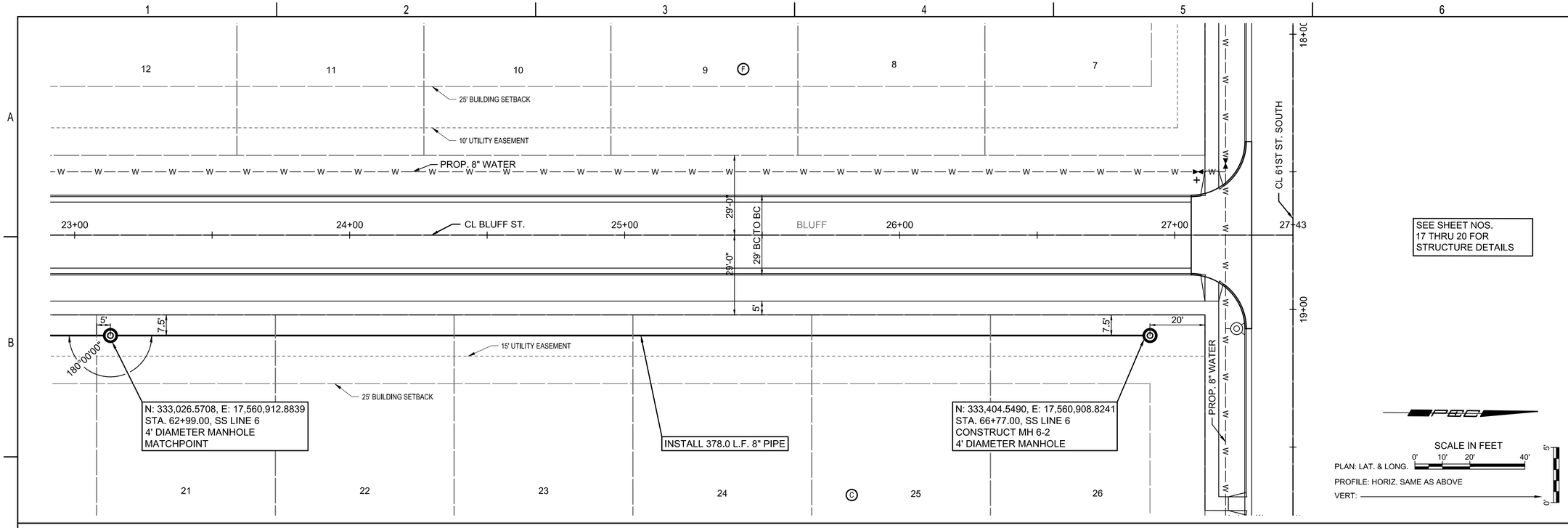
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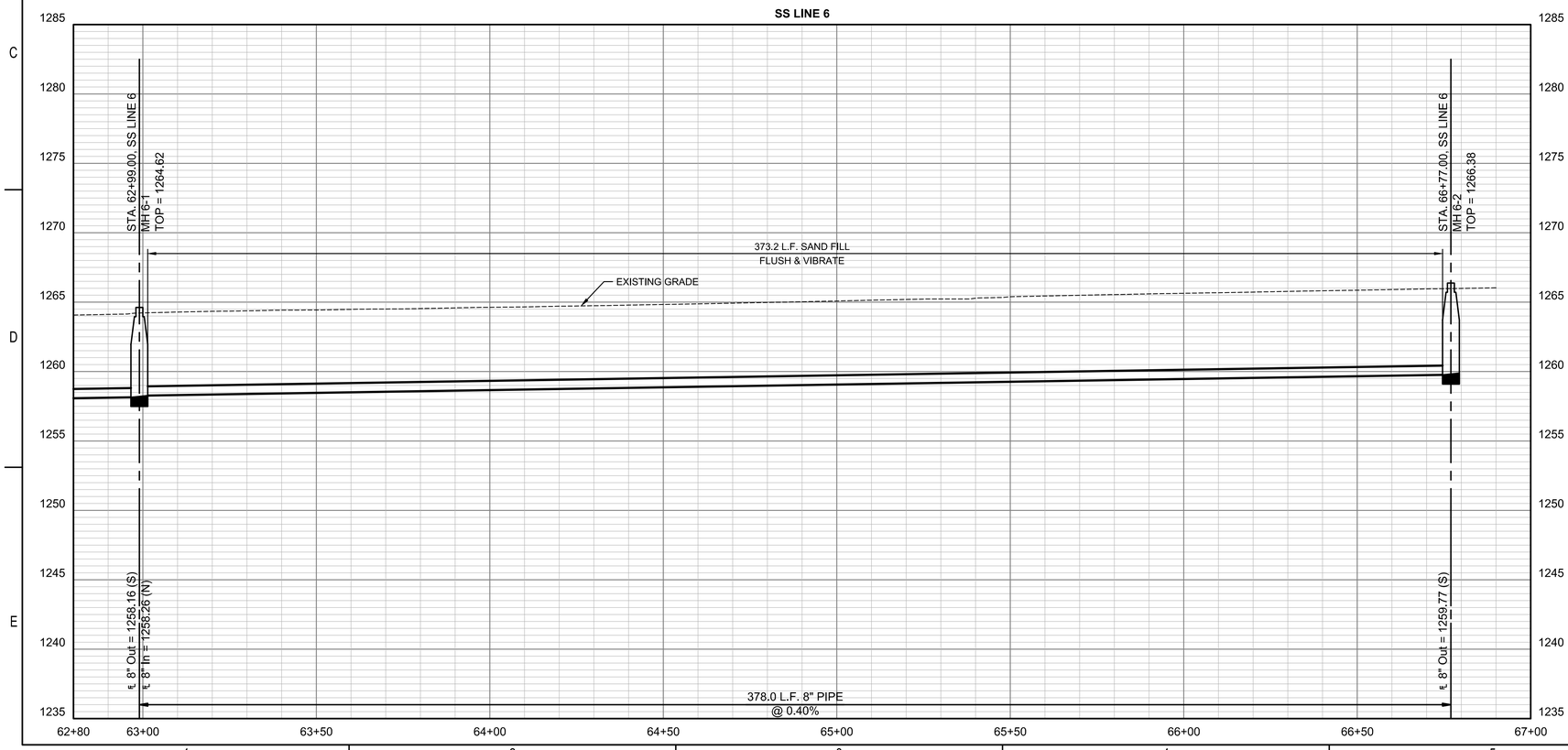
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DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

SANITARY SEWER LINE NO. 6

14
14 OF 26

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PLOTTED 11/6/2025 11:49:52 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\0091\2PD4_PLANS\030\SAN SEWER\14-200605-010-CU110 SANITARY SEWER LINE NO. 6.DWG





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27806
11/06/2025
KANSAS
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SANITARY SEWER IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-00780

Issue:		
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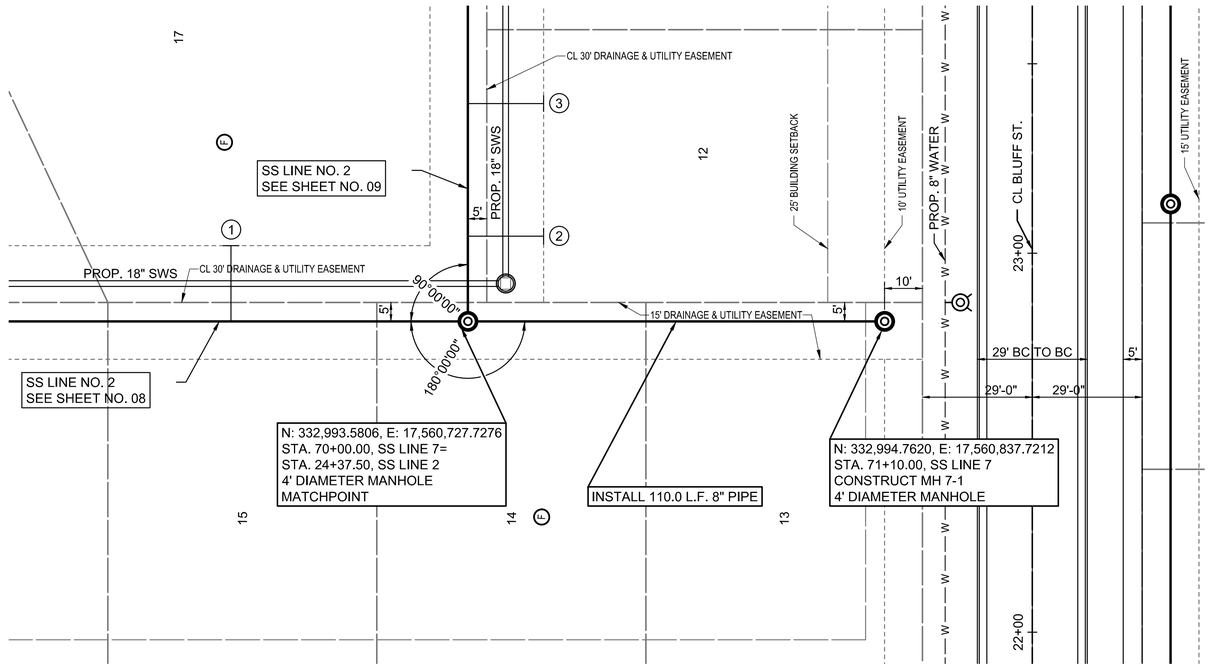
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CHECKED BY	CSB

SANITARY SEWER LINE NO. 6

15
15 OF 26

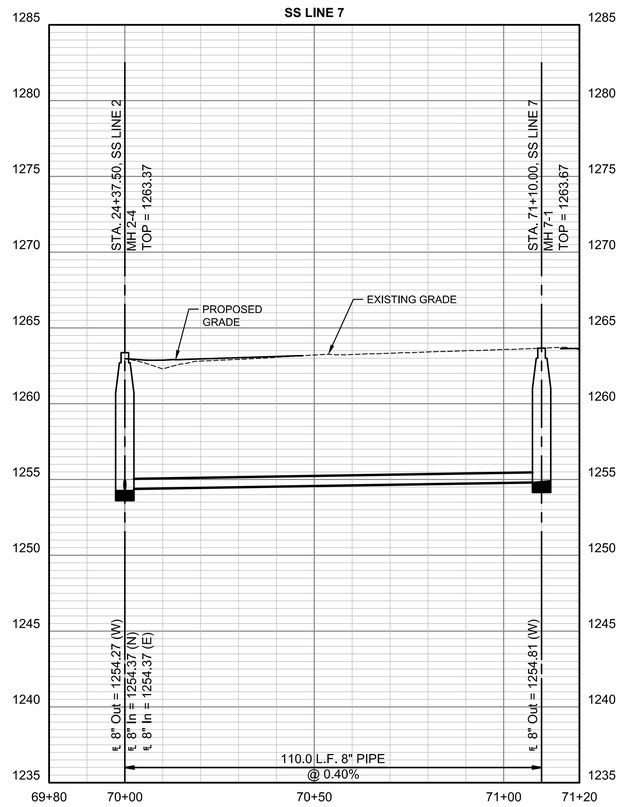
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SEE SHEET NOS. 17 THRU 20 FOR STRUCTURE DETAILS

SCALE IN FEET
0' 10' 20' 40'

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



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PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007801

Issue:		
	08/18/2026 - cjr	

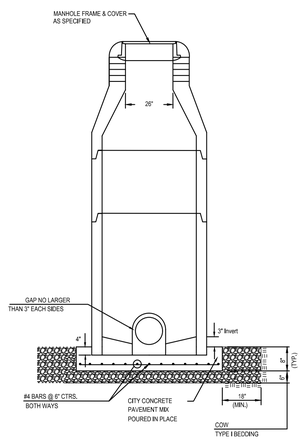
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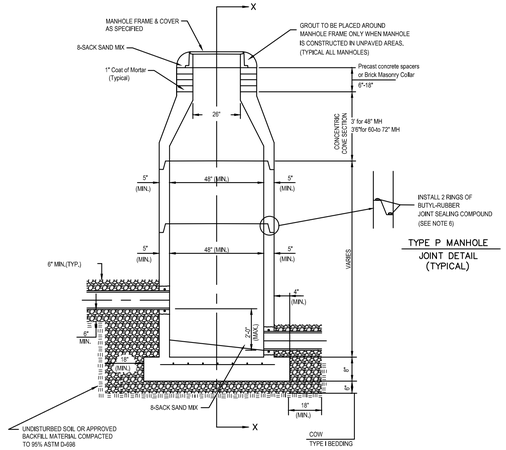
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16 OF 26

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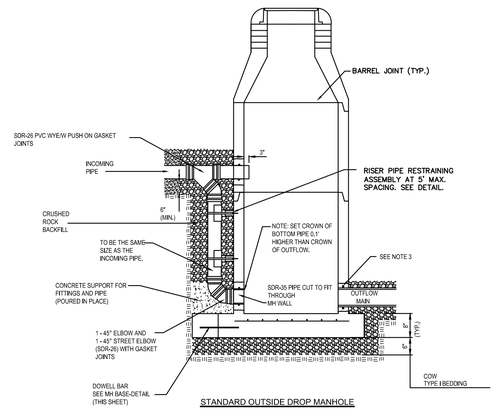


DOG HOUSE MANHOLE
(OVER EXISTING PIPE)
Not to Scale

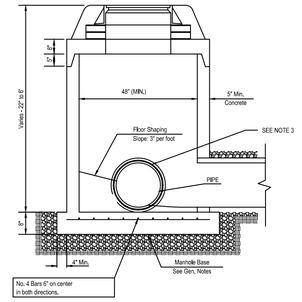


TYPE P MANHOLE
JOINT DETAIL
(TYPICAL)

STANDARD MANHOLE
Not to Scale



STANDARD OUTSIDE DROP MANHOLE
Not to Scale



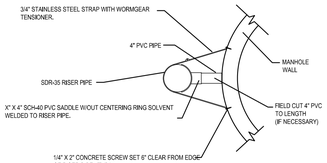
SHALLOW MANHOLE
Not to Scale

= COW TYPE I BEDDING

= UNDISTURBED SOIL

PRECAST MANHOLE GENERAL NOTES

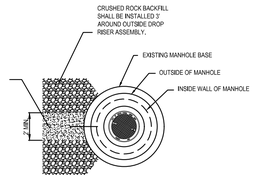
1. ALL PRECAST CONCRETE MANHOLE SECTIONS SHALL CONFORM TO THE LATEST REVISIONS OF A.S.T.M. C478 AS MODIFIED BY THE SPECIFICATIONS.
2. NON-SHRINK GROUT SHALL BE NON-METALLIC TYPE.
3. APPROVED FLEXIBLE WATERSTOP SHALL BE INSTALLED TO JOIN THE SEWER PIPE TO THE MANHOLE WALL. THE SEWER PIPE SHALL BE SUPPORTED 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.



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"



BASE FOR OUTSIDE DROP MH DOWELLED TO EXISTING MH BASE USING #5 BAR, EPOXY GROUTED 12" INTO EXISTING MH BASE AND 12" INTO OUTSIDE DROP BASE.

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
468-2024-007801	———	

CITY ENGINEER'S OFFICE
CITY HALL - SEVENTH FLOOR
455 NORTH MAIN STREET
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(316) 268-4501

SHEET
17 of 26

SS-101

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WICHITA, KS 67202
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CITY OF WICHITA

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

SANITARY SEWER IMPROVEMENTS
SWANEY FARM ADDITION PHASE 2
PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007801

Issue:		
	08/18/2026 - cjr	

RED LINE - FIELD SET PEC
U:\Wichita-Civil 200605-018

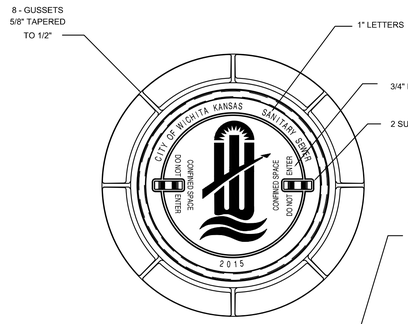
JOB NO.	200605-010
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

PRECAST SANITARY SEWER MANHOLE

17
17 OF 26

Saved: 06-24-2025, 10:45:20 AM by BILL.SEXSON
Plot: Scale 1:1 11-06-2025 11:50:28 AM by KEVIN.GRAHAM
U:\Wichita-Civil\2020\200605\009\2PD4_Plans\030\SAN SEWER\17-200605-010-CU501 PRECAST SANITARY SEWER MANHOLE

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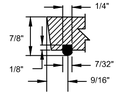


STANDARD MANHOLE FRAME & COVER

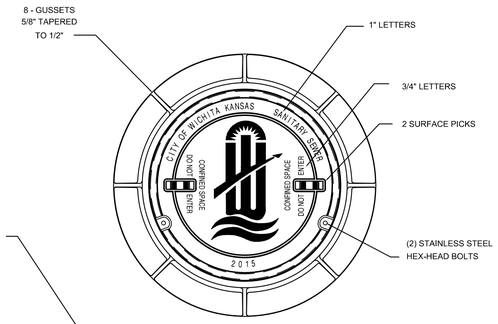
DEETER #1261 OR EJIW #1936-Z1

NOTE:

1. FURNISHED WITH MACHINED HORIZONTAL BEARING SURFACE.



O-RING DETAIL

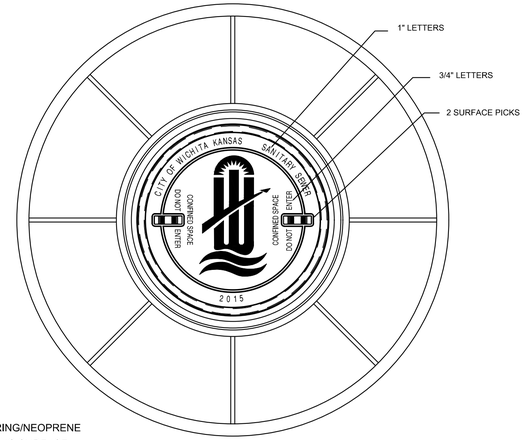


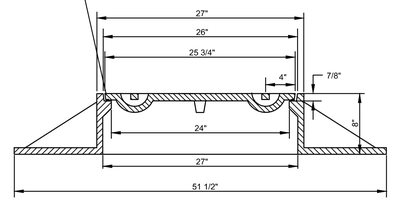
BOLT DOWN MANHOLE FRAME & COVER

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 CIRCUMFERENCE 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
468-2024-007801	———	

CITY ENGINEER'S OFFICE
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455 NORTH MAIN STREET
WICHITA, KANSAS 67202-1620
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18 of 26

SS-102

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Plot Scale: 1:1 - 06-2025 11:50:34 AM by KEVIN GRAHAM
U:\Wichita-Civil\2020\200605\009\2PD4_Plans\GA\SAN SEWER\18-200605-010-CU502 MANHOLE FRAME AND COVER (SS)

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CITY OF WICHITA

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

SANITARY SEWER IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007801

Issue:		
	08/18/2026 - cjr	

RED LINE - FIELD SET PEC
U:\Wichita-Civil 200605-018

JOB NO.	200605-010
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

MANHOLE FRAME AND COVER (SS)

18
18 OF 26

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 Standare 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 pie 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.

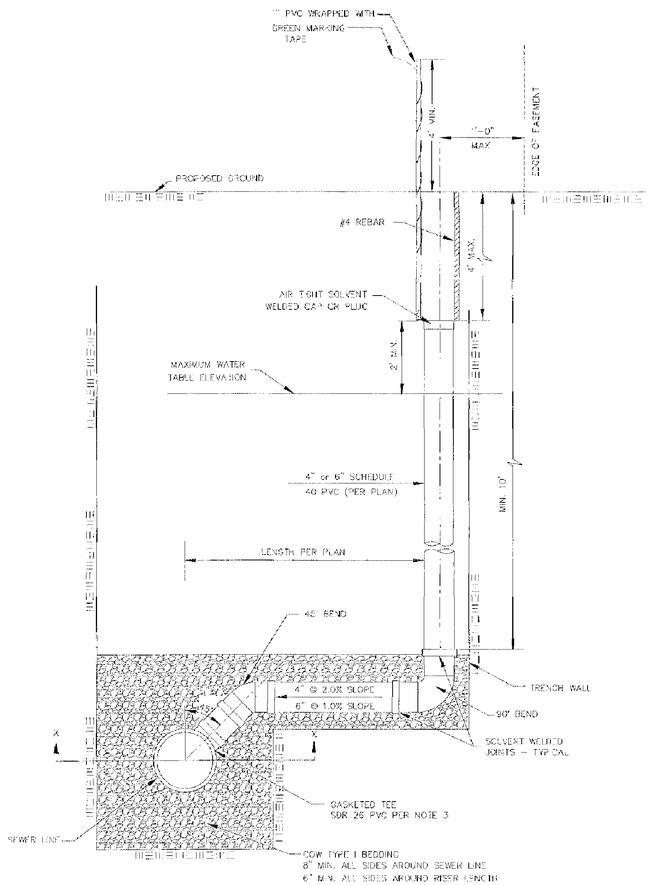
10. MARKING. Locations of the ends of the sanitary sewer riser pipe shall be marked by installing 1" PVC from the top of the riser to a minimum of 4' above the top of finished grade. No. 4 rebar shall be placed centered over the riser from the cap to the existing ground. The 1" PVC pipe shall be wrapped 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, Vertica " 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.

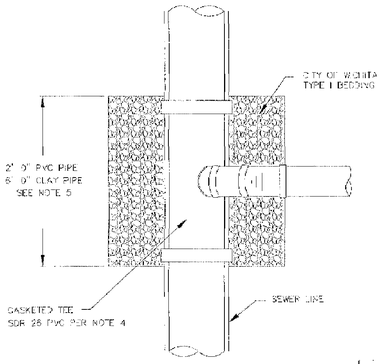
"Riser Assembly, Manhole Stub" shall be paid for at the contract unit price per each, which shall be full compensation for all labor material and incidentals necessary to complete the work including all pipe, fittings, rock encasement, and all other items as required and listed for "Riser Assembly, Vertica "



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	DOC. NUMBER	DATE
468-2024-007801		

CITY ENGINEER'S OFFICE
CITY HALL - SEVENTH FLOOR
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Plot: Scale - 1:1 11-06-2025 11:50:40 AM by KEVIN GRAHAM
U:\Wichita-Civil\2020\200605\009\2PD4_Plans\030\SAN SEWER\19-200605-010-CU503 VERTICAL RISER ASSEMBLY SEWER DETAILS

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CITY OF WICHITA

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

SANITARY SEWER IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007801

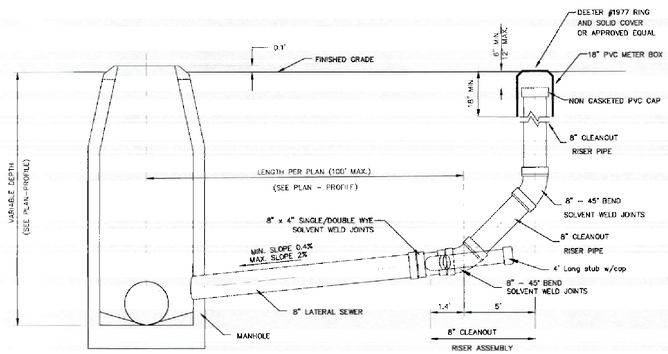
Issue:		
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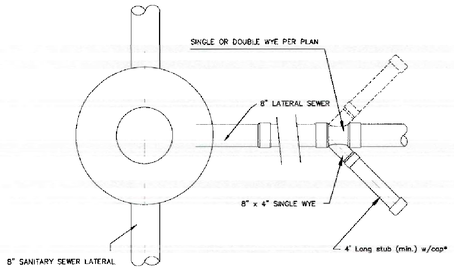
RED LINE - FIELD SET PEC
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JOB NO.	200605-010
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VERTICAL RISER ASSEMBLY SEWER DETAILS

19
19 OF 26





* 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.

CLEANOUT RISER ASSEMBLY DETAIL
W/ MANHOLE CONNECTION

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 PROFESSIONAL ENGINEER KANSAS
04/30/13

CITY OF WICHITA
PUBLIC WORKS & UTILITIES ENGINEERING DIVISION

CLEANOUT RISER ASSEMBLY DETAIL
CITY ENGINEER: GARY JANZEN, P.E.
PROJECT NUMBER: 468-2024-007801
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: 20 of 26

SS-104

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CITY OF WICHITA

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

SANITARY SEWER IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007801

Issue:		
	08/18/2026 - cjr	

RED LINE - FIELD SET PEC
U:\Wichita-Civil 200605-018

JOB NO.	200605-010
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PM	KPG
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CLEANOUT RISER ASSEMBLY DETAILS

20
20 OF 26

SILT FENCE PROTECTION
SEE SHEET NOS. 23 AND 24

STABILIZED CONSTRUCTION ENTRANCE
SEE SHEET NO. 22

QUANTITIES ARE PROVIDED FOR INFORMATION ONLY.

PAVING AND DRAINAGE-COW PROJ. NO. 472-2024-086027

CURB INLET PROTECTION	10 EACH
BACKYARD INLET PROTECTION	7 EACH
BACK OF CURB PROTECTION	6,069 L.F.
LIGHT STONE RIPRAP	27 S.Y.
DITCH CHECK PROTECTION	15 EACH
SILT FENCE PROTECTION	914 L.F.

WATER-COW PROJ. NO. 448-2024-007799

STABILIZED CONSTRUCTION ENTRANCE	1 EACH

GENERAL NOTES

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

EROSION CONTROL LEGEND

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

SAVED 9/17/2025 12:41:26 PM BY KEVIN.GRAHAM
PLOTTED 11/6/2025 11:51:14 AM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\SAN SEWER\21-200605-010-CU505 EROSION CONTROL PLAN.DWG

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WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

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

SANITARY SEWER IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007801

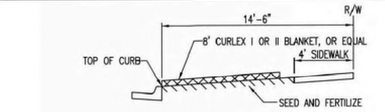
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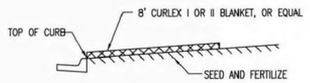
JOB NO.	200605-010
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

EROSION CONTROL PLAN

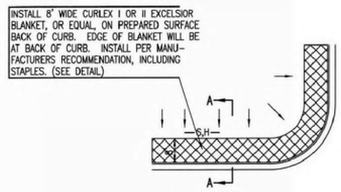
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SECTION B–B



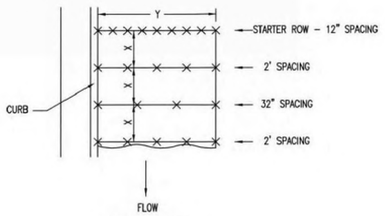
SECTION A–A

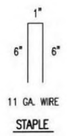


GENERAL NOTES

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



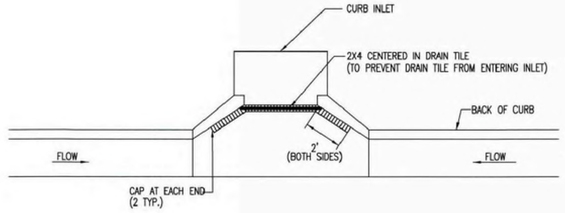


STAPLE

STAPLE PATTERN

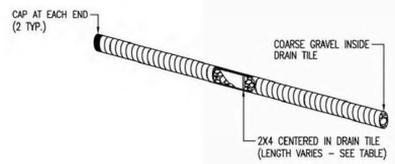
NOTES: USE 6" SEAM OVERLAP
(X & Y = RECOMMENDED BY MANUFACTURE)

DETAILS FOR APPROVED EROSION CONTROL MAT

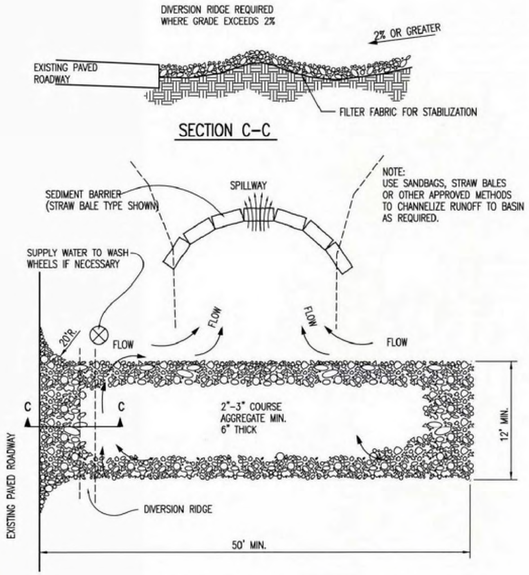


NOTE:
PLACE 4" PERFORATED PVC PIPE, FILLED WITH 1/2"-1" DIA. GRAVEL, IN FRONT OF CURB INLET AS SHOWN.

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 — REGISTERED 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
468-2024-007801		

CITY ENGINEER'S OFFICE
CITY HALL - SEVENTH FLOOR
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SW-501

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CITY OF WICHITA

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

SANITARY SEWER IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007801

Issue:		
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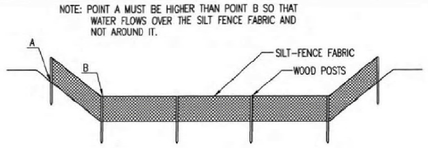
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DRAWN BY	BJS
CHECKED BY	CSB

BACK OF CURB AND CURB INLET PROTECTION

22
22 OF 26

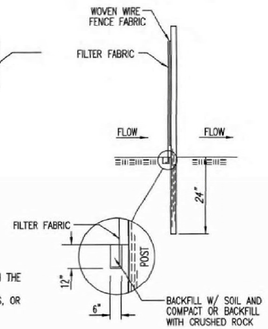
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ELEVATION

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

PROPER INSTALLATION METHOD:

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

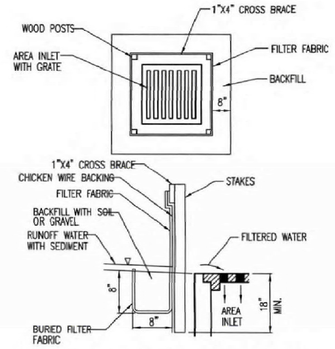
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

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

INSPECTION AND MAINTENANCE:

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

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



SILT FENCE BARRIERS FOR AREA INLETS
(INLET PROTECTION)

MATERIAL SPECIFICATION:

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

PLACEMENT:

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

PROPER INSTALLATION METHOD:

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

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

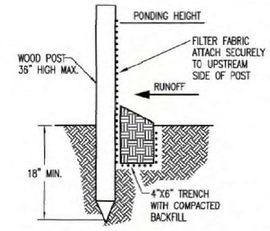
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

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

INSPECTION AND MAINTENANCE:

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

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



SILT FENCE BARRIERS

MATERIAL SPECIFICATION:

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

PLACEMENT:

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

PROPER INSTALLATION METHOD:

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

LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

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

INSPECTION AND MAINTENANCE:

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

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

REVISION DATE: MAY 2013

GARY L. JANZEN LICENSED PROFESSIONAL ENGINEER KANSAS 15243 05/31/25

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
468-2024-007801	____	

CITY ENGINEER'S OFFICE
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SANITARY SEWER IMPROVEMENTS
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RED LINE - FIELD SET PEC
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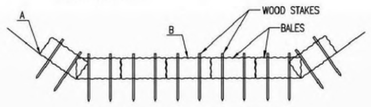
JOB NO.	200605-010
DATE	NOVEMBER 2025
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DESIGNED BY	KPG
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CHECKED BY	CSB

SILT FENCE DITCH CHECK

23
23 OF 26

Saved: 06-24-2025, 10:49:35 AM by BILL.SEXSON
Plotted: 11-6-2025, 11:51:24 AM by KEVIN GRAHAM
U:\Wichita-Civil\2020\200605\009\2PD4_Plans\030\SAN SEWER\23-200605-010-CU507 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 (%)	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 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".

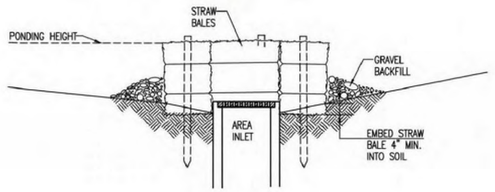
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

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.

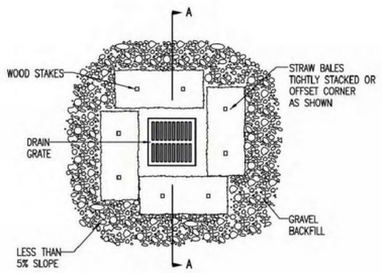
INSPECTION AND MAINTENANCE:

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.

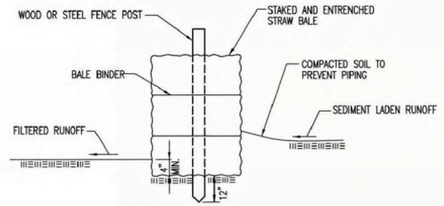
LIST OF COMMON PLACEMENT INSTALLATION MISTAKES TO AVOID:

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 ENGINEER 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
468-2024-007801		

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

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SW-503

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CITY OF WICHITA

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

SANITARY SEWER IMPROVEMENTS
SWANEY FARM ADDITION PHASE 2
PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007801

Issue:		
	08/18/2026 - cjr	

RED LINE - FIELD SET PEC
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JOB NO.	200605-010
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DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

STRAW BALE DITCH CHECK

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24 OF 26

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.

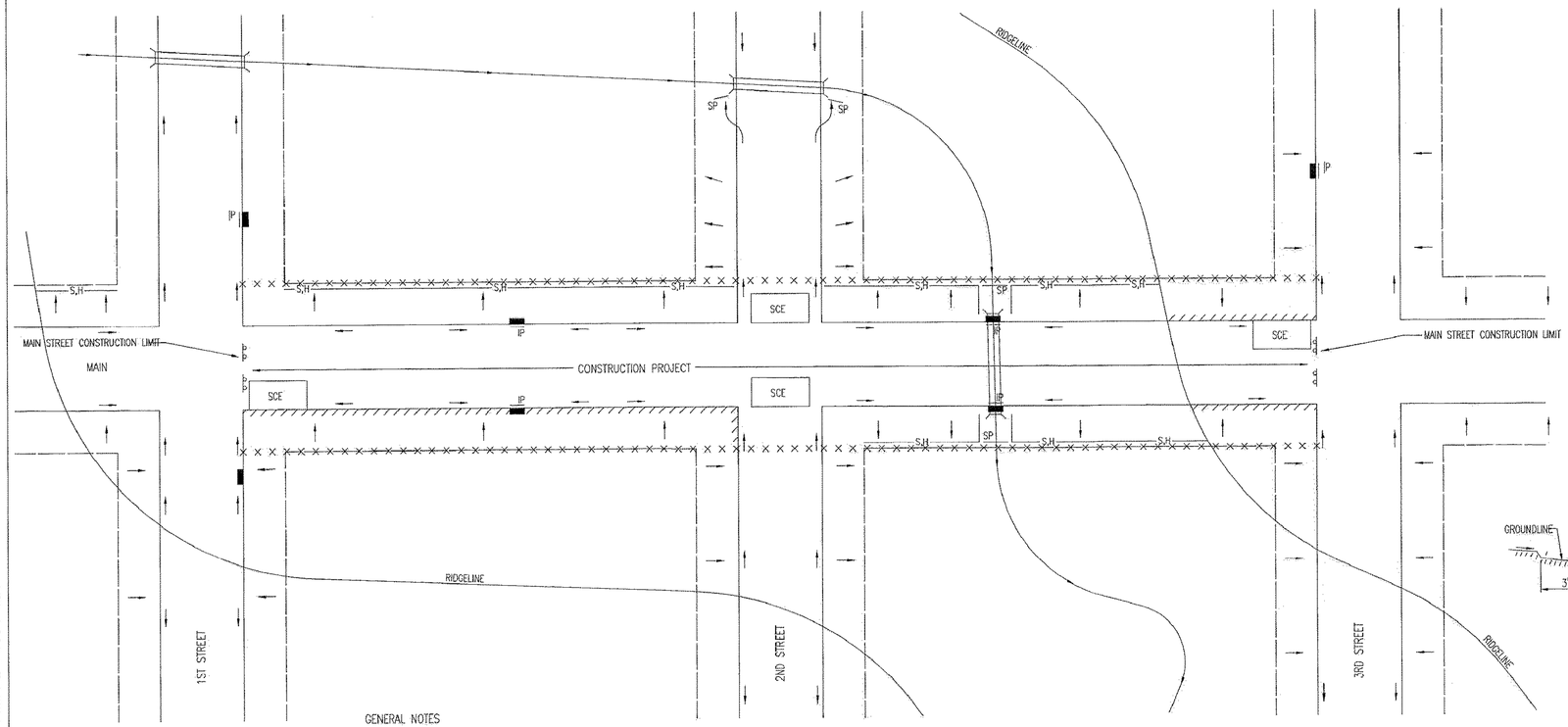
2. EROSION CONTROL DEVICES MUST BE MAINTAINED BY THE CONTRACTOR THROUGHOUT THE CONSTRUCTION PROCESS AND UNTIL THE DISTURBED EARTH IS RESTABILIZED.

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.



GROUNDLINE
> 3"–NO BACK OF CURB EROSION CONTROL DEVICE REQUIRED
≤ 3"–EROSION CONTROL DEVICE REQUIRED THIS DEPRESSION MUST BE MAINTAINED.
3" MIN.

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 — REGISTERED — 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
468-2024-007801		

CITY ENGINEER'S OFFICE
CITY HALL - SEVENTH FLOOR
455 NORTH MAIN STREET
WICHITA, KANSAS 67202-1620
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SHEET
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SW-504

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CITY OF WICHITA

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

SANITARY SEWER IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007801

Issue:		
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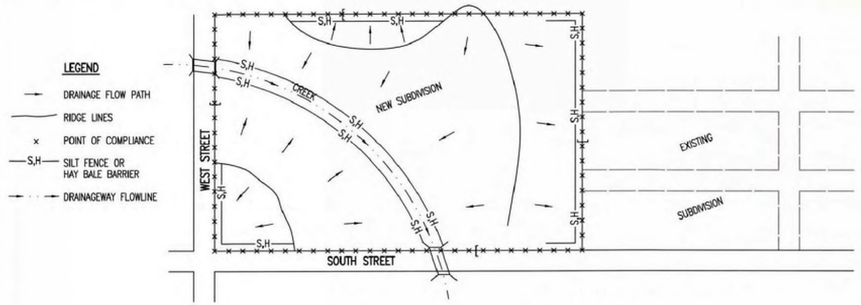
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STREET IMPROVEMENTS PROJECTS

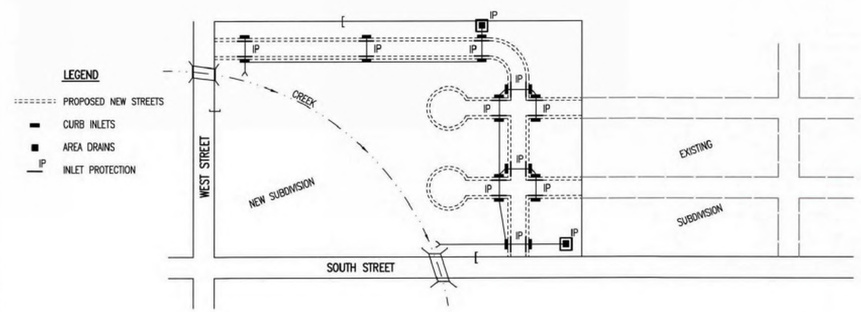
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PHASE 1 – INITIAL EARTHWORK AND UTILITIES (EXCEPT STORM SEWER)



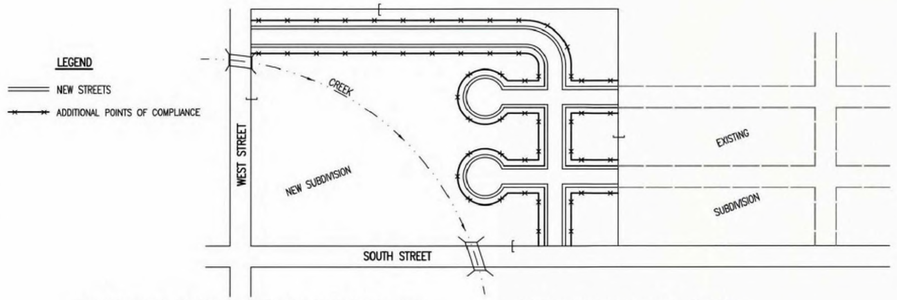
1. DURING THIS PHASE OF SUBDIVISION CONSTRUCTION, THE POINTS OF COMPLIANCE ARE THE PERIMETER BOUNDARIES AND ANY DRAINAGE WAYS OR STORM SEWERS DRAINING THROUGH OR FROM THE SITE. SHOULD LAKES BE CONSTRUCTED WITHIN THE SUBDIVISION THAT WILL DISCHARGE DURING STORMS, THEY ARE ALSO A POINT OF COMPLIANCE.
2.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

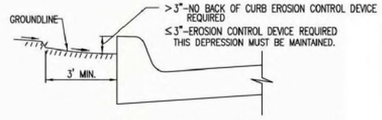


1. DURING THIS PHASE OF SUBDIVISION CONSTRUCTION, NEW STREETS ARE INSTALLED. ALL EROSION CONTROL DEVICES INSTALLED DURING PHASE 1 AND 2 MUST STILL BE MAINTAINED. THE POINT OF COMPLIANCE NOW SHIFTS TO THE BACK OF CURB ALONG EACH STREET.
2. CURB OPENING INLET PROTECTION:
   A. SUMP AREAS – INLET PROTECTION 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 SUBDIVSIONS 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 — 12.13

CITY OF WICHITA
PUBLIC WORKS & UTILITIES ENGINEERING DIVISION

SUBDIVISION DEVELOPMENT PROCESS

CITY ENGINEER: GARY JANZEN, P.E.

PROJECT NUMBER	OCA NUMBER	DATE
468-2024-007801	____	

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

SHEET: 26 of 26

SW-505

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CITY OF WICHITA

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

SANITARY SEWER IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-2024-007801

Issue:		
	08/18/2026 - cjr	

RED LINE - FIELD SET PEC
U:\Wichita-Civil 200605-018

JOB NO.	200605-010
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

SUBDIVISON DEVELOPMENT PROCESS

26
26 OF 26

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CONSTRUCTION PLANS FOR PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

TO SERVE

SWANEY FARM ADDITION-PHASE 2

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

CITY OF WICHITA, KS

PAUL GUNZELMAN, P.E. - CITY ENGINEER

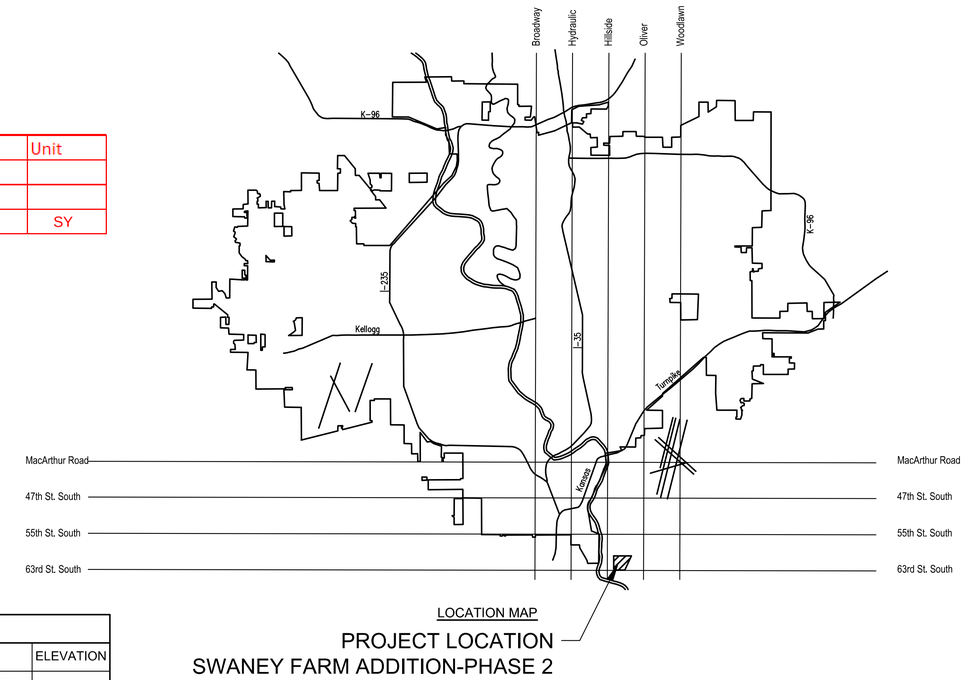
RED LINE - FIELD SET

INSPECTOR	PEC	TIGER WILLIAMS
	PEC	BRANDON DELANEY
CONTRACTOR	APAC	GARY HELMERS
	APAC	ETHAN BEIMER
CLIENT	CITY OF WICHITA	EVER VILLALOBOS

Item	Manufacturer	Qty	Unit
Concrete	Pearson Mix WE4013		
Asphalt Base Course	APAC BM-4 COW 35% RAP		
Asphalt Surface Course	APAC SC-1 15% RAP WM	9129	SY

DEVELOPER CONTACT

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



LOCATION MAP

PROJECT LOCATION
SWANEY FARM ADDITION-PHASE 2

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

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

NOVEMBER 2025

Sheet List Table

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

RED LINE - FIELD SET 08/18/2026 - cjr
Prepared By: TIGER WILLIAMS
BRANDON DELANEY
Date: AUGUST 2026 PEC

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CITY OF WICHITA

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

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS
SWANEY FARM ADDITION PHASE 2
PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

Issue:		

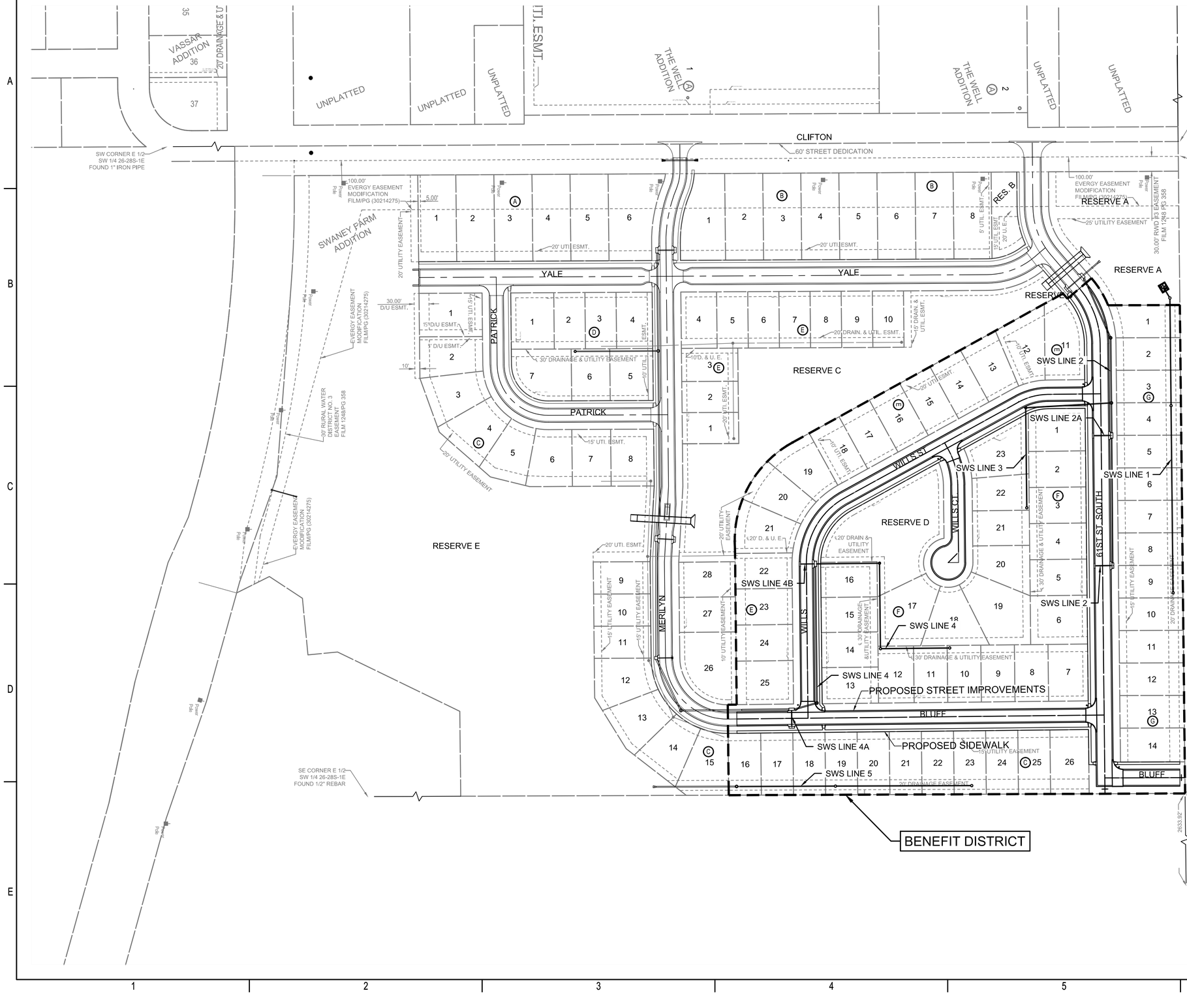
RED LINE - FIELD SET PEC
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JOB NO.	200605-009
DATE	NOVEMBER 2025
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DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

TITLE SHEET

CP001
1 OF 69

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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

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CITY OF WICHITA

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SWANEY FARM ADDITION PHASE 2

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

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U:\Wichita-Civil 200605-018

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DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

HORIZONTAL & VERTICAL CONTROL AND KEY MAP

CP002
2 OF 69

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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.

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PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

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

Issue:		
	08/18/2026 - cjr	

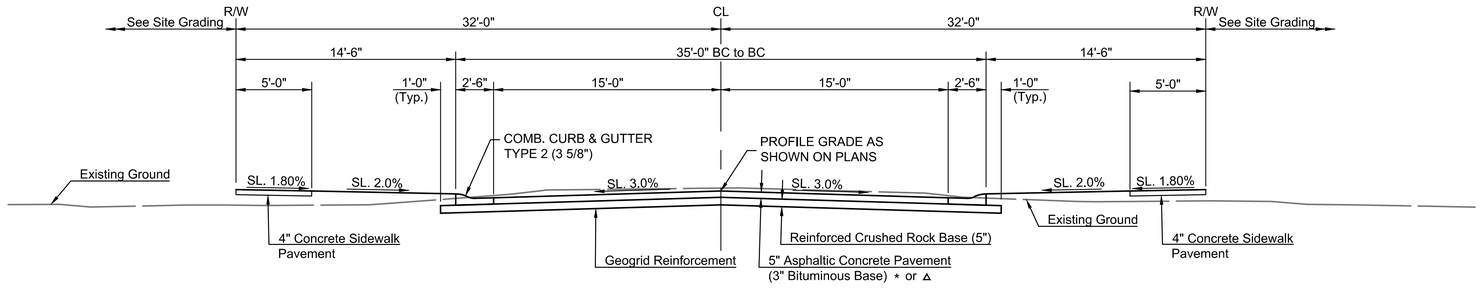
RED LINE - FIELD SET PEC
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JOB NO.	200605-009
DATE	NOVEMBER 2025
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GENERAL NOTES

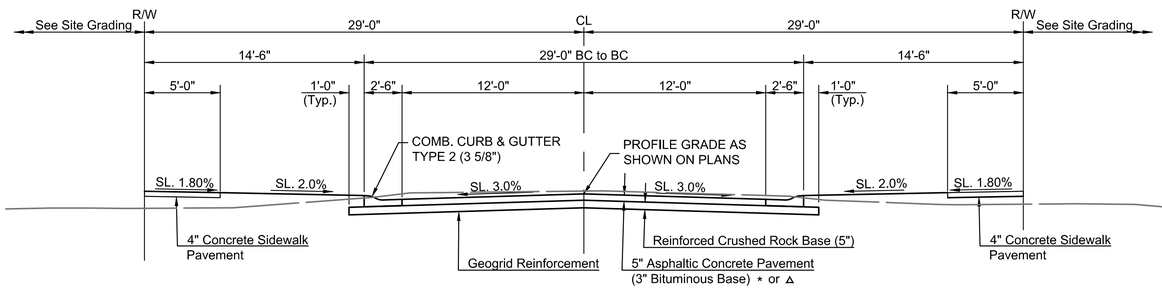
CP003
3 OF 69

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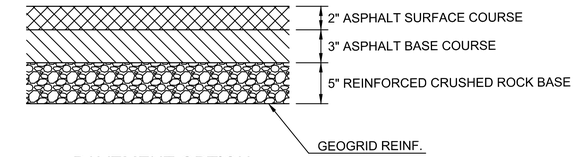
TYPICAL SECTION

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



TYPICAL SECTION

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



PAVEMENT OPTION
ASPHALTIC CONCRETE PAVEMENT

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

NO SHRINKAGE FACTOR HAS BEEN APPLIED.

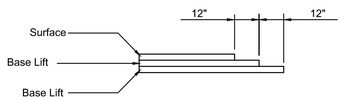
THE QUANTITIES SHOWN FOR "EXCAVATION" ARE MEASURED FROM THE BOTTOM OF SUBGRADE LINE TO THE FINISHED SUBGRADE LINE (ROCK BASE THICKNESS), THIS MATERIAL IS INTENDED TO BE PLACED AS BACKFILL BETWEEN THE BACK OF CURB AND THE EDGE OF THE STREET RIGHT-OF-WAY.

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

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

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

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



TRANSVERSE CONSTRUCTION JOINTS

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

GENERAL NOTES:
Geogrid reinforcement and aggregate base to comply with Sec. 404 of the City of Wichita Standard Specifications for the Construction of Public Projects. Geogrid reinforcement shall be installed in accordance with manufacturer's recommendations. Crushed rock shall be uniformly graded from 1 - $\frac{1}{2}$" maximum size to not more than 10% passing a No. 200 sieve. Rock quality shall be the same as specified for coarse aggregate for concrete mixes.

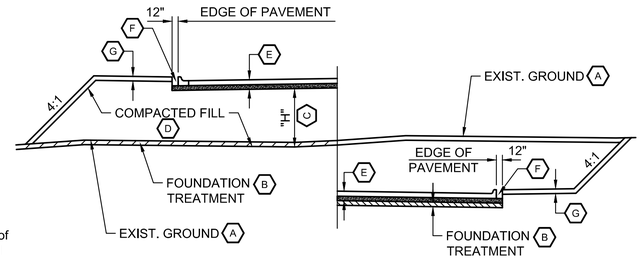
Rock base is to be compacted and smoothed with a steel faced roller prior to placement of asphalt. Tack coat will not be applied to rock base.

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

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

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

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



FOUNDATION TREATMENT & COMPACTION DIAGRAM

1" = 1'

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

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

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SWANEY FARM ADDITION PHASE 2

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Issue:		
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RED LINE - FIELD SET PEC
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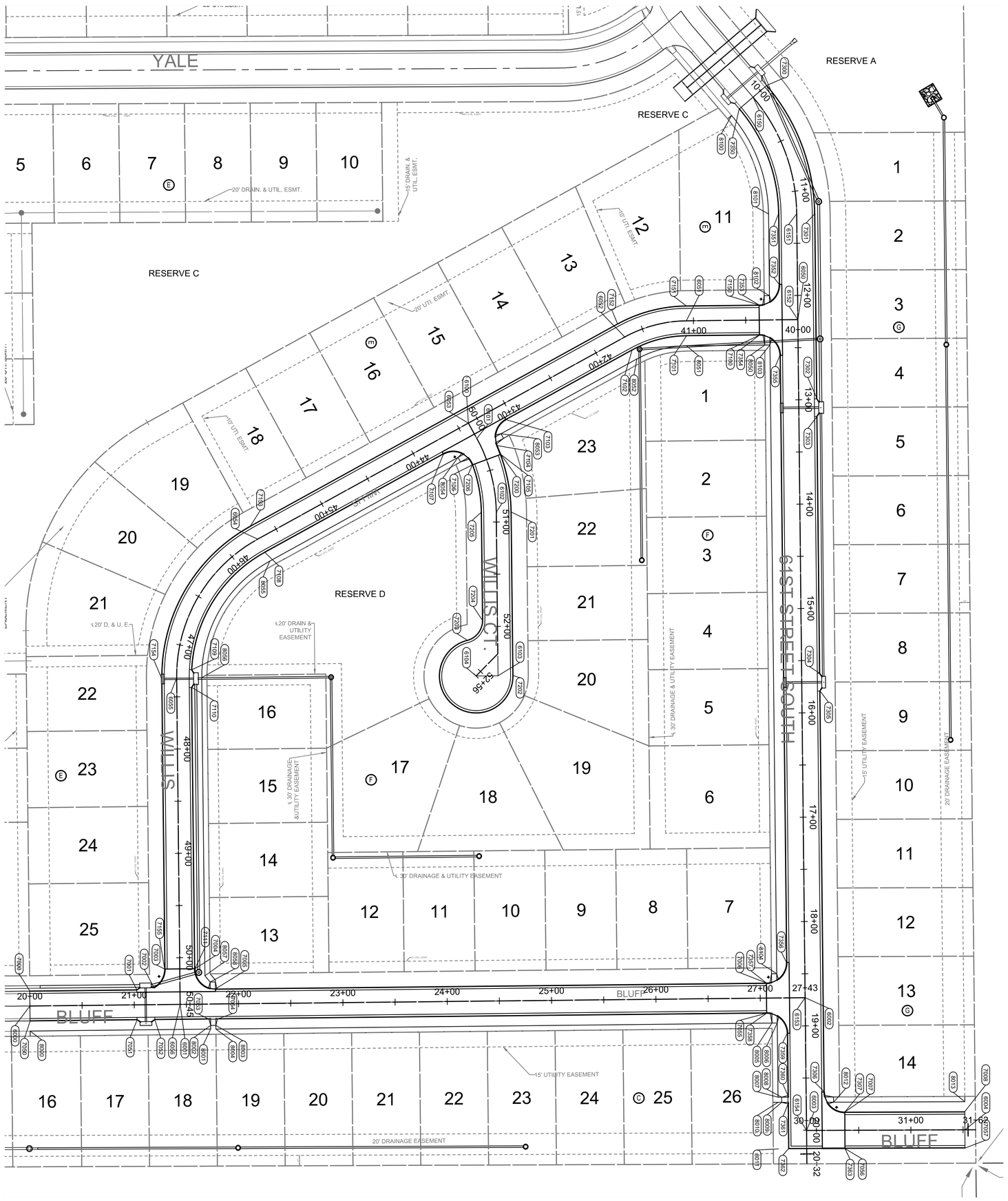
JOB NO.	200605-009
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CHECKED BY	CSB

TYPICAL SECTIONS

CP004
4 OF 69

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SCALE IN FEET
0'
50'
100'

COORDINATE GEOMETRY PLAN	CP101 5 OF 69
JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
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RED LINE - FIELD SET
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Issue:

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SWANEY FARM ADDITION PHASE 2

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KEVIN P. GRAHAM
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CENTERLINE-BLUFF

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

CENTERLINE-WILLIS

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

CENTERLINE-WILLIS CT.

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

CENTERLINE-61ST ST. SOUTH

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

BACK OF CURB LT.-BLUFF

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

BACK OF CURB RT.-BLUFF

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

BACK OF CURB LT.-WILLIS

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

BACK OF CURB RT.-WILLIS

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

BACK OF CURB-WILLIS CT.

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

BACK OF CURB LT.-61ST ST.

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

BACK OF CURB RT.-61ST ST.

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

FACE OF SIDEWALK-BLUFF

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

FACE OF SIDEWALK-WILLIS

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

FACE OF SIDEWALK-61ST ST.

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

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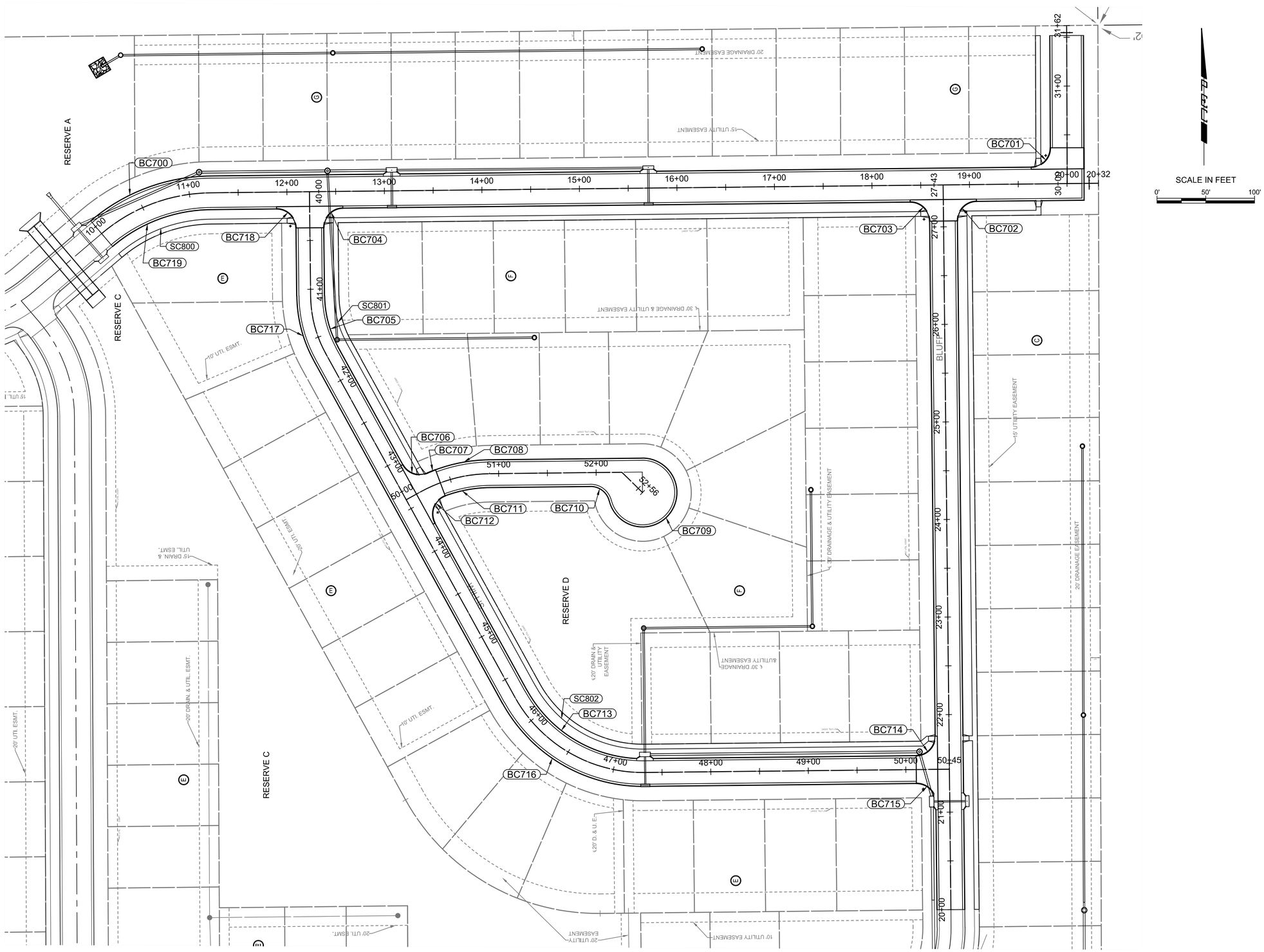
RED LINE - FIELD SET PEC
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JOB NO.	200605-009
DATE	NOVEMBER 2025
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COORDINATE GEOMETRY TABLES

CP102
6 OF 69

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COORDINATE GEOMETRY CURVE PLAN

CP103
7 OF 69

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

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

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CITY OF WICHITA

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

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

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

Issue:		
	08/18/2026 - cjr	

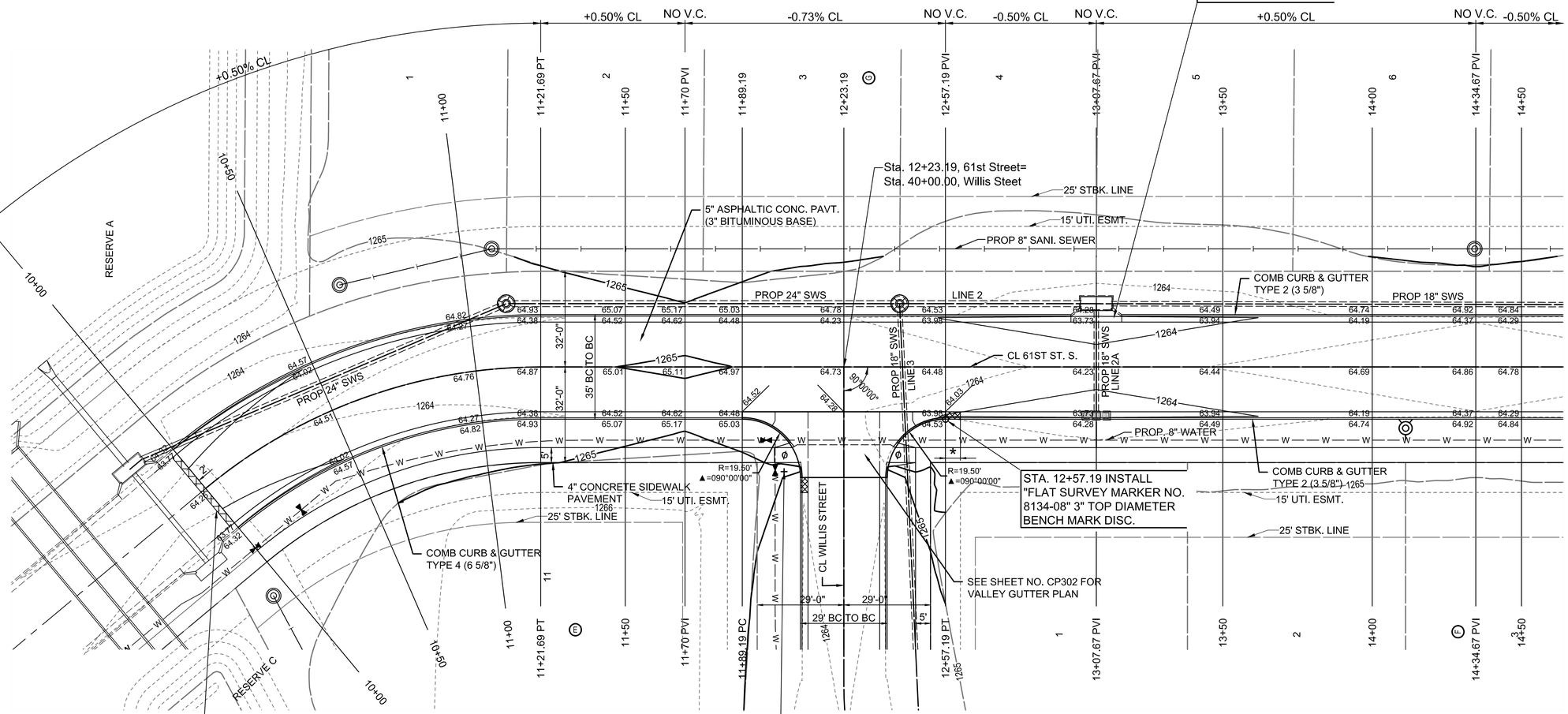
RED LINE - FIELD SET PEC
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JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
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COORDINATE GEOMETRY CURVE TABLES

CP104
8 OF 69

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



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

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

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

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

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

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

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PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

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

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	08/18/2026 - cjr	

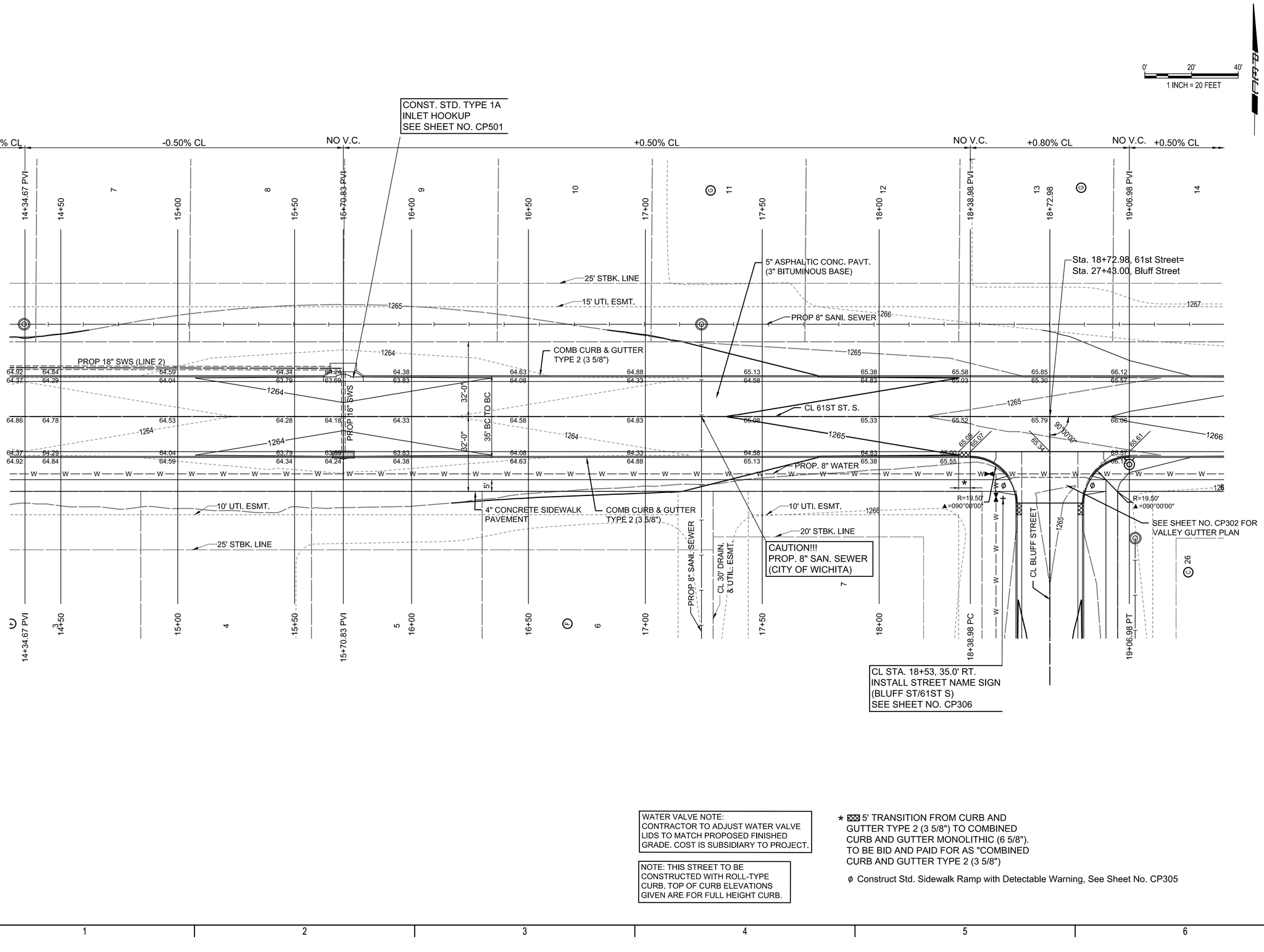
RED LINE - FIELD SET PEC
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JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
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61ST STREET SOUTH-PLAN

CP201
9 OF 69

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



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

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

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

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

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

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

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

Issue:		
	08/18/2026 - cjr	

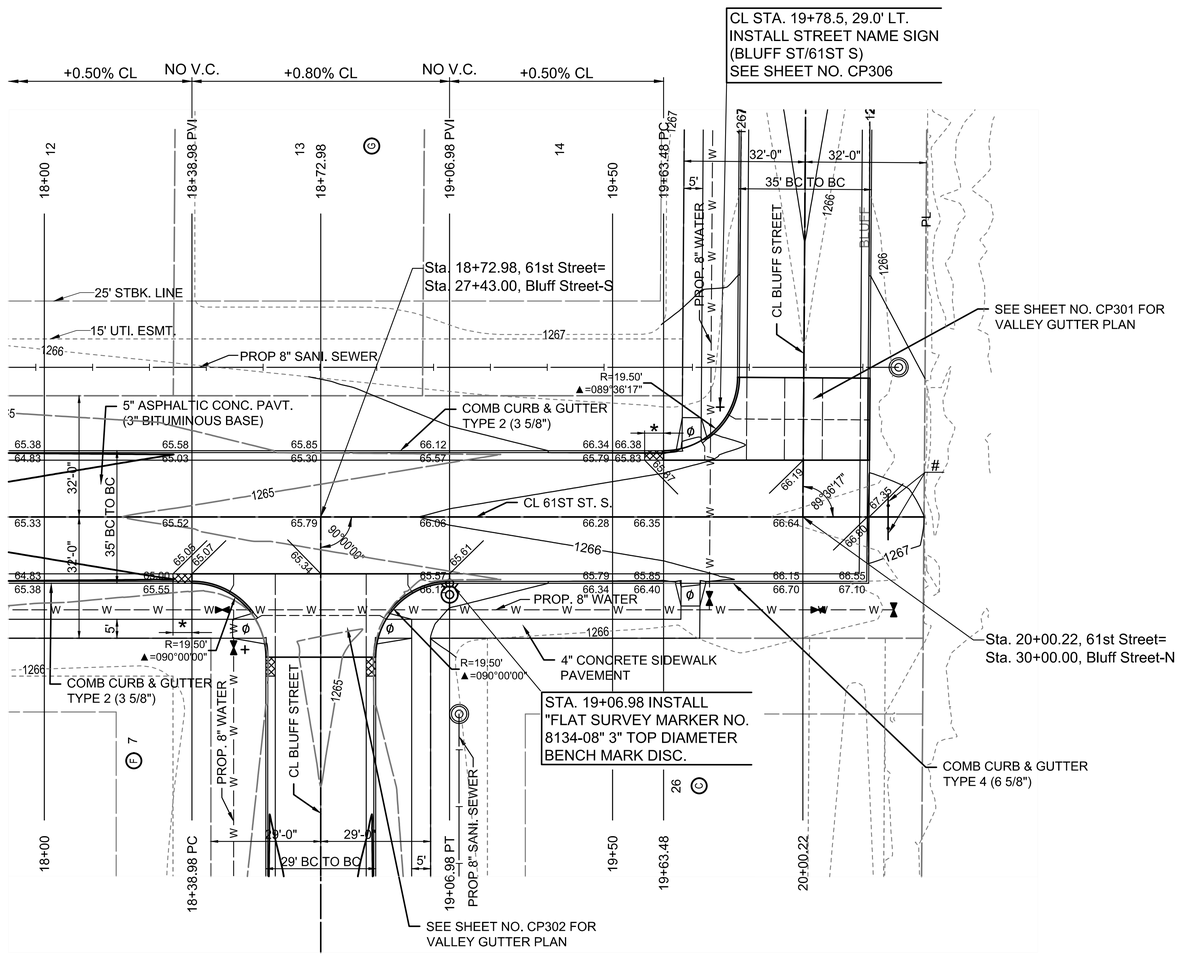
RED LINE - FIELD SET PEC
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JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
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61ST STREET SOUTH-PLAN

CP202
10 OF 69

SAVED 9/23/2025 10:32:45 AM BY KEVIN.GRAHAM
PLOTTED 11/6/2025 12:29:55 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\10-200605-009-CP202 61ST STREET SOUTH-PLAN.DWG



0' 20' 40'
1 INCH = 20 FEET

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

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

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

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

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

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

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

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

Issue:		
	08/18/2026 - cjr	

RED LINE - FIELD SET PEC
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JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

61ST STREET SOUTH-PLAN

CP203
11 OF 69

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

1 INCH = 20 FEET

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

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

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

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

PROP 30" SWS

PROP 15" SWS

PROP. 8" WATER

PROP 24" SWS

PROP 8" SANI. SEWER

GL WILLIS ST.

CL BLUFF ST.

BLUFF

29' BC TO BC

29'-0"

5'

R=19.50'
▲=062°57'52"

R=19.50'
▲=090°00'00"

90°00'00"

50+00

50+45

21+11.05 PVI

21+78 PT

25' STBK. LINE

15' STBK. LINE

10' UTIL. ESMT.

SEE SHEET NO. CP302 FOR
VALLEY GUTTER PLAN

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

15' UTIL. ESMT.

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

4" CONCRETE SIDEWALK
PAVEMENT

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

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

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

REMOVE 606 S.Y.
REINFORCED CRUSHED
ROCK BASE

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

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

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

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CITY OF WICHITA

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

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

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

Issue:		
	08/18/2026 - cjr	

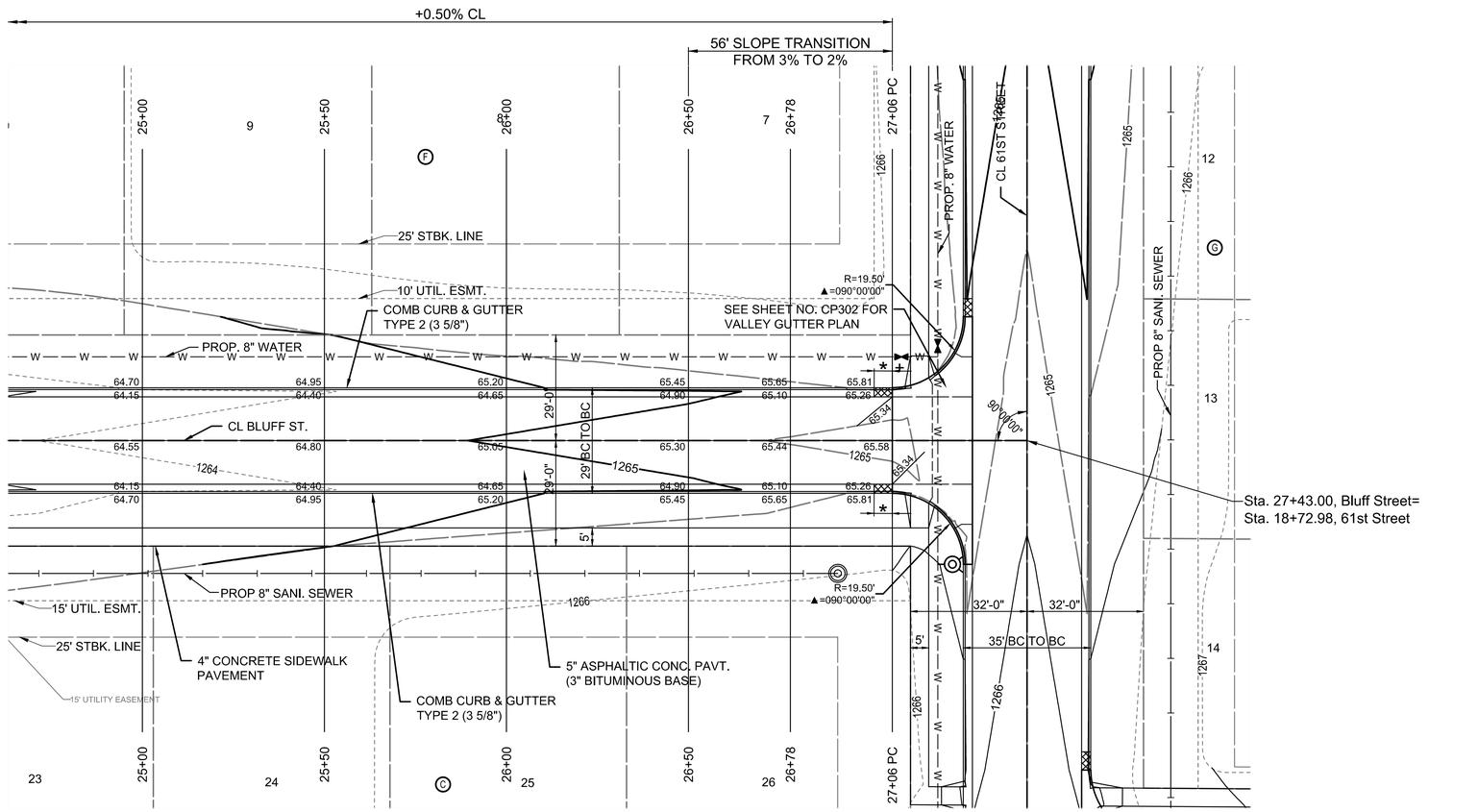
RED LINE - FIELD SET
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JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

BLUFF STREET-PLAN

CP204
12 OF 69

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



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

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

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

1 INCH = 20 FEET

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

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

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

Issue:		
	08/18/2026 - cjr	

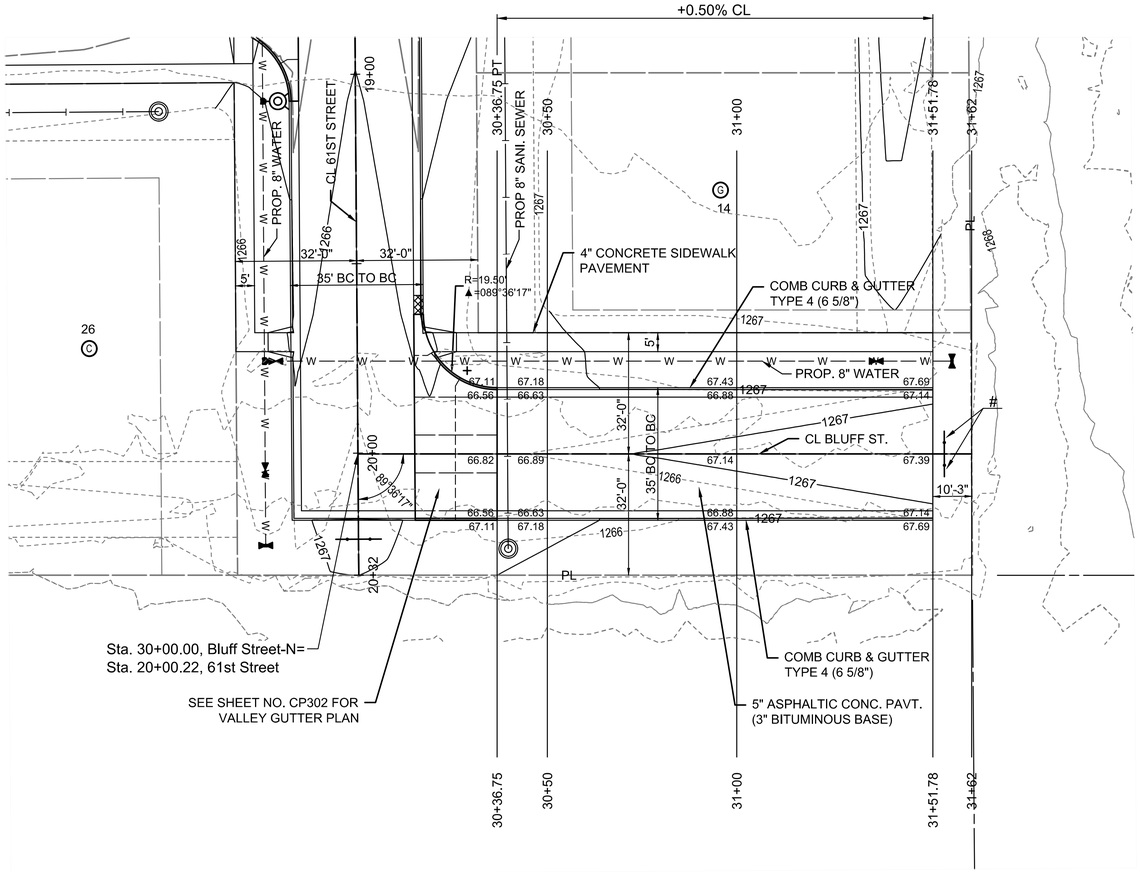
RED LINE - FIELD SET PEC
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JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
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BLUFF STREET-PLAN

CP205
13 OF 69

SAVED 9/23/2025 12:16:30 PM BY KEVIN.GRAHAM
PLOTTED 11/6/2025 12:30:58 PM BY KEVIN GRAHAM
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TREES WHICH ARE IN DIRECT CONFLICT WITH PROPOSED NEW CONSTRUCTION SHALL BE REMOVED BY THE CONTRACTOR WITH THE ENGINEER'S APPROVAL. TREE REMOVAL SHALL BE SUBSIDIARY TO "SITE CLEARING"

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

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

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

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

0' 20' 40'
1 INCH = 20 FEET

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CITY OF WICHITA

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PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

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

Issue:		
	08/18/2026 - cjr	

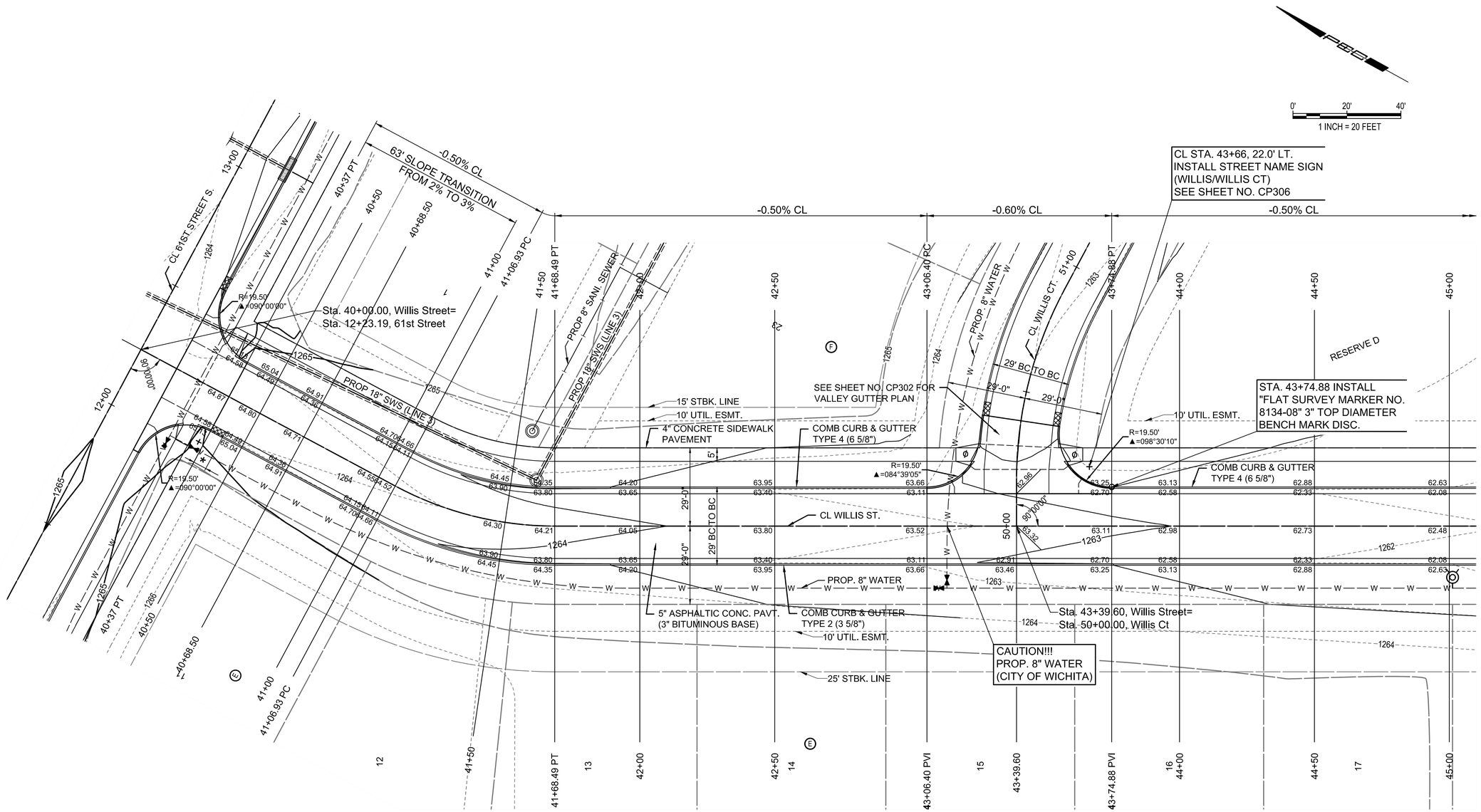
RED LINE - FIELD SET PEC
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JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
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BLUFF STREET NORTH-PLAN

CP206
14 OF 69

SAVED 9/23/2025 12:19:25 PM BY KEVIN.GRAHAM
PLOTTED 11/6/2025 12:31:15 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\14-200605-009-CP206 BLUFF STREET NORTH-PLAN.DWG



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

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

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

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

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CITY OF WICHITA

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

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

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

Issue:		
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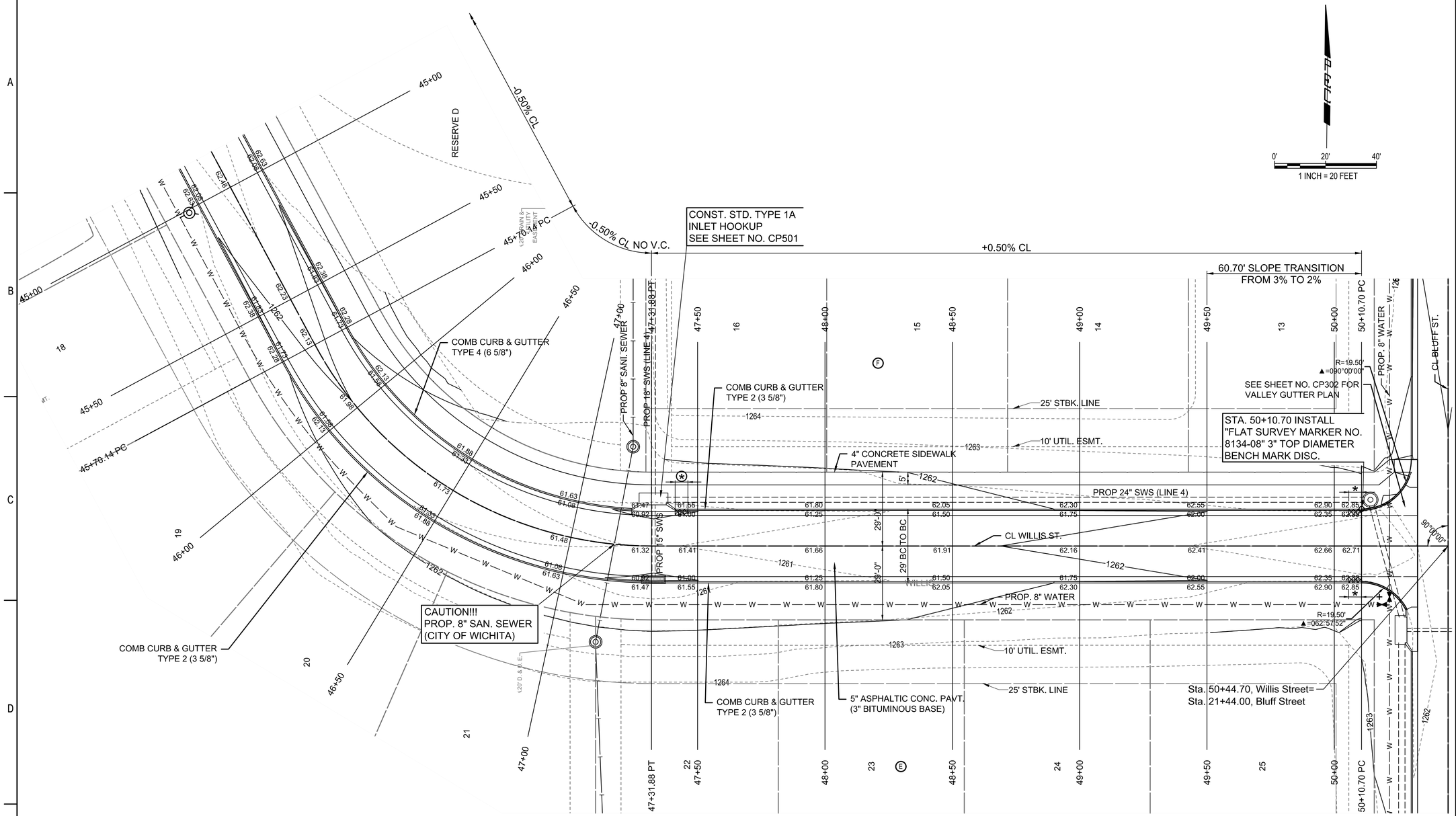
RED LINE - FIELD SET PEC
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JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
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WILLIS STREET-PLAN

CP207
15 OF 69

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



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

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

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

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

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PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

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

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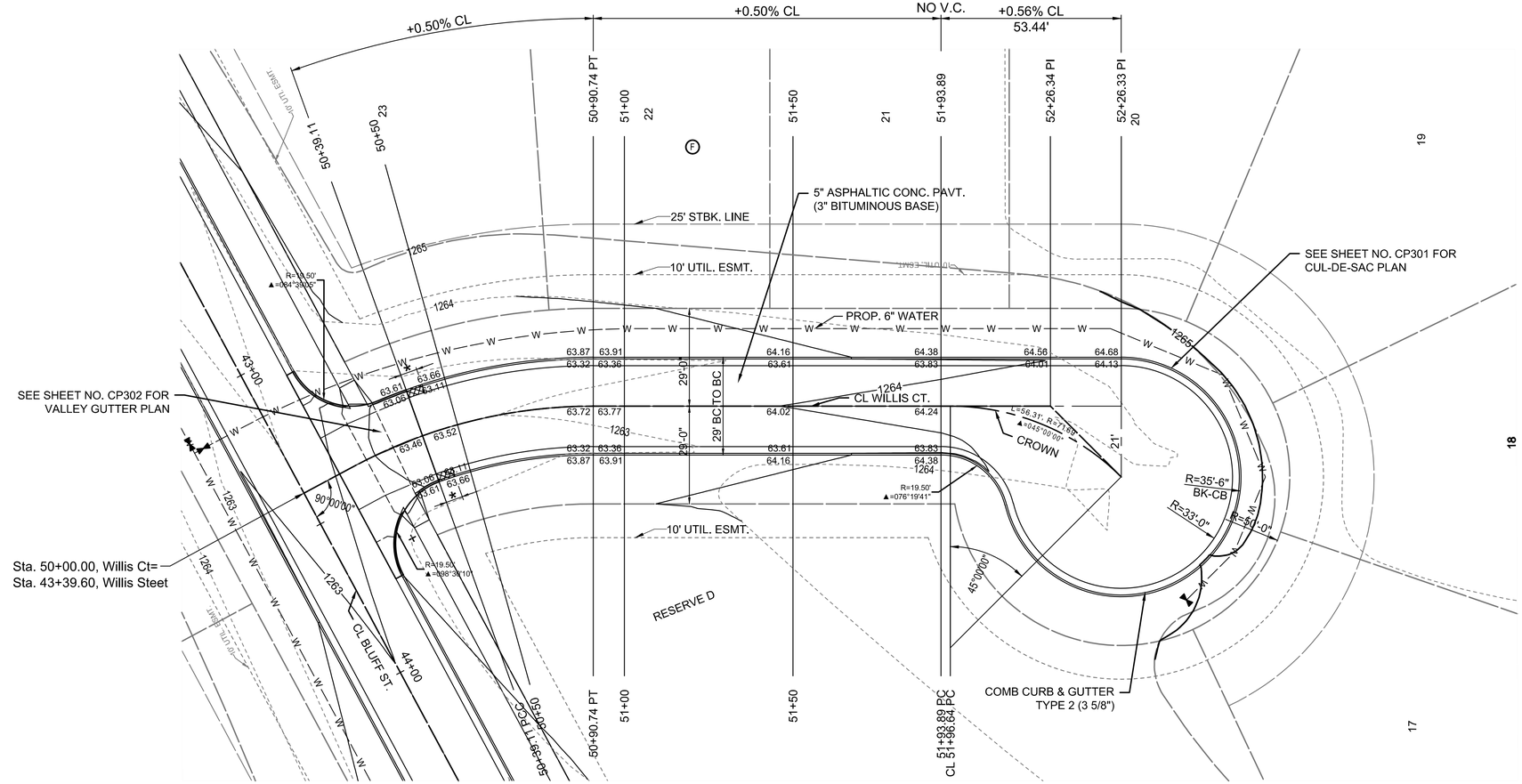
RED LINE - FIELD SET PEC
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JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

WILLIS STREET-PLAN

CP208
16 OF 69

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



0' 20' 40'
1 INCH = 20 FEET

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

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

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27806
11/06/2025
KANSAS PROFESSIONAL ENGINEER

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

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

Issue:		
	08/18/2026 - cjr	

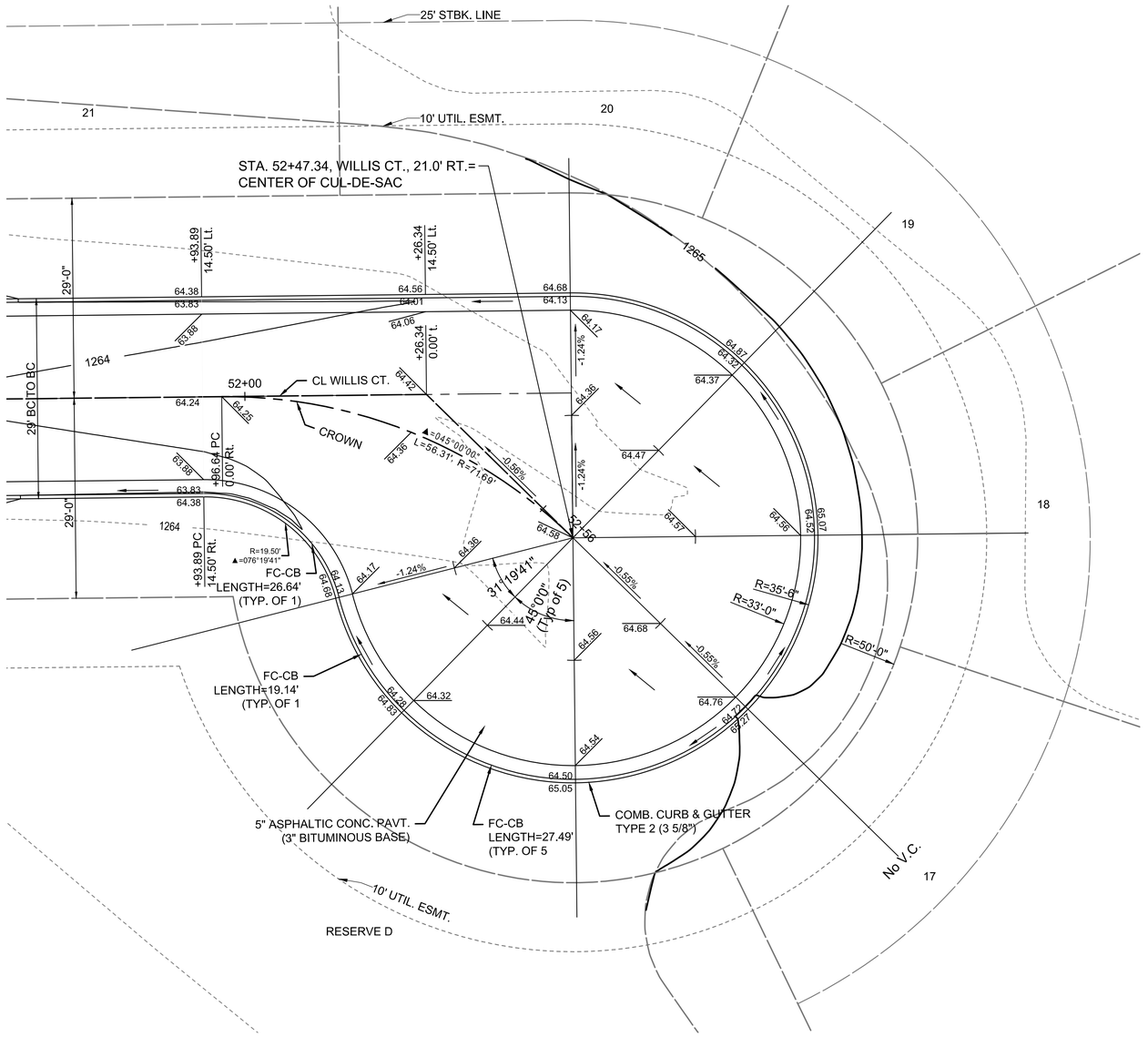
RED LINE - FIELD SET PEC
U:\Wichita-Civil 200605-018

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

WILLIS COURT-PLAN

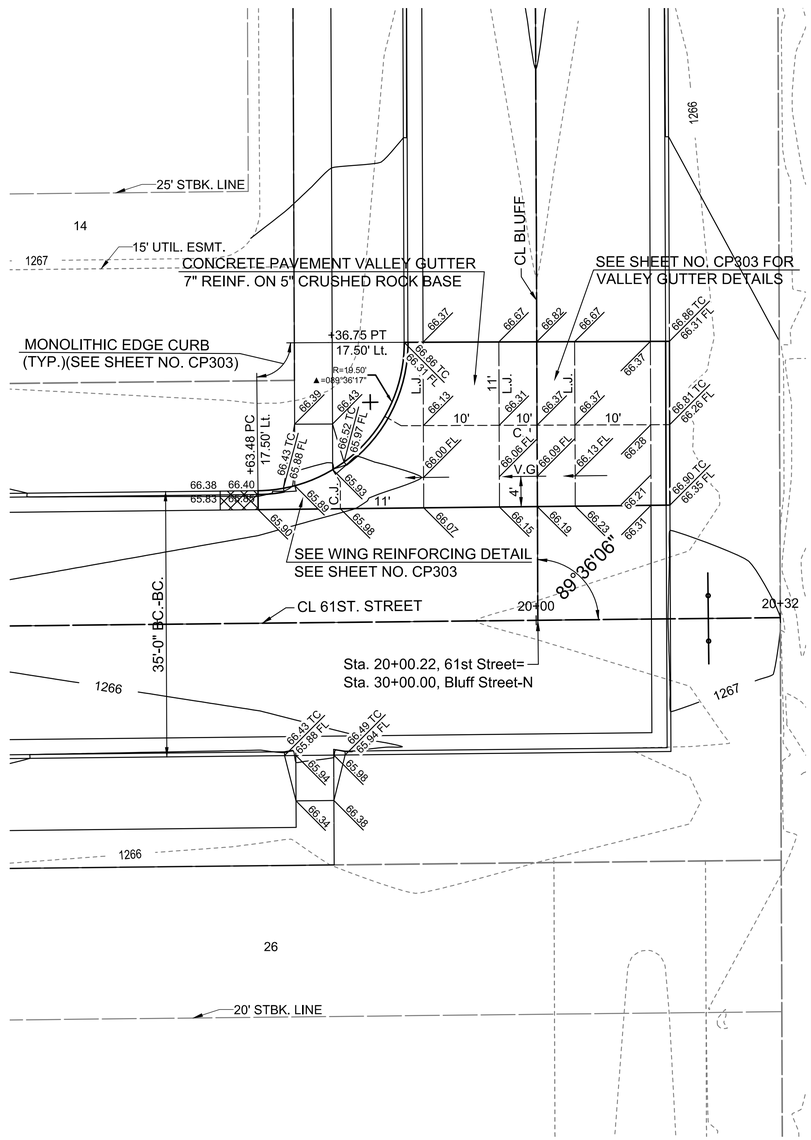
CP209
17 OF 69

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PLOTTED 11/6/2025 12:32:38 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605009\2PD4_PLANS\030\PAVING\17-200605-009-CP209 WILLIS COURT-PLAN.DWG



CUL0DE-SAC PLAN

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



VALLEY GUTTER PLAN

0' 10' 20'
1 INCH = 10 FEET

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

CITY OF WICHITA

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

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

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

Issue:		
	08/18/2026 - cjr	

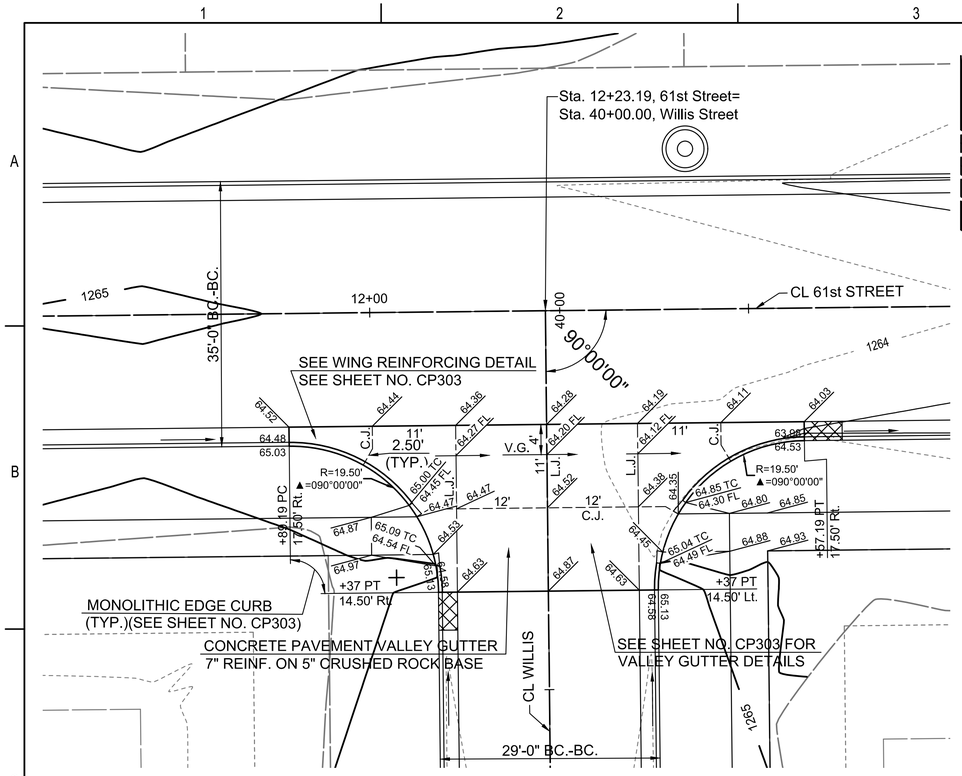
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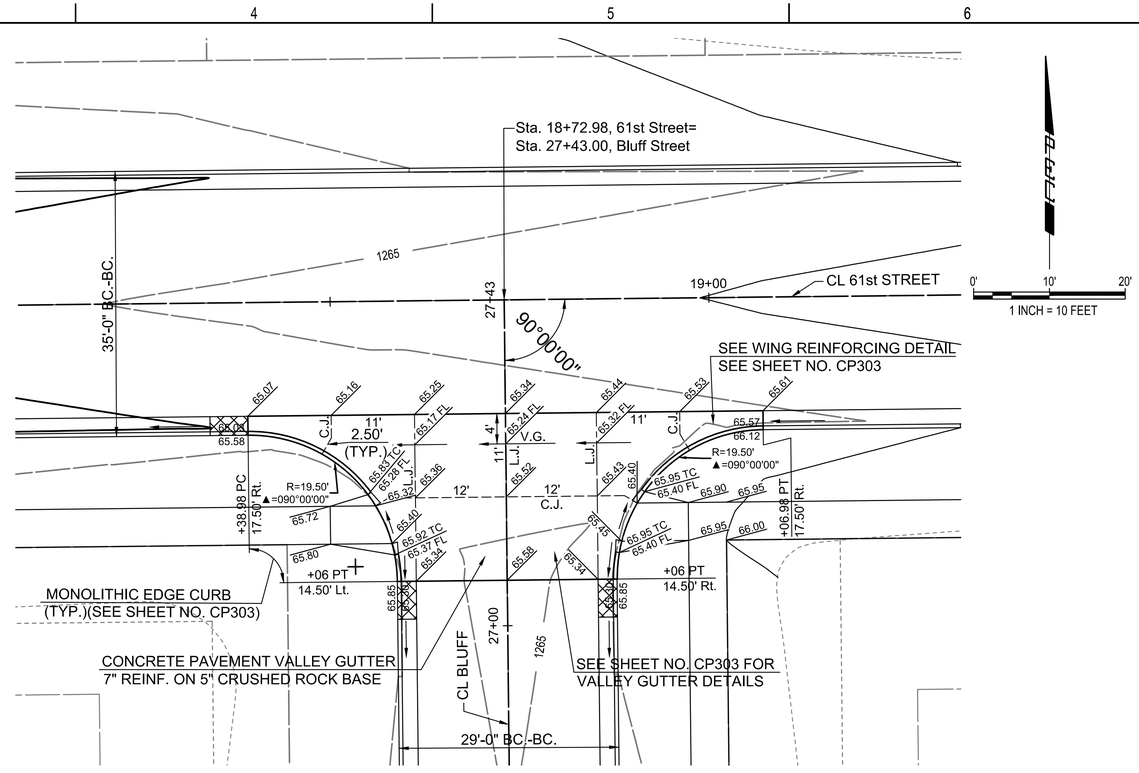
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DATE	NOVEMBER 2025
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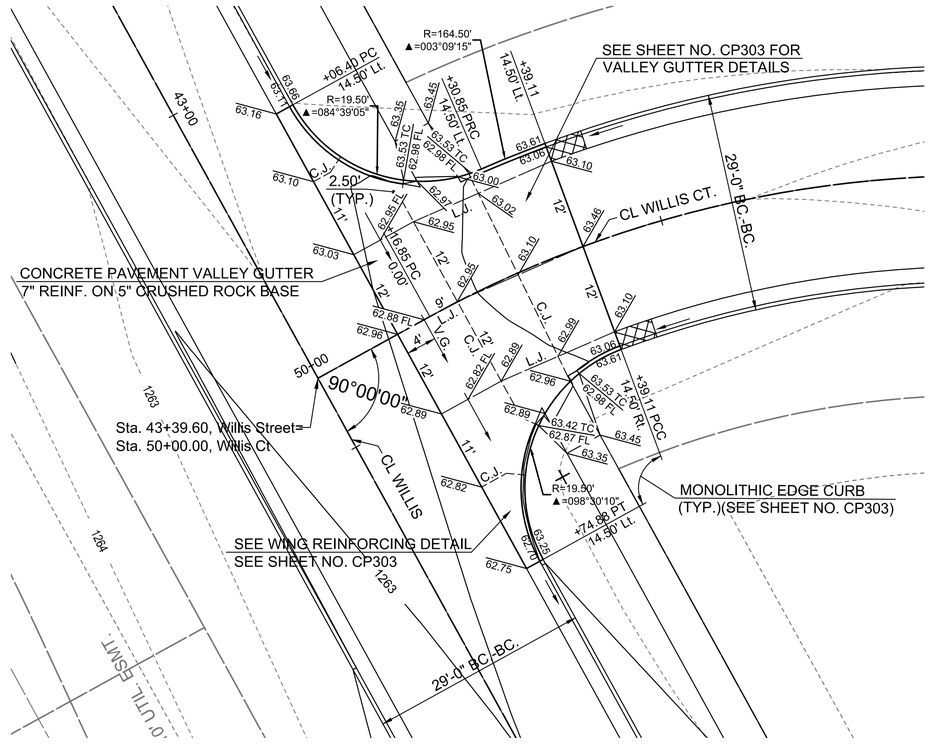
CUL-DE-SAC & VALLEY GUTTER PLAN

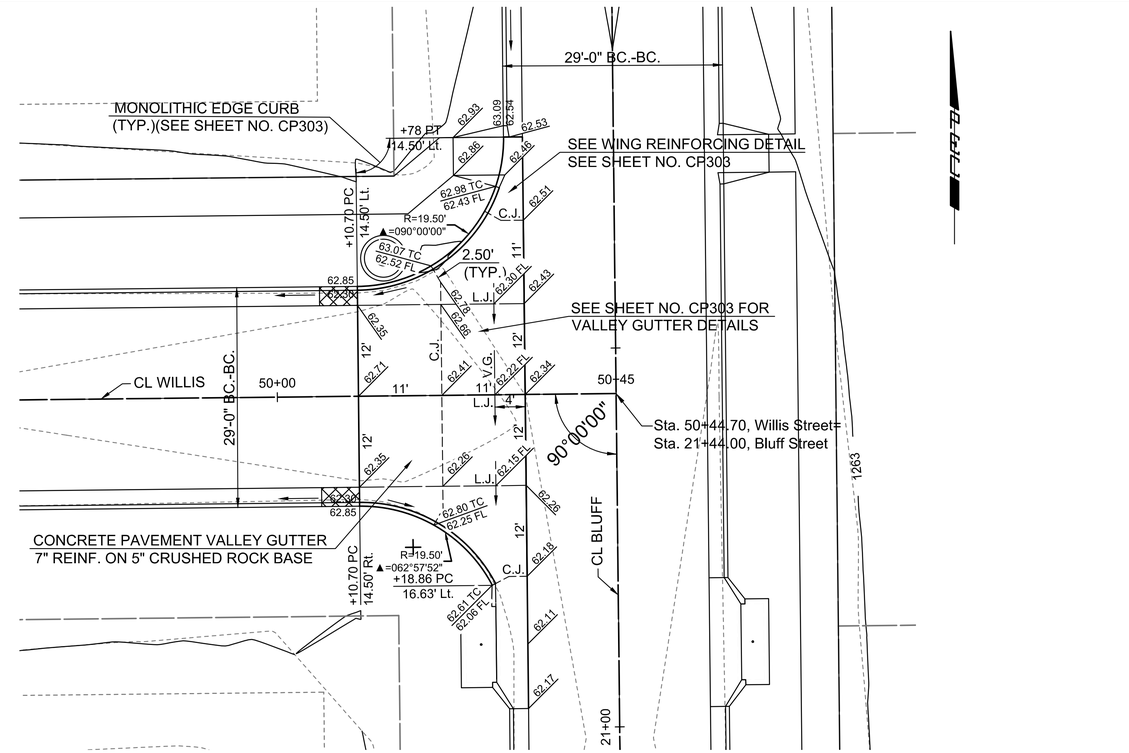
CP301
18 OF 69

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CITY OF WICHITA

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SWANEY FARM ADDITION PHASE 2

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

Issue:		
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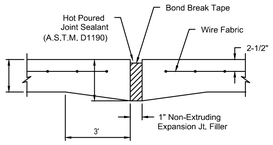
RED LINE - FIELD SET PEC
U:\Wichita-Civil 200605-018

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

VALLEY GUTTER PLANS

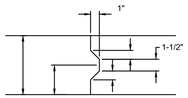
CP302
19 OF 69

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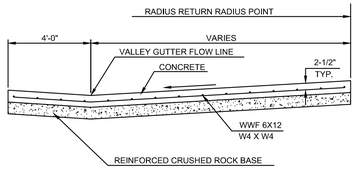


EXPANSION JOINT

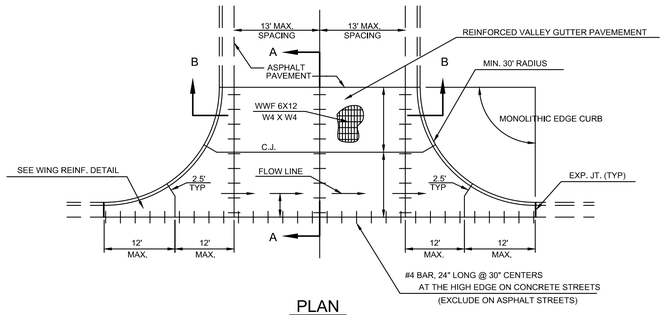
NOTE: Extra Thickness to be Subsidiary to Price of Square Yards Pavement



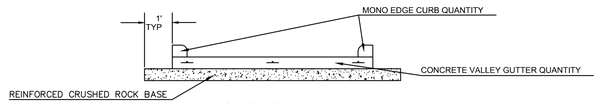
KEYWAY DETAIL



SECTION A-A

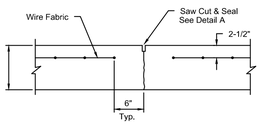


PLAN

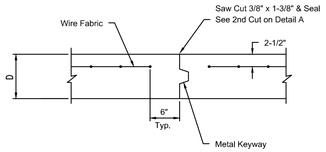


SECTION B-B

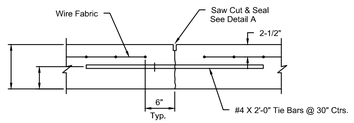
REINFORCED VALLEY GUTTER DETAIL



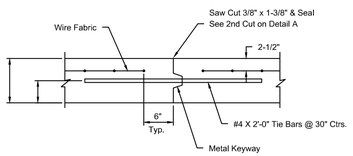
CONTRACTION JOINT DETAIL (C.J.)



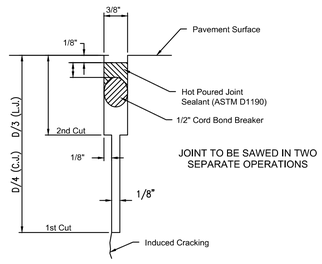
OPTIONAL CONTRACTION JOINT



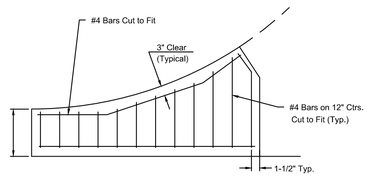
LONGITUDINAL JOINT DETAIL (L.J.)



OPTIONAL LONGITUDINAL JOINT DETAIL (L.J.)



SAW JOINT DETAIL
(DETAIL A)



WING REINFORCING DETAIL

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

CITY OF WICHITA
PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

VALLEY GUTTER DETAILS

CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER	OCA NUMBER	DATE
472-2024-086027		

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

SHEET
20 of 69

PV-109

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

CITY OF WICHITA

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

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION
PHASE 2

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

Issue:		
	08/18/2026 - cjr	

RED LINE - FIELD SET PEC
U:\Wichita-Civil 200605-018

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

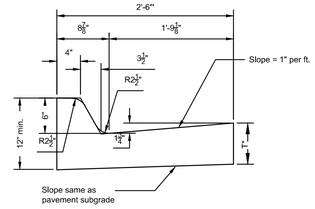
VALLEY GUTTER DETAILS

CP303
20 OF 69

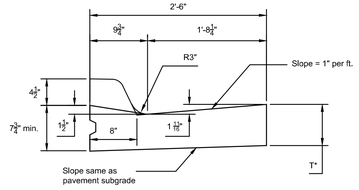
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U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\20-200605-009-CP303 VALLEY GUTTER DETAILS.DWG

TYPE 1
(Arterial curb)

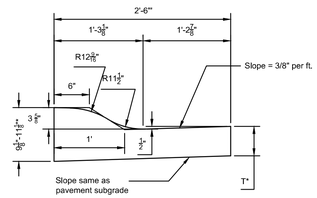


Combined Curb & Gutter (6")

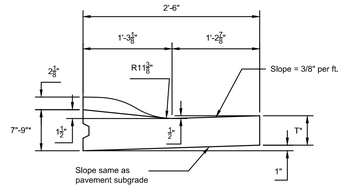


Combined Curb & Gutter (1 1/2")

TYPE 2
(Roll curb)

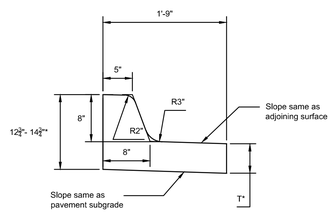


Combined Curb & Gutter (3 5/8")

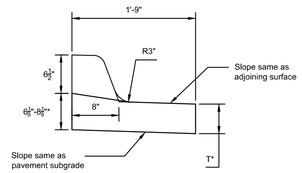


Combined Curb & Gutter (1 1/2")

TYPE 3
(Median curb)

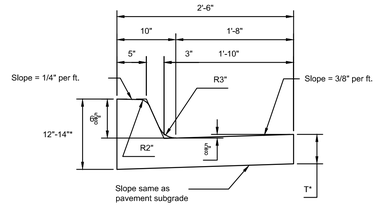


Combined Curb & Gutter (8")

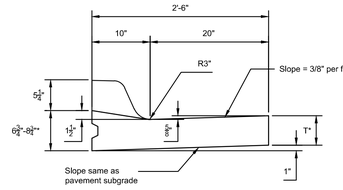


Combined Curb & Gutter (1 1/2")

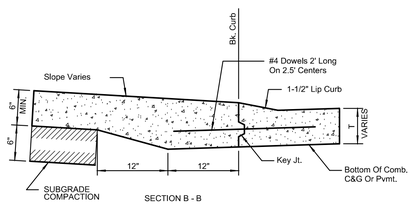
TYPE 4
(Residential curb)



Combined Curb & Gutter (6 5/8")

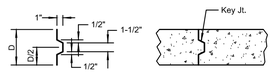


Combined Curb & Gutter (1 1/2")

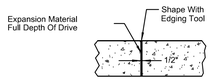


BACK OF CURB DETAIL

T* = Thickness of curb to adjust with pavement thickness



ALT. LONGITUDINAL CONSTRUCTION JOINT



EXPANSION JOINT (E.J.)

GENERAL NOTES

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

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

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

REVISED: OCTOBER 2015

CITY OF WICHITA
PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

CURB & GUTTER & PAVING BRICK CROSSWALK DETAILS

CITY ENGINEER
GARY JANZEN, P.E.

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

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

SHEET
21 of 69

PV-101

Saved: 06-24-2025 9:49:30 AM By: BILL.SEXSON
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CITY OF WICHITA

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

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

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

Issue:		
	08/18/2026 - cjr	

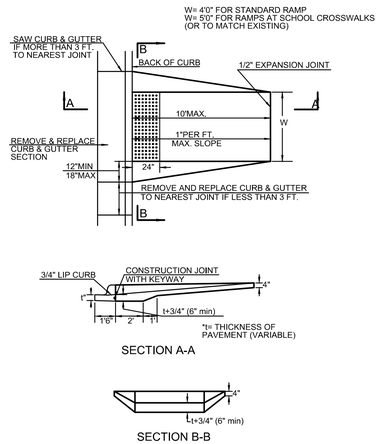
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U:\Wichita-Civil 200605-018

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

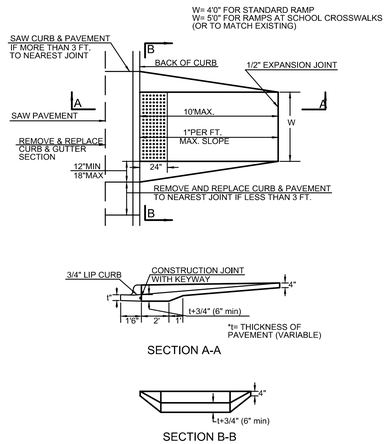
CURB AND GUTTER DETAILS

CP304
21 OF 69

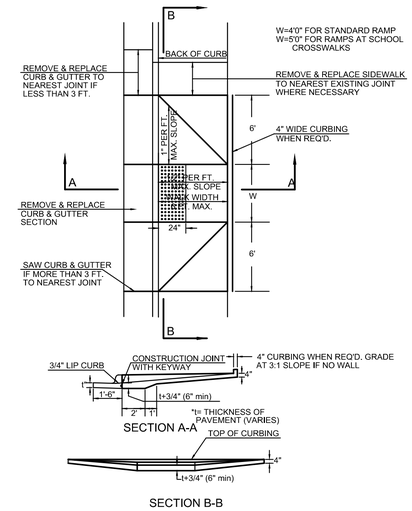
STANDARD WHEELCHAIR RAMP CONSTRUCTION DETAIL FOR STREETS WITH COMBINED CURB & GUTTER (TYPE A)



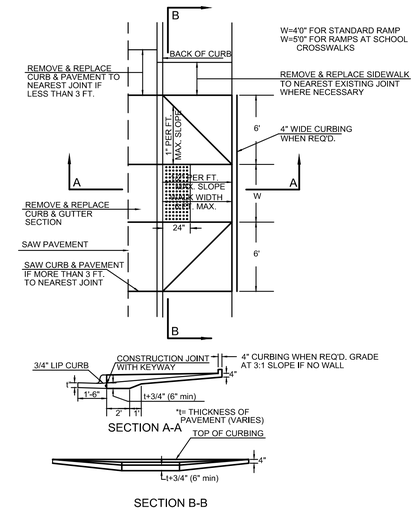
STANDARD WHEELCHAIR RAMP CONSTRUCTION DETAIL FOR CONCRETE STREETS WITH MONOLITHIC CURB (TYPE A)



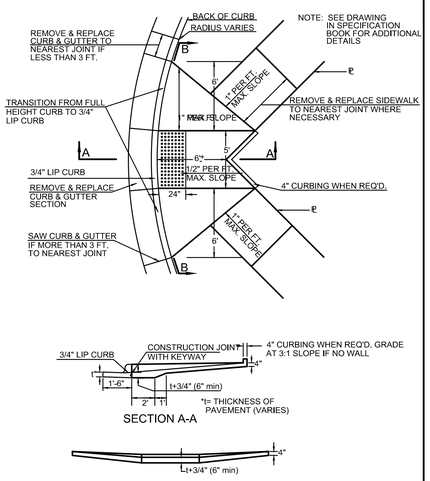
STANDARD WHEELCHAIR RAMP CONSTRUCTION DETAIL FOR STREETS WITH COMBINED CURB & GUTTER AND FULL WALK (TYPE B)



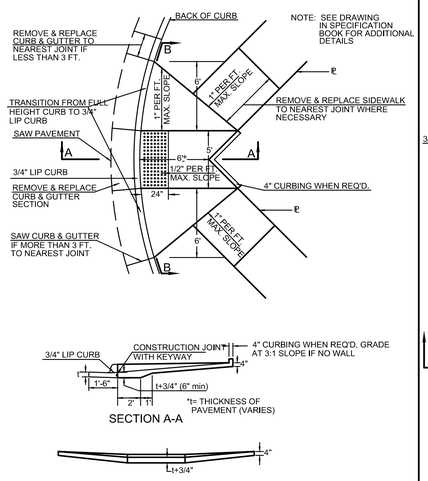
STANDARD WHEELCHAIR RAMP CONSTRUCTION DETAIL FOR STREETS WITH MONOLITHIC CURB AND FULL WALK (TYPE B)



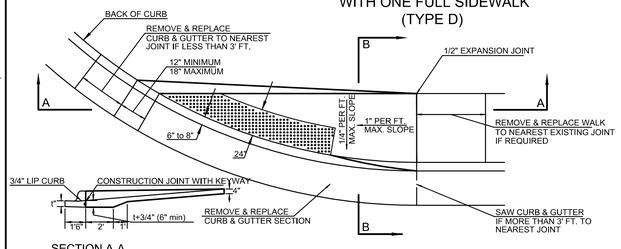
STANDARD WHEELCHAIR RAMP CONSTRUCTION DEAIL FOR STREET WITH COMBINED CURB AND GUTTER ON RADIUS WITH 6'\ FROM BACK OF CURB TO PROPERTY CORNER (TYPE C)



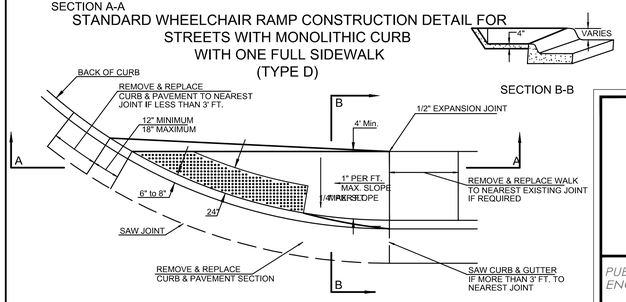
STANDARD WHEELCHAIR RAMP CONSTRUCTION DETAIL FOR STREET WITH MONOLITHIC CURB ON RADIUS WITH 6'\ FROM BACK OF CURB TO PROPERTY CORNER (TYPE C)

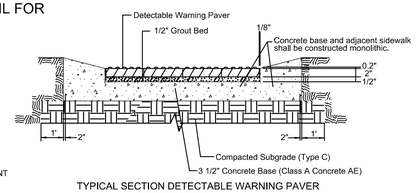


STANDARD WHEELCHAIR RAMP CONSTRUCTION DETAIL FOR STREETS WITH COMBINED CURB & GUTTER WITH ONE FULL SIDEWALK (TYPE D)



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

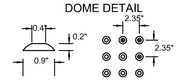




TYPICAL SECTION DETECTABLE WARNING PAVER
SECTION A-A

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
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DOME DETAIL



CITY OF WICHITA
PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

WHEELCHAIR RAMP DETAILS WITH DETECTABLE WARNING

CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER	OCA NUMBER	DATE
472-2024-086027	———	08/2013

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

SHEET
22 of 69

PV-110

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WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

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

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

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

Issue:		
	08/18/2026 - cjr	

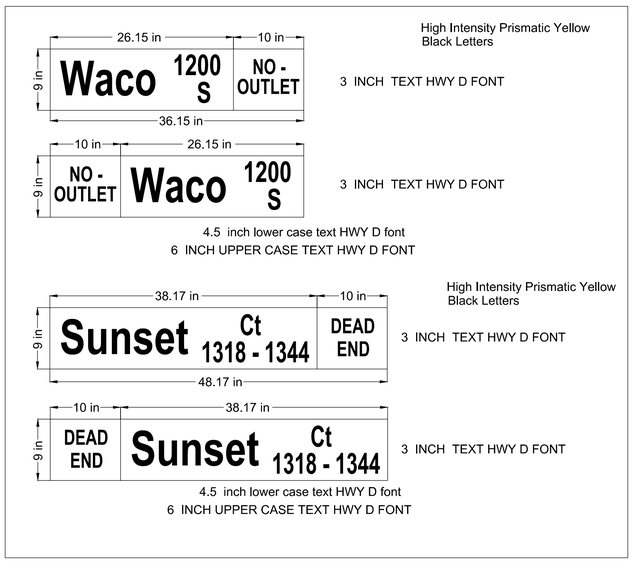
RED LINE - FIELD SET PEC
U:\Wichita-Civil 200605-018

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

WHEELCHAIR RAMP DETAILS

CP305
22 OF 69

SAVED 6/24/2025 9:50:11 AM BY BILL.SEXSON
PLOTTED 11/6/2025 12:34:07 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\22-200605-009-CP305 WHEELCHAIR RAMP DETAILS.DWG
Saved: 06--24--2025, 9:50:11 AM, By: BILL.SEXSON
Plotted: 11/06/2025, 12:34:07 PM, By: KEVIN.GRAHAM
U:\Wichita-Civil\2020\200605\009\2PD4_Plans\030\PAVING\22-200605-009-CP305 WHEELCHAIR RAMP DETAILS



High Intensity Prismatic Yellow
Black Letters

3 INCH TEXT HWY D FONT

3 INCH TEXT HWY D FONT

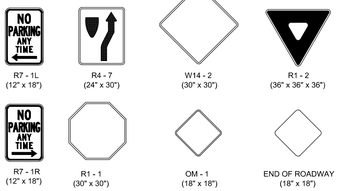
4.5 inch lower case text HWY D font
6 INCH UPPER CASE TEXT HWY D FONT

High Intensity Prismatic Yellow
Black Letters

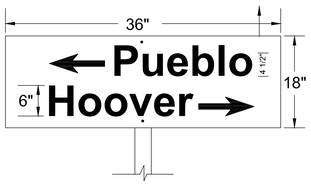
3 INCH TEXT HWY D FONT

3 INCH TEXT HWY D FONT

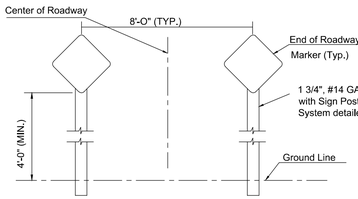
4.5 inch lower case text HWY D font
6 INCH UPPER CASE TEXT HWY D FONT



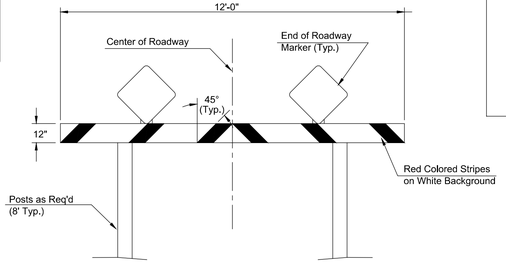
* IN NO CASE SHALL THE SPECIFICATIONS BE LESS THAN REQUIRED BY THE CURRENT MUTCD.



FLAT PLATE STREET NAME SIGN

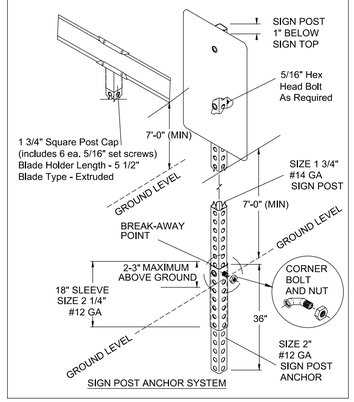


TYPICAL END OF ROADWAY SIGN MOUNTING INSTALLATION



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

PERFORATED TUBE SIGN POST INSTALLATION



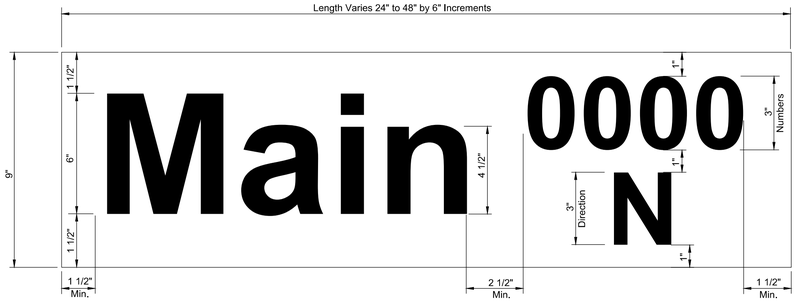
SIGN POST ANCHOR SYSTEM

SIGN ASSEMBLY TABLE

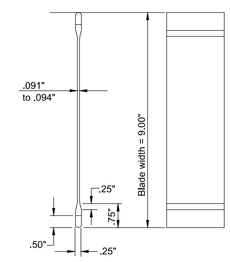
STATION	OFFSET	SIGN	QUANTITY*
12+03	RT.	STREET NAME SIGN	1
18+53	RT.	STREET NAME SIGN	1
19+78.5	LT.	STREET NAME SIGN	1
20+22	CL	(OM4-3)(END OF ROADWAY)	2
21+24	LT	STREET NAME SIGN	1
31+55	CL	(OM4-3)(END OF ROADWAY)	2
43+66	LT.	STREET NAME SIGN	1
TOTAL			7



DETAIL A
9" STANDARD



DETAIL B
9" METRO



STREET NAME SIGN
BLADE DETAILS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

CITY OF WICHITA
PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

TRAFFIC SIGNAL INSTALLATION DETAIL SHEET

TRAFFIC ENGINEER
MIKE ARMOUR, P.E.

PROJECT NUMBER	ORG NUMBER	DATE
472-2024-086027		

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

SHEET: 23 of 69

TR-106

TR-106

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CITY OF WICHITA

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

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

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

Issue:		
	08/18/2026 - cjr	

RED LINE - FIELD SET PEC
U:\Wichita-Civil 200605-018

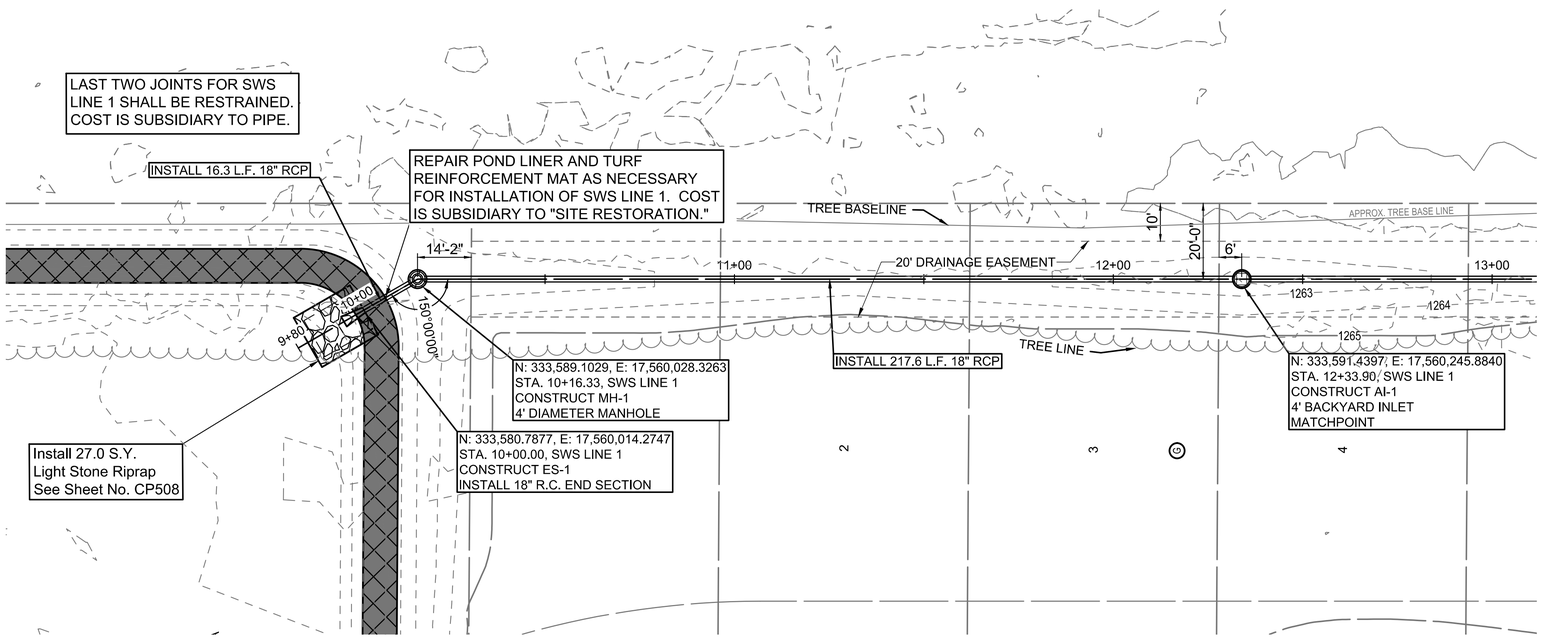
JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

SIGN DETAILS

CP306
23 OF 69

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

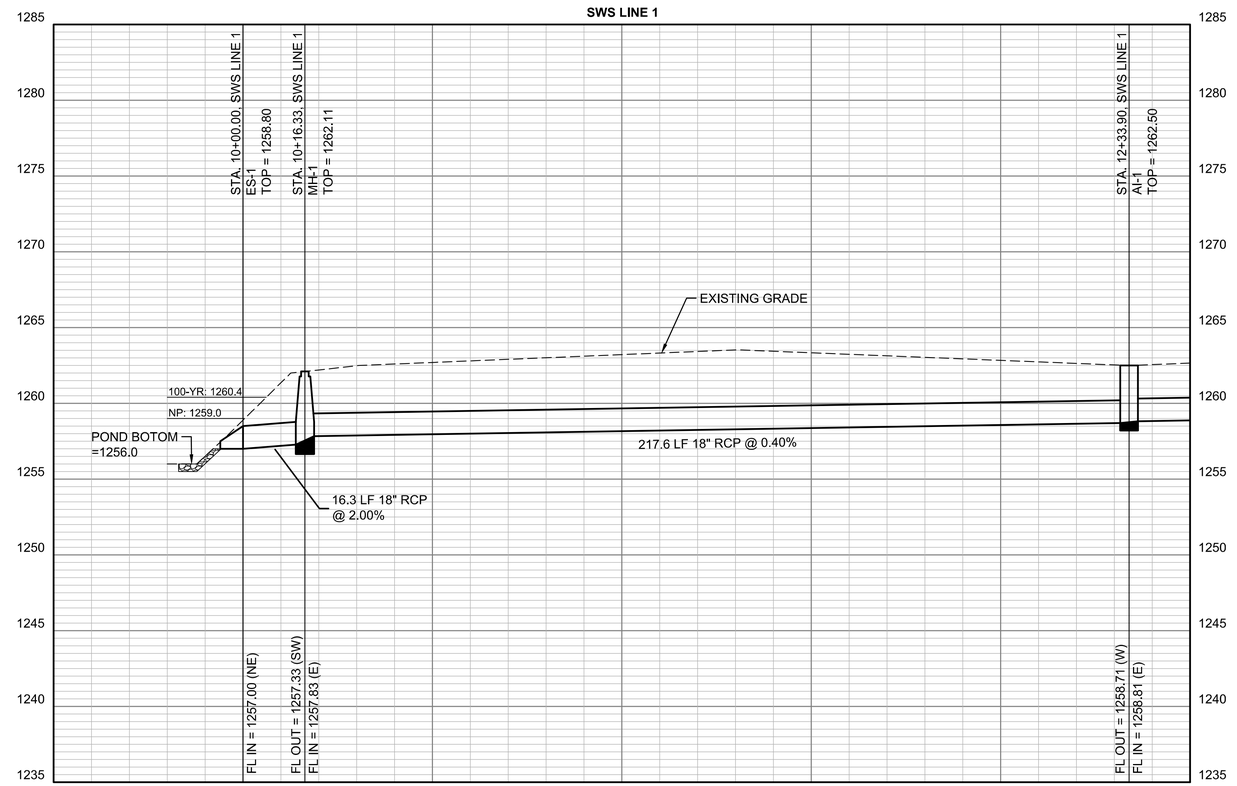
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U:\Wichita-Civil\2020\200605\009\2PD4_Plans\030\PAVING\23-200605-009-CP306 SIGN DETAILS



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

SEE SHEET NOS. CP501 THRU CP507 FOR STRUCTURE DETAILS

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



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CITY OF WICHITA

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

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

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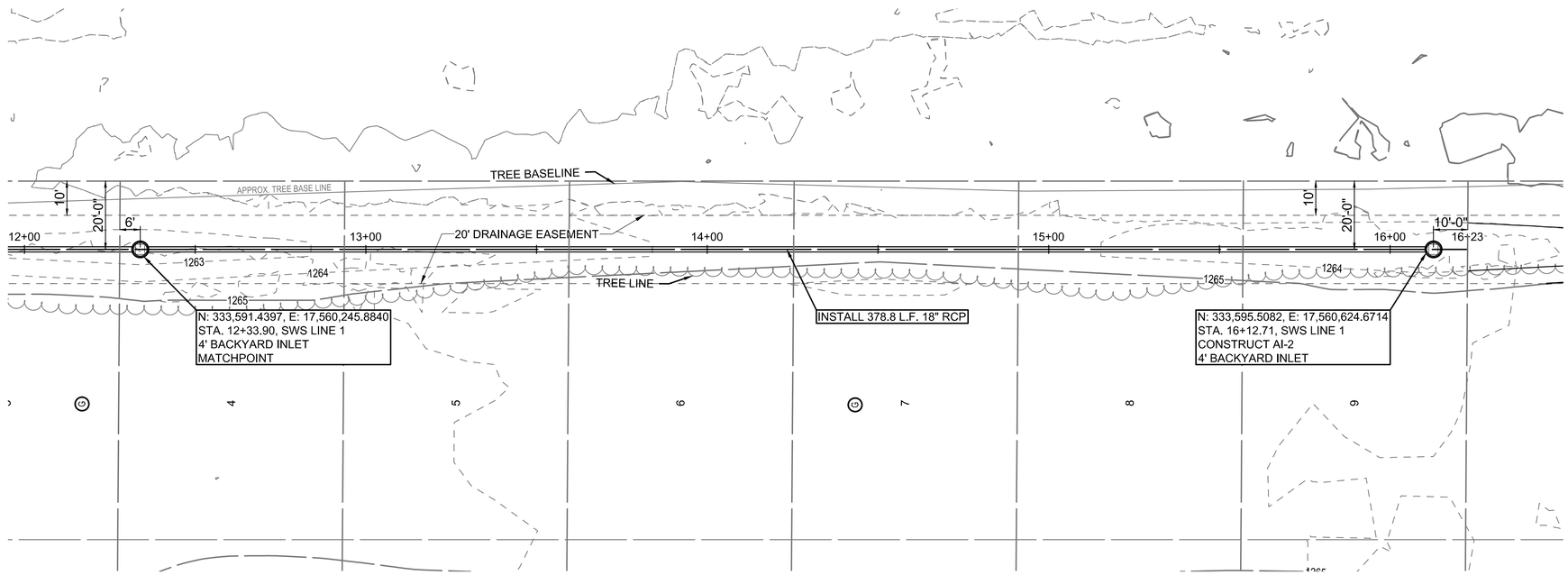
RED LINE - FIELD SET PEC
U:\Wichita-Civil 200605-018

JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
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PLAN AND PROFILE-SWS LINE 1

CP401
24 OF 69

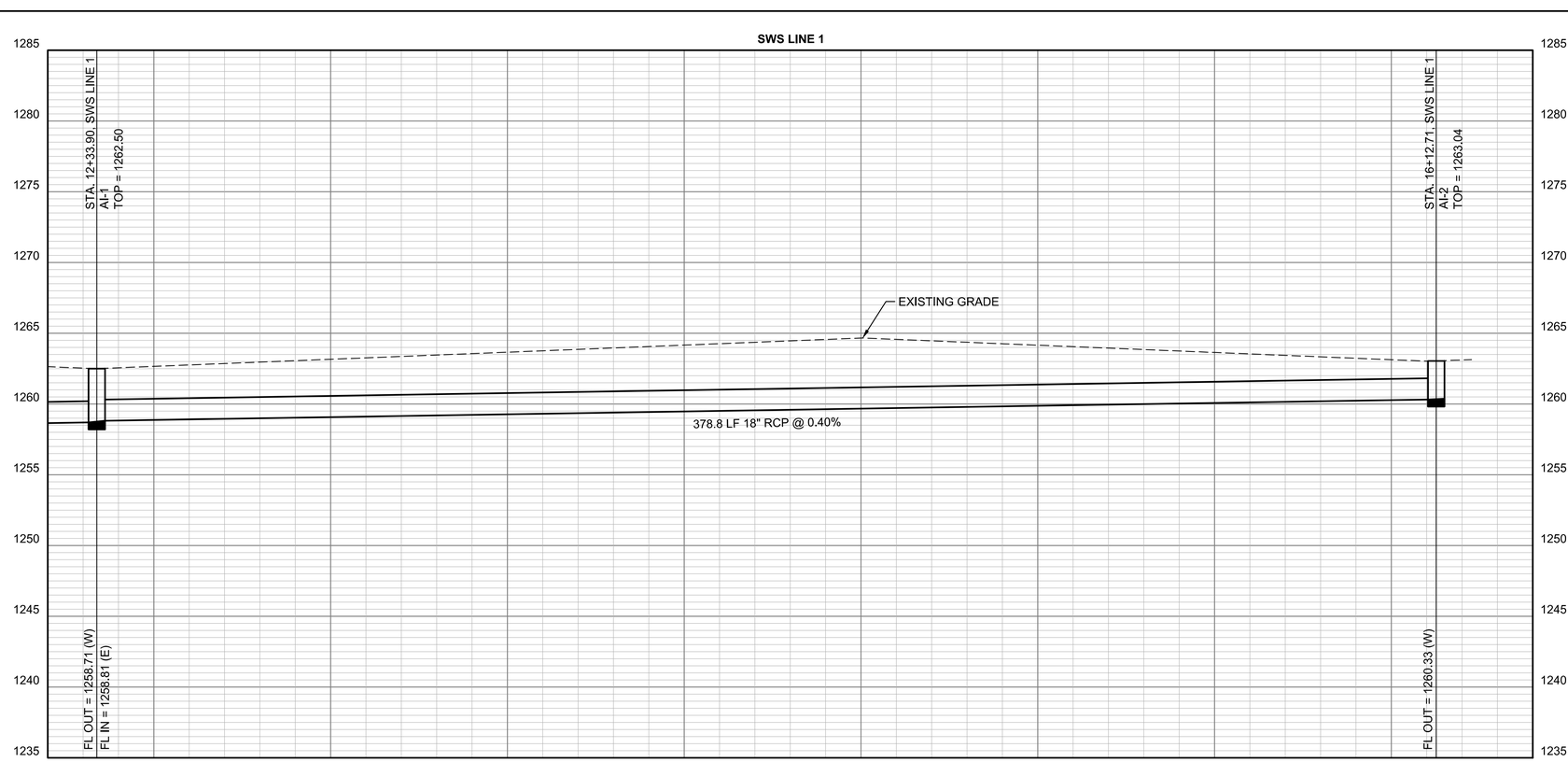
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U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\24-200605-009-CP401 PLAN AND PROFILE-SWS LINE 1.DWG



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

SEE SHEET NOS. CP501 THRU CP507 FOR STRUCTURE DETAILS

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



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CITY OF WICHITA

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SWANEY FARM ADDITION PHASE 2

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

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	08/18/2026 - cjr	

RED LINE - FIELD SET PEC
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JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
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CHECKED BY	CSB

PLAN AND PROFILE-SWS LINE 1

CP402
25 OF 69

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

N: 333,469.1264, E: 17,560,108.7527
STA. 21+12.75, SWS LINE 2
CONSTRUCT MH-2
5' DIAMETER MANHOLE

N: 333,470.5407, E: 17,560,240.4240
STA. 22+44.43, SWS LINE 2=
STA. 30+00.00, SWS LINE 3
CONSTRUCT MH-3
5' DIAMETER MANHOLE
MARCHPOINT

N: 333,423.7078, E: 17,560,005.5561
STA. 20+00.00, SWS LINE 2
CONNECT TO EXISTING 24" PIPE *

INSTALL 131.7 L.F. 24" RCP

INSTALL 112.7 L.F. 24" RCP

RESERVE A

25' STBK. LINE

15' UTI. ESMT.

PROP 8" SANI. SEWER

PROP. 8" WATER

CL 61ST STREET SOUTH

35' BC TO BC

32'-0"

40'-00

92°39'01"

87°20'58"

156°51'36"

CL WILLIS ST.

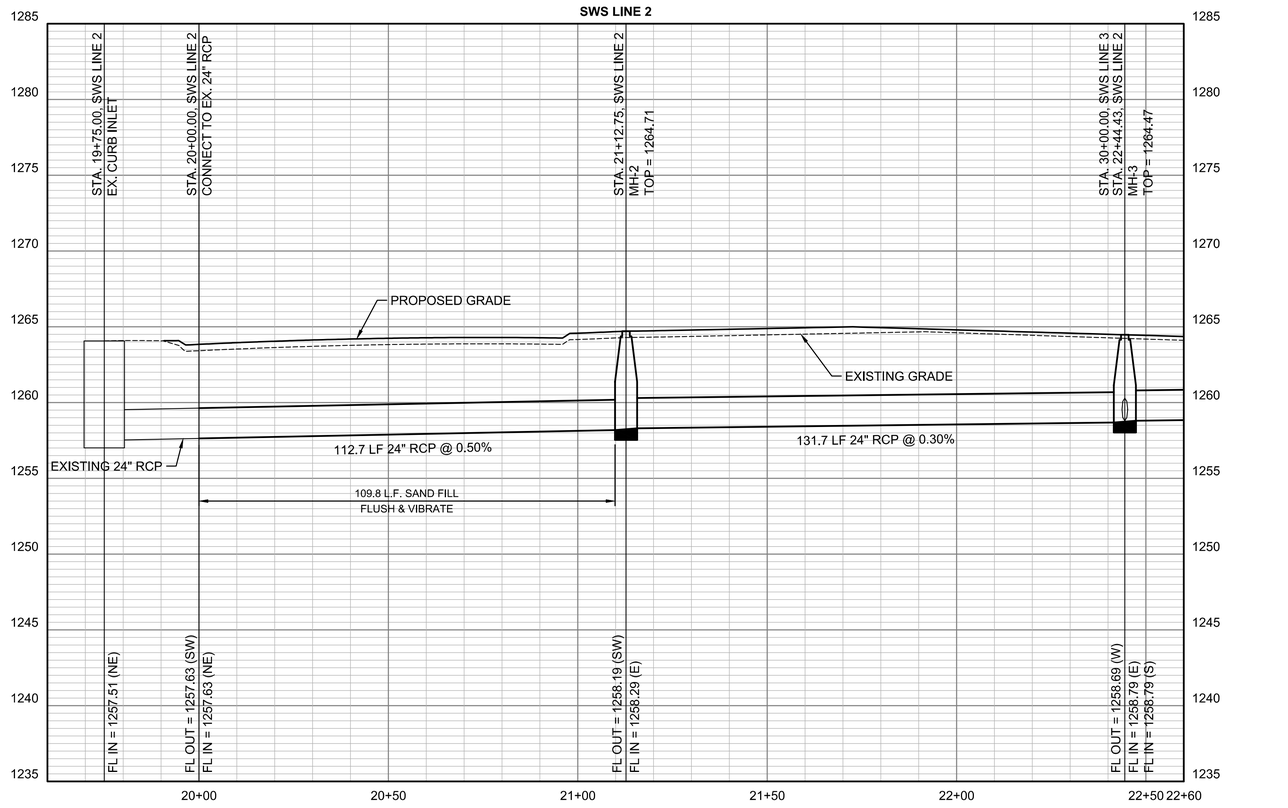
PROP. 8" WATER

PROP. 18" SWS

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

SEE SHEET NOS. CP501 THRU CP507 FOR STRUCTURE DETAILS

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



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SWANEY FARM ADDITION PHASE 2

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CITY OF WICHITA PROJECT NO. 472-2024-086027

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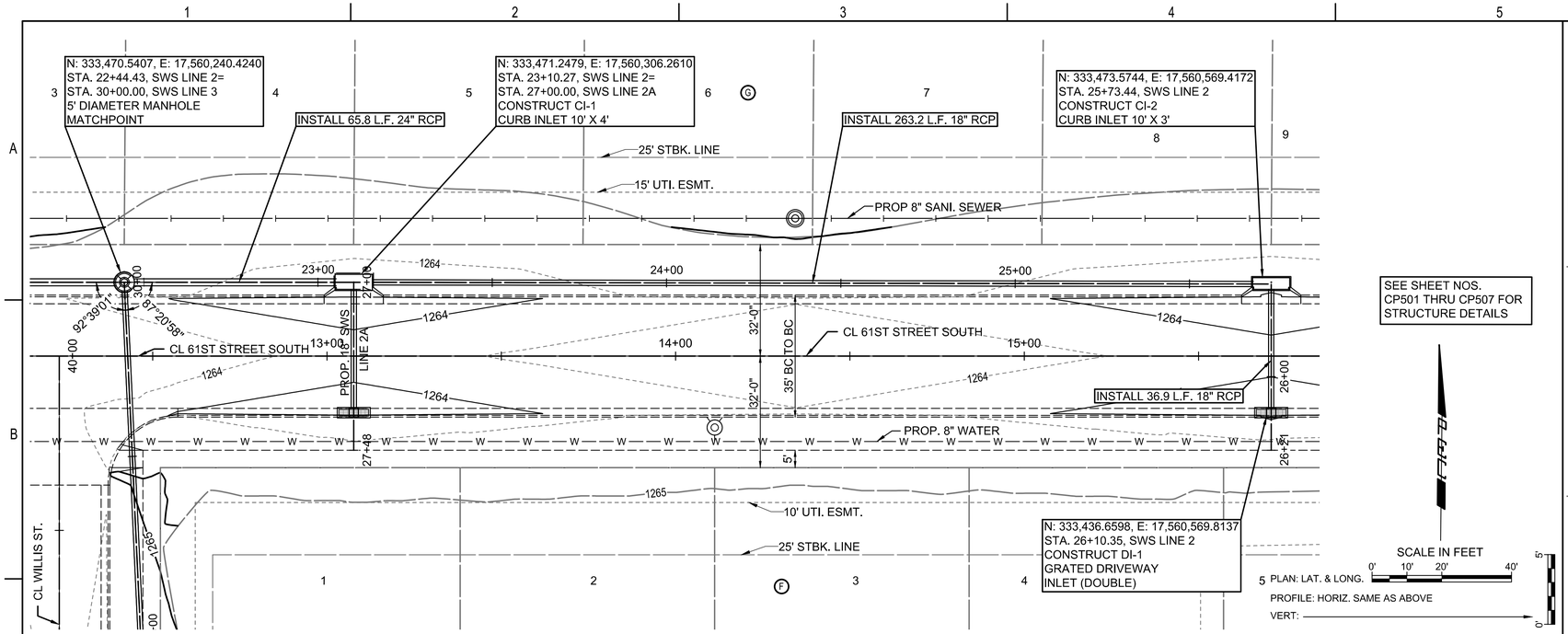
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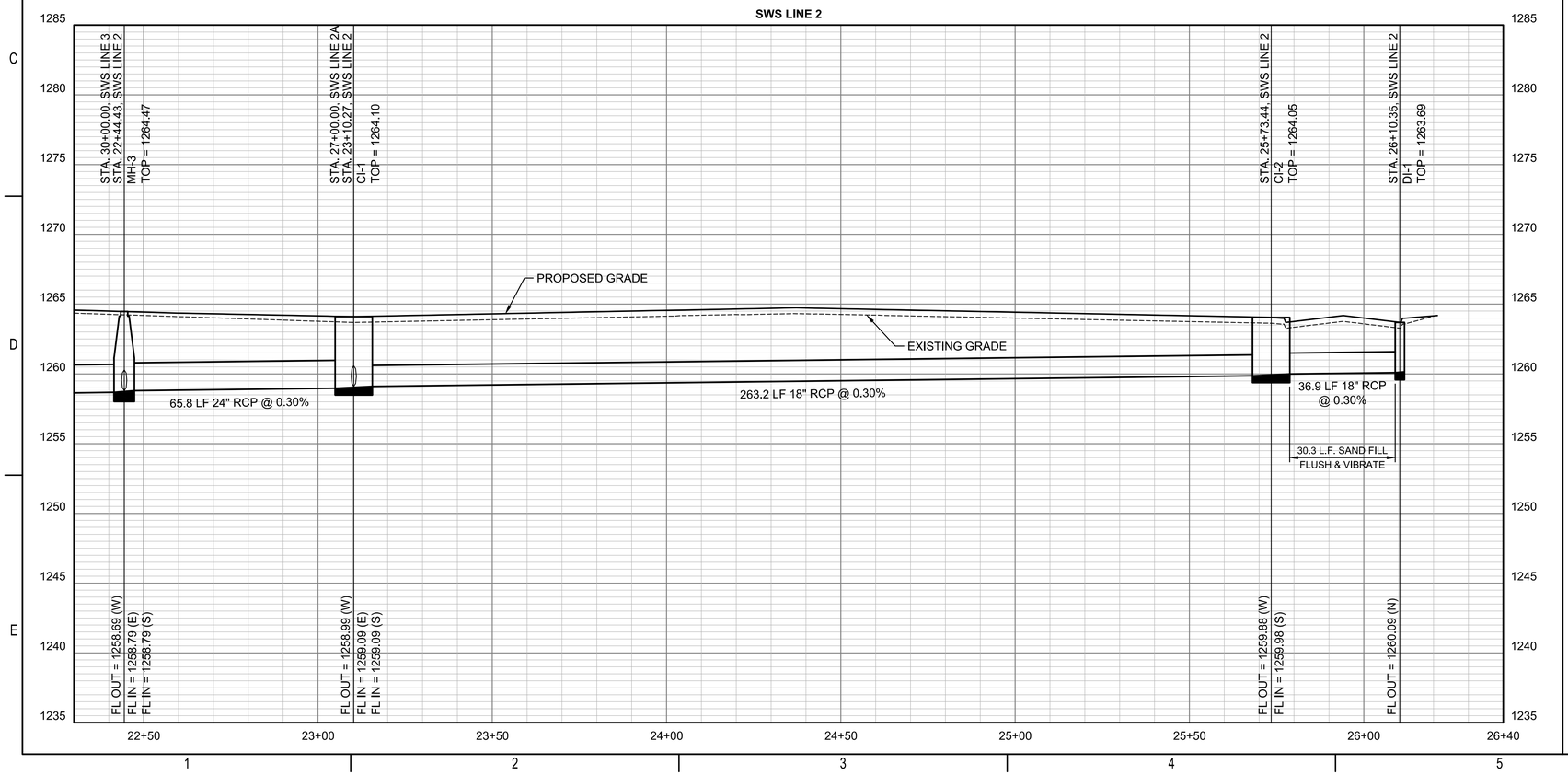
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DRAWN BY	BJS
CHECKED BY	CSB

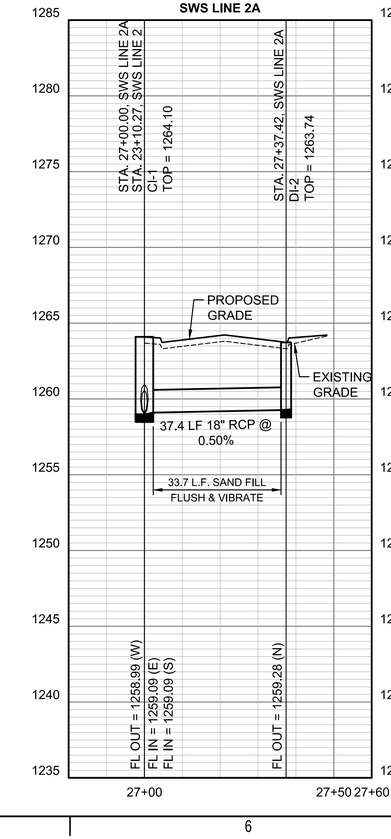
PLAN AND PROFILE-SWS LINE 2

CP403
26 OF 69

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







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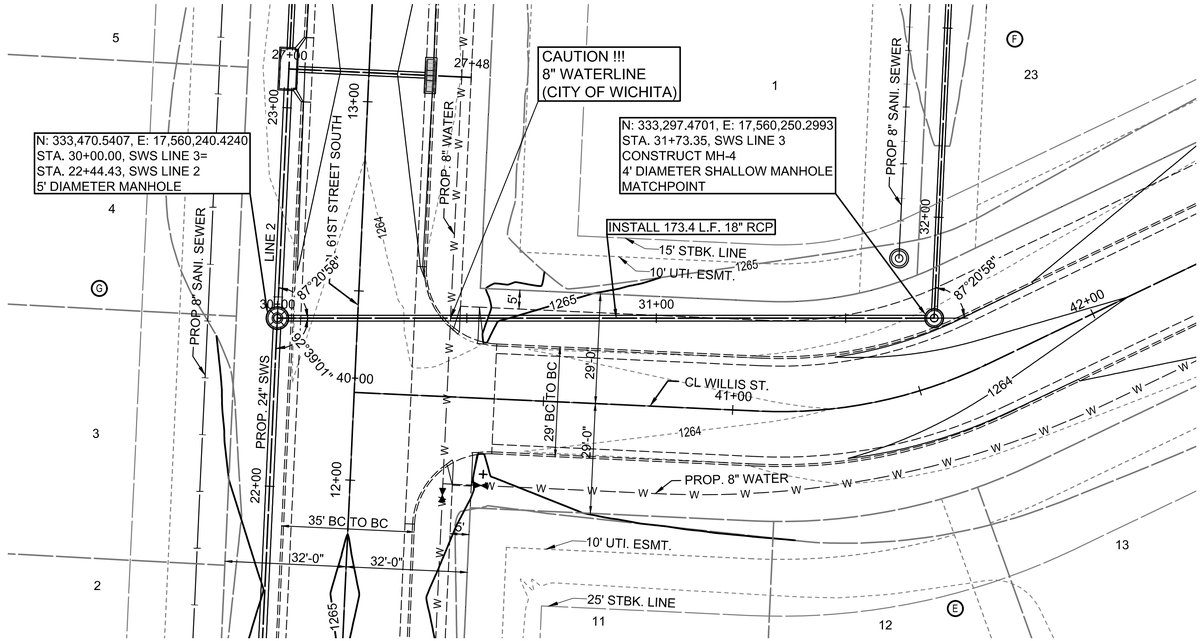
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JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
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PLAN AND PROFILE-SWS LINES 2 AND 2A

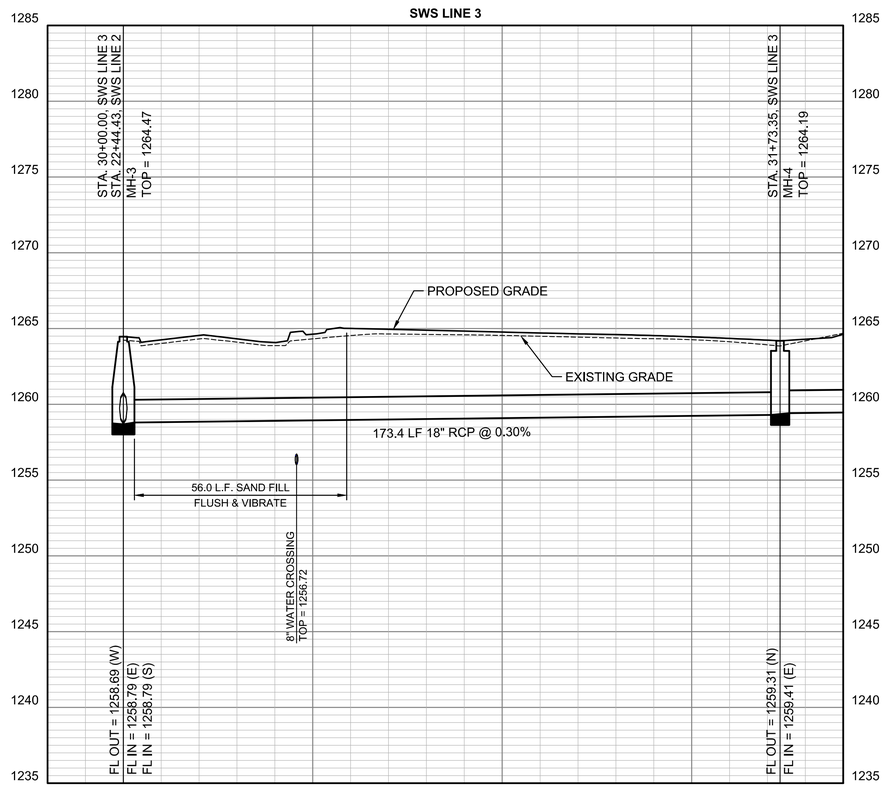
CP404
27 OF 69

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U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\27-200605-009-CP404 PLAN AND PROFILE-SWS LINES 2 AND 2A.DWG



SEE SHEET NOS. CP501 THRU CP507 FOR STRUCTURE DETAILS

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



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Issue:		
	08/18/2026 - cjr	

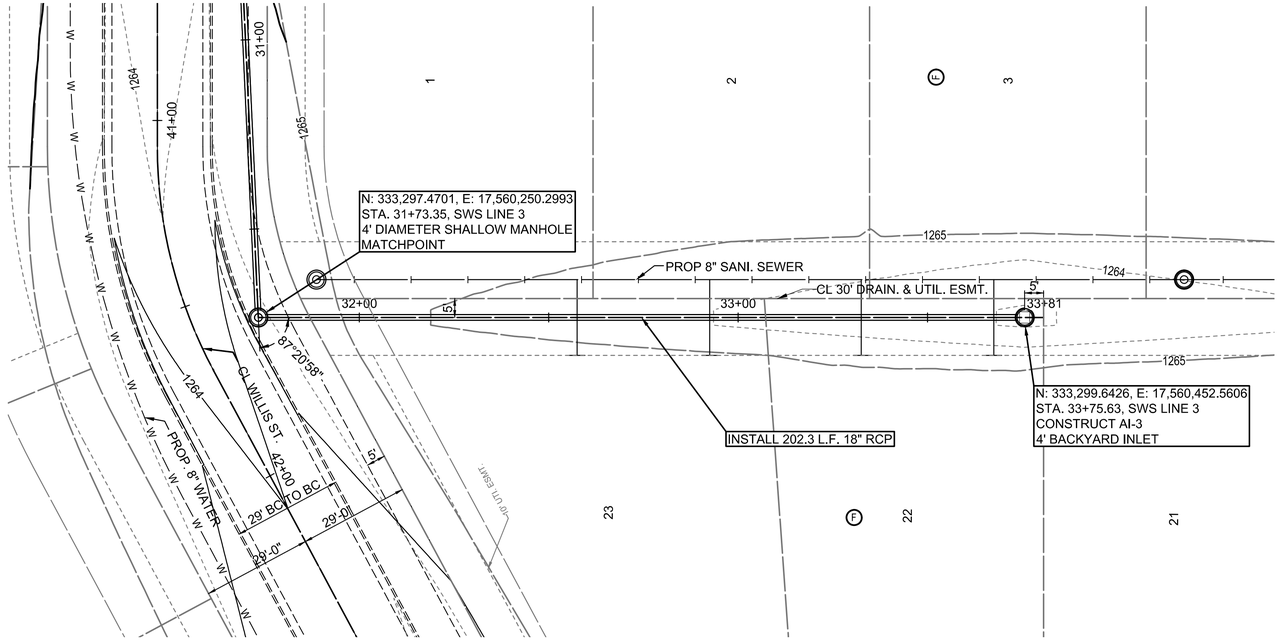
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JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

PLAN AND PROFILE-SWS LINE 3

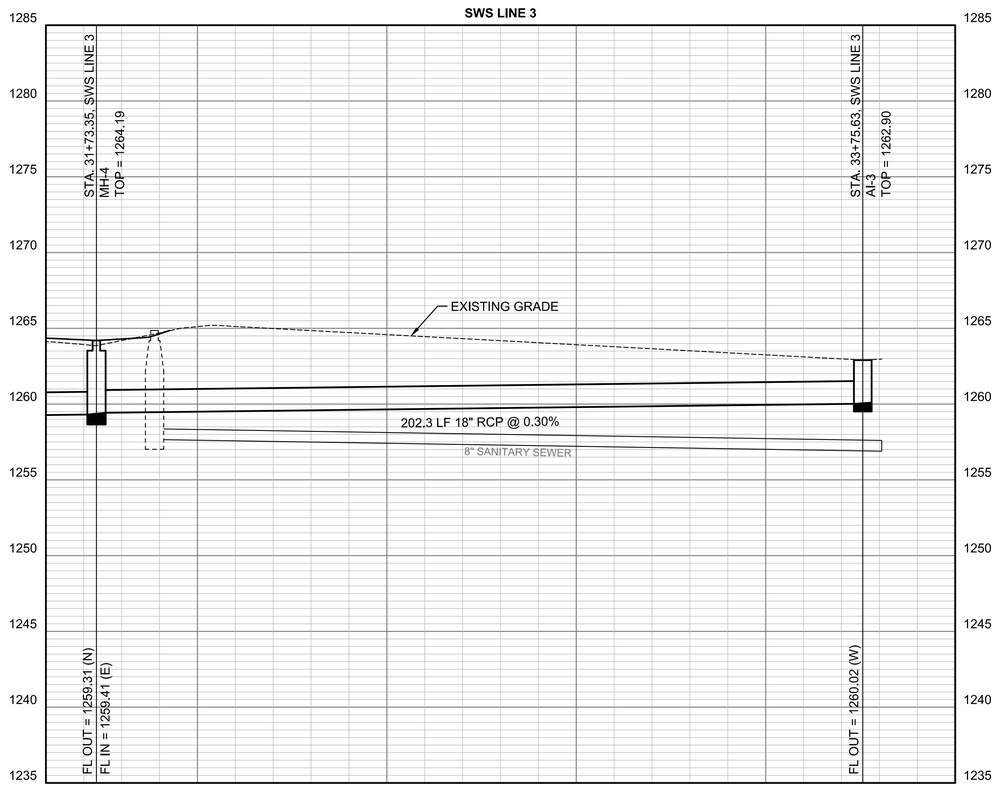
CP405
28 OF 69

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PLOTTED 11/6/2025 12:37:22 PM BY KEVIN GRAHAM
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SEE SHEET NOS. CP501 THRU CP507 FOR STRUCTURE DETAILS

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



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CITY OF WICHITA

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

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

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

Issue:		
	08/18/2026 - cjr	

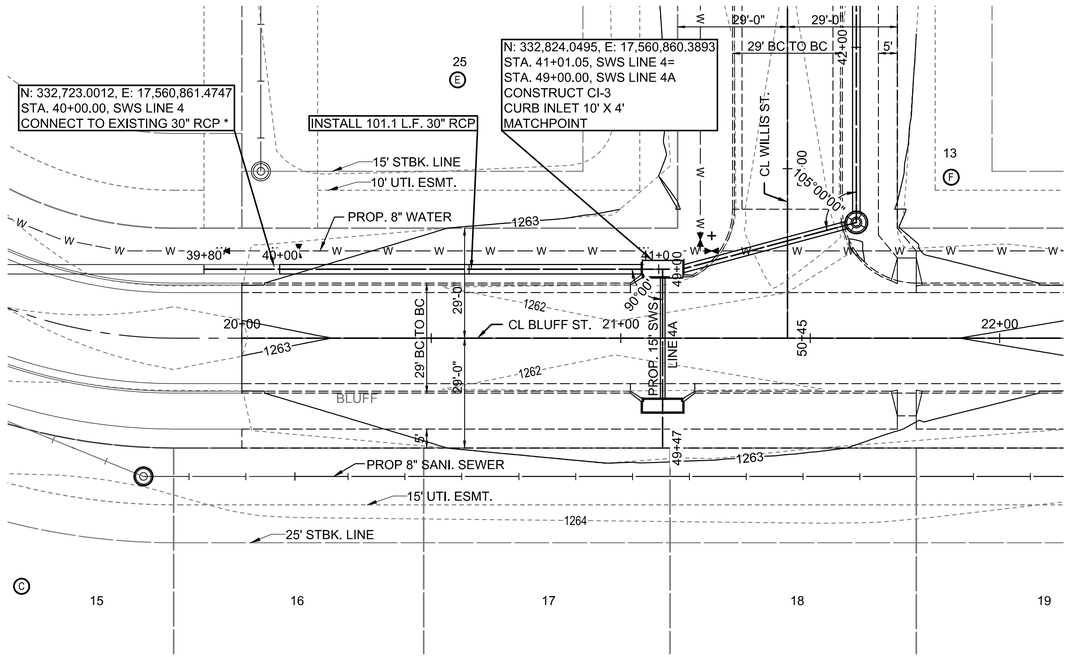
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U:\Wichita-Civil 200605-018

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

PLAN AND PROFILE-SWS LINE 3

CP406
29 OF 69

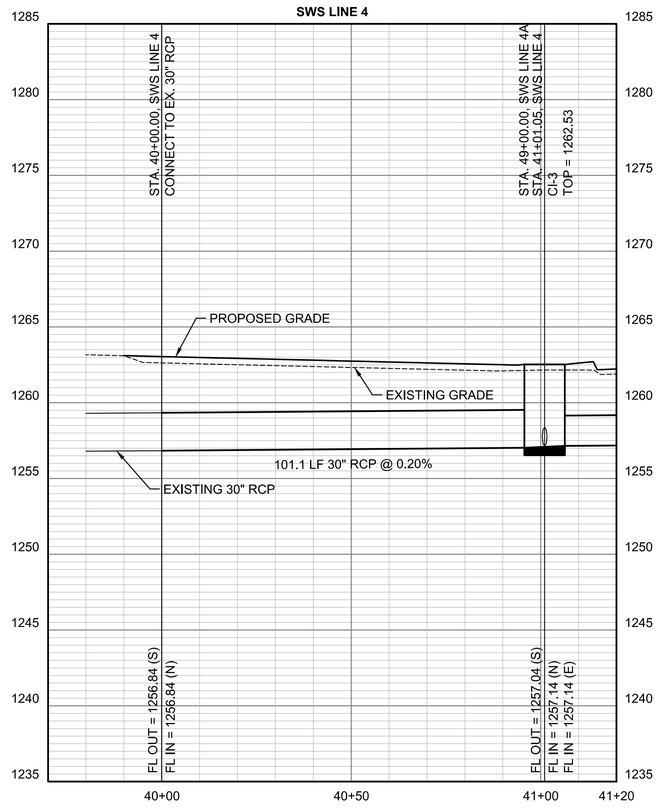
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U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\29-200605-009-CP406 PLAN AND PROFILE-SWS LINE 3.DWG



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

SEE SHEET NOS. CP501 THRU CP507 FOR STRUCTURE DETAILS

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



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Issue:		
	08/18/2026 - cjr	

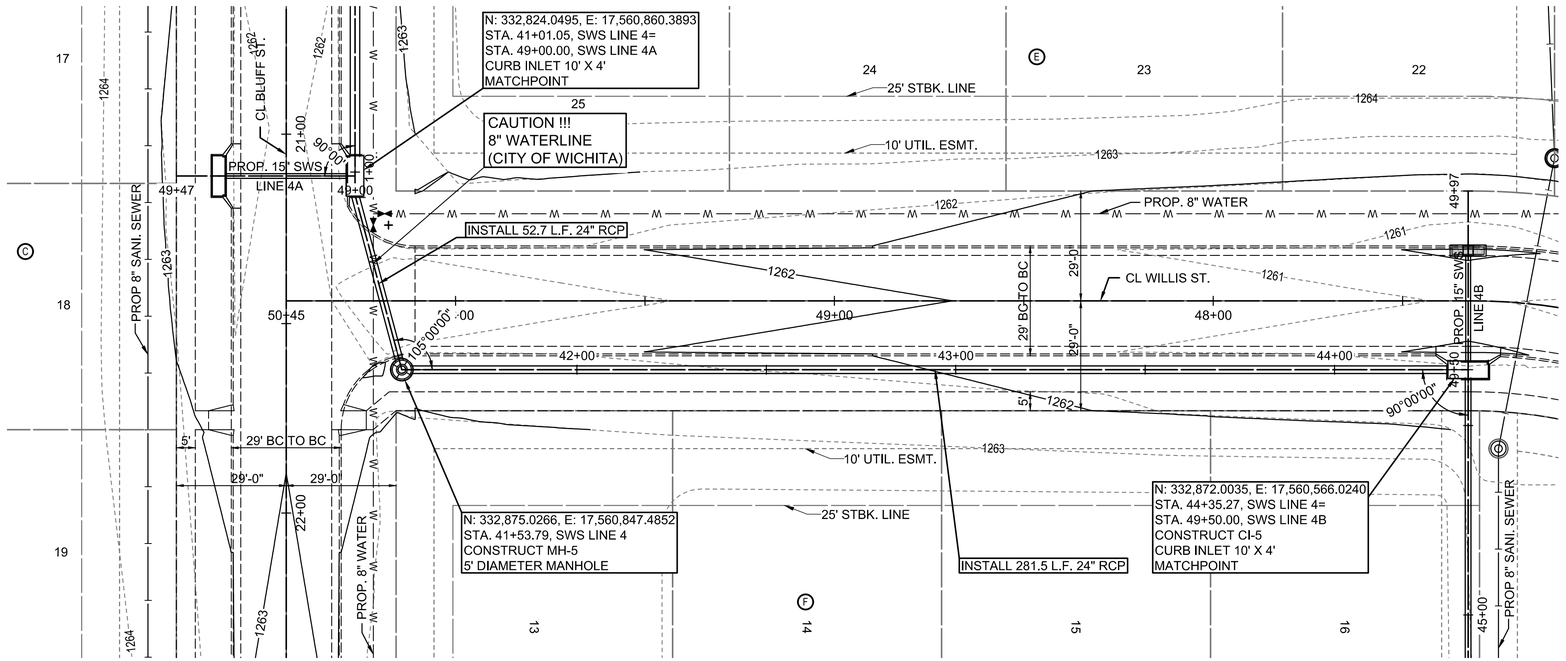
RED LINE - FIELD SET PEC
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JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

PLAN AND PROFILE-SWS LINE 4

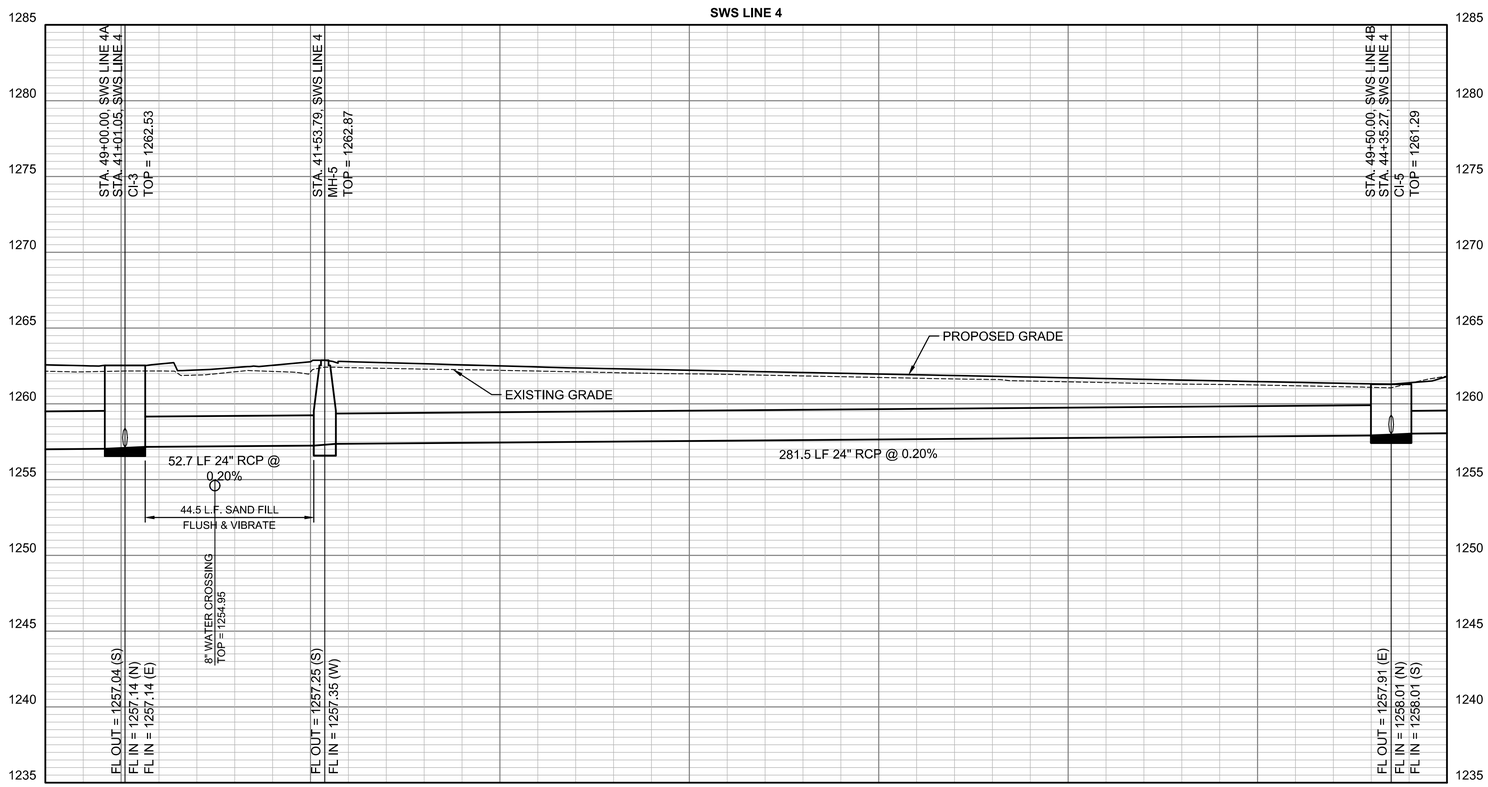
CP407
30 OF 69

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U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\30-200605-009-CP407 PLAN AND PROFILE-SWS LINE 4.DWG



SEE SHEET NOS. CP501 THRU CP507 FOR STRUCTURE DETAILS

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



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CITY OF WICHITA PROJECT NO. 472-2024-086027

Issue:		
	08/18/2026 - cjr	

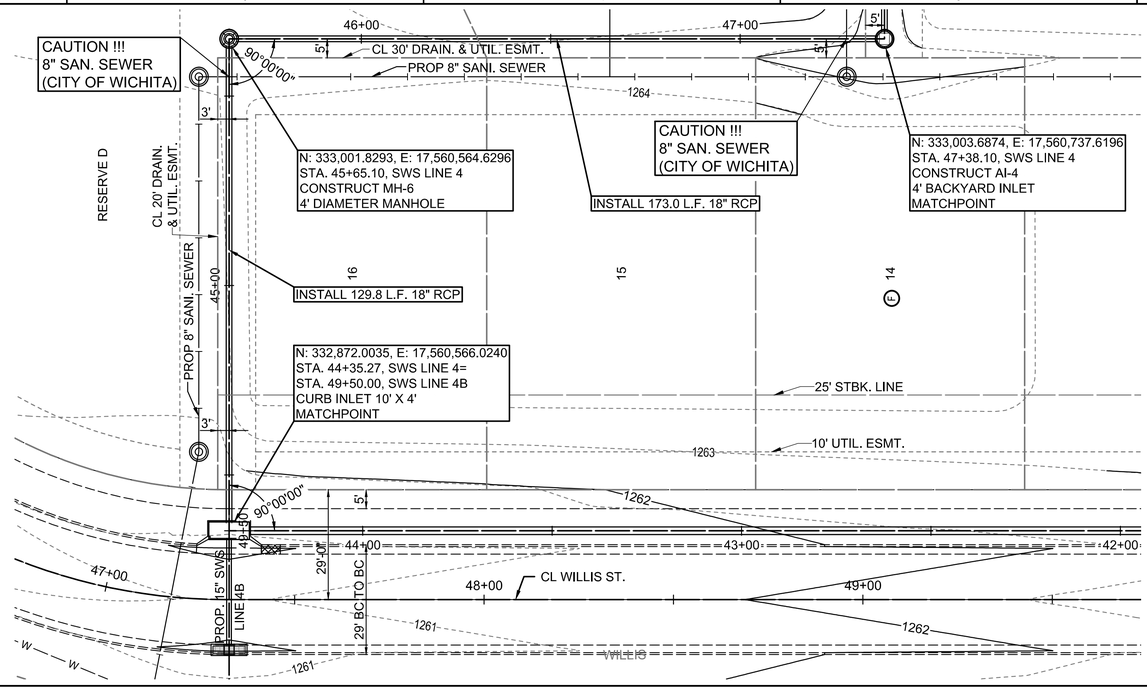
RED LINE - FIELD SET PEC
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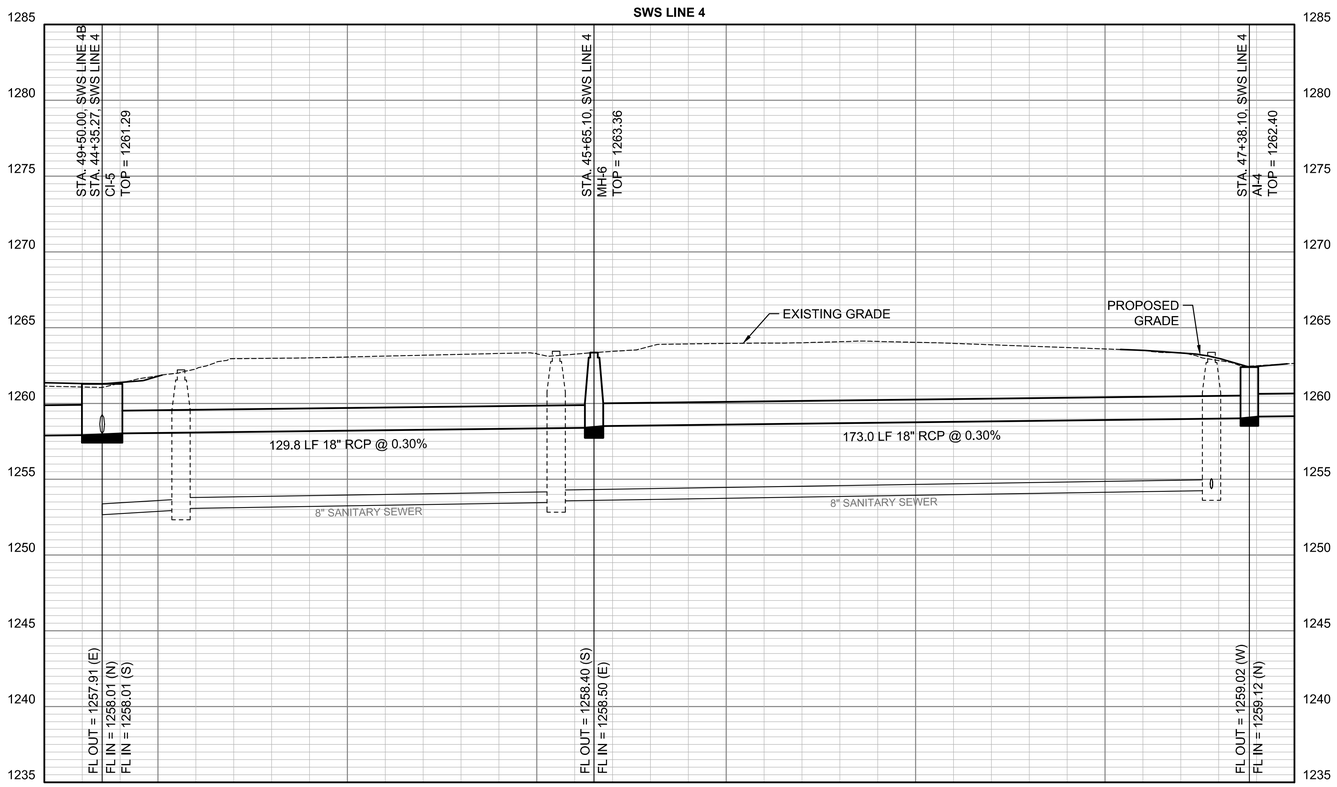
JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

PLAN AND PROFILE-SWS LINE 4

CP408
31 OF 69

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





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27806
11/06/2025
KANSAS
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PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

Issue:		
	08/18/2026 - cjr	

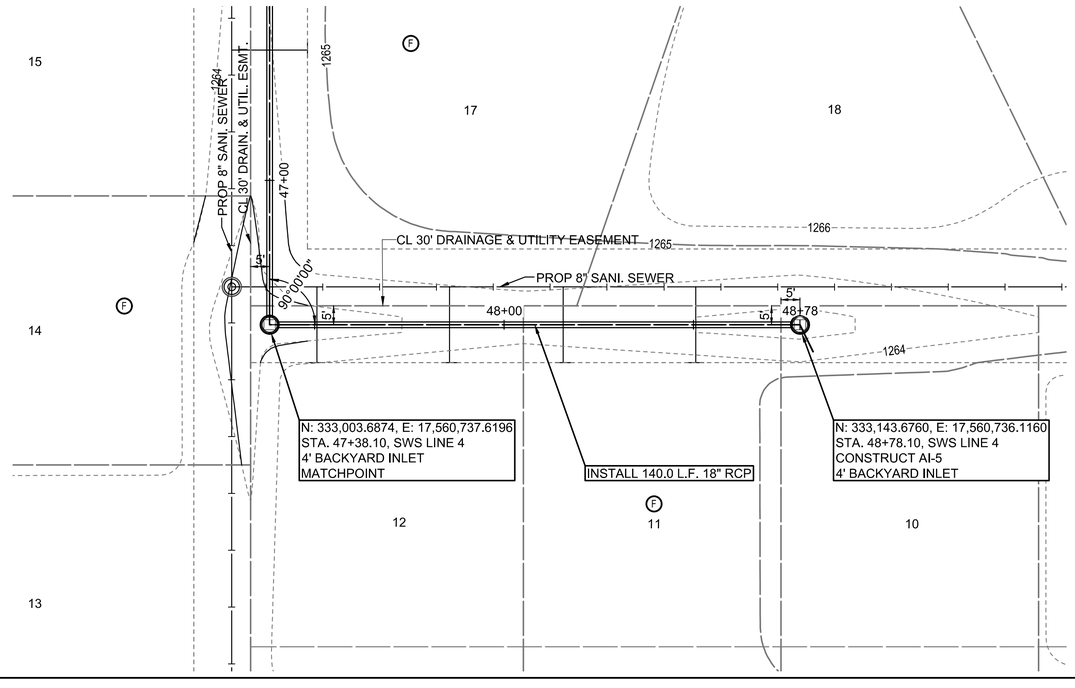
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JOB NO.	200605-009
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PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

PLAN AND PROFILE-SWS LINE 4

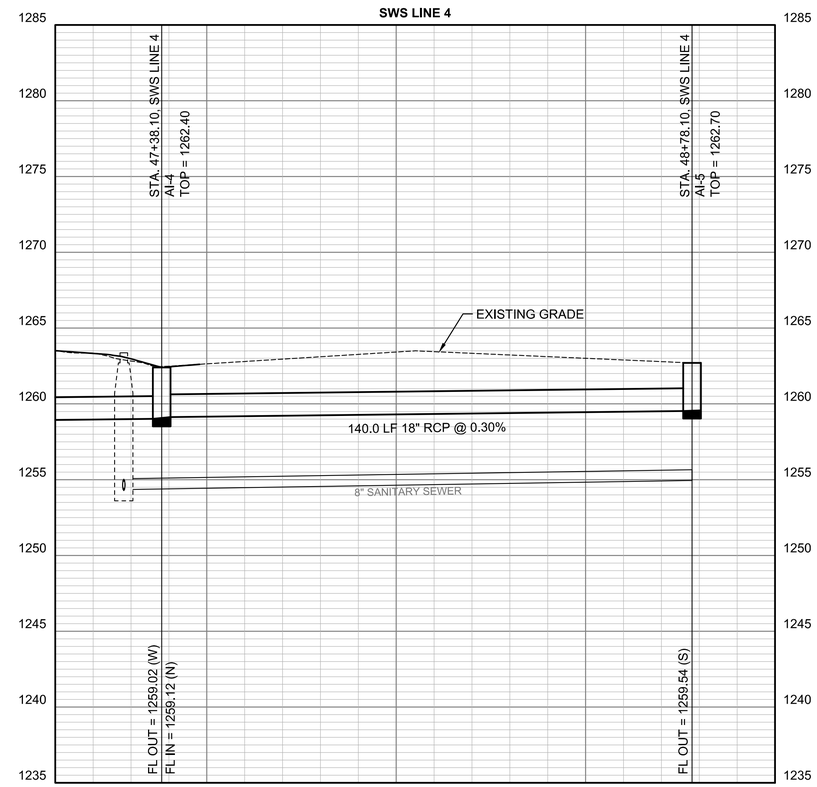
CP409
32 OF 69

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PLOTTED 11/6/2025 12:39:13 PM BY KEVIN GRAHAM
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SEE SHEET NOS. CP501 THRU CP507 FOR STRUCTURE DETAILS

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



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27806
11/06/2025
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PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

Issue:		
	08/18/2026 - cjr	

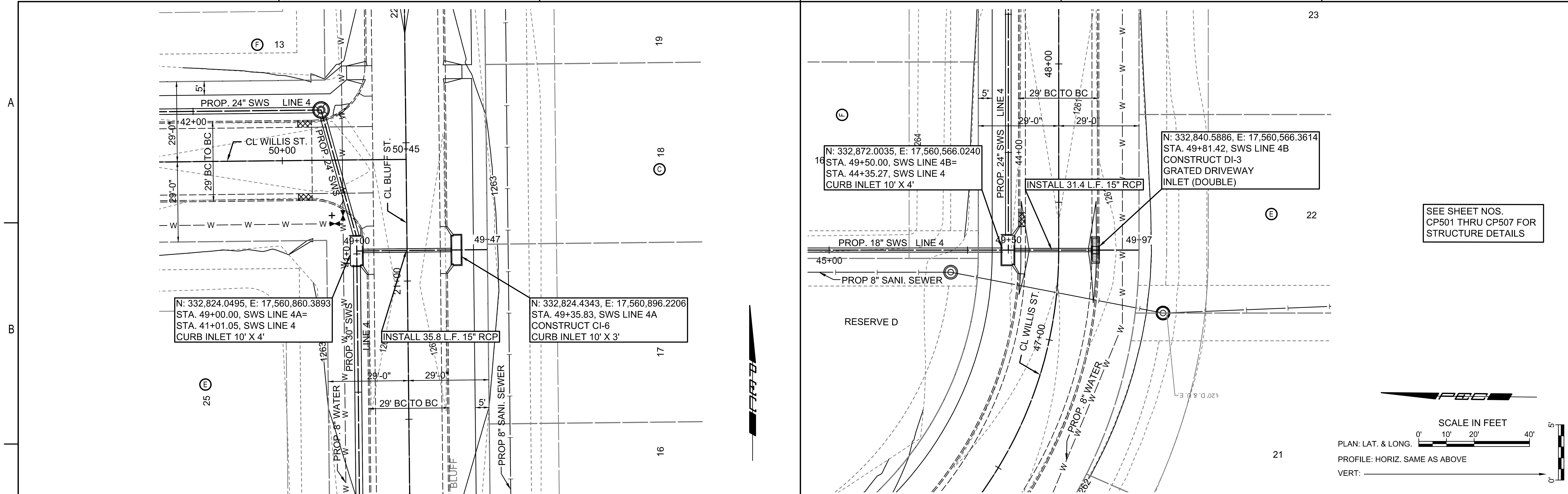
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JOB NO.	200605-009
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PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

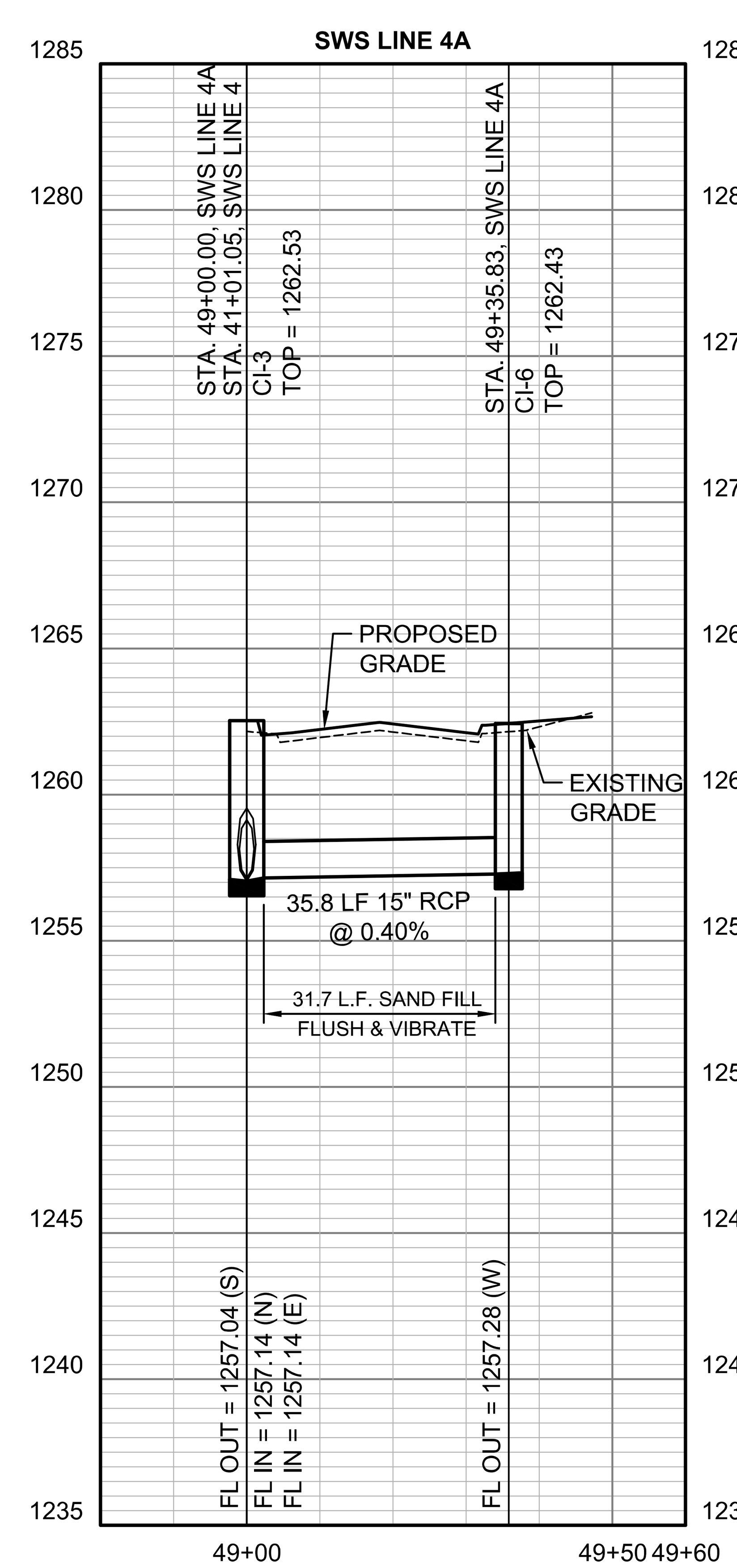
PLAN AND PROFILE-SWS LINE 4

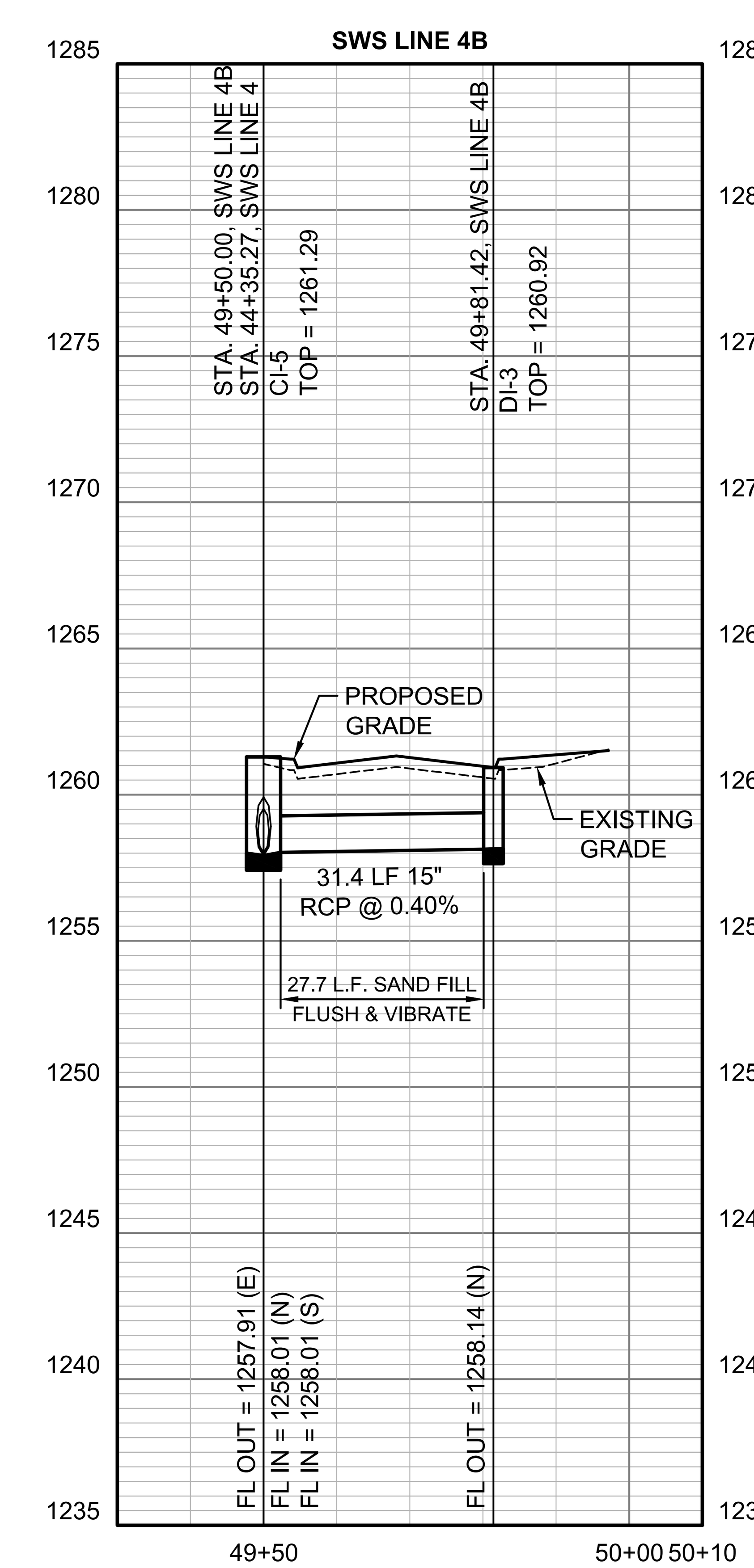
CP410
33 OF 69

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SEE SHEET NOS.
CP501 THRU CP507 FOR
STRUCTURE DETAILS





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CITY OF WICHITA PROJECT NO. 472-2024-086027

Issue:

08/18/2026 - cjr

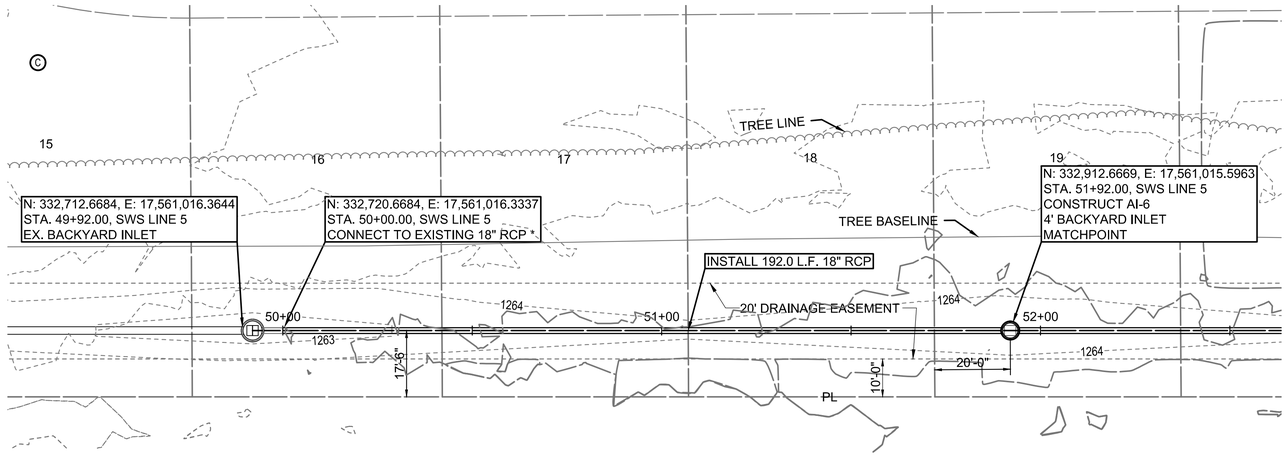
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JOB NO.	200605-009
DATE	NOVEMBER 2025
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DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

PLAN AND PROFILE-SWS LINES 4A AND 4B

CP411

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PLOTTED 11/6/2025 12:40:32 PM BY KEVIN GRAHAM
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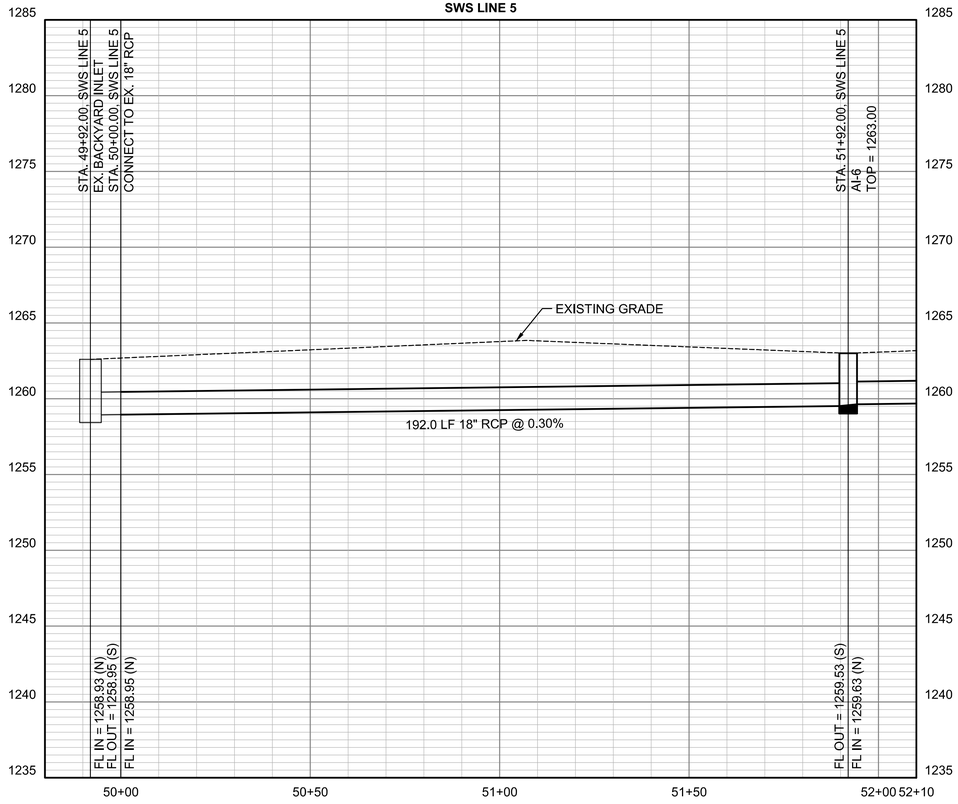


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TREES WHICH ARE IN DIRECT CONFLICT WITH PROPOSED NEW CONSTRUCTION SHALL BE REMOVED BY THE CONTRACTOR WITH THE ENGINEER'S APPROVAL. TREE REMOVAL SHALL BE SUBSIDIARY TO "SITE CLEARING".

SEE SHEET NOS.
CP501 THRU CP507 FOR
STRUCTURE DETAILS

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



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PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

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

Issue:		
	08/18/2026 - cjr	

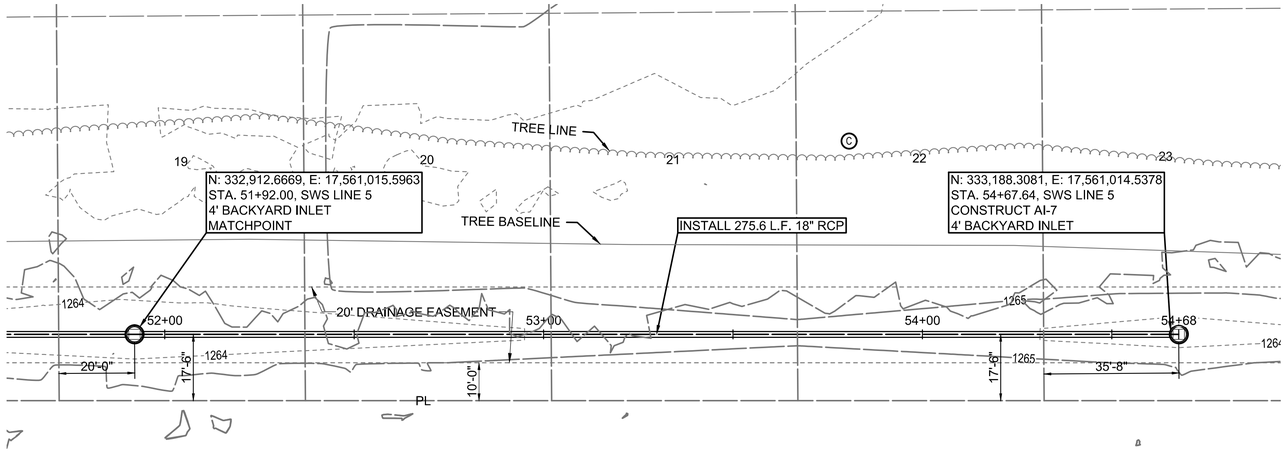
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JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

PLAN AND PROFILE-SWS LINE 5

CP412
35 OF 69

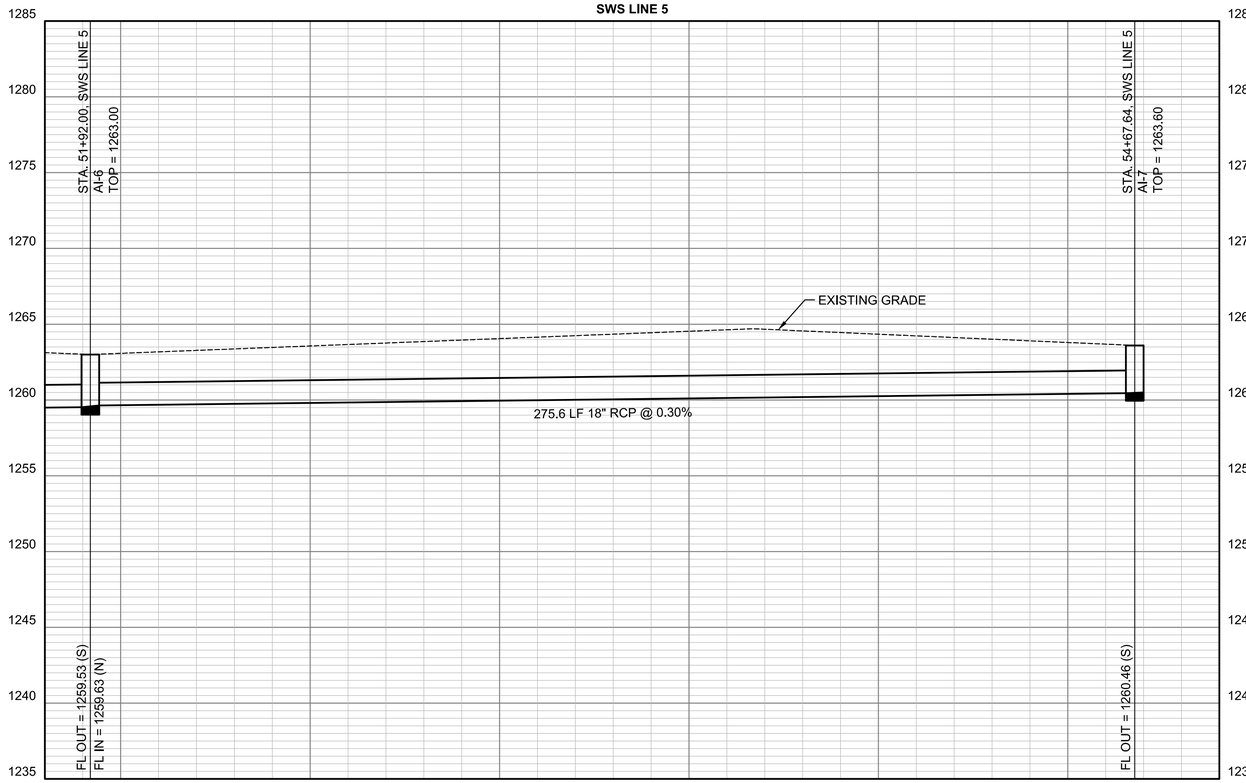
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PLOTTED 11/6/2025 12:41:13 PM BY KEVIN GRAHAM
U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\35-200605-009-CP412 PLAN AND PROFILE-SWS LINE 5.DWG



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

SEE SHEET NOS. CP501 THRU CP507 FOR STRUCTURE DETAILS

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



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Issue:		
	08/18/2026 - cjr	

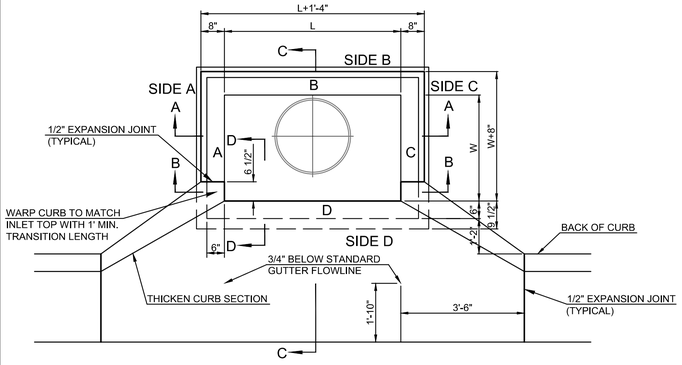
RED LINE - FIELD SET PEC
U:\Wichita-Civil 200605-018

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

PLAN AND PROFILE-SWS LINE 5

CP413
36 OF 69

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



TOP VIEW

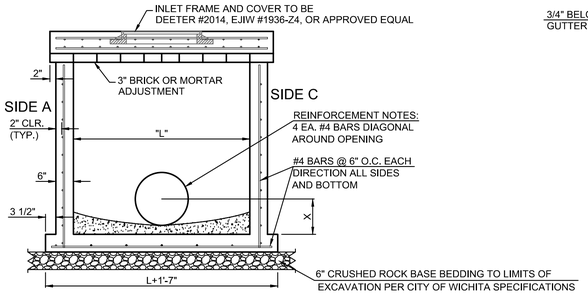
BAR SCHEDULE		
INLET OPENING	B1 BARS	SPACING
5'-0"	#4	4"
10'-0"	#6	3.5"

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

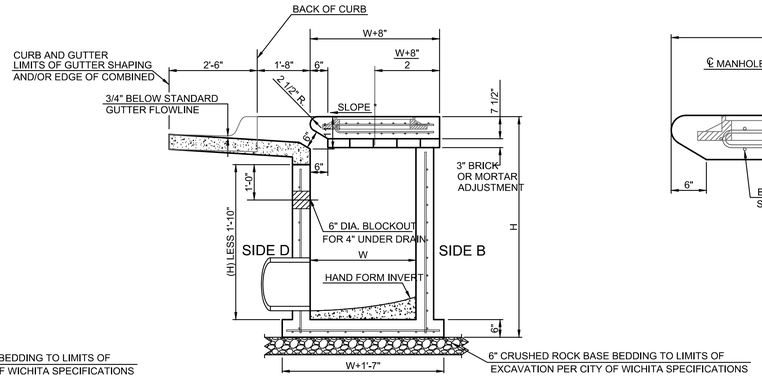
*** FOR PIPES PERPENDICULAR TO INLET WALL

GENERAL NOTES

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

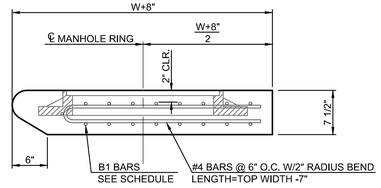


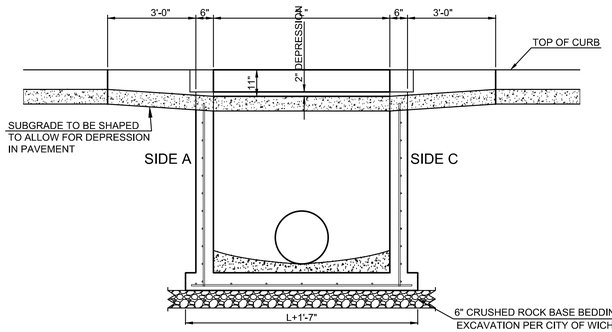
SECTION "A-A"



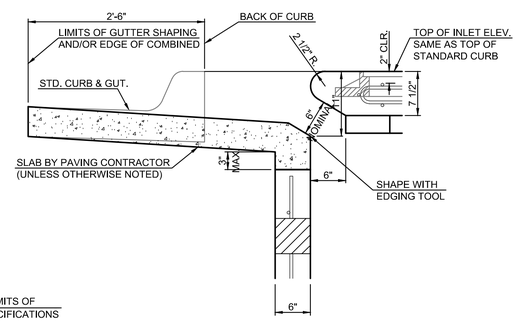
SECTION "C-C"

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





SECTION "B-B"



SECTION "D-D"

REVISION MAY 2017	UPDATED SET BACK DIMENSION ON TOP VIEW

CITY OF WICHITA
PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

STANDARD TYPE 1A
CURB INLET
5'-0" OR 10'-0" OPENING

CITY ENGINEER
GARY JANZEN, P.E.

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

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

SHEET
37 of 69

SW-103

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CITY OF WICHITA

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

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION
PHASE 2

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

Issue:		
	08/18/2026 - cjr	

RED LINE - FIELD SET PEC
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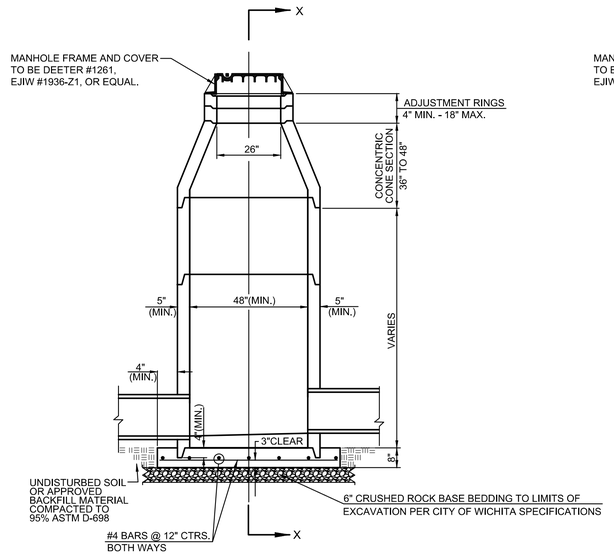
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DATE	NOVEMBER 2025
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DRAWN BY	BJS
CHECKED BY	CSB

STD. TYPE 1A CURB INLET DETAILS

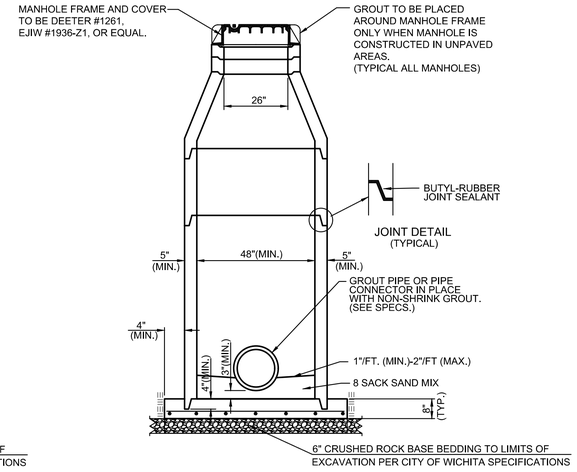
CP501
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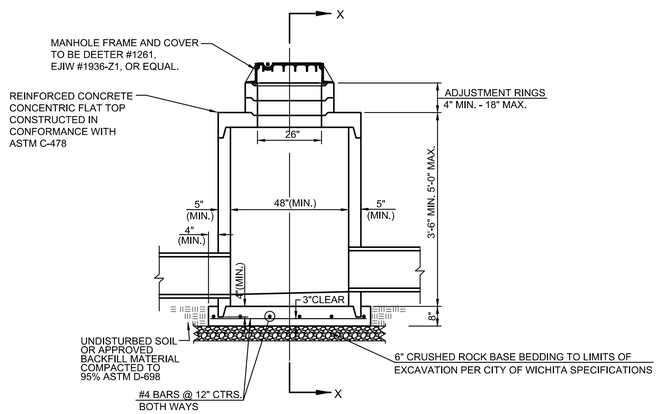
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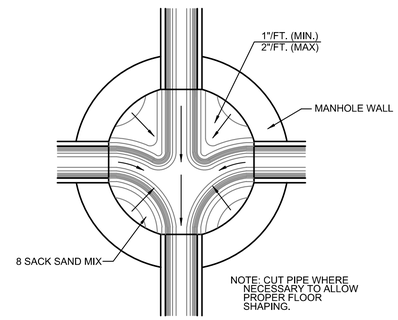
PRECAST
STANDARD MANHOLE
TYPE "A"



SECTION X-X
(TYPICAL)



PRECAST
SHALLOW MANHOLE
TYPE "B"



TYPICAL MANHOLE
FLOOR SHAPING

GENERAL NOTES

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
472-2024-086027	———	

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

SHEET
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SW-301

PEC
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WICHITA, KS 67202
316-262-2691 www.pec1.com

CITY OF WICHITA

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

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS
SWANEY FARM ADDITION PHASE 2
PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

Issue:		
	08/18/2026 - cjr	

RED LINE - FIELD SET PEC
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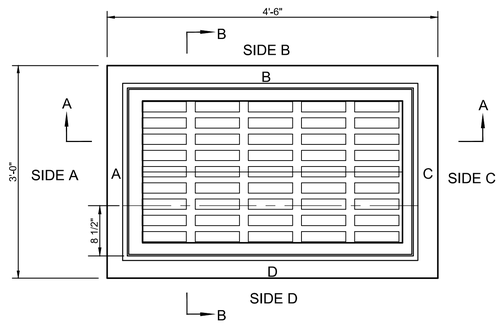
JOB NO.	200605-009
DATE	NOVEMBER 2025
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CHECKED BY	CSB

PRECAST CONCRETE MANHOLE DETAILS

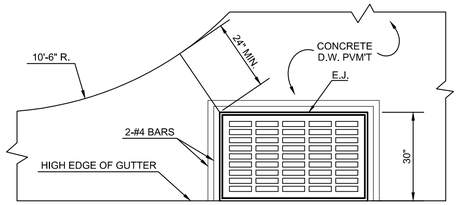
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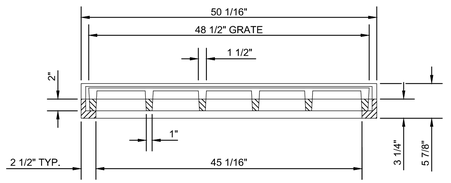
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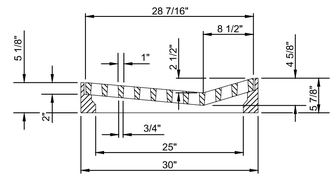
TOP VIEW



PLAN



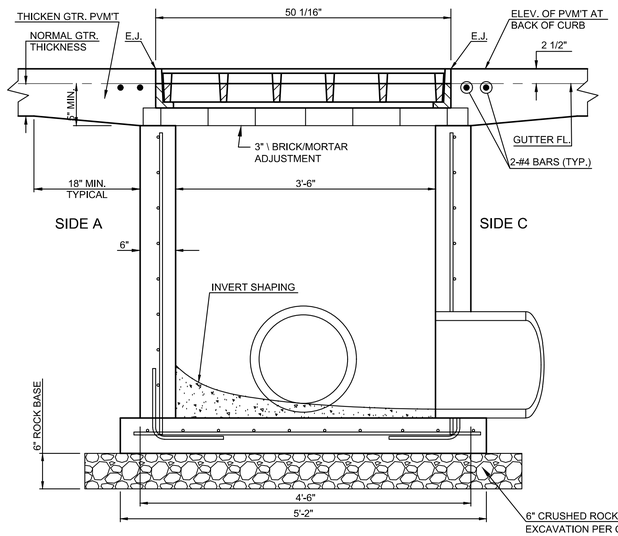
SECTION A-A



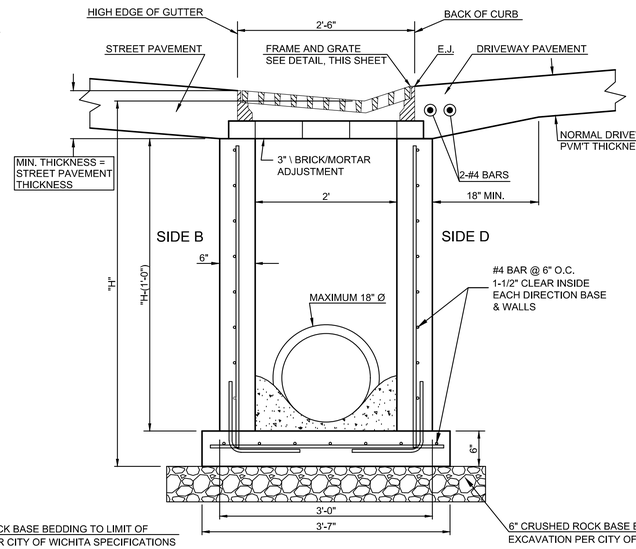
SECTION B-B

FRAME & GRATE

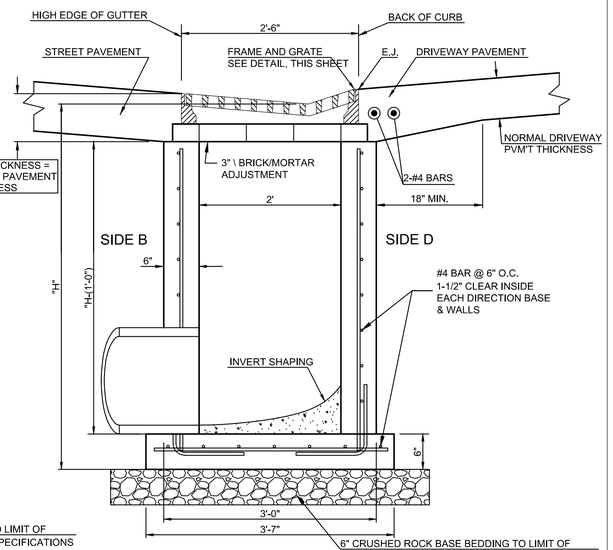
DEETER #2095 TOTAL WEIGHT: 705 LBS.
EJIW #7392 TOTAL WEIGHT: 675 LBS.



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

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

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

GENERAL NOTES

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

REVISED: MARCH 2015

CITY OF WICHITA
PUBLIC WORKS & UTILITIES ENGINEERING DIVISION

GRATED DRIVEWAY INLET (SINGLE)

CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER	OCA NUMBER	DATE
472-2024-086027		

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

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39 of 69

SW-108

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U:\Wichita-Civil\2020\200605\009\2PD4_Plans\030\PAVING\39-200605-009-CP503 GRATED DRIVEWAY INLET-SINGLE

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CITY OF WICHITA

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

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

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

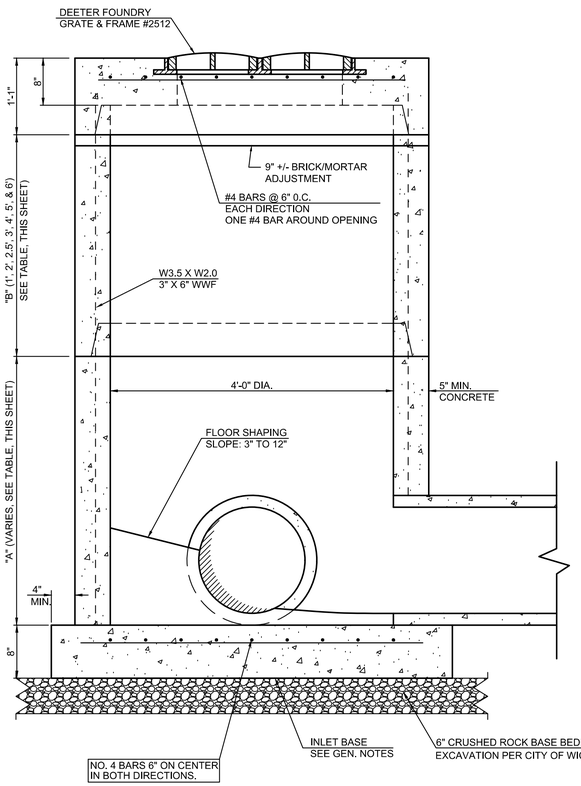
Issue:		
	08/18/2026 - cjr	

RED LINE - FIELD SET PEC
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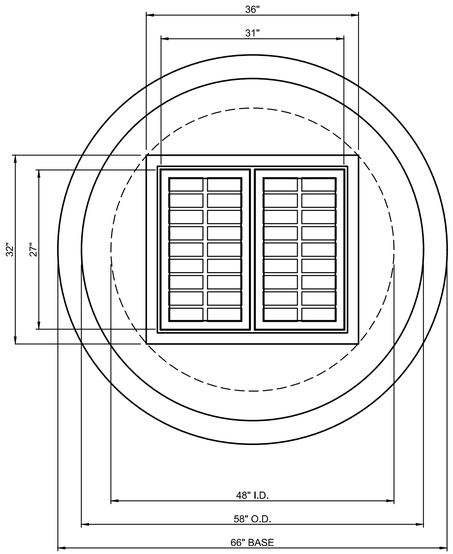
JOB NO.	200605-009
DATE	NOVEMBER 2025
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GRATED DRIVEWAY INLET-SINGLE

CP503
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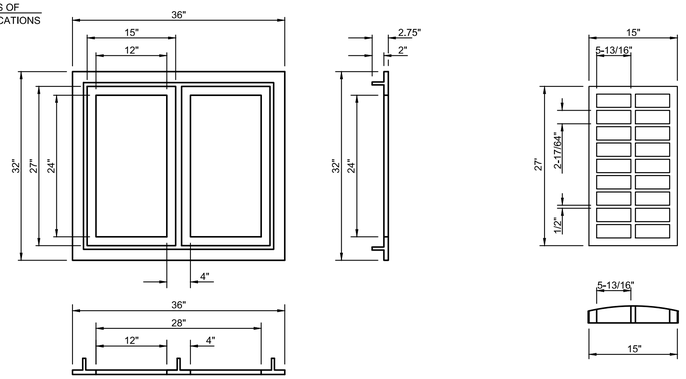


BACKYARD INLETS SHALL NOT BE USED UNDER PAVEMENT



BACKYARD INLET

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



DEETER #2512 CATCH BASIN INLET GRATE & FRAME

GENERAL NOTES

1. MORTAR USED IN MASONRY CONSTRUCTION SHALL CONTAIN 8 SACKS OF CEMENT PER CUBIC YARD. CONCRETE USED IN BACKYARD INLET BASES SHALL CONFORM TO THE REQUIREMENTS FOR CONCRETE PAVEMENT CONSTRUCTION AS SPECIFIED IN THE CITY STANDARD PAVING SPECIFICATIONS USING CITY CONCRETE CEMENT MIX WITHOUT AIR ENTRAINING.

2. REINFORCING STEEL SHALL BE INSTALLED IN THE BACKYARD INLET BASES AND SHALL CONSIST OF NO. 4 BARS PLACED ON 6" CENTERS IN BOTH DIRECTIONS. THE BACKYARD INLET BASE REINFORCEMENT SHALL BE PLACED 6" ABOVE THE BOTTOM OF THE BACKYARD INLET BASE. ALL COSTS FOR FURNISHING AND INSTALLING REINFORCING STEEL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE BACKYARD INLET.

3. THE FLOORS OF ALL BACKYARD INLET SHALL BE SHAPED WITH FLOW CHANNELS SUCH THAT THE INLETS WILL BE SELF CLEANING AND FREE OF AREAS WHERE SOLIDS COULD BE DEPOSITED. FLOW CHANNELS SHALL BE FORMED TO MATCH THE BOTTOM HALVES OF THE INFLOWING PIPES AND THE OUTFLOWING PIPE AS SHOWN BY THE DRAWINGS. INLET FLOORS SHALL HAVE SLOPES OF 3 INCHES PER FOOT IN THE AREAS OUTSIDE OF THE FLOW CHANNELS SLOPED TOWARD THE FLOW CHANNELS. PIPES LAID THROUGH INLETS SHALL HAVE THE TOP HALF REMOVED TO NEAT LINES FOR THE FULL INSIDE DIAMETER OF THE INLET. INLET FLOORS SHALL THEN BE SHAPED AROUND THE BOTTOM HALF OF THE PIPE WHICH FORMS THE FLOW CHANNEL.

4. PIPES INSTALLED WITHIN THE EXCAVATION MADE FOR THE INLET SHALL BE CRADLED WITH CONCRETE TO THE LIMITS OF THE INLET EXCAVATION. WHEN CLAY PIPE IS USED, THE CRADLE SHALL EXTEND TO THE FIRST JOINT OUTSIDE THE INLET. THE CRADLE SHALL BE TERMINATED AT THE CLAY PIPE JOINT IN A MANNER WHICH WILL MAINTAIN THE FLEXIBILITY OF THE JOINT. COST OF CRADLE WITHIN INLET EXCAVATION OR TO CLAY PIPE JOINTS ADJACENT TO INLET SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE INLET.

5. INLET GRATE CASTINGS AND INLET FRAME CASTINGS SHALL CONFORM TO THE REQUIREMENTS AS INDICATED IN THE STANDARD SPECIFICATIONS AND AS SHOWN IN THE STANDARD DETAIL DRAWING.

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

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

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

9. CONTRACTOR SHALL REMOVE LIFTING HOOKS AFTER INSTALLATION. RECESSES IN INLET WALL SHALL BE GROUTED FLUSH TO THE INLET WALL WITH HYDRAULIC CEMENT AFTER THE INLET IS IN PLACE. LIFTING HOLES THRU THE INLET WALL WILL NOT BE ACCEPTED.

REVISED: MARCH 2015

CITY OF WICHITA
PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

BACKYARD INLET

CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER	OCA NUMBER	DATE
472-2024-086027		

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

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SW-203

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CITY OF WICHITA

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

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

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

Issue:		
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RED LINE - FIELD SET PEC
U:\Wichita-Civil 200605-018

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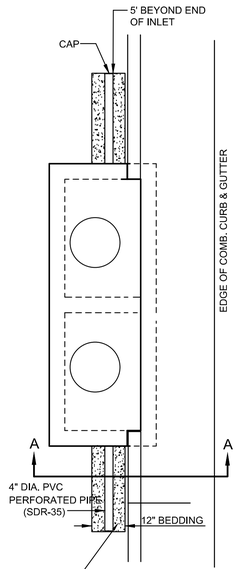
BACKYARD INLET

CP504
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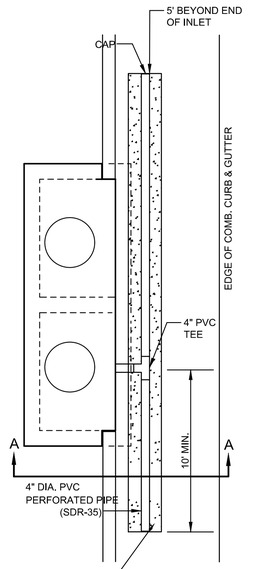
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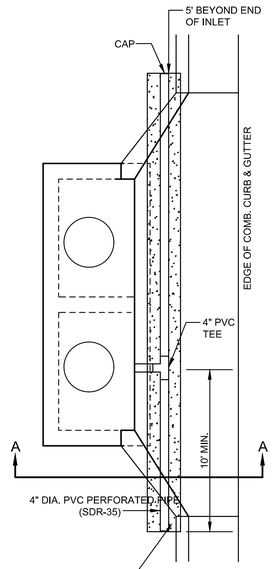
PAVEMENT UNDERDRAIN SHALL BE INSTALLED ON ALL CURB INLETS.



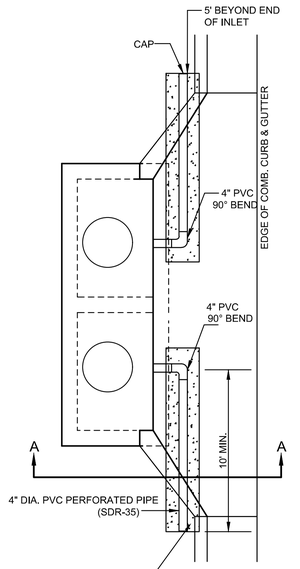
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OPTION 1



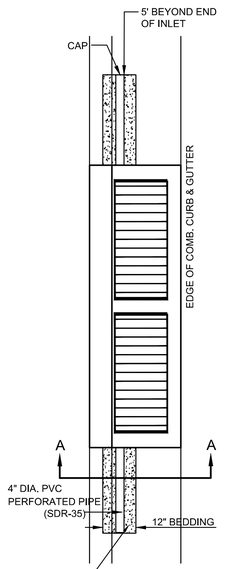
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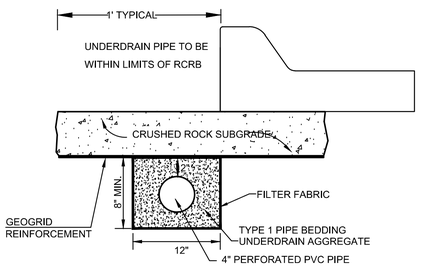
TYPE 1-A INLET
OPTION 1



TYPE 1-A INLET
OPTION 2



TYPE 2



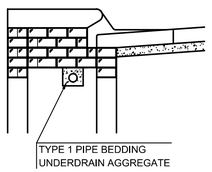
SECTION A-A (TYPICAL)

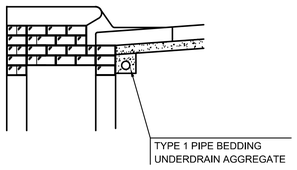
GENERAL NOTES

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

2. WHEN SWS CONSTRUCTED BY SEPARATE PROJECT, SWS CONTRACTOR SHALL INSTALL SDR 35, 4" DRAIN PIPE STUB ONLY THROUGH WALLS OF CURB INLETS AND CAP TO ALLOW FUTURE CONNECTION OF TEE AND ADDITIONAL DRAIN PIPE BY OTHERS.

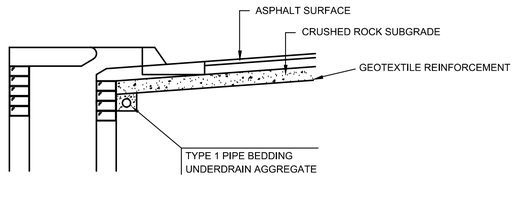
2. UNDERDRAIN PIPE SHALL BE PAID AS A MEASURED QUANTITY BY THE LINEAL FOOT.



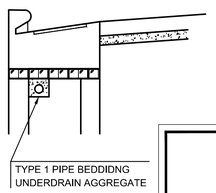


(MIN. 16 PERFORATIONS PER LIN. FT. @ 1/4" DIA.)
PERFORATIONS TO BE ON BOTTOM HALF

SECTION A-A



SECTION A-A



SECTION A-A

PAVEMENT UNDERDRAIN DETAIL

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

CITY OF WICHITA
PUBLIC WORKS & UTILITIES ENGINEERING DIVISION

CURB INLET PAVEMENT UNDERDRAIN DETAIL

CITY ENGINEER
GARY JANZEN, P.E.

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

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

SHEET
41 of 69

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

CITY OF WICHITA

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

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS
SWANEY FARM ADDITION PHASE 2
PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-2024-086027

Issue:		
	08/18/2026 - cjr	

RED LINE - FIELD SET PEC
U:\Wichita-Civil 200605-018

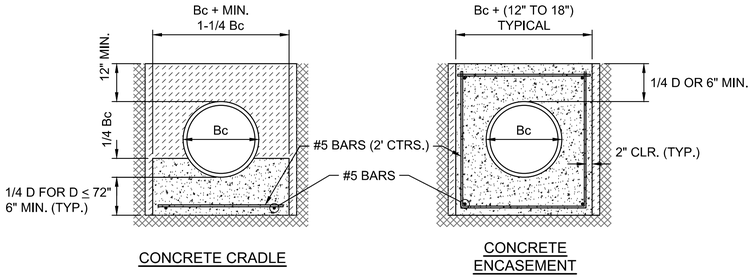
JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

PAVEMENT UNDERDRAIN DETAILS

CP505
41 OF 69

Saved: 06-24-2025, 10:12:02 AM by BILL.SEXSON
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U:\WICHITA-CIVIL\2020\200605\009\2PD4_PLANS\030\PAVING\41-200605-009-CP505 PAVEMENT UNDERDRAIN DETAILS.DWG



CLASS A
NOT TO SCALE

Bc = OUTSIDE PIPE DIAMETER

H = BACKFILL FROM TOP OF PIPE TO EXISTING GROUND

D = INSIDE PIPE DIAMETER

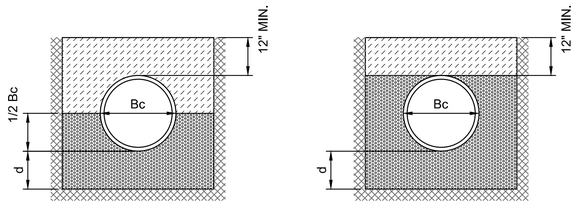
d = DEPTH OF BEDDING MATERIAL BELOW PIPE

GRANULAR BEDDING MATERIAL OR SAND-GRAVEL BEDDING

COMPACTED EMBEDMENT

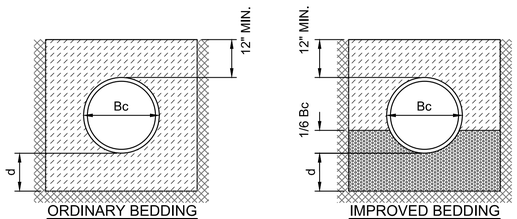
CONCRETE

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



CLASS B
NOT TO SCALE

IMPROVED BEDDING



CLASS C
NOT TO SCALE

PIPE ZONE BACKFILLING
NOT TO SCALE

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

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

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

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

CLASS B BEDDING SHALL BE USED FOR ALL FLEXIBLE PIPE.

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

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

CLASS C BEDDING SHALL BE USED FOR ALL RIGID PIPE.

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

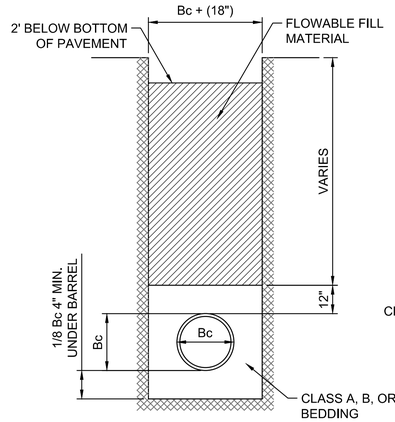
B. CLASS C IMPROVED BEDDING SHALL BE USED FOR WET CONDITIONS EXISTING IN THE TRENCH, AS DIRECTED BY THE ENGINEER, AT NO ADDITIONAL COST TO THE OWNER. THE DIMENSIONS SHALL BE EQUAL TO THAT REQUIRED FOR "ROCK" EXCAVATION (SEE SPECIFICATIONS).

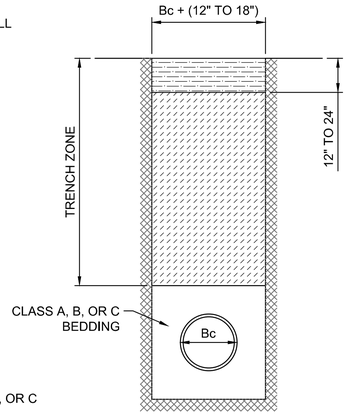
Bc = OUTSIDE PIPE DIAMETER

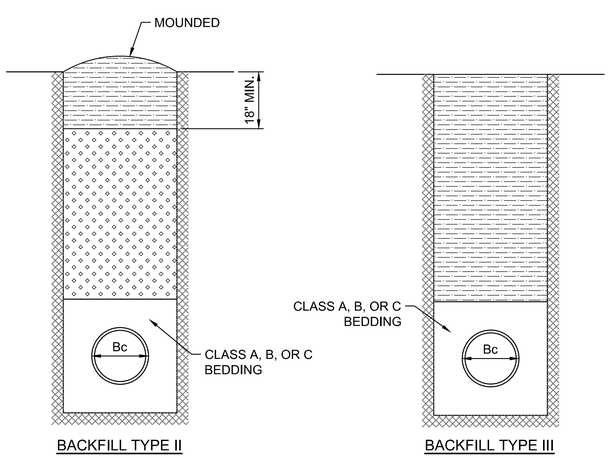
COMPACTED GRANULAR BACKFILL

UNCOMPACTED EARTH BACKFILL

COMPACTED EARTH BACKFILL







TRENCH ZONE BACKFILLING
NOT TO SCALE

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PROFESSIONAL ENGINEERING CONSULTANTS
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CITY OF WICHITA

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

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

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

Issue:		
	08/18/2026 - cjr	

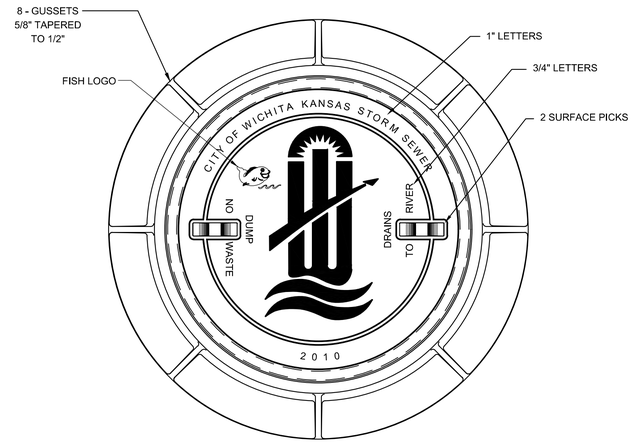
RED LINE - FIELD SET PEC
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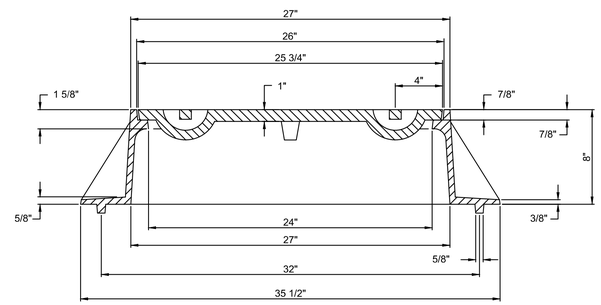
JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

BEDDING AND BACKFILL DETAILS

CP506
42 OF 69

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PLOTTED 11/6/2025 12:42:24 PM BY KEVIN GRAHAM
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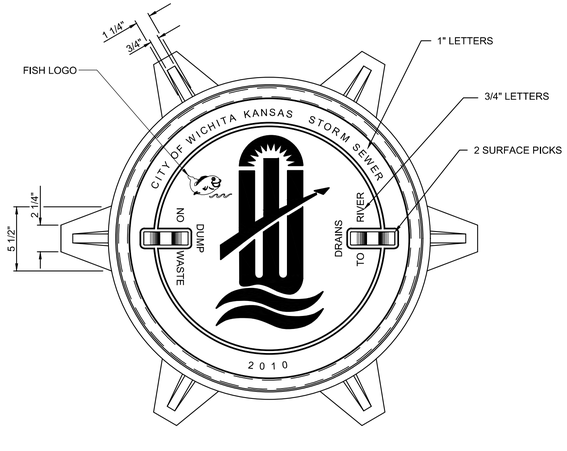


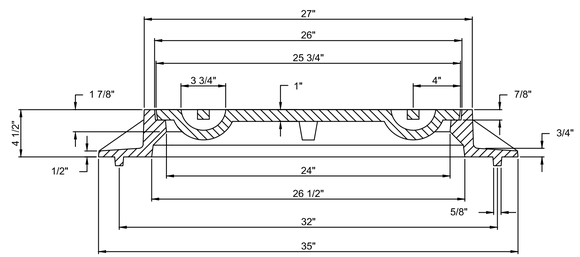


MANHOLE FRAME

DEETER #1261 OR EJIW #1936-Z1

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





INLET FRAME

DEETER #2014 OR EJIW #1936-Z4

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

CITY OF WICHITA
PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

MANHOLE/INLET FRAME AND COVER (STORM SEWER)

CITY ENGINEER
GARY JANZEN, P.E.

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

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

SHEET
43 of 69

SW-303

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316-262-2691 www.pec1.com

CITY OF WICHITA

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

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

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

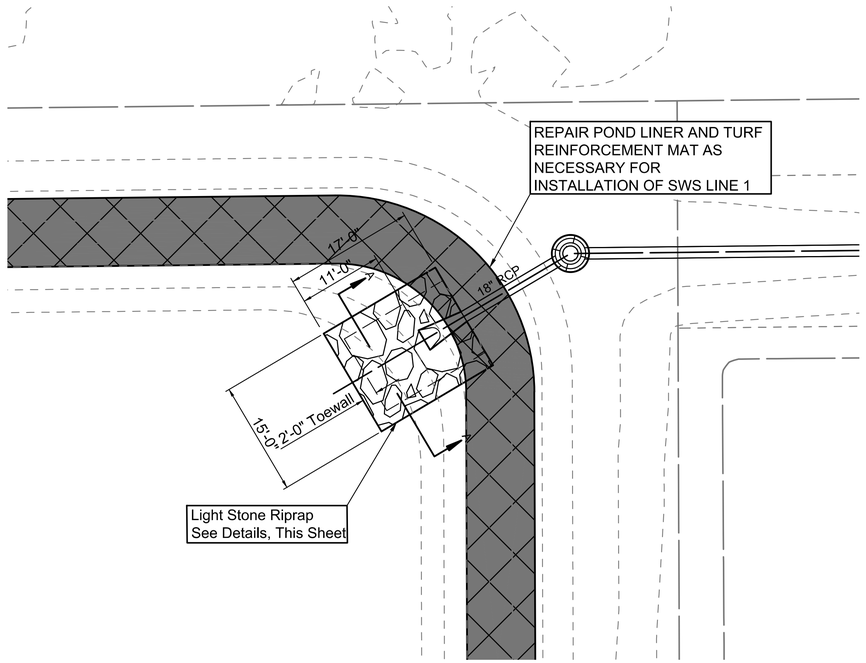
Issue:		
	08/18/2026 - cjr	

RED LINE - FIELD SET PEC
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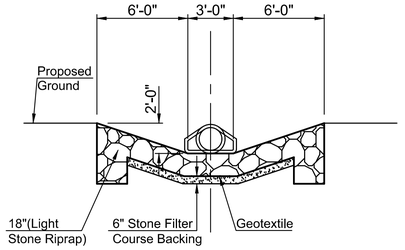
JOB NO.	200605-009
DATE	NOVEMBER 2025
PM	KPG
DESIGNED BY	KPG
DRAWN BY	BJS
CHECKED BY	CSB

MANHOLE-INLET FRAME AND COVER DETAILS

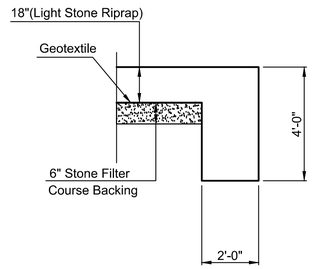
CP507
43 OF 69







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.

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CITY OF WICHITA

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

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

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

Issue:		
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RED LINE - FIELD SET PEC
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JOB NO.	200605-009
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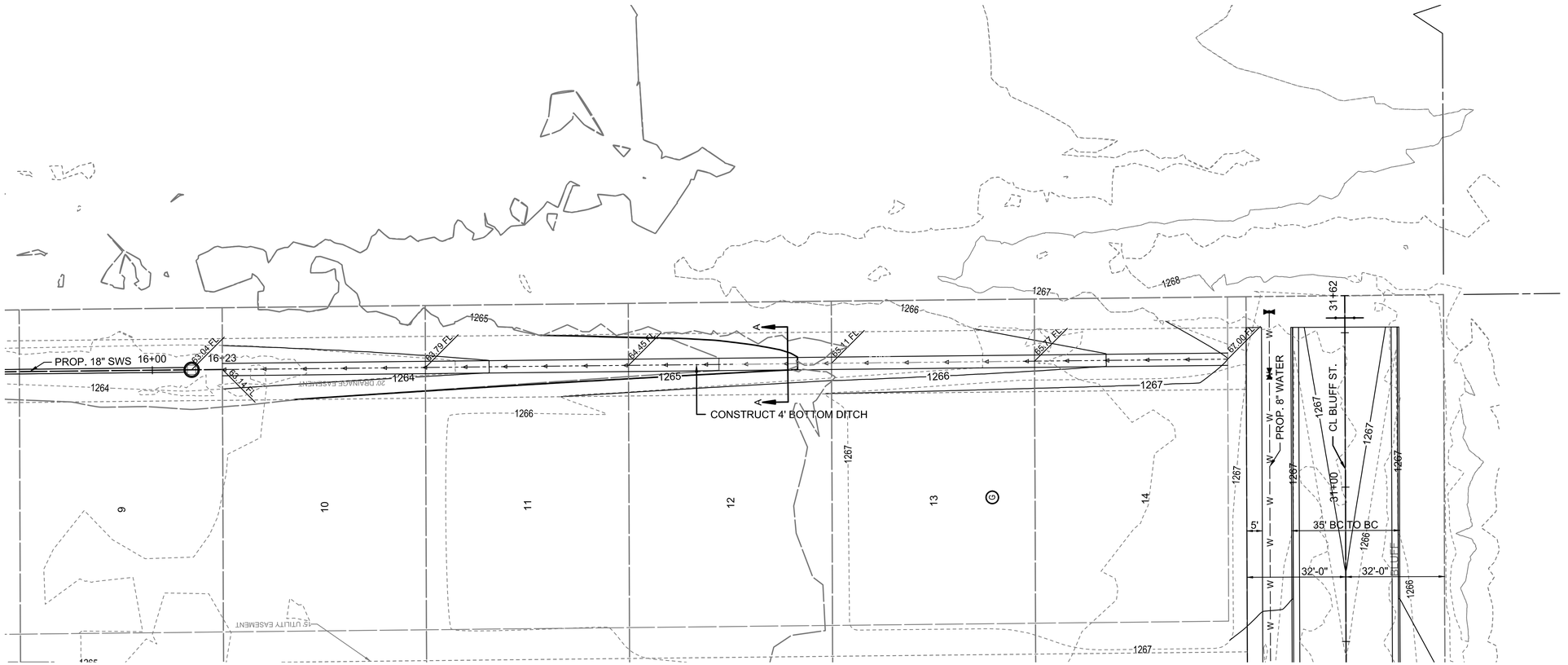
RIPRAP DETAILS

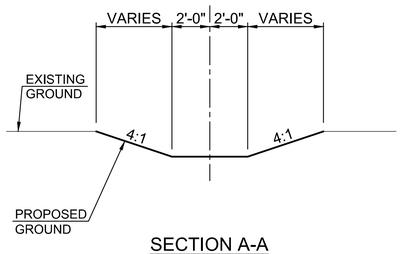
CP508
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TREES WHICH ARE IN DIRECT CONFLICT WITH PROPOSED NEW CONSTRUCTION SHALL BE REMOVED BY THE CONTRACTOR WITH THE ENGINEER'S APPROVAL. TREE REMOVAL SHALL BE SUBSIDIARY TO "SITE CLEARING".

SCALE IN FEET
0' 20' 40'





SECTION A-A

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CITY OF WICHITA

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

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

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

Issue:		
	08/18/2026 - cjr	

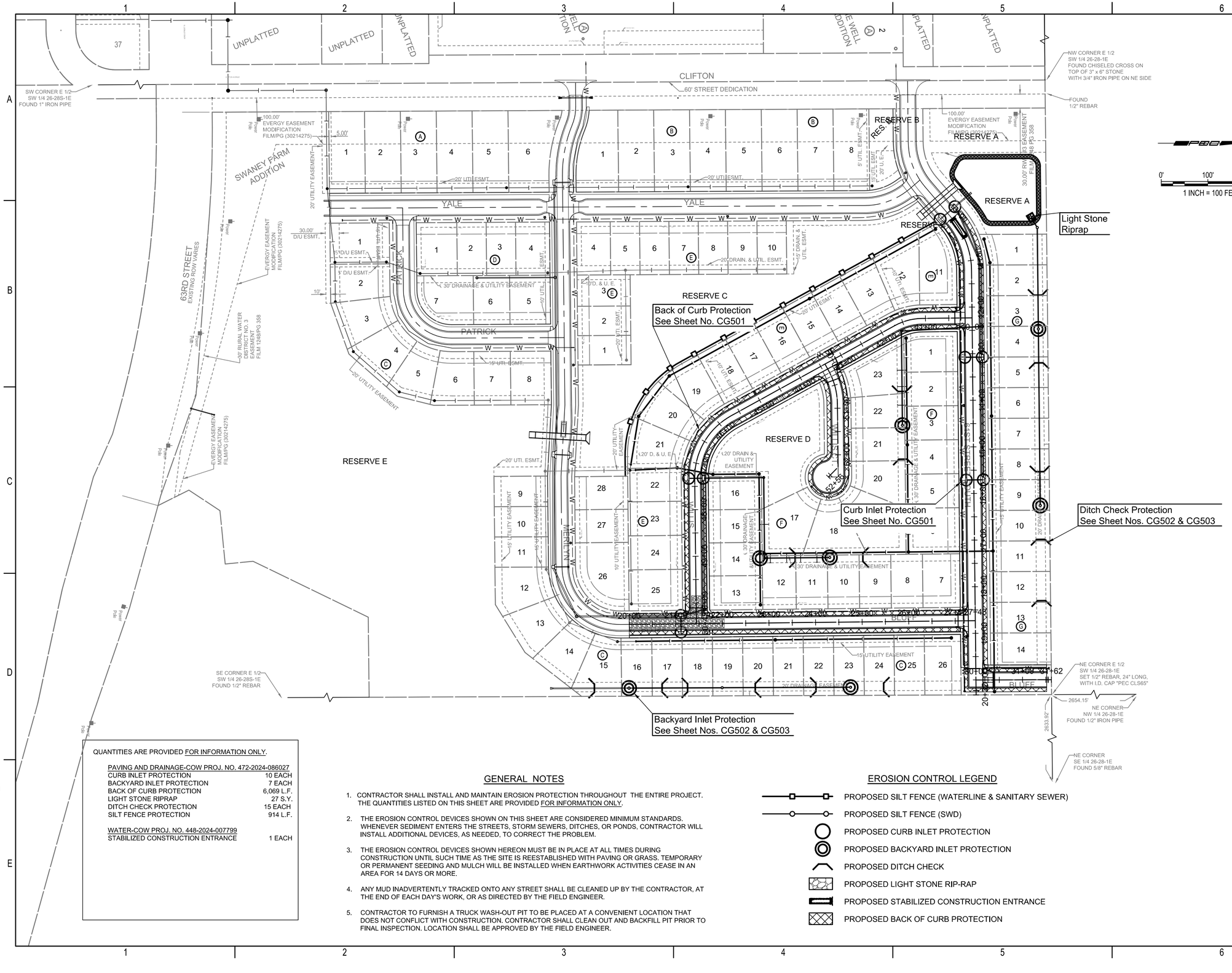
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JOB NO.	200605-009
DATE	NOVEMBER 2025
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DESIGNED BY	KPG
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BACKYARD DRAINAGE PLAN

CG101
45 OF 69

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QUANTITIES ARE PROVIDED FOR INFORMATION ONLY.

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

GENERAL NOTES

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

EROSION CONTROL LEGEND

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

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CITY OF WICHITA

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PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

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

Issue:		
	08/18/2026 - cjr	

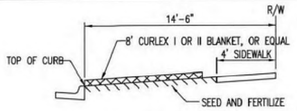
RED LINE - FIELD SET
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JOB NO.	200605-009
DATE	NOVEMBER 2025
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DRAWN BY	BJS
CHECKED BY	CSB

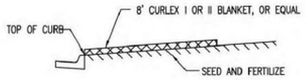
EROSION CONTROL PLAN

CG102
46 OF 69

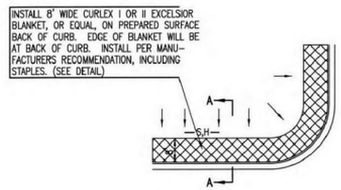
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SECTION B–B



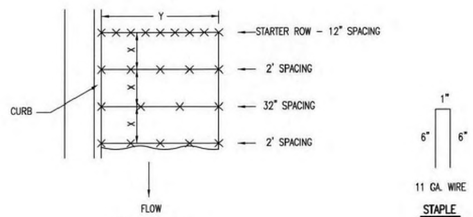
SECTION A–A



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.

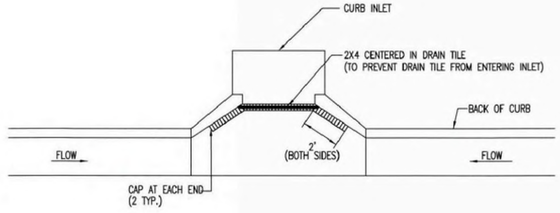
BACK OF CURB PROTECTION DETAIL



STAPLE PATTERN

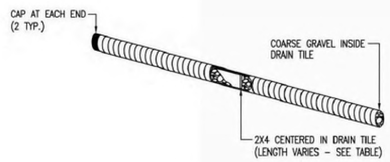
NOTES: USE 6" SEAM OVERLAP
(X & Y = RECOMMENDED BY MANUFACTURE)

DETAILS FOR APPROVED EROSION CONTROL MAT

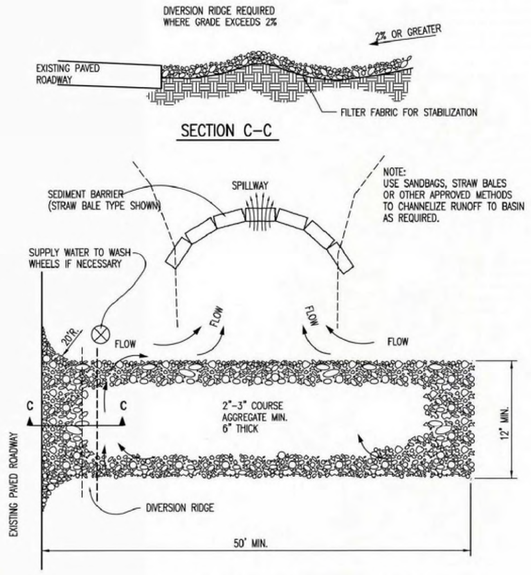


NOTE:
PLACE 4" PERFORATED PVC PIPE, FILLED WITH 1/2"–1" DIA. GRAVEL, IN FRONT OF CURB INLET AS SHOWN.

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 — 15004 — KANSAS — PROFESSIONAL ENGINEER
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
472-2024-086027		

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

SHEET
47 of 69

SW-501

SAVED 6/24/2025 10:20:55 AM BY BILL.SEXSON
PLOTTED 11/6/2025 12:43:44 PM BY KEVIN GRAHAM
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CG501 BACK OF CURB AND CURB INLET

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

CITY OF WICHITA

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

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

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

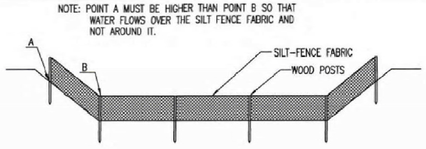
Issue:		
	08/18/2026 - cjr	

RED LINE - FIELD SET PEC
U:\Wichita-Civil 200605-018

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

BACK OF CURB AND CURB INLET PROTECTION

CG501
47 OF 69



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.

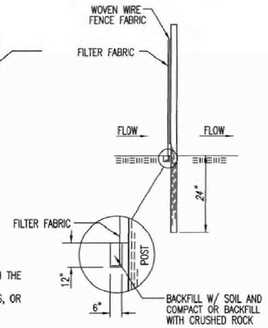
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

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.

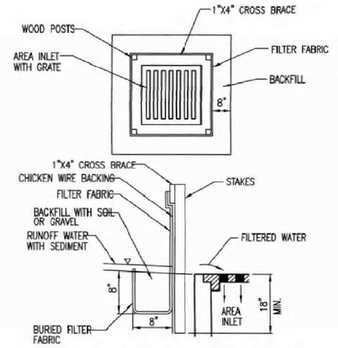
INSPECTION AND MAINTENANCE:

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.

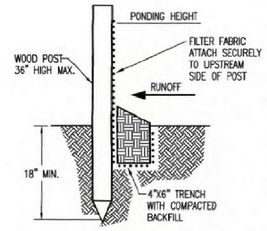
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

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 8" 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 PROFESSIONAL ENGINEER KANSAS 27806 05/14/13

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
472-2024-086027	——	

CITY ENGINEER'S OFFICE
CITY HALL - SEVENTH FLOOR
455 NORTH MAIN STREET
WICHITA, KANSAS 67202-1620
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CITY OF WICHITA

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

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

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

Issue:		
	08/18/2026 - cjr	

RED LINE - FIELD SET PEC
U:\Wichita-Civil 200605-018

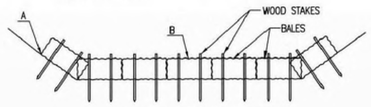
JOB NO.	200605-009
DATE	NOVEMBER 2025
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DESIGNED BY	KPG
DRAWN BY	BJS
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SILT FENCE DITCH CHECK

CG502
48 OF 69

Saved: 06-24-2025, 10:22:26 AM by BILL.SEXSON
Plotted: 11/6/2025, 12:43:49 PM by KEVIN.GRAHAM
U:\Wichita-Civil\2020\200605\009\2PD4_PLANS\030\PAVING\48-200605-009-CG502 SILT FENCE DITCH CHECK.DWG

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".

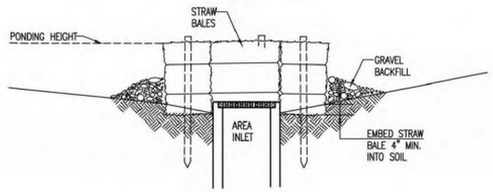
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

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.

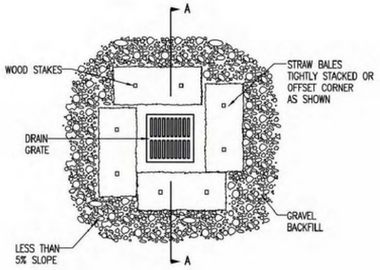
INSPECTION AND MAINTENANCE:

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.

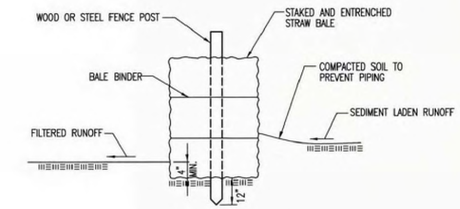
LIST OF COMMON PLACEMENT INSTALLATION MISTAKES TO AVOID:

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 05/31/13

CITY OF WICHITA
PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

STRAW BALE DITCH CHECK AND BARRIER DETAILS

CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER	OCA NUMBER	DATE
472-2024-086027		

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

SHEET
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SW-503

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PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
WICHITA, KS 67202
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CITY OF WICHITA

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

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION
PHASE 2

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

Issue:		
	08/18/2026 - cjr	

RED LINE - FIELD SET PEC
U:\Wichita-Civil 200605-018

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

STRAW BALE DITCH CHECK

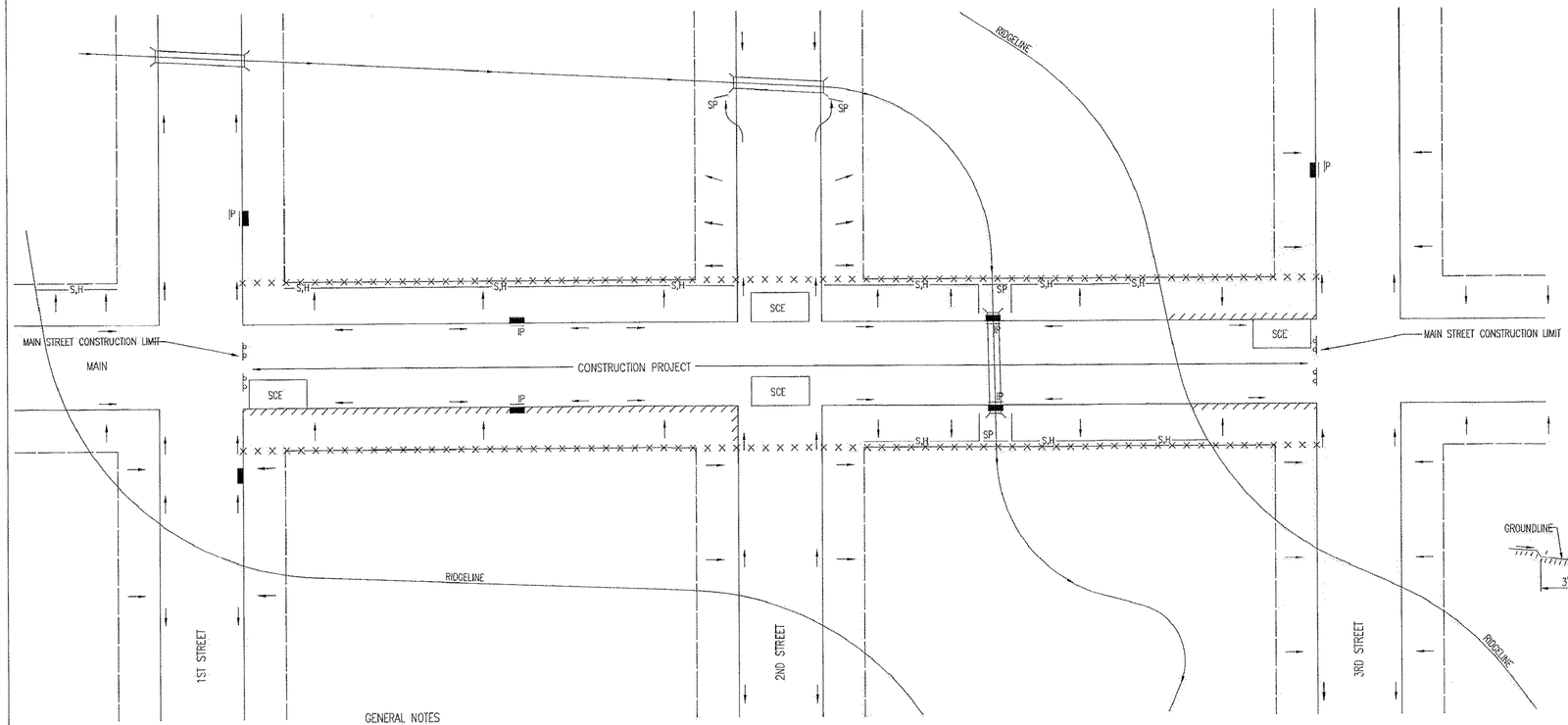
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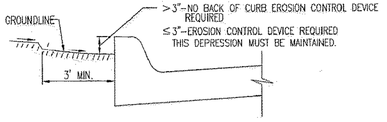
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GENERAL NOTES

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





CURB BACKFILL DETAIL

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

LEGEND

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

GENERAL NOTES

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

GARY L. JANZEN — LICENSED — 16294 — KANSAS — PROFESSIONAL ENGINEER — 06/05/25

REVISION: JUNE 2015

CITY OF WICHITA
PUBLIC WORKS & UTILITIES ENGINEERING DIVISION

STREET IMPROVEMENT PROJECTS

CITY ENGINEER: GARY JANZEN, P.E.

PROJECT NUMBER	OCA NUMBER	DATE
472-2024-086027		

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

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CITY OF WICHITA

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

PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

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

Issue:		
	08/18/2026 - cjr	

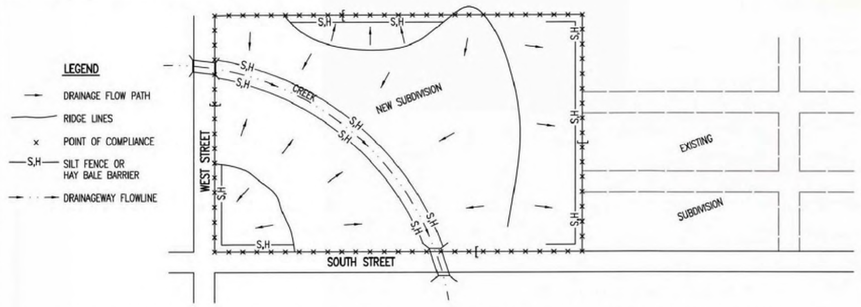
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U:\Wichita-Civil 200605-018

JOB NO.	200605-009
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PM	KPG
DESIGNED BY	KPG
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STREET IMPROVEMENT PROJECTS

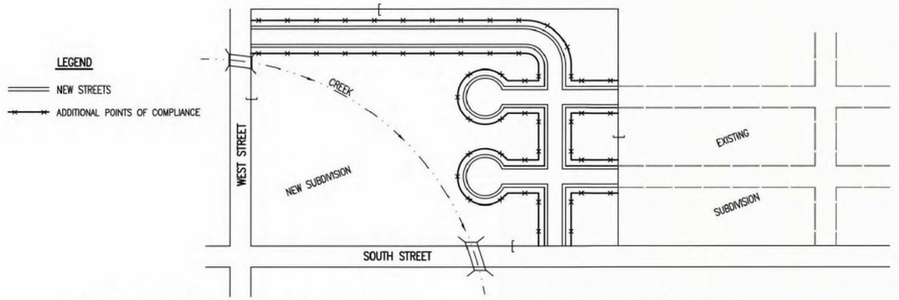
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PHASE 1 – INITIAL EARTHWORK AND UTILITIES (EXCEPT STORM SEWER)



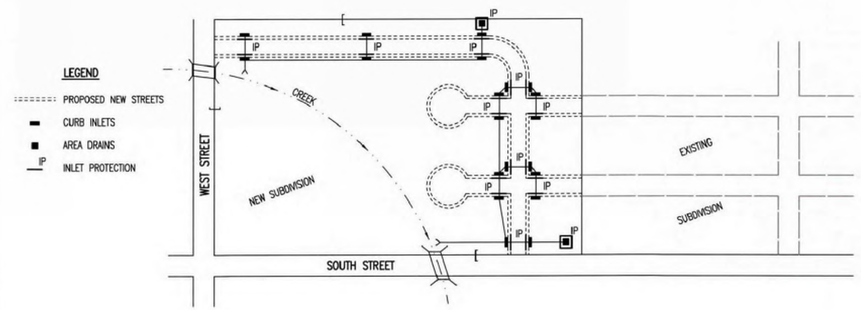
1. DURING THIS PHASE OF SUBDIVISION CONSTRUCTION, THE POINTS OF COMPLIANCE ARE THE PERIMETER BOUNDARIES AND ANY DRAINAGE WAYS OR STORM SEWERS DRAINING THROUGH OR FROM THE SITE. SHOULD LAKES BE CONSTRUCTED WITHIN THE SUBDIVISION THAT WILL DISCHARGE DURING STORMS, THEY ARE ALSO A POINT OF COMPLIANCE.
2.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

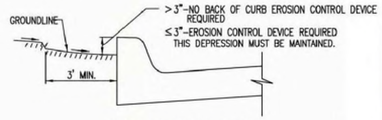


1. DURING THIS PHASE OF SUBDIVISION DEVELOPMENT, ALL EROSION CONTROL DEVICES REQUIRED IN PHASE 1 SHALL REMAIN IN PLACE AND BE MAINTAINED.
2. AS NEW STORM SEWERS, WITH INLETS, ARE INSTALLED, THE STORM SEWERS MUST NOW BE PROTECTED SO ALL NEW INLETS BECOME POINTS OF COMPLIANCE.
3. AREA DRAINS – AS SOON 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 KANSAS PROFESSIONAL ENGINEER 05/12/13

CITY OF WICHITA
PUBLIC WORKS & UTILITIES ENGINEERING DIVISION

SUBDIVISION DEVELOPMENT PROCESS

CITY ENGINEER
GARY JANZEN, P.E.

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

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

SHEET
51 of 69

SW-505

Saved 06-24-2025 10:30:37 AM by BILL.SEXSON
Plot Scale 1:1 11-06-2025 12:44:05 PM by ###
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PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

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

Issue:		
	08/18/2026 - cjr	

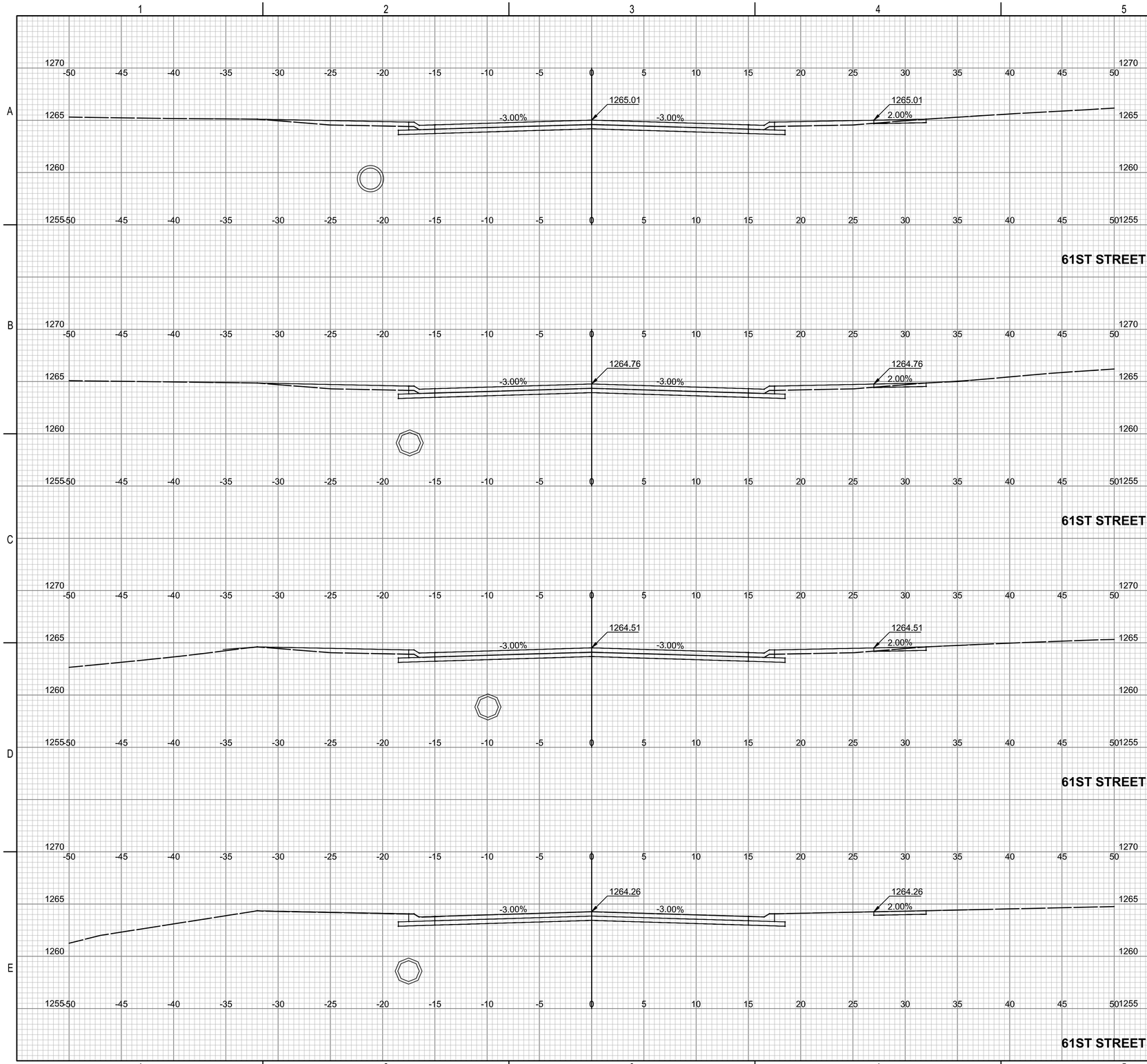
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JOB NO.	200605-009
DATE	NOVEMBER 2025
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SUBDIVISION DEVELOPMENT PROCESS

CG505
51 OF 69

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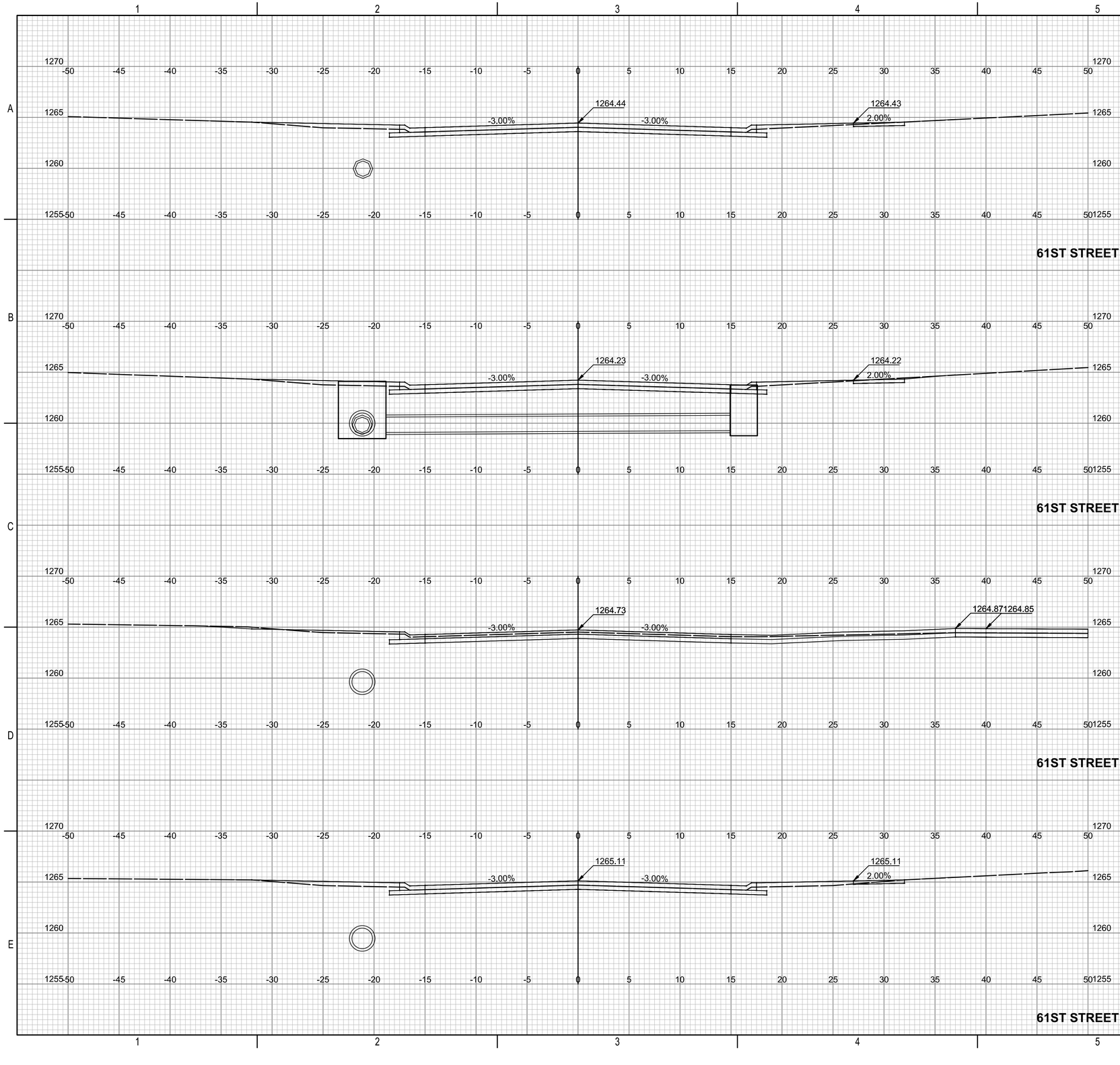
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DATE	NOVEMBER 2025
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CROSS SECTIONS-61ST STREET

CX601
52 OF 69

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61ST STREET 13+50.00

61ST STREET 13+07.67

61ST STREET 12+23.19

61ST STREET 11+70.00

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SWANEY FARM ADDITION PHASE 2

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

Issue:

08/18/2026 - cjr

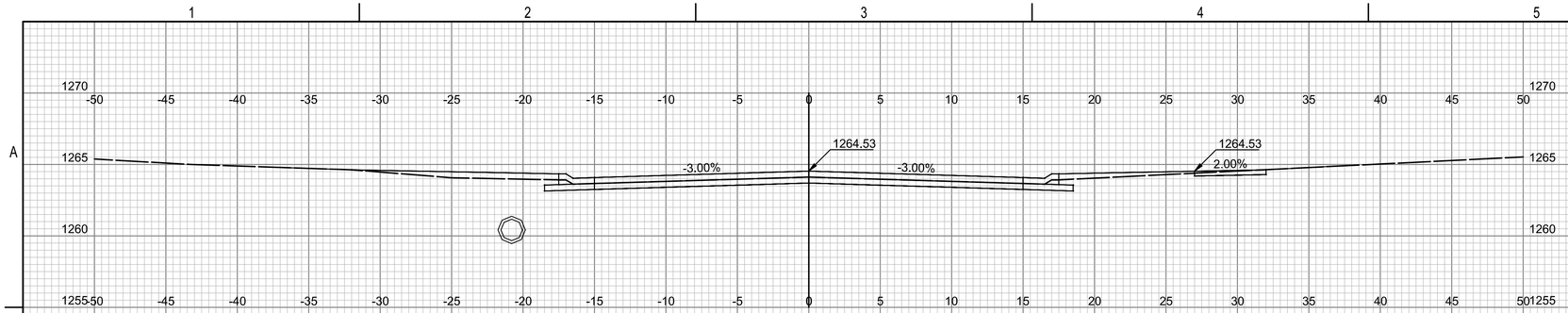
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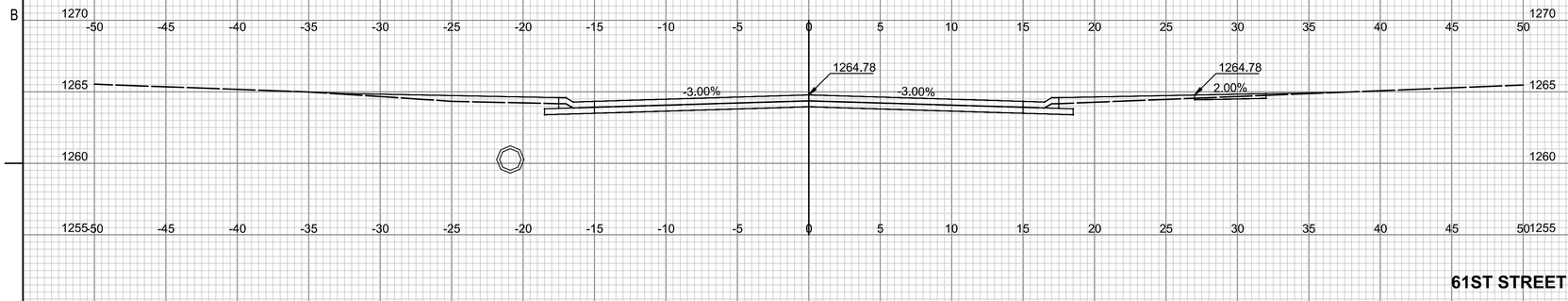
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CX602
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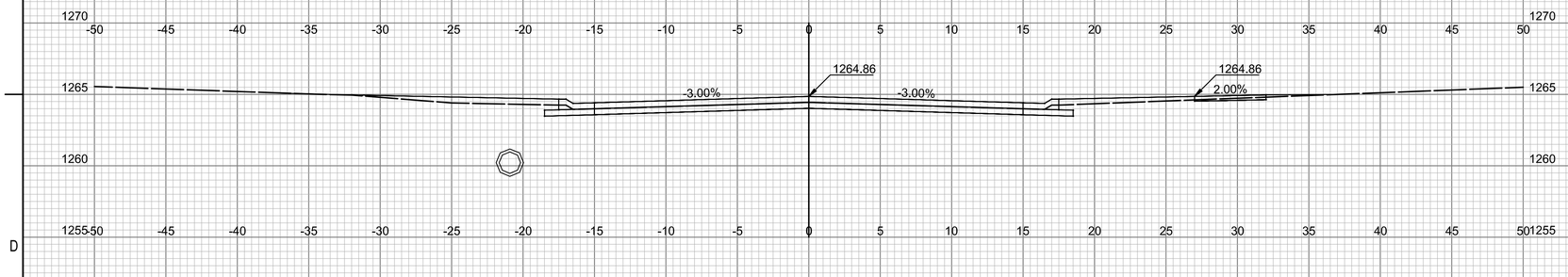
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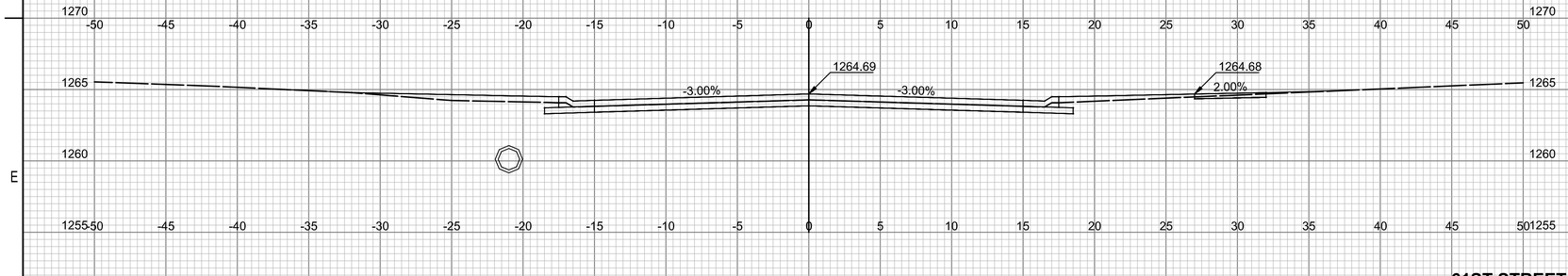
61ST STREET 15+00.00



61ST STREET 14+50.00



61ST STREET 14+34.67



61ST STREET 14+00.00

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SWANEY FARM ADDITION PHASE 2

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

Issue:

08/18/2026 - cjr

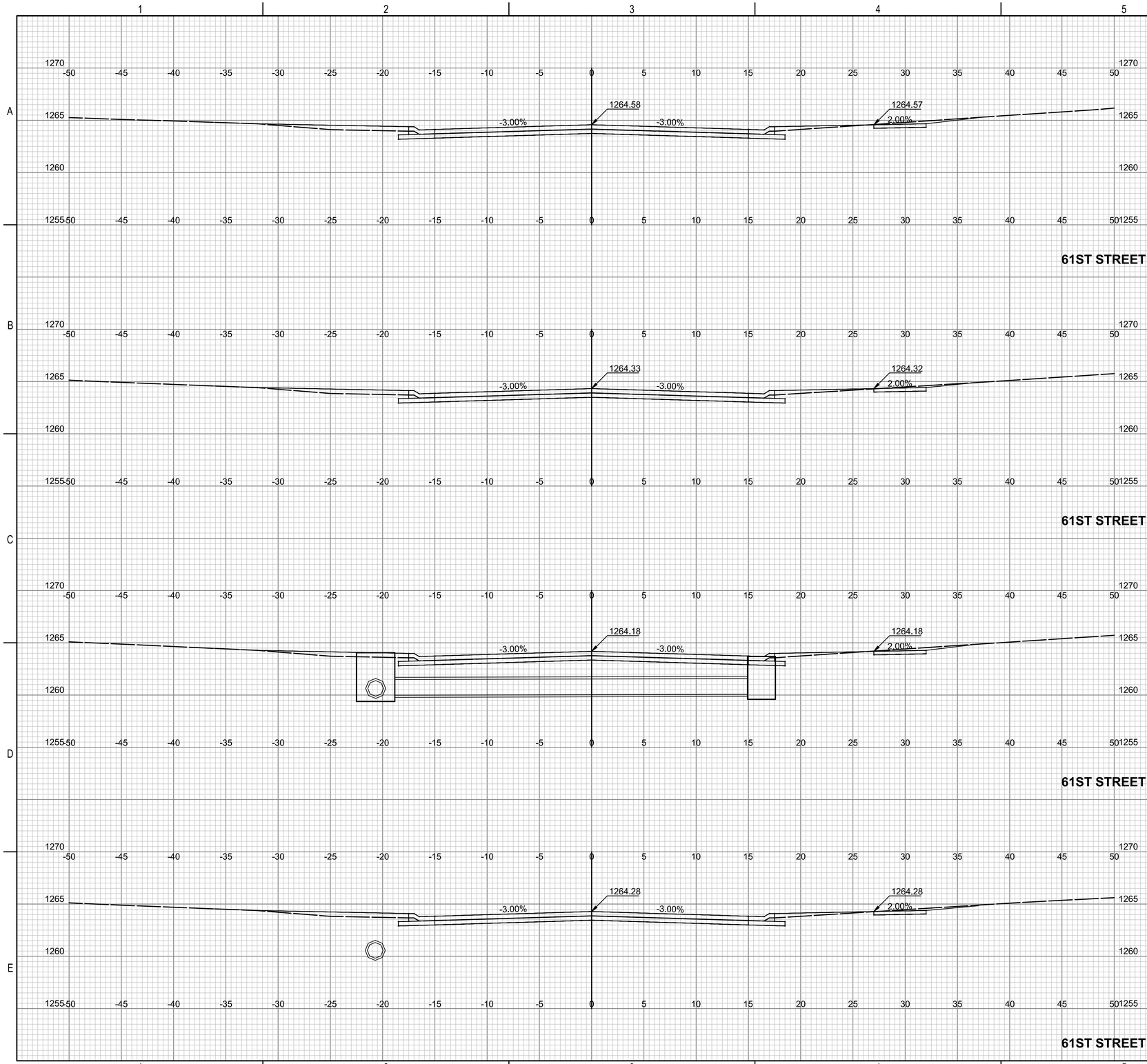
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CROSS SECTIONS-61ST STREET

CX603
54 OF 69

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CITY OF WICHITA PROJECT NO. 472-2024-086027

Issue:		
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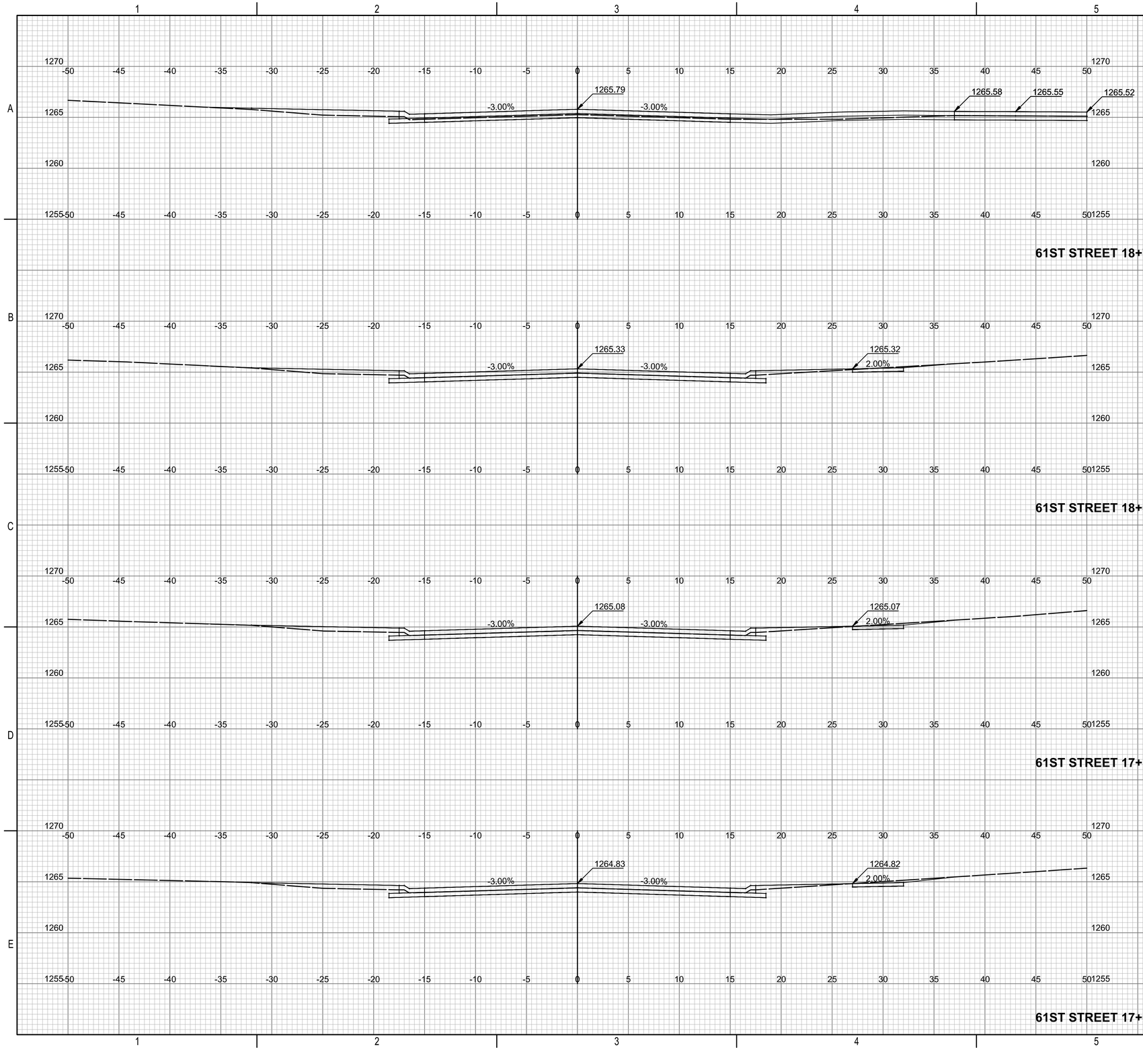
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CROSS SECTION-61ST STREET

CX604
55 OF 69

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

Issue:		
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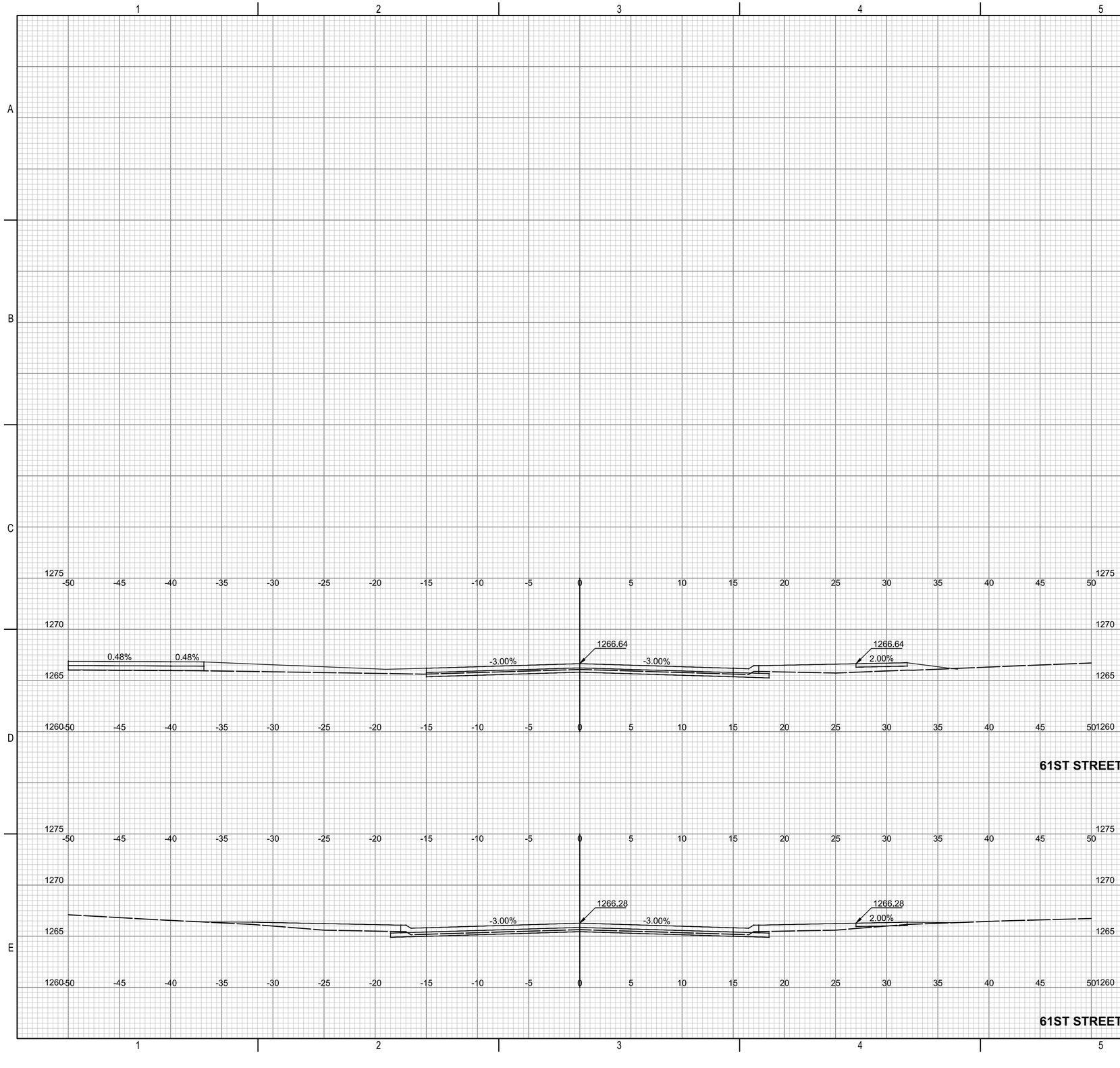
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CROSS SECTIONS-61ST STREET

CX605
56 OF 69

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Issue:		
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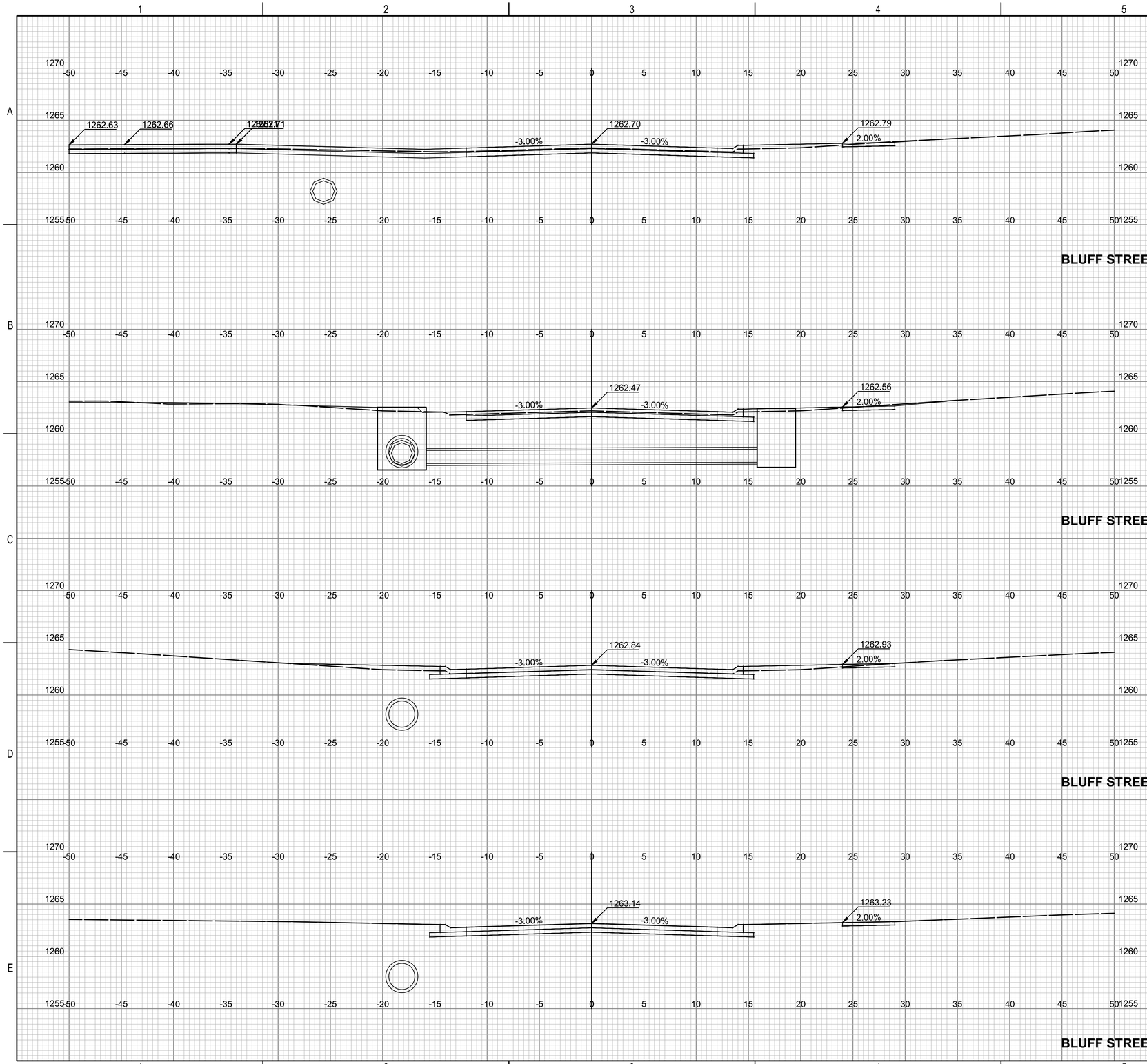
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CROSS SECTIONS-61ST STREET

CX606
57 OF 69

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BLUFF STREET 21+44.00

BLUFF STREET 21+11.05

BLUFF STREET 20+50.00

BLUFF STREET 20+00.00

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

Issue:		
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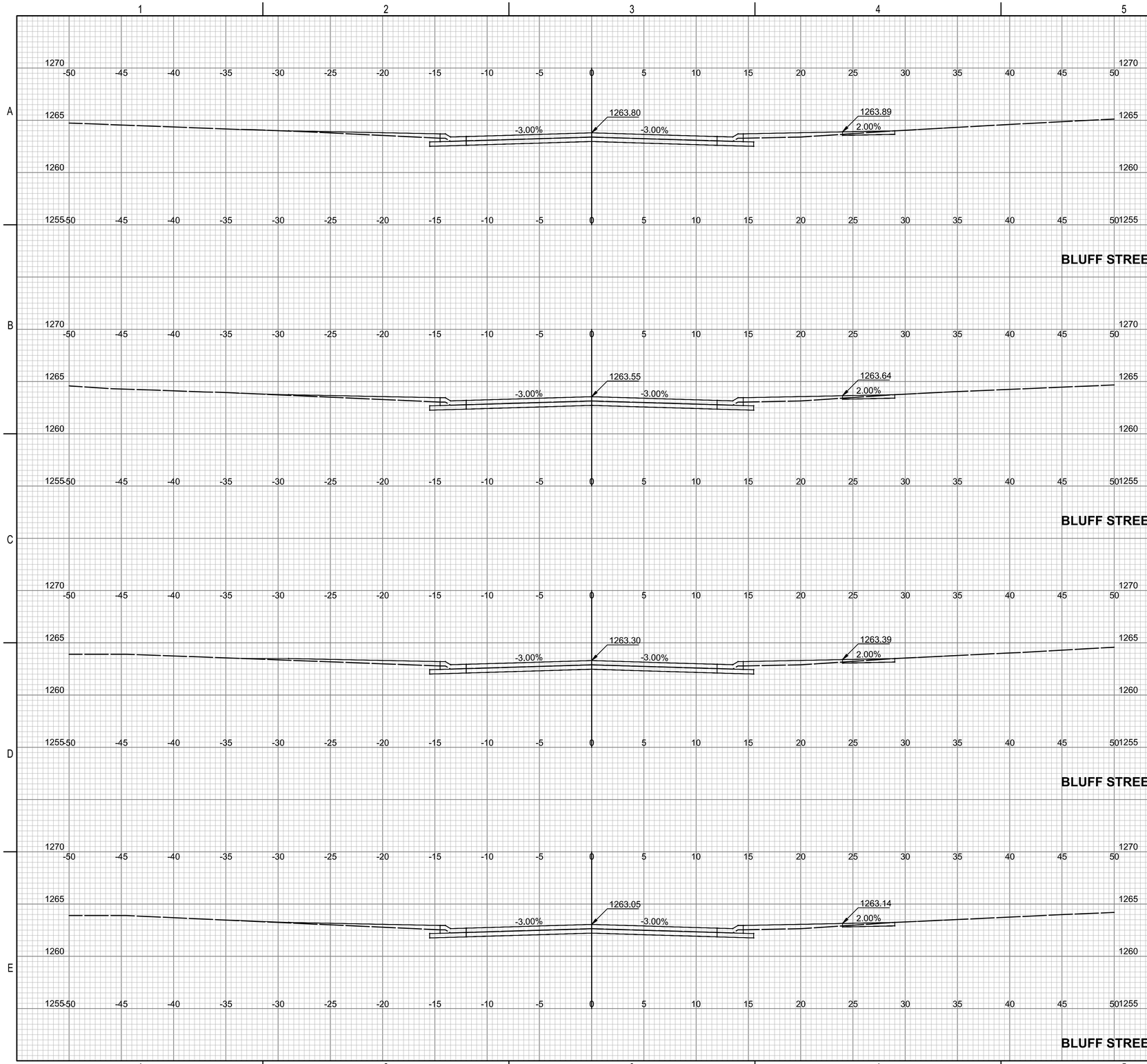
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CROSS SECTIONS-BLUFF STREET

CX607
58 OF 69

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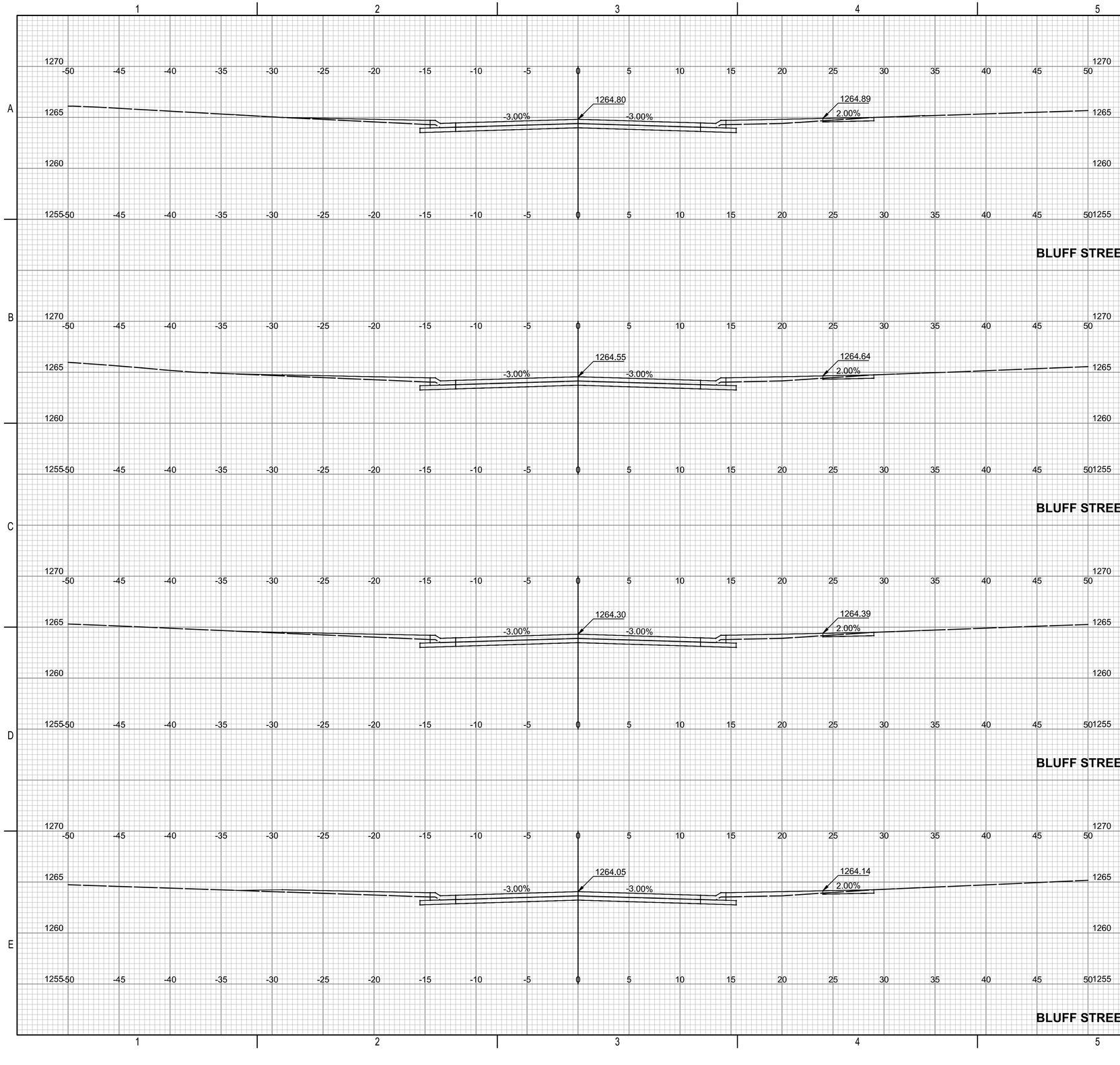
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CROSS SECTIONS-BLUFF STREET

CX608
59 OF 69

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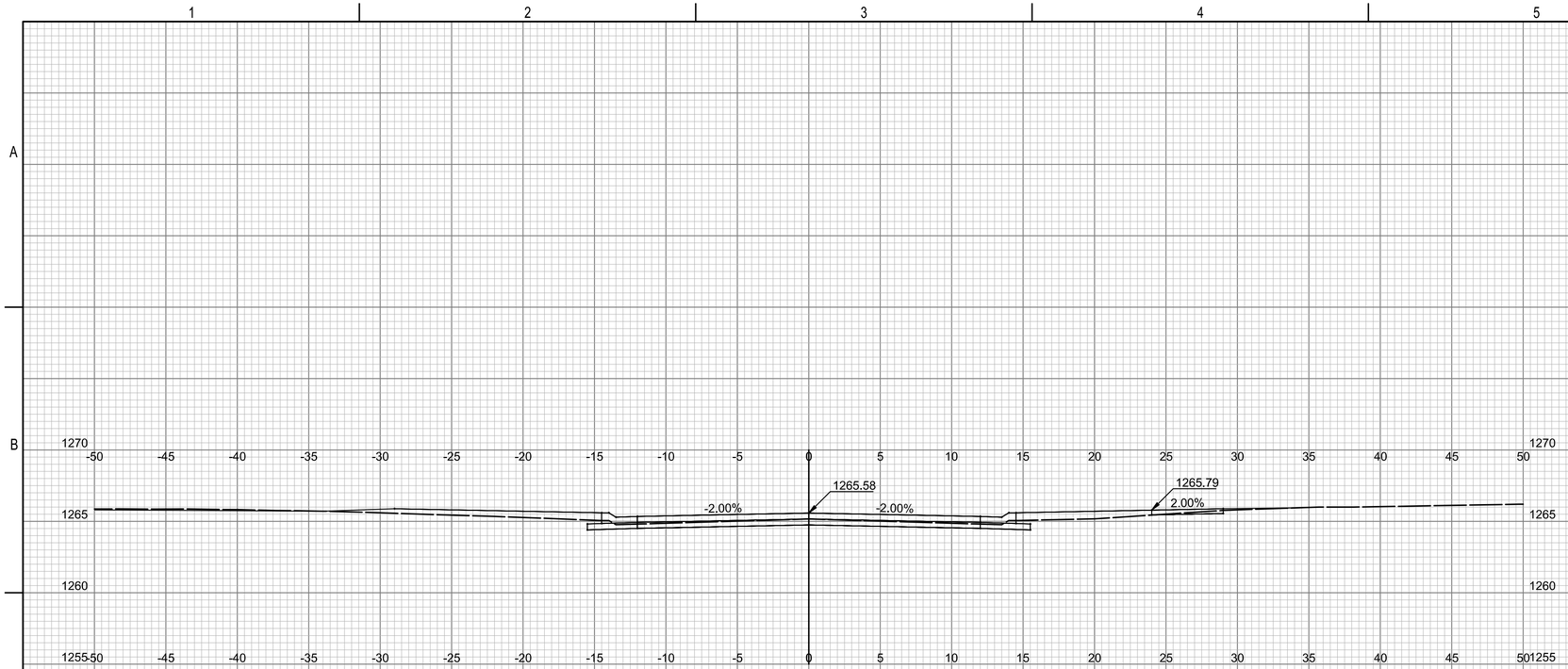
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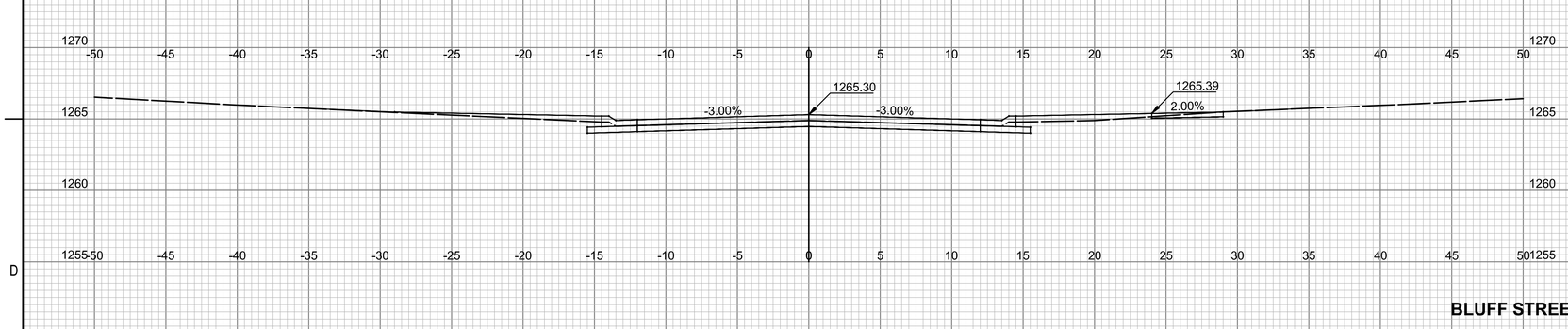
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CX609
60 OF 69

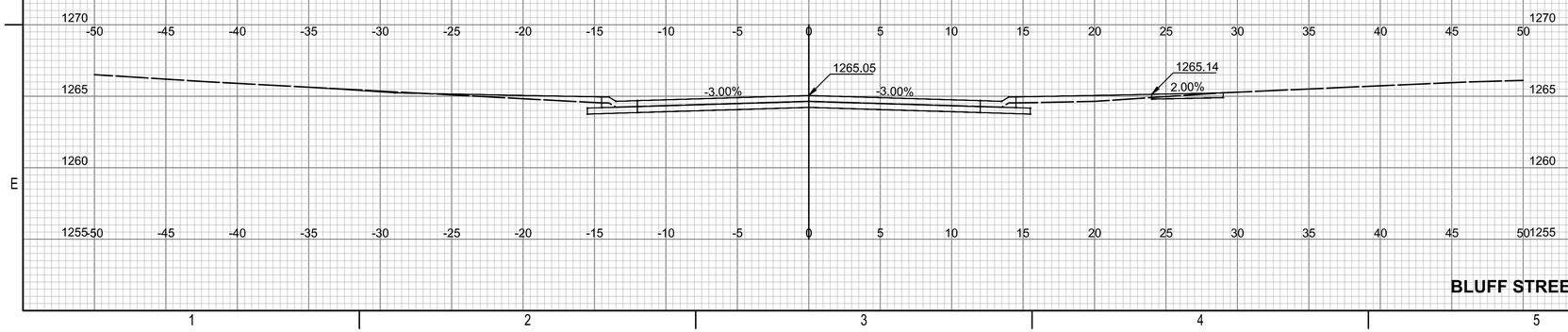
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BLUFF STREET 27+06.00



BLUFF STREET 26+50.00



BLUFF STREET 26+00.00

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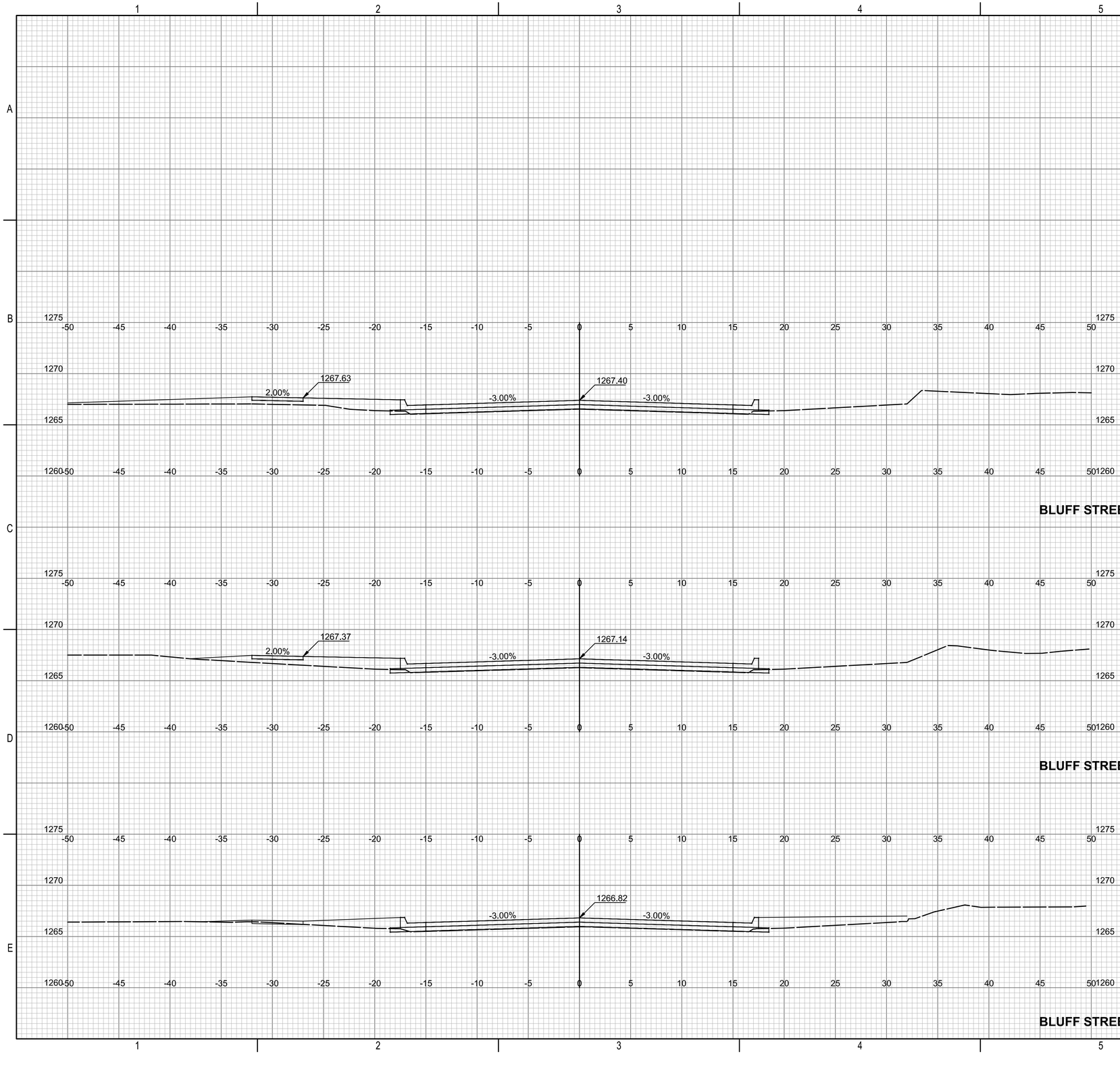
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CROSS SECTIONS-BLUFF STREET

CX610
61 OF 69

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

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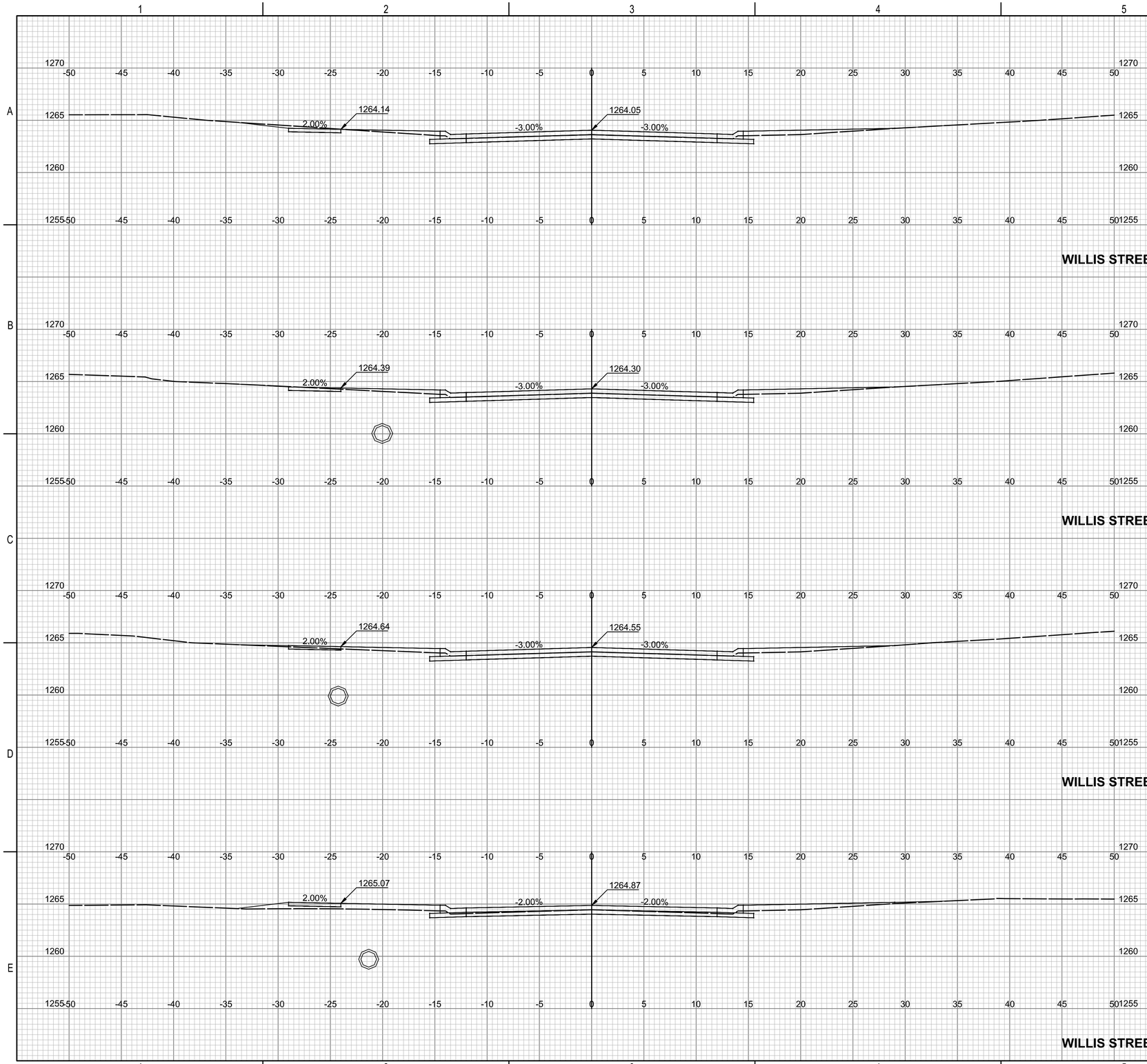
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CROSS SECTIONS-BLUFF STREET N

CX611
62 OF 69

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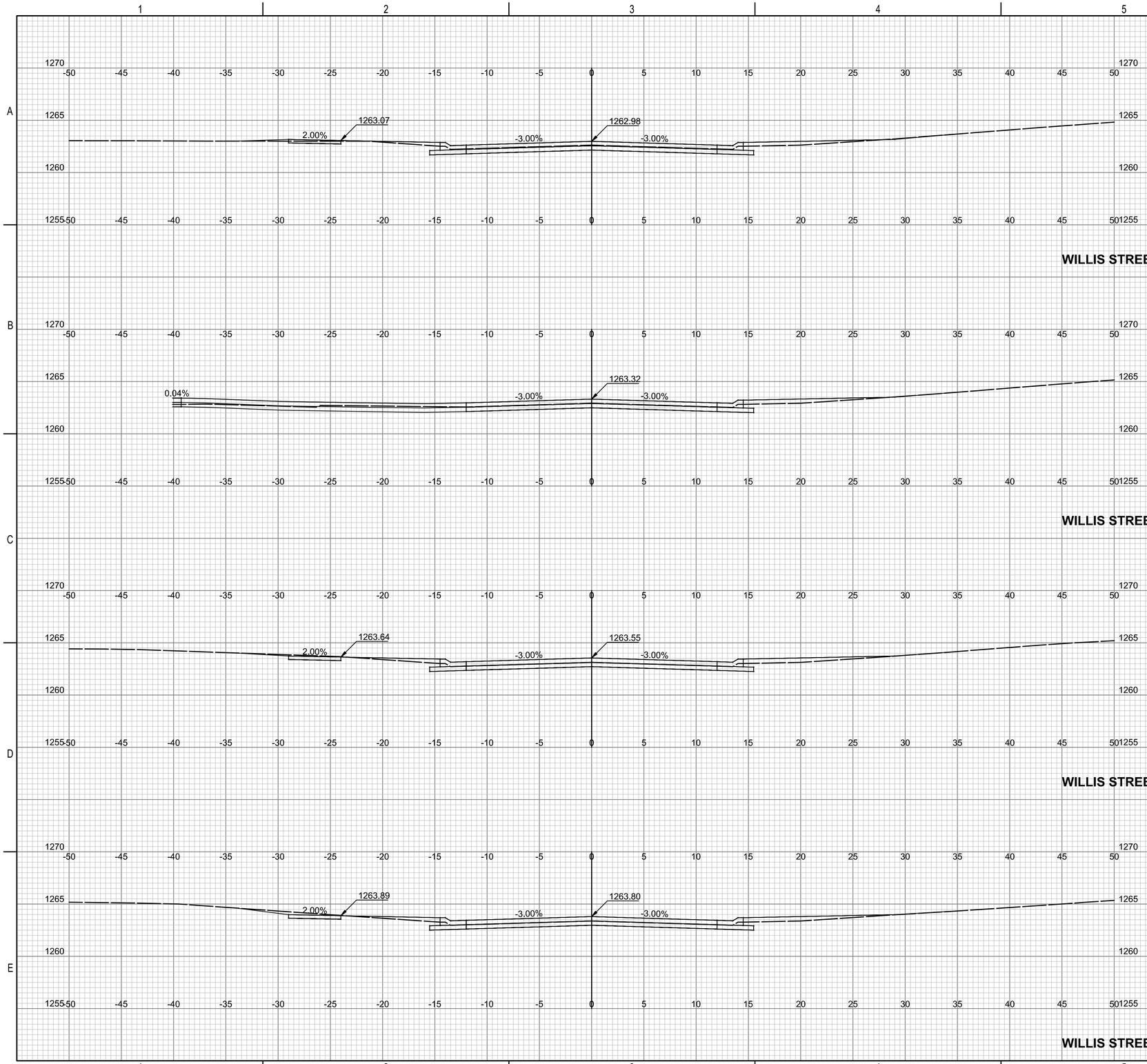
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CROSS SECTIONS-WILLIS STREET

CX612
63 OF 69

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CITY OF WICHITA

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PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS

SWANEY FARM ADDITION PHASE 2

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

Issue:		
	08/18/2026 - cjr	

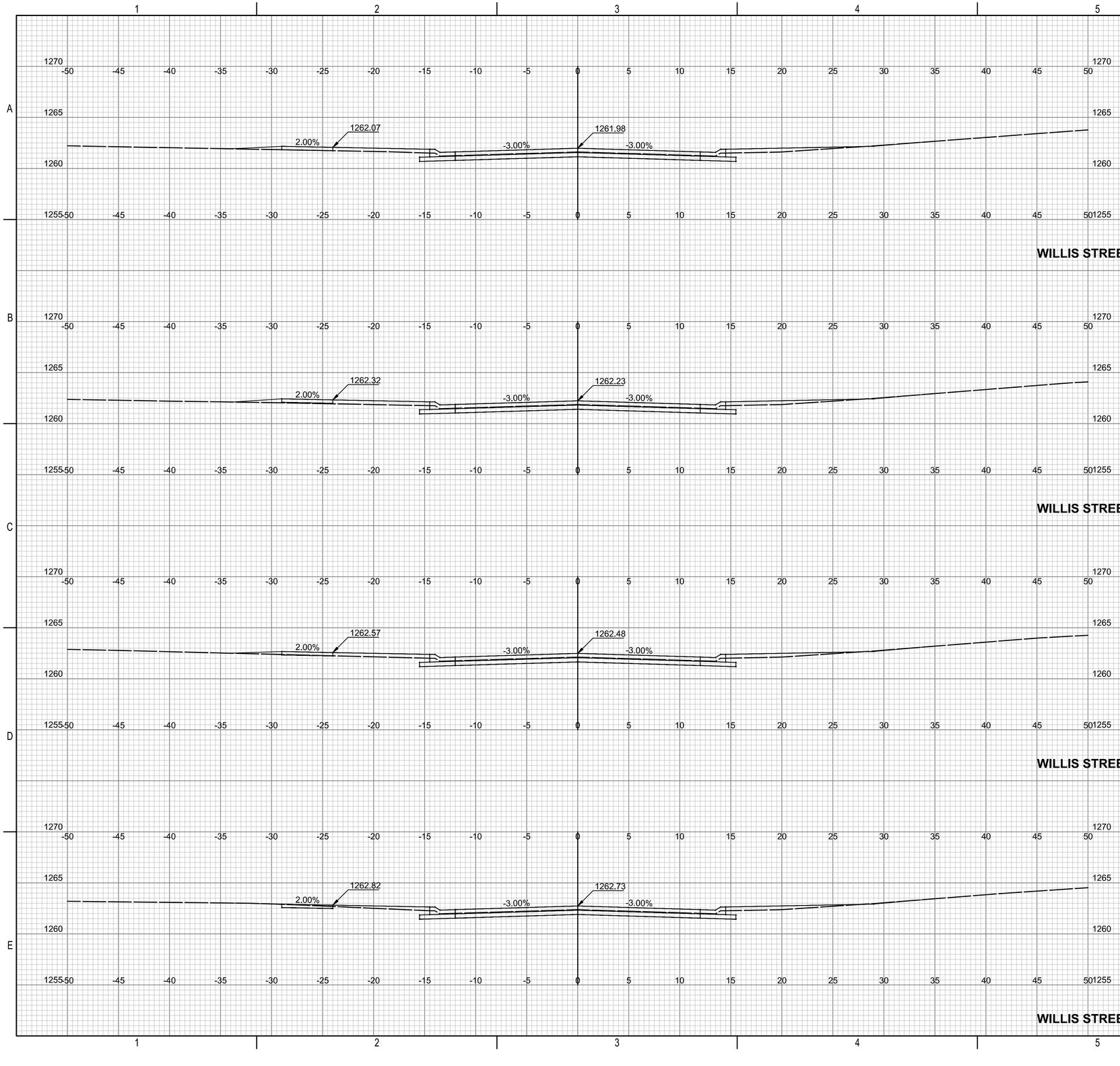
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JOB NO.	200605-009
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CROSS SECTIONS-WILLIS STREET

CX613
64 OF 69

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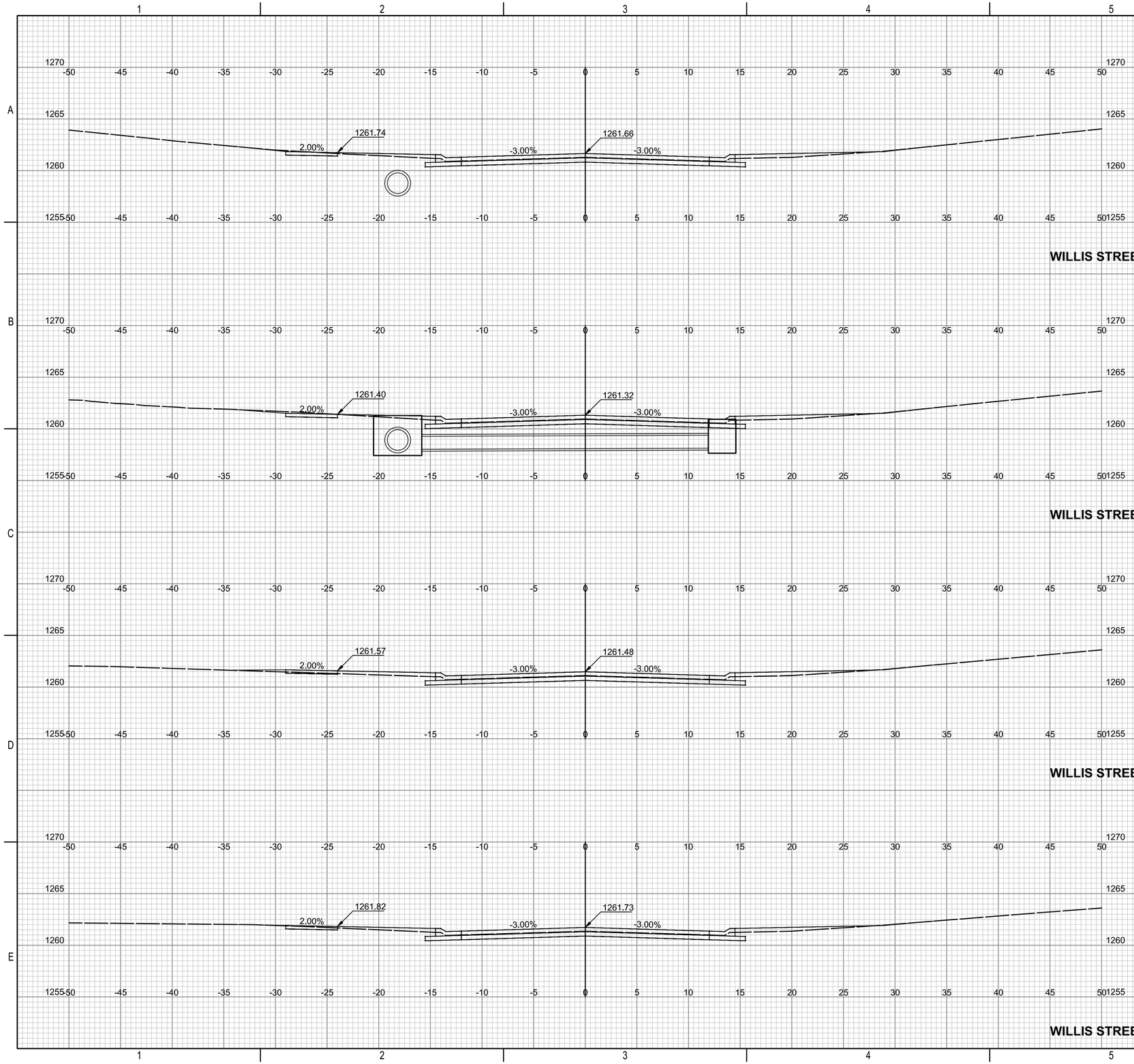
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CROSS SECTIONS-WILLIS STREET

CX614
65 OF 69

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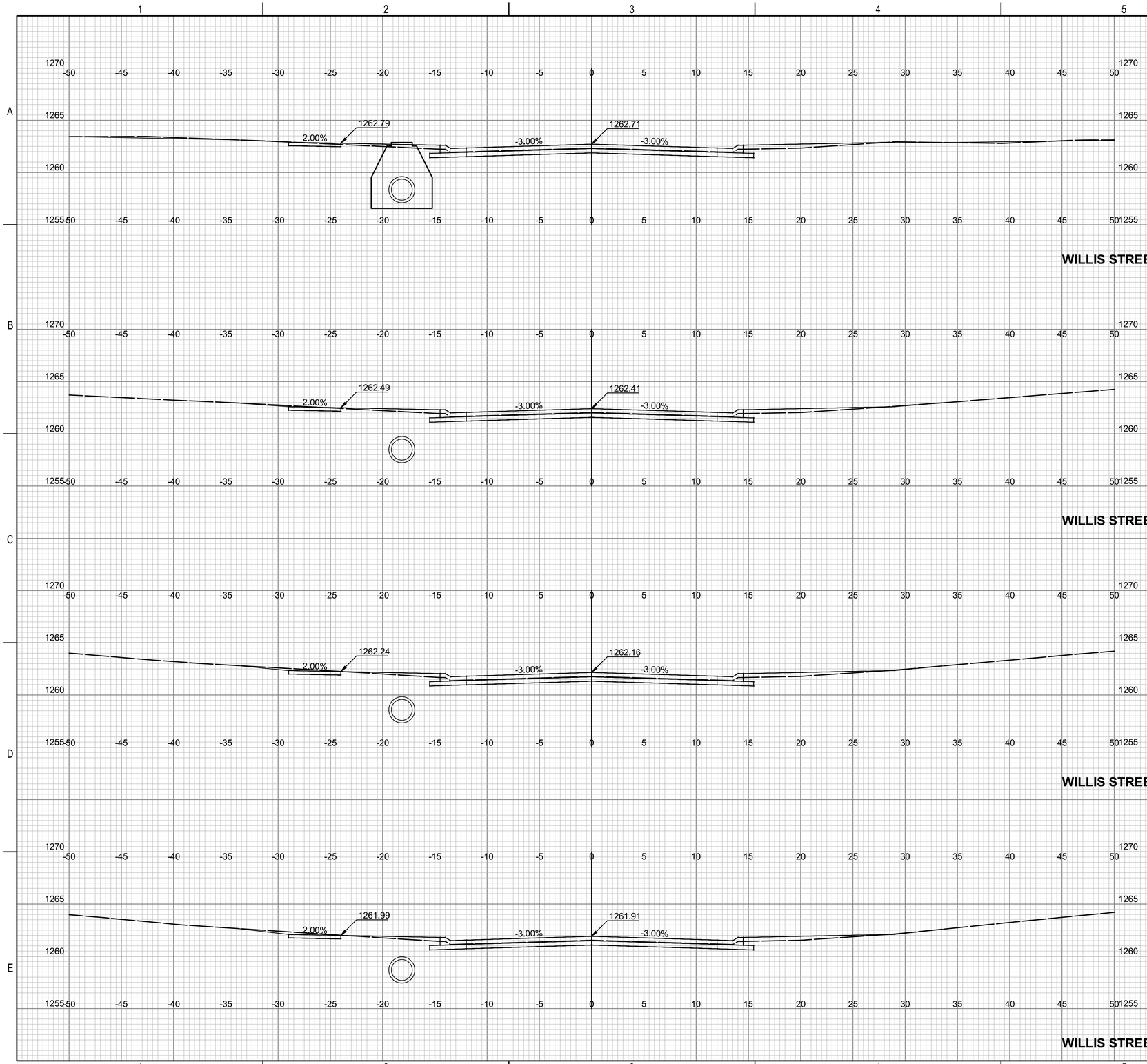
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CX615
66 OF 69

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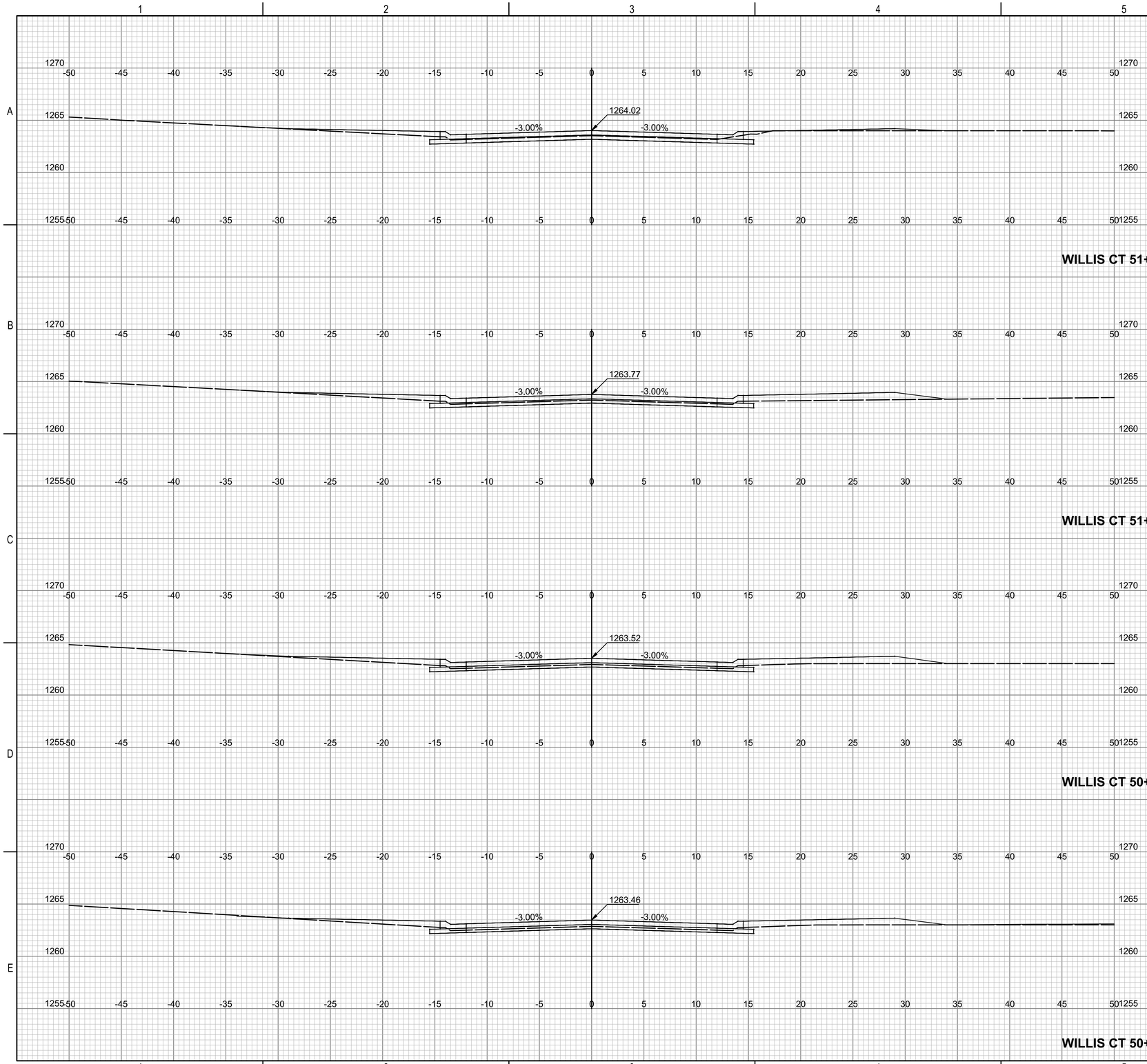
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CX616
67 OF 69

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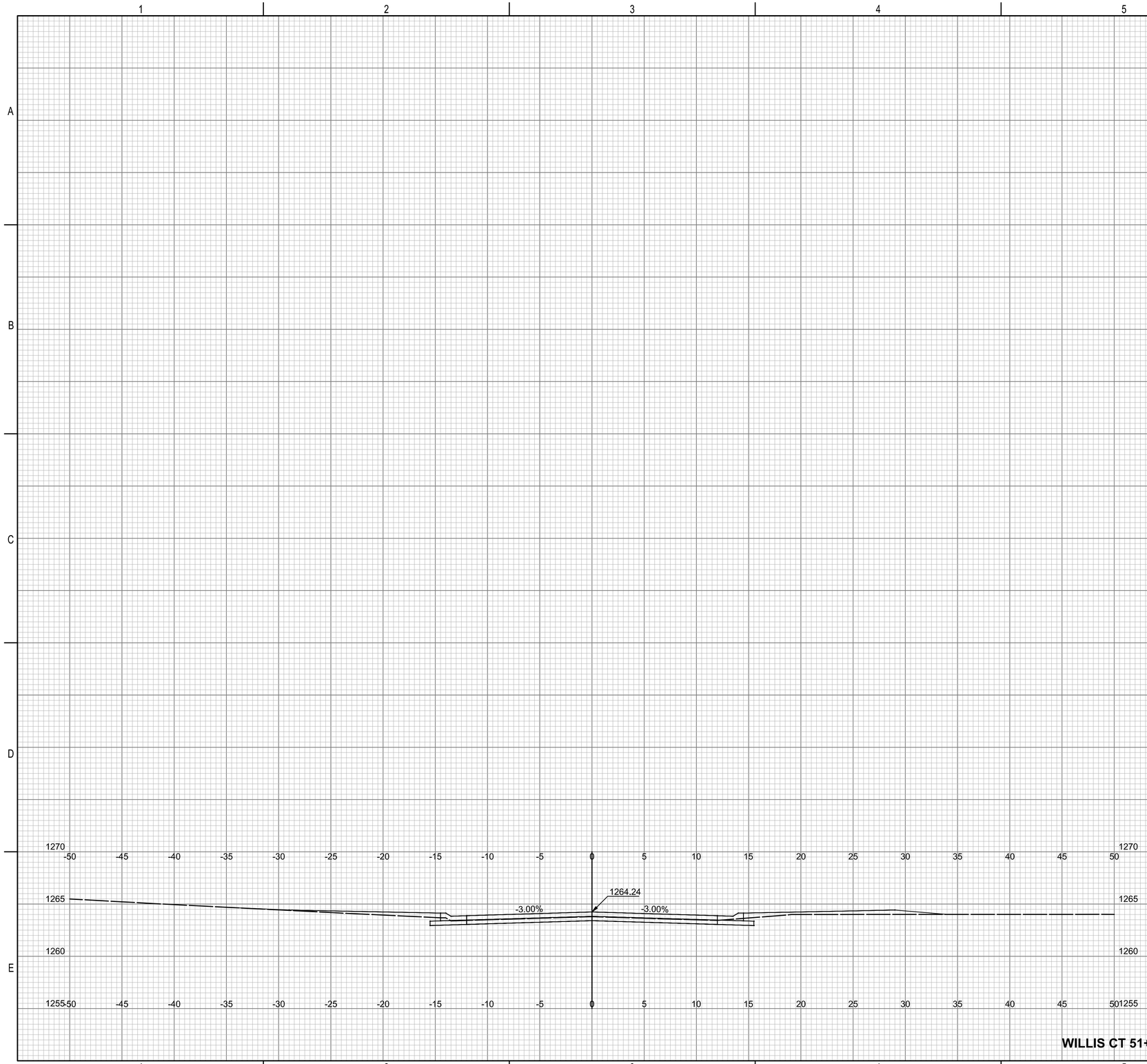
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CROSS SECTIONS-WILLIS COURT

CX617
68 OF 69

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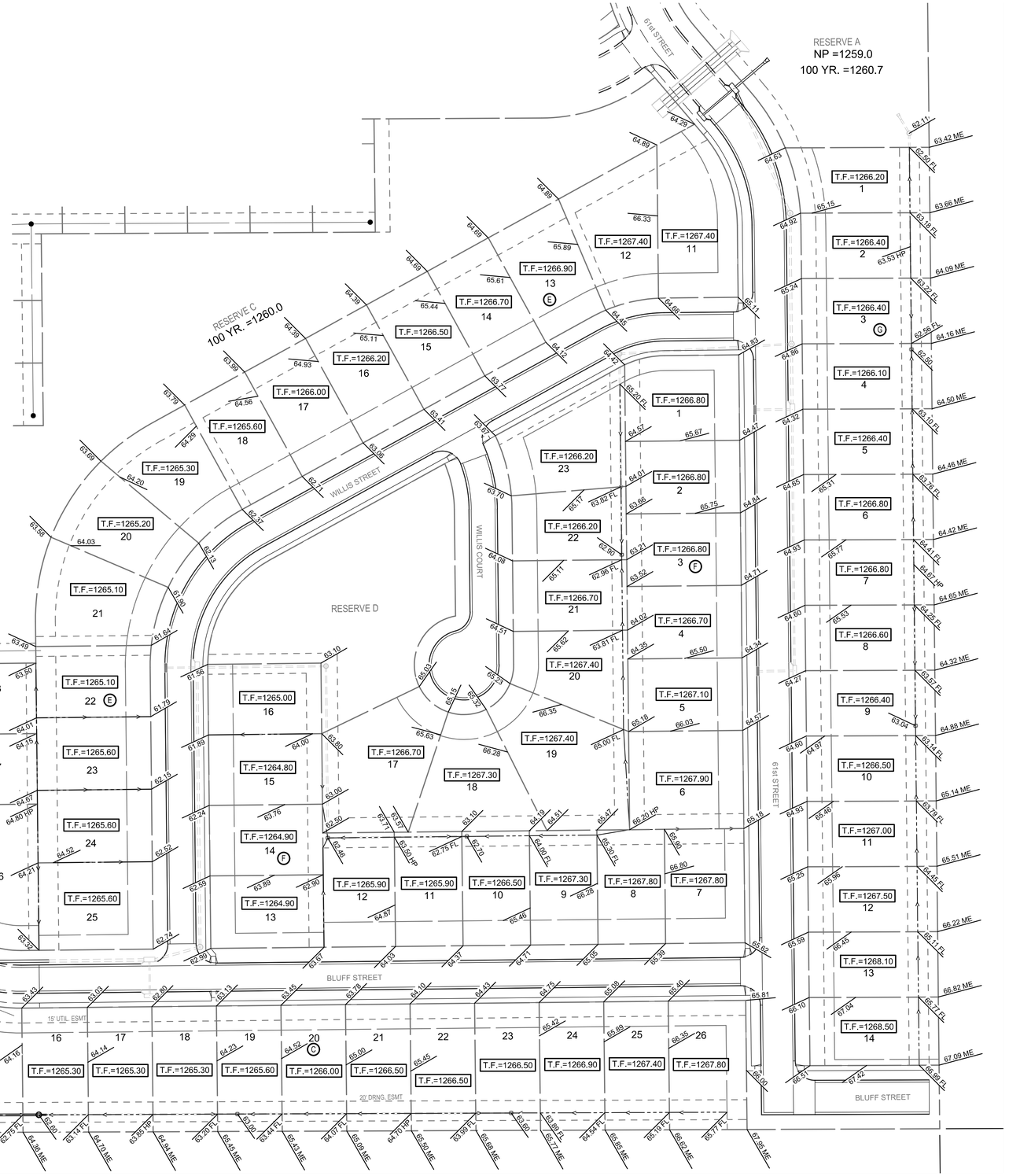
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69 OF 69

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PEC
0 60' 120'

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)

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

MINIMUM OPENING	ELEVATION (NAVD 88)
LOTS 11-12, BLOCK E	1264.9
LOTS 13-14, BLOCK E	1264.7
LOTS 15-16, BLOCK E	1264.4
LOT 17, BLOCK E	1264.0
LOT 18, BLOCK E	1263.8
LOT 19, BLOCK E	1263.7
LOT 20, BLOCK E	1263.6
LOTS 21-23, BLOCK E	1263.5
LOT 1, BLOCK F	1264.9
LOTS 15-16, BLOCK F	1264.3
LOTS 17-18, BLOCK F	1264.8
LOT 23, BLOCK F	1264.7
LOTS 1-3, BLOCK G	1265.0

GENERAL NOTES

1. SEE THE RECORDED PLAT TO VERIFY DIMENSIONS, EASEMENTS, AND SETBACK.
2. ALL ELEVATIONS SHOWN ARE NAVD88 DATUM.
3. ENSURE POSITIVE DRAINAGE AS INTENDED PER CITY REQUIREMENTS.
4. LOTS WERE MASS GRADED IN THE PUBLIC INFRASTRUCTURE PROJECTS. BUILDER TO VERIFY SOIL PROPERTIES AND ELEVATIONS PRIOR TO CONSTRUCTION TO SATISFY LOCAL BUILDING CODE.
5. BUILDER TO DETERMINE IF EXTRA DEEP FOOTINGS/ FOUNDATIONS ARE REQUIRED BASED ON EXISTING CONTOURS.
6. BUILDER TO VERIFY SANITARY SEWER SERVICE ELEVATIONS PRIOR TO CONSTRUCTION.
7. A DRAINAGE PLAN FOR THE SUBDIVISION HAS BEEN DEVELOPED AND IS ON FILE WITH THE CITY
8. HOUSE TYPES MAY ONLY CHANGE UPON APPROVAL FROM THE DEVELOPER AND ENGINEER.

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CITY OF WICHITA

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FOUR CORNER GRADING PLANS
SWANEY FARM ADDITION PHASE 2

Issue:		
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FOUR CORNER GRADING PLAN - PHASE 2

1

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