CITY OF WICHITA

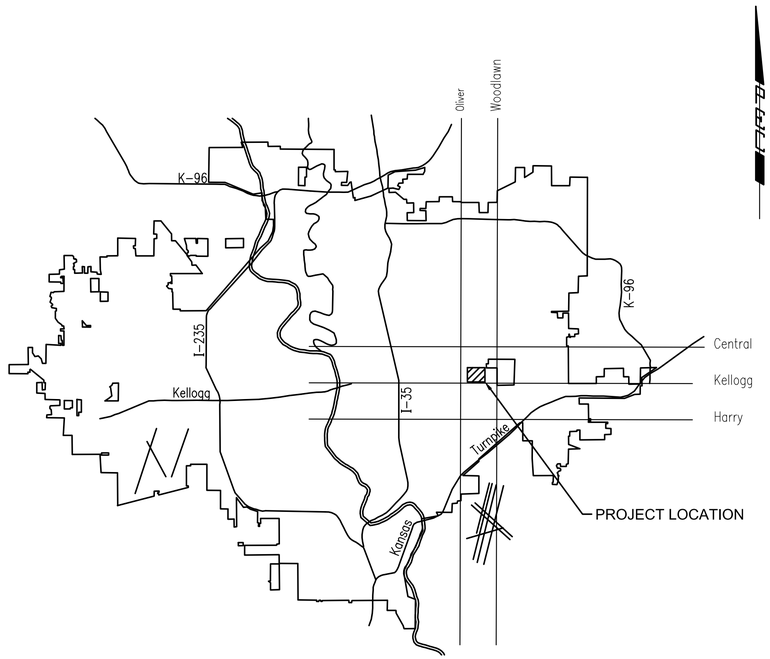
PAUL GUNZELMAN, P.E. - CITY ENGINEER

CONSTRUCTION PLANS FOR

BLECKLEY-PAVING AND

INCIDENTAL DRAINAGE IMPROVEMENTS

PEC PROJECT NO. 220018-003 (PAVING AND INCIDENTAL DRAINAGE)
CITY OF WICHITA STORM WATER SEWER PROJECT NO. 458-2022-085521
CITY OF WICHITA WATERLINE PROJECT NO. 448-2024-035105
MUNIS NO. U3001
ORG CODE 56200822



LOCATION MAP

JANUARY 2025

SHEET INDEX

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

benesch

CITY OF WICHITA

KRISTY SKAGGS
LICENSED
29958
01/27/2025
KANSAS
PROFESSIONAL ENGINEER

BLECKLEY - PAVING & INCIDENTAL DRAINAGE IMPROVEMENTS
PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO.
458-2022-085521

Issue:		

JOB NO.	220018-003
DATE	JANUARY 2025
PM	BMM
DESIGNED BY	KMS
DRAWN BY	CP
CHECKED BY	BMM

TITLE SHEET

C001
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SAVED 1/25/2025 11:09:29 AM BY KRISTY.SKAGGS
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SCALE IN FEET

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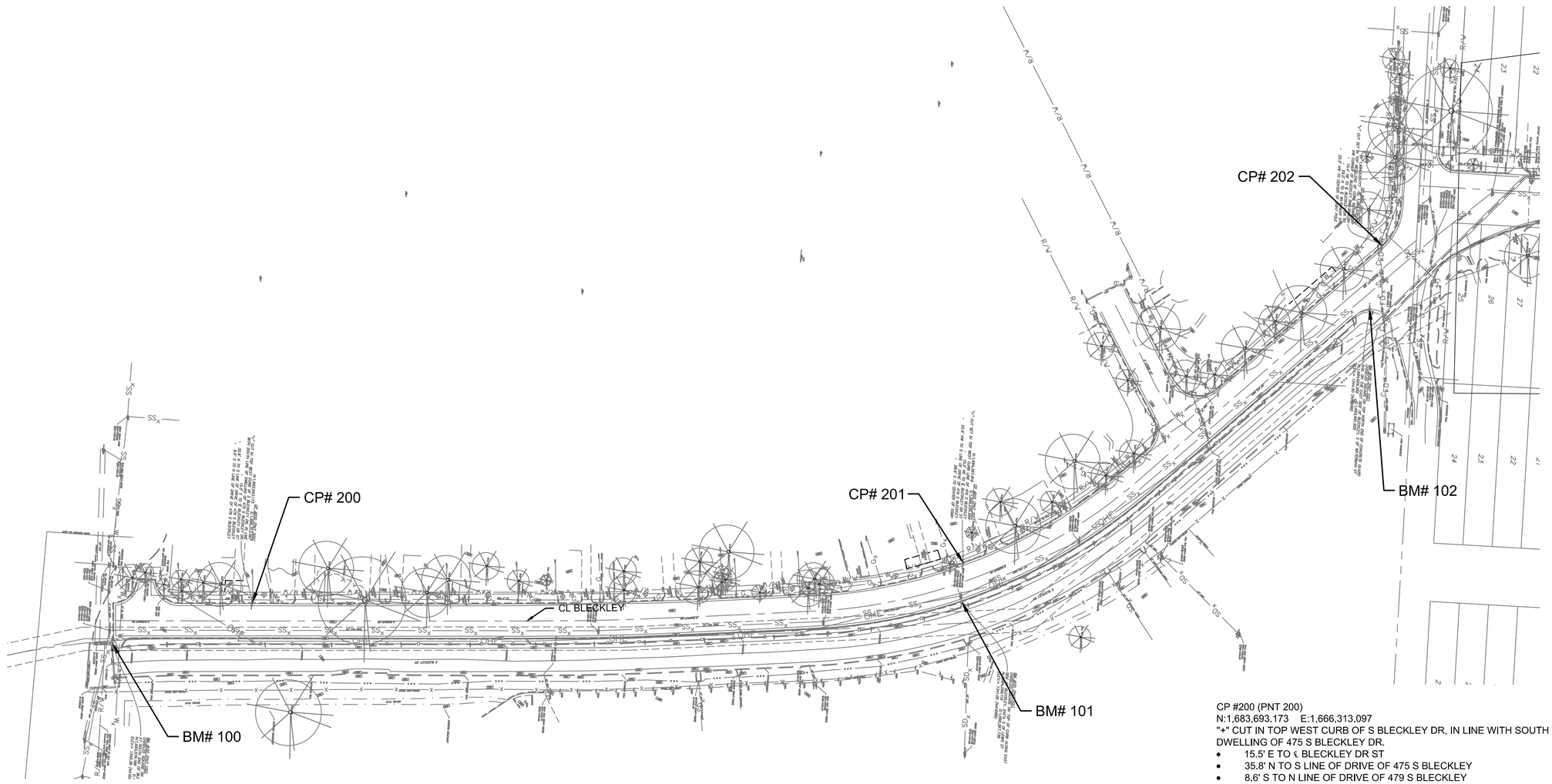

BM #100 (PNT 100)
CHISELED SQUARE ON TOP NW COR OF HEADWALL
AT SOUTH END OF BLECKLEY DR.
N:1,683,576.188 E:1,666,356.535
ELEV.= 1340.39 (NAVD88)

BM #101 (PNT 101)
CHISELED SQUARE ON TOP OF CURB ALONG EAST
SIDE OF BLECKLEY, 240'± S OF LEWIS ST
N:1,684,299.119 E:1,666,267.738ELEV.= 1341.05 (NAVD88)

BM #102 (PNT 102)
CHISELED SQUARE ON TOP NORTH END OF CONCRETE
GUARD RAIL ON THE EAST SIDE OF BLECKLEY, S OF WATERMAN ST
N:1,684,629.282 E:1,665,991.955
ELEV.= 1344.50 (NAVD88)

CP #200 (PNT 200)
N:1,683,693,173 E:1,666,313.097
"+" CUT IN TOP WEST CURB OF S BLECKLEY DR, IN LINE WITH SOUTH LINE OF DWELLING OF 475 S BLECKLEY DR.
- 15.5' E TO ℄ BLECKLEY DR ST
- 35.8' N TO S LINE OF DRIVE OF 475 S BLECKLEY
- 8.6' S TO N LINE OF DRIVE OF 479 S BLECKLEY

CP #201 (PNT 201)
N:1,684,297.816 E:1,666,234.269
"+" CUT SET IN TOP WEST CURB LINE OF 419 S BLECKLEY
- 15.5' NE TO ℄ BLECKLEY DR ST
- 22.9' NW TO S LINE OF DRIVE OF 419 S BLECKLEY
- 28.6' E TO CENTER OF SSMH

CP #202 (PNT 202)
N: 1,684,635.777 E: 1,665,936.880
"+" CUT SET IN TOP WEST END OF CURB RETURN ON NW CORNER OF BLECKLEY AND ENGLISH
- 15.4' NE TO ℄ BLECKLEY DR ST
- 29.0' N TO ℄ WATERMAN ST
- 22.5' NW TO CENTER OF LIGHT POLE

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BLECKLEY - PAVING & INCIDENTAL DRAINAGE IMPROVEMENTS

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO.
458-2022-085521

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SURVEY VERTICAL AND HORIZONTAL CONTROL

C002
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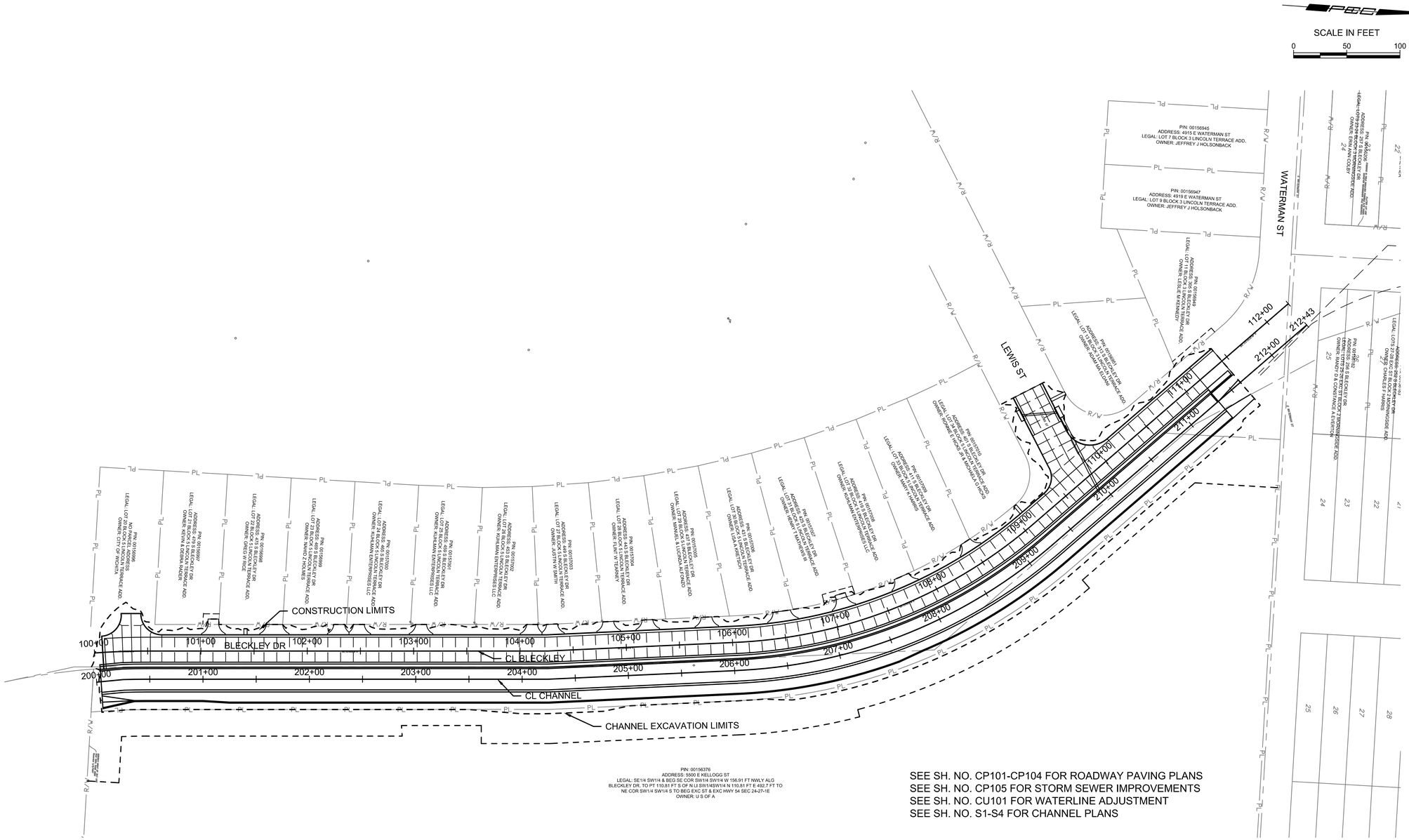

SEE SH. NO. CP101-CP104 FOR ROADWAY PAVING PLANS
SEE SH. NO. CP105 FOR STORM SEWER IMPROVEMENTS
SEE SH. NO. CU101 FOR WATERLINE ADJUSTMENT
SEE SH. NO. S1-S4 FOR CHANNEL PLANS

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CHECKED BY	BMM

KEY MAP

C003
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SAVED 1/25/2025 12:31:38 PM BY KRISTY.SKAGGS
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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. THE CONTRACTOR SHALL CONTACT THE ENGINEER AT LEAST 72 HOURS PRIOR TO BEGINNING CONSTRUCTION TO ADVISE THEM OF THE INTENDED WORK AND OF THEIR PROPOSED SCHEDULE:

   CITY OF WICHITA
   JOE HICKLE (JHICKLE@WICHITA.GOV)
   (316) 268-4307
   KELLY FLEMMING (KFLEMMING@WICHITA.GOV)

4. 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.

5. 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
CITY OF WICHITA WATER & SEWER	316-219-8921

6. 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.

7. 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.

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

9. 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.

10. 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.

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

12. 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.

13. 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).

14. 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.

15. 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.

16. 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.

17. THE CONTRACTOR SHALL INSTALL AND 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.

18. 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.

19. 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.

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 SODDING IS APPLIED. TEMPORARY SEEDING OR PERMANENT SODDING SHALL BE APPLIED WITHIN 14 DAYS AFTER THE AREA HAS BEEN DISTURBED.

21. 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. 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.

25. 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.

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

27. 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.

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

28. 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 NORTH AMERICAN 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.

29. 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.

30. MAINTAIN A MINIMUM OF 2-FOOT VERTICAL SEPARATION BETWEEN ALL WATER LINES (MAINS AND SERVICES) AND ALL PRESSURIZED SANITARY SEWER LINES (FORCE MAINS AND SERVICES) AT CROSSINGS. WATERLINES 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.

31. 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.

33. 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.

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

35. 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.

36. 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.

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

38. 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.

39. 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.

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

41. 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.

42. 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.

43. 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.

44. 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.

TRAFFIC HANDLING/CONSTRUCTION SCHEDULE

THE CONTRACTOR SHALL PROVIDE A DETAILED CONSTRUCTION SEQUENCING PLAN, INCLUDING THE ROAD AND CHANNEL, AND TRAFFIC CONTROL PLAN FOR ENGINEER REVIEW AND APPROVAL A MINIMUM OF TWO WEEKS 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

EMERGENCY SERVICE VEHICLES SHALL BE PERMITTED THROUGH AND ACROSS CONSTRUCTION AT ALL TIMES. THE CONTRACTOR SHALL PROTECT TRAFFIC BY USE OF PROPER AND NECESSARY FLAGS, FLASHERS, LIGHTS, BARRICADES OR OTHER WARNING DEVICES AS NEEDED, ALL IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). EMERGENCY MEDICAL SERVICES (EMS) SHALL BE CONTACTED PRIOR TO ROAD CLOSURE TO COORDINATE EMERGENCY SERVICE ACCESS ADJACENT TO THE CONSTRUCTION SITE.

TRASH SERVICE & MAIL DELIVERY

THE CONTRACTOR SHALL MAKE SATISFACTORY PROVISIONS FOR TRASH PICKUP SERVICE TO PROPERTIES ADJACENT TO THE PROJECT DURING CONSTRUCTION, INCLUDING MOVING TRASH CANS TO DESIGNATED PICK UP AREA FOR RESIDENTS. CONTRACTOR SHALL CONTACT TRASH PICKUP SERVICE PROVIDERS A MINIMUM OF TWO WEEKS PRIOR TO CONSTRUCTION TO COORDINATE.

THE CONTRACTOR SHALL MAKE SATISFACTORY PROVISIONS FOR MAIL DELIVERY TO PROPERTIES ADJACENT TO THE PROJECT DURING CONSTRUCTION. PRIOR COORDINATION WITH USPS STAFF INDICATES THAT NO TEMPORARY MAILBOXES SHALL BE REQUIRED. HOWEVER, CONTRACTOR SHALL CONTACT SHERRY DAVIS (SHERRY.R.DAVIS@USPS.GOV) 316-618-0054 A MINIMUM OF TWO WEEKS PRIOR TO CONSTRUCTION TO VERIFY. IF TEMPORARY MAILBOXES ARE REQUIRED, THE BID ITEM "TEMPORARY MAILBOX" SHALL BE USED. THE UNIT PRICE BID SHALL BE CONSIDERED FULL COMPENSATION FOR ALL MATERIALS, EQUIPMENT, TOOLS, LABOR, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK

RECOVERY DAYS

RECOVERY DAYS SHALL INCLUDE ANY DAYS AFTER A RAINFALL EVENT THAT WOULD IMPEDE THE WORK OR DELAY RESUMPTION OF WORK IN THE CRITICAL PATH OF THE CHANNEL CONSTRUCTION. THESE DAYS SHALL BE USED TO RESTORE THE WORK SITE TO THE CONDITION IT WAS IN PRIOR TO THE WEATHER EVENT. THE CRITICAL PATH SHALL BE DETERMINED BY THE WORK SCHEDULE PROVIDED BY THE CONTRACTOR. REQUESTS FOR RECOVERY DAYS SHALL BE SUBMITTED TO THE CITY OF WICHITA FOR APPROVAL. CONTRACTOR TO RECEIVE AUTHORIZATION FROM THE CITY FOR PAYMENT OF ANY RECOVERY DAY WORK PERFORMED. THE CONTRACTOR IS EXPECTED TO UTILIZE A FULL RECOVERY CREW TO QUALITY FOR A RECOVERY DAY. THE UNIT PRICE BID SHALL BE CONSIDERED FULL COMPENSATION FOR ALL MATERIALS, EQUIPMENT, TOOLS, LABOR, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK. ANY WORK PERFORMED BY THE CONTRACTOR DURING THESE DAYS SHALL BE PAID UNDER THE MEASURED SET PRICE BID ITEM "RECOVERY DAY". IF A RECOVERY DAY IS APPROVED BY CITY OF WICHITA STAFF, IT WILL NOT BE COUNTED AS A WORKING DAY TOWARDS THE OVERALL CONTRACT TIME.

DEWATERING

THE LUMP SUM ITEM "DEWATERING" SHALL BE UTILIZED FOR MANAGEMENT OF GROUNDWATER SEEPAGE/NUISANCE WATER ONLY. SEE GEOTECHNICAL REPORT FOR ADDITIONAL INFORMATION. THE LUMP SUM PRICE BID SHALL BE CONSIDERED FULL COMPENSATION FOR ALL MATERIALS, EQUIPMENT, TOOLS, LABOR, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK.

EROSION CONTROL RESPONSE PLAN

PRIOR TO ANY WORK BEGINNING ON THE PROJECT, CONTRACTOR SHALL PROVIDE AN EROSION CONTROL RESPONSE PLAN TO THE CITY OF WICHITA , THIS PLAN MUST INCLUDE A DETAILED DESCRIPTION OF HOW THE CONTRACTOR PLANS TO MITIGATE EROSION BEFORE/DURING SIGNIFICANT WEATHER/RAINFALL EVENTS, AND ADDRESS DAMAGE TO EXISTING OR PROPOSED CONDITIONS AFTER A SIGNIFICANT WEATHER/RAINFALL EVENT. THIS PLAN MUST BE APPROVED BY CITY STAFF PRIOR TO CONSTRUCTION. ANY DEVIATION IN THESE PLANS MUST BE SUBMITTED IN WRITING TO CITY STAFF FOR APPROVAL. IF UNFORESEEN CIRCUMSTANCES ARISE, COORDINATE WITH ENGINEER.

CHANNEL CONSTRUCTION

ANY DEVIATION OF CHANNEL CONSTRUCTION FROM STRUCTURAL DESIGN, AS SHOWN IN PLANS, SHALL REQUIRE SEALED ENGINEERED DRAWINGS SUBMITTED TO THE ENGINEER OF RECORD FOR APPROVAL. THIS MUST BE SUBMITTED AND APPROVED A MINIMUM OF TWO WEEKS PRIOR TO CONSTRUCTION OF THE CHANNEL. ALLOW A MINIMUM OF ONE WEEK FOR ENGINEER REVIEW.

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CITY OF WICHITA

KRISTY SKAGGS
LICENSED
29955
01/27/2025
KANSAS
PROFESSIONAL ENGINEER

BLECKLEY - PAVING & INCIDENTAL DRAINAGE IMPROVEMENTS

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO.
458-2022-085521

Issue:		

JOB NO.	220018-003
DATE	JANUARY 2025
PM	BMM
DESIGNED BY	KMS
DRAWN BY	CP
CHECKED BY	BMM

GENERAL NOTES

CP001
4 OF 73

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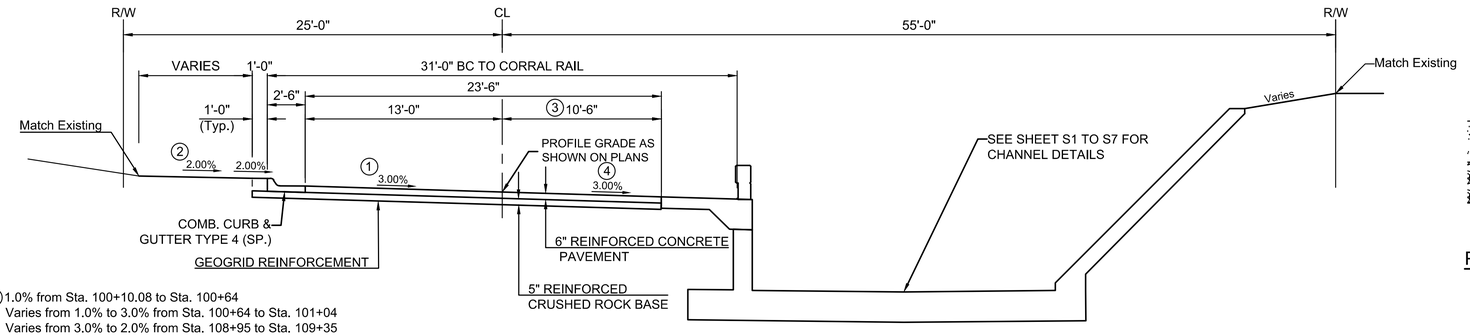


TYPICAL SECTION

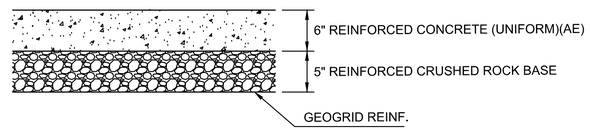
BLECKLEY STA. 100+10.08 TO STA. 111+44.00

(1) 1.0% from Sta. 100+10.08 to Sta. 100+64
Varies from 1.0% to 3.0% from Sta. 100+64 to Sta. 101+04
Varies from 3.0% to 2.0% from Sta. 108+95 to Sta. 109+35
2.0% from Sta. 109+35 to Sta. 110+50
Varies from 2.0% to 1.0% from Sta. 110+50 to Sta. 110+90
1.0% from Sta. 110+90 to Sta. 111+17
Varies from 1.0% to -0.7% from Sta. 111+17 to Sta. 111+44

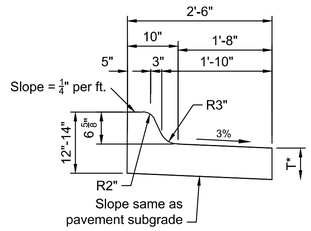
(2) 6:1 from Sta. 110+14 to Sta. 110+70
Varies from 6:1 to 2% from Sta. 110+70 to Sta. 110+80

(3) Varies from 11'-3" to 10'-6" from Sta. 100+10 to Sta. 100+25

(4) Varies from -3.0% to -0.84% from Sta. 111+17 to Sta. 111+44

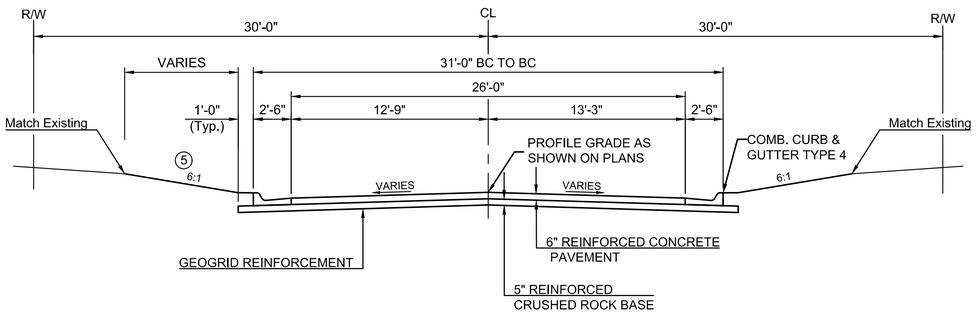


PORTLAND CEMENT CONCRETE
PAVEMENT



TYPE 4
(RESIDENTIAL CURB)
(SPECIAL)

*T = Thickness of curb to adjust
with pavement thickness



TYPICAL SECTION

LEWIS STREET STA. 149+00.00 TO STA. 149+40.00

(5) Varies from 6:1 to 8% from Sta. 149+09.00 to Sta. 149+16.59
Varies from 8% to 12% Sta. 149+16.59 to Sta. 149+19.34
Varies from 12% to 6:1 from Sta. 149+19.34 to Sta. 149+24.00

* ROAD EARTHWORK SUMMARY (C.Y.)		
	Unclassified Excavation	Compacted Fill (95%)
Road Excavation	877	41
GRAND TOTAL	877	41

ESTIMATED EXCESS MATERIAL (CONTRACTOR DISPOSAL)
877 - (41/0.80) = 825.75 C.Y.
VMF = 0.80 (ASSUMED)

THE CONTRACTOR SHALL SATISFY THEMSELVES WITH THE EARTHWORK QUANTITIES AND NO CHANGE ORDER FOR EARTHWORK WILL BE APPROVED.

* EARTHWORK QUANTITY FOR THE ROAD IMPROVEMENTS SHALL BEGIN AT THE WEST LIMITS OF THE EXCAVATION FOR THE CHANNEL IMPROVEMENTS.

THIS DOES NOT INCLUDE THE EXCESS EXCAVATION FOR THE CHANNEL, SEE SHEET CQ102 FOR CHANNEL EXCAVATION QUANTITY.

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BLECKLEY - PAVING & INCIDENTAL DRAINAGE IMPROVEMENTS

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO.
458-2022-085521

Issue:		

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TYPICAL SECTIONS

CP002
5 OF 73

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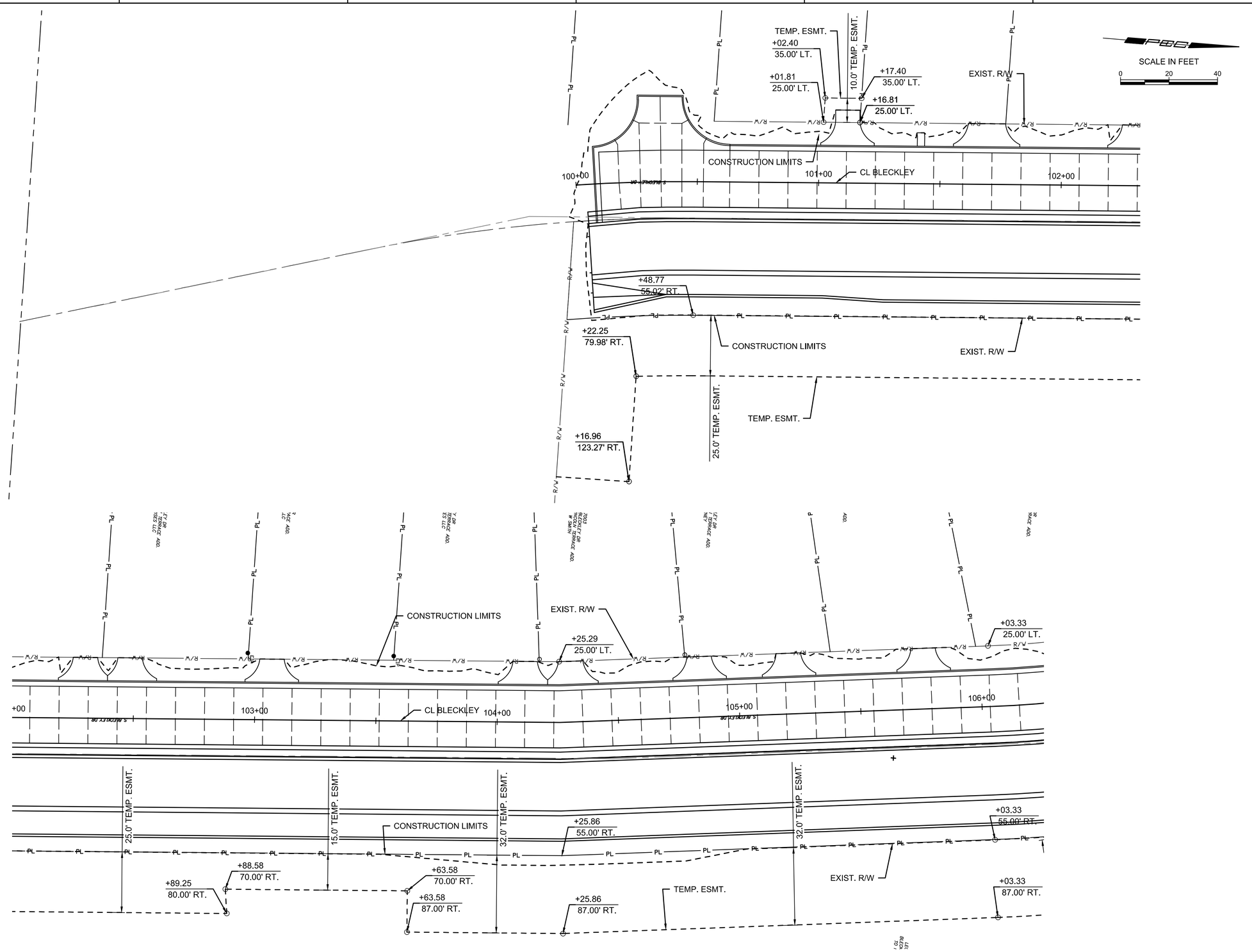

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RIGHT-OF-WAY & TEMPORARY EASEMENT PLANS

CP003
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RIGHT-OF-WAY & TEMPORARY EASEMENT PLANS

CP004
7 OF 73

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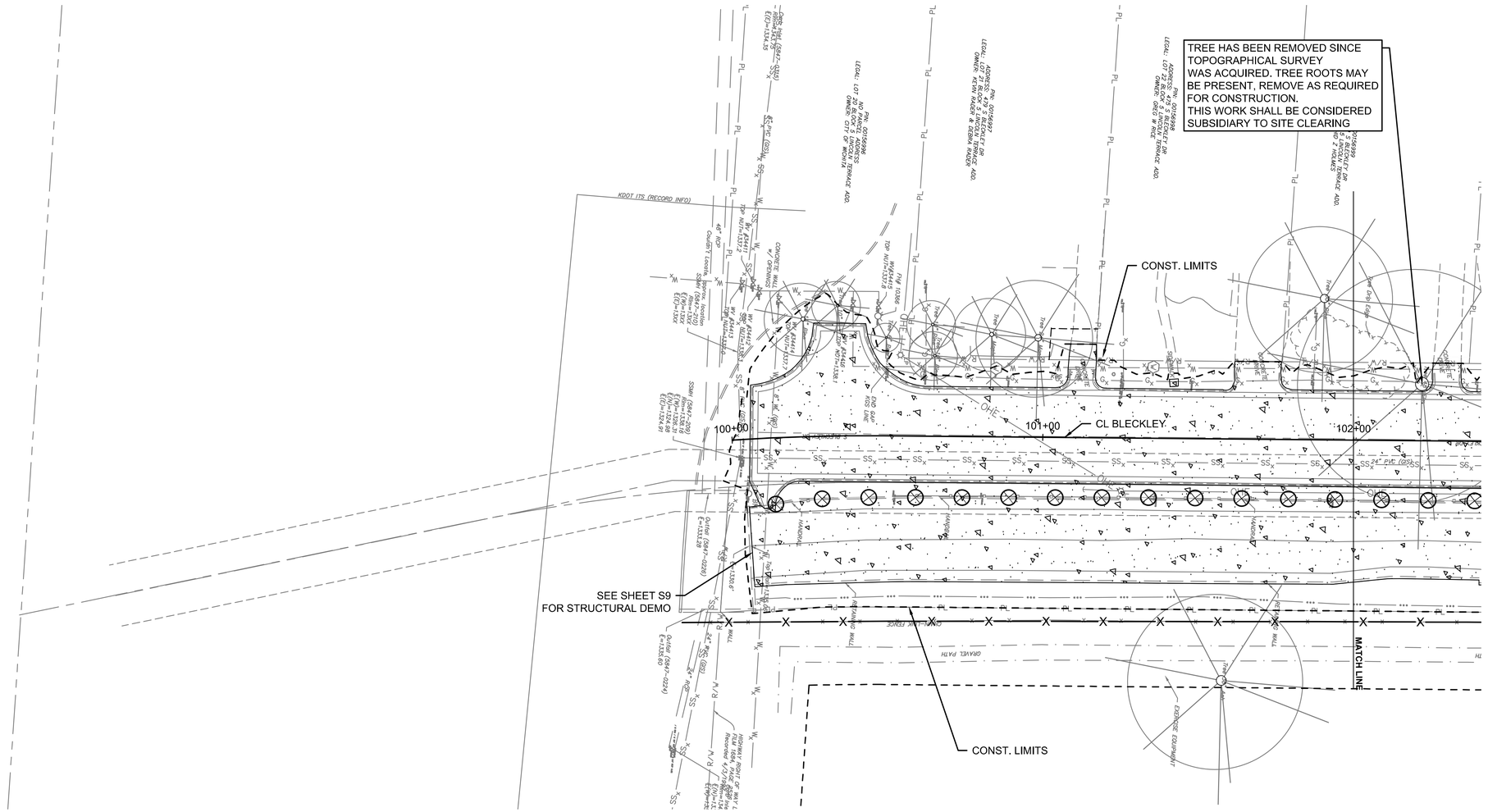
SCALE IN FEET
0 20 40



DEMOLITION LEGEND

- CONCRETE REMOVAL *
- HANDRAIL REMOVAL
- TREE REMOVAL
- FENCE REMOVAL & SALVAGE
- FENCE REMOVAL

* PAVEMENT REMOVAL TO BE CONSIDERED SUBSIDIARY TO "SITE CLEARING"

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Issue:		

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DEMO PLAN

CD101
8 OF 73

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SCALE IN FEET
0 20 40

TREE HAS BEEN REMOVED SINCE TOPOGRAPHICAL SURVEY WAS ACQUIRED. TREE ROOTS MAY BE PRESENT, REMOVE AS REQUIRED FOR CONSTRUCTION.
THIS WORK SHALL BE CONSIDERED SUBSIDIARY TO SITE CLEARING

CONST. LIMITS

CL BLECKLEY

MATCH LINE

MATCH LINE

CONST. LIMITS

REMOVE HEADWALL

102+00 103+00 104+00 105+00 106+00

41.16
40.66

DEMOLITION LEGEND

- CONCRETE REMOVAL
- HANDRAIL REMOVAL
- TREE REMOVAL
- FENCE REMOVAL & SALVAGE
- FENCE REMOVAL

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Issue:		

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DEMO PLAN

CD102
9 OF 73

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SCALE IN FEET
0 20 40

REMOVE EXISTING INLET. THIS WORK SHALL BE CONSIDERED SUBSIDIARY TO SITE CLEARING.

CONTRACTOR TO SHAPE GRADING AROUND EXISTING TREE. EXISTING TREE TO BE PROTECTED DURING CONSTRUCTION

53.0 L.F. OF EXISTING 15" VCP/18" RCP STORM PIPE TO BE REMOVED OR ABANDONED IN PLACE. IF ABANDONED, PIPE SHALL BE FILLED, CAPPED, AND ABANDONED PER CITY SPECIFICATIONS. THIS WORK SHALL BE CONSIDERED SUBSIDIARY TO SITE CLEARING.

CONST. LIMITS

CL BLECKLEY

106+00 107+00 108+00 109+00 110+00

MATCH LINE

REMOVE HEADWALL

CONST. LIMITS

PROTECT DURING CONSTRUCTION
EXISTING HEADWALL TO REMAIN

REMOVE PEDESTRIAN BRIDGE

REMOVE PRIVACY FENCE, SALVAGE TO OWNER

MATCH LINE

DEMOLITION LEGEND

- CONCRETE REMOVAL
- HANDRAIL REMOVAL
- TREE REMOVAL
- FENCE REMOVAL & SALVAGE
- FENCE REMOVAL

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DEMO PLAN

CD103
10 OF 73

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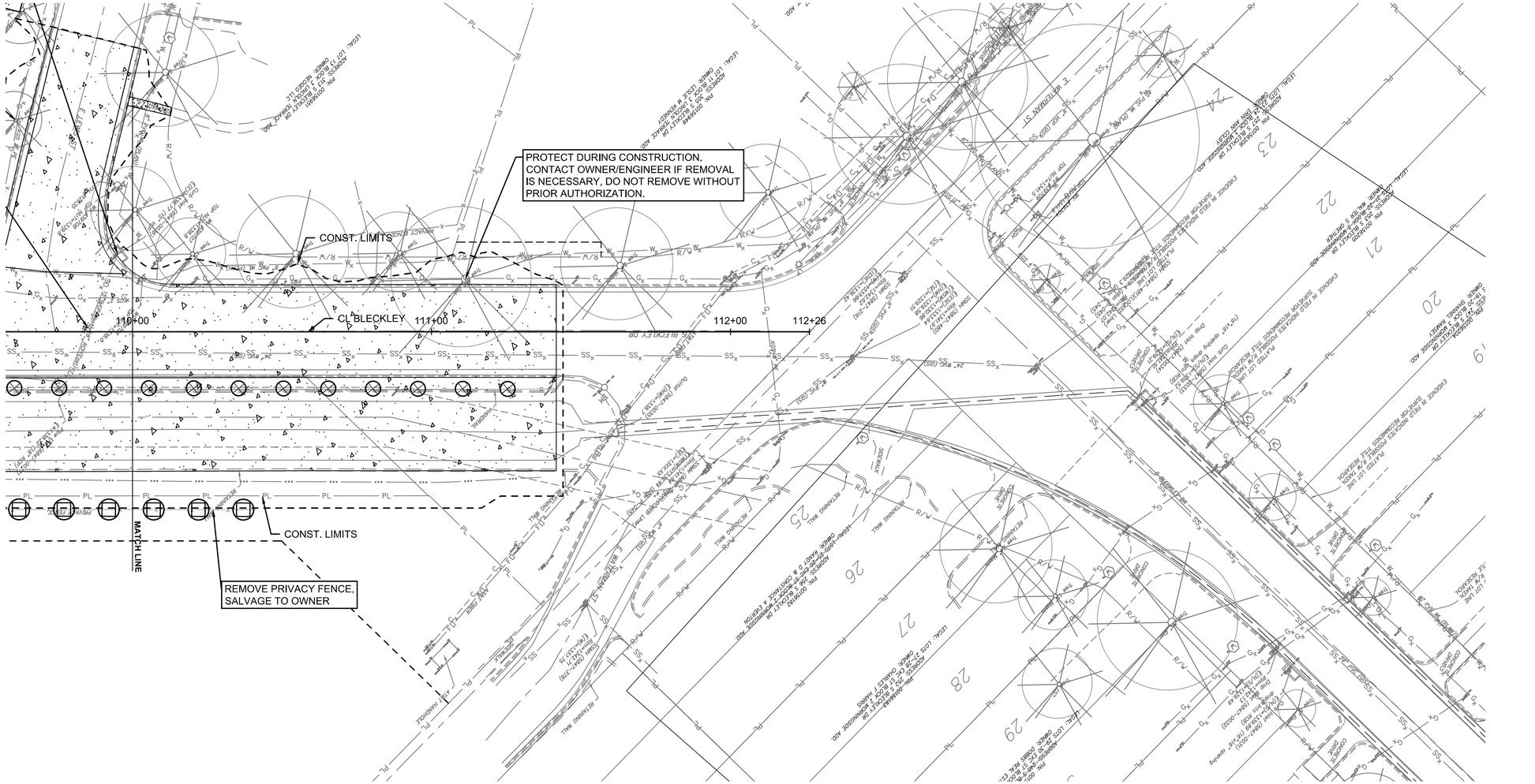

SCALE IN FEET
0 20 40

DEMOLITION LEGEND
- CONCRETE REMOVAL
- HANDRAIL REMOVAL
- TREE REMOVAL
- FENCE REMOVAL & SALVAGE
- FENCE REMOVAL

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DEMO PLAN

CD104
11 OF 73

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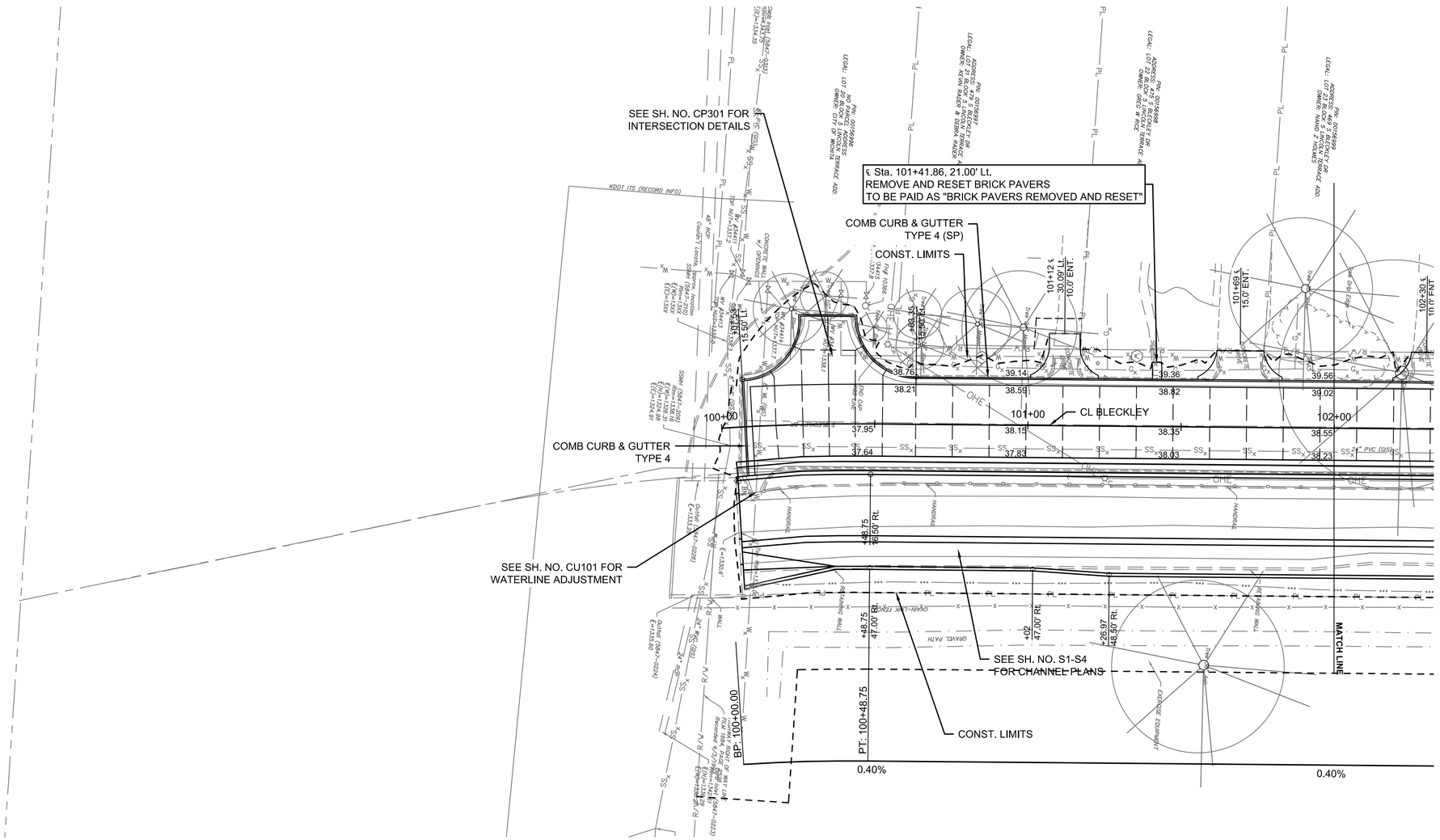
SCALE IN FEET
0 20 40



LEGEND

37.94 - TC
37.39 - FL

PBS

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PLAN BLECKLEY

CP101
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SCALE IN FEET
0 20 40

℄ Sta. 104+21.46, 8.09' Rt.
ADJUST SANITARY MH
FROM ELEV. 1339.73
TO ELEV. 1339.19

CONST. LIMITS

COMB CURB & GUTTER
TYPE 4 (SP)

MATCH LINE

CL BLECKLEY

SEE SH. NO. S2-S4
FOR CHANNEL PLANS

CONST. LIMITS

MATCH LINE

PI: 104+25.86

PC: 106+03.38

0.40%

0.40%

0.40%

LEGEND

37.94 - TC
37.39 - FL

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PLAN BLECKLEY

CP102
13 OF 73

SCALE IN FEET
0 20 40

SEE SH. NO. CP105 FOR STORM SEWER

SEE SH. NO. CP301 FOR INTERSECTION DETAILS

℄ Sta. 106+13.65, 8.89' Rt.
ADJUST SANITARY MH
FROM ELEV. 1340.29
TO ELEV. 1339.94

CONST. LIMITS

℄ Sta. 109+07.98, 24.38' Lt.
CONCRETE SIDEWALK REPLACEMENT
TO BE PAID AS "CONCRETE SIDEWALK (4")"

COMB CURB & GUTTER TYPE 4 (SP)

MATCH LINE

CL BLECKLEY

℄ Sta. 107+31.21, 10.41' Rt.
ADJUST SANITARY MH
FROM ELEV. 1340.64
TO ELEV. 1340.36

CONST. LIMITS

SEE SH. NO. S1-S4 FOR CHANNEL PLANS

℄ Sta. 108+40.68, 11.36' Rt.
ADJUST SANITARY MH
FROM ELEV. 1341.14
TO ELEV. 1340.77

BVC: 108+97.50
ELEV.: 1341.34

PVI: 109+10.00
ELEV.: 1341.36

EVC: 108+22.50
ELEV.: 1341.34

PVI ELEV.: 1341.39
VC 25.00'

PT: 109+10.15

BVC: 109+75.00
ELEV.: 1341.13

MATCH LINE

PC: 106+09.38

0.40%

0.40%

-0.40%

-0.40%

LEGEND

37.94 - TC
37.39 - FL

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PLAN BLECKLEY

CP103
14 OF 73

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SCALE IN FEET
0 20 40

℄ Sta. 110+12.92, 73.65' Lt.
CONCRETE SIDEWALK REPLACEMENT
TO BE PAID AS "CONCRETE SIDEWALK (4")"

COMB CURB & GUTTER
TYPE 4 (SP)

STA. 111+16.86 TO STA. 111+44.00
TEMPORARY PAVEMENT
PAVEMENT SHALL NOT BE TIED TO
PERMANENT IMPROVEMENTS. TEMPORARY
PAVEMENT TO BE PAID UNDER "REINFORCED
CONCRETE PAVEMENT (6")"

CONST. LIMITS

CL BLECKLEY

110+00 111+00 112+00

SEE SH. NO. S1-S4
FOR CHANNEL PLANS

CONST. LIMITS

MATCH LINE

BVC: 109+75.00
ELEV. 1341.13

PVI: 110+25.00
ELEV. 1341.19

EVC: 110+75.00
ELEV. 1341.75

-0.40% 1.65%
CL
PVI ELEV: 1340.93
VC 100.00'

BVC: 111+16.68
ELEV. 1342.44

EVC: 111+26.68
ELEV. 1342.43

BVC: 111+30.00
ELEV. 1342.36

EVC: 111+40.00
ELEV. 1342.21

-1.93% -1.24%

PVI: 111+21.68
ELEV. 1342.52

PVI: 111+35.00
ELEV. 1342.28

CL
PVI ELEV: 1342.52
VC 10.00'

CL
PVI ELEV: 1342.27
VC 10.00'

LEGEND

37.94 - TC
37.39 - FL

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CITY OF WICHITA

KRISTY SKAGGS
LICENSED
29958
01/27/2025
KANSAS
PROFESSIONAL ENGINEER

BLECKLEY - PAVING & INCIDENTAL DRAINAGE IMPROVEMENTS

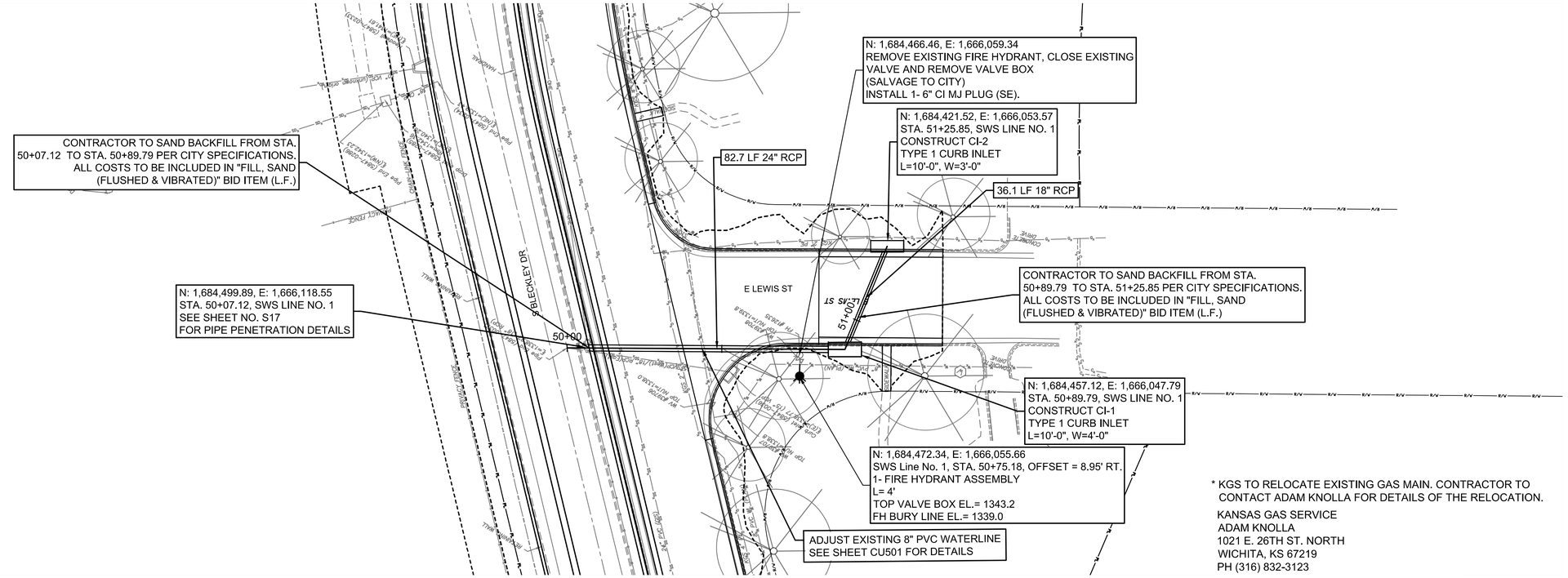
PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO.
458-2022-085521

Issue:		

JOB NO.	220018-003
DATE	JANUARY 2025
PM	BMM
DESIGNED BY	KMS
DRAWN BY	CP
CHECKED BY	BMM

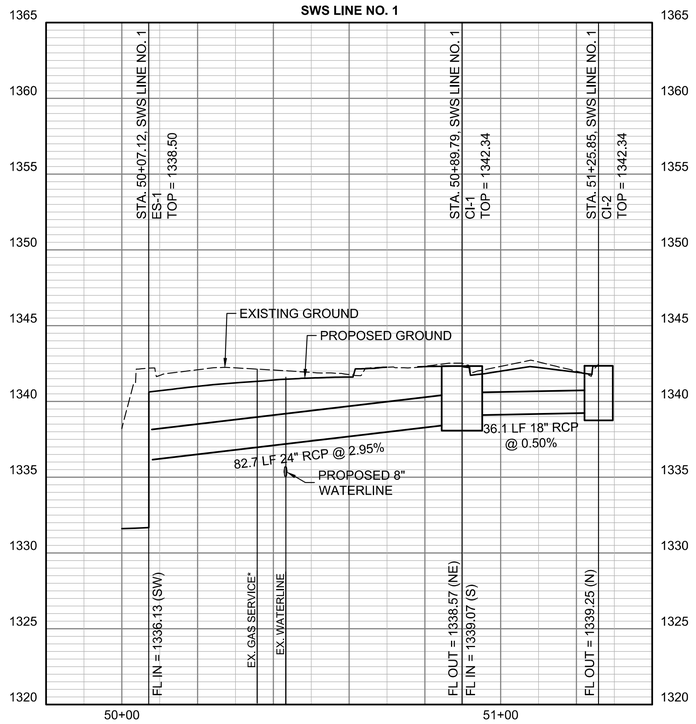
PLAN BLECKLEY

CP104
15 OF 73



* KGS TO RELOCATE EXISTING GAS MAIN. CONTRACTOR TO CONTACT ADAM KNOLLA FOR DETAILS OF THE RELOCATION.

KANSAS GAS SERVICE
ADAM KNOLLA
1021 E. 26TH ST. NORTH
WICHITA, KS 67219
PH (316) 832-3123



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

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BLECKLEY - PAVING & INCIDENTAL DRAINAGE IMPROVEMENTS

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO.
458-2022-085521

Issue:		

JOB NO.	220018-003
DATE	JANUARY 2025
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SWS LINE NO. 1

CP105
16 OF 73

SAVED 1/23/2025 1:45:02 PM BY BILL.SEXSON
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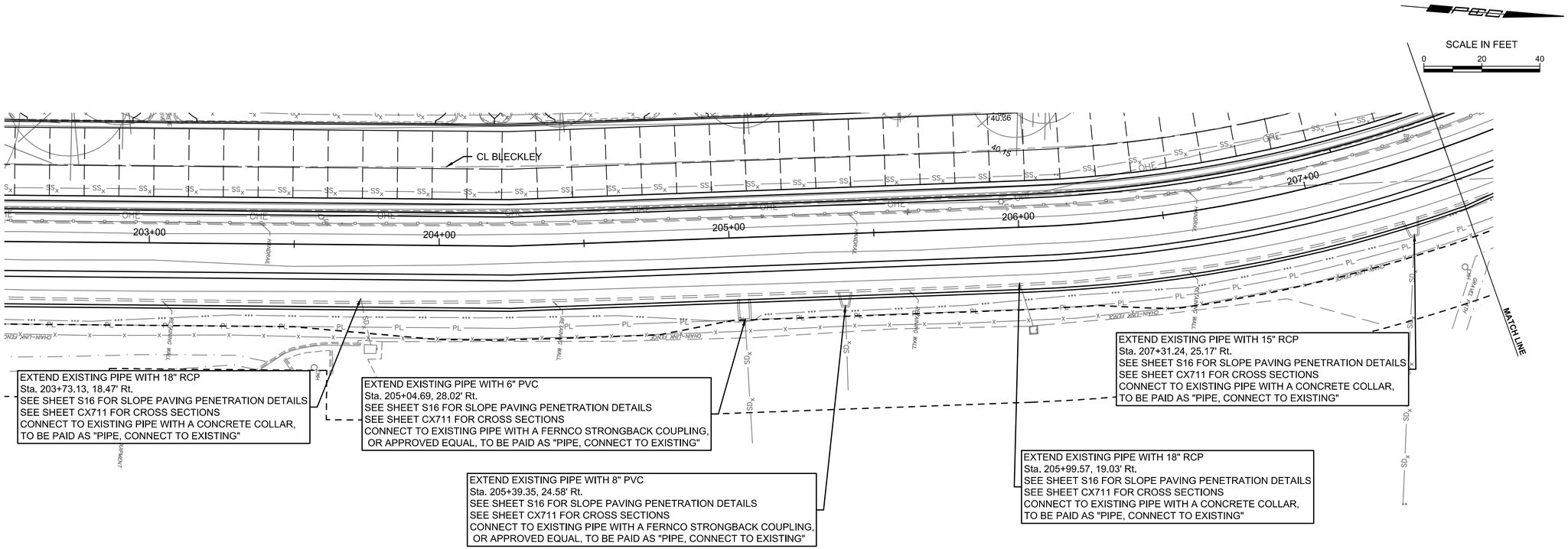

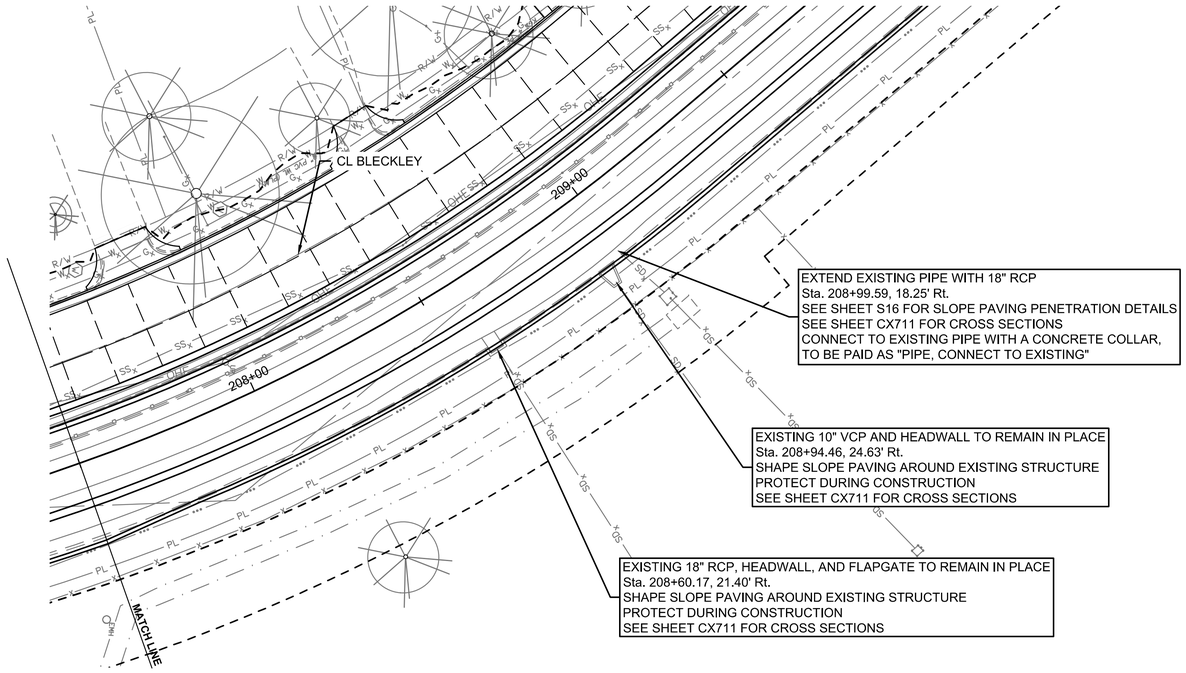

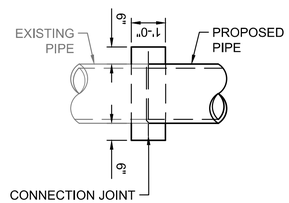

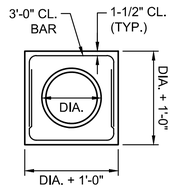

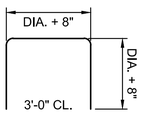

CONCRETE COLLAR NOTES

1. CONCRETE COLLARS SHALL BE PROVIDED AT CONNECTION TO EXISTING CONDUITS WHERE, IN THE OPINION OF THE ENGINEER, A COLLAR IS REQUIRED FOR A SATISFACTORY CONNECTION. CLASS A CONCRETE OR THE MIX USED IN CONCRETE PAVEMENT SHALL BE USED THROUGHOUT. CONCRETE COLLARS WILL NOT BE PAID FOR DIRECTLY, BUT SHALL BE CONSIDERED SUBSIDIARY TO THE VARIOUS PIPES INVOLVED.

CONCRETE COLLAR DETAIL

NOT TO SCALE

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BLECKLEY - PAVING & INCIDENTAL DRAINAGE IMPROVEMENTS

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO.
458-2022-085521

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PIPE PENETRATION PLAN

CP106
17 OF 73

SAVED 1/21/2025 8:07:22 AM BY MADISON.SCHOEMANN
PLOTTED 1/25/2025 11:53:13 AM BY KRISTY.SKAGGS
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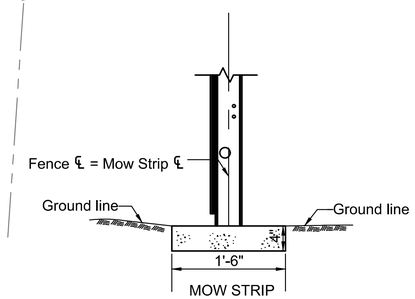

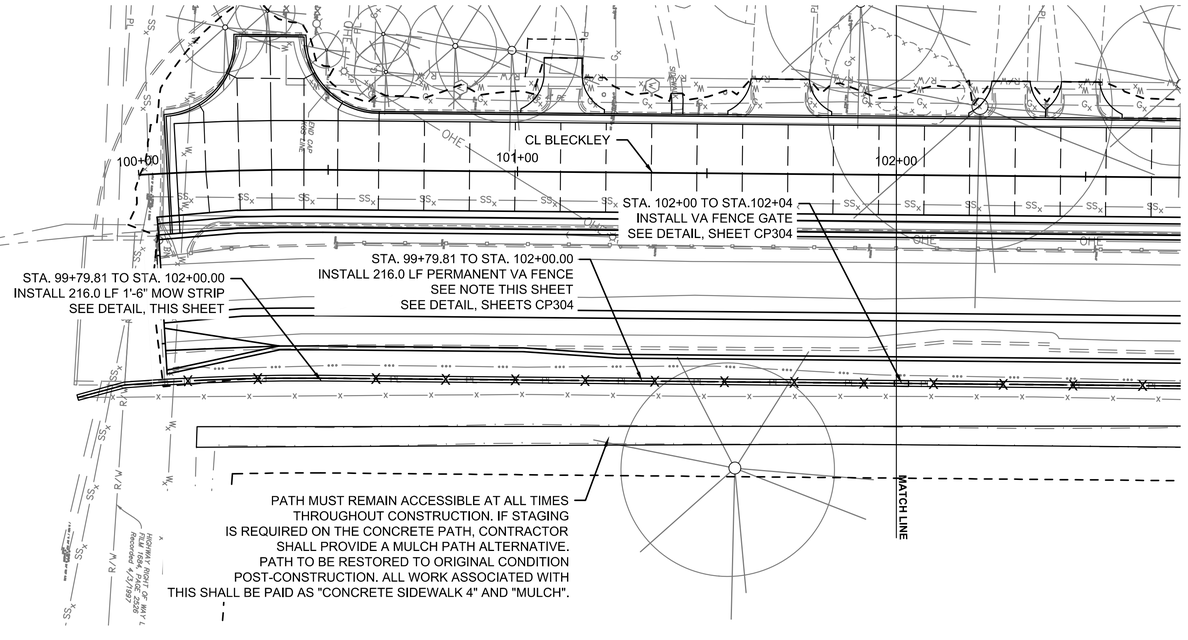

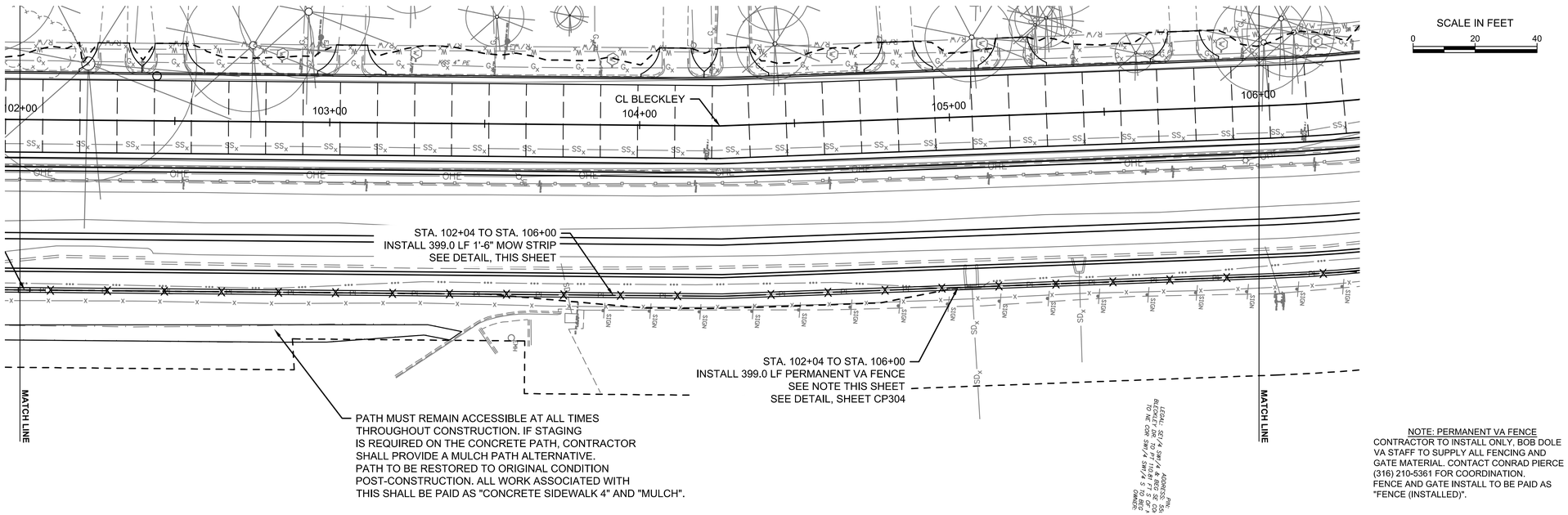

NOTE: PERMANENT VA FENCE
CONTRACTOR TO INSTALL ONLY. BOB DOLE VA STAFF TO SUPPLY ALL FENCING AND GATE MATERIAL. CONTACT CONRAD PIERCE (316) 210-5361 FOR COORDINATION. FENCE AND GATE INSTALL TO BE PAID AS "FENCE (INSTALLED)".

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Issue:		

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DATE	JANUARY 2025
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VA FENCE PLAN

CP107
18 OF 73

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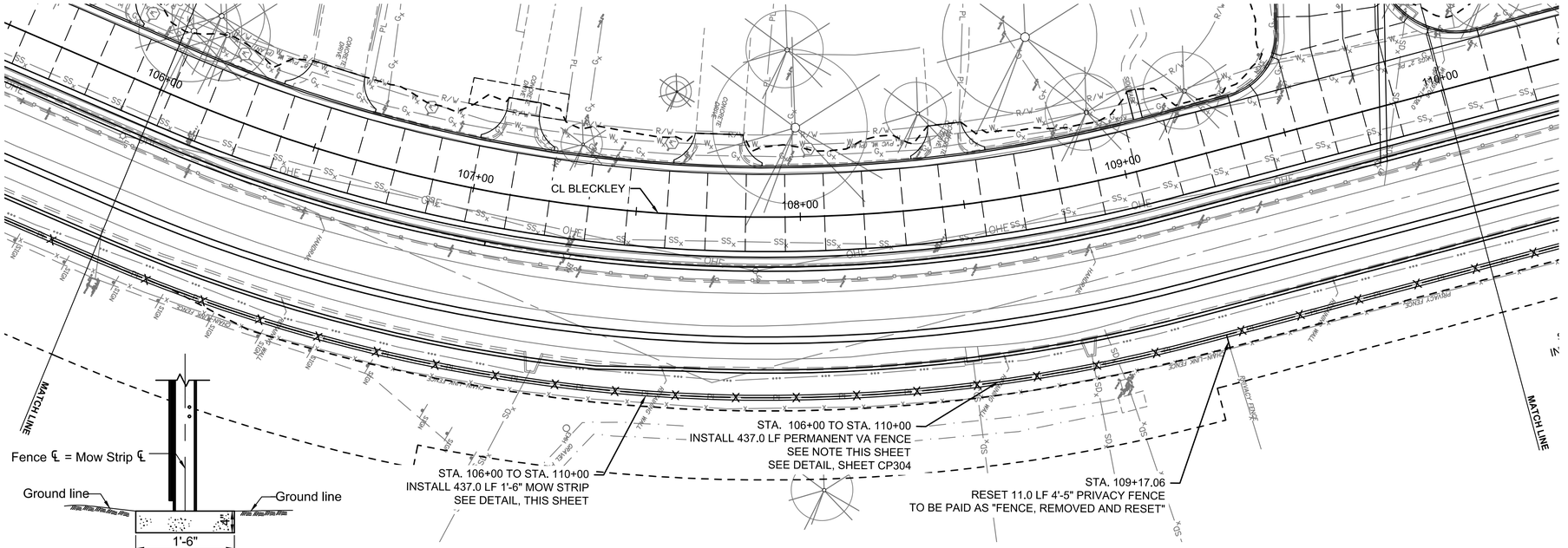
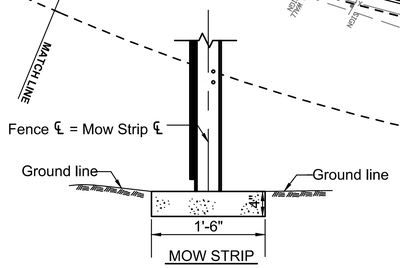
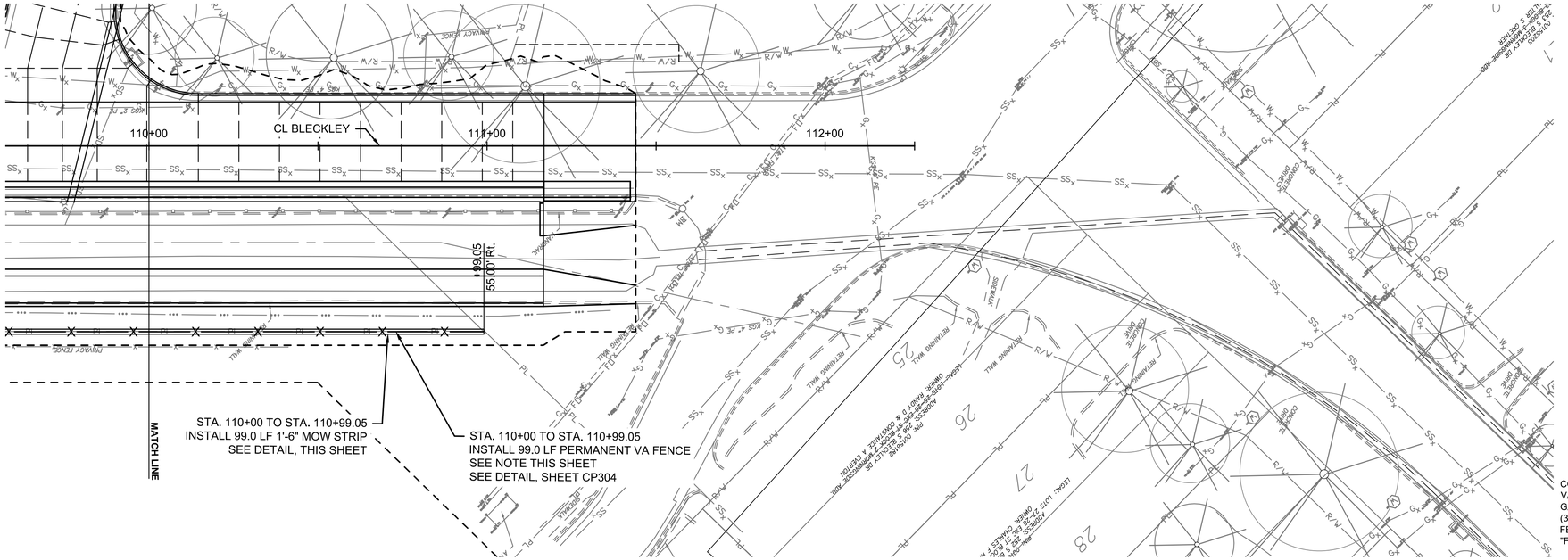
SCALE IN FEET
0 20 40







SCALE IN FEET
0 20 40

NOTE: PERMANENT VA FENCE
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VA FENCE PLAN

CP108
19 OF 73

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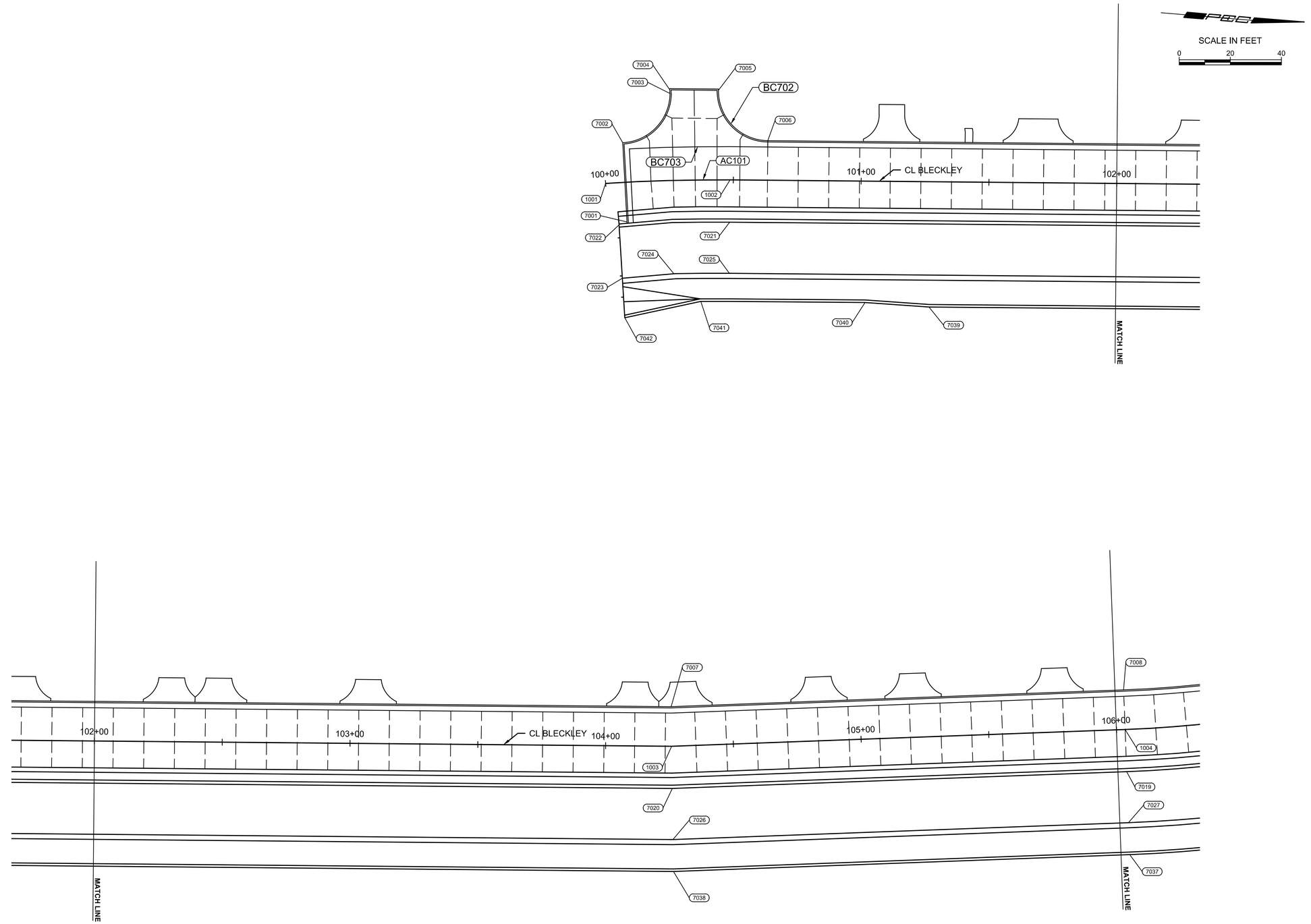

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PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO.
458-2022-085521

Issue:		

JOB NO.	220018-003
DATE	JANUARY 2025
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COORDINATE GEOMETRY PLANS

CP201
20 OF 73

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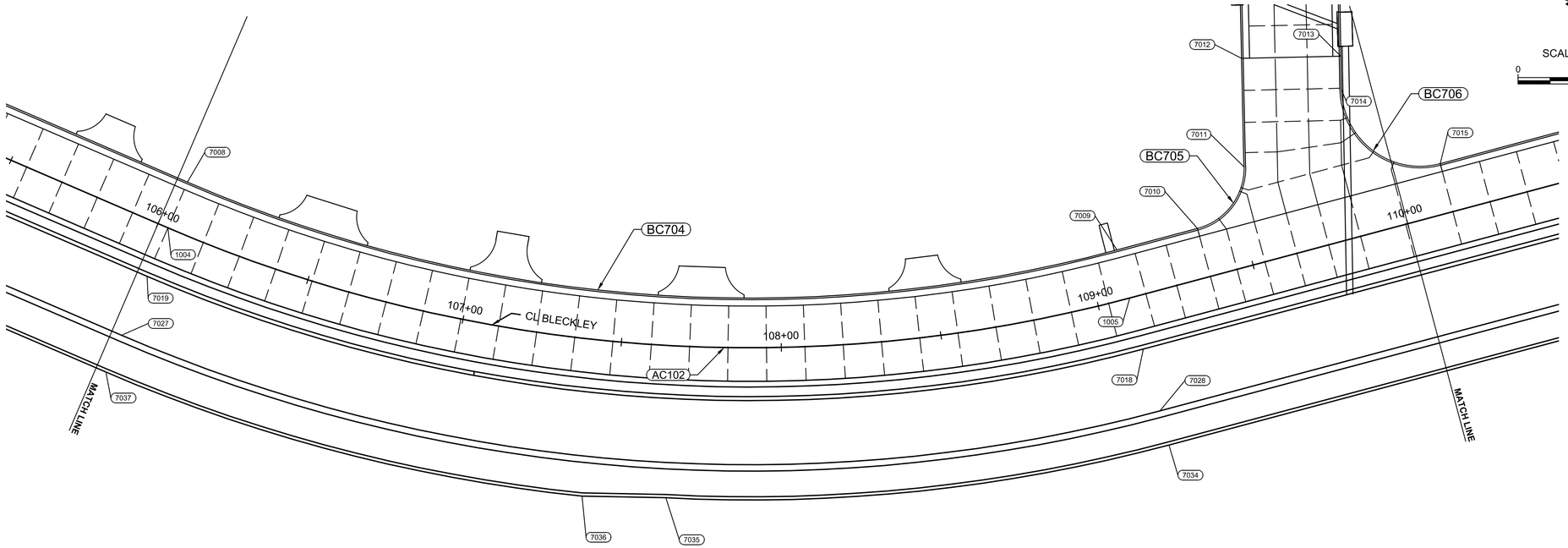
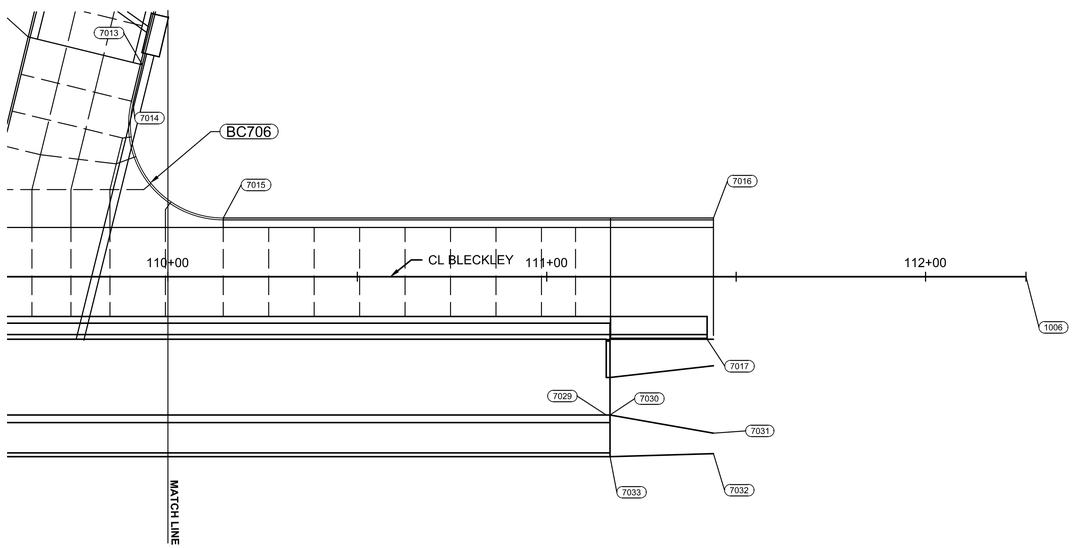


SCALE IN FEET
0 20 40



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0 20 40

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COORDINATE GEOMETRY PLANS

CP202
21 OF 73

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COORDINATE LIST		
POINT	NORTHING	EASTING
1001	1,683,569.4844	1,666,339.7781
1002	1,683,617.9256	1,666,334.4114
1003	1,683,994.0331	1,666,306.8601
1004	1,684,170.2415	1,666,285.7768
1005	1,684,441.0878	1,666,154.0772
1006	1,684,664.5988	1,665,930.2549

COORDINATE LIST		
POINT	NORTHING	EASTING
7001	1,683,579.0364	1,666,354.0713
7002	1,683,574.8316	1,666,323.3578
7003	1,683,591.6345	1,666,302.6134
7004	1,683,591.5347	1,666,301.2509
7005	1,683,610.4839	1,666,299.8628
7006	1,683,631.3564	1,666,317.8860
7007	1,683,992.5454	1,666,291.4275
7008	1,684,168.4000	1,666,270.3866
7009	1,684,430.1200	1,666,143.1247
7010	1,684,448.5187	1,666,124.7013
7011	1,684,451.3748	1,666,100.7791
7012	1,684,433.7740	1,666,071.8802
7013	1,684,460.2501	1,666,055.7551
7014	1,684,465.6663	1,666,064.6480
7015	1,684,503.9264	1,666,069.2154
7016	1,684,595.3559	1,665,977.6586
7017	1,684,616.8382	1,666,001.4328
7018	1,684,452.7632	1,666,165.7363
7019	1,684,172.2017	1,666,302.1599
7020	1,683,995.6167	1,666,323.2883
7021	1,683,619.1311	1,666,350.8673

COORDINATE LIST		
POINT	NORTHING	EASTING
7022	1,683,576.0889	1,666,355.4918
7023	1,683,579.0650	1,666,376.1846
7024	1,683,599.0443	1,666,372.8030
7025	1,683,620.5921	1,666,370.8139
7026	1,683,997.5355	1,666,343.2013
7027	1,684,174.5766	1,666,322.0184
7028	1,684,466.9134	1,666,179.8690
7029	1,684,612.1479	1,666,034.4322
7030	1,684,612.8552	1,666,033.7253
7031	1,684,635.5367	1,666,017.7662
7032	1,684,639.3800	1,666,021.6042
7033	1,684,620.6387	1,666,041.4980
7034	1,684,474.6969	1,666,187.6417
7035	1,684,347.0211	1,666,280.6942
7036	1,684,324.1425	1,666,293.3484
7037	1,684,176.0616	1,666,334.4298
7038	1,683,998.7353	1,666,355.6469
7039	1,683,699.5046	1,666,377.5667
7040	1,683,674.4469	1,666,377.8974
7041	1,683,610.3700	1,666,382.6931
7042	1,683,581.2707	1,666,391.5292

CURVE DATA								
CURVE #	DELTA	RADIUS (FT.)	T (FT.)	LENGTH (FT.)	P.C. NORTHING	P.C. EASTING	P.T. NORTHING	P.T. EASTING
BC702	090°00'00"	19.50	19.50	30.63	1,683,610.4839	1,666,299.8628	1,683,631.3564	1,666,317.8860
BC703	003°23'30"	668.00	19.78	39.54	1,683,577.6482	1,666,325.5002	1,683,616.9758	1,666,321.4462
BC704	038°13'01"	444.50	154.00	296.49	1,684,168.4000	1,666,270.3866	1,684,430.1200	1,666,143.1247
BC705	076°18'13"	19.50	15.32	25.97	1,684,448.5187	1,666,124.7013	1,684,451.3748	1,666,100.7791
BC706	103°42'02"	24.50	31.19	44.34	1,684,465.6663	1,666,064.6480	1,684,503.9264	1,666,069.2154

CURVE DATA (ALIGNMENTS)												
CURVE #	DELTA	RADIUS (FT.)	T (FT.)	LENGTH (FT.)	P.I. NORTHING	P.I. EASTING	P.C. NORTHING	P.C. EASTING	P.T. NORTHING	P.T. EASTING	CENTER NORTHING	CENTER EASTING
AC101	004°15'50"	655.00	24.39	48.75	1,683,593.6051	1,666,336.1930	1,683,569.4844	1,666,339.7781	1,683,617.9256	1,666,334.4114	1,683,665.7787	1,666,987.6611
AC102	038°13'00"	460.00	159.37	306.82	1,684,328.4780	1,666,266.8438	1,684,170.2415	1,666,285.7768	1,684,441.0878	1,666,154.0772	1,684,115.5924	1,665,829.0345

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CITY OF WICHITA PROJECT NO.
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Issue:		

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DESIGNED BY	KMS
DRAWN BY	CP
CHECKED BY	BMM

COORDINATE GEOMETRY TABLES

CP203
22 OF 73

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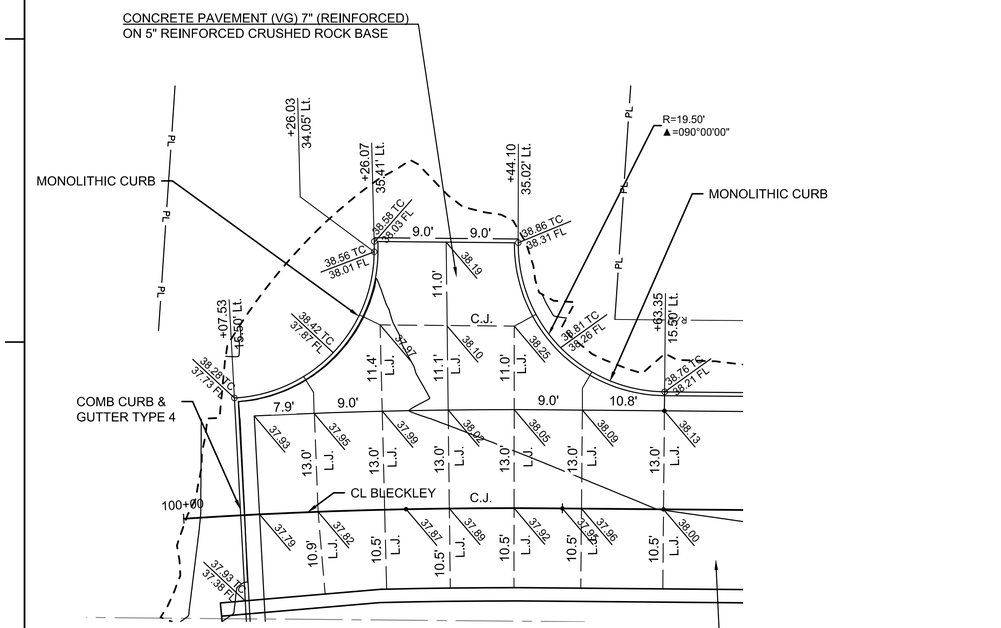


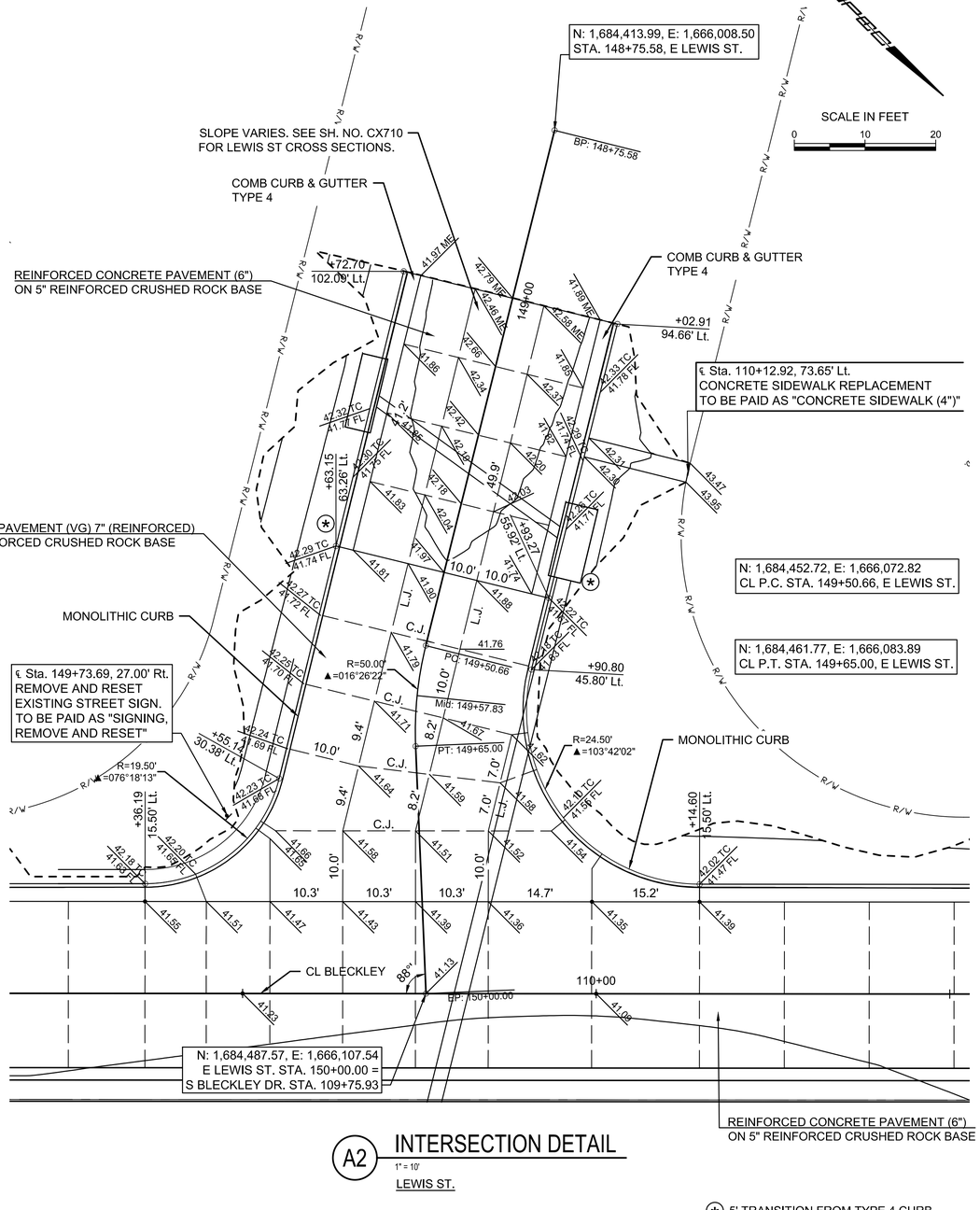
A1 INTERSECTION DETAIL

1" = 10'

BLECKLEY AT KELLOGG

SCALE IN FEET

0 10 20



A2 INTERSECTION DETAIL

1" = 10'

LEWIS ST.

SCALE IN FEET

0 10 20

(*) 5' TRANSITION FROM TYPE 4 CURB & GUTTER TO MONO CURB. TO BE BID AND PAID FOR AS "CONCRETE C & G, TYPE 4 (6-5/8" & 1-1/2")

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CHECKED BY	BMM

INTERSECTION DETAILS

CP301
23 OF 73

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PLOTTED 1/25/2025 12:37:39 PM BY KRISTY SKAGGS
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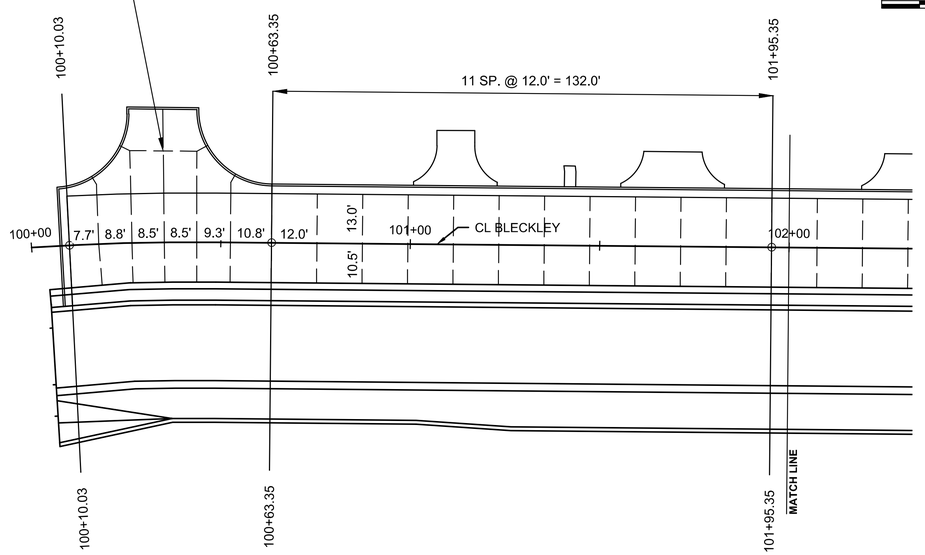
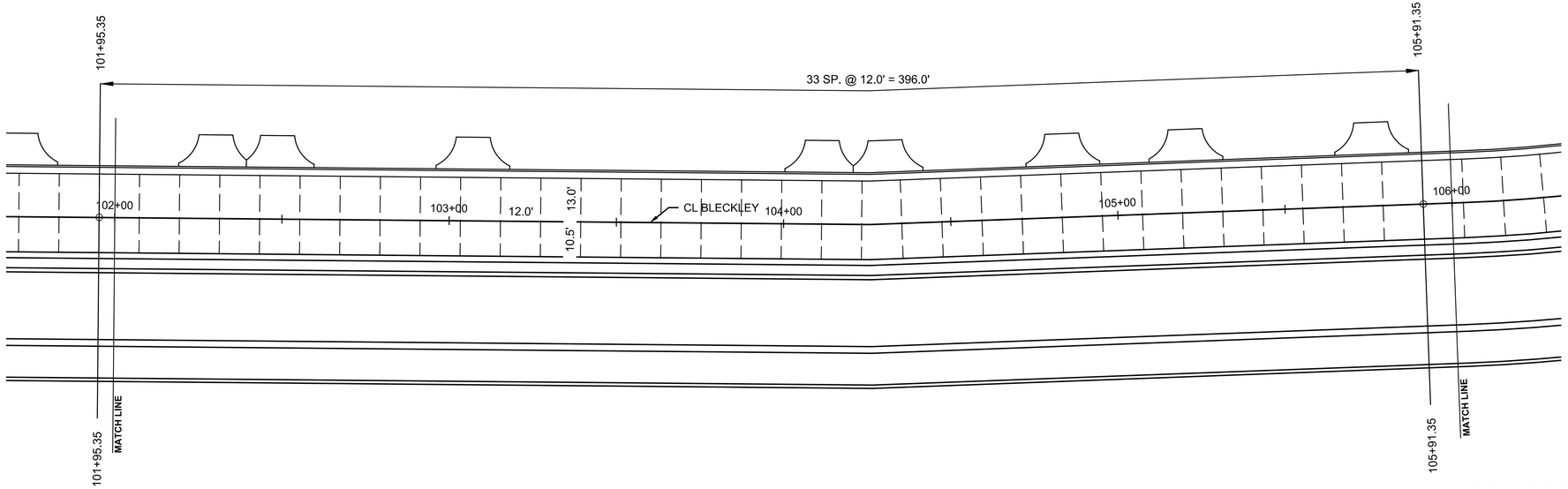
SEE SH. NO CP301 FOR INTERSECTION DETAILS

SCALE IN FEET
0 20 40





PAVEMENT JOINT LEGEND

TRANSVERSE JOINT

LONGITUDINAL JOINT

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PAVEMENT JOINTING PLANS

CP302
24 OF 73

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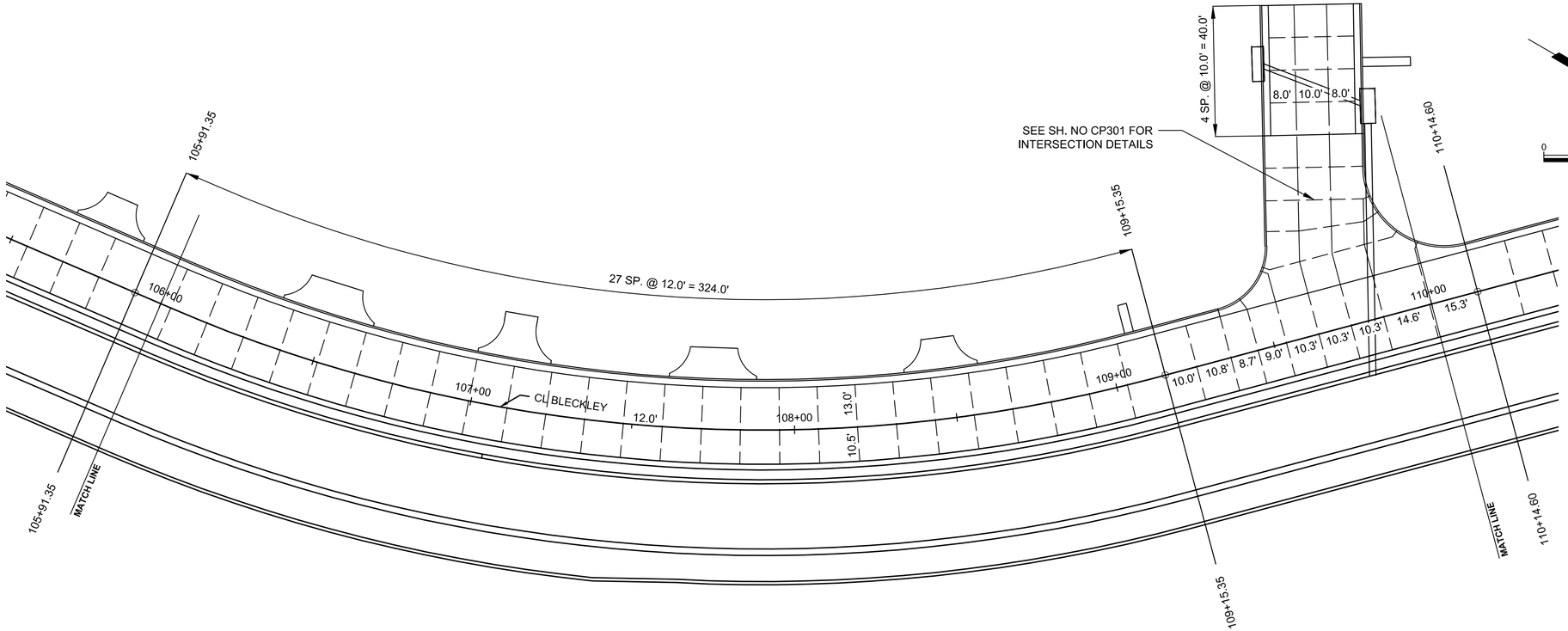

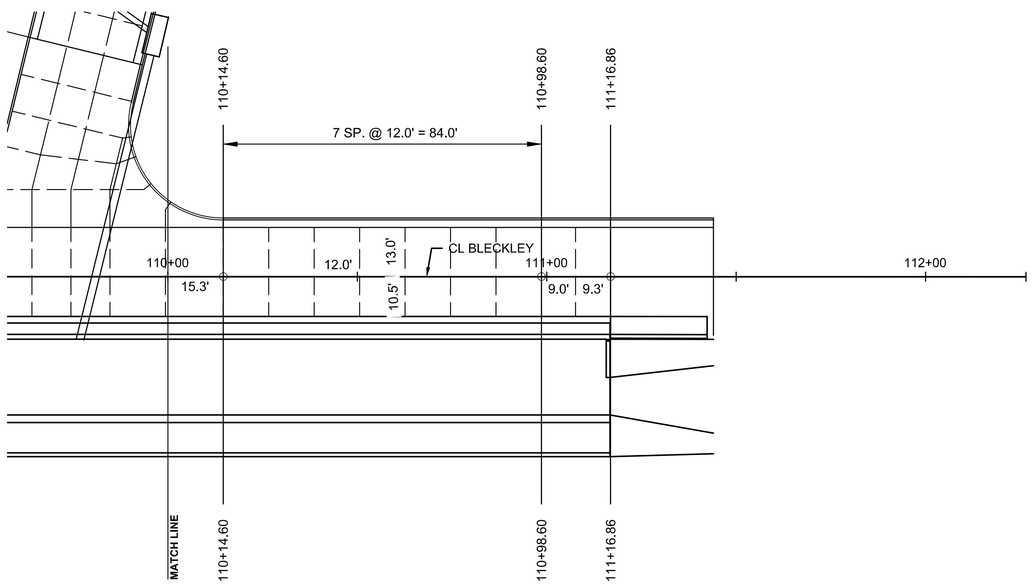

PAVEMENT JOINT LEGEND

- TRANSVERSE JOINT
- LONGITUDINAL JOINT

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WICHITA, KS 67202
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CITY OF WICHITA

KRISTY SKAGGS
LICENSED
29958
01/27/2025
KANSAS
PROFESSIONAL ENGINEER

BLECKLEY - PAVING & INCIDENTAL DRAINAGE IMPROVEMENTS

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO.
458-2022-085521

Issue:		

JOB NO.	220018-003
DATE	JANUARY 2025
PM	BMM
DESIGNED BY	KMS
DRAWN BY	CP
CHECKED BY	BMM

PAVEMENT JOINTING PLANS

CP303
25 OF 73

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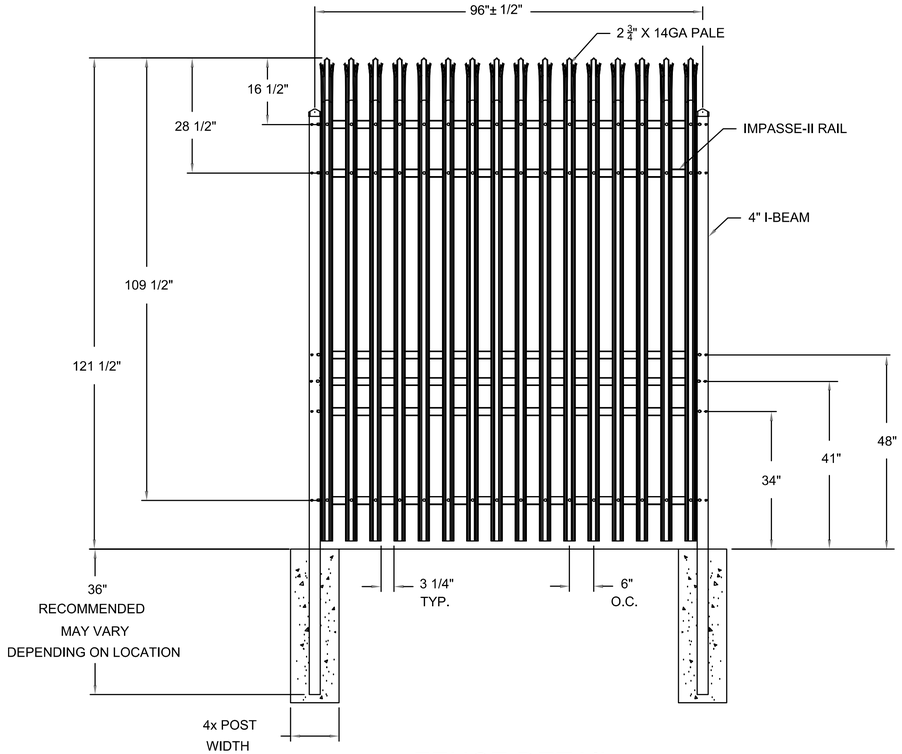
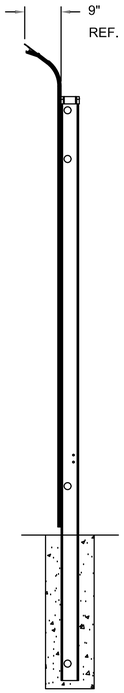
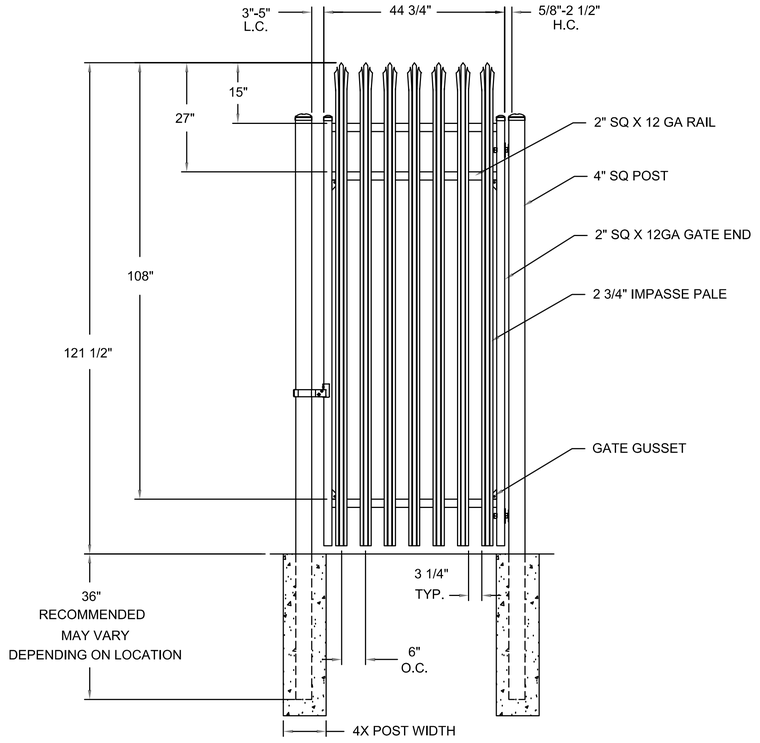


FENCE DETAIL
NTS



FENCE SIDE VIEW
NTS



GATE DETAIL
NTS

NOTE:
ALL FENCING AND GATE MATERIAL TO BE PROVIDED BY THE BOB DOLE VA STAFF.

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BLECKLEY - PAVING & INCIDENTAL DRAINAGE IMPROVEMENTS

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Issue:		

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DRAWN BY	CP
CHECKED BY	BMM

VA FENCE DETAILS

CP304
26 OF 73

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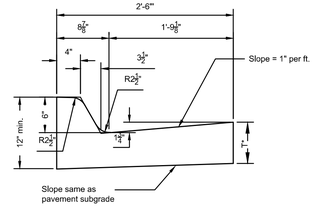
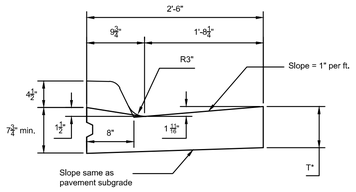
TYPE 1
(Arterial curb)

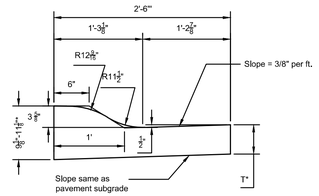


Combined Curb & Gutter (6")

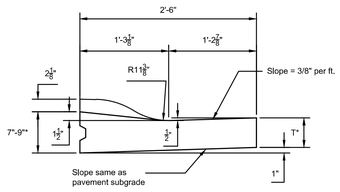


Combined Curb & Gutter (1 1/2")

TYPE 2
(Roll curb)

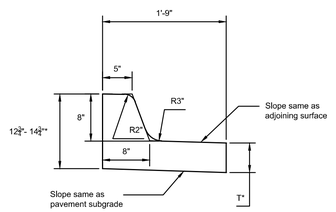


Combined Curb & Gutter (3 5/8")

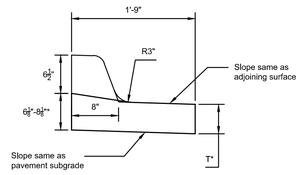


Combined Curb & Gutter (1 1/2")

TYPE 3
(Median curb)

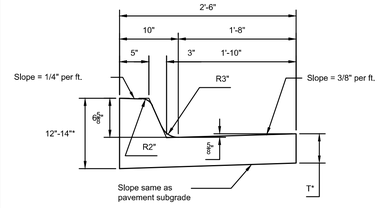


Combined Curb & Gutter (8")

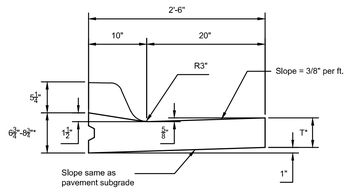


Combined Curb & Gutter (1 1/2")

TYPE 4
(Residential curb)

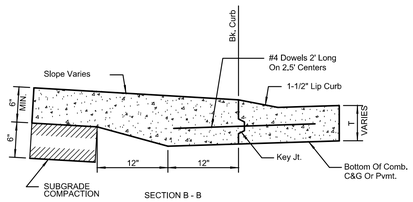


Combined Curb & Gutter (6 5/8")

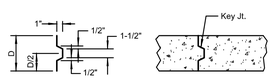


Combined Curb & Gutter (1 1/2")

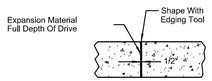
T* = Thickness of curb to adjust with pavement thickness



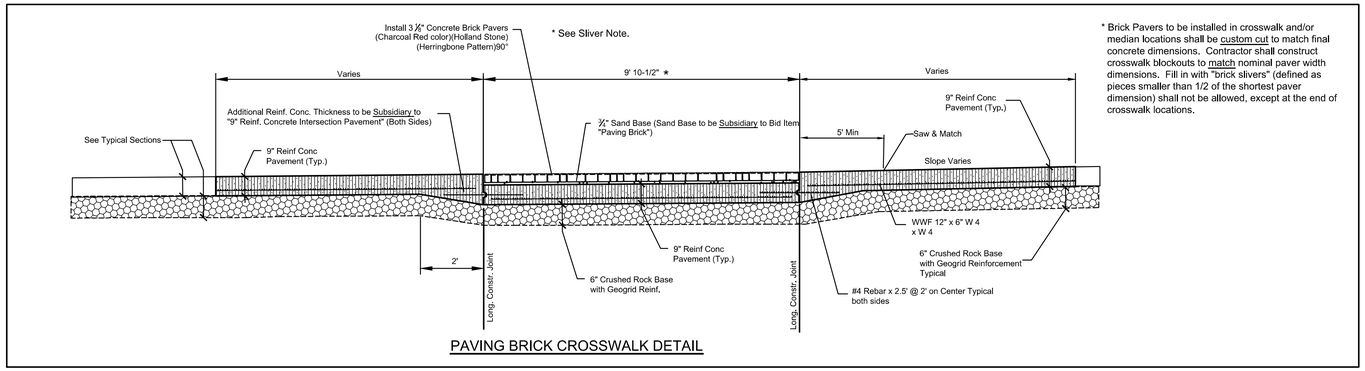
BACK OF CURB DETAIL



ALT. LONGITUDINAL CONSTRUCTION JOINT



EXPANSION JOINT (E.J.)



PAVING BRICK CROSSWALK DETAIL

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

GENERAL NOTES

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

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

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

REVISED: OCTOBER 2015

CITY OF WICHITA
PUBLIC WORKS & UTILITIES ENGINEERING DIVISION

CURB & GUTTER & PAVING BRICK CROSSWALK DETAILS

CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER	OCA NUMBER	DATE
___-___	_____	

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

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CITY OF WICHITA

KRISTY SKAGGS LICENSED
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BLECKLEY - PAVING & INCIDENTAL DRAINAGE IMPROVEMENTS

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO.
458-2022-085521

Issue:		

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CURB AND GUTTER STANDARD

CP501
27 OF 73

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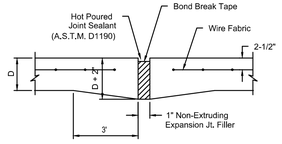
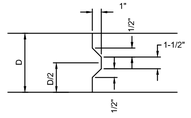
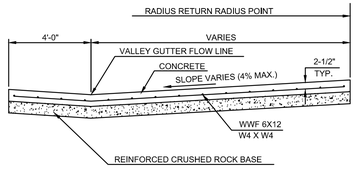


EXPANSION JOINT

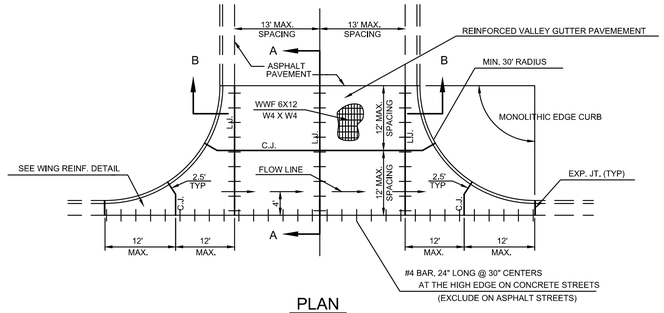
NOTE: Extra Thickness to be Subsidiary to Price of Square Yards Pavement



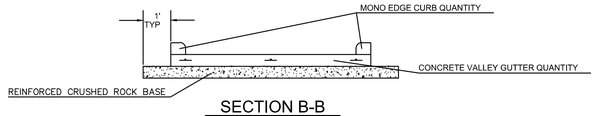
KEYWAY DETAIL



SECTION A-A

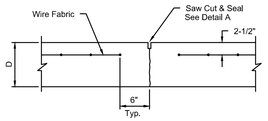


PLAN

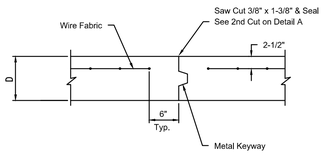


SECTION B-B

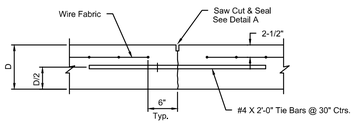
REINFORCED VALLEY GUTTER DETAIL



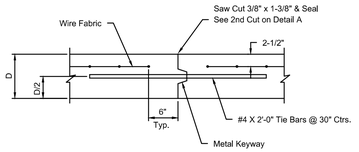
CONTRACTION JOINT DETAIL (C.J.)



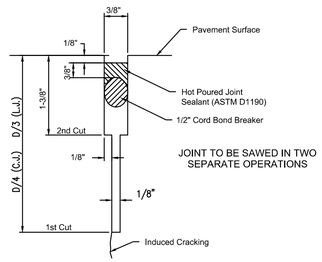
OPTIONAL CONTRACTION JOINT



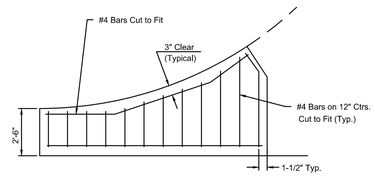
LONGITUDINAL JOINT DETAIL (L.J.)



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
____-_____	_____	

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

KRISTY SKAGGS
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29958
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PROFESSIONAL ENGINEER

BLECKLEY - PAVING & INCIDENTAL DRAINAGE IMPROVEMENTS

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO.
458-2022-085521

Issue:		

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VALLEY GUTTER STANDARD

CP502
28 OF 73

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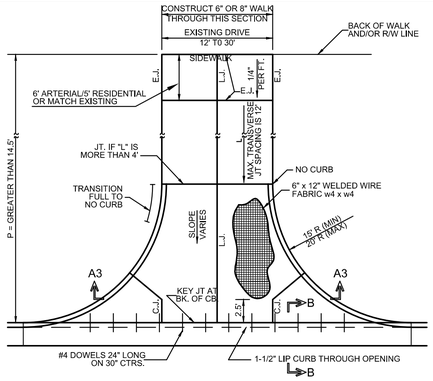
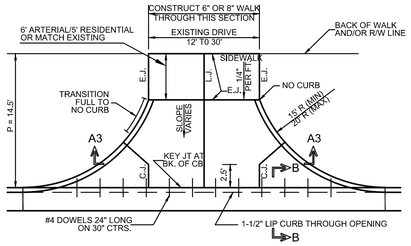
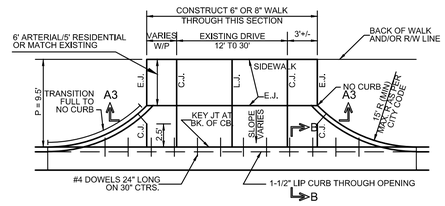
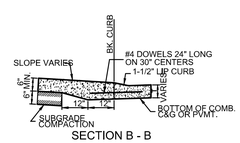
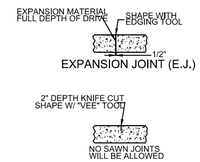


FULL RADIUS DRIVES (ARTERIAL/COLLECTOR DRIVEWAY)



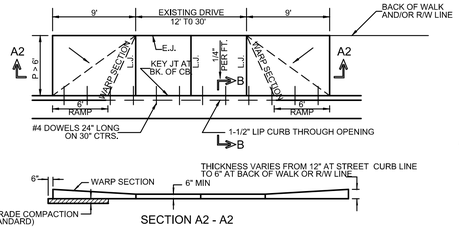




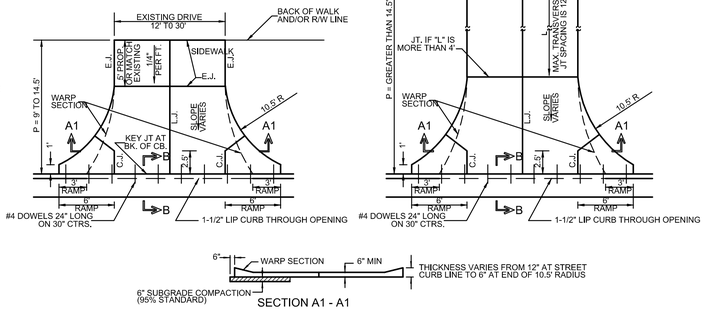


ALT. LONGITUDINAL CONSTRUCTION JOINT

BACK OF CURB DETAIL



FULL RAMP DRIVES (P = 4.0' & 6.5')



RADIUS RAMP DRIVES (RESIDENTIAL DRIVEWAY)

GENERAL NOTES

1. DRIVEWAY CONSTRUCTION DETAILED ON THIS SHEET IS FOR USE WITH FULL HEIGHT STREET CURBS AND IN AREAS WITHOUT FULL WALK CONSTRUCTION IN THE PARKING. SEE OTHER DETAIL SHEETS FOR DRIVEWAY CONSTRUCTION WITH ROLL CURB AND/OR FULL WALK.
2. ONE LONGITUDINAL JOINT SHALL BE CONSTRUCTED ALONG THE CENTERLINE OF DRIVES HAVING A WIDTH DIMENSION OF 24' OR LESS. TWO LONGITUDINAL JOINTS SHALL BE CONSTRUCTED WITH EQUAL SPACINGS NOT TO EXCEED 10' FOR DRIVES WITH A WIDTH DIMENSION GREATER THAN 24'.
3. DRIVEWAY WIDTH DENOTED AS WIDTH ON THE DETAIL DRAWINGS SHALL BE A MINIMUM OF 12' AND A MAXIMUM OF 30'. THE MAXIMUM OPENING FOR RADIUS TYPE DRIVES WITH CURBS THROUGH THE RADIUS SHALL NOT EXCEED 52' AT THE STREET CURB LINE.
4. CONTRACTION JOINT SPACING IN THE DRIVEWAY WALK SECTION SHALL BE A MINIMUM OF 3' AND A MAXIMUM OF 6' AND ARE TO BE EQUALLY SPACED WITHIN THIS RANGE. WALK SECTION SHALL BE CONSTRUCTED TO THE SAME THICKNESS AS THE DRIVEWAY.
5. ADDITIONAL THICKNESS OF DRIVE AS INDICATED IN THE DRAWINGS WILL NOT BE PAID FOR DIRECTLY AND THIS COST SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE DRIVEWAY CONSTRUCTION.
6. ONE HALF INCH EXPANSION JOINTS SHALL BE INSTALLED WHEREVER DRIVE CONSTRUCTION ABUTS SIDEWALK. ONE HALF INCH EXPANSION JOINTS SHALL ALSO BE INSTALLED ALONG THE PROPERTY LINE AND/OR BACK OF WALK LINE WHEN DRIVE CONSTRUCTION ALONG THIS LINE ABUTS CONCRETE PARKING LOTS OR CONCRETE DRIVE EXTENSION.
7. DRIVEWAYS ONLY ON RESIDENTIAL PROPERTIES ONLY CAN BE CONSTRUCTED WITH 6" IN THICKNESS AND CAN BE WITHOUT REINFORCEMENT.
8. ALL DRIVEWAYS TO NONRESIDENTIAL PROPERTY SHALL BE A MINIMUM OF 8" IN THICKNESS AND SHALL HAVE REINFORCEMENT WITH 6"x12", W4xW4.

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REVISED: NOVEMBER 2015

CITY OF WICHITA
PUBLIC WORKS & UTILITIES ENGINEERING DIVISION

STANDARD DRIVE ENTRANCES FULL HEIGHT CURB

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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CITY OF WICHITA

KRISTY SKAGGS LICENSED 29955 01/27/2025 KANSAS PROFESSIONAL ENGINEER

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PM	BMM
DESIGNED BY	KMS
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ENTRANCE DETAIL STANDARD

CP503
29 OF 73

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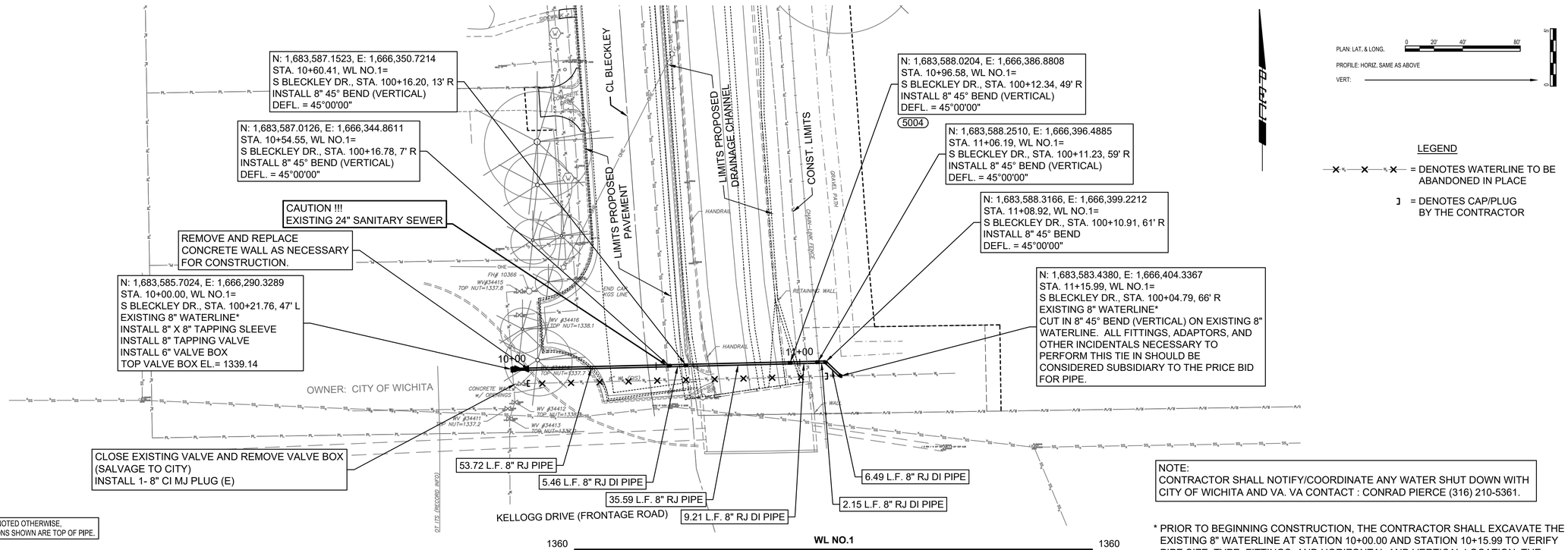
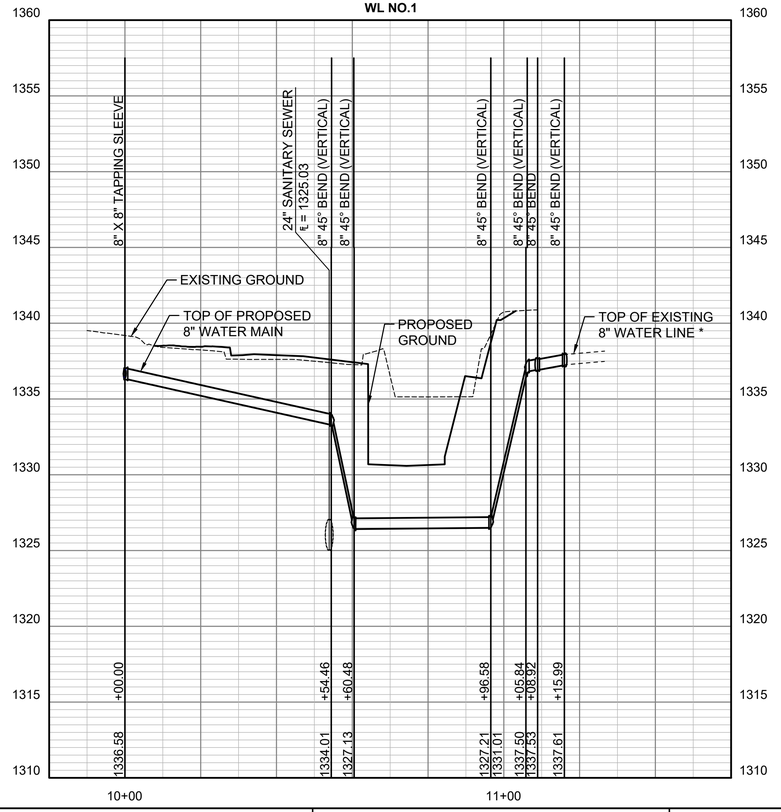


UNLESS NOTED OTHERWISE,
ELEVATIONS SHOWN ARE TOP OF PIPE.

NOTE:
CONTRACTOR SHALL NOTIFY/COORDINATE ANY WATER SHUT DOWN WITH CITY OF WICHITA AND VA. VA CONTACT : CONRAD PIERCE (316) 210-5361.

* PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE THE EXISTING 8" WATERLINE AT STATION 10+00.00 AND STATION 10+15.99 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

GAGE SCHEER
LICENSED
28775
KANSAS
PROFESSIONAL ENGINEER

BLECKLEY - PAVING & INCIDENTAL DRAINAGE IMPROVEMENTS

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO.
458-2022-085521

Issue:		

JOB NO.	220018-003
DATE	JANUARY 2025
PM	BMM
DESIGNED BY	KMS
DRAWN BY	CP
CHECKED BY	BMM

WATERLINE NO. 1

CU101
30 OF 73

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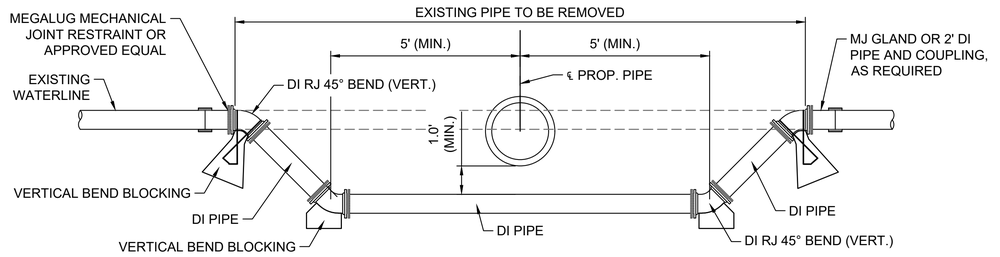
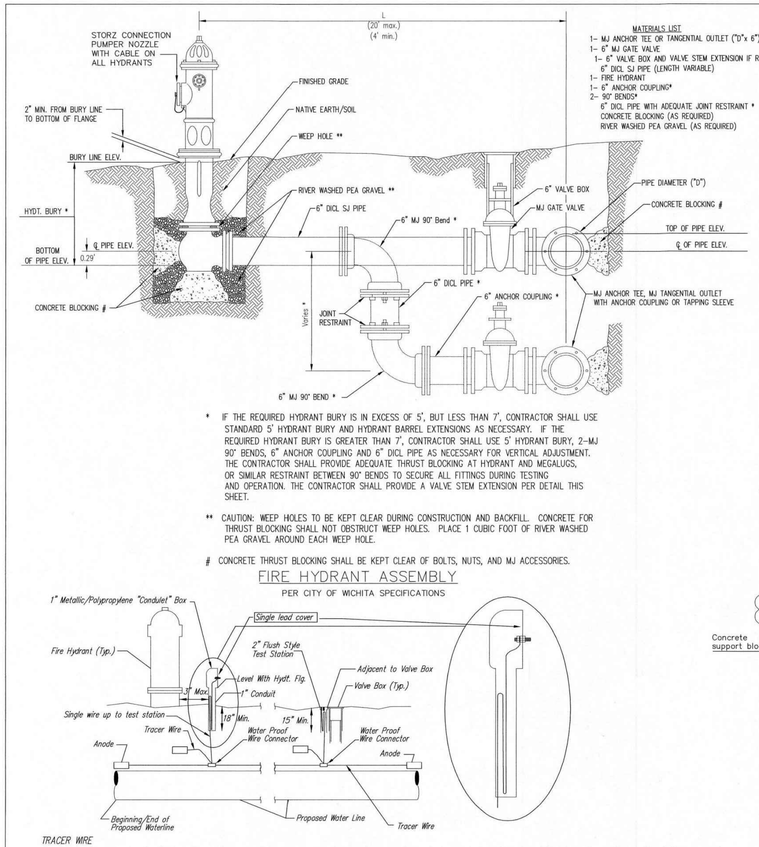


WATERLINE ADJUSTMENT DETAIL

NOT TO SCALE

WATERLINE ADJUSTMENT NOTES

1. CONTRACTOR SHALL COORDINATE SHUT-DOWN OF THE EXISTING WATER MAINS WITH THE CITY AND SHALL MINIMIZE THE LOSS OF WATER SERVICE TO WATER CUSTOMERS TO A MAXIMUM PERIOD OF 4 HOURS. ANY CUSTOMERS THAT WILL HAVE WATER SERVICE AFFECTED BY THIS WORK SHALL BE PROVIDED WRITTEN NOTICE AT LEAST 72 HOURS PRIOR TO THE SHUTDOWN.



* 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

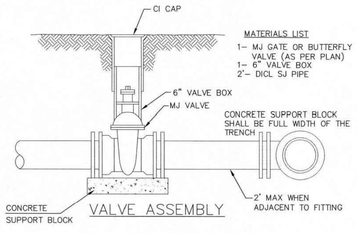
*The test station for fire hydrant application shall be a 1" "condulet" style station as manufactured by AGRA Industries with a removable solid cover having a single lead extending from the face or approved equal. The "conduit" style test station shall be attached to a 1" rigid galvanized conduit with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

ANODES

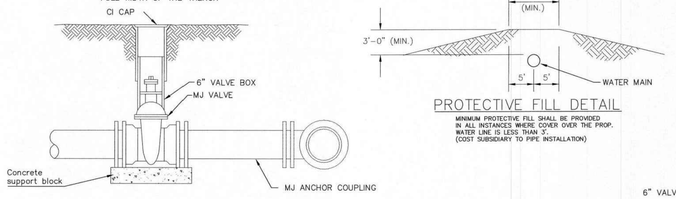
The anodes shall be 3 lb. bare zinc or magnesium. The anodes shall be buried at the same elevation as the waterline at each test station. The anodes shall be connected to 12 AWG CCS which shall be extended to the test station.

TRACER WIRE DETAIL

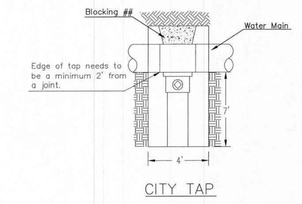
COST IS SUBSIDIARY TO PIPE INSTALLATION



VALVE ASSEMBLY



ANCHORED VALVE ASSEMBLY

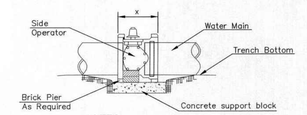


CITY TAP

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

PROTECTIVE FILL DETAIL

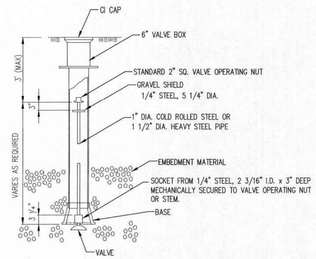
MINIMUM PROTECTIVE FILL SHALL BE PROVIDED IN ALL INSTANCES WHERE COVER OVER THE PROP. WATER LINE IS LESS THAN 3'. (COST SUBSIDIARY TO PIPE INSTALLATION)



NOTES

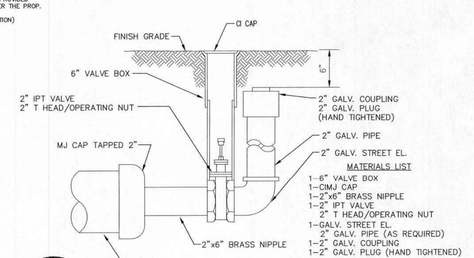
1. This detail covers Butterfly Valve installation, inclusive, regardless of type of pipe or joint used. 24" and larger lines to be detailed on plans.
2. 6" Valve Box and Cover required per City of Wichita Std. Specifications.
3. Conc. Support Block to be full width of trench.

CONCRETE SUPPORT BLOCKING FOR BUTTERFLY VALVE INSTALLATION



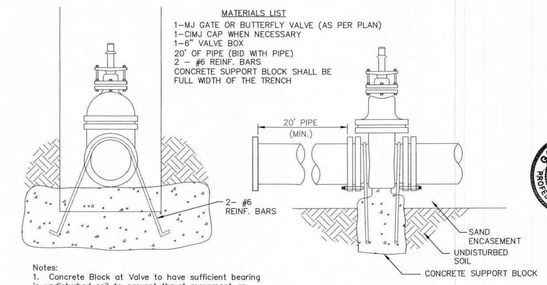
VALVE STEM EXTENSION DETAIL

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



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

2" BLOWOFF ASSEMBLY



Notes:

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

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

ANCHORED VALVE ASSEMBLY, SPECIAL

REVISED: OCTOBER 2016

GARY L. JANZEN LICENSED No. 16284 KANSAS PROFESSIONAL ENGINEER 1/27/16

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

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CITY OF WICHITA

GAGE SCHEER LICENSED 28775 KANSAS PROFESSIONAL ENGINEER

BLECKLEY - PAVING & INCIDENTAL DRAINAGE IMPROVEMENTS

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO.
458-2022-085521

Issue:		

JOB NO.	220018-003
DATE	JANUARY 2025
PM	BMM
DESIGNED BY	KMS
DRAWN BY	CP
CHECKED BY	BMM

MISCELLANEOUS DETAILS

CU501
31 OF 73

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GENERAL NOTES

GEOTECHNICAL REPORT: The geotechnical report (Dated July 2024) includes soil parameters for retaining wall design. The report is available for inspection by qualified bidders at the City of Wichita.

EXCAVATION: All excavation for the channel construction shall be according to KDOT Standard Spec. Section 204 and the Geotechnical Report for this project.

FOUNDATION PREPARATION: Foundation below the proposed footing and slope paving shall be prepared according to KDOT Standard Spec. Section 204 and the Geotechnical Report for this project. In areas where unsuitable materials are discovered, a concrete seal course shall be placed to the bottom of footing elevation.

CONSTRUCTION PLAN/PHASING: Contractor shall submit a detailed construction plan with phasing prior to commencement of work. This plan shall include proposed storm water management and diversion details and methods to limit erosion and runoff during construction.

RETAINING WALL DRAINAGE SYSTEM: See the General Notes on the "Wall Backfill & Drainage Detail" sheet.

BACKFILL COMPACTION: Compact backfill at the retaining wall.

CONCRETE: Concrete for the Corral Rail, Moment Slabs, Wall and Footings is bid as Concrete (Grade 4.0)(AE) (KDOT Standard Spec. Section 402). Concrete for the 12" Thick Slope Paving is bid as Concrete (Grade 4.0)(AE)(Slope Paving) (KDOT Standard Spec. Section 402). Concrete for the 6" Thick Slope Paving is bid as Fiber Reinforce Concrete (City of Wichita Standard Spec. Section 406). Bevel all exposed edges of all concrete with a ¾ inch triangular molding, except as otherwise noted on the plans. Construction joints are optional with the Contractor, but if used, place only at locations shown, or at locations approved by the Engineer.

REINFORCING STEEL: All reinforcing steel dimensions are to the centerline of bars unless otherwise noted. All reinforcing steel, shall conform to the requirements of ASTM A615, Grade 60. Where non coated bars come in contact with epoxy coated bars, they need not be coated. Reinforcing Steel for the Corral Rail, Moment Slabs, Wall and Footing are shown in the Bills of Reinforcing Steel and bid as Reinforcing Steel (Grade 60) (Epoxy Coated). Reinforcing Steel in the Slope Paving is subsidiary to Concrete (Grade 4.0)(AE) (Slope Paving).

EXISTING STRUCTURE: Plans of the existing structures are on file and available for inspection by qualified bidders at the City of Wichita.

REMOVAL OF EXISTING STRUCTURE: Removal of existing structure is included in the bid item, "Removal of Existing Structures", Lump Sum. All materials removed from the existing structure shall become the property of the Contractor. Remove this material from the site.

QUANTITIES: Items not listed separately in the Summary of Quantities are subsidiary to the project.

DIMENSIONS: All dimensions shown on the design plans are horizontal dimensions unless otherwise noted. Make necessary allowances for roadway grade and cross slope.

DESIGN DATA:

DESIGN SPECIFICATIONS:
AASHTO Specifications, (9th) Edition. Load and Resistance Factor Design

DESIGN LOADING:
HL-93

UNIT STRESSES:

Concrete (Grade 4.0)(AE) f'c = 4 ksi
Reinforcing Steel (Grade 60) fy = 60 ksi

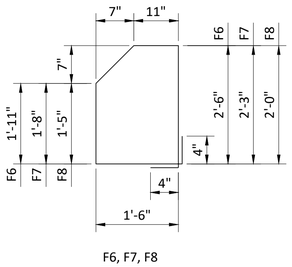
BILL OF REINFORCING STEEL
Grade 60 (Epoxy Coated)

	Straight Bars				Bent Bars			
	Mark	Size	Number	Length	Mark	Size	Number	Length
FOOTING	F1	#6	1137	25'-9"	F2	#6	1125	7'-6"
	F3	#5	1137	25'-9"	F5	#5	1125	6'-1"
	F4	#5	1060	60'-0"	F6	#5	460	8'-4"
					F7	#5	364	7'-10"
					F8	#5	311	7'-4"
WALL	W4	#8	1125	2'-0"				
	W1	#6	1125	Varies				
				4'-5" Min.				
				8'-0" Max.				
	W2	#5	1125	Varies				
				4'-5" Min.				
				8'-0" Max.				
	W3	#5	280	60'-0"				
MOMENT SLAB TYPE A	MS2	#5	1123	5'-8"	MS1	#6	1123	10'-7"
	MS3	#5	281	60'-0"				
MOMENT SLAB TYPE B	MS5	#5	26	5'-8"	MS4	#6	26	8'-0"
	MS7	#5	16	25'-2"				
					MS6	#5	26	4'-1"
NORTH CONNECTION WALL	N6	#5	20	Varies	N1	#6	10	Varies
				1'-8" Min.	N2	#6	11	4'-0"
				9'-3" Max.	N3	#6	25	4'-0"
					N4	#6	20	6'-0"
	N7	#5	2	13'-4"				
					N5	#5	10	Varies

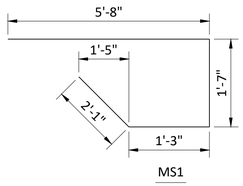
See Bending Diagrams

REINFORCING STEEL WEIGHTS
(For Information Only)

Footing	170,009 LB
Wall	41,305 LB
Moment Slab Type A	42,074 LB
Moment Slab Type B	997 LB
North Connection Wall	768 LB
Corral Rail	31,628 LB



F6, F7, F8



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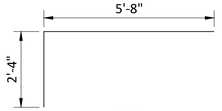

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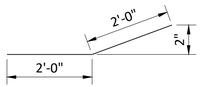

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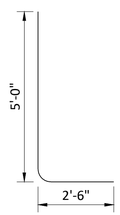

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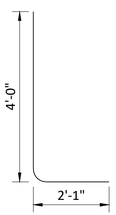

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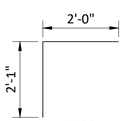

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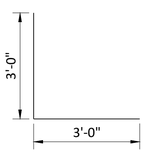
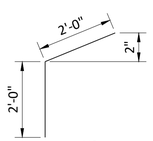


N4



N3

N1

N5

(All dimensions are out to out of bars.)

BENDING DIAGRAMS
NTS

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CITY OF WICHITA

AARON M. BLECKLEY LICENSED ENGINEER 19287 17 Jan 2025 KANSAS PROFESSIONAL ENGINEER

BLECKLEY - PAVING & INCIDENTAL DRAINAGE IMPROVEMENTS

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO.
472-2023-220018-003

Issue:		

JOB NO.	220018-003
DATE	JANUARY 2025
PM	CJC
DESIGNED BY	CJC
DRAWN BY	SJV
CHECKED BY	MJK

NOTES & QUANTITIES

S1

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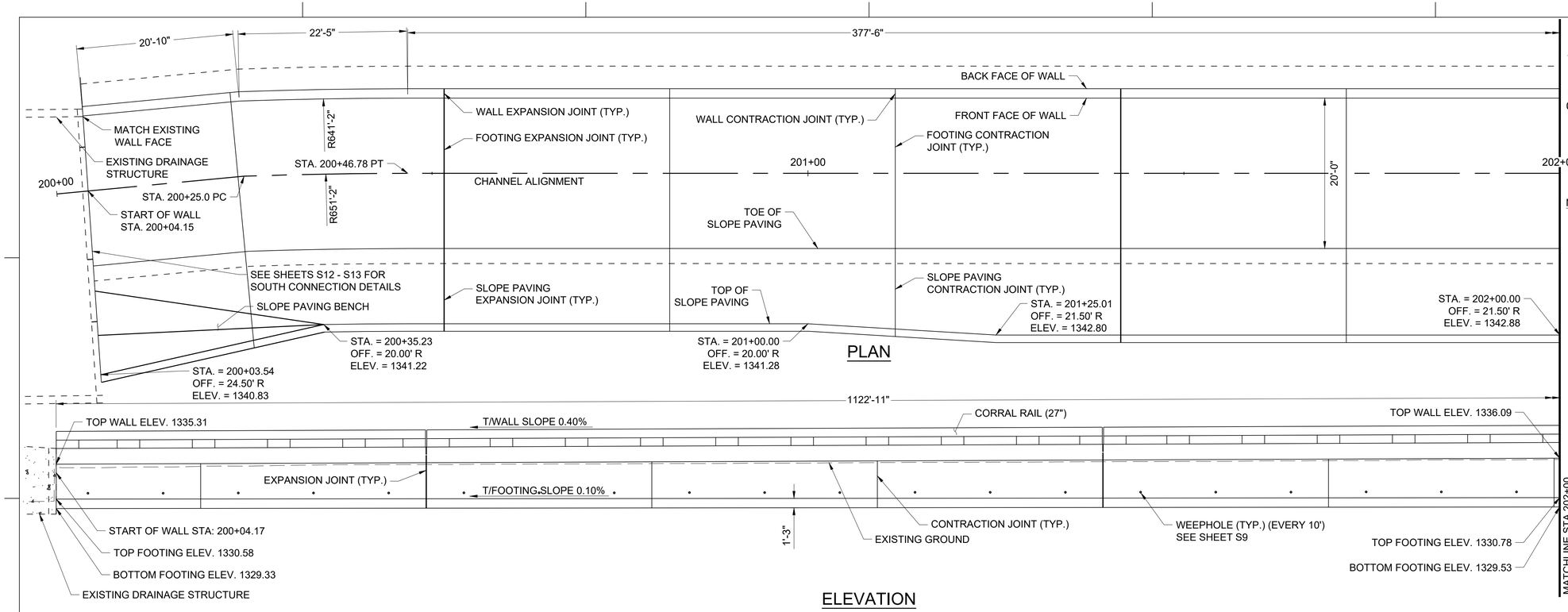
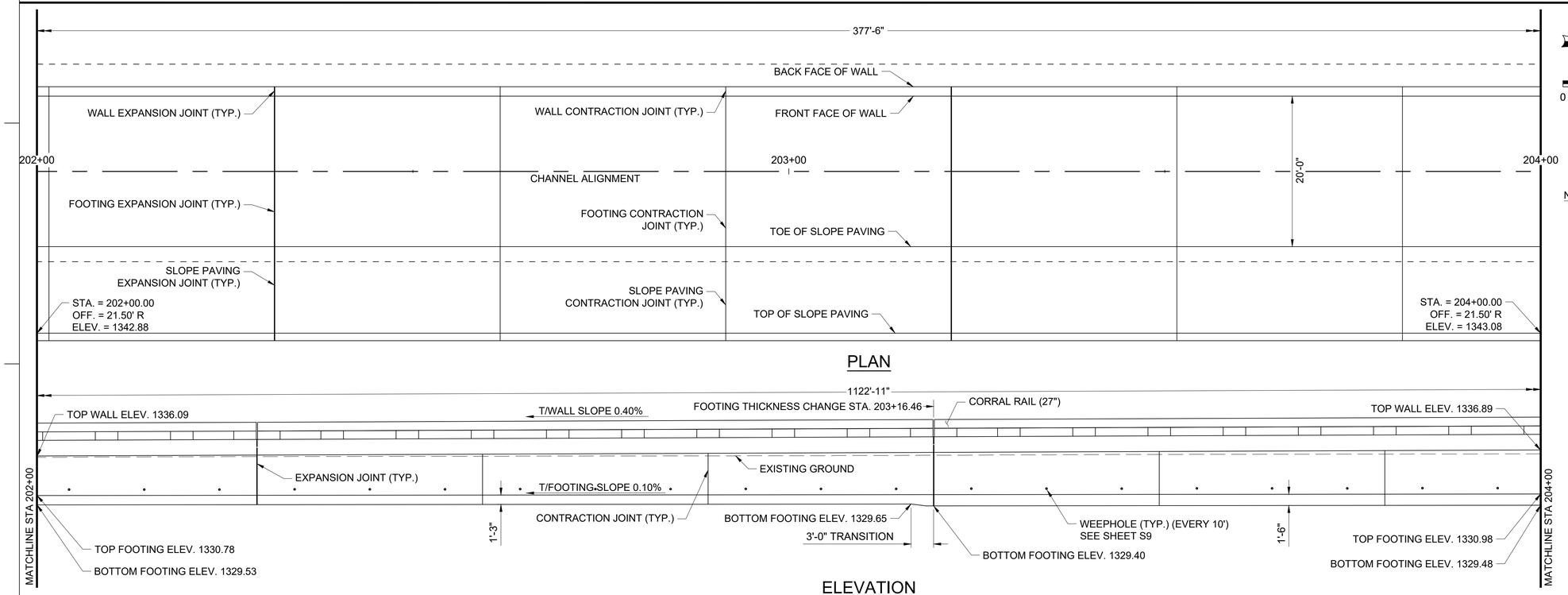


NOTES:

1. DIMENSIONS MEASURE OFF FRONT FACE OF WALL.
2. CORRAL RAIL AND MOMENT SLAB NOT SHOWN IN PLAN VIEW FOR CLARITY.
3. TOP OF WALL, TOP OF FOOTING AND BOTTOM OF FOOTING WILL BE CONSTRUCTED AS STRAIGHT LINE SLOPES BETWEEN ELEVATIONS SHOWN ON THIS PLAN.
4. TOP OF FOOTING ELEVATIONS ARE AT CL OF CHANNEL.



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

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CITY OF WICHITA

AARON M. SUE VILLMAN
LICENSED
19287
17 Jan 2025
KANSAS
PROFESSIONAL ENGINEER

BLECKLEY - PAVING & INCIDENTAL DRAINAGE IMPROVEMENTS

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO.
472-2023-220018-003

Issue:		

JOB NO.	220018-003
DATE	JANUARY 2025
PM	CJC
DESIGNED BY	CJC
DRAWN BY	SJV
CHECKED BY	MJK

PLAN AND ELEVATION (SHEET 1 OF 3)

S2

33 OF 73

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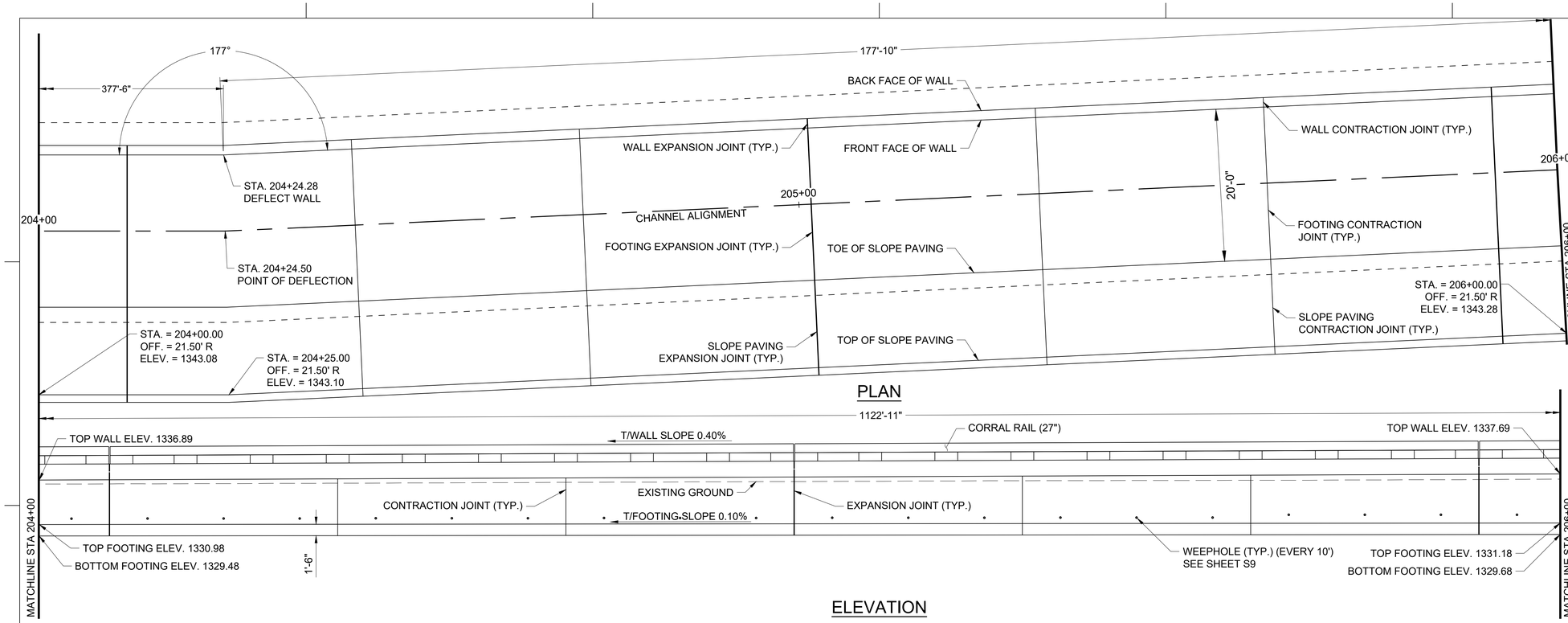

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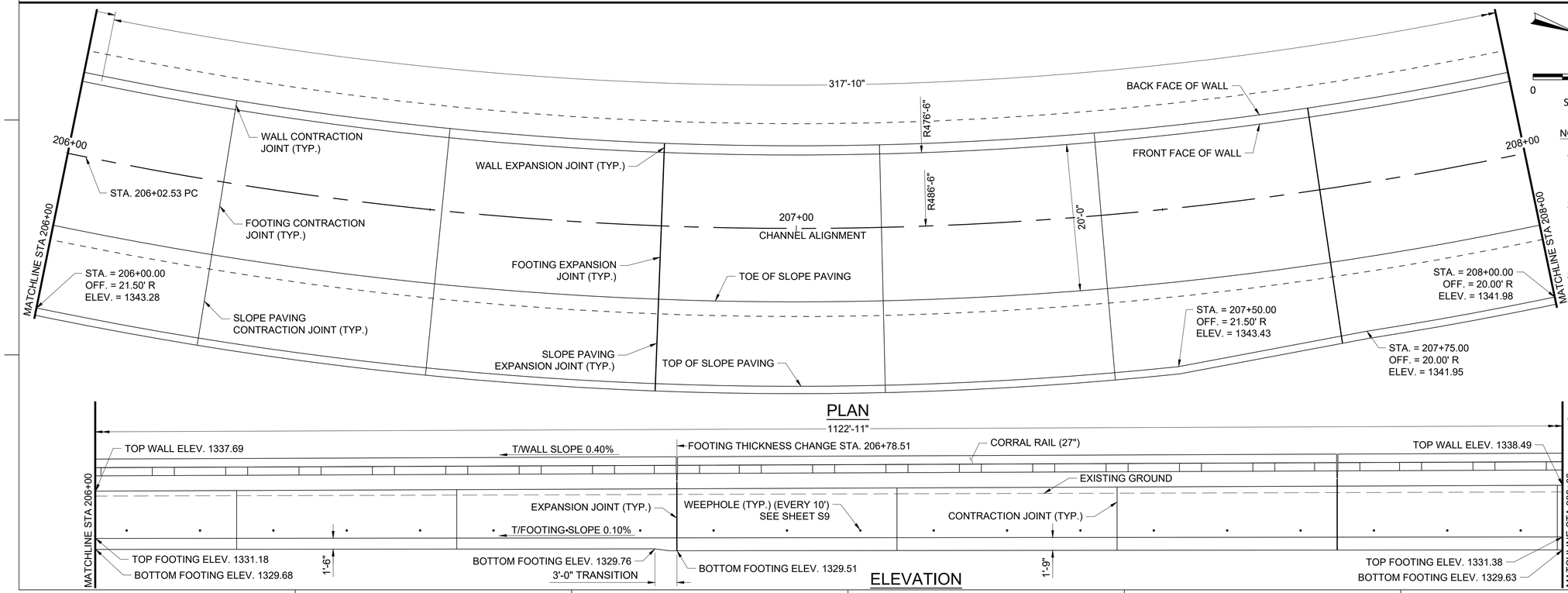
1. DIMENSIONS MEASURE OFF FRONT FACE OF WALL.
2. CORRAL RAIL AND MOMENT SLAB NOT SHOWN IN PLAN VIEW FOR CLARITY.
3. TOP OF WALL, TOP OF FOOTING AND BOTTOM OF FOOTING WILL BE CONSTRUCTED AS STRAIGHT LINE SLOPES BETWEEN ELEVATIONS SHOWN ON THIS PLAN.
4. TOP OF FOOTING ELEVATIONS ARE AT CL OF CHANNEL.



NOTES:

1. DIMENSIONS MEASURE OFF FRONT FACE OF WALL.
2. CORRAL RAIL AND MOMENT SLAB NOT SHOWN IN PLAN VIEW FOR CLARITY.
3. TOP OF WALL, TOP OF FOOTING AND BOTTOM OF FOOTING WILL BE CONSTRUCTED AS STRAIGHT LINE SLOPES BETWEEN ELEVATIONS SHOWN ON THIS PLAN.
4. TOP OF FOOTING ELEVATIONS ARE AT CL OF CHANNEL.

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CITY OF WICHITA

AARON M. JOE LICENSED 19287 17 Jan 2025 KANSAS PROFESSIONAL ENGINEER

BLECKLEY - PAVING & INCIDENTAL DRAINAGE IMPROVEMENTS

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO.
472-2023-220018-003

Issue:		

JOB NO.	220018-003
DATE	JANUARY 2025
PM	CJC
DESIGNED BY	CJC
DRAWN BY	SJV
CHECKED BY	MJK

PLAN AND ELEVATION
(SHEET 2 OF 3)

S3
34 OF 73

SAVED 1/16/2025 2:56:53 PM BY SVILLMAN
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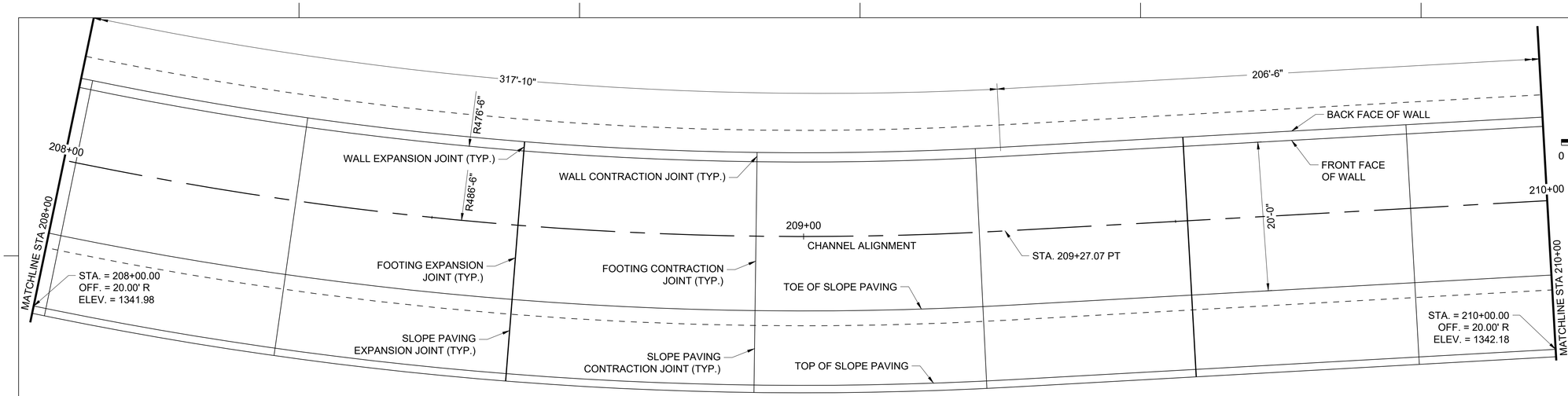
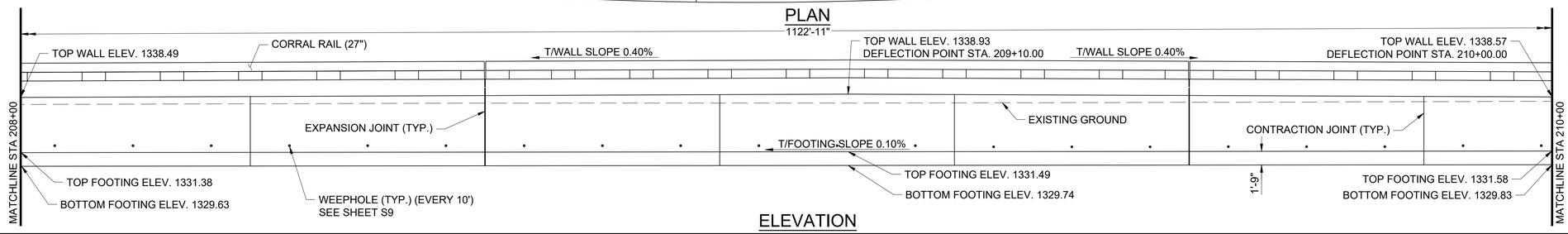


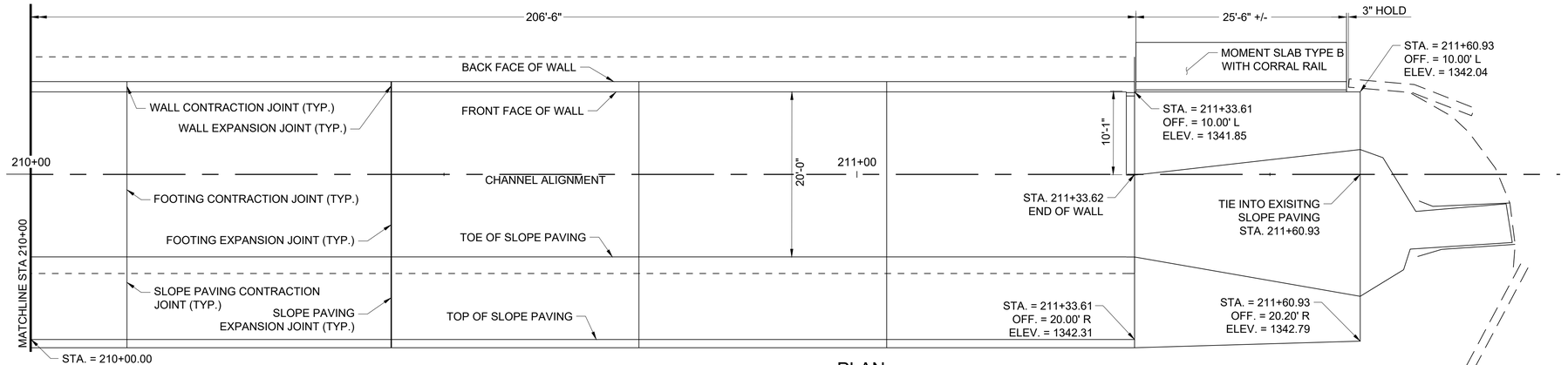
PLAN



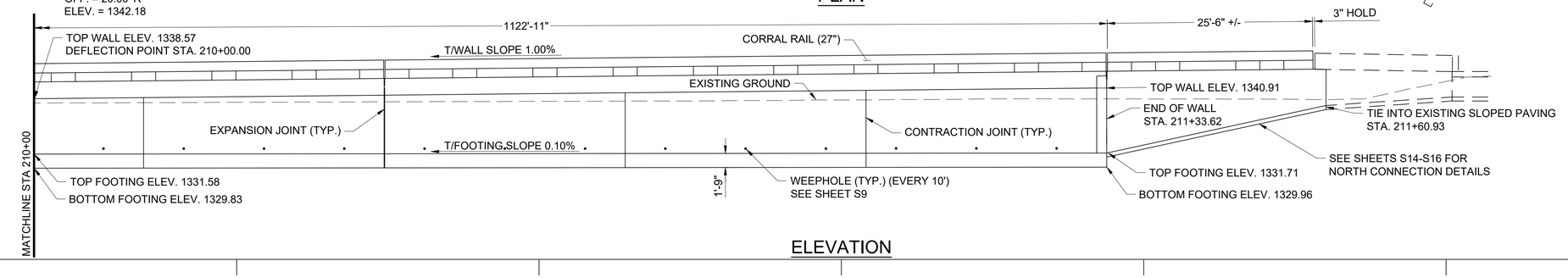
ELEVATION

NOTES:

1. DIMENSIONS MEASURE OFF FRONT FACE OF WALL.
2. CORRAL RAIL AND MOMENT SLAB NOT SHOWN IN PLAN VIEW FOR CLARITY.
3. TOP OF WALL, TOP OF FOOTING AND BOTTOM OF FOOTING WILL BE CONSTRUCTED AS STRAIGHT LINE SLOPES BETWEEN ELEVATIONS SHOWN ON THIS PLAN.
4. TOP OF FOOTING ELEVATIONS ARE AT CL OF CHANNEL.



PLAN



ELEVATION

NOTES:

1. DIMENSIONS MEASURE OFF FRONT FACE OF WALL.
2. CORRAL RAIL AND MOMENT SLAB NOT SHOWN IN PLAN VIEW FOR CLARITY.
3. TOP OF WALL, TOP OF FOOTING AND BOTTOM OF FOOTING WILL BE CONSTRUCTED AS STRAIGHT LINE SLOPES BETWEEN ELEVATIONS SHOWN ON THIS PLAN.
4. TOP OF FOOTING ELEVATIONS ARE AT CL OF CHANNEL.

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

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AARON M. SUELZER
LICENSED
19287
17 Jan 2025
KANSAS
PROFESSIONAL ENGINEER

BLECKLEY - PAVING & INCIDENTAL DRAINAGE IMPROVEMENTS

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO.
472-2023-220018-003

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DRAWN BY	SJV
CHECKED BY	MJK

PLAN AND ELEVATION
(SHEET 3 OF 3)

S4
35 OF 73

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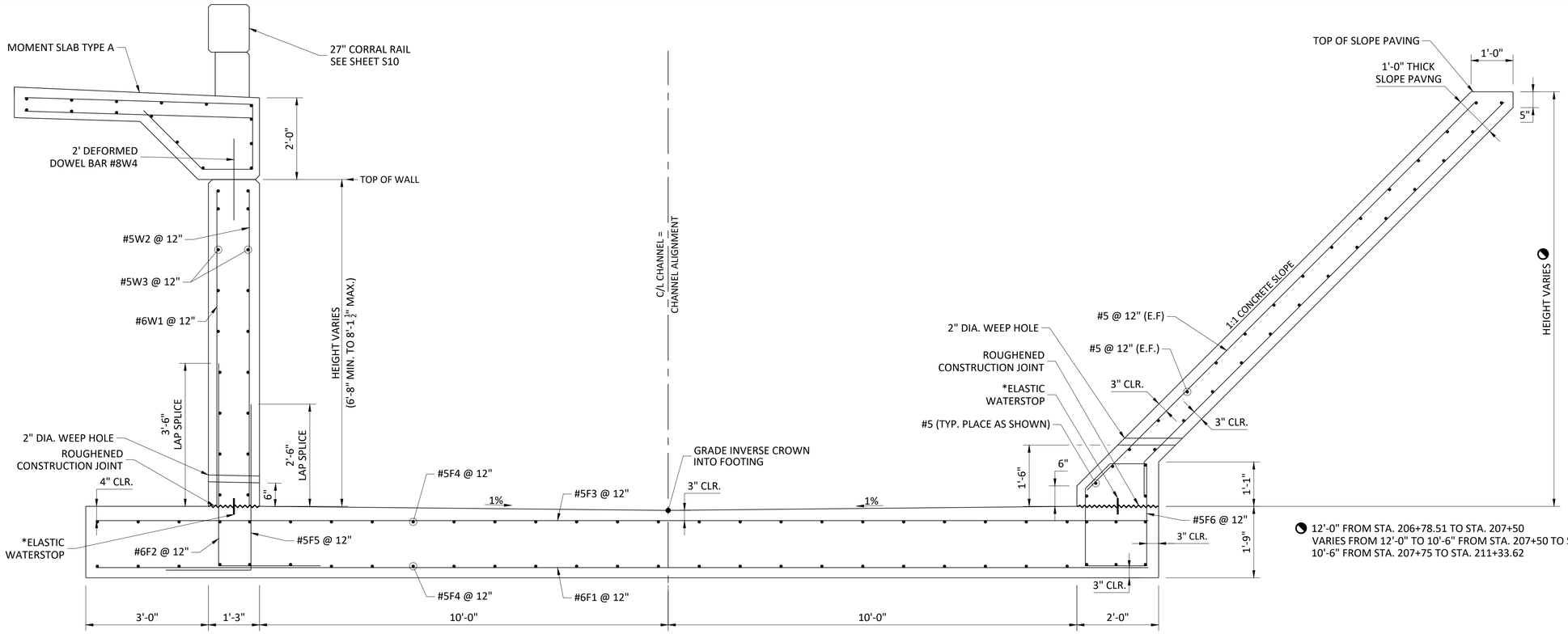
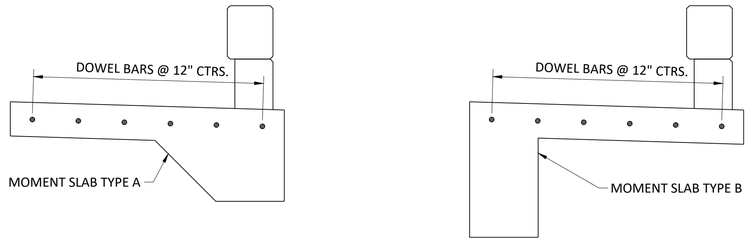


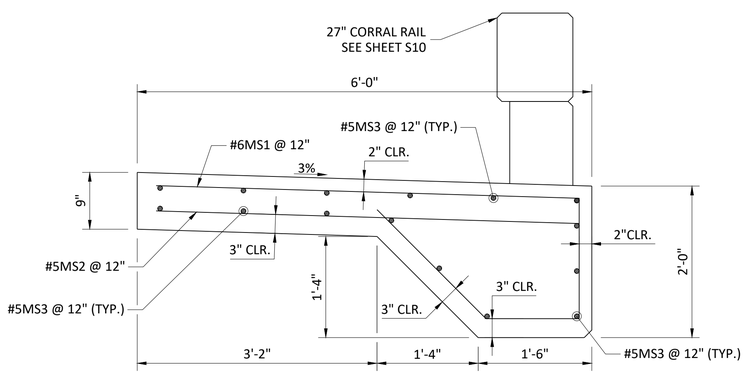
12'-0" FROM STA. 206+78.51 TO STA. 207+50
VARIES FROM 12'-0" TO 10'-6" FROM STA. 207+50 TO STA. 207+75
10'-6" FROM STA. 207+75 TO STA. 211+33.62

*ITEMS SUBSIDIARY TO THE BID ITEM - CONCRETE (GRADE 4.0)(AE)

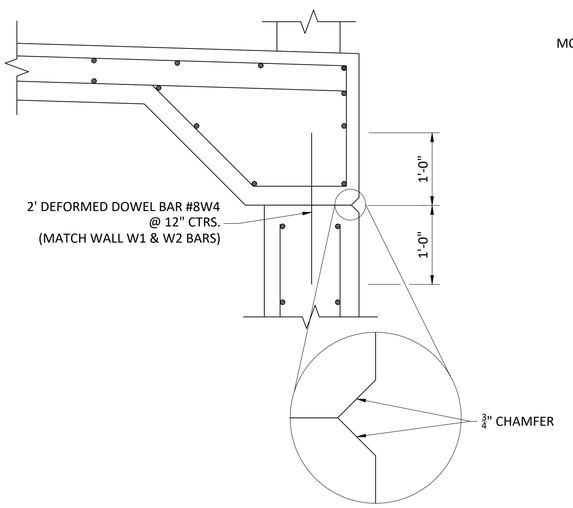
TYPICAL WALL SECTION
NTS
(STA. 206+78.51 TO STA. 211+33.62)



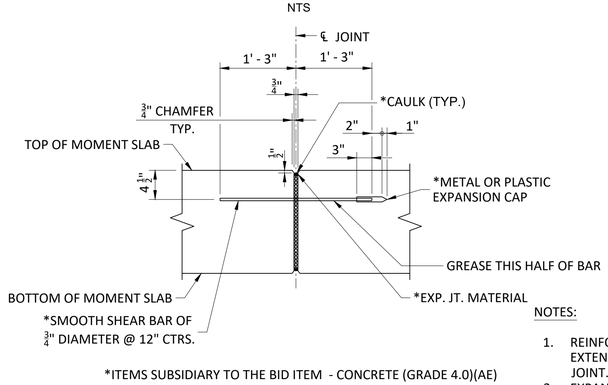
MOMENT SLAB DOWEL DETAIL
NTS



MOMENT SLAB SECTION TYPE A
NTS



JOINT / DOWEL DETAIL
NTS



*ITEMS SUBSIDIARY TO THE BID ITEM - CONCRETE (GRADE 4.0)(AE)

MOMENT SLAB EXPANSION JOINT DETAIL
NTS

NOTES:
1. REINFORCING STEEL SHALL NOT EXTEND ACROSS THE EXPANSION JOINT.
2. EXPANSION JOINTS SHALL BE SPACED AT 90'-0" (MEASURED AT THE FRONT FACE OF WALL).

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303 SOUTH TOPEKA
WICHITA, KS 67202
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CITY OF WICHITA

AARON M. SMITH LICENSED ENGINEER 19287 17 Jan 2025 KANSAS PROFESSIONAL ENGINEER

BLECKLEY - PAVING & INCIDENTAL DRAINAGE IMPROVEMENTS

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO.
472-2023-220018-003

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JOB NO.	220018-003
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DRAWN BY	SJV
CHECKED BY	MJK

TYPICAL SECTIONS AND DETAILS, STA. 206+78.51 TO STA. 211+33.62

S5

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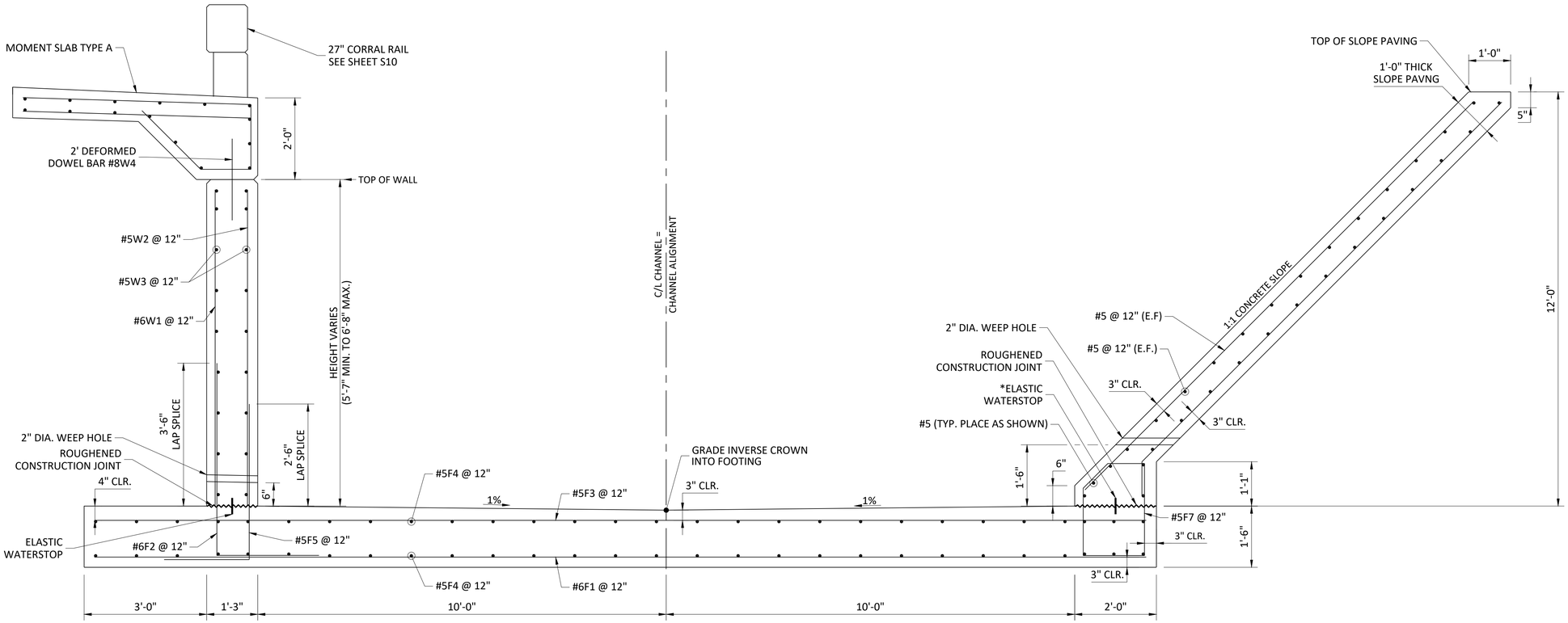

TYPICAL WALL SECTION

NTS

(STA. 203+16.46 TO STA. 206+78.51)

NOTES:

1. FOR MOMENT SLAB SECTION TYPE A DETAIL, SEE SHEET S5.
2. FOR JOINT/DOWEL DETAIL BETWEEN MOMENT SLAB AND TOP OF WALL, SEE DETAIL, SHEET S5.

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WICHITA, KS 67202
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AARON M. BRIEN
LICENSED
19287
17 Jan 2025
KANSAS
PROFESSIONAL ENGINEER

BLECKLEY - PAVING & INCIDENTAL DRAINAGE IMPROVEMENTS

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO.
472-2023-220018-003

Issue:		

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DATE	JANUARY 2025
PM	CJC
DESIGNED BY	CJC
DRAWN BY	SJV
CHECKED BY	MJK

TYPICAL SECTIONS AND DETAILS, STA. 203+16.46 TO STA. 206+78.51

S6

37 OF 73

SAVED 1/16/2025 2:58:27 PM BY SVILLMAN
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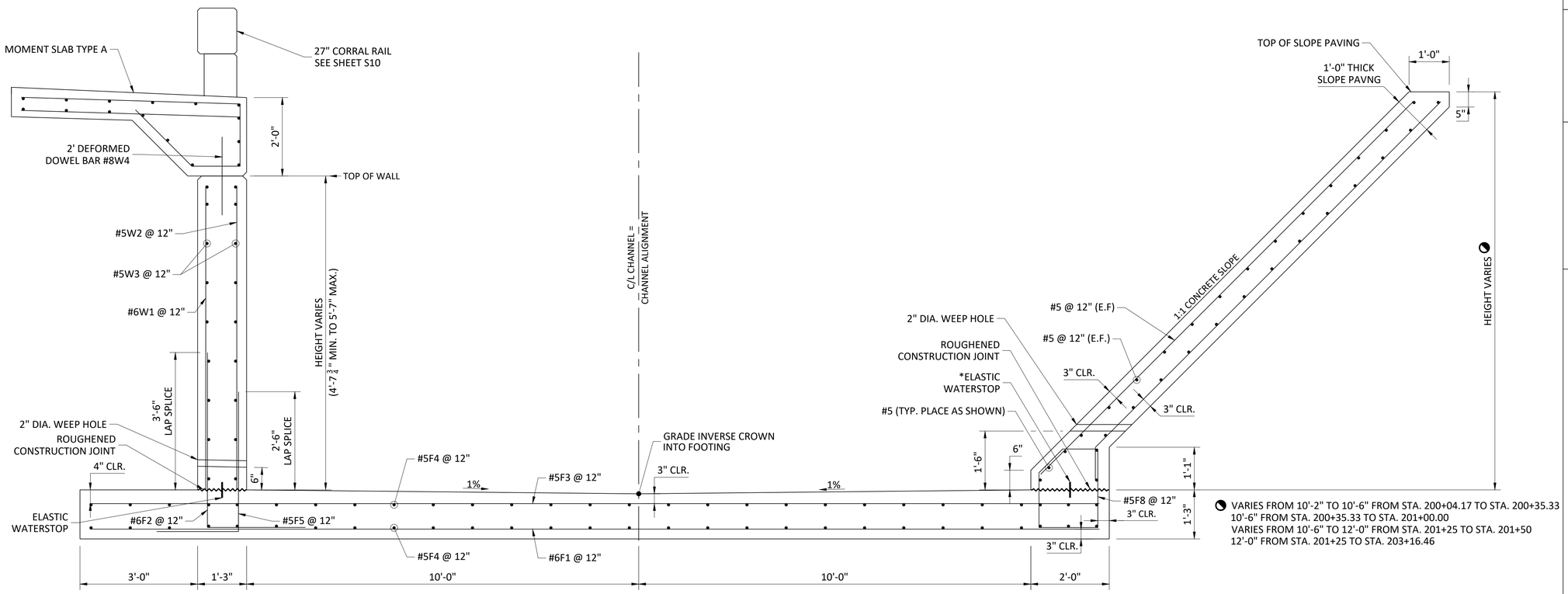

VARIES FROM 10'-2" TO 10'-6" FROM STA. 200+04.17 TO STA. 200+35.33
10'-6" FROM STA. 200+35.33 TO STA. 201+00.00
VARIES FROM 10'-6" TO 12'-0" FROM STA. 201+25 TO STA. 201+50
12'-0" FROM STA. 201+25 TO STA. 203+16.46

TYPICAL WALL SECTION

NTS

(STA. 200+04.17 TO STA. 203+16.46)

NOTES:

1. FOR MOMENT SLAB SECTION TYPE A DETAIL, SEE SHEET S5.
2. FOR JOINT/DOWEL DETAIL BETWEEN MOMENT SLAB AND TOP OF WALL, SEE DETAIL, SHEET S5.

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WICHITA, KS 67202
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AARON M. SVILLMAN
LICENSED
19287
17 Jan 2025
KANSAS
PROFESSIONAL ENGINEER

BLECKLEY - PAVING & INCIDENTAL DRAINAGE IMPROVEMENTS

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DESIGNED BY	CJC
DRAWN BY	SJV
CHECKED BY	MJK

TYPICAL SECTIONS AND DETAILS, STA. 200+04.17 TO STA. 203+16.46

S7

SAVED 1/16/2025 2:58:27 PM BY SVILLMAN
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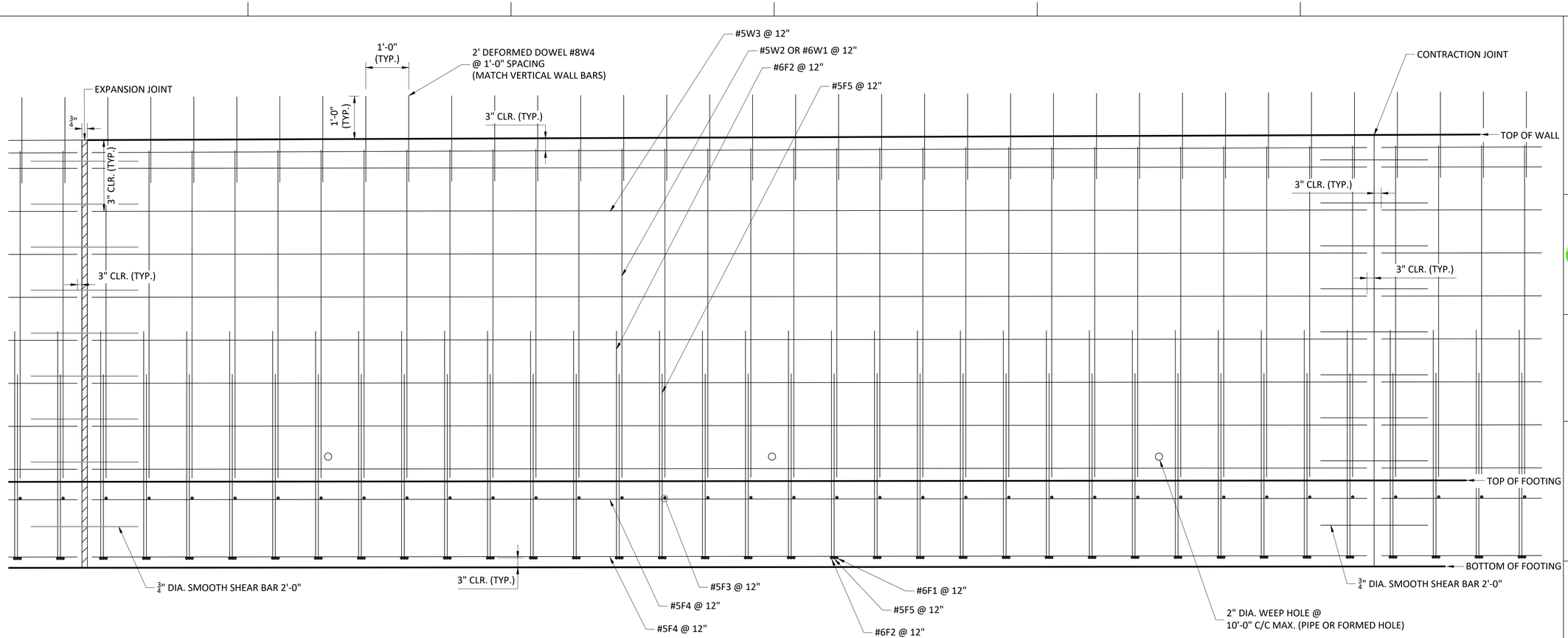
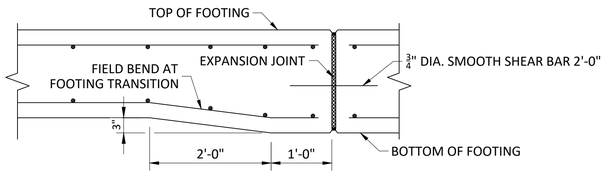


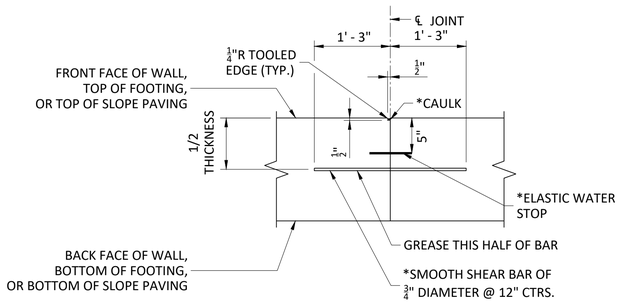
TYPICAL VERTICAL WALL REINFORCING LAYOUT

NTS



FOOTING TRANSITION DETAIL

NTS



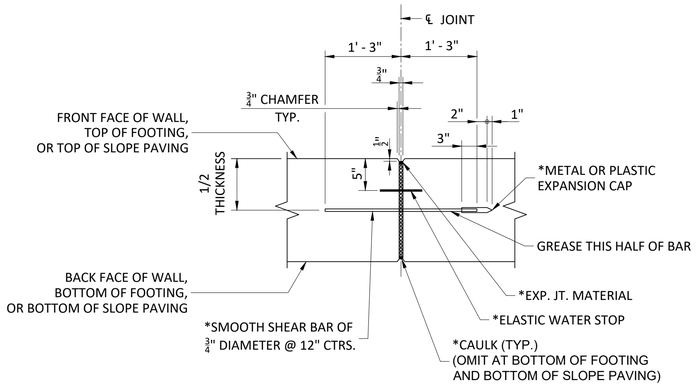
CONTRACTION JOINT DETAIL

NTS

NOTES:

1. REINFORCING STEEL SHALL NOT EXTEND ACROSS THE CONTRACTION JOINT.
2. CONTRACTION JOINTS SHALL BE SPACED AT 30'-0" (MEASURED AT THE FRONT FACE OF WALL).

*ITEMS SUBSIDIARY TO THE BID ITEM - CONCRETE (GRADE 4.0)(AE)



EXPANSION JOINT DETAIL

NTS

NOTES:

1. REINFORCING STEEL SHALL NOT EXTEND ACROSS THE EXPANSION JOINT.
2. EXPANSION JOINTS SHALL BE SPACED AT 90'-0" (MEASURED AT THE FRONT FACE OF WALL).

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BLECKLEY - PAVING & INCIDENTAL DRAINAGE IMPROVEMENTS

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO.
472-2023-220018-003

Issue:		

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PM	CJC
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CHECKED BY	MJK

TYPICAL WALL REINFORCING LAYOUT

S8

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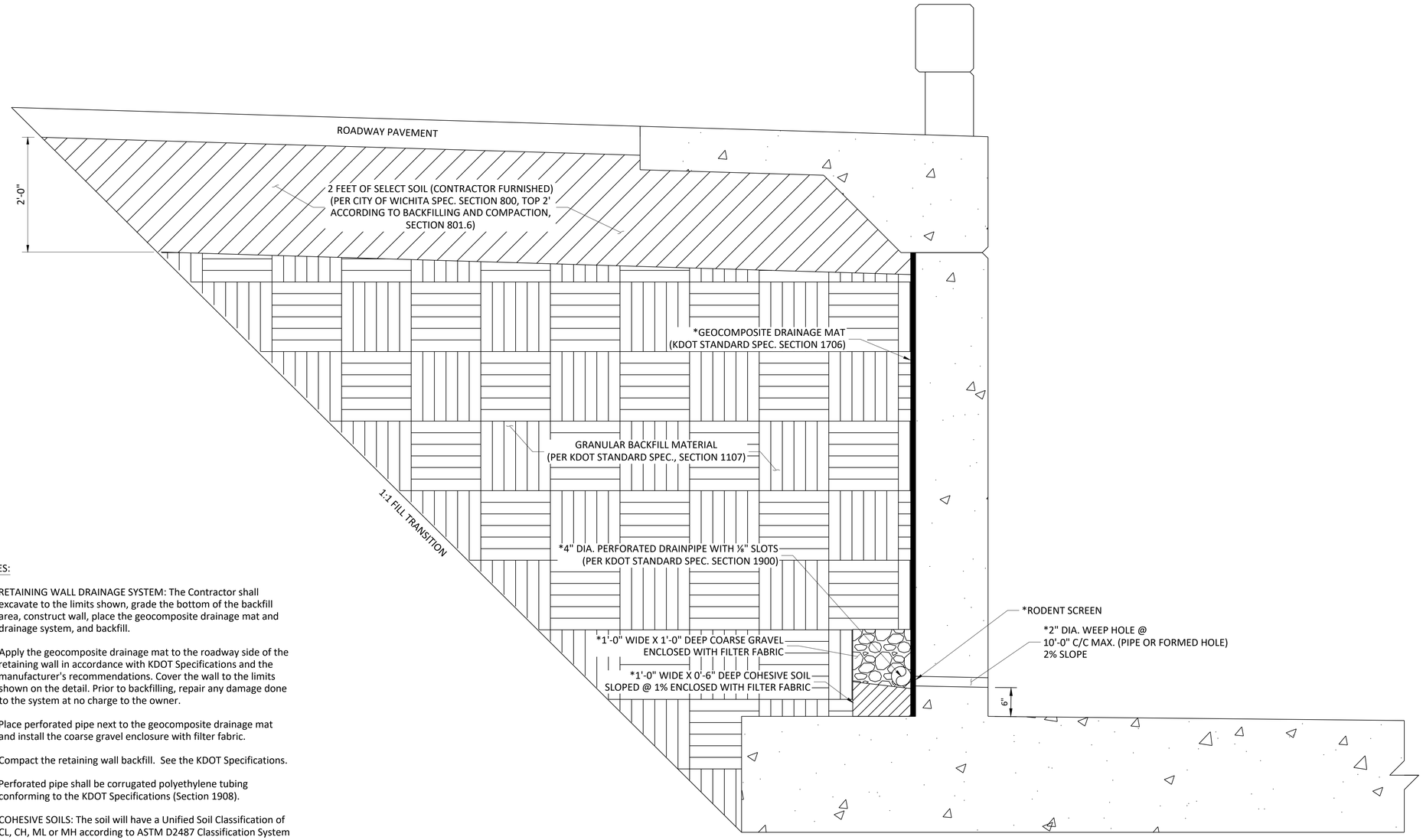

NOTES:

1. RETAINING WALL DRAINAGE SYSTEM: The Contractor shall excavate to the limits shown, grade the bottom of the backfill area, construct wall, place the geocomposite drainage mat and drainage system, and backfill.
2. Apply the geocomposite drainage mat to the roadway side of the retaining wall in accordance with KDOT Specifications and the manufacturer's recommendations. Cover the wall to the limits shown on the detail. Prior to backfilling, repair any damage done to the system at no charge to the owner.
3. Place perforated pipe next to the geocomposite drainage mat and install the coarse gravel enclosure with filter fabric.
4. Compact the retaining wall backfill. See the KDOT Specifications.
5. Perforated pipe shall be corrugated polyethylene tubing conforming to the KDOT Specifications (Section 1908).
6. COHESIVE SOILS: The soil will have a Unified Soil Classification of CL, CH, ML or MH according to ASTM D2487 Classification System with a minimum plasticity index of 13. Compact the material to Type A, MR-95 specifications. If the plasticity index cannot be met, add and mix Bentonite to the soil prior to placement and compaction so that the PI > 13.

NOTE:

* ITEMS ALL SUBSIDIARY TO BID ITEM - RETAINING WALL DRAINAGE SYSTEM

WALL BACKFILL & DRAINAGE DETAIL

NTS

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CITY OF WICHITA

AARON M. BRETZ
LICENSED
19287
23 Jan 2025
KANSAS
PROFESSIONAL ENGINEER

BLECKLEY - PAVING & INCIDENTAL DRAINAGE IMPROVEMENTS

PAUL GUNZELMAN CITY ENGINEER
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CHECKED BY	MJK

WALL BACKFILL & DRAINAGE DETAIL

S9

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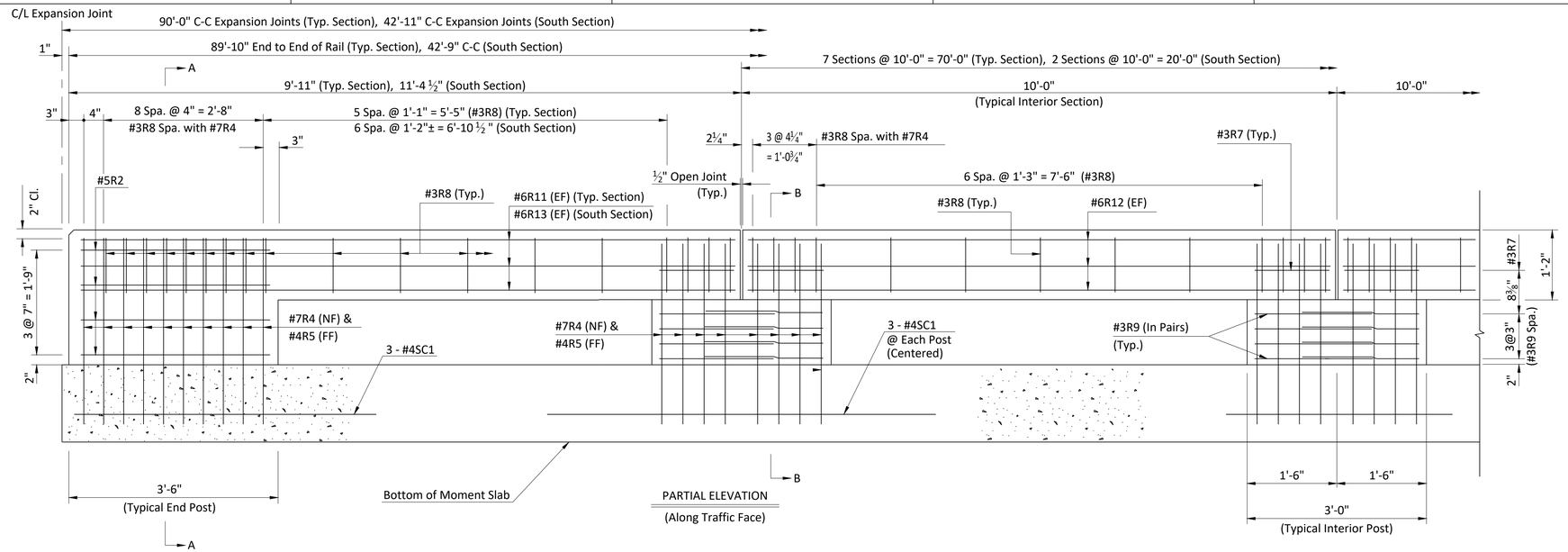
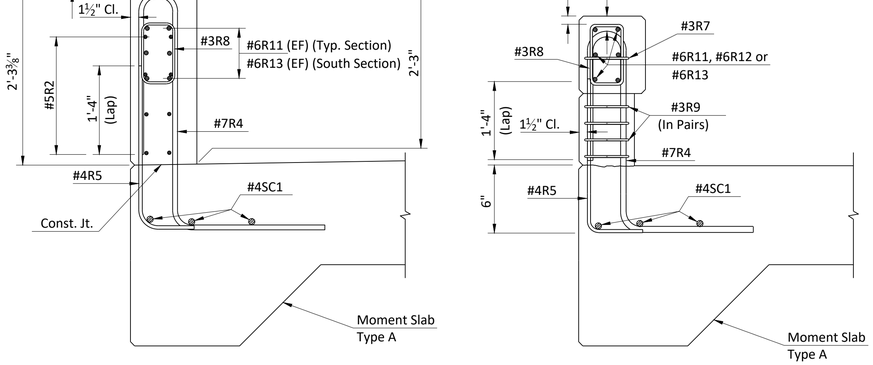
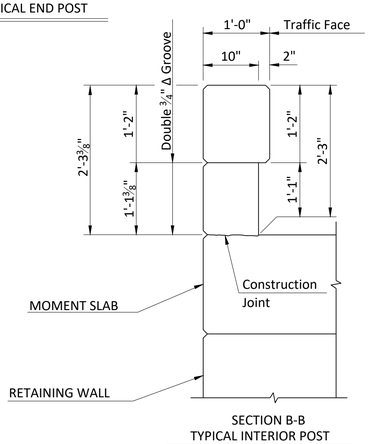


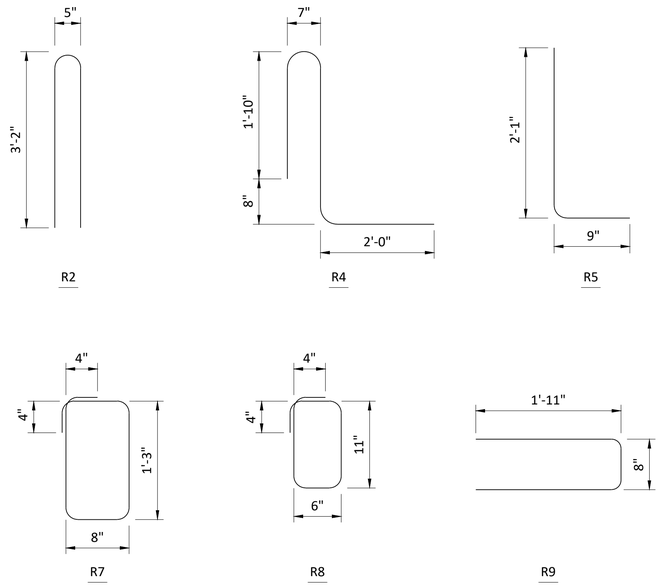


SECTION A-A
TYPICAL END POST

SECTION THRU POST



SECTION B-B
TYPICAL INTERIOR POST



BENDING DIAGRAMS

(All dimensions are out to out of bars.)

UNIT STRESSES :
Concrete (Grade 4.0)(AE) f'c = 4,000 psi
Reinforcing Steel (Grade 60)(Epoxy Coated) fy = 60,000 psi

BILL OF REINFORCING STEEL
(For 1 - 42'-9" & 12 - 89'-10" Rail Segments)
Grade 60 (Epoxy Coated)

Straight Bars				Bent Bars			
Mark	Size	Number	Length	Mark	Size	Number	Length
R11	#6	156	9'-7"	R4	#7	1052	6'-3"
R12	#6	504	9'-8"				
R13	#6	12	11'-0"	R2	#5	104	6'-6"
SC1	#4	375	6'-6"	R5	#4	1052	2'-10"
				R7	#3	198	4'-6"
				R8	#3	1132	3'-6"
				R9	#3	792	4'-6"

See Bending Diagrams

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AARON M. BLUE LICENSED
19287
17 Jan 2025
KANSAS
PROFESSIONAL ENGINEER

BLECKLEY - PAVING & INCIDENTAL DRAINAGE IMPROVEMENTS

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO.
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Issue:		

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CHECKED BY	MJK

27" CORRAL RAIL
ON MOMENT SLAB TYPE A
DETAILS

S10

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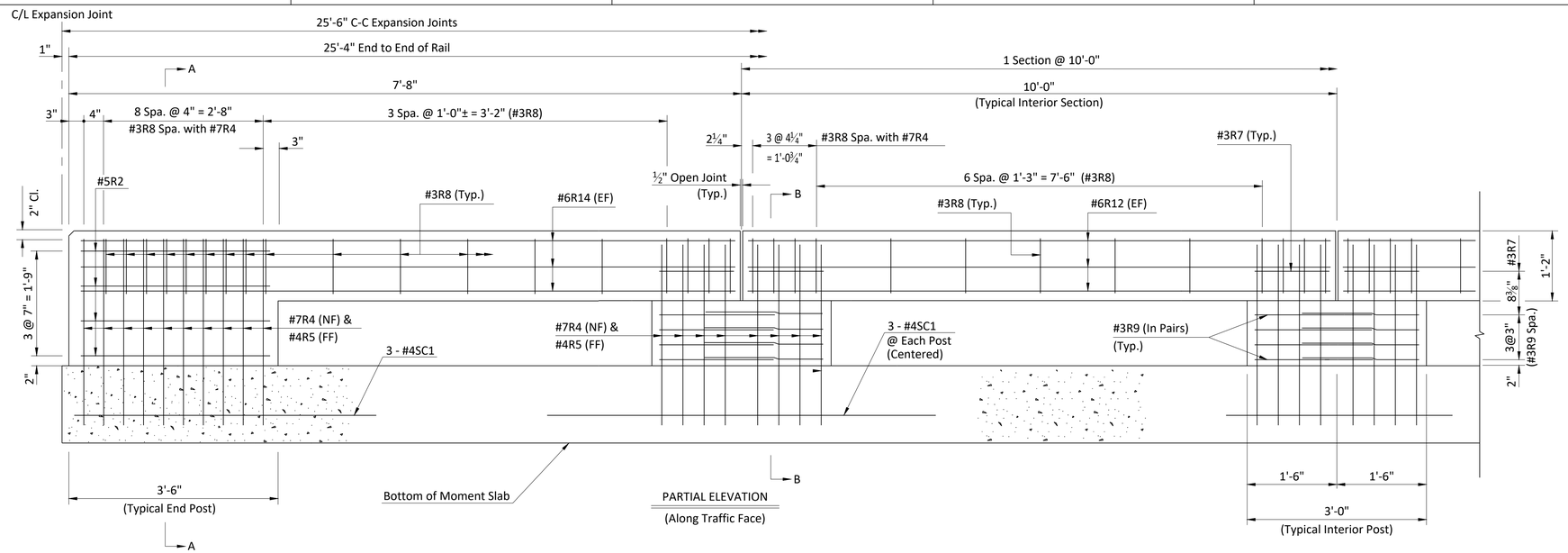
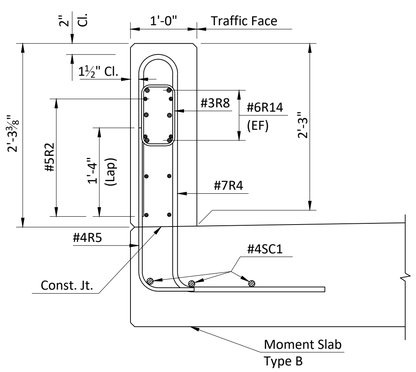
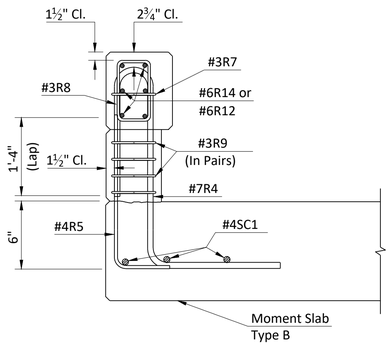
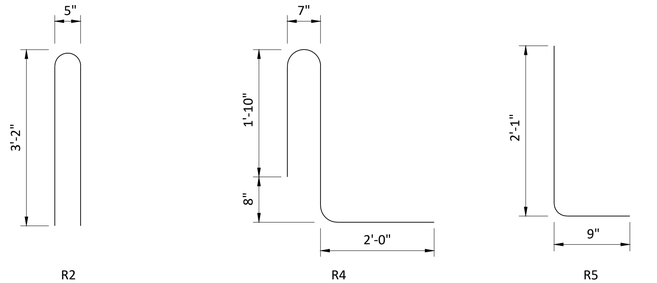




SECTION A-A
TYPICAL END POST

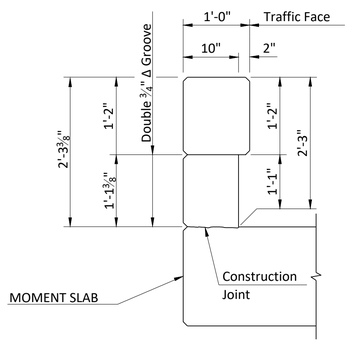


SECTION THRU POST



BENDING DIAGRAMS

(All dimensions are out to out of bars.)



SECTION B-B
TYPICAL INTERIOR POST

UNIT STRESSES :
Concrete (Grade 4.0)(AE) f'c = 4,000 psi
Reinforcing Steel (Grade 60)(Epoxy Coated) fy = 60,000 psi

BILL OF REINFORCING STEEL
(For 1 - 25'-4" Rail Segment)
Grade 60 (Epoxy Coated)

Straight Bars				Bent Bars			
Mark	Size	Number	Length	Mark	Size	Number	Length
R12	#6	6	9'-8"	R4	#7	36	6'-3"
R14	#6	12	7'-6"				
				R2	#5	8	6'-6"
SC1	#4	12	6'-6"				
				R5	#4	36	2'-10"
				R7	#3	4	4'-6"
				R8	#3	36	3'-6"
				R9	#3	16	4'-6"

See Bending Diagrams

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LICENSED
19287
17 Jan 2025
KANSAS
PROFESSIONAL ENGINEER

BLECKLEY - PAVING & INCIDENTAL DRAINAGE IMPROVEMENTS

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO.
472-2023-220018-003

Issue:		

JOB NO.	220018-003
DATE	JANUARY 2025
PM	CJC
DESIGNED BY	CJC
DRAWN BY	SJV
CHECKED BY	MJK

27" CORRAL RAIL
ON MOMENT SLAB TYPE B
DETAILS

S11

SAVED 1/16/2025 2:59:12 PM BY SVILLMAN
PLOTTED 1/16/2025 3:06:31 PM BY VILLMAN, STEVEN
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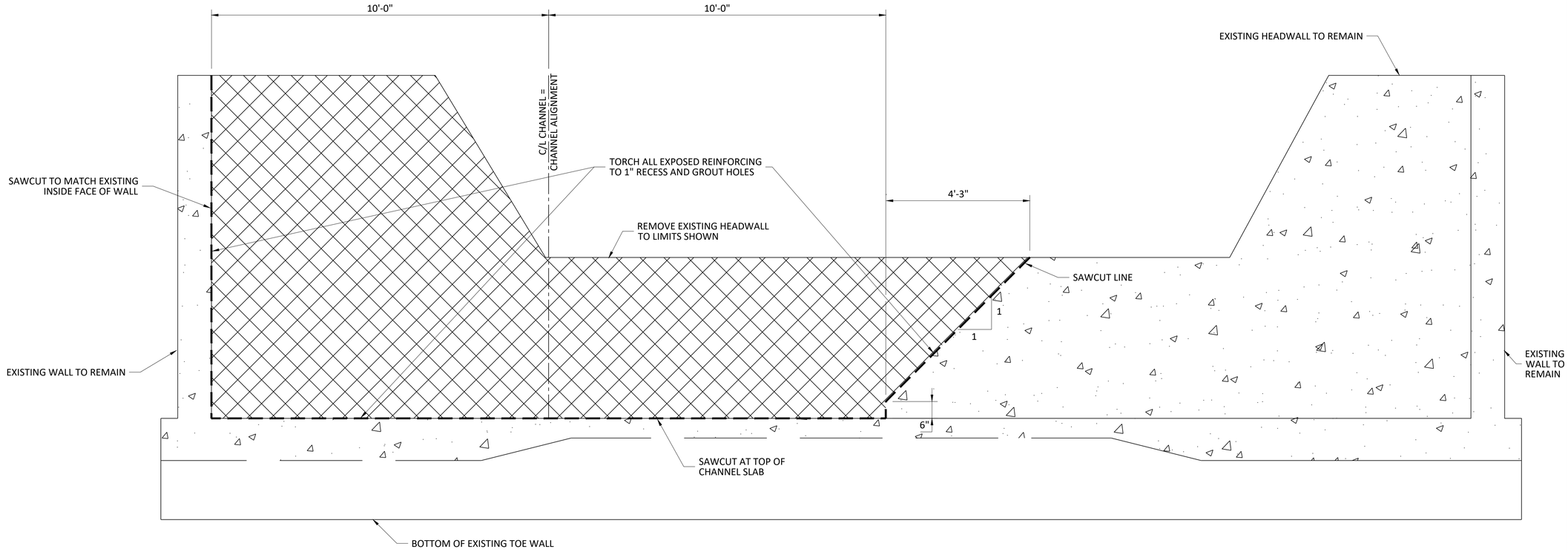
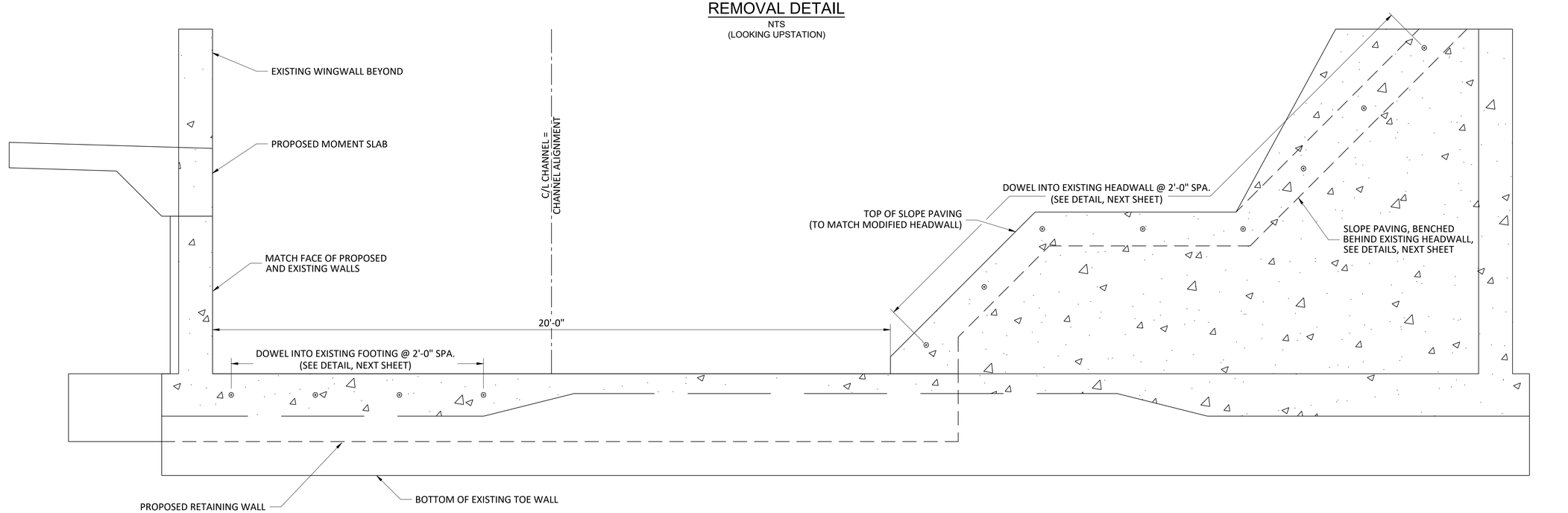


REMOVAL DETAIL

NTS
(LOOKING UPSTATION)



SOUTH CONNECTION DETAIL

NTS
(LOOKING UPSTATION)

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SOUTH CONNECTION DETAILS (SHEET 1 OF 2)

S12

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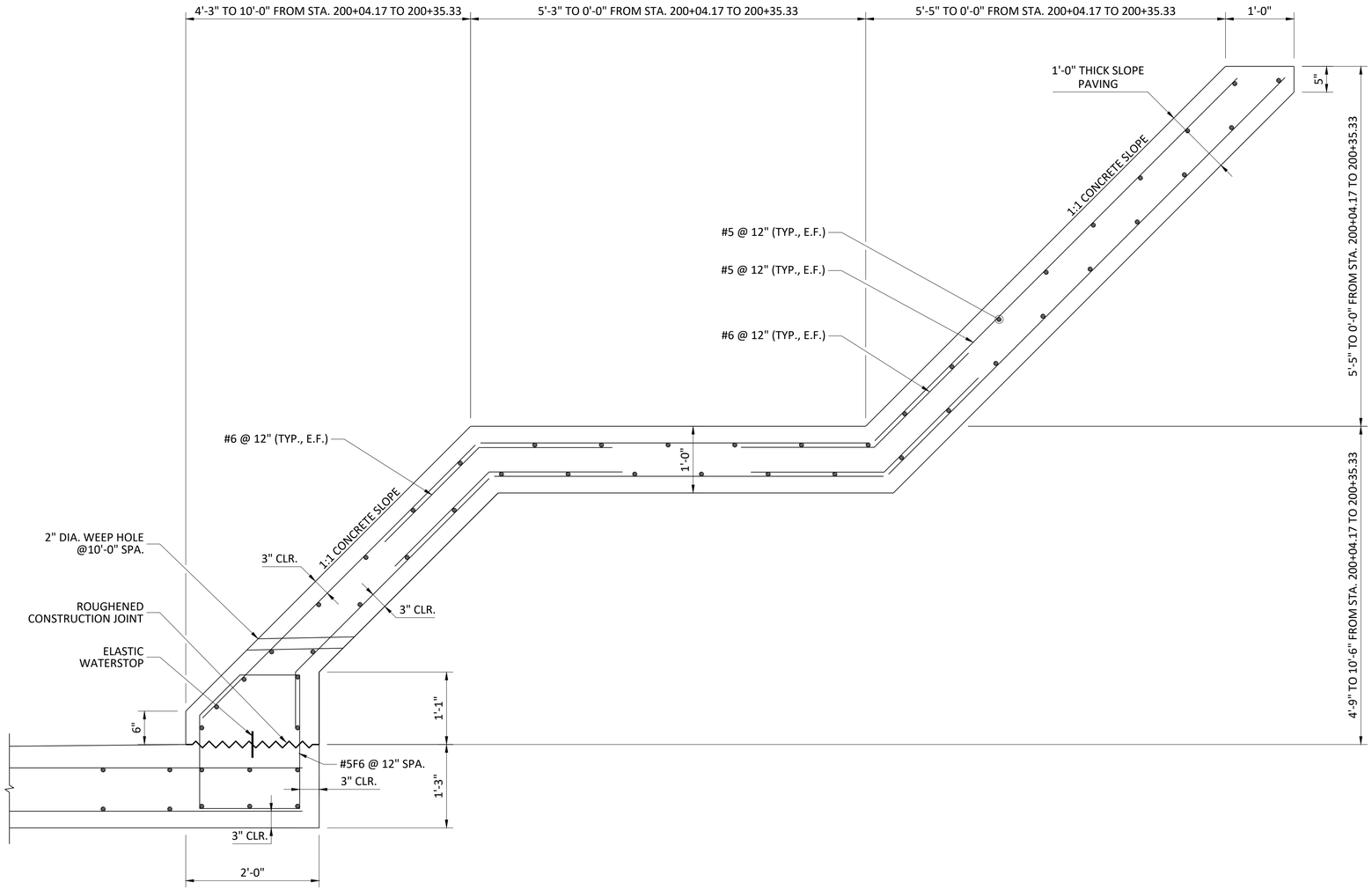
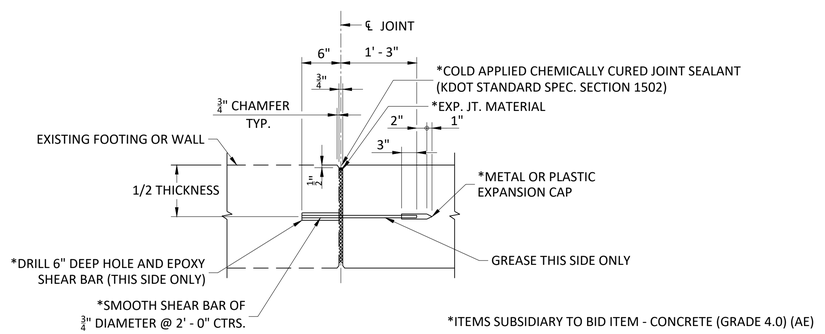


SLOPE PAVING DETAILS

NTS



*ITEMS SUBSIDIARY TO BID ITEM - CONCRETE (GRADE 4.0) (AE)

JOINT DETAIL

NTS

(AT INTERFACE BETWEEN OLD FOOTING/WALLS/HEADWALL AND NEW CHANNEL)

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BLECKLEY - PAVING & INCIDENTAL DRAINAGE IMPROVEMENTS

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SOUTH CONNECTION DETAILS (SHEET 2 OF 2)

S13

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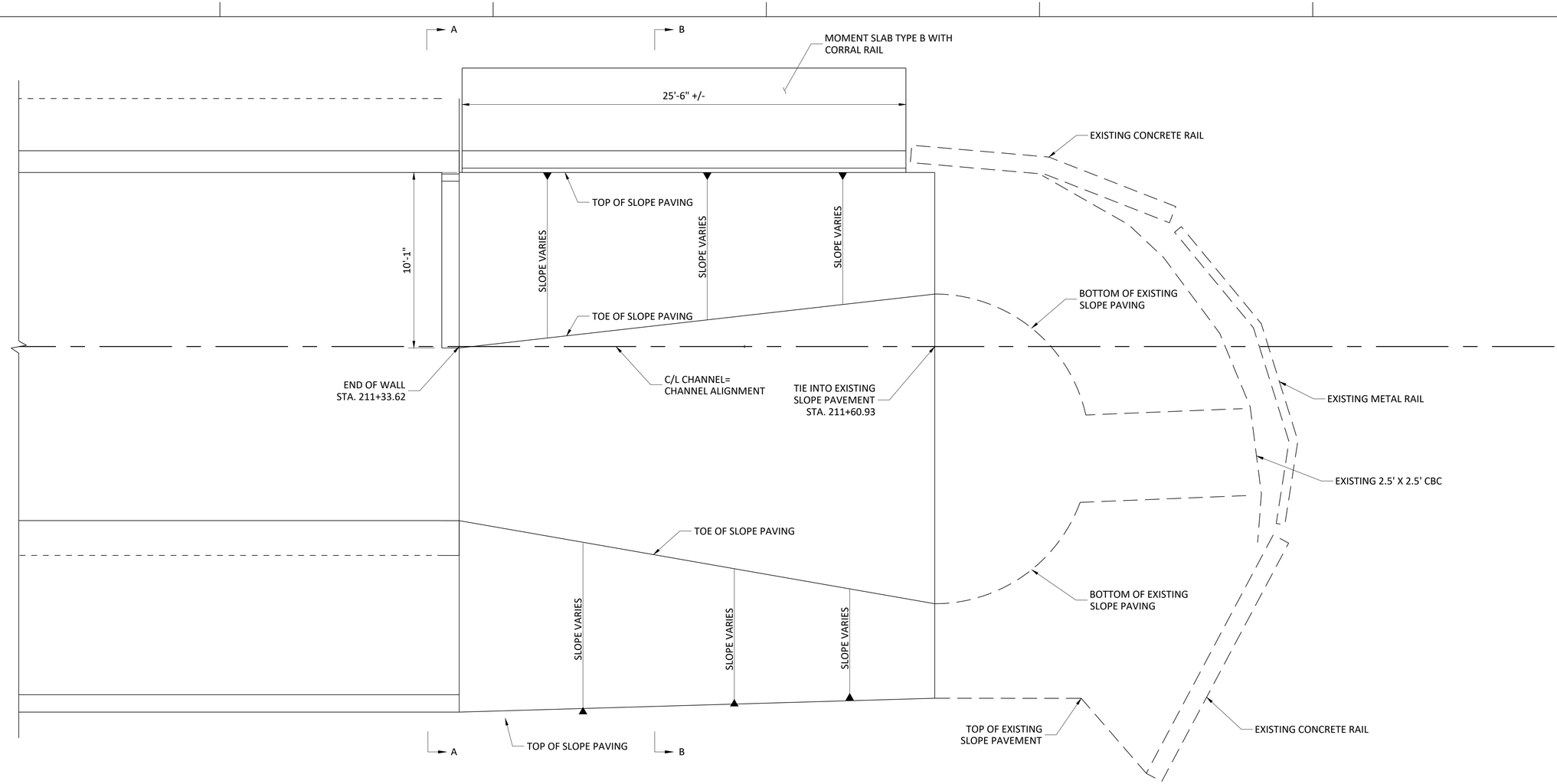
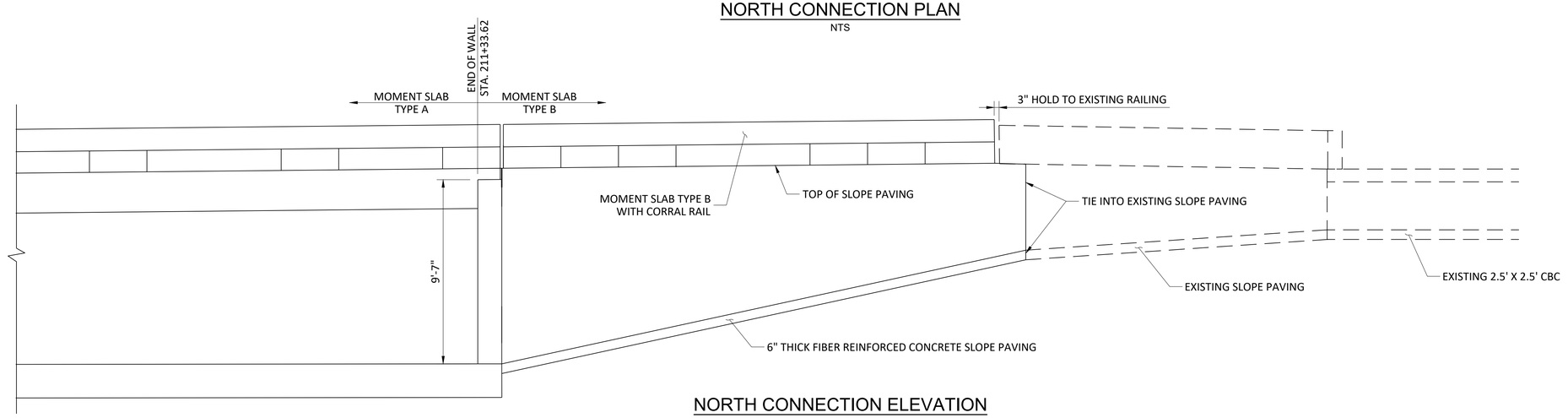


NORTH CONNECTION PLAN

NTS



NORTH CONNECTION ELEVATION

NTS

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NORTH CONNECTION DETAILS (SHEET 1 OF 3)

S14

45 OF 73

SAVED 1/16/2025 3:00:15 PM BY SVILLMAN
PLOTTED 1/16/2025 3:07:01 PM BY VILLMAN, STEVEN
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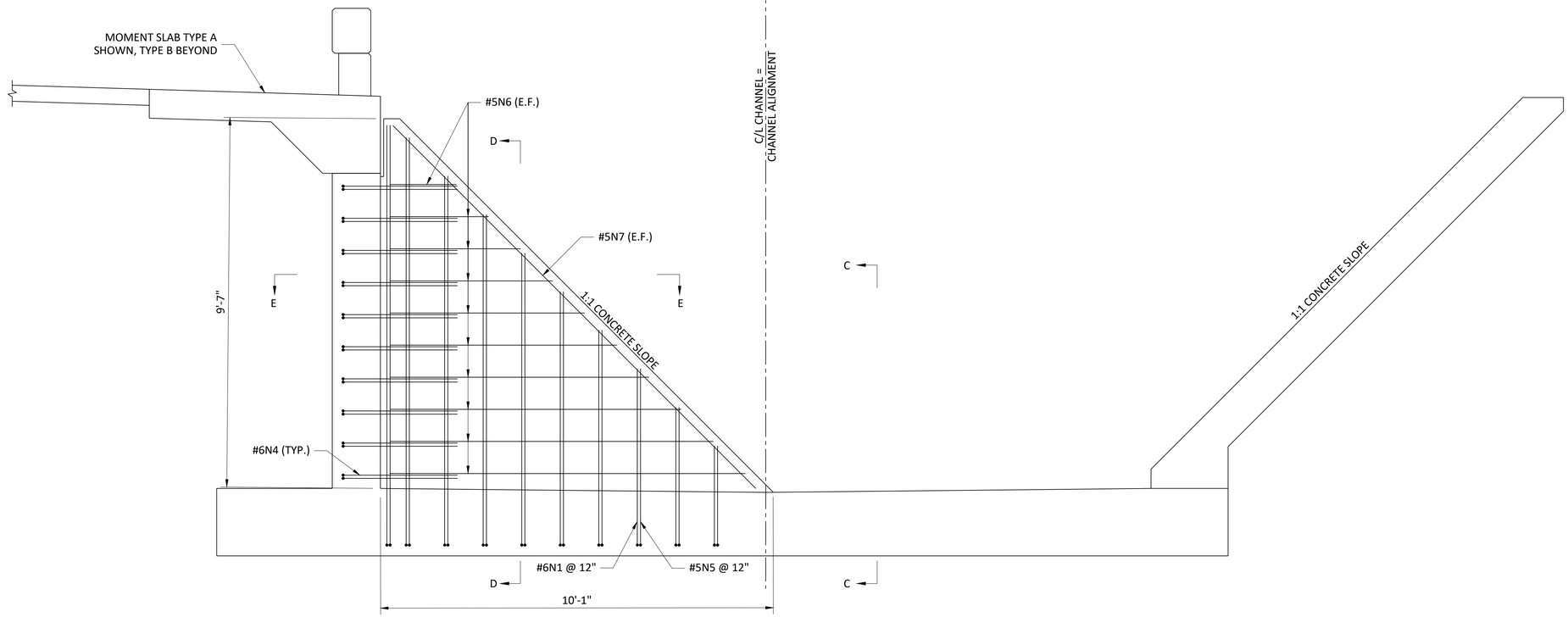
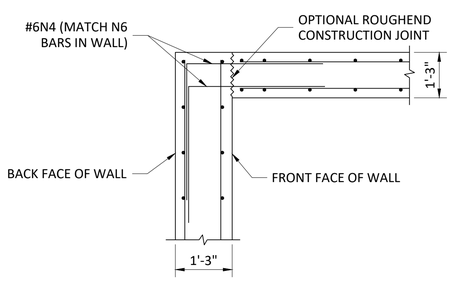


SECTION A
NTS



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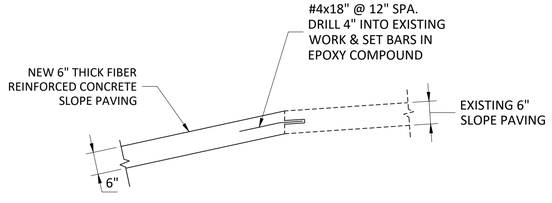
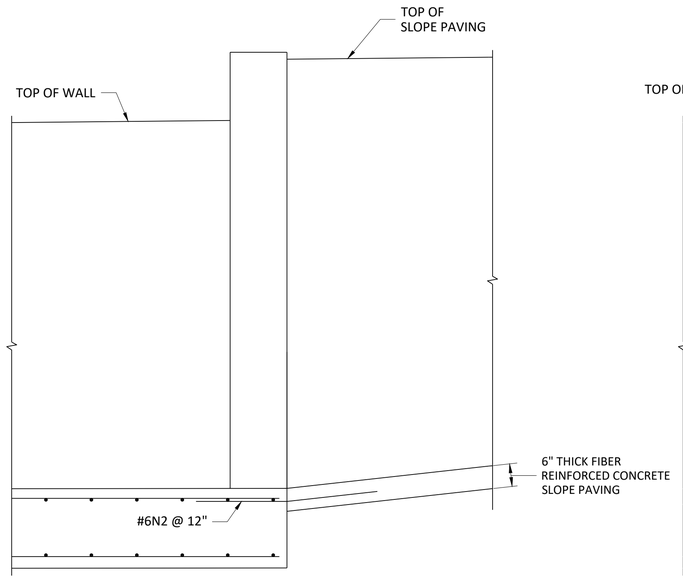


EXPANSION JOINT DETAIL
NTS



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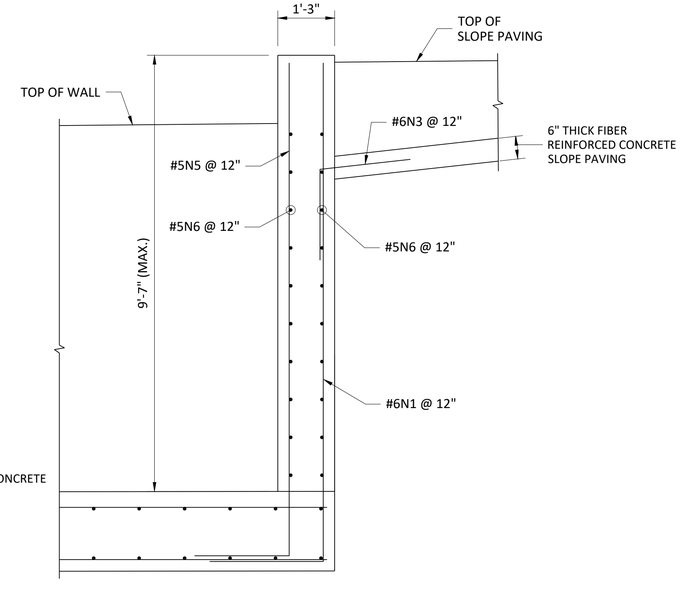
NTS



SECTION D
NTS

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LICENSED
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BLECKLEY - PAVING & INCIDENTAL DRAINAGE IMPROVEMENTS

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO.
472-2023-220018-003

Issue:		

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NORTH CONNECTION
DETAILS (SHEET 2 OF 3)

S15

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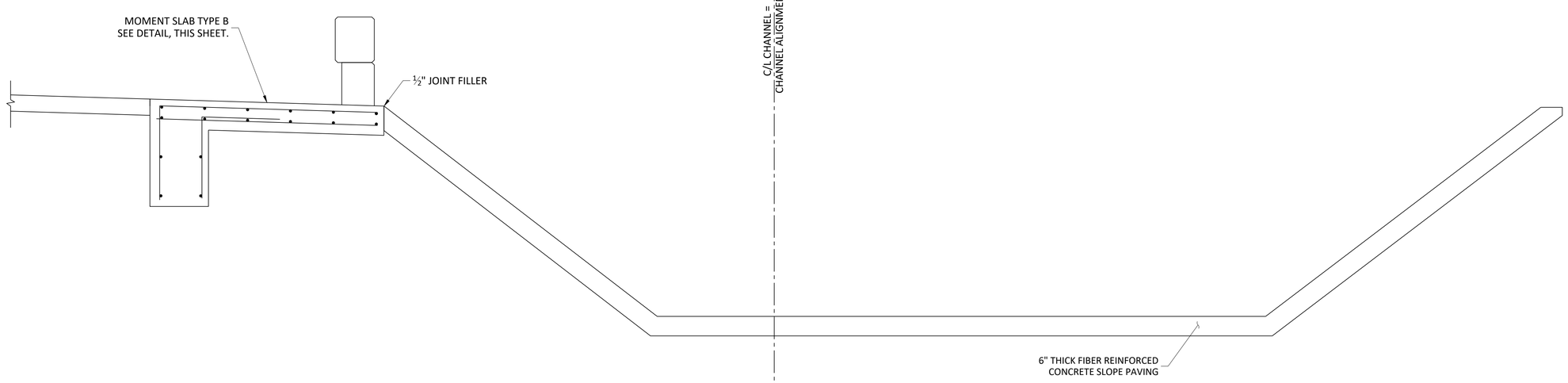
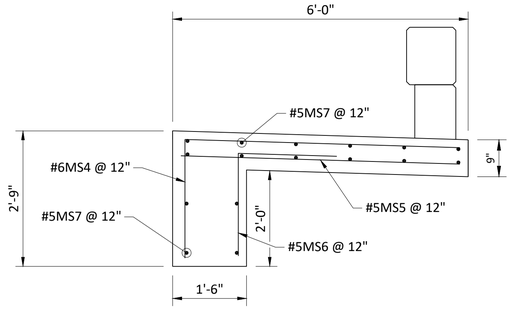


SECTION B
NTS



MOMENT SLAB TYPE B DETAIL
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NORTH CONNECTION DETAILS (SHEET 3 OF 3)

S16

47 OF 73

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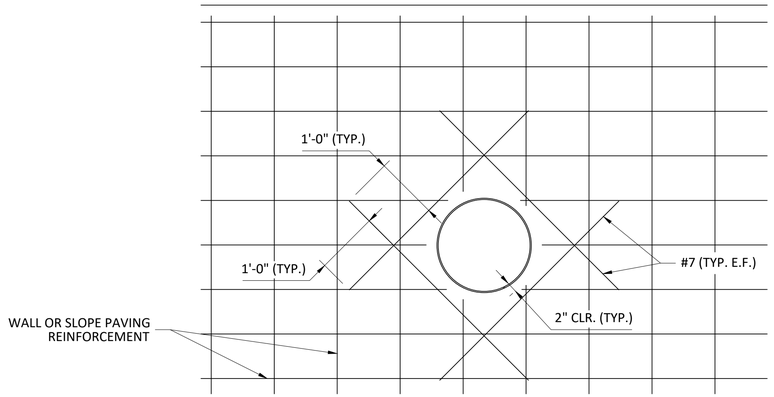
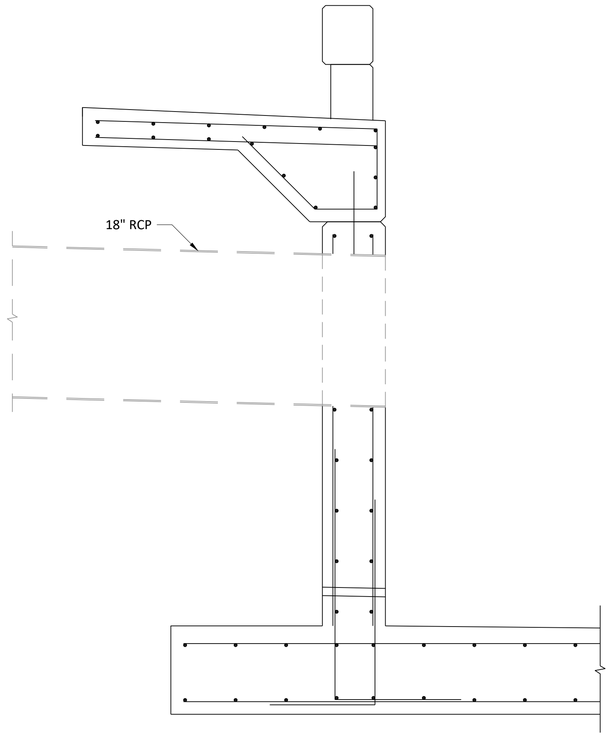


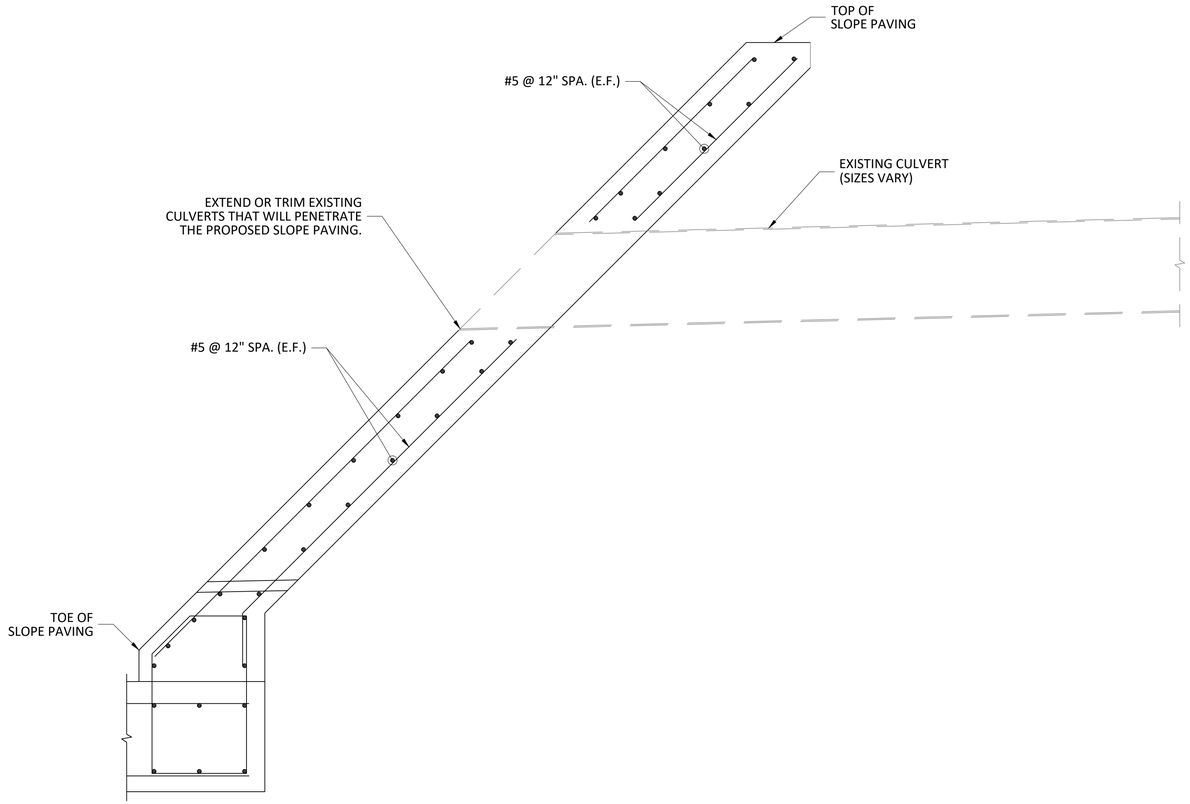
CULVERT PENETRATION AT SLOPE PAVING & WALL

NTS



TYPICAL SECTION OF CULVERT PENETRATION AT RETAINING WALL (STA. 209+93.82)

NTS



TYPICAL SECTION OF CULVERT PENETRATION AT SLOPE PAVING

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19287
17 Jan 2025
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BLECKLEY - PAVING & INCIDENTAL DRAINAGE IMPROVEMENTS

PAUL GUNZELMAN CITY ENGINEER
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472-2023-220018-003

Issue:		

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PM	CJC
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CULVERT
PENETRATION DETAILS

S17

SAVED 1/16/2025 3:01:06 PM BY SVILLMAN
PLOTTED 1/16/2025 3:07:21 PM BY VILLMAN, STEVEN
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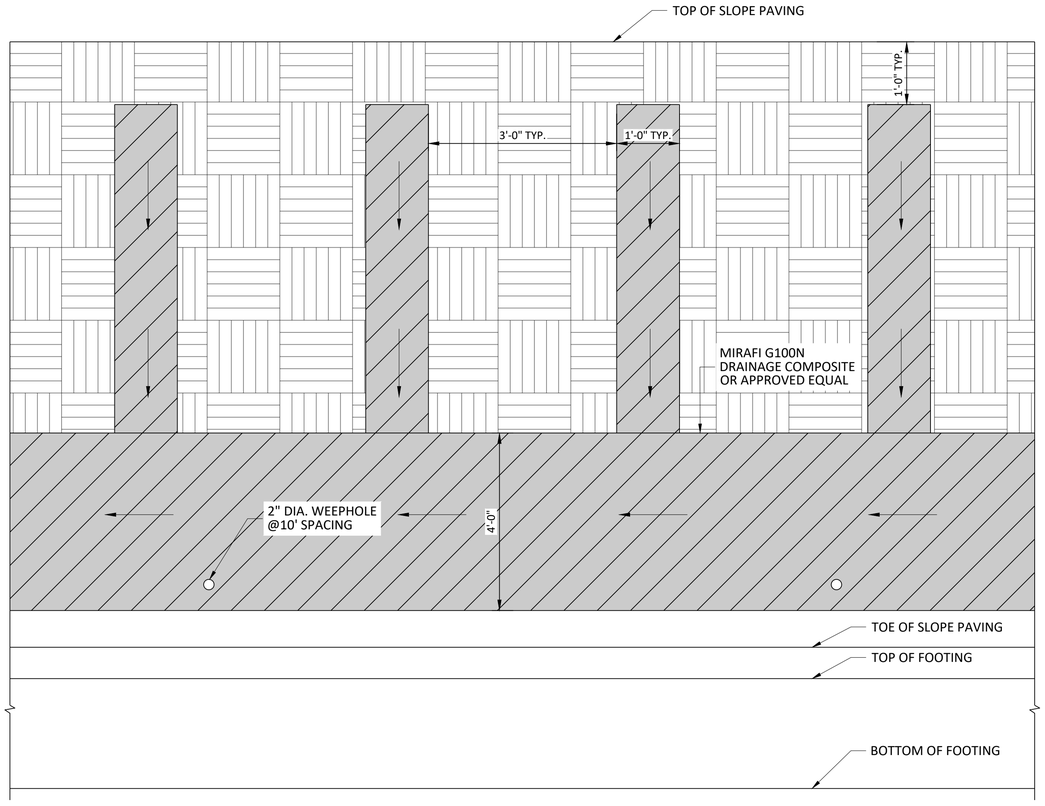

ELEVATION OF SLOPE PAVING SHOWING DRAINAGE SYSTEM

NTS

TYPICAL SECTION OF SLOPE PAVING SHOWING DRAINAGE SYSTEM

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SLOPE PAVING
DRAINAGE DETAILS

S18

SAVED 1/16/2025 3:01:06 PM BY SVILLMAN
PLOTTED 1/16/2025 3:07:26 PM BY VILLMAN, STEVEN
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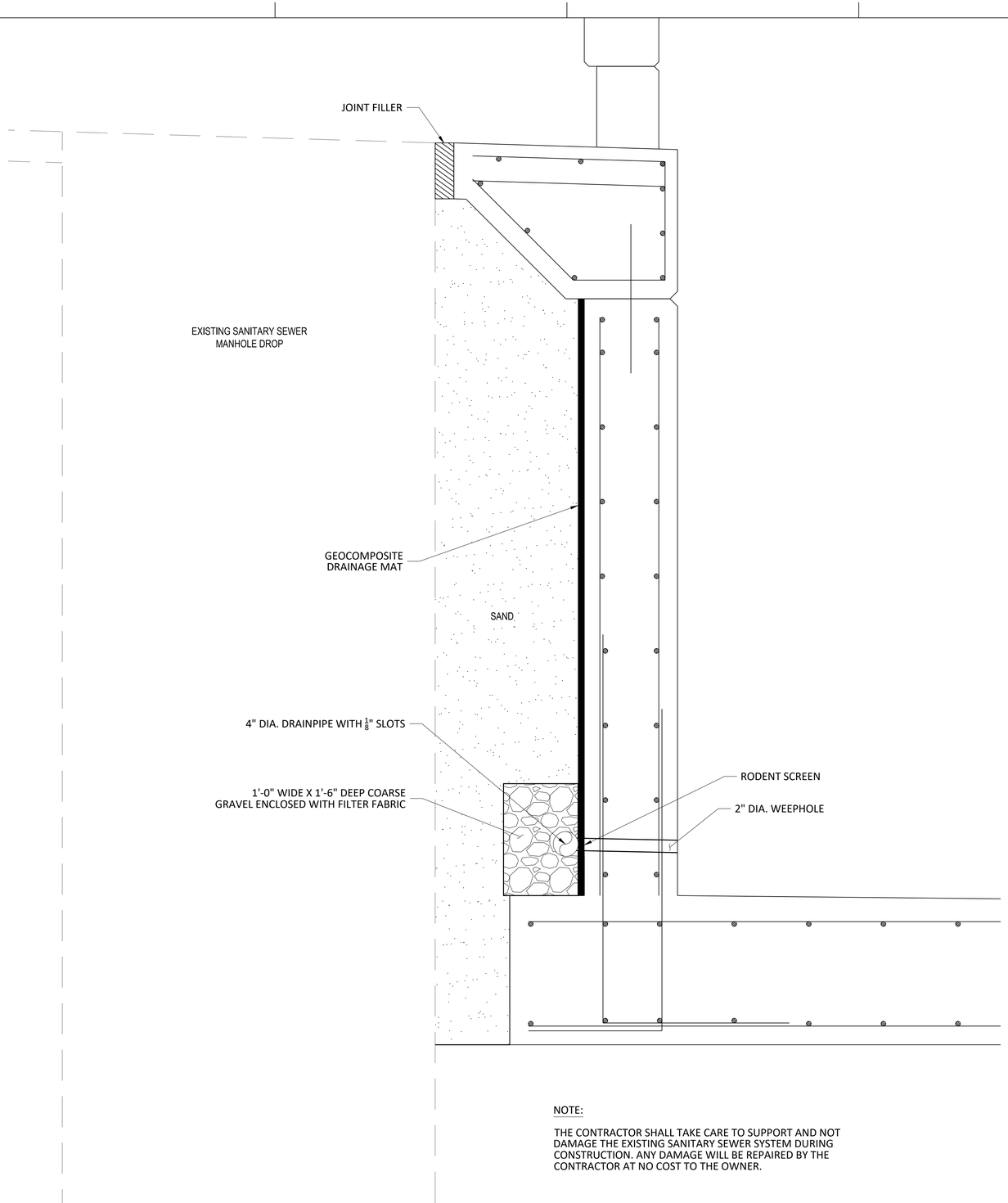
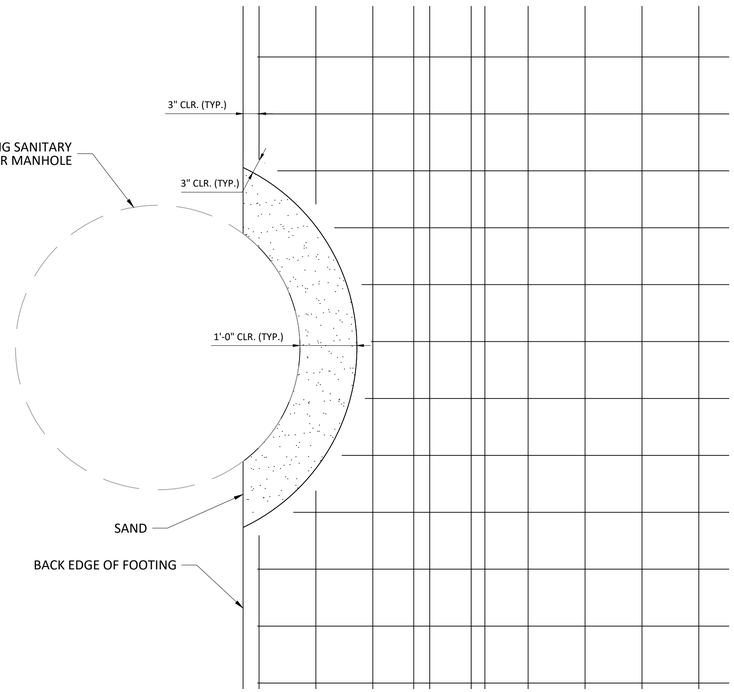


CROSS SECTION OF WALL NEAR SANITARY SEWER MANHOLE

NTS

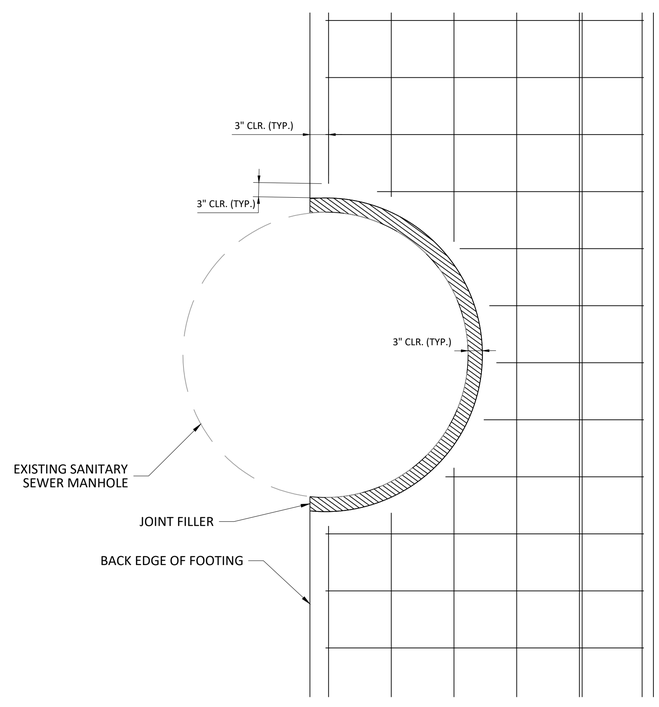
NOTE:

THE CONTRACTOR SHALL TAKE CARE TO SUPPORT AND NOT DAMAGE THE EXISTING SANITARY SEWER SYSTEM DURING CONSTRUCTION. ANY DAMAGE WILL BE REPAIRED BY THE CONTRACTOR AT NO COST TO THE OWNER.



PLAIN VIEW OF FOOTING AT SANITARY SEWER MANHOLE

NTS



PLAIN VIEW OF MOMENT SLAB AT SANITARY SEWER MANHOLE

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DETAILS AT SANITARY SEWER LOCATIONS

S19

SAVED 1/16/2025 3:01:06 PM BY SVILLMAN
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CONCRETE PAVEMENT AND CRUSHED ROCK BASE

STREET	STA. TO STA.	CONCRETE PAVEMENT 6" (REINFORCED)	CONCRETE PAVEMENT (VG) 7" (REINFORCED)	CRUSHED ROCK BASE 5", REINFORCED	REMARKS
		SQ. YD.	SQ. YD.	SQ. YD.	
S Bleckley Dr.	100+06.55 to 111+16.86	2,888.6	-	3,275.4	
S Bleckley Dr.	100+07.53 to 100+63.35	-	75.4	84.5	
S Bleckley Dr.	109+36.19 to 110+14.60	-	207.7	220.3	
S Bleckley Dr.	109+62.17 to 109+94.23	-	-	146.8	
S Bleckley Dr.	109+65.57 to 109+90.84	115.7	-	-	
S Bleckley Dr.	111+16.86 to 111+44.00	72.0	-	82.5	Temporary Pavement
TOTAL		3,076.3	283.1	3,809.5	

CURB AND GUTTER

STREET	STA. TO STA.	SIDE	TYPE 4 (RESID.)	TYPE 4 (RESID.) (SPECIAL)	MONO EDGE (6")
			LN. FT.	LN. FT.	LN. FT.
S Bleckley Dr.	100+08.01 to 100+08.04	RT	31.1	-	-
S Bleckley Dr.	100+08.01 to 100+26.55	LT	-	-	31.0
S Bleckley Dr.	100+26.55 to 100+43.62	LT	-	-	18.0
S Bleckley Dr.	100+43.62 to 100+63.35	LT	-	-	31.4
S Bleckley Dr.	100+63.35 to 109+36.19	LT	-	862.2	-
S Bleckley Dr.	109+36.19 to 109+63.63	LT	-	-	60.5
S Bleckley Dr.	109+63.64 to 109+73.19	LT	40.0	-	-
S Bleckley Dr.	109+90.32 to 110+14.60	LT	-	-	55.7
S Bleckley Dr.	109+92.78 to 110+02.51	LT	39.9	-	-
S Bleckley Dr.	110+14.60 to 111+44.00	LT	-	127.1	-
TOTAL			111.0	989.3	196.6

DRIVEWAY PAVEMENT

STREET	STA. TO STA.	SIDE	CONCRETE DRIVEWAY 6" (UNREINFORCED)	REMARKS
			SQ. FT.	
S Bleckley Dr.	101+00.74 to 101+22.79	LT	190.3	
S Bleckley Dr.	101+55.41 to 101+82.79	LT	189.8	
S Bleckley Dr.	102+19.00 to 102+39.24	LT	136.6	
S Bleckley Dr.	102+39.24 to 102+59.48	LT	136.6	
S Bleckley Dr.	102+95.93 to 103+17.99	LT	139.4	
S Bleckley Dr.	104+00.27 to 104+20.65	LT	136.9	
S Bleckley Dr.	104+20.65 to 104+42.27	LT	139.8	
S Bleckley Dr.	104+73.08 to 104+95.13	LT	139.4	
S Bleckley Dr.	105+09.93 to 105+31.98	LT	139.4	
S Bleckley Dr.	105+65.47 to 105+87.53	LT	139.4	
S Bleckley Dr.	106+35.05 to 106+64.97	LT	203.3	
S Bleckley Dr.	106+99.14 to 107+22.63	LT	183.9	
S Bleckley Dr.	107+60.50 to 107+88.29	LT	183.8	
S Bleckley Dr.	108+35.23 to 108+58.71	LT	142.6	
TOTAL			2,201.2	

MOW STRIP

STREET	STA. TO STA.	SIDE	MOW STRIP
			LN. FT.
S Bleckley Dr.	99+79.81 to 102+00.00	RT.	216.0
S Bleckley Dr.	102+04.00 to 110+99.05	RT.	935.0
TOTAL			1,151.0

FENCE (INSTALLED)

STREET	STA. TO STA.	SIDE	FENCE (INSTALLED)
			LN. FT.
S Bleckley Dr.	99+79.81 to 110+99.05	RT.	1,151.0
TOTAL			1,151.0

TEMPORARY CONSTRUCTION FENCE

STREET	STA. TO STA.	SIDE	TEMPORARY CONSTRUCTION FENCE
			LN. FT.
S Bleckley Dr.	99+79.81 to 111+12.39	RT.	1,205.3
TOTAL			1,205.3

FENCE, REMOVED AND RESET

STREET	STA.	SIDE	FENCE, REMOVED AND RESET
			LN. FT.
S Bleckley Dr.	109+17.06	RT.	10.6
TOTAL			10.6

CONCRETE SIDEWALK

	STREET	STA. TO STA.	SIDE	CONCRETE SIDEWALK 4"
				SQ. FT.
	S Bleckley Dr.	109+06.46 to 109+09.38	LT	24.3
	S Bleckley Dr.	109+98.24 to 110+13.22	LT	40.7
*	S. Bleckley Dr.	100+11.36 to 103+42.98	RT.	125.0
	TOTAL			190.0

BRICK PAVERS (REMOVE AND RESET)

STREET	STA. TO STA.	SIDE	BRICK PAVERS (REMOVE AND RESET)
			SQ. YD.
S Bleckley Dr.	101+40.36 to 101+43.52	LT	1.8
TOTAL			1.8

MULCH

	STREET	STA. TO STA.	SIDE	MULCH (4")
				CU. YD.
*	S. Bleckley Dr.	100+11.36 to 103+42.98	RT.	1.5
	TOTAL			1.5

* QUANTITY FOR THE POTENTIAL SIDEWALK REPLACEMENT ON THE VA PROPERTY. CONTRACTOR TO COORDINATE REMOVAL WITH CITY OF WICHITA AND BOB DOLE VA STAFF.

DRAINAGE PIPE AND STRUCTURES

ALIGNMENT	STA.	SIDE	PIPE, SWS 15" (RCP)	PIPE, SWS 18" (RCP)	PIPE, SWS 24" (RCP)	PIPE, SWS 6" (PVC)	PIPE, SWS 8" (PVC)	INLET, CURB (TYPE 1) (L=10', W=3')	INLET, CURB (TYPE 1) (L=10', W=4')	REMARKS
			LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.		EACH	
S Bleckley Dr.	109+67.45 to 109+96.69	LT		36.1	-			1	1	
S Bleckley Dr.	109+76.84 to 109+96.69	LT		-	82.7				-	
								-		
Channel	203+68.97	RT		4.0	-			-	-	CONCRETE PIPE EXTENSION, CONNECT TO EXISTING
Channel	205+04.06	RT		-	-	8.4		-	-	PVC PIPE EXTENSION, CONNECT TO EXISTING
Channel	205+39.35	RT		-	-		6.0	-	-	PVC PIPE EXTENSION, CONNECT TO EXISTING
Channel	205+94.14	RT		4.0	-			-	-	CONCRETE PIPE EXTENSION, CONNECT TO EXISTING
Channel	207+32.75	RT	6.1	-	-			-	-	CONCRETE PIPE EXTENSION, CONNECT TO EXISTING
Channel	208+95.98	RT		4.0	-			-	-	CONCRETE PIPE EXTENSION, CONNECT TO EXISTING
TOTAL			6.1	48.1	82.7	8.4	6.0	1	1	

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CITY OF WICHITA

KRISTY SKAGGS LICENSED 29958 01/27/2025 KANSAS PROFESSIONAL ENGINEER

BLECKLEY - PAVING & INCIDENTAL DRAINAGE IMPROVEMENTS

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO.
458-2022-085521

Issue:		

JOB NO.	220018-003
DATE	JANUARY 2025
PM	BMM
DESIGNED BY	KMS
DRAWN BY	CP
CHECKED BY	BMM

PAVING - SUMMARY OF QUANTITIES

CQ101
51 OF 73

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1114000	**Mobilization**	1	LS
1143000	**Dewatering**	1	ls
1211000	**Site Clearing**	1	LS
1212000	**Site Restoration**	1	LS
---	**Temporary Mailbox**	1	ea
---	**Recovery Day (Set Price)**	25	ea
1230000	**Excavation**	877	cy
1221000	**Fill, Compacted (95% Density)**	41	cy
2246400	**Concrete C & G, Type 4 (6-5/8" & 1-1/2") (Special)**	989	lf
2246400	**Concrete C & G, Type 4 (6-5/8" & 1-1/2")**	111	lf
2247300	**Concrete Curb, Mono Edge (6-5/8" & 1-1/2")**	197	lf
2248206	**Concrete Driveway 6" (Unreinforced)**	2,201	sf
2440007	**Concrete Pavement (VG) 7" (Reinf)**	283	sy
2430006	**Concrete Pavement 6" (Reinf)**	3,076	sy
2263005	**Crushed Rock Base 5", Reinforced**	3,810	sy
2255004	**Concrete Sidewalk 4"**	190	sf
9043000	**Mulch**	2	cy
2221000	**Brick Pavers Removed and Reset**	2	sy
4580008	**Pipe, WL 8" RJ**	90	lf
4580008	**Pipe, WL 8" DI RJ**	24	lf
---	**8"x8" Tapping Sleeve, Valve, and 6" Valve Box**	1	ea
4520008	**Pipe, CIMJ Plug 8"**	1	ea
4505000	**Pipe, Connect to Existing**	1	ea
7512000	**Fire Hydrant Relocation**	1	ea
---	**8" Waterline Adjustment**	1	LS
5511023	**Inlet, Curb (Type 1) (L=10', W=3')**	1	ea
5511024	**Inlet, Curb (Type 1) (L=10', W=4')**	1	ea
4560015	**Pipe, SWS 15" (RCP)**	6	lf
4560018	**Pipe, SWS 18" (RCP)**	48	lf
4560024	**Pipe, SWS 24" (RCP)**	83	lf
4560006	**Pipe, SWS 6" (PVC)**	8	lf
4560008	**Pipe, SWS 8" (PVC)**	6	lf
--	**Pipe, Connect to Existing, Storm Sewer**	6	ea
1228000	**Fill, Sand (Flushed & Vibrated)**	119	lf
6510500	**MH Adjusted, SS**	4	ea
1260000	**Fence (Installed)**	1,151	lf
---	**Mow Strip**	1,151	lf
1264000	**Fence Removed & Reset**	11	lf
904200	**Sodding (Buffalo)**	0.22	ac
904200	**Sodding (Bermuda)**	0.15	ac
8820000	**Signing, Remove and Reset**	1	LS
8710000	**Pavement Markings (Permanent)**	1	LS
8710000	**Pavement Markings (Temporary)**	1	LS
8810000	**Traffic Control**	1	LS
1240000	**Concrete Safety Barrier**	1,134	lf
9052000	**Tree Removed, Large**	1	ea
1612000	**BMP, Curb Inlet Protection**	2	ea
---	**Rock Check Dam**	2	ea
1610000	**BMP, Back of Curb Protection**	2,232	lf
1617000	**BMP, Silt Fence**	1,148	lf
9033000	**Seeding, Temporary**	1	LS
---	**Temporary Construction Fence**	1,205	lf
1230000	**Class III Excavation**	10,860	cy
2410000	**Concrete (Grade 4.0)(AE)**	2,346	cy
---	**Concrete (Grade 4.0)(AE)(Slope Paving)**	699	cy
---	**Fiber Reinforced Concrete Slope Paving**	19	cy
---	**Granular Backfill**	2,059	cy
1281000	**Reinforcing Steel (Grade 60) (Epoxy Coated)**	286,780	lbs
1201000	**Removal of Existing Structures**	1	LS
1130000	**Shoring, Temporary**	1	LS
1229000	**Select Soil (Contractor Furnished)**	890	cy
---	**Retaining Wall Drainage System**	1,123	sy
---	**Slope Paving Drainage System**	805	sy
1228000	**Sand Fill**	7	cy

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CITY OF WICHITA

KRISTY SKAGGS
LICENSED
29958
01/27/2025
KANSAS
PROFESSIONAL ENGINEER

BLECKLEY - PAVING & INCIDENTAL DRAINAGE IMPROVEMENTS

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO.
458-2022-085521

Issue:		

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CHECKED BY	BMM

RECAPITULATION OF QUANTITIES

CQ102
52 OF 73

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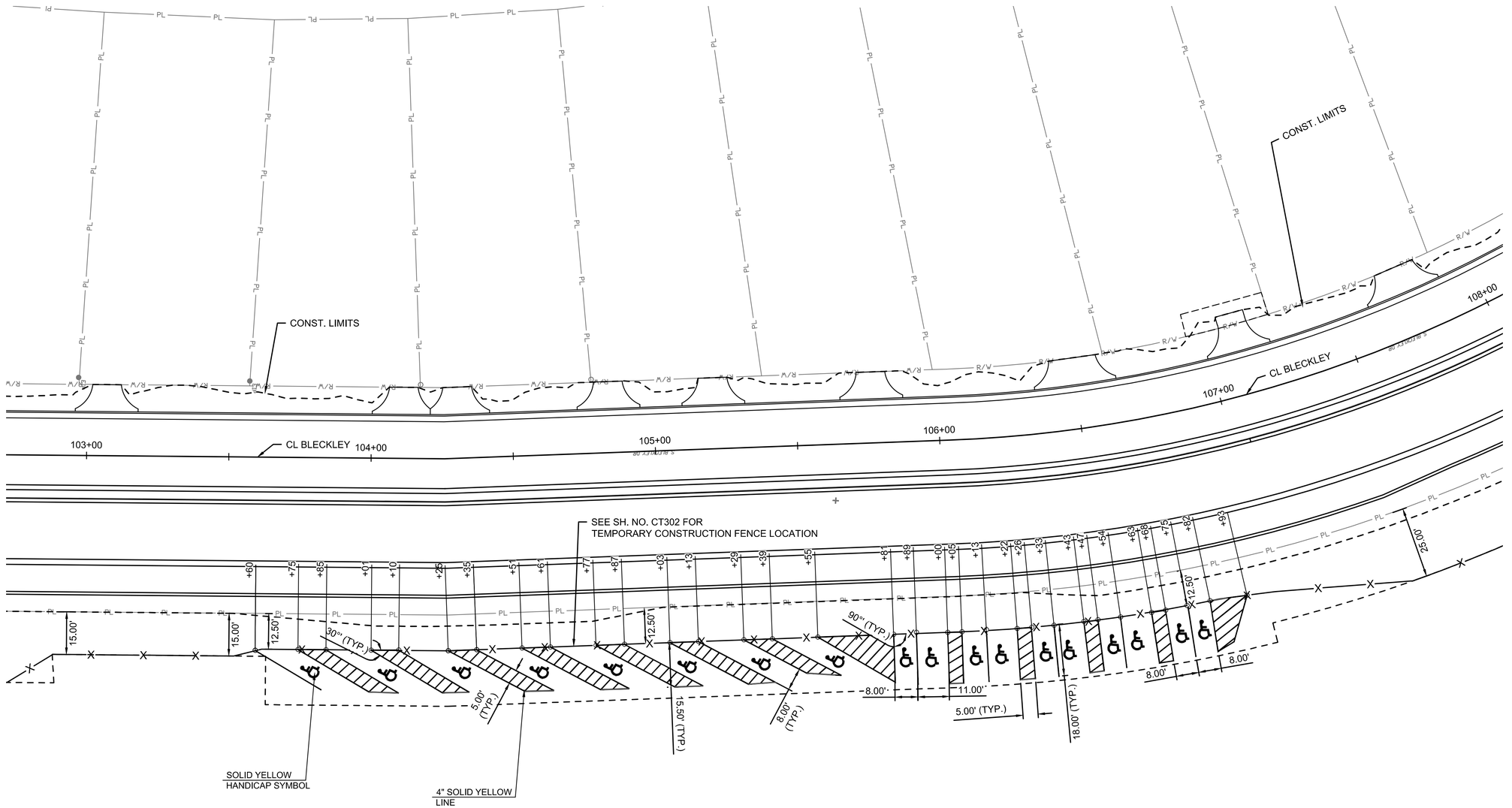

NOTE:
ALL WORK ASSOCIATED WITH TEMPORARY PAVEMENT MARKING SHALL BE PAID AS "PAVEMENT MARKINGS (TEMPORARY)".
ALL PERMANENT PAVEMENT MARKING SHALL BE RESTORED TO EXISTING DIMENSIONS AND COLOR AS SHOWN ON SH. NO. CT303.
COORDINATE WITH BOB DOLE VA STAFF. CONTACT CONRAD PIERCE (316) 210-5361 FOR COORDINATION. ALL WORK ASSOCIATED WITH PERMANENT PAVEMENT MARKING SHALL BE PAID AS "PAVEMENT MARKINGS (PERMANENT)".

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VA TEMPORARY PAVEMENT MARKING

CT301
53 OF 73

SAVED 1/23/2025 5:05:59 PM BY MADISON.SCHOEMANN
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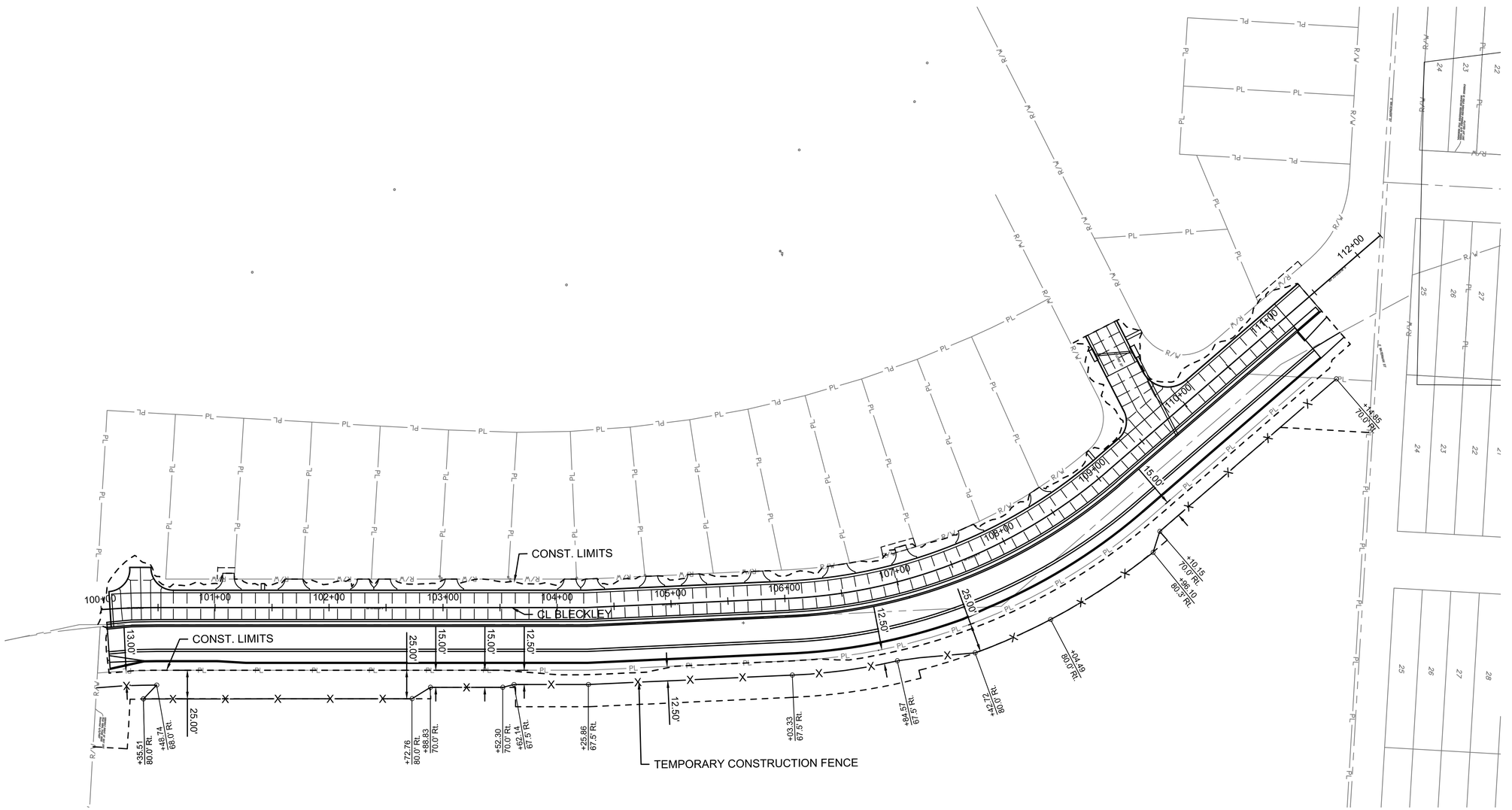

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VA TEMPORARY CONSTRUCTION FENCE

CT302
54 OF 73

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SCALE IN FEET
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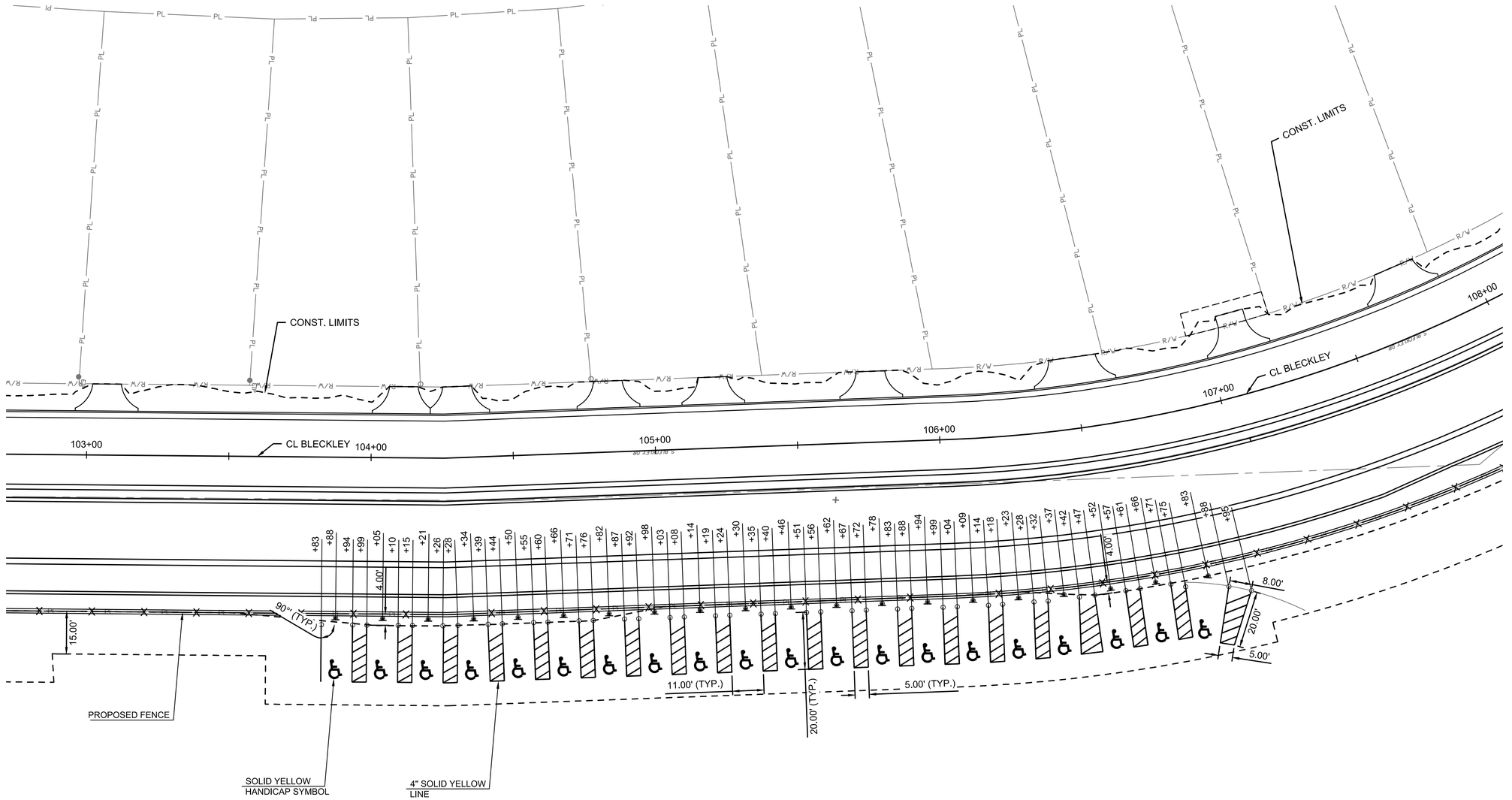

NOTES:
COORDINATE WITH BOB DOLE VA STAFF. CONTACT CONRAD PIERCE (316) 210-5361 FOR COORDINATION. ALL WORK ASSOCIATED WITH PERMANENT PAVEMENT MARKING SHALL BE PAID AS "PAVEMENT MARKINGS (PERMANENT)".

EXISTING SIGNING TO BE RESET AS SHOWN. TO BE PAID AS "SIGNING, REMOVE AND RESET".

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BLECKLEY - PAVING & INCIDENTAL DRAINAGE IMPROVEMENTS

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO.
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VA PERMANENT
PAVEMENT MARKING

CT303
55 OF 73

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THE SEQUENCE SHOWN IS INTENDED AS A GUIDE FOR MAJOR ITEMS ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF ALL MINOR ITEMS. VARIATIONS TO THE SEQUENCE SHOWN MAY BE USED AS APPROVED BY THE ENGINEER. REGARDLESS OF THE SEQUENCE USED, TRAFFIC HANDLING SHALL BE ESSENTIALLY IN ACCORDANCE WITH THAT SHOWN. PART OF THE WORK SHOWN FOR A SPECIFIC STAGE MAY BE ACCOMPLISHED IN OTHER STAGES. MAJOR WORK NOT CONSTRUCTED WITHIN THE INDICATED STAGE SHALL BE APPROVED BY THE ENGINEER.

TRAFFIC CONTROL FOR ALL CONSTRUCTION ACTIVITIES SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) FOR STREETS AND HIGHWAYS (LATEST EDITION).

TEMPORARY STRIPING SHOWN ON NEW ROADWAYS BEING USED TO CARRY DIVERTED TRAFFIC DURING CONSTRUCTION SHALL BE APPLIED BEFORE PLACEMENT OF THE FINAL SURFACE COURSE. PRIOR TO THE FINAL OPENING, THE SURFACE COURSE SHALL BE PLACED, COVERING THE TEMPORARY STRIPING.

TEMPORARY PAVEMENT SHALL BE AC TEMPORARY PAVEMENT 6". THIS BID ITEM SHALL INCLUDE CONSTRUCTION OF PAVEMENT INCLUDING SUBGRADE PREPARATION, AC PLACEMENT, ALL COSTS INCURRED TO PROPERLY MAINTAIN THE TEMPORARY PAVEMENT WHEN NO LONGER NEEDED.

INSTALLATION AND REMOVAL OF TEMPORARY DRAINAGE AND ENTRANCE PIPES AS SHOWN ON THE TRAFFIC CONTROL PLANS WILL NOT BE MEASURED OR PAID FOR SEPARATELY BUT SHALL BE CONSIDERED SUBSIDIARY TO THE CONTRACT LUMP SUM PRICE BID FOR "TRAFFIC CONTROL".

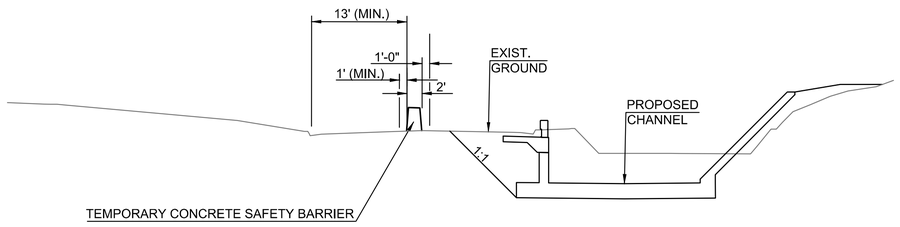
ADDITIONAL SIGNS, BARRICADES, AND ANY OTHER TRAFFIC CONTROL DEVICES NOT SHOWN ON THE PLANS WHICH MAY BE DEEMED NECESSARY BY THE ENGINEER FOR TRAFFIC CONTROL DURING CONSTRUCTION WILL NOT BE MEASURED OR PAID FOR SEPARATELY, BUT SHALL BE SUBSIDIARY TO THE CONTRACT LUMP SUM PRICE BID FOR "TRAFFIC CONTROL".

ALL ROAD CLOSURE TIMES SHALL BE MINIMIZED AND APPROVED BY THE ENGINEER.

THE CONTRACTOR SHALL PROVIDE ALL WEATHER ACCESS DRIVES TO ALL PROPERTIES ADJACENT TO THE PROJECT. ALL COSTS ASSOCIATED WITH PROVIDING ACCESS TO ADJACENT PROPERTIES DURING CONSTRUCTION SHALL BE INCLUDED IN THE CONTRACT LUMP SUM PRICE BID FOR "TRAFFIC CONTROL".

THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL PROPERTIES DURING CONSTRUCTION.

LOCATION	MAJOR CONSTRUCTION ITEMS	HANDLING OF TRAFFIC	REMARKS
STAGE 1	DEMO EXISTING CHANNEL AND NORTHBOUND LANE OF EXISTING ROADWAY. NORTHBOUND LANE TO REMAIN AS NECESSARY FOR CONCRETE SAFETY BARRIER.	1-LANE LOCAL TRAFFIC ONLY	MAINTAIN ACCESS TO PROPERTIES AT ALL TIMES.
STAGE 2	CONSTRUCT CHANNEL (DOWNSTREAM TO UPSTREAM) AND INCIDENTAL DRAINAGE IMPROVEMENTS	1-LANE LOCAL TRAFFIC ONLY	MAINTAIN ACCESS TO PROPERTIES AT ALL TIMES.
STAGE 3	CONSTRUCT NORTHBOUND ROADWAY IMPROVEMENTS	1-LANE LOCAL TRAFFIC ONLY	MAINTAIN ACCESS TO PROPERTIES AT ALL TIMES.
STAGE 4	CONSTRUCT SOUTHBOUND ROADWAY IMPROVEMENTS AND LEWIS ST.	1-LANE LOCAL TRAFFIC ONLY	MAINTAIN ACCESS TO PROPERTIES AT ALL TIMES.
STAGE 5	FINAL GRADING, SODDING, CLEANUP, AND OTHER MISCELLANEOUS ITEMS	2-WAY TRAFFIC	LANE CLOSURE WITH USE OF FLAGGERS WILL BE PERMITTED DURING DAYLIGHT HOURS WITH THE APPROVAL OF THE ENGINEER



TYPICAL SECTION - CONCRETE BARRIER
STA. 100+10.08 TO STA. 111+44.00

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BLECKLEY - PAVING & INCIDENTAL DRAINAGE IMPROVEMENTS

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO.
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CONSTRUCTION SEQUENCE & TRAFFIC HANDLING

CT110
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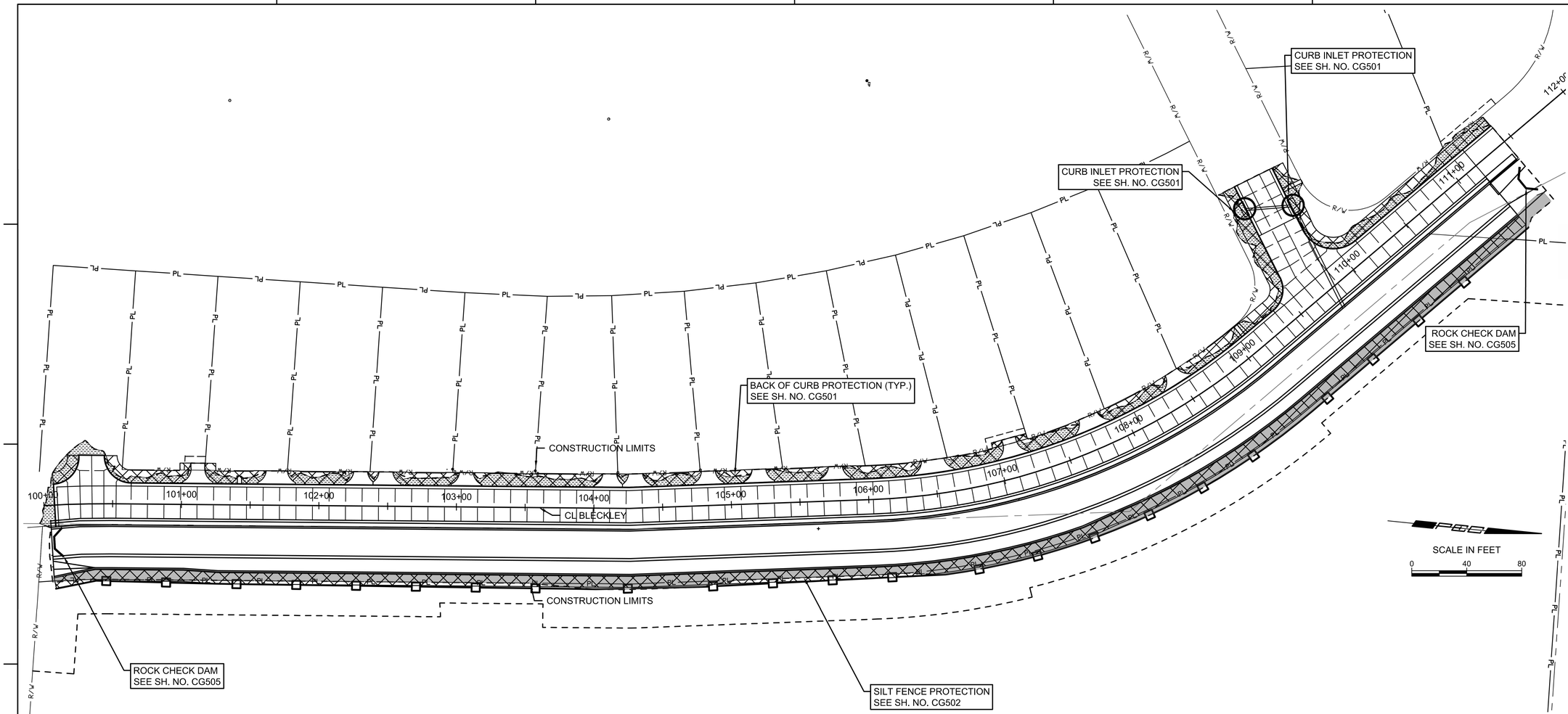

GENERAL NOTES

1. CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION PROTECTION THROUGHOUT THE ENTIRE PROJECT. THE FOLLOWING QUANTITIES ARE PROVIDED FOR THE PROJECT.

PAVING AND DRAINAGE		
CURB INLET PROTECTION	2	EACH
ROCK CHECK DAM	2	EACH
BACK OF CURB PROTECTION	2,232	L.F.
SILT FENCE PROTECTION	1,148	L.F.
TEMPORARY SEEDING	0.37	ACRES
BUFFALO SOD *	0.22	ACRES
BERMUDA SOD *	0.15	ACRES

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.

*SODDING INSTALLATION TO BE CONTINGENT UPON CURRENT DROUGHT STATUS. CONTRACTOR TO COORDINATE WITH CITY STAFF.

EROSION CONTROL LEGEND

- PROPOSED SILT FENCE
- PROPOSED CURB INLET PROTECTION
- PROPOSED AREA INLET PROTECTION
- PROPOSED ROCK CHECK DAM
- PROPOSED BACK OF CURB PROTECTION
- PROPOSED STABILIZED CONSTRUCTION ENTRANCE
- BUFFALO SOD
- BERMUDA SOD

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EROSION CONTROL PLANS

CG101
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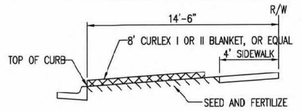
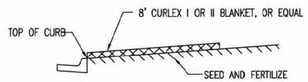
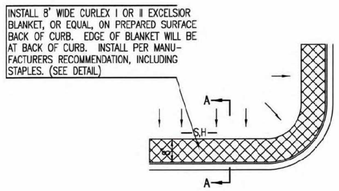


SECTION B–B



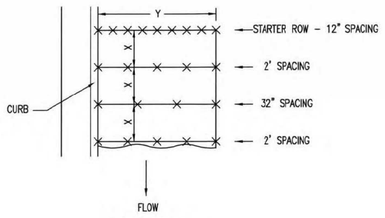
SECTION A–A

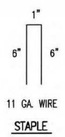


GENERAL NOTES

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



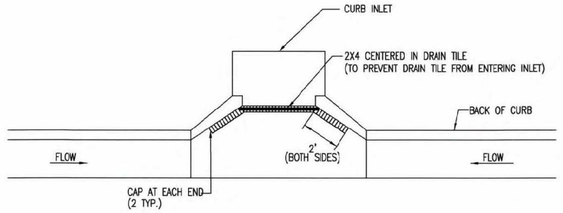


STAPLE

STAPLE PATTERN

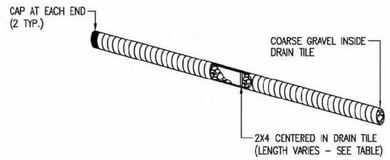
NOTES: USE 6" SEAM OVERLAP
(X & Y = RECOMMENDED BY MANUFACTURE)

DETAILS FOR APPROVED EROSION CONTROL MAT



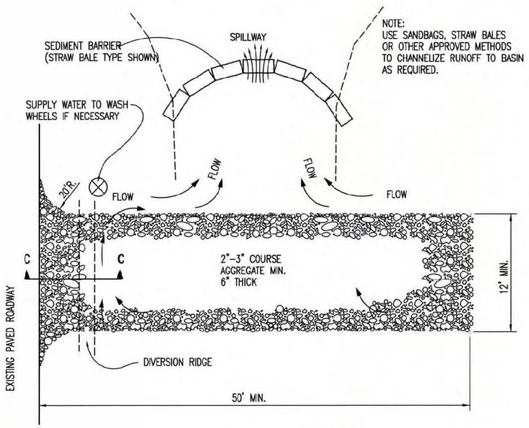
NOTE:
PLACE 4" PERFORATED PVC PIPE, FILLED WITH 1/2"–1" DIA. GRAVEL, IN FRONT OF CURB INLET AS SHOWN.

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 — 29958 — KANSAS — PROFESSIONAL ENGINEER
05/2, 13

CITY OF WICHITA
PUBLIC WORKS & UTILITIES ENGINEERING DIVISION

BACK OF CURB PROTECTION, CURB INLET PROTECTION AND CONSTRUCTION ENTRANCE

CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER	OCA NUMBER	DATE
___–____	____	

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

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

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CITY OF WICHITA

KRISTY SKAGGS — LICENSED — 29958 — 01/27/2025 — KANSAS — PROFESSIONAL ENGINEER

BLECKLEY - PAVING & INCIDENTAL DRAINAGE IMPROVEMENTS

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO.
458-2022-085521

Issue:		

JOB NO.	220018-003
DATE	JANUARY 2025
PM	BMM
DESIGNED BY	KMS
DRAWN BY	CP
CHECKED BY	BMM

BACK OF CURB PROTECTION STANDARDS

CG501
58 OF 73

SAVED 11/20/2024 8:38:34 AM BY KRISTY.SKAGGS
PLOTTED 1/25/2025 11:57:23 AM BY KRISTY SKAGGS
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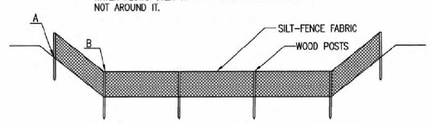
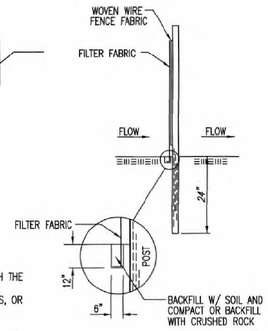
NOTE: POINT A MUST BE HIGHER THAN POINT B SO THAT WATER FLOWS OVER THE SILT FENCE FABRIC AND NOT AROUND IT.



ELEVATION

SILT FENCE DITCH CHECKS
(STREAM PROTECTION)



ANCHOR TRENCH DETAIL

MATERIAL SPECIFICATION:

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

PLACEMENT:

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

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

DITCH GRADE (%)	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.

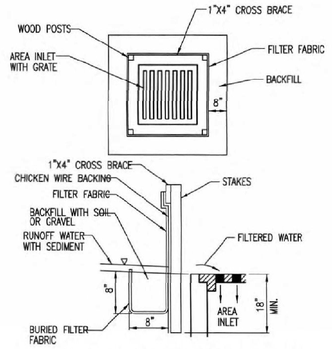
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

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 BEHIND THE DITCH CHECKS.
DO NOT ALLOW WATER TO FLOW AROUND THE DITCH CHECK. MAKE SURE THAT THE DITCH CHECK IS LONG ENOUGH SO THAT THE GROUND LEVEL AT THE ENDS OF THE FENCE IS HIGHER THAN THE LOW POINT ON THE TOP OF THE FENCE.
DO NOT PLACE SILT FENCE DITCH CHECKS IN CHANNELS WITH SHALLOW SOILS UNDERLAIN BY ROCK. IF THE CHECK IS NOT ANCHORED SUFFICIENTLY, IT WILL WASH OUT.

INSPECTION AND MAINTENANCE:

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

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



SILT FENCE BARRIERS FOR AREA INLETS
(INLET PROTECTION)

MATERIAL SPECIFICATION:

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

PLACEMENT:

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

PROPER INSTALLATION METHOD:

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

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

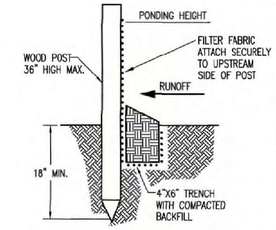
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

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

INSPECTION AND MAINTENANCE:

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

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



SILT FENCE BARRIERS

MATERIAL SPECIFICATION:

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

PLACEMENT:

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

PROPER INSTALLATION METHOD:

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

LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

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

INSPECTION AND MAINTENANCE:

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

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

REVISION DATE: MAY 2013

GARY L. JANZEN LICENSED 19294 PROFESSIONAL ENGINEER KANSAS
05/24/13

CITY OF WICHITA
PUBLIC WORKS & UTILITIES ENGINEERING DIVISION

SILT FENCE DITCH CHECK AND BARRIER DETAILS

CITY ENGINEER: GARY JANZEN, P.E.

PROJECT NUMBER	OCA NUMBER	DATE
___-____	_____	

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

SHEET: 2 of __

SW-502

PEC
PROFESSIONAL ENGINEERING CONSULTANTS
303 SOUTH TOPEKA
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benesch

CITY OF WICHITA

KRISTY SKAGGS LICENSED 29958 01/27/2025 KANSAS PROFESSIONAL ENGINEER

BLECKLEY - PAVING & INCIDENTAL DRAINAGE IMPROVEMENTS

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO.
458-2022-085521

Issue:		

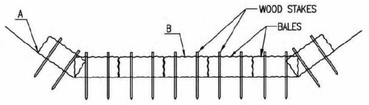
JOB NO.	220018-003
DATE	JANUARY 2025
PM	BMM
DESIGNED BY	KMS
DRAWN BY	CP
CHECKED BY	BMM

SILT FENCE DITCH CHECK STANDARD

CG502
59 OF 73

SAVED 11/20/2024 8:38:34 AM BY KRISTY.SKAGGS
PLOTTED 1/25/2025 11:57:23 AM BY KRISTY SKAGGS
U:\WICHITA-CIVIL\2022\220018\003\PEC\DRAWINGS\220018-003-CG501.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".

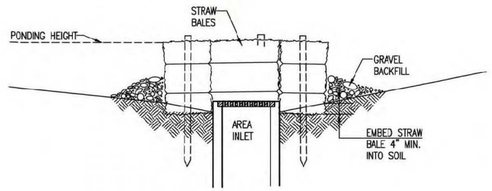
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

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.

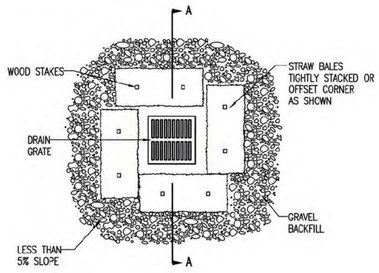
INSPECTION AND MAINTENANCE:

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.

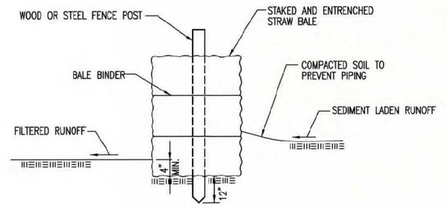
LIST OF COMMON PLACEMENT INSTALLATION MISTAKES TO AVOID:

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 PROFESSIONAL ENGINEER 19894 KANSAS 01.21.25

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: ---- of __

SW-503

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CITY OF WICHITA

KRISTY SKAGGS LICENSED PROFESSIONAL ENGINEER 29958 01/27/2025 KANSAS

BLECKLEY - PAVING & INCIDENTAL DRAINAGE IMPROVEMENTS
PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO. 458-2022-085521

Issue:		

JOB NO.	220018-003
DATE	JANUARY 2025
PM	BMM
DESIGNED BY	KMS
DRAWN BY	CP
CHECKED BY	BMM

STRAW BALE DITCH CHECK STANDARD

CG503
60 OF 73

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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.

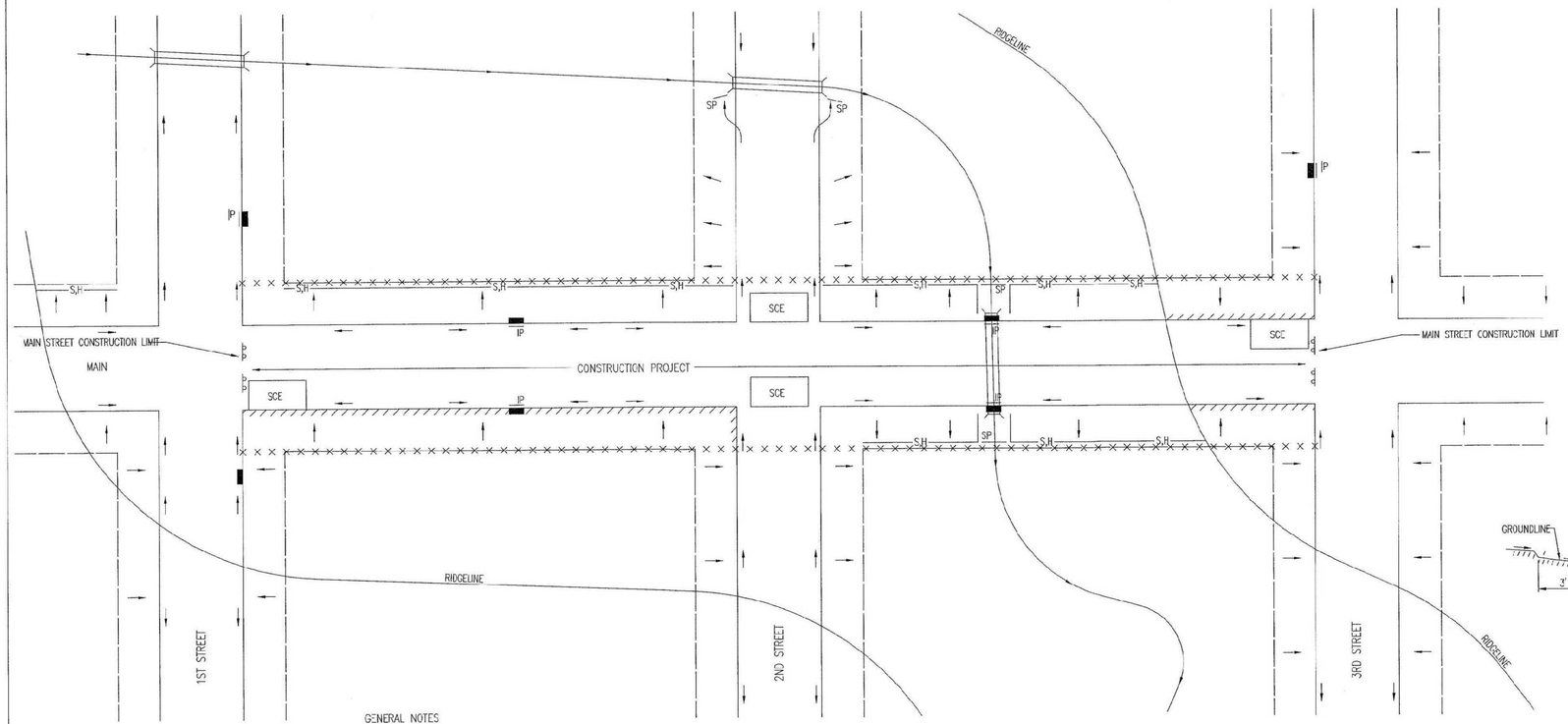
2. EROSION CONTROL DEVICES MUST BE MAINTAINED BY THE CONTRACTOR THROUGHOUT THE CONSTRUCTION PROCESS AND UNTIL THE DISTURBED EARTH IS RESTABILIZED.

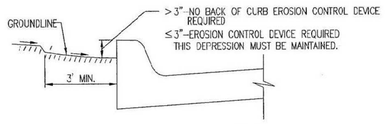
3. IF THE PROJECT WILL DISTURB 1 ACRE OR MORE, A FEDERAL/STATE NPDES STORMWATER PERMIT IS REQUIRED. A DETAILED STORMWATER POLLUTION PREVENTION PLAN, IS REQUIRED. THE EROSION CONTROL DEVICES SHOWN ON THIS SHEET ARE CONSIDERED TO BE THE MINIMUM TO BE SHOWN IN THE POLLUTION PREVENTION PLAN.

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 CONTRO.. 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

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

SHEET 4

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CITY OF WICHITA

KRISTY SKAGGS — LICENSED — 29958 — 01/27/2025 — KANSAS — PROFESSIONAL ENGINEER

BLECKLEY - PAVING & INCIDENTAL DRAINAGE IMPROVEMENTS

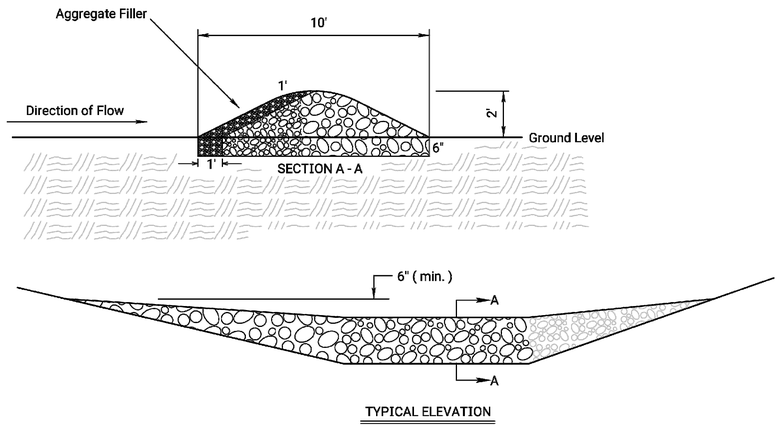
PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO.
458-2022-085521

Issue:		

JOB NO.	220018-003
DATE	JANUARY 2025
PM	BMM
DESIGNED BY	KMS
DRAWN BY	CP
CHECKED BY	BMM

STREET IMPROVEMENT PROJECT STANDARD

CG504
61 OF 73



TYPICAL ELEVATION

ROCK DITCH CHECK

NO SCALE

TEMPORARY ROCK DITCH CHECK SPACING	
DITCH ℄ SLOPE (%)	SPACING INTERVAL (FEET)
5.0	60
6.0	50
7.0	43
8.0	36
9.0	33
10.0	29
NOTE: Use this spacing for Rock Ditch Checks only.	

ROCK DITCH CHECK NOTES

1. Rock shall be clean aggregate, D50-6" and aggregate filler.
2. Place rock in such manner that water will flow over, not around ditch check.
3. Do not use rock ditch checks in clear zone.
4. Excavation: The ditch area shall be reshaped to fill any eroded areas. Prior to placement of the rock, the ditch shall be excavated to the dimensions of the Rock Ditch Check and to a minimum depth of 6" (150mm). After placement of the rock, backfill and compact any over-excavated soil to ditch grade. This work shall be subsidiary to the bid item Temporary Ditch Check (Rock).
5. Aggregate excavated on site may be used as an alternate to the 6" rock, if approved by the Engineer.
6. The Engineer may approve the use of larger aggregates for the downstream portion of the check when conditions warrant their use.
7. When the use of larger rock is approved, D50-6" rock will be placed between the larger aggregate and the aggregate filler.
8. Aggregate filler will be placed on the upstream face of the ditch check. Aggregate filler will comply with Filter Course Type I, Division 1114.

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BLECKLEY - PAVING & INCIDENTAL DRAINAGE IMPROVEMENTS

PAUL GUNZELMAN CITY ENGINEER
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458-2022-085521

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ROCK CHECK DAM STANDARD

CG505
62 OF 73

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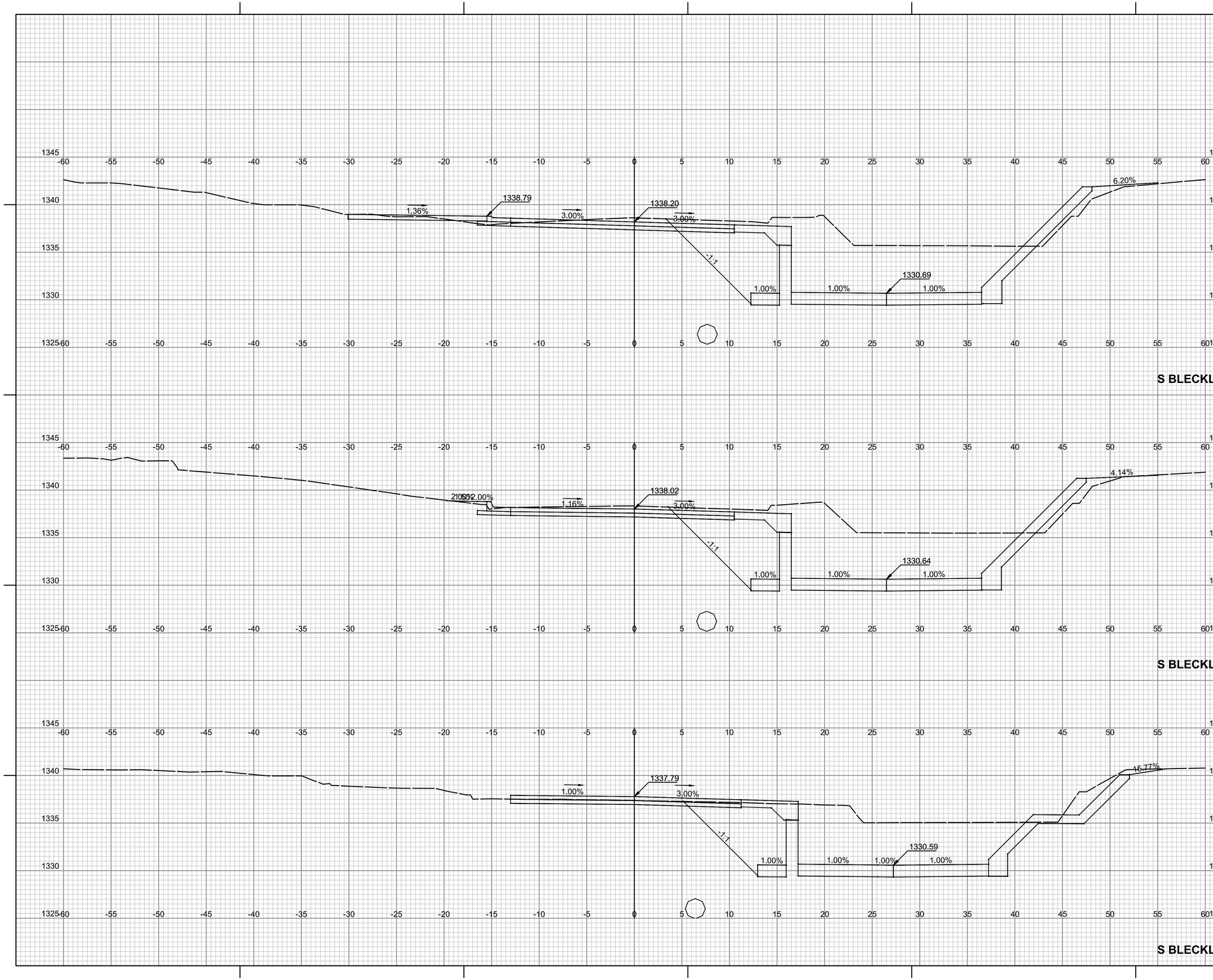

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BLECKLEY - PAVING & INCIDENTAL DRAINAGE IMPROVEMENTS

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BLECKLEY CROSS SECTIONS

CX701
63 OF 73

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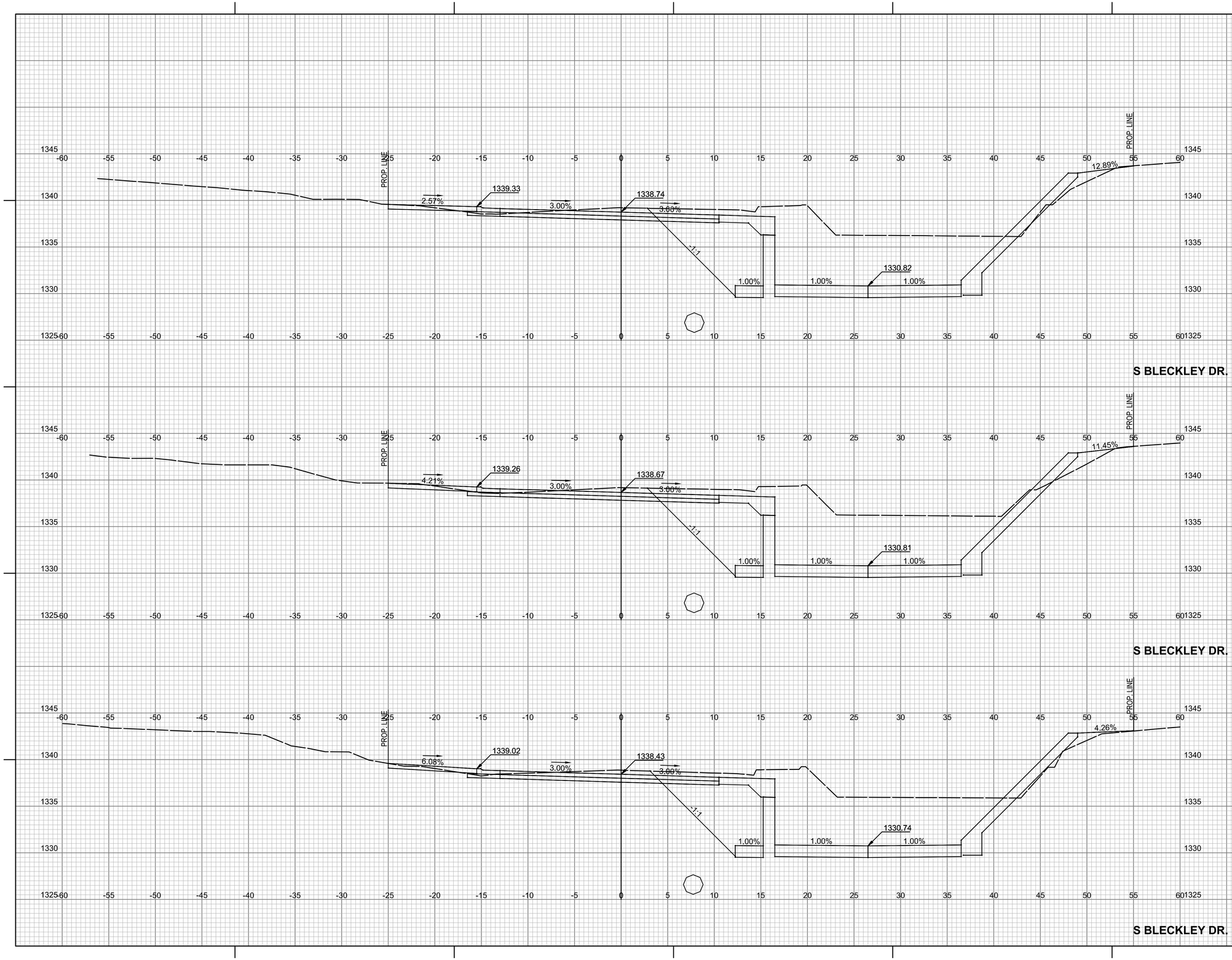

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CITY OF WICHITA

KRISTY SKAGGS
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01/27/2025
KANSAS
PROFESSIONAL ENGINEER

BLECKLEY - PAVING & INCIDENTAL DRAINAGE IMPROVEMENTS

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO.
458-2022-085521

Issue:		

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PM	BMM
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BLECKLEY CROSS SECTIONS

CX702
64 OF 73

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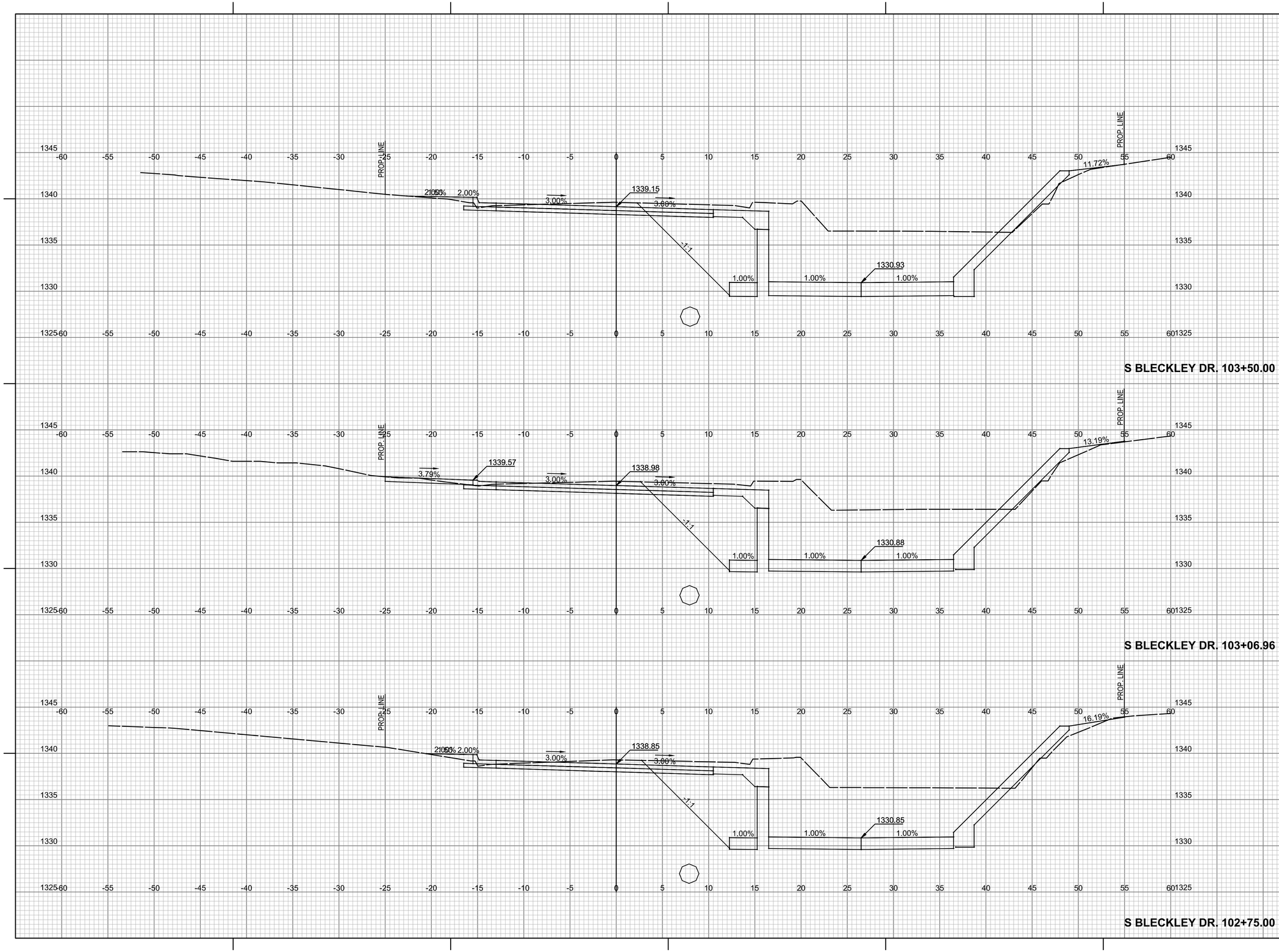

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WICHITA, KS 67202
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CITY OF WICHITA

KRISTY SKAGGS
LICENSED
29958
01/27/2025
KANSAS
PROFESSIONAL ENGINEER

BLECKLEY - PAVING & INCIDENTAL DRAINAGE IMPROVEMENTS

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO.
458-2022-085521

Issue:		

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DATE	JANUARY 2025
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BLECKLEY CROSS SECTIONS

CX703
65 OF 73

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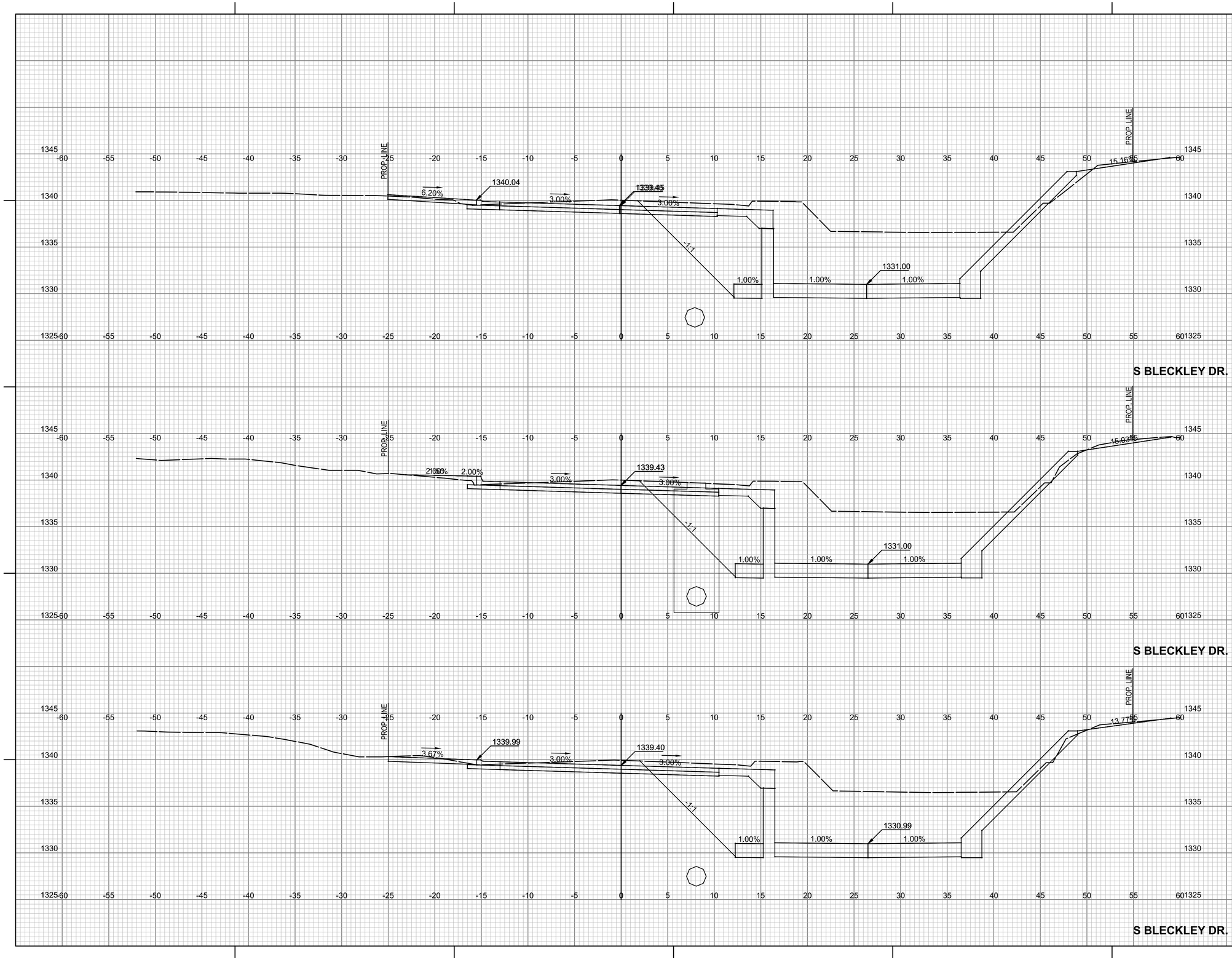

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CITY OF WICHITA

KRISTY SKAGGS
LICENSED
29958
01/27/2025
KANSAS
PROFESSIONAL ENGINEER

BLECKLEY - PAVING & INCIDENTAL DRAINAGE IMPROVEMENTS

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BLECKLEY CROSS SECTIONS

CX704
66 OF 73

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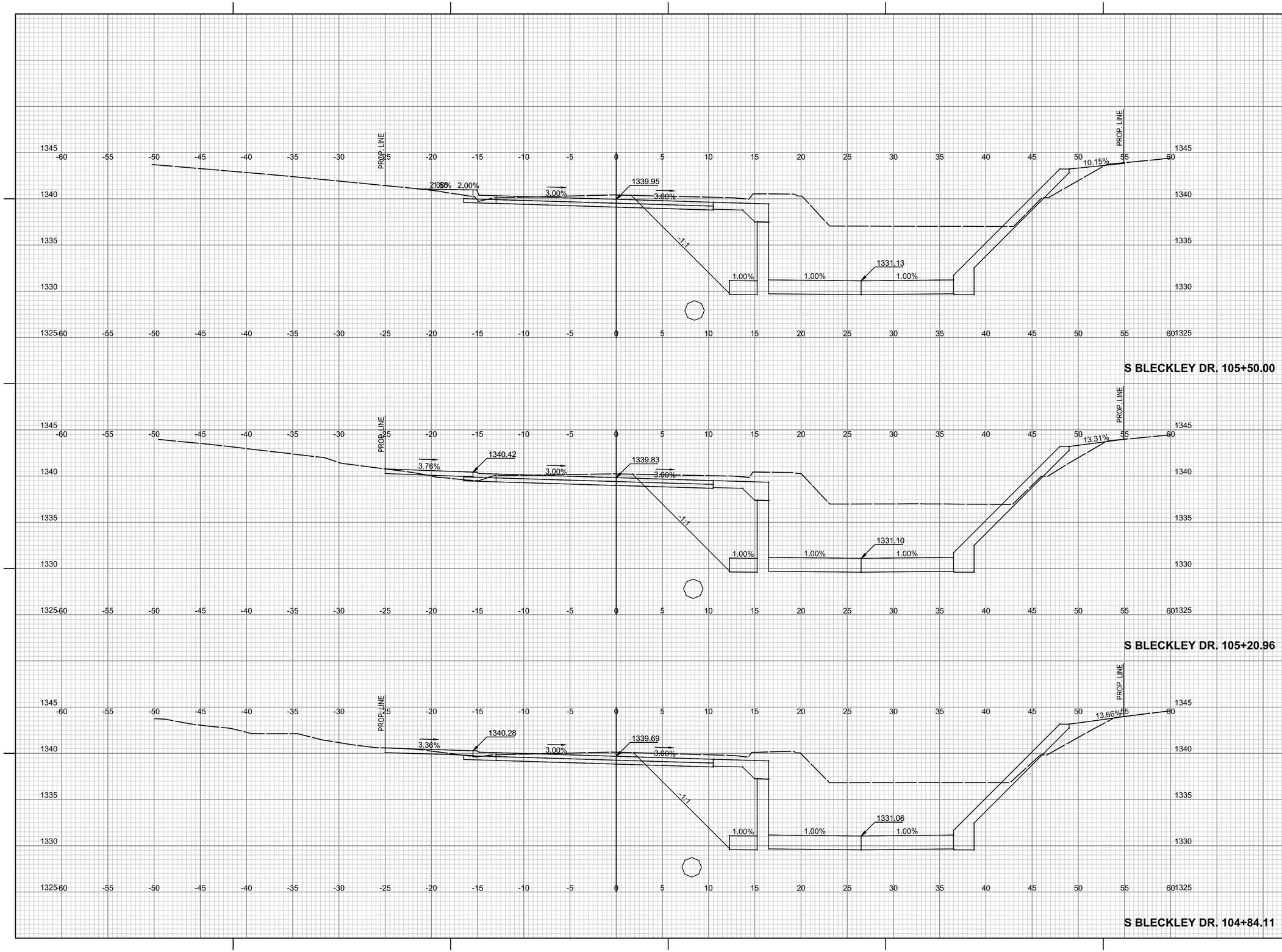

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BLECKLEY - PAVING & INCIDENTAL DRAINAGE IMPROVEMENTS

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458-2022-085521

Issue:	
JOB NO.	220018-003
DATE	JANUARY 2025
PM	BMM
DESIGNED BY	KMS
DRAWN BY	CP
CHECKED BY	BMM

BLECKLEY CROSS SECTIONS

CX705
67 OF 73

SAVED 1/24/2025 6:42:45 AM BY KRISTY.SKAGGS
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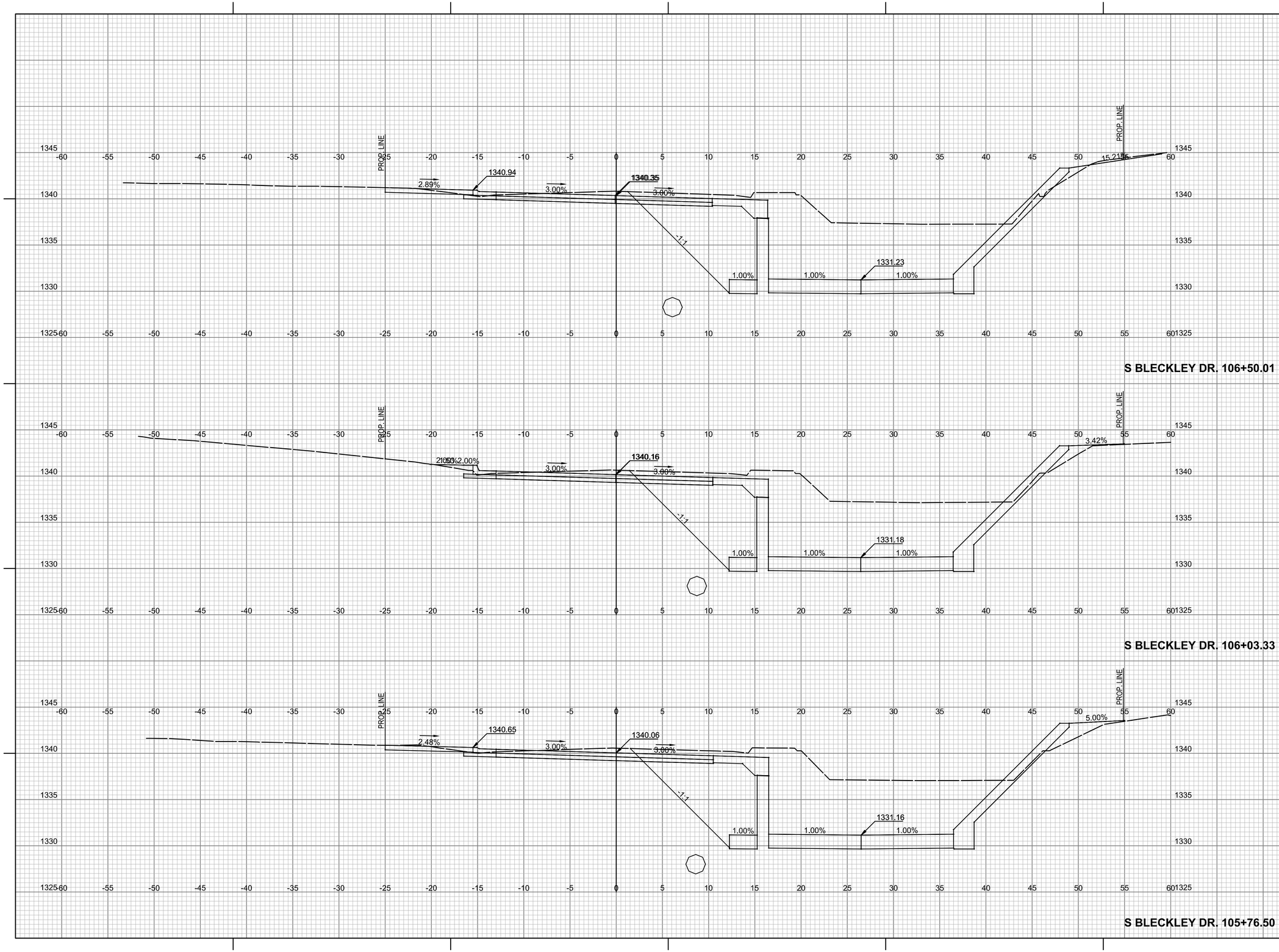

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LICENSED
29958
01/27/2025
KANSAS
PROFESSIONAL ENGINEER

BLECKLEY - PAVING & INCIDENTAL DRAINAGE IMPROVEMENTS

PAUL GUNZELMAN CITY ENGINEER
CITY OF WICHITA PROJECT NO.
458-2022-085521

Issue:		

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BLECKLEY CROSS SECTIONS

CX706
68 OF 73

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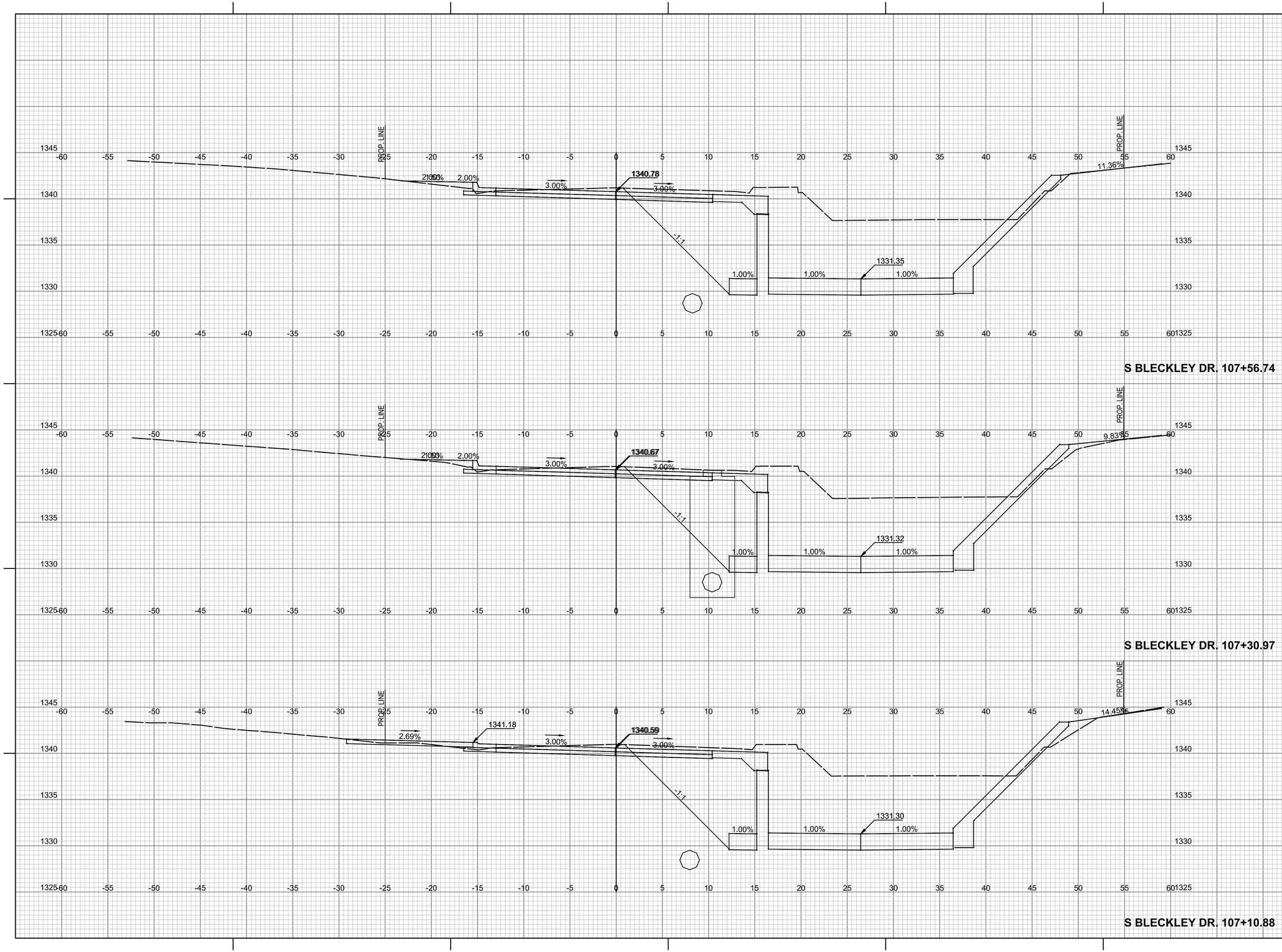

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LICENSED
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BLECKLEY CROSS SECTIONS

CX707
69 OF 73

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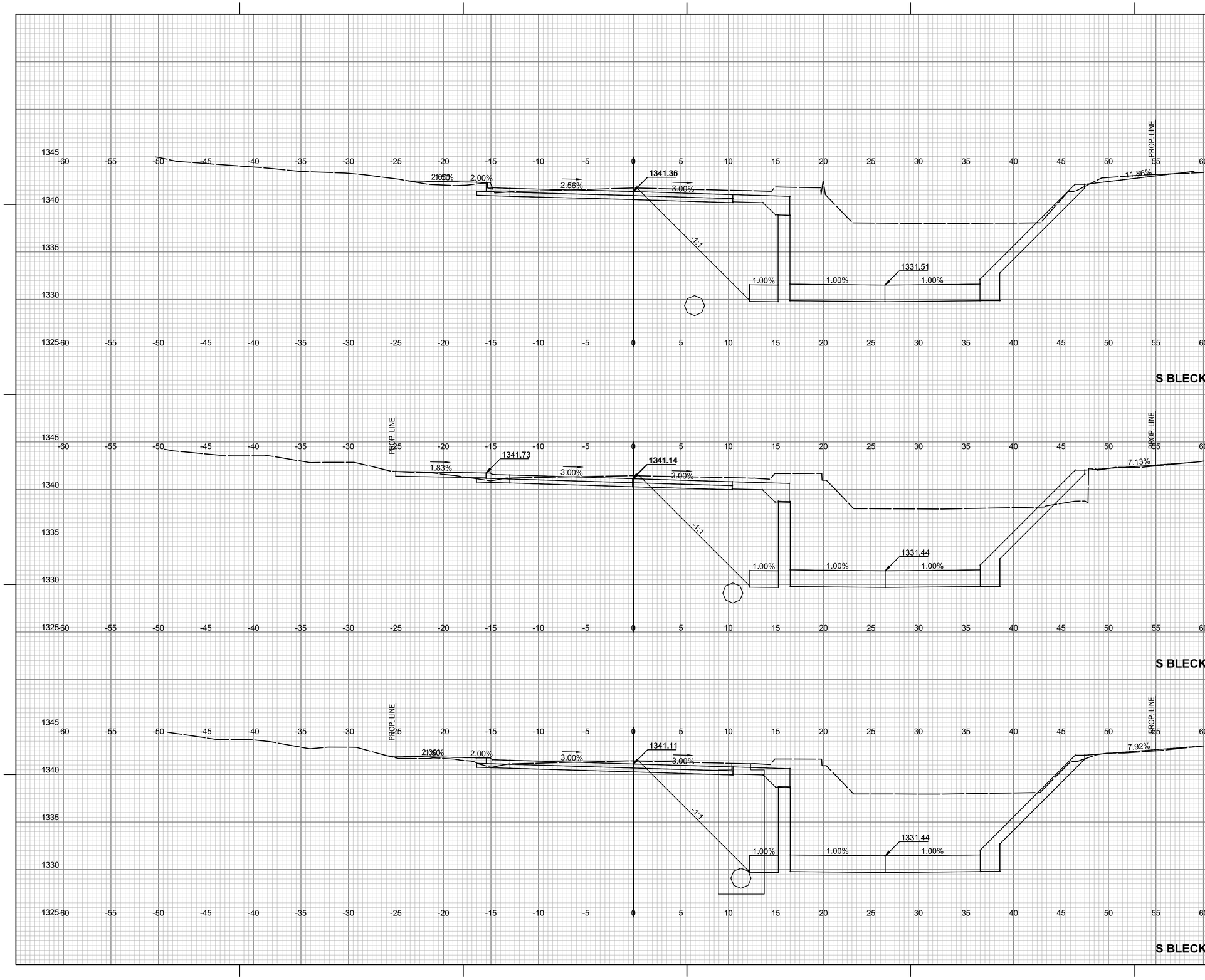

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LICENSED
299558
01/27/2025
KANSAS
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DATE	JANUARY 2025
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BLECKLEY CROSS SECTIONS

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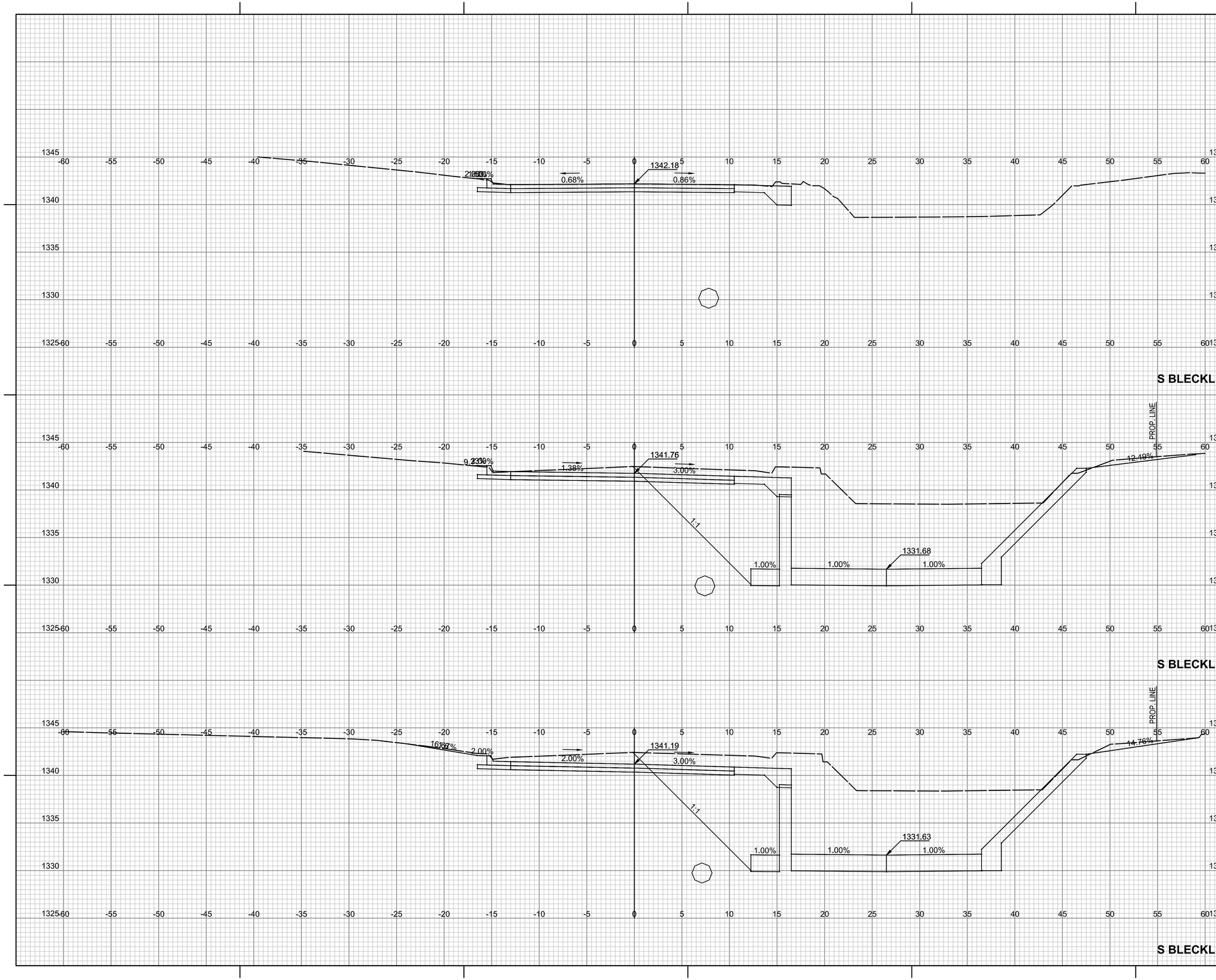

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BLECKLEY CROSS SECTIONS

CX709
71 OF 73

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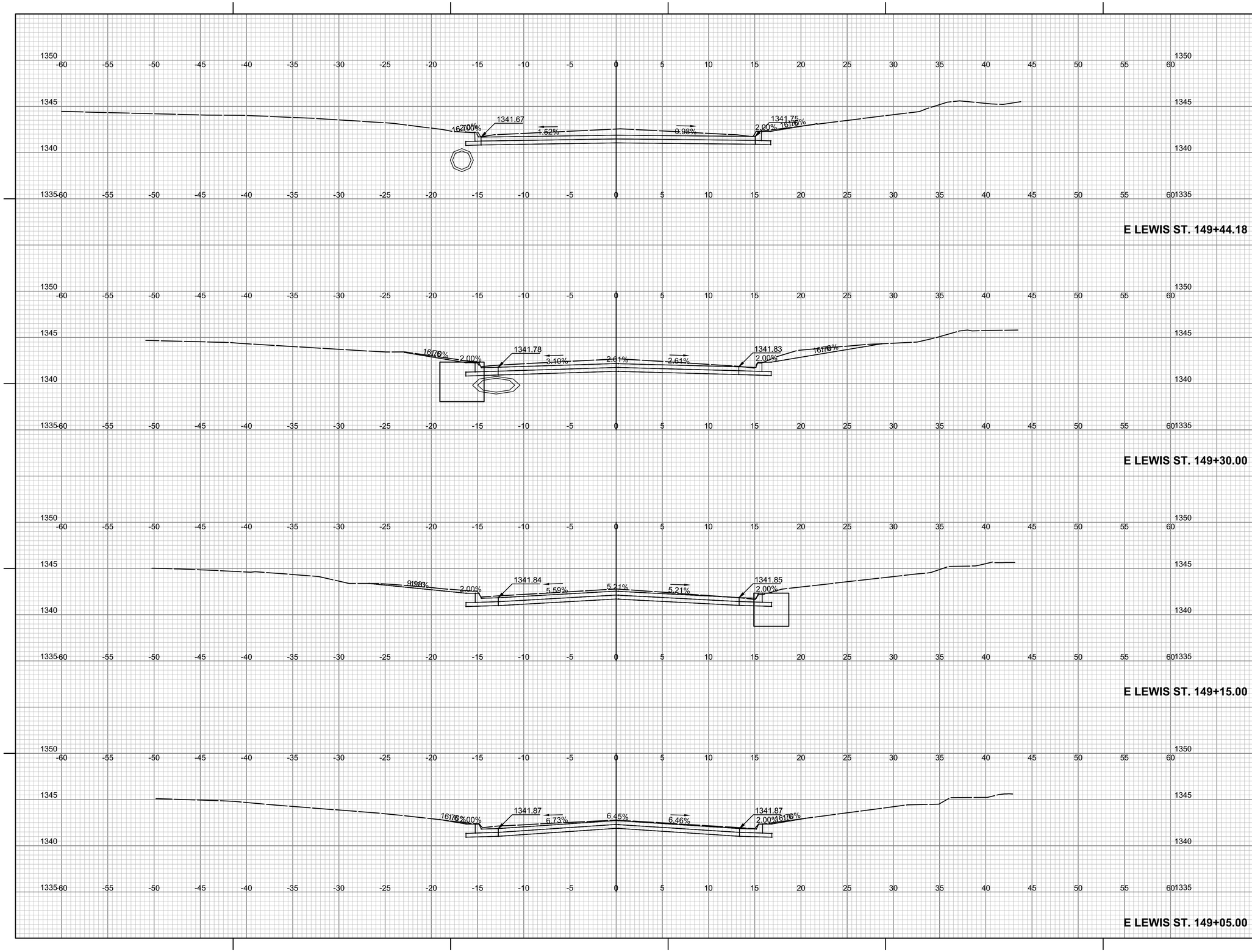

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LEWIS CROSS SECTIONS

CX710
72 OF 73

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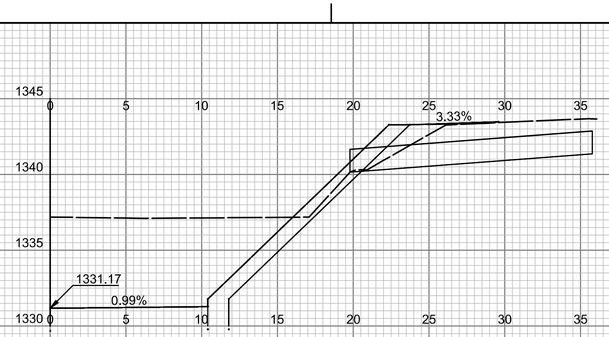

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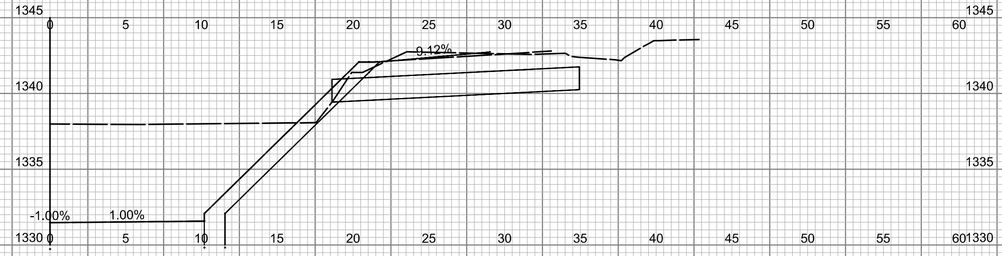
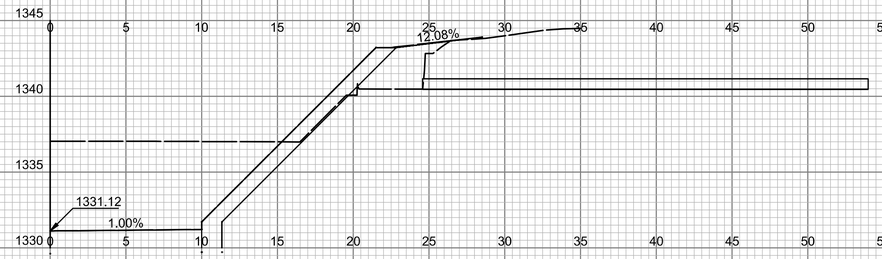


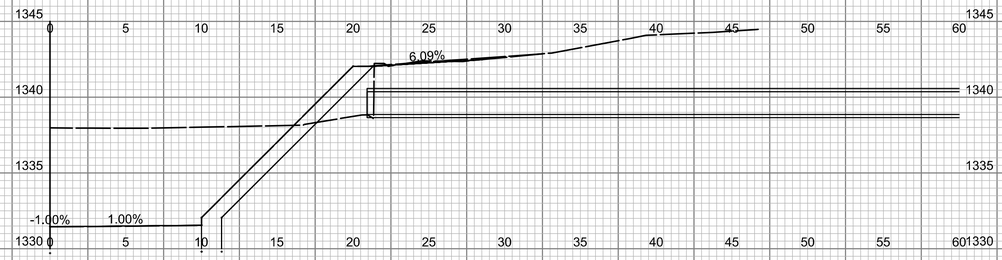
CHANNEL 208+99.59



CHANNEL 205+39.85

CHANNEL 208+94.46

CHANNEL 205+04.69



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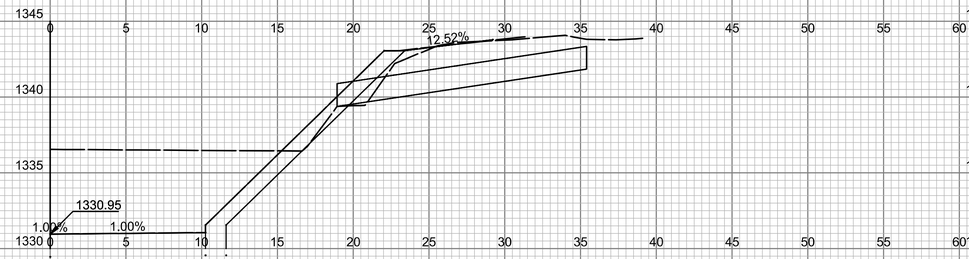
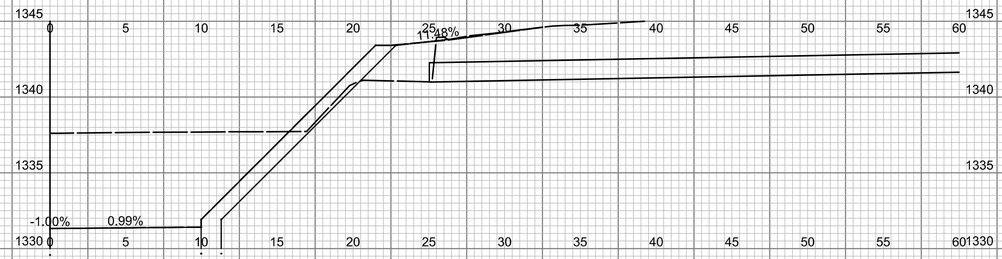


CHANNEL 203+73.13



CHANNEL 207+31.24

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PIPE PENETRATION CROSS SECTIONS

CX711
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PLOTTED 1/25/2025 11:58:36 AM BY KRISTY.SKAGGS
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