

PLOTTED: Tuesday, May 13, 2014 10:02:07 AM



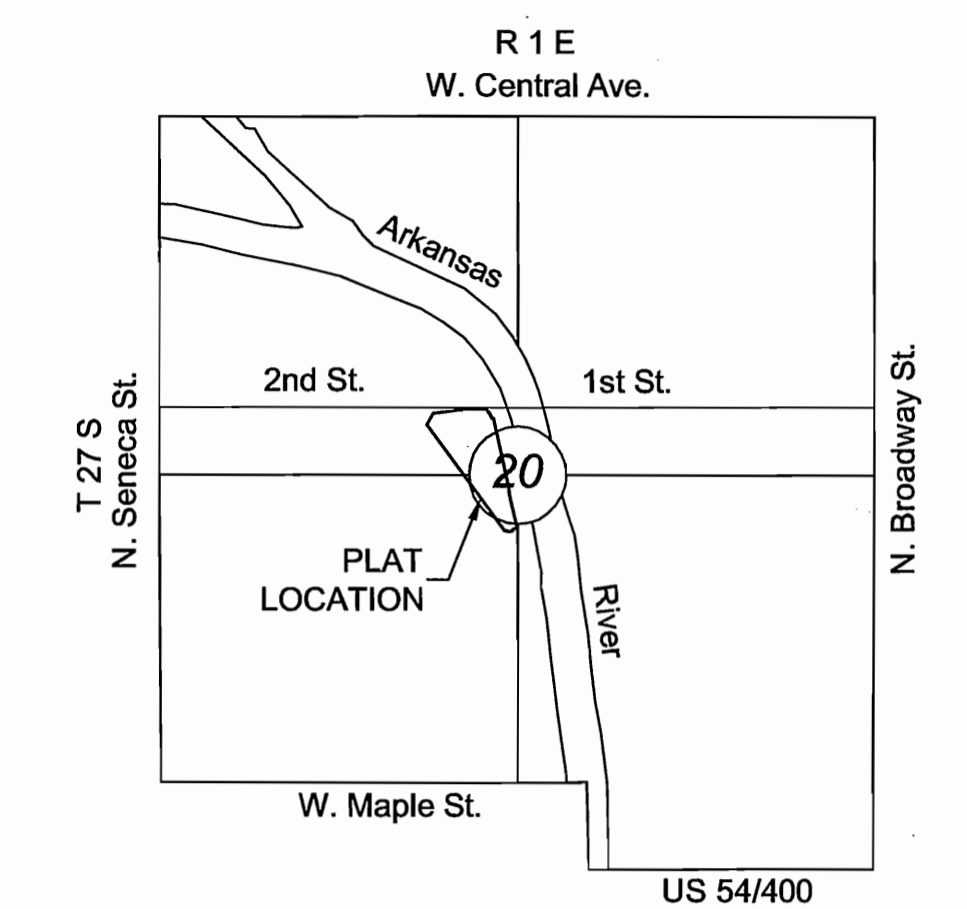
PRIVATE STORM WATER SEWER TO SERVE RIVER VISTA VILLAGE

PROJECT NO. 0229PPD

THE CITY OF WICHITA, KANSAS
GARY JANZEN, P.E. - CITY ENGINEER

OCA NO. 607861

AS BUILT PLANS
 Contractor: Dondlinger Construction
 Inspector: Dakota Zimmerman
 Ruggles & Bohm, P.A.
 PDF By: DGZ 11/09/15



VICINITY MAP
No Scale

INDEX TO DRAWINGS

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BENCHMARKS

BM 1 USC&GS brass disk in concrete post stamped Wichita 1934, 1.2 feet above ground, 131 feet north-northwest of north curb of Douglas, 5 feet west of top of west bank of Arkansas River.
 Elev.=1303.02 NAVD88 Datum. N 1685680.27, E 1646921.29

BM 2 Chiseled square on north corner of traffic signal vault in island on southeast corner of 2nd Street and McLean Boulevard, north vault of two vaults.
 Elev. = 1302.16 NAVD88 Datum N 1686367.66, E 1646233.98

BM 3 Chiseled "X" in center of 4'x5' concrete AT&T manhole vault, 44' south and 24' west of southwest corner of 2nd Street Bridge over Arkansas River.
 Elev = 1301.64 NAVD88 Datum N 1686389.27, E 1646742.87

- ### GENERAL NOTES
- UNLESS SHOWN OR OTHERWISE STATED ON THESE DRAWINGS, MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF WICHITA STANDARD SPECIFICATIONS.
 - ALL CONCRETE SHALL BE STANDARD PAVING MIX UNLESS OTHERWISE NOTED.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY IRONS. THE CONTRACTOR SHALL BE REQUIRED TO RE-ESTABLISH ANY PROPERTY IRONS WHICH ARE DAMAGED OR DESTROYED BY HIS CONSTRUCTION OPERATIONS. SUCH IRONS SHALL BE RE-ESTABLISHED BY A LICENSED LAND SURVEYOR IN ACCORDANCE WITH STATE LAWS.
 - TREES TO BE REMOVED ARE MARKED ~~X~~ ALL TREES WHICH IN THE OPINION OF THE FIELD ENGINEER CAN BE SAVED, SHALL BE SAVED.
 - CONTRACTOR SHALL NOTIFY UTILITY COMPANIES OF CONSTRUCTION SCHEDULING.
 - EXISTING UTILITIES AND THEIR LOCATIONS, AS SHOWN ON THE PLANS REPRESENT THE BEST INFORMATION OBTAINABLE FOR DESIGN. LOCATION INFORMATION HAS BEEN OBTAINED FROM THE VARIOUS COMPANIES AND IS EITHER FROM COMPANY UTILITY DRAWINGS OR COMPANY PROVIDED FIELD LOCATIONS. THE PLAN LOCATIONS SHOWN ARE NOT GUARANTEED. ADDITIONAL EXISTING UTILITIES MAY ALSO BE ENCOUNTERED.
 - CONTRACTOR WILL BE REQUIRED TO PROVIDE A MINIMUM ADVANCE NOTICE OF SEVENTY-TWO (72) HOURS TO UTILITY COMPANIES TO STARTING ANY EXCAVATION AS FOLLOWS:

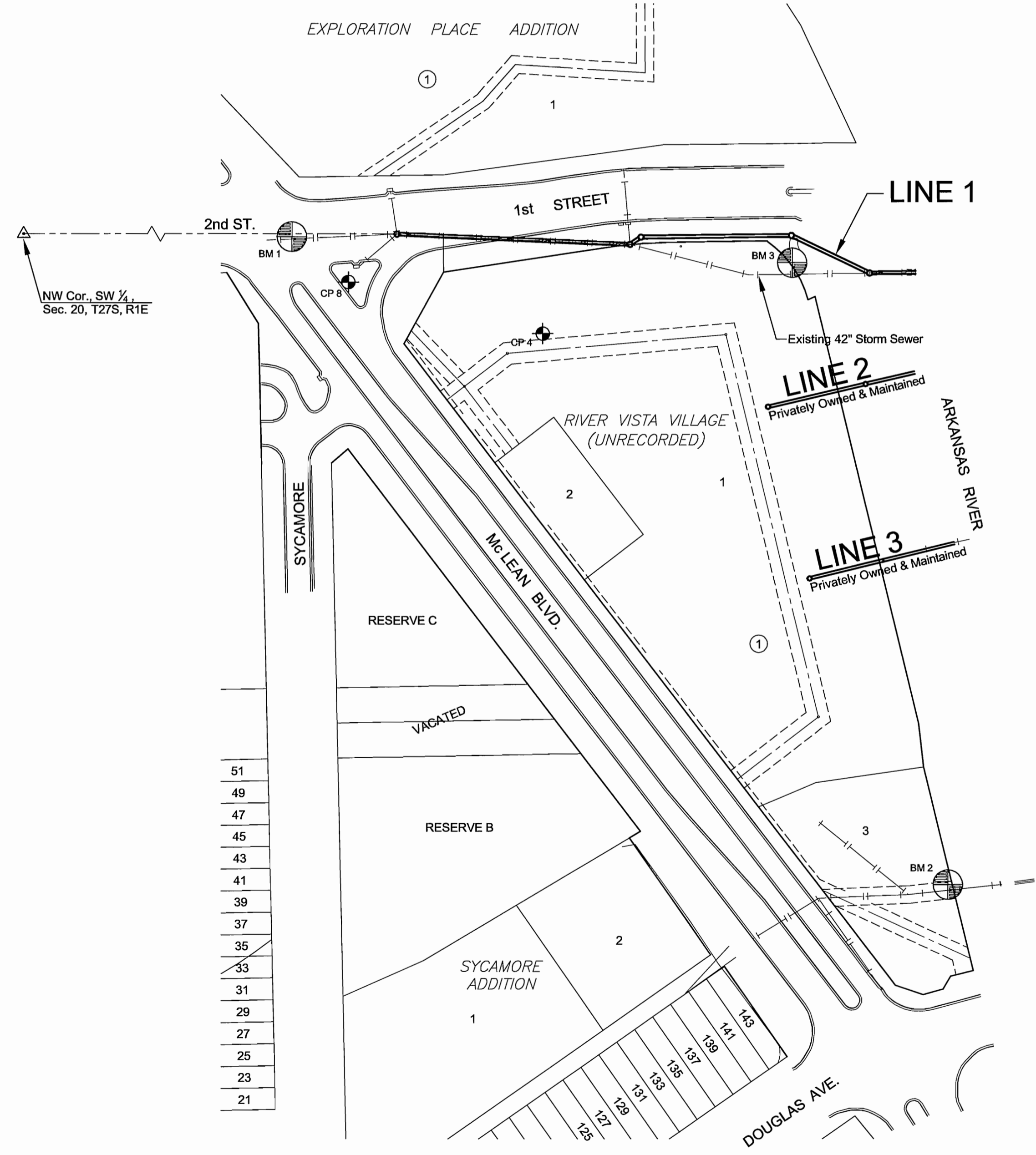
 KANSAS ONE-CALL 800-344-7233
 OR LOCAL WICHITA 687-2470

 THE CONTRACTOR MUST NOTIFY THE FOLLOWING IN CASE OF EMERGENCY:

 COX COMMUNICATIONS (CABLE) 262-0661
 WESTAR (ELECTRIC) 383-8600
 KANSAS GAS SERVICE (GAS) 832-3101
 SBC (TELEPHONE) 800-870-8390
 CITY OF WICHITA WATER & SEWER 262-6000
 ATT-T FIBER OPTIC (MARK JAHNKE) 841-5867
 KANSAS FIBER NETWORK (STEVE LINDER) 712-6016
 - RUBBLE FROM THE REMOVAL OF MISCELLANEOUS STRUCTURES AND EXCESS EXCAVATION WHICH IS TO BE WASTED SHALL BE DISPOSED OF ON SITES TO BE PROVIDED BY THE CONTRACTOR. THESE SITES SHALL BE APPROVED BY THE ENGINEER AS TO SUITABILITY, APPEARANCE AND SITE LOCATION. LOCATIONS 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 WOULD REQUIRE A KANSAS STATE BOARD OF AGRICULTURE PERMIT. ANY MATERIAL DUMPED IN WATERS OF THE UNITED STATES OR WETLANDS IS SUBJECT TO U.S. CORPS OF ENGINEERS PERMITTING REGULATIONS. ANY MATERIAL BURIED OR STOCKPILED BEYOND APPROVED CONSTRUCTION LIMITS WOULD REQUIRE ADDITIONAL ARCHAEOLOGICAL INVESTIGATIONS UNLESS BURIED IN A PREVIOUSLY APPROVED BORROW LOCATION.
 - CONTRACTOR TO COORDINATE WORK WITH OTHER UTILITY AND/OR PAVING CONTRACTORS ON SITE.
 - CONTRACTOR SHALL RESEED AND MULCH ALL DISTURBED AREAS. COST SHALL BE CONSIDERED SUBSIDIARY TO SITE RESTORATION. SEE EROSION CONTROL PLAN.
 - CONTRACTOR TO REFER TO SWPPP FILED ON SITE FOR EROSION/SEDIMENT CONTROL.
 - WORK DONE UNDER THIS PROJECT IS SUBJECT TO THE CITY OF WICHITA REQUIREMENTS FOR "CONSTRUCTION OF INFRASTRUCTURE IMPROVEMENTS BY PRIVATE CONTRACT." THE CONTRACTOR SHALL BE FAMILIAR AND COMPLY WITH ALL OF THE REQUIREMENTS, INCLUDING BONDING, INSPECTION, TESTING, NOTIFICATION, PROVIDING AS-BUILT DRAWINGS, PAYING FOR ALL NECESSARY CONNECTIONS AND/OR STREET REPAIR FEES AND PROVIDING PIPE MATERIAL AND OTHER CERTIFICATIONS.
 - ALL FILL SHALL BE COMPACTED TO 95% STANDARD PROCTOR DENSITY IN ACCORDANCE WITH ASTM D-698. MAXIMUM LIFT THICKNESS SHALL BE 8". CONTRACTOR TO PROVIDE ADEQUATE COMPACTION TESTING TO CONFIRM COMPACTION.
 - DEVELOPER FOR THIS PROJECT IS:
 LAHAM DEVELOPMENT
 150 N. MARKET
 WICHITA, KANSAS, 67202
 CONTACT - GEORGE LAHAM
 (316) 202-3950

NEW DEVELOPMENT
 DISTURBED AREA IS LIMITED TO THE INSTALLATION OF STORM WATER SEWER AND THE REMOVAL OF EXISTING UTILITIES. ALL DISTURBED AREA WILL BE RE-SEED AND STABILIZED UPON COMPLETION OF THIS PROJECT.
 PROPOSED (NEW) IMPERVIOUS AREA = 0.0 AC.
 DISTURBED PERVIOUS AREA = 0.75 AC.
 W_Q = TBD N/A
 C_P = TBD N/A

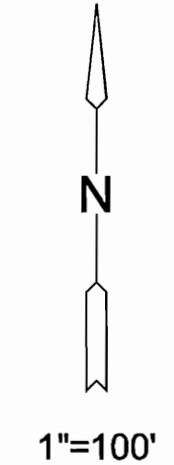
THIS OVERALL PROJECT WILL SATISFY CHAPTER 16-32 OF THE CITY CODE THROUGH TREATMENT PROVIDED BY A FUTURE PROPRIETARY DEVICE. LINES 2 & 3 WILL BE PRIVATELY OWNED AND MAINTAINED.



CONTROL POINTS

CP 4 5/8" bar w/ red mkec design pt cap
 Elev = 1317.51 NAVD88 Datum N 1686308.28, E 1646457.00

CP 8 a chiseled x to the north west of the property in the intersection of 2nd St. and McLean Blvd.
 Elev = 1301.6090 NAVD88 Datum N 1686418.50, E 1646169.76



APPROVED AS NOTED
 BY CITY ENGINEER OF WICHITA,
 BY STORMWATER DEPARTMENT

Engineering Rebecca Dault 5/14/14
 Storm Water HC Jelle 5/14/14
 (Public Works)

NOTE TO CONTRACTORS

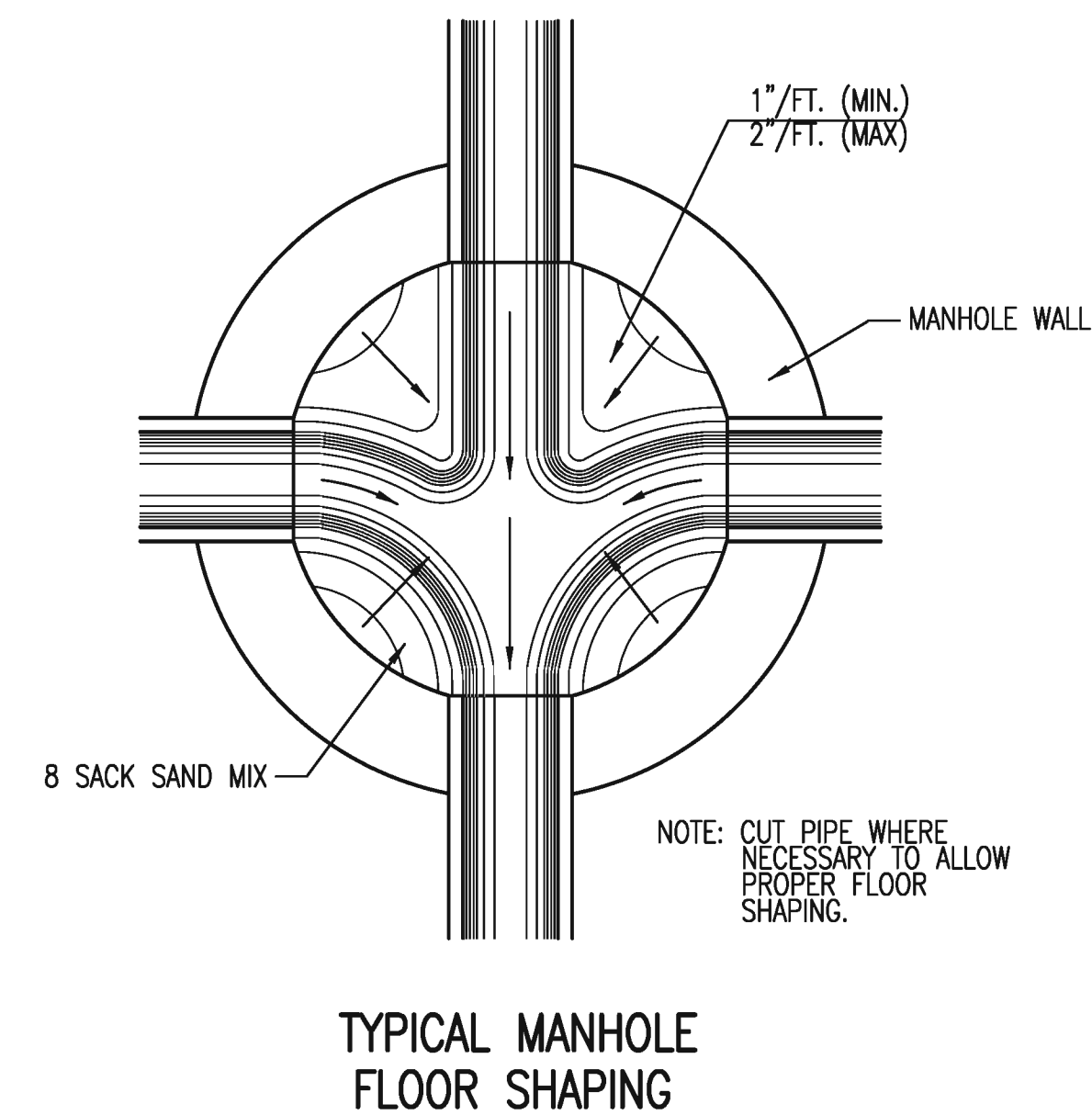
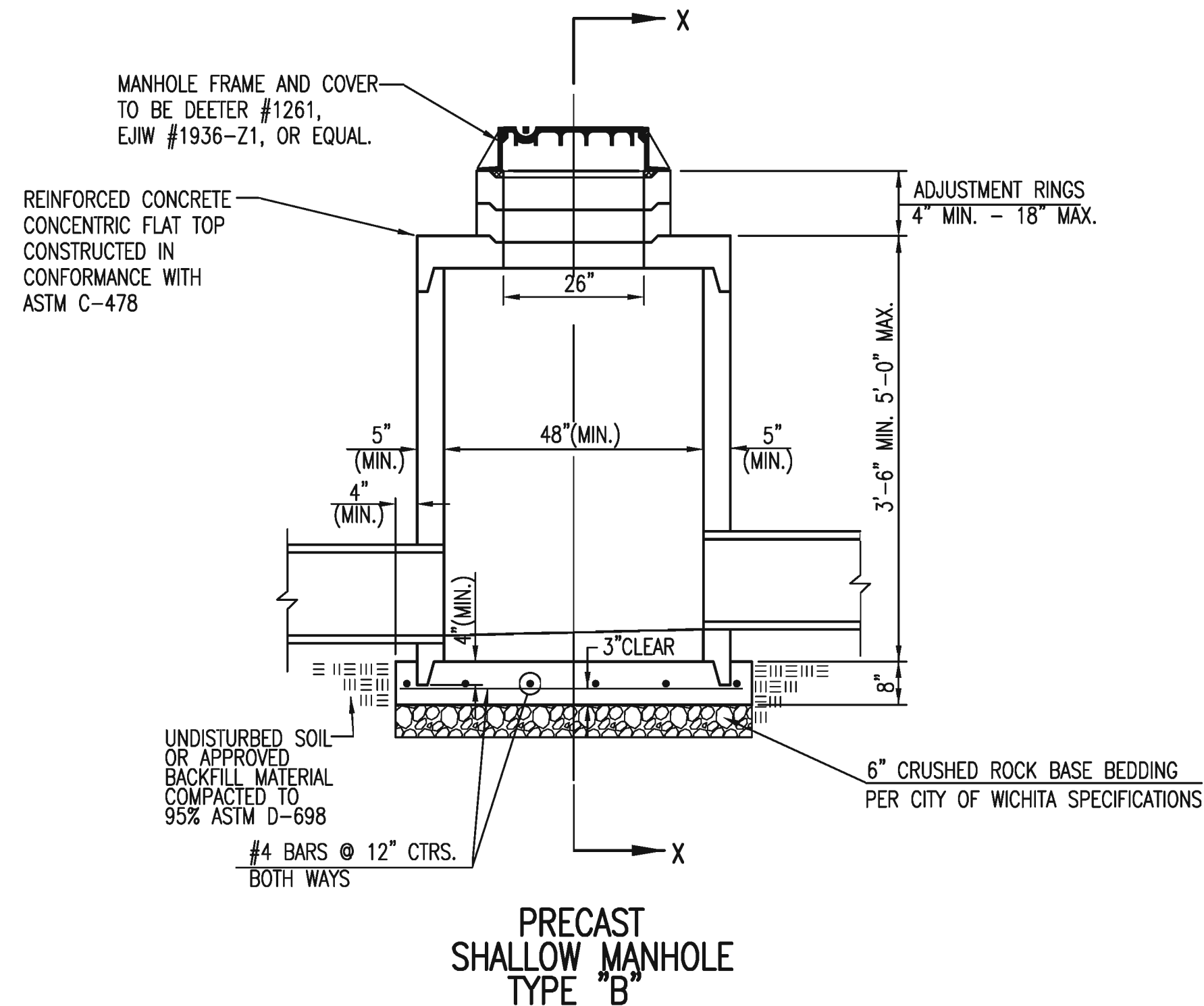
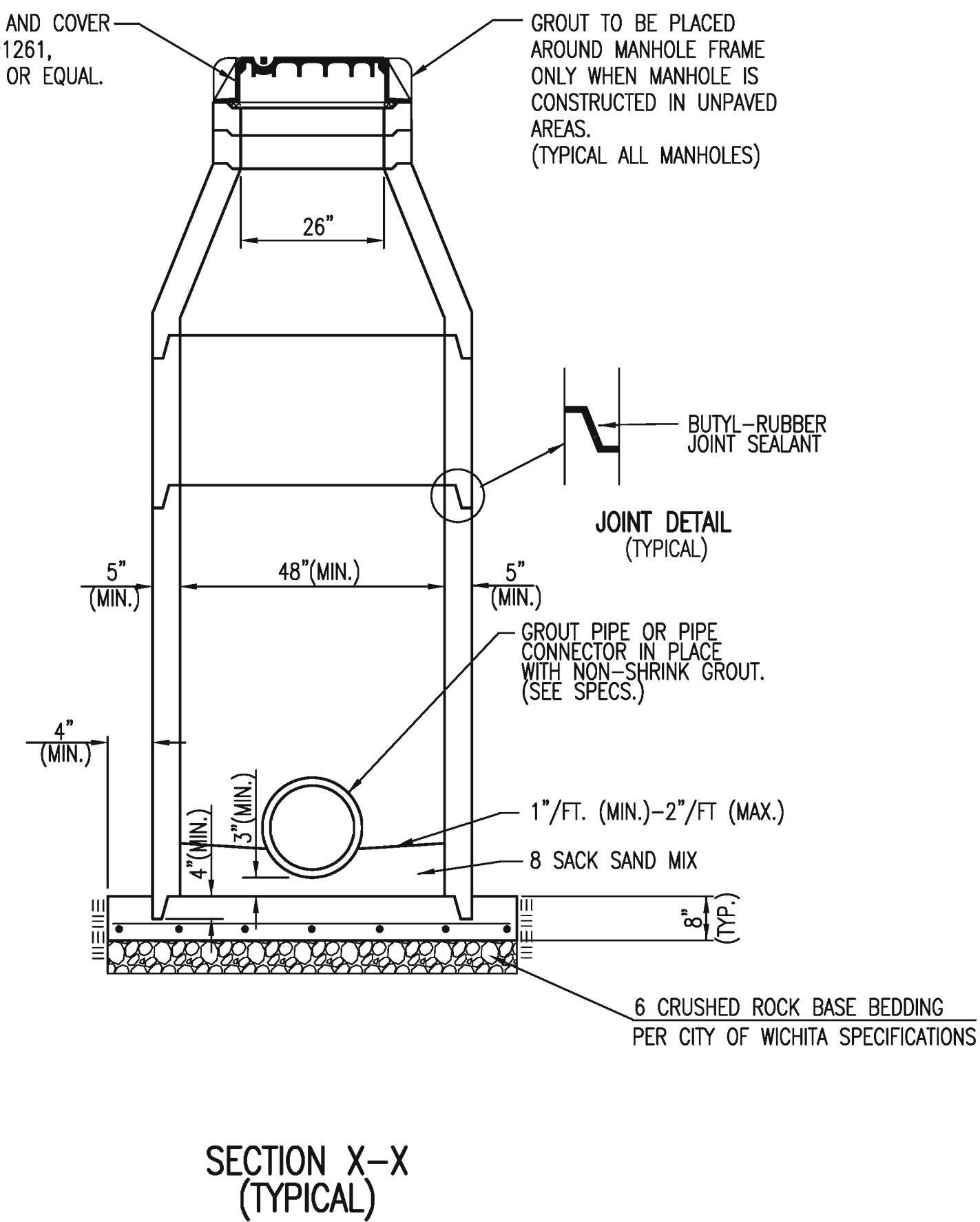
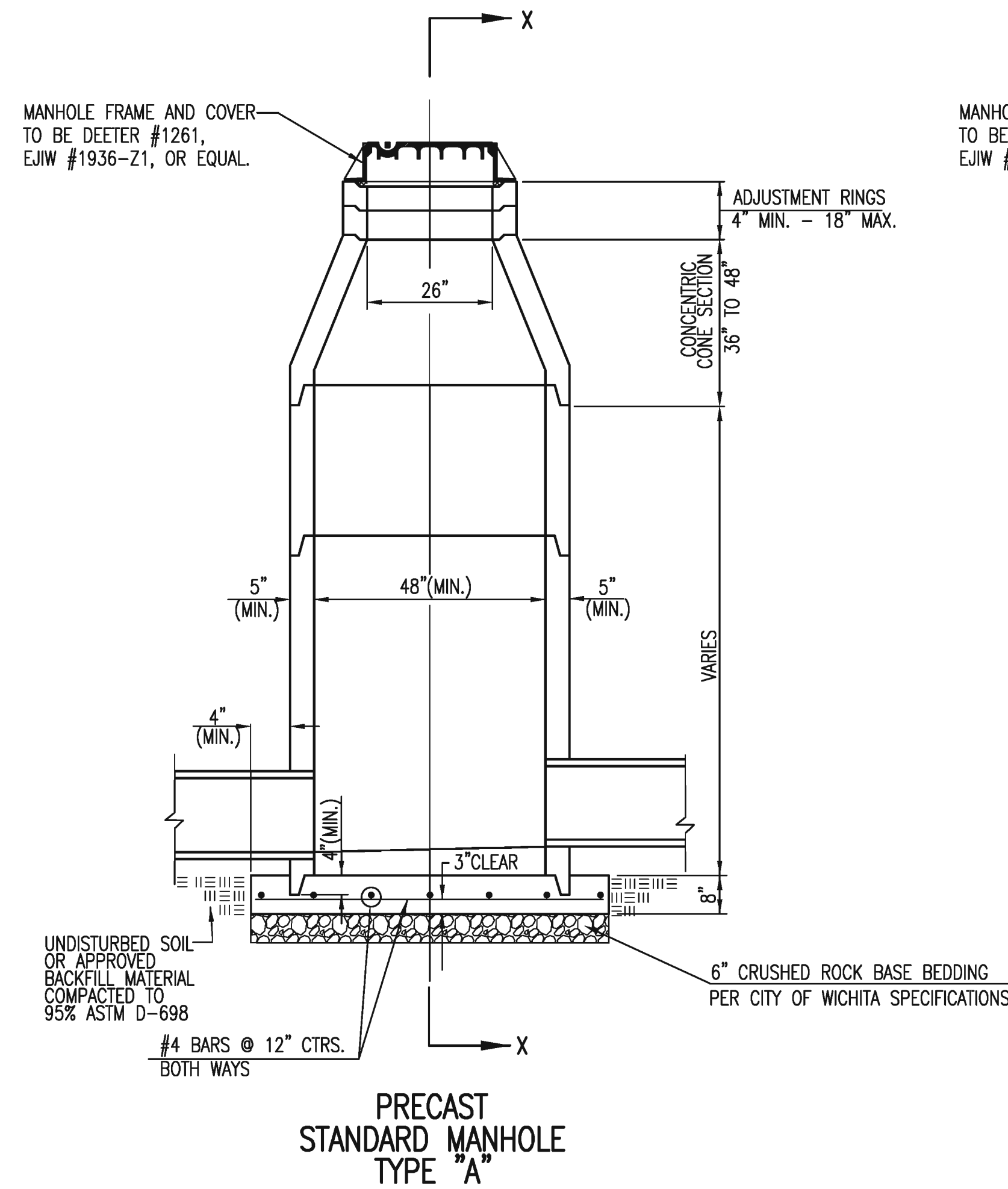
Public Property:
 Inspection and testing for the storm water sewer is to be provided by a Licensed Consulting Engineering Firm under contract with the Owner/Developer. Said inspection to be in accordance with the City of Wichita Standard Construction Engineering Practices and certified by a Professional Engineer licensed in the state of Kansas. No work shall be performed in dedicated easements or public rights-of-way by the Contractor without such inspection, nor shall any work be commenced without written authorization by the City Engineer. All construction and materials shall comply with the City of Wichita Specifications and Standards (on file and available in the City Engineer's Office).

PRIVATE STORM WATER SEWER PLAN FOR
RIVER VISTA VILLAGE

TITLE SHEET

PROJECT NO.	0229PPD	
DATE	MAY 2014	
SCALE	AS SHOWN	
DESIGNED	DRAWN	CHECKED
DFL	KKL	JAG
NO.	REVISION	DATE
SHEET NO.		
1 OF 13		

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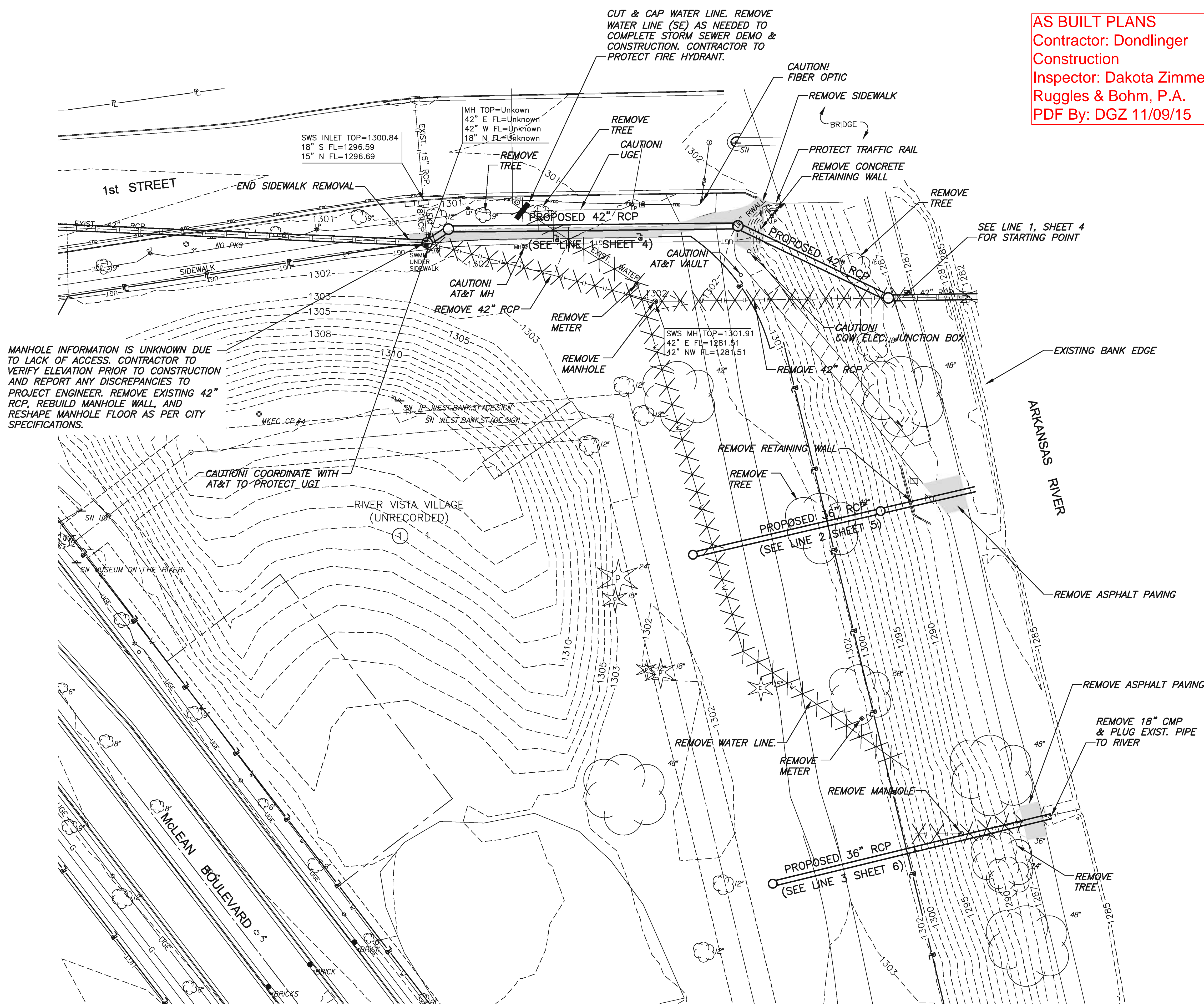
GENERAL NOTES

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



PRECAST CONCRETE MANHOLE (STORM SEWER)		
CITY ENGINEER GARY L. JANZEN, P.E.		
PROJECT NUMBER 0229PPD	OCA NUMBER 607861	DATE 11/2010
CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		DESIGN DRAWN SHEET 2 OF 13

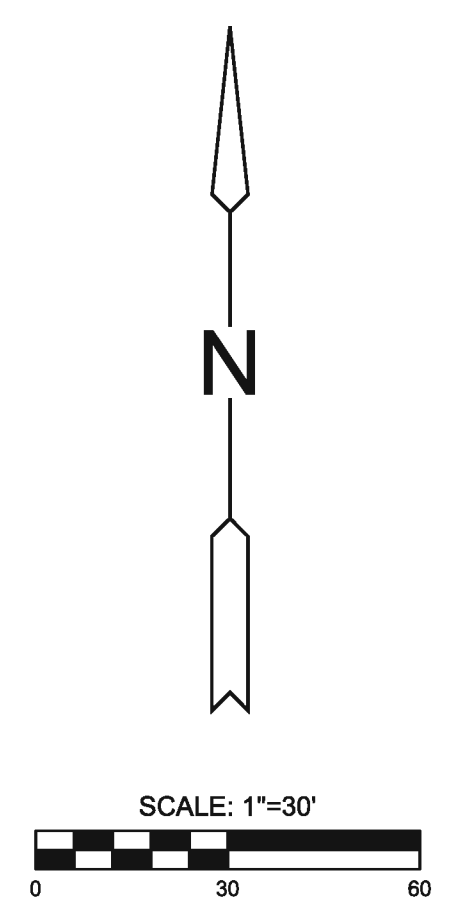
AS BUILT PLANS
 Contractor: Dondlinger
 Construction
 Inspector: Dakota Zimmerman
 Ruggles & Bohm, P.A.
 PDF By: DGZ 11/09/15







NOTES

- CONTRACTOR TO INSTALL "SIDEWALK CLOSED" SIGNS AT EAST END OF BRIDGE AND AT NORTHWEST PROPERTY CORNER OF RIVER VISTA PRIOR TO DEMOLITION. SIGNS TO REMAIN FOR DURATION OF PROJECT.

MANHOLE INFORMATION IS UNKNOWN DUE TO LACK OF ACCESS. CONTRACTOR TO VERIFY ELEVATION PRIOR TO CONSTRUCTION AND REPORT ANY DISCREPANCIES TO PROJECT ENGINEER. REMOVE EXISTING 42" RCP, REBUILD MANHOLE WALL, AND RESHAPE MANHOLE FLOOR AS PER CITY SPECIFICATIONS.



LEGEND

-  SIDEWALK REMOVAL
-  ASPHALT REMOVAL
-  CONCRETE REMOVAL
-  PIPE REMOVAL

**STORM WATER SEWER PLAN FOR
 RIVER VISTA VILLAGE**

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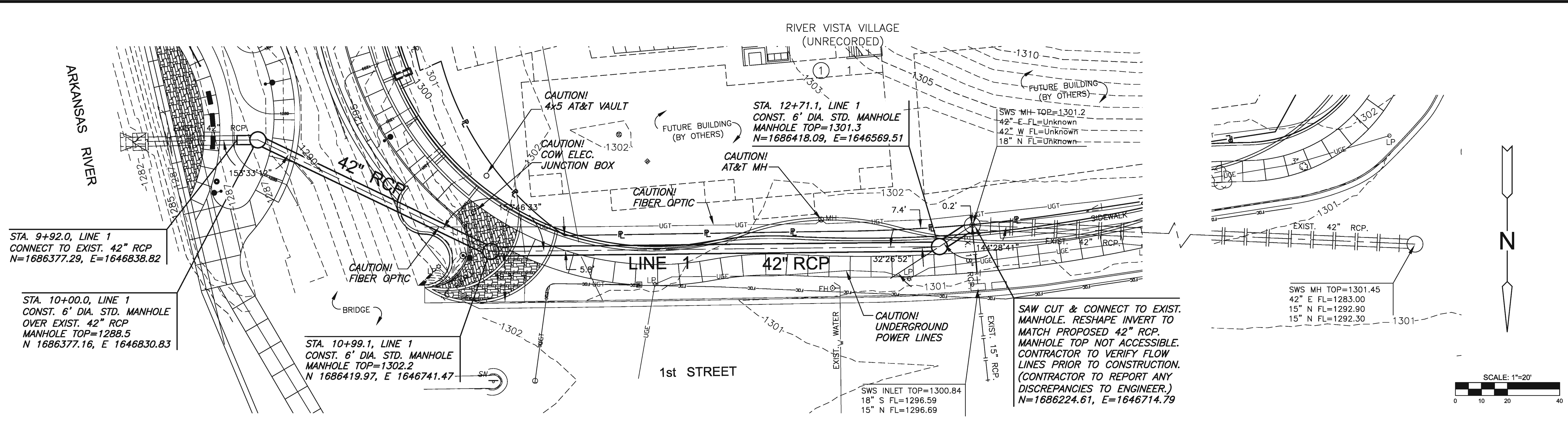
DEMOLITION PLAN

PROJECT NO.	0229PPD	
DATE	MAY 2014	
SCALE	AS SHOWN	
DESIGNED	DRAWN	CHECKED
DFL	KKL	JAG

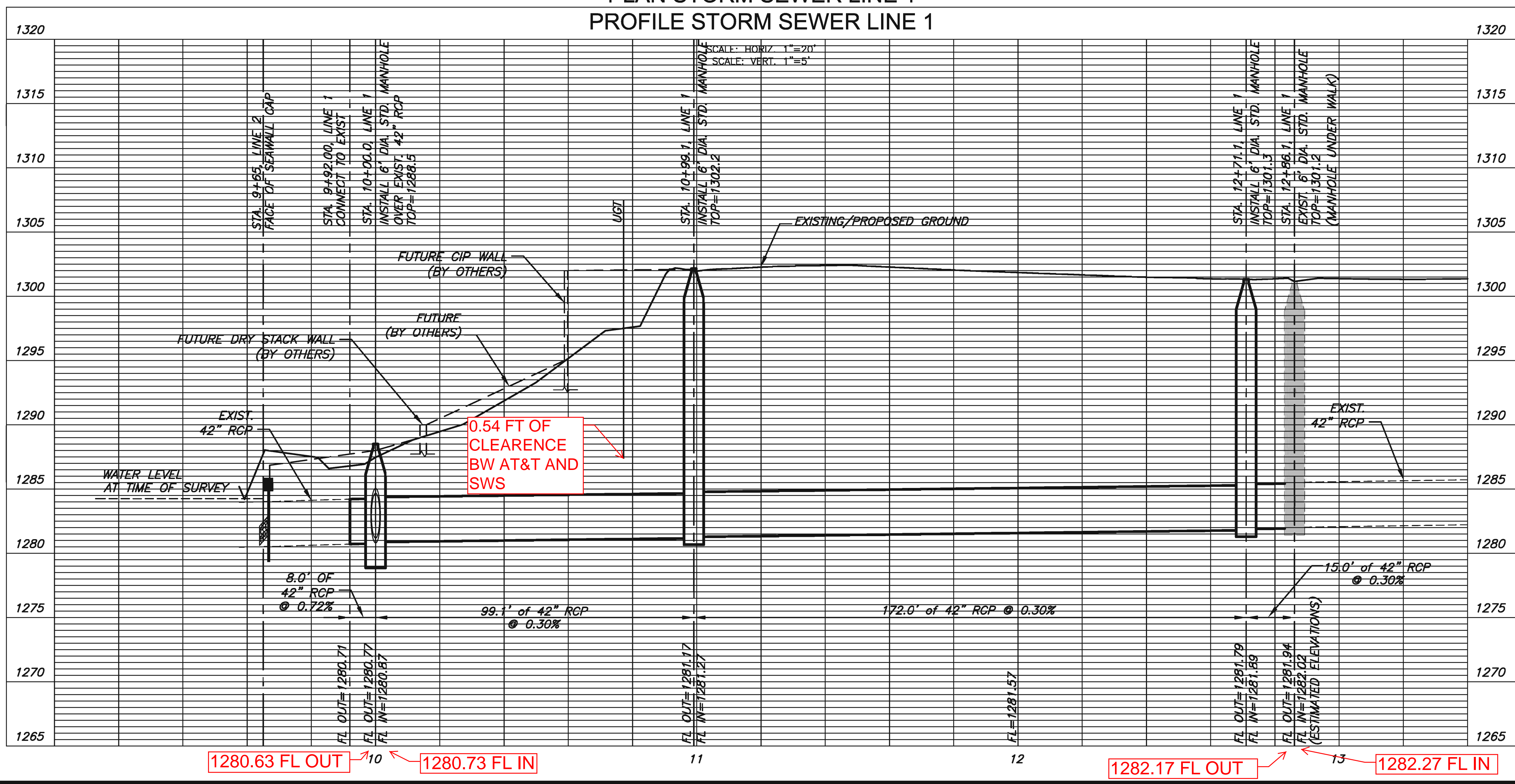
NO.	REVISION	DATE

SHEET NO.

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**PLAN STORM SEWER LINE 1
PROFILE STORM SEWER LINE 1**

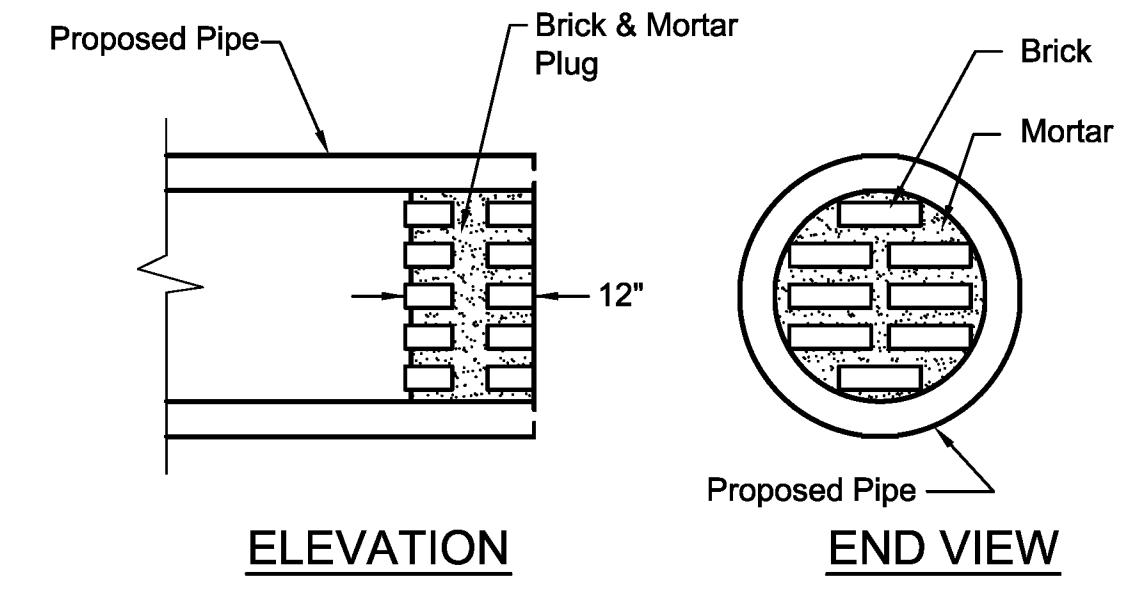
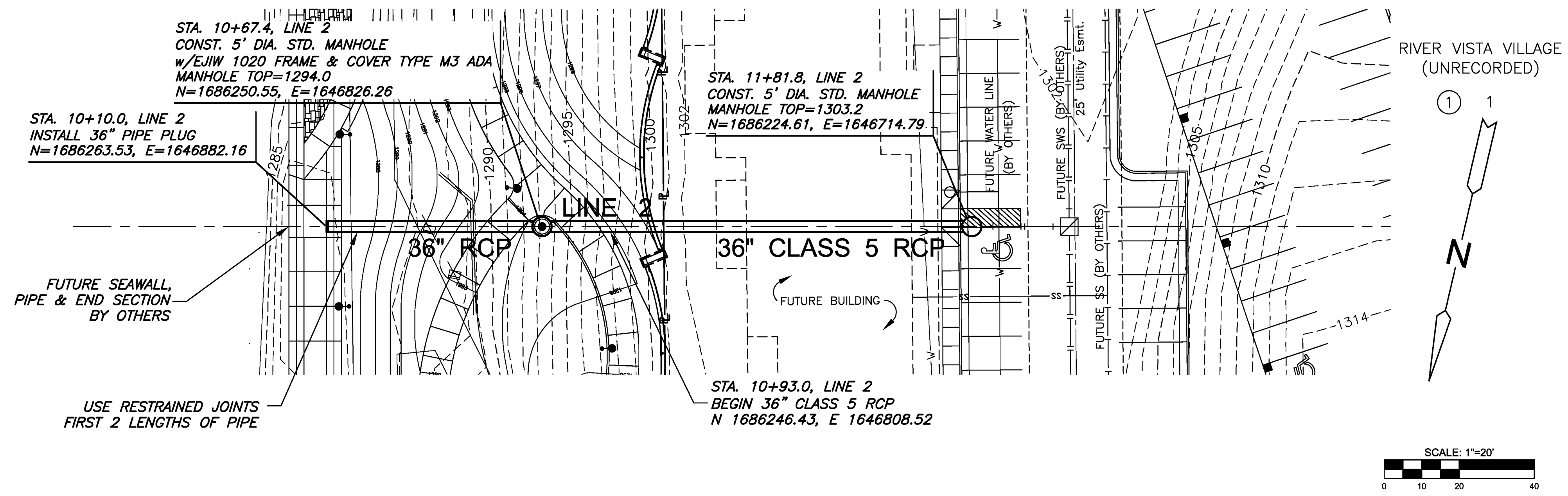


- NOTE:**
- FOR INFORMATION ONLY: PLAN DEPICTS FUTURE RIVER BANK AND INTERNAL PROJECT SITE IMPROVEMENTS. IMPROVEMENTS WILL BE COMPLETED BY OTHERS.
 - CONTRACTOR TO CONTACT STEVE LINDER (712-6016) AT KANSAS FIBER NETWORK PRIOR TO CONSTRUCTION.
 - CONTRACTOR TO VERIFY ELEVATION & LOCATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.
 - CONTRACTOR TO REMOVE PIPE TO NEAREST JOINT EAST OF THE PROPOSED MANHOLE AT STATION 10+00 AS NEEDED TO MAKE CONNECTION TO EXISTING PIPE.

AS BUILT PLANS
 Contractor: Dondlinger Construction
 Inspector: Dakota Zimmerman
 Ruggles & Bohm, P.A.
 PDF By: DGZ 11/09/15

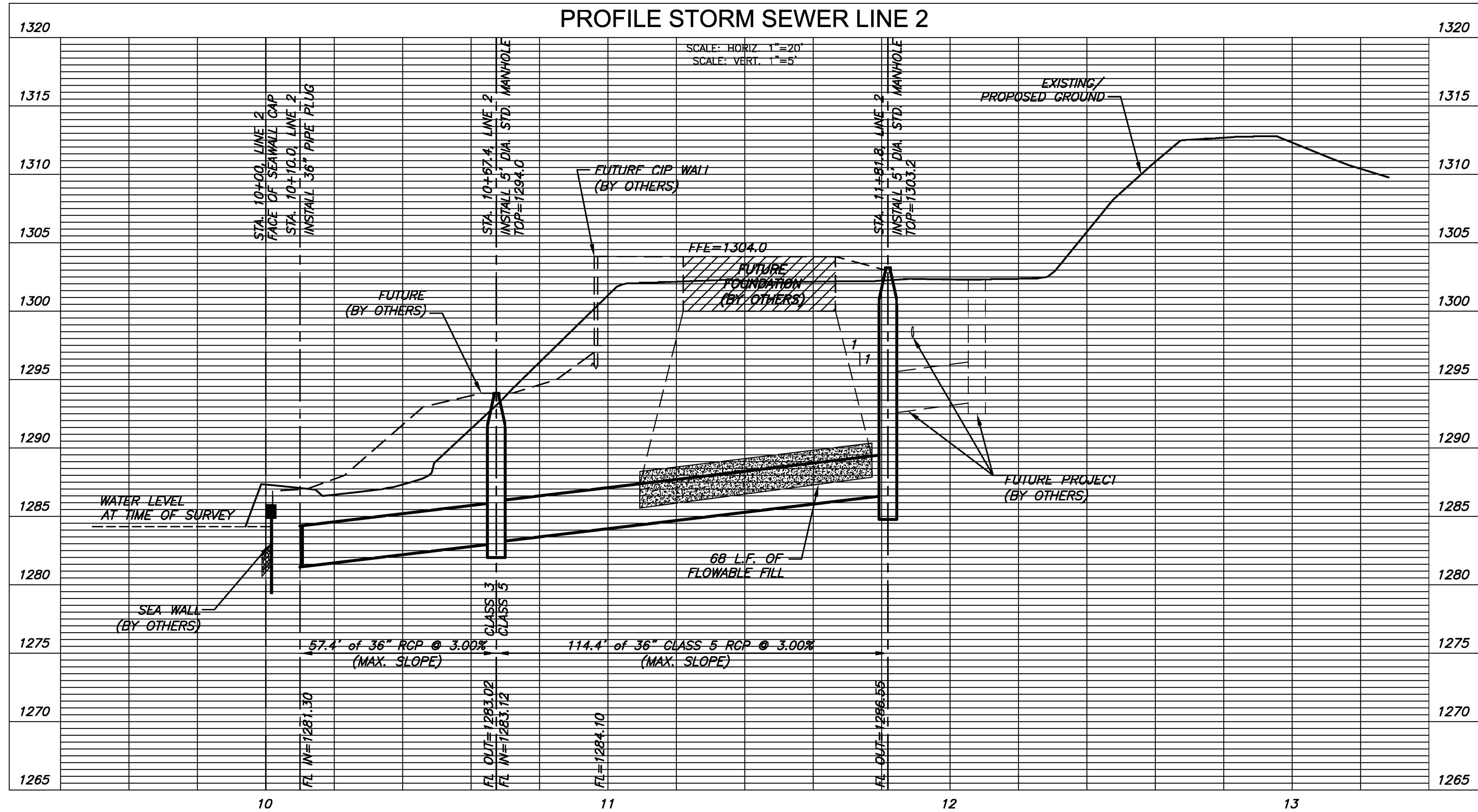
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STORM SEWER LINE 1		
PROJECT NO.	0229PPD	
DATE	MAY 2014	
SCALE	AS SHOWN	
DESIGNED	DRAWN	CHECKED
DFL	KKL	JAG
NO.	REVISION	DATE
SHEET NO.		
4 OF 13		



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 - CONTRACTOR TO CONTACT STEVE LINDER (712-6016) AT KANSAS FIBER NETWORK PRIOR TO CONSTRUCTION.
 - CONTRACTOR TO VERIFY ELEVATION & LOCATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.
 - LINE 2 TO BE PRIVATELY OWNED AND MAINTAINED.
 - PROVIDE SEDIMENT BARRIER FOR MANHOLE AT STATION 10+67.4 AND TEMPORARILY GRADE SURROUNDING AREA TO DRAIN AWAY FROM MANHOLE.

AS BUILT PLANS
Contractor: Dondlinger Construction
Inspector: Dakota Zimmerman
Ruggles & Bohm, P.A.
PDF By: DGZ 11/09/15

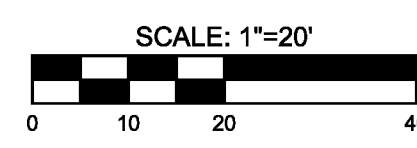
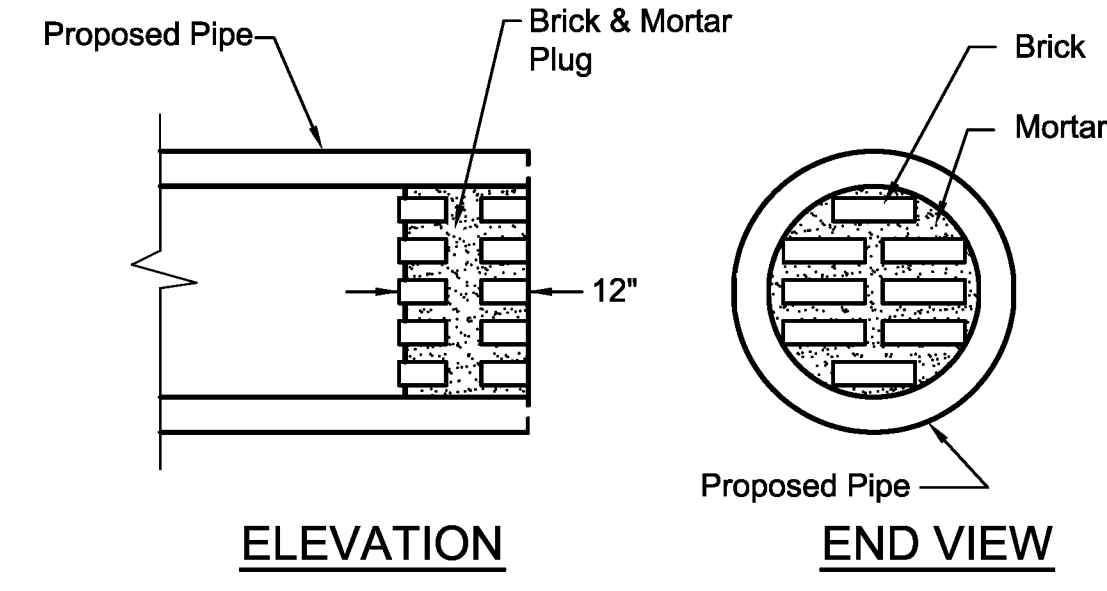
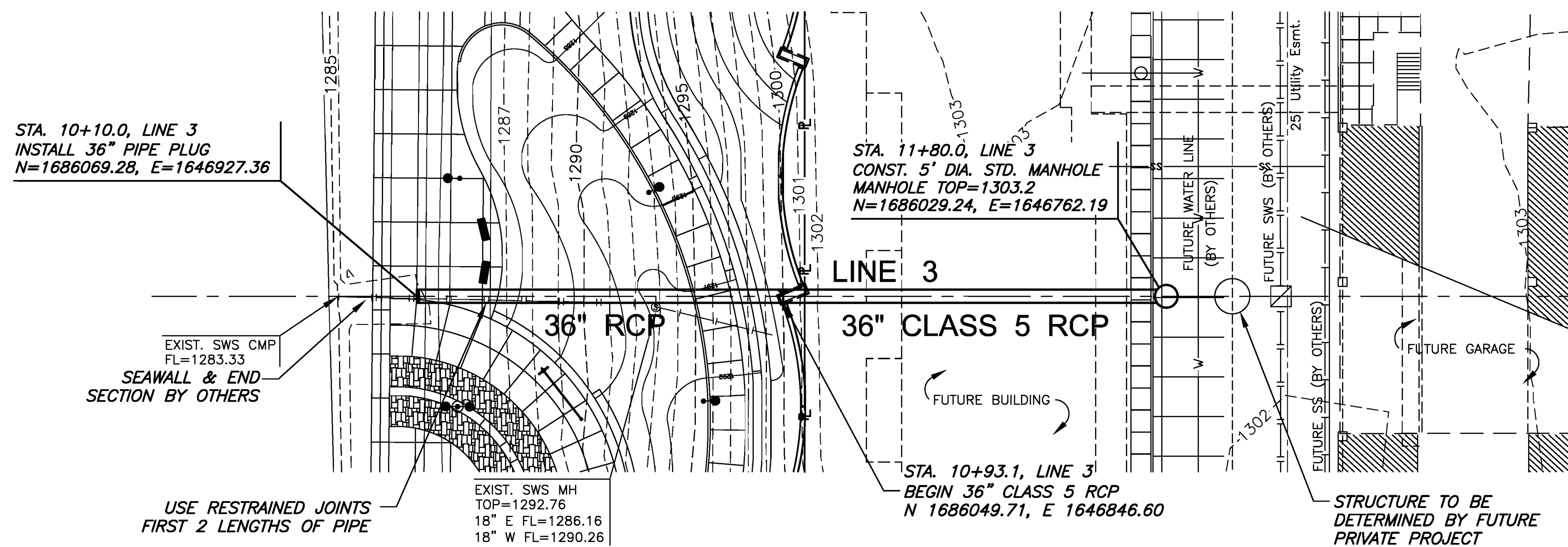


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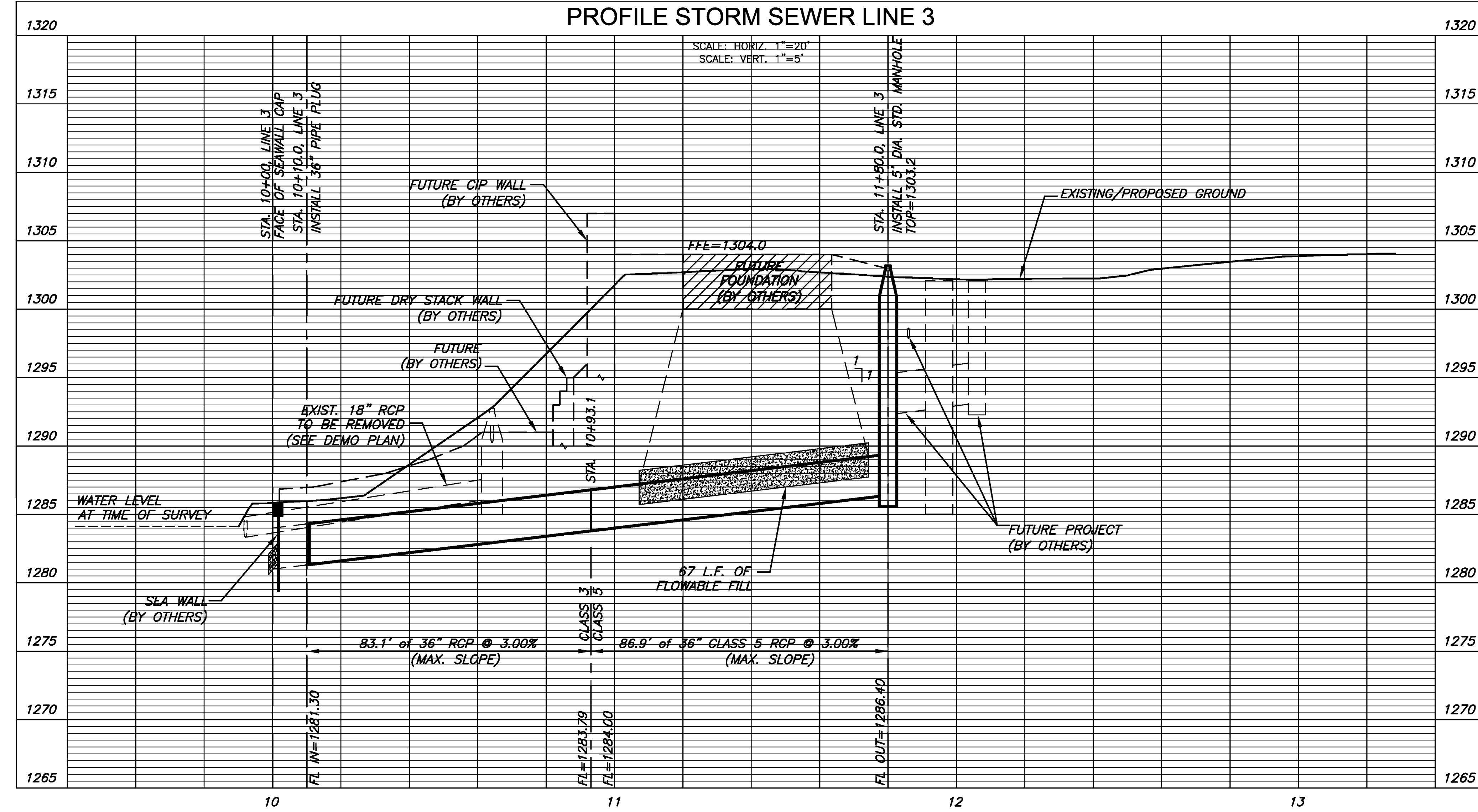
STORM SEWER LINE 2

PROJECT NO.	0229PPD	
DATE	MAY 2014	
SCALE	AS SHOWN	
DESIGNED	DRAWN	CHECKED
DFL	KKL	JAG

NO.	REVISION	DATE



PLAN STORM SEWER LINE 3
PROFILE STORM SEWER LINE 3



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 - CONTRACTOR TO CONTACT STEVE LINDER (712-6016) AT KANSAS FIBER NETWORK PRIOR TO CONSTRUCTION.
 - CONTRACTOR TO VERIFY ELEVATION & LOCATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.
 - LINE 3 TO BE PRIVATELY OWNED AND MAINTAINED.

AS BUILT PLANS
Contractor: Dondlinger Construction
Inspector: Dakota Zimmerman
Ruggles & Bohm, P.A.
PDF By: DGZ 11/09/15

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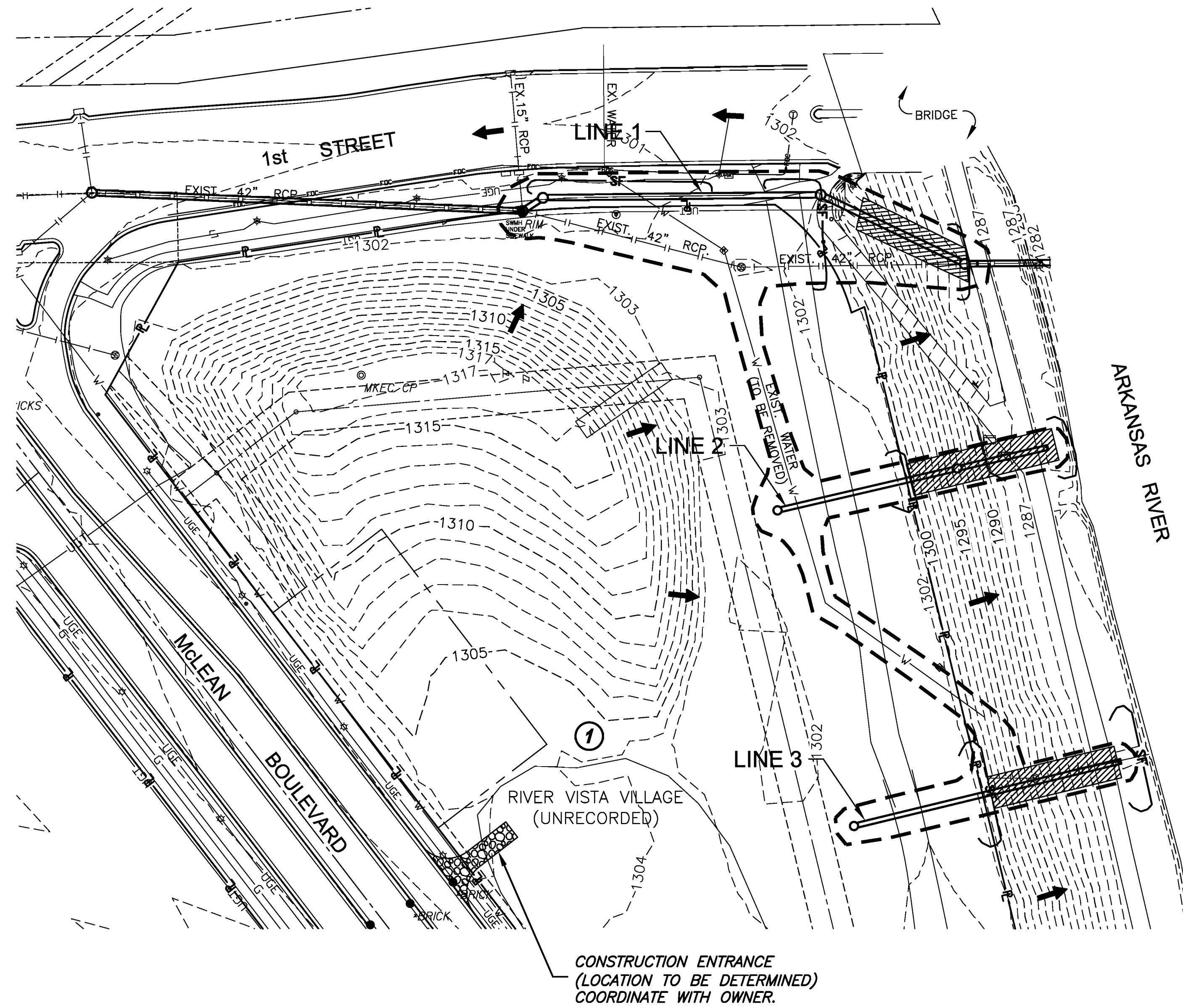
STORM SEWER LINE 3

PROJECT NO.	0229PPD	
DATE	MAY 2014	
SCALE	AS SHOWN	
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DFL	KKL	JAG

NO.	REVISION	DATE

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SEEDING NOTES (PERMANENT)

- SEEDING AREAS SHALL BE PREPARED FOR PLANTING WITH COMMON AGRICULTURAL TECHNIQUES. ALL RESERVE AREAS SHALL BE FINE GRADED USING SMALL EQUIPMENT. REMOVE EXISTING GRASS, VEGETATION, AND TURF. DO NOT MIX INTO SURFACE SOIL. LOOSEN SOIL TO A DEPTH OF AT LEAST 6". GRADE AREAS TO A SMOOTH UNIFORM SURFACE PLANE. ROLL, RAKE, AND REMOVE RIDGES AND FILL DEPRESSIONS, THE SURFACE SHALL BE FREE FROM STICKS, SMALL STONES, AND OTHER EXTRANEIOUS MATERIALS. APPROVE WITH OWNER'S REPRESENTATIVE BEFORE PLANTING.
- THE CONTRACTOR SHALL SEED AND FERTILIZE ALL DISTURBED AREAS AS FOLLOWS:
PERENNIAL RYE @ 200 LBS./ACRE
10-20-10 @ 150 LBS./ACRE
- ALL SEED SHALL BE DISTRIBUTED WITH AN ACCEPTABLE DRILL INTENDED FOR SUCH OPERATIONS, OR OTHER EQUIPMENT APPROVED BY THE OWNER'S REPRESENTATIVE. SEEDING DEPTH SHALL BE 1/4".
- BROADCASTING WILL BE ALLOWED IN INACCESSIBLE AREAS TO THE DRILL ONLY AFTER GROUND IS DISTURBED TO CREATE A SUITABLE SEEDBED. SEEDING DEPTH SHALL BE 1/4".
- ALL SEEDED AREAS SHALL BE IMMEDIATELY MULCHED W/ CLEAN PRAIRIE HAY AT 2 TONS/ACRE. ANCHOR MULCH BY CRIMPING INTO TOPSOIL WITH SUITABLE MECHANICAL EQUIPMENT.
- SUBMIT SEED TICKETS TO OWNER'S REPRESENTATIVE PRIOR TO PLANTING. TICKETS SHALL CONTAIN BOTANICAL AND COMMON NAME, PERCENTAGE BY WEIGHT OF EACH SPECIES, AND PERCENTAGE OF PURITY, GERMINATION, AND WEED SEED. INCLUDE THE YEAR OF PRODUCTION AND DATE OF PACKAGING.
- SEEDING SHALL NOT BE COMPLETED DURING PERIODS OF RAIN, SEVERE DROUGHT, HIGH WINDS, EXCESSIVE MOISTURE, FROZEN GROUND, OR OTHER CONDITIONS THAT PRECLUDE SATISFACTORY RESULTS.
- ANY WASHOUT THAT OCCURS SHALL BE RE-GRADED AND RE-SEEDED AT THE CONTRACTOR'S EXPENSE UNTIL A GOOD SOD IS ESTABLISHED.
- ALL SEEDED AREAS SHALL BE GUARANTEED FOR NOT LESS THAN 1 (ONE) FULL YEAR FROM THE TIME OF PROVISIONAL ACCEPTANCE.
- ALL DISTURBED AREAS INCLUDING HAUL ROADS SHALL BE RE-SEEDED. COST SUBSIDIARY TO THE PROJECT.

CRIMPING NOTES

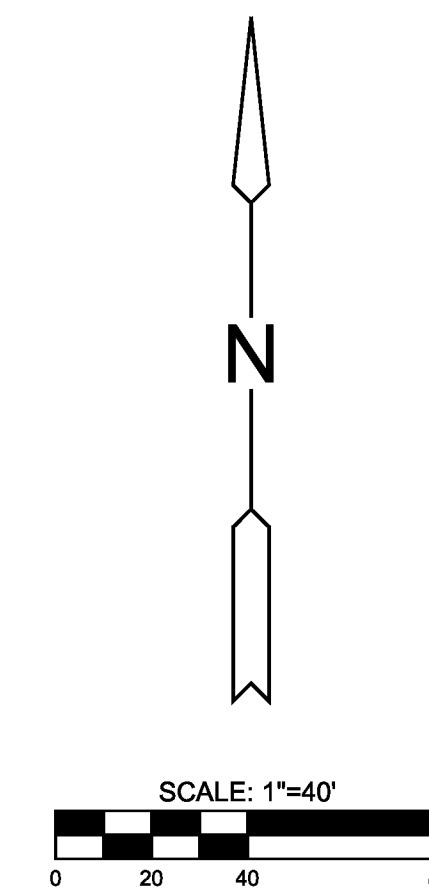
- ONCE TOPSOIL HAS BEEN PLACED, DISC/SCARIFY SOIL PRIOR TO SPREADING PRAIRIE HAY.
- SPREAD PRAIRIE HAY AND IMMEDIATELY CRIMP INTO TOPSOIL WITH SUITABLE MECHANICAL EQUIPMENT.

GENERAL NOTES

- THE CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE AT ALL LOCATIONS.
- UNLESS SHOWN OR STATED OTHERWISE ON THESE DRAWINGS, MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY OF WICHITA STANDARD SPECIFICATIONS.
- THE CONTRACTOR SHALL FIELD VERIFY LOCATIONS AND ELEVATIONS OF EXISTING UTILITIES AND TOPOGRAPHIC FEATURES PRIOR TO THE COMMENCEMENT OF SITE WORK. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF DISCREPANCIES OR VARIATIONS FROM THE PLANS.
- ALL EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. CONTACT "ONE CALL" (1-800-344-7233, LOCAL 687-2470) FOR UTILITY LOCATIONS, SEVENTY-TWO (72) HOURS PRIOR TO EXCAVATION.
AT&T (TEL COMMUNICATIONS) 316-268-2008
KANSAS GAS SERVICE 316-831-5864
WESTAR (ELECTRIC) 316-261-6320
- ALL EXISTING UTILITIES AND SERVICE LINES SHALL BE KEPT IN SERVICE AT ALL TIMES DURING CONSTRUCTION OF THIS PROJECT, UNLESS OTHERWISE AUTHORIZED BY THE ENGINEER.
- THE CONTRACTOR SHALL PAY ALL PERMIT & OTHER ASSOCIATED FEES REQUIRED BY LOCAL, STATE, & FEDERAL AGENCIES.
- LINES 2 AND 3 SHALL BE PRIVATELY OWNED AND MAINTAINED.

LEGEND

- 1374--- EXISTING CONTOUR
- W— WATERLINE
- SS— SANITARY SEWER
- ST— STORMWATER SEWER
- UGT— EXISTING UNDERGROUND TELEPHONE
- UGE— EXISTING UNDERGROUND ELECTRICAL
- G— EXISTING GAS LINE
- TV— EXISTING CABLE LINE
- ➔ DRAINAGE FLOW ARROW
- - - - - APPROXIMATE LIMITS OF SEEDING (0.75 AC)
- SF— SILT FENCE (650 L.F.)
- [Hatched Box] EROSION CONTROL FIBER MAT (4900 S.F.) TENSAR ERONET SC 150 (or approved equal installed per manufacturer's specifications)



NOTE: ABOVE QUANTITIES FOR INFORMATION ONLY.

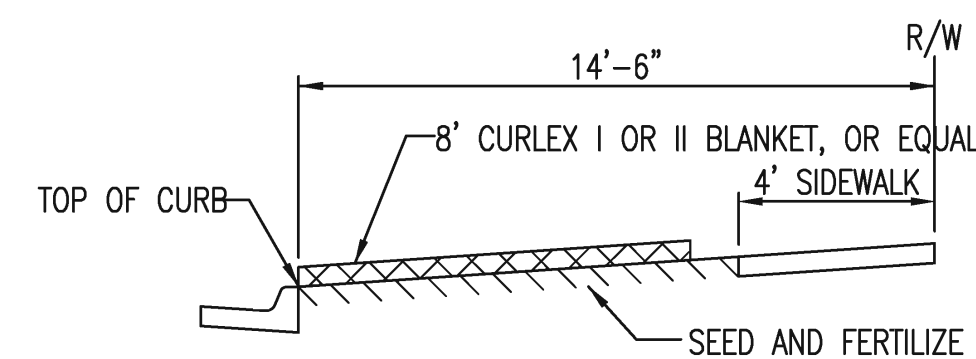
STORM WATER SEWER PLAN FOR RIVER VISTA VILLAGE

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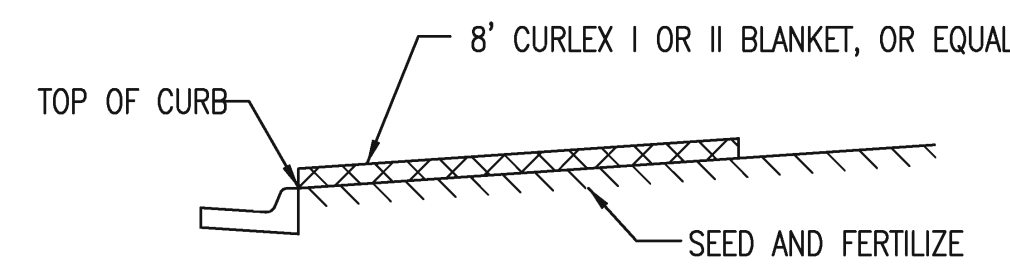
EROSION CONTROL PLAN

PROJECT NO.	0229PPD	
DATE	MAY 2014	
SCALE	AS SHOWN	
DESIGNED	DRAWN	CHECKED
DFL	KKL	JAG
NO.	REVISION	DATE

SHEET NO.

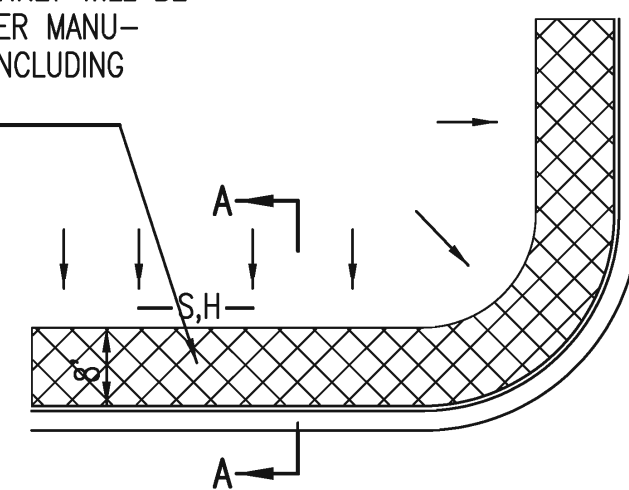


SECTION B-B

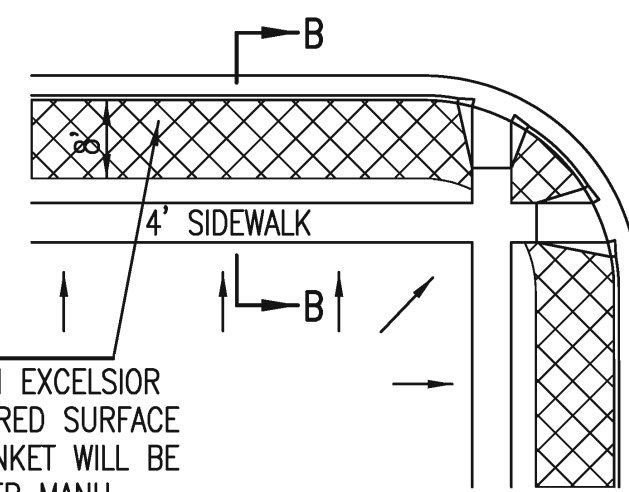


SECTION A-A

INSTALL 8' WIDE CURLEX I OR II EXCELSIOR BLANKET, OR EQUAL, ON PREPARED SURFACE BACK OF CURB. EDGE OF BLANKET WILL BE AT BACK OF CURB. INSTALL PER MANUFACTURERS RECOMMENDATION, INCLUDING STAPLES. (SEE DETAIL)



SOUTH STREET

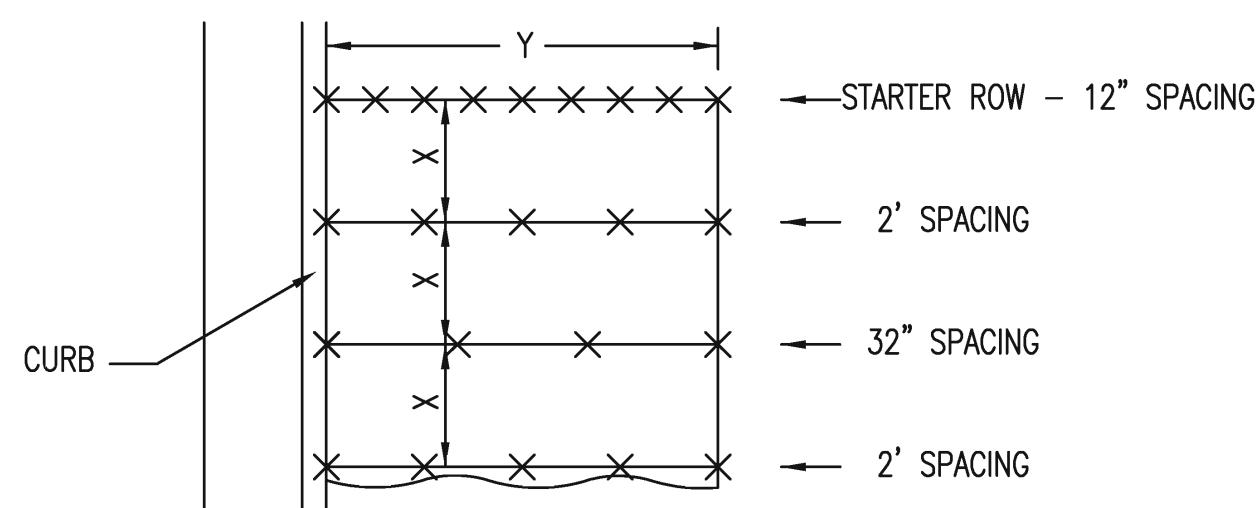


INSTALL 8' WIDE CURLEX I OR II EXCELSIOR BLANKET, OR EQUAL, ON PREPARED SURFACE BACK OF CURB. EDGE OF BLANKET WILL BE AT BACK OF CURB. INSTALL PER MANUFACTURERS RECOMMENDATION, INCLUDING STAPLES. (SEE DETAIL)

GENERAL NOTES

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

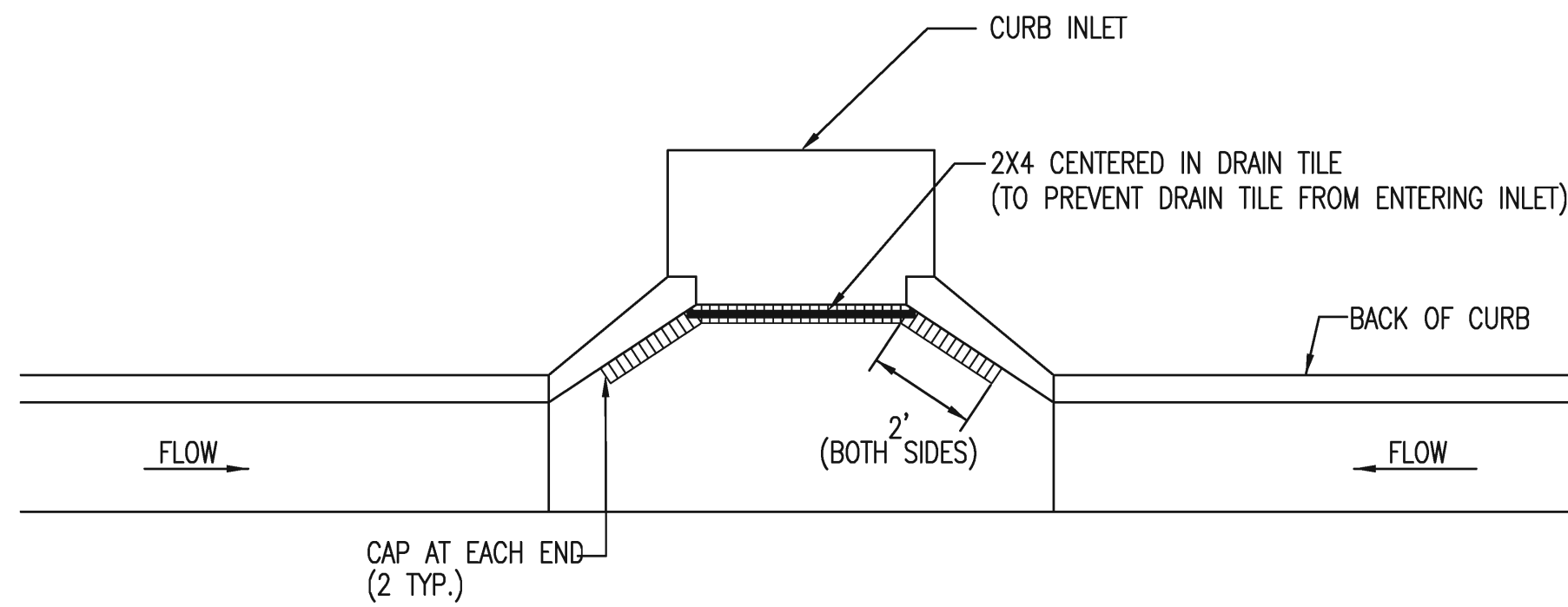
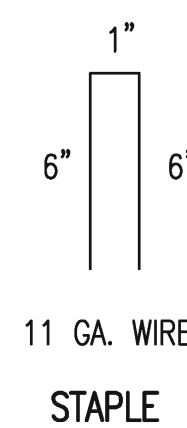
BACK OF CURB PROTECTION DETAIL



STAPLE PATTERN

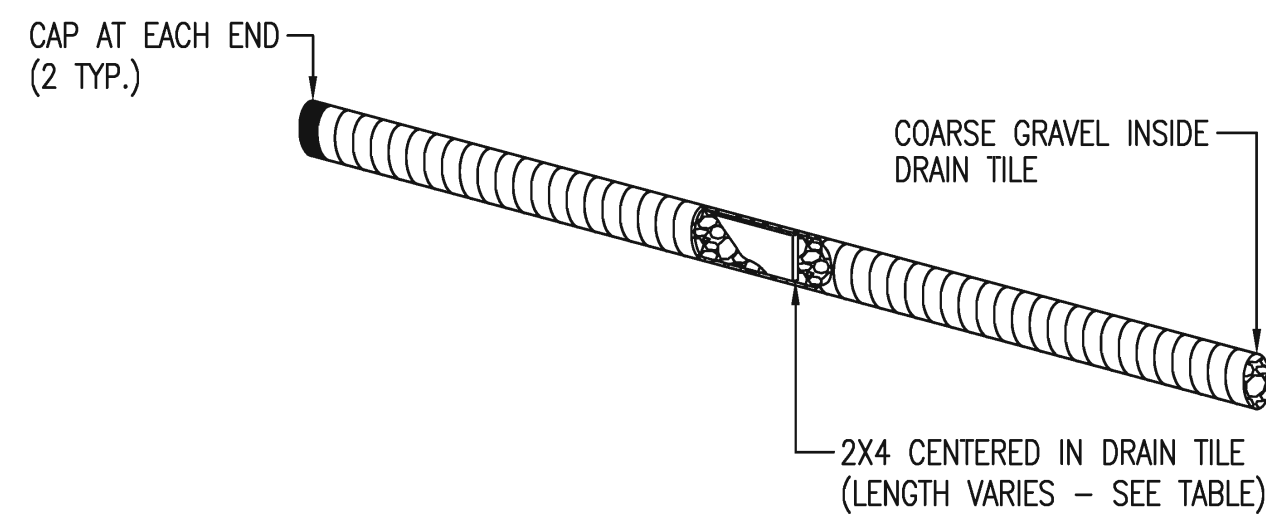
NOTES: USE 6" SEAM OVERLAP
(X & Y = RECOMMENDED BY MANUFACTURE)

DETAILS FOR APPROVED EROSION CONTROL MAT

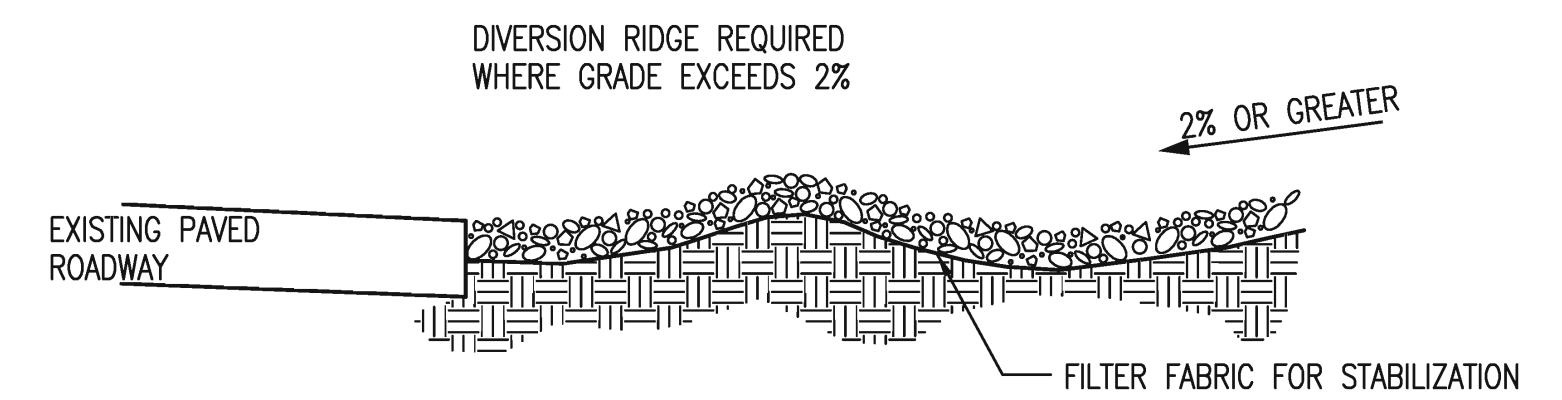


NOTE: PLACE 4" PERFORATED PVC PIPE, FILLED WITH 1/2"-1" DIA. GRAVEL, IN FRONT OF CURB INLET AS SHOWN.

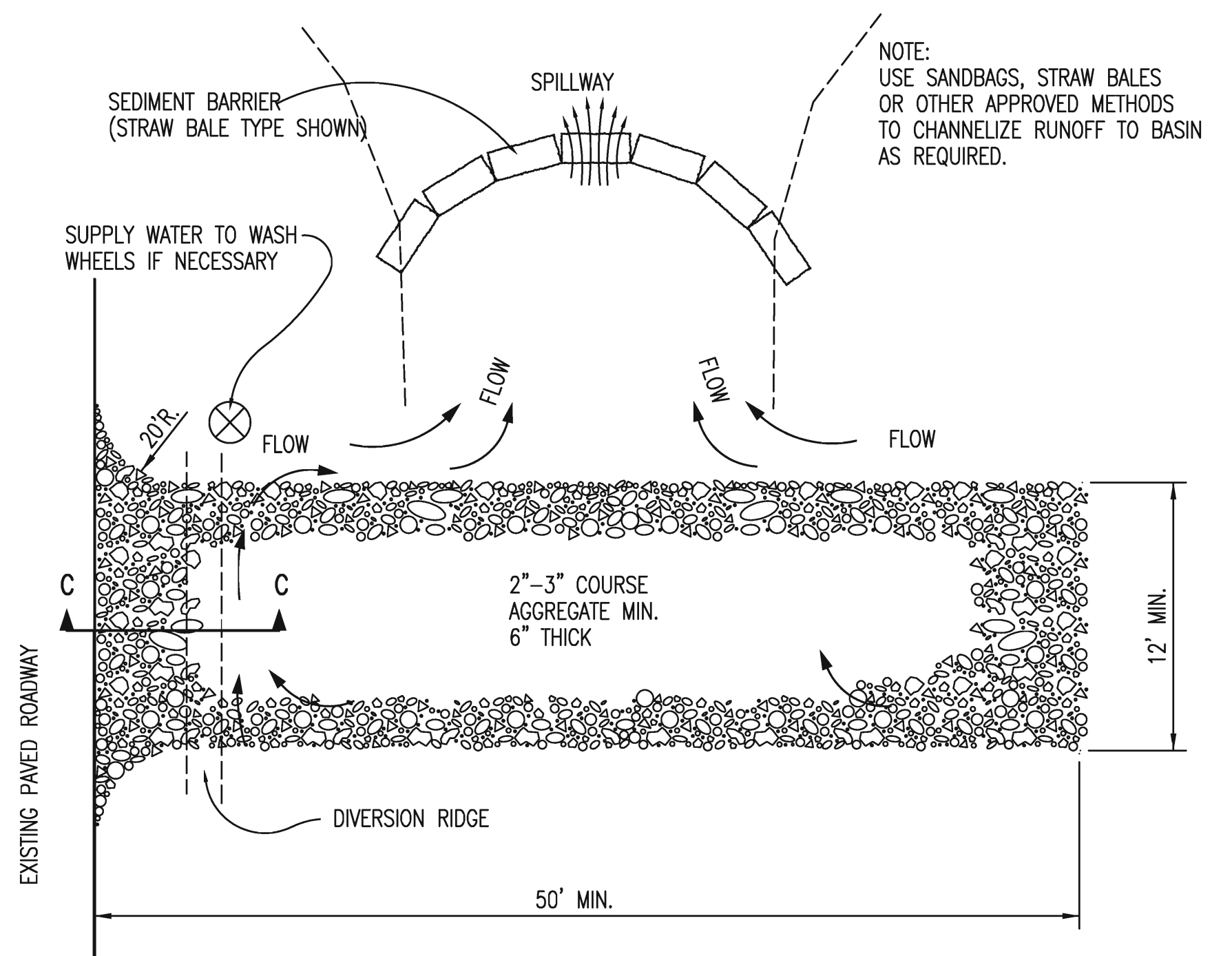
2X4 LENGTH	INLET TYPE	INLET OPENING
5'-6"	1-A	5'-0"
10'-6"	1-A	10'-0"
15'-6"	1-A	15'-0"



CURB INLET PROTECTION
4" PERFORATED PIPE W/ GRAVEL



SECTION C-C



STABILIZED CONSTRUCTION ENTRANCE

GENERAL NOTES

- 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.
- WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
- 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.
- 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



**BACK OF CURB PROTECTION,
CURB INLET PROTECTION AND
CONSTRUCTION ENTRANCE**

CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER 0229PPD	OCA NUMBER 607861	DATE 08/2012
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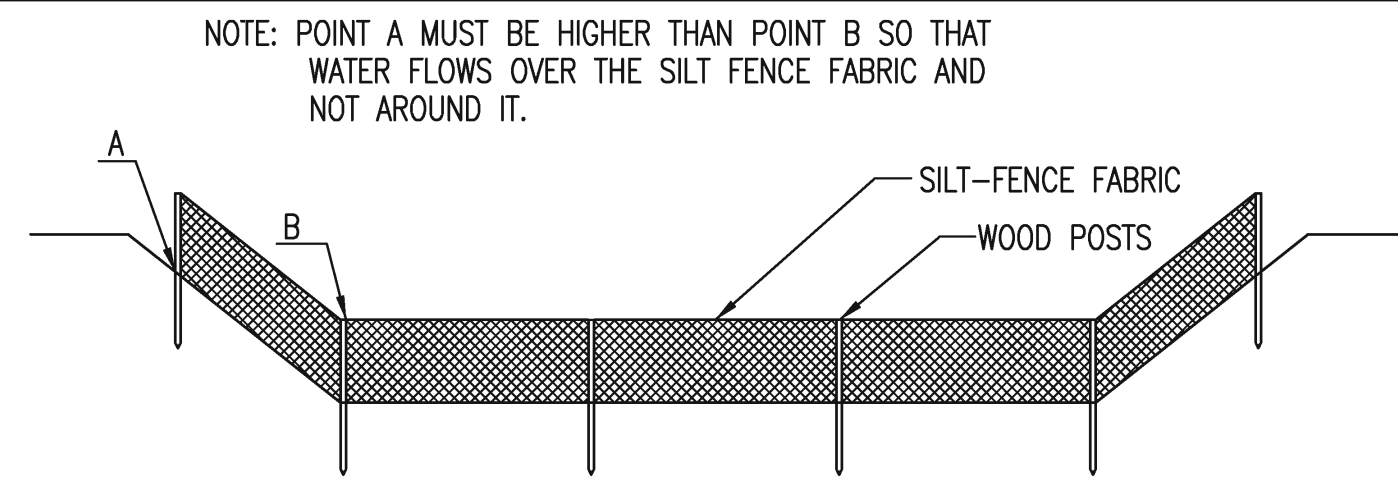
CITY ENGINEER'S OFFICE
CITY HALL - SEVENTH FLOOR
455 NORTH MAIN STREET
WICHITA, KANSAS 67202-1620
(316) 268-4501

SHEET

8 OF 13



05/30/13



ELEVATION
SILT FENCE DITCH CHECKS
(STREAM PROTECTION)

MATERIAL SPECIFICATION:

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

PLACEMENT:

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

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

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

PROPER INSTALLATION METHOD:

EXCAVATE A TRENCH PERPENDICULAR TO THE DITCH FLOWLINE THAT IS AT LEAST 12" DEEP BY 6" WIDE. EXTEND THE TRENCH IN A STRAIGHT LINE ALONG THE ENTIRE LENGTH OF THE PROPOSED DITCH CHECK. PLACE THE SOIL ON THE UPSTREAM SIDE OF THE TRENCH FOR LATER USE. ROLL OUT A CONTINUOUS LENGTH OF SILT FENCE FABRIC ON THE DOWNSTREAM SIDE OF THE TRENCH. PLACE THE EDGE OF THE FABRIC IN THE TRENCH STARTING AT THE TOP UPSLOPE 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 UPSLOPE 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.

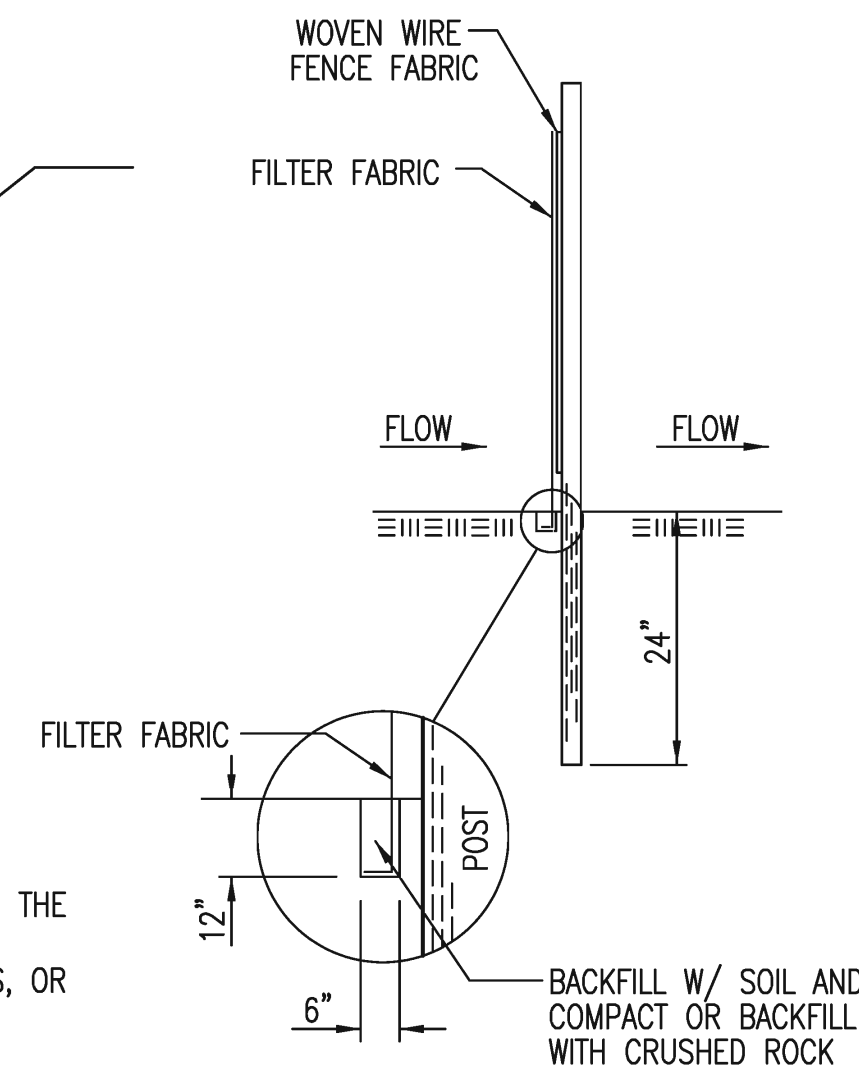
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

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 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 A SILT FENCE DITCH CHECK DIRECTLY IN FRONT OF A CULVERT OUTLET. IT WILL NOT STAND UP TO THE CONCENTRATED FLOW. DO NOT PLACE SILT FENCE DITCH CHECKS IN DITCHES THAT WILL LIKELY EXPERIENCE HIGH FLOWS. THEY WILL NOT STAND UP TO CONCENTRATED FLOW. FOLLOW PRESCRIBED DITCH CHECK SPACING GUIDELINES. IF SPACING GUIDELINES ARE EXCEEDED, EROSION WILL OCCUR BETWEEN THE DITCH CHECKS. DO NOT ALLOW WATER TO FLOW AROUND THE DITCH CHECK. MAKE SURE THAT THE DITCH CHECK IS LONG ENOUGH SO THAT THE GROUND LEVEL AT THE ENDS OF THE FENCE IS HIGHER THAN THE LOW POINT ON THE TOP OF THE FENCE. DO NOT PLACE SILT FENCE DITCH CHECKS IN CHANNELS WITH SHALLOW SOILS UNDERLAIN BY ROCK. IF THE CHECK IS NOT ANCHORED SUFFICIENTLY, IT WILL WASH OUT.

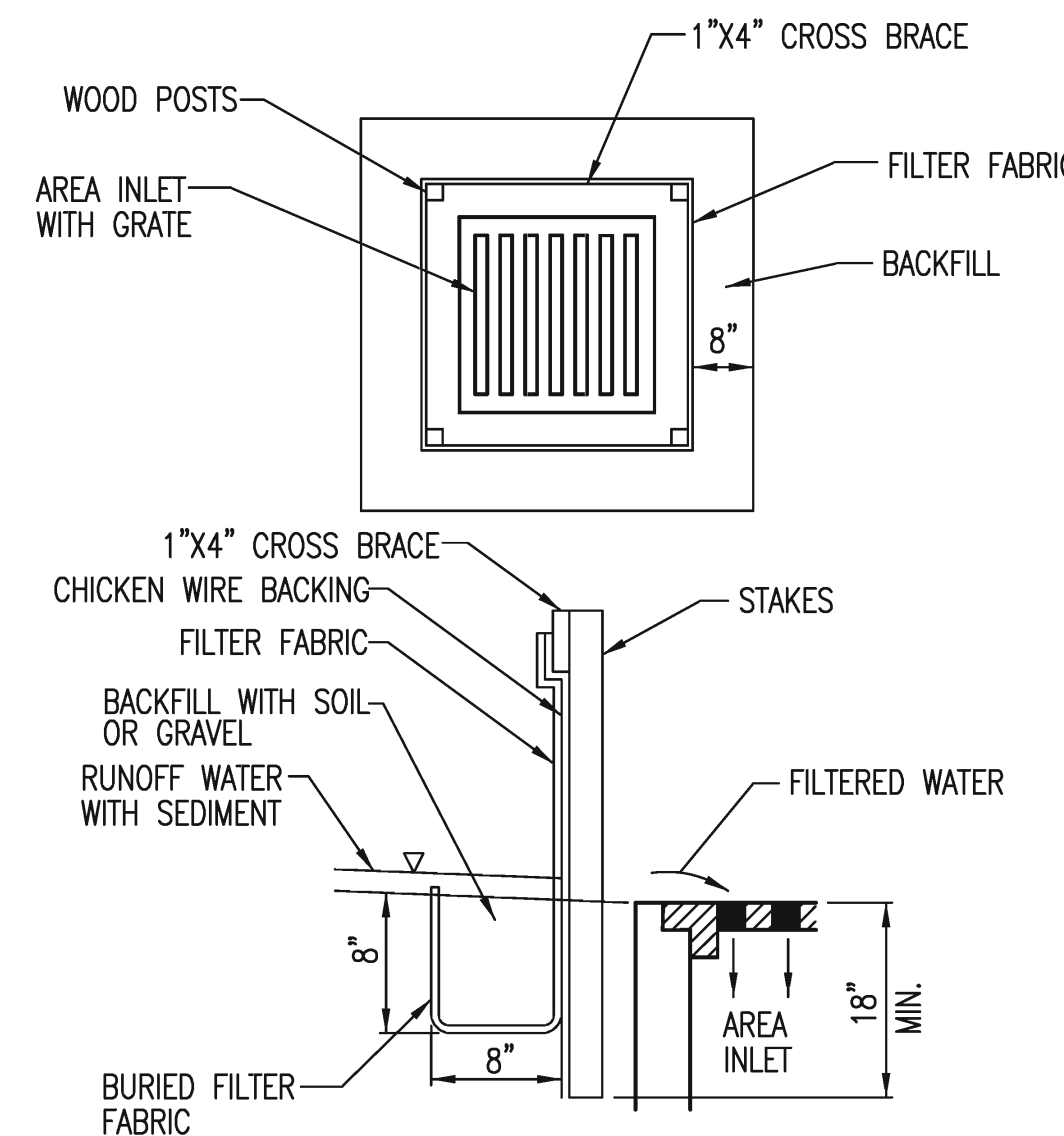
INSPECTION AND MAINTENANCE:

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

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



ANCHOR TRENCH DETAIL



SILT FENCE BARRIERS FOR AREA INLETS
(INLET PROTECTION)

MATERIAL SPECIFICATION:

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

PLACEMENT:

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

PROPER INSTALLATION METHOD:

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

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

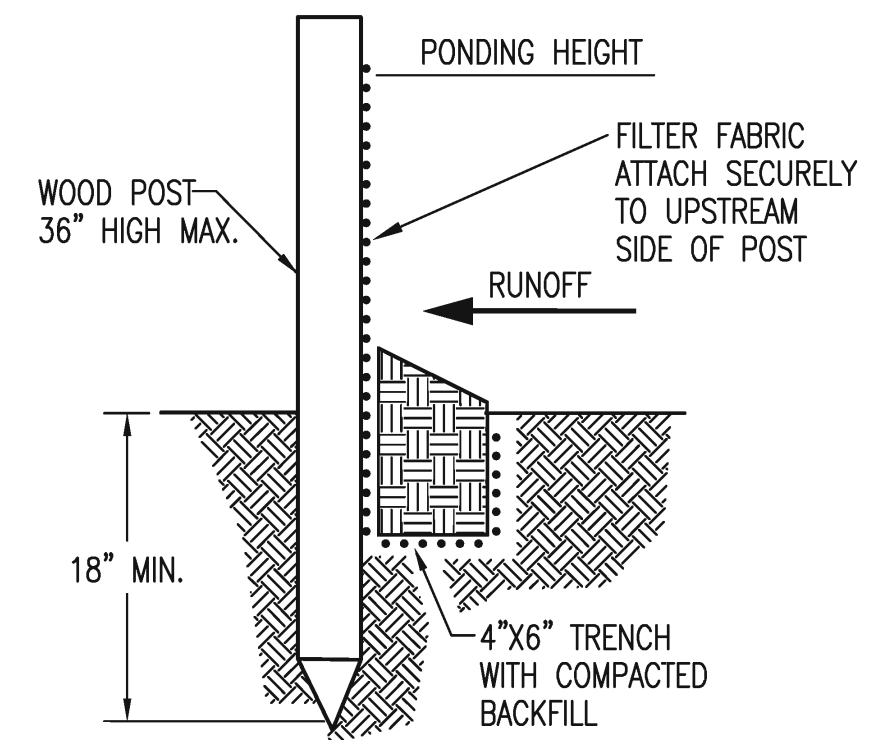
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

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

INSPECTION AND MAINTENANCE:

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

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



SILT FENCE BARRIERS

MATERIAL SPECIFICATION:

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

PLACEMENT:

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

PROPER INSTALLATION METHOD:

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

LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:


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

INSPECTION AND MAINTENANCE:

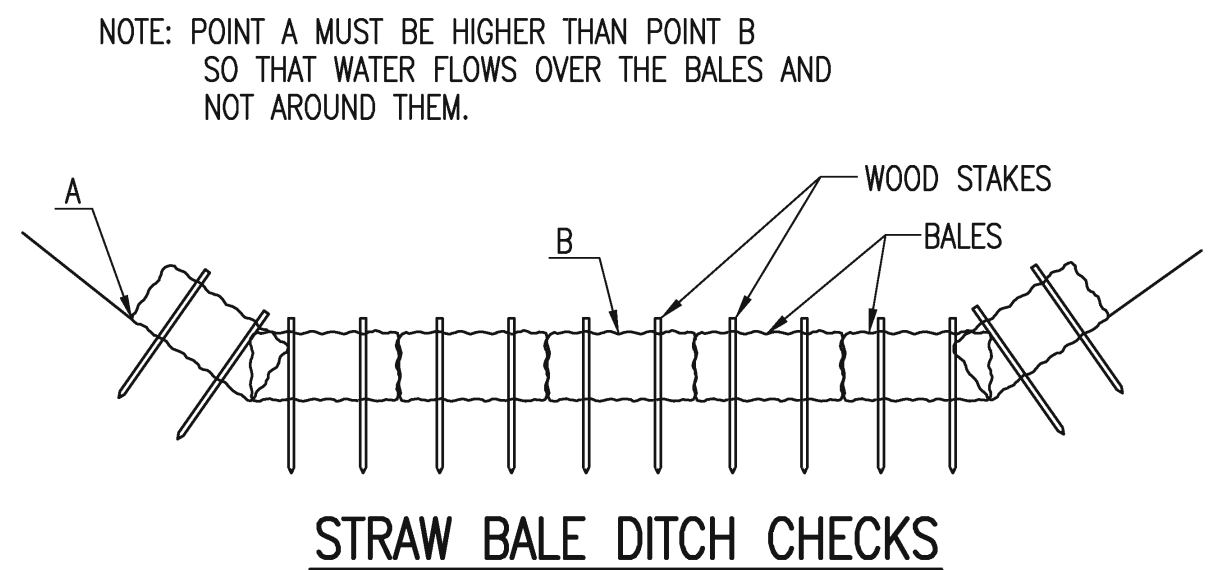
SILT FENCE SLOPE BARRIERS SHOULD BE INSPECTED EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL OF 1/2" OR MORE. THE FOLLOWING IS A LIST OF QUESTIONS THAT SHOULD BE ADDRESSED DURING EACH INSPECTION:

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



 CITY OF WICHITA PUBLIC WORKS & UTILITIES ENGINEERING DIVISION			SILT FENCE DITCH CHECK AND BARRIER DETAILS		
			CITY ENGINEER GARY JANZEN, P.E.		
PROJECT NUMBER	OCA NUMBER	DATE			
0229PPD	607861	11/2010			
CITY ENGINEER'S OFFICE			SHEET		
CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501			9 OF 13		

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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 CHECK 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 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".

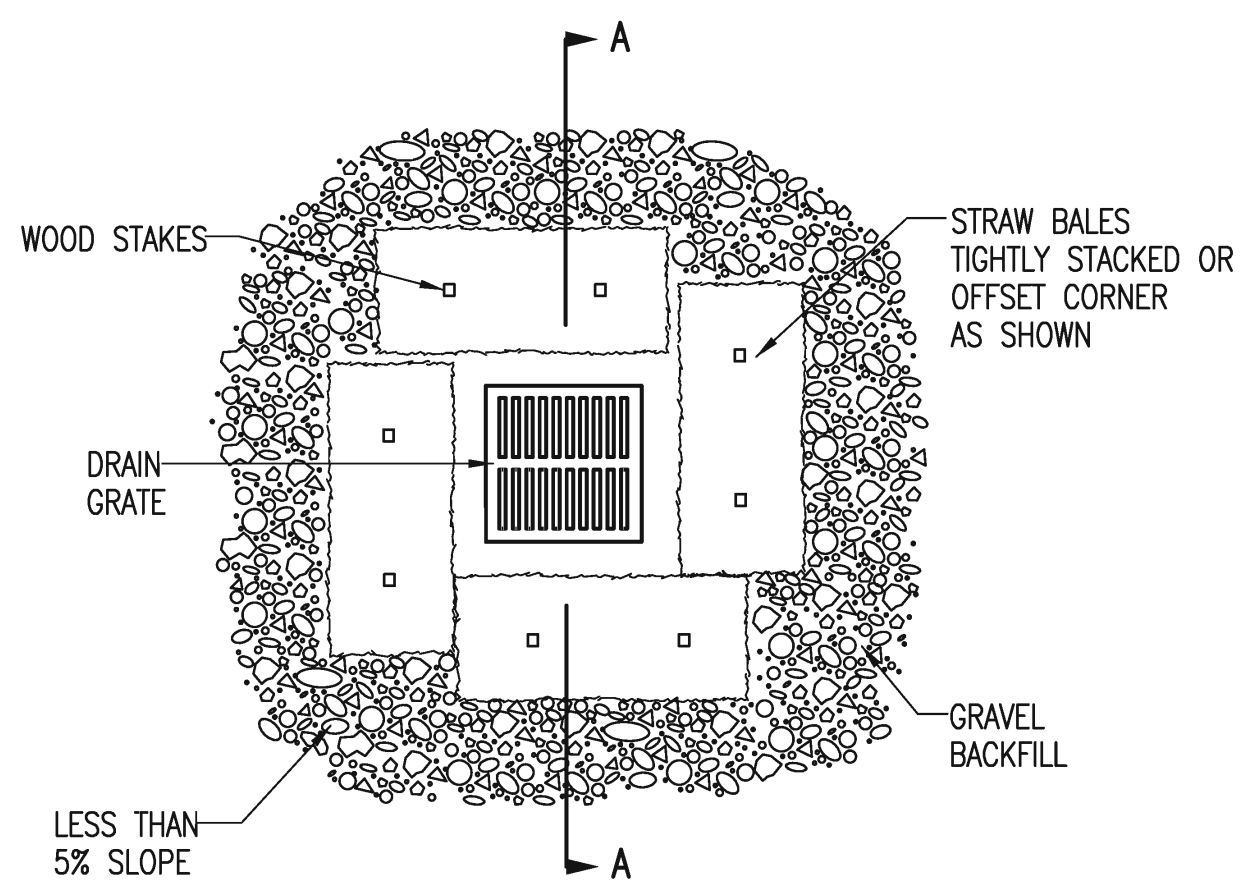
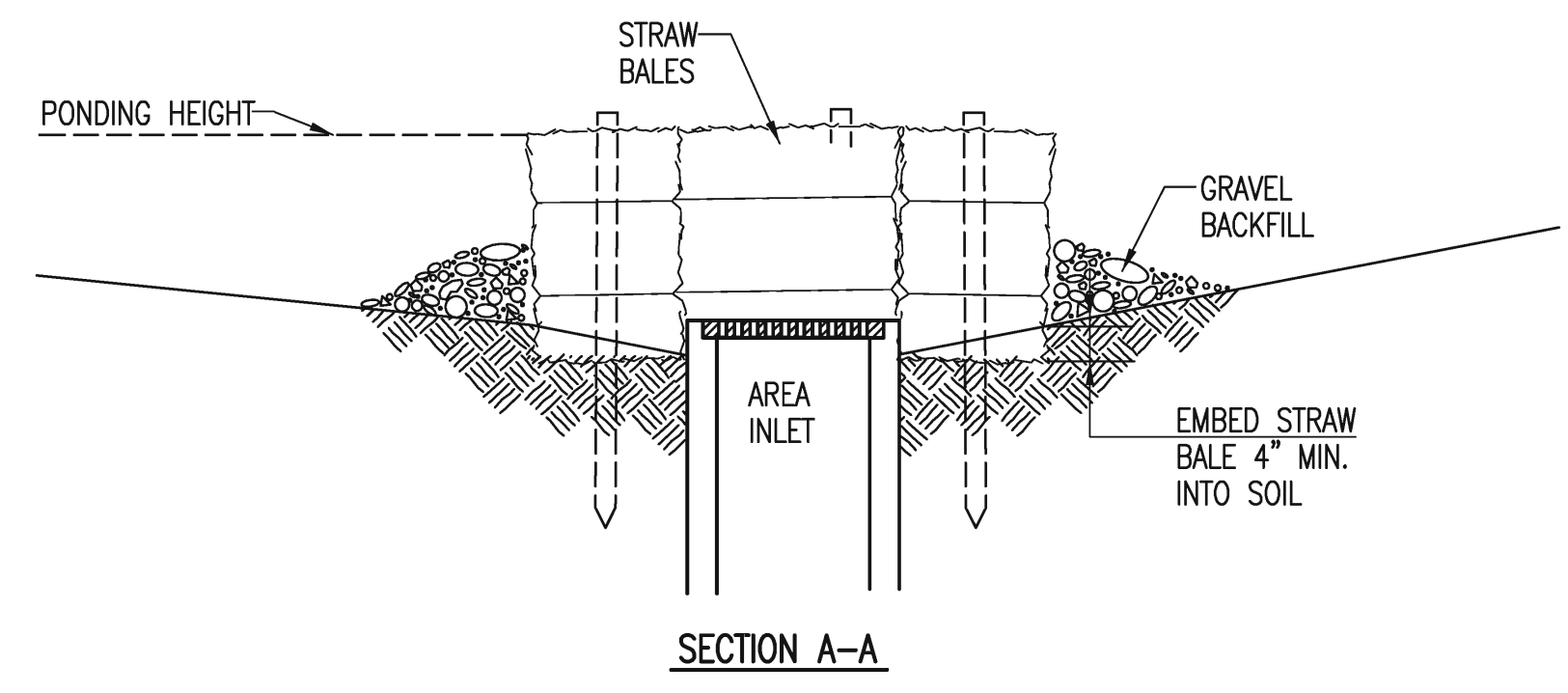
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

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?



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.

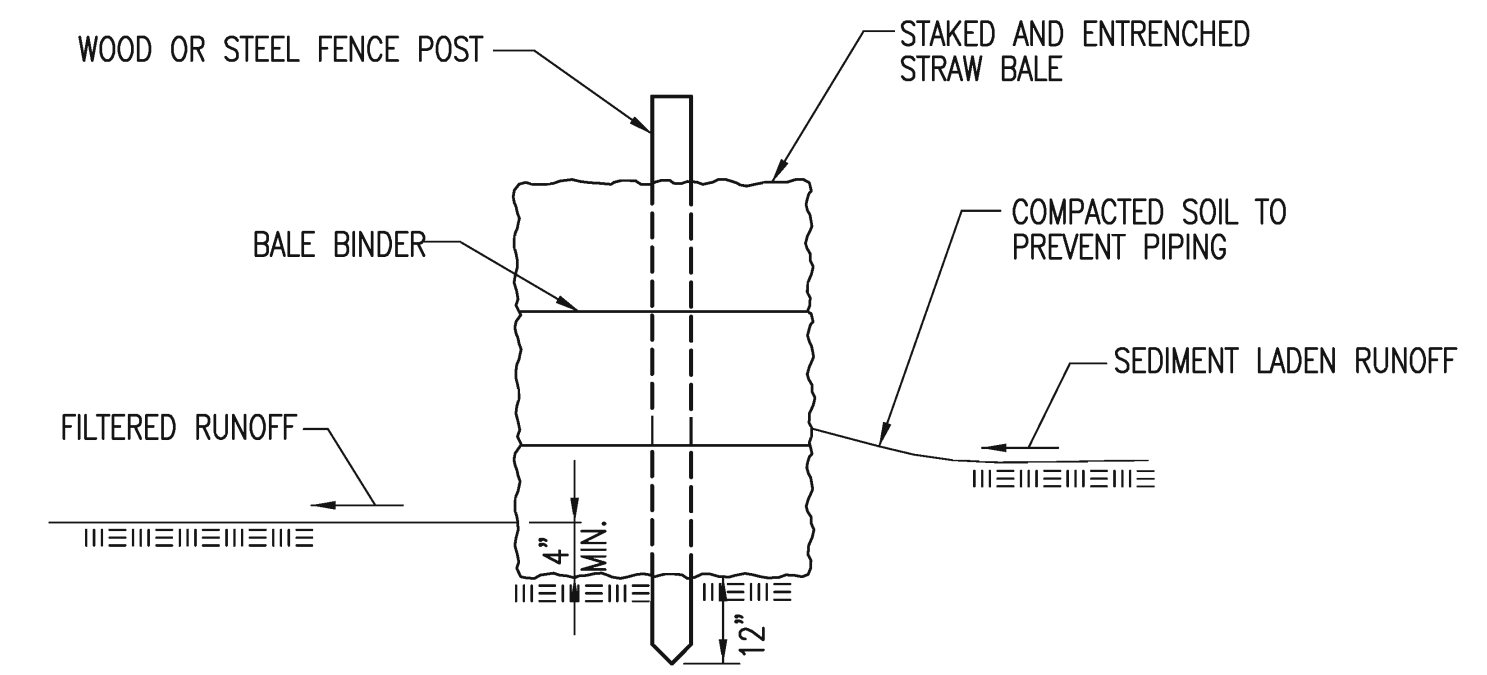
LIST OF COMMON PLACEMENT INSTALLATION MISTAKES TO AVOID:

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.

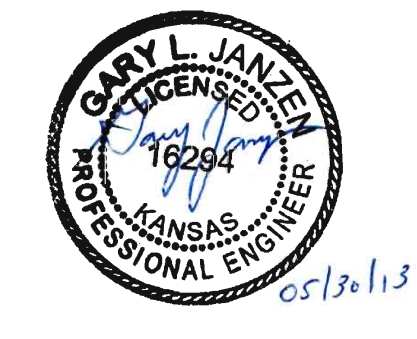
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:


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:

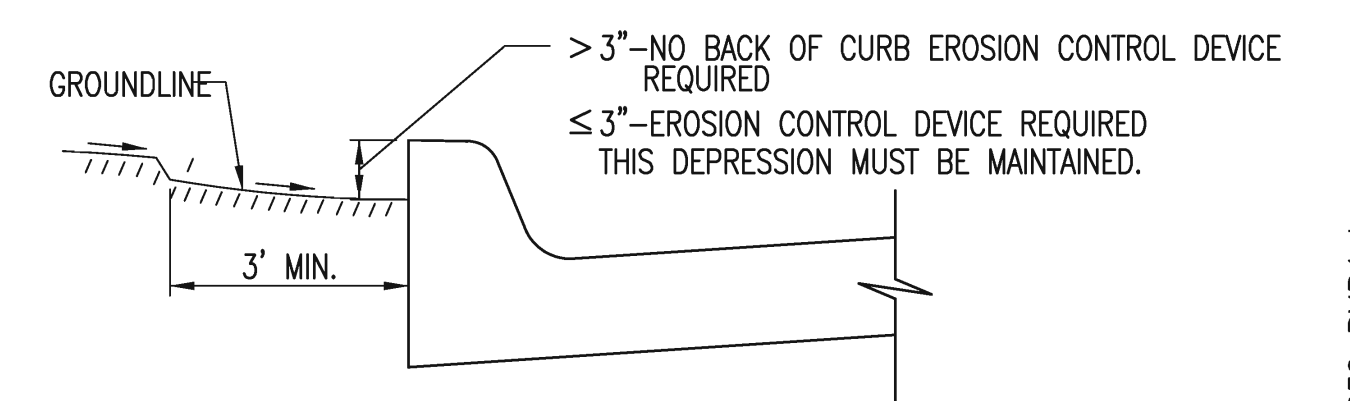
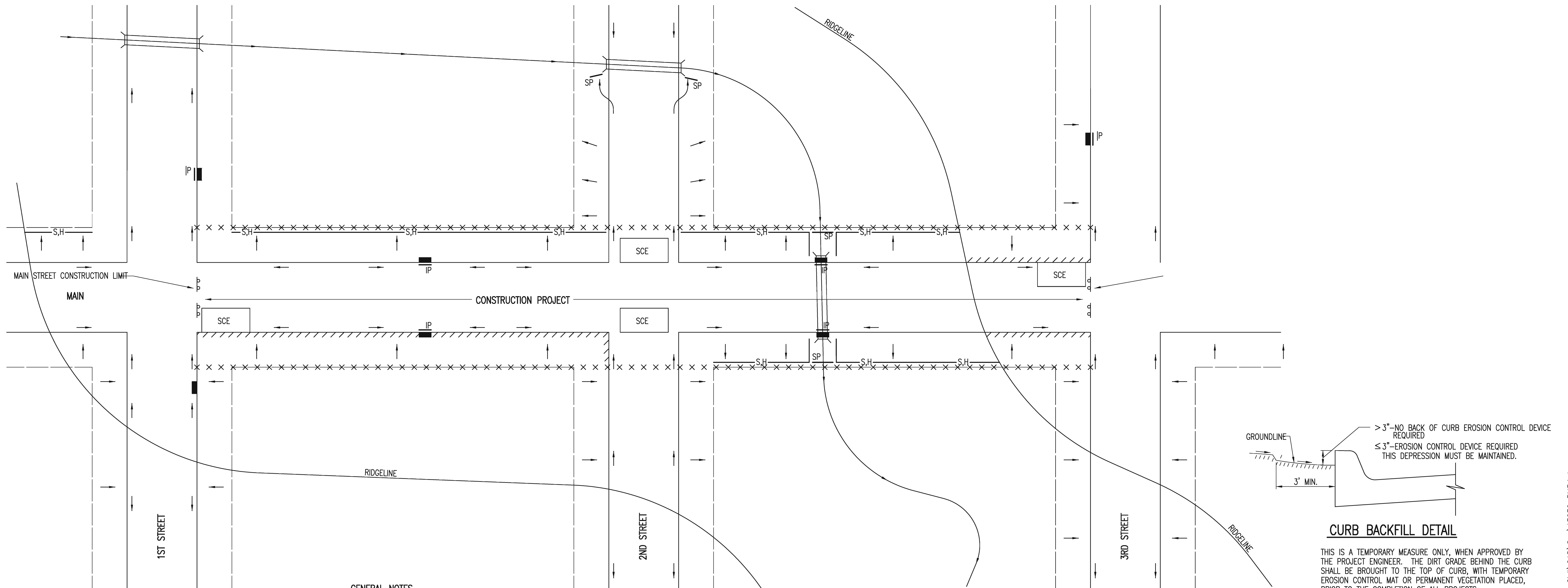
- ARE THERE ANY POINTS ALONG THE SLOPE BARRIER WHERE WATER IS CONCENTRATING?
- DOES WATER FLOW UNDER THE SLOPE BARRIER?
- DOES WATER FLOW THROUGH SPACES BETWEEN ABUTTING BALES?
- ARE ANY BALES DISLODGED?
- ARE BALES DECOMPOSING DUE TO AGE AND/OR WATER DAMAGE?
- DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE SLOPE BARRIER?



 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	
0229PPD		607861		11/2010	
CITY ENGINEER'S OFFICE					SHEET
CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501					10 OF 13

GENERAL NOTES

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

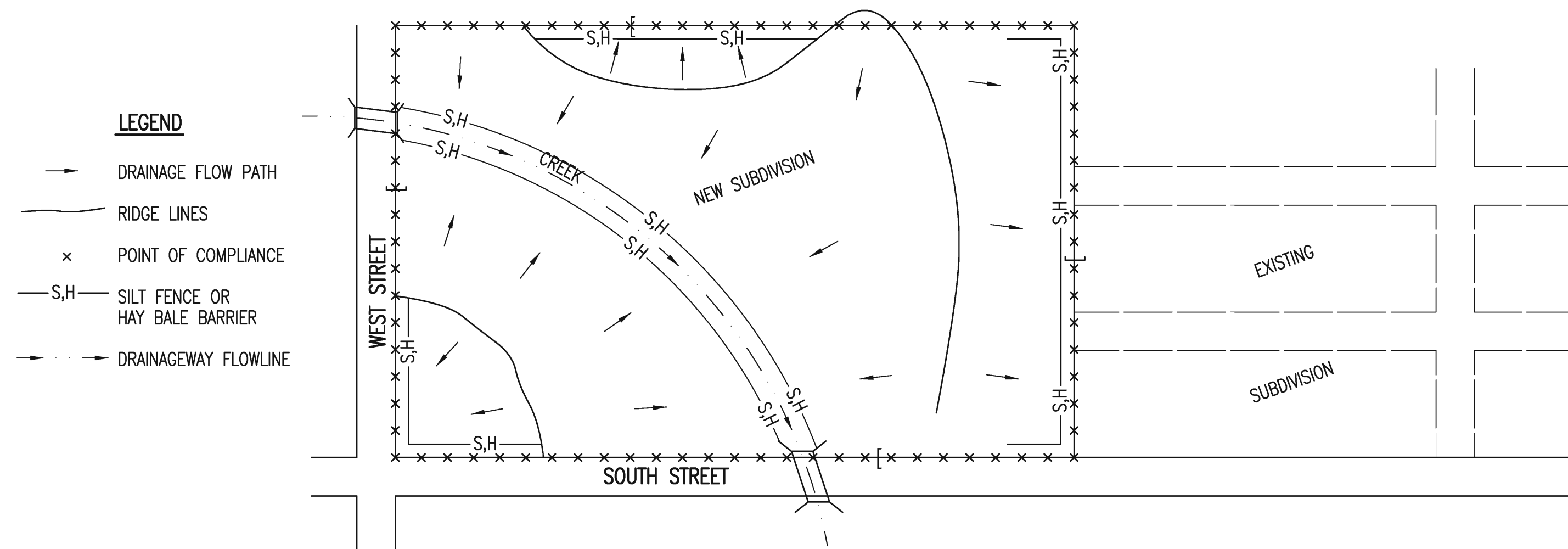
- THE INTENT OF ALL EROSION CONTROL DEVICES IS TO KEEP ALL SEDIMENT CONFINED TO THE CONSTRUCTION SITE, AND OUT OF ALL UNDERGROUND PIPES, DITCHES, LAKES, AND OTHER DRAINAGE FACILITIES, AND OFF OF STREETS.
- THE POINT OF COMPLIANCE IS GENERALLY THE RIGHT-OF-WAY LINES WITHIN THE LIMITS OF CONSTRUCTION.
- EROSION CONTROL DEVICES WILL BE REQUIRED AT ALL POINTS ALONG THE PROJECT WHERE DISTURBED EARTH CAN DRAIN ONTO PRIVATE PROPERTY.
- INLET PROTECTION DEVICES WILL BE REQUIRED WHEREVER WATER CAN DRAIN OFF THE PROJECT SITE INTO AN INLET, INCLUDING ANY SIDE STREET INLETS.
- EROSION CONTROL DEVICES SHALL BE INSTALLED AT CREEK CROSSINGS SO AS TO PREVENT SEDIMENT FROM ENTERING THEREIN.
- 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.
- ANY MUD TRACKED ONTO STREETS MUST BE REMOVED AT THE END OF EACH WORK DAY.
- THE CONTRACTOR 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:
 - THE DEVICE REQUIRED WILL BE APPROVED EROSION CONTROL MAT LISTED ON THE CITY'S APPROVED MATERIAL LIST. SAID BLANKET SHALL BE PLACED OVER THE APPROPRIATE SEED AND FERTILIZER, AS SPECIFIED IN THE PROJECT SPECIFICATIONS. (SEE SOIL EROSION BMPs - BACK OF CURB SEDIMENT BARRIER DETAILS)
 - 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.
 - ADDITIONALLY, OTHER EROSION CONTROL DEVICES (HAY BALES, SILT FENCE, ETC.) WILL BE INSTALLED AT LOCATIONS OF CONCENTRATED FLOW RESULTING IN SEDIMENT OVERRUNNING THE MAT.
 - 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)



STREET IMPROVEMENT PROJECTS		
CITY ENGINEER GARY JANZEN, P.E.		
PROJECT NUMBER 0229PPD	OCA NUMBER 607861	DATE 08/2012
CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		SHEET 11 OF 13

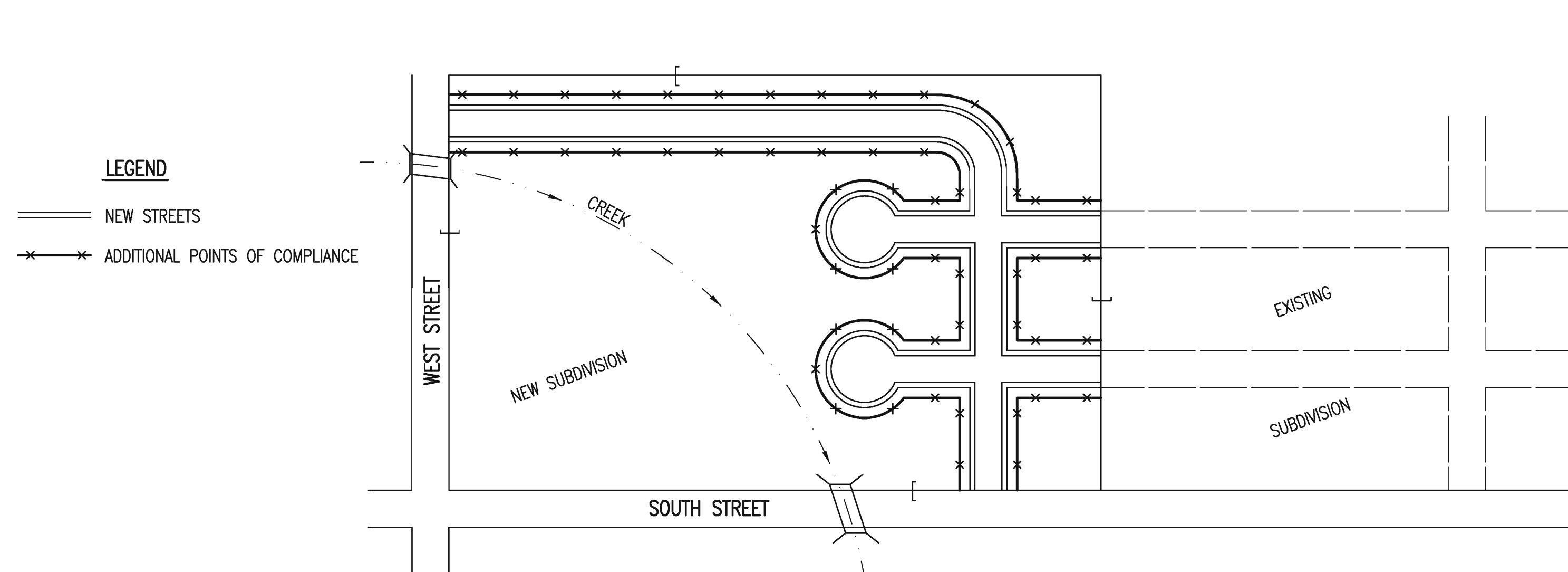
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PHASE 1 – INITIAL EARTHWORK AND UTILITIES (EXCEPT STORM SEWER)



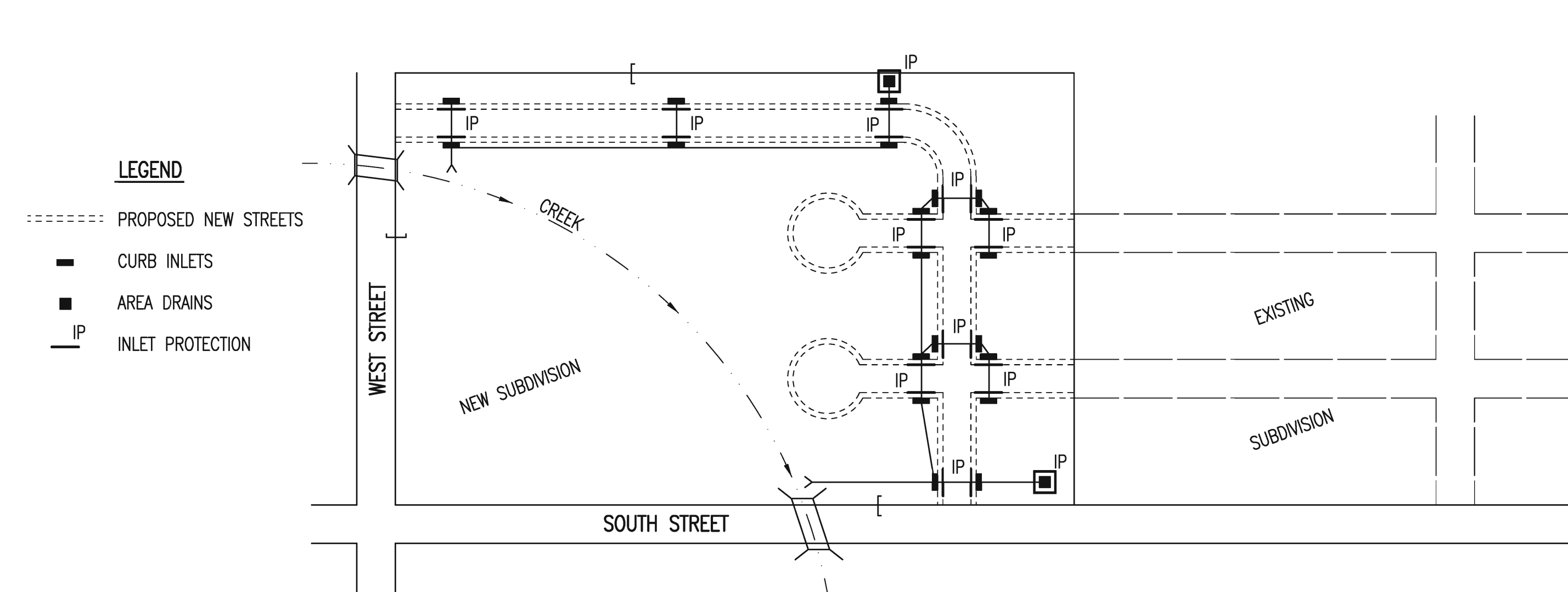
- LEGEND**
- DRAINAGE FLOW PATH
 - RIDGE LINES
 - x POINT OF COMPLIANCE
 - S.H. SILT FENCE OR HAY BALE BARRIER
 - DRAINAGEWAY FLOWLINE
- DURING THIS PHASE OF SUBDIVISION CONSTRUCTION, THE POINTS OF COMPLIANCE ARE THE PERIMETER BOUNDARIES AND ANY DRAINAGE WAYS OR STORM SEWERS DRAINING THROUGH OR FROM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

PHASE 3 – STREET CONSTRUCTION



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

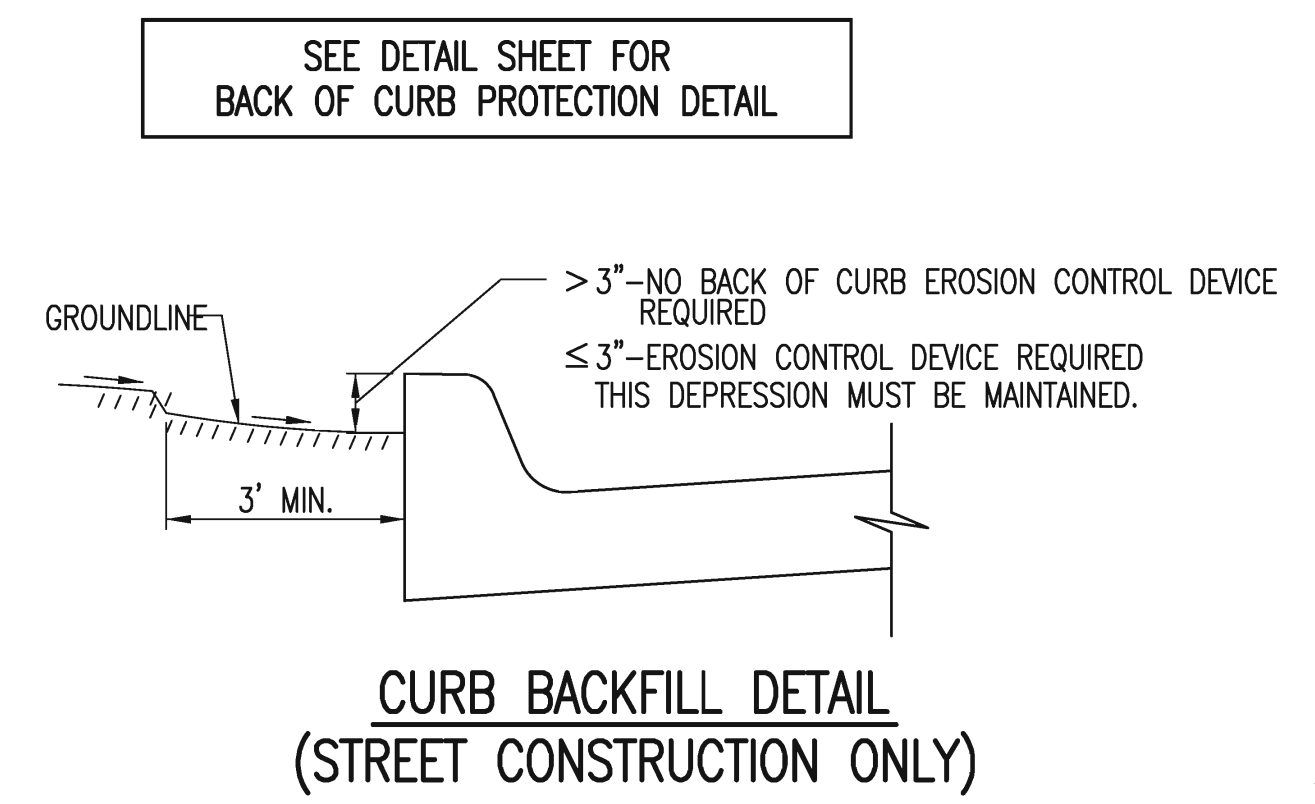
PHASE 2 – INSTALLATION OF STORM SEWER




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

GENERAL NOTES

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



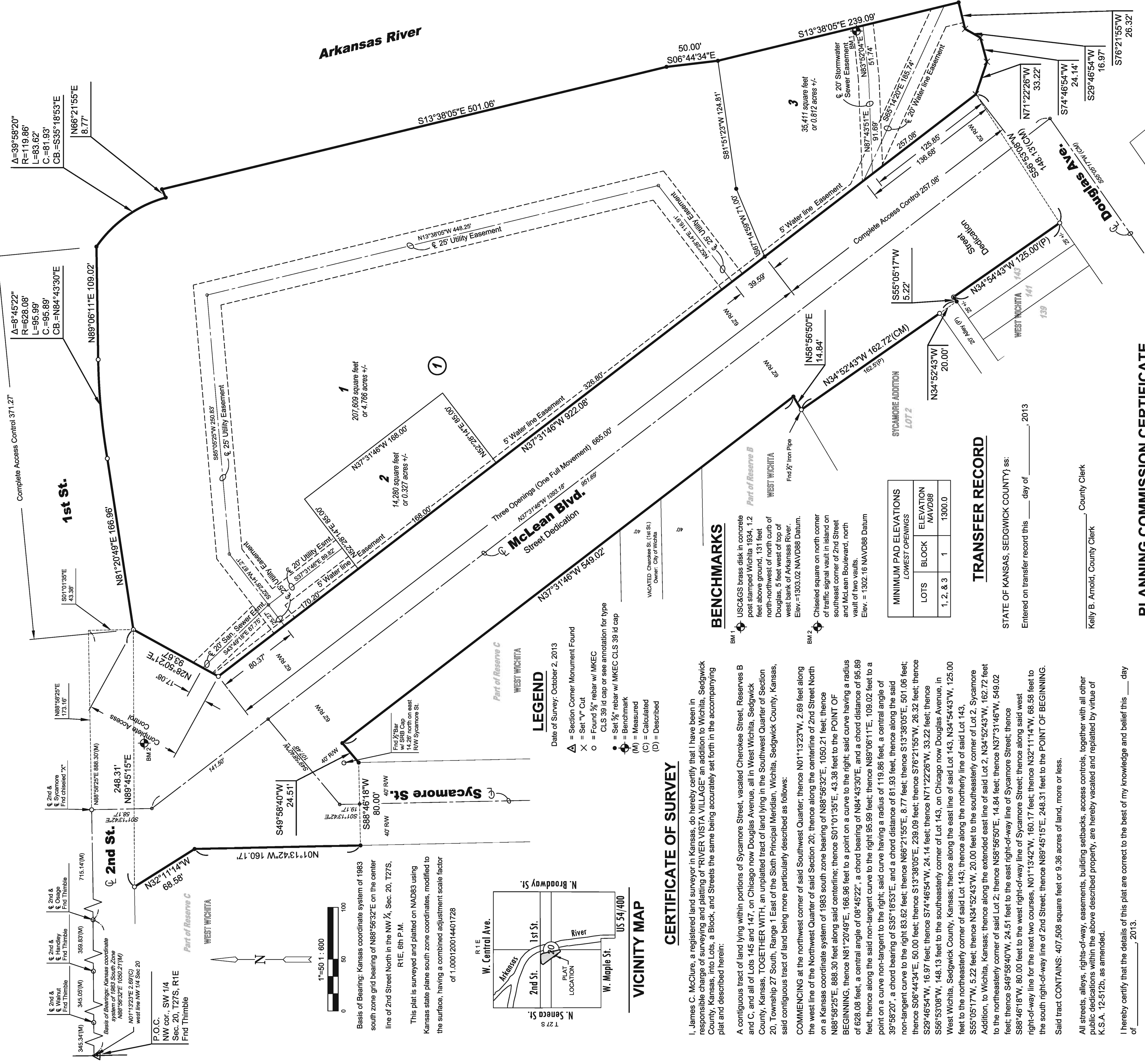
 CITY OF WICHITA PUBLIC WORKS & UTILITIES ENGINEERING DIVISION			SUBDIVISION DEVELOPMENT PROCESS		
			CITY ENGINEER GARY JANZEN, P.E.		
PROJECT NUMBER	OCA NUMBER	DATE			
0229PPD	607861	08/2012			
CITY ENGINEER'S OFFICE			SHEET		
CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501			12 OF 13		

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FINAL PLAT

RIVER VISTA VILLAGE

AN ADDITION TO WICHITA, SEDGWICK COUNTY, KANSAS



PLANNING COMMISSION CERTIFICATE

STATE OF KANSAS, SEDGWICK COUNTY) ss:
 This plat of "RIVER VISTA VILLAGE" has been submitted to and approved by the Wichita-Sedgwick County Metropolitan Area Planning Commission, Wichita, Kansas.

Dated this ____ day of _____, 2013
 Kelly B. Arnold, County Clerk
 County Clerk

COUNTY SURVEYOR

STATE OF KANSAS, SEDGWICK COUNTY) ss:
 Reviewed in accordance with K.S.A. 58-2005 on this ____ day of _____, 2013.

WICHITA-SEDGWICK COUNTY METROPOLITAN AREA PLANNING COMMISSION

Dated this ____ day of _____, 2013
 Don Klausmeyer, Chair
 Chair

Deputy County Surveyor
 Sedgwick County, Kansas

Attest:
 John L. Schlegel, Secretary
 Secretary

Deputy County Surveyor
 Sedgwick County, Kansas

GOVERNING BODY CERTIFICATE

STATE OF KANSAS, SEDGWICK COUNTY) ss:
 The dedications shown on this plat are hereby accepted and this plat is hereby approved by the governing body of the City of Wichita, Kansas.

Dated this ____ day of _____, 2013
 At the direction of the City Council.

Bill Meek, Register of Deeds
 Register of Deeds

Attest:
 Karen Sublett, City Clerk
 City Clerk
 Carl Brewer, Mayor
 Mayor

Tonya E. Buckingham, Deputy
 Deputy

CERTIFICATE OF SURVEY

I, James C. McClure, a registered land surveyor in Kansas, do hereby certify that I have been in responsible charge of surveying and plating of "RIVER VISTA VILLAGE", an addition to Wichita, Sedgwick County, Kansas, into Lots, a Block, and Streets the same being accurately set forth in the accompanying plat and described herein:

A contiguous tract of land lying within portions of Sycamore Street, vacated Cherokee Street, Reserves B and C, and all of Lots 145 and 147, on Chicago now Douglas Avenue, all in West Wichita, Sedgwick County, Kansas, TOGETHER WITH, an unplatted tract of land lying in the Southwest Quarter of Section 20, Township 27 South, Range 1 East of the Sixth Principal Meridian, Wichita, Sedgwick County, Kansas, said contiguous tract of land being more particularly described as follows:

COMMENCING at the northwest corner of said Southwest Quarter, thence N01°13'23"W, 2.69 feet along the west line of the Northwest Quarter of said Section 20; thence along the centerline of 2nd Street North on a Kansas coordinate system of 1983 south zone bearing of N89°56'32"E, 1050.21 feet; thence N88°56'25"E, 888.30 feet along said centerline; thence S01°01'35"E, 43.36 feet to the POINT OF BEGINNING, thence N81°20'49"E, 166.96 feet to a point on a curve to the right, said curve having a radius of 628.08 feet, a central angle of 08°45'22", a chord bearing of N84°43'30"E, and a chord distance of 95.89 feet; thence along the said non-tangent curve to the right 95.99 feet; thence N89°06'11"E, 109.02 feet to a point on a curve non-tangent to the right, said curve having a radius of 119.96 feet, a central angle of S8°58'20", a chord bearing of S35°18'53"E, and a chord distance of 81.93 feet; thence along the said non-tangent curve to the right 81.93 feet; thence N68°21'55"E, 8.77 feet; thence S13°38'05"E, 501.06 feet; thence S06°44'34"E, 50.00 feet; thence S13°38'05"E, 239.09 feet; thence S76°21'55"W, 26.32 feet; thence S29°46'54"W, 16.97 feet; thence S74°46'54"W, 24.14 feet; thence N71°22'26"W, 33.22 feet; thence S88°53'08"W, 148.13 feet to the southeasterly corner of Lot 143, on Chicago now Douglas Avenue, in West Wichita, Sedgwick County, Kansas; thence along the east line of said Lot 143, N34°54'43"W, 125.00 feet to the northeasterly corner of said Lot 143; thence along the northerly line of said Lot 143, S55°05'17"W, 5.22 feet; thence N34°52'43"W, 20.00 feet to the southeasterly corner of Lot 2, Sycamore Addition, to Wichita, Kansas; thence along the extended east line of said Lot 2, N34°52'43"W, 162.72 feet to the northeasterly corner of said Lot 2; thence N68°56'50"E, 14.84 feet; thence N37°31'46"W, 549.02 feet; thence S49°58'40"W, 24.51 feet to the east right-of-way line of Sycamore Street, thence S88°48'18"W, 80.00 feet to the west right-of-way line of Sycamore Street; thence along said right-of-way line for the next two courses, N01°13'42"W, 160.17 feet; thence N32°11'14"W, 68.58 feet to the south right-of-way line of 2nd Street; thence N89°45'15"E, 248.31 feet to the POINT OF BEGINNING.

Said tract CONTAINS: 407,508 square feet or 9.36 acres of land, more or less.

All streets, alleys, rights-of-way, easements, building setbacks, access controls, together with all other public dedications within the above described property, are hereby vacated and replatted by virtue of K.S.A. 12-512b, as amended.

I hereby certify that the details of this plat are correct to the best of my knowledge and belief this ____ day of _____, 2013.

James C. McClure, R.L.S. #1251
 MKEC Engineering Consultants, Inc.
 411 North Webb Road
 Wichita, Kansas 67206

OWNER'S CERTIFICATE

Know all men by these presents that we the undersigned property owners of the land above set forth in the Registered Land Surveyor's Certificate, have caused the same to be surveyed and platted into Lots, a Block, and Streets, the same to be known as "RIVER VISTA VILLAGE" an addition to Wichita, Sedgwick County, Kansas.

Easements for the construction and maintenance of drainage and utilities, as indicated hereon, are hereby granted to the public.

All abutters rights of access to or from McLean Boulevard over and across the west line of "RIVER VISTA VILLAGE" are hereby granted to the appropriate governing body, provided however three openings are allowed one of which being a full movement as indicated hereon. The location of the openings shall be approved by the city engineer prior to development.

A drainage plan has been developed for this plat. All drainage easements, rights-of-way, or reserves shall remain at established grades or as modified with the approval of the applicable City or County Engineer, and unobstructed to allow for the conveyance of stormwater.

CITY OF WICHITA
 At the direction of City Council

Attest:
 John L. Schlegel, Secretary
 Secretary

Carl Brewer, Mayor
 Mayor

STATE OF KANSAS, SEDGWICK COUNTY) ss:

This instrument was acknowledged before me on ____ day of _____, 2013, by
 Carl Brewer, Mayor, City of Wichita.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, the day and year last above written.

Notary Public: _____
 My Term Expires: _____



Wichita, KS • 316.684.9600

REGISTER OF DEEDS' CERTIFICATE

STATE OF KANSAS, SEDGWICK COUNTY) ss:
 This is to certify that this instrument was filed for record in the Register of Deeds office this ____ day of _____, 2014, at ____ o'clock ____ M, and is duly recorded.

Bill Meek, Register of Deeds
 Register of Deeds

Attest:

Tonya E. Buckingham, Deputy
 Deputy