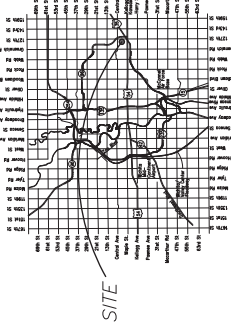




**JACKSON HEIGHTS TOWNHOMES
2ND ADDITION**
SANITARY SEWER
WICHITA, KANSAS

REVISIONS	DATE	DESIGNED	DRAWN
	08.2024	KEM	ZJS
NEW PROJ.		23044	

Title Sheet
SHEET **1.0**

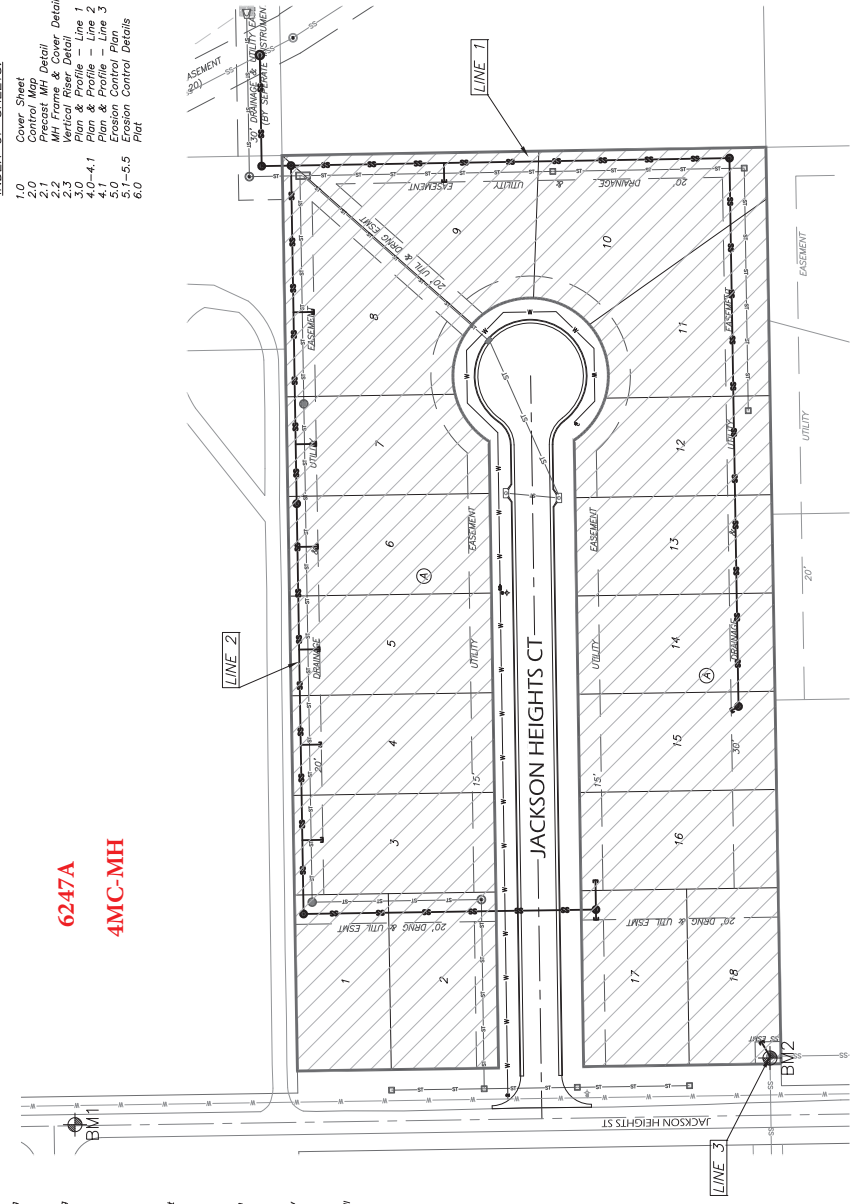


INDEX OF SHEETS:

1.0	Cover Sheet
2.0	Control Map
2.1	Precast MH Detail
2.2	Manhole Detail
2.3	Vertical Riser Detail
3.0	Plan & Profile - Line 1
4.0-4.1	Plan & Profile - Line 2
5.0	Erosion Control Plan
5.1-5.5	Erosion Control Details
6.0	Plot

**SANITARY SEWER
TO SERVE**
**JACKSON HEIGHTS
TOWNHOMES 2ND ADDITION**
CITY OF WICHITA, KANSAS
PAUL GUNZELMAN, P.E. CITY ENGINEER
Project Number: 468-2023-032523
Org Code: 47271624
Munis Number: E4064

6247A
4MC-MH



BENCHMARKS:
BM1: Magnolia in asphalt on Jackson Heights Street
Approx. 151' North and 36' West of the NW
Corner of Lot 1 Block 1. Directly across from
Garage. Elevation = 1360.39 (NAVD 88)
BM2: West rim of SS MH, Approx. 7' north and 4'
east of the SW corner of Lot 1 Block 1.
Elevation = 1364.59 (NAVD 88)

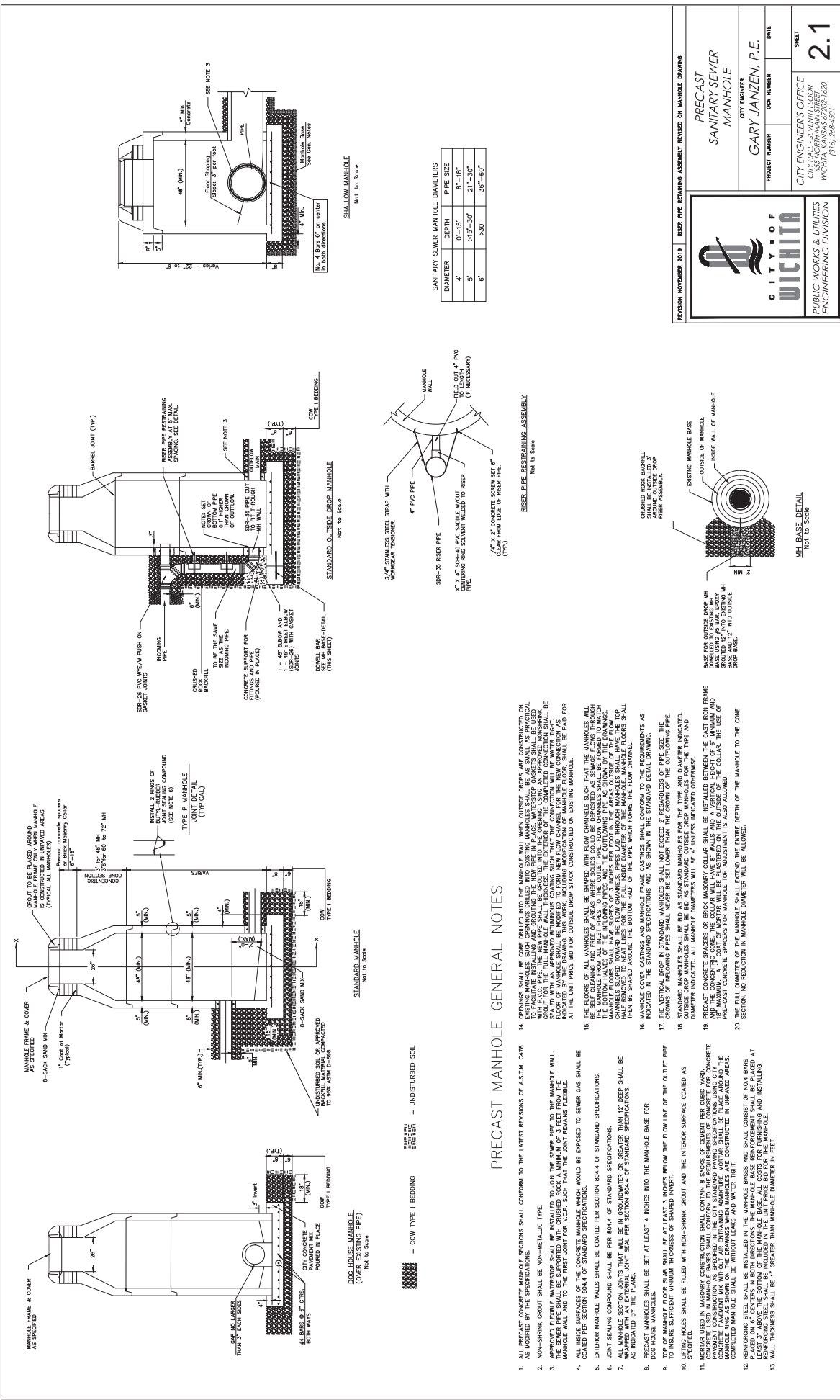
Benefit Area

AUGUST 2024

GENERAL NOTES:

- The Contractor shall comply with all applicable safety regulations. All construction shall be completed following current City Standard Specifications and Special Provisions.
- Contractor will be required to provide notice to utility companies a minimum of seventy-two (72) hours prior to any excavation, as follows:
Kansas One-Call 687-2470
The Contractor must notify the following in case of an emergency:
Black Hills Energy 1-800-546-8464
1-800-634-8889
City of Wichita Water & Sewer 1-316-259-9900
City of Wichita Traffic 1-316-265-4034
Kansas Gas Service 1-888-482-4200
Westar Energy 1-800-544-4857
- Utility service lines, poles, etc. are to be adjusted as necessary by others prior to construction unless the Contractor specifically call for their adjustment. Utility to be adjusted by the owner during construction. Plans, represent the best information obtainable for design. The Contractor will be required to work around existing utilities and structures in a way which do not conflict with proposed construction.
- Bubble from the approval of miscellaneous structures and excess excavation which is to be wasted shall be disposed of on site to be provided by the Contractor. Locations, in suitable appearance and site location. Locations, in suitable appearance will not be approved. All disposal sites must be approved by the Kansas Department of Health and Environment. A floor plan will require a Kansas State Board of Professional Engineers permit. Any material buried or placed in a public right-of-way shall be subject to U.S. Corps of Engineers permitting regulations. Any material buried or placed in a public right-of-way shall be subject to U.S. Corps of Engineers permitting regulations unless buried in a previously approved borrow location.
- Trees and shrubs in public right-of-way which are in direct conflict with proposed new construction shall be removed. Trees and shrubs which are not in direct conflict with proposed new construction shall be saved and protected from damage.
- The Contractor shall give all property owners and/or tenants of developed property about the construction project a minimum of ten (10) days notice prior to start of construction.
- The Contractor shall be responsible for re-establishing any property lines which are damaged or removed during construction. The Contractor will be required to re-establish by a licensed land surveyor in accordance with state laws.
- The Engineering Division shall field locate water values one time during construction when requested by the Contractor. Field locations during the construction process. Meter values shall be provided by the Contractor at his own expense. Valve boxes and water meters within the project limits shall be adjusted to match final grades by the contractor.
- If traffic will be impacted by construction, a traffic control plan must be submitted and approved by the City Traffic Engineering Division. The Contractor shall be responsible for all traffic control measures to facilitate construction. The latest version of the Manual on Uniform Traffic Control Devices (MUTCD) as published by the US Dept. of Transportation shall be used. Construction markings and signage shall be the Contractor's responsibility.
- All elevations shown are NAVD 88.
- All areas disturbed during construction that will not be restored to original condition shall be restored to match existing conditions.

Developer:
Steve Miller
Build Wichita
316-259-2377
steve@buildwichita.com

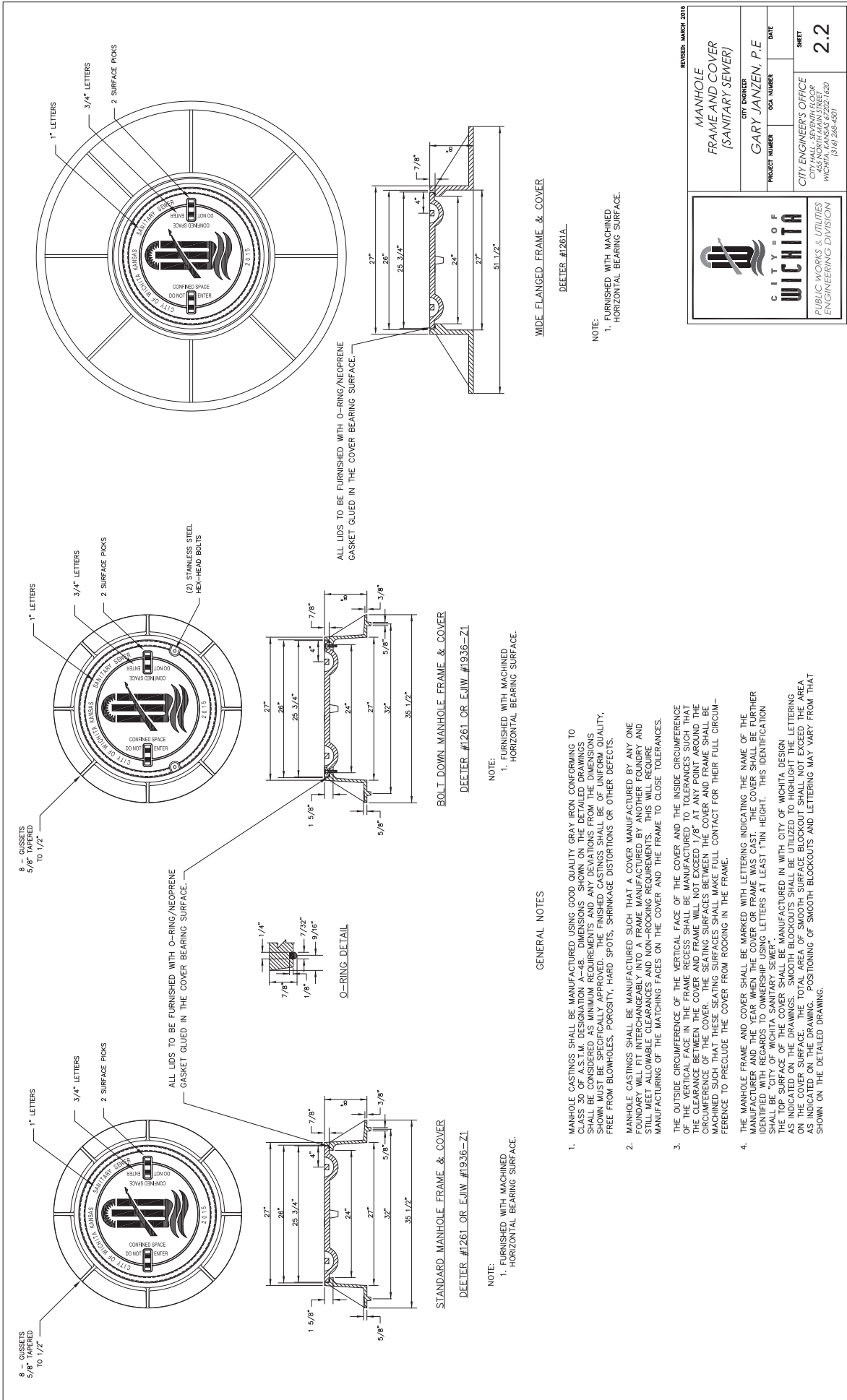


REVISION NOVEMBER 2019 RISER PIPE RESTRAINING ASSEMBLY REVISED ON MANHOLE DRAWING

PRECAST SANITARY SEWER MANHOLE CITY ENGINEER GARY JANZEN, P.E.	
PROJECT NUMBER	000 NUMBER
CITY ENGINEER'S OFFICE	DATE
CITY HALL - SEVENTH FLOOR	
WICHITA, KANSAS 67202-1620	
(316) 268-4521	

PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

SHEET
2.1



WIDE FLANGED FRAME & COVER
DEETER #1261A

NOTE:
1. FURNISHED WITH MACHINED HORIZONTAL BEARING SURFACE.

BOLT DOWN MANHOLE FRAME & COVER
DEETER #1261 OR EJIW #1936-Z1

NOTE:
1. FURNISHED WITH MACHINED HORIZONTAL BEARING SURFACE.

GENERAL NOTES

- MANHOLE CASTINGS SHALL BE MANUFACTURED USING GOOD QUALITY GRAY IRON CONFORMING TO CLASS 30 OF A.S.T.M. DESIGNATION A-48. DIMENSIONS SHOWN ON THE DETAILED DRAWINGS SHALL BE ADDRESSED AS MINIMUM REQUIREMENTS AND ALL DIMENSIONS FROM THE DIMENSIONS SHALL BE LISTED AS SUCH. ALL CASTINGS SHALL BE FREE OF BLOWHOLES, POROSITY, HARD SPOTS, SHRINKAGE DISTORTIONS OR OTHER DEFECTS.
- MANHOLE CASTINGS SHALL BE MANUFACTURED SUCH THAT A COVER MANUFACTURED BY ANY ONE FOUNDRY WILL FIT INTERCHANGEABLY INTO A FRAME MANUFACTURED BY ANOTHER FOUNDRY AND STILL MEET ALLOWABLE CLEARANCES AND NON-ROCKING REQUIREMENTS. THIS WILL REQUIRE MANUFACTURING OF THE MATCHING FACES ON THE COVER AND THE FRAME TO CLOSE TOLERANCES.
- THE OUTSIDE CIRCUMFERENCE OF THE VERTICAL FACE OF THE COVER AND THE INSIDE CIRCUMFERENCE OF THE VERTICAL FACE IN THE FRAME RECESS SHALL BE MANUFACTURED TO TOLERANCES SUCH THAT THE CLEARANCE BETWEEN THE COVER AND FRAME WILL NOT EXCEED 1/8" AT ANY POINT AROUND THE PERIPHERY. THE RECESS SHALL BE MACHINED TO PREVENT THE COVER FROM ROCKING IN THE FRAME. MACHINED SURFACES SHALL MAKE FULL CONTACT FOR THEIR FULL CIRCUMFERENCE TO PRECLUDE THE COVER FROM ROCKING IN THE FRAME.
- THE MANHOLE FRAME AND COVER SHALL BE MARKED WITH LETTERING INDICATING THE NAME OF THE MANUFACTURER AND THE YEAR WHEN THE COVER OR FRAME WAS CAST. THE COVER SHALL BE FURTHER IDENTIFIED BY MARKING THE TOP SURFACE WITH 1" HIGH LETTERS AT LEAST 1" IN HEIGHT. THIS IDENTIFICATION SHALL BE "CITY OF WICHITA SANITARY SEWER". THE TOP SURFACE OF THE COVER SHALL BE MANUFACTURED IN WITH CITY OF WICHITA DESIGN AS INDICATED ON THE DRAWINGS. SMOOTH BLOCKOUTS SHALL BE UTILIZED TO HIGHLIGHT THE LETTERING ON THE COVER SURFACE. THE TOTAL AREA OF SMOOTH SURFACE BLOCKOUT SHALL NOT EXCEED THE AREA AS INDICATED ON THE DRAWING. POSITIONING OF SMOOTH BLOCKOUTS AND LETTERING MAY VARY FROM THAT SHOWN ON THE DETAILED DRAWINGS.

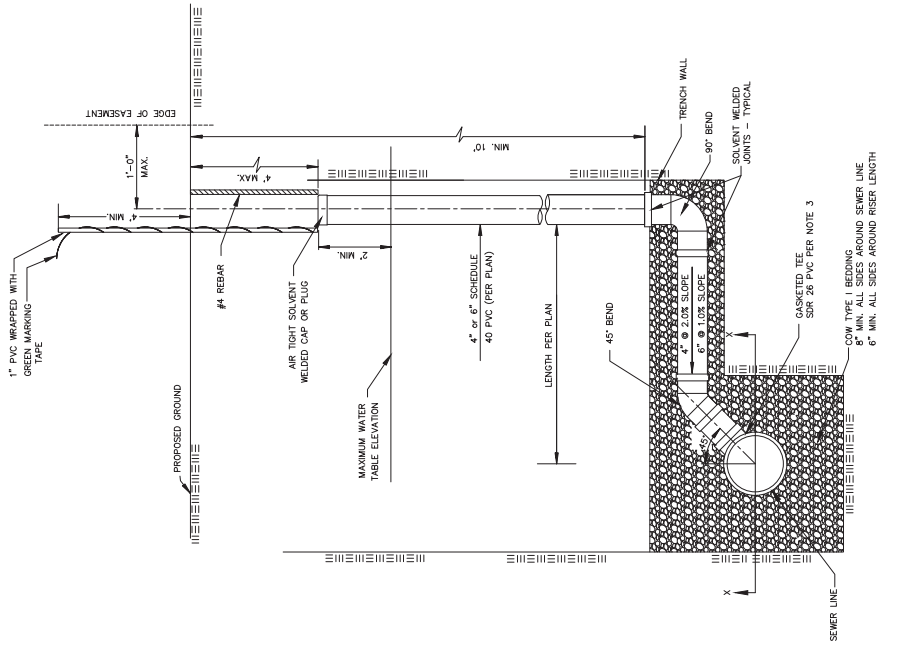
STANDARD MANHOLE FRAME & COVER
DEETER #1261 OR EJIW #1936-Z1

NOTE:
1. FURNISHED WITH MACHINED HORIZONTAL BEARING SURFACE.

		REVISION: MARCH 2015 MANHOLE FRAME AND COVER (SANITARY SEWER)	
		CITY ENGINEER GARY JANZEN, P.E.	DATE
PROJECT NUMBER	SCA NUMBER	CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR WICHITA, KANSAS 67202-1620 (316) 268-4501	
CITY OF WICHITA PUBLIC WORKS & UTILITIES ENGINEERING DIVISION		SHEET 2.2	

GENERAL NOTES

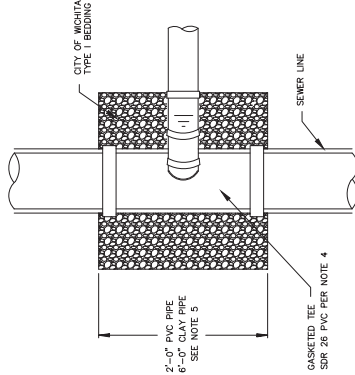
- APPLICATION: Risers shall be installed to serve all lots or tracts where the sanitary sewer main is below the water table, where the sanitary sewer main is above the water table and the water table is above the sanitary sewer main is adjacent to a pond or wherever sanitary lines would have to cross under storm sewer pipe. Installation of risers because of field conditions shall be approved by the Construction Engineer. The riser shall be installed on undeveloped property shall be approved by the property owner and the Construction Engineer.
- MANHOLE STUB RISERS: Manhole stub risers be installed in manholes where risers are indicated by the plans. Where risers are required because of field conditions, the riser shall be 6" diameter for commercial or industrial risers and 4" diameter for residential risers. The riser shall be the same size and sanitary sewer main depth. Sizing of risers shall be approved by the Construction Engineer prior to installation.
- SDING: Risers shall be sized according to the plans and riser table where risers are indicated by the plans. Where risers are required because of field conditions, the riser shall be 6" diameter for commercial or industrial risers and 4" diameter for residential risers. The riser shall be the same size and sanitary sewer main depth. Sizing of risers shall be approved by the Construction Engineer prior to installation.
- RISER MATERIAL: Risers shall be constructed of Schedule 40 PVC Pipe, 4" or 6" diameter, with 45° and 90° elbows and 45° and 90° tees. All riser joints shall be solvent welded. Full body tee shall be SDR 26 PVC pipe.
- ROCK ENCASMENT: Riser connection to clay pipe sanitary sewers shall be rock encased both ways from the riser centerline. The rock encasement shall be 18" thick and extend 18" from the riser centerline. Riser connections to PVC sanitary sewers shall be rock encased 18" from the riser centerline. Riser connections to 4" or 6" sanitary sewer shall be rock encased 18" from the riser centerline. Riser connections to 6" and shall meet all requirements for Portland Cement Concrete pavement. Course Aggregate, Section 406.2, City of Wichita Standards Specifications.
- BEDDING: Beyond the limits of the rock encasement, bedding around the riser shall be 4" of 6" schedule 40 PVC (PER PLAN) bedding. Bedding shall be placed and compacted from the depth of the sanitary sewer to the depth of the riser. Bedding shall be placed and compacted in vertical wall or sloped wall trenches. Bedding material and construction practices shall be approved by the Construction Engineer prior to installation.
- TRENCH BACKFILL: The riser pipe shall be bedded in situ at all times until trench backfill and compaction has been completed. Contractor's backfill shall be approved by the Construction Engineer. The riser pipe shall be approved by the Construction Engineer.
- PLUGGING: The ends of the riser pipes and manhole stubs shall be plugged using an original solvent welded cap or plug. Cap or plug fittings shall be 4" or 6" diameter. Plugs shall be 4" or 6" diameter. Caps or plugs which do not provide an airtight seal will not be accepted.
- TOP OF THE RISER PIPE: The top elevation of the sanitary riser pipe shall be marked by installing 1" PVC from the top of the riser to a minimum of 4" above the top of finished grade. No. 4 rebar shall be placed centered over the top of the riser pipe. The rebar shall be 4" long and shall be wrapped with green colored plastic tape for the full length above ground surface. If ground water is encountered, the top of the riser pipe shall be marked by installing 1" PVC from the top of the riser pipe to a minimum elevation, regardless of the riser elevation shown on the plans.
- MARKING: Locations of the ends of the sanitary sewer riser pipe shall be marked by installing 1" PVC from the top of the riser to a minimum of 4" above the top of finished grade. No. 4 rebar shall be placed centered over the top of the riser pipe. The rebar shall be 4" long and shall be wrapped with green colored plastic tape for the full length above ground surface. If ground water is encountered, the top of the riser pipe shall be marked by installing 1" PVC from the top of the riser pipe to a minimum elevation, regardless of the riser elevation shown on the plans.
- LOCATION MEASURES: The project inspector shall record and document the location of the riser pipe. The project inspector shall indicate the main, riser size, and elevation of the top of the riser in tabular format.
- RISER LOCATION: The riser shall be located per plan if shown. If not shown on the plan, the riser shall be located at the center of the lot, within one foot of the centerline of the sanitary sewer main. The riser shall be located as approved by the Construction Engineer prior to installation.
- PAYMENT: "Riser Assembly, Vertical" shall be paid for at the contract unit price per each, which shall be full compensation for all labor, material, and equipment necessary to complete the work. The riser assembly shall include the riser pipe, rock encasement, and all other items as required and listed for "Riser Assembly, Vertical".



NOTE: RISER PIPE REQUIREMENTS AT MANHOLE CONNECTION SHALL BE SIMILAR TO THOSE SHOWN ABOVE.


NOTE: TABLE FOR REFERENCE ONLY AND SHOULD BE ON EACH APPLICABLE PLAN SHEET.

SANITARY SEWER RISER TABLE						FOR INFORMATION ONLY	
NUMBER	TYPE	LOCATION		STATION	DIRECTION	VERTICAL (FT)	HORIZONTAL (FT)
		LOT NO.	BLOCK NO.				
1	4" MANHOLE CONNECTION						
2	6" MANHOLE CONNECTION						
3	4" TEE						
4	6" TEE						



NOTE: NON SHEAR COUPLING TO BE USED WHEN HOOKING TO CLAY PIPE.

TYPICAL SECTION X-X



CITY OF WICHITA
PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

REVISION: JULY 2015

VERTICAL
RISER ASSEMBLY SEWER
DETAIL

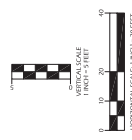
CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER: []
SHEET: **2.3**



**JACKSON HEIGHTS TOWNHOMES
2ND ADDITION**
WICHITA, KANSAS

SANITARY SEWER

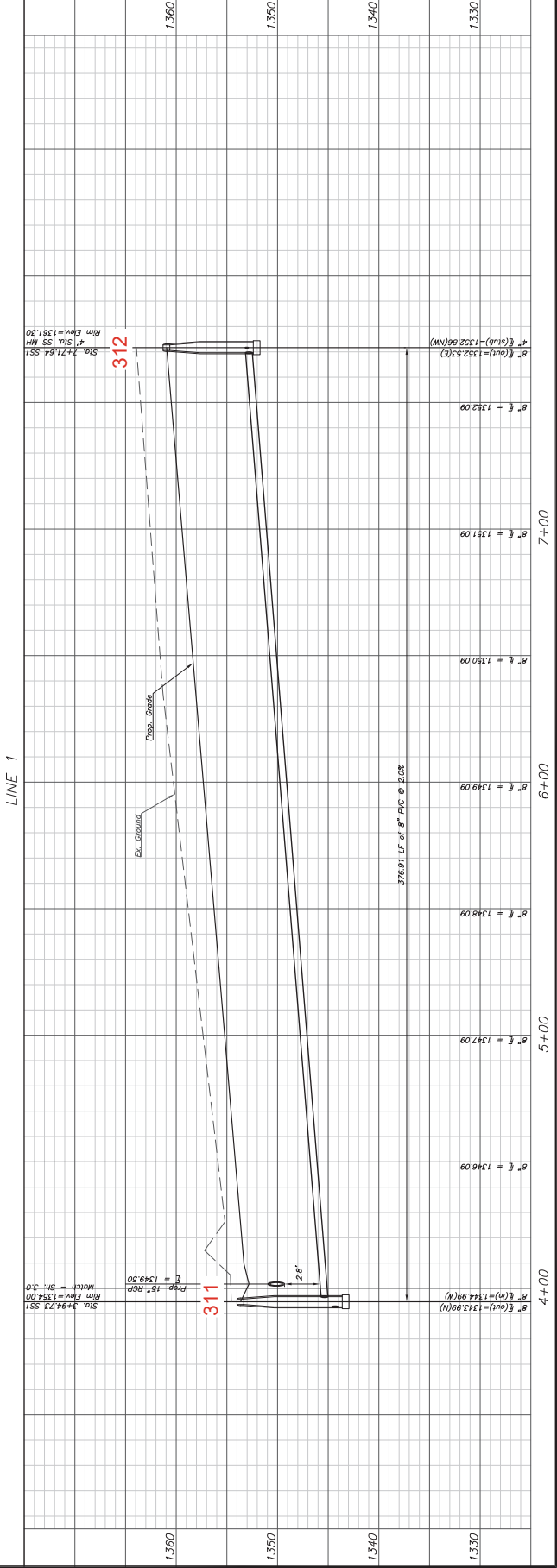
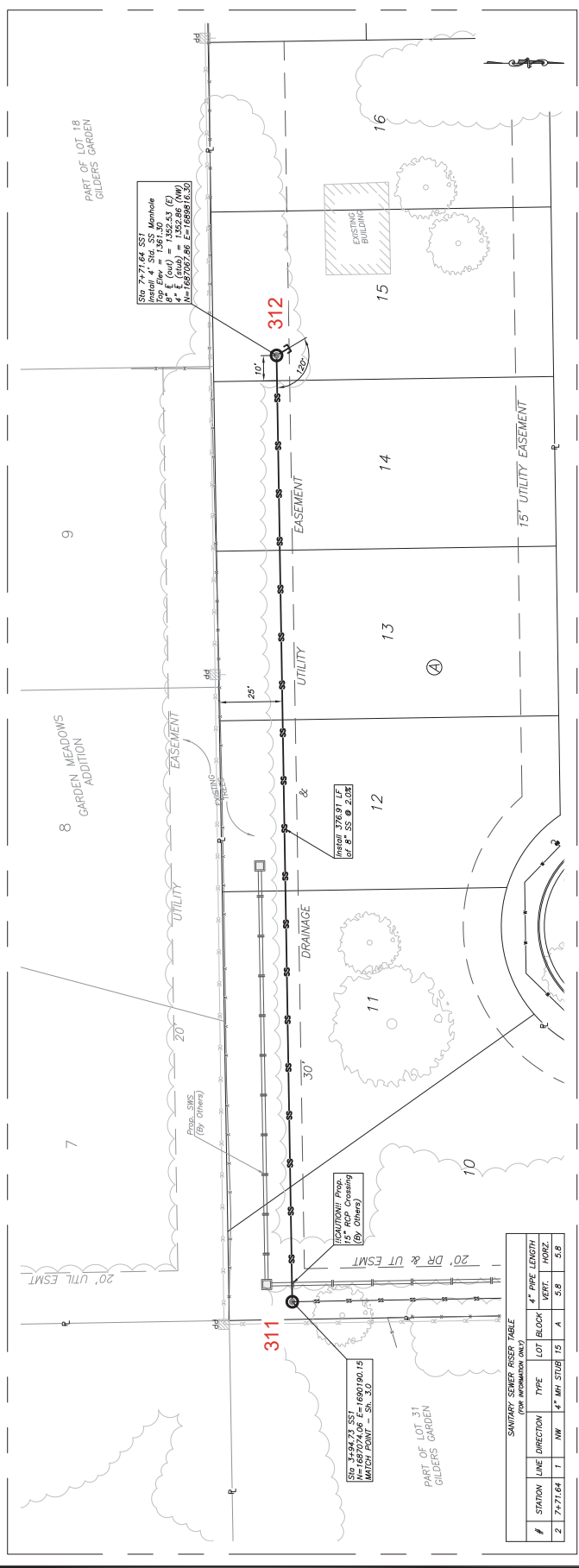


REVISIONS	

NEW PROJ. 2/20/24
DATE 01/20/24
DESIGNED KEM
DRAWN ZJS
CHECKED ZJS

Plan & Profile
Line 1

SHEET **3.1**



SANITARY SEWER COVER TABLE
(FOR INFORMATION ONLY)

#	STATION	LINE DIRECTION	TYPE	LOT BLOCK	4" PIPE LENGTH	VERT.	HORIZ.	5.8
2	7+71.64	T	NW	4" MH STUB	15	A	5.8	5.8

CAUTION! Prop. 16" RCP Crossing (By Others)

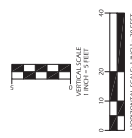
CAUTION! Prop. 16" RCP Crossing (By Others)

CAUTION! Prop. 16" RCP Crossing (By Others)

CAUTION! Prop. 16" RCP Crossing (By Others)



**JACKSON HEIGHTS TOWNHOMES
2ND ADDITION**
WICHITA, KANSAS
SANITARY SEWER

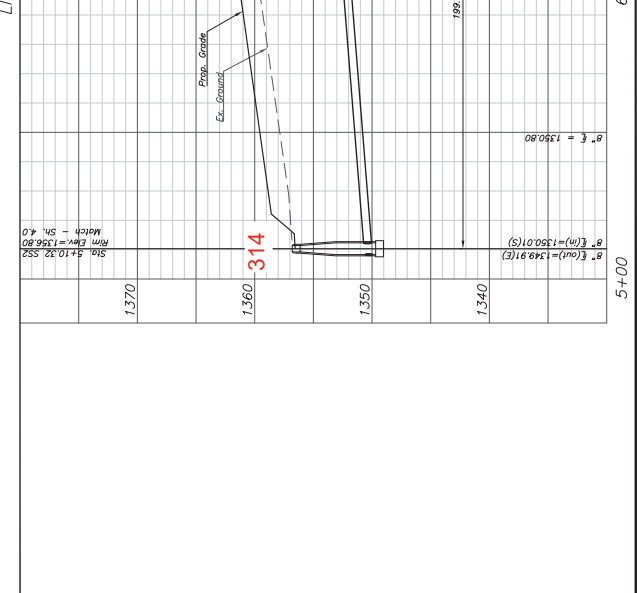
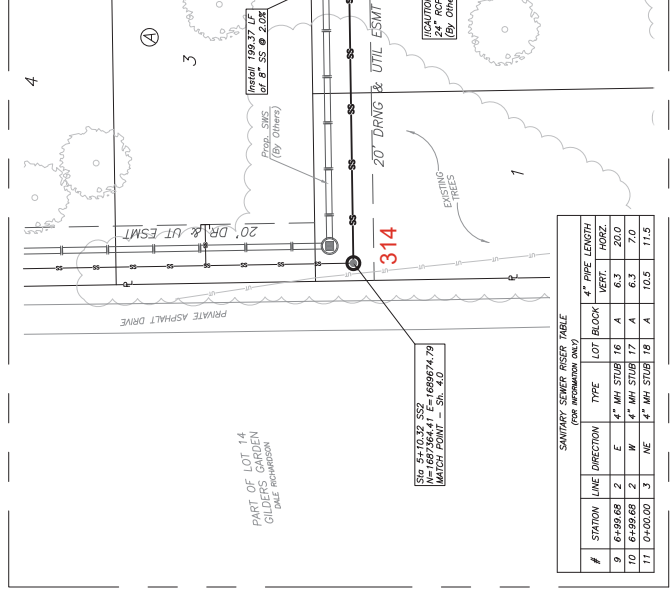
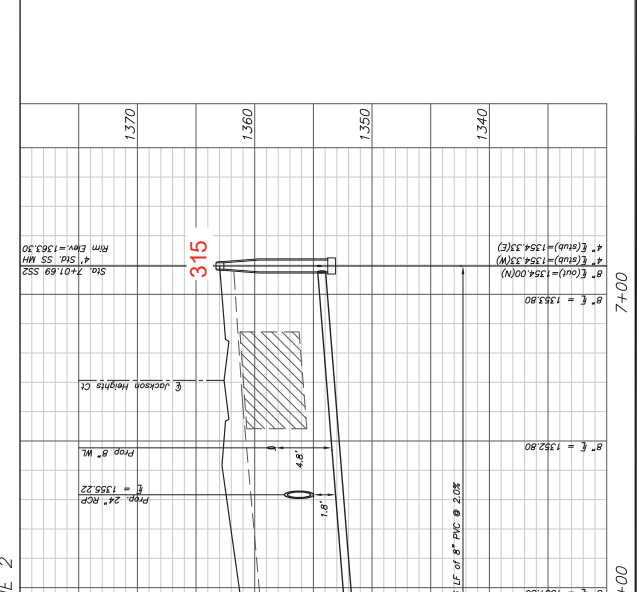
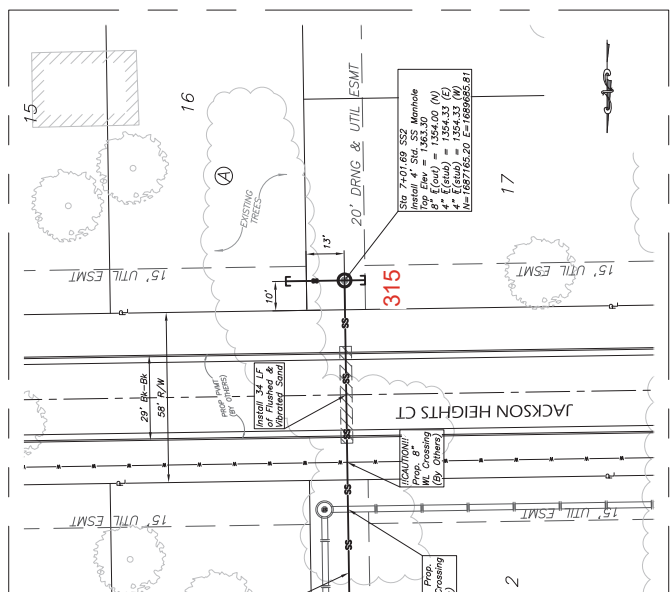
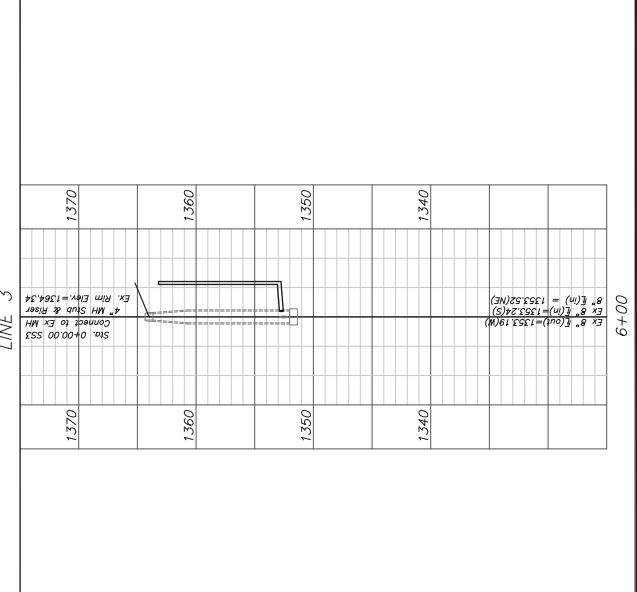
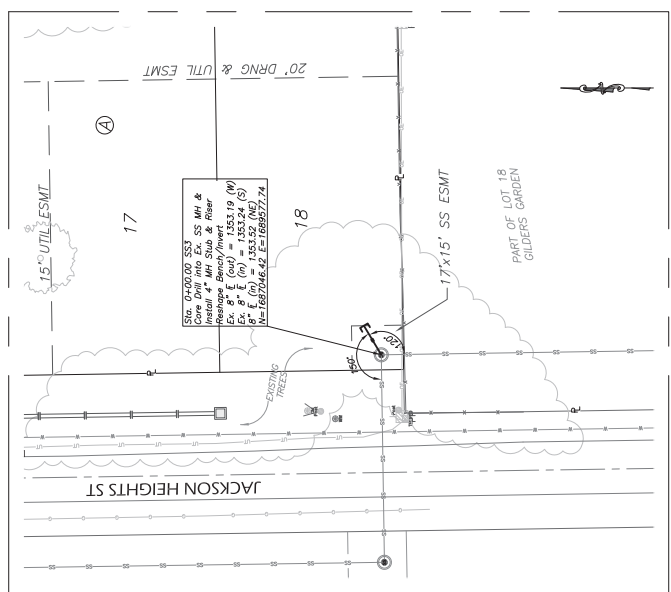


REVISIONS

NO.	DATE	DESCRIPTION
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2	2.2024 <td>DESIGNED</td>	DESIGNED
3		DRAWN
4		CHKD

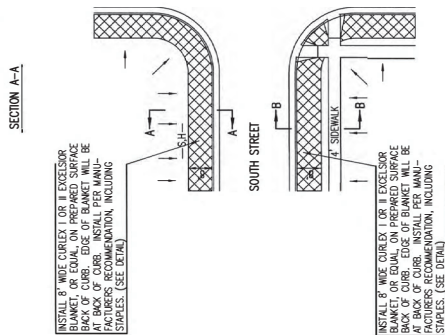
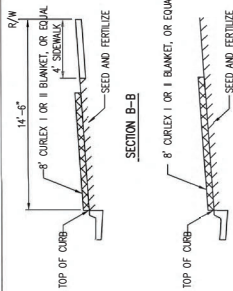
Plan & Profile
Lines 2 & 3

SHEET **4.1**



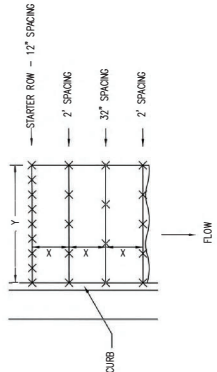
SANITARY SEWER RISER TABLE
(FOR INFORMATION ONLY)

#	STATION	LINE DIRECTION	TYPE	LOT BLOCK	4" PIPE LENGTH
					VERT. HORIZ.
9	6+59.68	2	E	4" MH STUB	16 A 6.3 20.0
10	6+59.68	2	W	4" MH STUB	17 A 6.3 7.0
11	0+00.00	3	NE	4" MH STUB	18 A 10.5 11.5



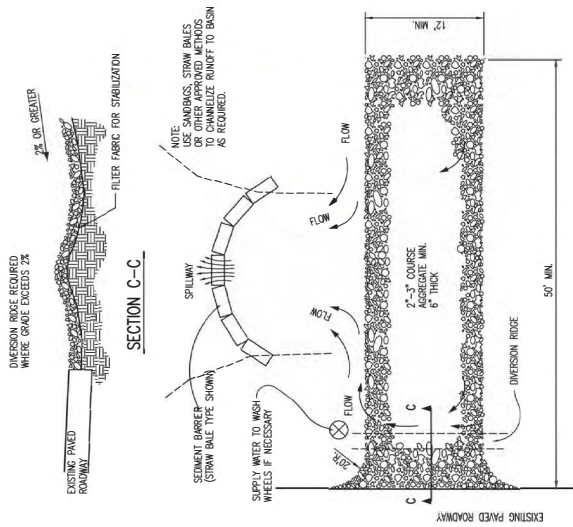
- GENERAL NOTES**
- EXCELSIOR MAT TO BE INSTALLED WHEN SOD IS NOT SPECIFIED ON PROJECT.
 - EXCELSIOR BLANKET TO BE INSTALLED OVER SEED AND FERTILIZER, AS SPECIFIED IN THE PROJECT SPECIFICATIONS.
 - AFTER INSTALLATION OF EXCELSIOR BLANKET, AT LOCATIONS WHERE CONCENTRATED FLOW CARRIES SEDIMENT OVER THE CURB AND INTO THE CULVERT, EXCESSIVE EROSION CONTROL DEVICES SHALL 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 MANUFACTURER)

DETAILS FOR APPROVED EROSION CONTROL MAT.



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 TRAP. HOWEVER, THE ENTRANCE SHALL BE STABILIZED WITH CRUSHED STONE. ENTRANCE SHALL EXTEND FROM BACK OF CURB TO FLOWLINE.

REVISION DATE: MAY 2013

BACK OF CURB PROTECTION AND CURB INLET PROTECTION AND CONSTRUCTION ENTRANCE

CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER: _____ DATE: _____
 GSA NUMBER: _____

CITY ENGINEER'S OFFICE
 CITY HALL - SEVENTH FLOOR
 WICHITA, KANSAS 67202-1620
 (316) 268-4601

SHEET
5.1



05/14/13

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, OR STRAW, BRANNE, HAY, OR BROMERGRASS. THE STAKES USED TO ANCHOR THE BALES SHOULD BE A HARDWOOD MATERIAL WITH THE FOLLOWING MINIMUM DIMENSIONS: 2" SQUARE (MINIMUM), 4' LONG. THE DOWNSTREAM SIDE OF THE DITCH CHECK SHOULD BE CONSTRUCTED OF A DOUBLE-WEFTED STRAW EROSION-CONTROL BLANKET AT LEAST 6" WIDE. OPTIONAL: THE METAL LANDSCAPE STAKES USED TO ANCHOR THE EROSION-CONTROL BLANKET SHOULD BE AT LEAST 6' 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 STRAW BALE DITCH CHECKS. STRAW BALE DITCH CHECKS SHOULD NOT BE PLACED IN DITCHES WHERE HIGH FLOWS ARE EXPECTED. ROCK STAKES SHOULD BE USED INSTEAD. BALES SHOULD BE PLACED IN DITCHES WITH SLOPES OF 6% OR LESS. FOR SLOPES GREATER THAN 6%, THE FOLLOWING TABLE PROVIDES CHECK SPACING FOR A GIVEN DITCH GRADE:

DITCH CHECK SPACING DITCH GRADE (%)	CHECK SPACING (FEET)
0.5	200
1.0	200
2.0	100
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 4" WIDE INTO A BALES WITH 1/2" OR MORE. PLACE THE BALES IN THE TRENCH, MAKING SURE THAT THEY ARE BUTTED TOGETHER. SOME BALES MAY NEED TO BE SHORTENED TO FIT INTO THE TRENCH. MAKE SURE THAT THEY ARE BUTTED TOGETHER. TWO STAKES SHOULD BE PLACED ALONG THE PERIMETER OF THE AREA INLET THAT IS AT LEAST 4" DEEP BY A 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 BARRE?

DOES WATER FLOW THROUGH SPACES BETWEEN ABUTTING BALES?

DOES WATER FLOW THROUGH SPACES BETWEEN ABUTTING BALES?

ARE ANY BALES DISLOADED?

ARE ANY BALES DISLOADED?

DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE DITCH 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 UNDER THE AREA INLET BARRE?

DOES WATER FLOW THROUGH SPACES BETWEEN ABUTTING BALES?

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DOES WATER FLOW UNDER THE AREA INLET BARRE?

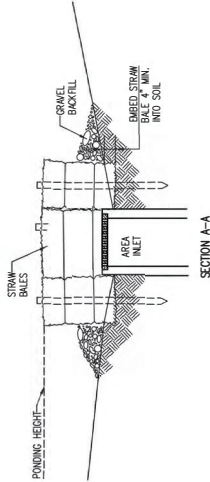
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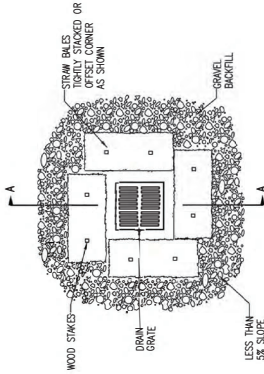
ARE ANY BALES DISLOADED?

ARE ANY BALES DISLOADED?

DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE DITCH CHECK?



SECTION A-A



STRAW BALE BARRIER (INLET)

MATERIAL SPECIFICATION:

BALE AREA INLET BARRIERS SHOULD BE CONSTRUCTED OF WHEAT STRAW, OR STRAW, BRANNE, HAY, OR BROMERGRASS. THE STAKES USED TO ANCHOR THE BALES SHOULD BE A HARDWOOD MATERIAL WITH THE FOLLOWING MINIMUM DIMENSIONS: 2" SQUARE (MINIMUM), 4' LONG. THE DOWNSTREAM SIDE OF THE DITCH CHECK SHOULD BE CONSTRUCTED OF A DOUBLE-WEFTED STRAW EROSION-CONTROL BLANKET AT LEAST 6" WIDE. OPTIONAL: THE METAL LANDSCAPE STAKES USED TO ANCHOR THE EROSION-CONTROL BLANKET SHOULD BE AT LEAST 6' LONG.

PLACEMENT:

EXCAVATE A TRENCH PERPENDICULAR TO THE DITCH FLOWLINE THAT IS 4" DEEP AND 4" WIDE INTO A BALES WITH 1/2" OR MORE. PLACE THE BALES IN THE TRENCH, MAKING SURE THAT THEY ARE BUTTED TOGETHER. SOME BALES MAY NEED TO BE SHORTENED TO FIT INTO THE TRENCH. MAKE SURE THAT THEY ARE BUTTED TOGETHER. TWO STAKES SHOULD BE PLACED ALONG THE PERIMETER OF THE AREA INLET THAT IS AT LEAST 4" DEEP BY A 1/2" OR MORE. THE FOLLOWING IS A LIST OF QUESTIONS THAT SHOULD BE ADDRESSED DURING EACH INSPECTION:

INSPECTION AND MAINTENANCE:

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

DOES WATER FLOW UNDER THE AREA INLET BARRE?

DOES WATER FLOW THROUGH SPACES BETWEEN ABUTTING BALES?

DOES WATER FLOW THROUGH SPACES BETWEEN ABUTTING BALES?

ARE ANY BALES DISLOADED?

ARE ANY BALES DISLOADED?

DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE AREA INLET BARRE?

DOES WATER FLOW UNDER THE AREA INLET BARRE?

DOES WATER FLOW THROUGH SPACES BETWEEN ABUTTING BALES?

DOES WATER FLOW THROUGH SPACES BETWEEN ABUTTING BALES?

ARE ANY BALES DISLOADED?

ARE ANY BALES DISLOADED?

DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE AREA INLET BARRE?

INSPECTION AND MAINTENANCE:

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

DOES WATER FLOW UNDER THE AREA INLET BARRE?

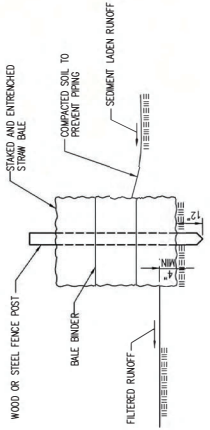
DOES WATER FLOW THROUGH SPACES BETWEEN ABUTTING BALES?

DOES WATER FLOW THROUGH SPACES BETWEEN ABUTTING BALES?

ARE ANY BALES DISLOADED?

ARE ANY BALES DISLOADED?

DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE AREA INLET BARRE?



STRAW BALE BARRIERS

MATERIAL SPECIFICATION:

BALE SLOPE BARRIERS MAY BE CONSTRUCTED OF WHEAT STRAW, OR STRAW, BRANNE, HAY, OR BROMERGRASS. THE STAKES USED TO ANCHOR THE BALES SHOULD BE A HARDWOOD MATERIAL WITH THE FOLLOWING MINIMUM DIMENSIONS: 2" SQUARE (MINIMUM), 4' LONG. THE DOWNSTREAM SIDE OF THE DITCH CHECK SHOULD BE CONSTRUCTED OF A DOUBLE-WEFTED STRAW EROSION-CONTROL BLANKET AT LEAST 6" WIDE. OPTIONAL: THE METAL LANDSCAPE STAKES USED TO ANCHOR THE EROSION-CONTROL BLANKET SHOULD BE AT LEAST 6' LONG.

PLACEMENT:

EXCAVATE A TRENCH PERPENDICULAR TO THE DITCH FLOWLINE THAT IS 4" DEEP AND 4" WIDE INTO A BALES WITH 1/2" OR MORE. PLACE THE BALES IN THE TRENCH, MAKING SURE THAT THEY ARE BUTTED TOGETHER. SOME BALES MAY NEED TO BE SHORTENED TO FIT INTO THE TRENCH. MAKE SURE THAT THEY ARE BUTTED TOGETHER. TWO STAKES SHOULD BE PLACED ALONG THE PERIMETER OF THE AREA INLET THAT IS AT LEAST 4" DEEP BY A 1/2" OR MORE. THE FOLLOWING IS A LIST OF QUESTIONS THAT SHOULD BE ADDRESSED DURING EACH INSPECTION:

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:

DOES WATER FLOW UNDER THE AREA INLET BARRE?

DOES WATER FLOW THROUGH SPACES BETWEEN ABUTTING BALES?

DOES WATER FLOW THROUGH SPACES BETWEEN ABUTTING BALES?

ARE ANY BALES DISLOADED?

ARE ANY BALES DISLOADED?

DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE DITCH CHECK?

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:

DOES WATER FLOW UNDER THE AREA INLET BARRE?

DOES WATER FLOW THROUGH SPACES BETWEEN ABUTTING BALES?

DOES WATER FLOW THROUGH SPACES BETWEEN ABUTTING BALES?

ARE ANY BALES DISLOADED?

ARE ANY BALES DISLOADED?

DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE DITCH CHECK?

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:

INSPECTION AND MAINTENANCE:

ARE THERE ANY POINTS ALONG THE SLOPE BARRIER WHERE WATER IS CONCENTRATING?

DOES WATER FLOW UNDER THE AREA INLET BARRE?

DOES WATER FLOW THROUGH SPACES BETWEEN ABUTTING BALES?

ARE ANY BALES DISLOADED?

ARE ANY BALES DISLOADED?

DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE DITCH CHECK?

CITY OF WICHITA
PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

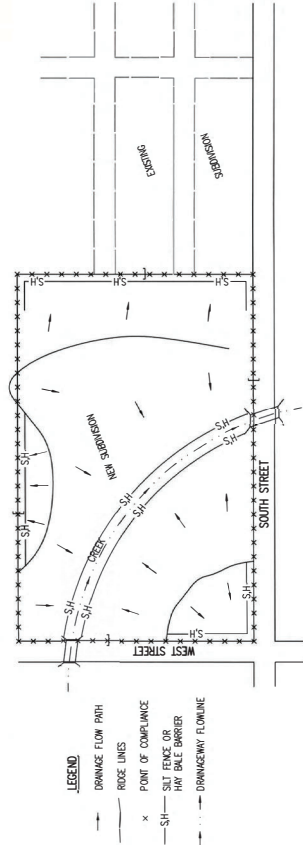
STRAW BALE DITCH CHECK AND BARRIER DETAILS

REVISION DATE: MAY 2013

CITY ENGINEER	DATE	SHEET	
GARY JANZEN, P.E.		5.3	
PROJECT NUMBER		CITY ENGINEER'S OFFICE	
		CITY HALL - SEVENTH FLOOR	
		455 NORTH MAIN STREET	
		WICHITA, KANSAS 67202-1480	
		(316) 268-4601	

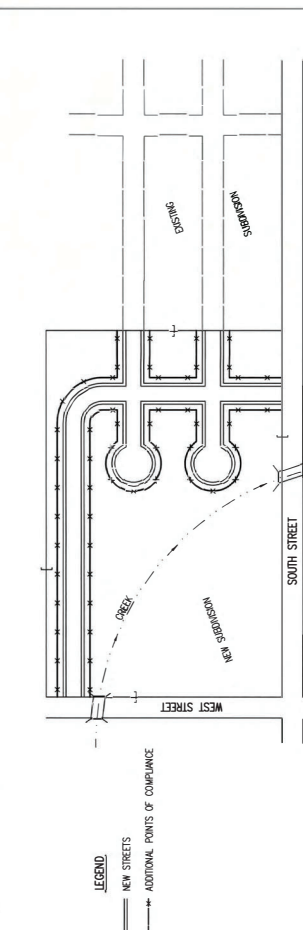


PHASE 1 - INITIAL EARTHWORK AND UTILITIES (EXCEPT STORM SEWER)



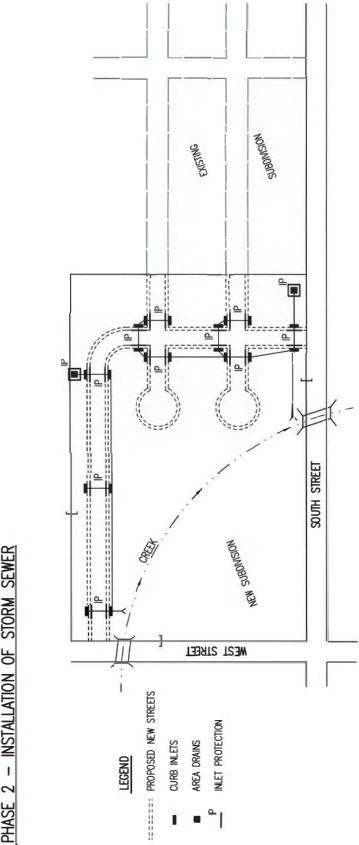
1. DURING THIS PHASE OF SUBDIVISION CONSTRUCTION, THE POINTS OF COMPLIANCE ARE THE PERMETER BOUNDARIES AND ANY DRAINAGE WAIS OR STORM SEWERS DRAINING THROUGH OR FROM THE SITE. SHOULD LAJES BE CONSTRUCTED WITHIN THE PERMETER BOUNDARIES THAT WILL DISCHARGE DURING STORMS, THEY ARE ALSO A POINT OF COMPLIANCE.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

PHASE 3 - STREET CONSTRUCTION



1. DURING THIS PHASE OF SUBDIVISION CONSTRUCTION, NEW STREETS ARE INSTALLED AND MAINTAINED. THE POINTS OF COMPLIANCE NOW SHIFTS TO THE BACK OF CURB ALONG EACH STREET.
2. CURB OPENING INLET PROTECTION.
3. SWAMP AREAS - INLET PROTECTION SHALL BE PROVIDED WHEN STREET SUBGRADE WORK IS COMPLETED.
4. ASPHALT IS INSTALLED, BEFORE THE SURFACE COURSE LIFT.
5. EROSION CONTROL DEVICES WILL BE REQUIRED BACK OF CURB UNLESS 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 SET ENTIRELY AT FINISH GRADE, CURB BACKFILL SHALL BE PLACED TO WITHIN 3" OF THE FINISHED GRADE. WATER BEARS OVER CURB WHICH COULD RESULT IN THE FLOWBACK OF SEDIMENT IN THE GUTTER.
6. THE STREET CONTRACTOR WILL BE RESPONSIBLE FOR INSTALLING BACK OF CURB EROSION CONTROL DEVICES.
7. THE INDIVIDUAL LOT OWNERS WILL BE RESPONSIBLE FOR MAINTAINING THE CURB EROSION CONTROL DEVICES.
8. SUCH TIME AS ADVANCED DISTURBED EARTH IS STABILIZED WITH GRASS OR SOO.

PHASE 2 - INSTALLATION OF STORM SEWER



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

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

SEE DETAIL SHEET FOR
BACK OF CURB PROTECTION DETAIL



CURB BACKFILL DETAIL
(STREET CONSTRUCTION ONLY)

THIS IS A TEMPORARY MEASURE ONLY, WHEN APPROVED BY THE PROJECT ENGINEER. THE DIRT GRADE BEHIND THE CURB SHALL BE MAINTAINED WITHIN 3" OF FINISH GRADE. EROSION CONTROL MAT OR PERMANENT VEGETATION PLACED PRIOR TO THE COMPLETION OF ALL PROJECTS.

		SUBDIVISION DEVELOPMENT PROCESS CITY ENGINEER GARY JANZEN, P.E.	
		PROJECT NUMBER	DATE
CITY ENGINEER'S OFFICE 1515 NORTH MAIN STREET WICHITA, KANSAS 67202-1400 (316) 268-6600		SHEET 5.5	



