

GENERAL NOTES:

- 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:
 Cox Communications 262-4270
 Kansas Gas Service 1-888-492-4950
 Evergy 383-8650
 Block Hills 1-800-303-0357
 AT&T 268-2245
 City of Wichita Sewer Maint. 268-4563
 City of Wichita Storm Sewer Maint. 268-4024
 City of Wichita Traffic Maint. 268-4090
 Conoco Phillips Pipeline Co. 268-4034
 Southern Star Pipeline Co. 1-877-267-2290
 Kinder-Morgan Pipeline Co. 529-6600
 1-888-844-3608
- Utility service lines, poles, valve boxes, meters, and electrical are to be adjusted as necessary by others prior to construction unless the plans specifically call for their adjustment by the Contractor or unless the plans specifically identify a utility to be adjusted by its owner during construction. Existing utilities and their location, as shown on the plans represent the best information obtainable for design. The Contractor will be required to work around existing utilities within the right-of-way which do not conflict with proposed construction.
- 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, in the opinion of the Engineer, that 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. Any material buried or stockpiled beyond approved construction limits would require additional archeological investigations 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 by the Contractor with the Engineer's approval. 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 abutting the construction of this project a minimum of ten (10) days notice prior to start of construction.
- The Contractor shall be responsible for preserving property irons. The Contractor will 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.
- All existing and proposed erosion control measures including silt fencing, erosion control mat, straw bales, silt barriers, and silt and sand entrances shall be maintained throughout construction by the contractor and until project is accepted by the City of Wichita. The on-site engineer shall complete weekly reports on the status of erosion control measures. The contractor shall be required to comply with maintenance and/or replacement of erosion control measures as determined by the on-site engineer until project is accepted by City of Wichita. Maintenance and/or replacement of erosion control measures to be paid by L.S. bid item "Maintain Existing BMP's".

- All excess excavation shall remain on-site and shall be stockpiled or spread at a location determined by the Engineer.
- The Contractor shall be responsible for maintaining continuous flow of sewage through construction. Contractor's proposed method for maintaining sewage flow shall be approved by the Engineer. Cost of maintaining flow of sewage through construction will not be paid for directly and this cost shall be considered as subsidiary to the other pay items of work.
- All other disturbed areas are to be seeded as follows:
 0.5 Tall Grasses
 4 Western Wheatgrass Seed (Barton)
 5 Annual Rye
 2 tons/acre Prairie Hay/Bromegrass Hay mulch
 SEED --- Rye grass (PLS)--5#/1000 Sq. Ft.
 All costs associated with seeding including mobilization, preparation of ground, seeding, fertilizing, mulching, etc. shall be included in the L.S. bid item "Seeding".
 An additional bid item for "Seeding, Temporary" has been included and may be used at the discretion of the Design Engineer. Temporary seed shall be Annual Rye at 5 Lbs./1000 Sq. Ft. unless otherwise noted and shall be planted when permanent seed or sod cannot be used due to seasonal limitations.
- Trees and shrubs in the work area which are in direct conflict with proposed new construction shall be removed by the Contractor ONLY with the Developer or Baughman Company approval. Trees and shrubs which are not in direct conflict with proposed new construction shall be saved and protected from damage. If trimming is necessary, a chainsaw shall be used. Breaking limbs with equipment will not be allowed. An on-site pre-construction meeting will occur prior to any construction to discuss tree removal, tree protection, and tree trimming.
- Geotechnical Report Available. Contact Design Engineer.
- Sales tax exemption does not apply to this project.
- The Developer for this project is Jay Russell, P.O. Box 75337, Wichita, KS 67272, PH# (316) 390-2105 Email jayrussell@ks.com

CONSTRUCTION PHASING

The goal of the phasing is to complete construction serving or adjacent to Lots 29-46 Bk C, Lots 57-73 Bk C, & Lots 75-84 Bk B.

- The following may be built in the order that the contractor desires. Sanitary Sewer Lines 1 Sta. 0+00.0 to Sta. 10+06.5, 5, 7-10, & 12. All Water Lines. Storm Sewer Lines 2 Sta. 0+00.0 to Sta. 3+08.0, 3, & 5-7.
- Paving contractor under separate contract to be mobilized with Ph. 3 Paving construction starting as soon as possible.
- The remaining sanitary sewer & storm sewer will be finished concurrently with the paving project.

BENCHMARKS

- SQUARE CUT ON TOP OF CURB NW CORNER OF LOT 14, BLOCK B, R.F. ADDITION. ELEV. = 1388.18 NAVD88
- SQUARE CUT ON TOP OF CURB NW CORNER OF LOT 7, BLOCK C, R.F. ADDITION. ELEV. = 1387.26 NAVD88
- SQUARE CUT ON TOP OF CURB NW CORNER OF LOT 47, BLOCK C, R.F. ADDITION. ELEV. = 1387.90 NAVD88

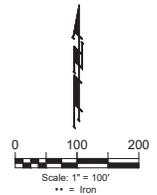
SANITARY SEWER IMPROVEMENTS
 to serve
R.F. & R.F. 2ND ADDITION - PHASE 3

CITY OF WICHITA, KANSAS

Gary Janzen, P.E. City Engineer
 Project Number: 468-2019-00518
 Org Code Number: 47266222
 Munis Number: E2051

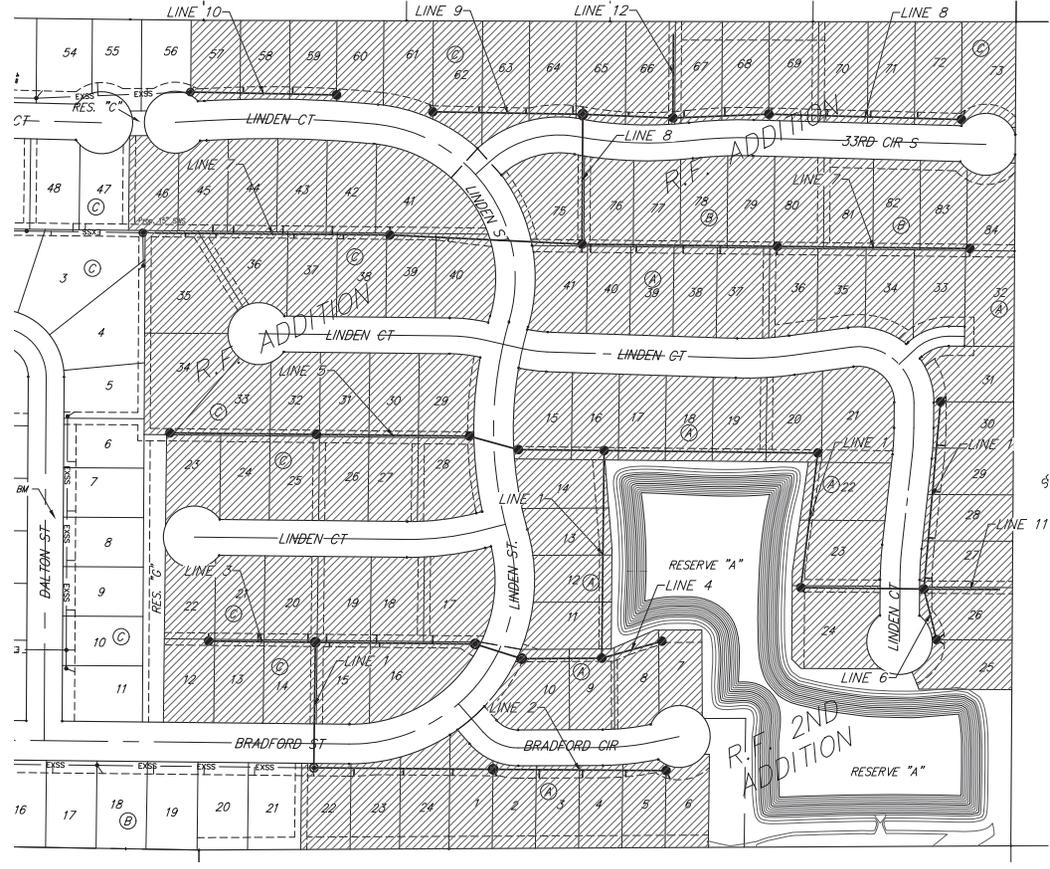
WIS-5A
6043A

APPROVED AS NOTED
 BY WICHITA PUBLIC WORKS ENGINEERING
 Engineering *[Signature]* 7-14-2023
 An approved copy of these plans signed by City staff are required on-site.

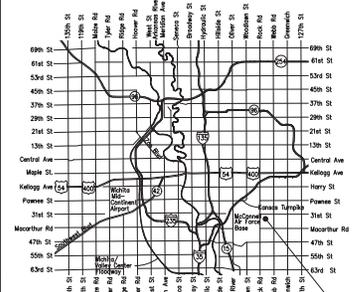


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BENEFIT DISTRICT



VICINITY MAP



July 1, 2022

BAUGHMAN COMPANY
 315 Ellis St. Wichita, KS 67211 316-262-7271
 BaughmanCo.com

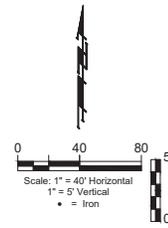
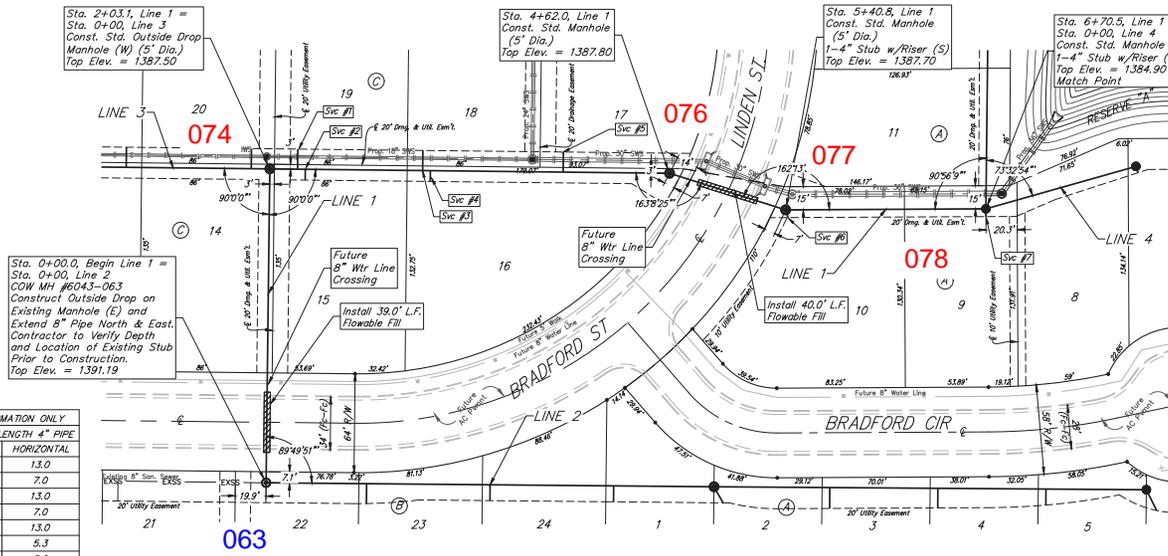
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BENCHMARKS:
 SQUARE CUT ON TOP OF CURB NW
 CORNER OF LOT 14, BLOCK B, R.F.
 ADDITION
 ELEV. = 1388.18 NAVD88

SQUARE CUT ON TOP OF CURB NW
 CORNER OF LOT 7, BLOCK G, R.F.
 ADDITION
 ELEV. = 1387.26 NAVD88

SQUARE CUT ON TOP OF CURB NW
 CORNER OF LOT 42, BLOCK C, R.F.
 ADDITION
 ELEV. = 1387.90 NAVD88

R.F. & R.F. 2ND ADDITION



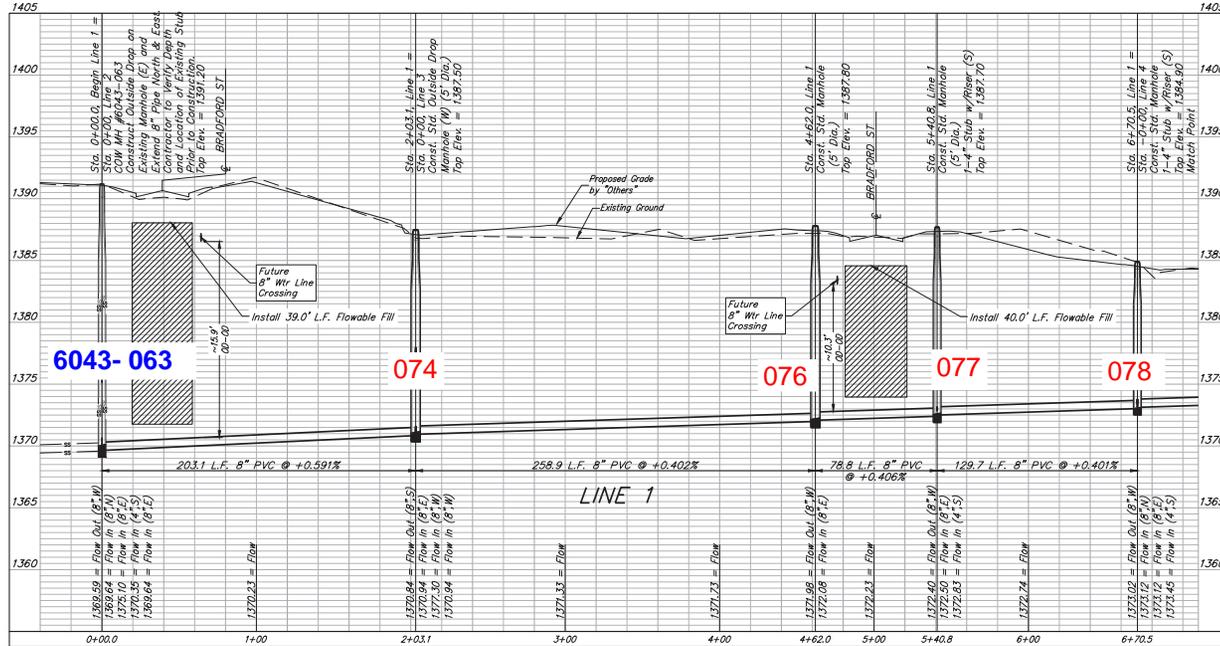
NOTE: Maintain 10 ft. of horizontal separation (outside dimension to outside dimension) between the water lines and sanitary sewer lines.

R.F. & R.F. 2ND ADDITION

SEWER SERVICE TABLE

NUMBER	TYPE	LOCATION			FOR INFORMATION ONLY		
		LOT NO.	BLOCK NO.	LINE NO.	STATION/ DIRECTION	APPROXIMATE LENGTH 4" PIPE VERTICAL	HORIZONTAL
1	8" X 4" Tee	19	C	1	2+21.10/L	11.0	13.0
2	8" X 4" Tee	15	C	1	2+26.10/RL	11.3	7.0
3	8" X 4" Tee	18	C	1	3+02.10/L	11.3	13.0
4	8" X 4" Tee	16	C	1	3+07.10/RL	11.3	7.0
5	8" X 4" Tee	17	C	1	3+93.10/L	10.1	13.0
6	4" Stub	10	A	1	5+40.80/RL	10.4	5.3
7	4" Stub	9	A	1	6+70.50/RL	6.4	5.0

NOTE: Vertical Riser Pipe shall be extended to 2' minimum above ground water elevation and 4' maximum below proposed ground elevation.



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R.F. & R.F. 2ND ADDITION
 PHASE 3

LINE 1

SANITARY SEWER
 IMPROVEMENTS

PROJECT NUMBER:
 468-2019-005518

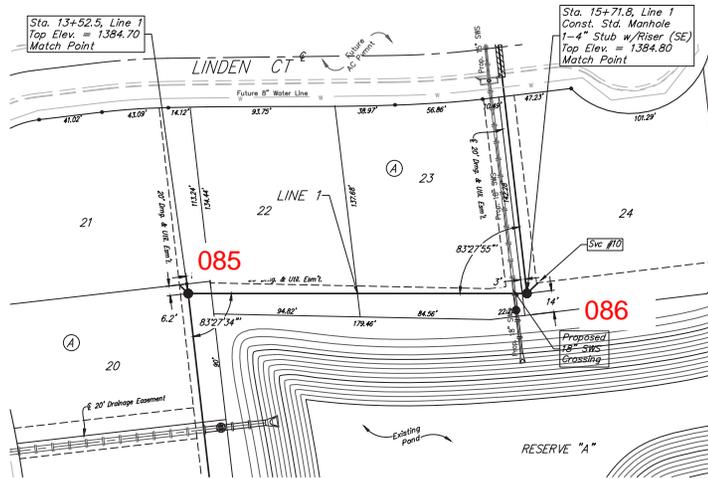
DESIGN: AEG DRAWN: HWJ

DATE: July 1, 2022

SHEET OF
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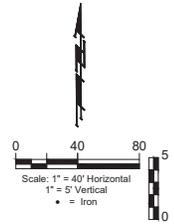
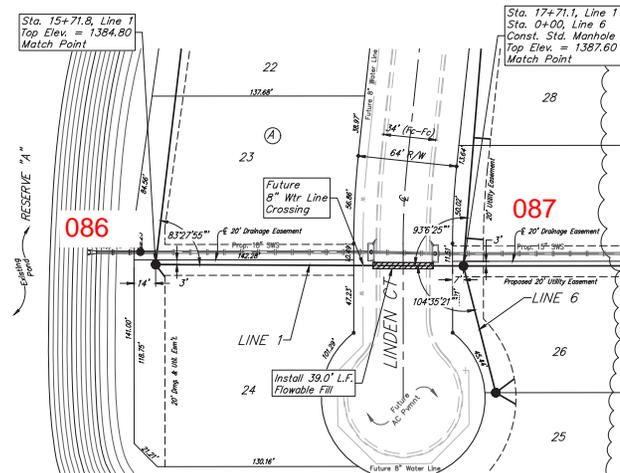
FIG. E: PROJECT R.F. Addition, 1542-F352 Engineering/Phase 3/ISS: 2/1/21/EA/03/SIS PLANS.dwg

BENCHMARKS:
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 ELEV. = 1388.18 NAVD88
 SQUARE CUT ON TOP OF CURB NW CORNER OF LOT 7, BLOCK C, R.F. ADDITION
 ELEV. = 1387.26 NAVD88
 SQUARE CUT ON TOP OF CURB NW CORNER OF LOT 42, BLOCK C, R.F. ADDITION
 ELEV. = 1387.90 NAVD88



R.F. & R.F. 2ND ADDITION

R.F. & R.F. 2ND ADDITION

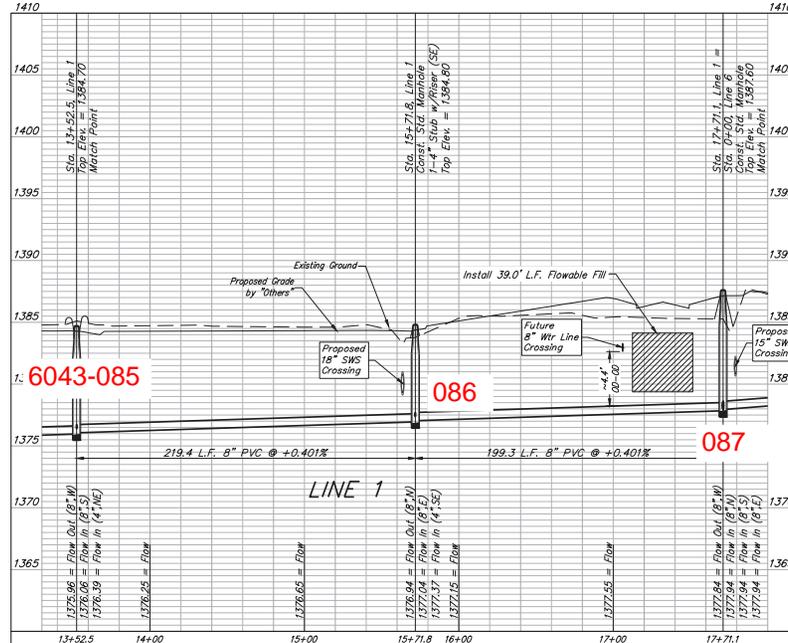


NOTE: Maintain 10 ft. of horizontal separation (outside dimension to outside dimension) between the water lines and sanitary sewer lines.

SEWER SERVICE TABLE

NUMBER	TYPE	LOCATION			FOR INFORMATION ONLY	
		LOT NO.	BLOCK NO.	LINE NO.	STATION/DIRECTION	APPROXIMATE LENGTH 4" PIPE
10	4" Stub	24	A	1	15+71.80/RT.	VERTICAL 3.0 HORIZONTAL 10.0

NOTE: Vertical Riser Pipe shall be extended to 2' minimum above ground water elevation and 4' maximum below proposed ground elevation.



BAUGHMAN COMPANY

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R.F. & R.F. 2ND ADDITION
 PHASE 3

LINE 1

SANITARY SEWER IMPROVEMENTS

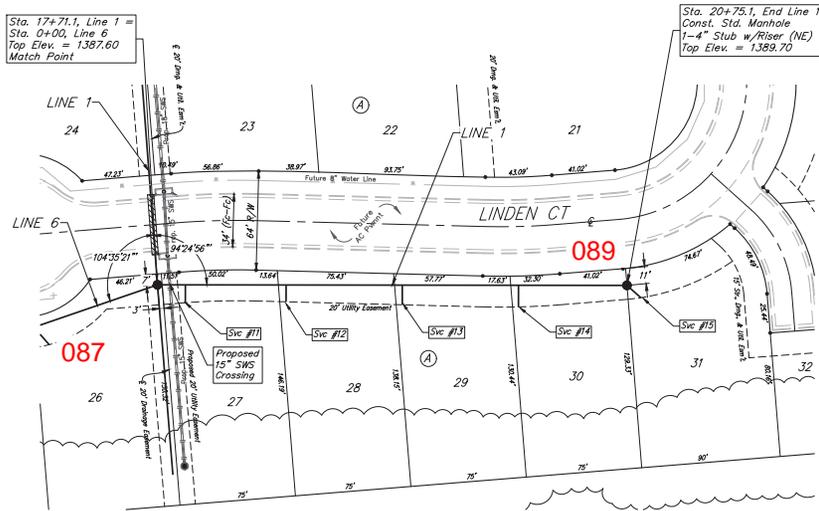
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DESIGN: AEG DRAWN: HWJ

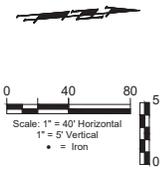
DATE: July 1, 2022

SHEET 4 OF 27

BENCHMARKS:
 SQUARE CUT ON TOP OF CURB NW CORNER OF LOT 14, BLOCK B, R.F. ADDITION
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R.F. & R.F. 2ND ADDITION



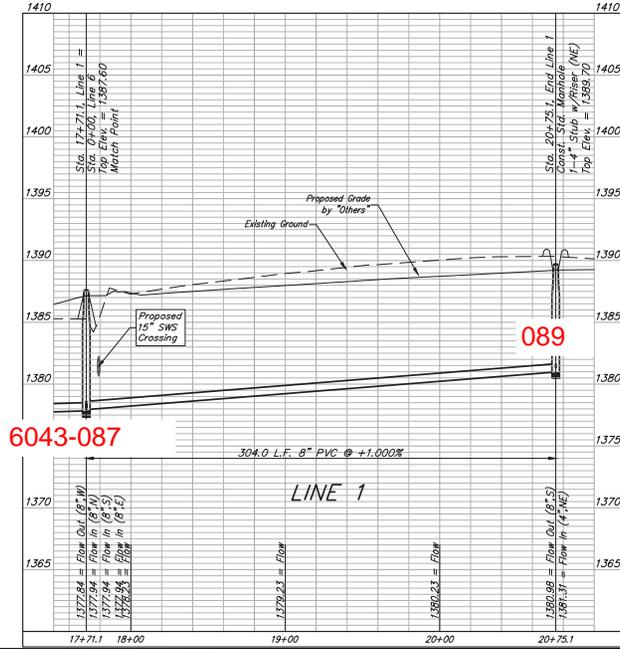
SEWER SERVICE TABLE

NUMBER	TYPE	LOCATION			FOR INFORMATION ONLY		
		LOT NO.	BLOCK NO.	LINE NO.	STATION/DIRECTION	APPROXIMATE LENGTH 4" PIPE VERTICAL	HORIZONTAL
11	8" X 4" Tee	27	A	1	17+89.20/RL	4.1	11.6
12	8" X 4" Tee	28	A	1	18+54.40/RL	3.8	11.0
13	8" X 4" Tee	29	A	1	19+29.60/RL	3.7	12.8
14	8" X 4" Tee	30	A	1	20+04.90/RL	3.4	14.0
15	4" Stub	31	A	1	20+81.10/RL	4.0	12.0

NOTE: Vertical Riser Pipe shall be extended to 2' 20+75.1/RL ground water elevation and 4" maximum below proposed ground elevation.

All trench and manhole excavation areas from Sta. 17+71.1 to Sta. 20+75.1, Line 1 shall be backfilled with sand. The sand backfill shall be water-jetted and vibrated during backfilling. All costs shall be paid for as L.F. Fill, Sand (Flushed & Vibrated).

R.F. & R.F. 2ND ADDITION



Professional Engineer
 E. GOULD
 LICENSE NO. 17010
 EXPIRES 07/05/2022
 KANSAS
 PROFESSIONAL ENGINEERING

B

BAUGHMAN COMPANY
 315 Ellis St.
 Wichita, KS 67211
 316-262-7271
 BaughmanCo.com

R.F. & R.F. 2ND ADDITION
 PHASE 3

LINE 1

SANITARY SEWER IMPROVEMENTS
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 468-2019-005518
 DESIGN: AEG DRAWN: HJW
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 SHEET OF
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BENCHMARKS:
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 ELEV. = 1387.26 NAVD88
 SQUARE CUT ON TOP OF CURB NW CORNER OF LOT 42, BLOCK C, R.F. ADDITION
 ELEV. = 1387.90 NAVD88

Sta. 0+00.0, Begin Line 2 =
 Sta. 0+00, Line 1
 COW MH #6043-063
 Construct Outside Drop on Existing Manhole (E) and Extend 8" Pipe North & East. Contractor to Verify Depth and Location of Existing Stub Prior to Construction.
 Top Elev. = 1391.19

Sta. 2+90.1, Line 2
 Const. Std. Manhole
 1-4" Stub w/Riser (SE)
 Top Elev. = 1389.70

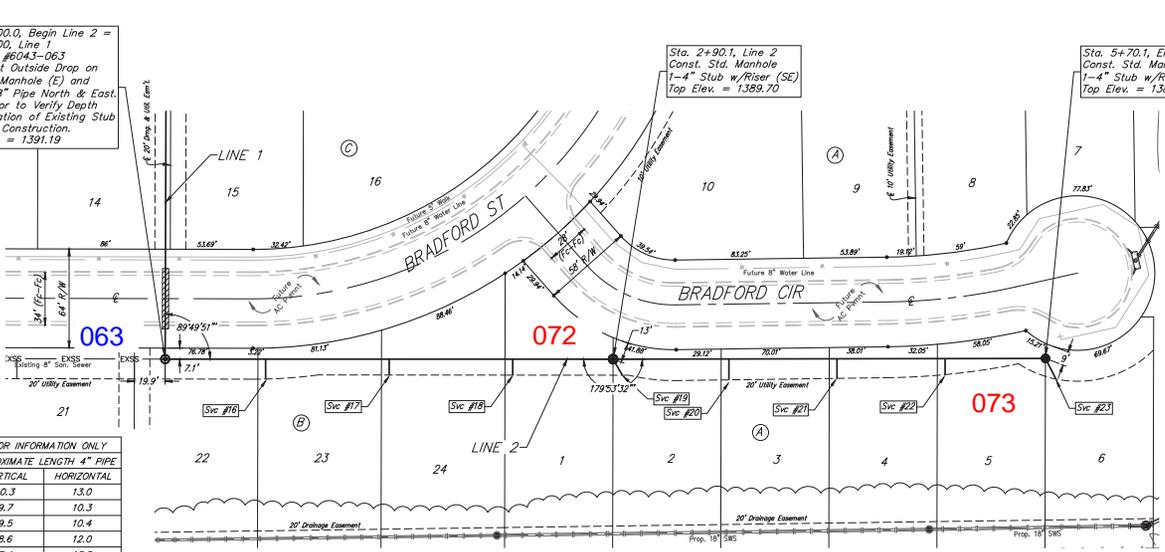
Sta. 5+70.1, End Line 2
 Const. Std. Manhole
 1-4" Stub w/Riser (SE)
 Top Elev. = 1387.70

R.F. & R.F. 2ND ADDITION

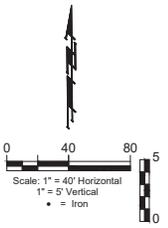
SEWER SERVICE TABLE

NUMBER	TYPE	LOCATION			FOR INFORMATION ONLY		
		LOT NO.	BLOCK NO.	LINE NO.	STATION/DIRECTION	APPROXIMATE LENGTH 4" PIPE VERTICAL	HORIZONTAL
16	8" X 4" Tee	23	B	2	0+65.10/RT.	10.3	13.0
17	8" X 4" Tee	24	B	2	1+45.10/RT.	9.7	10.3
18	8" X 4" Tee	1	A	2	2+25.40/RT.	9.5	10.4
19	4" Stub	2	A	2	2+90.10/RT.	8.6	12.0
20	8" X 4" Tee	3	A	2	3+65.10/RT.	7.4	13.5
21	8" X 4" Tee	4	A	2	4+35.10/RT.	6.7	12.7
22	8" X 4" Tee	5	A	2	5+05.10/RT.	6.1	10.4
23	4" Stub	6	A	2	5+70.10/RT.	5.3	15.0

NOTE: Vertical Riser Pipe shall be extended to 2' minimum above ground water elevation and 4' maximum below proposed ground elevation.

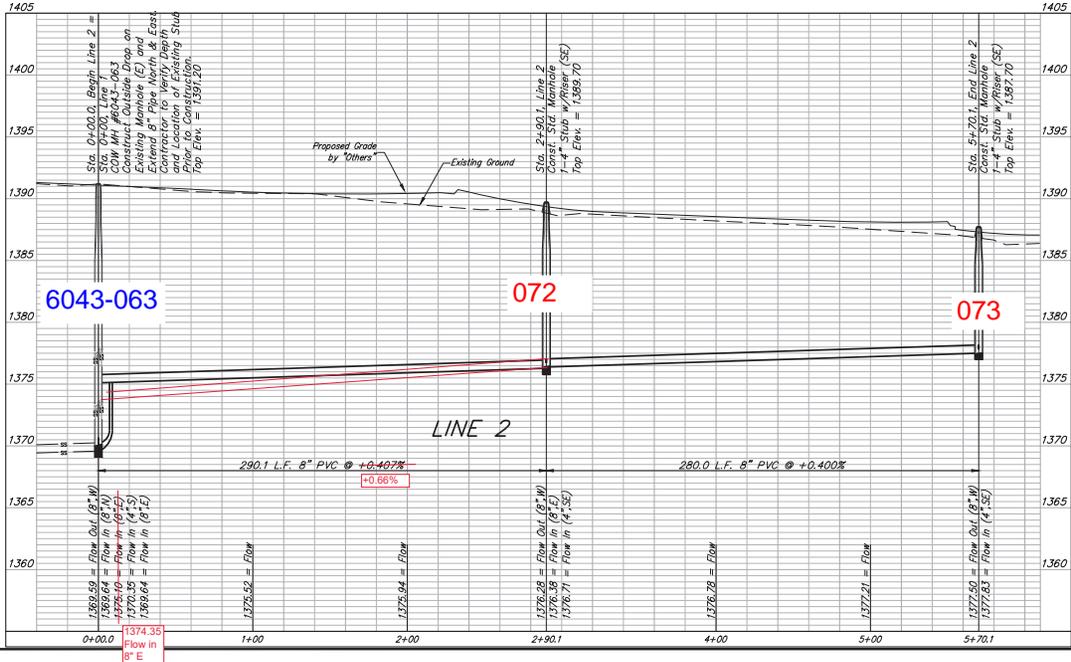


R.F. & R.F. 2ND ADDITION



NOTE: Maintain 10 ft. of horizontal separation (outside dimension to outside dimension) between the water lines and sanitary sewer lines.

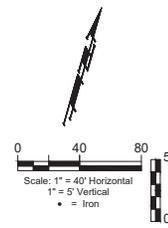
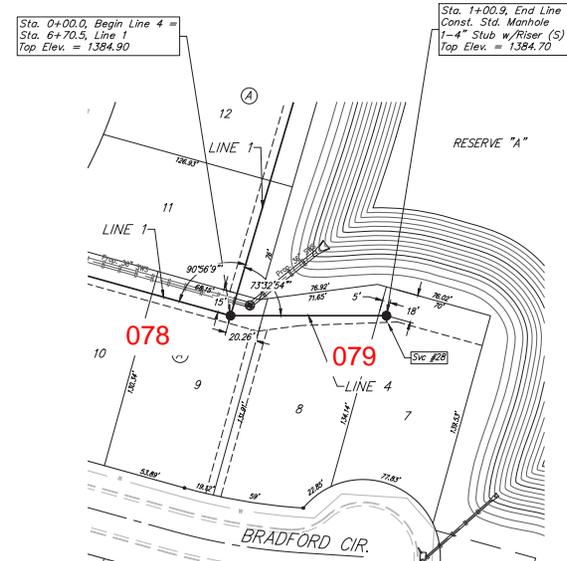
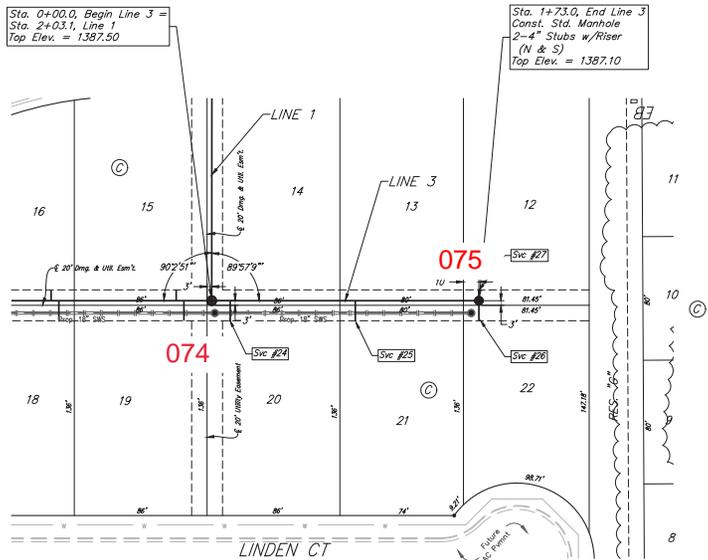
All trench and manhole excavation areas from Sta. 0+00.0 to Sta. 5+70.1, Line 2 shall be backfilled with sand. The sand backfill shall be water-jetted and vibrated during backfilling. All costs shall be paid for as L.F. "Fill, Sand (Flushed & Vibrated)".



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 R.F. & R.F. 2ND ADDITION
 PHASE 3
LINE 2
 SANITARY SEWER IMPROVEMENTS
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 ELEV. = 1387.90 NAVD88

R.F. & R.F. 2ND ADDITION

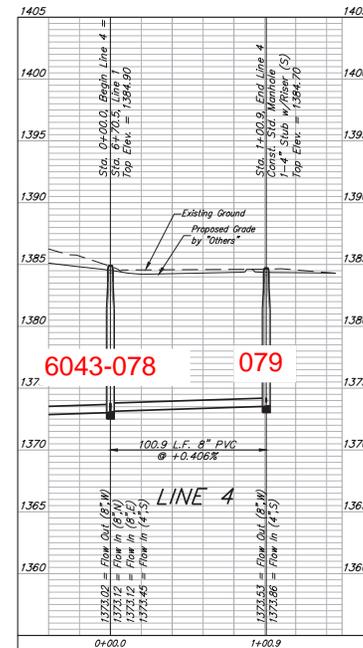
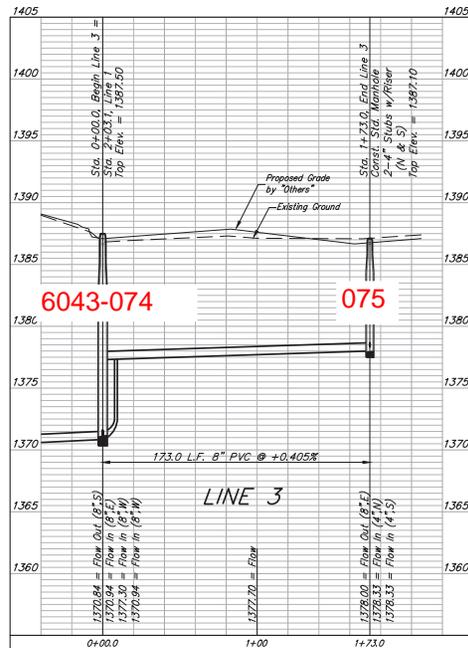


R.F. & R.F. 2ND ADDITION

SEWER SERVICE TABLE

NUMBER	TYPE	LOCATION			FOR INFORMATION ONLY	
		LOT NO.	BLOCK NO.	LINE NO. / STATION / DIRECTION	APPROXIMATE LENGTH 4" PIPE	VERTICAL
24	8" X 4" Tee	20	C	3 0+12.00/Rt.	4.7	13.0
25	8" X 4" Tee	21	C	3 0+93.00/Rt.	4.8	13.0
26	4" Stub	22	C	3 1+73.00/Rt.	4.3	13.0
27	4" Stub	12	C	3 1+73.00/Lt.	4.4	7.0
28	4" Stub	7	A	4 1+00.90/Rt.	6.8	4.3

NOTE: Vertical Riser Pipe shall be extended to 2" minimum above ground water elevation and 4" maximum below proposed ground elevation.



B

BAUGHMAN COMPANY

315 Ellis St.
 Wichita, KS 67211
 316-262-7271
 BaughmanCo.com

R.F. & R.F. 2ND ADDITION
 PHASE 3

LINES 3 & 4

SANITARY SEWER
 IMPROVEMENTS

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 468-2019-005518

DESIGN: AEG DRAWN: HWJ
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SHEET OF
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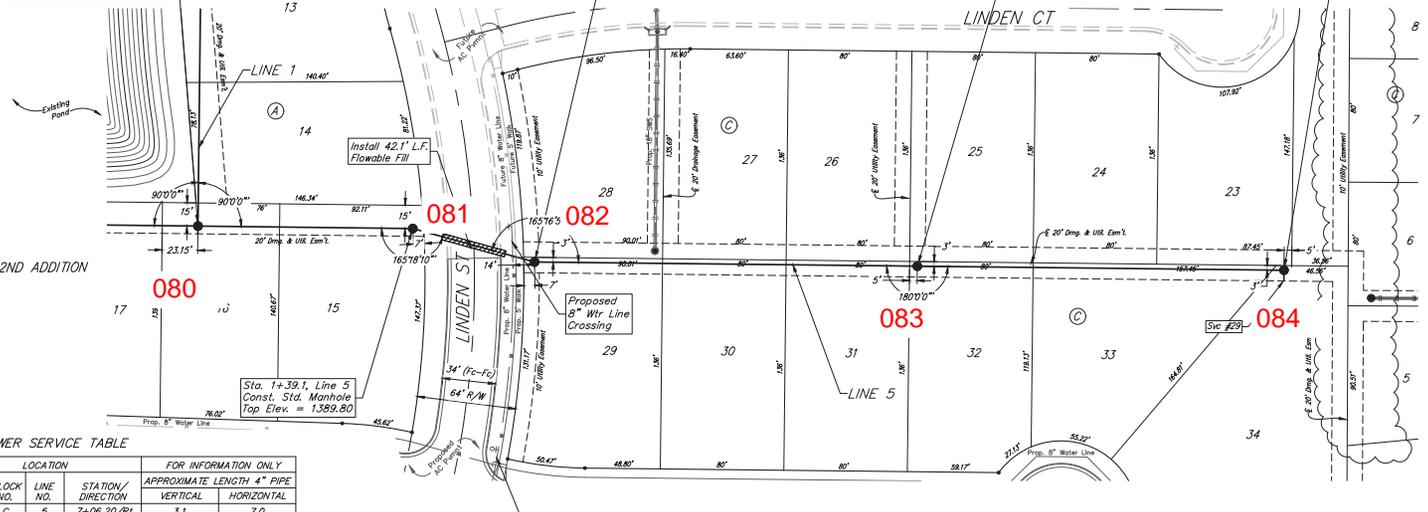
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 SQUARE CUT ON TOP OF CURB NW CORNER OF LOT 42, BLOCK C, R.F. ADDITION. ELEV. = 1387.90 NAVD88

Sta. 0+00.0, Begin Line 5 =
 Sta. 10+06.5, Line 1
 Top Elev. = 1384.70

Sta. 2+20.9, Line 5
 Const. Std. Manhole
 Top Elev. = 1389.90

Sta. 4+68.8, Line 5
 Const. Std. Manhole
 Top Elev. = 1388.70

Sta. 7+06.2, End Line 5
 Const. Std. Manhole
 1-4" Stub w/Riser (N)
 Top Elev. = 1387.80



R.F. & R.F. 2ND ADDITION

R.F. & R.F. 2ND ADDITION

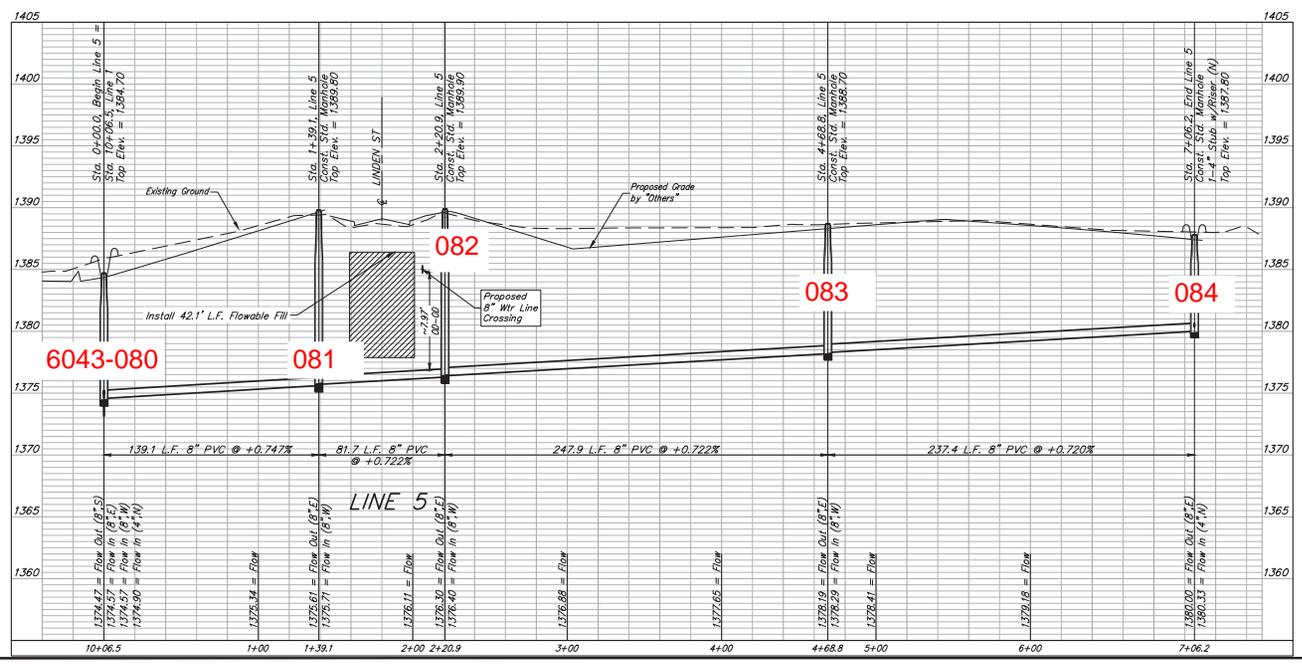
NOTE: Maintain 10 ft. of horizontal separation (outside dimension to outside dimension) between the water lines and sanitary sewer lines.

Existing trees which are in direct conflict with proposed new construction shall be removed by the Contractor ONLY, with approval of the Engineer. Trees not in direct conflict with proposed new construction shall remain and be protected from damage. Cost shall be included in bid item "Site Clearing"

SEWER SERVICE TABLE

NUMBER	TYPE	LOCATION			FOR INFORMATION ONLY	
		LOT NO.	BLOCK NO.	LINE NO.	STATION / DIRECTION	APPROXIMATE LENGTH 4" PIPE
29	4" Stub	34	C	5	7+06.20/Rt.	VERTICAL: 3.1 HORIZONTAL: 7.0

NOTE: Vertical Riser Pipe shall be extended to 2' minimum above ground water elevation and 4' maximum below proposed ground elevation.




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 R.F. & R.F. 2ND ADDITION
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 SQUARE OUT ON TOP OF CURB NW CORNER OF LOT 7, BLOCK G, R.F. ADDITION
 ELEV. = 1387.26 NAVD88
 SQUARE OUT ON TOP OF CURB NW CORNER OF LOT 42, BLOCK C, R.F. ADDITION
 ELEV. = 1387.90 NAVD88

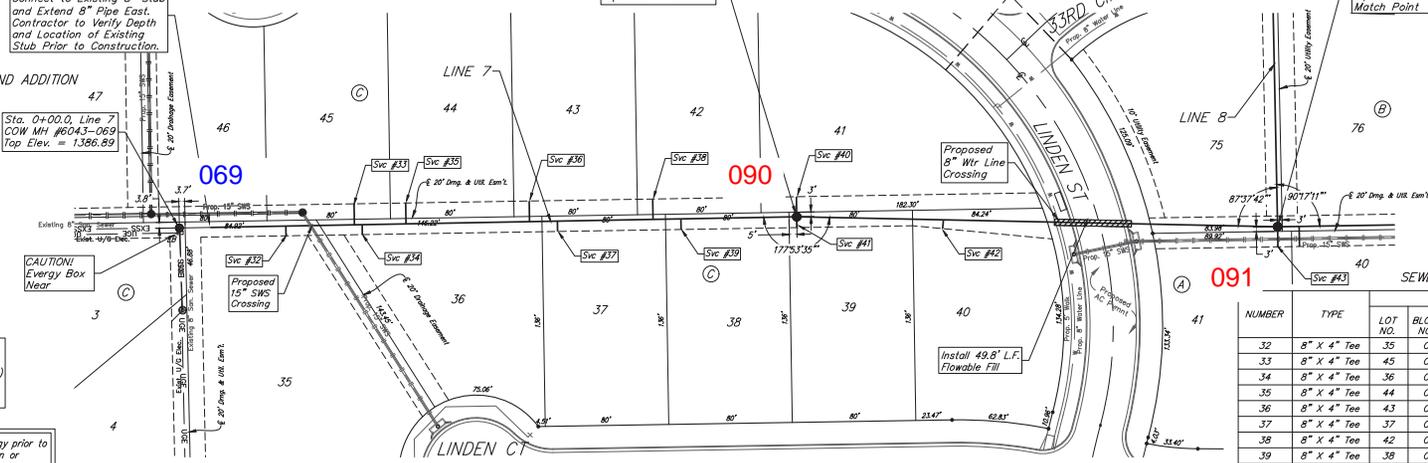
Sta. 0+20.0, Begin Line 7
 Connect to Existing 8" Stub and Extend 8" Pipe East. Contractor to Verify Depth and Location of Existing Stub Prior to Construction.

Sta. 0+00.0, Line 7
 COW MH #6043-069
 Top Elev. = 1386.89

Sta. 3+99.9, Line 7
 Const. Std. Manhole 2'-4" Stubs w/Riser (N & S)
 Top Elev. = 1389.30

Sta. 7+11.3, Line 7 =
 Sta. 0+00, Line 8
 Const. Std. Manhole 1'-4" Stub w/Riser (S)
 Top Elev. = 1387.50
 Match Point

R.F. & R.F. 2ND ADDITION



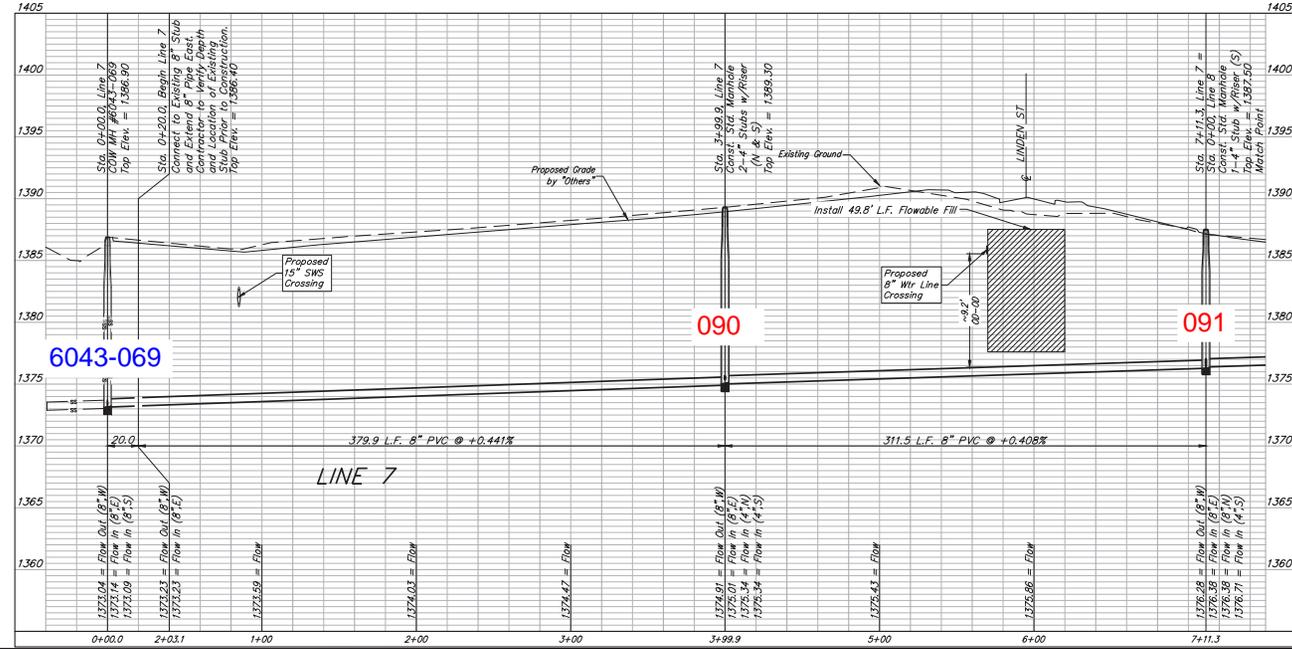
NOTE: Maintain 10 ft. of horizontal separation (outside dimension) between the water lines and sanitary sewer lines.

Contractor to verify depth and location of Every prior to construction. Coordinate with Every if relocation or temporary removal of equipment/lines is necessary. Contact Kevin Rieschick (785-508-2689) a minimum of three weeks prior to construction.

SEWER SERVICE TABLE

NUMBER	TYPE	LOCATION			FOR INFORMATION ONLY	
		LOT NO.	BLOCK NO.	LINE NO.	STATION/DIRECTION	APPROXIMATE LENGTH 4" PIPE
					VERTICAL	HORIZONTAL
32	8" X 4" Tee	35	C	7	0+69.00/RL	7.5
33	8" X 4" Tee	45	C	7	1+13.40/LL	7.2
34	8" X 4" Tee	36	C	7	1+18.40/RL	7.4
35	8" X 4" Tee	44	C	7	1+48.80/LL	7.4
36	8" X 4" Tee	43	C	7	2+26.80/LL	7.9
37	8" X 4" Tee	37	C	7	2+44.90/RL	8.2
38	8" X 4" Tee	42	C	7	3+06.80/LL	8.3
39	8" X 4" Tee	38	C	7	3+24.90/RL	8.6
40	4" Stub	41	C	7	3+99.90/LL	9.5
41	4" Stub	39	C	7	3+99.90/RL	9.6
42	8" X 4" Tee	40	C	7	4+94.90/RL	10.3
43	4" Stub	41	A	7	7+11.30/RL	6.0

NOTE: Vertical Riser Pipe shall be extended to 2' minimum above ground water elevation and 4' maximum below proposed ground elevation.



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R.F. & R.F. 2ND ADDITION
 PHASE 3

LINE 7

SANITARY SEWER IMPROVEMENTS
 PROJECT NUMBER:
 468-2019-005518
 DESIGN: AEG DRAWN: HWJ
 DATE: July 1, 2022
 SHEET OF
10 27

File: E:\PROJECTS\F_E_Addition_13402-F352\Engineering\Phase 3\ISS_210101-LE-010-SS_PLANS.dwg

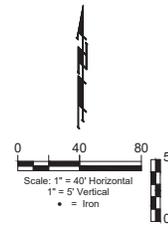
BENCHMARKS:
 SQUARE CUT ON TOP OF CURB NW
 CORNER OF LOT 14, BLOCK C, R.F.
 ADDITION
 ELEV. = 1388.18 NAVD88

SQUARE CUT ON TOP OF CURB NW
 CORNER OF LOT 7, BLOCK C, R.F.
 ADDITION
 ELEV. = 1387.26 NAVD88

SQUARE CUT ON TOP OF CURB NW
 CORNER OF LOT 42, BLOCK C, R.F.
 ADDITION
 ELEV. = 1387.90 NAVD88

R.F. & R.F. 2ND ADDITION

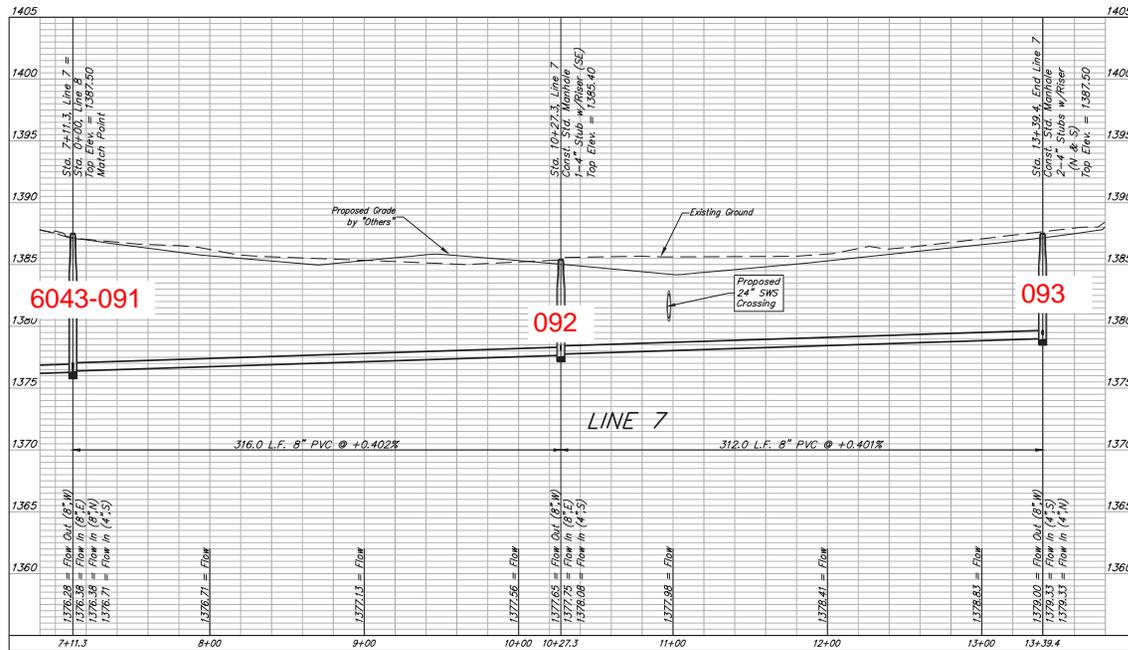
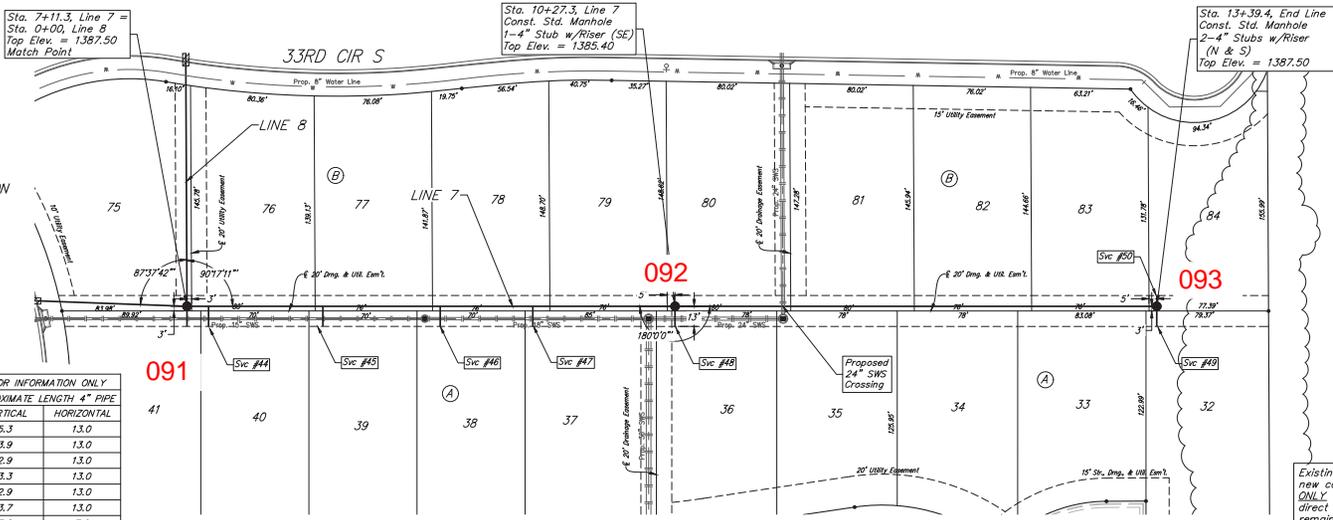
R.F. & R.F. 2ND ADDITION



SEWER SERVICE TABLE

NUMBER	TYPE	LOCATION			FOR INFORMATION ONLY		
		LOT NO.	BLOCK NO.	LINE NO.	APPROXIMATE LENGTH 4" PIPE		
					STATION/DIRECTION	VERTICAL	HORIZONTAL
44	8" X 4" Tee	40	A	7	7+25.30/R/L	5.3	13.0
45	8" X 4" Tee	39	A	7	7+95.30/R/L	3.9	13.0
46	8" X 4" Tee	38	A	7	8+75.30/R/L	2.9	13.0
47	8" X 4" Tee	37	A	7	9+35.30/R/L	3.3	13.0
48	4" Stub	36	A	7	10+27.30/R/L	2.9	13.0
49	4" Stub	32	A	7	13+39.40/R/L	3.7	13.0
50	4" Stub	84	B	7	13+39.40/L/L	3.8	7.0

NOTE: Vertical Riser Pipe shall be extended to 2' minimum above ground water elevation and 4' maximum below proposed ground elevation.



Existing trees which are in direct conflict with proposed new construction shall be removed by the Contractor ONLY with approval of the Engineer. Trees not in direct conflict with proposed new construction shall remain and be protected from damage. Cost shall be included in bid item "Site Clearing"



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R.F. & R.F. 2ND ADDITION
 PHASE 3

LINE 7

SANITARY SEWER
 IMPROVEMENTS

PROJECT NUMBER:
 468-2019-005518

DESIGN: AEG DRAWN: HWJ

DATE: July 1, 2022

SHEET OF
11 27

Fig. E: Project/R.F. & Addition, 1302-F352/Engineering/Phase 3/SIS_2101-LE-010-SIS_PLANS.dwg

BENCHMARKS:
 SQUARE CUT ON TOP OF CURB NW
 CORNER OF LOT 7, BLOCK G, R.F.
 ADDITION
 ELEV. = 1388.18 NAVD88

SQUARE CUT ON TOP OF CURB NW
 CORNER OF LOT 7, BLOCK G, R.F.
 ADDITION
 ELEV. = 1387.26 NAVD88

SQUARE CUT ON TOP OF CURB NW
 CORNER OF LOT 43, BLOCK C, R.F.
 ADDITION
 ELEV. = 1387.90 NAVD88

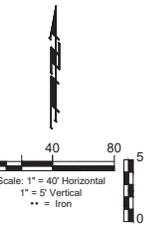
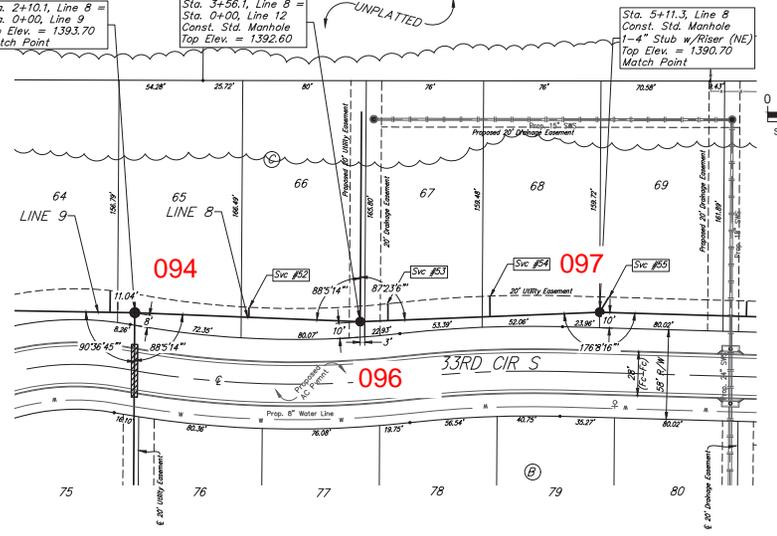
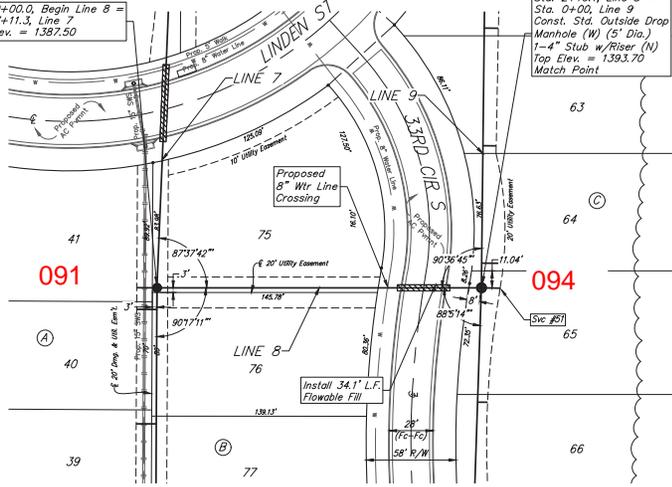
Sta. 0+00.0, Begin Line 8 =
 Sta. 7+11.3, Line 7
 Top Elev. = 1387.50

Sta. 2+10.1, Line 8 =
 Sta. 0+00, Line 9
 Const. Std. Outside Drop
 Manhole (W) (5' Dia.)
 1-4" Stub w/Riser (N)
 Top Elev. = 1393.70
 Match Point

Sta. 2+10.1, Line 8 =
 Sta. 0+00, Line 9
 Top Elev. = 1393.70
 Match Point

Sta. 3+56.1, Line 8 =
 Sta. 0+00, Line 12
 Const. Std. Manhole
 Top Elev. = 1392.60

Sta. 5+11.3, Line 8 =
 Const. Std. Manhole
 1-4" Stub w/Riser (NE)
 Top Elev. = 1390.70
 Match Point



NOTE: Maintain 10 ft. of
 horizontal separation (outside
 dimension to outside dimension)
 between the water lines and
 sanitary sewer lines.

R.F. & R.F. 2ND ADDITION

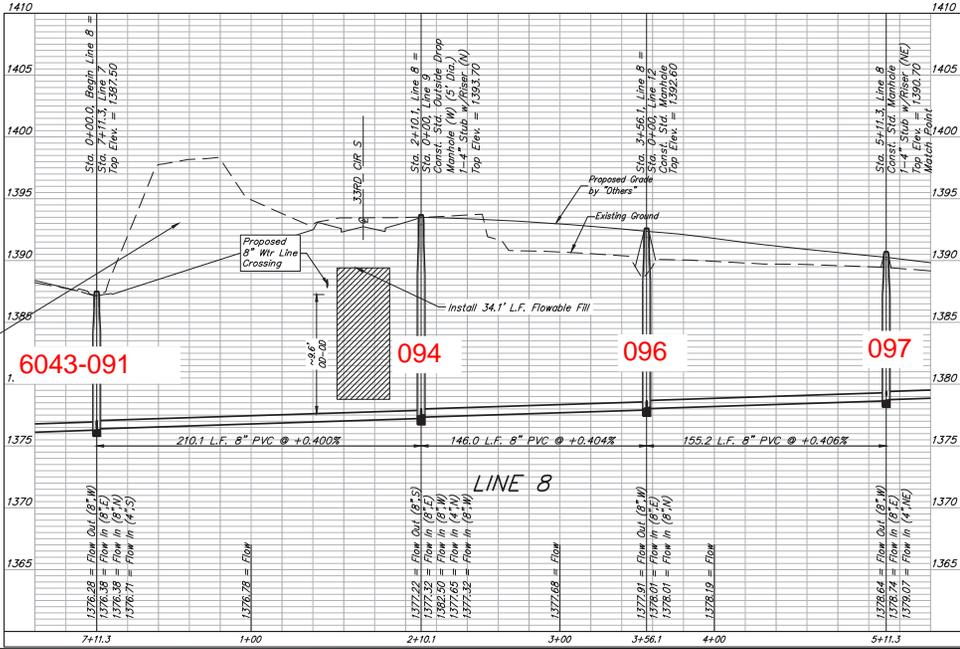
All trench and manhole excavation areas from Sta. 2+10.1 to Sta. 5+11.3, Line 8 shall be backfilled with sand. The sand backfill shall be water-buffed and vibrated during backfilling. All costs shall be paid for as L.F. "Fill, Sand (Flushed & Vibrated)".

SEWER SERVICE TABLE

NUMBER	TYPE	LOCATION				FOR INFORMATION ONLY	
		LOT NO.	BLOCK NO.	LINE NO. / STATION / DIRECTION	APPROXIMATE LENGTH	VERTICAL	HORIZONTAL
51	4" Stub	65	C	8 2+10.10/Lt.	11.5	12.2	
52	8" X 4" Tee	66	C	8 2+83.90/Lt.	10.1	6.5	
53	8" X 4" Tee	67	C	8 3+74.60/Lt.	8.6	10.9	
54	8" X 4" Tee	68	C	8 4+40.80/Lt.	7.7	13.3	
55	4" Stub	69	C	8 5+11.30/Lt.	7.7	11.5	

NOTE: Vertical Riser Pipe shall be extended to 2' minimum above ground water elevation and 4' maximum below proposed ground elevation.

Remove stockpile as necessary. Do not replace or leave excess excavation in street R/W or easements.



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R.F. & R.F. 2ND ADDITION
 PHASE 3

LINE 8

SANITARY SEWER IMPROVEMENTS

PROJECT NUMBER:
 468-2019-005518

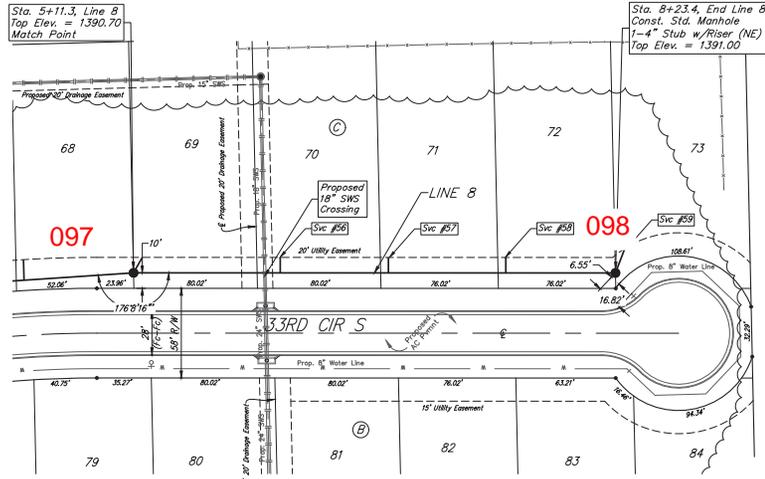
DESIGN: AEG DRAWN: HWJ

DATE: July 1, 2022

SHEET OF
12 27

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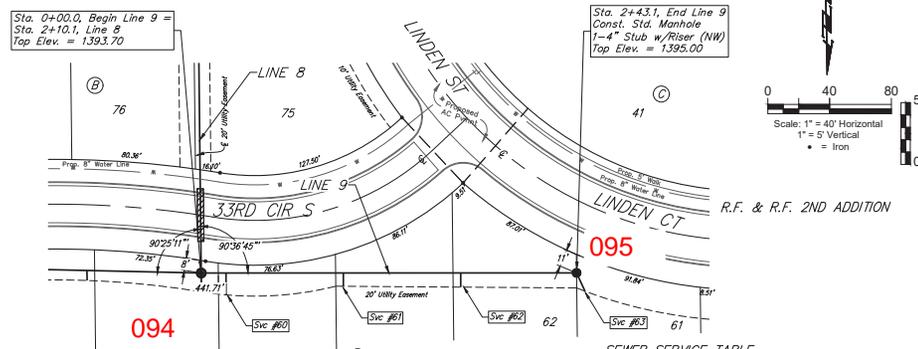
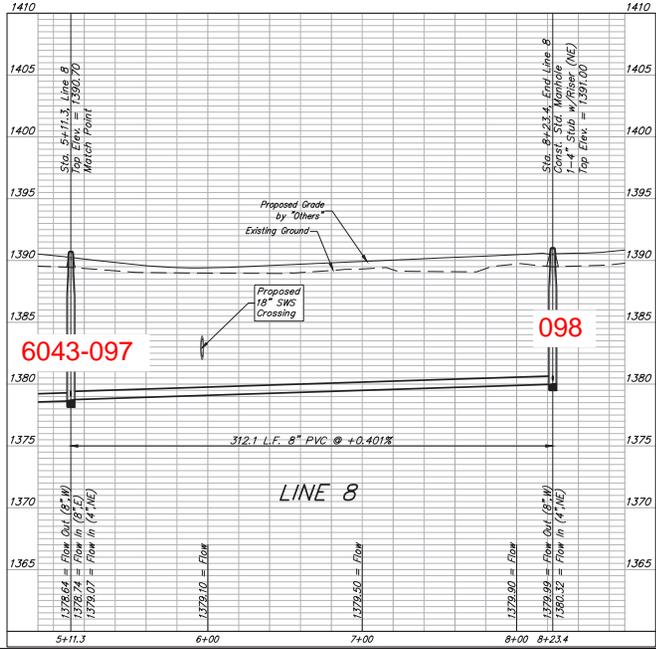
BENCHMARKS:
 SQUARE OUT ON TOP OF CURB NW CORNER OF LOT 14, BLOCK B, R.F. ADDITION. ELEV. = 1388.18 NAVD88
 SQUARE OUT ON TOP OF CURB NW CORNER OF LOT 7, BLOCK C, R.F. ADDITION. ELEV. = 1387.26 NAVD88
 SQUARE OUT ON TOP OF CURB NW CORNER OF LOT 42, BLOCK C, R.F. ADDITION. ELEV. = 1387.90 NAVD88



R.F. & R.F. 2ND ADDITION

NOTE: Maintain 10 ft. of horizontal separation (outside dimension to outside dimension) between the water lines and sanitary sewer lines.

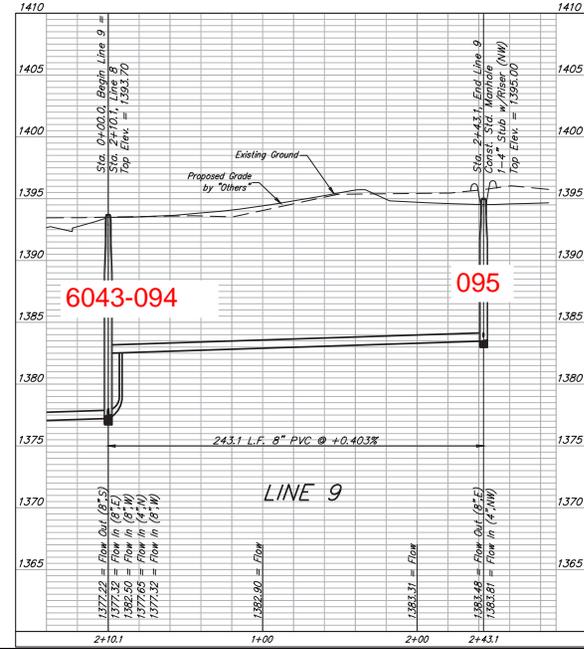
All trench and manhole excavation areas from Sta. 5+11.3 to Sta. 8+23.4, Line 8 and Sta. 0+00.0 to Sta. 2+43.1, Line 9 shall be backfilled with sand. The sand backfill shall be water-jetted and vibrated during backfilling. All costs shall be paid for as L.F. "Fill, Sand (Pushed & Vibrated)".



SEWER SERVICE TABLE

NUMBER	TYPE	LOCATION			FOR INFORMATION ONLY	
		LOT NO.	BLOCK NO.	LINE NO. STATION / DIRECTION	APPROXIMATE LENGTH	4" PIPE
					VERTICAL	HORIZONTAL
56	8" X 4" Tee	70	C	8 6+06.30/Lt.	5.4	10.0
57	8" X 4" Tee	71	C	8 6+76.30/Lt.	5.5	10.0
58	8" X 4" Tee	72	C	8 7+52.40/Lt.	5.7	10.0
59	4" Stub	73	C	8 8+23.40/Lt.	6.3	17.0
60	8" X 4" Tee	64	C	9 0+16.00/Rt.	6.1	14.2
61	8" X 4" Tee	63	C	9 0+92.00/Rt.	6.5	8.6
62	8" X 4" Tee	62	C	9 1+68.10/Rt.	7.4	9.2
63	4" Stub	61	C	9 2+43.10/Rt.	6.6	13.0

NOTE: Vertical Riser Pipe shall be extended to 2' minimum above ground water elevation and 4' maximum below proposed ground elevation.



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R.F. & R.F. 2ND ADDITION
 PHASE 3

LINES 8 & 9

SANITARY SEWER IMPROVEMENTS

PROJECT NUMBER:
 468-2019-005518

DESIGN: AEG DRAWN: HWJ

DATE: July 1, 2022

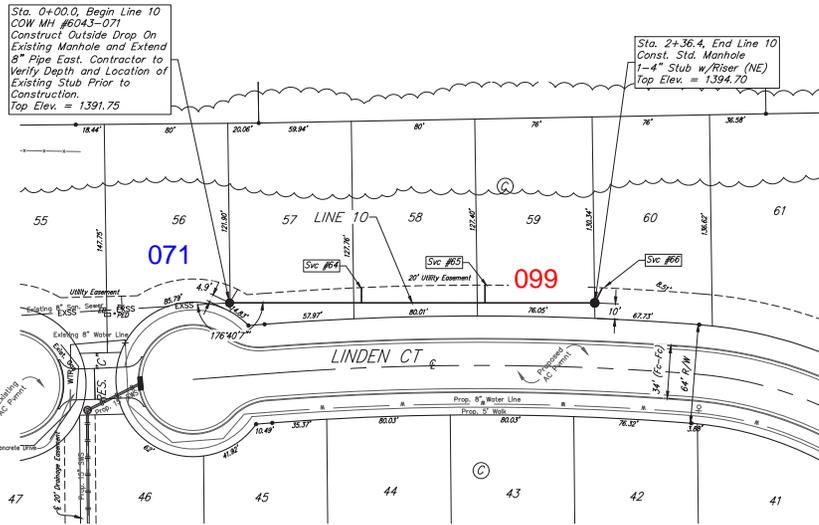
SHEET OF
13 27

File: E:\Project\RF & Addition_1302-2019-005518\Phase 3\SS_2101-LE010-SS_PLANS.dwg

BENCHMARKS:
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 CORNER OF LOT 14, BLOCK B, R.F.
 ADDITION.
 ELEV. = 1388.18 NAVD88

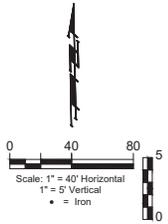
SQUARE CUT ON TOP OF CURB NW
 CORNER OF LOT 7, BLOCK C, R.F.
 ADDITION.
 ELEV. = 1387.26 NAVD88

SQUARE CUT ON TOP OF CURB NW
 CORNER OF LOT 42, BLOCK C, R.F.
 ADDITION.
 ELEV. = 1387.90 NAVD88



R.F. & R.F. 2ND ADDITION

R.F. & R.F. 2ND ADDITION



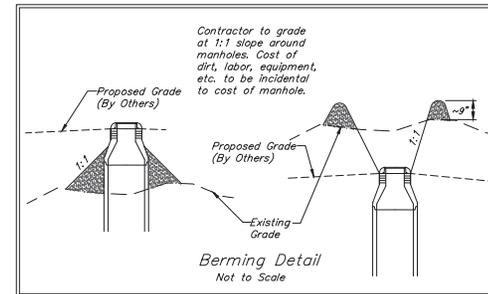
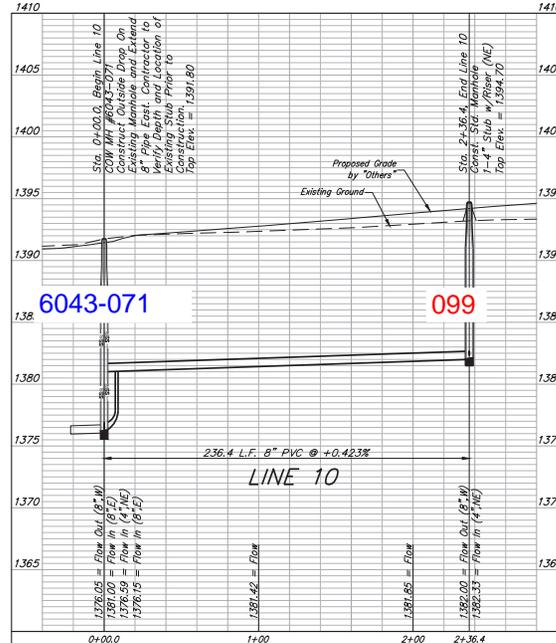
SEWER SERVICE TABLE

NUMBER	TYPE	LOCATION				FOR INFORMATION ONLY	
		LOT NO.	BLOCK NO.	LINE NO.	STATION/DIRECTION	APPROXIMATE LENGTH 4" PIPE	VERTICAL
64	8" X 4" Tee	58	C	10	0+85.40/Lt.	6.0	9.9
65	8" X 4" Tee	59	C	10	1+65.40/Lt.	6.3	11.6
66	4" Stub	60	C	10	2+36.40/Lt.	7.2	11.0

NOTE: Vertical Riser Pipe shall be extended to 2' minimum above ground water elevation and 4' maximum below proposed ground elevation.

NOTE: Maintain 10 ft. of horizontal separation (outside dimension to outside dimension) between the water lines and sanitary sewer lines.

All trench and manhole excavation areas from Sta. 0+00.0 to Sta. 2+36.4, Line 10 shall be backfilled with sand. The sand backfill shall be water-jetted and vibrated during backfilling. All costs shall be paid for as L.F. "Fill, Sand (Flushed & Vibrated)".



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R.F. & R.F. 2ND ADDITION
 PHASE 3

LINE 10

SANITARY SEWER
 IMPROVEMENTS

PROJECT NUMBER:
 468-2019-005518

DESIGN: AEG DRAWN: HJW

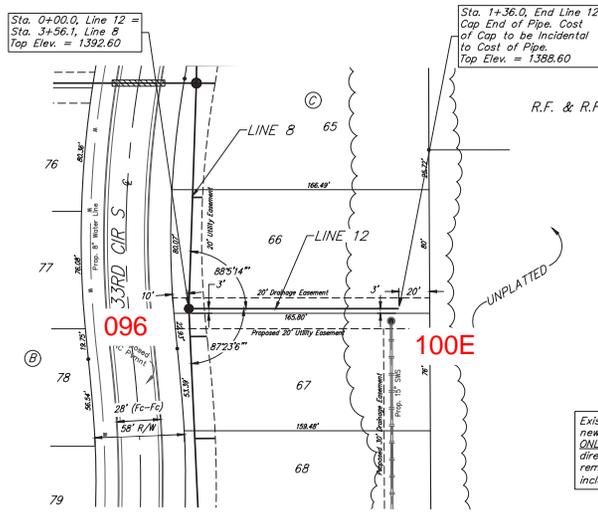
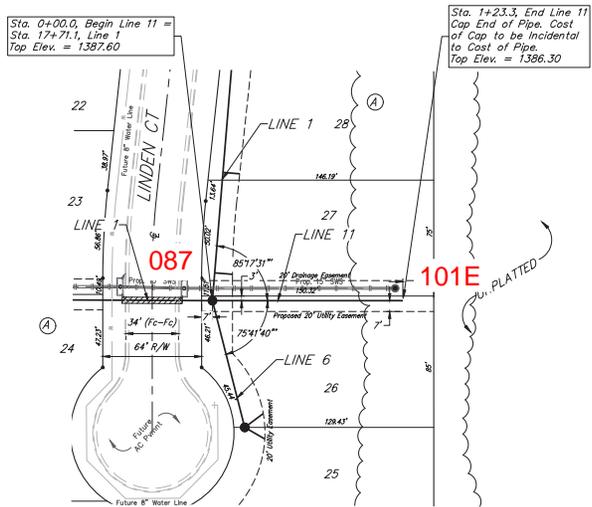
DATE: July 1, 2022

SHEET OF
14 27

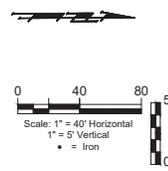
File: E:\Project\B.F. Addition_1302-PS10\Engineering\Phase 3\ISS_2101-LE10\ISS PLANS.dwg

BENCHMARKS:
 SQUARE OUT ON TOP OF CURB NW CORNER OF LOT 14, BLOCK B, R.F. ADDITION
 ELEV. = 1388.18 NAVD88
 SQUARE OUT ON TOP OF CURB NW CORNER OF LOT 7, BLOCK C, R.F. ADDITION
 ELEV. = 1387.26 NAVD88
 SQUARE OUT ON TOP OF CURB NW CORNER OF LOT 42, BLOCK C, R.F. ADDITION
 ELEV. = 1387.90 NAVD88

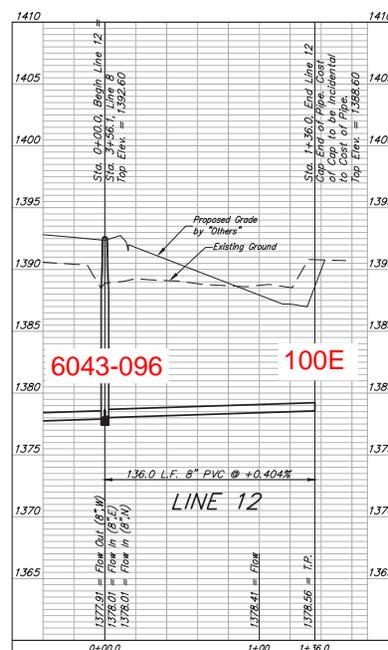
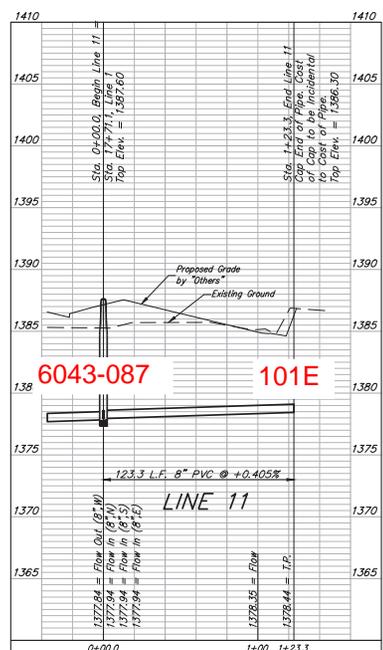
R.F. & R.F. 2ND ADDITION



R.F. & R.F. 2ND ADDITION



Existing trees which are in direct conflict with proposed new construction shall be removed by the Contractor ONLY with approval of the Engineer. Trees not in direct conflict with proposed new construction shall remain and be protected from damage. Cost shall be included in bid item "Site Clearing"



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R.F. & R.F. 2ND ADDITION
 PHASE 3

LINES 11 & 12

SANITARY SEWER IMPROVEMENTS

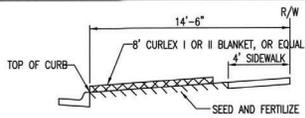
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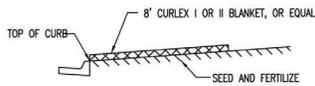
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15 27

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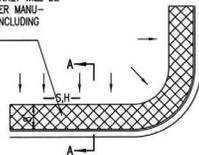


SECTION B-B

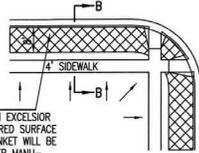


SECTION A-A

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 MANUFACTURER'S RECOMMENDATION, INCLUDING STAPLES. (SEE DETAIL)



SOUTH STREET

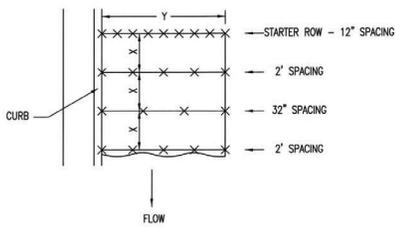


INSTALL 8' WIDE CURLEX I OR II EXCELSIOR BLANKET, OR EQUAL, ON PREPARED SURFACE BACK OF CURB. EDGE OF BLANKET WILL BE AT BACK OF CURB. INSTALL PER MANUFACTURER'S RECOMMENDATION, INCLUDING STAPLES. (SEE DETAIL)

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.

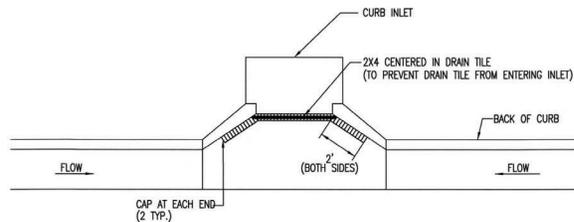
BACK OF CURB PROTECTION DETAIL



STAPLE PATTERN

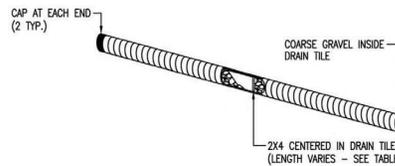
NOTES: USE 6" SEAM OVERLAP
(X & Y = RECOMMENDED BY MANUFACTURE)

DETAILS FOR APPROVED EROSION CONTROL MAT

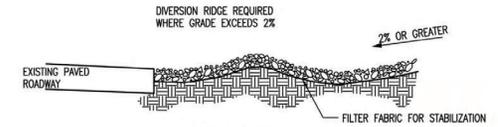


NOTE: PLACE 4" PERFORATED PVC PIPE, FILLED WITH 1/2"-1" DIA. GRAVEL, IN FRONT OF CURB INLET AS SHOWN.

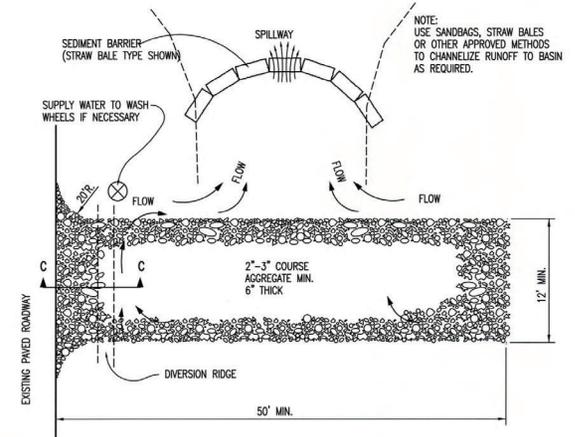
2X4 LENGTH	INLET TYPE	INLET OPENING
5'-6"	1-A	5'-0"
10'-6"	1-A	10'-0"
15'-6"	1-A	15'-0"



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



05/16/13

CITY OF WICHITA
PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

BACK OF CURB PROTECTION,
CURB INLET PROTECTION AND
CONSTRUCTION ENTRANCE

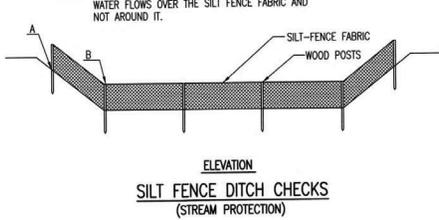
CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER: _____ OCA NUMBER: _____ DATE: _____

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

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



ELEVATION
SILT FENCE DITCH CHECKS
(STREAM PROTECTION)

MATERIAL SPECIFICATION:

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

PLACEMENT:

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

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

DITCH 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 UPSTREAM EDGE OF THE TRENCH. LINE TWO SIDES OF THE TRENCH WITH THE FABRIC AS SHOWN ON DETAIL. BACKFILL OVER THE FABRIC IN THE TRENCH WITH THE EXCAVATED SOIL AND COMPACT. AFTER FILLING THE TRENCH, APPROXIMATELY 24" TO 36" OF SILT FENCE FABRIC SHOULD REMAIN EXPOSED. LAY THE EXPOSED SILT FENCE ON THE UPSTREAM SIDE OF THE TRENCH TO CLEAR AN AREA FOR DRIVING IN THE POSTS. JUST DOWNSTREAM OF THE TRENCH, DRIVE POSTS INTO THE GROUND TO A DEPTH OF AT LEAST 24". PLACE POSTS NO MORE THAN 4' APART. ATTACH THE SILT FENCE TO THE ANCHORED POST WITH STAPLES, WIRE, ZIP TIES, OR NAILS.

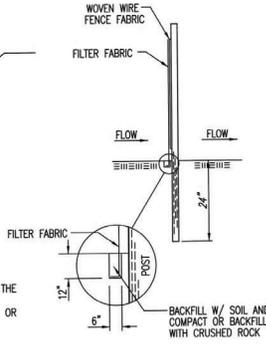
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

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

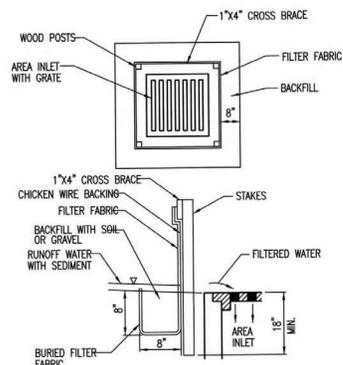
INSPECTION AND MAINTENANCE:

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

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



ANCHOR TRENCH DETAIL



SILT FENCE BARRIERS FOR AREA INLETS
(INLET PROTECTION)

MATERIAL SPECIFICATION:

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

PLACEMENT:

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

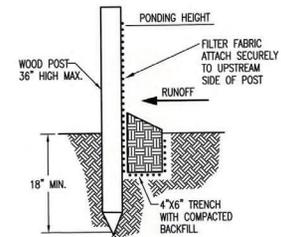
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

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 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?
- 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 SLOPE BARRIER?

REVISION DATE: MAY 2013



CITY OF WICHITA
PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

SILT FENCE DITCH CHECK AND BARRIER DETAILS

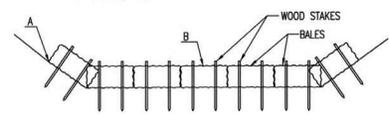
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GARY JANZEN, P.E.

PROJECT NUMBER: _____ OCA NUMBER: _____ DATE: _____

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

SHEET
18 of 27

NOTE: POINT A MUST BE HIGHER THAN POINT B SO THAT WATER FLOWS OVER THE BALES AND NOT AROUND THEM.



STRAW BALE DITCH CHECKS

MATERIAL SPECIFICATION:

BALE DITCH CHECKS MAY BE CONSTRUCTED OF WHEAT STRAW, OAT STRAW, PRAIRIE HAY, OR BROMEGRASS HAY THAT IS FREE OF WEEDS DECLARED NOXIOUS BY THE KANSAS STATE BOARD OF AGRICULTURE. THE STAKES USED TO ANCHOR THE BALES SHOULD BE A HARDWOOD MATERIAL WITH THE FOLLOWING MINIMUM DIMENSIONS: 2" SQUARE (NOMINAL) BY 4' LONG. OPTIONAL: THE DOWNSTREAM SCOUR APRON SHOULD BE CONSTRUCTED OF A DOUBLE-NETTED STRAW EROSION-CONTROL BLANKET AT LEAST 6' WIDE. OPTIONAL: THE METAL LANDSCAPE STAPLES USED TO ANCHOR THE EROSION-CONTROL BLANKET SHOULD BE AT LEAST 8" LONG.

PLACEMENT:

BALE DITCH CHECKS SHOULD BE PLACED PERPENDICULAR TO THE FLOWLINE OF THE DITCH. THE DITCH CHECK SHOULD EXTEND FAR ENOUGH SO THAT THE GROUND LEVEL AT THE ENDS OF THE CHECK IS HIGHER THAN THE TOP OF THE LOWEST CENTER BALE. THIS PREVENTS WATER FROM FLOWING AROUND THE CHECK. STRAW BALE DITCH CHECKS SHOULD NOT BE PLACED IN DITCHES WHERE HIGH FLOWS ARE EXPECTED. ROCK CHECKS SHOULD BE USED INSTEAD. BALES SHOULD BE PLACED IN DITCHES WITH SLOPES OF 6% OR LESS. FOR SLOPES STEEPER THAN 6%, ROCK CHECKS SHOULD BE USED. THE FOLLOWING TABLE PROVIDES CHECK SPACING FOR A GIVEN DITCH GRADE:

DITCH 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:

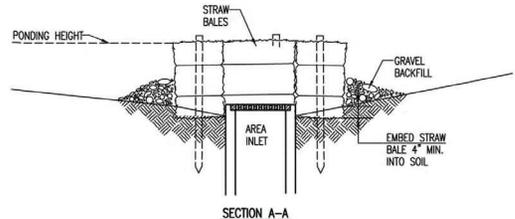
EXCAVATE A TRENCH PERPENDICULAR TO THE DITCH FLOWLINE THAT IS 4" DEEP AND A BALE'S WIDTH WIDE. EXTEND THE TRENCH IN A STRAIGHT LINE ALONG THE ENTIRE LENGTH OF THE PROPOSED DITCH CHECK. PLACE THE SOIL ON THE UPSTREAM SIDE OF THE TRENCH-IT WILL BE USED LATER. OPTIONAL: ON THE DOWNSTREAM SIDE OF THE TRENCH, 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:

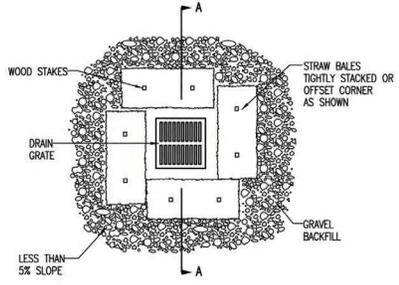
DO NOT PLACE A BALE DITCH CHECK DIRECTLY IN FRONT OF A CULVERT OUTLET. IT WILL NOT STAND UP TO THE CONCENTRATED FLOW. DO NOT PLACE BALE DITCH CHECKS IN DITCHES THAT WILL LIKELY EXPERIENCE HIGH FLOWS. THEY WILL NOT STAND UP TO CONCENTRATED FLOW. FOLLOW PRESCRIBED DITCH-CHECK SPACING GUIDELINES. IF SPACING 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?



SECTION A-A



STRAW BALE BARRIERS FOR AREA INLETS (INLET PROTECTION)

MATERIAL SPECIFICATION:

BALE AREA INLET BARRIERS SHOULD BE CONSTRUCTED OF WHEAT STRAW, OAT STRAW, PRAIRIE HAY, OR BROMEGRASS HAY THAT IS FREE OF WEEDS DECLARED NOXIOUS BY THE KANSAS STATE BOARD OF AGRICULTURE. THE STAKES USED TO ANCHOR THE BALES SHOULD BE A HARDWOOD MATERIAL WITH THE FOLLOWING MINIMUM DIMENSIONS: 2" SQUARE (NOMINAL) BY 4' LONG. TWINE SHOULD BE USED TO BIND BALES. THE USE OF WIRE BINDING IS PROHIBITED BECAUSE IT DOES NOT BIODEGRADE READILY.

PLACEMENT:

BALE AREA INLET BARRIERS SHOULD BE PLACED DIRECTLY AROUND THE PERIMETER OF A DROP INLET. WHEN A BALE AREA INLET BARRIER IS LOCATED NEAR AN INLET THAT HAS STEEP APPROACH SLOPES, THE STORAGE CAPACITY BEHIND THE BARRIER IS DRAMATICALLY REDUCED. TIMELY REMOVAL OF SEDIMENT MUST OCCUR FOR A BARRIER TO OPERATE PROPERLY IN THIS LOCATION.

PROPER INSTALLATION METHOD:

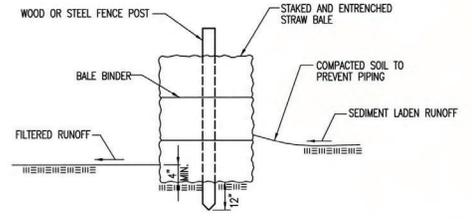
EXCAVATE A TRENCH AROUND THE PERIMETER OF THE AREA INLET THAT IS AT LEAST 4" DEEP BY A BALE'S WIDTH WIDE. PLACE THE BALES IN THE TRENCH, MAKING SURE THAT THEY ARE BUTTED TIGHTLY. SOME BALES MAY NEED TO BE SHORTENED TO FIT INTO THE TRENCH AROUND THE AREA INLET. TWO STAKES SHOULD BE DRIVEN THROUGH EACH BALE, APPROXIMATELY 6" TO 8" IN FROM THE BALE ENDS. STAKES SHOULD BE DRIVEN AT LEAST 12" INTO THE GROUND. ONCE ALL THE BALES HAVE BEEN INSTALLED AND ANCHORED, PLACE THE EXCAVATED SOIL AGAINST THE RECEIVING SIDE OF THE BARRIER AND COMPACT IT. THE COMPACTED SOIL SHOULD BE NO MORE THAN 3" TO 4" DEEP. NOTE: WHEN A BALE AREA INLET BARRIER IS PLACED IN A SHALLOW MEDIAN DITCH, MAKE SURE THAT THE TOP OF THE BARRIER IS NOT HIGHER THAN THE PAVED ROAD. IN THIS CONFIGURATION, WATER MAY SPREAD ONTO THE ROADWAY CAUSING A HAZARDOUS CONDITION.

LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

BALES SHOULD BE PLACED DIRECTLY AGAINST THE PERIMETER OF THE AREA INLET. THIS ALLOWS OVERTOPPING WATER TO FLOW DIRECTLY INTO THE INLET INSTEAD OF ONTO NEARBY SOIL CAUSING SCOUR. BALE AREA INLET BARRIERS MUST BE DUG INTO THE GROUND. BALES AT GROUND LEVEL DO NOT WORK BECAUSE THEY ALLOW WATER TO FLOW UNDER THE BARRIER.

INSPECTION AND MAINTENANCE:

BALE AREA INLET BARRIERS SHOULD BE INSPECTED EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL OF 1/2" OR MORE. THE FOLLOWING IS A LIST OF QUESTIONS THAT SHOULD BE ADDRESSED DURING EACH INSPECTION:
 DOES WATER FLOW UNDER THE AREA INLET BARRIER?
 DOES WATER FLOW THROUGH SPACES BETWEEN ABUTTING BALES?
 ARE ANY BALES DISLODGED?
 ARE BALES DECOMPOSING DUE TO AGE AND/OR WATER DAMAGE?
 DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE AREA INLET BARRIER?



STRAW BALE BARRIERS

MATERIAL SPECIFICATION:

BALE SLOPE BARRIERS MAY BE CONSTRUCTED OF WHEAT STRAW, OAT STRAW, PRAIRIE HAY, OR BROMEGRASS HAY THAT IS FREE OF WEEDS DECLARED NOXIOUS BY THE KANSAS STATE BOARD OF AGRICULTURE. THE STAKES USED TO ANCHOR THE BALES SHOULD BE A HARDWOOD MATERIAL WITH THE FOLLOWING MINIMUM DIMENSIONS: 2" SQUARE (NOMINAL) BY 4' LONG. TWINE SHOULD BE USED TO BIND BALES. THE USE OF WIRE BINDING IS PROHIBITED BECAUSE IT DOES NOT BIODEGRADE READILY.

PLACEMENT:

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

PROPER INSTALLATION METHOD:

EXCAVATE A TRENCH THE LENGTH OF THE PLANNED SLOPE BARRIER THAT IS 4" DEEP AND A BALE'S WIDTH WIDE. MAKE SURE THAT THE TRENCH IS EXCAVATED ALONG A SINGLE CONTOUR. WHEN PRACTICABLE, SLOPE BARRIERS SHOULD BE PLACED ALONG CONTOURS TO AVOID A CONCENTRATION OF FLOW. PLACE THE SOIL ON THE UPSLOPE SIDE OF THE TRENCH FOR LATER USE. PLACE THE BALES IN THE TRENCH, MAKING SURE THAT THEY ARE BUTTED TIGHTLY. TWO STAKES SHOULD BE DRIVEN THROUGH EACH BALE ALONG THE CENTERLINE OF THE DITCH CHECK, APPROXIMATELY 6" TO 8" IN FROM THE BALE ENDS. STAKES SHOULD BE DRIVEN AT LEAST 12" INTO THE GROUND. ONCE ALL THE BALES HAVE BEEN INSTALLED AND ANCHORED, PLACE THE EXCAVATED SOIL AGAINST THE UPSLOPE SIDE OF THE CHECK AND COMPACT IT. THE COMPACTED SOIL SHOULD BE NO MORE THAN 3" TO 4" DEEP.

LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

WHEN PRACTICAL, DO NOT PLACE BALE SLOPE BARRIERS ACROSS CONTOURS. SLOPE BARRIERS SHOULD BE PLACED ALONG CONTOURS TO AVOID A CONCENTRATION OF FLOW. CONCENTRATED FLOW OVER A SLOPE BARRIER CREATES A SCOUR HOLE ON THE DOWNSLOPE SIDE OF THE BARRIER. THE SCOUR HOLE EVENTUALLY UNDERMINES THE BALES AND THE BARRIER FAILS. DO NOT PLACE BALE SLOPE BARRIERS IN AREAS WITH SHALLOW SOILS UNDERLAIN BY ROCK. IF THE BARRIER IS NOT ANCHORED SUFFICIENTLY, IT WILL WASH OUT. BALE SLOPE BARRIERS MUST BE DUG INTO THE GROUND. BALES AT GROUND LEVEL DO NOT WORK BECAUSE THEY ALLOW WATER TO FLOW UNDER THE BARRIER.

INSPECTION AND MAINTENANCE:

BALE SLOPE BARRIERS SHOULD BE INSPECTED EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL OF 1/2" OR MORE. THE FOLLOWING IS A LIST OF QUESTIONS THAT SHOULD BE ADDRESSED DURING EACH INSPECTION:
 ARE THERE ANY POINTS ALONG THE SLOPE BARRIER WHERE WATER IS CONCENTRATING?
 DOES WATER FLOW UNDER THE SLOPE BARRIER?
 DOES WATER FLOW THROUGH SPACES BETWEEN ABUTTING BALES?
 ARE ANY BALES DISLODGED?
 ARE BALES DECOMPOSING DUE TO AGE AND/OR WATER DAMAGE?
 DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE SLOPE BARRIER?

REVISION DATE: MAY 2013





CITY OF WICHITA
PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

STRAW BALE DITCH CHECK AND BARRIER DETAILS

CITY ENGINEER
GARY JANZEN, P.E.

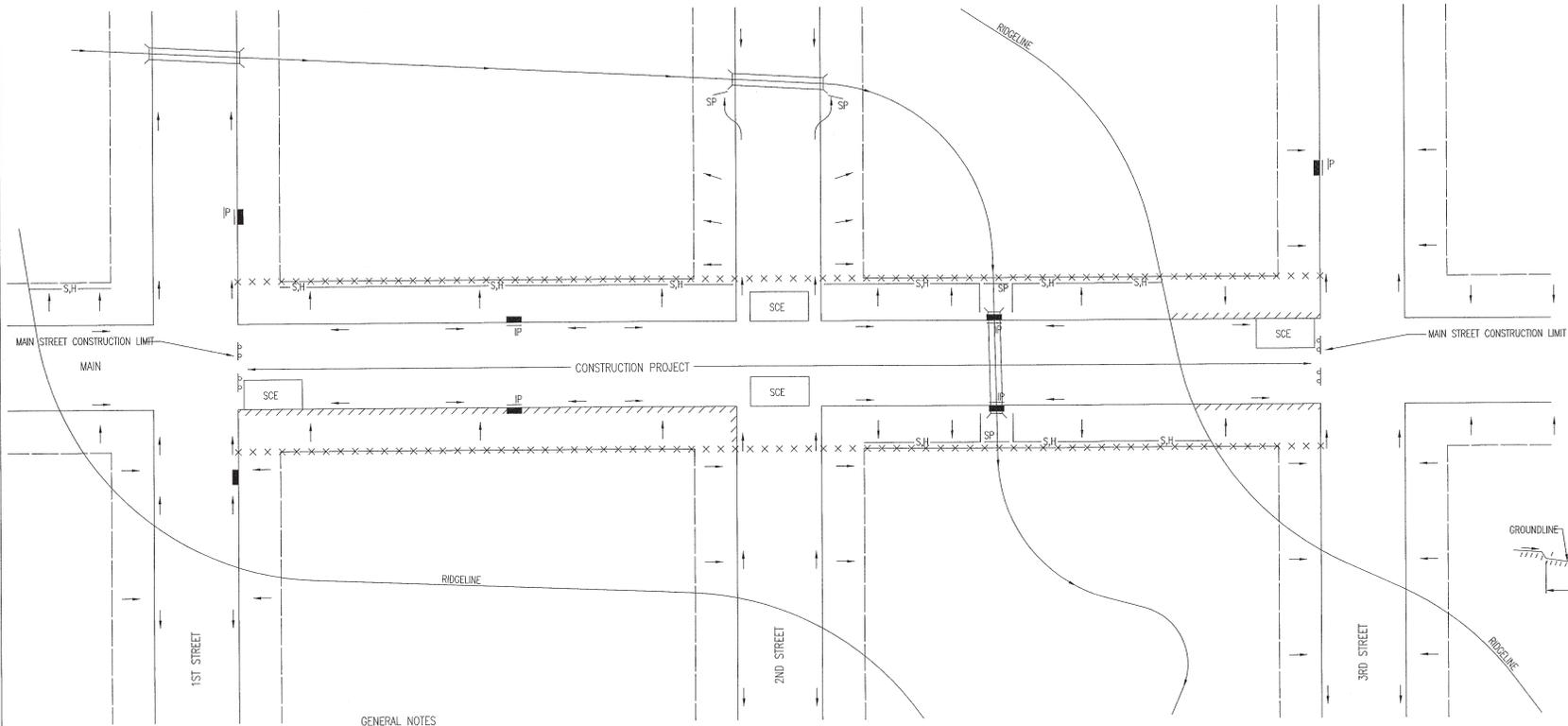
PROJECT NUMBER: _____ OCA NUMBER: _____ DATE: _____

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

SHEET
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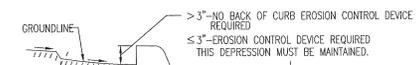
GENERAL NOTES

- 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.



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 BMP'S - 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 SLOPED, THE EXCESSOR 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)



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

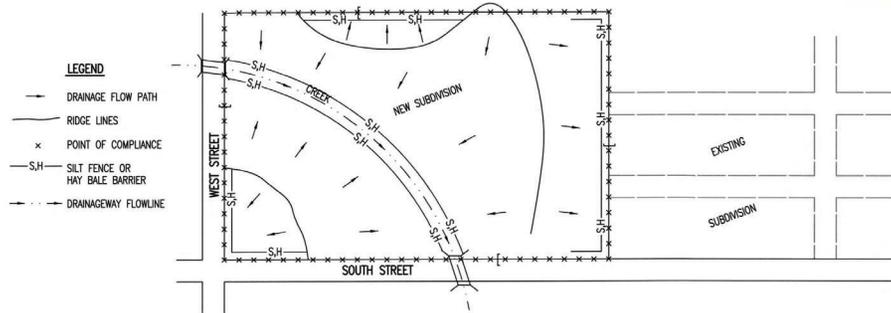
- R-O-W LIMITS
- DRAINAGE FLOW PATH
- x x x x x R/W LIMIT WITHIN CONSTRUCTION LIMIT
- S.W.I. STORM WATER INLETS
- IP INLET PROTECTION
- S.H. SILT FENCE OR HAY BALE BARRIER
- SP STREAM PROTECTION
- SCE STABILIZED CONSTRUCTION ENTRANCE
- BACK OF CURB PROTECTION



CITY OF WICHITA
PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

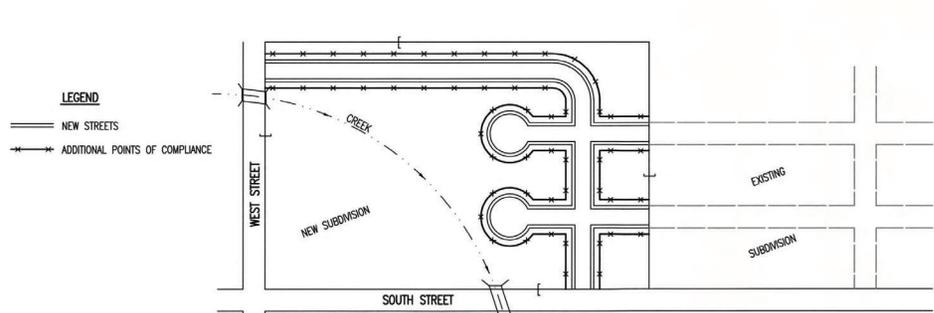
STREET IMPROVEMENT PROJECTS		REVISION: JUNE 2015
CITY ENGINEER GARY JANZEN, P.E.		
PROJECT NUMBER	OCA NUMBER	DATE
CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		SHEET 20 of 27

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



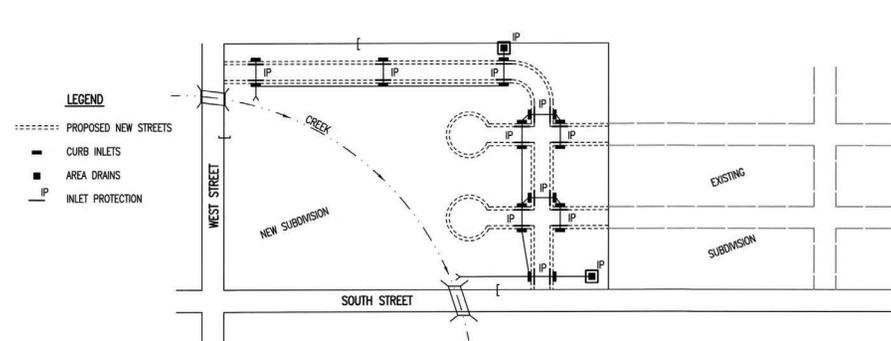
- DURING THIS PHASE OF SUBDIVISION CONSTRUCTION, THE POINTS OF COMPLIANCE ARE THE PERIMETER BOUNDARIES AND ANY DRAINAGE WAYS OR STORM SEWERS DRAINING THROUGH OR FROM THE SITE. SHOULD LAKES BE CONSTRUCTED WITHIN THE SUBDIVISION THAT WILL DISCHARGE DURING STORMS, THEY ARE ALSO A POINT OF COMPLIANCE.
-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



- 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:
 - SUMP AREAS – INLET PROTECTION SHALL BE PROVIDED WHEN STREET SUBGRADE WORK IS COMPLETED.
 - 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

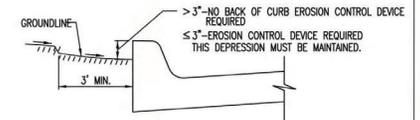


- DURING THIS PHASE OF SUBDIVISION DEVELOPMENT, ALL EROSION CONTROL DEVICES REQUIRED IN PHASE 1 SHALL REMAIN IN PLACE AND BE MAINTAINED.
- AS NEW STORM SEWERS, WITH INLETS, ARE INSTALLED, THE STORM SEWERS MUST NOW BE PROTECTED SO ALL NEW INLETS BECOME POINTS OF COMPLIANCE.
- AREA DRAINS – AS SOON AS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

SEE DETAIL SHEET FOR BACK OF CURB PROTECTION DETAIL



CURB BACKFILL DETAIL (STREET CONSTRUCTION ONLY)

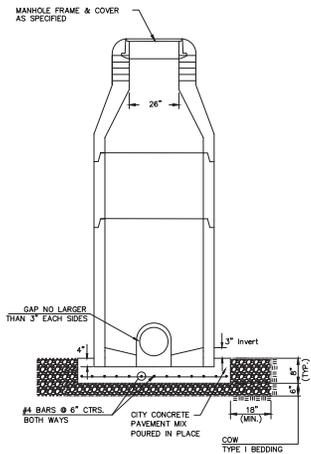
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REVISION DATE: MAY 2013

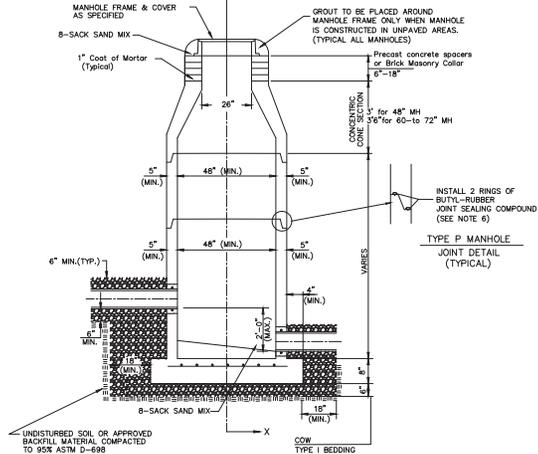


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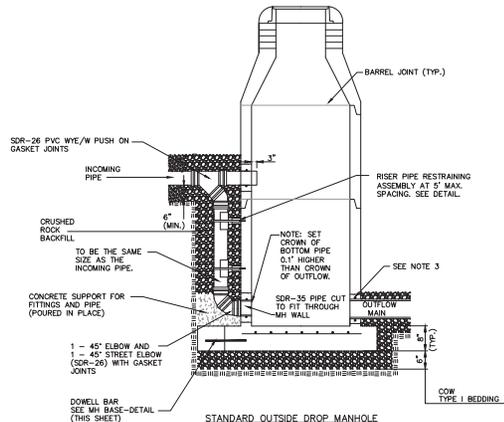
SUBDIVISION DEVELOPMENT PROCESS		
CITY ENGINEER GARY JANZEN, P.E.		
PROJECT NUMBER	OCA NUMBER	DATE
CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		SHEET 21 of 27



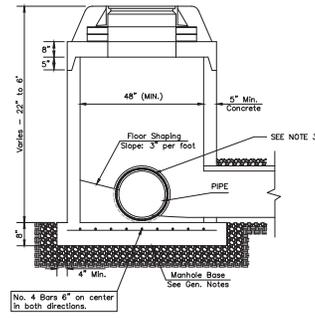
DOG HOUSE MANHOLE
(OVER EXISTING PIPE)
Not to Scale



STANDARD MANHOLE
Not to Scale



STANDARD OUTSIDE DROP MANHOLE
Not to Scale

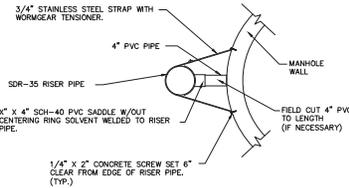


SHALLOW MANHOLE
Not to Scale

= COW TYPE I BEDDING
 = UNDISTURBED SOIL

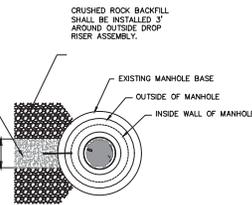
PRECAST MANHOLE GENERAL NOTES

- ALL PRECAST CONCRETE MANHOLE SECTIONS SHALL CONFORM TO THE LATEST REVISIONS OF A.S.T.M. C478 AS MODIFIED BY THE SPECIFICATIONS.
- NON-SHRINK GROUT SHALL BE NON-METALLIC TYPE.
- APPROVED FLEXIBLE WATERSTOP SHALL BE INSTALLED TO JOIN THE SEWER PIPE TO THE MANHOLE WALL. THE SEWER PIPE SHALL BE SUPPORTED WITH CRUSHED ROCK A MINIMUM OF 3 FEET FROM THE MANHOLE WALL AND TO THE FIRST JOINT FOR V.C.P. SUCH THAT THE JOINT REMAINS FLEXIBLE.
- ALL INSIDE SURFACES OF THE CONCRETE MANHOLE WHICH WOULD BE EXPOSED TO SEWER GAS SHALL BE COATED PER SECTION 804.4 OF STANDARD SPECIFICATIONS.
- EXTERIOR MANHOLE WALLS SHALL BE COATED PER SECTION 804.4 OF STANDARD SPECIFICATIONS.
- JOINT SEALING COMPOUND SHALL BE PER 804.4 OF STANDARD SPECIFICATIONS.
- ALL MANHOLE SECTION JOINTS THAT WILL BE IN GROUNDWATER OR GREATER THAN 12" DEEP SHALL BE WRAPPED WITH AN EXTERNAL JOINT SEAL PER SECTION 804.4 OF STANDARD SPECIFICATIONS, AS INDICATED BY THE PLANS.
- PRECAST MANHOLES SHALL BE SET AT LEAST 4 INCHES INTO THE MANHOLE BASE FOR DOG HOUSE MANHOLES.
- 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 SHARED INVERT.
- LIFTING HOLES SHALL BE FILLED WITH NON-SHRINK GROUT AND THE INTERIOR SURFACE COATED AS SPECIFIED.
- MORTAR USED IN MASONRY CONSTRUCTION SHALL CONTAIN 8 SACKS OF CEMENT PER CUBIC YARD. CONCRETE USED IN MANHOLE BASES SHALL CONFORM TO THE REQUIREMENTS OF CONCRETE FOR CONCRETE PAVEMENT CONSTRUCTION AS SPECIFIED IN THE CITY STANDARD PAVING SPECIFICATIONS USING CITY CONCRETE PAVEMENT MIX WITHOUT AIR ENTRAINING ADMIXTURE. MORTAR SHALL BE PLACED AROUND THE MANHOLE RING AS SHOWN ON THE DRAWINGS WHEN MANHOLES ARE CONSTRUCTED IN UNPAVED AREAS. COMPLETED MANHOLE SHALL BE WITHOUT LEAKS AND WATER TIGHT.
- REINFORCING STEEL SHALL BE INSTALLED IN THE MANHOLE BASES AND SHALL CONSIST OF NO. 4 BARS PLACED ON 6" CENTERS IN BOTH DIRECTIONS. THE MANHOLE BASE REINFORCEMENT SHALL BE PLACED AT LEAST 1" ABOVE THE BOTTOM OF THE MANHOLE BASE. ALL COSTS FOR FURNISHING AND INSTALLING REINFORCING STEEL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE MANHOLE.
- WALL THICKNESS SHALL BE 1" GREATER THAN MANHOLE DIAMETER IN FEET.
- OPENINGS SHALL BE CORE DRILLED INTO THE MANHOLE WALL WHEN OUTSIDE DROPS ARE CONSTRUCTED ON EXISTING MANHOLES. SUCH OPENINGS DRILLED INTO EXISTING MANHOLES SHALL BE AS SMALL AS PRACTICAL TO FACILITATE INSTALLING AND GROUTING THE NEW PIPE IN PLACE. WATERSTOP GASKETS SHALL BE USED WITH P.V.C. PIPE. THE NEW PIPE SHALL BE GROUTED INTO THE OPENING USING AN APPROVED NONSHRINK GROUT FOR THE FULL MANHOLE WALL THICKNESS. THE EXTERIOR OF THE COMPLETED CONNECTION SHALL BE SEALED WITH AN APPROVED BITUMINOUS COATING SUCH THAT THE CONNECTION WILL BE WATER TIGHT. FLOOR OF MANHOLE SHALL BE MODIFIED TO FORM NEW FLOW CHANNEL FOR THE NEW CONNECTION AS INDICATED BY THE DRAWING. THIS WORK, INCLUDING MODIFICATION OF MANHOLE FLOOR, SHALL BE PAID FOR AT THE UNIT PRICE BID FOR OUTSIDE DROP STACK CONSTRUCTED ON EXISTING MANHOLE.
- THE FLOORS OF ALL MANHOLES SHALL BE SHAPED WITH FLOW CHANNELS SUCH THAT THE MANHOLES WILL BE SELF CLEANING AND FREE OF AREAS WHERE SOLIDS COULD BE DEPOSITED AS SEWAGE FLOWS THROUGH THE MANHOLE FROM ALL INLET PIPES TO THE OUTLET PIPE. FLOW CHANNELS SHALL BE FORMED TO MATCH THE BOTTOM HALVES OF THE INFLOWING PIPES AND THE OUTFLOWING PIPE, AS SHOWN BY THE DRAWINGS. MANHOLE FLOORS SHALL HAVE SLOPES OF 3 INCHES PER FOOT IN THE AREAS OUTSIDE OF THE FLOW CHANNELS SLOPED TOWARD THE FLOW CHANNELS. PIPES LAD THROUGH MANHOLES SHALL HAVE THE TOP HALF REMOVED TO NEAT LINES FOR THE FULL INSIDE DIAMETER OF THE MANHOLE. MANHOLE FLOORS SHALL THEN BE SHAPED AROUND THE BOTTOM HALF OF THE PIPE WHICH FORMS THE FLOW CHANNEL.
- MANHOLE COVER CASTINGS AND MANHOLE FRAME CASTINGS SHALL CONFORM TO THE REQUIREMENTS AS INDICATED IN THE STANDARD SPECIFICATIONS AND AS SHOWN IN THE STANDARD DETAIL DRAWING.
- THE VERTICAL DROP IN STANDARD MANHOLES SHALL NOT EXCEED 2' REGARDLESS OF PIPE SIZE. THE CROWNS OF INFLOWING PIPES SHALL NEVER BE SET LOWER THAN THE CROWN OF THE OUTFLOWING PIPE.
- STANDARD MANHOLES SHALL BE BID AS STANDARD MANHOLES FOR THE TYPE AND DIAMETER INDICATED. OUTSIDE DROP MANHOLES SHALL BE BID AS STANDARD OUTSIDE DROP MANHOLES FOR THE TYPE AND DIAMETER INDICATED. ALL MANHOLE DIAMETERS WILL BE 4" UNLESS INDICATED OTHERWISE.
- PRECAST CONCRETE SPACERS OR BRICK MASONRY COLLAR SHALL BE INSTALLED BETWEEN THE CAST IRON FRAME AND THE CONCENTRIC CONE. THE COLLAR WILL HAVE 8" WALLS AND A VERTICAL HEIGHT OF 6" MINIMUM AND 18" MAXIMUM. A 1" COAT OF MORTAR WILL BE PLASTERED ON THE OUTSIDE OF THE COLLAR. THE USE OF PRE-CAST CONCRETE SPACERS FOR MANHOLE TOP ADJUSTMENT IS ALSO ALLOWED.
- THE FULL DIAMETER OF THE MANHOLE SHALL EXTEND THE ENTIRE DEPTH OF THE MANHOLE TO THE CONE SECTION. NO REDUCTION IN MANHOLE DIAMETER WILL BE ALLOWED.



RISER PIPE RESTRAINING ASSEMBLY
Not to Scale

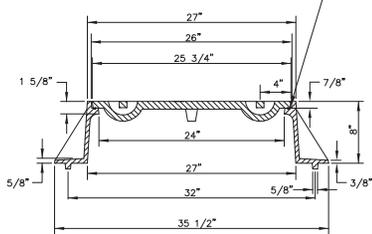
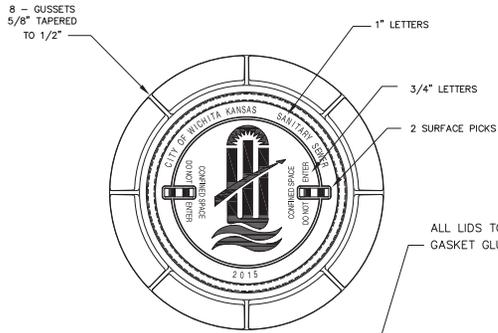
SANITARY SEWER MANHOLE DIAMETERS		
DIAMETER	DEPTH	PIPE SIZE
4"	0'-15"	8"-18"
5"	>15'-30"	21"-30"
6"	>30"	36"-60"



MH BASE DETAIL
Not to Scale



REVISION NOVEMBER 2019		RISER PIPE RETAINING ASSEMBLY REVISED ON MANHOLE DRAWING	
<p>CITY OF WICHITA PUBLIC WORKS & UTILITIES ENGINEERING DIVISION</p>		<p>PRECAST SANITARY SEWER MANHOLE</p> <p>CITY ENGINEER GARY JANZEN, P.E.</p>	
		PROJECT NUMBER	DATE
CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 435 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		SHEET 22 of 27	

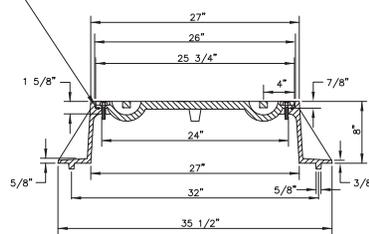
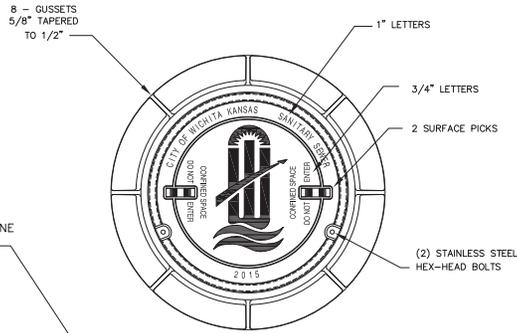


STANDARD MANHOLE FRAME & COVER

DEETER #1261 OR EJIW #1936-Z1

NOTE:

1. FURNISHED WITH MACHINED HORIZONTAL BEARING SURFACE.



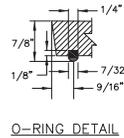
BOLT DOWN MANHOLE FRAME & COVER

DEETER #1261 OR EJIW #1936-Z1

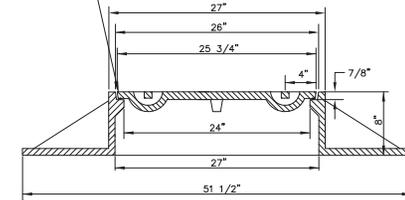
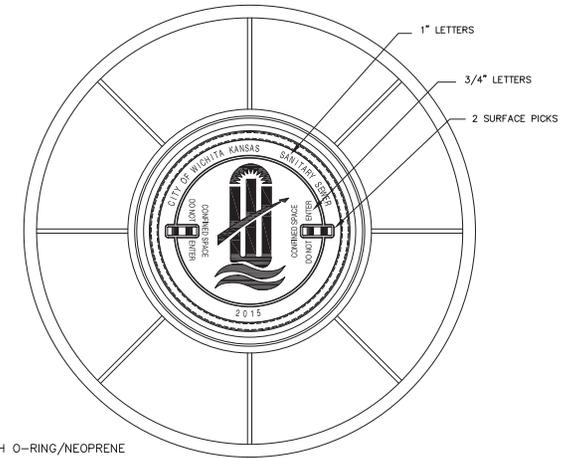
NOTE:

1. FURNISHED WITH MACHINED HORIZONTAL BEARING SURFACE.

ALL LIDS TO BE FURNISHED WITH O-RING/NEOPRENE GASKET GLUED IN THE COVER BEARING SURFACE.



ALL LIDS TO BE FURNISHED WITH O-RING/NEOPRENE GASKET GLUED IN THE COVER BEARING SURFACE.



WIDE FLANGED FRAME & COVER

DEETER #1261A

NOTE:

1. FURNISHED WITH MACHINED HORIZONTAL BEARING SURFACE.

GENERAL NOTES

1. MANHOLE CASTINGS SHALL BE MANUFACTURED USING GOOD QUALITY GRAY IRON CONFORMING TO CLASS 30 OF A.S.T.M. DESIGNATION A-48. DIMENSIONS SHOWN ON THE DETAILED DRAWINGS SHALL BE CONSIDERED AS MINIMUM REQUIREMENTS AND ANY DEVIATIONS FROM THE DIMENSIONS SHOWN MUST BE SPECIFICALLY APPROVED. THE FINISHED CASTINGS SHALL BE OF UNIFORM QUALITY, FREE FROM BLOWHOLES, POROSITY, HARD SPOTS, SHRINKAGE DISTORTIONS OR OTHER DEFECTS.
2. MANHOLE CASTINGS SHALL BE MANUFACTURED SUCH THAT A COVER MANUFACTURED BY ANY ONE 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.
3. THE OUTSIDE CIRCUMFERENCE OF THE VERTICAL FACE OF THE COVER AND THE INSIDE CIRCUMFERENCE OF THE VERTICAL FACE IN THE FRAME RECESS SHALL BE MANUFACTURED TO TOLERANCES SUCH THAT THE CLEARANCE BETWEEN THE COVER AND FRAME WILL NOT EXCEED 1/8" AT ANY POINT AROUND THE CIRCUMFERENCE OF THE COVER. THE SEATING SURFACES BETWEEN THE COVER AND FRAME SHALL BE MACHINED SUCH THAT THESE SEATING SURFACES SHALL MAKE FULL CONTACT FOR THEIR FULL CIRCUMFERENCE TO PRECLUDE THE COVER FROM ROCKING IN THE FRAME.
4. THE MANHOLE FRAME AND COVER SHALL BE MARKED WITH LETTERING INDICATING THE NAME OF THE MANUFACTURER AND THE YEAR WHEN THE COVER OR FRAME WAS CAST. THE COVER SHALL BE FURTHER IDENTIFIED WITH REGARDS TO OWNERSHIP USING LETTERS AT LEAST 1" 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 DRAWING.



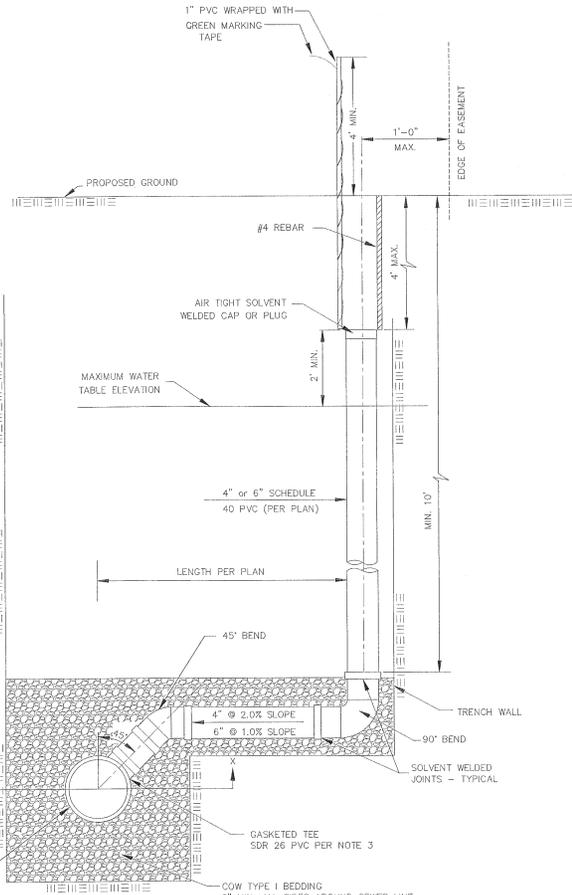
REVISED: MARCH 2016

MANHOLE FRAME AND COVER (SANITARY SEWER)		
CITY ENGINEER GARY JANZEN, P.E.		
PROJECT NUMBER	OCA NUMBER	DATE
CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		SHEET 23 of 27

GENERAL NOTES

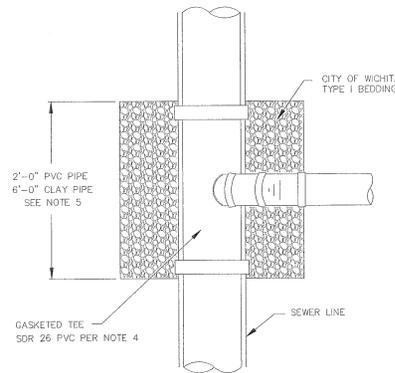
- APPLICATION.** Risers shall be installed to serve all lots or tracts where the sanitary sewer main is below the water table, where the sanitary sewer main depth is greater than 12' below the proposed ground elevation, where the main is adjacent to a pond or wherever service lines would have to cross under storm sewer pipe. Installation of risers because of field conditions shall be as approved by the City Engineer. The location of the risers to serve developed property shall be approved by the property owner and the Construction Engineer.
- MANHOLE STUB RISERS.** Manhole stub risers be installed in manholes where locations of manholes will provide satisfactory service connection as determined by the Construction Engineer. The vertical distance between the flowline of the manhole stub and the flowline of the sanitary sewer line out of the manhole shall not exceed 2'. Risers shall be utilized at manholes as indicated in Note 1. Manhole stub riser shall be set such that the top of the stub is not lower than the top of the sanitary sewer line.
- SIZING.** Risers shall be sized according to the plans and riser table where risers are indicated by the plans. Where risers are required because of field conditions, the risers shall be 6" diameter for commercial or industrial properties and 4" or 6" diameter for residential properties, based on lot size and sanitary sewer main depth. Sizing of risers shall be approved by the construction Engineer prior to installation.
- RISER MATERIAL.** Risers shall be constructed of Schedule 40 PVC Pipe, meeting the requirement of the latest revision of A.S.T.M. All pipe joints shall be solvent welded. Full body tee shall be SDR 26 PVC pipe.
- ROCK ENCASUREMENT.** Riser connection to clay pipe sanitary sewers shall be rock encased both ways from the riser centerline. The rock encasement shall extend three feet from the riser centerline or stop at the first sanitary sewer pipe joint within three feet of the riser centerline. Riser connections to PVC Sanitary sewer mains shall be rock encased one foot each way from the riser centerline. Crushed rock shall conform to ASTM C-33, Gradation No. 67, and shall meet all requirements for Portland Cement Concrete pavement Course Aggregate, Section 406.2, City of Wichita Standard Specifications.
- BEDDING.** Beyond the limits of the rock encasement, bedding around the sanitary sewer riser shall be compacted Pipe Bedding Type 1 or 2. The bedding shall be placed and compacted from the depth of the sanitary sewer main to the top of the sanitary sewer riser pipe. Compacted Pipe Bedding Type 1 or 2 shall be required for all risers whether constructed in vertical wall or sloped wall trenches. Bedding material and construction practices shall be approved by the Construction Engineer prior to installation.
- SUPPORT OF RISERS.** Sanitary sewer riser pipe shall be supported during trench backfill. The riser pipe shall be held in a vertical position at all times until trench backfill and compaction has been completed. Contractor's methods for supporting and back filling the riser pipe shall be approved by the Construction Engineer.
- PLUGGING.** The ends of the riser pipes and manhole stubs shall be plugged using an airtight solvent welded cap or plug. Cap or plug fittings shall be approved by the Construction Engineer prior to installation. Caps or plugs which do not provide an airtight seal will not be accepted.
- TOP OF THE RISER PIPE.** The top elevation of the sanitary sewer riser pipe shall be built per plan elevations, unless otherwise directed by the Construction Engineer, where riser elevations are not shown on the plans, the top of the risers shall be set at an elevation four feet below the proposed ground surface. If ground water is encountered, the top of the riser pipe shall be set at an elevation 2' (min.) above the maximum water table elevation, regardless of the riser elevation shown on the plans.
- MARKING.** Locations of the ends of the sanitary sewer riser pipe shall be marked by installing 1" PVC from the top of the riser to a minimum of 4' above the top of finished grade. No. 4 rebar shall be placed centered over the riser from the cap to the existing ground. The 1" PVC pipe shall be wrapped with green colored plastic tape, for the full length above ground surface. The green tape shall be 4 mil Polyethylene film with a minimum width of three inches, specifically manufactured for the purpose of identification of underground sewers.
- LOCATION MEASURES.** The project inspector shall record and document the location of all risers constructed as measured from the nearest manhole, indicate the direction from the manhole, the direction and distance from the main, riser size, and elevation of the top of the riser in tabular format.
- RISER LOCATION.** The riser shall be located per plan if shown. If not shown on the plan, the riser shall be located at the center of the lot, within one foot of the property side of the easement for the lot being served. All riser locations shall be approved by the Construction Engineer prior to installation.
- PAYMENT.** "Riser Assembly, Vertical" shall be paid for at the contract unit price per each, which shall be full compensation for all pipe, fittings, marking tape, length of backfill, labor, site restoration, and any other items necessary to complete the work.
"Riser Assembly, Manhole Stub" shall be paid for at the contract unit price per each, which shall be full compensation for labor material and incidentals necessary to complete the work including all pipe, fittings, rock encasement, and all other items as required and listed for "Riser Assembly, Vertical".

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



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

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



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

TYPICAL SECTION X-X



CITY OF WICHITA
PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

REVISED: JULY 2015

VERTICAL RISER ASSEMBLY SEWER DETAIL

CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER	QA NUMBER	DATE
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CITY ENGINEER'S OFFICE
CITY HALL - SEVENTH FLOOR
455 NORTH MAIN STREET
WICHITA, KANSAS 67202-1620
(316) 268-4301

SHEET
24 of 27

BENCHMARKS:
 SQUARE CUT ON TOP OF CURB NW
 CORNER OF LOT 14, BLOCK B, R.F.
 ADDITION
 ELEV. = 1388.18 NAVD88

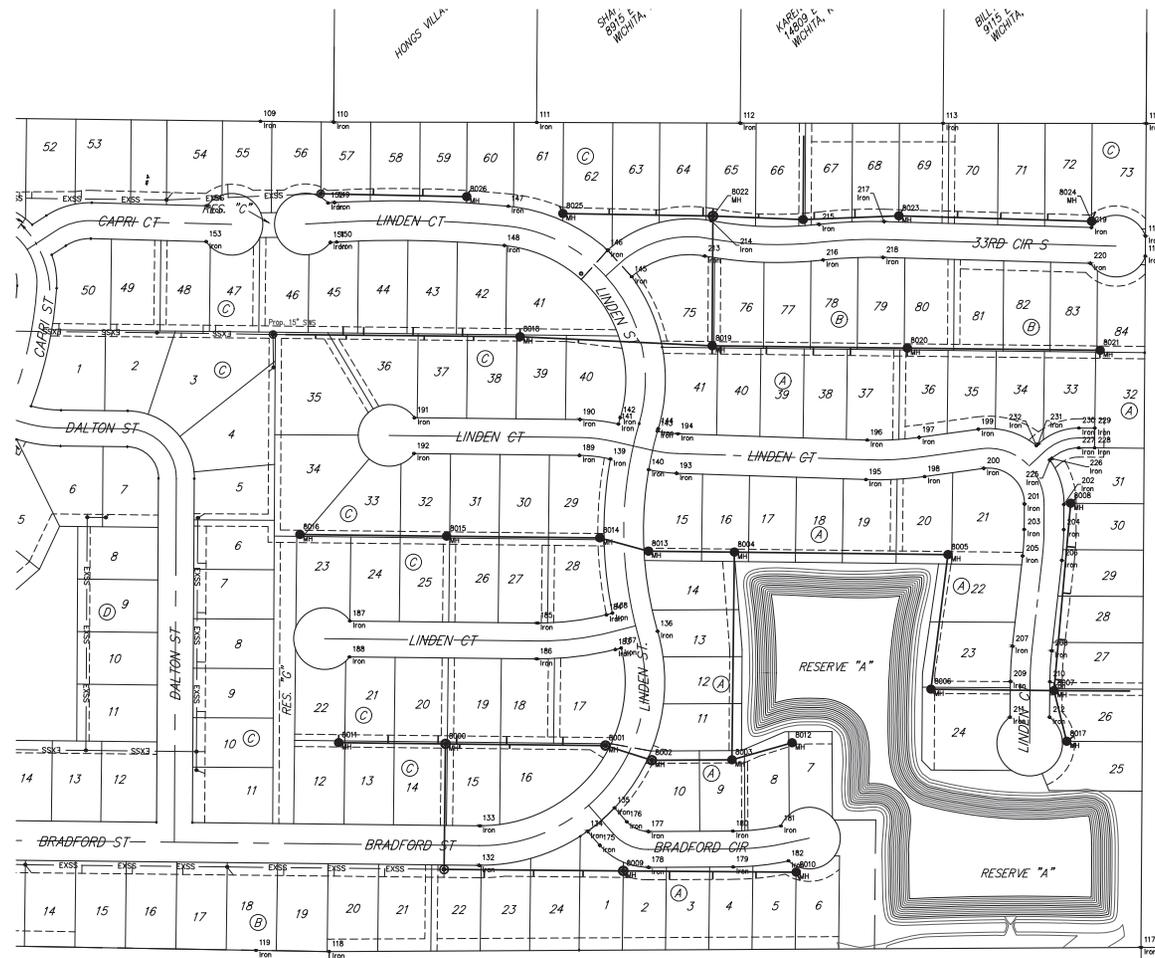
SQUARE CUT ON TOP OF CURB NW
 CORNER OF LOT 7, BLOCK G, R.F.
 ADDITION
 ELEV. = 1387.26 NAVD88

SQUARE CUT ON TOP OF CURB NW
 CORNER OF LOT 42, BLOCK C, R.F.
 ADDITION
 ELEV. = 1387.90 NAVD88

Point #	CONVRS	Dist	Description
109	21,281.87	12,511.77	Iron
110	21,291.28	12,435.08	Iron
111	21,286.65	12,508.78	Iron
112	21,285.52	12,588.48	Iron
113	21,285.14	12,616.78	Iron
114	21,284.99	12,645.60	Iron
115	21,284.48	12,694.48	Iron
116	21,283.77	12,744.28	Iron
117	21,281.84	12,817.27	Iron
118	21,280.52	12,820.81	Iron
119	21,280.74	12,804.34	Iron
120	21,280.67	12,865.78	Iron
121	21,280.67	12,906.48	Iron
122	21,280.67	12,947.24	Iron
123	21,280.67	12,988.00	Iron
124	21,280.67	13,028.76	Iron
125	21,280.67	13,069.52	Iron
126	21,280.67	13,110.28	Iron
127	21,280.67	13,151.04	Iron
128	21,280.67	13,191.80	Iron
129	21,280.67	13,232.56	Iron
130	21,280.67	13,273.32	Iron
131	21,280.67	13,314.08	Iron
132	21,280.67	13,354.84	Iron
133	21,280.67	13,395.60	Iron
134	21,280.67	13,436.36	Iron
135	21,280.67	13,477.12	Iron
136	21,280.67	13,517.88	Iron
137	21,280.67	13,558.64	Iron
138	21,280.67	13,599.40	Iron
139	21,280.67	13,640.16	Iron
140	21,280.67	13,680.92	Iron
141	21,280.67	13,721.68	Iron
142	21,280.67	13,762.44	Iron
143	21,280.67	13,803.20	Iron
144	21,280.67	13,843.96	Iron
145	21,280.67	13,884.72	Iron
146	21,280.67	13,925.48	Iron
147	21,280.67	13,966.24	Iron
148	21,280.67	14,007.00	Iron
149	21,280.67	14,047.76	Iron
150	21,280.67	14,088.52	Iron
151	21,280.67	14,129.28	Iron
152	21,280.67	14,170.04	Iron
153	21,280.67	14,210.80	Iron
154	21,280.67	14,251.56	Iron
155	21,280.67	14,292.32	Iron
156	21,280.67	14,333.08	Iron
157	21,280.67	14,373.84	Iron
158	21,280.67	14,414.60	Iron
159	21,280.67	14,455.36	Iron
160	21,280.67	14,496.12	Iron

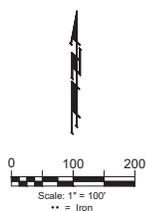
Point #	CONVRS	Dist	Description
191	21,281.87	12,703.81	Iron
192	21,283.87	12,703.23	Iron
193	21,283.89	12,685.35	Iron
194	21,283.89	12,667.47	Iron
195	21,283.89	12,649.59	Iron
196	21,283.89	12,631.71	Iron
197	21,283.89	12,613.83	Iron
198	21,283.89	12,595.95	Iron
199	21,283.89	12,578.07	Iron
200	21,283.89	12,560.19	Iron
201	21,283.89	12,542.31	Iron
202	21,283.89	12,524.43	Iron
203	21,283.89	12,506.55	Iron
204	21,283.89	12,488.67	Iron
205	21,283.89	12,470.79	Iron
206	21,283.89	12,452.91	Iron
207	21,283.89	12,435.03	Iron
208	21,283.89	12,417.15	Iron
209	21,283.89	12,399.27	Iron
210	21,283.89	12,381.39	Iron
211	21,283.89	12,363.51	Iron
212	21,283.89	12,345.63	Iron
213	21,283.89	12,327.75	Iron
214	21,283.89	12,309.87	Iron
215	21,283.89	12,291.99	Iron
216	21,283.89	12,274.11	Iron
217	21,283.89	12,256.23	Iron
218	21,283.89	12,238.35	Iron
219	21,283.89	12,220.47	Iron
220	21,283.89	12,202.59	Iron
221	21,283.89	12,184.71	Iron
222	21,283.89	12,166.83	Iron
223	21,283.89	12,148.95	Iron
224	21,283.89	12,131.07	Iron
225	21,283.89	12,113.19	Iron
226	21,283.89	12,095.31	Iron
227	21,283.89	12,077.43	Iron
228	21,283.89	12,059.55	Iron
229	21,283.89	12,041.67	Iron
230	21,283.89	12,023.79	Iron
231	21,283.89	12,005.91	Iron
232	21,283.89	11,988.03	Iron

Point #	CONVRS	Dist	Description
8002	21,291.88	12,811.25	MH
8003	21,288.44	12,075.09	MH
8004	21,284.74	12,145.28	MH
8005	21,285.39	12,174.88	MH
8006	21,281.34	12,278.80	MH
8007	21,282.41	12,624.73	MH
8008	21,278.18	12,578.10	MH
8009	21,277.77	12,786.54	MH
8010	21,283.32	12,821.43	MH
8011	21,285.58	12,088.91	MH
8012	21,285.83	12,738.80	MH
8013	21,283.18	12,638.26	MH
8014	21,282.87	12,732.10	MH
8015	21,282.82	12,747.17	MH
8016	21,282.82	12,762.24	MH
8017	21,282.82	12,777.31	MH
8018	21,282.82	12,792.38	MH
8019	21,282.82	12,807.45	MH
8020	21,282.82	12,822.52	MH
8021	21,282.82	12,837.59	MH
8022	21,282.82	12,852.66	MH
8023	21,282.82	12,867.73	MH
8024	21,282.82	12,882.80	MH
8025	21,282.82	12,897.87	MH
8026	21,282.82	12,912.94	MH
8027	21,282.82	12,928.01	MH
8028	21,282.82	12,943.08	MH
8029	21,282.82	12,958.15	MH
8030	21,282.82	12,973.22	MH
8031	21,282.82	12,988.29	MH
8032	21,282.82	13,003.36	MH
8033	21,282.82	13,018.43	MH
8034	21,282.82	13,033.50	MH
8035	21,282.82	13,048.57	MH
8036	21,282.82	13,063.64	MH
8037	21,282.82	13,078.71	MH
8038	21,282.82	13,093.78	MH
8039	21,282.82	13,108.85	MH
8040	21,282.82	13,123.92	MH
8041	21,282.82	13,138.99	MH
8042	21,282.82	13,154.06	MH
8043	21,282.82	13,169.13	MH
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8047	21,282.82	13,229.41	MH
8048	21,282.82	13,244.48	MH
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8054	21,282.82	13,334.90	MH
8055	21,282.82	13,350.00	MH
8056	21,282.82	13,365.09	MH
8057	21,282.82	13,380.18	MH
8058	21,282.82	13,395.27	MH
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8067	21,282.82	13,531.09	MH
8068	21,282.82	13,546.18	MH
8069	21,282.82	13,561.27	MH
8070	21,282.82	13,576.36	MH
8071	21,282.82	13,591.45	MH
8072	21,282.82	13,606.54	MH
8073	21,282.82	13,621.63	MH
8074	21,282.82	13,636.72	MH
8075	21,282.82	13,651.81	MH
8076	21,282.82	13,666.90	MH
8077	21,282.82	13,682.00	MH
8078	21,282.82	13,697.09	MH
8079	21,282.82	13,712.18	MH
8080	21,282.82	13,727.27	MH
8081	21,282.82	13,742.36	MH
8082	21,282.82	13,757.45	MH
8083	21,282.82	13,772.54	MH
8084	21,282.82	13,787.63	MH
8085	21,282.82	13,802.72	MH
8086	21,282.82	13,817.81	MH
8087	21,282.82	13,832.90	MH
8088	21,282.82	13,848.00	MH
8089	21,282.82	13,863.09	MH
8090	21,282.82	13,878.18	MH
8091	21,282.82	13,893.27	MH
8092	21,282.82	13,908.36	MH
8093	21,282.82	13,923.45	MH
8094	21,282.82	13,938.54	MH
8095	21,282.82	13,953.63	MH
8096	21,282.82	13,968.72	MH
8097	21,282.82	13,983.81	MH
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8112	21,282.82	14,210.18	MH
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8114	21,282.82	14,240.36	MH
8115	21,282.82	14,255.45	MH
8116	21,282.82	14,270.54	MH
8117	21,282.82	14,285.63	MH
8118	21,282.82	14,300.72	MH
8119	21,282.82	14,315.81	MH
8120	21,282.82	14,330.90	MH
8121	21,282.82	14,346.00	MH
8122	21,282.82	14,361.09	MH
8123	21,282.82	14,376.18	MH
8124	21,282.82	14,391.27	MH
8125	21,282.82	14,406.36	MH
8126	21,282.82	14,421.45	MH
8127	21,282.82	14,436.54	MH
8128	21,282.82	14,451.63	MH
8129	21,282.82	14,466.72	MH
8130	21,282.82	14,481.81	MH
8131	21,282.82	14,496.90	MH
8132	21,282.82	14,512.00	MH
8133	21,282.82	14,527.09	MH
8134	21,282.82	14,542.18	MH
8135	21,282.82	14,557.27	MH
8136	21,282.82	14,572.36	MH
8137	21,282.82	14,587.45	MH
8138	21,282.82	14,602.54	MH
8139	21,282.82	14,617.63	MH
8140	21,282.82	14,632.72	MH
8141	21,282.82	14,647.81	MH
8142	21,282.82	14,662.90	MH
8143	21,282.82	14,678.00	MH
8144	21,282.82	14,693.09	MH
8145	21,282.82	14,708.18	MH
8146	21,282.82	14,723.27	MH
8147	21,282.82	14,738.36	MH
8148	21,282.82	14,753.45	MH
8149	21,282.82	14,768.54	MH
8150	21,282.82	14,783.63	MH

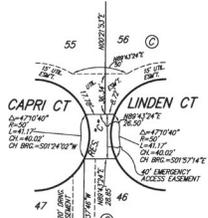


SEMI-JACK A &
 WICHITA, KS 67227

REBECCA JOHNSON REV. TRUST
 3707 WEBB ROAD
 WICHITA, KS 67210



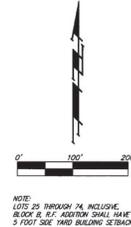
R.F. ADDITION WICHITA, SEDGWICK COUNTY, KANSAS



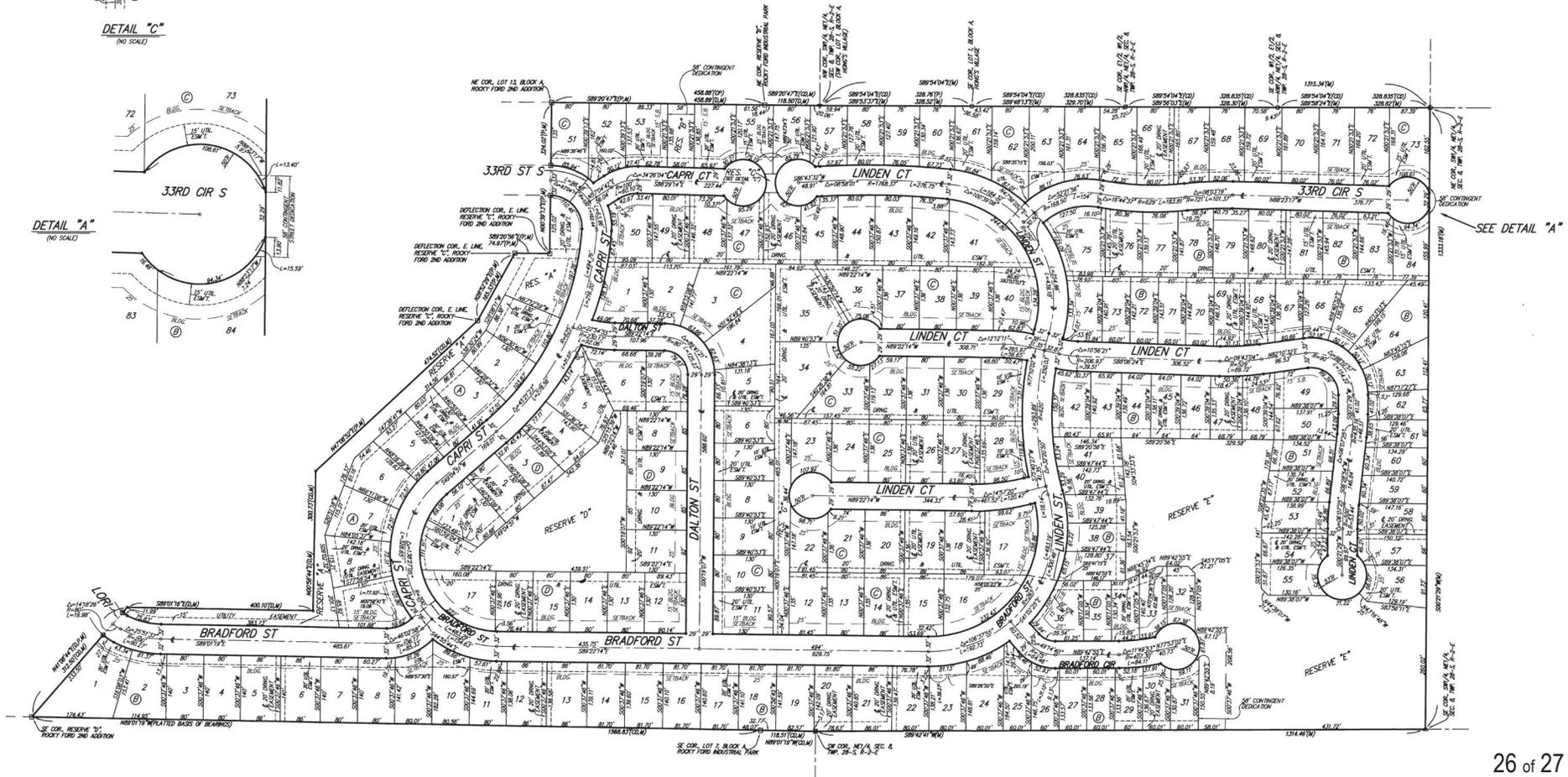
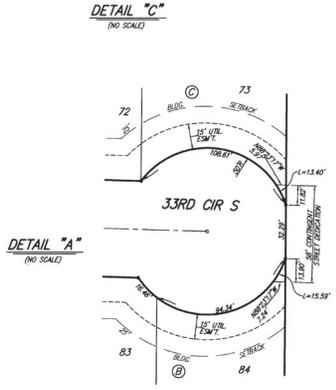
LOT	BLOCK	ELEVATION
1, 2	A	1582.8
3	A	1581.0
4, 5	A	1579.0
6-9	A	1580.7
1	B	1583.0
11-14, 17-41	B	1586.0
43-48, 50-58	B	1588.0
1-6, 8-17	D	1582.5

BENCHMARK:
CITY OF WICHITA BENCHMARK CORK AT SOUTH END OF HIGHWAY ON THE SW COR. OF 16-22, WEST SIDE OF ROCK ROAD, FOR NORTH-NORTHWEST OF THE NORTHWEST CORNER OF LOT 44, BLOCK A, ROCKY FORD ADDITION.
ELEV. = 1588.14 MACHES

**FOR REFERENCE ONLY
NOT TO SCALE**

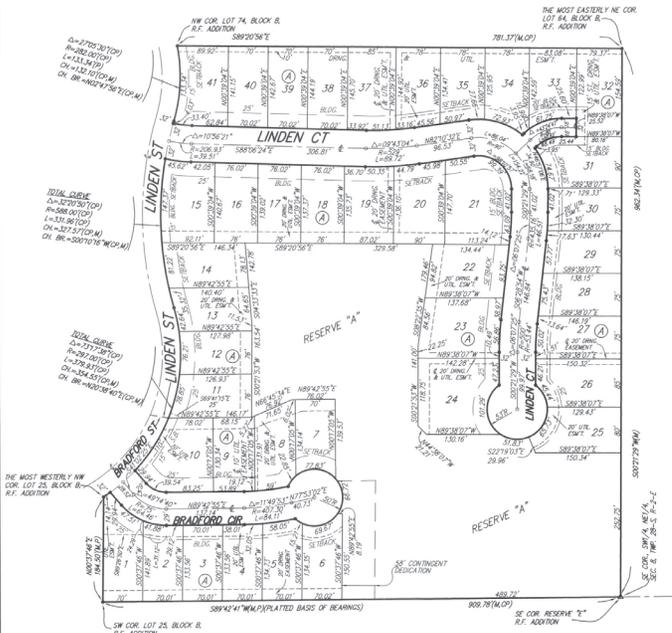


- (M) = MEASURED
 - (P) = PLATTED
 - (L) = RECORDED
 - (C) = CALCULATED FROM PLATTED INFO.
 - (O) = CALCULATED FROM RECORDED INFO.
- = # REBAR #1 "SAUNDHAM" CAP (SEE)
 - = # REBAR #1 "SAUNDHAM" CAP (FOUND)
 - = 1.2" RIB PIP (FOUND) (ORION UNKNOWN)
 - = 1.2" RIB PIP (NOT CHS) (FOUND)
 - = 1.4" RIB PIP (FOUND) (ORION UNKNOWN)
 - = # REBAR FOUNDATION (UNKNOWN)
 - = # REBAR FOUNDATION (UNKNOWN)
 - = # REBAR FOUNDATION (UNKNOWN)
 - = # REBAR FOUNDATION (UNKNOWN)



GRASSHOPPER PLAN NOTE:
A master drainage plan has been developed for this plat. All drainage easements, rights-of-way and reserves shall remain of established greater lotlines modified with the approval of the City Engineer and shall be unobstructed to allow for the conveyance of stormwater in accordance with the Stormwater Manual.

R.F. 2ND ADDITION WICHITA, SEDGWICK COUNTY, KANSAS



State of Kansas) SS We, Baughman Company, P.A., Surveyors in and for said county and state do hereby certify that we have surveyed and plotted "R.F. 2ND ADDITION", Wichita, Sedgwick County, Kansas and that the accompanying plat is a true and correct exhibit of the property surveyed, described as and being a replat of all of Lots 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, Block B, TOGETHER with all of Reserve "A", TOGETHER with all of Bradford Cir., and TOGETHER with all of the Linden Ct that lies east of and abuts the east right-of-way line of Linden St, all as plotted and dedicated in R.F. Addition, Wichita, Sedgwick County, Kansas.

Existing public easements, building setback lines, dedications, and access controls, if any, being vacated by virtue of K.S.A. 12-312b, as amended.

All being situated in the NE Quarter of Section 8, Township 28 South, Range 2 East of the Sixth Principal Meridian, Sedgwick County, Kansas.

Baughman Company, P.A.

Jonathan C. Hubbell
1-18-2022
Professional Seal
KANSAS
Professional Surveyor
No. 15160

Jonathan C. Hubbell, P.S.#15160

Know all men by these presents that we, the undersigned, have caused the land in the surveyors certificate to be plotted into Lots, a Block, Streets, and a Reserve, to be known as "R.F. 2ND ADDITION", Wichita, Sedgwick County, Kansas. The utility easements are hereby granted to the public as indicated for the construction and maintenance of all public utilities. The drainage easements are hereby granted to the public as indicated for drainage purposes. The drainage and utility easements are hereby granted to the public as indicated for drainage purposes and for the construction and maintenance of all public utilities. No sign, light poles, private drainage systems, berms, walls, masonry trash enclosures or other structures shall be located within public utility easements unless permitted by the City of Wichita Department of Engineering and that they do not inhibit the conveyance of surface drainage. No private drainage systems shall be located within public utility easements unless a Residential Drainage Relief Permit is obtained from the City of Wichita Public Works & Utilities Department. The street, drainage, and utility easements are hereby granted to the public as indicated for street purposes, for drainage purposes, and for the construction and maintenance of all public utilities. The streets are hereby dedicated to and for the use of the public. Any cul-de-sac with a 5.3 foot radius right-of-way shall have a pavement radius of 38 feet. Reserve "A" is hereby reserved for open space, lakes, landscaping, drainage purposes, contingent dedications, berms, walking paths and utilities as confined to easements. Reserve "A" shall be owned and maintained by the homeowners association for the addition. The contingent dedications are for public uses, such as streets, sidewalks, drainage, or utilities, and shall become effective if the adjacent subdivision is zoned Single-Family Residential (S-1) or Two-Family Residential (T-2) and the City Engineer of the City of Wichita determines a need for such dedication. The costs of constructing said improvements are to be borne by the person(s) or agency that owns said adjacent subdivision. The Minimum Building Pad Elevations for the lowest opening to the structures shall be as indicated on the face of the plat.

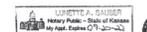
Rocky Ford, LLC,
a Kansas limited liability company

Joy W. Russell
Joy W. Russell, President of
J. Russell Development & Management, Inc.

State of Kansas) SS The foregoing instrument acknowledged before me, this 14th day of MARCH, 2022, by Joy W. Russell, President of J. Russell Development & Management, Inc., Manager of Rocky Ford, LLC, a Kansas limited liability company, on behalf of the limited liability company.

Lynette A. Saubel
Lynette A. Saubel, Notary Public

My App'l. Exp. 07-20-2022



Register of Sedgwick County
Sedgwick County, Kansas
Doc #/Plat #/Pg: 30158442
Serial #: 202207
Filing Fee \$12.00
Date Recorded: 04/26/2022 09:54:43 AM
Clerk: EVELYN
Notary: Lynette A. Saubel

Tonya Buckingham
Tonya Buckingham, Register of Deeds

Emily Zehring
Emily Zehring, Deputy

We the undersigned holders of a mortgage on the above described property, do hereby consent to this plat of "R.F. 2ND ADDITION", Wichita, Sedgwick County, Kansas.

Legacy Bank
REX REYNOLDS
REX REYNOLDS, EVP

State of Kansas) SS The foregoing instrument acknowledged before me, this 4th day of MARCH, 2022, by REX REYNOLDS, EVP of Legacy Bank, on behalf of the bank.

Lynette A. Saubel
Lynette A. Saubel, Notary Public

My App'l. Exp. 07-20-2022

R.F. 2ND ADDITION

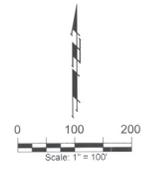
BAUGHMAN COMPANY
315 Ellis St. Wichita, KS 67211 316-262-7271
BaughmanCo.com

FOR REFERENCE ONLY
NOT TO SCALE

ORANGE PLAN NOTE:
A master drainage plan has been developed for this plat. All drainage easements, rights-of-way and reserves shall remain at established grades (unless modified with the approval of the City Engineer) and shall be unobstructed to allow for the conveyance of stormwater in accordance with the Stormwater Manual. The maintenance of all drainages and drainage facilities in a good drainage easement and reserves shall be the responsibility of the property owner, and shall be enforced by the Homeowners' Association and be provided for in the Homeowners' Association covenants.

GROUNDWATER NOTE:
The property is within a zone identified by the City Engineer's office as likely to have groundwater at some or all times within ten feet of the ground surface elevation. Building with specially engineered foundations or with the lowest floor opening above groundwater is recommended and where building permits on this property will be automatically obtained. More detailed information on recorded groundwater situations in the vicinity of this property is available in the City Engineer's office.

Right-of-way Note:
No regarding within abutting rights-of-way shall be allowed with the construction of the berms allowed within Reserve A. The berms cannot impact access to or be maintained, enter veins and/or water meters.



LOT	BLOCK	ELEVATION
6-8, 11-14	A	1,386.0
16-20, 22-25	A	1,386.0

BENCHMARKS:
SOURCE SET ON TOP OF CURB NW CORNER OF LOT 14, BLOCK B, R.F. ADDITION.
ELEV. = 1,387.00 NAHSD8
SOURCE SET ON TOP OF CURB NW CORNER OF LOT 7, BLOCK C, R.F. ADDITION.
ELEV. = 1,387.00 NAHSD8
SOURCE SET ON TOP OF CURB NW CORNER OF LOT 47, BLOCK C, R.F. ADDITION.
ELEV. = 1,387.00 NAHSD8

(N) = MEASURED
(P) = PLATTED
(CP) = CALCULATED FROM PLATTED INFO.
• = #4 REBAR w/ "BAUGHMAN" CAP (S1)
○ = 1" IRON PIPE (FOUND/ORGAN UNKNOWN)
NOTE:
LOT 1 THROUGH 41, INCLUSIVE, BLOCK A, R.F. 2ND ADDITION SHALL HAVE A 5 FOOT SIDE YARD BUILDING SETBACK.
NOTE:
ADDITIONAL REQUIREMENTS AND RESTRICTIONS PER R.F. ADDITION PLANNED UNIT DEVELOPMENT PLAN #81.