

GENERAL NOTES:

- The Contractor shall comply with all applicable safety regulations. All construction shall be completed following current City Standard Specifications and Special Provisions.
- Contractor will be required to provide notice to utility companies a minimum of seventy-two (72) hours prior to any excavation, as follows:

Kansas One-Call 687-2470

The Contractor must notify the following in case of an emergency:

AT&T 1-800-246-8464
 Black Hills Energy 1-800-694-8989
 City of Wichita Water & Sewer 1-316-219-8921
 City of Wichita Stormwater 1-316-268-4090
 City of Wichita Traffic 1-316-268-4034
 Cox Communications 1-888-249-3530
 Kansas Gas Service 1-888-482-4950
 Westar Energy 1-800-544-4857

- Utility service lines, poles, etc. 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 will require a Kansas State Board of Agriculture permit. Any material dumped in waters of the United States or wetlands is subject to U.S. Corps of Engineers permitting regulations. Any material buried or stockpiled beyond approved construction limits will require additional archaeological 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 City 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.
- The Engineering Division shall field locate water valves one time during construction when requested by the Contractor. It shall be the Contractor's responsibility to preserve such field locations during the construction process. Water valves, valve boxes or fire hydrants damaged during construction shall be repaired by Contractor at his own expense. Valve boxes and water meters within the project limits shall be adjusted to match final grades by the contractor.
- The Contractor shall notify the consultant engineer and Tom Mason at 316-268-4574 with the City of Wichita with the anticipated construction start date and notify them of project completion. Staking and inspection for this project will be the responsibility of the Contractor.
- If traffic will be impacted by construction, a traffic control plan must be submitted and approved by the City Traffic Engineer, Brian Coon at traffic@wichita.gov before construction can begin. The Contractor shall be responsible for all traffic control measures to facilitate construction. All construction zone markings and signage shall conform to the latest version of the Manual on Uniform Traffic Control Devices (MUTCD) as published by the US Dept. of Transportation, Federal Highway Administration. All costs associated with construction markings and signage shall be the Contractors responsibility.

11. All elevations shown are NAVD 88.

12. All areas disturbed during construction that will not be under proposed pavement shall be restored to match existing conditions.

- Any sidewalk, drive approach, or street pavement removed to construct project must have a pavement cut permit and be replaced by the City contractor. Permits can be obtained by calling 316-268-4501 or 316-268-4480.
- City maintenance of storm sewer ends at the last structure in the easement or right-of-way.
- A portion of excess excavated material shall be mounded around manholes which extend more than one (1) foot above the existing ground. Such mound shall be constructed with new development a six (6) foot diameter flat top with 4 to 1 side slopes down to the original ground. The elevation of the flat top of the mound shall be 0.4 foot below the top of the manhole.
- Geotechnical report available upon request.
- Contractor shall limit the extent of trench openings overnight and weekends to less than 50 feet.
- The inspecting firm shall submit to the City Stormwater Maintenance Division a digital copy of the CCTV inspection of the conduits and structures following construction. The digital file formation shall be compatible with the City input template. A copy of the template is available upon request at 316-268-4090.
- The Contractor shall protect from damage and support existing utilities through construction as approved by the utility owner and the Engineer at the contractors expense.

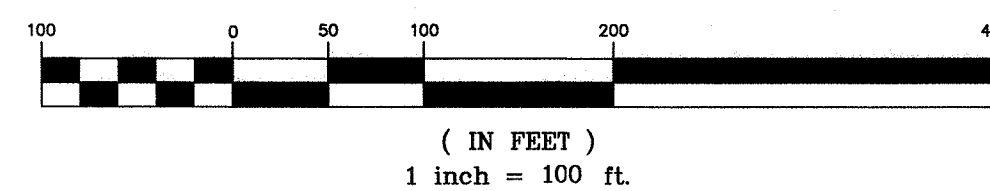
Benchmark

BM#1
 "□" Chiseled on
 Top of Curb
 Elevation=1316.23 (NAVD88)

BM#2
 "X" Chiseled on Top of Curb
 Elevation=1314.24 (NAVD88)



DATE: 8-21-2017
 THIS SHEET HAS BEEN
 SIGNED, SEALED AND
 DATED ELECTRONICALLY



STORM SEWER IMPROVEMENTS

to serve

Dold Foods

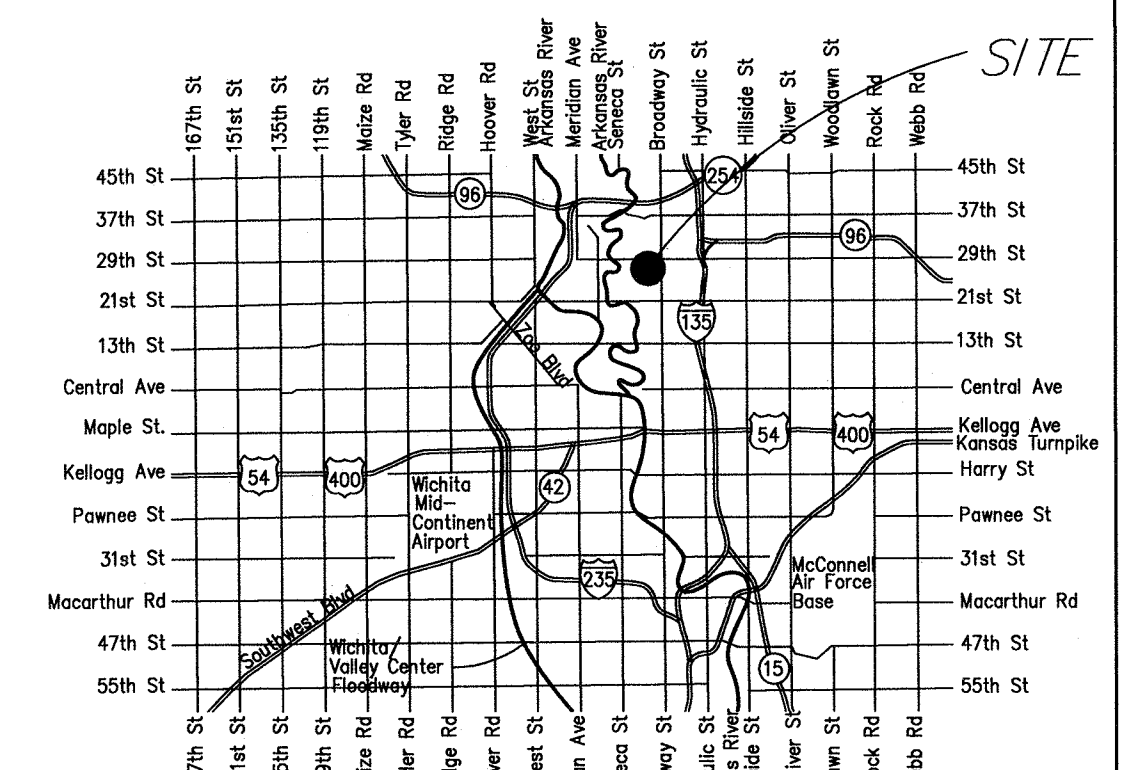
Block 1, North Industrial Park Addition 2nd

2929 N Ohio Street

CITY OF WICHITA, KANSAS

Gary Janzen, P.E. City Engineer

Project Number
 0474 PPD (133119)



Vicinity Map

Sheet Index

- | | |
|-----------|---|
| 1.0 | Title Sheet |
| 2.0 | Grading Plan |
| 3.0 | ERU Plan |
| 4.0-4.7 | Plan & Profile Line 1 & 1A |
| 5.0 | Plan & Profile Line 2 |
| 6.0 | Rainleader Plan |
| 7.0-7.6 | SWS Detail Sheets |
| 8.0 | Erosion Control Plan |
| 8.1 - 8.5 | Details/Specific/Erosion Control
(attached or available on the City's website) |
| 9.0 | Drainage Plan |
| 10.0 | Copy of Plat |

AS BUILTS

Contractor: McCullough Excavation
 Inspector: Matt Perez
 Date: 3-9-18

KEMILLER
 ENGINEERING PA

117 E. Lewis,
 Wichita, KS 67202



(316)264-0242

APPROVED AS NOTED
 BY WICHITA PUBLIC WORKS ENGINEERING
 AND STORMWATER DIVISION

Engineering *Julian Kallman* 11-9-17

Stormwater *Joethick PE* 11-9-17

NOTE TO CONTRACTORS

Inspection and testing for this project is to be provided by a Licensed Consulting Engineering Firm under contract with the Owner/Developer. Said inspection to be in accordance with the City of Wichita standard construction engineering practices and certified by a Licensed Professional Engineer in the state of Kansas. No work shall be performed the Contractor without such inspection nor shall any work be commenced without written authorization by City Engineering. All Construction and Materials shall comply with the current City of Wichita Specifications and Standards and Special Provisions. (on file and available at Wichita.gov).

An approved copy of these plans signed by City staff are required on-site.

Stormwater Certification: Redevelopment

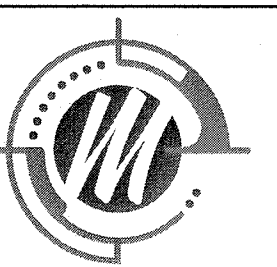
These construction plans were prepared in accordance with the current Stormwater Management Regulations as set forth in the City of Wichita's Stormwater Management Ordinance 16.32 and the policies/guidelines presented in the Wichita/Sedgwick County Stormwater Manual.

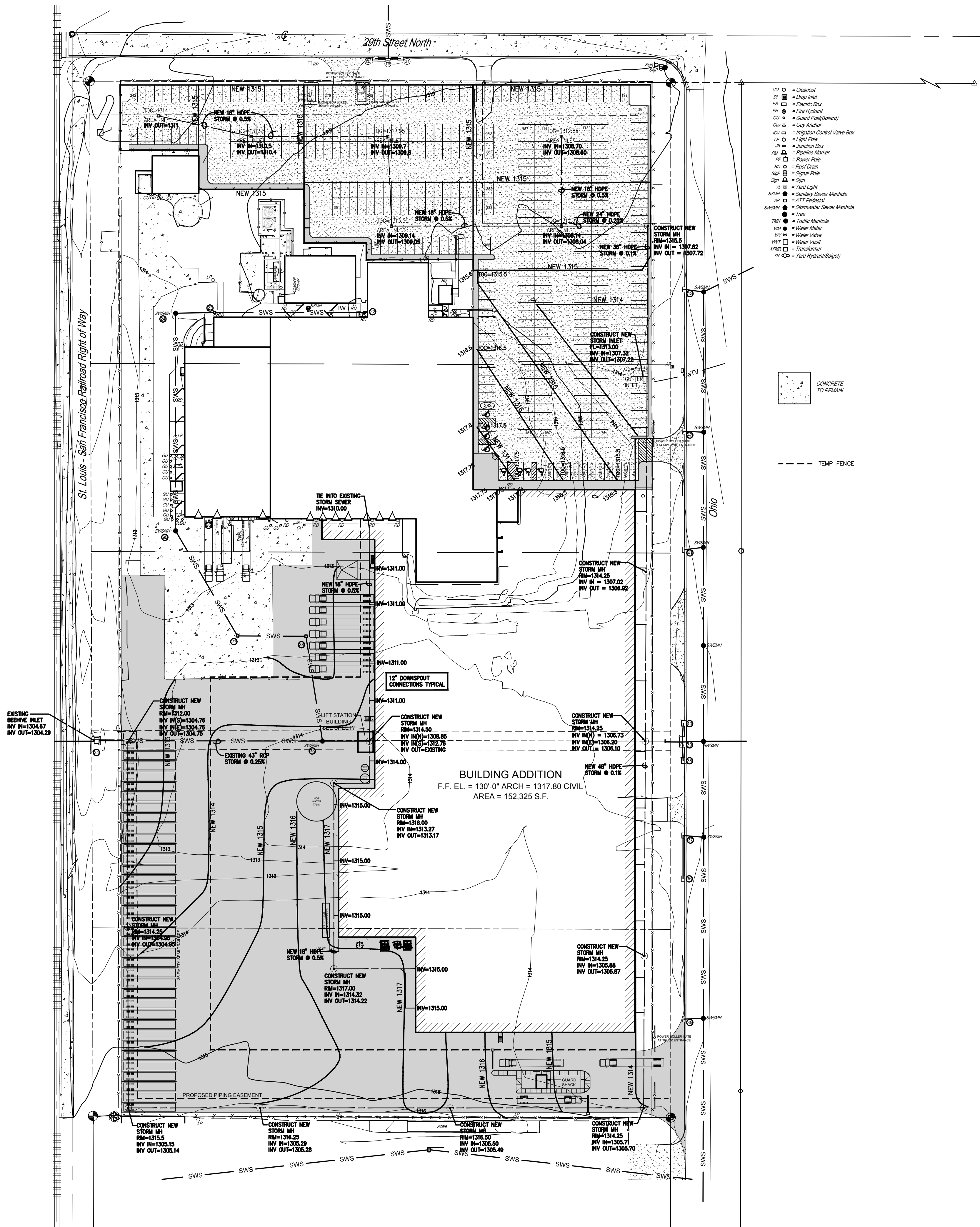
Disturbed Area = 515,300 SF
 Water Quality Treatment: Off site BMP program
 Downstream Channel Protection: n/a
 Detention: See Sheet 9.0
 The BMP used for this development is Off site BMP Program

August 2017

Developer: Hormel Foods

KEMILLER
 ENGINEERING PA
 117 E. Lewis, Wichita, KS 67202 (316)264-0242





- GENERAL NOTES:**
- EXISTING CONTOURS WERE TAKEN FROM PLANS PREPARED BY OTHERS. GLEASON CONSTRUCTORS & ENGINEERS, L.L.C. ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THE CONTOUR DATA SHOWN ON THIS SHEET.
 - APPROXIMATE LOCATIONS OF EXISTING UTILITIES ARE SHOWN HEREON. THE CONTRACTOR SHALL NOTIFY THE OWNER OF ALL UTILITY COMPANIES 48 HOURS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION AND ELEVATIONS OF ALL EXISTING UTILITIES BEFORE CONSTRUCTION. (CALL 811)
 - SEE DRAWING C01005 FOR SITE UTILITIES: SANITARY SEWER, WATER, AND PROCESS WASTE PIPING.
 - SEE ARCHITECTURAL DRAWINGS FOR DOWNSPOUT LOCATIONS.
 - ALL EXCAVATION, EMBANKMENT, AND GRADING SHALL BE IN ACCORDANCE WITH THE RECOMMENDATIONS CONTAINED IN THE SOILS REPORT PREPARED BY TERRACON CONSULTANTS, DATED JULY 13, 2017 AND ALL ADDENDUMS THERE TO.
 - MAINTAIN AND PROTECT EXISTING UTILITIES DURING CONSTRUCTION. DO NOT INTERRUPT ANY EXISTING UTILITY SERVICE WITHOUT PRIOR APPROVAL FROM OWNER. RESTORE AND REPAIR ANY DAMAGED UTILITIES TO ORIGINAL CONDITION. RESTORE AND REPAIR OTHER EXISTING IMPROVEMENTS (PAVING, SLABS, LAWN AREAS ETC.) WHERE DAMAGED OR REMOVED WITH SIMILAR MATERIALS (SIZE, TYPE, STRENGTH) TO EFFECT A SERVICEABLE INSTALLATION ACCEPTABLE TO THE OWNER. COORDINATE INDICATED WORK WITH OTHER NEW AND EXISTING UTILITIES. PROVIDE ALL BENDS, OFFSETS AND ETC. REQUIRED DUE TO COORDINATION WHETHER SHOWN ON DRAWINGS OR NOT. GRADING CONTRACTOR TO REPAIR ANY DAMAGE AT THEIR OWN EXPENSE.
 - MAINTAIN FACILITY SECURITY. SCHEDULE AND COORDINATE WORK TO MINIMIZE INTERFERENCE WITH OWNER'S OPERATIONS.
 - NEW PRIMARY ELECTRICAL SERVICE TO NEW TRANSFORMERS BY OWNER.
 - ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE MOST CURRENT STANDARD SPECIFICATIONS & ENGINEERING DESIGN STANDARDS OF THE CITY OF WICHITA, KS.
 - SITE LIGHTING BY OWNER.
 - CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE OSHA LOCAL, STATE, AND FEDERAL REGULATIONS & CODES. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS PRIOR TO BEGINNING WORK.
 - THIS PROJECT SHALL EXERCISE SELECTIVE PRESERVATION OF EXISTING VEGETATION. WHERE EXISTING VEGETATION HAS BEEN DESIGNATED TO REMAIN, THE CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO ENSURE SAID VEGETATION IS PROTECTED FROM HARM.
 - CARE SHALL BE TAKEN TO ENSURE ALL RUNOFF WITHIN CONSTRUCTION LIMITS IS PROPERLY DIRECTED TO EXISTING OR NEW DRAINAGE DITCHES, OR SWALES. CONTRACTOR SHALL ENSURE THAT ADJACENT PROPERTIES ARE PROTECTED FROM HARM RESULTING FROM RUNOFF LEAVING THE CONSTRUCTION AREA.
 - SEE DRAWING C02001 FOR ADDITIONAL GENERAL SITE NOTES.
 - ALL EROSION CONTROL ELEMENTS ARE TO BE INSTALLED PER THE PLANS PRIOR TO THE START OF ANY LAND DISTRIBUTION ACTIVITIES.

- CO = Cleanout
- DI = Drop Inlet
- EB = Electric Box
- FH = Fire Hydrant
- GU = Guard (Street/Barrier)
- GA = Guy Anchor
- ICV = Infiltration Control Valve Box
- LI = Light Pole
- JB = Junction Box
- PM = Pipe Marker
- PS = Power Pole
- RD = Road Drain
- SP = Signal Pole
- SG = Sign
- YL = Yard Light
- SSM = Sanitary Sewer Manhole
- AP = ATT Pile/Bolt
- SSM = Stormwater Sewer Manhole
- T = Tree
- TM = Traffic Manhole
- WM = Water Meter
- WV = Water Valve
- WVT = Water Vault
- TR = Transformer
- HY = Yard Hydrant (Signal)

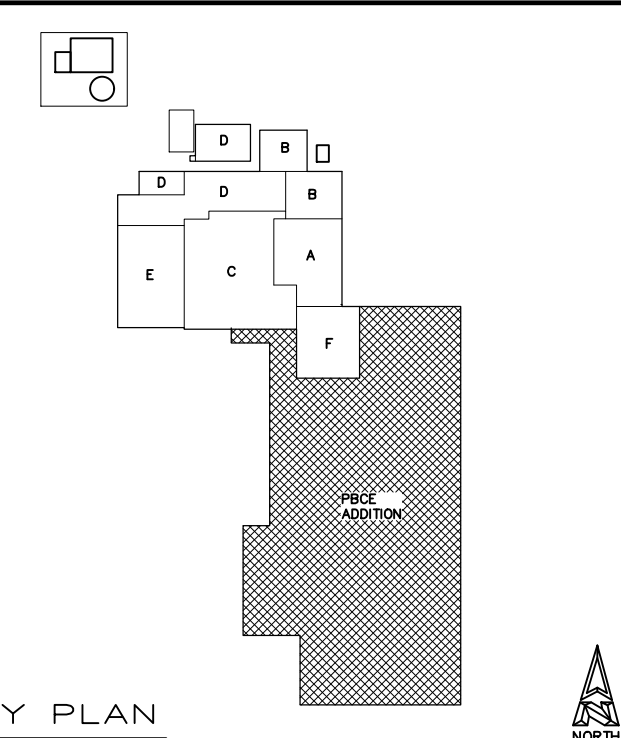
CONCRETE TO REMAIN

TEMP FENCE

REV.	BY	DATE	DESCRIPTION	CHK.

GLEASON
constructors
& engineers llc.

Designers of Value • Builders of Trust
2015 E. Seventh • P.O. Box 625
Sioux City, Iowa 51102 • Phone 712/258-9300



HORMEL FOODS CORPORATION, Corporate Office, Austin, MN 55912



CORPORATE ENGINEERING DIVISION, LLC

PROJECT
**DOLD PRECOOKED BACON
CAPACITY EXPANSION**

PLANT **WICHITA, KS**

SHEET TITLE
**OVERALL SITE
GRADING & DRAINAGE
PLAN**

DR. PE	PROJ. E. TABBERT	SHEET NO.
SCALE 1"=60'-0"	JOB NO. -----	C01007
DATE 8-3-17	FILENAME-SET W00C01007-43861	SHEET OF

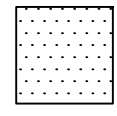
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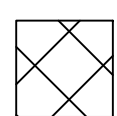


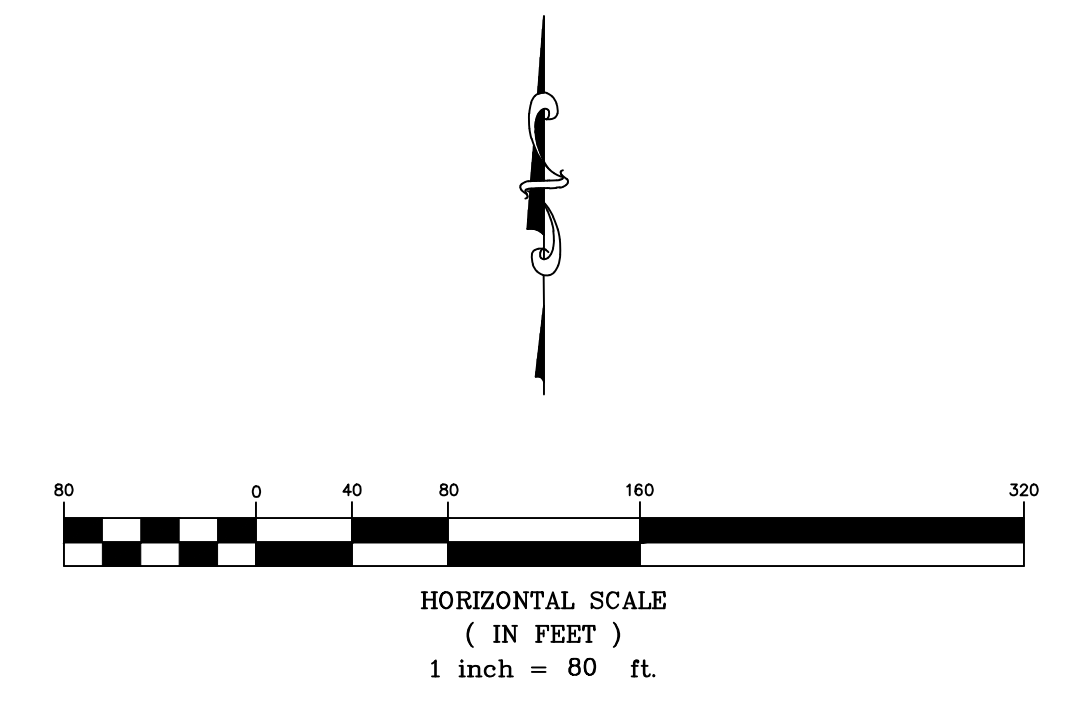
ERU Calculations:

Ex. Impervious Area =	289,693.31 sq. ft.
Total Lot Area =	677,548.73 sq. ft.
Proposed Building Area =	227,130.76 sq. ft.
Proposed Parking, Sidewalks, and Other Impervious Areas =	338,955.33 sq. ft.
Total Impervious Area = (Post Construction)	566,086.09 sq. ft.
Net Increase in Impervious Area =	276,393.59 sq. ft.

Hatching Legend:

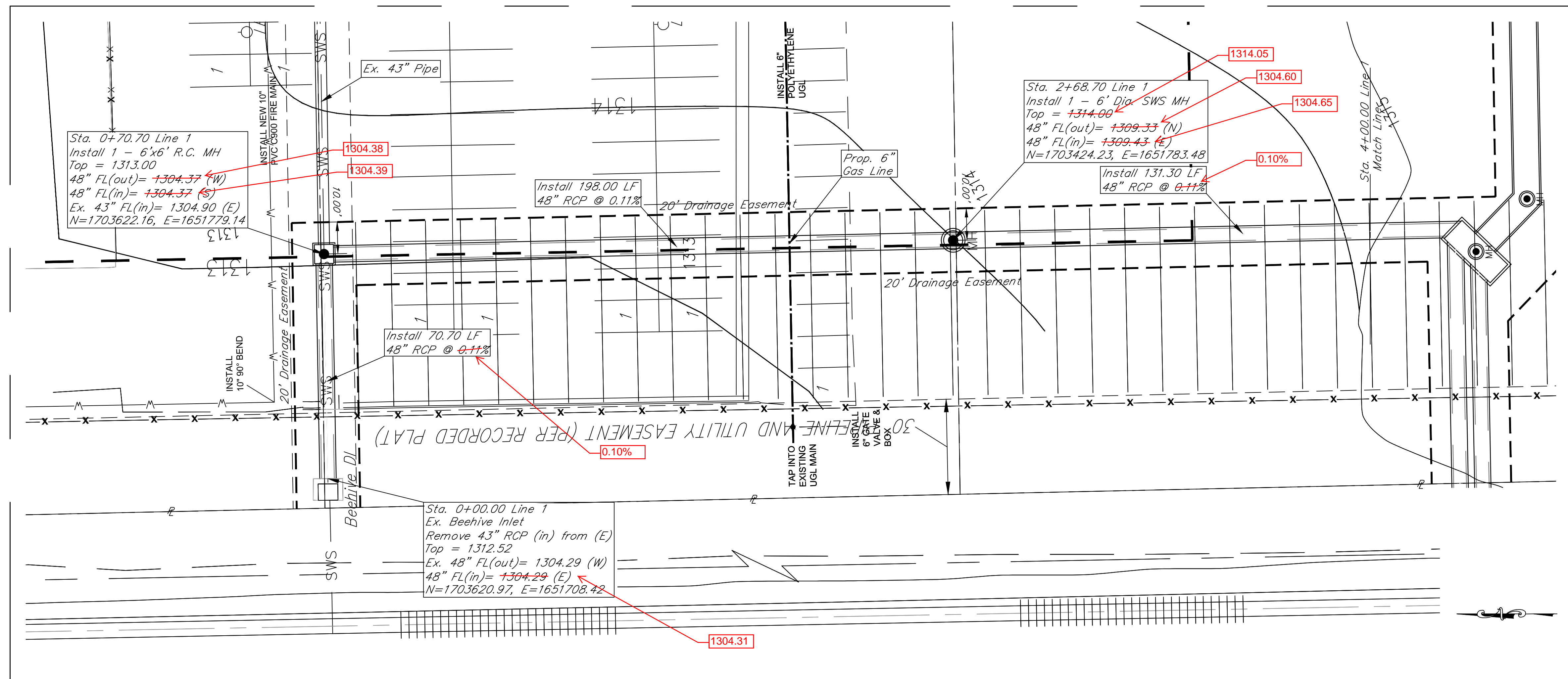
 Building Area

 Parking, Sidewalks, and Other Impervious Area



Dold Foods
ERU Plan
Wichita, Kansas

KEMILLER ENGINEERING PA <small>117 E. Lewis, Wichita, KS 67202 (316)264-0242</small>	PROJECT NUMBER			3.0
	KEM NO. 17151	FILE	DATE 8/2017	
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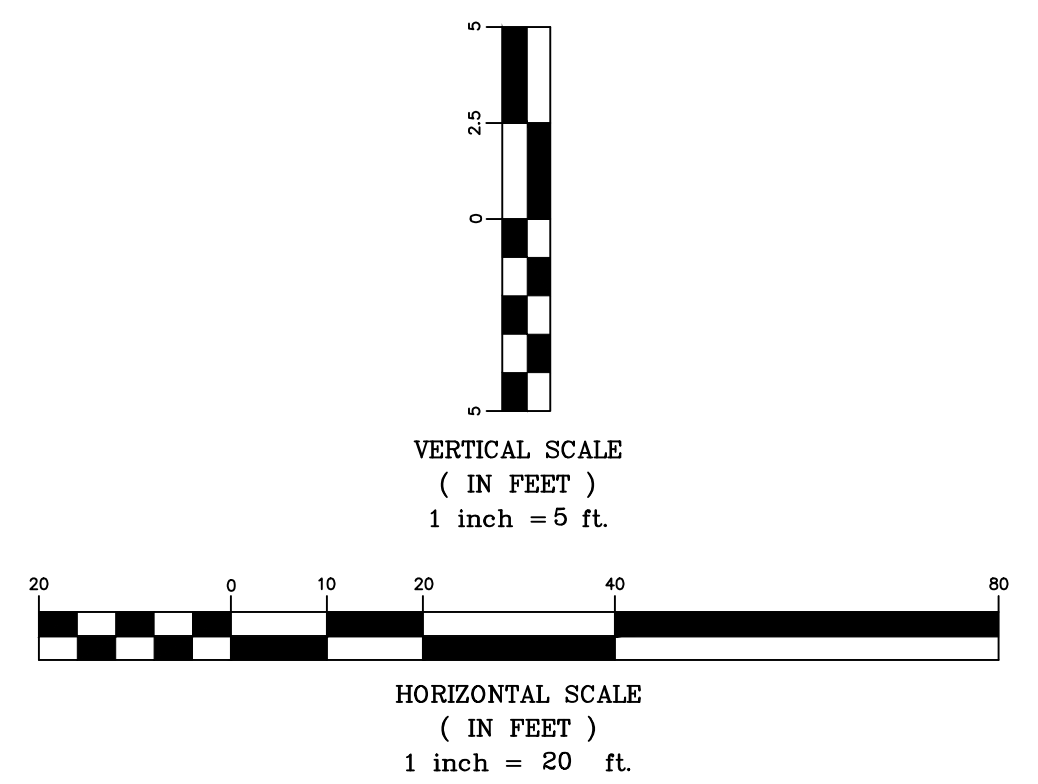
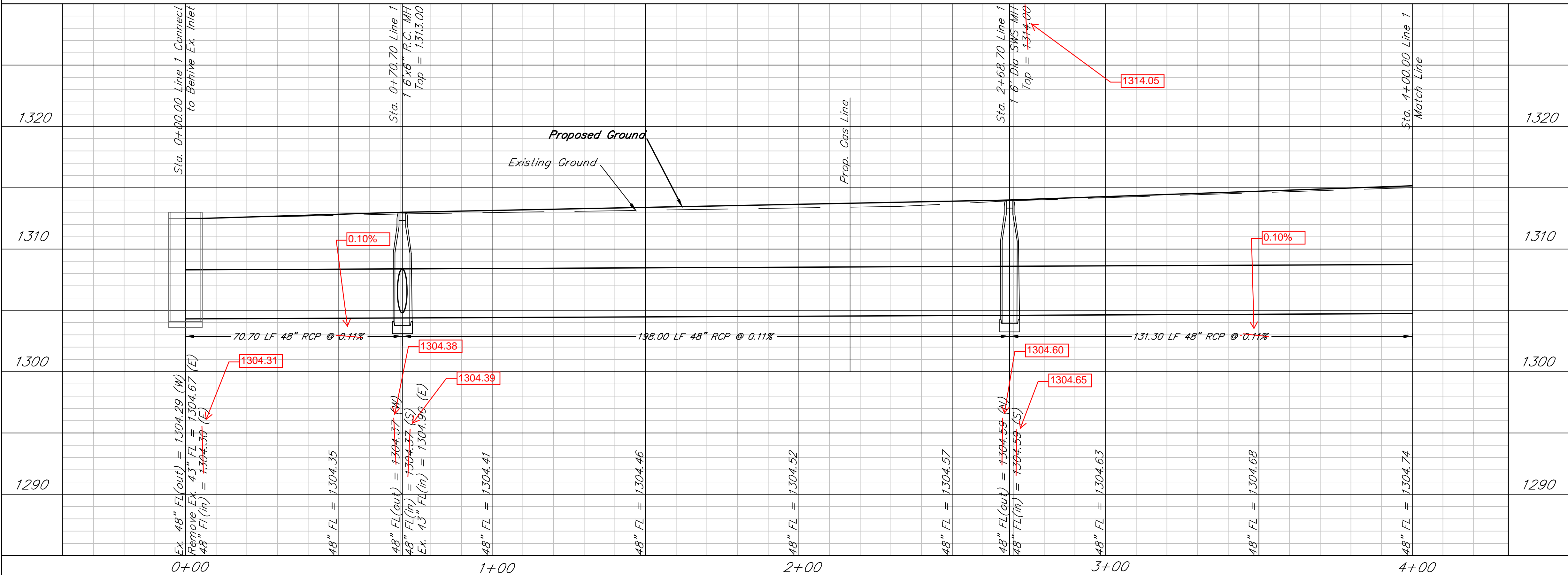
AS BUILTS

Contractor: McCullough Excavation
Inspector: Matt Perez
Date: 3-9-18

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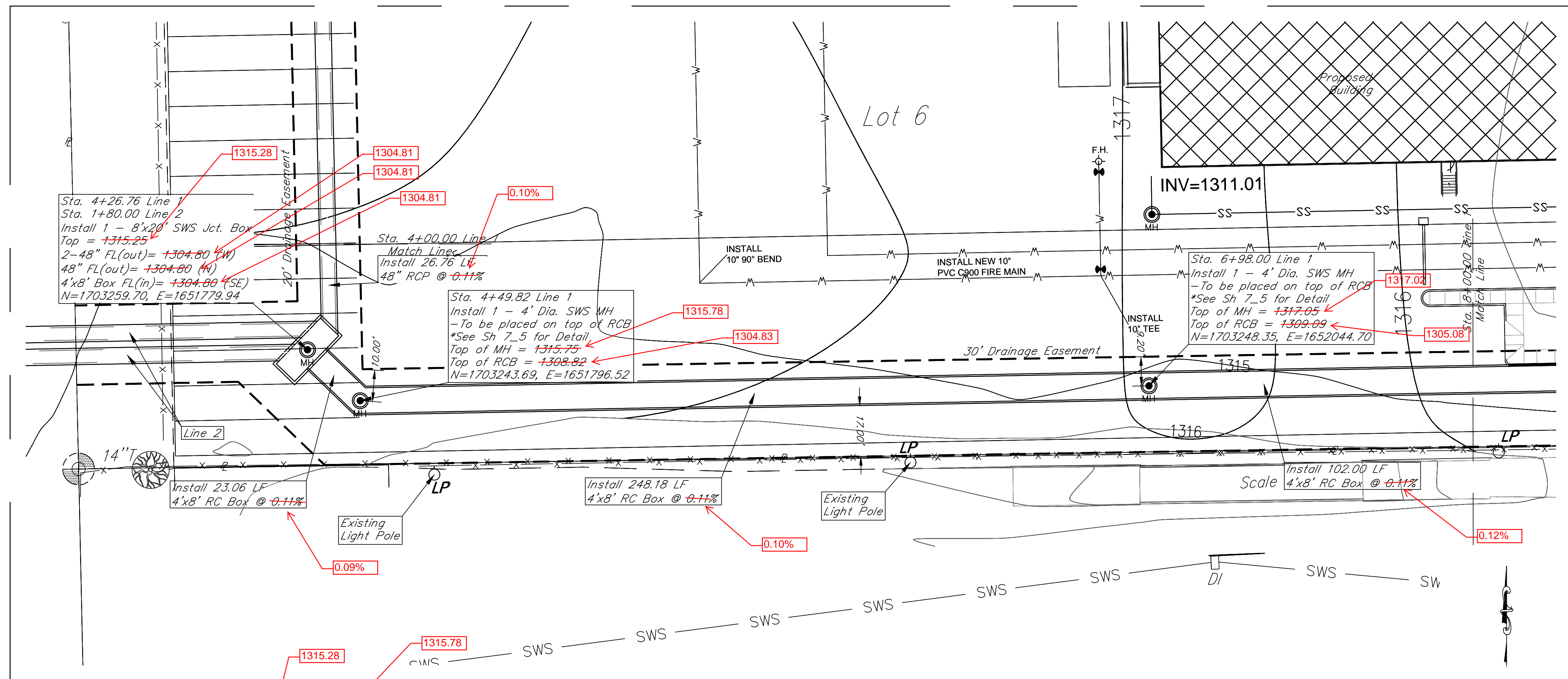
117 E. Lewis,
Wichita, KS 67202

(316)264-0242



Dold Foods
SWS - Plan and Profile - Line 1
Wichita, Kansas

KEMILLER ENGINEERING PA <small>117 E. Lewis, Wichita, KS 67202 (316)264-0242</small>	PROJECT NUMBER 0474 PPD 133119		SHEET 4.0
	KEM NO. 117151	FILE	
DESIGN KM	DRAWN ME	REVISED	



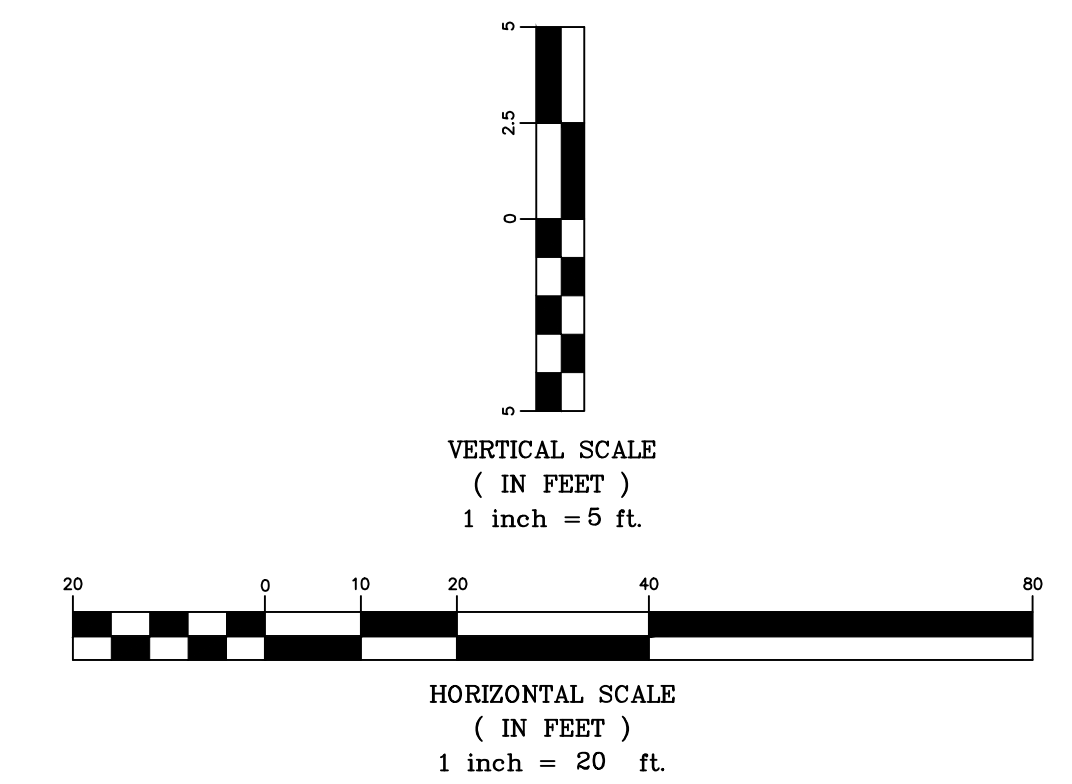
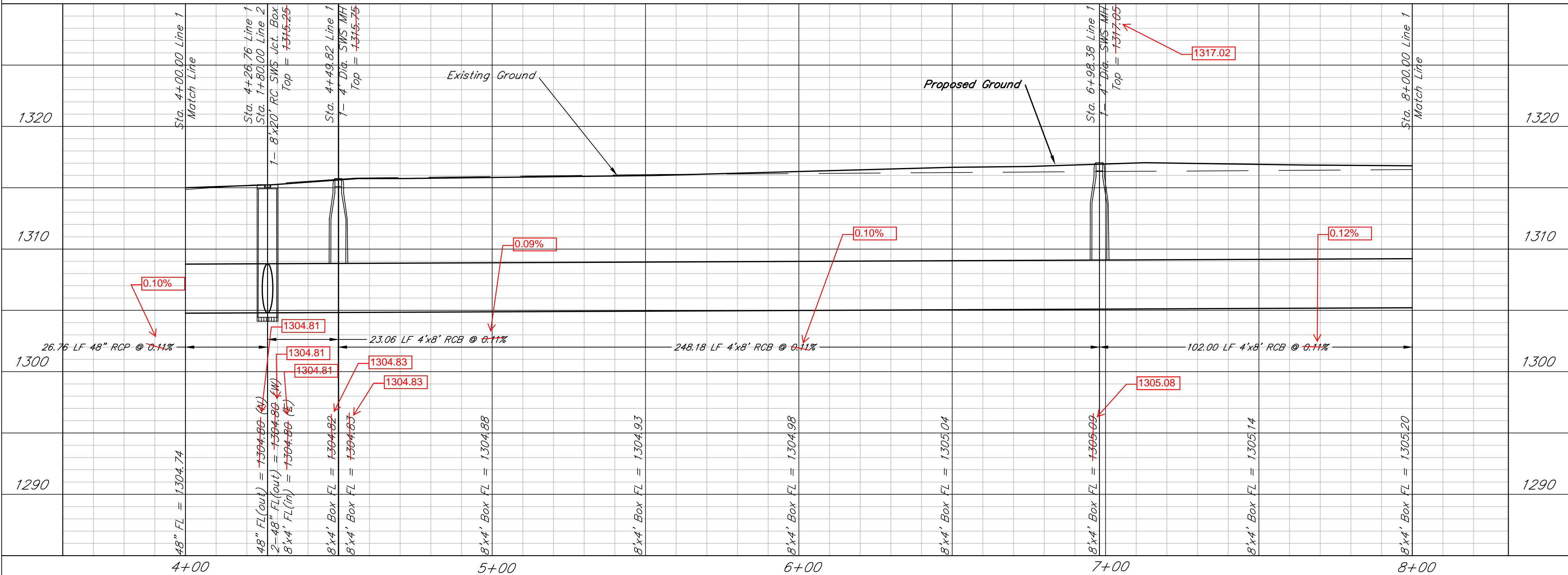
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Contractor: McCullough Excavation
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Date: 3-9-18



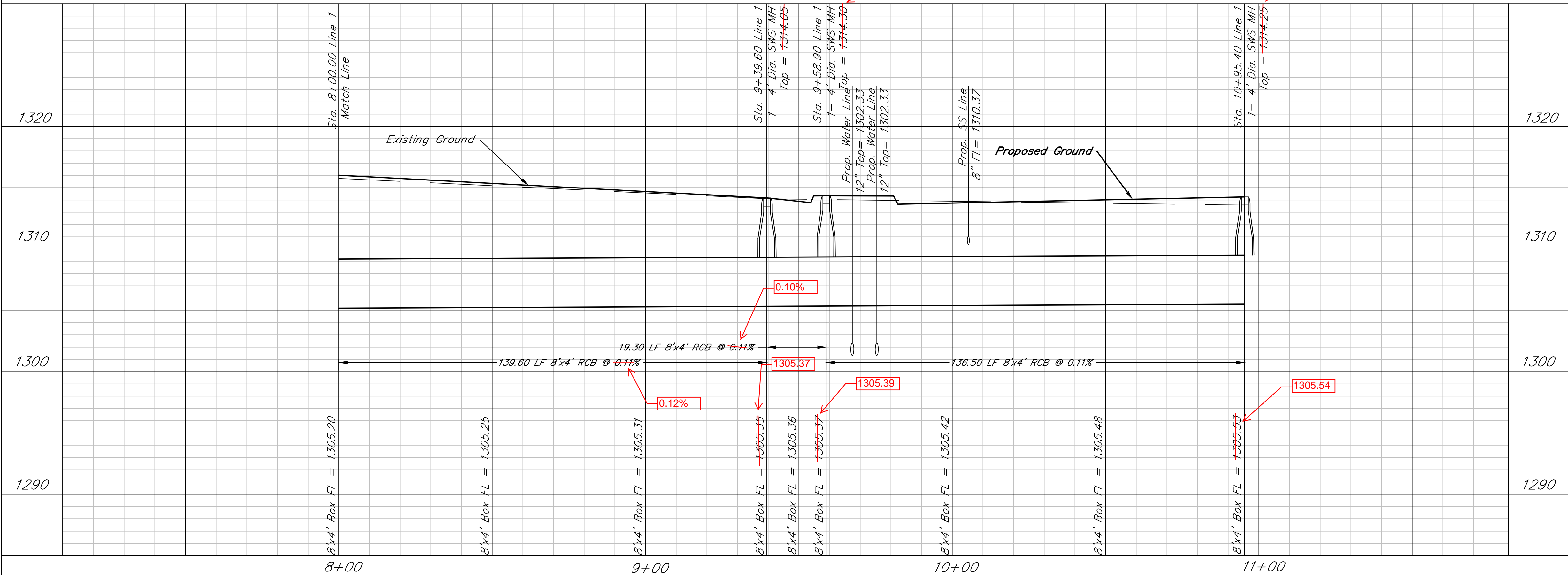
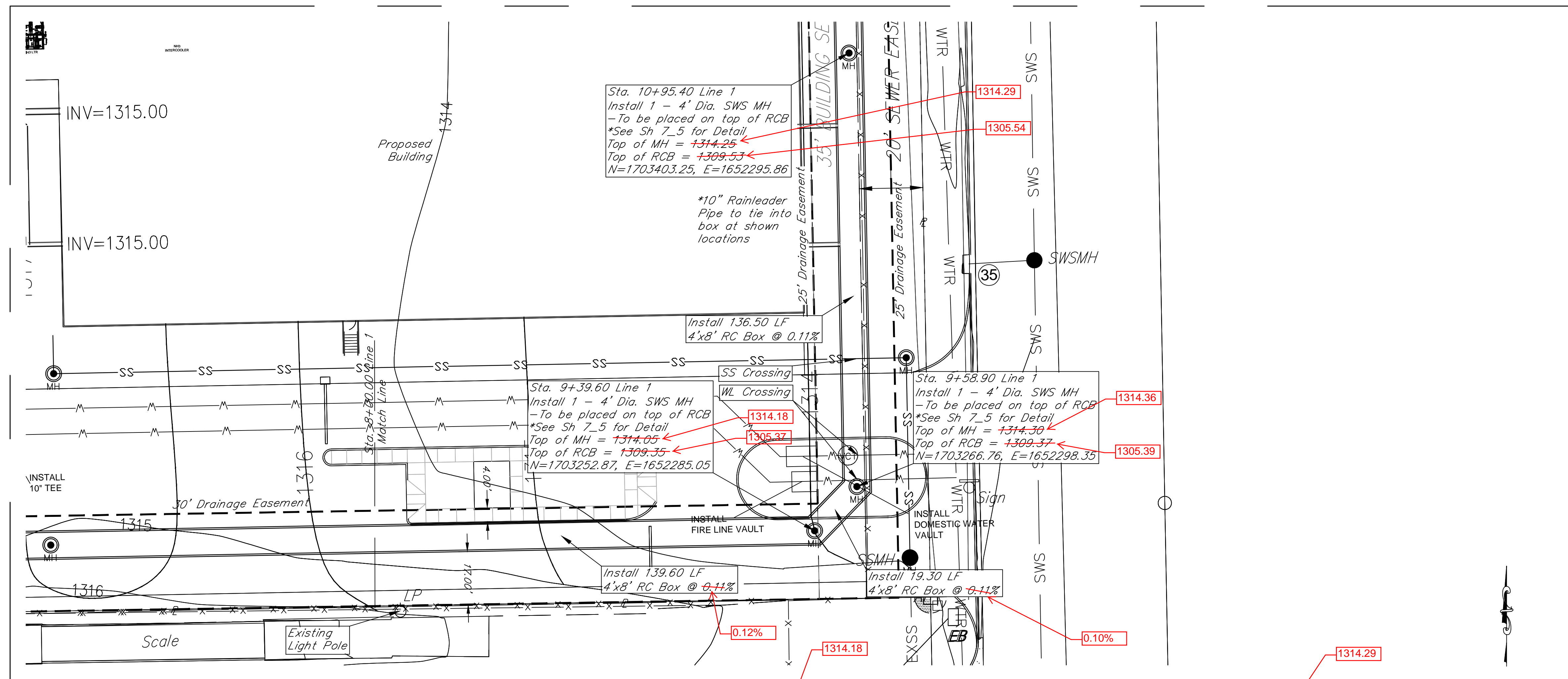
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ENGINEERING PA

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Wichita, KS 67202 (316)264-0242



Dold Foods
SWS - Plan and Profile - Line 1
Wichita, Kansas

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KEM NO. 17151	FILE	DATE 8/2017					
DESIGN KM	DRAWN ME	REVISED					



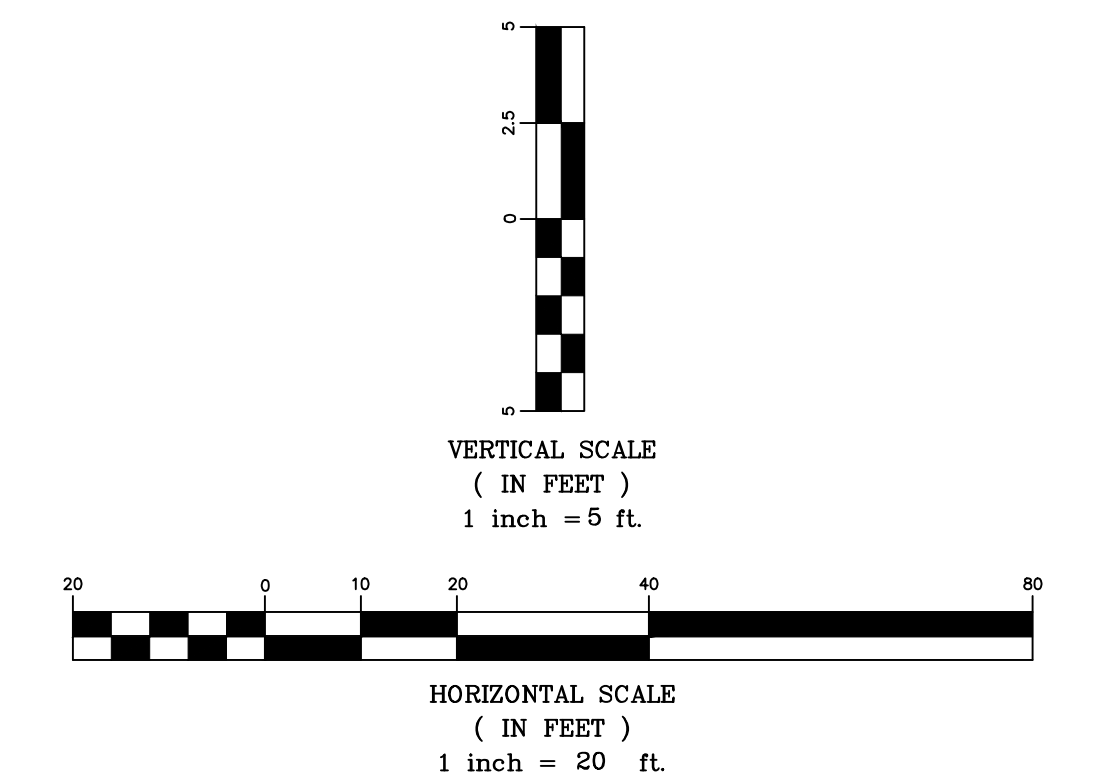
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Contractor: McCullough Excavation
 Inspector: Matt Perez
 Date: 3-9-18

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 ENGINEERING PA

117 E. Lewis,
 Wichita, KS 67202

(316)264-0242



Dold Foods
SWS - Plan and Profile - Line 1
 Wichita, Kansas

PROJECT NUMBER
 0474 PPD 133119

KEM NO. 17151	FILE	DATE 8/2017	SHEET
DESIGN KM	DRAWN ME	REVISED	4.2

KEMILLER ENGINEERING PA
 117 E. Lewis, Wichita, KS 67202 (316)264-0242

STORM SEWER IMPROVEMENTS
to serve
Dold Foods
Block 1, North Industrial Park Addition 2nd
2929 N Ohio Street
CITY OF WICHITA, KANSAS
Gary Janzen, P.E. City Engineer
Project Number
0474 PPD (133119)

AS BUILTS

Contractor: McCullough
Excavation
Inspector: Matt Perez
Date: 10-24-17



Sheet Index

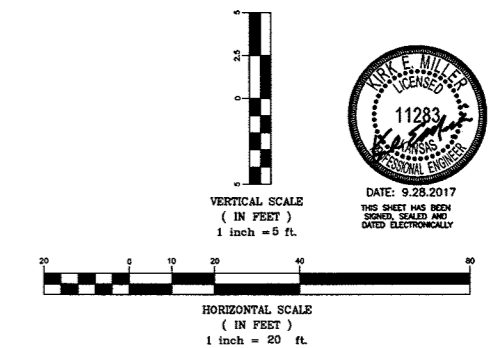
- 4.3-4.7 Plan & Profile Line 1 & 1A
- 5.0-5.6 Profile Line 1
- 7.0-7.6 SWS Detail Sheets
- 8.0 Erosion Control Plan
- 8.1 - 8.5 Details/Specific/Erosion Control
(attached or available on the City's website)
- 9.0 Drainage Plan
- 10.0 Copy of Plat

APPROVED AS NOTED
BY WICHITA PUBLIC WORKS ENGINEERING
AND STORMWATER DIVISION
Engineering *Robert Dippel 9/29/17*
Stormwater *Joe Hildebrand 9/29/17*

NOTE TO CONTRACTORS

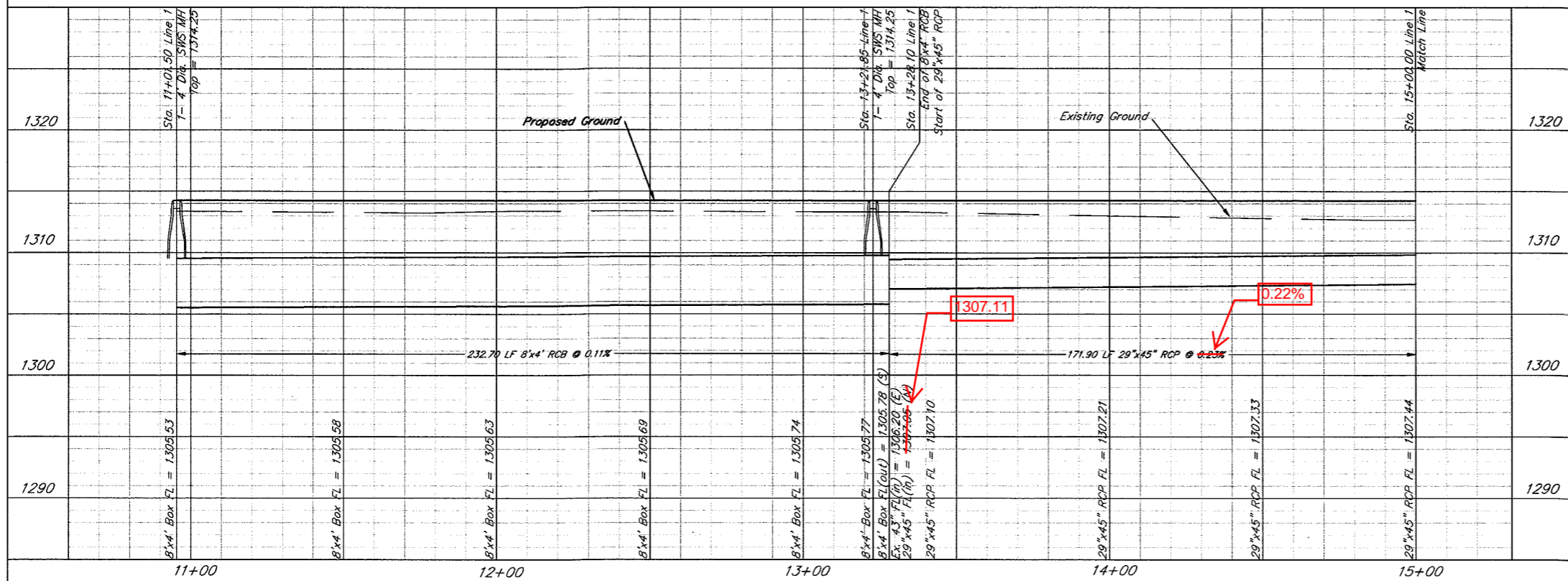
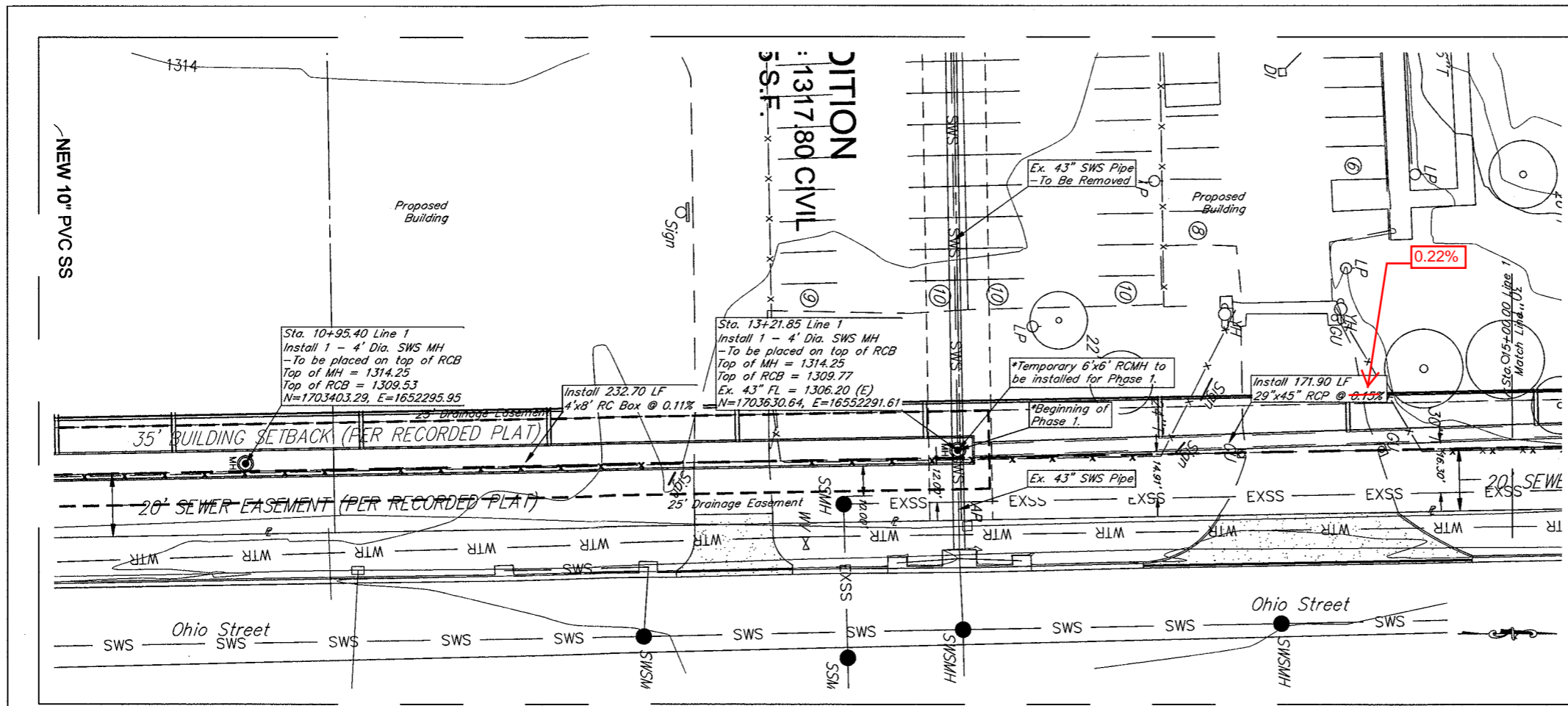
Inspection and testing for this project is to be provided by a Licensed Consulting Engineering Firm under contract with the Owner/Developer. Said inspection to be in accordance with the City of Wichita standard construction engineering practices and certified by a Licensed Professional Engineer in the state of Kansas. No work shall be performed the Contractor without such inspection nor shall any work be commenced without written authorization by City Engineering. All Construction and Materials shall comply with the current City of Wichita Specifications and Standards and Special Provisions. (on file and available at Wichita.gov).

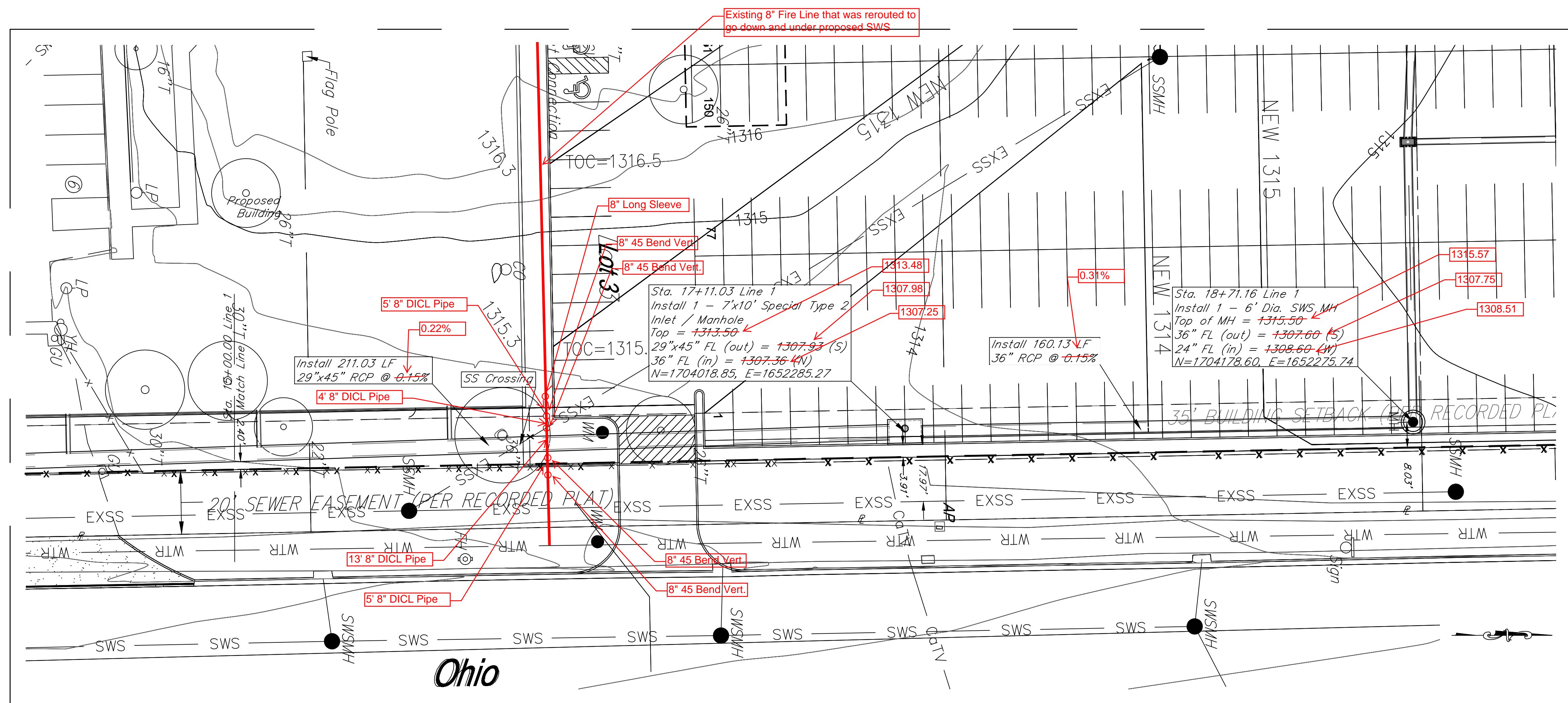
An approved copy of these plans signed by City staff are required on-site.



Dold Foods
SWS - Plan and Profile - Line 1
Wichita, Kansas

KEMILLER ENGINEERING PA 117 E. Lewis, Wichita, KS 67202 (316)264-0242	PROJECT NUMBER 0474 PPD 133119	DATE 8/2017	SHEET 4.3
	DESIGN KM	DRAWN ME	REVISED



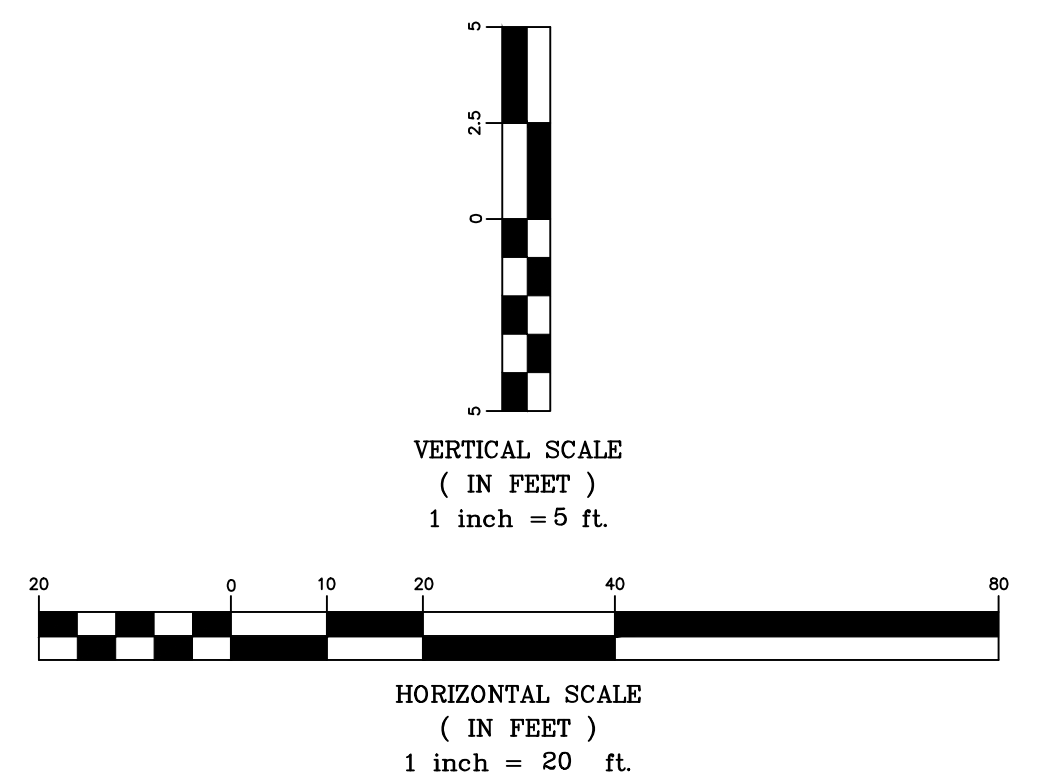
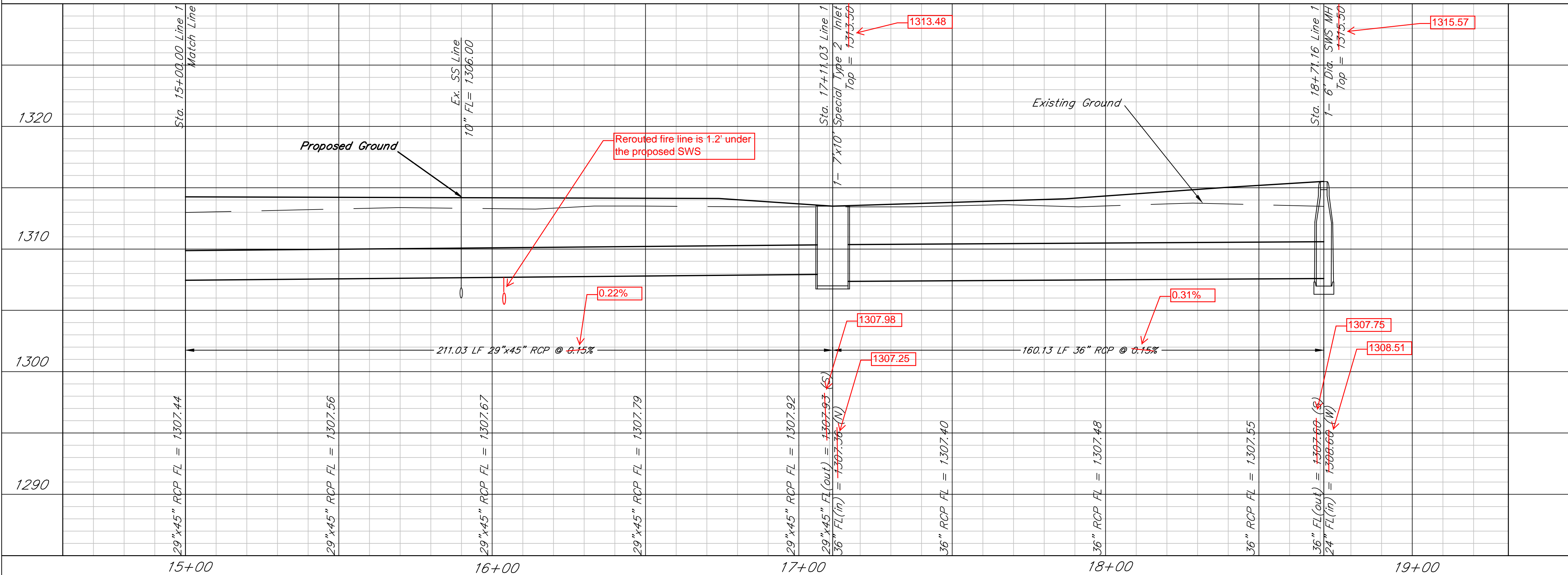


AS BUILTS

Contractor: McCullough Excavation
Inspector: Matt Perez
Date: 10-24-17

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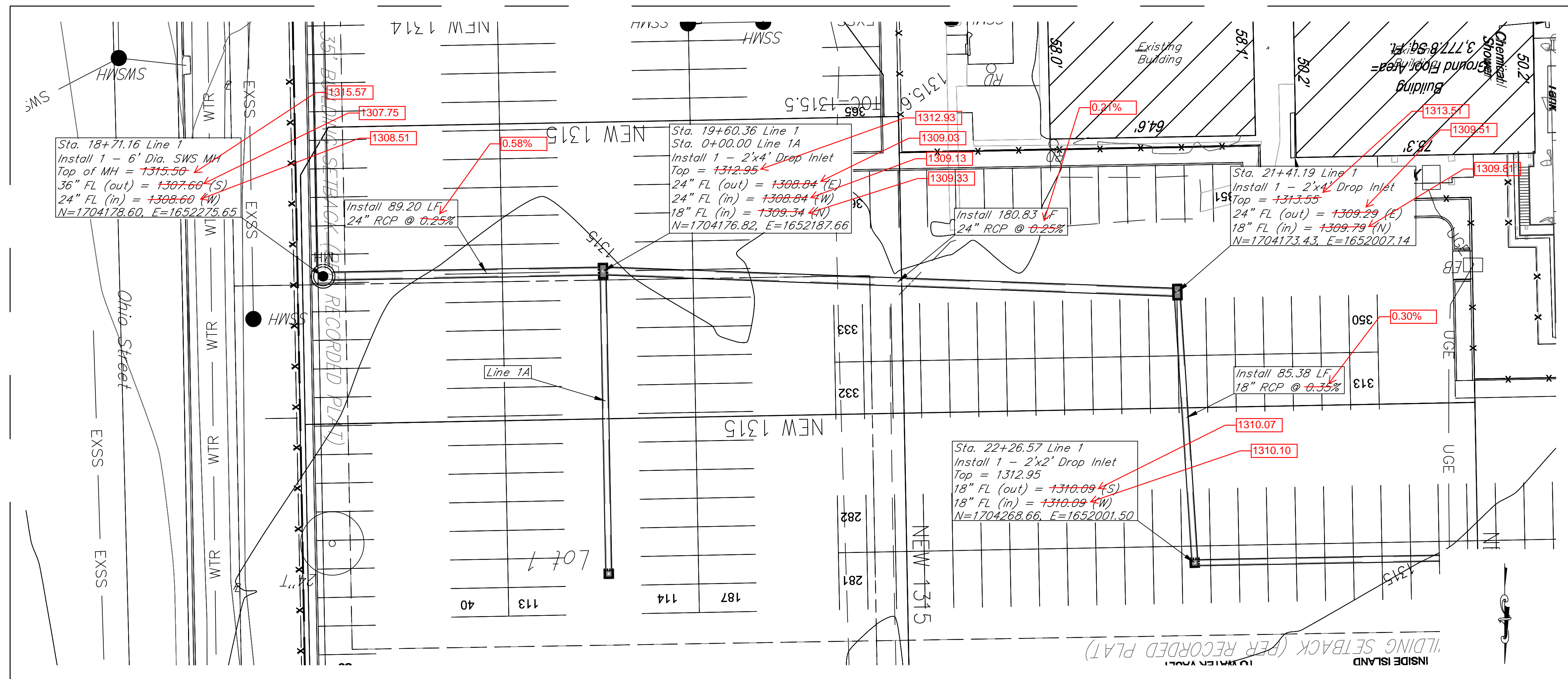
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Dold Foods
SWS - Plan and Profile - Line 1
Wichita, Kansas

	PROJECT NUMBER 0474 PPD 133119			SHEET 4.4
	KEM NO. 17151	FILE	DATE 8/2017	
DESIGN KM	DRAWN ME	REVISED		

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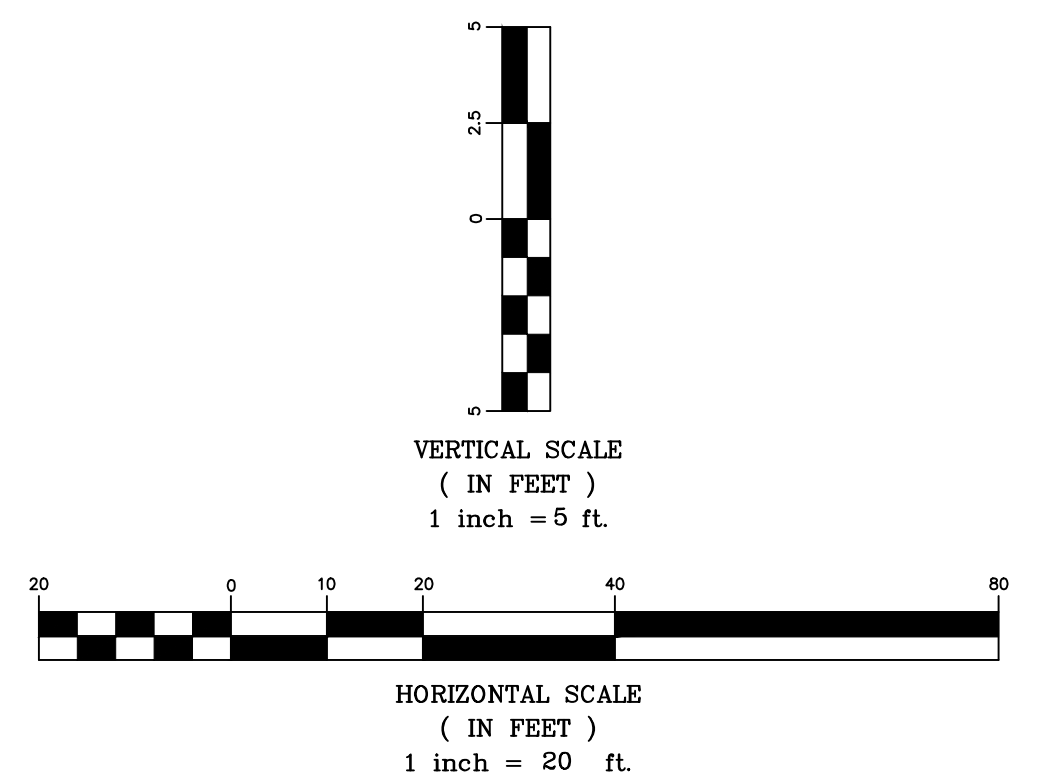
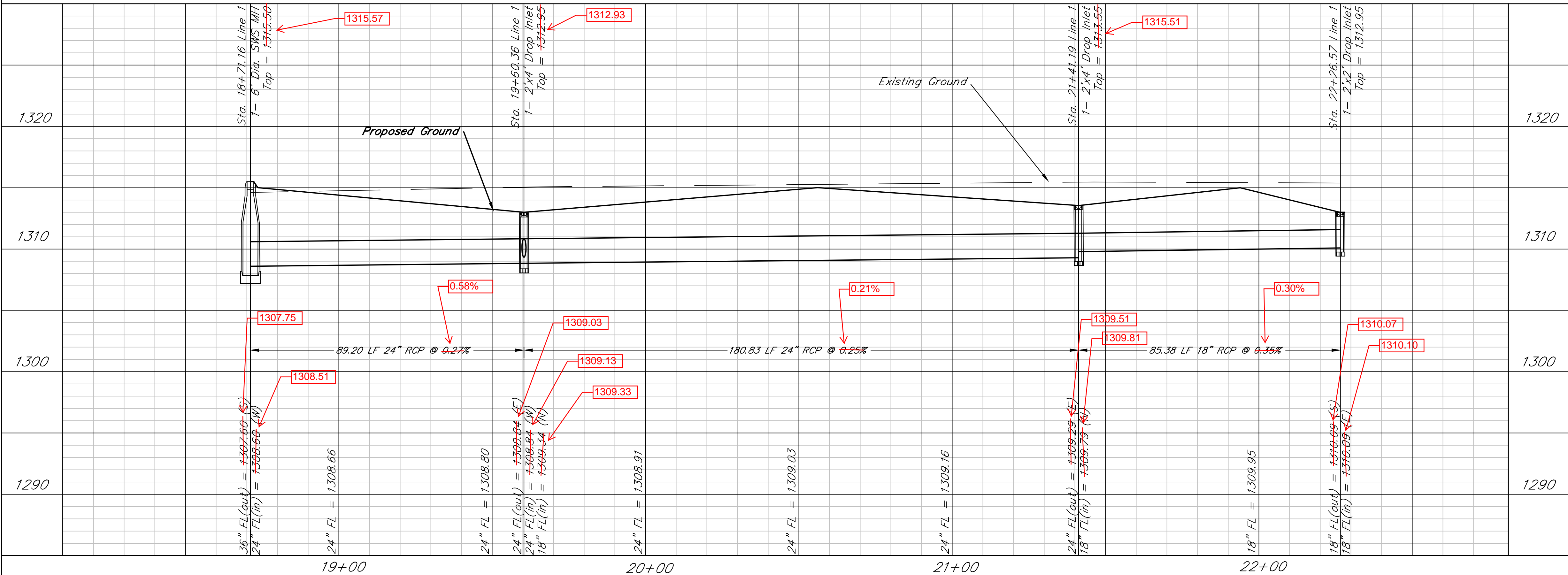
AS BUILTS

Contractor: McCullough Excavation
 Inspector: Matt Perez
 Date: 10-24-17




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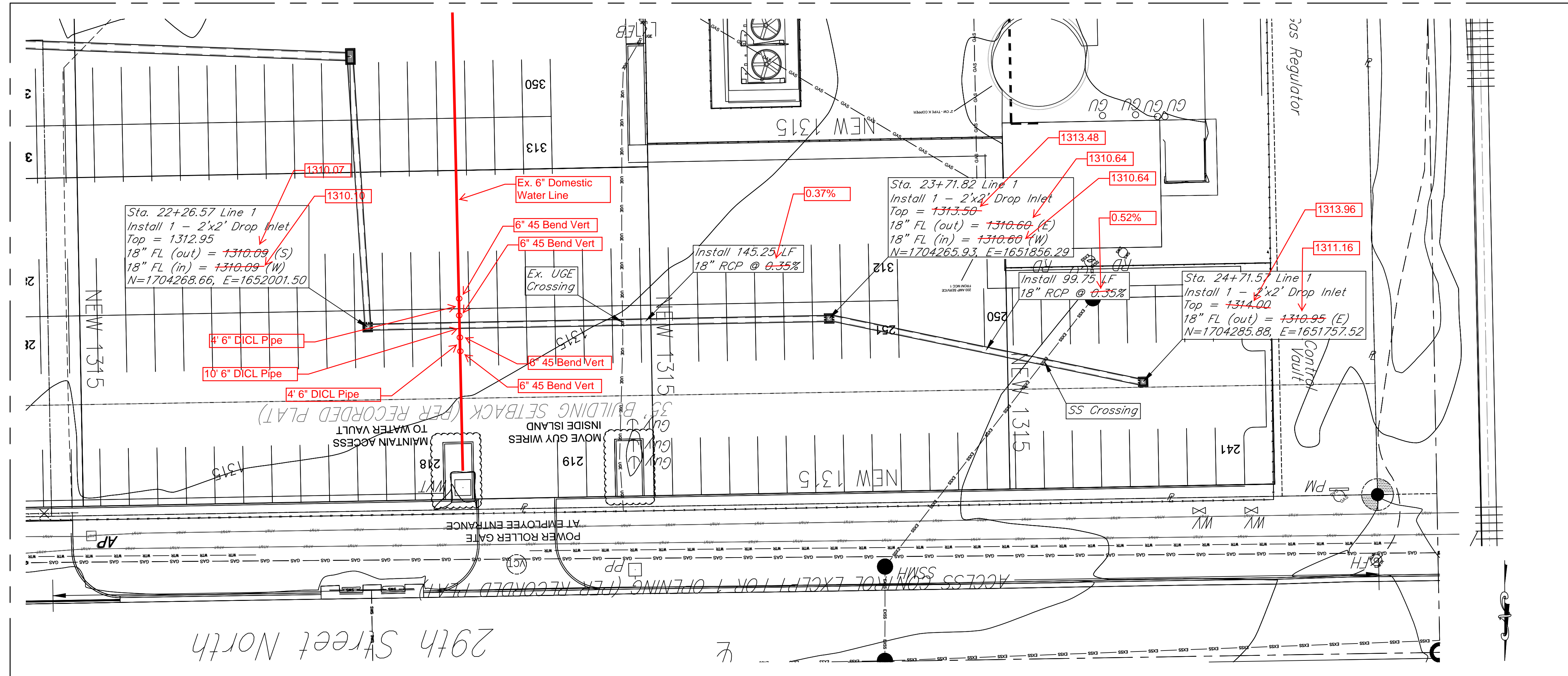
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Wichita, KS 67202 (316)264-0242



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SWS - Plan and Profile - Line 1
Wichita, Kansas

	PROJECT NUMBER 0474 PPD 133119			SHEET 4.5
	KEM NO. 17151	FILE	DATE 8/2017	
DESIGN KM	DRAWN ME	REVISED		

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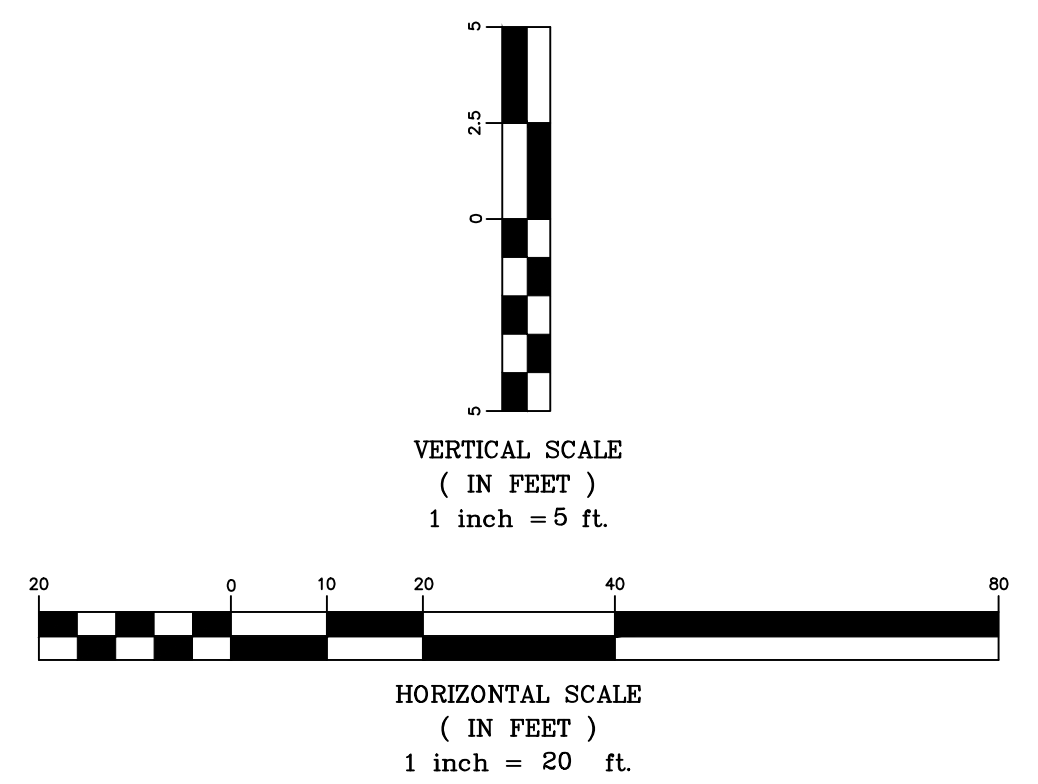
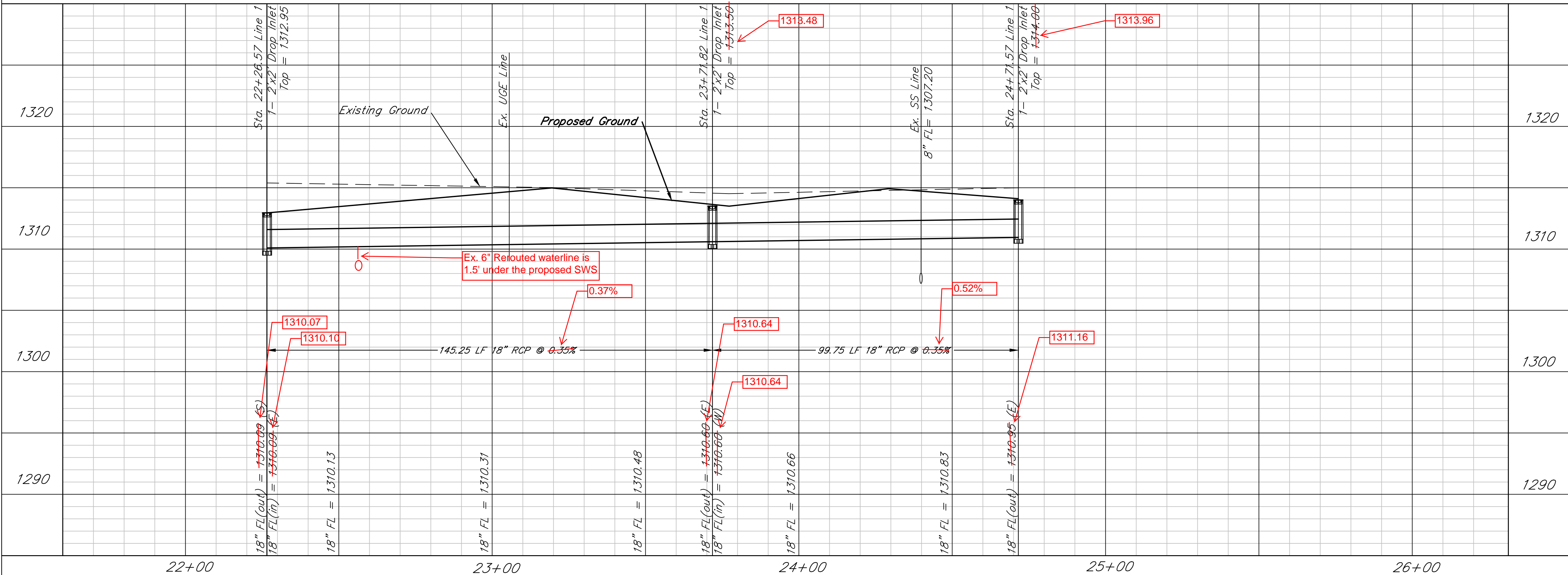


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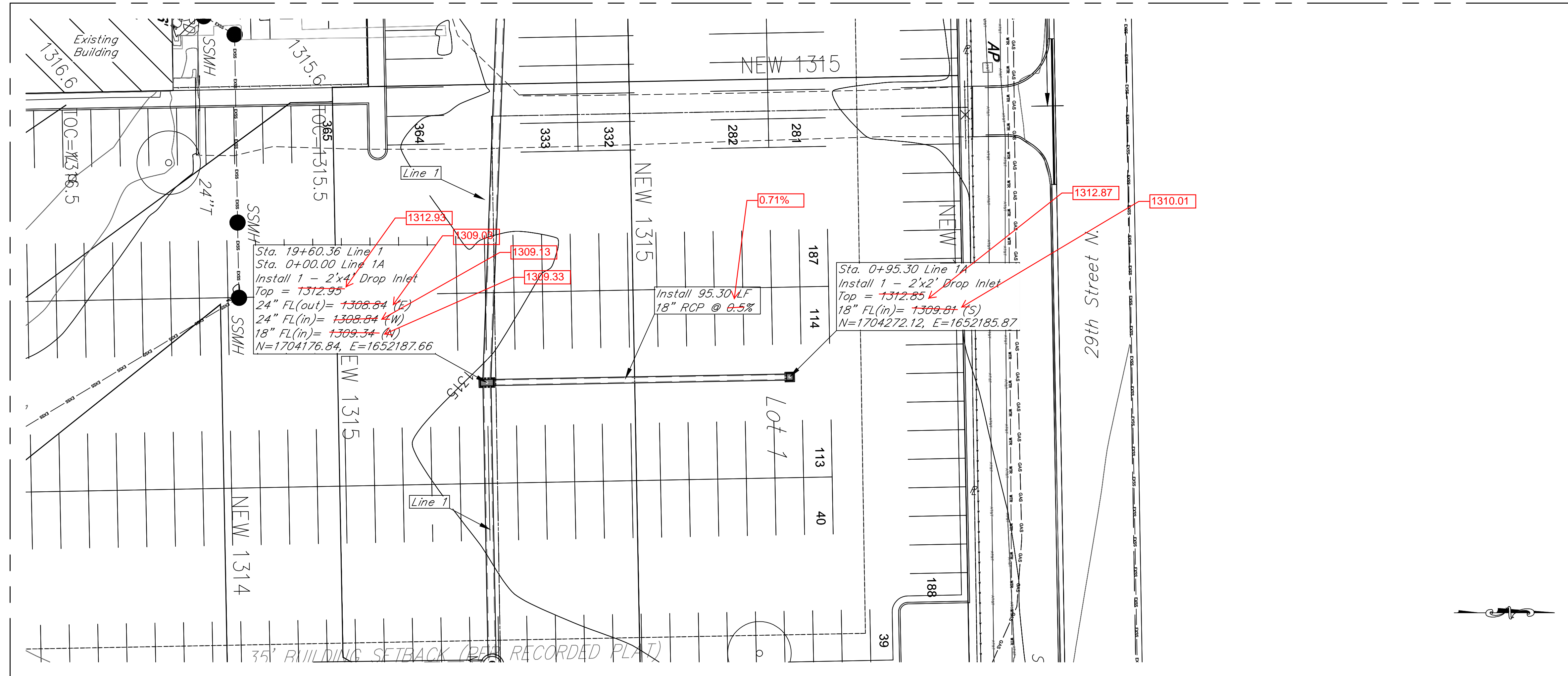
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ENGINEERING PA

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Wichita, KS 67202 (316)264-0242




Dold Foods
SWS - Plan and Profile - Line 1
Wichita, Kansas

KEMILLER ENGINEERING PA <small>117 E. Lewis, Wichita, KS 67202 (316)264-0242</small>	PROJECT NUMBER 0474 PPD 133119			SHEET 4.6
	KEM NO. 17151	FILE	DATE 8/2017	
DESIGN KM	DRAWN ME	REVISED		



AS BUILTS

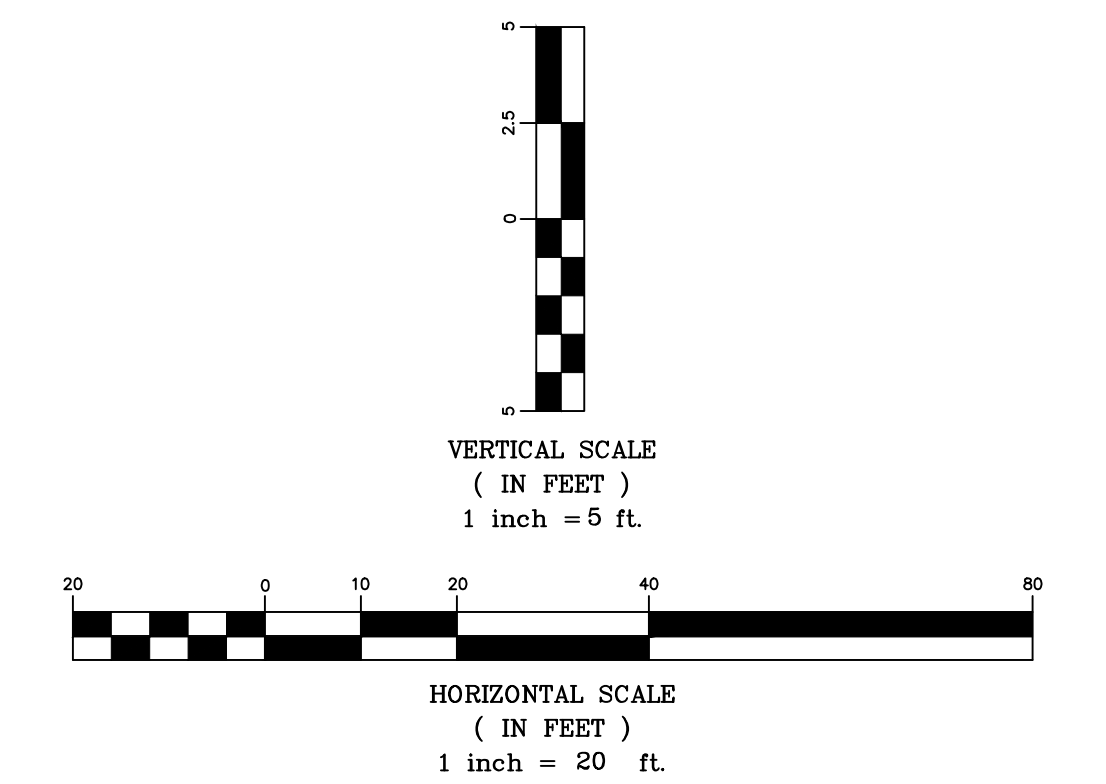
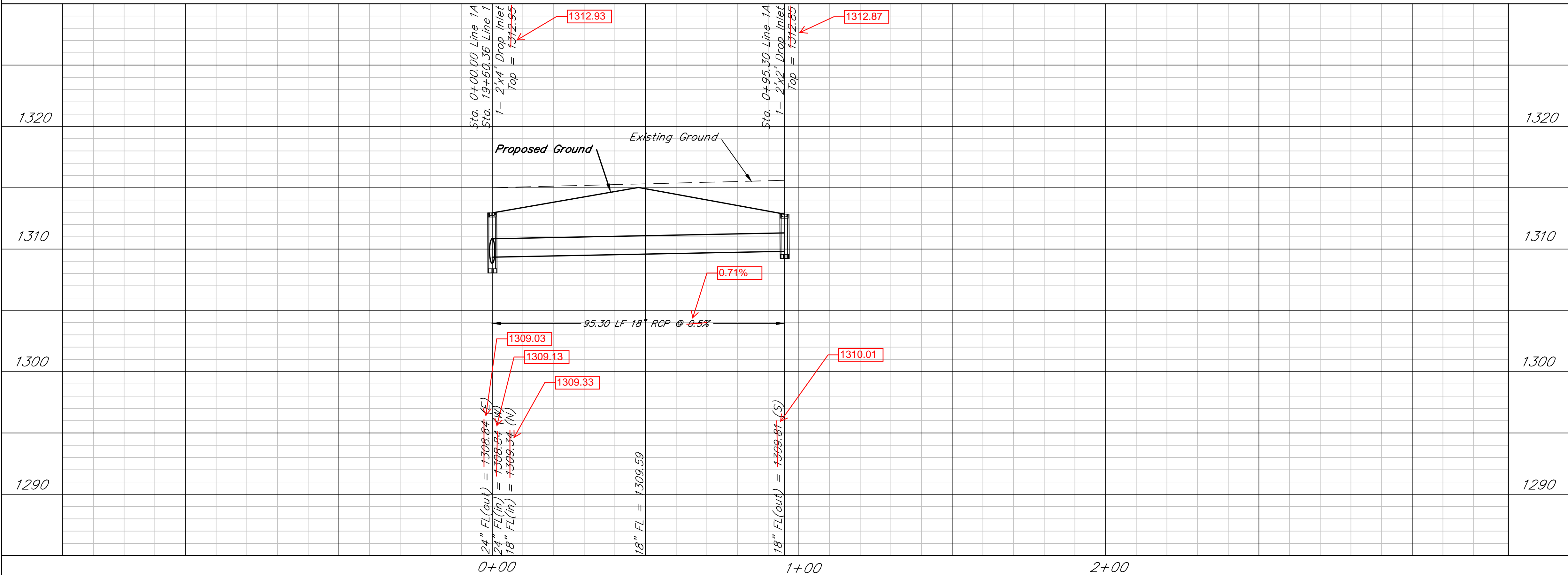
Contractor: McCullough Excavation
Inspector: Matt Perez
Date: 10-24-17




KEMILLER
ENGINEERING PA

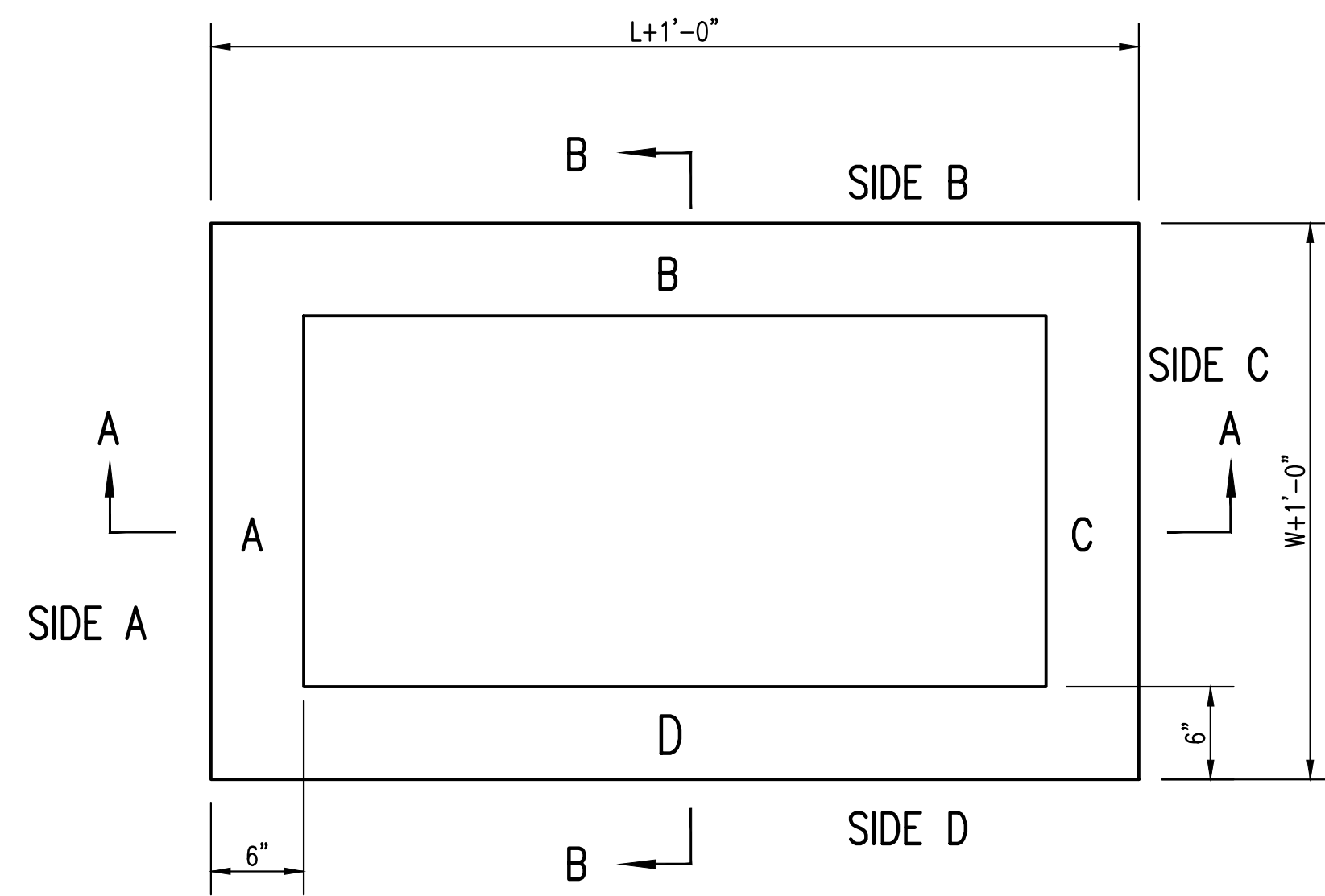
117 E. Lewis,
Wichita, KS 67202

(316)264-0242

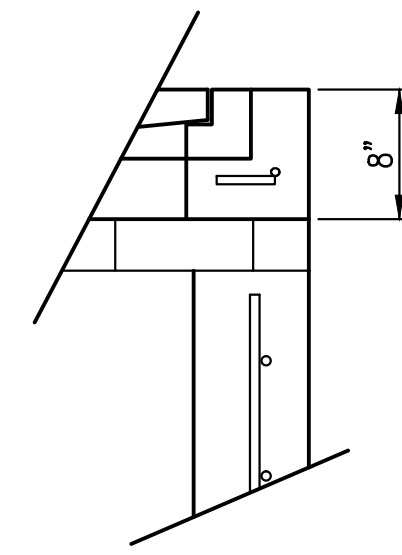


Dold Foods
SWS - Plan and Profile - Line 1A
Wichita, Kansas

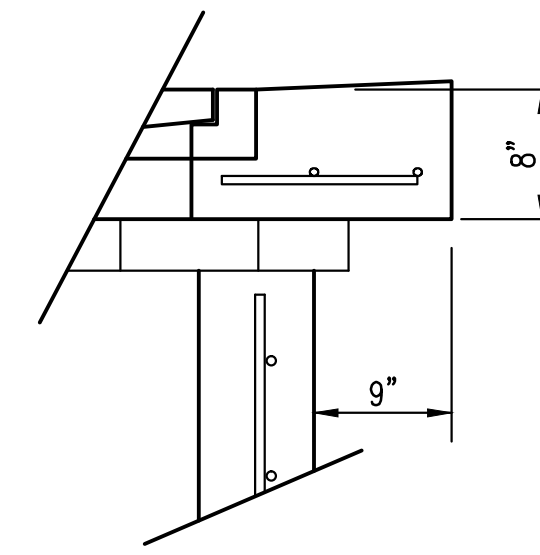
 KEMILLER ENGINEERING PA <small>117 E. Lewis, Wichita, KS 67202 (316)264-0242</small>	PROJECT NUMBER 0474 PPD 133119			SHEET 4.7
	KEM NO. 17151	FILE	DATE 8/2017	
DESIGN KM	DRAWN ME	REVISED		



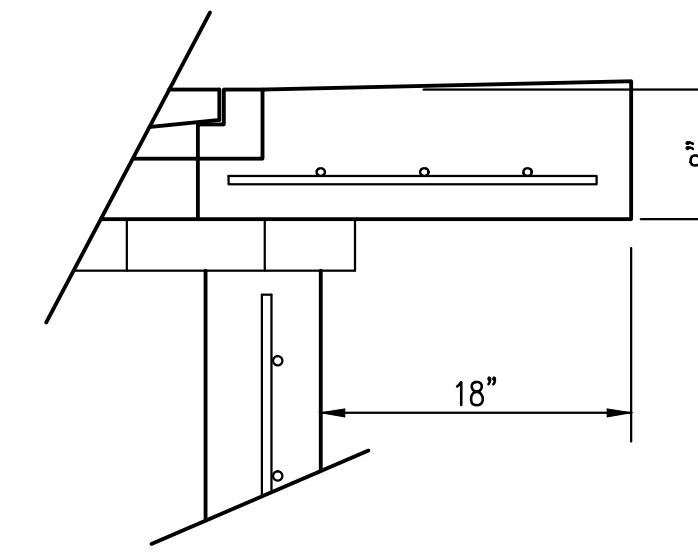
TOP VIEW



FLUSH STYLE TOP
NO APRON



9" APRON
* APRON TO EXTEND ON ALL 4 SIDES OF INLET.
DESIGNER TO DESIGNATE APRON SIZE.



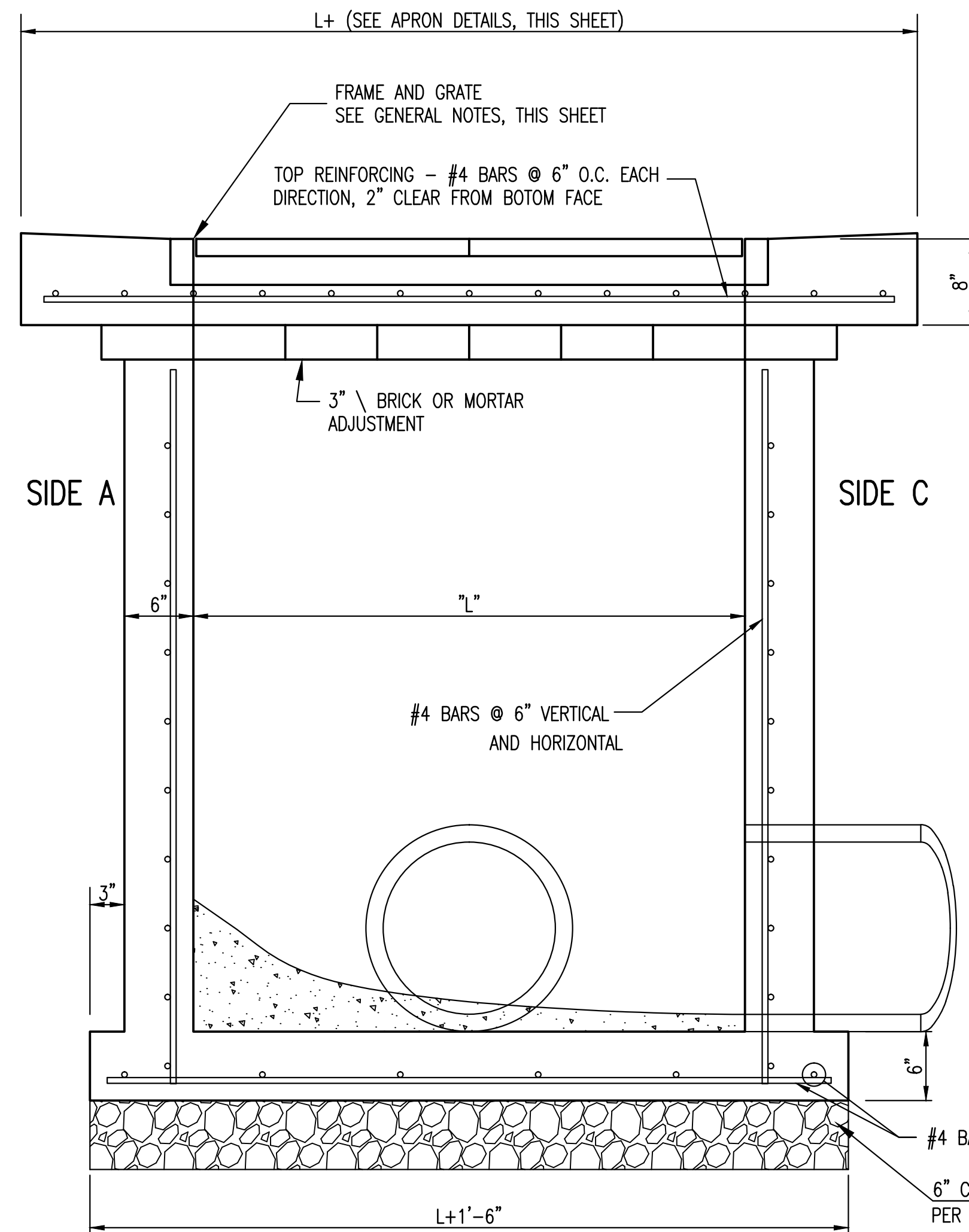
18" APRON

W=2' and L=2' for SINGLE DROP INLET
W=2' and L=4' for DOUBLE DROP INLET

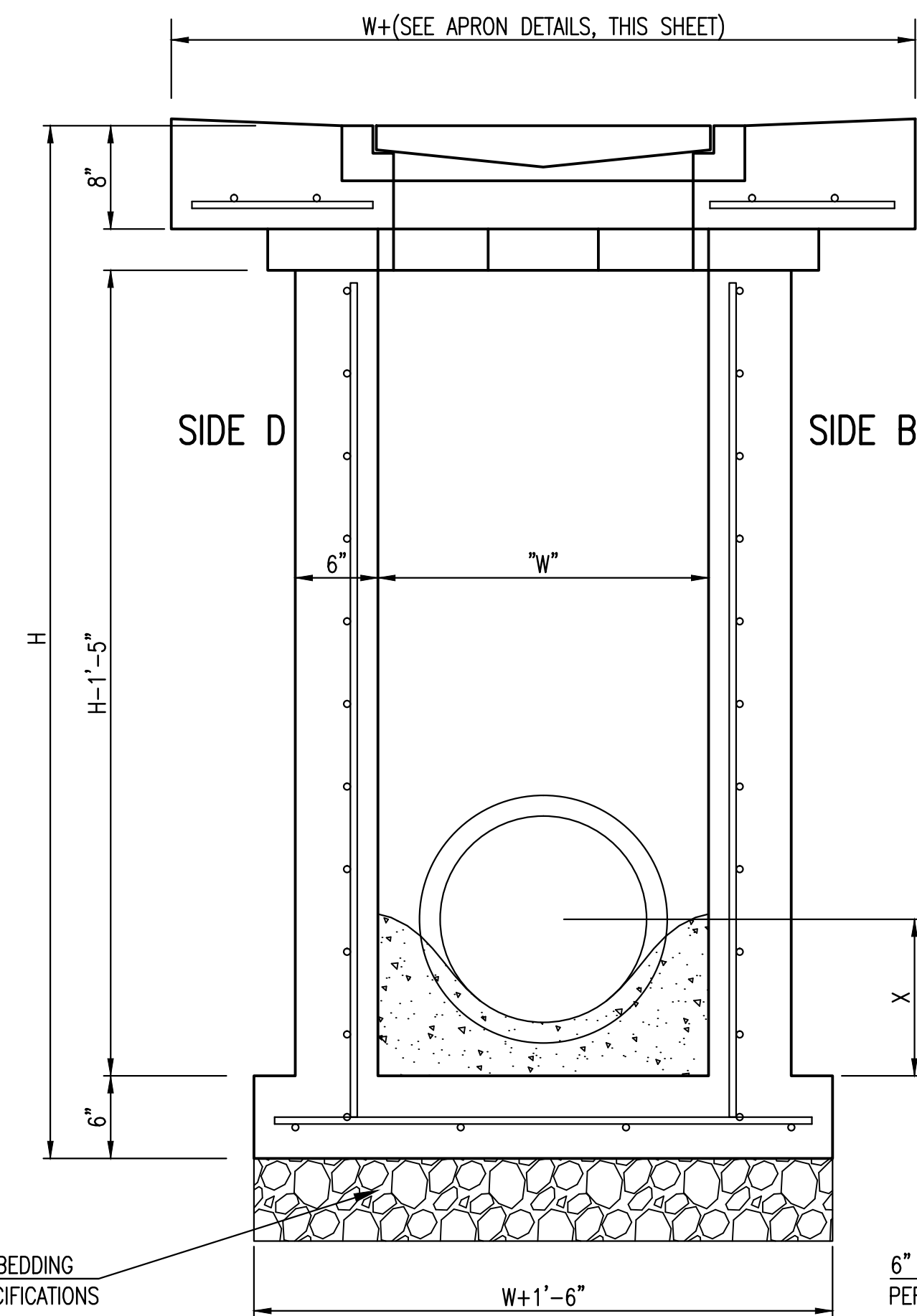
The structure(s) on this detail sheet are designed for HS-20 loading at these specific dimensions only. If larger dimensions are required, the ENGINEER shall provide a project specific structure design for approval by the City Engineer's office.

GENERAL NOTES

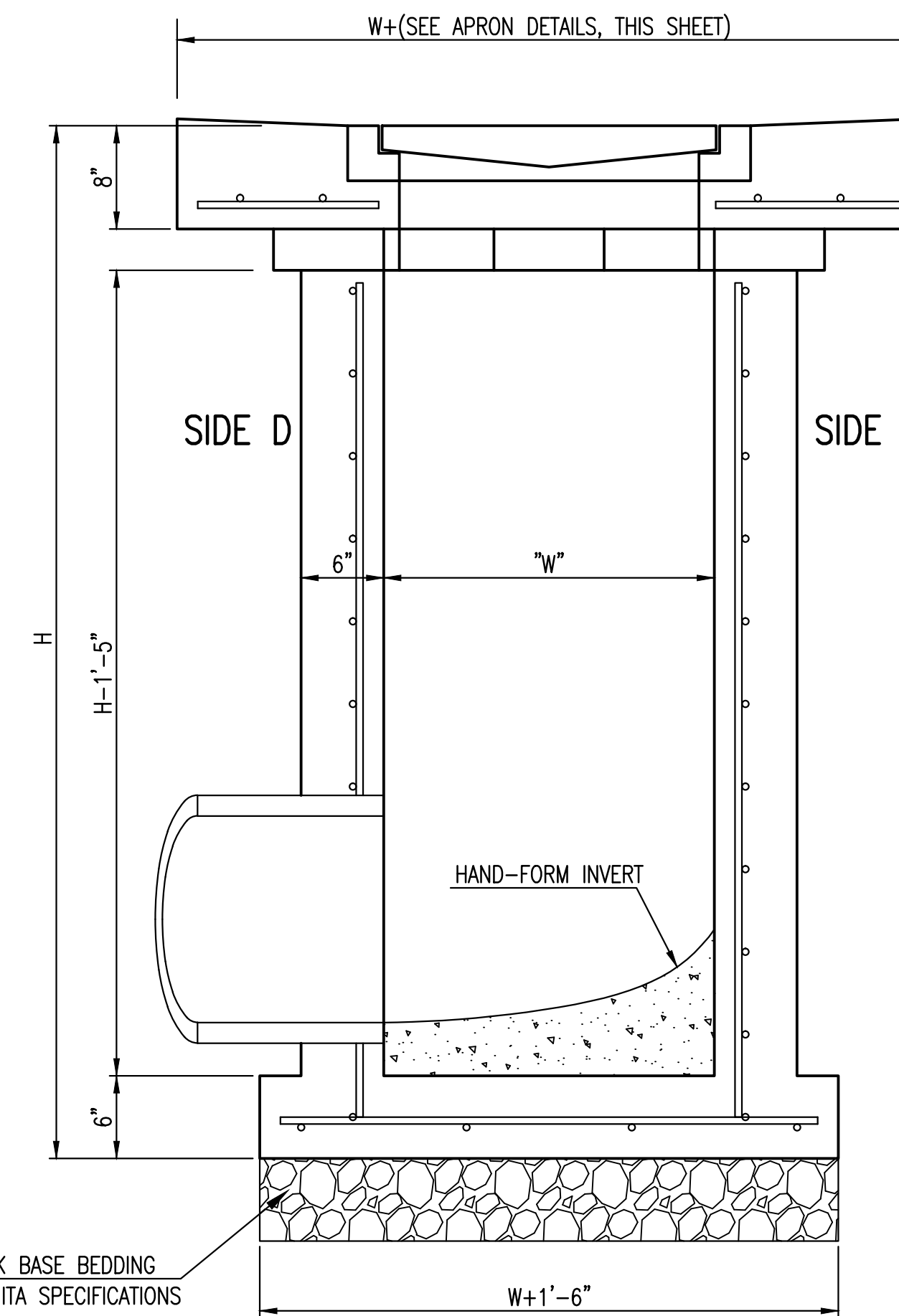
1. GRATE FRAME TO BE INSTALLED ON THIN MORTAR CUSHION TO INSURE FULL SUPPORT ALONG BRICK. CONCRETE USED FOR INLET CONSTRUCTION SHALL CONFORM TO CITY OF WICHITA SPECIFICATIONS FOR CONCRETE PAVEMENT MIX.
2. INLET INVERT SHALL BE SHAPED WITH 8 SACK SAND MIX CONCRETE TO CREATE FLOW CHANNELS AND TO INCREASE HYDRAULIC EFFICIENCY SUCH THAT THE INLET WILL BE SELF CLEANING BETWEEN ALL INLET AND/OR OUTLET PIPES.
3. THE ENDS OF ALL PIPES INSTALLED IN INLETS SHALL BE CUT OFF FLUSH WITH THE INSIDE FACE OF THE INLET WALL.
4. INLET FRAME AND GRATE TO BE DEETER #2433, EJIW #5391-Z1 OR APPROVED EQUAL FOR 2'x2' SINGLE DROP INLET AND DEETER #2434, EJIW #5391 Z3 OR APPROVED EQUAL FOR 2'x4' DOUBLE DROP INLET.
5. CONTRACTOR SHALL REMOVE LIFTING HOOKS AFTER INSTALLATION. RECESSES IN INLET WALL SHALL BE GROUTED FLUSH TO THE INLET WALL WITH HYDRAULIC CEMENT AFTER THE INLET IS IN PLACE. LIFTING HOLES THRU THE INLET WALL WILL NOT BE ACCEPTED.



SECTION "A-A"



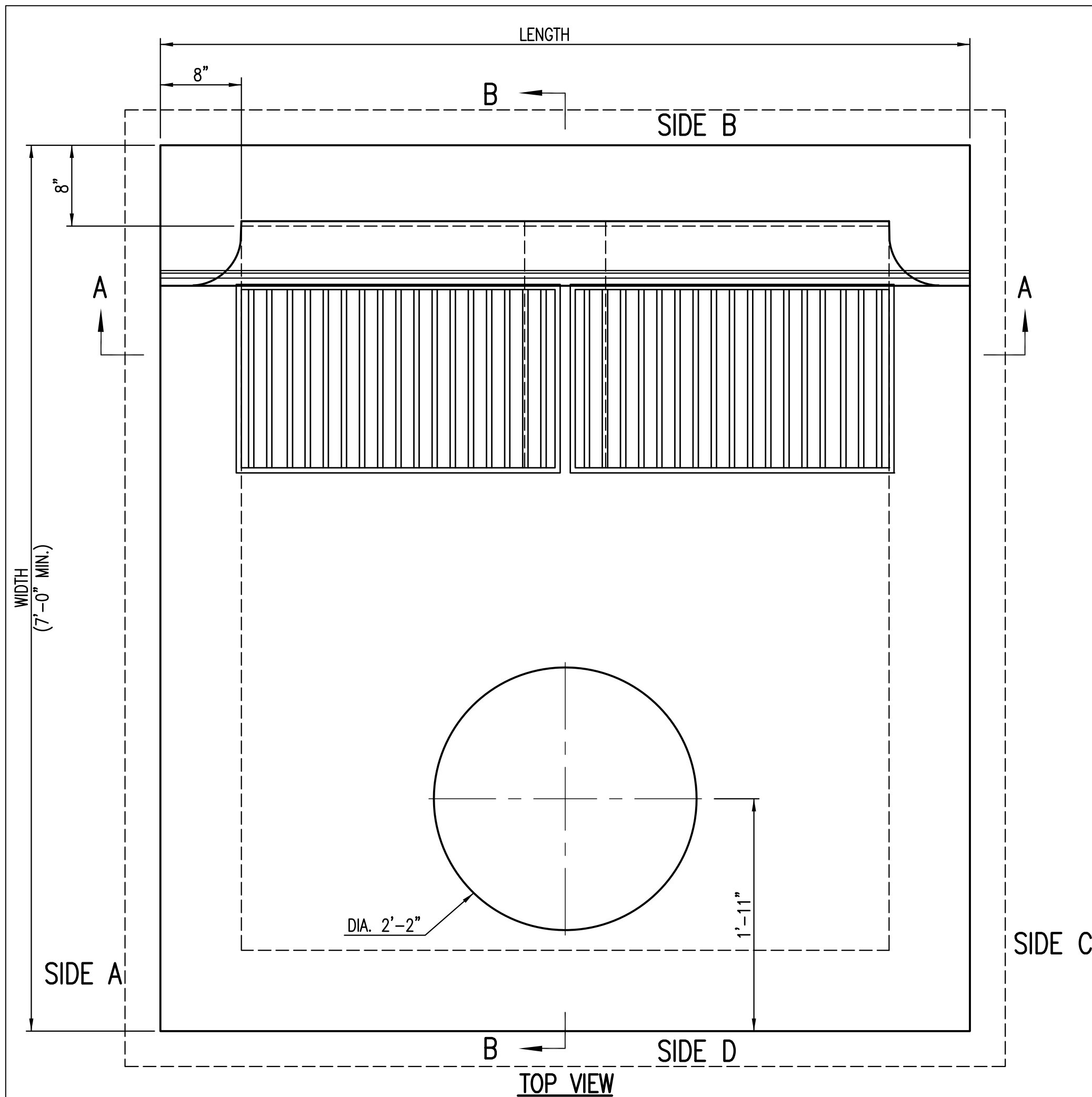
SECTION "B-B"
END OUTLET



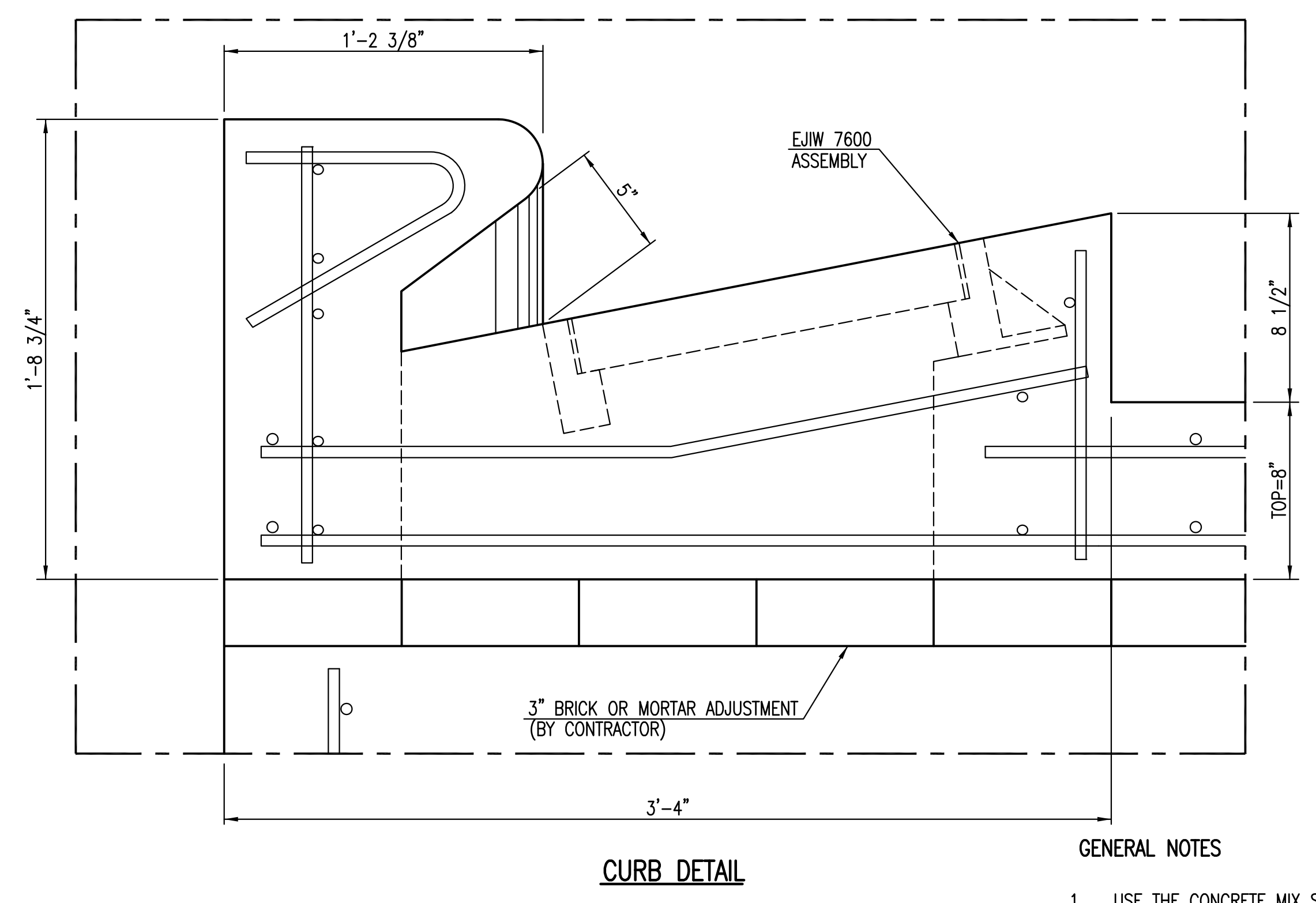
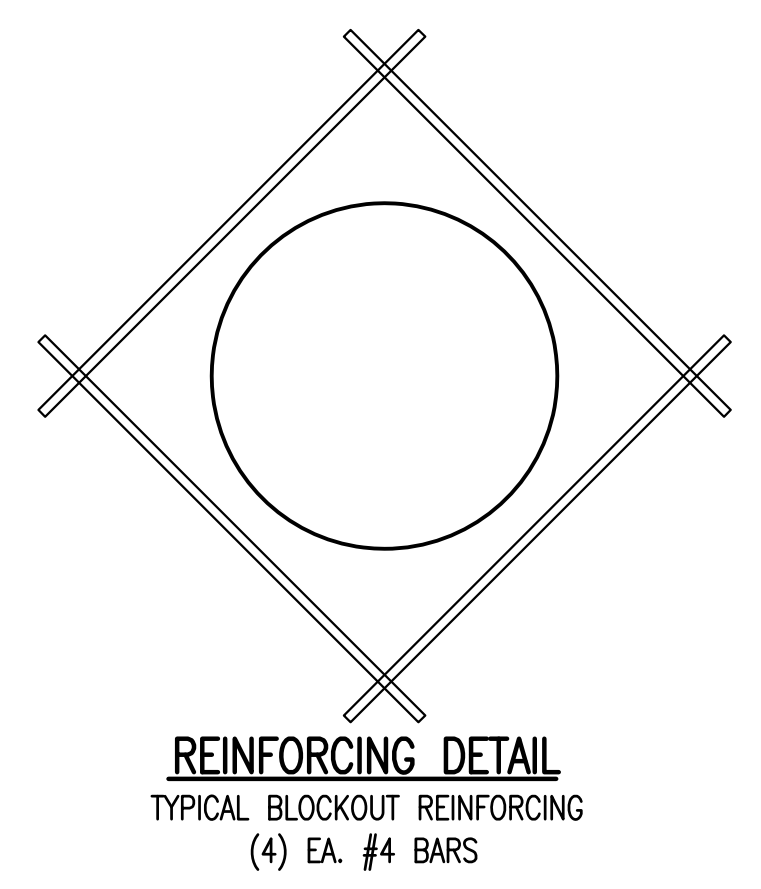
SECTION "B-B"
SIDE OUTLET



SINGLE/DOUBLE DROP INLET		
CITY ENGINEER GARY JANZEN, P.E.		
PROJECT NUMBER	OCA NUMBER	DATE 05/2011
CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		SHEET 7.0

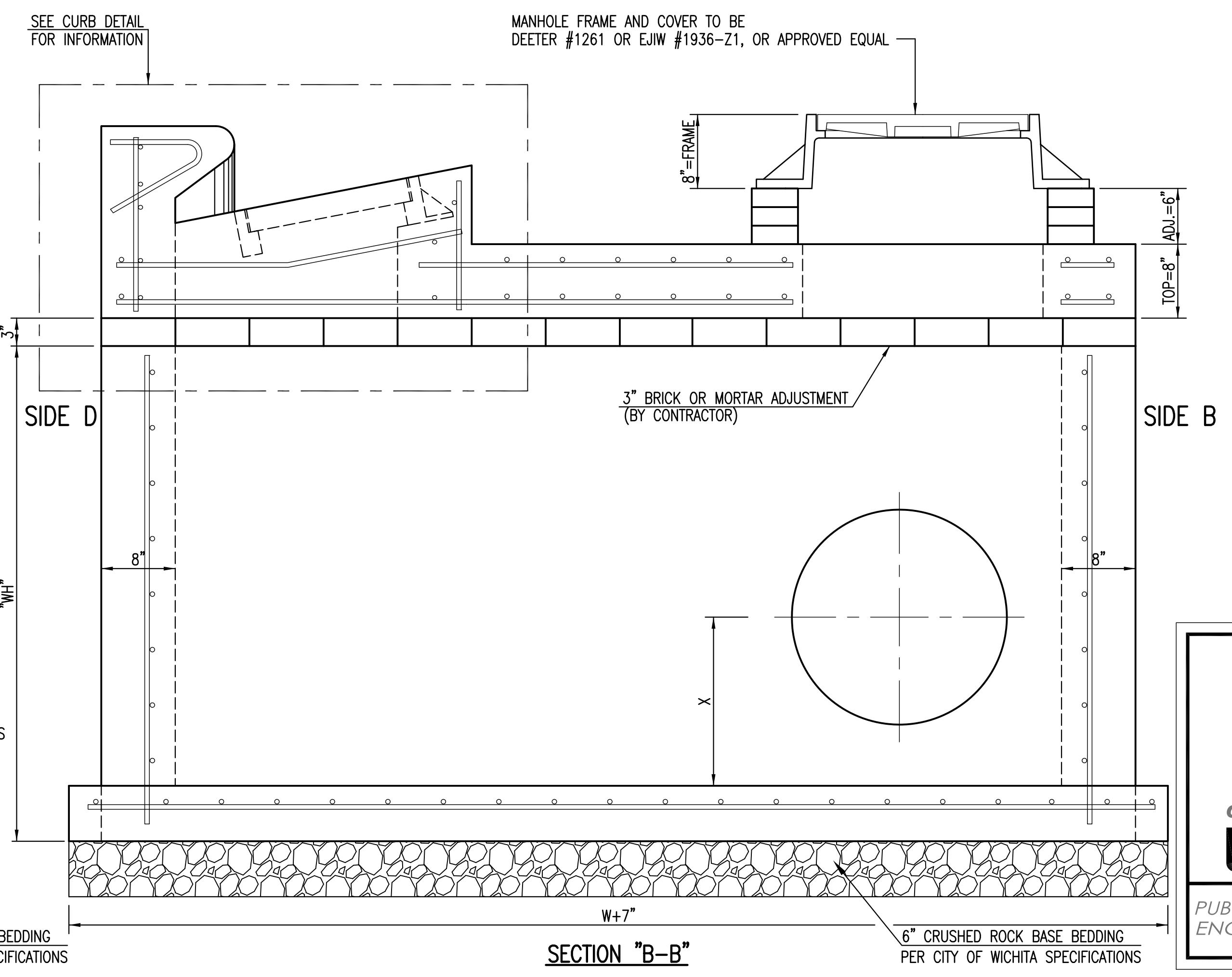
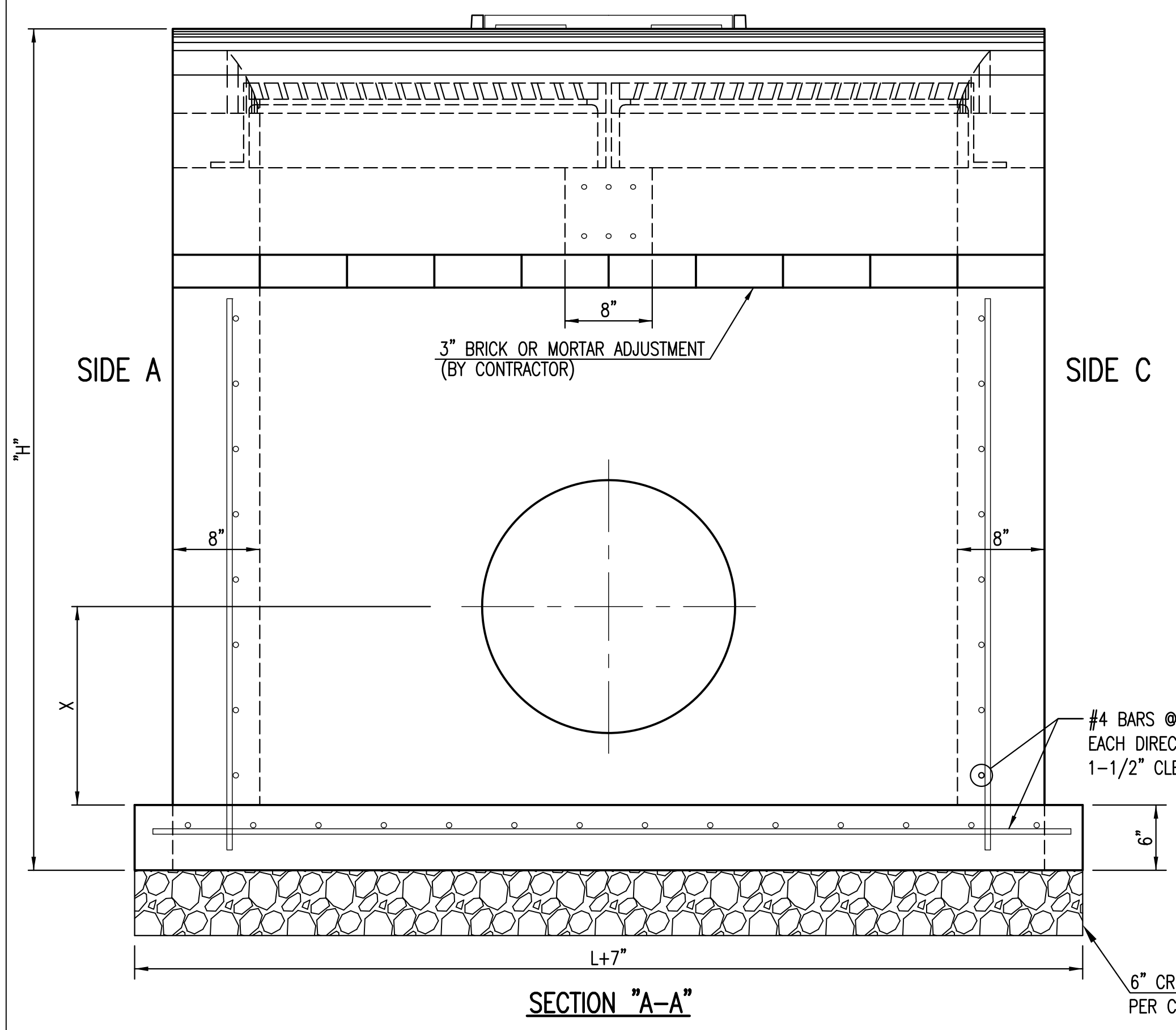


****ALL REINFORCING TO BE #4 BARS @ 6" O.C.**

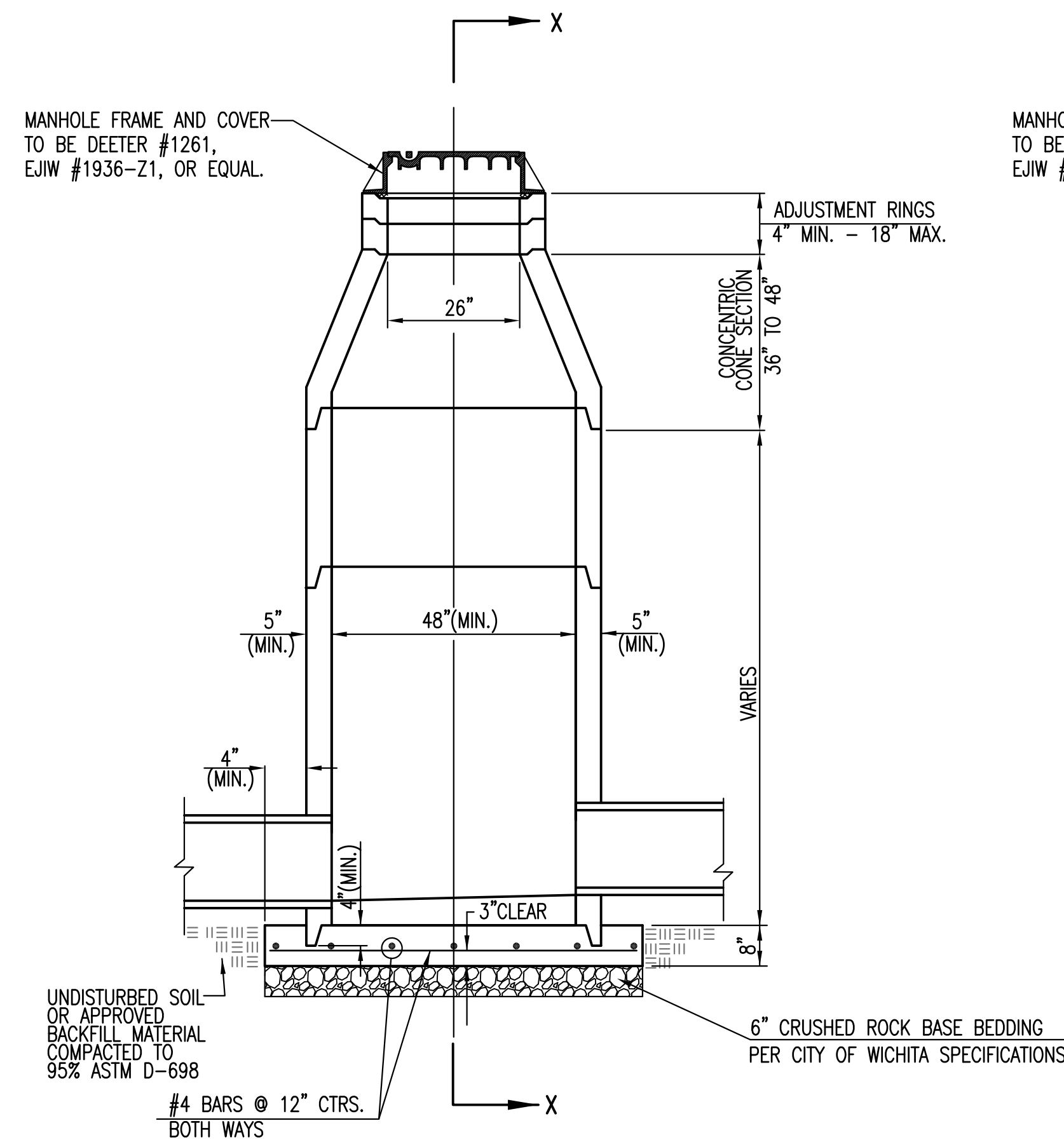


GENERAL NOTES

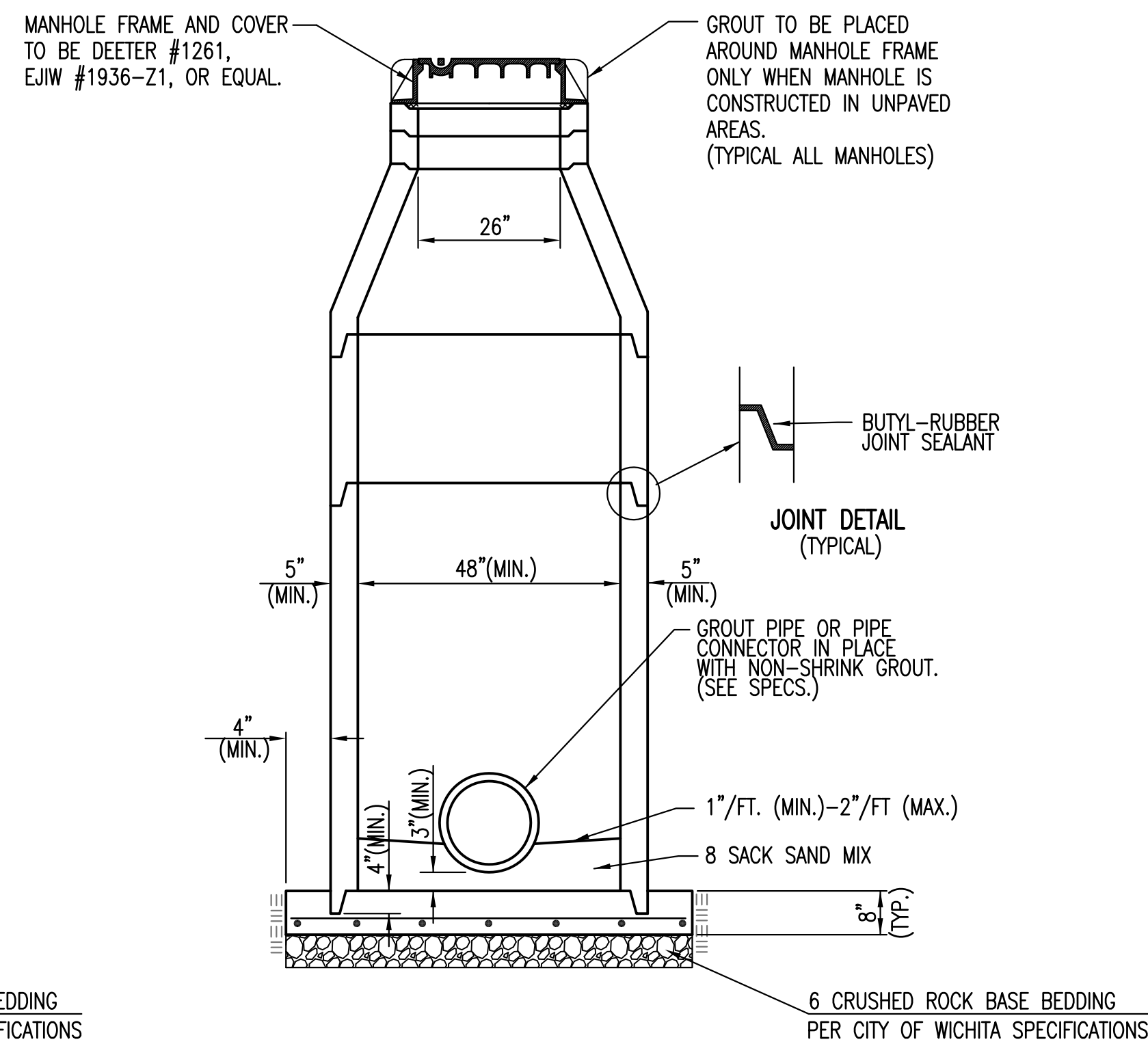
1. USE THE CONCRETE MIX SPECIFIED FOR THE CITY OF WICHITA CONCRETE PAVEMENT THROUGHOUT. ALL EXPOSED EDGES SHALL BE FINISHED WITH AN EDGING TOOL. REINFORCING BARS SHALL BE BENT AROUND PIPE.
2. INLET/MANHOLE INVERT SHALL BE SHAPED WITH 8 SACK MIX CONCRETE TO CREATE FLOW CHANNELS AND TO INCREASE HYDRAULIC EFFICIENCY SUCH THAT THE INLET WILL BE SELF CLEANING BETWEEN ALL INLET AND/OR OUTLET PIPES.
3. ALL BARS ARE #4 WITH 6" SPACING AND SHALL HAVE A MINIMUM CLEARANCE OF 1 1/2" INCHES UNLESS OTHERWISE NOTED ON THE PLANS.
4. NO DEDUCTIONS WILL BE MADE IN PAY LENGTH OF CURB, GUTTER, OR CURB AND GUTTER THROUGH THE INLET AREA.
5. USE DEETER FOUNDRY, INC. CASTING NO. 2442/43 OR EJW 7600Z LEFT SIDE, 7600 RIGHT SIDE IN INLET FRAME AND GRATE WITH STYLE H GRATE. INLET FRAME TO BE PROOF LOAD TESTED TO 40,000 LBS. ON UNSUPPORTED SIDE.
6. RING AND COVER SHALL BE DEETER #1261 OR EJW #1936-Z1, OR APPROVED EQUAL, SEE SW-303.
7. REINFORCING BARS SHALL BE CUT OR BENT AROUND PIPES. NO DEDUCTION IN CONCRETE QUANTITIES SHALL BE MADE FOR PIPE OPENINGS.
8. THE VANES OF THE GRATE SHALL BE ORIENTED WITH RESPECT TO THE FLOW ARROWS SHOWN ON THE PLANS.
9. AROUND INLET/MANHOLE OPENING IN TOP SLAB USE #5 BAR @ 45° ANGLE TO OTHER BARS. LENGTH = MH OPENING + 2'-0"
10. CONTRACTOR SHALL REMOVE LIFTING HOOKS AFTER INSTALLATION. RECESSES IN INLET/MANHOLE WALL SHALL BE GROUTED FLUSH TO THE INLET/MANHOLE WALL WITH HYDRAULIC CEMENT AFTER THE INLET/MANHOLE IS IN PLACE. LIFTING HOLES THRU THE INLET/MANHOLE WALL WILL NOT BE ACCEPTED.



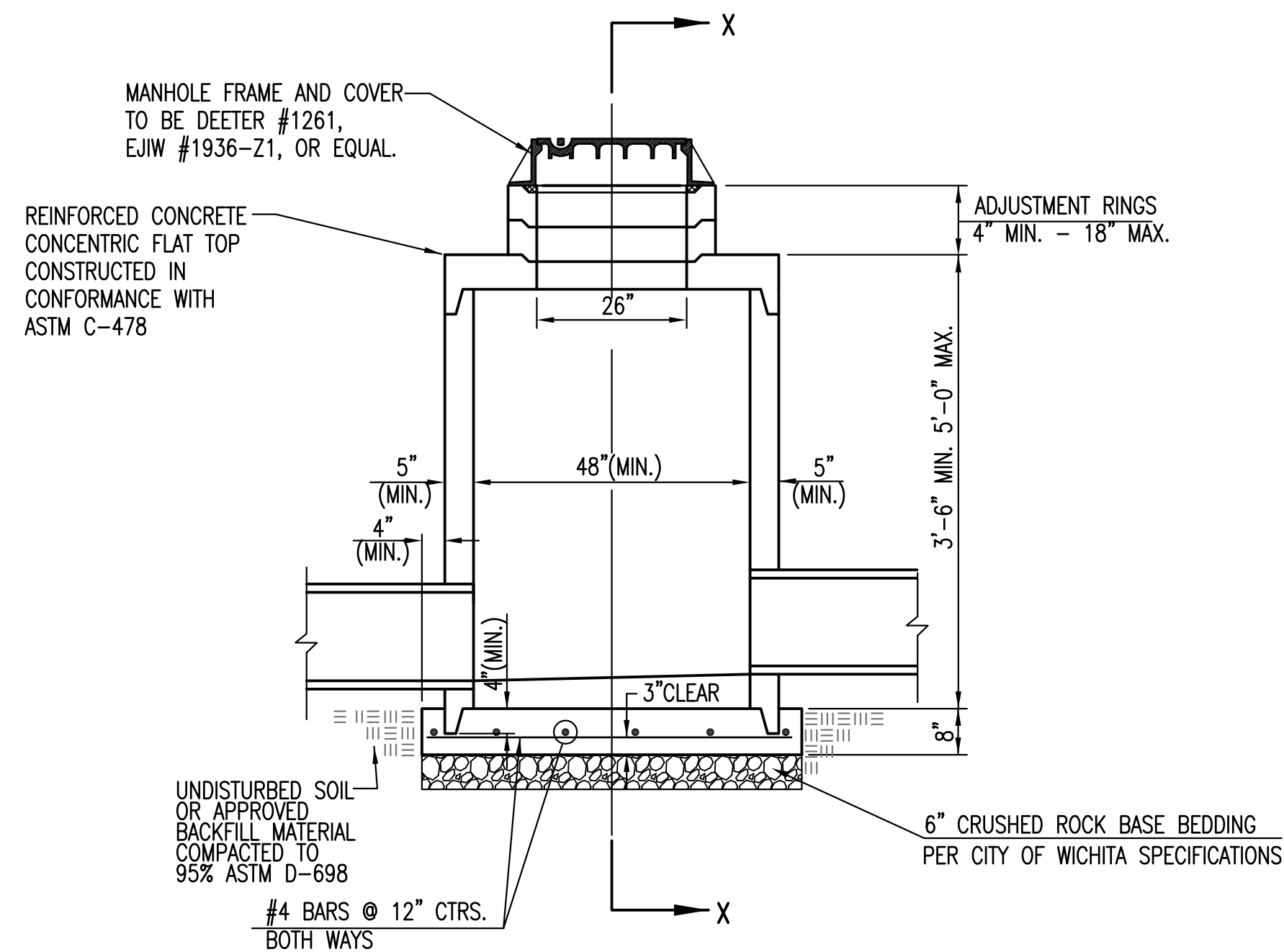
SPECIAL TYPE II INLET/MANHOLE		
CITY ENGINEER GARY JANZEN, P.E.		
PROJECT NUMBER	OCA NUMBER	DATE 11/2010
CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		SHEET



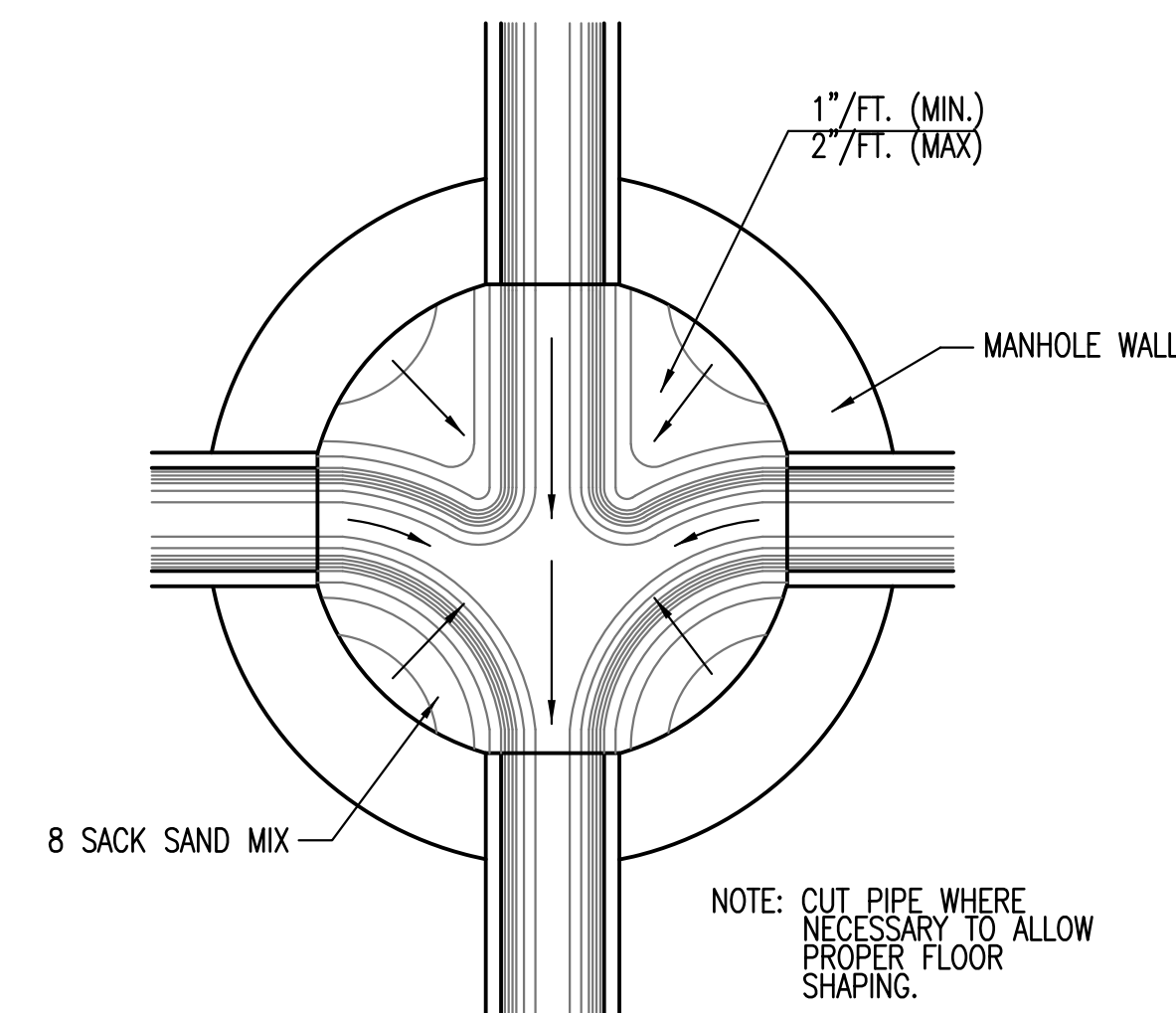
PRECAST STANDARD MANHOLE TYPE "A"



SECTION X-X (TYPICAL)



PRECAST SHALLOW MANHOLE TYPE "B"



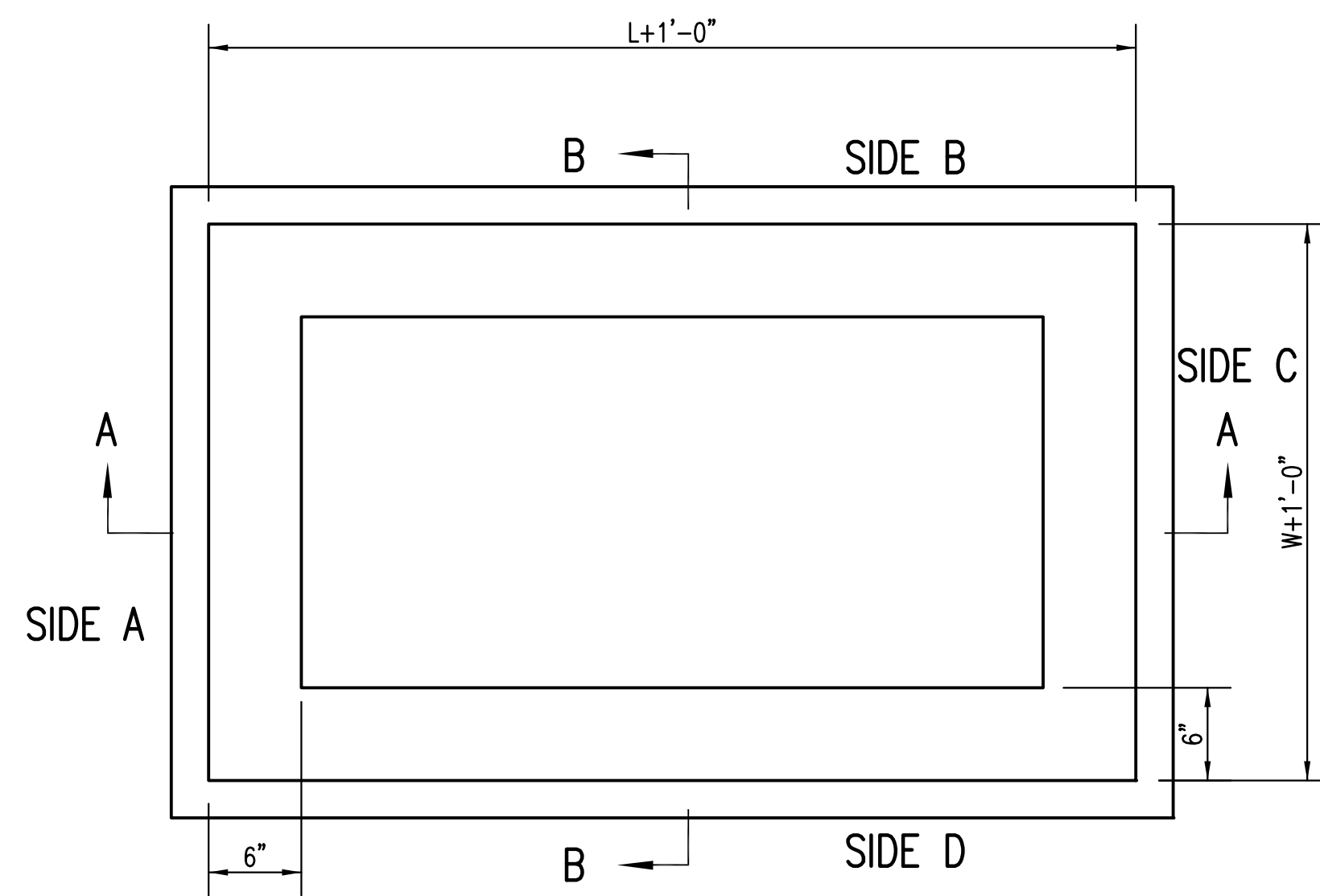
TYPICAL MANHOLE FLOOR SHAPING

GENERAL NOTES

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

CITY OF WICHITA
PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

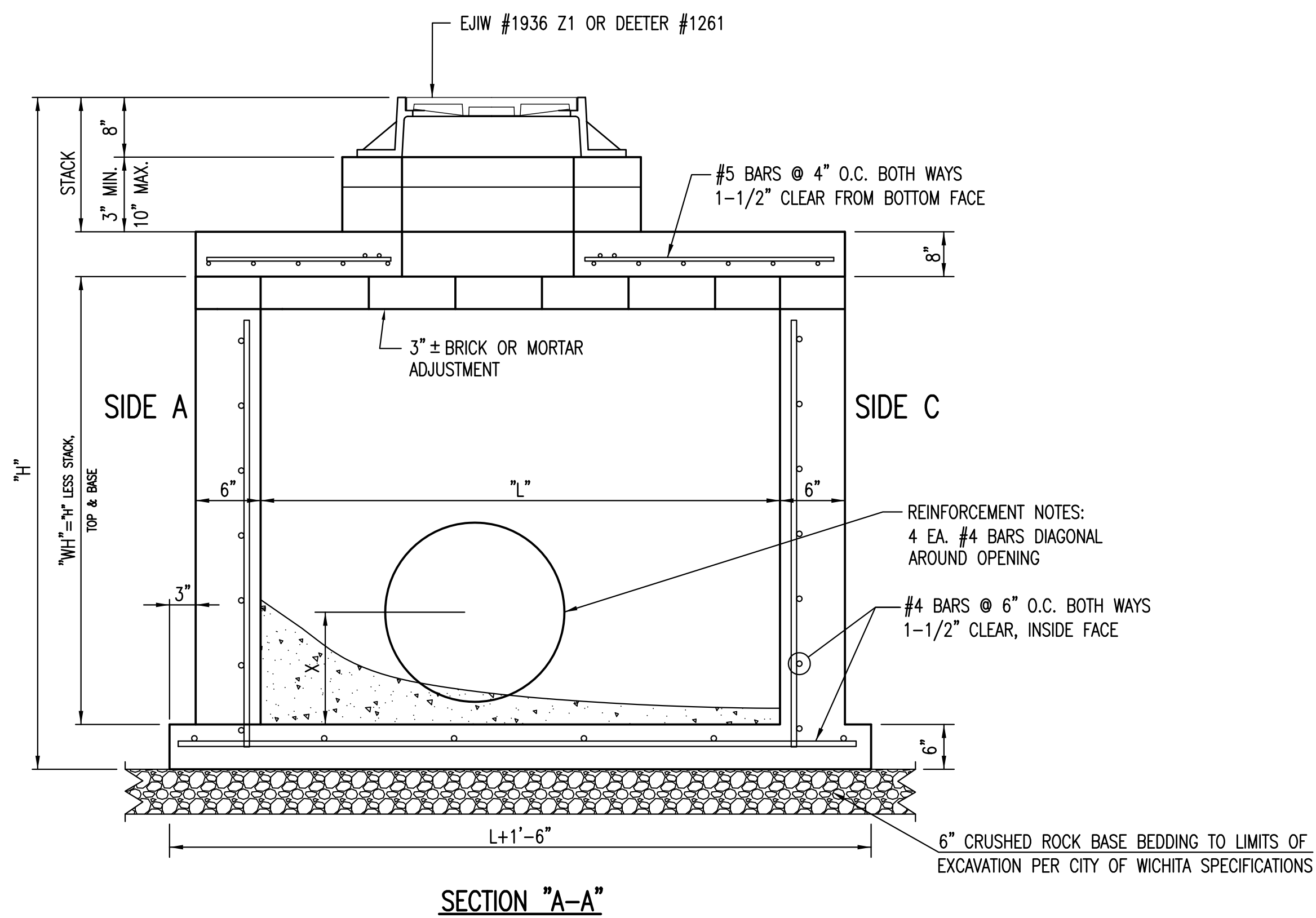
<p>PRECAST CONCRETE MANHOLE (STORM SEWER)</p> <p>CITY ENGINEER GARY JANZEN, P.E.</p>		
PROJECT NUMBER	OCA NUMBER	DATE
		11/2010
<p>CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501</p>		<p>SHEET</p> <p>7.2</p>



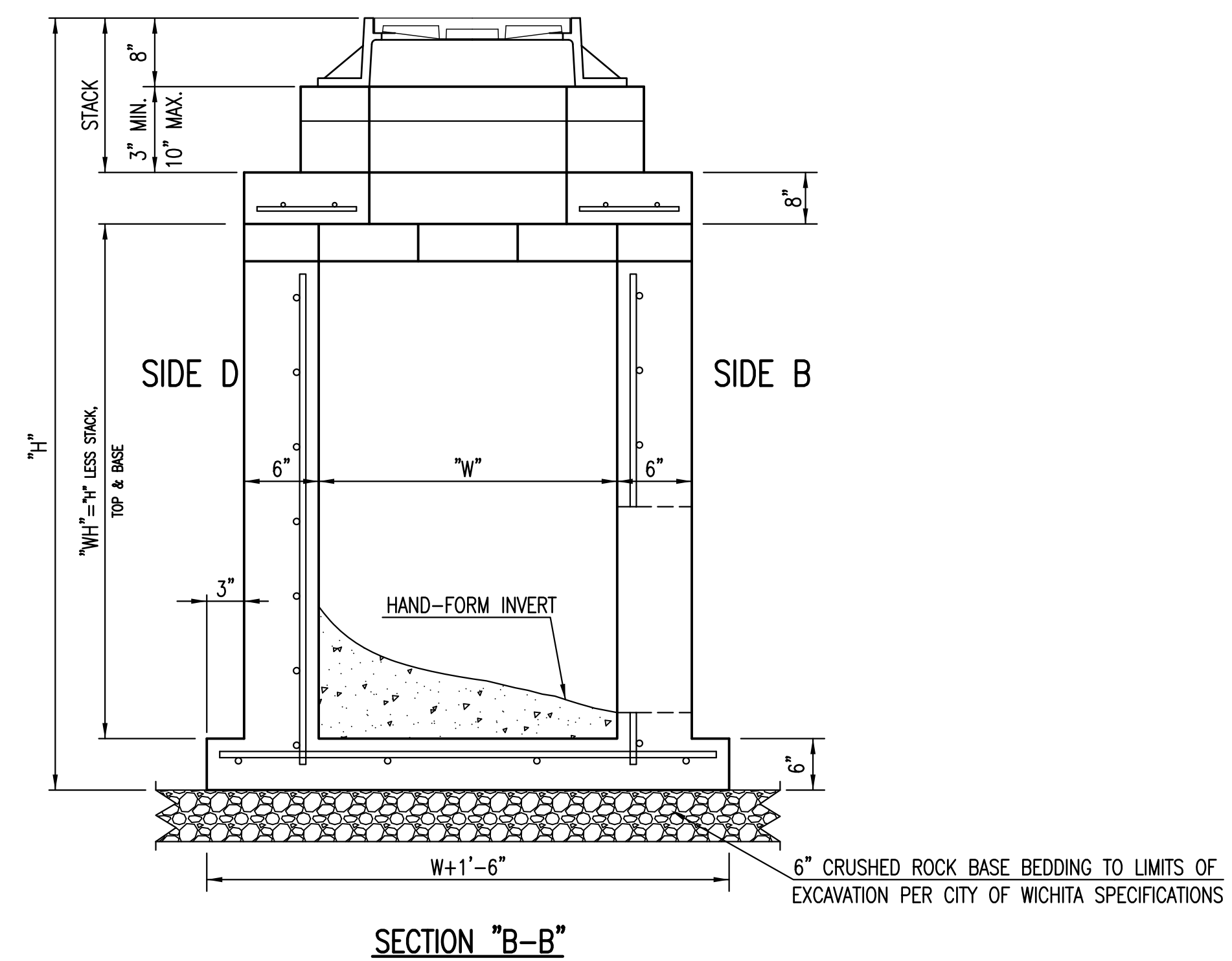
TOP VIEW

GENERAL NOTES

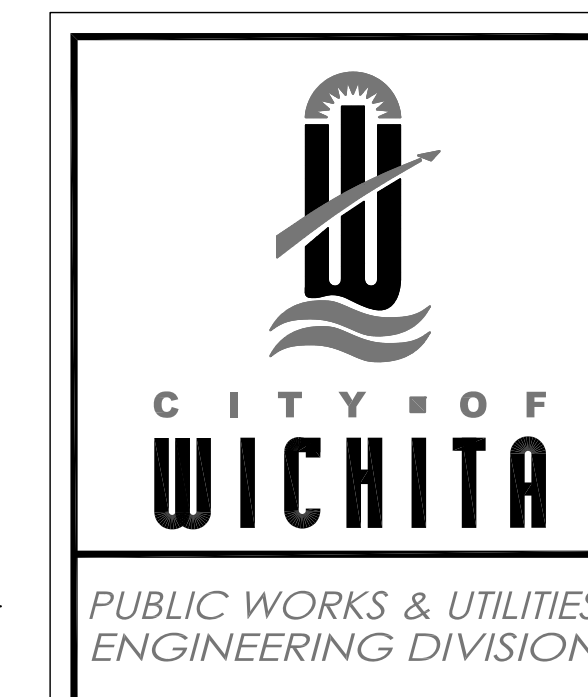
1. GRATE FRAME TO BE INSTALLED ON THIN MORTAR CUSHION TO INSURE FULL SUPPORT ALONG BRICK. CONCRETE USED FOR INLET CONSTRUCTION SHALL CONFORM TO CITY OF WICHITA SPECIFICATIONS FOR CONCRETE PAVEMENT MIX.
2. INLET INVERT SHALL BE SHAPED WITH 8 SACK SAND MIX CONCRETE TO CREATE FLOW CHANNELS AND TO INCREASE HYDRAULIC EFFICIENCY SUCH THAT THE INLET WILL BE SELF CLEANING BETWEEN ALL INLET AND/OR OUTLET PIPES.
3. THE ENDS OF ALL PIPES INSTALLED IN INLETS SHALL BE CUT OFF FLUSH WITH THE INSIDE FACE OF THE INLET WALL.
4. INLET FRAME AND GRATE TO BE DEETER #1261, EJIW #1936-Z1 OR APPROVED EQUAL, SEE SW-303.
5. CONTRACTOR SHALL REMOVE LIFTING HOOKS AFTER INSTALLATION. RECESSES IN MANHOLE WALL SHALL BE GROUTED FLUSH TO THE MANHOLE WALL WITH HYDRAULIC CEMENT AFTER THE MANHOLE IS IN PLACE. LIFTING HOLES THRU THE MANHOLE WALL WILL NOT BE ACCEPTED.



SECTION "A-A"

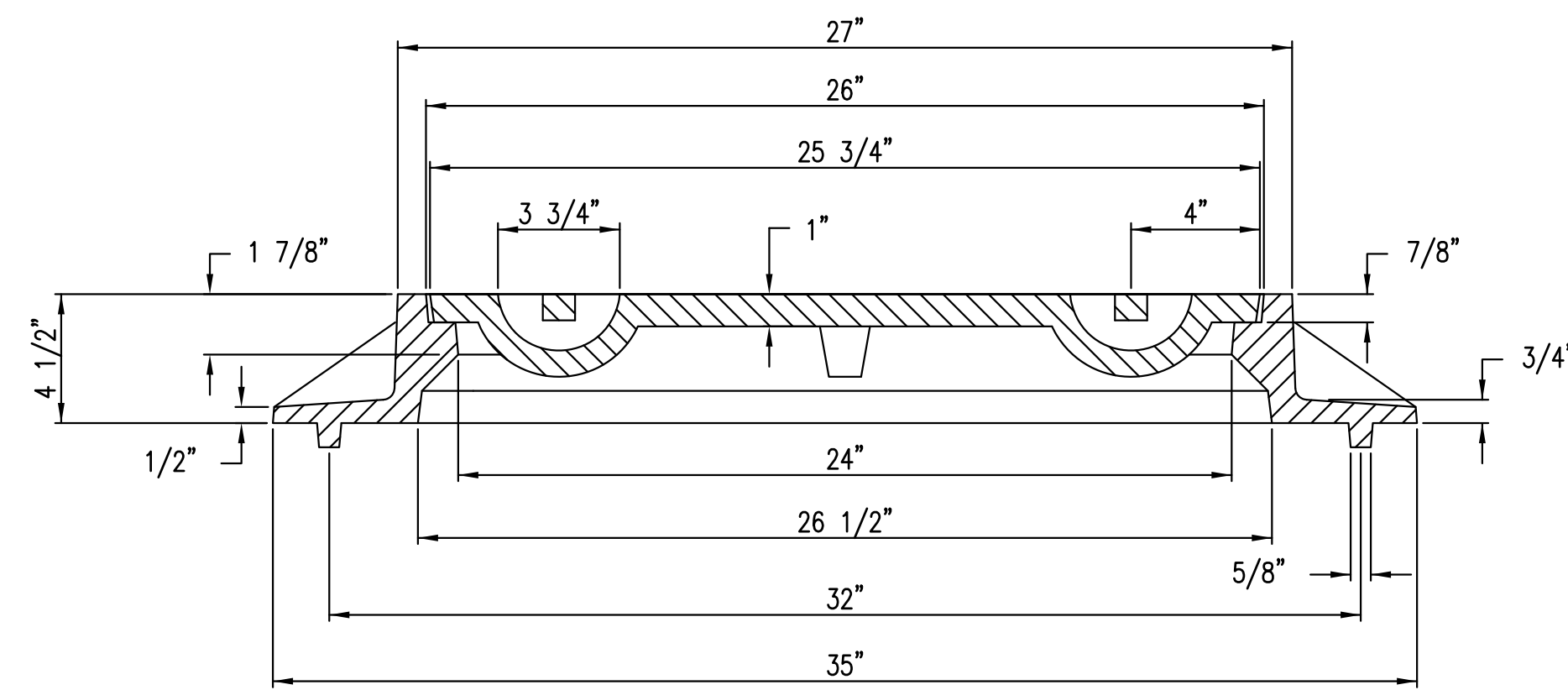
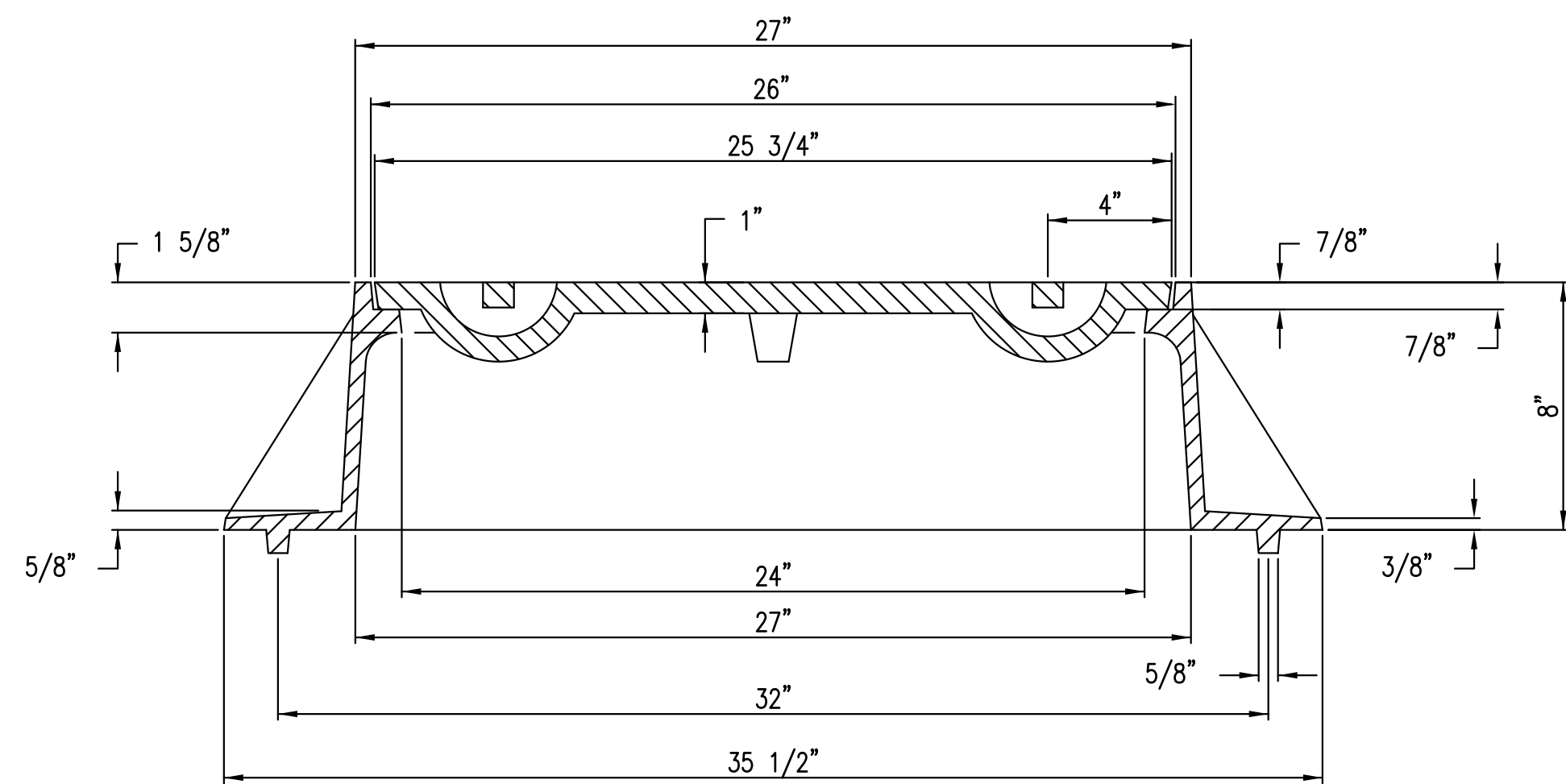
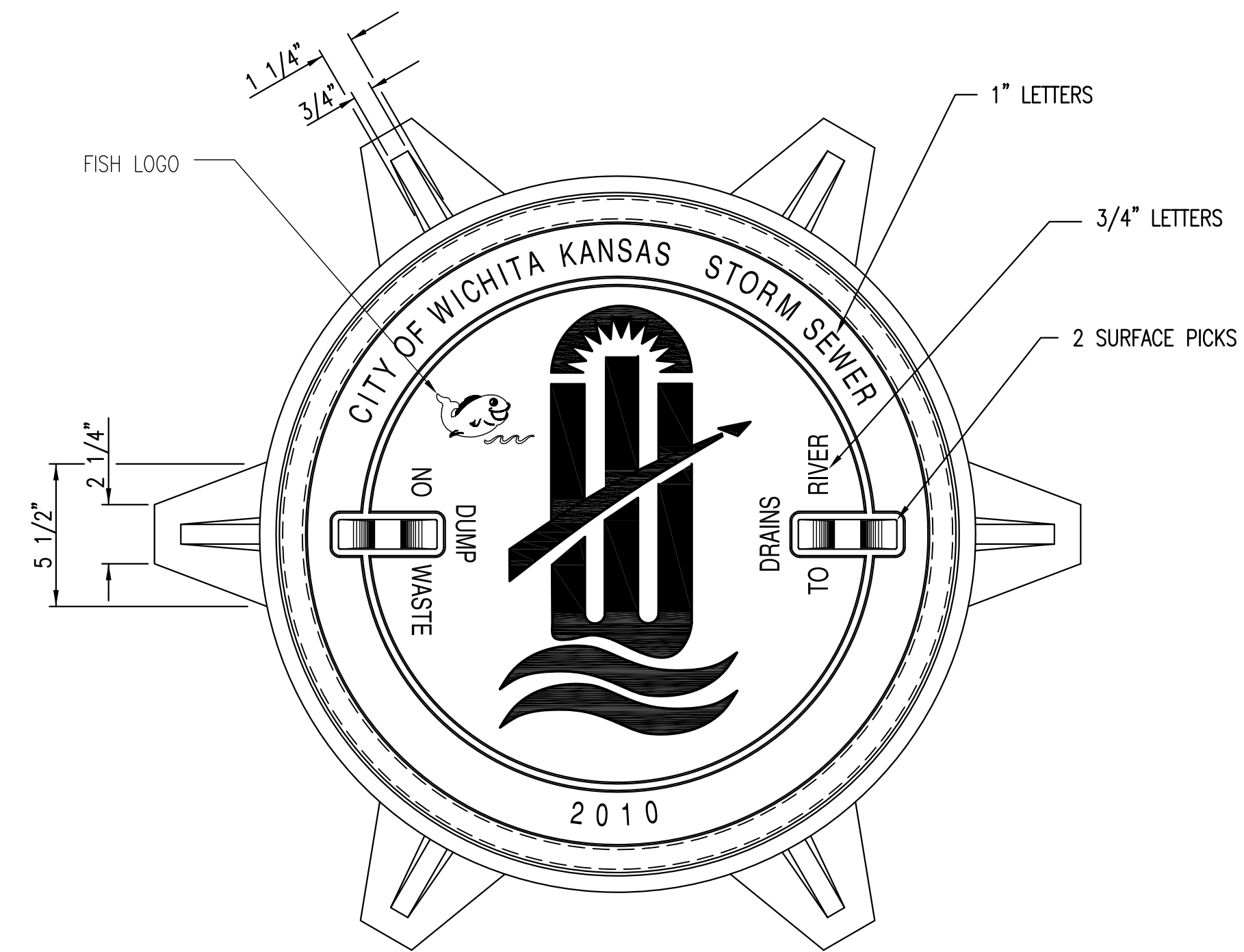
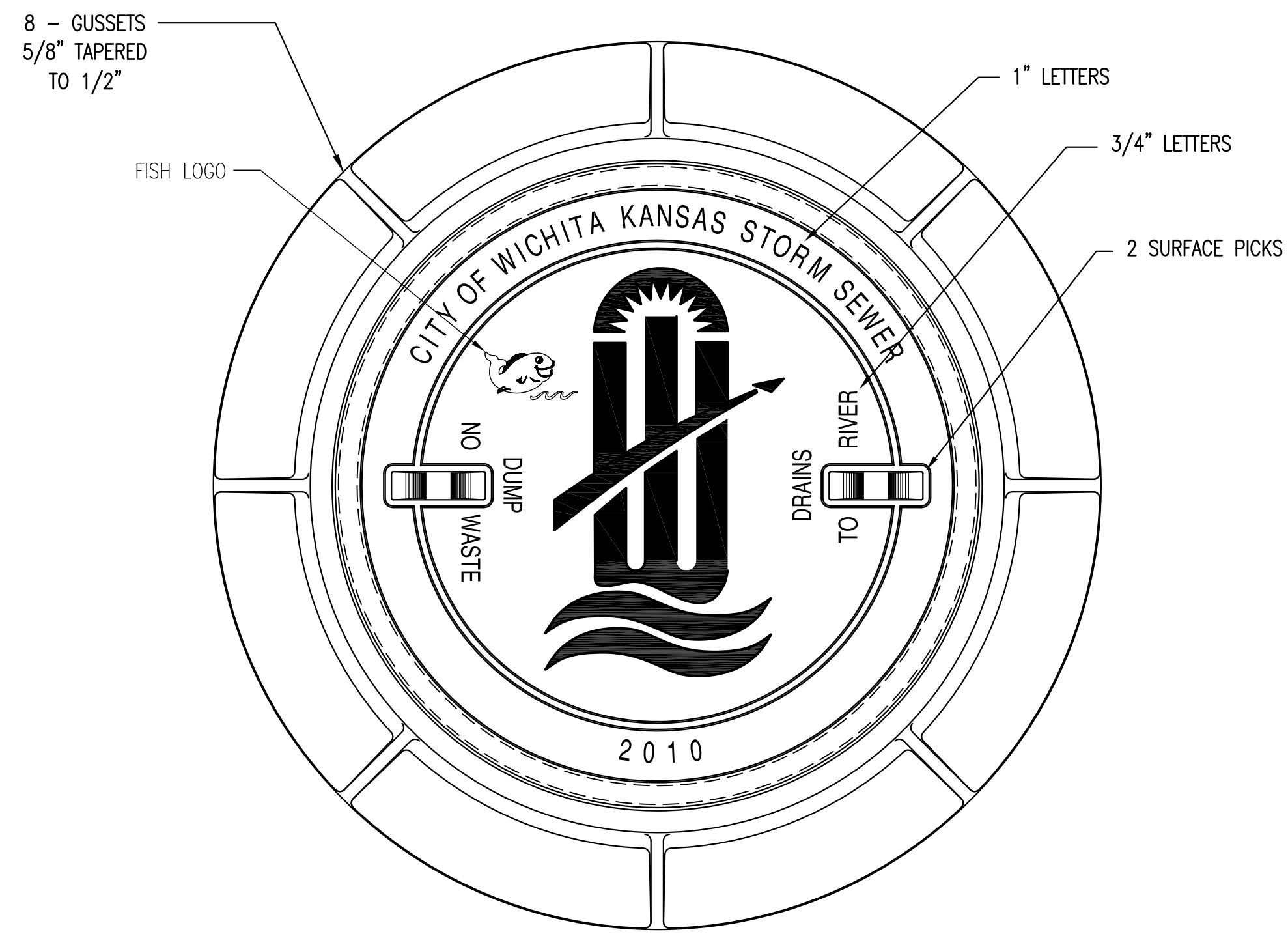


SECTION "B-B"



REINFORCED CONCRETE MANHOLE (STORM 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 7.3

REVISED: MARCH 2015

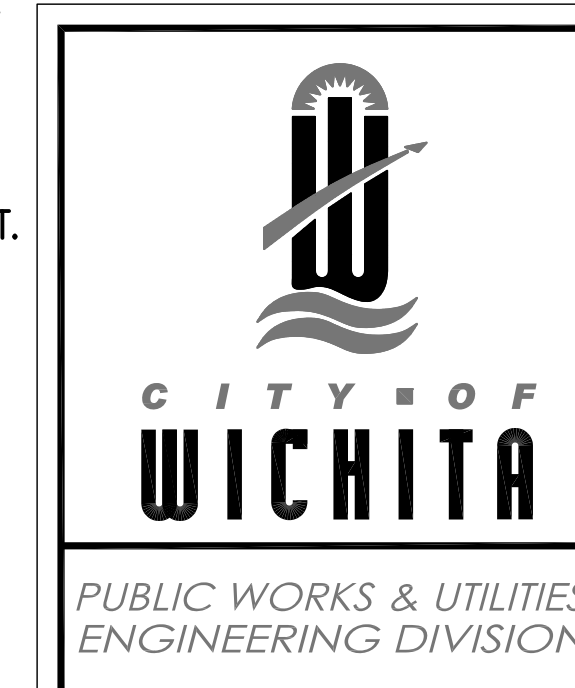


MANHOLE FRAME
DEETER #1261 OR EJIW #1936-Z1

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

INLET FRAME
DEETER #2014 OR EJIW #1936-Z4

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



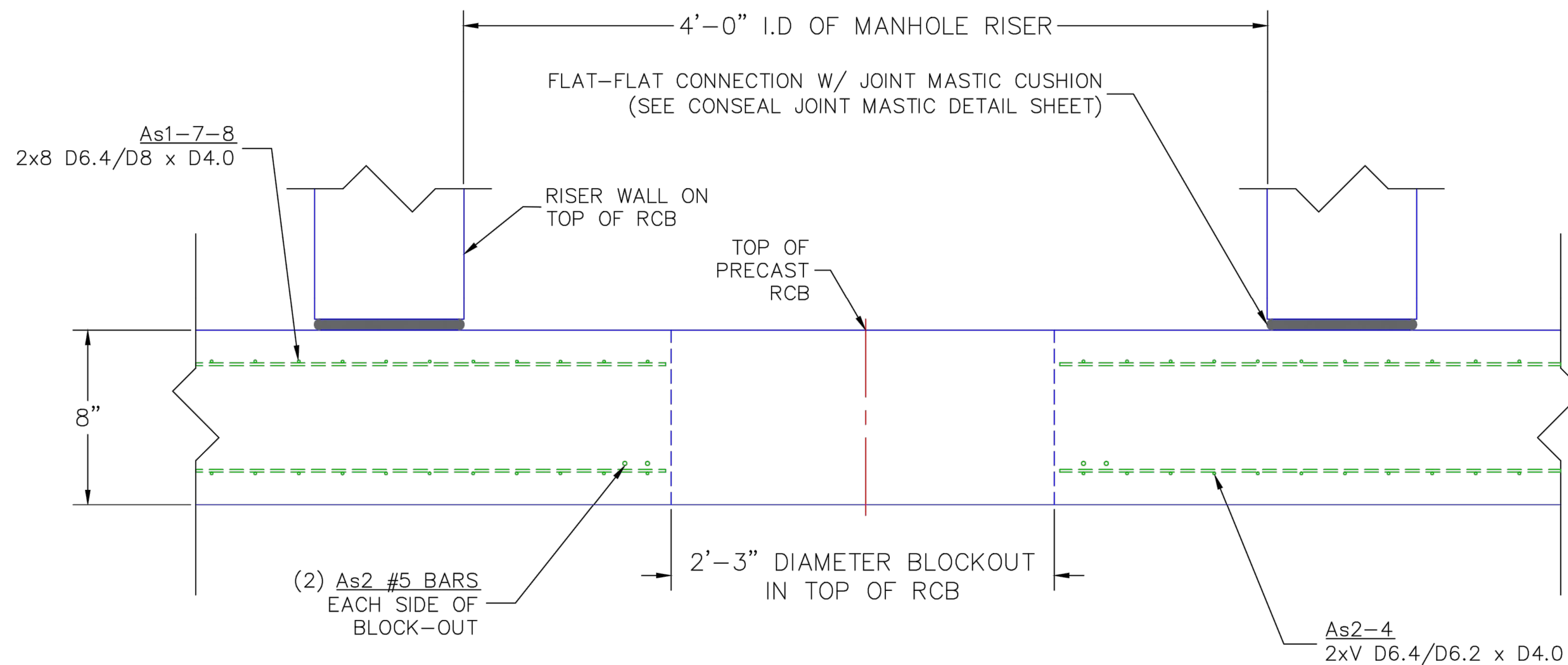
MANHOLE/INLET FRAME AND COVER (STORM SEWER)		
CITY ENGINEER GARY JANZEN, P.E.		
PROJECT NUMBER	OCA NUMBER	DATE 11/2010
CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		SHEET 7.4

NOTE:

CONTRACTOR TO PLACE INLET RISER WALLS ON 2 STRIPS OF 1-1/2" JOINT MASTIC (CS-102) WHICH WILL SERVE AS A CUSHION BETWEEN THE TWO CONCRETE SURFACES AND HELP HOLD THE INLET RISER IN PLACE DURING THE BACKFILLING PROCESS. THE CONTRACTOR SHALL TAKE SPECIAL CARE WHILE BACKFILLING AROUND THE INLETS TO PREVENT ANY MOVEMENT OF THE INLET. THE BACKFILL SHALL BE PLACED IN UNIFORM LIFTS AND HAND TAMPED TO AVOID ANY SIGNIFICANT SOIL PRESSURE DIFFERENTIALS ON ANY ADJACENT SIDES OF THE INLET.

PRECAST RCB RISER OPENING DETAIL

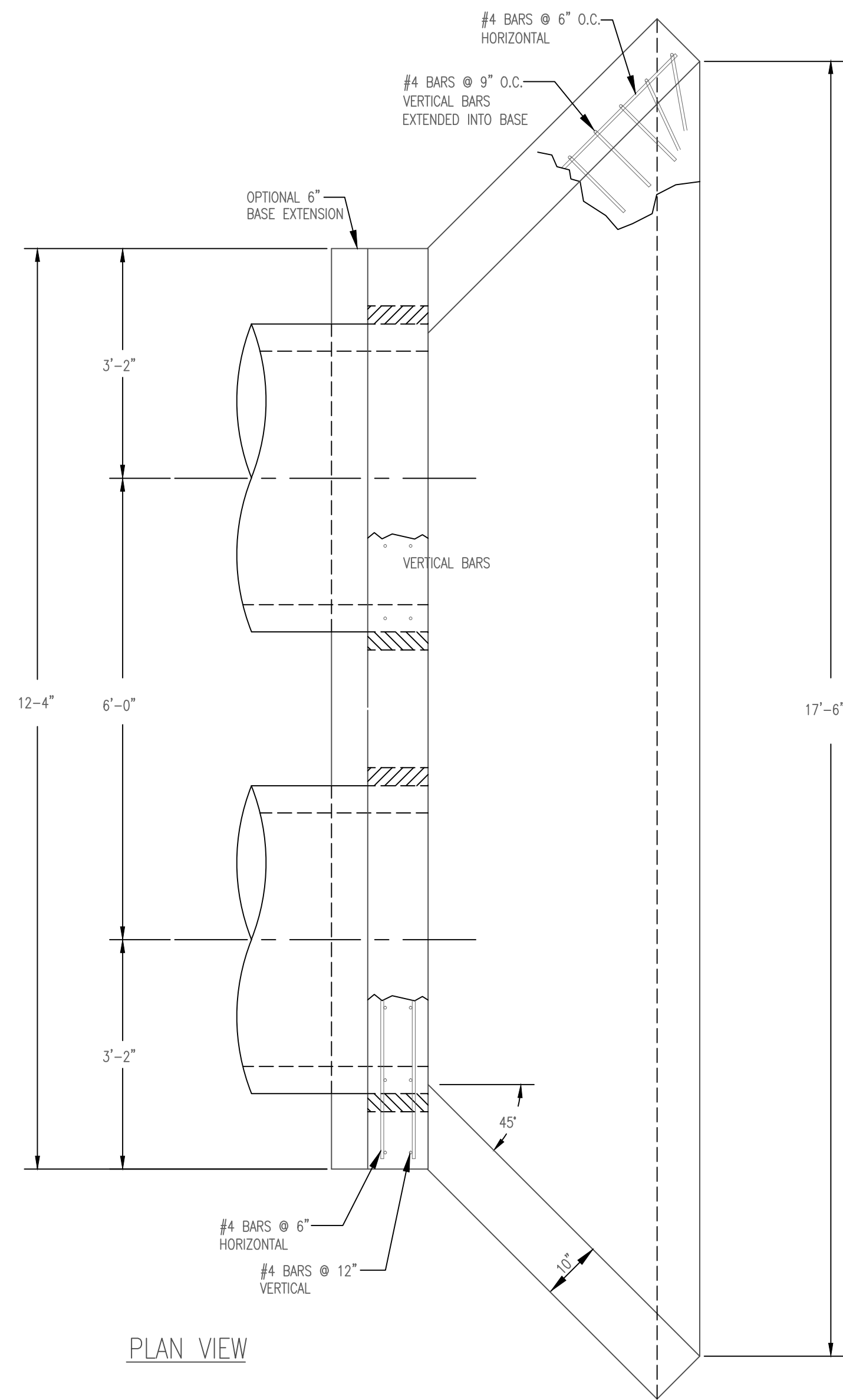
TYPICAL FOR ALL RISER OPENINGS



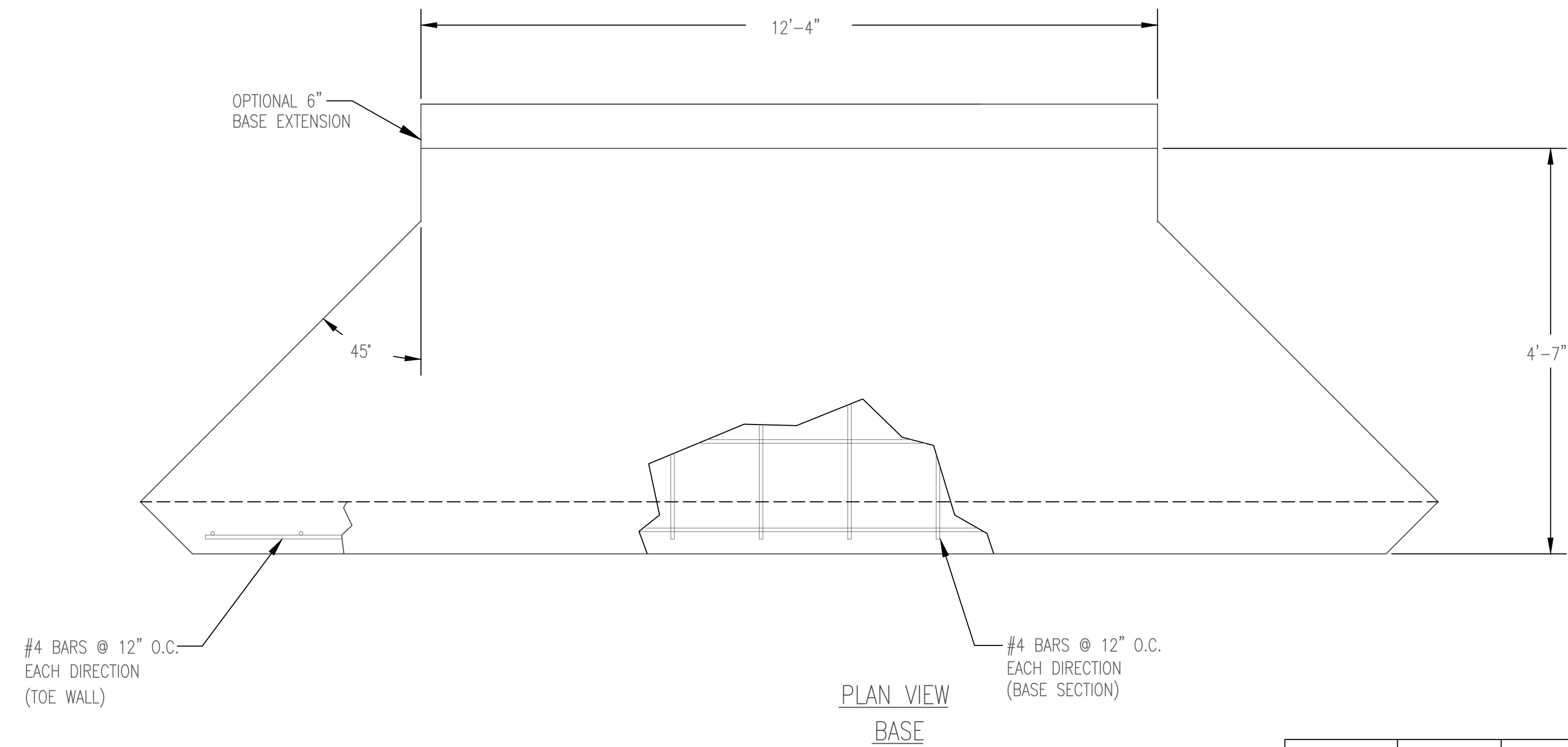
TYPICAL RCB RISER OPENING DETAIL
PROFILE VIEW

Dold Foods
MH Riser Connection
Wichita, Kansas

KEMILLER ENGINEERING PA 117 E. Lewis, Wichita, KS 67202 (316)264-0242	PROJECT NUMBER			SHEET 7.5
	KEM NO. 17151	FILE	DATE 8/2017	
	DESIGN KM	DRAWN ME	REVISED	

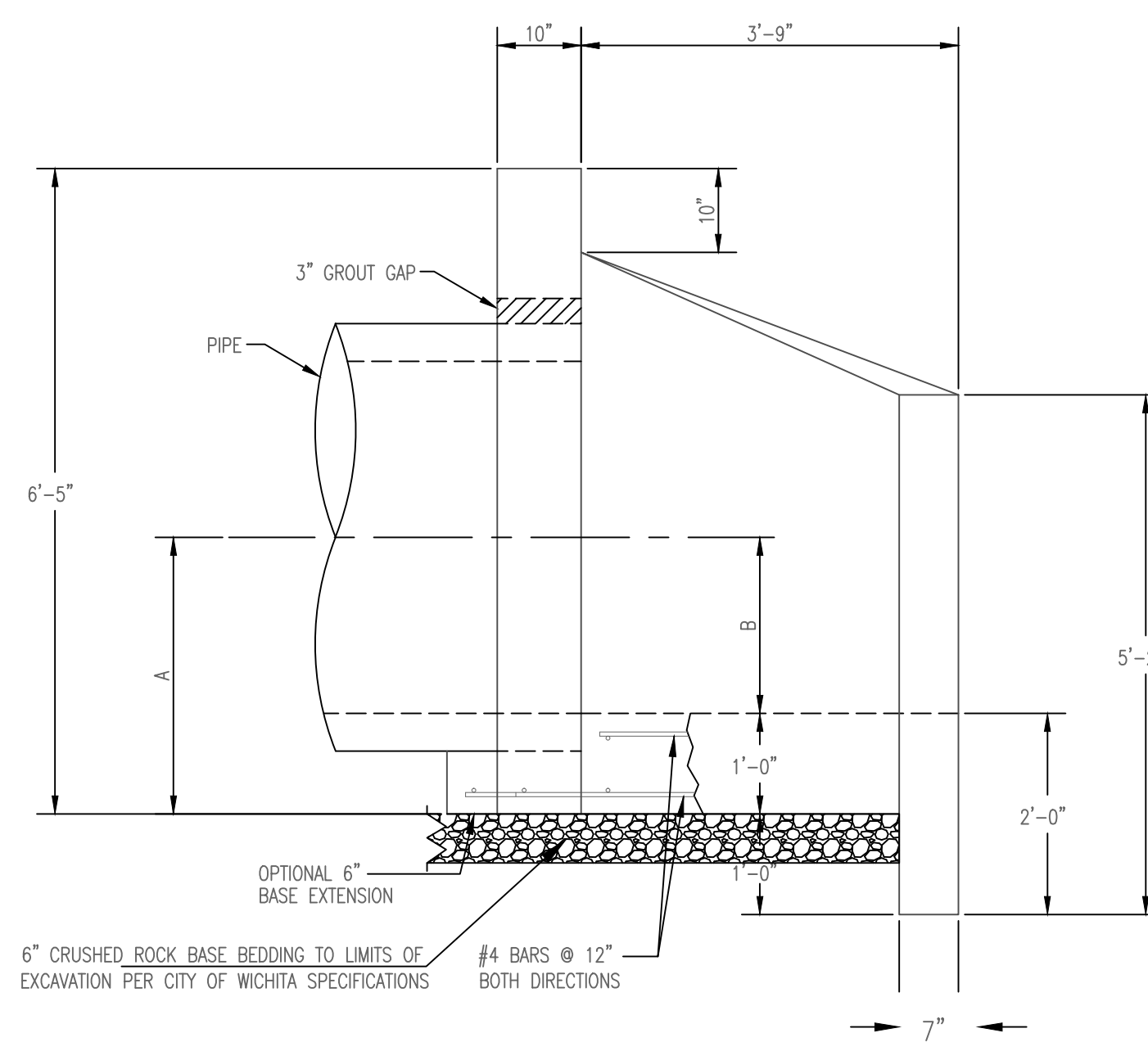


PLAN VIEW

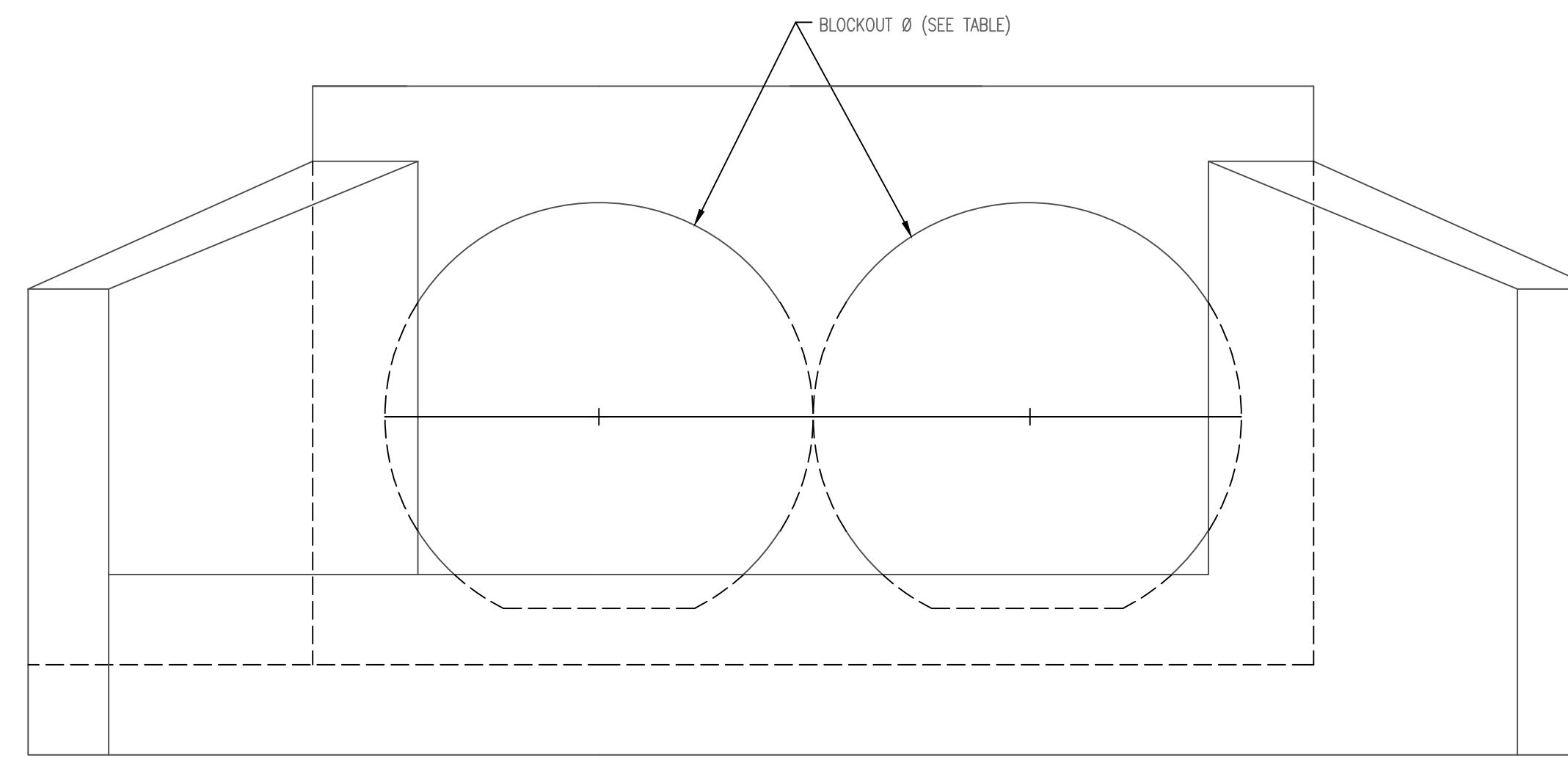


PLAN VIEW
BASE

PIPE Ø	A	B	BLOCKOUT Ø
42"	2'-9"	1'-9"	4'-9"
48"	3'-0"	2'-0"	5'-4"



ELEVATION



FRONT VIEW

HEADWALLS, AS SHOWN, WILL NOT SUPPORT FLAP GATE.

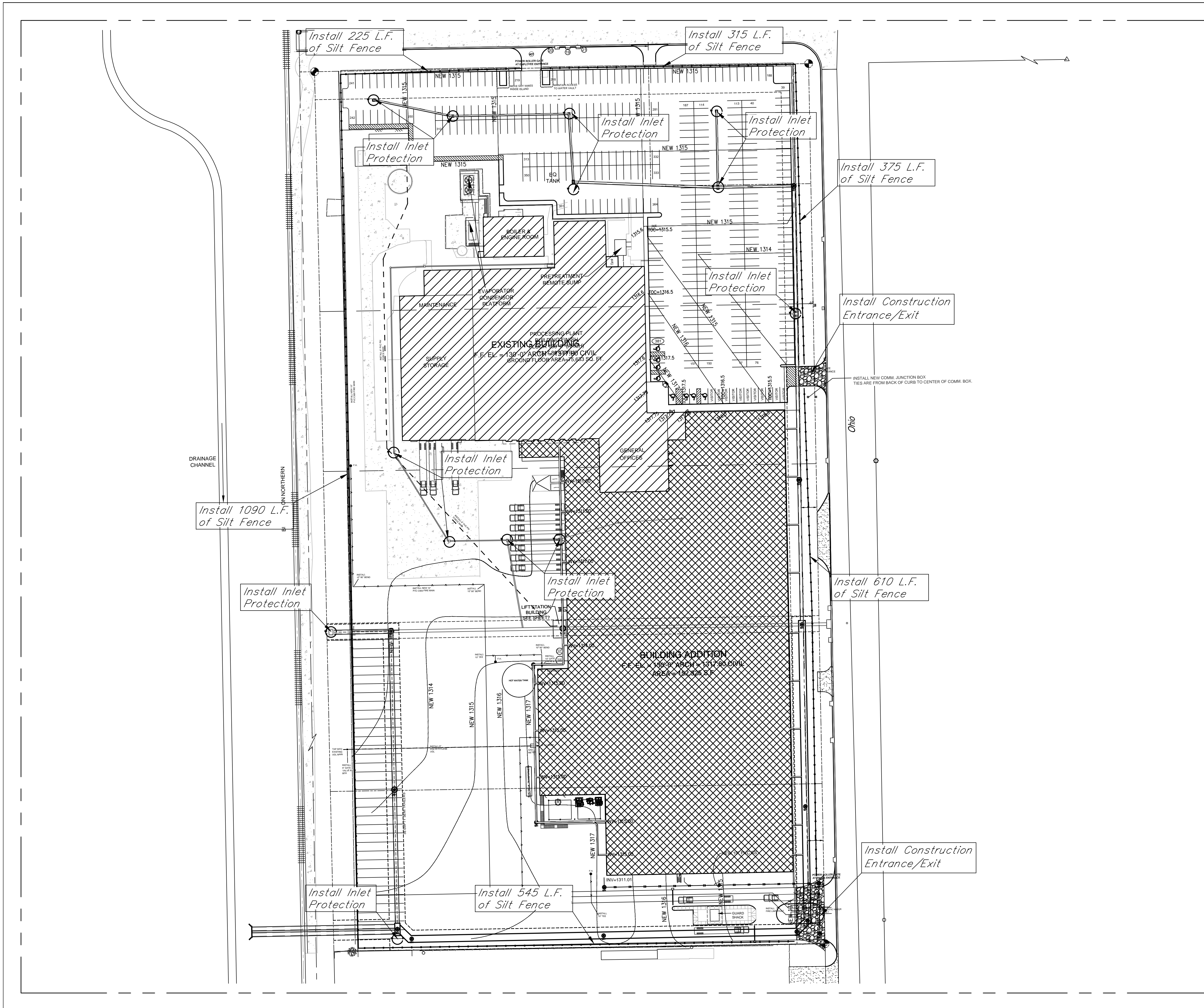
REVISED: MARCH 2015

CITY OF
WICHITA
PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

**HEADWALL DETAIL
FOR DOUBLE
42" AND 48" PIPE**

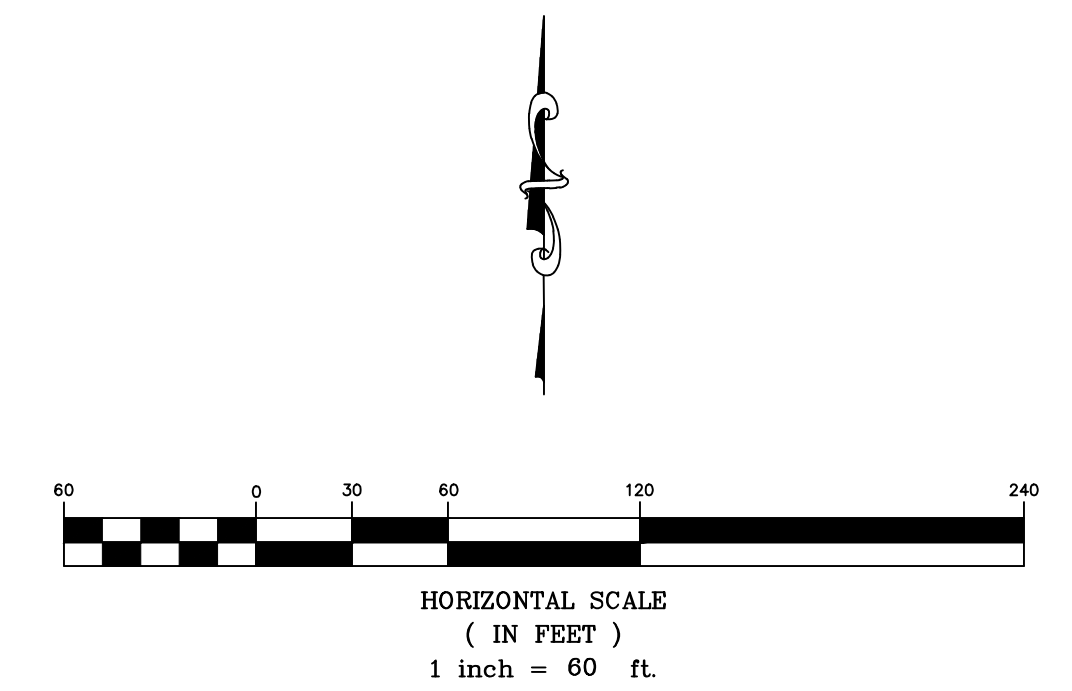
CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER	OCA NUMBER	DATE
CITY ENGINEER'S OFFICE		SHEET
CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		7.6



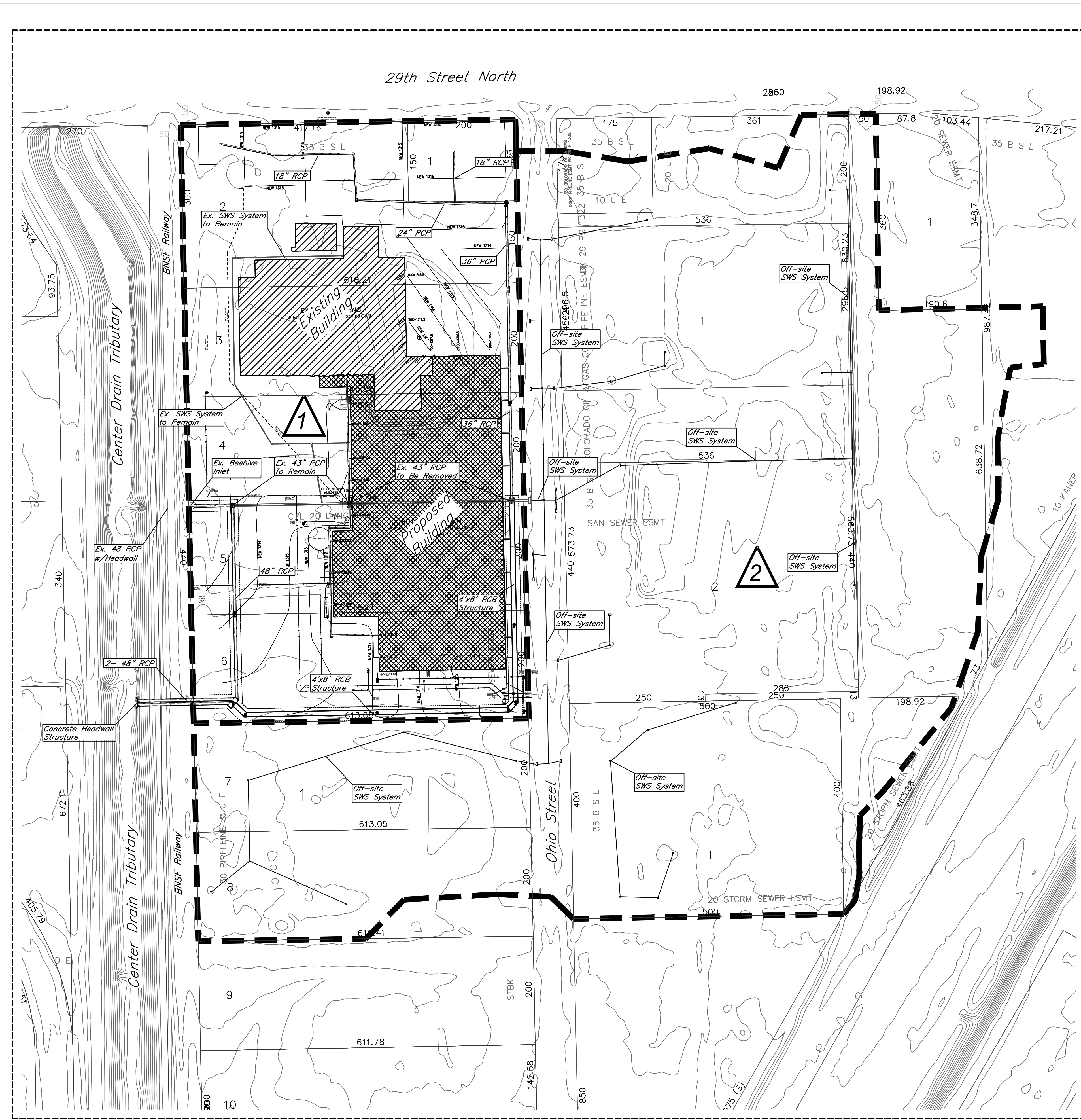
- General Notes:**
1. The BMP's shown on this sheet are considered minimum standards. Whenever sediment enters the streets, storm sewers, ditches, or ponds, contractor will install additional BMP's, as needed, to correct the problem.
 2. The soil erosion BMP's shown hereon must be in place at all times during construction until such time as the site is re-established with paving or grass.
 3. Back of curb protection can include hay bale, silt fence, Curlex barrier, or approved alternate as shown on BMP standard details. This BMP must remain in place until the area between the curb and right-of-way line has been permanently stabilized.
 4. The General Contractor is responsible for the installation and maintenance per the prevention maintenance plan.
 5. Concrete trucks will be permitted to wash out only at approved locations, then maintain and clean up as conditions require, by contractor. No hazardous materials are expected to be encountered. Any spills (diesel, fuel, oil, etc.) will be cleaned up and removed immediately. Portable toilets will be supplied and maintained at various sites along the project. Disposal of sewage will be handled by a contracting firm specializing in this activity.
 6. The above mentioned storm water prevention methods will be monitored daily and maintained as required. A weekly erosion control log will be posted in the job trailer onsite, and updated weekly. Site inspections are required within 24 hours after a precipitation event of 0.5" or greater.

- LEGEND:**
- Flow Direction
 - Inlet Protection - to be provided at all inlets subject to silt laden runoff.
 - - - Ditch Check
 - ▨ Temporary Seeding and Mowing.
 - Silt Fence or Hay Bale Barrier - to be installed along property lines where runoff from construction site can run onto other properties.
 - ▩ Stabilized Construction Entrance - to be used at all locations where vehicles or equipment enter or exit property.
 - ▨ Back of Curb Protection - to be installed whenever curb is backfilled to less than 3 inches from top and disturbed earth exists adjacent thereto. (See City Standard Details.)



Dold Foods
Erosion Control Plan
Wichita, Kansas

	PROJECT NUMBER		
	KEM NO. 17151	FILE	DATE 8/2017
117 E. Lewis, Wichita, KS 67202 (316)264-0242	DESIGN KM	DRAWN ME	REVISD
			8.0



Project Narrative:
 The Proposed Re-development is located south of 29th St N and west of Ohio Street. The site is currently partially developed with industrial development on the north part of the property. The existing drainage pattern indicates that the site drains to the west to existing SWS system that carries the runoff under the adjacent railroad and into the Center Drain Tributary. This will remain the same in developed condition with the addition of a second access point to the channel south of the existing. The scope of the project is to construct a new building addition, a parking lot, and SWS system.

Water Quality and TSS Removal Calculation:

Water Quality Volume (WQV) Calculation				
Calculation for water quality volume (WQV=P*Rv*A/12)			Soil Group 'D'	
85th percentile storm event (1.2 inches), P =	1.20	inches	Calculation of Rv	
Total area, A =	15.50	acres	Coeff.	Area
Rainfall Coeff, Rv, =	0.812	cf	Coeff for undisturbed area, R _{VU} =	0.03 2.33
Required Vol. for Water Quality =	1.259	ac-ft	Coeff for turf cover, disturbed, R _{VT} =	0.20 0.00
Corresponding Water Quality Peak Flow =	12.22	cfs	Coeff for impervious area, R _{VI} =	0.95 13.18
			Weighted, Rv =	

Total water quality flow needs to be treated for proposed development. The WQV and water quality flow will be treated by use of credits from the City of Wichita's Off-site BMP Program.

Runoff Calculations (2-, 5-, 10-, 25-, and 100-yr)

EXISTING CONDITION:
 Total Area A = 45.50 acres, Surface Type = Partially Developed Soil Group =D

EXISTING SITE									
DRAINAGE AREA	ACRES	Tc min	CN	Q2	Q5	Q10	Q25	Q100	REMARKS
On-site (1)	15.50	15.0	93	69.57	81.65	19.38	97.11	126.12	Runoff from existing site flowing east to ex. Beehive structure
Off-site (2)	30.00	23.1	93	81.11	108.34	127.27	151.49	196.91	Off-site underground drainage system routed to ex. Beehive structure

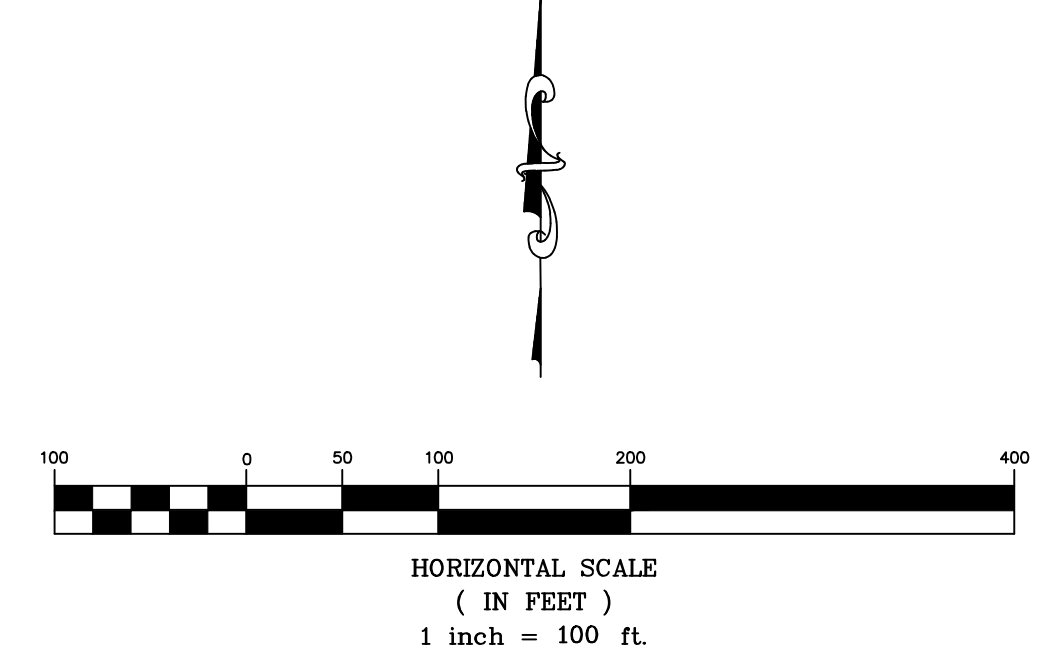
DEVELOPED CONDITION:
 Total Area, A = 45.50 acres, Total Impervious Area = 32.76 acres (72% impervious)
 Hydrological Soil Group =D

DEVELOPED SITE									
DRAINAGE AREA	ACRES	Tc min	CN	Q2	Q5	Q10	Q25	Q100	REMARKS
On-site (1)	15.50	15.0	98	56.83	73.74	85.53	100.65	129.14	Runoff from on-site area routed through proposed SWS system
Off-site (2)	30.00	23.1	93	81.11	108.34	127.27	151.49	196.91	Off-site underground drainage system merging with proposed system

PROPOSED OUTFALL:
 Runoff will be routed to the adjacent drainage channel under the existing railroad line, by 3-48" RCP, the existing 48" pipe as well as 2 additional 48" pipes that are to be installed at the south end of the property.

PEAK OUTFLOW							
DRAINAGE AREA	ACRES	Q2	Q5	Q10	Q25	Q100	REMARKS
Areas (1&2)	45.50	118.04	157.73	185.33	220.62	286.84	Entire Drainage Basin Post-Development

- Notes:**
- Existing and developed flows are calculated using the SCS Hydrograph method. "CN" & "T" values are established from "City of Wichita Stormwater Design Manual."
 - The developed peak flows are routed through the proposed 4'x8' box structure, and under the existing railroad line through 3-48" RC Pipes.
 - Detention is not required as the property is less than 10% of the total drainage area of the adjacent channel (Center Drain Tributary) > 0.05M.
 - The site is not in designated 100-yr floodplain (FIRM 2017C0352C, Revised, December 22, 2016)

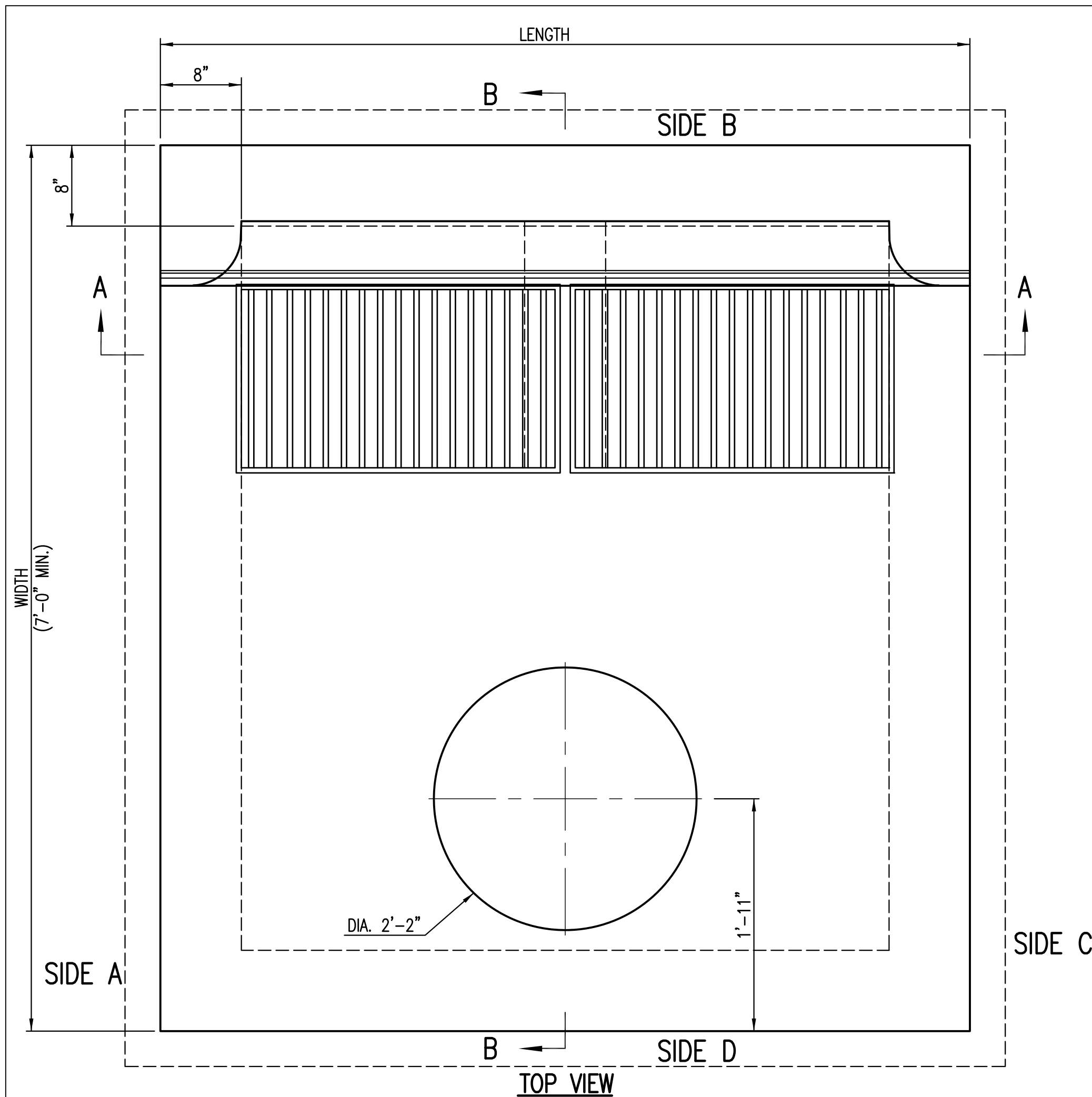


- 1 On-site drainage basin, Area = 15.50 acres
- 2 Off-site drainage basin, Area = 30.00 acres
- Drainage Basin Boundary

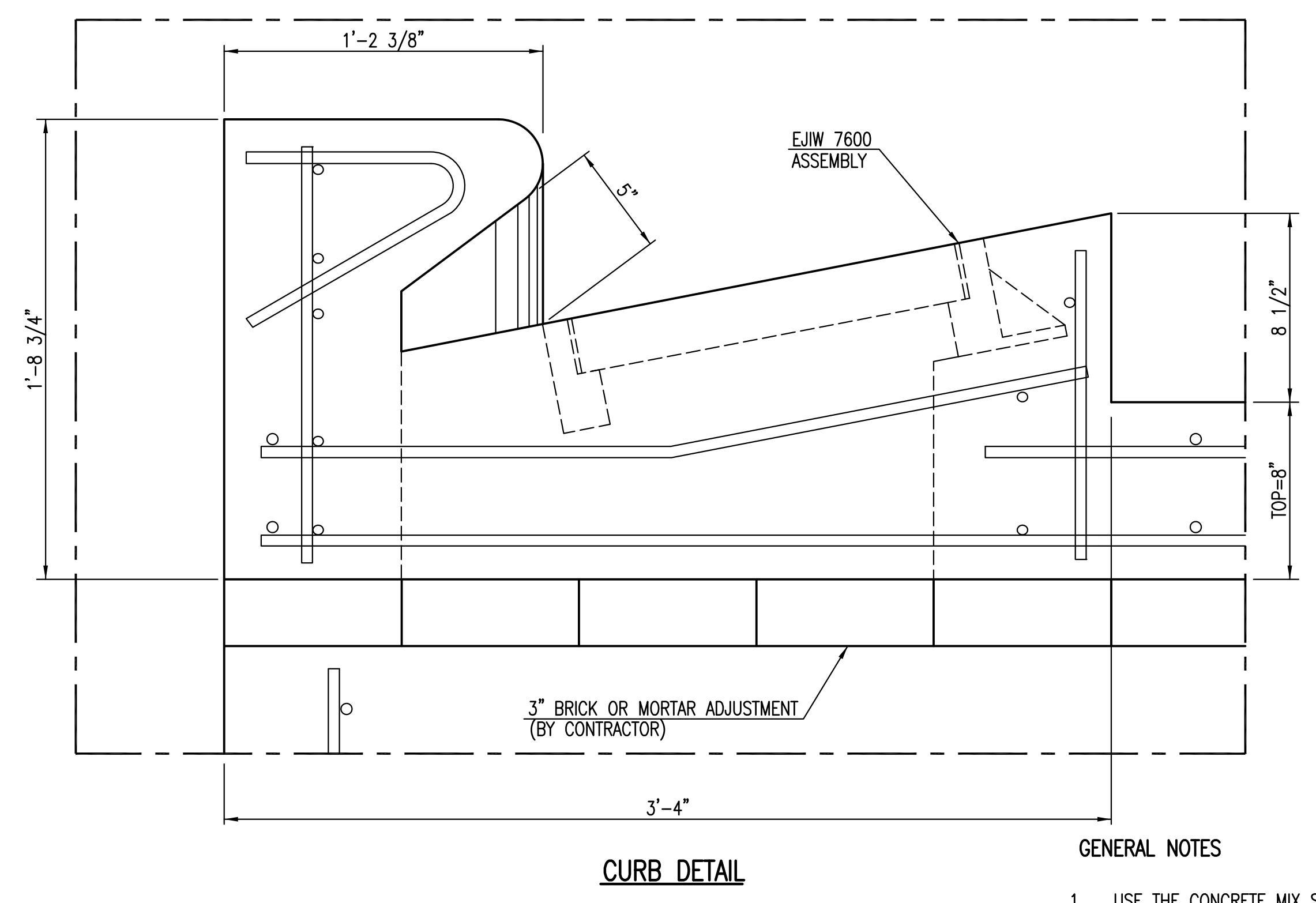
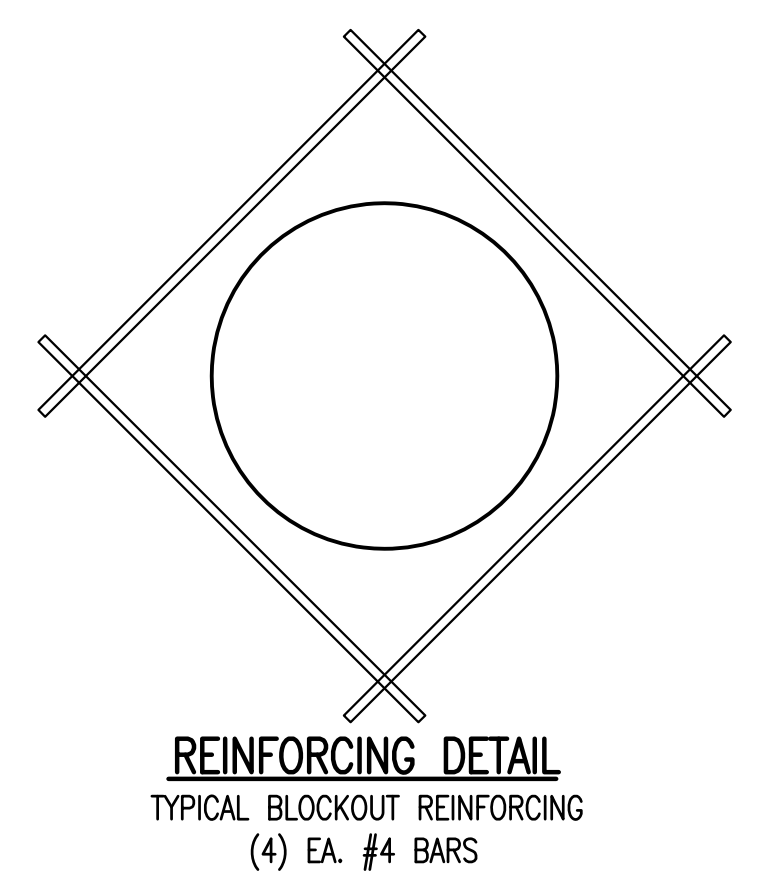
**Dold Foods
 Drainage Plan
 Wichita, Kansas**

PROJECT NUMBER

KEMILLER ENGINEERING PA 117 E. Lewis, Wichita, KS 67202 (316)264-0242	KEM NO. 17151	FILE	DATE 8/2017	9.0
	DESIGN KM	DRAWN ME	REVISED	

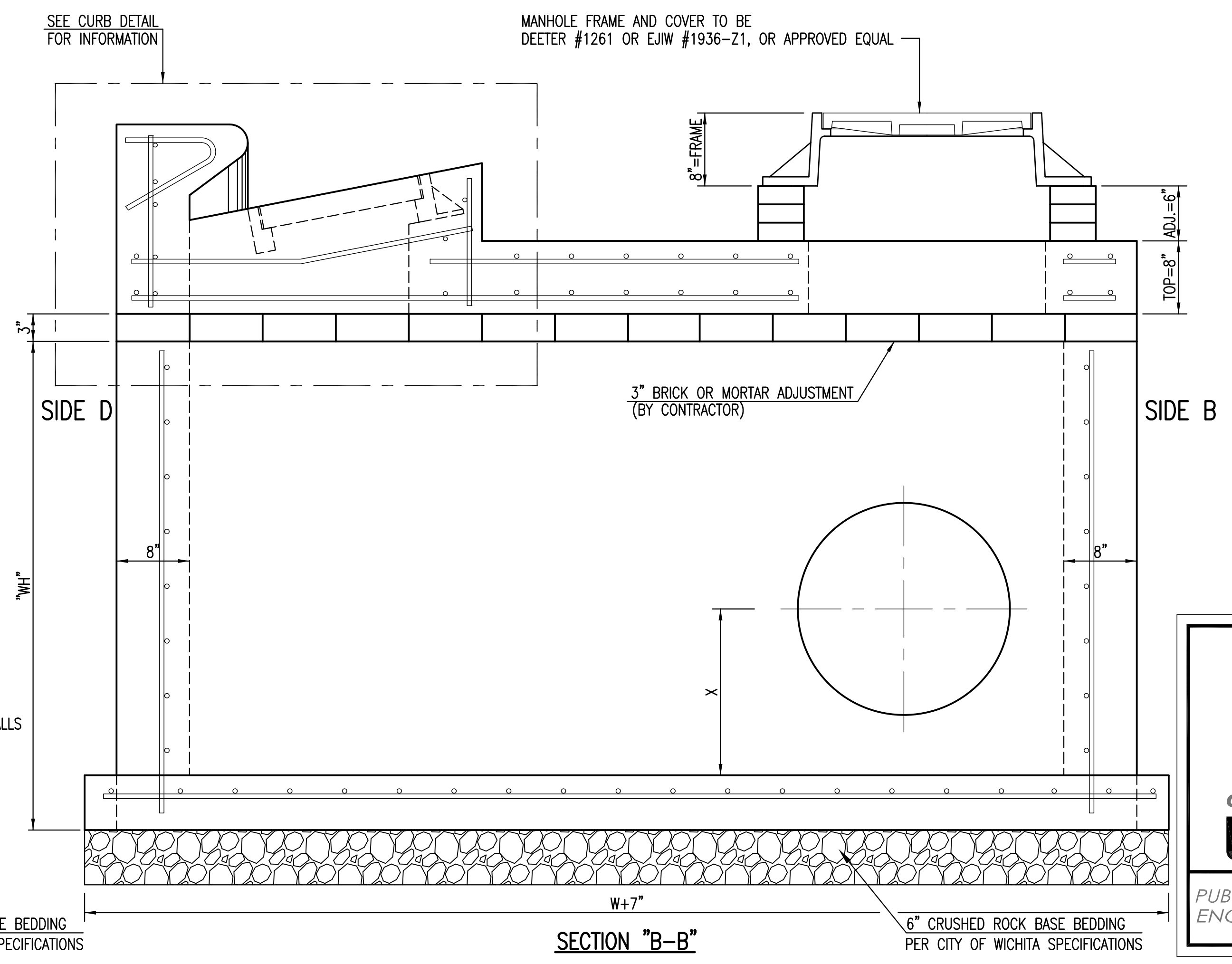
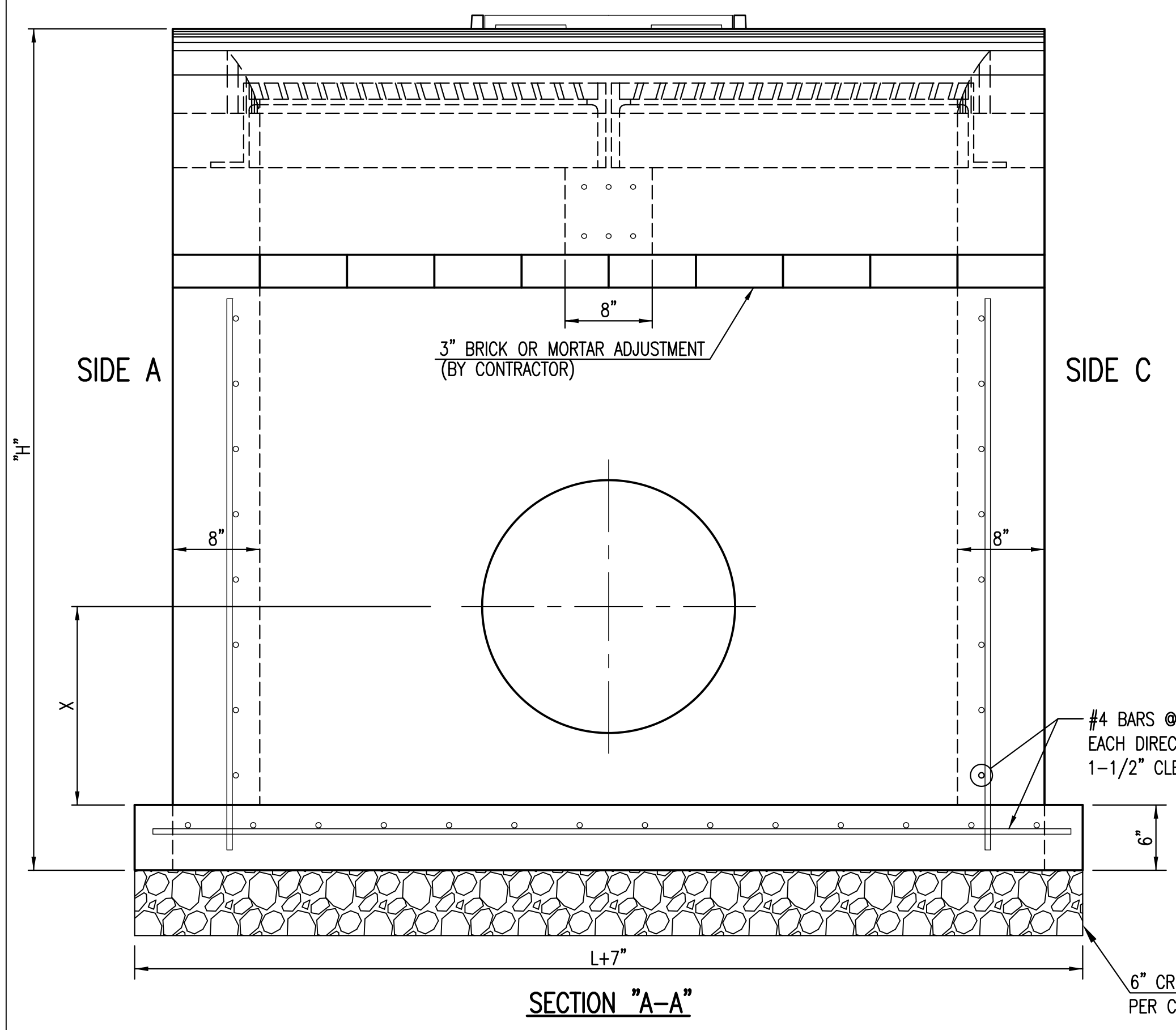


****ALL REINFORCING TO BE #4 BARS @ 6" O.C.**

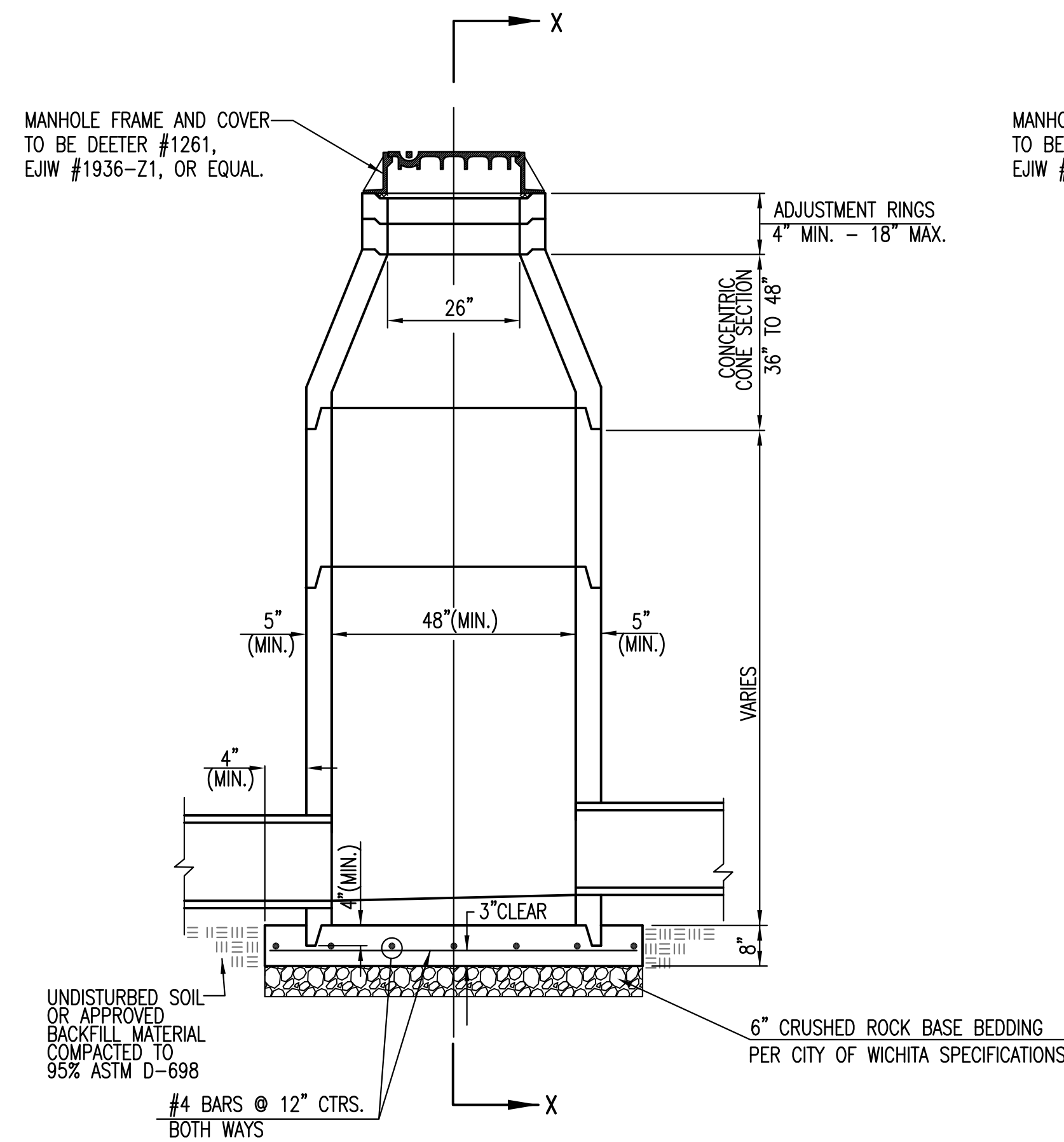


GENERAL NOTES

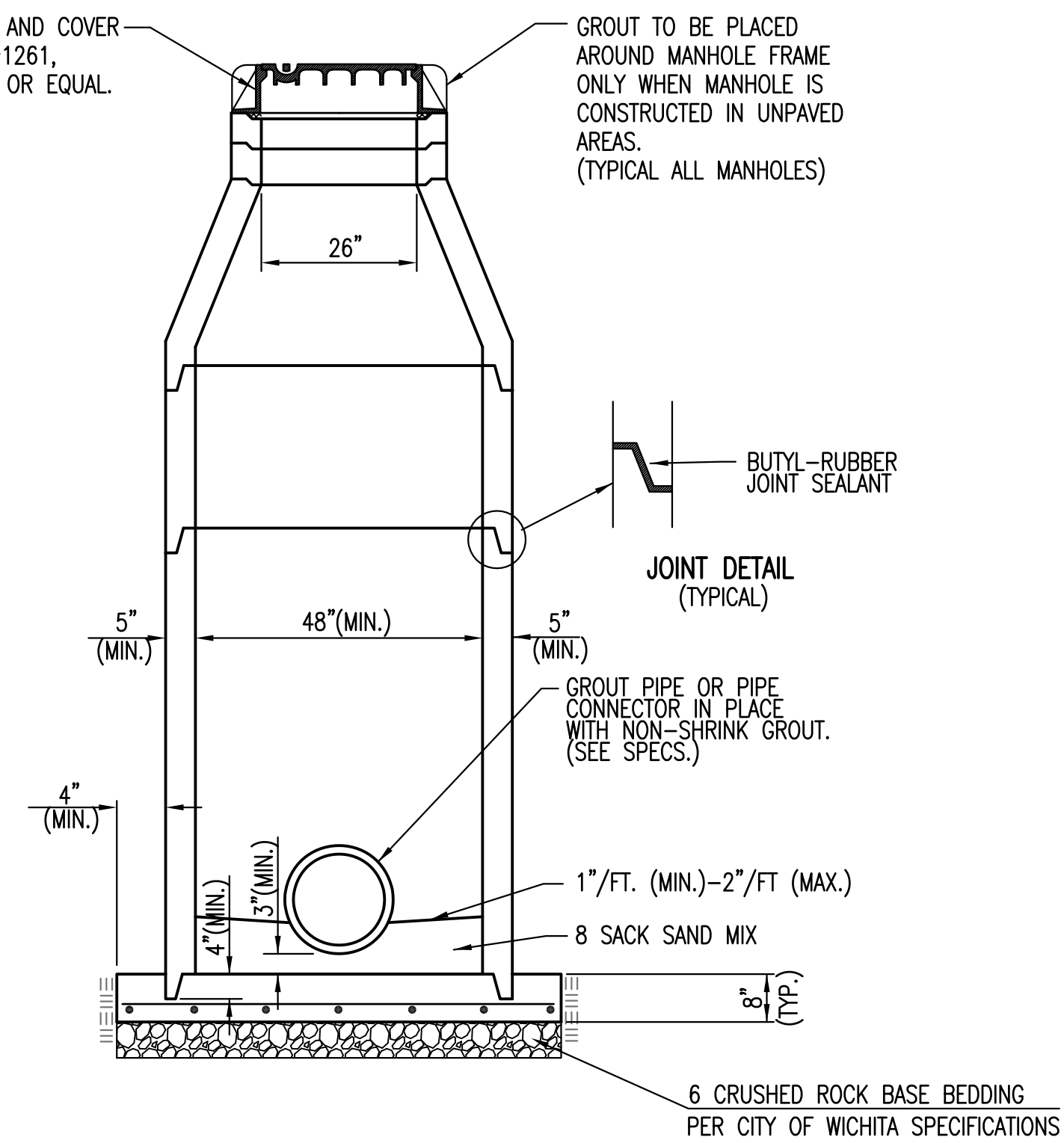
1. USE THE CONCRETE MIX SPECIFIED FOR THE CITY OF WICHITA CONCRETE PAVEMENT THROUGHOUT. ALL EXPOSED EDGES SHALL BE FINISHED WITH AN EDGING TOOL. REINFORCING BARS SHALL BE BENT AROUND PIPE.
2. INLET/MANHOLE INVERT SHALL BE SHAPED WITH 8 SACK MIX CONCRETE TO CREATE FLOW CHANNELS AND TO INCREASE HYDRAULIC EFFICIENCY SUCH THAT THE INLET WILL BE SELF CLEANING BETWEEN ALL INLET AND/OR OUTLET PIPES.
3. ALL BARS ARE #4 WITH 6" SPACING AND SHALL HAVE A MINIMUM CLEARANCE OF 1 1/2" UNLESS OTHERWISE NOTED ON THE PLANS.
4. NO DEDUCTIONS WILL BE MADE IN PAY LENGTH OF CURB, GUTTER, OR CURB AND GUTTER THROUGH THE INLET AREA.
5. USE DEETER FOUNDRY, INC. CASTING NO. 2442/43 OR EJW 7600Z LEFT SIDE, 7600 RIGHT SIDE IN INLET FRAME AND GRATE WITH STYLE H GRATE. INLET FRAME TO BE PROOF LOAD TESTED TO 40,000 LBS. ON UNSUPPORTED SIDE.
6. RING AND COVER SHALL BE DEETER #1261 OR EJW #1936-Z1, OR APPROVED EQUAL, SEE SW-303.
7. REINFORCING BARS SHALL BE CUT OR BENT AROUND PIPES. NO DEDUCTION IN CONCRETE QUANTITIES SHALL BE MADE FOR PIPE OPENINGS.
8. THE VANES OF THE GRATE SHALL BE ORIENTED WITH RESPECT TO THE FLOW ARROWS SHOWN ON THE PLANS.
9. AROUND INLET/MANHOLE OPENING IN TOP SLAB USE #5 BAR @ 45° ANGLE TO OTHER BARS. LENGTH = MH OPENING + 2'-0"
10. CONTRACTOR SHALL REMOVE LIFTING HOOKS AFTER INSTALLATION. RECESSES IN INLET/MANHOLE WALL SHALL BE GROUTED FLUSH TO THE INLET/MANHOLE WALL WITH HYDRAULIC CEMENT AFTER THE INLET/MANHOLE IS IN PLACE. LIFTING HOLES THRU THE INLET/MANHOLE WALL WILL NOT BE ACCEPTED.



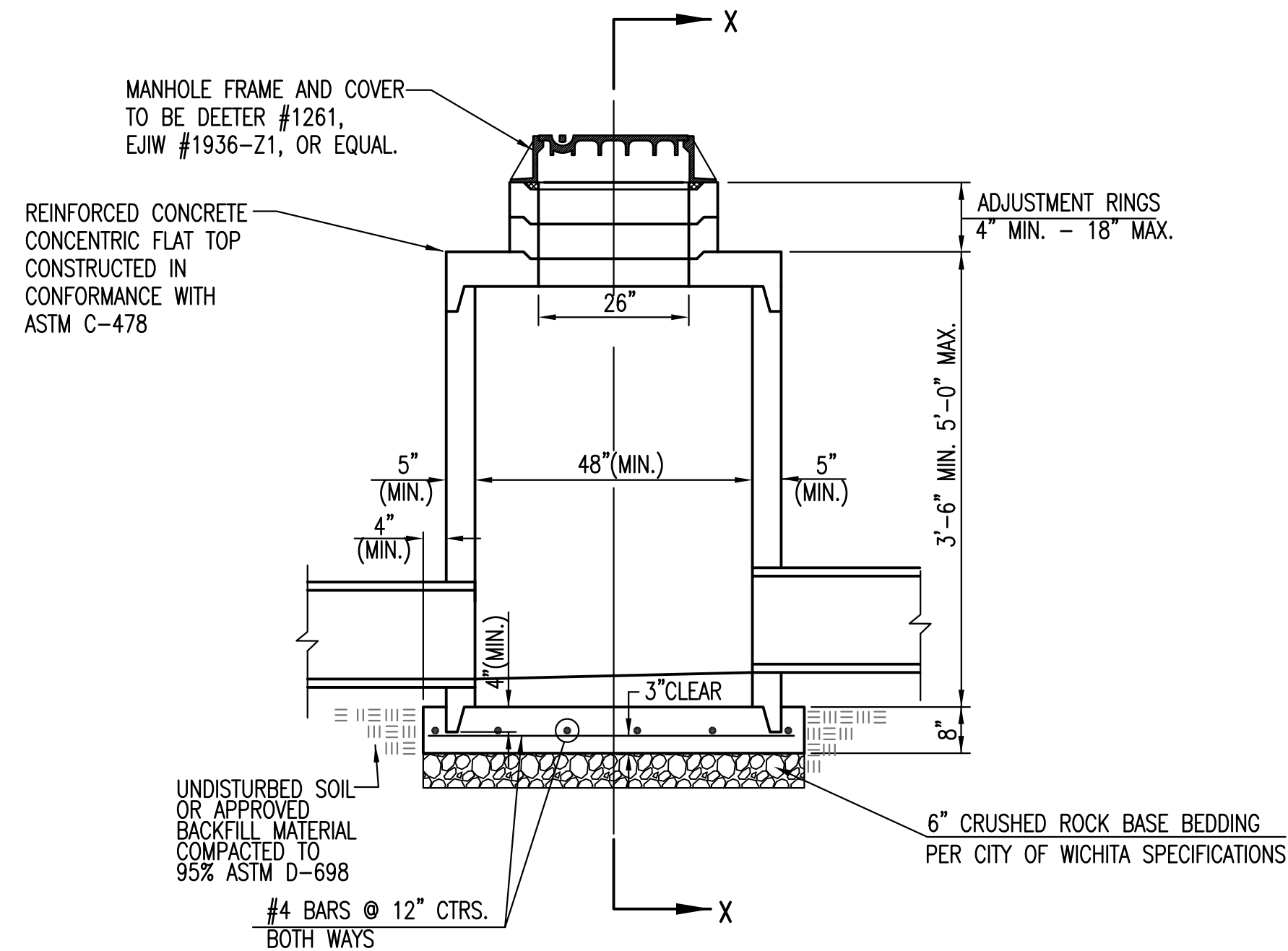
SPECIAL TYPE II INLET/MANHOLE		
CITY ENGINEER GARY JANZEN, P.E.		
PROJECT NUMBER	OCA NUMBER	DATE 11/2010
CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		SHEET



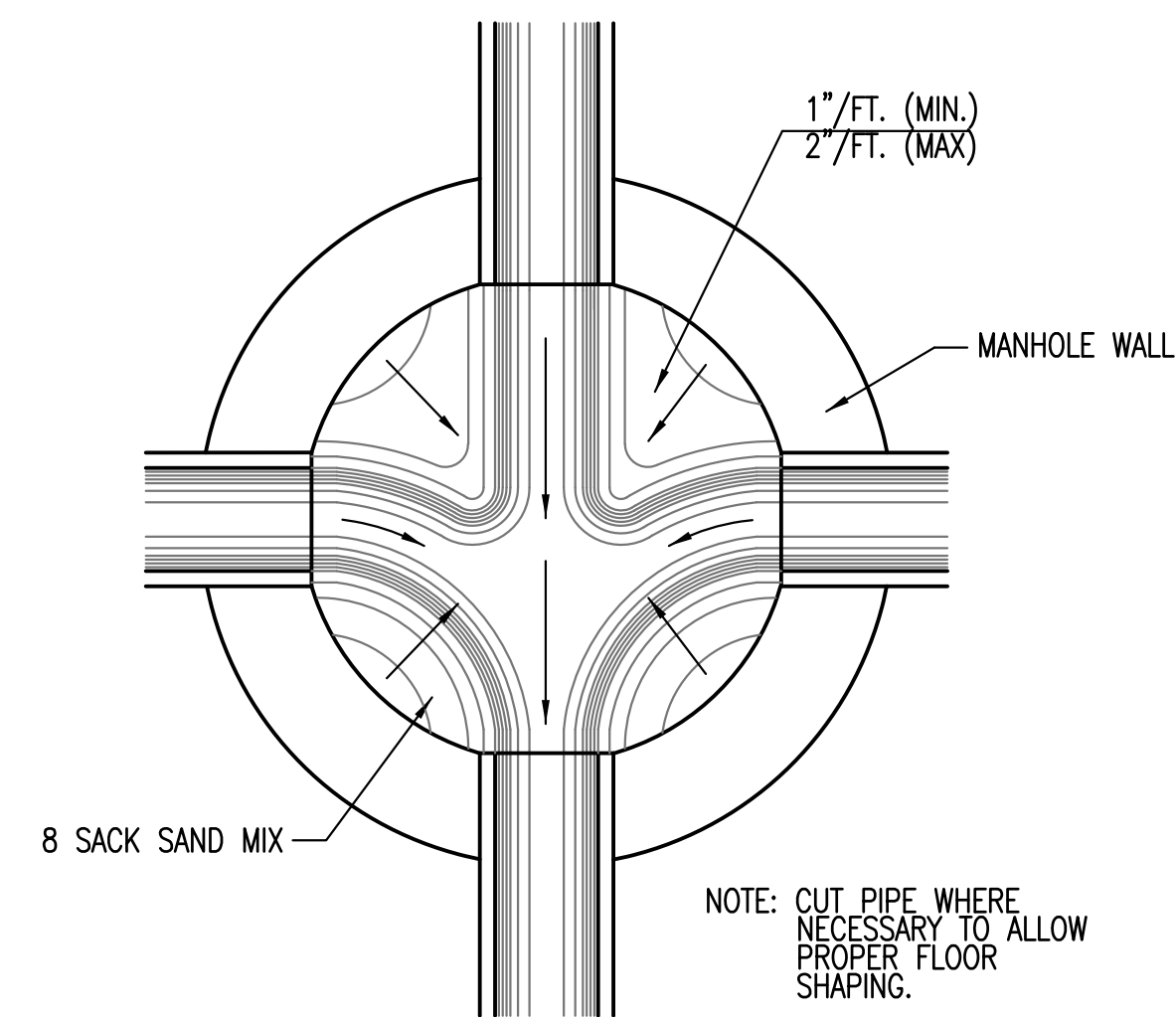
PRECAST STANDARD MANHOLE TYPE "A"



SECTION X-X (TYPICAL)



PRECAST SHALLOW MANHOLE TYPE "B"



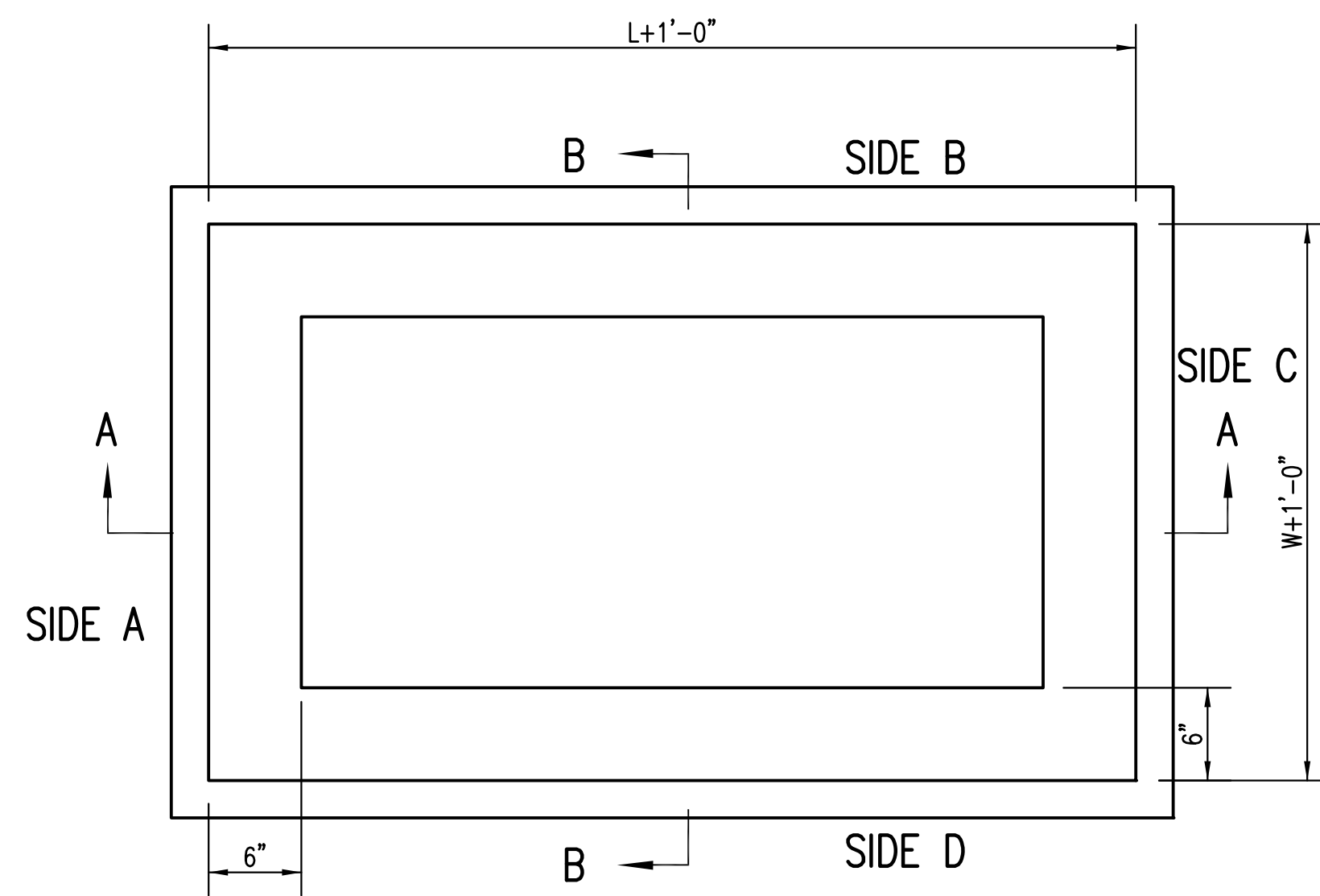
TYPICAL MANHOLE FLOOR SHAPING

GENERAL NOTES

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

CITY OF WICHITA
PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

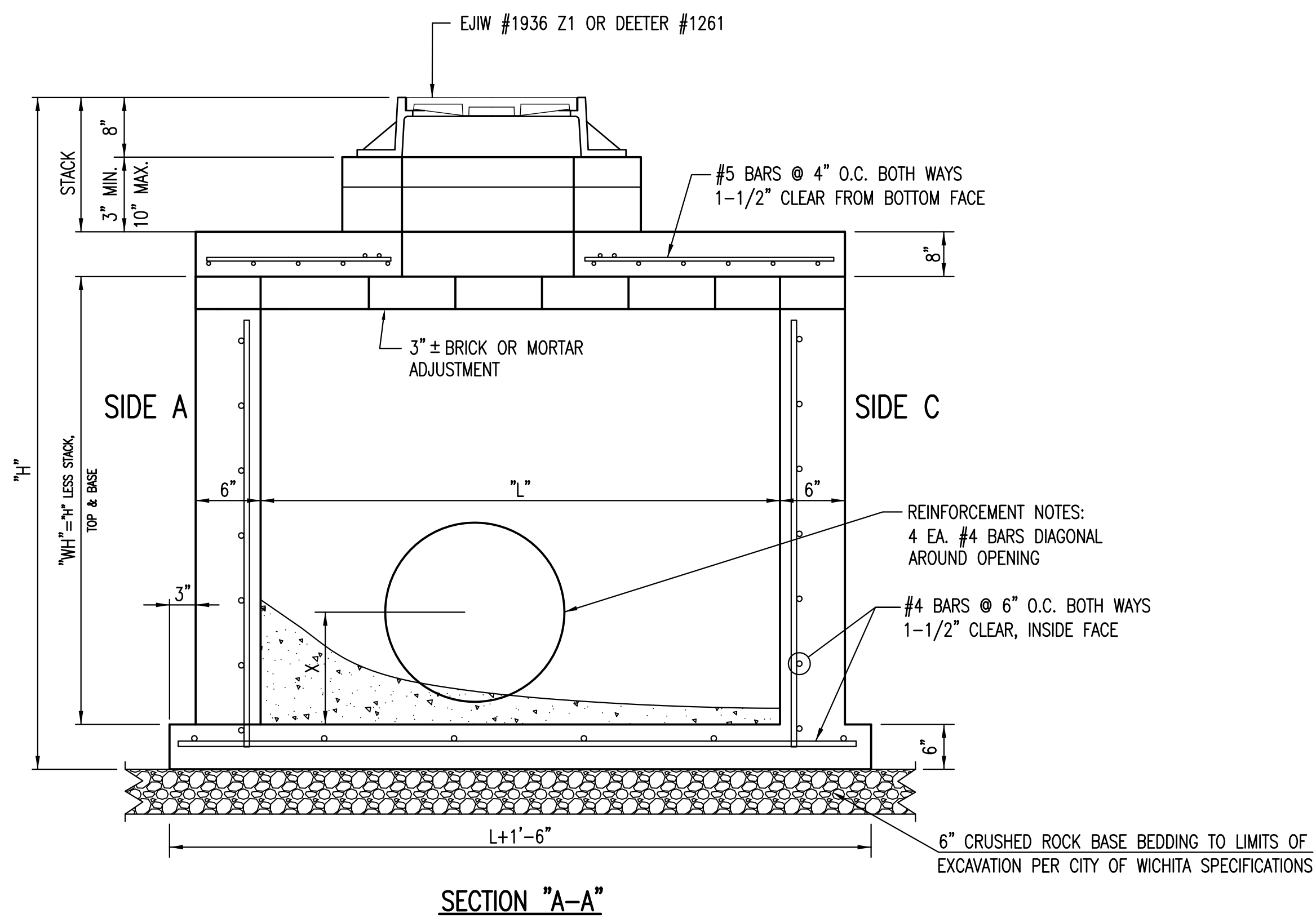
PRECAST CONCRETE MANHOLE (STORM SEWER)		
CITY ENGINEER GARY JANZEN, P.E.		
PROJECT NUMBER	OCA NUMBER	DATE 11/2010
CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		SHEET 7.2



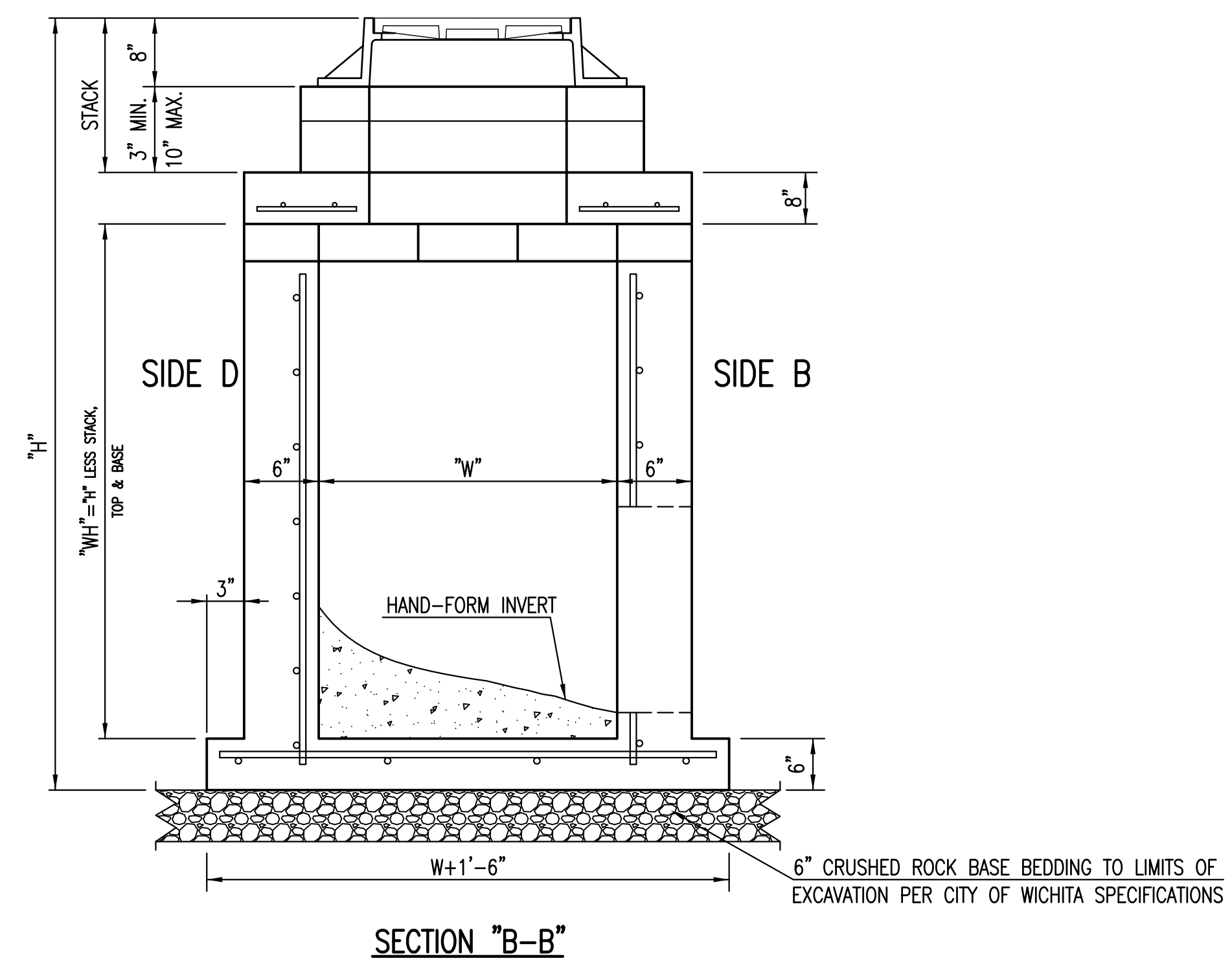
TOP VIEW

GENERAL NOTES

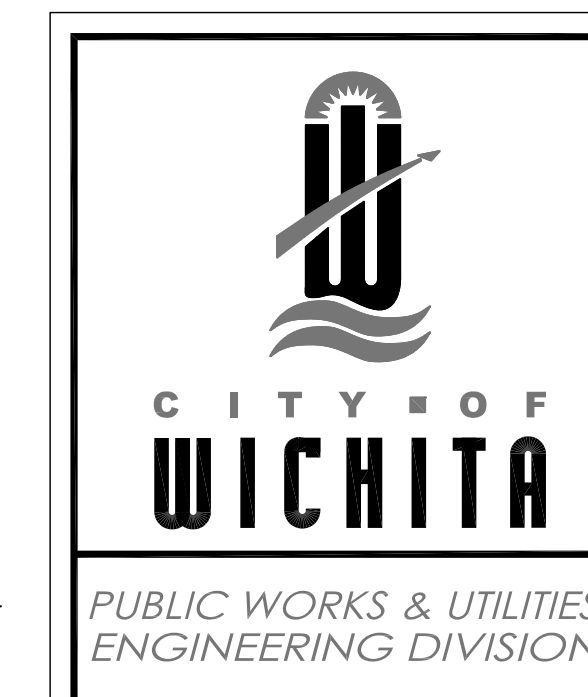
1. GRATE FRAME TO BE INSTALLED ON THIN MORTAR CUSHION TO INSURE FULL SUPPORT ALONG BRICK. CONCRETE USED FOR INLET CONSTRUCTION SHALL CONFORM TO CITY OF WICHITA SPECIFICATIONS FOR CONCRETE PAVEMENT MIX.
2. INLET INVERT SHALL BE SHAPED WITH 8 SACK SAND MIX CONCRETE TO CREATE FLOW CHANNELS AND TO INCREASE HYDRAULIC EFFICIENCY SUCH THAT THE INLET WILL BE SELF CLEANING BETWEEN ALL INLET AND/OR OUTLET PIPES.
3. THE ENDS OF ALL PIPES INSTALLED IN INLETS SHALL BE CUT OFF FLUSH WITH THE INSIDE FACE OF THE INLET WALL.
4. INLET FRAME AND GRATE TO BE DEETER #1261, EJIW #1936-Z1 OR APPROVED EQUAL, SEE SW-303.
5. CONTRACTOR SHALL REMOVE LIFTING HOOKS AFTER INSTALLATION. RECESSES IN MANHOLE WALL SHALL BE GROUTED FLUSH TO THE MANHOLE WALL WITH HYDRAULIC CEMENT AFTER THE MANHOLE IS IN PLACE. LIFTING HOLES THRU THE MANHOLE WALL WILL NOT BE ACCEPTED.



SECTION "A-A"

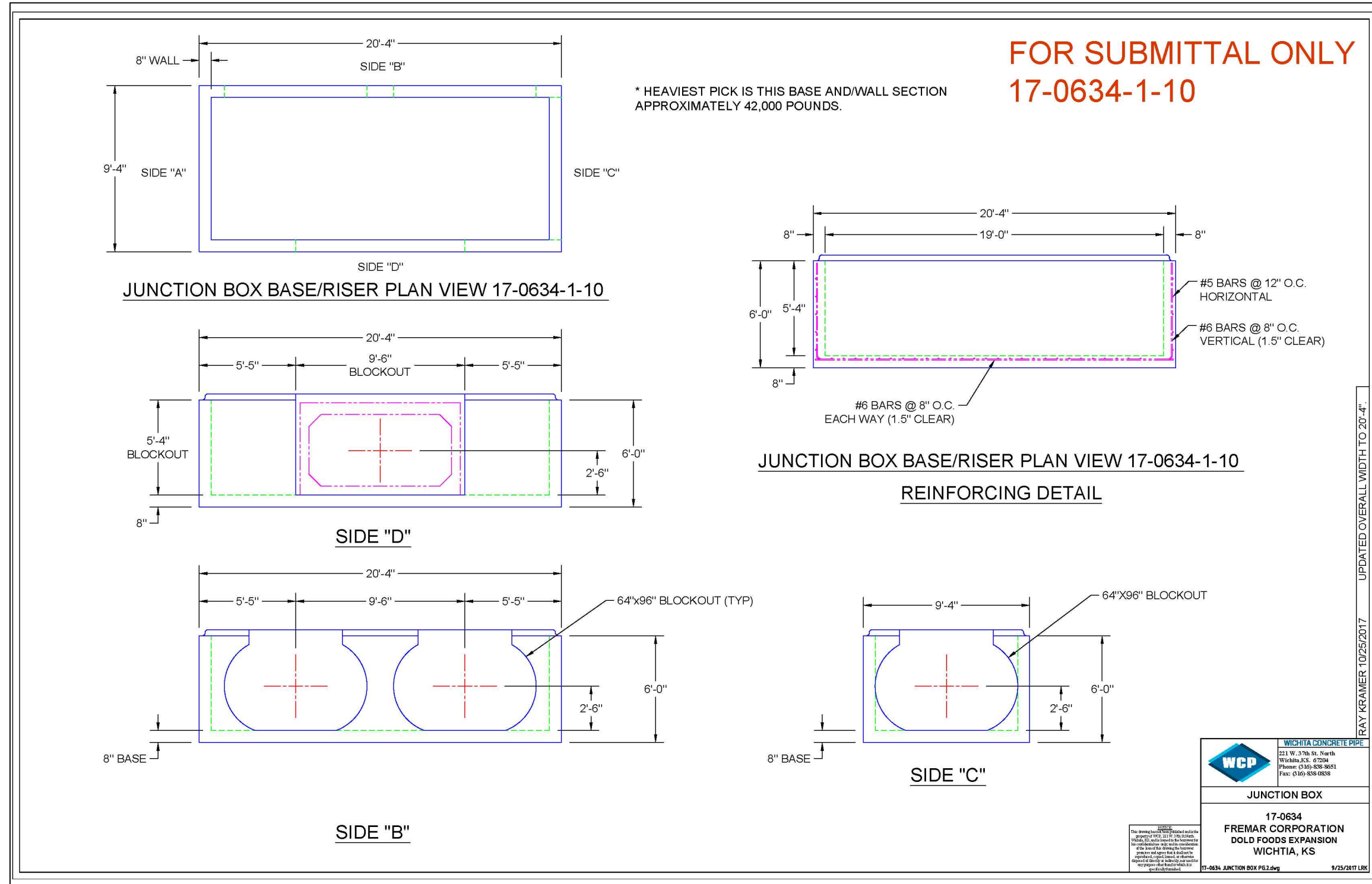
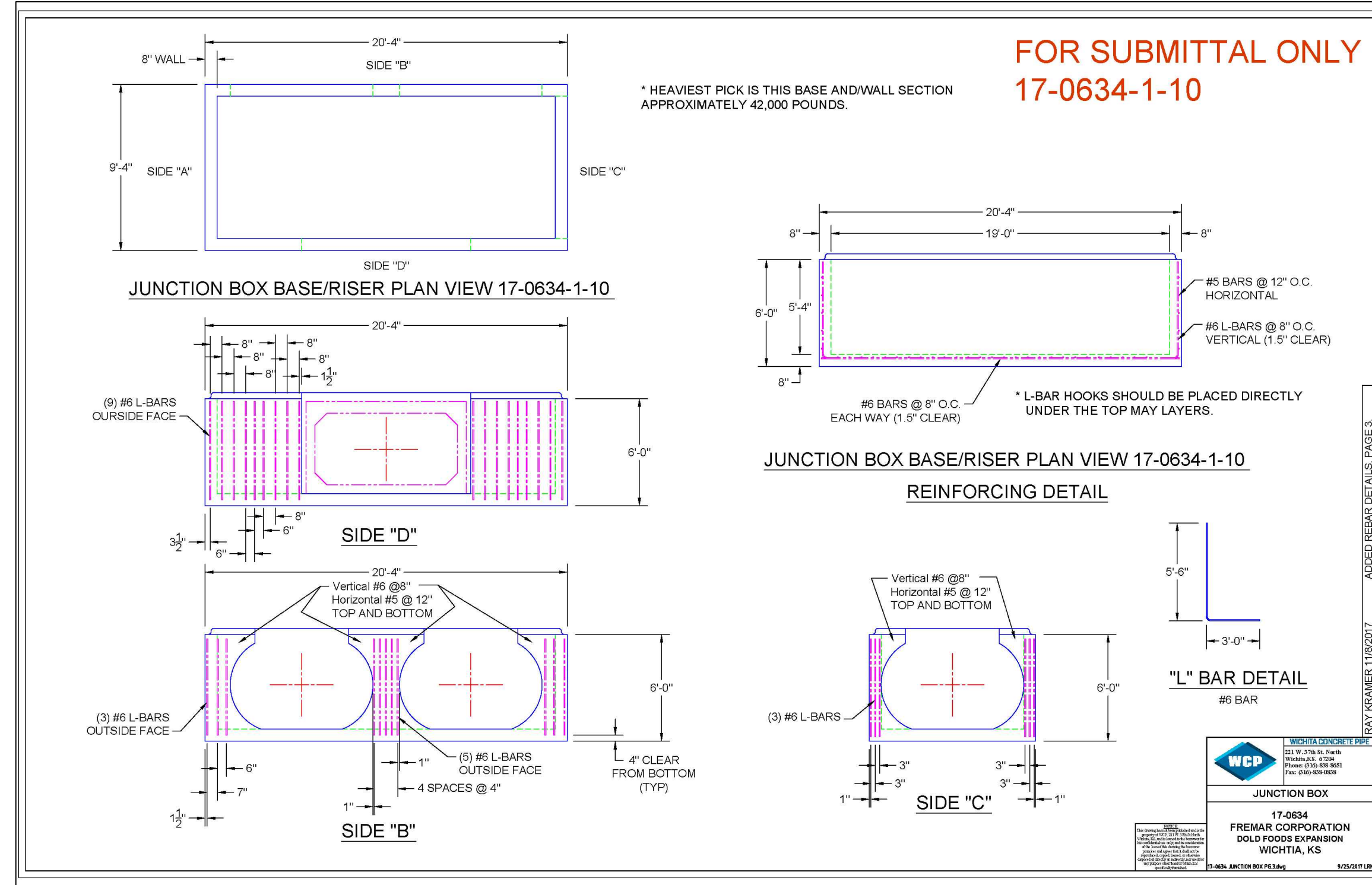
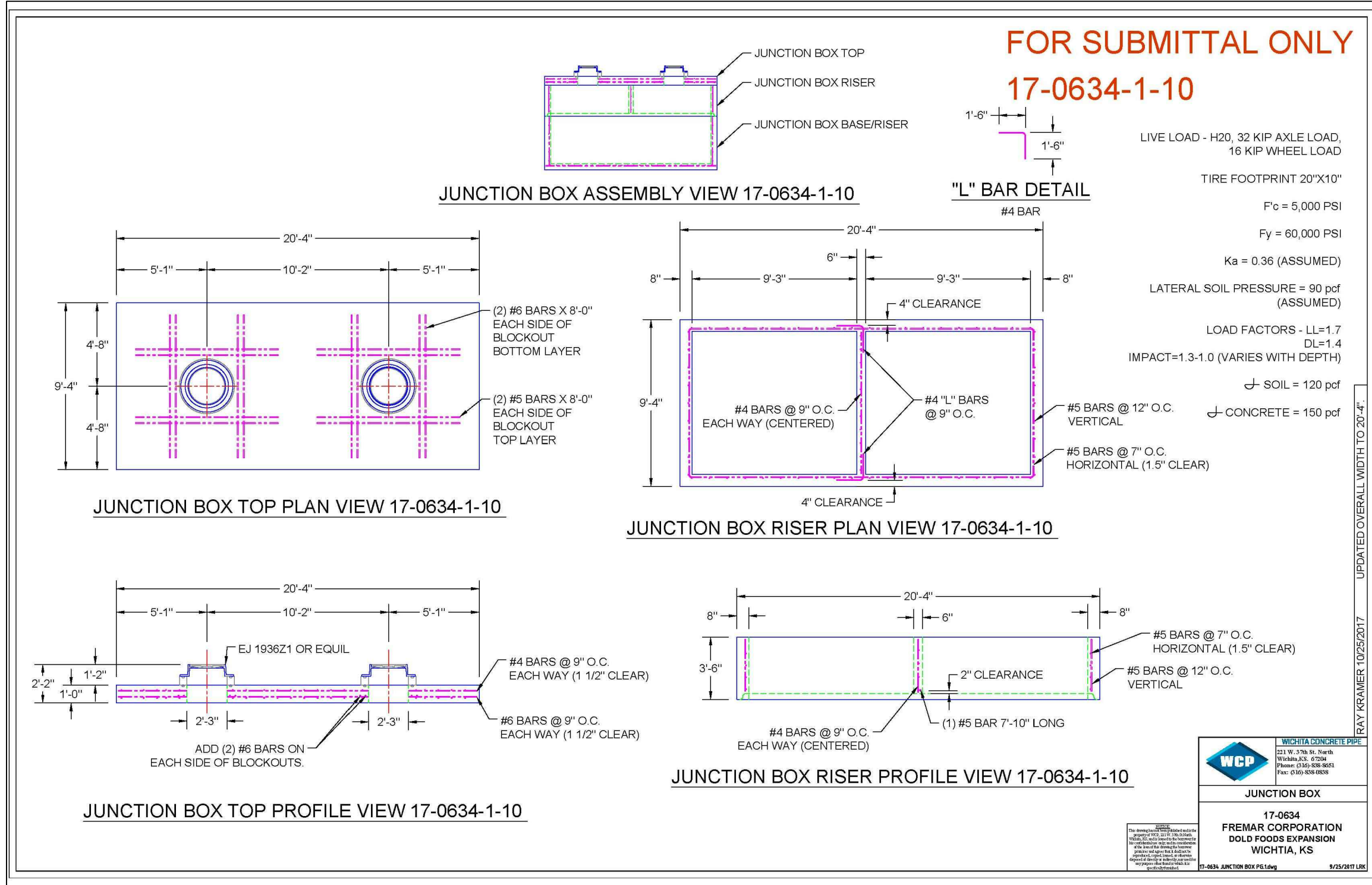


SECTION "B-B"



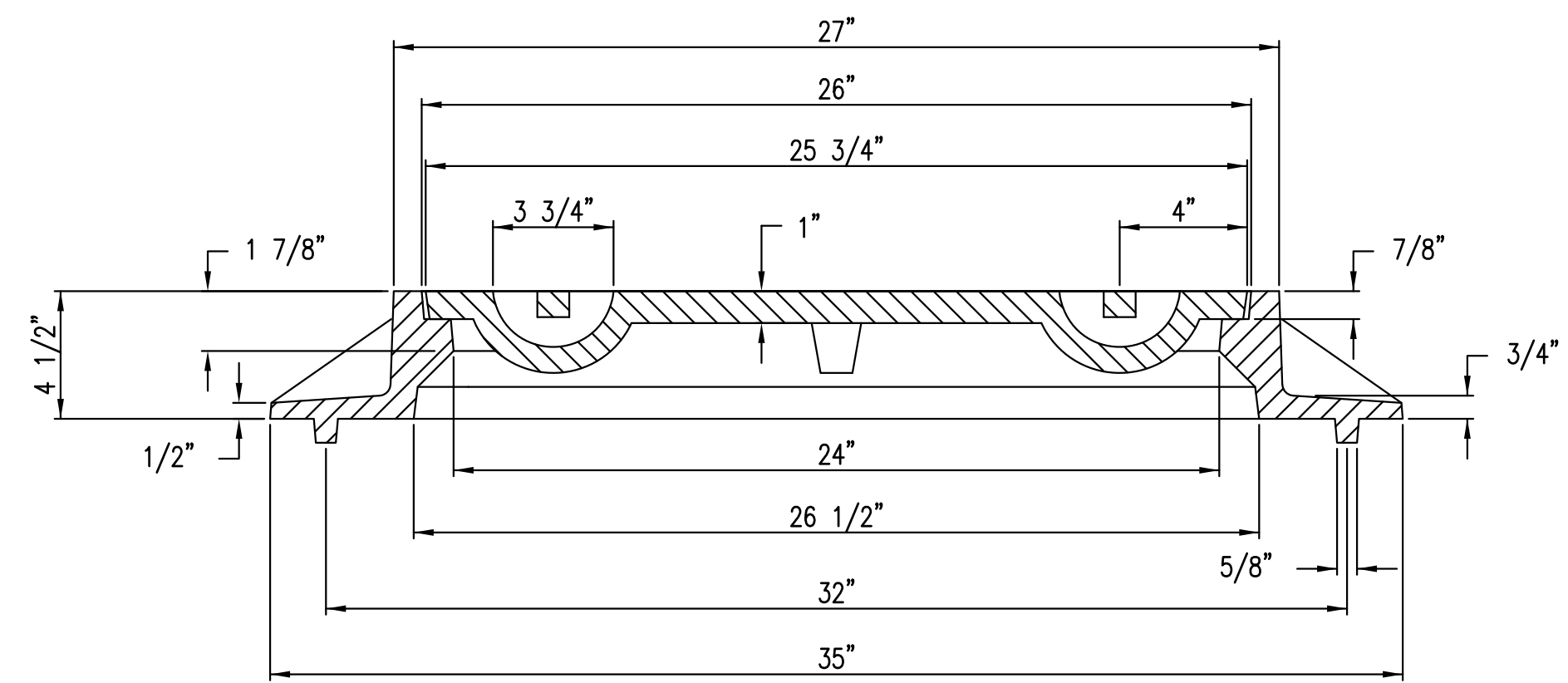
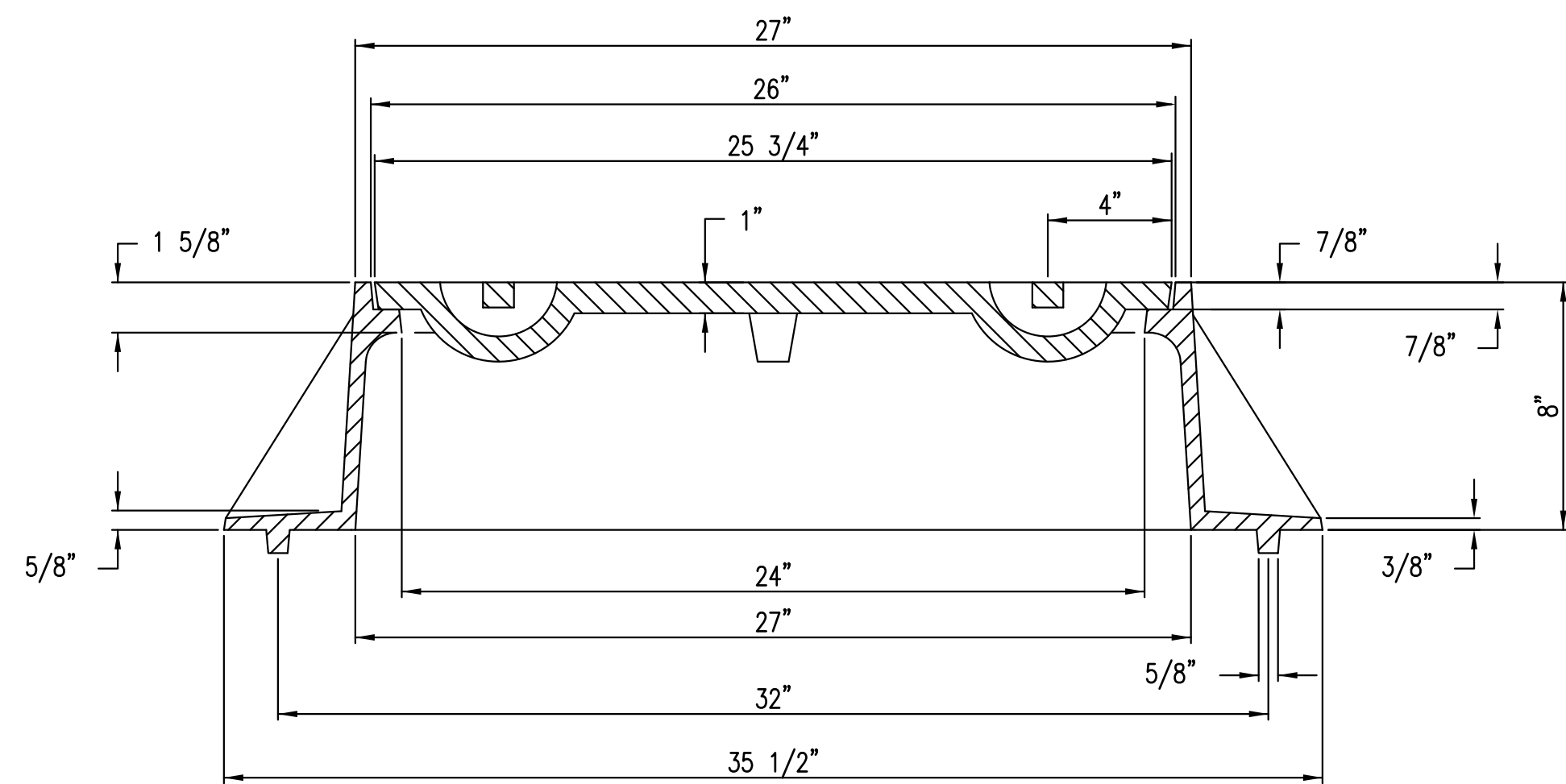
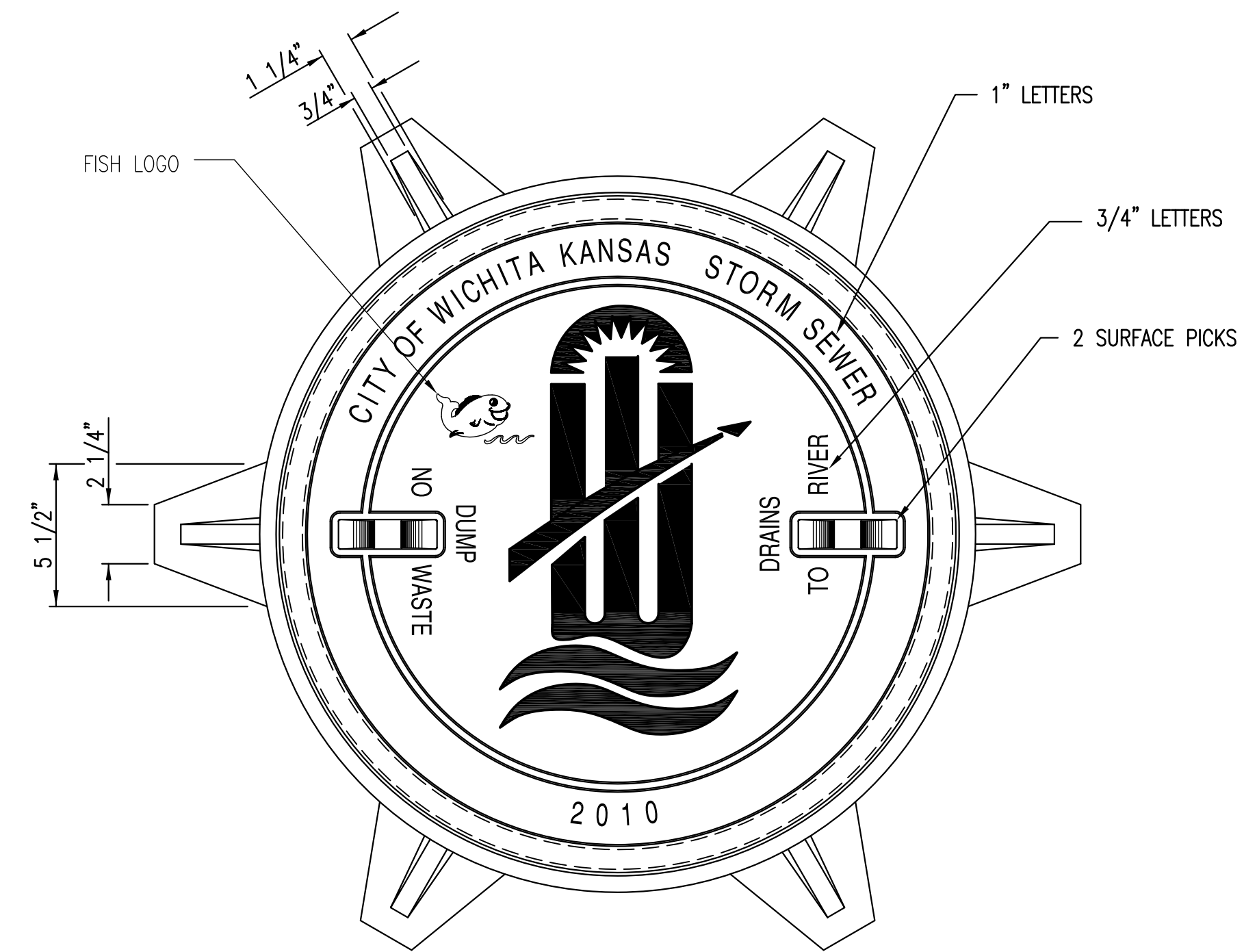
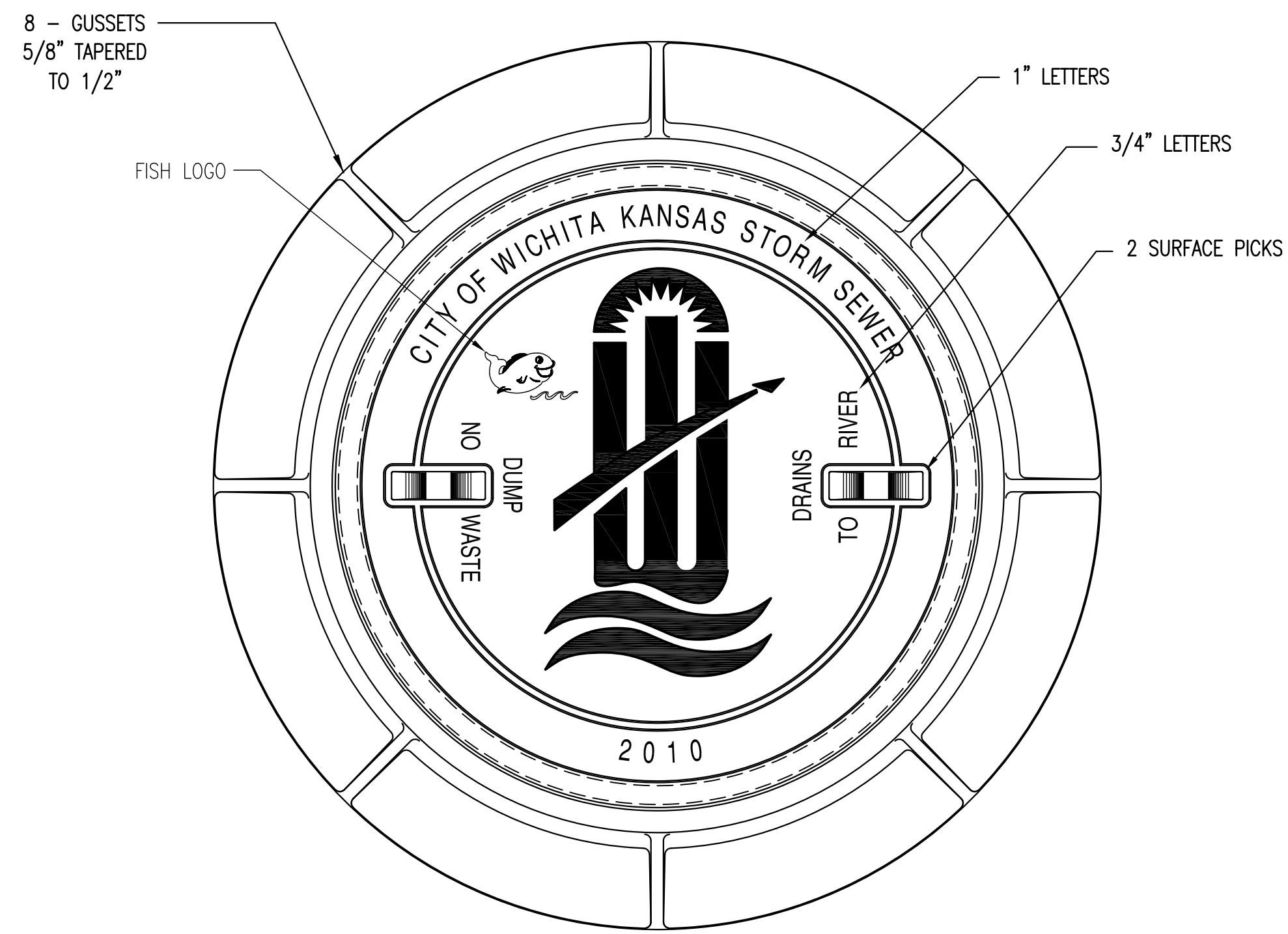
REINFORCED CONCRETE MANHOLE (STORM SEWER)		
CITY ENGINEER GARY JANZEN, P.E.		
PROJECT NUMBER	OCA NUMBER	DATE
CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		SHEET 7.3

REVISED: MARCH 2015



Dold Foods
Junction Box Details
Wichita, Kansas

KEMILLER ENGINEERING PA 117 E. Lewis, Wichita, KS 67202 (316)264-0242	PROJECT NUMBER			
	KEM NO. 17151	FILE	DATE 8/2017	SHEET 7.3A
	DESIGN KM	DRAWN ME	REVISED	



MANHOLE FRAME
DEETER #1261 OR EJIW #1936-Z1

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

INLET FRAME
DEETER #2014 OR EJIW #1936-Z4

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



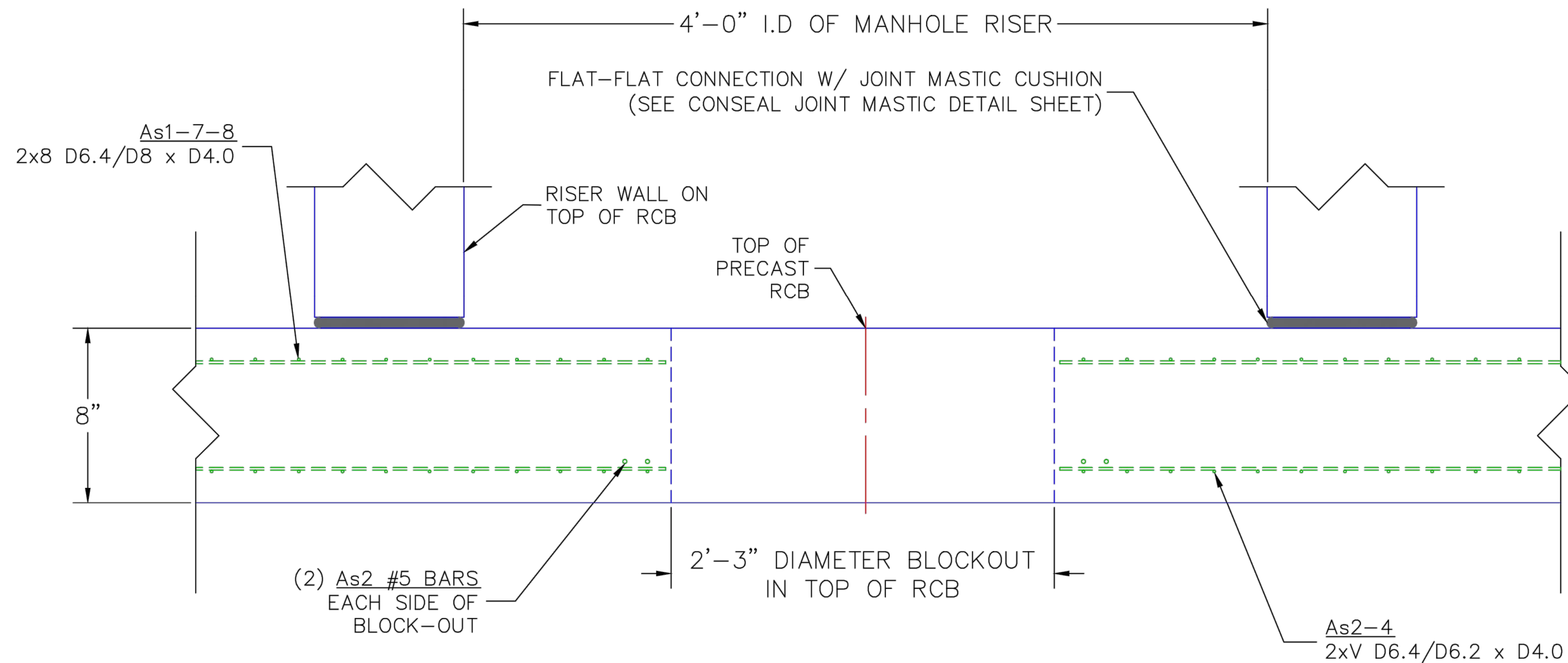
MANHOLE/INLET FRAME AND COVER (STORM SEWER)		
CITY ENGINEER GARY JANZEN, P.E.		
PROJECT NUMBER	OCA NUMBER	DATE 11/2010
CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		SHEET 7.4

NOTE:

CONTRACTOR TO PLACE INLET RISER WALLS ON 2 STRIPS OF 1-1/2" JOINT MASTIC (CS-102) WHICH WILL SERVE AS A CUSHION BETWEEN THE TWO CONCRETE SURFACES AND HELP HOLD THE INLET RISER IN PLACE DURING THE BACKFILLING PROCESS. THE CONTRACTOR SHALL TAKE SPECIAL CARE WHILE BACKFILLING AROUND THE INLETS TO PREVENT ANY MOVEMENT OF THE INLET. THE BACKFILL SHALL BE PLACED IN UNIFORM LIFTS AND HAND TAMPED TO AVOID ANY SIGNIFICANT SOIL PRESSURE DIFFERENTIALS ON ANY ADJACENT SIDES OF THE INLET.

PRECAST RCB RISER OPENING DETAIL

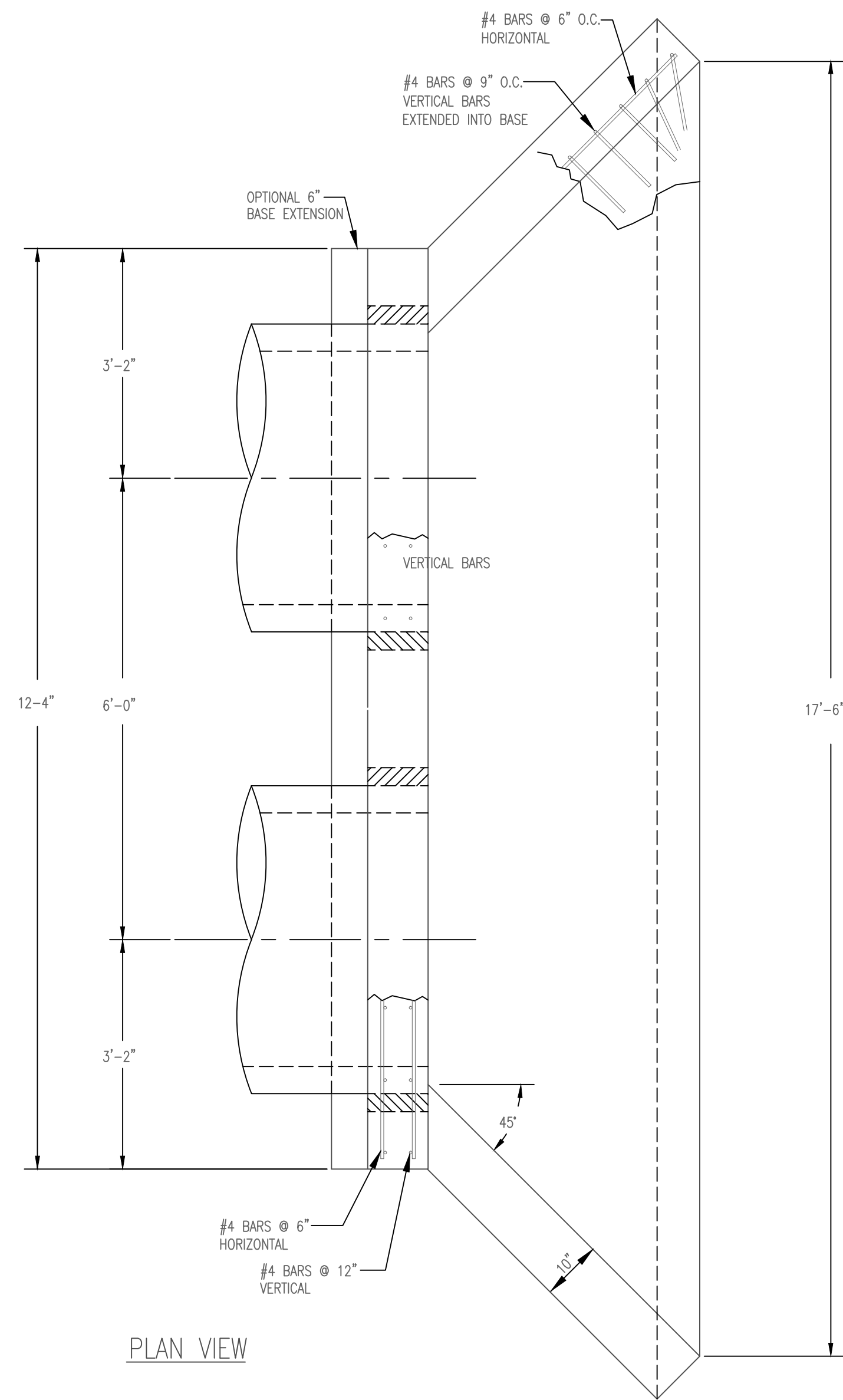
TYPICAL FOR ALL RISER OPENINGS



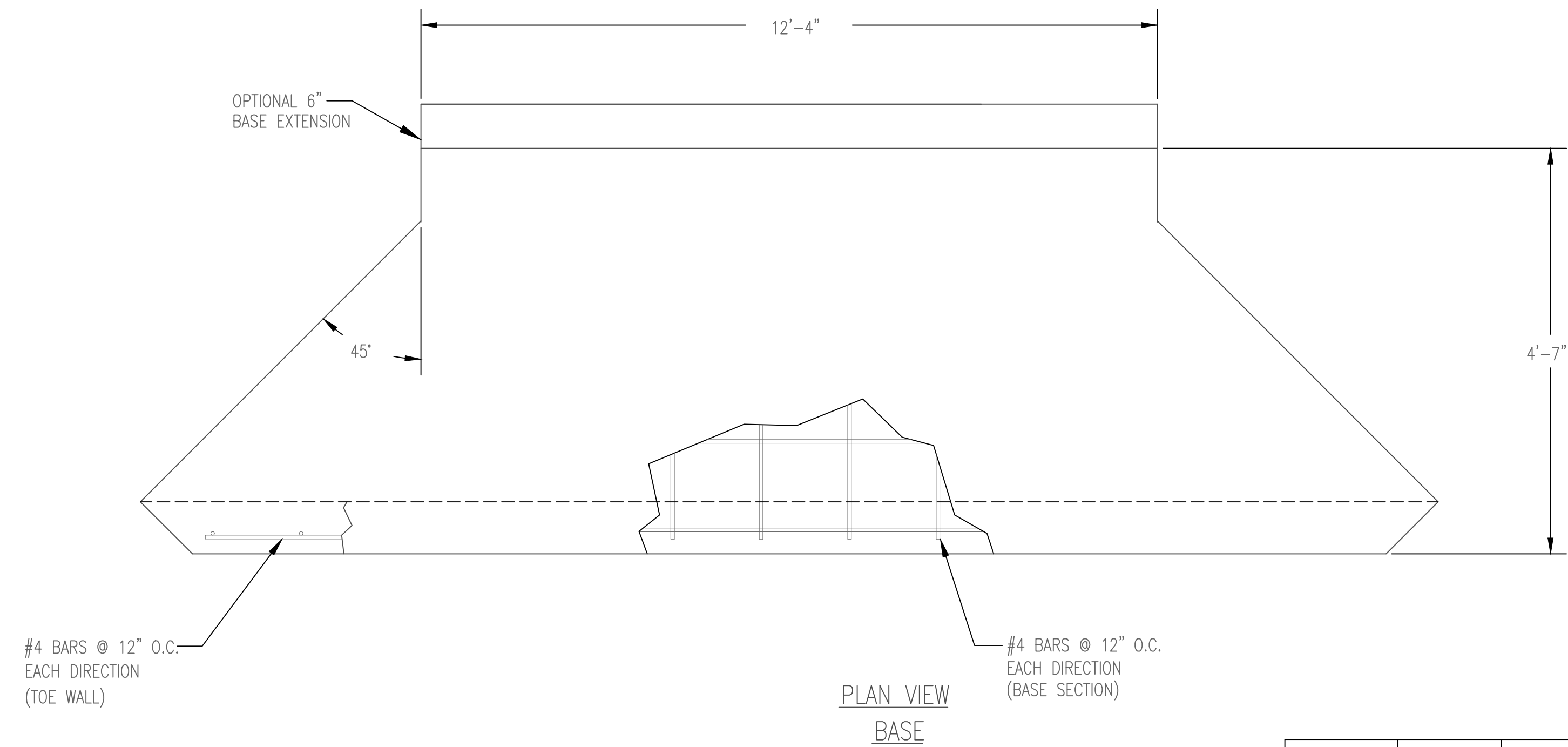
TYPICAL RCB RISER OPENING DETAIL
PROFILE VIEW

Dold Foods
MH Riser Connection
Wichita, Kansas

KEMILLER ENGINEERING PA 117 E. Lewis, Wichita, KS 67202 (316)264-0242	PROJECT NUMBER			SHEET 7.5
	KEM NO. 17151	FILE	DATE 8/2017	
	DESIGN KM	DRAWN ME	REVISED	

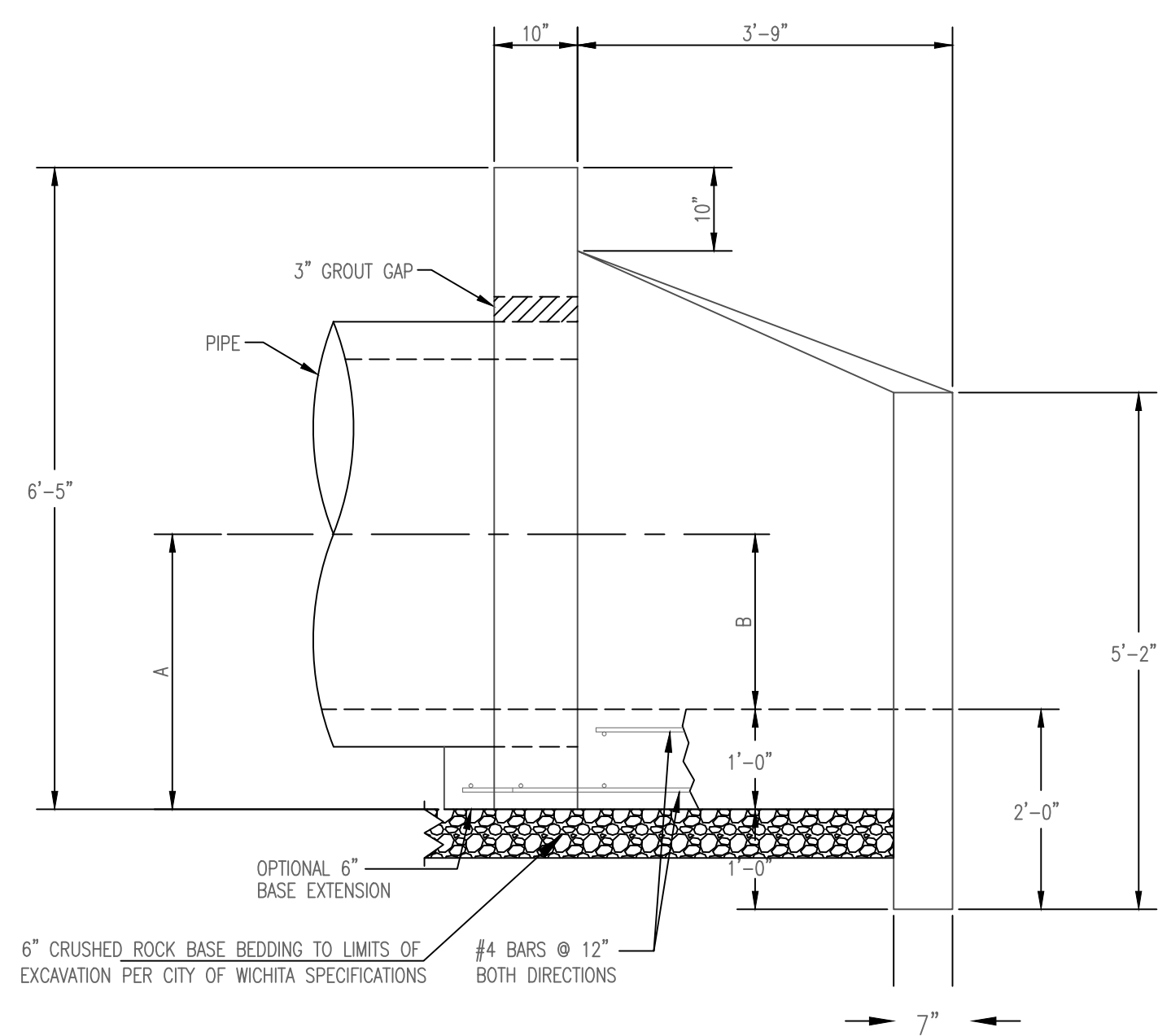


PLAN VIEW

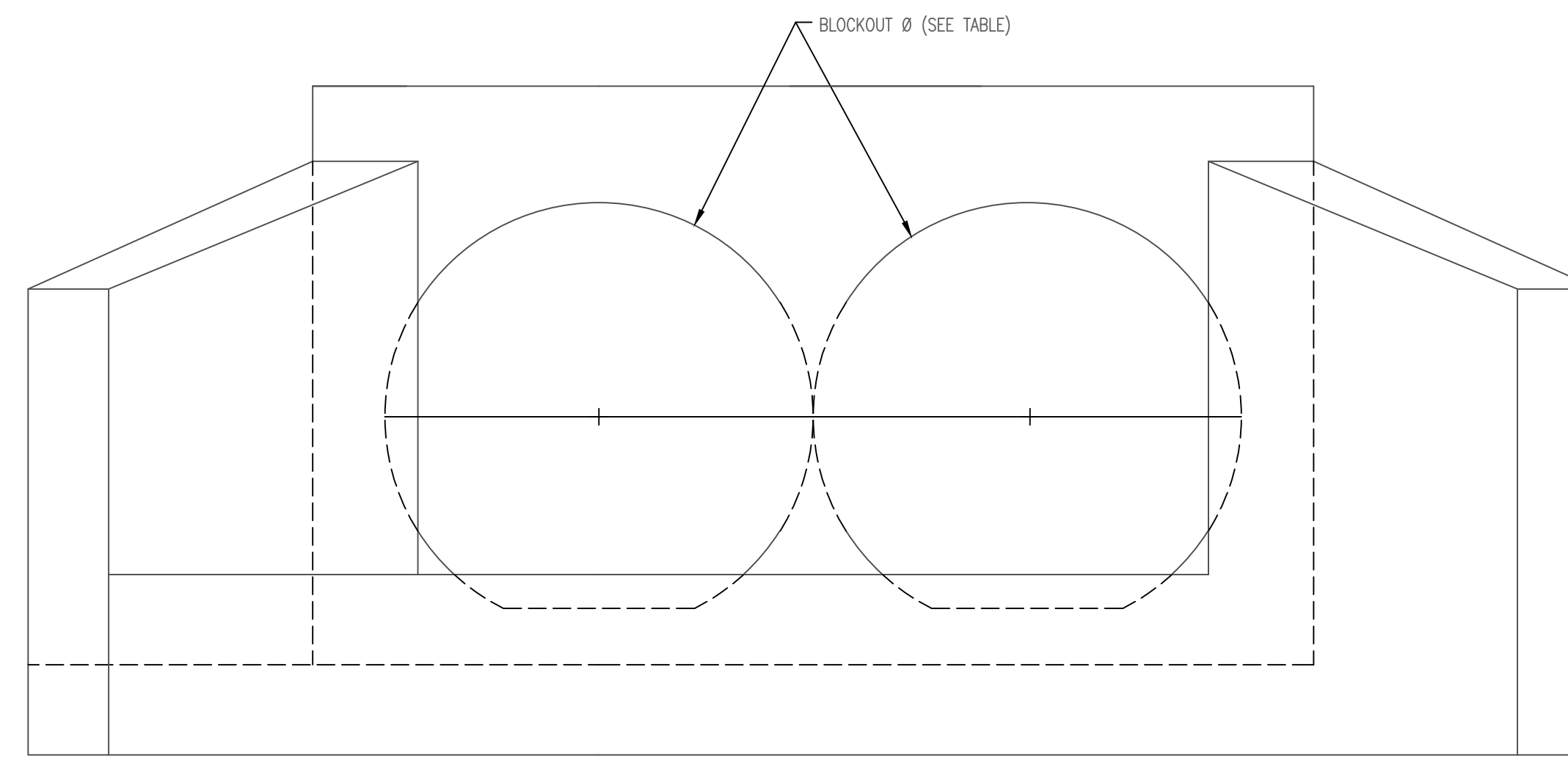


PLAN VIEW
BASE

PIPE Ø	A	B	BLOCKOUT Ø
42"	2'-9"	1'-9"	4'-9"
48"	3'-0"	2'-0"	5'-4"



ELEVATION



FRONT VIEW

HEADWALLS, AS SHOWN, WILL NOT SUPPORT FLAP GATE.

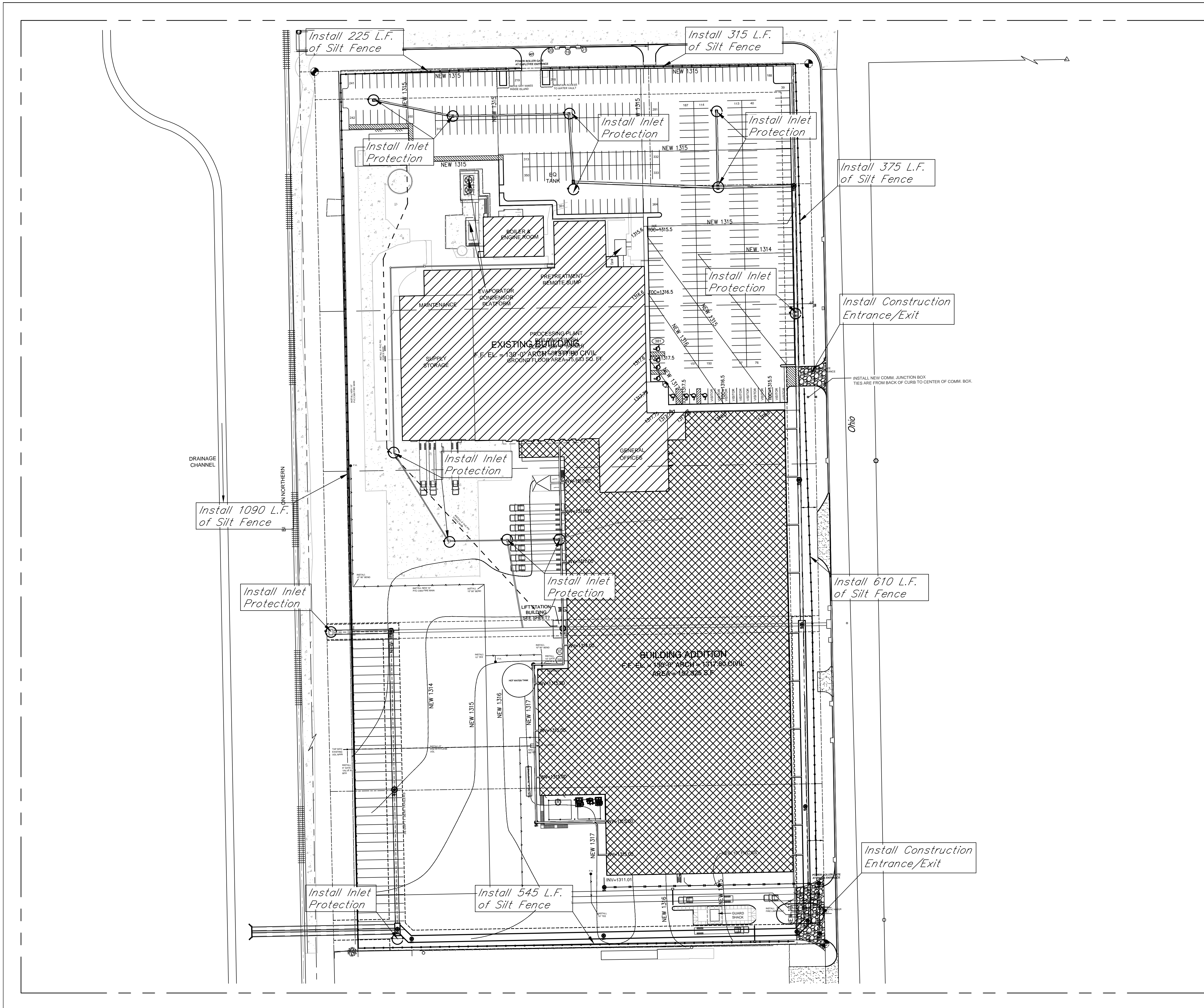
REVISED: MARCH 2015

CITY OF WICHITA
PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

**HEADWALL DETAIL
FOR DOUBLE
42" AND 48" PIPE**

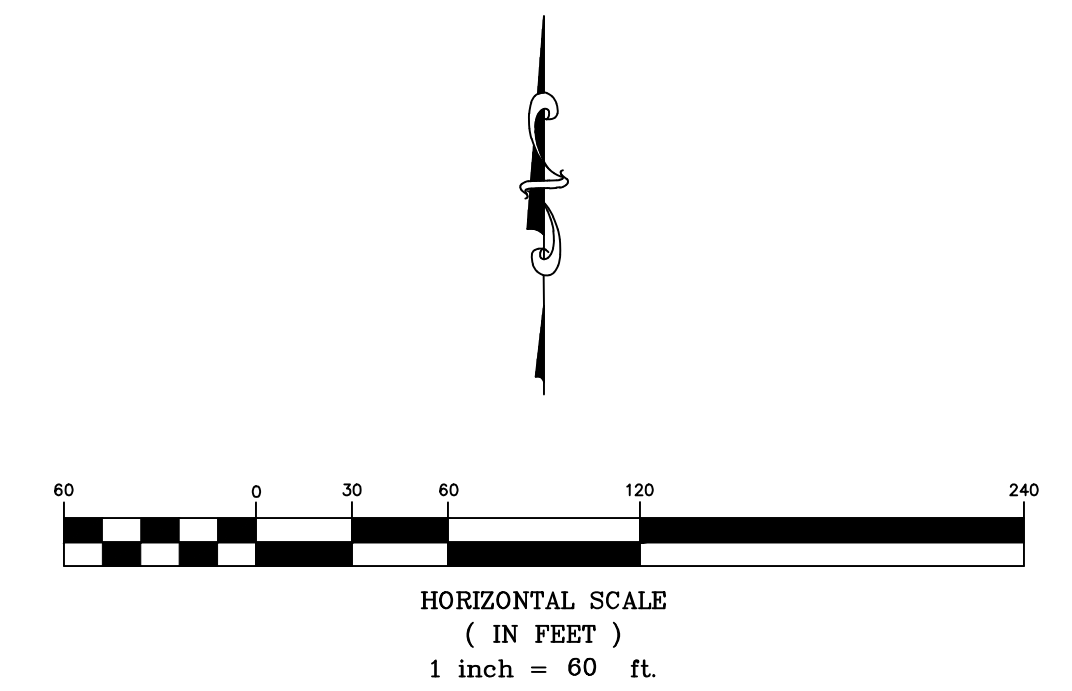
CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER	OCA NUMBER	DATE
CITY ENGINEER'S OFFICE		SHEET
CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		7.6



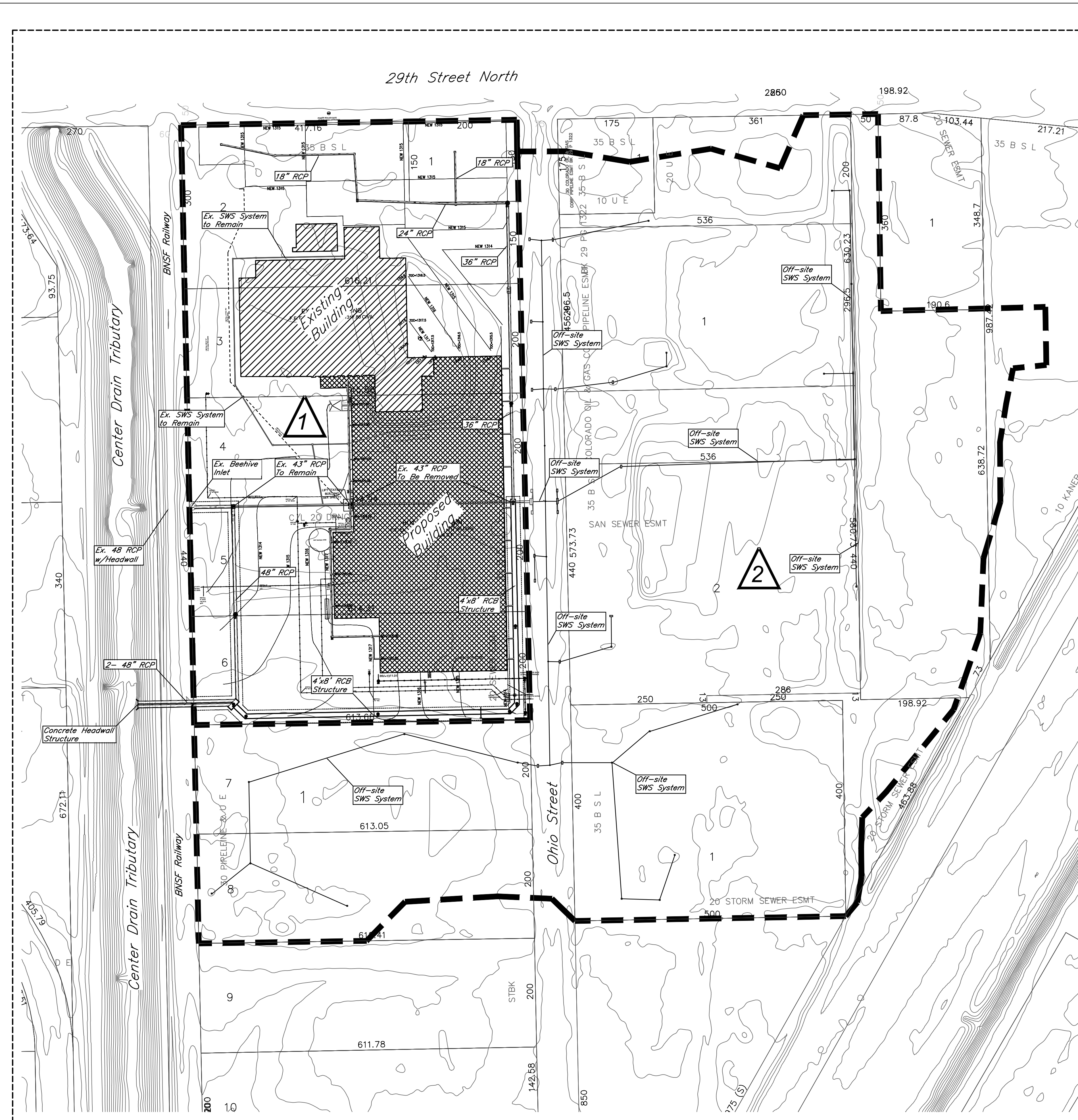
- General Notes:**
1. The BMP's shown on this sheet are considered minimum standards. Whenever sediment enters the streets, storm sewers, ditches, or ponds, contractor will install additional BMP's, as needed, to correct the problem.
 2. The soil erosion BMP's shown hereon must be in place at all times during construction until such time as the site is re-established with paving or grass.
 3. Back of curb protection can include hay bale, silt fence, Curlex barrier, or approved alternate as shown on BMP standard details. This BMP must remain in place until the area between the curb and right-of-way line has been permanently stabilized.
 4. The General Contractor is responsible for the installation and maintenance per the prevention maintenance plan.
 5. Concrete trucks will be permitted to wash out only at approved locations, then maintain and clean up as conditions require, by contractor. No hazardous materials are expected to be encountered. Any spills (diesel, fuel, oil, etc.) will be cleaned up and removed immediately. Portable toilets will be supplied and maintained at various sites along the project. Disposal of sewage will be handled by a contracting firm specializing in this activity.
 6. The above mentioned storm water prevention methods will be monitored daily and maintained as required. A weekly erosion control log will be posted in the job trailer onsite, and updated weekly. Site inspections are required within 24 hours after a precipitation event of 0.5" or greater.

- LEGEND:**
- Flow Direction
 - Inlet Protection - to be provided at all inlets subject to silt laden runoff.
 - - - Ditch Check
 - Temporary Seeding and Mating.
 - Silt Fence or Hay Bale Barrier - to be installed along property lines where runoff from construction site can run onto other properties.
 - Stabilized Construction Entrance - to be used at all locations where vehicles or equipment enter or exit property.
 - Back of Curb Protection - to be installed whenever curb is backfilled to less than 3 inches from top and disturbed earth exists adjacent thereto. (See City Standard Details.)



Dold Foods
Erosion Control Plan
Wichita, Kansas

 KEMILLER ENGINEERING PA 117 E. Lewis, Wichita, KS 67202 (316)264-0242	PROJECT NUMBER		
	KEM NO. 17151	FILE	DATE 8/2017
DESIGN KM	DRAWN ME	REVISED	



Project Narrative:
 The Proposed Re-development is located south of 29th St N and west of Ohio Street. The site is currently partially developed with industrial development on the north part of the property. The existing drainage pattern indicates that the site drains to the west to existing SWS system that carries the runoff under the adjacent railroad and into the Center Drain Tributary. This will remain the same in developed condition with the addition of a second access point to the channel south of the existing. The scope of the project is to construct a new building addition, a parking lot, and SWS system.

Water Quality and TSS Removal Calculation:

Water Quality Volume (WQV) Calculation				
Calculation for water quality volume (WQV=P*Rv*A/12)			Soil Group 'D'	
85th percentile storm event (1.2 inches), P =	1.20	inches	Calculation of Rv	
Total area, A =	15.50	acres	Coeff.	Area
Rainfall Coeff, Rv, =	0.812	cf	Coeff for undisturbed area, R _{VU} =	0.03 2.33
Required Vol. for Water Quality =	1.259	ac-ft	Coeff for turf cover, disturbed, R _{VT} =	0.20 0.00
Corresponding Water Quality Peak Flow =	12.22	cfs	Coeff for impervious area, R _{VI} =	0.95 13.18
			Weighted, Rv = 0.812	

Total water quality flow needs to be treated for proposed development. The WQV and water quality flow will be treated by use of credits from the City of Wichita's Off-site BMP Program.

Runoff Calculations (2-, 5-, 10-, 25-, and 100-yr)

EXISTING CONDITION:
 Total Area A = 45.50 acres, Surface Type = Partially Developed Soil Group =D

EXISTING SITE									
DRAINAGE AREA	ACRES	Tc min	CN	Q2	Q5	Q10	Q25	Q100	REMARKS
On-site (1)	15.50	15.0	93	69.57	81.65	19.38	97.11	126.12	Runoff from existing site flowing east to ex. Beehive structure
Off-site (2)	30.00	23.1	93	81.11	108.34	127.27	151.49	196.91	Off-site underground drainage system routed to ex. Beehive structure

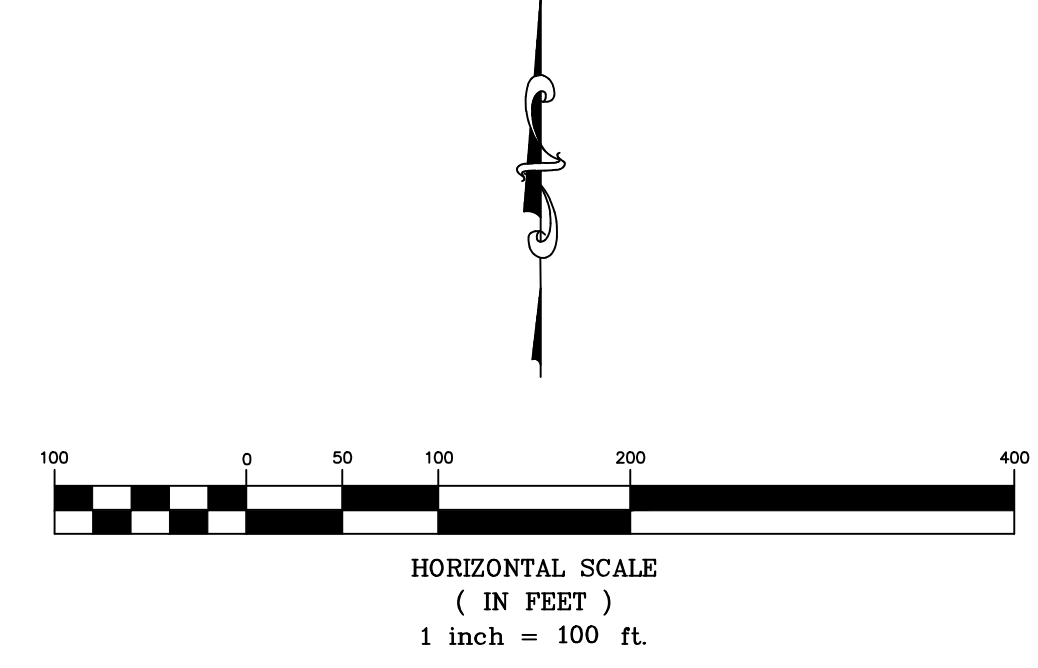
DEVELOPED CONDITION:
 Total Area, A = 45.50 acres, Total Impervious Area = 32.76 acres (72% impervious)
 Hydrological Soil Group =D

DEVELOPED SITE									
DRAINAGE AREA	ACRES	Tc min	CN	Q2	Q5	Q10	Q25	Q100	REMARKS
On-site (1)	15.50	15.0	98	56.83	73.74	85.53	100.65	129.14	Runoff from on-site area routed through proposed SWS system
Off-site (2)	30.00	23.1	93	81.11	108.34	127.27	151.49	196.91	Off-site underground drainage system merging with proposed system

PROPOSED OUTFALL:
 Runoff will be routed to the adjacent drainage channel under the existing railroad line, by 3-48" RCP, the existing 48" pipe as well as 2 additional 48" pipes that are to be installed at the south end of the property.

PEAK OUTFLOW							
DRAINAGE AREA	ACRES	Q2	Q5	Q10	Q25	Q100	REMARKS
Areas (1&2)	45.50	118.04	157.73	185.33	220.62	286.84	Entire Drainage Basin Post-Development

- Notes:**
- Existing and developed flows are calculated using the SCS Hydrograph method. "CN" & "T" values are established from "City of Wichita Stormwater Design Manual."
 - The developed peak flows are routed through the proposed 4'x8' box structure, and under the existing railroad line through 3-48" RC Pipes.
 - Detention is not required as the property is less than 10% of the total drainage area of the adjacent channel (Center Drain Tributary) > 0.05M.
 - The site is not in designated 100-yr floodplain (FIRM 2017C0352G, Revised, December 22, 2016)



- 1 On-site drainage basin, Area = 15.50 acres
- 2 Off-site drainage basin, Area = 30.00 acres
- Drainage Basin Boundary

**Dold Foods
 Drainage Plan
 Wichita, Kansas**

PROJECT NUMBER

KEMILLER ENGINEERING PA 117 E. Lewis, Wichita, KS 67202 (316)264-0242	KEM NO. 17151	FILE	DATE 8/2017	SHEET 9.0
	DESIGN KM	DRAWN ME	REVISED	

