

STORM WATER SEWER TO SERVE

South High School 2nd Addition

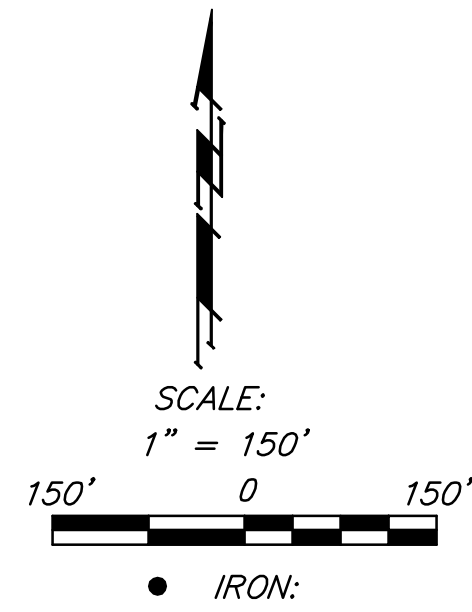
Lots 1, Block 1

Private Project: 0051 PPD (607861)

CITY OF WICHITA, KANSAS

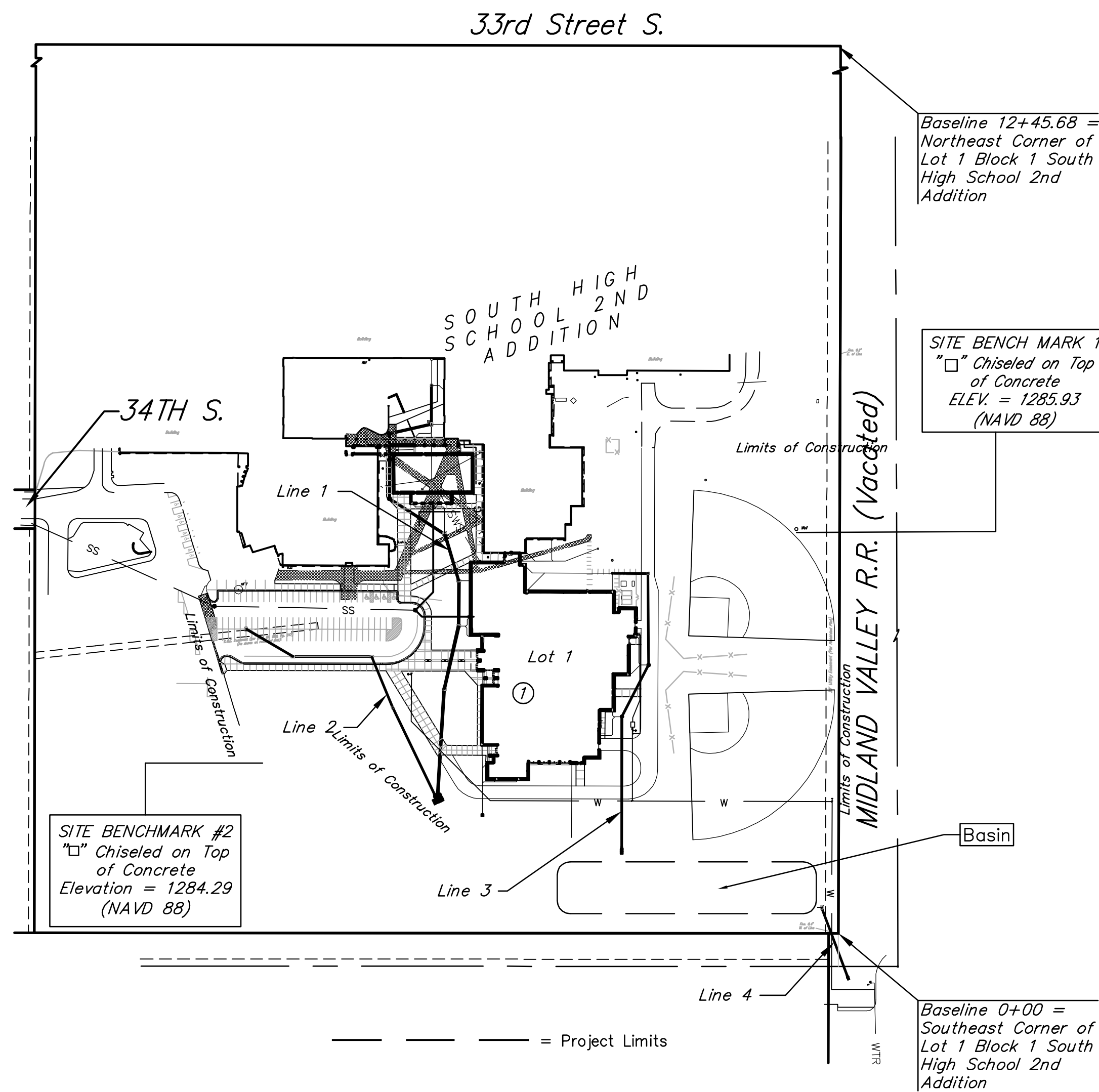
James Armour, P.E. City Engineer

OCTOBER 2011



SWS Lines 1,2,3,4 Only

AS BUILTS	
Contractor: Mies Construction 04/24/12	Project Inspector: Larry Gann



Benchmarks

Benchmark #1 - "□" Chiseled on Top of Concrete
 ELEV. = 1285.93 (NAVD 88)

Benchmark #2 - "□" Chiseled on Top of Concrete
 ELEV. = 1284.29 (NAVD 88)

Legal Description

Part of Lot 1, Block 1 of South High School 2nd Addition, in Wichita, Sedgwick County, KS.

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BMP Erosion Details	Available On Request

APPROVED AS NOTED
 BY CITY ENGINEER OF WICHITA

Engineering *Julianne Kallman 11-3-11*

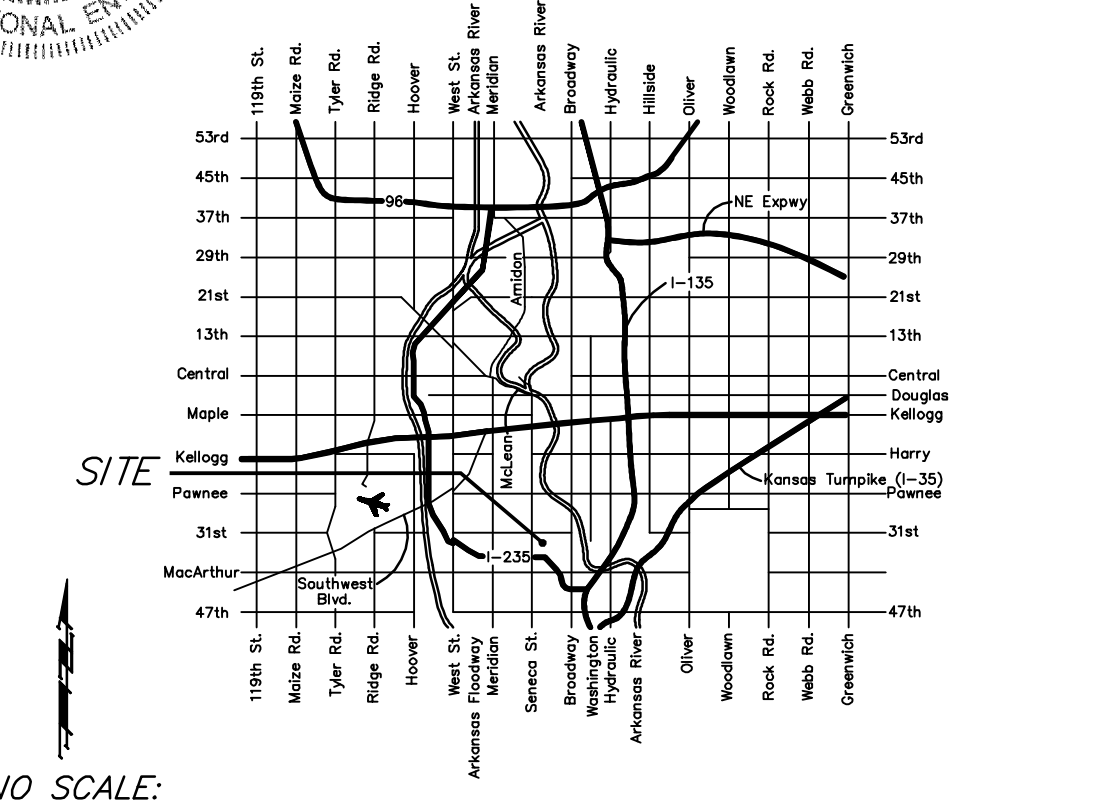
Storm Drainage *Jim Hendry 11-2-11*

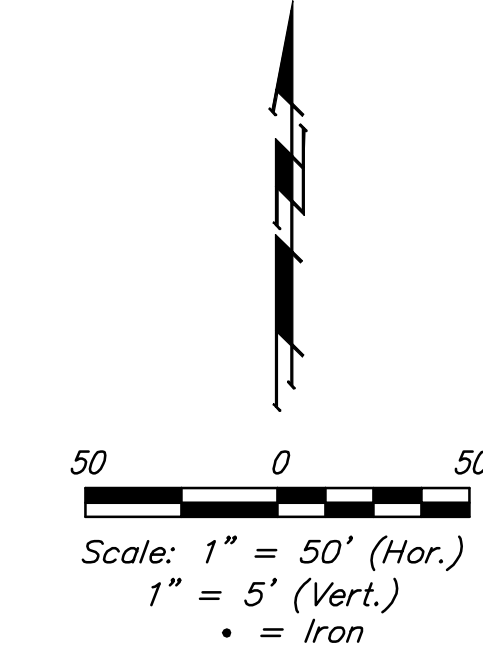
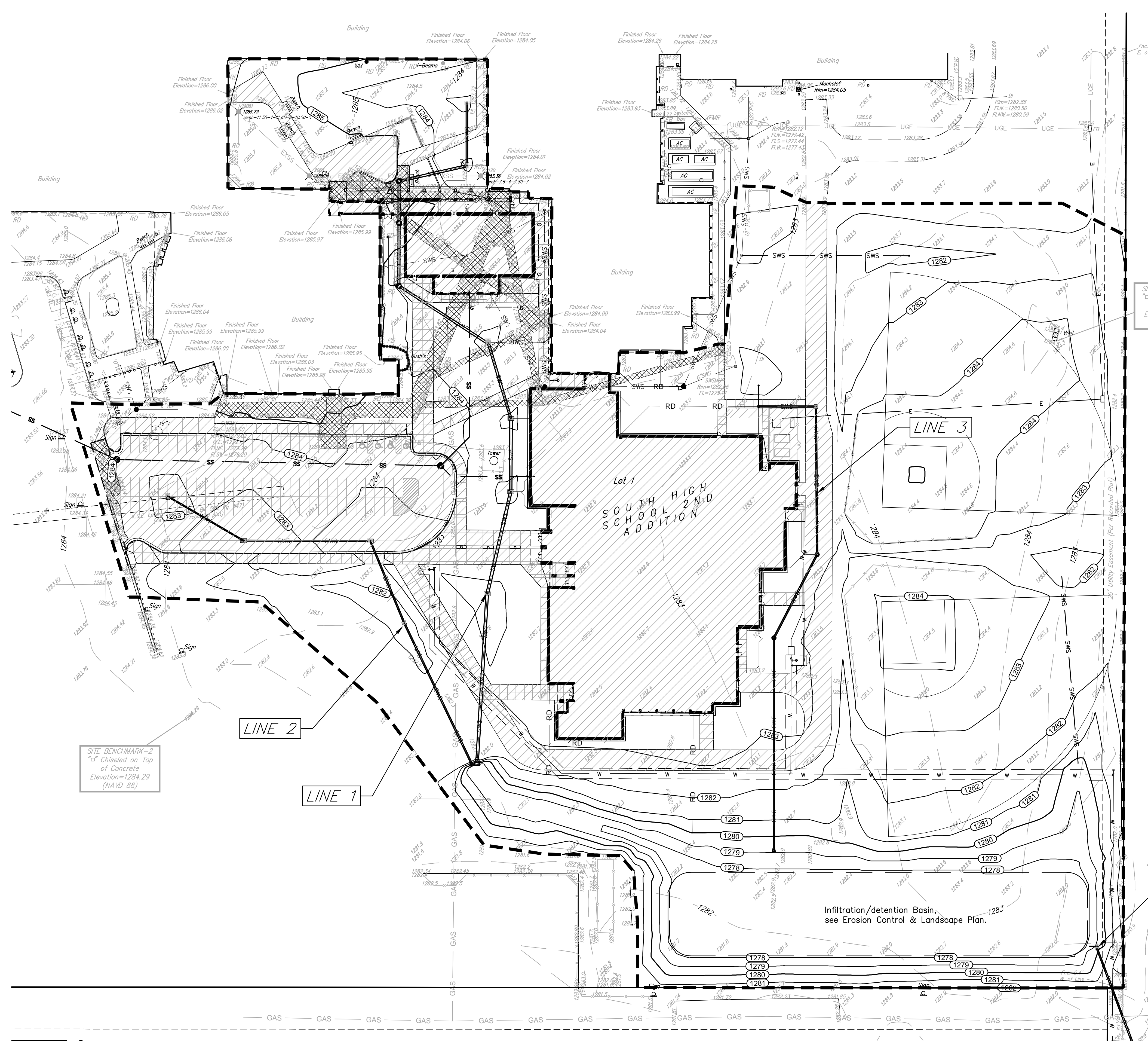
NOTE TO CONTRACTORS

Installation, 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. No work shall be performed in dedicated easements or public right-of-way by the Contractor without such inspection nor shall any work be commenced without written authorization by the City Engineer. All Construction and Materials shall comply with the City of Wichita Specifications and Standards (on file and available in the City Engineer's Office).

General Notes

- Contractor will be required to provide notice to utility companies a minimum of forty-eight (48) 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 Company 1-888-482-4950
 Westar Energy (Electric) 383-8650
 Black Hills Energy (Gas) 1-800-303-0357
 Southwestern Bell Telephone Co. 1-800-286-8313
 City of Wichita Water Dept. (Water) 262-6000
 City of Wichita Sewer Maint. (SS) 268-4090
 City of Wichita Storm Sewer Maint. 268-4034
 City of Wichita Traffic Maint. 262-6000
- All disturbed areas within the project site and that overlap the area to be disturbed shall have temporary and permanent erosion control measures installed by the general contractor. See site plan reference copy of the Erosion Control Plan and Landscape Plan and coordinate with General Contractor to ensure temp. erosion control measures are installed within 7 days of construction.
- All disturbed R/W areas not intended for pavement or sidewalk construction shall be seeded with Kansas Premium Fescue Blend at a rate of 8 lb./1000 Sq. Ft., fertilized with a 16-20-6 ratio at a rate of 4 lb./1000 Sq. Ft., and mulched with Prairie Hay at a rate of 92 lb./1000 Sq. Ft. Mulch shall be "patted" with forks or punched into soil to reduce loss due to wind.
- Utility service lines, poles, valve boxes, meters, et cetera 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 and shall be field verified. The contractor will be required to work around existing utilities within the right-of-way which do not conflict with proposed construction.
- Contractor shall furnish the inspector with a copy of the manufacturer's certification for all pipe used on this project after completion of pipe installation. The engineer will not certify the project to the city until pipe certification has been received.
- Properties within the project limits may have underground sprinkler systems which conflict with new construction. Contractor will be required to remove such improvements should they not be removed by their owner at the time of construction. The Contractor will be required to salvage all sprinkler heads and/or valves and give such material to their owner. Portions of underground sprinkler systems not in conflict with new construction shall be protected from damage and shall remain in place. All work in connection with underground sprinkler systems shall be considered as subsidiary to the contract pay items of work.
- Cuts made to paved surfaces on public property will be repaired by the City's contractor and charged against the owner/applicant. Unit repair prices are available from the City at 268-4418. A surcharge may be applicable; call 268-4418 for details. Repair costs to be paid prior to release of sewer service if sewer service is affected. Contractor shall obtain permit prior to construction.
- Barriers and detour signage shall be in accordance with the Manual On Uniform Traffic Control Devices.
- Contractor shall not start work on the project until the project inspector is assigned to the project and is present on the site. Contractor shall not start on the project until all necessary bonds and permits have been obtained. Bonds may include but are not limited to Statutory, Performance & Maintenance. Any work done without inspection will be required to be uncovered for inspection.
- Rubble from the removal of miscellaneous structures and excess excavation which is to be wasted shall be disposed of on sites to be provided by the Contractor. These sites shall be approved by the Engineer as to suitability, appearance and site location. Locations that, in the opinion of the Engineer, will leave an unsightly appearance will not be approved. All disposal sites must be approved by the Kansas Department of Health and Environment. Material either stockpiled or disposed of in a flood plain would require a Kansas State Board of Agriculture permit. Any material dumped in waters of the United States or wetlands is subject to U.S. Corps. of Engineers permitting regulations. Any material buried or stockpiled beyond approved construction limits would require additional archaeological investigations unless buried in a previously approved borrow location.
- All storm water sewer lines and appurtenances shall be installed in accordance with the most recent edition of City of Wichita, Kansas Standard Specifications for the Construction of City Projects unless otherwise noted.
- All storm water sewer lines shall be reinforced concrete pipe unless otherwise noted in the plans.
- See Landscape and Grading Plans for Groundwater Infiltration Pond Plans.





BENCHMARK

Benchmark #1 - "□" Chiseled on Top of Concrete
ELEV. = 1285.93 (NAVD 88)

Benchmark #2 - "□" Chiseled on Top of Concrete
ELEV. = 1284.29 (NAVD 88)

LEGAL DESCRIPTION

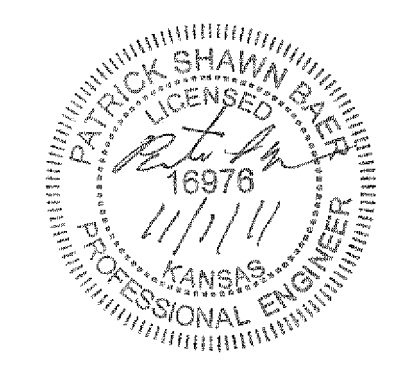
Lot 1, Block 1 South High School 2nd Addition, to
Wichita, Sedgewick County, Kansas.

SITE INFORMATION

Total Disturbed Area: 560,063 sq. ft. (12.86 acres)
Existing Impervious Area Removed: ±27,075 sq. ft.
Impervious Area Added: ±169,467 sq. ft. (incl. building)
Pervious Area: ±390,596 sq. ft.
Added Building Area: ±73,124 sq. ft.

LEGEND

- = Project Limits
- = Impervious Area
- = EX. Impervious Area to be removed.

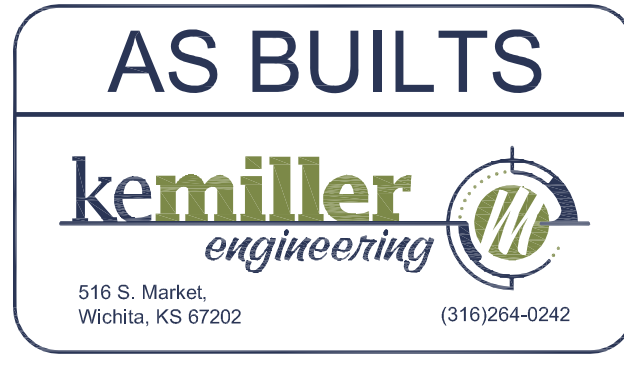


 Baughman	South High School 2nd Addn. ERU Plan Stormwater Sewer Improvements	
	Baughman Company, P.A. 315 Ellis St. Wichita, KS 67211 P 316-262-7271 F 316-262-0149 ENGINEERING SURVEYING PLANNING LANDSCAPE ARCHITECTURE	
PROJECT NUMBER 0051PPD067861	DESIGN PSB	DRAWN TNT
REVISIONS:	APPROVED PSB	DATE 10/20/2011
	SCALE Noted	SHEET 2 OF 17
E:\Projects\USD 259 South High (1104E620)\Engineering\PPD.dwg		

Benchmarks

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ELEV. = 1285.93 (NAVD 88)

Benchmark #2 - "□" Chiseled on Top of Concrete
ELEV. = 1284.29 (NAVD 88)



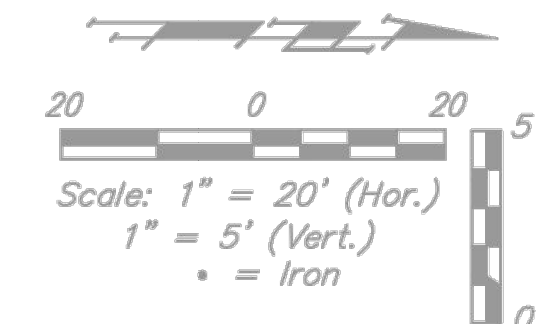
Sta. 0+00, Line 1 =
BL Sta 2+10.92, 618.87' Lt.
Begin construction of 30" RCP w/
30" RCP Endsection. Coordinate
installation of BMP's with GC, see
Erosion Control Plan.

Sta 1+64.4, Line 1 =
BL Sta 3+75.03, 609.55' Lt.
Construct Std. Drop Inlet
(2'x4')
Top Elev. = 1282.60

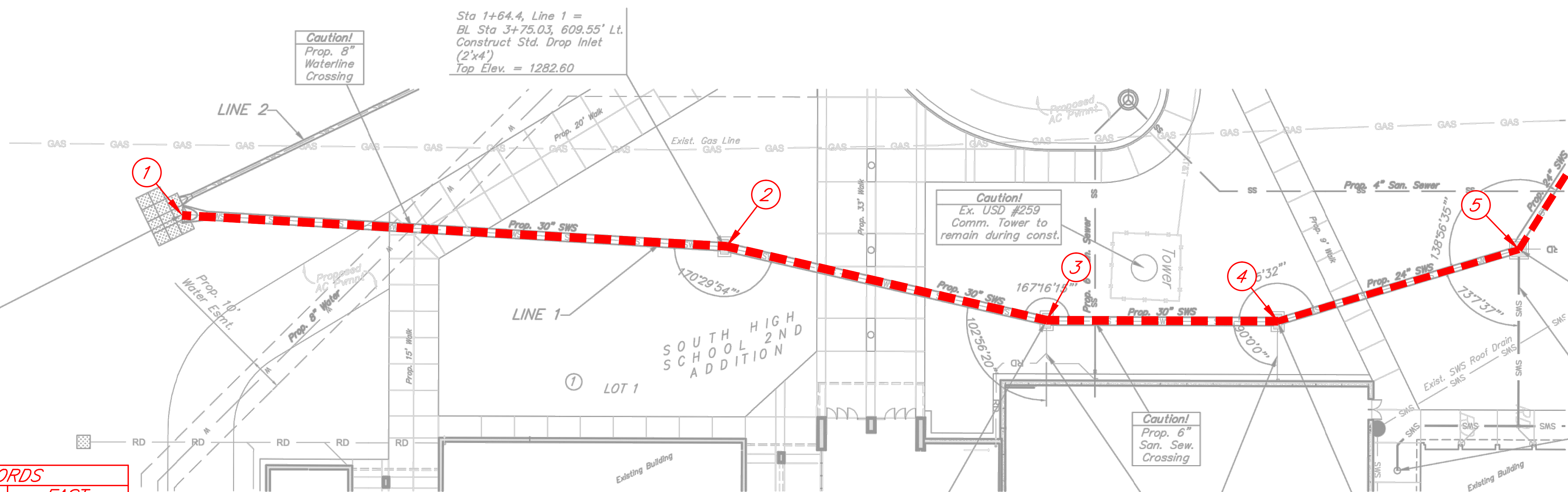
Sta 2+64.6, Line 1 =
BL Sta 4+72.75, 587.44' Lt.
Construct Std. Drop Inlet
(2'x4') w/ 8" Stub(E)
Top Elev. = 1282.70

Sta 3+46.6, Line 1 =
BL Sta 5+42.75, 587.41' Lt.
Construct Std. Drop Inlet
(2'x4') w/ 6" Stub(E)
Top Elev. = 1282.70

Sta 4+11.0, Line 1 =
BL Sta 6+15.87, 609.60' Lt.
Construct Std. Drop Inlet (4'x4')
w/ 10" Stub(E) & 8" Stub(N)
Top Elev. = 1282.80

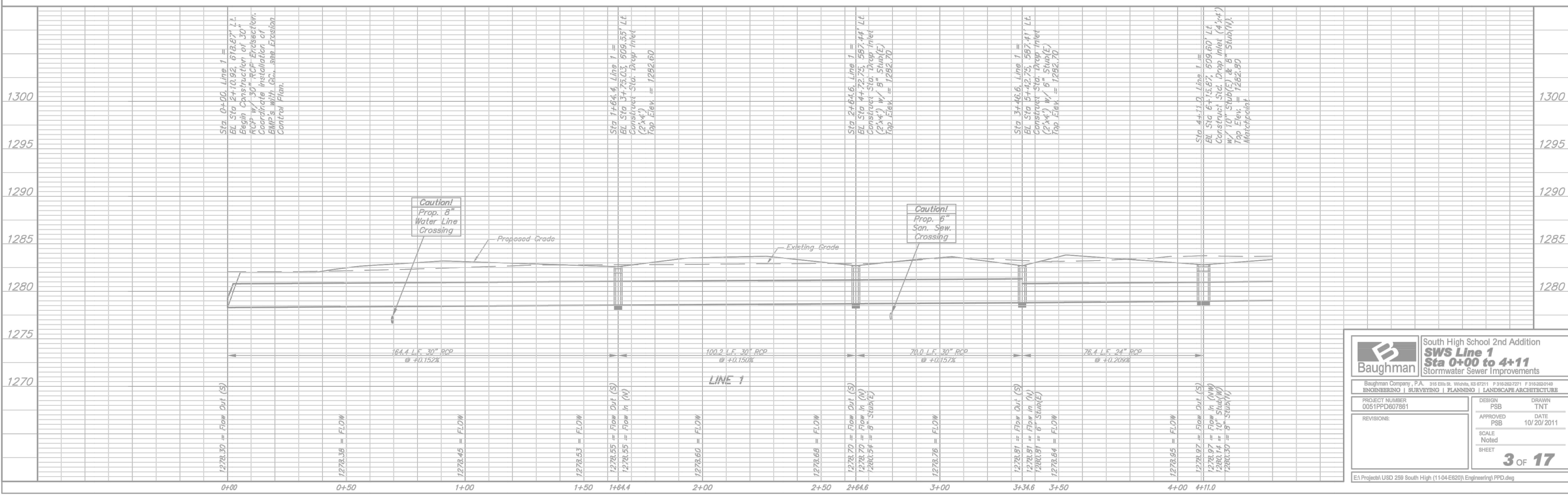
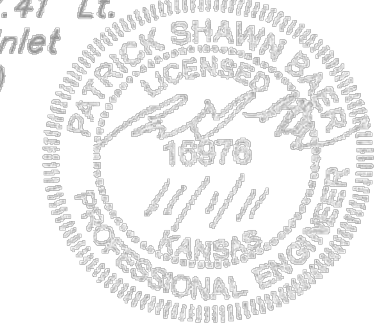


NO.	TOP ELEV.	FLOWLINE		COORDS	
		IN	OUT	NORTH	EAST
1	N/A	N/A	1278.35	1665345.79	1646566.49
2	1282.43	1278.63	1278.58	1665510.88	1646572.02
3	1282.50	1278.75	1278.75	1665608.44	1646592.17
4	1282.61	1279.05	1278.97	1665678.44	1646590.86
5	1282.72	1279.22	1279.22	1665751.01	1646567.47



Existing Sidewalk Note.
Ex. sidewalk to be removed as needed, coordinate with GC.

Existing Storm Sewer Note.
Ex. storm sewer line to be removed as needed, coordinate with GC. See Utility Plan.



Baughman South High School 2nd Addition
SWS Line 1
Sta 0+00 to 4+11
Stormwater Sewer Improvements

PROJECT NUMBER: 0051PPD07861
DESIGN: PSB
DRAWN: TNT
APPROVED: PSB
DATE: 10/20/2011
SCALE: Noted
SHEET: 3 OF 17

EA Project\USD 259 South High (11-04-E620)\Engineering\PPD.dwg

Benchmarks

Benchmark #1 - "□" Chiseled on Top of Concrete
ELEV. = 1285.93 (NAVD 88)

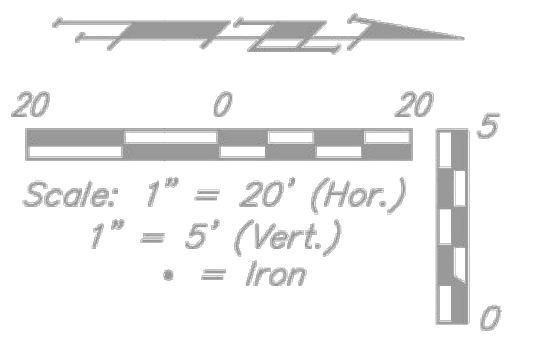
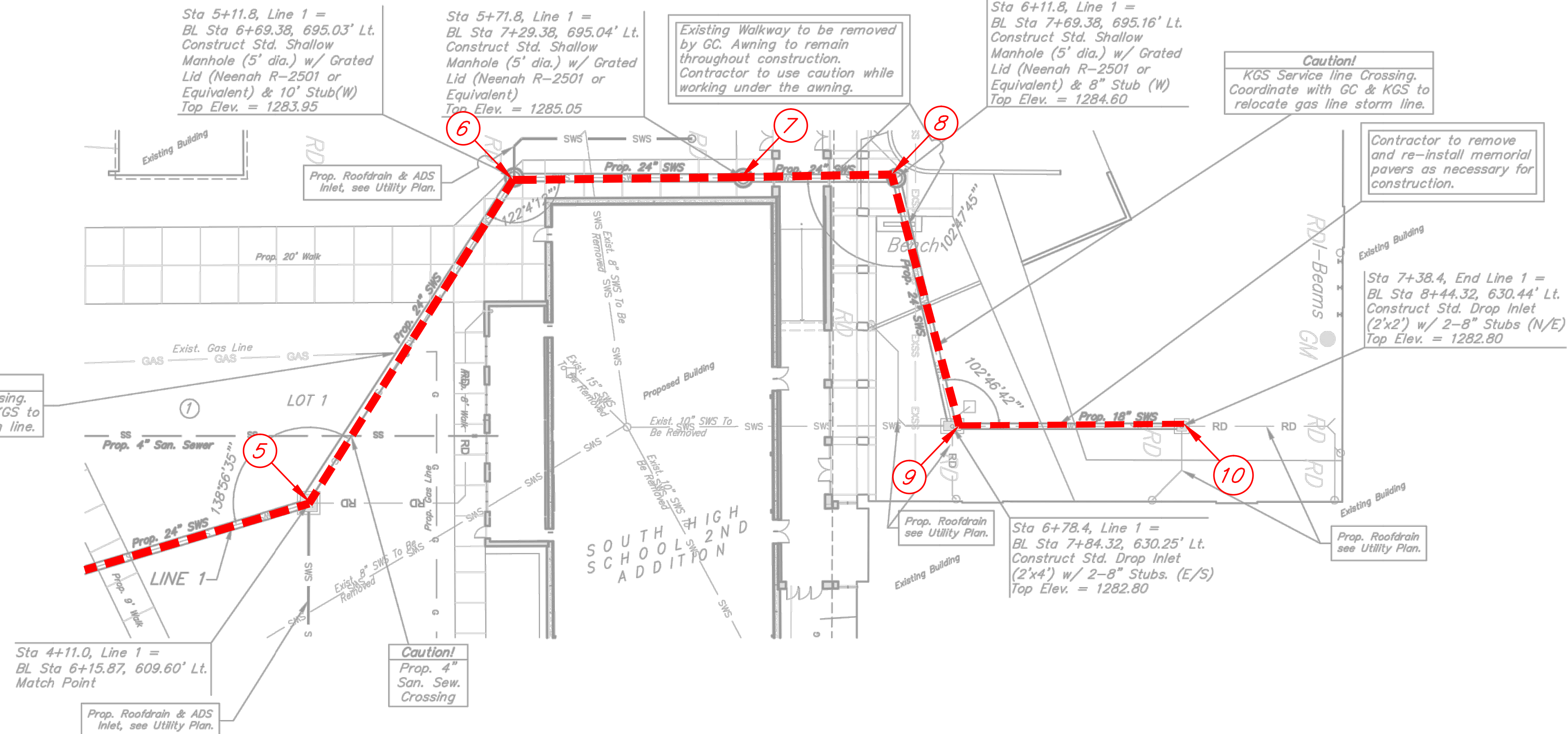
Benchmark #2 - "□" Chiseled on Top of Concrete
ELEV. = 1284.29 (NAVD 88)

AS BUILTS



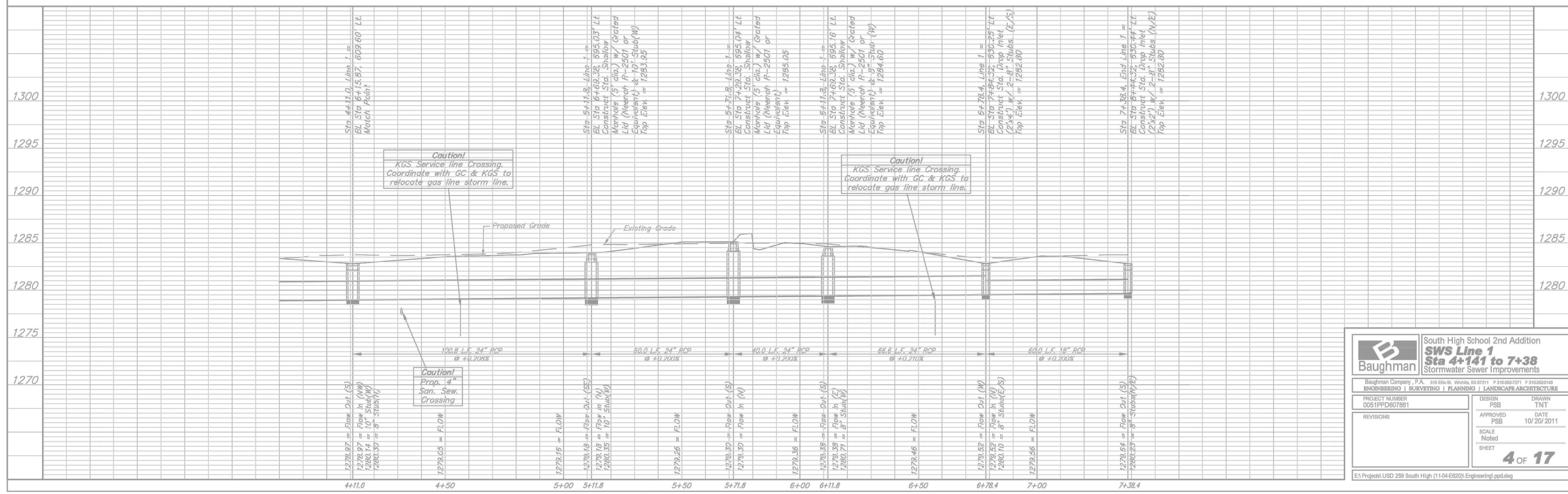
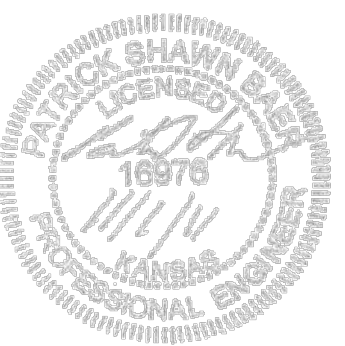
516 S. Market
Wichita, KS 67202
(316)264-0242

NO.	TOP ELEV.	FLOWLINE		COORDS	
		IN	OUT	NORTH	EAST
5	1282.72	1279.22	1279.22	1665751.01	1646567.47
6	1283.84	1279.34	1279.29	1665802.43	1646481.52
7	1285.23	1279.58	1279.58	1665862.13	1646479.37
8	1284.75	1279.55	1279.55	1665901.47	1646477.76
9	1282.63	1279.73	1279.71	1665920.67	1646543.06
10	1282.65	N/A	1279.81	1665979.45	1646541.24



Existing Sidewalk Note.
Ex. sidewalk to be removed as needed, coordinate with GC.

Existing Storm Sewer Note.
Ex. storm sewer line to be removed as needed, coordinate with GC. See Utility Plan.



Baughman South High School 2nd Addition
SWS Line 1
Sta 4+141 to 7+38
Stormwater Sewer Improvements

Baughman Company, P.A. 516 S. Market, Wichita, KS 67202 P 316-262-7271 F 316-262-0242
ENGINEERING | SURVEYING | PLANNING | LANDSCAPE ARCHITECTURE

PROJECT NUMBER 0051PPD607861	DESIGN PSB	DRAWN TNT
REVISIONS:	APPROVED PSB	DATE 10/20/2011
	SCALE Noted	SHEET 4 OF 17

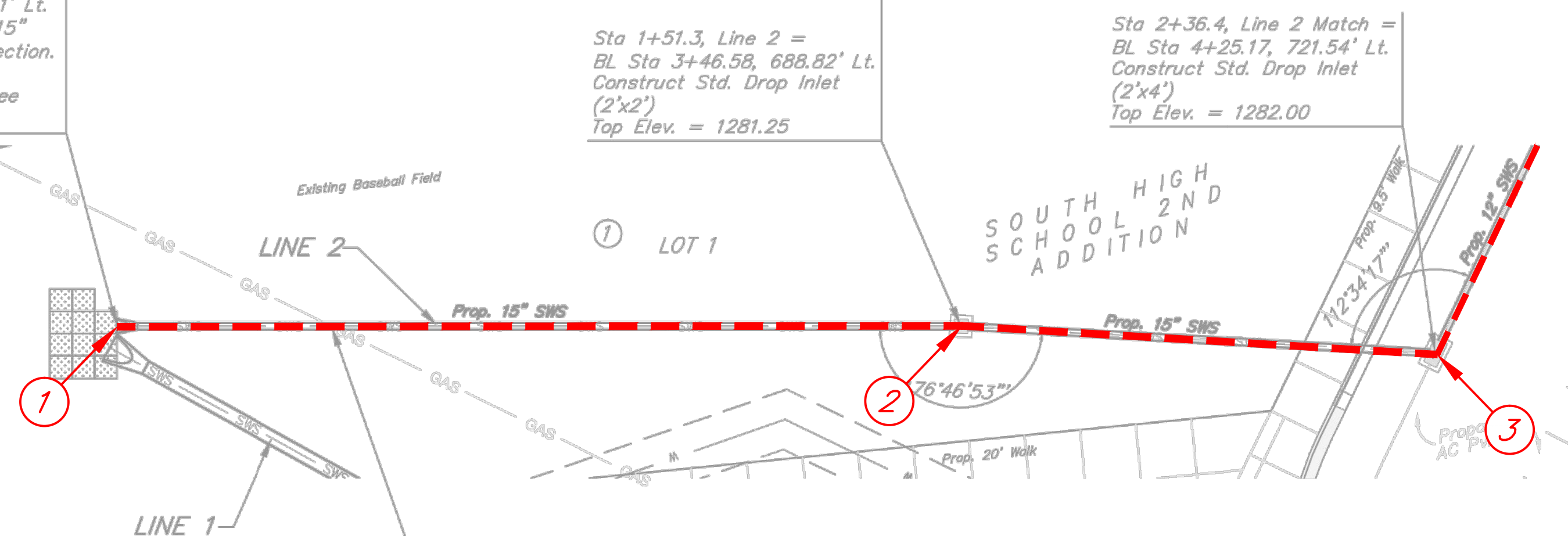
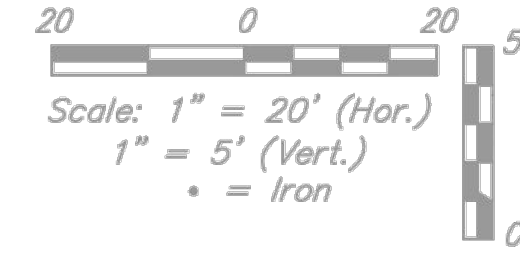
EA Projects\USD 259 South High (11-04-E620)\Engineering\ppd.dwg

Benchmarks

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ELEV. = 1285.93 (NAVD 88)

Benchmark #2 - "□" Chiseled on Top of Concrete
ELEV. = 1284.29 (NAVD 88)

Sta. 0+00, Line 2 =
BL Sta 2+10.40, 622.91' Lt.
Begin Construction of 15"
RCP w/ 15" RCP Endsection.
Coordinate with GC for
Installation of BMP's, see
Erosion Control Plan.



Sta 1+51.3, Line 2 =
BL Sta 3+46.58, 688.82' Lt.
Construct Std. Drop Inlet
(2'x4')
Top Elev. = 1281.25

Sta 2+36.4, Line 2 Match =
BL Sta 4+25.17, 721.54' Lt.
Construct Std. Drop Inlet
(2'x4')
Top Elev. = 1282.00

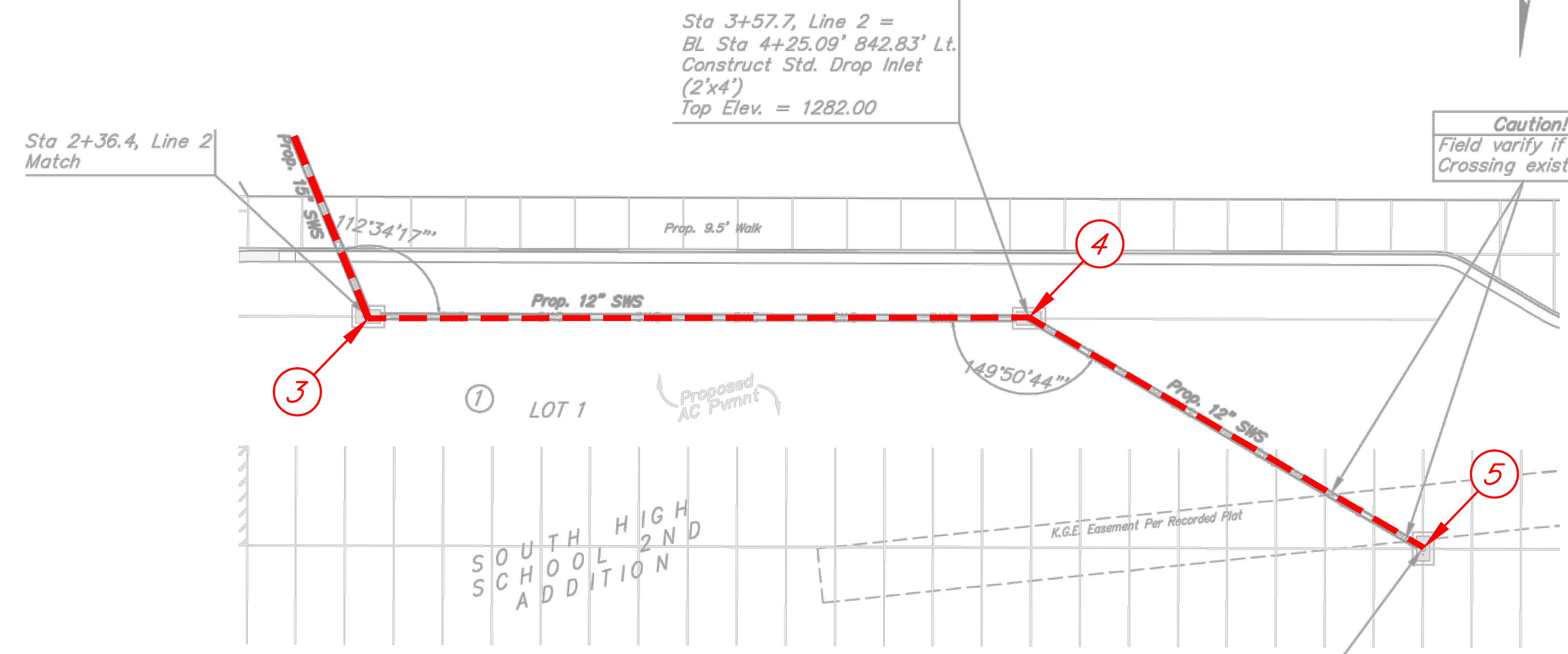
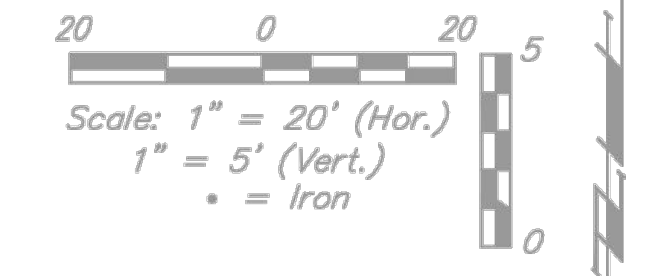
NO.	TOP ELEV.	FLOWLINE		COORDS	
		IN	OUT	NORTH	EAST
1	N/A	N/A	1278.56	1665345.28	1646562.37
2	1281.13	1279.03	1278.98	1665480.20	1646493.48
3	1281.98	1279.58	1279.48	1665558.47	1646459.40
4	1281.97	1280.09	1280.07	1665555.51	1646338.01
5	1282.47	N/A	1280.52	1665596.07	1646264.53

AS BUILTS

kemiller engineering

516 S. Market,
Wichita, KS 67202

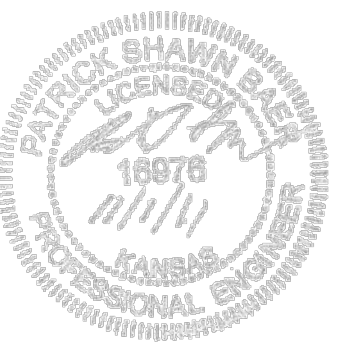
(316)264-0242



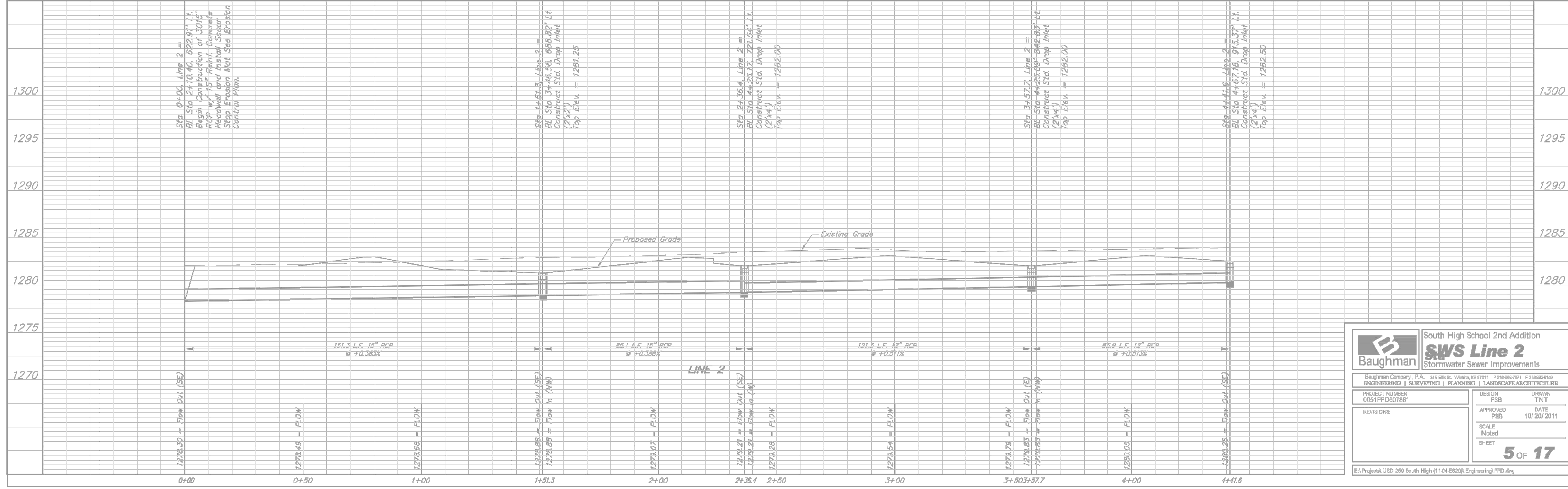
Sta 3+57.7, Line 2 =
BL Sta 4+25.09' 842.83' Lt.
Construct Std. Drop Inlet
(2'x4')
Top Elev. = 1282.00

Caution!
Field verify if UGE
Crossing exists.

Sta 4+41.6, Line 2 =
BL Sta 4+67.18, 915.37' Lt.
Construct Std. Drop Inlet
(2'x4')
Top Elev. = 1282.50



Caution!
KGS Service line Crossing.
Utility Contractor to expose
gas line north and south and
adjust gas line depth as
required to clear rap.



Baughman South High School 2nd Addition
SWS Line 2
Stormwater Sewer Improvements

Baughman Company, P.A. 516 S. Market, Wichita, KS 67202 P 316-262-7271 F 316-262-0246
ENGINEERING | SURVEYING | PLANNING | LANDSCAPE ARCHITECTURE

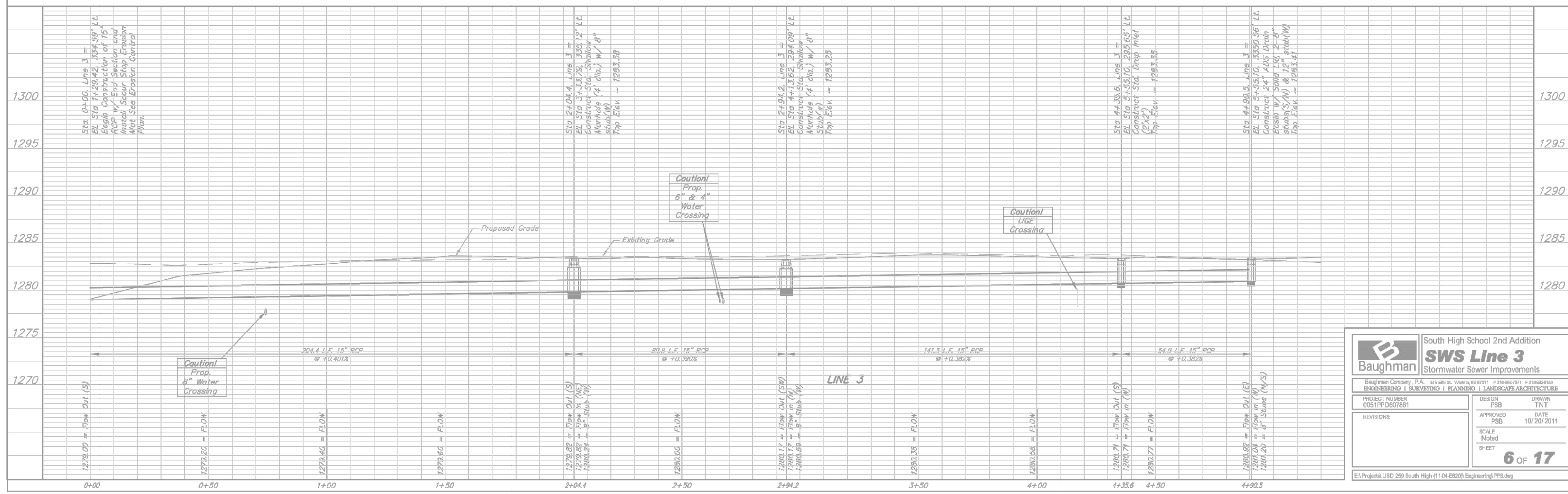
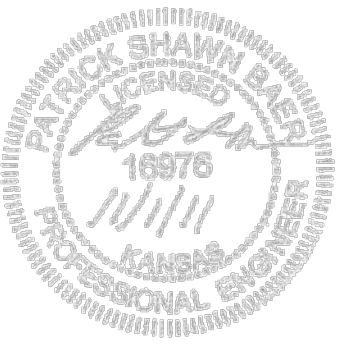
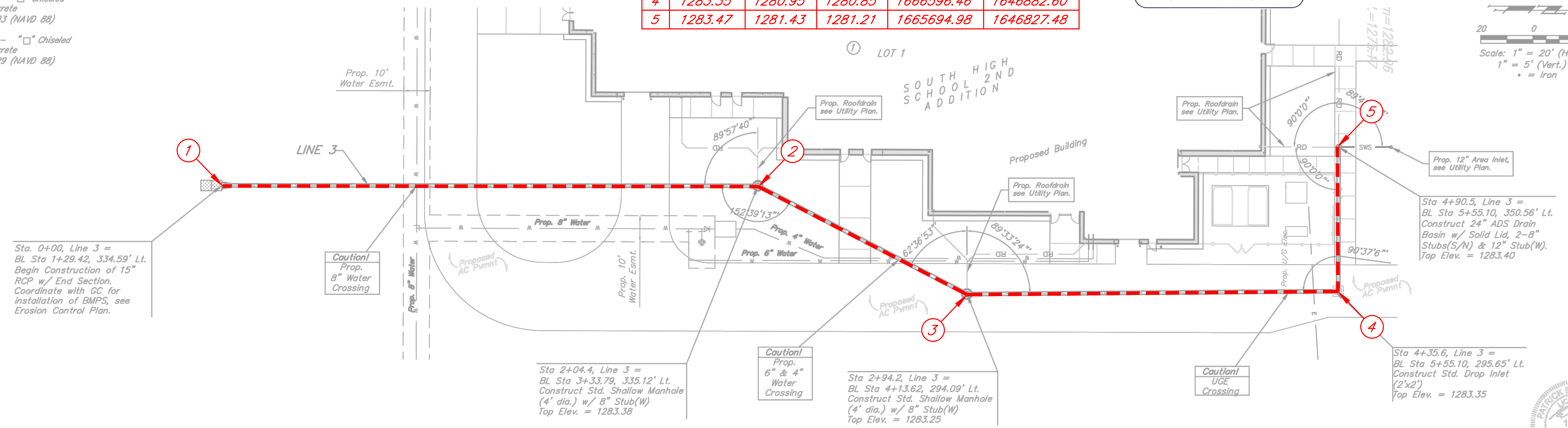
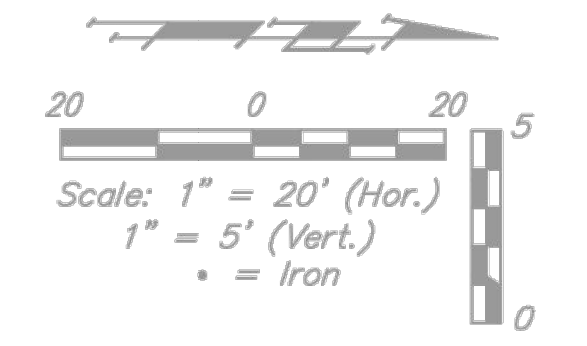
PROJECT NUMBER 0051PPD07861	DESIGN PSB	DRAWN TNT
REVISIONS:	APPROVED PSB	DATE 10/20/2011
SCALE Noted		5 OF 17
SHEET		

EA Project\USD 259 South High (11-04-E620)\Engineering\PPD.dwg



NO.	TOP ELEV.	FLOWLINE		COORDS	
		IN	OUT	NORTH	EAST
1	N/A	N/A	1278.92	1665270.35	1646852.24
2	1282.81	1279.81	1279.81	1665474.60	1646847.73
3	1283.36	1280.21	1280.21	1665555.17	1646887.09
4	1283.35	1280.95	1280.85	1666596.46	1646882.60
5	1283.47	1281.43	1281.21	1665694.98	1646827.48

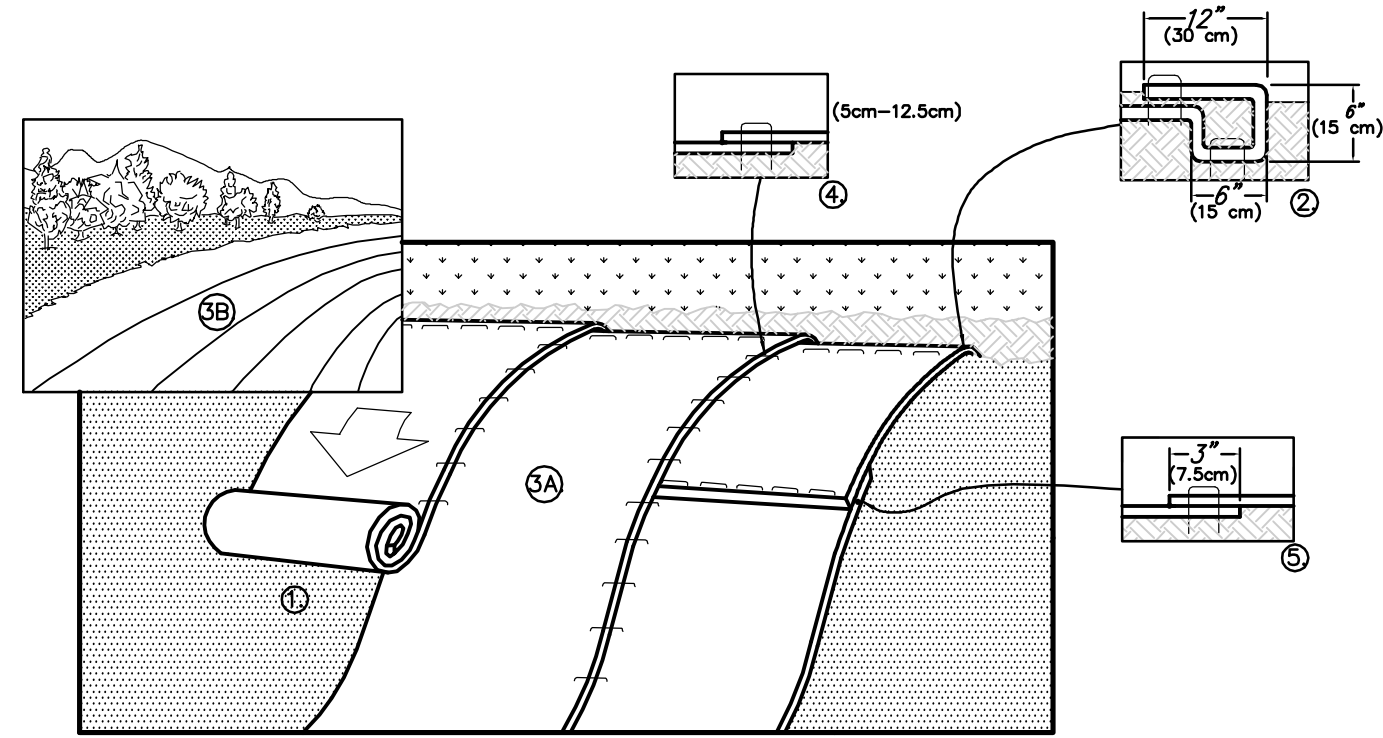
Benchmarks
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 ELEV. = 1285.93 (NAVD 88)
 Benchmark #2 - "□" Chiseled on Top of Concrete
 ELEV. = 1284.29 (NAVD 88)



Baughman South High School 2nd Addition
SWS Line 3
 Stormwater Sewer Improvements

PROJECT NUMBER: 0051PPD607861
 DESIGN: PSB
 DRAWN: TNT
 APPROVED: PSB
 DATE: 10/20/2011
 SCALE: Noted
 SHEET: 6 OF 17

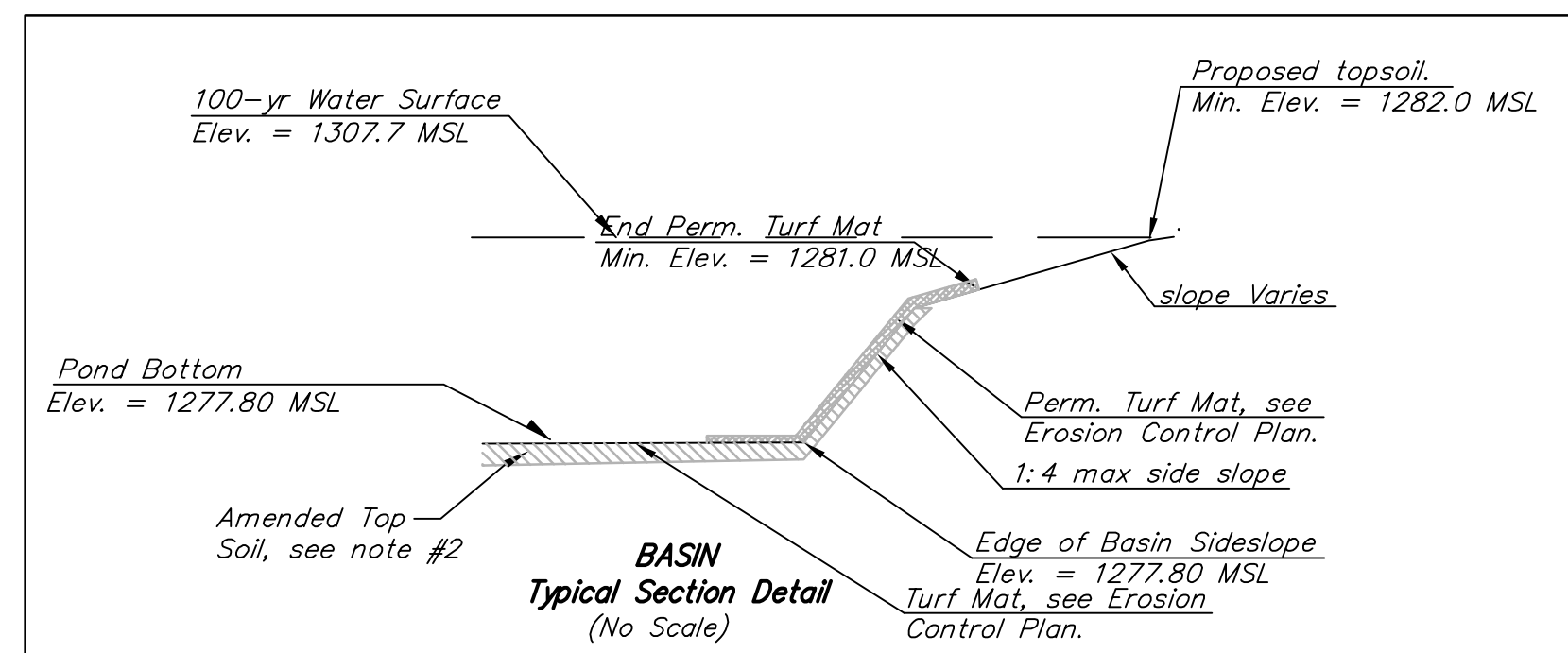
EA Project\USD 259 South High (11-04-E620)\Engineering\PPS.dwg



- INFILTRATION DETENTION BASIN NOTES:**
- Basin bottom and shall be over-excavated to the existing sand layer, see Geotechnical Report by Terracon Consultants Inc., and backfilled with on site sandy soil excavated from proposed Building Footings. Overexcavation and backfilling to be verified by PPD Inspector, to be paid by the contractor. Soil testing shall be arranged by the Contractor at the request of the Inspector.
 - Top 4" layer of bottom and sideslop of basin to consist of amended top soil consisting of 75% construction sand, 10% Organic Matter, and 15% Top Soil.
 - All of disturbed areas, see Erosion Control for temporary seeding, and Native Seed note for permanent seeding requirements.
 - Seeding within Infiltration Detention Basin to consist of a short Grass Prairie Mix: 12# PLS/oc. (Sharp's Shortgrass Pasture Mix from Sharp Bros. Seed Co. Heely, KS) 50% Blue Grama, Native, 25% Buffalograss, Sharp's Improved w/KNO3, 25% Sideoats Grama, El Reno.
 - Install Erosion Control Mat (North American Green Bionet S150BN & C350 or approved equal) within Basin as indicated on Erosion Control Plan.

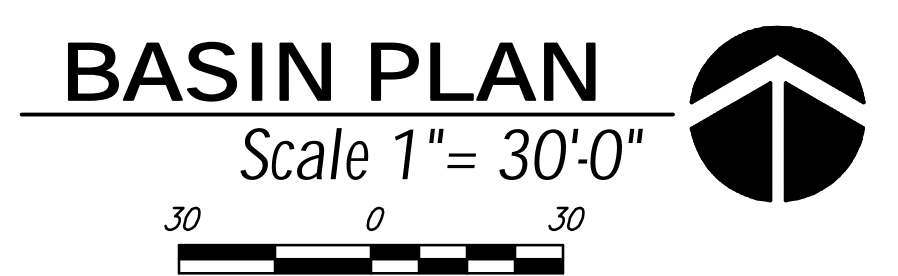
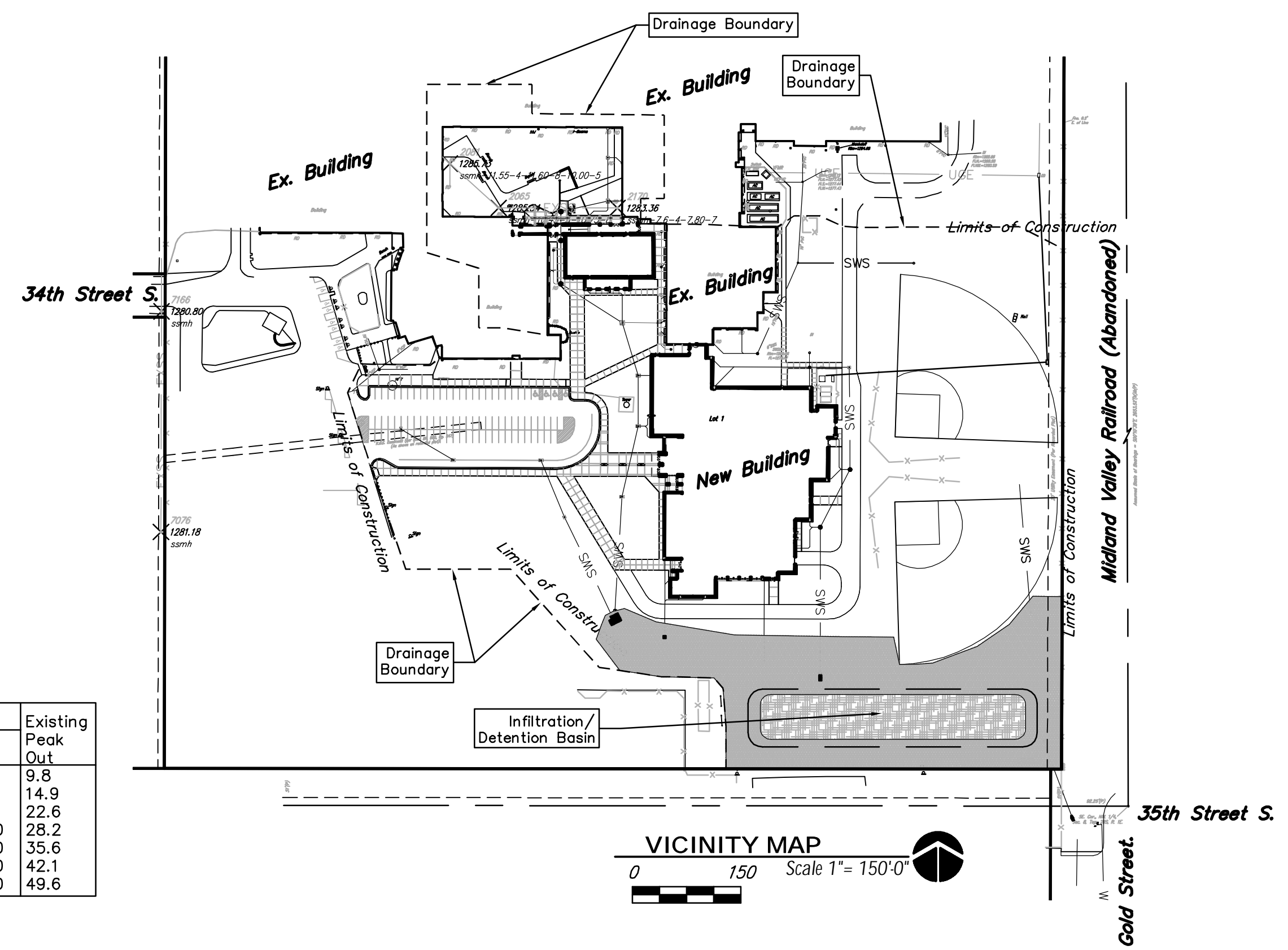
- PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-0-SEED DO NOT SEED PREPARED AREA. CELL-0-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
- BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" (15cm) DEEP X 6" (15cm) WIDE TRENCH WITH APPROXIMATELY 12" (30cm) OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30cm) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30cm) PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30cm) APART ACROSS THE WIDTH OF THE BLANKET.
- ROLL THE BLANKETS (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING OPTIONAL DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
- THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2"-5" (5cm-12.5cm) OVERLAP DEPENDING ON BLANKET TYPE. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET.
- CONSECUTIVE BLANKETS SPICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5cm) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30cm) APART ACROSS ENTIRE BLANKET WIDTH.

1 EROSION CONTROL MAT - SLOPE INSTALLATION
 NOT TO SCALE
 14649 HIGHWAY 41 NORTH, EVANSVILLE, INDIANA 47725
 USA 1-800-772-2040 CANADA 1-800-448-2040
 www.nogreen.com



Basin Size		
Elevation	Area	Volume
1277.8	32,000	0
1278.0	35,184	6,715
1279.0	49,898	49,038
1280.0	65,373	106,494
1281.0	82,140	180,084
1282.0	105,000	273,411

Event	Basin Event Results			Existing Peak Out
	Peak In	Peak Out	Peak Elev.	
1-yr	24.3	0.6	1,278.8	40,100
2-yr	33.7	1.1	1,279.1	56,500
5-yr	47.4	1.6	1,279.6	65,700
10-yr	57.0	1.9	1,279.9	100,700
25-yr	69.3	2.1	1,280.3	126,200
50-yr	80.3	2.3	1,280.6	149,600
100-yr	92.5	2.6	1,281.0	176,300



BENCHMARK

Benchmark #1 - "□" Chiseled on Top of Concrete
 ELEV. = 1285.93 (NAVD 88)

Benchmark #2 - "□" Chiseled on Top of Concrete
 ELEV. = 1284.29 (NAVD 88)

LEGAL DESCRIPTION

Lot 1, Block 1 South High School 2nd Addition, to
 Wichita, Sedgwick County, Kansas.

SITE INFORMATION

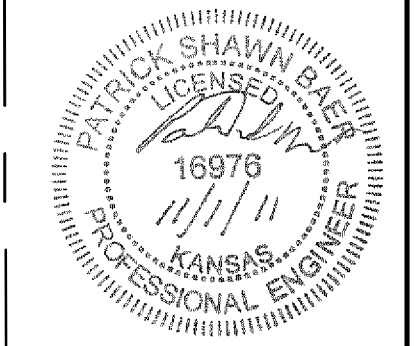
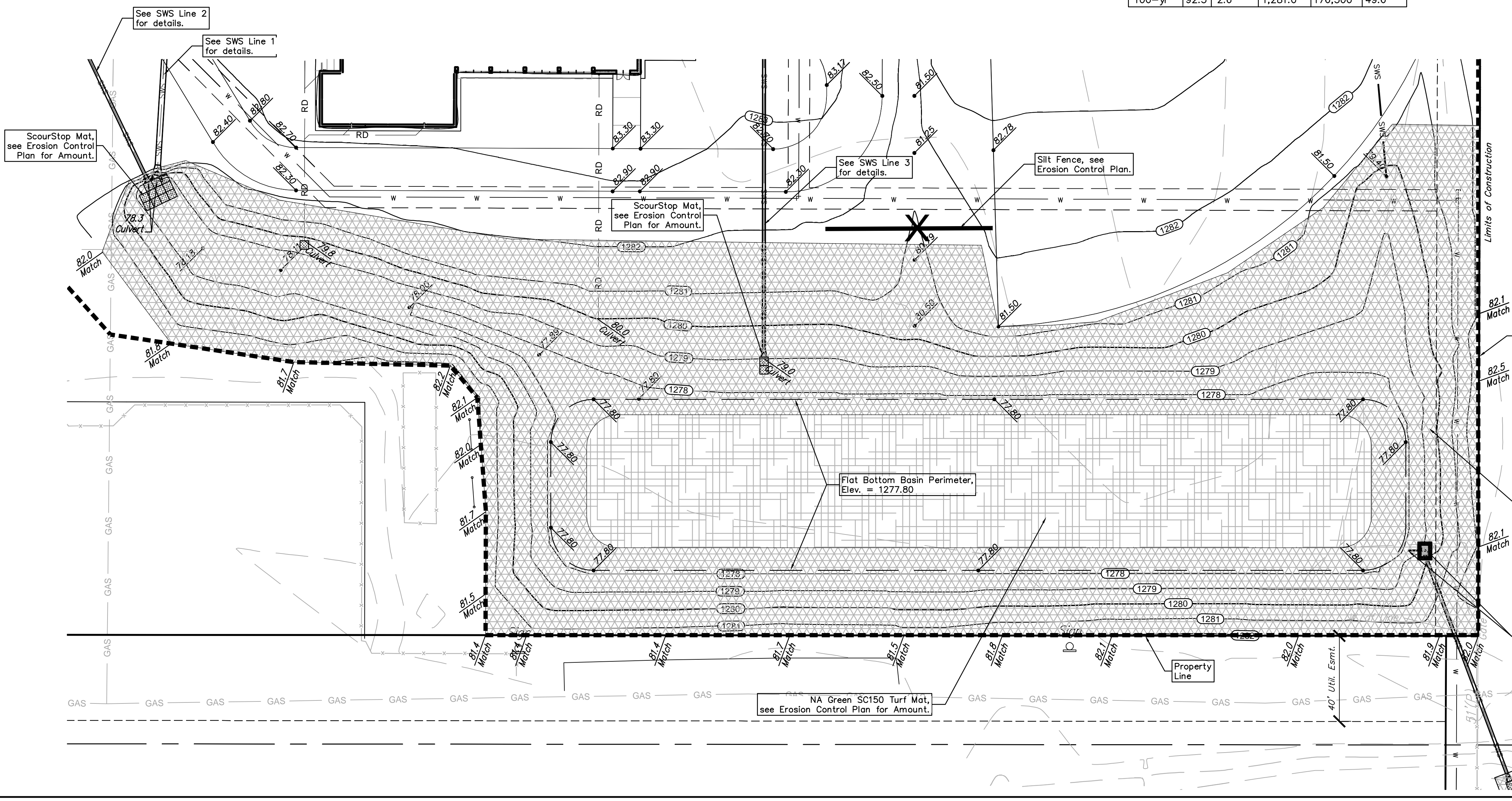
Total Disturbed Area: 560,063 sq. ft. (12.86 acres)
 Existing Impervious Area Removed: ±27,075 sq. ft.
 Impervious Area Added: ±169,467 sq. ft. (incl. building)
 Pervious Area: ±390,596 sq. ft.
 Added Building Area: ±73,124 sq. ft.

LEGEND

▬▬▬▬▬▬ = Drainage Region

▨▨▨▨▨▨ = NA Green SC 150 Erosion Control Mat with native seed. Install per Manufacture Specifications.

▩▩▩▩▩▩ = NA Green C350 Permanent Turf Reinforcement Mat with native seed. Install per Manufacture Specifications.



Baughman South High School 2nd Addn.
Infiltration/ Detention Basin
 Stormwater Sewer Improvements

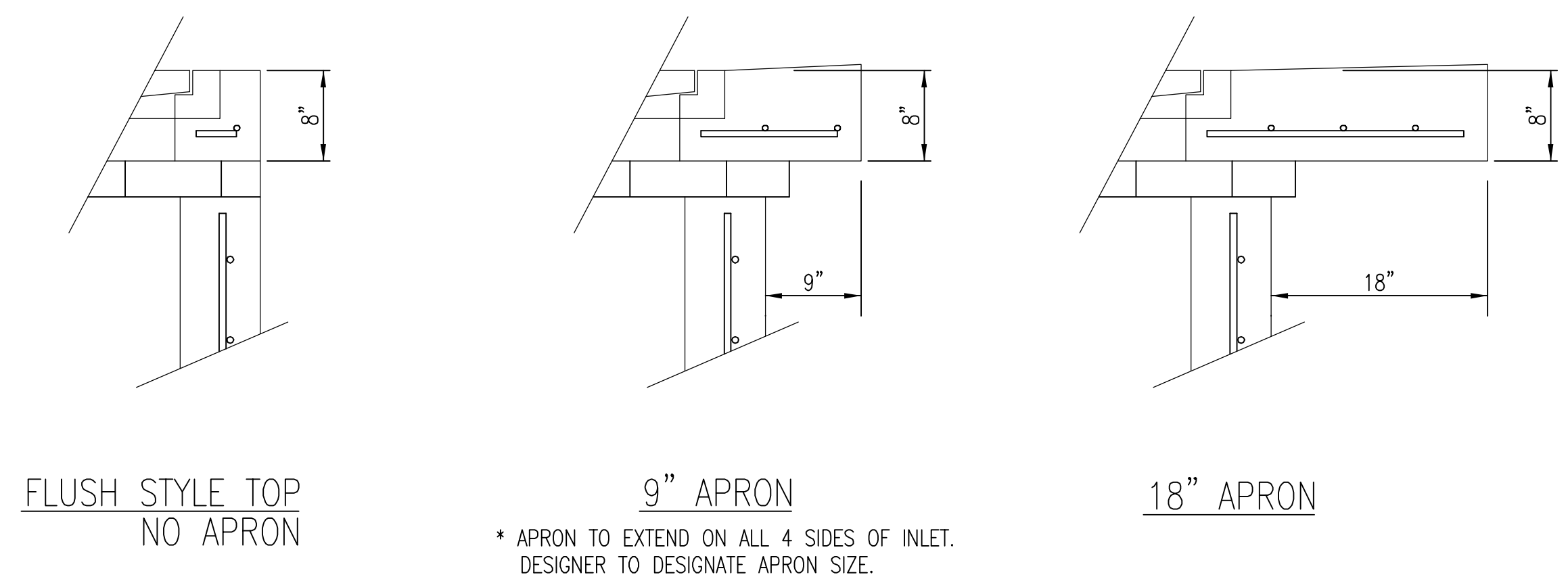
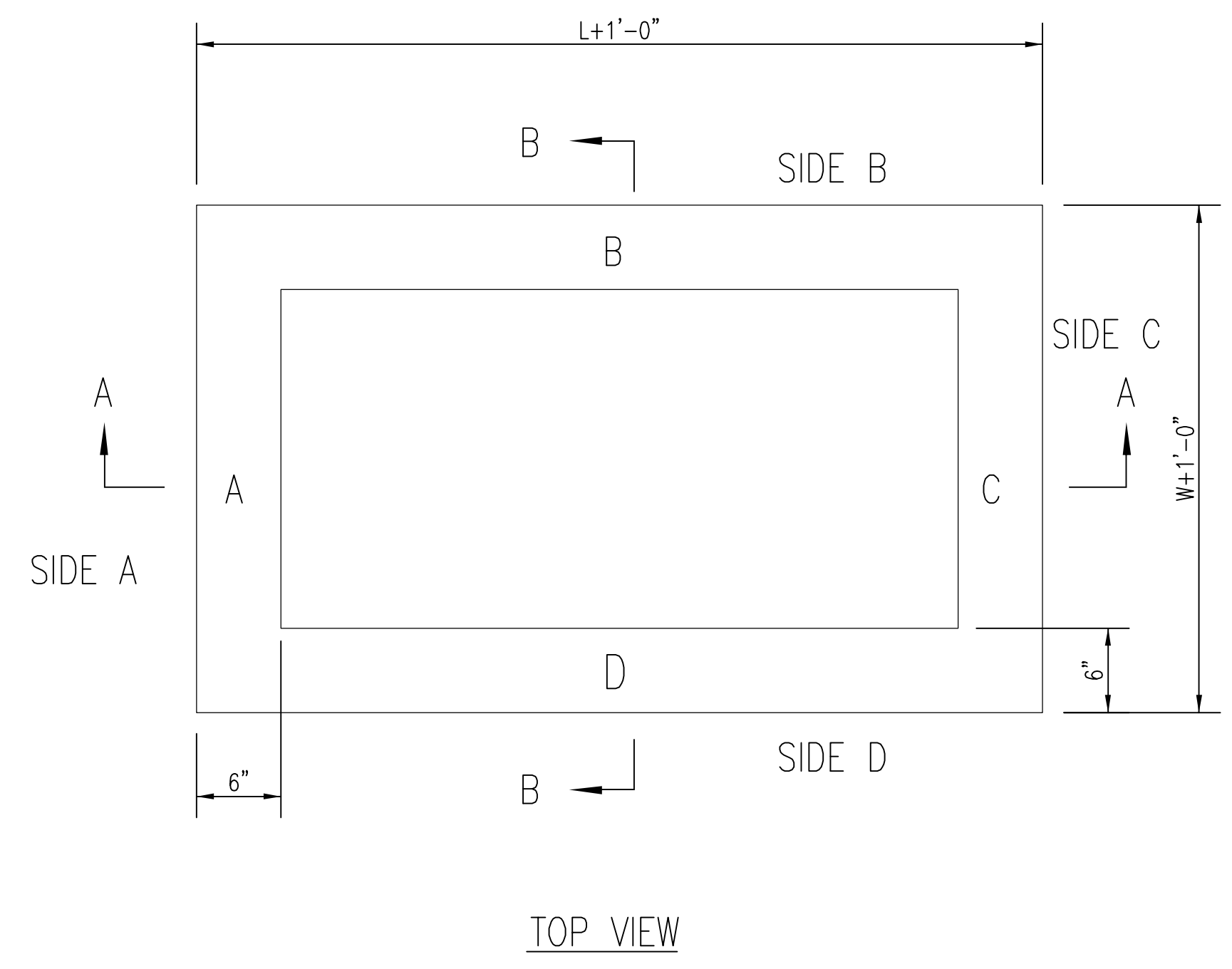
PROJECT NUMBER: 0051PPD607861
 DESIGN: PSB
 APPROVED: PSB
 DATE: 10/20/2011

REVISIONS:

SCALE: Noted
 SHEET: 8 OF 17

E:\Projects\USD 259 South High (11.04 E620)\Engineering\PPD.dwg

FHWA REGION NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KANSAS		2011	9	17



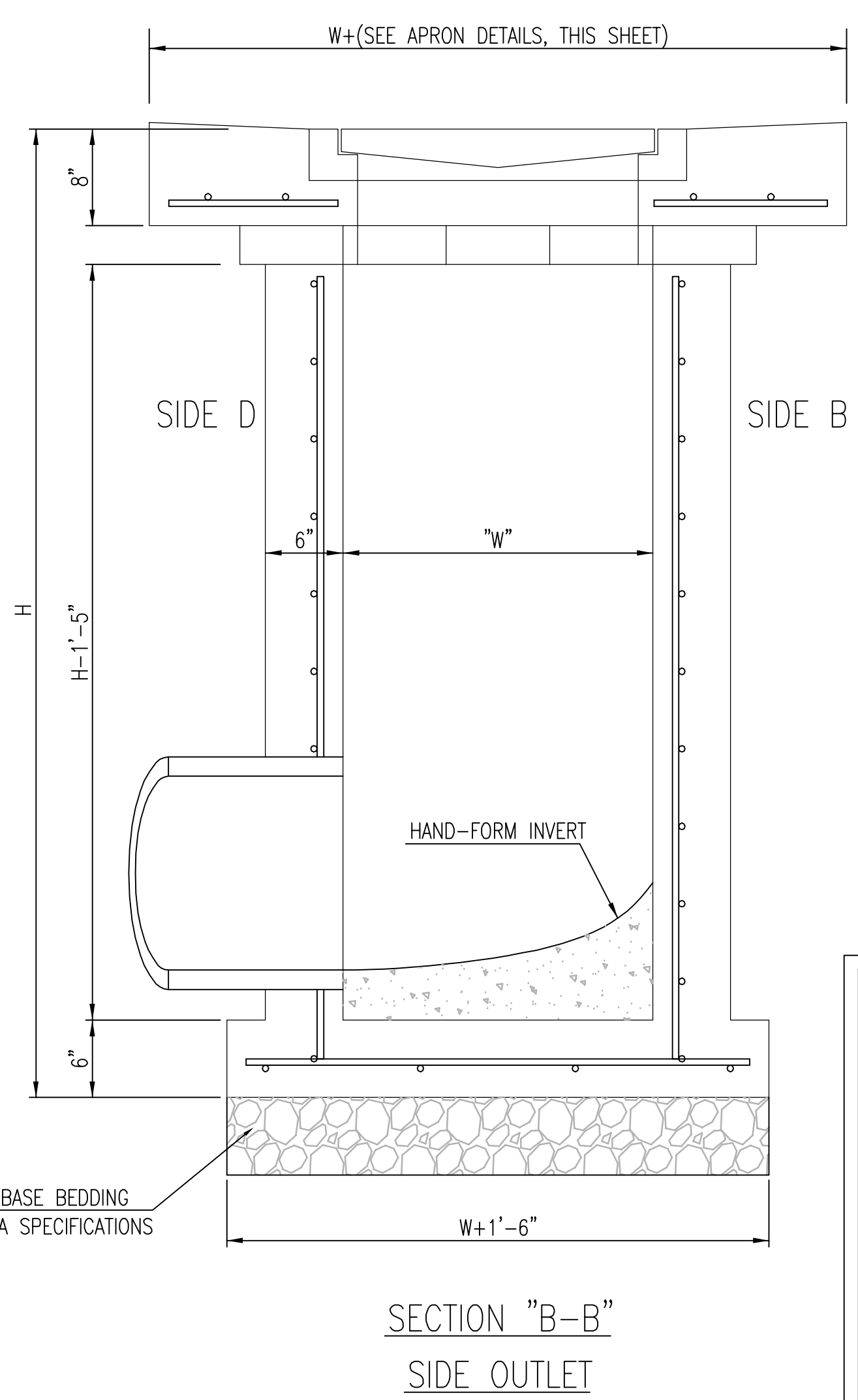
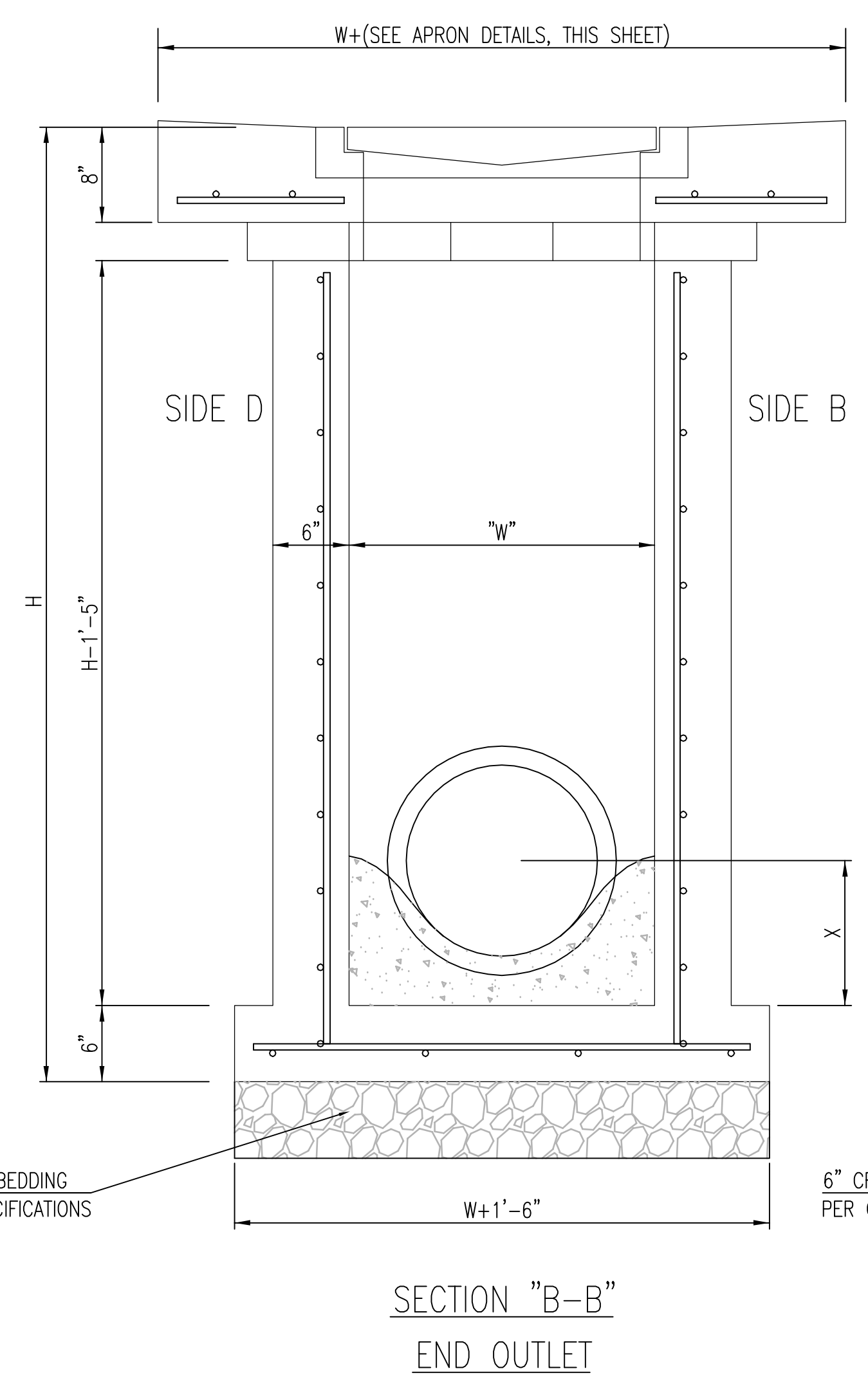
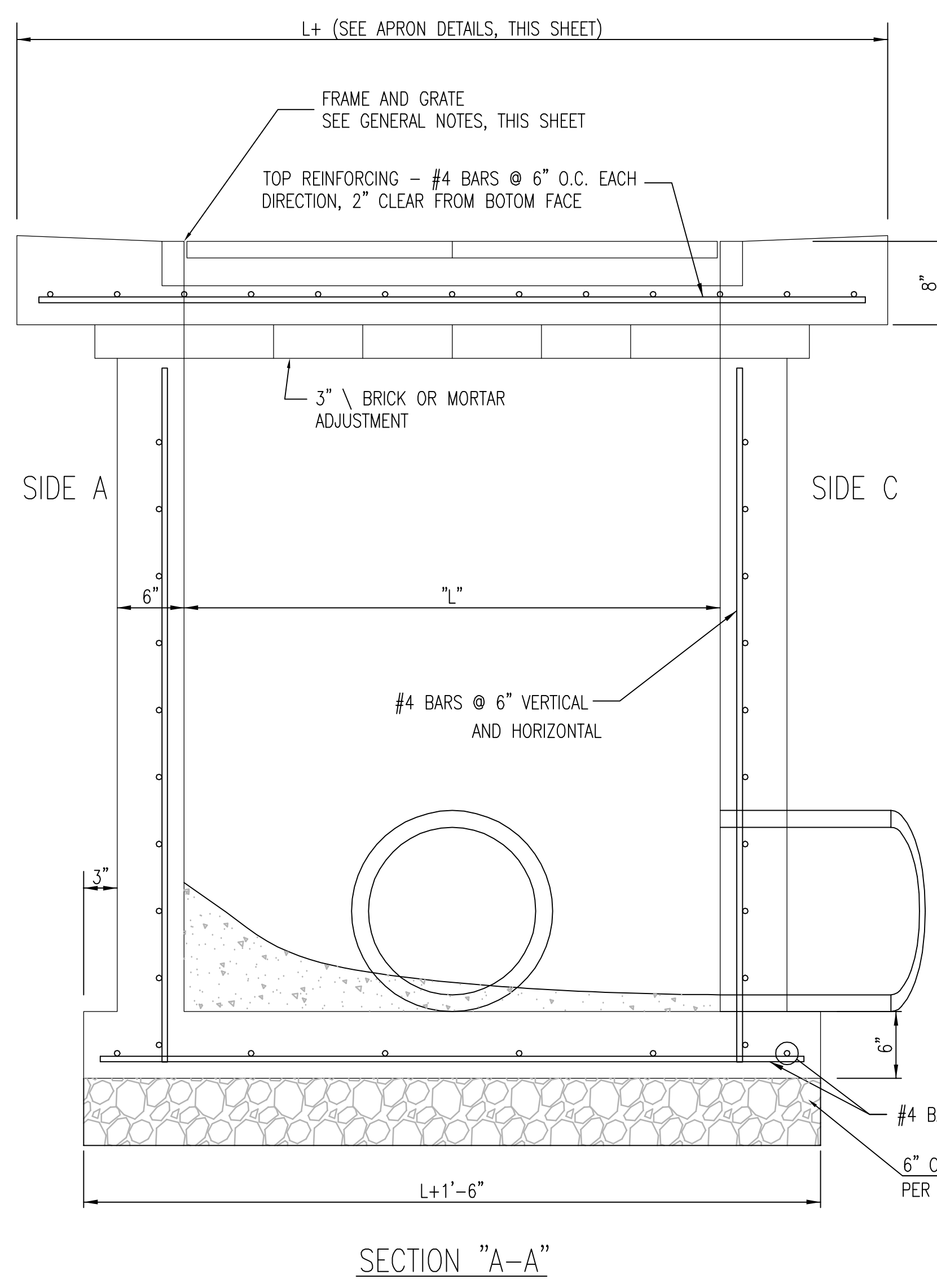
* APRON TO EXTEND ON ALL 4 SIDES OF INLET. DESIGNER TO DESIGNATE APRON SIZE.

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

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

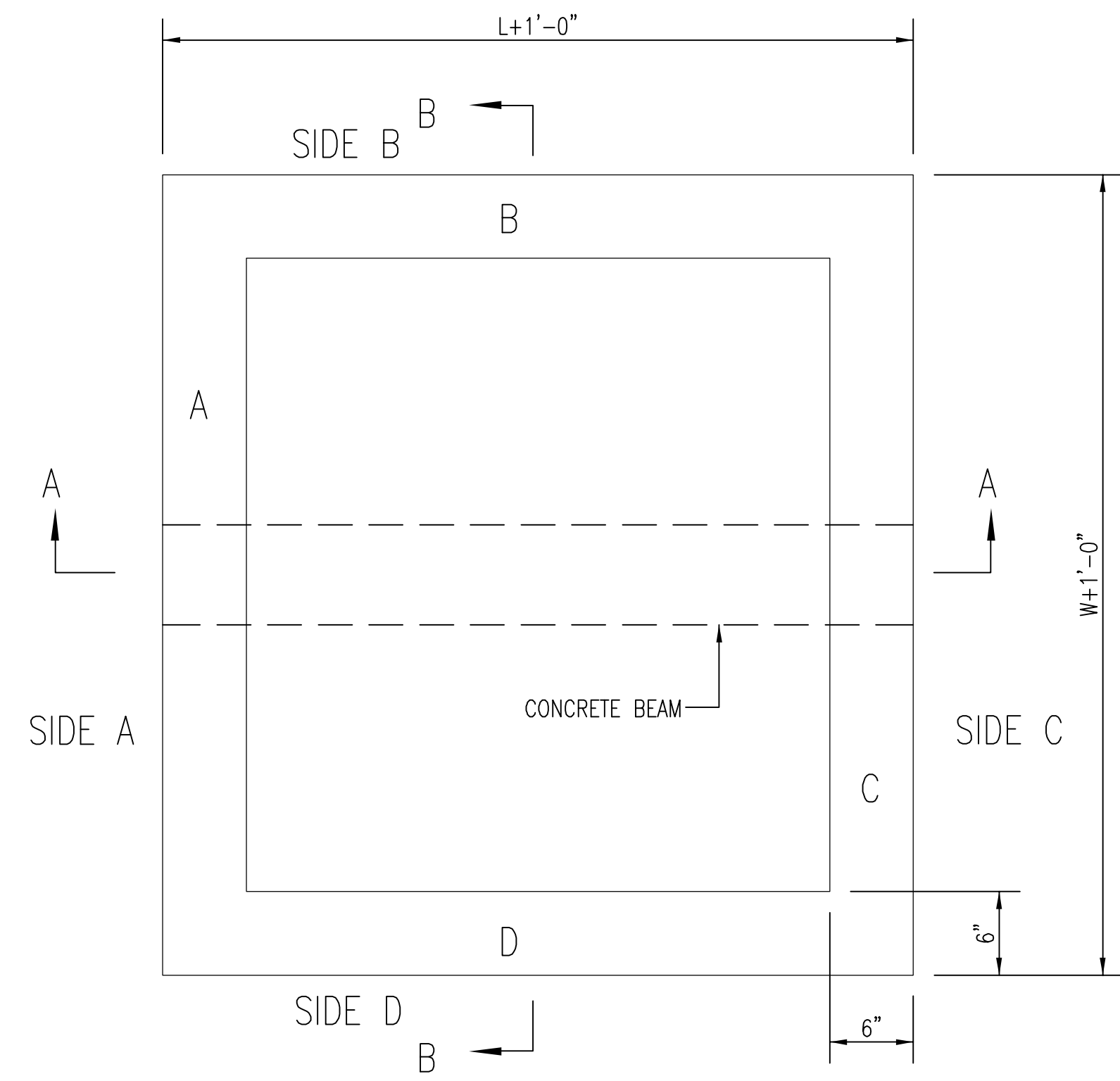
GENERAL NOTES

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 GROUDED FLUSH TO THE INLET WALL WITH HYDRAULIC CEMENT AFTER THE INLET IS IN PLACE. LIFTING HOLES THRU THE INLET WALL WILL NOT BE ACCEPTED.

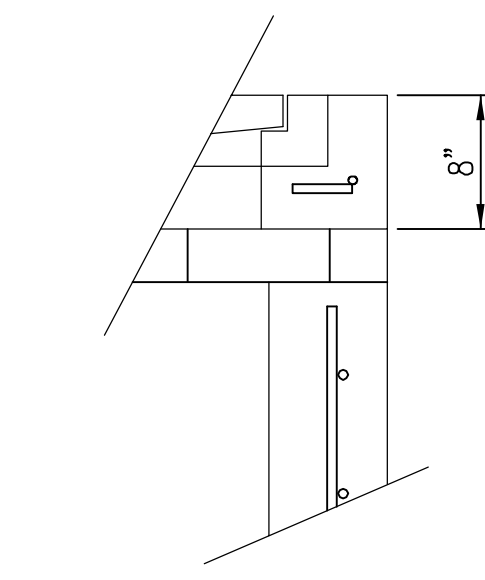


SINGLE/DOUBLE DROP INLET		
CITY ENGINEER JAMES L. ARMOUR, P.E., L.S.		
PROJECT NUMBER 0051PPD607861	OCA NUMBER	DATE 11/2010
CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		DESIGN DRAWN SHEET 9 of 17

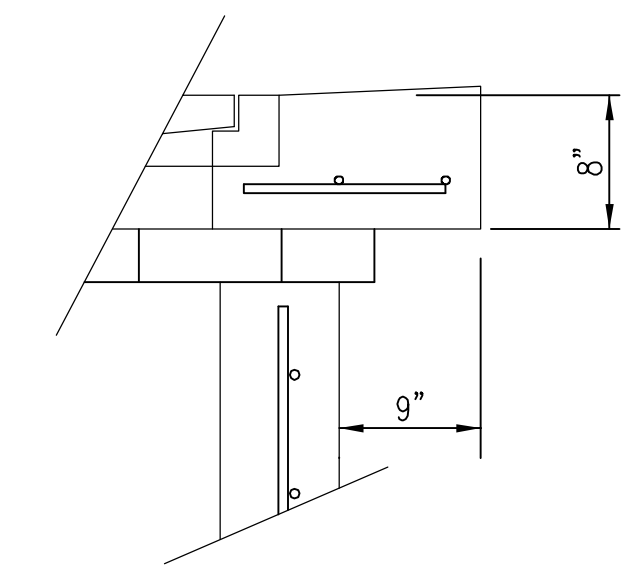
FHWA REGION NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KANSAS		2011	10	17



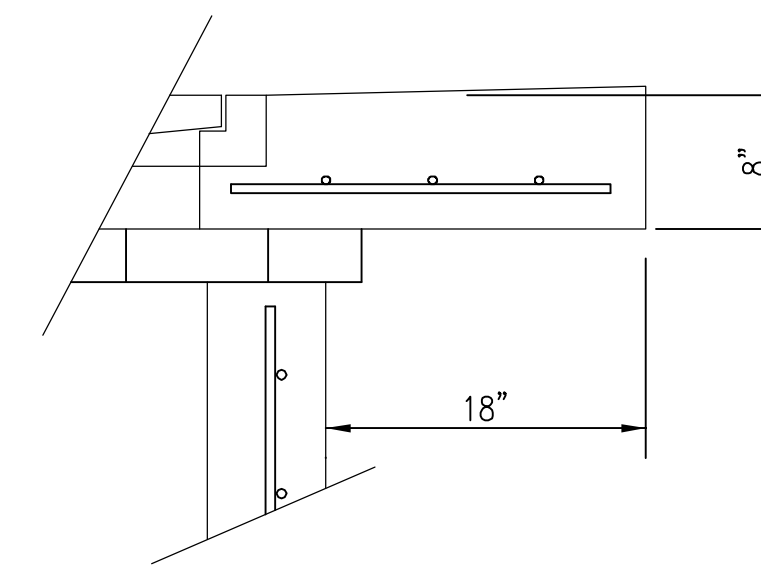
TOP VIEW



FLUSH STYLE TOP
NO APRON

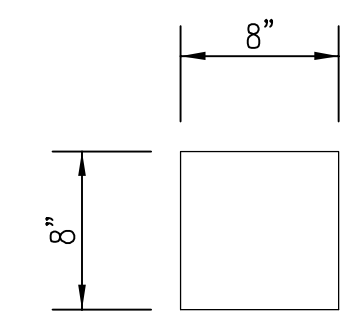


9" APRON
* APRON TO EXTEND ON ALL 4 SIDES OF INLET.
DESIGNER TO DESIGNATE APRON SIZE.

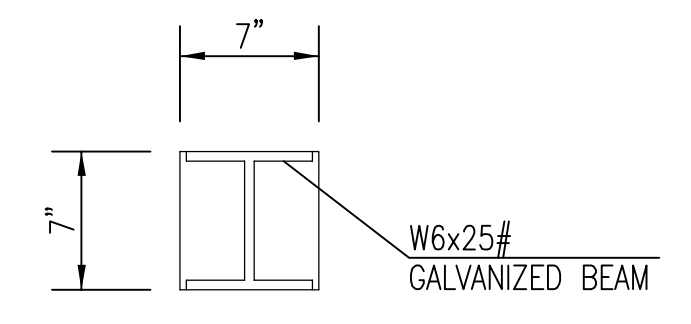


18" APRON

BEAM REQUIRED FOR THIS INLET



CONCRETE BEAM POCKET



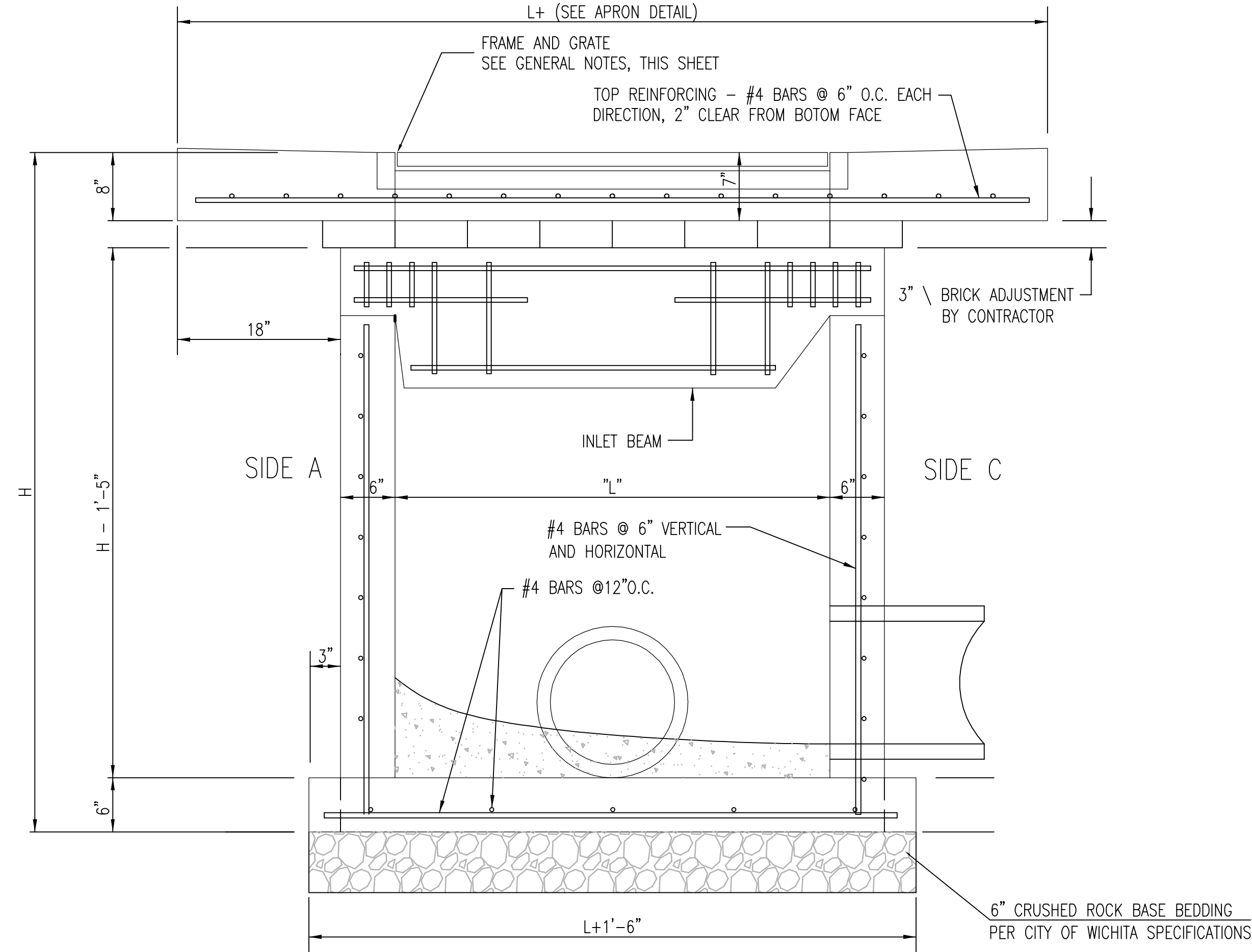
GALV. STEEL BEAM POCKET

W=4'-4" and L=4' for DOUBLE DROP INLET

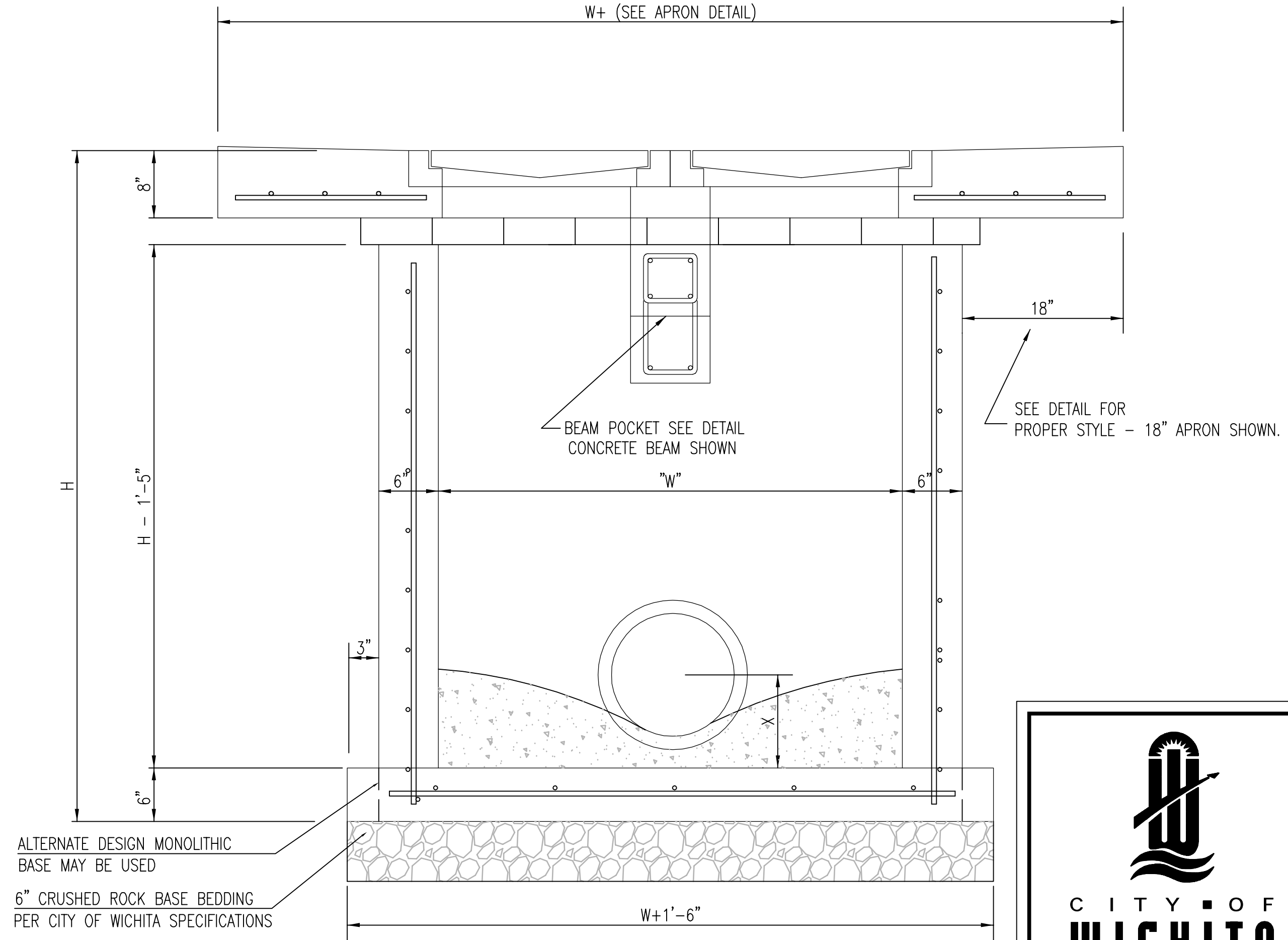
The structure(s) on this detail are designed for HS-20 at these specific dimensions only. If larger dimensions are required, the ENGINEER shall provide specific structure design for approval by the City Engineer's office.

GENERAL NOTES

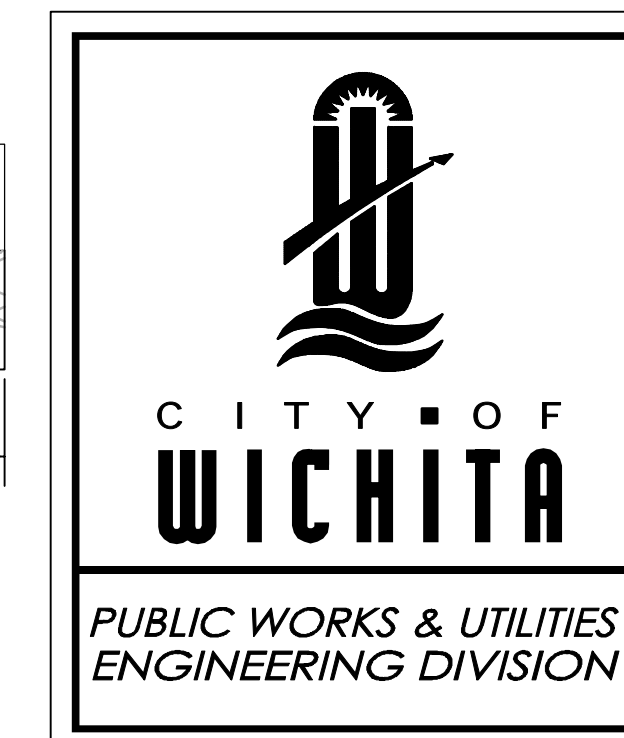
1. GRATE FRAME TO BE INSTALLED ON THIN MORTAR CUSHION TO INSURE FULL SUPPORT ALONG BRICK. CONCRETE USED FOR INLET CONSTRUCTION SHALL CONFORM TO CITY OF WICHITA SPECIFICATIONS FOR CONCRETE PAVEMENT MIX.
2. INLET INVERT SHALL BE SHAPED WITH 8 SACK SAND MIX CONCRETE TO CREATE FLOW CHANNELS AND TO INCREASE 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"

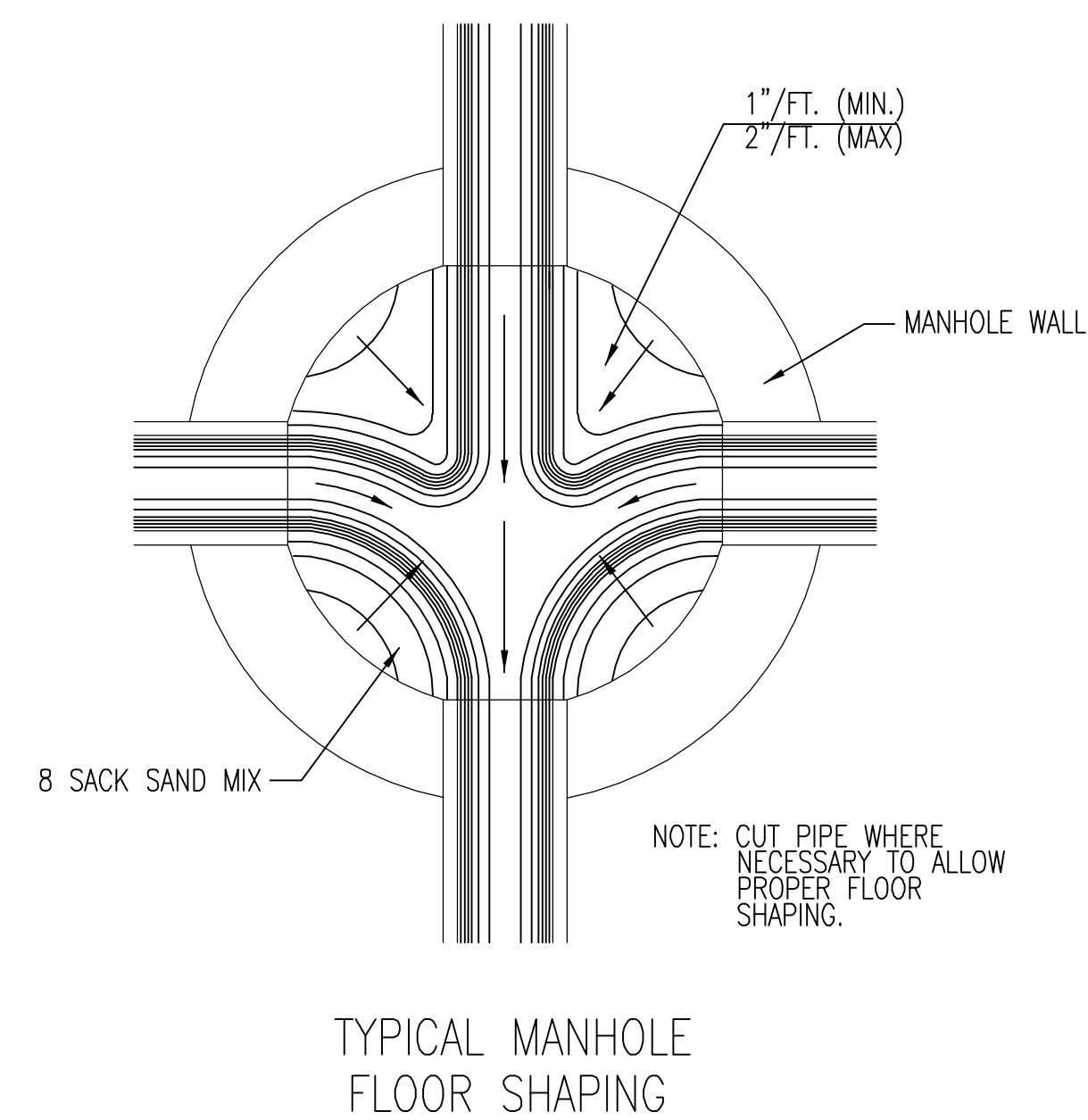
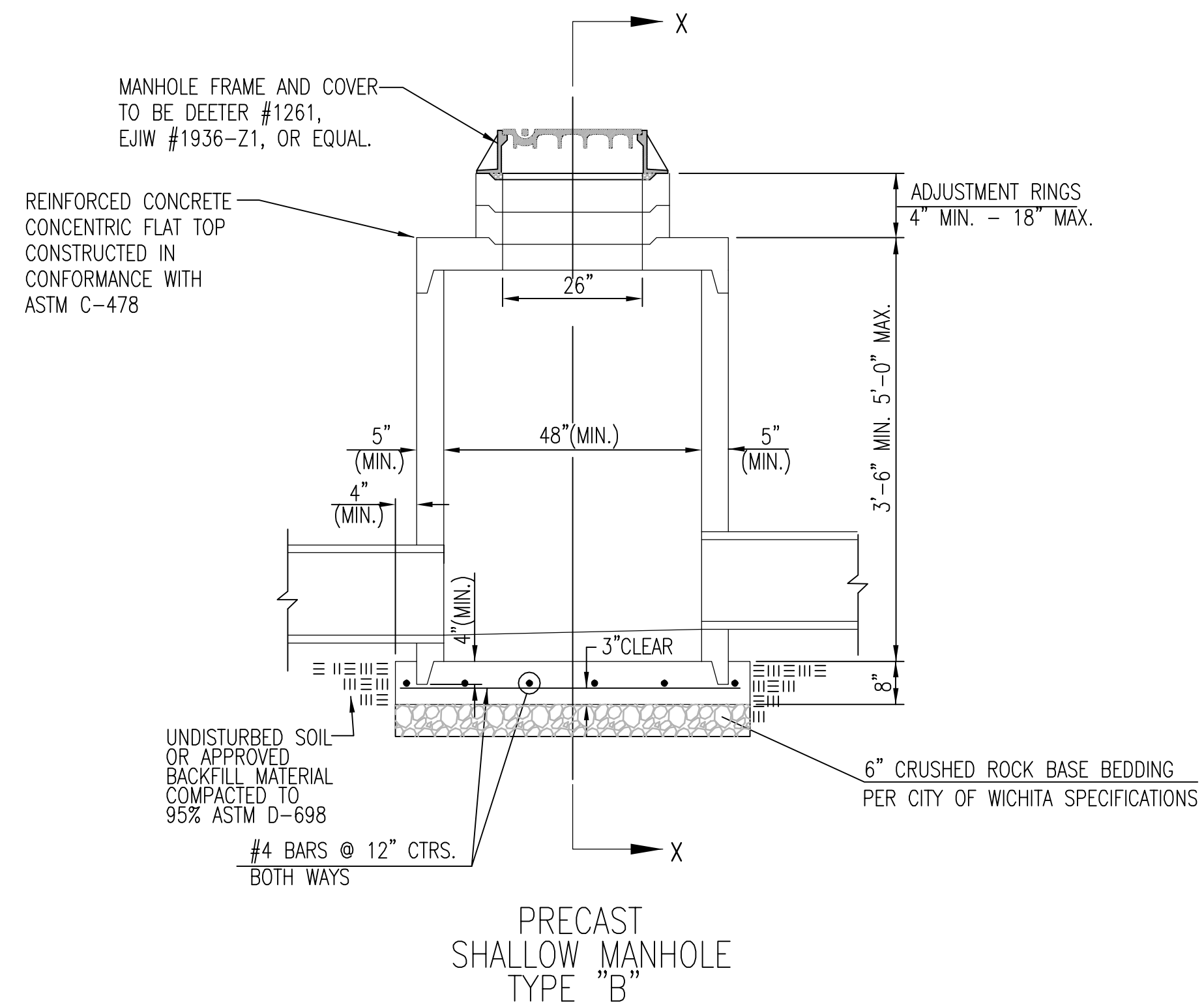
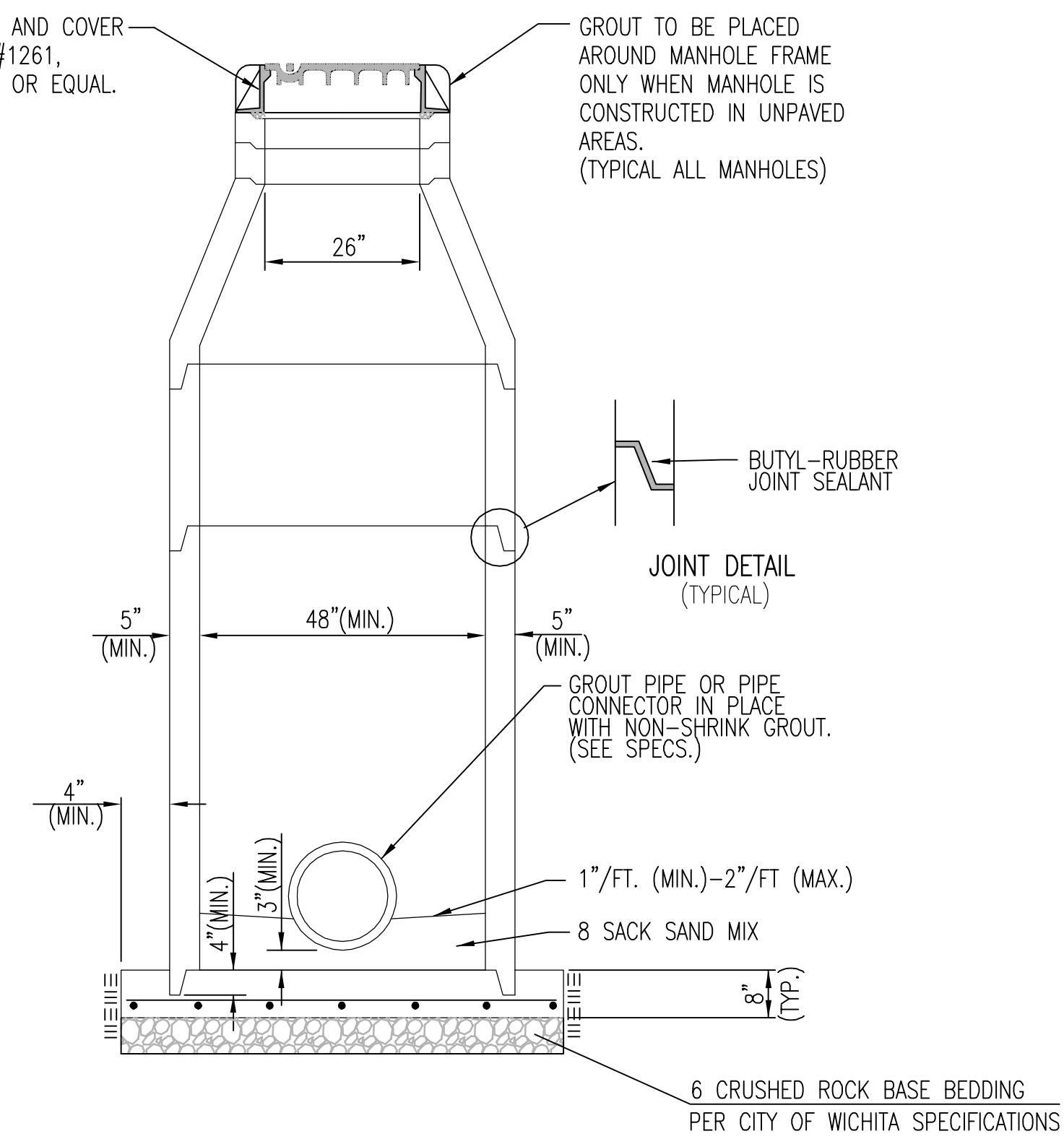
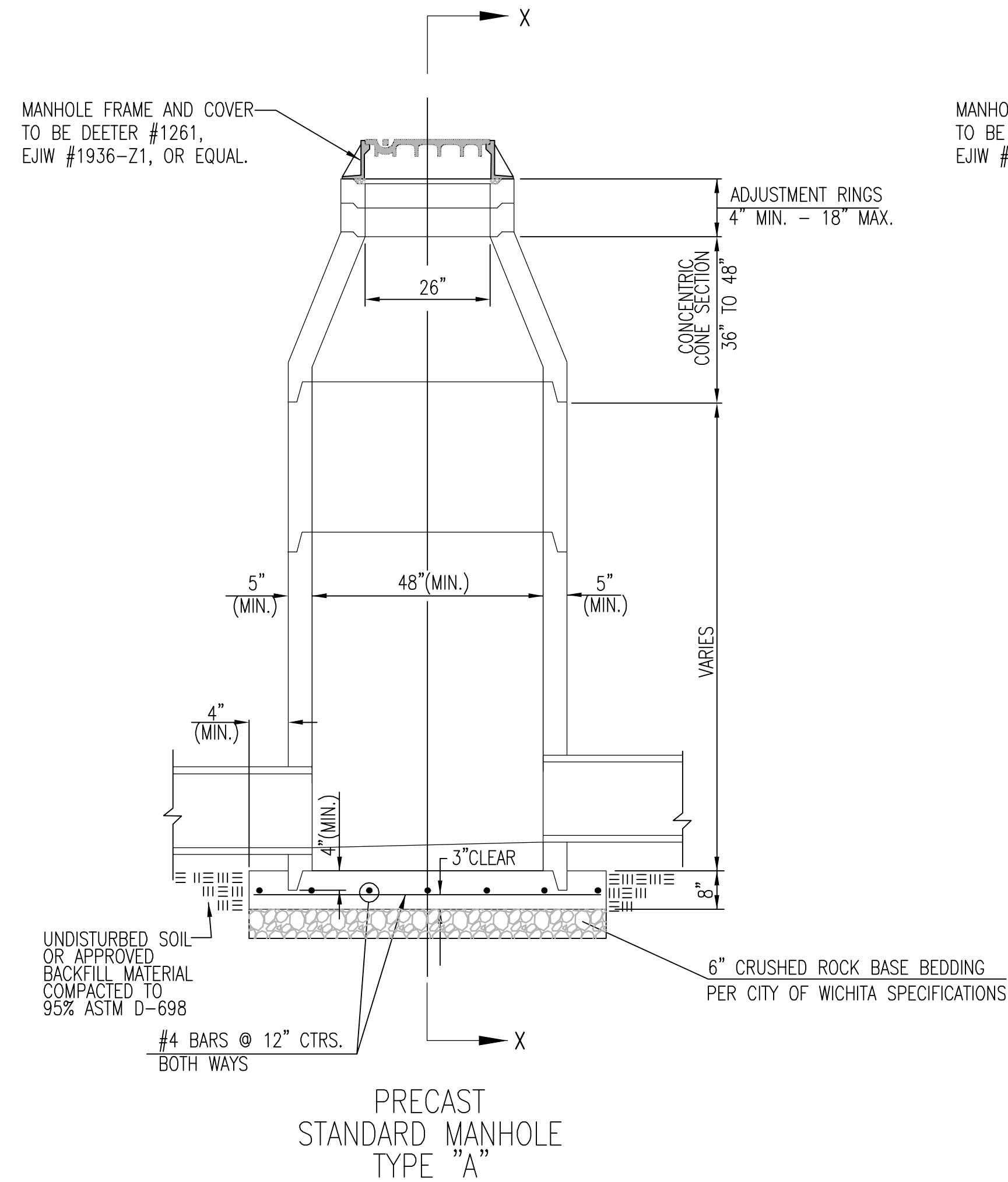


DOUBLE DOUBLE DROP INLET WITH BEAM

CITY ENGINEER
JAMES L. ARMOUR, P.E., L.S.

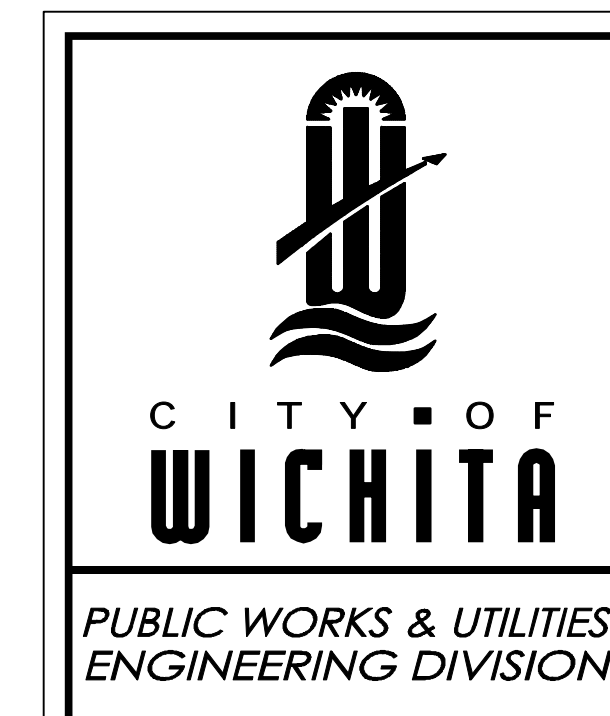
PROJECT NUMBER 0051PPD607853	OCA NUMBER	DATE 11/2010
CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		DESIGN
		DRAWN
		SHEET 10 of 17

FHWA REGION NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KANSAS		2011	11	17



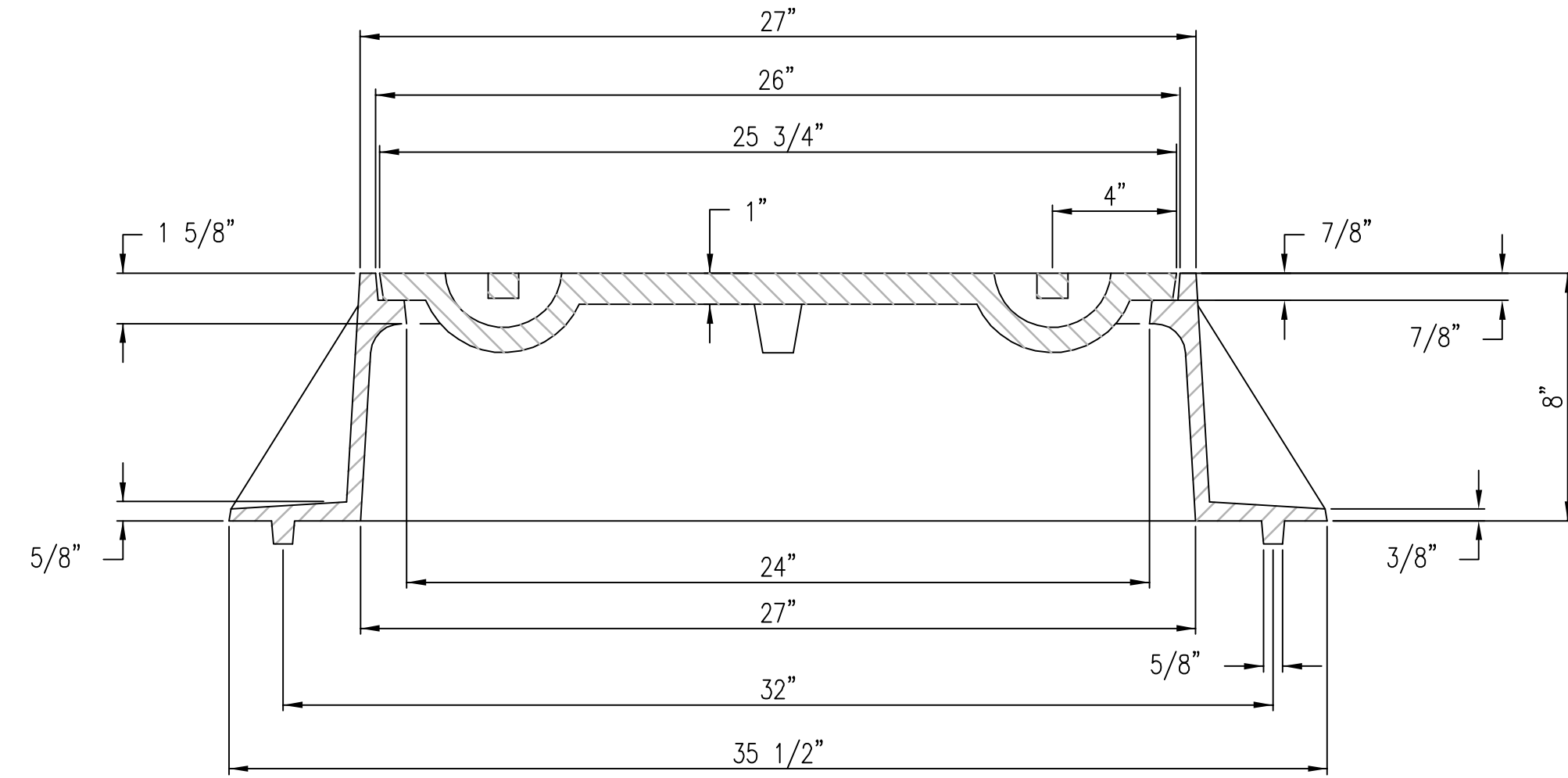
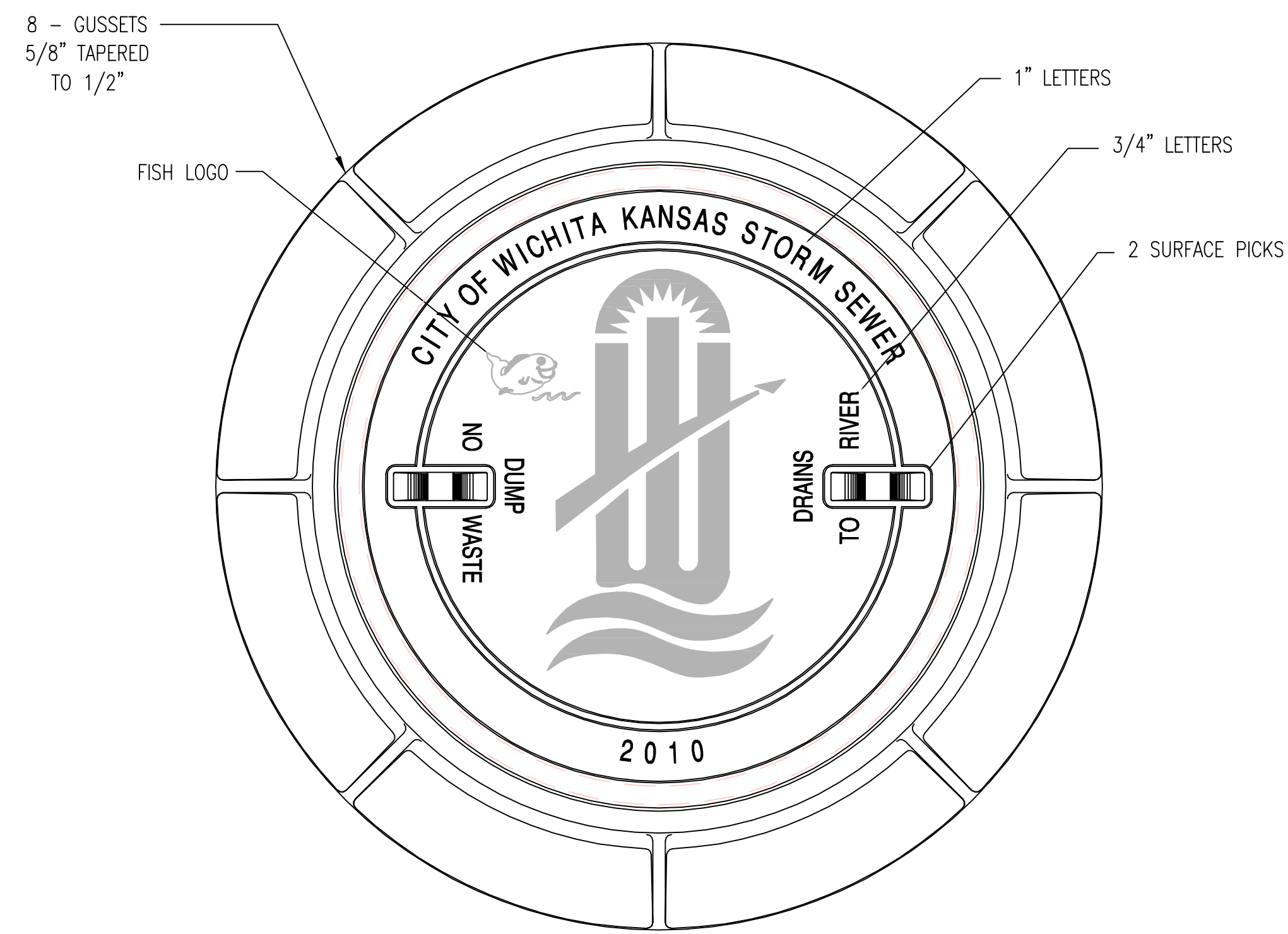
GENERAL NOTES

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



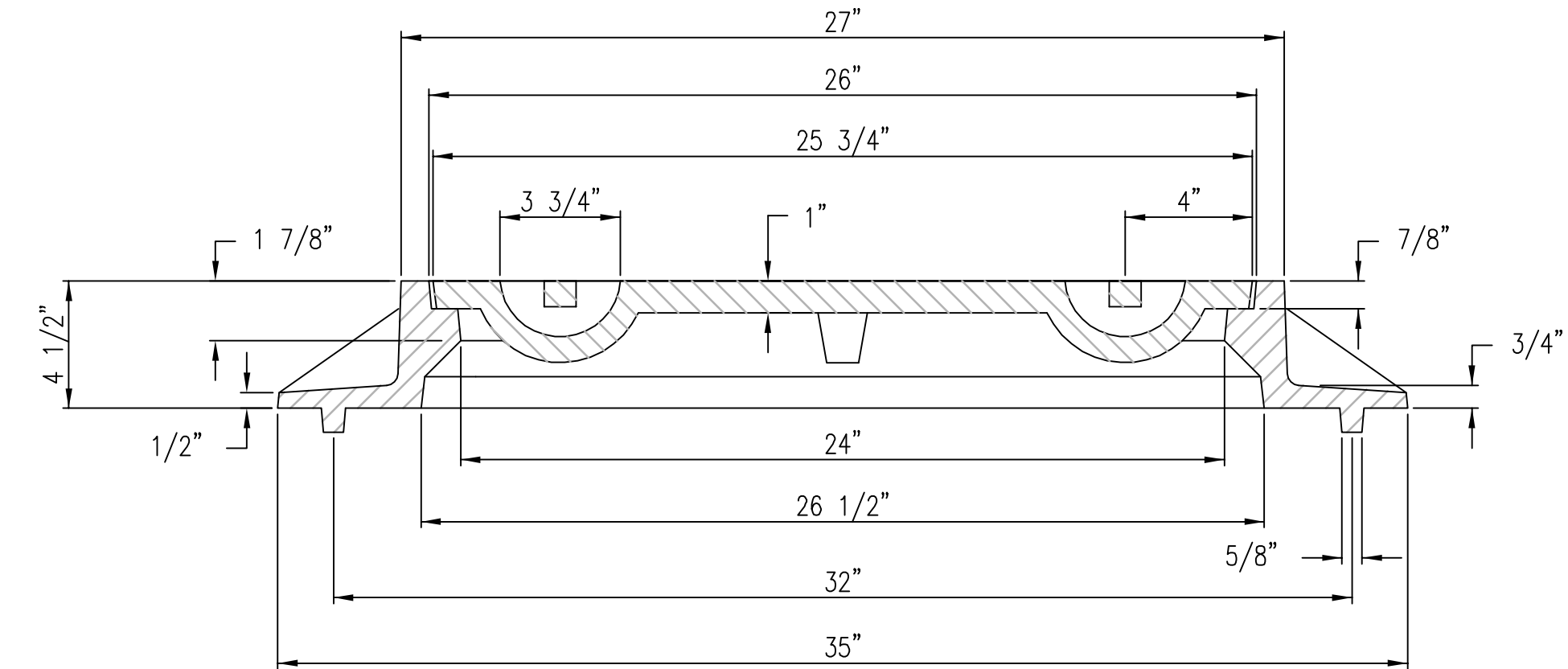
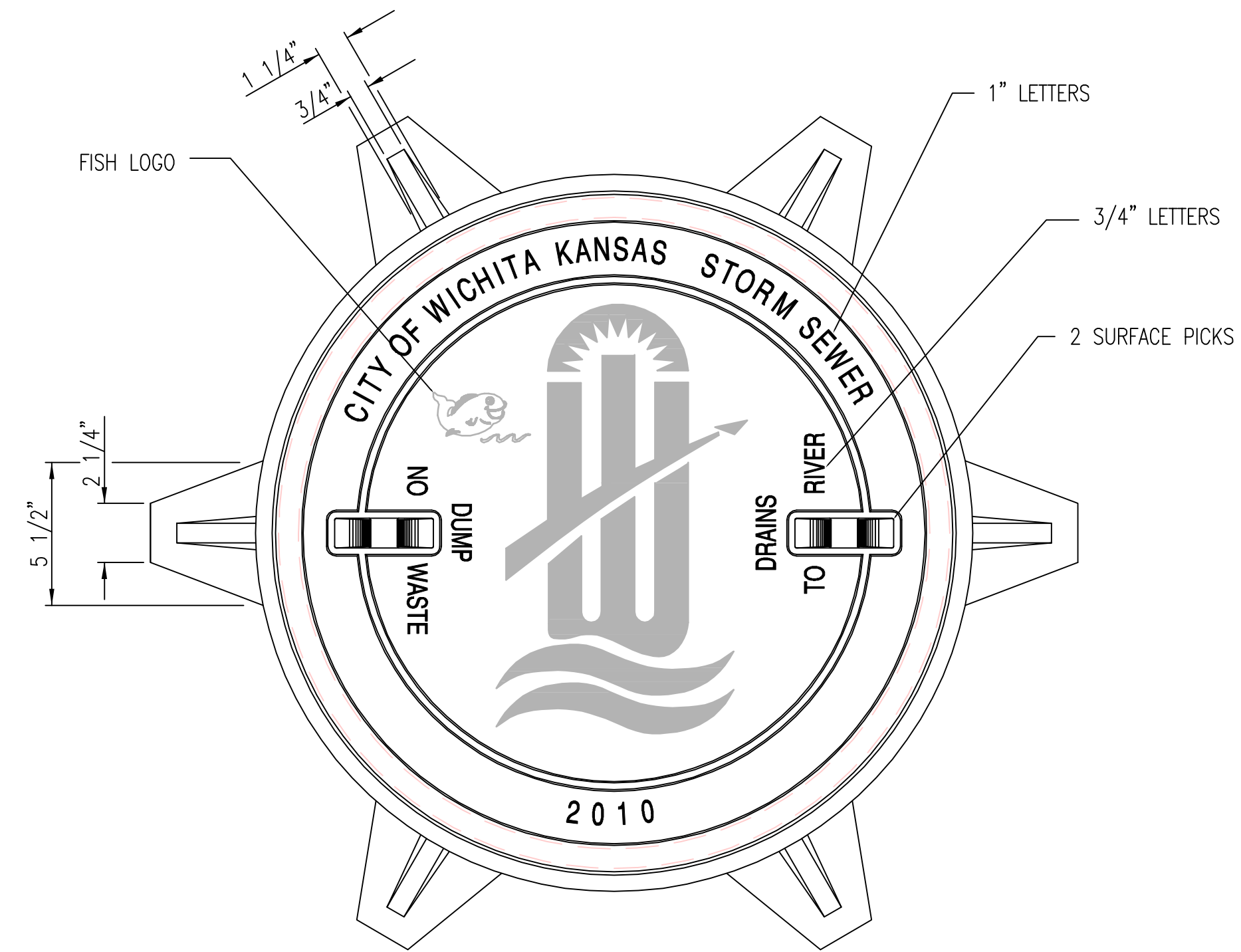
PRECAST CONCRETE MANHOLE (STORM SEWER)		
CITY ENGINEER JAMES L. ARMOUR, P.E., L.S.		
PROJECT NUMBER 0051PPD607853	OCA NUMBER	DATE 11/2010
CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		DESIGN DRAWN
		SHEET 11 of 17

FHWA REGION NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KANSAS		2011	12	17



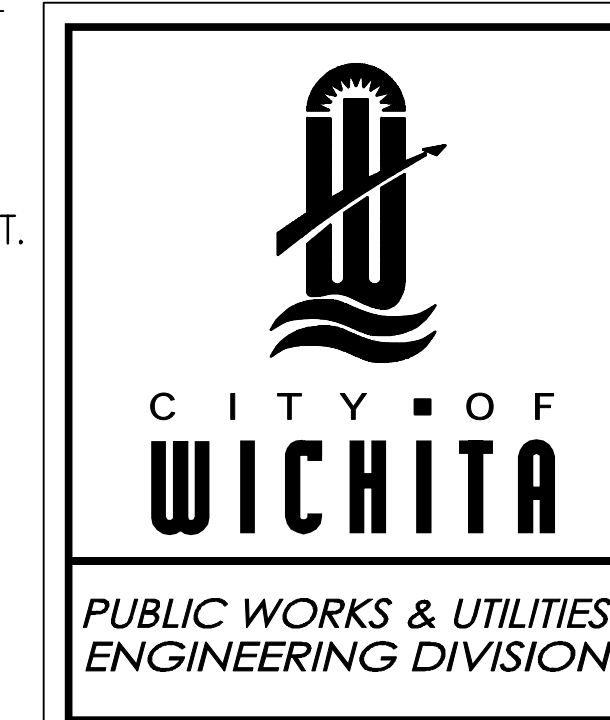
MANHOLE FRAME
DEETER #1261 OR EJIW #1936-Z1

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

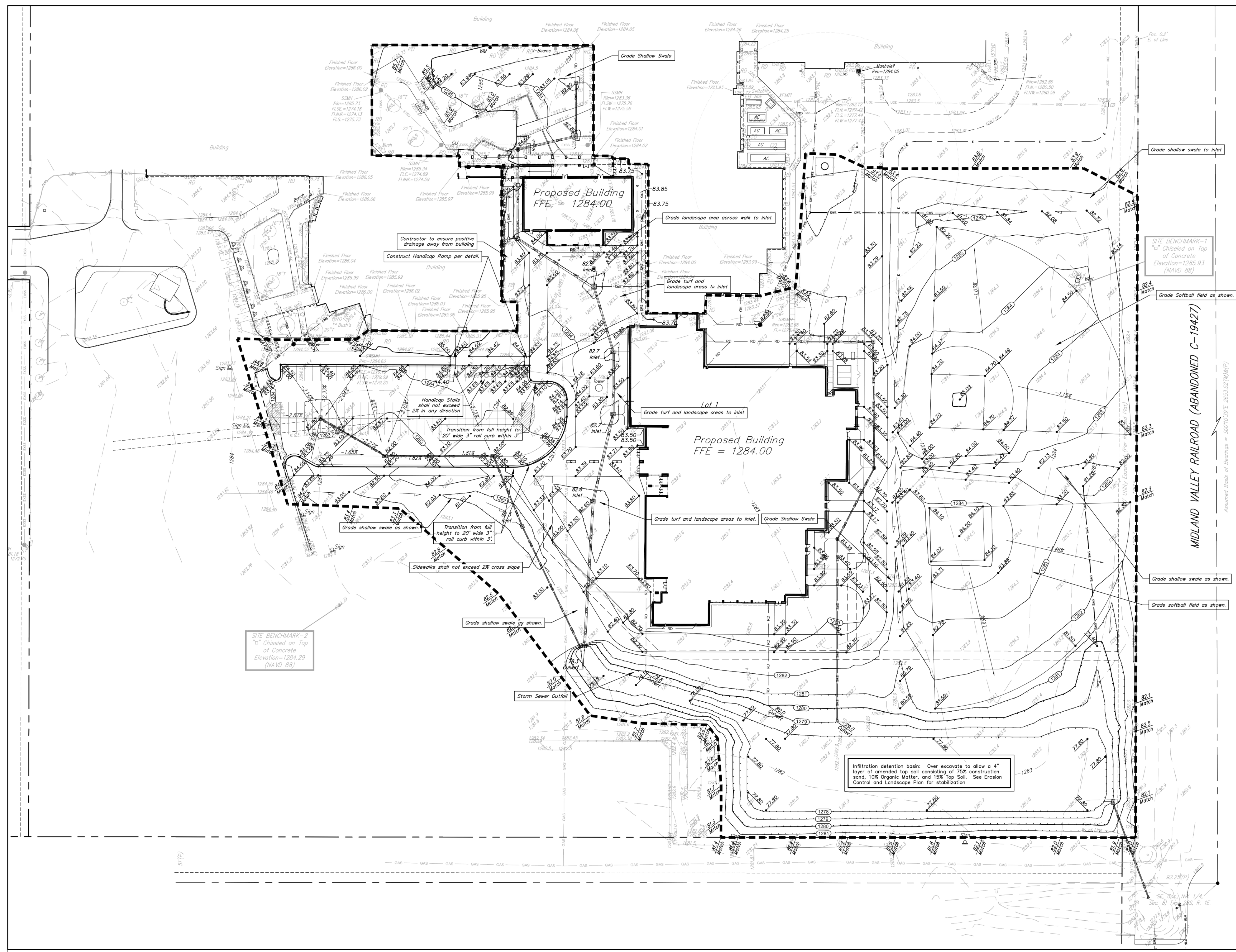


INLET FRAME
DEETER #2014 OR EJIW #1936-Z4

- 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 JAMES L. ARMOUR, P.E., L.S.		
PROJECT NUMBER 0051PPD607853	OCA NUMBER ---	DATE 11/2010
CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		DESIGN DRAWN SHEET 12 of 17



SITE GRADING PLAN
 Scale 1"= 40'-0"

DATE
 100% CONSTRUCTION DOCUMENTS
 8/21/2011
 REVISIONS



3500 north rock road
 bldg. 500
 wichita, ks 67226
 316.634.1111 (p)
 316.634.1016 (f)

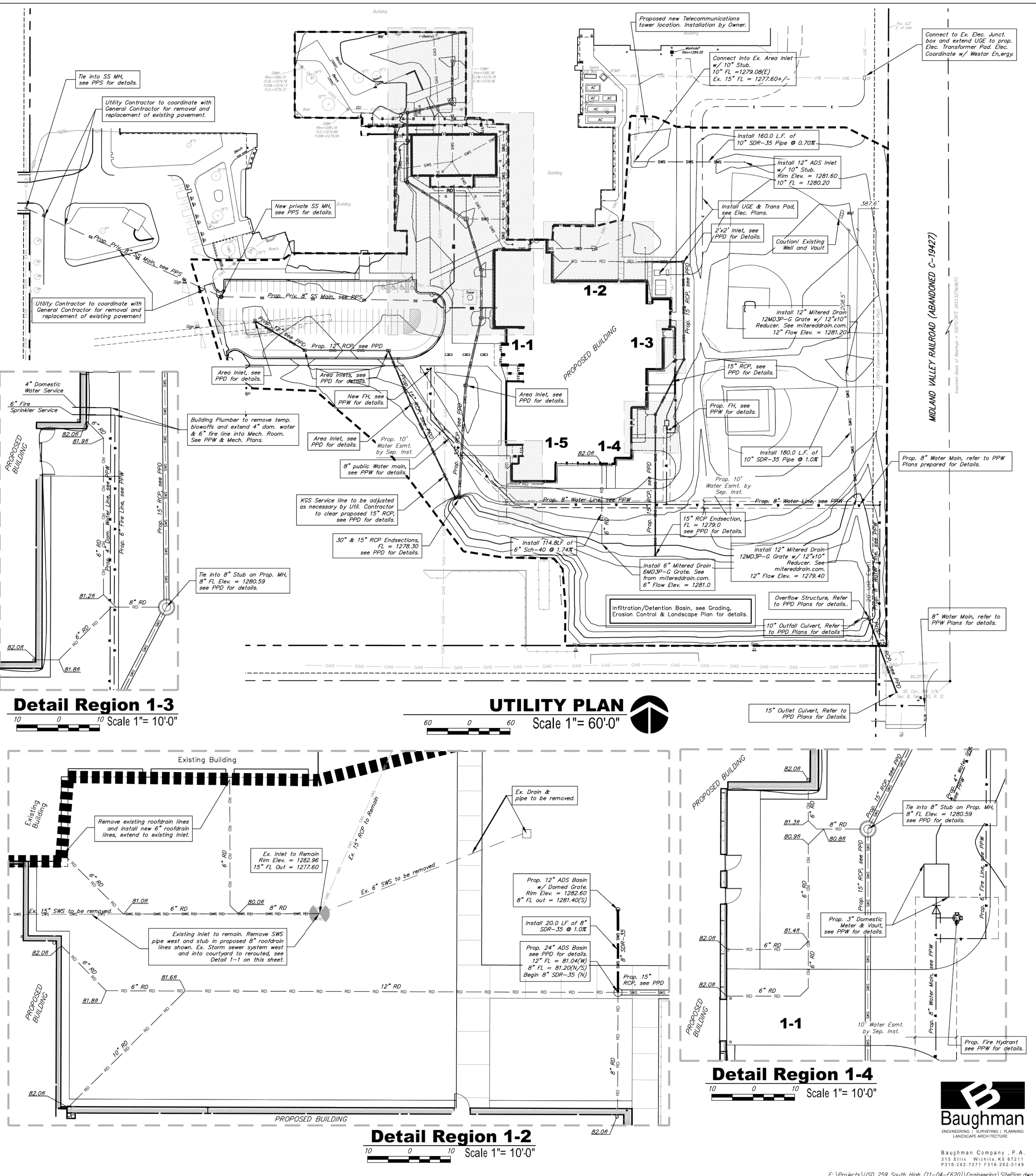
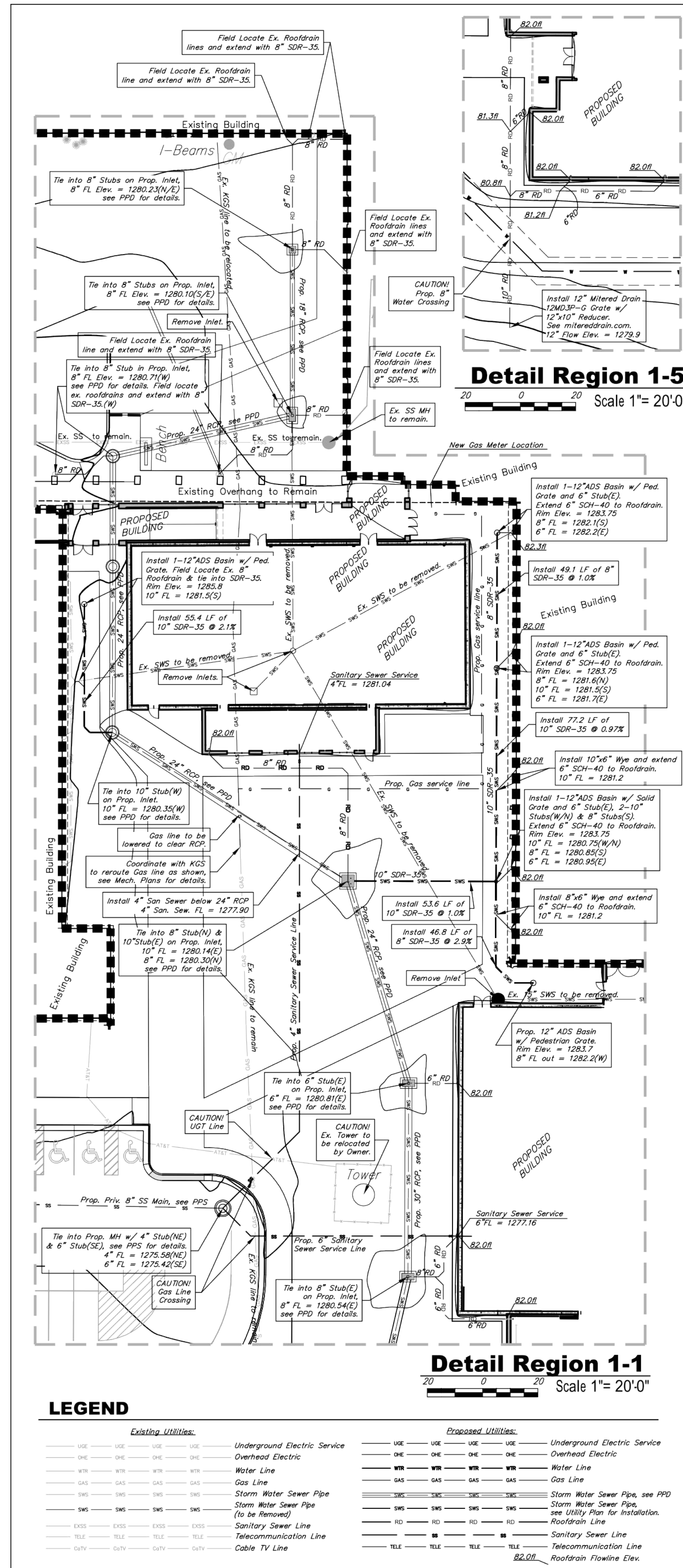
project no.
 10355.00
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**ADDITIONS & RENOVATIONS TO SOUTH HIGH SCHOOL
 for WICHITA - USD #259**
 WICHITA, KANSAS

sheet
C3.1

*Reference Copy
 Not to Scale
 Dated: 8-24-11
 Coordinate with General Contractor for
 installation Infiltration/Retention
 Basin, Erosion Control, & Landscape.*

		South High School 2nd Addn. Reference Copy Grading Plan Stormwater Sewer Improvements	
Baughman Company, P.A. 315 Ellis St. Wichita, KS 67211 P 316-262-7271 F 316-262-0149 ENGINEERING SURVEYING PLANNING LANDSCAPE ARCHITECTURE			
PROJECT NUMBER 0051PPD607861	DESIGN PSB	DRAWN TNT	APPROVED PSB
REVISIONS:	DATE 10/20/2011	SCALE Noted	SHEET 13 OF 17



LEGEND

Existing Utilities:		Proposed Utilities:	
USE	Underground Electric Service	USE	Underground Electric Service
OHE	Overhead Electric	OHE	Overhead Electric
WL	Water Line	WL	Water Line
GL	Gas Line	GL	Gas Line
SWS	Storm Water Sewer Pipe	SWS	Storm Water Sewer Pipe, see PPD
SMS	Storm Water Sewer Pipe (to be removed)	SMS	Storm Water Sewer Pipe, see Utility Plan for Installation
SSL	Sanitary Sewer Line	SSL	Sanitary Sewer Line
TEL	Telecommunication Line	TEL	Telecommunication Line
CVL	Cable TV Line	CVL	Roofdrain Flowline Elev.

DATE: 0000 CONSTRUCTION DOCUMENTS 8/31/2011 REVISIONS

HOWARD+HELMER
architecture
www.howardhelmer.com | kansascity+wichita

3500 north rock road
bliss, MO 67226
316.634.1111 (p)
316.634.1016 (f)

project no. 10355.00

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**ADDITIONS & RENOVATIONS TO SOUTH HIGH SCHOOL
for WICHITA - USD #259**
WICHITA, KANSAS

**Reference Copy
Not to Scale**
Dated 8-24-11
Coordinate with General Contractor for
Installation Infiltration/Detention
Basin, Erosion Control, & Landscape.

Baughman
ENGINEERING | SURVEYING | PLANNING | LANDSCAPE ARCHITECTURE

South High School 2nd Addn.
**Reference Copy
Utility Plan**
Stormwater Sewer Improvements

Baughman Company, P.A. 315 Ellis St. Wichita, KS 67211 P 316.262.7271 F 316.262.0149
ENGINEERING | SURVEYING | PLANNING | LANDSCAPE ARCHITECTURE

PROJECT NUMBER 0051PPD607861

DESIGN PSB DRAWN TNF

APPROVED DATE 10/20/2011

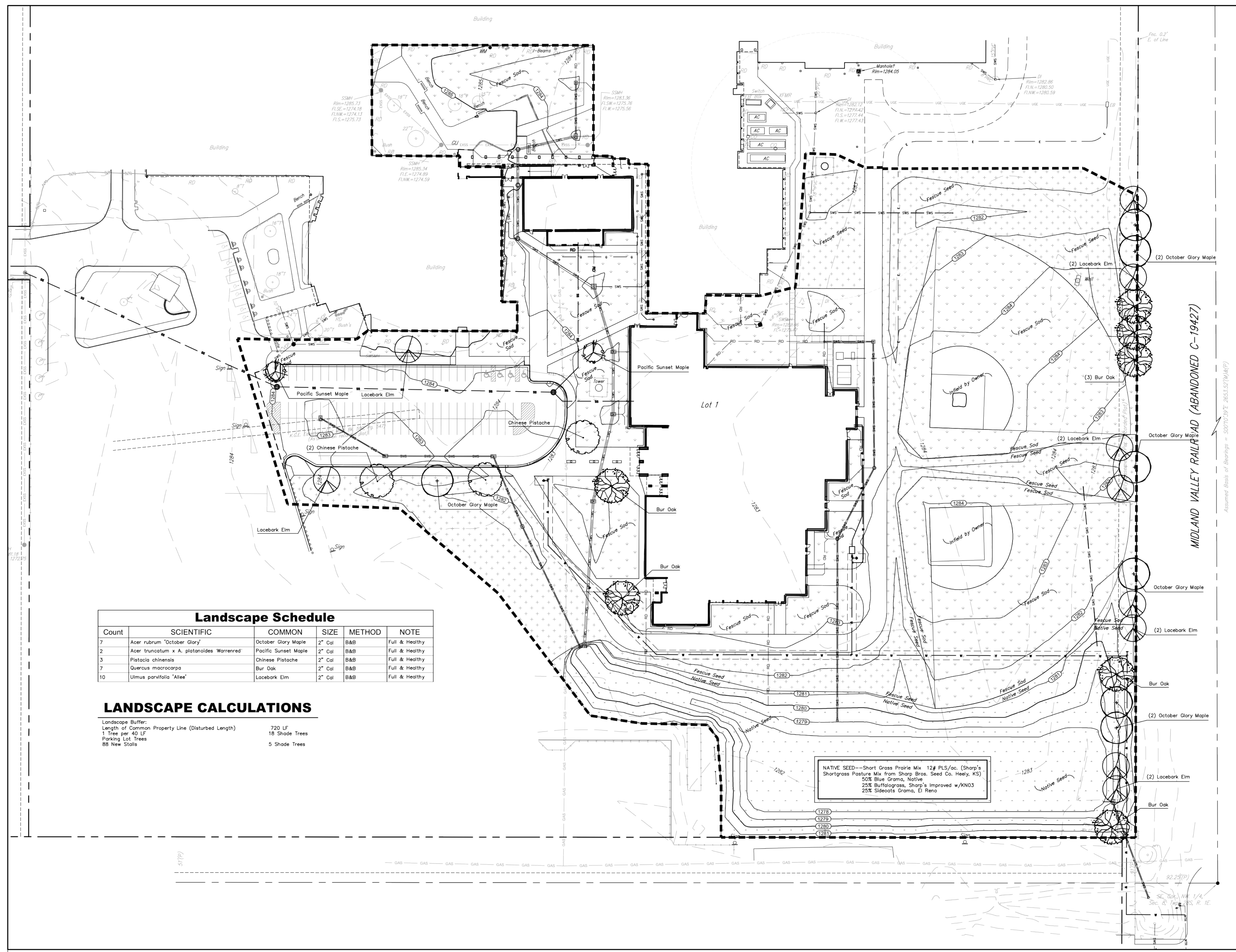
SCALE Noted

SHEET 14 OF 17

sheet **C4.1**

of

E:\Projects\USD 259 South High (11-04-E620)\Engineering\PPD.dwg



Landscape Schedule

Count	SCIENTIFIC	COMMON	SIZE	METHOD	NOTE
7	Acer rubrum "October Glory"	October Glory Maple	2" Cal	B&B	Full & Healthy
2	Acer truncatum x A. glabroides "Warrenred"	Pacific Sunset Maple	2" Cal	B&B	Full & Healthy
3	Pistacia chinensis	Chinese Pistache	2" Cal	B&B	Full & Healthy
7	Quercus macrocarpa	Bur Oak	2" Cal	B&B	Full & Healthy
10	Ulmus parvifolia "Atlee"	Lacebark Elm	2" Cal	B&B	Full & Healthy

LANDSCAPE CALCULATIONS

Landscape Buffer: 720 LF
 Length of Common Property Line (Disturbed Length): 19 Shade Trees
 1 Tree per 40 LF
 Parking Lot Trees: 88 New Stalls
 5 Shade Trees

SITE LANDSCAPE PLAN

Scale 1"= 40'-0"

DATE
 100% CONSTRUCTION DOCUMENTS
 8/31/2011
 REVISIONS



3500 north rock road
 bldg. 500
 wichita, ks 67226
 316.634.1111 (p)
 316.634.1018 (f)

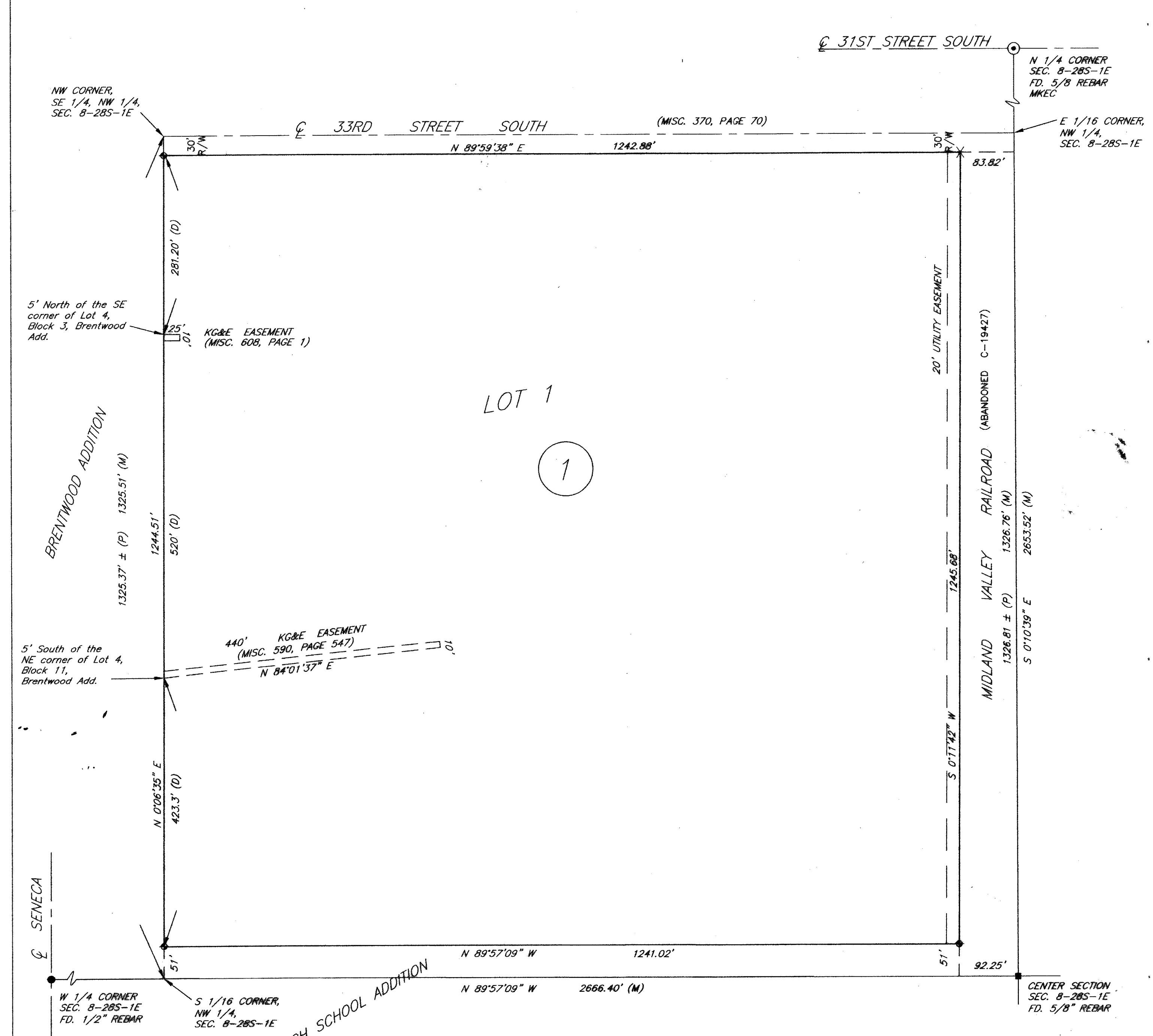
project no.
 10355.00
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**ADDITIONS & RENOVATIONS TO SOUTH HIGH SCHOOL
 FOR WICHITA - USD #259**
 WICHITA, KANSAS

sheet
LA1.1
 of

Reference Copy
Not to Scale
 Dated: 8-24-11
 Coordinate with General Contractor for
 Basin, Erosion Control, & Landscape.

	South High School 2nd Addn. Reference Copy Landscape Plan Stormwater Sewer Improvements
	Baughman Company, P.A. 315 Ellis St. Wichita, KS 67211 P 316-262-7271 F 316-262-0149 ENGINEERING SURVEYING PLANNING LANDSCAPE ARCHITECTURE
PROJECT NUMBER 0051PPD607861	DESIGN PSB
REVISIONS:	DRAWN TNT
	APPROVED PSB
	DATE 10/20/2011
	SCALE Noted
	SHEET 16 OF 17



LOT 1

SOUTH HIGH SCHOOL SECOND ADDITION TO WICHITA, SEDGWICK COUNTY, KANSAS

Southeast Quarter of the Northwest Quarter of Section 8, Township 28 South, Range 1 East of the 6th. P.M.

State of Kansas } ss
County of Sedgwick }

I, Bradley C. Ward, a registered land surveyor in aforesaid County and State, do hereby certify that this map or plat and the survey on which it is based was made in accordance with the Minimum Standards for Boundary Surveys. Said survey is true and correct to the best of my knowledge. All monuments were either found or set.

LEGAL DESCRIPTION
The Southeast 1/4 of the Northwest 1/4 of Section 8, Township 28 South, Range 1 East of the 6th Principal Meridian, Sedgwick County, Kansas, EXCEPT the North 30 feet thereof, and EXCEPT that part platted as South High School Addition, and EXCEPT the Right of Way of the Midland Valley Railroad.

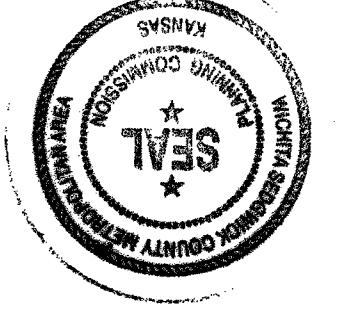


Bradley C. Ward, L.S. #920 Date 1-6-04

State of Kansas } ss
City of Wichita }

This plat of South High School Second Addition, Wichita, Sedgwick County, Kansas, has been submitted to and approved by the Wichita-Sedgwick County Metropolitan Area Planning Commission, Wichita, Kansas. Dated this 24th day of March, 2004. Wichita-Sedgwick County Metropolitan Area Planning Commission.

Bernard Hentzen, Chair
John L. Schlegel, Secretary



State of Kansas } ss
City of Wichita }

This plat approved and all dedications shown hereon accepted by the City Council of the City of Wichita, Kansas, this 24th day of March, 2004.

Carlos Mayans, Mayor

Karen Schofield, City Clerk

Entered on transfer record this 24th day of March, 2004.

Don Brace, County Clerk



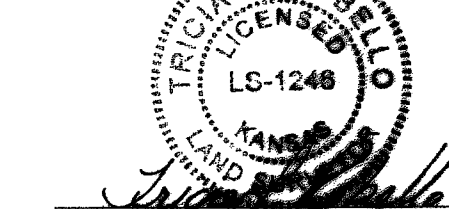
State of Kansas } ss
County of Sedgwick }

This is to certify that this instrument was filed for record in the Register of Deeds Office, at 4:20 on the 24th day of March, 2004, and is duly recorded.

Bill Meek, Register of Deeds

Linda Kizzire, Deputy

Reviewed in accordance with K.S.A. 58-2005 on this 24th day of January, 2004.



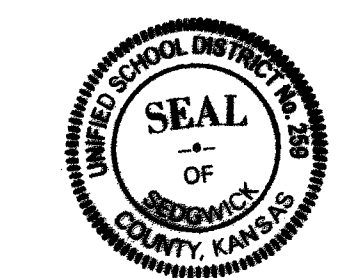
Tricia L. Robello, L.S. #1246, Deputy County Surveyor, Sedgwick County, Kansas

State of Kansas } ss
County of Sedgwick }

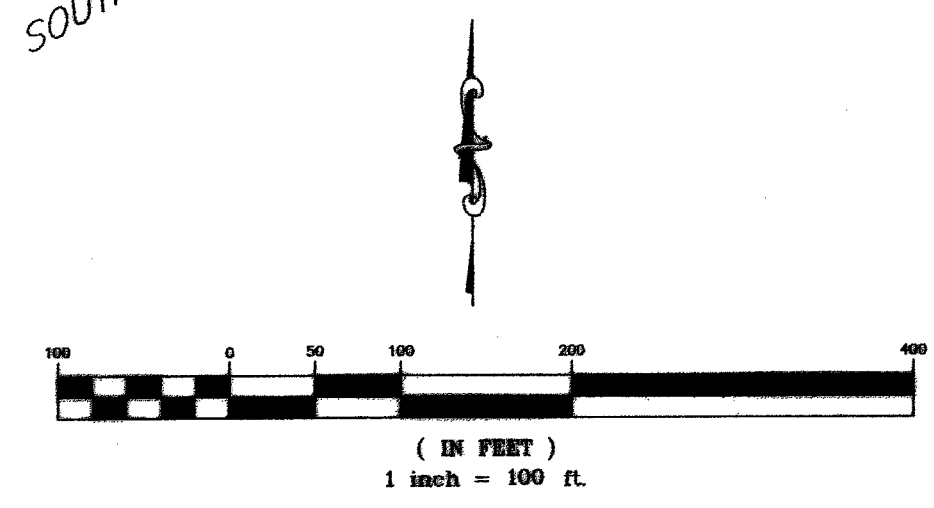
This instrument was acknowledged before me on this 5th day of February, 2004, by Michael Kinard (Platman in US 259)

Mike Willoma, Notary Public

My Commission Expires: 6/9/07



- LEGEND**
- ⊙ 5/8" Rebar in Thimble (found) MKEC
 - 1/2" Rebar in Thimble (found)
 - 1/2" Iron Pipe
 - X "X" Cut (set)
 - 5/8" Rebar (found)
 - ◆ 5/8" Rebar (set) B. Ward L.S. #920
 - P Platted
 - M Measured
 - D Deeded



Benchmarks: □ cut on back of curb 4' North of North end of the Northeast return at 33rd and Exchange. Elevation = 93.67 City Datum

Copy of Plat Not to Scale

Sedgwick County Register of Deeds - Bill Meek
 DOC #/FLM-PG: 26553426
 Record #: 1547354
 Page Recorded: 1
 Caster Initials: SL
 Date Recorded: 3/26/2004 8:08:09 PM
 Authorized By: [Signature]
 Recording Fee: \$20.00

Filename: 02144.mxd Date Plat Prepared: 1/6/04

216 S. Market, Wichita, KS 67202 316/264-0242