

GENERAL NOTES:

- Contractor will be required to provide notice to utility companies a minimum of seventy-two (72) hours prior to any excavation, as follows:
 Kansas One-Call 687-2470
 The Contractor must notify the following in case of an emergency:
 Cox Communications 262-4270
 Kansas Gas Service 1-888-482-4950
 Westar Energy 383-8650
 Black Hills Energy 1-800-303-0357
 AT&T 268-2245
 City of Wichita Water Dept. 268-4563
 City of Wichita Sewer Maint. 268-4024
 City of Wichita Storm Sewer Maint. 268-4090
 City of Wichita Traffic Maint. 268-4034
 Conoco Phillips Pipeline Co. 1-877-267-2290
 Southern Star Pipeline Co. 529-6600
 Kinder-Morgan Pipeline Co. 1-888-844-5658
- Utility service lines, poles, valve boxes, meters, and etcetera are to be adjusted as necessary by others prior to construction unless the plans specifically call for their adjustment by the Contractor or unless the plans specifically identify a utility to be adjusted by its owner during construction. Existing utilities and their location, as shown on the plans, represent the best information obtainable for design. The Contractor will be required to work around existing utilities within the right-of-way which do not conflict with proposed construction.
- Rubble from the removal of miscellaneous structures and excess excavation which is to be wasted shall be disposed of on sites to be provided by the Contractor. These sites shall be approved by the Engineer as to suitability, appearance and site location. Locations, in the opinion of the Engineer, that will leave an unsightly appearance will not be approved. All disposal sites must be approved by the Kansas Department of Health and Environment. Material either stockpiled or disposed of in a flood plain would require a Kansas State Board of Agriculture permit. Any material dumped in waters of the United States or wetlands is subject to U.S. Corps of Engineers permitting regulations. Any material buried or stockpiled beyond approved construction limits would 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 Engineer's approval. Trees and shrubs which are not in direct conflict with proposed new construction shall be saved and protected from damage.
- The Contractor shall give all property owners and/or tenants of developed property abutting the construction of this project a minimum of ten (10) days notice prior to start of construction.
- The Contractor shall be responsible for preserving property irons. The Contractor will be required to re-establish any property irons which are damaged or destroyed by his construction operations. Such irons shall be re-established by a licensed land surveyor in accordance with state laws.
- All existing and proposed erosion control measures including silt fencing, erosion control mat, straw bales, inlet barriers, and const. entrance shall be maintained throughout construction by the contractor and until project is accepted by the City of Wichita. The on-site engineer shall complete weekly reports on the status of erosion control measures. The contractor shall be required to comply with maintenance and/or replacement of erosion control measures as determined by the on-site engineer until project is accepted by City of Wichita. Maintenance and/or replacement of erosion control measures to be paid by L.S. bid item "Site Restoration".
- All excess excavation shall remain on-site and shall be stockpiled or spread at a location determined by the engineer.
- Contractor shall grade around exposed manholes at a 1:1 slope. Manholes set lower than existing grade shall have a 9" berm constructed around manhole to prevent infiltration into sanitary sewer system. Cost of dirt, labor, equipment, etc. to be incidental to cost of manhole. Easements shall be graded with the street improvement project as part of the mass grading plan.
- All areas disturbed during construction that will not be under pavement shall be seeded as indicated on Pond Plan.
- Contractor shall not start work on the project until the project inspector is assigned to the project and is present on the site. Any work done without inspection will be required to be uncovered for inspection.

STORM WATER DRAIN IMPROVEMENTS
to serve

LOT 1, BLOCK A
GREAT PLAINS BUSINESS PARK 4TH ADD.

CITY OF WICHITA, KANSAS

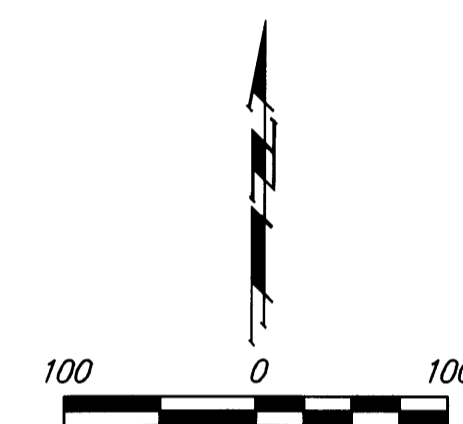
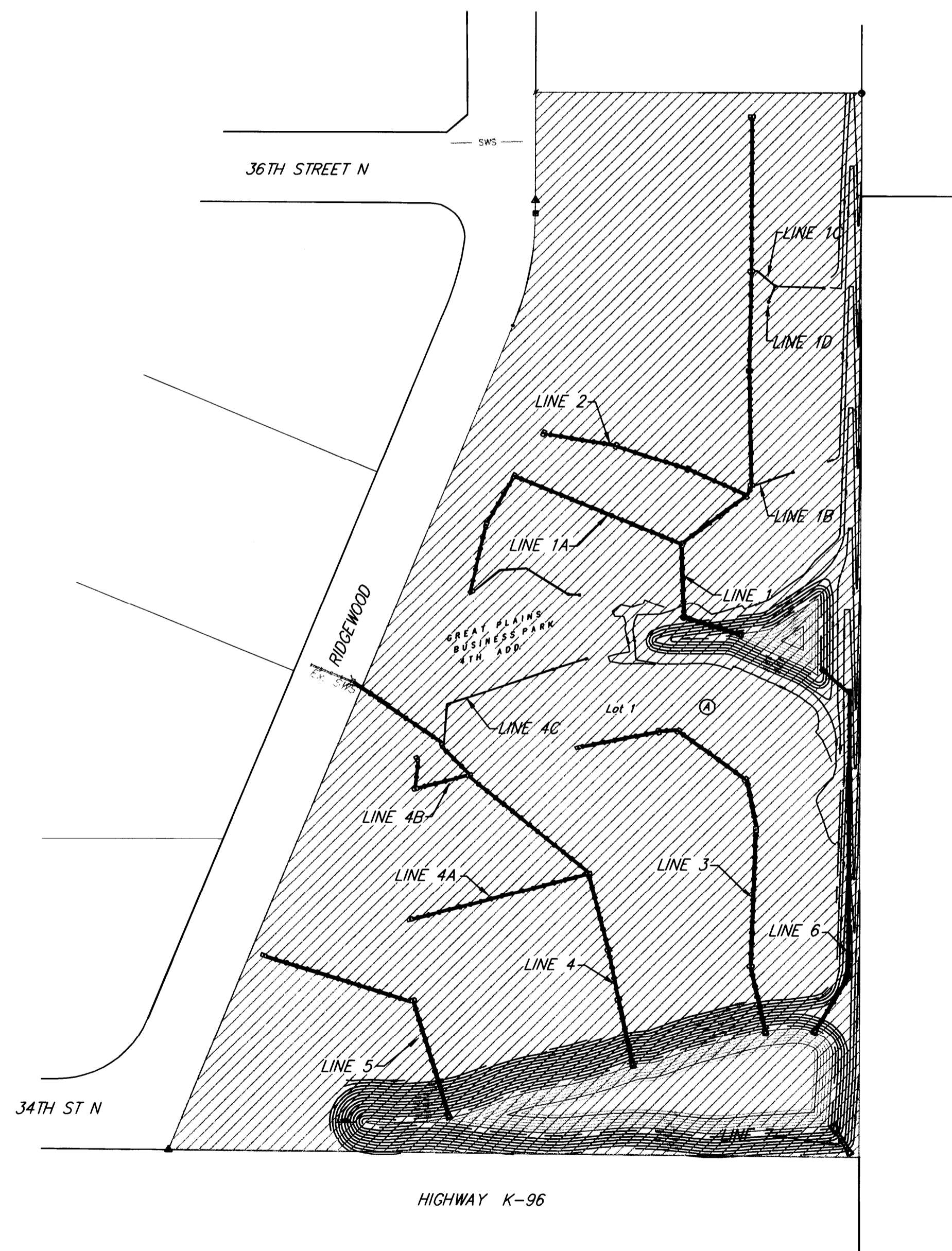
Gary Janzen, P.E. Interim City Engineer
Private Project Number
0116 PPD

Benchmarks

CROSS CUT TOP OF CATCH BASIN WEST SIDE OF RIDGEWOOD 14'± NORTH OF THE SE COR. OF LOT 3, BLOCK 2, GREAT PLAINS BUSINESS PARK ADDITION.
ELEV.=1368.03 (NAVD88)

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As-Built Plans

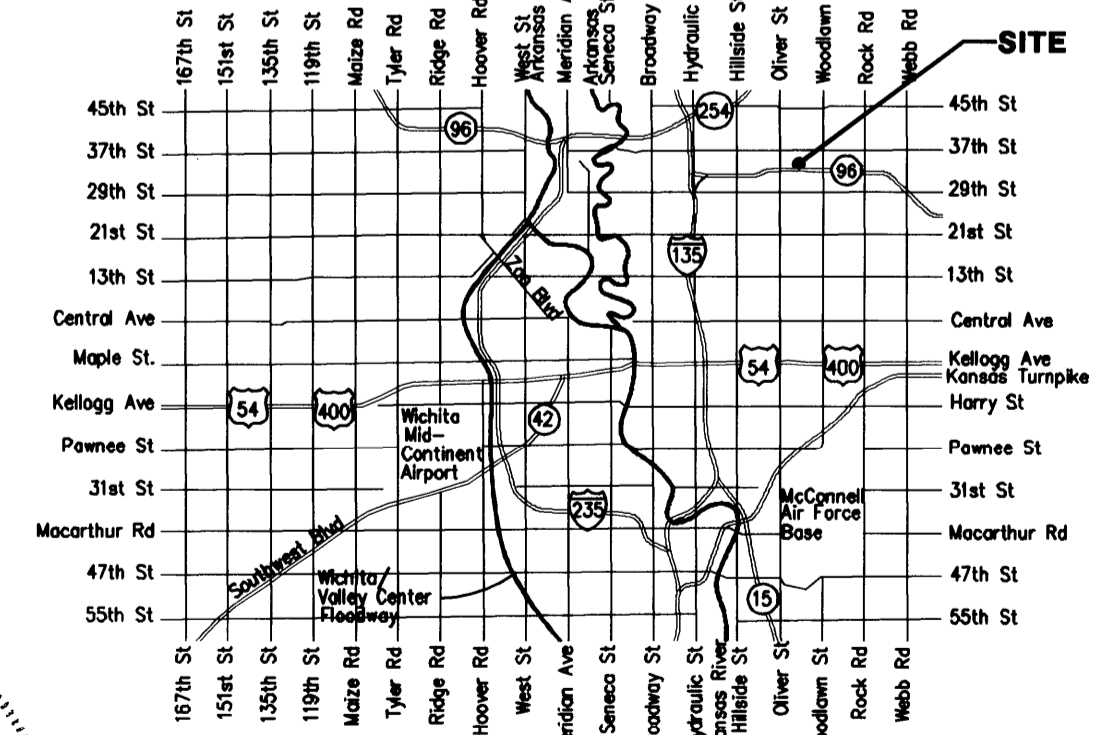
Contractor: Mies Construction, Inc.
Inspector: Eric Strecker, Schwab-Eaton, PA
PDF by: ELS, 03/25/13

APPROVED AS NOTED
BY CITY ENGINEER OF WICHITA

Storm Sewers *Jim Healy 9-12-12*
Julianne Kallman 9-12-12

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).



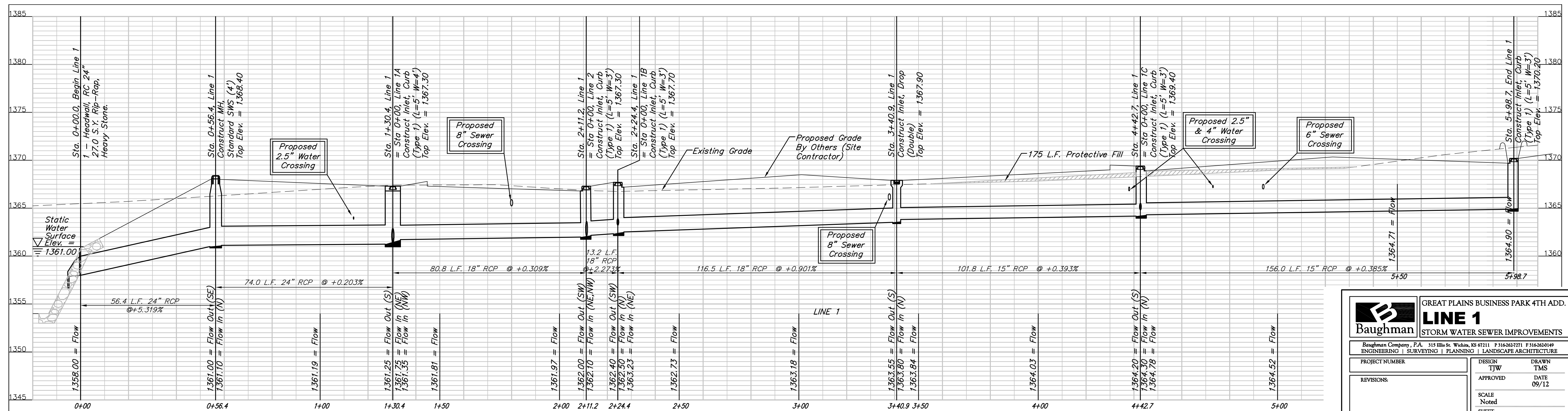
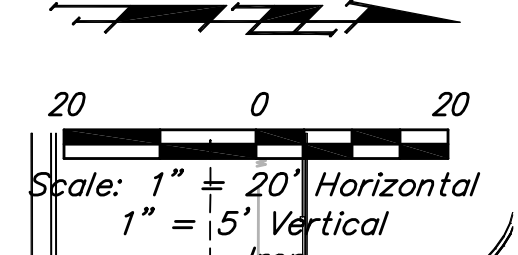
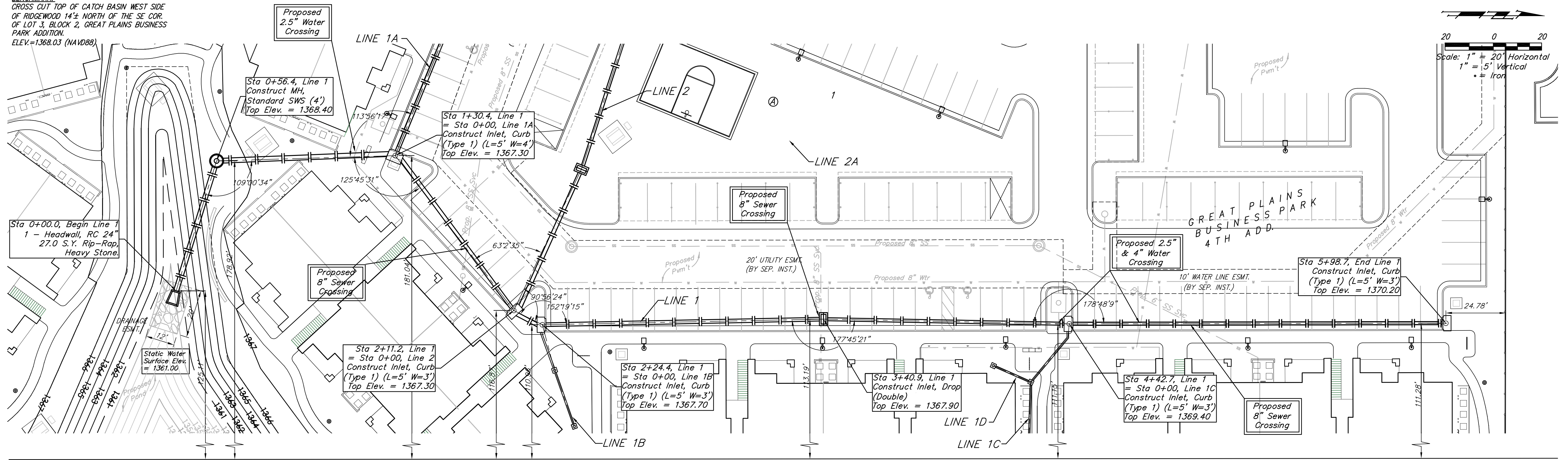
Vicinity Map

Benefit District



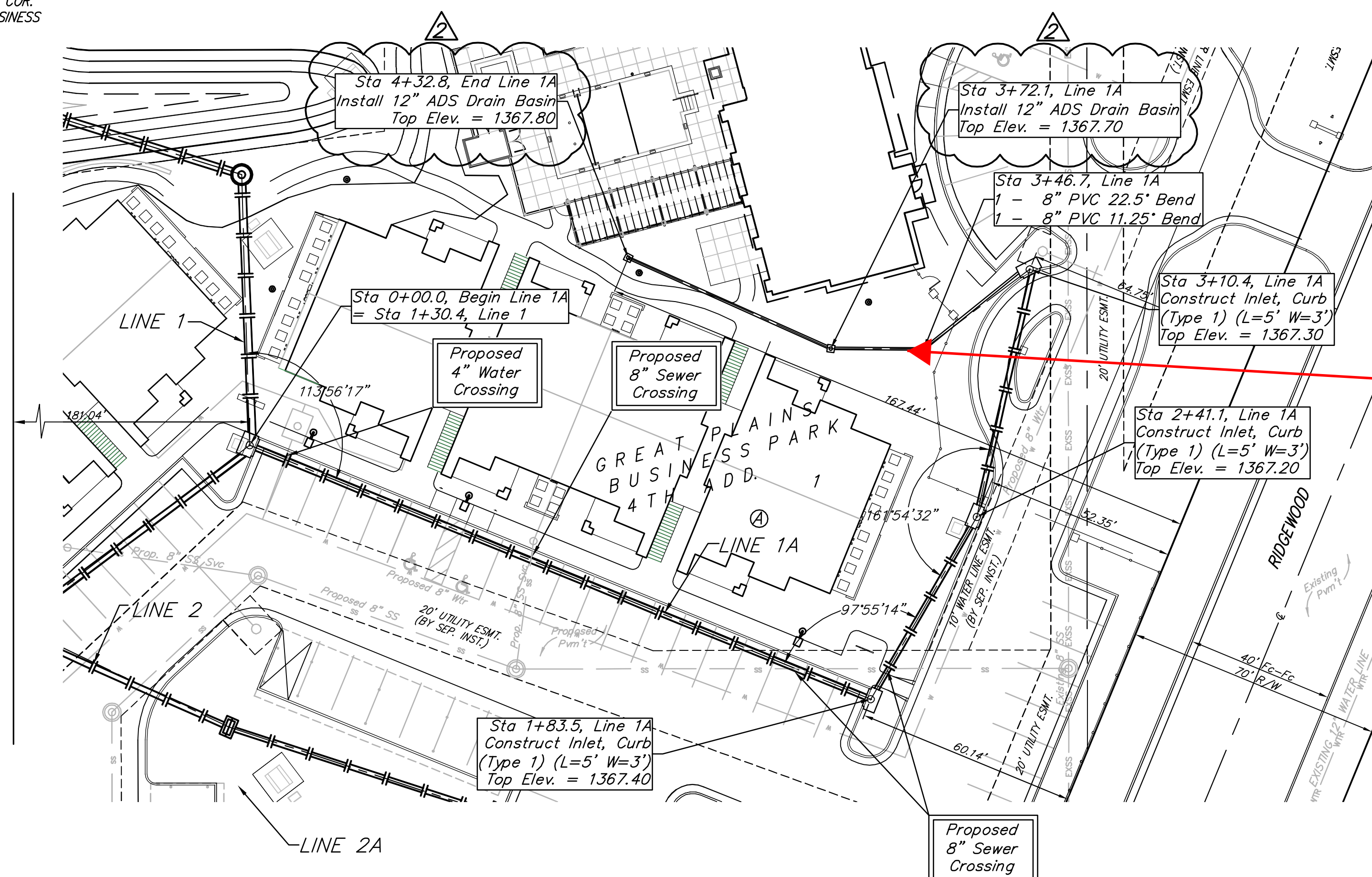
Baughman Company, P.A. 315 Ellis St. Wichita, KS 67211 P 316-262-7271 F 316-262-0149
ENGINEERING | SURVEYING | PLANNING | LANDSCAPE ARCHITECTURE

BENCHMARK:
 CROSS CUT TOP OF CATCH BASIN WEST SIDE
 OF RIDGEWOOD 14± NORTH OF THE SE COR.
 OF LOT 3, BLOCK 2, GREAT PLAINS BUSINESS
 PARK ADDITION.
 ELEV.=1368.03 (NAVD88)

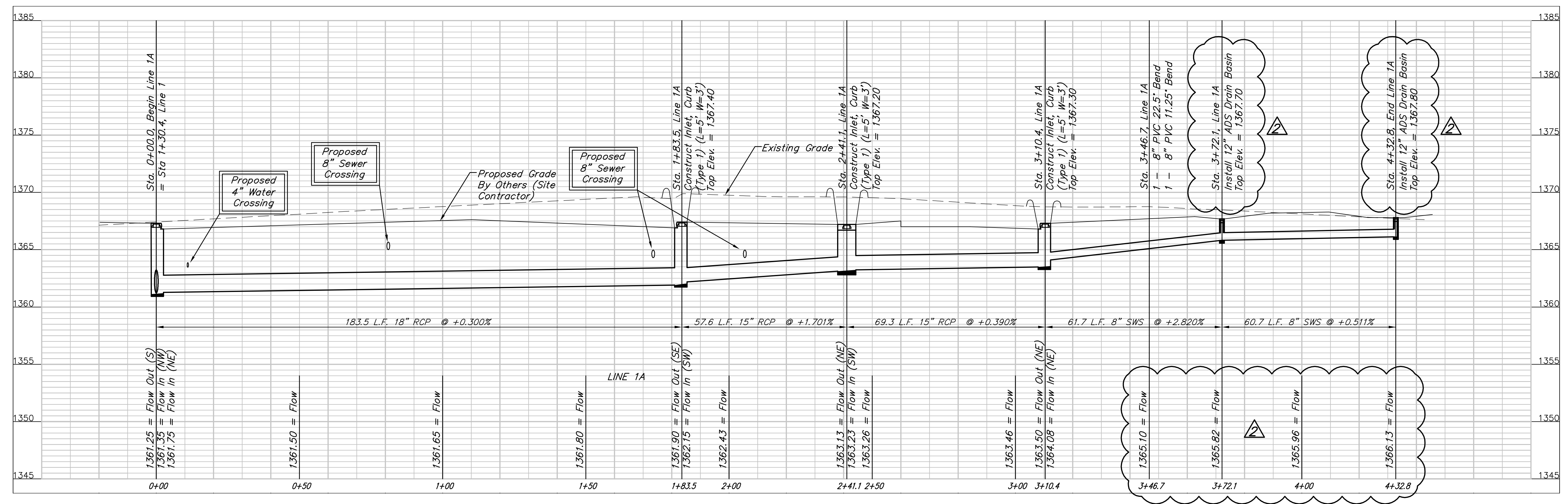
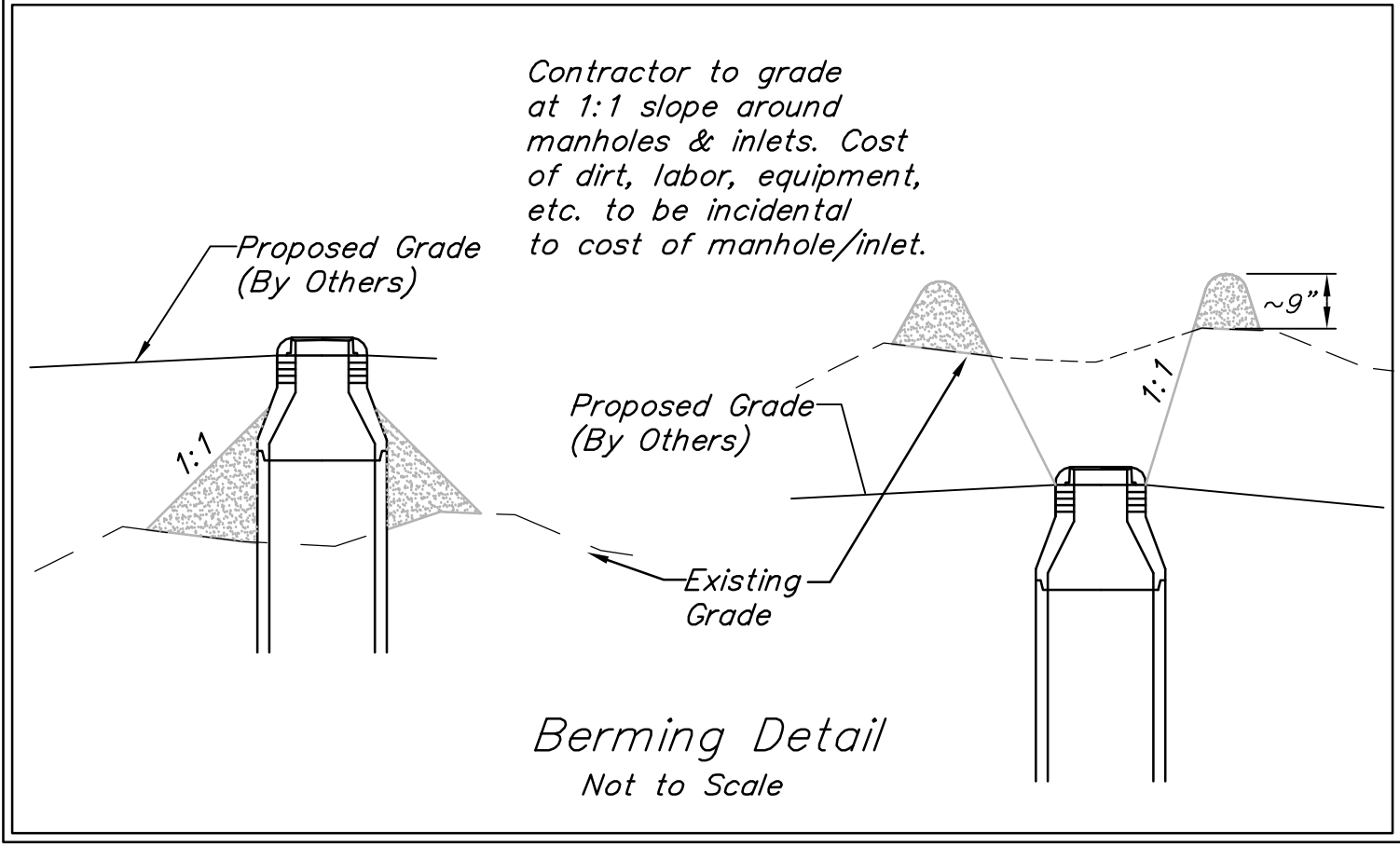
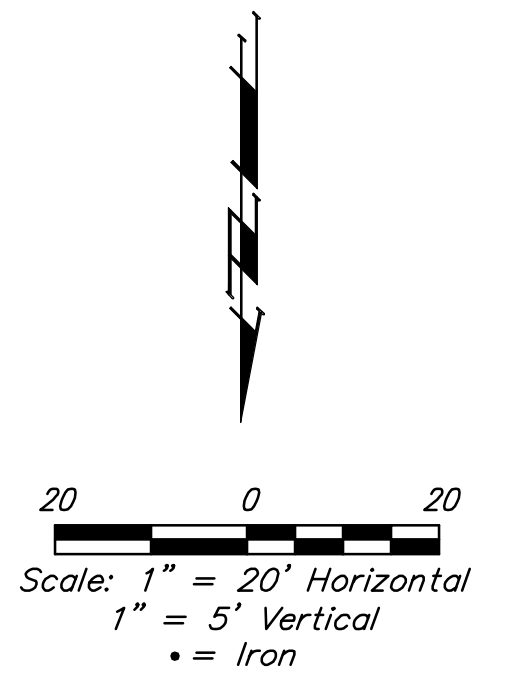


		GREAT PLAINS BUSINESS PARK 4TH ADD. LINE 1 STORM WATER SEWER IMPROVEMENTS	
		<small>Baughman Company, P.A. 315 Ellis St. Wichita, KS 67211 P 316-262-7271 F 316-262-0149 ENGINEERING SURVEYING PLANNING LANDSCAPE ARCHITECTURE</small>	
PROJECT NUMBER	DESIGN	DRAWN	
REVISIONS:	TJW	TMS	
	APPROVED	DATE	
	Noted	09/12	
	SHEET	2 OF 25	
SWS.dwg		12-06-E777	

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 CROSS CUT TOP OF CATCH BASIN WEST SIDE
 OF RIDGEWOOD 14'± NORTH OF THE SE COR.
 OF LOT 3, BLOCK 2, GREAT PLAINS BUSINESS
 PARK ADDITION.
 ELEV.=1368.03 (NAVD88)

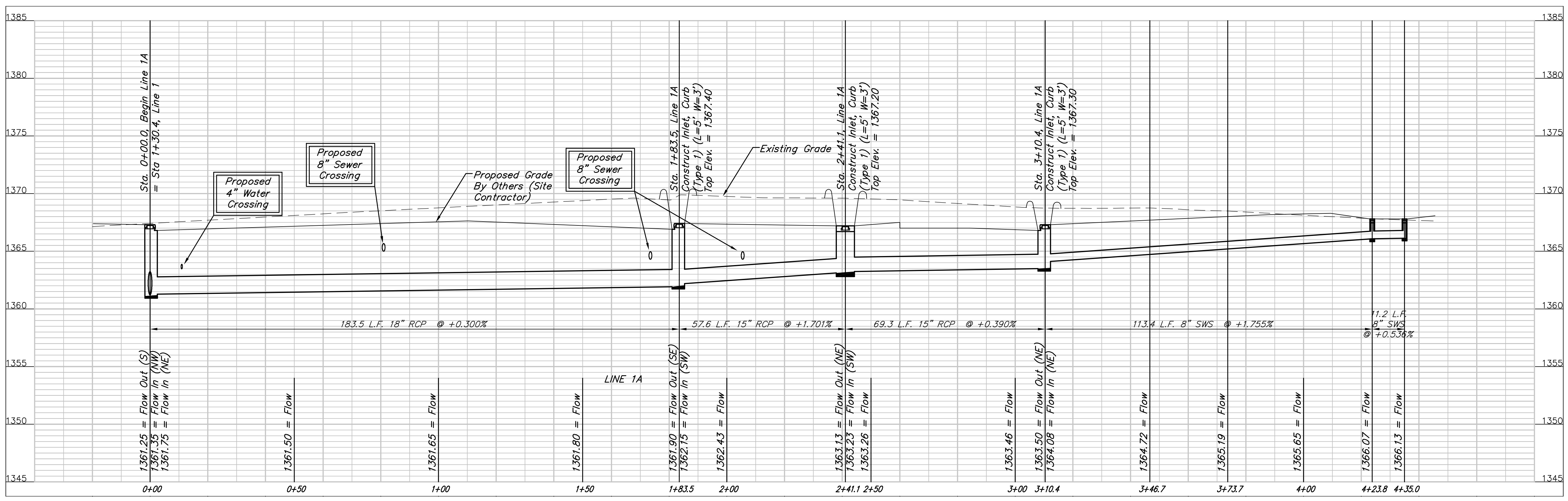
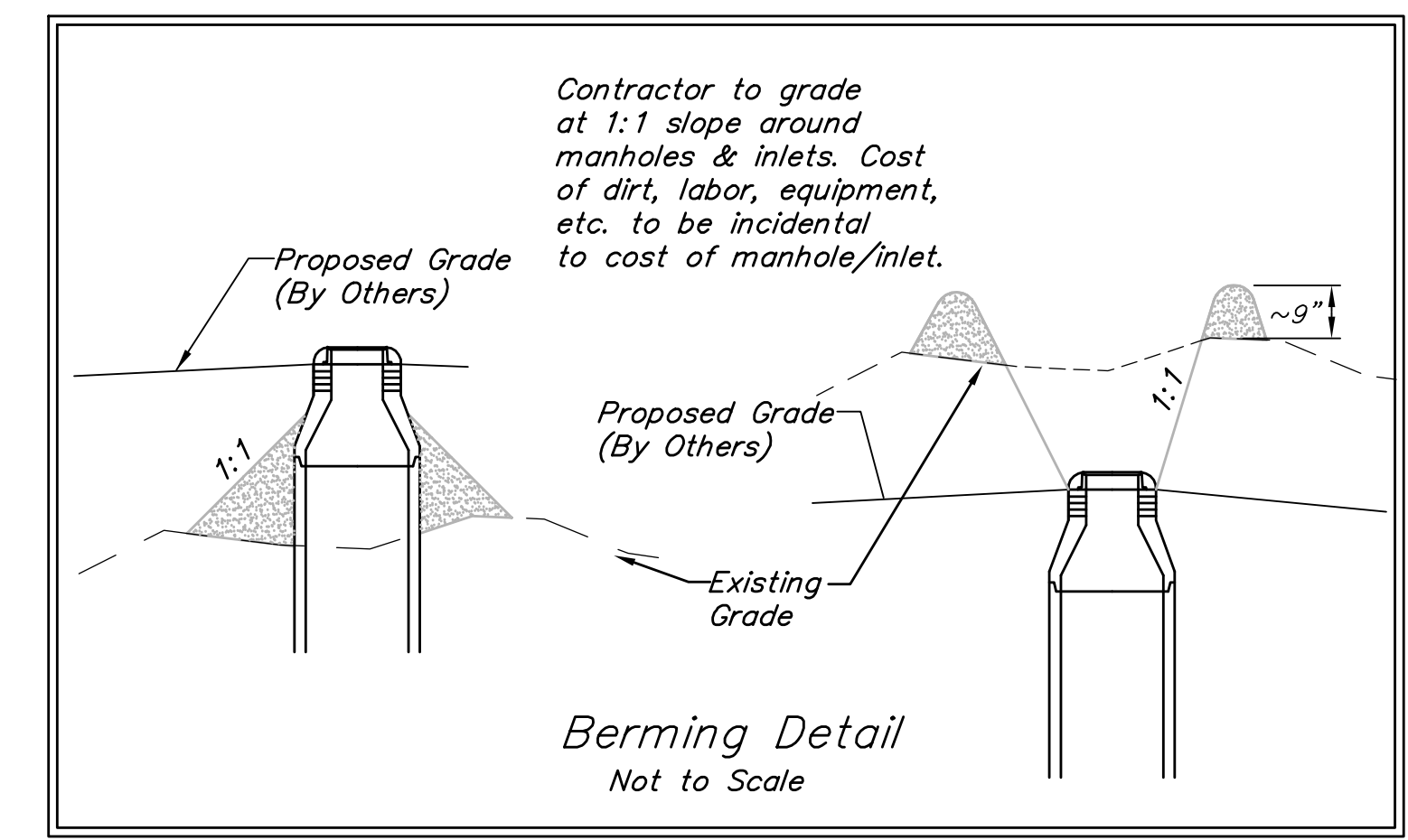
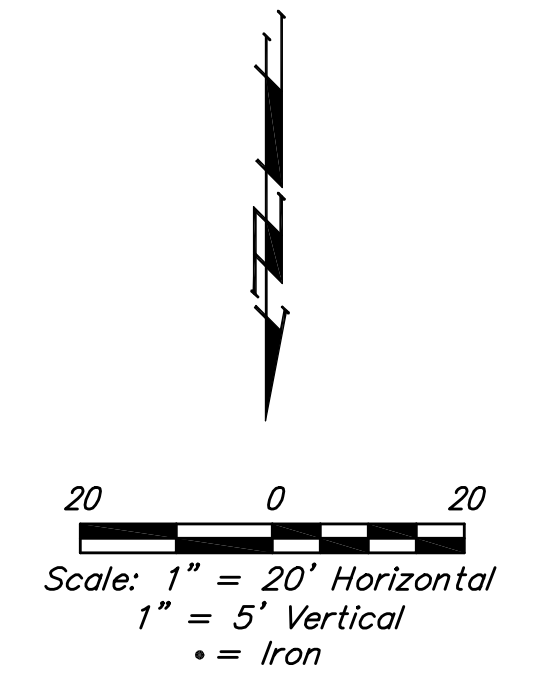
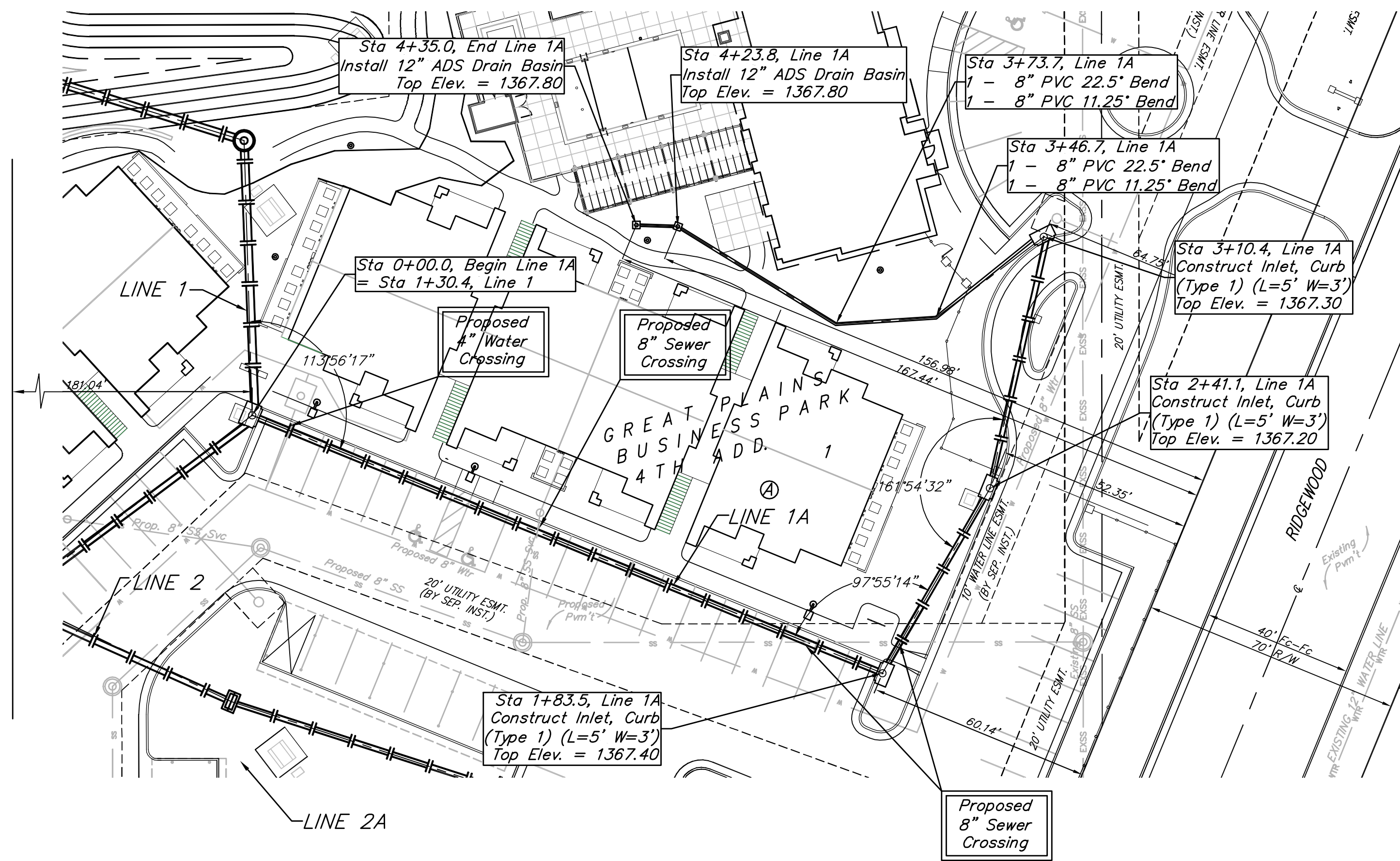


**Line repaired @ Sta. 3+50 +/- on
 03/04/13 by Mies Construction**



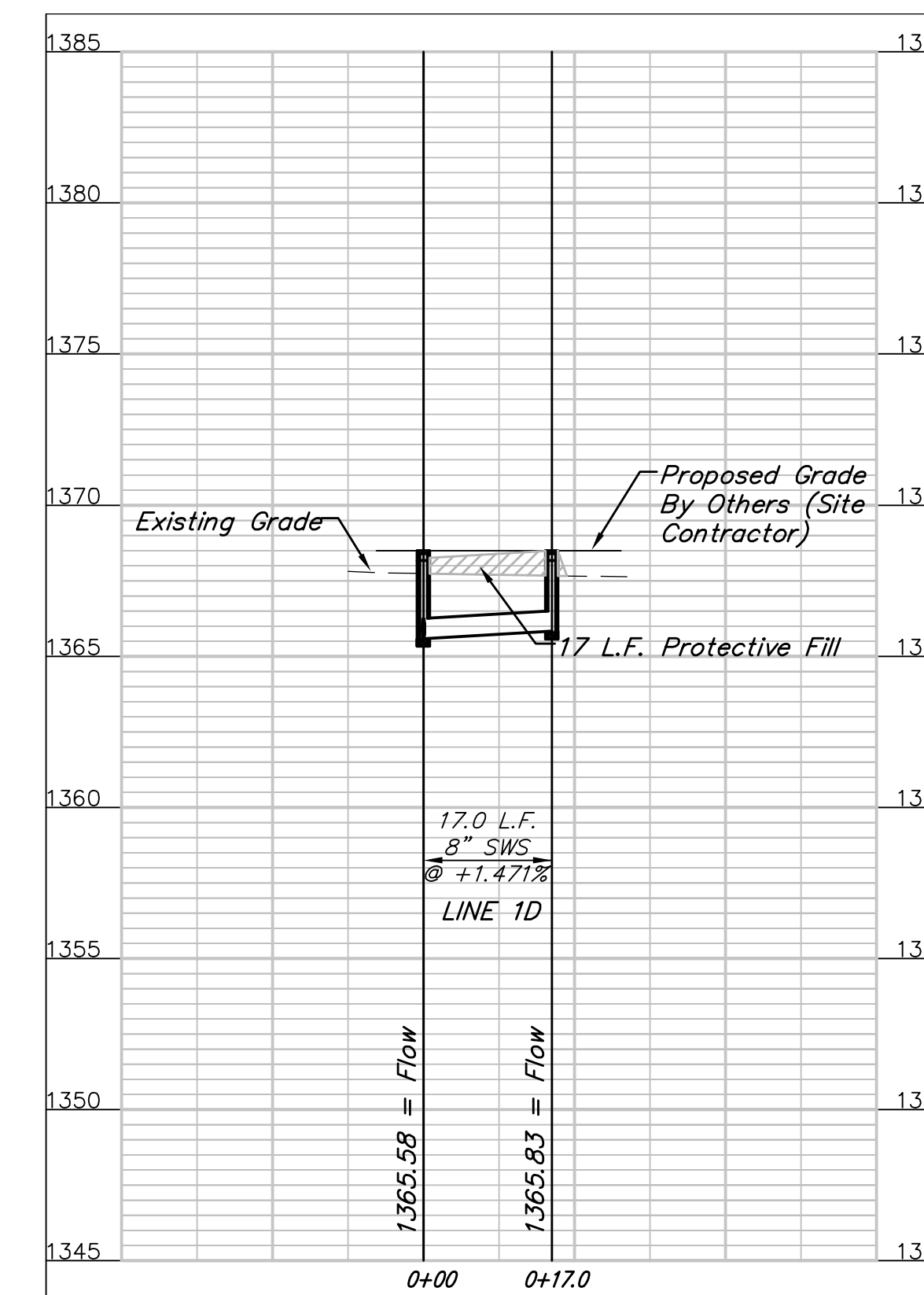
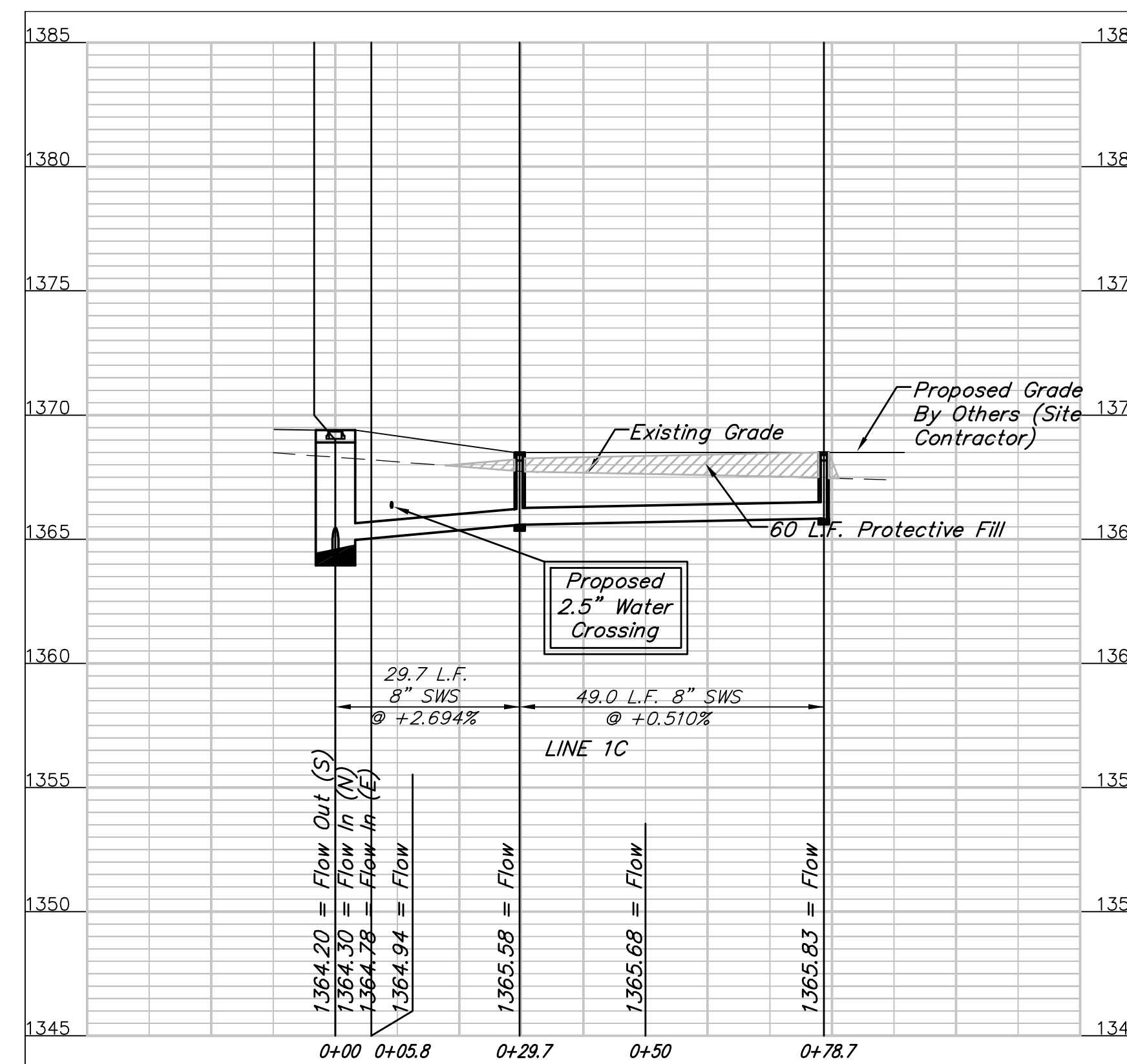
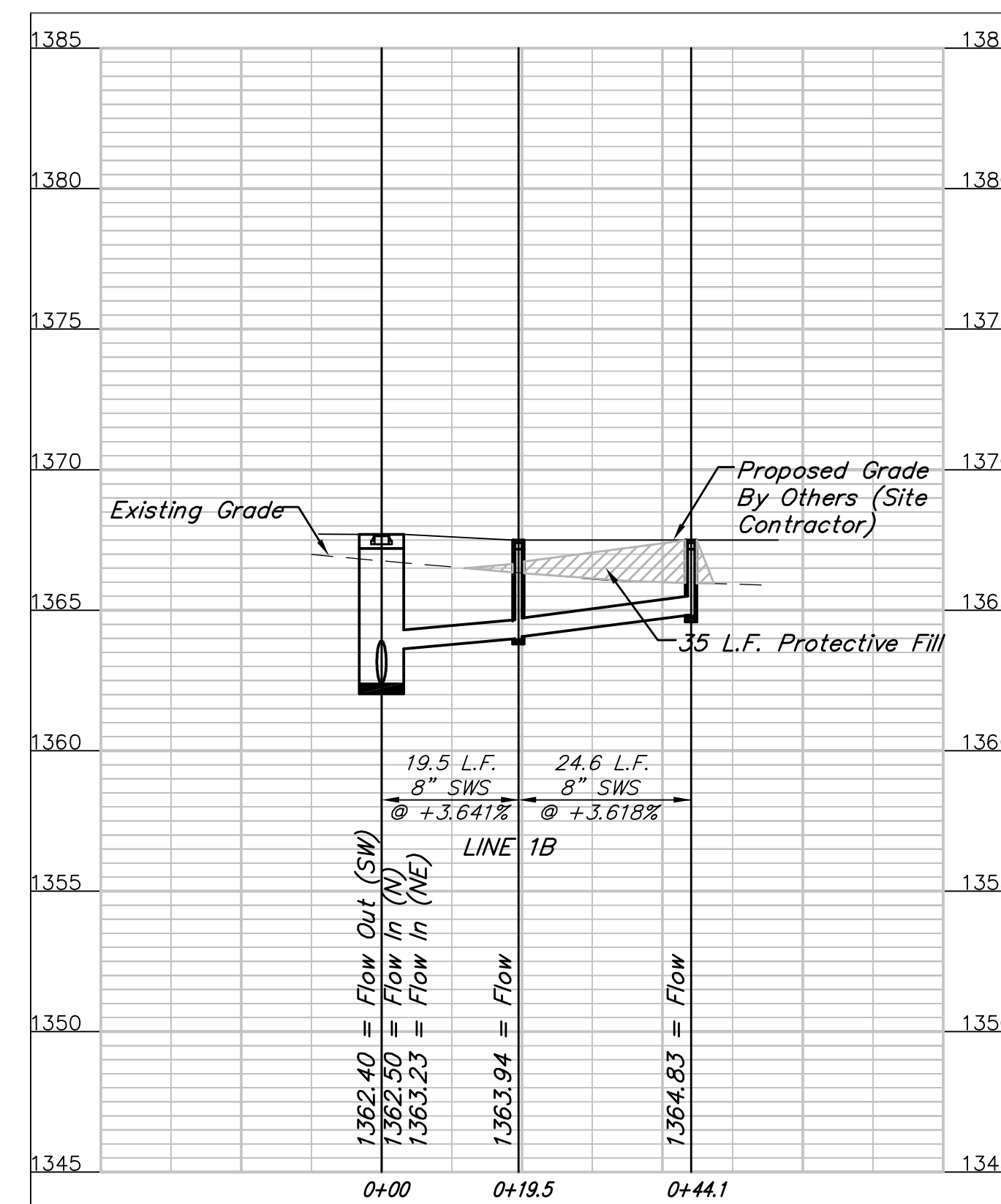
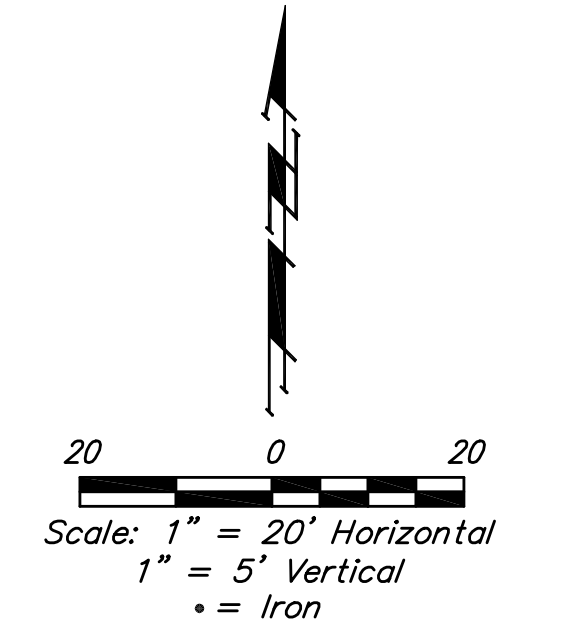
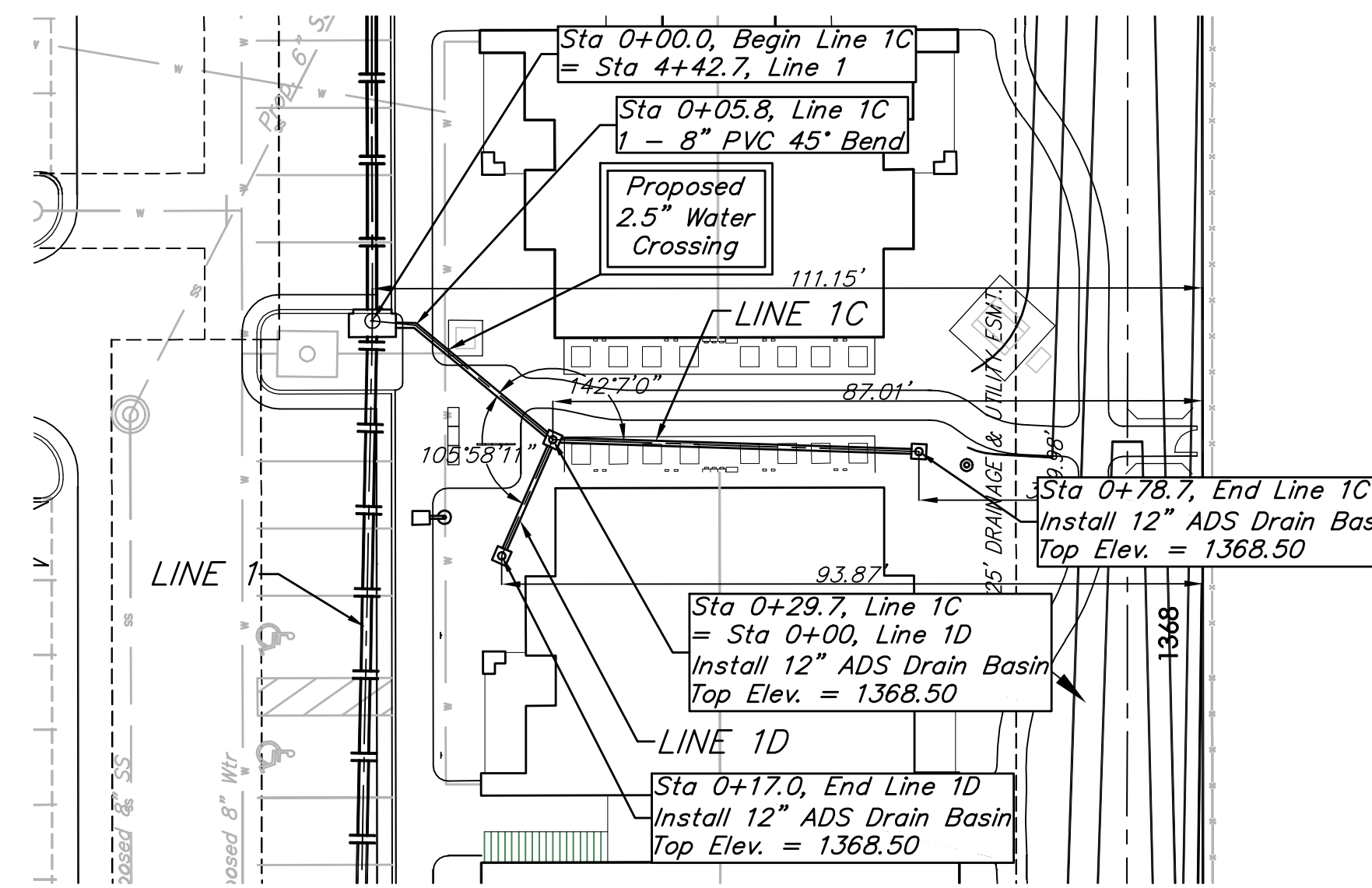
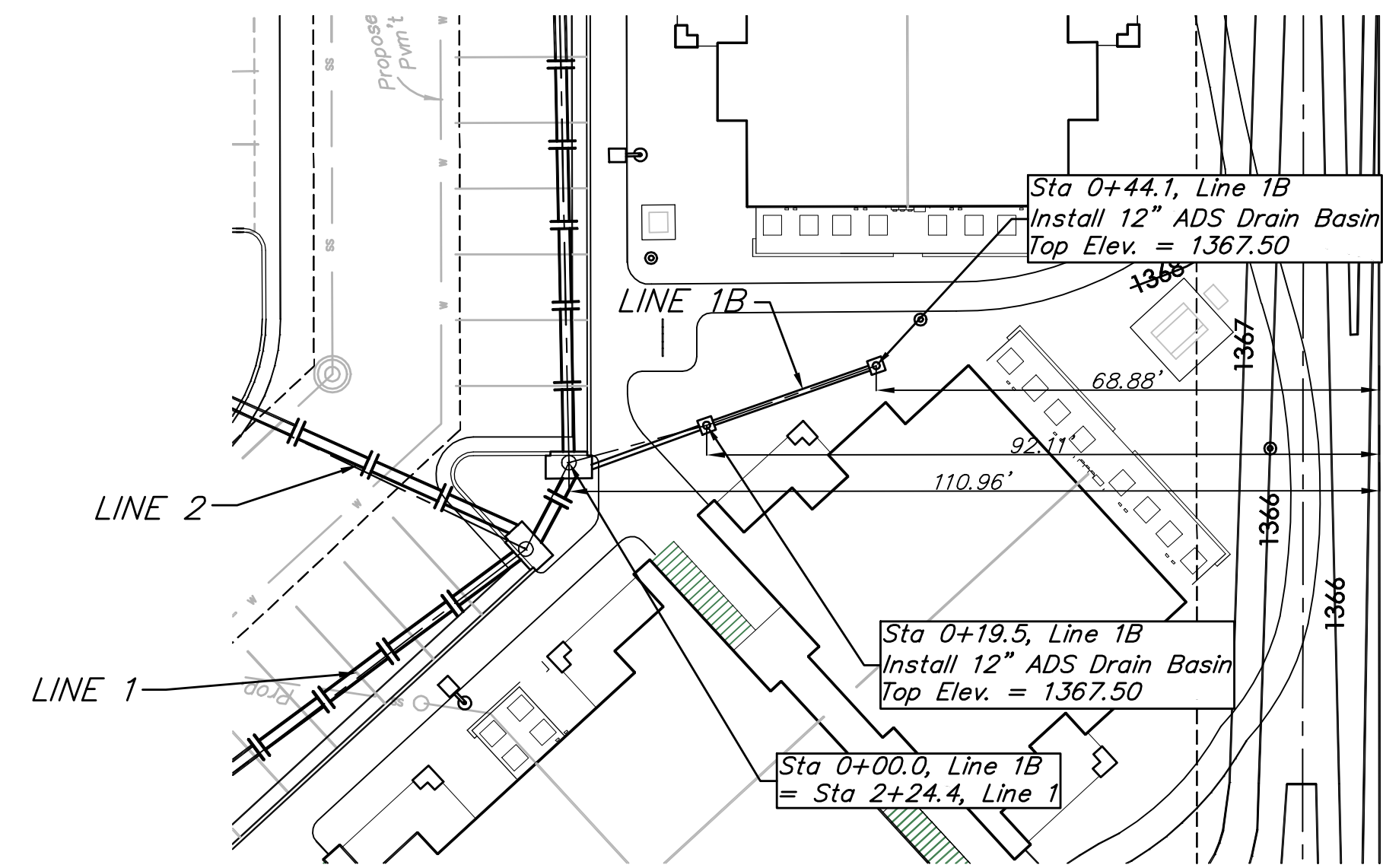
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<small>Baughman Company, P.A. 315 Ellis St. Wichita, KS 67211 P 316-262-7271 F 316-262-0149 ENGINEERING SURVEYING PLANNING LANDSCAPE ARCHITECTURE</small>			
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REVISIONS:		APPROVED	TMS
09-21-12		DATE	09/12
Moved 12" ADS Inlet		SCALE	Noted
		SHEET	
			3 OF 25

BENCHMARK:
 CROSS CUT TOP OF CATCH BASIN WEST SIDE
 OF RIDGEWOOD 14± NORTH OF THE SE COR.
 OF LOT 3, BLOCK 2, GREAT PLAINS BUSINESS
 PARK ADDITION.
 ELEV.=1368.03 (NAVD88)



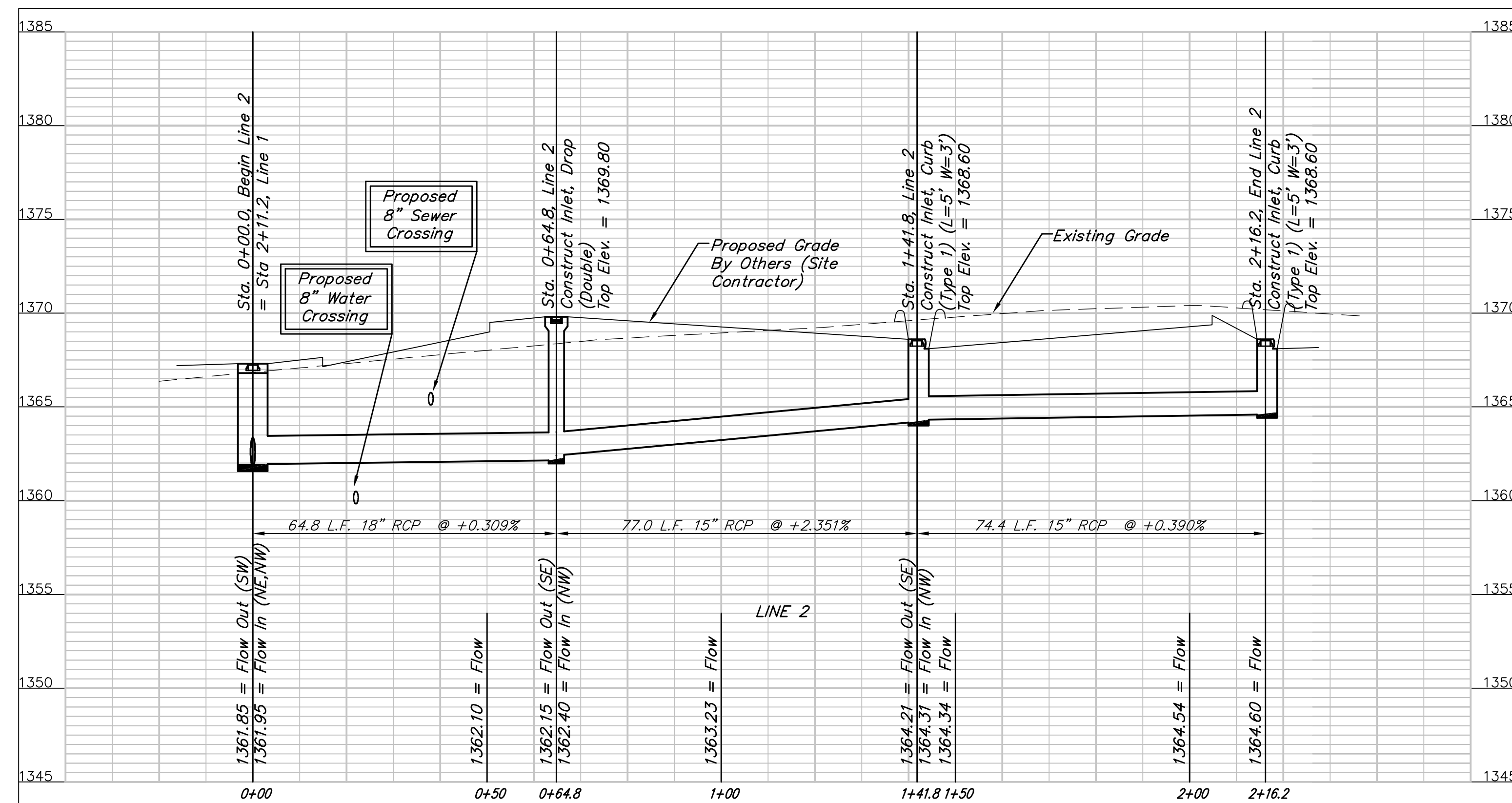
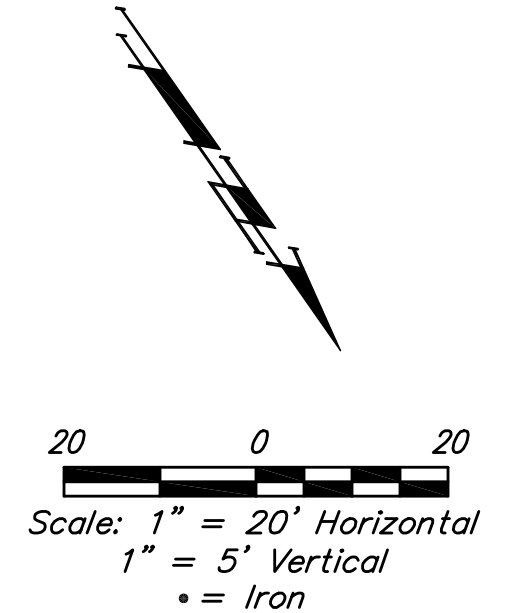
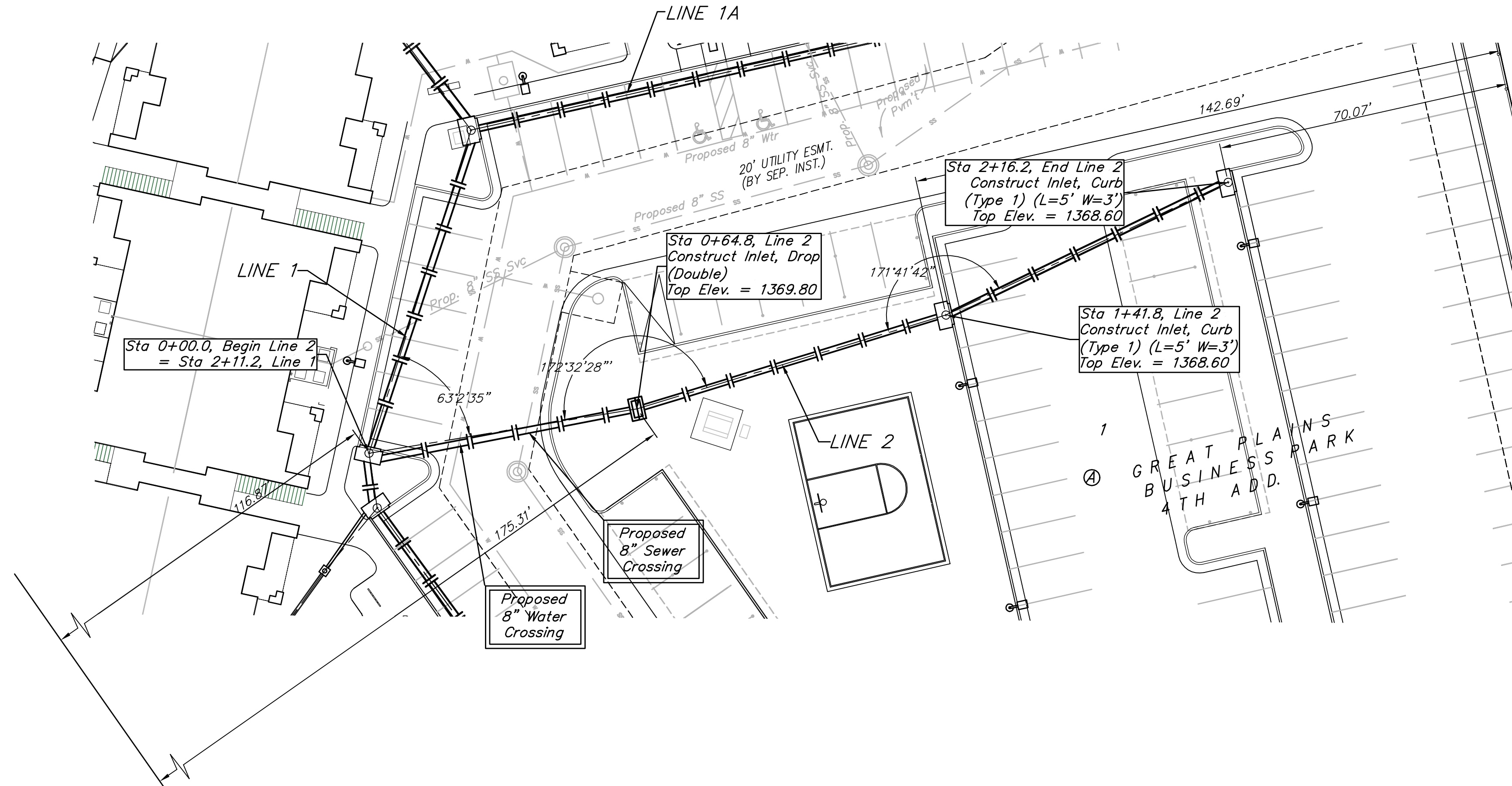
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	<small>Baughman Company, P.A. 315 Ellis St. Wichita, KS 67211 P 316-262-7271 F 316-262-0149 ENGINEERING SURVEYING PLANNING LANDSCAPE ARCHITECTURE</small>	
PROJECT NUMBER REVISIONS:	DESIGN TJW APPROVED SCALE Noted SHEET	DRAWN TMS DATE 09/12 3 OF 25 <small>12-06-E777</small>

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 CROSS CUT TOP OF CATCH BASIN WEST SIDE
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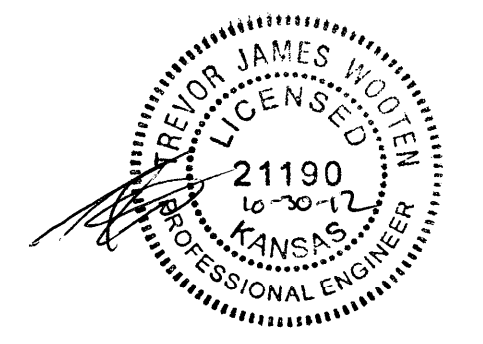
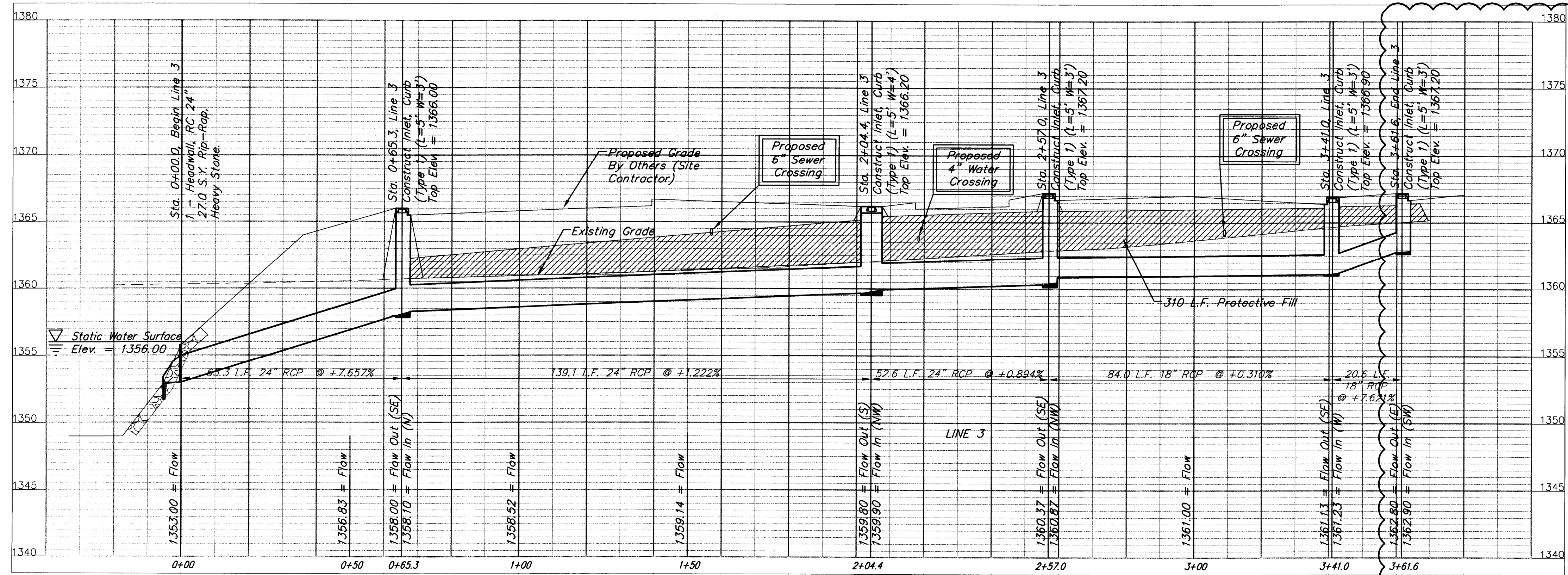
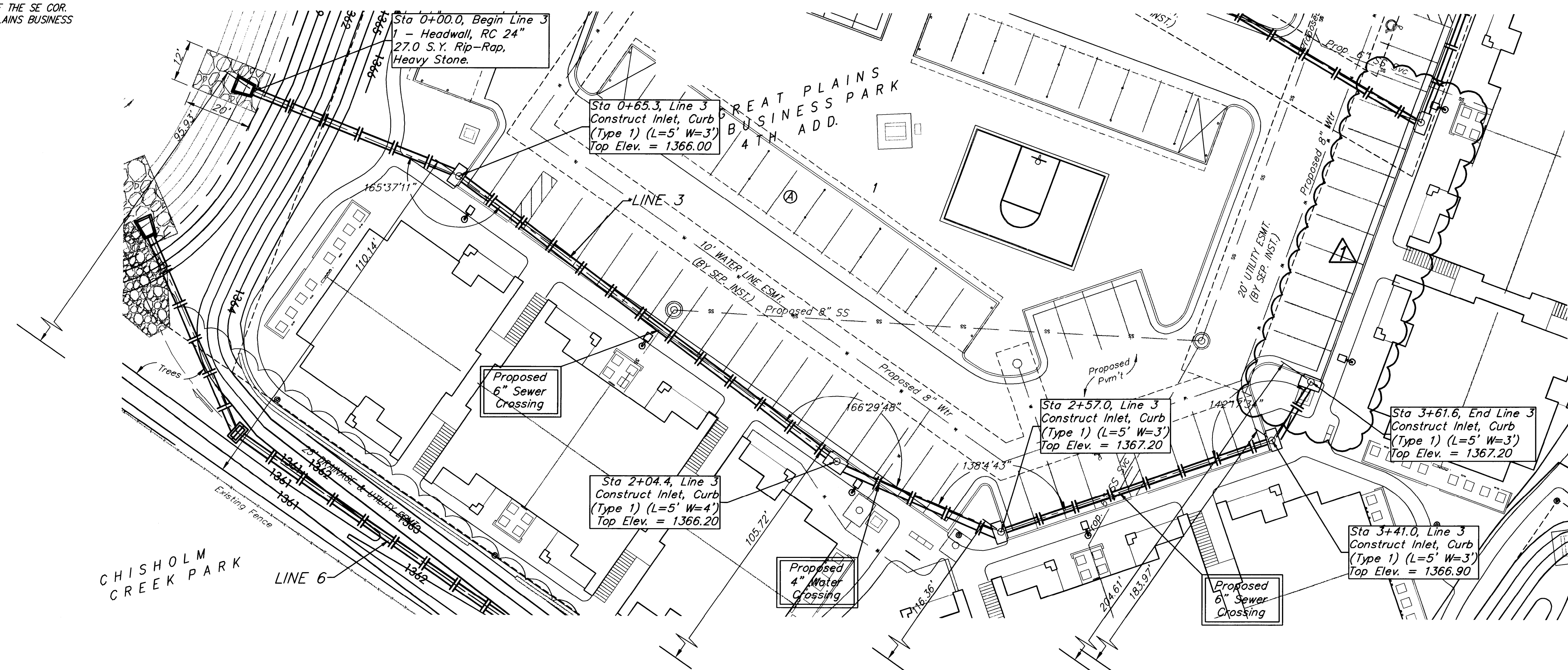
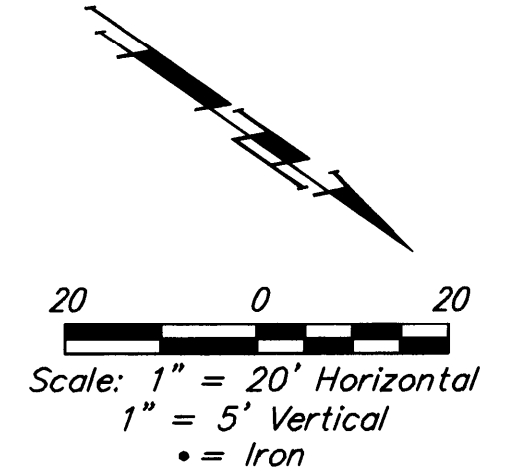
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	<small>Baughman Company, P.A. 315 Ellis St. Wichita, KS 67211 P 316-262-7271 F 316-262-0149 ENGINEERING SURVEYING PLANNING LANDSCAPE ARCHITECTURE</small>	
PROJECT NUMBER REVISIONS:	DESIGN TJW APPROVED DATE 09/12	DRAWN TMS DATE 09/12 SCALE Noted SHEET 4 OF 25
<small>12-06-E777</small>		

BENCHMARK:
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 PARK ADDITION.
 ELEV.=1368.03 (NAVD88)



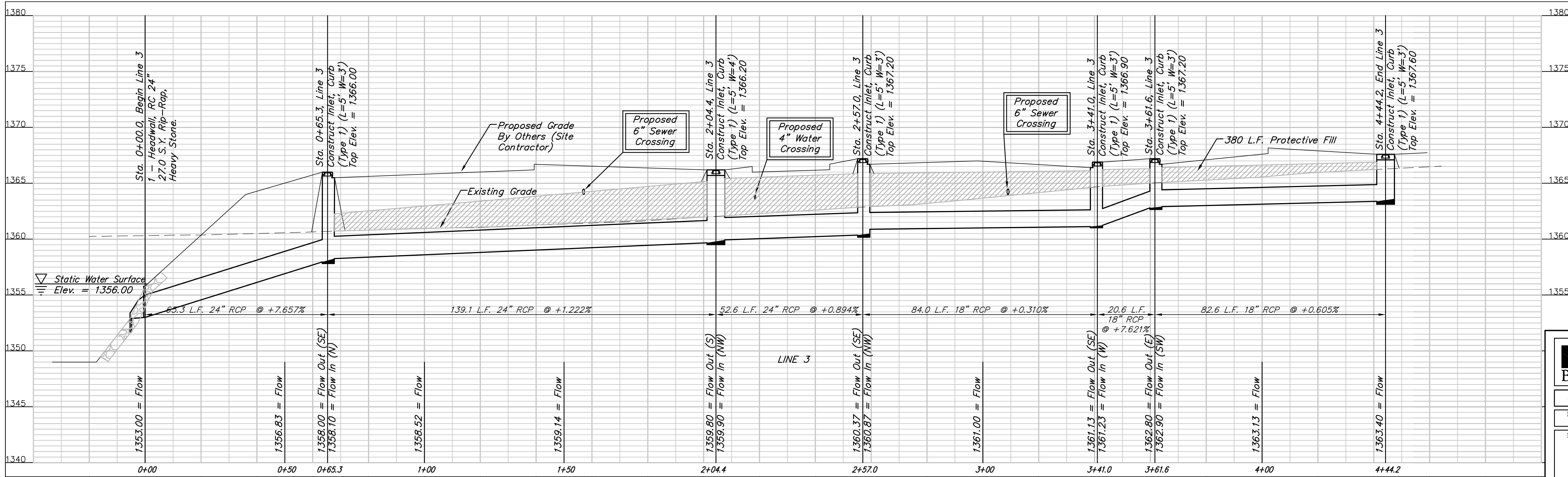
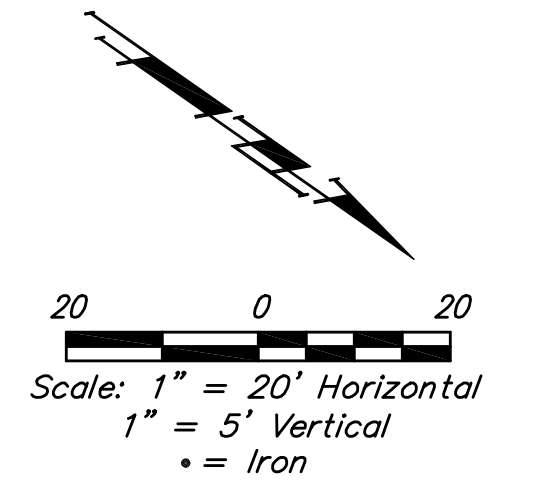
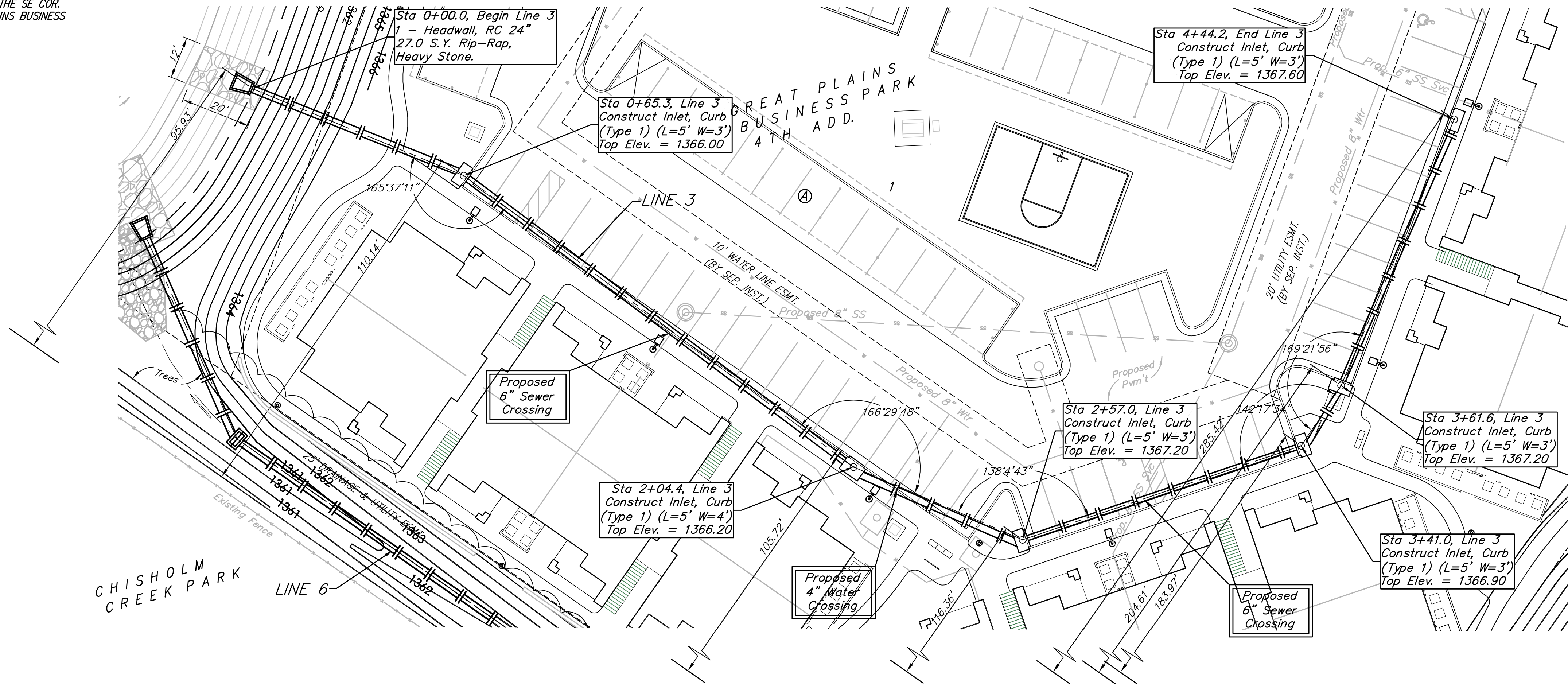
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PROJECT NUMBER REVISIONS:	DESIGN TJW APPROVED SCALE Noted SHEET	DRAWN TMS DATE 09/12	5 OF 25 <small>12-06-E777</small>

BENCHMARK:
 CROSS CUT TOP OF CATCH BASIN WEST SIDE
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 OF LOT 3, BLOCK 2, GREAT PLAINS BUSINESS
 PARK ADDITION.
 ELEV.=1368.03 (NAVD88)

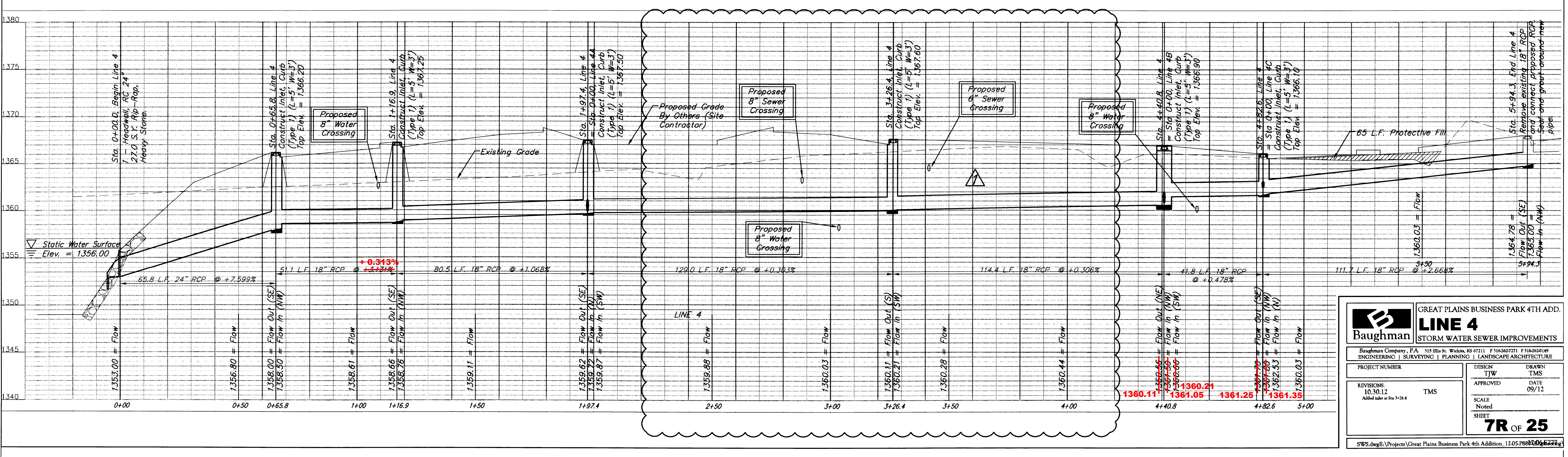
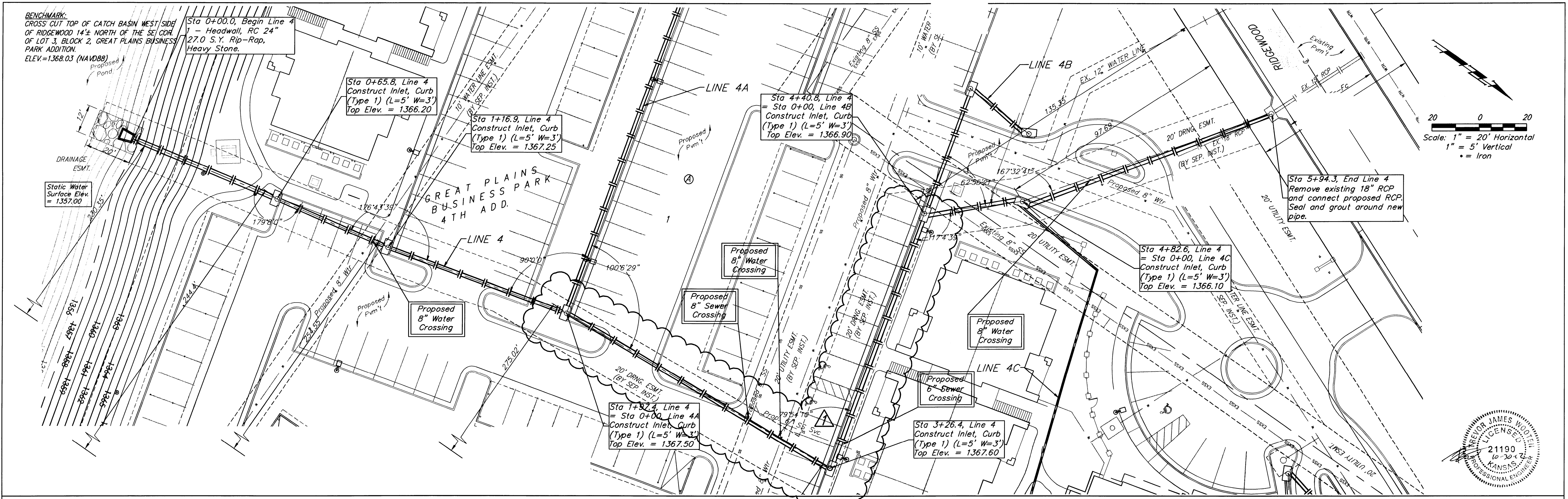


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PROJECT NUMBER 10.30.12 <small>removed last leg of Line 3</small>	TMS	DESIGN TJW	DRAWN TMS
REVISIONS:	TMS	APPROVED	DATE 09/12
SCALE Noted		SHEET 6R OF 25	
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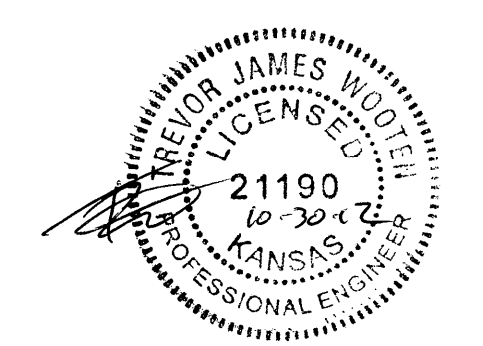
BENCHMARK:
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 PARK ADDITION.
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B Baughman		GREAT PLAINS BUSINESS PARK 4TH ADD.	
LINE 3		STORM WATER SEWER IMPROVEMENTS	
Baughman Company, P.A. 315 Ellis St. Wichita, KS 67211 P 316-262-7271 F 316-262-0149 ENGINEERING SURVEYING PLANNING LANDSCAPE ARCHITECTURE			
PROJECT NUMBER	DESIGN	DRAWN	
	TJW	TMS	
REVISIONS:	APPROVED	DATE	09/12
	Noted		
	SHEET		
			6 OF 25
1206-E777			

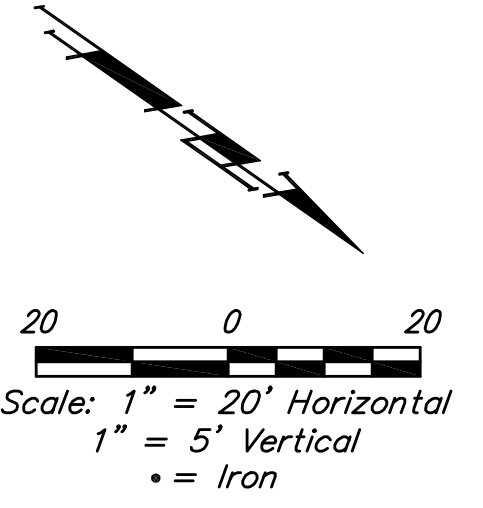
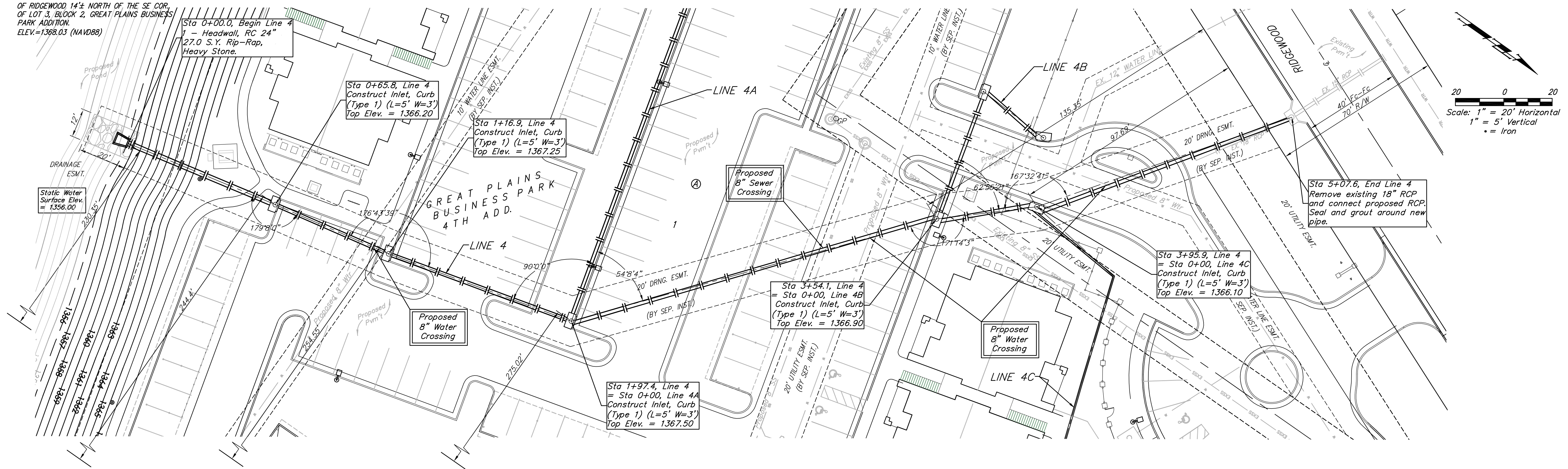


Scale: 1" = 20' Horizontal
1" = 5' Vertical
• = Iron

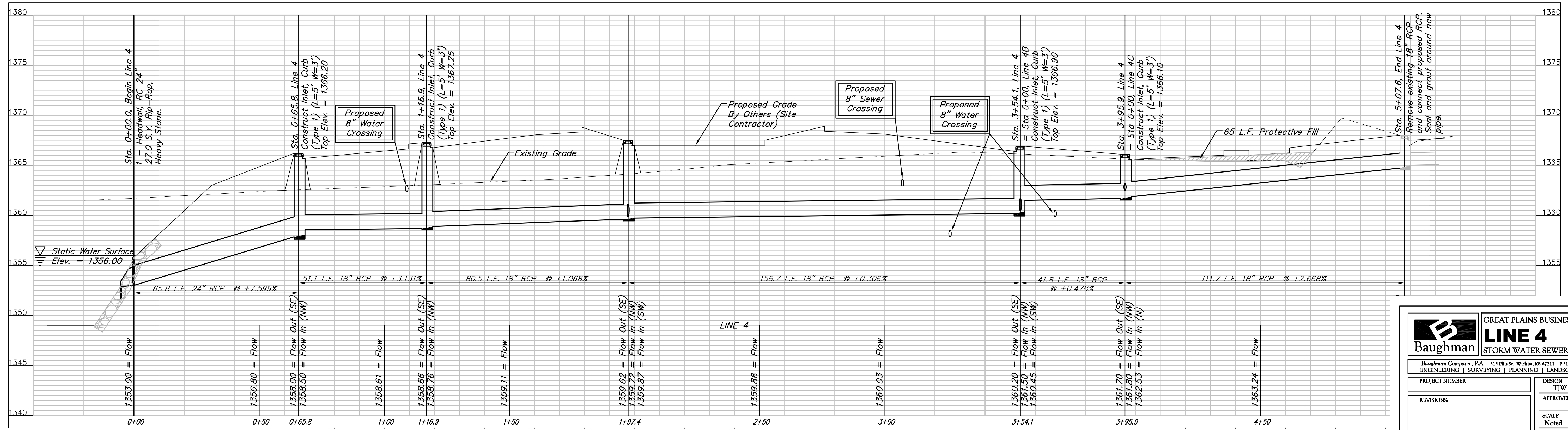


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BENCHMARK:
 CROSS CUT TOP OF CATCH BASIN WEST SIDE
 OF RIDGEWOOD 14± NORTH OF THE SE COR.
 OF LOT 3, BLOCK 2, GREAT PLAINS BUSINESS
 PARK ADDITION.
 ELEV.=1368.03 (NAVD88)

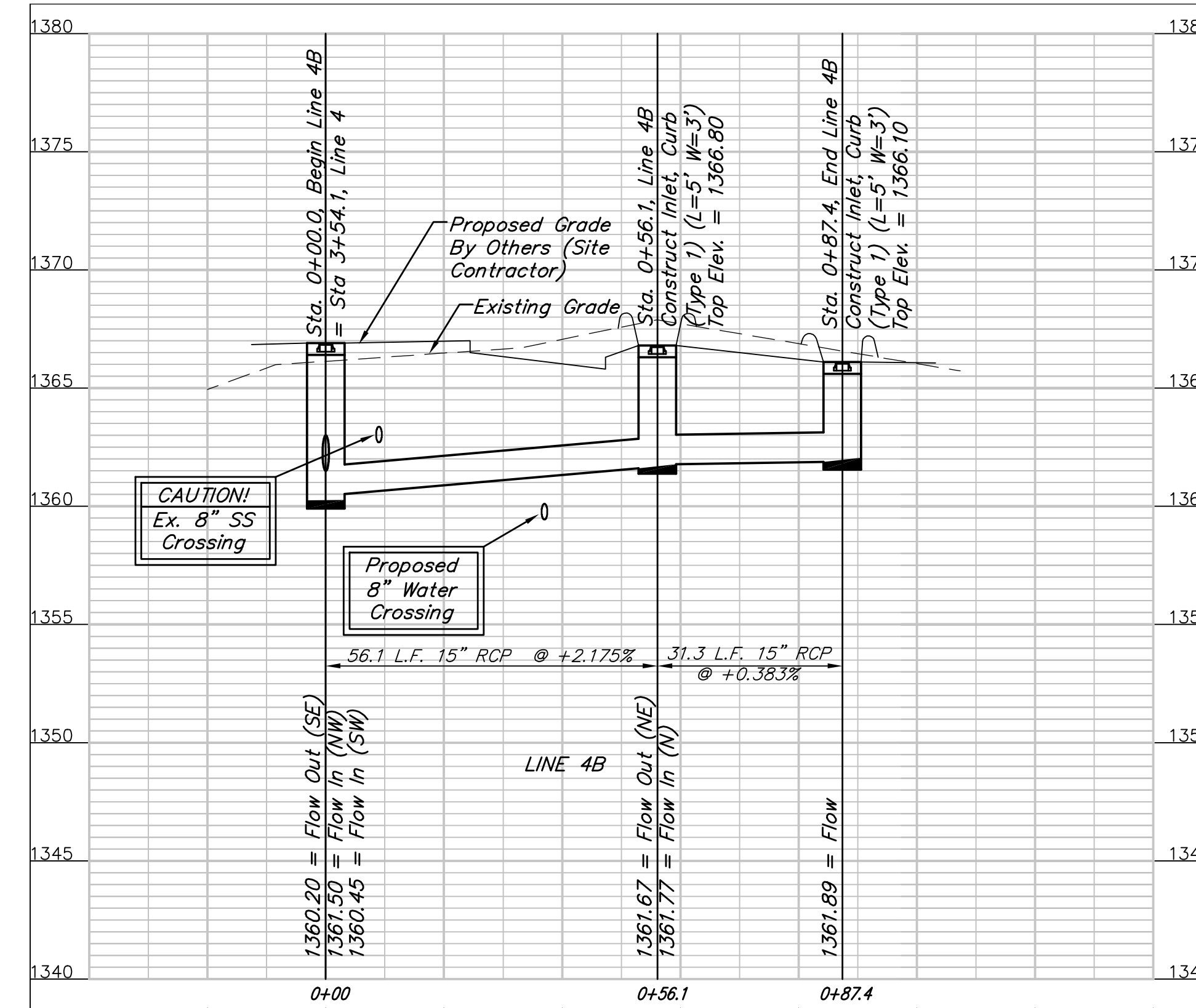
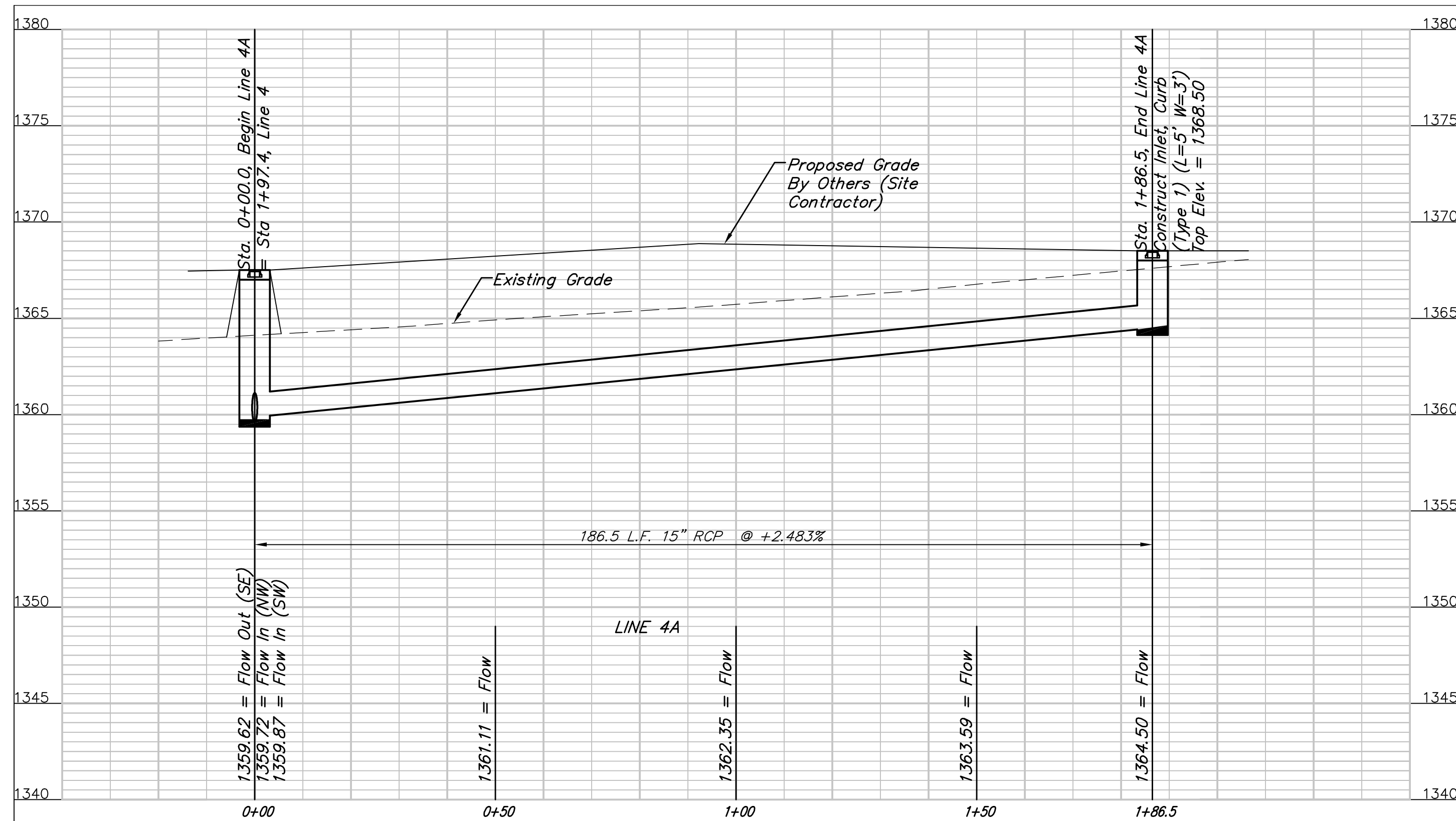
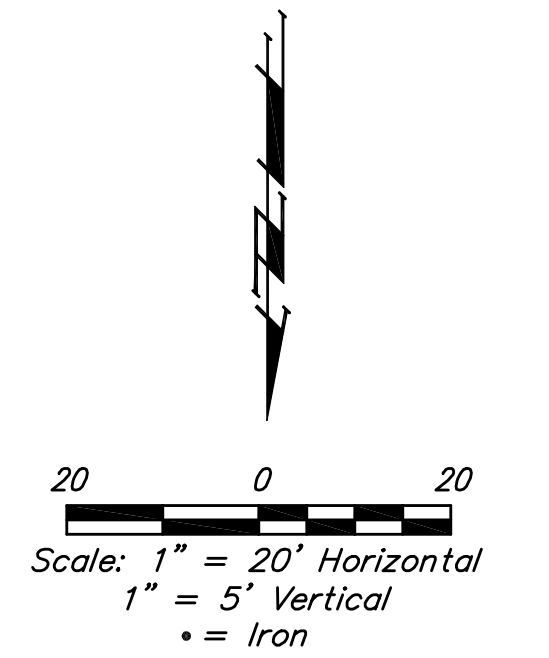
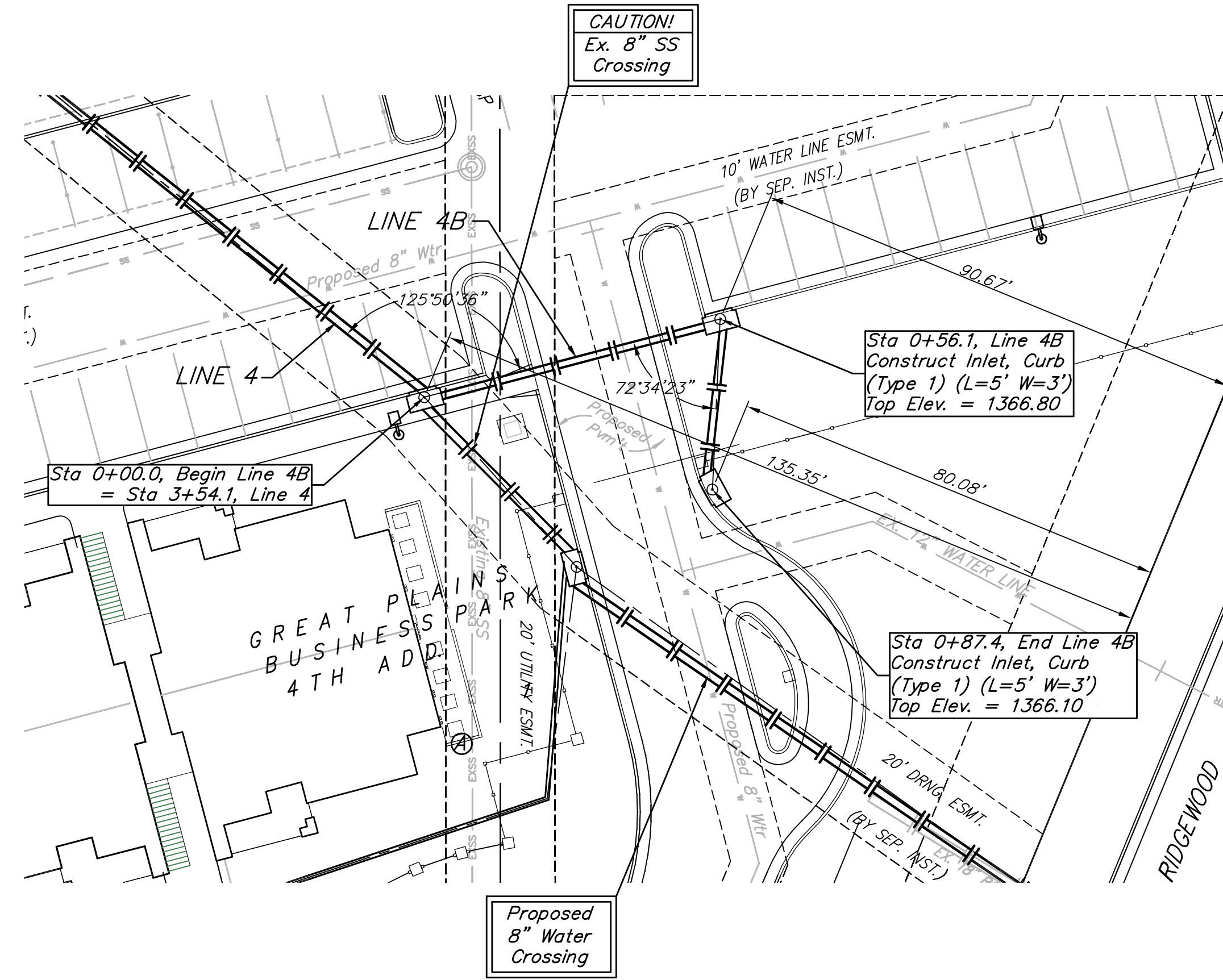
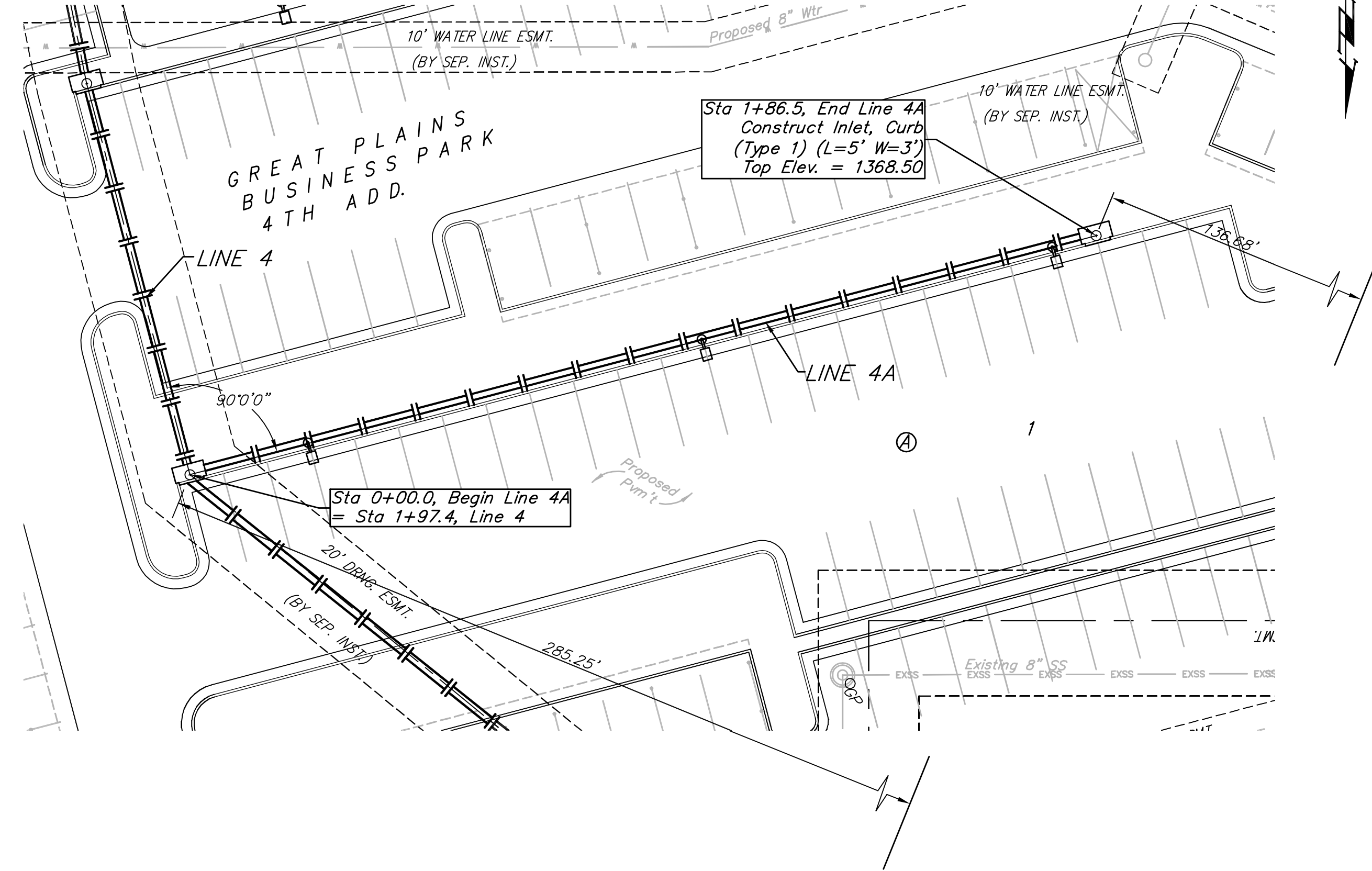


PLAN VIEW OF LINE 4



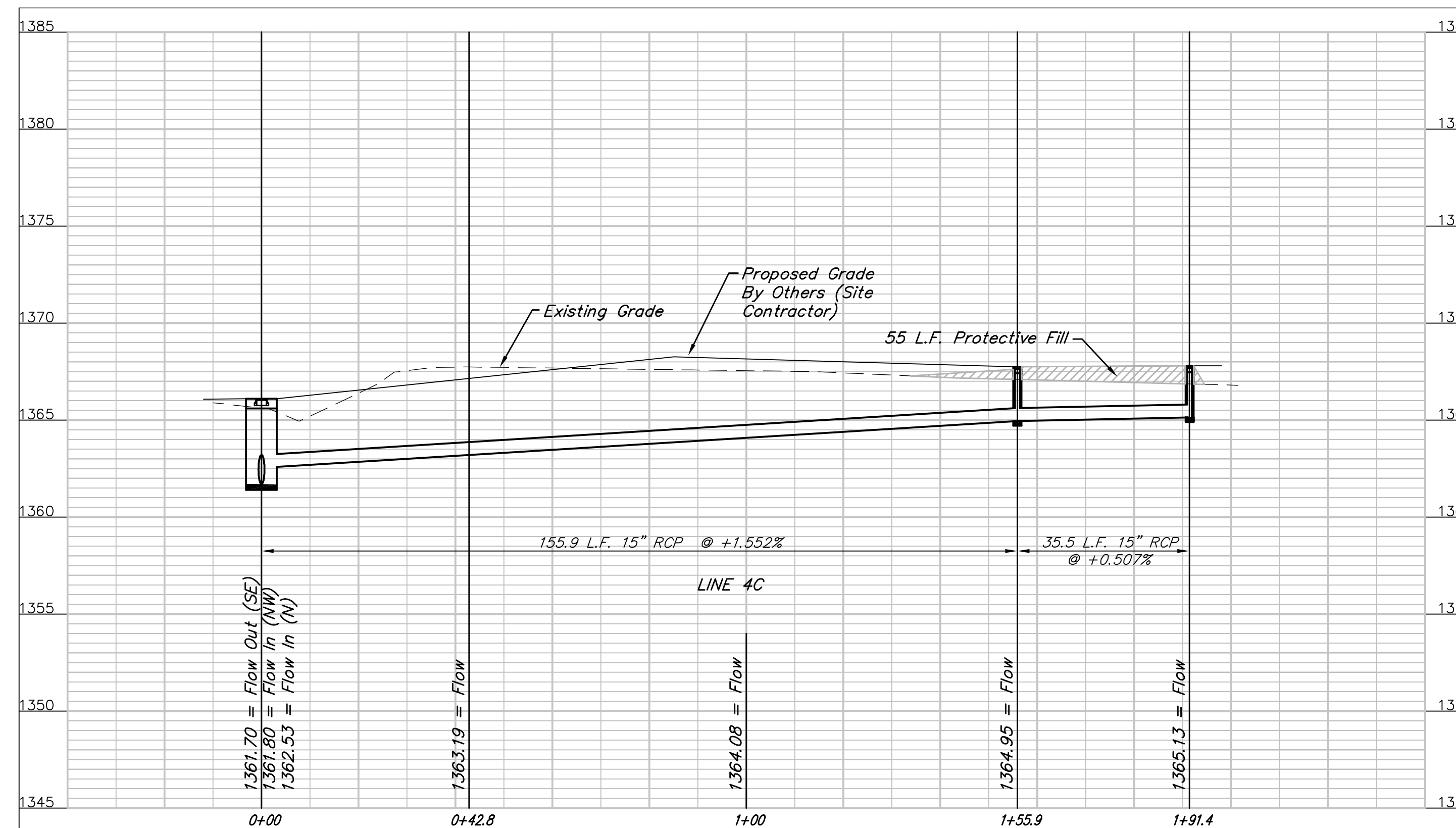
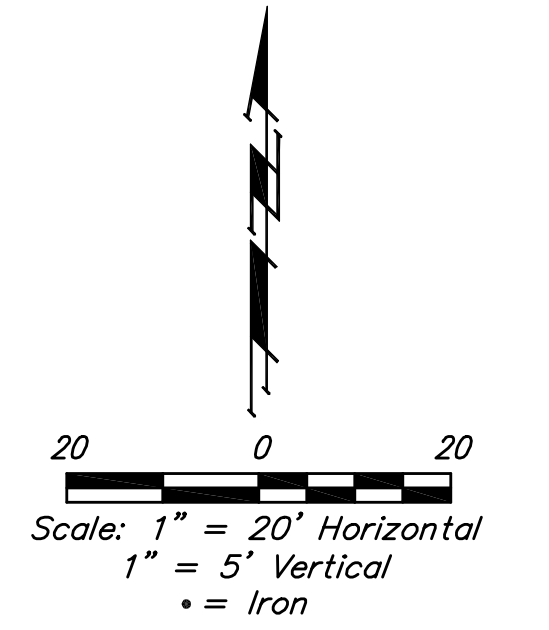
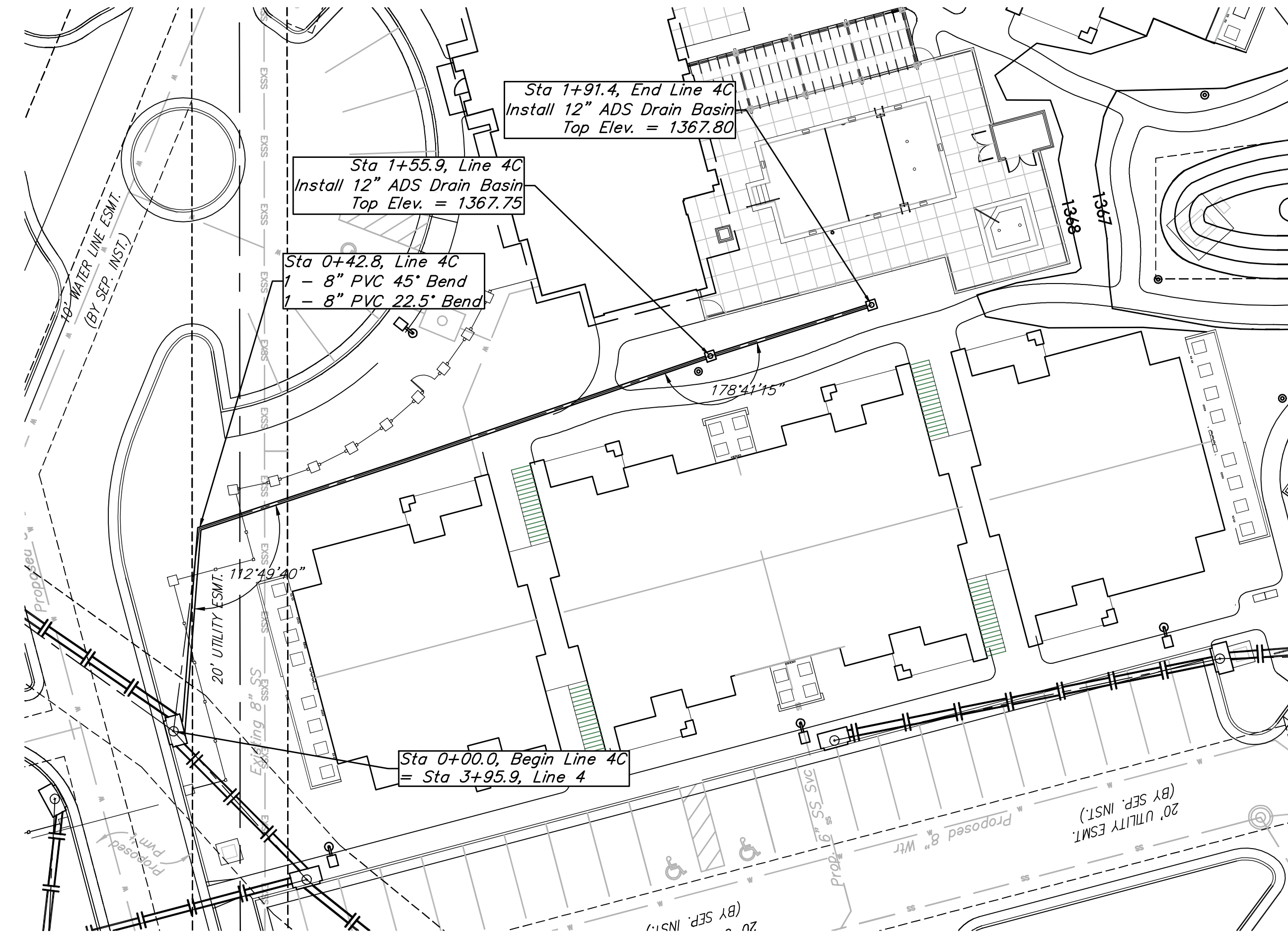
	GREAT PLAINS BUSINESS PARK 4TH ADD. LINE 4 STORM WATER SEWER IMPROVEMENTS	
	<small>Baughman Company, P.A. 315 Ellis St. Wichita, KS 67211 P 316-262-7271 F 316-262-0149 ENGINEERING SURVEYING PLANNING LANDSCAPE ARCHITECTURE</small>	
PROJECT NUMBER REVISIONS:	DESIGN TJW APPROVED DATE 09/12	DRAWN TMS DATE 09/12
SCALE Noted		7 OF 25 SHEET
1206-E777		

BENCHMARK:
 CROSS CUT TOP OF CATCH BASIN WEST SIDE
 OF RIDGEWOOD 14± NORTH OF THE SE COR.
 OF LOT 3, BLOCK 2, GREAT PLAINS BUSINESS
 PARK ADDITION.
 ELEV.=1368.03 (NAVD88)



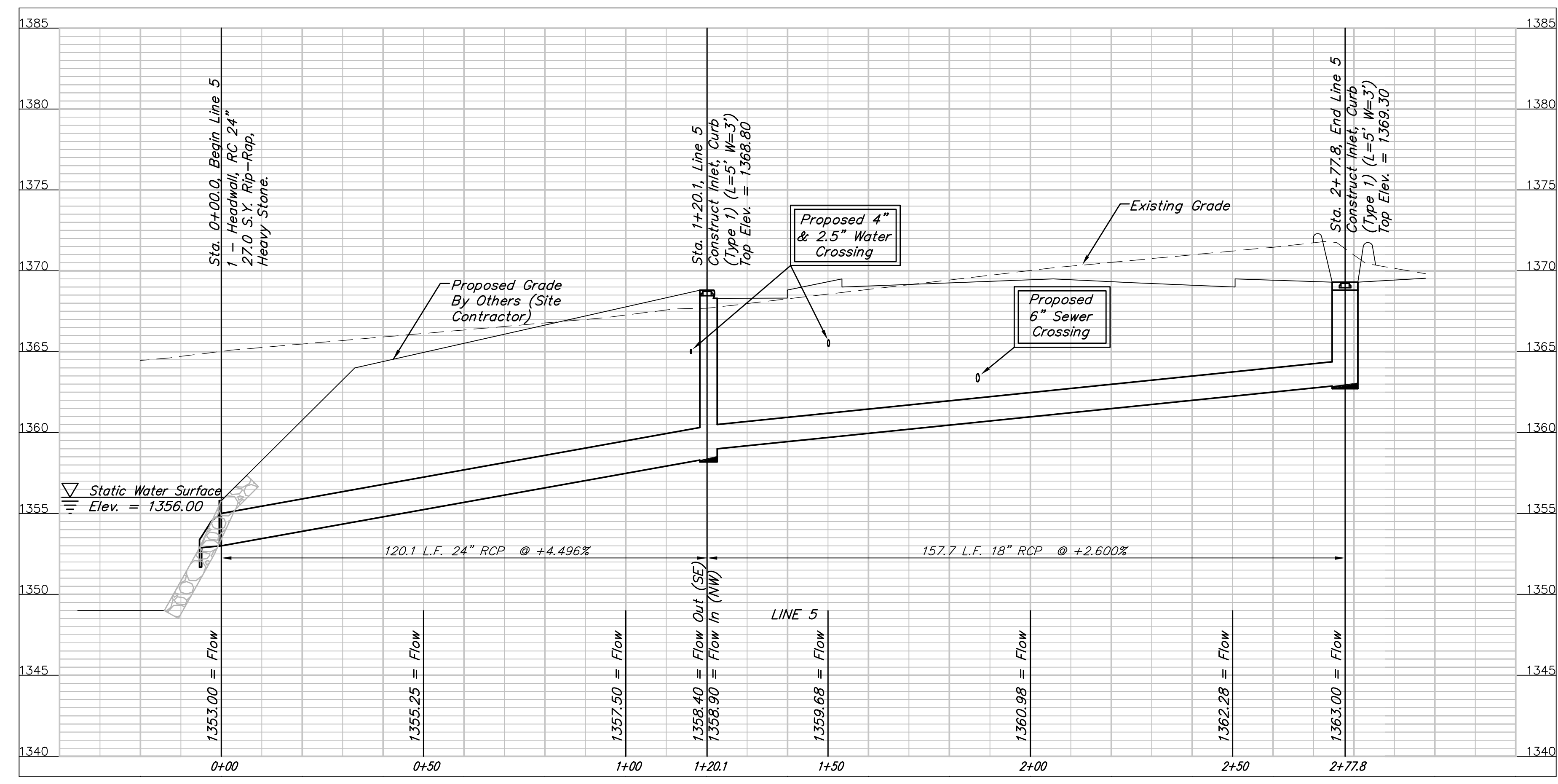
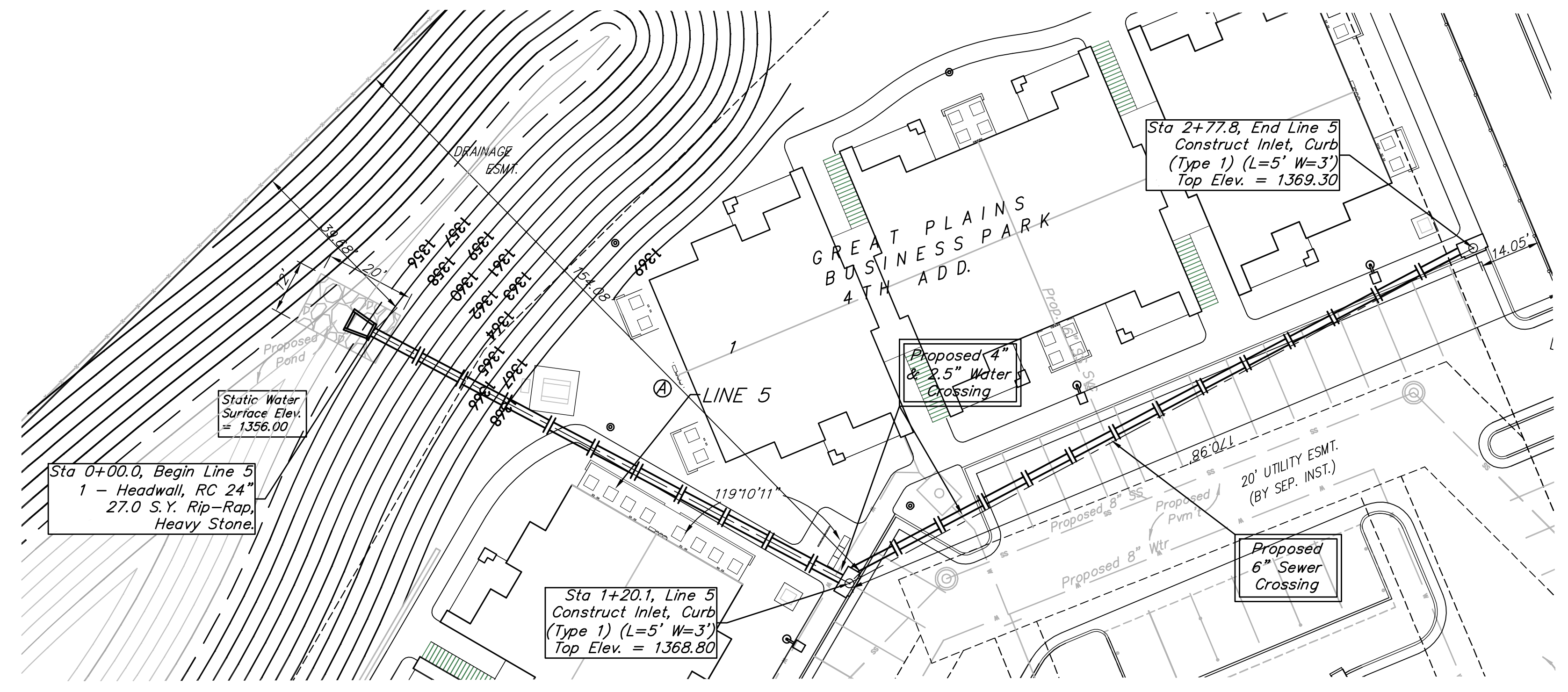
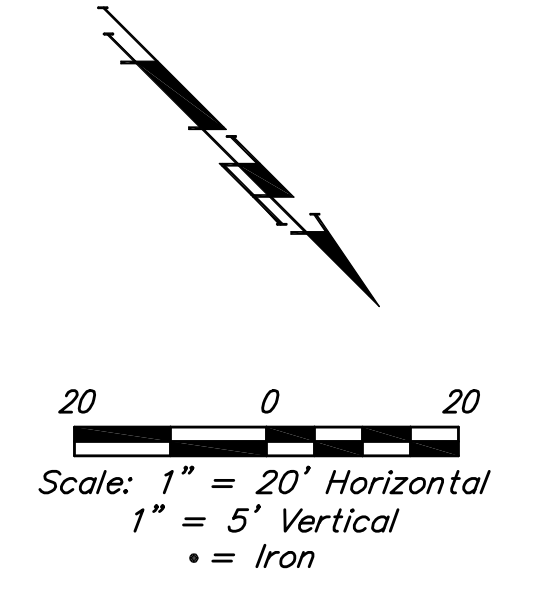
	GREAT PLAINS BUSINESS PARK 4TH ADD. LINE 4A & 4B STORM WATER SEWER IMPROVEMENTS	
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PROJECT NUMBER REVISIONS:	DESIGN TJW APPROVED SCALE Noted SHEET	DRAWN TMS DATE 09/12 8 OF 25 <small>12-06-E777</small>

BENCHMARK:
 CROSS CUT TOP OF CATCH BASIN WEST SIDE
 OF RIDGEWOOD 14± NORTH OF THE SE COR.
 OF LOT 3, BLOCK 2, GREAT PLAINS BUSINESS
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 ELEV.=1368.03 (NAVD88)



	GREAT PLAINS BUSINESS PARK 4TH ADD. LINE 4C STORM WATER SEWER IMPROVEMENTS	
	<small>Baughman Company, P.A. 315 Ellis St. Wichita, KS 67211 P 316-262-7271 F 316-262-0149 ENGINEERING SURVEYING PLANNING LANDSCAPE ARCHITECTURE</small>	
PROJECT NUMBER REVISIONS:	DESIGN TJW APPROVED SCALE Noted SHEET	DRAWN TMS DATE 09/12 9 OF 25 <small>12-06-E777</small>

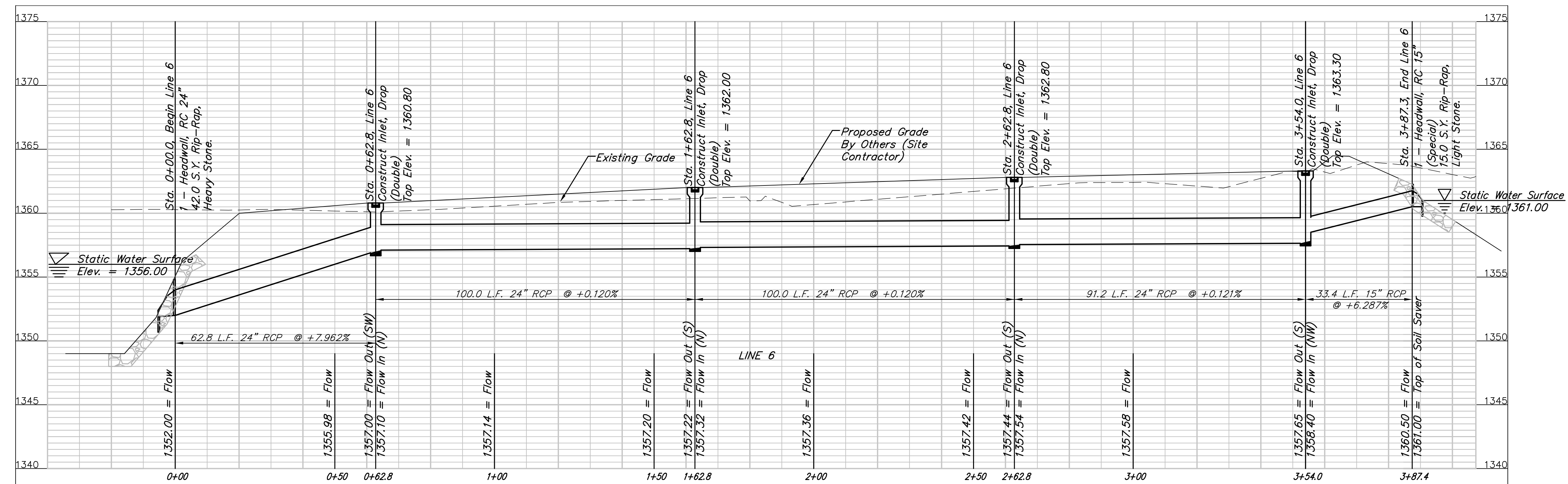
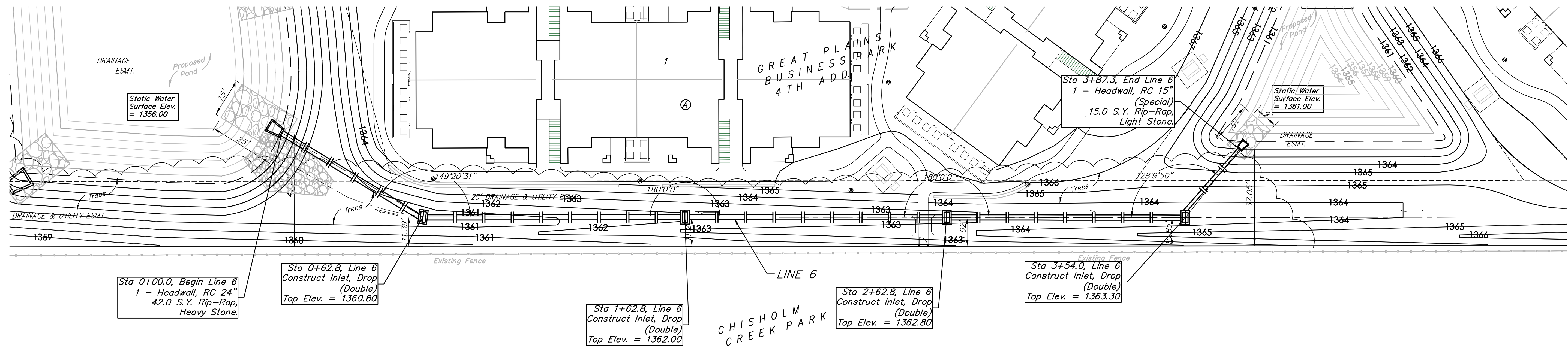
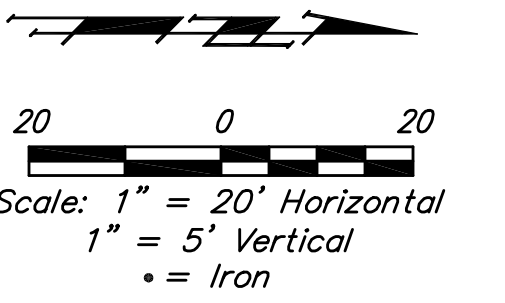
BENCHMARK:
 CROSS CUT TOP OF CATCH BASIN WEST SIDE
 OF RIDGEWOOD 14± NORTH OF THE SE COR.
 OF LOT 3, BLOCK 2, GREAT PLAINS BUSINESS
 PARK ADDITION.
 ELEV.=1368.03 (NAVD88)



	GREAT PLAINS BUSINESS PARK 4TH ADD. LINE 5 STORM WATER SEWER IMPROVEMENTS	
	<small>Baughman Company, P.A. 315 Ellis St. Wichita, KS 67211 P 316-262-7271 F 316-262-0149 ENGINEERING SURVEYING PLANNING LANDSCAPE ARCHITECTURE</small>	
PROJECT NUMBER REVISIONS:	DESIGN TJW APPROVED SCALE Noted SHEET	DRAWN TMS DATE 09/12 10 OF 25
<small>12-06-E777</small>		

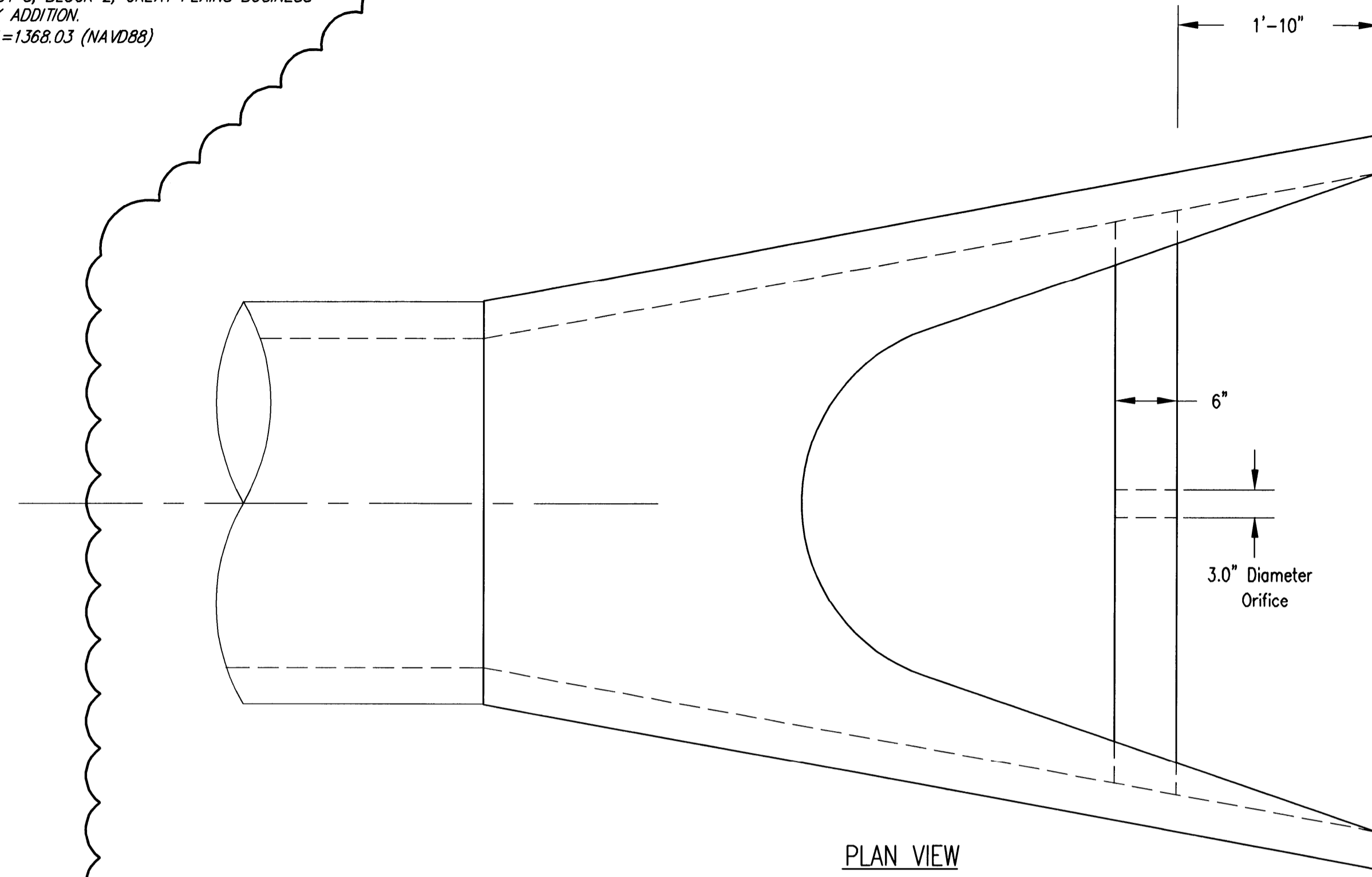
BENCHMARK:
 CROSS CUT TOP OF CATCH BASIN WEST SIDE
 OF RIDGEWOOD 14± NORTH OF THE SE COR.
 OF LOT 3, BLOCK 2, GREAT PLAINS BUSINESS
 PARK ADDITION.
 ELEV.=1368.03 (NAVD88)

Trees shall only be removed as
 absolutely necessary for storm sewer
 construction. All other trees shall
 remain and be protected from damage
 during construction. Overhanging limbs
 shall be trimmed by the Contractor
 only as necessary for construction and
 with approval of the Engineer. Cost
 of tree trimming to be included in bid
 item "Site Clearing"

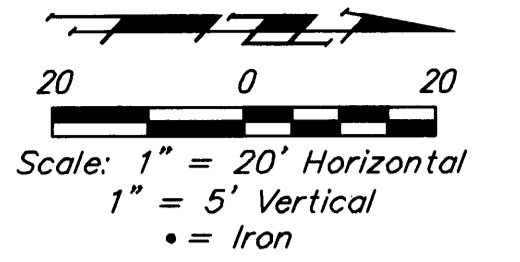
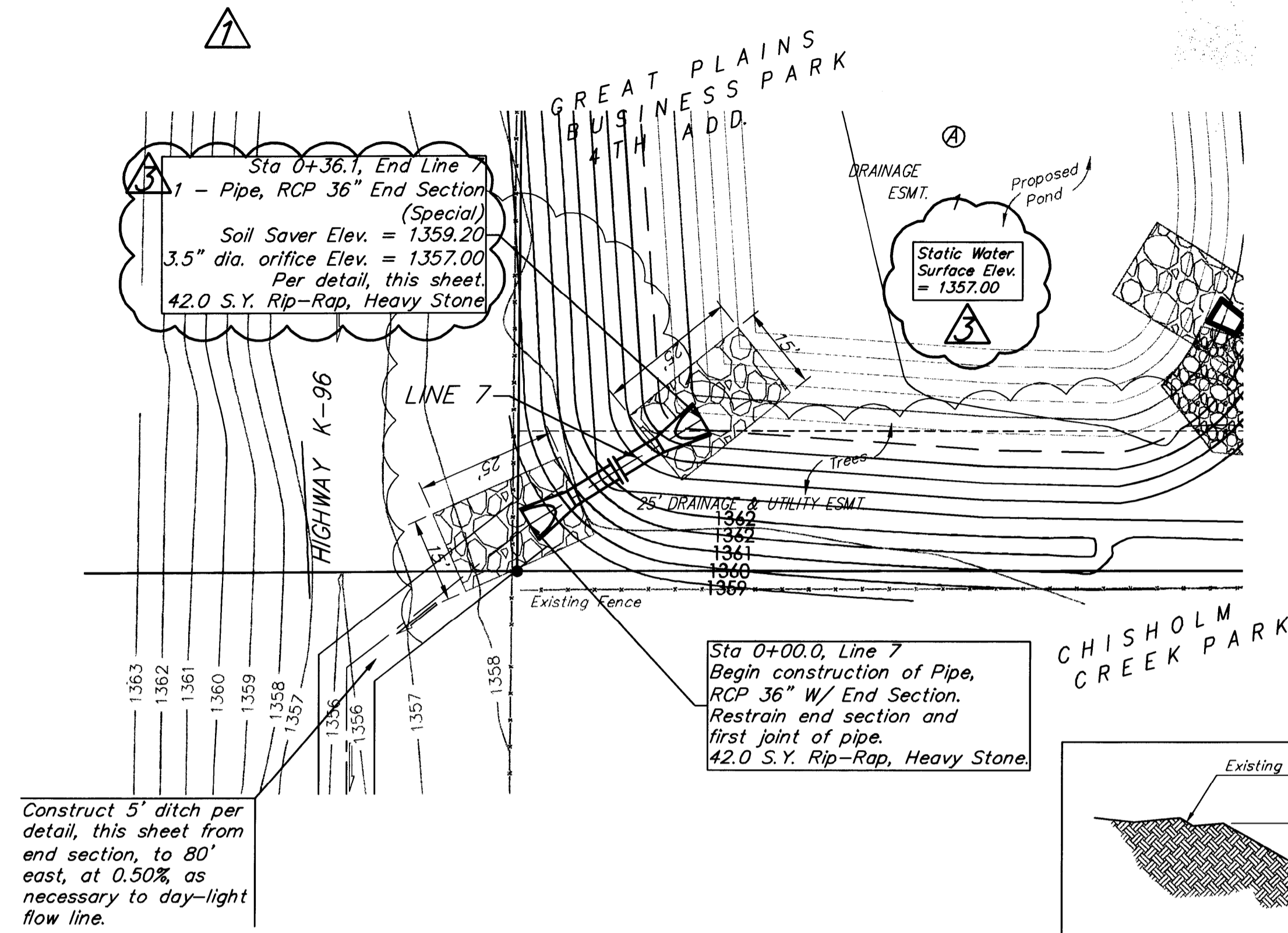


	GREAT PLAINS BUSINESS PARK 4TH ADD. LINE 6 STORM WATER SEWER IMPROVEMENTS	
	<small>Baughman Company, P.A. 315 Ellis St. Wichita, KS 67211 P 316-262-7271 F 316-262-0149 ENGINEERING SURVEYING PLANNING LANDSCAPE ARCHITECTURE</small>	
<small>PROJECT NUMBER</small> <small>APPROVED</small> <small>REVISIONS:</small>	<small>DESIGN</small> <small>APPROVED</small> <small>SCALE</small> <small>SHEET</small>	<small>DRAWN</small> <small>DATE</small> 11 OF 25 <small>12-06-E777</small>

BENCHMARK:
 CROSS CUT TOP OF CATCH BASIN WEST SIDE
 OF RIDGEWOOD 14'± NORTH OF THE SE COR.
 OF LOT 3, BLOCK 2, GREAT PLAINS BUSINESS
 PARK ADDITION.
 ELEV.=1368.03 (NAVD88)

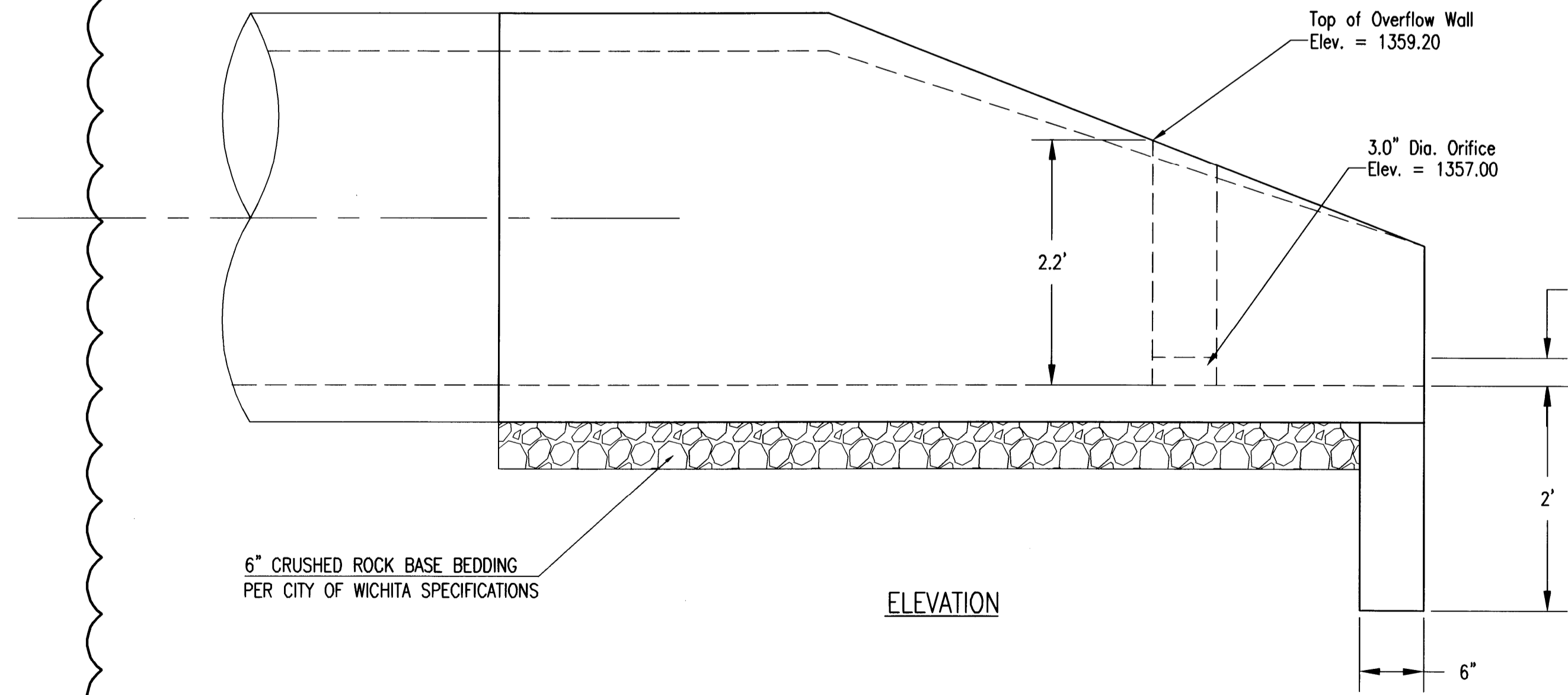
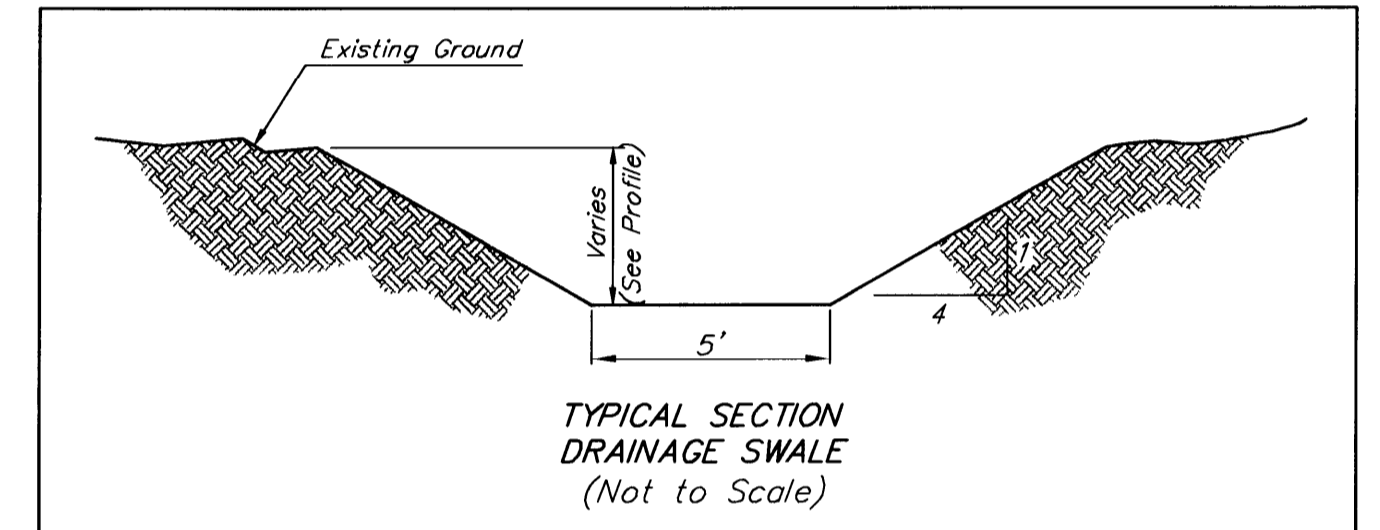


PLAN VIEW

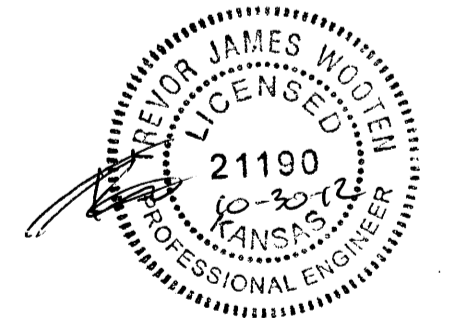
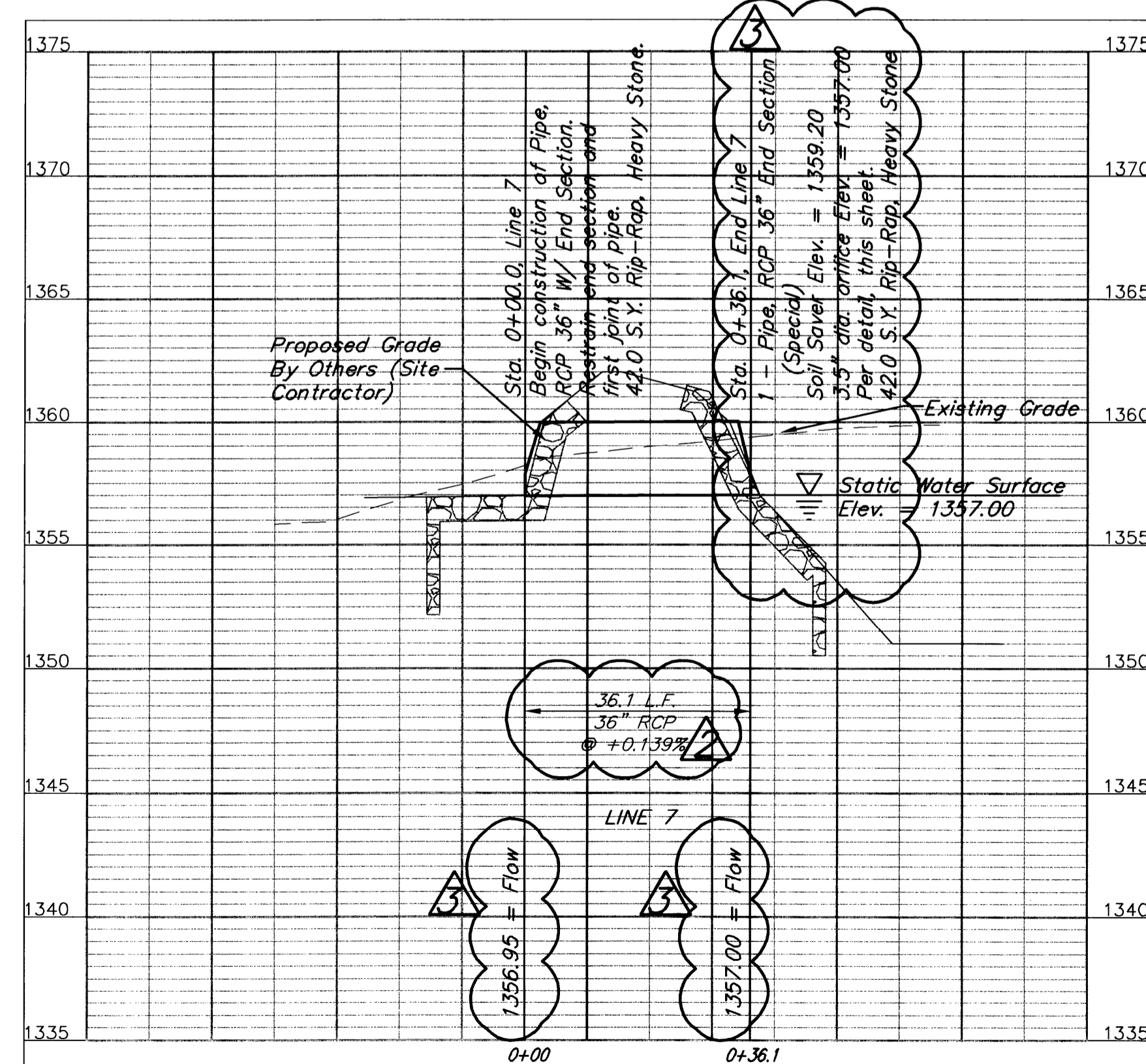


Construct 5' ditch per detail, this sheet from end section, to 80' east, at 0.50% as necessary to day-light flow line.

Sta 0+00.0, Line 7
 Begin construction of Pipe, RCP 36" W/ End Section. Restrain end section and first joint of pipe. 42.0 S.Y. Rip-Rap, Heavy Stone.



ELEVATION



Baughman GREAT PLAINS BUSINESS PARK 4TH ADD.
LINE 7
 STORM WATER SEWER IMPROVEMENTS

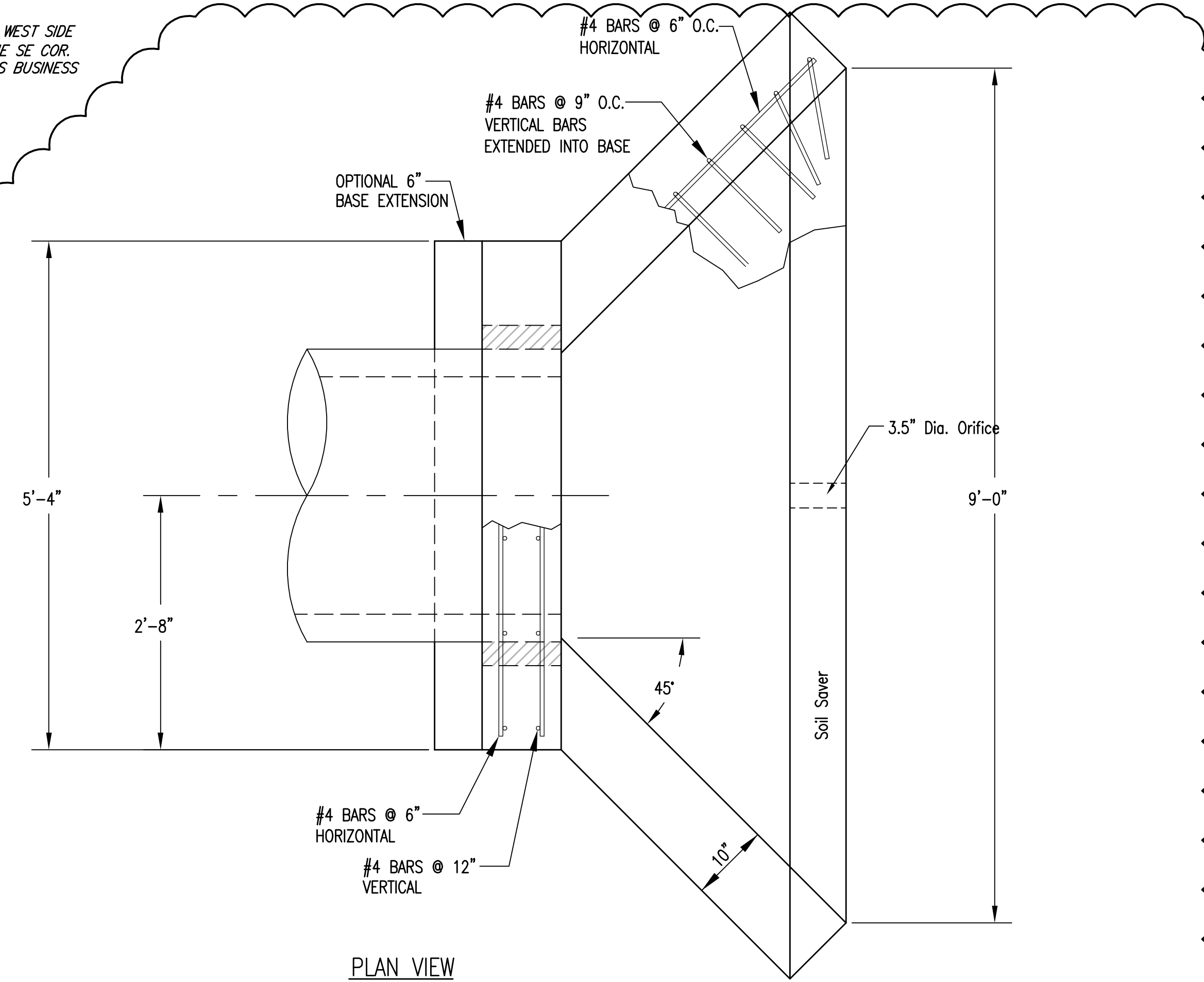
ENGINEERING | SURVEYING | PLANNING | LANDSCAPE ARCHITECTURE

PROJECT NUMBER	DESIGN	DRAWN
	TJW	TMS
REVISIONS:	APPROVED	DATE
09.05.12 TMS/TJW		09/12
10.12.12 Changed EROD to Special HW	SCALE	
10.26.12 Changed Special HW to Special End Section	Noted	
10.26.12 TMS/TJW		
10.26.12 TMS/TJW		
Noted Line 7 up 1', pond depth 6', end section detail		

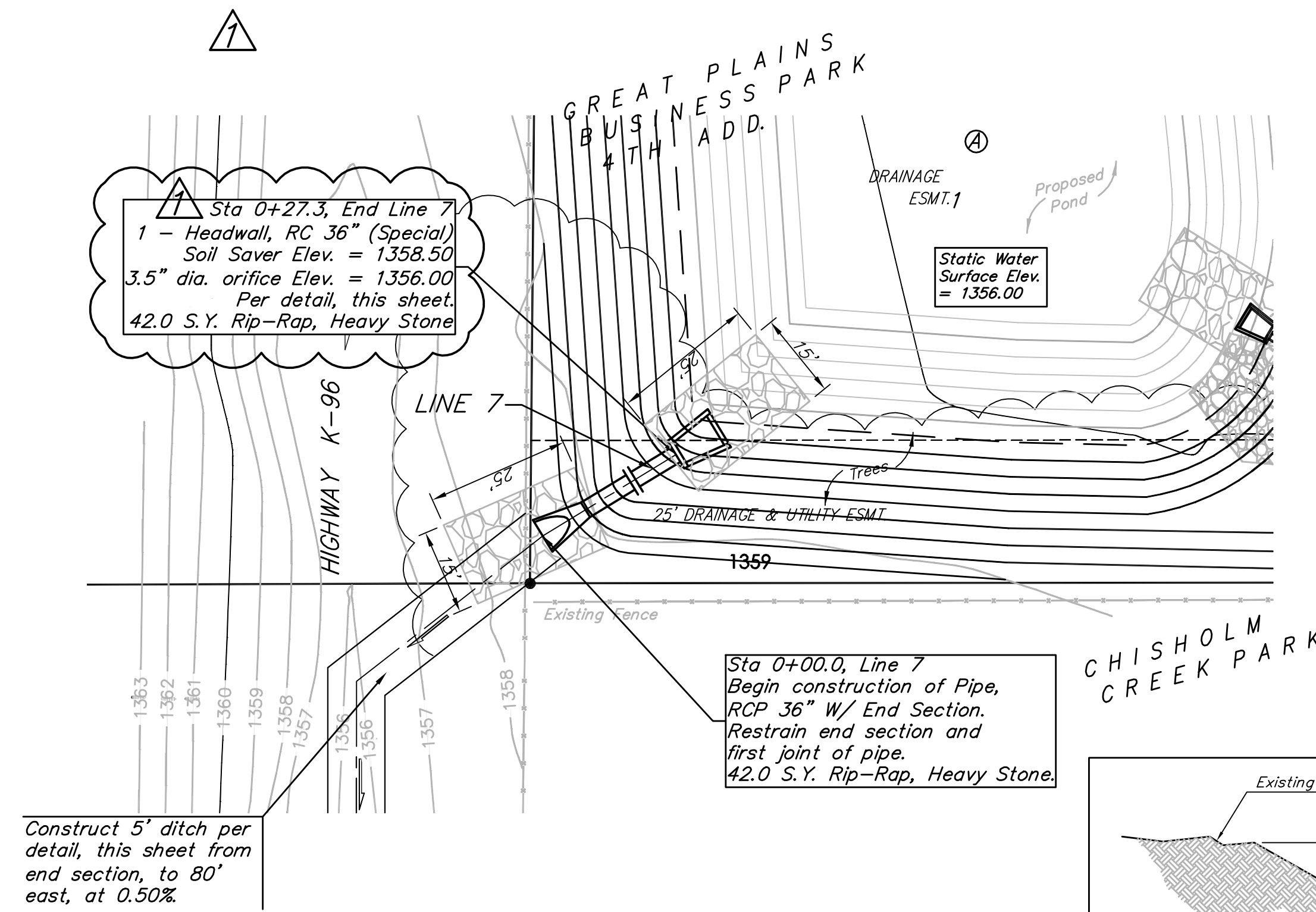
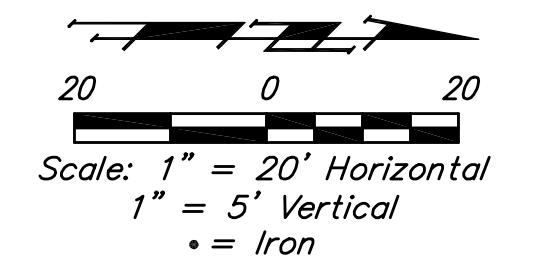
SHEET 12R OF 25

SWS.dwg\B:\Projects\Great Plains Business Park 4th Addition. 12-05-12 09:46:27

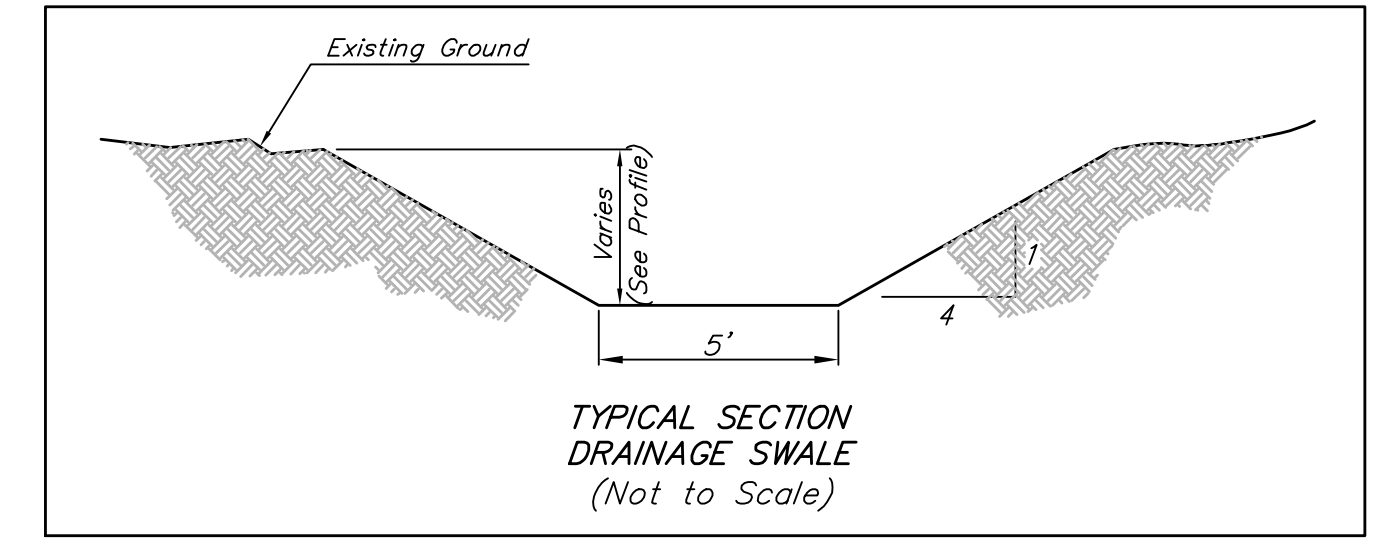
BENCHMARK:
 CROSS CUT TOP OF CATCH BASIN WEST SIDE
 OF RIDGEWOOD 14± NORTH OF THE SE COR.
 OF LOT 3, BLOCK 2, GREAT PLAINS BUSINESS
 PARK ADDITION.
 ELEV.=1368.03 (NAVD88)



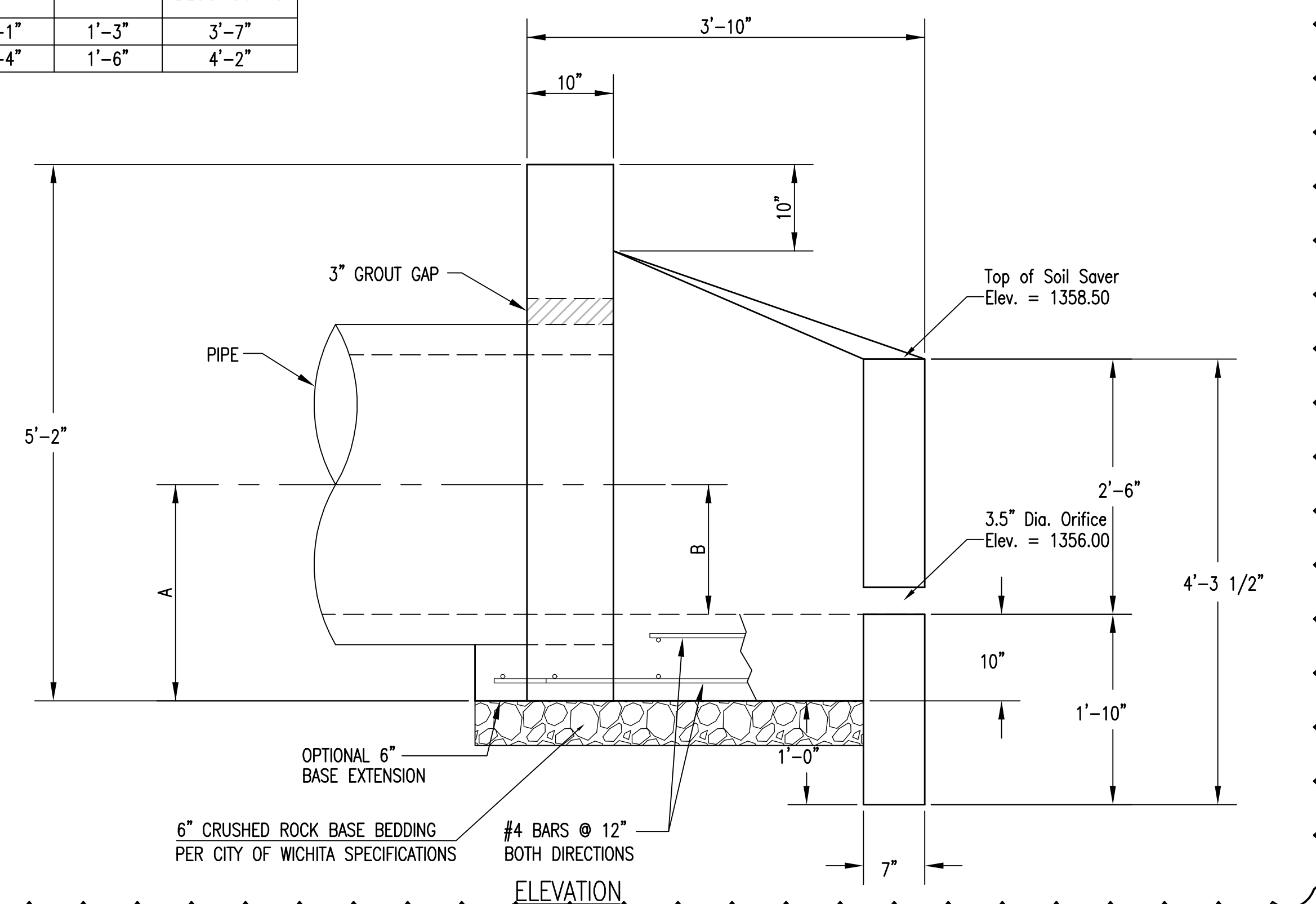
PLAN VIEW



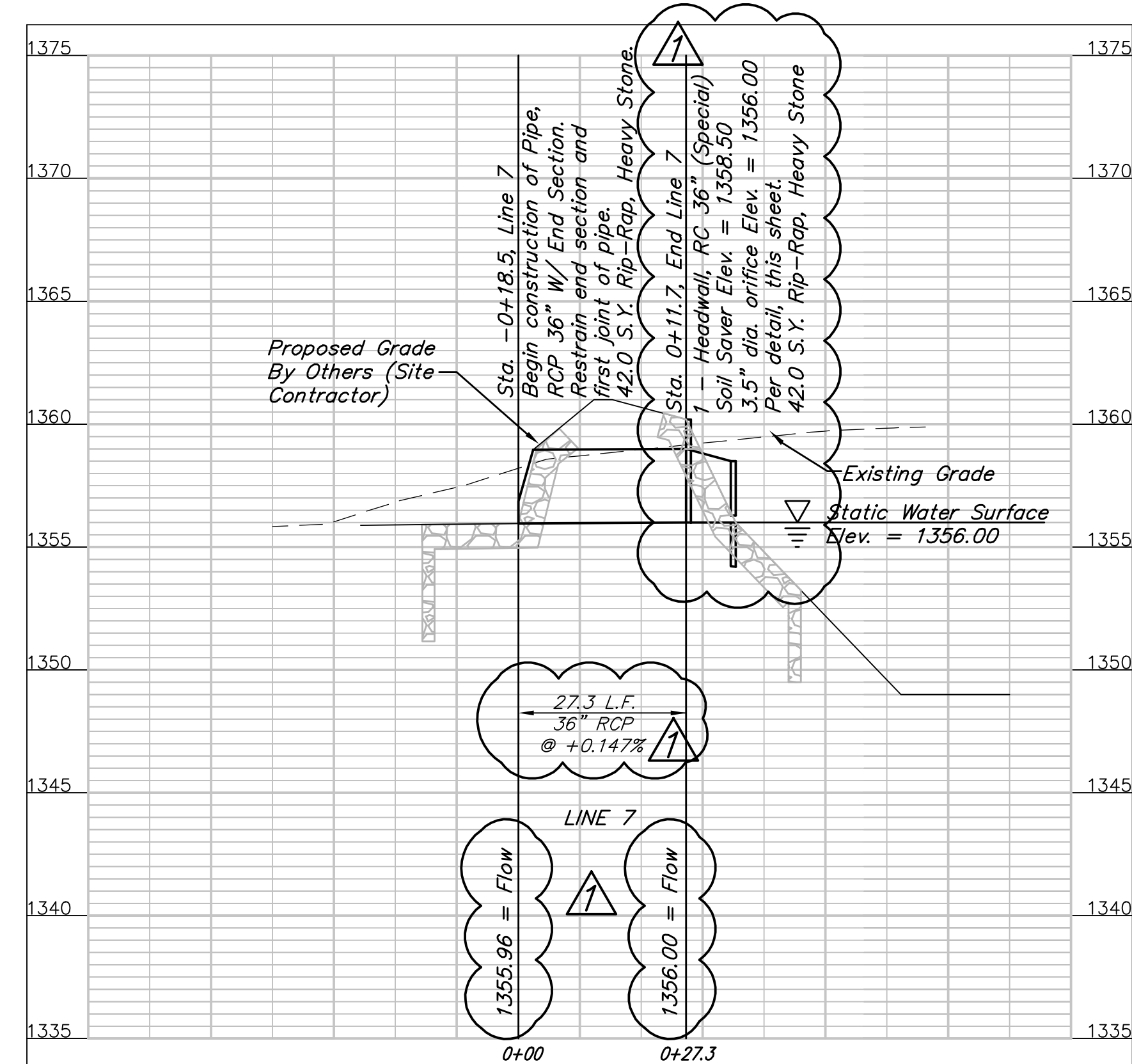
Construct 5' ditch per detail, this sheet from end section, to 80' east, at 0.50%.



PIPE Ø	A	B	BLOCKOUT Ø
30"	2'-1"	1'-3"	3'-7"
36"	2'-4"	1'-6"	4'-2"



ELEVATION



Baughman GREAT PLAINS BUSINESS PARK 4TH ADD.
LINE 7
 STORM WATER SEWER IMPROVEMENTS

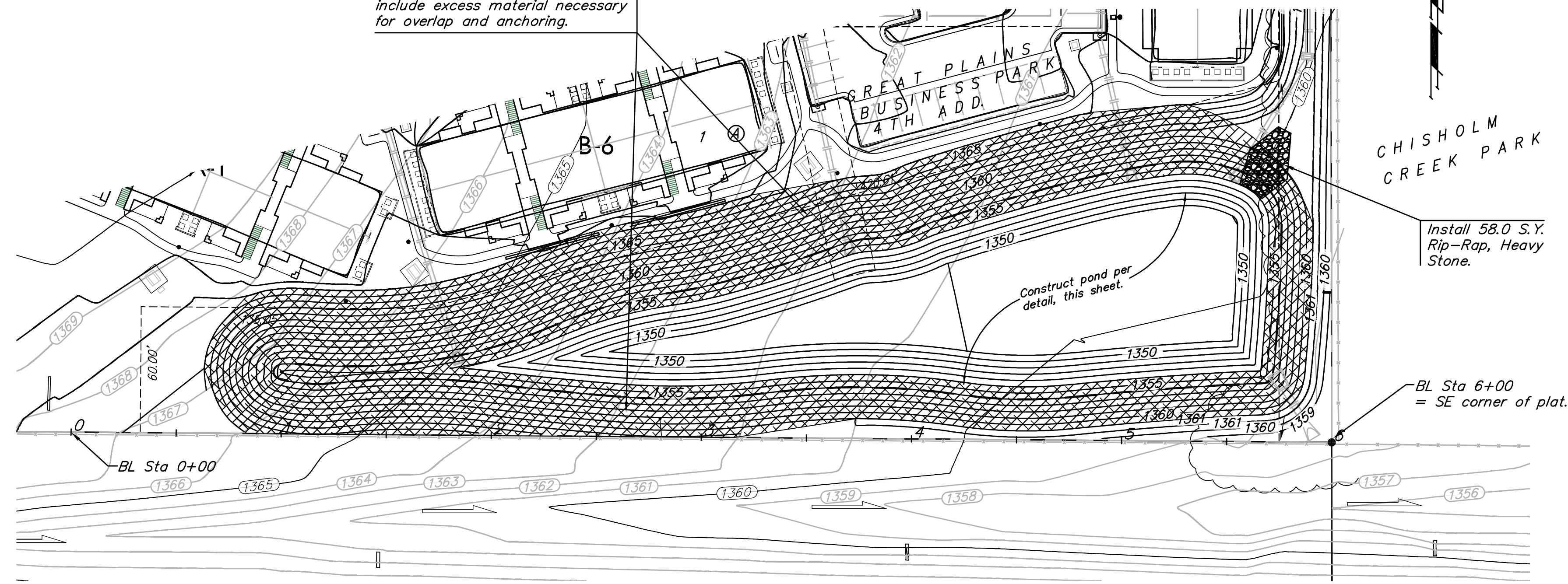
Baughman Company, P.A. 315 Ellis St. Wichita, KS 67211 P 316-262-7271 F 316-262-0149
 ENGINEERING | SURVEYING | PLANNING | LANDSCAPE ARCHITECTURE

PROJECT NUMBER	DESIGN	DRAWN
	TJW	TMS
REVISIONS:	APPROVED	DATE
09.05.12 TMS/TJW	Noted	09/12
Changed KDOT Inlet to Special Inlet	SCALE	
	Noted	
	SHEET	
		12 OF 25

12-06-E777

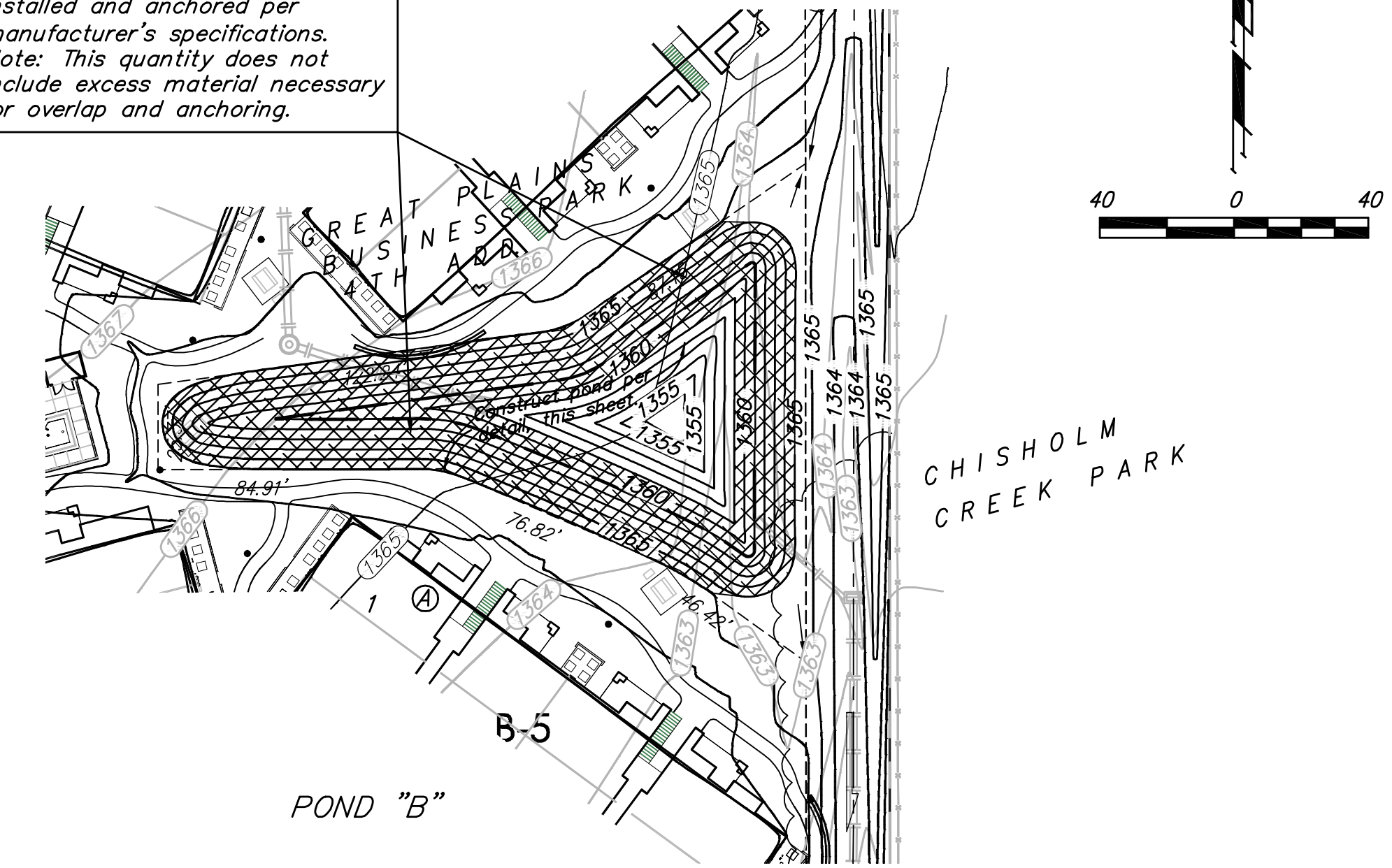
BENCHMARK:
CROSS CUT TOP OF CATCH BASIN WEST SIDE OF RIDGEWOOD 14± NORTH OF THE SE COR. OF LOT 3, BLOCK 2, GREAT PLAINS BUSINESS PARK ADDITION.
ELEV.=1368.03 (NAVD88)

Install 3,784 S.Y. Curlex II, or approved equal to be paid for as bid item "Erosion Control Mat". Erosion control mat shall be installed and anchored per manufacturer's specifications. Note: This quantity does not include excess material necessary for overlap and anchoring.



POND "A"

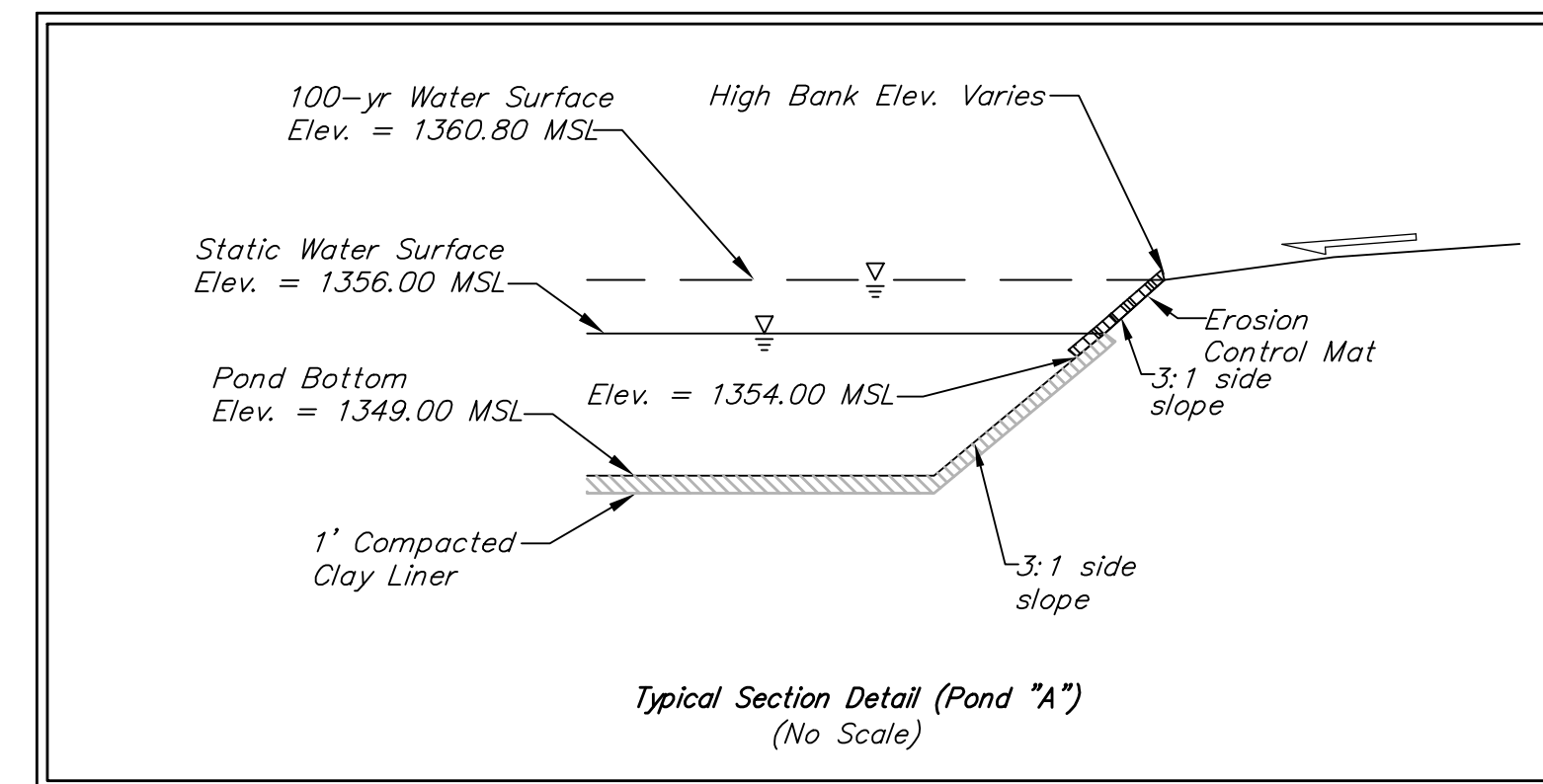
Install 937 S.Y. Curlex II, or approved equal to be paid for as bid item "Erosion Control Mat". Erosion control mat shall be installed and anchored per manufacturer's specifications. Note: This quantity does not include excess material necessary for overlap and anchoring.



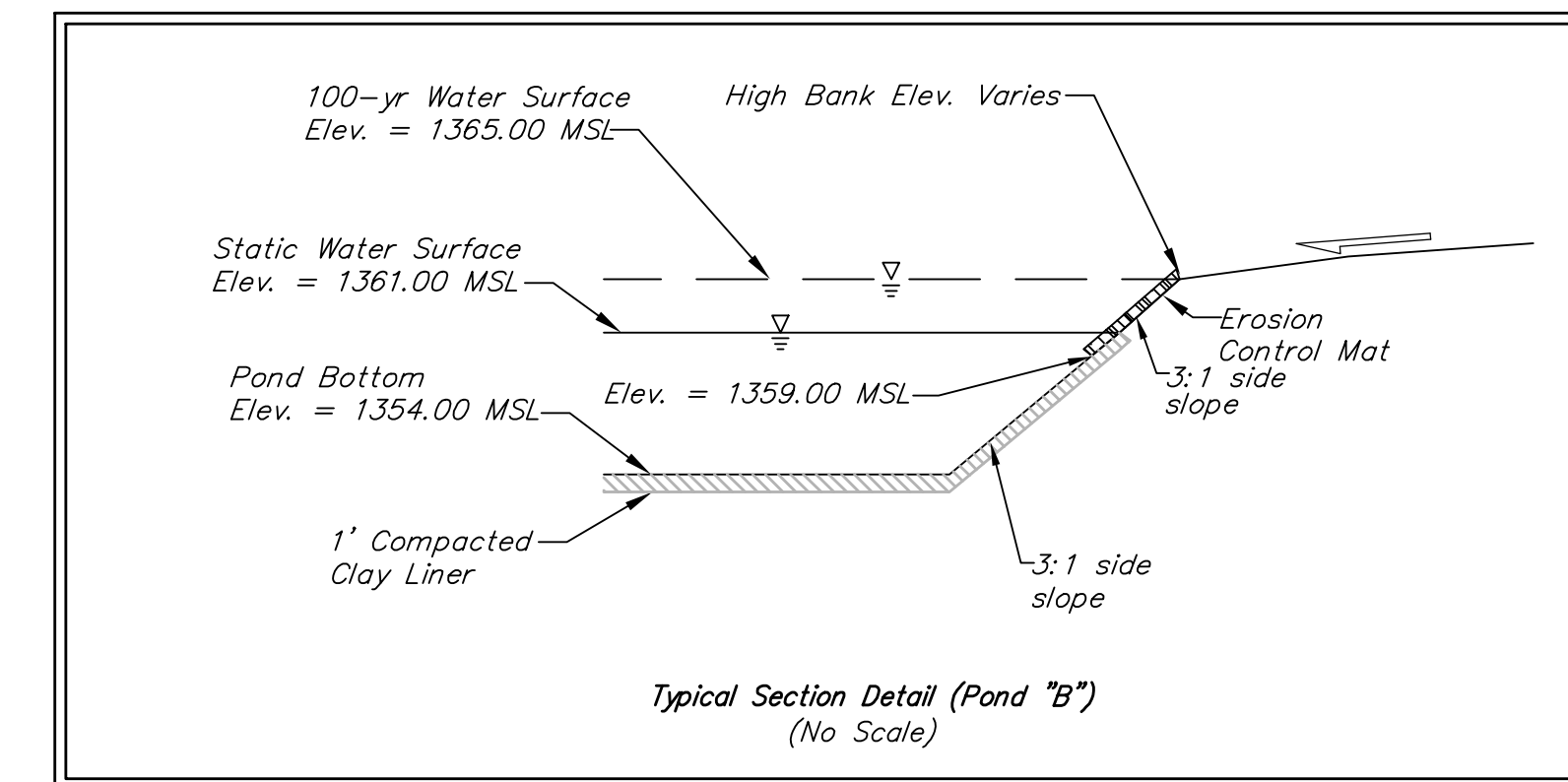
POND "B"

NOTES:

- Pond bottom and sideslopes below static pool elevation shall be over-excavated 1' and a 1' clay liner shall be compacted to 95% std. density. The plasticity index (P.I.) shall be at least 30. The compaction and P.I. shall be verified during construction. P.I. determination and compaction testing shall be arranged by the contractor at the request of the inspector. Cost shall be incidental to "Site Restoration". Cost of over-excavation to install Clay Liner shall be incidental to bid item, "Excavation, Unclassified".
- Any excess excavation shall be stockpiled on-site at an area indicated by the Engineer out of easements and R/W. Area will be staked by Engineer. Additional area will be staked out if needed.
- All areas disturbed during construction that will not be under pavement shall be seeded and mulched as follows: (Permanent Seeding)
SEED -- Kansas Premium Fescue Blend; 8#/1000 Sq. Ft.
FERTILIZER -- 12-24-12 Ratio at 350 Lbs./Ac.
MULCH -- 2 Tons Prairie Hay / Acre
- Install Erosion Control Mat (Curlex II or approved equal) from 2' below the water surface to top bank. To be paid for as bid item "Erosion Control Mat".
- Baughman Company will provide staking information at the time of construction.
- Contractor to strip top 3" of soil within proposed pond & ditch areas before mass grading and stockpile. Top soil stockpile to be redistributed over area surrounding pond & ditch above water elevation prior to seeding.
- Compaction of 95% shall be obtained in all street R/W's, 90% in all other areas.



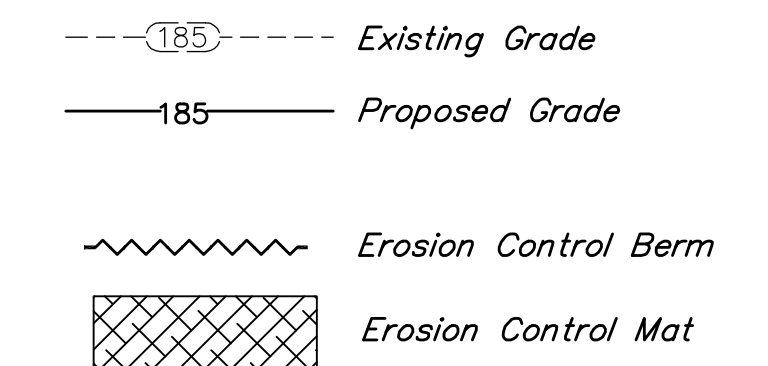
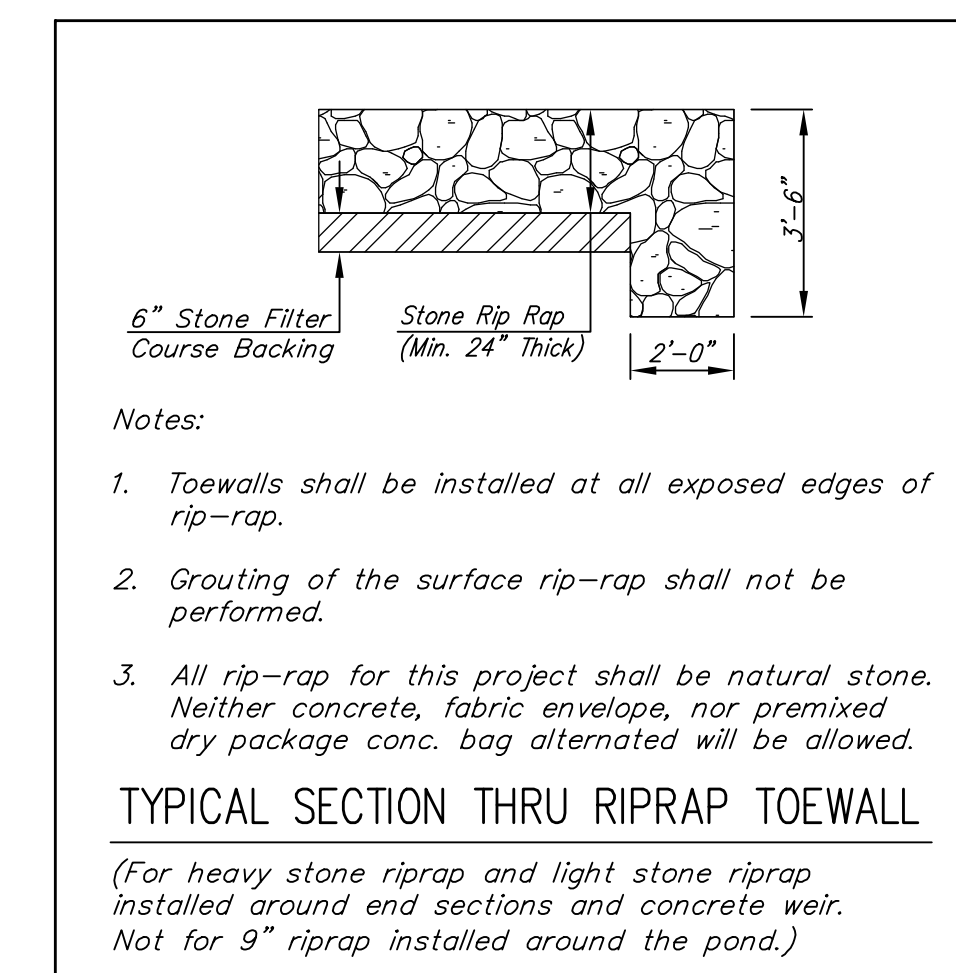
Typical Section Detail (Pond "A")
(No Scale)



Typical Section Detail (Pond "B")
(No Scale)

EARTH WORK TOTALS		
	C.Y. Cut	C.Y. Fill
Pond A	13,132	1,005
Pond B	1,271	145
Ditch Construction	0	983
Total Earthwork	14,403	2,133

Earthwork quantities do not include correction factors and are for reference only. All cost associated with mass grading shall be included in the bid "Ditch Grading".



Baughman GREAT PLAINS BUSINESS PARK 4TH ADD.
POND PLAN
WICHITA, KANSAS

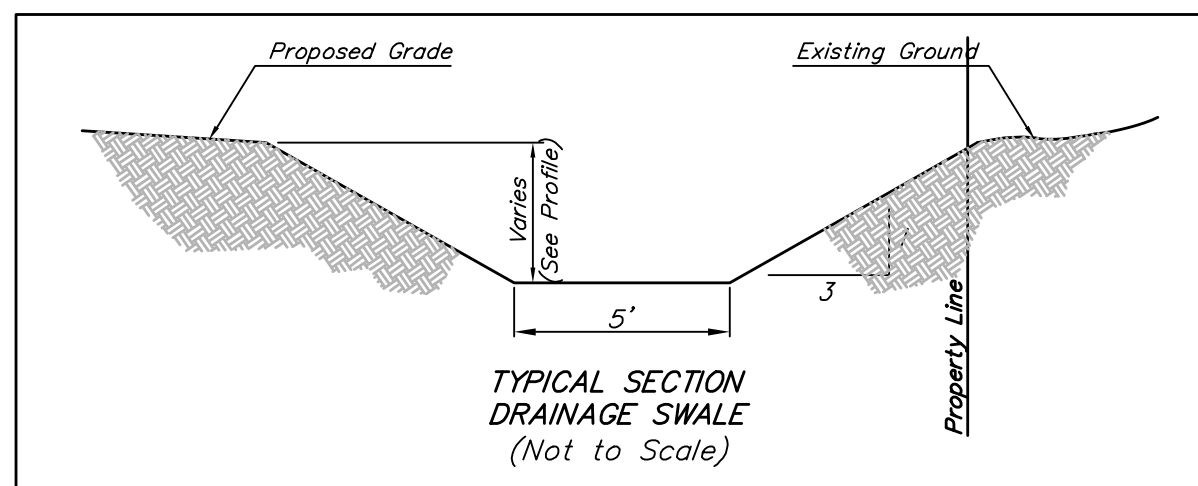
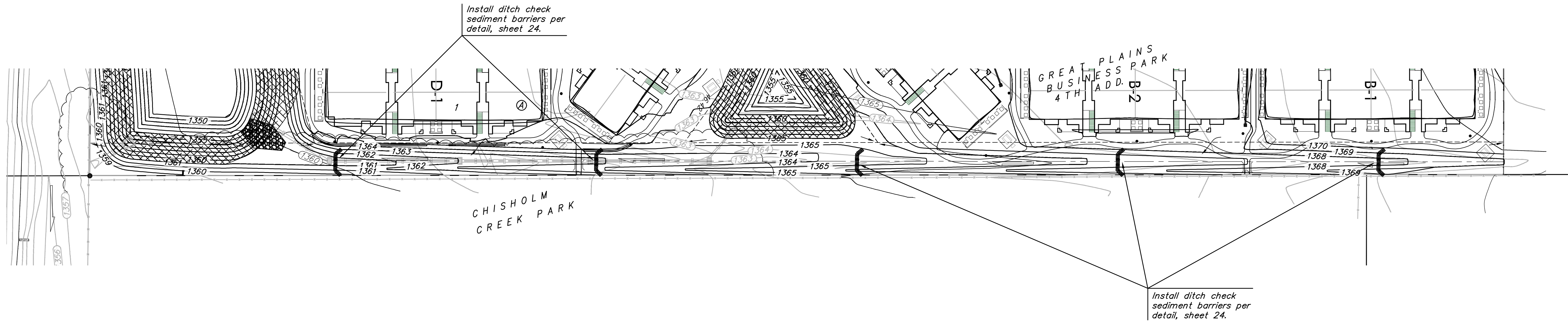
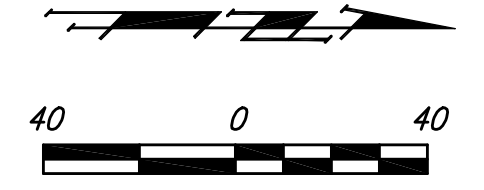
Baughman Company, P.A. 515 Ellis St. Wichita, KS 67211 P 316-262-7771 F 316-262-0414
ENGINEERING | SURVEYING | PLANNING | LANDSCAPE ARCHITECTURE

PROJECT NUMBER	DESIGN TJW	DRAWN TMS
REVISIONS:	APPROVED	DATE 08/12
	SCALE Noted	SHEET

13 OF 25

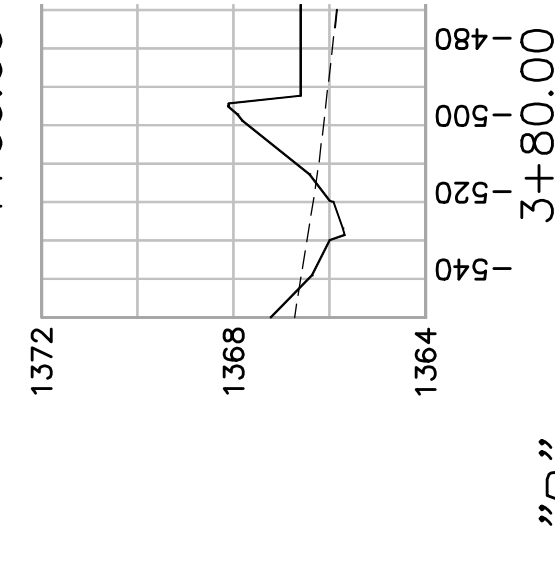
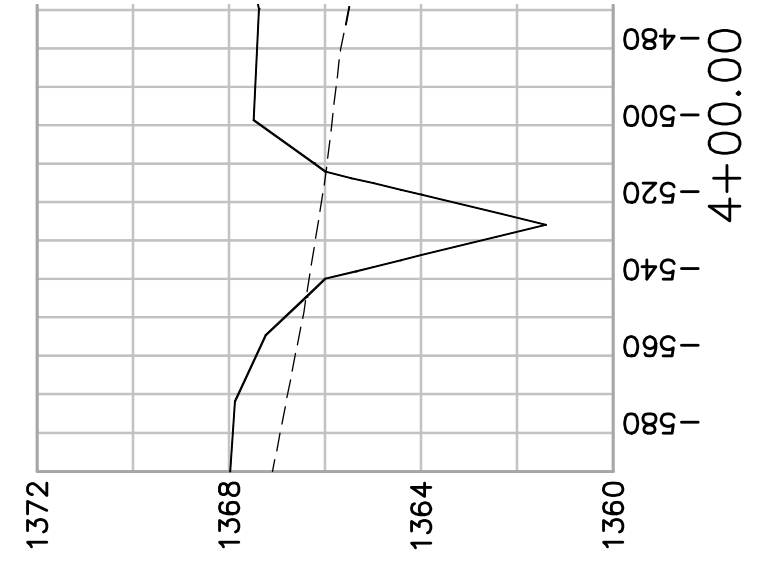
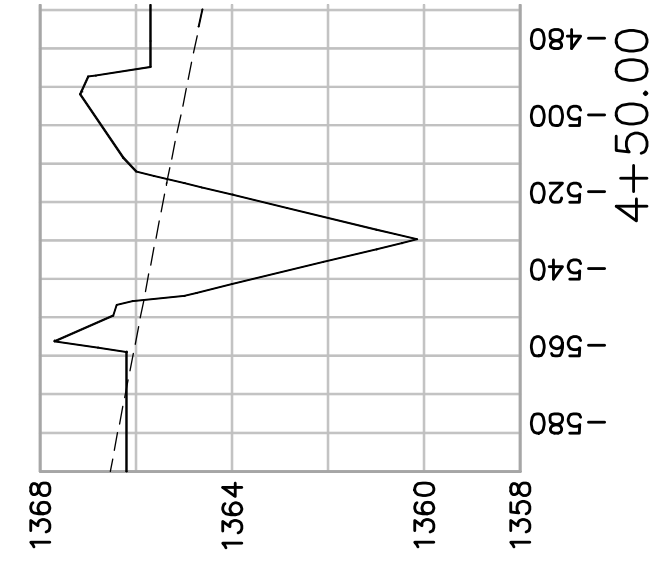
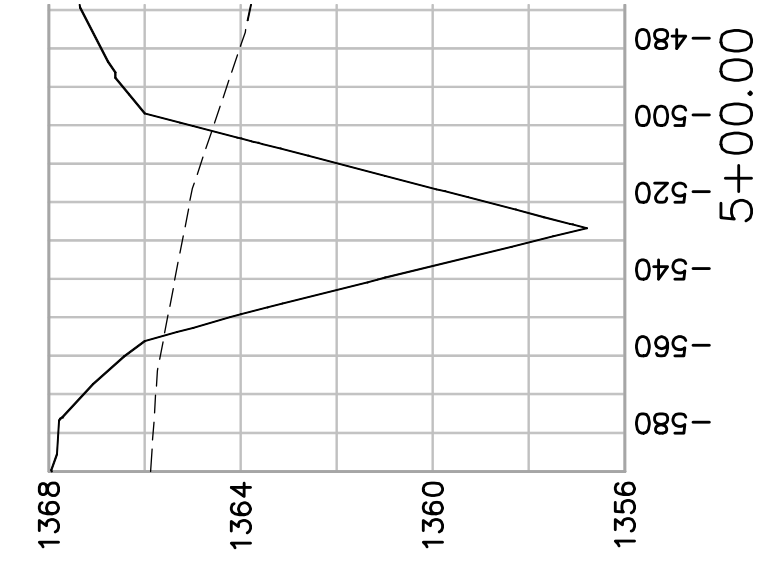
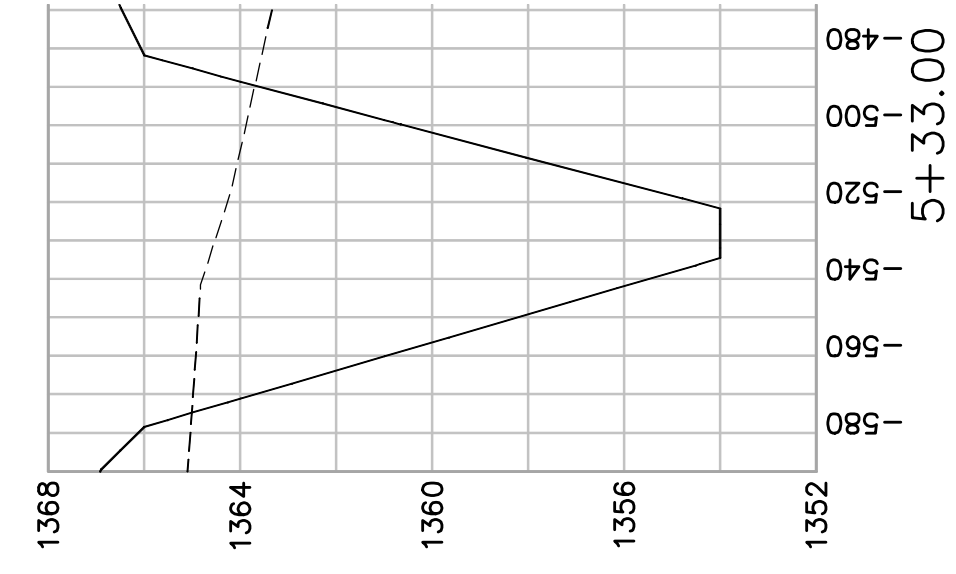
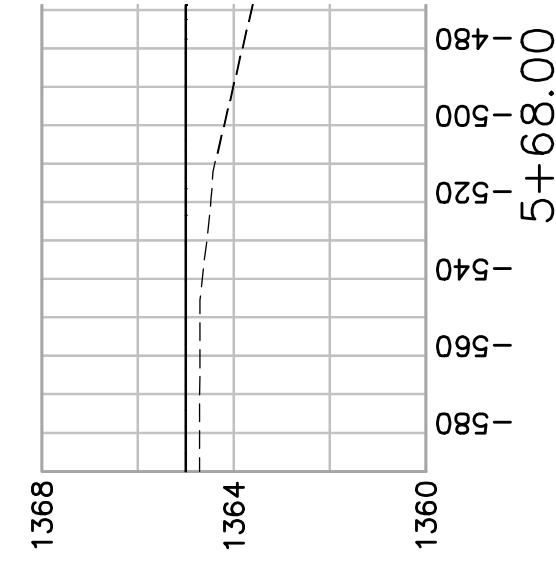
12-06-E777

BENCHMARK:
 CROSS CUT TOP OF CATCH BASIN WEST SIDE
 OF RIDGEWOOD 14 $\frac{1}{2}$ NORTH OF THE SE COR.
 OF LOT 3, BLOCK 2, GREAT PLAINS BUSINESS
 PARK ADDITION.
 ELEV.=1368.03 (NAVD88)

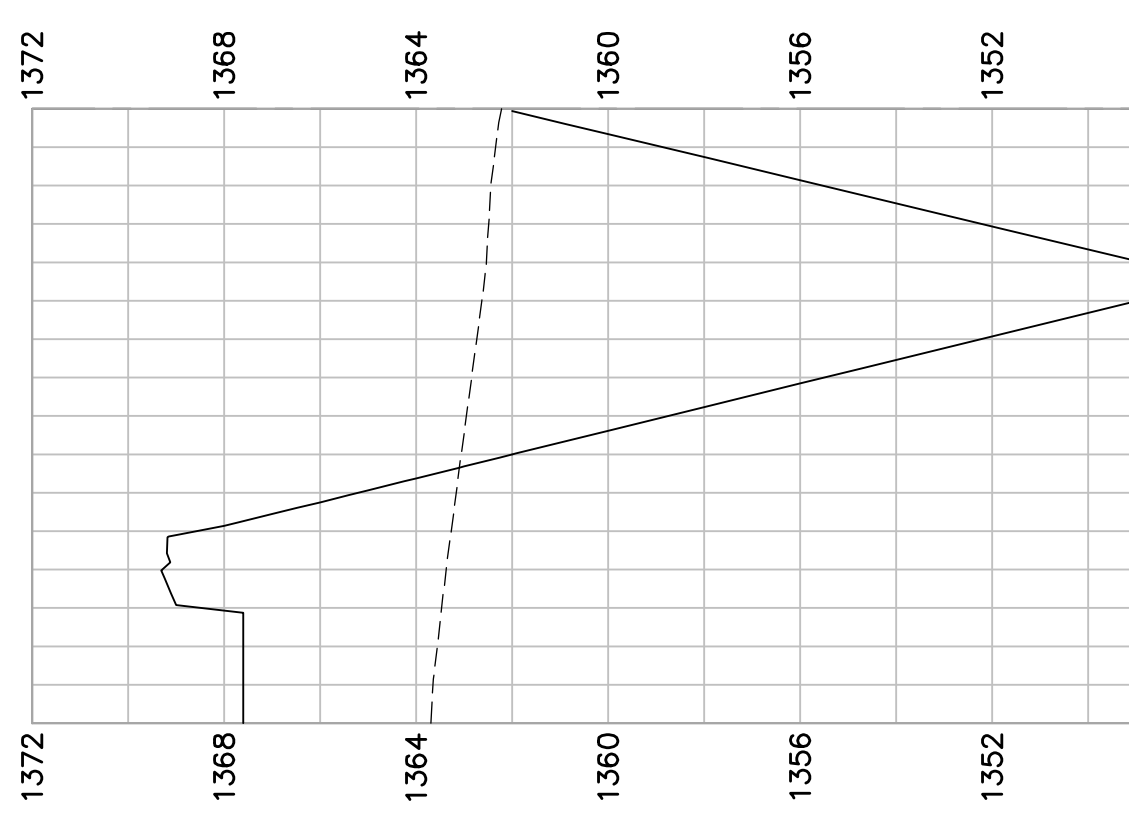
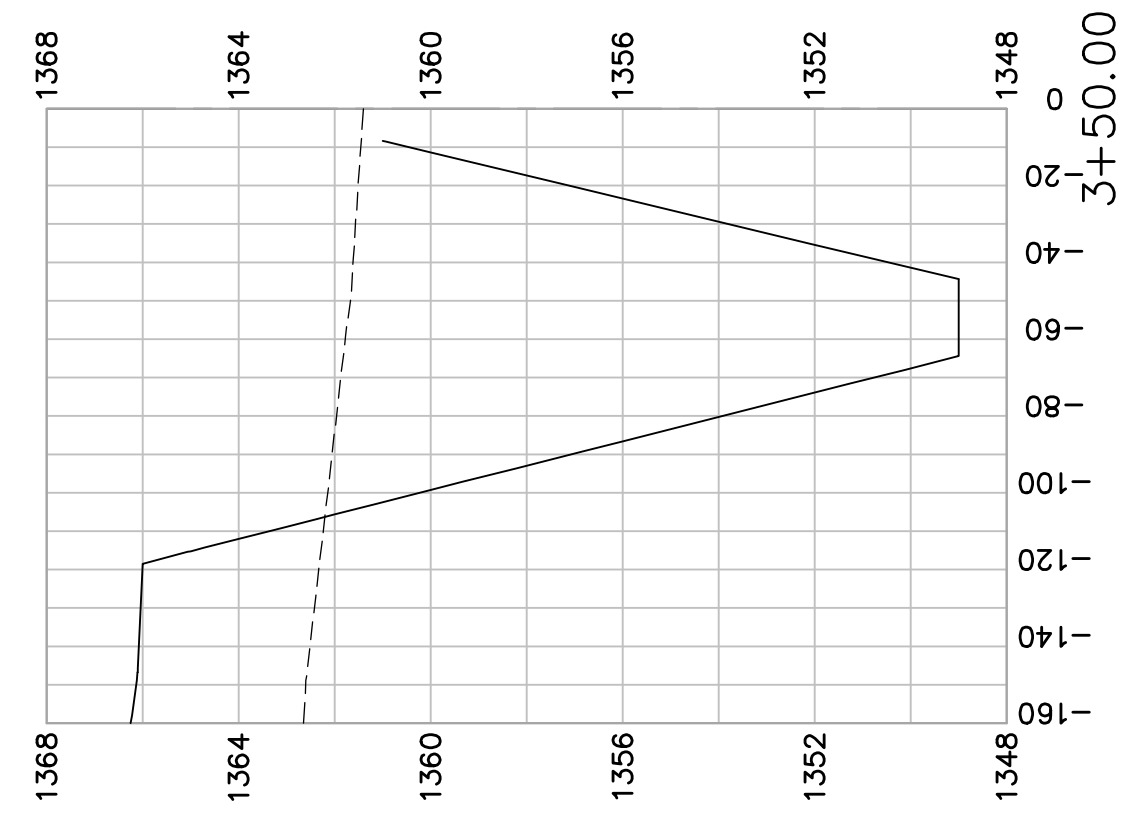
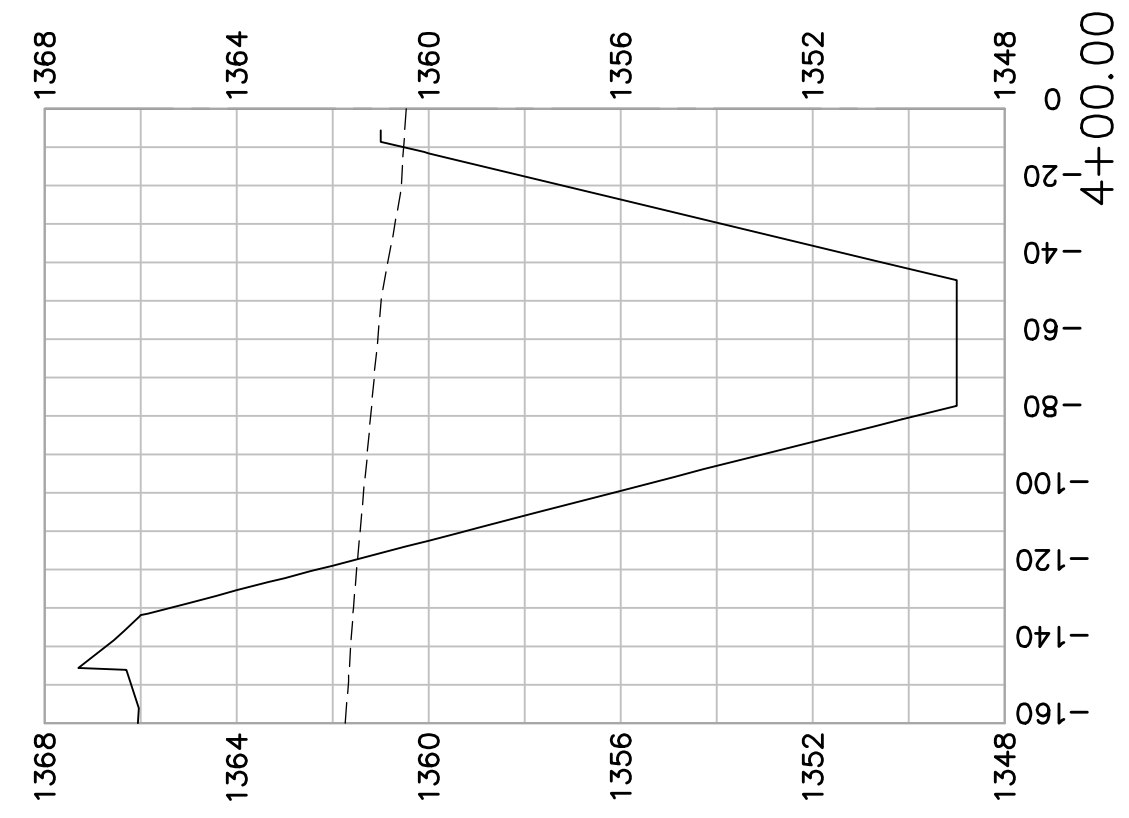
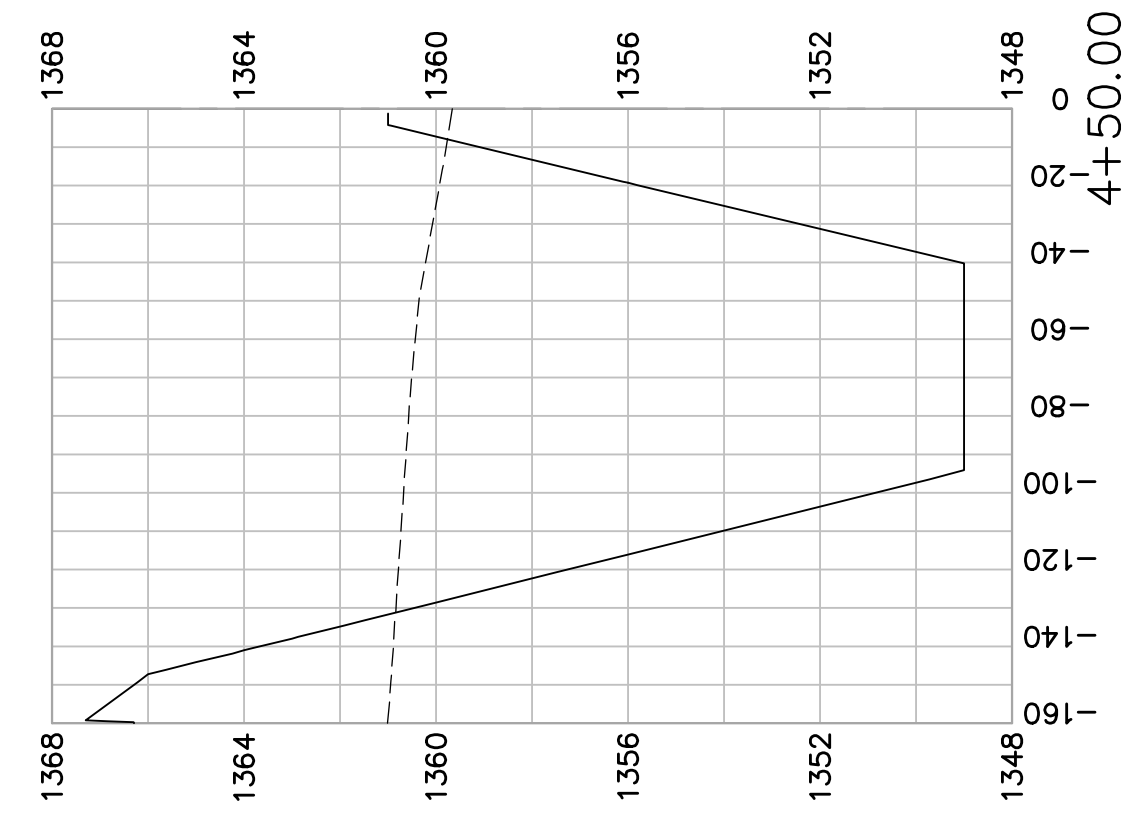
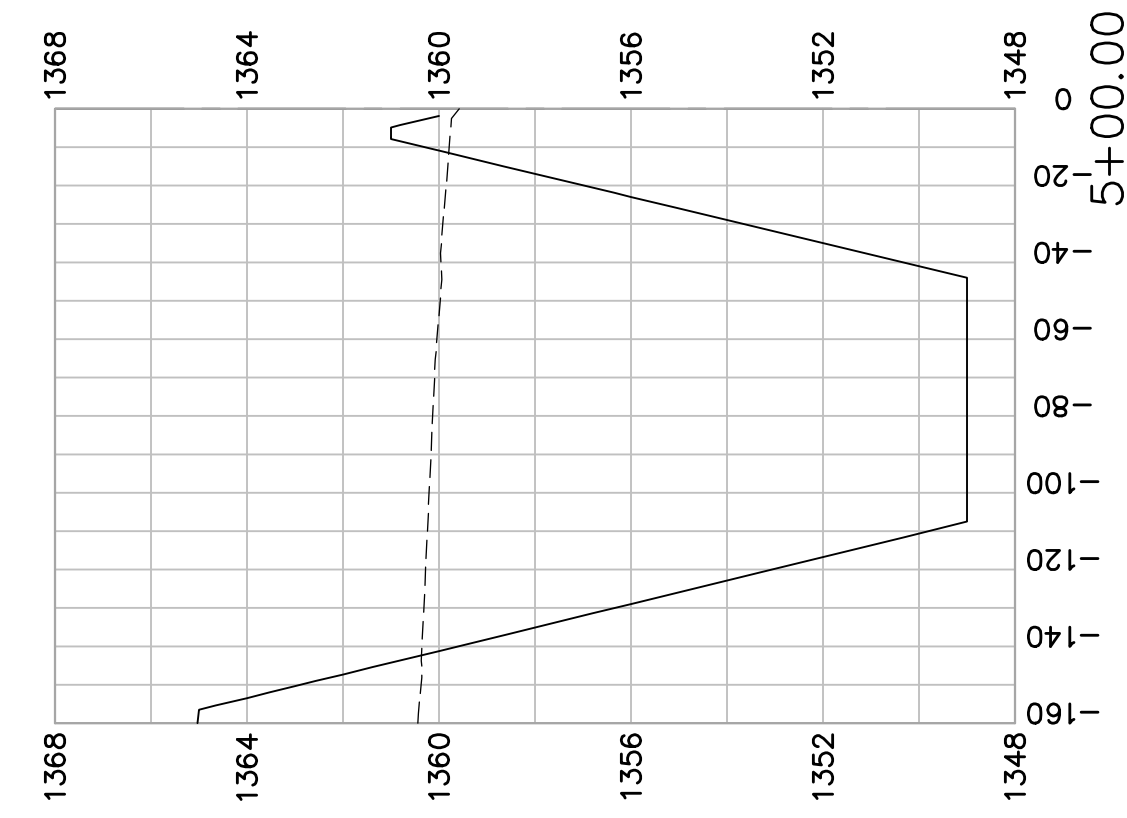
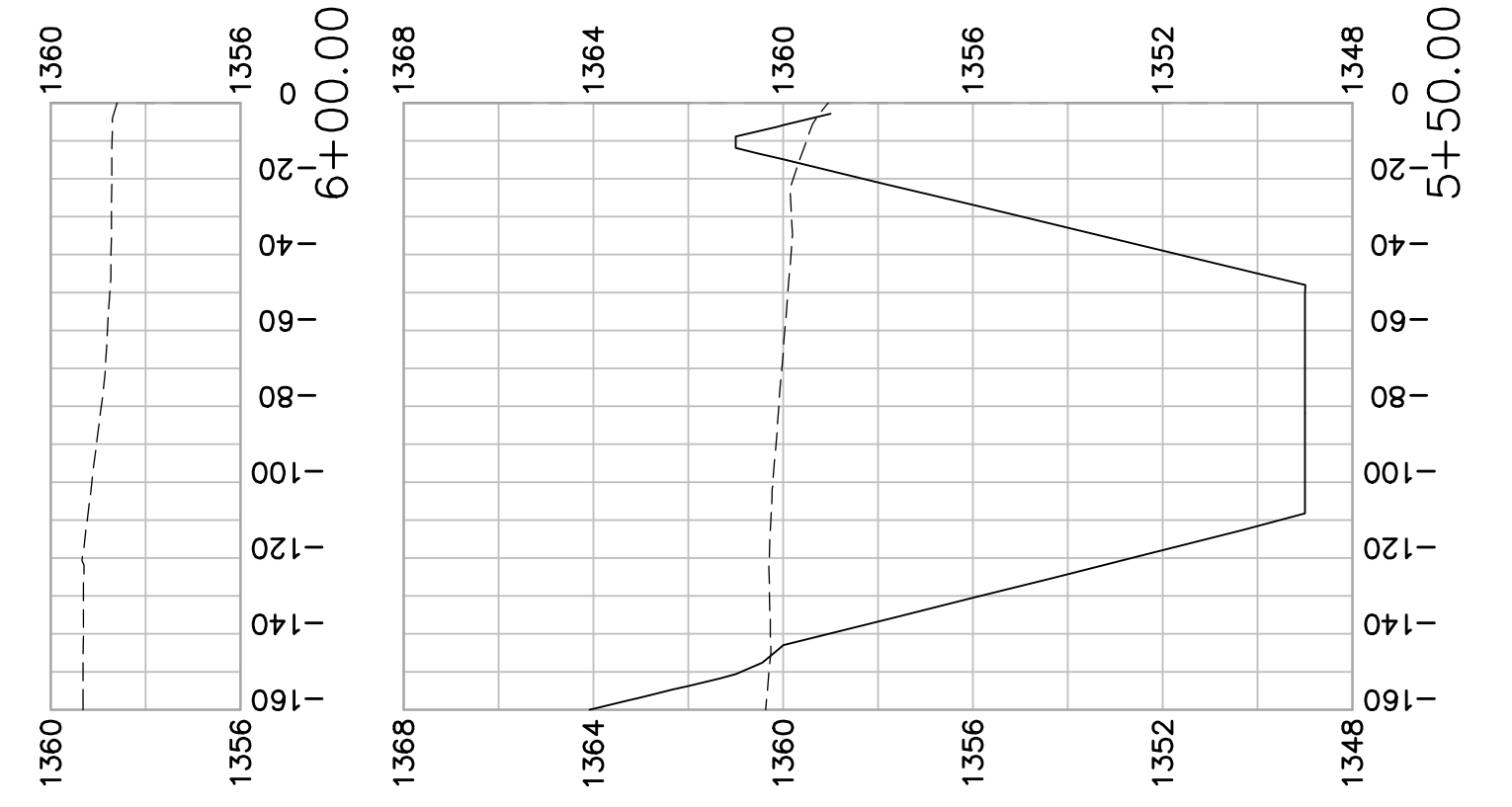


---(185)--- Existing Grade
 —185— Proposed Grade
 = Ditch Checks

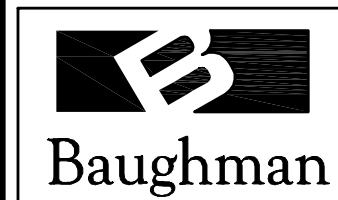
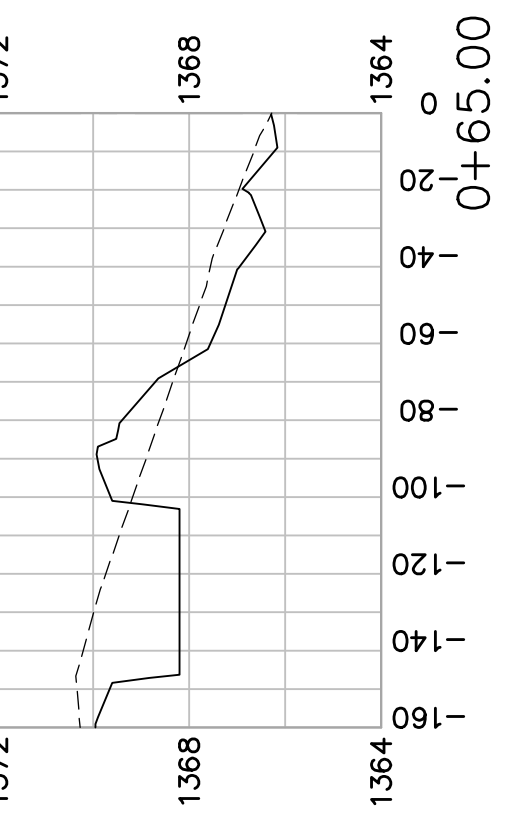
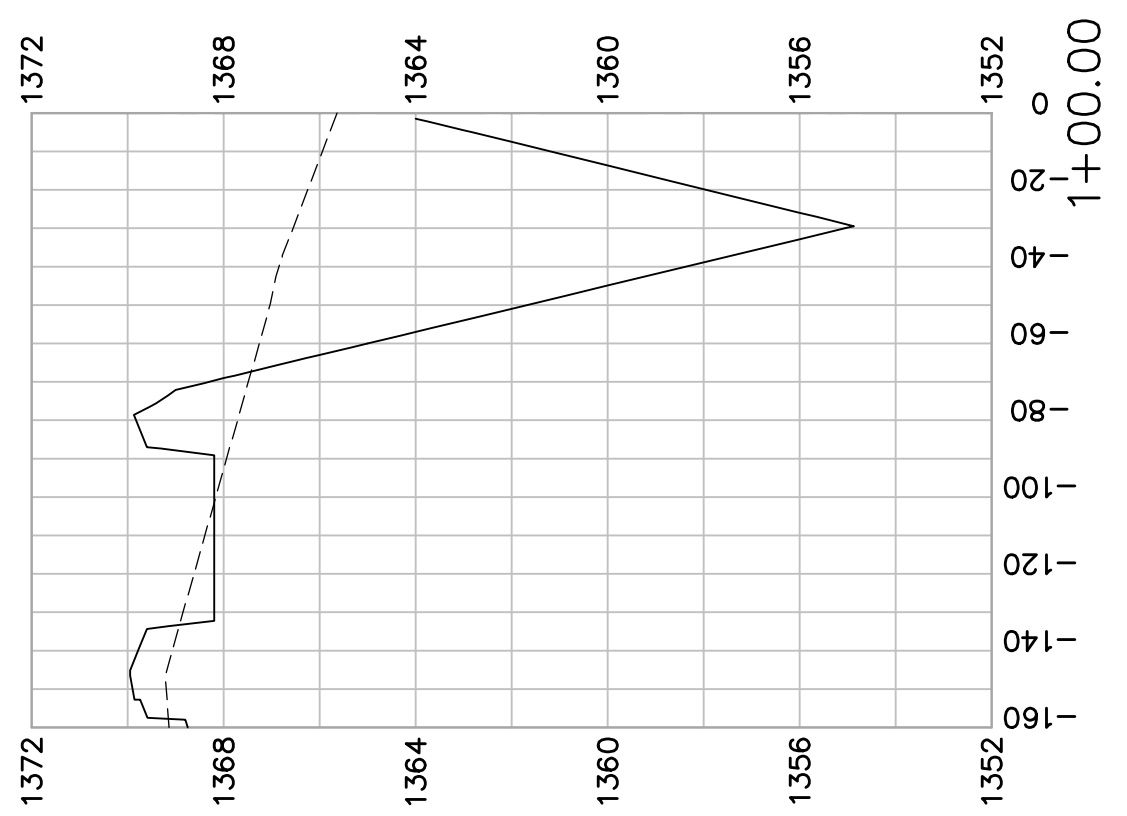
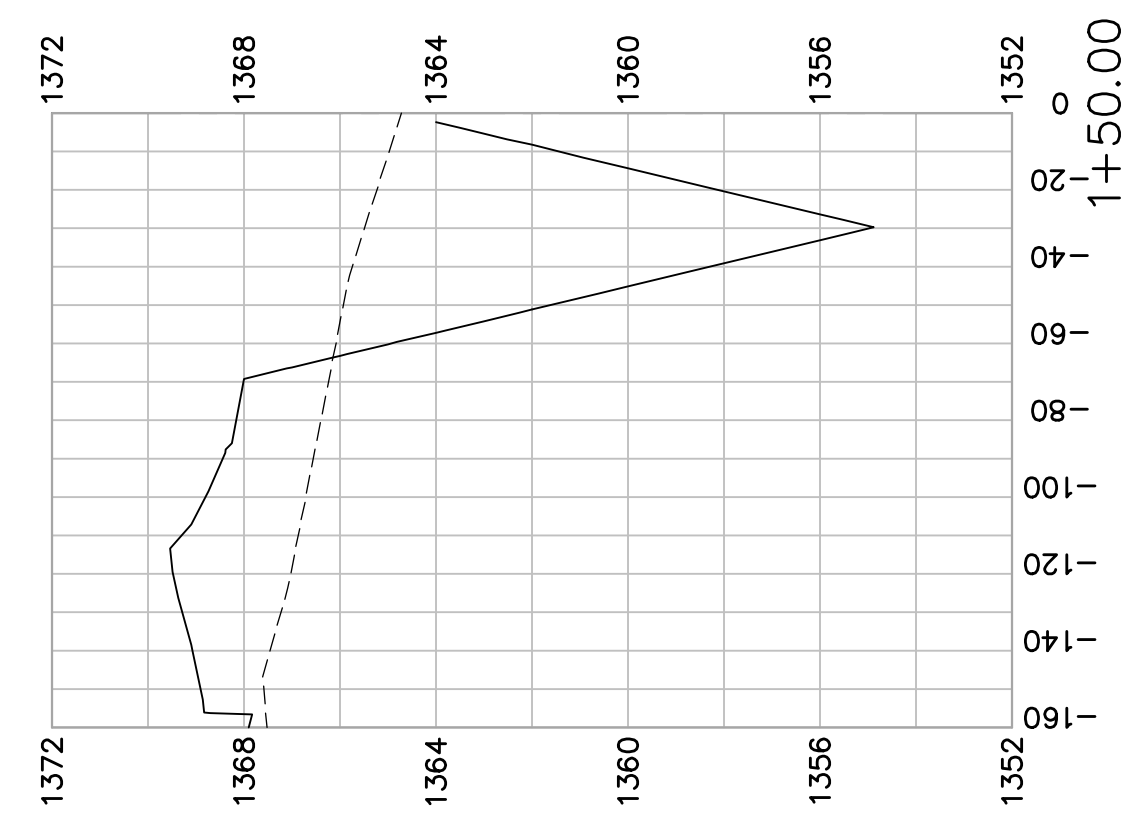
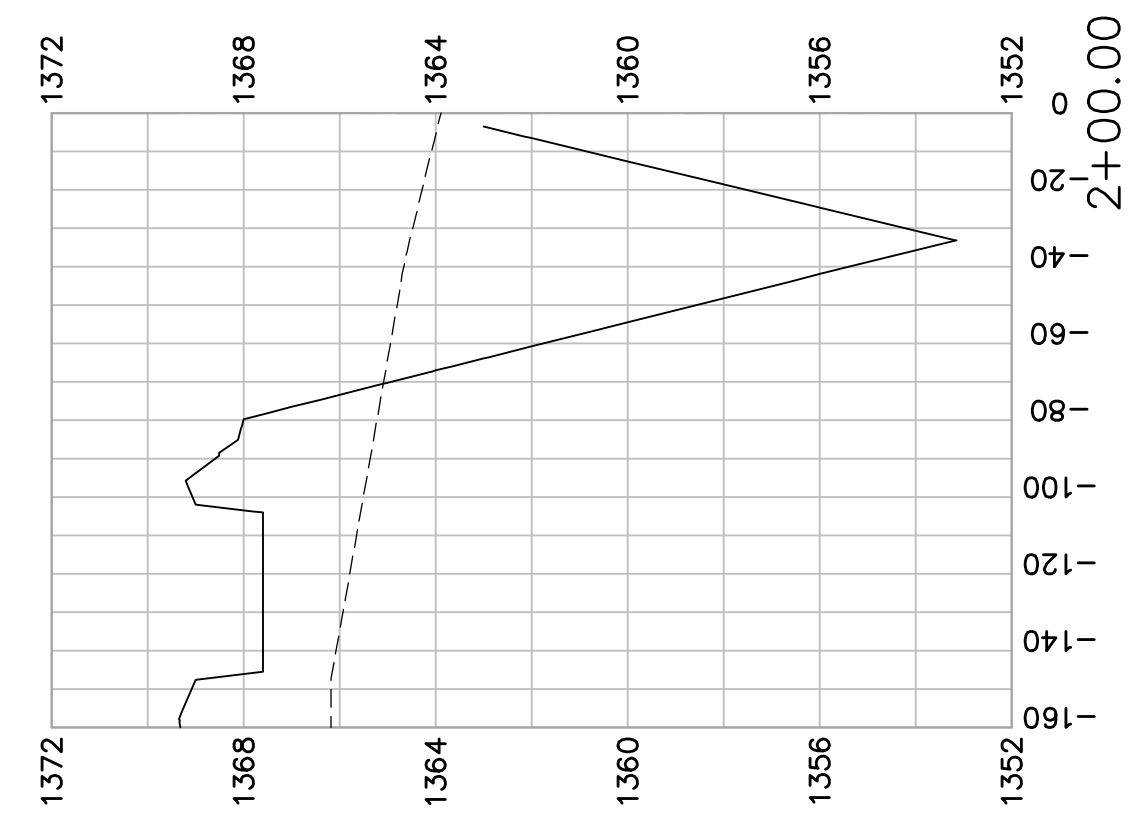
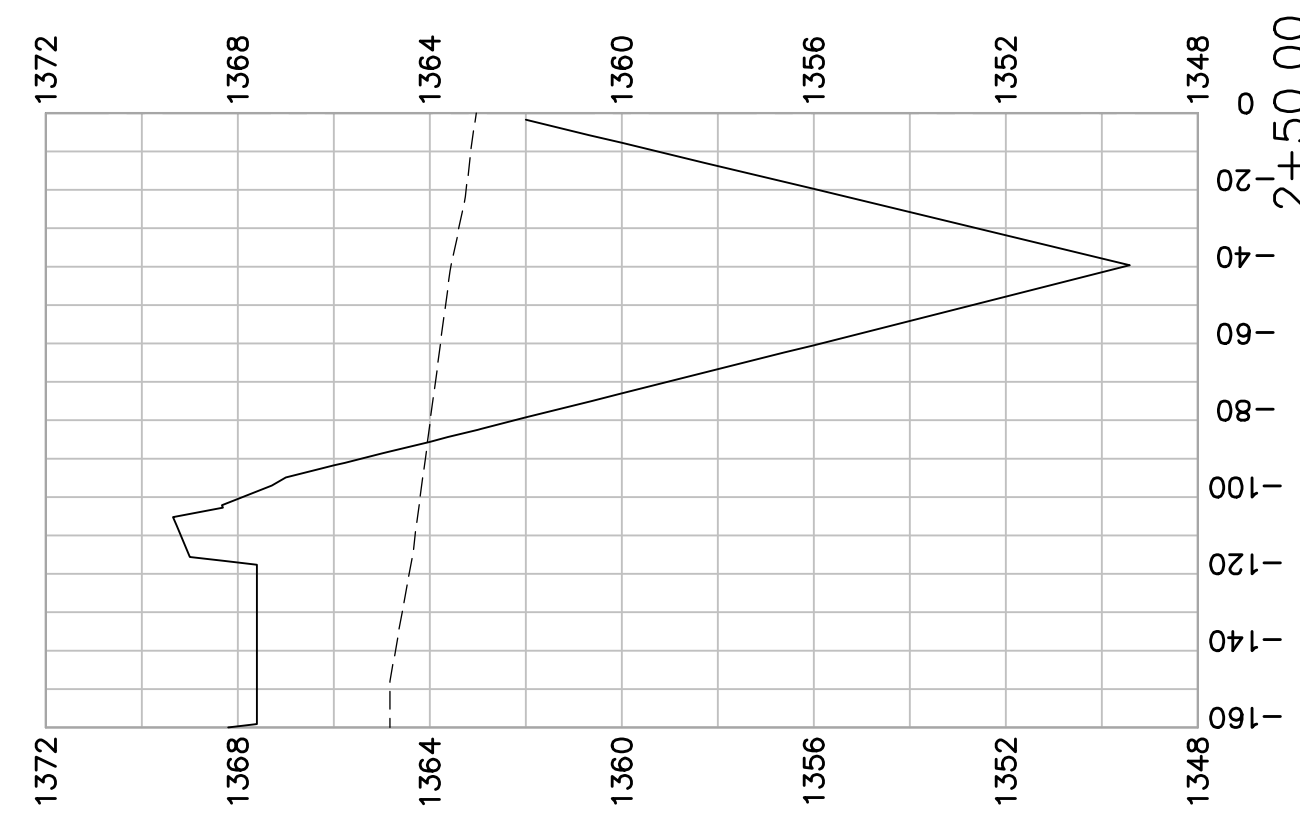
	GREAT PLAINS BUSINESS PARK 4TH ADD.	
	DITCH PLAN WICHITA, KANSAS	
<small>Baughman Company, P.A. 515 Ellis St. Wichita, KS 67211 P 316-2627771 F 316-2624149 ENGINEERING SURVEYING PLANNING LANDSCAPE ARCHITECTURE</small>		
PROJECT NUMBER	DESIGN TJW	DRAWN TMS
REVISIONS:	APPROVED	DATE 08/12
	SCALE Noted	SHEET
	14 OF 25	
	12-06-E777	

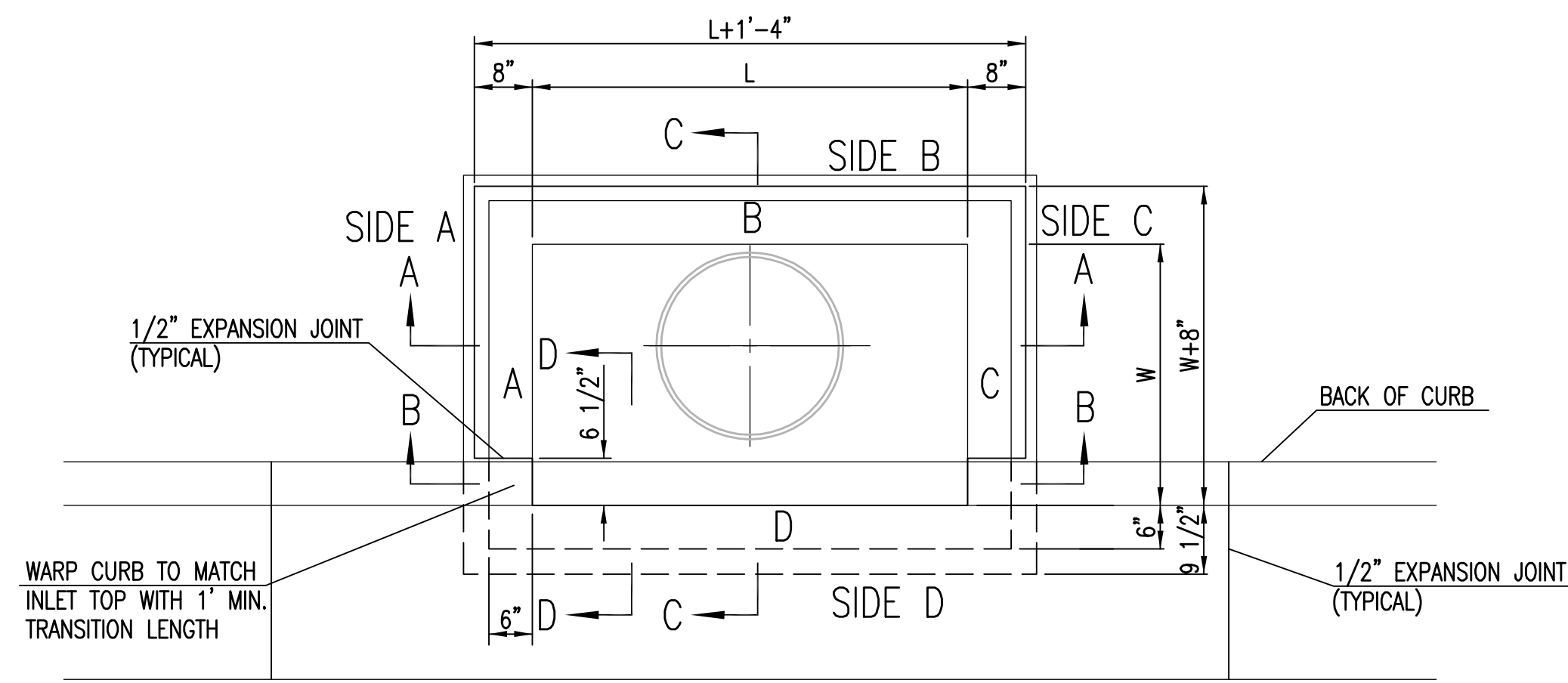


POND "B"



POND "A"





TOP VIEW

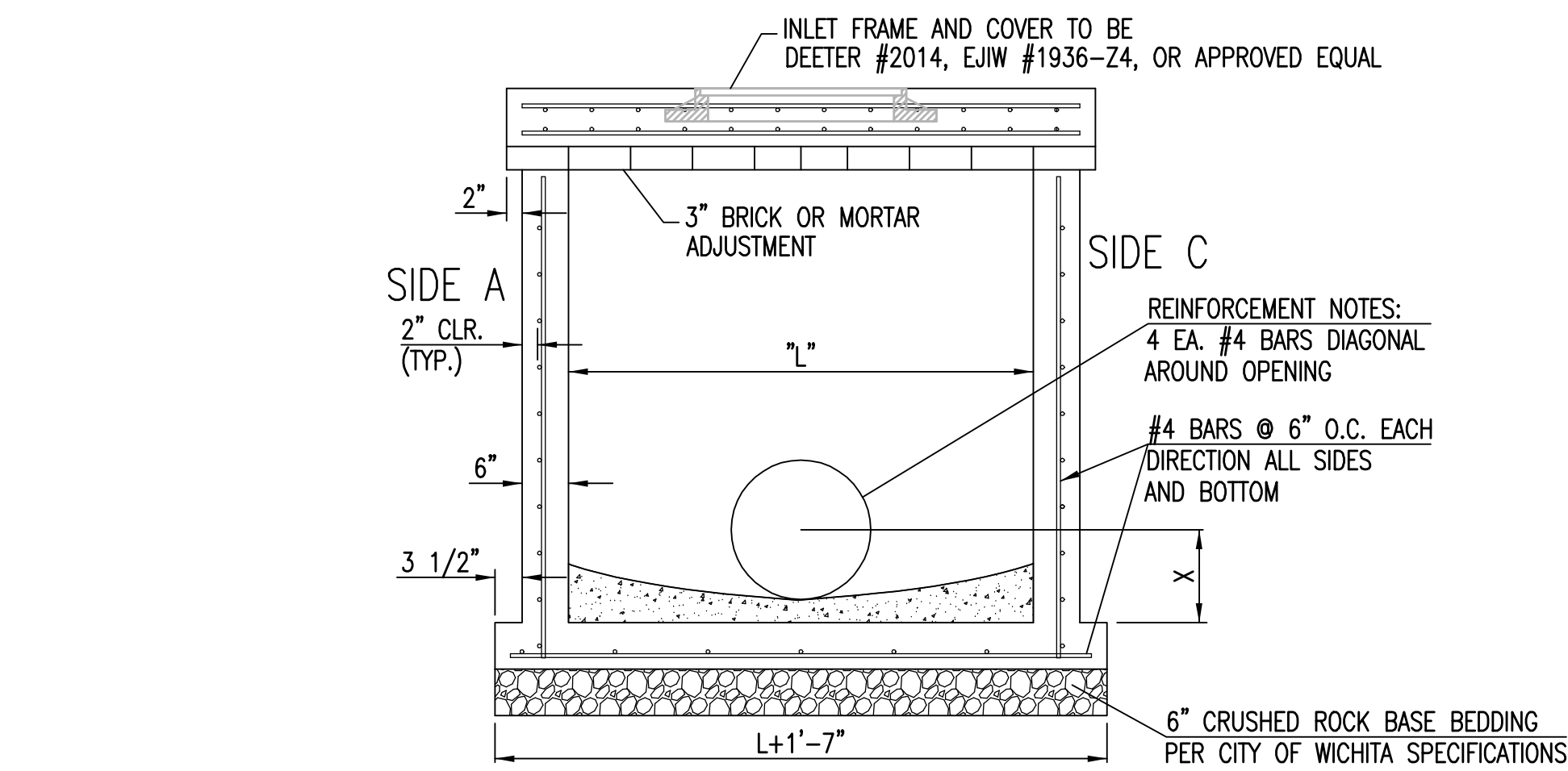
BAR SCHEDULE		
INLET OPENING	B1 BARS	SPACING
5'-0"	#4	4"
10'-0"	#6	3.5"

W	PRE-CAST TOP SIZE			PIPE DIA.**
	WIDTH	LENGTH	TOP	
3'-0"	W+8"	L+1'-4"	7 1/2"	21" & SMALLER
4'-0"	W+8"	L+1'-4"	7 1/2"	24" & 30"
5'-0"	W+8"	L+1'-4"	7 1/2"	36" & 42"
6'-0"	W+8"	L+1'-4"	7 1/2"	48" & 54"
7'-0"	W+8"	L+1'-4"	7 1/2"	60" & 66"

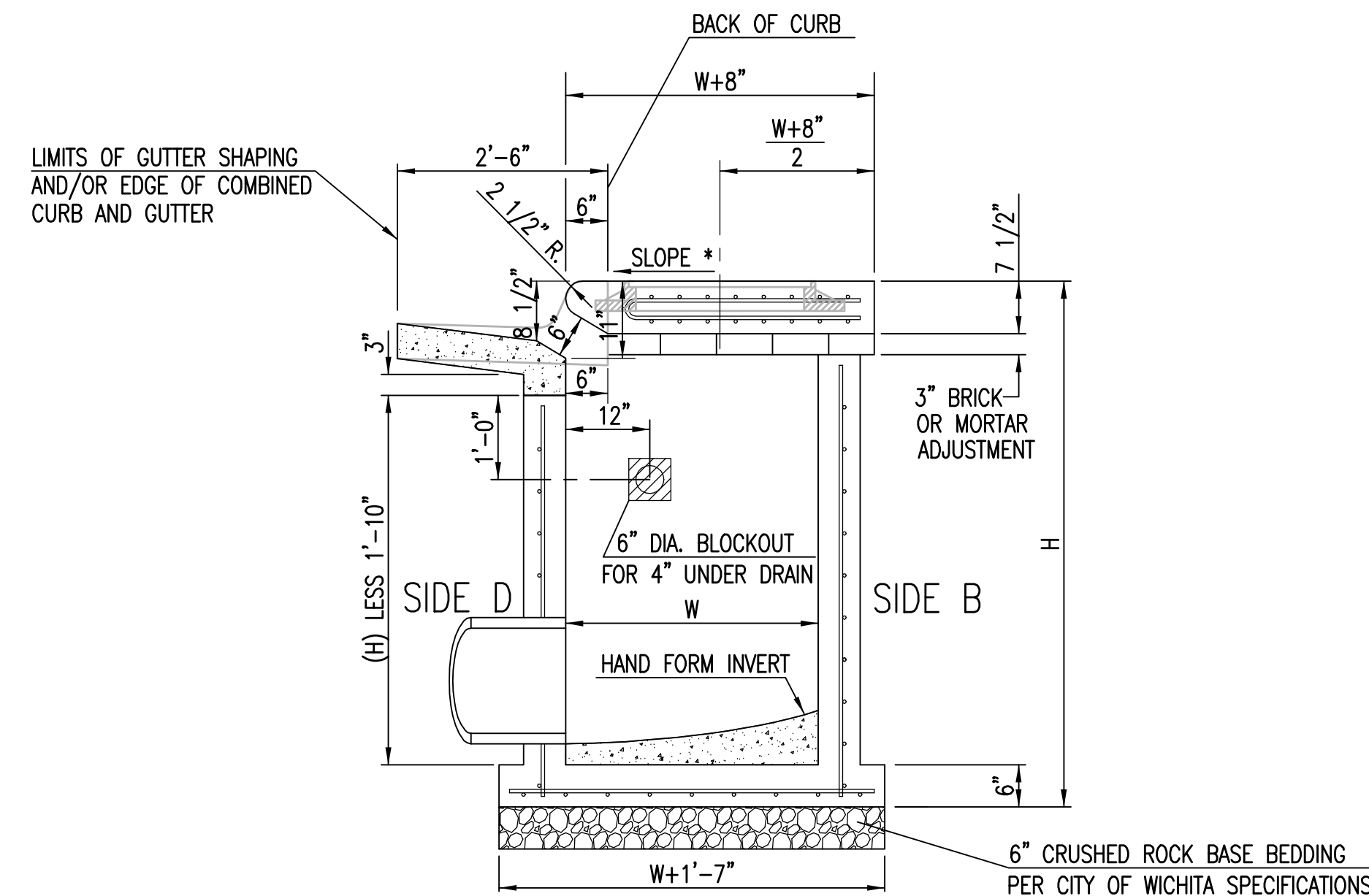
** FOR PIPES PERPENDICULAR TO INLET WALL

GENERAL NOTES

1. CONCRETE TOPS TO BE INSTALLED ON THIN MORTAR CUSHION TO INSURE FULL SUPPORT ALONG BRICK. CONCRETE TOPS MAY BE CAST IN PLACE OR PRECAST. CONCRETE USED FOR INLET CONSTRUCTION SHALL CONFORM TO CITY OF WICHITA SPECIFICATIONS FOR CONCRETE PAVEMENT MIX.
2. CONTRACTOR SHALL HAVE THE OPTION OF CONSTRUCTING 8" BRICK MASONRY WALLS BETWEEN THE CONCRETE INLET BASE AND TOP OF THIS INLET WHEN W=5'-0" AND H=7'-0" OR LESS.
3. 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.
4. THE ENDS OF ALL PIPES INSTALLED IN INLETS SHALL BE CUT OFF FLUSH WITH THE INSIDE FACE OF THE INLET WALL.
5. INLET FRAME AND COVER TO BE DEETER #2014, EJIW #1936 Z4, OR APPROVED EQUAL, SEE SW-303.
6. 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.

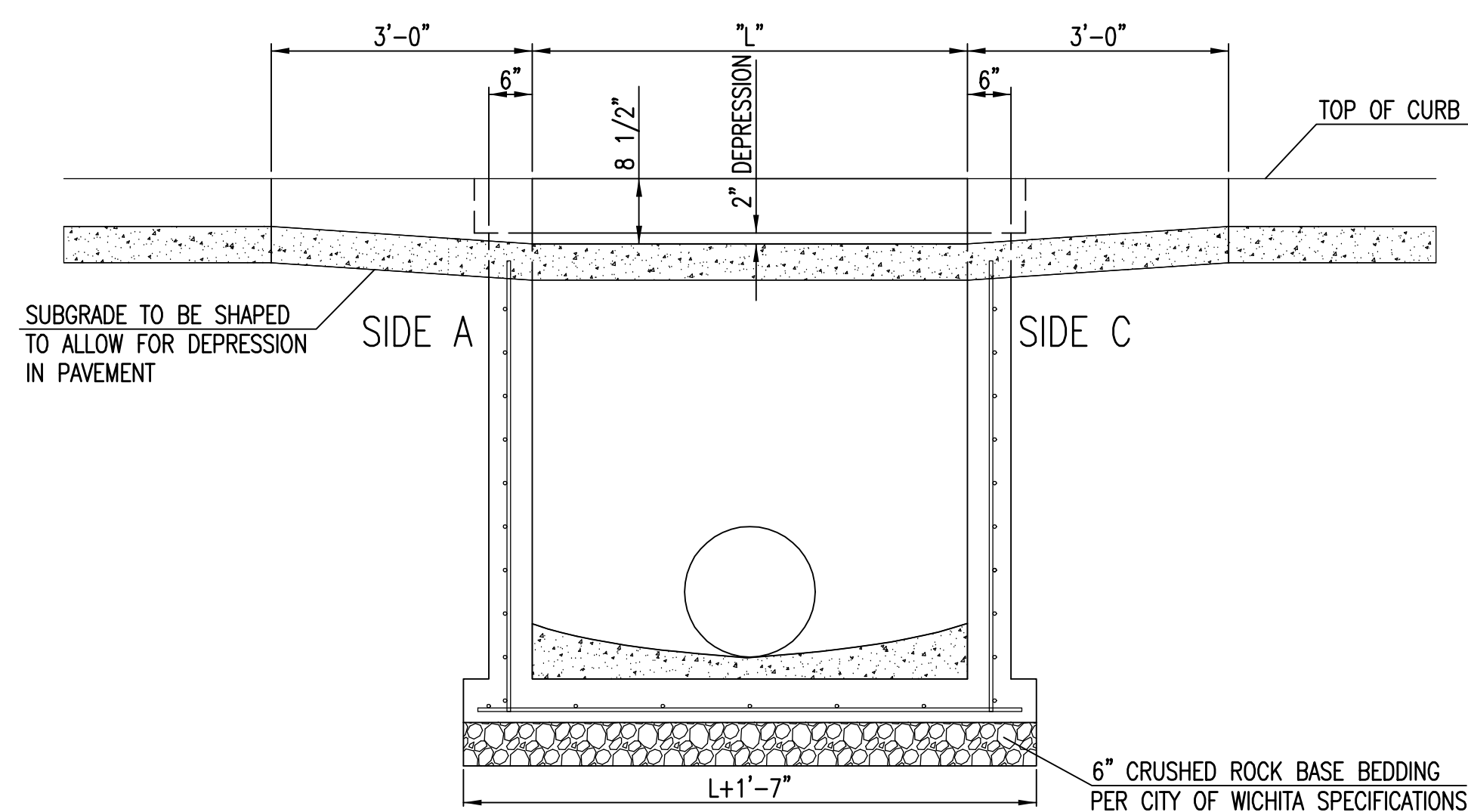
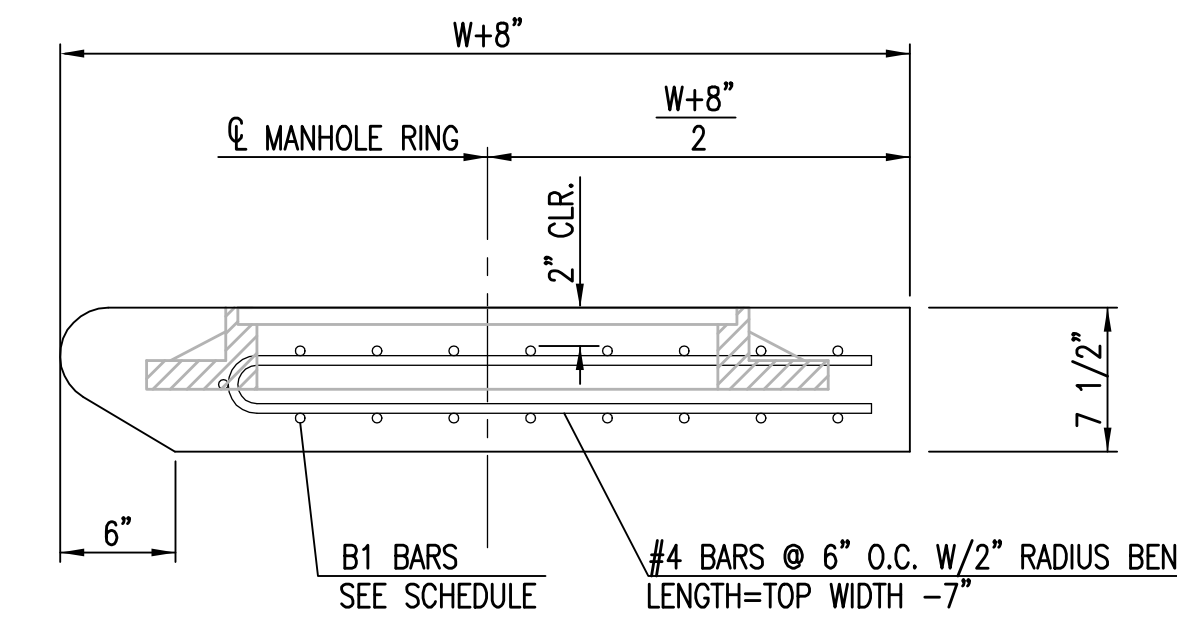


SECTION "A-A"

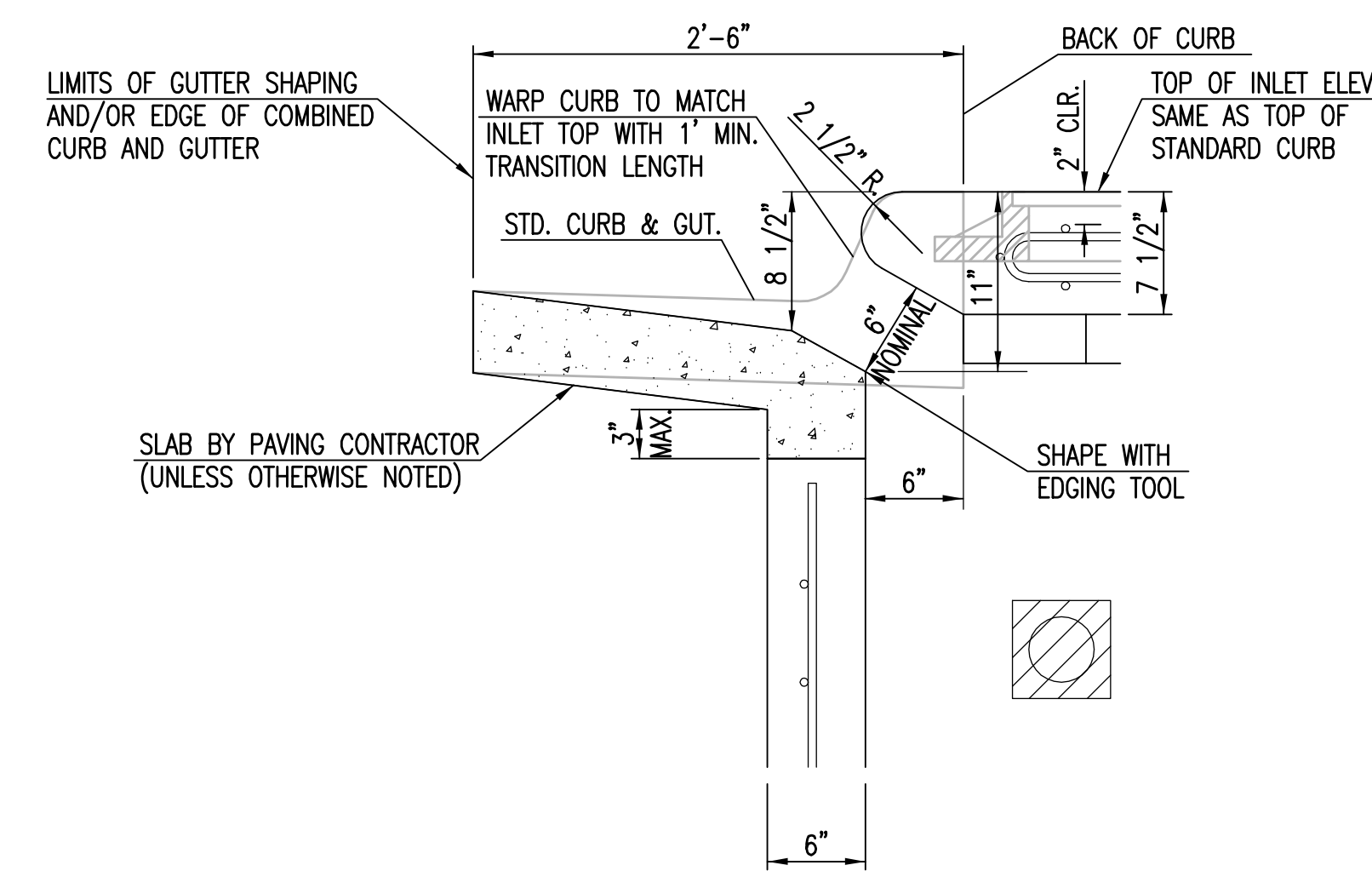


SECTION "C-C"

NOTES:
* SLOPE OF INLET TOP TO MATCH SIDEWALK OR PARKING SLOPES WITHIN LIMITS INDICATED.



SECTION "B-B"



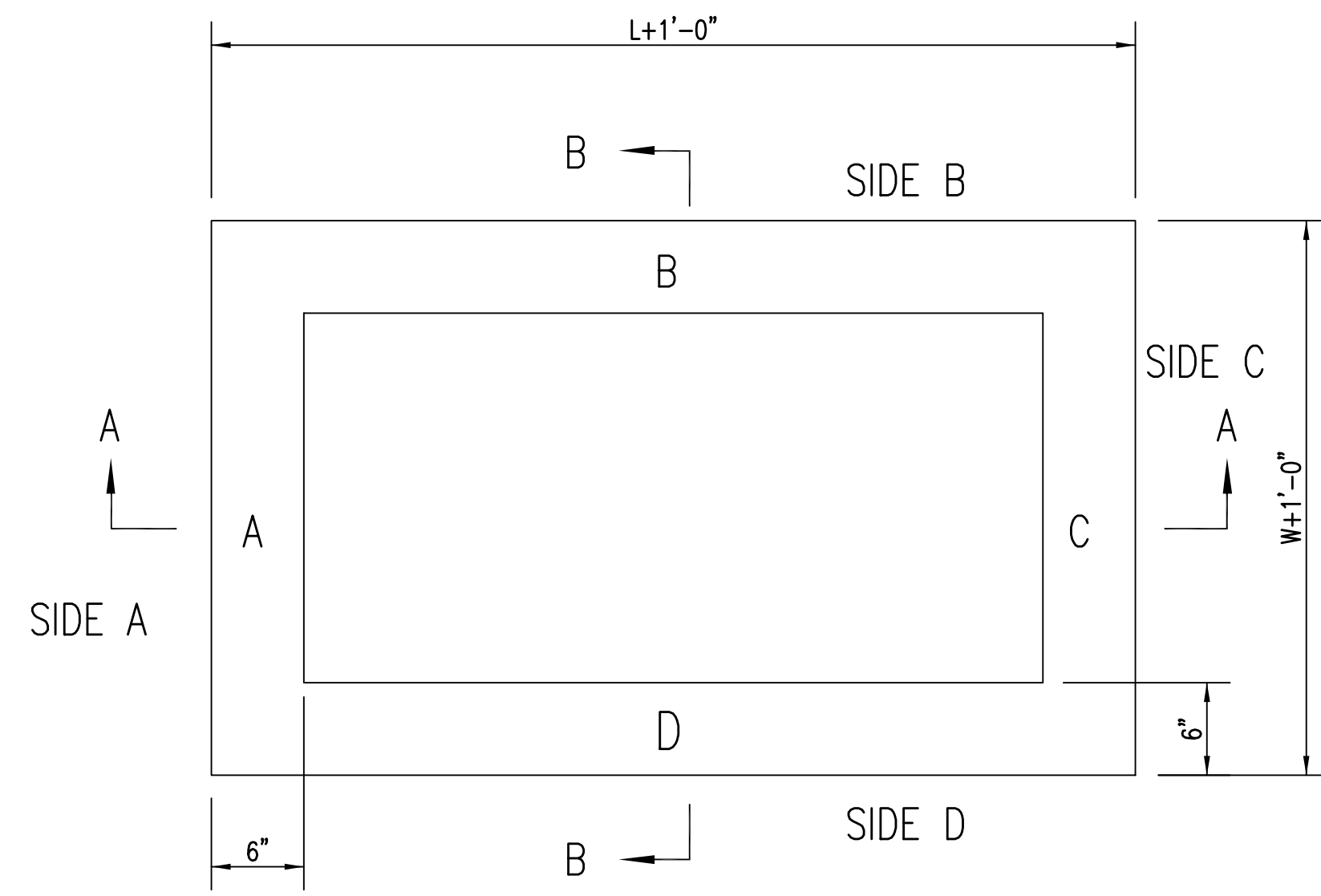
SECTION "D-D"



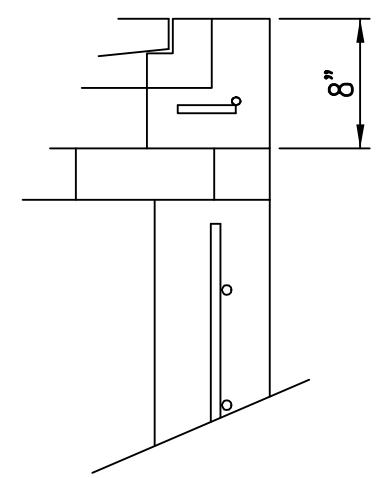
**STANDARD TYPE 1
CURB INLET
5'-0" OR 10'-0" OPENING**

CITY ENGINEER
Gary Janzen, P.E. Interim City Engineer

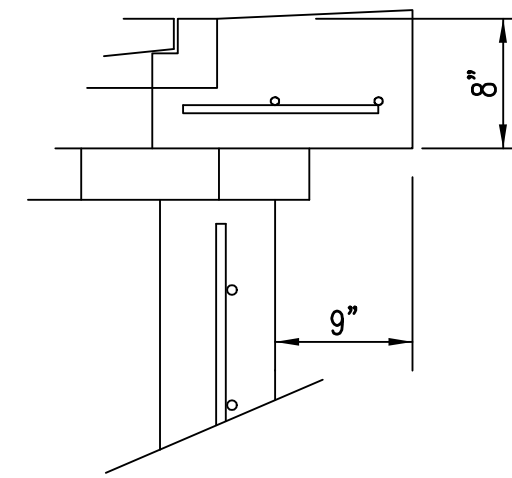
PROJECT NUMBER	OCA NUMBER	DATE
		09/12
CITY ENGINEER'S OFFICE	DESIGN	DRAWN
CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501	Staff	Staff
	SHEET	16 of 25



TOP VIEW

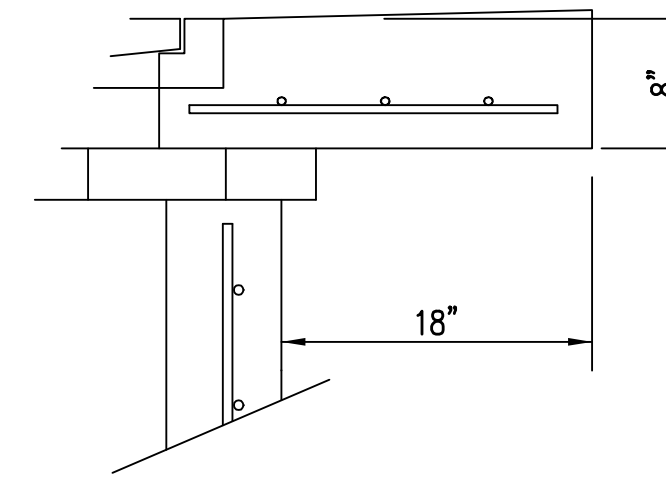


FLUSH STYLE TOP
NO APRON



9" APRON

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



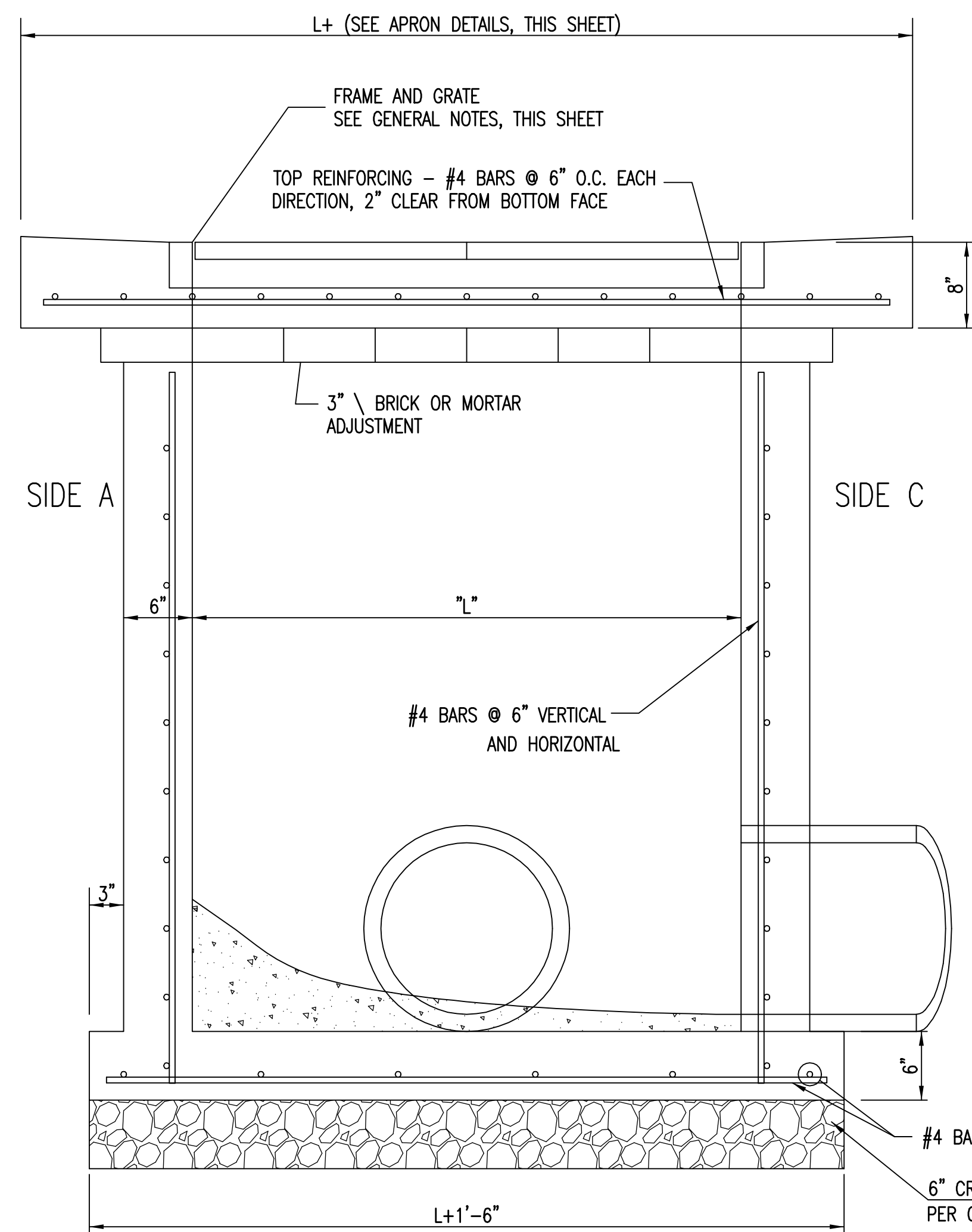
18" APRON

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

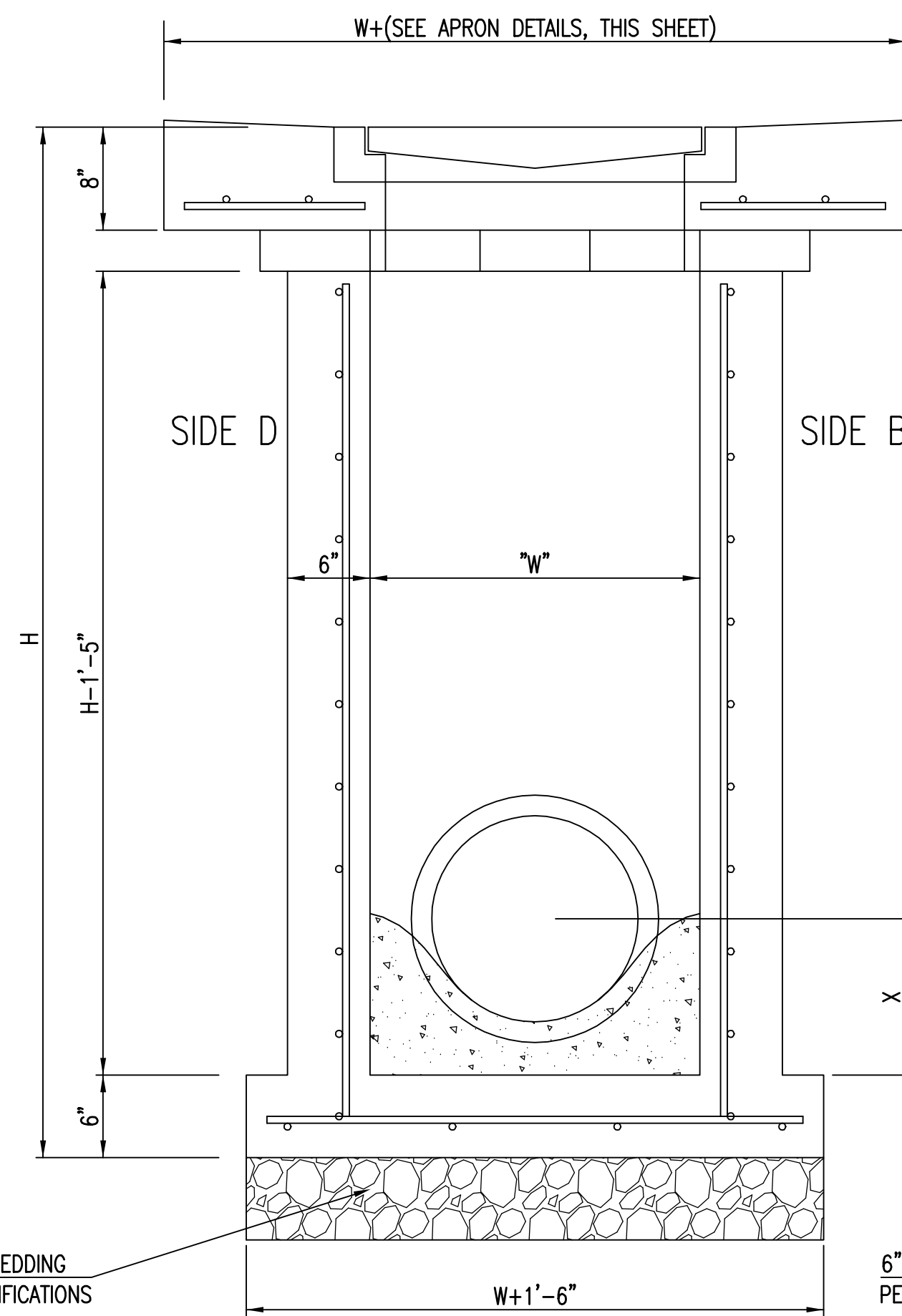
The structure(s) on this detail sheet are designed for HS-20 loading at these specific dimensions only. If larger dimensions are required, the ENGINEER shall provide a project specific structure design for approval by the City Engineer's office.

GENERAL NOTES

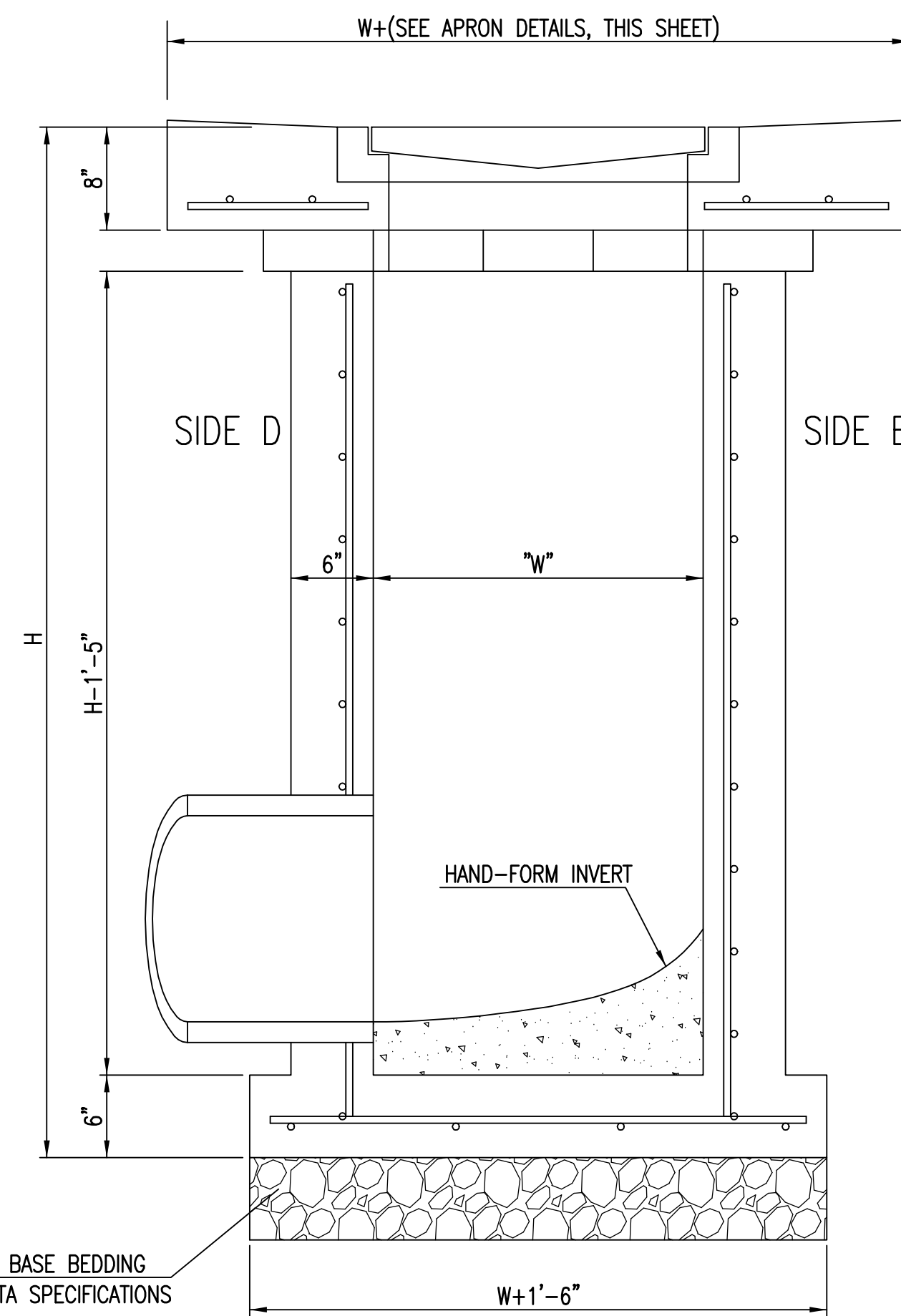
- GRATE FRAME TO BE INSTALLED ON THIN MORTAR CUSHION TO INSURE FULL SUPPORT ALONG BRICK. CONCRETE USED FOR INLET CONSTRUCTION SHALL CONFORM TO CITY OF WICHITA SPECIFICATIONS FOR CONCRETE PAVEMENT MIX.
- INLET INVERT SHALL BE SHAPED WITH 8 SACK SAND MIX CONCRETE TO CREATE FLOW CHANNELS AND TO INCREASE HYDRAULIC EFFICIENCY SUCH THAT THE INLET WILL BE SELF CLEANING BETWEEN ALL INLET AND/OR OUTLET PIPES.
- THE ENDS OF ALL PIPES INSTALLED IN INLETS SHALL BE CUT OFF FLUSH WITH THE INSIDE FACE OF THE INLET WALL.
- 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.
- 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"



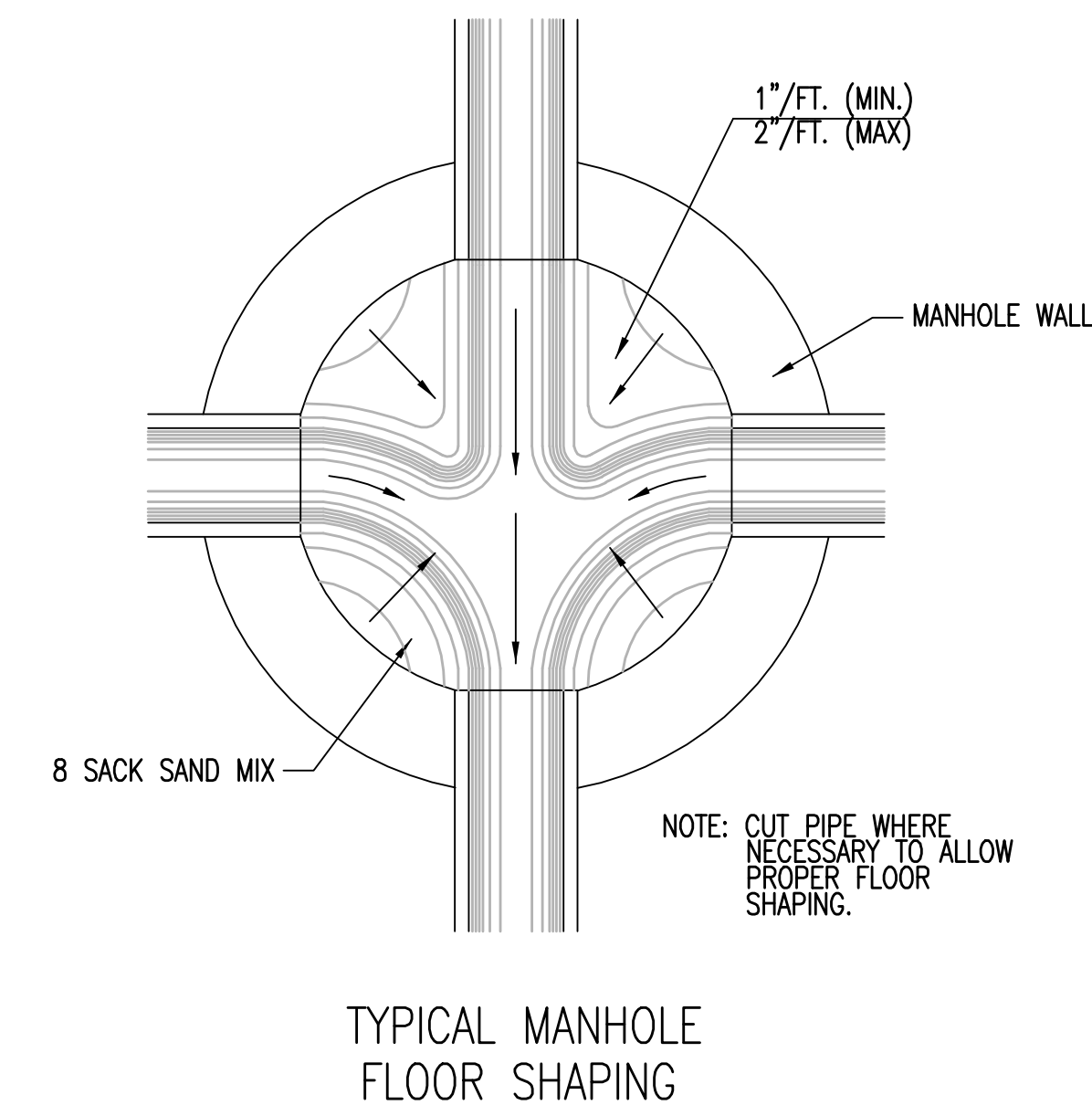
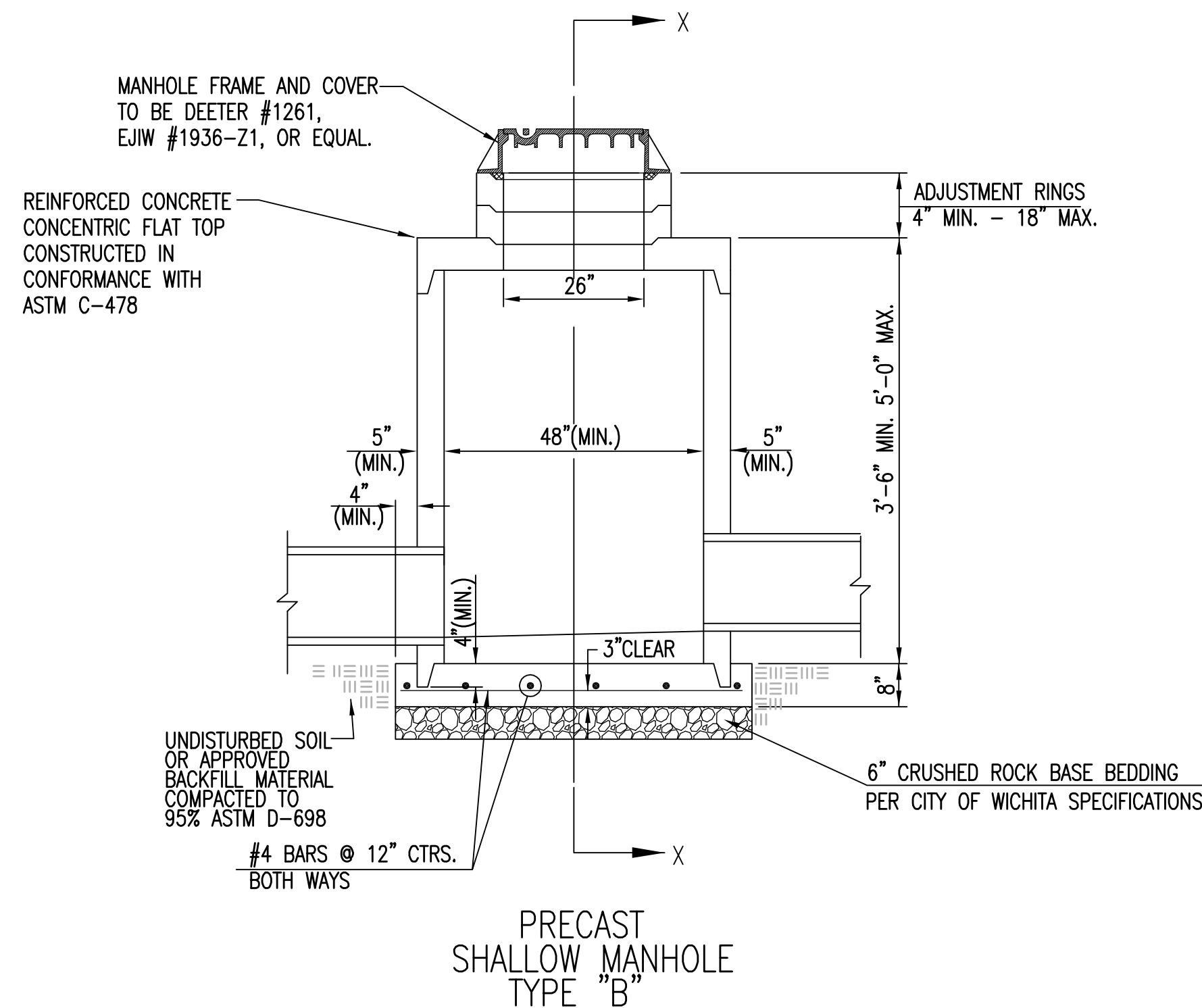
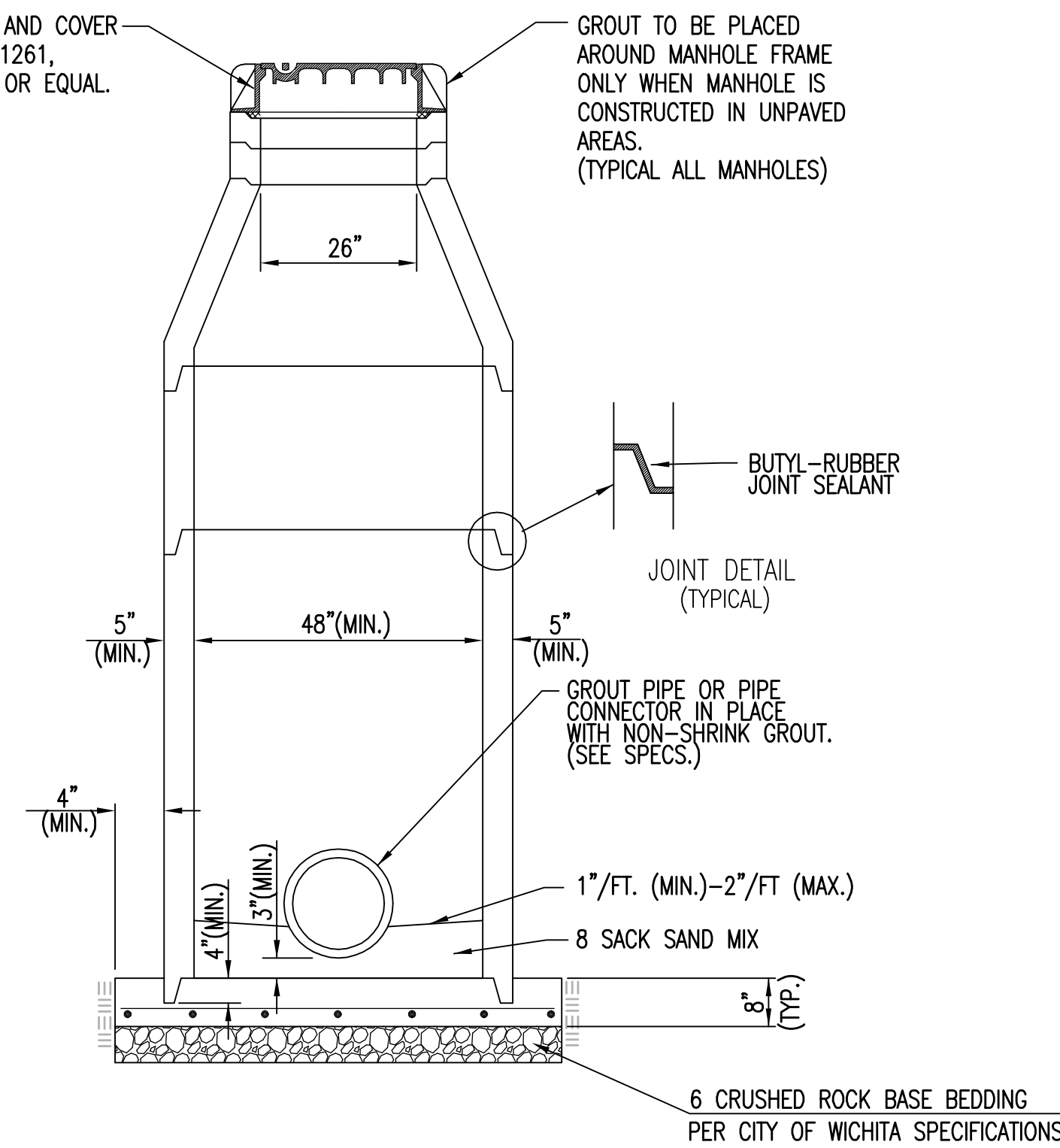
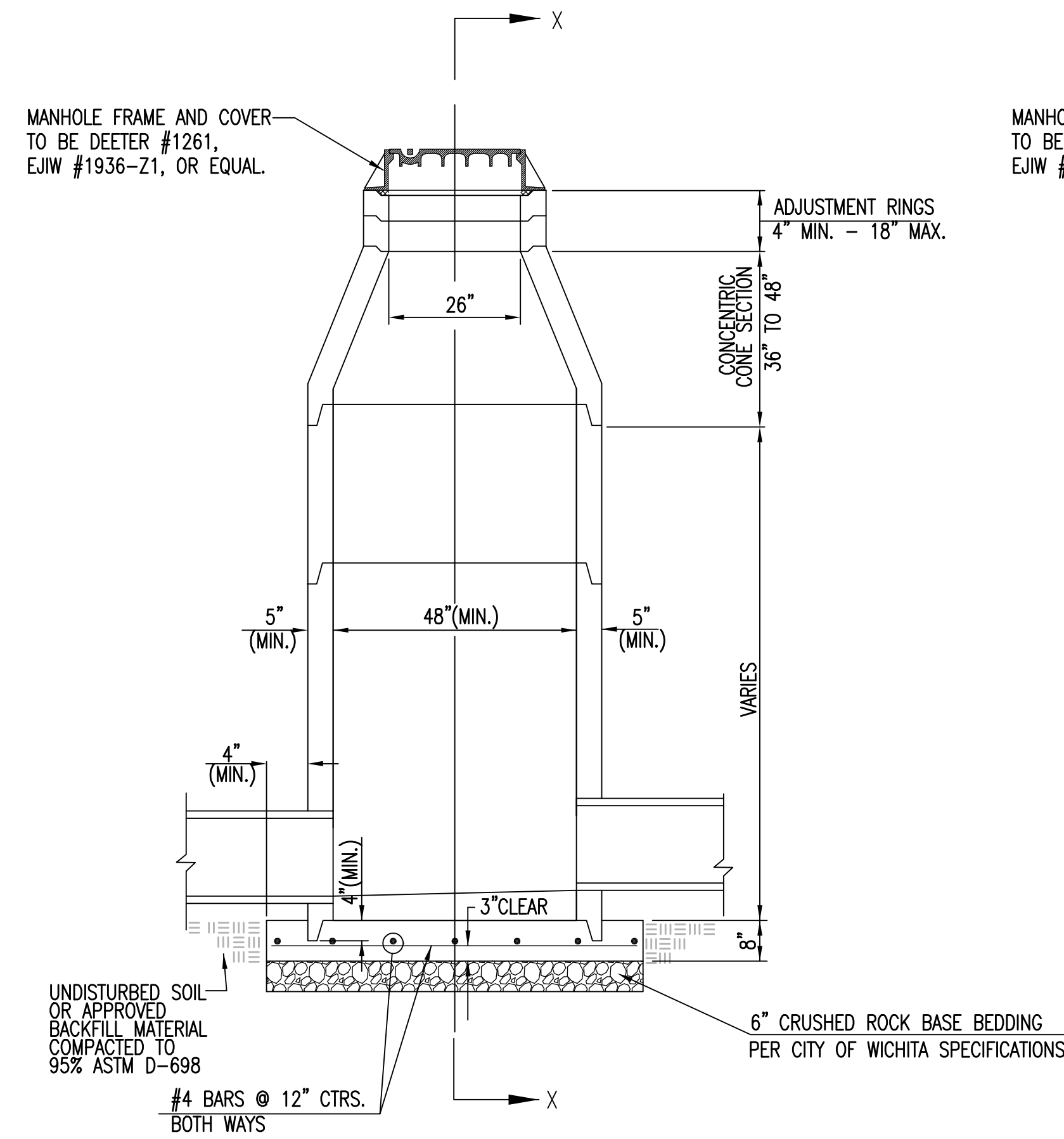
SECTION "B-B"
END OUTLET



SECTION "B-B"
SIDE OUTLET




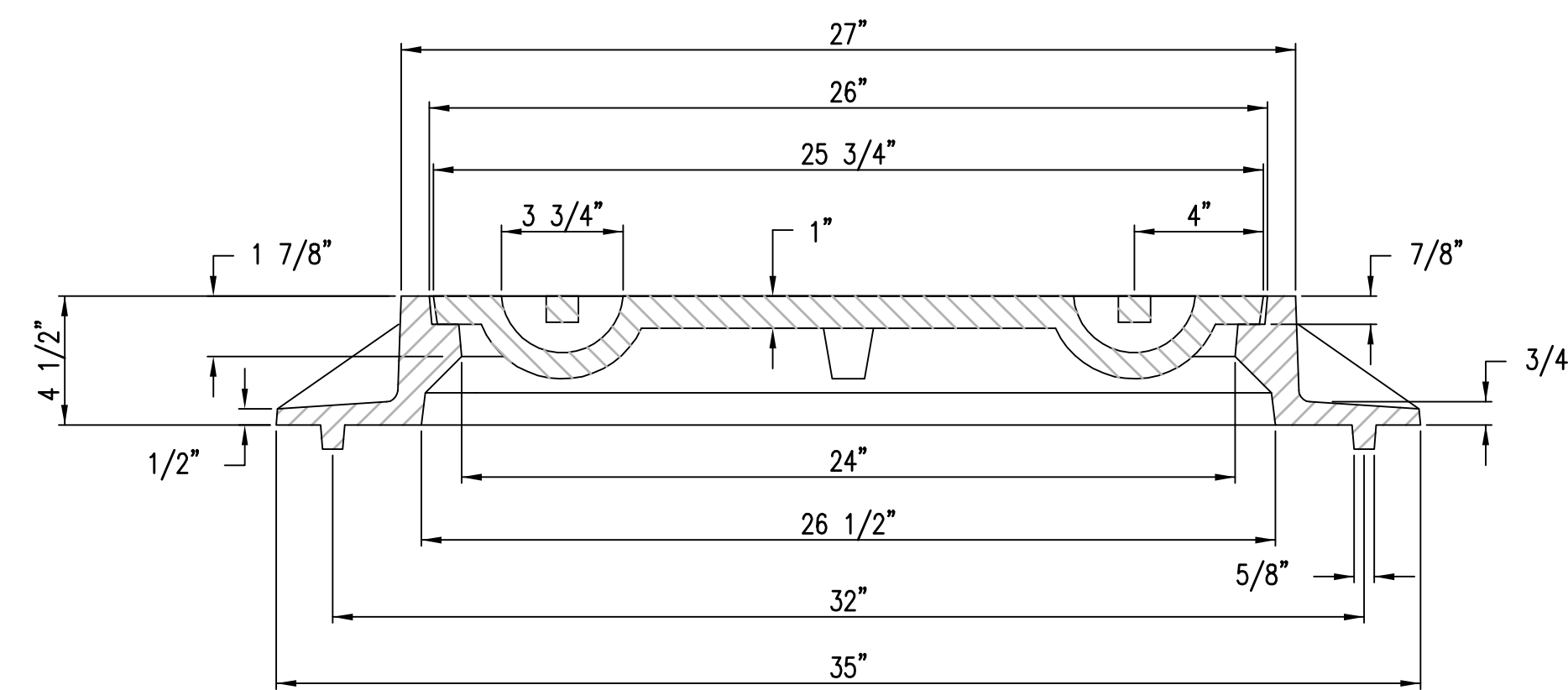
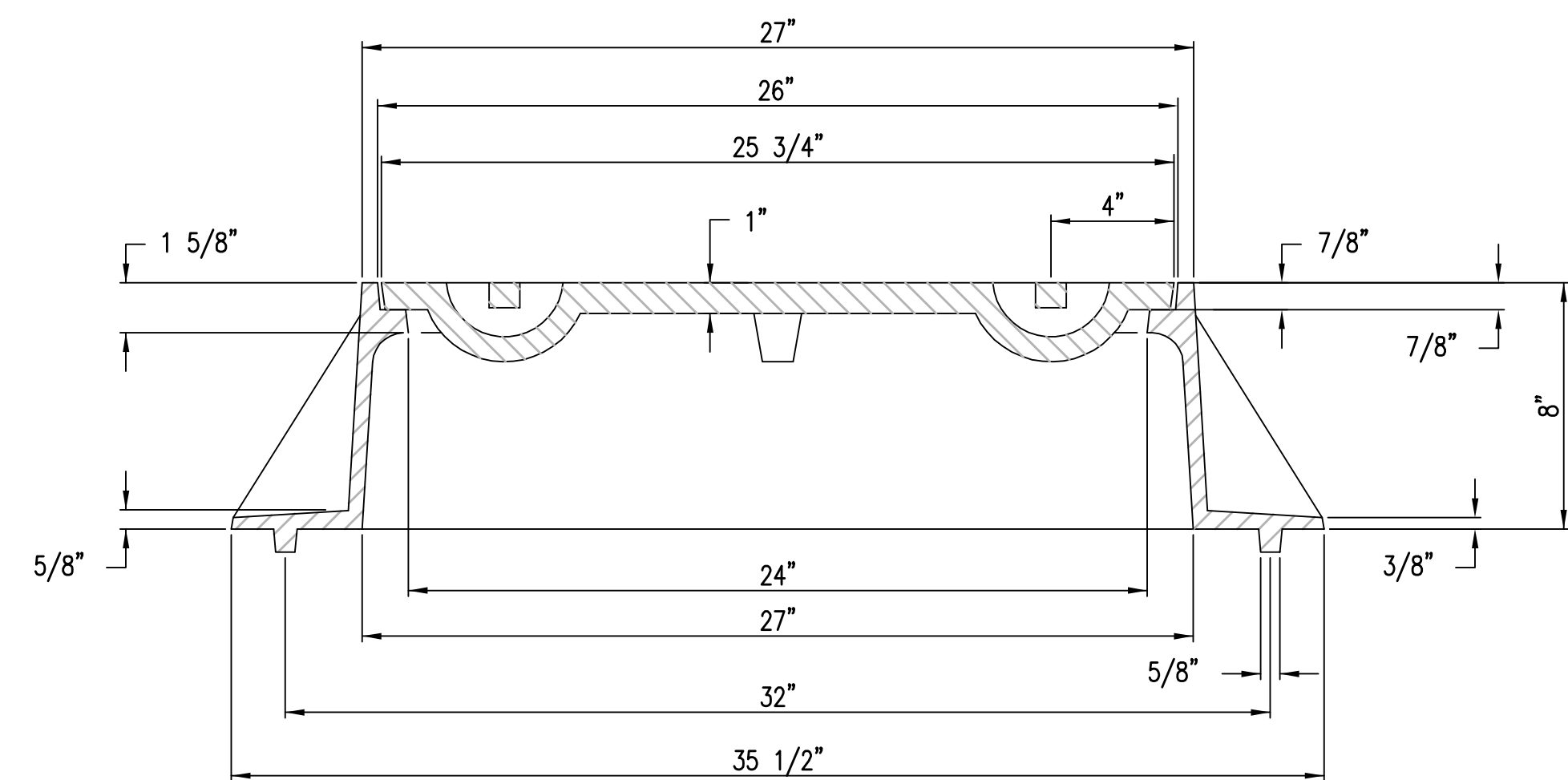
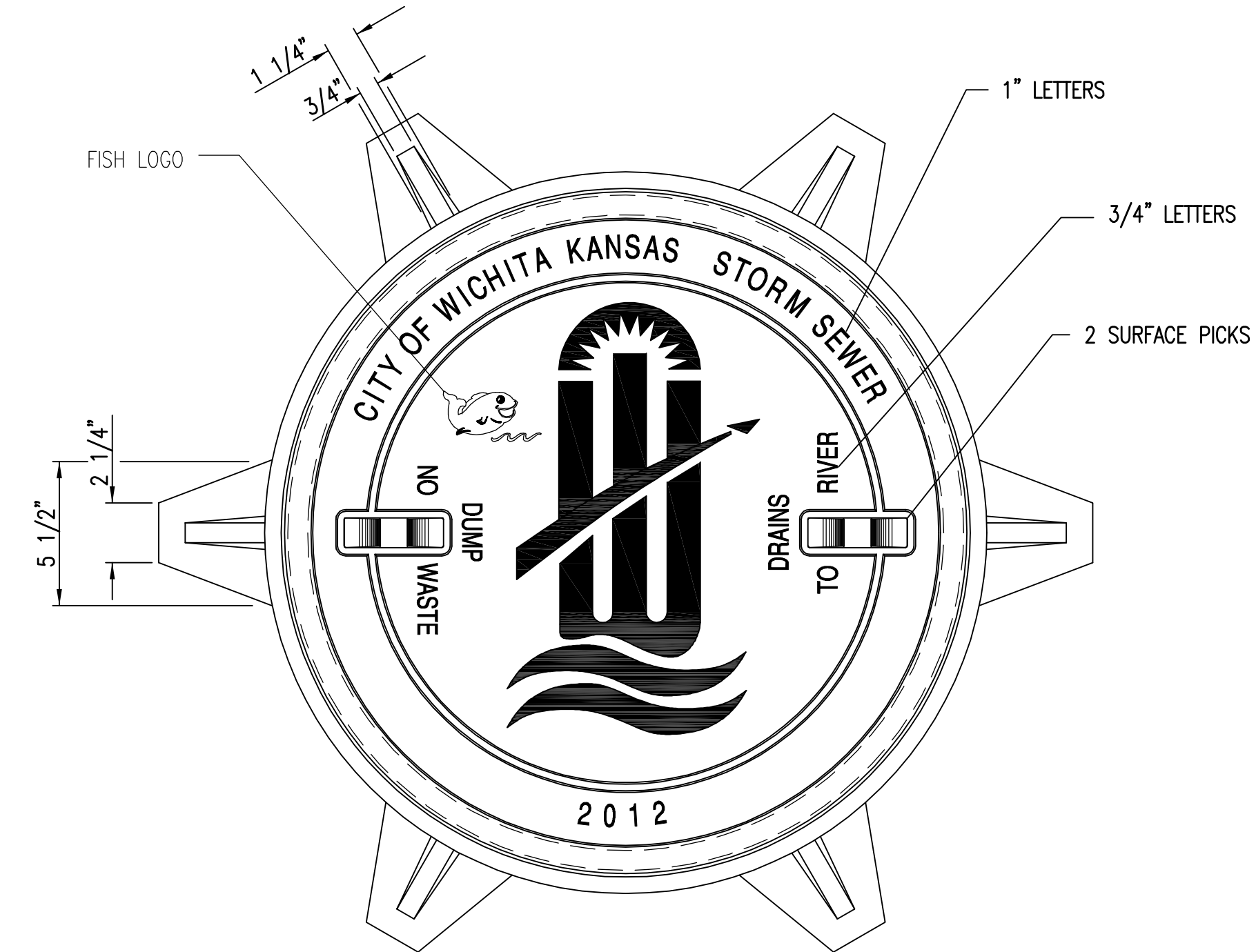
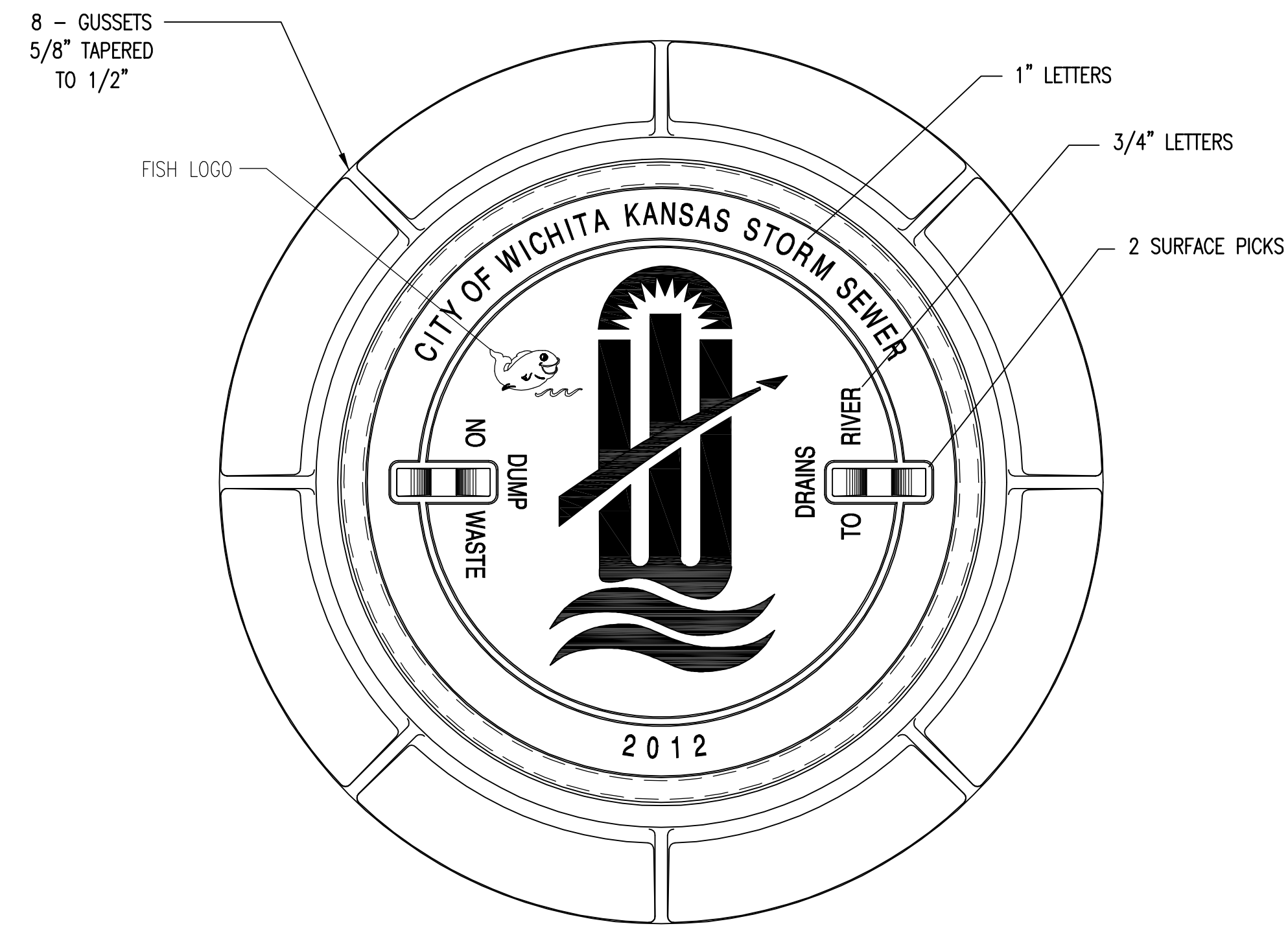
SINGLE/DOUBLE DROP INLET		
CITY ENGINEER Gary Janzen, P.E. Interim City Engineer		
PROJECT NUMBER	OCA NUMBER	DATE
		09/12
CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		DESIGN Staff
		DRAWN Staff
		SHEET 17 of 25



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.

 <p>CITY OF WICHITA PUBLIC WORKS & UTILITIES ENGINEERING DIVISION</p>	<p>PRECAST CONCRETE MANHOLE (STORM SEWER)</p> <p>CITY ENGINEER Gary Janzen, P.E. Interim City Engineer</p>		
	PROJECT NUMBER	OCA NUMBER	DATE
			09/12
	<p>CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501</p>		<p>DESIGN Staff</p> <p>DRAWN Staff</p> <p>SHEET 18 of 25</p>



MANHOLE FRAME
DEETER #1261 OR EJIW #1936-Z1

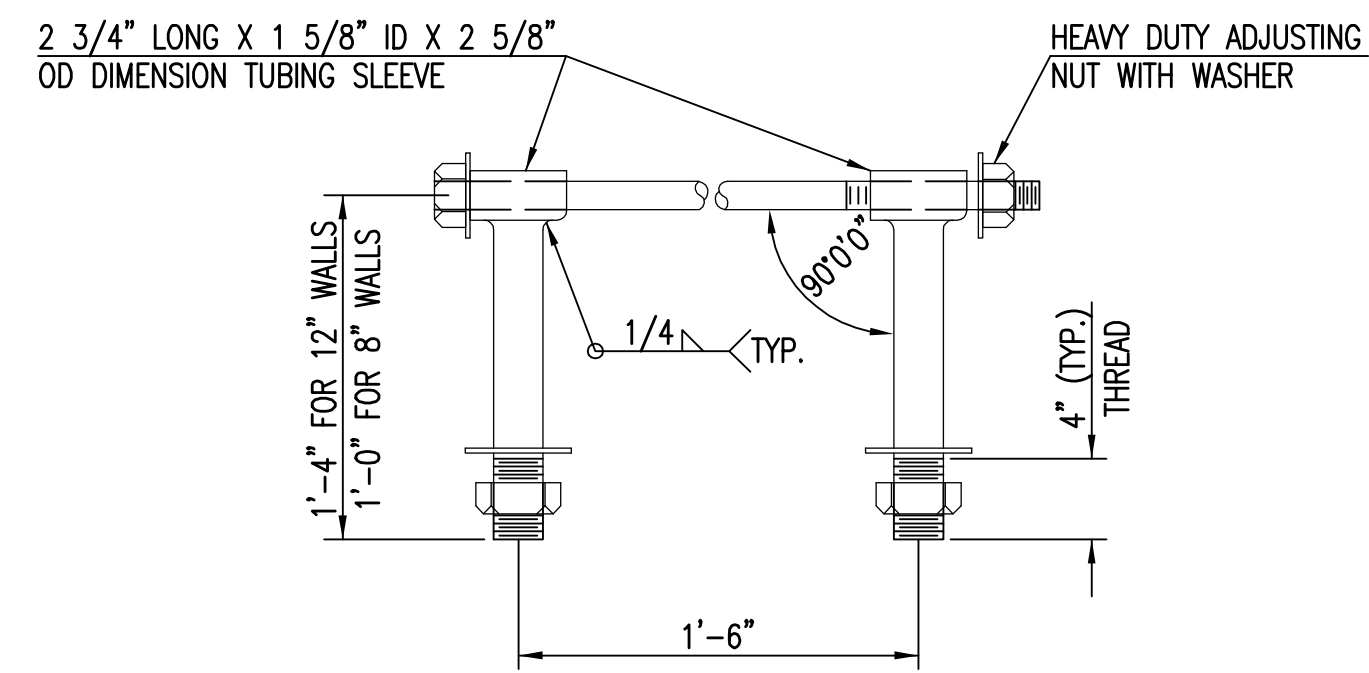
- NOTE:
1. FURNISHED WITH MACHINED HORIZONTAL BEARING SURFACE.
 2. COVER TO BE DEETER #1261 OR EJIW #1936A.

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 <i>Gary Janzen, P.E. Interim City Engineer</i>		
PROJECT NUMBER	OCA NUMBER	DATE 09/12
CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		DESIGN DRAWN Staff Staff SHEET 19 of 25

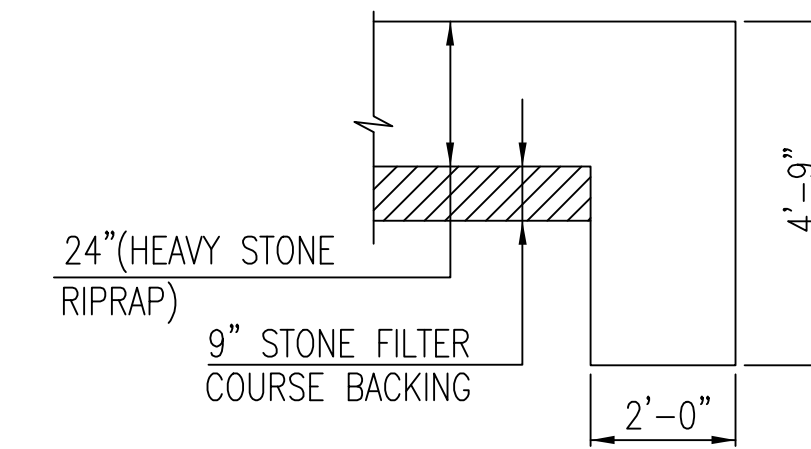


HEAVY DUTY (H.D.) COUPLER

NO SCALE

NOTES

1. BOLTS TO BE A-36 1 1/2" DIAMETER.
2. BOLTS, NUTS, WASHERS AND SLEEVES TO BE ZINC PLATED.
3. WASHERS TO BE 3 1/2" O.D. X 7 GAUGE.
4. SHIP WITH NUTS AND WASHERS PLACED ON BOLTS.



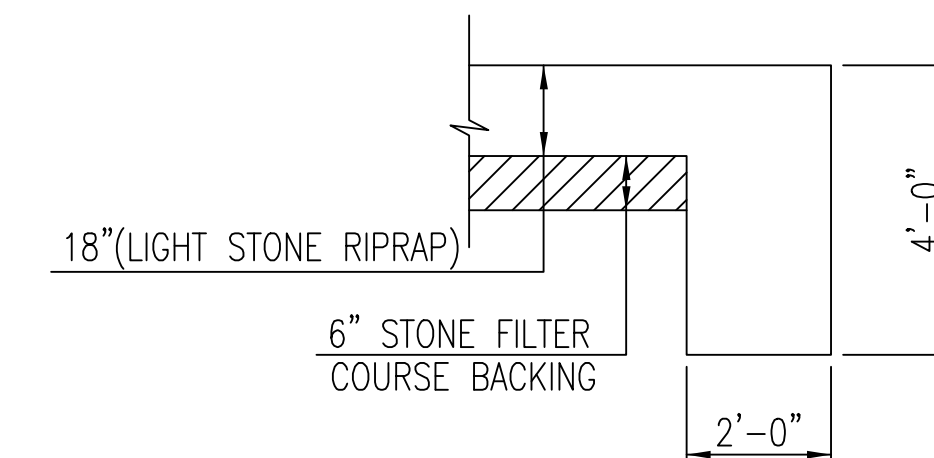
TYPICAL SECTION THRU TOEWALL

NO SCALE

NOTES

1. ALL RIPRAP FOR THIS PROJECT SHALL BE NATURAL STONE. NEITHER BROKEN CONCRETE, FABRIC ENVELOPE, NOR PREMIXED DRY PACKAGED CONCRETE BAG ALTERNATES WILL BE ALLOWED, UNLESS INDICATED OTHERWISE.
2. TOEWALLS SHALL BE INSTALLED ALONG ALL UNPROTECTED EDGES OF STONE RIPRAP.
3. GROUTING OF THE SURFACE OF THE RIPRAP SHALL NOT BE PERFORMED, UNLESS INDICATED OTHERWISE. GROUTING OF THE TOEWALLS SHALL BE PERFORMED PER CITY SPECIFICATIONS.

HEAVY STONE RIPRAP DETAILS



TYPICAL SECTION THRU TOEWALL

NO SCALE

NOTES

1. ALL RIPRAP FOR THIS PROJECT SHALL BE NATURAL STONE. NEITHER BROKEN CONCRETE, FABRIC ENVELOPE, NOR PREMIXED DRY PACKAGED CONCRETE BAG ALTERNATES WILL BE ALLOWED, UNLESS INDICATED OTHERWISE.
2. TOEWALLS SHALL BE INSTALLED ALONG ALL UNPROTECTED EDGES OF STONE RIPRAP.
3. GROUTING OF THE SURFACE OF THE RIPRAP SHALL NOT BE PERFORMED, UNLESS INDICATED OTHERWISE. GROUTING OF THE TOEWALLS SHALL BE PERFORMED PER CITY SPECIFICATIONS.

LIGHT STONE RIPRAP DETAILS

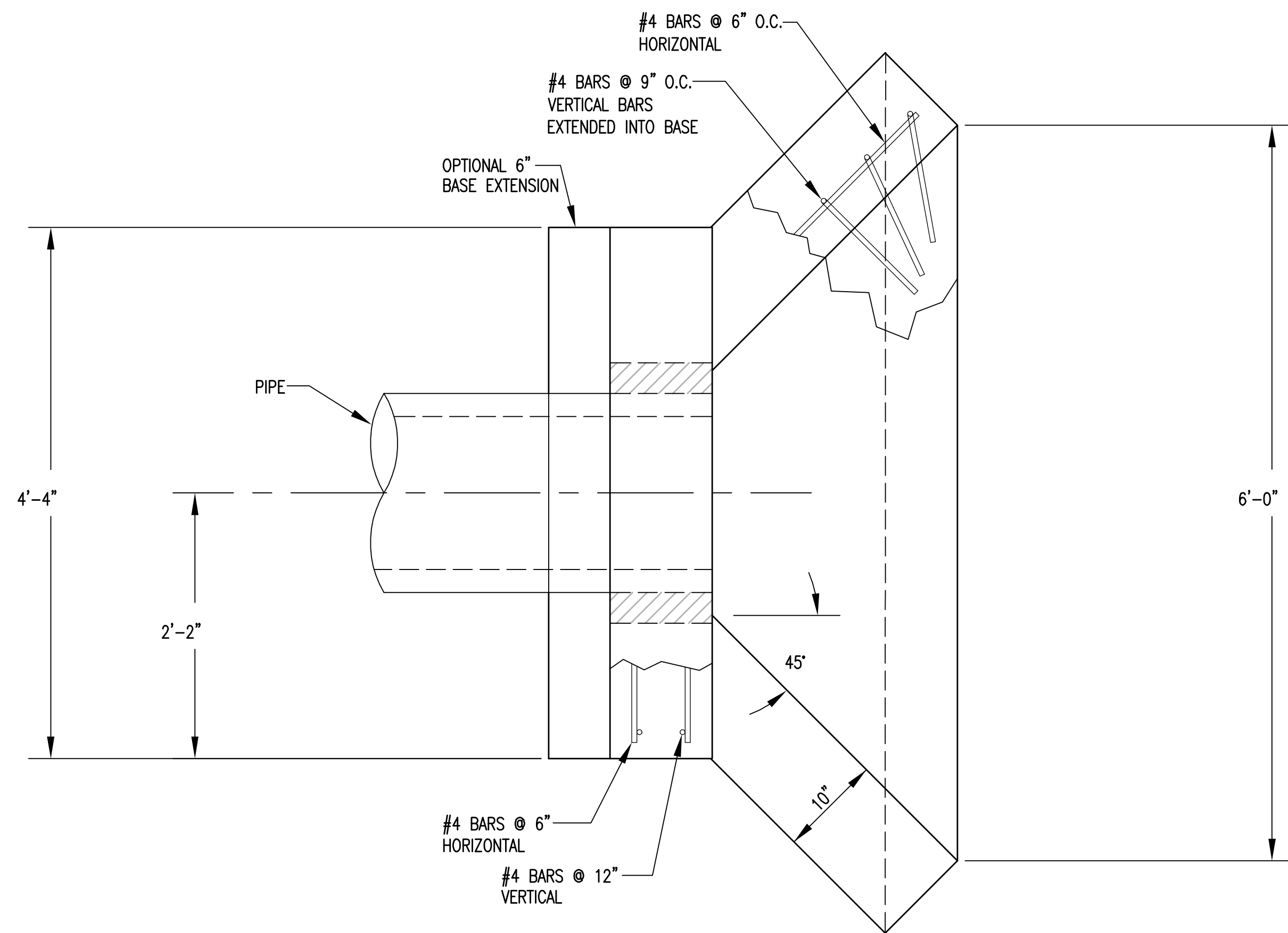


**MISCELLANEOUS
DETAILS
(STORM SEWER)**

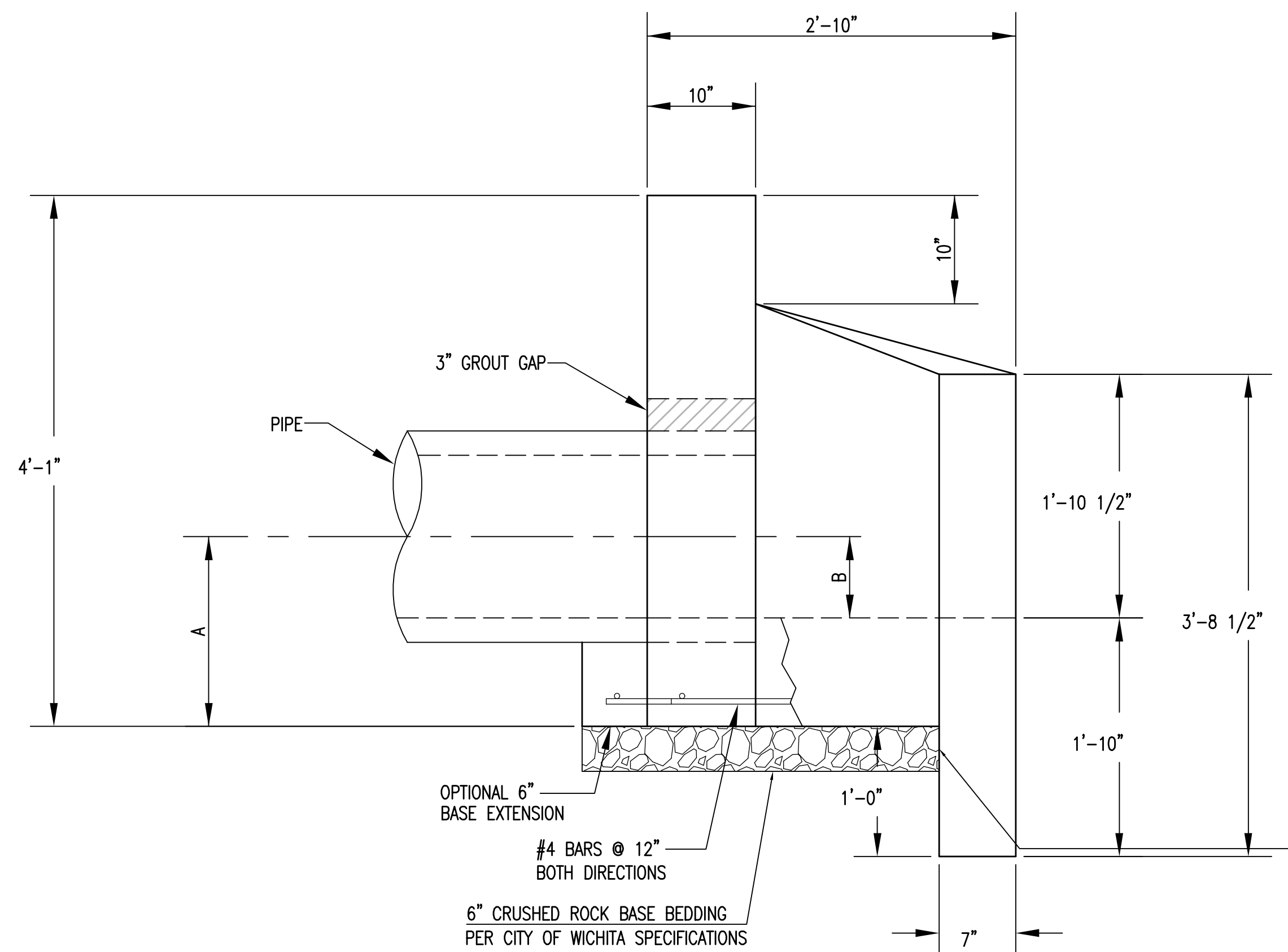
CITY ENGINEER

Gary Janzen, P.E. Interim City Engineer

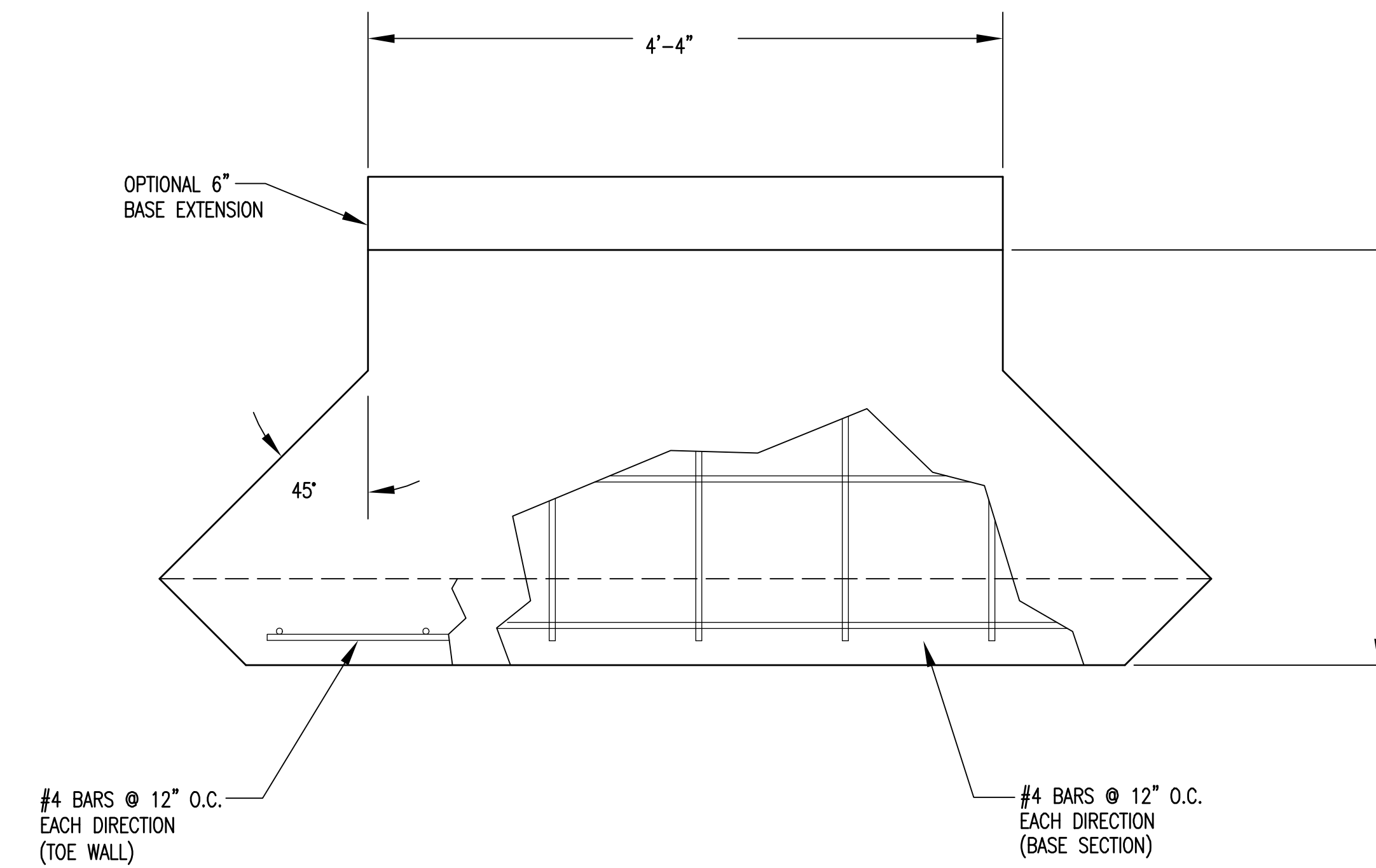
PROJECT NUMBER	OCA NUMBER	DATE
		09/12
CITY ENGINEER'S OFFICE	DESIGN	DRAWN
CITY HALL - SEVENTH FLOOR	Staff	Staff
455 NORTH MAIN STREET		
WICHITA, KANSAS 67202-1620		
(316) 268-4501		
	SHEET	
		20 of 25



PLAN VIEW

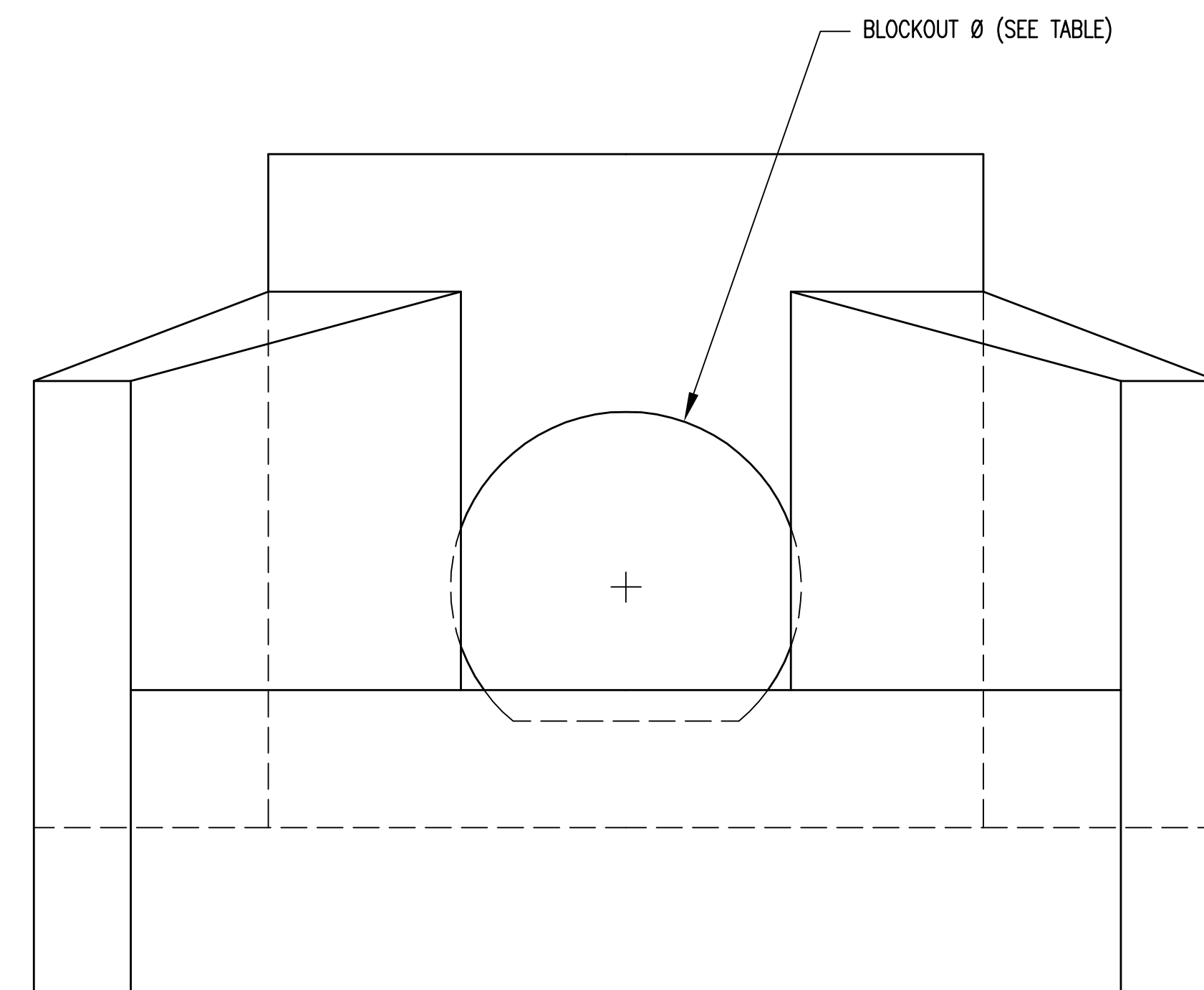


ELEVATION




PLAN VIEW
BASE

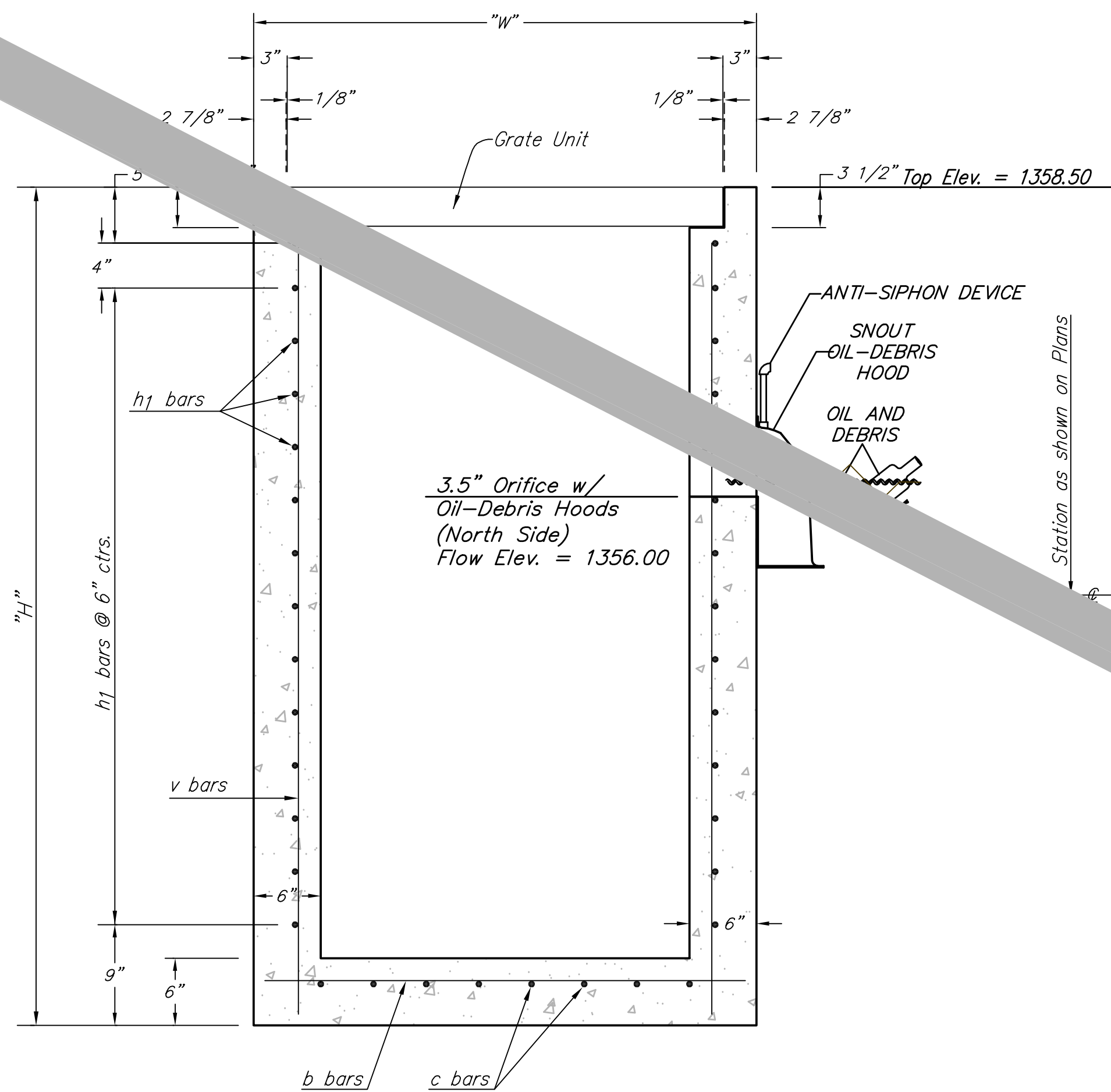
PIPE Ø	A	B	BLOCKOUT Ø
15"	1'-5 1/2"	7 1/2"	2'-1 1/2"
18"	1'-7"	9"	2'-5"
24"	1'-10"	1'-0"	3'-0"



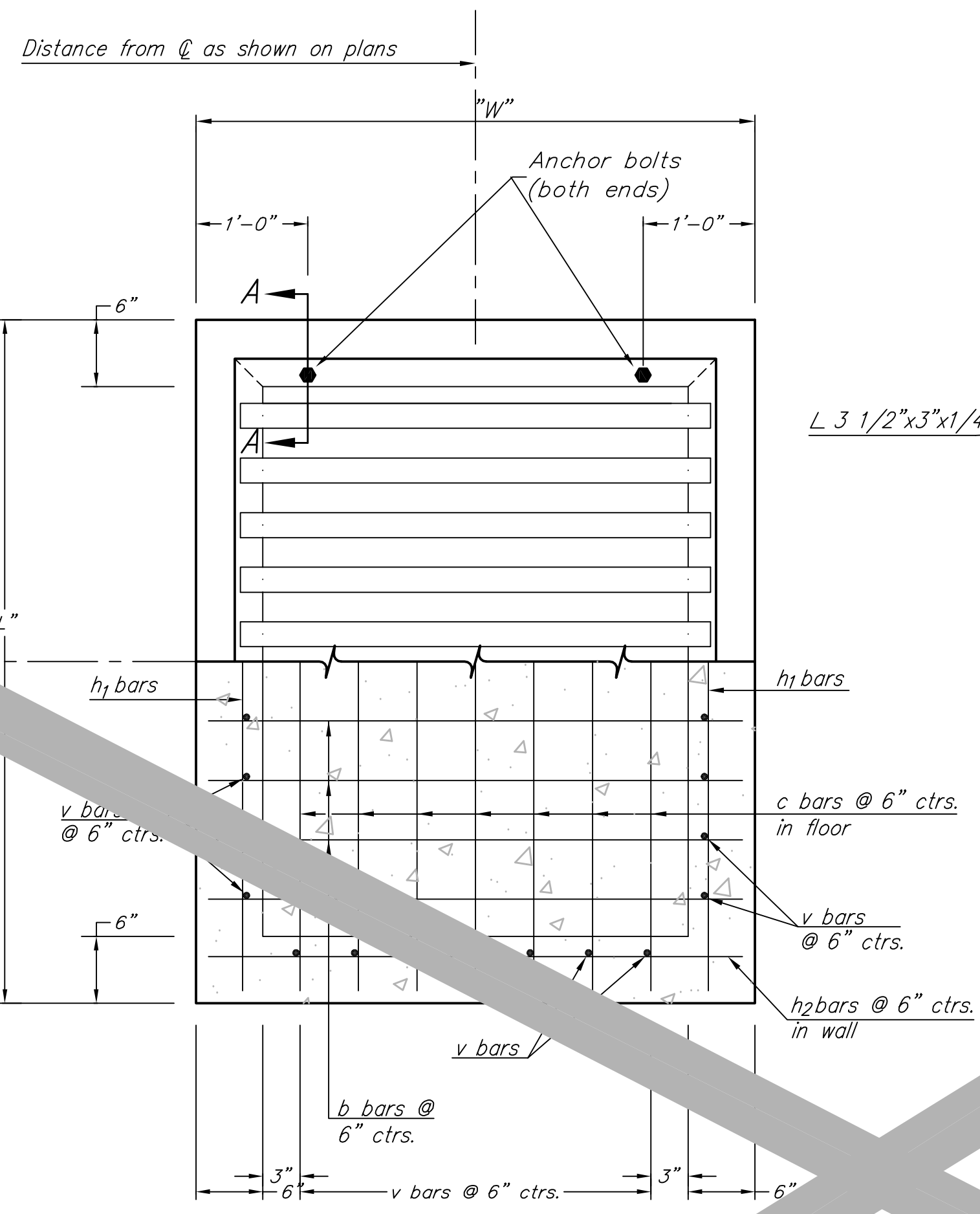
FRONT VIEW

HEADWALLS, AS SHOWN, WILL NOT SUPPORT FLAP GATE.

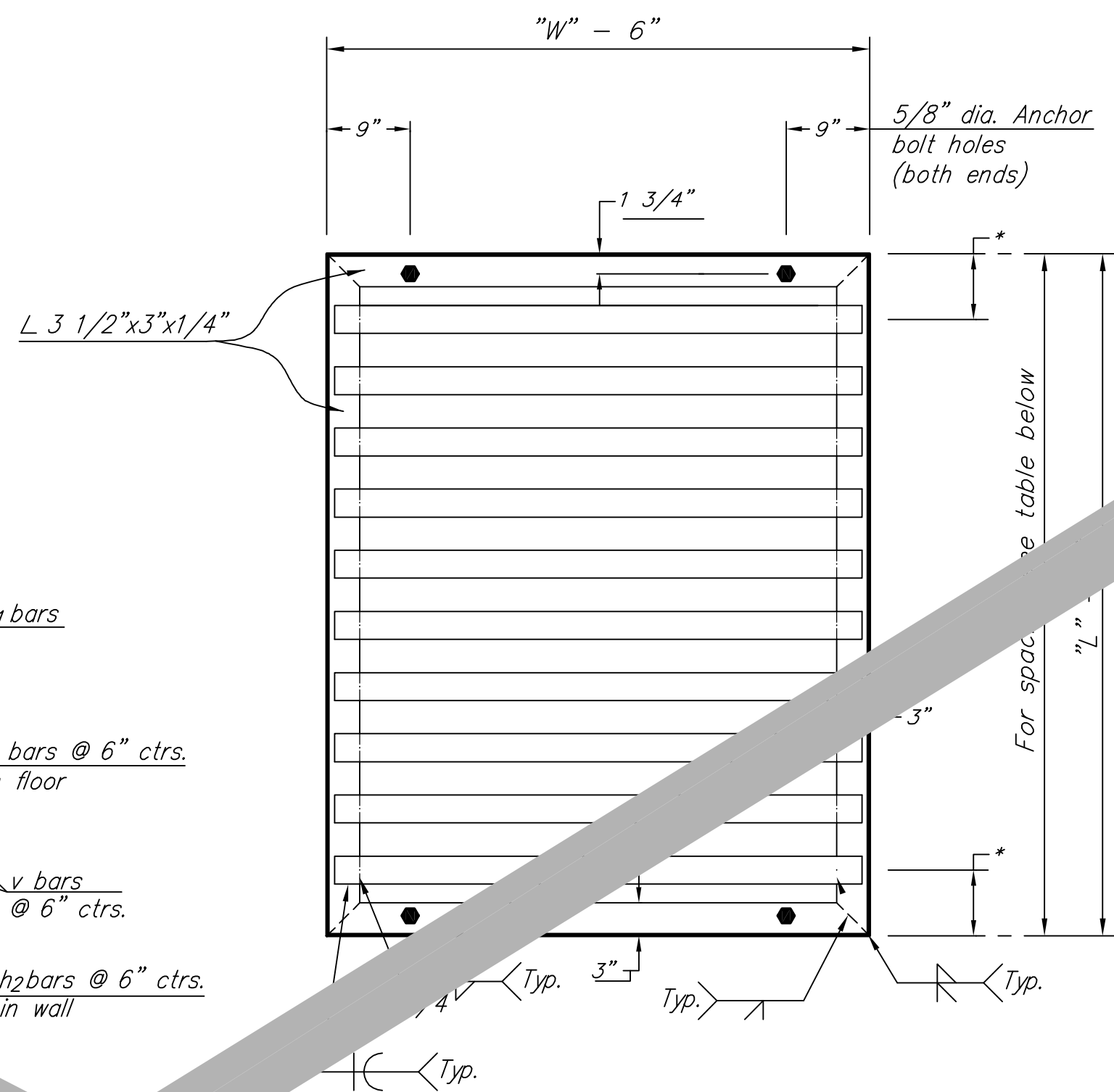
 <p>CITY OF WICHITA</p> <p>PUBLIC WORKS & UTILITIES ENGINEERING DIVISION</p>	<p>HEADWALL DETAILS FOR 15", 18", AND 24" PIPE</p> <p>CITY ENGINEER Gary Janzen, P.E. Interim City Engineer</p>		
	PROJECT NUMBER	OCA NUMBER	DATE
			09/12
	<p>CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501</p>		



SECTION



PLAN AND SECTION



GRATE UNIT DETAILS

PIPE DIMENSIONS AND SPACING

L x W	No. of	Dia. x Length x Spacing	*
5'-0" x 5'-0"		2 1/2" Ø x 4'-4" pipes @ 6" ctrs.	6"

GENERAL NOTE

Use Class A Concrete throughout. All exposed surfaces shall be finished with an edging tool.

At the Contractors option, Class A concrete (AE) or mix used in concrete pavement may be used throughout.

In general, pipes will enter and leave the manhole at various positions. Where possible, use bars around pipes.

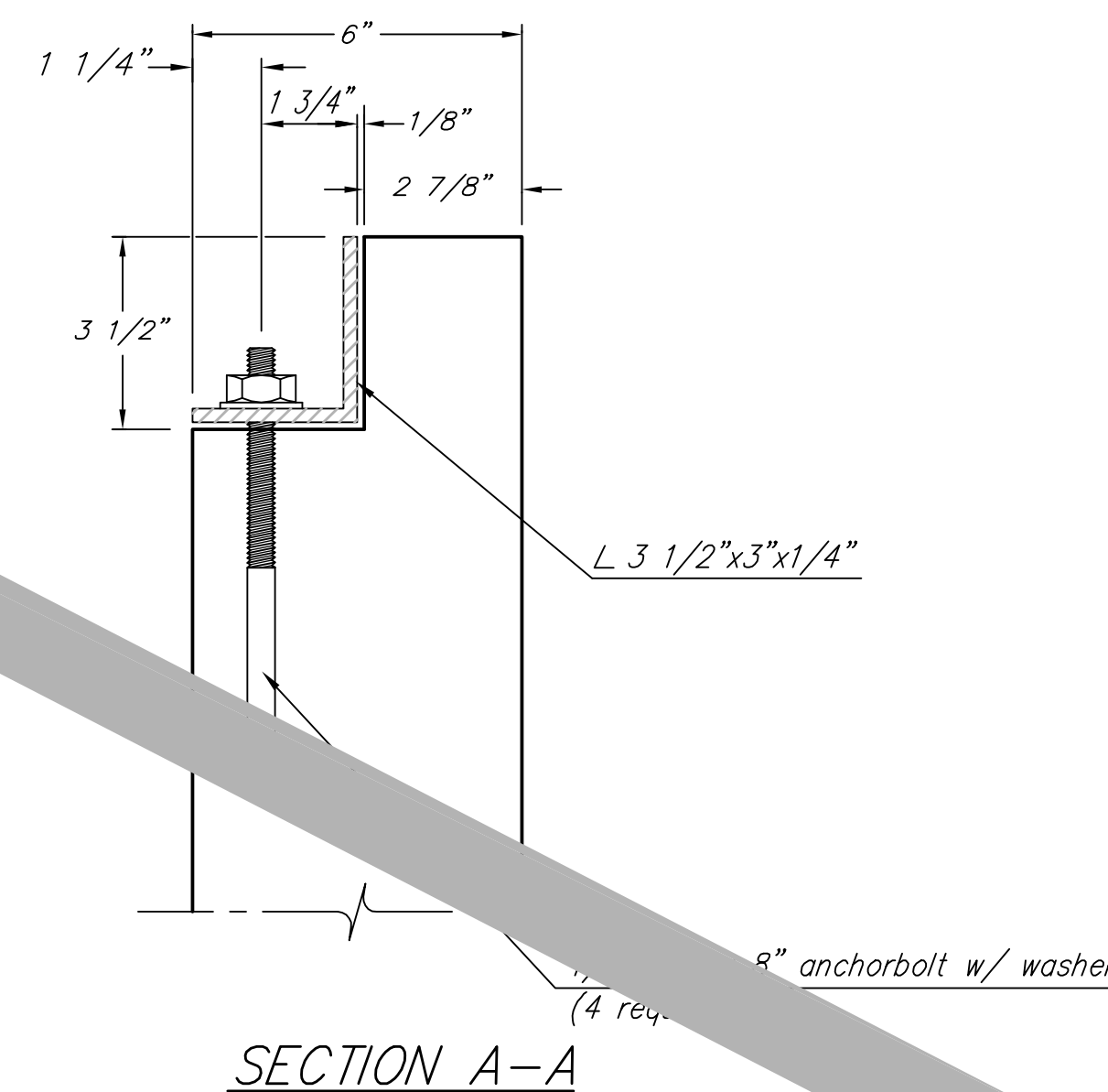
Floor of inlet shall be shaped as shown on Precast Concrete Manhole. Concrete used for shaping shall conform to city of Wichita specifications for concrete pavement mix. No addition in concrete quantities shall be made for shaping floor of inlets.

Reductions in concrete quantities shall be made for pipe penetrations.

The top of the manhole shall be sloped slightly to approximately fit the ground line or other conditions as directed by the Engineer.

The grate shall be fabricated from standard or commercial grade structural steel and black steel pipe. The unit shall be hot dipped, galvanized after fabrication, in accordance with ASTM A123 except the weight of coating shall average not less than 2.0 ounces per square foot of actual surface and no individual test shall show less than 1.8 ounces of coating per square foot of actual surface area.

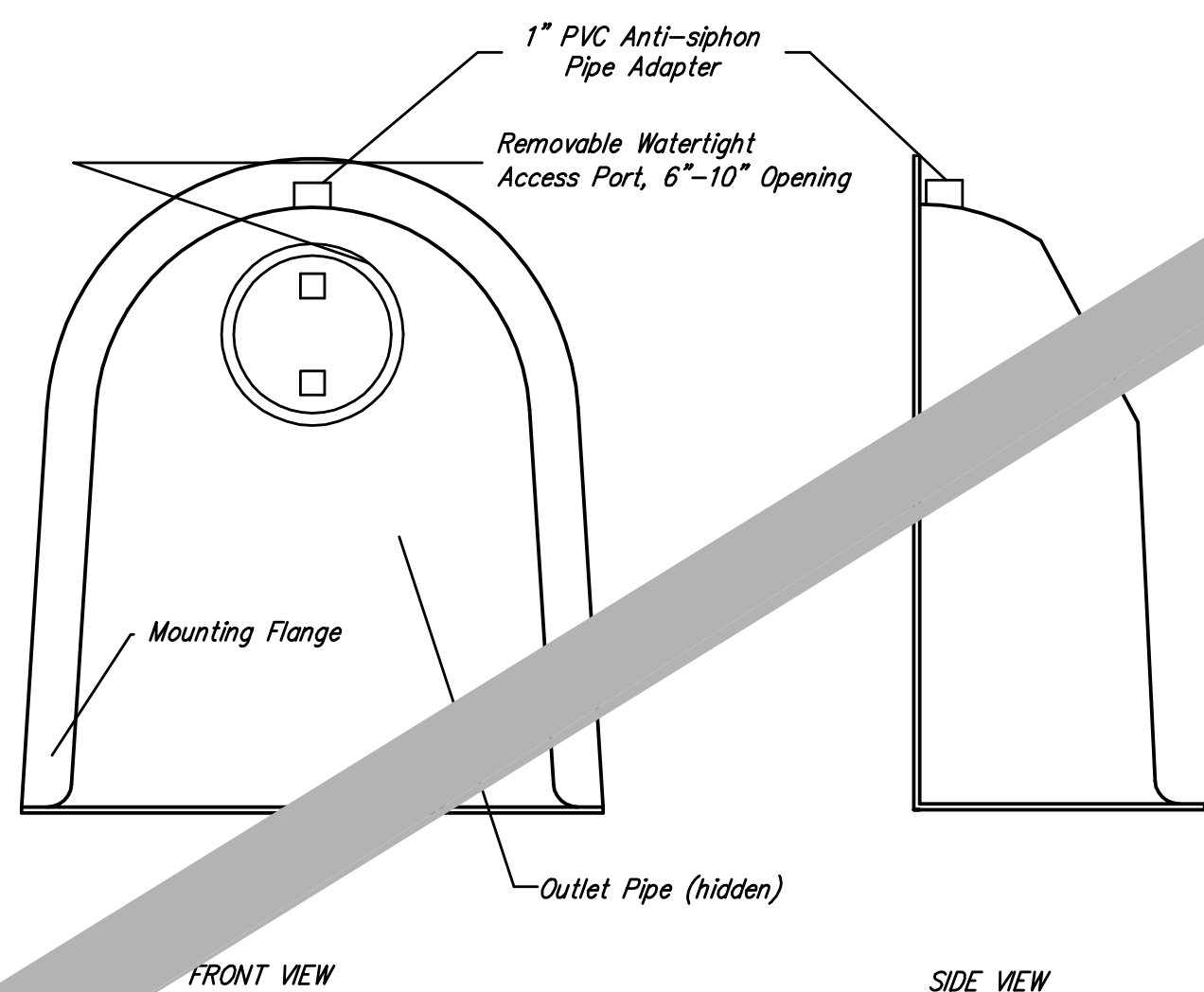
** Quantities shown are for information only.



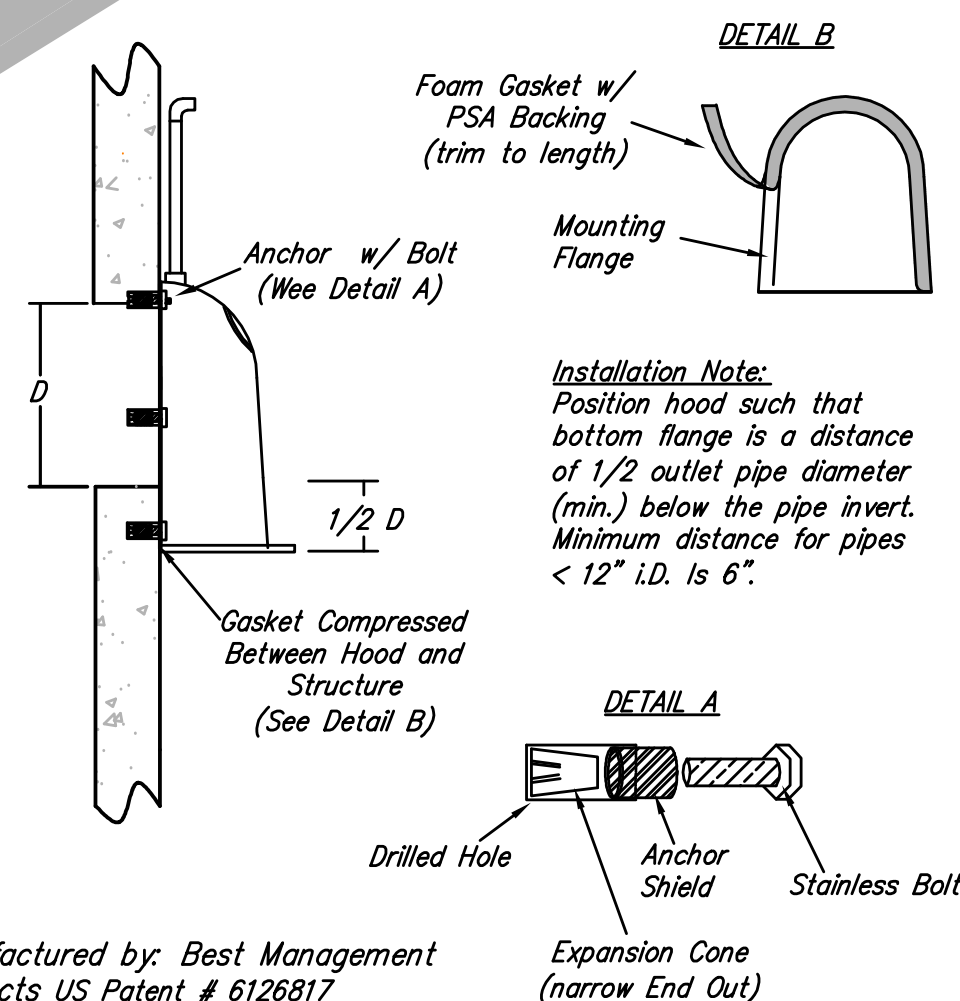
SECTION A-A

HOOD SPECIFICATION FOR CATCH BASINS AND WATER QUALITY STRUCTURES

CONFIGURATION DETAIL



INSTALLATION DETAIL



Notes:

- All hoods and traps for catch basins and water quality structures shall be as manufactured by Best Management Products, Inc. or pre-approved equal.
- All hoods shall be constructed of a glass reinforced resin composite with ISO Gel Coat exterior finish with a minimum 0.125" laminate thickness.
- All hoods shall be equipped with a watertight access port, a mounting flange, and an anti-siphon vent pipe and elbow as drawn. (See Configuration Detail)
- The size and position of the hood shall be determined by outlet pipe size as per manufacturer's recommendation (snout size always larger than pipe size).
- The bottom of the hood shall extend downward a minimum distance equal to 1/2 the outlet pipe diameter with a minimum distance of 6" for pipes <12" i.d.
- The anti-siphon vent shall extend above hood by minimum of 3" and a maximum of 12" according to structure configuration.
- The surface of the structure where the hood is mounted shall be finished smooth and free of loose material and pipe shall be finished flush to wall.
- The hood shall be securely attached to structure wall with 3/8" stainless steel bolts and oil-resistant gasket as supplied by manufacturer. (See Installation Detail)
- Installation instructions shall be furnished with manufacturer supplied installation kit. Installation kit shall include:
 - Installation instructions
 - PVC anti-siphon vent pipe and adapter
 - Oil-resistant crushed cell foam gasket with PSA backing
 - 3/8" stainless steel bolts
 - Anchor shields

SNOUT OIL-WATER-DEBRIS SEPARATOR

Manufactured by: Best Management Products US Patent # 6126817







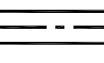

Baughman GREAT PLAINS BUSINESS PARK 4TH ADD.
Inlet Manhole
 Storm Water Sewer Improvements

Baughman Company, P.A. 515 Ella St. Wichita, KS 67211 P 316-263-2771 F 316-263-0149
 ENGINEERING | SURVEYING | PLANNING | LANDSCAPE ARCHITECTURE

PROJECT NUMBER	DESIGN Staff	DRAWN Staff
REVISIONS: 3/01/95 Baughman Company Revision	APPROVED	DATE 09/12
	SCALE None	SHEET

22 OF 25

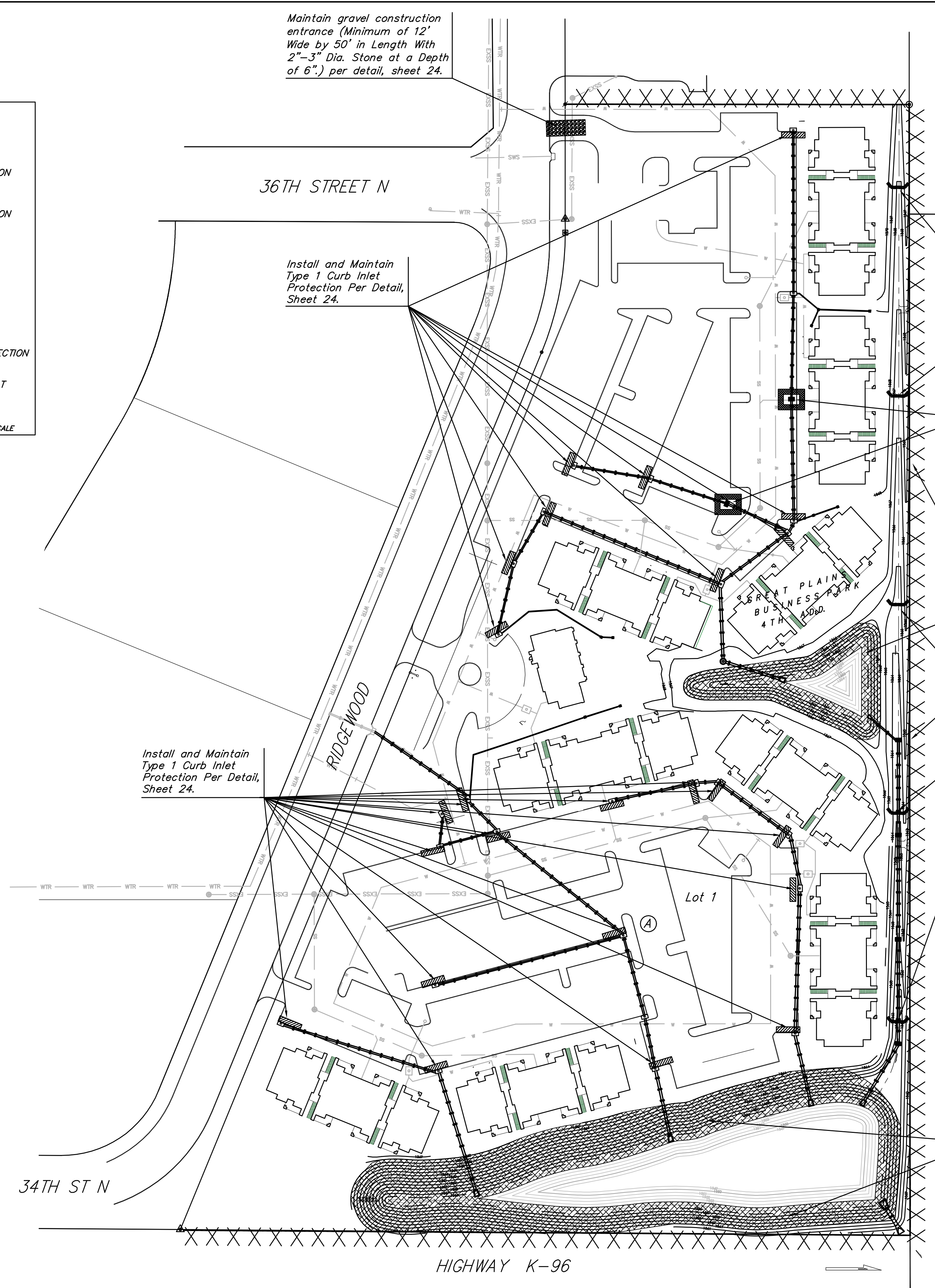
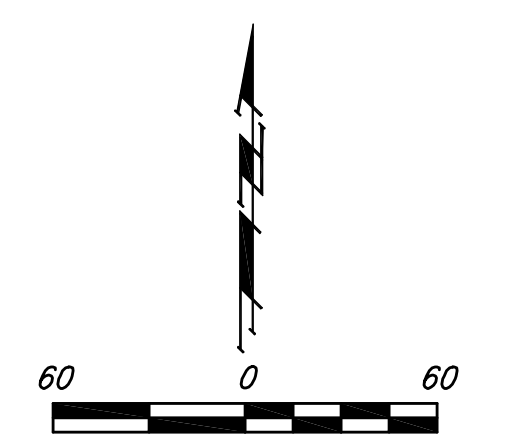
EROSION CONTROL PLAN LEGEND
(Installation Details Found in the SWP2 Plan)

-  - DROP INLET PROTECTION
-  - CURB INLET PROTECTION
-  - DITCH CHECKS
-  - SILT FENCING
-  - CUT-OFF TRENCH
-  - BACK OF CURB PROTECTION
-  - EROSION CONTROL MAT
-  - TEMPORARY DITCH

NO SCALE

EROSION CONTROL NOTES:

1. No leaf clearing or grading shall begin until all applicable erosion and sedimentation control measures are in place. The contractor shall be required to maintain all erosion control measures for the life of the project. Erosion control measures shall be maintained and repaired as necessary for the life of the project. Erosion control measures shall be maintained and repaired as necessary for the life of the project.
2. All exposed areas shall be seeded or mulched within 30 days of grading.
3. Should construction stop for longer than 15 days, the site shall be seeded.
4. Maintain erosion control measures after each rain and at least once a week.
5. This plan shall not be considered as inclusive as the contractor shall take all necessary precautions to prevent soil sediment from leaving the site.
6. Contractor shall comply with all state and local ordinances that apply.
7. Additional erosion and sediment control measures will be included if deemed necessary by the site inspector.
8. Land disturbing activities shall not commence until approved to do so has been received by governing authorities.
9. If installation of storm drainage system should be interrupted by weather or nightfall, the pipe ends shall be covered with filter fabric.
10. This SWP Plan should be in job trailer and/or on site at all times. The Contractor is responsible for any needed changes, updates or maintenance to BMP's on site. This plan may change and updates need to be recorded and documented on the plan. This plan is a Baseline plan, due to changing site conditions and weather. Please inform Landscape Architect and/or Engineer of changes to plan.
11. ANY substitutions for the sediment control devices shown, must be approved by the Landscape Architect and/or Engineer prior to any uses on site.
12. An NPDES permit application has been submitted for this property. A copy of this application must be on file at the job site for the duration of the construction process.



Install ditch check sediment barriers per detail, sheet 24.

Install drop inlet sediment barriers per detail, sheet 24.

Install 937 S.Y. Curlex II, or approved equal to be paid for as bid item "Erosion Control Mat". Erosion control mat shall be installed and anchored per manufacturer's specifications. Note: This quantity does not include excess material necessary for overlap and anchoring.

Maintain 2,113 L.F. of Erosion Control Silt Fence per Detail, sheet 24.

Install ditch check sediment barriers per detail, sheet 24.

Install 3,784 S.Y. Curlex II, or approved equal to be paid for as bid item "Erosion Control Mat". Erosion control mat shall be installed and anchored per manufacturer's specifications. Note: This quantity does not include excess material necessary for overlap and anchoring.

Install ditch check sediment barriers per detail, sheet 24.

EROSION CONTROL MEASURE	INSTALL	MAINTAIN	REMOVE
BACK OF CURB PROTECTION (LF)	0	0	0
CONSTRUCTION ENTRANCE (EA)	0	1	0
CURB INLET BARRIER (EA)	24	0	0
DITCH CHECK (EA)	7	0	0
DROP INLET PROTECTION (EA)	2	0	0
EROSION CONTROL (LS)	0	0	0
EROSION CONTROL BERM (LF)	0	0	0
SILT FENCE (LF)	0	2,113	0
EROSION CONTROL MAT (SY)	4,721	0	0

QUANTITIES ARE FOR INFORMATION ONLY! CONTRACTOR SHALL VERIFY QUANTITIES PER FINAL BID QUANTITY SHEET.

* ALL EXISTING BMPs INCLUDING CONSTRUCTION ENTRANCE, SEDIMENT BARRIERS, SILT FENCE, CUT-OFF TRENCH, AND EROSION CONTROL MAT SHALL BE MAINTAINED AND REPAIRED IF NECESSARY. REPLACEMENT OR REMOVAL OF EROSION CONTROL MEASURES TO BE PAID FOR BY L.S. BID ITEM "MAINTAIN EXISTING EROSION CONTROL BMPs"

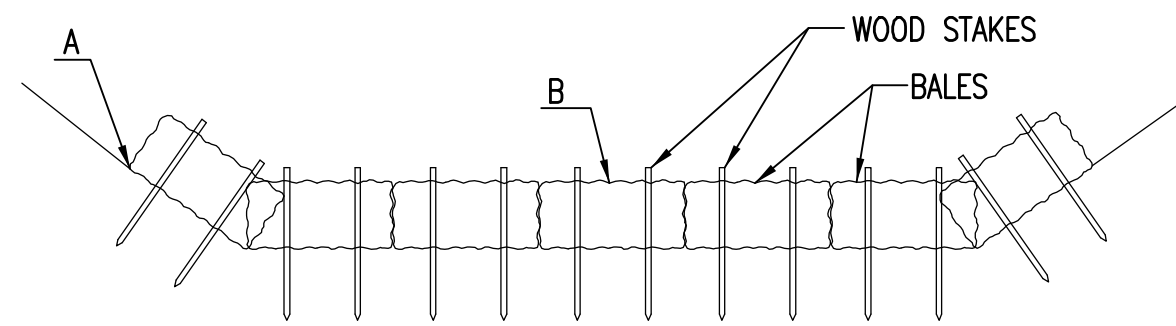
Baughman GREAT PLAINS BUSINESS PARK 4TH ADD.
EROSION CONTROL PLAN
STORM WATER SEWER IMPROVEMENTS

Baughman Company, P.A. 515 Ella St. Wichita, KS 67211 P 316-262-7771 F 316-262-0149
ENGINEERING | SURVEYING | PLANNING | LANDSCAPE ARCHITECTURE

PROJECT NUMBER	DESIGN	DRAWN
	TJW	TMS
REVISIONS:	APPROVED	DATE
		09/12
	SCALE	
	Noted	
	SHEET	
	23	OF 25

SWS.dwg 12-06-E777

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



STRAW BALE DITCH CHECKS

MATERIAL SPECIFICATION:

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

PLACEMENT:

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

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

PROPER INSTALLATION METHOD:

EXCAVATE A TRENCH PERPENDICULAR TO THE DITCH FLOWLINE THAT IS 4" DEEP AND A BALE'S WIDTH WIDE. EXTEND THE TRENCH IN A STRAIGHT LINE ALONG THE ENTIRE LENGTH OF THE PROPOSED DITCH CHECK. PLACE THE SOIL ON THE UPSTREAM SIDE OF THE TRENCH-IT WILL BE USED LATER.
 OPTIONAL: ON THE DOWNSTREAM SIDE OF THE TRENCH, ROLL OUT A LENGTH OF EROSION-CONTROL BLANKET (SCOUR APRON) EQUAL TO THE LENGTH OF THE TRENCH. PLACE THE UPSTREAM EDGE OF THE EROSION-CONTROL BLANKET ALONG THE BOTTOM UPSTREAM EDGE OF THE TRENCH. THE EROSION CONTROL BLANKET SHOULD BE ANCHORED IN THE TRENCH WITH ONE ROW OF 8" LANDSCAPE STAPLES PLACED ON 18" CENTERS. THE REMAINDER OF THE EROSION-CONTROL BLANKET (THE PORTION THAT IS NOT LYING IN THE TRENCH) WILL SERVE AS THE DOWNSTREAM SCOUR APRON. THIS SECTION OF THE BLANKET SHOULD BE ANCHORED TO THE GROUND WITH 8" LANDSCAPE STAPLES PLACED AROUND THE PERIMETER OF THE BLANKET ON 18" CENTERS. THE REMAINDER OF THE BLANKET SHOULD BE ANCHORED USING TWO EVENLY SPACED ROWS OF 8" LANDSCAPE STAPLES ON 18" CENTERS PLACED PERPENDICULAR TO THE FLOWLINE OF THE DITCH.
 PLACE THE BALES IN THE TRENCH, MAKING SURE THAT THEY ARE BUTTED TIGHTLY. TWO STAKES SHOULD BE DRIVEN THROUGH EACH BALE ALONG THE CENTERLINE OF THE DITCH CHECK, APPROXIMATELY 6" TO 8" IN FROM THE BALE ENDS. STAKES SHOULD BE DRIVEN AT LEAST 12" INTO THE GROUND.
 ONCE ALL THE BALES HAVE BEEN INSTALLED AND ANCHORED, PLACE THE EXCAVATED SOIL AGAINST THE UPSTREAM SIDE OF THE CHECK AND COMPACT IT. THE COMPACTED SOIL SHOULD BE NO MORE THAN 3" TO 4" DEEP AND EXTEND UPSTREAM NO MORE THAN 24".

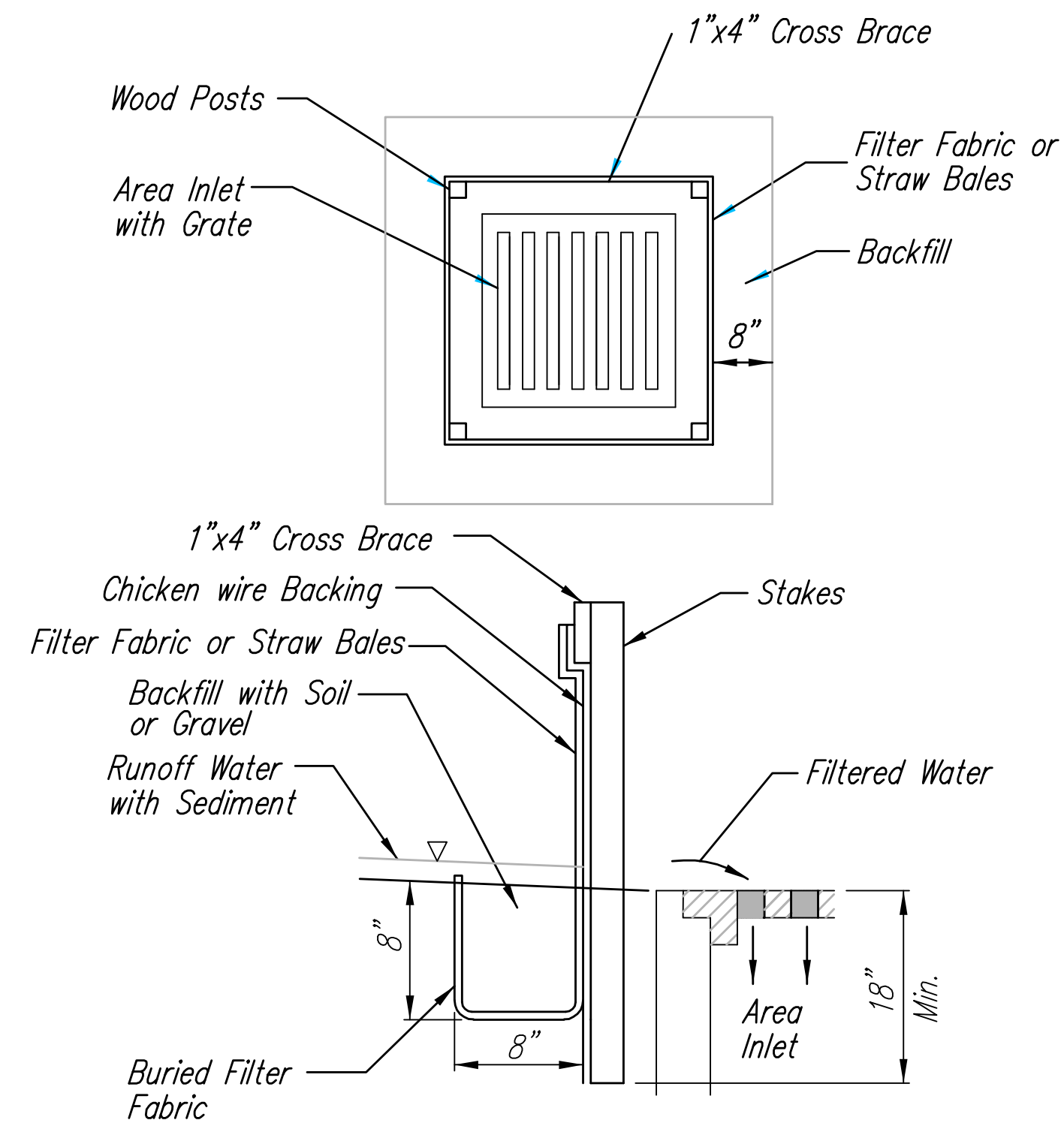
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

DO NOT PLACE A BALE DITCH CHECK DIRECTLY IN FRONT OF A CULVERT OUTLET. IT WILL NOT STAND UP TO THE CONCENTRATED FLOW.
 DO NOT PLACE BALE DITCH CHECKS IN DITCHES THAT WILL LIKELY EXPERIENCE HIGH FLOWS. THEY WILL NOT STAND UP TO CONCENTRATED FLOW.
 FOLLOW PRESCRIBED DITCH-CHECK SPACING GUIDELINES. IF SPACING GUIDELINES ARE EXCEEDED, EROSION WILL OCCUR BETWEEN THE DITCH CHECKS.
 DO NOT ALLOW WATER TO FLOW AROUND THE DITCH CHECK. MAKE SURE THAT THE DITCH CHECK IS LONG ENOUGH SO THAT THE GROUND LEVEL AT THE ENDS OF THE CHECK IS HIGHER THAN THE TOP OF THE LOWEST CENTER BALE.
 DO NOT PLACE BALE DITCH CHECKS IN CHANNELS WITH SHALLOW SOILS UNDERLAIN BY ROCK. IF THE CHECK IS NOT ANCHORED SUFFICIENTLY, IT WILL WASH OUT.
 BALE DITCH CHECKS MUST BE DUG INTO THE GROUND. BALES AT GROUND LEVEL DO NOT WORK BECAUSE THEY ALLOW WATER TO FLOW UNDER THE CHECK.

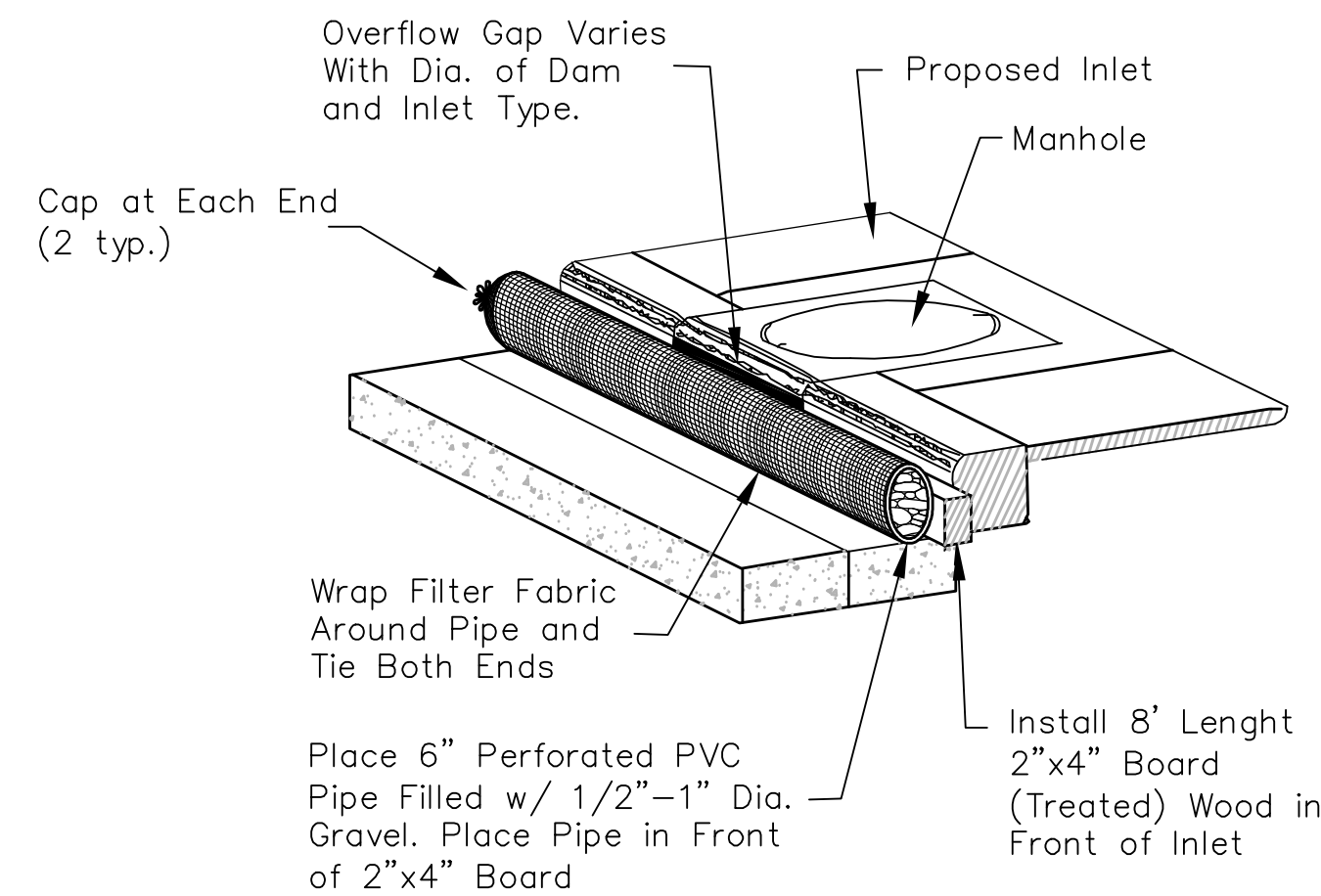
INSPECTION AND MAINTENANCE:

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

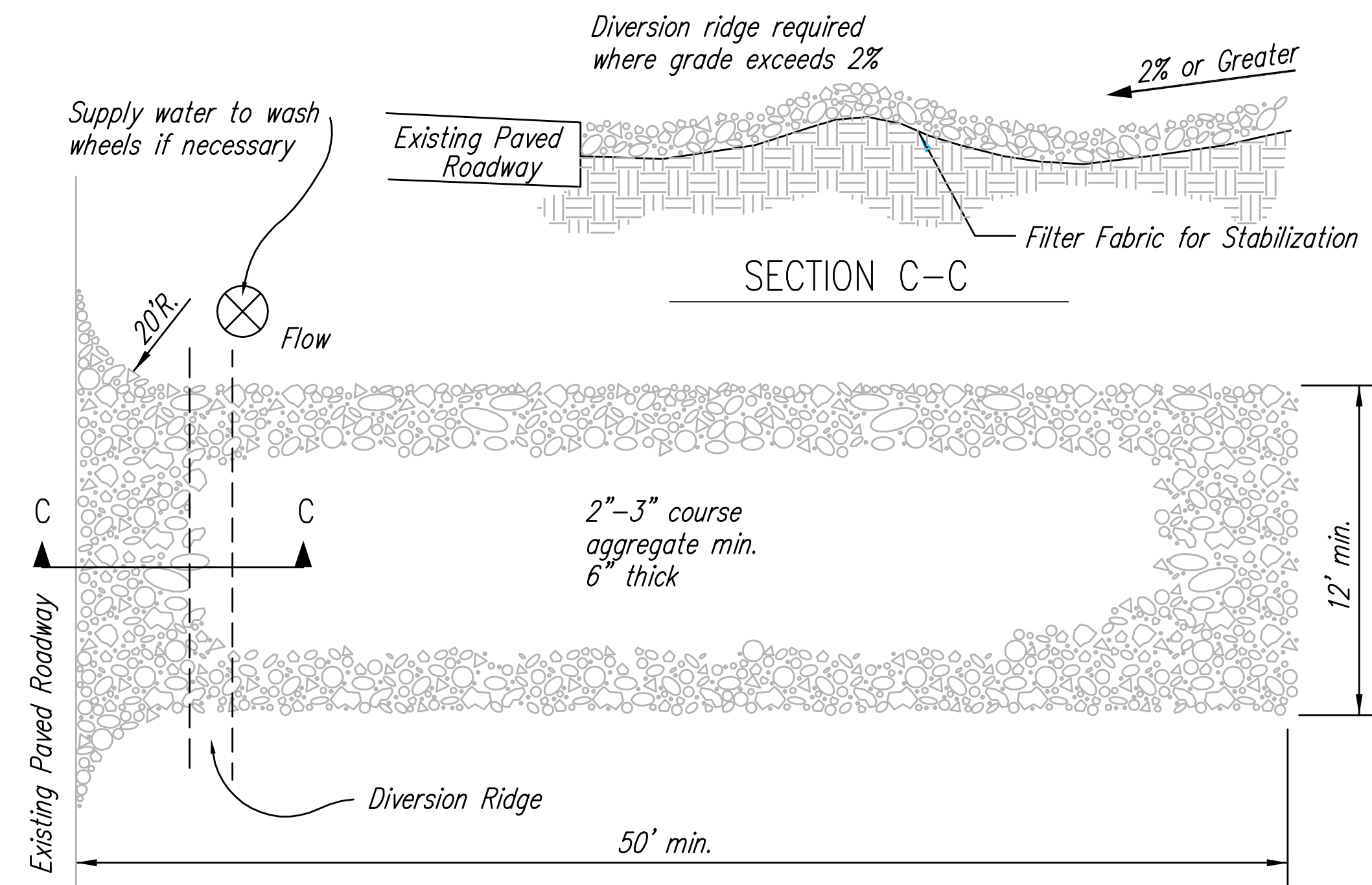
- DOES WATER FLOW AROUND THE DITCH CHECK?
- DOES WATER FLOW UNDER THE DITCH CHECK?
- DOES WATER FLOW THROUGH SPACES BETWEEN ABUTTING BALES?
- ARE ANY BALES AND/OR SCOUR APRONS (OPTIONAL) DISLODGED?
- ARE BALES DECOMPOSING DUE TO AGE AND/OR WATER DAMAGE?
- DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE DITCH CHECK?



1 INLET PROTECTION FOR AREA INLETS
 (INLET PROTECTION: SILT FENCE OR STRAW BALES)



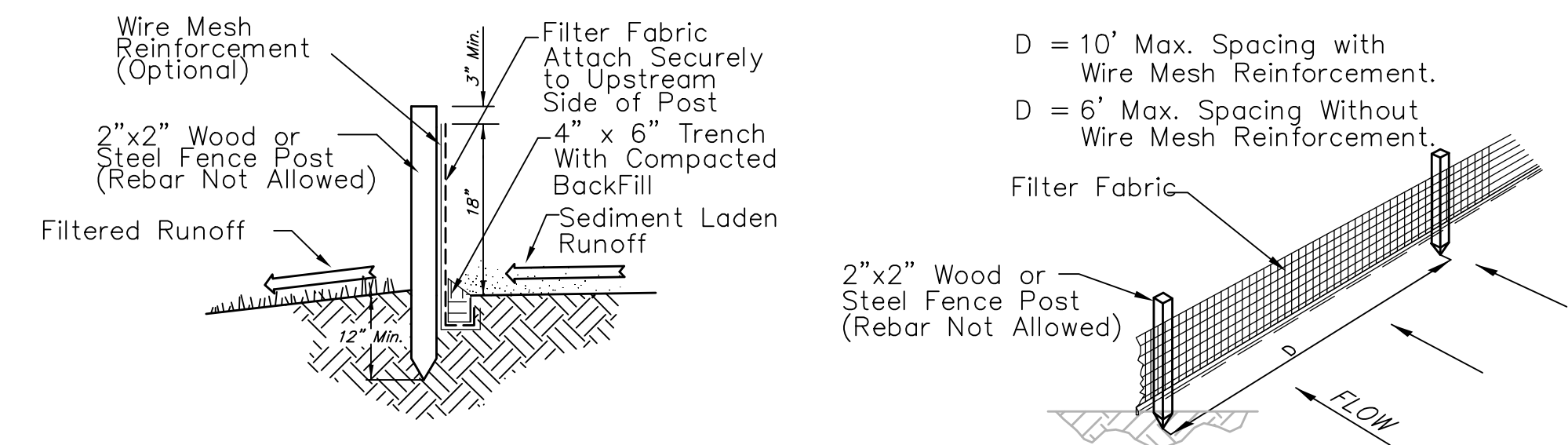
2 TYPE 1 INLET PROTECTION
 NOT TO SCALE



NOTES:

- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
- WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
- WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN, AS SHOWN ABOVE.
- DRIVE ENTRANCES ONTO RESIDENTIAL LOTS WILL NOT BE REQUIRED TO HAVE THE SEDIMENT BARRIER SHOWN, BUT WHEEL WASHING MAY BE REQUIRED IF STABILIZED ENTRANCE IS NOT SUFFICIENT TO KEEP MUD FROM BEING TRACKED ONTO ADJACENT STREET. ENTRANCE SHALL EXTEND FROM BACK OF CURB TO DWELLING.

3 STABILIZED CONSTRUCTION ENTRANCE
 NOT TO SCALE

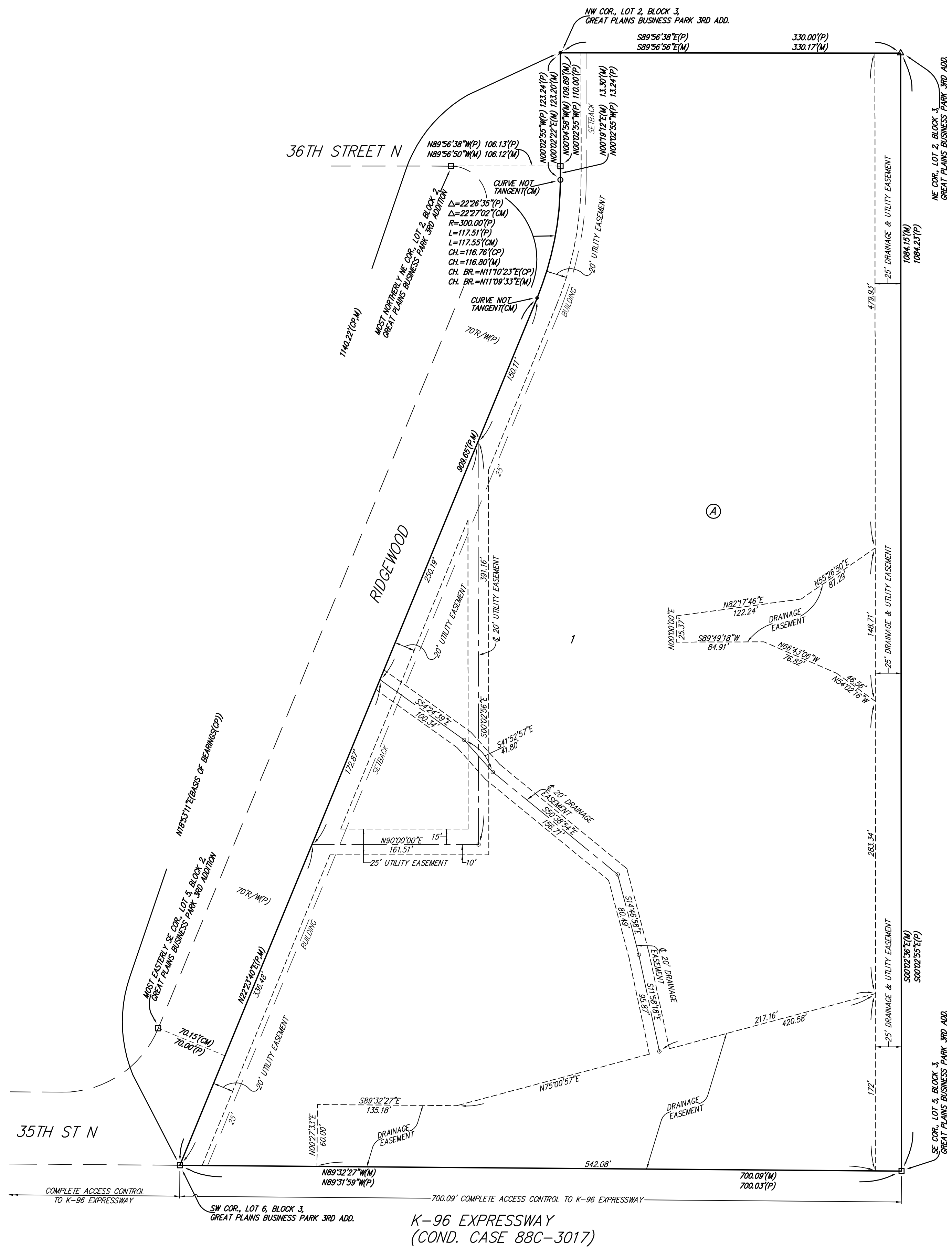


4 SILT FENCE DETAIL
 NOT TO SCALE

<p>CITY OF WICHITA PUBLIC WORKS & UTILITIES ENGINEERING DIVISION</p>	<p>STRAW BALE DITCH CHECK AND BARRIER DETAILS</p>		
	<p>INTERIM CITY ENGINEER GARY JANZEN, P.E.</p>		
	PROJECT NUMBER	OCA NUMBER	DATE
			09/12
CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		DESIGN	DRAWN
		SHEET 24 of 25	

GREAT PLAINS BUSINESS PARK 4TH ADDITION

WICHITA, SEDGWICK COUNTY, KANSAS



NOTE:
ADDITIONAL BUILDING SETBACK REQUIREMENTS AND RESTRICTIONS PER COMMUNITY UNIT PLAN DP-326.

- = #4 REBAR W/ "BAUGHMAN" CAP (SET)
- = #4 REBAR W/ "BAUGHMAN" CAP (FOUND)
- = #5 REBAR W/ "TIG" CAP (FOUND)
- = #5 REBAR (FOUND)
- △ = #4 REBAR W/ "SL5168" CAP (FOUND)

(M) = MEASURED
(P) = PLATED
(CM) = CALCULATED PER MEASURED INFO.
(CP) = CALCULATED PER PLATED INFO.

MINIMUM BUILDING PAD ELEVATIONS FOR LOWEST OPENING TO THE STRUCTURES		
LOT	BLOCK	ELEVATION
1	A	1366.0

BENCHMARK:
CROSS CUT ON TOP OF CATCH BASIN, WEST SIDE OF RIDGEWOOD, 14'2" NORTHEAST OF THE SE COR. OF LOT 3, BLOCK 2, GREAT PLAINS BUSINESS PARK 3RD ADDITION. ELEV.=1366.03 (NAVD88)

State of Kansas) SS We, Baughman Company, P.A., Surveyors in Sedgwick County) do hereby certify that we have surveyed and platted "GREAT PLAINS BUSINESS PARK 4TH ADDITION", Wichita, Sedgwick County, Kansas and that the accompanying plat is a true and correct exhibit of the property surveyed, described as and being a replat of all of Lots 2, 3, 4, 5, and 6, Block 3, Great Plains Business Park 3rd Addition to Wichita, Kansas, Sedgwick County, Kansas, TOGETHER with all of Ridgewood Court as dedicated in said Great Plains Business Park 3rd Addition.

All being situated in the Northwest Quarter of Section 36, Township 26 South, Range 1 East of the 6th Principal Meridian, Sedgwick County, Kansas.

Existing public easements and dedications being vacated by virtue of K.S.A. 12-512b.

Baughman Company, P.A.

_____, Surveyor
Michael G. Conrey

Know all men by these presents that we, the undersigned, have caused the land in the surveyors certificate to be platted into a Lot and a Block, to be known as "GREAT PLAINS BUSINESS PARK 4TH ADDITION", Wichita, Sedgwick County, Kansas. The utility easements are hereby granted as indicated for the construction and maintenance of all public utilities. The drainage and utility easements are hereby granted as indicated for drainage purposes and for the construction and maintenance of all public utilities. The drainage easements are hereby granted as indicated for drainage purposes. Access controls shall be as indicated on the face of the plat and are hereby granted to the appropriate governing body. The Minimum Building Pad Elevation for the lowest opening to the structures on Lot 1, Block A shall be as indicated on the face of the plat.

Ridgewood North, LLC,
a limited liability company

_____, Manager
Susayn C. Brandes, President of
Great Plains Ventures, Inc.,
a Kansas corporation

State of Kansas) SS The foregoing instrument acknowledged before me, this _____ day of _____, 2012, by Susayn C. Brandes, President of Great Plains Ventures, Inc., a Kansas corporation, as Manager of Ridgewood North, LLC, a limited liability company, on behalf of the limited liability company.

_____, Notary Public

My App't. Exp. _____

We, the undersigned holders of a mortgage on the above described property, do hereby consent to this plat of "GREAT PLAINS BUSINESS PARK 4TH ADDITION", Wichita, Sedgwick County, Kansas.

INTRUST Bank, N.A.

State of Kansas) SS The foregoing instrument acknowledged before me, this _____ day of _____, 2012, by _____, _____ of INTRUST Bank, N.A., on behalf of the bank.

_____, Notary Public

My App't. Exp. _____

This plat of "GREAT PLAINS BUSINESS PARK 4TH ADDITION", Wichita, Sedgwick County, Kansas has been submitted to and approved by the Wichita-Sedgwick County Metropolitan Area Planning Commission, Wichita, Kansas.

Dated this _____ day of _____, 2012.

Wichita-Sedgwick County Metropolitan Area Planning Commission

_____, Chair
Shawn Farney

_____, Secretary
John L. Schlegel

This plat approved and all dedications shown hereon accepted by the City Council of the City of Wichita, Kansas, this _____ day of _____, 2012.

_____, Mayor
Carl Brewer

_____, City Clerk
Karen Sublett

Reviewed in accordance with K.S.A. 58-2005 on this _____ day of _____, 2012.

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

Entered on transfer record this _____ day of _____, 2012.

_____, County Clerk
Kelly B. Arnold

State of Kansas) SS This is to certify that this plat has been filed for record in the office of the Register of Deeds, this _____ day of _____, 2012 at _____ o'clock _____ M; and is duly recorded.

_____, Register of Deeds
Bill Meek

_____, Deputy
Tonya Buckingham

