

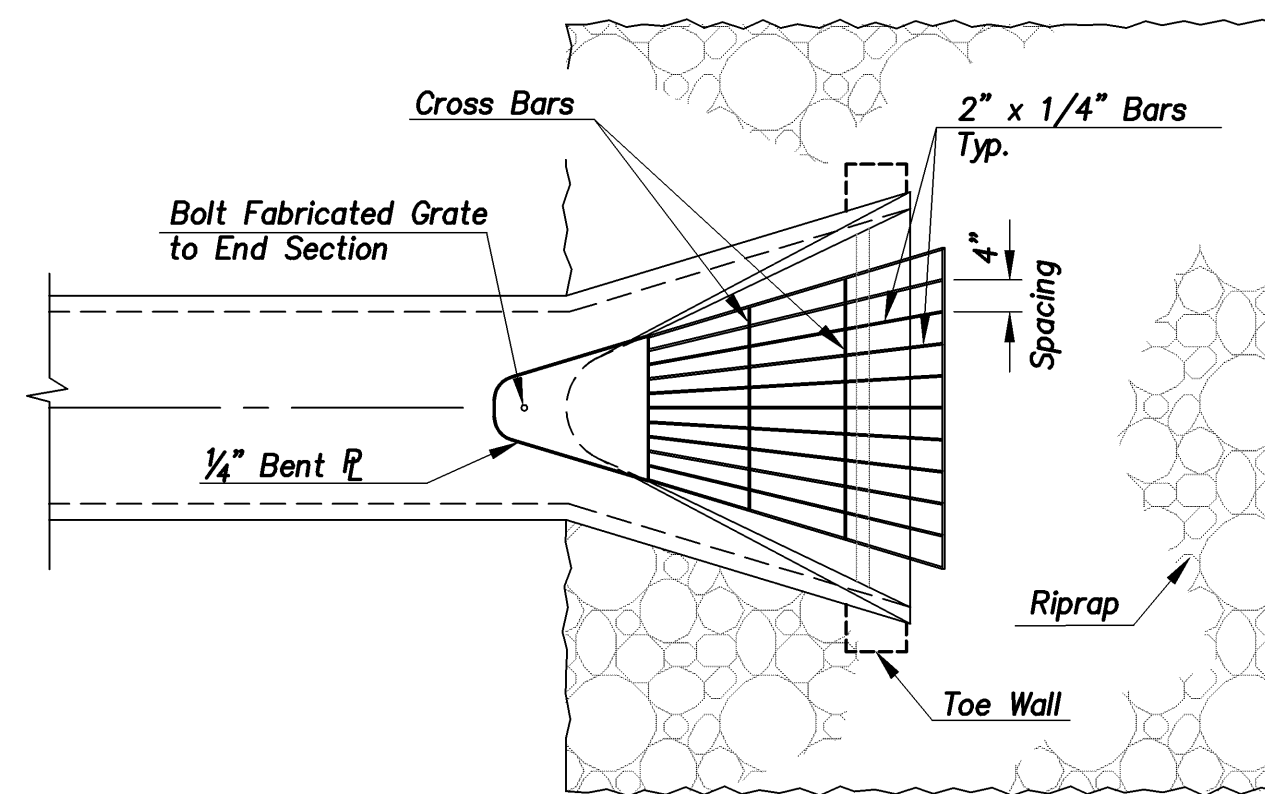
TYPICAL FLAP GATE DETAIL

Scale: 1/2" = 1'-0"

Notes for Flap Gates:

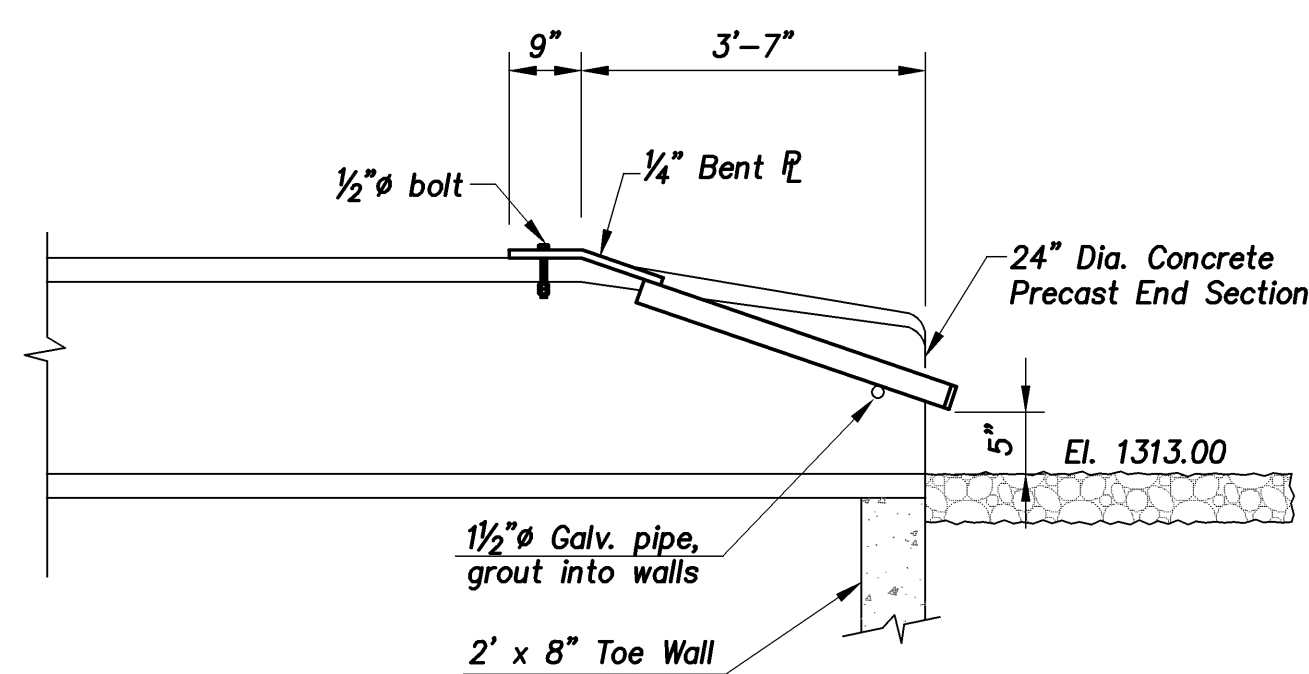
1. Flap gates shall be heavy duty with round openings for heads up to 50 feet.
2. Flap gates shall meet the following:
 - a. Seat and cover (one piece each)—Cast Iron, ASTM A126, Class B
 - b. Seating Faces — Silicon Bronze, ASTM B98, Alloy 651
 - c. Pivot Lugs — Ductile Iron, ASTM A536, Grade 80-55-06
 - d. Links — Ductile Iron, ASTM A536, Grade 80-55-26
 - e. Bushings — Bronze, ASTM B584, Alloy 932
 - f. Fasteners — Stainless Steel, ASTM F593 (Bolts), Alloy Group 2, Type 316
3. Flap Gates shall be installed on MJ Wall Thimbles and as recommended by the manufacturer. All machine surfaces shall be coated with a water resistant rust preventive compound. All cast iron parts shall be shop cleaned and painted according to the manufacturer's standard practice. All gates shall be equipped with stops.
4. Flap Gates shall be fitted with a stainless steel spring bumper.

Opening Size Dia. (in.)	Dimensions (in.)			Pivot Radius (in.)
	A	B	C	
8	13.50	6.75	9.50	14.00
12	19.00	9.50	10.25	16.75
20	27.50	13.75	16.25	26.25
24	32.00	16.00	19.25	31.25
36	46.00	23.00	27.50	45.50
48	59.50	29.75	37.75	61.75



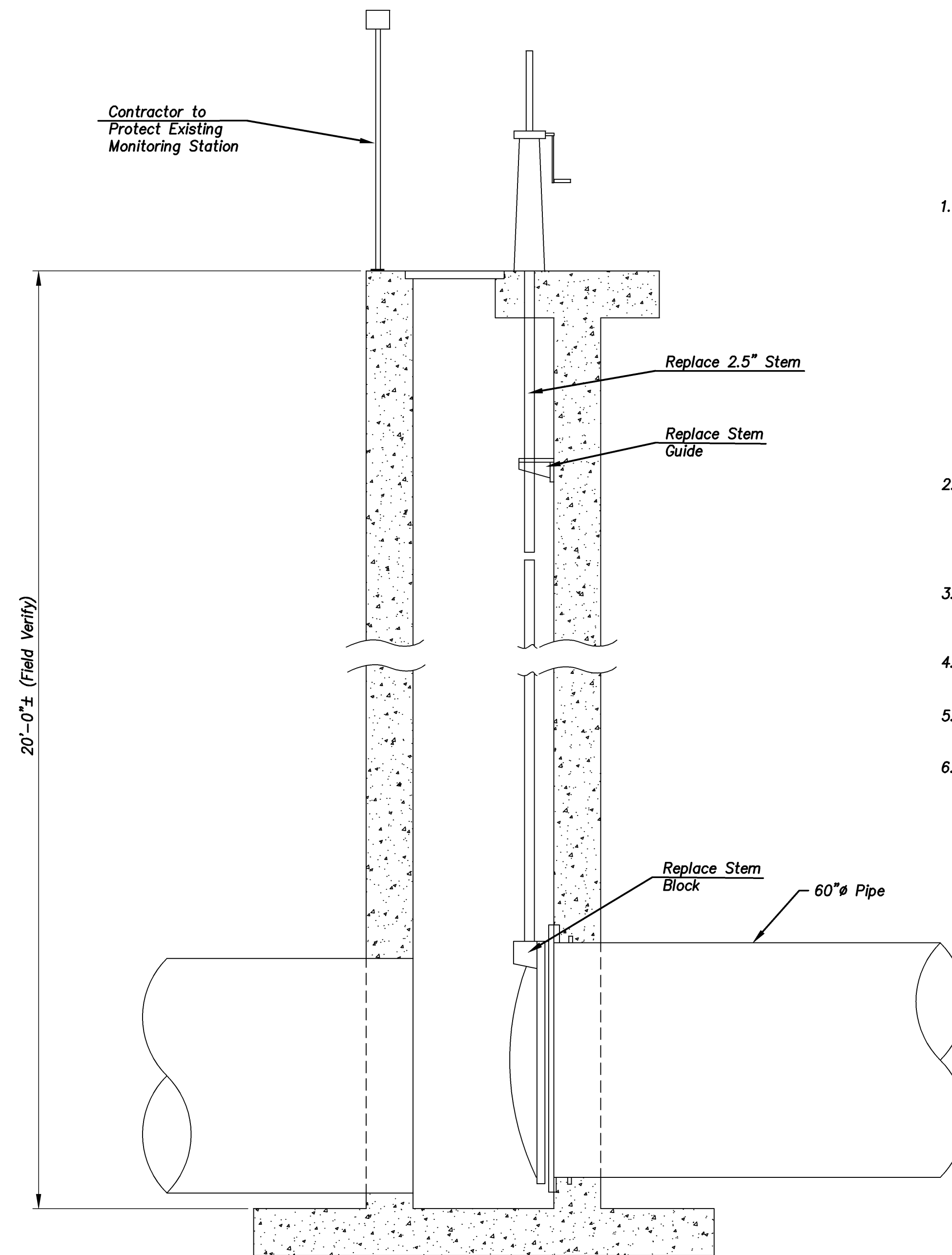
PLAN — POND OUTLET STRUCTURE

No Scale



SECTION — POND OUTLET STRUCTURE

No Scale



**SECTION
EXISTING SLUICE GATE STRUCTURE
(Three (3) Gates to be Rehabilitated)**

No Scale

Sluice Gate Rehabilitation Notes:

1. The following sluice gate parts shall be replaced on all three gates:
 - Crane lift — Rising stem with 12:1 ratio with stop nut and clear plastic stem cover.
 - Stem — 2 1/2" diameter 304 stainless steel with left hand rolled threads.
 - Stem guide — Split-type, cast iron bracket with bronze guide collar.
 - Stem block — Manganese bronze, threaded and bolted to the stem.
2. The existing gates are Armco 60x60 gates. The gatewell width is about 76". There is one stem guide down about 47" from the deck. The structure is about 20' deep. The contractor is to verify all dimensions including the required stem length.
3. The gates shall be thoroughly cleaned and inspected. The portions of the gate requiring lubrication shall be maintained as recommended by the manufacturer.
4. The gates shall be brought to full operation and demonstrated by the manufacturer's representative.
5. Steel gate components shall be painted as recommended by the manufacturer.
6. The rehabilitation details shall be prepared by the manufacturer and submitted by the contractor for shop drawing review.

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CITY OF WICHITA, KANSAS	
PUMP STATION NO. 11	
CIVIL	
GATES & DRAINAGE DETAILS	

Cook, Flatt & Strobel
ENGINEERS, P. A.

DESIGNED	MDC	SCALE	As Shown
DETAILED	HAP	DATE	3-10-2010
CHECKED		SHEET	C17 OF C31