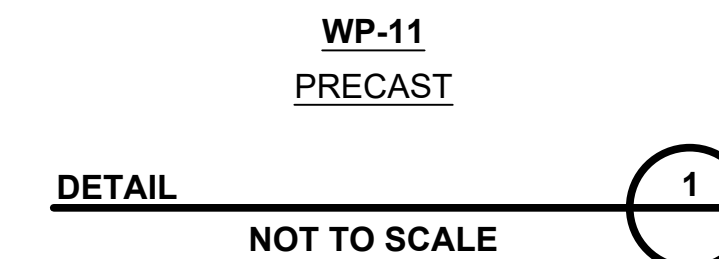
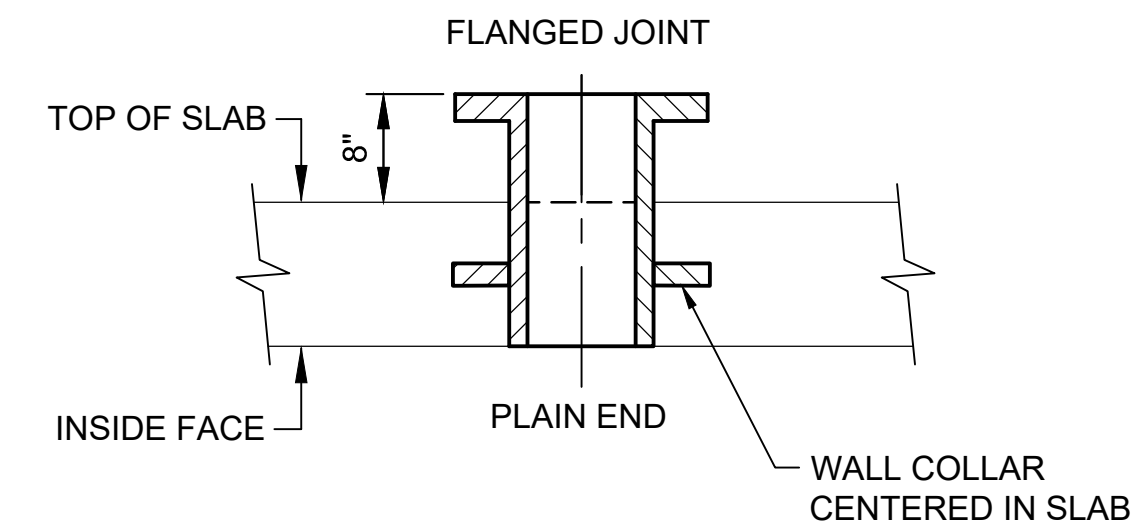
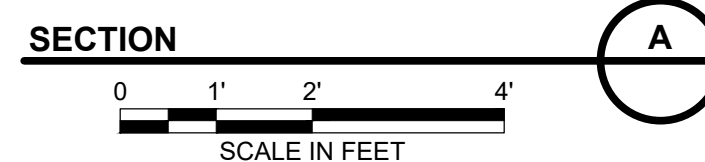
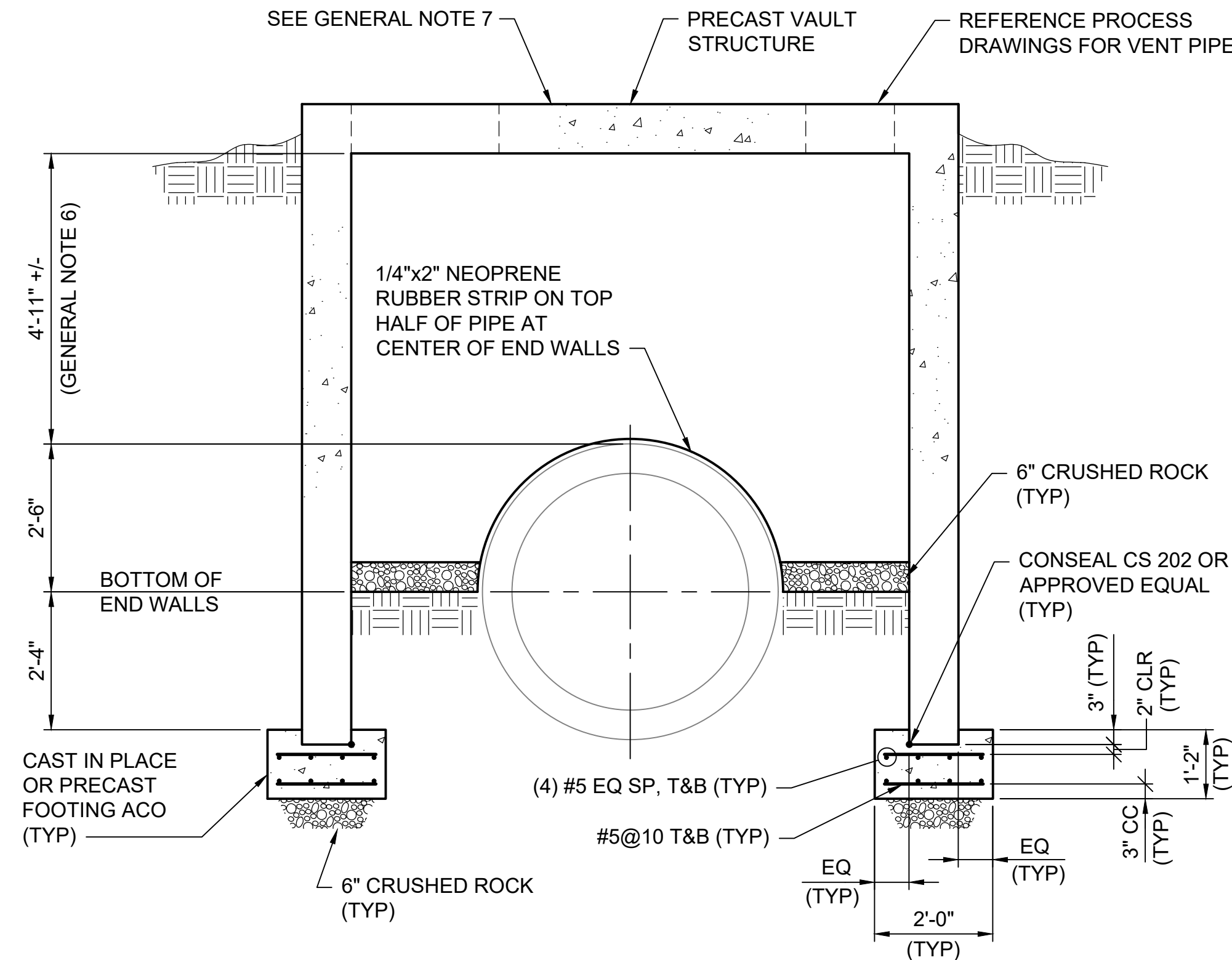
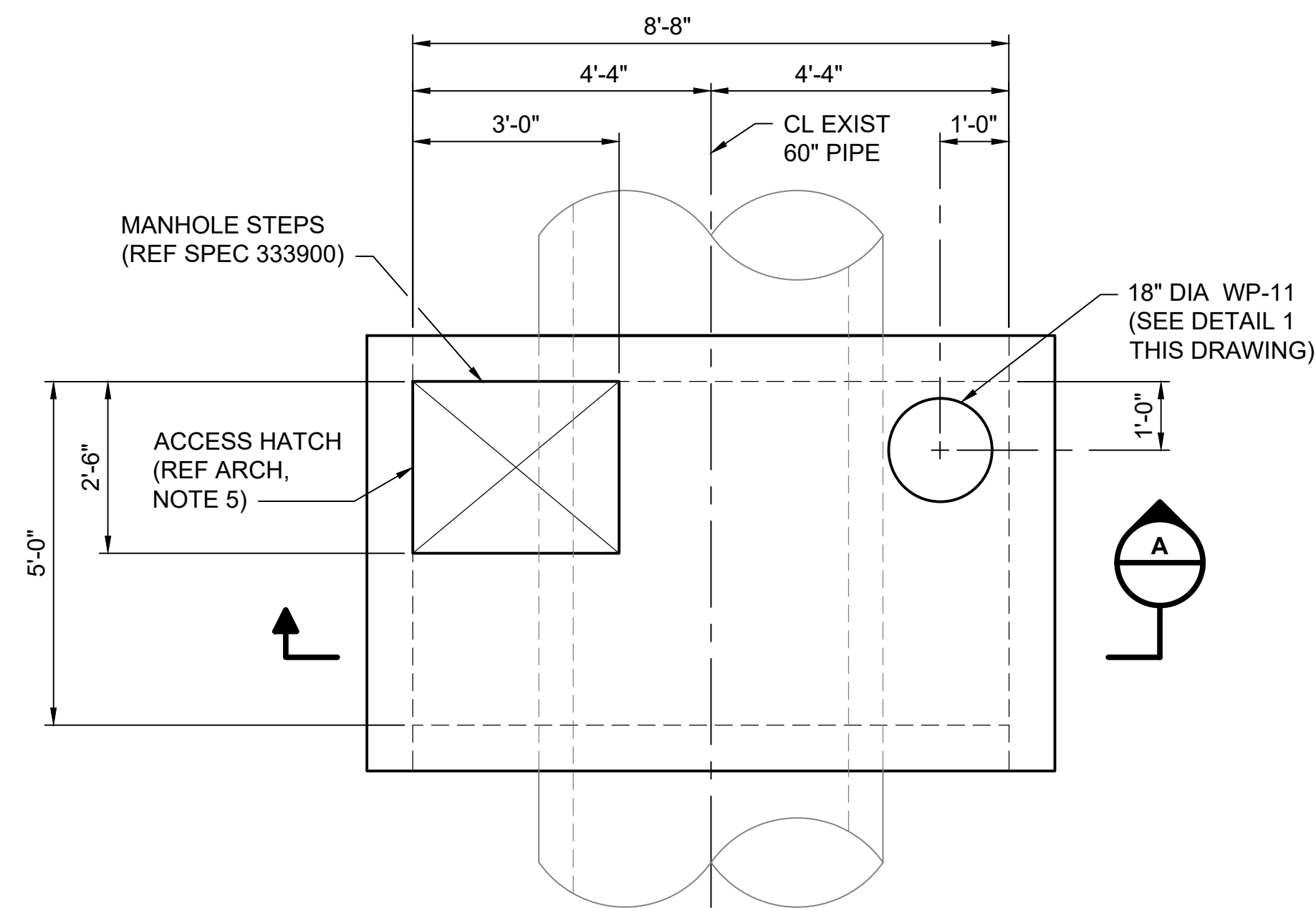


**BID ALTERNATE**

no.	date	by	ckd	description
0	11/8/17	AMG	JT	ISSUED FOR BID



**GENERAL NOTES:**

- THIS SHEET SHALL APPLY ONLY TO BID ALTERNATES 1, 2, AND 3 FOR VAULTS 14, 19, AND 21.
- MATERIALS:
  - CONCRETE:
    - CONCRETE SHALL CONFORM TO ALL REQUIREMENTS OF ACI 301-10. STANDARD SPECIFICATIONS FOR STRUCTURAL CONCRETE EXCEPT AS MODIFIED BY THE SUPPLEMENT REQUIREMENTS BELOW:
      - CAST IN PLACE  $f_c = 4500$  PSI @ 28 DAYS UNLESS NOTED OTHERWISE.
      - 6% +/- 1.5% ENTRAINED AIR PER ASTM C260 FOR ALL CONCRETE EXPOSED TO WEATHER.
    - CONCRETE CLEAR COVER FOR CAST-IN-PLACE CONCRETE SHALL BE 3" FOR EARTH FORMED AND 2" ALL OTHER CASES UNLESS NOTED OTHERWISE. MINIMUM CLEAR COVER FOR PRECAST CONCRETE STRUCTURES SHALL BE 1 1/2".
    - ADMIXTURES SHALL NOT CONTAIN ANY CHLORIDE IONS.
    - SUBMIT PROPOSED MIX DESIGNS TO ENGINEER FOR REVIEW.
  - REINFORCING STEEL:
    - ALL REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60, UNLESS NOTED OTHERWISE.
    - SUBMIT SHOP DRAWINGS FOR REVIEW. THESE DRAWINGS SHALL SHOW ALL CONCRETE DIMENSIONS.
  - FORMWORK:
    - FORMWORK FOR ALL CONCRETE THAT WILL BE EXPOSED WHEN COMPLETE, SHALL BE CONSTRUCTED FROM METAL OR SUITABLE SURFACE PLYWOOD THAT WILL PRODUCE AN ACCEPTABLE SMOOTH SURFACE.
    - PROVIDE 3/4-INCH CHAMFER ON ALL EXPOSED CORNERS OF SLABS UNLESS OTHERWISE INDICATED. MINIMUM CLEARANCES FOR REINFORCEMENT SHALL BE MAINTAINED.
- LOADS: SEE PRECAST STRUCTURE NOTES.
- ASSUMED NET ALLOWABLE BEARING PRESSURE = 1500 PSF
- HATCH ANCHORS SHALL BE 304 SST HILTI HAS ADHESIVE ANCHORS WITH HILTI HIT-HY200 ADHESIVE OR ENGINEER APPROVED EQUAL. ANCHOR DIAMETER AND EMBEDMENT PER HATCH MANUFACTURER.
- TOP OF CONCRETE VAULT ELEVATION SHALL MATCH EXISTING VAULT ELEVATION.
- INSULATE AND COVER VAULT PER PROCESS AND ARCHITECTURAL DRAWINGS.

**PRECAST STRUCTURE NOTES:**

- STRUCTURAL DESIGN LOADS:
  - PRECAST MANUFACTURER SHALL DESIGN TOP SLAB, WALLS AND BASE SLAB OF ALL PRECAST STRUCTURES WHERE INDICATED ACCORDING TO IBC 2012, ACI318 AND REQUIREMENTS BELOW:
    - RECTANGULAR PRECAST STRUCTURES SHALL ALSO CONFORM TO ASTM C913.
  - TOP SLAB:
    - UNIFORM LOAD: 300 PSF
    - CONCENTRATED LIVE LOAD: 1500 LB
  - WALLS:
    - SOIL EQUIVALENT FLUID DENSITY: 100 PCF
    - SURCHARGE LOAD: 80 PSF
  - ALL WALLS, AND TOP AND BASE SLAB THICKNESS SHALL BE DETERMINED BY THE PRECAST MANUFACTURER AND SHALL BE 6" MINIMUM.
  - PRECAST MANUFACTURER SHALL SUBMIT SHOP DRAWINGS AND CALCULATIONS SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF KANSAS TO ENGINEER FOR APPROVAL.
- PRECAST CONCRETE:
  - $f_c = 5000$  PSI @ 28 DAYS.
  - SEE GENERAL NOTES FOR ADDITIONAL REQUIREMENTS.
- REINFORCING STEEL: SEE GENERAL NOTES
- ALL ALUMINUM SURFACES IN CONTACT WITH CONCRETE SHALL HAVE A BITUMASTIC COATING.



This document has been digitally sealed. 09/25/17



9400 WARD PARKWAY  
KANSAS CITY, MO 64114  
816-333-9400  
LICENSEE NO. E-65

date	designed	detailed
SEPTEMBER 27, 2017	A. GRIFFIN	B. FIFIELD
checked	J. TSOUFLIAS	



SEDGWICK, KANSAS

**WICHITA CHENEY PIPELINE**

VAULT REPLACEMENT PLANS, SECTIONS, AND DETAILS	
project	contract
97687	
drawing	rev.
<b>BA-S002</b>	<b>0</b>
sheet	of sheets
file 97687_S002.DWG	

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