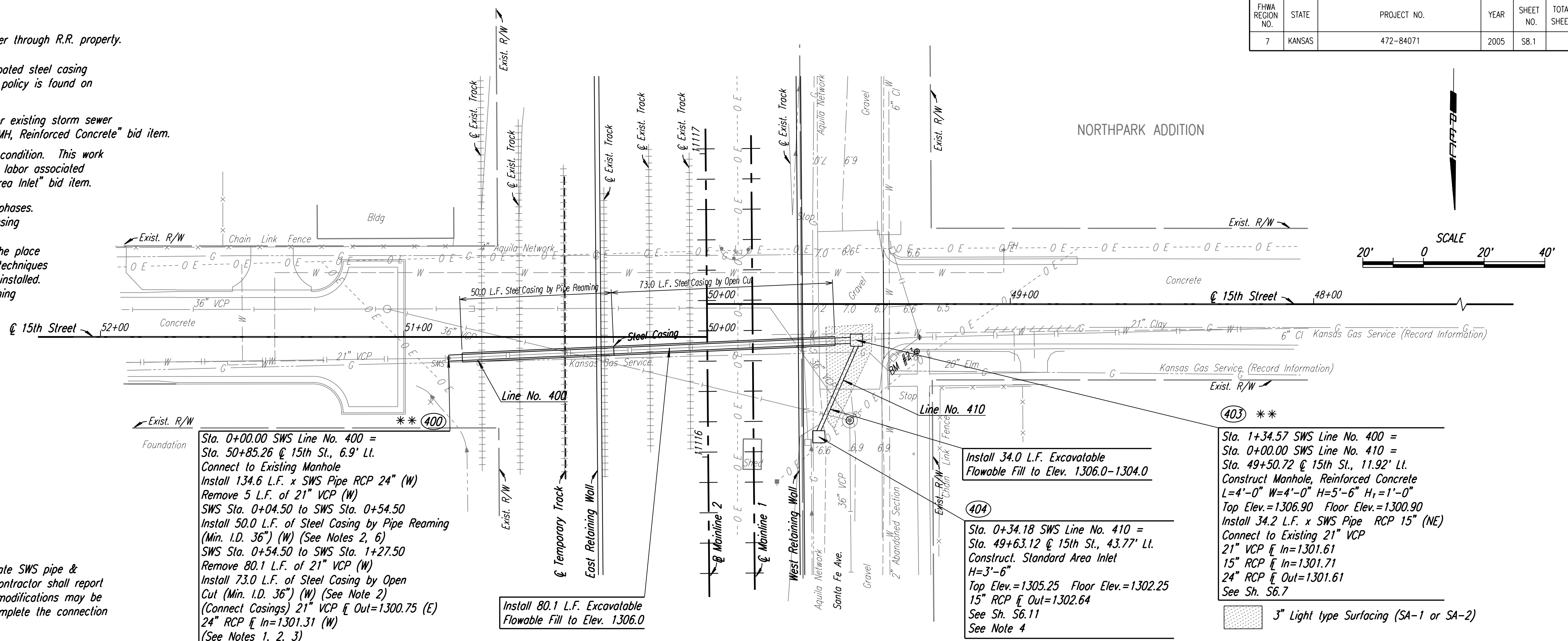


| FHWA REGION NO. | STATE  | PROJECT NO. | YEAR | SHEET NO. | TOTAL SHEETS |
|-----------------|--------|-------------|------|-----------|--------------|
| 7               | KANSAS | 472-84071   | 2005 | S8.1      |              |

**Notes:**

- 1) See construction sequencing for coordination of storm sewer through R.R. property.
- 2) Refer to "B.N.S.F. Utility Accommodation Policy" for non-coated steel casing thickness & construction guidelines. Information to acquire policy is found on the general notes page.
- 3) All material & labor associated with connecting proposed or existing storm sewer pipe to proposed manhole or inlet shall be incidental to "MH, Reinforced Concrete" bid item.
- 4) Contractor shall field adjust Inlet as necessary to fit field condition. This work shall be coordinated with the field engineer. All material & labor associated with adjustment of Inlet shall be incidental to "Standard Area Inlet" bid item.
- 5) Storm sewer pipe and casing shall be constructed in two phases. Refer to construction sequencing plans for storm sewer phasing.
- 6) Pipe Reaming process involves installing a casing pipe in the place of existing pipe by utilizing directional drilling, tooling and techniques to grind and remove the existing pipe as the new pipe is installed. All material, labor and pumping required for the Pipe Reaming process shall be incidental to the bid item "L.F. of Pipe Reaming (min. ID XX").

| BY | DATE |
|----|------|
|    |      |
|    |      |



\*\* Prior to beginning construction the contractor shall excavate SWS pipe & manholes to verify location, elevation & integrity. The contractor shall report his findings to the engineer so that any necessary plan modifications may be made. Any additional labor or materials necessary to complete the connection shall be considered Subsidiary to the project.

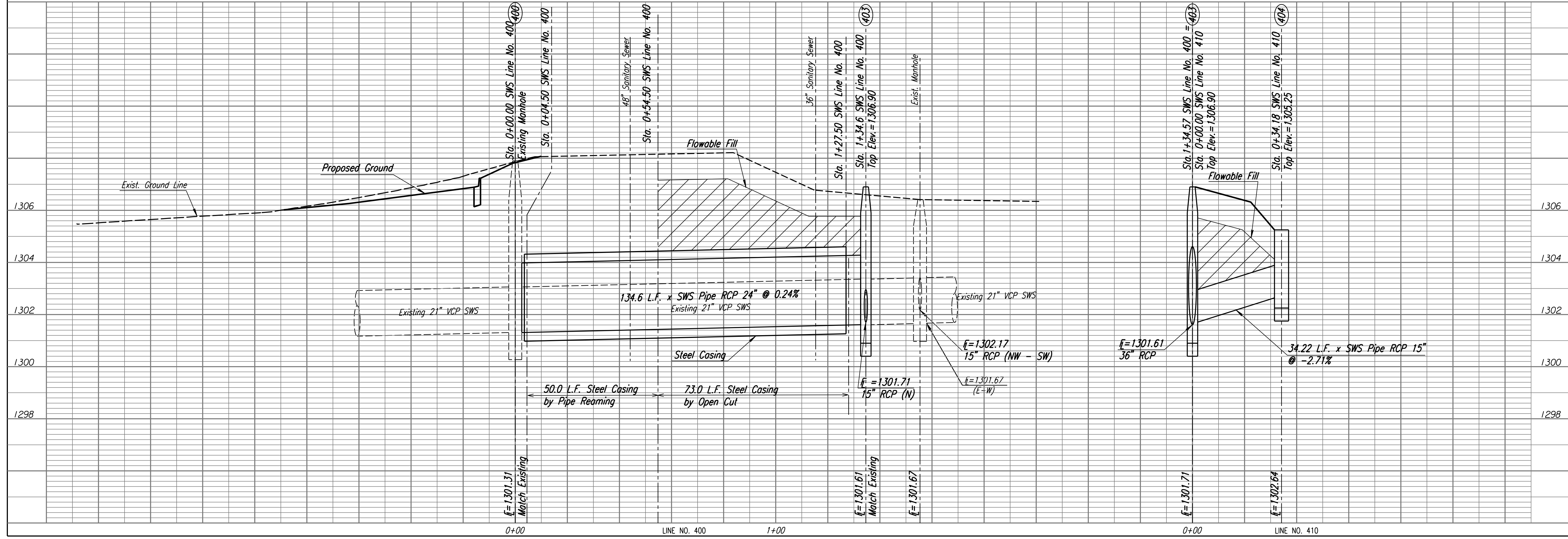
Sta. 0+00.00 SWS Line No. 400 = Sta. 50+85.26 @ 15th St., 6.9' Lt.  
 Connect to Existing Manhole  
 Install 134.6 L.F. x SWS Pipe RCP 24" (W)  
 Remove 5 L.F. of 21" VCP (W)  
 SWS Sta. 0+04.50 to SWS Sta. 0+54.50  
 Install 50.0 L.F. of Steel Casing by Pipe Reaming (Min. I.D. 36") (W) (See Notes 2, 6)  
 SWS Sta. 0+54.50 to SWS Sta. 1+27.50  
 Remove 80.1 L.F. of 21" VCP (W)  
 Install 73.0 L.F. of Steel Casing by Open Cut (Min. I.D. 36") (W) (See Note 2)  
 (Connect Casings) 21" VCP @ In=1300.75 (E) 24" RCP @ In=1301.31 (W) (See Notes 1, 2, 3)

Install 34.0 L.F. Excavatable Flowable Fill to Elev. 1306.0-1304.0

404  
 Sta. 0+34.18 SWS Line No. 410 = Sta. 49+63.12 @ 15th St., 43.77' Lt.  
 Construct Standard Area Inlet H=3'-6"  
 Top Elev.=1305.25 Floor Elev.=1302.25  
 15" RCP @ In=1302.64  
 See Sh. S6.11  
 See Note 4

403 \*\*  
 Sta. 1+34.57 SWS Line No. 400 = Sta. 0+00.00 SWS Line No. 410 = Sta. 49+50.72 @ 15th St., 11.92' Lt.  
 Construct Manhole, Reinforced Concrete L=4'-0" W=4'-0" H=5'-6" H<sub>i</sub>=1'-0"  
 Top Elev.=1306.90 Floor Elev.=1300.90  
 Install 34.2 L.F. x SWS Pipe RCP 15" (NE)  
 Connect to Existing 21" VCP  
 21" VCP @ In=1301.61  
 15" RCP @ In=1301.71  
 24" RCP @ Out=1301.61  
 See Sh. S6.7

3" Light type Surfacing (SA-1 or SA-2)



CENTRAL RAIL CORRIDOR  
**STORM SEWER PLAN**  
 15TH STREET  
 LINE NO. 400

Professional Engineering Consultants, P.A.  
 300 S. TOPICK • WICHITA, KANSAS 67202  
 316-262-2691 • FAX 316-262-3000

Job No. 99189 Date Oct., 2002  
 Designed by RMM  
 Drawn by DRP

DSNR: OPER: DRP SCALE: 1/1999/99189/BID SET 3/SHEETS/SB.1\_SWS\_15TH.DGN LAST REV: 10-20-2003 BY: drp