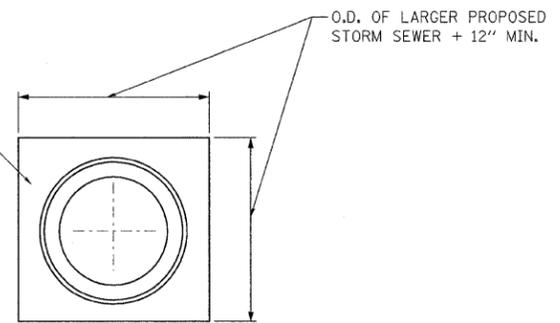
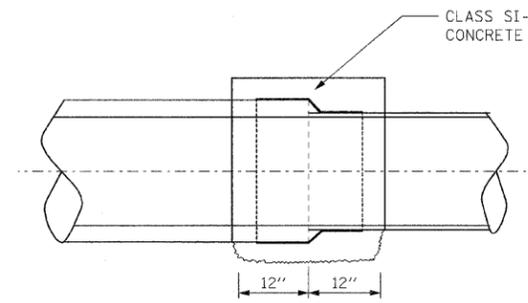
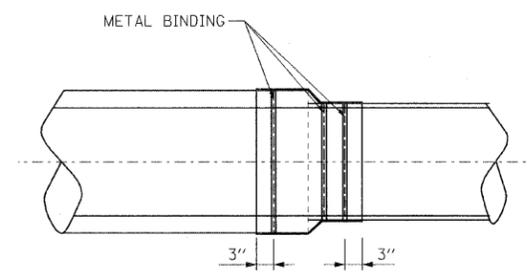
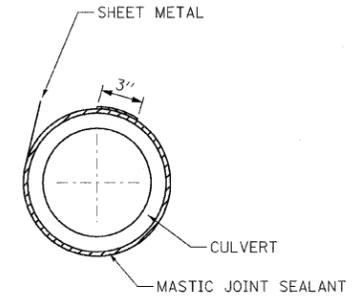
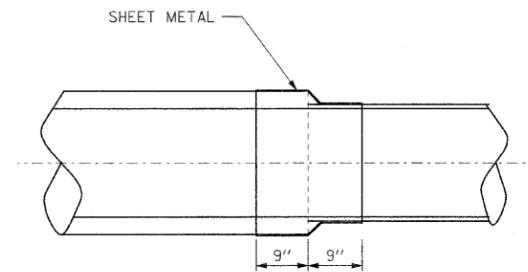
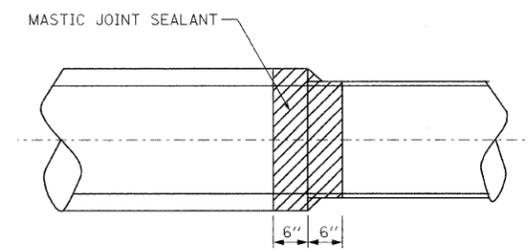
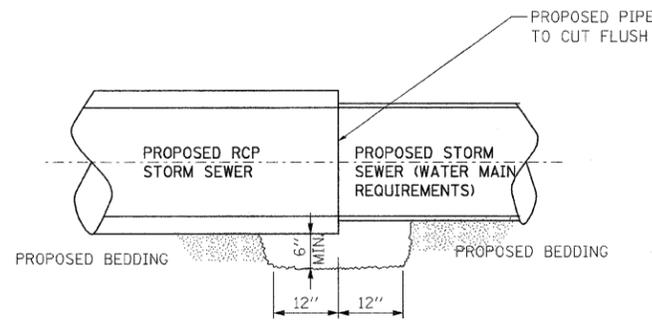


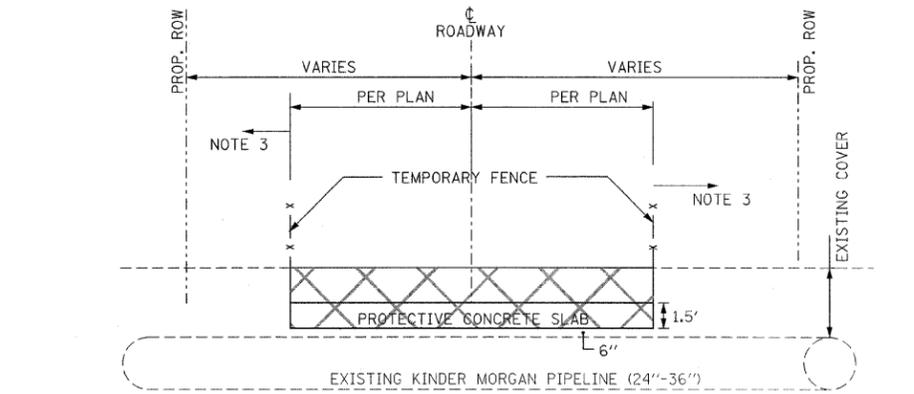
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55		WILL	608	415
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
* (26, 26HB-1&114) R-2		CONTRACT NO. 60363		

**CONSTRUCTION SEQUENCE**

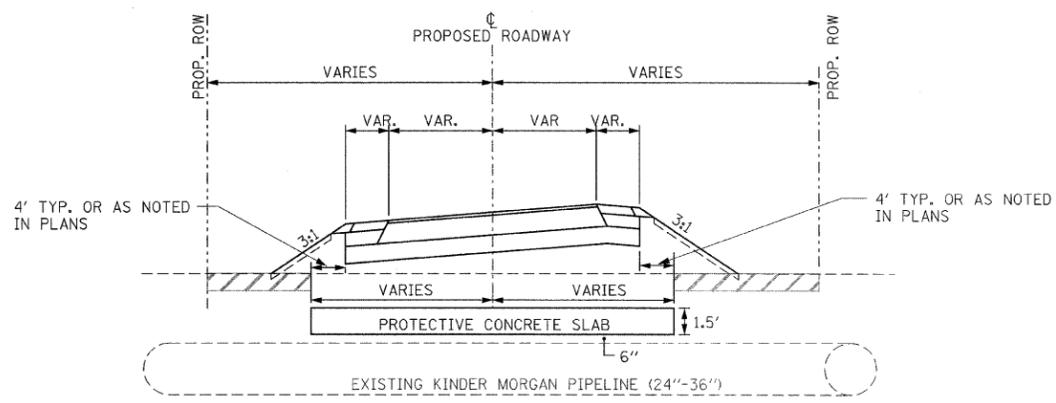
- CUT THE EXISTING END OF THE PIPE SO AS TO PRESENT A FLUSH BUTT JOINT. BRUSH AND CLEAN ALL PIPES.
- BUTT THE PIPES TOGETHER LEAVING A MINIMUM OF 12" X 6" DEEP EXCAVATION UNDER AND AROUND EACH PIPE END.
- APPLY THE MASTIC JOINT SEALANT TO THE FIRST 6" OF EACH PIPE.
- CUT A PIECE OF SHEET METAL GAGE NO. 19 (.0418") X 18" WIDE BY THE OUTSIDE CIRCUMFERENCE OF THE PIPE PLUS MINIMUM 3" LONG.
- WRAP THE SHEET METAL AROUND THE PIPES, 9" ON EACH SIDE OF THE JOINT, STARTING AT THE TOP OF THE PIPE.
- LAP THE SHEET METAL AT LEAST 3" AT THE TOP OF THE PIPE AND PLACE THE MASTIC JOINT SEALANT BETWEEN THE LAP.
- PLACE TWO OR MORE METAL BANDS AROUND THE SHEET METAL AND TIGHTEN TO CAUSE THE SHEET METAL TO CONFORM, AS CLOSELY AS POSSIBLE, TO THE OUTSIDE CIRCUMFERENCE OF THE PIPE.
- WIPE OFF ANY EXCESS MASTIC JOINT SEALANT THAT OOOZES OUT FROM BETWEEN THE SHEET METAL AND THE PIPES.
- PLACE SI CONCRETE AROUND THE JOINT INCLUDING COMPLETELY FILLING THE EXCAVATION UNDER EACH PIPE END.



**CLASS SI CONCRETE COLLAR**



**PROPOSED ROADWAY CORRIDOR KINDER MORGAN PROTECTIVE CONCRETE SLAB PLACEMENT TYPICAL**



**PROPOSED ROADWAY CORRIDOR FINAL CONDITION TYPICAL**



- NOTES:**
- PROTECTIVE SLAB FOR THE 6 EXISTING KINDER MORGAN PIPELINE SHALL BE CONSTRUCTED AT THE LOCATIONS AS NOTED IN THE PLANS AND PER KINDER MORGAN STANDARD DETAIL STD-32-03. CONSTRUCTION SHALL ADHERE TO THE NGPL GUIDELINES DOCUMENT. NOTE THAT THE OPTIONAL BACKFILL WITH CEMENT STABILIZED SAND IS NOT REQUIRED FOR THIS APPLICATION. TRENCH BACKFILL SHALL BE USED TO BACKFILL OVER THE PROPOSED PROTECTIVE SLAB UP TO THE EXISTING GROUND ELEVATION. AN ALTERNATE DETAIL 32-02 CAN BE UTILIZED WITH THE APPROVAL OF KINDER MORGAN.
  - HEAVY EQUIPMENT WILL NOT BE ALLOWED TO OPERATE DIRECTLY OVER KM PIPELINES EXCEPT AT AREAS WITH PROTECTIVE CONCRETE SLABS IN PLACE, OR AT THE DISCRETION OF THE KM REPRESENTATIVE.
  - THE AREAS WITHIN THE EXISTING ROW WITHOUT PROTECTIVE CONCRETE SLAB SHALL BE STAKED AND FENCED OFF DURING CONSTRUCTION SO NO CONSTRUCTION VEHICLES OR MACHINERY CAN DRIVE OR OPERATE IN THESE AREAS WITHOUT THE PERMISSION AND/OR SUPERVISION OF A KM REPRESENTATIVE. SOIL COMPACTION OVER UNPROTECTED KM PIPELINES IS ACCEPTABLE, HOWEVER, THE EQUIPMENT UTILIZED FOR THIS WORK MUST BE SUITABLE FOR WORK OVER UNPROTECTED PIPELINES. SUCH COMPACTION EQUIPMENT WILL BE SUBJECT TO KINDER MORGAN APPROVAL. SHEEPSFOOT OR OTHER UNAPPROVED VIBRATORY DEVICES WILL NOT BE ALLOWED OVER UNPROTECTED KM PIPELINES. A KM REPRESENTATIVE WILL BE ON SITE FOR COORDINATION.
  - IF TOPSOIL IS DISTURBED ABOVE EXISTING KM PIPELINES BEFORE CONCRETE SLABS ARE CONSTRUCTED, APPROPRIATE CRANE MATS MUST BE IN PLACE AT THE SATISFACTION OF THE KM REPRESENTATIVE BEFORE CONSTRUCTION VEHICLES MAY DRIVE OVER THOSE AREAS.
  - POWER EQUIPMENT UTILIZED FOR EXCAVATION WILL NOT BE ALLOWED WITHIN 18" OF EXISTING PIPELINES.
  - THE CONTRACTOR SHALL FOLLOW THE "GUIDELINES FOR DESIGN AND CONSTRUCTION NEAR KINDER MORGAN OPERATED FACILITIES" AND "PROTECTIVE SLAB FOR EXISTING PIPELINES" STD-32-03 IN THE SPECIAL PROVISIONS.

**GENERAL NOTES**

- CARE MUST BE TAKEN TO PREVENT DEBRIS FROM ENTERING THE SEWER. ALL DEBRIS WHICH ENTERS THE SEWER MUST BE REMOVED. THE SEWER MUST BE LEFT CLEAN AND UNOBSTRUCTED UPON COMPLETION OF THE CONTRACT.
- CONCRETE COLLAR FOR CONNECTING A PROPOSED STORM SEWER TO PROPOSED STORM SEWER (WATER MAIN REQUIREMENTS) WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE PROPOSED STORM SEWER (WATER MAIN REQUIREMENTS).

REVISIONS	
NAME	DATE
JB - ENTIRE SHEET	07/11/08

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 FAI 55 AT FAP 338 ILLINOIS ROUTE 59  
 SECTION: (26, 26HB-1&114) R-2

**DRAINAGE DETAILS VI  
 KINDER MORGAN DETAILS  
 AND CONCRETE COLLAR**

SCALE: N.T.S. DRAWN BY: JB  
 DATE: 03/14/08 CHECKED BY: ACL

**TENG**  
 TENG & ASSOCIATES, INC.  
 PROFESSIONAL ENGINEERS  
 305 N. MICHIGAN AVE. CHICAGO, IL 60610  
 TELEPHONE: 312.666.6999

ATT:BOORADON, V:\TSC002\JLDGN  
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