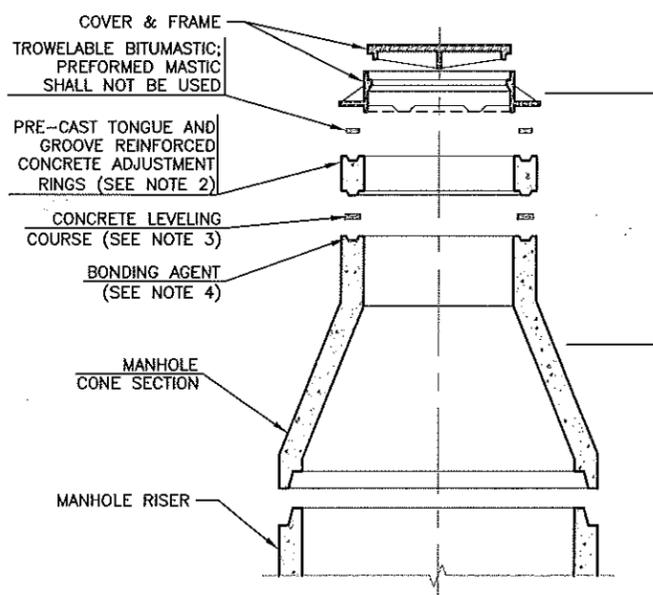
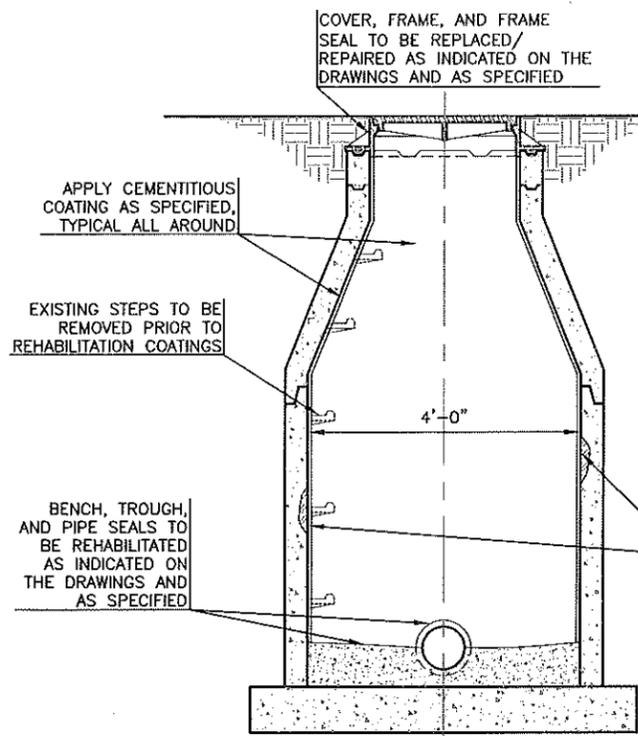


STEP REMOVAL DETAILS

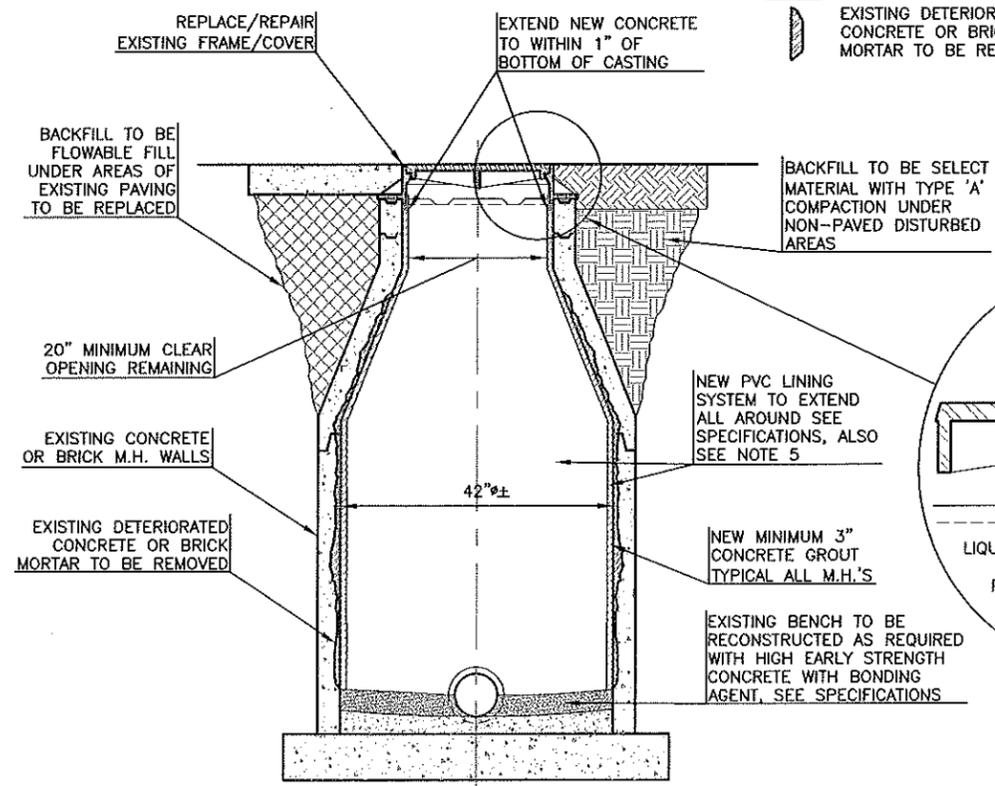


COVER, FRAME, FRAME SEAL, GRADE ADJUSTMENT DETAILS

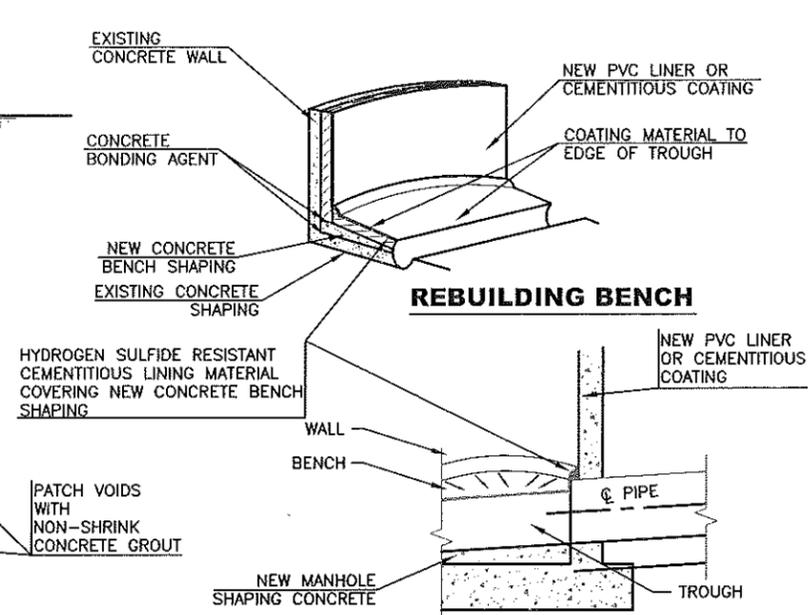
- NOTES:**
1. FOR COLD OR WET WEATHER CONDITIONS, USE TNEMEC 465 BLACK, SERIES 46, H.B. TNEMECOL.
 2. IF MULTIPLE RINGS ARE USED, BITUMASTIC SEALER SHALL BE USED BETWEEN RINGS.
 3. ALL LEVELING FOR SLOPED STREETS OR GRADES SHALL BE ACCOMPLISHED WITH THE CONCRETE LEVELING COURSE. BITUMASTIC SHALL NOT BE USED TO ACCOMPLISH LEVELING.
 4. CONCRETE BONDING AGENT SHALL BE 'WELD-CRETE' (R) BY LARSEN PRODUCTS CORP. OF JESSUP, MD., OR EQUAL.
 5. OVERLAPPING OR OPEN JOINTS WHERE 2 SHEETS OF PVC MEET, OR WHERE PVC HAS BEEN CUT, SHALL HAVE HEAT FUSION WELD STRIPS APPLIED.



DETAIL OF REHABILITATION WITH CEMENTITIOUS COATING ON 4' DIAMETER EXISTING MANHOLES

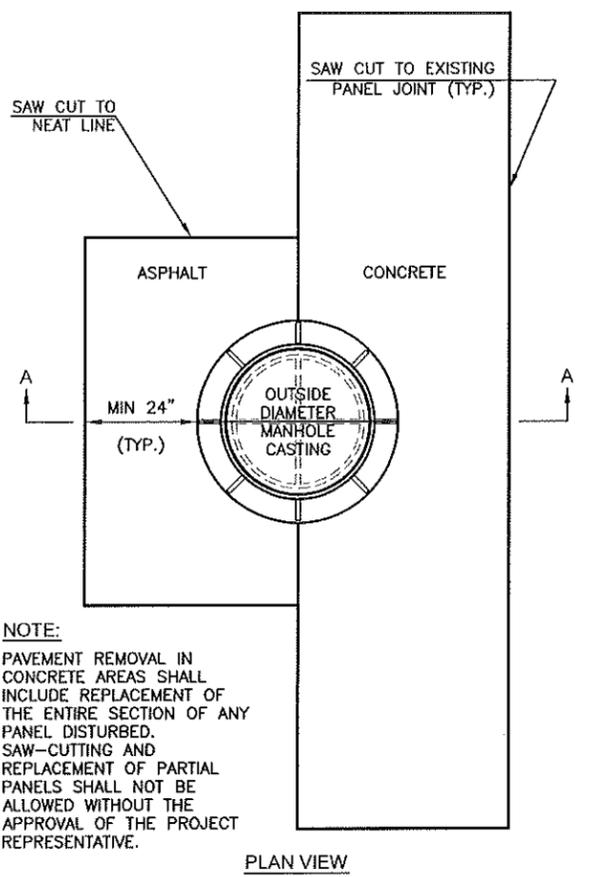


DETAIL OF MANHOLE REHABILITATION WITH CAST-IN-PLACE CONCRETE AND PVC LINER ON 4' DIAMETER EXISTING MANHOLES

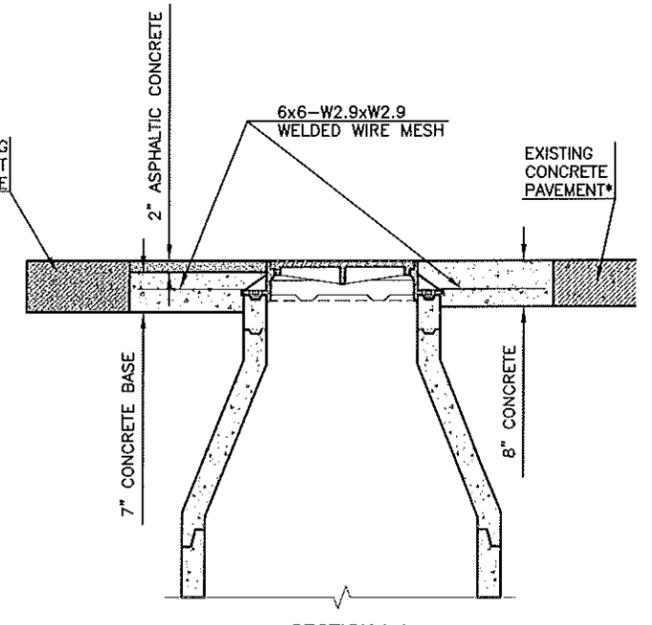


REBUILDING BENCH
REPAIR BENCH / TROUGH / PIPE SEAL DETAILS

- LEGEND**
- LIQUID EPOXY
 - CAST-IN-PLACE CONCRETE
 - EXISTING DETERIORATED CONCRETE OR BRICK MORTAR TO BE REMOVED
 - SELECT MATERIAL WITH TYPE 'A' COMPACTION
 - COMPACTED TOPSOIL
 - FLOWABLE FILL



NOTE:
PAVEMENT REMOVAL IN CONCRETE AREAS SHALL INCLUDE REPLACEMENT OF THE ENTIRE SECTION OF ANY PANEL DISTURBED. SAW-CUTTING AND REPLACEMENT OF PARTIAL PANELS SHALL NOT BE ALLOWED WITHOUT THE APPROVAL OF THE PROJECT REPRESENTATIVE.



SECTION A-A
PAVEMENT REMOVAL AND REPLACEMENT DETAILS

* ANY EXISTING PANEL OF CONCRETE PAVEMENT PARTIALLY REMOVED OR DISTURBED DURING CONSTRUCTION ACTIVITIES SHALL BE COMPLETELY REMOVED AND REPLACED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND/OR TYPICAL CITY/COUNTY STANDARD SPECIFICATIONS.

NO.	DATE	REVISION	BY	APP'D
1	Feb. 2008	Update	DHS	SB

DRAWN BY: *rm/mc*
APP'D BY: *R. C. ...*



SHAWNEE COUNTY, KANSAS
PUBLIC WORKS DEPARTMENT
1515 NW SALINE
TOPEKA, KS 66618
(785) 233-7702



STANDARD DETAILS

MANHOLE REHABILITATION DETAILS
(DT-005)

DATE: Month_Year
SHEET: X_of_X
PROJ.: X-XXXXX.XX