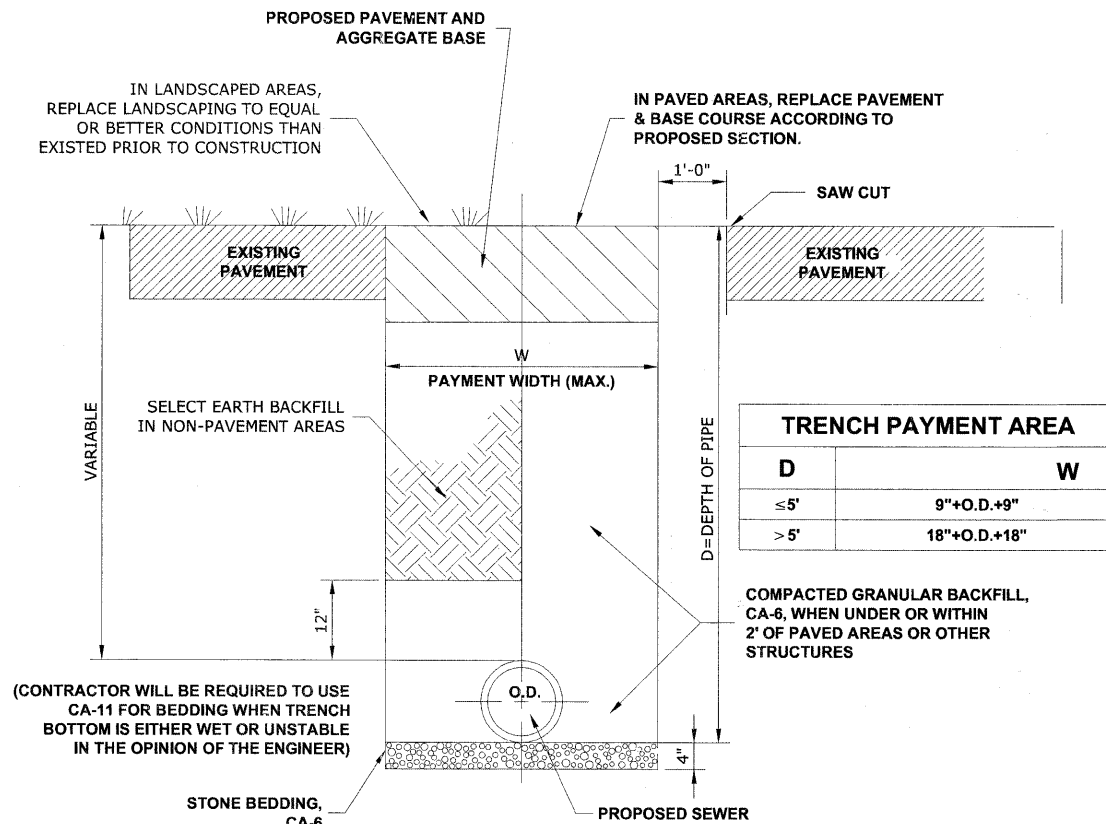
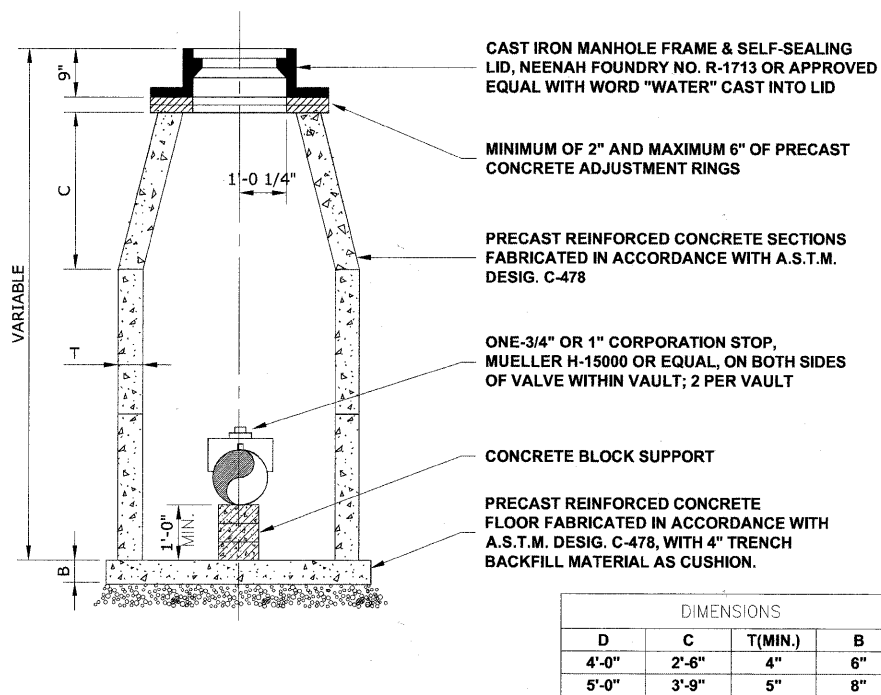


- NOTE:**
1. THRUST BLOCKS TO BE USED AT 1/16(22-1/2°) OR GREATER BENDS & AT ALL ENDS TO BE PLUGGED.
 2. PRECAST CONCRETE THRUST BLOCKS TO BE PLACED AGAINST FIRM, UNDISTURBED SOIL.

THRUST BLOCK DETAIL

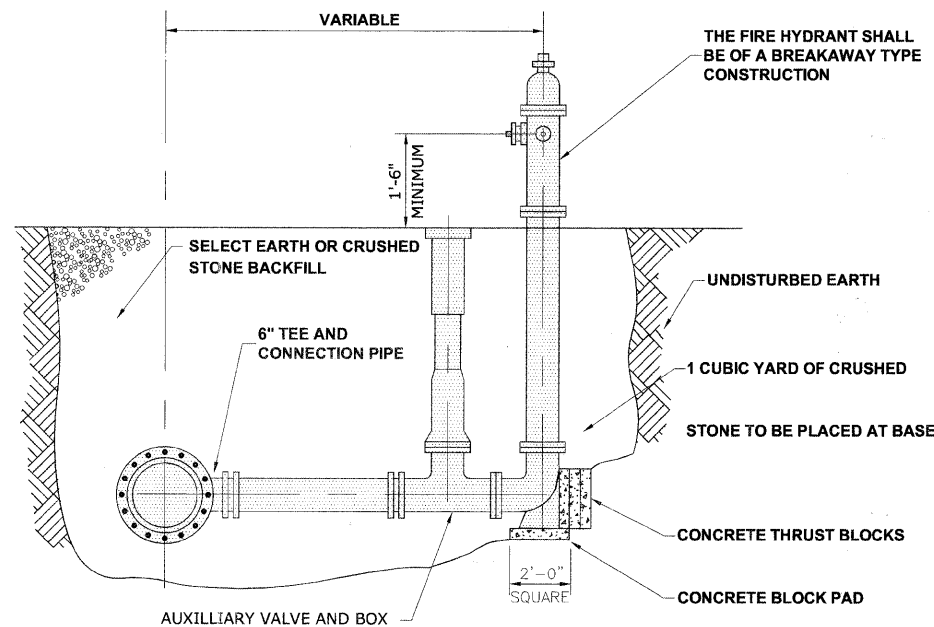


TYPICAL WATER MAIN TRENCH DETAIL



| DIMENSIONS | | | |
|------------|-------|---------|----|
| D | C | T(MIN.) | B |
| 4'-0" | 2'-6" | 4" | 6" |
| 5'-0" | 3'-9" | 5" | 8" |

STANDARD VALVE VAULT DETAIL



FIRE HYDRANT DETAIL

M.W.R.D. SEWER CROSSING NOTES:

1. AN MWRD INSPECTOR MUST BE PRESENT DURING CONSTRUCTION OF THE PROPOSED SEWER IN CLOSE PROXIMITY TO THE MWRD SEWER.
2. IN THE EVENT THE MWRD STRUCTURES/MANHOLES/FACILITIES NEED TO BE ENTERED, THE RESPONSIBLE PARTY MUST SUBMIT A COMPLETED AND NOTARIZED RELEASE AND INDEMNITY FORM FOR CONFINED SPACE ENTRY.
3. THE MWRD SEWER SHALL BE LOCATED PRIOR TO PROCEEDING WITH ANY CONSTRUCTION WORK TO MAKE SURE THAT THERE IS ENOUGH VERTICAL CLEARANCE BETWEEN THE PROPOSED SEWER AND THE MWRD SEWER.
4. SHOULD A CONFLICT BE DISCOVERED BETWEEN THE SEWER AND THE MWRD INTERCEPTOR DURING EXCAVATION, THE SEWER WORK MUST STOP AND THE DESIGN ENGINEER AND THE MWRD MUST BE CONTACTED IMMEDIATELY. APPROVAL MUST BE PROVIDED BY THE MWRD PRIOR TO COMPLETION OF ANY NECESSARY CONFLICT SEWER WORK.
5. ALL MWRD MANHOLES AND SEWERS ARE TO BE PROTECTED BY THE CONTRACTOR AT ALL TIMES.
6. THE CONTRACTOR SHALL VACUUM/HAND EXCAVATE WITHIN 2 FEET OF THE MWRD SEWER.
7. THE MWRD SEWER NEAR THE PROPOSED SEWER CROSSINGS SHALL BE TELEVIEWED BEFORE EXCAVATION AND AFTER CONSTRUCTION TO IDENTIFY ANY POTENTIAL DAMAGE THAT MAY OCCUR.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE TO THE MWRD SEWER TO THE SATISFACTION OF THE MWRD.

Drawing file: W:\Projects\12509232 - Grand Blvd. Design - Engineer\Drainage-Details.dwg Oct 24, 2011 - 4:16pm



| | | |
|--------------|--------------------|-----------|
| USER NAME - | DESIGNED - WOP, JG | REVISED - |
| PLOT SCALE - | DRAWN - MK, DMM | REVISED - |
| PLOT DATE - | CHECKED - WOP, JG | REVISED - |
| | DATE - 10-24-11 | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DRAINAGE AND UTILITIES
DETAILS**

SCALE: NOT TO SCALE SHEET NO. 3 OF 3 SHEETS STA. - TO STA. -

| | | | | |
|--------------------------------|----------------|------------------------------|--------------|-----------|
| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| FAU 1694 | 07-00122-01-PV | COOK | 86 | 54 |
| FIELD BOOK NO. -/AERIALS/LL | | CONTRACT NO. 63651 | | |
| FED. ROAD DIST. NO. 1 ILLINOIS | | FED. AID PROJECT M-9003(875) | | |

E.H.E. PROJECT NO. 125-09-23201