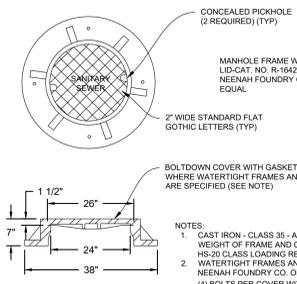
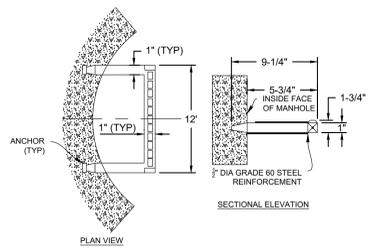


PLAN BELOW LINE A-A

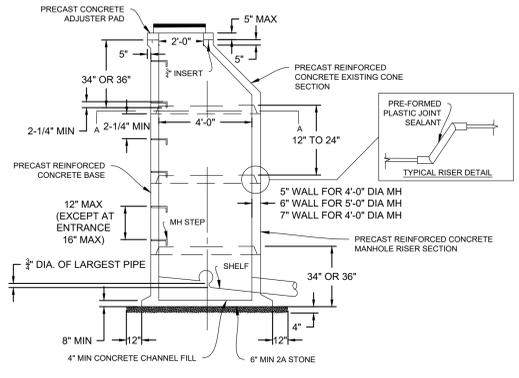
- NOTES:
1. THE DEPTH OF THE INVERT CHANNEL SHALL BE EQUAL TO 1/2 OF THE DIAMETER OF THE SEWER
  2. THE SHELVE SHALL SLOPE TOWARD THE INVERT CHANNEL AT A RATE OF 1" PER FOOT.
  3. FOR MANHOLES HAVING 5" DIA. AND 6" DIA. BASE REDUCTION IN DIAMETER TO 4" SHALL START AT THE FIRST JOINT ABOVE THE UPPERMOST PIPE CONNECTION TO WALL DEPTH IS SUFFICIENT
  4. ALL MANHOLE FRAMES SHALL BE BOLTED TO THE CONE SECTION OR CONCRETE SLAB WITH 2-3/4" DIA. BOLTS WITH WASHERS AND NUTS WHEN REQUIRED BY ENGINEER.
- WATERTIGHT COVER SHALL HAVE 4-3/4" BOLTS AT 90° ON THE BOLT CIRCLE. ALL BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED.
5. ALL CONCRETE SHALL BE CLASS A 4000 P.S.I. MIN AT 28 DAYS.
  6. ENTIRE OUTSIDE SURFACE OF MANHOLE SHALL RECEIVE THREE COATS OF BITUMINOUS COATING. COPPERS 300M OR EQUAL MIN 35 ML THICK.
  7. INSTALL PLASTIC PRE-FORMED JOINT SEALANT BETWEEN ALL SECTIONS AND UNDER FRAME.
  8. MANHOLE CONSTRUCTION SHALL BE ACCORDANCE WITH ASTM C478. (SEE FIGURE 4)
  9. STEPS TO BE ALUMINUM ALLOY WITH DEPRESSED TREAD OR REINFORCED PLASTIC.
  10. A-LOK GASKETS PER ASTM C443 WITH 10° OMNIDIRECTIONAL DEFLECTION.



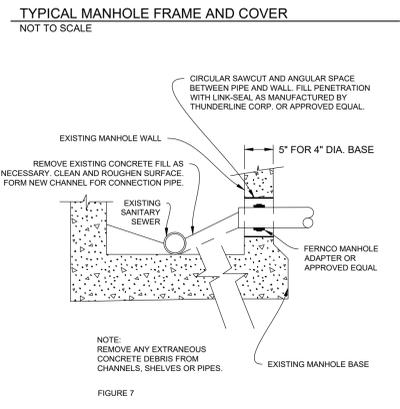
- CONCEALED PICKHOLE (2 REQUIRED) (TYP)
- MANHOLE FRAME WITH SELF SEALING LID-CAT NO. R-1642 WITH TYPE C LID NEEHAN FOUNDRY CO. OR APPROVED EQUAL
- 2" WIDE STANDARD FLAT GOTHIC LETTERS (TYP)
- BOLT DOWN COVER WITH GASKET IN LOCATIONS WHERE WATERTIGHT FRAMES AND COVERS ARE SPECIFIED (SEE NOTE)
- NOTES:
1. CAST IRON - CLASS 35 - ASTM A4 APPROXIMATE WEIGHT OF FRAME AND COVER = 350 LBS. AASHTO R-920 CLASS LOADING REQUIRED
  2. WATERTIGHT FRAMES AND COVERS - R-1916-F1 NEEHAN FOUNDRY CO. OR APPROVED EQUAL WITH (4) BOLTS PER COVER WITH GASKET AND (4) ANCHOR BOLTS PER FRAME
- APPROXIMATE WEIGHT OF FRAME AND COVER = 400 LBS.



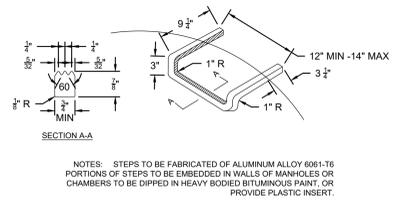
REINFORCED PLASTIC  
NOT TO SCALE



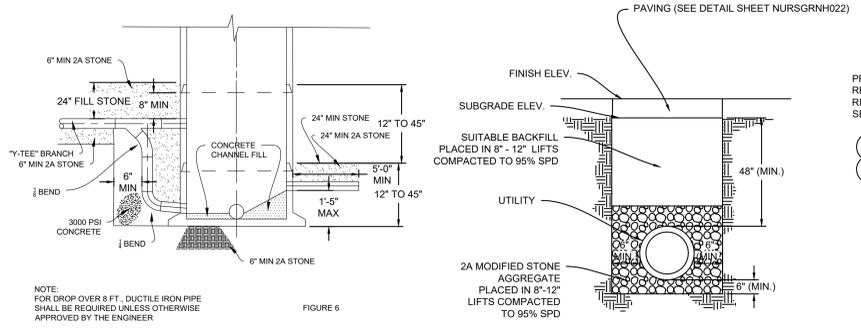
TYPICAL STANDARD MANHOLE  
NOT TO SCALE



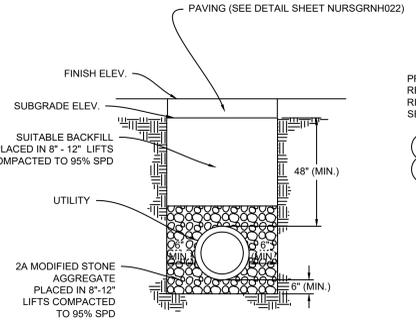
TYPICAL CONNECTION TO EXISTING MANHOLE  
NOT TO SCALE



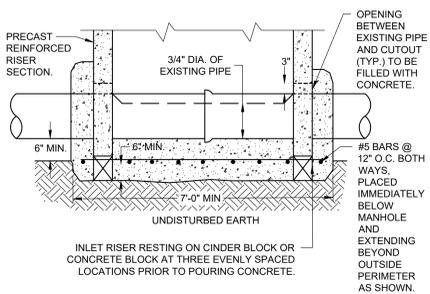
TYPICAL ALUMINUM MANHOLE STEPS  
NOT TO SCALE



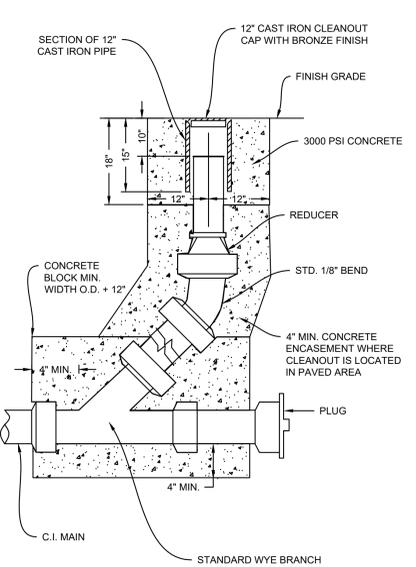
TYPICAL DROP MANHOLE  
NOT TO SCALE



TYPICAL SANITARY TRENCH DETAIL - PAVED AREAS  
NOT TO SCALE



SANITARY SEWER "DOG HOUSE" MANHOLE  
NOT TO SCALE



CLEANOUT DETAIL  
NOT TO SCALE

- NOTES:
1. EXISTING PIPE TO REMAIN UNTIL SATISFACTORY COMPLETION OF MANHOLE TESTING.
  2. REMOVE CROWN OF EXISTING PIPE FLUSH WITH CONCRETE SHELVE.



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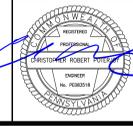
LONGWOOD GARDENS NURSERY GREENHOUSE

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