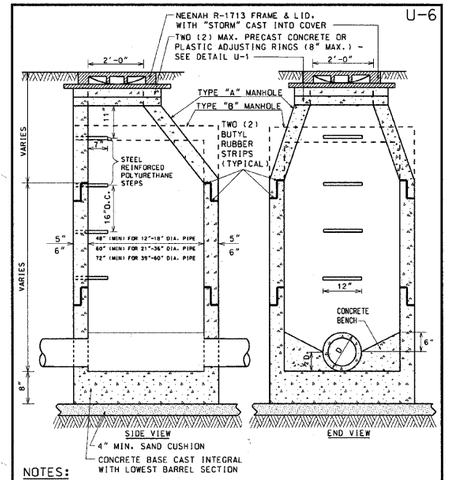
U-6



NOTES:

1. MANHOLES MUST CONFORM TO ASTM C-478.
2. MANHOLE SECTIONS TO BE TONGUE AND GROOVED.
3. BENCHES MUST BE PROVIDED IN ALL STORM SEWER MANHOLES.
4. ALL PIPE PENETRATIONS OCCURING WITHIN (OR BELOW) GROUNDWATER TABLE AND ALL NON-PRECAST OPENINGS SHALL BE CORED. RUBBER BOOTED AND INTERIOR MORTARED AROUND PIPE.*
5. USE ECCENTRIC CONE ONLY.

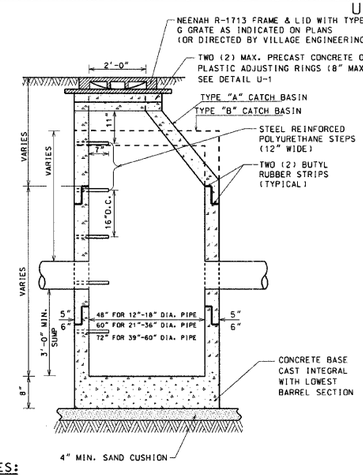
* SEE PIPE CONNECTION TO STRUCTURE DETAIL U-5.

NOT TO SCALE

STORM MANHOLE DETAIL

REVISED:01-01-11

U-9



NOTES:

1. MANHOLES MUST CONFORM TO ASTM C-478.
2. MANHOLE SECTIONS TO BE TONGUE AND GROOVED.
3. NON-PRECAST OPENINGS SHALL BE CORED. RUBBER BOOTED AND INTERIOR MORTARED AROUND PIPE.*
4. USE ECCENTRIC CONE ONLY.

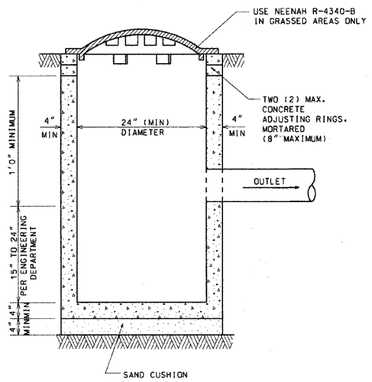
* SEE PIPE CONNECTION TO STRUCTURE DETAIL U-5.

NOT TO SCALE

CATCH BASIN (TYA) DETAIL

REVISED:01-01-11

U-10



NOTE:

1. CATCH BASIN TO BE CONSTRUCTED OF PRECAST REINFORCED CONCRETE.
2. CATCH BASIN MUST CONFORM TO ASTM C-478.
3. NON-PRECAST OPENINGS SHALL BE CORED. RUBBER BOOTED AND INTERIOR MORTARED AROUND PIPE.*
4. MAXIMUM DEPTH FROM INVERT OF OUTLET PIPE TO TOP OF FRAME SHALL NOT EXCEED 42 INCHES. IF DESIGN OR CONSTRUCTION REQUIRES DEPTH BEYOND 42 INCHES, STRUCTURE SHALL BE REVISED TO A 48 INCH DIAMETER CATCH BASIN.

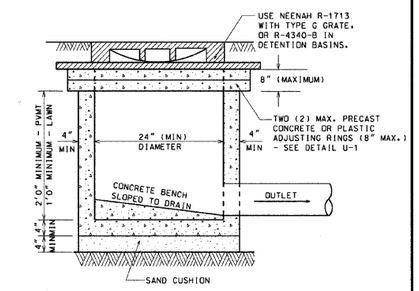
* SEE PIPE CONNECTION TO STRUCTURE DETAIL U-5.

NOT TO SCALE

TYPE C CATCH BASIN DETAIL

REVISED:01-01-11

U-11



NOTE:

1. INLET MUST CONFORM TO ASTM C-478.
2. NON-PRECAST OPENINGS SHALL BE CORED RUBBER BOOTED, AND INTERIOR MORTARED AROUND PIPE.*
3. MAXIMUM DEPTH FROM INVERT OF OUTLET PIPE TO TOP OF FRAME SHALL NOT EXCEED 42 INCHES. IF DESIGN OR CONSTRUCTION REQUIRES DEPTH BEYOND 42 INCHES, STRUCTURE SHALL BE REVISED TO A 48 INCH DIAMETER MANHOLE.
4. BENCHES MUST BE PROVIDED IN ALL INLETS.

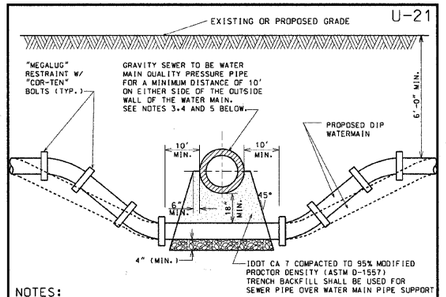
* SEE PIPE CONNECTION TO STRUCTURE DETAIL U-5.

NOT TO SCALE

INLET DETAIL

REVISED:01-01-11

U-21



NOTES:

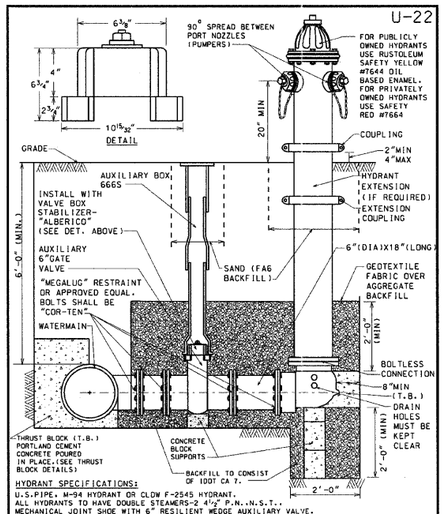
1. HORIZONTAL AND VERTICAL SEPARATION BETWEEN WATERMAINS AND SEWERS SHALL COMPLY WITH VILLAGE OF GLENVIEW ENGINEERING STANDARDS MANUAL OR IEPA REQUIREMENTS, WHICHEVER IS MORE STRINGENT.
2. CONTRACTOR MAY BEND WATER MAIN PIPE UNIFORMLY UNDER SEWERS WITHOUT USING FITTINGS, PROVIDED THAT JOINT DEFLECTION DOES NOT EXCEED 5 DEGREES PER JOINT FOR PIPE UNDER 14" IN DIAMETER AND 3 DEGREES PER JOINT FOR PIPE 14" AND OVER IN DIAMETER. IF FITTINGS ARE USED, CONTINUOUS STRAPPING WITH RODS, STRAPS, NUTS AND BOLTS BELOW NORMAL WATERMAIN DEPTH ARE REQUIRED. OR RETAINER GLANDS MAY BE USED IN LIEU OF STRAPPING. RETAINER GLANDS TO BE "MEGALUG" RESTRAINT, SERIES 1100 OR APPROVED EQUAL WITH "COR TEN" BOLTS.
3. ALL SANITARY SEWER (INCLUDING SERVICE) CROSSINGS WHERE THE WATER MAINS OR WATER SERVICES ARE LESS THAN 18" VERTICALLY ABOVE THE SEWER SHALL BE POLYVINYL CHLORIDE PRESSURE PIPE (SDR 26-160 PSI) AND SHALL CONFORM WITH THE LATEST REVISION OF ASTM D- 2241. JOINTS SHALL CONFORM TO ASTM D-3139 AND ELASTOMERIC GASKETS SHALL CONFORM TO ASTM F-477. THE SAME PIPE AND JOINT MATERIALS SHALL BE USED WHENEVER WATER MAIN CROSSES BELOW THE SEWER.
4. ALL STORM SEWER (INCLUDING SERVICE) CROSSINGS WHERE THE WATER MAINS ARE LESS THAN 18" VERTICALLY ABOVE THE SEWER SHALL BE REINFORCED CONCRETE PIPE. ASTM C-361, CLASS D-25 WITH BELL AND SPIGOT JOINTS AND RUBBER GASKETS. OR PVC SDR 26 AS SPECIFIED IN NOTE 3 ABOVE. THE SAME PIPE AND JOINT MATERIAL SHALL BE USED WHENEVER WATER MAIN CROSSES BELOW THE SEWER.
5. FOR NEW SEWER INSTALLATIONS CROSSING OVER WATER MAINS, THE ENTIRE RUN OF NEW SEWER SHALL BE WATER MAIN QUALITY PIPE, EXTENDING FROM STRUCTURE TO STRUCTURE ON EACH SIDE OF THE CROSSING.

NOT TO SCALE

WATER MAIN CROSSING DETAIL

REVISED:01-01-11

U-22



HYDRANT SPECIFICATIONS:

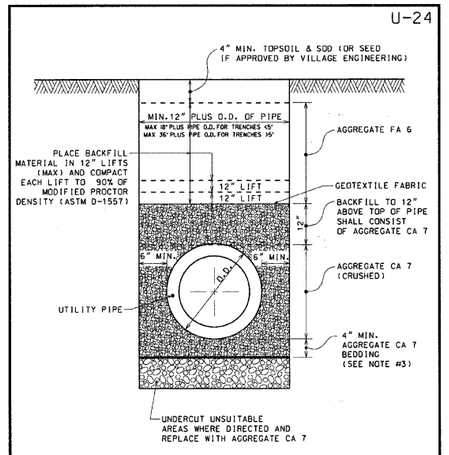
U.S.PIPE, M-94 HYDRANT OR CLOW F-2545 HYDRANT.
ALL HYDRANTS TO HAVE DOUBLE STEAMERS-2 ½" P.N.,N.S.T..
MECHANICAL JOINT SHOE WITH 6" RESILIENT WEDGE AUXILIARY VALVE.
MAIN VALVE OPENING SHALL BE 5¼".
ONLY AUXILIARY BOX EXTENSIONS ARE PERMITTED.
AUXILIARY BOX ADAPTERS OR RISERS ARE NOT PERMITTED.
HYDRANT BARREL SHALL BE ONE PIECE DUCTILE IRON PIPE.
POLY-WRAPPED (AS WATER MAIN) TO HYDRANT BASE.
HYDRANT LEADS TO BE 6" DIAMETER UP TO 25' LONG AND 8" DIAMETER IF GREATER THAN 25'.
ALL PARTS OF AUXILIARY BOX INCLUDING THE COVER SHALL BE MADE OF CAST IRON.

NOT TO SCALE

HYDRANT DETAIL

REVISED:01-01-11

U-24



NOTES:

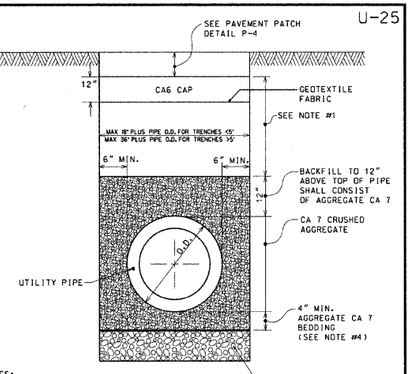
1. ALL BACKFILL MATERIALS SHALL BE PROPERLY COMPACTED.
2. ALL TRENCH EXCAVATIONS SHALL MEET OSHA REQUIREMENTS.
3. BEDDING MATERIAL FOR PVC PIPE INSTALLATION SHALL COMPLY WITH ASTM D-2321.

NOT TO SCALE

UTILITY TRENCH IN NON-PAVED AREAS DETAIL

REVISED:01-01-11

U-25



NOTES:

1. TRENCH BACKFILL UNDER A PAVED SURFACE OR WITHIN THE ZONE OF INFLUENCE (5' FROM EDGE OF PAVEMENT) SHALL CONSIST OF:
   a) UNDER NEW PAVEMENT:
      12" THICK PAVEMENT SUBGRADE (AGGREGATE CA 6 CAP) OVER AGGREGATE CA 7 TRENCH BACKFILL OR CONTROLLED LOW STRENGTH MATERIAL (CLSM) MIX 1 (ONLY IF REQUIRED BY VILLAGE ENGINEERING)
   b) UNDER EXISTING PAVEMENT:
      SAME AS "a" ABOVE
   c) UNDER PRIVATELY OWNED PAVEMENT:
      SAME AS "a" ABOVE.
2. ALL MATERIALS SHALL BE PROPERLY COMPACTED PER SPECIFICATIONS (INUNDATION OR WATER JETTING IS NOT ALLOWED).
3. ALL TRENCH EXCAVATIONS SHALL MEET OSHA REQUIREMENTS.
4. BEDDING MATERIAL FOR PVC PIPE INSTALLATION SHALL COMPLY WITH ASTM D-2321.
5. IF APPROVED BY VILLAGE ENGINEERING, A ONE (1) INCH THICK STEEL PLATE SHALL BE PROVIDED AND MAINTAINED BY CONTRACTOR UNTIL THE SURFACE RESTORATION IS COMPLETE. THE PLATE SHALL BE PROTECTED FROM SLIDING AND PROVIDED WITH BITUMINOUS RAMPS IF REQUIRED BY VILLAGE ENGINEERING.
6. PRIOR TO PLACEMENT OF PAVEMENT MATERIALS, THE EXISTING EXPOSED EDGES SHALL BE SAWCUT TO PROVIDE A SMOOTH CLEAN EDGE, FREE OF LOOSE MATERIAL.
7. THE PLACEMENT OF PAVEMENTS SHALL NOT BE ALLOWED WITHOUT PRIOR APPROVAL BY VILLAGE ENGINEERING.

NOT TO SCALE

TRENCH BACKFILL (SPECIAL) UTILITY TRENCH IN PAVEMENT AREAS DETAIL

REVISED:01-01-11

CAPITAL PROJECTS DEPARTMENT

DISCLAIMER

The attached files contain information for the exclusive use of the individual or entity to whom they are addressed and may contain information that is proprietary, privileged, confidential and/or exempt from disclosure. The addressee must protect any and all proprietary, privileged, confidential and/or exempt information from disclosure. Any unauthorized use, misuse or sharing of data is a violation of applicable copyright laws. The Village makes no warranty or other representation regarding the use of the attached files for any purpose other than that for which they are originally transmitted.

Joint Utility Locating Information for Excavators
Call
48 hours before you dig
(Excluding Sat., Sun. & Holidays)

WEST LAKE AVENUE

VILLAGE STANDARD DETAILS

REVISIONS		
NO.	DATE	DESCRIPTION
1	4-18-11	PER IDOT COMMENTS

DESIGNED BY: E.L. DATE: 11-12-2010
DRAWN BY: Z.S. DATE: 11-12-2010
CHECKED BY: E.L. DATE: 2-24-2011

F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1284	07-00164-01-RS	COOK	34	18
JOB. NO: C-91-275-11		FED. AID PROJECT: TE-00D1 (841)		
FED. ROAD DIST. NO. 1		ILLINOIS	CONTRACT NO. 63612	

COPYRIGHT © ZOLL & BAKER & WOODMAN, INC.
SITE: ILLINOIS - DEVELOPMENT SOLUTIONS FORM
LICENSE No.: 184-000121 - EXPIRES: 4/30/2012
8.25in x 6.25in 6/29/2011 6:40:01 PM
\\report\prive\PDF22x34.pit
\\PLOTS\00025.16.tbl
\\SMCLFS\Projects\VILLAGE\00025-Supp Civ Eng\00025.16 OT Misc Services\Centennial Bike Trail\DONNJ00025.16 Village Details.dwg