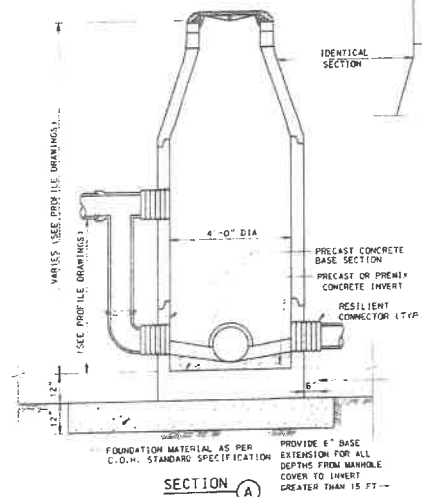
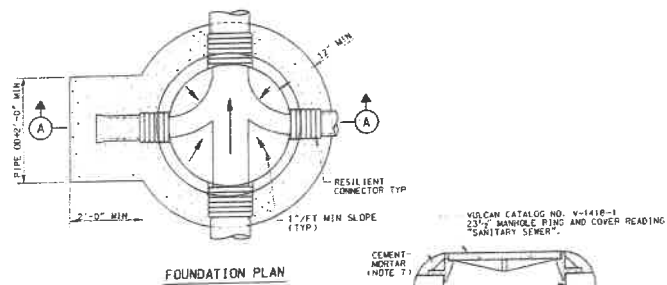




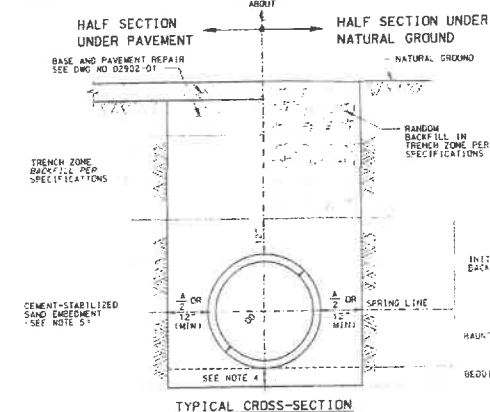
- NOTES:**
1. DEPTH OF MANHOLE DETERMINES SECTIONS REQUIRED.
 2. PRECAST CONCRETE RINGS SHALL BE PROVIDED FOR A COMBINED ADJUSTMENT HEIGHT OF AT LEAST 12". THE TOTAL HEIGHT OF THE ADJUSTMENT RINGS SHALL NOT EXCEED 1'-6".
 3. MANHOLE WALL THICKNESS FOR DEPTH EXCEEDING 12'-0" SHALL BE DETERMINED TO MEET LOADING CONDITIONS. MIN THICKNESS 5".
 4. MANHOLE DROP AND INTERSECTING PIPES SHALL BE INSTALLED ONLY WHEN CALLED FOR IN PLAN AND PROFILE DRAWINGS.
 5. SEAT MANHOLE FRAME IN SEALANT PER C.O.M. STANDARD SPECIFICATION.
 6. ECCENTRIC PRECAST CONCRETE MANHOLE MAY BE USED.
 7. OMIT CEMENT MORTAR WHEN MANHOLE IS LOCATED IN PAVED AREAS.
 8. MIN REINFORCING IN THE PRECAST CONCRETE BASE SHALL BE # 5 @ 8 IN.
 9. PROVIDE BACKFILL TO MATCH ADJACENT PIPE TRENCH BACKFILL PER C.O.M. STANDARD SPECIFICATION.
 10. PROVIDE A DISH INSERT IN THE MANHOLES.
 11. MANHOLES WITHIN THE PORTER M.U.D. EASEMENT OR RIGHT-OF-WAY MUST BE VACUUM TESTED IN ACCORDANCE WITH COR STD. SPECS. INSPECTOR MUST BE PRESENT DURING ALL TESTING. CALL PH #554-9352 24-HOURS PRIOR TO TESTING.

**PROP. SANITARY SEWER
4'-0" DIA. PRECAST CONCRETE
MANHOLE**

(NOT TO SCALE)

NOTES:

1. THIS DETAIL MAY BE USED ONLY FOR DRY STABLE TRENCH CONDITIONS PER C.O.M. STANDARD. SEE SPECIFICATIONS FOR REQUIREMENTS IN OTHER CONDITIONS.
2. MIN TRENCH WIDTH SHALL BE PIPE OD PLUS AN ALLOWANCE "A" FOR THE NOMINAL PIPE SIZE:
NOMINAL PIPE SIZE "A"
LESS THAN 18" 18"
18" TO 30" 24"
OVER 30" 36"
3. MAX TRENCH WIDTH SHALL BE NOT GREATER THAN MIN TRENCH WIDTH PLUS 24 INCHES, UNLESS OTHERWISE NOTED.
4. MIN BEDDING DEPTH SHALL BE THE GREATER OF 1' CO OR 6 INCHES.
5. ALTERNATIVE EMBEDEDMENT BACKFILL MATERIALS FOR FORCE MAINS MAY BE ALLOWED. SEE C.O.M. STANDARD SPECIFICATIONS.



**SANITARY SEWER
BEDDING AND BACKFILL
FOR DRY STABLE TRENCH**

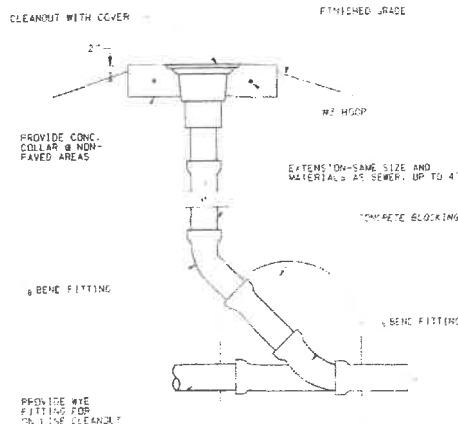
(NOT TO SCALE)

NOTE:

1. LAND MUST BE FLATTED TO PROVIDE ADDITIONAL SERVICE.
2. COMMERCIAL SERVICE WILL REQUIRE CONSTRUCTION OF AN ADDITIONAL SERVICE LINE TO THE DISTRICT'S SANITARY SEWER MAIN.

GENERAL CONSTRUCTION NOTES:

1. THE APPROXIMATE LOCATION OF EXISTING UTILITIES ARE GIVEN FOR REFERENCE ONLY. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE EXISTENCE, LOCATION AND ELEVATION OF ALL UTILITIES IN THE CONSTRUCTION AREA. ANY EXISTING UTILITIES/FACILITIES (CONDUITS, VAULTS/MANHOLES, POWER POLES, ETC.) THAT CONFLICT WITH THE PROPOSED SANITARY SEWER LOCATION MUST BE RELOCATED AT THE CONTRACTOR'S EXPENSE.
2. CONTRACTOR IS TO NOTIFY THE "UNDERGROUND UTILITY COORDINATING COMMITTEE" (TELEPHONE: 713-223-4867) AT LEAST TWO FULL WORKING WEEKDAYS (M-F) BEFORE STARTING WORK IN PUBLIC STREET RIGHT-OF-WAYS AND/OR EASEMENTS. THIS IS NECESSARY SO THAT ALL EXISTING UTILITIES WITHIN THE WORK AREA CAN BE LOCATED PRIOR TO CONSTRUCTION.
3. THE CONTRACTOR SHOULD EXERCISE EXTREME CAUTION WHEN WORKING IN THE AREAS WHERE OVERHEAD POWER LINES EXIST SO AS TO AVOID MAKING CONTACT WITH SAID LINES. THE CONTRACTOR SHALL CONTACT HOUSTON LIGHTS & POWER # 713-228-7400 TO ARRANGE FOR ELECTRICAL LINES TO BE TURNED OFF OR MOVED, AS REQUIRED.
4. THE CONTRACTOR SHALL COMPLY WITH OSHA REGULATIONS AND STATE OF TEXAS LAW CONCERNING EXCAVATION, TRENCHING AND SHORING AS SPECIFIED IN CITY OF HOUSTON ORDINANCE #87-1457.
5. THE CONTRACTOR IS TO PROVIDE ADEQUATE SHEETING, SHORING, BRACING, BRIDGING ENCASMENT, ETC. NECESSARY AND APPLICABLE TO PROTECT WORKMEN AND/OR ALL EXISTING ADJACENT/NEARBY/OVERHEAD NON-REMOVABLE/DOCK RELOCATABLE/NON-REPLACEABLE UTILITIES, VEHICULAR PAVEMENT AND ANY OTHER MANMADE STRUCTURES DURING ALL PHASES OF CONSTRUCTION.
6. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE EXISTING SOIL CONDITIONS WITHIN THE WORK AREA PRIOR TO CONSTRUCTION. SHOULD THE GROUNDWATER TABLE EXIST WITHIN THE TRENCH ZONE NOTIFY THE ENGINEER PRIOR TO COMMENCING CONSTRUCTION.
7. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL PERMITS REQUIRED TO PERFORM THE WORK.
8. UNLESS NOTED OTHERWISE ON THE PLANS, ALL PROPOSED SANITARY SEWER AND RELATED CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF HOUSTON DEPARTMENT OF PUBLIC WORKS AND ENGINEERING'S "STANDARD CONSTRUCTION SPECIFICATIONS FOR WASTEWATER COLLECTION SYSTEMS, WATER LINES, STORM DRAINAGE AND STREET PAVING" DATED SEPT. 1986 WITH LATEST REVISIONS THERETO.
9. THE CONTRACTOR MUST CALL PH #354-9352 24 HOURS PRIOR TO INSPECTION.



SANITARY SEWER CLEANOUT

(NOT TO SCALE)

Reference File Name: Reference File Description		Scale: N.T.S.	 Martinez, Guy & Maybik, Inc. 2000 Redmond Lane 100 Houston, Texas 77062 (281) 679-0335 CIVIL Structural Engineering & Land Surveying	SANITARY SEWER DETAILS		2
Date: APR 1993		Designed By: S.C.		MILKOVIC RESIDENCE @ 22648 FORD ROAD		2
Drawn By: R.V.		Checked By: S.C.		PORTER, TEXAS		
Date: 10/28/2011		Sheet Number: 2082101				
Revisions						