1. APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS AND BERVICES AND MAINTAIN UNINTERRUPTED SUPPLY. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER AND AT THE CONTRACTOR'S 2. ALL HORIZONTAL CONTROLS ARE BASED ON MARYLAND STATE COORDINATES.

GENERAL NOTES

3. ALL VERTICAL CONTROLS ARE BASED ON USGS DATA. 4. ALL PIPE ELEVATIONS SHOWN ARE INVERT -(1) BLEVATIONS.

5. CLEAR ALL UTILITIES BY A MINIMUM OF 64 CLEAR ALL POLES BY 24" HINIMUM OR TUNNED AS REQUIRED. THE OWNER HAS CONTACTED THE UTILITY COMPANIES AND HAS MADE Arrangements for bracing of poles as shown on the drawings. IN THE EVENT THE CONTRACTOR'S WORK REQUIRES THE BRACING OF ADDITIONAL POLES, ANY COST INCURRED BY THE OWNER FOR THE BRACING OF ADDITIONAL POLES OR DAMAGE SHALL BE DEDUCTED FROM

MONEY OWED THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE

WITH THE UTILITY COMPANIES TO SCHEDULE THE BRACING OF THE

6. FOR DETAILS NOT SHOWN ON THE DRAWINGS, AND FOR MATERIALS AND CONSTRUCTION METHODS, USE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION. THE CONTRACTOR SHALL HAVE A COPY OF VOLUME IV

(LATEST EDITION) ON THE JOB. 7. WHERE TEST PITS HAVE BEEN MADE ON EXISTING UTILITIES, THEY ARE NOTED BY THE SYMBOL AT THE LOCATION OF THE TEST PIT. A note or notes containing the results of the test pit or PITS IS INCLUDED ON THE DRAWINGS. EXISTING UTILITIES IN THE VICINITY OF THE PROPOSED WORK FOR WHICH TEST PITS HAVE NOT BEEN DUG SHALL BE LOCATED BY THE CONTRACTOR TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS AT HIS OWN EXPENSE.

a. CONTRACTOR SHALL NOTIFY THE FOLLOWING UPILITIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:

> SHA - 531-5533 BGSE CONTRACTOR SERVICES - 850-4620 BGSE UNDERGROUND DAMAGE CONTROL - 787-9068 BGSE TROUBLE SHOOTING - 298-9001 MISS UTILITY - 1-800-281-7777

BUREAU OF UTILITIES, HOWARD CO DPW - 313-4900 9. TREES ARE TO BE PROTECTED FROM DAMAGE TO MAXIMUM EXTENT. TREES LOCATED WITHIN THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.

COLONIAL PIPELINE CO. - 795-1390

10. Contractor shall remove trees, stumps and roots along the LINE OF EXCAVATION AS DIRECTED BY THE ENGINEER. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONSTRUCTION OF THE MAIN.

11. PLACE REGULATION "MEN WORKING" AND WARNING SIGNS AS REQUIRED TO COMPLY WITH MARYLAND STATE HIGHWAY ADMINISTRATION MANUAL OF TRAFFIC CONTROL FOR HIGHWAY CONSTRUCTION AND MAINTENANCE OPERATIONS.

12. ALL WATERMAINS TO BE D.I.P. CLASS SO UNLESS OTHERWISE NOTED.

13. TOP OF ALL WATERMAINS TO HAVE A MINIMUM OF 3'-6" COVER UNLESS OTHERWISE NOTED.

VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES. 15. ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED W/CONC. IN ACCORDANCE W/STAND. DTLS.

16. BURY LINE ELEVATIONS ON FIRE HYDRANTS SHALL BE SET TO THE ELEVATIONS SHOWN ON THE DRAWINGS. ALL FIRE HYDRANTS SHALL BE RESTRAINED AND BUTTRESSED WITH CONCRETE IN ACCORDANCE WITH STANDARD DETAILS. SOIL AROUND THE FIRE HYDRANT TO BE COMPACTED IN ACCORDANCE WITH SECTIONS 1000 AND 1008 OF THE STANDARD SPECIFICATIONS.

17. ALL WATER HOUSE CONNECTIONS SHALL BE FOR AND INSIDE METER

18. THE CONTRACTOR SHALL NOT OPERATE ANY WATERMAIN VALVES ON THE EXISTING WATER SYSTEM. 19. ALL D.I.P. FITTINGS SHALL BE IN ACCORDANCE WITH A.W.W.A.

SPEC C-153, DUCTILE IRON COMPACT FITTINGS, 3"-12" FOR WATER AND OTHER LIQUIDS.

20. ALL SERVICE CLAMPS TO HAVE STAINLESS STEEL STRAPS. 21. ALL SEWER MAINS SHALL BE C.S.P.S., V.C.P.X.ORP.V.C. UNLESS OTHERWISE NOTEO

22. NO PIPE SHALL BE LAID UNTIL LINES OF EXCAVATION HAVE BEEN BROUGHT TO SUBGRACE.

2). ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE 24. MANHOLES SHOWN WITH 12" AND 16" WALLS ARE BRICK MANHOLES

25. MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAMES AND COVERS, STANDARD DETAIL G5.52, VOLUME 1. WHERE WATERTIGHT FRAME AND COVER IS USED, SET TOP OF

26. HOUSE(S) WITH SYMBOL "C.N.S." INDICATES THE CELLAR CANNOT BE

27. ALL WATER HOUSE CONNECTIONS SHALL HAVE A ONE FOOT MINIMUM CLEARANCE ABOVE ALL SANITARY SEWER CROSSINGS.

FRAME 1'-6" ABOVE FINISHED GRADE.

ALL SANITARY SEWER HOUSE CONNECTIONS SHALL HAVE A MINIMUM VERTICAL CLEARANCE BELOW ALL WATERMAIN CROSSINGS.

29. PROFILE STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.

LACKING BORING, TUNNELING CLAUSE

The hole bared for the pipe shall not exceed the autility diameter of the pipe.

LICKING AND BORING

A hearing timber shaft at either and of the facking pit will be provided in order to prevent fallure of the embankments and to maintain occess to the jacking and boring operation. This support shall be meintained during non-working hours in order to

ficking shall be accomplished in accordance with the latest approved method or as directed by the engineer.

Sacking pits to be located a minimum of 6° off edge of shoulder and 6° off edge of

The stoot castrig plips shall be jacked, and the earth removed therefrom in such a manner as to cause he settlement or demage to the roudbed of the highways. The removal of earth from the facked pipe shall be accomplished by methods approved by the engineer and in such a manner as to protect the inside of the pipe whall be controlled as to prevent caring of earth beyond the pipe. If, is the opinion of the Bagin or, the installation is being conducted in an ansafe manner, the fermittee and/or Contractor will be required to stop work and suithead the heading until the match in match the match the research of the fermittee. method is modified to meet the approval of the Engineer.

Solid sheeting shall be driven in all jacking pits and in any cuts within 6' of the edge

formanent repairs shall consist of removing the temporary parement and explacing with the same type of material and to the same depth and section that existed or

All other backfill shall be made in 6" layers with the slopes being protected at all

The Permistee shall be responsible to repair any and all sessement and/or other faults at the pit areas and over the pipe for a intnimum period of one (1) year from date of

k) The Permittee shall be responsible to maintain traffic on the State highway until aforementioned repair work is completed and normal truffic on the State highway is

1) The Permittee is responsible for the repair of roading embankments, draining, structures, etc., that becomes necessary or cause by the construction of existence of the work covered under this permit.

M) Vertical and hirricated deflections of the proposed pipe shall not exceed 0.89% from established tine and grade. All work exceeding these limits, will be replaced with and all further operations will be continued with tunnel liners, through which the proposed pipe will be placed. Liner place to be 12 gauge plain or corrugated sized as manufactured by Republic Steel Company, Armos or approved equal.

All backfill in grass plot shall be made in 8° layers, thoroughly composted, brought to and maintained to grade of existing grass, sod within previously removed sod and in the event said sod is damage, or destroyed, it shall be replaced to the satisfaction of the State Highway Administration Engineer. 50P 54 Q5 REVAMED FOR HOWARD SOIL CONSERVATION DISTRICT AND MESTS TECHNICAL REAUTAMENTS. Istricia

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL BROSION AND SEDIMENT CONTROL BY THE HOW AND SOIL COMPERVATION DISTRICT.

BEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 210 OF THE HOWARD COUNTY STANDARD SPECIFICATIONS AND AS PER SITE PLAN # SOP 04:08.

QUANTITIES ITEM BOTIMATE AS/BUILT TYPE MFOR/SUPPLIER O"WATER G' WATER 7 LF O'VALVE FIRE HYDRANT W/G'V. 8"x8" SOLID SLEEVE W'STEEL CASING PIPE 39 LF 8"×8" TEE

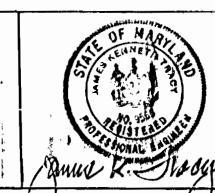
NAME OF UTILITY CONTRACTOR: L.P 3186, SURVEY I DRAFTING DIVISION AS BUILT DATE

(410) 243 - 8320

DEPARTMENT OF PUBLIC WORKS

HOWARD COUNTY, MARYEAND SHIEP, LAND DEVELOPMENT DIVISION . DATE

TRACY ENGINEERING, INC DUINSSHIELD DUINANT THEMPOSTAGO DUAL PO BOX 20281 BALTIMORGEMARYLAND RISTO



	066. 1127	
	DES: JKT	
	DAN: COT	
	CHKI JKT	
	An Africa Company of the Company of	
- >	DATE: 8.5.93	,

STEEL TO BE COATED AS IN NOTE 2 ABOYE. 4 STEEL CASING INSTALLED BY JACKING TO BE 5/16" MINIMUM THICK, A.W.W.A. C. 200.80 WITH COAL TAR ENAMEL COATING, AWWA. C. 203 ORCZIO. JOINTS TO BE WELDED FULL CIRCUMFERENCE. BORING & JACKING DETAIL NO SCALE PLAN WATER ! SEWE COUNTY CODE WATER JOI SEWER TEST GRADIENT THOSE VICINITY MAP SCALE: 1': GOO' TYPE OF BUILDING ... RELIGIOUS MICHLITY CLEV. 460.00 Nº OF LOTS ONE Nº OF WHCS ONE Nº OF SHO'S ... NA DRAINAGE AREA LITTLE PATUXENT TREATMENT FLANT N/A PROPERTY OF ELLICOIT CITY ASSEMBLY OF GOD property of 7844/497 BYWATER MAIN ? G'SEWEN SUBMISSION THERD) WATER SEWE 1 WILITY EASEMENA 13' STEEL CABING PIPE BURY LINE ELEV. 460.4 BUILDING 470 EX GRADE OVER & WATER EXISTING. R/W PRIVATE WATERMAIN | PUBLIC WATERMAIN FRECERICK RO. 400 prop grade over & water 457.8 45£, 3+98 (BY OTHERS) 8"xG"FHT 384.4 454.4 352.G 350.3 3467 149.0 (265.10) O+64 /W/SOLID SLEEVE 315.6 442.5 . L EX. 8"W. (CONT. # 44-1311) C(WIE)BB 10 STEEL CASING SAG' THICK AWWA PROFILE : SCALE: VERT : 1:4 C.200.80 W/COAL TAR ENAMEL LIN ETNIOL DINTS WILL BE WELDED ELLICOTT CITY ASSEMBLY OF GOD AS PLAN AND PROFILE PHASE 1 SHOWN S. TOIRTEID HOLTOS OF WATER MAIN CONTRACT NO. 44 - 3308 - D DATE 600'SCALE MAP NO. 10 BLOCK NO. 1 24 15-BUILT 11/14/94

BENCHMARK *1

CEMETERY LANE.

H.C. TRAVERBE STA. IG! A.

-FILL ALL VOIDS WITH FLOW ASH

- CREOSOTED TIMBER SKICS

1" x Yoz" STEEL STRAP

(2 PER PIFE LENGTH)

.18" STEEL JACKING PIFE

NOTES

PROVIDED WITHIN 2 FEET OF EACH

I A JOINT IN THE MAIN PIPE TO BE

OUTBIDE END OF CABING.

2. AN 8" BRICK BULKHEAD TO BE

PROVIDED AT EACH END OF

CASING. TWO 2" DIAMETER PIPES

PRIOR TO FILLING WITH GROUT.

AT EACH BIDE OF MAIN PIPE AT

ALL STRAPS AND OTHER EXPOSED

THROUGH BULKHEAD TO BE PROVIDED

LOW END OF CABING FOR DRAINAGE,

RAILROAD SPIKE IN BG ! E. POLE #60031

NORTH SIDE OF RTS. 144, 22G5's WEST OF

N 585, 500. 288

E 1,346,343.50G

EL 4:0.77