

GENERAL NOTES

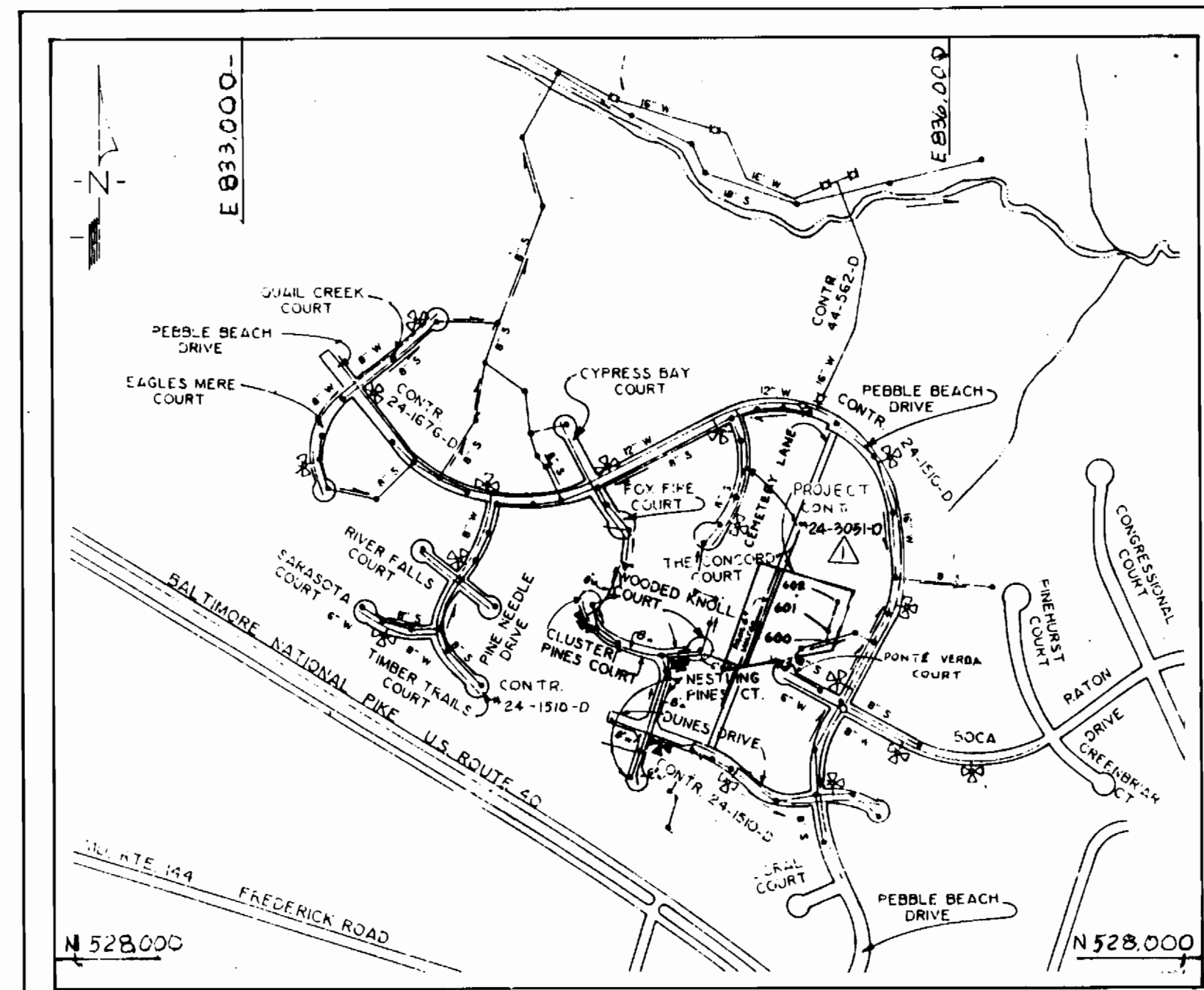
- Approximate location of existing mains are shown. The contractor shall take all necessary precautions to protect existing mains and services and maintain uninterrupted supply. Any damage incurred shall be repaired immediately to the satisfaction of the inspector, at the contractor's expense.
- All horizontal controls are based on Maryland State Coordinates.
- All vertical controls are based on U.S.G.S. Datum.
- All pipe elevations shown are invert elevations.
- Clear all utilities by a minimum of 6" clear all poles by 2'-0" minimum or tunnel as required. Any cost incurred to the contractor for tunnelling or bracing at poles shall be included in unit prices bid for excavation and backfill.
- For details not shown on the drawings use Howard County Standard Details.
- For materials and construction methods use Howard County Standard Specifications and Howard County Design Manual, Volume IV, 1989 Amendments. The Contractor shall have Volume IV, 1989 Amendments on the job site.
- Contractor shall locate existing utilities a minimum of two (2) weeks in advance of construction operations in the vicinity of proposed utilities at his own expense.
- Contractor shall notify the following utilities or agencies at least five (5) working days before starting work shown on these plans.

State Highway Administration	531-5533
Baltimore Gas & Electric Company, Underground Damage Control	859-9004
Baltimore Gas & Electric Company Contractor Services	850-4620
Baltimore Gas & Electric Company Trouble Shooting	992-3525
"Miss Utility"	1-800-257-7777
Chesapeake & Potomac (C&P)	392-9900
Bureau of Utilities, Howard County	992-2366
Colonial Pipeline Company	795-1390

- 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.
- Contractor shall remove trees, stumps, and roots along line of excavation as directed by the inspector. Payment for such removal shall be included in the unit price bid for excavation and backfill.
- 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.
- All water mains to be D.I.P. Class 52 unless otherwise noted.
- Top of all water mains to have a minimum of 3-1/2' cover unless otherwise noted.
- Valves adjacent to tees shall be strapped to tees.
- Block all fittings with concrete.
- All water house connections shall be for an inside meter setting.
- The contractor shall not operate any water main valves on the existing system.
- All sewer mains shall be C.S.P.X., V.C.P.X., or P.V.C., unless otherwise noted.
- The contractor shall provide a joint in all sewer mains within 2'-0" of exterior manhole wall.
- All manholes shall be 4'-0" inside diameter, unless otherwise noted.
- Water main and water house connection lines must have a minimum of one foot separation from the sanitary sewer and sewer house connections as they cross. Except at crossings, water and sewer lines shall have a minimum horizontal separation of 10'.
- Manholes designated thus: WT, shall have a Watertight Frame & Cover.
- All D.I.P. fittings shall be in accordance with A.W.W.A. specification C-153 Ductile Iron Compact Fittings, 3-inch through 12-inch for water and other liquids.
- All sewer house connections shall be 6" dia.
- For benchmarks see Contract 24-1510-D.
- Topo taken from field run data. Performed by Land Design Engineering, Inc. December, 1989.

SEWER HOUSE CONNECTION TABLE

LOT	Inv. at R.	Min. C
1	431.50	437.00
2	432.67	441.73

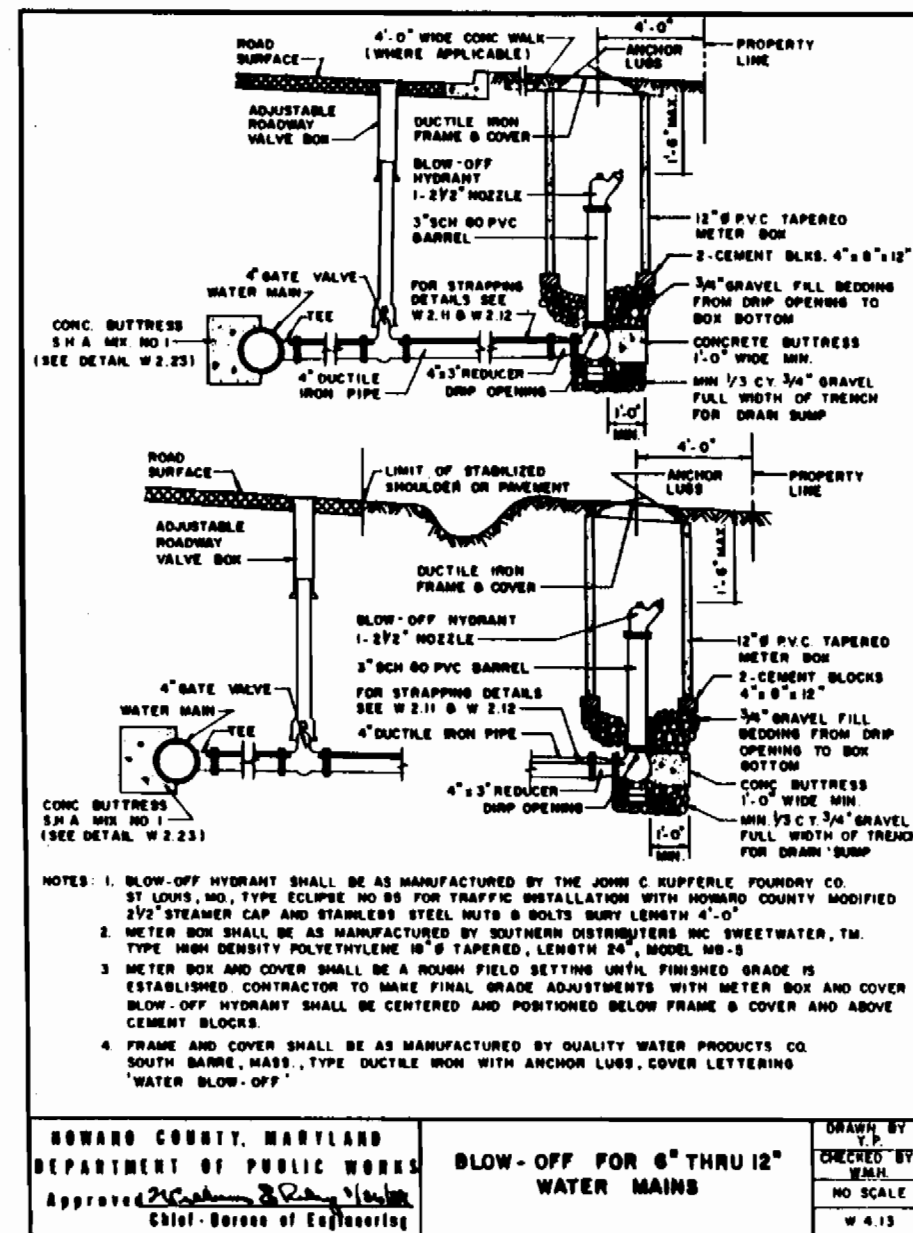


TYPE OF BUILDING RESIDENTIAL
 NUMBER OF LOTS 2
 NO. OF WATER HOUSE CONNECTION 2
 NO. OF SEWER HOUSE CONNECTION 2
 DRAINAGE AREA: LITTLE PATUXENT

SCALE: 1" = 600'

WATER AND SEWER CODE FOR COUNTY USE ONLY
 WATER No. H07
 SEWER No. 5992000

PATAPSCO VIA ROUTE 108 PUMPING STATION.



NOTES:
 1. BLOW-OFF HYDRANT SHALL BE AS MANUFACTURED BY THE JOHN C. SUPPERLE FOUNDRY CO. 3" DIA. 100' TYPE COUPLER NO. 85 FOR TRAFFIC INSTALLATION WITH HOWARD COUNTY MODIFIED 2" STEEL CAP AND STAINLESS STEEL W/ 6" HOUSING LENGTH 4'-0".
 2. METER BOX SHALL BE AS MANUFACTURED BY BOUTHERN DISTRIBUTORS INC. BEEETWATER, TN. TYPE: HIGH DENSITY POLYETHYLENE 18" DIA. TAPERED, LENGTH 24", MODEL: MB-3.
 3. METER BOX AND COVER SHALL BE A HOUSE FIELD SETTING UNLESS OTHERWISE NOTED. ESTABLISHED CONTRACTOR TO MAKE FINAL GRADE ADJUSTMENTS WITH METER BOX AND COVER. BLOW-OFF HYDRANT SHALL BE CENTERED AND POSITIONED BELOW FRAME & COVER AND ABOVE CEMENT BLOCKS.
 4. FRAME AND COVER SHALL BE AS MANUFACTURED BY QUALITY WATER PRODUCTS CO. SOUTH BARNES, MASS. TYPE: DUCTILE IRON WITH ANCHOR LUGS, COVER LETTERING: "METER BLOW-OFF".

HOWARD COUNTY, MARYLAND
 DEPARTMENT OF PUBLIC WORKS
 APPROVED: [Signature] DATE: 7/10/90
 Chief, Bureau of Engineering

BLOW-OFF FOR 8" THRU 12" WATER MAINS
 W 4-13

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENT
 [Signature] DATE: 7/10/90
 U.S. SOIL CONSERVATION SERVICE

REFERENCE No. F-89-50

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.
 [Signature] DATE: 7/10/90
 HOWARD S.C.D.

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE STANDARD SPECIFICATIONS

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 [Signature] DATE: 7/10/90
 DIRECTOR OF PUBLIC WORKS

[Signature] DATE: 7/10/90
 CHIEF BUREAU OF ENGINEERING

[Signature] DATE: 7-5-90
 CHIEF BUREAU OF UTILITIES

[Signature] DATE: 7/10/90
 CHIEF LAND DEVELOPMENT DIV.

LAND DESIGN ENGINEERING, INC.
 10620 Guilford Road • Suite 210 • Jessup • Maryland 20794
 (301) 804-6264 • (301) 880-0034

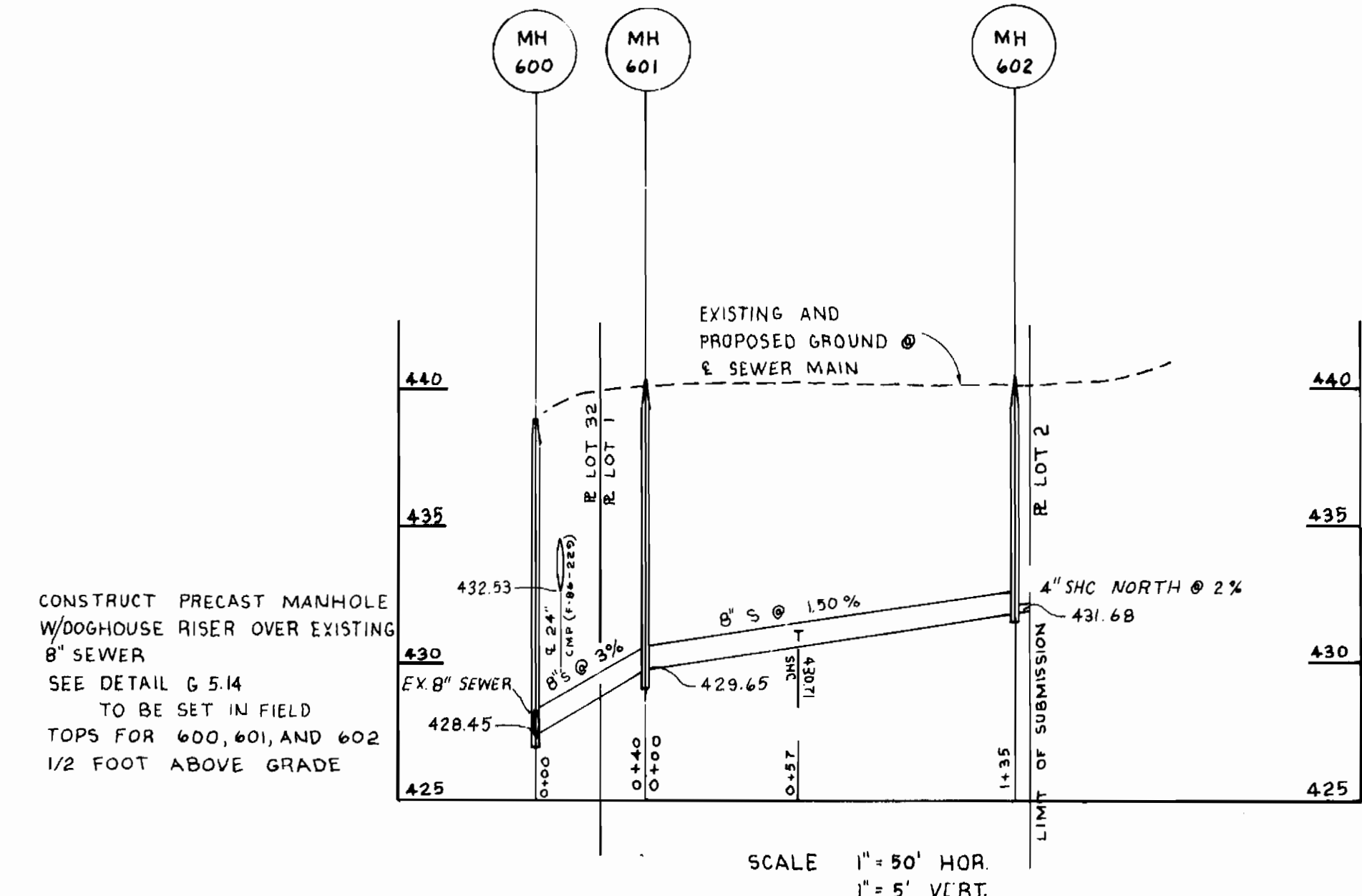
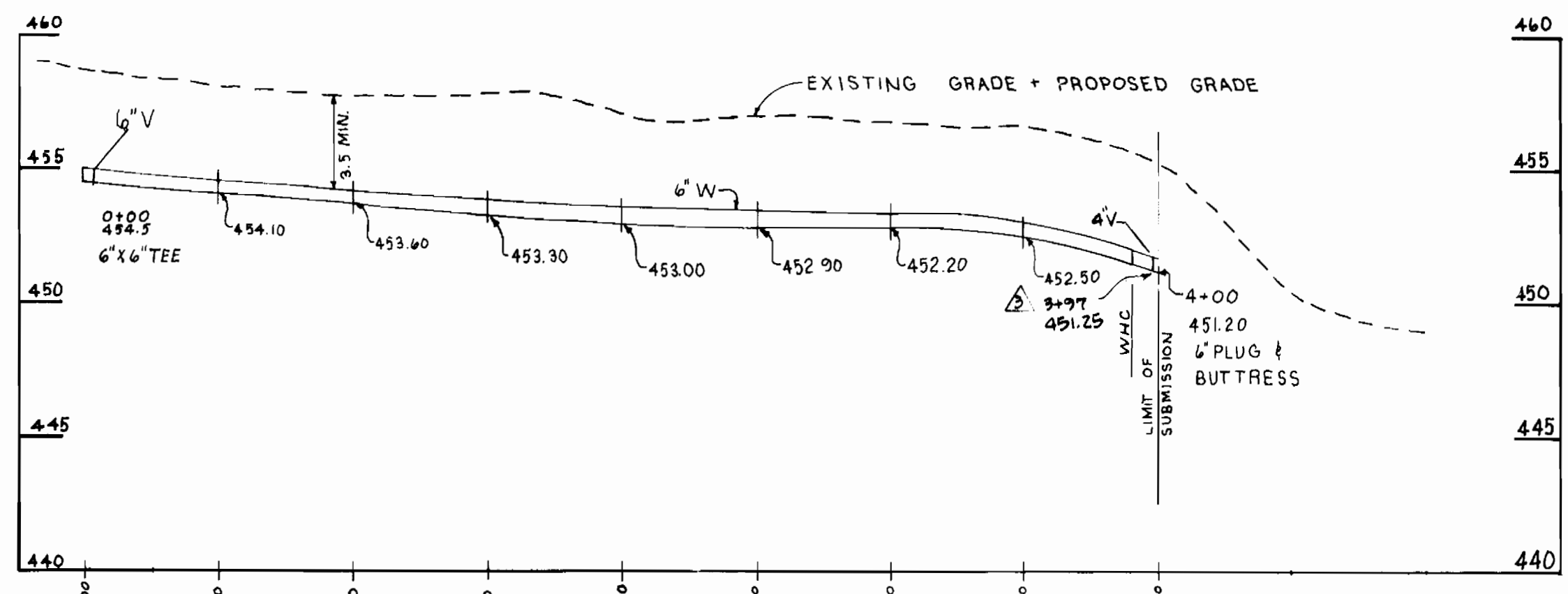
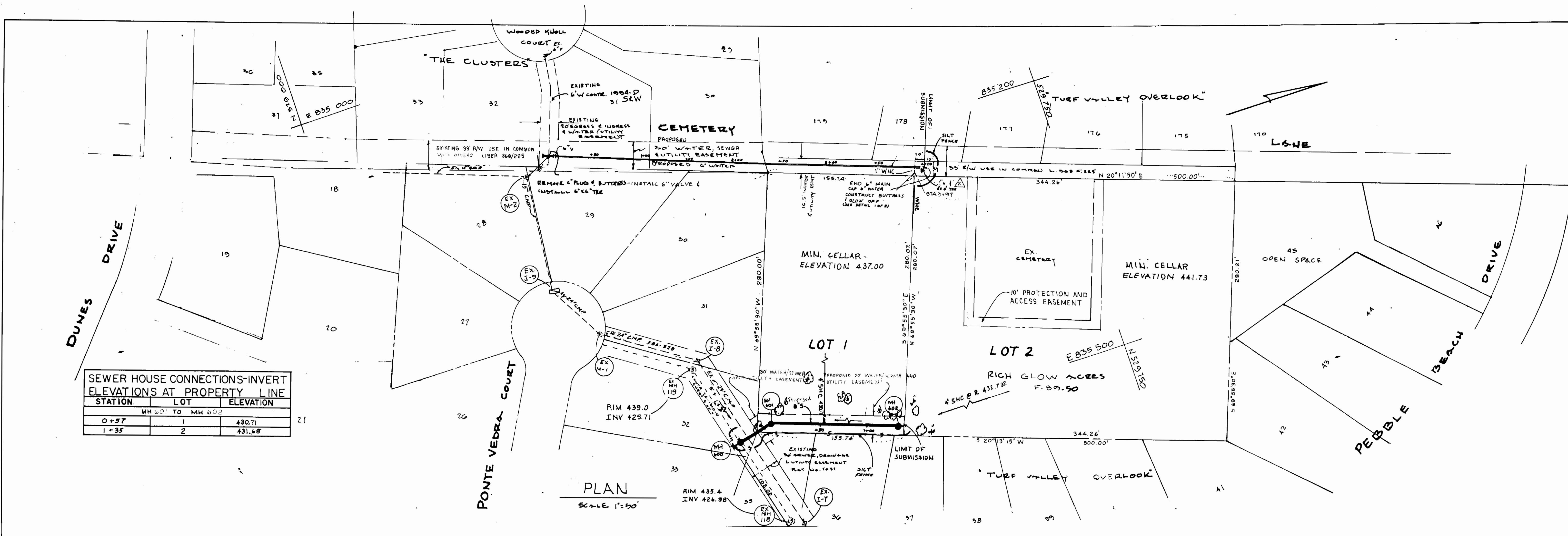
DES: T M	KBW	ADDED CONTR 24-3051-D B SITE ON VICINITY MAP	12/28/90
DRN: W J	KBW	ON PLAN VIEW - SHOWED 6" X 4" TEE + 4" VALVE @ STA. 3+97.4 DELETED 6" VALVE.	12/28/90
CHK: R L M	KBW	ADDED 4" VALVE, STA. + BLEV. ON PROFILE	12/28/90
	KBW	ADDED 4" VALVE + 6" X 4" TEE TO QUANTITIES BOX	12/28/90
DATE: 5/30/90	BY: NO.	REVISION	DATE

TITLE SHEET
 600' SCALE MAP NO. 16 BLOCK NO. 24

RICH GLOW ACRES
 WATER & SEWER EXTENSION
 LOTS 1 AND 2, F-89-50
 2ND ELECTION DISTRICT
 CONTRACT NO. 24-3051-D

SCALE AS SHOWN
 SHEET 1 OF 2

QUANTITIES			
ITEM	EST'D	AS BUILT	MATERIAL / SUPPLIER
6" WATER	400 LF		
1" WHC	10 LF		
MANHOLE	3 EA		
6" X 6" TEE	1 EA		
6" BUTTRESS PLUG	1 EA		
8" SEWER	190 LF		
6" BLOWOFF	1 EA		
6" VALVE	1 EA		
4" VALVE	1 EA		
6" X 4" TEE	1 EA		



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James P. [Signature] 7/20/90
DIRECTOR OF PUBLIC WORKS DATE

Robert [Signature] 7-5-90
CHIEF, BUREAU OF UTILITIES DATE

[Signature] 7/19/90
CHIEF, BUREAU OF ENGINEERING DATE

[Signature] 7/19/90
CHIEF LAND DEVELOPMENT DIV. DATE

LAND DESIGN ENGINEERING, INC.
10820 Guilford Road • Suite 210 • Jessup • Maryland 20794
(301)804-8284 • (301) 880-0034

Rodolph May

DES: T/M	KBW	ADDED CONTR # 24-3051-D @ SITE ON VICINITY MAP	12/28/90
DRN: W/J	KBW	ON PLAN VIEW SHOWN 6" X 6" TEE + 4" VALVE @ STA 3+97 + DELETED 6" VALVE	12/28/90
CHK: R/LM	KBW	ADDED 4" VALVE - STA + ELEV. ON PROFILE	12/28/90
	KBW	ADDED 4" VALVE + 6" X 4" TEE TO QUANTITIES BOX	12/28/90
DATE: 5/30/90	BY NO.	REVISION	DATE

PROFILES OF
WATER & SEWER MAINS

60' SCALE MAP NO. 16 BLOCK NO. 24

RICH GLOW ACRES
WATER & SEWER EXTENSION
LOTS 1 AND 2, F-89-50
2ND ELECTION DISTRICT
CONTRACT NO. 24-3051-D

SCALE AS SHOWN
SHEET 2 OF 2