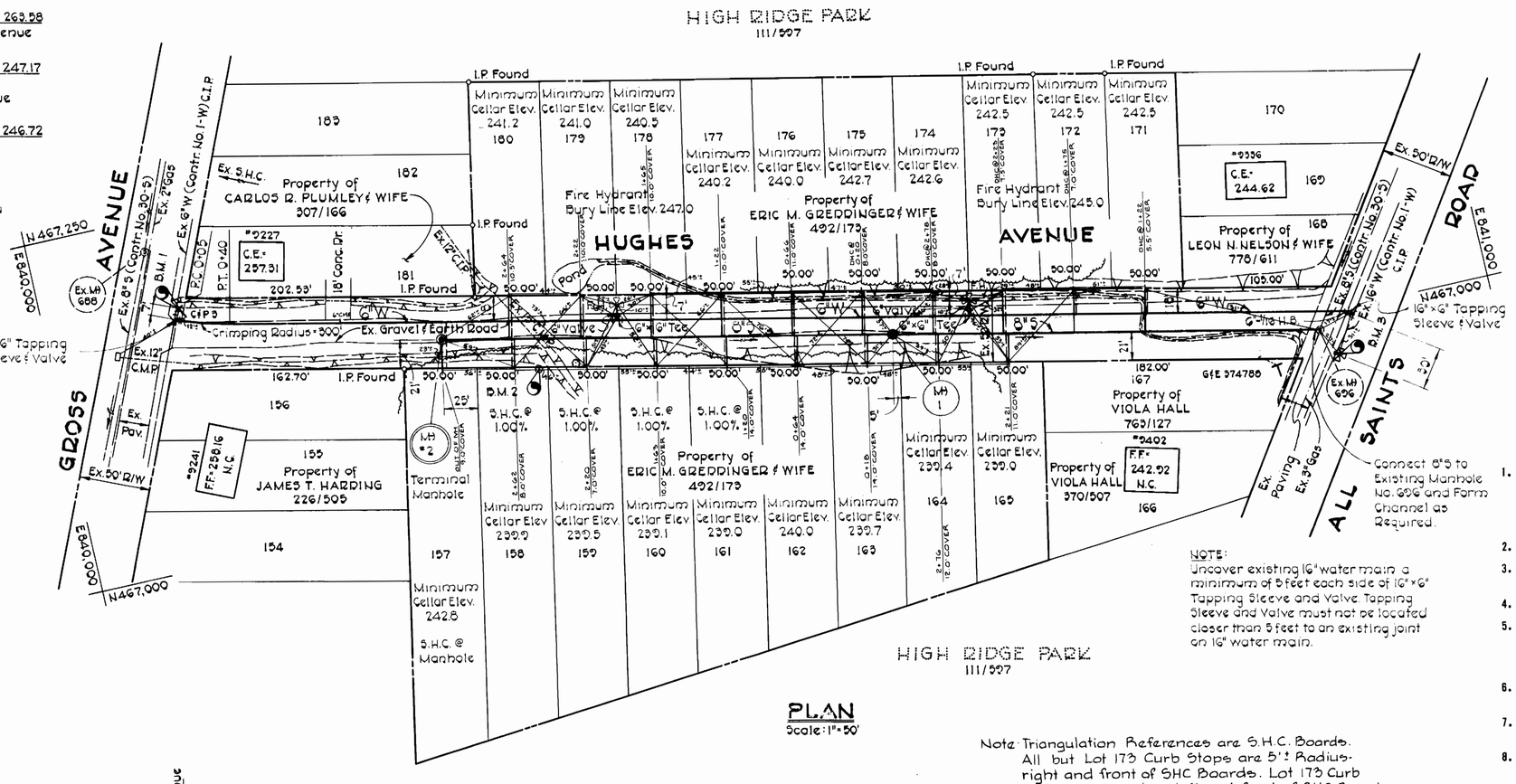
BENCH MARKS

B.M. 1 — Elev. 263.58
R.R. Spike in C&P 3 at Gross Avenue and Hughes Avenue

B.M. 2 — Elev. 247.17
R.R. Spike found in Twin 12" Maple South of Hughes Avenue

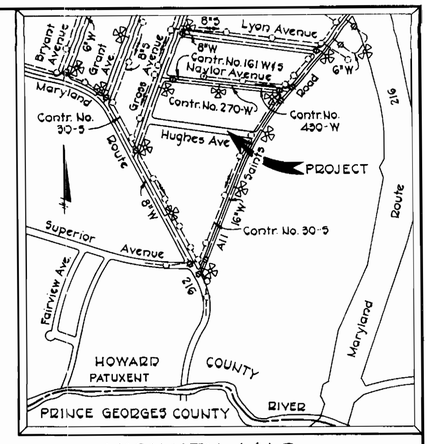
B.M. 3 — Elev. 246.72
Roadside Bonnet Bolt, Fire Hydrant at Hughes Avenue and All Saints Road

NOTE:
Uncover existing 6" water main a minimum of 5 feet each side of 6"×6" Tapping Sleeve and Valve. Tapping Sleeve and Valve must not be located close than 5 feet to an existing joint on 6" water main.



NOTE:
Uncover existing 16" water main a minimum of 5 feet each side of 16"×6" Tapping Sleeve and Valve. Tapping Sleeve and Valve must not be located closer than 5 feet to an existing joint on 16" water main.

PLAN
Scale: 1" = 50'

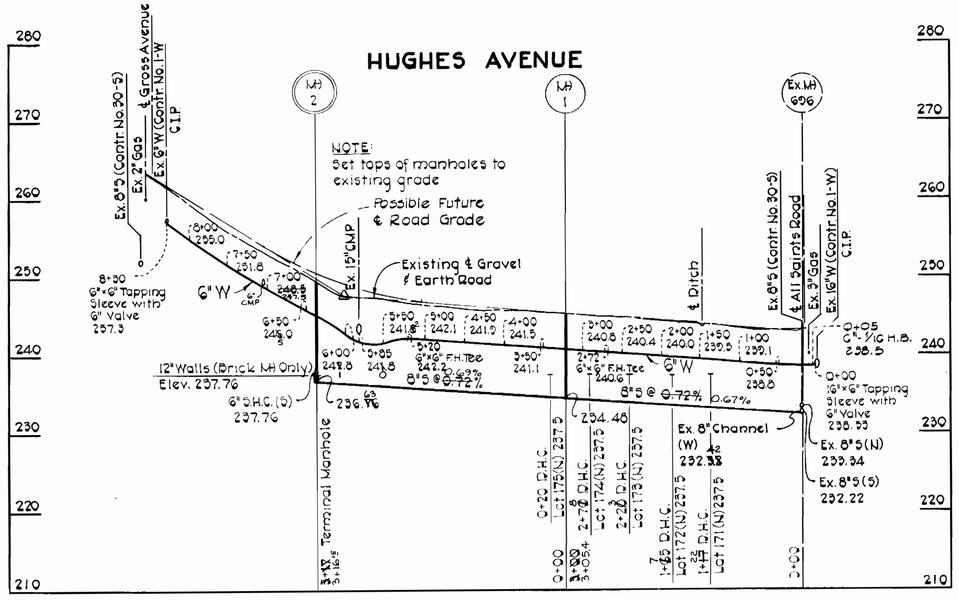


VICINITY MAP
Scale: 1" = 600'

GENERAL NOTES

1. Approximate locations of existing utilities are shown. The Contractor shall take all necessary precautions to protect the existing utilities and to maintain uninterrupted service. Any damage incurred due to the Contractor's operation shall be repaired immediately at the Contractor's expense.
2. All pipe elevations shown are invert (I) elevations.
3. The Contractor shall locate existing utilities well in advance of construction activities.
4. See standard details bound in specifications.
5. Clear all utilities by a minimum of 6 inches. Clear all utility poles by 2'-0" minimum or tunnel as required. Any costs incurred to the Contractor for tunneling or bracing poles shall be included in the unit price bid for excavation.
6. The Contractor shall provide a pipe joint in all sewer mains within 2'-0" of exterior manhole walls.
7. All manholes shall be 4'-0" inside diameter, unless otherwise noted.
8. Buttress or anchor all water main fittings with concrete. All valves shall be strapped to tees in accordance with standard details.
9. All water mains to have a minimum of 3.5' cover unless otherwise noted.
10. All fire hydrants shall be strapped to the tee and shall be buttressed with concrete in accordance with standard details. Cost of strapping fire hydrants and valves to be included in the unit price bid for furnishing and installing fire hydrants. Soil around the fire hydrant to be compacted in accordance with Section 5-15 of the Standard Specifications.
11. Bury line elevations on fire hydrants shall be set to the elevations shown on the plan.
12. All horizontal and vertical controls are based on the Maryland State Grid System.

Note: Triangulation References are S.H.C. Boards. All but Lot 173 Curb Stops are 5'± Radius right and front of SHC Boards. Lot 173 Curb Stop is 5'± Radius left and front of SHC Board



PROFILE
Scale: Horiz. 1" = 100'
Vert. 1" = 10'

8" Sewer Pipe - ACP - Class 2400 - John Mansfield
6" Water - DIP - US Pipe

QUANTITIES		
Item	Proposed	As-Built
8" Sewer	~~617~~ L.F.	613 L.F.
6" Water	~~885~~ L.F.	850 L.F.
Manholes	~~20~~ V.F.	22 V.F.
8" S.H.C.	~~479~~ L.F.	478 L.F.
¾" W.H.C.	~~498~~ L.F.	512 L.F.
Fire Hydrants	2 Each	

CONTRACT NO. 2747-D-W&S
HUGHES AVENUE
HIGH RIDGE PARK
WATER AND SEWER MAIN EXTENSION

STATE OF MARYLAND — BEVERLY M. JOHNSON — No. 3407 — REGISTERED PROFESSIONAL ENGINEER

PURDUM & JESCHKE
ENGINEERS
1023 N. CALVERT ST.
BALTIMORE, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
P. J. Rogan Jr. 6-10-77 — DIRECTOR OF PUBLIC WORKS — DATE
W. O. Hilbert 6-10-77 — CHIEF-BUREAU OF ENGINEERING — DATE

CONTRACT NO. X747-D-W&S

PLAN OF WATER AND SEWER MAINS

HUGHES AVENUE
HIGH RIDGE PARK
WATER AND SEWER MAIN EXTENSION
ELECTION DISTRICT NO. 6 — HOWARD COUNTY, MARYLAND

DRAWING NO. 1 OF 1
SCALE: As Shown
DESIGNED: RDB
DRAFTED: ARZ
CHECKED: TAF

AS BUILT 9-28-77

K&E BALTIMORE 17 0493 PHOENIX MC 3343+

JUNE 7, 1977

W.O. 5328-00