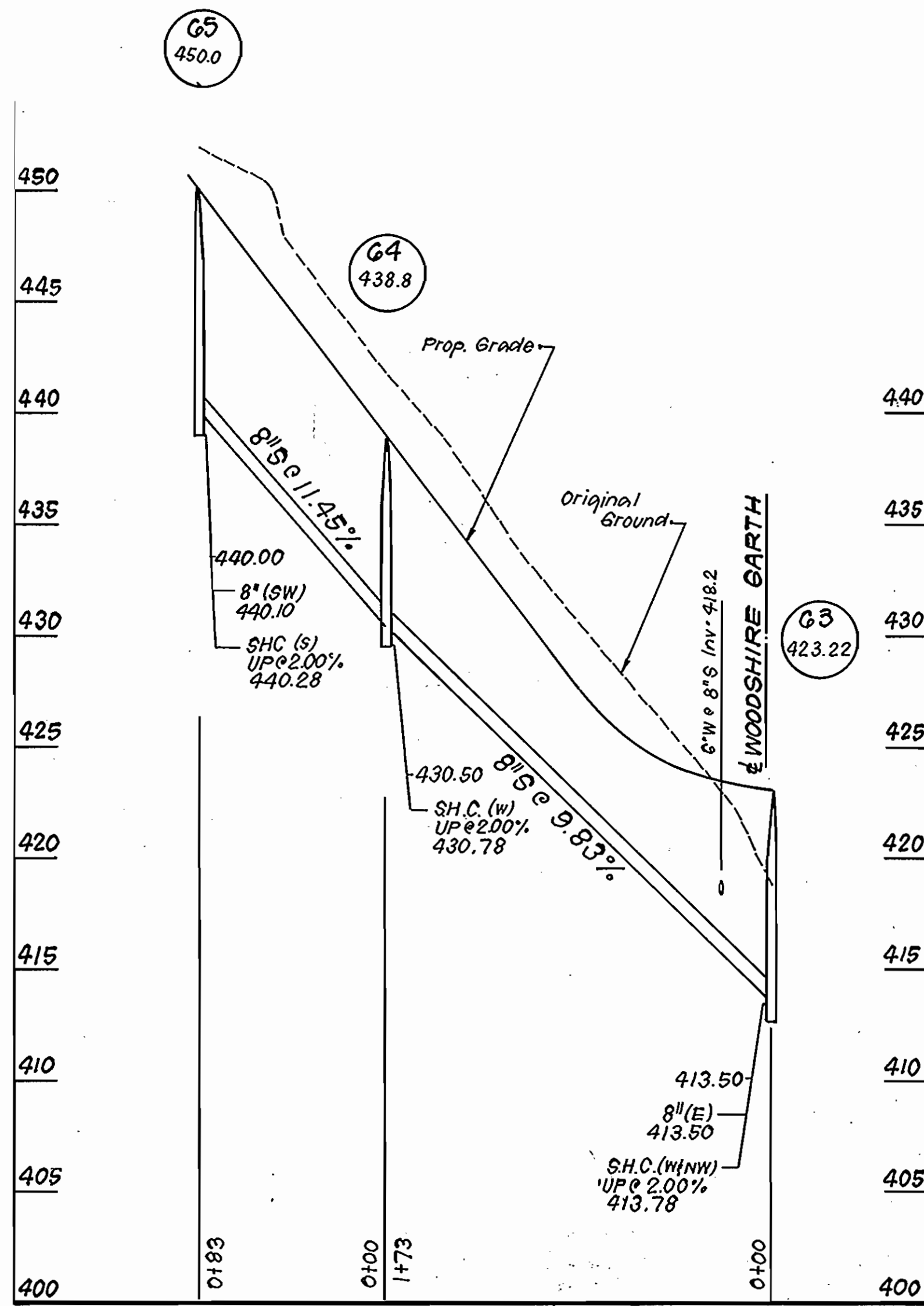
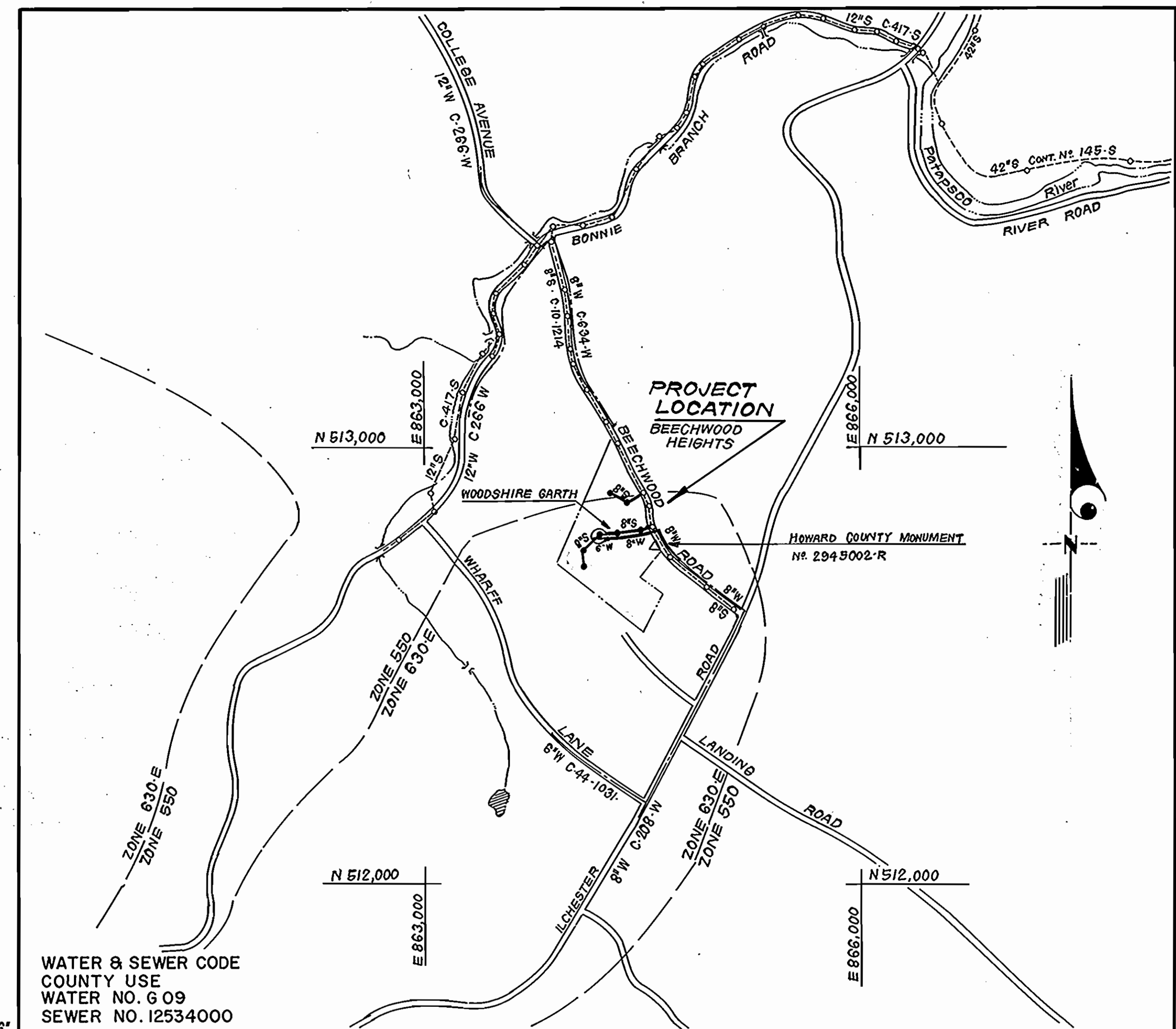


NOTE: THESE W/S PLANS SUPERSEDE THOSE W/S PLANS APPROVED BY THE DIRECTOR OF PUBLIC WORKS ON JULY 6, 1989.

TYPE OF BUILDING	SINGLE FAMILY
NO. OF LOTS	17
NO. OF WHC's	16
NO. OF SHC's	16
DRAINAGE AREA	PATAPSCO



PROFILE SCALE
HORIZONTAL: 1"=50'
VERTICAL: 1"=5'

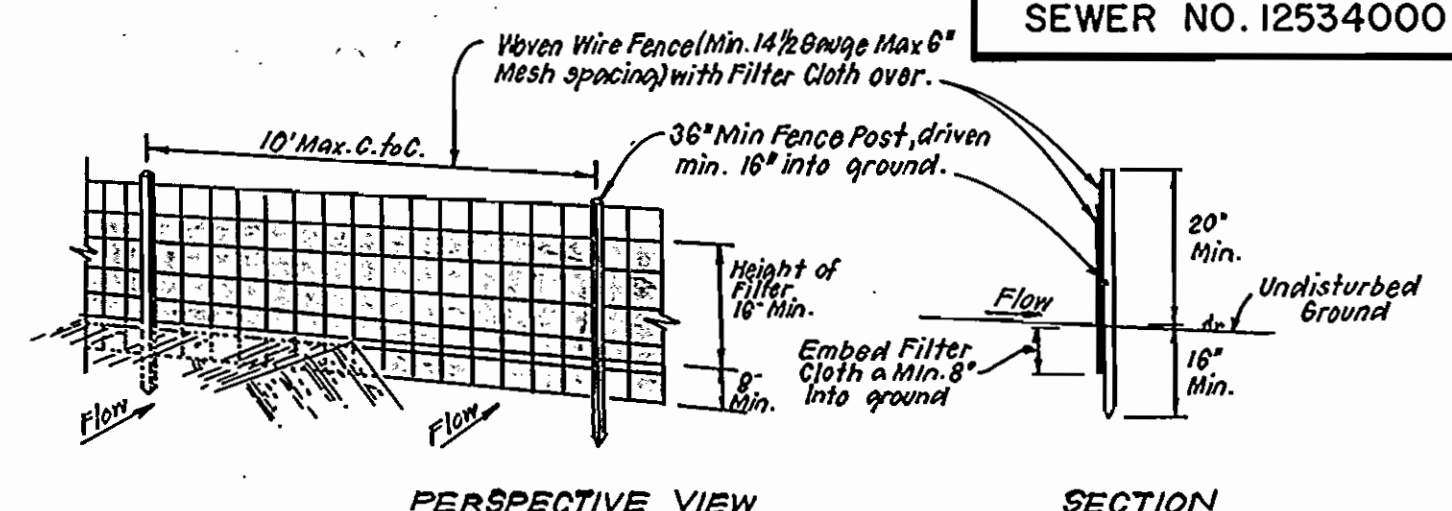


WATER & SEWER CODE
COUNTY USE
WATER NO. 6 09
SEWER NO. 12534000

VICINITY MAP
SCALE: 1"=600'

GENERAL NOTES

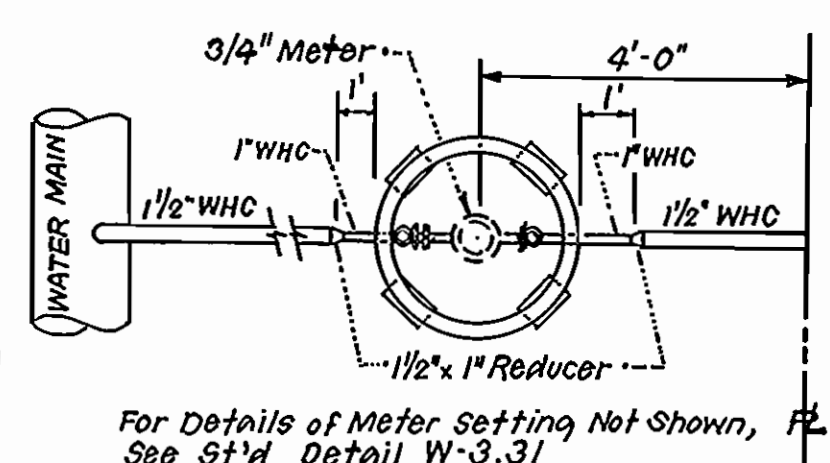
- Approximate location of existing mains are shown. The contractor shall take all necessary precautions to protect existing mains and services and maintain uninterrupted supply. Any damage incurred shall be repaired immediately to the satisfaction of the Inspector, at the contractor's expense.
- All 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 tunneling 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 Amend., 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 - 298-9001
 - "Miss Utility" - 1-800-257-7777
 - Chesapeake & Potomac (C & P) Telephone Company - 1-800-257-7777
 - 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.
- Bury line elevations on fire hydrants shall be set to the elevations shown on the drawings. All fire hydrants shall be strapped and buttressed with concrete in accordance with standard details. Soil around the fire hydrant to be compacted in accordance with Sections 1000 & 1005 of the Standard Specifications.
- The contractor shall not operate any water main valves on the existing system.
- All sewer mains shall be C.S.P.X., V.C.R.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 and Cover.
- WHC's to lots 4, 5, 6 & 7 shall be 1-1/2" with 3/4" outside meter setting. See Special Detail This Sheet. WHC's to lots 8, 10, 13 & 15 shall be 1" with 3/4" outside meter setting. See S'd Detail W/ 3.31. All other lots shall have inside meter settings.



PERSPECTIVE VIEW
CONSTRUCTION SPECIFICATIONS:
1. Woven wire fence to be fastened securely to fence posts with wire ties or staples.
2. Filter cloth to be fastened securely to woven wire fence with ties spaced every 24" at top and mid section.
3. When 2 sections of filter cloth adjoin each other, they shall be overlapped by 6" and pinned.
4. Maintenance shall be performed as needed and material removed when "Bulges" develop in Silt Fence.

POSTS: Steel either T or U Type or 2" Hardwood
FENCE: Woven Wire, 14 1/2 Gauge 6" Max. Mesh Opening
FILTER CLOTH: Filter X, Mirafi 100X, Stablilink, T140N or Approved equal.
PREFABRICATED UNIT: Geotab, Envirofence, or Approved equal.

SILT FENCE DETAIL (S)
NO SCALE



SPECIAL DETAIL FOR WHC AND METER TO LOTS 4, 5, 6 & 7
NO SCALE

CONTRACT NO. 14-1859-D
BEECHWOOD HEIGHTS
LOTS 1 THRU 17, PARCEL 129
HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS

Sediment Control Measures will be implemented in accordance with Section 219 of the Specifications & with Road Construction Plan F-89-81; Drawing Sediment & Erosion Control.

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENT
SIGNATURE: [Signature] DATE: 1-31-90

U.S. SOIL CONSERVATION SERVICE

This Development Plan is approved for Soil Erosion and Sediment Control by the Howard Soil Conservation District.

APPROVED: [Signature] DATE: 1/31/90
Howard S.C.D.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
James J. [Signature] 2/2/90 DIRECTOR OF PUBLIC WORKS
Robt M. [Signature] 1-23-90 CHIEF, BUREAU OF UTILITIES
[Signature] 2/2/90 CHIEF, LAND DEVELOPMENT DIV.

CLARK FINEPROCK & SACKETT, INC.
ENGINEERS - PLANNERS - SURVEYORS
7135 MINSTREL WAY COLUMBIA MARYLAND 21045
(301) 381-7500 BALTO. (301) 621-8100 WASH.



DES: JTR	JTR	1	Rev. Quantities Box & 8'S bet Ex.M 9 and M 167	8-17-90
DRN: JTR	JTR	2	REV. SEWER BETWEEN MH. 110 (61), 66-67	11-6-90
CHK: C.C.M.				
DATE: DEC. 89				
BY	NO.	REVISION	DATE	

TITLE SHEET
600' SCALE MAP NO. 31 BLOCK NO. 1

QUANTITIES				
ITEM	EST'D	AS BUILT	MATERIAL / SUPPLIER	
8" S	942 LF	868 LF	8" SDR-35 PVC SEWER	J-M MANUFACTURING CORP.
8" W	575 LF	568 LF	8" CL 52 DIP.	GRIFFIN PIPE PRODUCTS
6" W	95 LF	115 LF	6" CL 52 DIP.	"
4" SHC	500 LF	480 LF	4" SDR-35 PVC SEWER	J-M MANUFACTURING CORP.
1-1/2" WHC	85 LF	80 LF	1/2" TYPE K COPPER	HOWELL METALS
1" WHC	230 LF	176 LF	1" TYPE K COPPER	"
3/4" WHC	135 LF	135 LF	3/4" TYPE K COPPER	"
4'-0" DIA. MH	7 EA			
FIRE HYDRANT	2 EA	2 EA	CENTURION FIRE HYD.	MUELLER CO.
8" V	1 EA	1 EA	8" M.J. RESILIENT SEAT GATE VALVE	MUELLER CO.
3/4" W METER PIT	8 EA	8 EA		

BEECHWOOD HEIGHTS
LOTS 1 THRU 17
PARCEL 129
1ST ELECTION DISTRICT
CONTRACT NO. 14-1859-D

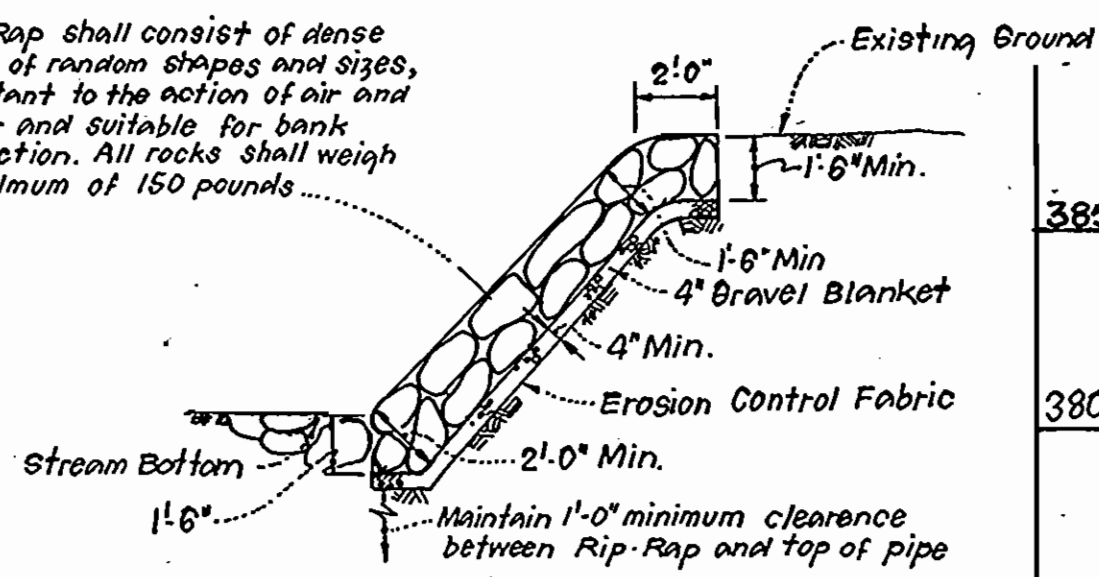
AS-BUILT 3-15-91

BENCH MARK #8 ELEV.=415.64
cut in corner of catch basin.

BENCH MARK #9 ELEV.=398.56
cut nail in B6+E Pole #85898

PLAN SCALE
1" = 50'

Rip-Rap shall consist of dense rocks of random shapes and sizes, resistant to the action of air and water and suitable for bank protection. All rocks shall weigh a minimum of 150 pounds.



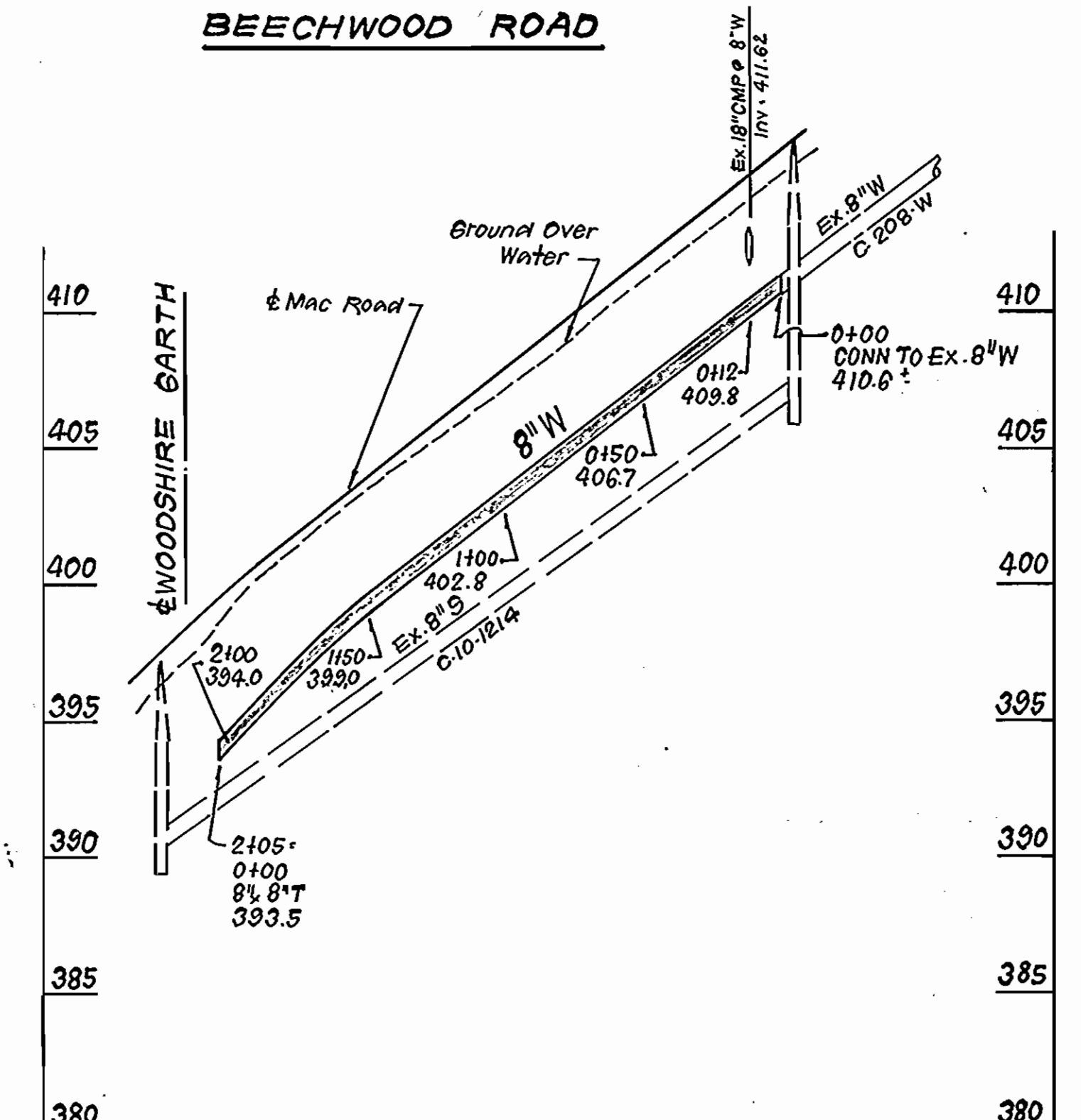
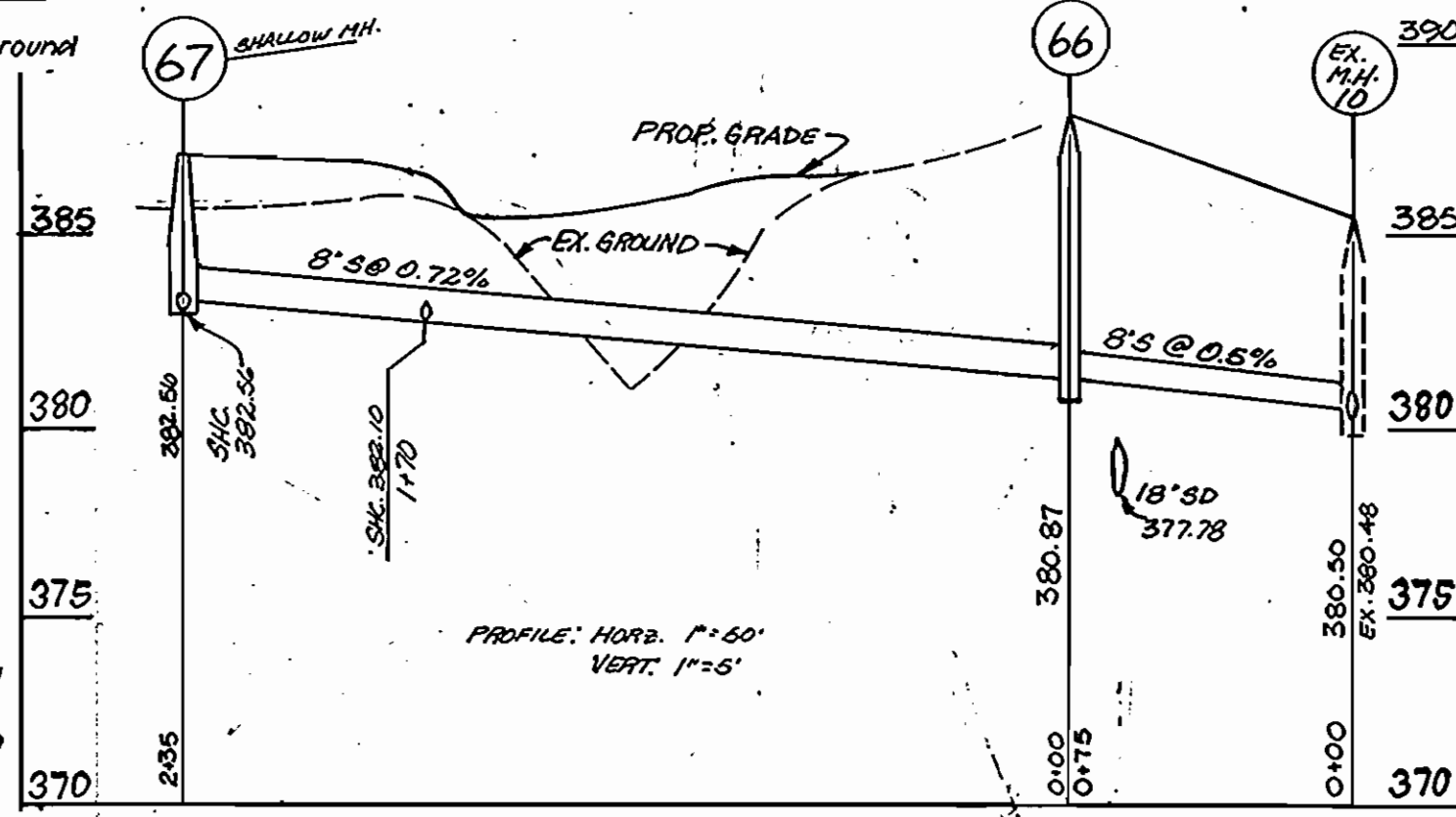
NOTES:

- Erosion Control Fabric shall be Poly Filter-X as manufactured by Carthage Mills Inc., Erosion Control Division, 124 West 66th Street, Cincinnati, Ohio; Laurel Erosion Control Cloth as manufactured by Laurel Plastics Inc., Madison, Main, or approved equal.
- Rip-Rap shall be placed 6" each side of sewer or as shown. Any disturbance to stream banks beyond these limits shall be protected with Rip-Rap.

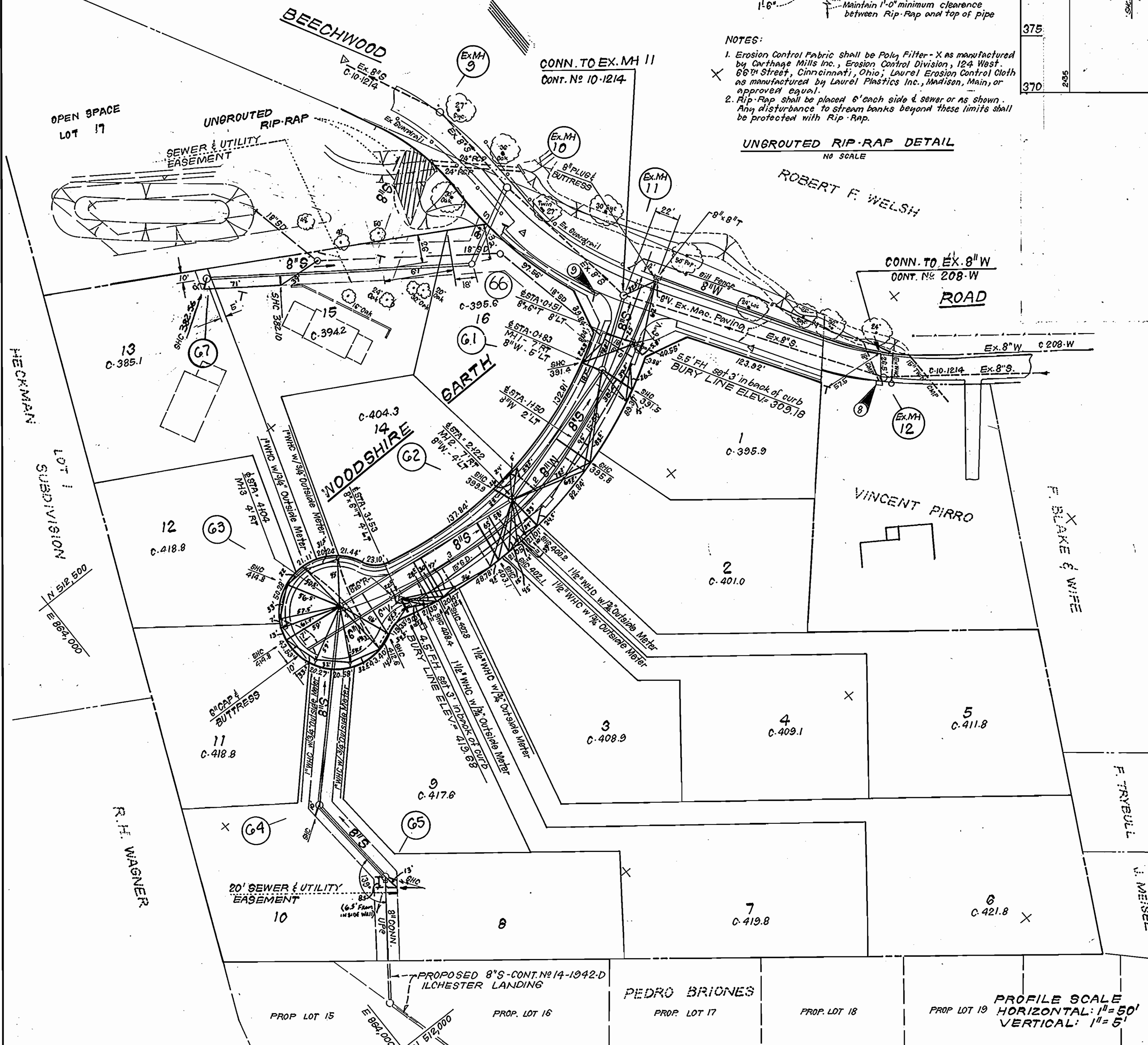
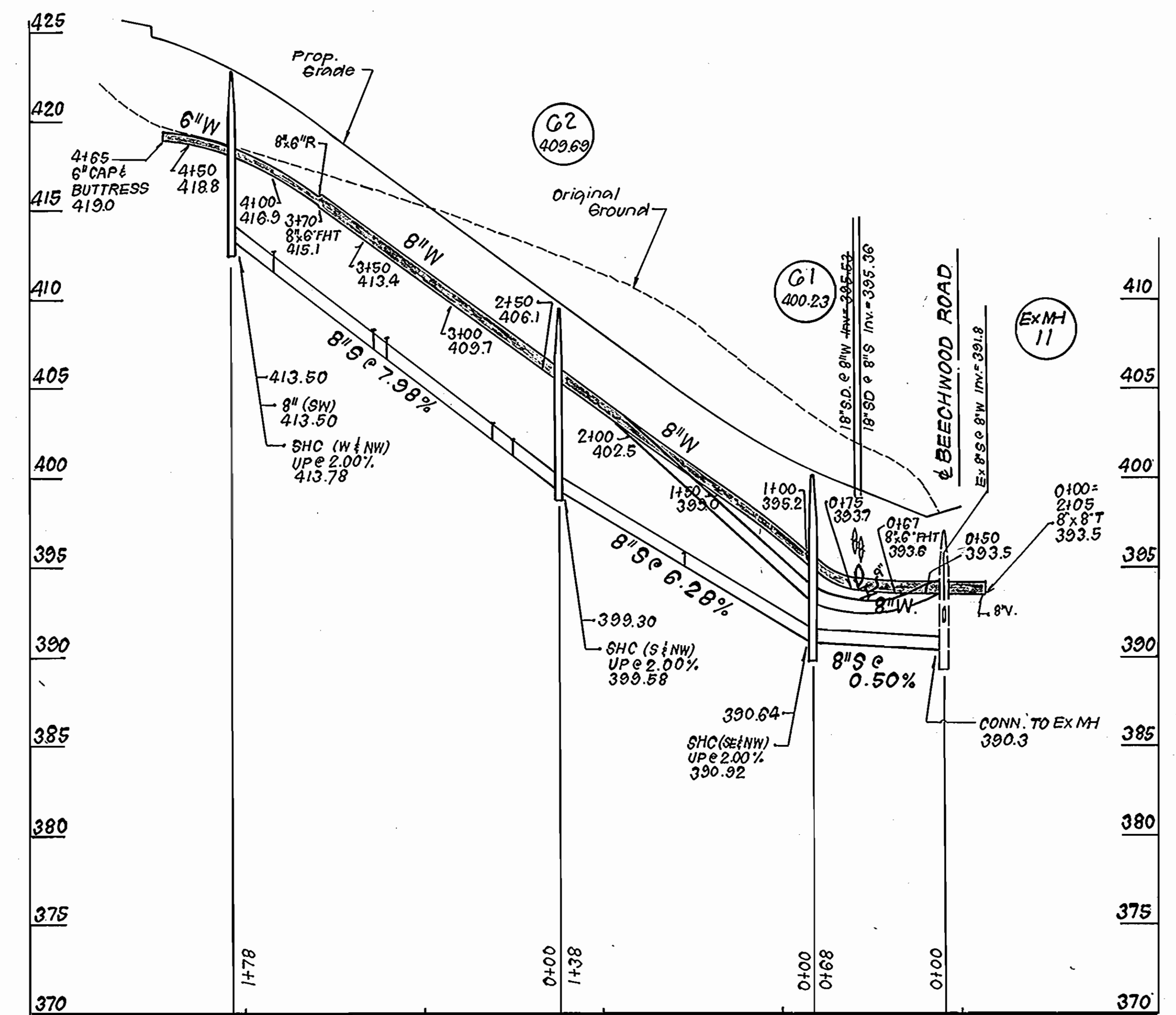
UNGRROUTED RIP-RAP DETAIL
NO SCALE

ROBERT F. WELSH

CONN. TO EX. 8" W
CONT. NO. 208-W
ROAD



WOODSHIRE GARTH



PROFILE SCALE
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James H. ... 2/2/90
DIRECTOR OF PUBLIC WORKS DATE

Robert W. ... 1-23-90
CHIEF, BUREAU OF UTILITIES DATE

... 2/2-90
CHIEF, BUREAU OF ENGINEERING DATE

... 2/1/90
CHIEF, LAND DEVELOPMENT DIV. DATE

CLARK · FINEPROCK & SACKETT, INC.
ENGINEERS · PLANNERS · SURVEYORS

7155 MINSTREL WAY COLUMBIA MARYLAND 21045
(301) 381-7500 BALTO. (301) 621-8100 WASH.



DES: JTR	JTR	1	REV. 8" S between Ex.MH 9 and MH 67	8-17-90
DRN: JTR	JTR	2	REV. SEWER BETWEEN MH #10 (EX.) 66-67	11-6-90
CHK: C.C.M.				
DATE: DEC-90				
BY	NO.	REVISION	DATE	

PLAN & PROFILE OF
WATER & SEWER MAINS

600' SCALE MAP NO. 31 BLOCK NO.

BEECHWOOD HEIGHTS
LOTS 1 THRU 17
PARCEL 129
1ST ELECTION DISTRICT
CONTRACT NO. 14-1859-D

SCALE AS SHOWN
SHEET 2 OF 2