

Reviewed for HOWARD S.C.D. and meets Technical Requirements.

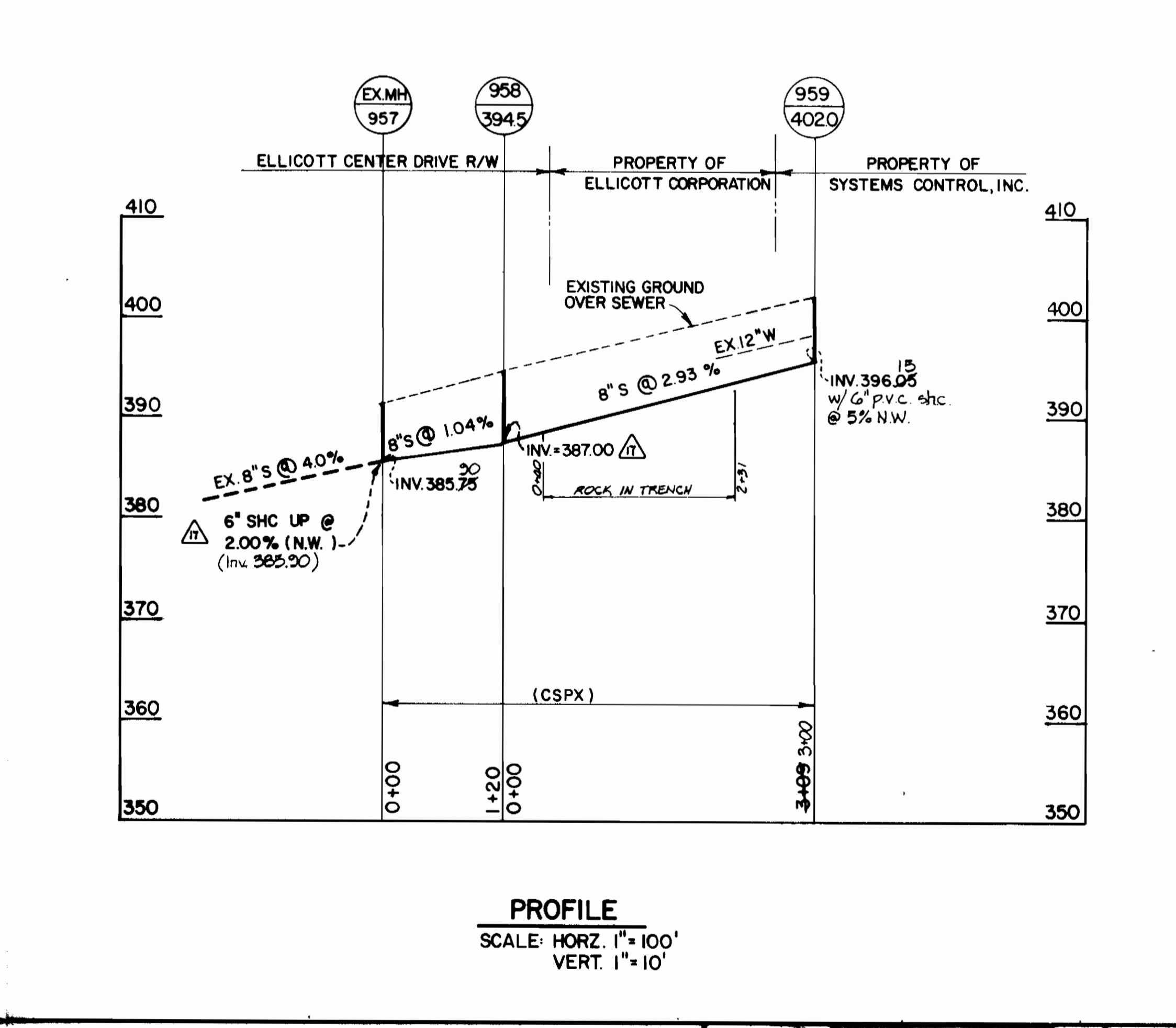
Y. Kanan 2/4/83
U.S. Soil Conservation Service Date

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

Howard S.C.D. 2-4-83
Date

TYPE OF BUILDING	OFFICE
NUMBER OF LOTS	1
NUMBER OF WHC	1
NUMBER OF SHC	1
DRAINAGE AREA	PATAPSCO

WATER CODE F04
SEWER CODE I403500



WATER AND SEWER 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 Engineer, 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 construction of the main.
- For details not shown on the drawings use Howard County Standard Details.
- For materials and construction methods use Howard County Standard Details.
- 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.
- 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 Engineer. Payment for such removal shall be included in the unit price bid for construction of the main.
- 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.

SEWER

- All sewer mains shall be C.S.P.X., R.C.S.P., V.C.P.X., A.C.P. Class 2400 or PVC 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.
- Manholes shown with 12" and 16" walls are brick manholes only.
- Manholes designated W.T. in plan and profile shall have watertight frame and covers, Standard Detail S1.45. Where watertight manhole frame and cover is used, set top of frame 1'-6" above finished grade.

QUANTITIES	AS BUILT	MATERIAL / SUPPLIES
ITEM NO.		
8" CSPX SEWER 429'		
4' DIA. MH	2	

CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE (5) WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:

- BALTIMORE GAS & ELECTRIC COMPANY - UNDERGROUND ELECTRIC DISTRIBUTION, CUSTOMER SERVICE - 685-0123
- BALTIMORE GAS & ELECTRIC COMPANY - UNDERGROUND GAS DISTRIBUTION, CUSTOMER SERVICE - 685-0123
- STATE HIGHWAY ADMINISTRATION - 531-5533
- ENGINEERING "DAMAGE CONTROL" - 234-5621
- "MISS UTILITY" - 1-559-0100
- CHESAPEAKE & POTOMAC (C&P) TELEPHONE COMPANY 725-9976
- AMERICAN TELEPHONE AND TELEGRAPH - CABLE LOCATION DIVISION - 393-3553
- COLONIAL PIPELINE COMPANY - 781-4641
- BUREAU OF UTILITIES HOWARD COUNTY - 992-2366

Seedbed Preparation

Plow, disc and slopes up to 3:1 grade shall be loose and to a depth of at least 3 inches. The top layer of soil shall be loosened by raking, discing or other acceptable means before seeding.

Seeding

Apply seed uniformly with a cyclone seeder, drill, culti-picker, seeder or hydroseeder on firm moist seedbed.

Mulching

- Straw - 1 1/2 - 2 tons/acre - 70 - 90 lbs./1000 sq. ft.
- Woodfiber - 1500 lbs./acre - 35 lbs./sq. ft.
- Mulch nettings
- Wood chips - 6 tons/acre - 275 lbs./1000 sq. ft.

Mulch Anchoring

Peg and twine, mulch nettings, mulch anchoring tool, liquid mulch binders.

Temporary Seeding

- 1000 lbs./acre Fertilizer 10-10-10
- 4000 lbs./acre Dolomitic Limestone
- 1 bushel/acre Perennial Ryegrass, Acceptable dates 2/1-4/30 and 8/15-11/15
- 1 bushel/acre Millet, Acceptable dates 5/1-8/14

Permanent Seeding

- 1000 lbs./acre Fertilizer 10-10-10
- 4000 lbs./acre Dolomitic Limestone
- 6 lbs./1000 F², K-31, Acceptable 2/1-10/31*

*Irrigate from 5/1-8/14

- 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.
 - All pipe elevations shown are 4" MH invert elevations.
 - Total invert drop across each MH shall be 0.10 feet.
 - The Contractor shall locate existing utilities a minimum of two weeks in advance of construction operations in vicinity of utilities.
 - All manholes shall be 4'-0" inside diameter, precast and have paved inverts.
 - The Contractor shall provide a pipe joint in all sewer mains within 2'-0" of exterior manhole walls.
 - All coordinates are based on Maryland state datum.
 - All disturbed areas except where paving is required shall be seeded/sodded in accordance with specifications shown.
 - All finish grading and paving shall be done in such a manner so as to preclude the ponding of water.
 - All utility work must be coordinated by Contractor with utility companies and with the approval by the Owner prior to any construction.
 - The Contractor or Developer shall contact the construction inspection/survey division, 24 hours in advance of commencement of work at 792-7272 or 792-7273.
 - Contractor shall be responsible for maintaining existing paved surfaces in a clean and dust-free condition during construction.
 - Contractors shall erect and maintain temporary barricades to limit public access to hazardous areas. Barricades shall be clearly visible with adequate illumination to provide sufficient visual warning of the hazardous areas during both day and night. Plastic tape, rope, or similar material will not constitute a satisfactory barricade.
 - The Contractor shall be held responsible for any damage to, and for the maintenance and protection of existing facilities and structures.
 - All horizontal and vertical locations of existing underground structures and utility lines shown on these plans are taken from field topographic surveys. True horizontal and vertical locations shall be field verified by careful hand excavation where subject to new construction.
 - Contractor shall make saw cuts or otherwise clean connections and match elevations where existing pavement, concrete curb and gutter, and utilities must be removed, connected to or replaced for new construction.
 - Contractor shall be responsible for all vertical and horizontal control required for new work.
 - Sediment and erosion control for trench excavation:
 - Place all excavation on the upstream side of trench.
 - Immediately stabilize all areas disturbed by trench construction at the end of each day.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

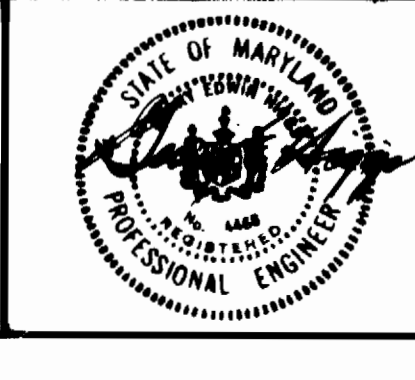
F. Newman 2-8-83
DATE

W. R. ... 2-8-83
DATE

M. B. ... 2-7-83
DATE

Boyle
Engineering Corporation

SUITE 302
7700 LEESBURG PIKE
FALLS CHURCH, VA 22043
(703) 893-0711



DES. JC III	
DRN. RUL	
CHK. GEH	
DATE 1/13/83	
BY NO	
REVISION	

PLAN & PROFILE OF SEWER MAIN

600 SCALE MAP NO. 24 BLOCK NO. _____

ELLICOTT CENTER CONTRACT No. 14-1092-D
SECTION 2 PARCEL A-1

OWNER & DEVELOPER
SYSTEMS CONTROL, INC.
139D OLD SOLOMON'S ISLAND ROAD
ANNAPOLIS, MARYLAND 21401

SCALE AS SHOWN
SHEET 1 OF 1