

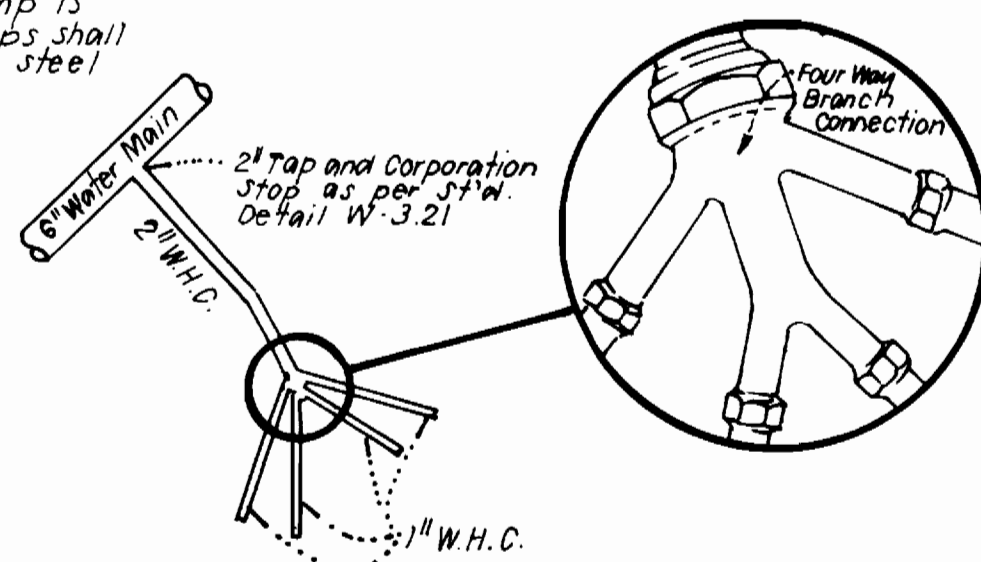
| SEWER HOUSE CONNECTION TABLE | | | | | |
|------------------------------|-----------|----------|-------------|-----------|----------|
| Lot No. | Inv. @ PL | Min. CEL | Lot No. | Inv. @ PL | Min. CEL |
| M-60 | 407.0 | 410.1 | M-82 | 397.8 | 401.0 |
| M-61 | 407.1 | 410.3 | M-83 | 398.0 | 401.0 |
| M-62 | 407.3 | 410.5 | M-84 | 390.9 | 393.9 |
| M-63 | 407.6 | 410.8 | M-85 | 396.9 | 400.2 |
| M-64 | 407.5 | 410.7 | M-86 | 396.6 | 399.8 |
| M-65 | 408.0 | 411.2 | M-87 | 396.0 | 399.2 |
| M-66 | 407.8 | 411.0 | M-88 | 395.7 | 398.9 |
| M-67 | 408.1 | 411.3 | M-89 | 395.2 | 398.4 |
| M-68 | 409.7 | 412.7 | M-90 | 394.8 | 397.9 |
| M-69 | 409.6 | 412.6 | M-91 | 394.3 | 397.4 |
| M-70 | 408.0 | 411.1 | M-92 D.H.C. | 399.9 | 402.9 |
| M-71 | 407.7 | 410.8 | M-93 D.H.C. | 401.1 | 404.2 |
| M-72 | 406.3 | 409.5 | M-94 D.H.C. | 401.3 | 404.4 |
| M-73 | 406.1 | 409.3 | M-95 D.H.C. | 402.2 | 405.4 |
| M-74 | 404.9 | 407.7 | M-96 | 403.3 | 406.6 |
| M-75 | 403.4 | 406.6 | M-97 | 404.0 | 407.3 |
| M-76 | 402.8 | 406.0 | M-98 | 404.2 | 407.4 |
| M-77 | 401.9 | 405.1 | M-99 | 408.3 | 411.9 |
| M-78 | 401.2 | 404.3 | M-100 | 407.6 | 411.2 |
| M-79 | 400.1 | 403.2 | M-101 | 406.5 | 410.0 |
| M-80 | 399.0 | 402.2 | M-102 | 404.8 | 408.2 |
| M-81 | 398.3 | 401.5 | M-103 | 403.9 | 407.1 |

BENCH MARKS

BM No. 1-A ELEV. = 406.30
Square cut in top of inlet at rear of Cul-De-Sac, Green Meadow Drive.

BM No. 1-B ELEV. = 420.94
Square cut in top of inlet slab at N.W. intersection of Little Patuxent Parkway and Green Meadow Drive (SEE VICINITY MAP)

NOTE: If double strap service clamp is used, straps shall be stainless steel



4-WAY W.H.C. DETAIL
For Lots M-82 Through M-85

Sediment Control Measures will be implemented in accordance with Section 219 of the Specifications & with Road Construction Plan F-72-122; Drawing, Sediment & Erosion Control.

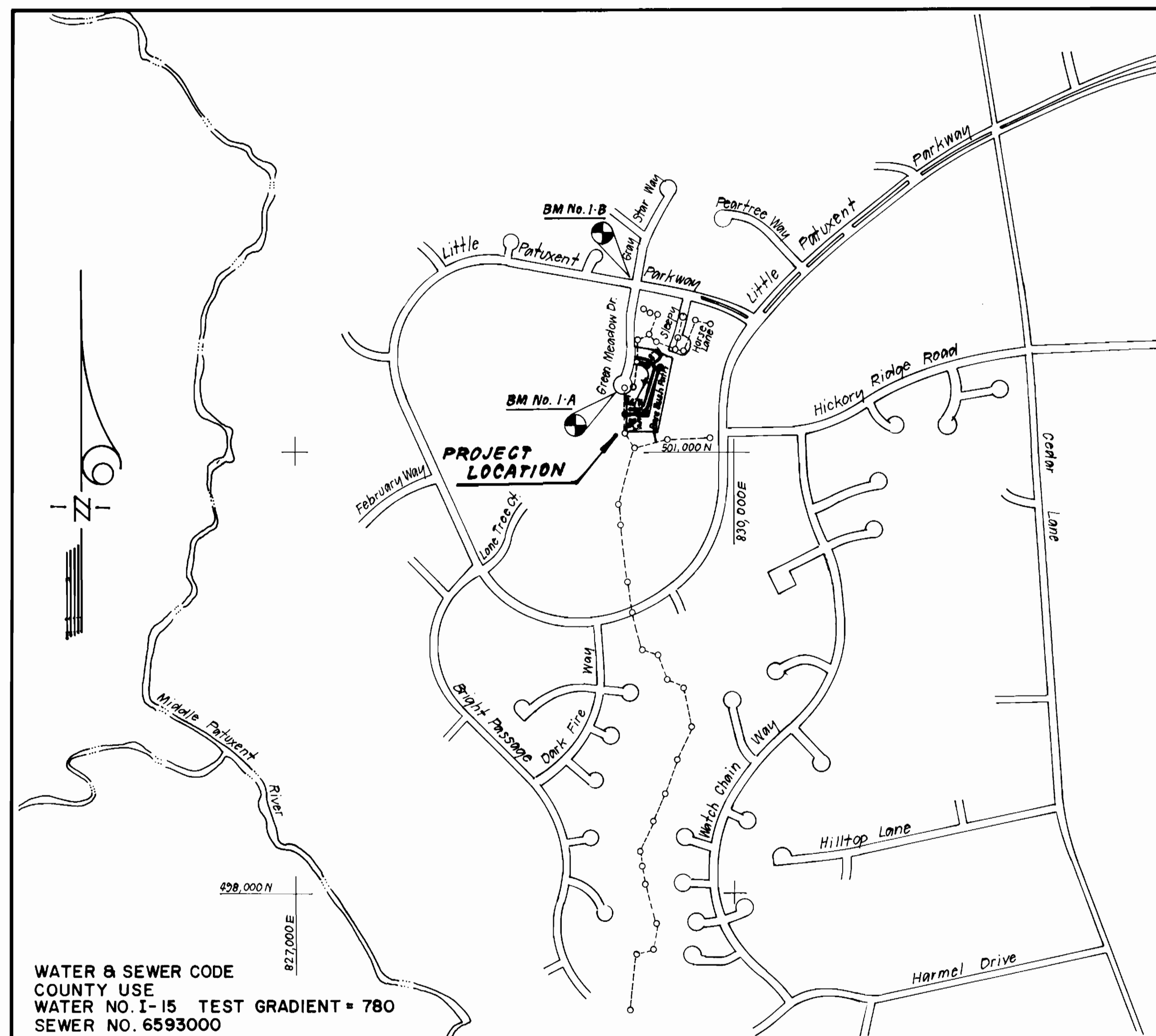
REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENT.

James M. Kelly 7/15/93
SIGNATURE DATE

U.S. SOIL CONSERVATION SERVICE

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

APPROVED:
John R. Roberts 7/15/93
Howard S.C.D. DATE



VICINITY MAP
SCALE: 1" = 600'

CONTRACT NO.34-3271- D
VILLAGE OF HICKORY RIDGE
SECTION 3 AREA 4, LOTS M-60 THRU M-104
HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS

| | |
|------------------|-----------------|
| TYPE OF BUILDING | TOWNHOUSES |
| NO. OF LOTS | 44 |
| NO. OF WHC's | 44 |
| NO. OF SHC's | 36 |
| DRAINAGE AREA | MIDDLE PATUXENT |

LITTLE PATUXENT W.W.T.P.

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 copy of same 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 Service Control - 797-9068
 - 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 - 313-4900
 - 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 restrained and buttressed with concrete in accordance with Std. Det. W.11.1 & W.2.11 Soil around the fire hydrant to be compacted in accordance with Sections 1000 & 1005 of the Standard Specifications.
- 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., P.V.C., or D.I.P. 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.

| ITEM | QUANTITIES ESTIMATED | QUANTITIES AS BUILT | | |
|---------------|----------------------|---------------------|-----------------------|-------------------------------|
| | | QUANTITIES | TYPE | MANUFACTURER / SUPPLIER |
| 8" SEWER | 595 LF | 595 | 8" D.I.P. CLASS 52 | L.P.C. NATIONAL PIPE CO. |
| 4" SH.C. | 790 LF | | 4" D.I.P. CLASS 52 | L.P.C. NATIONAL PIPE CO. |
| 8" WATER | 388 LF | 388 | D.I.P. CLASS 52 | GRIFFIN PIPE PRODUCTS CO. |
| 6" WATER | 325 LF | 328 | D.I.P. CLASS 52 | GRIFFIN PIPE PRODUCTS CO. |
| 2" W.H.C. | 55 LF | 55 | K COPPER | HOWELL METALS |
| 1 1/2" W.H.C. | 535 LF | 535 | K COPPER | HOWELL METALS |
| 1" W.H.C. | 495 LF | 495 | K COPPER | HOWELL METALS |
| 4' I.D. MH | 4 EA | 4 | PRECAST | ATLANTIC CONC. PRODUCTS, INC. |
| FIRE HYDRANT | 1 EA | #1 | MUELLER | MUELLER CO. |
| DROP H.C. | 4 EA | #4 | 5" D.I.P. CLASS 52 | L.P.C. NATIONAL PIPE CO. |
| BLOW-OFF HYD. | 1 EA | #1 | LOW PRESSURE HYDRANTS | ECLIPSE / KUPFERLE |

NAME OF UTILITY CONTRACTOR: W. F. WILSON

SURVEY & DRAFTING DIV. - AS BUILT DATE: _____

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James M. Kelly 7/15/93
DIRECTOR OF PUBLIC WORKS DATE

Robert S. Soren 7/15/93
CHIEF, BUREAU OF ENGINEERING DATE

Michael A. Reynolds 7-12-93
CHIEF, BUREAU OF UTILITIES DATE

John R. Roberts 7/15/93
CHIEF, LAND DEVELOPMENT DIV. DATE

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

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



DES: JTR
DRN: JTR
CHK: CCM
DATE: MAY 93

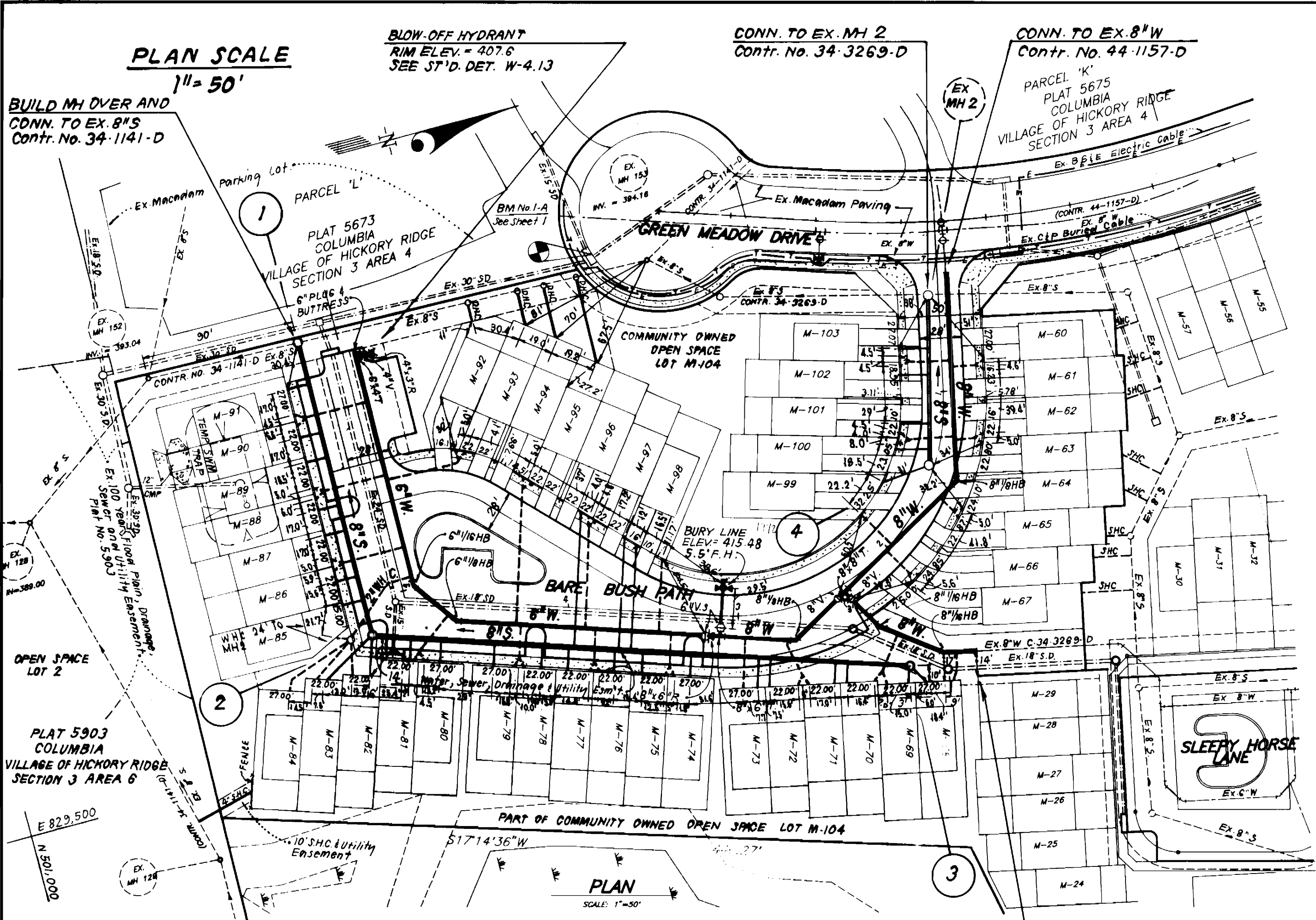
TITLE SHEET

600' SCALE MAP NO. 35 BLOCK NO. 4

COLUMBIA, VILLAGE OF HICKORY RIDGE
SECTION 3 AREA 4, LOTS M-60 THRU M-104
5TH ELECTION DISTRICT
CONTRACT NO. 34-3271- D

SCALE AS SHOWN
SHEET 1 OF 2

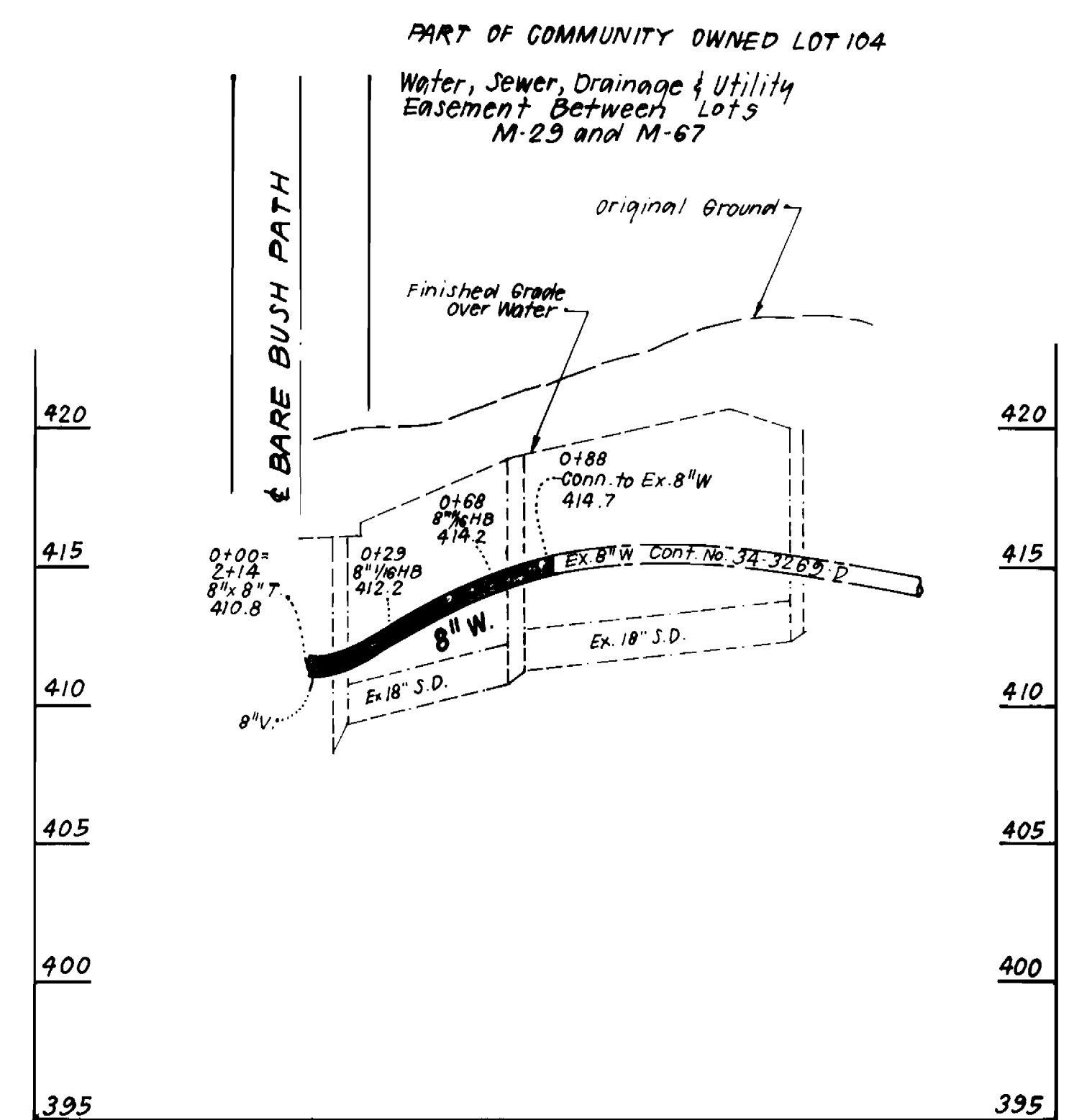
AS-BUILTS 12/96



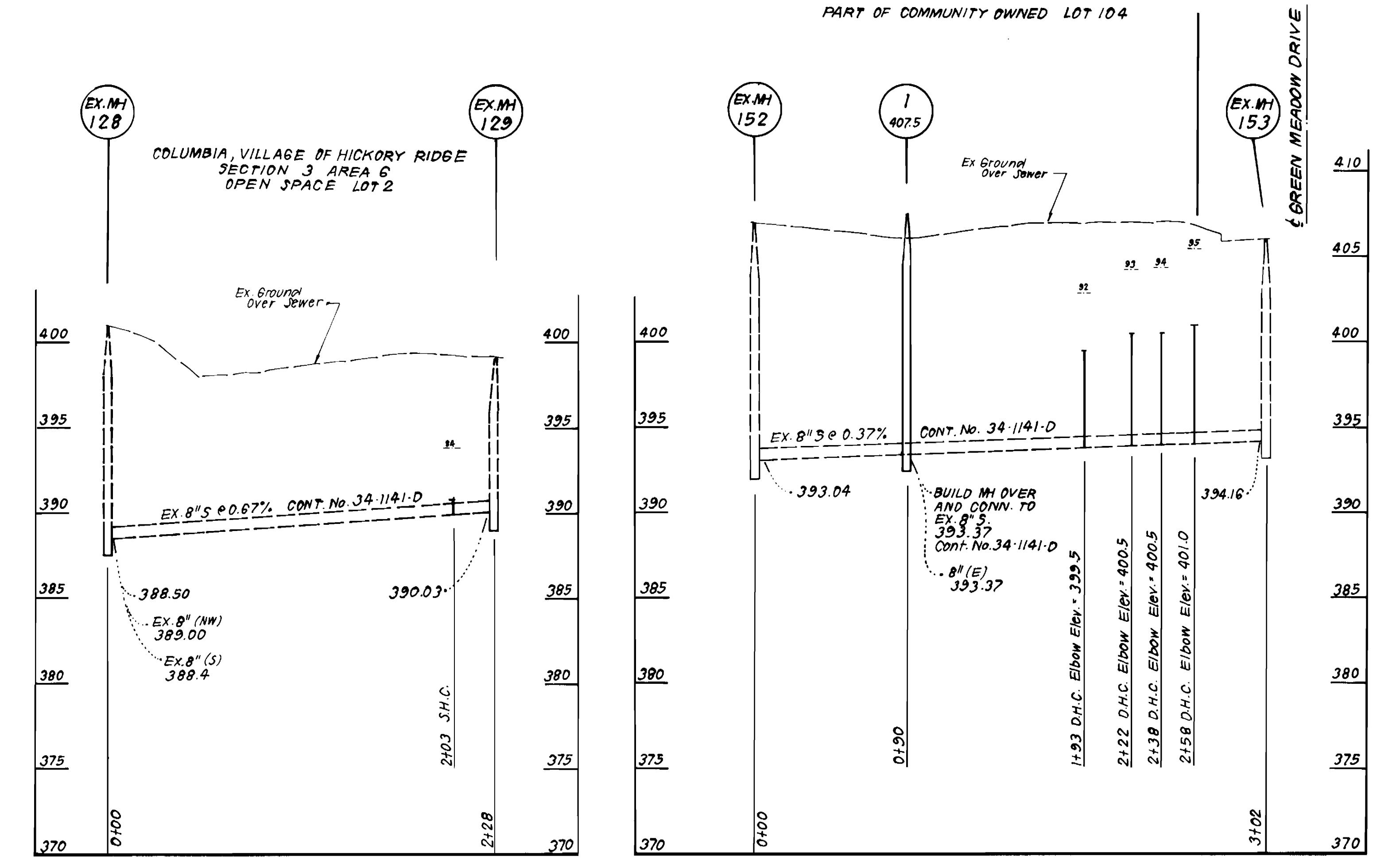
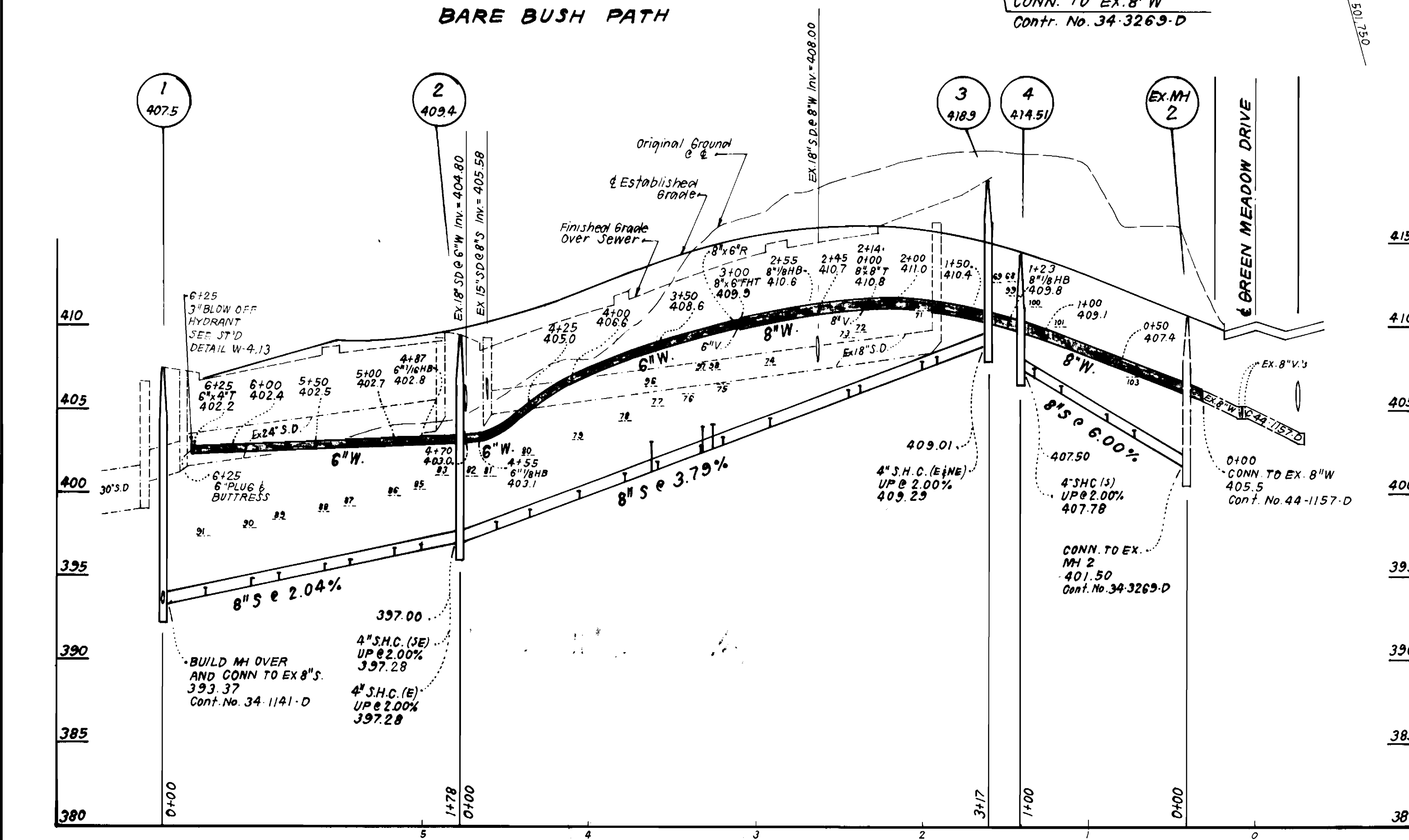
BARE BUSH PATH STAKEOUT TABLE

| STA | OFF. SET | REMARKS |
|--------|----------|---------------------|
| 0 + 30 | 5' LT | CONN TO EX 8" WATER |
| 1 + 44 | 3' RT | M.H. 4 |
| 1 + 50 | 1.5' LT | 8" 1/8 BEND |
| 2 + 30 | 3.3' LT | 8" 1/16 BEND |
| 2 + 35 | 4' LT | 8" x 8" TEE. |
| 2 + 70 | 19' LT | 8" 1/8 BEND |
| 3 + 10 | 11' LT | 8" x 6" TEE. |
| 3 + 10 | 19' RT | FIRE HYDRANT |
| 4 + 00 | 11' LT | 6" WATER |
| 4 + 65 | 11' LT | 6" 1/8 BEND |
| 5 + 01 | 6' RT | 6" 1/16 BEND |
| 5 + 52 | 6' RT | 6" WATER |
| 0 + 88 | 6' RT | 6" x 4" TEE. |
| 0 + 88 | 18' RT | BLOW-OFF HYDRANT |

NOTE:
All Water House Connections shall be a minimum 1-inch connection with 3/4" Meter for single connections. Twin connections shall be 1/2" inch connection with 1-inch outlets.



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



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
James J. Lee 7/19/93
DIRECTOR OF PUBLIC WORKS DATE
7/19/93

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

DES: JTR
DRN: JTR
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DATE: MAY 93

PLAN & PROFILES OF
WATER & SEWER MAINS
600' SCALE MAP NO. 35 BLOCK NO. 4

COLUMBIA, VILLAGE OF HICKORY RIDGE
SECTION 3 AREA 4, LOTS M-60 THRU M-104
5TH ELECTION DISTRICT
CONTRACT NO. 34-3271-D

SCALE
AS SHOWN
SHEET
2 OF 2

AS-BUILTS 12/96