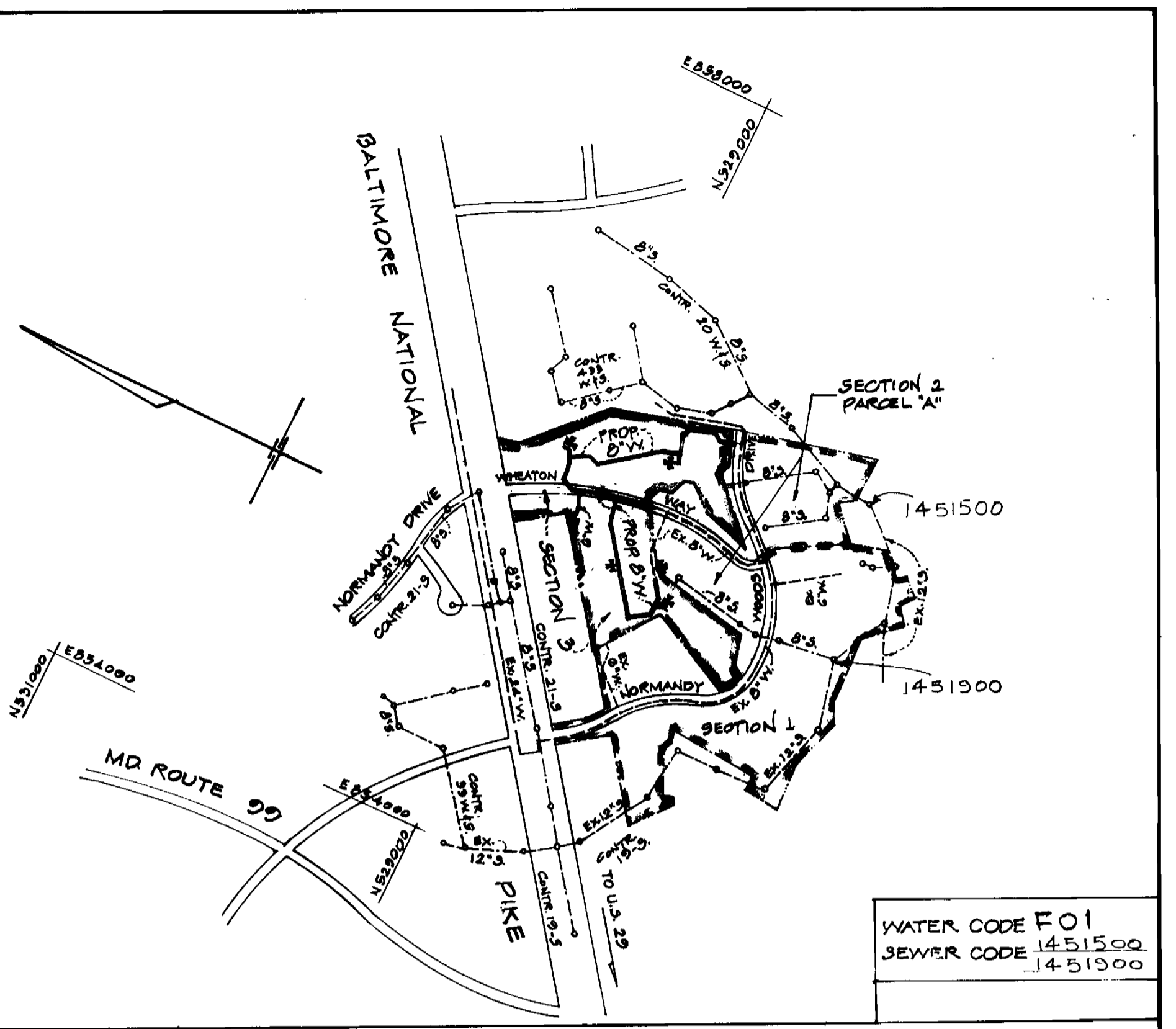


| QUANTITIES  |           |          |                           |
|-------------|-----------|----------|---------------------------|
| ITEM        | ESTIMATED | AS BUILT | MATERIAL/SUPPLIER         |
| 8" WATER    | 2363'     | 2397'    | D.I.P. / A&P Supply       |
| 6" WATER    | 150'      | 120'     | "                         |
| 8" VALVE    | 7         | 7        | Flow Ind.                 |
| 6" F.H.     | 5         | 5        | "                         |
| 6" VALVE    | 6         | 6        | "                         |
| 4" W.M.V.T. | 2         | 2        | Penn. cast Conc. Products |
| 2" W.M.V.T. | 1         | 1        | "                         |
| 8" SAN.     | 10'       | 10'      | V.C.P.X. / A&P Supply     |

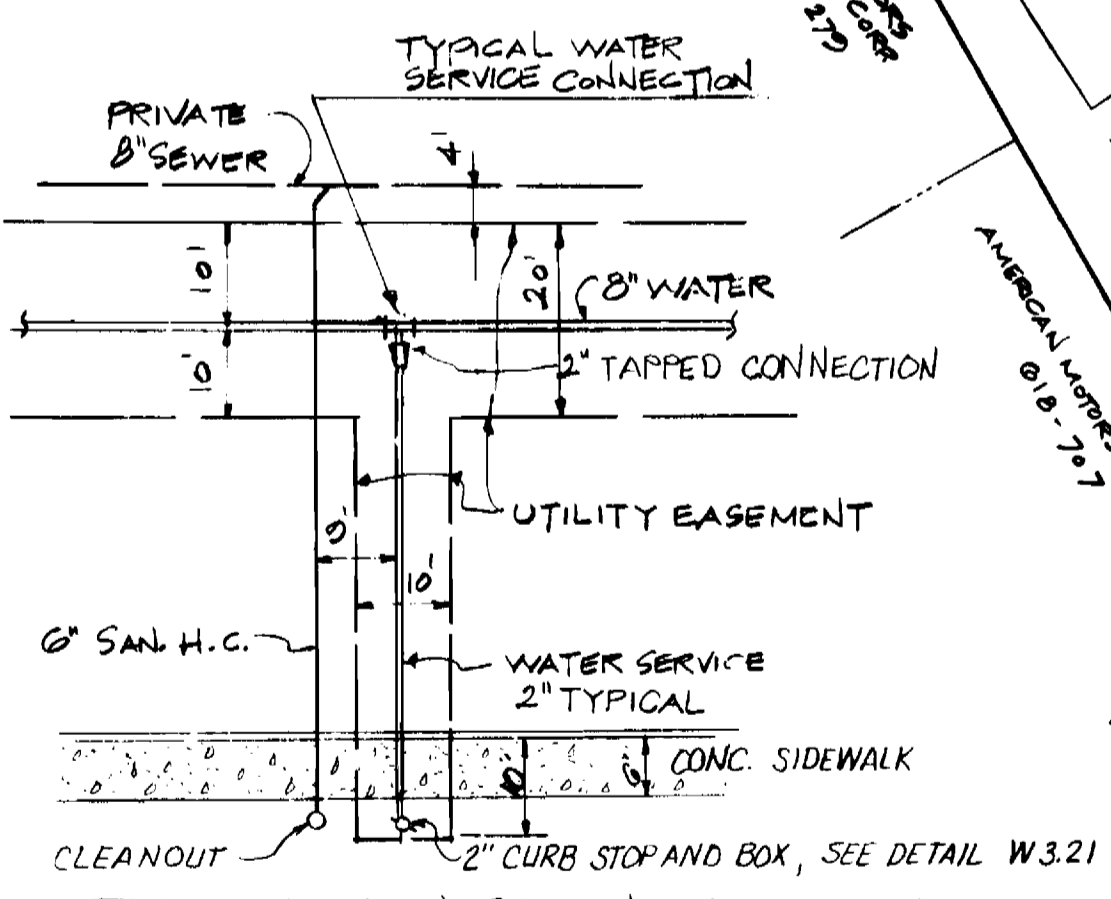
| TYPE OF BUILDINGS                 | APARTMENTS                |
|-----------------------------------|---------------------------|
| NUMBER OF LOTS                    | SITE ACREAGE - 18.8981 Ac |
| NUMBER OF WATER HOUSE CONNECTIONS | 20                        |
| NUMBER OF SEWER HOUSE CONNECTIONS | PRIVATE                   |
| DRAINAGE AREA                     | PARADES W.W.T.P.          |
| NUMBER OF UNITS                   | 163 BEDROOM APPTS. 348    |



**LOCATION PLAN**  
SCALE: 1" = 600'

**NORMANDY WOODS APARTMENTS**  
**SECTION 3**  
**WATER & SEWER EXTENSION**  
(PRIVATE & PUBLIC)

- GENERAL NOTES**
- APPROXIMATE LOCATIONS OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS TO PROTECT EXISTING MAINS AND SURFACES & MAINTAIN UNINTERRUPTED SUPPLY. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY.
  - ALL NEW PIPE INSTALLATIONS SHALL BE INVERT ELEVATIONS. SANITARY OR DRAIN PIPES ARE INVERT ELEVATIONS.
  - ALL INSTALLATION DETAILS ARE BASED ON MARYLAND STATE STANDARDS.
  - ALL VERTICAL CURVES ARE BASED ON U.S.C.S. FORMS.
  - ALL 8" X 2" & 8" X 2" X 4" X 2" CONNECTIONS SHALL BE STANDARD 90° 2" COPPER PIPE OUTLET CONNECTIONS - SEE DETAIL.
  - THE CONTRACTOR SHALL VERIFY THE FOLLOWING UTILITIES OR RECORDS AT LEAST 5 DAYS BEFORE COMMENCED WORK ON THIS PROJECT:
    - UNDERGROUND GAS TRANSMISSION INFORMATION - 888-8123
    - UNDERGROUND TELEPHONE RECORDS - 888-8123
    - UNDERGROUND CABLE RECORDS - 234-8881
    - DEP TELEPHONE RECORDS - 728-8870
    - STATE RECORDS INFORMATION - 531-8883
    - "ROAD QUALITY" - 1-888-8100
    - UNDERGROUND WATER & WASTEWATER - SAME LOCATION INFORMATION - 388-8883
    - RECORDS OF UTILITIES RECORDS - 888-8888
  - CLEAR ALL UTILITIES BY A MINIMUM OF 6". CLEAR ALL MAINS BY 1'-0" MINIMUM OR TRIMMED AS NECESSARY. AND RECONSTRUCT TO THE ORIGINAL OR BETTER CONDITION. ALL UTILITIES TO BE REMOVED OR CHANGED TO BE INCLUDED IN UNIT PRICES AND FOR RECONSTRUCTION AND REMOVAL.
  - FOR DETAILS NOT SHOWN ON THE DRAWINGS SEE MARYLAND STANDARD DETAILS, (VOLUME IV)
  - FOR MATERIALS AND CONNECTIONS SPECIFICATIONS SEE MARYLAND STANDARD SPECIFICATIONS.
  - CONTRACTOR SHALL LOCATE EXISTING UTILITIES AT A MINIMUM OF 10' (2) FEET IN ADVANCE OF CONSTRUCTION OPERATIONS AT THE PROXIMITY OF PROPOSED UTILITIES AT 10' AND DEEPER.
  - WORKS ARE TO BE PERFORMED FROM MONDAY TO FRIDAY 8:00 AM TO 5:00 PM. WORKS OUTSIDE THE CONSTRUCTION ZONE ARE NOT TO BE PERFORMED OR SCHEDULED BY THE CONTRACTOR.
  - CONTRACTOR SHALL PROTECT TREES, TREES AND BUSHES ALONG LINE OF RECONSTRUCTION AS ORDERED BY THE ENGINEER. PAYMENT FOR SUCH PROTECTION SHALL BE INCLUDED IN THE UNIT PRICES AND FOR RECONSTRUCTION AND REMOVAL.
  - FRAME REGULATION "SEE REGULATION" AND RECORDS AS ORDERED TO VERIFY WITH MARYLAND STATE HIGHWAY INFORMATION RECORDS OF TRUCKS LOADS FOR ROAD CONSTRUCTION AND IMPROVEMENT OPERATIONS.



REVIEWED FOR H.S.C. DIST. & MEETS TECHNICAL REQUIREMENTS  
*James M. Nelson* 12-23-82  
U.S. SOIL CONSERVATION SERVICE DATE  
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION & SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.  
*Robert W. Wood* 12/28/82  
SOIL CONSERVATION DISTRICT DATE

**DEPARTMENT OF PUBLIC WORKS**  
HOWARD COUNTY, MARYLAND

*Blaine F. Newman* 1-3-83 DATE  
DIRECTOR OF PUBLIC WORKS

*Robert W. Wood* 12/28/82 DATE  
CHIEF BUREAU OF UTILITIES

*William B. Kelly* 12/28/82 DATE  
CHIEF BUREAU OF ENGINEERING

*William B. Kelly* 12/28/82 DATE  
CHIEF DIVISION OF LAND DEVELOPMENT

**NOTE:**  
SEE SHEET 2 OF 3 FOR WATER & SEWER "GENERAL NOTES"

**NOTE:**  
SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 14 OF THE SPECIFICATIONS AND SEDIMENT CONTROL PLANS # 30P 01-181, DWGS. 3 THRU 9 OF 19

**PLAN**  
SCALE: 1" = 50'

**LEGEND**

|             |  |
|-------------|--|
| 8" SAN.     | PRIVATE SANITARY LINE & PRIVATE CONNECTION |
| 2" or 4" W. | PRIVATE WATER & CONNECTION                 |
| 8" W.       | PUBLIC WATER & CONNECTION                  |
| (14)        | BUILDING NO.                               |

| DATE     | REVISION                          | BY  |
|----------|-----------------------------------|-----|
| 2-10-83  | WATER REVISIONS                   | KCI |
| 12-23-82 | WATER REVISIONS                   | RGB |
| 10-15-82 | WATER REVISIONS                   | KCI |
| 8-19-82  | 3 <sup>RD</sup> COMMENTS REVISION | KCI |
| 6-3-82   | 2 <sup>ND</sup> COMMENTS REVISION | KCI |
| 2-19-82  | 1 <sup>ST</sup> COMMENTS REVISION | KCI |
| 8-1-81   | FINAL OFFICE DESIGN               | BEI |

**KIDDE CONSULTANTS, INC.**  
1020 CROMWELL BRIDGE RD.  
TOWSON, MD. 21204

DESIGNED W.F.  
DRAWN W.F. & W.B.  
CHECKED R.G.D.

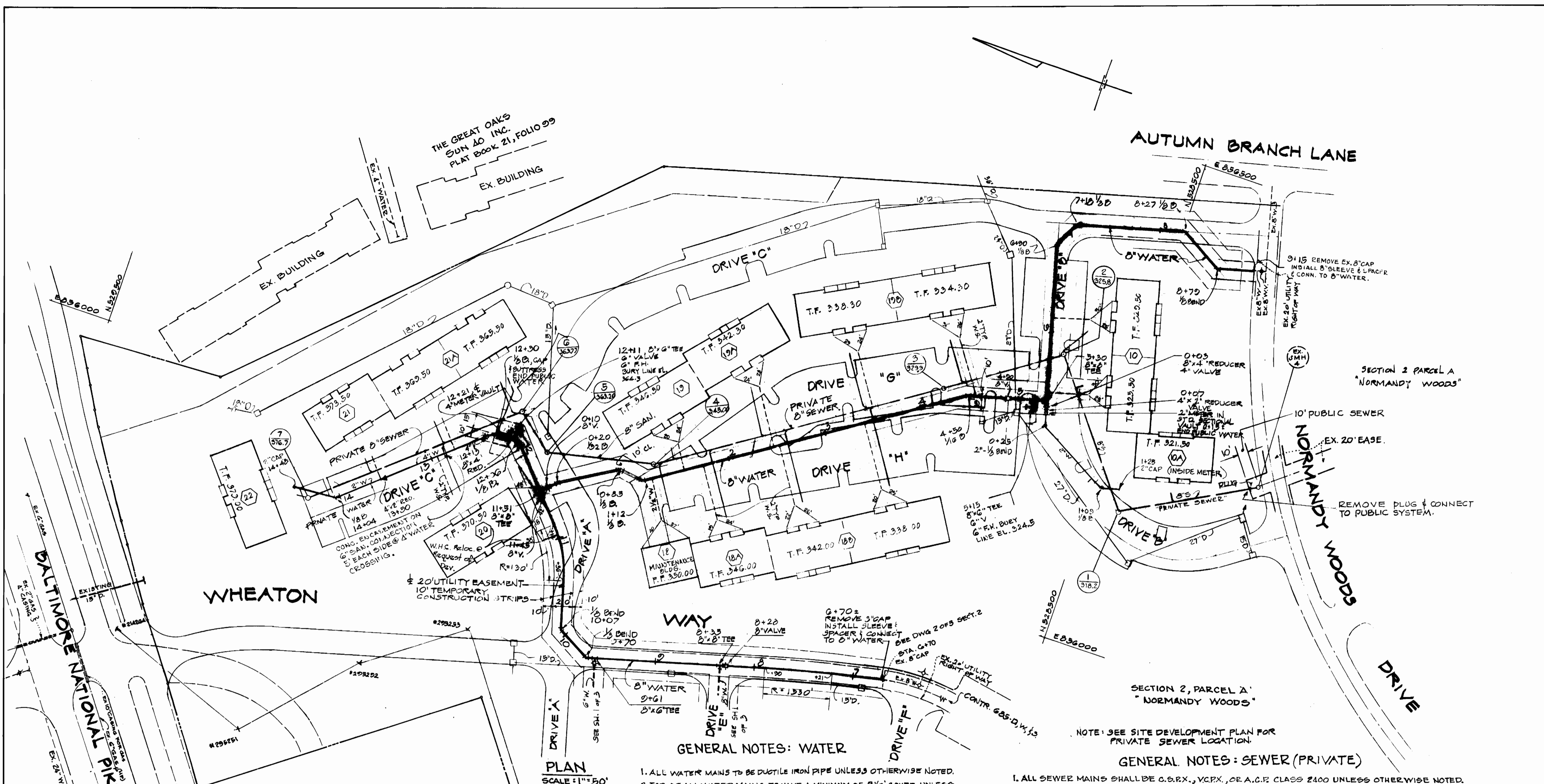
CONTRACT NO. 14-0995-D

**PLAN**  
PRIVATE AND PUBLIC  
WATER & SEWER MAINS

**NORMANDY WOODS APARTMENTS**  
SECTION 3  
ELECTION DISTRICT 2

DRAWING NO. 3 OF 3  
SCALE AS SHOWN

AS BUILT JULY, 1984



**GENERAL NOTES: WATER**

1. ALL WATER MAINS TO BE DUCTILE IRON PIPE UNLESS OTHERWISE NOTED.
2. TOP OF ALL WATER MAINS TO HAVE A MINIMUM OF 3 1/2' COVER UNLESS OTHERWISE NOTED.
3. VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
4. BLOCK ALL FITTINGS WITH CONCRETE.
5. BURY LINE ELEVATIONS ON FIRE HYDRANTS SHALL BE SET TO THE ELEVATIONS SHOWN ON THE DRAWINGS. ALL FIRE HYDRANTS SHALL BE STRAPPED & BUTTRESSED WITH CONCRETE IN ACCORDANCE WITH STANDARD DETAILS. SOIL AROUND THE FIRE HYDRANT TO BE COMPACTED IN ACCORDANCE WITH SECTION 37.01 OF THE STANDARD SPECIFICATIONS.
6. ALL WATER HOUSE CONNECTIONS SHALL BE FOR AN INSIDE METER SETTING.
7. THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING SYSTEM.

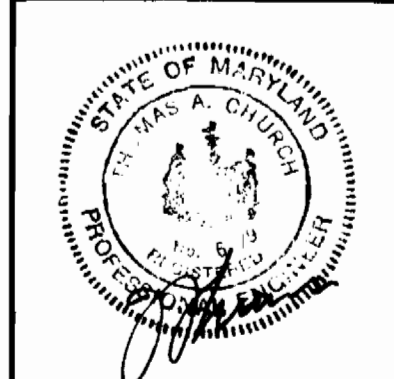
**GENERAL NOTES: SEWER (PRIVATE)**

1. ALL SEWER MAINS SHALL BE C.S.P.R., V.C.P.R., OR A.C.P.R. CLASS 2400 UNLESS OTHERWISE NOTED.
2. THE CONTRACTOR SHALL PROVIDE A JOINT IN ALL SEWER MAINS WITHIN 2'-0" OF EXTERIOR MANHOLE WALL.
3. ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER, UNLESS OTHERWISE NOTED.
4. MANHOLES SHOWN WITH 12" AND 16" WALLS ARE BRICK MANHOLES ONLY.
5. MANHOLES DESIGNATED W.T. IN PLAN & PROFILE SHALL HAVE WATERTIGHT FRAME & COVERS, STANDARD DETAIL 3-12 (RCE-G3A). WHERE WATERTIGHT MANHOLE FRAME & COVER IS USED, SET TOP OF FRAME 4'-6" ABOVE FINISHED GRADE.
6. HOUSE (S) WITH THE SYMBOL "C.N.S." INDICATES THAT CELLAR CAN NOT BE SERVED.
7. MANHOLE INDICATED: (1) F.M. NUMBER (2) F-TOP ELEVATION
8. 4" METER VAULT DETAIL IS AVAILABLE AT HOWARD COUNTY BUREAU OF ENGINEERING.

**LEGEND**

- 8" SAN. PRIVATE SANITARY LINE & PRIVATE CONNECTION
- 2" or 4" W.P. PRIVATE WATER & CONNECTION
- 8" W.P. PUBLIC WATER & CONNECTION
- WA BUILDING NO.

PLAN SCALE: 1" = 50'



|          |             |
|----------|-------------|
| DESIGNED | W.P.        |
| DRAWN    | W.P. & W.B. |
| CHECKED  | R.G.D.      |

KIDDE CONSULTANTS, INC.  
1020 CROMWELL BRIDGE RD.  
TOWSON, MD. 21204

**DEPARTMENT OF PUBLIC WORKS**  
HOWARD COUNTY, MARYLAND

*Robert F. Neuman* 1-3-82 DATE  
DIRECTOR OF PUBLIC WORKS

*William S. Reilly* 12/30/82 DATE  
CHIEF BUREAU OF ENGINEERING

*Robert J. Wood* 12/20/82 DATE  
CHIEF BUREAU OF UTILITIES

*William F. H. ...* DATE  
CHIEF, DIVISION OF LAND DEVELOPMENT

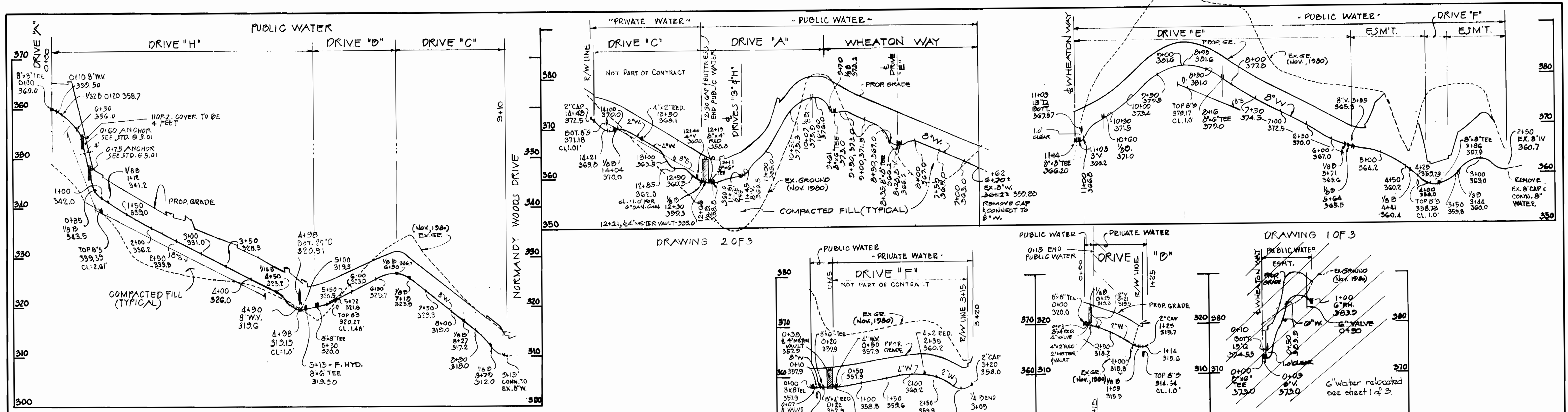
CONTRACT NO. 14-0995-D

**PLAN PRIVATE AND PUBLIC WATER & SEWER MAINS**

**NORMANDY WOODS APARTMENTS**  
SECTION 3 ELECTION DISTRICT 2

|                     |   |       |          |
|---------------------|---|-------|----------|
| DRAWING NO.         | 2 | SCALE | AS SHOWN |
| OF                  | 3 |       |          |
| AS BUILT JULY, 1984 |   |       |          |

| DATE    | REVISION              | BY  |
|---------|-----------------------|-----|
| 2-10-83 | WATER REVISIONS       | KCI |
| 8-19-82 | 3RD COMMENTS REVISION | KCI |
| 6-3-82  | 2ND COMMENTS REVISION | KCI |
| 2-19-82 | 1ST COMMENTS REVISION | KCI |
| 8-1-81  | FINAL OFFICE REVISION | ME  |



DRAWING 2 OF 3

DRAWING 2 OF 3

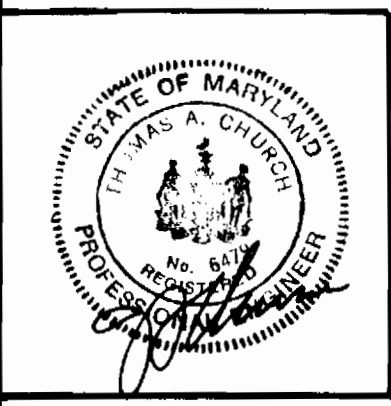
DRAWING 1 OF 3

DRAWING 2 OF 3

DRAWING 1 OF 3

**PROFILES**  
SCALE: 1" = 100' HOR.  
1" = 10' VERT.

|         |                                   |     |
|---------|-----------------------------------|-----|
| 2-10-83 | WATER REVISIONS                   | KCI |
| 6-3-82  | 2 <sup>ND</sup> COMMENTS REVISION | KCI |
| 2-12-82 | 1 <sup>ST</sup> COMMENTS REVISION | KCI |
| 8-1-81  | FINAL OFFICE REVISION             | KEI |
| DATE    | REVISION                          | BY  |



|          |           |
|----------|-----------|
| DESIGNED | WP        |
| DRAWN    | WP & W.B. |
| CHECKED  | R.O.B.    |

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

*Joseph F. Nemej* 1-3-82  
DIRECTOR OF PUBLIC WORKS DATE

*William S. Rely* 12/30/82  
CHIEF BUREAU OF ENGINEERING DATE

*Robert Wood* For RMB 10/20/82  
CHIEF BUREAU OF UTILITIES DATE

*William L. P. 2952*  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

CONTRACT NO 14-0025-D

PROFILES  
PUBLIC  
WATER LINES

NORMANDY WOODS  
APARTMENTS  
SECTION 3  
ELECTION DISTRICT 2

DRAWING  
No 3  
OF 3

SCALE  
AS  
SHOWN

AS BUILT JULY, 1984