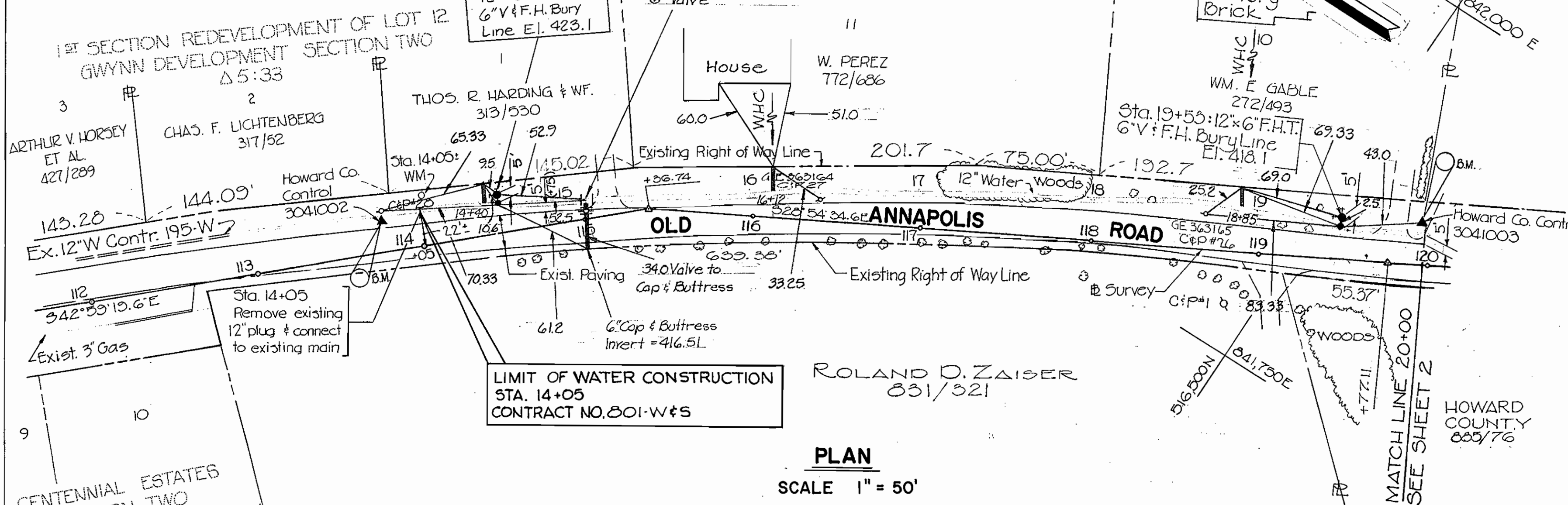
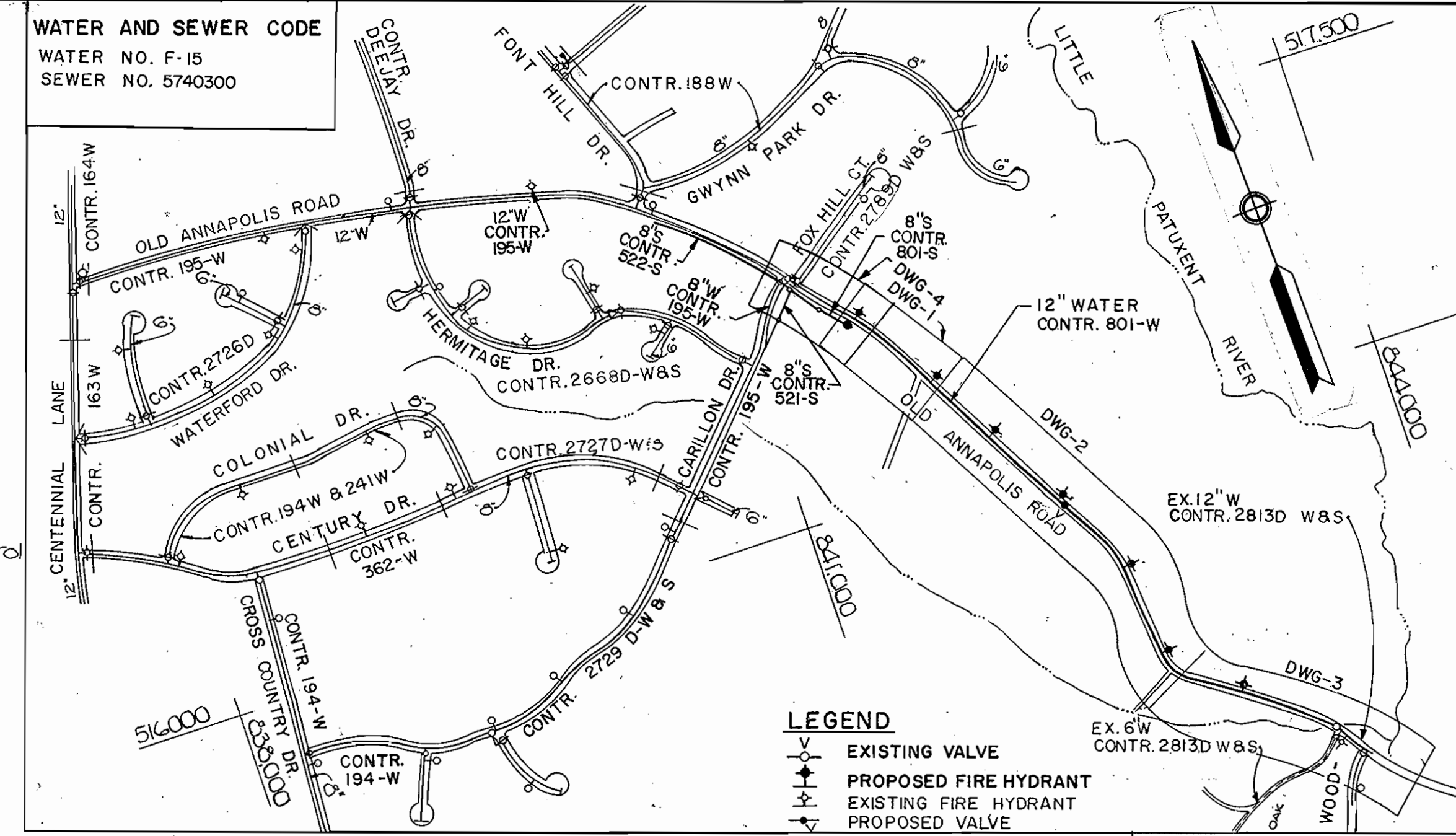


B.M. Howard Co. Mon. 3041002  
Concrete Monument 18.30' Lt. Stall 13+80.78 B. Survey  
Elevation 424.520

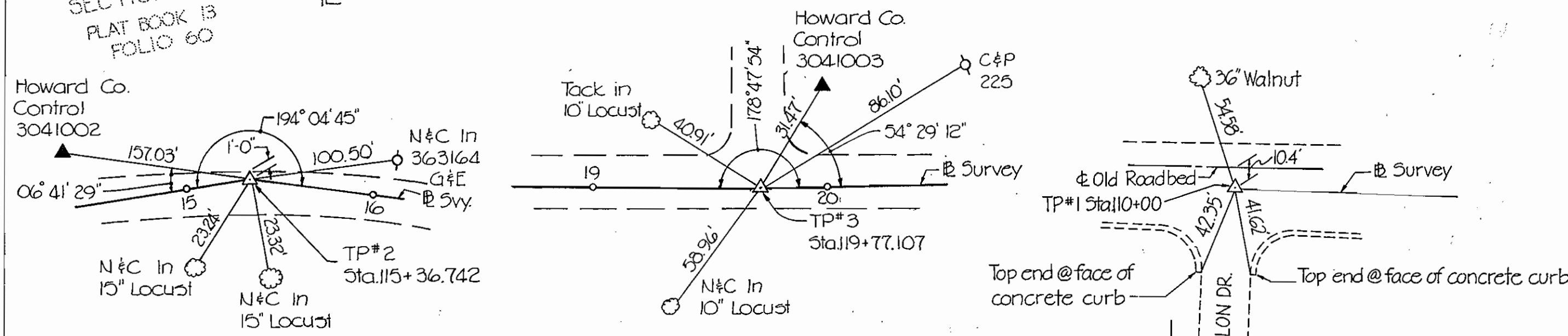
B.M. Howard Co. Mon. 3041003  
Concrete Monument 25.62' Lt.  
Stall 13+95.39 B. Svy.  
Elevation 417.165



**PLAN**  
SCALE 1" = 50'

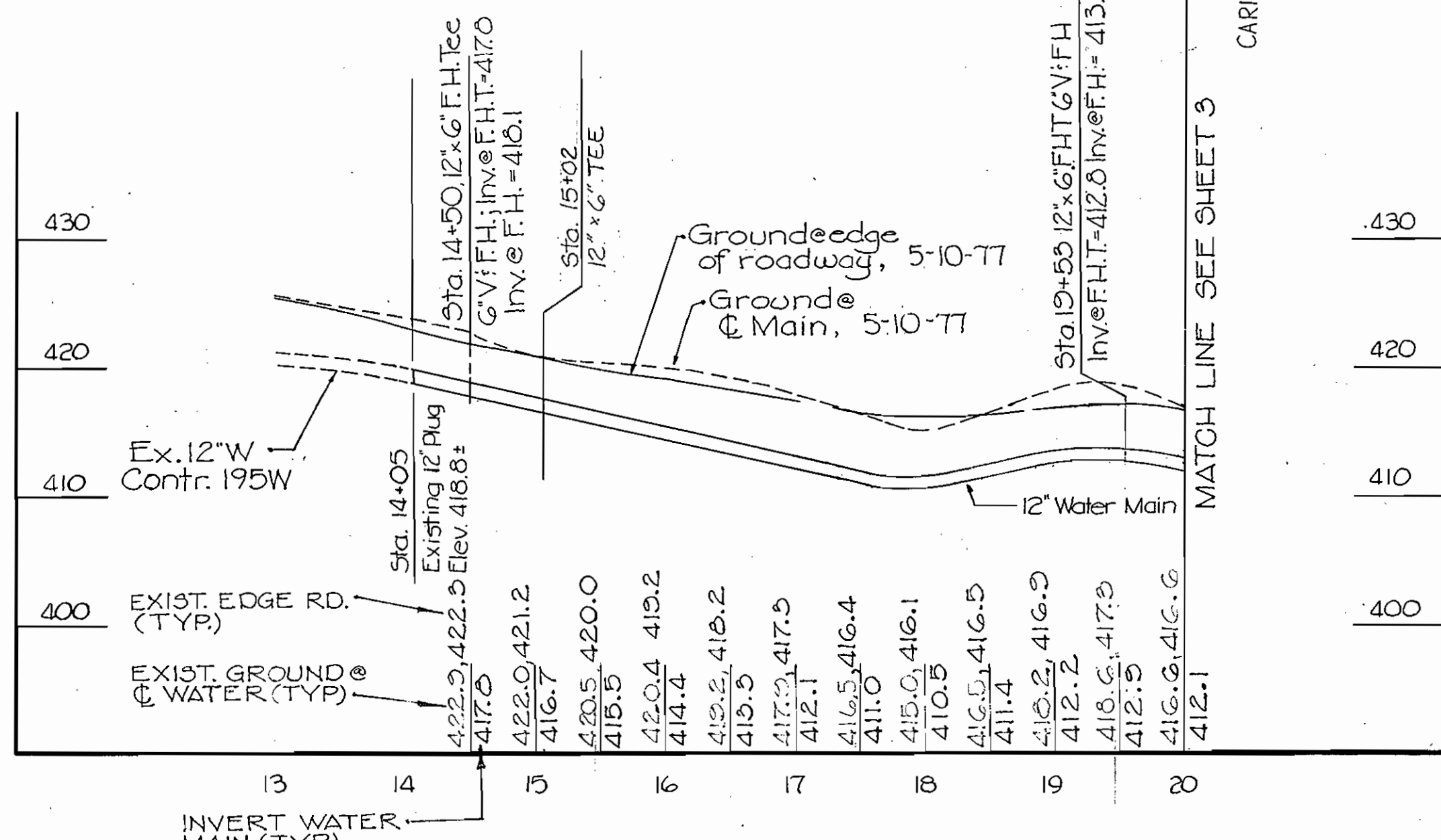


**VICINITY MAP**  
Scale 1" = 600'



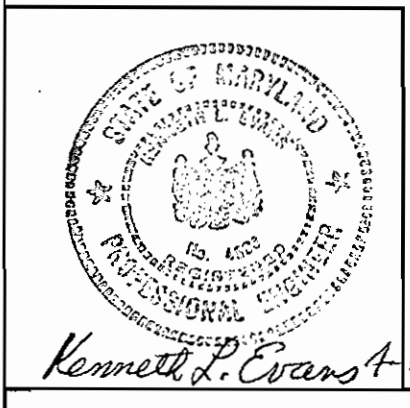
WATER MAIN STATION	OFFSET FROM EDGE OF RD.	WATER MAIN STATION	OFFSET FROM EDGE OF RD.
14+05	9'	17+15	5.0'
14+25	9'	17+50	5.0'
14+50	7.9'	18+00	7.0'
14+75	5.8'	18+25	10.0'
15+00	5.0'	18+50	11.6'
15+25	5.0'	18+75	12.1'
15+50	5.0'	19+00	11.4'
15+75	5.0'	19+25	9.9'
16+00	5.0'	19+50	6.6'
16+25	7.7'	19+75	5.7'
16+50	7.5'	20+00	5.0'
16+75	6.7'		
17+00	5.3'		

- GENERAL NOTES**
- Approximate locations of existing mains are shown. The contractor shall take all the necessary precautions to protect the existing mains and services and maintain uninterrupted supply. Any damage incurred due to the contractor's operations shall be repaired immediately at the contractor's expense.
  - All pipe elevations shown are invert elevations.
  - The contractor shall locate existing utilities a minimum of two weeks in advance of construction operations in the vicinity of proposed utilities.
  - For all standard details see standards bound in specifications.
  - Clear all utilities by a minimum of 6". Clear all utility poles by 2'-0" or tunnel as required. Any costs incurred to the contractor for tunneling or bracing at poles shall be included in unit prices bid for excavation.
  - Contractor shall notify the following utilities or agencies at least five (5) days before starting work shown on these plans:  
Baltimore Gas & Electric Company - Underground Electric Distribution Engineering - "Damage Control" - 234-5691  
Baltimore Gas & Electric Company - Underground Gas Distribution Engineering - 559-0100  
Chesapeake & Potomac Telephone Company - 725-9976  
Miss Utility - 393-3648
  - 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.
  - 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 C.I.P. or D.I.P. unless otherwise noted.
  - Top of all water mains to have a minimum of 3'-6" cover unless otherwise noted.
  - All valves shall be strapped to tees, where applicable, in accordance with standard details.
  - Buttress or anchor all water main fittings with concrete. See Standard details bound in the Specifications.
  - 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 Section 5-15 of the Standard Specifications.
  - Cost of strapping fire hydrants and valves to be included in the unit price bid for furnishing and installing fire hydrants.
  - All horizontal controls are based on Maryland State Coordinates.
  - All vertical controls are based on USGS Datum.
  - 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 excavation and backfill for water and sewer mains.
  - All water house connections shall be constructed in accordance the Standards bound in the Specifications for inside meters.
  - Block all fittings with concrete, see Standards bound in the Specifications.
  - All sewer mains shall be C.S.P.X., V.C.P.X., or A.C.P. Class 2400 unless otherwise noted.
  - The contractor shall provide a pipe joint in each sewer main within 2'-0" of the exterior manhole walls.
  - All manholes shall be 4'-0" inside diameter.



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

QUANTITIES	As Built	Supplier
12" Water	3281 L.F.	Griffin Pipe Co.
Fire Hydrants	7 ea.	Flow Industries
6" Water	35 L.F.	Griffin Pipe Co.
12" Valve	1 ea.	Flow Industries
3/4" Copper Water Service	220 L.F.	Flow Industries
2" Copper Water Service	30 L.F.	Flow Industries
8" Sewer	170 L.F.	John Mansville
Manhole	16 V.L.F.	Atlantic Precast
6" Sewer House Connections	67 L.F.	Certain-Tech Products



**THE WILSON T. BALLARD COMPANY**  
CONSULTING ENGINEERS  
OWINGS MILLS MARYLAND

**DEPARTMENT OF PUBLIC WORKS**  
HOWARD COUNTY, MARYLAND  
4-10-80  
DIRECTOR OF PUBLIC WORKS DATE: CHIEF - BUREAU OF ENGINEERING DATE

CONTRACT NO. 801-W&S  
W-7-8073  
CAPITAL PROJECT NO. S-4-6030

**PLAN AND PROFILE OF 12" WATER MAIN**

**OLD ANNAPOLIS ROAD WATER MAIN**  
S.E. OF CARILLON DR. TO OAK HILL DR.  
ELECTION DISTRICT NO. 2

**DRAWING NO. 1 OF 4**  
**SCALE AS SHOWN**  
Designed: P.R.  
Drafted: S.H.  
Checked: K.L.F.

**OLD ANNAPOLIS ROAD**  
PROJECT NO. W-7-8073  
& S-4-6030  
CONTRACT NO. 801-W&S  
As built 10-6-80

B.M. 'A' = Boat Spike in C+P pole #21 on East Side of Old Annapolis Road Left Entrance to Howard Fruit Farm

CONSTRUCTION STAKEOUT DATA

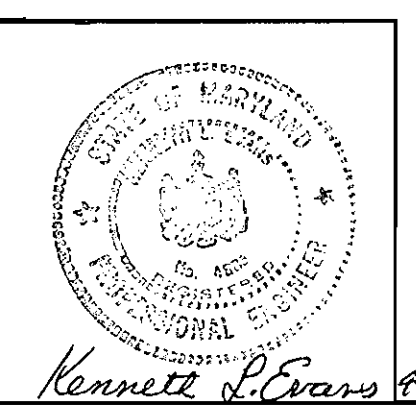
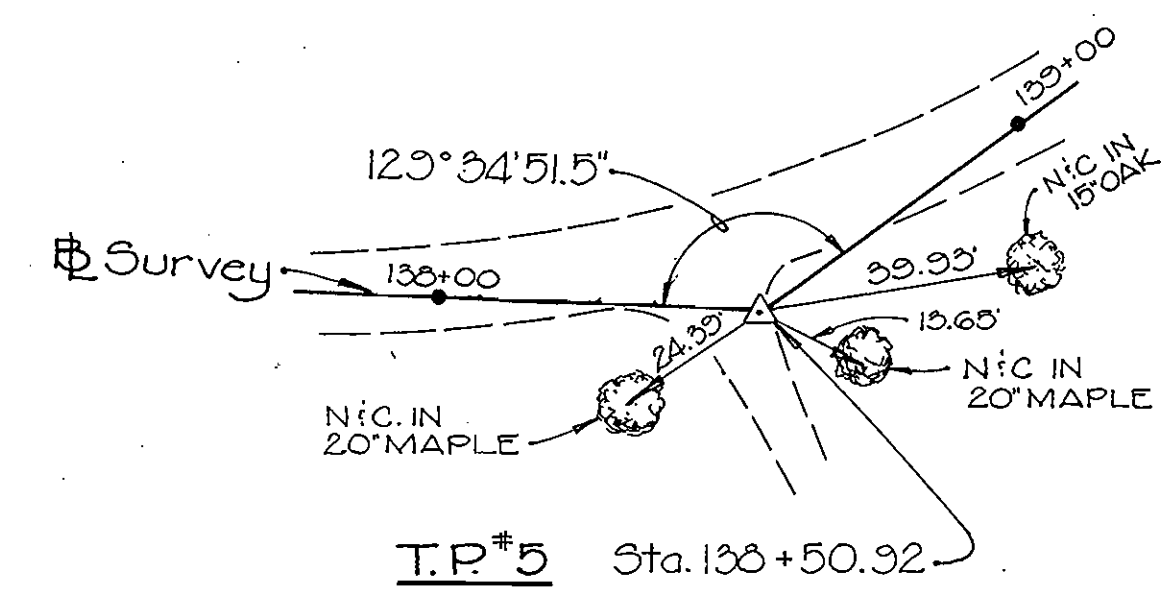
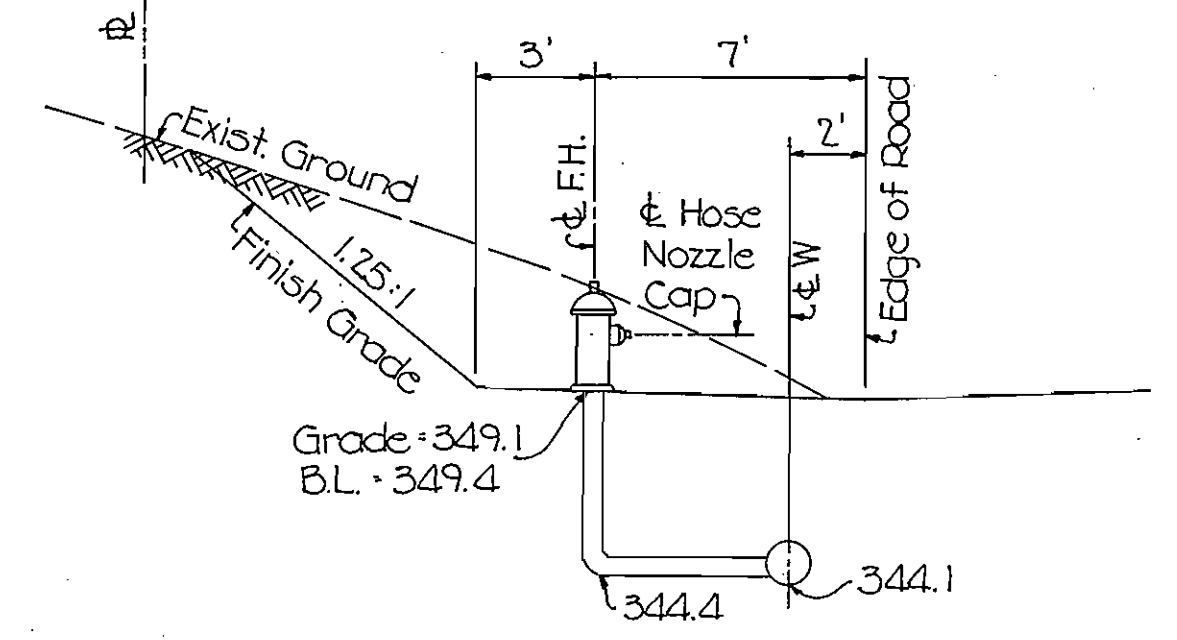
WATER MAIN STATION	OFFSET FROM EDGE OF RD.	WATER MAIN STATION	OFFSET FROM EDGE OF RD.
29+00	5.0	31+25	3.1
29+25	6.0	31+50	2.8
29+50	8.2	31+75	2.4
29+75	10.1	32+00	2.0
30+00	10.3	32+25	1.6
30+25	9.3	32+50	1.2
30+50	6.6	32+75	0.8
30+75	5.0	33+00	0.4
31+00	4.7	33+25	0.0

CONSTRUCTION STAKEOUT DATA

WATER MAIN STATION	OFFSET FROM EDGE OF RD.
36+50	5.0
37+15	4.7
37+00	3.5
37+15	2.6
37+50	2.0

NOTE: WARP 12" WATER BETWEEN STA 29+00 AND STA 30+65 TO MISS C+P POLE #20 SEE STAKEOUT DATA

NOTE: Grade around FH in accordance with Std. No. W-48. Transition to 2:1 slope as soon as possible. Sod slope.



THE WILSON T. BALLARD COMPANY  
CONSULTING ENGINEERS  
OWINGS MILLS MARYLAND

James L. Blair  
CHIEF - BUREAU OF UTILITIES  
DATE 11/9/80

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND  
Director of Public Works DATE 4-10-80  
Chief - Bureau of Engineering DATE 4-9-80

CONTRACT NO. 801-W&S  
W-7-8073  
CAPITAL PROJECT NOS-4-6030

PLAN AND PROFILE  
OF 12" WATER MAIN

OLD ANNAPOLIS ROAD WATER MAIN  
S.E. OF CARILLON DR. TO OAK HILL DR.  
ELECTION DISTRICT NO. 2

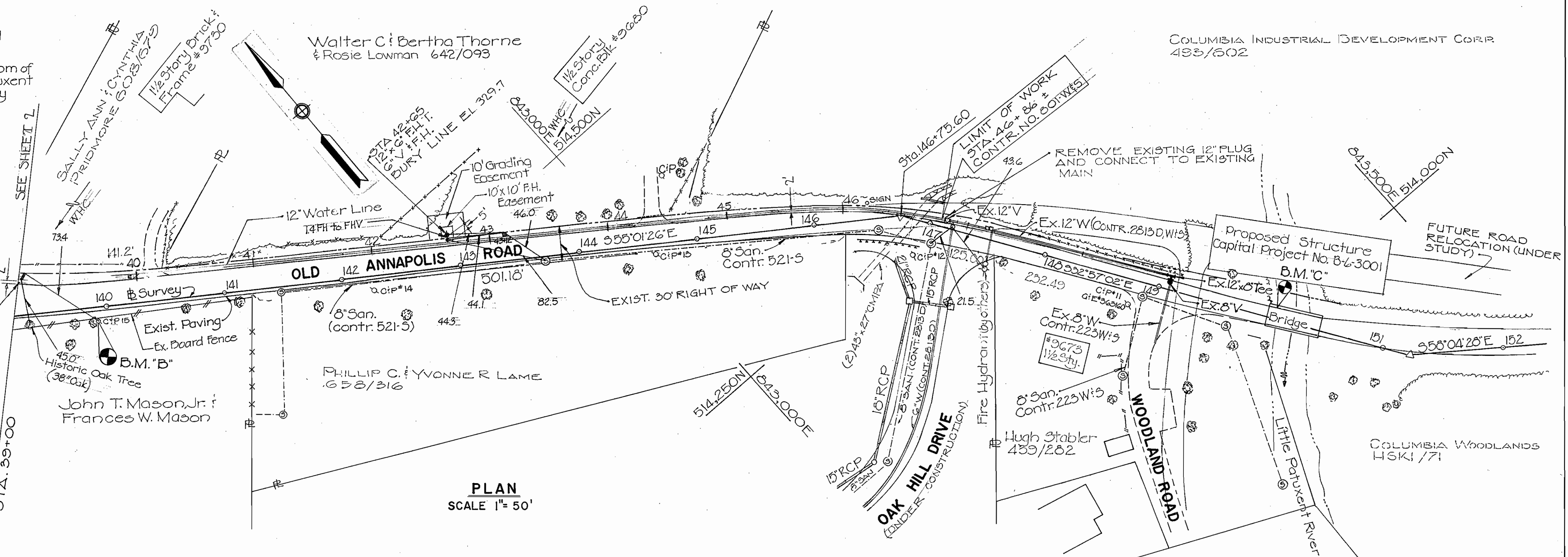
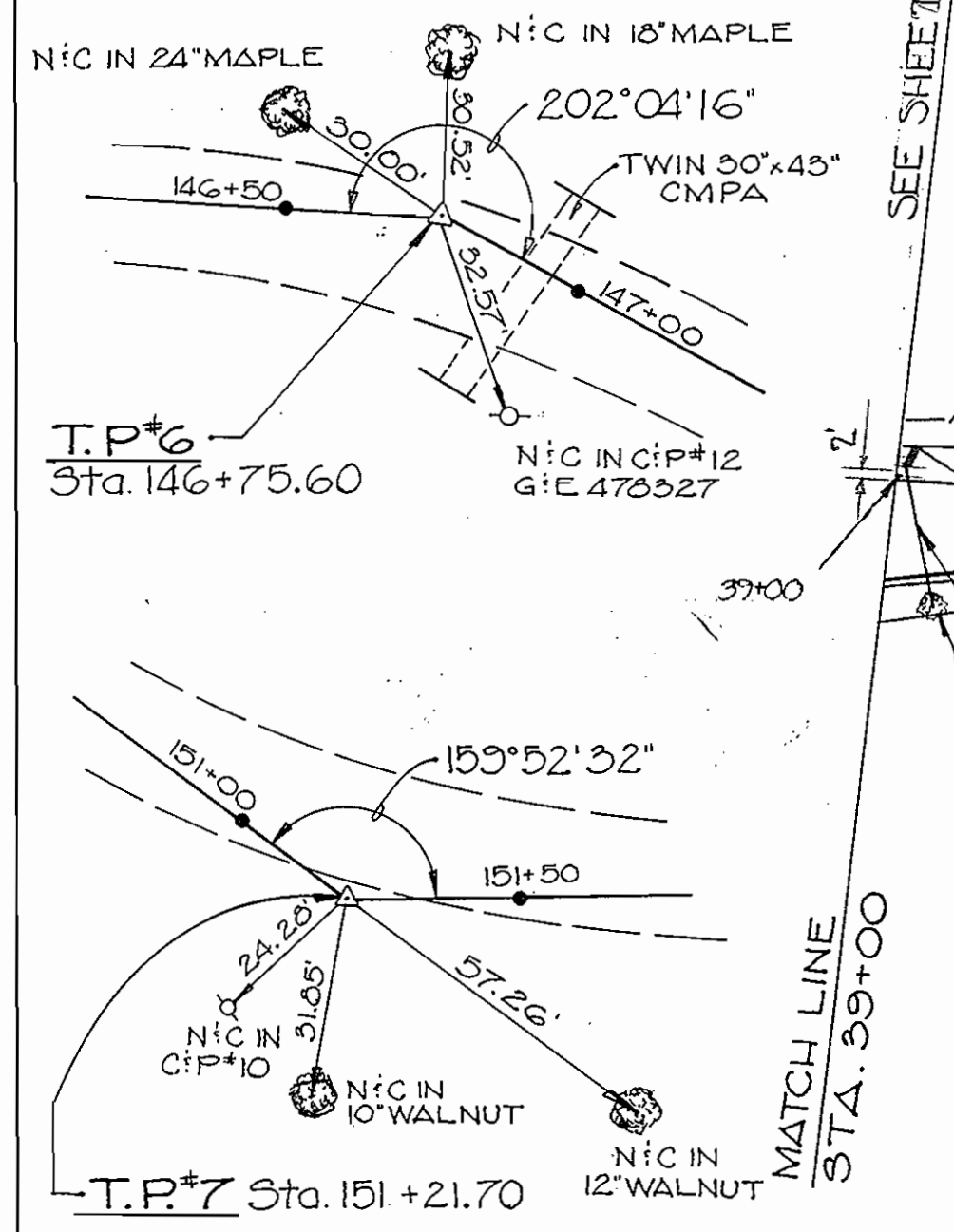
DRAWING NO. 2 OF 4  
SCALE AS SHOWN  
Designed: P.R.  
Drafted: S.H.  
Checked: K.L.E.

April 3, 1980

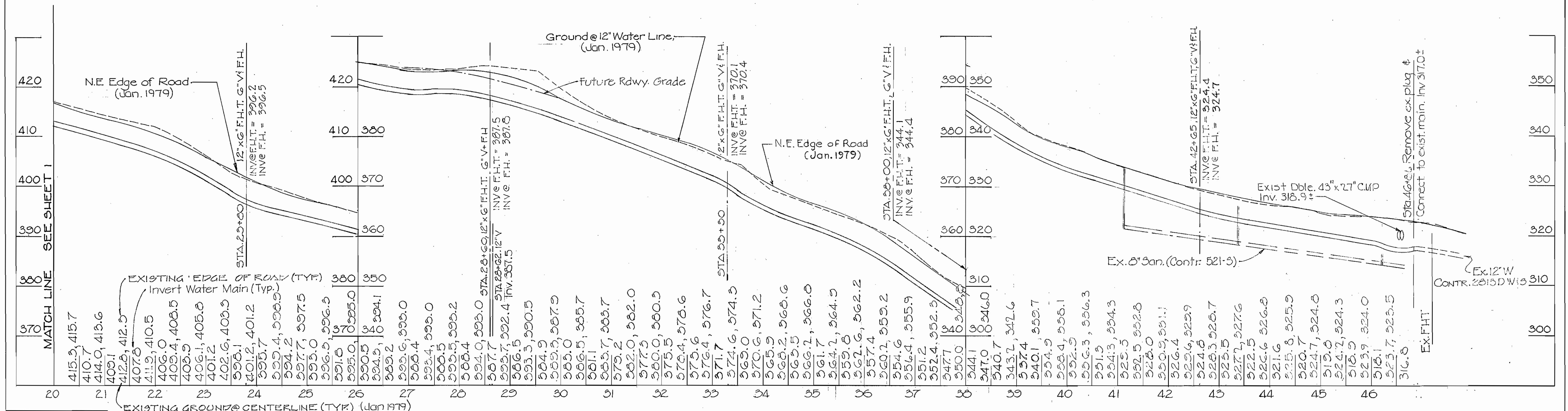
WS 801-W&S/2

B.M. "B": Boat Spike in C.P. pole #15 on West Side of Old Annapolis Rd. 150'± South of Entrance to Squirrel Hill Farm El. 339.60 ± 339.177

B.M. "C": Cut in top of curbing @ bottom of wall East Side Bridge over Little Patuxent River (101 Lt. Sta. 150+00 ± Survey El. 520.590)



PLAN SCALE 1" = 50'



PROFILE SCALE: HOR. 1" = 100' VERT. 1" = 10'

As-Built 10-6-80

OLD ANNAPOLIS ROAD PROJECT NO. W-7-8073 8 S-4-6030 CONTRACT NO. 801-W&S

DRAWING NO. 3 OF 4 SCALE AS SHOWN



THE WILSON T. BALLARD COMPANY CONSULTING ENGINEERS OWINGS MILLS MARYLAND

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND  
 Director: F. Newman  
 Chief - Bureau of Engineering: [Signature]  
 Chief - Bureau of Utilities: [Signature]  
 Date: 4/9/80

CONTRACT NO. 801-W&S W-7-8073 8 S-4-6030  
 CAPITAL PROJECT NO. S-4-6030

PLAN AND PROFILE OF 12" WATER MAIN

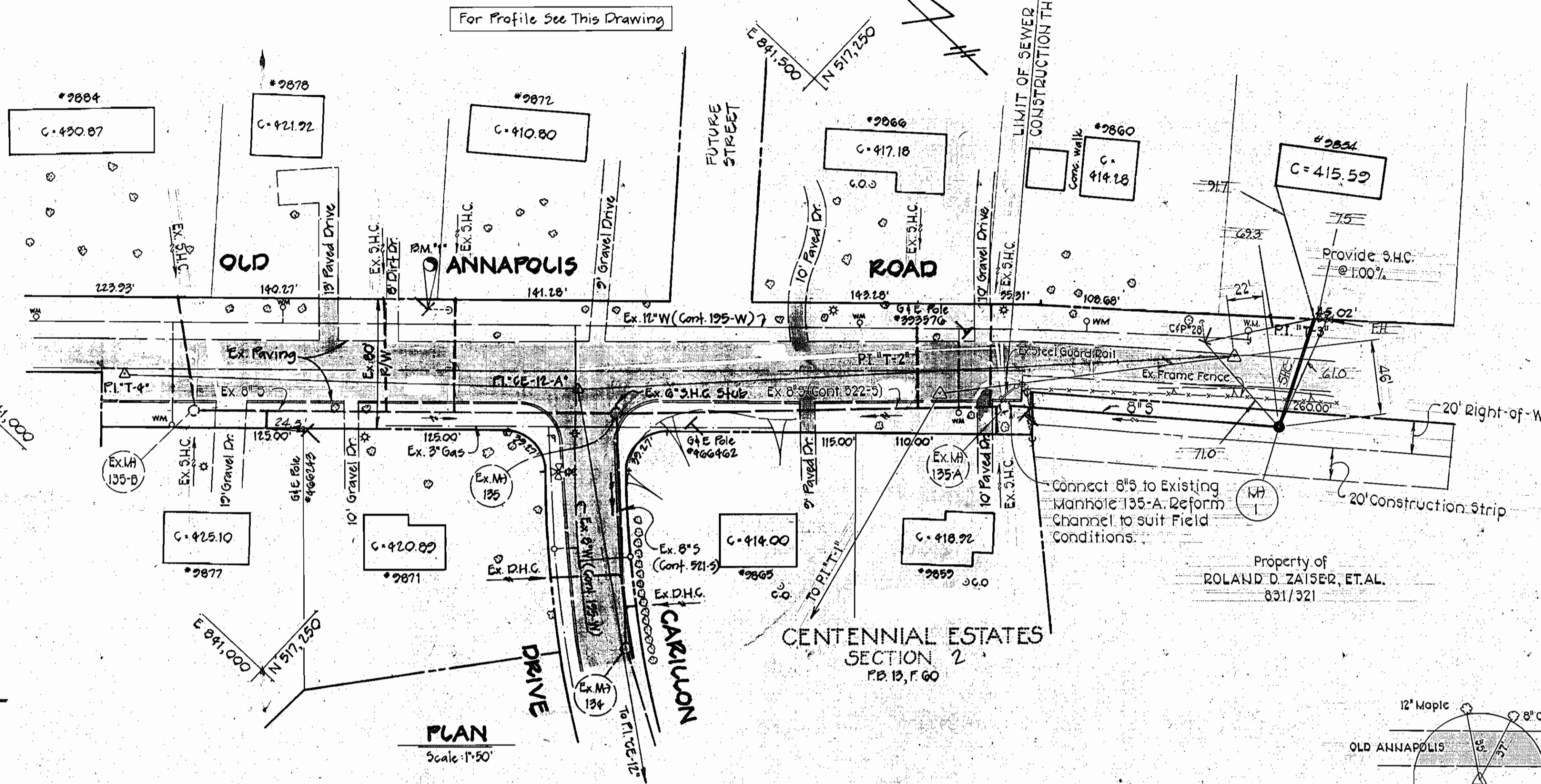
OLD ANNAPOLIS ROAD WATER MAIN S.E. OF CARILLON DR. TO OAK HILL DR. ELECTION DISTRICT NO. 2

Corrected B.M. "B" Elev. 8-6-80

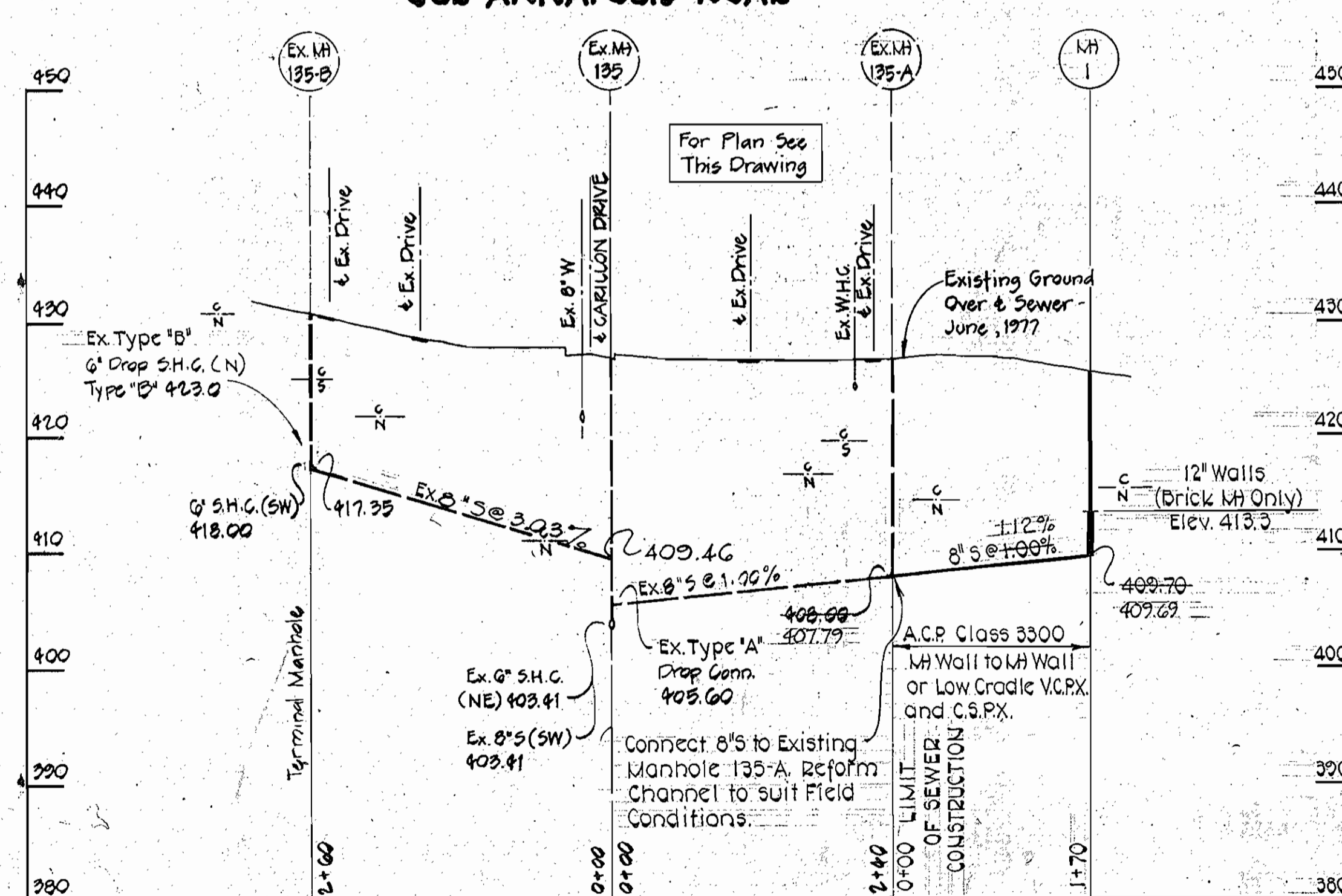
WS 801-W&S/3

**BENCH MARK**

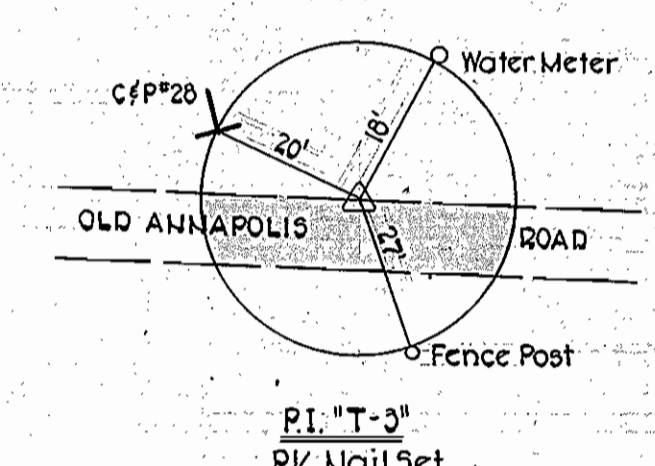
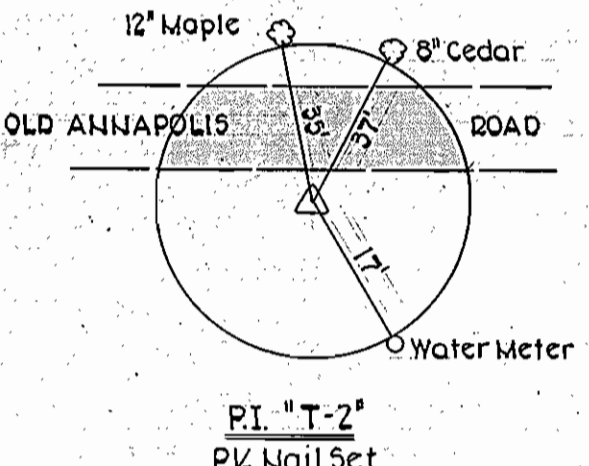
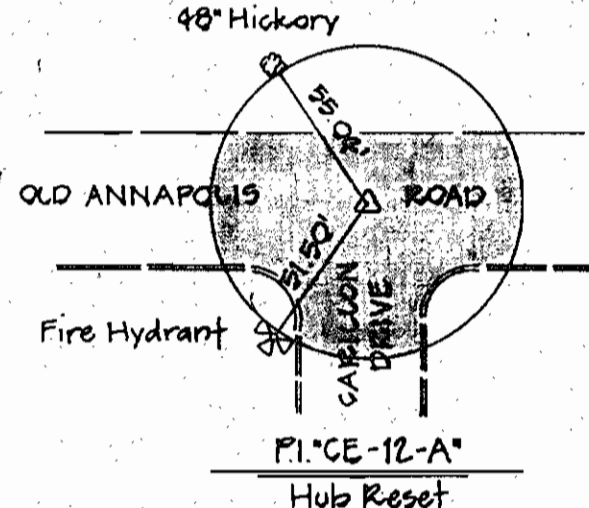
B.M. "1" Elev. 426.47  
Galvanized Spike in Pole 102.8' Northeast of P.I. "CE-12-A"



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



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



*James J. Craig*  
CHIEF - BUREAU OF UTILITIES  
DATE: 4/19/80

*How F. Neuman*  
DIRECTOR OF PUBLIC WORKS  
DATE: 4-10-80

CONTRACT NO. 801-W&S  
W-7-8073  
CAPITAL PROJECT NO. S-4-6030

PLAN & PROFILE  
OF SEWER MAINS

OLD ANNAPOLIS ROAD WATER AND SEWER MAINS  
S.E. OF CARRILLON DRIVE TO OAK HILL DRIVE  
ELECTION DISTRICT NO. 2

DRAWING NO. 4 OF 4  
SCALE AS SHOWN  
Designed: REP  
Drafted: ARZ  
Checked: REP

WS 801-W&S/4