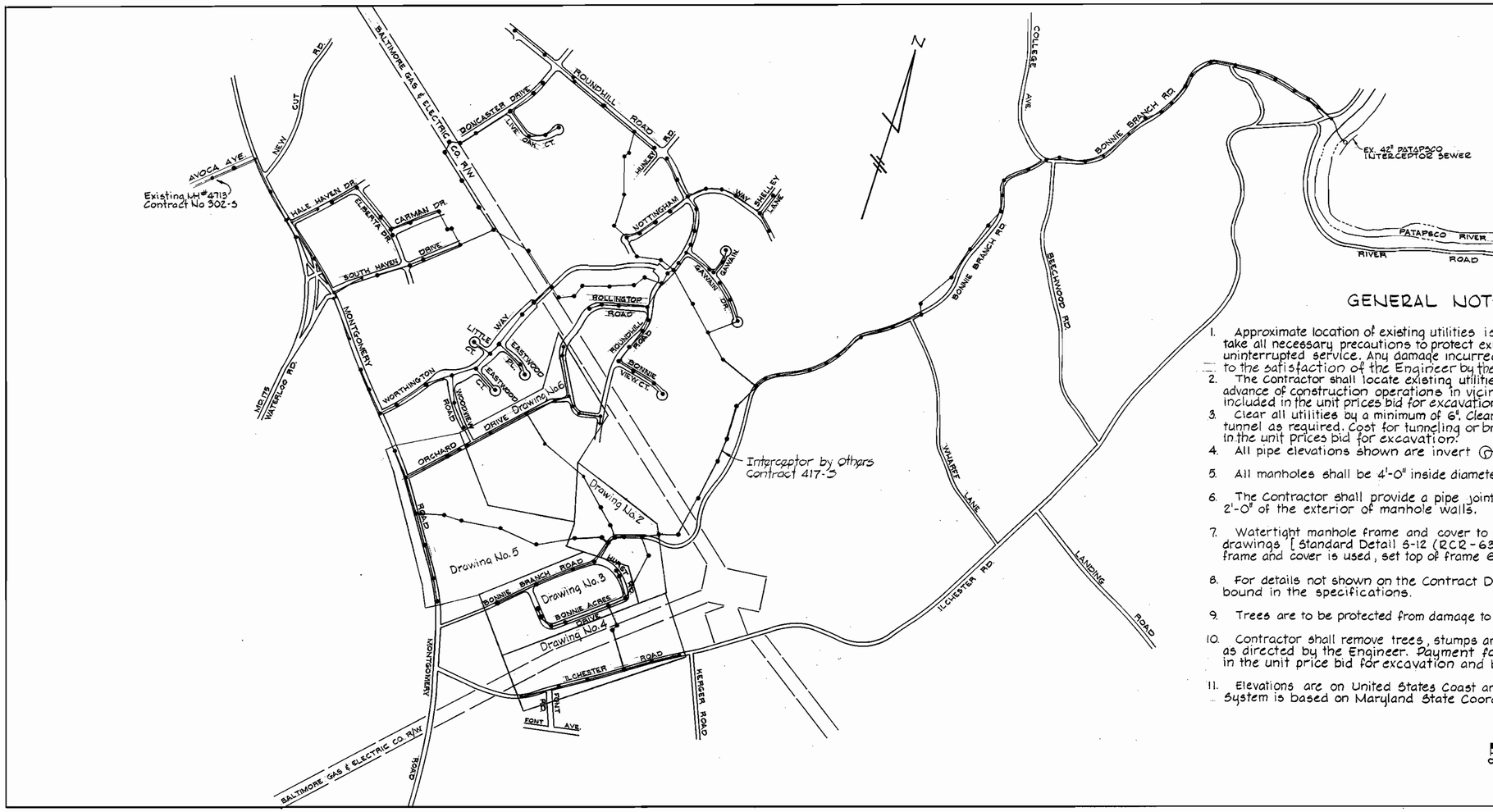
K+E BALTIMORE 17 0453 PHOENIX 44112



GENERAL NOTES

1. Approximate location of existing utilities is shown. The Contractor shall take all necessary precautions to protect existing utilities and to maintain uninterrupted service. Any damage incurred shall be repaired immediately to the satisfaction of the Engineer by the Contractor at the Contractors expense.
2. The Contractor shall locate existing utilities a minimum of two weeks in advance of construction operations in vicinity of utilities. Cost shall be included in the unit prices bid for excavation.
3. Clear all utilities by a minimum of 6". Clear of all poles 2'-0" minimum, or tunnel as required. Cost for tunneling or bracing at poles shall be included in the unit prices bid for excavation.
4. All pipe elevations shown are invert ⊕ elevations.
5. All manholes shall be 4'-0" inside diameter, unless otherwise noted.
6. The Contractor shall provide a pipe joint in each sewer main within 2'-0" of the exterior of manhole walls.
7. Watertight manhole frame and cover to be used where indicated on drawings [Standard Detail S-12 (RCR-63A)]. Where watertight manhole frame and cover is used, set top of frame 6" above finished grade.
8. For details not shown on the Contract Drawings see standard Details bound in the specifications.
9. Trees are to be protected from damage to the maximum extent.
10. Contractor shall remove trees, stumps and roots along the 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 sewer mains.
11. Elevations are on United States Coast and Geodetic Survey Datum. Grid System is based on Maryland State Coordinate System.

SCALE: 1"=600'
0 300 600 1200 1800

CONTRACT NO 418-S
SANITARY SEWERS
HOWARD COUNTY MARYLAND
DEPARTMENT OF PUBLIC WORKS

PURDUM & JESCHKE ENGINEERS 1023 N. CALVERT ST. BALTIMORE, MARYLAND	DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND 1-26-72 DATE CHIEF-BUREAU OF WATER AND SEWER	CONTRACT NO. 418-S WSF-MD-03-05-1000	LOCATION MAP OF SANITARY SEWERS	ELECTION DISTRICTS NO. 1 & 2	DRAWING NO. 1 OF 11	SCALE AS SHOWN

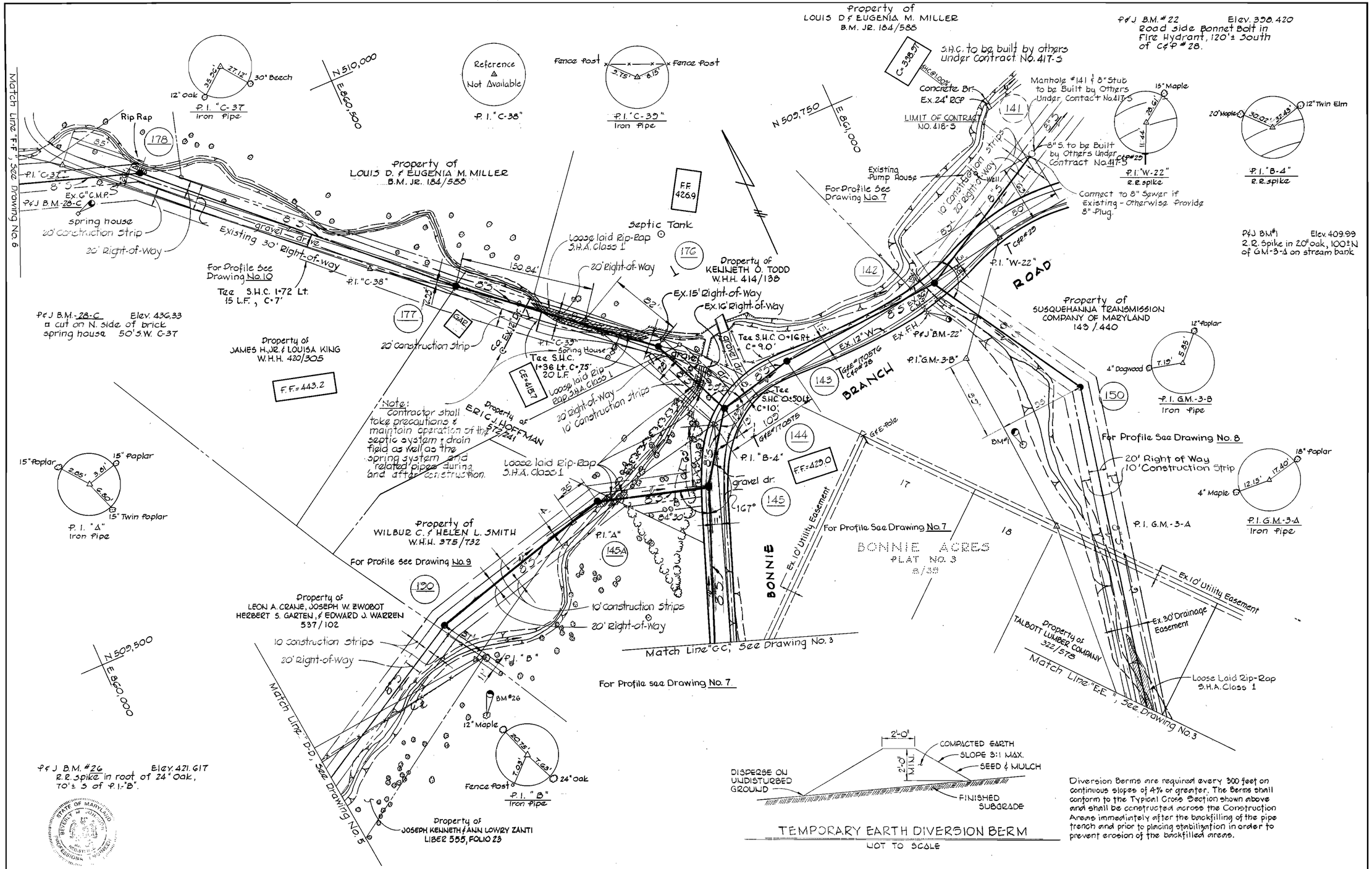
W.O. D-650 F.B. # 605 + 608 + 611 + 615 + 616

JANUARY 22, 1973

"AS BUILT" AUG. 28, 1974

1/S-418 S/M

K+E BALTIMORE 17 0453 PHOENIX 44112



TEMPORARY EARTH DIVERSION BERM
NOT TO SCALE

Diversion Berms are required every 300 feet on continuous slopes of 4% or greater. The Berms shall conform to the Typical Cross Section shown above and shall be constructed across the Construction Areas immediately after the backfilling of the pipe trench and prior to placing stabilization in order to prevent erosion of the backfilled areas.

REVISED - 12/21/72

PURDUM & JESCHKE ENGINEERS 1023 N. CALVERT ST. BALTIMORE, MARYLAND	DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND 1-26-72 DATE W O Fickert CHIEF-BUREAU OF WATER AND SEWER	CONTRACT NO. 418-S WSF-MD-03-05-1000	PLAN OF SEWER MAINS	BONNIE BRANCH ROAD ELECTION DISTRICTS NO. 1 & 2	DRAWING NO. 2 OF 11	SCALE 1"=50'

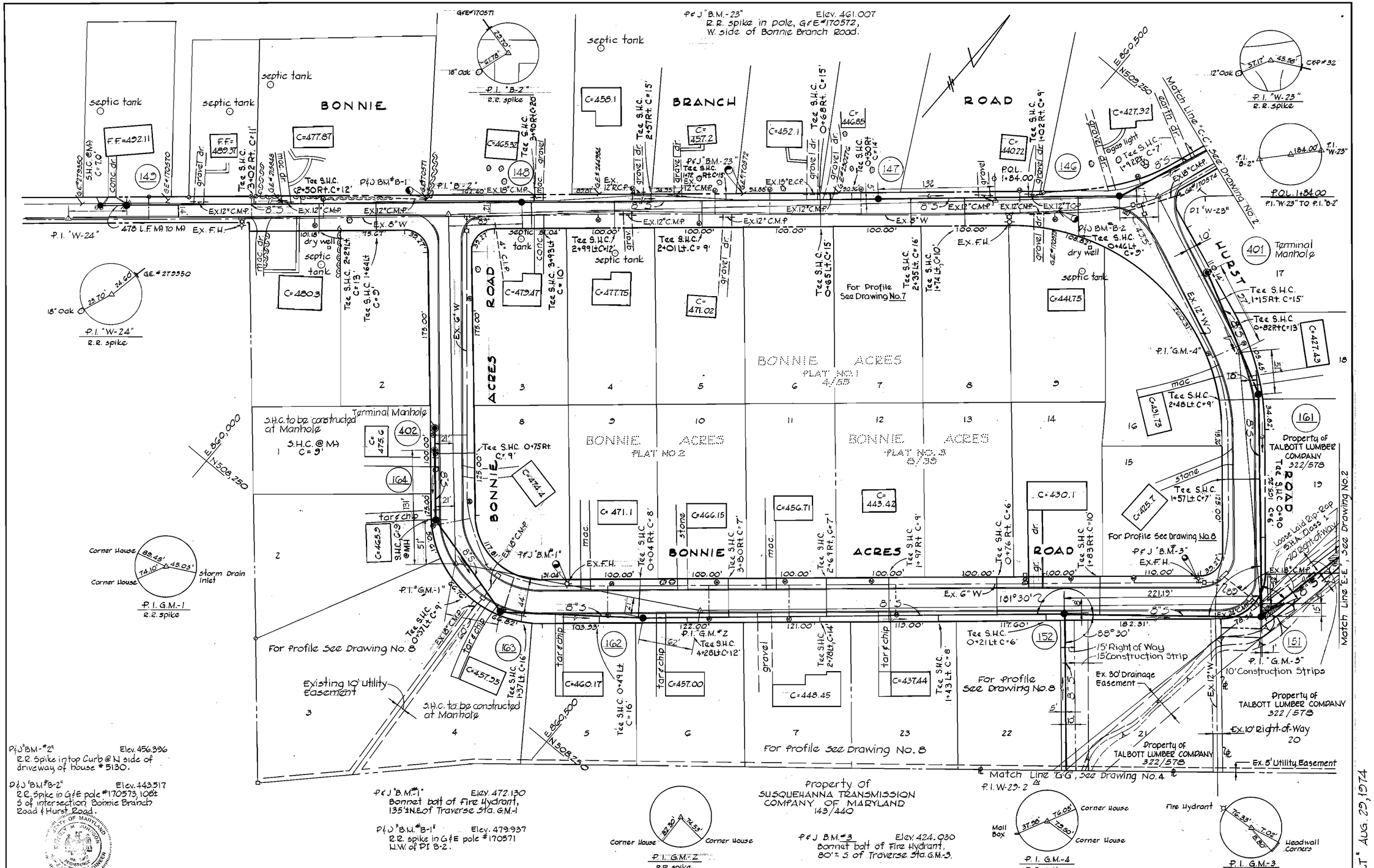
W.O. D-650, F.B. #611 + 616

JANUARY 22, 1973

WS 418-S/2

"AS BUILT" - AUG. 23, 1974

K+E BALTIMORE 17 0453 PHOENIX 44112



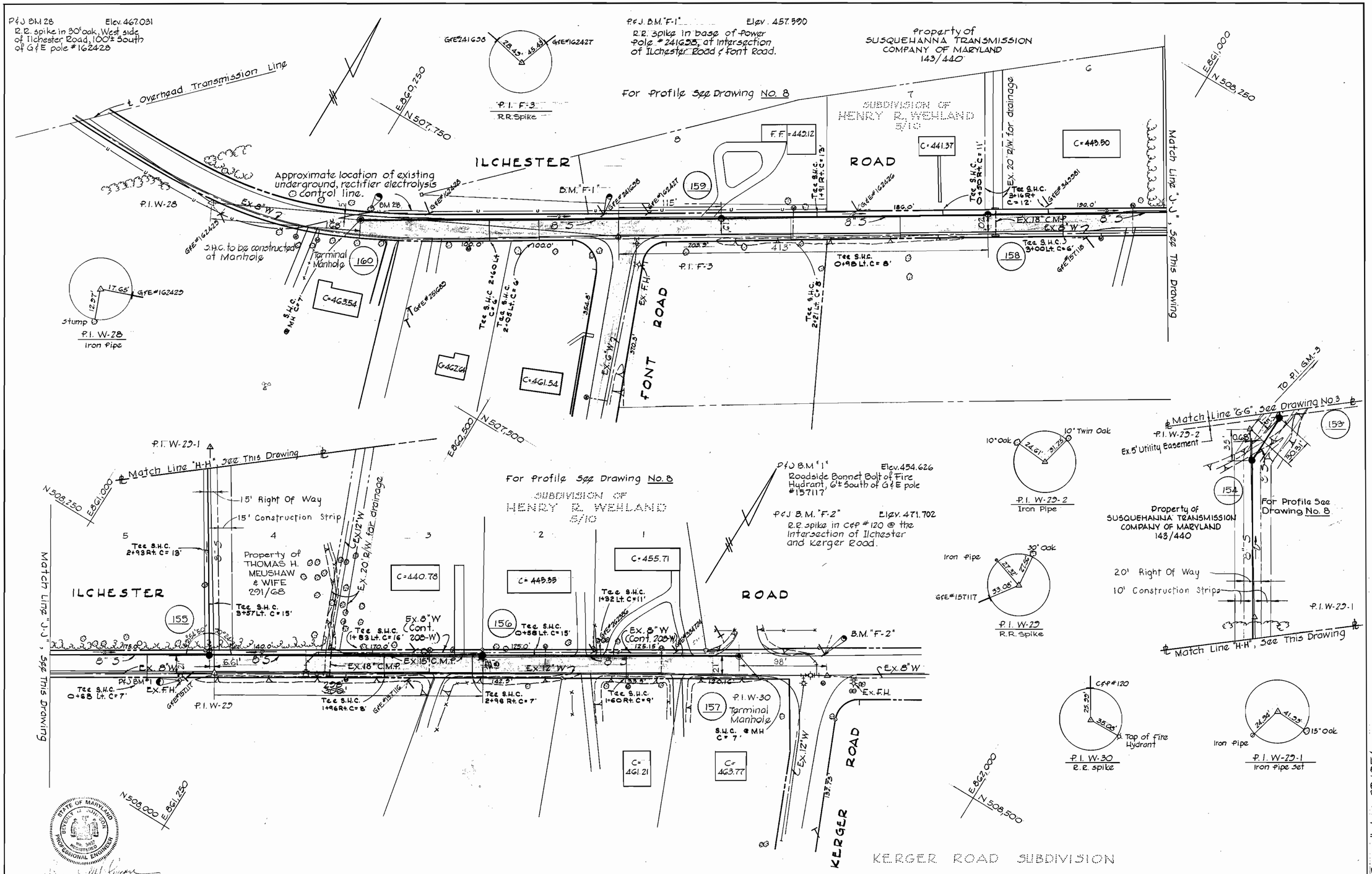
PURDUM & JESCHKE ENGINEERS 1023 N. CALVERT ST. BALTIMORE, MARYLAND	DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND 1-26-72 DATE — CHIEF-BUREAU OF WATER AND SEWER	CONTRACT NO. 418-S WSF-MD-03-05-1000	PLAN OF SEWER MAINS	ELECTION DISTRICTS NO. 1 & 2	DRAWING NO. 3 OF 11	SCALE 1"=50'

W.O. D-650, F.B. # 605 F.B. #615 F.B.

JANUARY 22, 1973

"AS BUILT" AUG. 29, 1974

WS 418-S/3



PURDUM & JESCHKE ENGINEERS 1023 N. CALVERT ST. BALTIMORE MARYLAND	DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND 1-26-72 DATE — CHIEF-BUREAU OF WATER AND SEWER	CONTRACT NO. 418-S WSF-MD-03-05-1000	PLAN OF SEWER MAINS	ELECTION DISTRICT NO. 2	DRAWING NO. 4 OF 11	SCALE 1"=50'

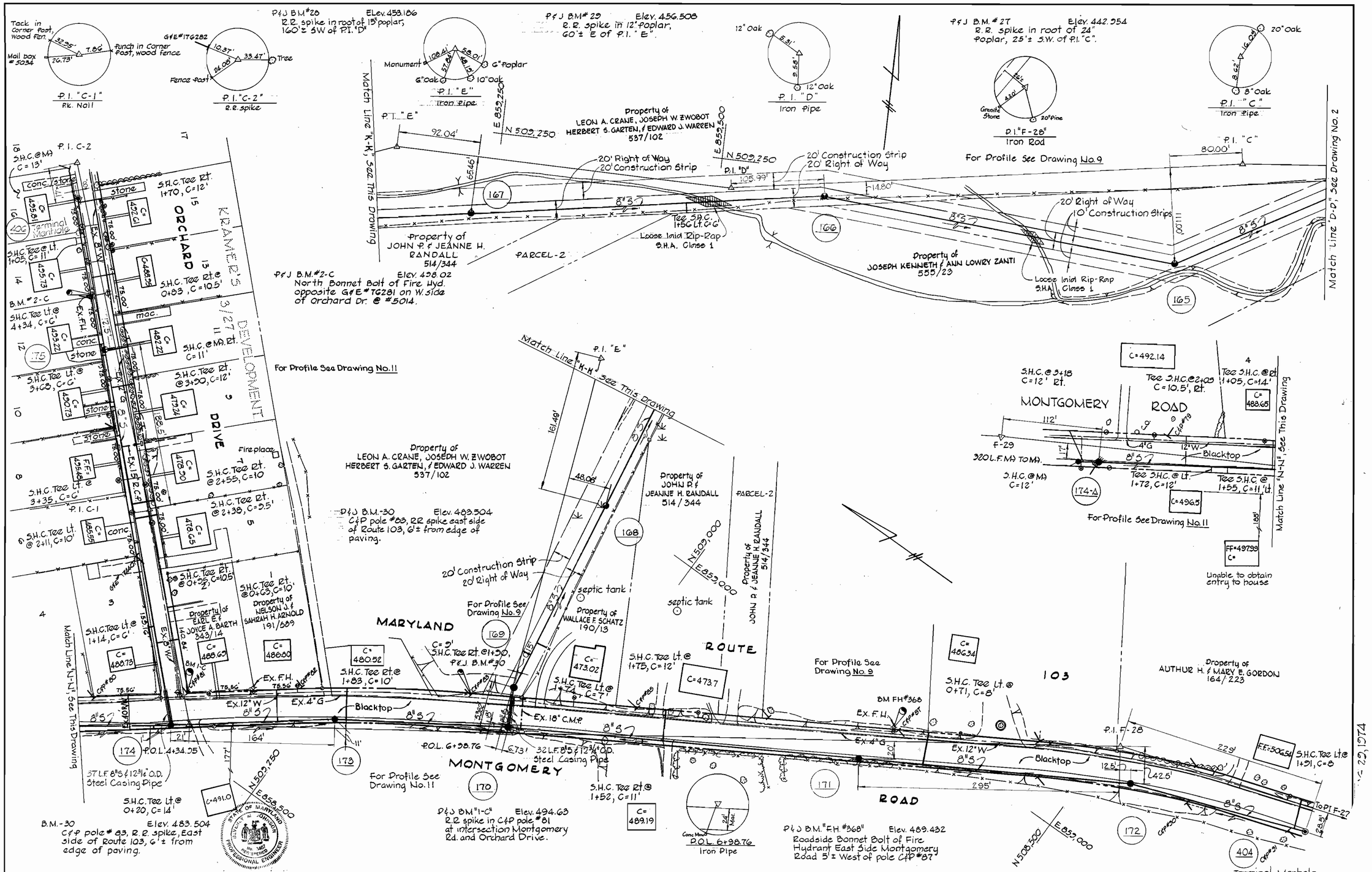
W.O. D-650 F.B. #605 F.B. #615

JANUARY 22, 1973

"AS BUILT" AUG. 29, 1974

WS 418-S/4

K+E BALTIMORE 17 0453 PHOENIX 44112+

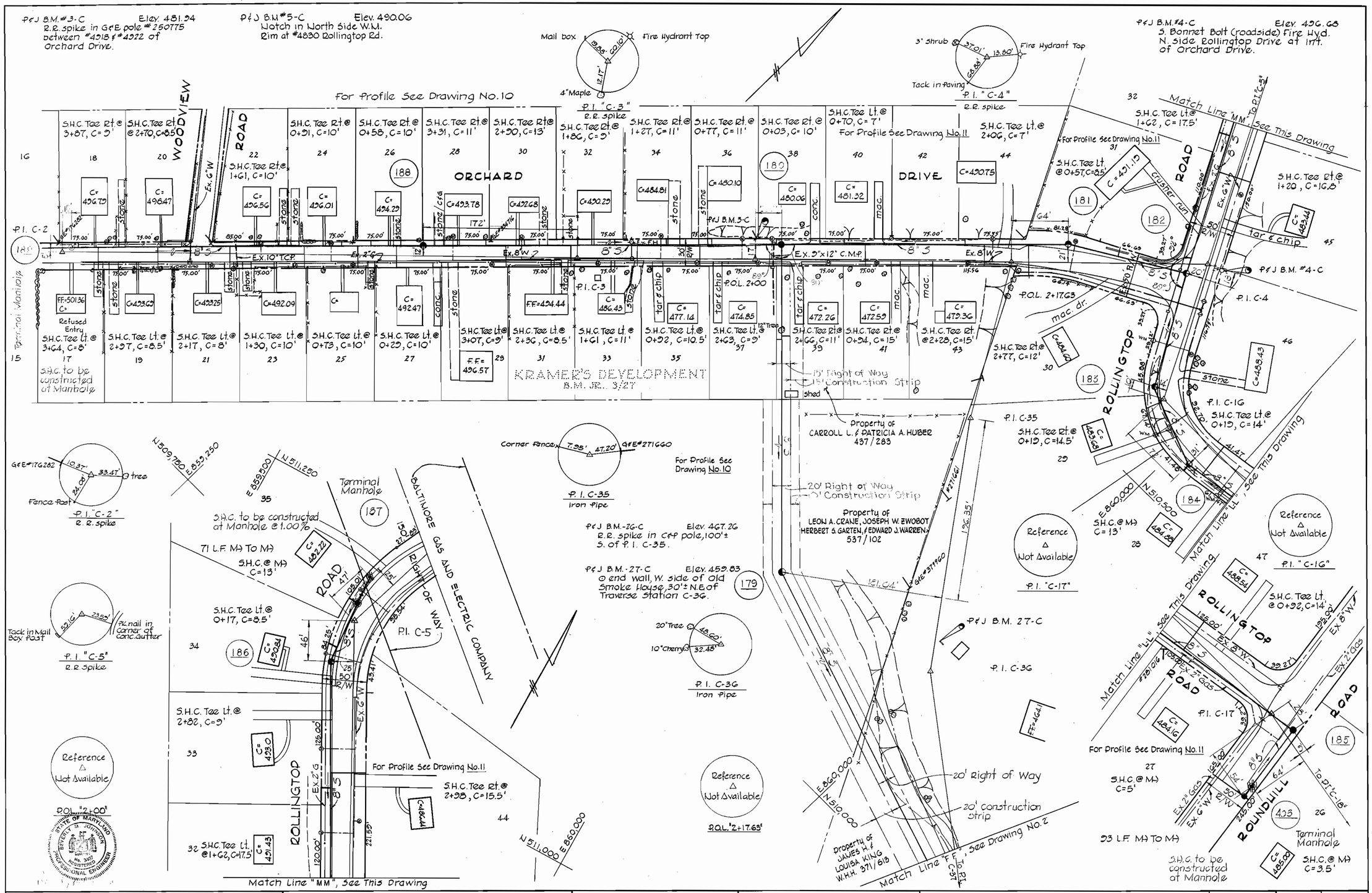


PURDUM & JESCHKE ENGINEERS 1023 N. CALVERT ST. BALTIMORE, MARYLAND	DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND 1-26-72 DATE — CHIEF-BUREAU OF WATER AND SEWER	CONTRACT NO. 418-S WSF-MD-03-05-1000	PLAN OF SEWER MAINS	ELECTION DISTRICT NO. 2	DRAWING NO. 5 OF 11	SCALE 1"=50'

W.O. D-650, F.B. #616

JANUARY 22, 1973

WS 418-S/5



PURDUM & JESCHKE ENGINEERS 1023 N. CALVERT ST. BALTIMORE MARYLAND	DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND 1-26-72 DATE — CHIEF-BUREAU WATER AND SEWER	CONTRACT NO. 418-S WSF-MD-03-05-1000	PLAN OF SEWER MAIN	ELECTION DISTRICT NO. 2	DRAWING NO. 6 OF 11	SCALE 1" = 50'

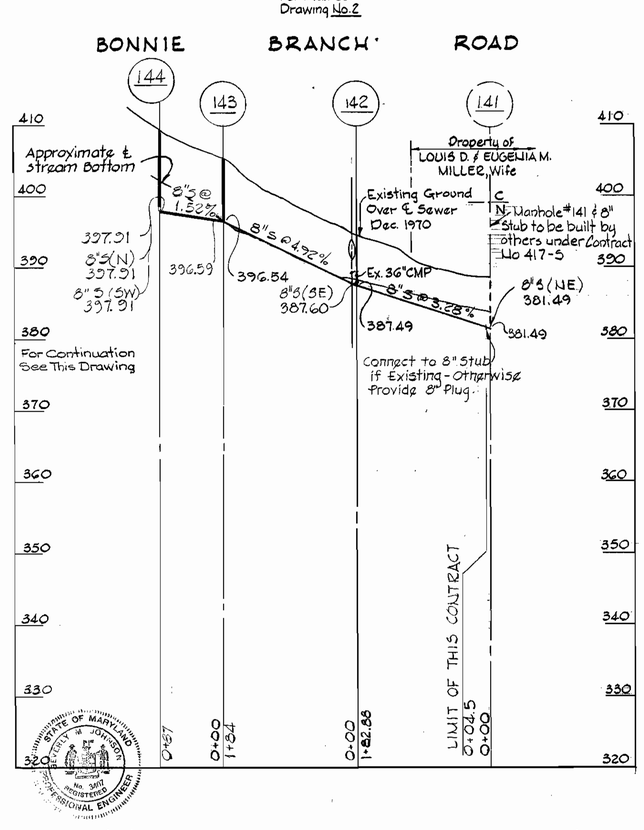
W.O. D-650 F.B. # 608

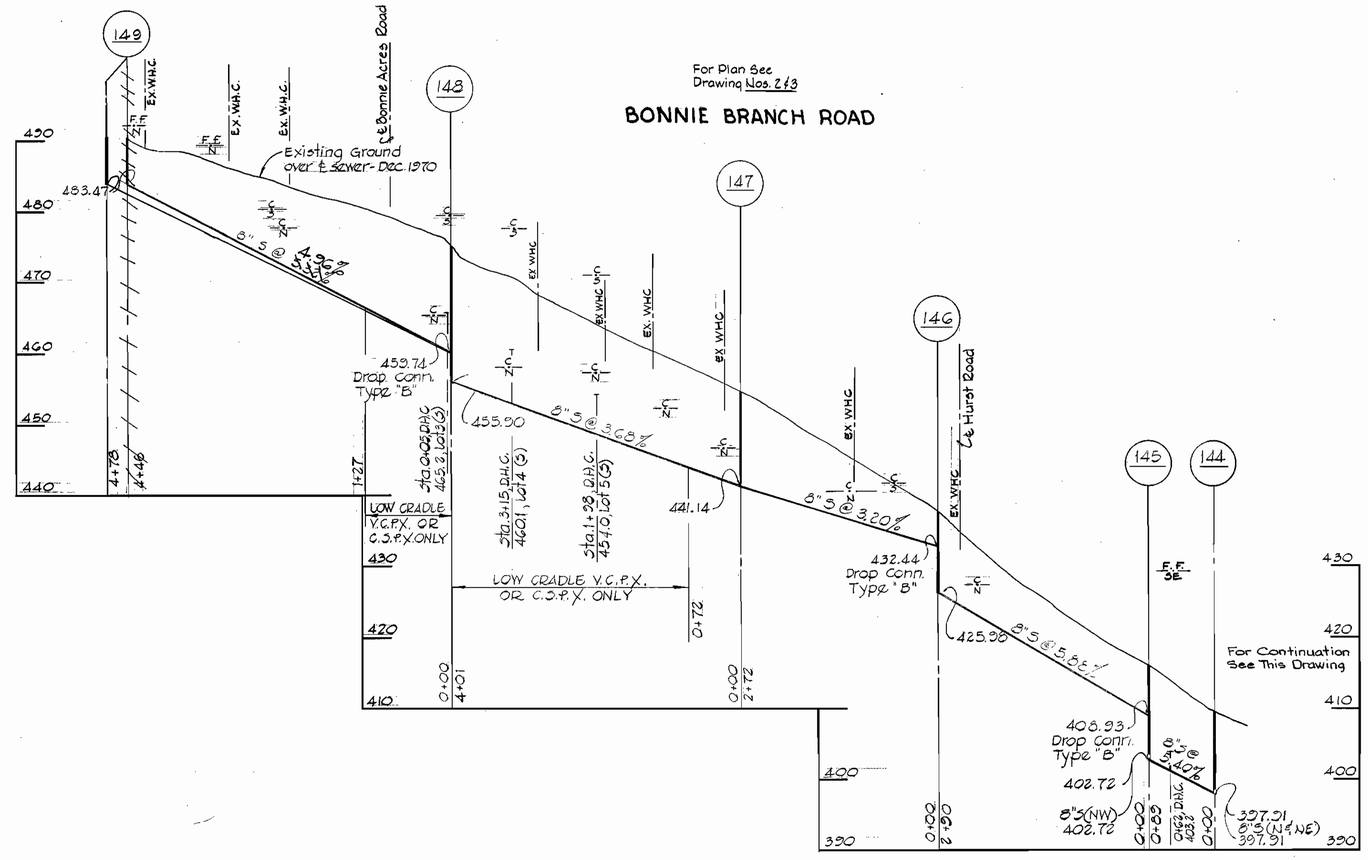
JANUARY 22, 1973

"AS BUILT", AUG. 30, 1974

W.S. 418-S/6

K+E BALTIMORE 17 0453 PHOENIX 44112





PROFILES
Scale: Hor. 1" = 100'
Vert. 1" = 10'

PURDUM & JESCHKE ENGINEERS 1023 N. CALVERT ST. BALTIMORE, MARYLAND	DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND 1-26-72 DATE — CHIEF-BUREAU OF WATER AND SEWER	CONTRACT NO. 418-S WSF-MD-03-05-1000	PROFILE	ELECTION DISTRICTS NO. 1 & 2	DRAWING NO. 7 OF 11	SCALE AS SHOWN

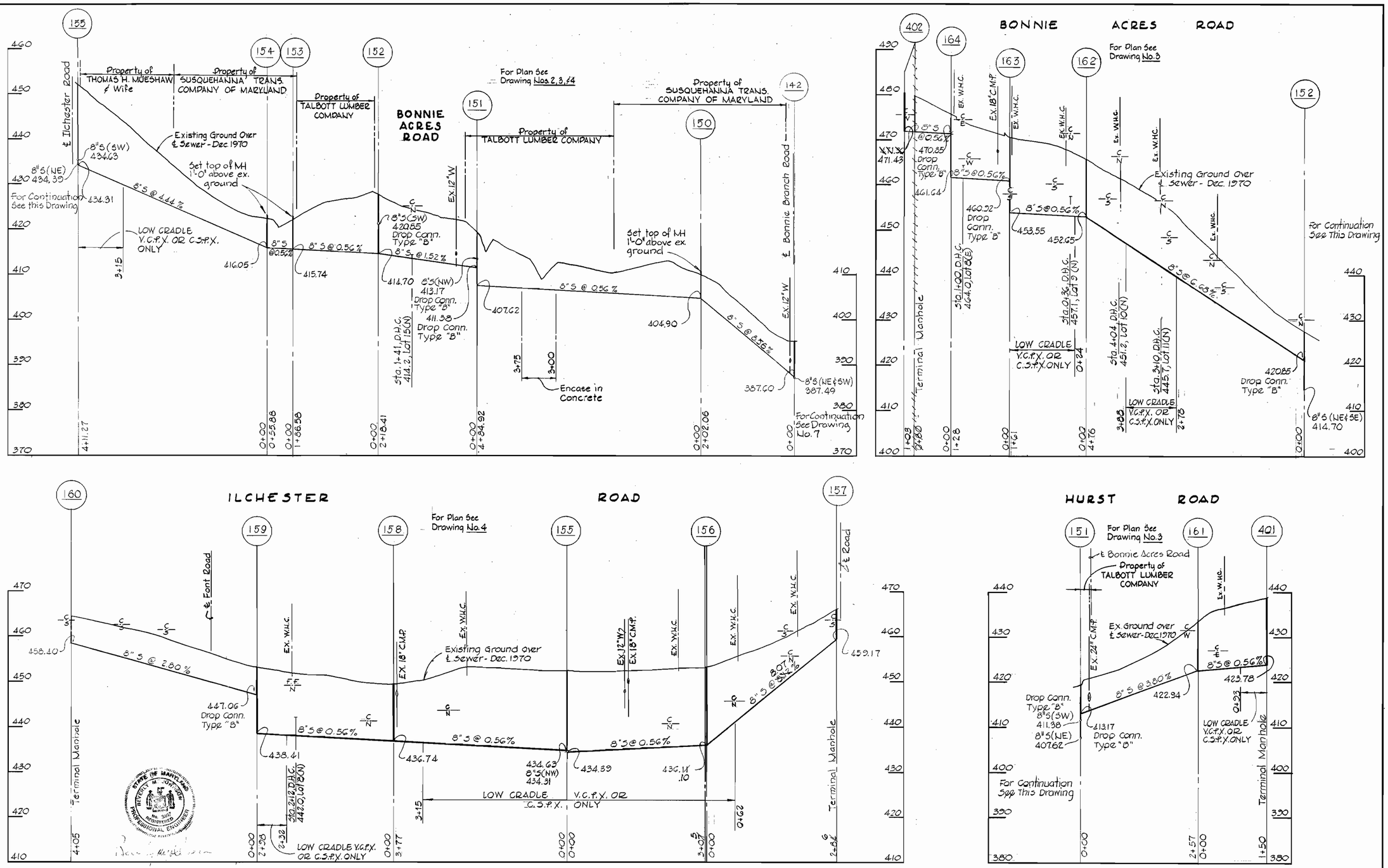
W.O. D-650 F.B. # 611 F.B. # 616 F.B. # 605 F.B. # 615

JANUARY 22, 1973

"AS BUILT" AUG. 30, 1974

WS 418-S/7

K+E BALTIMORE 17 0453 PHOENIX 441121



PROFILES

Scale: Hor 1" = 100'
Vert 1" = 10'

PURDUM & JESCHKE ENGINEERS 1023 N. CALVERT ST. BALTIMORE, MARYLAND	DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND 1-26-72 DATE — CHIEF-BUREAU OF WATER AND SEWER	CONTRACT NO. 418-S WSF-MD-03-05-1000	PROFILE	ELECTION DISTRICT NO. 1	DRAWING NO. 8 OF 11	SCALE AS SHOWN

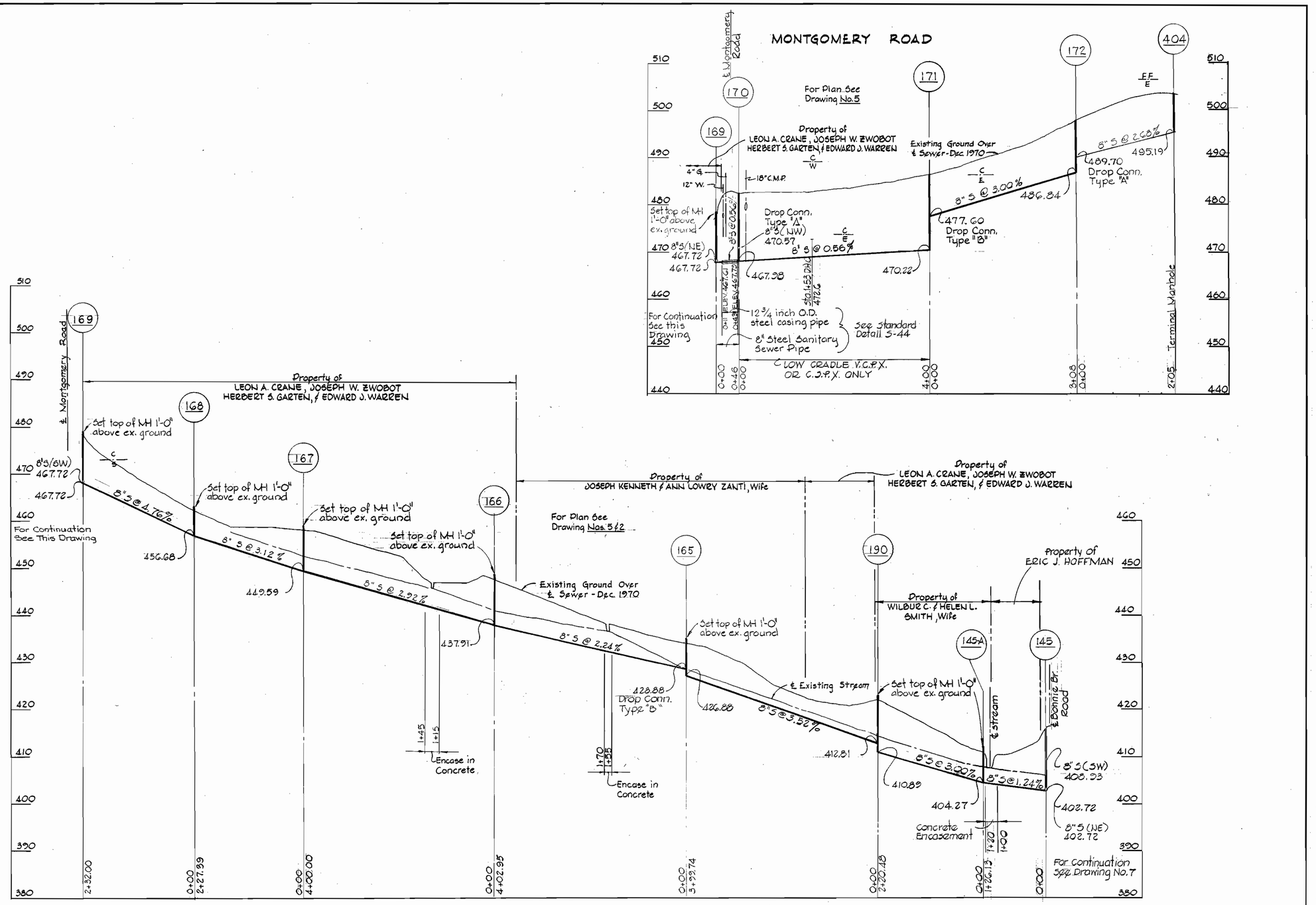
W.O. D-650 F.B. # 616 F.B. # 611

JANUARY 22, 1973

"AS BUILT" AUG. 29, 1974

WS 418-S/8

K+E BALTIMORE 17 0453 PHOENIX 44112+



PROFILES

SCALE : Hor.: 1" = 100'
Vert.: 1" = 10'

PURDUM & JESCHKE ENGINEERS 1023 N. CALVERT ST. BALTIMORE, MARYLAND	DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND 1-26-72 DATE — CHIEF-BUREAU OF WATER AND SEWER	CONTRACT NO. 418-S WSF-MD-03-05-1000	PROFILE	ELECTION DISTRICT NO. 2	DRAWING NO. 9 OF 11	SCALE AS SHOWN

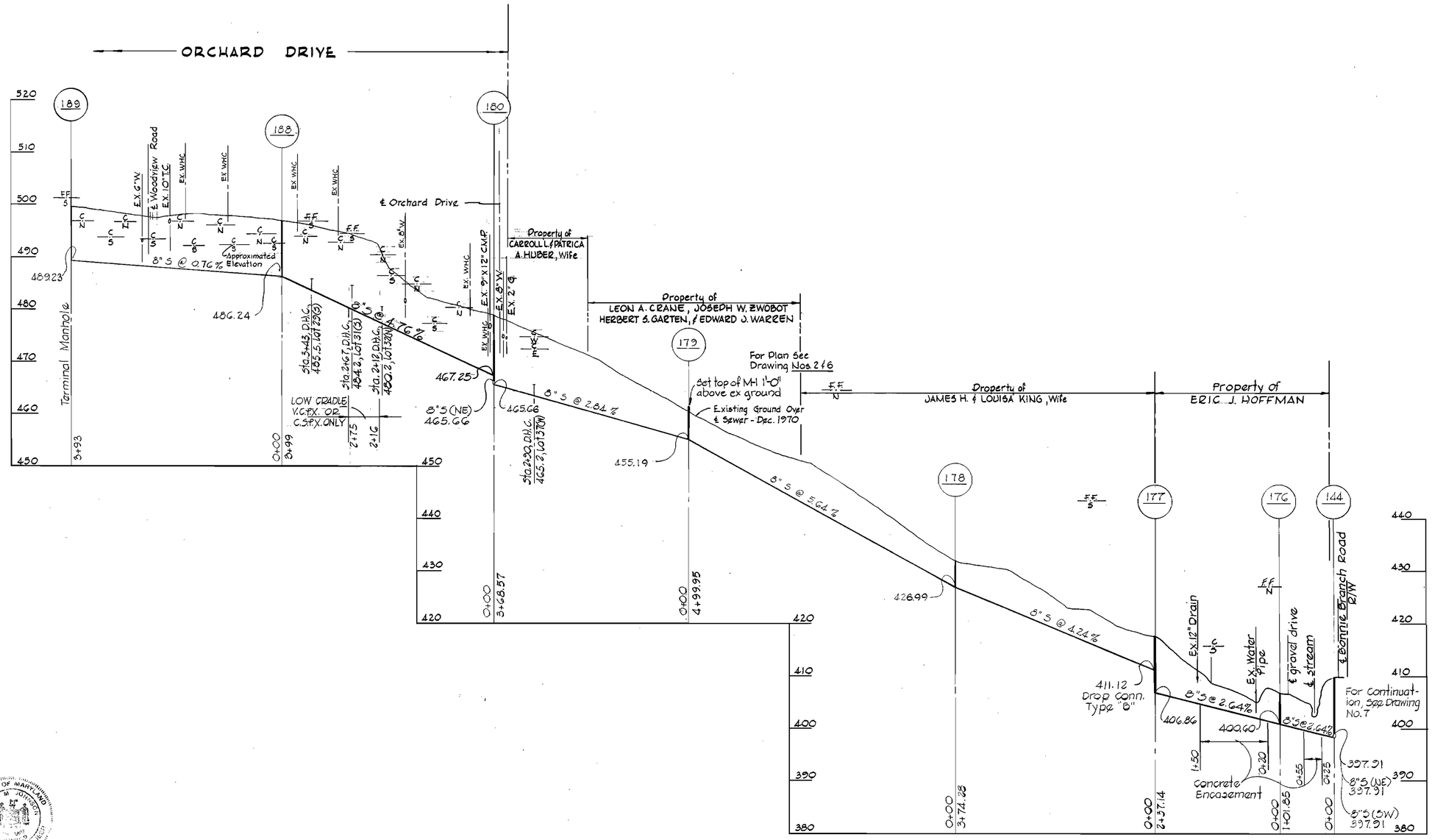
W.O. D-650 F.B. # 611 F.B. # 616

JANUARY 22, 1973

"AS BUILT" AUG. 30, 1974

WS 418-S/9

K+E BALTIMORE 17 0453 PHOENIX 44112



PROFILES

Scale: Hor. 1" = 100'
Vert. 1" = 10'

PURDUM & JESCHKE ENGINEERS 1023 N. CALVERT ST. BALTIMORE, MARYLAND	DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND 1-26-72 DATE — CHIEF-BUREAU OF WATER AND SEWER	CONTRACT NO. 418-S WSF-MD-03-05-1000	PROFILE	ELECTION DISTRICTS NO. 2	DRAWING NO. 10 OF 11	SCALE AS SHOWN

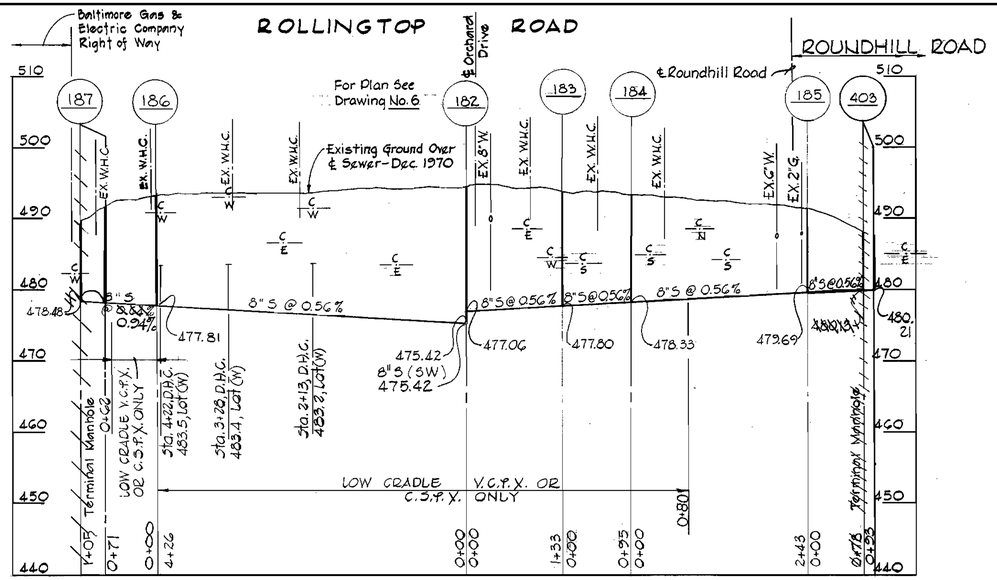
W.O. D-650 F.B. # 608 & 611 & 616

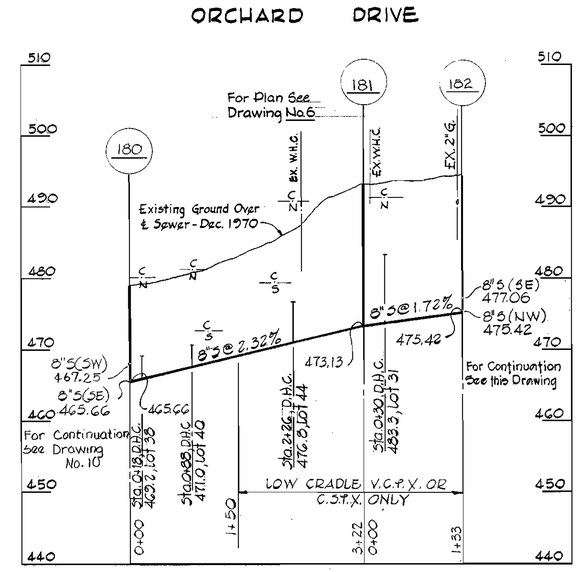
JANUARY 22, 1973

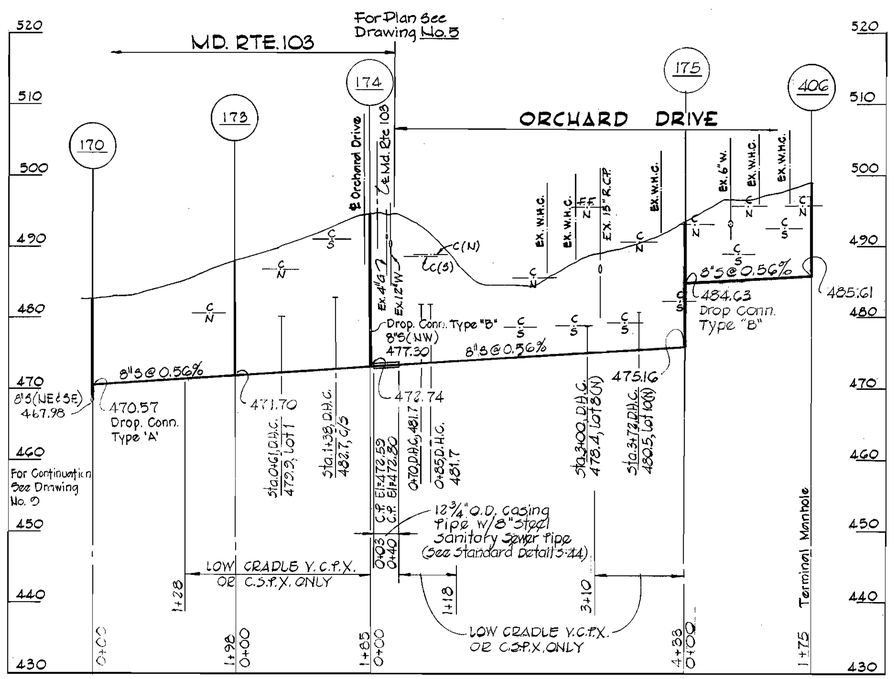
"AS BUILT" AUG. 30, 1974

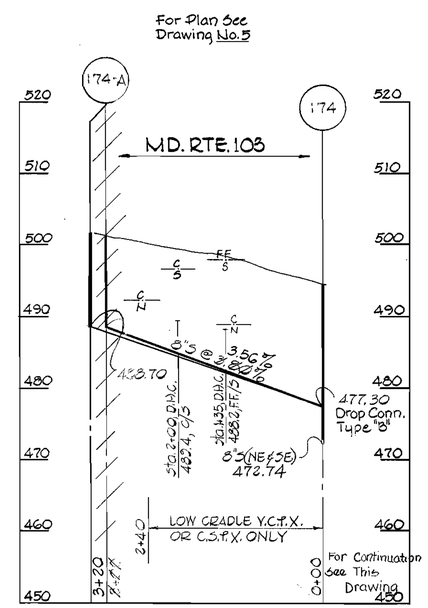
WS 418-S/10

K+E BALTIMORE 17 0453 PHOENIX 44112+









PROFILES

SCALE - Hor. : 1" = 100'
Vert. : 1" = 10'

PURDUM & JESCHKE ENGINEERS 1023 N. CALVERT ST. BALTIMORE, MARYLAND	DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND 1-26-72 DATE — CHIEF-BUREAU OF WATER AND SEWER	CONTRACT NO. 418-S WSF-MD-03-05-1000	PROFILE	ELECTION DISTRICTS NO. 2	DRAWING NO. 11 OF 11	SCALE AS SHOWN

"AS BUILT" AUG. 30, 1974

WS 418-S/11

W.O. D-650

JANUARY 22, 1973

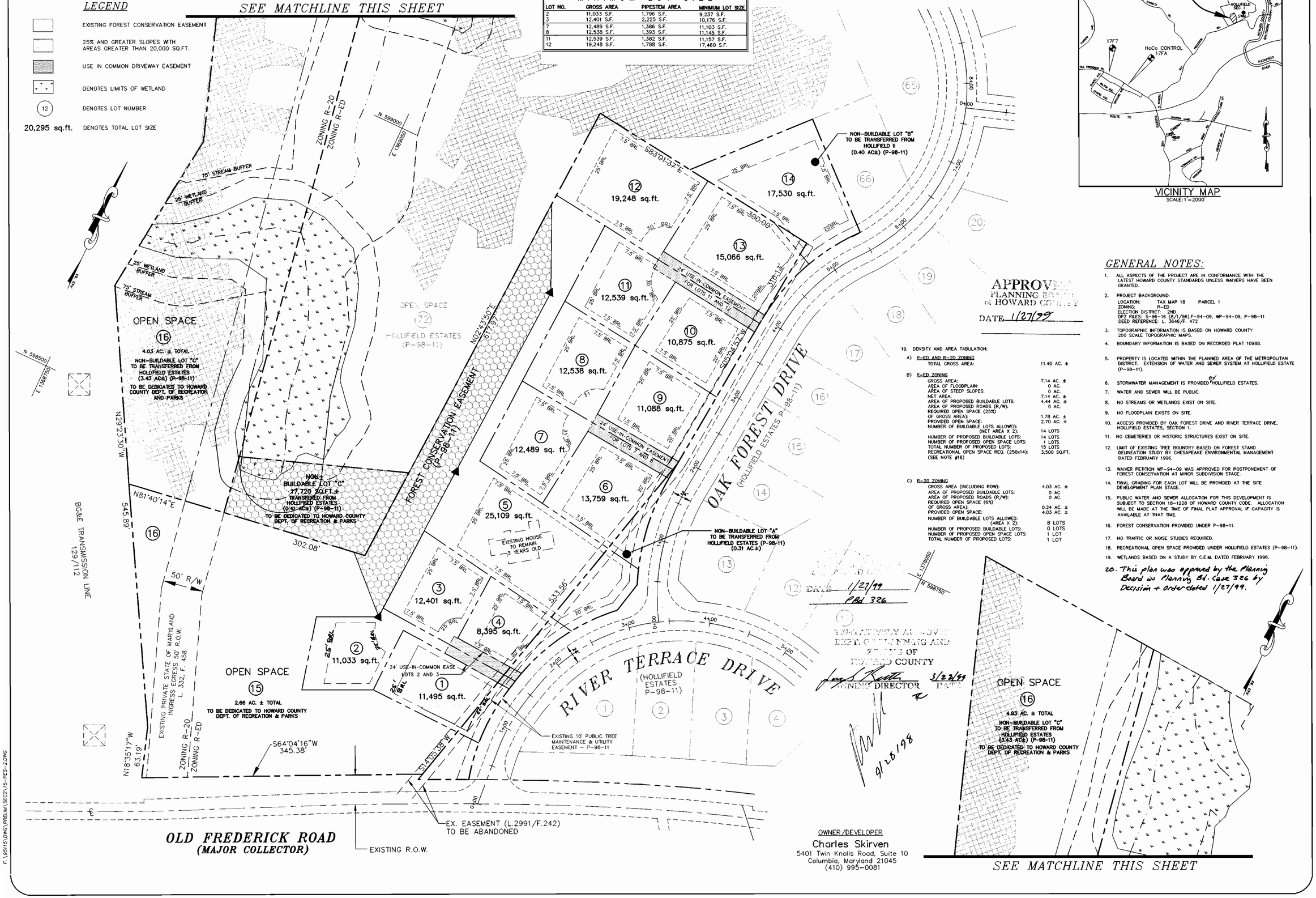
LEGEND

- EXISTING FOREST CONSERVATION EASEMENT
- 25% AND GREATER SLOPES WITH AREAS GREATER THAN 20,000 SQ.FT.
- USE IN COMMON DRIVEWAY EASEMENT
- DENOTES LIMITS OF WETLAND
- (12) DENOTES LOT NUMBER
- 20,295 sq.ft. DENOTES TOTAL LOT SIZE

SEE MATCHLINE THIS SHEET

MINIMUM LOT SIZE

LOT NO.	GROSS AREA	PIPESTEM AREA	MINIMUM LOT SIZE
2	11,033 S.F.	1,796 S.F.	9,237 S.F.
3	12,401 S.F.	2,225 S.F.	10,176 S.F.
7	12,489 S.F.	1,386 S.F.	11,103 S.F.
8	12,538 S.F.	1,393 S.F.	11,145 S.F.
11	12,539 S.F.	1,382 S.F.	11,157 S.F.
12	19,248 S.F.	1,788 S.F.	17,460 S.F.



APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 1/27/99

DATE 1/27/99
PBd 326

TECHNICALLY APPROVED
DEPT. OF PLANNING AND ZONING
OF HOWARD COUNTY
PLANNING DIRECTOR 3/22/99 DATE

9/28/98

19. DENSITY AND AREA TABULATION:

A) R-ED AND R-20 ZONING

TOTAL GROSS AREA:	11.40 AC. ±

B) R-ED ZONING

GROSS AREA:	7.14 AC. ±
AREA OF FLOODPLAIN:	0 AC.
AREA OF STEEP SLOPES:	0 AC.
NET AREA:	7.14 AC. ±
AREA OF PROPOSED BUILDABLE LOTS:	4.44 AC. ±
AREA OF PROPOSED ROADS (R/W):	0 AC.
REQUIRED OPEN SPACE (25%) OF GROSS AREA):	1.78 AC. ±
PROVIDED OPEN SPACE:	2.70 AC. ±
NUMBER OF BUILDABLE LOTS ALLOWED: (NET AREA X 2):	14 LOTS
NUMBER OF PROPOSED BUILDABLE LOTS:	14 LOTS
NUMBER OF PROPOSED OPEN SPACE LOTS:	1 LOTS
TOTAL NUMBER OF PROPOSED LOTS:	15 LOTS
RECREATIONAL OPEN SPACE REQ. (250x14): (SEE NOTE #18)	3,500 SQ.FT.

C) R-20 ZONING

GROSS AREA (INCLUDING ROW):	4.03 AC. ±
AREA OF PROPOSED BUILDABLE LOTS:	0 AC.
AREA OF PROPOSED ROADS (R/W):	0 AC.
REQUIRED OPEN SPACE (65%) OF GROSS AREA):	0.24 AC. ±
PROVIDED OPEN SPACE:	4.03 AC. ±
NUMBER OF BUILDABLE LOTS ALLOWED: (AREA X 2):	8 LOTS
NUMBER OF PROPOSED BUILDABLE LOTS:	0 LOTS
NUMBER OF PROPOSED OPEN SPACE LOTS:	1 LOT
TOTAL NUMBER OF PROPOSED LOTS:	1 LOT

GENERAL NOTES:

1. ALL ASPECTS OF THE PROJECT ARE IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS WAIVERS HAVE BEEN GRANTED.
2. PROJECT BACKGROUND:
   LOCATION: TAX MAP 18 PARCEL 1
   ZONING: R-ED
   ELECTION DISTRICT: 2ND
   DPZ FILES: S-96-16 (8/1/96),F-94-09, WP-94-09, P-98-11
   DEED REFERENCE: L. 3646/F. 472
3. TOPOGRAPHIC INFORMATION IS BASED ON HOWARD COUNTY 200 SCALE TOPOGRAPHIC MAPS.
4. BOUNDARY INFORMATION IS BASED ON RECORDED PLAT 10988.
5. PROPERTY IS LOCATED WITHIN THE PLANNED AREA OF THE METROPOLITAN DISTRICT. EXTENSION OF WATER AND SEWER SYSTEM AT HOLLIFIELD ESTATE (P-98-11).
6. STORMWATER MANAGEMENT IS PROVIDED BY HOLLIFIELD ESTATES.
7. WATER AND SEWER WILL BE PUBLIC.
8. NO STREAMS OR WETLANDS EXIST ON SITE.
9. NO FLOODPLAIN EXISTS ON SITE.
10. ACCESS PROVIDED BY OAK FOREST DRIVE AND RIVER TERRACE DRIVE, HOLLIFIELD ESTATES, SECTION 1.
11. NO CEMETERIES OR HISTORIC STRUCTURES EXIST ON SITE.
12. LIMIT OF EXISTING TREE BOUNDRY BASED ON FOREST STAND DELINEATION STUDY BY CHESAPEAKE ENVIRONMENTAL MANAGEMENT DATED FEBRUARY 1996.
13. WAIVER PETITION WP-94-09 WAS APPROVED FOR POSTPONEMENT OF FOREST CONSERVATION AT MINOR SUBDIVISION STAGE.
14. FINAL GRADING FOR EACH LOT WILL BE PROVIDED AT THE SITE DEVELOPMENT PLAN STAGE.
15. PUBLIC WATER AND SEWER ALLOCATION FOR THIS DEVELOPMENT IS SUBJECT TO SECTION 18-1228 OF HOWARD COUNTY CODE. ALLOCATION WILL BE MADE AT THE TIME OF FINAL PLAT APPROVAL IF CAPACITY IS AVAILABLE AT THAT TIME.
16. FOREST CONSERVATION PROVIDED UNDER P-98-11.
17. NO TRAFFIC OR NOISE STUDIES REQUIRED.
18. RECREATIONAL OPEN SPACE PROVIDED UNDER HOLLIFIELD ESTATES (P-98-11).
19. WETLANDS BASED ON A STUDY BY C.E.M. DATED FEBRUARY 1996.
20. This plan was approved by the Planning Board as Planning Bd. Case 326 by Decision + Order dated 1/27/99.

OWNER/DEVELOPER
Charles Skirven
5401 Twin Knolls Road, Suite 10
Columbia, Maryland 21045
(410) 995-0081

F:\95115\DWG\PRELIM\SEC2\15-PES-2.DWG

project	95115
date	MAY 98
illustration	AMY/SD
engineering	MMP/SD
scale	1" = 50'
approval	

no.	description	date
	revisions	

TAX MAP 18, PARCEL 1
HOLLIFIELD ESTATES II
2nd ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
PRELIMINARY EQUIVALENT SKETCH

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
(410) 997-0296 Balt. (301) 621-5521 Wash. (410) 997-0298 Fax

SP-98-17