

WATER AND SEWER EXTENSIONS RETTGER PROPERTY

LOTS 1-25
5th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT NO. 34-3475-D

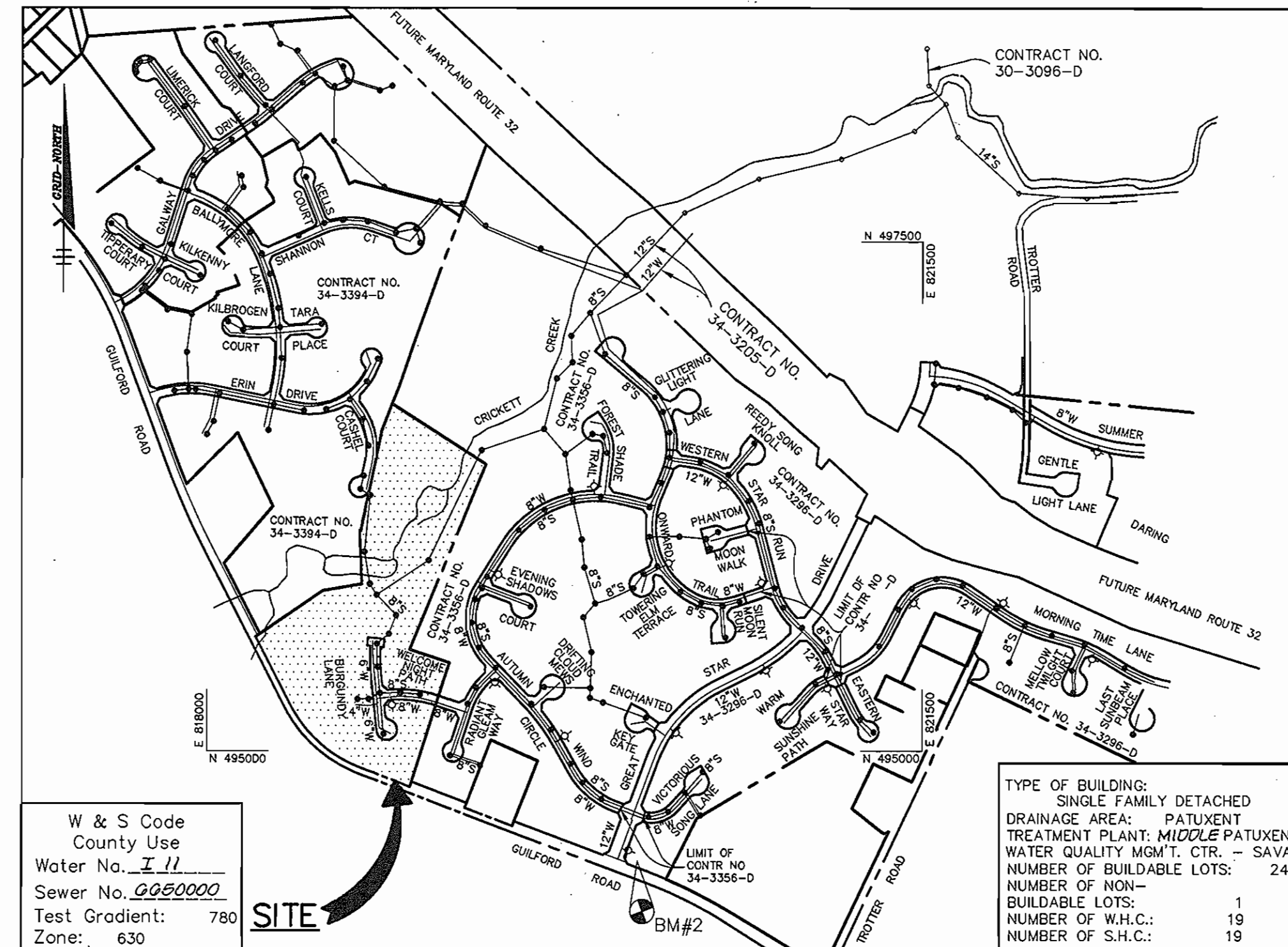
GENERAL NOTES

1. 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.
2. All horizontal controls are based on Maryland State Coordinates.
3. All vertical controls are based on U.S.G.S. data.
4. All pipe elevations shown are invert elevations.
5. Clear all utilities by a minimum of 6". Clear all poles by 2'-0" minimum or tunnel as required. The owner has contacted the utility companies and has made arrangements for bracing of poles as shown on the drawings. In the event the contractor's work requires the bracing of additional poles, any cost incurred by the owner for bracing of additional poles or damages shall be deducted from money owed the contractor. The contractor shall coordinate with the utility companies to schedule the bracing of the poles.
6. For details not shown on the drawings, and for materials and construction methods use Howard County Design Manual, Volume IV, Standard Specifications and Detail for Construction. (Latest Edition). The contractor shall have a copy of Volume IV on the job.
7. Where test pits have been made on existing utilities, they are noted by the symbol at the location of the test pit. A note or notes containing the results of the test pit or pits is included on the drawings. Existing utilities in the vicinity of the proposed work for which test pits have not been dug shall be located by the contractor two weeks in advance of construction operations at his own expense.
8. Contractor shall notify the following utility companies or agencies at least five working days before starting work shown on these plans:

State Highway Administration	531-5533
Baltimore Gas & Electric Co. Contractor Services	850-4620
Baltimore Gas & Electric Co. Underground Damage Control	787-9086
Miss Utility	1-800-257-7777
Colonial Pipeline Co.	795-1390
Bureau of Utilities, Howard County Department of Public Works	313-4900
9. Trees and shrubs are to be protected from damage to maximum extent. Trees and shrubs located within the construction strip are not to be removed or damaged by the contractor.
10. Contractor shall remove trees, stumps and roots along line of excavation. Payment for such removal shall be included in the unit price bid for construction of the main.
11. All water mains to be D.I.P. Class 52 unless otherwise noted.
12. Tops of all water mains to have a minimum of 3-1/2' cover unless otherwise noted.
13. Valves adjacent to tees shall be strapped to tees.
14. All fittings shall be buttressed or anchored with concrete in accordance with the Standard Details unless otherwise provided for on the drawings.
15. Fire hydrants shall be set to the bury line elevations shown on the drawings. All fire hydrants shall be restrained and buttressed with concrete in accordance with Standard Details. Soil around the fire hydrant shall be compacted in accordance with Section 1000 and 1005 of the Standard Specifications.
16. The contractor shall not operate any water main valves on the existing water system.
17. All water house connections shall be for inside meter setting unless otherwise noted on plans or in specifications.
18. All sewer mains shall be D.I.P. and P.V.C. unless otherwise noted.
19. All manholes shall be 4'-0" inside diameter unless otherwise noted.
20. Force mains shall be D.I.P. only.
21. Manholes shown with 12" and 16" walls are for brick manholes only.
22. Manholes designated W.T. in plan and profile shall have watertight frame and covers, Standard Detail 05-52. Where water tight manhole frame and cover is used, set top of frame 1"-6" above finished grade unless otherwise noted on the drawings.
23. House(s) with the symbol "C.N.S." indicates that cellar cannot be served.
24. Manholes can be either brick or precast concrete structures.
25. Contractor is solely responsible for construction means, methods, techniques, sequences, procedures, and safety precautions and programs.
26. The fire hydrant shall be installed as per standard detail W.1.11.
27. Fire hydrants will be located 3' FROM BACK OF CURB unless otherwise noted.
28. For sprinkler system for all townhomes or multi-family dwelling units should have a minimum of 1" connection with a 3/4" meter.
29. The contractor shall notify the Bureau of Highways, Howard County, at (410) 313-2450 at least five (5) working days before any open cut of any County road or boring/jacking operation in County roads for laying water/sewer mains or house connections. The approval of these drawings will constitute compliance with DPW requirements per Section 18.114(c) of the Howard County Code.

QUANTITIES

ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER / SUPPLIER
8" WATER	473 LF	541 L.F.	CLASS 52 D.I.P.	GRIFFIN
6" WATER	324 LF	340 L.F.	" " "	"
4" WATER	172 LF	171 L.F.	" " "	"
3/4" WHC	549 LF	621 L.F.	" " "	HOWELL
6" VALVES	1 EA.	2	" " "	MUELLER
4" VALVES	1 EA.	1	" " "	"
6" 1/8 BEND	1 EA.	1	" " "	GRIFFIN
4" 1/32 BEND	1 EA.	0	" " "	"
8"x8" TEE	1 EA.	1	" " "	GRIFFIN
6" VALVES	3 EA.	3	" " "	MUELLER
6"x4" TEE	1 EA.	1	" " "	GRIFFIN
4" CAP AND BUTTRISS	1 EA.	1	" " "	"
6" CAP AND BUTTRISS	2 EA.	2	" " "	"
8"x6" REDUCER	2 EA.	2	" " "	"
FIRE HYDRANTS	2 EA.	2	" " "	MUELLER
8" SEWER	935 LF	935 L.F.	SDR-35 P.V.C.	J-M MANUF.
8" D.I.P. CL 52 SEWER	286 LF	286 L.F.	CLASS 52 D.I.P.	" " "
4" SHC	501 LF	550 L.F.	SDR-35 P.V.C.	" " "
4'-0" DIA PRECAST SEWER MANHOLES	8 EA.	8 EA.	" " "	ATLANTIC CONC.
SEWER MANHOLES	50 VF.	50 VF.	" " "	" " "
TYPE "B" DROP MANHOLES	3 EA.	3 EA.	" " "	ATLANTIC CONC.
1/2" DRAIN	1 EA.	1 EA.	" " "	" " "
BLOCKS S.H.C.	10 EA.	10 EA.	" " "	DANIS CONCRETE



VICINITY MAP
SCALE: 1"=600'

BENCHMARKS

BM1
HOWARD COUNTY MONUMENT NO. 2837003
ELEV. 481.25
CONCRETE MONUMENT

BM2
HOWARD COUNTY MONUMENT NO. 2437003
ELEV. 472.12
CONCRETE MONUMENT

NAME OF UTILITY CONTRACTOR: C.C.S.

Sediment control measures for this contract will be implemented in accordance with Section 219 of the Specifications and as shown on F 36-60

W & S AS-BUILT

Review for Howard Soil Conservation District and meets technical requirements.

J. A. Wafford / *M.K.* 3/11/96
NATURAL RESOURCE CONSERVATION SERVICE DATE

This plan is approved for soil erosion and sediment control by the Howard Soil Conservation District

John P. Blanton 3/11/96
HOWARD SOIL CONSERVATION DISTRICT DATE

CHECKBOX OK

AS-BUILT DATE 2/22/97

SURVEY AND DRAFTING DIVISION

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND <i>Robert Beatty</i> 3-7-96 CHIEF, BUREAU OF UTILITIES DATE	DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND <i>Michael Cannon</i> 3/15/96 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE	RIEMER MUEGGE & ASSOCIATES, INC. Planners • Engineers • Surveyors 8818 Centre Park Drive • Suite 200 • Columbia, MD 21045 410-997-8900 FAX: 410-997-9282 www.riemermuegge.com	DES: JTD DRN: BRD CHK: JTD DATE: 2-20-97	BY NO. REVISION DATE	TITLE SHEET 600' SCALE MAP NO. <u>35</u> BLOCK NO. <u>13</u>	RETTGER PROPERTY LOTS 1 THRU 25 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND CONTRACT # <u>34-3475-D</u>	SCALE AS SHOWN SHEET 1 OF 3
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(AS-BUILT) 4-3-97

NOTE:
RETTGER PROPERTY LOTS 20-24
WATER & SEWER SERVICE ARE
INSTALLED UNDER CONTRACT
No. 34-3394-D.



MANHOLE SCHEDULE

SEWER MANHOLE	LOCATION	RIM ELEV.	SLOPE	
1	N 556488.83 - E 1331266.71	18" ABOVE GRADE	0.0%	
2	N 556444.18 - E 1331379.17	18" ABOVE GRADE	0.0%	
3	N 556320.26 - E 1331329.95	389.0	8.0%	
4	7.00' RT OF STA. 2+61.90	BURGUNDY LANE	390.44	7.3%
5	5.79' RT OF STA. 1+56.34	BURGUNDY LANE	400.46	10.0%
6	7.00' RT OF STA. 0+07.00	BURGUNDY LANE	412.05	6.0%
7	N 555825.15 - E 1331283.96	BURGUNDY LANE	420.40	1.7%
8	10.00' RT OF STA. 3+43.45	WELCOME NIGHT PATH	416.00	4.0%
9	10.00' RT OF STA. 2+40.90	WELCOME NIGHT PATH	419.88	2.7%
10	N 555978.53 - E 1331177.12		416.20	2.0%
11	N 555985.70 - E 1331084.05		411.48	6.0%

PLAN
SCALE: 1" = 50'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

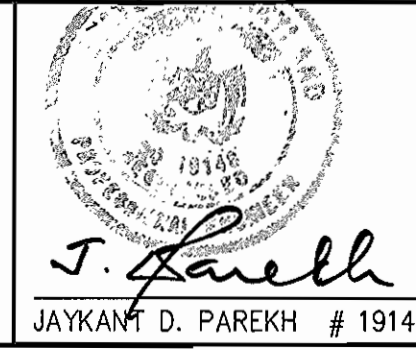
Robert B. ...
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

...
CHIEF, DEVELOPMENT ENGINEERING DIVISION

RIEMER MUEGGE & ASSOCIATES, INC.
Planners Engineers Surveyors
8818 Centre Park Drive • Suite 200 • Columbia, MD 21045
410-997-9900 FAX: 410-997-9282
ECCC/05080608 WSL/DWG

J. Farrell
JAYKANT D. PAREKH # 19148



DES: JTD			
DRN: BRD			
CHK: JTD	R.J.C.	MOVED R/W LINE ALONG BURGUNDY LANE (BOTH SIDES) IN AN EASTERLY DIRECTION, REV. FRONTAGES/INVS. & EX. HSE NOTE, LOT 9, 11/22/96	
DATE: 2-20-00	R.J.C.	REVISED FRONTAGES AND ADDED PLAN OF LOTS 20-24	4-26-96
BY NO.		REVISION	DATE

PLAN OF WATER AND SEWER MAINS
S.H.C. & W.H.C. AS-BUILT

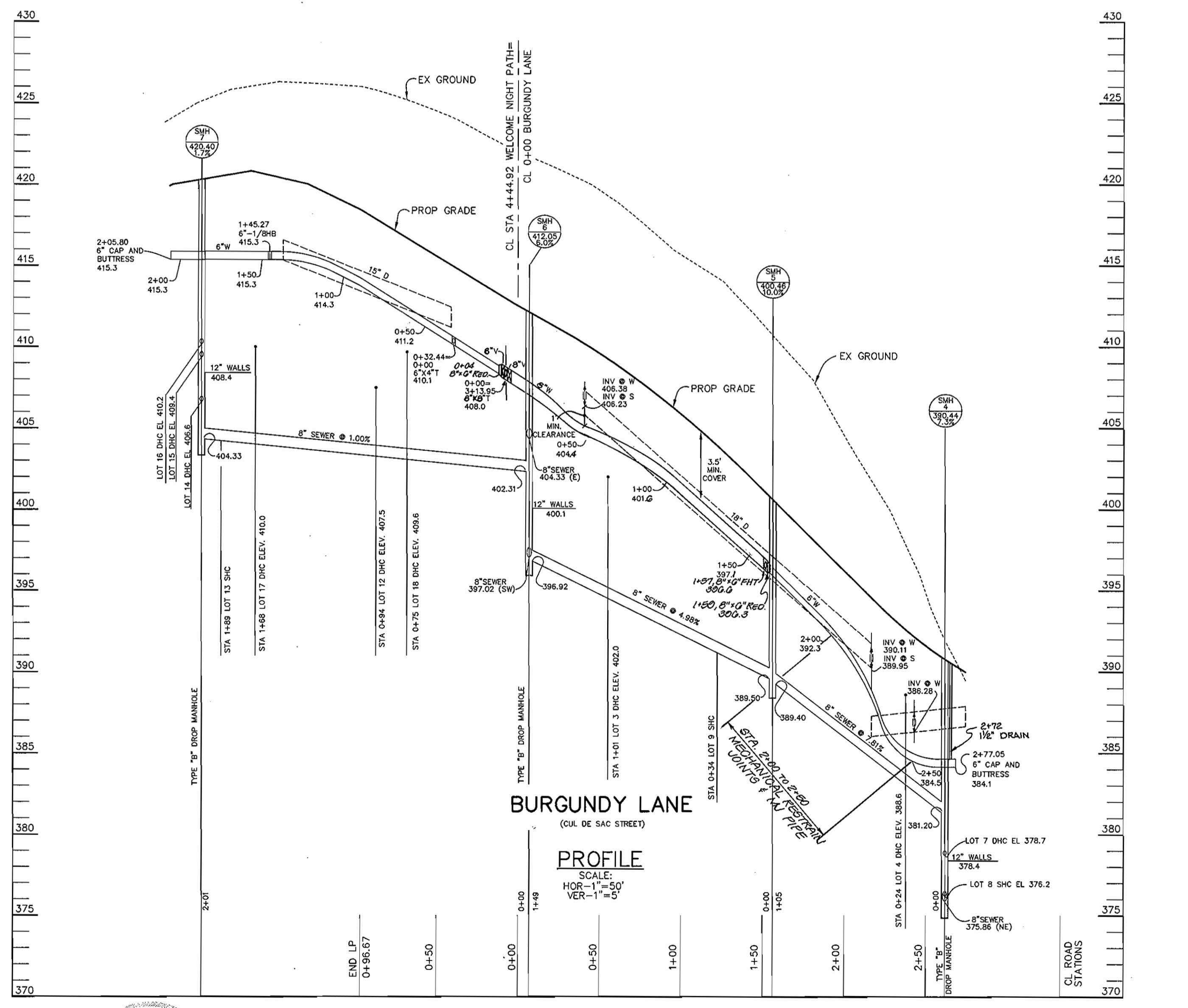
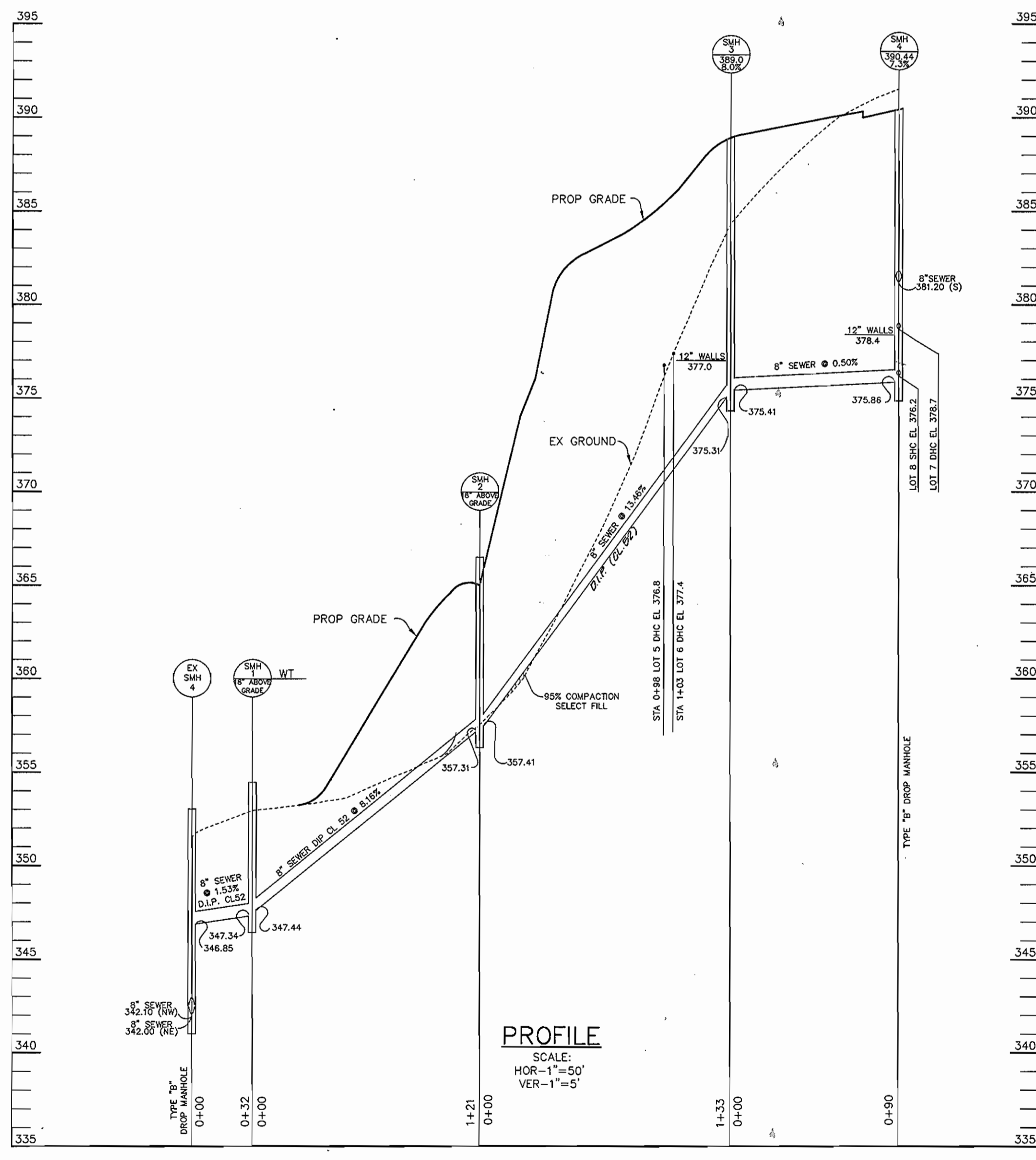
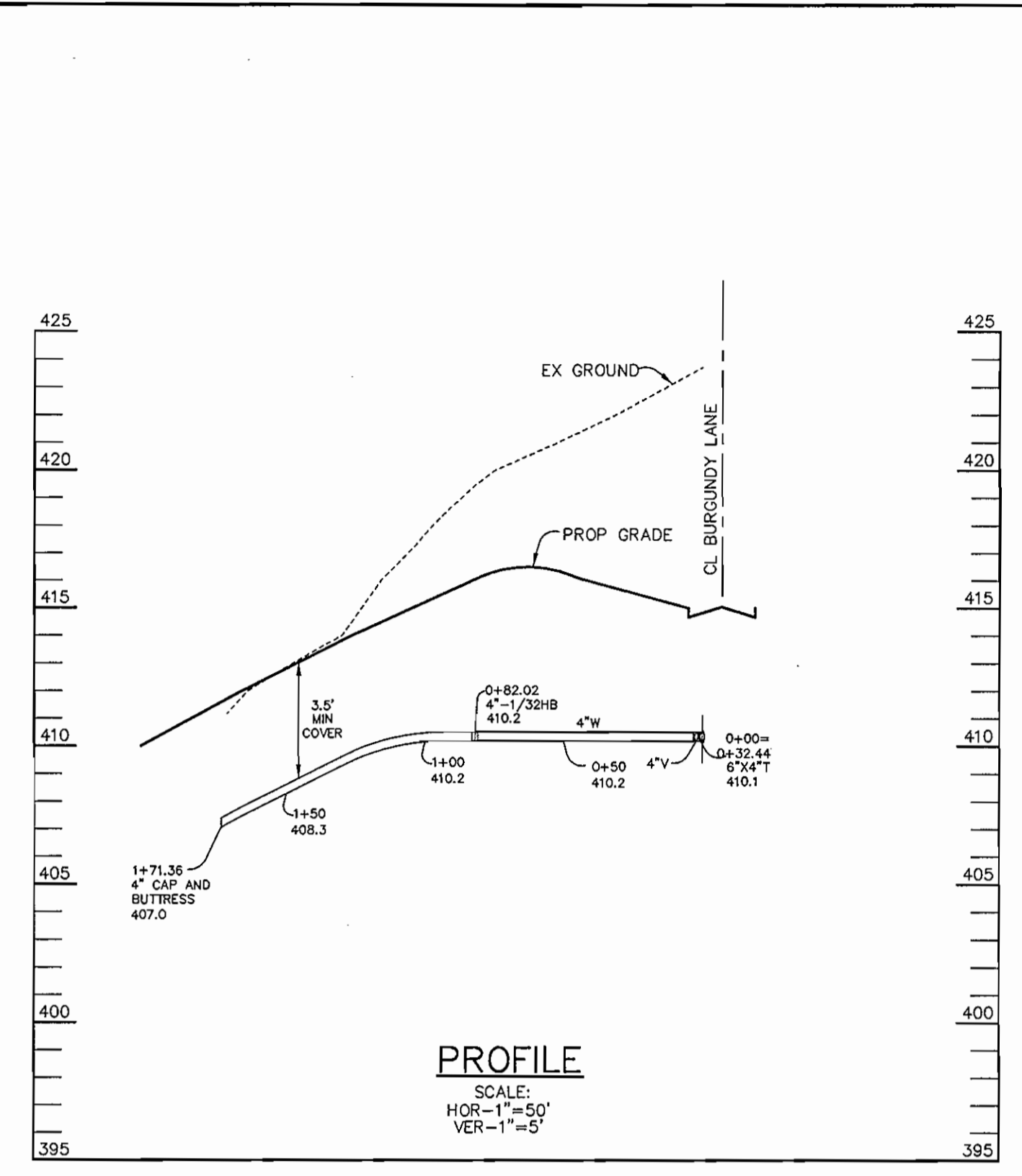
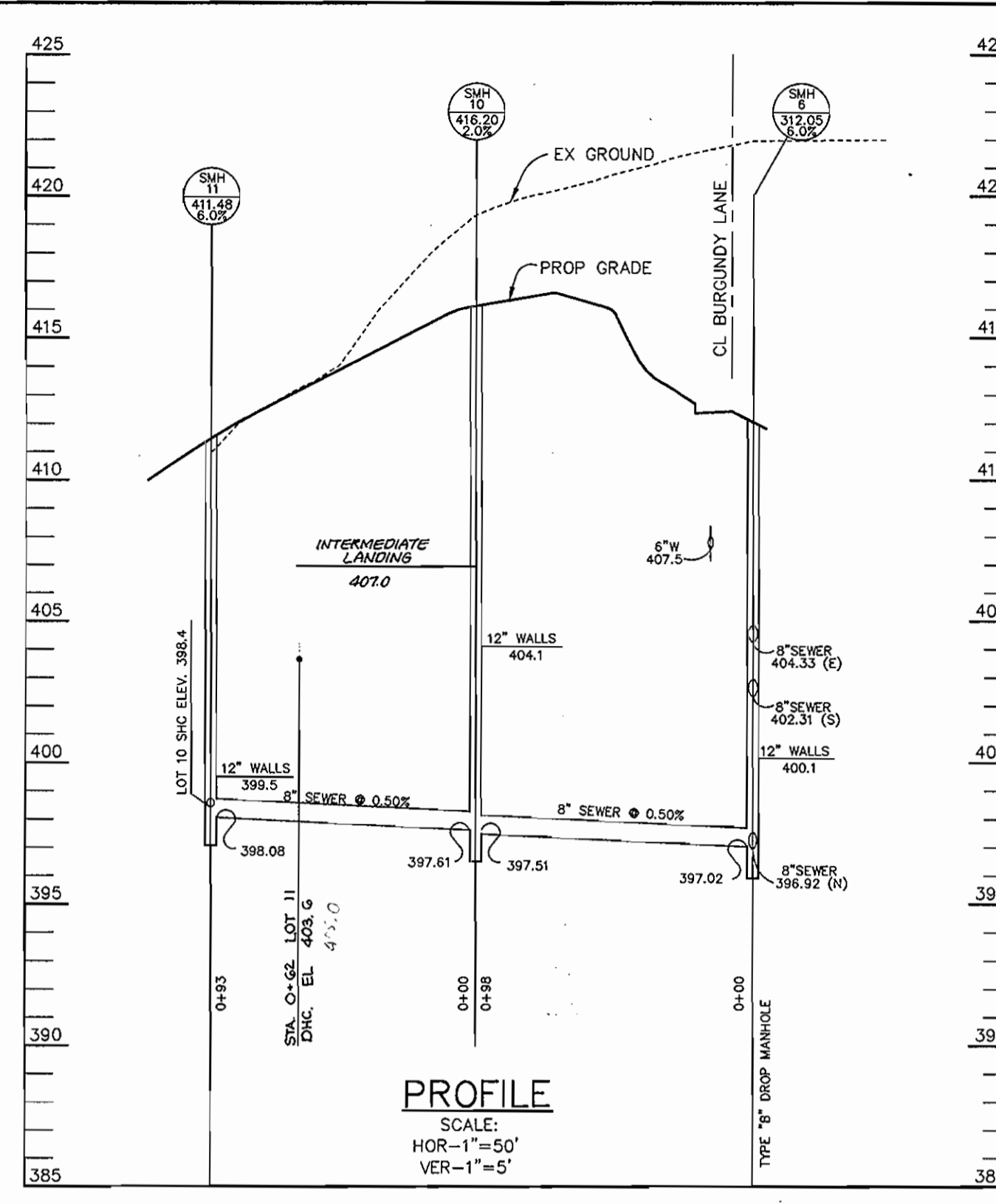
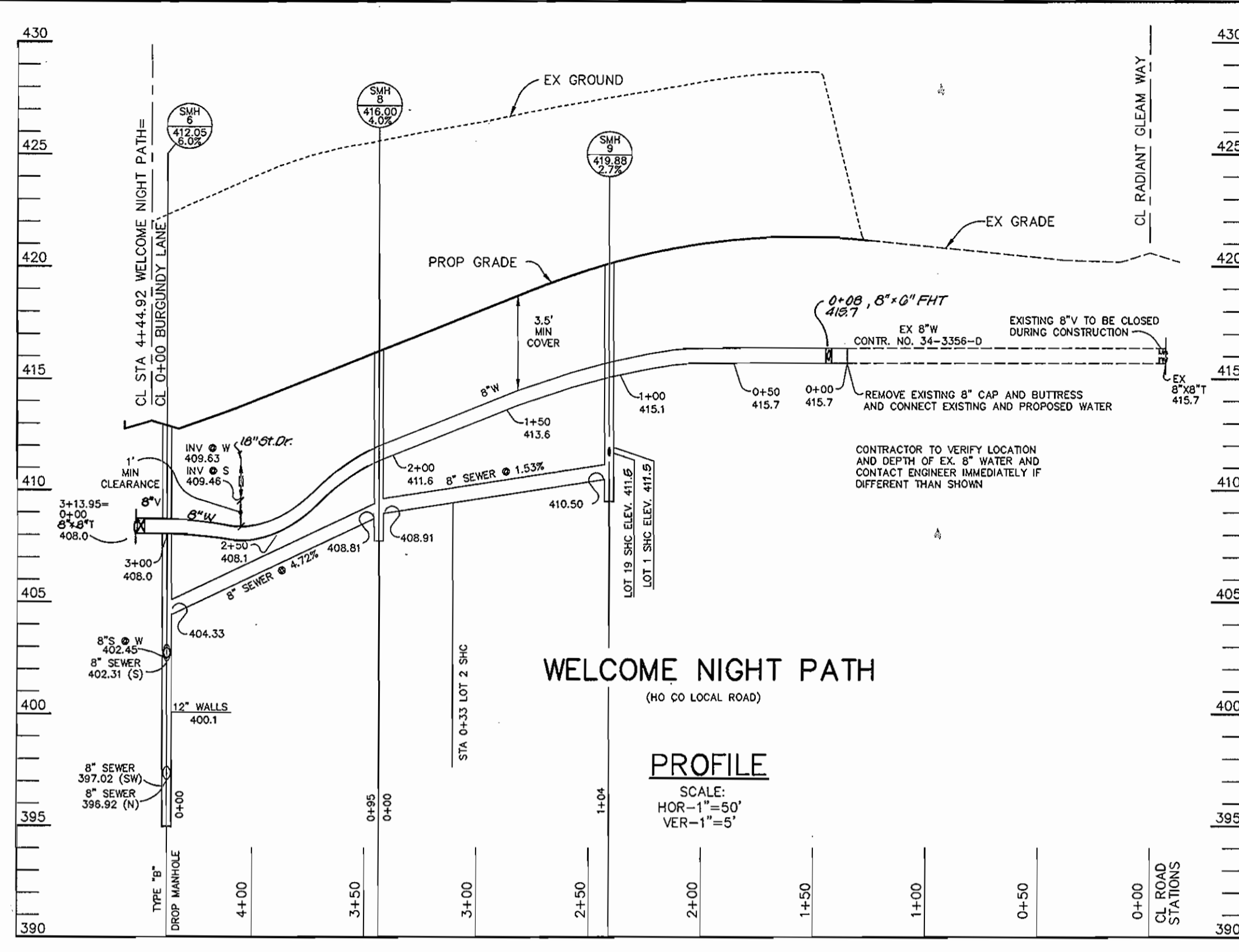
60' SCALE MAP NO. 35 BLOCK NO. 13

S.H.C. & W.H.C.
AS-BUILT
2/22/97

RETTGER PROPERTY
LOTS 1 THRU 25
5TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT # 34-3475-D

SCALE AS SHOWN
SHEET 2 OF 3

(AS-BUILT) 9-3-97



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Robert B. ...
CHIEF, BUREAU OF UTILITIES

DATE: 3-7-96

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

...
CHIEF, DEVELOPMENT ENGINEERING DIVISION

DATE: 2/15/96

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410-997-8900 FAX: 410-997-9282
HOCO/99880609 WSL/DWG

J. ...
JAYKANT D. PAREKH # 19148

DES:	JTD				
DRN:	BRD				
CHK:	JTD				
DATE:	2-20-00	BY:	NO.	REVISION	DATE

PROFILES OF WATER AND SEWER MAINS

600' SCALE MAP NO. 35 BLOCK NO. 13

RETTGER PROPERTY
LOTS 1 THRU 25
5th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT # 34-3475-D

SCALE AS SHOWN

SHEET 3 OF 3

(AS-BUILT) 9-3-97