

QUANTITIES				
ITEMS	QUANTITIES ESTIMATED	QUANTITIES	AS-BUILT	
8" WATER	2400 LF	2401 LF	CLASS 52 D.I.P.	GRIFFIN PIPE
6" WATER	62 LF	43 LF	CLASS 52 D.I.P.	GRIFFIN PIPE
8" SEWER	1948 LF	1824 LF	SDR 35 PVC	J.M. MANUFG./BRS
4" WATER	138 LF	137 LF	CLASS 52 D.I.P.	GRIFFIN PIPE
4" SHC	935 LF	1141 LF	SDR 35 PVC	J.M. MANUFG./BRS
3/4" WVC	364 LF	403 LF	"K" COPPER	HOWELL METALWORKS
1" WVC	246 LF	206 LF	"K" COPPER	HOWELL METALWORKS
FIRE HYDRANT	4 EA.	4 EA.		
8" VALVES	5 EA.	5 EA.	GATE VALVES	MUELLER CO./BRS
4" VALVES (P.W.)	0	0		
MANHOLES	12 EA.	12 EA.	PRECAST	ATLANTIC CONC.
12" TAPPING LEGS AND VALVE	1 EA.	1 EA.		
4" VALVES	1 EA.	1 EA.	GATE VALVE	MUELLER CO./BRS
1/2" DRAIN	1 EA.	1 EA.		
METER VAULT	1 EA.	0		

PROPERTY OF CHARLES A. REESE  
BARBARA ANN PARNOTT  
SUSAN M. LAZAR  
TAX MAP 88, PARCEL 793

HOWARD SOIL CONSERVATION DISTRICT  
REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT  
AND MEETS TECHNICAL REQUIREMENTS

*Patricia Engle* 3/15/94  
U.S. SOIL CONSERVATION SERVICE DATE

THIS PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

*Steph. Z. Hlyj* 2/15/94  
HOWARD SOIL CONSERVATION DISTRICT DATE

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY STANDARD SPECIFICATIONS AND AS PER ROAD CONSTRUCTION PLANS F-92-25

**SHC ABANDONMENT PROCEDURES**

- 1) REMOVE SHC BACK TO SEWER MAIN AND PLUG SEWER MAIN AT WYE.
- 2) REPAIR PAVING IN ACCORDANCE WITH COUNTY SPECIFICATIONS.

NOTE: REMOVE EXISTING WATER METER FOR HOUSE NO. 6205 AND INSTALL NEW TWIN WVC FOR LOT 1 AND HOUSE NO. 6205. RELOCATE WVC FOR HOUSE NO. 6205 AS NECESSARY TO ESTABLISH SERVICE WITHIN MANAMA PROPERTY.

BM TSA TRAN 1011 PK IN EDGE OF PAVING ELEV. 187.26

PROPERTY OF DF & DS. MANAMA 612 / 282

EXIST. HOUSE NO. 6205 CELLAR ELEV. 182.01

PROPERTY OF CHARLES A. REESE BARBARA ANN PARNOTT SUSAN M. LAZAR TAX MAP 88, PARCEL 793

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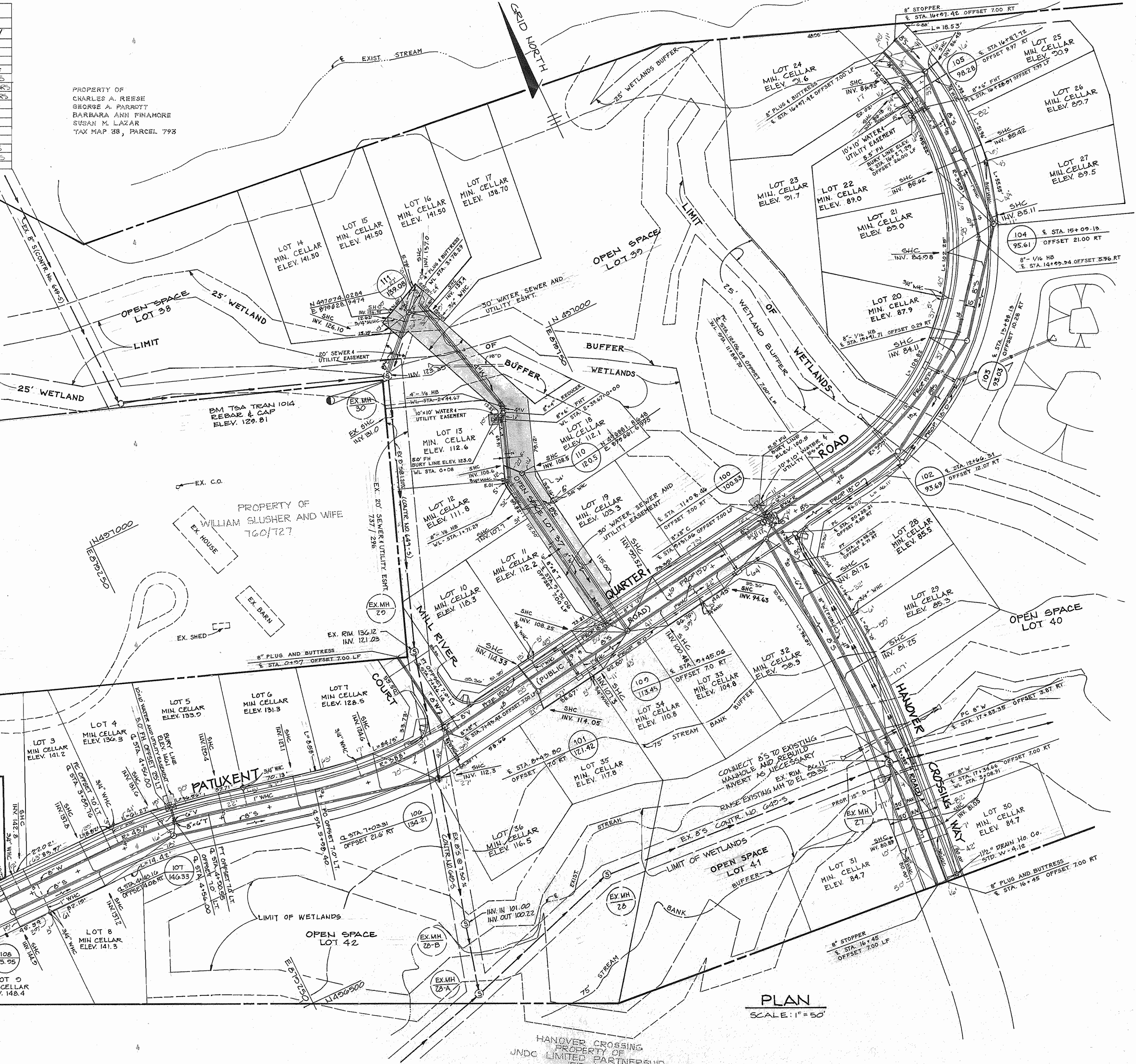
PROPERTY OF CHARLES A. REESE BARBARA ANN PARNOTT SUSAN M. LAZAR TAX MAP 88, PARCEL 793

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NUMBER OF BUILDABLE LOTS 36  
BUILDINGS TYPE S.F.D.  
NO. OF WHCS 37  
NO. OF SHCS 36  
DRAINAGE AREA PATAPSCO

TREATMENT PLANT: PATAPSCO WASTE WATER TREATMENT PLANT

**CONTRACT No. 14-3192-D**

WATER AND SEWER COUNTY USE 450  
TEST GRADIENT WATER CODE 491  
SEWER CODE 2130000

**VICINITY MAP**  
SCALE: 1" = 600'

- 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. ALL HORIZONTAL CONTROLS ARE BASED ON MARYLAND STATE COORDINATES.
  2. ALL VERTICAL CONTROLS ARE BASED ON U.S.G.C. DATA.
  3. ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
  4. 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 THE 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.
  5. 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. THE CONTRACTOR SHALL HAVE A COPY OF VOLUME IV ON THE JOB.
  6. 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. CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES FOR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
  7. STATE HIGHWAY ADMINISTRATION.....531-5533
  8. BALTIMORE GAS & ELECTRIC CO. CONTRACTOR SERVICES.....850-4620
  9. BALTIMORE GAS & ELECTRIC CO. UNDERGROUND DAMAGE CONTROL.....787-9068
  10. MISS UTILITY.....1-800-257-7777
  11. COAL PIPELINE CO.....795-1390
  12. BUREAU OF UTILITIES, HOWARD CO. DEPT. OF PUBLIC WORKS.....313-4900
  13. TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO MAXIMUM EXTENT. EXISTING TREES AND SHRUBS LOCATED WITHIN THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
  14. 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.
  15. PLACE REGULATION "MEN WORKING" AND WARNING SIGNS AS REQUIRED TO COMPLY WITH MARYLAND STATE HIGHWAY ADMINISTRATION MANUAL OF TRAFFIC CONTROL FOR HIGHWAY MAINTENANCE OPERATIONS.
  16. THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT (410) 313-2450 AT LEAST FIVE WORKING DAYS BEFORE ANY OPEN CUT OR ANY COUNTY ROAD OR BORING/JACKING OPERATION IN COUNTY ROADS FOR LAYING WATER/SEWER MAINS OR HOUSE CONNECTIONS. THE APPROVAL OF THESE DRAWINGS CONSTITUTE COMPLIANCE WITH DPW REQUIREMENTS PER SECTION 18.114(a) OF THE HOWARD COUNTY CODE.
- PART II - WATER**
1. ALL WATER MAINS TO BE D.I.P. CLASS 52 UNLESS OTHERWISE NOTED.
  2. TOPS 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. ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS UNLESS OTHERWISE PROVIDED FOR ON THE DRAWINGS.
  5. FIRE HYDRANTS SHALL BE SET TO THE BURY LINE 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 SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1000 AND 1005 OF THE STANDARD SPECIFICATIONS.
  6. THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
  7. ALL WATER HOUSE CONNECTIONS SHALL BE FOR INSIDE METER SETTING UNLESS OTHERWISE NOTED ON PLANS OR IN SPECIFICATIONS.
- PART III - SEWER**
1. ALL SEWER MAINS SHALL BE DIP, RCP, VCPX, CSPX, RCP AND P.V.C. UNLESS OTHERWISE NOTED.
  2. ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
  3. FORCE MAINS SHALL BE D.I.P. ONLY.
  4. MANHOLES SHOWN WITH 12" AND 16" WALLS ARE FOR BRICK MANHOLES ONLY.
  5. MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVERS, STANDARD DETAIL 65.52. WHERE WATERTIGHT FRAME AND COVER IS NOT SHOWN, SET TOP OF FRAME 1'-0" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
  6. HOUSE(S) WITH THE SYMBOL "C.N.S." INDICATES THAT CELLAR CANNOT BE SERVED.

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

*James J. Selman* 2/10/94  
DIRECTOR OF PUBLIC WORKS DATE

*Paul H. Rappin* 2/17/94  
CHIEF, BUREAU OF ENGINEERING DATE

*Robert J. Rainey* 2-8-94  
CHIEF, BUREAU OF UTILITIES DATE

*John J. Rainey* 2/16/94  
CHIEF, LAND DEVELOPMENT DIVISION DATE

TSA GROUP INC.  
planning · architecture · engineering  
8480 Baltimore National Pike · Suite 418  
Ellicott City, Maryland 21043

STATE OF MARYLAND  
SEAL OF THE ENGINEER  
*John J. Rainey*  
15171/560

DES: DAM			
DRN: CAB			
CHK:			
DATE: 2/9/91	BY: NO.	REVISION	DATE

PLAN OF WATER AND SEWER MAINS

600' SCALE MAP NO. 33 BLOCK NO. 15

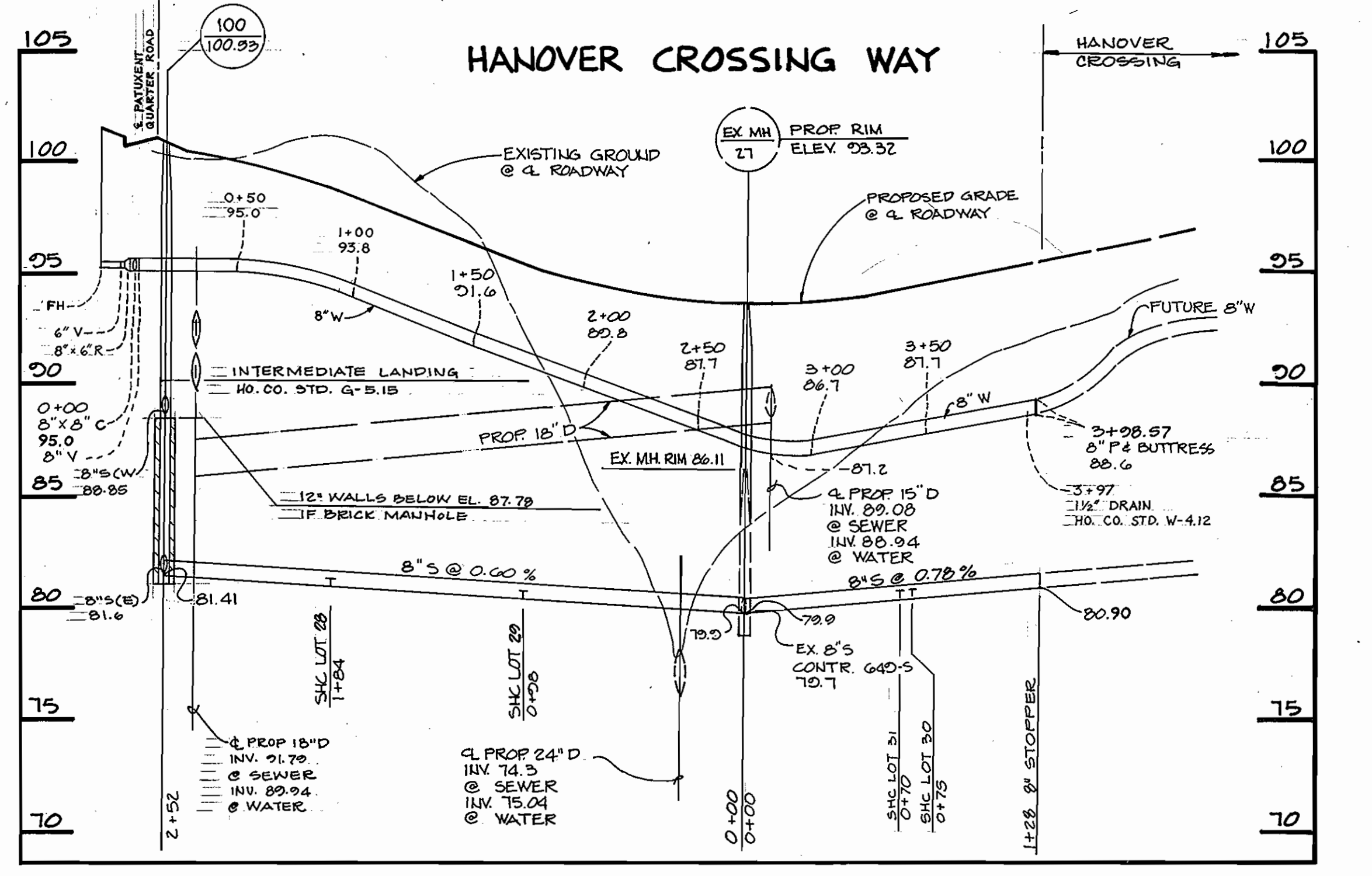
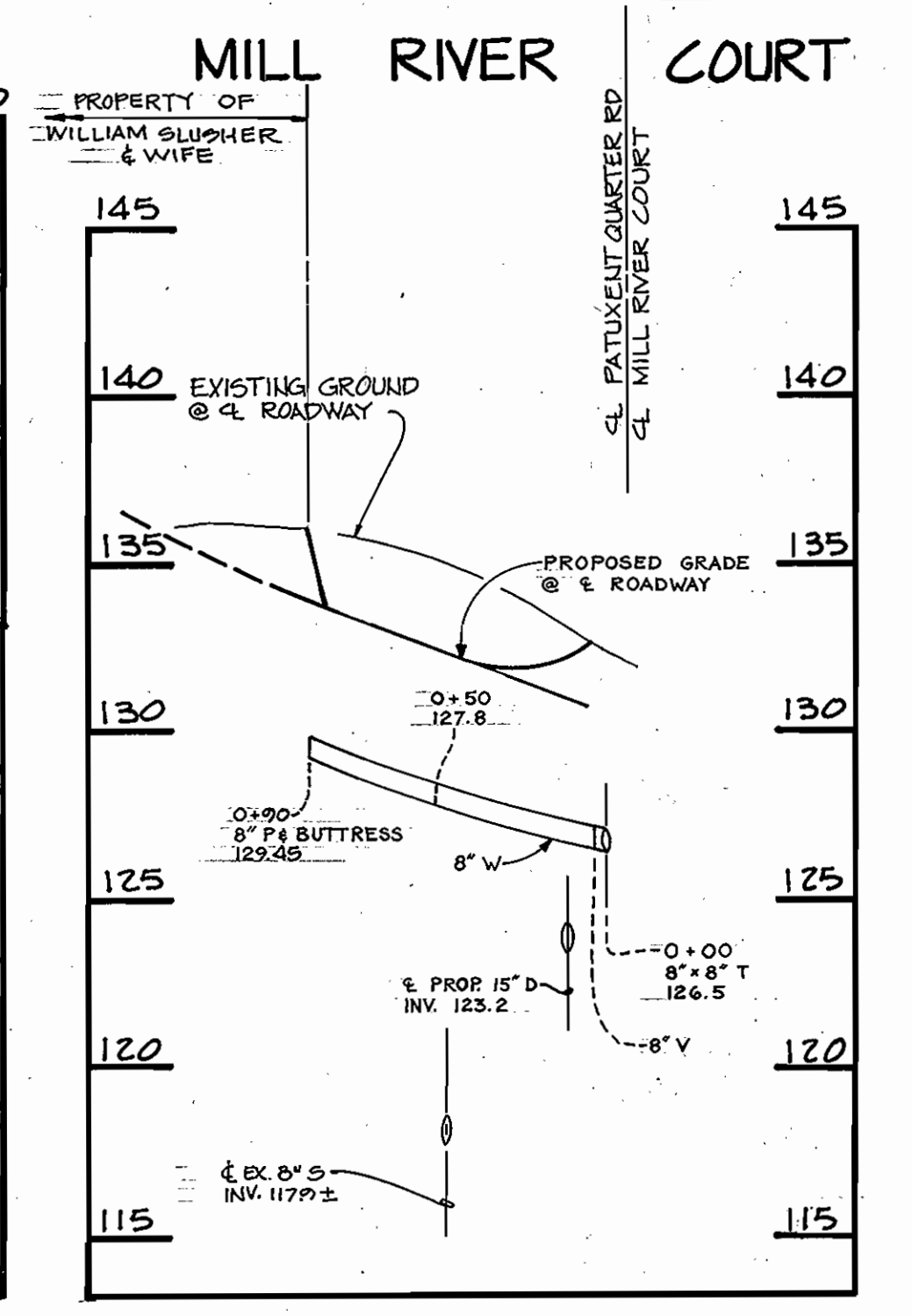
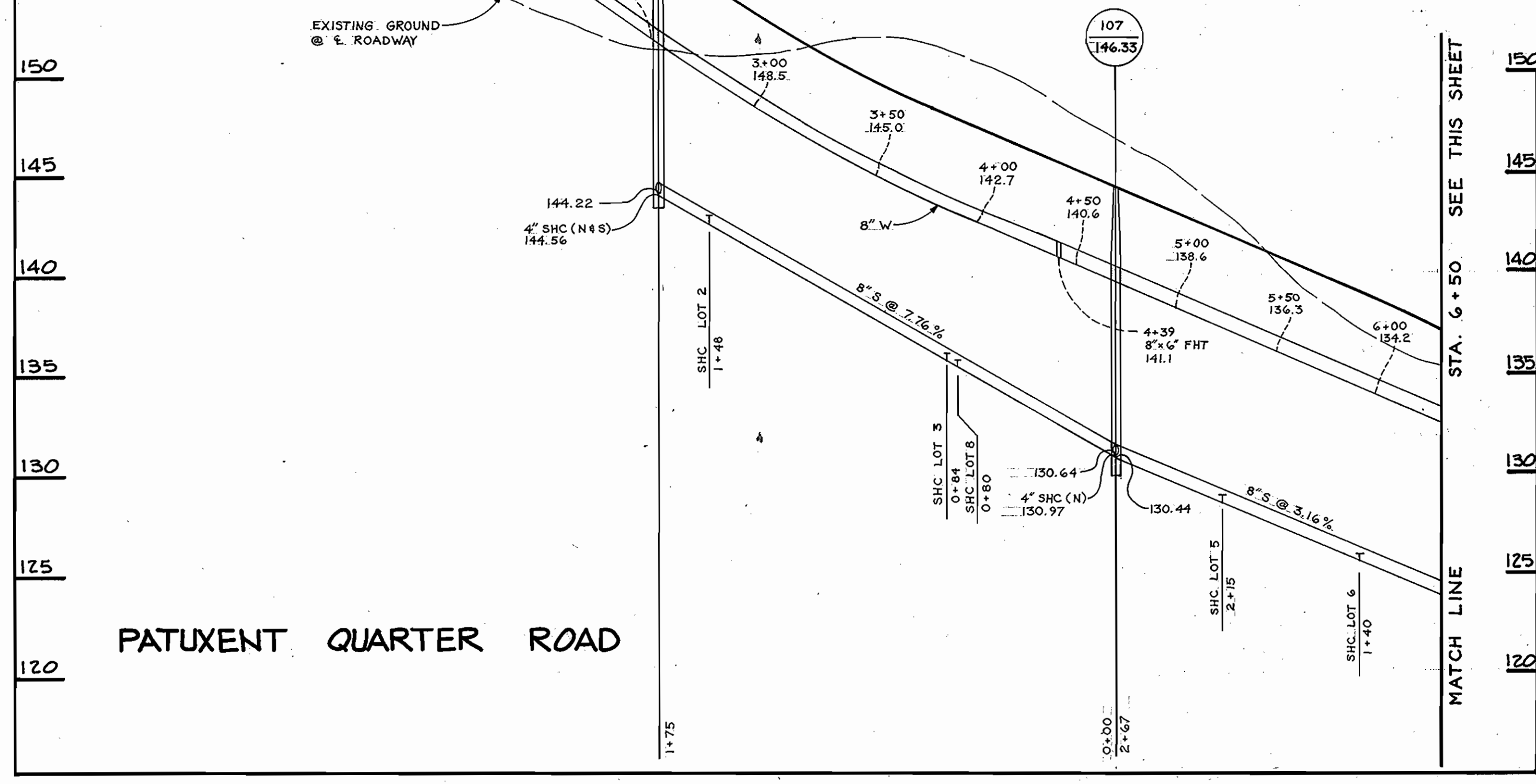
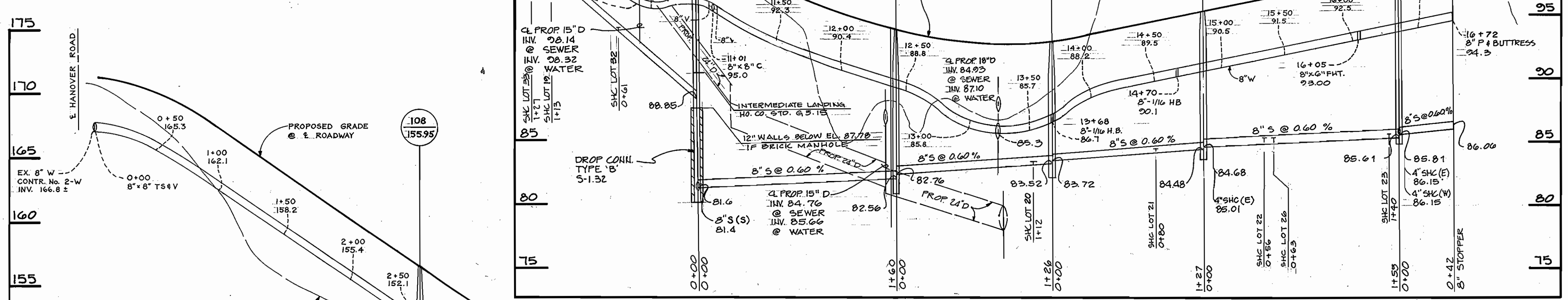
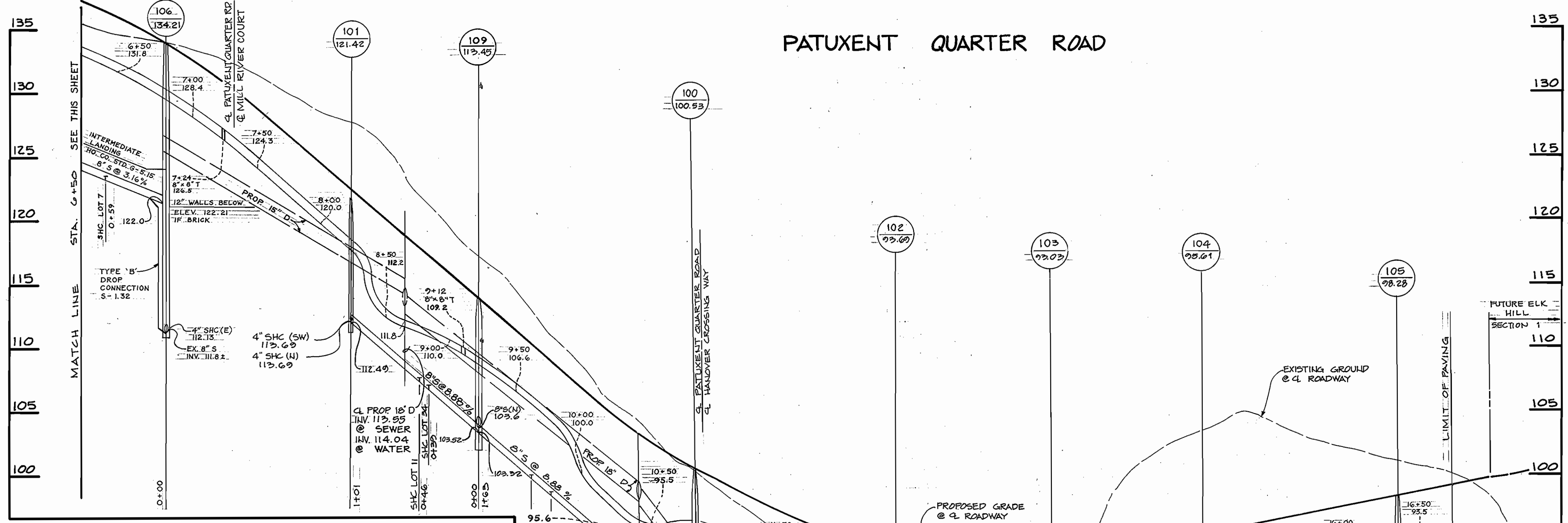
**PATAPSCO RIDGE**  
SECTION I LOTS 1 THRU 44  
ELECTION DISTRICT NO. 1  
CONTRACT NO. 14-3192-D

SCALE AS SHOWN  
SHEET 1 OF 3

ws/1 PATAPSCO RIDGE 3192

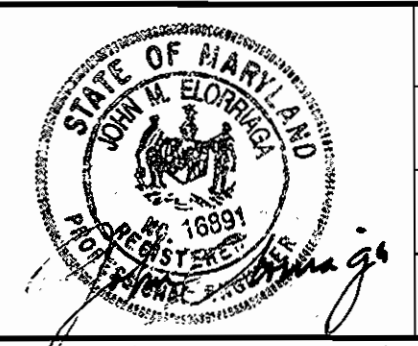
AS-BUILT 11/3/94

3192 W/2 PATAPSCO RIDGE



DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND  
 Director of Public Works: *Robert J. ...* 2/17/94  
 Chief, Bureau of Engineering: *...*  
 Chief, Bureau of Utilities: *...* 2-8-94  
 Chief, Land Development Division: *...* 2/10/94

T.S.A. GROUP INC.  
 planning • engineering • surveying  
 8480 Baltimore National Pike • Suite 418  
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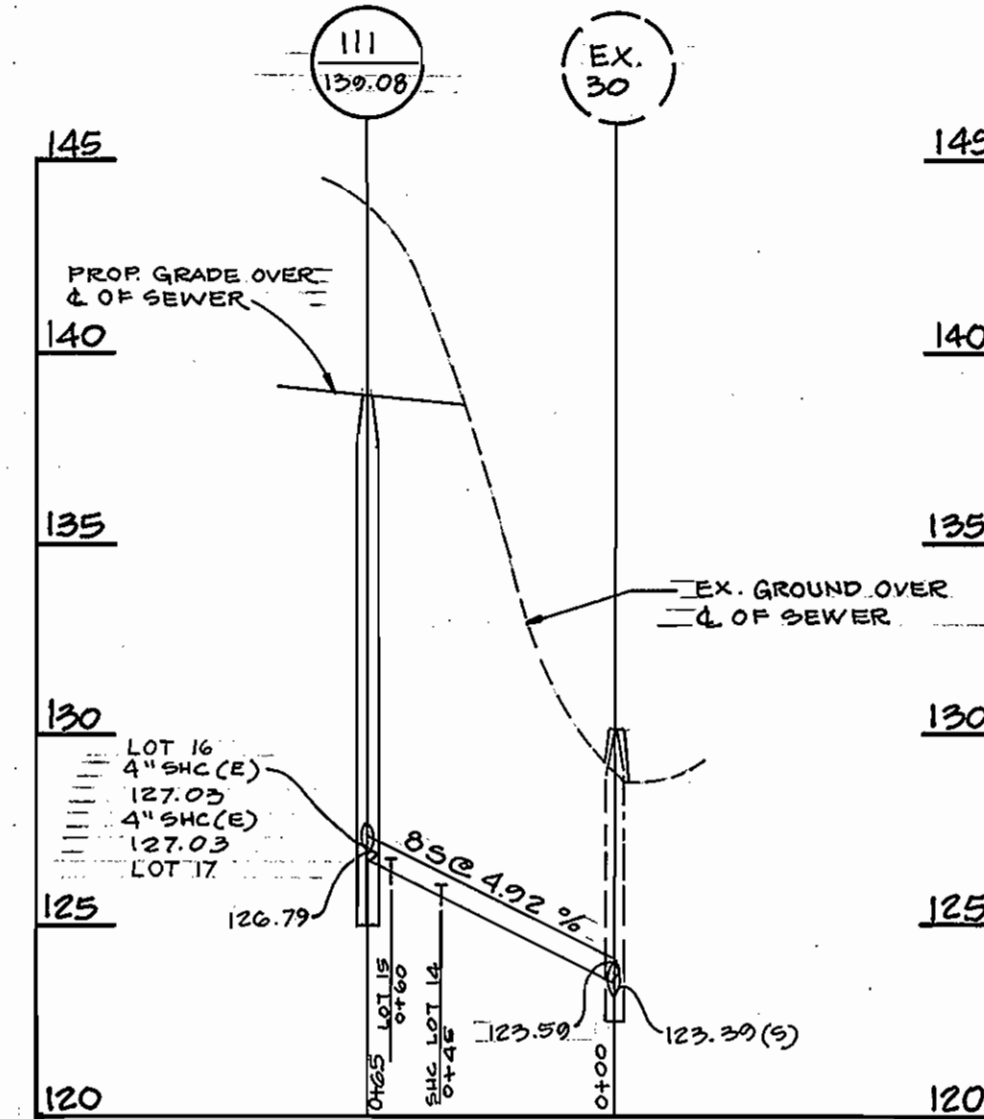
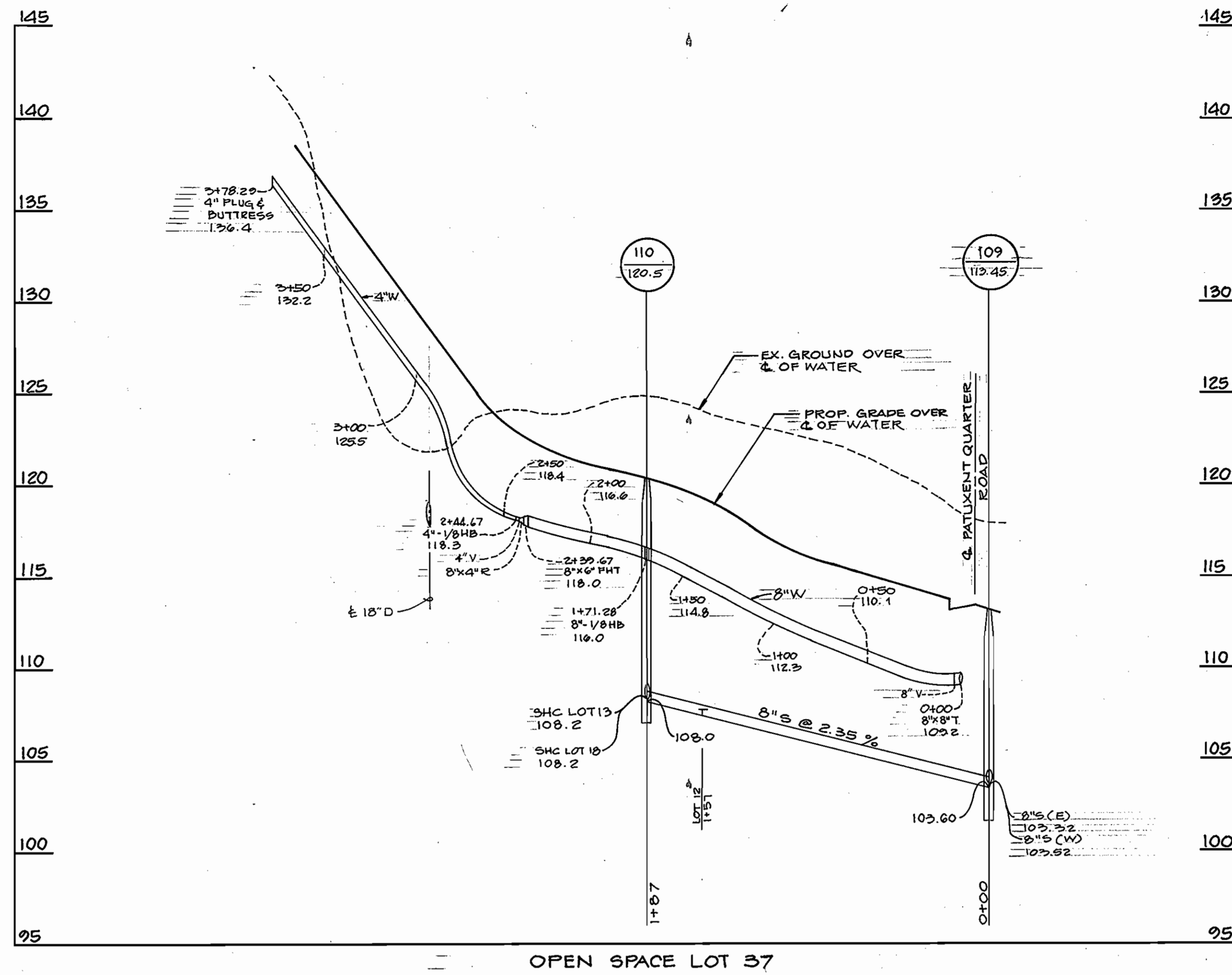
DES: DAM	4-19-94	REVISED 8" S SLOPE FROM 105 TO STUB TO 0.60% AND CORRECTED STORM DRAIN ALONG PATUXENT QUARTER ROAD.
DRN: CAB		
CHK:		
DATE: 8/9/91	BY NO.	REVISIONS
1-11-94		

PROFILES OF WATER & SEWER MAINS  
 600 SCALE MAP NO. 38 BLOCK NO. 15

PATAPSCO RIDGE  
 SECTION 1  
 LOTS 1 THRU 44  
 1ST ELECTION DISTRICT  
 CONTRACT NO. 14-3192-D  
 SCALE: HORIZ: 1" = 50' VERT: 1" = 5'  
 SHEET 2 OF 3

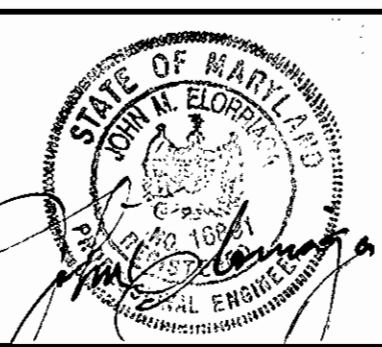
AS BUILT 11/3/94

3192 WS/13 PATAPSCO RIDGE



DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND  
 James J. ... 2/18/94 DIRECTOR OF PUBLIC WORKS  
 ... 2/17/94 CHIEF, BUREAU OF ENGINEERING  
 ... 2/8/94 CHIEF, BUREAU OF UTILITIES  
 ... 2/16/94 CHIEF, LAND DEVELOPMENT DIVISION

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DES: DAM				
DRN: JWG				
CHK: DAM				
DATE: 8-9-91	BY	NO.	REVISIONS	DATE
1-11-94				

**PROFILES OF WATER & SEWER MAINS**  
 600 SCALE MAP NO. 38 BLOCK NO. 15

**PATAPSCO RIDGE**  
 SECTION 1  
 LOTS 1 THRU 44  
 ELECTION DISTRICT NO. 1  
**CONTRACT NO. 14-3192-D**

SCALE  
 HORIZ: 1" = 50'  
 VERT: 1" = 5'  
 SHEET  
 3 OF 3

AS BUILT 11/3/94