TEMPORARY SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE REDISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.

SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING.

SOIL AMENDMENTS: FOR PERIODS MARCH 1 THRU APRIL 30 AND FROM AUGUST 15 THRU NOVEMBER 15: SEED WITH 2½ BUSHEL PER ACRE OF ANNUAL RYE (3.2 LBS/1000 SQ FT). FOR THE PERIOD MAY 1 THRU AUGUST 14, SEED WITH 3 LBS PER ACRE OF WEEPING LOVEGRASS (.07 LBS/1000 SQ FT). FOR THE PERIOD NOVEMBER 16 THRU FEBRUARY 28, PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OR USE SOD.

SEEDING: FOR PERIODS MARCH 1 THRU APRIL 30 AND FROM AUGUST 15 THRU NOVEMBER 15, SEED WITH 2½ BUSHEL PER ACRE OF ANNUAL RYE (3.2 LBS/1000 SQ FT). FOR THE PERIOD MAY 1 THRU AUGUST 14, SEED WITH 3 LBS PER ACRE OF WEEPING LOVEGRASS (.07 LBS/1000 SQ FT). FOR THE PERIOD NOVEMBER 16 THRU FEBRUARY 28, PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OR USE SOD.

MULCHING: APPLY 1½ TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SQ FT) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL 218 GAL PER ACRE (5 GAL/1000 SQ FT) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES, 8 FT OR HIGHER, USE 348 GAL PER ACRE (8 GAL/1000 SQ FT) FOR ANCHORING.

REFER TO THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

PERMANENT SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-LIVED VEGETATIVE COVER IS NEEDED.

SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING.

SOIL AMENDMENTS: IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING "SCHEDULES":

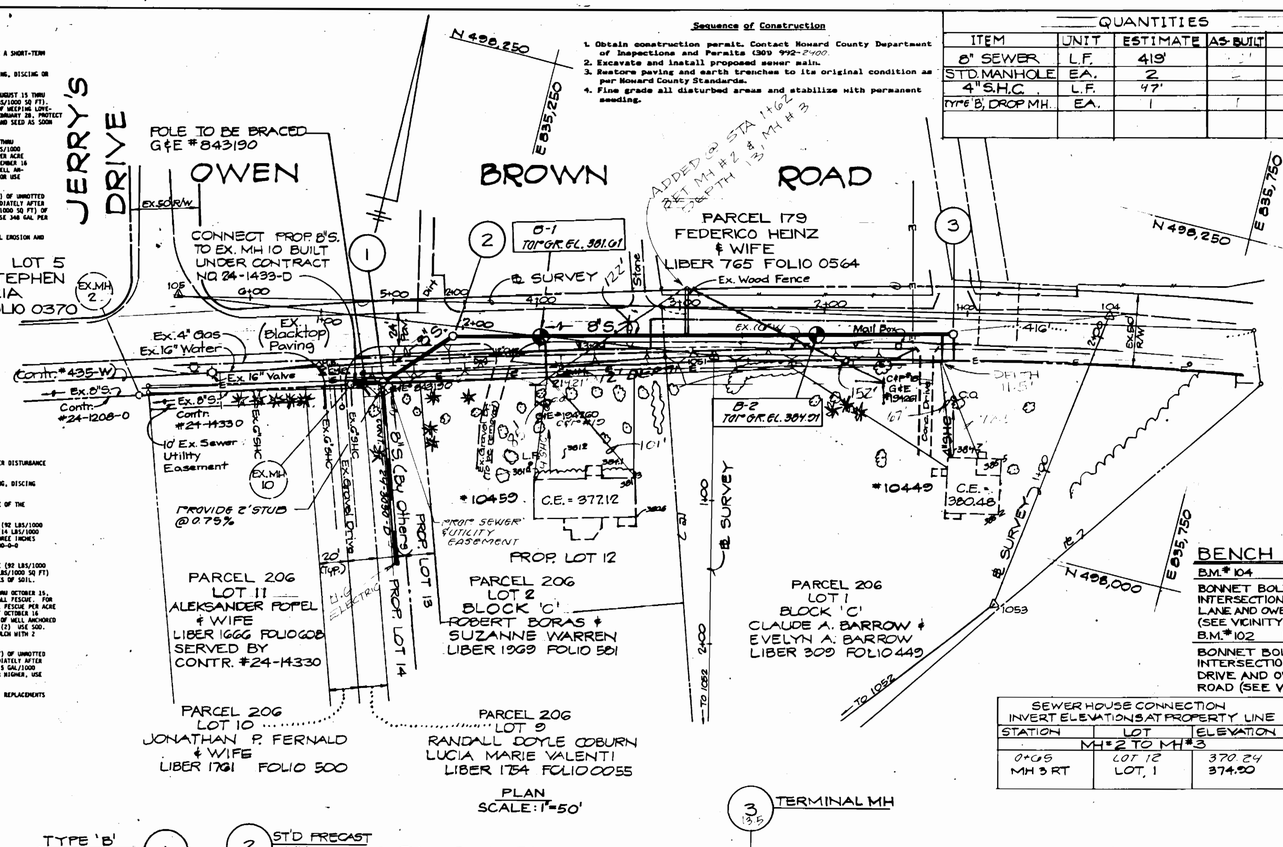
1) PREFERRED - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS/1000 SQUARE FT.) AND 600 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ. FT.) BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING, APPLY 600 LBS PER ACRE 30-0-0 UREAFORM FERTILIZER (9 LBS/1000 SQ FT).

2) ACCEPTABLE - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (90 LBS/1000 SQ FT) AND 1000 LBS PER ACRE 10-10-10 FERTILIZER (23 LBS/1000 SQ FT) BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE INCHES OF SOIL.

SEEDING - FOR THE PERIODS MARCH 1 THRU APRIL 30, AND AUGUST 1 THRU OCTOBER 15, SEED WITH 60 LBS PER ACRE (1.4 LBS/1000 SQ FT) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THRU JULY 31, SEED WITH 60 LBS KENTUCKY 31 TALL FESCUE PER ACRE (.05 LBS/1000 SQ FT) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 THRU FEBRUARY 28, PROTECT SITE BY: OPTION (1) 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING. OPTION (2) USE SOD. OPTION (3) SEED WITH 60 LBS/ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS/ACRE WELL ANCHORED STRAW.

MULCHING - APPLY 1½ TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SQ FT) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GALLONS PER ACRE (5 GAL/1000 SQ FT) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FEET OR HIGHER, USE 348 GALLONS PER ACRE (8 GAL/1000 SQ FT) FOR ANCHORING.

-MAINTENANCE - INSPECT ALL SEEDED AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

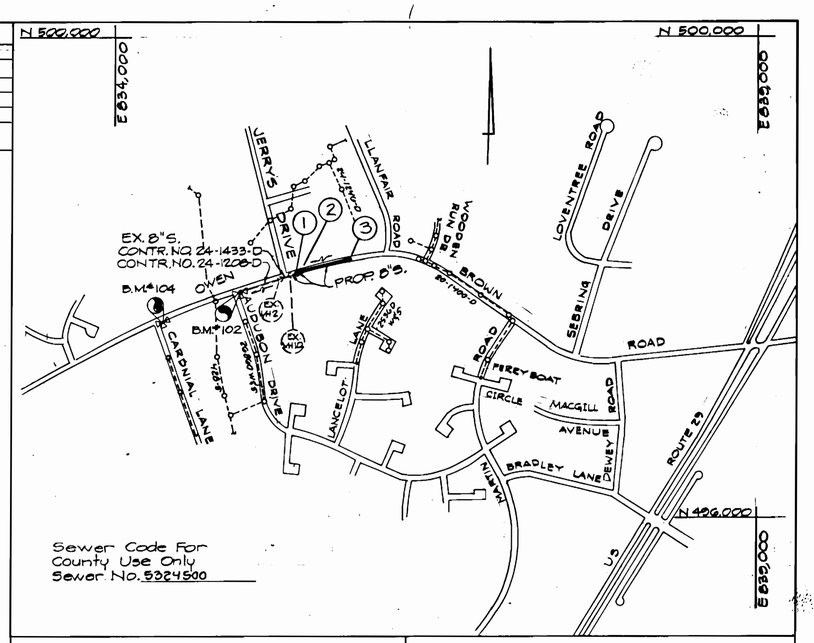


Sequence of Construction

1. Obtain construction permit. Contact Howard County Department of Inspections and Permits (301 992-2400)
2. Excavate and install proposed sewer main.
3. Restore paving and earth trenches to its original condition as per Howard County Standards.
4. Fine grade all disturbed areas and stabilize with permanent seeding.

QUANTITIES

ITEM	UNIT	ESTIMATE	AS-BUILT	SUPPLIER
8" SEWER	L.F.	419'		
STD. MANHOLE	EA.	2		
4" S.H.C.	L.F.	47'		
TYPE 'B' DROP MH.	EA.	1		



BENCH MARKS

B.M.#104 ELEV. 392.12
BONNET BOLT ON EX. F.H. INTERSECTION OF CARDINAL LANE AND OWEN BROWN ROAD (SEE VICINITY MAP)

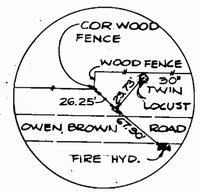
B.M.#102 ELEV. 370.98
BONNET BOLT ON EX. F.H. INTERSECTION OF AUDUBON DRIVE AND OWEN BROWN ROAD (SEE VICINITY MAP)

NUMBER OF LOTS - 2
TYPE OF BUILDING - RESIDENTIAL
NUMBER OF S.H.C. - 2
DRAINAGE AREA - LITTLE PATUXENT

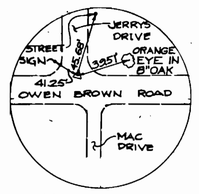
VICINITY MAP
SCALE: 1" = 600'

SEWER HOUSE CONNECTION INVERT ELEVATIONS AT PROPERTY LINE		
STATION	LOT	ELEVATION
MH #2 TO MH #3		
0+69 MH 3 RT	LOT 12 LOT 1	370.24 374.90

H.E.C. TRAV. P.I.# 105 N 498028.480 E 835039.477
N 82°11'14"E 376.99'
H.E.C. TRAV. P.I.# 1051 N 498070.654 E 835400.373
S 13°32'48"E 325.280'
H.E.C. TRAV. P.I.# 1052 N 497763.423 E 835482.567
N 38°36'29"E 251.17'
H.E.C. TRAV. P.I.# 1053 N 497959.693 E 835639.291
N 07°37'11"E 217.31'
H.E.C. TRAV. P.I.# 104 N 498175.101 E 835668.102
S 76°59'36"W 651.34'
H.E.C. TRAV. P.I.# 105



TRAVERSE PT.# 104



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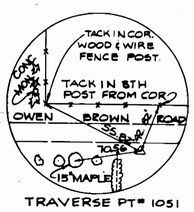

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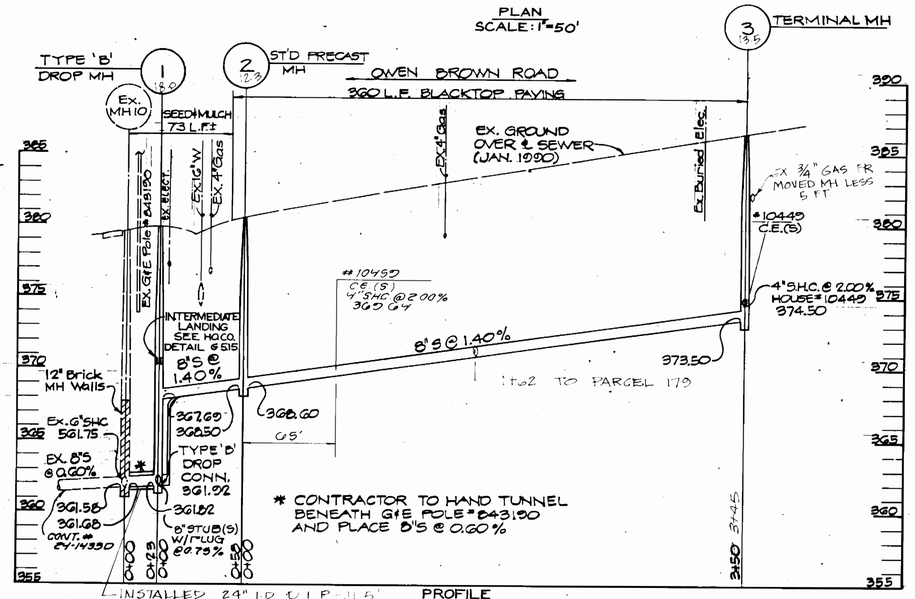

RESTORATION SCHEDULE		
LOCATION	DISTANCE	TYPE
EX. MH 10 TO MH #1	23 L.F.	SEED & MULCH
MH #1 TO MH #2	48 L.F. 10 L.F.	SEED & MULCH PAVING RESTOR.
MH #2 TO MH #3	350 L.F.	PAVING RESTOR.
S.H.C. (LOT 12)	25 L.F. 5 L.F.	SEED & MULCH PAVING RESTOR.
S.H.C. (LOT 1)	12 L.F. 5 L.F.	SEED & MULCH PAVING RESTOR.

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 Contractors expense.
2. All Horizontal Controls are based on Maryland State Coordinates.
3. All Vertical Controls are based on U.S.G.S. Datum.
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.
6. Trench repair to be in accordance with Howard County Standard Details.
7. All work will be in accordance with Howard County Standards and Specifications for soil erosion and sediment control section 219.
8. For details not shown on the drawings, and for materials and construction methods, use Howard County Design Manual, Volume IV, Standard Specifications and Details for Construction. The contractor shall have a copy of Volume IV on the job.
9. 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 tests have not been dug shall be located by the contractor two weeks in advance of construction operations at the contractor's expense.
10. Contractor shall notify the following utilities 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 ... 850-0004
    - Baltimore Gas & Electric Co. Trouble Shooting 290-5001
    - Miss Utility 1-800-257-7777
    - Colonial Pipeline Co. 795-1300
    - Bureau of Utilities, Howard County Dept. of Public Works... 992-2366
11. 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.
12. Contractor shall remove trees, stumps and roots along line of excavation. Payment for such removal shall be included in the unit price for construction of the main.
13. All sewer mains shall be C.S.P.X., R.C.S.P., V.C.P.X., or P.V.C. unless otherwise noted.
14. The contractor shall provide a joint in all sewer mains within 2'-0" of exterior manhole wall with the exception of P.V.C.
15. All manholes shall be 4'-0" inside diameter unless otherwise noted.

AS BUILT

MANHOLE STAKEOUT TABLE		
MANHOLE	DISTANCE	OFFSET
1	P.I.#105 TO P.I.#1051, STA. 1+48	4.4' RT.
2	" " " , STA. 1+04	7' RT.
3	P.I.# 104 TO P.I.# 105, STA. 1+10	15' LT.

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

7/10/90
U.S. SOIL CONSERVATION SERVICE

This Construction Plan is approved for Soil Erosion and Sediment Control by the Howard Soil Conservation District.

APPROVED:

HOWARD S.C.D. DATE

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS — DATE 7/17/90
CHIEF, BUREAU OF ENGINEERING — DATE
CHIEF, BUREAU OF UTILITIES — DATE 7-17-90
CHIEF, UTILITY DESIGN DIVISION — DATE 7-11-90

HICKS ENGINEERING CO. INC.
ENGINEERS · SURVEYORS · PLANNERS
200 E. JOPPA ROAD · SUITE 402
TOWSON MARYLAND 21204

STATE OF MARYLAND — DONALD EDWIN HICKS — PROFESSIONAL ENGINEER

DES: G.J.J.
DRN: G.J.J.
CHK: K.Q.
DATE: 6/11/90

BY	NO.	REVISION	DATE
E.A.S.	1	Revised per D.P.W. Comments and S.C.S. Comments	4/19/90
E.A.S.	2	REVISED PER BUREAU OF ENG. COMMENTS OF 6/22/90	6/27/90
E.A.S.	3	REVISED PER BUREAU OF ENG. (8-1-90)	8/17/90

CONTRACT NO. 20-3043

600' SCALE MAP NO. S 35 BLOCK NO. 12

OWEN BROWN ROAD SEWER EXTENSION
FIFTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CAPITAL PROJECT S-6690

SCALE AS SHOWN

SHEET 1 OF 1

AS BUILT 10-8-91