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BENCH MARKS

B.M. # Ho Co 2743010-R Elev. 482.29
 3/4" Rebar 0.4 Below Surface 347'
 South of Curb On Maryland Route 108,
 175' East Of E Of Phelps Luch Drive

B.M. # Ho Co 2743009 Elev. 530.07
 Conc Monument @ Surface 49±
 East of Northwest Drive Of Howard
 High School On North Side Of Maryland
 Route #108

SEDIMENT CONTROL CONSTRUCTION NOTES

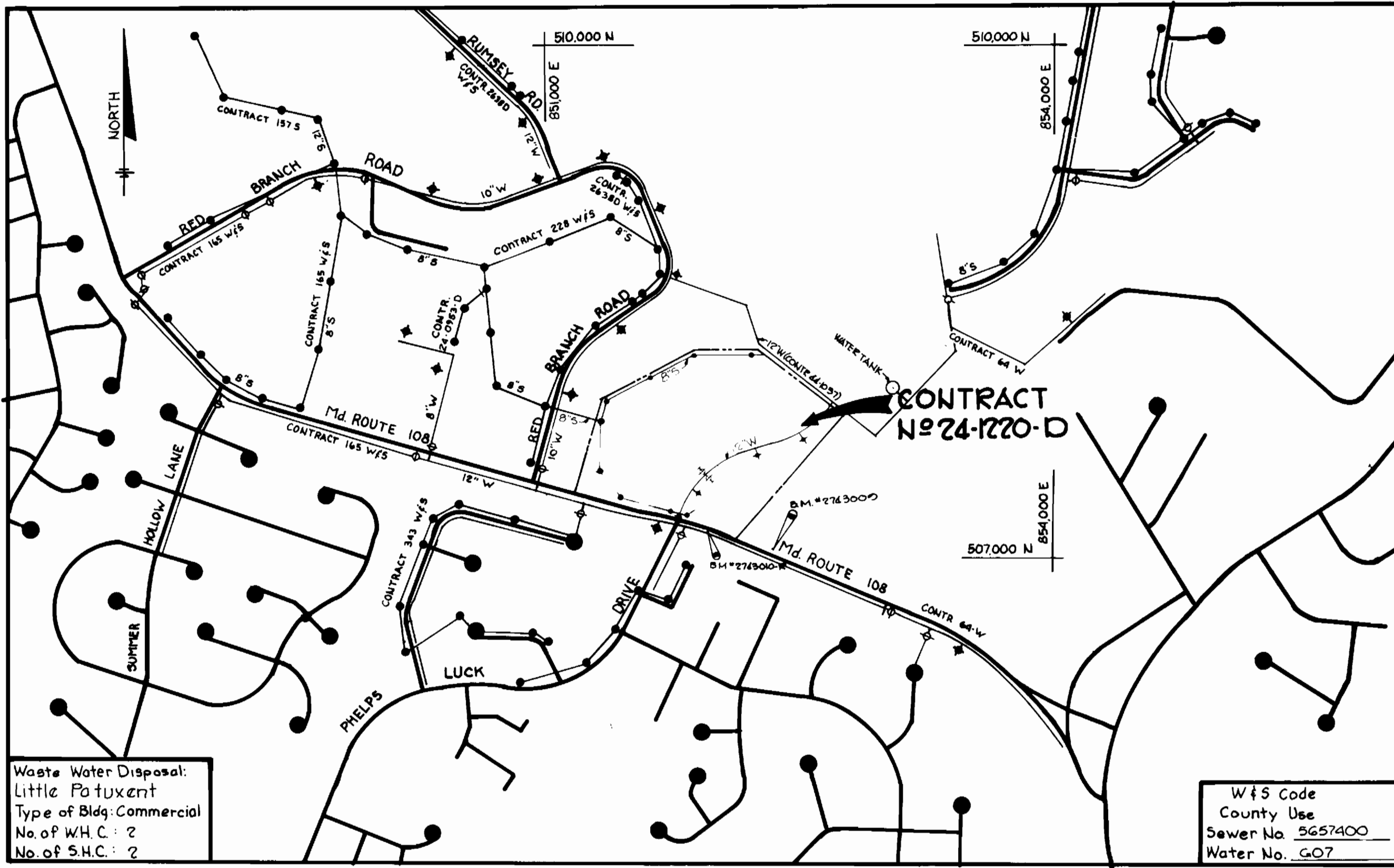
- All Sediment Controls Structures will be installed in accordance with "The Standards and Specifications for Soil Erosion and Sediment Control in Developing Areas" as prepared by the US Department of Agriculture Soil Conservation Service.
- Fertilizer and lime rates may be changed through authorization by the Howard Soil Conservation District if soil tests determine a reduction in the specified rates is justified.
- All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.
- References called for on the sediment control construction plan and details are made to "The Standards and Specifications for Soil Erosion and Sediment Control in Developing Areas."

PERMANENT SEEDING NOTES

- Final stabilization will take place as soon as possible as weather conditions permit, as follows:
- Apply dolomitic limestone at the rate of 2 tons per acre (one ton per acre if application of ton per acre made for temporary seeding).
 - Apply 0-20-20 fertilizer at the rate of 600 lbs per acre harrow or disc lime and 0-20-20 fertilizer into the soil to a minimum depth of 3" in low or high maintenance areas will be dragged and leveled with a York rake. At the time of seeding apply 400 pounds of 30-0-0 urea-form fertilizer and 500 lbs. of 10-20-20 or equivalent fertilizer per acre.
 - Seed with a mixture of certified Merion Kentucky Bluegrass - 40 lbs per acre, common Kentucky Bluegrass @ 40 lbs per acre; Red Fescue, Pennlawn or Jamestown @ 20 lbs. per acre.
 - Mulch with unweathered small grain straw at the rate of 1 1/2 to 2 tons per acre and anchor with a cutback asphalt or emulsified asphalt at the rate of 5 gallons per 1000 square feet.
 - Seed all slopes with a mixture of certified Kentucky 31 tall fescue @ 50 lbs per acre and inoculated Korean Lespedeza @ 15 lbs. per acre.

SEQUENCE OF CONSTRUCTION

- Construction shall begin after grading permits are issued under F84-174 or GP84- and the sediment basin is constructed by others.
- Install silt fence as indicated.
- Construct Sanitary Sewer storing excavated material on the uphill side of the trench.
- Stabilize all restored trench areas outside the sediment basin area in accordance with the permanent seeding notes.
- Upon approval by the sediment control inspector, remove the silt fence.



VICINITY MAP
 SCALE: 1" = 600'

Waste Water Disposal:
 Little Patuxent
 Type of Bldg. Commercial
 No. of W.H.C.: 2
 No. of S.H.C.: 2

W & S Code
 County Use
 Sewer No. 5657400
 Water No. 607

GENERAL NOTES

- 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.
- All vertical controls are based on U.S.G.S. Datum.
- All pipe elevations shown are invert elevations.
- Clear all utilities by a minimum of 6". Clear all poles by 2'-0" minimum or tunnel as required. Any cost incurred to the contractor for tunneling or bracing at poles shall be included in unit priced bid for excavation and backfill.
- For details not shown on the drawings use Howard County Standard Details.
- For materials and construction methods use Howard County Standard Specifications.
- Contractor shall locate existing utilities a minimum of two (2) weeks in advance of construction operations in the vicinity of proposed utilities at his own expense.
- Contractor shall notify the following utilities or agencies at least five (5) working days before starting work shown on these plans.

a. State Highway Administration	531-5533
b. Baltimore Gas & Electric Company - Underground Electric Distribution Customer Service	685-0123
c. Baltimore Gas & Electric Company - Underground Gas Distribution Customer Service	685-0123
d. Engineering - "Damage Control"	243-5621
e. "Miss Utility"	1-559-0100
f. Chesapeake & Potomac (C&P) Telephone Company	725-9976
g. American Telephone & Telegraph - Cable Location Division	393-3653
h. Colonial Pipeline Company	781-4641
i. Bureau of Utilities Howard County	992-2366
- 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.
- 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.
- 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 D.I.P. unless otherwise noted.
- Top of all water mains to have a minimum of 3' cover unless otherwise noted.
- Valves adjacent to tees shall be strapped to tees.
- Block all fittings with concrete.
- 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 1003 & 1008 of the General Requirements for Water & Sewer.
- All water house connections shall be for an inside meter setting.
- The contractor shall not operate any water main valves on the existing system.
- For all copper water house connections utilize flared type fittings only.
- All sewer mains shall be C.S.P.X., V.C.P.X., P.V.C. or A.C.P. Class 2400 unless otherwise noted.
- All water house connections shall be within 2'-0" of exterior manhole wall.
- The contractor shall provide a joint in all sewer mains within 2'-0" of exterior manhole wall.
- All manholes shall be 4'-0" inside diameter, unless otherwise noted.
- Manholes shown with 12" and 16" walls are brick manholes only.
- Manholes designated W.T. in plan and profile shall have watertight frame and covers Standard Detail G5.52 Volume IV. Where watertight manhole frame and cover is used, set top of frame 1'-6" above finished grade.
- Houses with the symbol C.N.B. indicates the cellar can not be served.
- All water house connections shall have a minimum vertical clearance of 12" above all sanitary sewer crossing.
- All sanitary sewer house connections shall have a minimum vertical clearance of 12" below all water main crossings.
- Profile stations shall be adjusted as necessary to conform to Plan dimensions.
- No pipe shall be laid until lines of excavation have been brought to subgrade.
- Additional sediment control for this contract is provided under GP-84-174.

OAKLAND EXECUTIVE PARK

CONTRACT NO. 24-1220-D

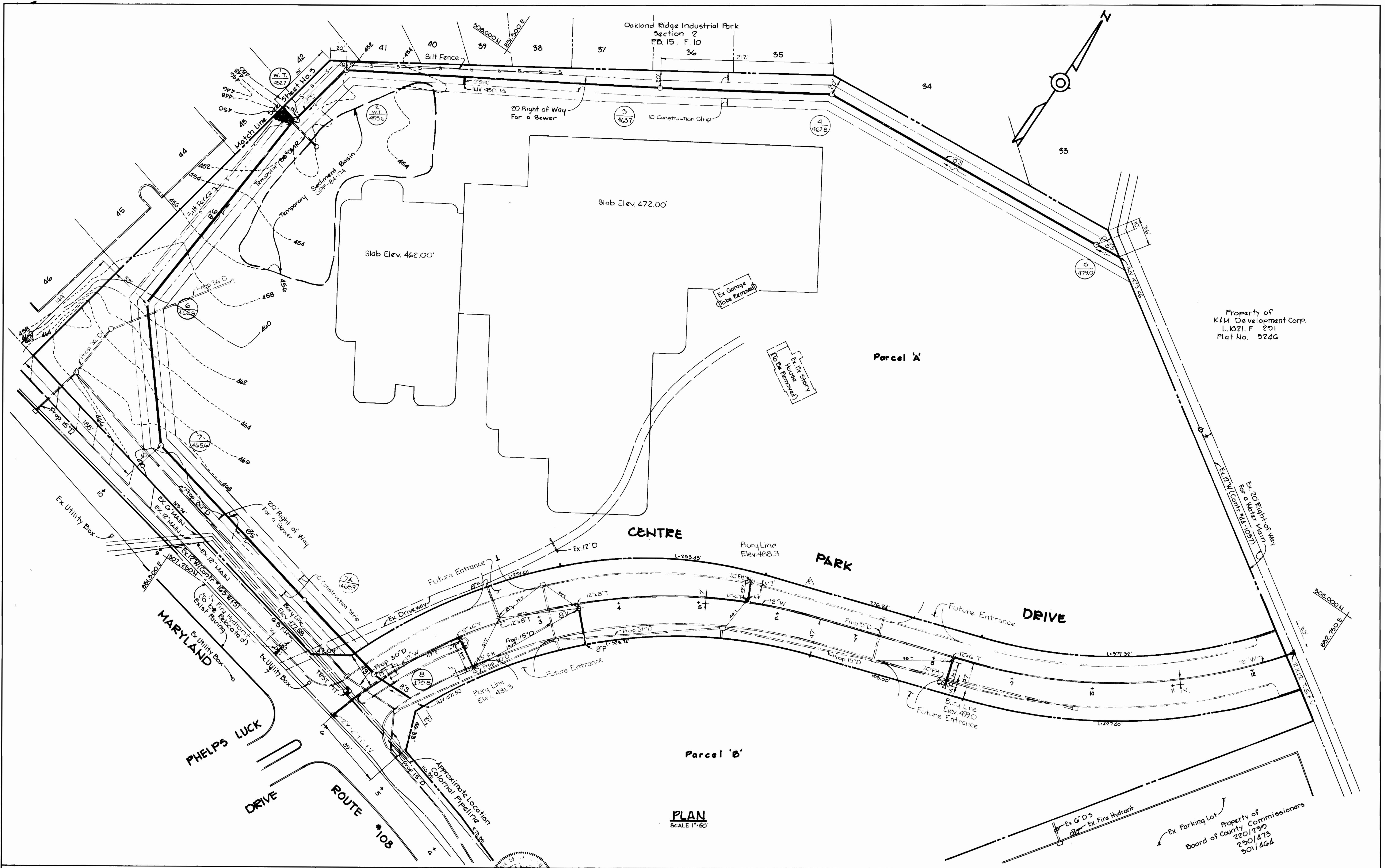
HOWARD COUNTY, MARYLAND

Sediment control measures for this contract will be implemented in accordance with Article 15 of the Specifications (F- B4-174)

Howard Soil Conservation District:
 Reviewed for Howard Soil Conservation District and meets technical requirements.
Stephen L. Pender Date: 6-20-84
 District Engineer
 This plan is approved for Soil Erosion and Sediment Control by the Howard Soil Conservation District
Stephen L. Pender Date: 6/20/84
 District Engineer

ITEM	QUANTITIES		MATERIAL SUPPLIER
	ESTIMATED	AS BUILT	
12" WATER	1238 LF	1238	Griffin Pipe
8" W.H.C.	100 LF	100	Griffin Pipe
Fire Hydrants	3	3	M&H
12"x12" T.S. & V.	2	2	Clow (T.S.) M&H (V.)
8" S	1915 LF	2243	ETI & G.P.K. Products
6" SMC - 6" SMC	115 LF		ETI & G.P.K.
MANHOLES	2a-72 - W.F. (10)	10	Atlantic Precast
8" V	2 EA.	2	M&H

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND <i>Shawn E. Newmyer</i> 4/13/84 DIRECTOR OF PUBLIC WORKS DATE <i>Thomas M. Bunker</i> 6/23/84 CHIEF BUREAU OF UTILITIES DATE	THE RIEMER GROUP INC. 3105 HEALTH PARK DRIVE ELLICOTT CITY, MARYLAND 21043 <i>Arthur E. Muegge</i> ARTHUR E. MUEGGE	DES: DAM DRN: TJM CHK: DATE: 4/13/84	WCV BY NO. REVISION DATE Revised V.F. of Manholes in Quantities 12/1/84	TITLE SHEET 600' SCALE MAP NO. 30 BLOCK NO.	OAKLAND EXECUTIVE PARK ELECTION DISTRICT NO. 2 CONTRACT NO. 24-1220-D SCALE AS SHOWN SHEET 1 OF 4
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Property of
K&M Development Corp.
L.1021.F.201
Plat No. 524G

Property of
Board of County Commissioners
220/230
230/473
301/468

PLAN
SCALE 1"=50'

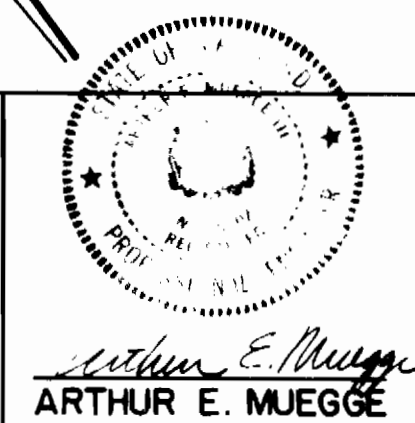
DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Shay F. Newman 9-17-84
DIRECTOR OF PUBLIC WORKS DATE

Robert W. Beaman 10-28-84
CHIEF BUREAU OF UTILITIES DATE

Michael J. ... 9-15-84
CHIEF LAND DEVELOPMENT DIVISION DATE

THE RIEMER GROUP INC.
3105 HEALTH PARK DRIVE
ELLCOTT CITY, MARYLAND 21043



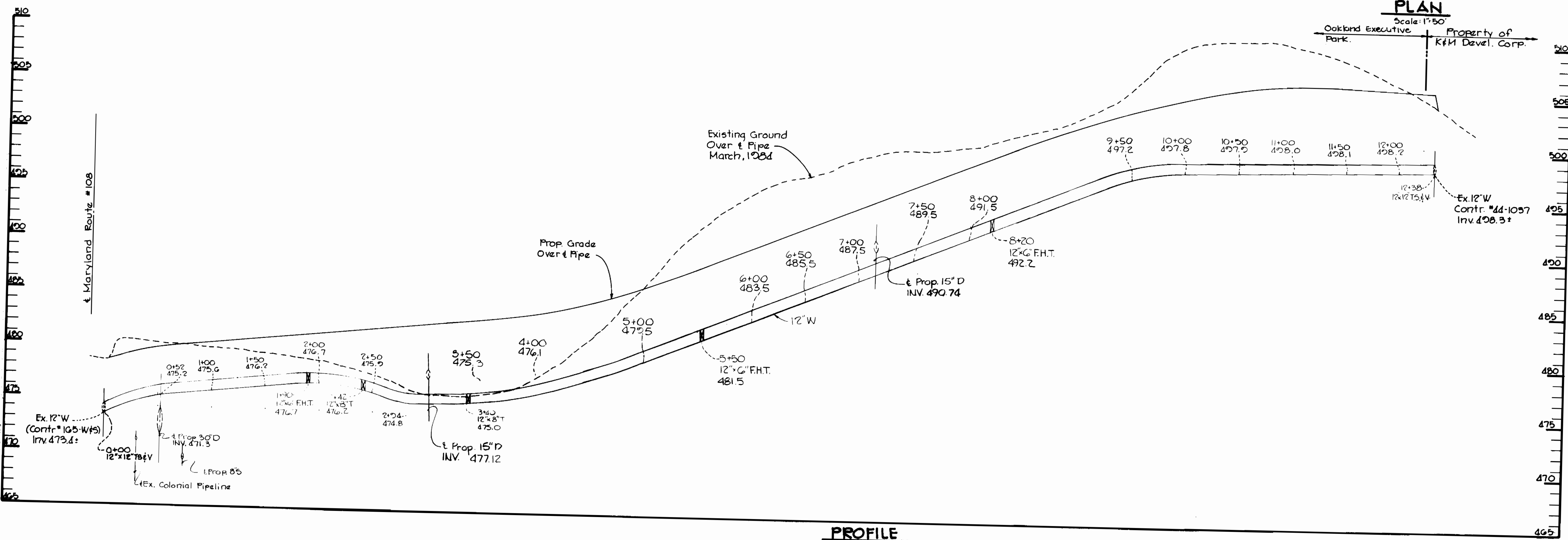
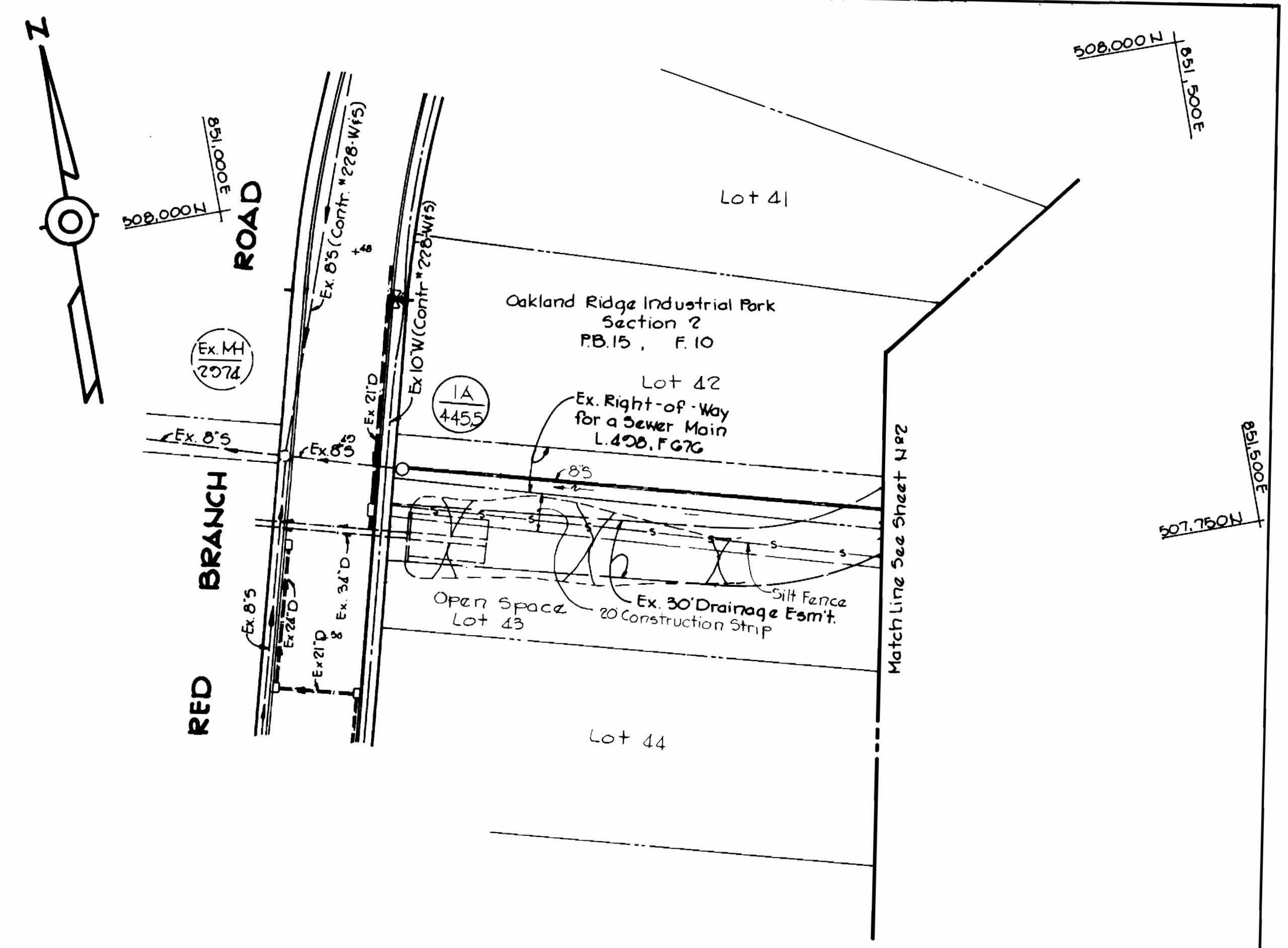
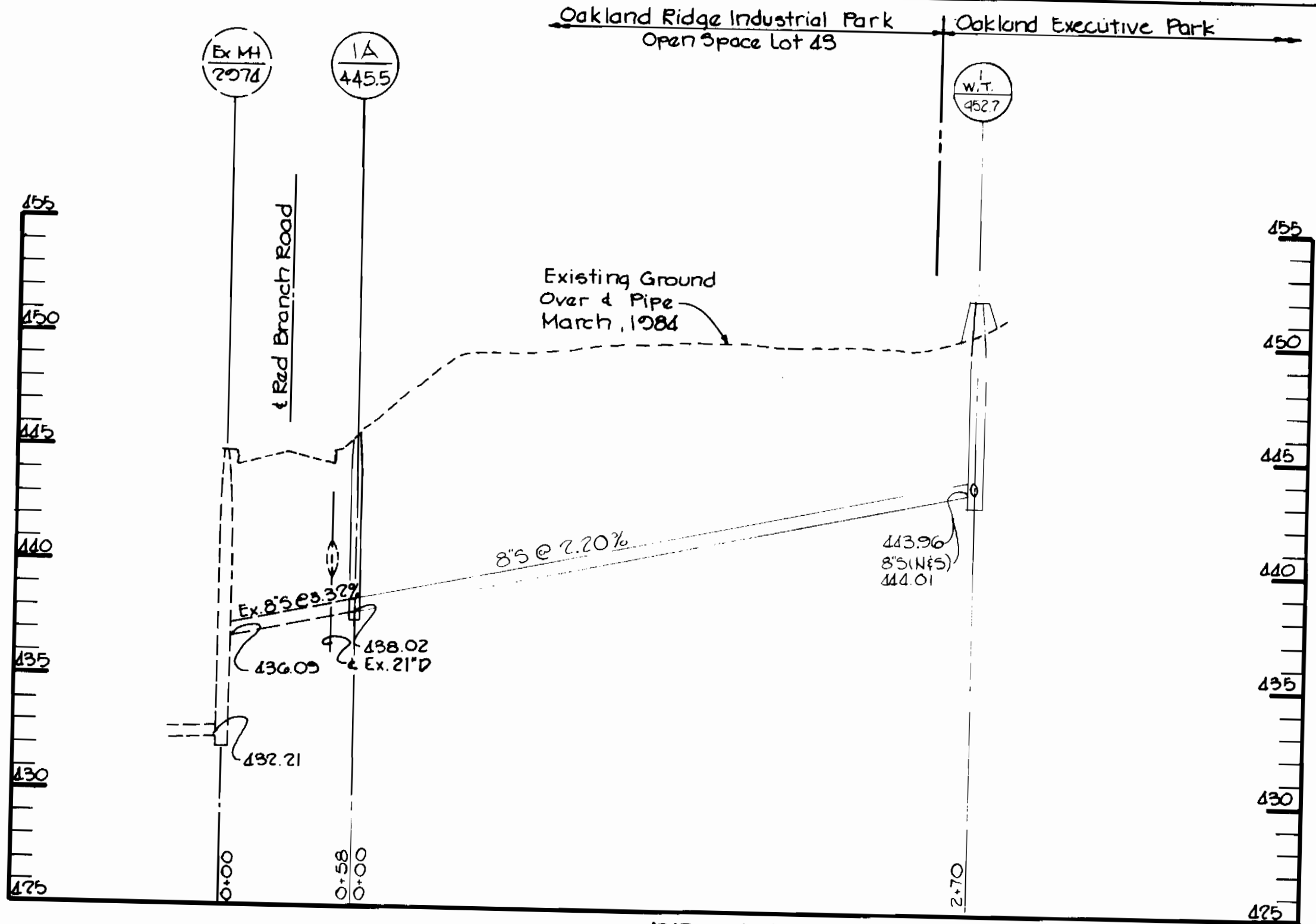
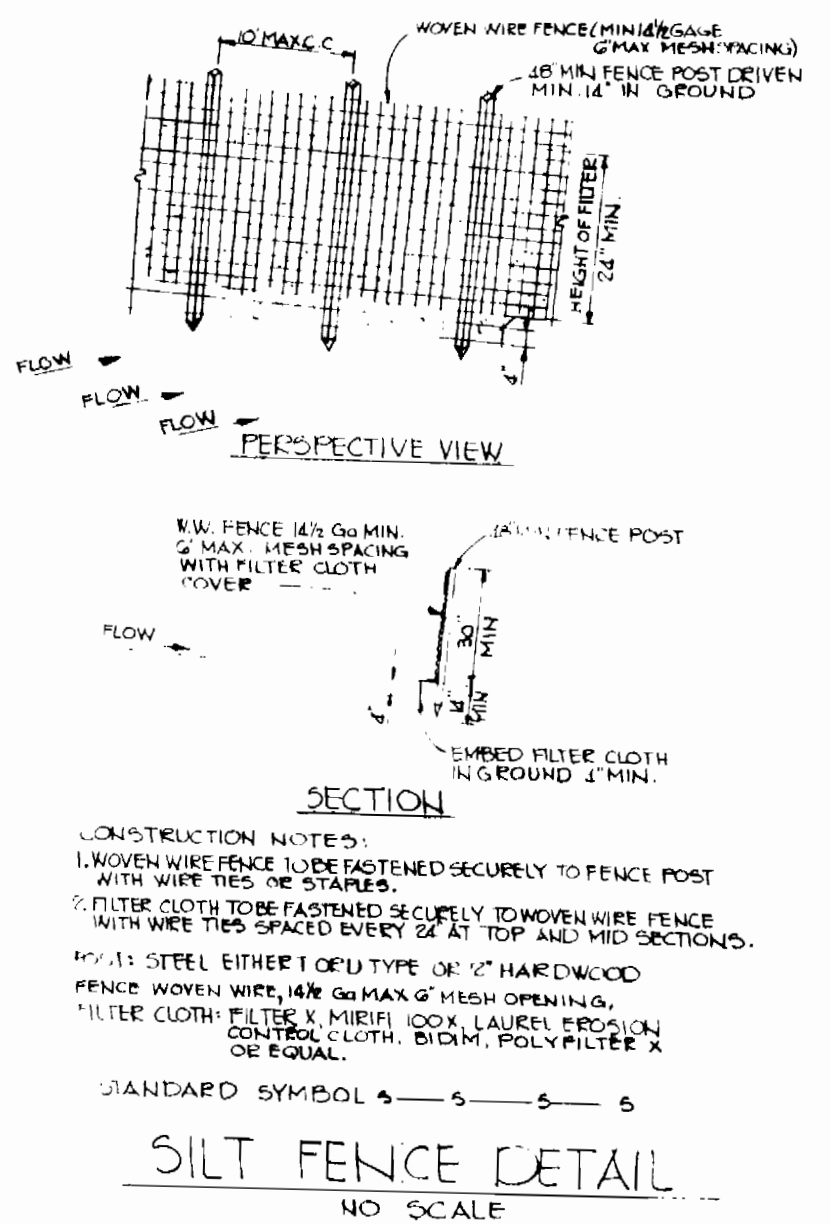
DES: DAM			
DRN: ETJ			
CHK:	DAM	Revised paving width of CPD, relocated FH	5-20-85
	WCW	Added LH #7A & Relocated 8" Water Connection	12/14/84
DATE: 4/13/84	BY: NO.	REVISION	DATE

PLAN OF A WATER & SEWER MAIN

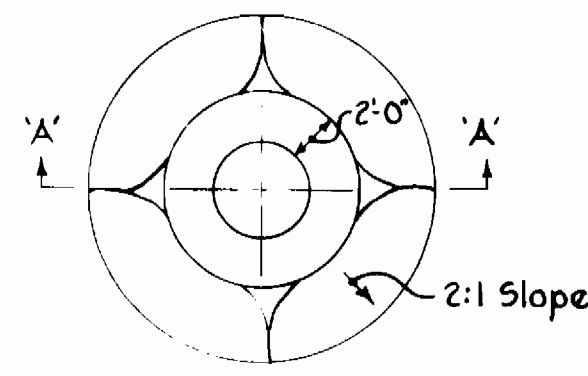
600' SCALE MAP NO. 30 BLOCK NO. _____

OAKLAND EXECUTIVE PARK
ELECTION DISTRICT NO. 2
CONTRACT NO. 24-1220-D

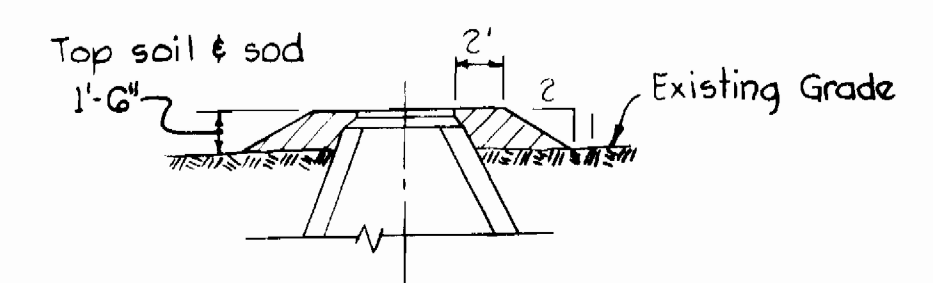
SCALE AS SHOWN
SHEET 2 OF 4



DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND DATE: 1-13-84 DATE: 6-28-84		THE RIEMER GROUP INC. 3105 HEALTH PARK DRIVE ELLICOTT CITY, MARYLAND 21043 DATE: 4/13/84		DES: DAM DRN: ETJ CHK: DATE: 4/13/84		PLAN AND PROFILE OF A WATER & SEWER MAIN DATE: 6/30/84		OAKLAND EXECUTIVE PARK ELECTION DISTRICT NO. 2 CONTRACT NO. 24-1220-D AS BUILT - JULY 1985		SCALE AS SHOWN SHEET 3 OF 4	
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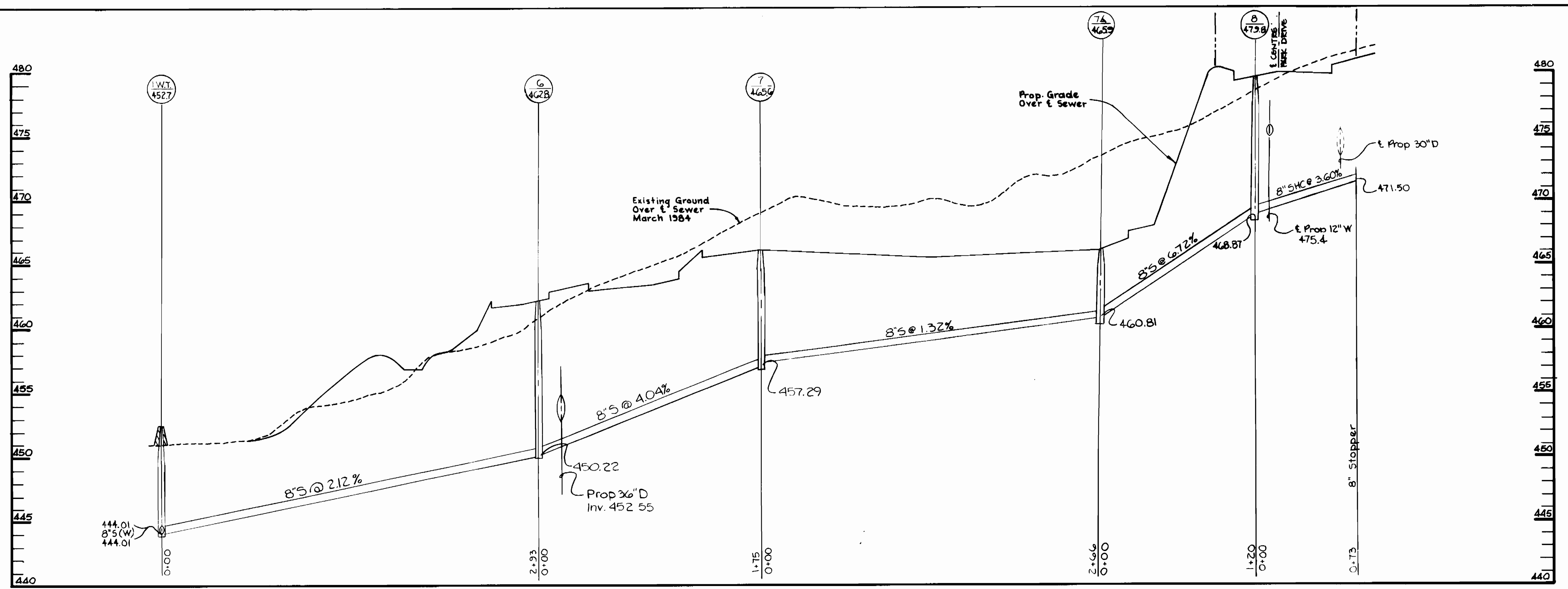
PLAN



SECTION "A-A"

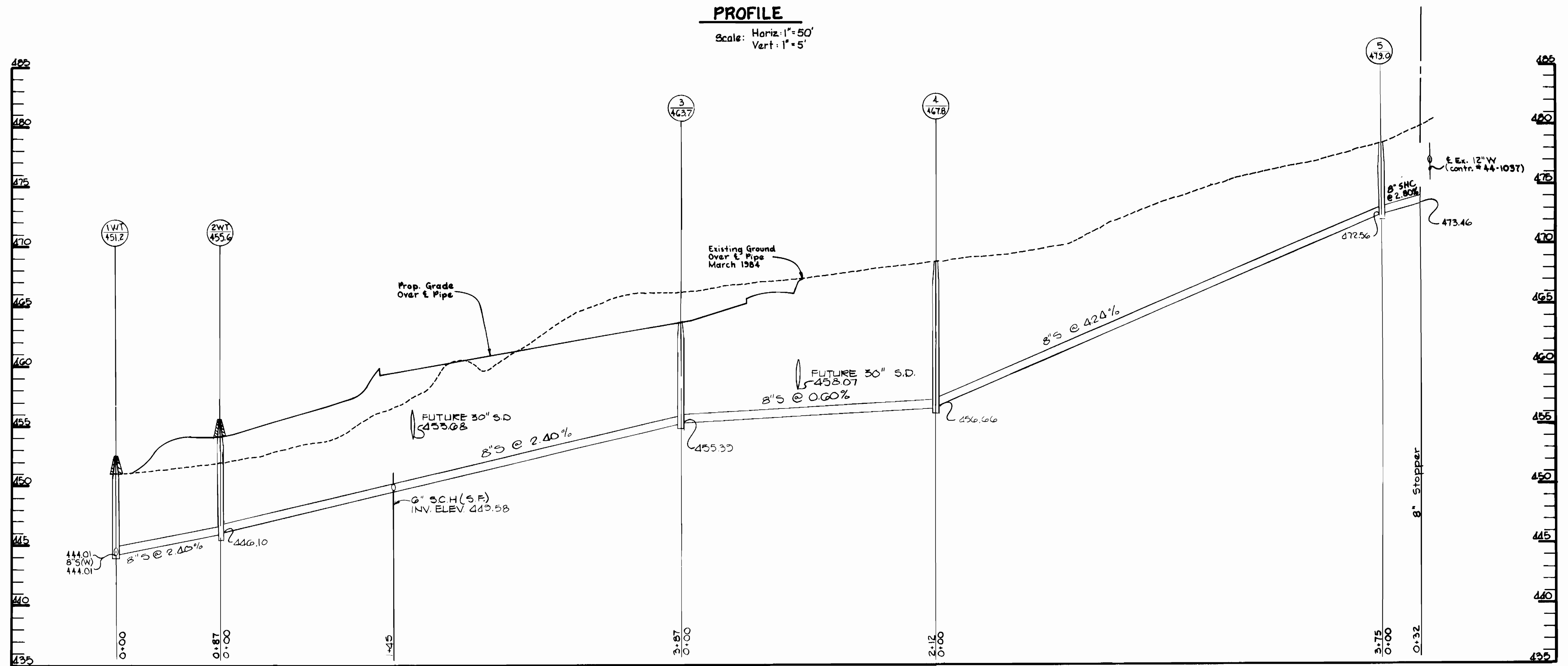
- Notes:
- 1) All manhole frame and covers shall be flush with grade except when shown on Profile to be set higher than grade.
 - 2) Manhole frame and covers to be set higher than grade shall be set in accordance with this detail.
 - 3) Manhole frames and covers to be set higher than 1'-6" shall be set as noted on the Profile and in accordance with this Detail.

FILL AROUND MH'S 1 THRU 2
No Scale



PROFILE

Scale: Horiz: 1"=50'
Vert: 1"=5'



PROFILE

Scale: Horiz: 1"=50'
Vert: 1"=5'

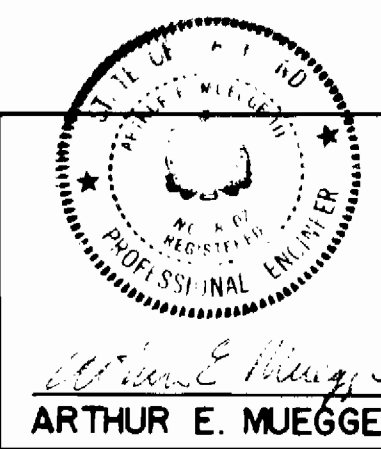
DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Robert M. Brimmer
DIRECTOR OF PUBLIC WORKS
DATE: 9-13-84

Arthur E. Muegge
CHIEF BUREAU OF ENGINEERING
DATE: 9-13-84

Arthur E. Muegge
CHIEF LAND DEVELOPMENT DIVISION
DATE: 9-13-84

THE RIEMER GROUP INC.
3105 HEALTH PARK DRIVE
ELLCOTT CITY, MARYLAND 21043



DES: DAM					
DRN: ETJ					
CHK: WCV	Added MH #7A, Revised Prop Grades	12-1-84			
DATE: 4/13/84	DPW COMMENT - NOV. 14, 1984	11-15-84			
BY: NO.	REVISION	DATE			

PROFILES OF A SEWER MAIN

600' SCALE MAP NO. 30 BLOCK NO.

OAKLAND EXECUTIVE PARK
ELECTION DISTRICT NO. 2
CONTRACT NO. 24-1220-D

SCALE AS SHOWN
SHEET 4 OF 4