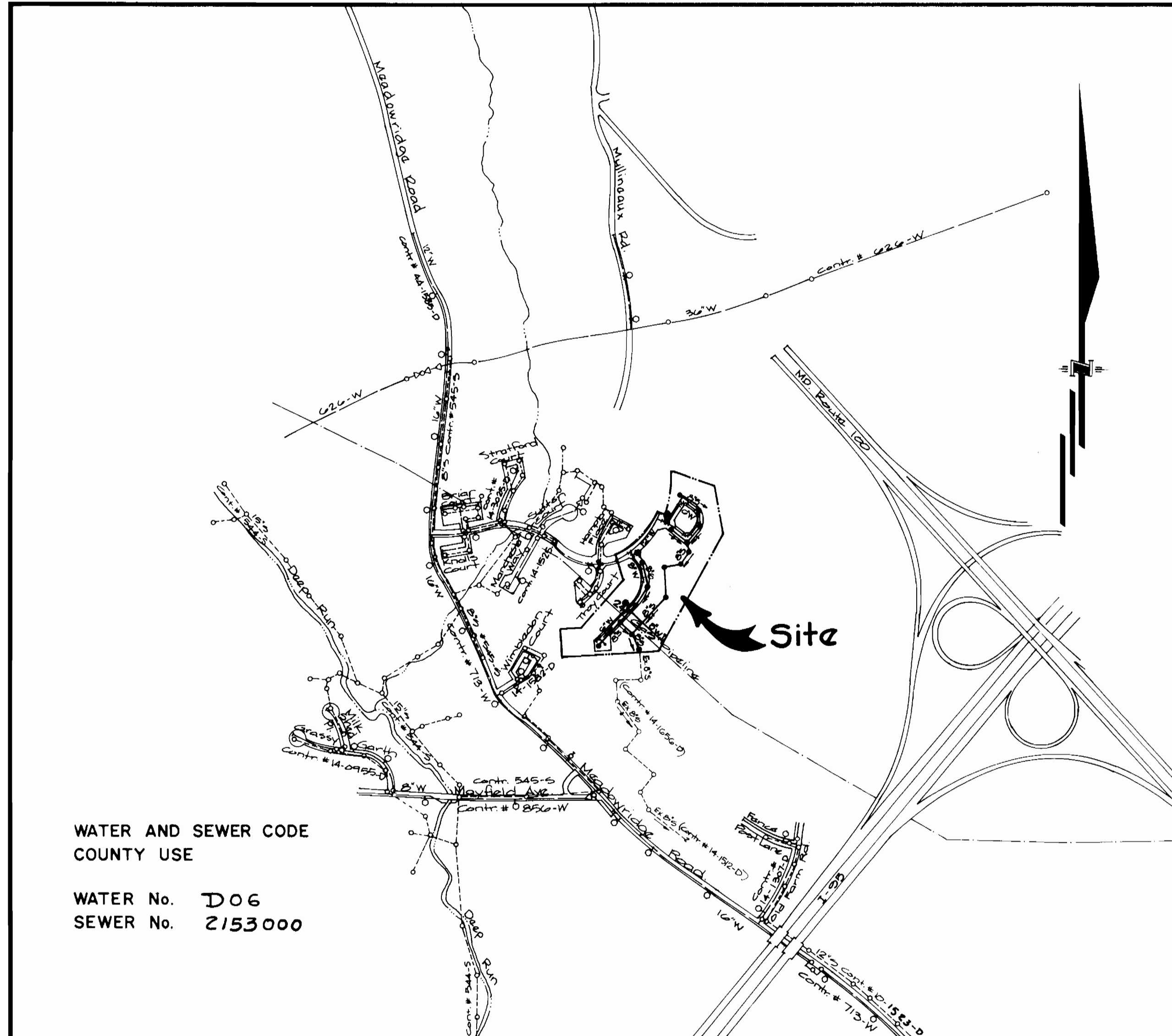


TYPE OF BUILDING	Townhomes
NUMBER OF UNITS	24
NUMBER OF SHC's	24
NUMBER OF WHC's	24
DRAINAGE AREA	Patapasco



WATER AND SEWER CODE
COUNTY USE

WATER No. D06
SEWER No. 215300

VICINITY MAP
SCALE: 1" = 600'

GENERAL NOTES

- Approximate locations 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 by the contractor for tunneling or bracing at poles shall be included in unit prices bid for construction of the main.
- For details not shown on the drawings, use Howard County Standard Details.
- For materials and construction methods, use Howard County Standard Specifications & Howard County Design Manual, Volume IX. The Contractor shall have a copy of Volume IX on the job.
- 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.

State Highway Administration	531-5533	Baltimore Gas & Electric Company	
"Miss Utility"	1-559-0100	Contractor Services	561-2585
Chesapeake & Potomac (C&P)		Underground Damage Control	234-5621
Telephone Company	725-9976	Trouble-shooting	298-9013
Colonial Pipeline Company	795-1390	Bureau of Utilities, Howard County	313-4000
- 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 construction of the main.
- 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. Class 52 Only.
- Top of all water mains to have a minimum of 3-1/2' 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 Sections 1000 and 1005 of the Standard Specifications.
- 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., R.C.S.P., P.V.C. or A.G.P. Class 2400 unless otherwise noted.
- 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.
- 12" and 16" manhole wall thicknesses shown on profiles pertain to brick manholes only.
- Manholes designated W.T. in plan and profile shall have watertight frames and covers. (See Standard Detail G 5 52) Where watertight manhole frame and cover is used, set top of frame 1'-6" above finished grade. (See Standard Detail G 5 41)
- House(s) with the symbol "CNS" indicates that cellar cannot be served.
- Water main and water house connection lines must have a minimum of one foot separation from either sanitary sewer or sewer house connections as they cross. Except at crossings, water and sewer lines shall have a minimum horizontal separation of 10'.
- All D.I.P. fittings shall be in accordance with A.W.W.A. specification C-153 ductile iron compact fittings, 3-inch through 12-inch for water and other liquids.

CONTRACT NO. 14-3131-D

**WILLOWOOD
SECTION 2, AREA 3**

**HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS**

Sediment Control Measures will be implemented in accordance with Section 213 of the Specifications & with Road Construction Plan F21-77; Drawings G#7 of B, Sediment & Erosion Control

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENT

[Signature] 8/8/91
SIGNATURE DATE

U.S. SOIL CONSERVATION SERVICE

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

APPROVED

[Signature] 8/8/91
HOWARD S.C.D. DATE

ITEM	QUANTITIES		MATERIAL / SUPPLIER
	ESTIMATED	AS-BUILT	
8" Sewer	2323 LF		J.M. MANUF.
4" Manholes	16 ea.		J.M. MANUF.
4" SHC	2403 LF		J.M. MANUF.
12" Water	435 LF		KRIFFEN
8" Water	886 LF		"
6" Water	999 LF		"
4" Water	35 LF		"
2" WHC	130 LF		HOWELL METALS
1" WHC	958 LF		"
3/4" WHC	1425 LF		"
Fire Hydrants	3 ea.		MILLER
12" Valves	2 ea.		"
8" Valves	2 ea.		"
6" Valves (Excl. FH)	4 ea.		"
8" x 6" Reducers	2 ea.		KRIFFEN
4" x 3" Reducers	2 ea.		"
3" Blowoffs	2 ea.		"

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

[Signature] 9/10/91
DIRECTOR OF PUBLIC WORKS DATE

[Signature] 8/6/91
CHIEF, BUREAU OF UTILITIES DATE

[Signature] 8/8/91
CHIEF, LAND DEVELOPMENT DIV DATE

GW GUTSCHICK LITTLE & WEBER, P.A.
ENGINEERS, PLANNERS, SURVEYORS

1909 NATIONAL DRIVE SUITE 250 BURTNSVILLE OFFICE PARK
BURTNSVILLE, MD 20886
1301 421 4024

DES: G.A.W.
DRN: G.A.W.
CHK: C.K.G.
DATE: July 1991

BY NO REVISION DATE

Water and Sewer Title Sheet

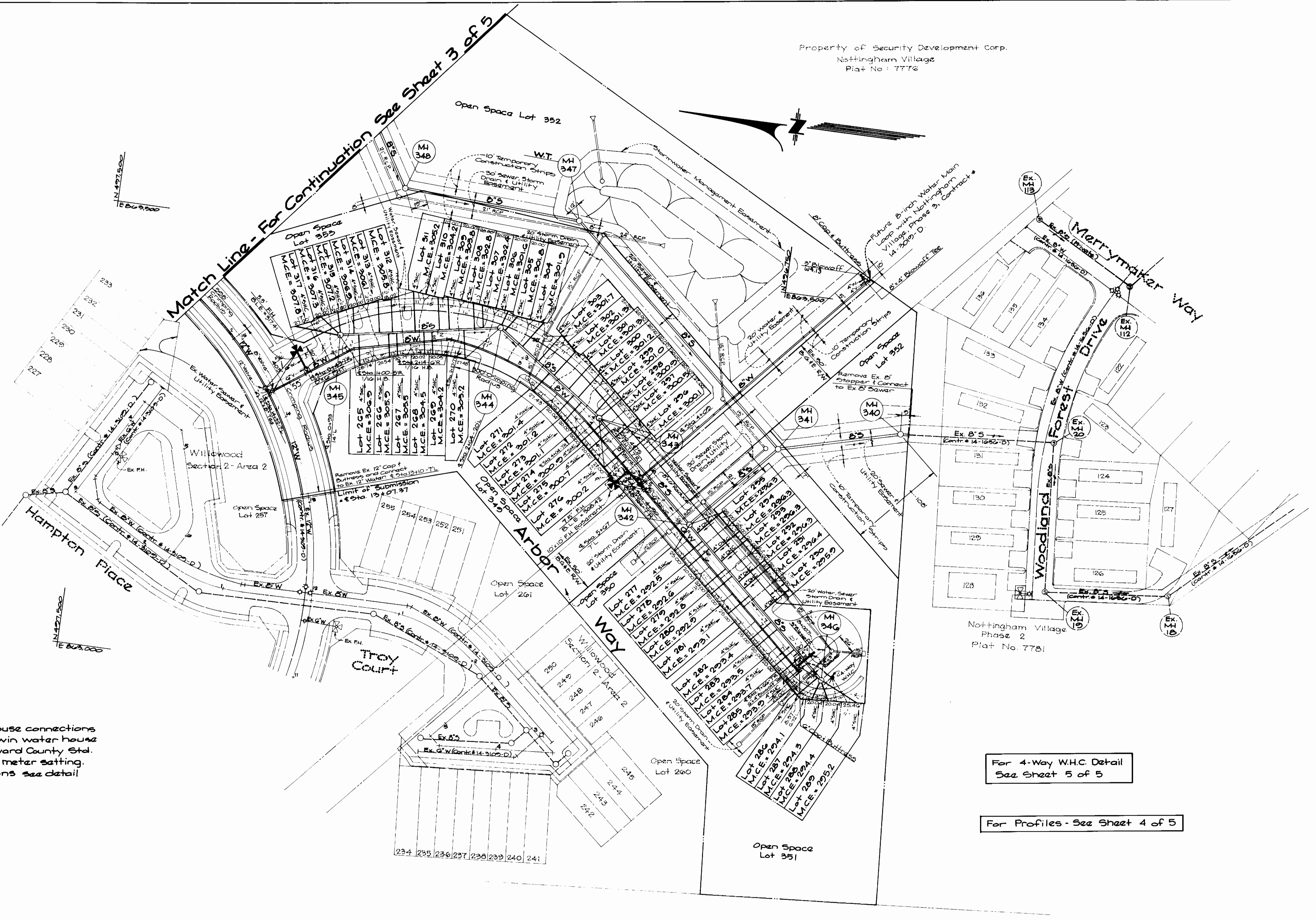
600' SCALE MAP NO. 37 BLOCK NO. 15 & 16

Willowood
Section 2 - Area 3, Lots 263-354
First Election District
Howard County, Maryland
Contract No: 14-3131-D

SCALE AS SHOWN
SHEET 1 OF 5

Lot Number	Elevation
265	303.0
266	302.6
267	302.2
268	301.4
269	301.1
270	300.1
271	299.3
272	298.0
273	298.0
274	297.7
275	297.6
276	297.1
277	296.4
278	295.5
279	295.7
280	295.6
281	295.0
282	295.2
283	295.3
284	295.5
285	295.6
286	295.8
287	295.9
288	295.9
289	291.4
290	292.8
291	293.3
292	293.3
293	293.3
294	293.3
295	293.3
296	297.0
297	297.4
298	297.9
299	297.9
300	298.1
301	298.3
302	298.4
303	298.6
304	298.7
305	298.6
306	298.6
307	299.3
308	299.7
309	300.7
310	301.1
311	302.0
312	302.7
313	303.1
314	303.8
315	304.2
316	304.3
317	304.7

Property of Security Development Corp.
Nottingham Village
Plat No: 7778



Note: All single water house connections shall be 3/4" I.P. For Twin water house connections see Howard County Std. Dat. W3.23 for 5/8" meter setting. For 4-way connections see detail sheet 5 of 5.

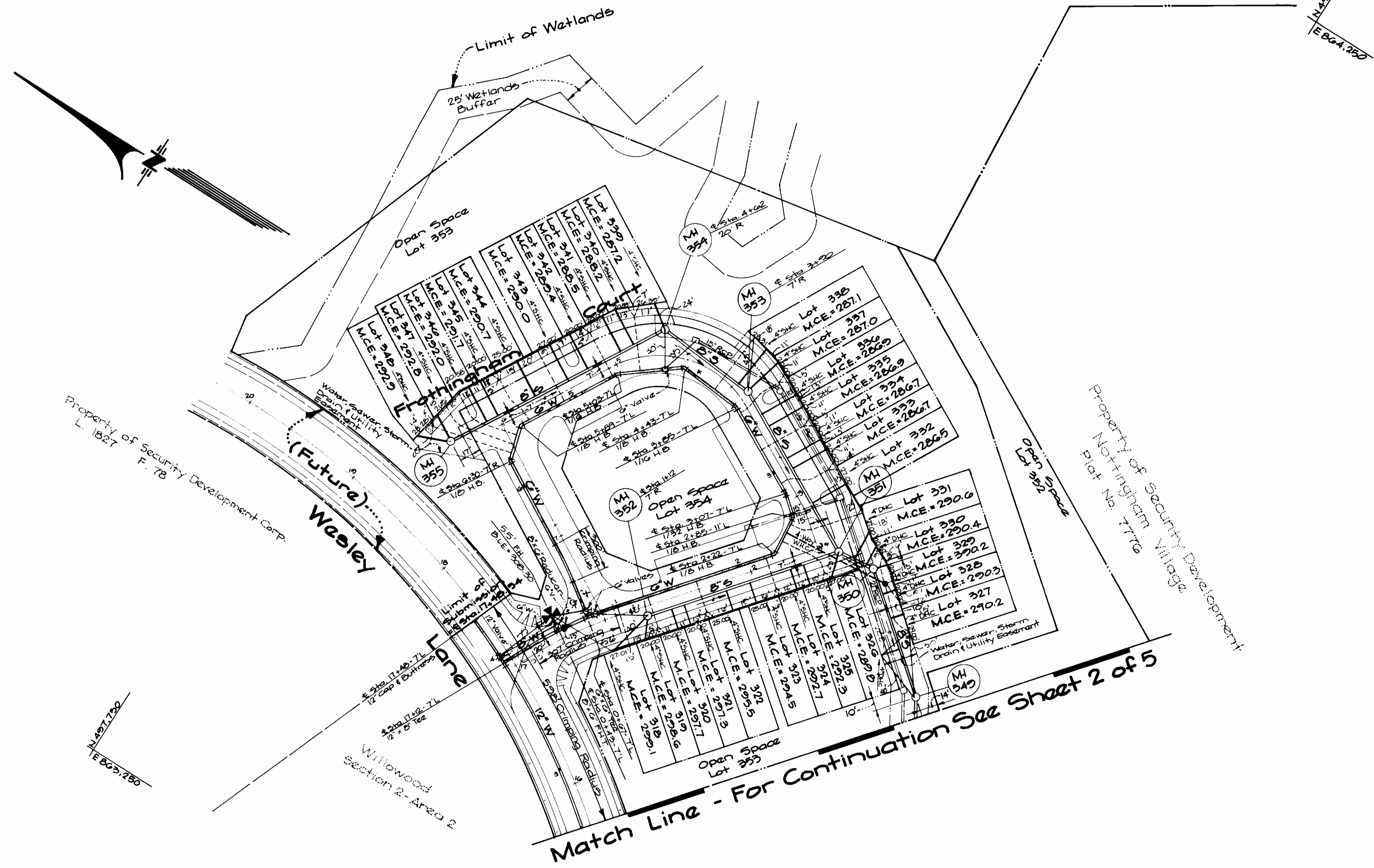
For 4-Way W.H.C. Detail
See Sheet 5 of 5

For Profiles - See Sheet 4 of 5

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND Director of Public Works: <i>[Signature]</i> 2/6/91 Chief, Bureau of Engineering: <i>[Signature]</i> 8-18-91 Chief, Bureau of Utilities: <i>[Signature]</i> 8-6-91 Chief, Land Development: <i>[Signature]</i> 8/19/91		G.W. GUTSCHICK LITTLE & WEBER, P.A. ENGINEERS, PLANNERS, SURVEYORS 3909 NATIONAL DRIVE, SUITE 250, BURTONTVILLE OFFICE PARK BURTONTVILLE, MD. 20886 (301) 421-4024		DES: G.A.W. DRN: G.A.W. CHK: C.K.G. DATE: July 1991		Water and Sewer Plan Scale: 1" = 50' 600' SCALE MAP NO. 37 BLOCK NO. 15 & 16		Willowood Section 2 - Area 3, Lots 265-354 First Election District Howard County, Maryland Contract No: 14-3131-D		SCALE AS SHOWN SHEET 2 OF 5
--	--	--	--	--	--	--	--	---	--	--------------------------------

Lot Number	Elevation
318	256.0
319	255.6
320	254.6
321	254.1
322	252.4
323	251.3
324	250.6
325	250.1
326	250.8
327	257.2
328	257.2
329	257.2
330	257.4
331	257.5
332	253.4
333	253.6
334	253.6
335	253.8
336	253.8
337	253.9
338	254.0
339	254.1
340	255.1
341	255.5
342	256.4
343	256.8
344	257.7
345	258.7
346	259.0
347	259.7
348	259.7

Property of Security Development Corp.
L. 1827 F. 78



Note: All single water house connections shall be 3/4" I.D. For twin water house connections see Howard County Std. Det. W3.23 for 5/8" meter setting. For 4-way connections see detail Sheet 5 of 5.

Match Line - For Continuation See Sheet 2 of 5

For 4-Way W.H.C. Detail
See Sheet 5 of 5

For Profiles - See Sheets 4 and 5 of 5

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James J. ... 9/10/91
DIRECTOR OF PUBLIC WORKS DATE

John M. ... 9/4/91
CHIEF, BUREAU OF ENGINEERING DATE

Robert ... 8-6-91
CHIEF, BUREAU OF UTILITIES DATE

...
CHIEF, LAND DEVELOPMENT DIV DATE

GW GUTSCHICK LITTLE & WEBER, P.A.
ENGINEERS, PLANNERS, SURVEYORS

3909 NATIONAL DRIVE, SUITE 250, BURTONTVILLE OFFICE PARK
BURTONTVILLE, MD. 20886
(301) 421-4024

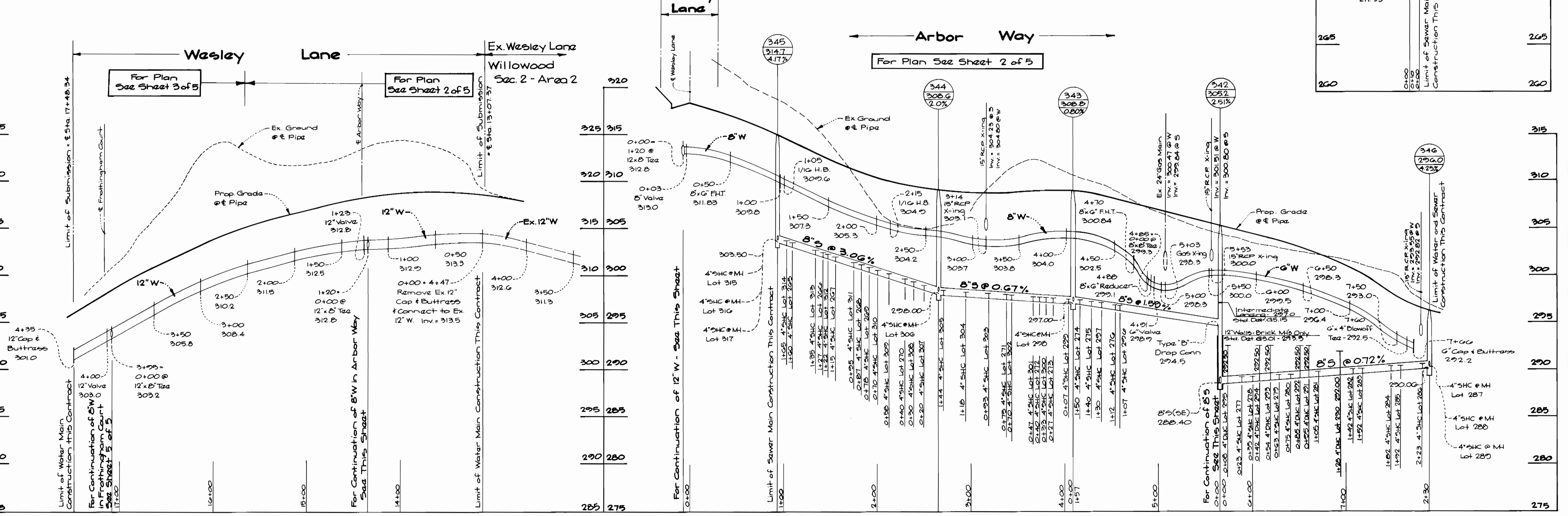
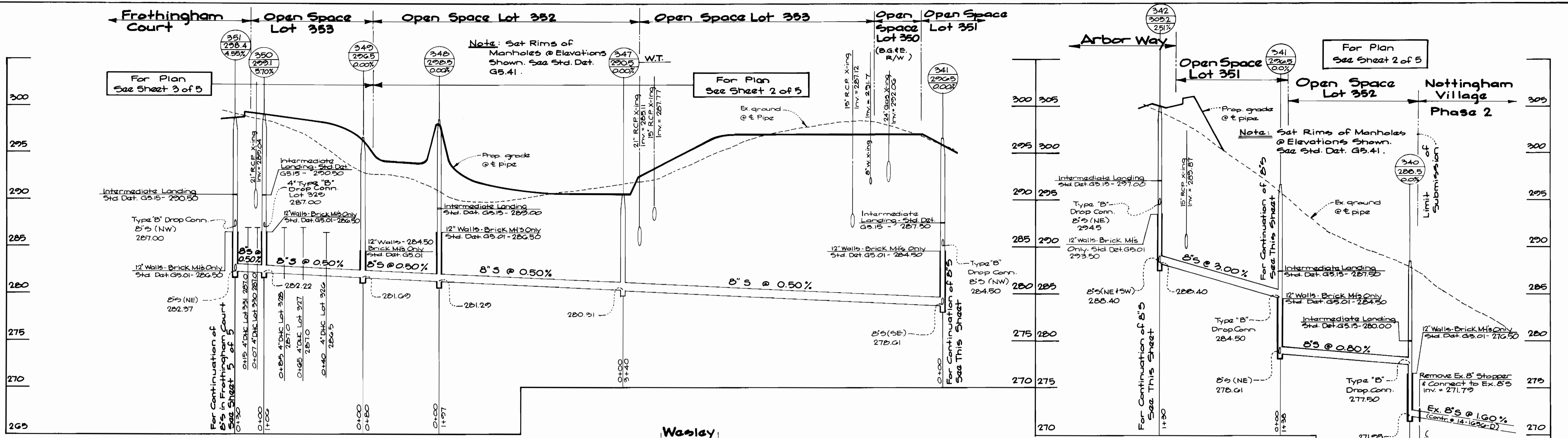
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DES: G.A.W.					
DRN: G.A.W.					
CHK: C.K.G.					
DATE: July 1991	BY: NO.	REVISION	DATE	600' SCALE MAP NO. 37	BLOCK NO. 15 & 16

Water and Sewer Plan
Scale: 1" = 50'

Willowood
Section 2 - Area 3, Lots 265-354
First Election District
Howard County, Maryland
Contract No: 14-3131-D

SCALE AS SHOWN
SHEET 3 OF 5



Note: Set Rims of Manholes @ Elevations Shown. See Std. Det. G5.41.

Note: Set Rims of Manholes @ Elevations Shown. See Std. Det. G5.41.

For Plan See Sheet 3 of 5

For Plan See Sheet 2 of 5

For Plan See Sheet 2 of 5

For Plan See Sheet 3 of 5

For Plan See Sheet 2 of 5

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

GW GUTSCHICK LITTLE & WEBER, P.A.
ENGINEERS, PLANNERS, SURVEYORS

DES: G.A.W.	
DRN: G.A.W.	
CHK: C.K.G.	
DATE: July 1991	DATE: 11/4/91

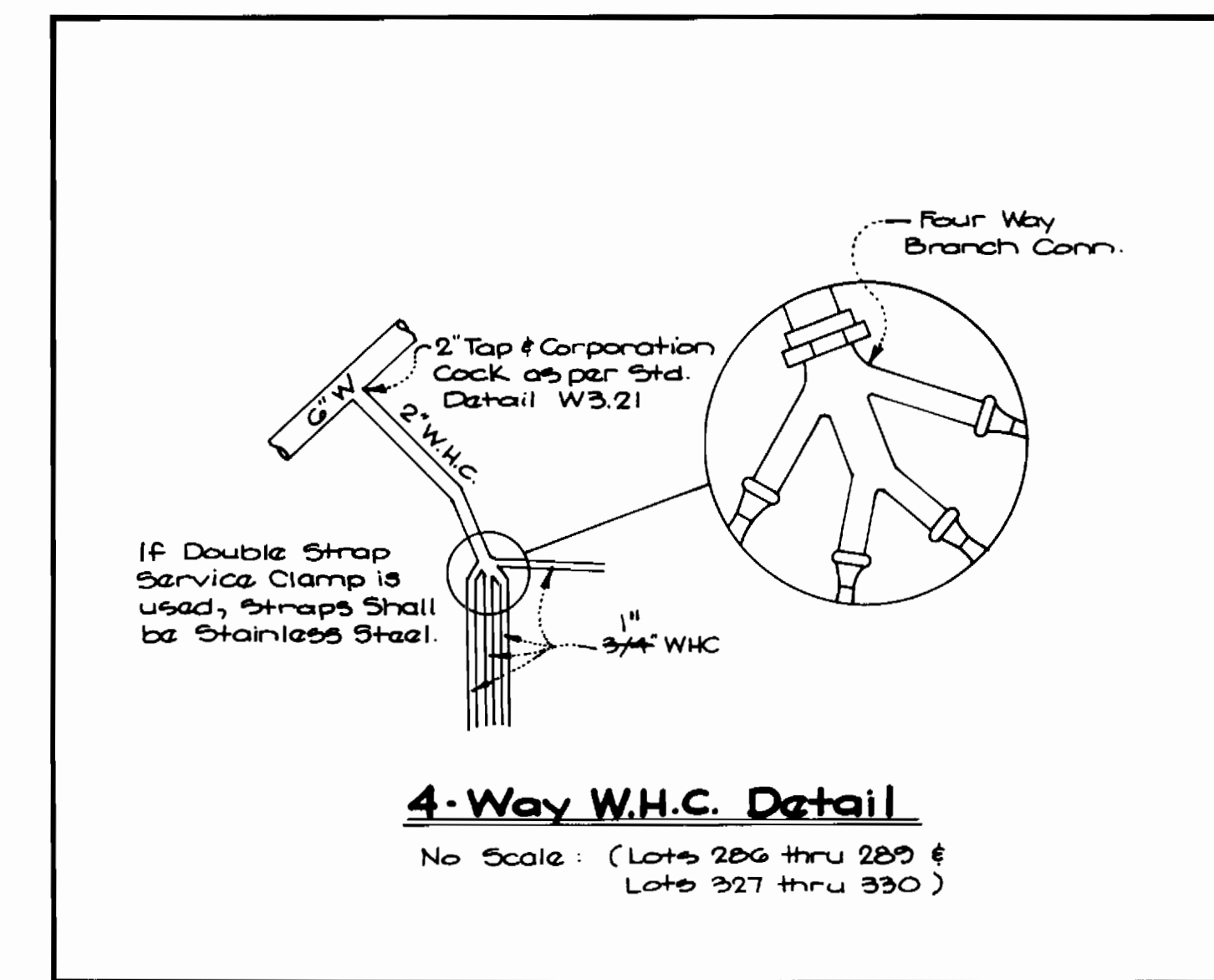
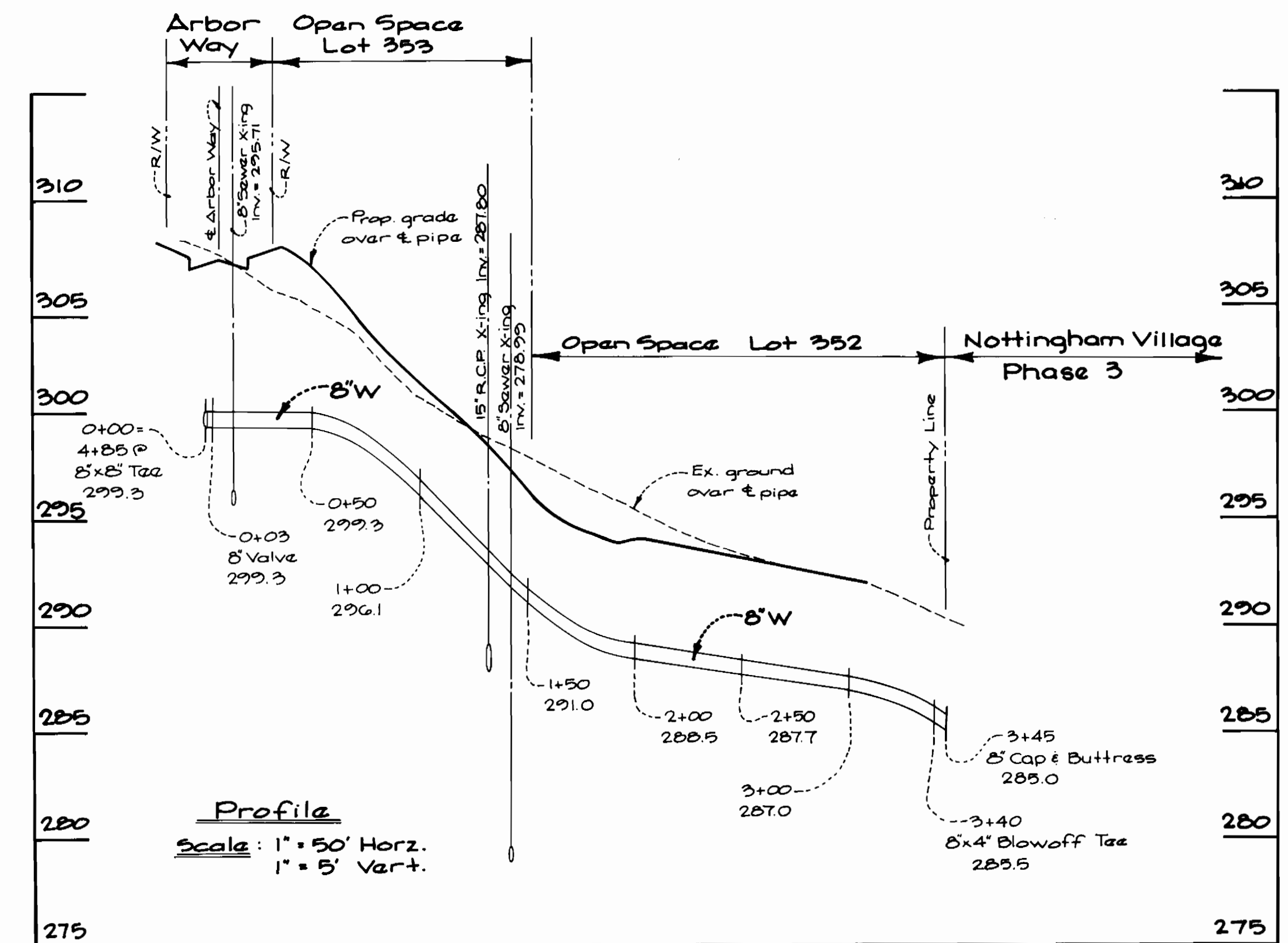
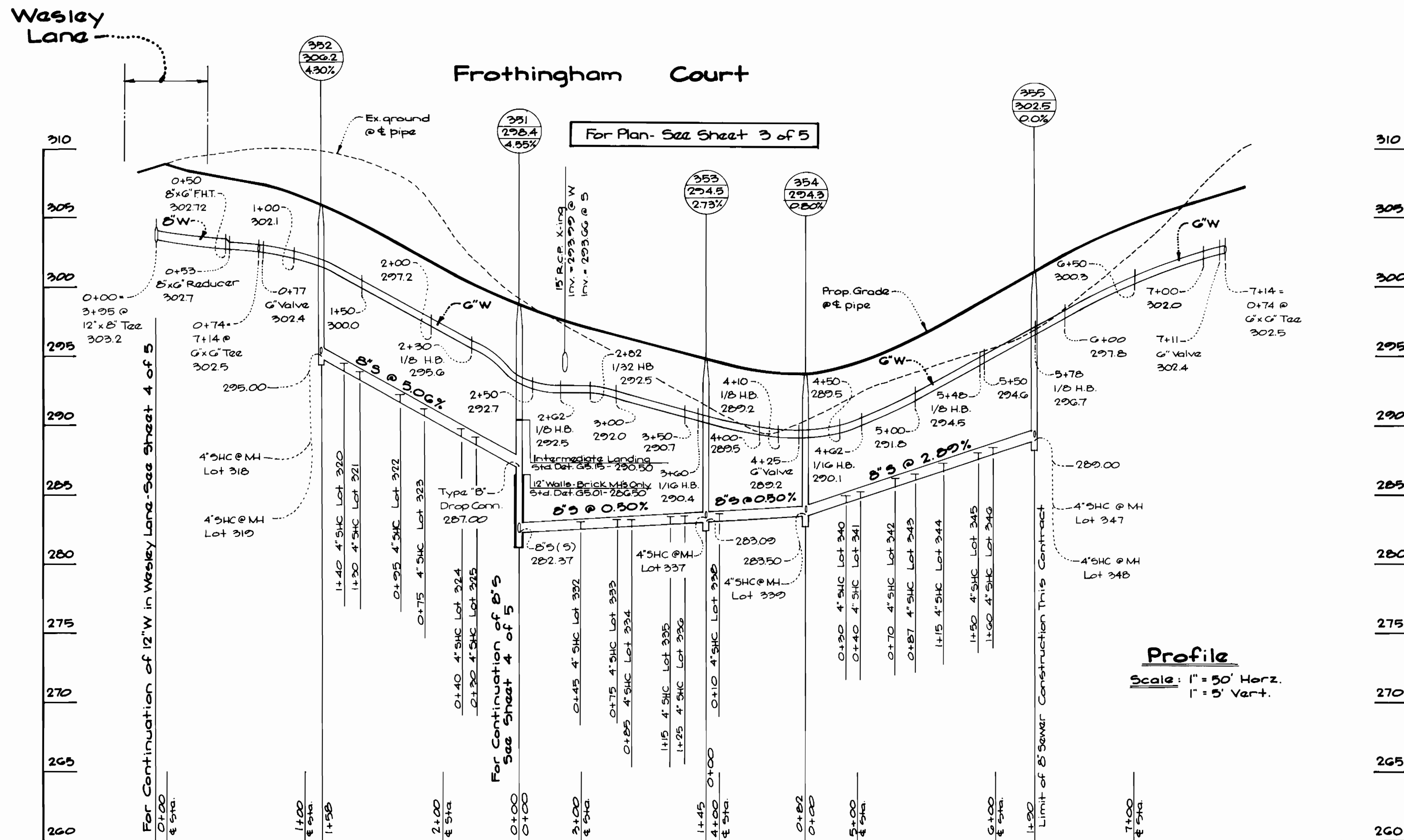
Profiles
Scale: 1" = 50' Horiz.
1" = 5' Vert.

Willowood
Section 2, Area 3
First Election District
Howard County, Maryland
Contract No: 14-3131-D

SCALE AS SHOWN
SHEET 4 OF 5

Handwritten signature/initials

Handwritten note: A.C. 10/11/91



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James P. Smith 9/10/91
DIRECTOR OF PUBLIC WORKS DATE

Robert A. Benign 8-6-91
CHIEF, BUREAU OF UTILITIES DATE

John M. Pagan 1/9/91
CHIEF, LAND DEVELOPMENT DIV DATE

GW GUTSCHICK LITTLE & WEBER, P.A.
ENGINEERS, PLANNERS, SURVEYORS

3909 NATIONAL DRIVE SUITE 250 HUNTINGVILLE OFFICE PARK
HUNTINGVILLE, MD 20886
(301) 421-1024

C.K.G.

DES: G.A.W.					
DRN: G.A.W.					
CHK: C.K.G.					
DATE: July 1991	BY: NO.	REVISION	DATE	600' SCALE MAP NO. 37	BLOCK NO. 15 & 16

Profiles and Details

Willowood
Section 2, Area 3
First Election District
Howard County Maryland
Contract No: 14-3131-D

SCALE AS SHOWN
SHEET 5 OF 5