

IMPROVEMENT PLANS HIGHGROVE PLACE (NORTH PORTION)

A TRACT OF LAND BEING PART OF
U.S. SURVEYS 469 AND 1790
TOWNSHIP 47 NORTH, RANGE 3 EAST
ST. CHARLES COUNTY, MISSOURI

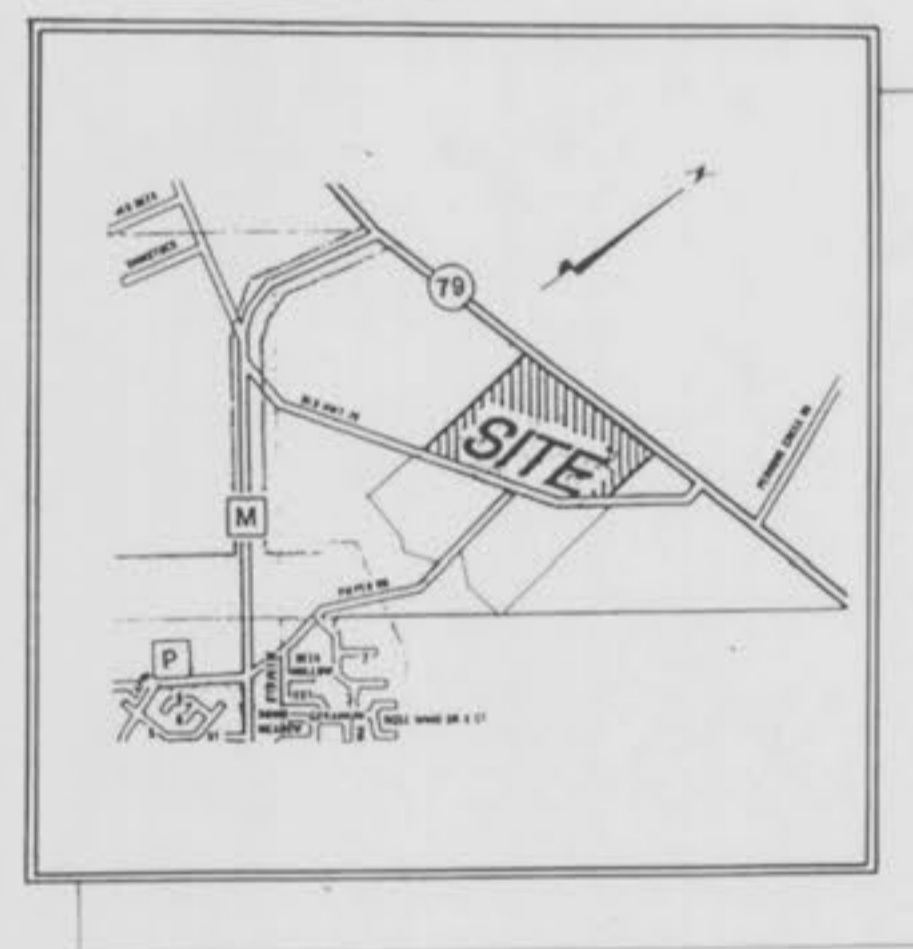
116 LOTS

"AS-BUILTS"

CITY OF O'FALLON GENERAL NOTES

- Gas, water and other underground utilities shall not conflict with the depth or horizontal locations of existing and proposed sanitary and storm sewers, including house laterals.
- Underground utilities have been plotted from available information and, therefore, their locations must be considered approximate only. The verification of the location of all underground utilities, either shown or not shown on these plans, shall be the responsibility of the contractor and shall be located prior to grading or construction of improvements.
- Polyvinyl Chloride (PVC) shall conform to the requirements of ASTM D-3034 Standard Specifications for the PSM Polyvinyl Chloride (PVC) Sewer Pipe and Fittings, SDR-35.
- All storm sewer pipe under pavement, regardless of size, shall be reinforced concrete pipe (ASTM C-76, Class III) unless noted otherwise in the plans.
- Corrugated metal pipe shall conform to the standard specifications for corrugated culvert pipe M-36, A.A.S.H.T.O. See plans for gauge.
- All filled places under buildings, proposed sanitary and storm sewer lines, and/or paved areas including trench backfills shall be compacted to 90% of maximum density as determined by the "Modified A.A.S.H.T.O. T-180 Compaction Test" (ASTM D-1557) unless otherwise specified by the local governing authority specifications. All tests will be verified by a soils engineer.
- All earthen filled places within State, County, or City roads (highways) shall be compacted to 95% of maximum density as determined by the "Standard Proctor Test A.A.S.H.T.O. T-99" (ASTM D-698) unless otherwise specified by local governing authority specifications. All tests will be verified by a soils engineer.
- All storm and sanitary trench backfills shall be water jetted. Granular fill will be used under paved areas.
- Easements shall be provided for storm sewers, sanitary sewers, and all utilities on the record plot. See record plot for location and size of easements. This does not apply to house laterals.
- No area shall be cleared without the permission of the developer.
- All grades shall be within 0.2 feet (more or less) of those shown on the grading plan.
- No slope shall be greater than 3:1 and shall be either sodded or seeded and mulched.
- Hazard markers will consist of three (3) standard specification, "Manual on Uniform Traffic Control Devices," and of roadway markers mounted on two (2) pound "U" channel sign post. Each marker shall consist of an eighteen (18) inch diamond reflectorized red panel. The bottom of each panel shall be mounted a minimum of four (4) feet above the elevation of the pavement surface.
- All manhole and curb inlet tops built without elevations furnished by the Engineer will be the responsibility of the sewer contractor. At the time of construction stake-out of the sewer lines, all curb and grate inlets will be face staked. If normal face stakes fall in line with sewer construction, the Engineer will set these stakes on a double offset. It shall be the responsibility of the sewer contractor to preserve all face stakes from destruction.
- All standard street curb inlets to have front of inlet 2 feet behind curb.
- The minimum vertical distance from the low point of the basement to the flowline of a sanitary sewer at the corresponding house connection shall not be less than the diameter of the sanitary sewer plus a vertical distance not less than two and one-half feet (2-1/2').
- Water lines, valves, sleeves, meters and etc., shall meet all specifications and installation requirements of the local governing authority.
- All cast iron pipe for water mains shall conform to A.W.W.A. specification C-106 and/or C-108. The cast iron fittings shall conform to A.W.W.A. specification C-110. All rubber gasket joints for water cast iron pressure pipe and fittings shall conform to A.W.W.A. specification C-111.
- All water hydrants and valves shall be cast iron and installed in accordance with plans and details.
- All sanitary and storm sewers shall meet all specifications and installation requirements of the local governing authority.
- All PVC water pipe shall have a minimum pressure rating of PR-200 or SDR-21.
- All PVC sanitary sewer pipe shall be DR-35 or equal with crushed stone bedding uniformly graded between 1" and 1/4" size. This bedding shall extend from 6" below the pipe to 12" above the top of the pipe.
- All grading on Missouri State Highway Right-of-Way shall be seeded and mulched and all disturbed Right-of-Way markers shall be reset at the completion of grading.
- All streets must meet the specifications and installation requirements of the City of O'Fallon.
- All sanitary manholes top shall be set 0.2' higher than the proposed ground except in pavement areas.
- All sanitary manholes shall have a 31 mil thick coat of coal tar pitch waterproofing.
- All sanitary service lines shall have a 6" diameter for Multi-family and a 4" diameter for single-family developments.
- Manhole frame and cover shall be Clay and Bailey No. 2008 or Neenah R-1736 or Dexter 1315 or approved equal.
- A drop of 0.2 feet is required through each sanitary manhole.
- The City of O'Fallon shall be notified at least 48 hours prior to construction of sanitary sewers for coordination and inspection.
- Brick shall not be used on manholes.
- Waterproofing: Waterproofing will be required on the exterior of all manholes. The bitumen shall consist of two coats of asphalt, coal-tar pitch, or a coating meeting American Society for Testing and Materials (ASTM) D-41. Asphalt shall conform to the requirements of ASTM D-449. Coal-tar pitch shall conform to the requirements of ASTM D-450. Coating shall be 31 mils thickness.
- NOTE: The grading and elevations shown on the grading plans are for construction purposes only. Finished grades, swales and slopes will vary from those shown on the plans depending upon the location, size and type of house built on the lot. However, care should be taken to insure that finished grading conforms to drainage area maps.
- As needed, siltation fence shall be installed as a protective barrier for trees to remain.
- This tract is in or served by:
A. Water - City of O'Fallon Water
B. Electric - Union Electric
C. Telephone - G.T.E. Missouri
D. Sewers - City of O'Fallon
E. Gas - St. Charles Gas
F. Fire Protection - O'Fallon Fire Protection District
G. School District - Fort Zumwalt
H. Mail Service - O'Fallon
- Lot Data: A. Total Number of Lots - 116
B. Minimum Lot Size - 8,250 Sq. Ft.
C. Minimum Lot Width at Building Line - 75 Ft.
- Yard and Setback Requirements:
A. Front - 25 Feet
B. Side - 6 Feet
C. Rear - 25 Feet
- The contractor will be responsible to insure that all areas within the project limits that have been disturbed by the grading process shall be seeded and mulched within ninety (90) days of completion.
- The contractor will be responsible for the removal and disposal of all existing improvements, except those designated to be left in place, from within the limits of the construction area.
- The existing structures to be removed from the site will be recycled for future use in accordance with applicable laws.
- Property is located in Zone X: area of 500 year flood; areas of 100 year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile, and areas protected by levees from 100 year flood per Flood Insurance Rate Map for St. Charles County; Panel 120 of 250. Map No. 29183C0120 D. Effective Date - 12-15-92.
- SEE NOTE 43 PER HIGHGROVE PLACE SOUTH PORTION COVER SHEET 1 OF 23.

LOCATION MAP
1" = 2000'



EACH CONTRACTOR, SUBCONTRACTOR, AND/OR UTILITY COMPANY SHALL BE RESPONSIBLE FOR THE MAINTENANCE AND PRESERVATION OF ANY SILTATION CONTROL PLACED ON THE DEVELOPMENT BY THE DEVELOPER AND SHALL NOT DISTURB THE SILTATION CONTROL EXCEPT AS ABSOLUTELY NECESSARY. IN THE EVENT OF ANY SUCH CONTRACTOR, SUBCONTRACTOR, OR UTILITY COMPANY AS APPLICABLE, DISTURBING SUCH SILTATION CONTROL SHALL IMMEDIATELY REPLACE THE SAME AT SUCH CONTRACTOR'S, SUBCONTRACTOR'S, AND UTILITY COMPANY'S, AS APPLICABLE, EXPENSE. IN THE EVENT OF ANY FINES OR PENALTIES BEING LEVIED AS A RESULT OF THE DISTURBANCE OF ANY SUCH SILTATION CONTROL, THE PARTY DISTURBING SUCH SILTATION CONTROL SHALL BE LIABLE FOR PAYMENT OF SAME AND SHALL INDEMNIFY AND HOLD WHITTAKER CONSTRUCTION, INCORPORATED HARMLESS FROM ANY AND ALL LIABILITIES, DAMAGES, DEMANDS, PENALTIES, FINES, FEES, CLAIMS, CAUSES OF ACTION, JUDGMENTS, COSTS AND EXPENSES, INCLUDING WITHOUT LIMITATION, ATTORNEY'S FEES, ARISING FROM OR IN CONNECTION WITH ANY SUCH DISTURBANCES.

PROJECT BENCHMARK:

RM 70 (U.S.G.S.) ELEVATION = 505.026
STANDARD DISK STAMPED "H 149 1935" SET IN TOP OF WEST END OF THE BASE OF SOUTH PIER OF NORFOLK SOUTHERN RAILWAY OVER STATE HIGHWAY 79.

by Pickett Ray & Silver

Delmar F. Vincent
MO R.L.S. No 1869
12-9-97
Date

ENGINEERS AUTHENTICATION

The responsibility for professional engineering liability on this project is hereby limited to the set of plans indicated by the seal, signature and date hereunder attached. Responsibility is declined for all other engineering plans involved in the project and specifically includes reasons after the date unless re-audited.

PICKETT, RAY & SILVER, INC.



DRAWING INDEX

Sheet	Description
1	COVER SHEET
2, 3	FLAT PLANS
4, 5	GRADING PLANS
6, 7	STREET PROFILES
8, 9 4-5	SANITARY SEWER PROFILES
10, 11 6-7	STORM SEWER PROFILES
12, 13	WATER PLAN
14, 15	DRAINAGE AREA MAP
16, 17	CONSTRUCTION DETAILS

LEGEND

—●— Sanitary Sewer (Proposed)	Sanitary Structure	R.C.P. Reinforced Concrete Pipe
—○— Sanitary Sewer (Existing)	Storm Structure	C.M.P. Corrugated Metal Pipe
—■— Storm Sewer (Proposed)	Test Hole	C.I.P. Cast Iron Pipe
—□— Storm Sewer (Existing)	Power Pole	P.V.C. Polyvinyl Chloride
—*— Water Line & Size	Light Standard	V.C.P. Vitrified Clay Pipe
—EX— Existing water line	Double Water Meter Setting	
—T— Tee & Valve	Single Water Meter Setting	C.O. Clean Out
—H— Hydrant	C.I. Curb Inlet	V.T. Vent Trap
—C— Cap	S.C.I. Skewed Curb Inlet	T.B.R. To Be Removed
18 Lot or Building Number	D.C.I. Double Curb Inlet	T.B.R.&R. To Be Removed & Relocated
—X— Existing Fence Line	G.I. Grate Inlet	T.B.P. To Be Protected
—T— Existing Tree Line	A.I. Area Inlet	T.B.A. To Be Abandoned
—S— Street Sign	D.A.I. Double Area Inlet	B.C. Base Of Curb
—C— Existing Contour	C.C. Concrete Collar	T.C. Top Of Curb
—P— Proposed Contour	F.E. Flared End Section	T.W. Top Of Wall
—G— Grouted Rip-Rap	E.P. End Pipe	B.W. Base Of Wall
—L— End of Lateral	E.D. Energy Dissipator	(TYP) Typical
—A— Asphalt Pavement	M.H. Manhole	U.N.O. Unless Noted Otherwise
—C— Concrete Pavement	C.P. Concrete Pipe	U.I.P. Use In Place

REVISIONS

REV 7-16-96 CITY COMMENTS G.S.
REV 8-20-96 CITY COMMENTS G.S.
REV 1-11-97 SAN ESTORM SEWERS
REV 4-24-97 PRE 212117-NOTE RM

PICKETT RAY & SILVER

Civil Engineers
Planners
Land Surveyors

333 Mid Rivers Mall Dr.
St. Peters, MO 63376
397-1211 FAX 397-1104

DEVELOPER

12-9-97 "AS-BUILTS"

WHITTAKER CONSTRUCTION CO., INC.
355A MID RIVERS MALL DRIVE
ST. PETERS, MO. 63376
(314)970-1511

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DRAWN	J.L.K.	DATE	MAY, 1996
CHECKED		DATE	
FIELD BOOK	609	PROJECT #	95-067
		JOB ORDER #	34618

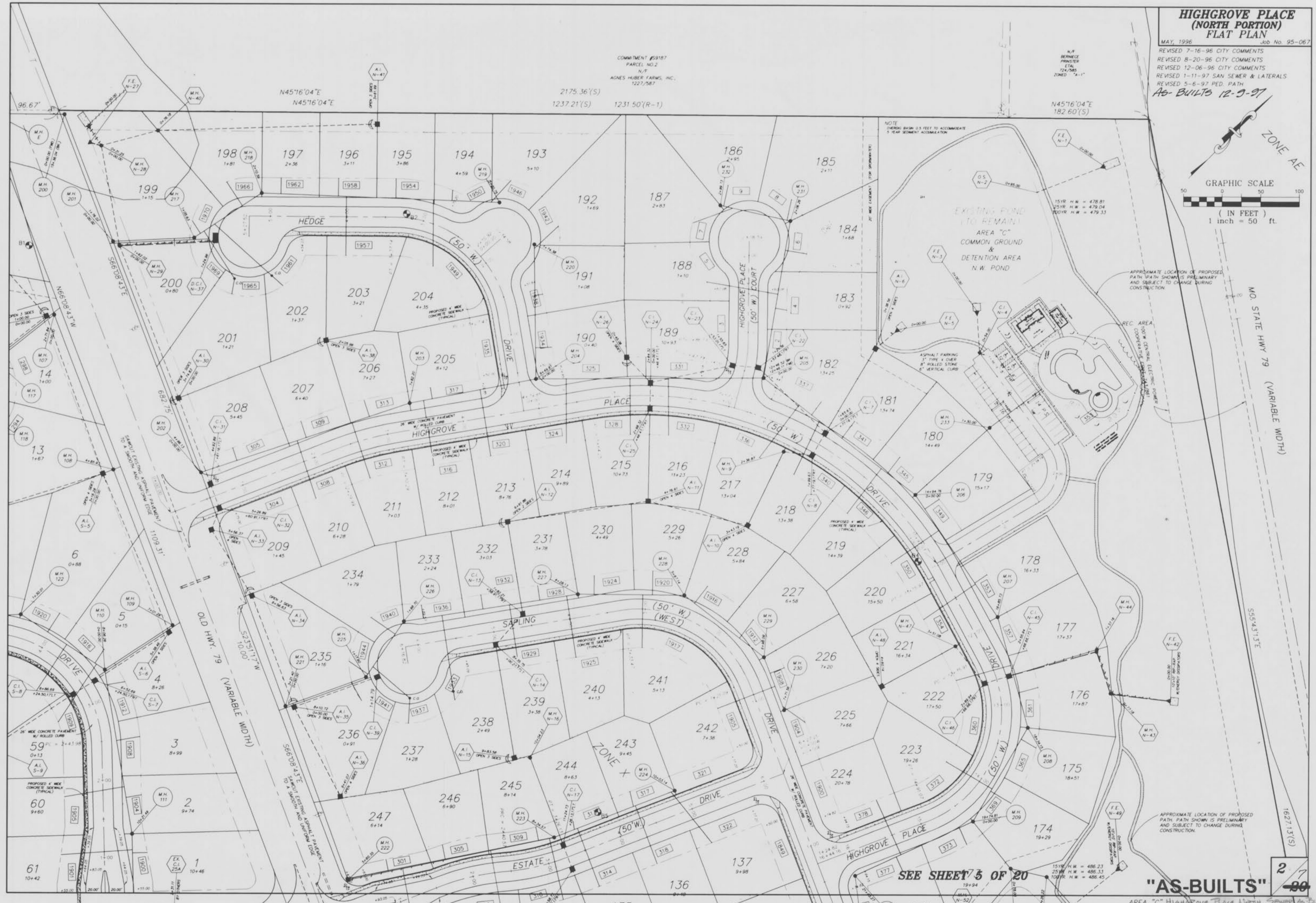
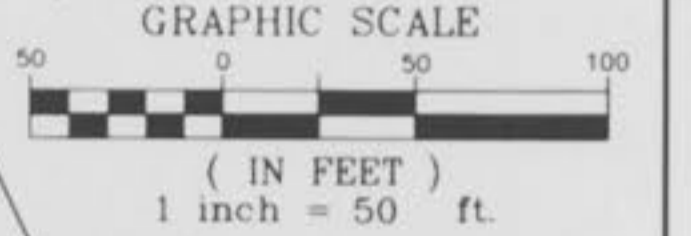
HIGHGROVE PLACE NORTH SEWER AS-BUILTS

**HIGHGROVE PLACE
(NORTH PORTION)
FLAT PLAN**

MAY, 1996 Job No. 95-067
 REVISED 7-16-96 CITY COMMENTS
 REVISED 8-20-96 CITY COMMENTS
 REVISED 12-06-96 CITY COMMENTS
 REVISED 1-11-97 SAN SEWER & LATERALS
 REVISED 5-6-97 PED. PATH
AS-BUILTS 12-9-97

COMMITMENT #59187
 PARCEL NO. 2
 N.P.
 AGNES HUBER FARMS, INC.
 1227,587

N.P.
 BRINCE
 PRINSTER
 ETAL
 724,785
 ZONED "A-1"



NOTE
 CHECK BASH 0.5 FEET TO ACCOMMODATE
 5 YEAR SEDIMENT ACCUMULATION

EXISTING POND
 (TO REMAIN)
 AREA "C"
 COMMON GROUND
 &
 DETENTION AREA
 N.W. POND

APPROXIMATE LOCATION OF PROPOSED
 PATH. PATH SHOWN IS PRELIMINARY
 AND SUBJECT TO CHANGE DURING
 CONSTRUCTION.

REC. AREA
 100' W. CENTRAL ELECTRIC POWER

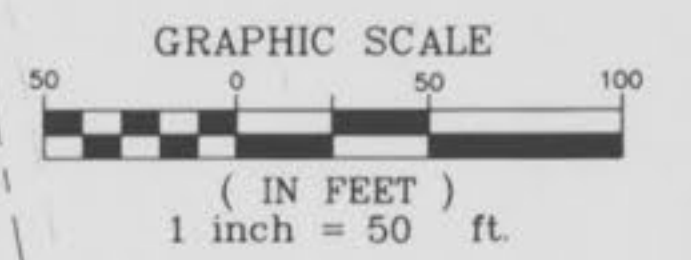
SEE SHEET 5 OF 20

"AS-BUILTS"
 AREA "C" Highgrove Place North Sewer As-Built

**HIGHGROVE PLACE
(NORTH PORTION)
FLAT PLAN**

MAY, 1996
 REVISED 7-16-96 CITY COMMENTS
 REVISED 8-20-96 CITY COMMENTS
 REVISED 12-06-96 CITY COMMENTS
 REVISED 1-11-97 SAN SEWER & LATERALS
 REVISED 5-6-97 PED. PATH
AS-BUILTS 12-9-97

SEE SHEET 4 OF 20



APPROXIMATE LOCATION OF PROPOSED PATH. PATH SHOWN IS PRELIMINARY AND SUBJECT TO CHANGE DURING CONSTRUCTION.

AREA "C"
 COMMON GROUND &
 DETENTION AREA
 N.E. POND
 NOTE
 OVERING BASIN 0.5 FEET TO ACCOMMODATE 2 YEAR SEDIMENT ACCUMULATION.

N/T
 KEEVEN
 8762/P992
 ZONED: "A-1"

N/T
 RANDAL B. PRINSTER
 1496/187
 ZONED: "A-1"

"AS-BUILTS"

3
 99

HIGHGROVE PLACE NORTH SEWER AS-BUILTS

AS-BUILTS 12-9-97
**HIGHGROVE PLACE
 (NORTH PORTION)**
 SANITARY SEWER PROFILES
 MAY, 1996
 Rev. 6-13-96
 0-19
 Rev. 8-20-96
 City Council
 Rev. 1-11-97
 City Council
 Rev. 1-11-97
 City Council
 Rev. 1-11-97
 City Council

FINAL SURVEY
 DATE: 12/9/97
 BY: [Signature]
 CHECKED: [Signature]
 TITLE: [Title]

ORIGINAL SURVEY
 DATE: 12/9/97
 BY: [Signature]
 CHECKED: [Signature]
 TITLE: [Title]



SCALE
 HORIZ 1" = 50'
 VERT 1" = 10'

**HIGHGROVE PLACE
(NORTH PORTION)
SANITARY SEWER PROFILES**

MAY, 1996 Job No. 95-067
 REV. 6-13-96 C.I.A.
 REV. 7-15-96 CITY COMMENTS
 REV. 8-20-96 CITY COMMENTS
 REV. 1-11-97 SAN SEWER & LATERALS
AS-BUILTS-12-9-97

SCALE
 HORIZ 1" = 50'
 VERT 1" = 10'

FINAL SURVEY
 PLATTED
 NOTE BOOK
 DATE

ORIGINAL SURVEY
 PLATTED
 NOTE BOOK
 DATE

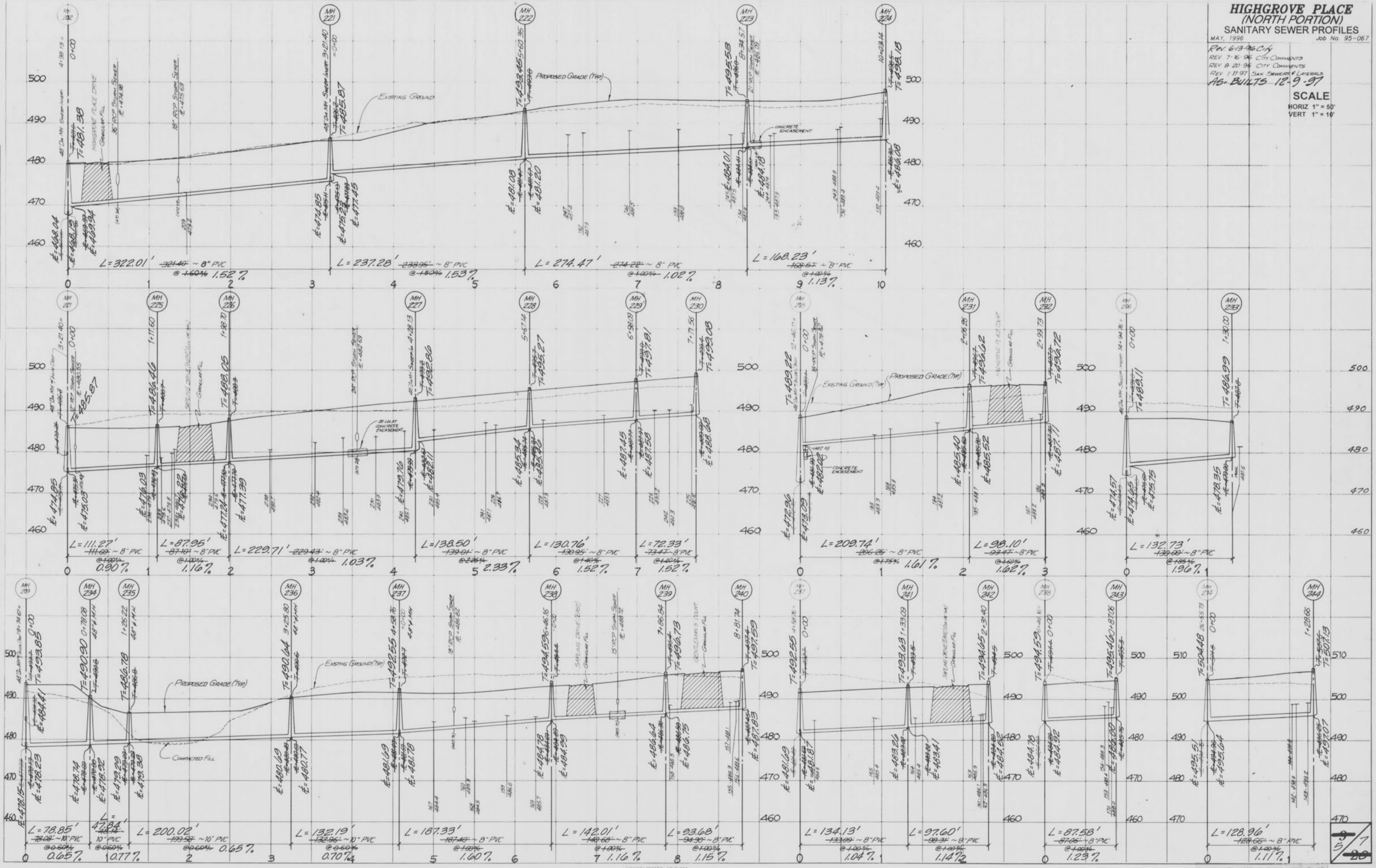


PLATE 3-FULL CROSS SECTION LINE & DOT
 NATIONAL INSTRUMENT

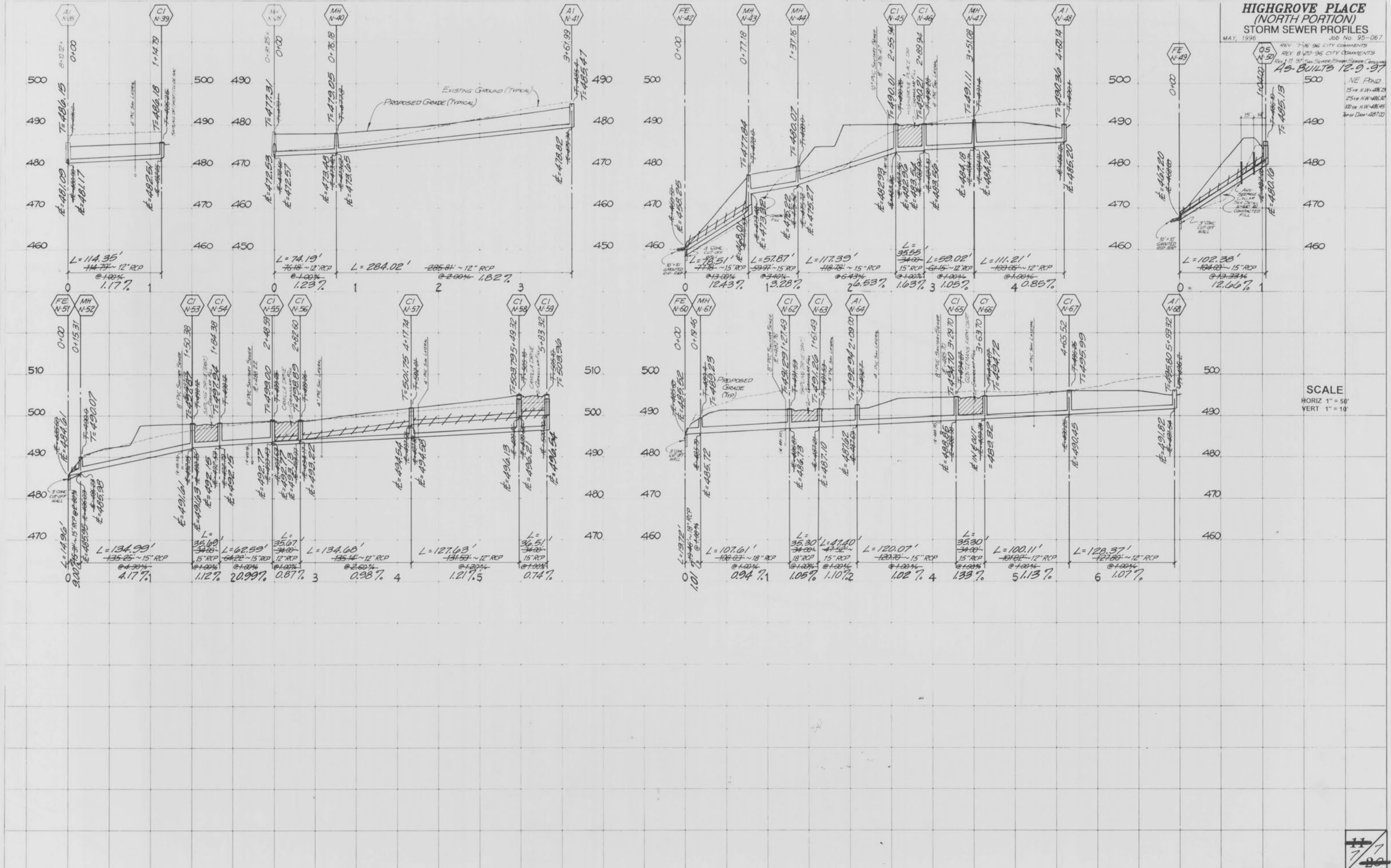
"AS-BUILTS"
 HIGHGROVE PLACE NORTH SEWER AS-BUILTS

**HIGHGROVE PLACE
(NORTH PORTION)
STORM SEWER PROFILES**

MAY, 1996 JOB No. 95-067
REV. 7-16-96 CITY COMMENTS
REV. 8-20-96 CITY COMMENTS
REV. 11-97 City Engineer/Storm Sewer Consultant
AS-BUILTS 12-9-97
NE END
15' x 18" H.W. 485.25
25' x 36" H.W. 485.50
30" x 42" H.W. 485.65
48" Dia. 487.00

FINAL SURVEY
NOTED: SEE PLAN FOR
NOTED: SEE PLAN FOR
NOTED: SEE PLAN FOR

ORIGINAL SURVEY
NOTED: SEE PLAN FOR
NOTED: SEE PLAN FOR
NOTED: SEE PLAN FOR



SCALE
HORIZ 1" = 50'
VERT 1" = 10'