

PLANS FOR CONSTRUCTION OF SANITARY SEWERS, STORM SEWERS,
PAVING, GRADING, AND WATER MAINS FOR:

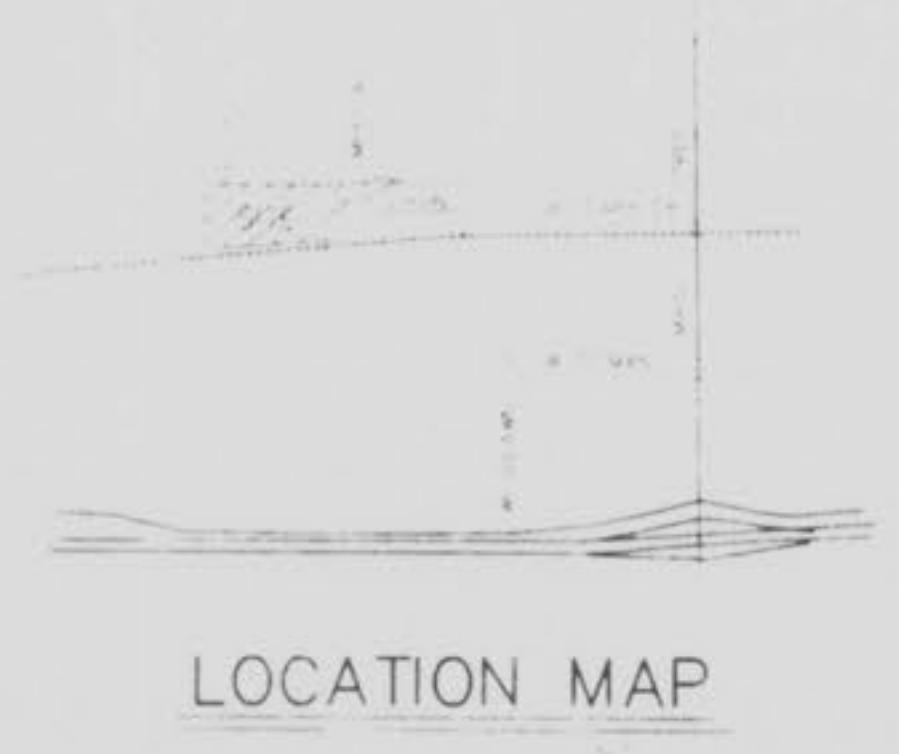
ESTATES
PLATS TWO & THREE

A TRACT OF LAND BEING PART OF SECTION 20 AND PART OF FRACTIONAL SECTION 29
TOWNSHIP 47 NORTH, RANGE 3 EAST, ST. CHARLES COUNTY, MISSOURI

AS-BUILTS

LEGEND

- 1" = 10' (PLAN)
- 1" = 10' (ELEVATION)
- 1" = 10' (SECTION)
- 1" = 10' (DETAIL)
- 1" = 10' (AS-BUILT)
- 1" = 10' (PROPOSED)
- 1" = 10' (EXISTING)
- 1" = 10' (ADJACENT)
- 1" = 10' (COMMON GROUND)
- 1" = 10' (PARK COURT)
- 1" = 10' (CORONATION DRIVE)
- 1" = 10' (EMGE ROAD)
- 1" = 10' (LORETTA DRIVE)
- 1" = 10' (RUSSEL DRIVE)
- 1" = 10' (IMPERIAL DRIVE)
- 1" = 10' (NORFOLK & WESTERN RAILROAD)
- 1" = 10' (STREET CENTER)



LOCATION MAP

GRADING NOTES

1. A Geotechnical Engineer shall be employed by the owner and be on site during grading operations. All soils tests shall be verified by the Geotechnical Engineer concurrent with the grading and backfilling operations.
2. The grading contractor shall perform a complete grading and compaction operation as shown on the plans, stated in these notes, or reasonably implied therefrom, all in accordance with the plans and notes as interpreted by the Geotechnical Engineer.
3. The Contractor shall notify the Soils Engineer at least two days in advance of the start of the grading operation.
4. All areas shall be allowed to drain. All low points shall be provided with temporary ditches.
5. A sediment control plan that includes monitored and maintained sediment control basins and/or straw bales should be implemented as soon as possible. No graded area is to be allowed to remain bare over the winter without being seeded and mulched. Care should be exercised to prevent soil from damaging adjacent property and silting up existing downstream storm drainage system.
6. Soft soil in the bottom and banks of any existing or former pond sites or tributaries should be removed, spread out and permitted to dry sufficiently to be used as fill. None of this material should be placed in proposed right-of-way locations or on storm sewer locations.
7. Site preparation includes the clearing of stumps, trees, bushes, shrubs, and weeds, the grubbing and removal of rocks and other surface obstructions from the site, and the demolition and removal of any man-made structures. The unsuitable material shall be properly disposed of off-site. Topsoil and grass in the #1 areas shall be thoroughly dried prior to the placement of dry fill. The Soils Engineer shall approve the drying operation.
8. Construction equipment shall consist of trenchers, rollers, pneumatic-tired trucks, vibratory plate or high speed impact type drum rollers acceptable to the Soils Engineer. The roller shall be designed and used to avoid the creation of ruts, ripples, or other surface irregularities on the subgrade.
9. The Soils Engineer shall be notified of the placement of fill. To verify that spots of the fill meet a 95% compaction density, tests will be determined on each 1000 sq. ft. surface. Results showing a quality which is below the level of regular interests.
10. The Soils Engineer shall notify the Contractor of rejection of a lift of fill or portion thereof. The Contractor shall rework the rejected portion of fill and obtain approval from the Soils Engineer of its acceptance prior to the placement of additional fill.
11. All areas to receive fill shall be scarified to a depth of not less than 6 inches and then compacted in accordance with the specifications given below. Natural slopes steeper than 1 vertical to 5 horizontal to receive fill shall have horizontal benches cut into the slopes before the placement of any fill. The width and height to be determined by the Soils Engineer. The fill shall be loosely placed in horizontal layers not exceeding 8 inches in thickness and compacted in accordance with the specifications given below. The Soils Engineer shall be responsible for determining the acceptability of soils placed. Any unacceptable soils placed shall be removed at the Contractor's expense.
12. The sequence of operation in the fill areas will be to compact, verify acceptable soil density, and repetition of the sequence. The acceptable moisture contents during the filling operation are those at which satisfactory dry densities can be obtained. The acceptable moisture contents during the filling operation in the remaining areas are from 2 to 8 percent above the optimum moisture content.
13. The surface of the fill shall be finished so that it will not impound water. If at the end of a day's work it will be apparent that there may be any ponding, the surface shall be graded and the surface shall be finished and graded. If the surface has been finished smooth, it shall be scarified and shall be scarified before proceeding with the placement of succeeding lifts. It shall not be placed on frozen ground nor shall filling operations continue when the temperature is such as to prevent the lower subgrade from freezing.

GENERAL NOTES

1. Underground utilities have been plotted from available information and therefore their locations shall 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 any grading or construction of the improvements.
2. All manhole tops built without elevations furnished by the Engineer will be the responsibility of the sewer contractor.
3. 8" P.V.C. sanitary sewer pipe shall meet the following standards: A.S.T.M. D-3034 SDR-35, with wall thickness compression joint A.S.T.M.-D-3212. An appropriate rubber seal waterstop as approved by the sewer district shall be installed between P.V.C. pipe and masonry structures.
4. All filled places, including trench backfills, under buildings, proposed storm and sanitary sewer lines and/or paved areas and all filled places within public roadways shall be compacted to 95% of maximum density as determined by the "Standard Proctor Test" AASHTO T-99, Method C ("A.S.T.M." -69B).
5. All trench backfill under paved areas shall be granular backfill, and shall be compacted to 90% of the maximum density as determined by the "Modified AASHTO T-99 Compaction Test" ("A.S.T.M." -1557). All other trench backfills may be earth material (free of large clods or stones). All trench backfills shall be water jetted.
6. A sanitary house connection has been designed so that the minimum vertical distance from the low point of the basement to the top of a sanitary sewer at the corresponding house connection is not less than the diameter of the pipe plus the vertical distance of 2 1/2 feet.
7. No work shall be moved without the permission of the Project Engineer.
8. All grades shall be within 1/4" of the grade shown on the grading plan.
9. No slope shall be steeper than 1 to 5 unless specifically noted on the plans. All slopes shall be graded and seeded with grass.
10. All backfill shall be verified by the Soils Engineer concurrent with the grading and backfilling operations.
11. Easements shall be provided for sanitary sewers, and all other utilities as shown on the Record Plat for this subdivision.
12. Maintenance and upkeep of the common ground areas shall be the responsibility of the developer and/or successors.
13. A 25' building line shall be established along all 150' frontage lots.
14. All water lines shall be laid at least 10 feet horizontally from any sanitary sewer, storm sewer, or manhole. Whenever water lines must cross sanitary sewers, storm sewers, or manholes the water line shall be laid at such an elevation that the bottom of the water line is above the top of the drain or sewer. A full length of water pipe shall be centered over the sewer line to be crossed so that the joints will be evenly spaced from the sewer and as remote therefrom as possible. This vertical separation shall be maintained for that portion of the water line located within 10 feet horizontally of any sewer or drain it crosses.
15. All P.V.C. water mains shall have a minimum pressure rating of 100 PSI or 150 PSI.
16. Water lines, valves, meters, and fittings shall meet all specifications and installation requirements of the City of O'Fallon.
17. All water hydrants and valves shall be ductile iron and installed in accordance with plans and details. All ductile iron pipe for water mains shall conform to A.W.W.A. specifications 106 and/or C-106. The ductile iron fittings shall conform to A.W.W.A. Specification C-106. All water gasket joints for water ductile iron pressure pipe and fittings shall conform to A.W.W.A. Specification C-106.
18. All lots with minimum basement floors to park elevation, which are:

20. All sanitary manholes shall be waterproofed on the exterior in accordance with Missouri Department of Natural Resources specifications 10 CSR 8-120 (7)E.
21. The grading yardage shown on the drawings is an approximation only, and is not for bidding purposes. The contractor shall verify quantities prior to construction. It is the intention of the Engineer for the earthwork to balance on-site. The Engineer shall be notified if any difficulties arise in achieving the balance.
22. Brick will not be used in the construction of sanitary sewer manholes.
23. All pipes shall have positive drainage through manholes. No flat base structures are allowed.
24. All sanitary sewer manholes to be 48 inch minimum inside diameter in accordance with Missouri Department of Natural Resources specification 10 CSR 20-8.
25. The City of O'Fallon shall be notified 48 hours prior to construction for coordination and inspection.
26. All sanitary structures will be pre-cast and coated per Mo. D.N.R. SPEC. 10 CSR 20-8.

DEVELOPMENT NOTES

1. Existing zoning: P-1 P.U.D.
2. Number of lots Proposed: 28 Lots
3. Area of Tract: 10.75 acres
4. Minimum lot Area: 10,000 sq ft
5. The proposed height and setbacks are as follows:
Minimum Front yard: 25 feet
Minimum Side yard: 5 feet
Minimum Rear yard: 25 feet
Maximum Height of Building: 2 1/2 stories or 35 feet
6. Current Owner of Property: R & D EMGE, INC.
306 Imperial Drive
O'Fallon, MO 63366
314-281-1274
7. Site Checked by:
City of O'Fallon Sewer District
Urban Electric Company
O'Fallon Gas Company
City of O'Fallon Water Company
AT&T Telephone Company
St. Zumwalt School District
O'Fallon Fire Protection District
8. Boundary information is per survey by Pickett, Ray & Silver dated June, 1982.
9. Topographic information is per topographic survey by Pickett, Ray & Silver during June, 1982.
10. All streets will be constructed to City of O'Fallon standards. Streets will consist of 26 foot wide concrete pavement with integral rolled curb centered in a 50 foot right-of-way. Minimum radius shall be 150 feet.
11. All lot side yards will have pavement road of 42 feet with right-of-way road of 54 feet. Street intersection shall have a minimum rounding radii of 25 feet with pavement road of 37 feet.
12. Minimum street grades shall be 1%.
13. The maximum house size will be 1,100 square feet.
14. All utilities must be located underground.
15. Signs, posted devices shall be approved by the City Engineer. Additional signs and devices required will be placed at the discretion of the Soils Engineer at site and the City Engineer prior to construction.
16. The Engineer shall comply with Green Tree Preservation Ordinance Number 200-10-100, as amended, which is located in Article 20 of the City of O'Fallon Code.
17. A 10 foot wide concrete sidewalk shall be constructed on the side of all streets where indicated.
18. All houses shall have a minimum of 100 sq. feet parking area with upper garages.
19. The following information is for the City of O'Fallon:
The Engineer shall provide a copy of the final plans to the City of O'Fallon for their review and approval. The City of O'Fallon shall be notified 48 hours prior to construction for coordination and inspection.



KEY MAP

SHEET INDEX

- 1 OF 4 - COVER SHEET
- 2 OF 4 - SITE PLAN
- 3 OF 4 - GRADING SHEET
- 3 OF 4 - WATER PLAN
- 5 OF 4 - STREET PROFILES
- 4 OF 4 - SEWER PROFILES
- 7 OF 4 - DRAINAGE AREA MAP
- 8 THRU - DETAIL SHEETS

This is to certify that the following as-built locations were located in the field and are correctly shown herein.

Neal J. Niswald, MO, Reg. L.S. #2117

AS-BUILTS ADDED JULY, 1995

PREPARED FOR:
R & D EMGE INC.
306 IMPERIAL DRIVE
O'FALLON, MO 63366
314-281-1274

DISCLAIMER OF RESPONSIBILITY
The undersigned hereby certifies that the documents contained herein are true and correct copies of the original documents and that the undersigned is not responsible for any errors or omissions in the original documents or in any copies thereof.

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REVISIONS

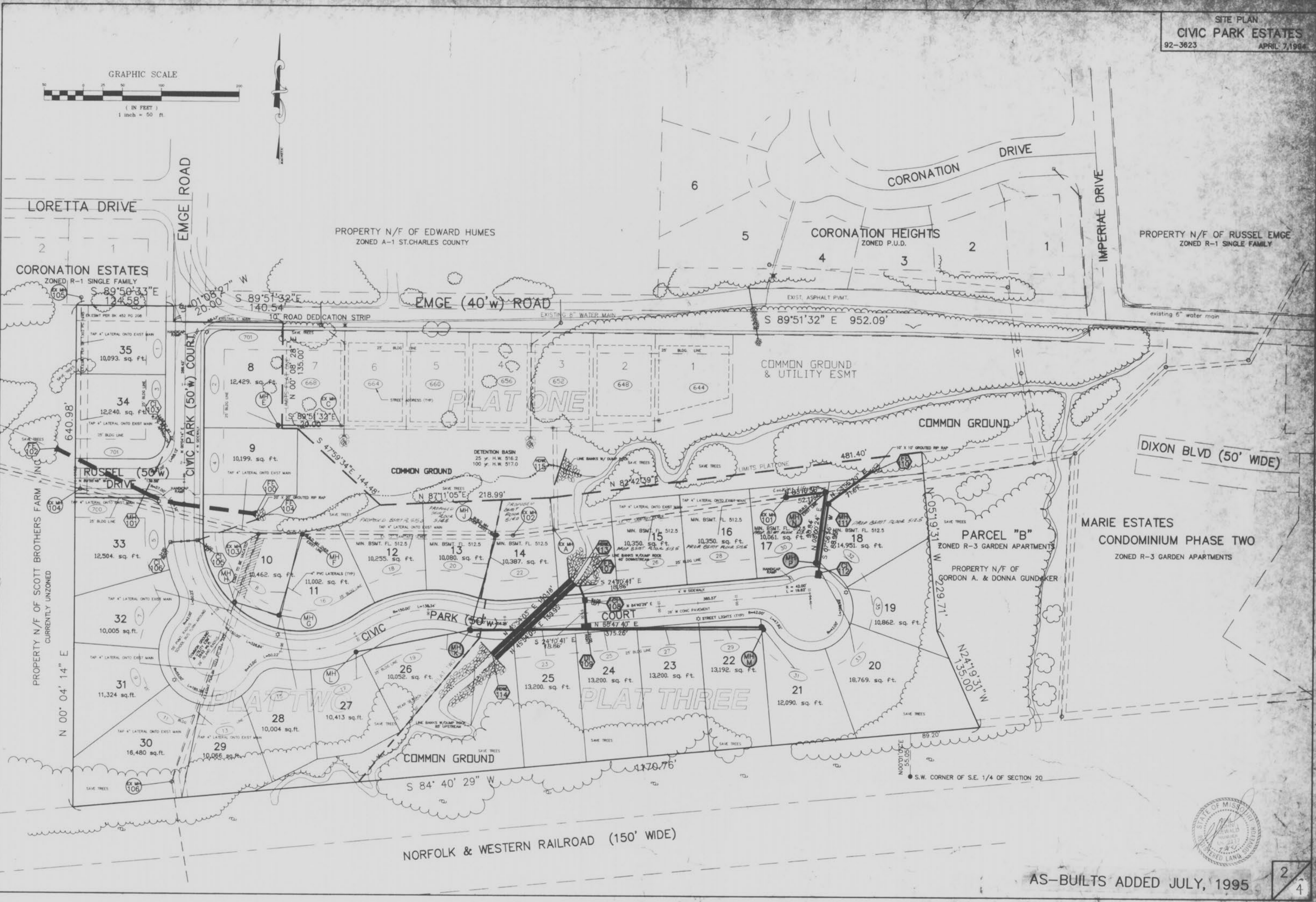
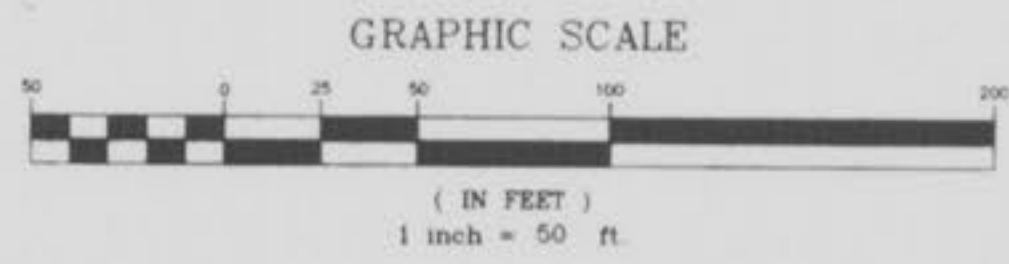
NO.	DATE	DESCRIPTION



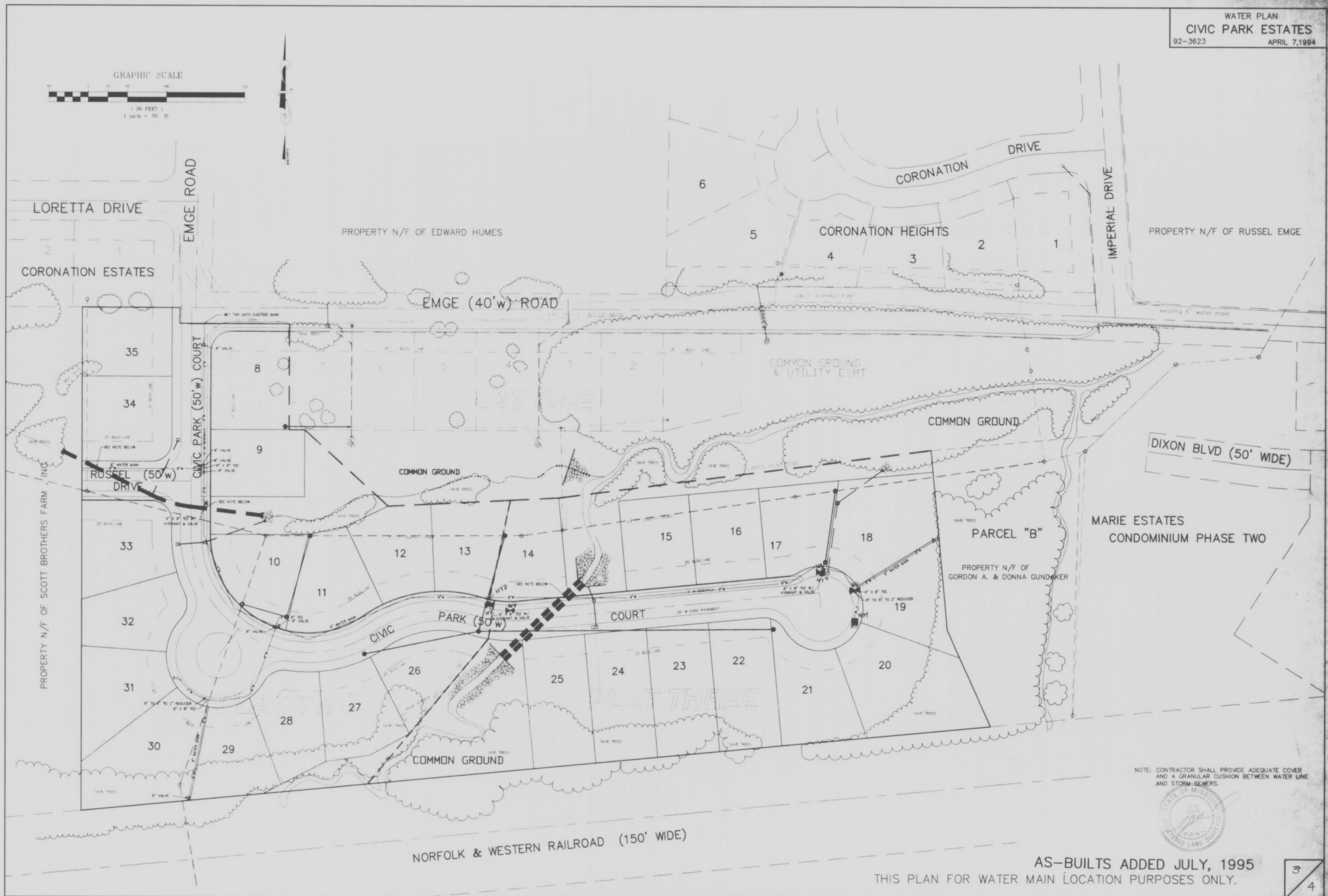
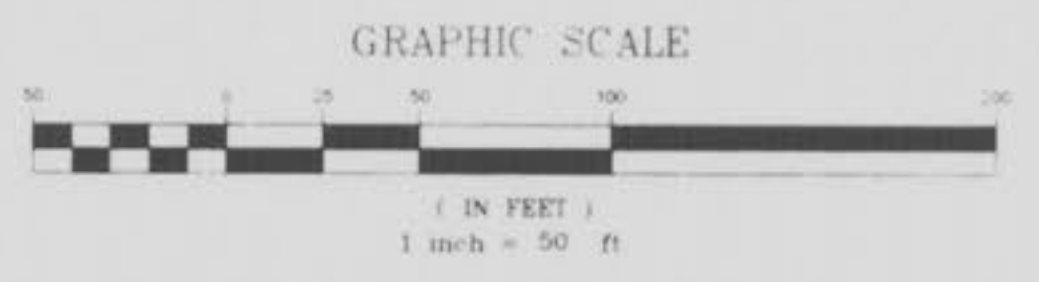
221 Point West Boulevard
St. Charles, MO. 63301
314-946-8588
314-724-3330
FAX 947-9182

APRIL 7, 1994
DATE
92-3623
PROJECT NUMBER
1 OF 4
SHEET OF
3623CON.DWG
FILE NAME
BJB
DRAWN BY
CHECKED

City of O'Fallon
July 20, 1995



AS-BUILTS ADDED JULY, 1995



NOTE: CONTRACTOR SHALL PROVIDE ADEQUATE COVER AND A GRANULAR CUSHION BETWEEN WATER LINE AND STORM SEWERS.



AS-BUILTS ADDED JULY, 1995
 THIS PLAN FOR WATER MAIN LOCATION PURPOSES ONLY.

Civic Park Estates
 Plot 247

SEWER PROFILES
CIVIC PARK ESTATES
N. 3423 APRIL 7, 1994

FINAL SURVEY

ORIGINAL SURVEY

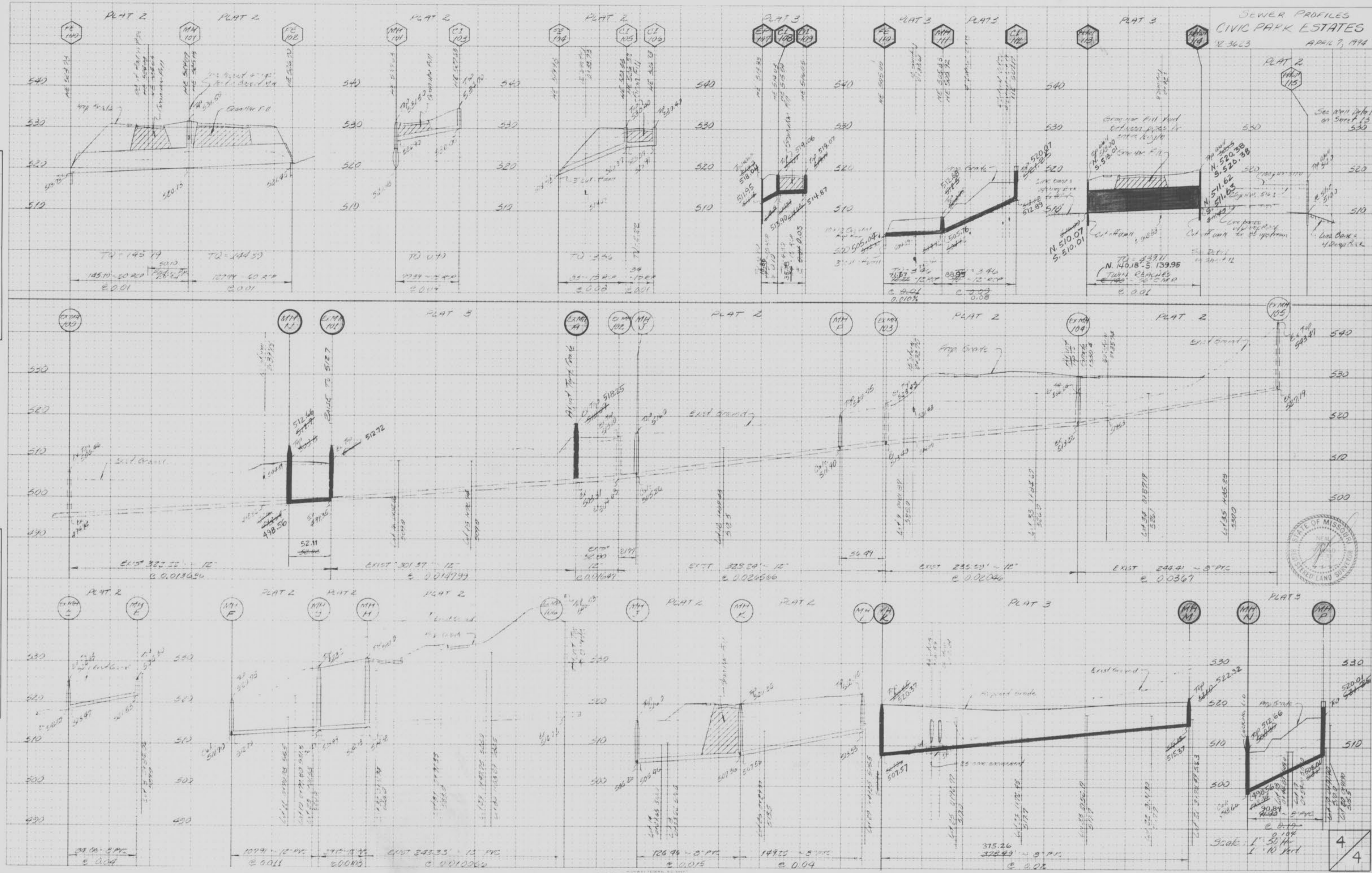


PLATE 3 FULL CROSS SECTION FULL LINE

AS-BUILTS ADDED JULY, 1995

Civic Park Estates
Plat 2 & 3 As-Built