

CHADWYCK

A TRACT OF LAND IN SECTION 34,
TOWNSHIP 47 NORTH, RANGE 3 EAST, CITY OF O'FALLON,
ST. CHARLES COUNTY, MISSOURI

IMPROVEMENT PLANS PHASE TWO

ENG. FILE COPY
APPROVED
FOR TRENCH DRAIN
9.23.99
CHADWYCK

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CD-1 THRU CD-4

GENERAL NOTES:

- All construction methods, materials and practices shall conform to all current applicable specifications of the governing agencies.
- Any destruction of existing improvements or features shall be repaired or replaced in kind by the Contractor and shall remain the Contractor's responsibility.
- 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.
- It shall be distinctly understood that failure to mention specifically any work which would normally be required to complete the project shall not relieve the contractor of his responsibility to perform such work.
- Contractor shall keep road clear of mud and debris.
- Easements shall be provided for storm sewers, sanitary sewers, and all utilities on the record plat. See record plat for location and size of easements. This does not apply to house laterals.
- All streets must meet the specifications and installation requirements of the City of O'Fallon.
- This tract is in or served by:
 - Water - Missouri American Water Company
 - Electric - Union Electric Company
 - Telephone - Southwestern Bell Telephone Company
 - Sewer - City of O'Fallon connecting into St. Peters
 - Gas - Laclede Gas Company
 - Fire Protection - City of O'Fallon Fire Protection District
 - School District - Fort Zumwalt School District
- Lot Data:
 - Total Lots - 277
 - Minimum Lot Size - 7500 sq. ft.
 - Minimum Lot Width at Building Line - 70 ft.
- Yard and Setback Requirements:
 - Front - 25 ft.
 - Side - 6 ft.
 - Rear - 25 ft.

SEWER CONSTRUCTION NOTES:

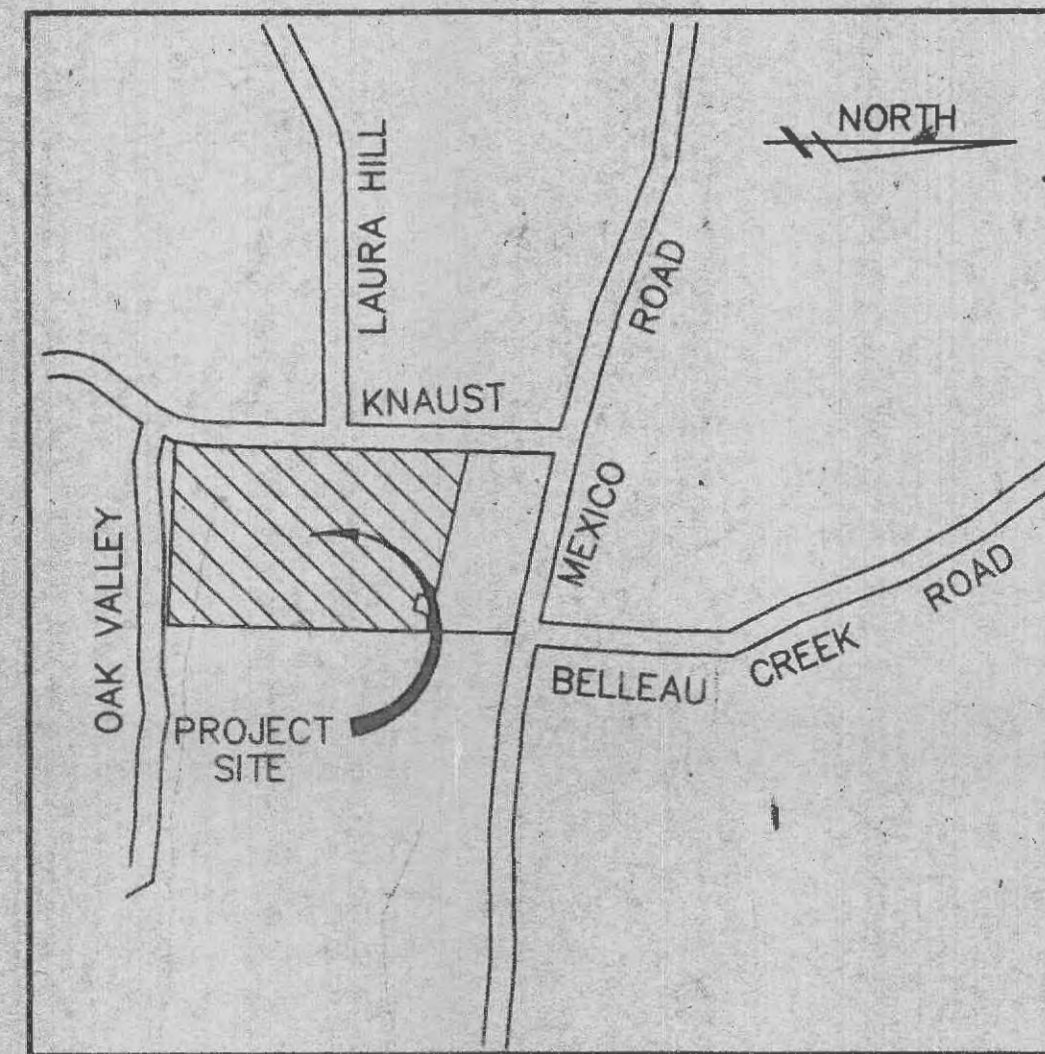
- All storm and sanitary sewer construction methods to conform to latest standards and specifications of the applicable codes and shall conform to all appropriate City of O'Fallon standards.
- After all sewers and appurtenances are completed, inspected and accepted, the contractor will be permitted to connect the sewer extension into the existing system, in the presence of an inspector.
- Drainage pipe shall be reinforced concrete class III except as noted on plans.
- Joining material for Poly Vinyl Chloride (PVC) Sanitary Sewers shall conform to ASTM Specification D-3212. All PVC pipe shall conform to ASTM D-3034, Type PSM with a SDR rating of 35 or lower.
- Manhole frames and covers shall be standard frames and covers as approved by the governing authority.
- Trenches under existing pavement and under areas to be paved shall be backfilled with 3/4" minus crushed limestone and compacted to 90% of the maximum dry density as determined by the modified proctor test.
- In all areas where sewer and appurtenances are to be constructed in filled ground, the fill will be placed to approximate finish grade and compacted to 90% of maximum dry density as determined by the modified proctor test prior to the excavating and installing pipe.
- The sewer contractor may construct the building sewer laterals in conjunction with the sanitary main, trunk or lateral sewers, within development, provided that the building sewer lateral terminates five (5) feet, or more, outside the proposed, or existing building line or foundation wall.
- All manhole and inlet tops built without elevations furnished by the engineer will be the responsibility of sewer contractor. At the time of construction stake-out of the sewer lines, all curb and grate inlets will be face staked, provided said stakes do not fall in the ditch line. If stakes fall within the ditch line the sewer company or job superintendent shall notify the engineer that stakes are needed and allow 48 hours for cuts. Tops of manholes, inlets, valve boxes, etc. shall conform to Finish Grade.
- All standard street curb inlets to have front of inlet two feet (2.25) behind curb. All area inlets open 4 sides except as noted.
- All sanitary building connections have been designed so that the minimum vertical distance from the low point of the finished floor to the flow line of a sanitary sewer at the corresponding building connection is not less than the diameter of the pipe plus a vertical distance of 2-1/2 feet.
- All filled areas, including trench backfills, under building, proposed storm and sanitary sewer lines, and paved areas shall be placed in a maximum of 9" lifts and compacted to a minimum of 90 percent of maximum dry density as determined by the Modified AASHTO Compaction Test, ASTM D1557, unless otherwise recommended in the Soils Report for this project. Tests shall be taken at a maximum of 50 foot intervals along the route of the pipe, at a maximum of two foot vertically, and starting at the bottom of the fill and continuing through the fill to the top of the pipe at 6" intervals and laterally on each side of the pipe for a distance equal to the depth of fill from the top of pipe to virgin soil.
- When PVC pipe is used, appropriate rubber seal waterstop, as approved by the sewer district, shall be installed between PVC pipe and masonry (concrete & brick) structure.
- It is the contractor's responsibility to confirm the location of existing utilities and/or underground facilities by notifying utility companies prior to construction.
- Gas, water and other underground utilities shall not conflict with the depth or horizontal location of existing and proposed sanitary and storm sewers including building laterals.
- All construction methods and materials used shall conform to current applicable standards.
- Shop drawings are required for construction of non-standard reinforced concrete structures.
- Face of curb inlets shall be flush with face of vertical curb when used.
- All storm and sanitary trench backfills shall be water jetted.
- All sanitary manhole tops 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 Deeter 1315 or approved equal.
- A drop of 0.2 feet is required through each sanitary & storm manholes and inlets.
- 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.
- All exterior sanitary sewer manholes shall be waterproofed on the exterior in accordance with Missouri Dept. of Natural Resources specifications 10 CSR-8.120(7)(E).
- All PVC sanitary sewer pipe is to be SDR-35 or equal with "clean" 1/2 inch to 1 inch granular stone bedding uniformly graded. This bedding shall extend from 4 inches below the pipe to springline of pipe. Immediate backfill over pipe shall consist of same size "clean" or "minus" stone from springline of pipe to 6 inches above the top of pipe.
- All pipes shall have positive drainage through manholes.
- Sanitary sewer connections shall be as approved by the St. Peters Sewer District.

GRADING SPECIFICATIONS:

- All fill areas to be compacted to a minimum of 90 percent of maximum dry density as determined by the Modified AASHTO compaction Test, ASTM D1557-78, or as specified by the soils engineer.
- It shall be the grading contractor's responsibility to notify the soils engineer prior to work in progress and to comply with recommendations by the soils engineer with regards to Compaction surface preparation and placement of fill.
- It shall be the grading contractor's responsibility to provide the location of any existing underground utilities by notifying utility companies prior to grading operations.
- All grading adjustments shall be submitted in writing and approved by the City of O'Fallon.
- The grading contractor shall cut or fill to subgrade elevation under all areas to be paved. Subgrade depth is 1.0 foot below proposed finished elevations on Knaut Road relocation and 0.5' on all other streets.
- All drainage swales shall be sodded or seeded and mulched to prevent erosion.
- All rough grading is to be completed within +/- 0.2' and all subgrade to be +/- 0.1'.
- All stumps, limbs, and other debris are to be removed from the site unless a suitable dump area is approved in advance by the owner after consulting with the soils engineer if burning is approved.
- Subgrade is included in the total bid yardage. (Subgrade is figured at pavement depth.)
- Slope to receive fill which are steeper than 5:1 should be benched prior to placement of fill.
- If fill is to be placed in areas of soft soil, particularly in draws, drainage channels and other low lying areas, the soft soil shall be excavated until firm soil is encountered.
- All grading shall comply with the soils engineer's recommendations.

SILTATION CONTROL NOTES:

- Siltation controls will be installed prior to any grading or construction operations and shall be inspected and maintained as necessary to insure their proper function until sufficient vegetation has been established to prevent erosion.
- The installation and maintenance of all siltation controls shall be the responsibility of the developer.
- Additional siltation controls may be required as directed by the local governing authority.
- All grading area shall be protected from erosion by erosion control devices and/or seeding and mulching as required by the City of O'Fallon.
- When utilized temporary siltation pond(s) and/or outfall structure shall be completely removed following re-establishment of vegetation. Pond(s) shall be back filled, compacted, and leveled to provide positive drainage (min. 2% slope), and then seeded and mulched.
- No earth slope shall exceed 3:1 max.



NOT TO SCALE
LOCATION MAP

EXISTING	LEGEND	PROPOSED
542	CONTOURS	(542)
536	SPOT ELEVATIONS	(536)
---	CENTER LINE	---
---	BUILDINGS, ETC.	---
---	TREE LINE	---
---	FENCE	---
---	STORM SEWERS	---
---	SANITARY SEWERS	---
---	CURB INLET	---
---	AREA INLET	---
---	GRATED INLET	---
---	STORM MANHOLE	---
---	SANITARY MANHOLE	---
---	FLARED END SECTION	---
---	CLEANOUT	---
---	LATERAL CONNECTION	---
PP	UTILITY OR POWER POLE	PP
FH	FIRE HYDRANT	FH
○	TEST HOLE	●
---	PAVEMENT	---
2" G	GAS MAIN & SIZE	2" G
6" W	WATER MAIN & SIZE	6" W
T	TELEPHONE	T
E(U)	ELECTRIC (U) UNDERGROUND	E(U)
E(O)	ELECTRIC (O) OVERHEAD	E(O)
E	FLOW LINE	E
---	TO BE REMOVED	---
TC	TOP OF CURB	TC
---	SWALE	---
○	LIGHT STANDARD	●
---	STREET SIGN	---

PROJECT ZIP CODE 63376
○ DENOTES LOT ADDRESS

These plans have been reviewed by Brucker Earth Engineering & Testing Inc. for their compliance regarding geotechnical recommendations relative to site development. Based on this review and available subsurface information, it is our opinion that the site may be constructed in accordance with the plans, good construction practices, and the recommendations given in the geotechnical report of June, 1996.

We have not prepared any part of these plans and my seal on these plans is intended only to confirm my personal review and approval of the site grading plan as it relates to the stability of earth slopes.

Brucker Earth Engineering & Testing Inc. must be involved during the construction phase of this project in order to determine if subsurface conditions are as anticipated from the field exploration data, that our recommendations relative to site grading are implemented, and that other geotechnical aspects of site development are performed in accordance with these plans.

BRUCKER EARTH ENGINEERING & TESTING INC.

Daniel J. Cottin, P.E.

STATE OF MISSOURI
NO. 182388
GEORGE J. GOWER
Vice President
MO Res. L.S. #2388

PROJECT BENCHMARK:

580.06 - N.E. Corner concrete porch of house on south side of Mexico Road first house east of Belleau Creek Road.

THE UNDERGROUND UTILITIES SHOWN HEREON WERE PLOTTED FROM AVAILABLE INFORMATION AND DO NOT NECESSARILY REFLECT THE ACTUAL EXISTENCE, NONEXISTENCE, SIZE, TYPE, NUMBER OR LOCATION OF THESE OR OTHER UTILITIES. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ACTUAL LOCATION OF ALL UNDERGROUND UTILITIES, SHOWN OR NOT SHOWN, AND SAID UTILITIES SHALL BE LOCATED IN THE FIELD PRIOR TO ANY GRADING, EXCAVATION OR CONSTRUCTION OF IMPROVEMENTS. THESE PROVISIONS SHALL IN NO WAY ABSOLVE ANY PARTY FROM COMPLYING WITH THE UNDERGROUND FACILITY SAFETY AND DAMAGE PREVENTION ACT, CHAPTER 319, RSMo

ISSUE REMARKS/DATE

1	10/18/96	11/20/96
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DRAWN: CHADWYCK
DESIGNED:
CHECKED: FJ

PROJECT: CHADWYCK
SHEET TITLE: COVER SHEET

NO. 95 08 193
M.S.D. P# 1
SHEET 1 OF 31

DIGITAL FILE LOCATION
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BASE MAP