

- 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.
  - City approval of the Construction site plans does not mean that single family and two family dwelling units can be constructed on the lots without meeting the building setbacks as required by the Zoning Code.
  - Prior to issuance of building permits for more than 30% of the total units, building permits for all recreation amenities shall be pulled and prior to issuance of building permits for 40% if the total units all recreational amenities be opened for use.

- GRADING SPECIFICATIONS:**
- All fill areas to be compacted to a minimum of 90 percent of maximum dry density as determined by the Modified AASHTO T-190 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.
  - The grading contractor shall cut or fill to subgrade elevation under all areas to be paved. Subgrade depth is 0.5 foot below proposed finished elevations.
  - All drainage swales shall be sodded or seeded and mulched to prevent erosion.
  - 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 areas of excavation and other low lying areas, the soft soil shall be excavated and removed to a suitable area.
  - All grading shall comply with the soils engineer's recommendations.
  - Grading exceeding 3:1 slope shall be done at the direction of a Soils Engineer registered in the State of Missouri.
  - All grading shall conform to the City of O'Fallon specifications.

- SITATION CONTROL NOTES:**
- Sitation control will be installed prior to any grading or construction operations and shall be inspected and maintained as required 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 control may be required as directed by the local governing authority.

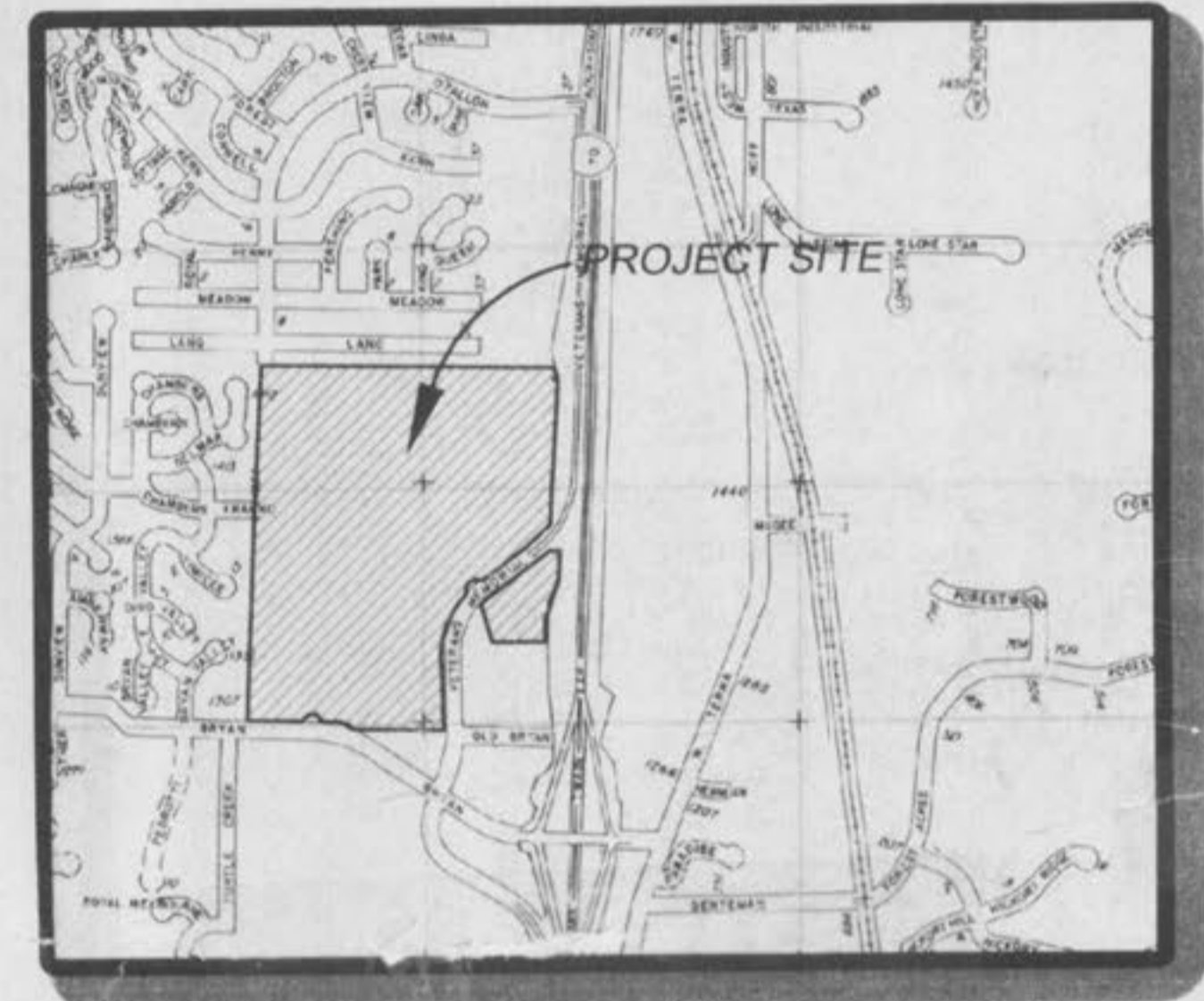
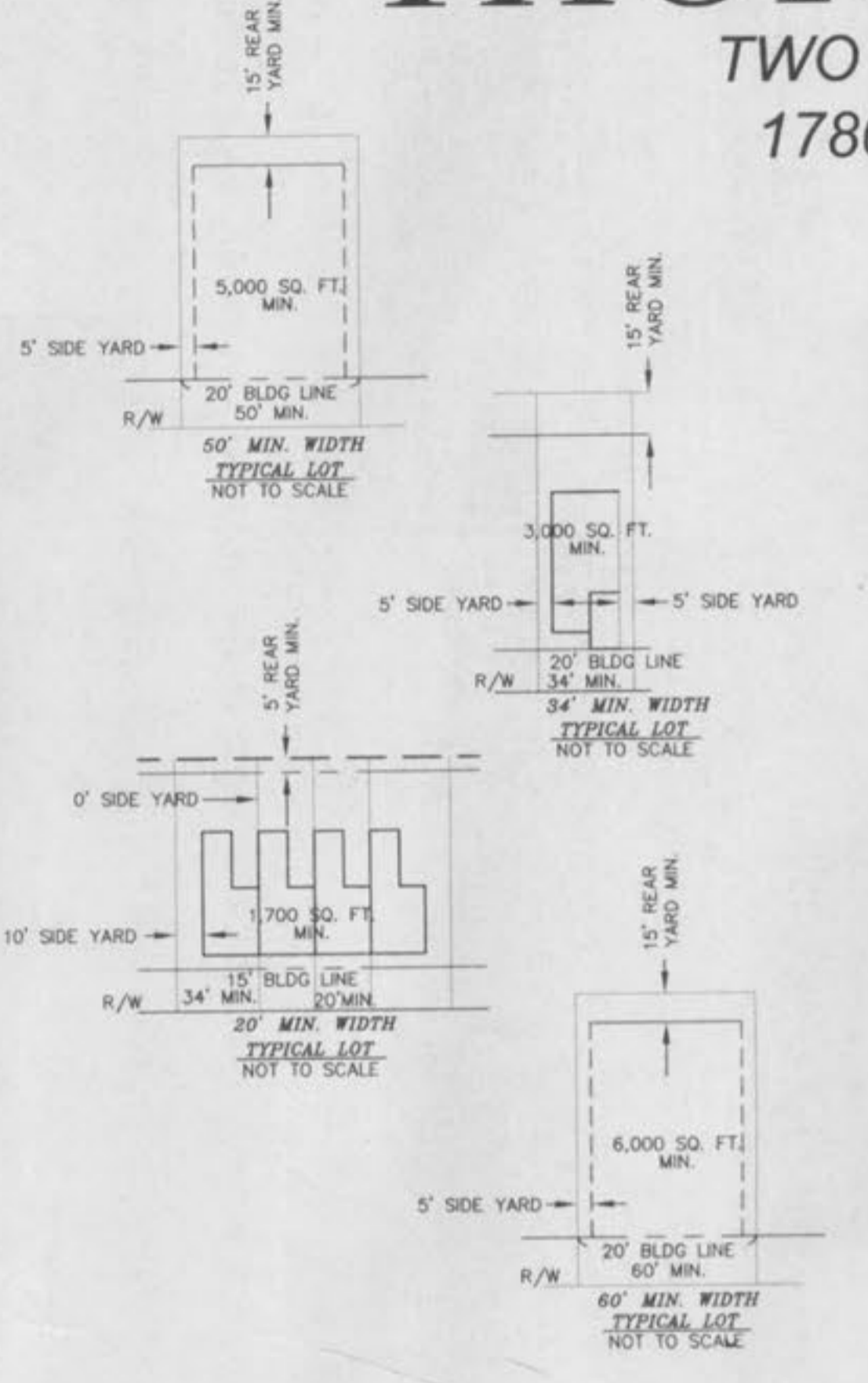
- SEWER CONSTRUCTION NOTES:**
- Public storm and sanitary sewer construction methods to conform to latest standards and specifications of the applicable codes and shall conform to all appropriate The City of O'Fallon.
  - All sewers and appurtenances are completed, inspected and accepted, the contractor will be permitted to connect the sewer extension into the existing system, in the presence of the Inspector.
  - Manhole pipe shall be reinforced concrete class III except as noted on plans.
  - Installation shall conform to The City of O'Fallon Standards and Specifications.
  - Jointing material for Poly Vinyl Chloride (PVC) Sanitary Sewers shall conform to ASTM specification D-3212. All poly vinyl chloride (PVC) pipe shall conform to ASTM D-3034 type PSM with a SDR rating of 35, or lower.
  - Manholes shall be precast conforming to A.S.T.M. C-478 and shall have 31 mils of asphalt or coal tar pitch waterproof applied to the outside of each sanitary manhole. All manholes shall be 48" minimum diameter.
  - Inches under existing pavement and under areas to be paved shall be backfilled with 1/4" minus crushed limestone.
  - 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% maximum dry density, as determined by modified proctor test, prior to the excavating and installing pipe.
  - Manhole and inlet tops built without elevations furnished by the engineer will be the responsibility of the Sewer Contractor. At the time of construction stake-out curb or grate inlets will be face staked, provided said stakes do not fall in the ditch line. If stakes fall within the ditch line the contractor or job superintendents shall notify the engineer that stakes are needed and allow 48 hours for cuts. Tops of manholes, inlets, valve boxes, etc. shall conform to Finished Grade.
  - All standard street curb inlets to have front of inlet two and one quarter (2.5) feet behind curb.

- All filled areas, including trench backfills, under buildings, proposed storm and sanitary sewer lines, public right-of-way and paved areas shall be compacted to a minimum of 90% of maximum dry density as determined by the Modified AASHTO Compaction Test, ASTM D-1557, unless otherwise recommended in the Soils Report for this project.
- 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.

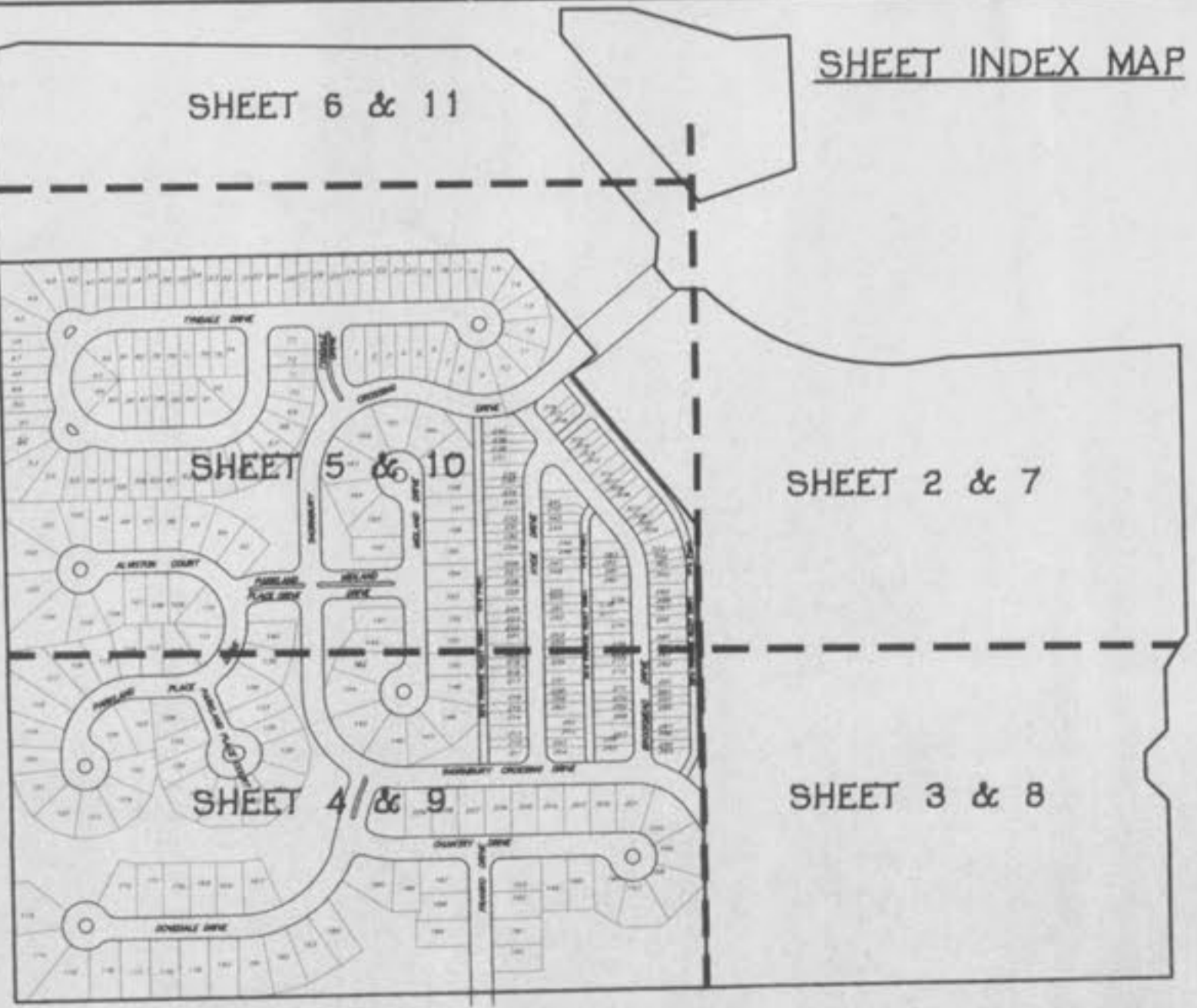
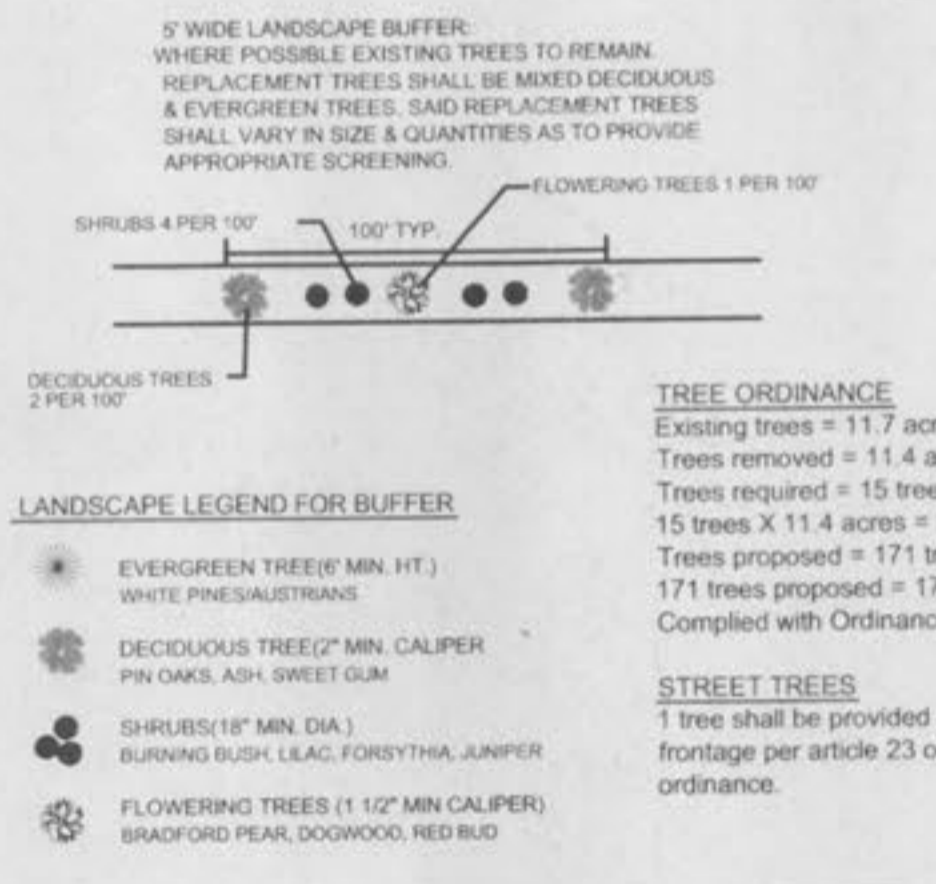
# THORNBURY CROSSING

TWO TRACTS OF LAND BEING PART OF U.S. SURVEY  
1780, TOWNSHIP 47 NORTH, RANGE 2 AND 3 EAST,  
ST. CHARLES COUNTY, MISSOURI

## IMPROVEMENT PLANS



LOCATION MAP  
NOT TO SCALE



EXISTING	LEGEND	PROPOSED
542	CONTOURS	(542)
536	SPOT ELEVATIONS	(536)
	CENTER LINE	
	BUILDINGS, ETC.	
	TREE LINE	
	FENCE	
	STORM SEWERS	
	SANITARY SEWERS	
	CATCH BASIN	
	AREA INLET	
	GRATED INLET	
	STORM MANHOLE	
	SANITARY MANHOLE	
	FLARED END SECTION	
	CLEANOUT	
	LATERAL CONNECTION	
	UTILITY OR POWER POLE	
	FIRE HYDRANT	
	TEST HOLE	
	PAVEMENT	
2"	GAS MAIN & SIZE	(2")
6"	WATER MAIN & SIZE	(6")
7"	TELEPHONE	(7)
E	ELECTRIC (U) UNDERGROUND	(E)
OHW	ELECTRIC (O) OVERHEAD	(OHW)
E	FLOW LINE	E
	TO BE REMOVED	TBR
TC	TOP OF CURB	(TC)
	SWALE	
LS	LIGHT STANDARD	LS
P.S.	PARKING STALLS	P.S.
YLF	YARD LIGHT	YLF

**VILLAGE A PROJECT NOTES:**  
R-3 PUD

- Area of Site: 12.84 acres
- Existing Zoning: "R-3 PUD"-City of O'Fallon
- Present Owner: Westway Corporation  
No. 8 Emerson Drive, St. Louis, Missouri 63124
- Lot Data:  
1. Total Units: 92  
2. Average Lot Size: 2000 sq. ft.  
3. Minimum Lot width at building line: 20'
- Yard set backs:  
1. Front - 15'  
2. Side - 0'  
3. Rear - 15'
- Total area of tract = 12.84 ac.  
Common ground = 0.32 ac.  
Net total = 12.52 ac.
- Allowable Lots:  
12.52 ac. x (43,560 Sq Ft/Ac) = 539,280 Sq Ft  
5000 Sq Ft allowlot = 111.9 Lots
- Net lot Area:  
12.52 ac. x (43,560 Sq Ft/Ac) = 539,280 Sq Ft  
92 Lots = 5,928 Sq Ft/Lot  
5312.84 = 7.17 lots per ac.
- Smallest Lot Size = 3,000 Sq Ft Village A  
\* Lot Coverage Village A = 52%

**VILLAGES B, C, & D PROJECT NOTES:**  
R-1 PUD

- Area of Site: 30.09 acres
- Existing Zoning: "R-1 PUD"-City of O'Fallon
- Present Owner: Westway Corporation  
No. 8 Emerson Drive, St. Louis, Missouri 63124
- Lot Data:  
1. Total Units: 118  
2. Average Lot Size: 2000 sq. ft.  
3. Minimum Lot width at building line: 20'
- Yard set backs:  
1. Front - 15'  
2. Side - 0'  
3. Rear - 15'
- Total area of tract = 30.09 ac.  
Common ground = 0.79 ac.  
Net total = 29.34 ac.
- Allowable Lots:  
29.34 ac. x (43,560 Sq Ft/Ac) = 1,278,000 Sq Ft  
10000 Sq Ft allowlot = 127.8 Lots
- Net lot Area:  
29.34 ac. x (43,560 Sq Ft/Ac) = 1,278,000 Sq Ft  
118 Lots = 10,862 Sq Ft/Lot  
11800.09 = 3.36 lots per ac.
- Smallest Lot Size = 5,000 Sq Ft VILLAGE B & C  
Smallest Lot Size = 5,000 Sq Ft VILLAGE D  
\* Lot Coverage Village B = 40%  
\* Lot Coverage Village C = 40%  
\* Lot Coverage Village D = 45%

**VILLAGE E PROJECT NOTES:**  
R-4 PUD

- Area of Site: 9.05 acres
- Existing Zoning: "R-4 PUD"-City of O'Fallon
- Present Owner: Westway Corporation  
No. 8 Emerson Drive, St. Louis, Missouri 63124
- Lot Data:  
1. Total Units: 108  
2. Average Lot Size: 2,000 sq. ft.  
3. Minimum Lot width at building line: 20'
- Yard set backs:  
1. Front - 15'  
2. Side - 10' & 0'  
3. Rear - 0'
- Total area of tract = 9.05 ac.  
Common ground = 0.20 ac.  
Net total = 8.85 ac.
- Allowable Lots: (13 Units/Acre)  
8.85 ac. x (43,560 Sq Ft/Ac) = 385,500 Sq Ft  
2004 Sq Ft allowlot = 135.8 Lots
- Net lot Area:  
8.85 ac. x (43,560 Sq Ft/Ac) = 385,500 Sq Ft  
108 Lots = 3,549 Sq Ft/Lot  
10800.05 = 11.93 lots per ac.
- Smallest Lot Size = 1,944 Sq Ft Village E  
\* Lot Coverage Village E = 46%

Village A = 92 - 1 Car Detached Houses  
Village B = 48 - 50' Lots  
Village C = 26 - 50' Lots  
Village D = 44 - 60' Lots  
Village E = 108 - Attached Row Houses

**PROJECT BENCHMARK:** Southwest corner of front of curb inlet on East side of relocated Bryan Road at approximate Station 31+00  
Elevation: 596.60 per topographic survey for Quiktrip (FLAVAN TRACT "C") as prepared by GBA, Inc. Aug. 6, 1997.  
Note: B.M. Elevation based on USGS datum.

George J. Gower, L.S.  
**APPROVED**

ADDITIONAL City of O'Fallon notes:

- The Developer shall provide the City construction inspectors with soils reports prior to and during site soil testing.
- The contractor shall assume complete responsibility for controlling all siltation and erosion of the project area. The Contractor shall use whatever means necessary to control erosion and siltation including, but not limited to, staked straw bales and/or siltation fabric fences (possible methods of control are detailed in the plan). Control shall commence with grading and be maintained throughout the project until acceptable of the work by the Owner and/or the City of O'Fallon and/or MODOOT. The Contractor's responsibilities include all design and implementation as required to prevent erosion and the depositing of silt. The Owner and/or the City of O'Fallon and/or MODOOT may at their option direct to the Contractor in his methods as deemed fit to project property and improvements. Any depositing of any silts or mud on new or existing pavement or in new or existing sewers or swales shall be removed after each rain and affected areas cleaned to the Owner and/or the City of O'Fallon and/or MODOOT.
- All erosion control systems shall be inspected and necessary corrections made within 24 hours any rainstorm resulting in one-half inch of rain or more.
- Erosion control shall not be limited to what is shown on the plan. Whatever means necessary shall be taken to prevent siltation and erosion from entering natural streams, adjacent roadways, properties, ditches, and storm drainage systems (both on and offsite).
- No graded area shall remain bare for over 6 months without being seeded or mulched.
- No slope shall exceed 3(horz.):1(Vert.).
- All filled places under proposed storm and sanitary sewer and/or paved areas shall be compacted from the bottom of the fill up to 90% of maximum density as determined by the Modified AASHTO T-180 Compaction Test or 95% of maximum density as determined by the Standard Proctor Test AASHTO T-99. A soils engineer concurrent with the grading and backfilling operations shall verify all trees.
- No Floodplain exists on this site per F.I.R.M. map: 29183C0240 E.
- Driveway locations shall not interfere with the sidewalk handicap ramps.
- Sidewalks, curb ramps, ramp, and accessible parking spaces shall be constructed in accordance with the current approved American with Disabilities Act Accessibility Guidelines (ADAAG) along with the required grades, construction materials, specification and signage. If any conflict occurs between the above information and the plans, the ADAAG guidelines shall take precedence and the contractor prior to any construction shall notify the Project Engineer.
- All sign post, backs, mast arms, and brackets arms shall be painted black using Carboline Rustbond Penetrating Sealer SG and Carboline 133 HB paint (or equivalent as approved by the City and MODOOT).
- All proposed playgrounds areas and pavilions will need a separate permit from the Building Division.
- All Utilities shall be located underground.

### INDEX OF SHEETS

1	COVER SHEET
2-6	SITE/GRADING PLANS
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23-25	STORM SEWER PROFILES
26	STORM SEWER HYDRAULICS
27-31	DRAINAGE AREA MAPS
32-33	WARPING DETAILS
LP-1	LANDSCAPE PLAN
W1-W2	WATER PLANS
WD-1	WATER DETAILS
CE-1 - CD3	CONSTRUCTION DETAILS
T-1	TRAFFIC CONTROL PLAN

THESE PLANS HAVE BEEN REVIEWED BY SCI ENGINEERING, INC. FOR THEIR COMPLIANCE REGARDING GEOTECHNICAL RECOMMENDATIONS RELATIVE TO THE SITE. BASED ON THIS REVIEW AND AVAILABLE SUBSURFACE INFORMATION, IT IS OUR SITE MAY BE CONSTRUCTED IN ACCORDANCE WITH THE PLANS, AND CONSTRUCTION AND THE RECOMMENDATIONS GIVEN IN THE GEOTECHNICAL REPORT OF JUNE, 1997.

WE HAVE NOT PREPARED ANY PART OF THESE PLANS AND MY SEAL ON THESE ONLY TO CONFIRM MY PERSONAL REVIEW AND APPROVAL TO THE SITE GRADING TO THE STABILITY OF EARTH SLOPES.

SCI ENGINEERING, INC. MUST BE INVOLVED DURING THE CONSTRUCTION PHASE OF THIS PROJECT IN ORDER TO DETERMINE IF SUBSURFACE CONDITIONS ARE AS FROM THE FIELD EXPLORATION DATA, THAT OUR RECOMMENDATIONS RELATIVE ARE IMPLEMENTED, AND THAT OTHER GEOTECHNICAL ASPECTS OF SITE DEVELOPMENT PERFORMED IN ACCORDANCE WITH THESE PLANS.

- MARSHA GELBERT-MURPHY, P.E.
- This site is in the City of O'Fallon, Missouri.
  - This site is in the City of O'Fallon, Missouri, Ameren UE Cor. GTE Telephone St. Charles.

ISSUE REMARKS/DATE

1	7/25/01	
2	8/7/01	City of O'Fallon Comments
3	10/18/01	
4	11/7/01	

McBride & Son Homes, Inc.  
#1 McBride & Son Center Drive  
Chesterfield, Missouri 63005  
(636)537-2000

PREPARED FOR:  
**SCI ENGINEERING, INC.**  
SURVEYORS  
2011 BRYAN ROAD  
ST. LOUIS, MO 63129  
(314) 487-8844  
j-eng@sci-inc.com

THE UNDERGROUND UTILITIES SHOWN ON THESE PLANS ARE BASED ON AVAILABLE INFORMATION AND FIELD SURVEY. THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO CONSTRUCTION.