

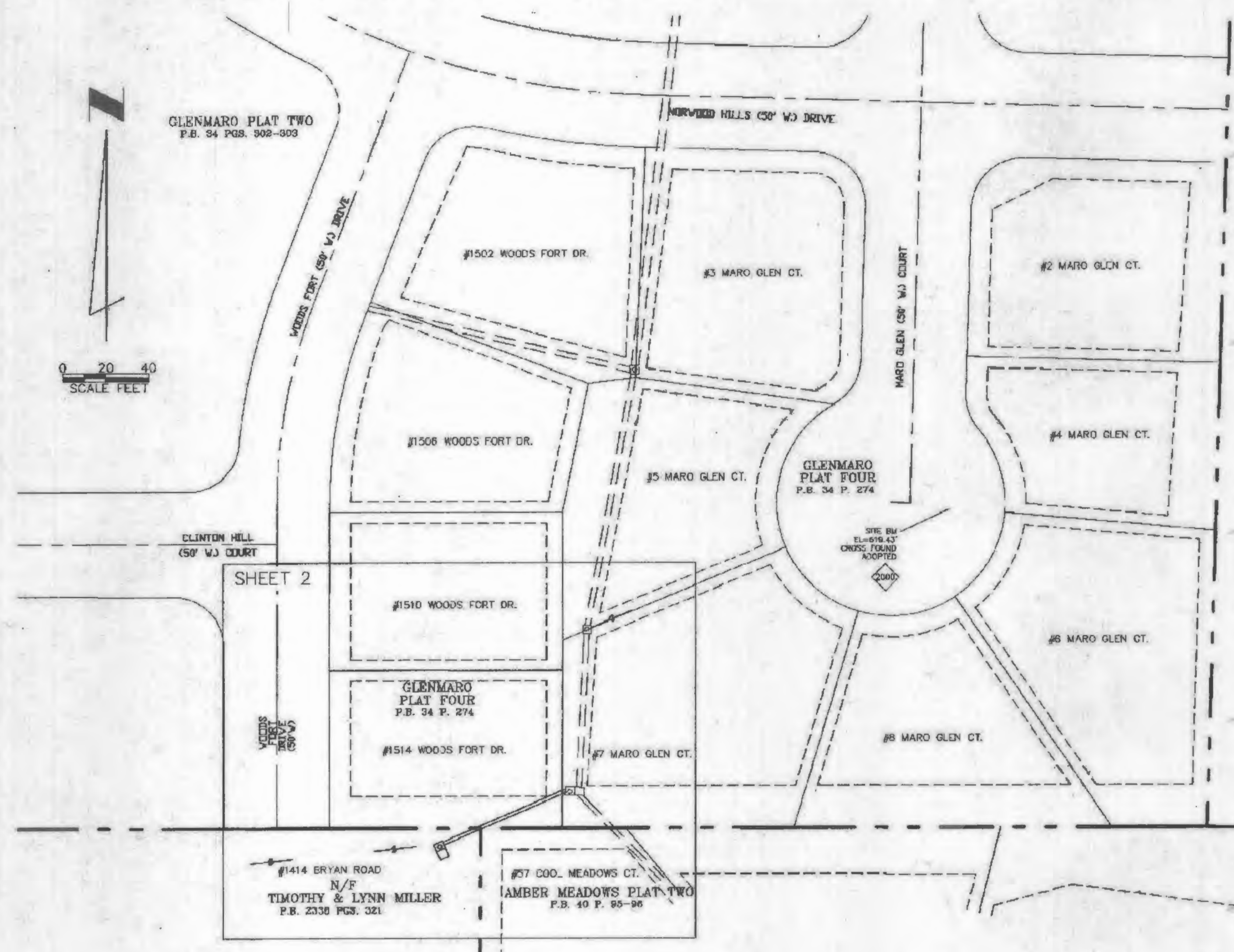
Plotted on: 5/26/2016 2:34:10 PM by skorch  
 Path: P:\O'FALLON-1014083205\3-Maro Glen Crt. Flooding.dwg\2014093205\_MG.dwg

# CITY OF O'FALLON MO

## 3 MARO GLEN STORMWATER IMPROVEMENTS

### LEGEND

- | EXISTING | NEW |
|----------|-----|
|          |     |
|          |     |
|          |     |
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- 
- |  |                                  |
|--|----------------------------------|
|  | FLOWLINE OF CREEK OR DITCH       |
|  | GUARD RAIL                       |
|  | TREE                             |
|  | BUSH                             |
|  | HEDGE ROW                        |
|  | UTILITY METER OR VALVE           |
|  | POWER POLE                       |
|  | POWER POLE & GUY                 |
|  | STREET SIGN                      |
|  | FIRE HYDRANT                     |
|  | LIGHT STANDARD                   |
|  | MAIL BOX                         |
|  | HOUSE VENT                       |
|  | TRAFFIC SIGNAL                   |
|  | CONTROL POINT/TRVERSE POINT      |
|  | CONTROL POINT DESIGNATOR         |
|  | TRVERSE POINT DESIGNATOR         |
|  | TEST HOLE                        |
|  | EXISTING GRADE                   |
|  | PROPOSED GRADE                   |
|  | UTILITY BOX                      |
|  | DOWN SPOUT (PRIVATE)             |
|  | IRRIGATION HEAD (APPRX LOCATION) |
|  | SUMP PUMP (PRIVATE)              |
|  | CORRUGATED PLASTIC PIPE          |
|  | ELECTRIC BREAKER                 |
|  | MODULAR BLOCK WALL               |
|  | TREE TO BE PROTECTED             |
|  | PULL BOX                         |
|  | POLYVINYL CHLORIDE PIPE          |
|  | REINFORCED CONCRETE PIPE         |
|  | TO BE ABANDONED                  |
|  | TO BE REMOVED                    |
|  | TO BE REMOVED AND REPLACED       |
|  | TYPICAL                          |
|  | USE IN PLACE                     |



**SITE BENCHMARK:**  
 ELEVATION = 618.43'  
 DESCRIPTION: CROSS FOUND AT CENTERLINE OF MARO GLEN COURT.  
 Do No Use Rover GPS. Coordinates have been related to the subdivision plat.

CONTROL POINT NUMBER	COORDINATES		DESCRIPTION
	N	E	
2000	1073300.89	753742.08	Site benchmark; Cross found adopted
2002	1073194.32	753561.23	Ex Double Area Inlet 49
2032	1073222.26	753578.12	X in sidewalk along west side of Woods Fort Dr
500	1073139.5	753517.0	Swale "A", at inlet A1-49A
501	1073128.0	753515.4	Swale "A", upstream end of swale
502	1073138.6	753519.9	New Double Area Inlet 49A

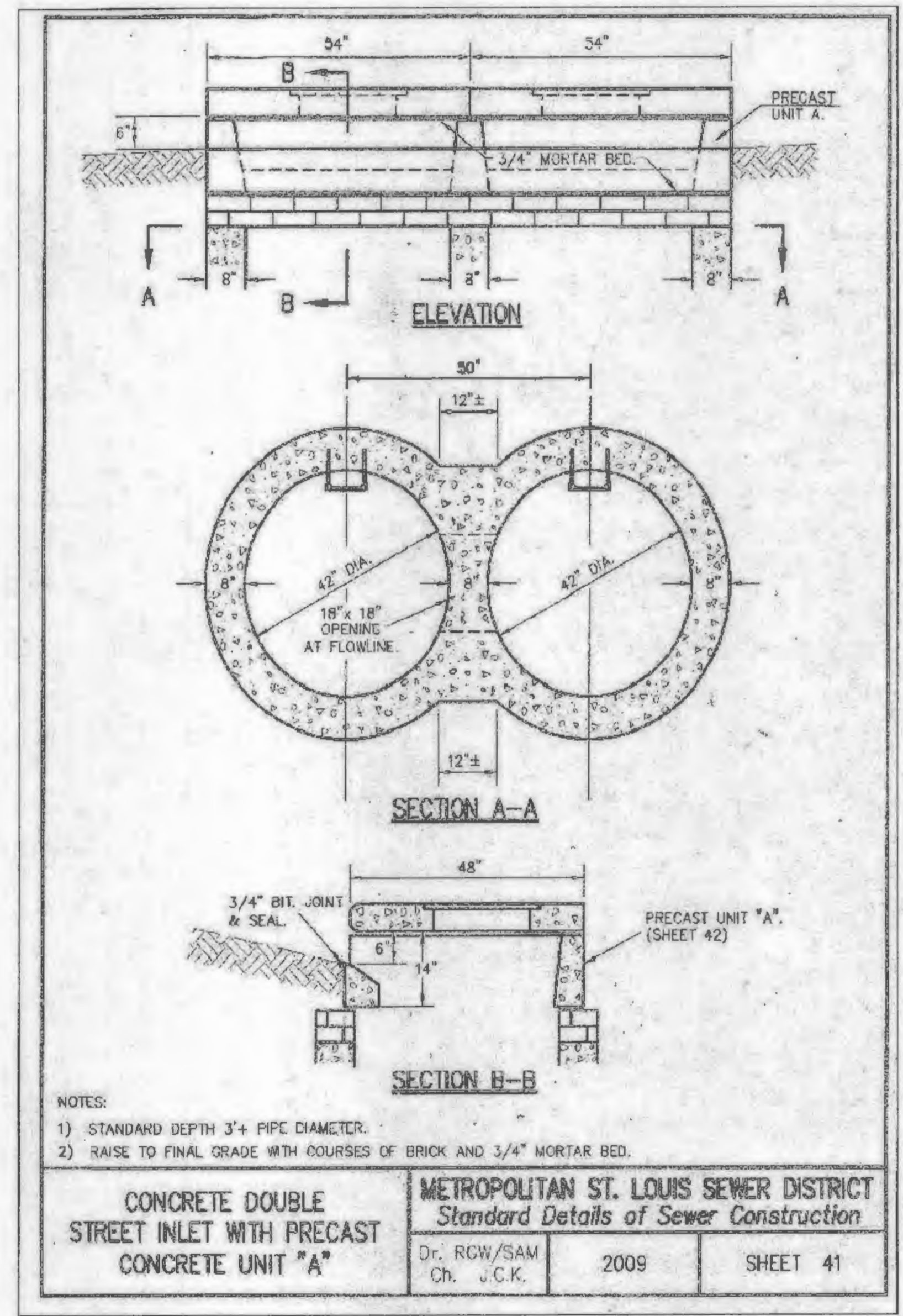
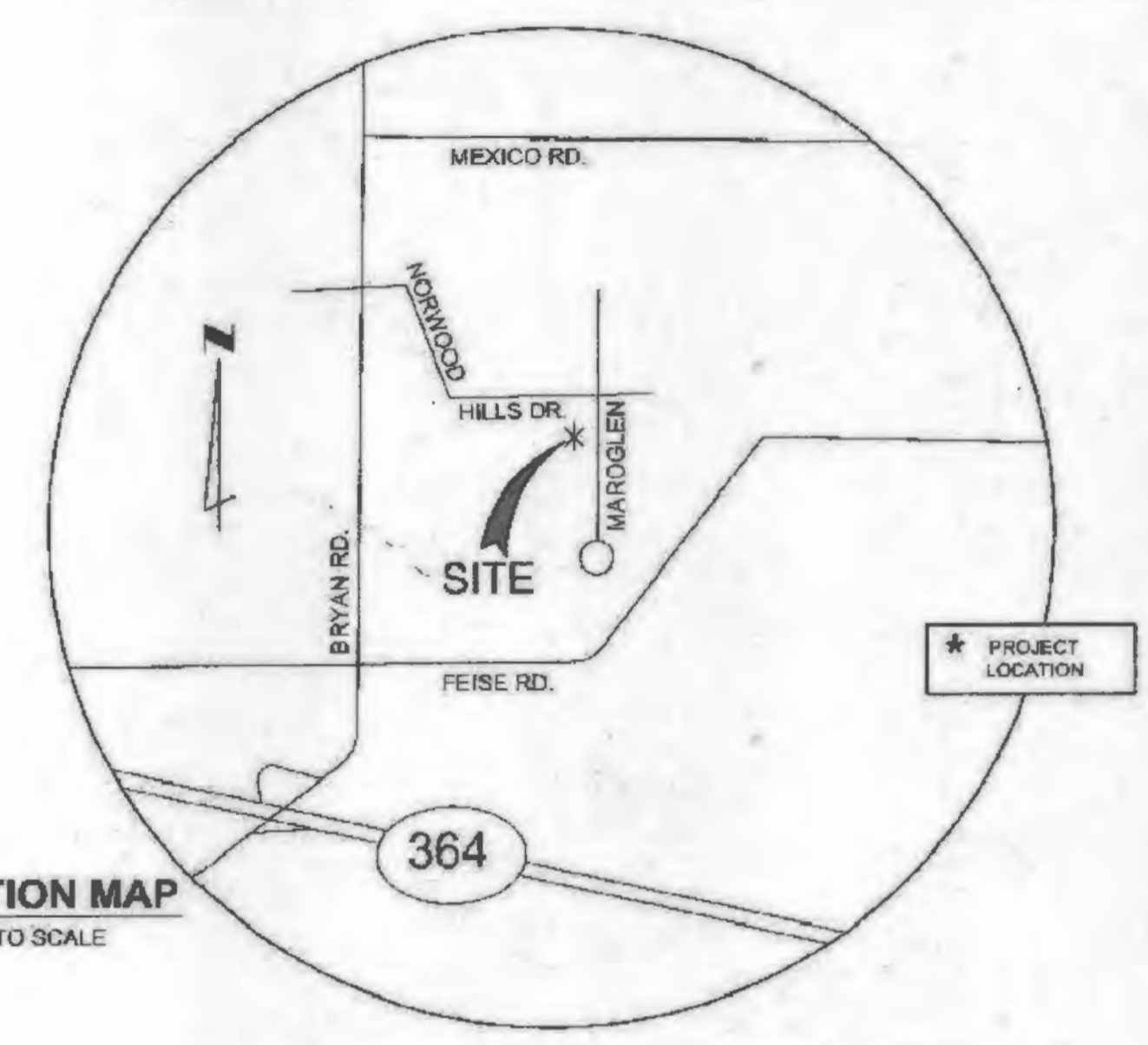
**SURVEYORS NOTES:**  
 THE BACKGROUND DRAWING THAT THIS AS-BUILT SURVEY IS BASED, HAS BEEN PROVIDED BY OTHERS. WE HAVE ADDED AS-BUILT SEWER INFORMATION TO THIS DRAWING FROM FIELD OBSERVATIONS AND ONLY CLAIM RESPONSIBILITY OF ACCURACY AND INFORMATION FOR THE AS-BUILT DATA REPORTED HEREON.

ELEVATIONS AND STATE PLANE COORDINATE VALUES SHOWN ARE ON U.S.G.S. DATUM AND HAVE BEEN DERIVED FROM GPS OBSERVATION USING THE MISSOURI DEPARTMENT OF TRANSPORTATION'S GNSS VRS NETWORK, WGS 84, NAVD 88.

**STORM AND SANITARY SEWER MEASUREMENTS**  
 THE EXISTING SEWER LENGTHS, SIZES, FLOWLINES, DEPTHS OF STRUCTURES AND SEWERS, AND LOCATIONS WITH RESPECT TO EXISTING OR PROPOSED EASEMENTS HAVE BEEN MEASURED. THE RESULTS OF THOSE MEASUREMENTS ARE SHOWN ON THIS SET OF FINAL MEASUREMENT PLATS. SINCE THE WYE LOCATIONS HAVE BEEN PLOTTED FROM INFORMATION PROVIDED BY THE SEWER CONTRACTOR OR OTHER SOURCES, I DISCLAIM ANY RESPONSIBILITY FOR THAT SPECIFIC INFORMATION.

ALL STRUCTURES AS SHOWN ON THIS AS-BUILT PLAN THAT ARE ON PRIVATE PROPERTY ARE PRIVATE. ALL STRUCTURES IN THE STREET RIGHT OF WAY AND THE METROLINK PROPERTY ARE PUBLIC.

GATEWAY LAND SERVICES, INC. (AGENT) DATE: DECEMBER 14, 2016  
 SIGNED: *Lee C. Ferrenbach III*  
 (AGENT) LEE C. FERRENBACH III PLS - 2310 VICE PRESIDENT



SHEET NO.	DESCRIPTION
1	COVER SHEET WITH CONTROL POINTS & DETAILS
2	PLAN, PROFILE, & NOTES

BEFORE YOU DIG - DRILL - BLAST  
 1-800-344-7483  
 (TOLL FREE)  
 MISSOURI ONE CALL SYSTEM, INC.



THE BUSINESS AND PERSONAL RESPONSIBILITY AND PERSONAL SEAL APPEAR HEREON ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS DRAWING. I AM NOT PROVIDING ANY RESPONSIBILITY FOR ALL OTHER ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEaled BY THE DESIGNER. INTENDED TO BE USED FOR ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PRICE REFERS.

**REITZ & JENS, INC.**  
 CONSULTING ENGINEERS  
 1035 CORPORATE SQUARE DRIVE  
 ST. LOUIS, MISSOURI 63132  
 PROFESSIONAL ENGINEERING COMP. LICENSE #020215  
 Checked: E.J.K. Issued: MAY 22, 2016  
 Drawn: D.L.B.

CITY OF O'FALLON MO  
 100 North Main St.  
 O'FALLON, MO 63366  
 636-240-2000

**AS BUILT**

3 Maro Glen  
 Stormwater Improvements  
 COVER SHEET  
 CITY OF O'FALLON PROJECT # 15-002 B RELI PROJECT# 3014083205

REVISIONS

Plotter: P:\O'FALLON-MO\2014092025 Macro Glen Ct. Plotting\dwg\2014092025\_MG.dwg  
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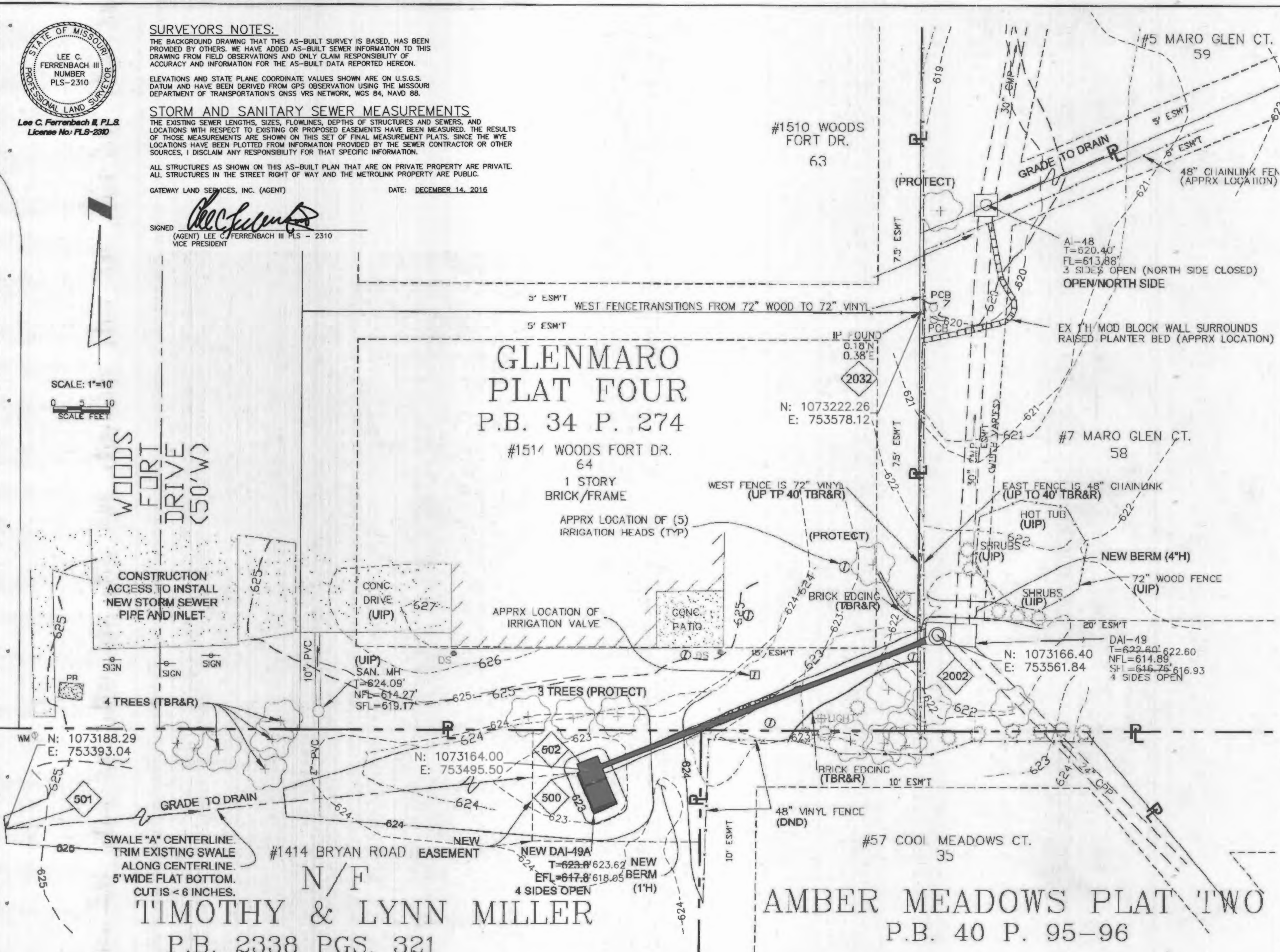


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GATEWAY LAND SERVICES, INC. (AGENT) DATE: DECEMBER 14, 2016  
SIGNED: *Lee C. Ferrenbach III*  
(AGENT) LEE C. FERRENBACH III PLS - 2310  
VICE PRESIDENT

SCALE: 1"=10'  
SCALE FEET



**GENERAL NOTES:**

- All work shall be performed in accordance with the Metropolitan St. Louis Sewer District Standard Construction Specifications for Sewers and Drainage Facilities (2009) and Missouri Standard Specifications for Highway Construction (July, 2010) except as modified by the City of O'Fallon and herein. The Missouri Standard Specifications for Highway Construction shall generally apply to surveying while the Metropolitan St. Louis Sewer District Standard Construction Specifications shall generally apply to all other portions of the project. In the Metropolitan St. Louis Sewer District Standard Construction Specifications, the word "District" shall be replaced by "Owner's Representative".
- The location and depth of existing underground facilities, structures and utilities, if shown on these plans, shall be considered approximate. There may be others, the existence of which are unknown. The contractor shall be solely responsible to notify all utility companies and field locate and verify all existing underground facilities, structures and utilities, either shown or not shown on these plans, prior to the beginning of excavation or construction. Any discrepancy between the size, quantity, depth or location of underground improvements shown on these plans and those located in the field shall be immediately brought to the attention of the Engineer and Owner. The general contractor must be on file with the Missouri One Call System 1-800-344-7483.
- All construction methods and operations shall be completed in such a manner as to protect all adjacent existing buildings and site improvements. The contractor will be held solely responsible and shall take all precautions necessary to avoid damage to adjacent properties during all phases of construction. Any damage to adjacent existing buildings and/or site improvements, including private utilities, shall be repaired at the contractor's sole expense.
- Private drains and downspouts shall not be disturbed and shall be left in-place unless directed otherwise.
- Private irrigation system is located within 1514 Wood Fort Drive, and portions that must be disturbed for installation of storm sewer improvements shall be removed and replaced as necessary by a professional irrigation company (Professional Irrigation of Lake St. Louis or approved equal).
- Contractor shall perform a Pre-Construction Property Damage Survey of Woods Fort Drive (1514), and Maro Glen Court (7). See Technical Project Specifications Section 8 Part A for details.
- All elevations are based on Missouri State Plane and NGVD datums and are shown to finished elevation. The site benchmarks are shown on the plans. All finished grades in soil areas shall be within 0.1 feet of that shown. All finished grades in paved areas shall be within 0.02 feet of that shown. With the exception of sumps at area inlets, all areas will be sloped to drain, without ponding, to an adequate discharge point at the completion of construction.
- Conditions shown on the drawings represent conditions surveyed during the February of 2015. Existing elevations and grades may have changed since the original survey was completed due to erosion and/or sediment accumulation. The number, size and location of trees shall be considered approximate.
- Field verify all dimensions before construction. Do not scale drawings, follow dimensions. All control points and construction stake-out shall be provided by the Contractor.
- All trenching and excavation shall be sloped or braced in strict compliance with all Federal, State and Local laws, rules and regulations. Compliance with these laws, rules and regulations is the sole responsibility of the Contractor.
- The Contractor shall be solely and completely responsible to conditions of the job site, including safety of all persons and property during performance of the work. This requirement will apply continuously and not be limited to normal working hours.
- The Contractor shall provide berms, flashers and/or safety devices as necessary or as directed by the City of O'Fallon. The Contractor shall provide adequate and proper traffic control when working within the public right-of-way. The Contractor shall provide informational, road closure and warning signs as necessary or as directed by the City of O'Fallon.
- The contractor is to remove and dispose of off site, all debris, rubbish and other materials resulting from demolition operation. Burning on site will not be allowed.
- Pavement and final repaving of all streets, driveways, and similar surfaces where pavement has been removed, disturbed, settled or damaged by or as a result of construction shall be performed by the Contractor, with a new and similar pavement. Where new pavement and curb but existing, sawcut existing pavement and curb to provide straight and uniform edges. The finished surface of all new pavement and curbs shall conform with the grade of existing adjacent pavement, and shall be sloped to drain.
- All public roads and sidewalks must be kept clear of mud and debris by the end of each work day.
- The contractor shall maintain a clean set of marked plans showing all changes and "as built" information. Said plans shall be certified by a registered engineer or land surveyor and submitted to the Owner's Representative upon completion of work.

**STORM SEWER NOTES:**

- Connections at all storm sewer structures to be made with A-lock joint or equal.
- All backfill in trenches shall be compacted to prevent settlement, as described in MSD Standard Construction Specifications Part 4, Section H, paragraph 1.4 which requires relative density testing to confirm that compaction has been achieved. Job Special Provisions modify compaction as follows. All backfill shall be compacted in horizontal lifts with a loose thickness prior to compaction of 9 inches or less and shall be compacted to a minimum of 90% maximum dry density as determined by Modified Proctor ASTM D-1557.
- Private Drain Connection shall be installed where indicated on the plan and profile. To retrofit the private drain connection into the existing area inlet, the opening shall be "stitch-critted" with a 3/4 inch masonry bit approximately 1-inch larger than the outside diameter of the pipe on 1-inch centers to prevent fracturing or spalling of the concrete. The concrete can then be broken out with a hammer and chisel and the reinforcing bars can be cut. Secure 8 inch PVC to structure with mortar around pipe on inside and outside of structure. Contractor shall install compacted crushed limestone and screenings pipe bedding (MSD#1) per MSD standard details for 8-inch pipe.
- Storm sewer manhole access covers shall be steel and include City of O'Fallon Logo. See City Job Special Provisions for detail.
- New inlets shall include 5/8 inch trash bars in inlet openings.

**GRADING NOTES:**

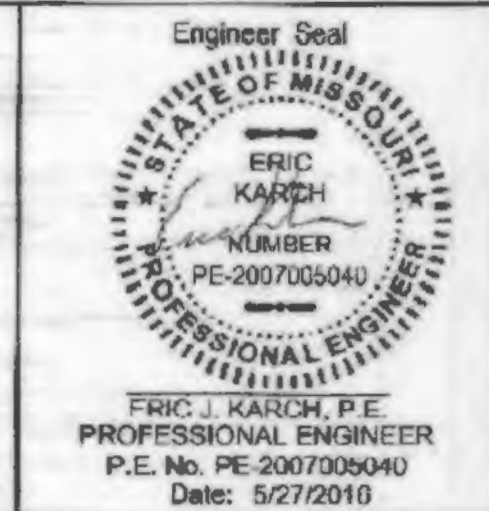
- All elevations are shown to finished elevation. Contractor shall account for soil thickness when grading to meet finished elevation.
- New swales shall be fine graded to provide positive drainage that assures all areas will freely drain with no depressions which would temporarily trap surface water.
- Strip grass prior to placing fill for new berms. New berms shall be compacted to the density of the adjacent undisturbed earth.

**VEGETATION NOTES:**

- Protect all trees, shrubs, plants and landscaping from physical damage unless marked to be removed (TBR or TBR&R).
- The contractor shall protect all trees marked (PROTECT). The contractor shall root prune along the pay line of excavation trees to be protected in order to minimize damage and promote long term health of tree roots. Roots shall be clean out. Under no circumstances shall the Contractor rip or tear tree roots with excavation equipment.
- Trees and shrubs to be removed shall be replaced with 1-inch caliper and 1 gallon container, respectively, of like species in a similar location or as directed by the Owner's Representative. Installation of containerized plants shall be in accordance with ANSI A 300 (Parts 1 through 9) and companion publications (i.e. Best Management Practices, Tree Planting, Special Companion Publication to Part 6).
- Once fine grading is completed, all disturbed areas shall be fertilized and soded with fescue.

**SEDIMENT AND EROSION CONTROL NOTES:**

- 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 (usable methods of control are detailed in the plan). Control shall commence with the clearing operations and be maintained throughout the project until acceptance of the work by the City of O'Fallon and as required by MoDOT. The Contractor's responsibilities include all design and implementation as Required to prevent erosion and the depositing of silt. The City of O'Fallon and as required by MoDOT may at their option direct the Contractor in his methods as deemed fit to protect property and improvements. Any depositing of silt or mud on new or existing pavement shall be removed immediately. Any depositing of silt or mud in new or existing storm sewers and/or swales shall be removed after each rain and affected areas cleaned to the satisfaction of the City of O'Fallon and as required by MoDOT.
- All erosion control systems are to be inspected and corrected weekly, especially within 48 hours of any rain storm resulting in one-half inch of rain or more. Any silt or debris leaving the site and affecting public right of way or storm water drainage facilities shall be cleaned up within 24 hours after the end of the storm.
- Erosion control devices (silt fence, sediment basin, etc.) shall be in accordance with St. Charles County Soil and Water Conservation District Erosion and Sediment Control guidelines.



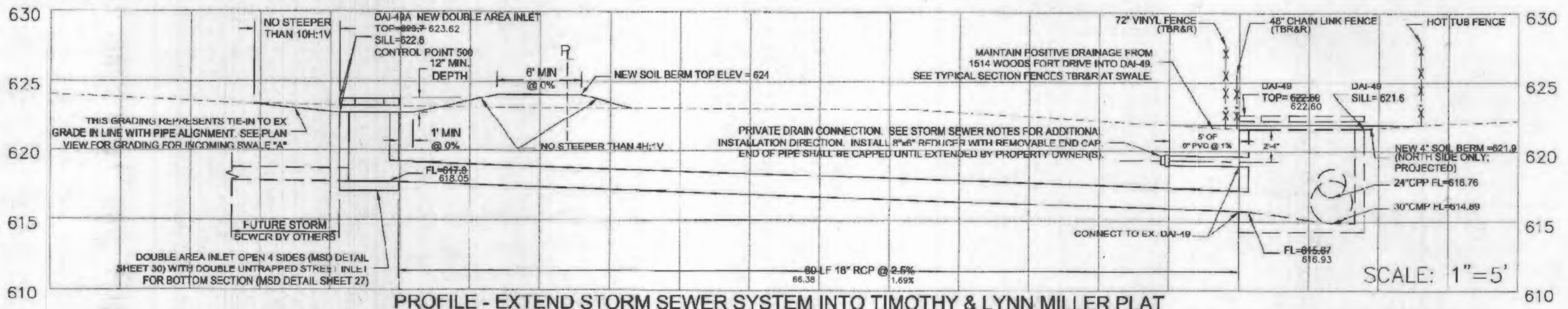
THE ENGINEER WHOSE SIGNATURE AND PERSONAL SEAL APPEAR ON THIS DRAWING IS NOT RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION PROVIDED TO HIM BY THE SURVEYOR OR OTHERS. HIS LIABILITY IS LIMITED TO THE DESIGN AND CONSTRUCTION OF THE WORK SHOWN ON THIS DRAWING. HE IS NOT RESPONSIBLE FOR ANY INFORMATION RELAYED TO OR FROM ANY OTHER PARTY.

**REITZ & JENS, INC.**  
CONSULTING ENGINEERS  
108 CONVENT ROAD, SUITE 200  
ST. LOUIS, MISSOURI 63102  
(314) 864-1152  
PROFESSIONAL ENGINEERING CORP. LICENSE #00075

**CITY OF O'FALLON MO**  
Stormwater Improvements  
3 Maro Glen  
100 North Main St.  
O'Fallon, MO 63366  
636-240-2000

**PLAN, PROFILE, SECTIONS, & NOTES**  
CITY OF O'FALLON PROJECT # 15-002E  
REJ PROJECT# 2014092025

**REVISIONS**  
SHEET 2 OF 2



PROFILE - EXTEND STORM SEWER SYSTEM INTO TIMOTHY & LYNN MILLER PLAT

SCALE: 1"=5'

BEFORE YOU DIG - DRILL - BLAST  
1-800-344-7483  
(TOLL FREE)  
MISSOURI ONE CALL SYSTEM, INC.