

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 to remain shall be repaired or replaced in kind by the contractor and shall remain the contractors 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.
 - All signs shall meet MUTCD requirements and specifications, when applicable.
 - This site is in the following districts:
DUCKETT CREEK SEWER DISTRICT
WENTZVILLE FIRE PROTECTION DISTRICT
WENTZVILLE SCHOOL DISTRICT
PUDG WATERS DISTRICT NO. 2
CUVER RIVER ELECTRIC COOPERATIVE
LACLEDE GAS COMPANY
CENTURYTEL INC.
 - All water mains, valves, fittings, hydrants, and related items are to be installed in accordance with the current St. Charles County P.W.S.D. #2 guidelines and specifications as approved by M.D.N.R. Review No. 61996-04C.
 - All paving to be in accordance with St. Charles County standards and specifications except as modified by the City of O'Fallon ordinances.
 - Gross area of site: 14.2 Acres
Area of right-of-way: 3.0 Acres
Area of common ground: 1.8 Acres
Project to be completed in one phase.
Dwelling units proposed:
71 units (68 attached and 3 free-standing)
 - Yard Setbacks:**
Front yard 25'
Side yard 6' min. (0' on attached units)
Rear yard 15' min.
 - Driveway locations shall not interfere with the sidewalk handicap ramps.
 - Sidewalks, curb ramps and accessible parking spaces shall be constructed in accordance with the current approved "American with Disabilities Act Accessibility Guidelines" (ADAAC) along with the required grade, construction materials, spacing, dimensions, and any other requirements between the above and the plan. The ADAAC guidelines shall take precedence and the contractor prior to any construction shall notify the Project Engineer.
 - All sign posts and backs and bracket arms shall be pointed back using Carboline Rustbond Penetrating Sealer SG and Carboline 133 HB point (or equivalent as approved by City and MoDOT).
 - Any proposed pavilions or playground areas will need a separate permit from the Building Division.
 - Developer must supply City construction inspectors with soil reports prior to or during site soil testing.
 - 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.
 - All street signs and traffic signals shall be colored black in accordance with the approved MoDOT specifications.
 - No slopes shall exceed 3(horiz.:vert.):1 (vertical).
 - 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. Control shall commence with grading and be maintained throughout the duration of the work by the Owner and/or the City of O'Fallon and/or MoDOT. 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 MoDOT may at their option direct the contractor the Contractor in his methods as deemed fit to protect property and improvements. Any depositing of silt onto new or existing pavement shall be removed immediately. Any depositing of silt or mud onto existing storm sewers or swales shall be removed after rain and affected areas cleaned to the satisfaction of the Owner and/or the City of O'Fallon and/or MoDOT.
 - All fill areas under proposed storm and sanitary sewer, proposed roads, and/or paved areas shall be compacted to 90% of maximum density as determined by the Standard Proctor Test AASHTO T-99. All fill placed in proposed roads shall be compacted from the bottom of the fill up. All tests shall be verified by a soils engineer concurrent with grading and backfilling operations. Ensure the moisture content of the soil in the areas to be compacted to specification as defined by the Standard or Modified Proctor Test. Optimum moisture content shall be determined using the soil test that was used for compaction. Soil compaction curves shall be submitted to the City of O'Fallon prior to the placement of fill.
 - All proposed utilities shall be located underground.
 - According to the flood insurance rate map of St. Charles County, Missouri, unincorporated areas (community panel number 29183c0220 E dated March 17, 2003), this property lies entirely outside the 500-year floodplain.
 - All subdivision identification or directional sign(s) must have the locations and sizes approved and permitted separately through the Planning and Development Department.
 - All requirements of the Planning and Zoning Commission have been addressed.
 - All on site utility and storm drainage easements required for this development will be shown on the Record Plat.
 - The maximum lot coverage for the lots shall be 50%.
 - P.W.S.D. #2 of St. Charles County shall be notified 48 hours prior to commencement of any construction on the water distribution system.
- GRADING SPECIFICATIONS:**
- It shall be the grading contractors 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 contractors 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 and burning is approved by the governing agencies.
 - Subgrade is included in the total bid yardage. (Subgrade is figured at pavement depth.)
 - Slopes 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.
 - Grading exceeding 3:1 slope shall be done at the direction of a Soils Engineer registered in the State of Missouri.
- Drawing name: GASSXPDRJU051363 Rhodes East McBride AS-Built AS-Built.dwg
Plotted on: Jun 06, 2007 - 3:25pm
Plotted by: dgrider

BELMONTE LANDING

A TRACT OF LAND BEING PART OF FRACTIONAL SECTION 10, TOWNSHIP 46 NORTH, RANGE 2 EAST, ST. CHARLES COUNTY, MISSOURI

IMPROVEMENT PLANS



KEY MAP
N.T.S.

ZIP CODE 63366

INDEX OF SHEETS

1.1	COVER SHEET
2.1	GRADING PLAN
3.1	SITE PLAN
4.1	WATER PLAN
5.1	STREET PROFILES
6.1	SANITARY SEWER PROFILES
7.1	STORM SEWER PROFILES
7.2	OUTFALL STRUCTURE/BASIN DETAILS
7.3	HYDRAULICS/STORM SEWER DETAILS
8.1	DRAINAGE AREA MAP
9.1	WARPING DETAILS
9.2	ENTRANCE DETAILS
10.1-10.8	CONSTRUCTION DETAILS

AS-BUILT
SANITARY AND STORM SEWER
FINAL MEASUREMENT PLAT

TREE PRESERVATION REQUIREMENTS

As of _____, I certify that the actual sewer lengths, sizes, flowlines, depths of structures 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 Plans. 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.

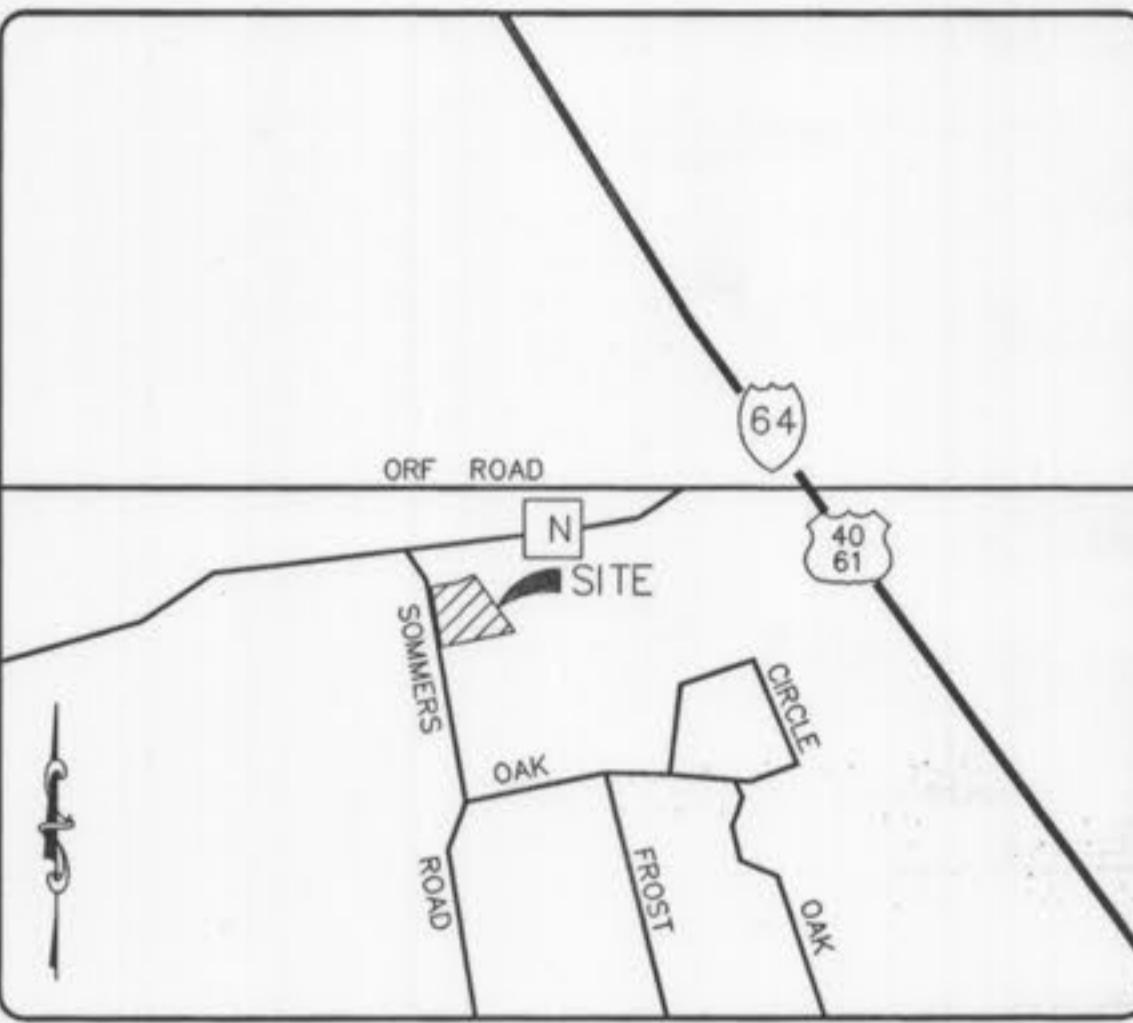
All public sewers are located within the designated existing or proposed easements except as follows:



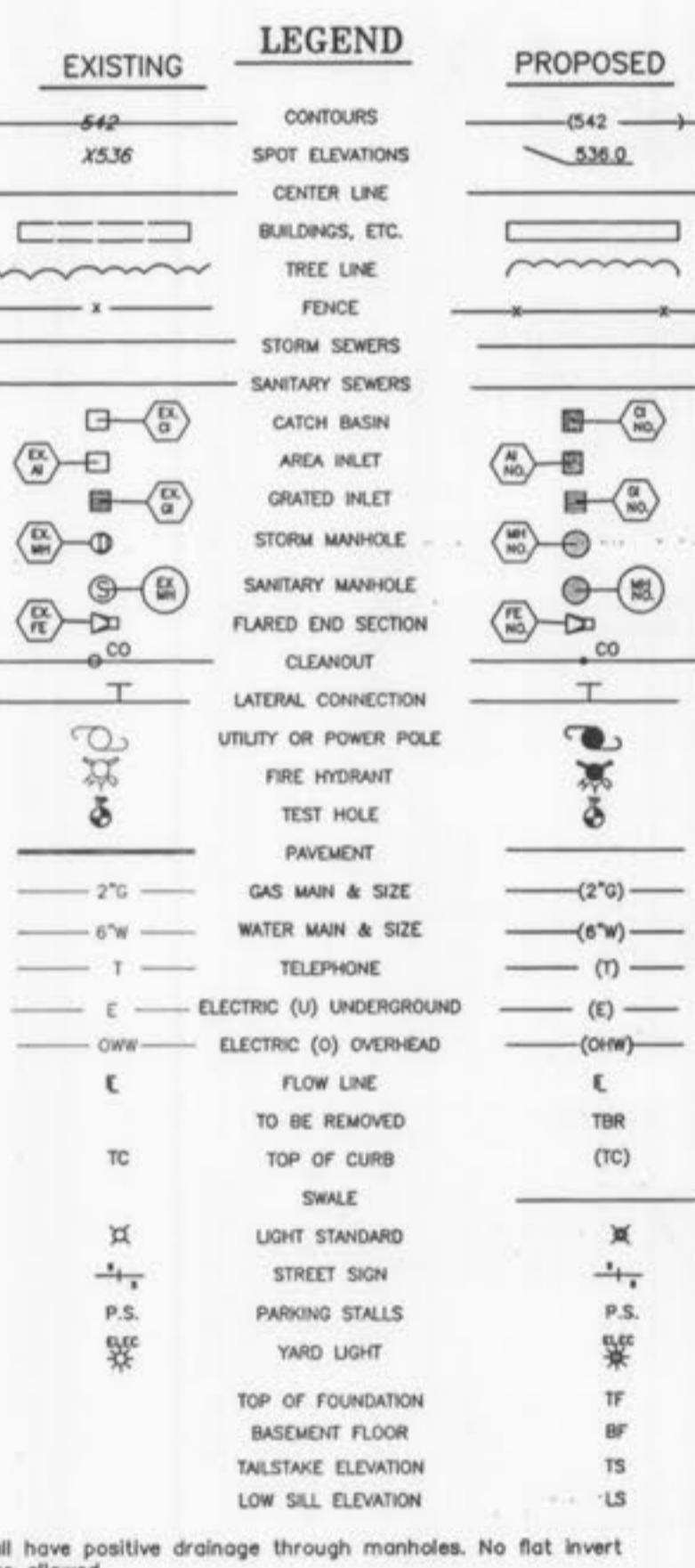
CALL BEFORE
YOU DIG!
1-800-DIG-RITE

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 Duckett Creek Sanitary District and the 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.
 - RCP drainage pipe shall be reinforced concrete class III (ASTM C76) minimum unless otherwise noted on plans.
 - 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 AASHTO T-180 Compaction Test" (ASTM D-1557). All tests shall be verified by a Soils Engineer concurrent with grading and backfilling operations.
 - All manholes and inlet tops built without elevations furnished by the Engineer will be the responsibility of the Sewer Contractor. At the time of construction, stakes of elevations for inlets and catch basins will be face staked; provided staked 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 finished grade.
 - All standard street curb inlets to have front of inlet two and one half feet (2.5') behind rolled curb and two feet (2') behind vertical curb. All area inlets are opened 4 sides unless otherwise noted on the plans.
 - It is the contractors responsibility to confirm the location of existing utilities and/or underground facilities by notifying utility companies prior to construction.
 - All construction methods and materials used shall conform to current applicable standards.
 - Brick shall not be used in the construction of storm sewer structures. Pre-cast concrete structures are to be used unless otherwise approved by the City.
 - If the storm and sanitary sewers are parallel and in the same trench or over dig, the upper pipe shall be placed on a shelf and the lower pipe shall be bedded in compacted granular fill to the flow line of the upper pipe.
 - All creek crossings shall be grouted rip-rap as directed by District Inspectors. (All grout shall be high slump ready-mix concrete).
 - Concrete pipe joints shall be MSD type "A" approved compression-type joints and shall conform to the requirements and specifications of joints of Concrete Pipe and Spherical Coupling Pipe using Flexible, Water-tight, Rubber-type Gaskets ASTM C443. Bond type gaskets depending entirely on cement for adhesion and resistance to displacement during jointing shall not be used.
 - All storm sewer pipes shall be reinforced concrete pipe, Class III minimum. Any concrete pipe, conduit or culvert beneath a street right-of-way or with reasonable probability of being so located shall be a minimum of Class III, but shall also account for all vertical loads. In no case shall the design provide for less than HS-20 loading per AASHTO. For other locations, the minimum design live load shall be HS-10 loading.
 - All curb and area inlets shall be installed with a 5% trash bar per the City of O'Fallon requirements.
 - Each storm sewer shall be marked per the City of O'Fallon requirements. The City allows the following markers and adhesive procedures shown in the table below.
- | Manufacturer | Size | Adhesive | Style | Message |
|------------------------|--------|----------|----------------|--|
| ACP International | 3-7/8" | Epoxy | Crystal Cap | No Dumping Drains to Waterways (SD-W-CC) |
| DAS Manufacturing Inc. | 4" | Epoxy | Standard Style | No Dumping Drains To Stream (#SDS) |
| | 2 1/2" | | | (2 1/2") |
| | 6" W | | | (6" W) |
| | T | | | (T) |
| | E | | | (E) |
| | OWW | | | (OWW) |
| | C | | | (C) |
| | L | | | (L) |
| | TC | | | (TC) |
| | P.S. | | | (P.S.) |
| | Y.L. | | | (Y.L.) |
| | TF | | | (TF) |
| | BF | | | (BF) |
| | TS | | | (TS) |
| | LS | | | (LS) |
- Underground utilities have been plotted from available information and therefore location 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 improvements.
 - Gas, water and other underground utilities shall not conflict with the depth or horizontal location of existing or proposed sanitary and storm sewers, including house laterals.
 - All existing site improvements disturbed, damaged or destroyed shall be repaired or replaced to closely match preconstruction conditions.
 - All fill including places under proposed storm and sanitary sewer lines and paved areas including trench backfills within and off the road right-of-way shall be compacted to 90% per cent of maximum density as determined by the "Modified AASHTO T-180 Compaction Test" (ASTM D1557). All tests shall be verified by a Soils Engineer concurrent with grading and backfilling operations. The compacted fill shall be free of rutting and shall be non-yielding and non-pumping during proctoring and compaction.
 - The contractor shall prevent all storm, surface water, mud and construction debris from entering the existing sanitary sewer system.
 - All sanitary sewer flowlines and tops built without elevations furnished by the engineer will be the responsibility of the sewer contractor.
 - It is the responsibility of the contractor to adjust all sanitary sewer manholes (that are affected by the development) to finish grade.
 - Easements shall be provided for all sanitary sewers, storm sewers and all utilities on the record plat.
 - All sanitary sewer construction and materials shall conform to the current construction standards of the Duckett Creek Sanitary District.
 - The Duckett Creek Sanitary District shall be notified at least 48 hours prior to construction for coordination of inspection.
 - All sanitary sewer building connections shall be designed so that the minimum vertical distance from the low point of the basement to the flowline of a sanitary sewer at the corresponding building connection shall not be less than the diameter of the pipe plus the vertical distance of 23 feet.
 - All sanitary sewer manholes shall be waterproofed on the exterior in accordance with Missouri Department of Natural Resources specification CSR-8120(7)(E).
 - All PVC sanitary sewer pipe shall conform to the requirements of ASTM D-3034 Standard Specification for PSM Polyvinyl Chloride Sewer Pipe, 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 some size "clean" or "minus" stone from springline of pipe to 6 inches above the top of pipe.
 - All sanitary trench backfills shall be water jetted. Granular backfill will be used under pavement areas.



LOCATION MAP
N.T.S.



ISSUE	REMARKS/DATE
1	FIRST SUBMITTAL 01-12-07
2	REVISED PER ST. CHARLES COUNTY CMANTS 2-5-07
3	REVISED PER DUCKETT CREEK CMANTS 2-4-07
4	REVISED PER CITY OF O'FALLON AND PWS#2 3-1-07
5	REV. PER CITY OF O'FALLON & PWS#2 & DCSD 3-22-07
6	REV. PER CITY OF O'FALLON & PWS#2 CMANTS 4-06-07
7	REV. PER CITY OF O'FALLON & PWS#2 CMANTS 4-06-07

PREPARED FOR:
McBride and Son Homes Land Development, Inc.
#1 McBride and Son Center Drive Chesterfield, Missouri 63005
(636) 537-2000

STERLING CO.
ENGINEERS & SURVEYORS
5055 NEW BAUGARTNER ROAD
ST. LOUIS, MISSOURI 63129
(314)-487-0440 FAX: (314)-894-4444
E-mail: Sterling@sterling-eng-sur.com

DRAWN: THE BELMONTE
LANDING
DESIGNED: COVER SHEET
CHECKED: SHEET TITLE: COVER SHEET

PROJECT: BELMONTE
LANDING
SHEET: 363
NO. 05 11
M.S.D. 363
P# 1
DIGITAL FILE LOCATION
SERIAL#-STERLING-2
KBA

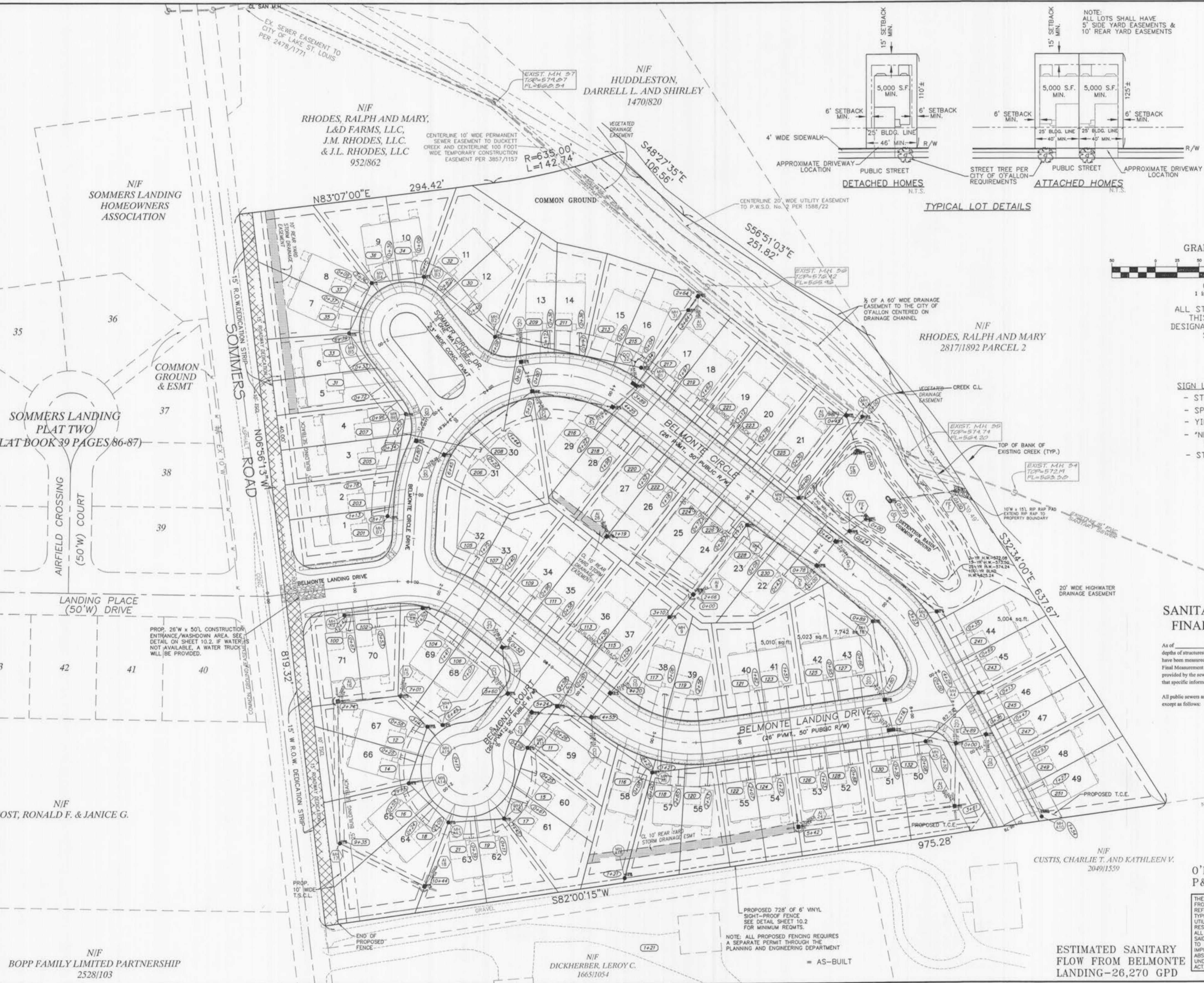
PROJECT & SITE BENCHMARK

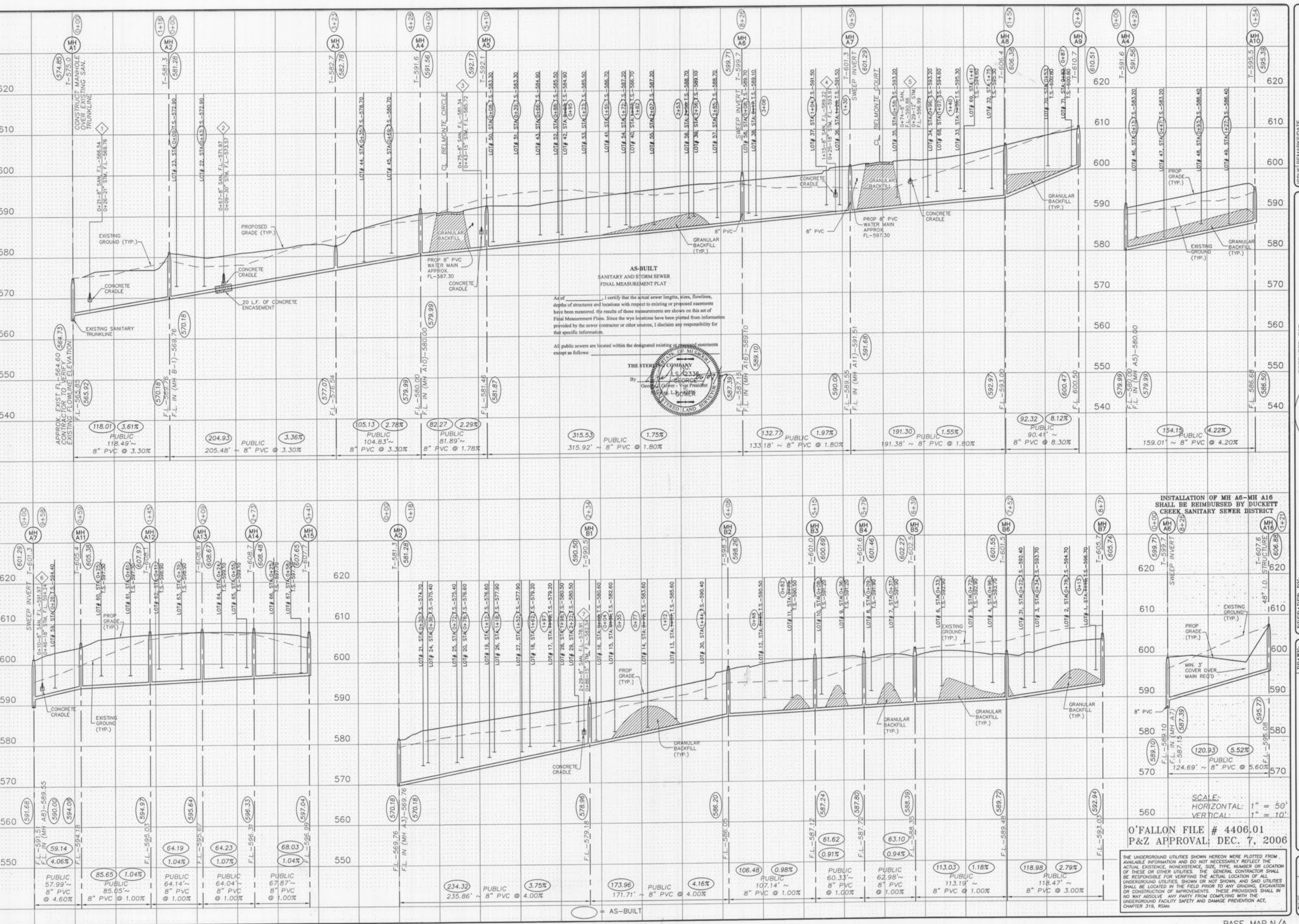
607.22 (USGS) - "Sq" CUT WEST END OF SOUTHERN HEADWALL LOCATED AT THE SOUTHEAST INTERSECTION OF SOMMERS ROAD AND STATE HIGHWAY "N", 36.5' EAST OF CENTERLINE OF SOMMERS AND 14' SOUTH OF CENTERLINE HIGHWAY "N".

O'FALLON FILE # 4406.01
P&Z APPROVAL: DEC. 7, 2006

BASE MAP N/A

Drawing name: G:\S\DES\PROJ\A\51363 Rhodes East McBride As-Built\As-Built\As-Built.dwg
 Plot date: Sep 12, 2007 - 3:49pm
 Plotter: plotted by dgrider
 Plot scale: 1:1000
 Plot area: 1000' x 1000'
 Plot offset: 0' x 0'





PREPARED BY:
DRAWN: THE STERLING CO.
DESIGNED: THE STERLING CO.
CHECKED: THE STERLING CO.

PROJECT: BELMONTE LANDING
NO.: 05 **11** **363**
M.S.D.: 6.1
P#: 05
DIGITAL FILE LOCATION: G:\DCSD\PROJ\011263\rhodeseast\as-built.dwg
SHEET TITLE: SANITARY SEWER PROFILES

PREPARED FOR:
McBride and Son Homes Land Development, Inc.
#1 McBride and Son Center Drive
Chesterfield, Missouri 63005
(636) 537-2000

ISSUE DATE:
1 FIRST SUBMITTED 01-12-07
2 REVISED PER DUCKETT CREEK CMHNTS 2-9-07
3 REVISED PER CITY OF O'FALLON AND PWSD2 3-1-07
4 REV. PER CITY OF O'FALLON, PWSD & DCSD COMMENTS 4-16-07
5 REVISED PER DCSD COMMENTS 4-16-07
6 REVISED PER DCSD COMMENTS 4-16-07

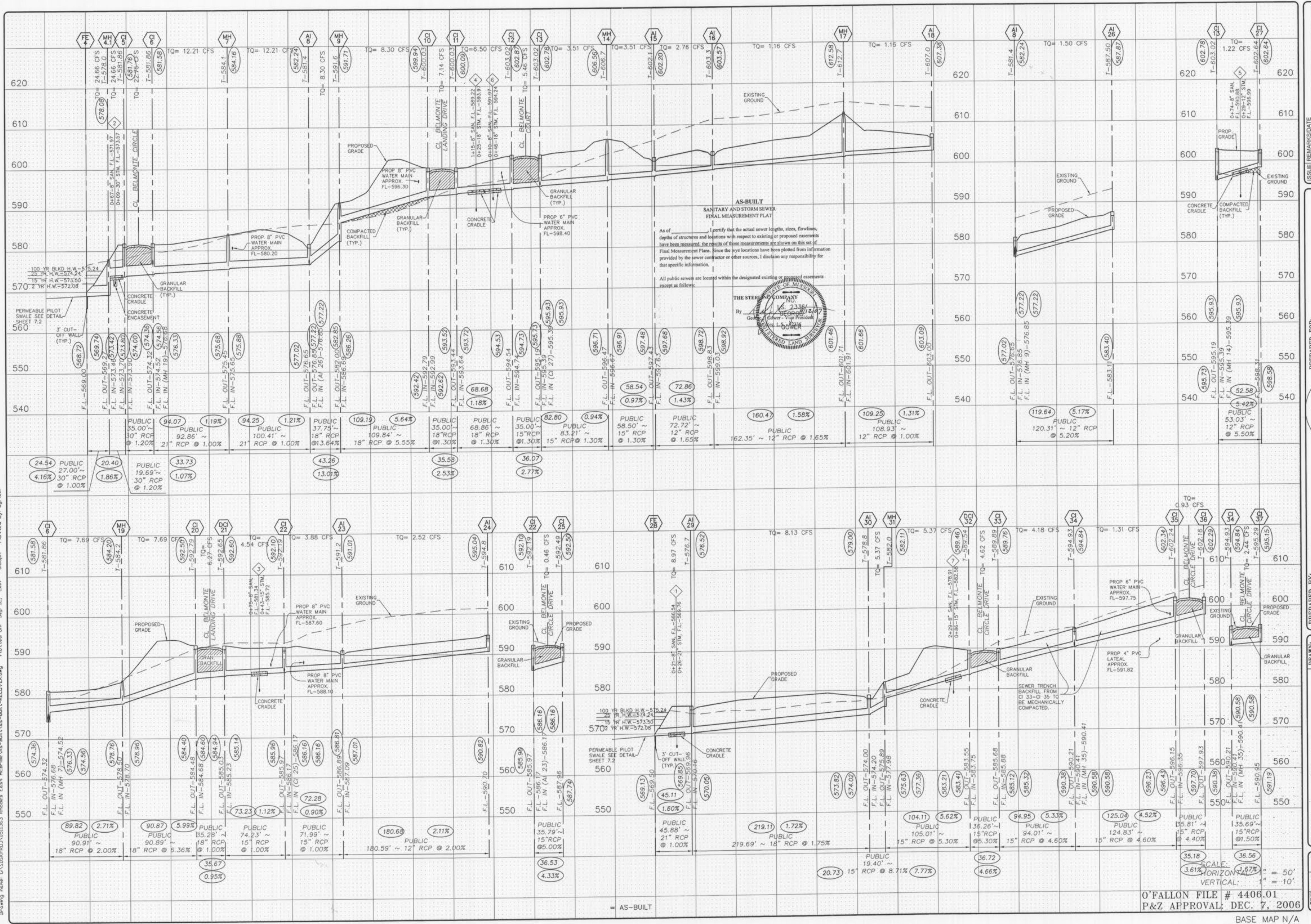
SCALE:
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 10'

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 UNDERGROUND UTILITIES. NO CONSTRUCTION OF NEW 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.

O'FALLOON FILE # 4406.01
P&Z APPROVAL, DEC. 7, 2006

NO.: 05 **11** **363**
SHEET: 6.1
OF: 1

BASE MAP N/A



**BELMONTE
LANDING**

SHEET TITLE: STORM SEWER PROFILES

ST
THE
ENG
5055
ST.
(314)-
E-M

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3	REVISED PER DUCETT C
4	REVISED PER CITY OF O'FALL
5	REV. PER CITY OF O'FALL
7	REV. PER PWSD #2 COMM

ON A
PWSI
S 4-0

