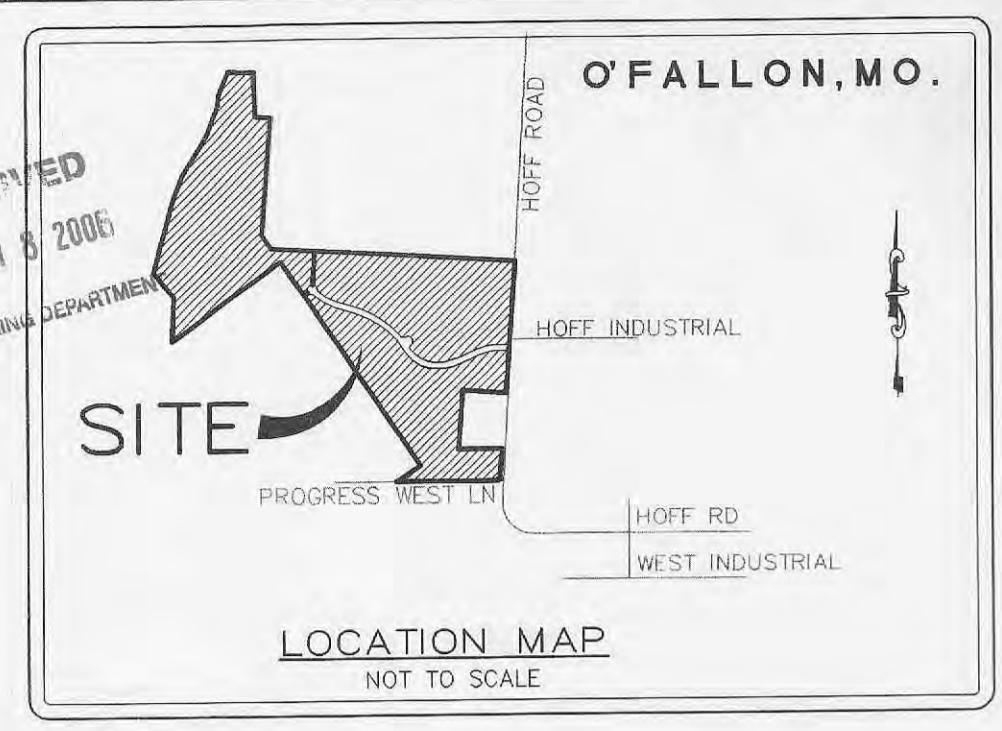


AN AS-BUILT PLAN FOR PROGRESS WEST INDUSTRIAL PARK/ BROOKSIDE OFF-SITE WATER

A TRACT OF LAND BEING PART OF SECTIONS 23 AND 26, AND PART OF U.S. SURVEY 54, TOWNSHIP 47 NORTH, RANGE 2 EAST OF THE FIFTH PRINCIPAL MERIDIAN ST. CHARLES COUNTY, MISSOURI



CALL BEFORE
YOU DIG!
1-800-DIG-RITE
AND
MoDOT
(314) 340-4100

REFERENCE BENCHMARK:
REFERENCE BENCHMARK: RM 45 ELEV 526.16 CHISELED SQUARE
ON THE SOUTHEAST WINGWALL OF THE LAKE SAINT LOUIS
BOULEVARD BRIDGE OVER THE SPILLWAY OF LAKE SAINT LOUIS.

SITE BENCHMARK: ELEV 567.02 OLD IRON BAR AT NORTHEAST
CORNER OF SITE.

GENERAL NOTES:

- Underground utilities have been plotted from available information and therefore locations shall be considered approximate only. The verifications 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 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 building laterals.
- All existing site improvements disturbed, damaged or destroyed shall be repaired or replaced to closely match pre construction conditions.
- 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.
- Easements shall be provided for all public sanitary sewers, storm sewers and utilities on the record plat. See record plat (if required) for location and size of easement.
- All construction and materials shall conform to the current construction standards of the City of O'Fallon.
- The City of O'Fallon shall be notified at least 48 hours prior to construction for coordination and inspection.
- All sanitary sewer building connections have been designed so that the minimum vertical distances from the low point of the basement to the flow line of a sanitary sewer at the corresponding building connection is not less than the diameter of the pipe plus the vertical distance of 2-1/2 feet. (unless otherwise noted)
- All sanitary sewer manholes shall be waterproofed on the exterior in accordance 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 back fill over pipe shall consist of same size "clean" or "minus" stone from springline of pipe to 12 inches above the top pipe. (Note: All P.V.C. Force Main shall be C-900, Class 200 P.V.C.)
- All sanitary and storm sewer trench back fills shall be water jetted. Granular back fill will be used under pavement areas.
- All pipes shall have positive drainage through manholes. No flat base structures are allowed.
- Brick shall not be used on sanitary sewer manholes nor shall brick be used in the construction of storm sewer structures.
- All PVC 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. (Note: All P.V.C. Force Main shall be C-900, Class 200 P.V.C.)
- All sanitary and storm sewers shall meet all specifications and installation requirements of the local governing authority.
- Storm sewers 18 inch diameter and smaller shall be A.S.T.M. C-14 unless otherwise shown on the plans.
- Storm sewers 21 inch diameter and larger shall be A.S.T.M. C-76, Class II minimum, unless otherwise shown on the plans.
- All storm sewer pipe in the right-of-way shall be reinforced concrete pipe (A.S.T.M. C-76, Class III minimum).
- All storm sewer pipe shall be "O-ring" pipe. Joints shall be gasketed O-ring type.
- All water lines shall be laid at least 10 feet horizontally from any sanitary sewer, or manhole. Whenever water lines must cross sanitary sewers, laterals or storm drains the water line shall be laid at such an elevation that the bottom of the water line is 18 inches 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 equally distant 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.
- All water lines shall be C-900 Class 200 P.V.C.
- Any permits, easements, or approvals to work on public or private properties or roadways are the responsibility of the developer.
- All sanitary sewer laterals shall be a minimum of 6 inches in diameter.
- Maintenance of the sewers designated as "public" shall be the responsibility of the City of O'Fallon upon dedication of the sewers to the district.
- All sign post and backs and bracket arms shall be painted black using Carboline Rustbond Penetrating Sealer SG and Carboline 133 HB paint (or equivalent as approved by City and MoDOT). Signs designating street name shall be on the opposite side of the street from traffic control signs.
- There shall be no obstruction, i.e. planting, bushes, trees, signs, light standards, mailboxes, etc. within six (6) feet of any fire hydrant, and/or fire department connection to an automatic sprinkler system.
- All paving to be in accordance with St. Charles County standards and specifications except as modified by the City of O'Fallon ordinances.
- Existing sanitary sewer service shall not be interrupted.
- Pre-manufactured adapters shall be used at all PVC to DIP connections. Rubber Boot/Mission-type couplings will not be allowed.
- "Type N" Lock-Type Cover and Locking Device (Lock-Lug) shall be used where lock-type covers are required.
- Retail uses will not be permitted, this review and approval action is for an office uses only being located with in this development. In addition, this facility is being parked as an office use; if at any time that the use should change and a retail entertainment use is operated within the facility (restaurant, bar, nightclub, etc.) this Site Plan will have to be brought back before the Commission for review to determine if the existing parking can accommodate the new use.
- All paving to be in accordance with St. Charles County standards and specifications except as modified by the City of O'Fallon ordinances.

PRINCIPALS & STANDARDS:

- All excavations, grading, or filling shall have a finished grade not to exceed a 3:1 slope (33%). Steeper grades may be approved by the designated official if the excavation is through rock or the excavation or the fill is adequately protected (a designed head wall or toe wall may be required). Retaining walls that exceed a height of four (4) feet shall require the construction of safety guards as identified in the appropriate section(s) of the adopted BOCA Codes and must be approved by the City Building Department. Permanent safety guards will be constructed in accordance with the appropriate section(s) of the adopted BOCA Codes.
- Sediment and erosion control plans for sites that exceed 20,000 square feet of grading shall provide for sediment or debris basins, silt traps or filters, staked straw bales or other approved measures to remove sediment from run-off waters. Temporary siltation control measures shall be maintained until vegetative cover is established at a sufficient density to provide erosion control on the site.
- Where natural vegetation is removed during grading, vegetation shall be re-established in such a density as to prevent erosion. Permanent type grasses shall be established as soon as possible during the next seeding period after grading has been completed.
- When grading operations are completed or suspended for more than 30 days permanent grass must be established at sufficient density to provide erosion control on the site. Between permanent grass seeding periods, temporary cover shall be provided.
- All finished grades (areas not to be disturbed by future improvement) in excess of 20% slopes (S:1) shall be mulched and tacked at the rate of 100 pounds per 1,000 square feet when seeded.
- Provisions shall be made to accommodate the increased runoff caused by changed soils and surface conditions during and after grading. Unvegetated open channels shall be designed so that gradients result in velocities of 2 fps (feet per second) or less. Open channels with velocities more than 2 fps and less than 5 fps shall be established in permanent vegetation by use of commercial erosion control blankets or lined with rock riprap or concrete or other suitable materials. Detention basins, diversions or any other appropriate structures shall be constructed to prevent velocities above 5 fps.
- The adjoining ground to development sites (lots) shall be provided with protection from accelerated and increased surface water, silt from erosion, and any other consequence of erosion. Run-off water from developed areas (parking lots, paved sites and buildings) above the area to be developed shall be directed to diversions, detention basins, concrete gutters and/or underground outlet systems. Sufficiently anchored straw bales may be temporarily substituted.
- Development along natural watercourses shall have residential lot lines, commercial or industrial improvements, parking areas or driveways set back a minimum of 25 feet from the top of the existing stream bank. The watercourse shall be maintained and made the responsibility of the subdivision trustees or in the case of a site plan by the property owner. Permanent vegetation should be left intact. Variances will include designed stream bank erosion control measures. FEMA and U.S. Army Corps of Engineers guidelines shall be followed where applicable regarding site development areas designated as flood plains and wetlands.
- All lots shall be seeded and mulched or sodded before an occupancy permit shall be issued except that a temporary occupancy permit may be issued by the Building Department in cases of undue hardship because of unfavorable ground conditions.

VEGETATIVE ESTABLISHMENT
For Urban Development Sites
APPENDIX A

Seeding Rates:	
Permanent:	
Tall Fescue	30 lbs./ac.
Smooth Brome	20 lbs./ac.
Combined Fescue	15 lbs./ac. and Brome @ 10 lbs./ac.
Temporary:	
Wheat or Rye	150 lbs./ac. (3.5 lbs. per 1,000 square foot)
Oats	120 lbs./ac. (2.75 lbs. per 1,000 square foot)
Seeding Periods:	
Fescue or Brome	March 1 to June 1
	August 1 to October 1
Wheat or Rye	March 15 to November 1
Oats	March 15 to September 15
Mulch Rates:	100 lbs. per 1,000 sq. feet (4,356 lbs. per acre)
Fertilizer Rates:	
Nitrogen	30 lbs./ac.
Phosphate	30 lbs./ac.
Potassium	30 lbs./ac.
Lime	600 lbs./ac. ENM*

* ENM = effective neutralizing material as per State evolution of quarried rock.

APPROXIMATE MASS GRADING QUANTITIES:
245,482 C.Y. FILL (INCLUDES 15% SHRINKAGE)
245,402 C.Y. CUT
(BALANCED)
 THE ABOVE GRADING QUANTITY IS APPROXIMATE ONLY, NOT FOR BIDDING PURPOSES. CONTRACTOR SHALL VERIFY QUANTITIES PRIOR TO CONSTRUCTION.

STANDARD SYMBOLS & ABBREVIATIONS

TREE OR BUSH	○
LIGHT POLE	—
SANITARY SEWER & MANHOLE	—○—
STORM SEWER & INLET	—□—
MAILBOX	⊞
ELECTRIC LINE	—E—
GAS LINE	—G—
WATER LINE	—W—
TELEPHONE LINE	—T—
CABLE TV LINE	—CATV—
OVERHEAD WIRE	—OHW—
UTILITY POLE	⊙
UTILITY POLE W/ DOWN GUY	⊙—
FIRE HYDRANT	⊞
WATER VALVE	⊞
WATER METER	⊞
GAS VALVE	⊞
ROAD SIGN	⊞
TELEPHONE PEDESTAL	⊞ TEL. PED.
FENCE	—x—

DEVELOPMENT NOTES

- Total area of Tract: 126.135 Acres
 Area of lot 4: 2.165 Acres
 Area of lot 5: 1.268 Acres
 Area of lot 6: 1.270 Acres
 Area of lot 7: 1.271 Acres
 Area of lot 8: 1.010 Acres
 Area of Lot 9A: 3.844 Acres
 Area of Lot 9B: 10.985 Acres
 Area of Lot 9C: 6.830 Acres
 Area of Lot 9D: 3.577 Acres
 Area of Lot 9E: 3.724 Acres
 Area of Lot 10A: 11.634 Acres
 Area of Lot 10B: 2.152 Acres
 Area of Lot 10C: 1.216 Acres
 Area of Lot 10D: 3.261 Acres
 Area of Lot 10E: 3.101 Acres
 Area of Lot 10F: 3.573 Acres
 Area of Lot 10G: 2.950 Acres
 Area of Lot 11: 48.419 Acres
 Area of Common Ground: 7.936 Acres
 Area of R.O.W. Dedication: 0.777 Acres
 Area of West Hoff Industrial R.O.W.: 3.547 Acres
 Future West Hoff Industrial R.O.W.: 1.164 Acres
- Existing Zoning: I-2 Heavy Industrial (City of O'Fallon)
 Proposed Use: Agriculture Office/Warehouse
- Existing Use: Agriculture
 Proposed Use: Office/Warehouse
- The required height and building setbacks are as follows:
 Minimum Front Yard: 30 feet
 Minimum Side Yard: 25 feet
 Minimum Rear Yard: 50 feet
 Parking Setback: 10 feet
 Note: This tract of land does not abut a residential district, or any property projected for future residential development
- Owner of property: H & K Machine Services Company, Inc.
 1550 Progress West Lane
 O'Fallon, MO 63366
 636-240-8412
- Site is served by:
 City of O'Fallon Sewer (636) 281-2858
 City of O'Fallon Water (636) 281-2858
 AmerenUE Electric Company 1-800-55-ASKUE
 Laclede Gas Company (636) 946-8937
 SBC Telephone Company (636) 949-1301
 O'Fallon Fire Department (636) 272-3493
- Proposed detention shall be analyzed to accommodate for the 100 year storm event.
- According to the flood insurance rate map of the City of O'Fallon, Missouri, (Community Panel Numbers 290316 0210 and 290316 0220 F, dated March 17, 2003). This tract lies partly within Zone AE and partly within Zone X. A Zone AE is defined as an area with the 100 year flood hazard area. A Zone X is defined as not being a flood hazard area. The areas as shown on this survey are based on graphic scaling from the above mentioned FEMA base maps.
- Tree Preservation Calculations:
 Existing Woodlands = 3,298,338 sq. ft. (75.72 acres)
 Woodlands to be Preserved = 2,404,691.24 sq. ft. (55.20 acres) ~ 72.9%
 Disturbed Area = 2,509,690 sq. ft. (57.615 acres)
- All outdoor mechanical equipment shall be screened from public view city standards.
- All signs shall require a separate permit by the City of O'Fallon.
- Site lighting is proposed to be building mounted. Prior to Construction Site Plan approval, a Photometric Lighting Plan in accordance with the City's Exterior Lighting Standards shall be submitted for review and approval for all proposed exterior lighting.
- Sidewalk, curb ramps, ramp and accessible parking spaces shall be constructed accordance with the current approved "Americans with Disabilities Act Accessibility Guidelines" (ADAAG) along with the required grades, construction materials, specifications 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 proposed fencing requires a separate permit through the Planning Department.
- All new utilities shall be located underground.

SHEET INDEX

SHEET 1	COVER
SHEET 2	SITE PLAN
SHEET 3	SITE PLAN

WATER AS-BUILTS

WE HAVE EXECUTED AN AS-BUILT SURVEY OF THE WATER VALVES, HYDRANTS AND MAIN LOCATIONS, WHERE POSSIBLE, WITH RESPECT TO EXISTING AND PROPOSED EASEMENTS. THE RESULTS OF THAT SURVEY ARE SHOWN ON THIS SET OF AS-BUILT PLANS.

ALL PUBLIC WATER AS-BUILTS ARE SHOWN WITHIN DESIGNATED EXISTING OR PROPOSED EASEMENTS EXCEPT AS FOLLOWS:

SIGNED: DARREL R. OAKLEY
 P.E./L.S. LS-2285
 DATE: 5/12/06

APPROVED

PREPARED FOR:
 T.R. HUGHES
 239 FOX HILL ROAD
 ST. CHARLES, MO. 63301
 636-940-9300

**PROGRESS WEST INDUSTRIAL PARK/
BROOKSIDE OFF-SITE WATER**

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REVISIONS

**ENGINEERING
PLANNING
SURVEYING**

221 Point West Blvd.
 St. Charles, MO 63301
 636-928-5552
 FAX 928-1718

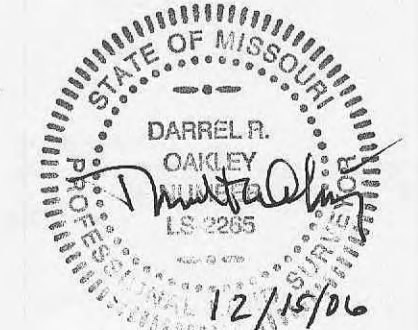
5-18-06
 DATE
 89-3029C
 PROJECT NUMBER
 1 OF 3
 SHEET OF
 3029C-ASB
 FILE NAME
 SAZ
 DRAWN
 DRO
 DESIGNED CHECKED

AS-BUILTS ADDED MAY 2006. City of O'Fallon File # 5204



AS-BUILTS ADDED MAY 2006.

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.



PROPERTY N/F
ST. CHARLES COUNTY PIPING, INC.
3726/1330

PROPERTY N/F
F & F INVESTMENTS COMPANY, INC.
1414/1244

PROPERTY N/F
F & F INVESTMENTS COMPANY, INC.
1414/1244

LOT 11

LOT 10G

LOT 10F

LOT 9E

LOT 9D

S88°31'48"E 1221.36'

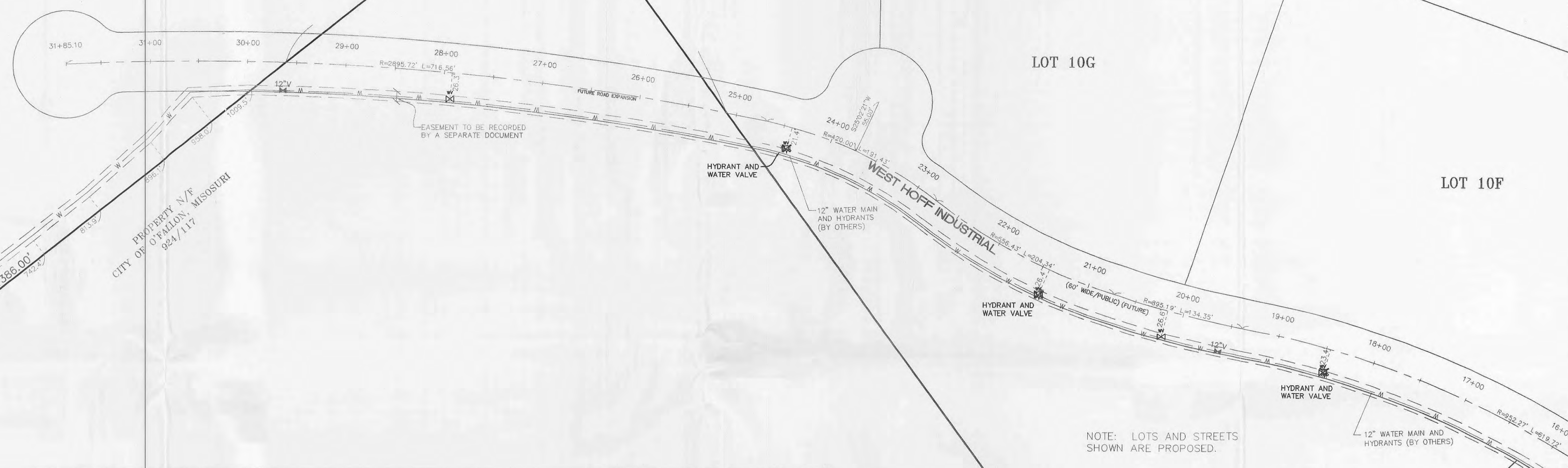
N36°34'25"W
164.33'

10' W. ESM¹ GRANTED TO
CUMBER RIVER ELECTRIC BY
B.M. 560 P. 1036

LIFT
STATION

COMMON GROUND

60' UNDISTURBED
PRESERVATION EASEMENT
(CENTERLINE OF CREEK)



EASEMENT TO BE RECORDED
BY A SEPARATE DOCUMENT

HYDRANT AND
WATER VALVE

12" WATER MAIN
AND HYDRANTS
(BY OTHERS)

WEST HOFF INDUSTRIAL

HYDRANT AND
WATER VALVE

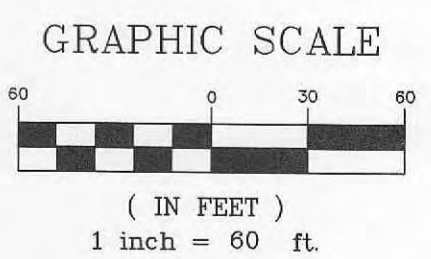
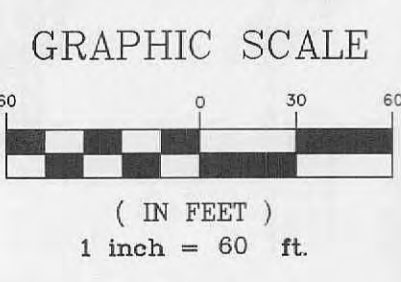
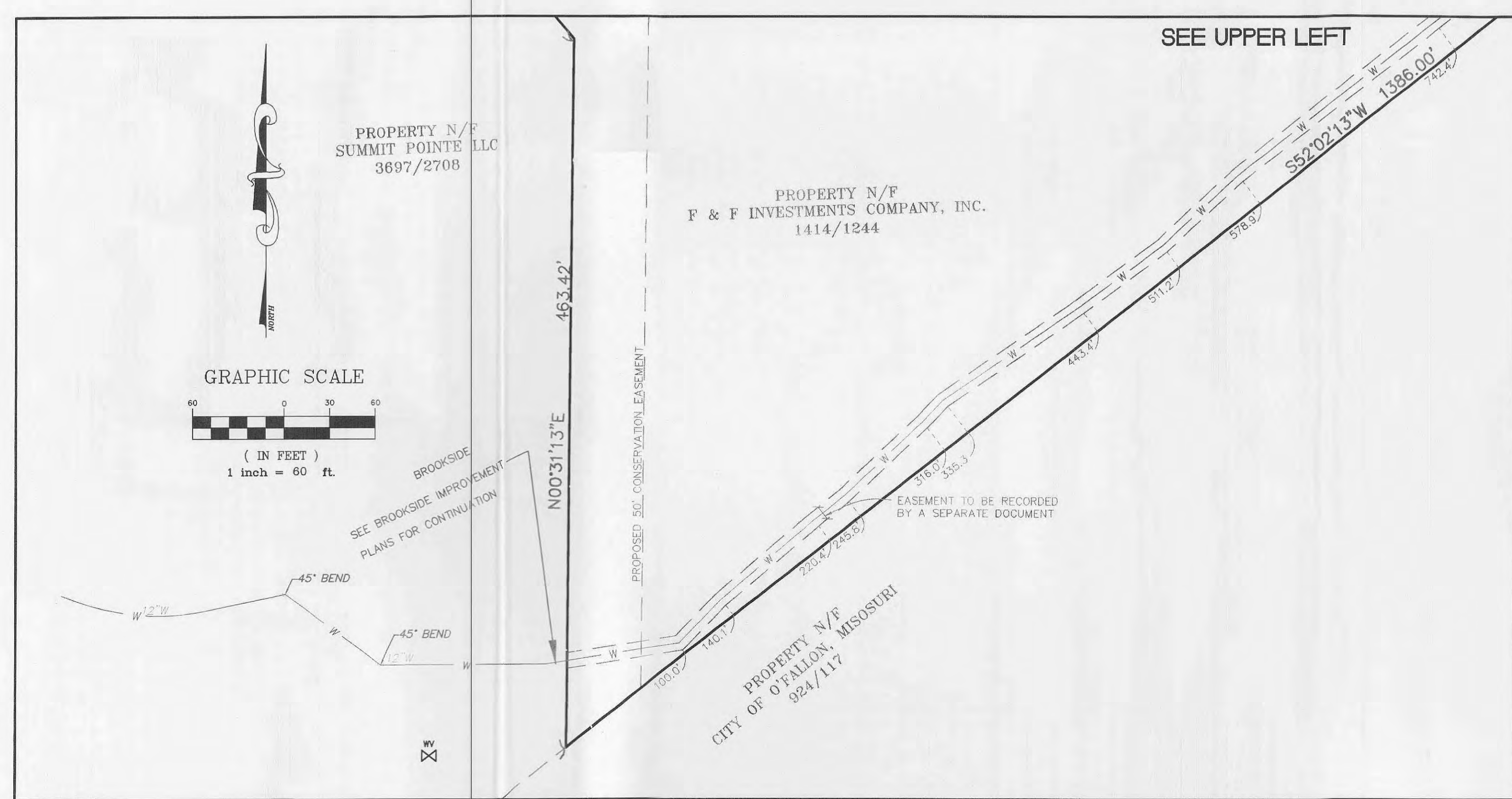
HYDRANT AND
WATER VALVE

12" WATER MAIN
AND HYDRANTS
(BY OTHERS)

NOTE: LOTS AND STREETS
SHOWN ARE PROPOSED.

SEE DETAIL BELOW

SEE UPPER LEFT



AS-BUILTS ADDED MAY 2006.

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 3726/1330

PROPERTY N/F
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PROPERTY N/F
 F & F INVESTMENTS COMPANY, INC.
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LOT 11

LOT 10G

LOT 10F

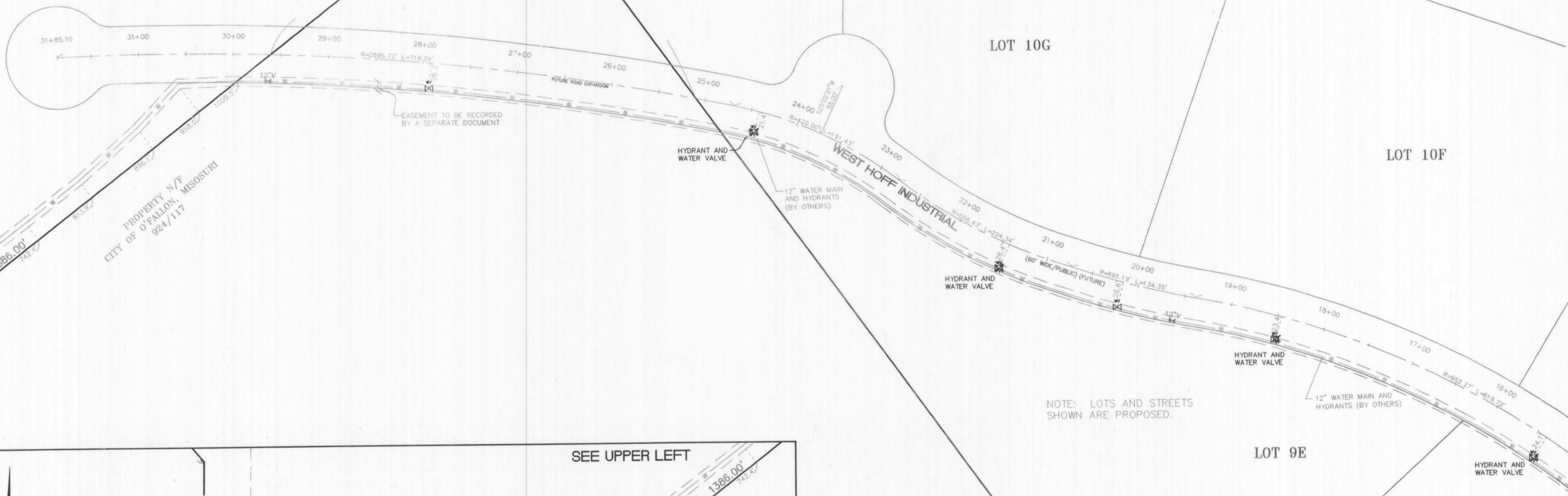
LOT 9E

LOT 9D

S88°31'48"E 1221.36'

COMMON GROUND

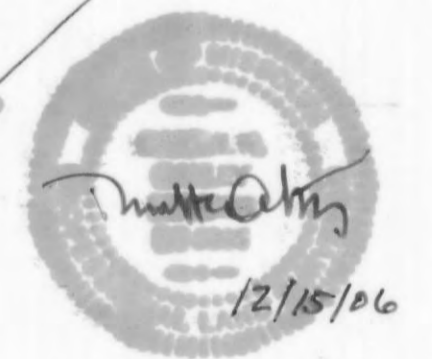
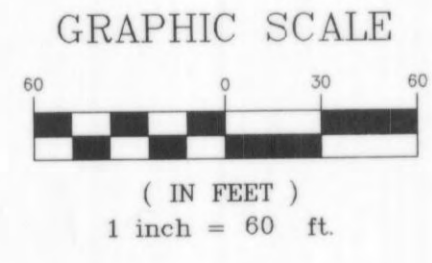
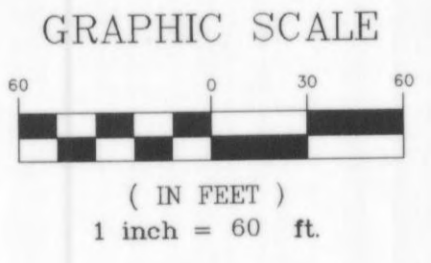
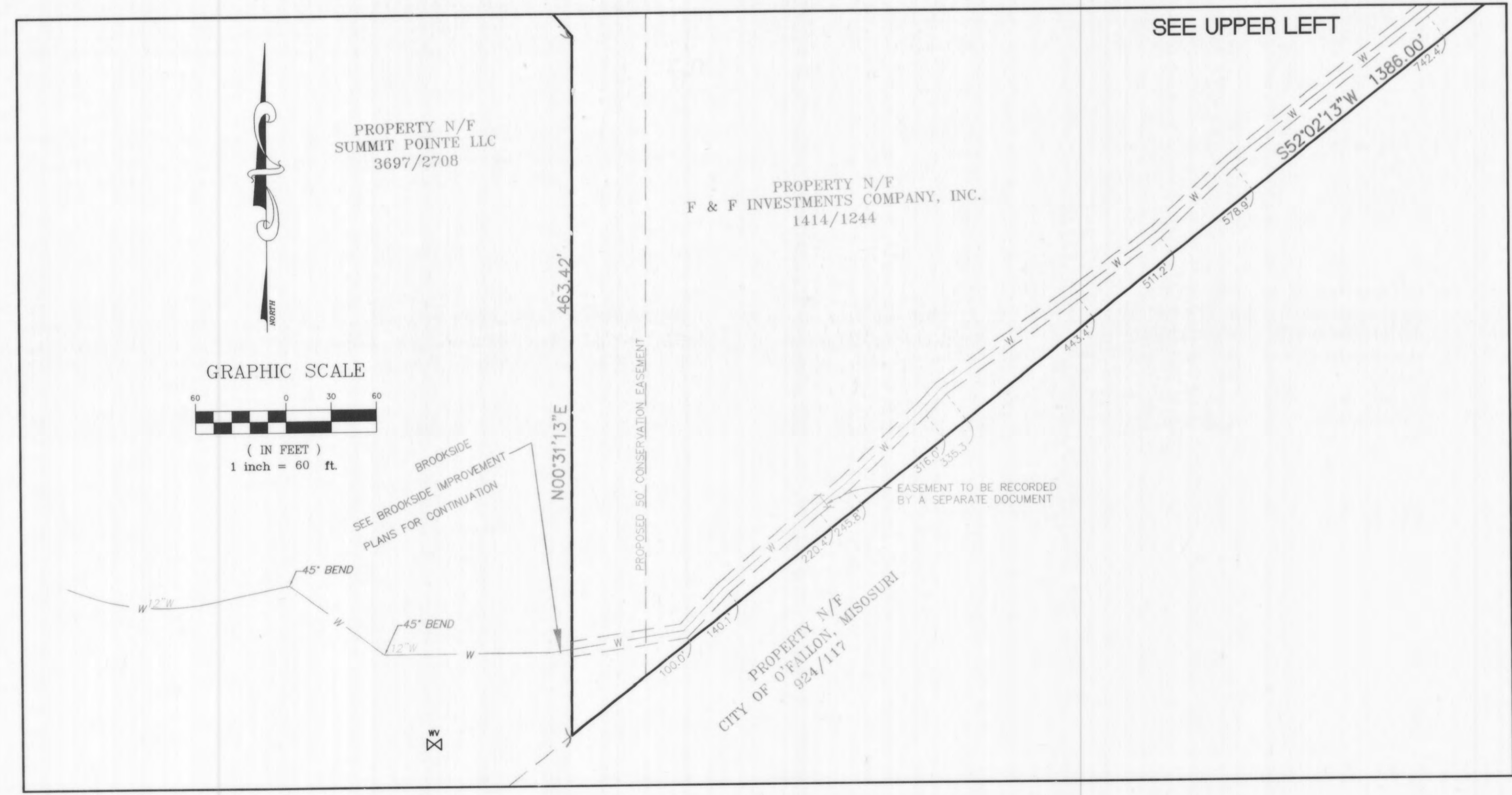
60' UNDISTURBED
 PRESERVATION EASEMENT
 (CENTERLINE OF CREEK)



NOTE: LOTS AND STREETS
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SEE DETAIL BELOW

SEE SHEET 2



AS-BUILTS ADDED MAY 2006.

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Progress West Industrial Park/Brookside offsite water
 as built 3/3

3
 3