

GRADING NOTES

1. A Geotechnical Engineer shall be employed by the owner and be on site during grading operations. All soils tests shall be verified by the Geotechnical Engineer concurrent with the grading and backfilling operations. The developer shall also supply the City Construction Inspector with the soil report(s) prior to or during site soil testing.
2. The grading contractor shall perform a complete grading and compaction operation as shown on the plans, stated in these notes, or reasonably implied therefrom, all in accordance with the plans and notes as interpreted by the Geotechnical Engineer.
3. The Contractor shall notify the Soils Engineer at least two days in advance of the start of the grading operation.
4. All areas shall be allowed to drain. All low points shall be provided with temporary ditches.
5. All filled places, including trench backfills, under buildings, proposed storm and sanitary sewer lines and/or paved areas, shall be compacted to 90% of maximum density as determined by the "Modified A.A.S.H.T.O. T-180 Compaction Test," (A.S.T.M.-D-1557), or 95% maximum density as determined by the Standard Proctor Test A.A.S.H.T.O. T-99. All filled 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 fill areas is to correspond to the compactive effort as defined by the standard or modified proctor test. Optimum moisture content shall be determined using the same test that was used for compaction curves shall be submitted to the city of O'Fallon prior to the placement of fill. Proof rolling may be required to verify soil stability at the discretion of the City of O'Fallon.
6. Debris and foundation material from any existing on-site building or structure which is scheduled to be razed for this development must be used as non structural fill.
7. All trash and debris on site, either existing or from construction, must be removed and properly disposed of off-site.
8. Soft soil in the bottom and banks of any existing or former pond sites or tributaries or on any sediment basins or traps should be removed, spread out and permitted to dry sufficiently to be used as fill. None of this material should be placed in proposed public right-of-way locations or on any storm sewer locations.
9. Site preparation includes the clearance of all stumps, trees, bushes, shrubs, and weeds; the grubbing and removal of roots and other surface obstructions from the site; and the demolition and removal of any man-made structures. The material shall be properly disposed of off-site. Topsoil and grass in the fill areas shall be thoroughly disced prior to the placement of any fill. The Soils Engineer shall approve the discing operation.
10. Compaction equipment shall consist of tamping rollers, pneumatic-tired rollers, vibratory rollers, or high speed impact type drum rollers acceptable to the Soils Engineer. The roller shall be designed so as to avoid the creation of a layered fill without proper blending of successive fill layers.
11. The Soils Engineer shall observe and test the placement of the fill to verify that specifications are met. A series of fill density tests will be determined on each lift of fill. Interim reports showing fill quality will be made to the Owner at regular intervals.
12. The Soils Engineer shall notify the Contractor of rejection of a lift of fill or portion thereof. The Contractor shall rework the rejected portion of fill and obtain notification from the Soils Engineer of its acceptance prior to the placement of additional fill.
13. All areas to receive fill shall be scarified to a depth of not less than 6 inches and then compacted in accordance with the specifications given below. Natural slopes steeper than 1 vertical to 5 horizontal to receive fill shall have horizontal benches cut into the slopes before the placement of any fill. The width and height to be determined by the Soils Engineer. The fill shall be loosely placed in horizontal layers not exceeding 6 inches in thickness and compacted in accordance with the specifications given below. The Soils Engineer shall be responsible for determining the acceptability of soils placed. Any unacceptable soils placed shall be removed at the Contractor's expense.
14. The surface of the fill shall be finished so that it will not impound water. If at the end of a days work it would appear that there may be rain prior to the next working day, the surface shall be finished smooth. If the surface has been finished smooth for any reason, it shall be scarified before proceeding with the placement of succeeding lifts. Fill shall not be placed on frozen ground, nor shall filling operations continue when the temperature is such as to permit the layer under placement to freeze.
15. Ensure graded areas that are to remain bare for over 2 weeks are seeded and mulched. (ONR Requirement).

PRINCIPALS & STANDARDS

1. 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.
2. 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.
3. 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.
4. All finished grades (areas not to be disturbed by future improvement) in excess of 20% slopes (5:1) shall be mulched and tacked at the rate of 100 pounds per 1,000 square feet when seeded.
5. 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.
6. 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.
7. 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

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 PLANS.

ALL PUBLIC SEWERS ARE LOCATED WITHIN DESIGNATED EXISTING OR PROPOSED EASEMENTS EXCEPT AS FOLLOWS:

SIGNED: _____ DATE: _____
P.E./L.S. _____
NUMBER LS-2197
5/13/05

ASBUILTS NOTE:
ALL DISTANCE AND SLOPE CALCULATIONS ARE FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.

A SET OF AS-BUILT PLANS FOR O'FALLON WALK

A TRACT OF LAND BEING PART OF THE NORTHEAST QUARTER OF FRACTIONAL SECTION 5, TOWNSHIP 46 NORTH, RANGE 3 EAST OF THE FIFTH PRINCIPAL MERIDIAN, CITY OF O'FALLON, ST. CHARLES COUNTY, MISSOURI

GENERAL NOTES

1. 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.
2. NO AREA SHALL BE CLEARED WITHOUT THE PERMISSION OF THE PROJECT ENGINEER.
3. ALL GRADES SHALL BE WITHIN 0.1 FEET OF WHAT IS SHOWN ON THE GRADING PLAN.
4. THE CITY OF O'FALLON SHALL BE NOTIFIED 48 HOURS PRIOR TO CONSTRUCTION FOR COORDINATION AND INSPECTION.
5. ALL EXISTING SITE IMPROVEMENTS DISTURBED, DAMAGED OR DESTROYED SHALL BE REPAIRED OR REPLACED TO CLOSELY MATCH PRE-CONSTRUCTION CONDITIONS.
6. ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO THE CURRENT CONSTRUCTION STANDARDS OF THE CITY OF O'FALLON INCLUDING ARTICLE 13 PERFORMANCE STANDARDS.
7. ANY PERMITS, LICENSES, EASEMENTS, OR APPROVALS REQUIRED TO WORK ON PUBLIC OR PRIVATE PROPERTIES OR ROADWAYS ARE THE RESPONSIBILITY OF THE DEVELOPER.
8. NO SLOPES SHALL EXCEED 3(H) : 1(V). ALL SLOPES SHALL BE SEEDED AND MULCHED.
9. 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 ACCEPTANCE 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 IS 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 IN HIS METHODS AS DEEMED FIT TO PROTECT PROPERTY AND IMPROVEMENTS. ANY DEPOSITING OF SILTS OR MUD ON NEW OR EXISTING PAVEMENT OR IN NEW OR EXISTING STORM SEWERS OR SWALES SHALL BE REMOVED AFTER EACH RAIN AND AFFECTED AREAS CLEANED TO THE SATISFACTION OF THE OWNER AND/OR THE CITY OF O'FALLON AND/OR MODOT.
10. EROSION CONTROL SYSTEMS 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 AND ADJACENT ROADWAYS, PROPERTIES AND DITCHES.
11. DEVELOPER MUST SUPPLY THE CITY CONSTRUCTION INSPECTORS WITH SOIL REPORTS PRIOR TO OR DURING SITE SOIL TESTING.
12. BRICK SHALL NOT BE USED IN THE CONSTRUCTION OF STORM SEWER STRUCTURES.
13. ALL PROPOSED UTILITIES ARE TO BE BORED UNDER EXISTING STREETS.
14. ALL SIGN LOCATIONS AND SIZES MUST BE APPROVED SEPARATELY THROUGH THE PLANNING DIVISION.
15. 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).
16. ALL NEW UTILITIES WILL BE LOCATED UNDERGROUND (ELECTRIC, GAS, WATER, TELEPHONE, CABLE ETC.).
17. ALL CONSTRUCTION METHODS AND PRACTICES SHALL CONFORM WITH CURRENT OSHA STANDARDS.
18. LIGHTING VALUES WILL BE REVIEWED ON SITE PRIOR TO FINAL OCCUPANCY INSPECTION. CORRECTIONS WILL NEED TO BE MADE IF NOT IN COMPLIANCE WITH CITY STANDARDS.
19. ALL STORM AND SANITARY STRUCTURES SHALL NOT BE CONSTRUCTED WITH BRICK. ALL STORM SEWER JOINTS SHALL BE GASKETED O-RING TYPE.
20. ALL PAVING TO BE IN ACCORDANCE WITH ST. CHARLES COUNTY STANDARDS AND SPECIFICATIONS EXCEPT AS MODIFIED BY THE CITY OF O'FALLON ORDINANCE.
21. ALL FUTURE SIDEWALKS, CURB RAMP, RAMP AND ACCESSIBLE PARKING SPACES SHALL BE CONSTRUCTED IN ACCORDANCE WITH CURRENT APPROVED "AMERICAN 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. (ENSURE AT LEAST (1) 8' WIDE HANDICAPPED ACCESS AISLE IS PROVIDED AND CURB RAMP DO NOT PROJECT INTO HANDICAP ACCESS AISLE.)
22. ENSURE ALL EROSION CONTROL SYSTEMS ARE INSPECTED AND NECESSARY CORRECTIONS MADE WITHIN 24 HOURS OF ANY RAINSTORM RESULTING IN ONE-HALF INCH OF RAIN OR MORE.
23. ALL SIGNS FOR TRAFFIC CONTROL SHALL ADHERE CURRENT CONDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTED).
24. CURBING ALONG FRONTAGE OF BUILDINGS A THROUGH G SHALL BE PAINTED YELLOW AND SUFFICIENT SIGNAGE PLACED INDICATING "NO PARKING FIRE LANE".

REFERENCE BENCHMARK:

RM66 (USGS) ELEVATION 581.74
CROSS CUT ON THE WEST BOLT OF A FIRE HYDRANT LOCATED AT THE NORTHEAST CORNER OF MILL POND DRIVE AND SPRING HILL DRIVE

SITE BENCHMARK:

(USGS) ELEVATION 609.66
OLD IRON PIPE AT THE SOUTHEAST CORNER OF PROPERTY CONVEYED TO KENNETH BLACKWOOD AS PARCEL 1 BY DEED RECORDED IN BOOK 1921 PAGE 1030 OF THE ST. CHARLES COUNTY RECORDS. IRON PIPE IS 318± SOUTH OF THE CENTERLINE OF FEISE ROAD AND 80± WEST OF THE CENTERLINE OF MISSOURI STATE HIGHWAY K.

LEGEND	
○	—UTILITY POLE
●	—IRON PIPE
⊙	—SANITARY MANHOLE
—S—	—SANITARY SEWER
—STM—	—STORM SEWER
—OW—	—OVERHEAD ELECTRIC
—CMP—	—CORRUGATED METAL PIPE
—RCP—	—REINFORCED CONCRETE PIPE
—VCP—	—VITRIFIED CLAY PIPE LINE
●	—BOLLARDS
▲	—GAS METER
—	—SIGN
—W—	—WATER LINE
—G—	—GAS LINE

DEVELOPMENT NOTES

1. AREA OF TRACT: 18.85 ACRES
2. EXISTING ZONING: C-2 COMMERCIAL (CITY OF O'FALLON)
3. PROPOSED USE: RETAIL CENTER
4. THE REQUIRED HEIGHT AND BUILDING SETBACKS ARE AS FOLLOWS:
MINIMUM FRONT YARD: 25 FEET
MINIMUM SIDE YARD: 25 FEET
MINIMUM REAR YARD 10 FEET
MAXIMUM BUILDING HEIGHT 50 FEET
5. ACCORDING TO THE FLOOD INSURANCE RATE MAP OF THE CITY OF O'FALLON, MISSOURI (COMMUNITY PANEL NUMBER 290316-0239-E, EFFECTIVE DATE AUGUST 2, 1996), THIS PROPERTY LIES WITHIN ZONE X. ZONE X IS DEFINED AS A AREA OF NO FLOOD HAZARD.
6. TOPOGRAPHIC INFORMATION IS PER SURVEY BY BAX ENGINEERING.
7. PARKING REQUIRED:
SHOPPING CENTER PARKING REQUIREMENTS:
5.5 SPACES REQUIRED PER 1,000 SQ. FT. OF LEASABLE SPACE
140,789 / 1000 X 5.5 = 774.33 = 775 SPACES REQUIRED
PARKING PROVIDED = 785 (INCLUDING 24 HANDICAP SPACES)
8. INTERNAL LANDSCAPING
6% OF TOTAL NUMBER OF SPACES X 270 SQ. FT.
785 SPACES X 6% X 270 = 12,717.00 SQ. FT. REQUIRED
12,800.33 SQ. FT. GREENSPACE PROVIDED
9. LIGHTING PLAN BASED ON PLAN SL-1 BY TRI ARCHITECTS.
10. LANDSCAPE PER PLAN L-1 BY TRI ARCHITECTS.
11. ALL PAVEMENT THAT IS TO RECEIVE TRUCK TRAFFIC SHALL BE A MINIMUM OF 4" OF ASPHALT OVER 10" AGGREGATE BASE. ALL OTHER PAVEMENT IS 3" ASPHALT OVER 8" AGGREGATE BASE AND WILL FURTHER DETAILED ON THE CONSTRUCTION PLANS.
12. THIS SITE IS SERVED BY THE FOLLOWING:
CITY OF O'FALLON SEWERS
AMEREN UE
PUBLIC WATER DISTRICT #2
SBC
LACLEDE GAS
SOUTHERN PIPELINE
O'FALLON FIRE DISTRICT
FT. ZUMWALT SCHOOL DISTRICT
MODOT
13. NO OUTDOOR DISPLAY OF MATERIALS OR PRODUCTS, TEMPORARY OR OTHERWISE, SHALL OCCUR BEYOND THE AREA BETWEEN THE FRONT OF THE BUILDING AND THE DRIVE AISLE. NO SUCH MATERIALS SHALL BE ATTACHED OR AFFIXED TO ANY EXTERIOR WALL.
14. A BOUNDARY ADJUSTMENT AND EASEMENT PLAT SHALL BE APPROVED PRIOR TO OCCUPANCY.
15. ALL PROPOSED FENCING REQUIRES A SEPERATE PERMIT THROUGH THE PLANNING DIVISION.
16. ALL ROOFTOP MECHANICAL APPARATUS SHALL BE ADEQUATELY SCREENED BY A PARAPET WALL.
17. IF AT ANY TIME IN THE FUTURE A RESTAURANT IS LOCATED IN THE PROPOSED CENTER, A GREASE DUMPSTER AND ENCLOSURE SHALL BE LOCATED IN THE GENERAL AREA OF SUCH FUTURE USE.
18. REMOVAL OF THE RIGHT-IN / RIGHT-OUT LOCATED AT 2107 AND 2119 HIGHWAY K WILL BE THE RESPONSIBILITY OF THE DEVELOPER OF THE CRAZY BOWLS AND WRAPS LOT; IBT GROUP IS RELIEVED OF THE BURDEN PER CITY PLANNER OF O'FALLON (4/16/2004). THE ACTUAL REMOVAL OF THE RIGHT-IN / RIGHT-OUT WILL OCCUR ONCE ALL THE TRAFFIC CONNECTIONS TO THE O'FALLON WALK DEVELOPMENT HAVE BEEN COMPLETED.

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- 3.....STORM SEWER PROFILES
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5-13-05
APPROVED



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MoDOT WILL NEED TO BE CONTACTED DIRECTLY AT (314) 340-4100

* FIBER OPTICS ARE PRESENT (MoDOT)

AS-BUILTS ADDED JANUARY 2005

PREPARED FOR:
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(312) 421-8710

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04-22-04	Per City Comments
04-29-04	Per City Comments
05-10-04	Per City Comments
05-25-04	Per City Comments
08-02-04	Per MoDOT
08-17-04	Per MoDOT

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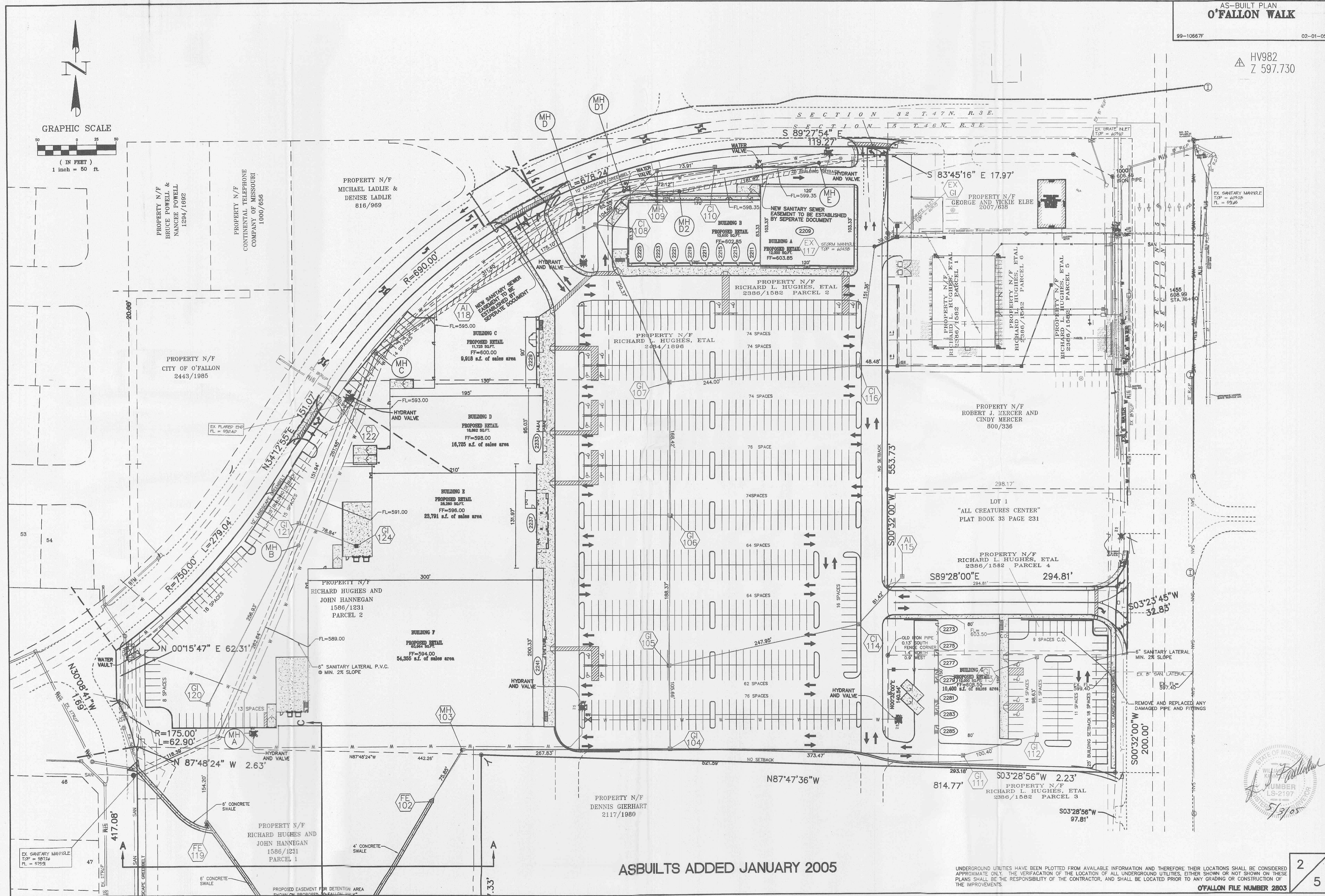
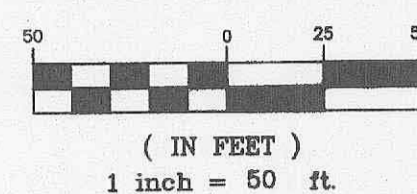
1052 South Cloverleaf Drive
St. Peters, MO. 63576-6445
636-928-5552
FAX 928-1718

2-5-2005
DATE
99-10667D
PROJECT NUMBER
1 OF 5
SHEET OF
10667FASB.dwg
FILE NAME
MG
DRAWN
DESIGNED
CHECKED
WSK

O'FALLON FILE NUMBER 2803

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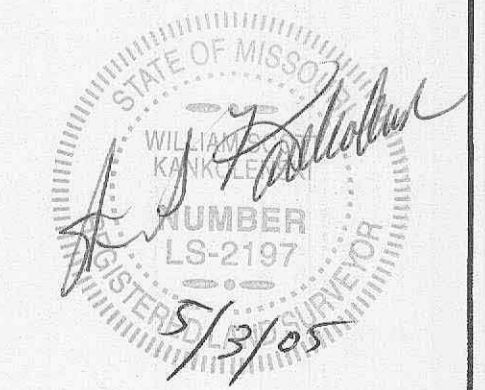
GRAPHIC SCALE



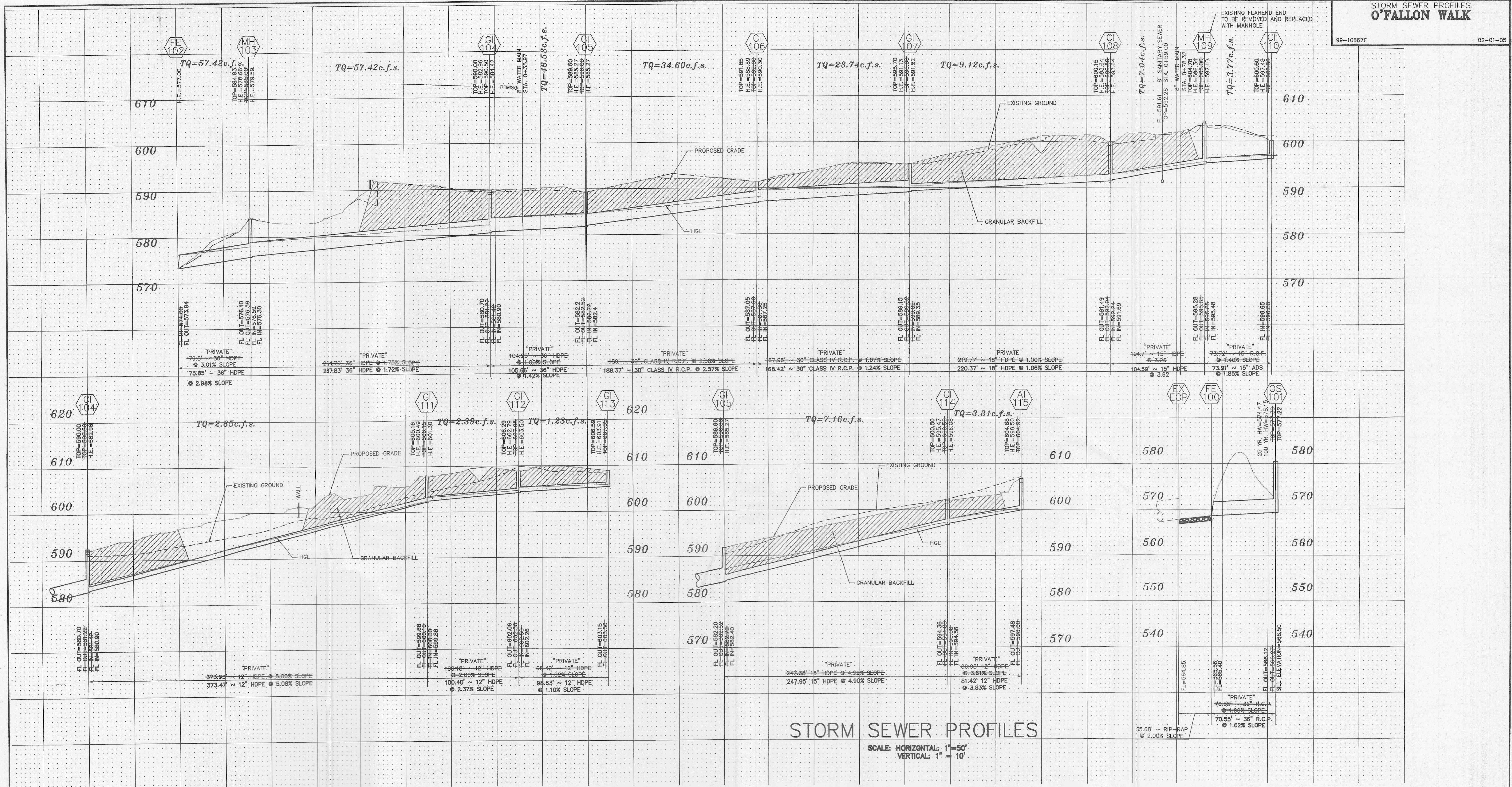
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UNDERGROUND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE INFORMATION AND THEREFORE THEIR LOCATIONS SHALL BE CONSIDERED APPROXIMATE ONLY. THE VERIFICATION OF THE LOCATION OF ALL UNDERGROUND UTILITIES, EITHER SHOWN OR NOT SHOWN ON THESE PLANS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, AND SHALL BE LOCATED PRIOR TO ANY GRADING OR CONSTRUCTION OF THE IMPROVEMENTS.

O'FALLON FILE NUMBER 2803



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STORM SEWER PROFILES

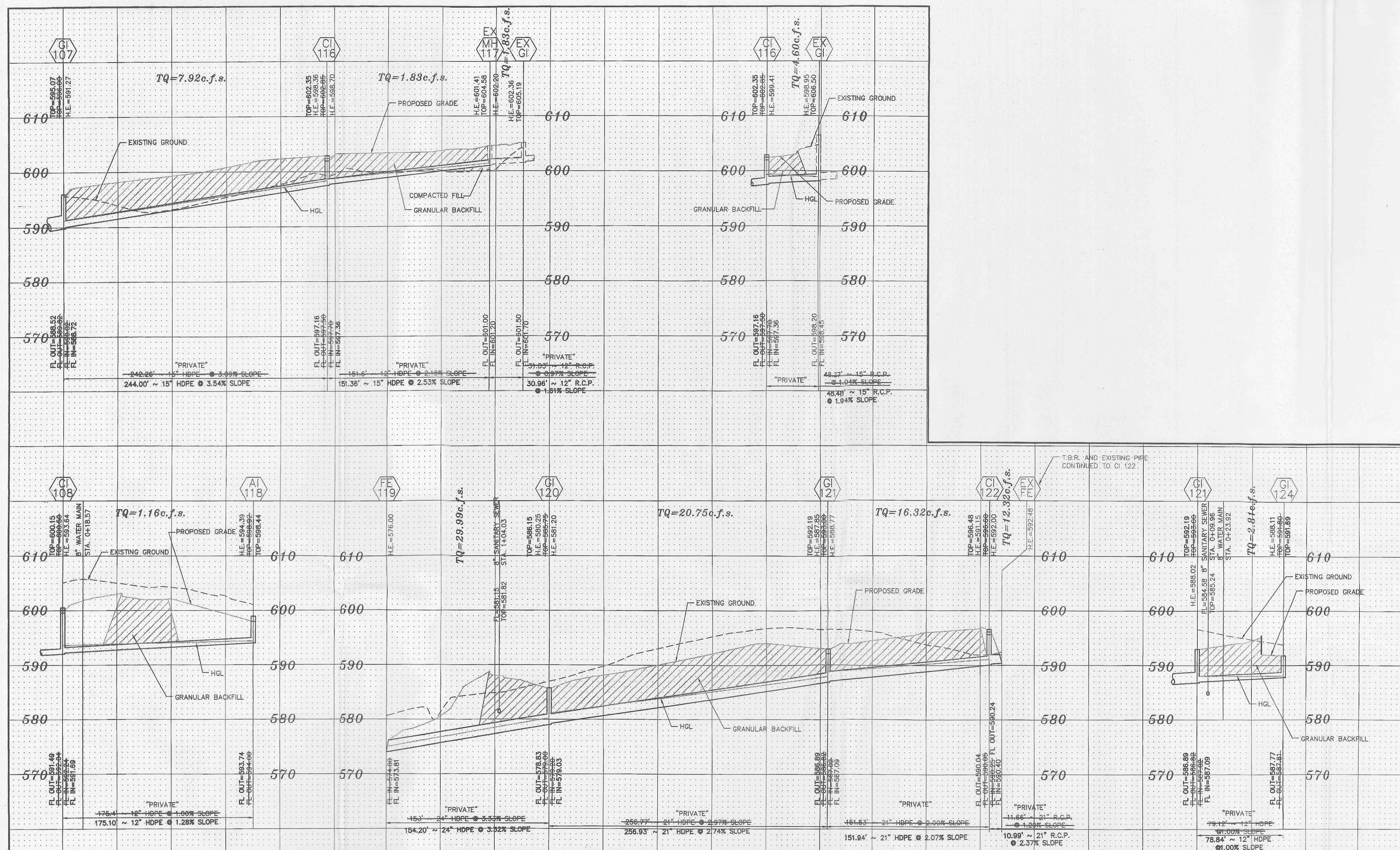
SCALE: HORIZONTAL: 1"=50'
VERTICAL: 1"=10'

ASBUILT
DATE OF M.S.D.
NUMBER
LS-2197
5/3/05

ASBUILT ADDED JANUARY 2005

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STORM SEWER PROFILES

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

FILENAME: 10667F / SYSTEM 35

UPP STR	LOW STR	L	DIA	UPPER FL LN	LOWER FL LN	PS	UPPER ST EL	DEPTH BY GR	UPPER BY EL	LOWER BY EL	HYDR GRADE	FR HEAD	VEL	VEL HEAD	JUNC LOSS	TURN LOSS	TQ	PIPE CAP	REMARKS
AI 118	CI 108	175	12	593.74	591.69	1.17	598.44	4.33	594.12*	593.10	.00110	0.19	1.48	0.03	0.03	0.00	1.16	3.85	1
EX GI	CI 116	48	15	598.20	597.36	1.74	606.50	7.43	599.07	598.61	.00510	0.24	3.75	0.22	0.22	0.00	4.60	8.52	2
EX GI	MH 117	31	12	601.50	601.20	0.97	605.19	2.83	602.36	602.20	.00260	0.08	2.33	0.08	0.08	0.00	1.83	3.51	3
MH 117	CI 116	151	15	601.00	597.36	2.42	604.58	3.23	601.15*	598.61	.00070	0.10	1.49	0.03	0.00	0.04	1.83	10.88	4
CI 116	GI 107	244	15	597.16	588.72	3.46	602.35	4.50	597.85*	591.06	.01280	3.13	6.45	0.65	0.53	0.03	7.92	13.02	5
AI 115	CI 114	81	12	597.48	594.56	3.61	604.68	6.73	595.95*	595.56	.00760	0.62	4.29	0.29	0.29	0.00	3.37	7.33	6
CI 114	GI 105	248	15	594.36	582.40	4.82	600.50	5.53	594.97*	584.77	.01050	2.60	5.83	0.53	0.45	0.11	7.16	15.37	7
GI 113	GI 112	99	12	603.15	602.26	0.90	606.59	3.05	603.54*	603.26	.00100	0.10	1.57	0.04	0.04	0.00	1.23	3.67	8
GI 112	CI 111	100	12	602.06	599.88	2.17	606.29	3.77	602.52*	600.88	.00380	0.38	3.04	0.14	0.13	0.03	2.39	5.69	9
GI 111	CI 104	373	12	599.68	580.90	5.03	605.16	5.10	600.06*	582.41	.00470	1.76	3.37	0.18	0.08	0.03	2.65	8.66	10
GI 110	MH 109	74	15	596.65	595.48	1.58	600.60	3.38	597.22*	596.73	.00290	0.21	3.07	0.15	0.15	0.00	3.77	8.81	11
MH 109	CI 108	105	15	595.28	591.69	3.43	604.78	8.84	595.94*	593.10	.01010	1.06	5.74	0.51	0.46	0.06	7.04	12.97	12
CI 108	GI 107	220	18	591.49	589.35	0.97	600.15	7.05	593.10	591.06	.00640	1.42	5.16	0.41	0.27	0.35	9.12	11.21	13
GI 107	GI 106	168	30	589.15	587.25	1.13	595.70	4.64	591.06	589.75	.00330	0.56	4.84	0.36	0.18	0.57	23.74	43.57	14
GI 106	GI 105	188	30	587.05	582.40	2.47	591.85	3.51	588.34*	584.90	.00710	1.34	7.05	0.77	0.53	0.00	34.60	64.44	15
GI 105	CI 104	106	36	582.20	580.90	1.23	589.60	4.83	584.77	583.90	.00410	0.44	6.58	0.67	0.08	0.35	46.83	80.15	16
CI 104	MH 103	286	36	580.70	576.30	1.64	590.00	7.59	582.41*	579.30	.00630	1.69	8.12	1.02	0.85	0.47	57.42	92.61	17
MH 103	FE 102	76	36	576.10	573.94	2.85	584.93	6.39	578.54	576.94	.00630	0.48	8.12	1.02	0.56	0.56	57.42	121.93	18
GI 124	GI 121	79	12	587.77	587.09	0.86	591.69	2.98	588.71	588.09	.00530	0.42	3.58	0.20	0.20	0.00	2.81	3.58	19
EX FE	CI 122	11	21	590.40	590.24	1.46	592.65	0.18	592.47	591.99	.00600	0.07	5.12	0.41	0.41	0.00	12.32	19.12	20
CI 122	GI 121	152	21	590.04	587.09	1.94	596.48	5.40	591.08*	588.84	.00900	1.37	6.79	0.71	0.56	0.21	15.32	23.92	21
GI 121	GI 120	257	21	586.89	579.03	3.06	592.19	4.23	587.96*	580.78	.01460	3.75	8.63	1.16	0.64	0.19	20.75	30.02	22
GI 120	FE 119	154	24	578.83	573.81	3.26	586.15	6.13	580.02*	575.81	.01500	2.31	9.55	1.42	0.88	0.37	29.99	44.22	23

* INDICATES CRITICAL DEPTH

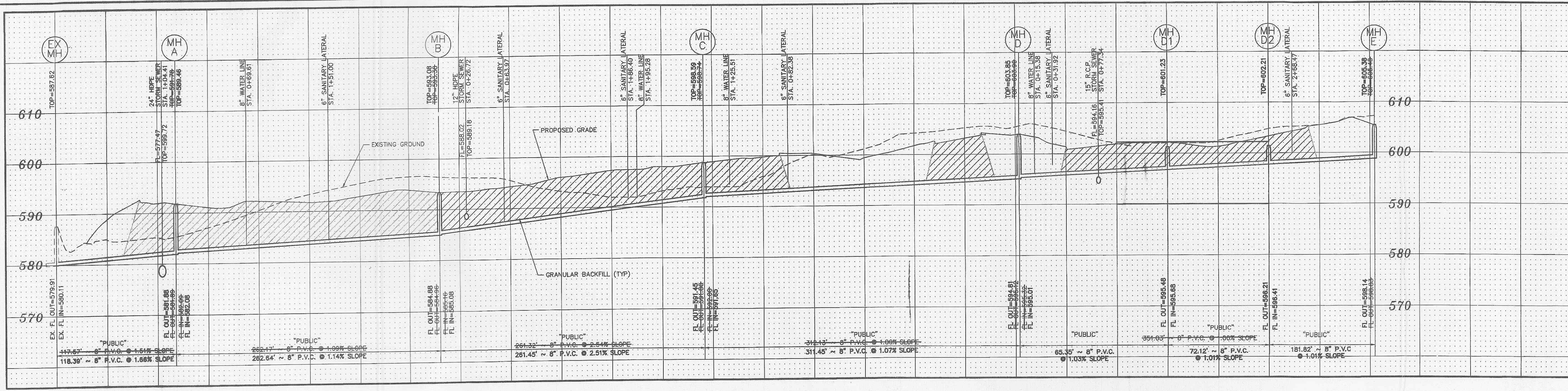
STATE OF MISSOURI
REGISTERED PROFESSIONAL ENGINEER
NUMBER LS-2197
5/3/05

AS-BUILTS ADDED JANUARY 2005

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.

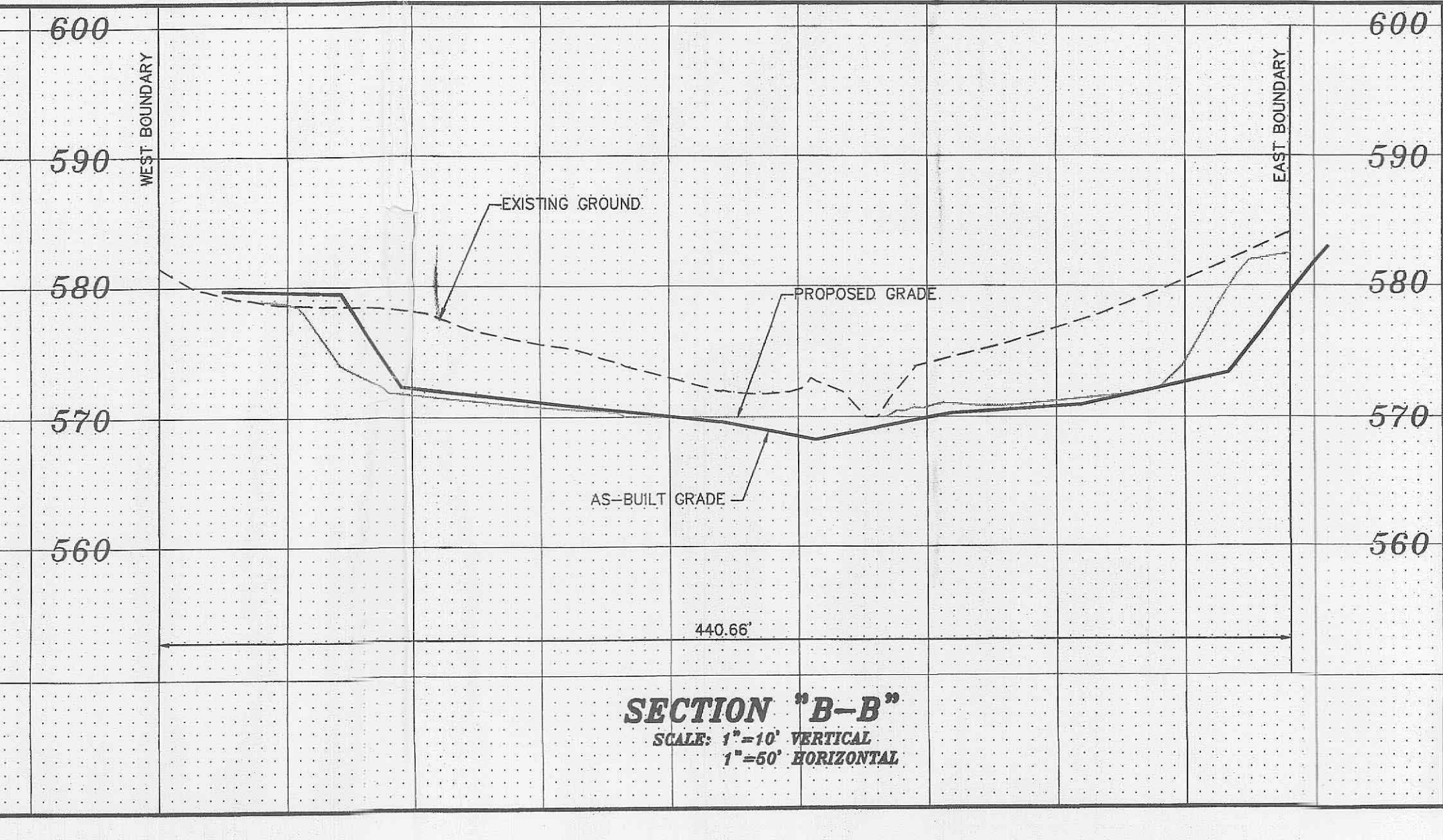
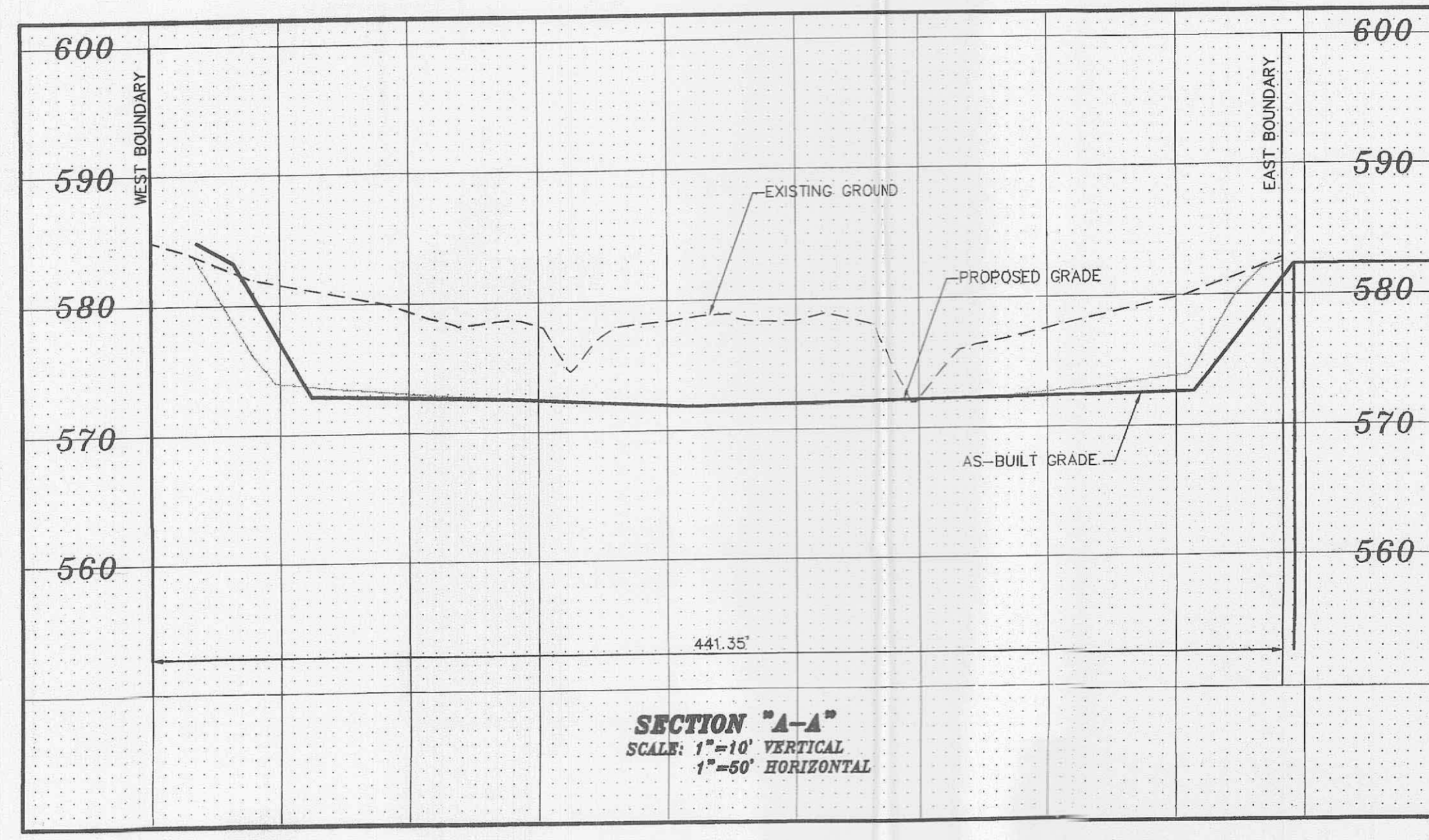
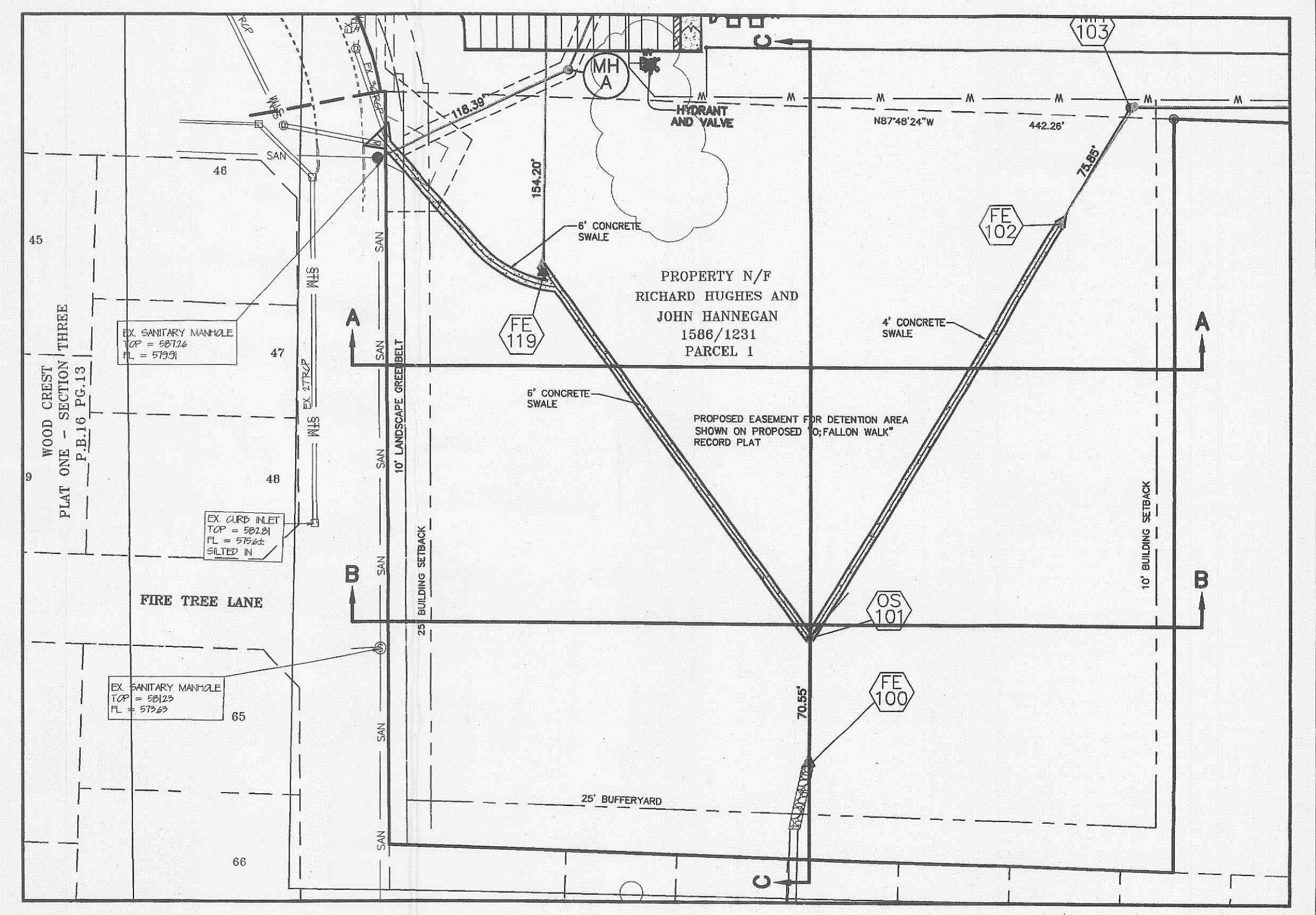
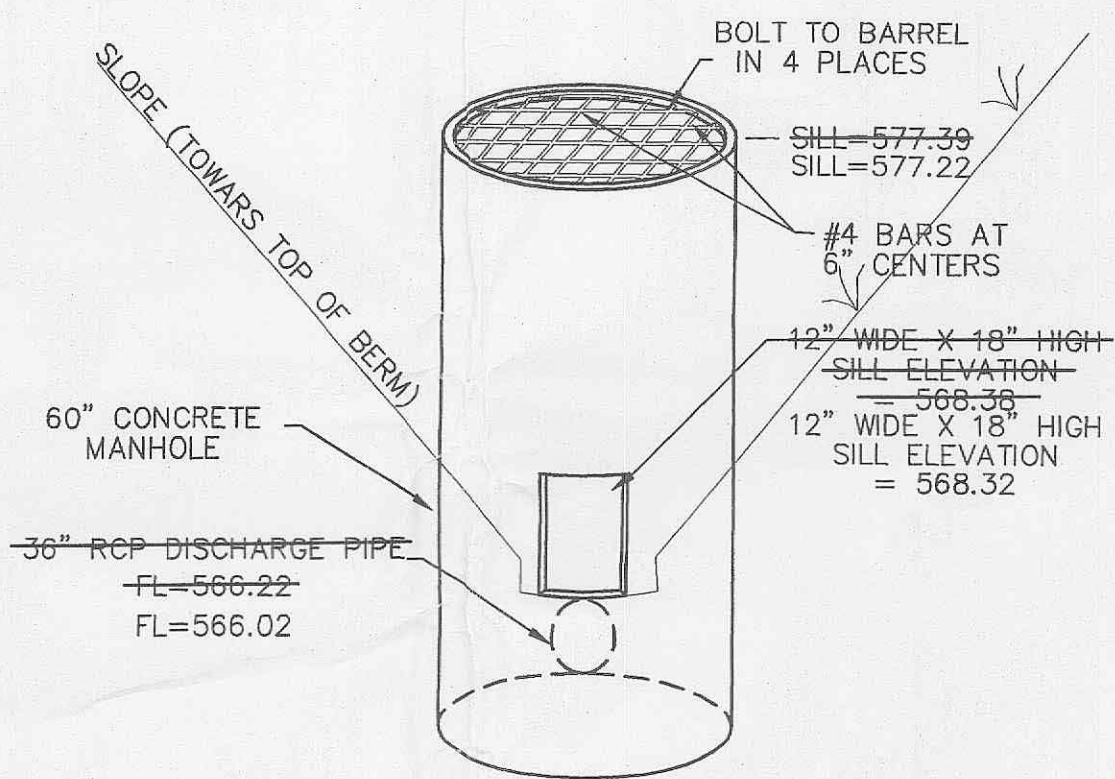
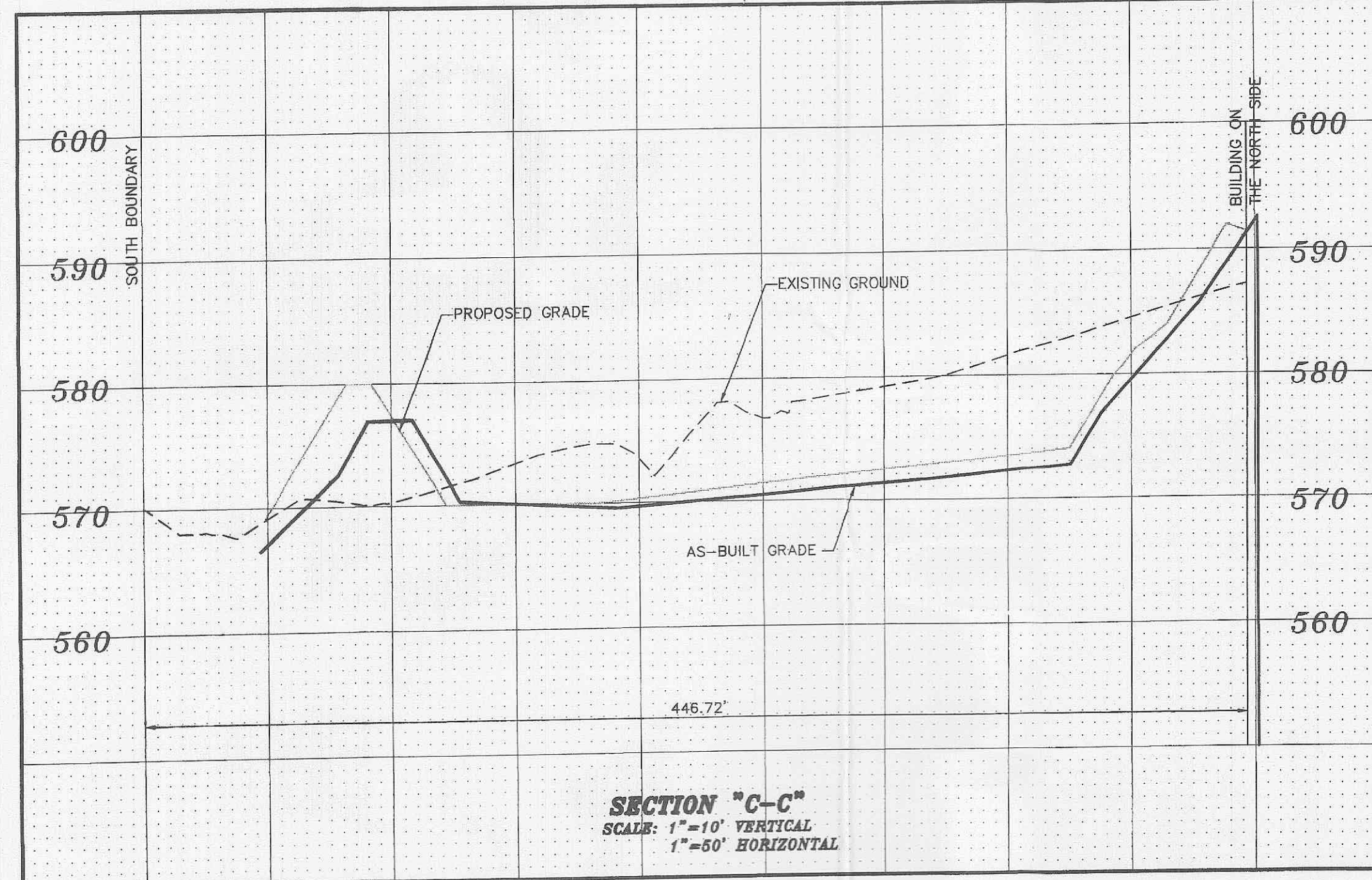
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SANITARY SEWER PROFILES

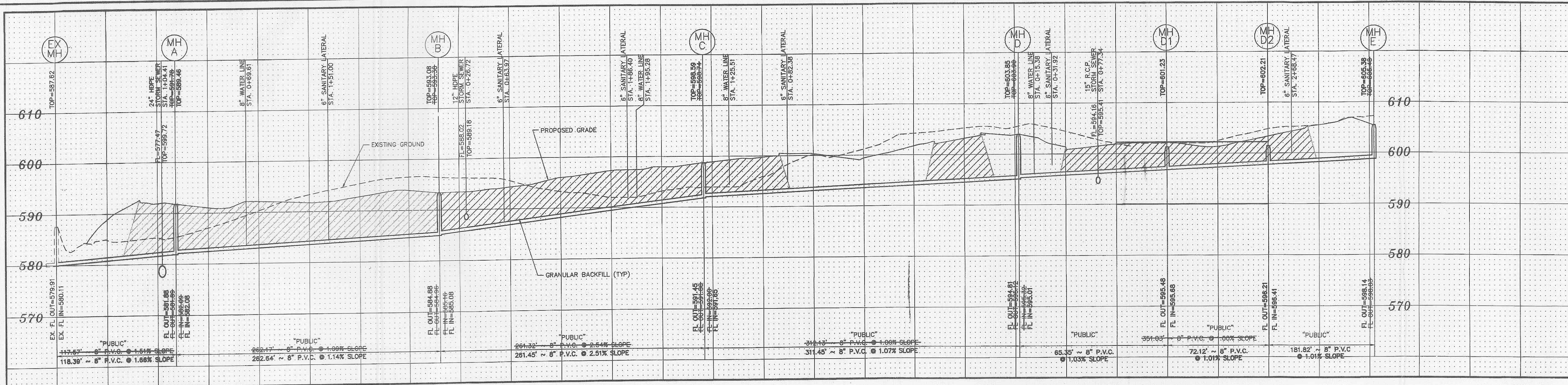
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VERTICAL: 1"=10'



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.

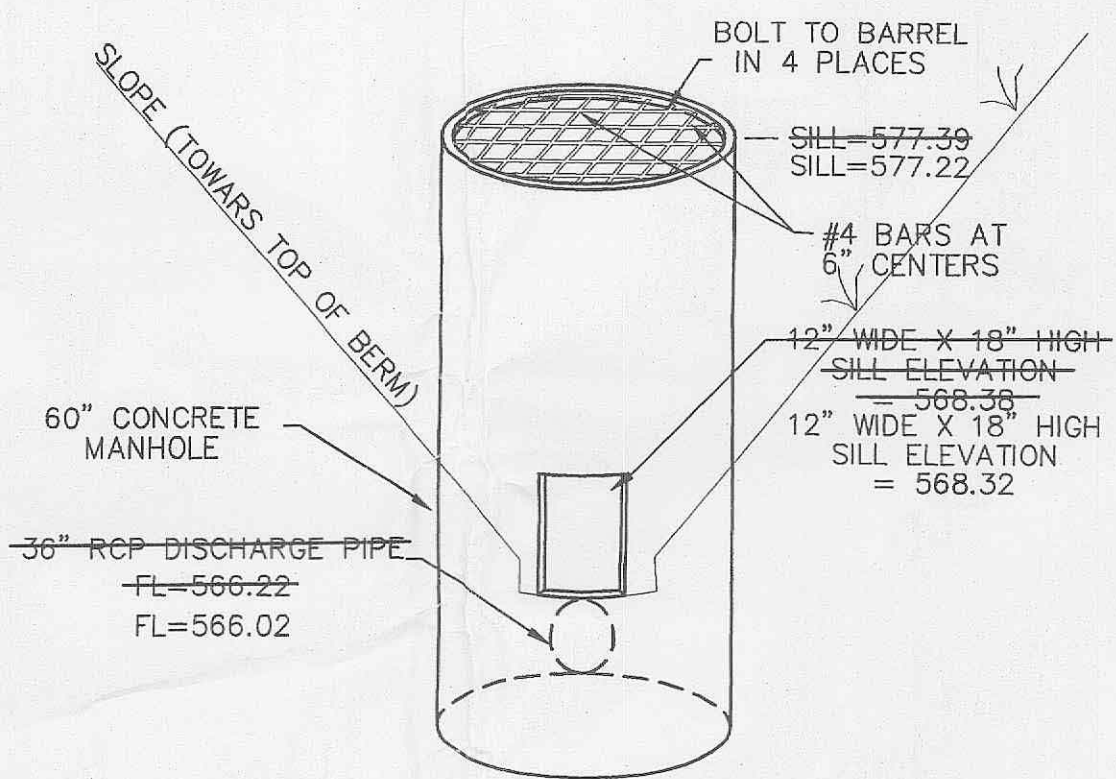
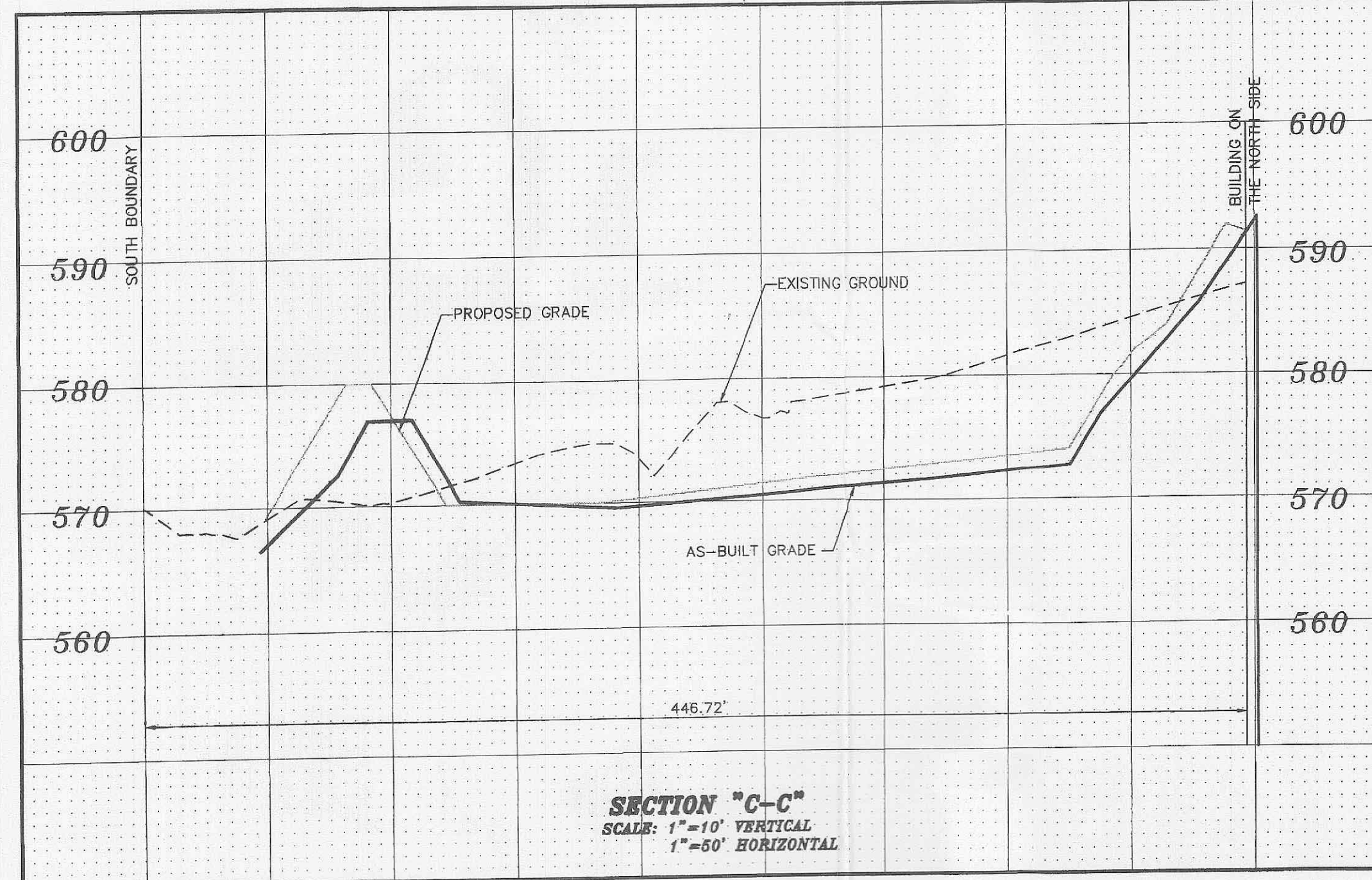
ASBULTS ADDED JANUARY 2005
O'FALLON FILE NUMBER 2803

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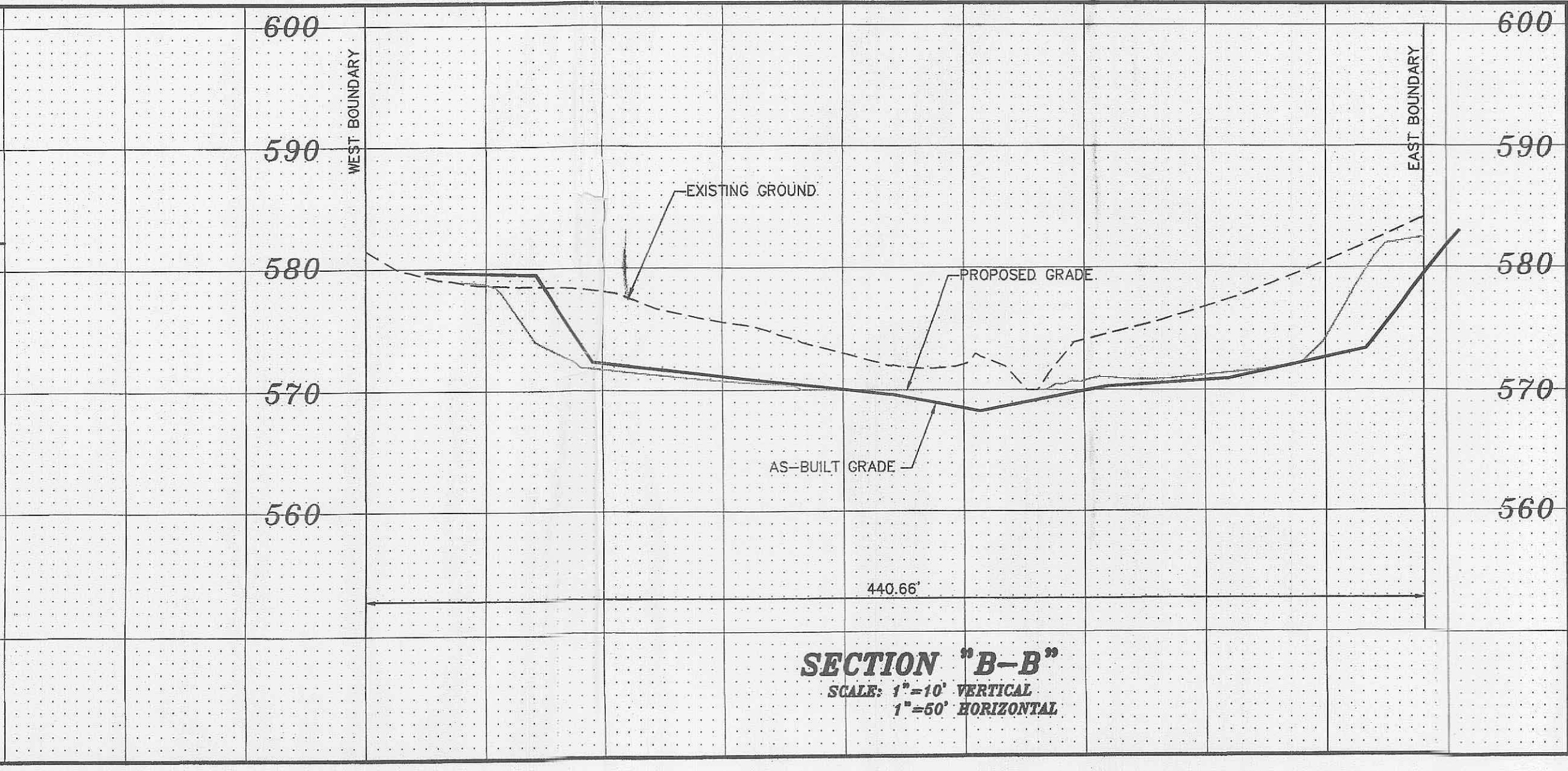
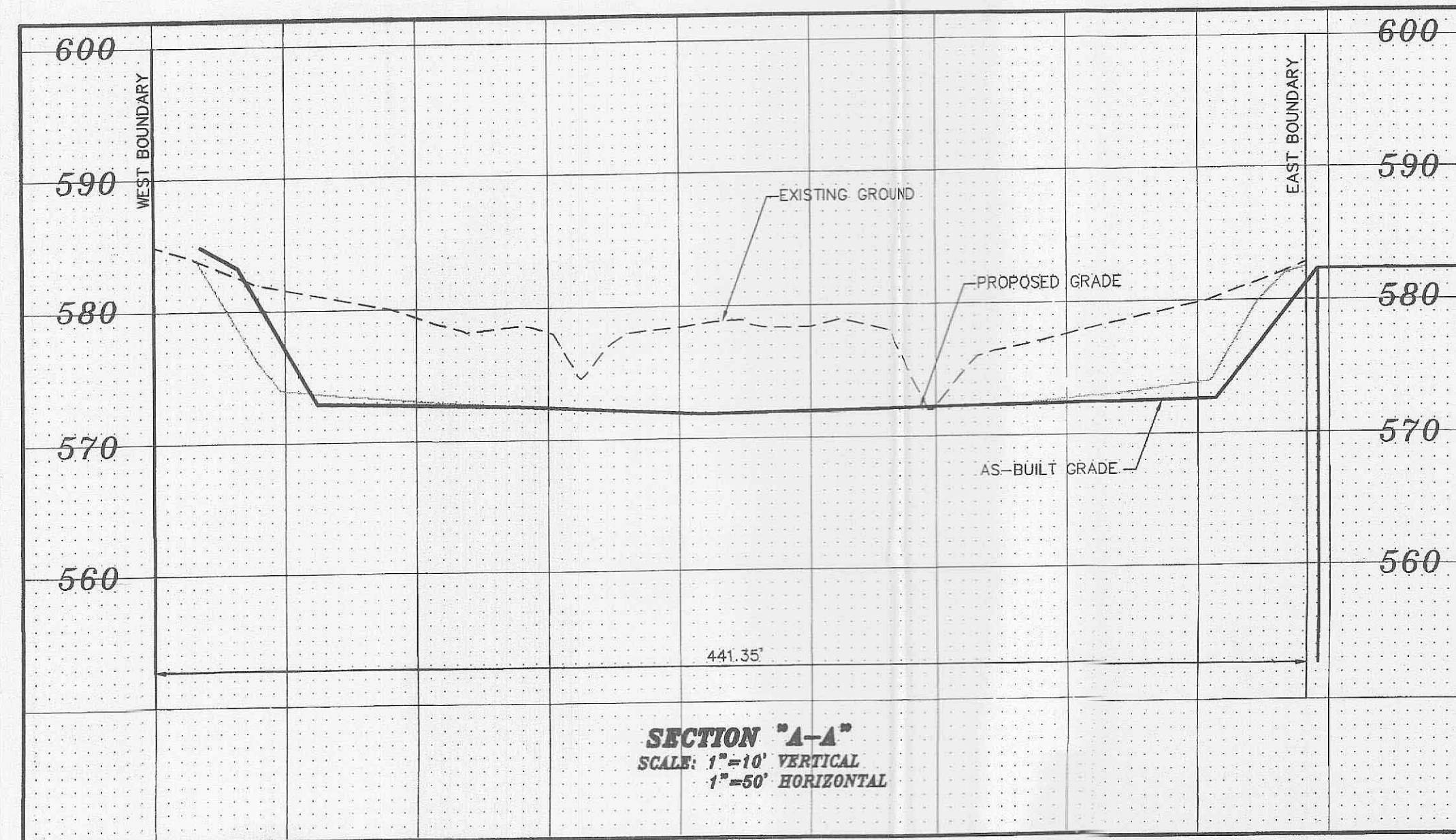
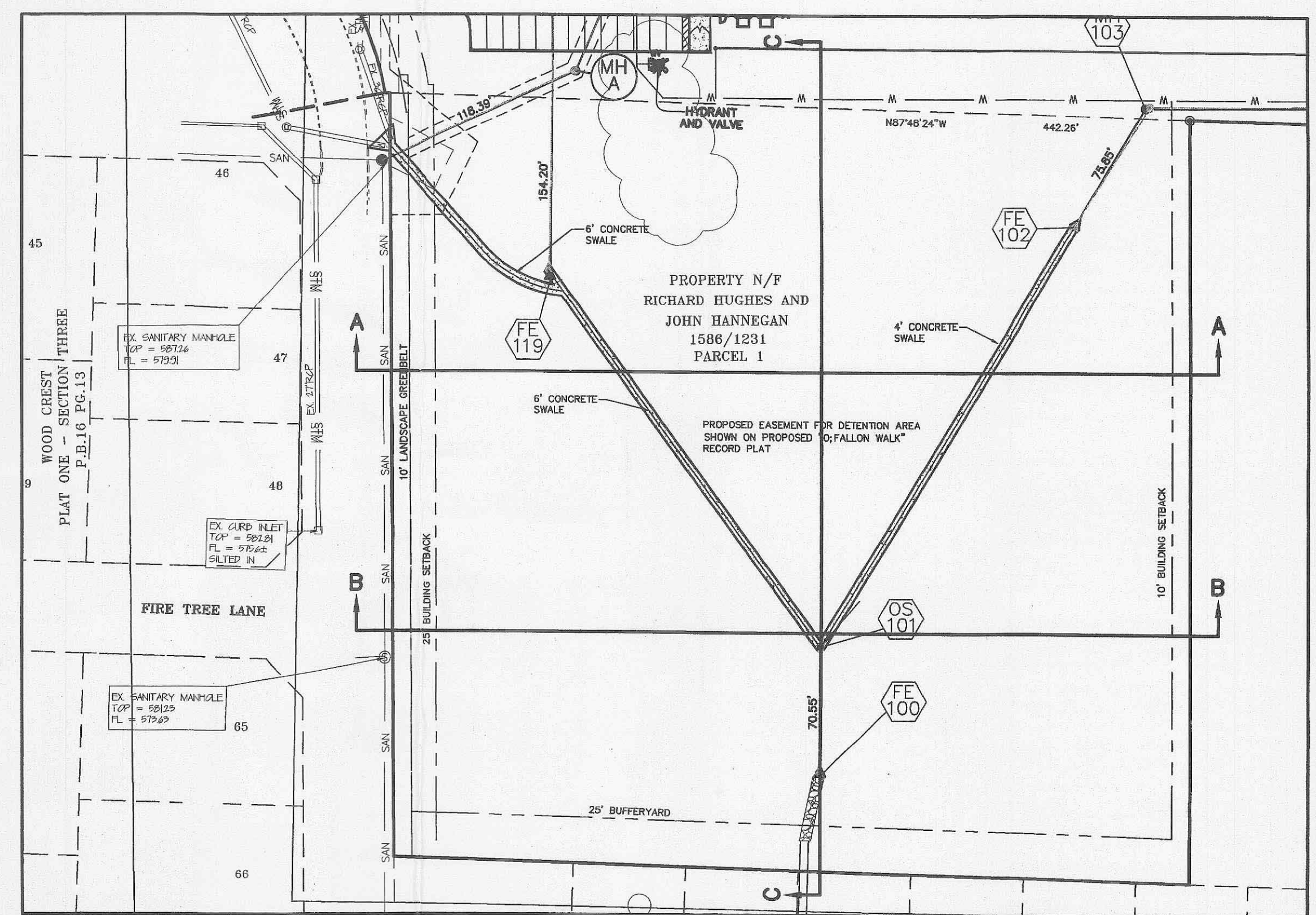


SANITARY SEWER PROFILES

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



25 YEAR HIGHWATER 574.67
100 YEAR HIGHWATER 575.48



DETENTION AREA DETAIL
SCALE: 1"=80'



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ASBULTS ADDED JANUARY 2005

O'FALLON FILE NUMBER 2803

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