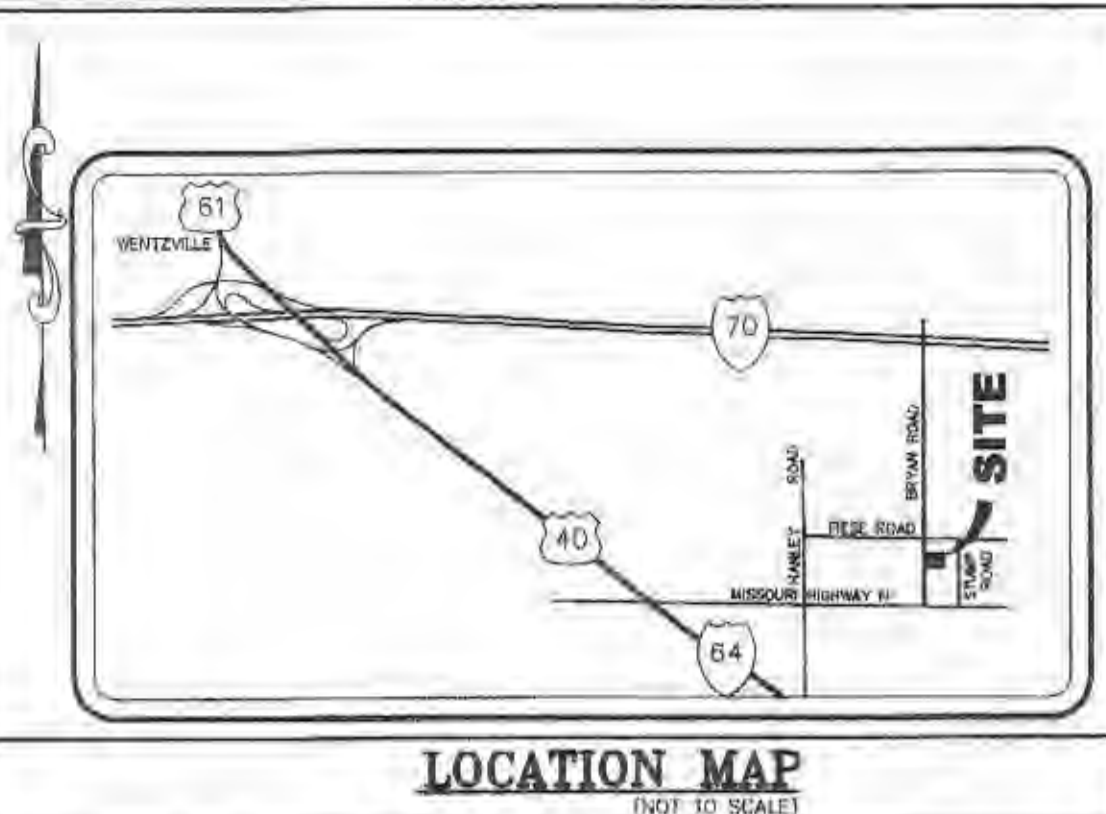


A SET OF CONSTRUCTION PLANS FOR PROPOSED LOT 5 OF DARDENNE PRAIRIE PLAZA RETAIL BUILDING #2

A TRACT OF LAND BEING PART OF THE SOUTHWEST QUARTER OF SECTION 6, TOWNSHIP 46 NORTH, RANGE 3 EAST OF THE FIFTH PRINCIPAL MERIDIAN ST. CHARLES COUNTY, MISSOURI



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	—CAV—
OVERHEAD WIRE	—OH—
UTILITY POLE	⊥
UTILITY POLE W/ DOWN GUY	⊥/G
FIRE HYDRANT	⊞
WATER VALVE	⊞
WATER METER	⊞
GAS VALVE	⊞
ROAD SIGN	⊞
TELEPHONE PEDESTAL	⊞
FENCE	—X—

GENERAL NOTES

- 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.
- ALL TRENCH BACKFILLS UNDER PAVED AREAS SHALL BE GRANULAR BACKFILL, AND SHALL BE COMPACTED TO 90% OF THE MAXIMUM DENSITY AS DETERMINED BY THE "MODIFIED AASHTO T-100 COMPACTION TEST," (A.S.T.M.-D-1557). ALL OTHER TRENCH BACKFILLS MAY BE EARTH MATERIAL (FREE OF LARGE CLONDS OR STONES). ALL TRENCH BACKFILLS SHALL BE WATER JETTED.
- NO AREA SHALL BE CLEARED WITHOUT THE PERMISSION OF THE PROJECT ENGINEER.
- ALL GRADES SHALL BE WITHIN 0.2 FEET OF THOSE SHOWN ON THE GRADING PLAN.
- NO SLOPE SHALL BE STEEPER THAN 3:1. ALL SLOPES SHALL BE SODDED OR SEEDED AND MULCHED.
- ALL CONSTRUCTION AND MATERIALS USED SHALL CONFORM TO CURRENT CITY OF DARDENNE PRAIRIE STANDARDS.
- ALL MECHANICAL EQUIPMENT TO BE SCREENED FROM PUBLIC VIEW.
- PROPOSED BUILDING WILL COMPLY WITH CURRENT AMERICAN DISABILITY ACT REQUIREMENTS.
- SEE ARCHITECTURAL DRAWING FOR ALL BUILDING DIMENSIONS, SERVICE CONNECTIONS, DETAILS, ETC.
- ALL UTILITIES SHOWN ARE EXISTING UNLESS OTHERWISE NOTED. ALL NEW UTILITIES SHALL BE LOCATED UNDERGROUND.
- ALL DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.
- ALL CONSTRUCTION METHODS AND PRACTICES SHALL CONFORM WITH CURRENT O.S.H.A. STANDARDS.
- ALL SIGNS ON THE SITE OR ANY STRUCTURE MUST HAVE SIGN PERMITS APPROVED BY THE CITY OF DARDENNE PRAIRIE. A GROUND SIGN'S MAXIMUM HEIGHT IS 6 FEET AND NOT EXCEEDING 32 SQUARE FEET IN SIZE PER FACE. ANY GROUND SIGN MUST BE 5 FEET FROM ANY RIGHT-OF-WAY LINE AND OUT OF THE SIGHT DISTANCE TRIANGLE.
- EXTERIOR LIGHTING SHALL BE SHIELDED SO THAT ARTIFICIAL LIGHT INTENSITY AT THE PROPERTY LINE WILL NOT EXCEED 0.5 FOOT CANDLES.
- ALL NECESSARY UTILITIES (PUBLIC AND PRIVATE) WILL BE AVAILABLE, FUNCTIONING, AND USABLE AT THE TIME ANY STAGE OF THE PROJECT OR THE TOTAL PROJECT IS READY FOR OCCUPANCY.
- DEVELOPER MUST SUPPLY THE CITY CONSTRUCTION INSPECTORS WITH SOIL REPORTS PRIOR TO OR 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). EROSION CONTROL SHALL COMMENCE WITH GRADING AND BE MAINTAINED THROUGHOUT THE PROJECT UNTIL ACCEPTANCE OF THE WORK BY THE OWNER AND/OR THE CITY OF DARDENNE PRAIRIE. 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 DARDENNE PRAIRIE MAY, AT THEIR OPTION, DIRECT THE CONTRACTOR IN HIS METHODS AS DEEMED FIT TO PROTECT PROPERTY AND IMPROVEMENTS. ANY DEPOSITING OF SILT OR SOIL 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 DARDENNE PRAIRIE.
- AFTER THE IMPROVEMENT PLANS HAVE BEEN APPROVED, BUT BEFORE RECORDING THE RECORD PLAT, THE DEVELOPER MUST COMPLETE ALL PUBLIC IMPROVEMENTS UNDER THE INSPECTION OF ALL APPROPRIATE INSPECTION AGENCIES AND IN ACCORDANCE WITH THE APPROVED IMPROVEMENT PLANS. THE DEVELOPER OR ESCROW AGREEMENT INSURING OR GUARANTEEING THE INSTALLATION OF PUBLIC IMPROVEMENTS. AN ENGINEER'S ESTIMATE OF PROBABLE CONSTRUCTION COST FOR ALL PUBLIC IMPROVEMENTS NEEDS TO BE SUBMITTED FOR REVIEW AND APPROVAL BY BOTH THE CITY AND COUNTY ENGINEER PRIOR TO ESTABLISHING ESCROW.
- ALL EROSION CONTROL SYSTEMS SHALL BE INSPECTED AND NECESSARY CORRECTIONS MADE WITHIN 24 HOURS OF ANY RAINSTORM RESULTING IN ONE-HALF INCH OF RAIN OR MORE.
- ALL STORM SEWER JOINTS SHALL BE GASKET O-RING TYPE.
- A SPECIAL USE PERMIT MUST BE OBTAINED FROM ST. CHARLES COUNTY HIGHWAY DEPARTMENT BEFORE ANY WORK CAN BE PERFORMED IN STUMP ROAD RIGHT-OF-WAY. PLEASE CONTACT DONNA RAY AT ST. CHARLES COUNTY HIGHWAY DEPARTMENT AT 636-949-7305.
- ST. CHARLES COUNTY HIGHWAY DEPARTMENT SHALL BE NOTIFIED 24 HOURS PRIOR TO THE START OF CONSTRUCTION. CONTACT VANCE BRIBBLE AT 636-949-7305.

LIGHTING REQUIREMENTS

- INTENSITY OF ILLUMINATION: IN NO INSTANCE SHALL THE AMOUNT OF ILLUMINATION ATTRIBUTABLE TO EXTERIOR LIGHTING, AS MEASURED AT THE PROPERTY LINE EXCEED 0.50 FOOT CANDLES. THE USE OF SHIELDED LUMINAIRES AND CAREFUL PLACEMENT IS ENCOURAGED SO AS TO FACILITATE COMPLIANCE WITH THIS REQUIREMENT.
- LOCATION: LIGHT FIXTURES SHALL NOT BE LOCATED WITHIN REQUIRED TRANSITION STRIPS.
- FLASHING, FLICKERING AND OTHER DISTRACTING LIGHTING: FLASHING, FLICKERING AND/OR OTHER LIGHTING WHICH MAY DISTRACT MOTORISTS IS PROHIBITED.
- MINIMUM LIGHTING STANDARDS: ALL AREAS DESIGNATED ON REQUIRED SITE PLANS FOR VEHICULAR PARKING, LOADING, OR CIRCULATION AND USED FOR ANY SUCH PURPOSE AFTER SUNSET SHALL PROVIDE ARTIFICIAL ILLUMINATION IN SUCH AREAS AT A MINIMUM INTENSITY OF 0.4 FOOT CANDLES.
- HEIGHT OF FIXTURES: LIGHTING SHALL BE PERMITTED AT HEIGHTS REASONABLE TO MEET THE MINIMUM ILLUMINATION REQUIREMENTS WHILE MAINTAINING COMPLETE COMPLIANCE WITH THE INTENSITY, LOCATION AND ORIENTATION STANDARDS OF THIS SECTION.
- SPECIAL EVENTS LIGHTING: ANY TEMPORARY USE HAVING EXTERIOR LIGHTING WHICH IS NOT IN COMPLETE COMPLIANCE WITH THE REQUIREMENTS OF THIS SECTION SHALL REQUIRE THE APPROVAL OF THE BOARD OF ALDERMEN.
- NONCONFORMING LIGHTING: ALL LIGHTING FIXTURES LEGALLY EXISTING PRIOR TO THE EFFECTIVE DATE OF THIS SECTION SHALL BE CONSIDERED AS LEGAL NONCONFORMING USES.

DUCKETT CREEK SANITARY DISTRICT CONSTRUCTION

- 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.
- All fill, including places under proposed storm and sanitary sewer lines and paved areas within one (1) foot right-of-way shall be compacted to 90% of maximum density as determined by the "Standard Proctor Test" (ASTM-D-698). All tests shall be verified by a Soils Engineer concurrent with grading and back filling operations. The compacted fill shall be free of rutting and shall be non-yielding and non-pumping during proof rolling and compaction. All trench backfills in paved areas shall be granular fill.
- 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 Dardenne Prairie.
- The Duckett Creek Sanitary District shall be notified at least 48 hours prior to start of 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 flowline of a sanitary sewer of 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 ID 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 the springline of pipe. Immediate back fill over pipe shall consist of same size "clean" or "minus" stone from springline of pipe to 6 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 backfills 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.
- 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 gasket shall be provided by the sewer district and 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.)
- Existing sanitary sewer service shall not be interrupted.
- Mainline access to existing residential driveway and streets.
- Pre-manufactured adapters shall be used at all PVC to DIP connection. Rubber sock/Mission type fittings shall not be allowed.

INSTALLATION OF WATER MAINS

- "ALWAYS KEEP THE WATER MAIN ON EASEMENT"
- No Water main may be installed under "E" and having a minimum Pressure Rating (PR) of 200 or SDR-21.
 - Water main should be located 5' behind the curb, as not to interfere with other utility locations.
 - All water mains should be 8 inches minimum, if not looped (no 6" over 300').
 - Fire hydrants must be Mueller Steamers Centurion and painted yellow in color and all valves must be Mueller mechanical joint resilient wedge gate valves.
 - All fire hydrants are to have valves flanged to the top and (with a total length of 30" or less) hydrant swivel anchored to the valve.
 - The contractor shall place all fire hydrants between 1.5 (1-1/2) feet and three feet (3') from the street curb (measured from the edge of the fire hydrant).
 - These water mains (45 degree, 22-1/2 degree, 11-1/4 degree), are to be made with mechanical joint fittings using msaq lugs.
 - Water fittings, ex. tees, angle fittings (90 degree) cross, etc. and shall have concrete blocking. Concrete not to be on nuts and bolts, or covering weep holes on fire hydrants. Clean 1" rock backfilled above the weep holes at this hydrant.
 - Rocky soils shall require bedding 6" under and 6" over water pipe.
 - Concrete encasement required, to DNR Specification, when crossing storm or sanitary sewers.
 - Must use appropriate sized casings when crossing streets.
 - Must attach coated solid core, 12 gauge tracer wire, taped to the top of the pipe. All wires must run up the outside of the valve box and come up inside the valve box under the water lid.
 - Use 3M waterproof splice kits for all splicing of tracer wire.
 - Any project with over 1500' of pipe should use the 2500' roll of tracer wire to eliminate splicing.
 - A chlorine test is required. It must initially test at 25 PPM, or greater, and 24 hour later 10 PPM must be present.
 - If chlorine test fails then main must be rechlorinated.
 - California samples should be collected every 1,200'.
 - Final Pressure Test: The water main must be pumped up to 125 PSI and maintain this pressure for one hour without any drop in pressure.
 - Gas, water, and other underground utilities shall not conflict with the depth or horizontal location of existing and proposed sanitary and storm sewers including house laterals.
 - All waterline construction shall conform to current Public Water Supply District No.2 Standards and Specifications.
 - The contractor shall place the "steamer" outlet of the fire hydrant toward the street.
 - Backfill no debris larger than 6" in diameter.
 - Creek crossings encasement to rip rap.
 - All P.V.C. pipe to be used for water mains shall be tested and approved by NSF.
 - A minimum horizontal separation of 10 feet and vertical separation of 18 inches between the water main and the sanitary sewer force main must be maintained without exception.
 - Quantity of each size and class of pipe to be installed:
-6" P.V.C. SDR 21 PR-200 — 1360 LF

GRADING NOTES

- All filled places under proposed storm and sanitary sewer lines and/or paved areas including trench backfills within and off the road right-of-way shall be compacted to 90 percent of maximum density as determined by the "Modified AASHTO T-100 Compaction Test" (ASTM D-1557). All tests shall be verified by a Soils Engineer concurrent with grading and backfilling operations.
- All filled places in proposed and existing City of D'Fallon roads shall be compacted from the bottom of the fill up to 90 percent maximum density as determined by the "Modified AASHTO T-100 Compaction Test" (ASTM D-1557). Paved areas in cuts shall meet the same compaction requirements. All tests shall be verified by a Soils Engineer concurrent with grading operations.
- All walls and/or springs which may exist on this property should be located and sealed in a manner acceptable to the St. Charles County Highway and Building Departments.
- All trash and debris on-site, either existing or from construction, must be removed and properly disposed of off-site.
- Debris and foundation material from any existing on-site building or structure which is scheduled to be razed for this development must be properly disposed of off-site.
- Soft soils in the bottom and banks of any existing or former pond sites or tributaries or 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 location.
- All excavations, grading or filling shall have a finished grade not to exceed a 3:1 slope (33%).
- Temporary siltation control measures (structural) shall be maintained until vegetative cover is established at a sufficient density to provide erosion control on the site.
- Upon completion of storm sewers, siltation control shall be provided around all open sewer inlets and shall remain until the disturbed drainage areas have been properly stabilized.
- Where natural vegetation is removed during grading, vegetation shall be re-established in such a density as to prevent erosion.
- When mechanized land clearing activities are completed or suspended for more than 30 days, either temporary vegetation must be established or temporary siltation control measures must be in place in accordance with the review and approval of the County Engineer.
- 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 according to the County Engineer's recommendation.
- All finished grass (areas not to be disturbed by future improvement) in excess of 20% slope (5:1) shall be mulched and tacked at the rate of 100 pounds per 1,000 square feet when seeded.
- All lots shall be seeded and mulched at the minimum rates defined in Appendix "A" of the "Model Sediment & Erosion Control Regulations" 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.

REFERENCE BENCHMARK

REFERENCE BENCHMARK: ELEVATION = 643.21 USGS Datum
Existing 800 mil. in power pole at the Northwest corner of Fleece road and Bryan road as shown on Improvement plans for Fleece road, D'Fallon project no.210-005, as prepared by George Butler Associates.

SITE BENCHMARK: ELEVATION = 643.34 USGS Datum
Old iron pipe at the Northwest corner of property vested in the name of Herbst as shown in this survey drawing.

VEGETATION ESTABLISHMENT For Urban Development Sites APPENDIX A

SEEDING RATES:	
PERMANENT:	
Tall Fescue	= 30 lbs./ac.
Smooth Bromes	= 20 lbs./ac.
Combined	= Fescue @ 15 lbs./ac. AND Bromes @ 10 lbs./ac.
TEMPORARY:	
Wheat or Rye	= 150 lbs./ac. (3.5 lbs. per 1,000 sq ft)
Oats	= 120 lbs./ac. (2.75 lbs. per 1,000 sq ft)
SEEDING PERIODS:	
Fescue or Bromes	= March 1 to June 1
Wheat or Rye	= March 15 to November 1
Oats	= March 15 to September 15
MULCH RATES:	
100 lbs. per 1000 sq. ft. (4,358 lbs. per ac.)	
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 evaluation of quarried rock.	

LANDSCAPE LEGEND

○	QTY (29) -	INDICATES PROPOSED EVERGREEN OR ORNAMENTAL SHRUB (mugo pines, yews, junipers, hollies, boxwoods) (spirea, forsythia, barberry, privet, hick)
○	QTY (10) -	INDICATES PROPOSED DECIDUOUS HARDWOOD TREE (Size: 2" min. caliper 1" above breast and 2" clear trunk) (redwood, oaks, maples, birches, sweet gum)
○	QTY (33) -	INDICATES PROPOSED WHITE PINE TREE (Size: 8" minimum height)

**LANDSCAPING AS DEPICTED IS SUBJECT TO FINAL DESIGN BY A QUALIFIED LANDSCAPE DESIGNER AND APPROVED BY THE CITY OF DARDENNE PRAIRIE.

DEVELOPMENT NOTES:

- Area of tract: 2.185 Acres (Proposed Lot 5)
- Current Zoning: C-2 General Business District (Dardenne Prairie) Engineer: George Butler Associates, Inc.
- Proposed Use: Retail Center
- Area of Building: 16,800 sq.ft. upper floor, 16,800 sq.ft. lower floor, 33,600 sq.ft. total
- Required building & parking setbacks:
Front yard: 25 feet
Side yard: 10 feet
Rear yard: 15 feet
Parking: 10 feet along lot perimeter
- According to the Flood Insurance Rate Map (F.I.R.M.) number 2018300240E dated August 02, 1996, this property lies within Zone "X". Zone X is defined as areas determined to be outside the 500-year floodplain.
- All site lighting shown is for presentation only and exact locations will depend on a lighting layout by a qualified lighting consultant. All lighting on the site shall be shielded and directed away from the residential units to the South. A photometric lighting plan will be provided for review and approval by the City of Dardenne Prairie during construction plan review and that all lighting will be installed in compliance with Section 13.13 of the Dardenne Prairie Zoning Ordinance requirements following the installation of such exterior lighting shall be corrected by the owner.
- All new utilities shall be located underground.
- This property is served by the following utilities:
Electric - Ameren Electric Company, 636-639-6312
Telephone - Century Telephone Co., 636-332-7318
Water - Public Water Supply District No. 2, 636-561-3737
Sewer - Duckett Creek Sanitary Sewer District, 636-441-1244
Gas - Laclede Gas Company, 314-658-3417
Wentzville Fire Protection District, 636-322-0238
- Any mechanical units to be located on the roof of the building shall be screened by the parapet roof design. All ground mounted units shall be screened with materials and/or landscaping.
- Landscaping requirements:
Material Landscaping:
1 tree per 300 sq. ft. of interior landscaping required.
Area = 270 x 112 spaces x 10 = 3,024 sq. ft. required
10,583.68 sq. ft. provided
3 trees required, if provided.
Required right of way trees along the Bryan, Fleece and Stump Road right of way will be planted seven feet individual space of Lot 3 developments.
- Any proposed signs to be approved by a separate Permit.
- Parking Requirements:
1 space per 400 sq. ft. (in excess of the first 2,000 sq. ft.) + 10 spaces required (33,600 sq. ft. - 2,000) / 400 = 79 + 10 = 89 spaces required
110 spaces provided (including 6 handicapped spaces)
- Property owner: Spruce, L.L.C., 1543 Duncan Ave, St. Louis, MO 63110
- 15' dedication strip along Stump Road will be provided on record plat. This will provide 3/4 of R.O.W. from the centerline of Stump Road. Any other required R.O.W. dedication will be provided on record plat.
- Covenants and restrictions for the subdivision will be provided with the record plat.
- Drive lanes proposed with this development will be dedicated as cross access and utility easements with the record plat.
- Right of Way dedication strips along Fleece, Bryan and Stump Roads will be provided on record plat.
- All roof drains shall be connected to the storm sewer system via underground pipe.
- All proposed storm sewers on owners property are to be private.
- Trash enclosure screening shall match the same level of architectural design as the primary structure.
- All necessary utilities (public or private) will be available, functioning, and usable at the time any stage of the project or the total project is ready for occupancy.
- This construction plan is being submitted in support of a Conditional Use Permit Request.
- All construction methods and practices to conform with DSHA and the City of Dardenne Prairie Standards.
- Water mains proposed for this development are private.
- Lighting plans shall be reviewed on site prior to the final occupancy inspection. Corrections will need to be made if not in compliance with City Standards.
- All overhead mechanical units screened by parapet wall and ground mounted units screened with materials and/or landscaping.
- The any retained wall over 4' in height, a separate building permit will be required.

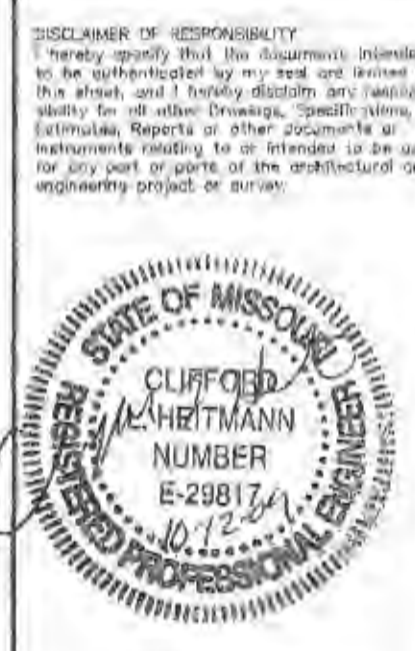
GRADING QUANTITIES:

9,730 C.Y. CUT (INCLUDES SUBGRADE)
6,200 C.Y. FILL (INCLUDES 15% SHRINKAGE)
3530 C.Y. HEAVY

THE ABOVE GRADING QUANTITY IS APPROXIMATE ONLY, NOT FOR BIDDING PURPOSES. CONTRACTOR SHALL VERIFY QUANTITIES PRIOR TO CONSTRUCTION.

SHEET 1	COVER SHEET
SHEET 2	SITE PLAN
SHEET 3	GRADING PLAN
SHEET 4	DRAINAGE AREA MAP
SHEET 5	PROFILES/DETAILS
SHEET 6	CONSTRUCTION DETAILS
SHEET 7	ENTRANCE DETAILS

PREPARED FOR: SPRUCE, L.L.C.
 4343 DUNCAN AVE.
 ST. LOUIS, MO. 63110
 314-535-8700



REVISIONS

07-28-04	Per City Comments
08-10-04	Per PWS#2
08-11-04	Per City Comments
08-24-04	Per Duckett Creek
09-20-04	Per City Comments
10-12-04	Per City at Q'tion

**ENGINEERING
PLANNING
SURVEYING**
 1052 South Cloverleaf Drive
 St. Peters, MO 63376-6445
 636-928-5552
 FAX 626-1718

07-15-04	DATE
03-12-453	PROJECT NUMBER
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12453CON.DWG	FILE NAME
DRB	DESIGNED
DRWN	CHECKED
LDW	DESIGNED
CLH	CHECKED

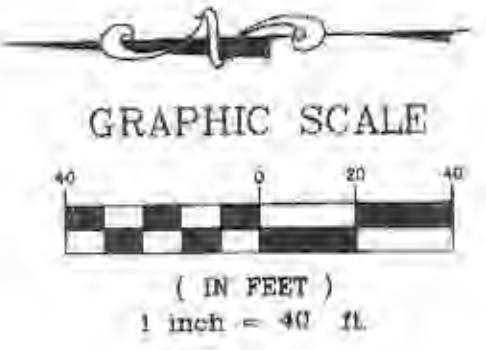
REVISIONS:

07-28-04	Per City Comments
08-10-04	Per #45242
08-11-04	Per City Comments
08-24-04	Per Duckett Creek
09-23-04	Per City Comments
10-12-04	Per City of O'Fallon

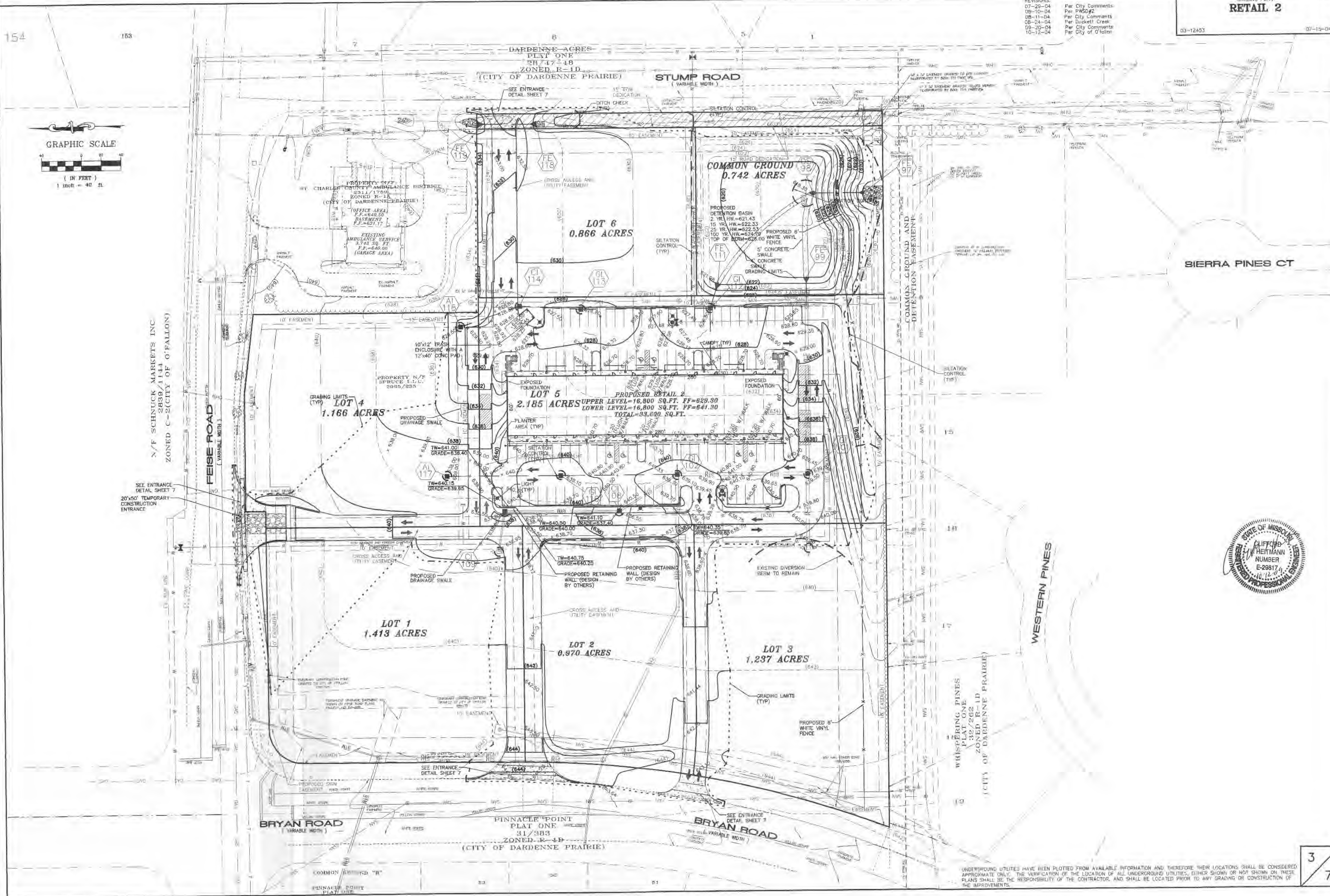
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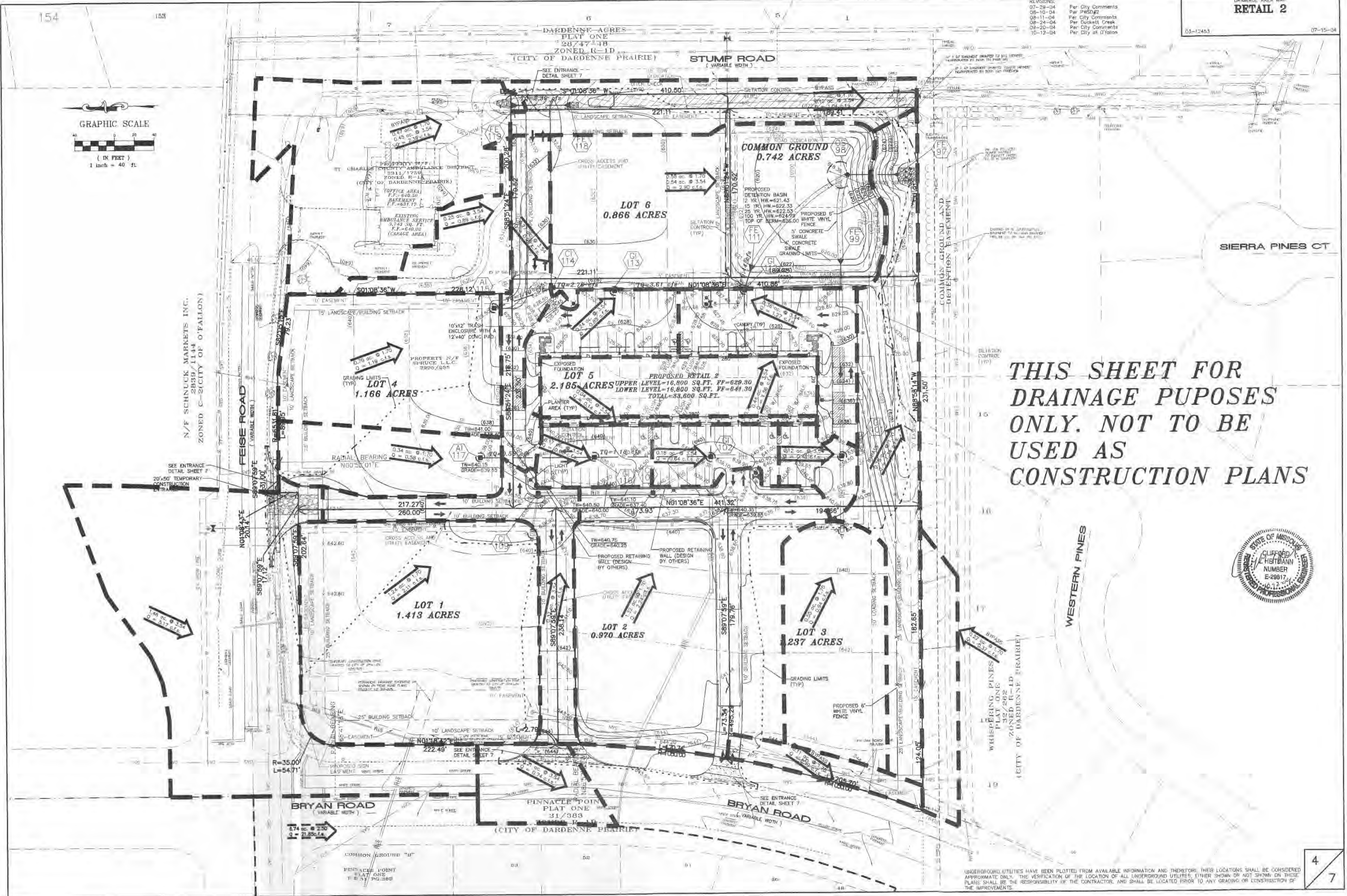
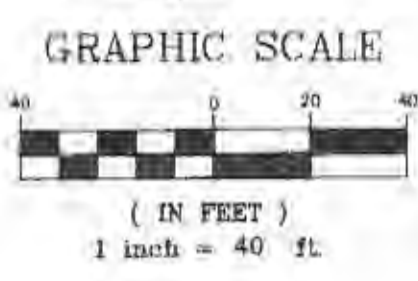
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REVISIONS:
 07-29-04 Per City Comments
 08-10-04 Per PWS#2
 08-11-04 Per City Comments
 08-24-04 Per Duckett Creek
 09-20-04 Per City Comments
 10-12-04 Per City at Fallon

DRAINAGE AREA MAP
RETAIL 2
 03-12453 07-15-04



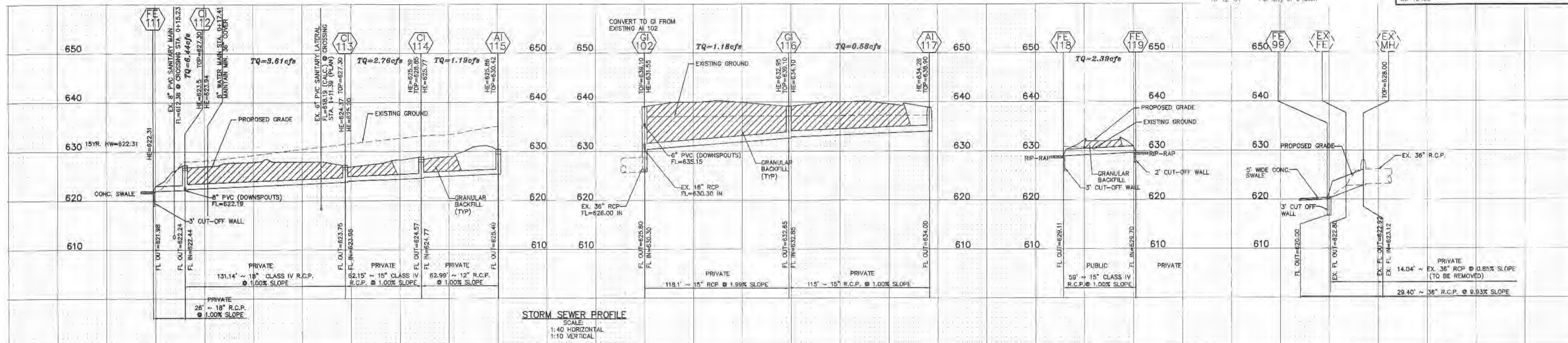
**THIS SHEET FOR
 DRAINAGE PUPOSES
 ONLY. NOT TO BE
 USED AS
 CONSTRUCTION PLANS**



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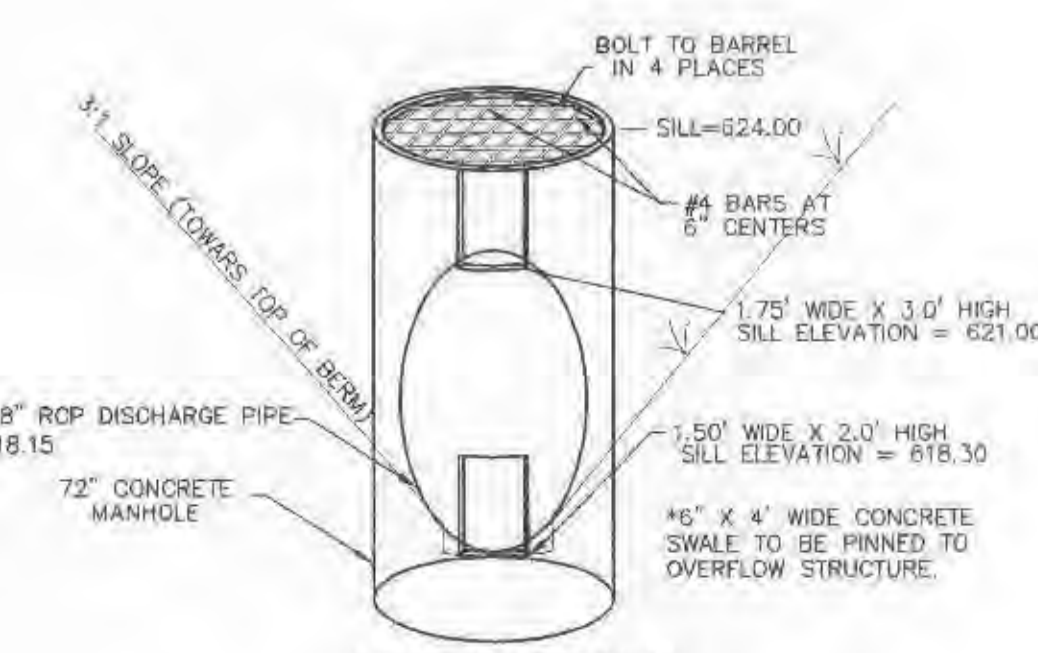
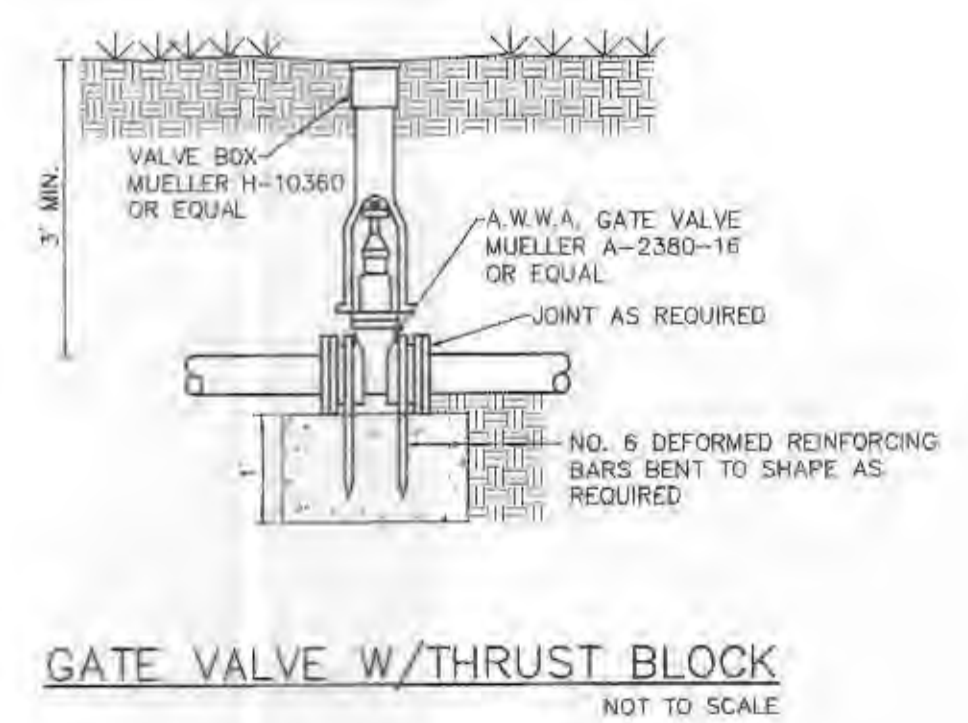
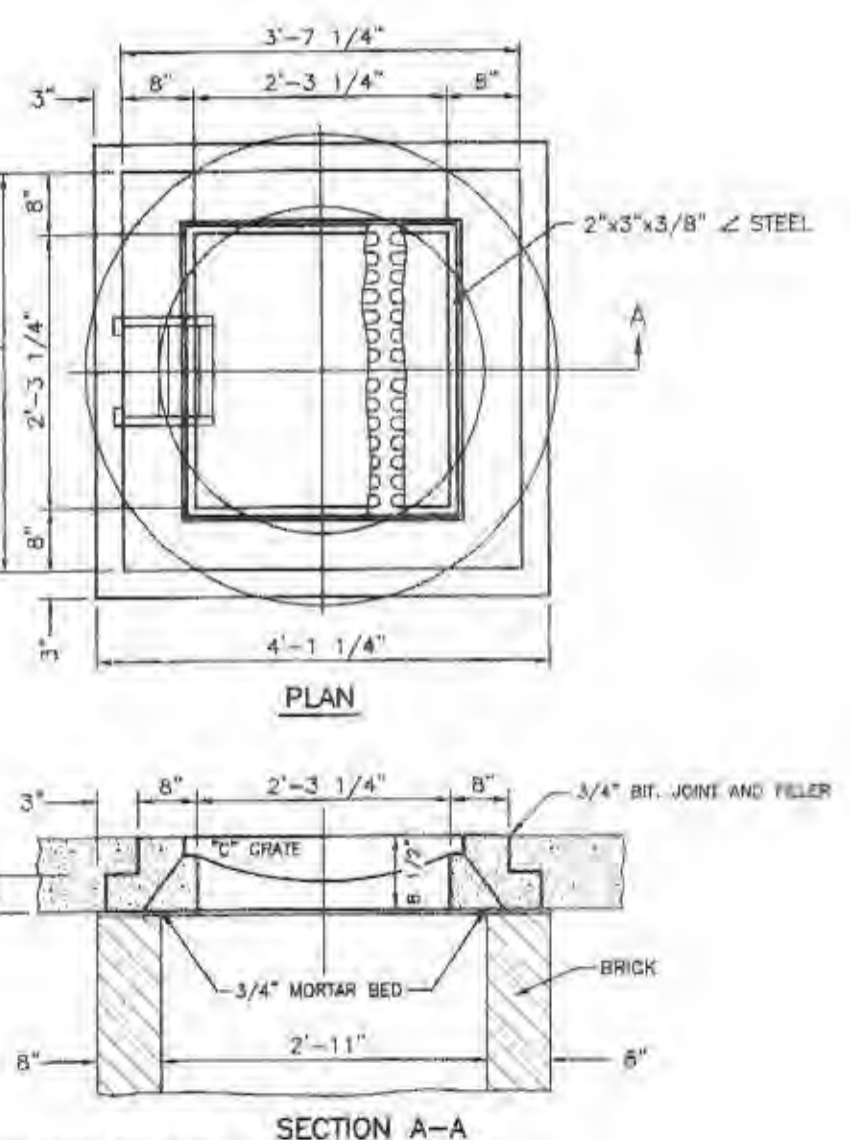
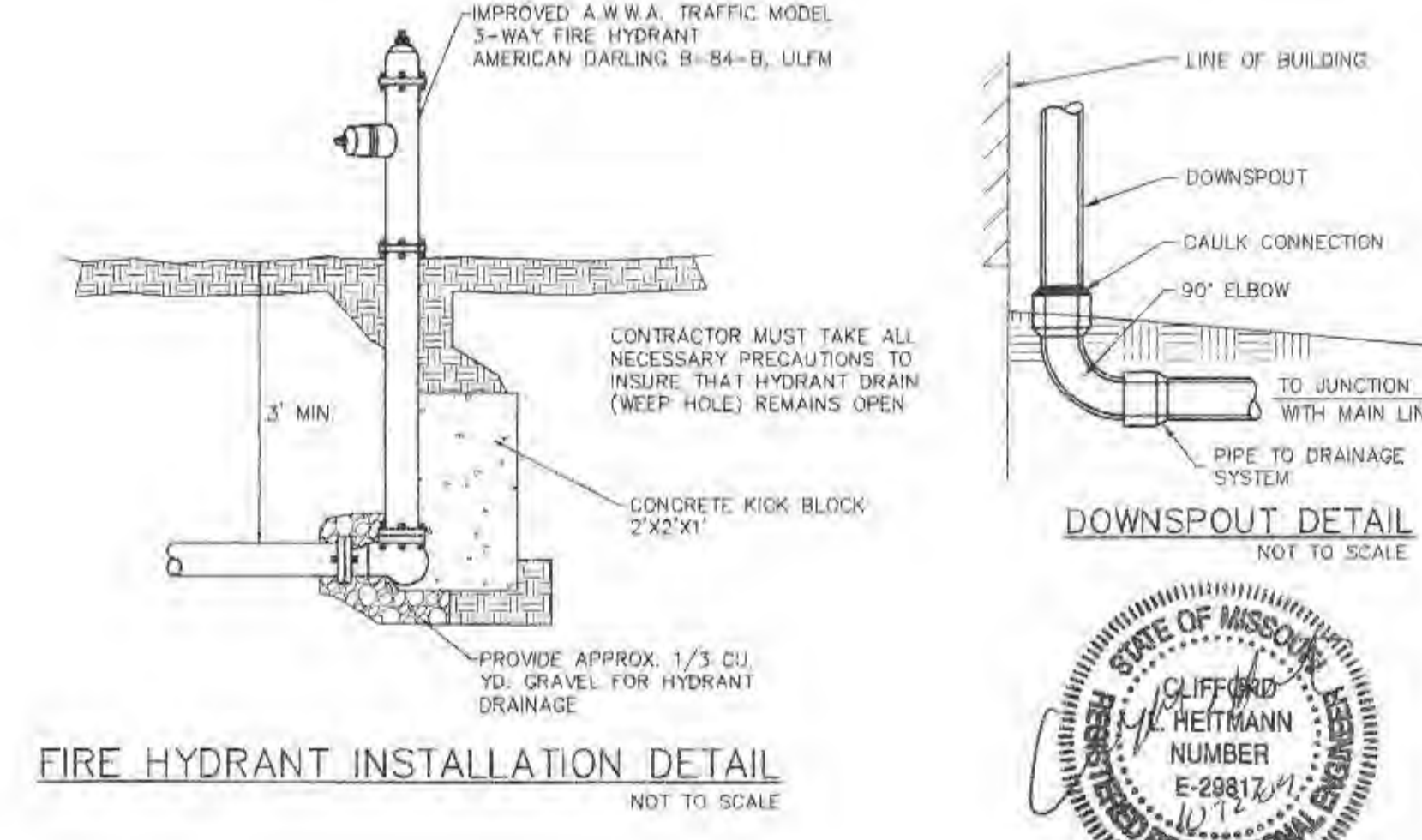
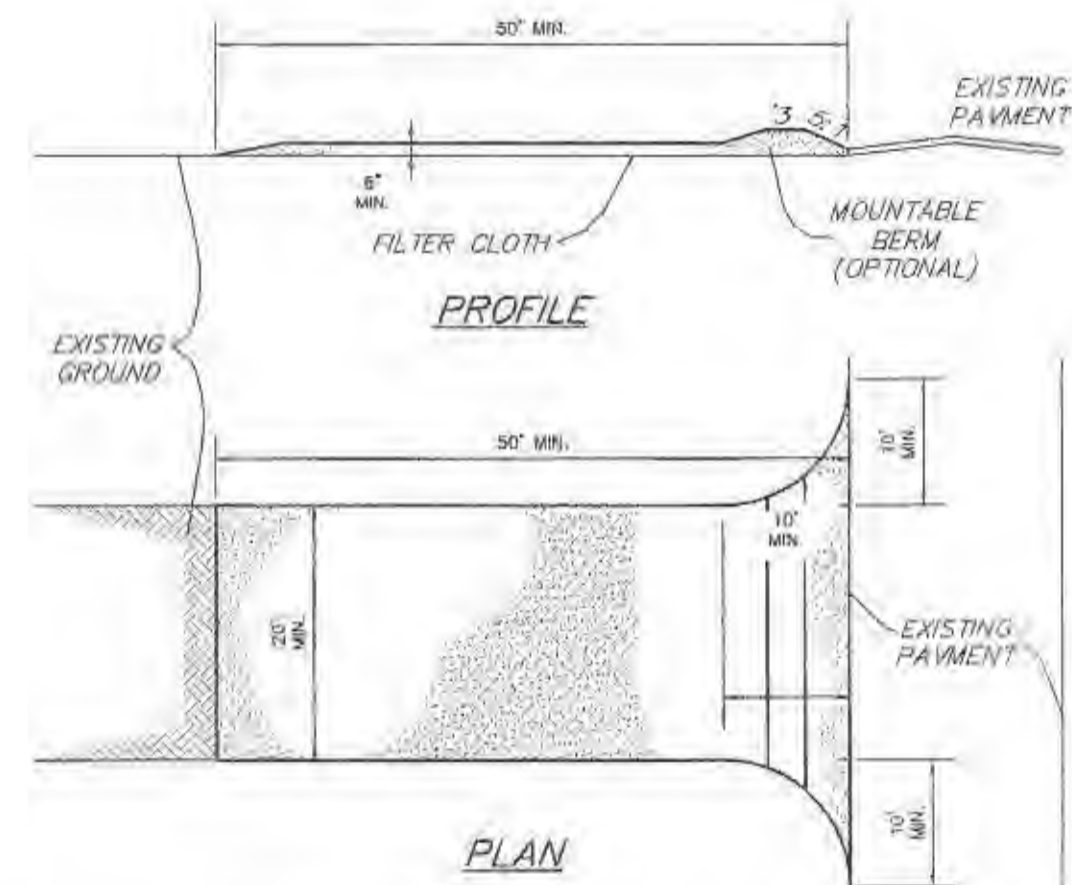
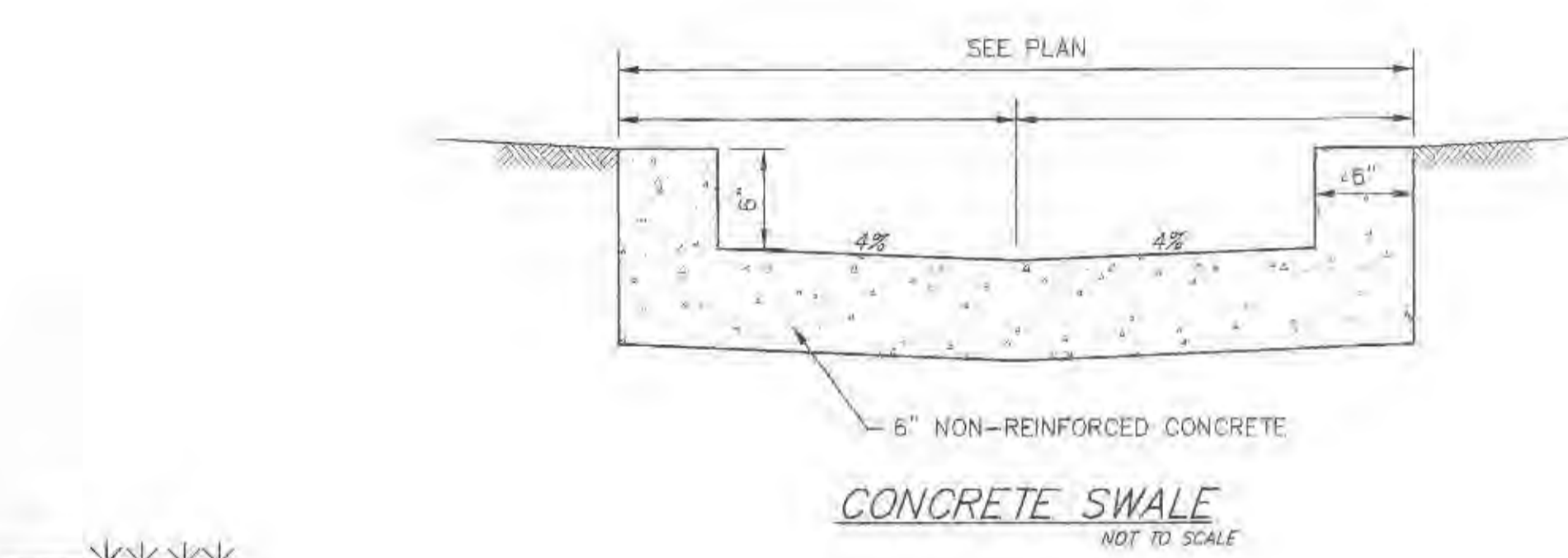
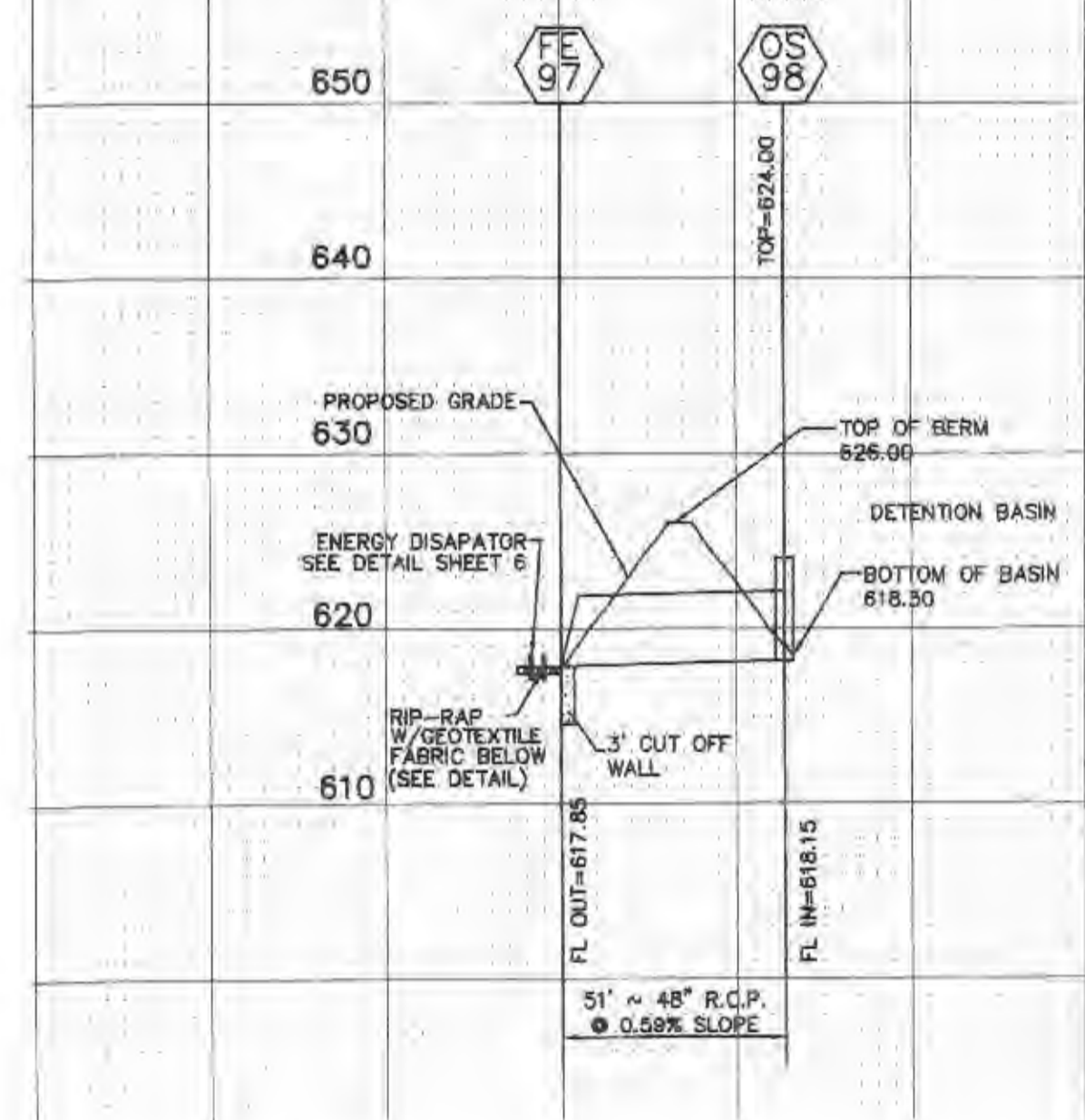
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REVISIONS:
07-29-04 Per City Comments
08-10-04 Per PWS02
08-11-04 Per City Comments
08-24-04 Per Duckett Creek
08-20-04 Per City Comments
10-12-04 Per City of O'Fallon



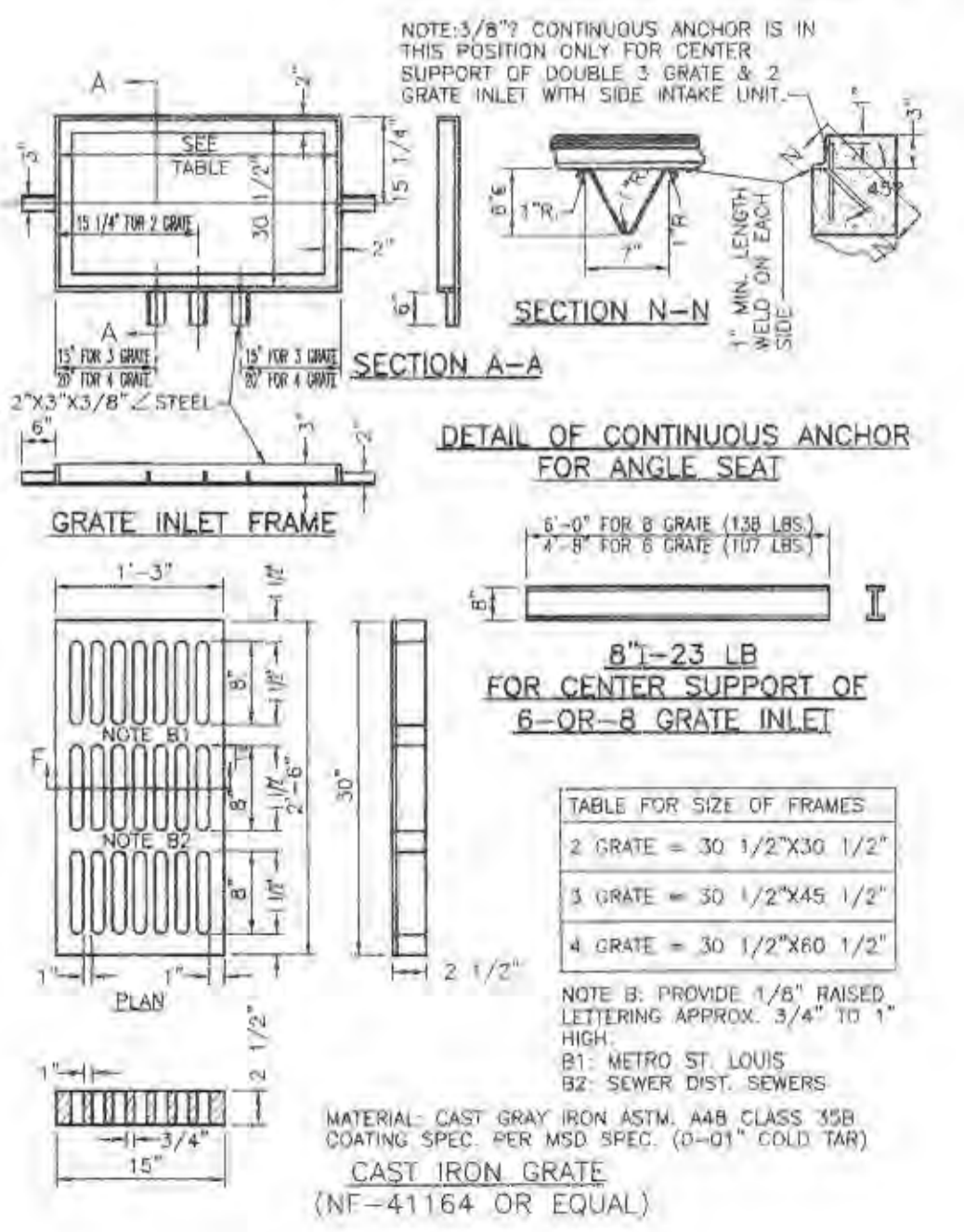
DESIGN DATE: 08-24-04
FILENAME: 12453-RETAIL-2

UPP STR	LOW STR	L	DFA	UPPER FL LW	LOWER FL LN	PS	UPPER ST EL	DEPTH HY GR	UPPER HY EL	LOWER HY EL	HYDR GRADE	FR HEAD	VEI HEAD	JUNC LOSS	TO	PIPE CAP	REMARKS
MB 117	CI 116	115	15	634.00	632.85	1.00	638.90	4.83	634.28*	634.10	-0.0010	0.01	0.47	0.00	0.58	6.46	1
CI 116	CI 102	118	15	632.65	630.30	1.99	639.10	6.15	632.95*	631.88	-0.0030	0.04	0.96	0.01	1.38	9.11	2
AI 115	CI 114	63	12	625.40	624.77	1.00	630.42	4.54	625.88	625.77	-0.0110	0.07	1.52	0.04	1.19	3.56	3
CI 114	CI 113	62	15	624.57	623.95	1.00	628.85	3.46	625.39	625.20	-0.0180	0.11	2.25	0.08	2.76	6.45	4
CI 113	CI 112	131	18	623.75	622.44	1.00	627.30	2.93	624.37*	623.94	-0.0120	0.15	2.04	0.06	3.61	10.50	5
CI 112	FE 111	26	18	622.24	621.98	1.00	627.30	4.21	623.10*	622.31	-0.0380	0.10	3.64	0.21	6.44	10.50	6



- CONSTRUCTION SPECIFICATIONS**
- Stone Size - Use 2" stone, or reclaimed or recycled concrete equivalent.
 - Length - As required, but not less than 50 feet (except on a single residence lot where a 30 foot minimum length would apply).
 - Thickness - Not less than six (6) inches.
 - Width - Twenty (20) foot minimum, but not less than the full width at points where ingress or egress occurs.
 - Filter Cloth - Will be placed over the entire area prior to placing of stone. Filter will not be required on a single family residence lot.
 - Surface Water - All surface water flowing or diverted toward construction entrances shall be piped across the entrance. If piping is impractical, a mountable berm with 5:1 slopes will be permitted.
 - Maintenance - The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanup of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public rights-of-way must be removed immediately.
 - Washing - Wheels shall be cleaned to remove sediment prior to entrance onto public rights-of-way when washing is required. It shall be done on an area stabilized with stone and which drains into an approved sediment trapping device.
 - Periodic inspection and needed maintenance shall be provided after each rain.

STABILIZED CONSTRUCTION ENTRANCE/WASHDOWN AREA
NOT TO SCALE



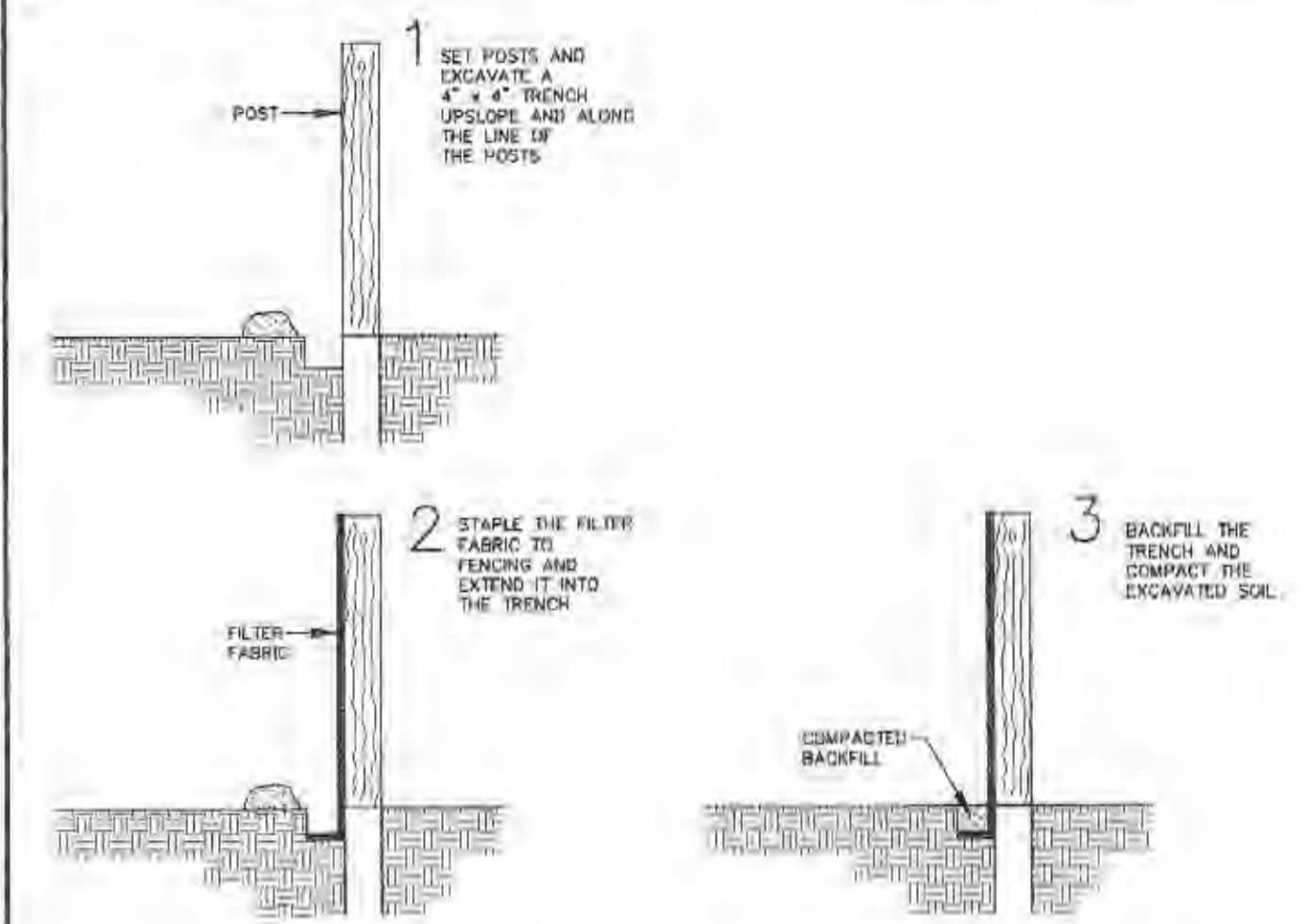
DETAILS OF INLET FRAME AND GRATES

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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REVISIONS:
1/7-29-04
08-10-04
08-11-04
08-24-04
08-20-04
11-12-04

Per City Comments
Per PWS&E
Per City Comments
Per Duckett Crank
Per City Comments
Per City of Tallon

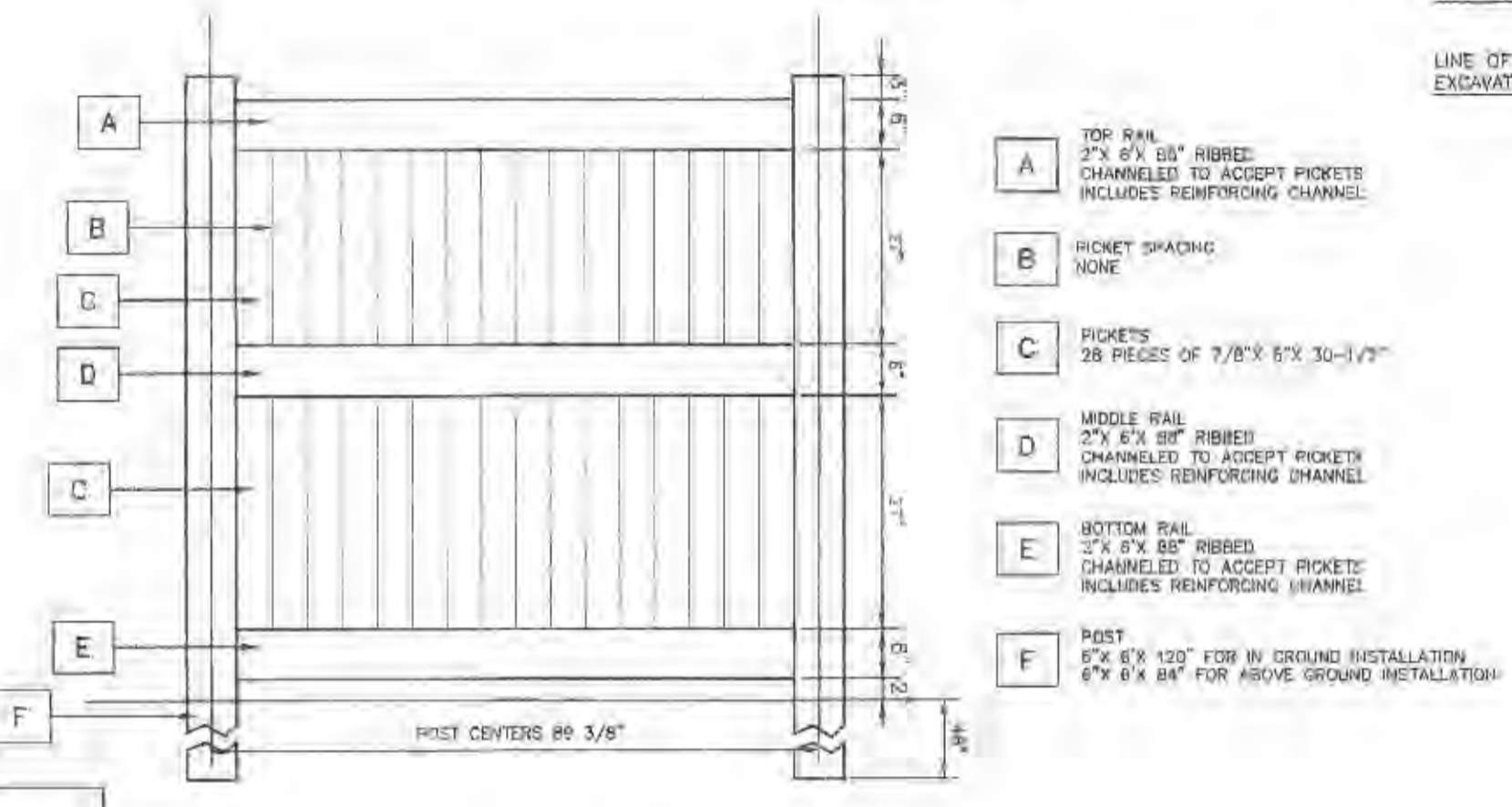
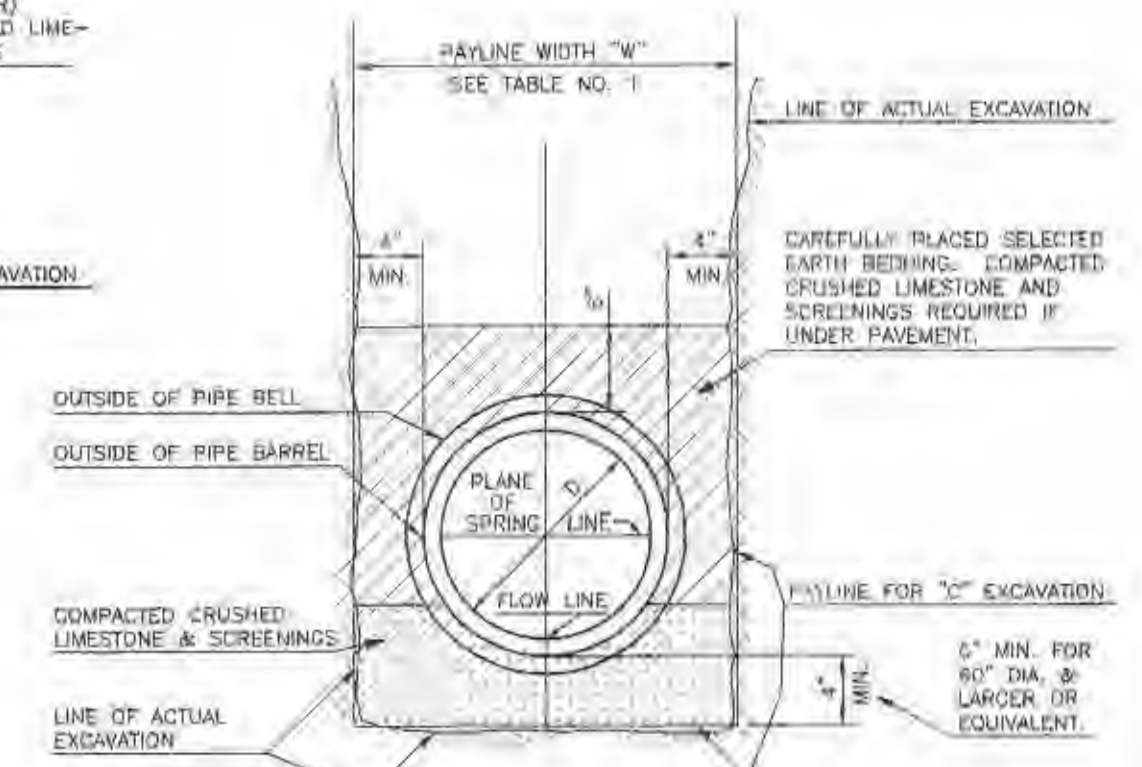
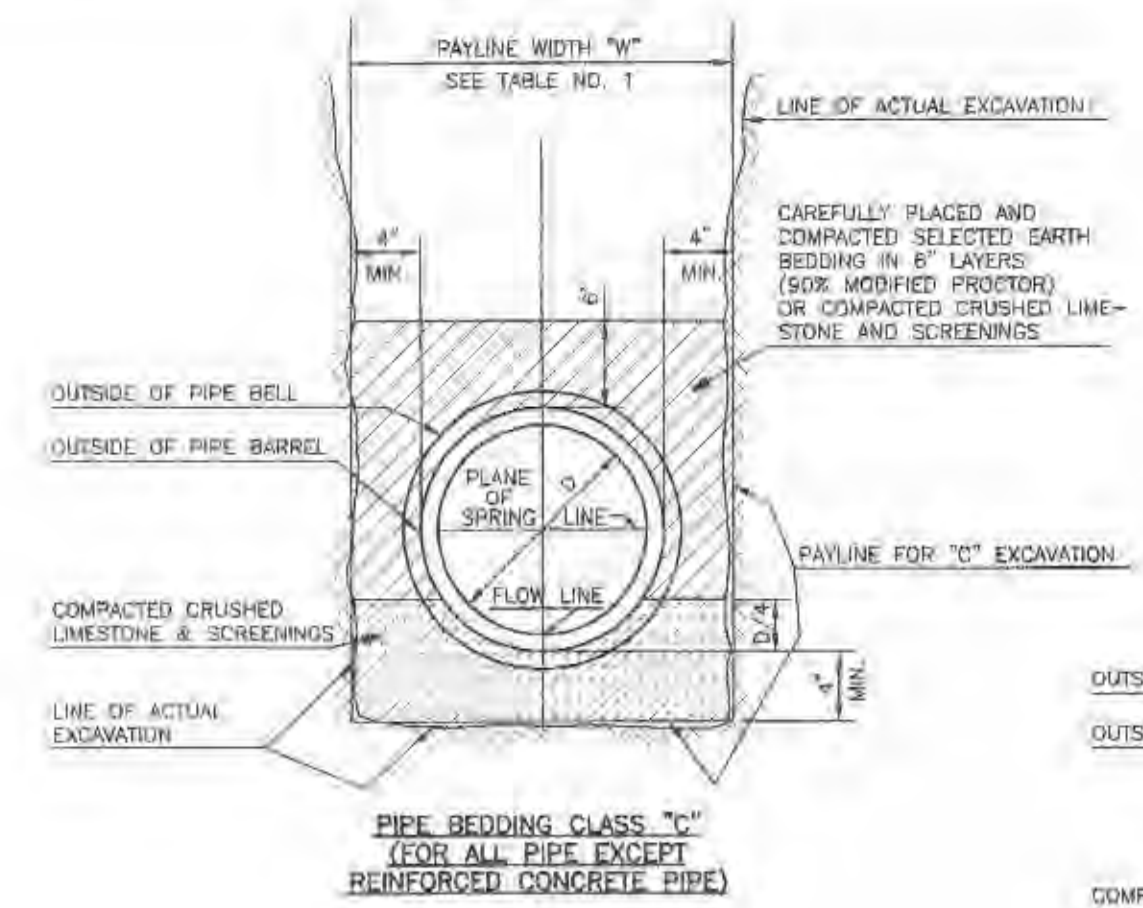


1. FILTER BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
2. SHOULD THE FABRIC DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL BE NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.
3. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY HALF THE HEIGHT OF THE BARRIER.
4. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE OR FILTER BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM WITH THE EXISTING GRADE, PREPARED AND SEEDED.

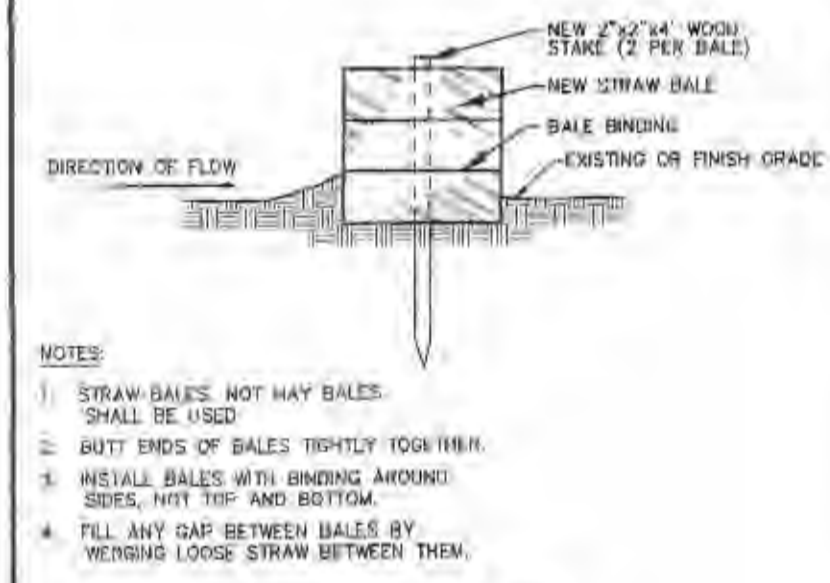


ROUND PIPE				HORIZONTAL ELLIPTICAL PIPE			
Inside Diameter of Pipe (Inches)	Payline Width of Trench (Inches)	Payline Width of Trench (Feet)	Pay-volumes cu. ft. per ft. of Concrete Encasement	Inside Diameter of Pipe (Inches)	Payline Width of Trench (Inches)	Payline Width of Trench (Feet)	Pay-volumes cu. ft. per ft. of Concrete Encasement
4	28	2.33	3.20				
6	28	2.33	3.46				
8	28	2.33	3.70				
10	28	2.33	3.86				
12	28	2.33	3.98				
15	32	2.67	4.88				
18	35	2.92	5.63	14 X 23	41	3.42	5.94
21	39	3.25	6.61				
24	42	3.50	7.39	19 X 30	49	4.08	7.68
27	45	3.75	8.18	22 X 34	53	4.42	8.21
30	49	4.08	9.30	24 X 38	58	4.83	9.70
33	53	4.42	10.53	27 X 42	62	5.17	10.71
36	56	4.67	11.43	29 X 45	66	5.50	11.72
39	60	5.00	12.43	32 X 49	71	5.92	13.14
42	63	5.25	13.36	34 X 53	75	6.25	14.05
48	70	5.83	15.67	38 X 60	83	6.92	16.18
54	77	6.42	18.15	43 X 68	92	7.67	18.61

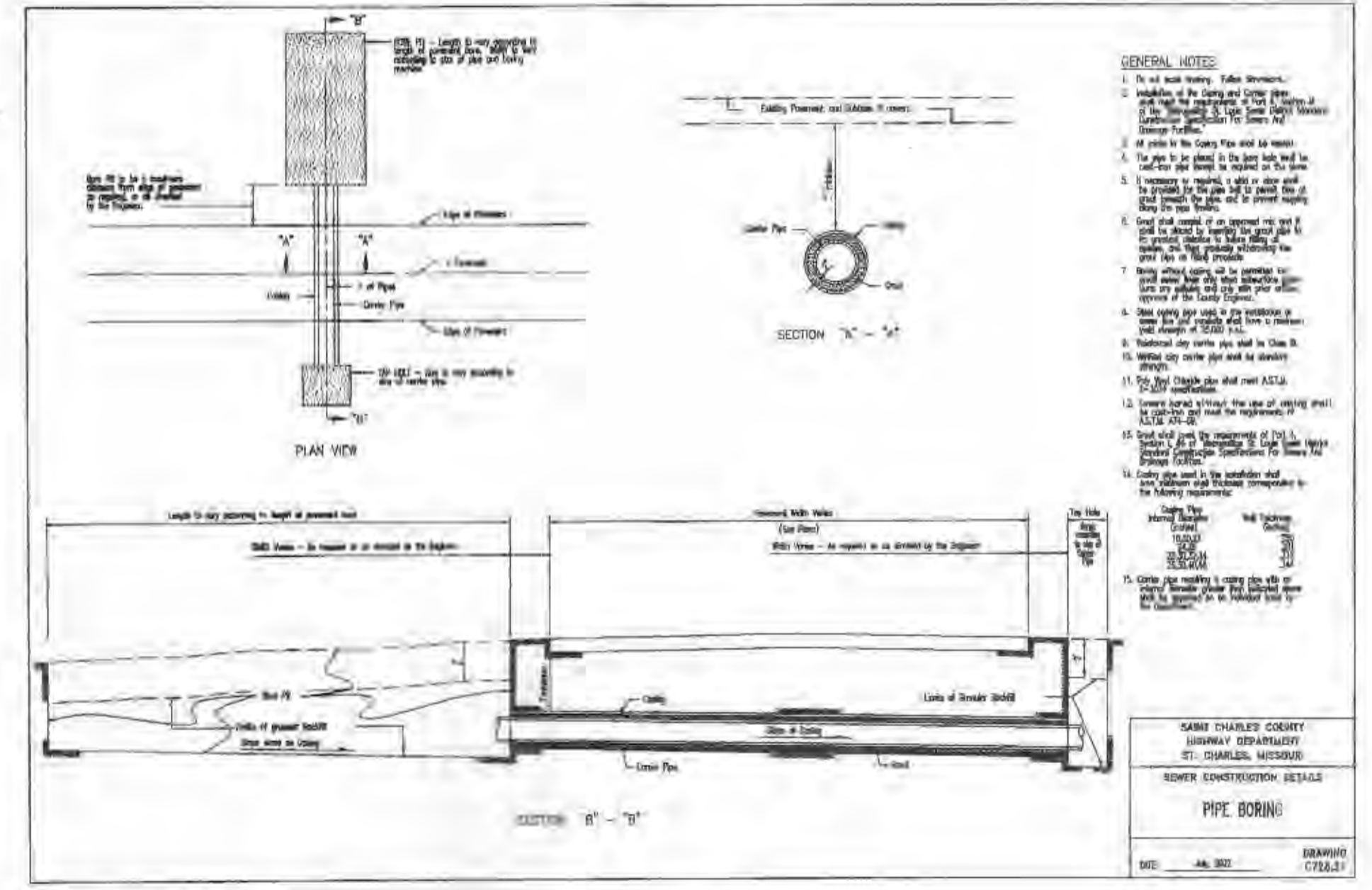
TABLE NO. 1
PAYLINE WIDTHS OF TRENCH AND
PAY-QUANTITIES OF CONCRETE



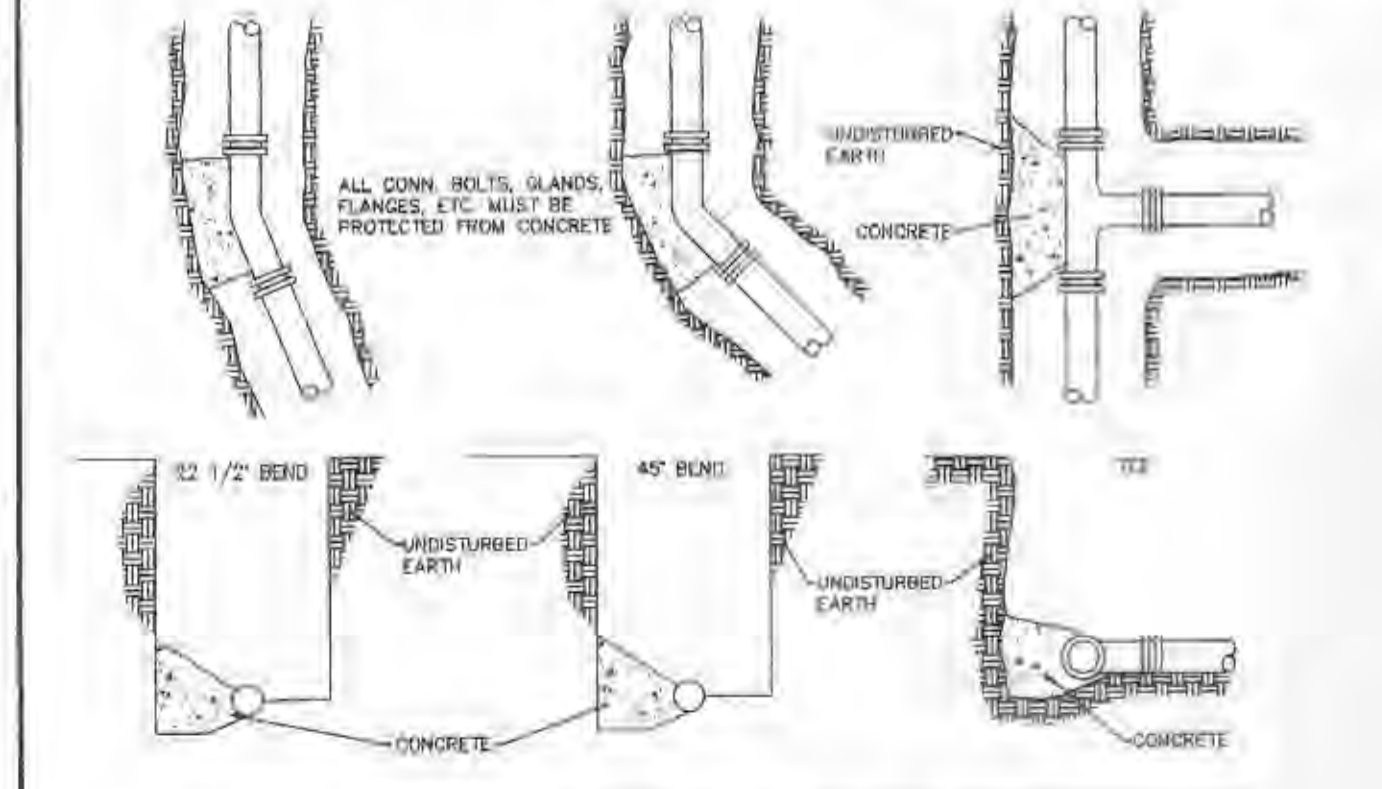
6' HIGH VINYL PRIVACY FENCE
NOT TO SCALE



SEDIMENT BARRIER
NOT TO SCALE



STUMP ROAD BORE DETAIL
ST. CHARLES COUNTY JURISDICTION

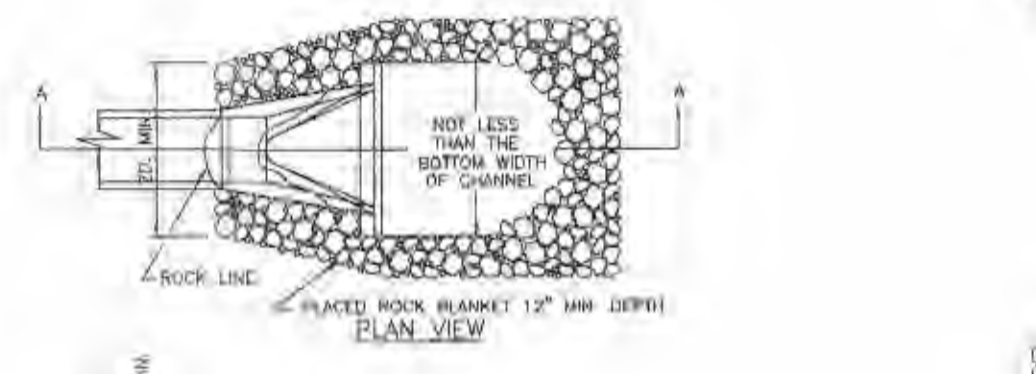


MAIN SIZE (D.I.)	45° BEND	90° BEND	135° BEND	180° BEND	VALVE	CROSS
2"	5' x 1'	5' x 1'	5' x 1'	5' x 1'	5' x 1'	5' x 1'
4"	1' x 1'	1' x 1'	1' x 1'	1' x 1'	1' x 1'	1' x 1'
6"	1' x 1'	1' x 1'	1' x 1'	1' x 1'	1' x 1'	1' x 1'
8"	2' x 1'	1' x 1'	2' x 2.5'	2' x 2'	2' x 2'	1' x 3.5'
10"	2' x 2.5'	1' x 2.5'	2' x 3.5'	2' x 3'	2' x 3'	2' x 2'
12"	2' x 3.5'	1' x 2.5'	3' x 3.5'	3' x 3'	3' x 3'	2' x 3'
16"	3' x 4'	2' x 3'	4' x 4.5'	3' x 4.5'	3' x 4.5'	3' x 3.5'

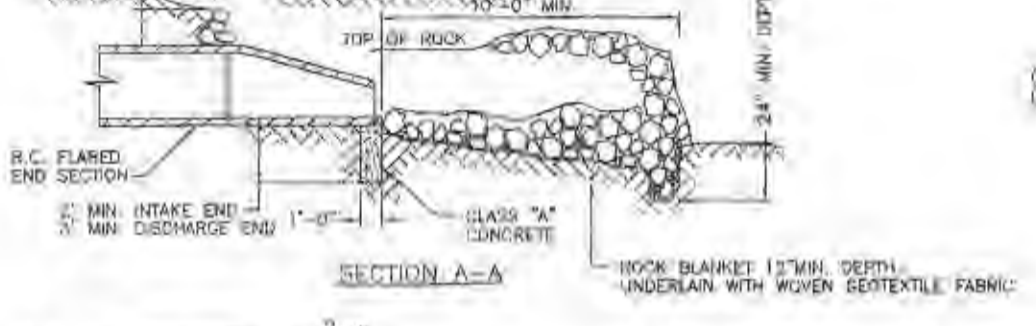
1. TRASH ENCLOSURE PLAN
NOT TO SCALE

2. ELEVATION
NOT TO SCALE

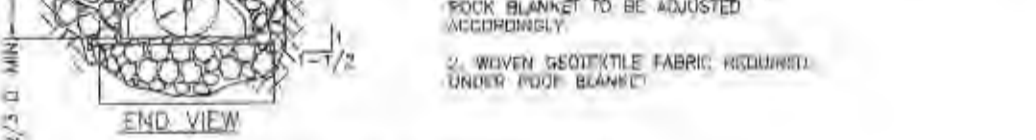
3. ELEVATION
NOT TO SCALE



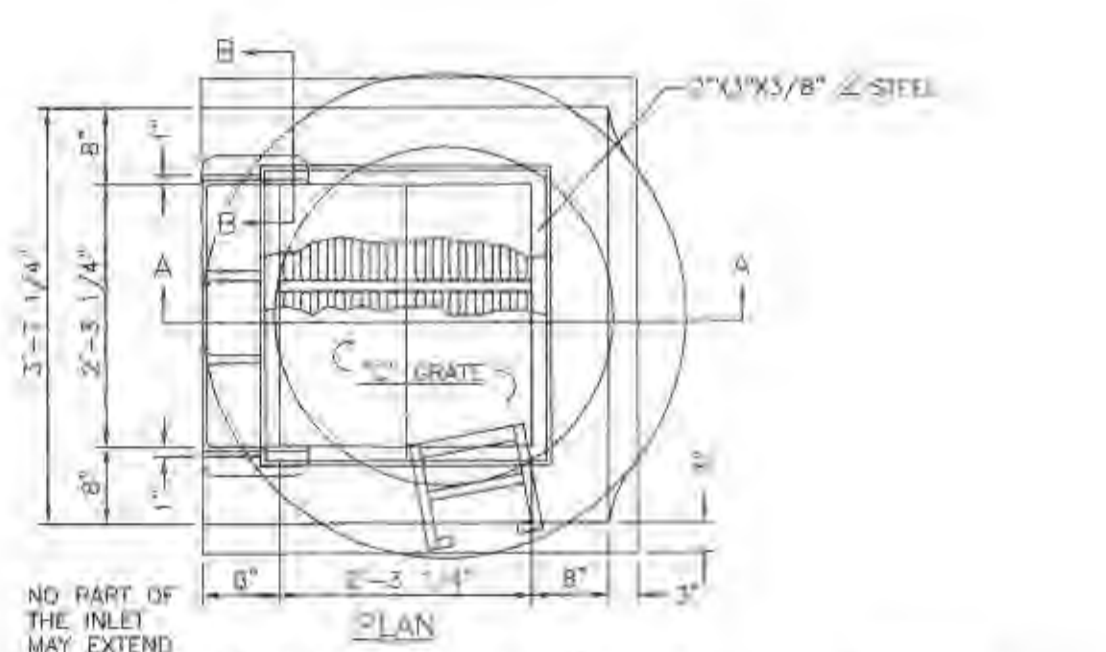
FLARED END SECTION
INLET/OUTLET PROTECTION



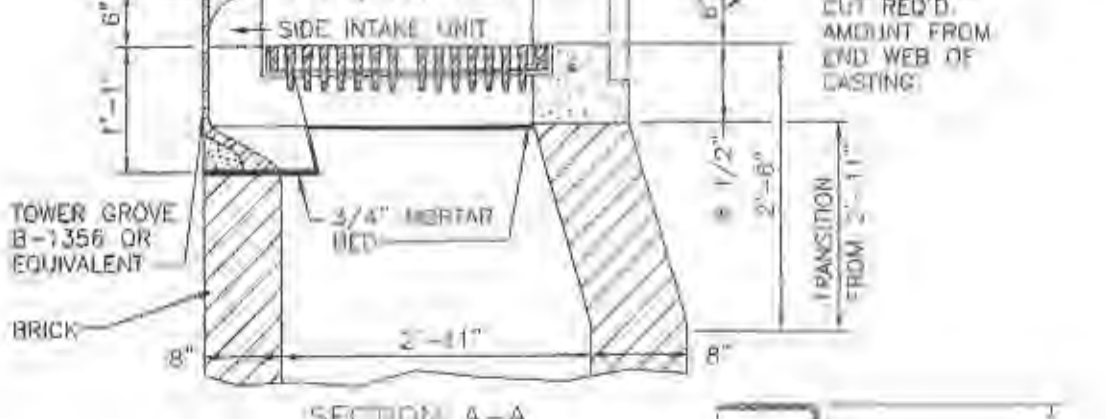
SECTION A-A



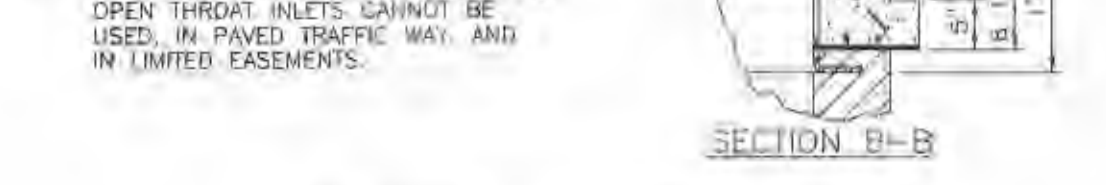
END VIEW



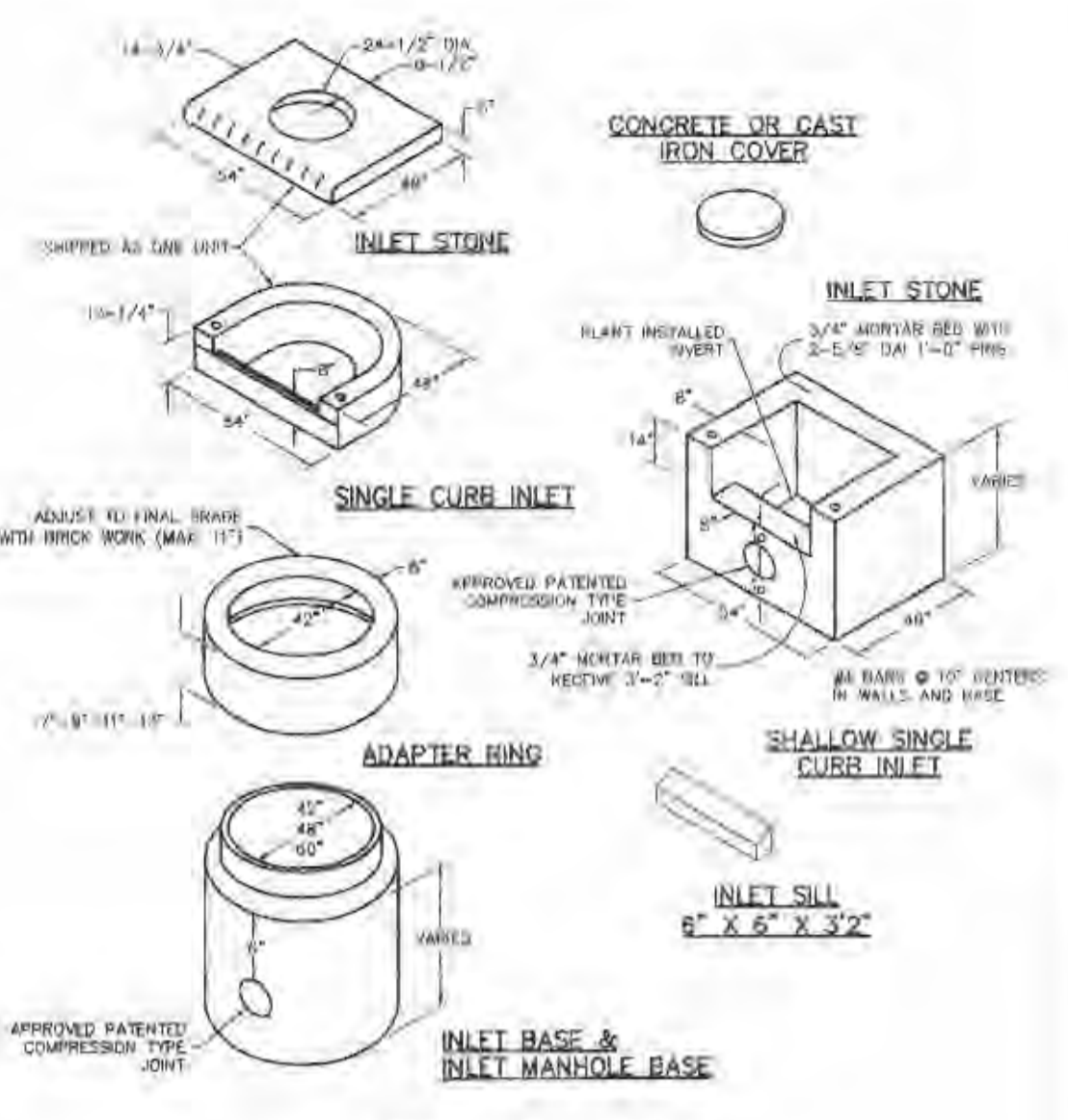
2-GRADE INLET WITH
SIDE INTAKE UNIT



SECTION A-A



SECTION B-B



SINGLE STREET INLETS
PRECAST CONCRETE

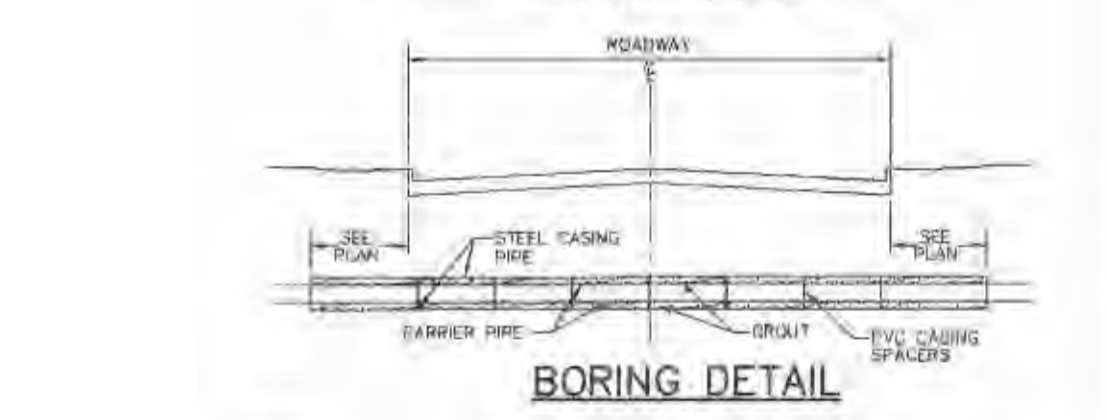


TYPICAL WATER AND SEWER SEPARATION
NOT TO SCALE

TYPICAL WATER AND SEWER SEPARATION
NOT TO SCALE

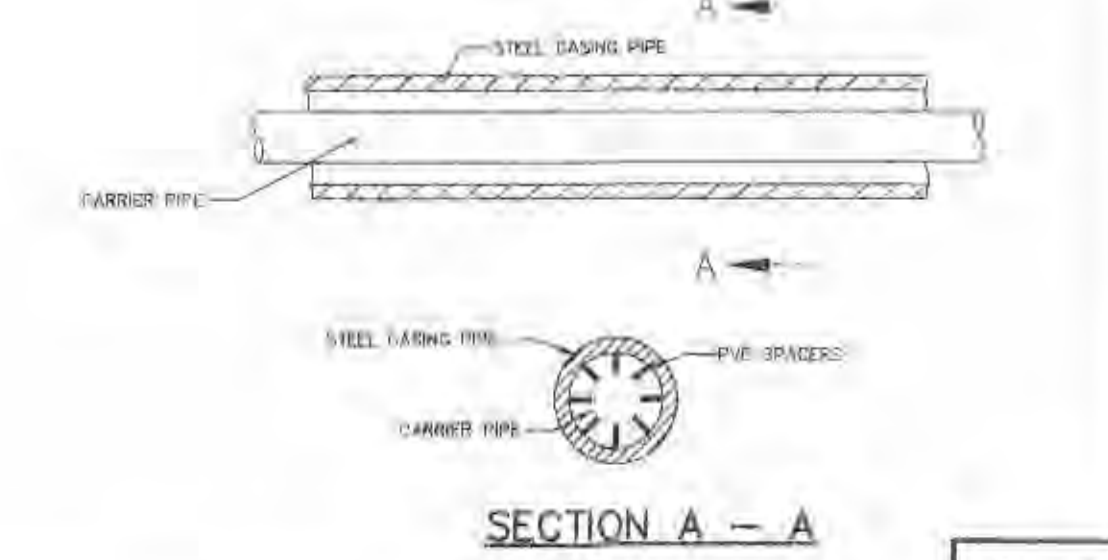


FEISE ROAD BORE DETAIL
CITY OF FALLON JURISDICTION



BORING DETAIL

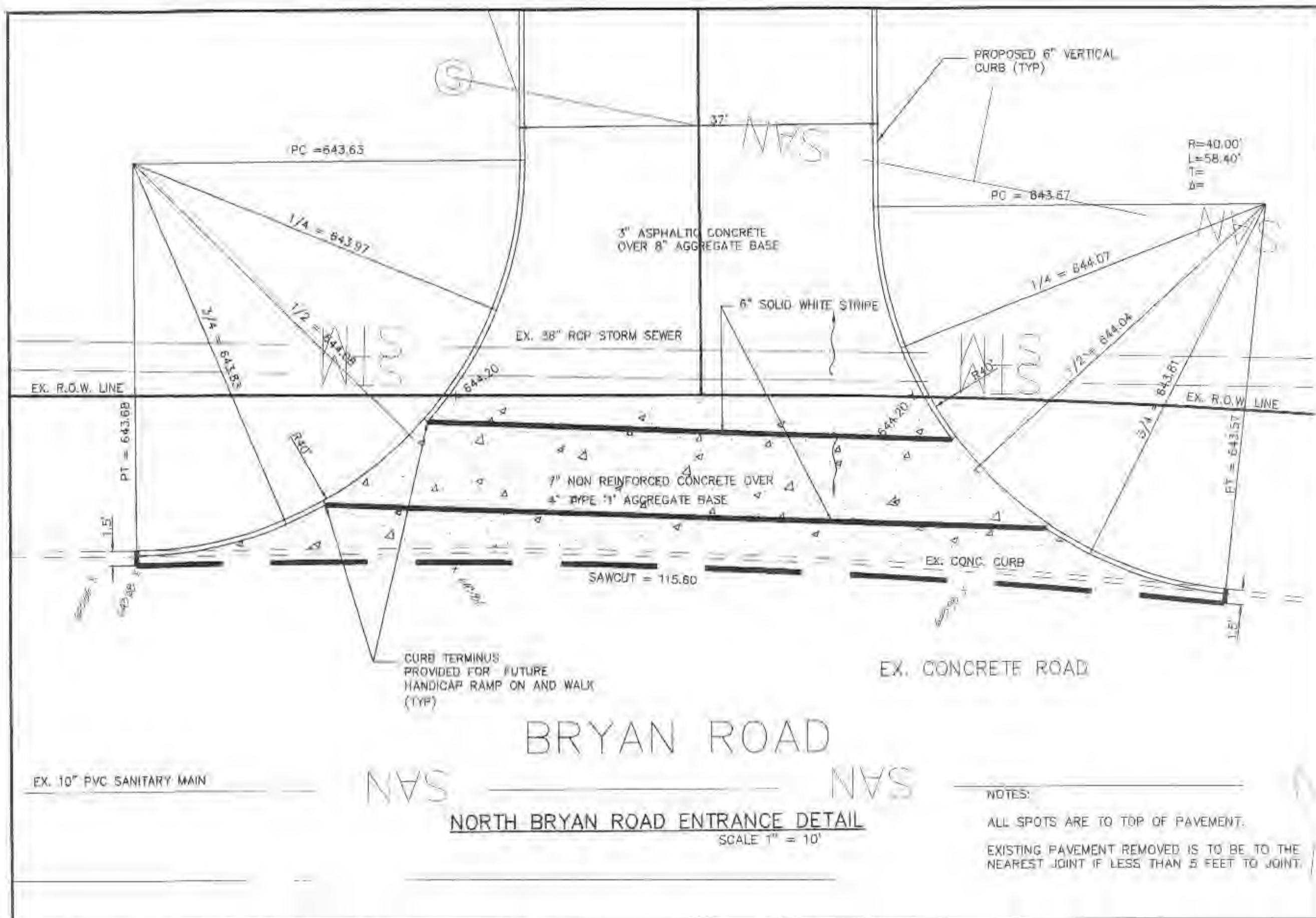
- NOTES:
- 1) INSIDE DIAMETER OF CASING PIPE TO BE A MINIMUM OF 4" GREATER THAN CARRIER DIAMETER OF CARRIER PIPE.
 - 2) IF BY ANY MEANS A HOLE THAT WILL BECOME THE CASING WITH A BORE HOLE.
 - 3) THE INSIDE DIAMETER OF THE CASING SHALL NOT BE LESS THAN, NOR MORE THAN ONE INCH GREATER THAN THE BORE HOLE.
 - 4) CASING SPACERS TO BE INSTALLED FOR MANUFACTURER'S SPECIFICATIONS.



SECTION A - A

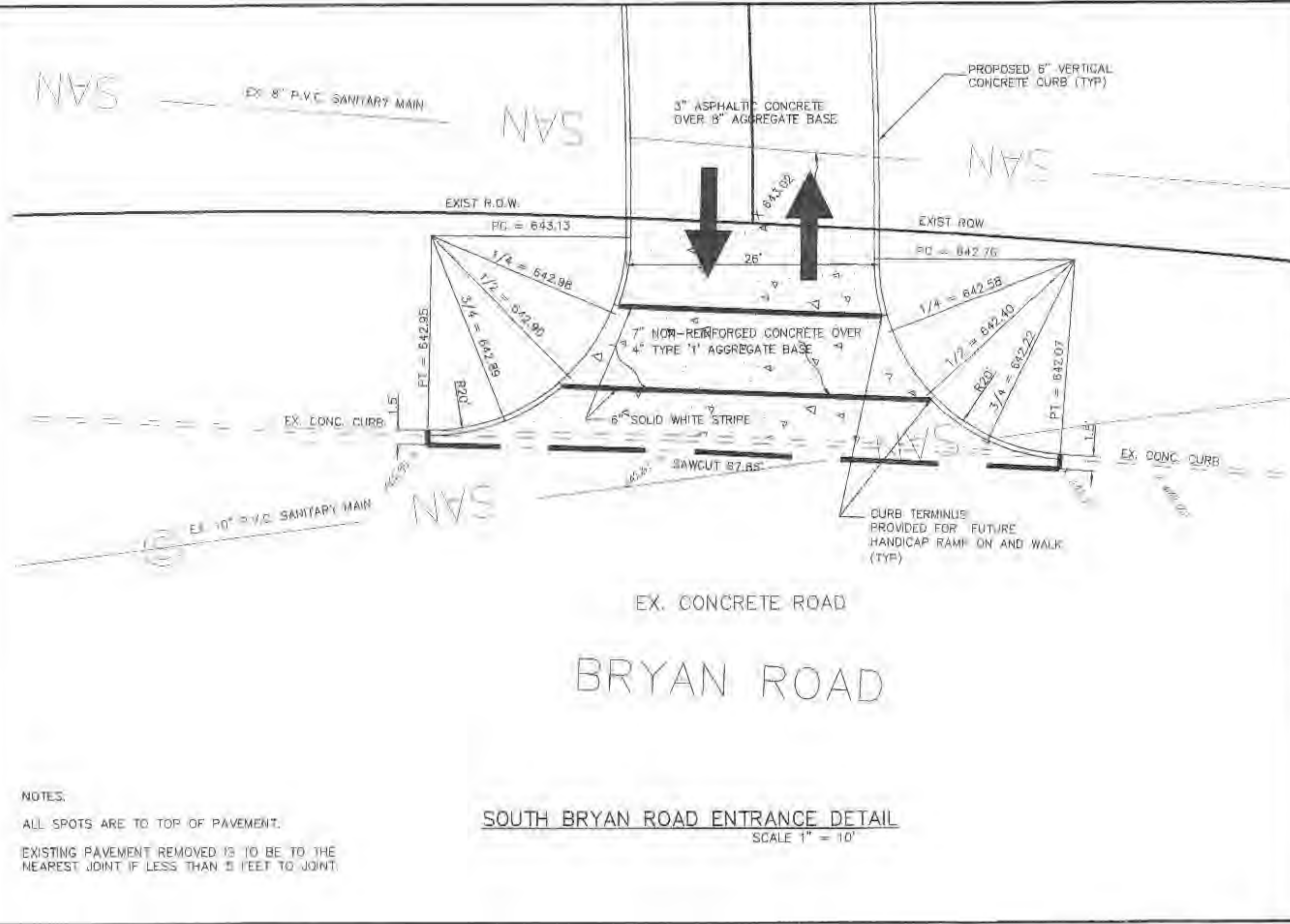
UNDERGROUND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE INFORMATION AND THEREFORE THEIR LOCATIONS SHALL BE CONSIDERED APPROXIMATE ONLY. THE VERIFICATION OF THE LOCATION OF ALL UNDERGROUND UTILITIES, EITHER SHOWN OR NOT SHOWN ON THESE PLANS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, AND SHALL BE LOCATED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

C:\DWG\12453\12453 SE FEISE AND PRIVACY CONSTRUCTION\12453CON.dwg, retail 2 con.dwg(1), 10/12/2004 9:06:12 AM, STA 47.DWG



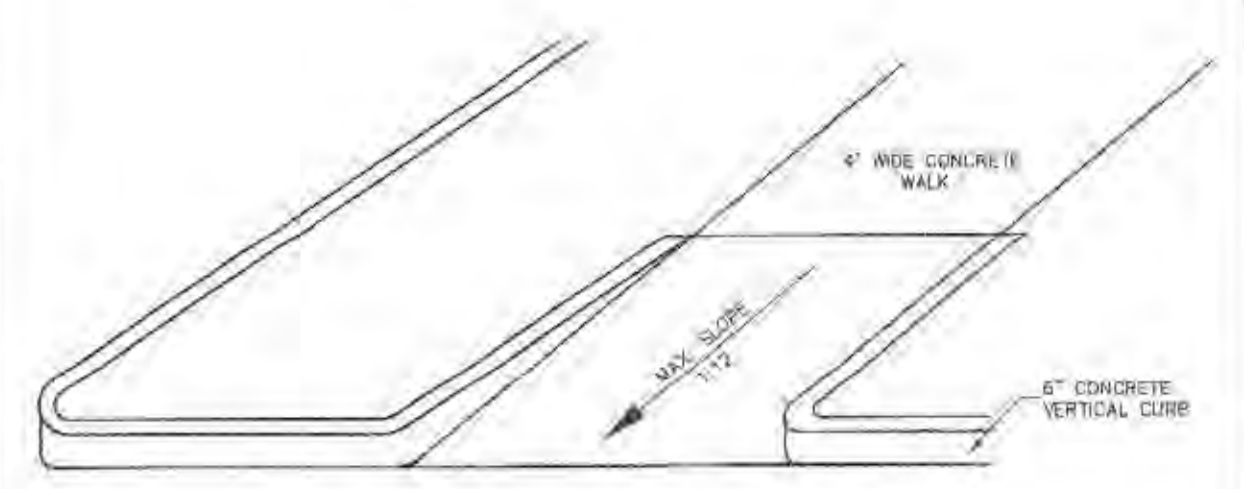
NORTH BRYAN ROAD ENTRANCE DETAIL
SCALE 1" = 10'

NOTES:
ALL SPOTS ARE TO TOP OF PAVEMENT.
EXISTING PAVEMENT REMOVED IS TO BE TO THE NEAREST JOINT IF LESS THAN 2 FEET TO JOINT.

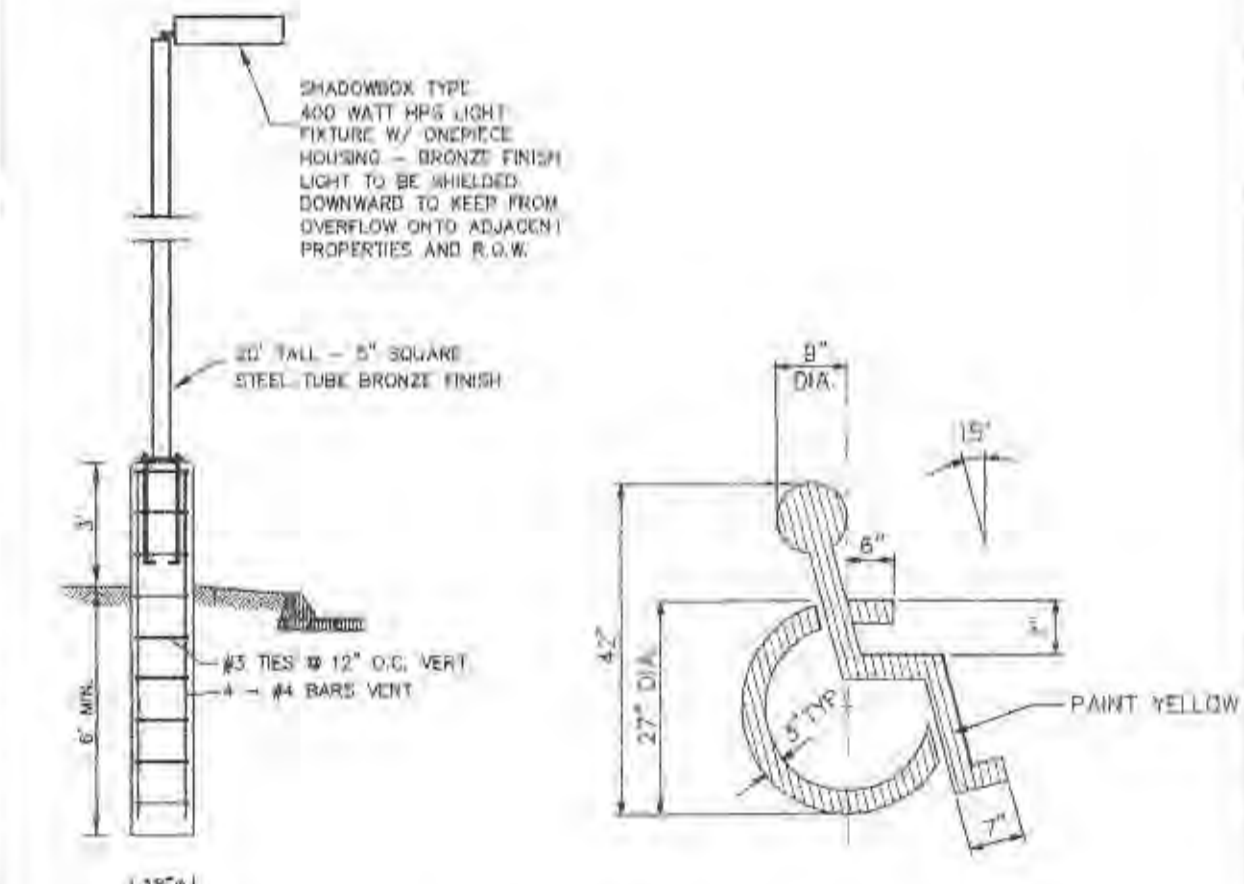


SOUTH BRYAN ROAD ENTRANCE DETAIL
SCALE 1" = 10'

NOTES:
ALL SPOTS ARE TO TOP OF PAVEMENT.
EXISTING PAVEMENT REMOVED IS TO BE TO THE NEAREST JOINT IF LESS THAN 2 FEET TO JOINT.

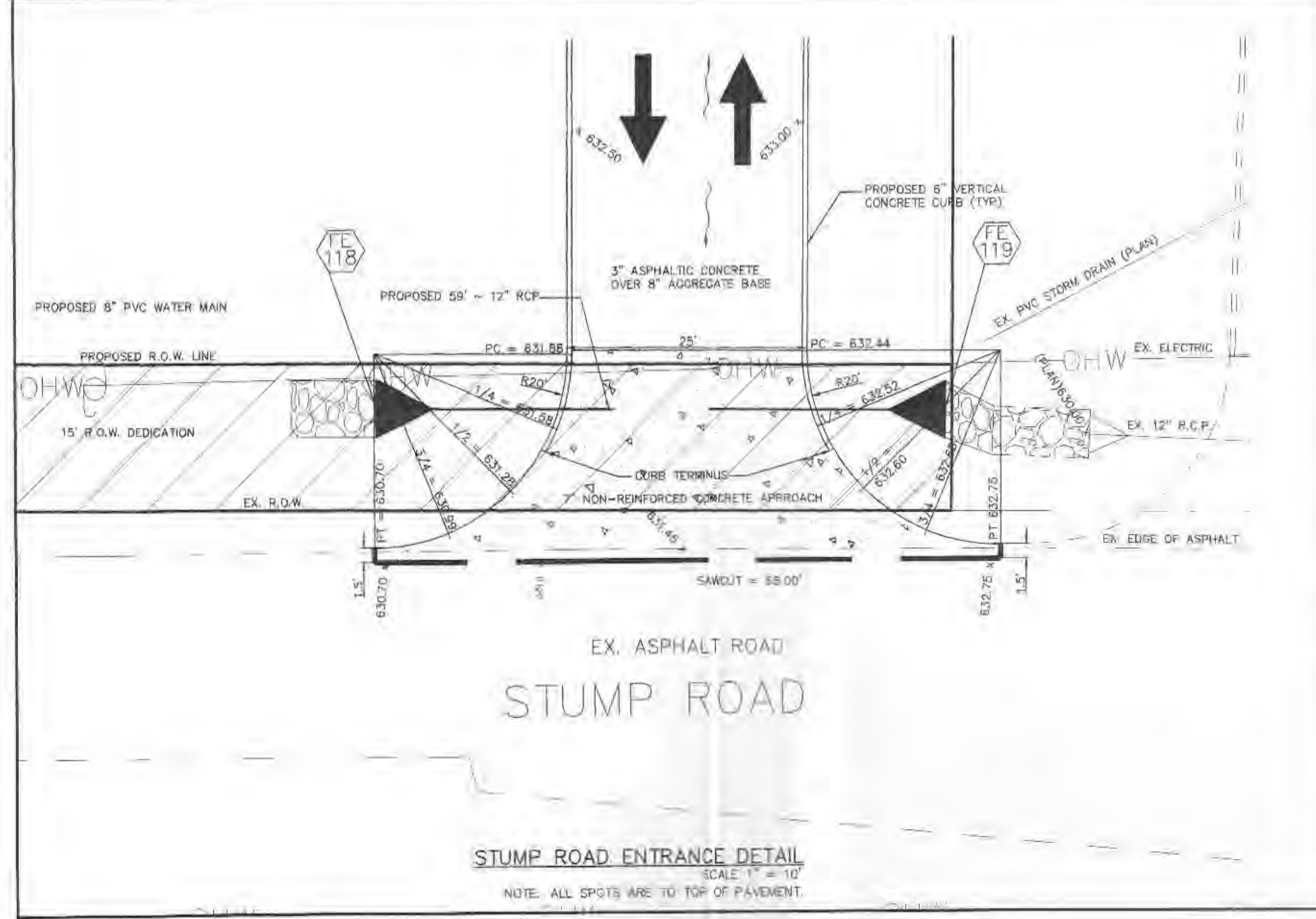


HANDICAPPED RAMP DETAIL
NOT TO SCALE



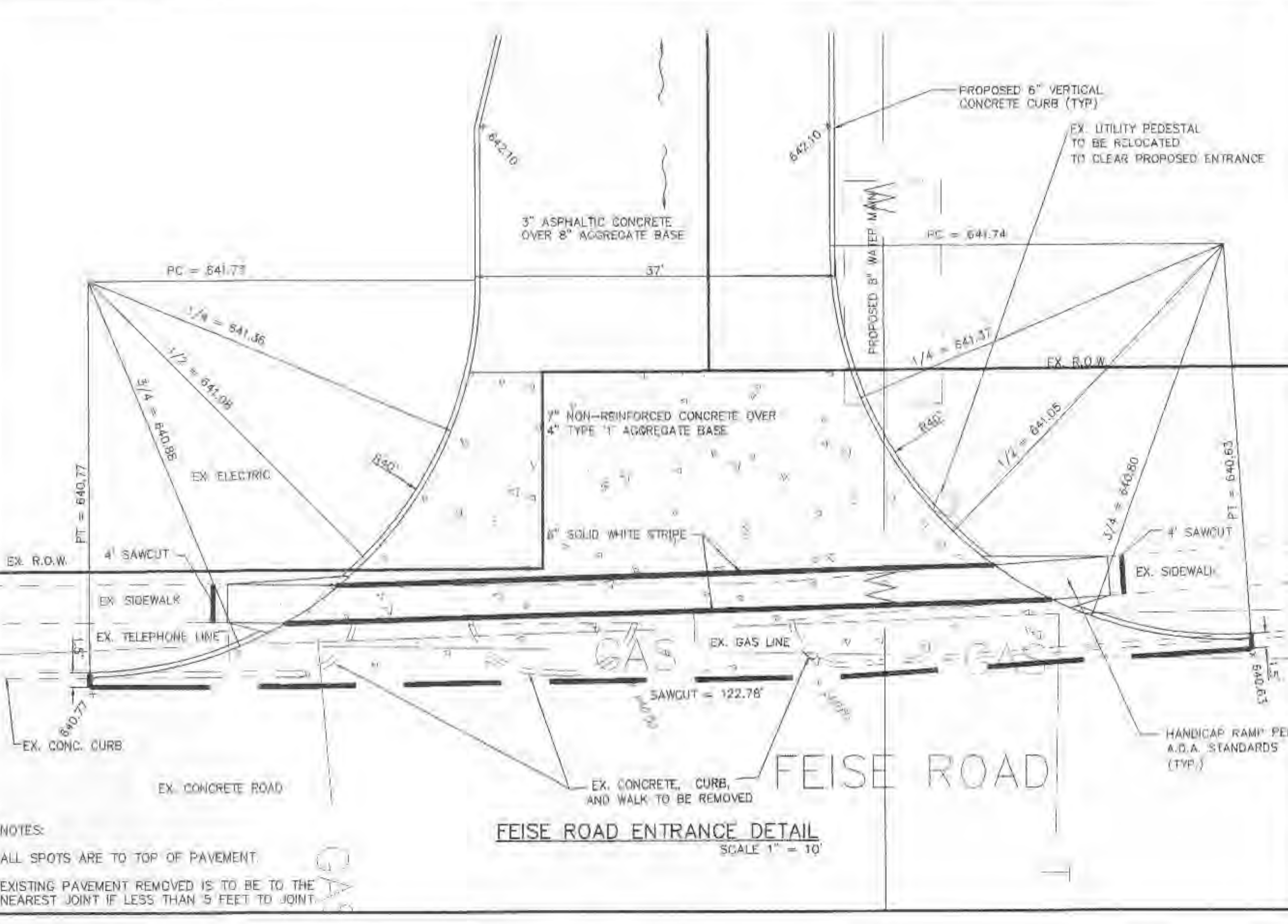
LIGHT POLE & BASE
NOT TO SCALE

PAINTED HANDICAPPED PARKING SYMBOL
NOT TO SCALE



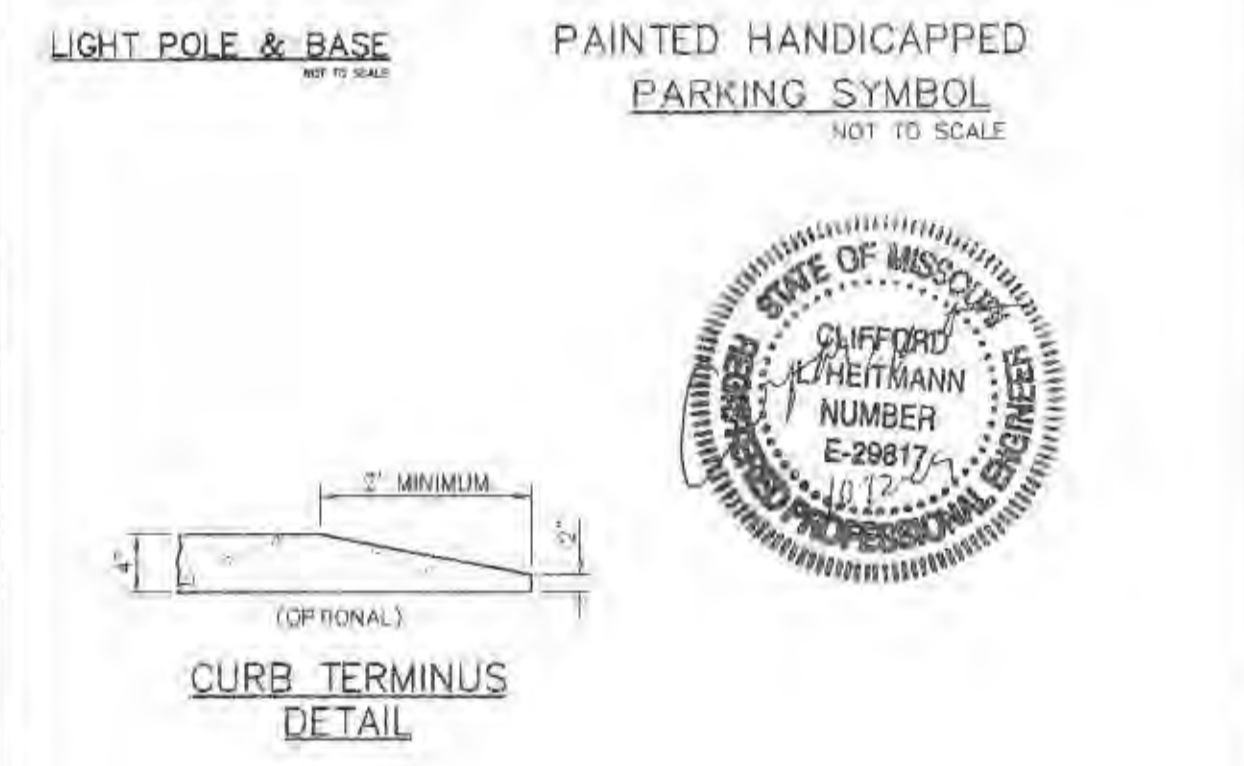
STUMP ROAD ENTRANCE DETAIL
SCALE 1" = 10'

NOTE: ALL SPOTS ARE TO TOP OF PAVEMENT.

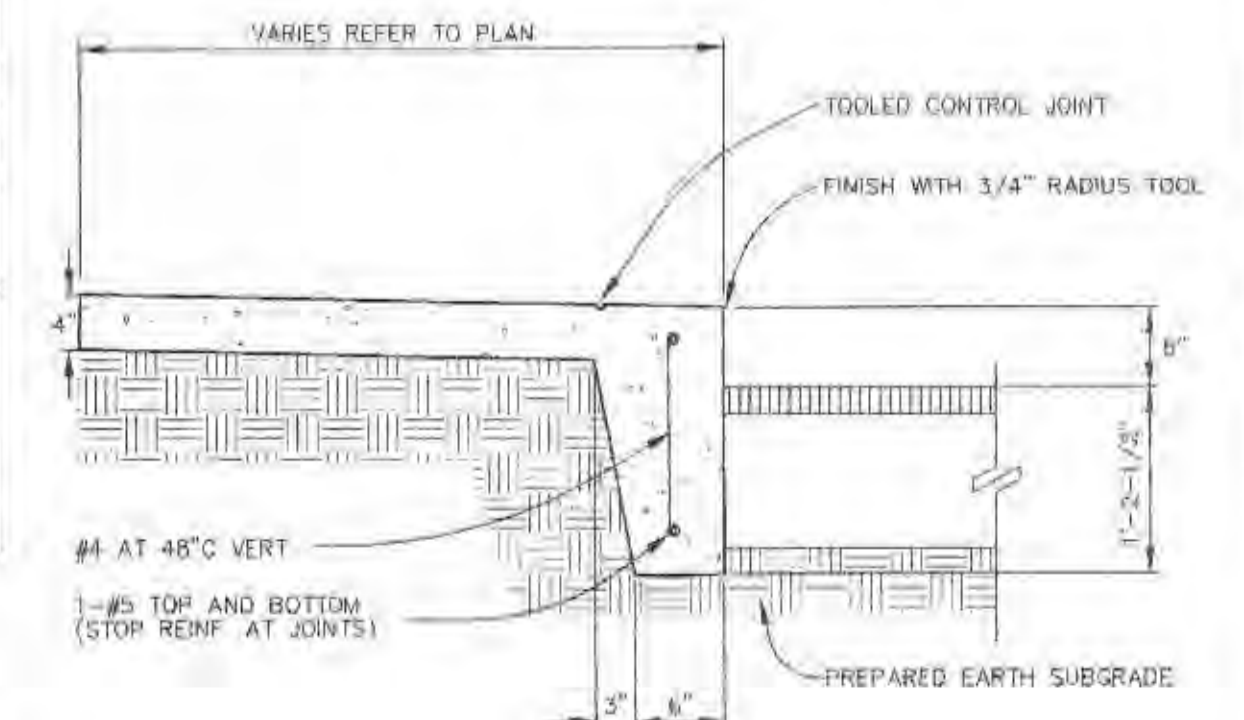


FEISE ROAD ENTRANCE DETAIL
SCALE 1" = 10'

NOTES:
ALL SPOTS ARE TO TOP OF PAVEMENT.
EXISTING PAVEMENT REMOVED IS TO BE TO THE NEAREST JOINT IF LESS THAN 2 FEET TO JOINT.

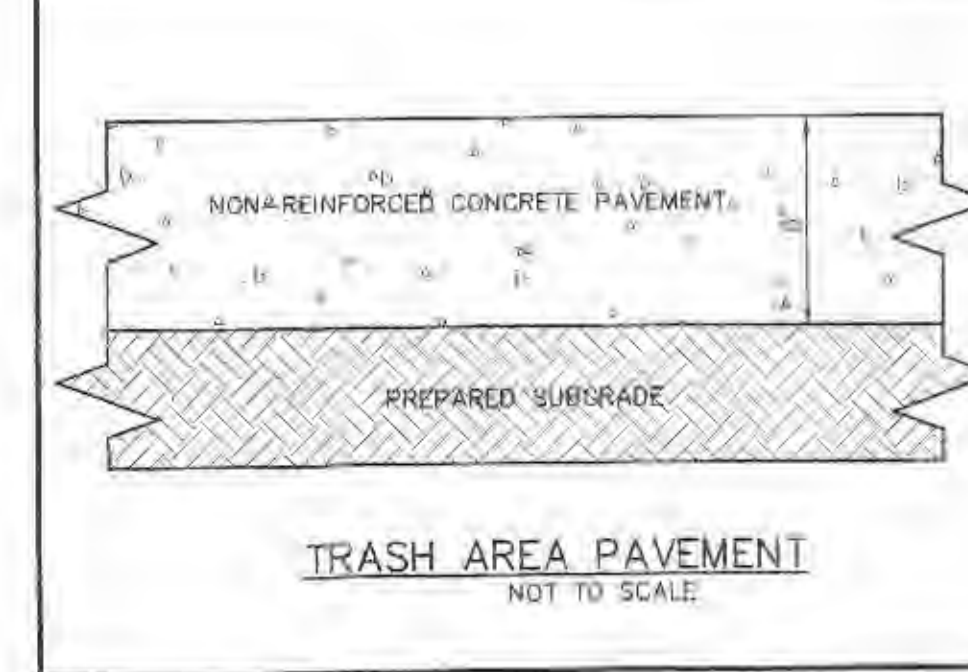


CURB TERMINUS DETAIL
NOT TO SCALE

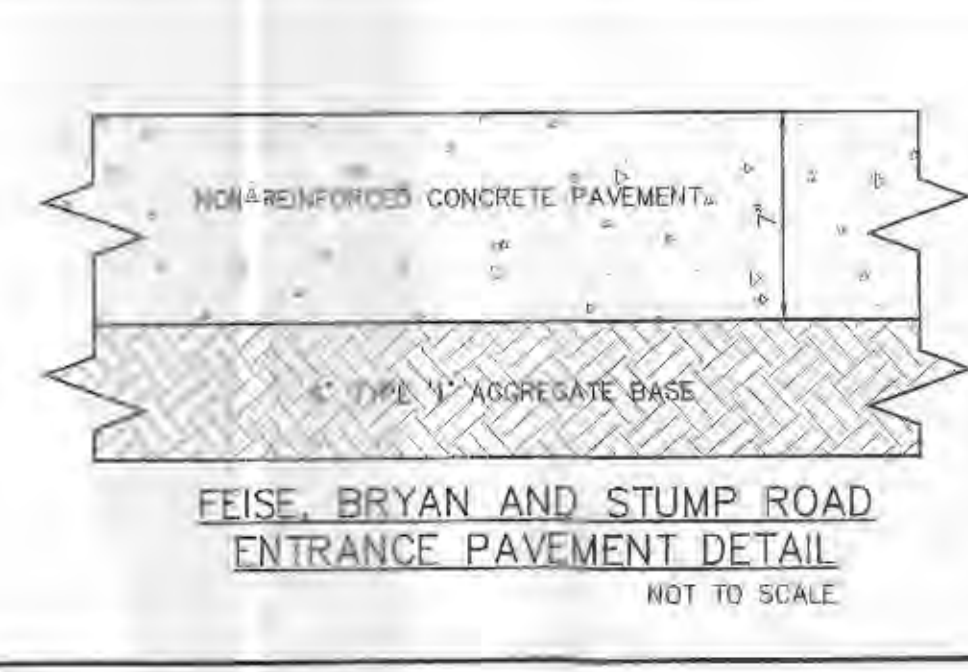


TURNDOWN CONCRETE WALK
NOT TO SCALE

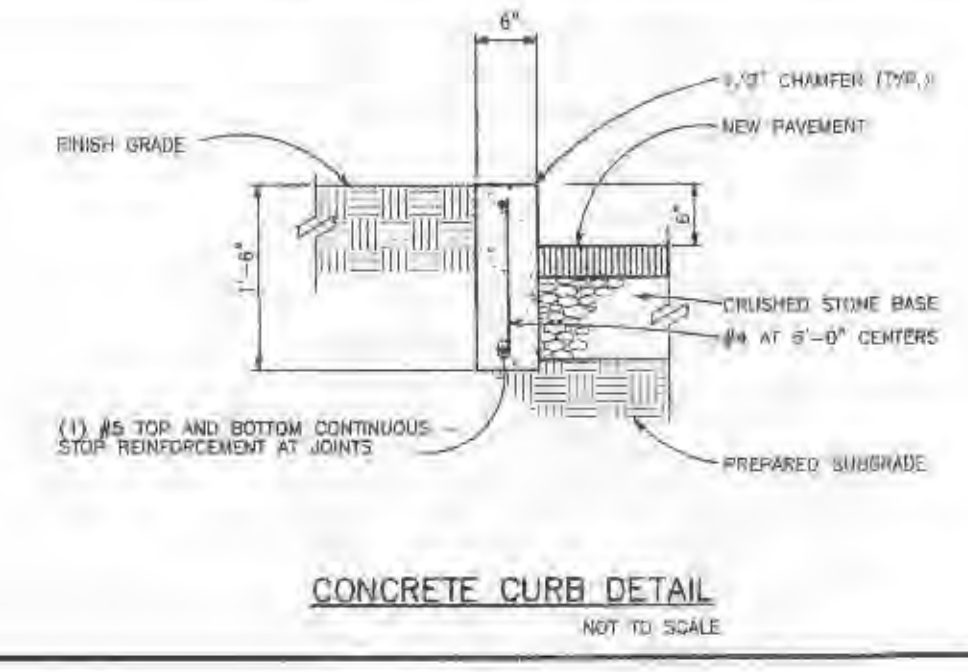
PROVIDE 1/2\"/>



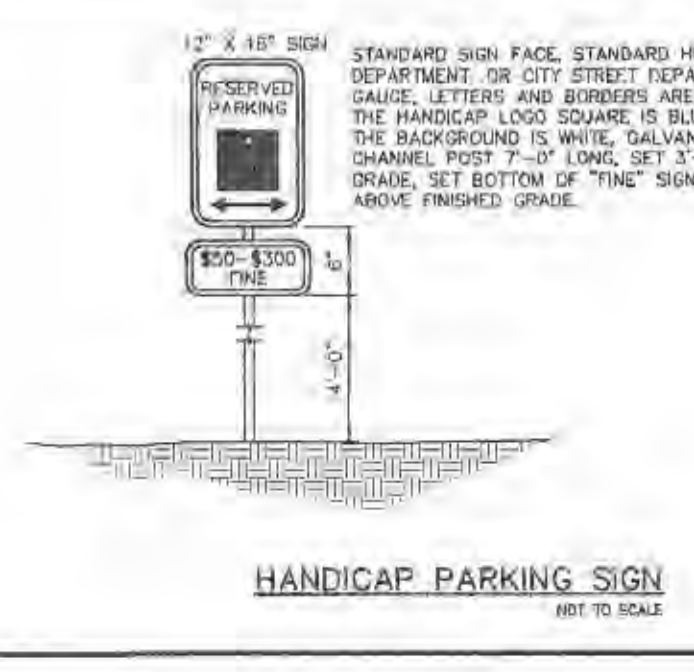
TRASH AREA PAVEMENT
NOT TO SCALE



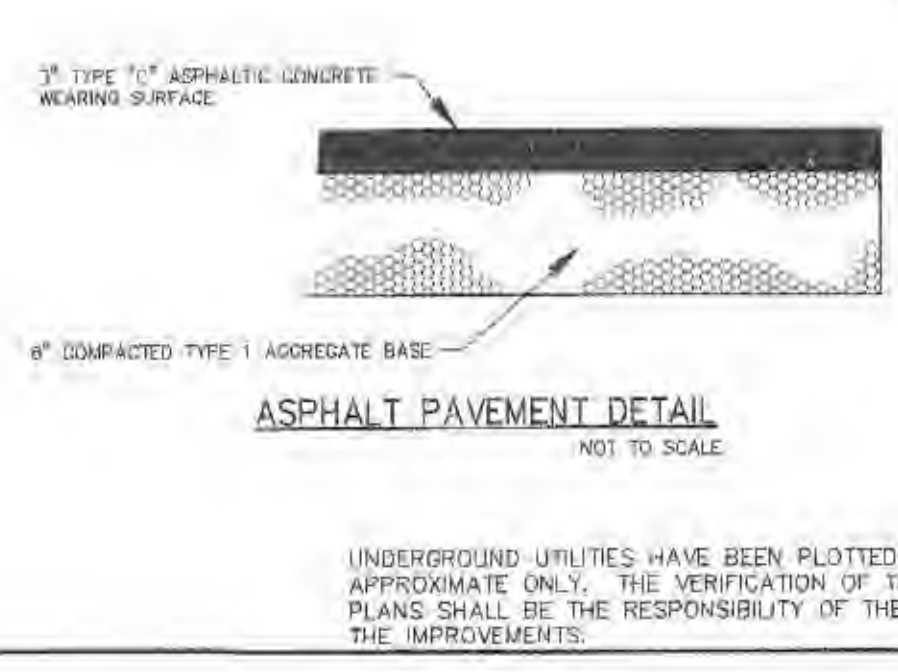
FEISE, BRYAN AND STUMP ROAD ENTRANCE PAVEMENT DETAIL
NOT TO SCALE



CONCRETE CURB DETAIL
NOT TO SCALE



HANDICAP PARKING SIGN
NOT TO SCALE



ASPHALT PAVEMENT DETAIL
NOT TO SCALE

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P:\DWG\A\2000PLUS\12453 SE FEISE AND BRYAN CONSTRUCTION\12453CON.dwg, Detail 2, con, vtl, det(7), 10/12/2004 9:56:20 AM, STA 47.DRB