

GENERAL NOTES

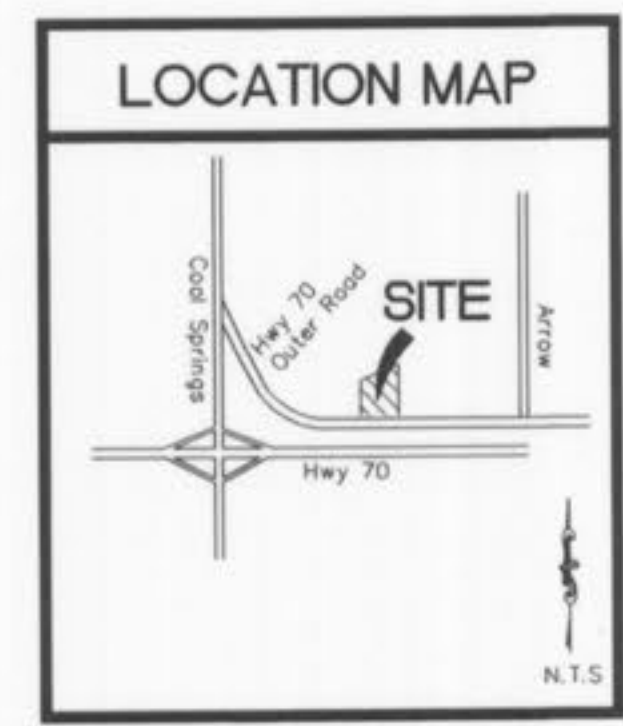
- Underground utilities have been plotted from available information and therefore their locations shall be considered approximate only. The verification of the location of all underground utilities, either shown or not shown on these plans, shall be the responsibility of the contractor, and shall be located prior to any grading and/or construction of improvements.
- 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 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 as required to prevent erosion and 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 silt or mud on new or existing pavement shall be removed immediately. Any depositing of silt or mud 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 City of O'Fallon and/or MoDOT.
- No area shall be cleared without permission of the developer.
- Owner/Developer assumes full responsibility as to the performance of the grading operation and assurance that all properties and County and State roads will be adequately protected.
- Soil preparation and re-vegetation shall be performed according to Appendix A of the Model Sediment and Erosion Control Regulations for Urban Development.
- 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 or during the next seeding period after grading has been completed. Refer to Appendix A of St. Charles Soil and Water Conservation District - Model Sediment and Erosion Control Regulations.
- 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 unsuitable material shall be properly disposed of off-site. Topsoil and grass in the fill areas shall be thoroughly diced prior to the placement of any fill. The Soils Engineer shall approve the dicing operation.
- 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 rollers shall be designed so as to avoid the creation of a layered fill without proper blending of successive fill layers.
- Developer must supply City construction inspectors with soils reports prior to or during site soil testing. 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. The City of O'Fallon shall be provided a copy of the final site compaction results.
- The Soils Engineer shall notify the Contractor of rejections 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.
- All Areas to receive fill shall be scarified to a depth of not less than 6 inches and then compacted to at least 85 percent of the maximum density as determined by the Modified AASHTO T-180 Compaction Test (ASTM-D1557). 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 8 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.
- The sequence of operation in the fill areas will be: fill, compact, verify acceptable soil density, and repetition of the sequence. The acceptable moisture contents during the filling operation are those at which satisfactory dry densities can be obtained. The acceptable moisture contents during the filling operation in the remaining areas are from 2% to 8% above the optimum moisture content.
- 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.
- All cut and fill slopes should be a maximum of 33% slope (3:1) after grading.
- All fill placed under the proposed storm and sanitary sewer, proposed roads, paved areas and/or trench backfills within and off the road right-of-way shall be compacted to 90% of maximum density as determined by the Modified AASHTO T-180 Compaction Test or 95% 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 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. Soil 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. 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 proof rolling and compaction.
- Fill placed within proposed street R.O.W. shall be compacted to 90% M.O.D. Proctor and be 2% below to 5% above optimum moisture content.
- Soft soil in the bottom and banks of any existing or former pond site should be removed, spread out and permitted to dry sufficiently to be used as fill. None of this material should be placed in proposed right-of-way locations or on storm sewer locations.
- Any wells and/or springs which may exist on this property should be located and sealed in a manner acceptable to the City of O'Fallon.
- Temporary siltation control measures (structural) shall be maintained until vegetative cover is established at a sufficient density to provide erosion control on the site.
- If straw bales or silt fences are destroyed by heavy rains, vandalism, etc., they are to be replaced immediately by contractor.
- When grading operations are completed or suspended for more than thirty (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 Designated Official's recommendation. Refer to Appendix A of St. Charles Soil and Water Conservation District - Model Sediment and Erosion Control Regulations. All finished grades (or is not to be disturbed by improvement) in excess of 20% slopes (5:1) shall be mulched and tacked at the rate of 100 pounds per 1000 square feet when seeded.
- All existing trash and debris on-site must be removed and 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 disposed of off-site.
- The total yardage of this project is based on a 15% ± shrinkage factor.
- The shrinkage factor is subject to change, due to soil conditions (types and moisture content), weather conditions, and the percentage of compaction actually achieved at the time of the year grading is performed. As a result, adjustments in final grade may be required. If adjustments need to be made, the contractor shall contact St. Charles Engineering and Surveying prior to completion of the grading.
- Earth quantities were obtained from surveyed topography.
- The vertical grading tolerance shall be plus or minus 0.2 feet for all rough grading.
- The Contractor shall prevent all storm/surface water, mud or construction debris from entering the existing sanitary sewer system.
- The most stringent of the above requirements shall apply.
- No slopes shall be steeper than 3 (horizontal) to 1 (vertical).
- All paving to be in accordance with St. Charles County Standards and specifications except as modified by the City of O'Fallon ordinances.
- Ensure sidewalks, curb ramps, ramp and accessible parking spaces shall be constructed in accordance with the current approved "American 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 plan, the ADAAG guidelines shall take precedence and the contractor prior to any construction shall notify the Project Engineer.
- Brick shall not be used in the construction of the storm sewers or sanitary sewer structures.
- All joints shall be gasketed O-ring type.
- Contractor to provide 5/8" diameter trash bar for all inlets.
- Lighting values will be reviewed on-site prior to the final occupancy inspection. Corrections will need to be made if not in compliance with City Standards.
- All proposed fencing requires a separate permit through the Planning Department.
- All sign post and backs and bracket arms shall be painted back using Carboline Rustbond Penetration Sealer SG and Carboline 133 HB point (or equivalent as approved by the City and MoDOT). Signs designating street name shall be on the opposite side of the street from traffic control signs.
- Ensure graded areas that are to remain bare for over 2 weeks are seeded and mulched.
- Ensure all erosion control systems are inspected and necessary corrections made within 24 hours of any rainstorm resulting on one-half inch of rain or more.
- Backflow preventer to be located inside building.

RATHER'S SUBDIVISION LOT 2

~~CONSTRUCTION PLANS~~

OF A TRACT OF LAND BEING PART OF
RATHERS SUBDIVISION LOT 2
SECTION 21,
TOWNSHIP 47 NORTH, RANGE 3 EAST
ST. CHARLES COUNTY, MISSOURI

AS-BUILTS



INDEX OF SHEETS

- 1 COVER SHEET
- 2 FLAT PLAN
- 3 GRADING PLAN
- 4 DRAINAGE AREA MAP + STORM PROFILES
- 5 WATER DETAILS + BASIN CROSS SECTIONS
- ~~6 STORM + SANITARY SEWER DETAILS~~

THE EXISTING SEWER LENGTHS, SIZES, FLOW LINES, 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 AS-BUILT 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.

ST. CHARLES ENGINEERING AND SURVEYING, INC.

Michael Newell
MICHAEL NEWELL MEINERS
MISSOURI PROFESSIONAL ENGINEER NUMBER E-22483



LEGEND

- | | |
|---|---|
| <ul style="list-style-type: none"> MS SANITARY STRUCTURE SS STORM STRUCTURE TH TEST HOLE PP POWER POLE LS LIGHT STANDARD CI CURB INLET DCI DOUBLE CURB INLET GI GRATE INLET (EXISTING) AI AREA INLET (EXISTING) DAI DOUBLE AREA INLET FE FLARED END SECTION EP END PIPE ED ENERGY DISSIPATOR MH MANHOLE R.C.P. REINFORCED CONCRETE PIPE C.M.P. CORRUGATED METAL PIPE C.I.P. CAST IRON PIPE PVC POLYVINYL CHLORIDE VCP VITRIFIED CLAY PIPE GW GUY WIRE POST WM WATER METER WV WATER VALVE WSO WATER SHUT OFF GV GAS VALVE DS DOWNSPOUT | <ul style="list-style-type: none"> C.O. CLEAN OUT T.B.R. TO BE REMOVED T.B.R.&R. TO BE REMOVED & RELOCATED T.B.P. TO BE PROTECTED T.B.A. TO BE ABANDONED B.C. BASE OF CURB T.C. TOP OF CURB T.W. TOP OF WALL TYP. TYPICAL U.N.O. UNLESS NOTED OTHERWISE U.I.P. USE IN PLACE EXISTING CONTOUR PROPOSED CONTOUR TREE LINE SAN. SEWER (EXISTING) SAN. SEWER (PROPOSED) STORM DRAIN (EXISTING) STORM DRAIN (PROPOSED) PHONE BOX IRON PIPE WATER LINE, SIZE HYDRANT CONCRETE PAVEMENT PLACED RIP-RAP W/UNDERLAIN FABRIC SWALE |
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DEVELOPMENT NOTES

- Owner: Elsie C. Kinker Revocable Trust
27 Lake Forest Circle
Lake St. Louis, MO 63367
- Prepared For: Le Pique and Orne Architects, Inc.
423 Jackson Street
St. Charles, MO 63301
(636) 947-0099
- Area of Tract = 1.12 Acres
- Zoning - I-1 (Light Industrial)
- Proposed Use - Office
- Setback Requirements:
-Front Yard Setback Thirty (30) feet
-Side Yard Setback Twenty (20) feet
-Rear Yard Setback Thirty Five (35) feet
- All utilities are located underground.
- Parking Calculations:
One space per 300 S.F. of Building Area
38 Parking Spaces Required
38 Parking Spaces Provided
- Pavement shall be 3" Type C mix over 8" Type 1 aggregate.
- Utilities:
-Water: City of O'Fallon
-Sanitary: City of O'Fallon
-Electric: Ameren UE
-Gas: St. Charles Gas Company
-School: Fort Zumwalt
-Fire: Central County Fire & Rescue
- According to FIRM Map Panel Number 29183C0241E Dated April 2, 1996. This Parcel is not in the 100 year floodplain.
- All Storm Sewer Construction must meet the current standards and specifications of the City of O'Fallon.
- All Sanitary Sewer Construction must meet the current standards and specifications of the City of O'Fallon.
- All sign locations and sizes must be approved separately through the Planning Division.
- Electric will be served underground.
- If detention is required the site will meet all current standards and specifications of the City of O'Fallon.
- Landscaping will meet all the requirements of the City of O'Fallon.
- All spot elevations are top of pavement unless otherwise noted.
- All slopes shall be 3:1 max.
- Retail uses are not permitted in industrial Zoning.

LEGAL DESCRIPTION: RATHERS SUBDIVISION LOT 2

LANDSCAPE PLANTING SCHEDULE

SYM	QTY	SPECIES TYPE	SIZE
SR	4	SHRUB	24"
DC	9	DECIDUOUS	2" CAL.
EX	3	EX. DECIDUOUS (TO BE SAVED)	3" CAL.
EX	4	EX. DECIDUOUS (TO BE SAVED)	2" CAL.

* Existing tree mass removed was replaced with two additional trees.

SITE COVERAGE CALCULATIONS

ITEM	AREA (S.F.)
BUILDING S.F.	11,432 S.F.
PAVEMENT S.F.	20,207 S.F.
GREENSPACE S.F.	17,289 S.F.
TOTAL S.F.	48,928 S.F.

SITE BENCHMARK: RM 69 Elevation = 456.02
Chissted "L" on top of wingwall in northeast corner of Old Highway 79, bridge over Belleau Creek.



REVISED PER CITY COMMENTS	REVISED PER CITY COMMENTS	REVISED PER CITY COMMENTS	REVISED PER CITY COMMENTS
4/6/04	5/20/04	6/11/04	4/15/06
REVISED AS-BUILTS PER CITY	REVISED AS-BUILTS PER CITY	REVISED AS-BUILTS PER CITY	REVISED AS-BUILTS PER CITY

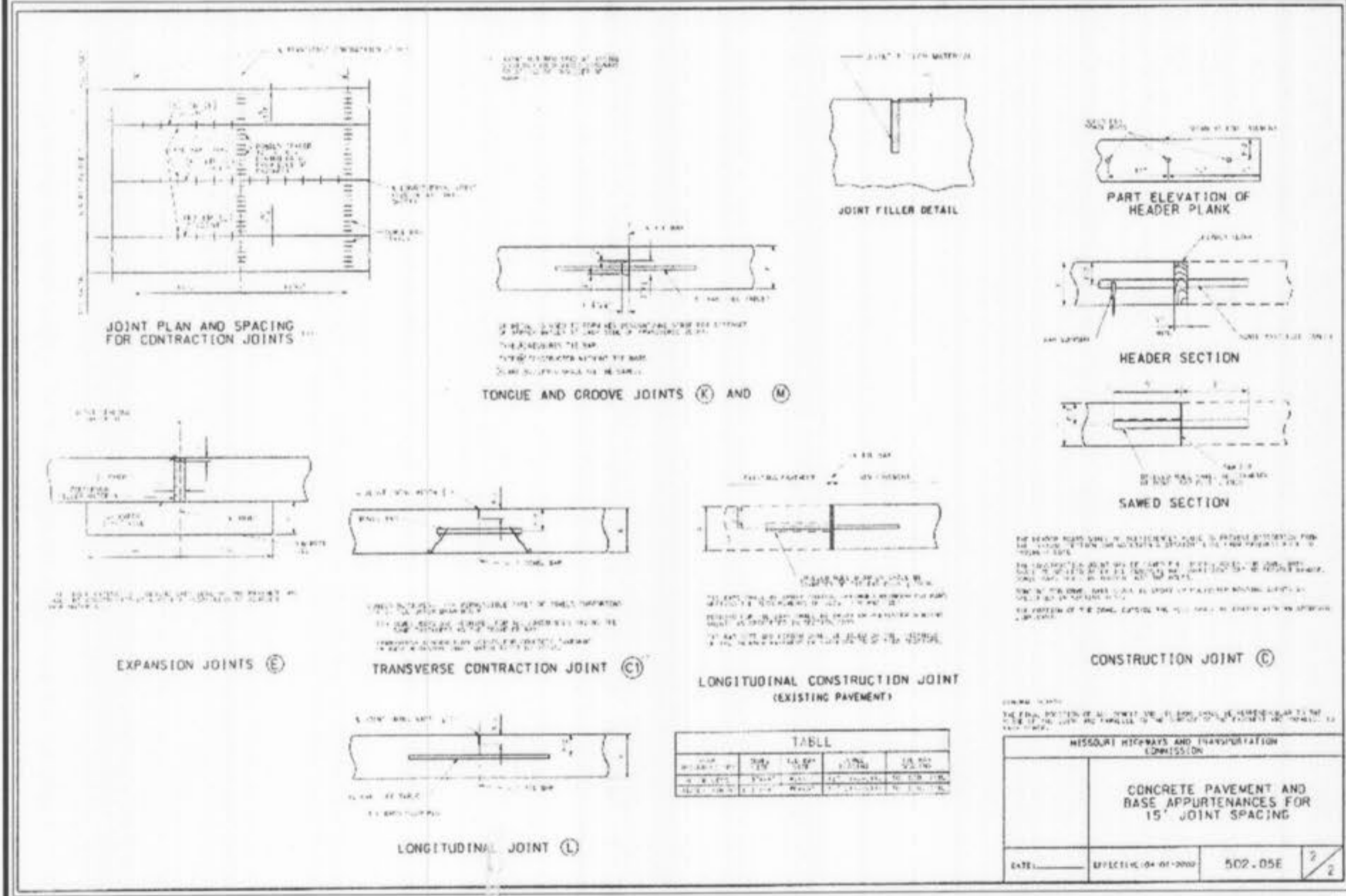
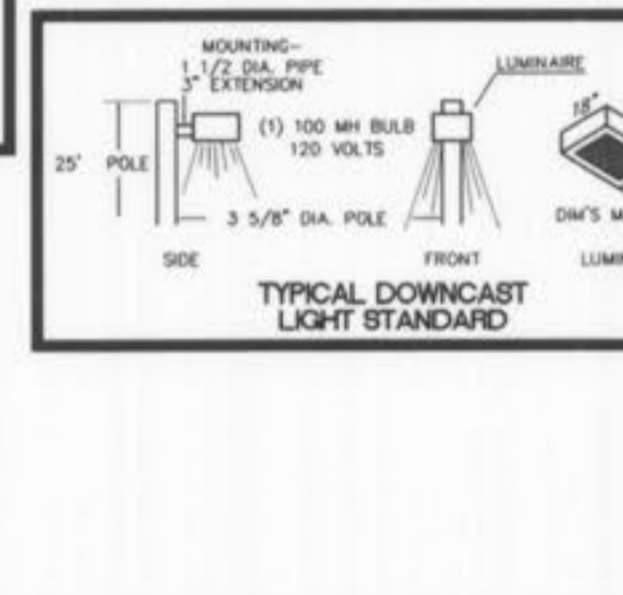
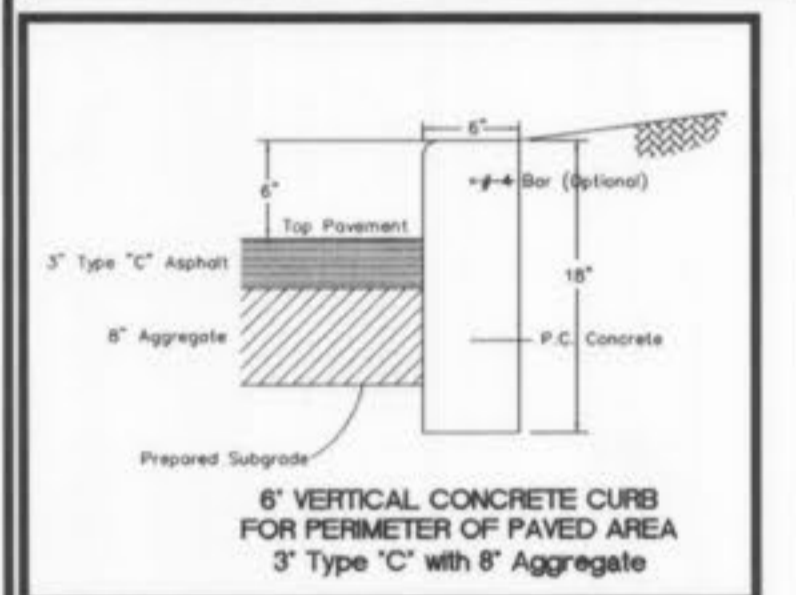
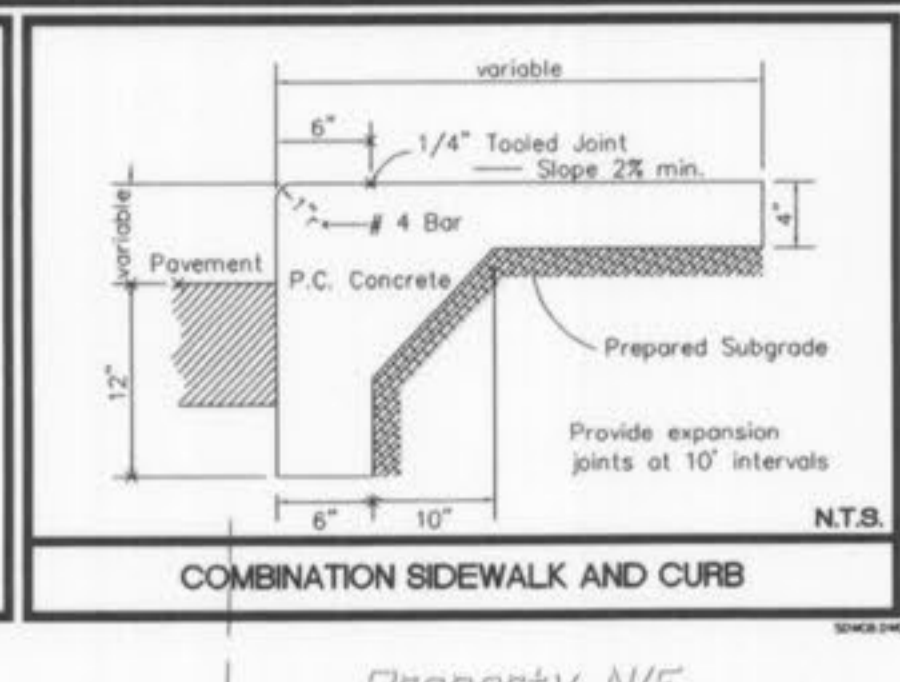
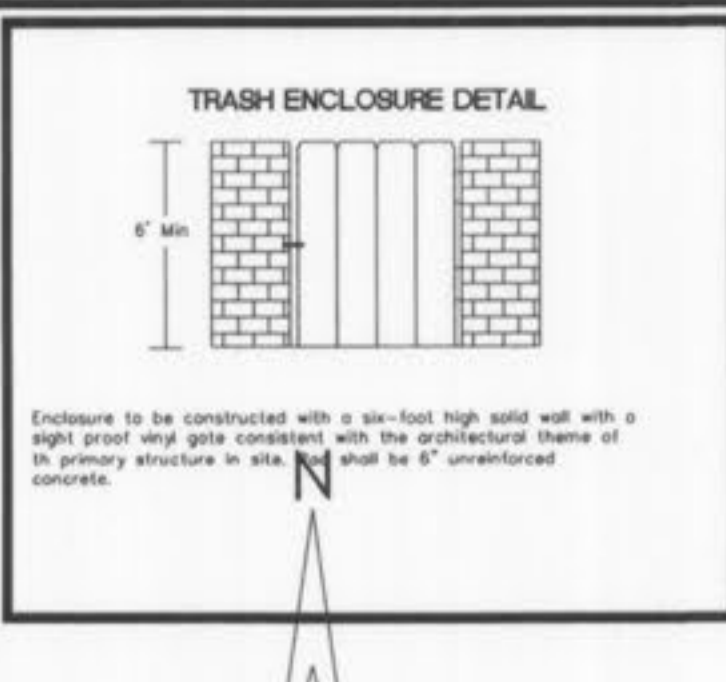
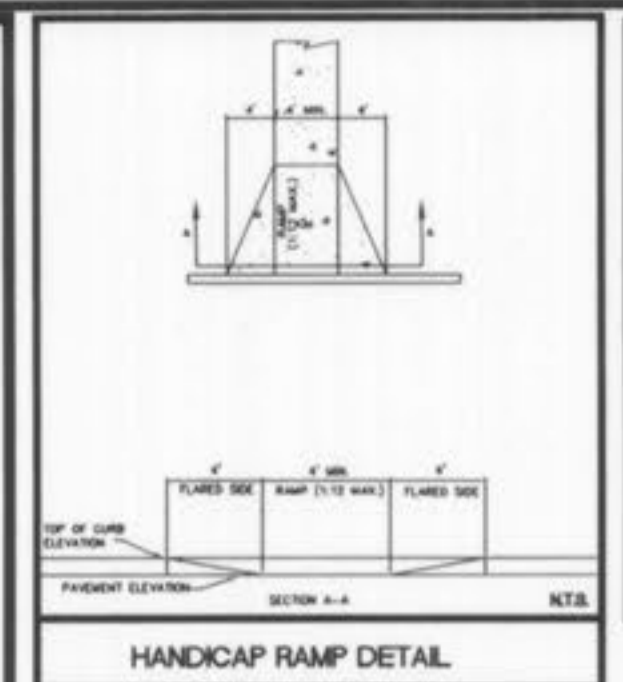
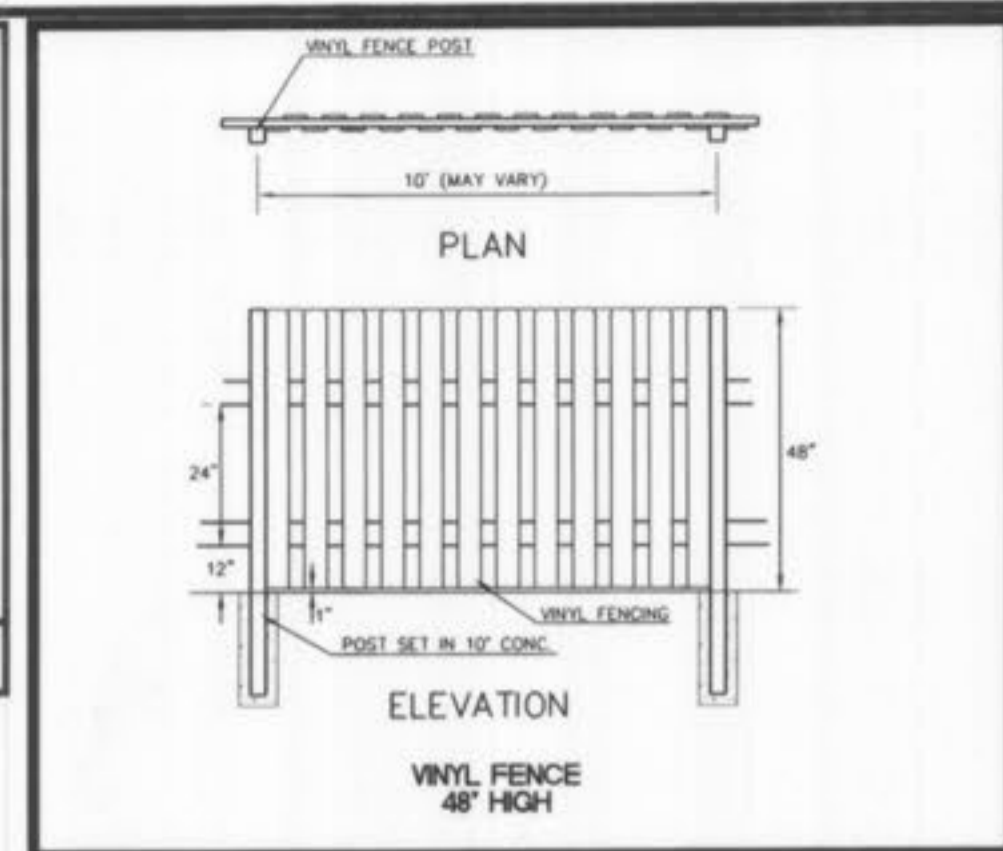
AS-BUILTS CONSTRUCTION PLANS KINKER BUILDING COVER SHEET

ST. CHARLES ENGINEERING & SURVEYING, INC.
801 S. FIFTH STREET, SUITE 202
ST. CHARLES, MO 63301
TEL: (636) 947-0607 FAX: (636) 947-2448



Planning & Zoning File# 5601.03

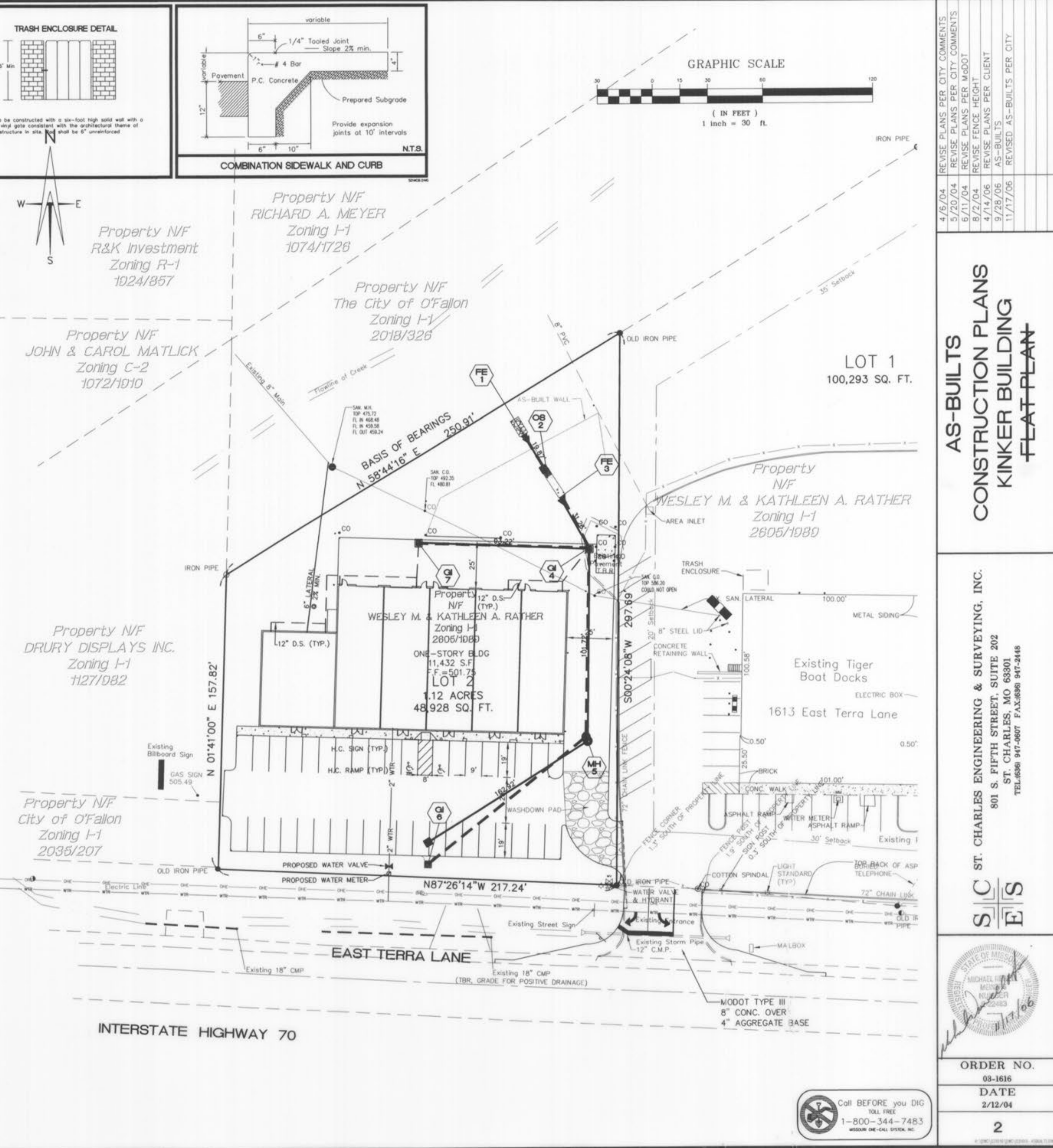
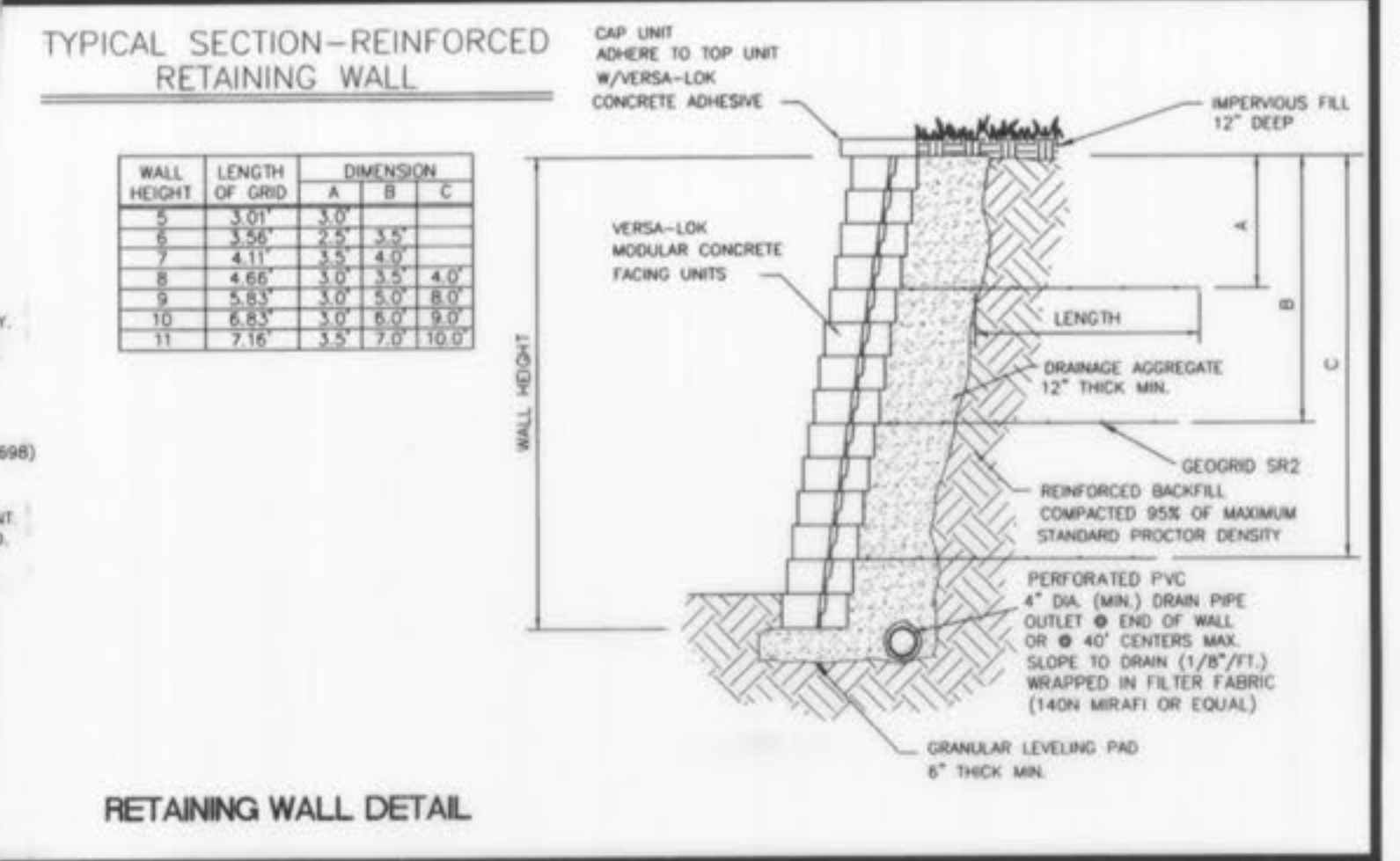
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GENERAL NOTES

- STRIP VEGETATION AND ORGANIC SOIL FROM WALL AND GEOSYNTHETIC ALIGNMENT.
- BENCH CUT ALL EXCAVATED SLOPES.
- DO NOT OVER EXCAVATE UNLESS DIRECTED BY SITE SOIL ENGINEER TO REMOVE UNSATURABLE SOIL.
- SITE SOILS ENGINEER SHALL VERIFY FOUNDATION SOILS AS BEING COMPETENT PER THE DESIGN STANDARDS AND PARAMETERS.
- LEVELING PAD SHALL CONSIST OF COMPACTED COARSE SAND OR CRUSHED GRAVEL, 6" THICK MIN.
- CONTRACTOR MAY OPT FOR A LEAN CONCRETE PAD. CONCRETE PAD SHALL BE UNREINFORCED, 3" THICK MAXIMUM.
- MINIMUM EMBEDMENT OF WALL BELOW FINISH GRADE SHALL BE 6" FOR WALL HEIGHTS UNDER 4 FT. AND 12" FOR WALLS OVER 4 FT. UNLESS SHOWN DIFFERENTLY.
- FOR UNITS TO BE EMBEDDED, COMPACT FILL IN FRONT OF UNITS AT THE SAME TIME FULL BEHIND UNITS IS COMPLETED.
- DRAINAGE AGGREGATE SHALL BE INSTALLED DIRECTLY BEHIND THE WALL WITHIN 12" OF THE TOP OF THE WALL. DRAINAGE AGGREGATE SHALL NOT EXTEND BELOW FINAL GRADE IN FRONT OF WALL.
- COMPACTION SHALL BE TO 95% OF MAXIMUM STANDARD PROCTOR DENSITY (ASTM E-998).
- COMPACTION TESTS SHALL BE TAKEN AS THE WALL IS INSTALLED. THE MINIMUM NUMBER OF TESTS SHALL BE DETERMINED BY THE SITE SOILS ENGINEER.
- COMPACTION WITHIN 3 FT. OF WALL SHALL BE LIMITED TO HAND OPERATED EQUIPMENT.
- SEE ELEVATION DRAWINGS FOR GEOSYNTHETIC TYPE, LENGTH AND LOCATION REQUIRED.
- GEOSYNTHETIC SHALL BE PLACED WITH STRONGEST DIRECTION PERPENDICULAR TO WALL. FOLLOW GEOSYNTHETIC MANUFACTURER'S INSTALLATION INSTRUCTIONS AND WRITTEN SPECIFICATIONS.
- CONTRACTOR SHALL DIRECT SURFACE RUNOFF AWAY FROM DAMAGING WALL WHILE UNDER CONSTRUCTION.
- ANY SURFACE DRAINAGE FEATURES, FINISH GRADING, PAVEMENT, OR TURF SHALL BE INSTALLED IMMEDIATELY AFTER WALL IS COMPLETED.
- FOLLOW APPLICABLE PROVISIONS OF THE MANUFACTURER'S INSTALLATION INSTRUCTIONS AND WRITTEN SPECIFICATIONS.

IF CONDITIONS ARE DIFFERENT THAN THOSE STATED IN THESE DRAWINGS AND SPECIFICATIONS, THE CONTRACTOR MUST CONTACT ENGINEER PRIOR TO PROCEEDING WITH THE CONSTRUCTION OF THE WALL.



REVISE PLANS PER CITY COMMENTS

4/6/04	REVISE PLANS PER CITY COMMENTS
5/20/04	REVISE PLANS PER MGOOT
6/11/04	REVISE PLANS PER MGOOT
8/2/04	REVISE FENCE HEIGHT
4/14/06	REVISE PLANS PER CLIENT
9/28/06	AS-BUILTS
11/17/06	REVISED AS-BUILTS PER CITY

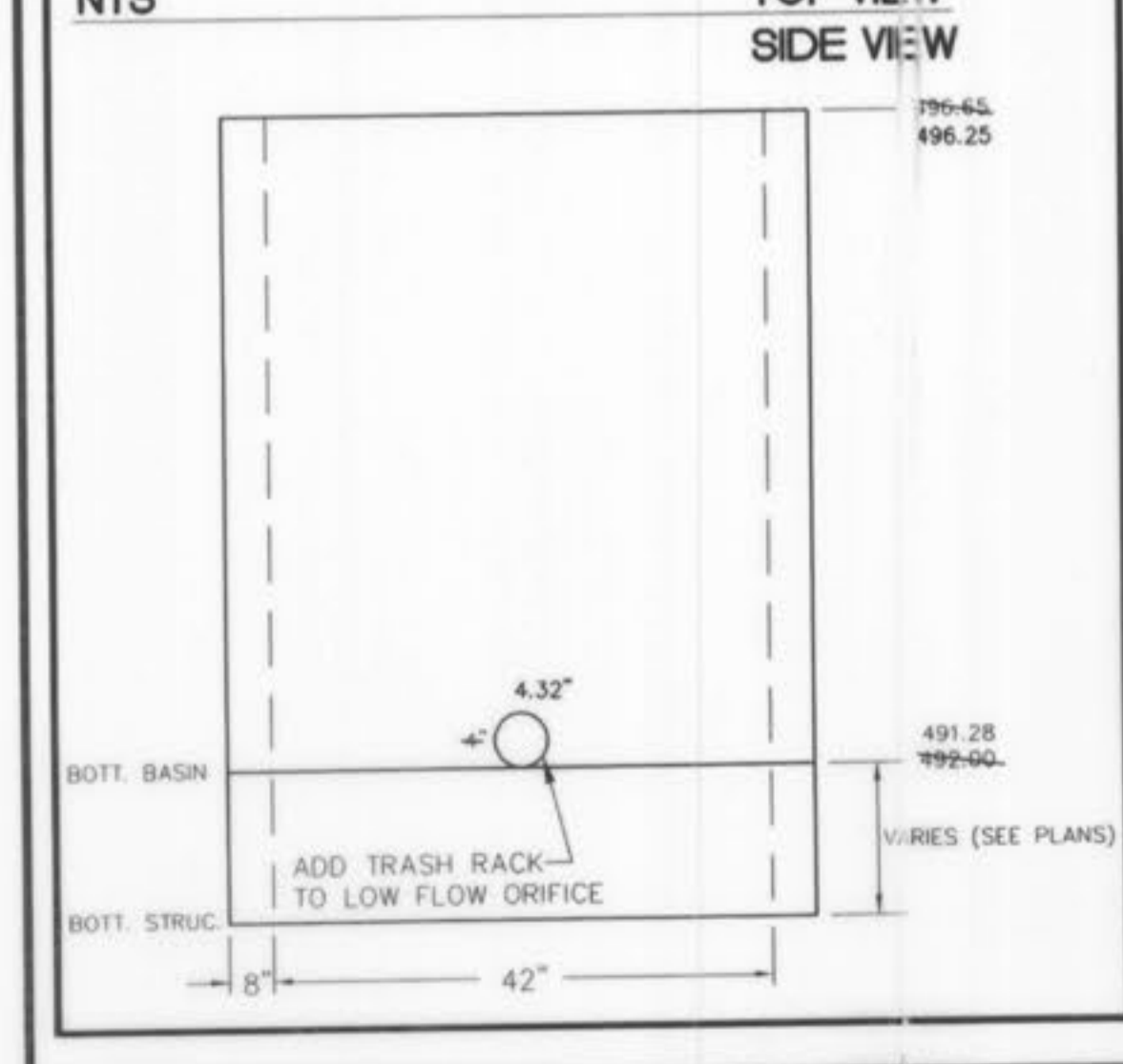
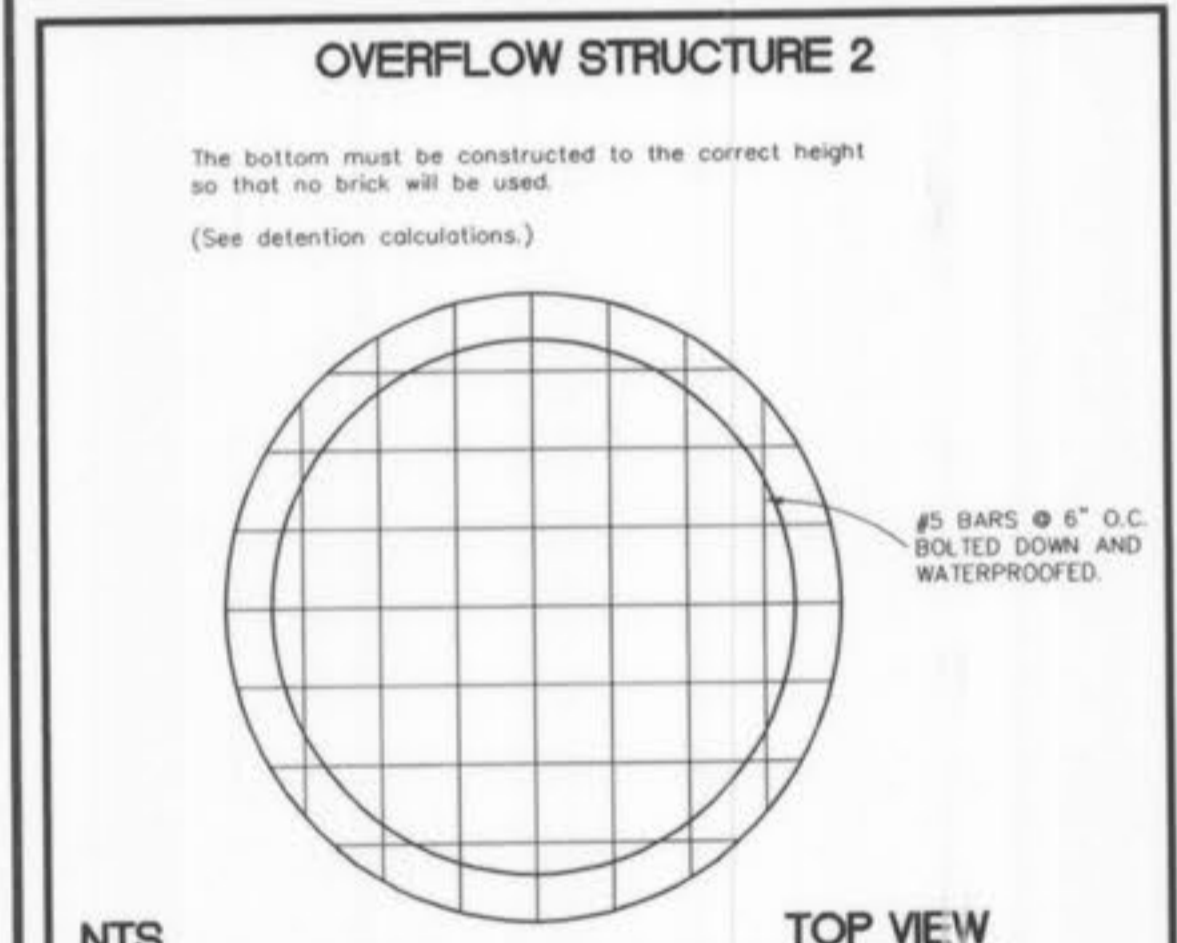
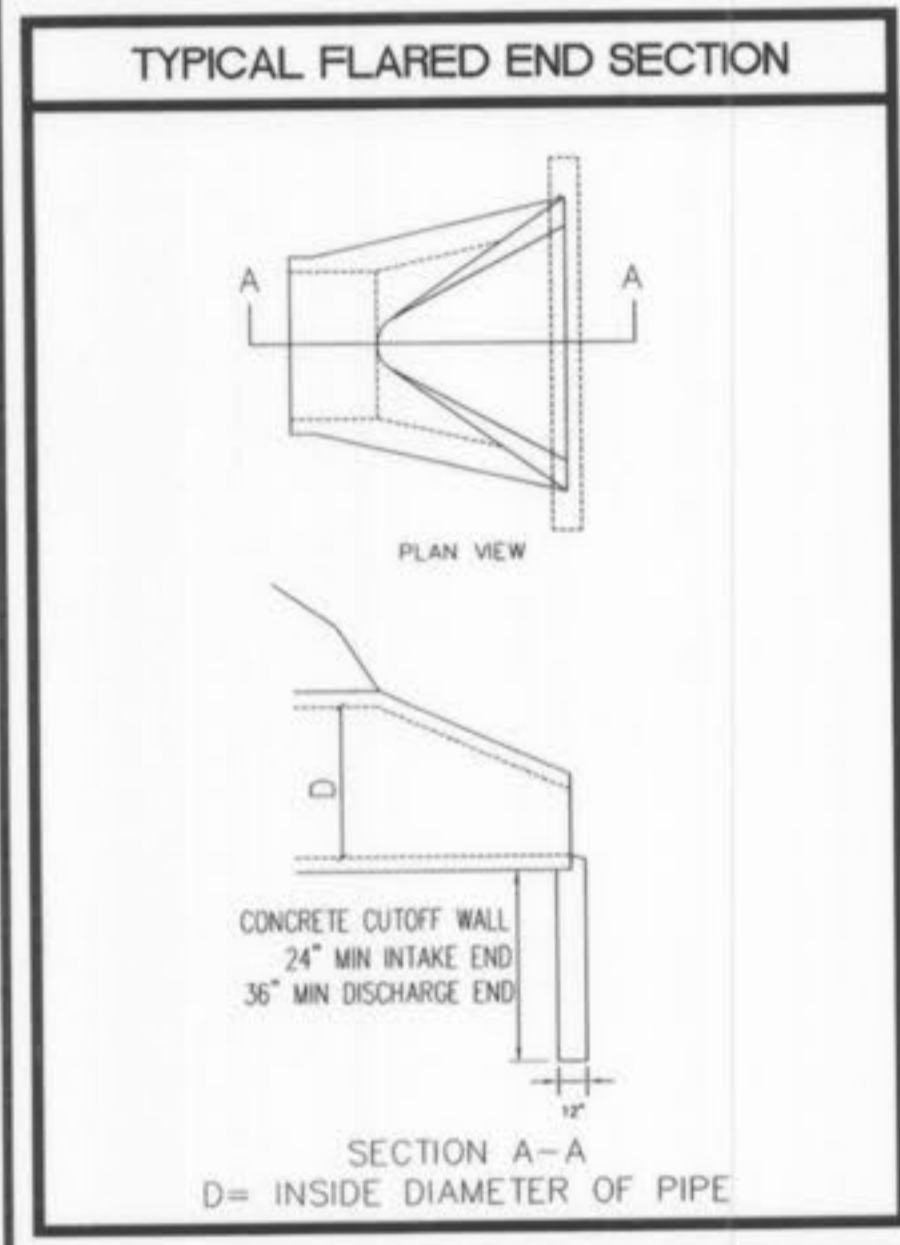
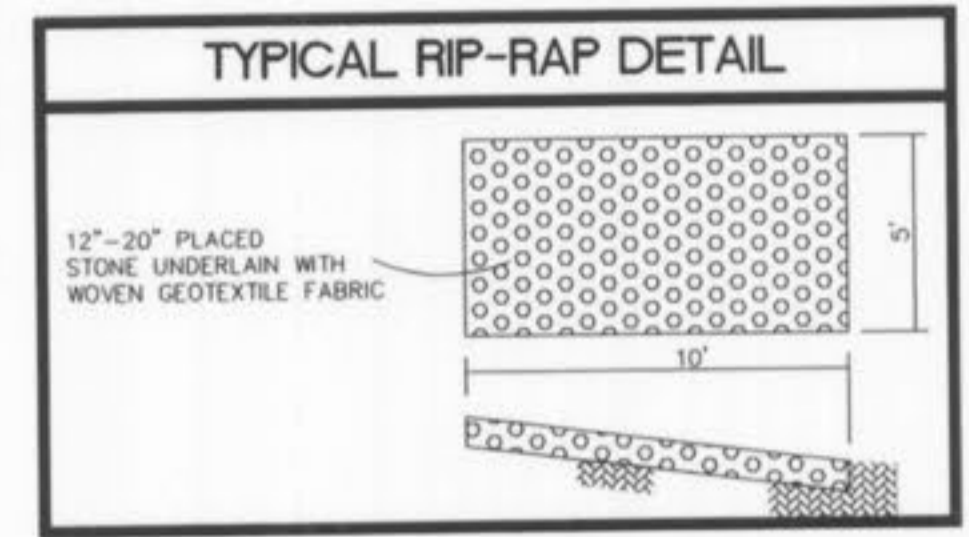
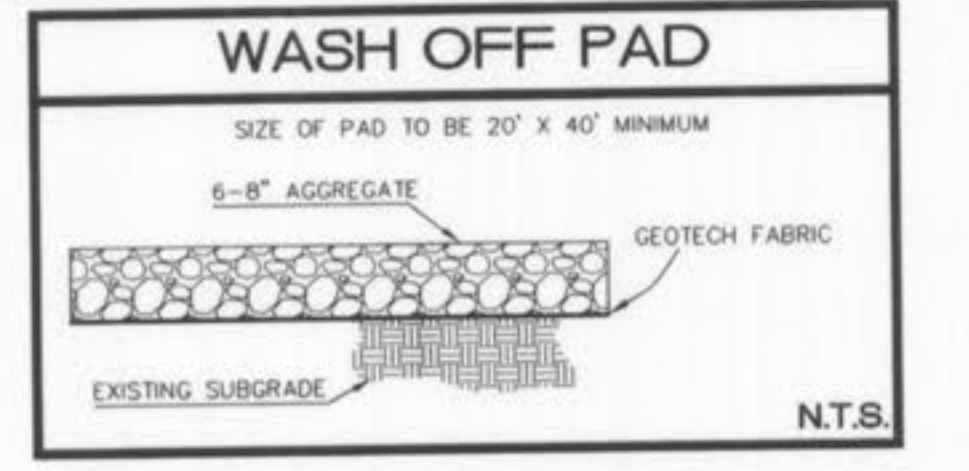
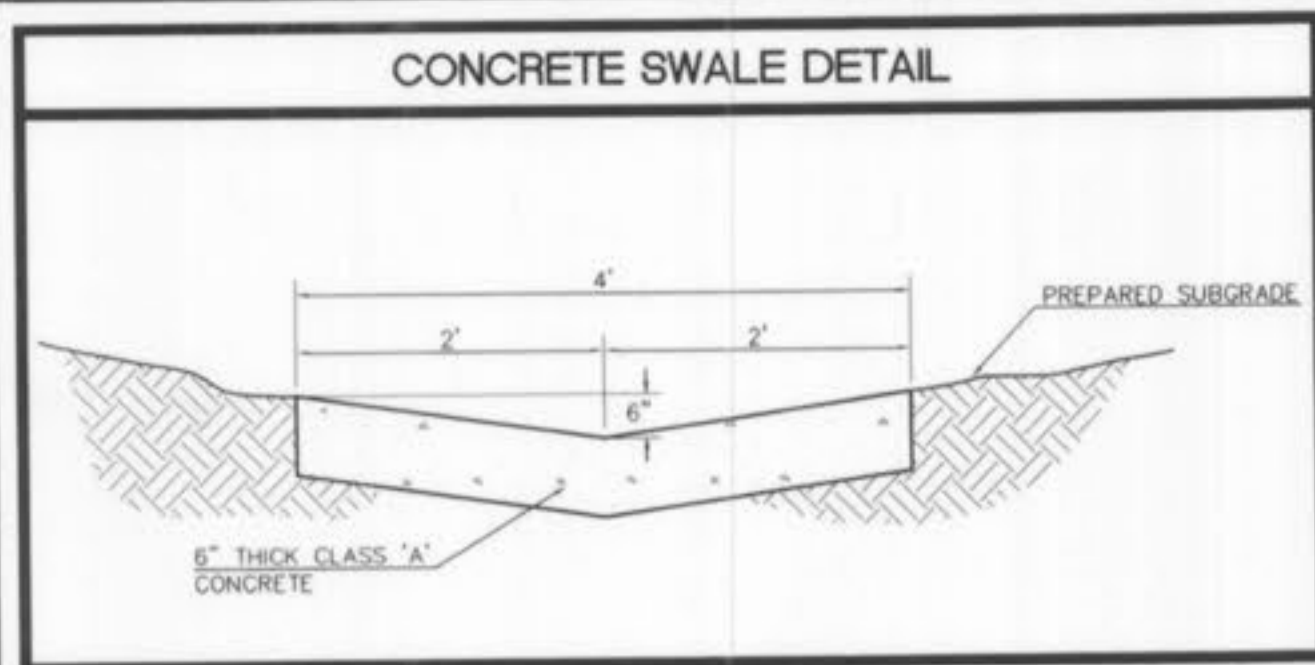
AS-BUILTS
CONSTRUCTION PLANS
KINKER BUILDING
FLAT PLAN

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801 S. FIFTH STREET, SUITE 202
ST. CHARLES, MO 63301
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2

Call BEFORE you DIG
TOLL FREE
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MISSOURI ONE-CALL SYSTEM, INC.



VEGETATIVE ESTABLISHMENT FOR URBAN DEVELOPMENT SITES

APPENDIX A

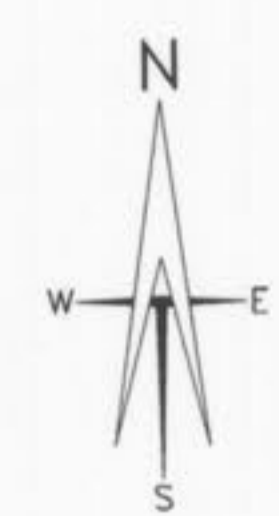
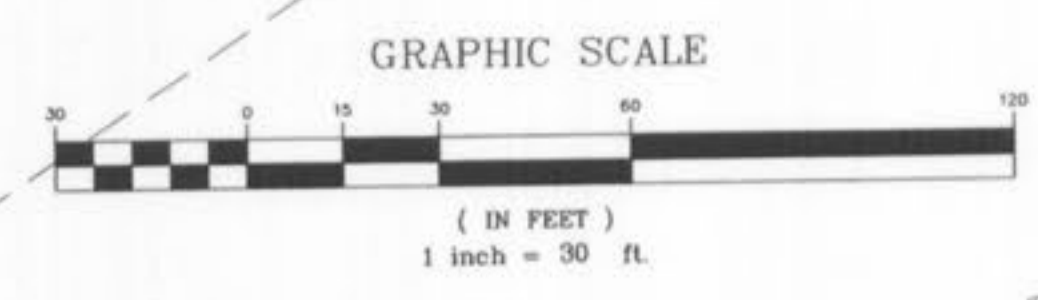
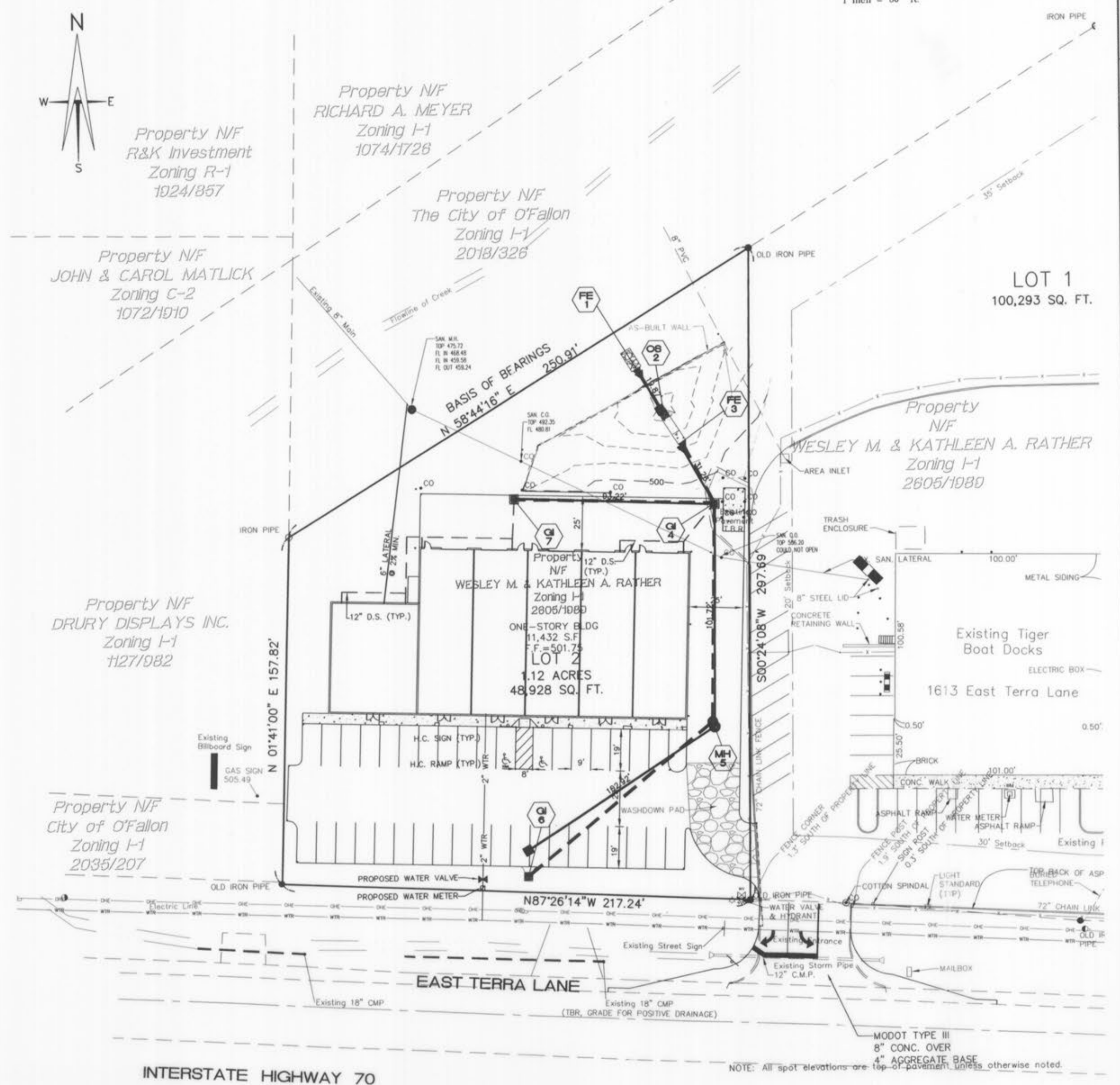
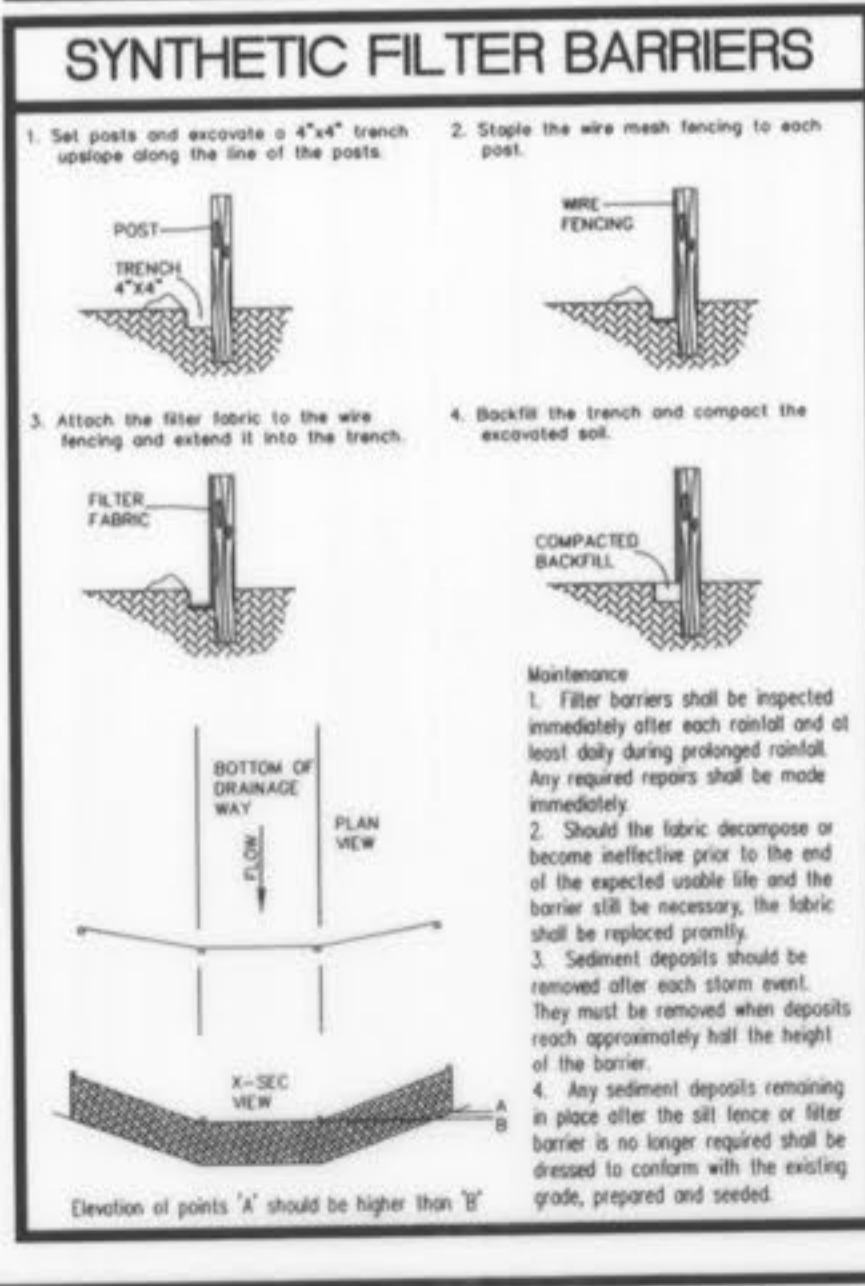
Seeding Rates:
 Permanent:
 Tall Fescue - 30 lbs./ac.
 Smooth Brome - 20 lbs./ac.
 Combined: Fescue @ 15 lbs./ac. and Brome @ 10 lbs./ac.
 Temporary:
 Wheat or Rye - 150 lbs./ac. (3.5 lbs. per 1000 sq. ft.)
 Oats - 120 lbs./ac. (2.75 lbs. per 1000 sq. ft.)

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. ft. (4,356 lbs. per acre)

Fertilizer Rates:
 Nitrogen: 30 lbs./ac.
 Phosphate: 30 lbs./ac.
 Potassium: 30 lbs./ac.
 Lime: 600 lbs./ac. ENM*

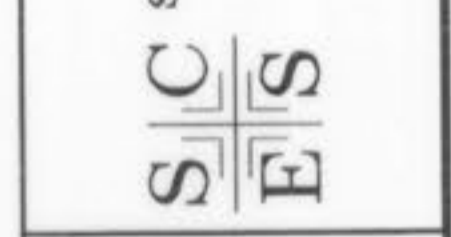
*ENM - Effective Neutralizing Material as per State evaluation of quarried rock.



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9/28/06	AS-BUILTS
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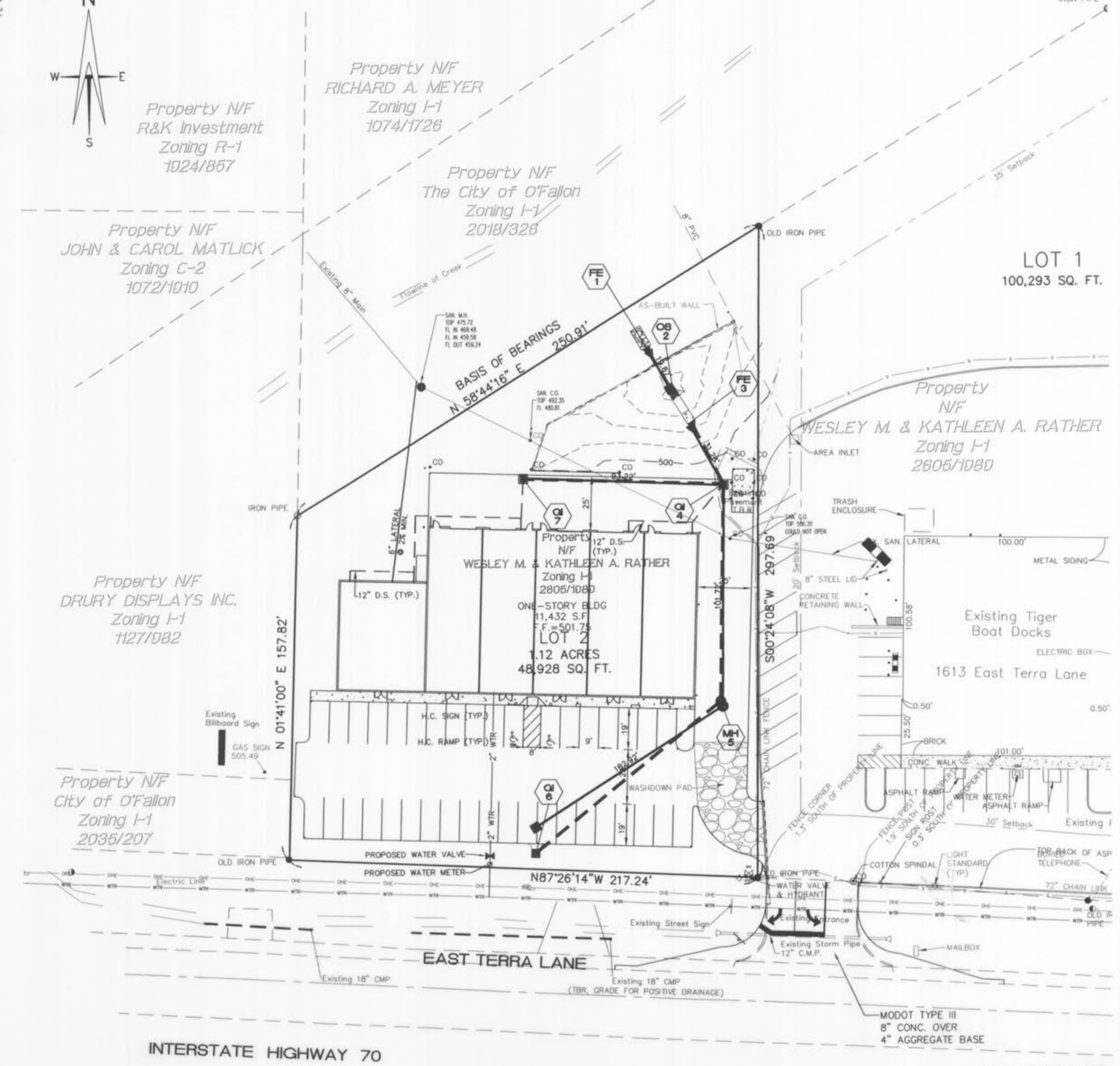
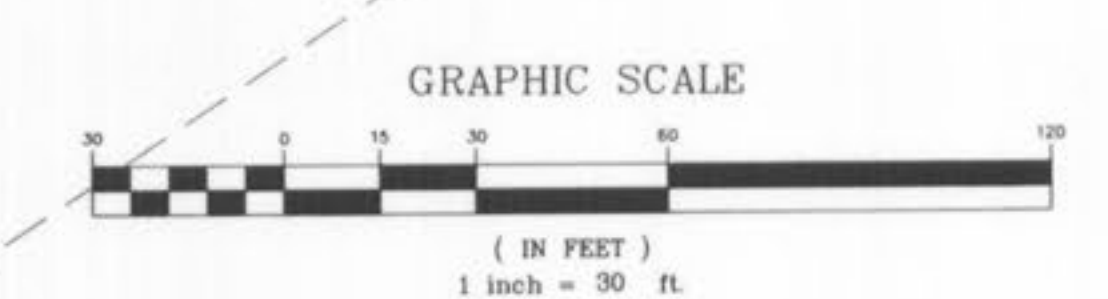
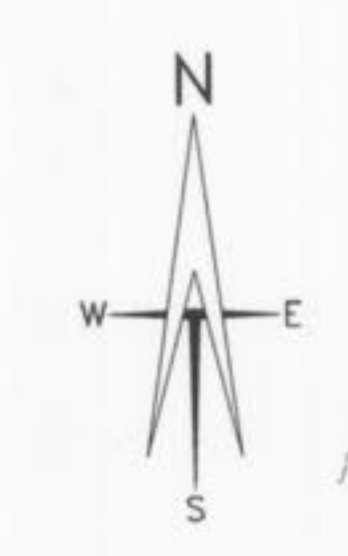
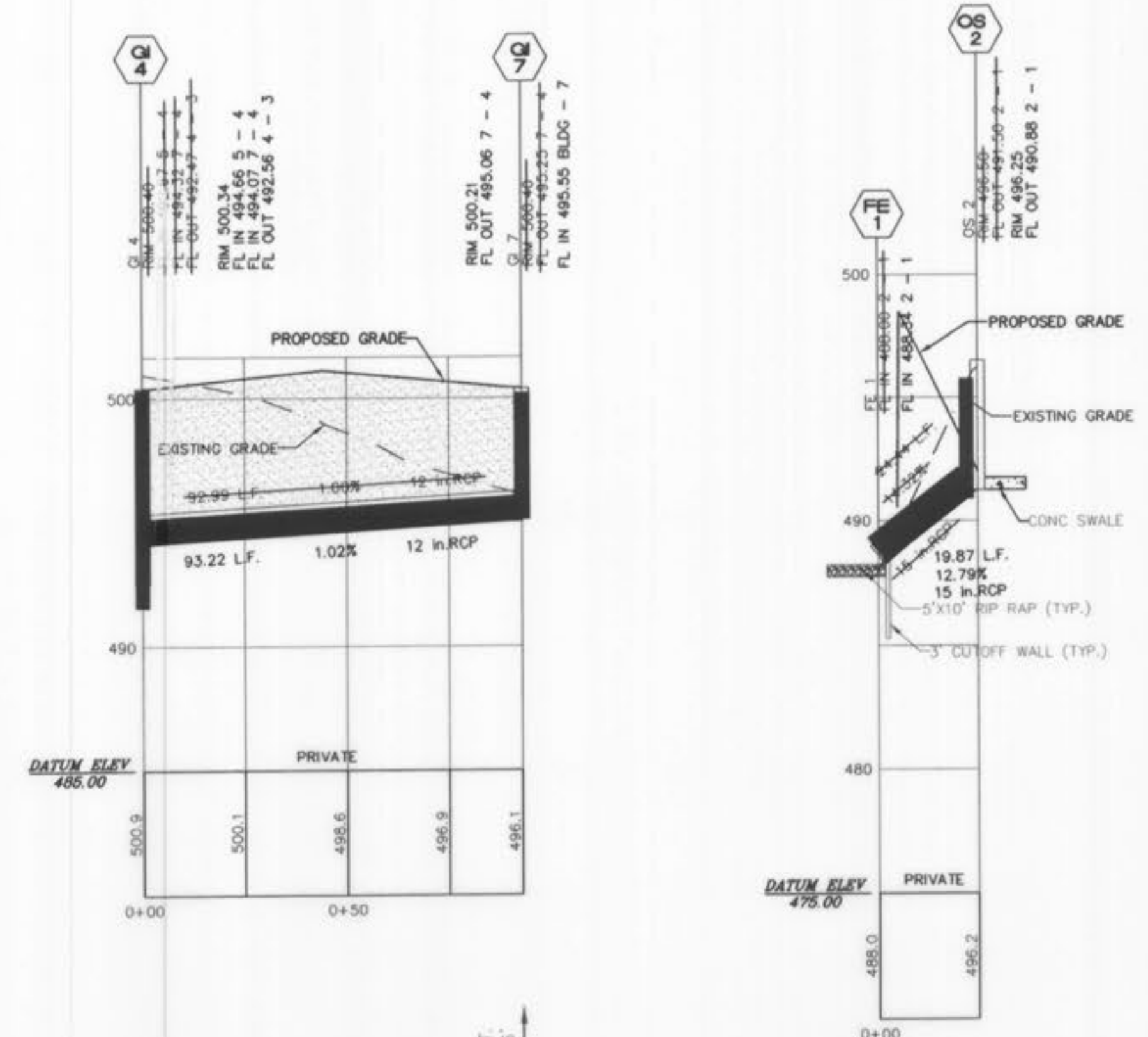
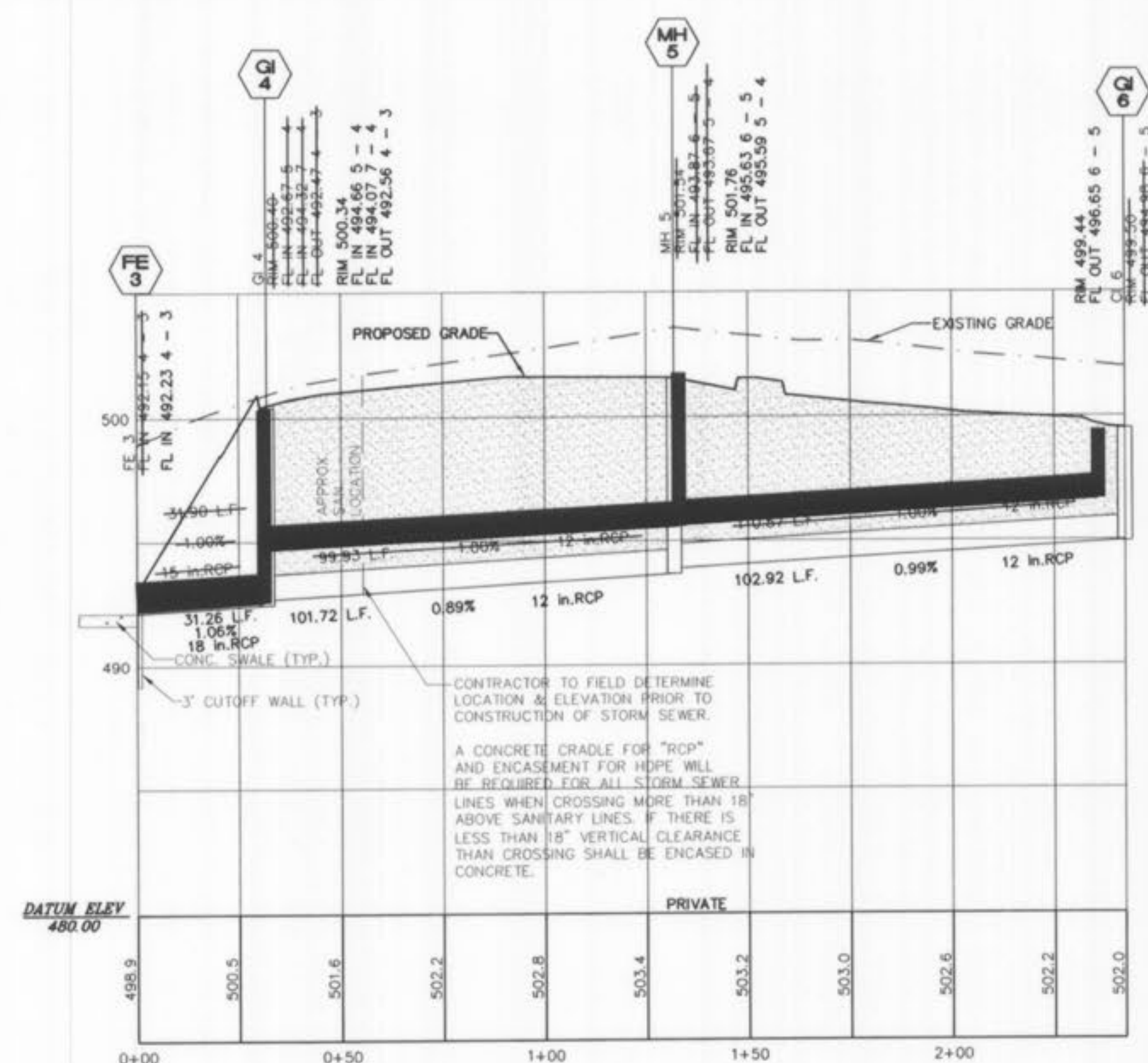
AS-BUILTS
CONSTRUCTION PLANS
KINKER BUILDING
GRADING PLAN

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REVISION	DATE	BY	DESCRIPTION
4/6/04			REVISE PLANS PER CITY COMMENTS
6/11/04			REVISE PLANS PER MoDOT
9/28/06			AS-BUILTS
11/17/06			REVISED AS-BUILTS PER CITY

AS-BUILTS
CONSTRUCTION PLANS
KINKER BUILDING
DRAINAGE AREA PLAN
AND STORM PROFILES

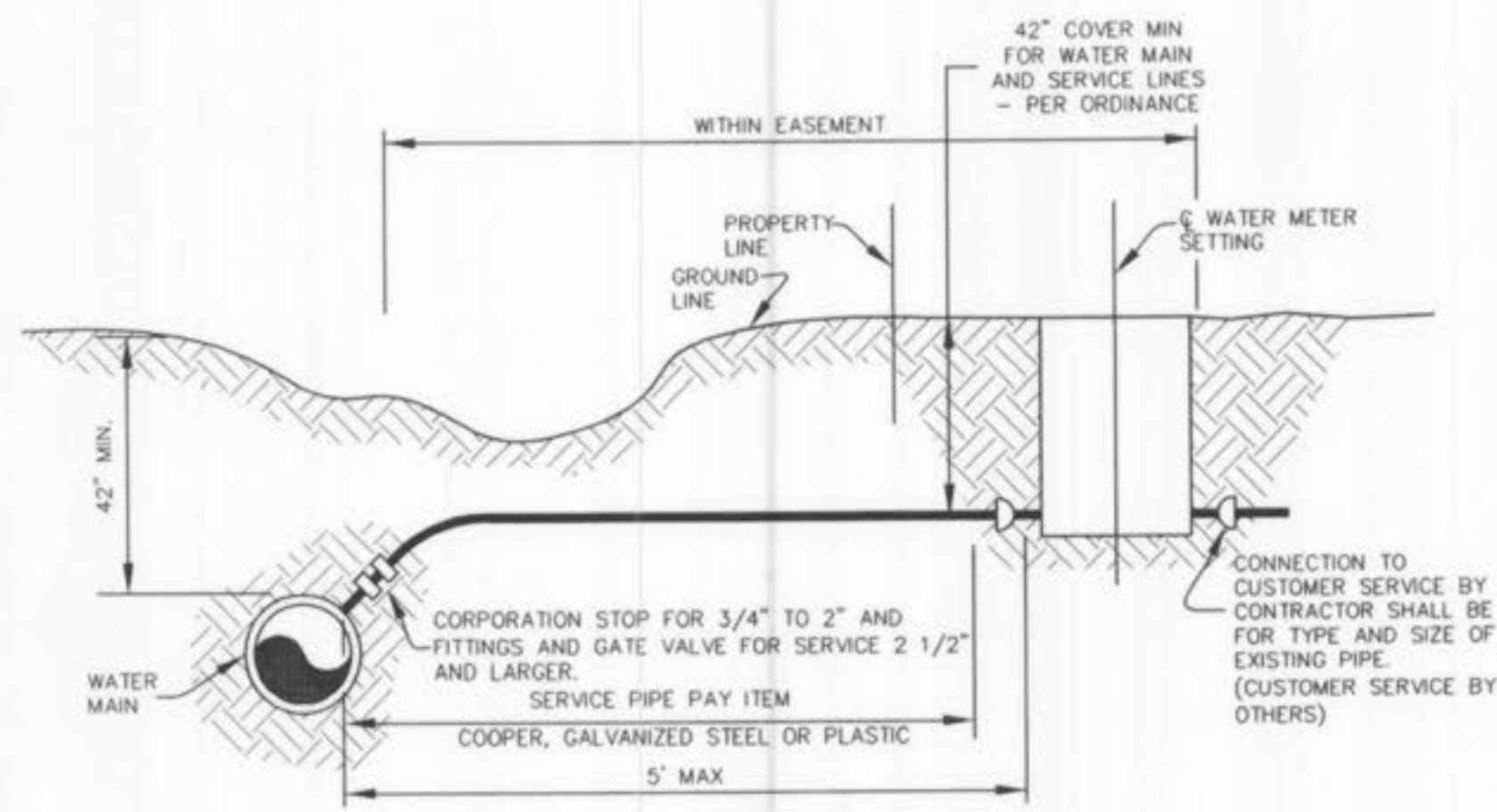
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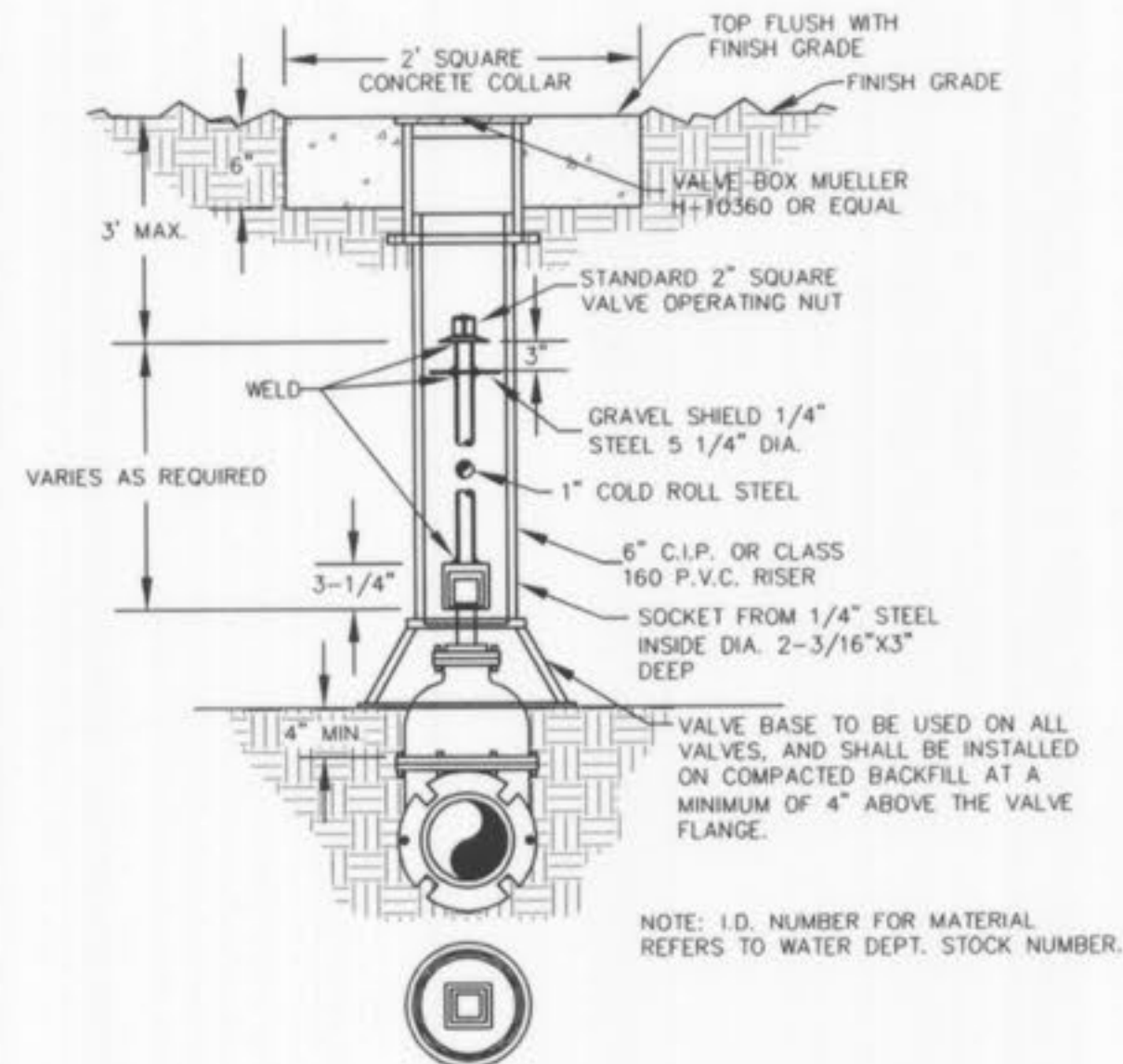
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	4

UTILITY LOCATES MoDOT
 (314) 340-4100
 FIBER OPTICS MAY BE PRESENT

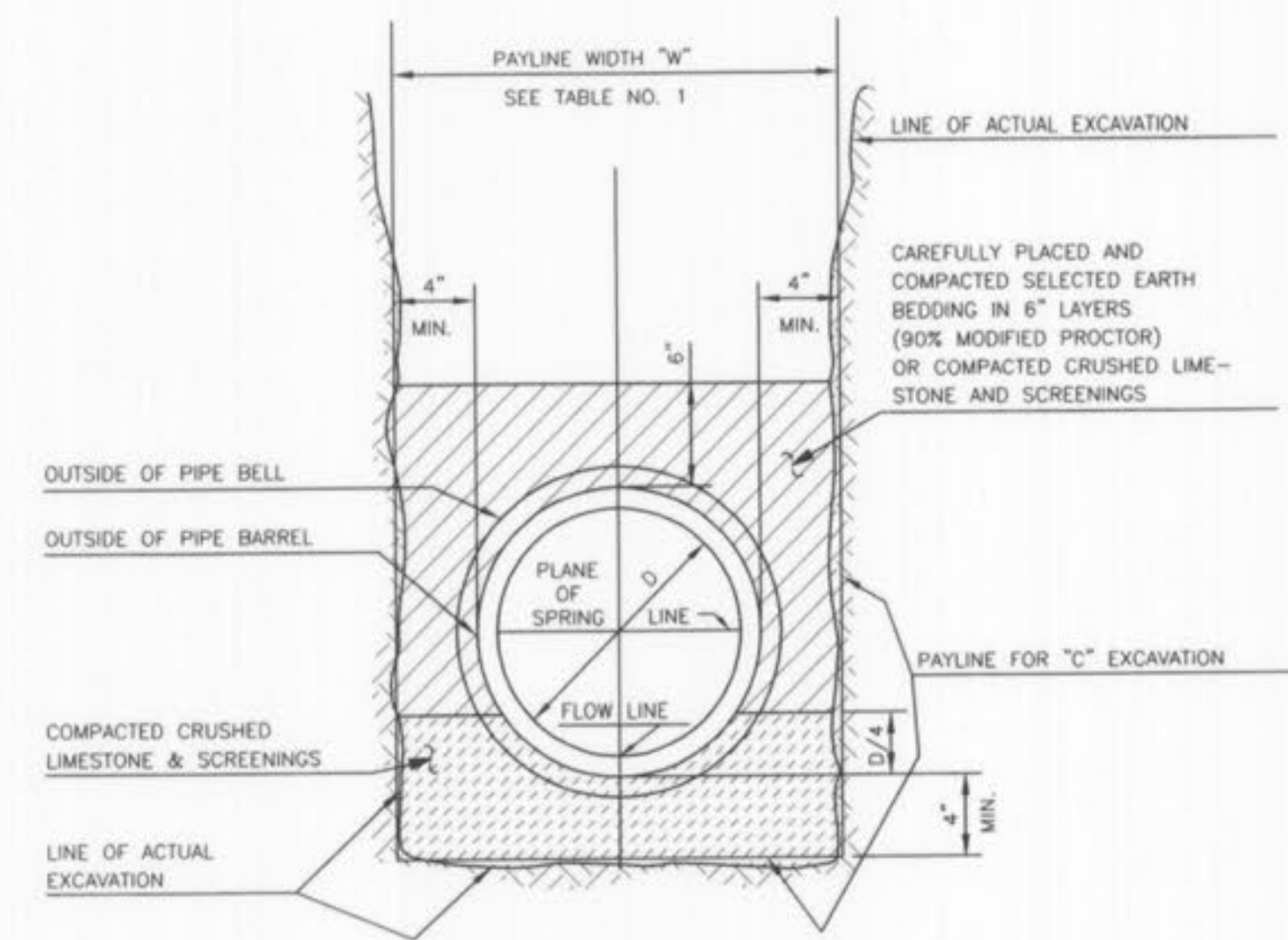




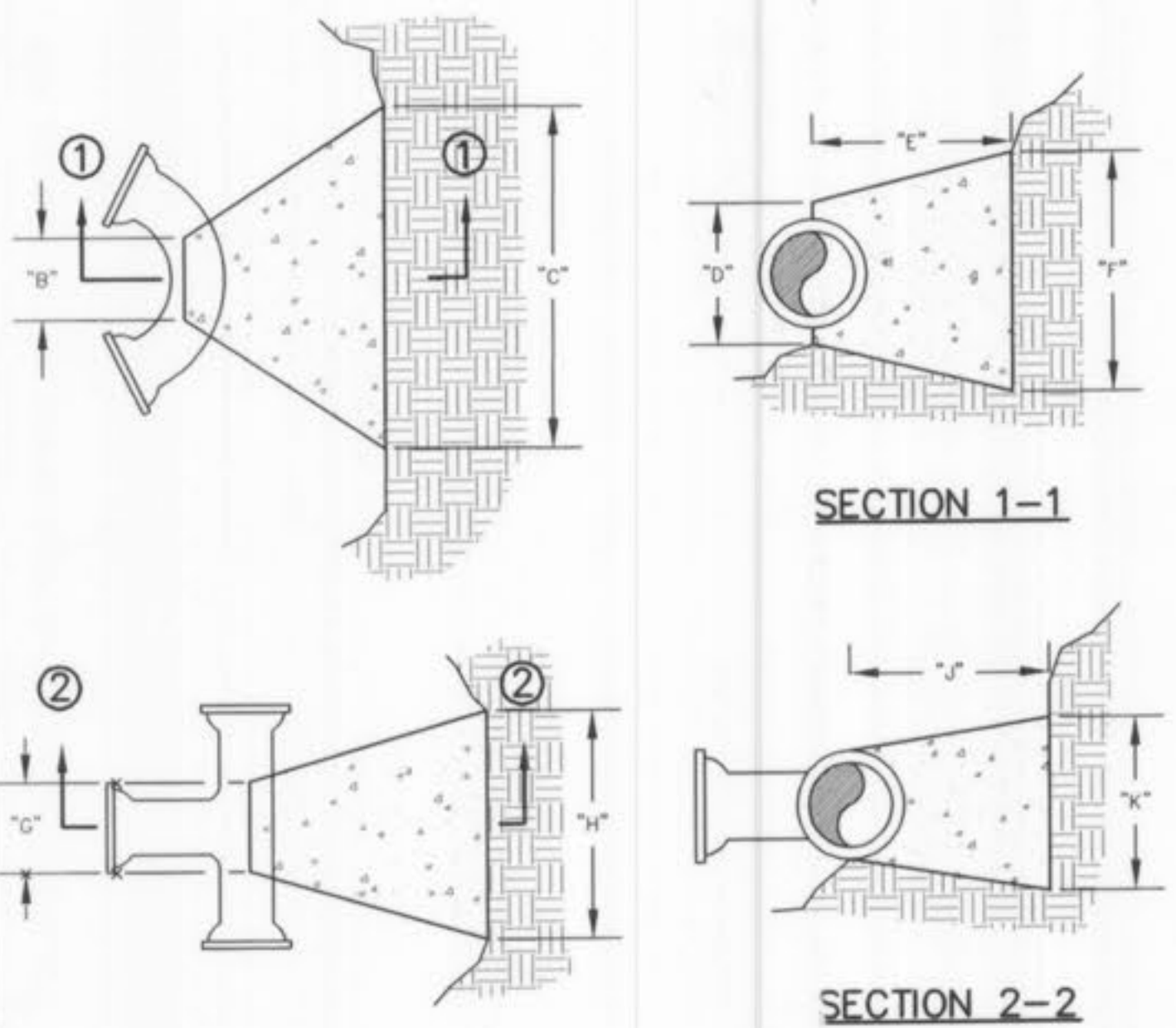
TYPICAL SERVICE ASSEMBLY
NOT TO SCALE



WATER VALVE DETAIL
NOT TO SCALE



PIPE BEDDING CLASS "C"
(FOR ALL PIPE EXCEPT REINFORCED CONCRETE PIPE)



BENDS	"B"	"C"	"D"	"E"	"F"
6"-11 1/4"	8"	15"	12"	24"	10"
6"-22 1/2"	8"	19"	12"	24"	13"
6"-45"	8"	30"	12"	24"	14"
6"-90"	8"	30"	12"	24"	27"
8"-11 1/4"	8"	20"	12"	24"	10"
8"-22 1/2"	8"	22"	12"	24"	17"
8"-45"	8"	30"	12"	24"	24"
8"-90"	8"	38"	12"	24"	36"
12"-11 1/4"	8"	30"	12"	24"	15"
12"-22 1/2"	8"	35"	12"	24"	25"
12"-45"	8"	40"	12"	24"	40"
12"-90"	8"	60"	12"	24"	52"

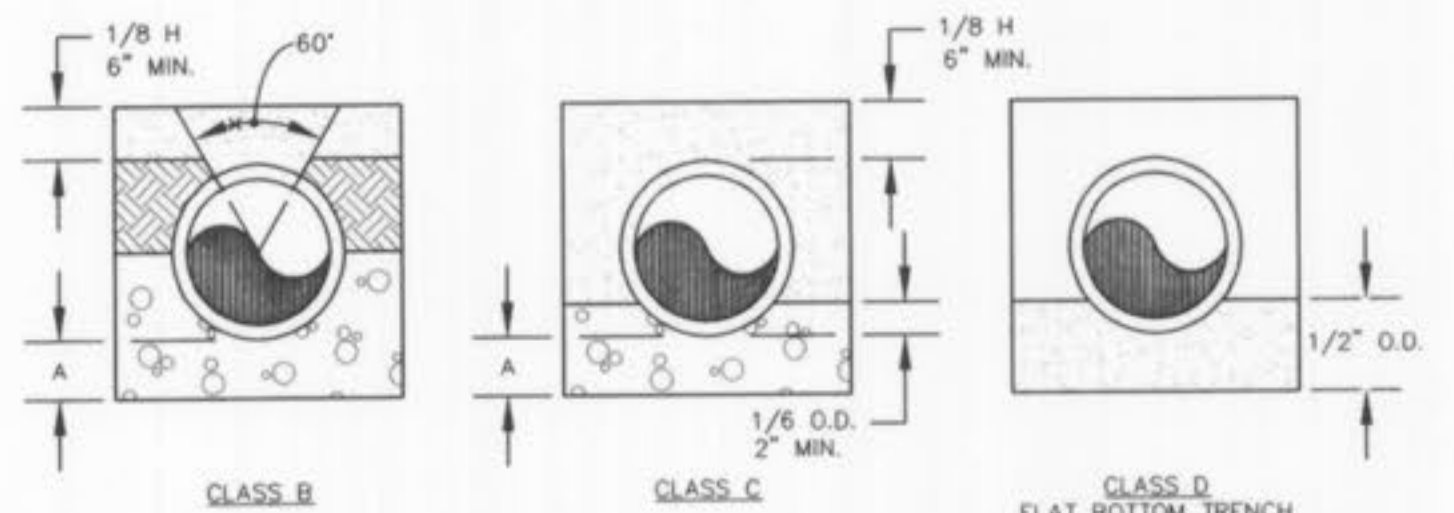
TEES	"C"	"H"	"J"	"K"
6"x6"x6"	12"	24"	24"	18"
8"x8"x8"	12"	24"	24"	18"
8"x8"x8"	12"	24"	24"	24"
12"x12"x6"	12"	24"	24"	18"
12"x12"x8"	12"	24"	24"	24"
12"x12"x12"	12"	36"	24"	36"

CUBIC FEET OF CONCRETE REQUIRED				
BEND	11 1/4"	22 1/2"	45"	90"
6"	1.7	2.4	3.5	5.5
8"	2.1	3.1	5.0	8.5
12"	3.7	5.9	9.7	17.5

TEE X	6"	8"	12"	PLUG
6"	4.0	-	-	4.0
8"	4.0	5.0	-	5.0
12"	4.0	5.5	10.5	10.5

NOTES:
1. 2" & 4" FITTINGS EQUIVALENT TO 6" FITTINGS.
2. TAPPING SLEEVES TO HAVE BACKING BLOCKS SAME SIZE AS REQUIRED FOR TEES.

BACKING BLOCKS
NOT TO SCALE



LEGEND:
I.D. - NOMINAL PIPE SIZE
O.D. - OUTSIDE DIAMETER OF PIPE
H - COVER ABOVE TOP OF PIPE
A - EMBEDMENT BELOW PIPE (SEE TABLE)

TABLE OF EMBEDMENT DEPTHS BELOW PIPE			
I.D.	A	B	C
2" & SMALLER	3"	3"	6"

GRANULAR BEDDING SHALL BE CRUSHED ROCK OR PEA GRAVEL WITH NOT LESS THAN 95% PASSING 1/2" (95% PASSING 3/4" FOR 30" AND LARGER PIPE) AND NOT LESS THAN 95% RETAINED ON A #4; TO BE PLACED IN NOT MORE THAN 6" LAYERS AND COMPACTED BY SLICING WITH A SHOVEL OR VIBRATING.

COMPACTED BACKFILL SHALL BE FINELY DIVIDED JOB EXCAVATED MATERIAL FREE FROM DEBRIS, ORGANIC MATERIAL AND STONES, PLACED IN UNIFORM LAYERS NOT MORE THAN 6" THICK, COMPACTED TO 95% MAXIMUM DENSITY AS DETERMINED BY A.S.T. D698, OR GRADED AGGREGATE. GRANULAR BACKFILL MATERIAL MAY BE SUBSTITUTED FOR ALL OR PART OF COMPACTED BACKFILL.

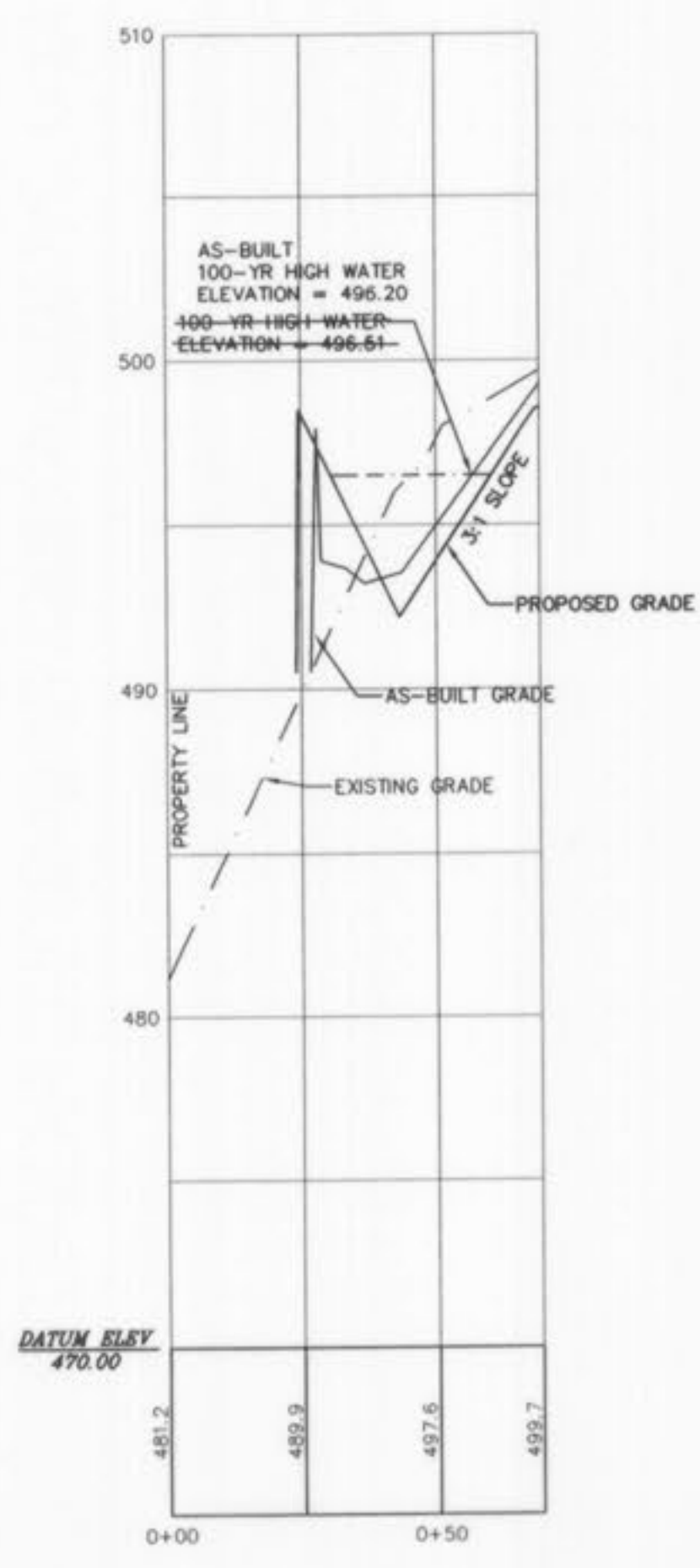
TAMPED BACKFILL SHALL BE FINELY DIVIDED JOB EXCAVATED MATERIAL FREE FROM DEBRIS, ORGANIC MATERIAL AND STONES, HAND PLACED IN UNIFORM LAYERS NOT MORE THAN 8" THICK AND TAMPED AROUND CONDUIT PIPE. GRANULAR BACKFILL MATERIAL MAY BE SUBSTITUTED FOR ALL OR PART OF TAMPED BACKFILL.

TRENCH BACKFILL SHALL BE AS REQUIRED IN THE "LAYING AND BACKFILL" SECTION OF THE DETAILED SPECIFICATIONS.

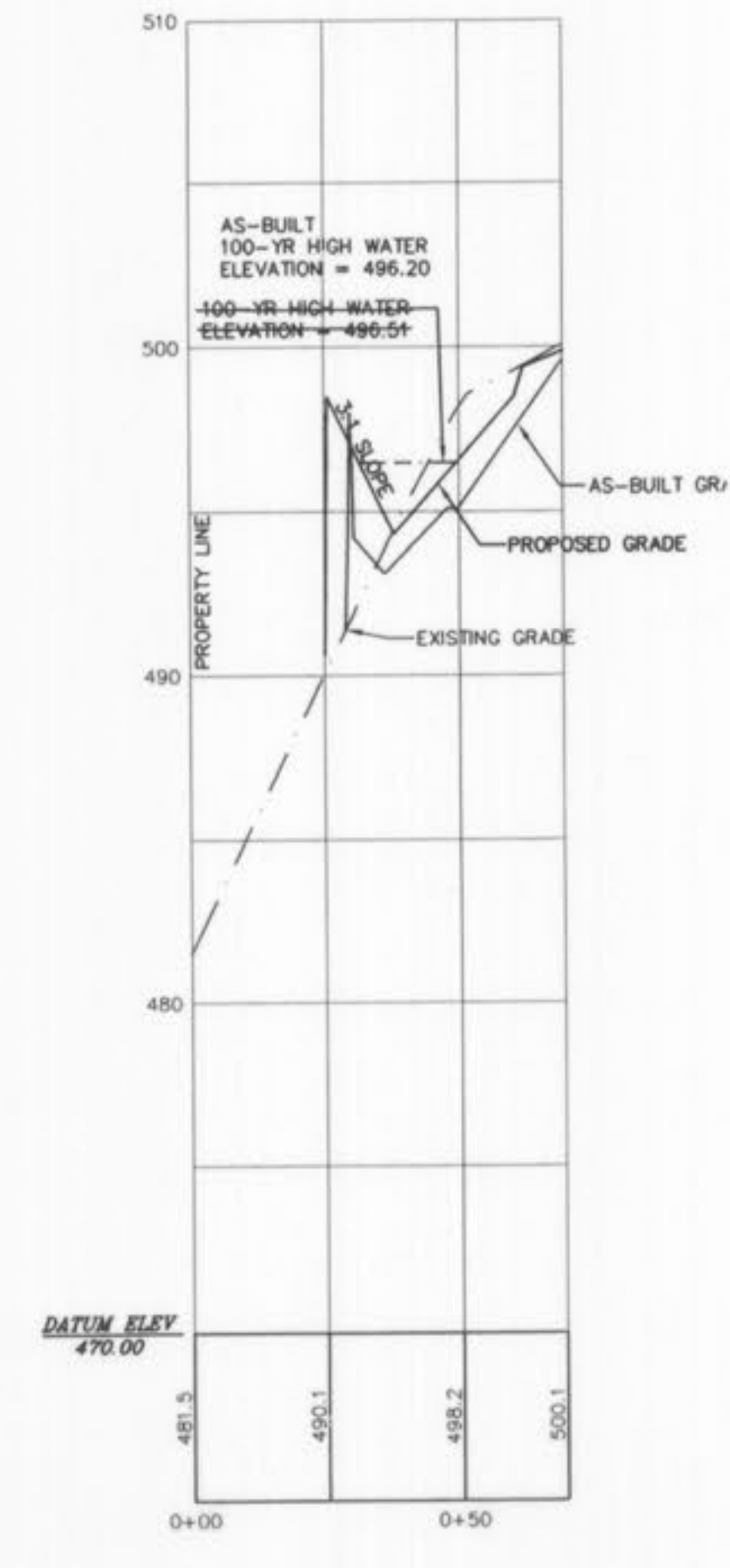
EMBEDMENT THE TYPE OF EMBEDMENT TO BE USED SHALL BE AS SPECIFIED IN THE PLANS AND SPECIFICATIONS.

TRACER WIRE REQUIRED ON ALL WATER MAINS

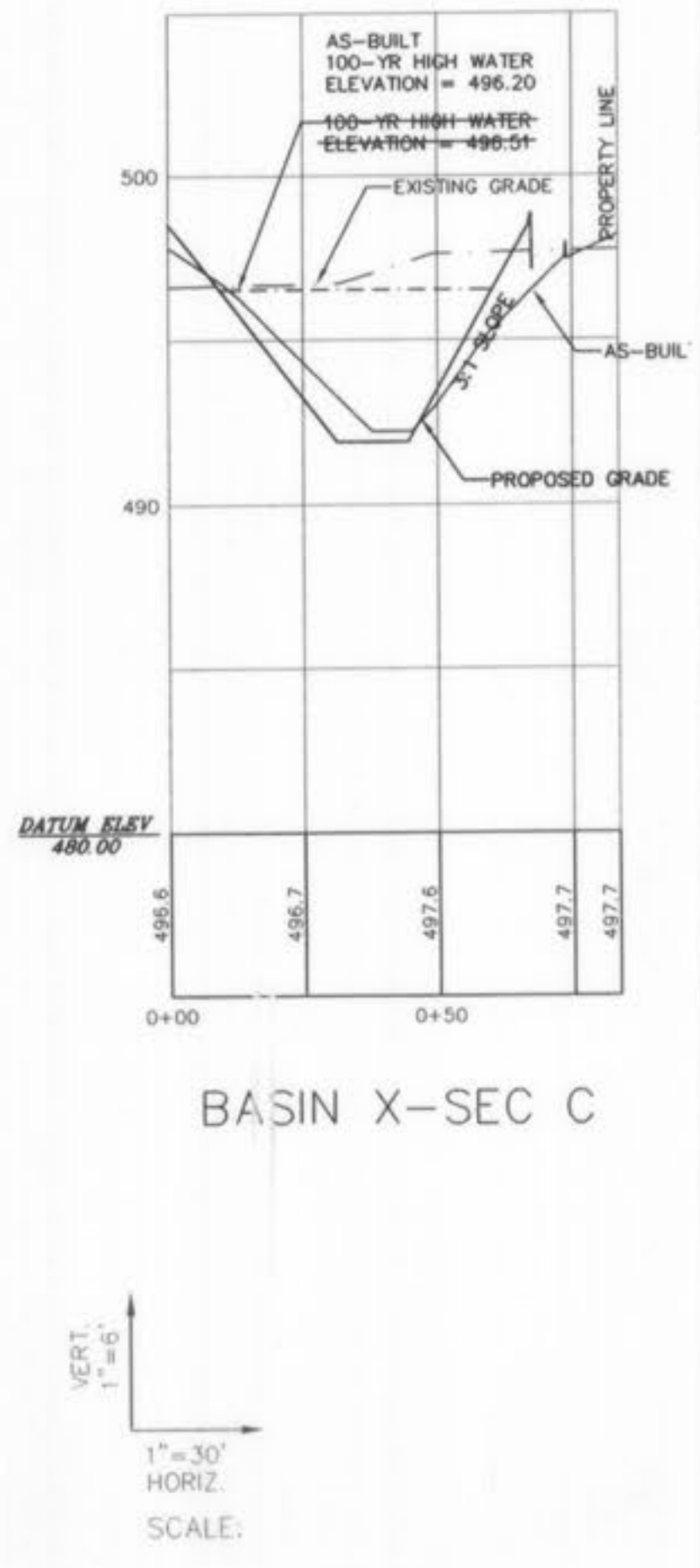
WATER MAIN EMBEDMENT
NOT TO SCALE



BASIN X-SEC A



BASIN X-SEC B



BASIN X-SEC C

DETENTION BASIN CROSS SECTIONS

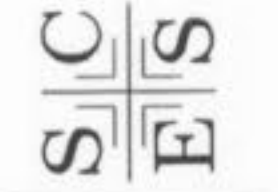
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9/28/06			AS-BUILTS
11/17/06			REVISED AS-BUILTS PER CITY

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CONSTRUCTION PLANS
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-BASIN CROSS SECTIONS

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801 S. FIFTH STREET, SUITE 202
ST. CHARLES, MO 63301
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DATE 2/12/04
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