

4MC-049

SEDGWICK COUNTY PUBLIC WORKS



SANITARY SEWER IMPROVEMENTS

FOR

SPRINGDALE LAKES ADDITION PHASE III

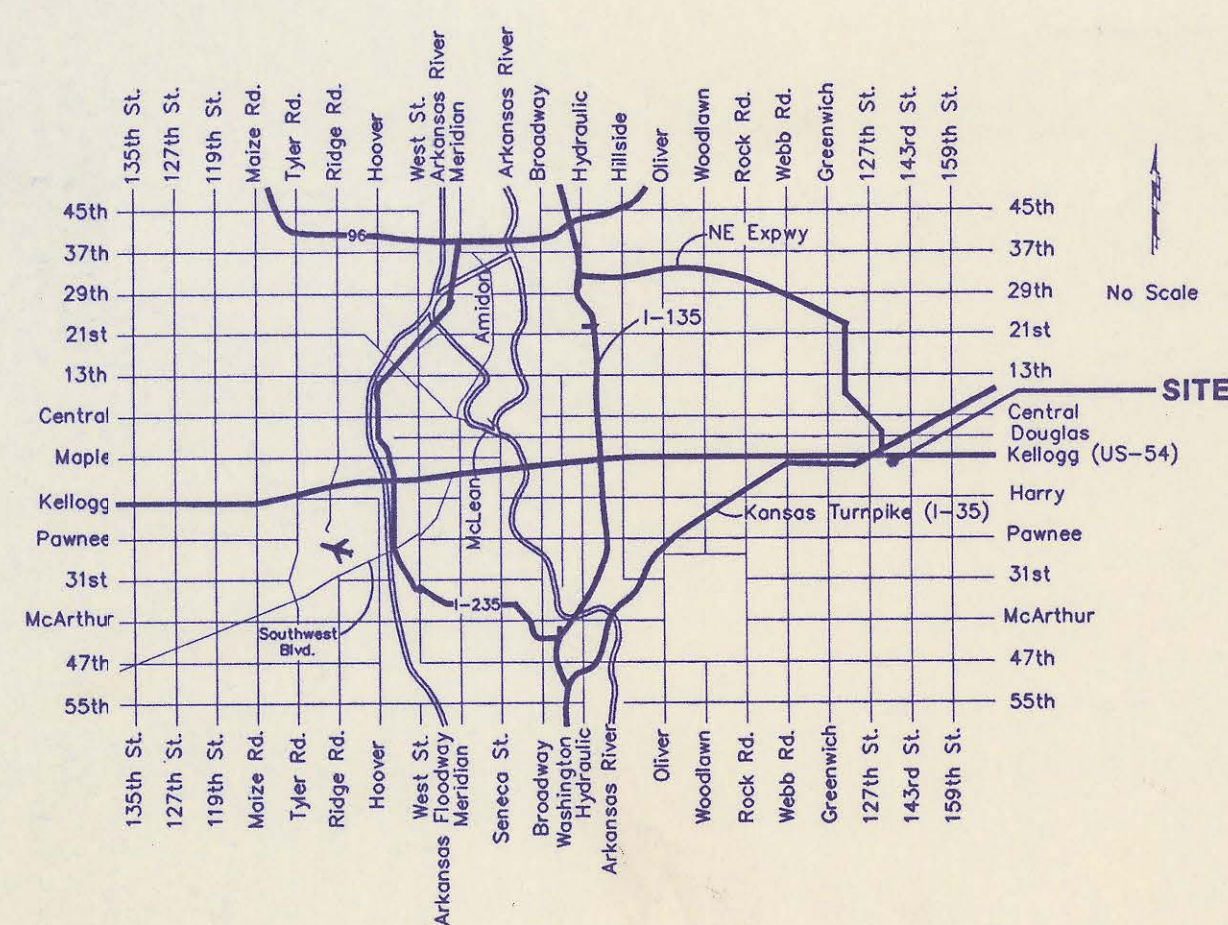
AUGUST 2000

NET LENGTH OF PROJECT 2028 FT. 0.38 MILES

INDEX of SHEETS:

1. COVER SHEET
2. GENERAL NOTES & PROJECT AREA
3. SANITARY SEWER LINE 6-1 & SANITARY SEWER LINE 6-3
4. SANITARY SEWER LINE 6-2
5. SANITARY SEWER LINE 6-4
6. EASEMENT GRADING PLAN
7. PRECAST MANHOLE DETAILS
8. BACKFILL DETAILS
9. SERVICE CONNECTION DETAILS
10. PLAT OF SPRINGDALE LAKES ADDITION

*Inspectors Notes
Delivered 11-30-00
cm*



Vicinity Map

APPROVED:

David C. Adams
DIRECTOR OF PUBLIC WORKS / COUNTY ENGINEER
DATE: 8/28/00

APPROVED:

Thomas Swinton
CHAIRMAN, BOARD OF COUNTY COMMISSIONERS
DATE: 8-28-00

FILED IN THE OFFICE OF THE SEDGWICK COUNTY CLERK:

James A. ...
COUNTY CLERK
DATE: 8-30-00



PLANS PREPARED BY:

BAUGHMAN COMPANY P. A.
ENGINEERING, SURVEYING & PLANNING
316/262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

4MC-049

SPRINGDALE LAKES ADDITION

SEDGWICK COUNTY, KANSAS.

PHASE III

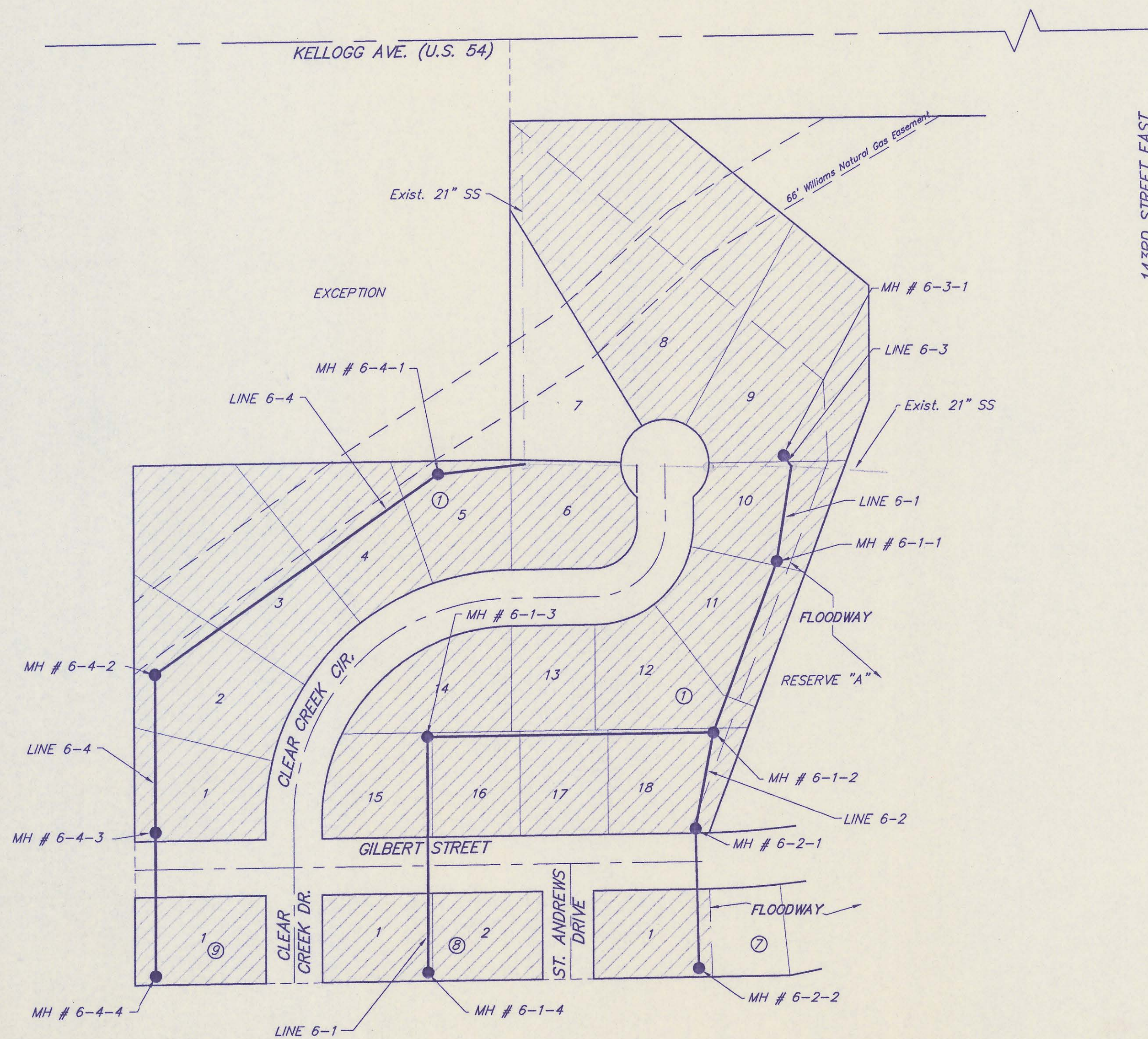
SANITARY SEWER

GENERAL NOTES

BENCHMARKS:
 "□" Cut in Top of Curb at
 East Lot Line of Lot 17, Block
 1, Springdale Lakes Addition.
 Elev. = 1319.79

**Benefit
 District**

SCALE:
 1" = 100'



1. All Elevations shown are USGS Datum.
2. At least 72 hours prior to beginning any excavation (excluding weekends and holidays), the Contractor shall contact the Kansas One-Call system, a utility location service, at 687-2470 to request all members to locate any existing lines within the project area.
3. The buried utilities as shown on the plans are approximate locations only. It should be noted that other buried lines and cables may exist which are not shown on these plans. The Contractor shall exercise extreme caution during trenching operations to avoid damaging these lines. Any lines damaged shall be replaced or repaired immediately as directed by the Engineer at the Contractor's expense.
4. At least 24 hours before connecting new sewer pipe to the existing sewage system, the Contractor shall contact the Sedgwick County Eastern Sewer District (733-0202). The Contractor shall keep any construction debris from entering the existing sanitary sewer during construction. To prevent water or debris from entering the existing sewer, a mechanical plug shall be installed and maintained to isolate the existing sewer from the new construction until the new construction is cleaned, televised, and has been accepted. The water used for cleaning shall not be added to the flow of the existing sewer. The cleaning or otherwise accumulated water shall be pumped or otherwise removed prior to televising.
5. All pipe joints shall be laid and pushed 'full home', with the beveled end of the spigot making full contact with the chamfered area at the throat of the bell or socket, with no separation between them. If separation is determined, the pipe shall be excavated and re-laid at the Contractor's expense.
6. Excess excavation material and other debris shall be wasted on sites to be provided by the Contractor as approved by the engineer at no additional cost to the Owner. Approved excess material shall be stockpiled in a location as approved by the developer.
7. The Contractor shall contain his operations to permit traffic through and across construction at existing roadways at all times. The Contractor shall erect warning signs, flashing lights, and barricades in compliance with the manual on uniform traffic control devices to ensure safety as directed in the general conditions. The Contractor shall limit the extent of trench to remain open overnight and weekends to less than 50 feet.
8. The Contractor shall restore all ditches, swales, road shoulders, and banks to their original slopes and grades. Where existing entrance pipe, drainage pipe, signs, fences, etc., conflict with the proposed work herein, they shall be removed and replaced or reset unless otherwise indicated on the plans replacement of all the aforementioned items, including seeding, fertilizer, and mulching shall be considered subsidiary to "Site Clearing and Restoration".
9. Easements and right-of-ways provided by the Owner for the project are shown in the plans. The Contractor shall be responsible for the acquisition of any additional temporary easements or right-of-ways that he desires to use in completing the work.
10. Positive drainage shall be provided for all areas on or near spoil areas. Natural drainage ways shall be maintained.
11. The Contractor shall provide positive drainage away from all manhole covers.
12. The Contractor shall give all property owners and/or tenants of developed property abutting the construction of this project a minimum of 10 days advance notice prior to start of construction in the vicinity of the affected property.
13. All trench backfill shall be either type I or type III unless noted otherwise.
14. The Contractor shall contact the following at least 72 hours prior to beginning construction to advise them of the intended work and of his proposed schedule:
 Sedgwick County Public Works
 1144 S. Seneca
 Wichita, KS. 67213
 Mr. Paul Taylor
 (316) 660-3020
15. The Contractor shall avoid removal or trimming or any trees where possible. Where the Contractor believes the removal or trimming is unavoidable, he shall obtain the concurrence of the engineer before proceeding with such work.
16. Rubble from the removal of miscellaneous structures including any trees removed, tree trimmings, and excess excavation which is to be wasted, shall be disposed of on sites provided by the Contractor. These sites shall also be approved by the engineer as to suitability, appearance, and site location. All disposal sites must be approved by the Kansas Department of Health and Environment. Material either stockpiled or disposed of in a floodplain will require a Kansas State Board of Agriculture permit and a floodplain development permit from Sedgwick County. Any materials dumped in waters of the United States or wetlands is subject to U.S. Corps of Engineers permitting regulations. Any materials buried or stockpiled beyond approved construction limits may require archaeological investigations unless buried in a previously approved disposal location.
17. Each bidder shall visit the site of the project before submitting the proposal for this work so that he will be fully informed of the existing field conditions and the obstacles which might be encountered. Upon award of the contract, the Contractor will not be granted any additional compensation with regards to time and money for conditions that may have been evaluated during an inspection of the site.
18. All grassed areas disturbed by construction of the proposed improvement shall be replanted with grass and fertilized in accordance with the specifications for such work. All costs for seeding and fertilizing shall be considered subsidiary to "Site Clearing and Restoration".
19. Properties within the project limits may have underground sprinkler systems in public right-of-way which conflict with new construction. Contractor will be required to remove such improvements should they not be removed by their owner at the time of construction of the project. The Contractor will be required to salvage all sprinkler heads and/or valves and give such material to their owner. Portions of underground sprinkler systems not in conflict with new construction shall be protected from damage and shall remain in place. All work in connection with underground sprinkler systems shall be considered as subsidiary to price bid for pipe in place.
20. The Contractor shall not bury manholes that have rim elevations which are lower than existing ground at the manhole. The ground around such manholes and along the sewer alignment shall be backfilled to the approximate elevation of the proposed ground elevation shown on the plan/profile sheets. The Contractor shall provide drainage away from these manholes and sewer lines by construction of temporary ditches or sloping the ground as required. All costs for this work shall be considered subsidiary to the installed bid price for manholes or pipe.
21. The Contractor shall provide mounded earth at manholes and cleanouts that have top elevations greater than 1 foot above finished grade, as shown on the plans. Costs for mounding shall be considered subsidiary to the lump sum price bid for "Easement Grading".
22. Contractor shall grade the sanitary sewer alignment to the profile and elevations shown on the easement grading plan. All costs for easement grading shall be subsidiary to the lump sum price bid for "Easement Grading".
23. The Contractor shall be responsible for maintaining continuous flow of sewage through construction. Contractor's proposed method for maintaining sewage flow shall be approved by the County. Cost of maintaining flow of sewage through construction will not be paid for directly and this cost shall be considered as subsidiary to the other pay items of work.
24. It shall be the responsibility of the Contractor to satisfy himself as to the existence of unusual subsurface conditions, and to allow for such conditions in his bid.
25. Contractor shall isolate existing sewer from new construction with mechanical plug maintained throughout the project.
26. Easements by separate instrument:
 Film 2079, Page 0324 - Restrictive Covenant
 Film 2079, Page 1117 - Utility Easement
 Film 2074, Page 1647 - Drainage Easement
 Film 2074, Page 1649 - Utility Easement

SPRINGDALE LAKES ADDITION
GENERAL NOTES
& PROJECT AREA

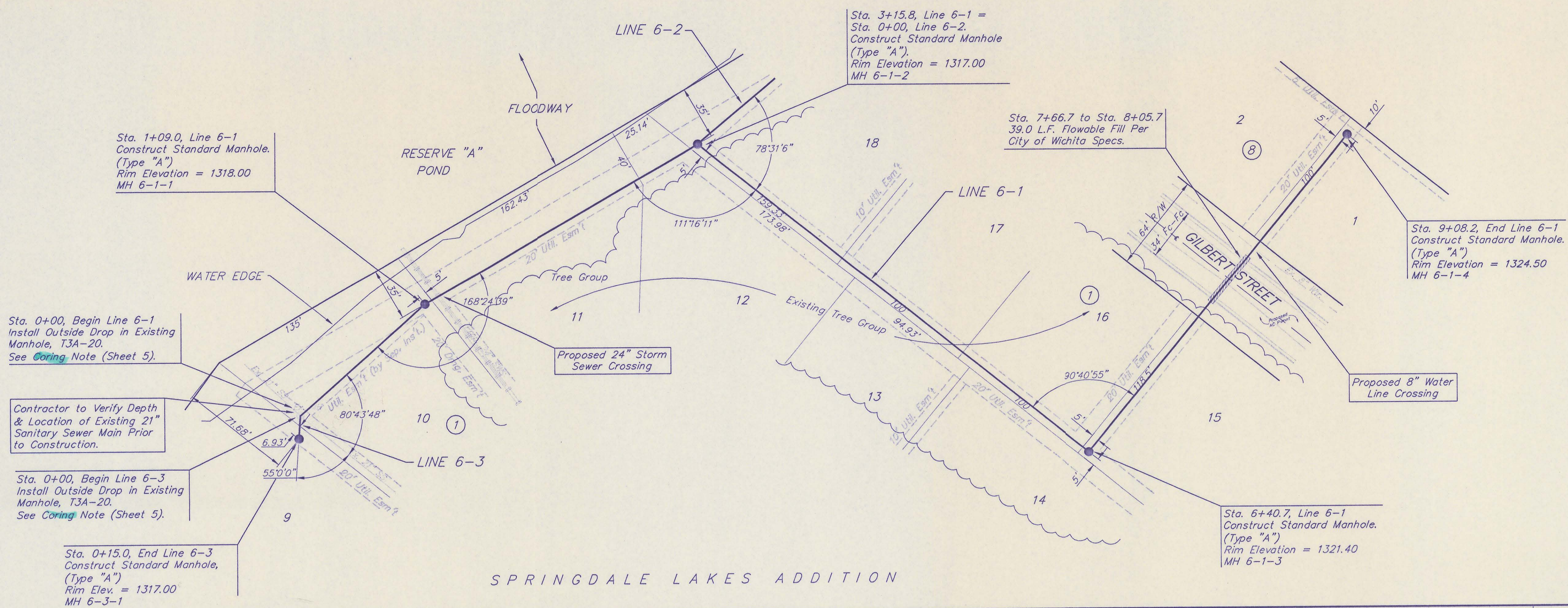
BAUGHMAN COMPANY P.A.
 ENGINEERING, SURVEYING, & PLANNING
316-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

PROJECT NUMBER _____ SHEET **2** OF **10**

DESIGN BP/AEG	DRAWN AEG	APPROVED	DATE 6/00
		SCALE NOTED	OF 10

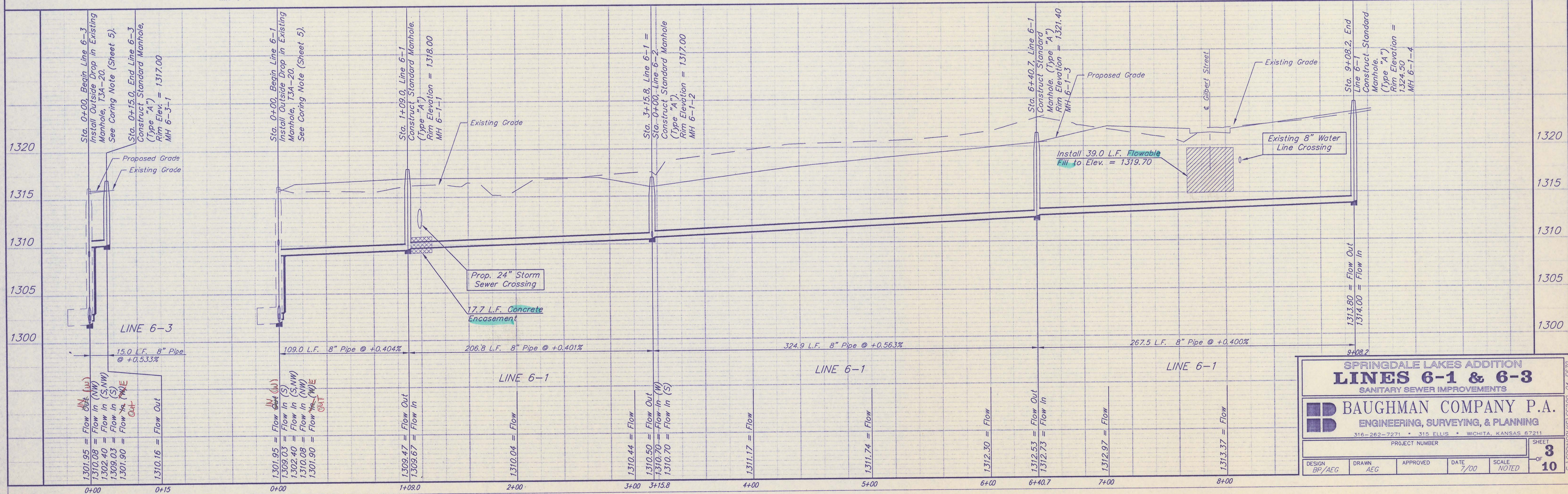
Springdale Lakes Addition 00-04-EG70

BENCHMARKS:
 "□" Cut in Top of Curb at the North Catch Basin at East Lot Line of Lot 17, Block 1, Springdale Lakes Addition.
 Elev. = 1319.79



Scale:
 1" = 40' Horizontal
 1" = 5' Vertical
 • = Iron

Remove Trees Only as Necessary For Construction. Cost to be included in Bid Item "Site Clearing & Restoration"



SPRINGDALE LAKES ADDITION
LINE 6-1 & 6-3
 SANITARY SEWER IMPROVEMENTS

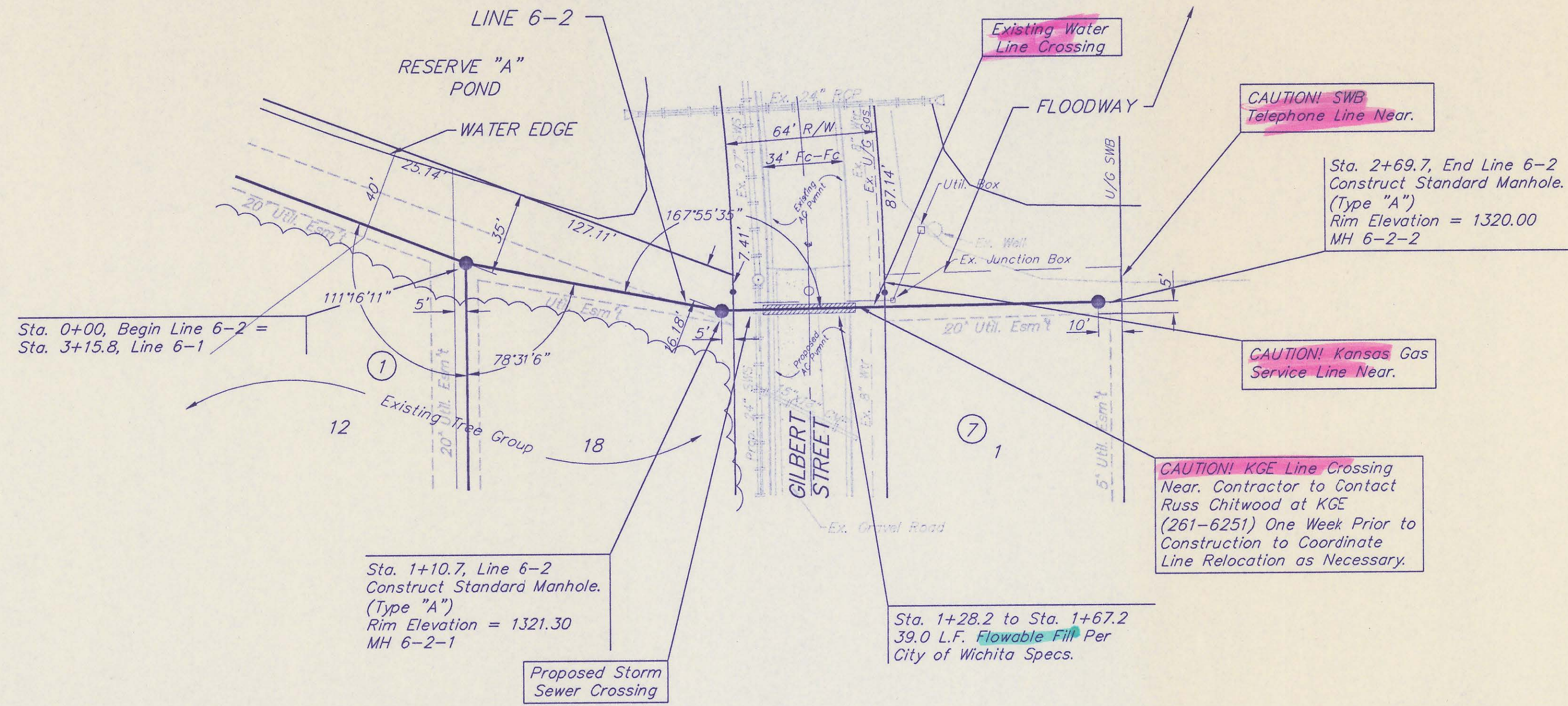
BAUGHMAN COMPANY P.A.
 ENGINEERING, SURVEYING, & PLANNING
 316-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

PROJECT NUMBER: _____ SHEET **8** OF **10**

DESIGN BP/AEG	DRAWN AEG	APPROVED	DATE 7/00	SCALE NOTED
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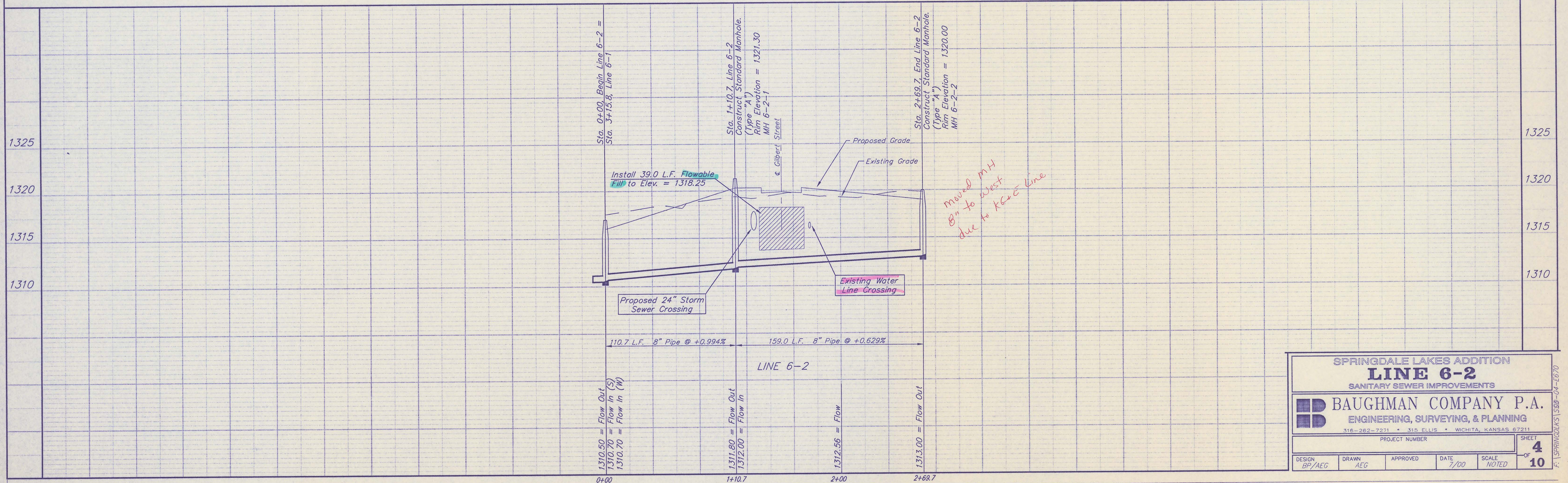
BENCHMARKS:
 "□" Cut in Top of Curb at the North Catch Basin at East Lot Line of Lot 17, Block 1, Springdale Lakes Addition.
 Elev. = 1319.79

Scale:
 1" = 40' Horizontal
 1" = 5' Vertical
 • = Iron



Remove Trees Only as Necessary For Construction.
 Cost to be included in Bid Item "Site Clearing & Restoration"

SPRINGDALE LAKES ADDITION



SPRINGDALE LAKES ADDITION
LINE 6-2
 SANITARY SEWER IMPROVEMENTS

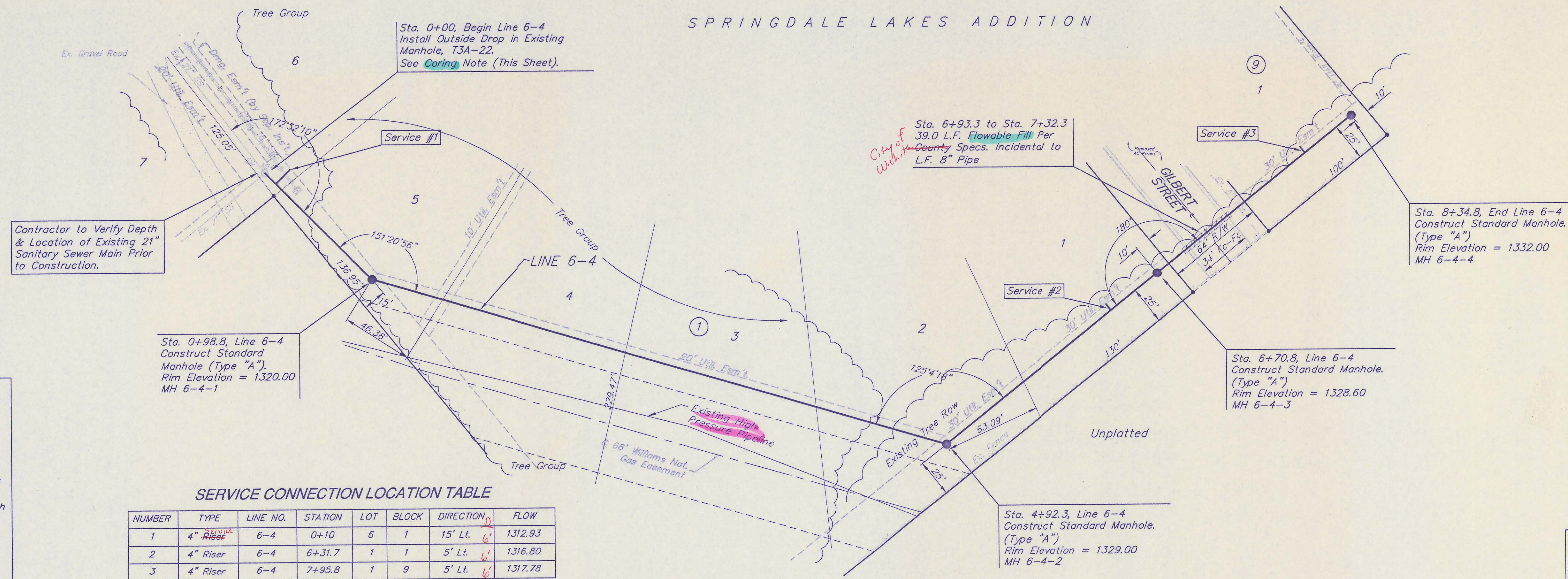
BAUGHMAN COMPANY P.A.
 ENGINEERING, SURVEYING, & PLANNING
 316-262-7221 • 315 ELLIS • WICHITA, KANSAS 67211

PROJECT NUMBER: _____ SHEET: **4** OF **10**

DESIGN: BP/AEG DRAWN: AEG APPROVED: _____ DATE: 7/00 SCALE: NOTED

BENCHMARKS:
 "□" Cut in Top of Curb at the North Catch Basin at East Lot Line of Lot 17, Block 1, Springdale Lakes Addition. Elev. = 1319.79

SPRINGDALE LAKES ADDITION



Scale:
 1" = 40' Horizontal
 1" = 5' Vertical
 • = Iron

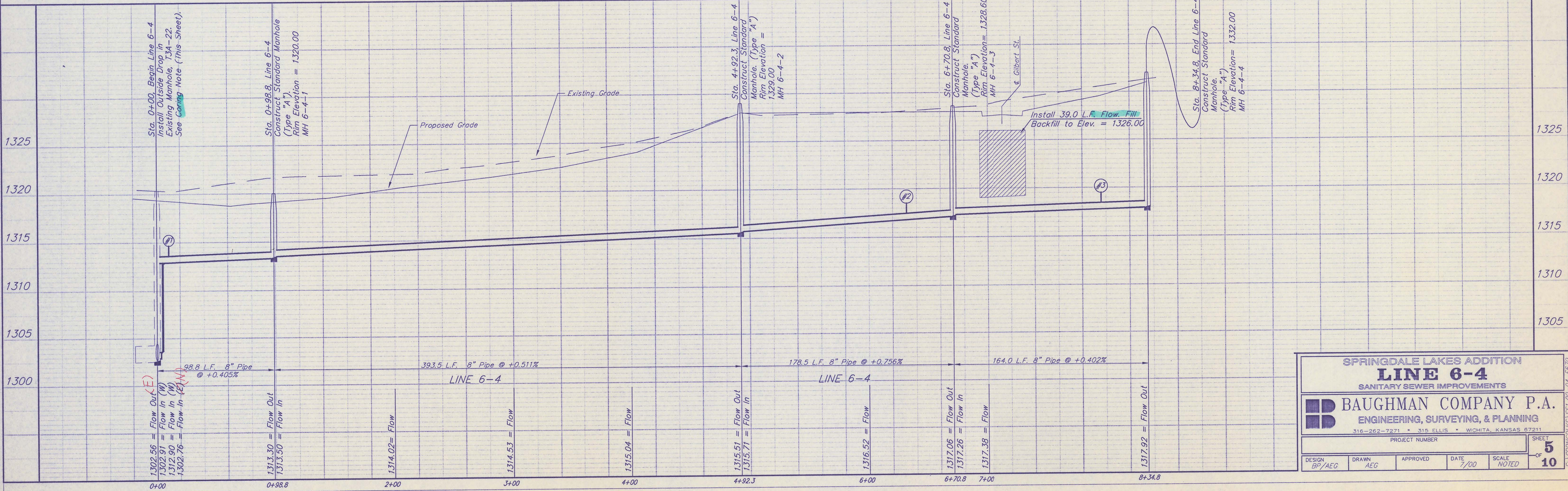
Contractor to Verify Depth & Location of Existing 21" Sanitary Sewer Main Prior to Construction.

CORING NOTE:
 Seal New 8" Pipe to Manhole with an Approved Water Stop Gasket and Quickset Hydraulic Cement. Pipe Penetrations that do not Utilize an Approved Gasket Precast in the Manhole Wall shall have the Pipe Encased a Minimum of 3' from the Face of the Outside Wall with Class I Concrete. The Contractor shall Drill and Epoxy 4-#4 Dowels 12" in Length into the Manhole Wall (2" into Manhole Wall) and tie these Dowels into the Reinforcement for the Concrete Encasement at all Pipe Penetrations that do not use the Gasket Precast in the Manhole.

SERVICE CONNECTION LOCATION TABLE

NUMBER	TYPE	LINE NO.	STATION	LOT	BLOCK	DIRECTION	FLOW
1	4" Riser	6-4	0+10	6	1	15' Lt.	1312.93
2	4" Riser	6-4	6+31.7	1	1	5' Lt.	1316.80
3	4" Riser	6-4	7+95.8	1	9	5' Lt.	1317.78

Remove Trees Only as Necessary For Construction. Cost to be included in Bid Item "Site Clearing & Restoration"



SPRINGDALE LAKES ADDITION
LINE 6-4
 SANITARY SEWER IMPROVEMENTS

BAUGHMAN COMPANY P.A.
 ENGINEERING, SURVEYING, & PLANNING
 316-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

PROJECT NUMBER: _____ SHEET: **5** OF **10**

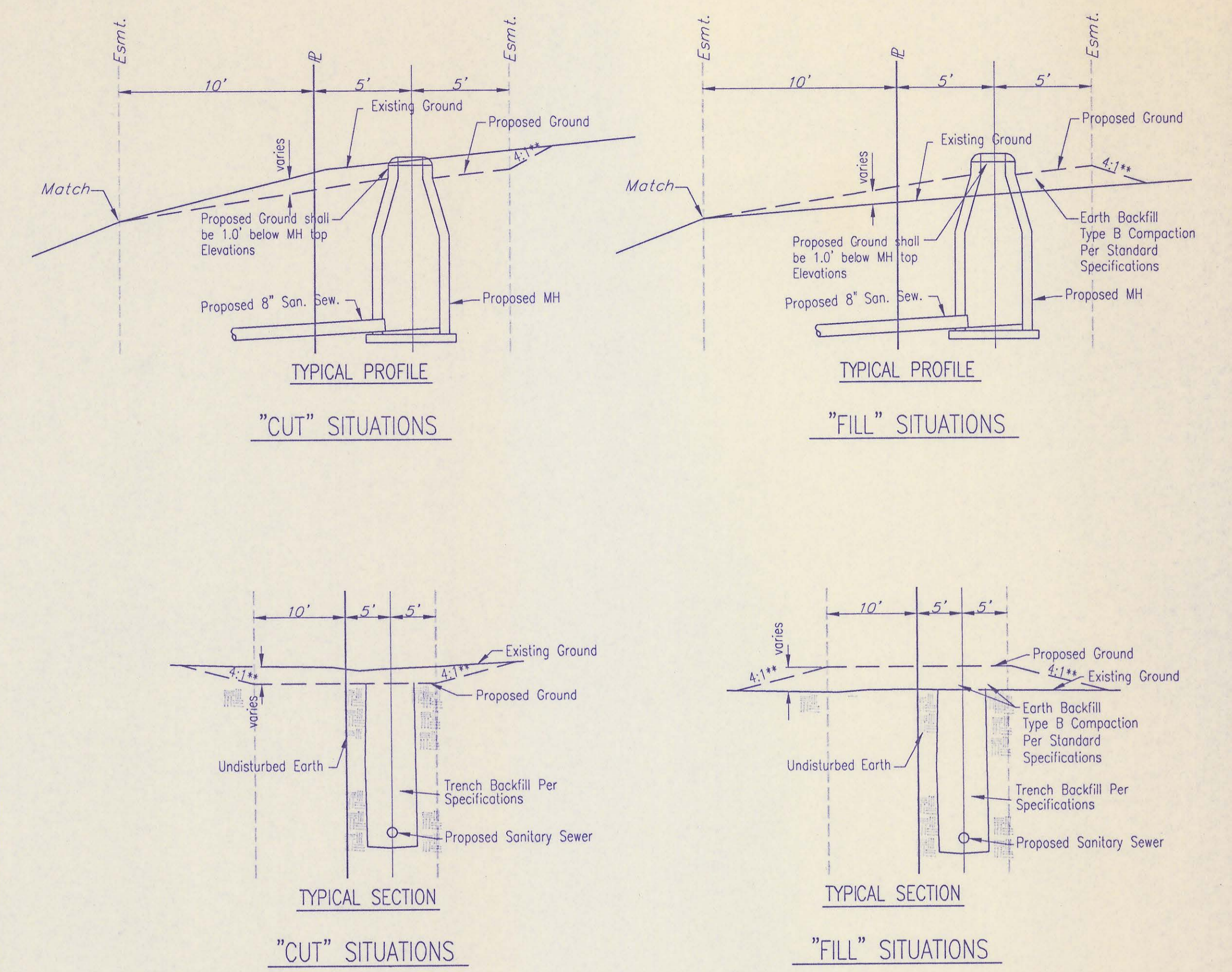
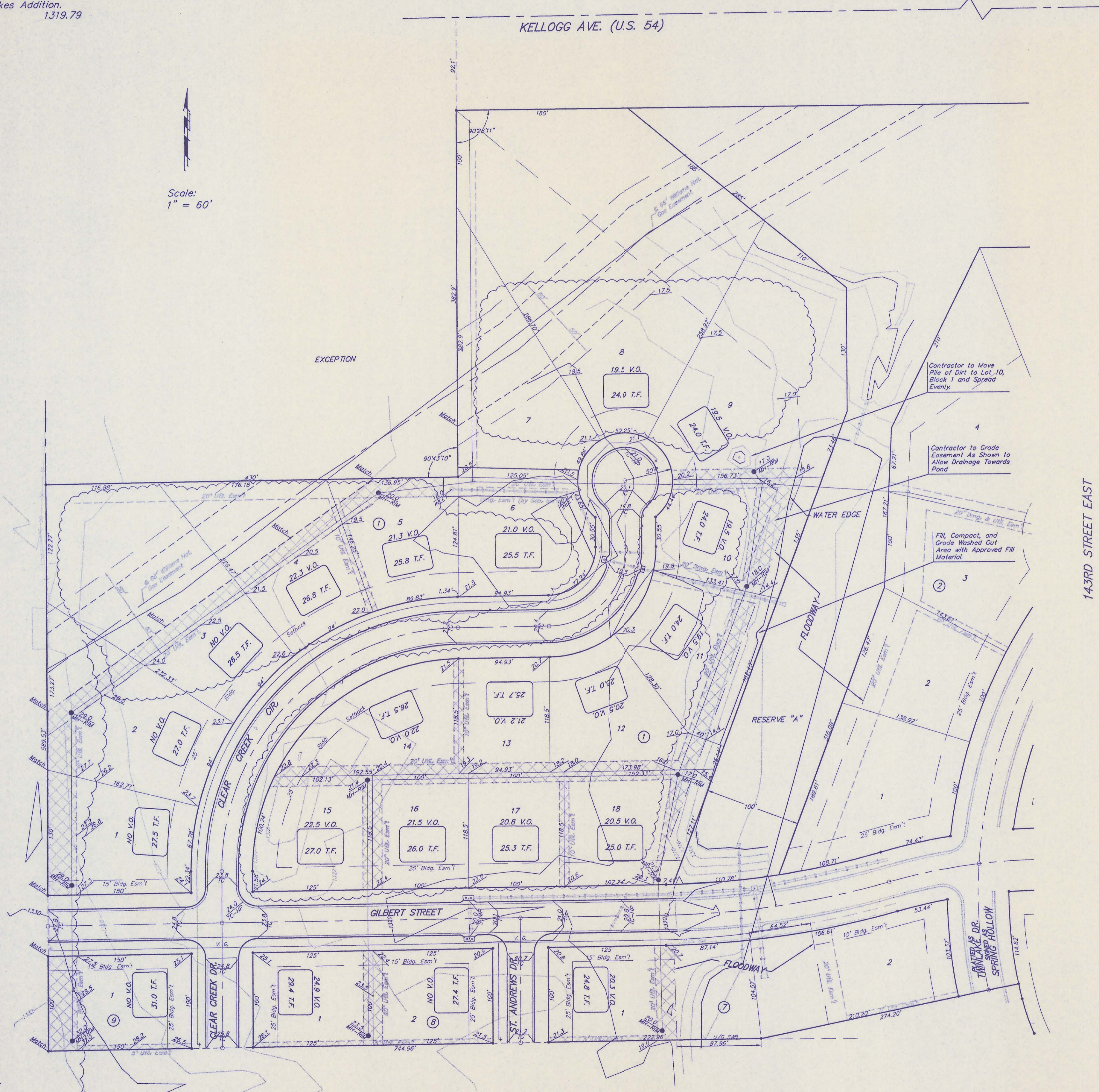
DESIGN: BP/AEG DRAWN: AEG APPROVED: _____ DATE: 7/00 SCALE: NOTED

BENCHMARKS:

"□" Cut in Top of Curb at the North Catch Basin at East Lot Line of Lot 17, Block 1, Springdale Lakes Addition.
Elev. = 1319.79



PLAN	CHECKED	DATE
	CHECKED	



EASEMENT GRADING DETAILS

Contractor to place excess excavation in Lot 10, Block 1. The material shall be spread evenly over the lot. Drainage to the pond shall be maintained. The maximum fill elevation shall be 2 feet above existing elevation.

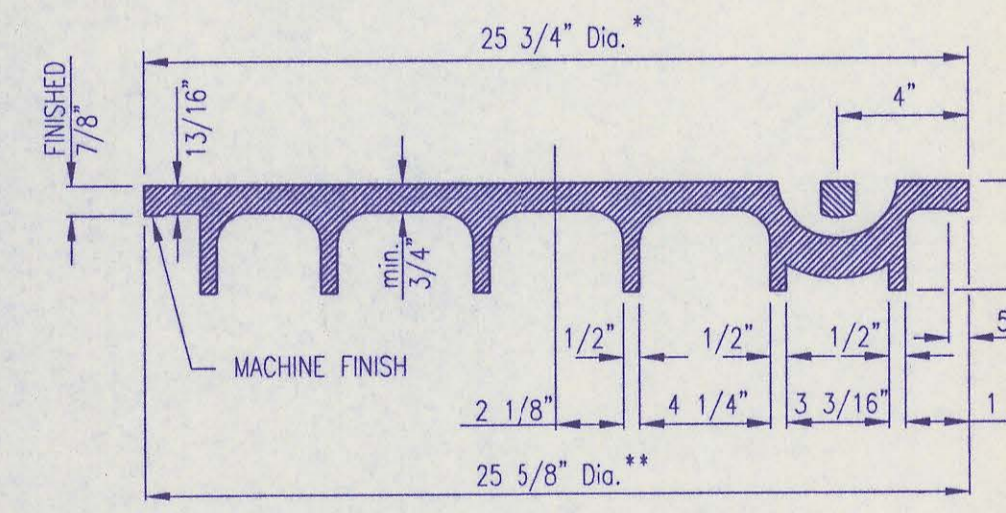
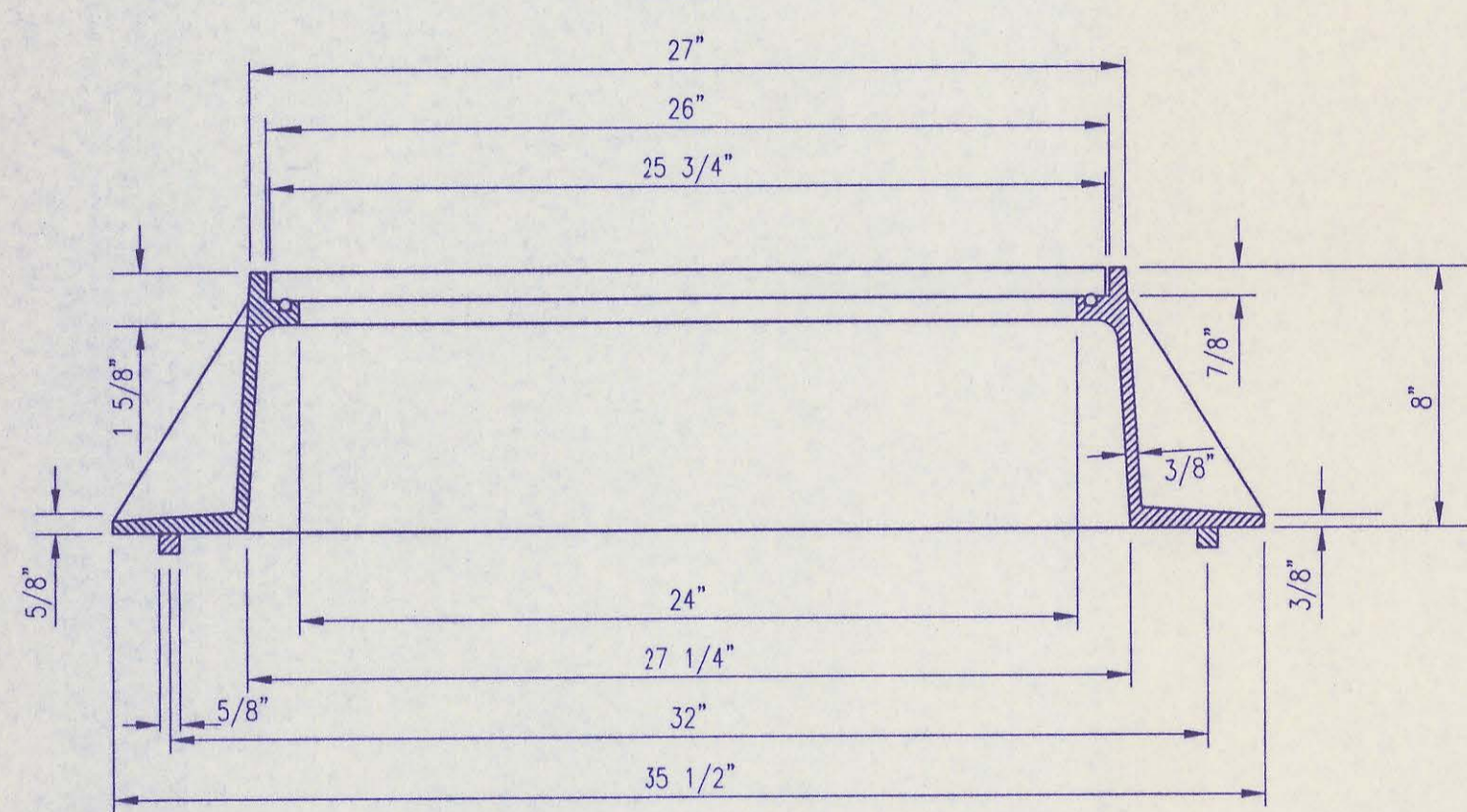
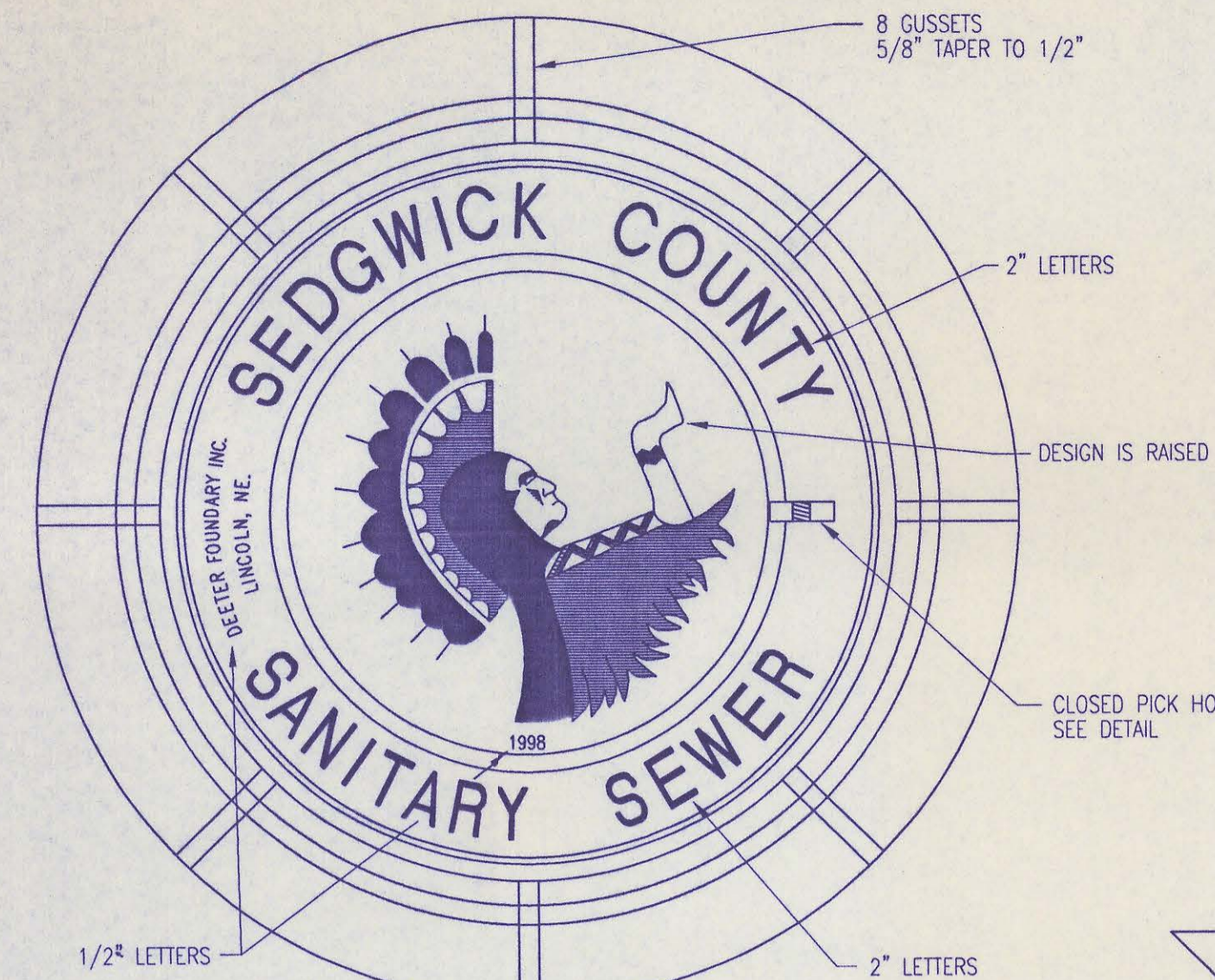
▨ = AREAS TO BE GRADED

H.P. = HIGH POINT
M.E. = MATCH EXISTING

**Graded widths and slopes may vary as approved by the Engineer to minimize conflict with existing trees.

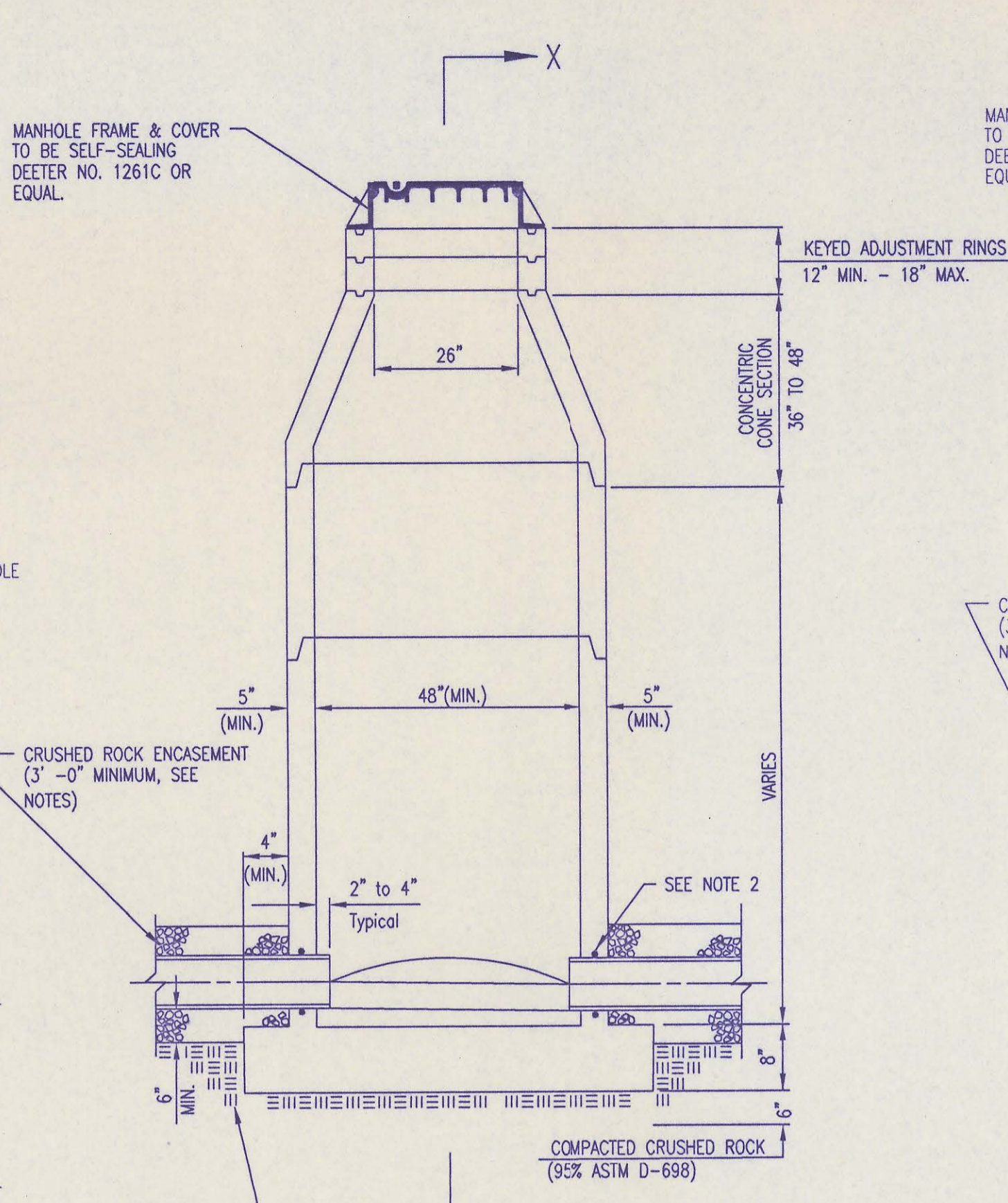
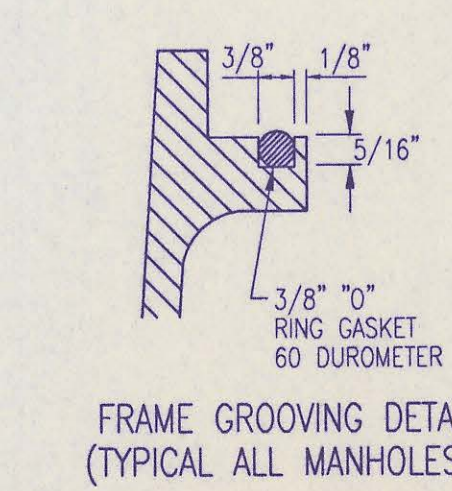
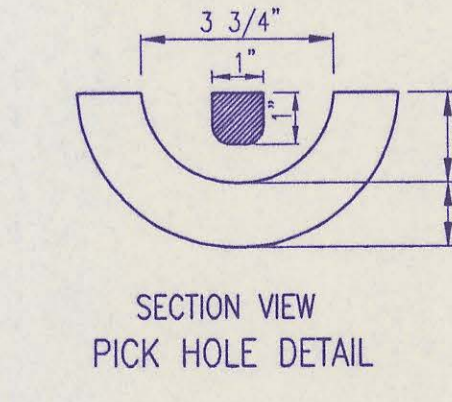
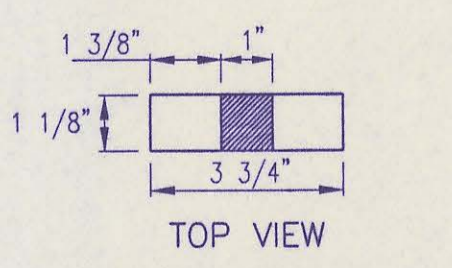
Easement Grading will be bid on a lump sum basis for grading the easements to the profile and elevations shown on the Easement Grading Plan (this sheet). Approximate quantities of earthwork for easement grading are shown below. These approximate quantities are given for information only. The Contractor should verify the quantities when preparing the proposal.

Cut 1320 C.Y. (Approximate)
Fill 900 C.Y. (Approximate)

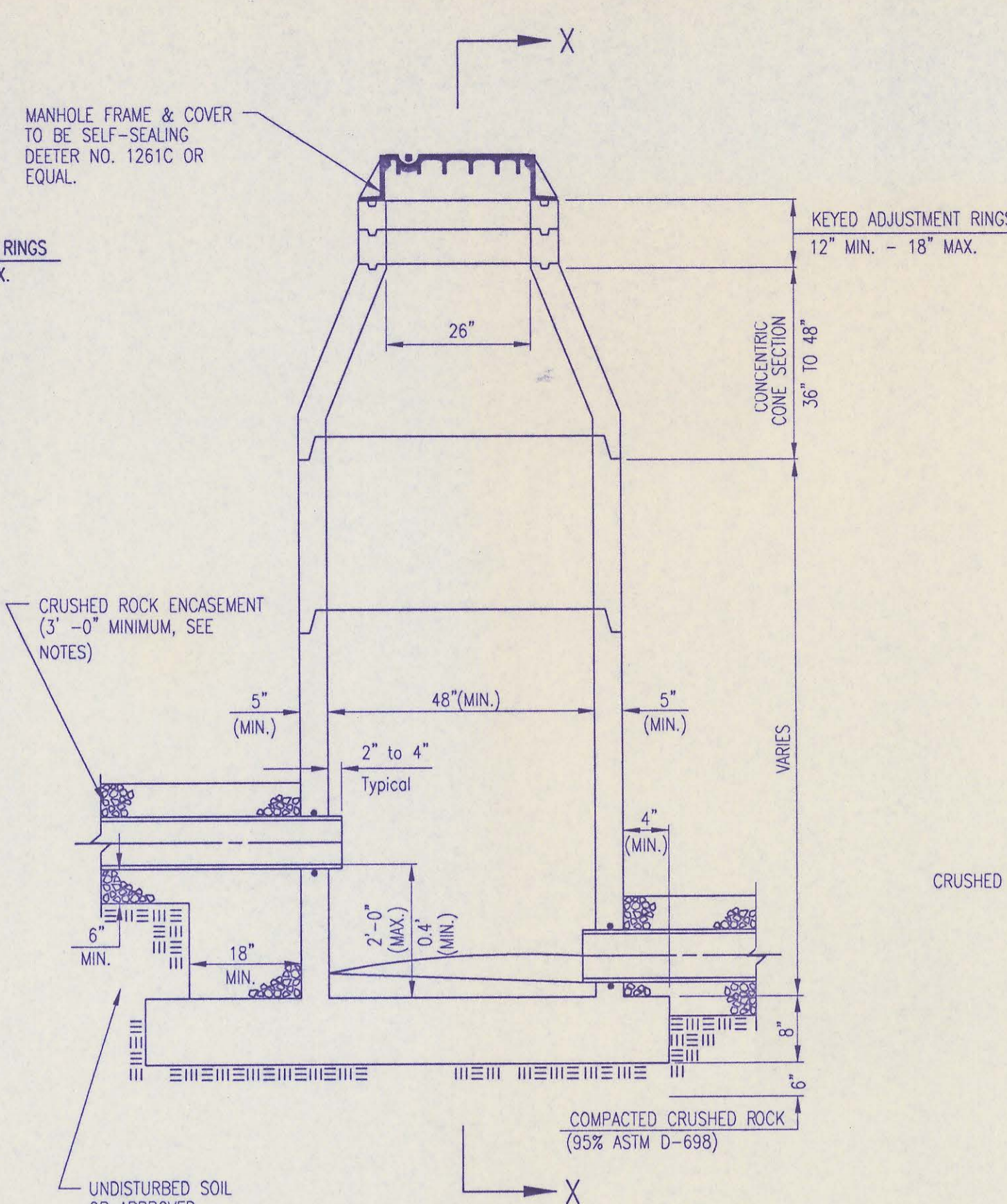


MANHOLE FRAME AND COVER
(TOTAL WEIGHT = 325 LBS.)

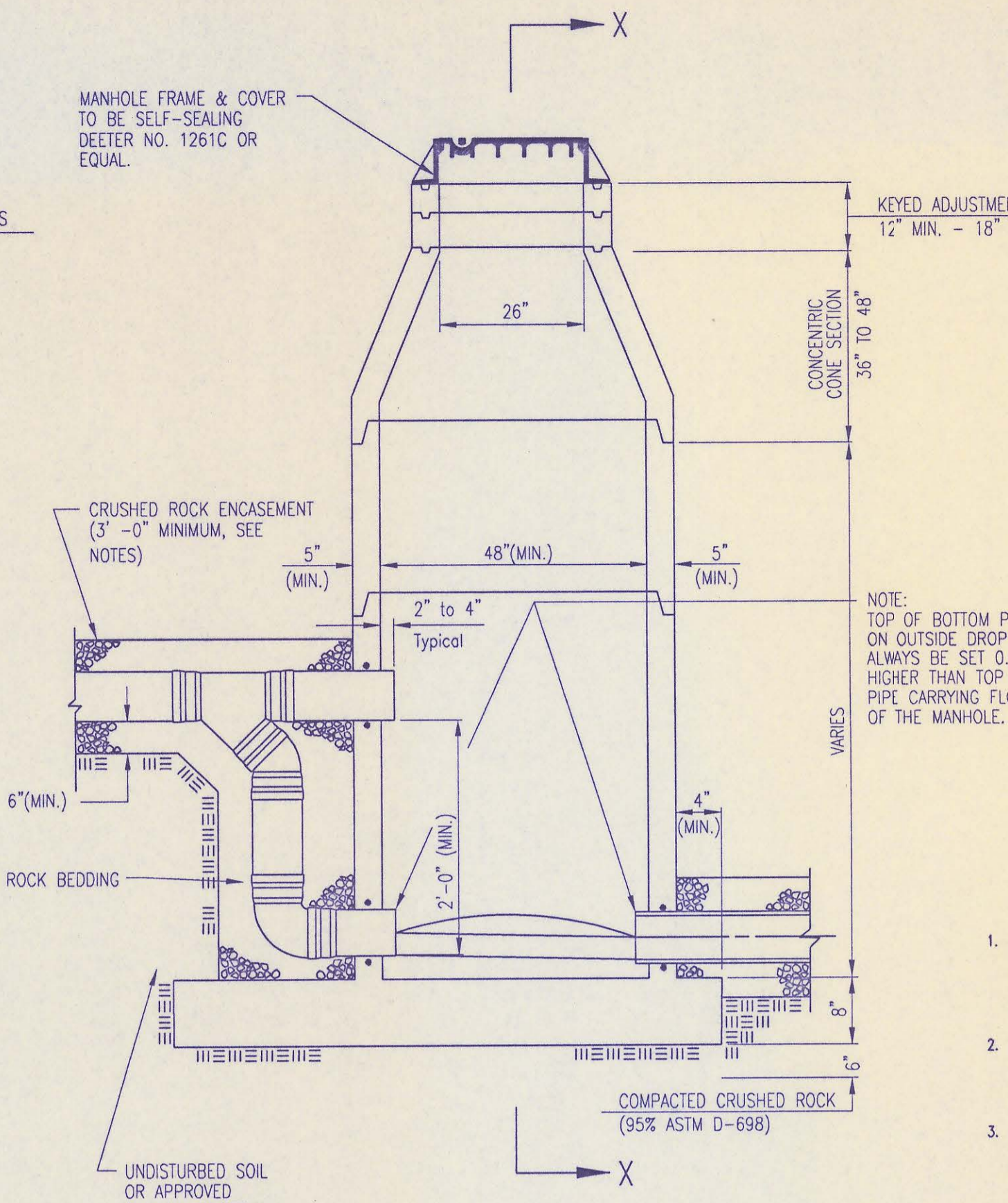
- MANHOLE FRAME AND COVER NOTES**
1. CAST IRON MANHOLE FRAME AND COVER SHALL CONFORM TO ASTM A-48, CLASS 35B, OR BETTER.
 2. CASTINGS ARE TO BE MANUFACTURED TRUE TO PATTERN AND WITH SATISFACTORY FIT OF COMPONENT PARTS. CASTINGS SHALL BE FREE OF DEFECTS AND ALL BURRS SHALL BE GROUND SMOOTH. DIMENSIONS AS DETAIL ON PLAN SHALL NOT DEVIATE BY 1/16" PER FOOT.
 3. NO OTHER LETTERING OR MARKINGS OTHER THAN THOSE DETAILED ON PLAN WILL BE PERMITTED ON CASTINGS.
 4. CASTINGS MUST BE DOMESTICALLY MANUFACTURED IN THE UNITED STATES OF AMERICA.
 5. THE FRAMES AND COVERS SHALL BE FURNISHED WITH MACHINED HORIZONTAL BEARING SURFACES SO FITTING PARTS WILL NOT RATTLE OR ROCK UNDER TRAFFIC.
 6. MANHOLE CASTINGS SHALL BE SELF-SEALING DEETER FOUNDARY INC. NO. 1261C OR APPROVED EQUAL, UNLESS OTHERWISE SPECIFIED IN THE SPECIAL CONDITIONS. (MINIMUM WT. = 325 LBS.) ALL MANHOLE CASTINGS SHALL BE CONSIDERED SUBSIDIARY TO THE UNIT PRICES BID FOR THE VARIOUS MANHOLE TYPES.
 7. THE MANUFACTURER SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL PRIOR TO MANUFACTURE. THE ENGINEER SHALL RETAIN THE RIGHT TO REJECT CASTINGS NOT CONFORMING TO THE SPECIFICATIONS OR THE APPROVED SHOP DRAWINGS.
 8. THE MANHOLE FRAME SHALL BE FURNISHED WITH AN APPROVED CONTINUOUS "O" RING GASKET GROoved INTO THE BEARING SURFACE OF THE MANHOLE FRAME (PER DETAIL). THE "O" RING GASKET SHALL BE FACTORY INSTALLED IN THE MANHOLE FRAME WITH 100% SILICON SEALANT-DOW CORNING OR EQUAL.



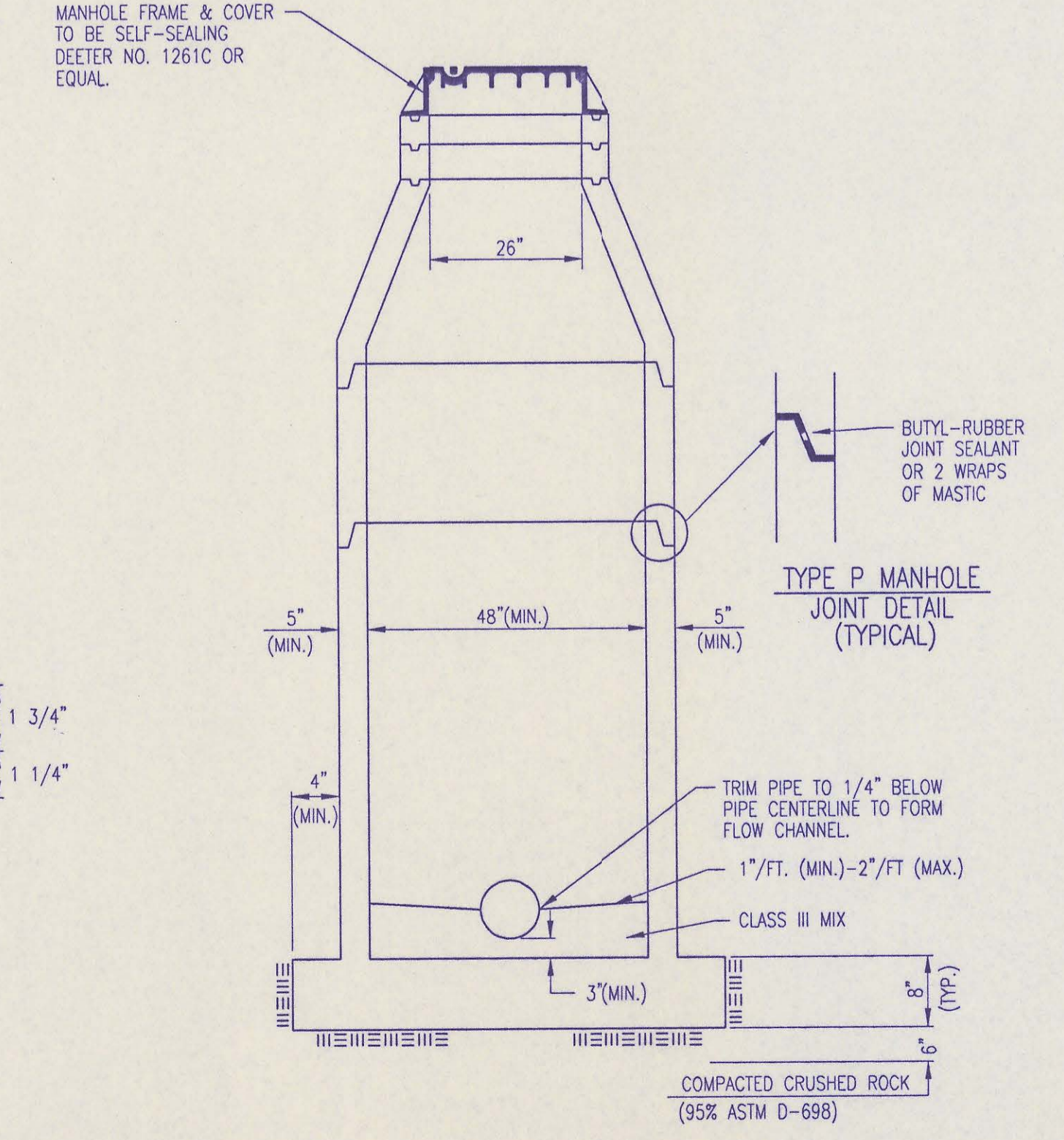
PRECAST STANDARD MANHOLE TYPE "A"



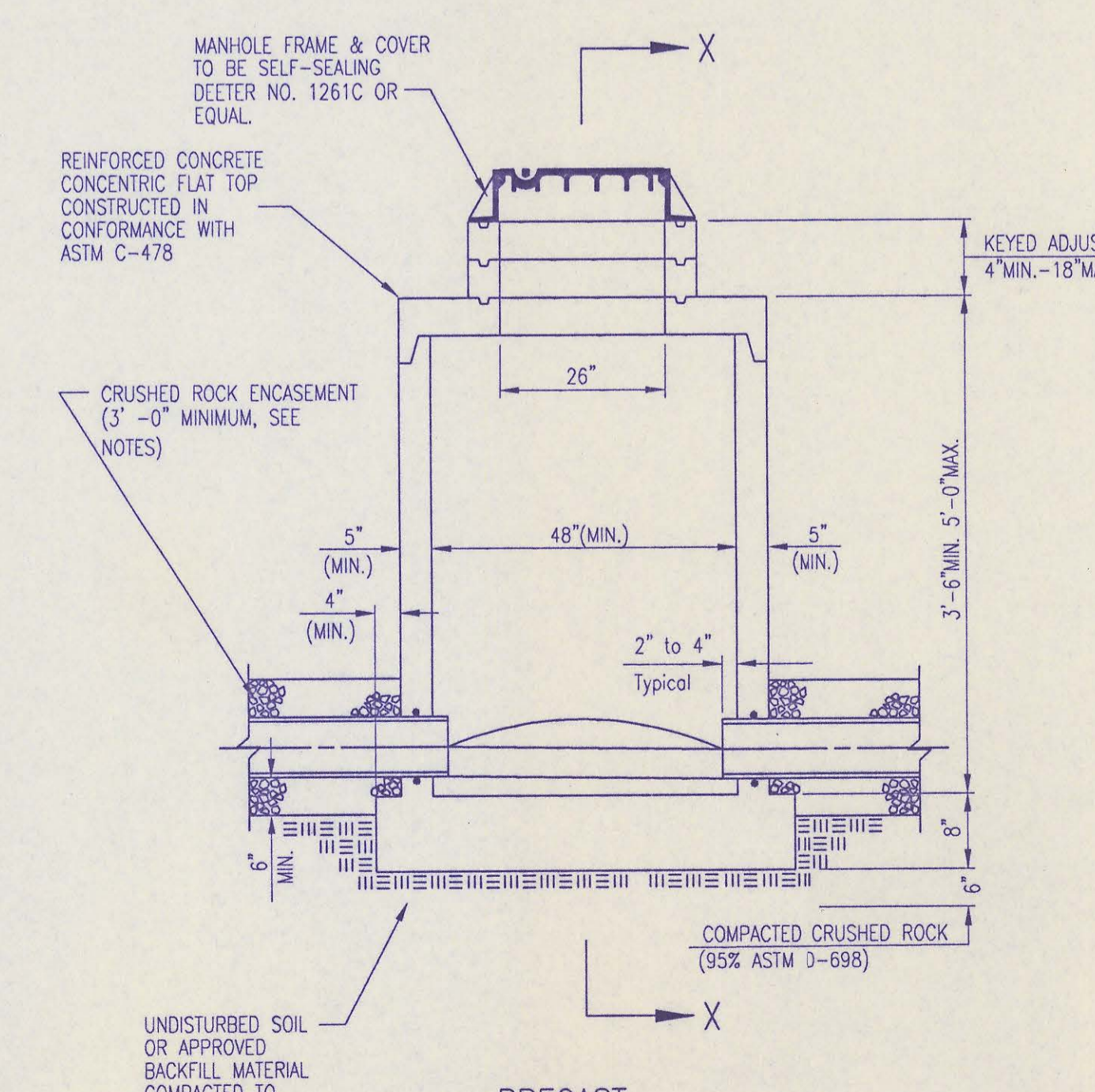
PRECAST INSIDE DROP MANHOLE TYPE "B"



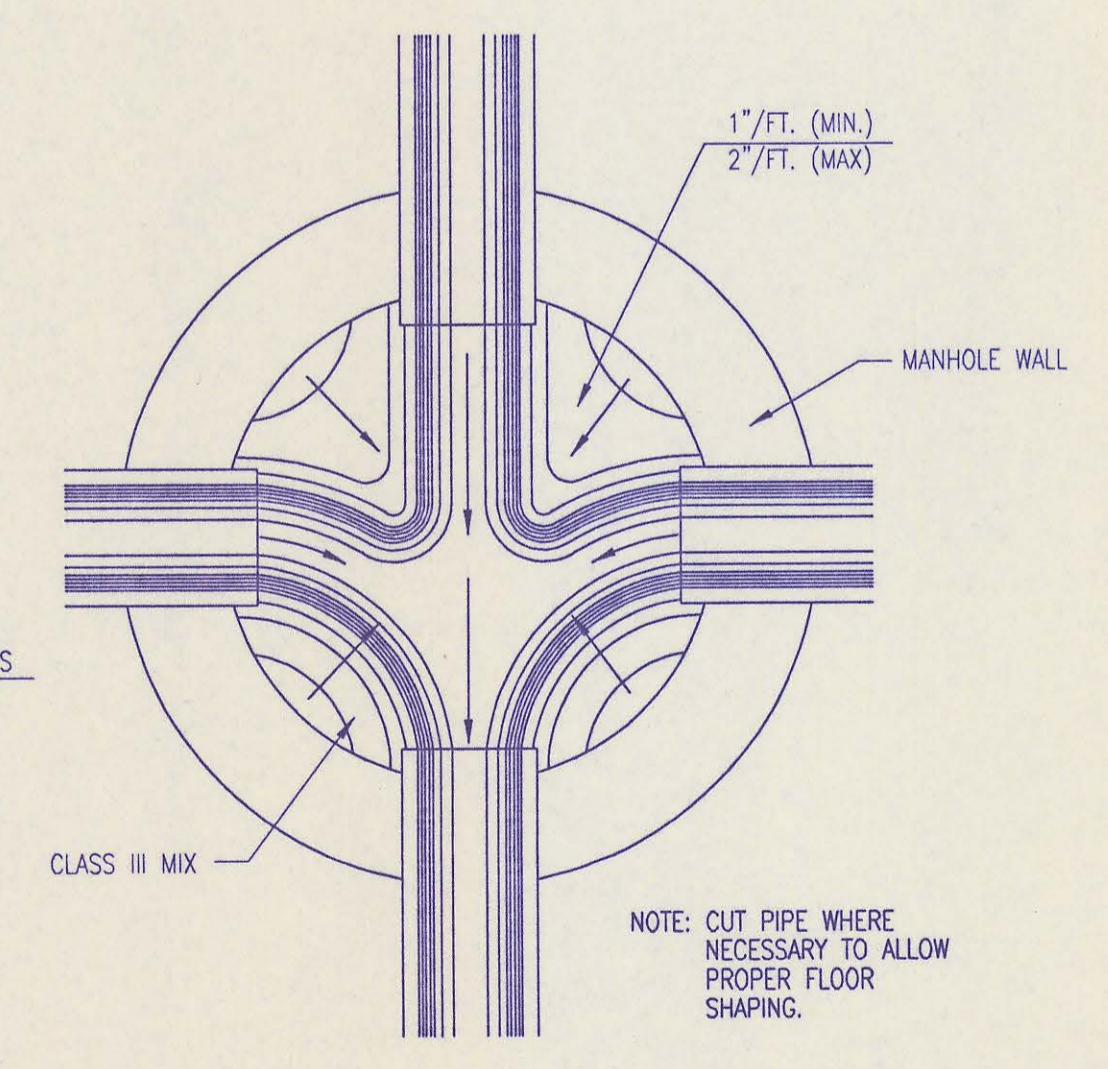
PRECAST OUTSIDE DROP MANHOLE TYPE "C"



SECTION X (TYPICAL)



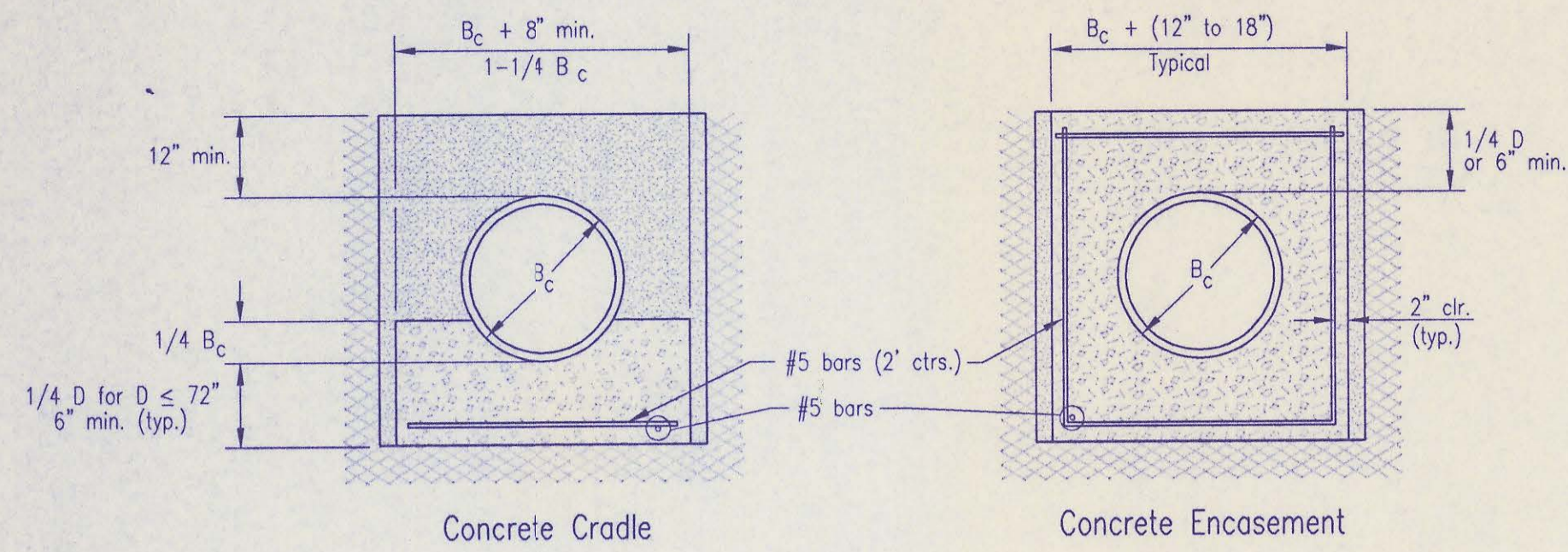
PRECAST SHALLOW MANHOLE TYPE "D"



TYPICAL MANHOLE FLOOR SHAPING

- PRECAST MANHOLE NOTES**
1. IF, IN THE OPINION OF THE ENGINEER, THE MANHOLE SUBGRADE APPEARS UNSTABLE, THE CONTRACTOR WILL OVEREXCAVATE TO A SUITABLE SUBGRADE CONDITION AND CRUSHED ROCK SHALL BE PLACED AND COMPACTED TO THE REQUIRED GRADE.
 2. "A-LOK" OR APPROVED EQUAL FLEXIBLE WATER-STOP GASKETS WHICH MEET OR EXCEED THE TEST REQUIREMENTS OF ASTM C-923 SHALL BE INSTALLED TO CONNECT THE SEWER TO THE MANHOLE WALL.
 3. THE MANHOLE FRAME SHALL BE SEATED ON AN APPROVED BUTYL-RUBBER OR MASTIC SEALANT TO PROVIDE WATER-TIGHT SEAL BETWEEN THE MANHOLE ADJUSTMENT RING AND THE MANHOLE FRAME.
 4. GASKETED PIPE CAPS SHALL BE PROVIDED BY THE PIPE SUPPLIER. GULLED OR CEMENTED CAPS WILL NOT BE ACCEPTED.
 5. ALL MANHOLE CONSTRUCTION SHALL BE WATER TIGHT.
 6. TOP OF MANHOLE FLOOR SLAB SHALL BE AT LEAST 3 INCHES BELOW THE FLOW LINE OF THE OUTLET PIPE TO INSURE SUFFICIENT MINIMUM THICKNESS OF SHAPED INVERT.
 7. MANHOLES WITH PIPE SIZES 24" AND LARGER SHALL HAVE 5" INSIDE DIAMETER (MIN.).
 8. INSIDE DIAMETER OF FIVE-FOOT DIAMETER PRECAST MANHOLES SHALL REMAIN CONSTANT TO THE LOCATION OF THE REDUCING FLAT TOP WHICH CONNECTS THE FOUR-FOOT DIAMETER CONE SECTION TO THE FIVE-FOOT DIAMETER MANHOLE BARREL.
 9. MANHOLES SHALL BE SUPPLIED WITH PRECAST BASE SECTIONS UNLESS OTHERWISE APPROVED. ALL PRECAST CONCRETE MANHOLE SECTIONS AND BASES SHALL CONFORM TO THE LATEST REVISION OF ASTM C478 AS MODIFIED BY THE SPECIFICATIONS. ALL MANHOLES WITH PRECAST BASES SHALL INCLUDE A-LOK GASKETS FOR ALL PIPE PENETRATIONS INTO THE MANHOLES.
 10. WHERE MANHOLE STUBS ARE SHOWN ON THE PLANS, THE STUB SHALL EXTEND AT LEAST 5 FEET FROM THE INSIDE WALL OF THE MANHOLE. 4" STUBS SHALL BE SET AT 2.0% GRADE. 6" STUBS SHALL BE SET AT 1.0% GRADE.
 11. MANHOLE SECTIONS SHALL BE SUPPLIED WITH RECESSED LIFTING EYES. LIFTING EYE RECESSES SHALL BE GROUDED FLUSH TO THE MANHOLE WALL WITH HYDRAULIC CEMENT AFTER THE MANHOLE IS IN PLACE. LIFTING HOLES THRU THE MANHOLE WALL WILL NOT BE ACCEPTED.
 12. WHERE A-LOK GASKETS ARE REQUIRED, THE CONTRACTOR SHALL UTILIZE A CRUSHED ROCK BEDDING MATERIAL. THE ROCK BEDDING MATERIAL SHALL EXTEND TO 3 FEET FROM THE MANHOLE WALL AND SHALL BE COMPACTED IN PLACE FROM THE BOTTOM OF THE DISTURBED AREA TO 1 FOOT ABOVE THE TOP OF PIPE. THE CRUSHED ROCK WHICH IS PLACED BELOW THE PIPE BEDDING ZONE SHALL BE COMPACTED TO 95% ASTM D-698(MIN.).
 13. WHERE MANHOLES ARE TO BE BUILT OVER EXISTING SANITARY SEWER LINES, SEWER PIPES SHALL BE SUPPORTED WITH CLASS I CONCRETE ENCASEMENT A MINIMUM OF 3 FEET OUTSIDE THE MANHOLE WALL.
 14. CRUSHED ROCK SHALL MEET THE REQUIREMENTS FOR GRANULAR BEDDING MATERIAL, AS OUTLINED IN THE SPECIFICATIONS.

DATE	
BY	
CHECKED	
CHECKED	
PLAN	

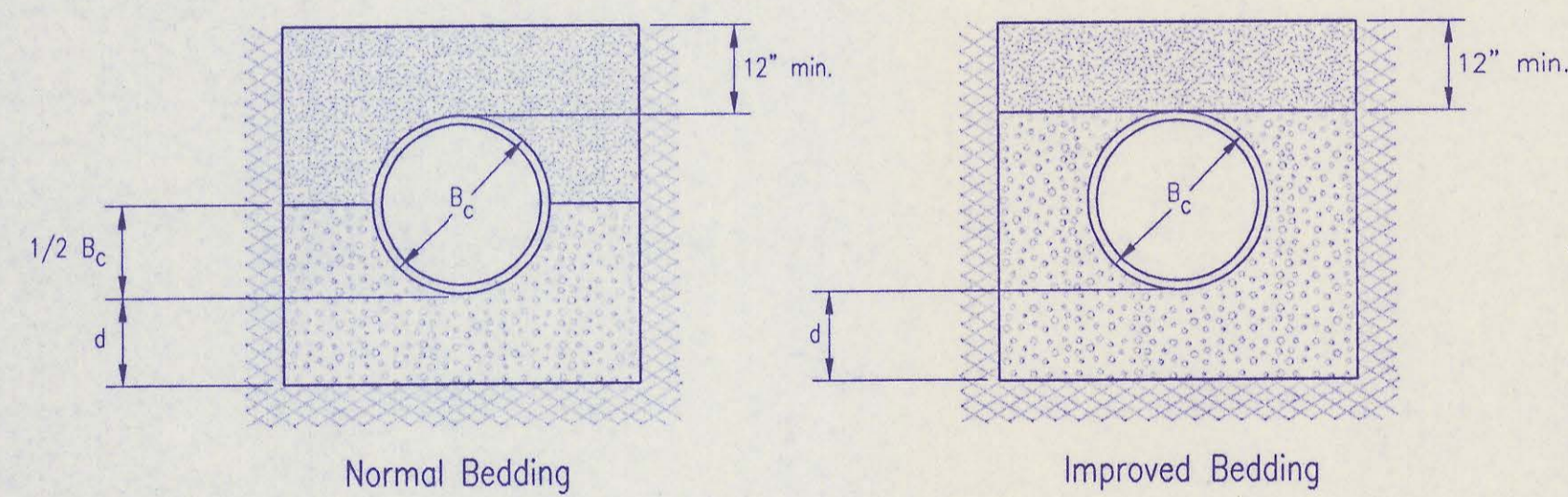


CLASS A

B_c = Outside Pipe Diameter
H = Backfill from Top of Pipe to Existing Ground
D = Inside Pipe Diameter
d = Depth of Bedding Material Below Pipe



Depth of Bedding Material Below Pipe		
D	d(min) Soil	d(min) Rock
27" & smaller	4"	6"
30" to 60"	5"	9"
66" & larger	6"	12"



CLASS B

Granular Bedding Material shall be an approved material consisting of durable crushed rock conforming with the requirements of the latest revision of ASTM C-33 Size No. 67 (3/4" to No. 4); to be placed in not more than 6" layers and compacted by slicing with a shovel or vibrating. Soundness, abrasion, and absorption limits shall be as required for coarse aggregates in Section 03010-Concrete Work in the specifications.

Sand-Gravel Bedding Material - sand-gravel mix meeting Type UD-1 of the 1990 Kansas Standard Specifications for State Road and Bridge Construction.

Compacted Embedment shall be an approved sand material free from debris, organic material, and stones with 100% passing the 3/4" sieve to be placed in uniform layers not more than 6" thick and compacted to 95 percent maximum density as determined by ASTM D698. Granular Bedding Material may be substituted for all or part of Compacted Embedment Materials.

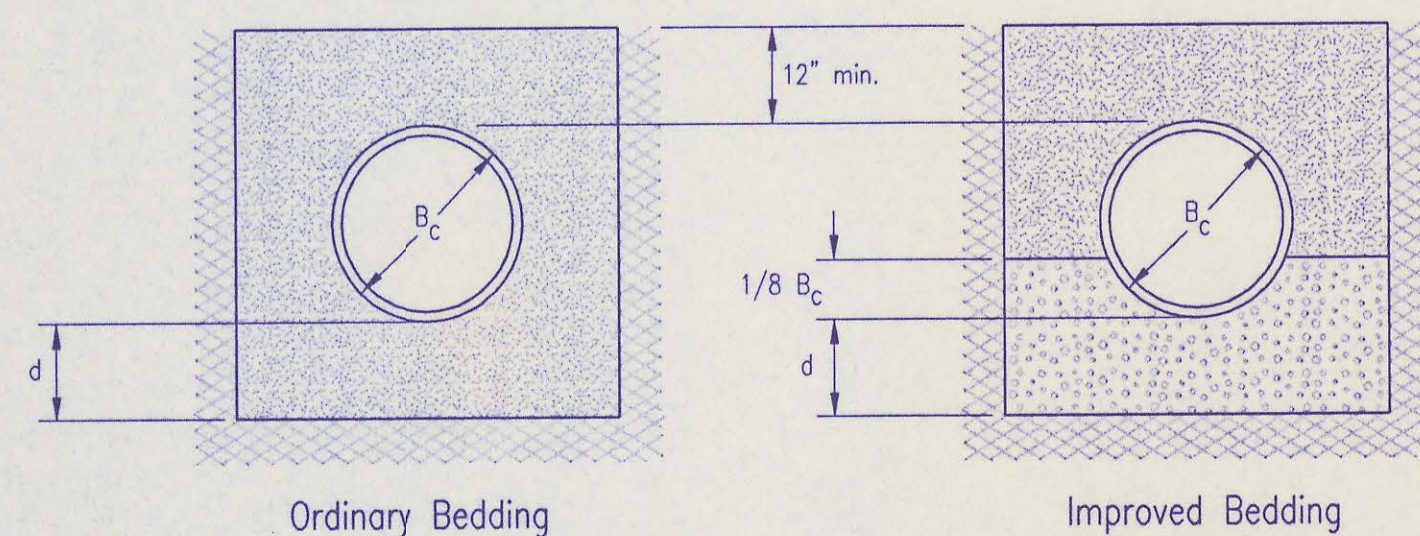
Class A "Concrete Cradle" and/or Class A "Concrete Encasement" is not required unless specified on the plans. However, where unexpected trench conditions exist or improper trenching is performed Class A Bedding may be required as determined by the Engineer.

Class B Bedding shall be used for all flexible pipe.

- Class B Normal Bedding shall be used for PVC Pipe unless wet conditions are encountered.
- Class B Improved Bedding shall be used for other flexible pipe, and for PVC pipe in wet conditions.

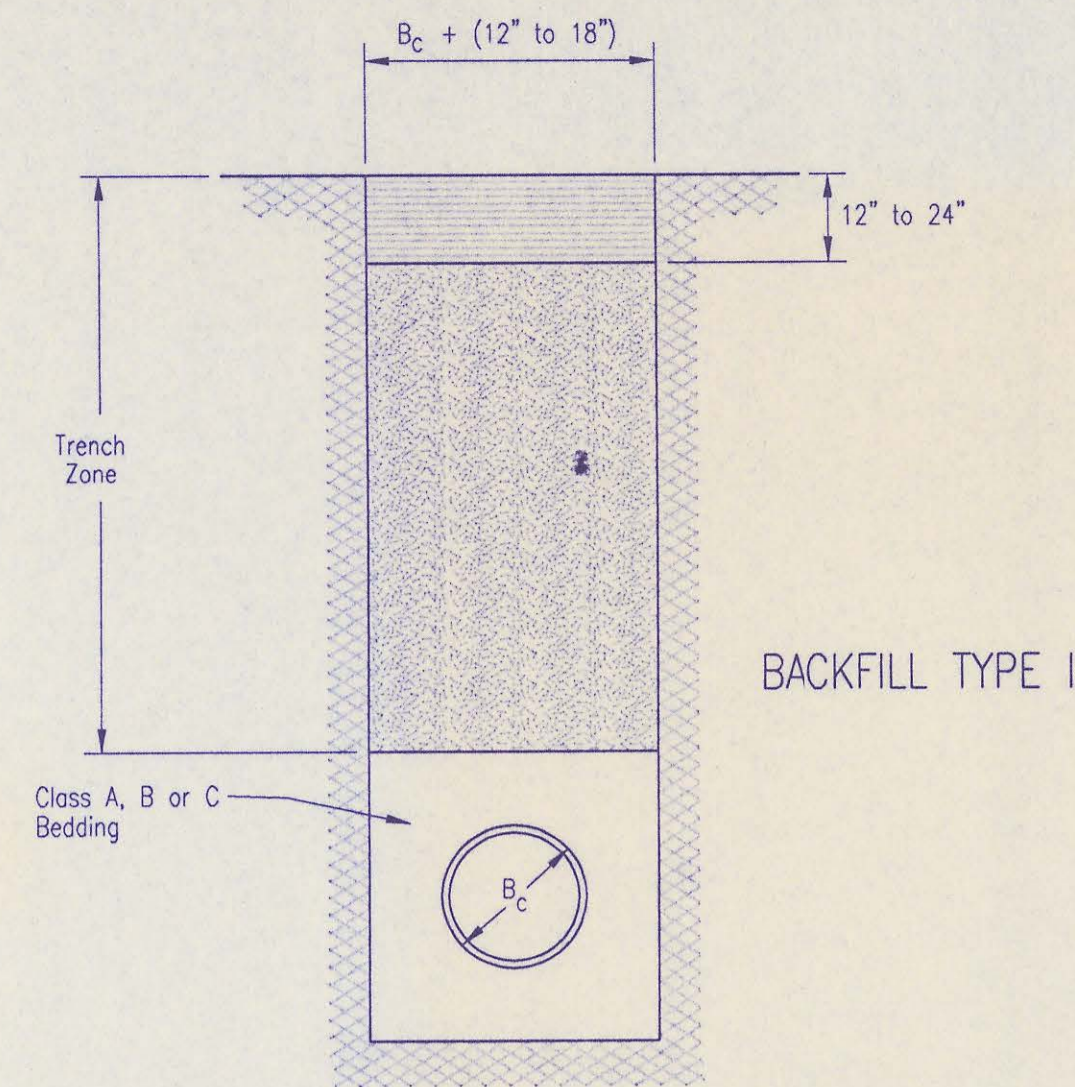
Class C Bedding shall be used for all rigid pipe.

- Class C Ordinary Bedding shall be used for all rigid pipe unless wet conditions are encountered.
- Class C Improved Bedding shall be used for wet conditions existing in the trench, as directed by the Engineer, at no additional cost to the Owner. The dimensions shall be equal to that required for "rock" excavation (see specifications).



CLASS C

PIPE ZONE BACKFILLING



B_c = Outside Pipe Diameter

Compacted Granular Backfill material shall be an approved sand material free from debris, organic material and stones with 100% passing the 3/4" sieve and not more than 15% passing a No. 200 sieve; to be jetted and mechanically vibrated into place and compacted to 95% density as determined by ASTM D698.

Uncompacted Earth Backfill material may be natural soil free from large clods or stones, brush, roots more than 2 inches in diameter, debris, and junk. Flooding with water shall be provided as directed by the Engineer.

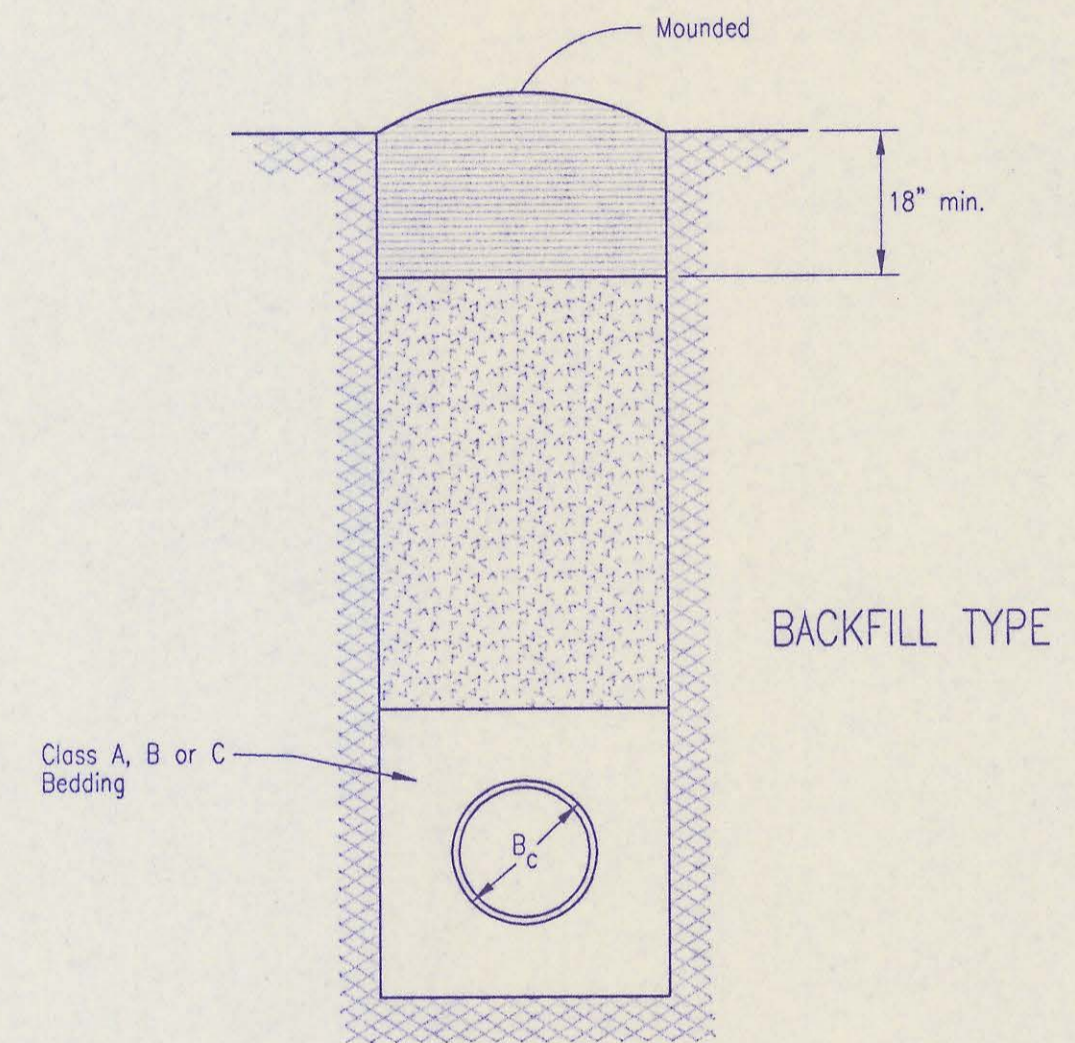
Compacted Earth Backfill shall consist of material existing prior to trenching or selected material as directed by the Engineer, and shall be compacted to 90% density as determined by ASTM D698.

Backfill: Backfill material and compaction requirements shall conform to either Type I, Type II or Type III as specified in the plans. One years maintenance will be required on all backfill.

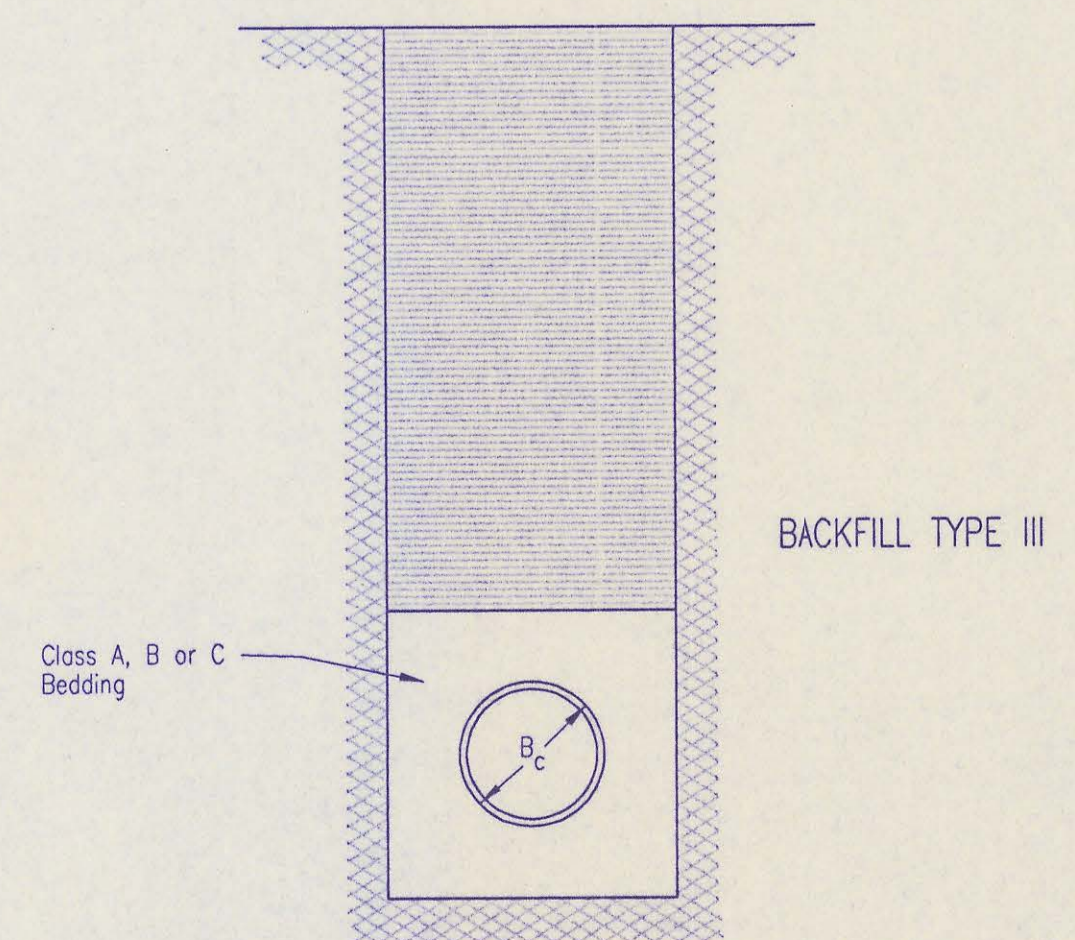
Backfilling Through Rock: Backfilling through rock shall be performed as specified in the paragraph Backfill above, except that the Pipe Zone is increased to provide eighteen (18) inches of cover over the pipe. When approved by the Engineer the remainder of the backfill may be excavated rock provided the excavated rock has been broken up so that earth and rock will thoroughly mix and not result in voids around the larger pieces of rock. Any excess rock remaining after the trench has been backfilled shall be removed or wasted as directed by the Engineer.

Backfilling Under Pavement: Backfilling under existing or proposed pavement shall be performed as Backfill Type I to a level of two (2) feet from the bottom of the pavement.* The remainder of the trench shall be backfilled with selected material, sufficiently damp to be properly compacted in layers not exceeding six (6) inches in depth, compaction shall be performed with mechanical tampers and continued until a relative density of 100 percent of standard density, in conformance with ASTM D698 is attained. *or as otherwise noted

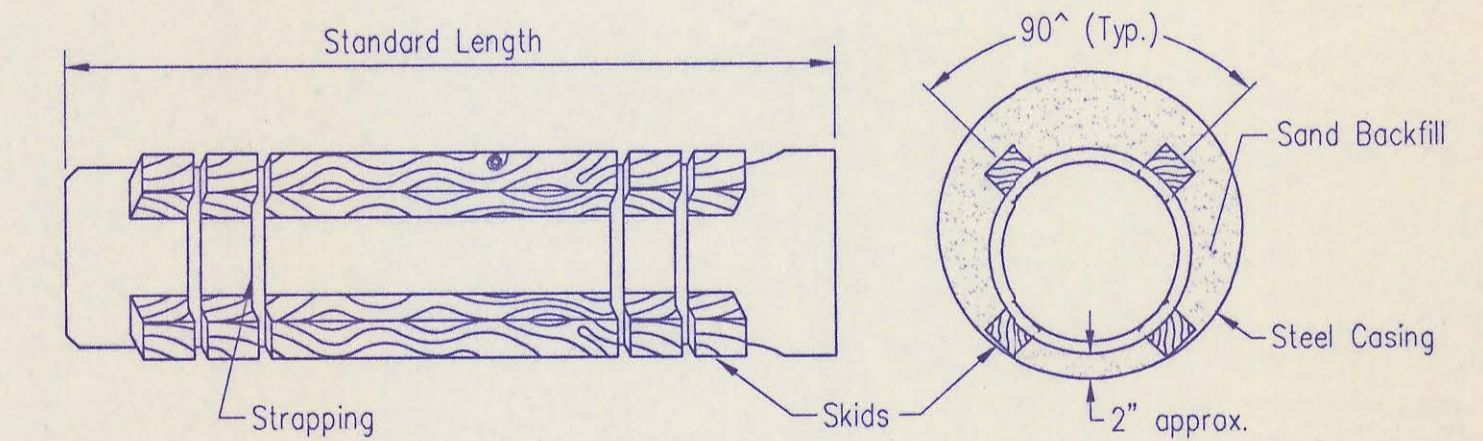
Backfilling Under Gravel Streets: Where the trench crosses or is in existing gravel surfaced streets, the backfill shall be compacted as provided in the paragraph "Backfilling Under Pavement".



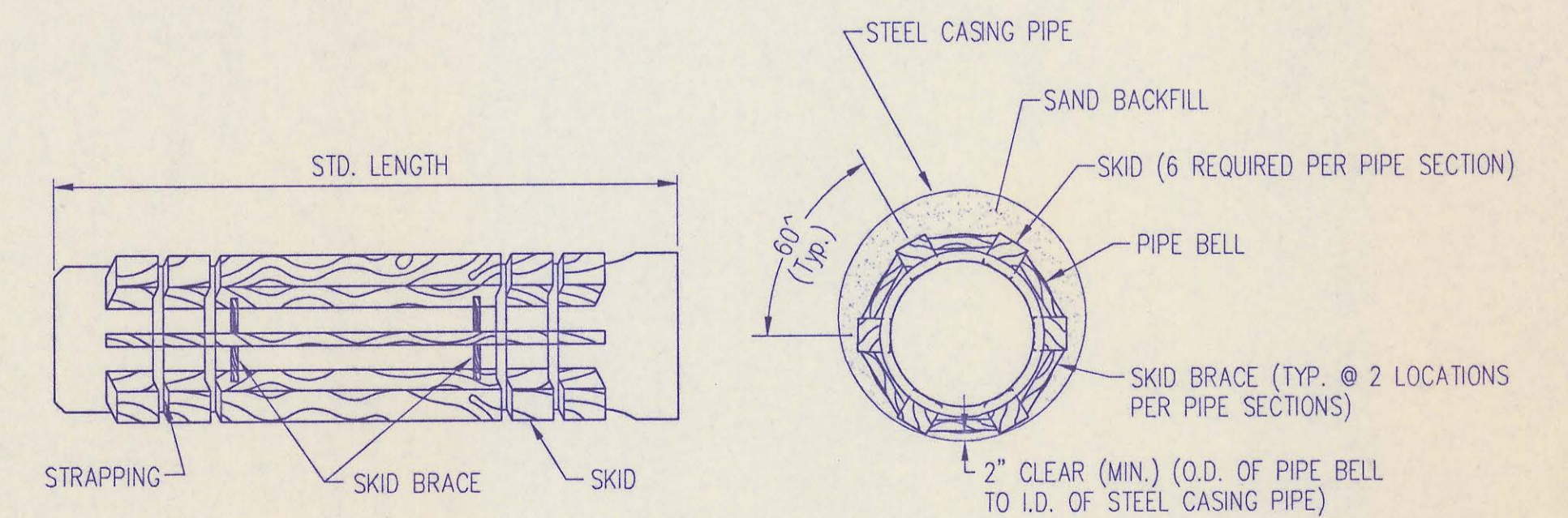
BACKFILL TYPE II



BACKFILL TYPE III



STEEL ENCASEMENT DETAIL
SEWER MAIN 12" AND UNDER

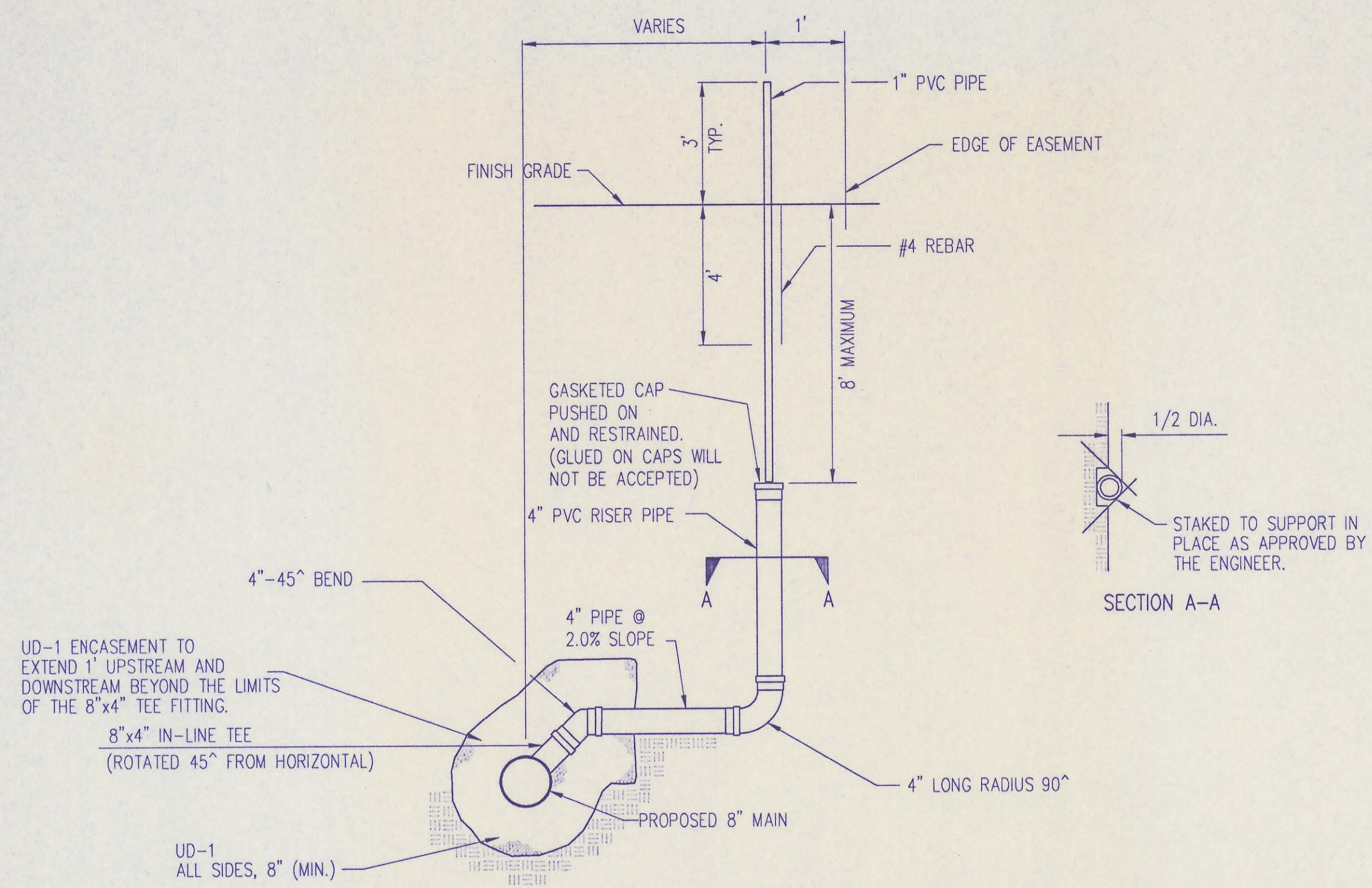


STEEL ENCASEMENT DETAIL
SEWER MAIN OVER 12"

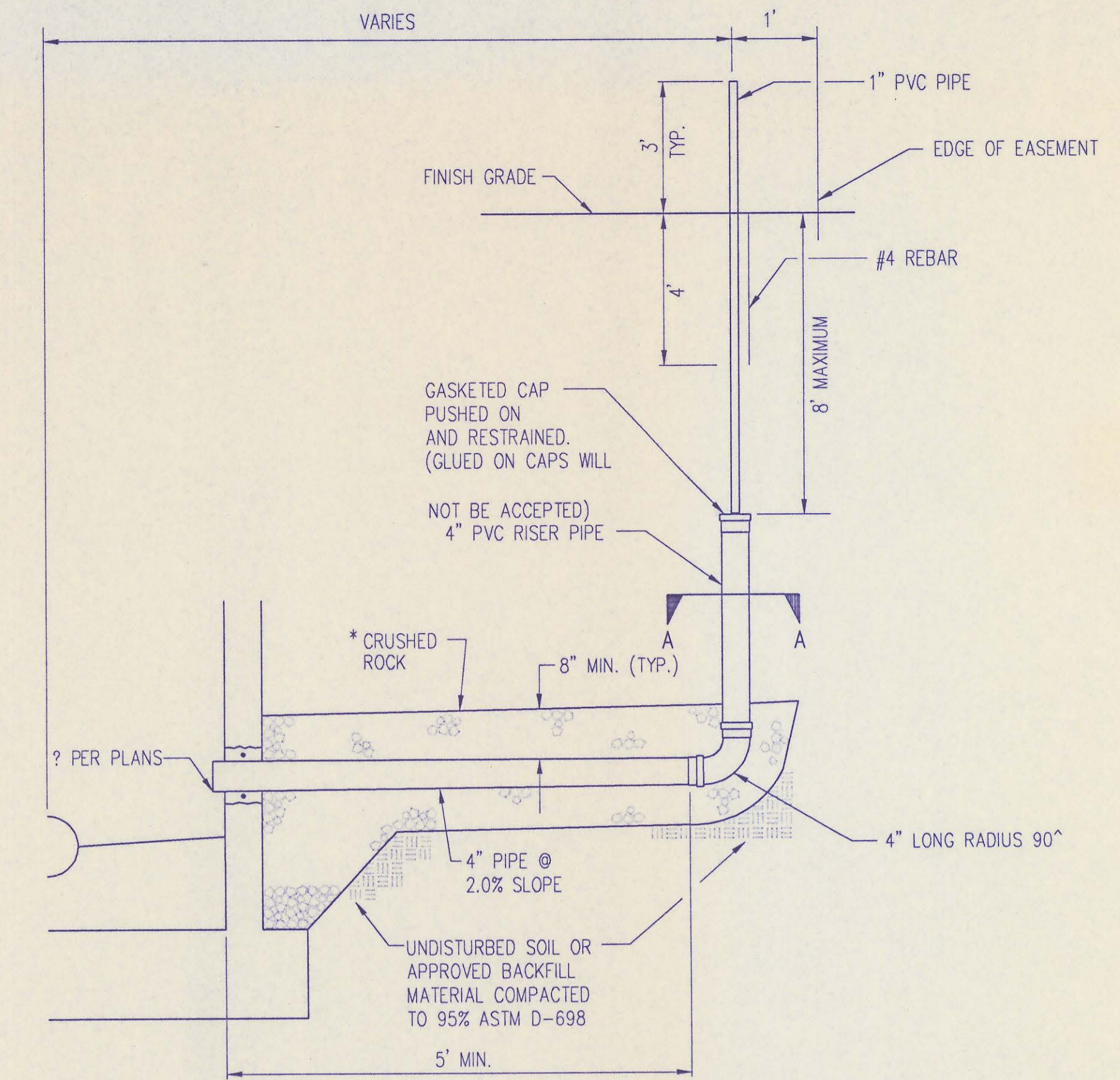
TRENCH ZONE BACKFILLING

TRENCH AND BACKFILL DETAILS

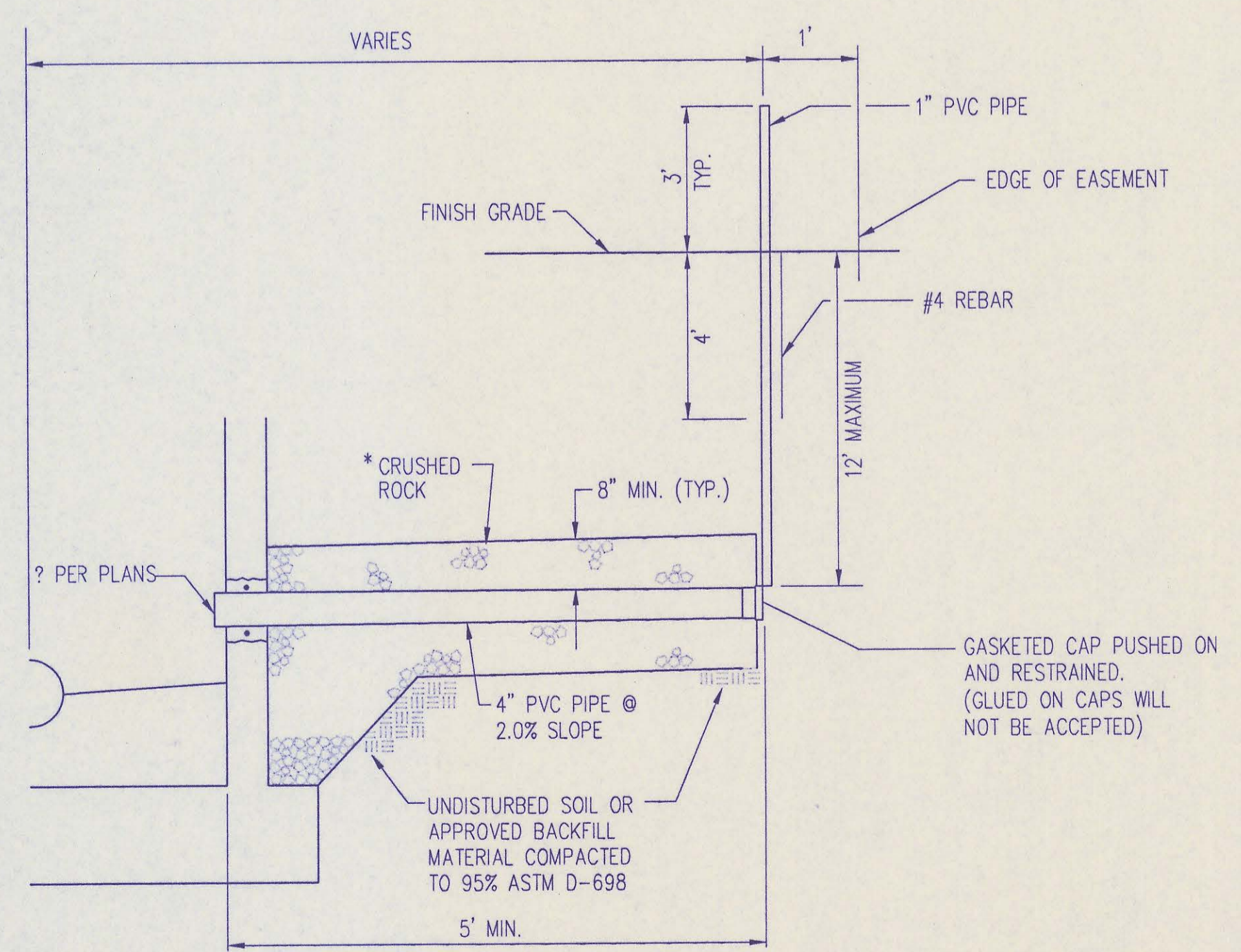
ADOPTED AS STANDARD DESIGN JANUARY 1998
BY
SEDGWICK COUNTY PUBLIC WORKS
DAVID C. SPEARS, P.E. DIRECTOR, PUBLIC WORKS/COUNTY ENGINEER



TEE SERVICE CONNECTION



MH SERVICE CONNECTION



4" STUB

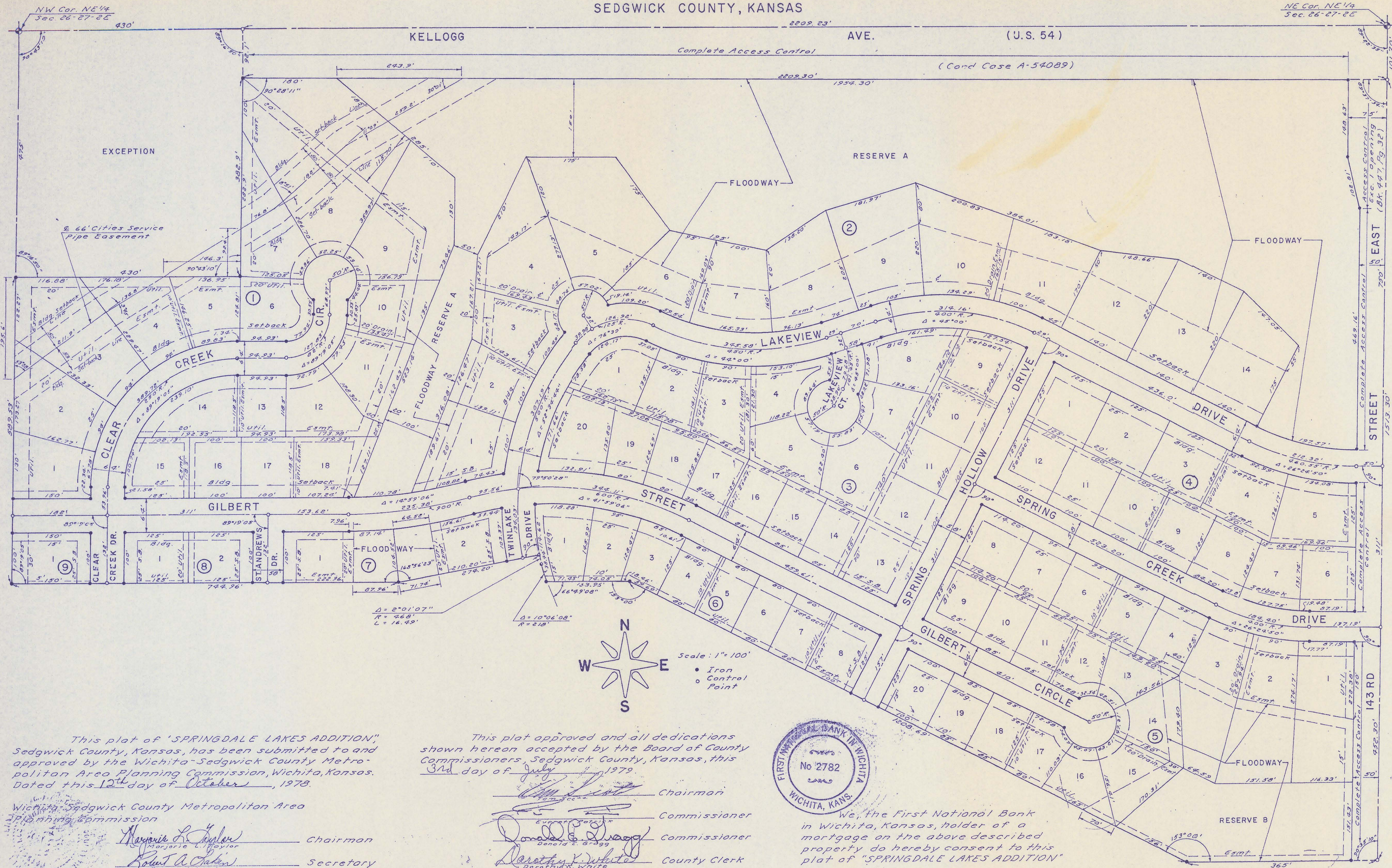
* CRUSHED ROCK SHALL MEET THE REQUIREMENTS FOR GRANULAR BEDDING MATERIAL, AS OUTLINED IN THE SPECIFICATIONS.

SERVICE CONNECTIONS ARE TO BE INSTALLED WHERE PROPOSED SEWER MAIN IS 12' OR MORE BELOW PROPOSED GROUND OR AS SHOWN IN THE PLANS.

SEWER SERVICE TABLE										
NO.	TYPE	LOCATION				FOR INFORMATION ONLY APPROXIMATE LENGTH 4" PIPE	RECORD INFORMATION (TO BE COMPLETED BY PROJECT INSPECTOR)			
		LOT NO.	BLOCK NO.	LATERAL NO.	STATION/DIRECTION		DEPTH	DISTANCE FROM NEAREST MANHOLE UPSTREAM	DISTANCE FROM NEAREST MANHOLE DOWNSTREAM	NO.
1	4" Riser Service	6	1	6-4	0+10/LT.	15'	6"	10'	89'	1
2	4" Riser	1	1	6-4	6+31.7/LT.	5'	6"	139'	39'	2
3	4" Riser	1	9	6-4	7+95.8/LT.	5'	6"	125'	39'	3
4										4
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SPRINGDALE LAKES ADDITION

SEDGWICK COUNTY, KANSAS



State of Kansas } S.S. We, Baughman Company, Sedgwick County } Surveyors in aforesaid county and state, do hereby certify that we have surveyed and platted "SPRINGDALE LAKES ADDITION", Sedgwick County, Kansas, and that the accompanying plat is a true and correct exhibit of the property surveyed described as beginning at the NE corner of the NE 1/4 of Section 26, T27S, R2E of 6th PM, Sedgwick County, Kansas; thence southerly, along the east line of said NE 1/4, 1615 feet; thence westerly, parallel with the south line of said NE 1/4, 365 feet; thence northwesterly, with a deflection angle to the right of 27°00', 1208.83 feet; thence westerly, parallel with the south line of said NE 1/4, 145.50 feet to the P.C. of a curve to the right; thence northwesterly, along said curve whose tangent deflects 66°49'08" to the right with a radius of 218 feet, a central angle of 10°06'08" and a distance of 38.44 feet to the P.T. of said curve; thence northwesterly, along a curve to the right with a radius of 468 feet, a central angle of 2°01'07" and a distance of 16.49 feet to the P.T. of said curve; thence southwesterly, with a deflection angle to the left of 90° from the tangent of said curve, 274.20 feet; thence westerly, parallel with the south line of said NE 1/4, 744.96 feet to the west line of said NE 1/4; thence northerly, along said west line, 589.53 feet to a point 475 feet south of the NW corner of said NE 1/4; thence easterly, parallel with the north line of said NE 1/4, 430 feet; thence northerly, parallel with the west line of said NE 1/4, 475 feet to the north line of said NE 1/4; thence easterly, along said north line, 2202.23 feet to the point of beginning, except that part taken for U.S. 54 Highway, (Cond. Case A-54089) & 143rd St. East (BK 447, Pg. 32, Date June 1, 1979) Baughman Company



John E. Lundblade
John E. Lundblade
Surveyor

Know all men by these presents that we, the undersigned, have caused the land described in the surveyors certificate to be platted into lots, blocks, streets, floodways and a reserve to be known as "SPRINGDALE LAKES ADDITION", Sedgwick County, Kansas. The easements are hereby granted as indicated for the construction and maintenance of public utilities. The streets are hereby dedicated to and for the use of the public. All abutters rights of access over and across the south line of Kellogg Ave. (U.S. 54) and the west line of 143rd Street East are hereby granted to the appropriate governing body, except, however, that Reserve A shall have access to 143rd Street East at one location, said location to be determined by the appropriate Engineer. The floodway covering the rear of Lots 8 thru 12, inclusive, and Lot 18 in Block 1 and Lots 1 thru 14, inclusive, Block 2 and the floodways in Blocks 5 and 7, shall be the responsibility of the abutting property owners. The floodway in Reserve A shall be the responsibility of the Homeowners Association to be established for Reserve A. Said responsibilities shall continue until such time as the governing body exercising jurisdiction elects to assume the responsibility for maintenance and improvement of the drainage, provided further that no building shall be constructed on or within said floodway, nor shall any fill, change of grade, creation of channel or other work be carried on without the permission of the Wichita-Sedgwick County Flood Control Office or their successors of office. Reserves "A" and "B" uses shall be drainage, floodway, utilities, lake, recreation and open space. Minimum building pads shall be as follows: Lots 7 & 8, Blk 1, Lots 5 thru 14, Blk 2 & Blk 4, 1314.5; Lots 9 thru 15, Blk 1, Lots 1 thru 4, Blk 2, 1316.5; Lots 1 thru 5 & Lots 12 thru 17, Blk 3, 1315.5; Blk 7, 1322.0

W.E. Lusk, Jr.
W.E. Lusk, Jr.
President

This plat of "SPRINGDALE LAKES ADDITION", Sedgwick County, Kansas, has been submitted to and approved by the Wichita-Sedgwick County Metropolitan Area Planning Commission, Wichita, Kansas, Dated this 12th day of October, 1979.

Wichita-Sedgwick County Metropolitan Area Planning Commission
Chairman
Secretary

This plat approved and all dedications shown hereon accepted by the Board of City Commissioners, Wichita, Kansas, this 19th day of June, 1979.

Mayor
City Clerk
County Clerk

This plat approved and all dedications shown hereon accepted by the Board of County Commissioners, Sedgwick County, Kansas, this 3rd day of July, 1979.

Chairman
Commissioner
County Clerk

State of Kansas } S.S. This is to certify that Sedgwick County } This plat has been filed for record in the Office of the Register of Deeds this 5th day of JULY, 1979, at 8:00 o'clock A.M., and is duly recorded.

Register of Deeds
Deputy

Restrictive Covenants F 314 pg. 503
Restrictive Covenants F 372 pg. 750
Dec. of Covenants, Conditions & Restrictions F 520 pg. 432



We, the First National Bank in Wichita, Kansas, holder of a mortgage on the above described property do hereby consent to this plat of "SPRINGDALE LAKES ADDITION"

First National Bank in Wichita
Senior Vice Pres.

State of Kansas } S.S. The foregoing instrument was acknowledged before me this 22 day of May, 1979, by the First National Bank in Wichita, by Clayton W. Hargadine, Senior Vice Pres. In testimony whereof, I have hereunto set my hand and affixed my notarial seal the day and year above written.

Notary Public
My Commission Expires 7-19-80

State of Kansas } S.S. The foregoing instrument was acknowledged before me this 22 day of May, 1979, by Springdale Lakes, Inc., by W.E. Lusk, Jr., President. In testimony whereof, I have hereunto set my hand and affixed my notarial seal the day and year above written.

Notary Public
My Commission Expires 7-17-80

