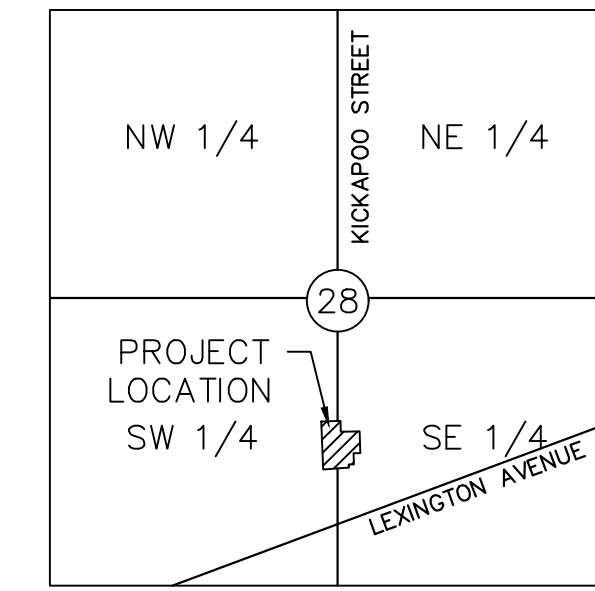


LEGAL DESCRIPTION

A tract of land being part of the Southeast Quarter of Section 28, Township 12 South, Range 22 East, in Johnson County, Kansas, being more particularly described as follows: Beginning at the Northeast corner of Lot 1, Medical Plaza Final Plat, a recorded subdivision in Book 79, Page 31 in the Johnson County recorder of deeds; Thence South 86°04'16" West, 235.56 feet along the North line of said subdivision, to the East line of Wyvoff View, a subdivision recorded in Book 28, Page 23, at the Johnson County Recorder of Deeds office; Thence North 01°49'13" East, 438.75 feet along said East line, to the South Right of Way line of West 85th St, as now established; Thence North 88°07'17" East, along said Right of Way, 171.64 feet; Thence South 01°49'17" East, 100.00 feet; Thence North 88°07'17" East, 172.75 feet; Thence South 01°49'17" East, 200 feet; Thence South 88°07'17" West, 62.50 feet; Thence South 01°49'17" East, 102.00'; Thence South 88°07'17" West, 46.49 feet; Thence South 01°49'17" East, 28.32 feet, to the Point of Beginning. Contains 1,222,454 square feet or 2.84 acres more or less.

ANDERSON ESTATES SANITARY SEWER PLANS 33475 W 85TH ST DE SOTO, KS 66018

Sanitary Permit #202400116



VICINITY MAP
SEC. 28-12-22
N.T.S.



Milburn Civil Engineering, LLC
33135 W 83RD ST
DE SOTO, KS 66018
913-583-0367

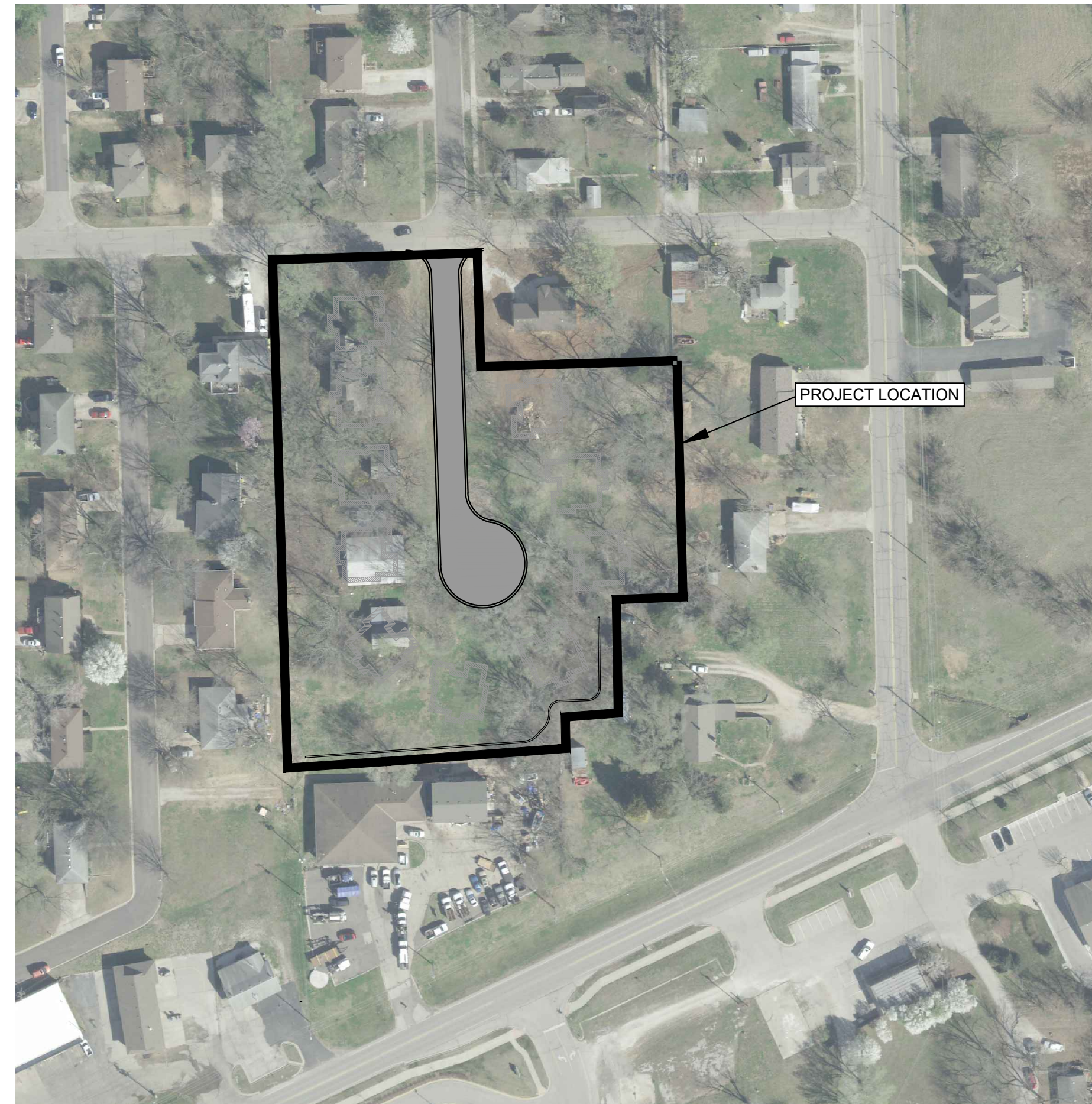


UTILITIES

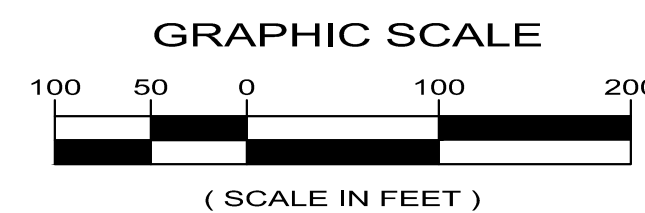
- | | |
|--|--|
| ELECTRIC
EVERGY
CONTACT MATT ROECKER
(913)667-5116 | WATER
CITY OF DE SOTO
32905 W 84TH STREET
DE SOTO, KS 66018
(913) 238-0434 |
| NATURAL GAS
ATMOS ENERGY
P.O BOX 650205
DALLAS, TEXAS 75265-0205
(888) 286-6700 | STORMWATER
CITY OF DE SOTO
32905 W 84TH STREET
DE SOTO, KS 66018
(913) 238-0434 |
| SANITARY SEWER
CITY OF DE SOTO
32905 W 84TH STREET
DE SOTO, KS 66018
(913) 238-0434 | CABLE/COMMUNICATIONS
SPECTRUM CABLE
6921 W 119TH STREET
(855)707-7328 |

INDEX OF SHEETS

- | | |
|------|--------------------------|
| C400 | COVER PAGE |
| C401 | GENERAL LAYOUT |
| C402 | PLAN & PROFILE "LINE-A" |
| C403 | SAN SERVICE LINE DETAILS |
| C404 | DETAILS AND CALCULATIONS |



LOCATION MAP



LEGEND

- PROPOSED STREET
- PROPOSED SIDEWALK
- PROPOSED R/W
- PROPOSED EASEMENT
- EXISTING CONTOURS
- EXISTING WATER VALVE
- EXISTING FIRE HYDRANT
- EXISTING WATER METER
- EXISTING WATER
- EXISTING STORM SEWER
- EXISTING SANITARY SEWER
- EXISTING GAS
- EXISTING OVERHEAD POWER
- EXISTING FIBER OPTIC
- EXISTING TELEPHONE
- EXISTING UNDERGROUND POWER
- EXISTING UTILITY POLE

SURVEY CONTROL POINTS

Point #	Northing	Easting	Elevation	Description
2	247522.47	2173039.71	819.88	BM790
40	248003.64	2172649.83	859.30	Square Cut in Top of Curb
50	248002.59	2172696.95	858.06	Plus Cut in Sidewalk
51	247992.86	2172502.82	855.55	Plus Cut in Top of Curb

BENCHMARK

BM790: Alum Disk Located at the intersection of Ottawa & Lexington, on the Northwest corner of the intersection, on 1st curb inlet on West side of Ottawa.
Elevation = 819.88

Anderson Estates - Sanitary Sewer			
No.	Description	Unit	Quantities Plan
3.00	4' Diameter Sanitary Sewer Manhole	EA	5
3.01	8" Diameter SDR-26 PVC Sanitary Sewer Pipe	LF	574
3.02	6" Diameter SDR-26 PVC Sanitary Sewer Pipe	LF	283
3.03	Connections to Proposed Manholes (Existing Sanitary Mains)	EA	2
3.04	8x6 PVC Tee	EA	9
3.05	Reinforced Concrete Encasement	LF	20

OWNER

PRAIRIE FIELD DEVELOPMENT CO LLC
26035 W 73RD ST
SHAWNEE, KS 66227

Roger Neighbors
ROGER NEIGHBORS

4/3/24
DATE

CIVIL ENGINEER

MILBURN CIVIL ENGINEERING, LLC
33135 W 83RD ST
DE SOTO, KS 66018

PLANS PREPARED AND SUBMITTED BY:

Justin Milburn

04/05/2024

JUSTIN MILBURN, KANSAS PE #18836

DATE

APPROVED BY: CITY OF DE SOTO, KANSAS

Joe Johnson P.E.

04/05/2024

JOE JOHNSON
CITY ENGINEER, DE SOTO, KANSAS
APPROVED FROM ONE YEAR FROM THIS DATE

DATE

ANDERSON ESTATES
 SANITARY SEWER PLANS
 33475 W 85TH ST
 DE SOTO, KS 66018

DATE 4/3/2024
DESIGNED BY TAS
CHECKED BY JPM

REVISIONS DATE

COVER
C400

GENERAL NOTES

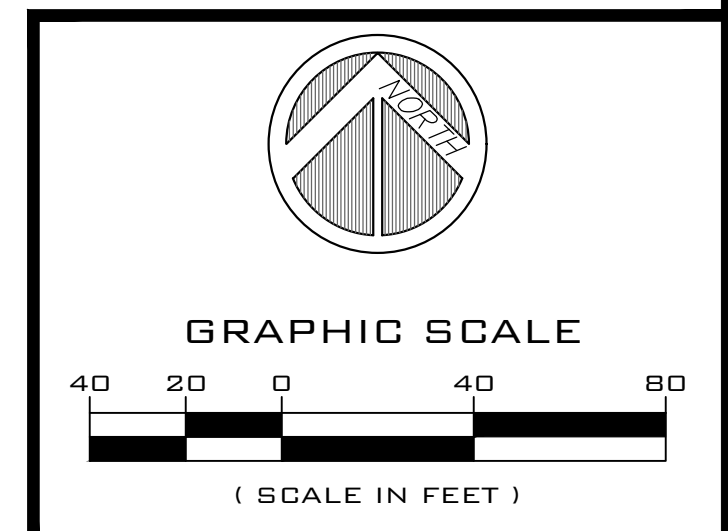
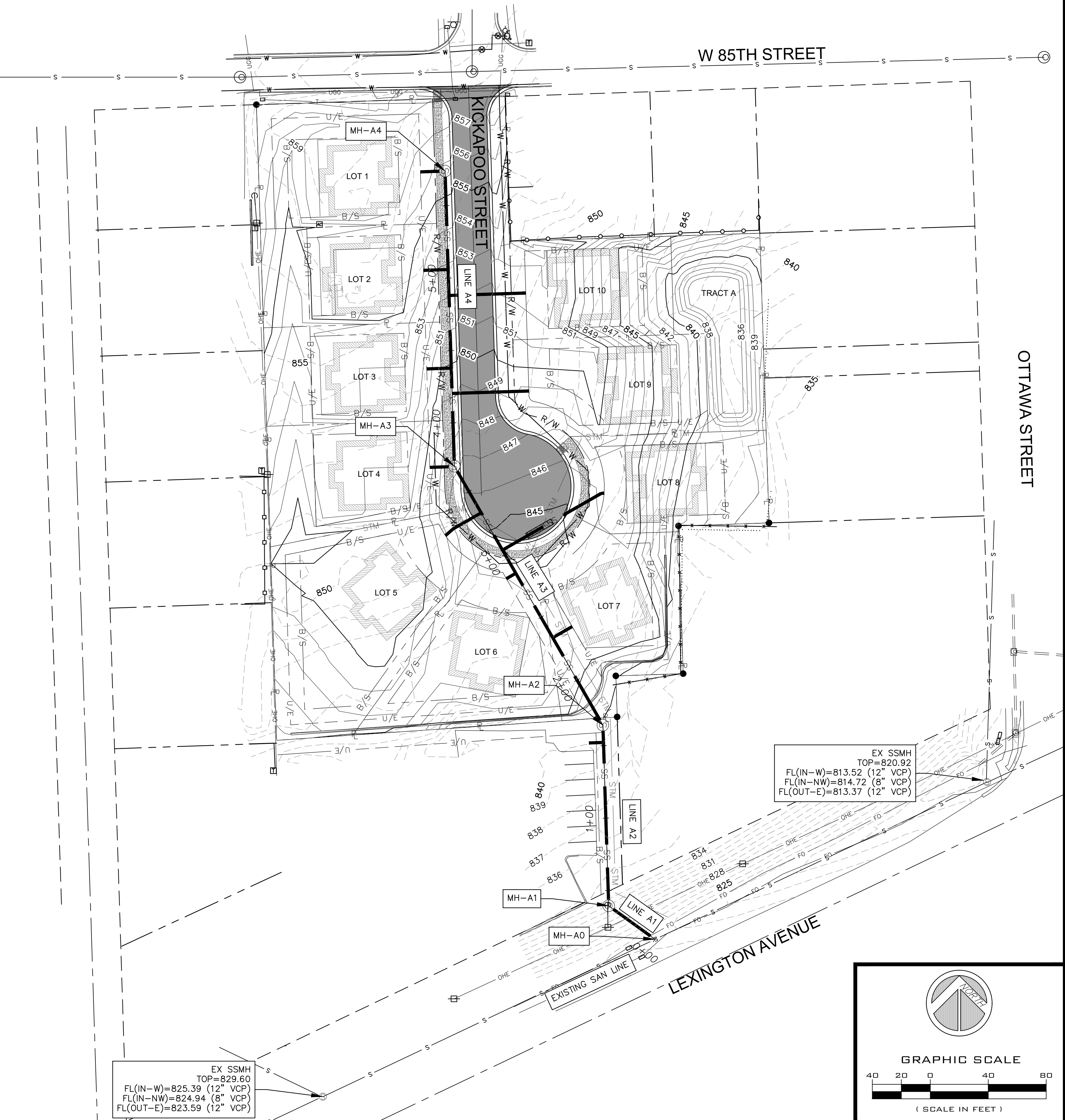
- ALL EXISTING UTILITIES INDICATED ON THE DRAWINGS ARE ACCORDING TO THE BEST INFORMATION AVAILABLE TO THE ENGINEER; HOWEVER, ALL UTILITIES ACTUALLY EXISTING MAY NOT BE SHOWN. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATIONS AND ELEVATIONS OF ALL EXISTING UTILITIES. UTILITIES DAMAGED THROUGH THE NEGLIGENCE OF THE CONTRACTOR TO OBTAIN THE LOCATION OF SAME SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT HIS EXPENSE.
- PRIOR TO THE LAYING OF PIPE OR SETTING OF MANHOLES, THE CONTRACTOR SHALL EXPOSE ALL UTILITIES AT PIPE CROSSINGS AND VERIFY ELEVATIONS TO DETERMINE ANY CONFLICTS THAT MAY EXIST. THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER OF ANY SUCH CONFLICTS.
- THE CONTRACTOR MUST SUPPORT ALL UTILITIES DURING THIS CONSTRUCTION TO THE SATISFACTION OF THE RESPECTIVE UTILITY COMPANY. ALL SHORING AND TEMPORARY SUPPORTS ARE TO BE INCLUDED IN THE CONTRACT PRICE.
- UNLESS OTHERWISE SPECIFIED PIPE AND PIPE FITTINGS SHALL MEET AND/OR EXCEED ALL OF THE REQUIREMENTS OF THE LATEST REVISION OF ASTM SPECIFICATION D-3034 AND CONFORM TO STANDARD RATIO (SDR) 26. PIPE LENGTHS SHALL HAVE TERMINALS FABRICATED FOR THE APPROVED JOINT SYSTEM AND SUCH LENGTH TO PERMIT EASE OF HANDLING AND INSTALLATION WITHOUT DAMAGE TO THE PIPE SECTIONS. JOINTS SHALL CONFORM TO ASTM D3212 AND SHALL BE SLIP JOINT WITH A RUBBER (NEOPRENE) GASKET TO FORM A TIGHT COMPRESSION SEAL. FITTINGS AND OR ADAPTERS SHALL BE AS APPROVED BY THE DIRECTOR OF PUBLIC WORKS. THE PIPE SHALL BE PROTECTED AGAINST ULTRAVIOLET LIGHT DEGRADATION. EACH PIPE SHALL BE IDENTIFIED WITH THE MANUFACTURER'S NAME, PIPE DESIGNATION, AND DATE OF MANUFACTURE.
- THE LAYING OF WATER PIPES AND SANITARY SEWERS SHALL BE IN SEPARATE TRENCHES WITH UNDISTURBED EARTH BETWEEN THEM. WHEN A WATER LINE AND A SANITARY SEWER CROSS AND THE SEWER IS TWO FEET OR MORE (CLEAR SPACE) BELOW THE WATER PIPE, NO EXTRA PROTECTION OR SPECIAL REQUIREMENTS ARE NEEDED. AT ALL OTHER CROSSINGS, THE SEWER SHALL BE CONSTRUCTED OF AN APPROVED DUCTILE IRON, PVC, OR REINFORCED CONCRETE PIPE WITH GASKETED JOINTS EXTENDED FOR A DISTANCE OF 10 FEET ON EACH SIDE OF THE CROSSING. THE SEWER LINE SHALL BE PRESSURE/LEAK TESTED PER KOMO APWA SPECIFICATIONS.
- THE PIPE SHALL BE STORED AT THE SITE TO AVOID ANY DAMAGE TO THE PIPE, PIPE COATINGS, AND JOINT SYSTEM. WHEN THE PIPE IS LAID OUT ALONG THE TRENCH, THE SAME PRECAUTIONS SHALL BE TAKEN TO PREVENT DAMAGE TO THE PIPE OR JOINT SYSTEMS.
- THE INTERIOR OF ALL PIPE SHALL BE THOROUGHLY CLEANED OF ALL FOREIGN MATTER BEFORE BEING LOWERED INTO THE TRENCH, AND SHALL BE KEPT CLEAN DURING THE LAYING OPERATION BY MEANS OF PLUGS, PIGS, SWABS OR OTHER APPROVED METHODS.
- EACH SECTION OF PIPE SHALL BE LAID TO LINE AND GRADE PROCEEDING UPGRADE WITH THE SPIGOT ENDS POINTING IN THE DIRECTION OF FLOW. THE TRENCH BED SHALL SUPPORT THE FULL LENGTH OF PIPE, EXCEPT FOR JOINT RECESSES, OVER THE BOTTOM QUADRANT OF THE PIPE CIRCUMFERENCE UNLESS SHOWN OTHERWISE IN THE DETAILS. WHERE SHOWN ON THE PLANS, SPECIFIED, OR WHEN DIRECTED BY THE DIRECTOR OF PUBLIC WORKS THE PIPE SHALL BE SUPPORTED ON SPECIAL BEDDING MATERIAL, CONCRETE CRADLE, OR CONCRETE ENCASUREMENT.
- ANY PIPE THAT HAS ITS GRADE OR JOINTS DISTURBED AFTER LAYING, SHALL BE TAKEN UP AND RE-LAID BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. TRENCHES SHALL BE KEPT FREE FROM WATER UNTIL THE PIPE SECTIONS ARE JOINTED, AND PIPE SHALL NOT BE LAID WHEN THE CONDITION OF THE TRENCH OR THE WEATHER IS UNSUITABLE FOR SUCH WORK. AT TIMES WHEN WORK IS NOT IN PROGRESS, OPEN ENDS OF PIPE AND FITTINGS SHALL BE SECURELY AND SATISFACTORILY CLOSED SO THAT NO TRENCH WATER, EARTH, OR OTHER SUBSTANCE WILL ENTER THE PIPE.
- ALL SECTIONS OF THE PIPE SHALL BE SET TO FORM A CLOSE CONCENTRIC JOINT WITH THE PRECEDING PIPE. JOINTS SHALL BE MADE WITH THE PIPE IN PLACE IN THE TRENCH UNLESS APPROVED OTHERWISE IN WRITING BY THE DIRECTOR OF PUBLIC WORKS. ALL PIPE AND JOINT SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS EXCEPT FOR VARIATIONS DUE TO SPECIAL ADAPTERS, WITH ALL TYPES AS APPROVED BY THE DIRECTOR OF PUBLIC WORKS. CARE SHALL BE TAKEN TO LUBRICATE JOINT SYSTEMS TO AVOID DAMAGE OR PREVENT TWISTING OF RUBBER GASKETS OUT OF POSITION. PIPE HAVING SMOOTH EXTERIOR SURFACES, UNABLE TO MAKE A WATERTIGHT BOND WITH MANHOLE WALLS, SHALL BE INSTALLED WITH A RUBBER WATER STOP AT ALL MANHOLE PENETRATIONS AS RECOMMENDED BY THE PIPE MANUFACTURER AND AS DIRECTED BY THE DIRECTOR OF PUBLIC WORKS.
- A MINIMUM OF ONE (1) COMPACTION TEST SHALL BE PERFORMED BY A QUALIFIED TESTING LABORATORY AT INTERVALS NOT EXCEEDING 200'-FEET OF TRENCH FOR THE FIRST AND EVERY OTHER 6-INCH LIFT OF COMPACTED TRENCH BACKFILL.
- THE CONTRACTOR SHALL PROVIDE SHOP DRAWINGS ON MATERIAL AND STRUCTURES USED FOR APPROVAL BY THIS ENGINEER AND FINAL APPROVAL BY THE CITY OF DE SOTO SANITARY SEWER DEPARTMENT.

GENERAL NOTES - CITY OF DE SOTO

- THE SPECIFICATIONS FOR THIS PROJECT SHALL BE CURRENT AMERICAN PUBLIC WORKS ASSOCIATION, KANSAS CITY CHAPTER STANDARD SPECIFICATIONS. IN ADDITION, THE KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT SPECIFICATIONS, SHALL GOVERN FOR ALL ITEMS OR WORK SHOWN ON THESE PLANS THAT ARE NOT ADDRESSED BY THE APWA SPECIFICATIONS.
- THE CONTRACTOR SHALL CALL 1-800-DIG-SAFE PRIOR TO PROJECT EXCAVATION.
- THE CONTRACTOR SHALL HAVE ALL UTILITIES LOCATED BY THE RESPECTIVE UTILITY OWNERS PRIOR TO ANY ON-SITE EXCAVATION. KEY LOCATIONS AS NOTED SHALL BE LOCATED VERTICALLY/HORIZONTALLY BY UTILITY OWNERS AND/OR UTILITY OWNERS SHALL BE PRESENT ONSITE FOR LOCATION PRIOR TO EXCAVATION. CONTRACTOR SHALL COORDINATE ANY UTILITY CONFLICTS WITH THE RESPECTIVE UTILITY COMPANY. REQUIRED RELOCATES WILL BE PAID BY THE CONTRACTOR.
- THE CONTRACTOR SHALL PROTECT EXISTING UTILITIES AT ALL TIMES. RELOCATION OF EXISTING UTILITIES BY CONTRACTOR MUST BE COORDINATED WITH AND APPROVED BY THE UTILITY OWNER, THE CITY, AND THE ENGINEER.
- THE CONTRACTOR SHALL MAINTAIN DRAINAGE DURING CONSTRUCTION AND IS RESPONSIBLE FOR ANY DEWATERING NECESSARY FOR CONSTRUCTION. DEWATERING SHALL BE SUBSIDIARY TO OTHER BID ITEMS.
- THE CONTRACTOR SHALL GIVE NOTICE TO THE CITY, POLICE, AND UTILITY DEPARTMENTS 48 HOURS IN ADVANCE OF BEGINNING CONSTRUCTION WORK ON ANY EXISTING STREET. NO EXCAVATION SHALL BE LEFT UNATTENDED AND UNPROTECTED. CONTRACTOR IS RESPONSIBLE FOR ALL TRAFFIC CONTROL AND SIGNAGE REQUIRED.
- CONTRACTOR SHALL PROMPTLY REPLACE ANY EXISTING FEATURES REMOVED, INCLUDING MAILBOXES, FENCES, POSTS, SIGNS, ETC. AS NECESSARY UPON COMPLETION OF CONSTRUCTION. THIS WORK SHALL BE SUBSIDIARY TO "CLEARING & GRUBBING".
- ALL AREAS DISTURBED DURING CONSTRUCTION SHALL BE FERTILIZED, SEEDED, AND MULCHED BY THE CONTRACTOR IN ACCORDANCE WITH SECTION 2400 OF THE AMERICAN PUBLIC WORKS ASSOCIATION STANDARD SPECIFICATIONS, LATEST EDITION.
- THE CONTRACTOR SHALL PROVIDE ADEQUATE TRAFFIC CONTROL SIGNING, BARRELS, AND BARRICADES AS RECOMMENDED IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION, OR AS OTHERWISE BY THE CITY. TYPE AND PLACEMENT OF STOP SIGNS SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION, OR AS OTHERWISE REQUIRED BY THE CITY.
- CONSTRUCTION STAKING SHALL BE PROVIDED BY THE CONTRACTOR. SURVEY STAKES, BENCHMARKS, AND PROPERTY PINS DESTROYED BY THE CONTRACTOR SHALL BE REPLACED BY THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL COMPLY WITH SECTION 5100 OF THE APWA IN OBSERVING SOIL EROSION CONTROL MEASURES DURING AND AFTER CONSTRUCTION, ON AND OFF SITE.
- THE CONTRACTOR SHALL PROVIDE AND PAY FOR TESTING OF ALL INSTALLED COMPONENTS IN ACCORDANCE WITH SECTION 2509 OF THE APWA SPECIFICATIONS.
- DURING THE PERIOD OF TWO YEARS FROM THE DATE OF FINAL ACCEPTANCE BY THE CITY, THE CONTRACTOR IS RESPONSIBLE FOR MAKING ANY NECESSARY REPAIRS ARISING OUT OF DEFECTIVE WORKMANSHIP OR MATERIALS. THIS INCLUDES, BUT IS NOT LIMITED TO, TRENCH SETTLEMENT OF STORM SEWERS, WATERLINES, AND SANITARY SEWERS CONSTRUCTED AS PART OF THE PROJECT. THE CITY SHALL PERFORM AN INSPECTION 23 MONTHS AFTER THE PROJECTS HAS BEEN ACCEPTED BY THE CITY TO DETERMINE WHAT REPAIRS NEED TO BE MADE.
- DEVELOPMENT PLANS ARE APPROVED INITIALLY FOR ONE YEAR AFTER WHICH THEY AUTOMATICALLY BECOME VOID AND MUST BE UPDATED AND RE-APPROVED BY THE CITY ENGINEER BEFORE ANY CONSTRUCTION WILL BE PERMITTED.
- THE CITY OF DE SOTO PLAN REVIEW IS ONLY FOR GENERAL CONFORMANCE WITH THE CITY OF DE SOTO DESIGN CRITERIA AND THE CITY CODE. THE CITY IS NOT RESPONSIBLE FOR THE ACCURACY AND ADEQUACY OF THE DESIGN, OR DIMENSIONS AND ELEVATIONS WHICH SHALL BE CONFIRMED AND CORRELATED AT THE JOB SITE. THE CITY OF DE SOTO THROUGH APPROVAL OF THE DOCUMENT ASSUMES NO RESPONSIBILITY, OTHER THAN THAT AS STATED ABOVE, FOR THE COMPLETENESS AND/OR ACCURACY OF THIS DOCUMENT.
- THE CONTRACTOR SHALL HAVE ONE COPY OF THE PLANS APPROVED BY THE CITY OF DE SOTO WITH STATE APPROVAL STAMP ON COVER SHEET AND ONE COPY OF THE APPROPRIATE DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS AT THE JOB SITE AT ALL TIMES.
- THE CONTRACTOR SHALL NOT BE ALLOWED TO WORK ON SUNDAYS, HOLIDAYS OR SATURDAY WORK SHALL BE APPROVED BY THE CITY ENGINEER.
- CONSTRUCTION OF THE IMPROVEMENTS SHOWN OR IMPLIED BY THIS SET OF DRAWINGS SHALL NOT BE INITIATED OF ANY PART THEREOF AND ALL REQUIRED AND PROPERLY EXECUTED BONDS AND CONTRACT AGREEMENTS ARE RECEIVED AND APPROVED BY THE CITY ENGINEER.
- THE CONTRACTOR SHALL SUBMIT A PERFORMANCE AND 2 YEAR MAINTENANCE BOND TO THE CITY OF DE SOTO PRIOR TO THE START OF CONSTRUCTION.
- THE CONTRACTOR SHALL SUBMIT PROOF OF CONTRACTOR'S LIABILITY INSURANCE PRIOR TO CONSTRUCTION. THIS INSURANCE SHALL LIST THE CITY OF DE SOTO AS ADDITIONAL INSURED.
- CONSTRUCTION INSPECTION WILL BE PROVIDED BY THE CITY OF DE SOTO. A FEE IN THE AMOUNT OF 3% OF THE BONDED IMPROVEMENT COST WILL BE ASSESSED.



Milburn Civil Engineering, LLC
 MILBURN CIVIL ENGINEERING, LLC
 33135 W 83RD ST
 DE SOTO, KS 66018
 913-583-0367



ANDERSON ESTATES
 SANITARY SEWER PLANS
 33475 W 85TH ST
 DE SOTO, KS 66018

DATE	4/3/2024
DESIGNED BY	TAS
CHECKED BY	JPM
REVISIONS	DATE

GENERAL LAYOUT
C401

Apr 03, 2024 - 2:02pm - USER: gaitmann
 F:\Civil_3D\Projects\De Soto\Anderson Estates\1604-251\CD\Sheets\Project - Sanitary.dwg

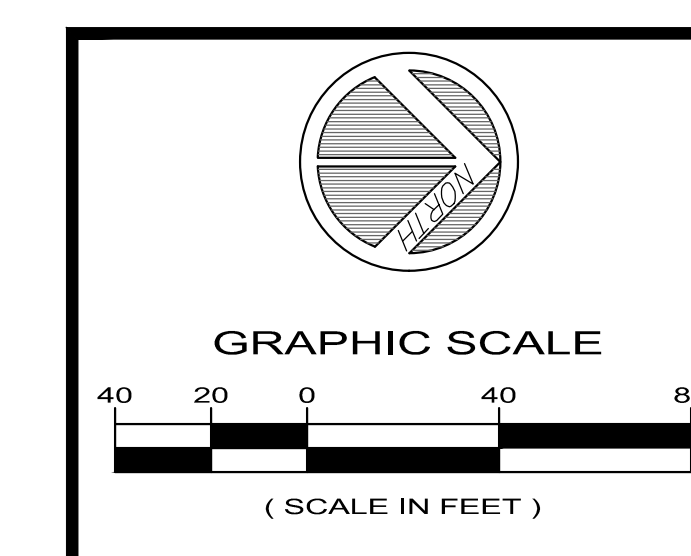


Know what's below.
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913-583-0367

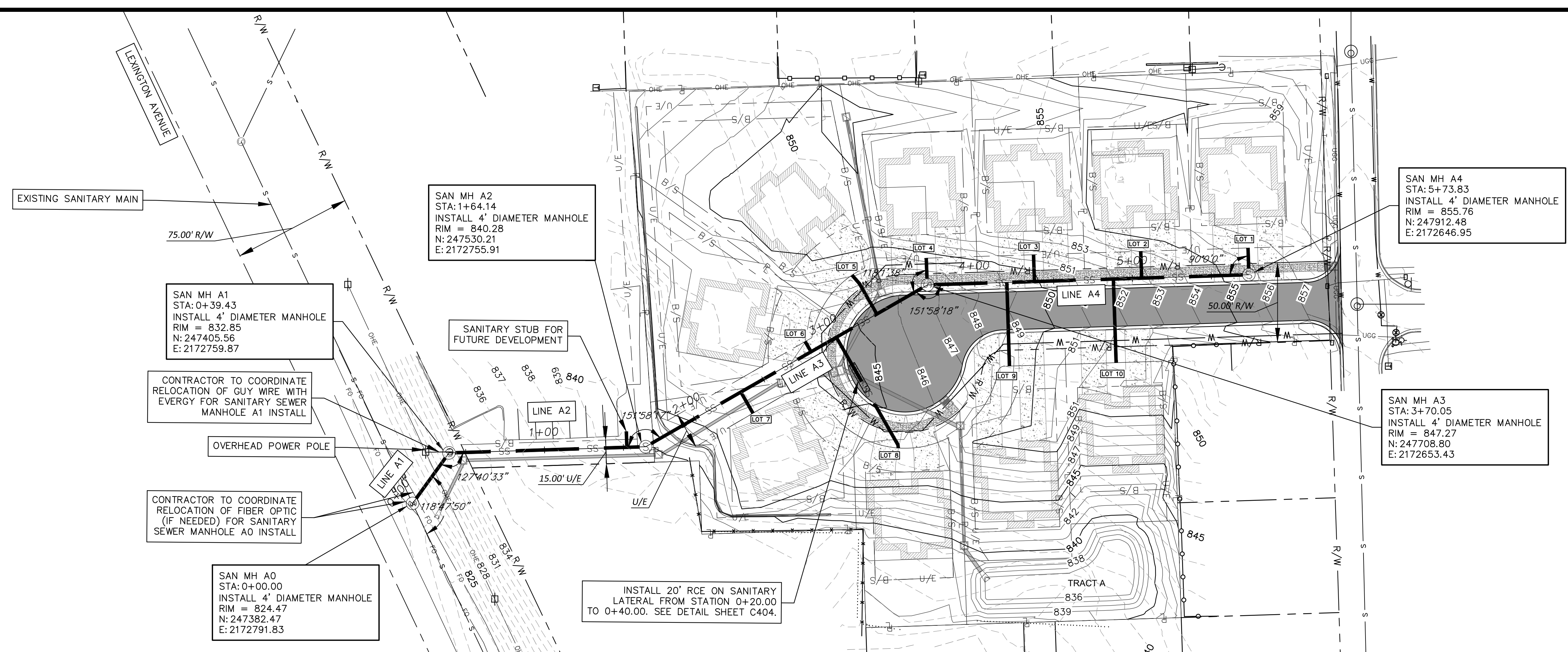


ANDERSON ESTATES
SANITARY SEWER PLANS
33475 W 85TH ST
DE SOTO, KS 66018

DATE 4/15/2024
DESIGNED BY TAS
CHECKED BY JPM

REVISIONS	DATE

PLAN & PROFILE 'LINE A'
C402



SAN MH A1
STA: 0+39.43
INSTALL 4' DIAMETER MANHOLE
RIM = 832.85
N: 247405.56
E: 2172759.87

SAN MH A2
STA: 1+64.14
INSTALL 4' DIAMETER MANHOLE
RIM = 840.28
N: 247530.21
E: 2172755.91

SAN MH A4
STA: 5+73.83
INSTALL 4' DIAMETER MANHOLE
RIM = 855.76
N: 247912.48
E: 2172646.95

SAN MH A3
STA: 3+70.05
INSTALL 4' DIAMETER MANHOLE
RIM = 847.27
N: 247708.80
E: 2172653.43

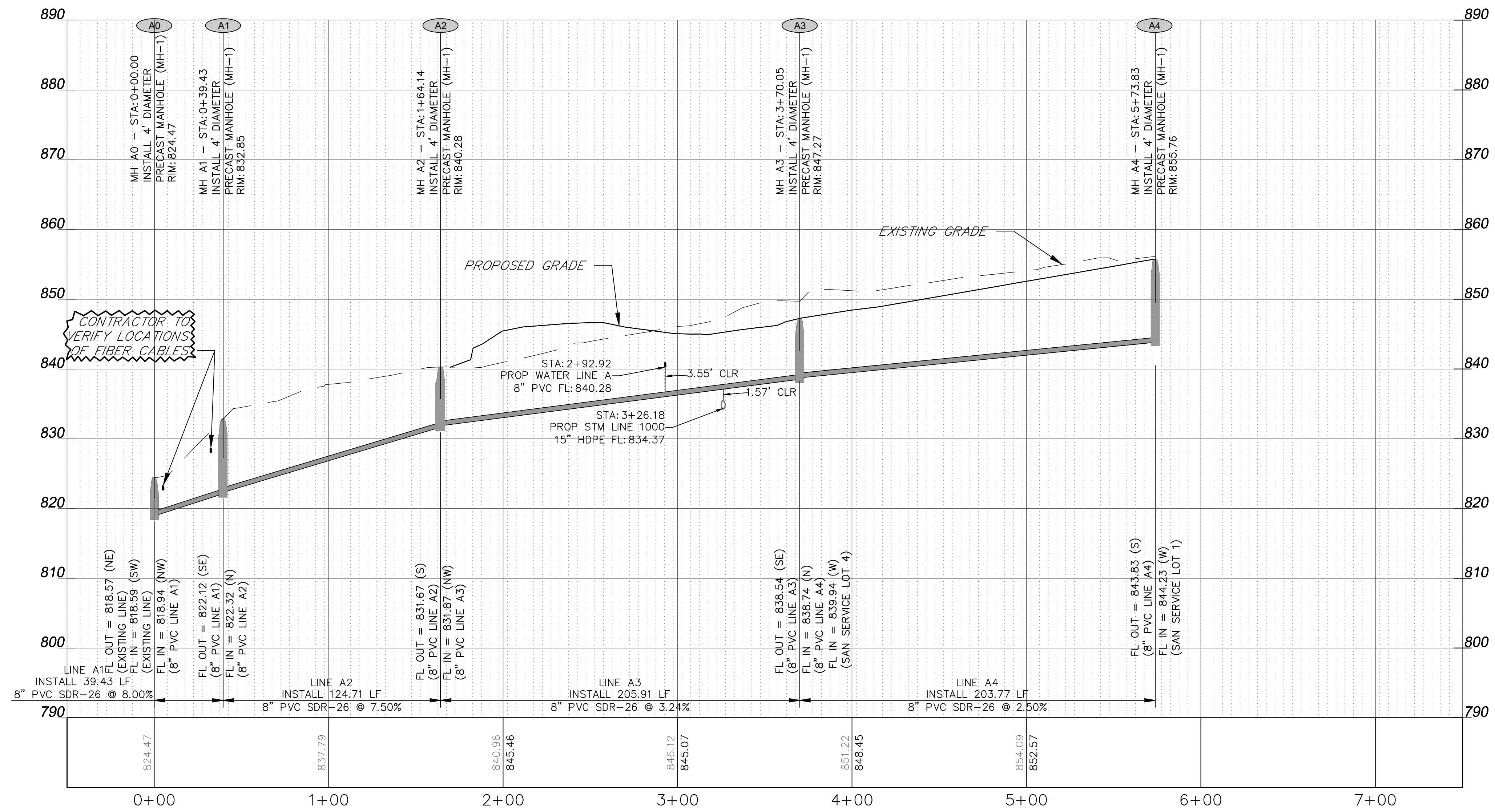
SAN MH A0
STA: 0+00.00
INSTALL 4' DIAMETER MANHOLE
RIM = 824.47
N: 247382.47
E: 2172791.83

INSTALL 20" RCE ON SANITARY
LATERAL FROM STATION 0+20.00
TO 0+40.00. SEE DETAIL SHEET C404.

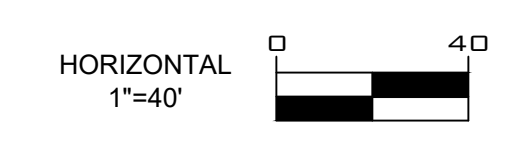
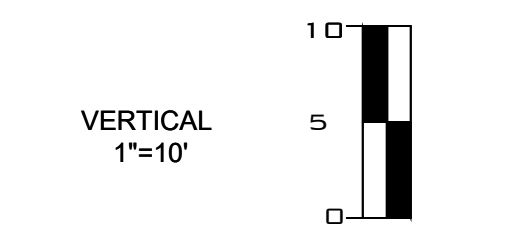
CONTRACTOR TO COORDINATE
RELOCATION OF GUY WIRE WITH
EVERGY FOR SANITARY SEWER
MANHOLE A1 INSTALL

CONTRACTOR TO COORDINATE
RELOCATION OF FIBER OPTIC
(IF NEEDED) FOR SANITARY
SEWER MANHOLE A0 INSTALL

SAN LINE A



GRAPHIC SCALES



Apr 15, 2024 - 11:37am - USER: tsoag
F:\Chil_3D\Projects\Done Anderson Estates\1604-251\CAD\Sheets\ Project - Sanitary.dwg



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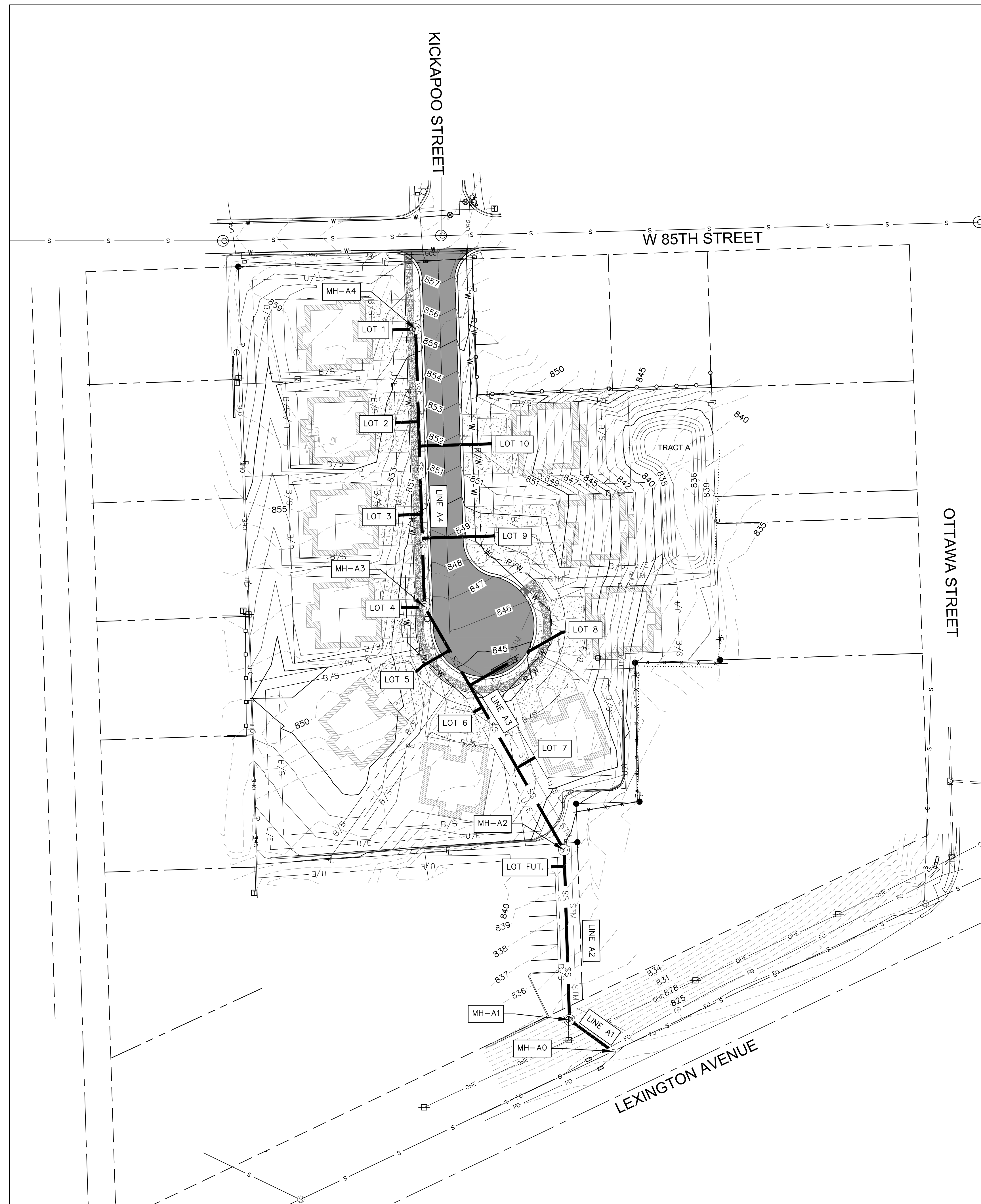
ANDERSON ESTATES
SANITARY SEWER PLANS
33475 W 85TH ST
DE SOTO, KS 66018

DATE 4/3/2024
DESIGNED BY TAS
CHECKED BY JPM

REVISIONS table with columns for date and description.

SAN SERVICE
LINE DETAILS

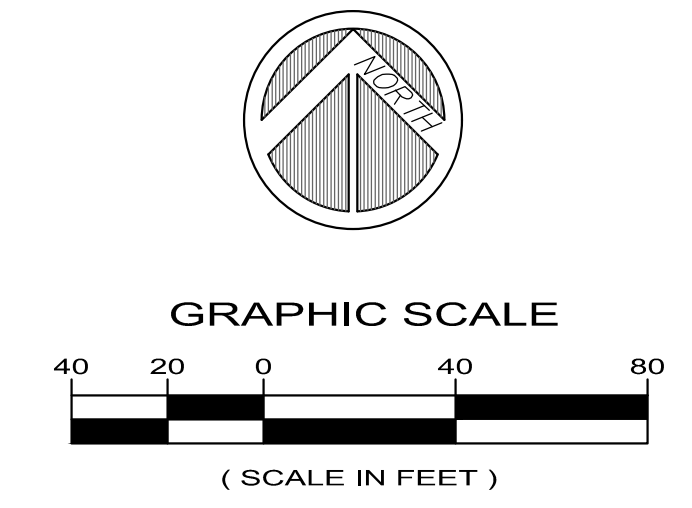
C403



GENERAL NOTES:
ALL STUBS SHALL BE 6" PVC (SDR-26) INSTALLED AT 2.00% SLOPE,
UNLESS OTHERWISE NOTED IN THESE PLANS.
A MINIMUM OF THREE (3) FEET OF COVER SHALL BE PROVIDED OVER THE
SANITARY SEWER MAIN AND SERVICE STUBS AND MAINTAINED AT ALL
TIMES

Main sewer line data table with columns: Lot Number, Line, Station, Flowline of SS, Lateral Length*, DDS*, Riser Height, Riser Pipe Length, Flowline at End of Lateral (10' Inside R/W), Minimum Serviceable Floor Elevation (MSFE), Minimum FFE (Grading), Difference, Lot Number.

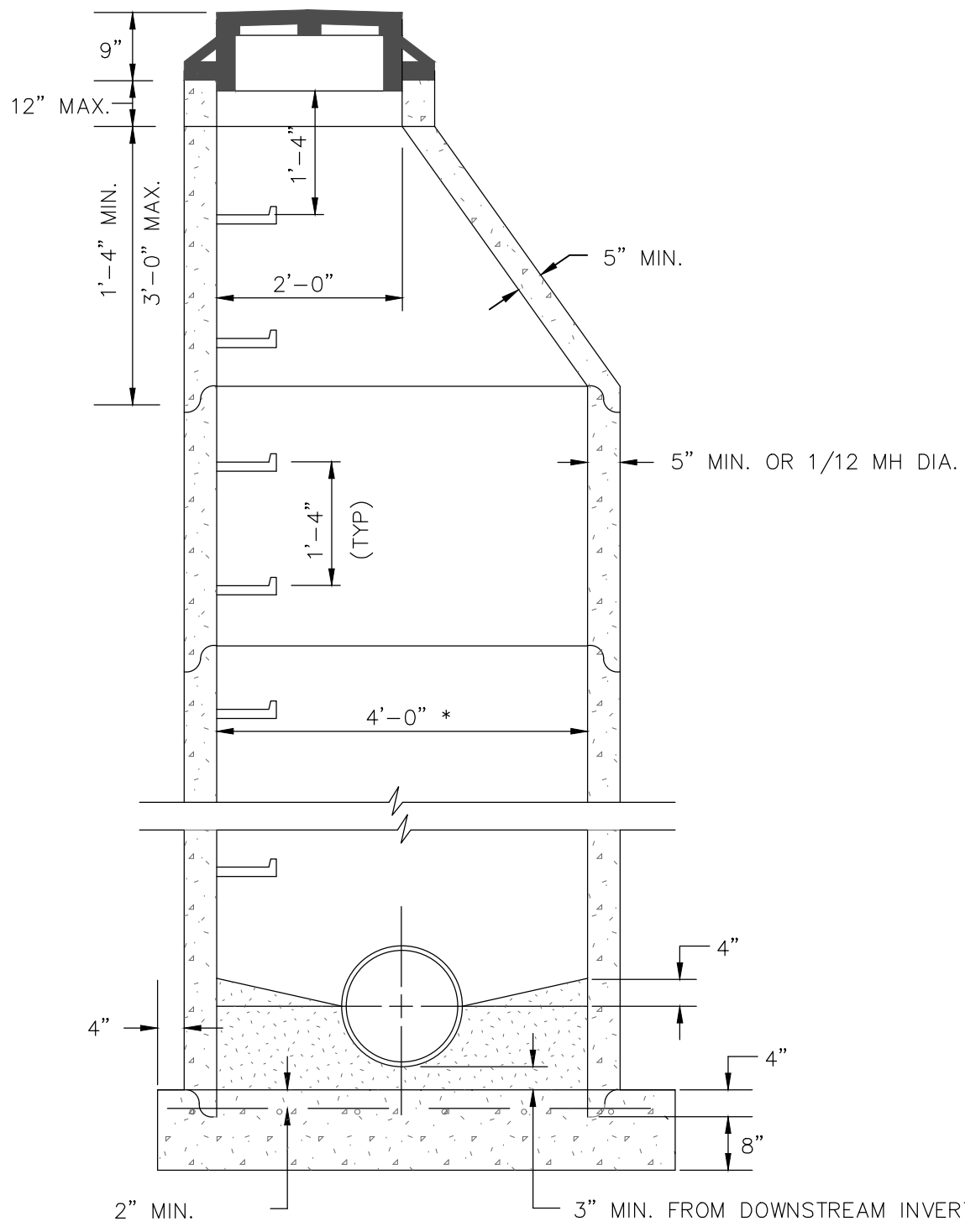
Manhole Stub Information table with columns: Manhole, Invert @ MH, Lot, Lateral Length (ft), Riser Height, Riser Pipe Length, EOS, MSFE, FFE.



Apr 03, 2024 - 3:11pm - USER: caltzmann
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SANITARY FLOW CALCULATIONS

SANITARY SEWER NETWORK												
Upstream	Pipe	Downstream	Downstream	Proposed	Future	Total	Minimum	Proposed	Total	Pipe	Downstream	Pipe
Manhole	Section	Pipe Slope	Pipe Diameter	Local	Local	Cumulative	Hourly Peak	Local	Cumulative	Manning	Pipe	Full Flow
		(ft/ft)	(in.)	(Ac.)	(Ac.)	(Ac.)	(cfs/ac)	(cfs)	(cfs)	(n)	(cfs)	(fps)
LINE A												
MHA0	MHA1	0.0808	8	2.81	0.00	2.81	0.02	0.06	0.06	0.013	3.44	9.87



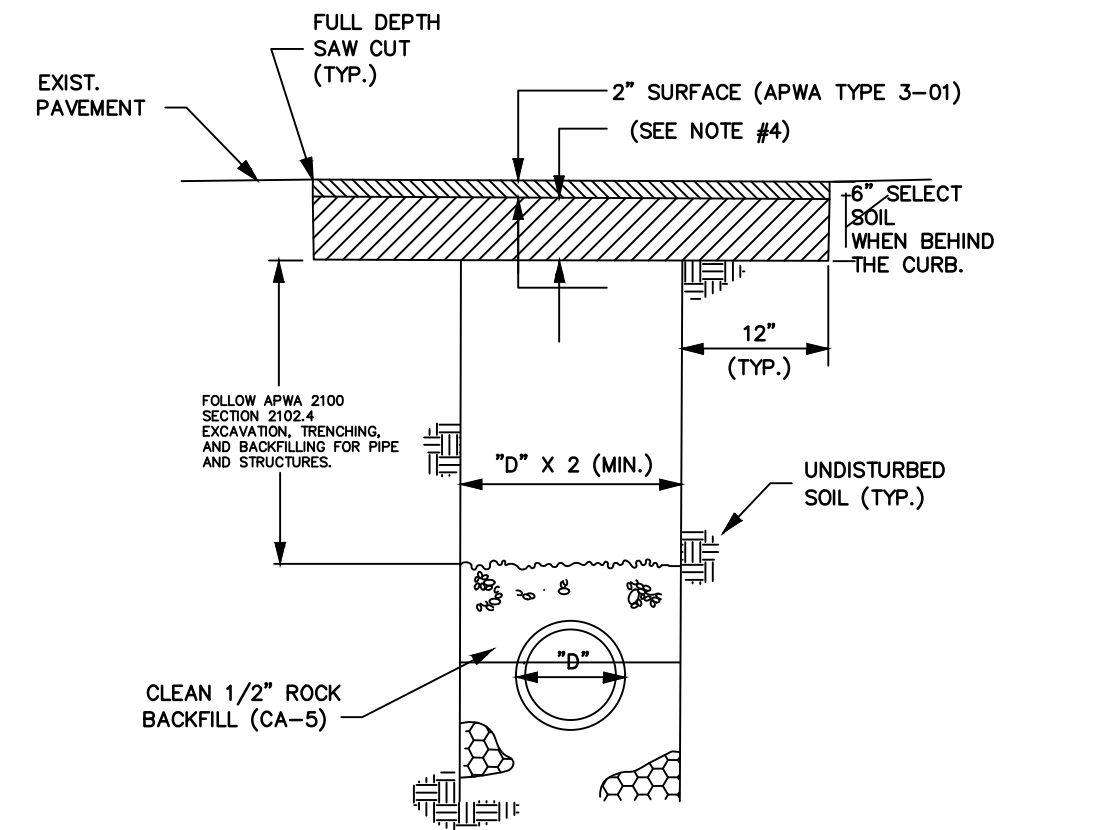
* UNLESS OTHERWISE NOTED ON PLANS LOCATIONS SHOWN ON DRAWINGS ARE TO CENTER OF STRUCTURE.

STANDARD PRECAST MANHOLE-MH-1

N.T.S.

GENERAL NOTES FOR PRE-CAST MANHOLES

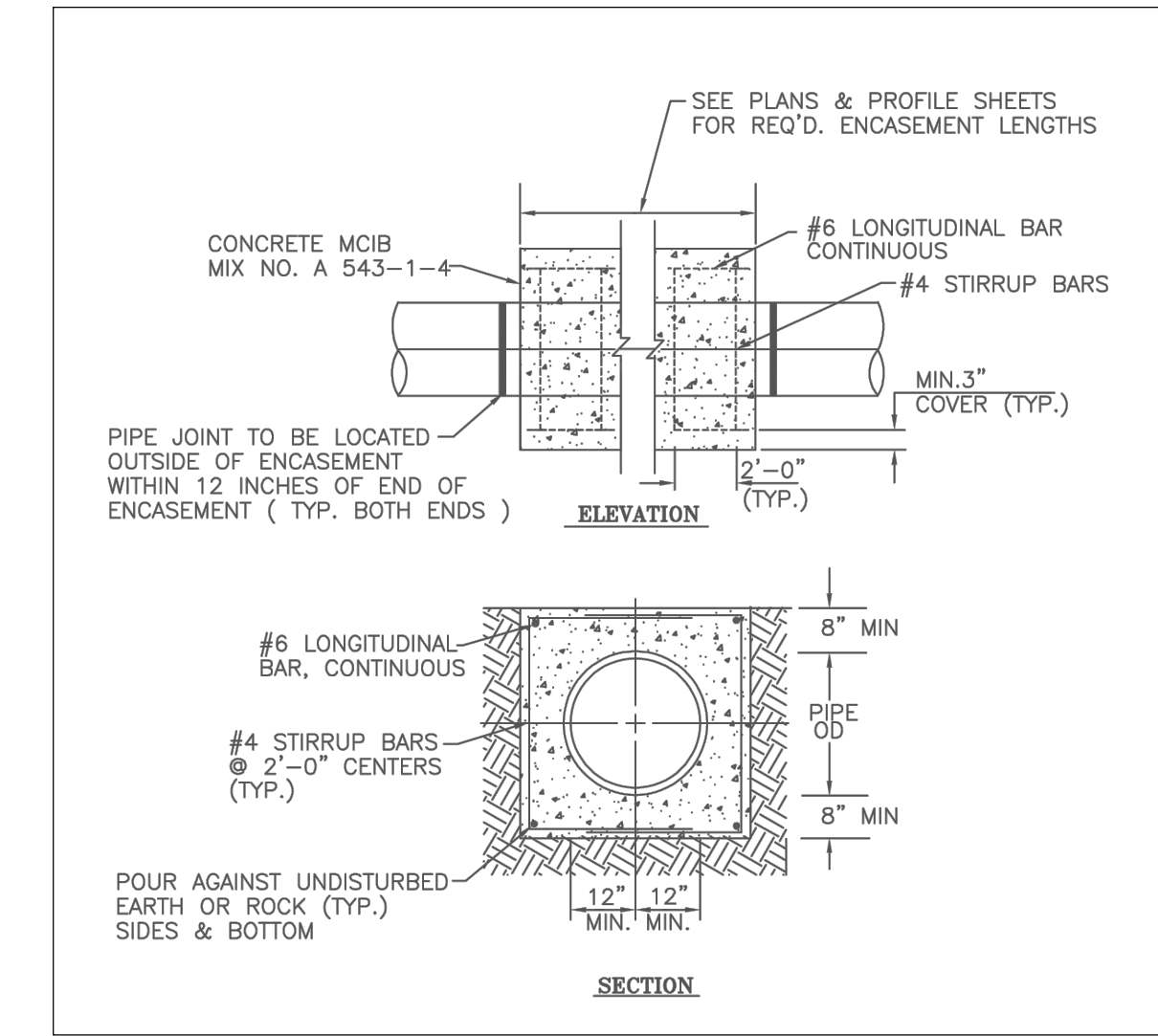
- REINFORCEMENT IN ALL SECTIONS SHALL EQUAL OR EXCEED A.S.T.M. C-478 SPECIFICATIONS.
- MASTIC MATERIAL TO BE USED AT ALL SECTIONS JOINTS. O-RINGS MAY BE USED FOR JOINTS BELOW THE CONE SECTION, BUT THE CONE SECTION ITSELF SHALL NOT HAVE O-RING JOINTS.
- APPROVED GASKET AND CONCRETE MORTAR TO BE USED AROUND PIPE IN KNOCK-OUTS.



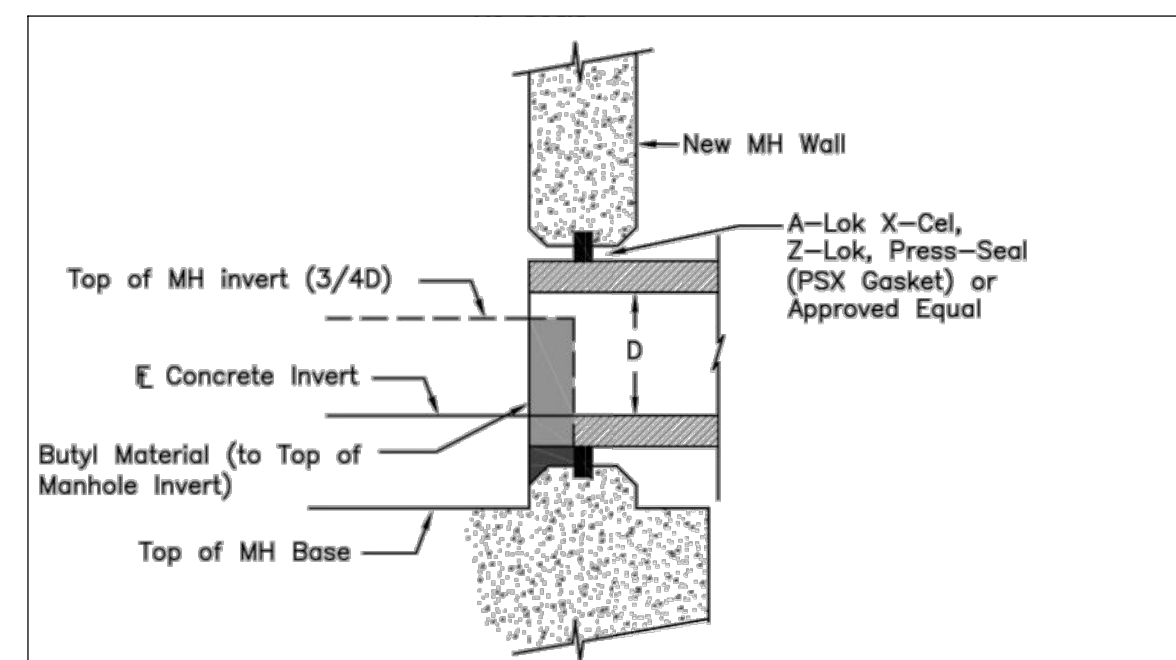
NOTES: NOT TO SCALE

- THIS DETAIL APPLIES TO ALL UTILITY INSTALLATIONS UNDER EXISTING STREETS. A UTILITY CUT PERMIT IS REQUIRED.
- THE 1.0' EITHER SIDE OF ORIGINAL TRENCH SHALL NOT BE REMOVED UNTIL BACKFILL HAS BEEN PLACED AND COMPACTED.
- ASPHALT SHALL COMPLY WITH CITY SPECIFICATIONS AS FOLLOWS:
SURFACE COURSE - APWA TYPE 3-01
BASE COURSE - APWA TYPE 1-01
- BASE THICKNESS:
6" RESIDENTIAL }
8" COLLECTOR } OR EXISTING DEPTH,
10" ARTERIAL } WHICH EVER IS GREATER
10" PRIMARY ARTERIAL }
- ALL PIPES SHALL BE INSPECTED PRIOR TO BACKFILL. ALL PIPE COVERED PRIOR TO INSPECTION SHALL BE UNCOVERED AT THE CONTRACTOR'S EXPENSE.
- UNLESS OTHERWISE AUTHORIZED BY THE CITY ENGINEER, TRENCH BACKFILL IN AREAS OF FUTURE STREET CONSTRUCTION, SHALL CONFORM TO THIS DETAIL. BACKFILL LIMITS FOR THIS DETAIL SHALL EXTEND TO THE TOP OF TRENCH AND 3 FT. BACK OF ALL CURBS, AND UNDER ANY SIDEWALKS, EXISTING OR PROPOSED.
- ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO APWA TECHNICAL SPECIFICATIONS.
- ANY EXCAVATION LEFT OPEN OVERNIGHT ON ANY THROUGHFARE OR COLLECTOR TYPE STREET SHALL BE SECURELY PLATED.

NOTE: CONTRACTOR TO FOLLOW APWA 2100 SECTION 2102.4 EXCAVATION, TRENCHING, AND BACKFILLING FOR PIPE AND STRUCTURES.

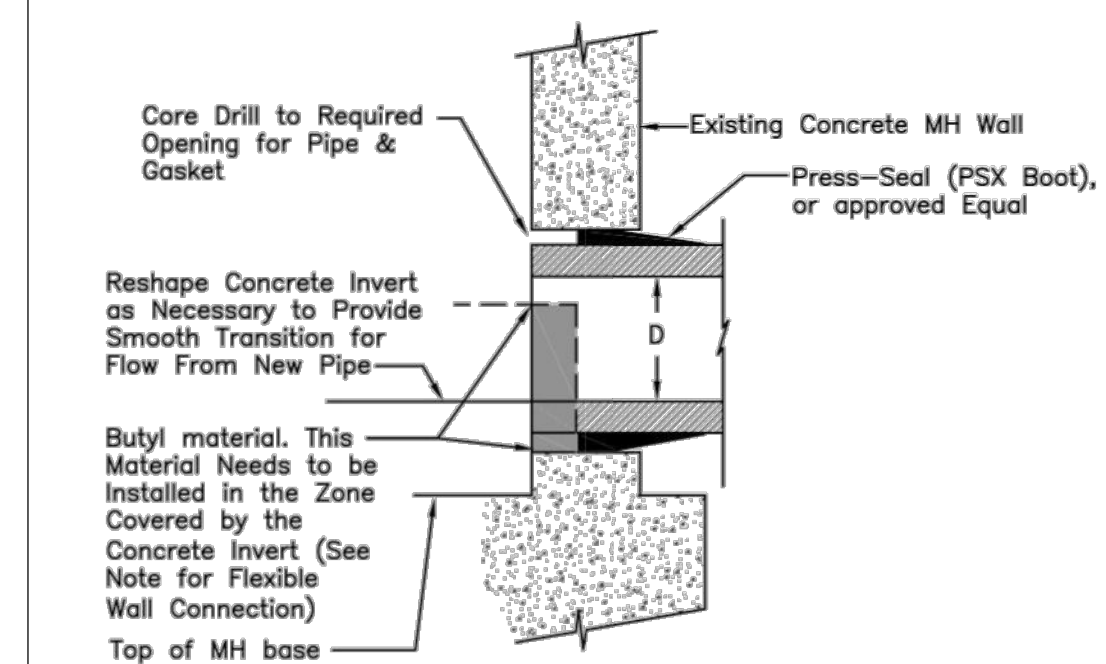


REINFORCED CONCRETE ENCASEMENT (RCE) DETAIL



FLEXIBLE WALL CONNECTION DETAIL

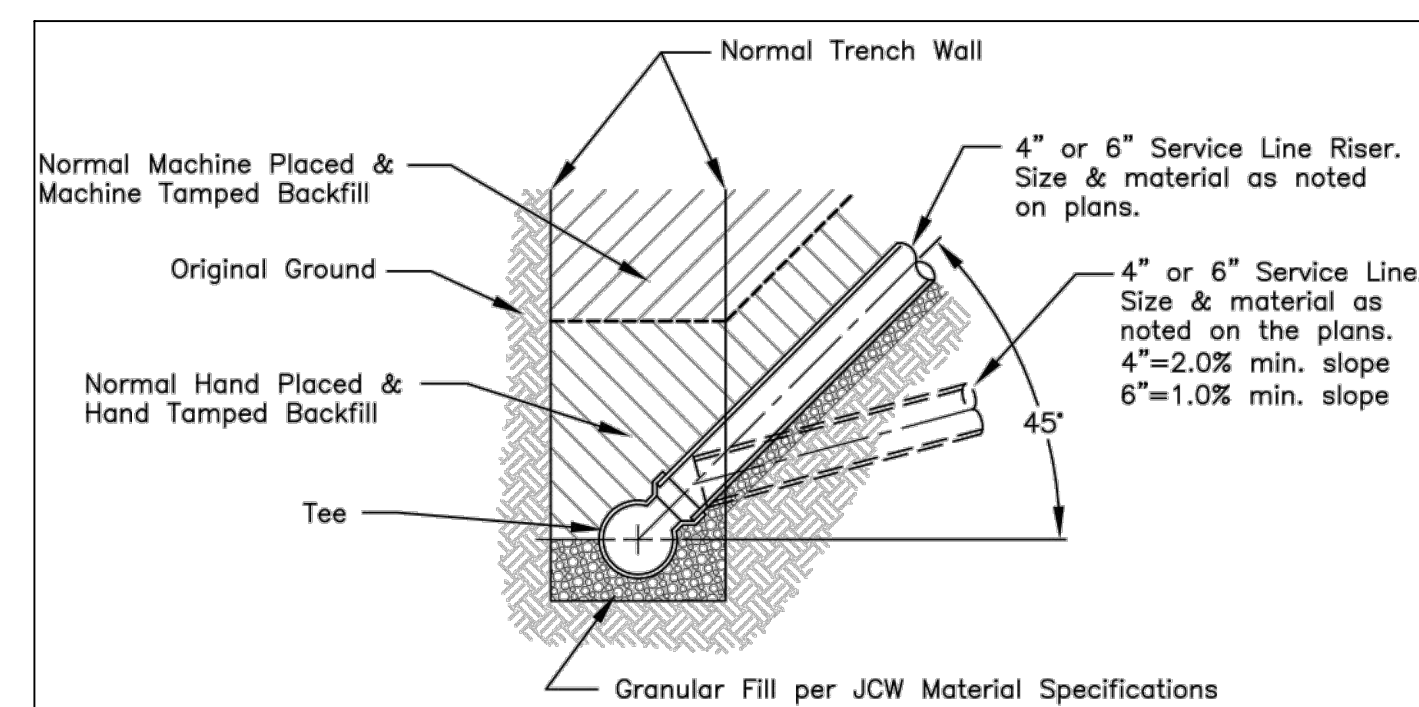
No Scale



EXISTING WALL CONNECTION DETAIL

No Scale

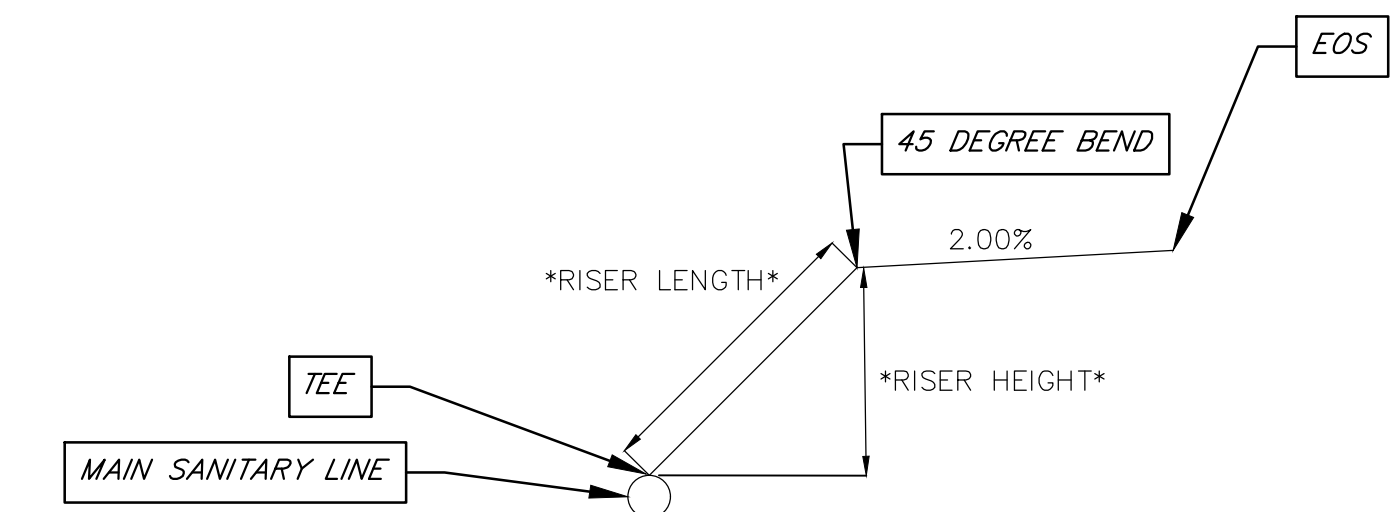
LATERAL CONNECTION DETAILS (TO PROPOSED)



TEE ORIENTATION AND RISER DETAIL

No Scale

SANITARY LATERAL PROFILE DETAIL



811
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DATE 4/3/2024
DESIGNED BY TAS
CHECKED BY JPM

REVISIONS	DATE

DETAILS AND CALCULATIONS
C404

Apr 05, 2024 - 10:42am - USER: astzmann
F:\Civil_3D\Projects\Done\Anderson Estates\1604-251\CAD\Sheets\Project - Sanitary.dwg