

GENERAL NOTES:

- THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE SAFETY REGULATIONS. ALL CONSTRUCTION SHALL BE COMPLETED FOLLOWING CURRENT CITY STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
- CONTRACTOR WILL BE REQUIRED TO PROVIDE NOTICE TO UTILITY COMPANIES A MINIMUM OF SEVENTY-TWO (72) HOURS PRIOR TO ANY EXCAVATION, AS FOLLOWS:
KANSAS ONE-CALL 687-2470
THE CONTRACTOR MUST NOTIFY THE FOLLOWING IN CASE OF AN EMERGENCY:
AT&T 1-800-246-8464
BLACK HILLS ENERGY 1-800-694-8989
CITY OF WICHITA WATER & SEWER 1-316-219-8921
CITY OF WICHITA STORMWATER 1-316-268-4090
CITY OF WICHITA TRAFFIC 1-316-268-4034
COX COMMUNICATIONS 1-888-249-3530
KANSAS GAS SERVICE 1-888-482-4950
WESTAR ENERGY 1-800-544-4857
- UTILITY SERVICE LINES, POLES, ETC. ARE TO BE ADJUSTED AS NECESSARY BY OTHERS PRIOR TO CONSTRUCTION UNLESS THE PLANS SPECIFICALLY CALL FOR THEIR ADJUSTMENT BY THE CONTRACTOR OR UNLESS THE PLANS SPECIFICALLY IDENTIFY A UTILITY TO BE ADJUSTED BY ITS OWNER DURING CONSTRUCTION. EXISTING UTILITIES AND THEIR LOCATION, AS SHOWN ON THE PLANS, REPRESENT THE BEST INFORMATION OBTAINABLE FOR DESIGN. THE CONTRACTOR WILL BE REQUIRED TO WORK AROUND EXISTING UTILITIES WITHIN THE RIGHT-OF-WAY WHICH DO NOT CONFLICT WITH PROPOSED CONSTRUCTION.
- RUBBLE FROM THE REMOVAL OF MISCELLANEOUS STRUCTURES AND EXCESS EXCAVATION WHICH IS TO BE WASTED SHALL BE DISPOSED OF ON SITES TO BE PROVIDED BY THE CONTRACTOR. THESE SITES SHALL BE APPROVED BY THE ENGINEER AS TO SUITABILITY, APPEARANCE AND SITE LOCATION. LOCATIONS, IN THE OPINION OF THE ENGINEER, THAT WILL LEAVE AN UNSIGHTLY APPEARANCE WILL NOT BE APPROVED. ALL DISPOSAL SITES MUST BE APPROVED BY THE KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT. MATERIAL EITHER STOCKPILED OR DISPOSED OF IN A FLOOD PLAIN WILL REQUIRE A KANSAS STATE BOARD OF AGRICULTURE PERMIT. ANY MATERIAL DUMPED IN WATERS OF THE UNITED STATES OR WETLANDS IS SUBJECT TO U.S. CORPS. OF ENGINEERS PERMITTING REGULATIONS. ANY MATERIAL BURIED OR STOCKPILED BEYOND APPROVED CONSTRUCTION LIMITS WILL REQUIRE ADDITIONAL ARCHAEOLOGICAL INVESTIGATIONS UNLESS BURIED IN A PREVIOUSLY APPROVED BORROW LOCATION.
- TREES AND SHRUBS IN PUBLIC RIGHT-OF-WAY WHICH ARE IN DIRECT CONFLICT WITH PROPOSED NEW CONSTRUCTION SHALL BE REMOVED BY THE CONTRACTOR WITH THE CITY ENGINEER'S APPROVAL. TREES AND SHRUBS WHICH ARE NOT IN DIRECT CONFLICT WITH PROPOSED NEW CONSTRUCTION SHALL BE SAVED AND PROTECTED FROM DAMAGE.
- THE CONTRACTOR SHALL GIVE ALL PROPERTY OWNERS AND/OR TENANTS OF DEVELOPED PROPERTY ADJUTING THE CONSTRUCTION OF THIS PROJECT A MINIMUM OF TEN (10) DAYS NOTICE PRIOR TO START OF CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY IRONS. THE CONTRACTOR WILL BE REQUIRED TO RE-ESTABLISH ANY PROPERTY IRONS WHICH ARE DAMAGED OR DESTROYED BY HIS CONSTRUCTION OPERATIONS. SUCH IRONS SHALL BE RE-ESTABLISHED BY A LICENSED LAND SURVEYOR IN ACCORDANCE WITH STATE LAWS.
- THE ENGINEERING DIVISION SHALL FIELD LOCATE WATER VALVES ONE TIME DURING CONSTRUCTION WHEN REQUESTED BY THE CONTRACTOR. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PRESERVE SUCH FIELD LOCATIONS DURING THE CONSTRUCTION PROCESS. WATER VALVES, VALVE BOXES OR FIRE HYDRANTS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED BY CONTRACTOR AT HIS OWN EXPENSE. VALVE BOXES AND WATER METERS WITHIN THE PROJECT LIMITS SHALL BE ADJUSTED TO MATCH FINAL GRADES BY THE CONTRACTOR.
- THE CONTRACTOR SHALL NOTIFY THE CONSULTANT ENGINEER AND TOM MASON WITH THE CITY AT 316-268-4574 WITH THE CITY OF WICHITA WITH THE ANTICIPATED CONSTRUCTION START DATE AND NOTIFY THEM OF PROJECT COMPLETION. STAKING, INSPECTION AND AS-BUILTS FOR THIS PROJECT WILL BE THE RESPONSIBILITY OF THE CITY OF WICHITA ENGINEERING.
- IF TRAFFIC WILL BE IMPACTED BY CONSTRUCTION, A TRAFFIC CONTROL PLAN MUST BE SUBMITTED AND APPROVED BY THE CITY TRAFFIC ENGINEER AT TRAFFIC@WICHITA.GOV BEFORE CONSTRUCTION CAN BEGIN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL MEASURES TO FACILITATE CONSTRUCTION. ALL CONSTRUCTION ZONE MARKINGS AND SIGNAGE SHALL CONFORM TO THE LATEST VERSION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AS PUBLISHED BY THE US DEPT. OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION. ALL COSTS ASSOCIATED WITH CONSTRUCTION MARKINGS AND SIGNAGE SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
- ALL ELEVATIONS SHOWN ARE NAVD 88.

- ALL AREAS DISTURBED DURING CONSTRUCTION THAT WILL NOT BE UNDER PROPOSED PAVEMENT SHALL BE RESTORED TO MATCH EXISTING CONDITIONS.
- ANY SIDEWALK, DRIVE APPROACH, OR STREET PAVEMENT REMOVED TO CONSTRUCT PROJECT MUST HAVE A PAVEMENT CUT PERMIT AND BE REPLACED BY THE CITY CONTRACTOR. PERMITS CAN BE OBTAINED BY CALLING 316-268-4501 OR 316-268-4480.
- CITY MAINTENANCE OF STORM SEWER ENDS AT THE LAST STRUCTURE IN THE EASEMENT OR RIGHT-OF-WAY.
- A PORTION OF EXCESS EXCAVATED MATERIAL SHALL BE MOUND AROUND MANHOLES WHICH EXTEND MORE THAN ONE (1) FOOT ABOVE THE EXISTING GROUND. SUCH MOUND SHALL BE CONSTRUCTED WITH NEW DEVELOPMENT A SIX (6) FOOT DIAMETER FLAT TOP WITH 4 TO 1 SIDE SLOPES DOWN TO THE ORIGINAL GROUND. THE ELEVATION OF THE FLAT TOP OF THE MOUND SHALL BE 0.4 FOOT BELOW THE TOP TO THE MANHOLE.
- CONTRACTOR SHALL LIMIT THE EXTENT OF TRENCH OPENINGS OVERNIGHT AND WEEKENDS TO LESS THAN 50 FEET.
- THE CONTRACTOR SHALL PROTECT FROM DAMAGE AND SUPPORT EXISTING UTILITIES THROUGH CONSTRUCTION AS APPROVED BY THE UTILITY OWNER AND THE ENGINEER AT THE CONTRACTORS EXPENSE.
- THE CONTRACTOR SHALL RESTORE ALL DITCHES, SWALES, ROAD SHOULDERS, ENTRANCES AND BANK LINES TO THEIR ORIGINAL SLOPES AND GRADES EXCEPT AS SHOWN OTHERWISE.
- THE CONTRACTOR SHALL USE BEST MANAGEMENT PRACTICES (BMP'S) TO PREVENT ERODED SOIL FROM ENTERING DITCHES, CULVERTS AND DRAINAGE AREAS. THE CONTRACTOR SHALL FOLLOW THE INTENT OF THE BMP'S WHICH ACT AS A GUIDELINE.
- EACH BIDDER SHALL VISIT THE SITE OF THE PROJECT BEFORE SUBMITTING A PROPOSAL IN ORDER TO BECOME BETTER INFORMED OF THE EXISTING FIELD CONDITIONS AND OBSTACLES WHICH MIGHT BE ENCOUNTERED DURING CONSTRUCTION. EACH BIDDER SHOULD UNDERSTAND THAT NO ADDITIONAL COMPENSATION WILL BE AWARDED FOR EXTRA WORK THAT SHOULD HAVE BEEN EVALUATED PRIOR TO BIDDING.
- THE PRECAST MANUFACTURER SHALL PROVIDE A SEALED DESIGN DETAIL FOR ALL PRECAST ITEMS USED ON THE PROJECT TO INSURE THE INTENT OF THE PLANS ARE MET.
- ALL TRENCHING IN PAVEMENT OR DRIVEWAYS, WHICH WILL BE REQUIRED TO CARRY TRAFFIC UNTIL PERMANENT PAVING REPLACEMENT, SHALL BE TOPPED WITH A MINIMUM OF 6" CRUSHED ROCK (COMPACTED) TO BE INCIDENTAL TO THE PROJECT. CONTRACTOR SHALL BE REQUIRED TO MAINTAIN TEMPORARY CRUSHED ROCK UNTIL PERMANENT PAVEMENT IS INSTALLED.
- BACKFILL SAND FLUSH & VIBRATE ALL UTILITIES UNDER PAVEMENT. ALL TRENCHING AND PIPE EMBEDMENT TO BE PER CITY OF WICHITA STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
- ALL EXCAVATION FROM PIPE AND STRUCTURE REMOVAL TO BE BACKFILLED IN 6" LIFTS AND COMPACTED TO 95% OF STANDARD PROCTOR ASTM D698. FILL MATERIAL TO BE APPROVED BY PROJECT ENGINEER.
- KAW VALLEY ENGINEERING PROVIDES TESTING AND INSPECTION SERVICES. CONTACT MICHAEL COLLINS @ (785) 223-2664.

SAFETY NOTICE TO CONTRACTOR

IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.

WARRANTY / DISCLAIMER

THE DESIGNS REPRESENTED IN THESE PLANS ARE IN ACCORDANCE WITH ESTABLISHED PRACTICES OF CIVIL ENGINEERING FOR THE DESIGN FUNCTIONS AND USES INTENDED BY THE OWNER AT THIS TIME. HOWEVER, NEITHER KAW VALLEY ENGINEERING, INC NOR ITS PERSONNEL CAN OR DO WARRANTY THESE DESIGNS OR PLANS AS CONSTRUCTED, EXCEPT IN THE SPECIFIC CASES WHERE KAW VALLEY ENGINEERING PERSONNEL INSPECT AND CONTROL THE PHYSICAL CONSTRUCTION ON A CONTEMPORARY BASIS AT THE SITE.

CAUTION - NOTICE TO CONTRACTOR

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.

THE CONTRACTOR SHALL EXPOSE EXISTING UTILITIES AT LOCATIONS OF POSSIBLE CONFLICTS PRIOR TO ANY CONSTRUCTION.

STORM SEWER IMPROVEMENTS to serve OLIVER FOURPLEX PROJECT 2805 N. OLIVER CITY OF WICHITA, KANSAS

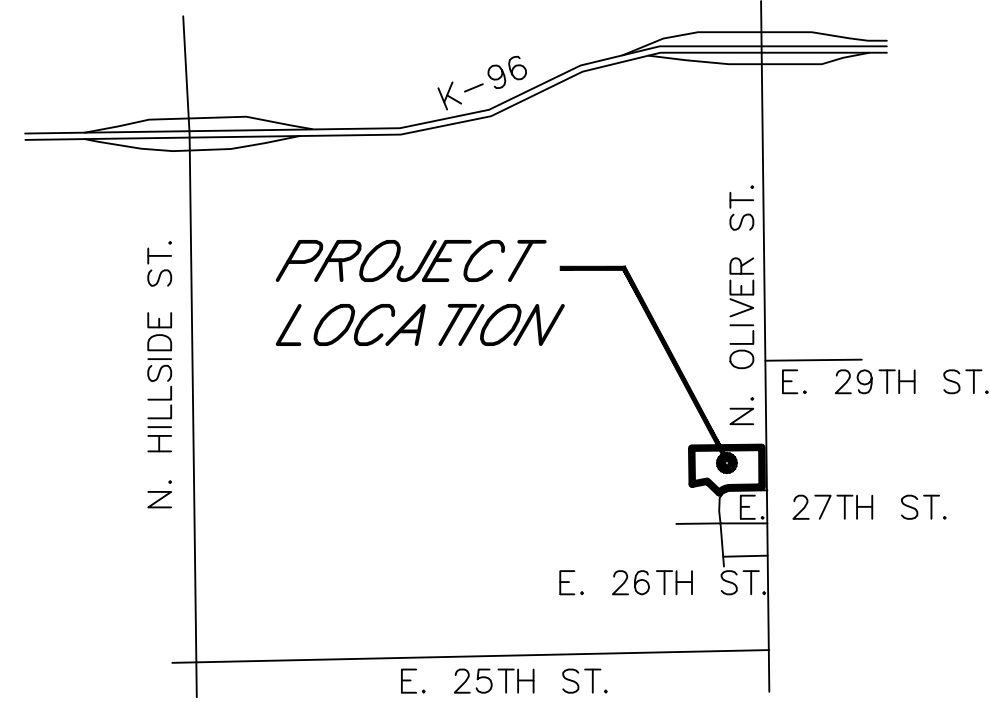
GARY JANZEN, P.E. CITY ENGINEER

PROJECT NUMBER
PPD-2020-648 (133119)

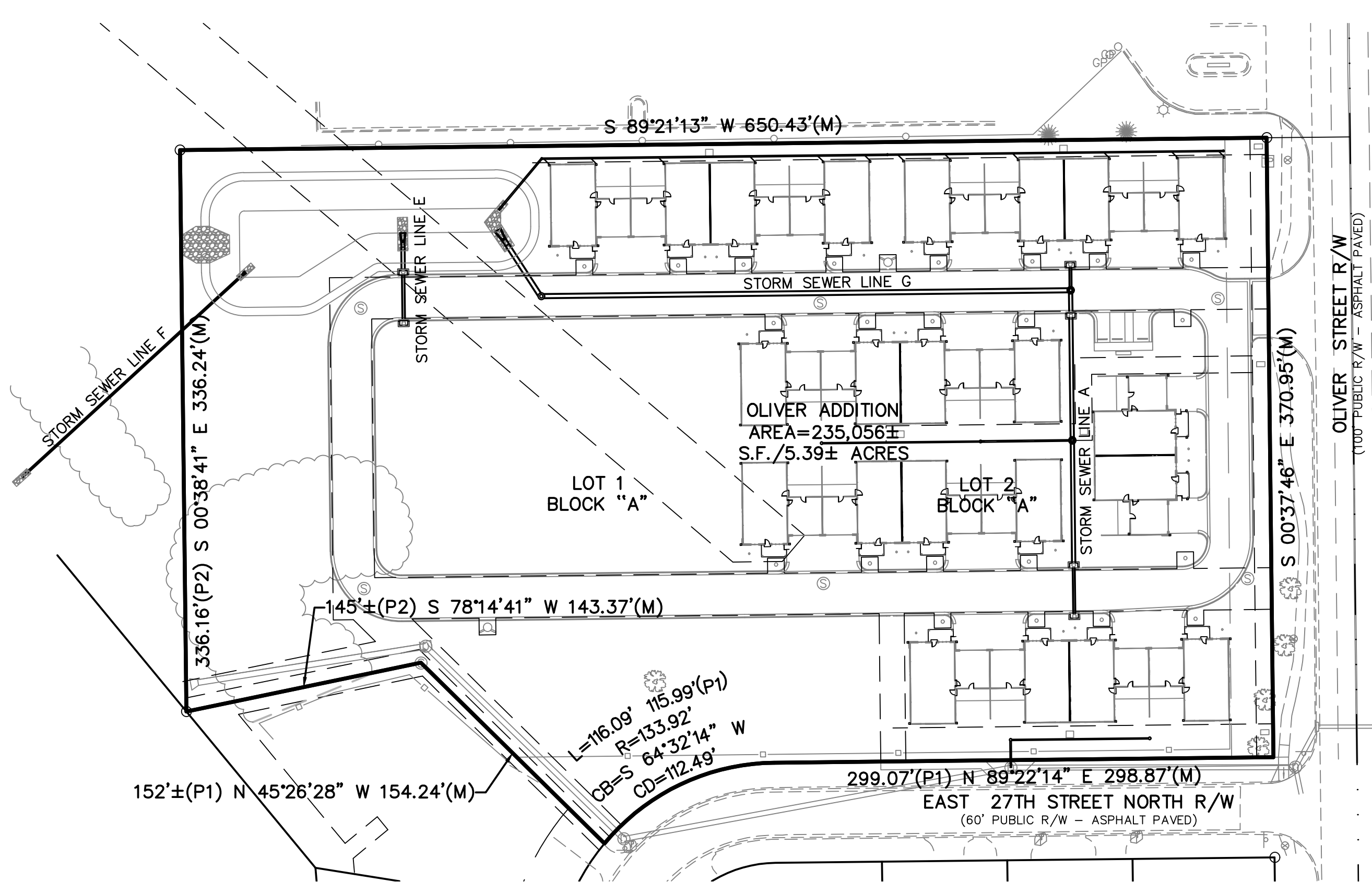
Date: 2021-03-30
Inspector: A. Thompson/M. Collins
Design/Inspecting Firm: Kaw Valley Engineering, Inc.
Contractor:
Subcontractor: Wilks underground Utilities
Built in general conformance to construction plans,
except where noted on plans.

SHEET INDEX

01	TITLE SHEET
02-04	STORM SEWER PLAN AND PROFILE
05	EROSION CONTROL PLAN
06-09	STORM SEWER DETAILS
10-14	EROSION CONTROL BMP DETAILS
15	DRAINAGE PLAN



VICINITY MAP



Stormwater Certification:
New Development
Stormwater Permit # SW02020-0037
NOI Permit # S-AR94-1635 KSR115611

These construction plans were prepared in accordance with the current Stormwater Management Regulations as set forth in the City of Wichita's Stormwater Management Ordinance 16.32 and the policies/guidelines presented in the Wichita/Sedgwick County Stormwater Manual.

Disturbed Area = 235,056 SF (5.39 ACRES ±)
Water Quality Treatment: OFF SITE BMP
Downstream Channel Protection: SATISFIED WITH PROPOSED DETENTION POND
Detention: Proposed detention for the development
The BMP used for this development is: OFF SITE BMP PROGRAM

APPROVED AS NOTED
BY WICHITA PUBLIC WORKS ENGINEERING
AND STORMWATER DIVISION

Engineering approved by Seth Gotchey 8/26/2020
Stormwater approved by Joe Hickle 8/26/2020

NOTE TO CONTRACTORS

Inspection and testing for this project is to be provided by a Licensed Consulting Engineering Firm under contract with the Owner/Developer. Said inspection to be in accordance with the City of Wichita standard construction engineering practices and certified by a Licensed Professional Engineer in the state of Kansas. No work shall be performed the Contractor without such inspection nor shall any work be commenced without written authorization by City Engineering. All Construction and Materials shall comply with the current City of Wichita Specifications and Standards and Special Provisions. (on file and available at Wichita.gov).

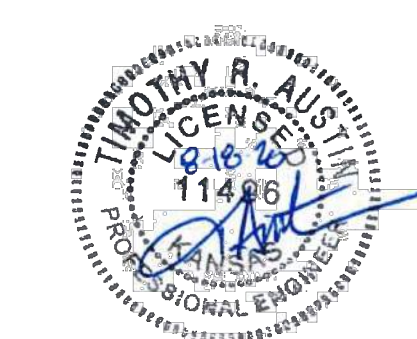
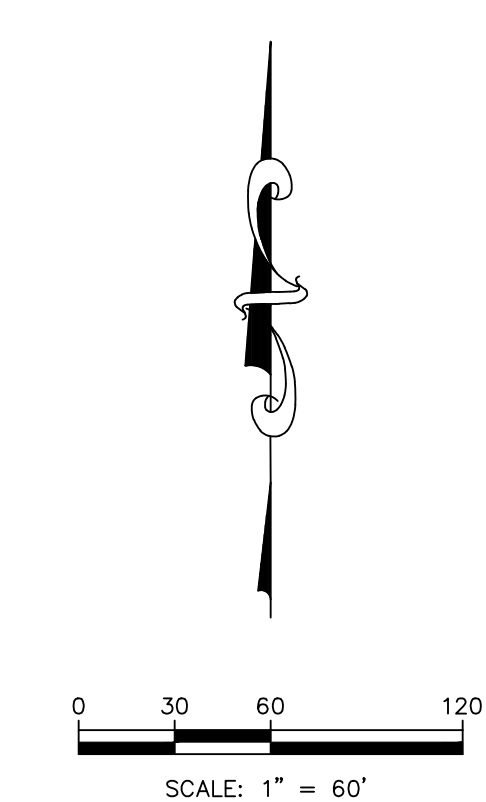
An approved copy of these plans signed by City staff are required on-site.

THIS PLAN SHEET IS PART OF AN OVERALL KAW VALLEY ENGINEERING PLAN SET FOR THE SPECIFIC IMPROVEMENTS CONTEMPLATED THEREIN. AS SUCH, THE INFORMATION REFLECTED HEREIN SHOULD ONLY BE INTERPRETED WITHIN THE CONTEXT OF THE COMPLETE PLAN SET.

BENCHMARKS

DATUM BENCHMARK:
DATUM IS U.S. SURVEY FEET AND DERIVED FROM THE PLATTED BENCHMARK FOR CAMPUS CREST ADDITION, AN ADDITION IN THE CITY OF WICHITA, COUNTY OF SEDGWICK, STATE OF KANSAS DESCRIBED AS: CHISELED "+ " CUT ON SW CORNER TRAFFIC SIGNAL LIGHT BASE POLE ON SW CORNER BOLT AT SW CORNER OLIVER & 29TH ST. N.
ELEV.=1348.33 NAVD 88

BENCHMARK (NAVD 88 DATUM):
BM #61: CHISELED SQUARE CUT ON N. EDGE OF DRIVEWAY AT 2739 DELROSE AVE. AT INTERSECTION 27TH ST. N. & DELROSE AVE.
ELEV.=1353.01 NAVD 88



TIMOTHY R. AUSTIN
PROFESSIONAL ENGINEER

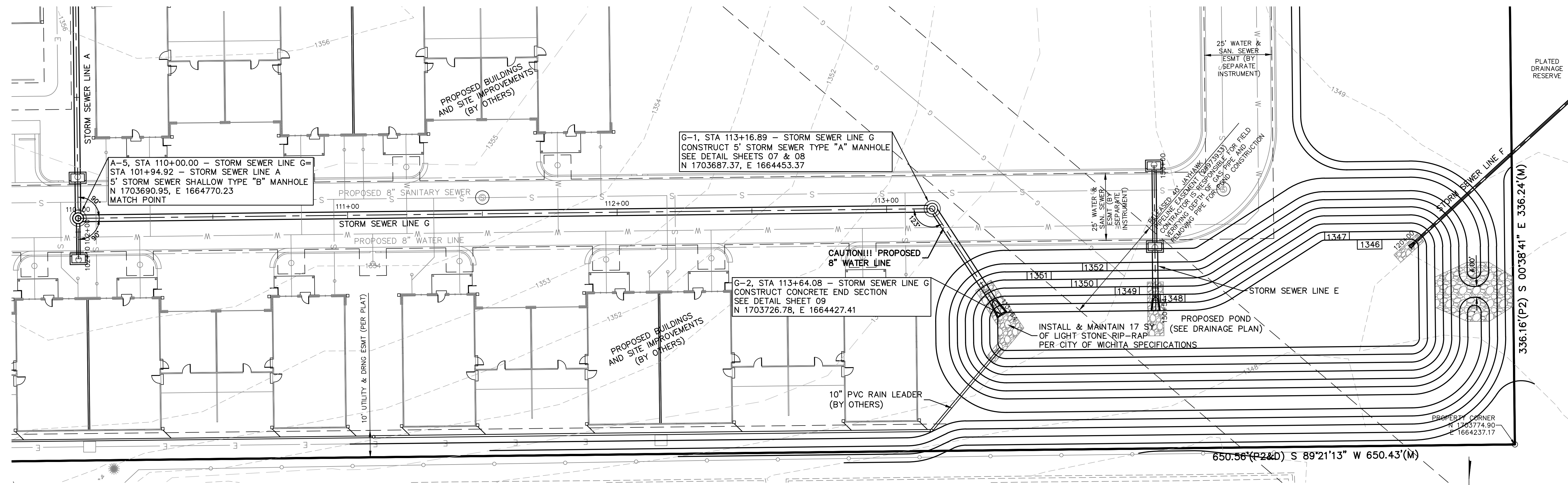
AUGUST 2020

PROJ. NO. G19-1092 DSN: TRA TIMOTHY R. AUSTIN
CFN: 1092DTS DWN: EAM ENGINEER
KS # 11496

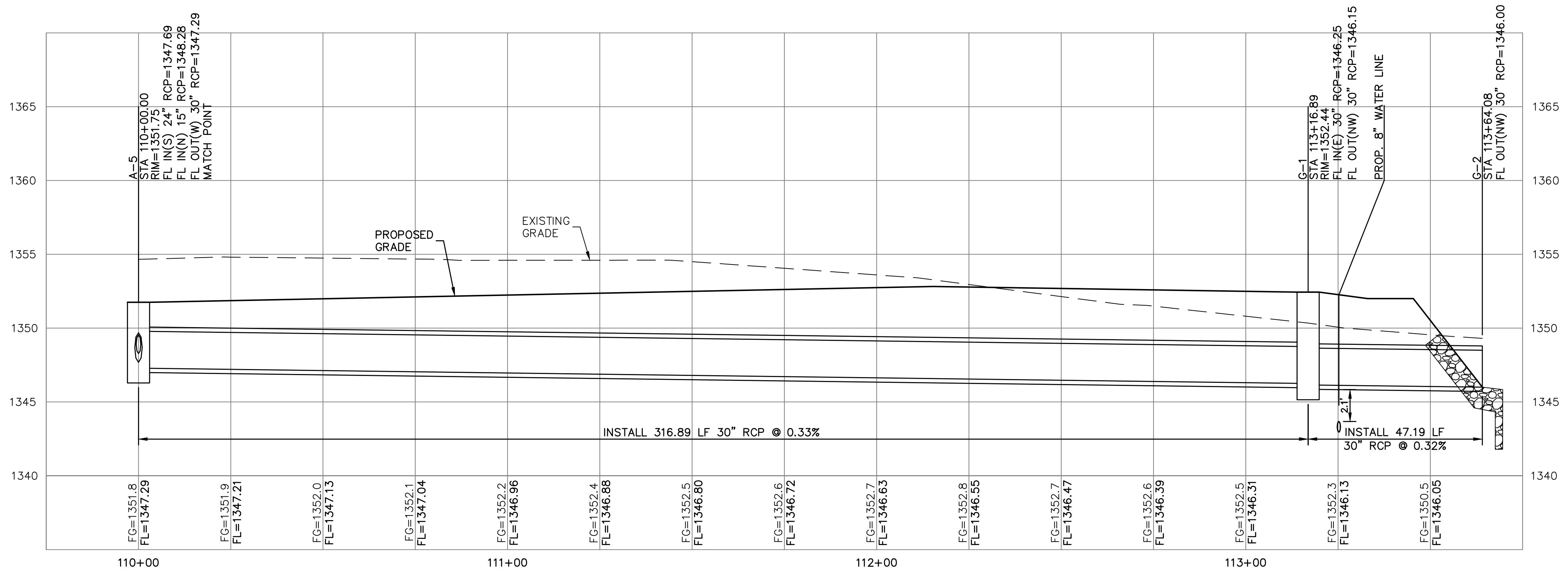
200 N. EMPORIA, SUITE 100
WICHITA, KANSAS 67202
PH. (316) 440-4304 | FAX (316) 440-4309
wh@kveeng.com | www.kveeng.com

KAW VALLEY ENGINEERING

KAW VALLEY ENGINEERING, INC., IS AUTHORIZED TO OFFER ENGINEERING SERVICES BY KANSAS STATE CERTIFICATE OF AUTHORIZATION # E-113. EXPIRES 12/31/20



STORM SEWER LINE G



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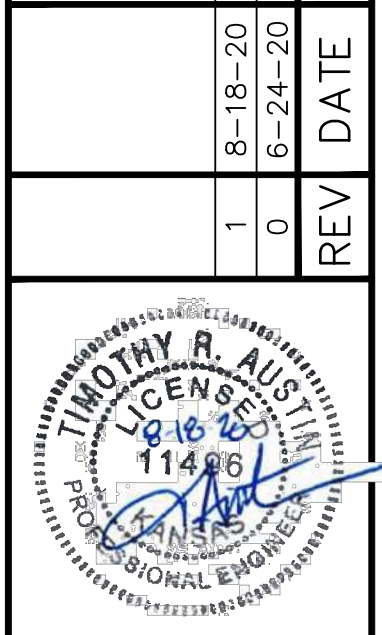
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CHK	CHK
EAM	CHK
TRA	CHK
TRA	CHK
DSN	CHK

REV	DATE	DESCRIPTION
1	8-18-20	FOR FINAL SUBMITTAL
0	6-24-20	FOR CITY REVIEW



TIMOTHY R. AUSTIN
 ENGINEER
 KS # 11496

200 N. EMPORIA, SUITE 100
 WICHITA, KANSAS 67202-4400-4309
 PH: (316) 261-1111
 info@kveeng.com | www.kveeng.com

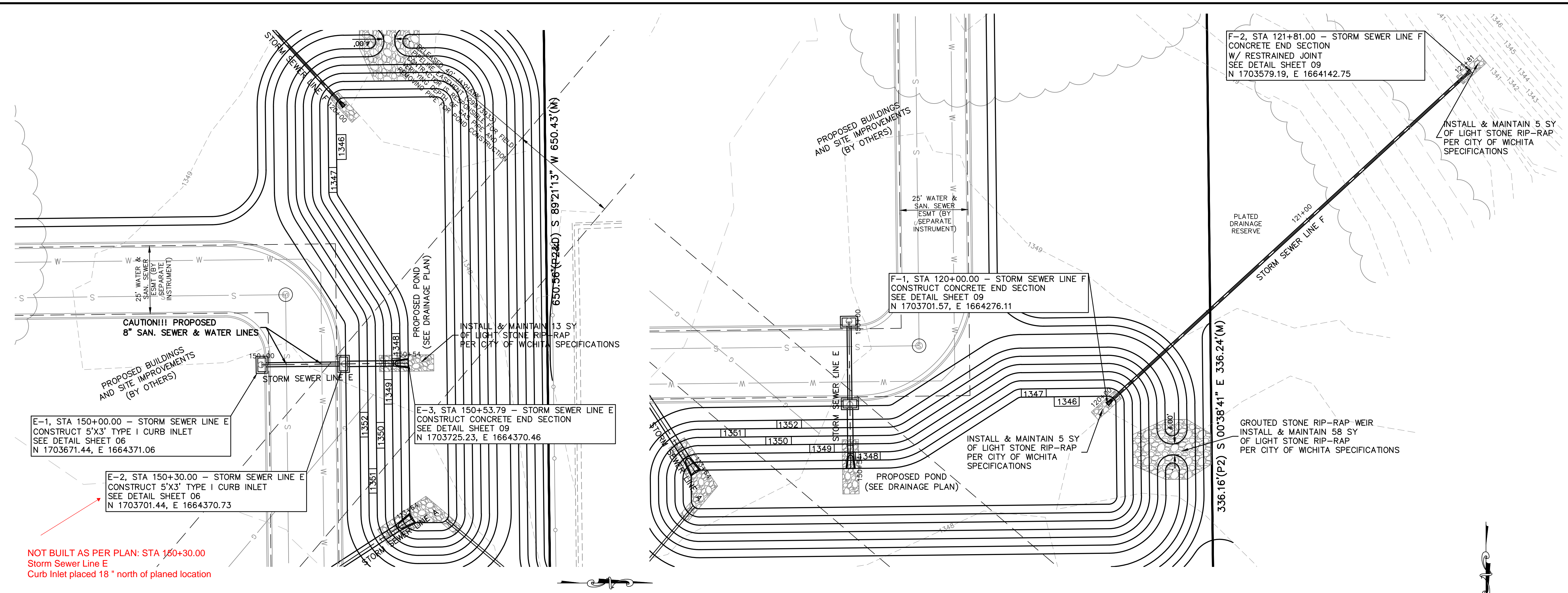
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OLIVER FOURPLEX PROJECT
 2805 N. OLIVER
 WICHITA, KS

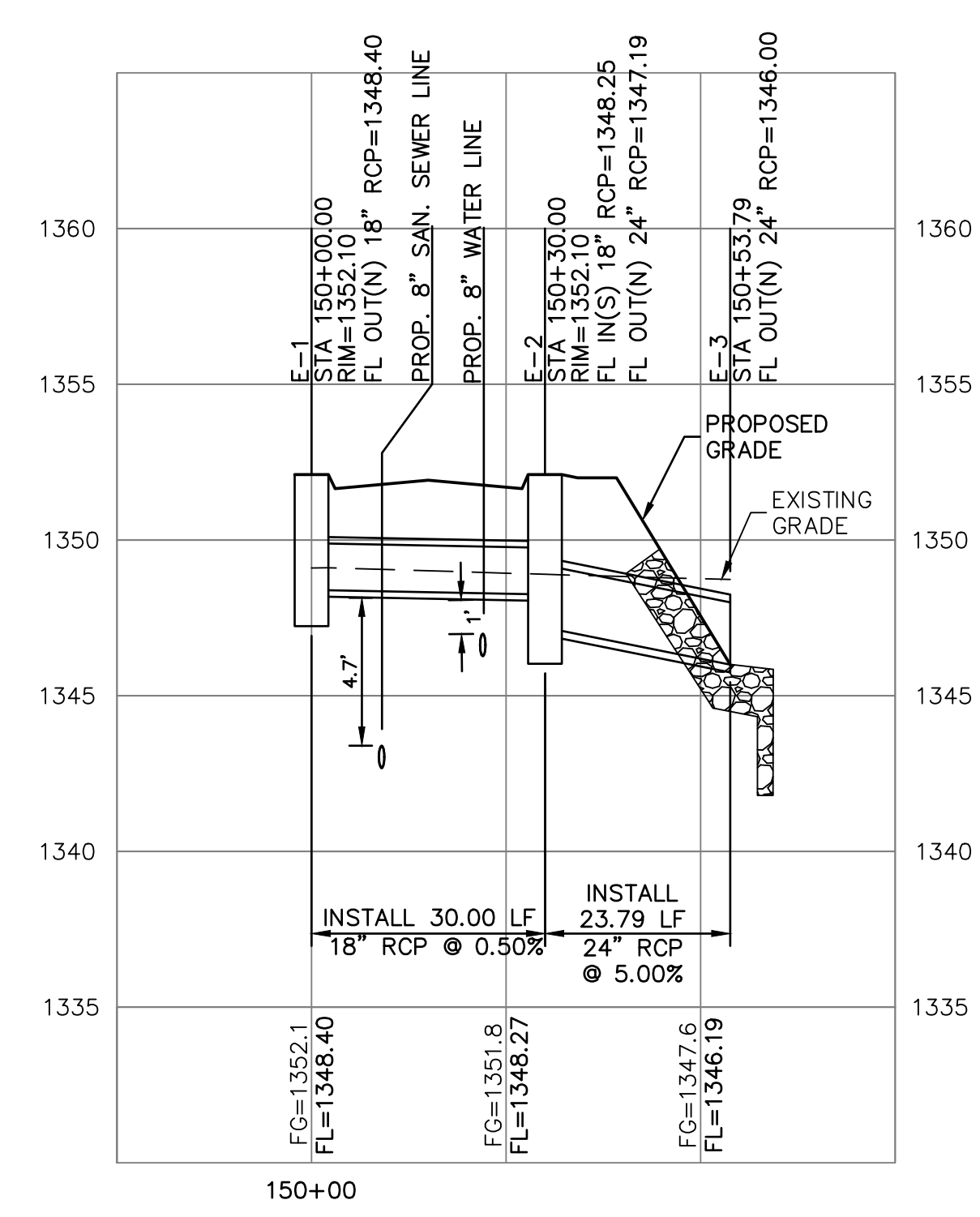
STORM SEWER PLAN & PROFILE

PROJ. NO.	G19_1092
DESIGNER	TRA
DRAWN BY	EAM
CFN	
SHEET	1092DPP
REV	
03	1

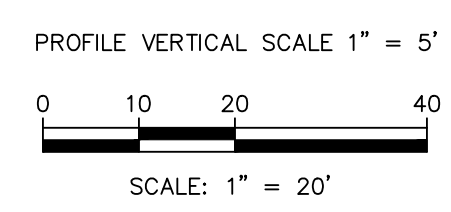
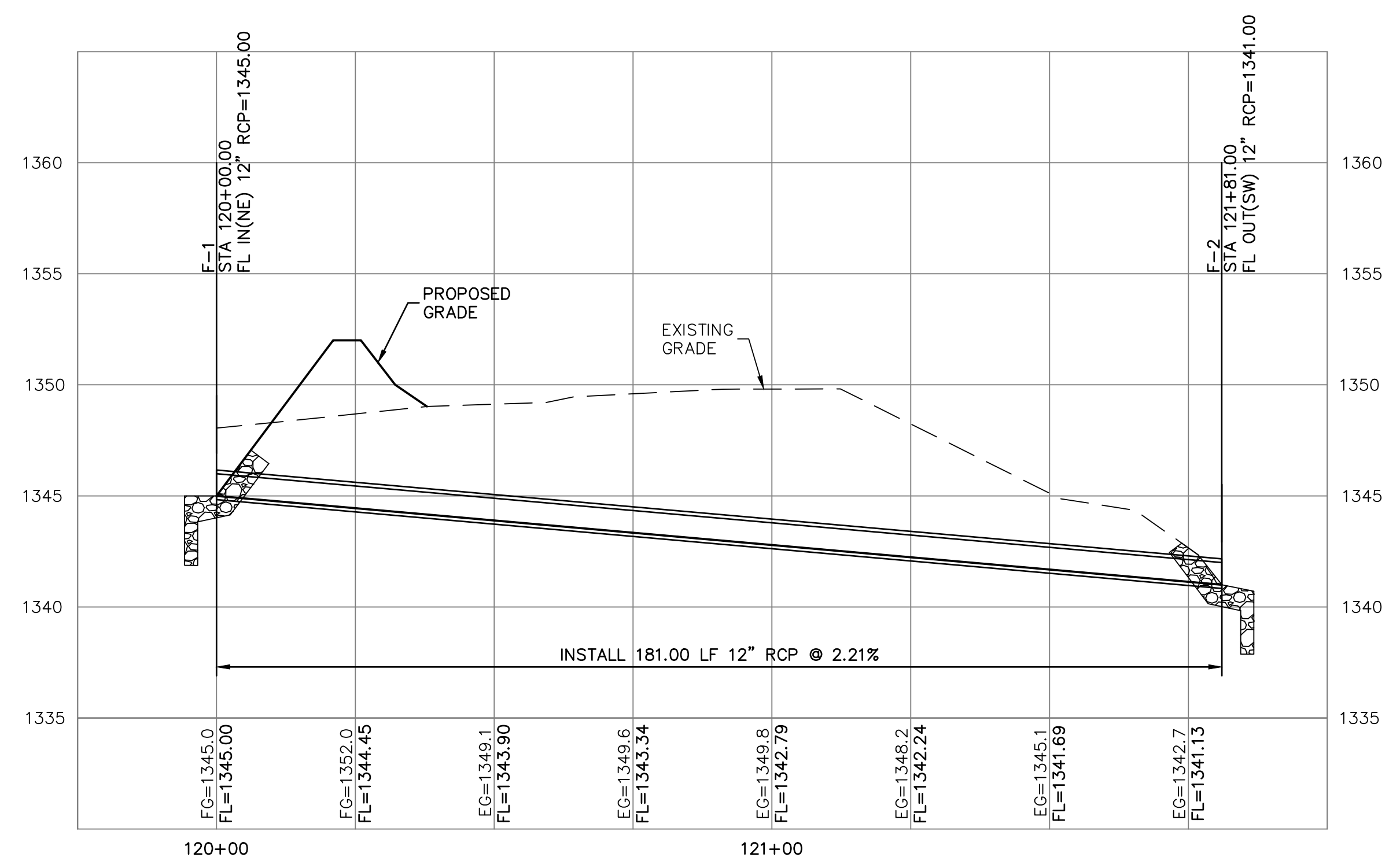


NOT BUILT AS PER PLAN: STA 160+30.00
Storm Sewer Line E
Curb Inlet placed 18" north of planned location

STORM SEWER LINE E



STORM SEWER LINE F



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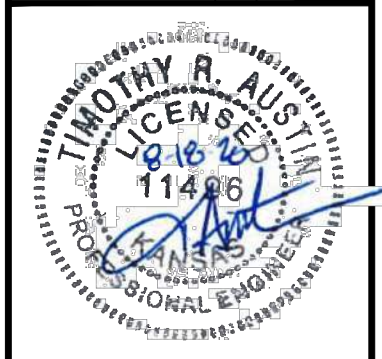
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CHK	CHK
EAM	CHK
TRA	CHK
TRA	CHK
DSN	CHK

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KS # 11496

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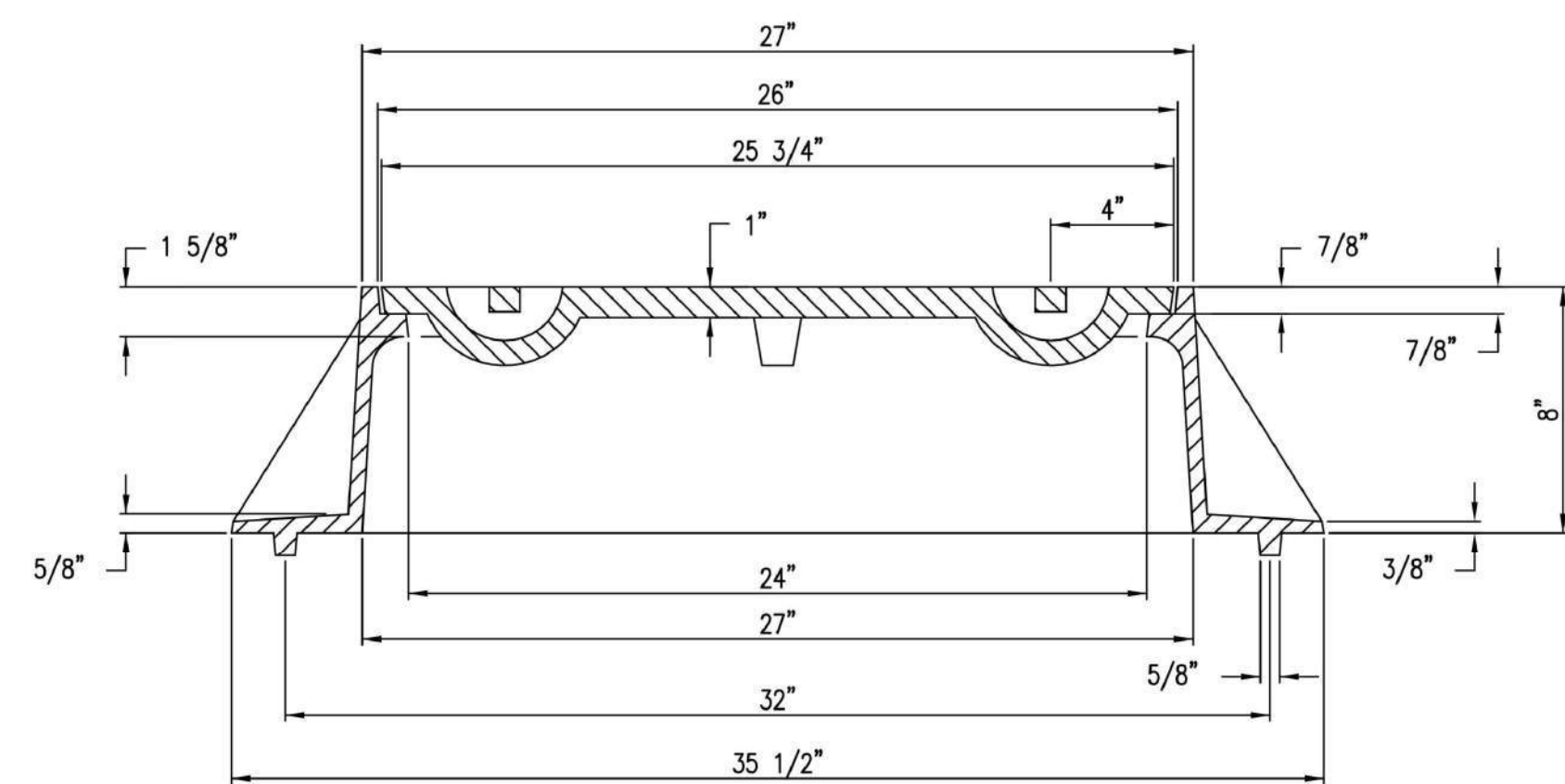
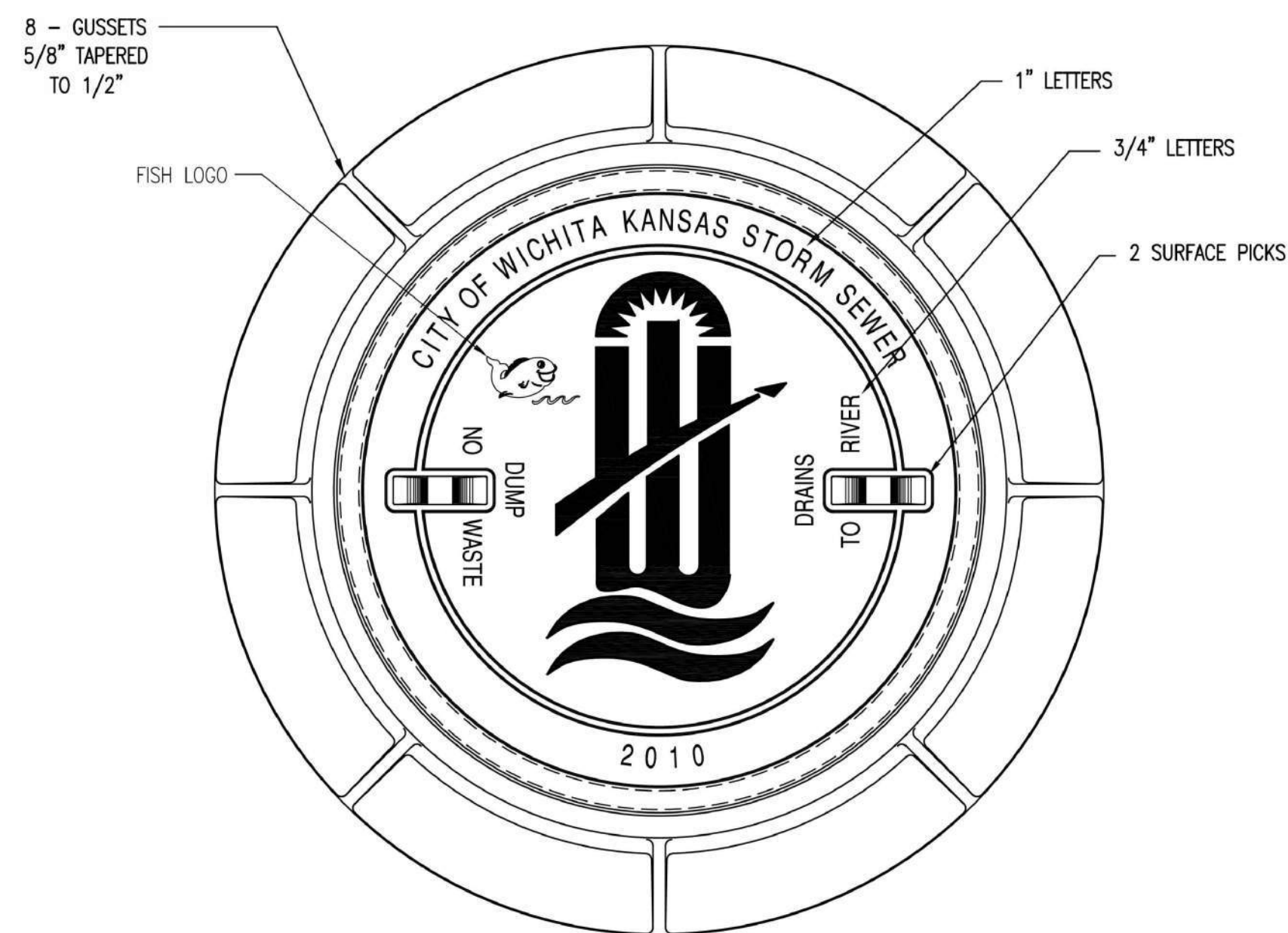
KAW VALLEY ENGINEERING

KAW VALLEY ENGINEERING, INC. IS AUTHORIZED TO OFFER ENGINEERING SERVICES IN THE STATE OF KANSAS UNDER CERTIFICATE OF AUTHORIZATION # E-113. EXPIRES 12/31/20

OLIVER FOURPLEX PROJECT
2805 N. OLIVER
WICHITA, KS

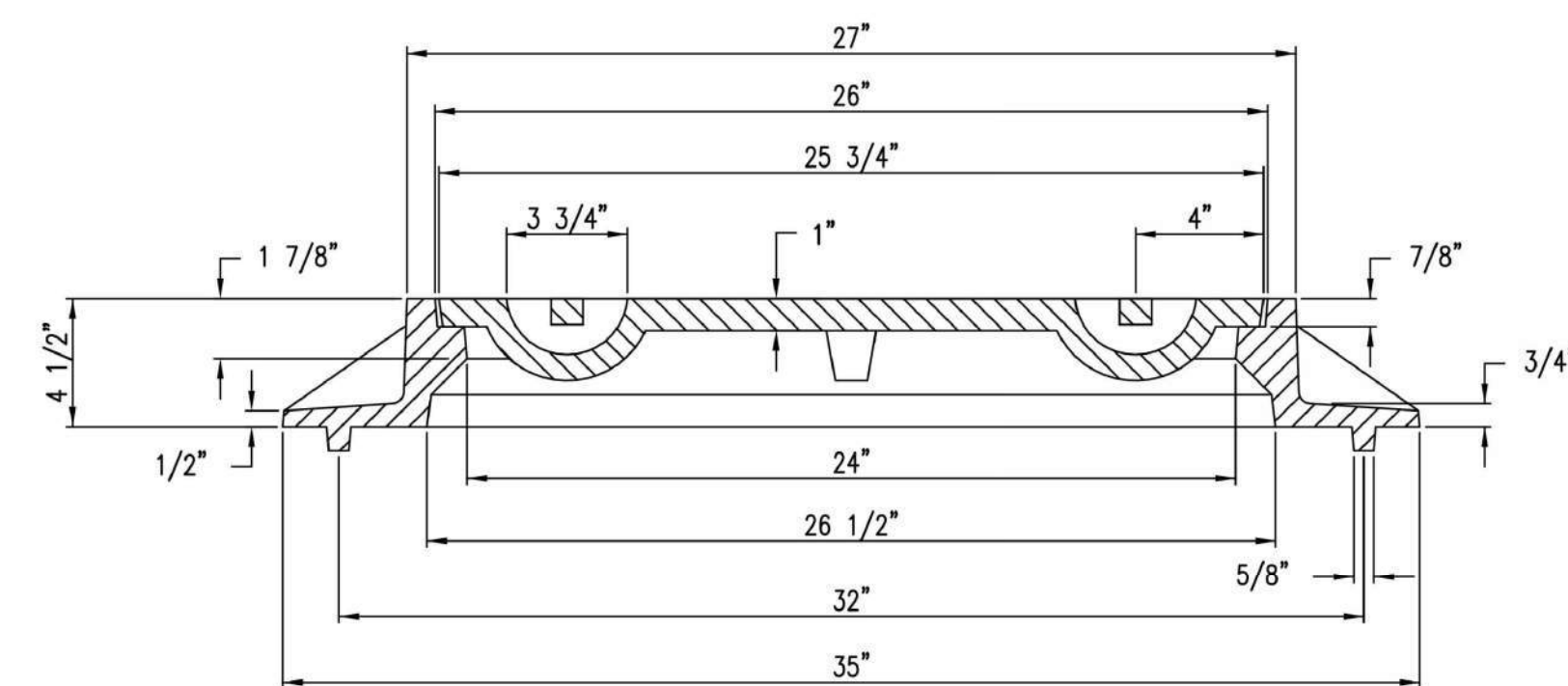
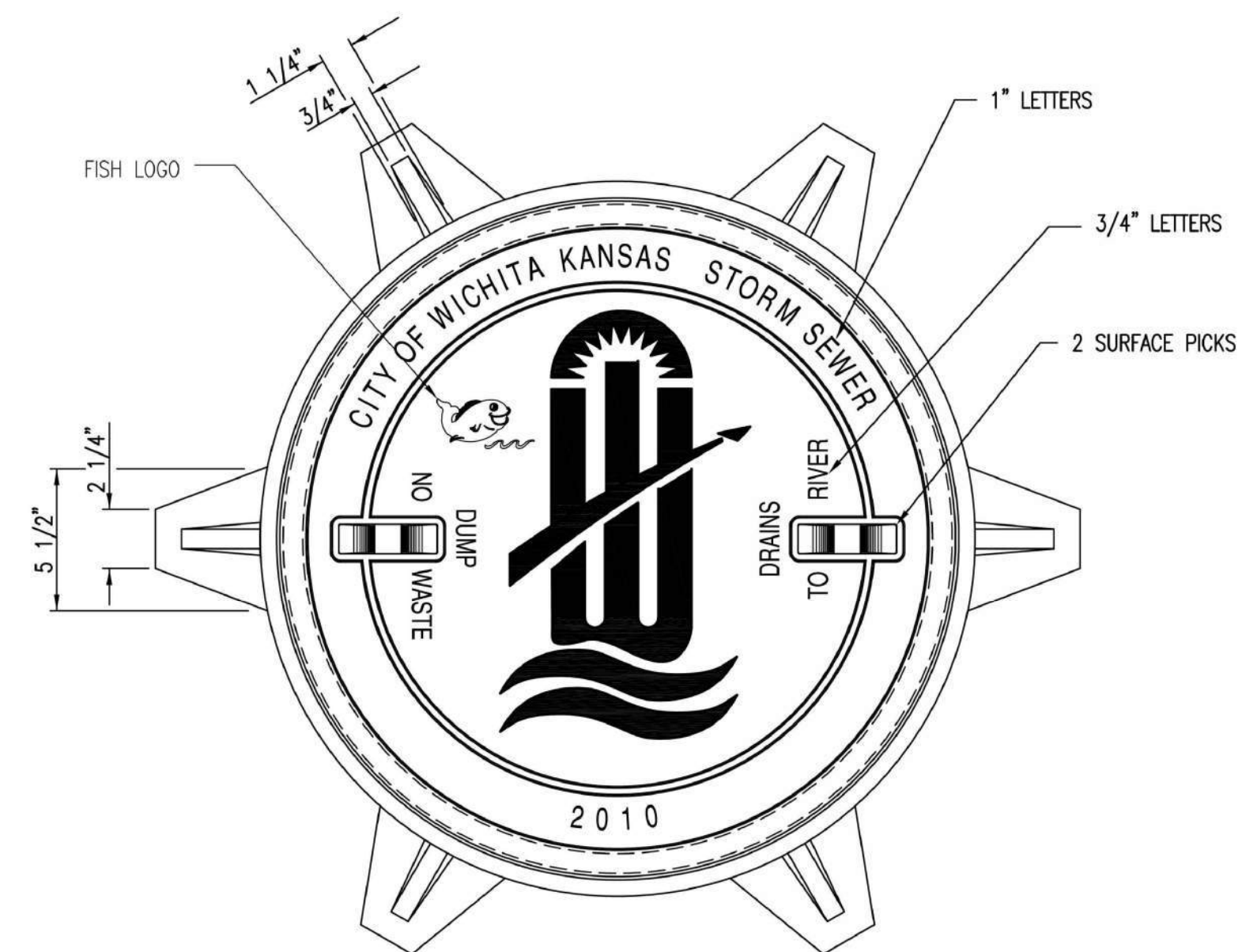
STORM SEWER PLAN & PROFILE

PROJ. NO.	G19_1092
DESIGNER	TRA
DRAWN BY	EAM
CFN	
SHEET	1092DPP
REV	04
	1



MANHOLE FRAME
DEETER #1261 OR EJIW #1936-Z1

- NOTE:
1. FURNISHED WITH MACHINED HORIZONTAL BEARING SURFACE.
 2. COVER TO BE DEETER #1261 OR EJIW #1936A.



INLET FRAME
DEETER #2014 OR EJIW #1936-Z4

- NOTE:
1. FURNISHED WITH MACHINED HORIZONTAL BEARING SURFACES.
 2. NOT TO BE USED UNDER PAVEMENT.
 3. COVER TO BE DEETER #1261 OR EJIW #1936A.



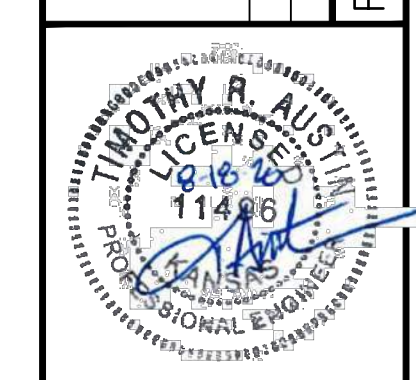
MANHOLE/INLET FRAME
AND COVER
(STORM SEWER)

CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER	OCA NUMBER	DATE
		11/2010

CITY ENGINEER'S OFFICE	SHEET
CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501	

			CHK
		TRA	CHK
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		DSN	CHK
		REV	DATE
1	8-18-20	FOR FINAL SUBMITTAL	
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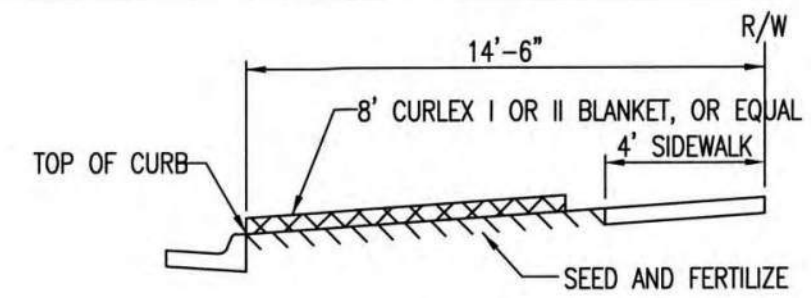
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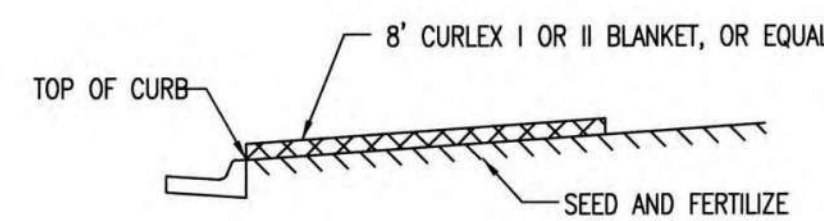
KAW VALLEY ENGINEERING

KAW VALLEY ENGINEERING, INC. IS AUTHORIZED TO OFFER ENGINEERING SERVICES IN KANSAS STATE CERTIFICATE OF AUTHORIZATION # E-113. EXPIRES 12/31/20

OLIVER FOURPLEX PROJECT		STANDARD DETAILS
2805 N. OLIVER WICHITA, KS		
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SHEET	08	REV
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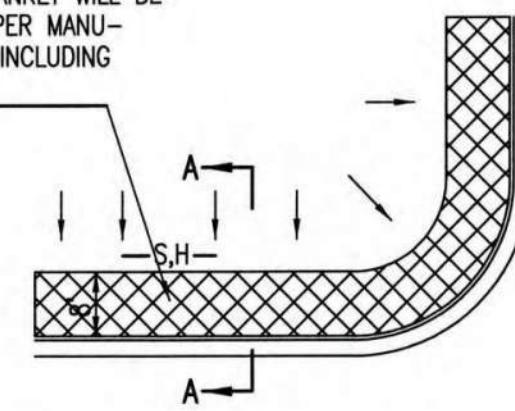


SECTION B-B

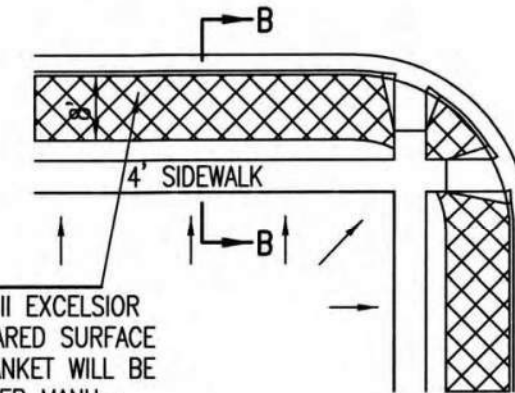


SECTION A-A

INSTALL 8' WIDE CURLEX I OR II EXCELSIOR BLANKET, OR EQUAL, ON PREPARED SURFACE BACK OF CURB. EDGE OF BLANKET WILL BE AT BACK OF CURB. INSTALL PER MANUFACTURER'S RECOMMENDATION, INCLUDING STAPLES. (SEE DETAIL)



SOUTH STREET

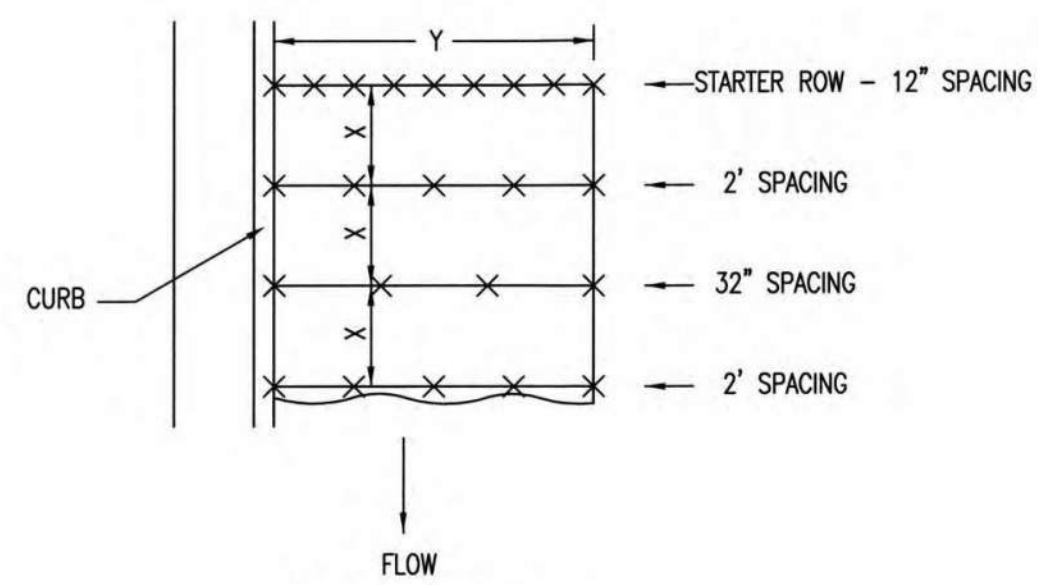


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GENERAL NOTES

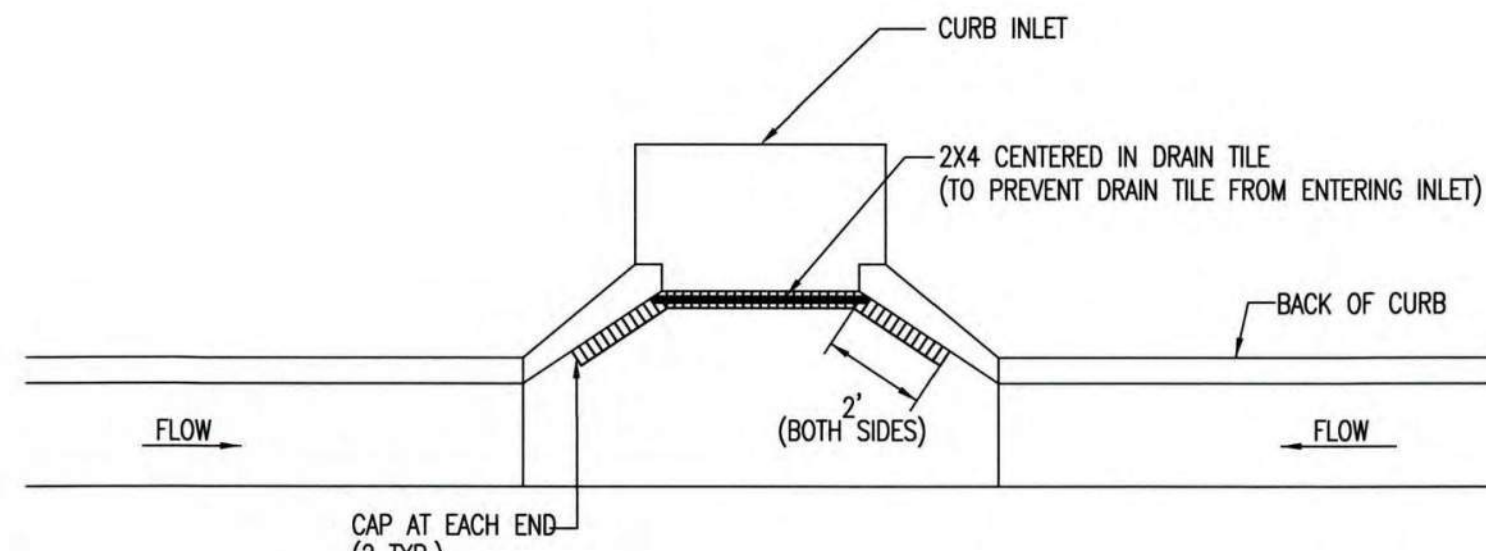
- EXCELSIOR MAT TO BE INSTALLED WHEN SOD IS NOT SPECIFIED ON PROJECT.
- EXCELSIOR BLANKET TO BE INSTALLED OVER SEED AND FERTILIZER, AS SPECIFIED IN THE PROJECT SPECIFICATIONS.
- AFTER INSTALLATION OF EXCELSIOR BLANKET, AT LOCATIONS WHERE CONCENTRATED FLOW CARRIES SEDIMENT OVER THE CURB AND INTO THE GUTTER, SUPPLEMENTAL EROSION CONTROL DEVICES WILL BE INSTALLED BY THE CONTRACTOR AS NEEDED, TO FIX THE PROBLEM.

BACK OF CURB PROTECTION DETAIL



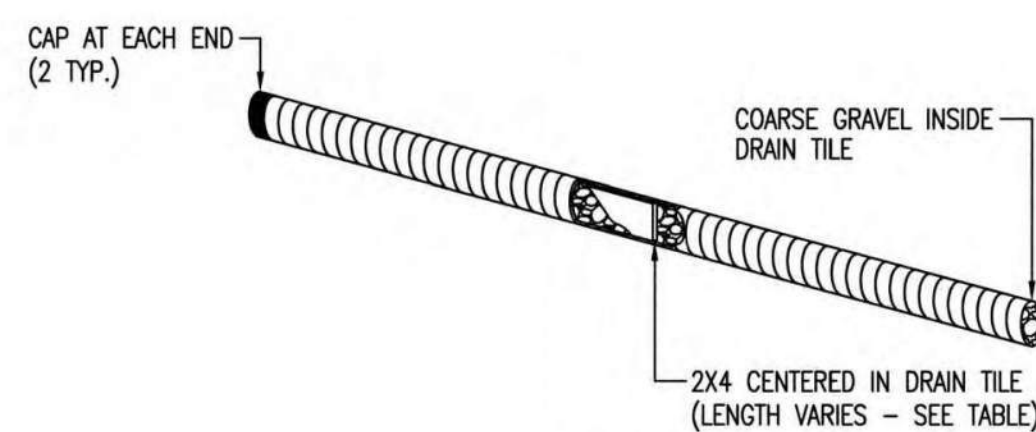
STAPLE PATTERN
NOTES: USE 6" SEAM OVERLAP
(X & Y = RECOMMENDED BY MANUFACTURE)

DETAILS FOR APPROVED EROSION CONTROL MAT

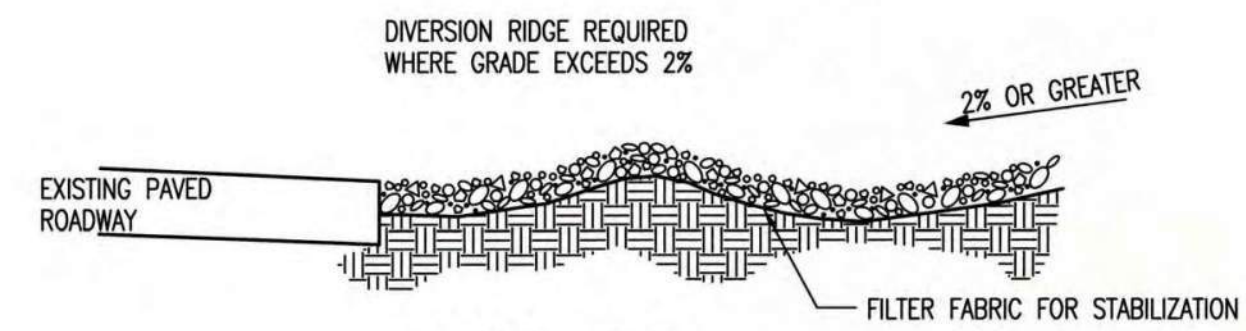


NOTE:
PLACE 4" PERFORATED PVC PIPE, FILLED WITH 1/2"-1" DIA. GRAVEL, IN FRONT OF CURB INLET AS SHOWN.

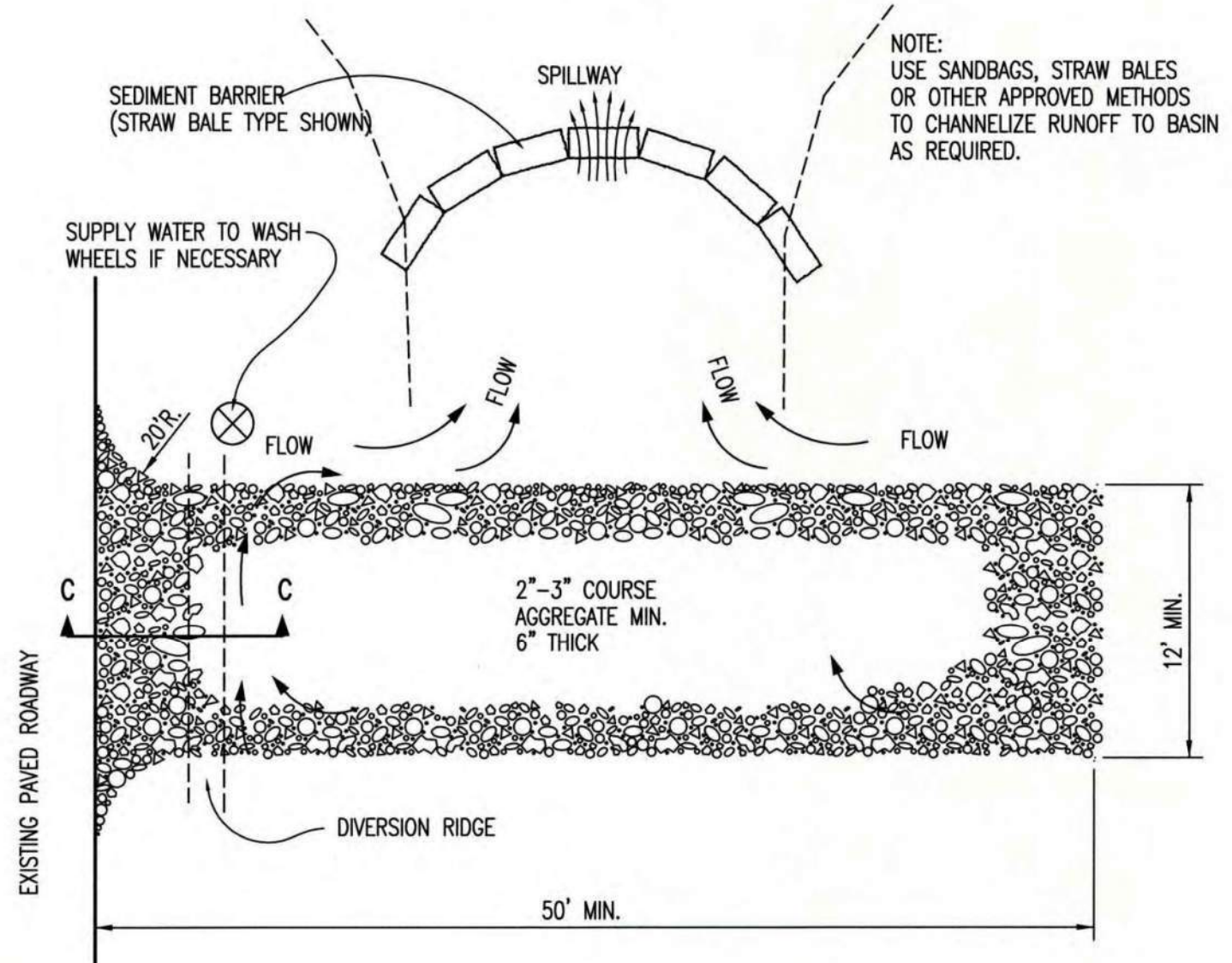
2X4 LENGTH	INLET TYPE	INLET OPENING
5'-6"	1-A	5'-0"
10'-6"	1-A	10'-0"
15'-6"	1-A	15'-0"



CURB INLET PROTECTION
4" PERFORATED PIPE W/ GRAVEL



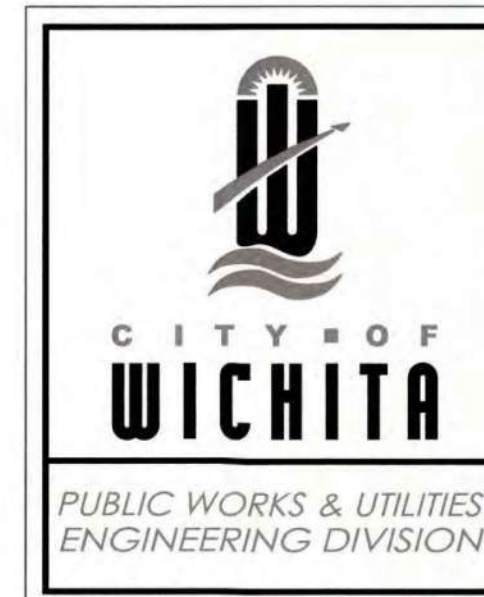
SECTION C-C



STABILIZED CONSTRUCTION ENTRANCE

GENERAL NOTES

- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
- WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
- WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN, AS SHOWN ABOVE.
- DRIVE ENTRANCES ONTO RESIDENTIAL LOTS WILL NOT BE REQUIRED TO HAVE THE SEDIMENT BARRIER SHOWN, BUT WHEEL WASHING MAY BE REQUIRED IF STABILIZED ENTRANCE IS NOT SUFFICIENT TO KEEP MUD FROM BEING TRACKED ONTO ADJACENT STREET. ENTRANCE SHALL EXTEND FROM BACK OF CURB TO DWELLING.



BACK OF CURB PROTECTION,
CURB INLET PROTECTION AND
CONSTRUCTION ENTRANCE

CITY ENGINEER
GARY JANZEN, P.E.

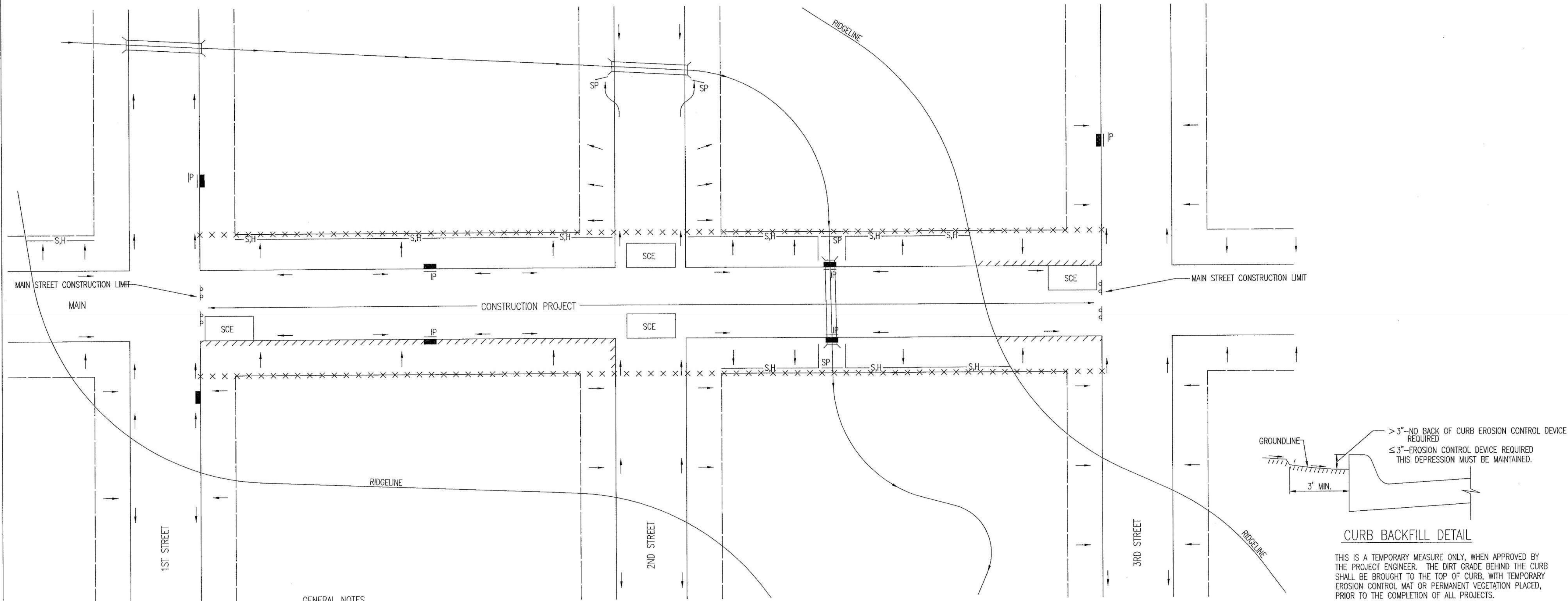
PROJECT NUMBER	OCA NUMBER	DATE
CITY ENGINEER'S OFFICE		
CITY HALL - SEVENTH FLOOR		
455 NORTH MAIN STREET		
WICHITA, KANSAS 67202-1620		
(314) 268-4501		

SW-501

			CHK	CHK
			EAM	CHK
			TRA	CHK
			TRA	DWN
			DSN	CHK
			FOR FINAL SUBMITTAL	
			FOR CITY REVIEW	
			DATE	DESCRIPTION
1	8-18-20			
0	6-24-20			
TIMOTHY R. AUSTIN ENGINEER KS # 11496				
200 N. EMPORIA, SUITE 100 WICHITA, KANSAS 67202-4400-4309 PH: (316) 268-4309 info@kveeng.com www.kveeng.com				
KAW VALLEY ENGINEERING, INC. IS AUTHORIZED TO OFFER ENGINEERING SERVICES UNDER THE KANSAS STATE CERTIFICATE OF AUTHORIZATION # E-113. EXPIRES 12/31/20				
OLIVER FOURPLEX PROJECT 2805 N. OLIVER WICHITA, KS				
EROSION CONTROL DETAILS				
PROJ. NO.	G19_1092			
DESIGNER	TRA	DRAWN BY	EAM	
CFN	1092DDET			
SHEET	10	REV	1	

GENERAL NOTES

- THIS SHEET IS INTENDED TO PROVIDE GUIDELINES AS TO WHAT TYPES OF EROSION CONTROL DEVICES WILL BE INSTALLED DURING THE CONSTRUCTION PROCESS. CONTRACTORS ARE EXPECTED TO BID PROJECTS ACCORDINGLY.
- EROSION CONTROL DEVICES MUST BE MAINTAINED BY THE CONTRACTOR THROUGHOUT THE CONSTRUCTION PROCESS AND UNTIL THE DISTURBED EARTH IS RESTABILIZED.
- IF THE PROJECT WILL DISTURB 1 ACRE OR MORE, A FEDERAL/STATE NPDES STORMWATER PERMIT IS REQUIRED. A DETAILED STORMWATER POLLUTION PREVENTION PLAN, IS REQUIRED. THE EROSION CONTROL DEVICES SHOWN ON THIS SHEET ARE CONSIDERED TO BE THE MINIMUM TO BE SHOWN IN THE POLLUTION PREVENTION PLAN.
- FOR PROJECTS DISTURBING LESS THAN 1 ACRE, CONTRACTORS ARE ENCOURAGED TO PREPARE STORMWATER POLLUTION PREVENTION PLANS PRIOR TO CONSTRUCTION. EROSION CONTROL DEVICES MUST BE USED ON ALL PROJECTS.
- FAILURE TO USE AND MAINTAIN EROSION CONTROL DEVICES IS A VIOLATION OF SECTION 16.32 OF THE CITY CODE AND WILL SUBJECT THE CONTRACTOR TO THE PENALTIES PROVIDED FOR THEREIN.
- THE APPLICATION OF EROSION CONTROL DEVICES SHOWN ON THIS SHEET IS FOR SITUATIONS NORMALLY ENCOUNTERED. FROM TIME TO TIME, SITUATIONS WILL ARISE THAT MAY REQUIRE A DIFFERENT DEVICE OTHER THAN THOSE SHOWN. EROSION CONTROL DEVICES, OTHER THAN THOSE SHOWN, MAY BE UTILIZED AS LONG AS THEY ARE EFFECTIVE AND MAINTAINED.

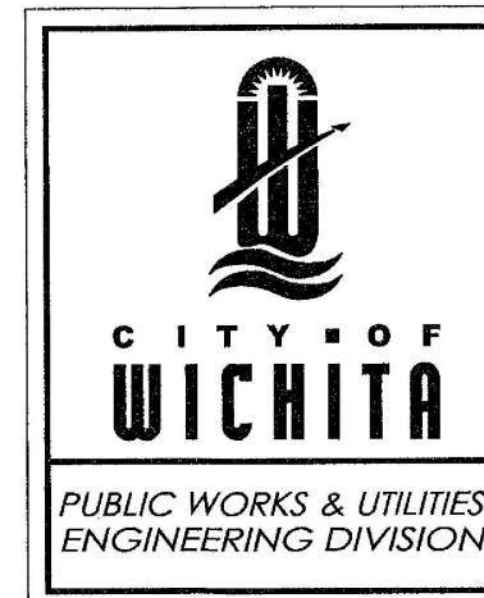


LEGEND

- R-O-W LIMITS
- DRAINAGE FLOW PATH
- x x x x x R/W LIMIT WITHIN CONSTRUCTION LIMIT
- STORM WATER INLETS
- IP INLET PROTECTION
- S,H- SILT FENCE OR HAY BALE BARRIER
- SP STREAM PROTECTION
- SCE STABILIZED CONSTRUCTION ENTRANCE
- ////// BACK OF CURB PROTECTION

GENERAL NOTES

- THE INTENT OF ALL EROSION CONTROL DEVICES IS TO KEEP ALL SEDIMENT CONFINED TO THE CONSTRUCTION SITE, AND OUT OF ALL UNDERGROUND PIPES, DITCHES, LAKES, AND OTHER DRAINAGE FACILITIES, AND OFF OF STREETS.
- THE POINT OF COMPLIANCE IS GENERALLY THE RIGHT-OF-WAY LINES WITHIN THE LIMITS OF CONSTRUCTION.
- EROSION CONTROL DEVICES WILL BE REQUIRED AT ALL POINTS ALONG THE PROJECT WHERE DISTURBED EARTH CAN DRAIN ONTO PRIVATE PROPERTY.
- INLET PROTECTION DEVICES WILL BE REQUIRED WHEREVER WATER CAN DRAIN OFF THE PROJECT SITE INTO AN INLET, INCLUDING ANY SIDE STREET INLETS.
- EROSION CONTROL DEVICES SHALL BE INSTALLED AT CREEK CROSSINGS SO AS TO PREVENT SEDIMENT FROM ENTERING THEREIN.
- STABILIZED CONSTRUCTION ENTRANCES SHALL BE PROVIDED, AS NEEDED, TO PREVENT MUD FROM TRACKING ONTO STREETS NOT UNDER CONSTRUCTION AND ON STREETS WITHIN THE PROJECT LIMITS IF TRAFFIC IS BEING MAINTAINED THROUGH THE PROJECT.
- ANY MUD TRACKED ONTO STREETS MUST BE REMOVED AT THE END OF EACH WORK DAY.
- THE CONTRACTOR WILL BE REQUIRED TO PLACE EROSION CONTROL DEVICES BACK OF CURB, WHENEVER WATER CAN DRAIN OVER CURB, TO KEEP ERODED SOIL OUT OF THE GUTTERLINES, IN ACCORDANCE WITH THE FOLLOWING:
 - THE DEVICE REQUIRED WILL BE APPROVED EROSION CONTROL MAT LISTED ON THE CITY'S APPROVED MATERIAL LIST. SAID BLANKET SHALL BE PLACED OVER THE APPROPRIATE SEED AND FERTILIZER, AS SPECIFIED IN THE PROJECT SPECIFICATIONS. (SEE SOIL EROSION BMPs - BACK OF CURB SEDIMENT BARRIER DETAILS)
 - THIS DEVICE SHALL BE INSTALLED IMMEDIATELY WHENEVER THE CURB IS BACKFILLED TO WITHIN 3" OF THE TOP OF CURB. (SEE CURB BACKFILL DETAIL) OTHER BMP'S MAY BE REQUIRED AT LOCATIONS WHERE CONCENTRATED FLOW CARRIES SEDIMENT OVER THE CURB.
 - ADDITIONALLY, OTHER EROSION CONTROL DEVICES (HAY BALES, SILT FENCE, ETC.) WILL BE INSTALLED AT LOCATIONS OF CONCENTRATED FLOW RESULTING IN SEDIMENT OVERRUNNING THE MAT.
 - SHOULD THE PROJECT PLANS SPECIFY THAT THE RIGHT-OF-WAY IS TO BE SODDED, THE EXCELSIOR MAT WILL NOT BE REQUIRED SO LONG AS THE SOD IS PLACED WITHIN 48 HOURS AFTER CURB BACKFILL REACHES A HEIGHT OF 3" OR LESS FROM TOP OF CURB. (SEE CURB BACKFILL DETAIL)



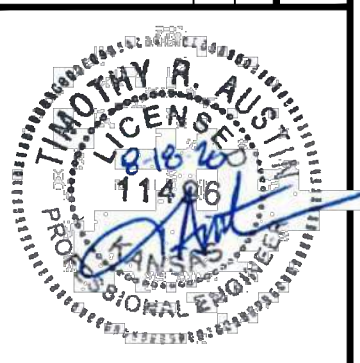
REVISION: JUNE 2015

STREET IMPROVEMENT PROJECTS		
CITY ENGINEER GARY JANZEN, P.E.		
PROJECT NUMBER	OCA NUMBER	DATE
CITY ENGINEER'S OFFICE	SHEET	
CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		

SW-504

	CHK	CHK
	EAM	CHK
	TRA	CHK
	TRA	CHK
	DSN	CHK

REV	DATE	DESCRIPTION
1	8-18-20	FOR FINAL SUBMITTAL
0	6-24-20	FOR CITY REVIEW



TIMOTHY R. AUSTIN
ENGINEER
KS # 11496

200 N. EMPORIA, SUITE 100
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KAW VALLEY ENGINEERING

KAW VALLEY ENGINEERING, INC. IS AUTHORIZED TO OFFER ENGINEERING SERVICES IN THE STATE OF KANSAS UNDER CERTIFICATE OF AUTHORIZATION # E-113. EXPIRES 12/31/20

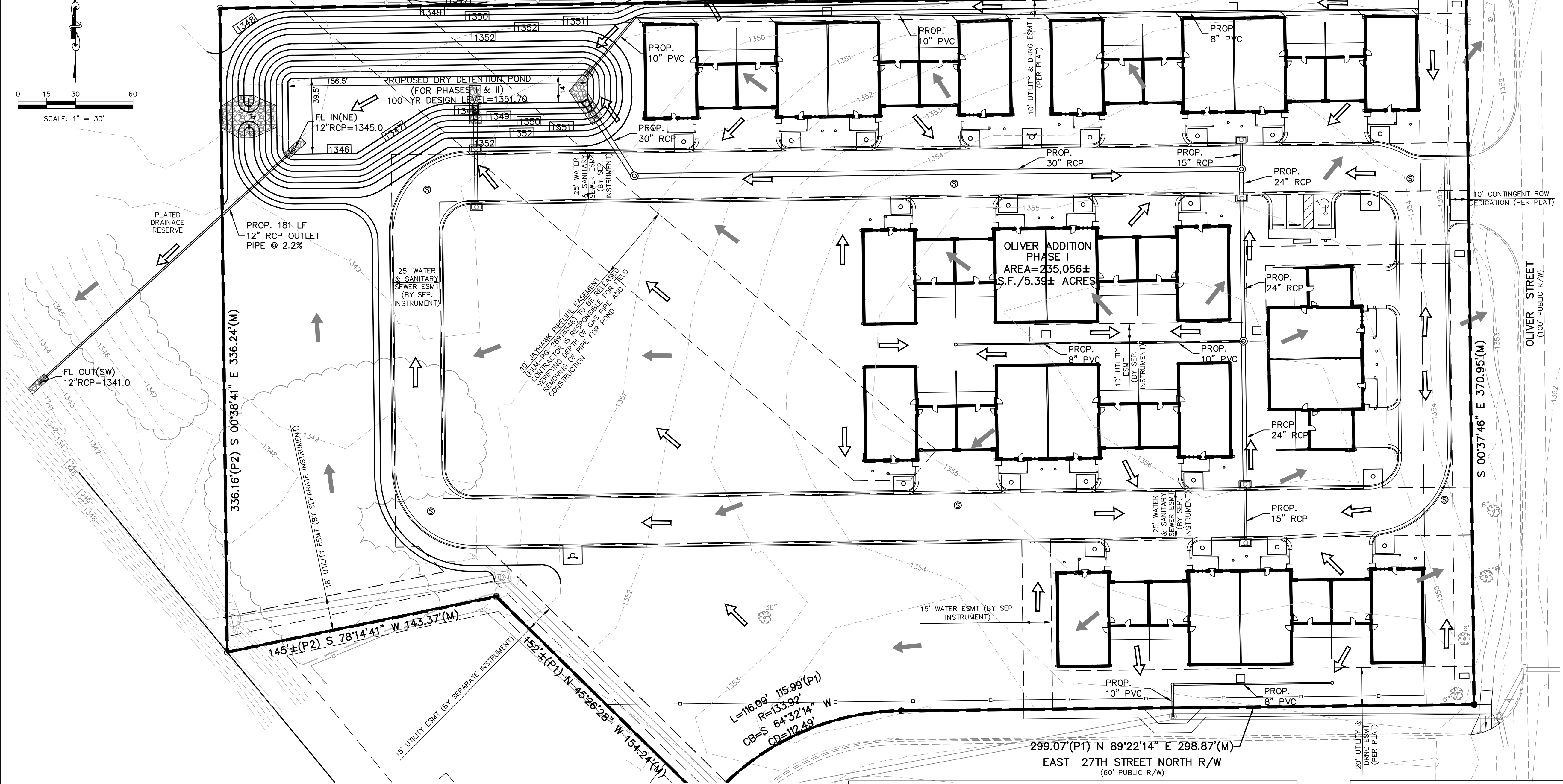
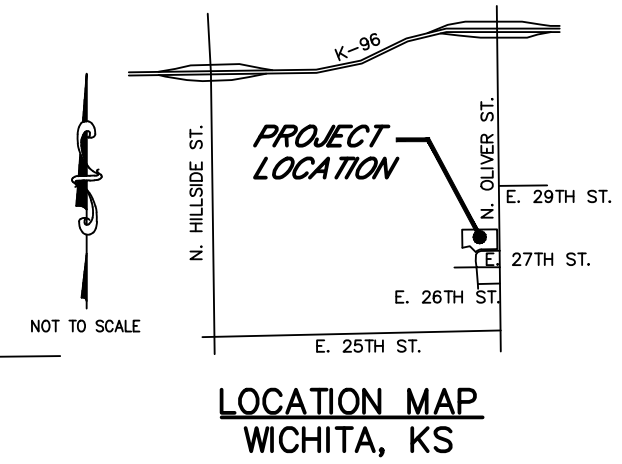
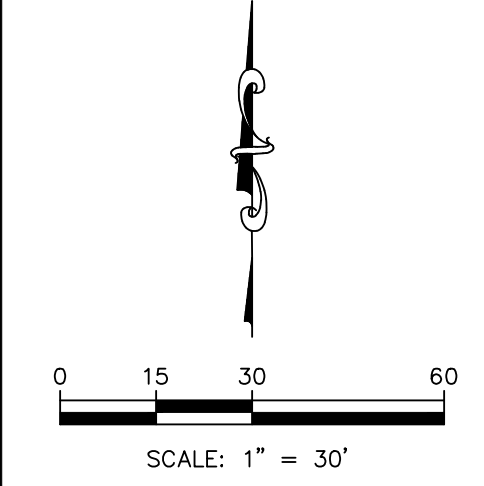
OLIVER FOURPLEX PROJECT
2805 N. OLIVER
WICHITA, KS

EROSION CONTROL DETAILS

PROJ. NO.	G19_1092
DESIGNER	TRA
CFN	1092DDET
SHEET	13
REV	1

DRAINAGE PLAN FOR OLIVER ADDITION CITY OF WICHITA, SEDGWICK COUNTY, KANSAS

A TRACT IN THE NORTHEAST QUARTER OF SECTION 2, TOWNSHIP 27 SOUTH, RANGE 1 EAST OF THE 6TH P.M., SEDGWICK COUNTY, KANSAS
650.56'(P2&D) S 89°21'13" W 650.43'(M)

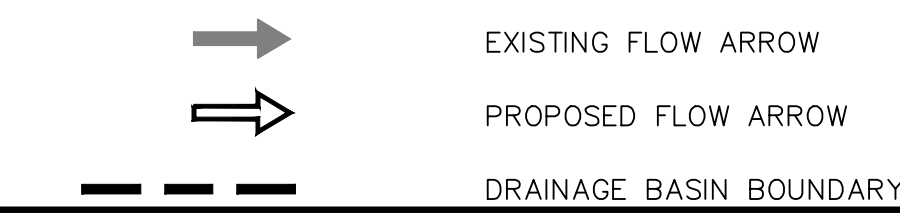


DRAINAGE CALCULATIONS:

PARCEL AREA 235,056 S.F. (5.39 AC)
DRAINAGE BASIN 235,056 S.F. (5.39 AC)

SOIL TYPE
 ELANDCO SILT LOAM - GROUP "B" WESTERN 40% OF PARCEL
 FARNUM LOAM - GROUP "B" MIDDLE 30% OF PARCEL
 IRWIN SILTY CLAY LOAM - GROUP "D" EASTERN 30% OF PARCEL

POND INFORMATION
 DEPTH 6 FEET
 WEIR 4 FEET WIDE BROAD CRESTED WEIR FROM CONTOUR 1350 TO CONTOUR 1352
 OUTLET PIPE 12" RCP (APPROX. 181 L.F. AT 2.2% SLOPE)
 POND SIDE SLOPE 3:1 (MAX)
 EROSION CONTROL ALL 3:1 SIDE SLOPES TO BE PROTECTED WITH NORTH AMERICAN GREEN VMAX P550 TURF REINFORCEMENT MAT, THAT WILL PREVENT EROSION



EXISTING RUNOFF						
Description	Impervious (%)	CN	Tc (min)	24-hr precip. (in)	A (ac)	Q (cfs)
Existing basin "A" (1yr)	0	75	15	2.90	5.39	5.80
Existing basin "A" (2yr)	0	75	15	3.39	5.39	8.08
Existing basin "A" (5yr)	0	75	15	4.24	5.39	12.47
Existing basin "A" (10yr)	0	75	15	4.98	5.39	16.53
Existing basin "A" (25yr)	0	75	15	6.03	5.39	22.51
Existing basin "A" (100yr)	0	75	15	7.83	5.39	33.11

PROPOSED RUNOFF						
Description	Impervious (%)	CN	Tc (min)	24-hr precip. (in)	A (ac)	Q (cfs)
Proposed basin "A" (1yr)	80	95	6.5	2.90	5.39	19.80
Proposed basin "A" (2yr)	80	95	6.5	3.39	5.39	23.54
Proposed basin "A" (5yr)	80	95	6.5	4.24	5.39	29.99
Proposed basin "A" (10yr)	80	95	6.5	4.98	5.39	35.57
Proposed basin "A" (25yr)	80	95	6.5	6.03	5.39	43.45
Proposed basin "A" (100yr)	80	95	6.5	7.83	5.39	56.89

POND TABLE			
Description	Q(cfs)	Max Elev. (ft)	Vol. (ft³)
Pond basin (1yr)	5.64	1348.80	14,155
Pond basin (2yr)	5.87	1349.20	17,305
Pond basin (5yr)	6.20	1349.90	22,990
Pond basin (10yr)	9.31	1350.40	27,490
Pond basin (25yr)	16.25	1351.00	32,400
Pond basin (100yr)	29.08	1351.70	39,700

DATUM BENCHMARK:
 DATUM IS U.S. SURVEY FEET AND DERIVED FROM THE PLATTED BENCHMARK FOR CAMPUS CREST ADDITION, AN ADDITION IN THE CITY OF WICHITA, COUNTY OF SEDGWICK, STATE OF KANSAS DESCRIBED AS: CHISELED "4" CUT ON SW CORNER TRAFFIC SIGNAL LIGHT BASE POLE ON SW CORNER BOLT AT SW CORNER OLIVER & 29TH ST. N. ELEV.=1348.33 NAVD 88

BENCHMARK (NAVD 88 DATUM):
 BM #61: CHISELED SQUARE CUT ON N. EDGE OF DRIVEWAY AT 2739 DELROSE AVE. AT INTERSECTION 27TH ST. N. & DELROSE AVE. ELEV.=1353.01 NAVD 88

DESCRIPTION:
 LOTS 5, 6, 7, 8, 9 AND 10, BLOCK 8, GREENBRIAR MANOR ADDITION TO WICHITA, SEDGWICK COUNTY, KANSAS.

TOGETHER WITH
 A TRACT OF LAND LOCATED IN THAT PART OF VACATED BLOCKS 8 AND 10, AS VACATED ON FILM 2512, PAGE 605, OF GREENBRIAR MANOR ADDITION TO WICHITA, SEDGWICK COUNTY, KANSAS, MORE PARTICULARLY DESCRIBED AS FOLLOWS:
 BEGINNING AT THE SOUTHEAST CORNER OF LOT 11, BLOCK 8, OF SAID GREENBRIAR MANOR ADDITION; THENCE N 90°00'00" W ALONG THE SOUTH LOT LINE OF LOTS 11 THRU 15, BLOCK 8, OF SAID ADDITION, 385.00 FEET TO THE SOUTHWEST CORNER OF LOT 15, BLOCK 8; THENCE S 64°58'59" W ALONG THE SOUTH LINE OF LOT 16 AND A PORTION OF LOT 17, BLOCK 8, 137.76 FEET; THENCE S 78°52'51" W ALONG THE SOUTH LINE OF LOTS 17 AND 18, BLOCK 8, 143.42 FEET TO A POINT WHERE THE SOUTH LINE OF LOT 18, BLOCK 8 MEETS THE EAST LINE OF LOT 52, BLOCK 8, OF SAID ADDITION; THENCE N 00°00'00" E, 335.92 FEET; THENCE S 90°00'00" E, 650.56 FEET TO A POINT ON THE EAST LINE OF SAID GREENBRIAR MANOR ADDITION; THENCE S 00°00'00" E ALONG THE SAID EAST LINE, 250.00 FEET TO THE BEGINNING.

DATE OF SURVEY: SEPT. 27, 2019

THIS DRAWING SHALL NOT BE UTILIZED BY ANY PERSON, FIRM, OR CORPORATION IN WHOLE OR IN PART WITHOUT THE SPECIFIC PERMISSION OF KAW VALLEY ENGINEERING, INC.

	CHK	CHK	CHK	CHK	CHK	CHK	CHK
	EAM	EAM	EAM	EAM	EAM	EAM	EAM
	TRA	TRA	TRA	TRA	TRA	TRA	TRA
	DWN	DWN	DWN	DWN	DWN	DWN	DWN
1	8-18-20	FOR FINAL SUBMITTAL					
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OLIVER FOURPLEX PROJECT 2805 N. OLIVER WICHITA, KS							
DRAINAGE PLAN							
PROJ. NO.		G19_1092					
DESIGNER		TRA					
DRAWN BY		EAM					
CFN		1092DRNG					
SHEET		15					
REV		1					