

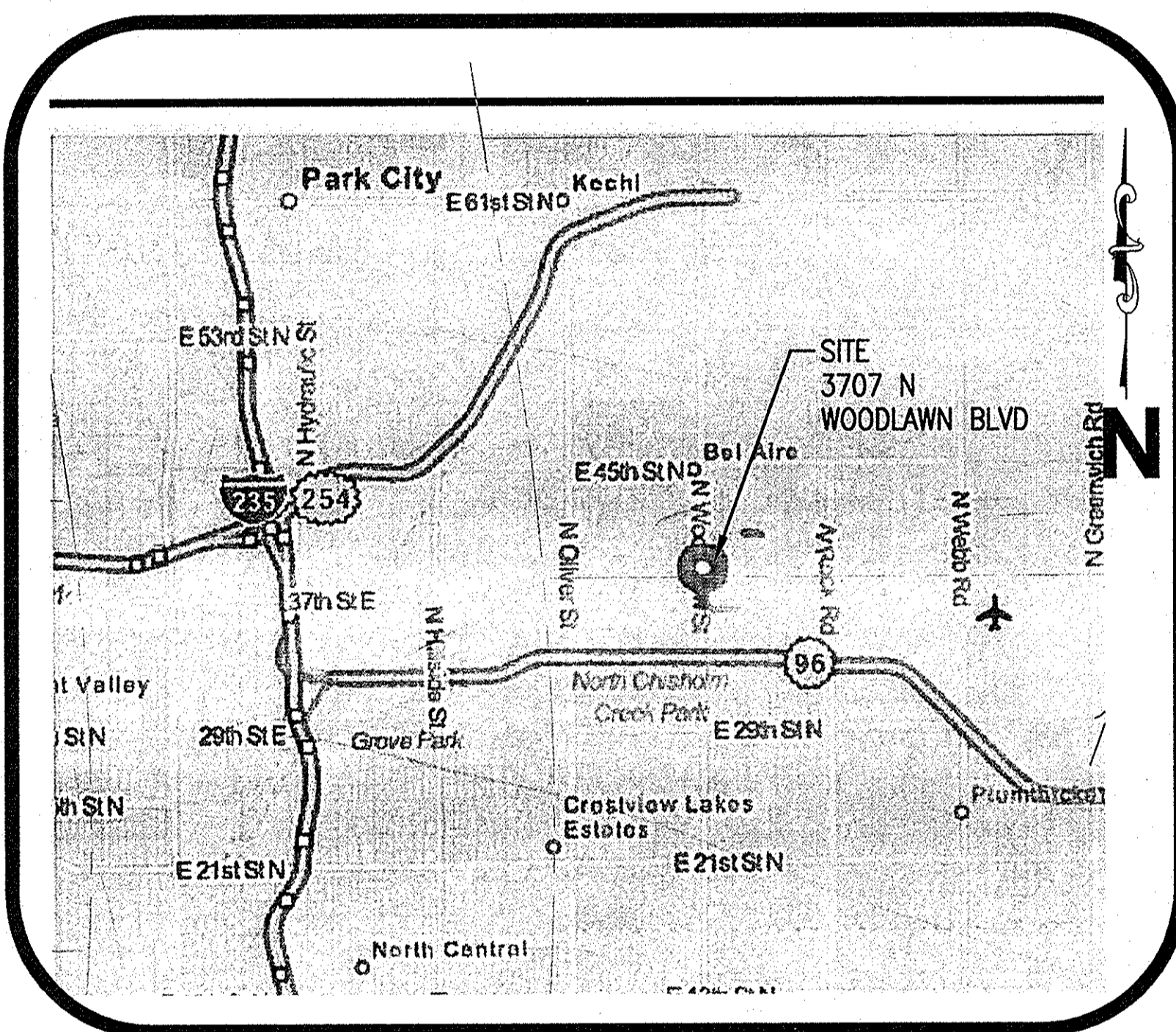
INDEX OF DRAWINGS

DILLONS FOOD STORES NEW BUILDING CONSTRUCTION

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SHEET 2/11	LINE A - STORM SEWER PLAN & PROFILE
SHEET 3/11	LINE B - STORM SEWER PLAN & PROFILE
SHEET 4/11	EROSION CONTROL PLAN
SHEET 5/11	STORM SEWER DETAILS - SHALLOW MANHOLES
SHEET 6/11	STORM SEWER DETAILS - MANHOLE FRAME AND COVER
SHEET 7/11	STORM SEWER DETAILS - TYPE 2 CURB-INLET SINGLE
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WICHITA, KS

VICINITY MAP



STORM SEWER IMPROVEMENTS FOR DILLONS FOOD STORE #56 BUILDING EXPANSION

PRIVATE PROJECT NUMBER: **190 ppd**

CITY OF WICHITA, SEDGWICK COUNTY, KANSAS
CITY ENGINEER: GARY JANZEN, P.E.

NEW DEVELOPMENT:

DISTURBED AREA = 3.20 AC
EXISTING IMPERVIOUS AREA = 1.0 AC
PROPOSED (NEW) IMPERVIOUS AREA = 1.68 AC
DISTURBED PERVIOUS AREA = 0.52 AC.

WQV = 0.26 AC-FT
CFV = N/A

THIS OVERALL PROJECT SATISFIES CHAPTER 16-32 OF THE CITY CODE THROUGH TREATMENT PROVIDED BY THE INSTALLATION OF PROPRIETARY DEVICES.

PREPARED & SUBMITTED BY
PICKERING FIRM, INC.
6775 LENOX CENTER COURT, SUITE 300
MEMPHIS, TN 38115



ENGINEER: _____ DATE: _____

APPROVED AS NOTED
BY CITY ENGINEER OF WICHITA,
BY STORMWATER DEPARTMENT

ENGINEERING: *Jim Schultz* 10/15/13

STORM WATER: *Jim Schultz* 10-28-13

(PUBLIC WORKS)

NOTE TO CONTRACTOR:

PUBLIC PROPERTY:

INSPECTION AND TESTING FOR THE STORM WATER SEWER IS 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 LICENSED IN THE STATE OF KANSAS. NO WORK SHALL BE PERFORMED IN DEDICATED EASEMENTS OR PUBLIC RIGHTS-OF-WAY BY THE CONTRACTOR WITHOUT SUCH INSPECTION, NOR SHALL ANY WORK BE COMMENCED WITHOUT WRITTEN AUTHORIZATION BY THE CITY ENGINEER. ALL CONSTRUCTION AND MATERIALS SHALL COMPLY WITH THE CITY OF WICHITA SPECIFICATIONS AND STANDARDS (SH FILE AND AVAILABLE IN THE CITY ENGINEER'S OFFICE.)

DEVELOPER:

DILLON STORES
2700 EAST 4TH STREET
P.O. BOX 1608
HUTCHINSON, KS 67501-1608

UTILITY NOTE:

VISUAL INDICATIONS OF UTILITIES ARE AS SHOWN. UNDERGROUND LOCATIONS SHOWN, AS FURNISHED BY THEIR LESSORS, ARE APPROXIMATE AND SHOULD BE VERIFIED IN THE FIELD AT THE TIME OF CONSTRUCTION. FOR ACTUAL FIELD LOCATIONS OF UNDERGROUND UTILITIES, CALL KANSAS ONE-CALL AT 811. THE CONTRACTOR MUST NOTIFY THE FOLLOWING IN CASE OF EMERGENCY:

POWER: WESTAR 316-261-6512
KANSAS GAS SERVICE 316-832-3101
WATER & SEWER: CITY OF WICHITA 316-262-6000
SOUTHWESTERN BELL TELEPHONE CO. 800-870-8390
CABLE: COX COMMUNICATIONS 316-262-0661

BENCHMARK:

SITE TBM: CITY OF WICHITA STD. DISC S.W. CORNER OF TRAFFIC SIGNAL LIGHT BASE @ N.E. CORNER OF INTERSECTION OF SENECA & 31ST ST. S.

ELEVATION: = 1283.22 NAVD 88

PICKERING FIRM INCORPORATED UNDERGROUND UTILITIES DISCLAIMER
INFORMATION REGARDING THE REPUTED PRESENCE, SIZE, CHARACTER AND LOCATION OF EXISTING UNDERGROUND UTILITIES AND STRUCTURES RELATED TO UNDERGROUND UTILITIES IS SHOWN HEREON. THERE IS NO CERTAINTY OF THE ACCURACY OF THIS INFORMATION AND IT SHALL BE CONSIDERED IN THAT LIGHT BY THOSE USING THIS DRAWING. THE LOCATION AND ARRANGEMENT OF UNDERGROUND UTILITIES AND STRUCTURES RELATED TO UNDERGROUND UTILITIES SHOWN HEREON MAY BE INACCURATE AND UTILITIES AND STRUCTURES RELATED TO UNDERGROUND UTILITIES NOT SHOWN MAY BE ENCOUNTERED. THE OWNER, HIS EMPLOYEES, HIS CONSULTANTS AND HIS CONTRACTORS SHALL HEREBY DISTINCTLY UNDERSTAND THAT THE ENGINEER IS NOT RESPONSIBLE FOR THE CORRECTNESS OR SUFFICIENCY OF THIS INFORMATION REGARDING THE UNDERGROUND UTILITIES AND STRUCTURES RELATED TO UNDERGROUND UTILITIES SHOWN HEREON.

LEGAL DESCRIPTION:
LOTS 2, 3 & 4, BLOCK 1, WHISPERING BROOK COMMERCIAL, 2nd ADDITION TO WICHITA KANSAS

ZONING NOTE:
LC - LIMITED COMMERCIAL

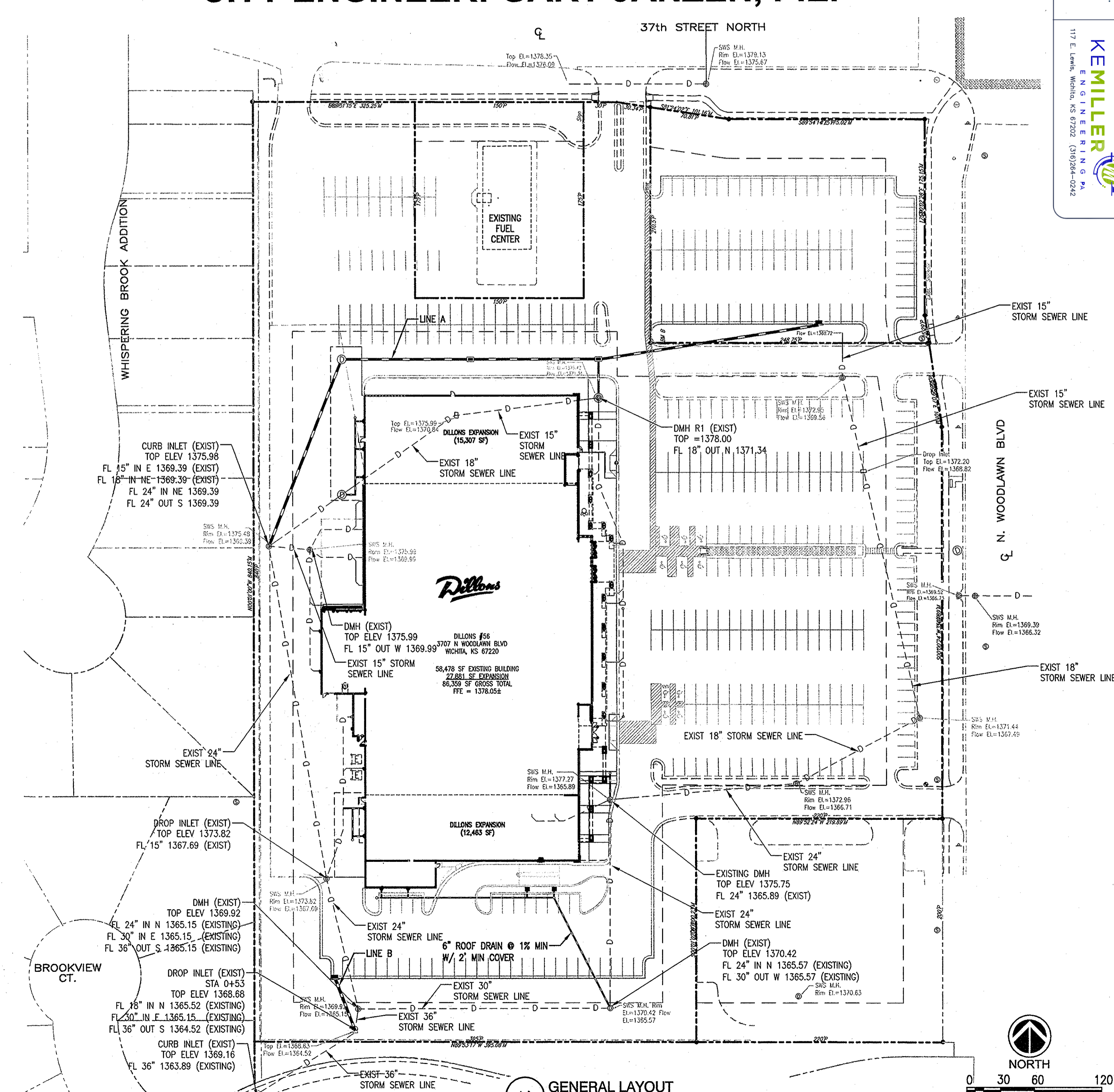
SPECIAL FLOOD HAZARD STATEMENT
BY GRAPHIC DETERMINATION, THE SUBJECT PROPERTY IS LOCATED IN ZONE X, AN AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAIN PER FEMA/FIRM MAP NUMBER 21073C0219E, CITY OF WICHITA, KANSAS, SEDGWICK COUNTY, EFFECTIVE DATE OF FEB 2, 2007.

Contractor:
McCullough
Excavation, Inc.
5/12/2014

Project Inspector:
Larry Gann

KEMILLER
ENGINEERING, INC.
117 E. LAMAR, WICHITA, KS 67202 (316)261-0282

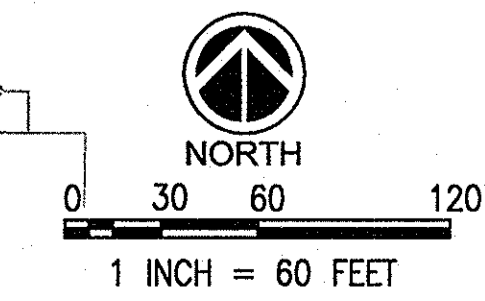
AS BUILTS



GENERAL NOTES:

- UNLESS SHOWN OR OTHERWISE STATED ON THESE DRAWINGS, MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF WICHITA STANDARD SPECIFICATIONS.
- CONNECTING TO EXISTING STRUCTURES: PRIOR TO LAYING SEWER LINES USING EXISTING STUBS IN EXISTING STRUCTURES, THE CONTRACTOR SHALL EXPOSE AND VERIFY THE ELEVATION, GRADE AND ALIGNMENT OF THE EXISTING STUB AND NOTIFY THE ENGINEER OF ANY DEVIATION FROM THE PLAN. WHERE CONNECTION TO AN EXISTING STRUCTURE THAT DOES NOT HAVE AN EXISTING STUB OR THE STUB IS UNSUBSIDIARY DUE TO ELEVATION, GRADE OR ALIGNMENT, THE CONTRACTOR SHALL BORE CUT INTO EXISTING STRUCTURE WALL TO MAKE CONNECTION USING APPROVED WATER STOP GASKET, AND RESHAPE THE EXISTING INVERT TO PROVIDE SMOOTH FLOW. THE COST OF CONNECTING TO EXISTING STRUCTURES IS INCIDENTAL TO THE PROJECT.
- ALL STUBS AND PLUGGED PIPES SHALL BE LOCATED WITH GREEN PLASTIC TAPE IN THE SAME MANNER AS RISERS.
- COST OF EXCAVATION, HAULING AND DUMPING OF EXCESS EXCAVATION SHALL BE SUBSIDIARY TO THE PROJECT.
- ALL CONCRETE SHALL BE STANDARD PAVING MIX UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY IRONS. THE CONTRACTOR SHALL 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 LAW.
- TREES TO BE REMOVED ARE MARKED WITH A TREE SYMBOL. ALL TREES WHICH IN THE OPINION OF THE FIELD ENGINEER CAN BE SAVED, SHALL BE SAVED.
- CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES OF CONSTRUCTION SCHEDULING.
- EXISTING UTILITIES AND THEIR LOCATIONS, AS SHOWN ON THE PLANS REPRESENT THE BEST INFORMATION OBTAINABLE FOR DESIGN. LOCATION INFORMATION HAS BEEN OBTAINED FROM THE VARIOUS COMPANIES AND IS EITHER FROM COMPANY UTILITY DRAWINGS, OR COMPANY PROVIDED FIELD LOCATIONS. THE PLAN LOCATIONS SHOWN ARE NOT GUARANTEED. ADDITIONAL EXISTING UTILITIES MAY ALSO BE ENCOUNTERED.
- RUBBLE FROM THE REMOVAL OF MISCELLANEOUS STRUCTURES AND EXCESS EXCAVATION WHICH IS TO 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 THAT, IN THE OPINION OF THE ENGINEER, 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 WOULD REQUIRE A KANSAS STATE BOARD OF AGRICULTURE PERMIT. ANY MATERIAL BURIED OR STOCKPILED BEYOND APPROVED CONSTRUCTION LIMITS WOULD 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 ENGINEER'S APPROVAL. TREES AND SHRUBS WHICH ARE NOT IN DIRECT CONFLICT WITH PROPOSED NEW CONSTRUCTION SHALL BE SAVED AND PROTECTED FROM DAMAGE.
- ALL DISTURBED AREAS TO BE SEEDDED WITH RYE GRASS AT A RATE OF 200 LBS. PER ACRE WITHIN 10 DAYS OF CONSTRUCTION. CONTRACTOR TO PREPARE GROUND PER CITY SPECIFICATIONS. COST IS SUBSIDIARY TO SITE PREPARATION AND RESTORATION.

1A GENERAL LAYOUT

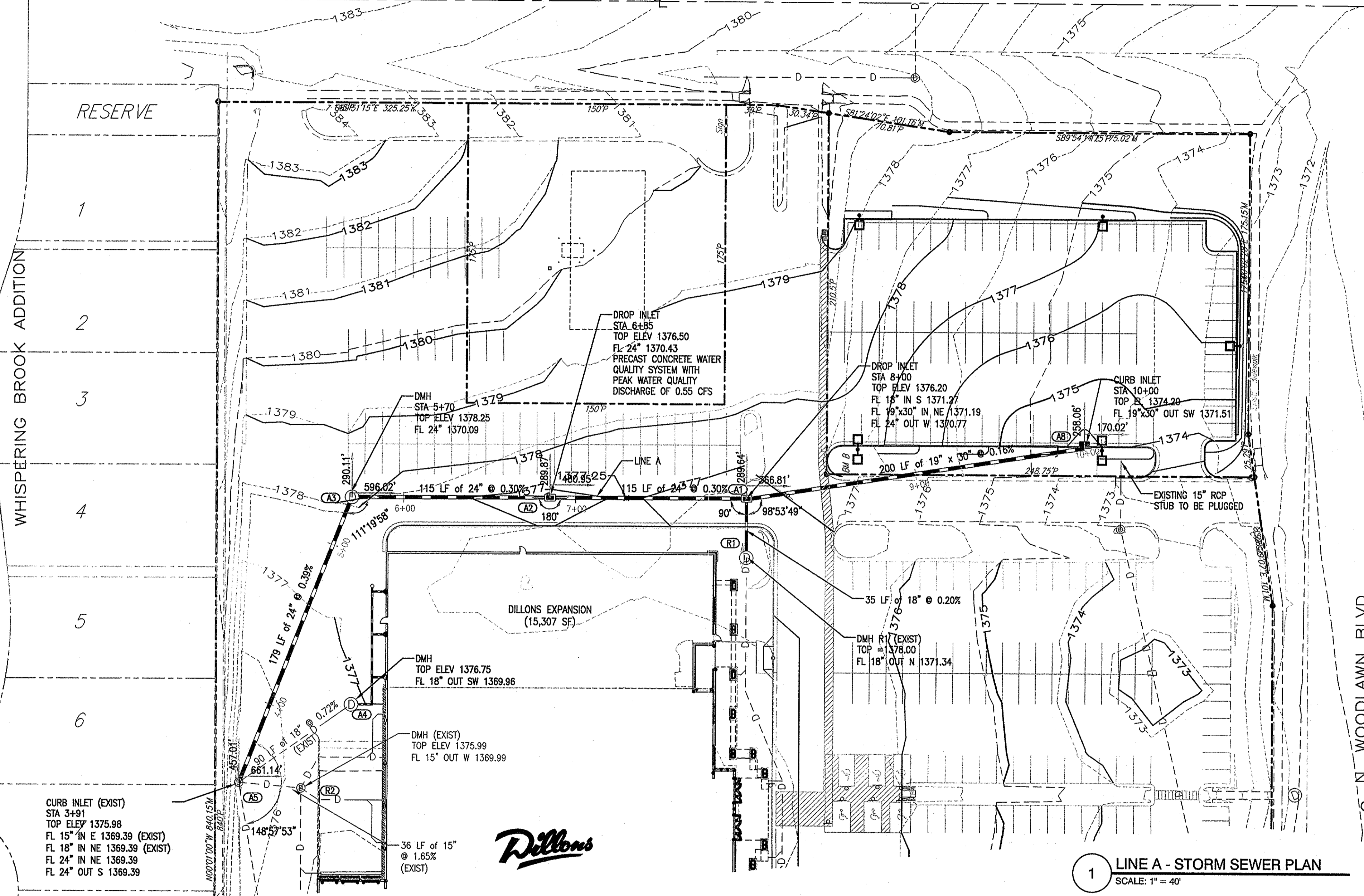


Pickering Firm Incorporated
Architecture • Engineering • Planning • Surveying
6775 Lenox Center Court, Suite 300
Memphis, TN 38115
901.726.0810

DILLONS FOOD STORE #56
COVER SHEET

DATE: 10-08-13	SCALE: 21047-04	SHEET: 1 OF 11
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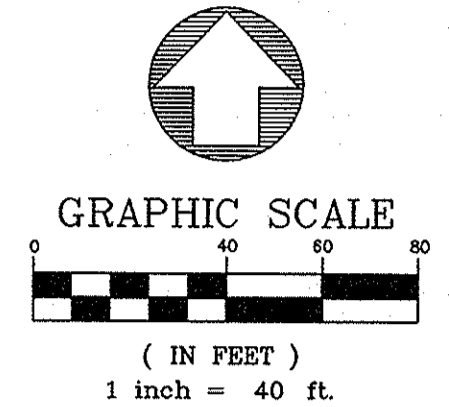
37th STREET NORTH



1 LINE A - STORM SEWER PLAN
SCALE: 1" = 40'

PICKERING FIRM INCORPORATED UNDERGROUND UTILITIES DISCLAIMER

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SITE DATA	
DILLONS STORE #56	3070 N WOODLAWN STREET WICHITA, KANSAS 67220
ZONING:	LC - LIMITED COMMERCIAL
PARCEL SIZE:	8.96 AC (390,297 SF)

BENCHMARK:

SITE TBM: CITY OF WICHITA STD. DISC S.W. CORNER OF TRAFFIC SIGNAL LIGHT
BASE @ N.E. CORNER OF INTERSECTION OF SENECA & 31ST ST. S.

ELEVATION: = 1283.22 NGVD

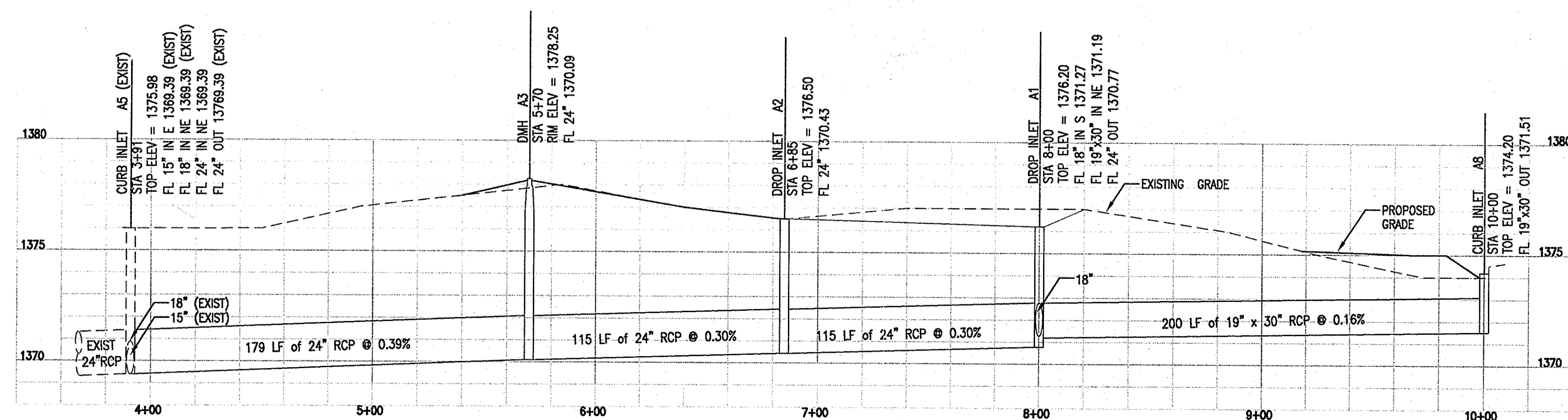
STORM DRAINAGE - PIPE DATA

FROM	FLOWLINE	TO	FLOWLINE	PIPE	SLOPE	LENGTH	DESIGN	PIPE	MAX.	DRAIN
	ELEV.		ELEV.	DIA.	(%)	(FT.)	Q (SVR)	CAPACITY	VELOCITY	AREA
				(IN.)			(CFS)	(CFS)	(FPS)	(AC)
A1	1370.77	A2	1370.43	24"	0.30	115	5.5	12.32	3.9	1.54
A2	1370.43	A3	1370.09	24"	0.30	115	7.6	12.32	3.9	2.18
A3	1370.09	A5	1369.39	24"	0.39	179	7.5	14.14	4.5	2.18
A4	1369.96	A5	1369.39	18"	0.72	80	1.4	8.89	5.0	0.36
A5	1369.39	A6	1367.69	24"	0.58	302	14.2	16.98	5.4	4.26
A6	1367.69	A15	1365.15	24"	2.12	120	17.1	32.90	10.5	5.25
A7	1368.50	A16	1365.52	18"	5.62	53	2.5	24.88	14.1	0.62
A8	1371.51	A1	1371.19	19" x 30"	0.16	200	2.9	8.82	2.7	0.73
A9	1369.58	A10	1368.82	15"	0.86	86	1.2	5.99	4.9	0.30
A10	1368.82	A11	1367.49	18"	0.59	226	4.8	8.06	4.8	1.25
A11	1367.49	A12	1366.71	18"	0.62	125	9.3	8.30	4.7	2.53
A12	1366.71	A13	1365.89	24"	0.49	167	10.4	15.85	5.0	2.88
A13	1365.89	A14	1365.57	24"	0.17	187	10.2	9.36	3.0	2.88
A14	1365.57	A15	1365.15	30"	2.19	225	10.2	17.72	3.6	2.94
A15	1365.15	A16	1364.52	36"	2.93	21	26.5	114.22	16.2	8.19
A16	1364.52	A17	1363.89	36"	0.59	106	29.3	51.42	7.3	9.54
R1	1371.34	A1	1371.27	18"	0.20	35	0.4	4.73	2.7	0.09
R2	1369.99	A5	1369.39	15"	1.65	36	3.6	8.29	6.8	0.92

STORM DRAINAGE - STRUCTURE DATA

STRUC.	STRUC.	GRATE /	FLOW LINE	AREA	DESIGN Q
NO.	TYPE	TOP OF CURB ELEV.	ELEV.	(AC)	5-YR (CFS)
A1	DROP INLET	1376.20	1370.77	0.72	2.85
A2	DROP INLET	1376.50	1370.43	0.64	2.53
A3	DMH	1378.25	1370.09	0.00	....
A4	DMH	1376.75	1369.96	0.36	1.39
A5	CURB INLET	1375.98	1369.39	0.80	3.17
A6	DROP INLET	1373.82	1367.69	0.99	3.92
A7	CURB INLET	1373.50	1366.50	0.62	2.45
A8	CURB INLET	1374.20	1371.51	0.73	2.89
A9	CURB INLET	1372.95	1369.58	0.30	1.19
A10	DROP INLET	1372.20	1368.82	0.95	3.76
A11	CURB INLET	1371.44	1367.49	1.28	5.07
A12	CURB INLET	1372.96	1366.71	0.35	1.35
A13	DMH	1377.27	1365.89	0.00	....
A14	DMH	1370.42	1365.57	0.06	0.23
A15	DMH	1369.92	1365.15	0.00	....
A16	DROP INLET	1368.68	1364.52	0.73	1.00
A17	CURB INLET	1369.16	1363.89	....	....
R1	DMH	1378.00	1371.34	0.09	0.35
R2	DMH	1375.99	1369.99	0.82	3.56

* EXISTING STRUCTURES
PRECAST WATER QUALITY UNIT



1 LINE A - STORM SEWER PROFILE
SCALE: 1" = 40' H / 1" = 4' V

AS BUILTS
kemiller engineering
516 S. Market, Wichita, KS 67202 (316)264-0242



Pickering Firm Incorporated
Architecture • Engineering • Planning • Surveying
6775 Lenox Center Court, Suite 300, Memphis, TN 38115, 901.726.0810

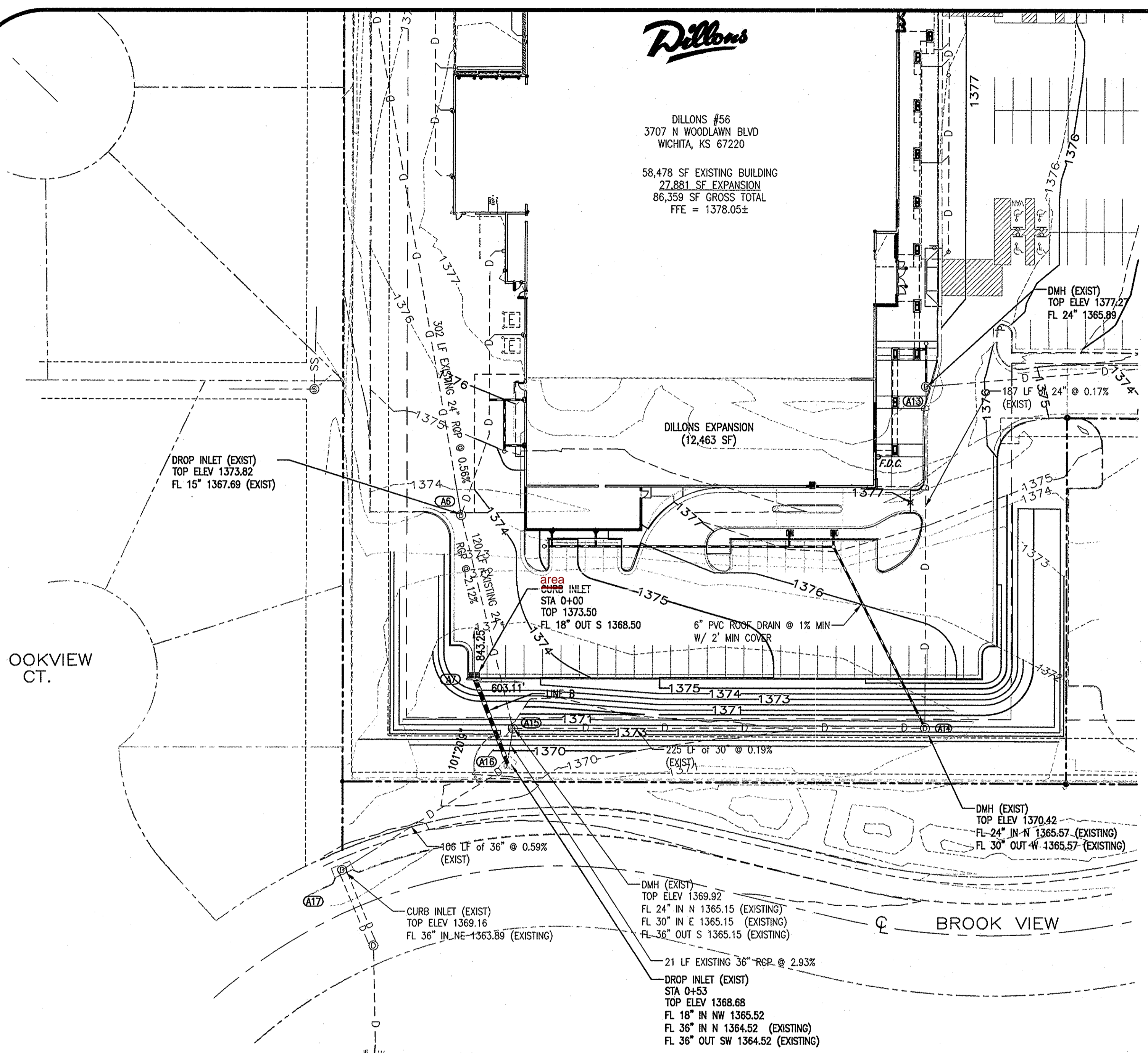
DILLONS FOOD STORE #56
PROJECT NAME: LINE A - STORM SEWER PLAN & PROFILE
SHEET TITLE: JML, LJJ, CLM
DESIGN BY: JML, LJJ, CLM
DATE: 10-08-13, 21047-04, 2 OF 11



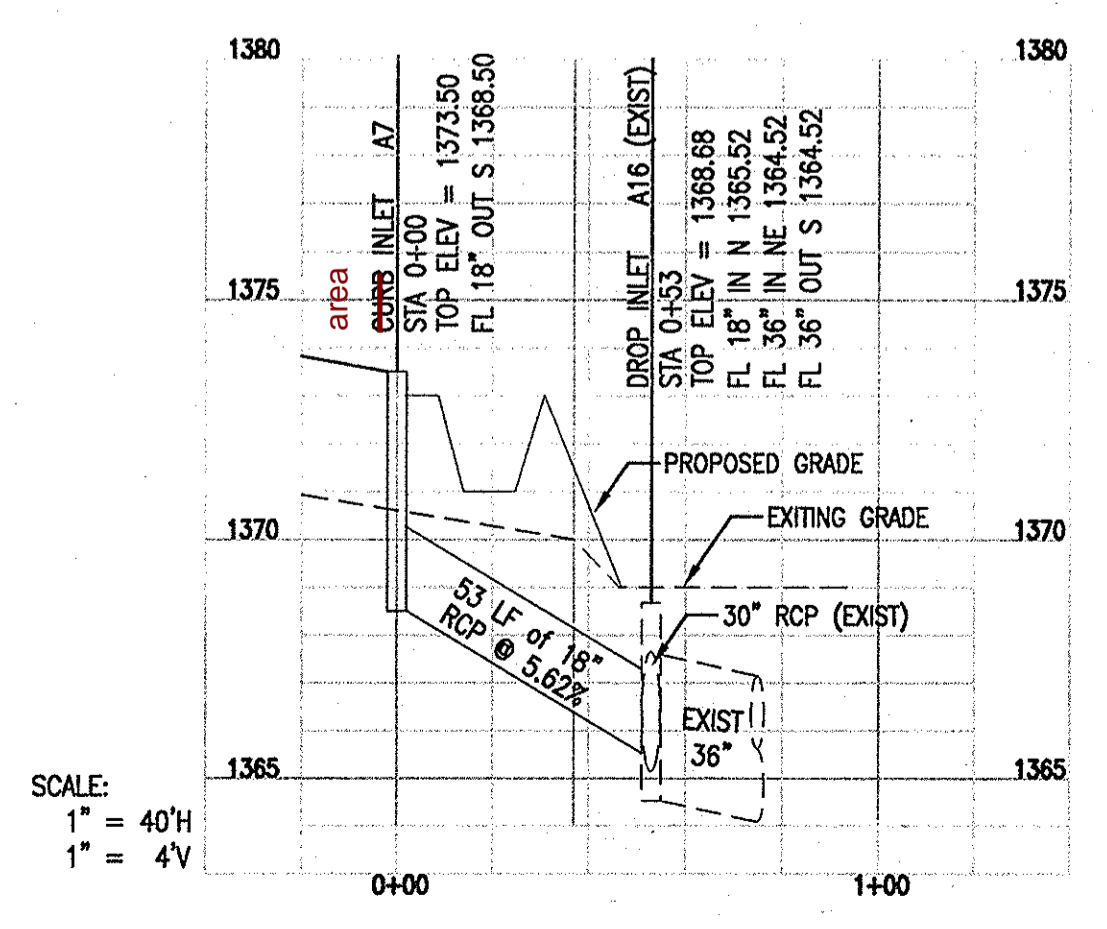
DILLONS #56
3707 N WOODLAWN BLVD
WICHITA, KS 67220

58,478 SF EXISTING BUILDING
27,881 SF EXPANSION
86,359 SF GROSS TOTAL
FFE = 1378.05±

DILLONS EXPANSION
(12,463 SF)



1 LINE B - STORM SEWER PLAN
SCALE: 1" = 40'

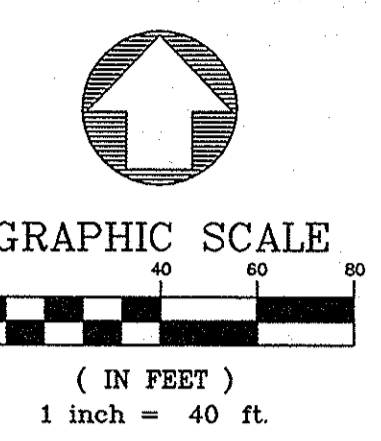


2 LINE B - STORM SEWER PROFILE
SCALE: 1" = 40'H 1" = 4'V

STORM DRAINAGE - PIPE DATA										
FROM	FLOW LINE	TO	FLOW LINE	PIPE DIA.	SLOPE (%)	LENGTH (FT.)	DESIGN Q (6YR) (CFS)	PIPE CAPACITY (CFS)	MAX. VELOCITY (FPS)	DRAIN AREA (AC)
A1	1370.77	A2	1370.43	24"	0.30	115	5.5	12.32	3.9	1.54
A2	1370.43	A3	1370.09	24"	0.30	115	7.6	12.32	3.9	2.18
A3	1370.09	A5	1369.39	24"	0.39	179	7.5	14.14	4.5	2.18
A4	1369.95	A5	1369.39	18"	0.72	80	1.4	8.89	5.0	0.36
A5	1369.39	A6	1367.69	24"	0.56	302	14.2	16.98	5.4	4.26
A6	1367.69	A15	1365.15	24"	2.12	120	17.1	32.90	10.5	5.25
A7	1368.50	A16	1365.52	18"	5.62	53	2.5	24.88	14.1	0.62
A8	1371.51	A1	1371.19	19" x 30"	0.16	200	2.9	8.82	2.7	0.73
A9	1369.56	A10	1368.82	15"	0.86	86	1.2	5.99	4.9	0.30
A10	1368.82	A11	1367.49	18"	0.59	226	4.8	8.06	4.6	1.25
A11	1367.49	A12	1366.71	18"	0.62	125	9.3	8.30	4.7	2.53
A12	1366.71	A13	1365.89	24"	0.49	167	10.4	15.85	5.0	2.88
A13	1365.89	A14	1365.57	24"	0.17	187	10.2	9.36	3.0	2.88
A14	1365.57	A15	1365.15	30"	0.19	225	10.2	17.72	3.6	2.94
A15	1365.15	A16	1364.52	36"	2.93	21	26.5	114.22	16.2	8.19
A16	1364.52	A17	1363.89	36"	0.59	106	29.3	51.42	7.3	9.54
R1	1371.34	A1	1371.27	18"	0.20	35	0.4	4.73	2.7	0.09
R2	1369.99	A5	1369.39	15"	1.65	36	3.6	8.29	6.8	0.92

STORM DRAINAGE - STRUCTURE DATA					
STRUC. NO.	STRUC. TYPE	GRATE / TOP OF CURB ELEV.	FLOW LINE ELEV.	AREA (AC)	DESIGN Q 5-YR (CFS)
A1	DROP INLET	1376.20	1370.77	0.72	2.85
A2	DROP INLET	1376.50	1370.43	0.64	2.63
A3	DMH	1378.25	1370.09	0.00	....
A4	DMH	1376.75	1369.95	0.36	1.39
A5	CURB INLET	1375.98	1369.39	0.80	3.17
A6	DROP INLET	1373.82	1367.69	0.99	3.92
A7	CURB INLET	1373.50	1368.50	0.62	2.45
A8	CURB INLET	1374.20	1371.51	0.73	2.89
A9	CURB INLET	1372.95	1369.56	0.30	1.19
A10	DROP INLET	1372.20	1368.82	0.95	3.76
A11	CURB INLET	1371.44	1367.49	1.28	5.07
A12	CURB INLET	1372.96	1366.71	0.35	1.35
A13	DMH	1377.27	1365.89	0.00	....
A14	DMH	1370.42	1365.57	0.06	0.23
A15	DMH	1369.92	1365.15	0.00	....
A16	DROP INLET	1368.68	1364.52	0.73	1.00
A17	CURB INLET	1369.16	1363.89	....	....
R1	DMH	1378.00	1371.34	0.09	0.35
R2	DMH	1375.99	1369.99	0.92	3.58

* EXISTING STRUCTURES
PRECAST WATER QUALITY UNIT



SITE DATA
DILLONS STORE #56
3070 N WOODLAWN STREET
WICHITA, KANSAS 67220

ZONING: LC - LIMITED COMMERCIAL
PARCEL SIZE: 8.96 AC (390,297 SF)

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GRADING AND DRAINAGE NOTES

- SITE PREPARATION SHALL BE DONE IN ACCORDANCE WITH THE GEOTECHNICAL REPORT DATED AUGUST/SEPTEMBER, 2009, PREPARED BY ALLIED LABORATORIES OR THE PROJECT SPECIFICATIONS, WHICHEVER IS MORE STRINGENT.
- IN ALL AREAS OF CONSTRUCTION, TOPSOIL SHALL BE STRIPPED AS REQUIRED BY THE GEOTECHNICAL ENGINEER. THIS TOPSOIL WILL BE USED FOR THE FINISH GRADING WORK. PROVIDE EROSION CONTROL AS NECESSARY TO PREVENT TOPSOIL FROM ERODING AND DAMAGING ADJACENT PROPERTIES.
- CLEAR AND GRUB ALL AREAS OF THE SITE WHERE CUT OR FILL IS TO OCCUR. REMOVE ORGANIC MATTER, FOREIGN MATERIAL, PAVEMENT, TOPSOIL, FENCES, TRASH, BRUSH, BURIED OBSTRUCTIONS SUCH AS TREE STUMPS, ROOTS AND INACTIVE DRAINAGE STRUCTURES. DISPOSE OF ALL MATERIAL REMOVED WHICH IS NOT TO BE REPLACED. BURNING OF MATERIAL ON THE SITE WILL NOT BE PERMITTED UNLESS APPROVED IN WRITING BY THE DESIGNER AND AFTER THE REQUIRED PERMITS HAVE BEEN OBTAINED FROM THE APPLICABLE AUTHORITIES.
- ALL AREAS SHALL BE COMPACTED PER THE RECOMMENDATIONS OF THE GEOTECHNICAL INVESTIGATION PREPARED BY ALLIED LABORATORIES DATED AUGUST/SEPTEMBER, 2009.
- PROPER DRAINAGE SHALL BE MAINTAINED THROUGHOUT THE PROJECT SITE TO PREVENT THE INCREASE OF THE IN-SITU SOILS MOISTURE CONTENT. FLUCTUATIONS MAY NECESSITATE SOIL IMPROVEMENTS PER THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER.
- THE SUBGRADE SHALL BE PROOF-ROLLED WITH A LOADED DUMP TRUCK TO DETECT ZONES OF UNSUITABLE AND/OR EXCESSIVELY WET SOILS.
- SITE CONTRACTOR SHALL PROVIDE SUBGRADE FOR BUILDING PAD PER THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT PREPARED BY ALLIED LABORATORIES. THE EXPOSED SURFACE IN PAVEMENT OR BUILDING FLOOR AREAS SHALL BE INSPECTED BY THE GEOTECHNICAL ENGINEER AND MAY REQUIRE SOME IMPROVEMENTS IF THE MOISTURE CONTENTS ARE BEYOND ACCEPTABLE LIMITS.
- THE PREPARED SUBGRADE SHALL PROVIDE A MAXIMUM ALLOWABLE BEARING PRESSURE OF 2500 PSF. ALL FOOTING AND FOUNDATION EXCAVATIONS SHALL BE INSPECTED BY THE GEOTECHNICAL ENGINEER BEFORE PLACING FOUNDATIONS.
- ESTABLISH PERMANENT VEGETATION WITH SOD ON ALL DISTURBED AREAS.

BENCHMARK:

SITE TBM: CITY OF WICHITA STD. DISC S.W. CORNER OF TRAFFIC SIGNAL LIGHT BASE @ N.E. CORNER OF INTERSECTION OF SENECA & 31ST ST. S.
ELEVATION: = 1283.22 NGVD



DILLONS FOOD STORE #56
PROJECT NAME: LINE B - STORM SEWER - PLAN & PROFILE
SHEET TITLE: JML LJM CLM
DATE: 10-08-13 21047-04 3 OF 11

37th STREET NORTH



0 25 50 100
1 INCH = 50 FEET

SITE DATA
DILLONS STORE #56
3070 N WOODLAWN STREET
WICHITA, KANSAS 67220
ZONING: LC - LIMITED COMMERCIAL
PARCEL SIZE: 8.96 AC (390,297 SF)

EROSION CONTROL LEGEND	
	CONSTRUCTION EGRESS
	SILT FENCE BARRIER
	INLET PROTECTION

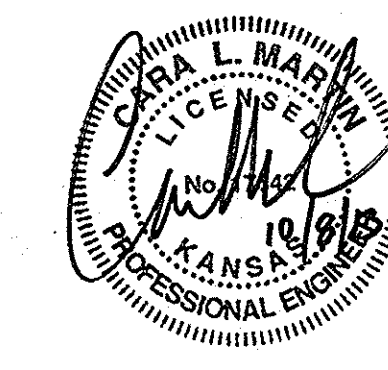
ACREAGE SUMMARY	
OVERALL SITE ACREAGE	10.69 ACRES
TOTAL DISTURBED AREA	3.20 ACRES

EROSION AND SEDIMENTATION CONTROL NOTES:

- ALL NEWLY CUT AND/OR FILLED AREAS LACKING ADEQUATE VEGETATION SHALL BE SOLID SODDED AS REQUIRED TO EFFECTIVELY PREVENT SOIL EROSION.
- SILT FENCES, HAY BALES, AND OTHER BEST MANAGEMENT PRACTICES SHALL BE USED AS SHOWN AND AS DIRECTED BY THE ENGINEER TO CONTROL SOIL EROSION.
- THE CONTRACTOR SHALL PROVIDE AND MAINTAIN EROSION CONTROL DURING CONSTRUCTION BY THE PLACEMENT OF SILT FENCES, SEDIMENT INLET TRAPS, HAY BALES, AND OTHER BEST MANAGEMENT PRACTICES WHERE NECESSARY TO PREVENT DOWNSTREAM SILTATION OF ANY DITCHES, PIPES, DRAINAGE STRUCTURES, OR ADJACENT PROPERTIES. THE CONTROLS SHOWN ON THE PLAN ARE THE MINIMUM REQUIRED AND THE CONTRACTOR SHALL PROVIDE ANY ADDITIONAL EROSION CONTROL AS NECESSARY OR AS DIRECTED BY THE ENGINEER.
- THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING TO THE KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT STORM WATER CONSTRUCTION GENERAL PERMIT FOR ALL EROSION CONTROL DURING CONSTRUCTION ACTIVITIES.
- THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING EROSION CONTROL DEVICES AND REPORTING ANY MAINTENANCE AS REQUIRED BY THE KDEH STORM WATER CONSTRUCTION GENERAL PERMIT DURING CONSTRUCTION ACTIVITIES.
- PROVISIONS SHALL BE MADE TO PROTECT DOWNSTREAM WATERCOURSES (I.E., STORM SEWER SYSTEMS, DITCHES, WETLANDS, ETC.) FROM SEDIMENT RUNOFF DEVELOPED FROM THE CONSTRUCTION PROCESS. PROVISIONS INCLUDE, BUT ARE NOT LIMITED TO, STRUCTURAL CONTROLS SUCH AS SILT FENCING, GEOTEXTILE FABRIC PROTECTION OF STORM SEWERS, HAY BALES, DIKES AND SANDBAG BERMS; AND/OR VEGETATION CONTROLS SUCH AS SEEDING OR EXISTING VEGETATIVE BUFFER STRIPS (MINIMUM 25 FEET WIDE).
- PRIOR TO START OF CONSTRUCTION, CONTRACTOR SHALL INSTALL EROSION AND SEDIMENTATION CONTROLS AT LOCATIONS SHOWN ON PLANS.
- ABSOLUTELY NO DIRT, MUD, DUST OR SEDIMENT SHALL MOVE INTO ANY STORM DRAIN APPURTENANCES AND PUBLIC STREETS.
- CONTRACTOR SHALL PERFORM DAILY STREET CLEANING ON ROADS AND STREETS ADJACENT TO THE PROJECT WHICH ARE USED AS ACCESS ROUTES FOR CONSTRUCTION TRAFFIC IF DIRT AND MUD ARE NOT ADEQUATELY REMOVED FROM VEHICLES AT THE CONSTRUCTION EXIT. WASHING OF STREETS IS PROHIBITED.
- LOCATE FUEL/MATERIAL STORAGE AREAS AWAY FROM STORM WATER CONVEYANCE SYSTEMS. USE A MINIMUM 60 MIL POLYETHYLENE LINER UNDER ABOVE GROUND STORAGE TANKS. USE 2 FOOT HIGH BERMS AROUND FUEL STORAGE AREAS.
- CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL ENVIRONMENTAL LAWS.
- CONTRACTOR IS RESPONSIBLE FOR DISPOSING OF FUELS, MATERIALS, AND CONTAMINATED EXCAVATIONS IN A LEGALLY APPROVED MANNER.
- CONTRACTOR SHALL INSPECT ALL STRUCTURAL CONTROLS WITHIN 24 HOURS AFTER ANY STORM EVENT (THAT MEETS OR EXCEEDS 0.5 INCHES OF RAINFALL IN A 24 HOUR PERIOD). DURING PROLONGED RAINFALL EVENTS, CONTRACTOR SHALL INSPECT STRUCTURAL CONTROLS ON A DAILY BASIS. AT A MINIMUM, STRUCTURAL CONTROLS SHOULD BE INSPECTED ONCE PER MONTH. A QUALIFIED REPRESENTATIVE OF THE CONTRACTOR, AS APPROVED BY THE OWNER, SHALL PROVIDE THESE INSPECTIONS. SHOULD CONTROLS BECOME INEFFECTIVE, NECESSARY REPAIRS SHALL BE PERFORMED TO RETURN THE INTEGRITY OF THE STRUCTURAL CONTROLS.
- CONTRACTOR SHALL MAINTAIN, REPAIR AND/OR REPLACE DAMAGED EROSION AND SEDIMENTATION CONTROL SYSTEMS THROUGHOUT THE DURATION OF THE CONTRACT.
- CONTRACTOR WILL PROVIDE PROTECTED STORAGE AREAS FOR CHEMICALS, PAINTS, SOLVENTS, FERTILIZERS AND OTHER POTENTIALLY TOXIC MATERIALS.
- EQUIPMENT STAGING AREA TO BE DESIGNATED BY CONTRACTOR AND APPROVED BY OWNER PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL PROVIDE ALL EROSION CONTROL NECESSARY FOR UTILITY CONSTRUCTION, EVEN IF THE UTILITIES ARE OUTSIDE THE LIMITS OF GRADING OPERATIONS.
- SEDIMENT WILL BE REMOVED FROM THE UPSTREAM FACE OF THE SILT FENCE WHEN IT REACHES A MAXIMUM DEPTH OF 1/3 OF THE FENCE'S HEIGHT PER EPA DOCUMENT 883-R-06-04. THE FENCE WILL BE REPLACED AS NECESSARY TO MAINTAIN A BARRIER.
- THE CONTRACTOR SHALL SUBMIT PHASED EROSION CONTROL PLANS TO THE ENGINEER FOR REVIEW AS NEEDED TO CONTROL SEDIMENT AND EROSION DURING CONSTRUCTION.
- TEMPORARY SEEDING MAY BE REQUIRED IN ADDITION TO PERMANENT SEEDING TO ASSIST IN COMPLYING WITH THE CONSTRUCTION GENERAL PERMIT.
- EROSION AND SEDIMENT CONTROL DEVICES WILL NEED TO BE MAINTAINED THROUGHOUT THE PROJECT UNTIL SUCH TIME AS DETERMINED BY THE CITY OF WICHITA INSPECTOR ASSIGNED TO THIS SITE.

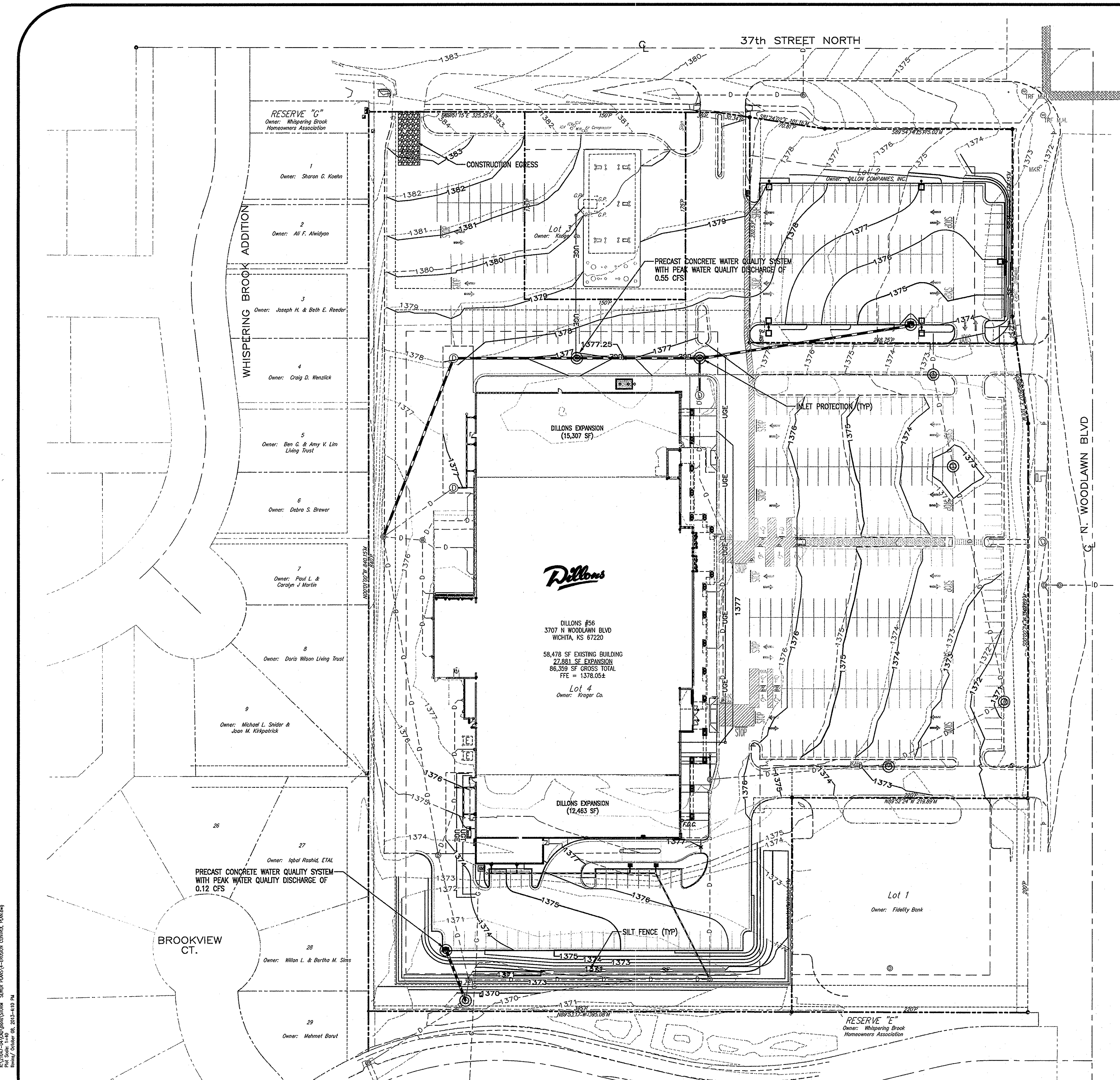
CONSTRUCTION ENTRANCE NOTE

CONTRACTOR TO PROVIDE A TEMPORARY STABILIZED CONSTRUCTION ENTRANCE TO MINIMIZE SEDIMENT DEPOSITING ON CITY STREETS. TEMPORARY STABILIZED CONSTRUCTION ENTRANCE TO CONFORM TO CITY OF WICHITA'S MINIMUM STANDARDS (SEE SHEET 10 OF 11). CONTRACTOR TO COORDINATE LOCATION OF TEMPORARY STABILIZED CONSTRUCTION ENTRANCE WITH CITY OF WICHITA, ENGINEER, AND OWNER.

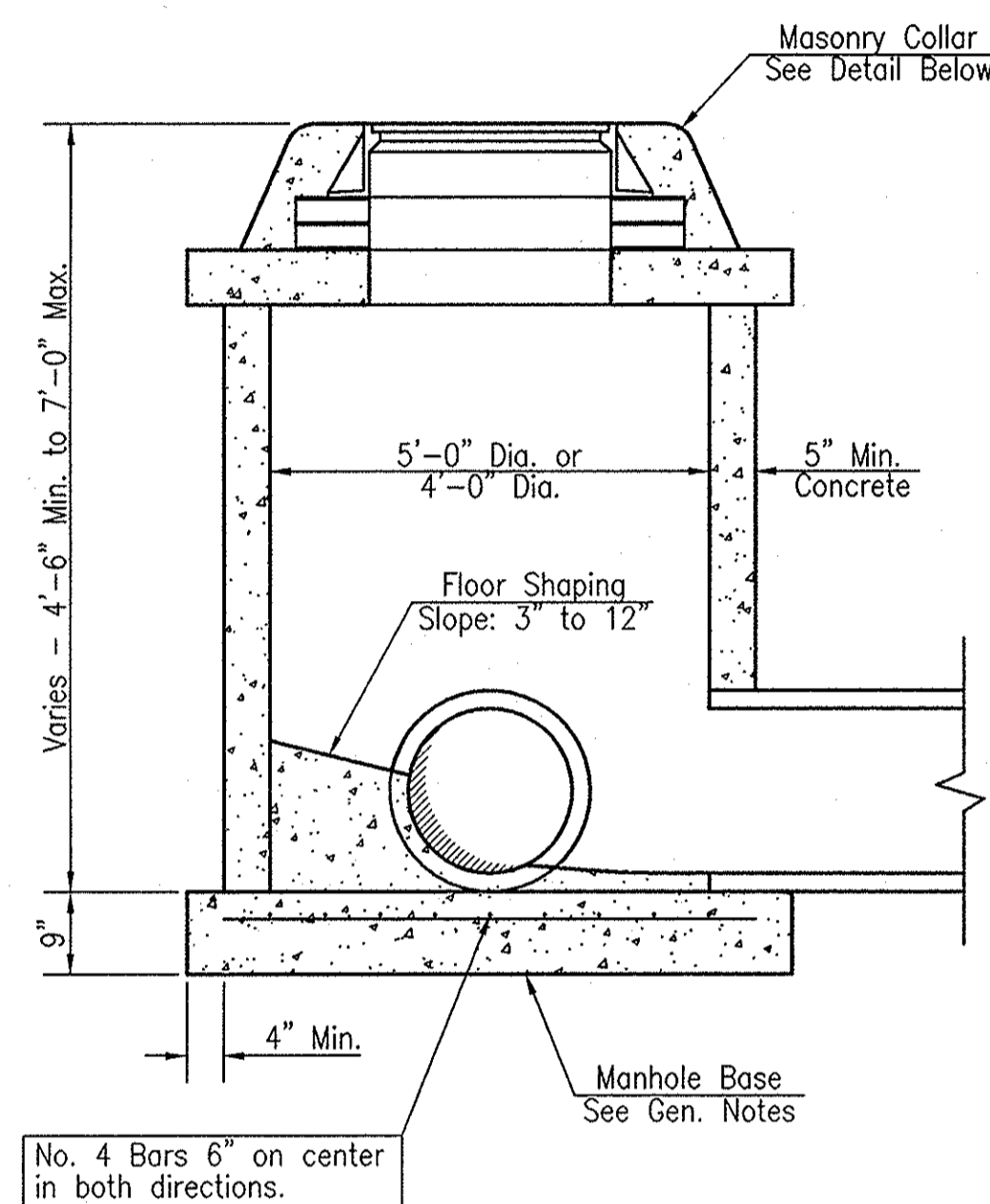


Pickering Firm
Incorporated
Architecture • Engineering • Planning • Surveying
6775 Leno Center Court, Suite 300
Memphis, TN 38115
901.728.0810

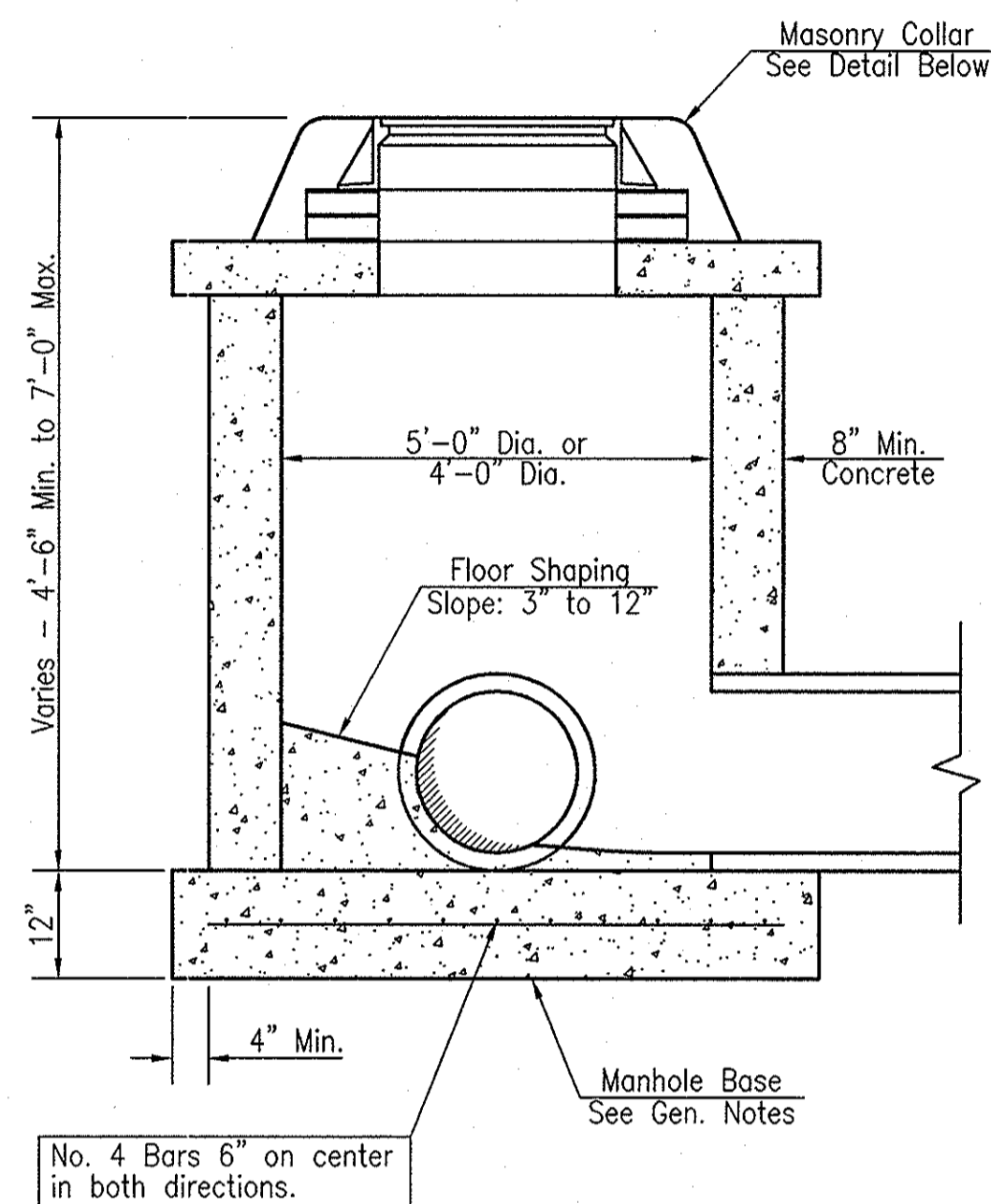
DILLONS FOOD STORE #56		
EROSION CONTROL PLAN		
JML	LJL	CLM
DESIGN BY	DRAWN BY	CHECKED BY
10-08-13	21047-04	4 of 11
DATE	JOB NUMBER	SHEET



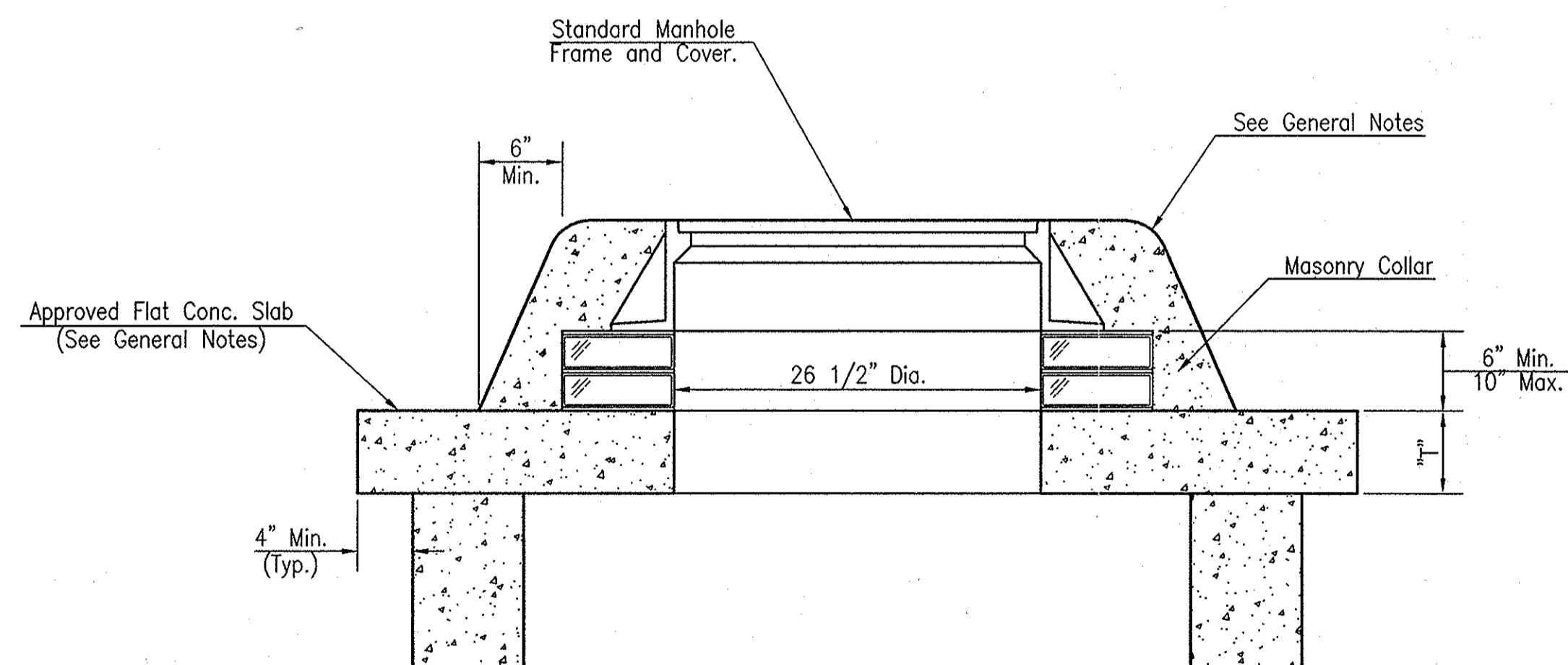
EROSION CONTROL PLAN
SCALE: 1"=50'



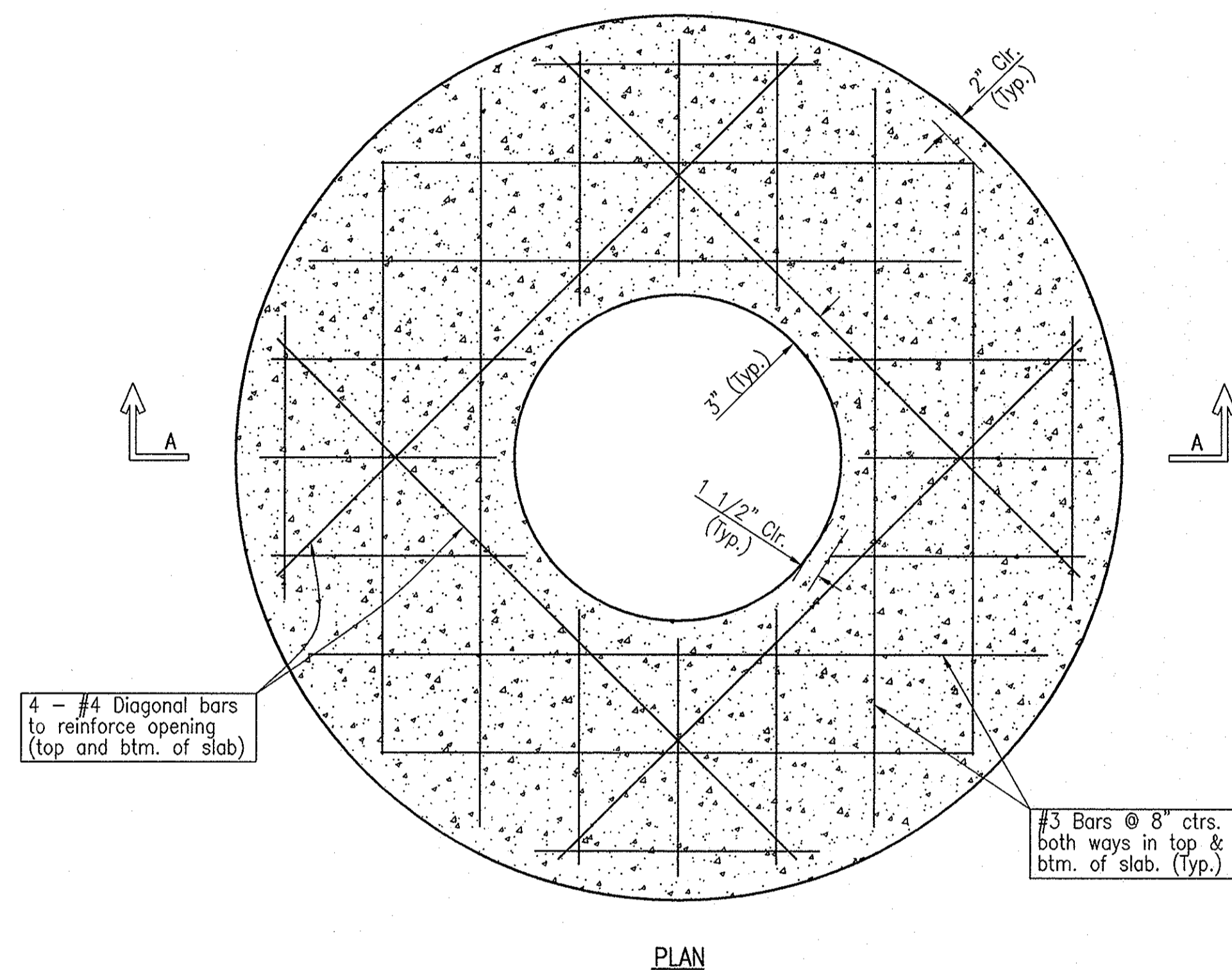
SHALLOW TYPE "P" MANHOLE



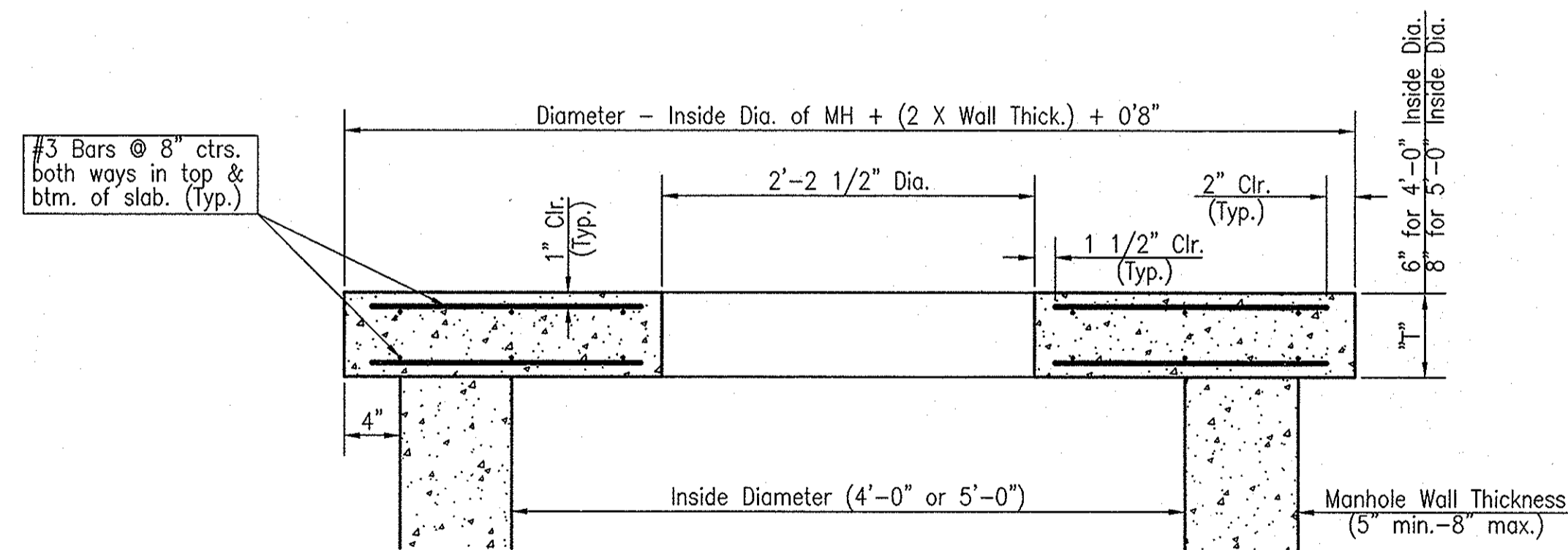
SHALLOW TYPE "C" MANHOLE



MASONRY COLLAR DETAIL



PLAN



SECTION A-A

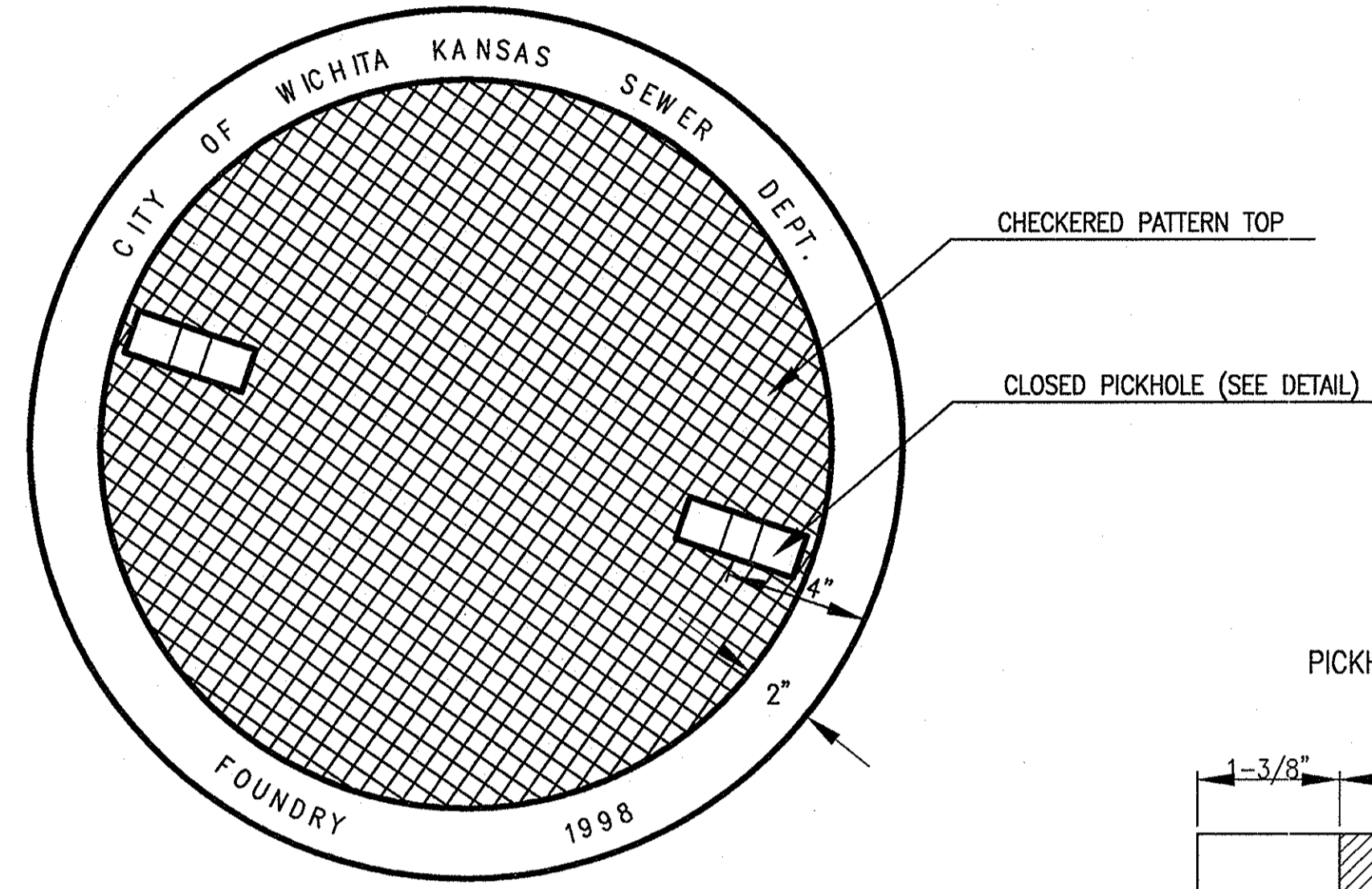
FLAT CONCRETE SLAB DETAILS

GENERAL NOTES

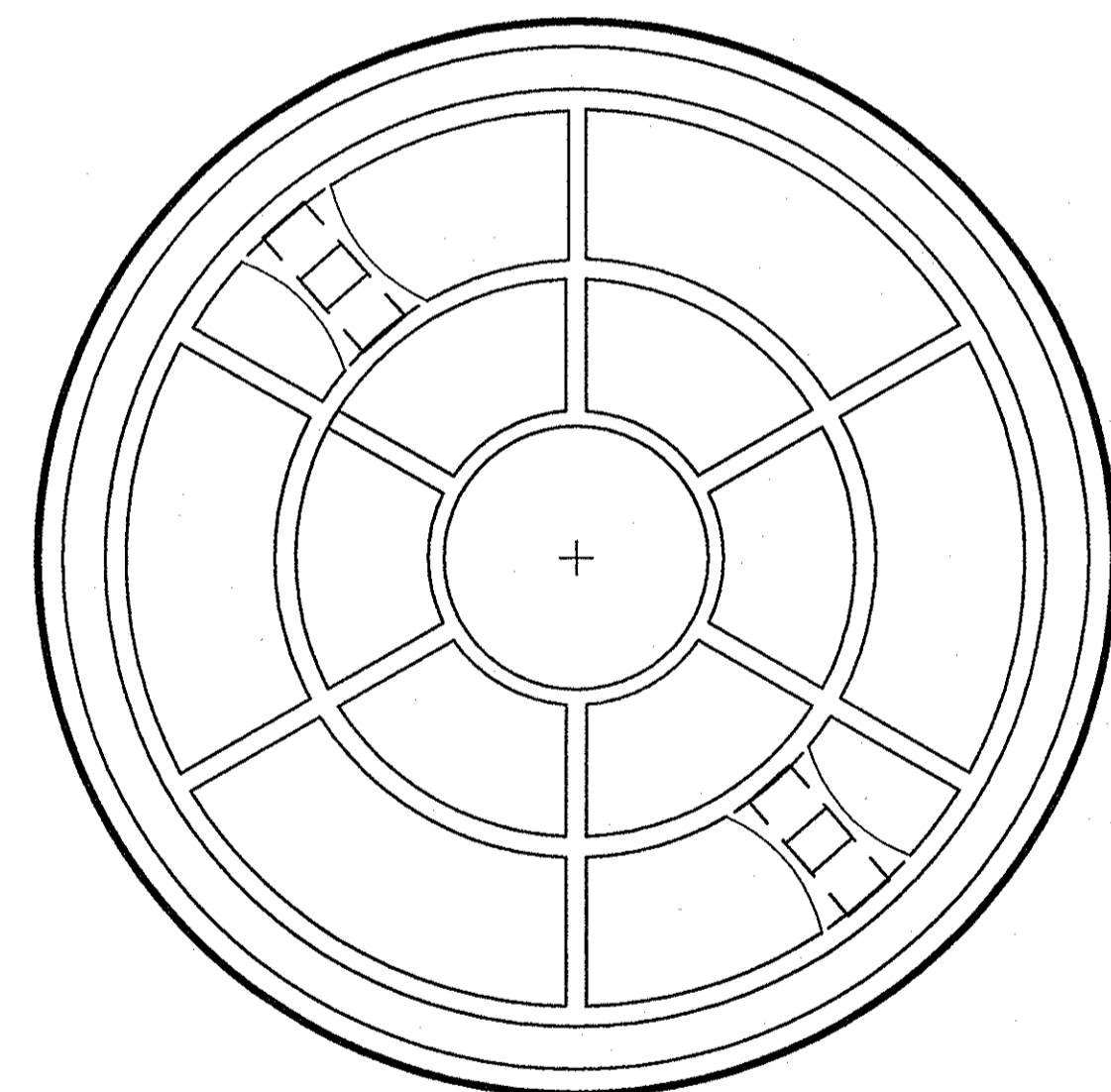
- Mortar used in masonry construction shall contain 8 sacks of cement per cubic yard. Concrete used in manhole bases shall conform to the requirements of concrete for concrete pavement construction as specified in the city standard paving specifications using city concrete cement mix without air entraining admixture. Mortar shall be placed around the manhole ring as shown on the drawings when manholes are constructed in unpaved areas. Manholes constructed where pipe sizes are smaller than 24" shall have an inside diameter of 4'. Manholes constructed where pipe sizes are 24" or larger shall have an inside diameter of 5'. Completed manhole shall be without leaks and water tight.
- Reinforcing steel shall be installed in the manhole bases and shall consist of no. 4 bars placed on 6" centers in both directions. The manhole base reinforcement shall be placed 6" above the bottom of the manhole base. All costs for furnishing and installing reinforcing steel shall be included in the unit price bid for the manhole.
- The floors of all manholes shall be shaped with flow channels such that the manholes will be self cleaning and free of areas where solids could be deposited as sewage flows through the manhole from all inlet pipes to the outlet pipe. Flow channels shall be formed to match the bottom halves of the inflowing pipes and the outflowing pipe as shown by the drawings. Manhole floors shall have slopes of 3 inches per foot in the areas outside of the flow channels sloped toward the flow channels. Pipes laid through manholes shall have the top half removed to neat lines for the full inside diameter of the manhole. Manhole floors shall then be shaped around the bottom half of the pipe which forms the flow channel.
- Pipes installed within the excavation made for the manhole shall be cradled with concrete to the limits of the manhole excavation. When clay pipe is used, the cradle shall extend to the first joint outside the manhole. The cradle shall be terminated at the clay pipe joint in a manner which will maintain the flexibility of the joint. Cost of cradle within manhole excavation or to clay pipe joints adjacent to manhole shall be included in the unit price bid for the manhole.
- Manhole cover castings and manhole frame castings shall conform to the requirements as indicated in the standard specifications and as shown in the standard detail drawings.
- The crowns of inflowing pipes shall never be set lower than the crown of the outflowing pipe.
- Standard shallow manholes type "P" and "C" shall be paid for at the unit price bid per each for the type and diameter indicated. All standard shallow manhole diameters will be 4' unless indicated otherwise.
- All brick used in manhole construction shall meet Grade SW of ASTM C652 or C62-87.

	SHALLOW MANHOLES		
	TYPE 'P' & 'C'		
	CITY ENGINEER JAMES L. ARMOUR, P.E., L.S.		
	PROJECT NUMBER 21047-04	ACK NUMBER -	DATE 7/13
CITY ENGINEER'S OFFICE 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 253-4500 (316) 253-4114 FAX		DESIGN C of W	DRAWN C of W
		SHEET 5 of 11	

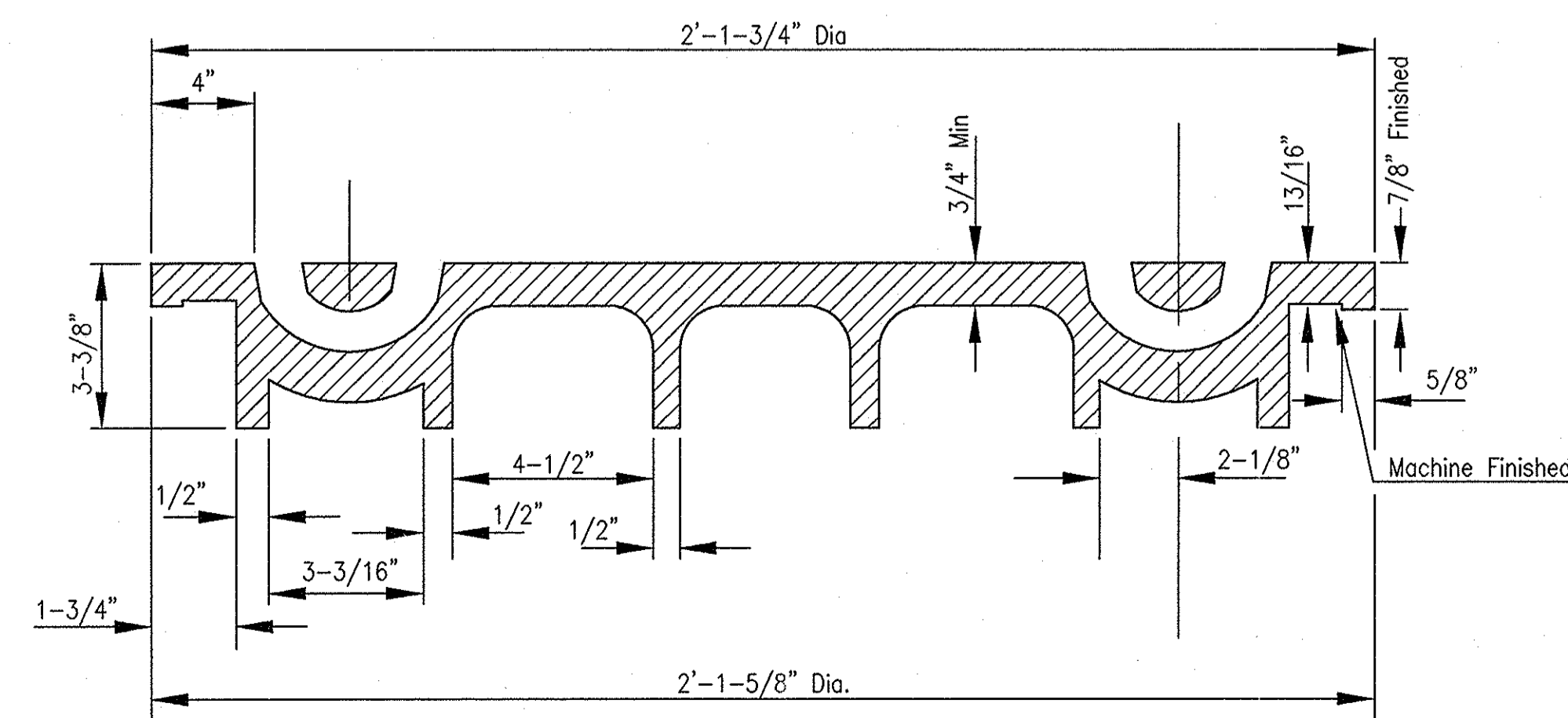
MANHOLE COVER
Weight = 180 Lbs.



TOP VIEW

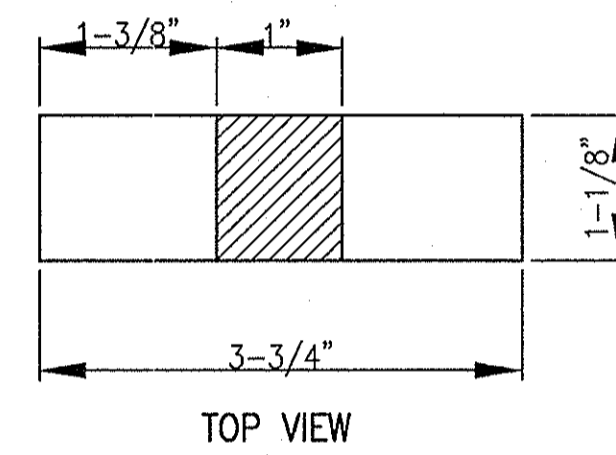


BOTTOM VIEW

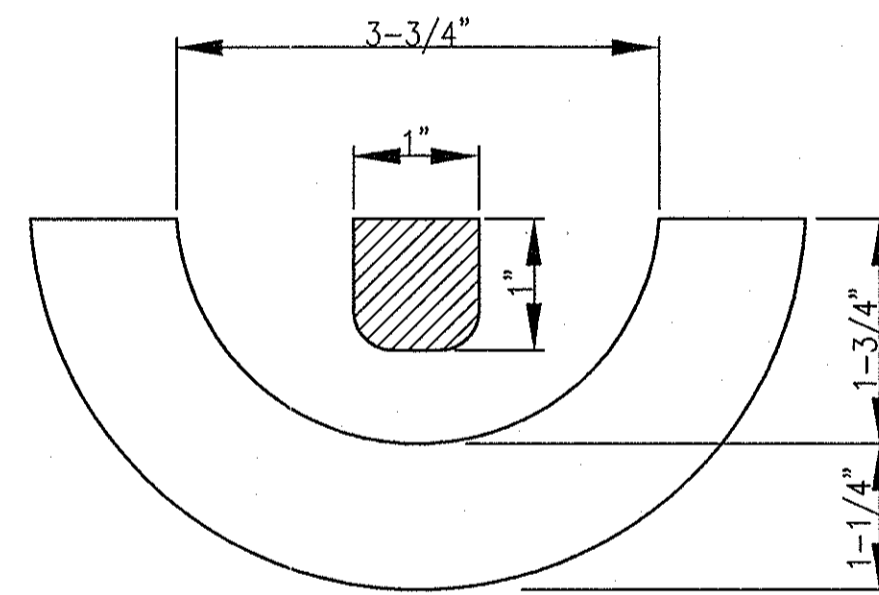


SECTION VIEW

PICKHOLE DETAIL



TOP VIEW

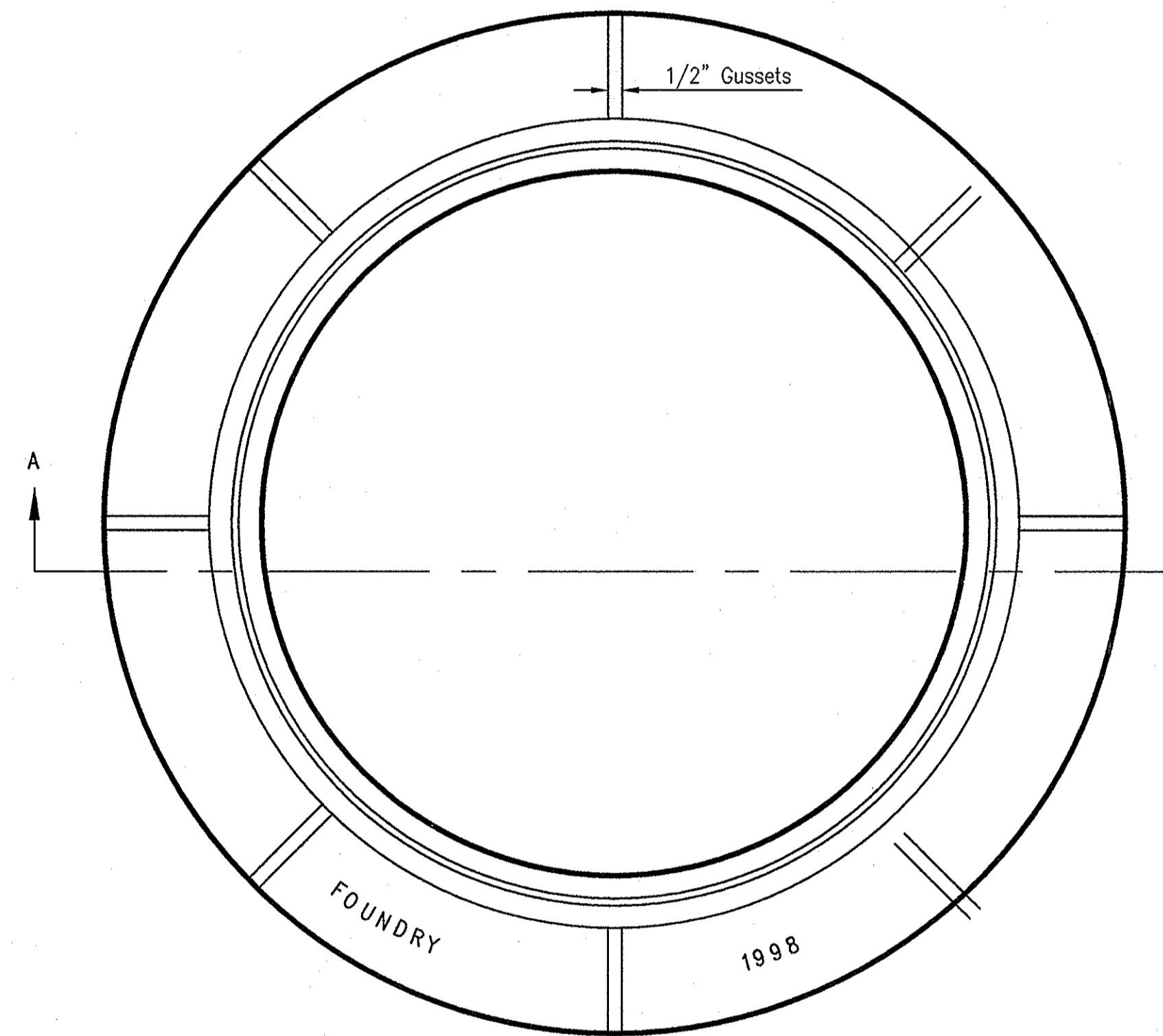


SECTION VIEW

MANHOLE FRAME AND COVER DETAIL

ADOPTED AS STANDARD DESIGN BY
CITY OF WICHITA, KANSAS

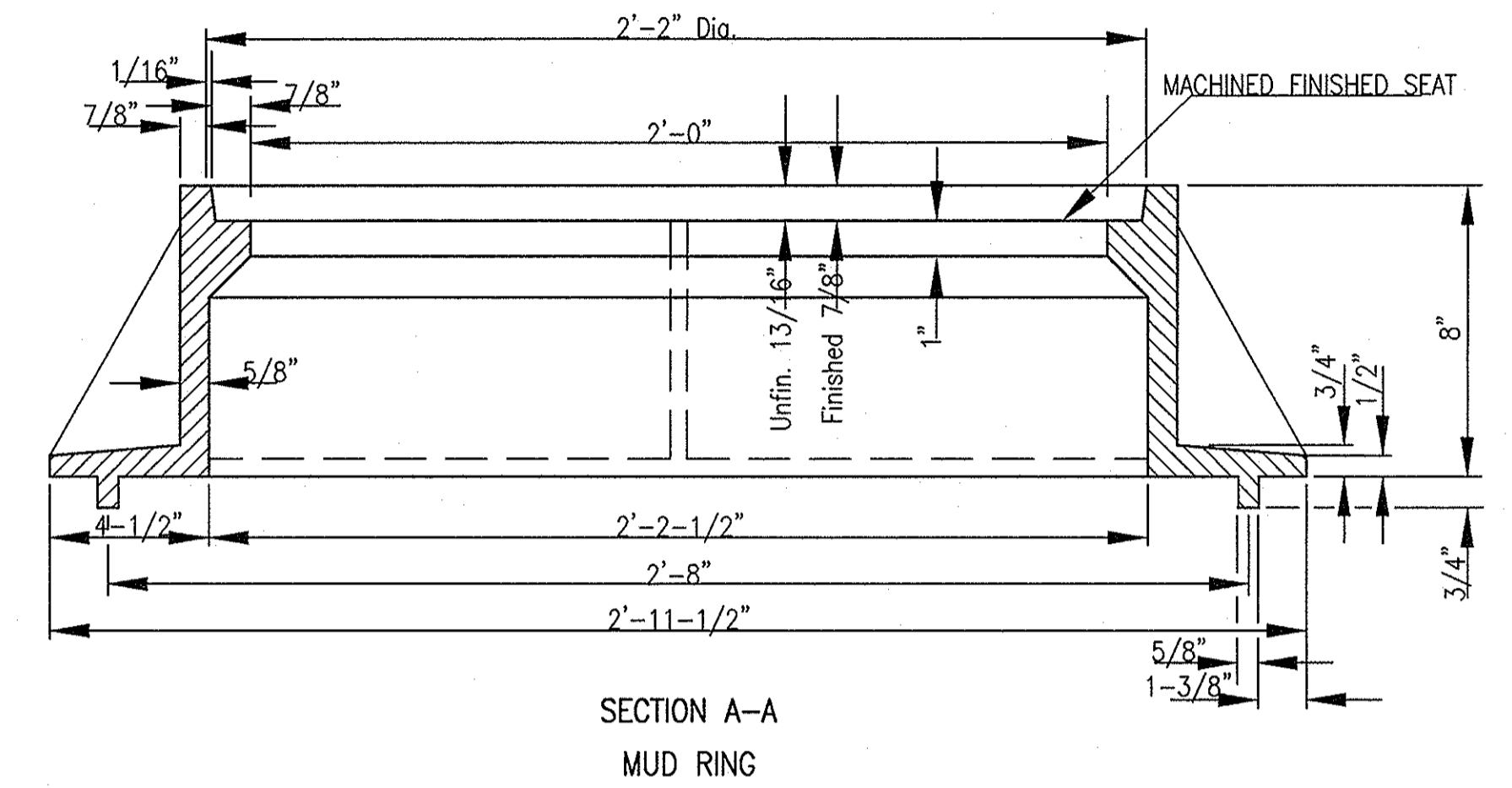
MANHOLE FRAME
Weight = 240 Lbs.



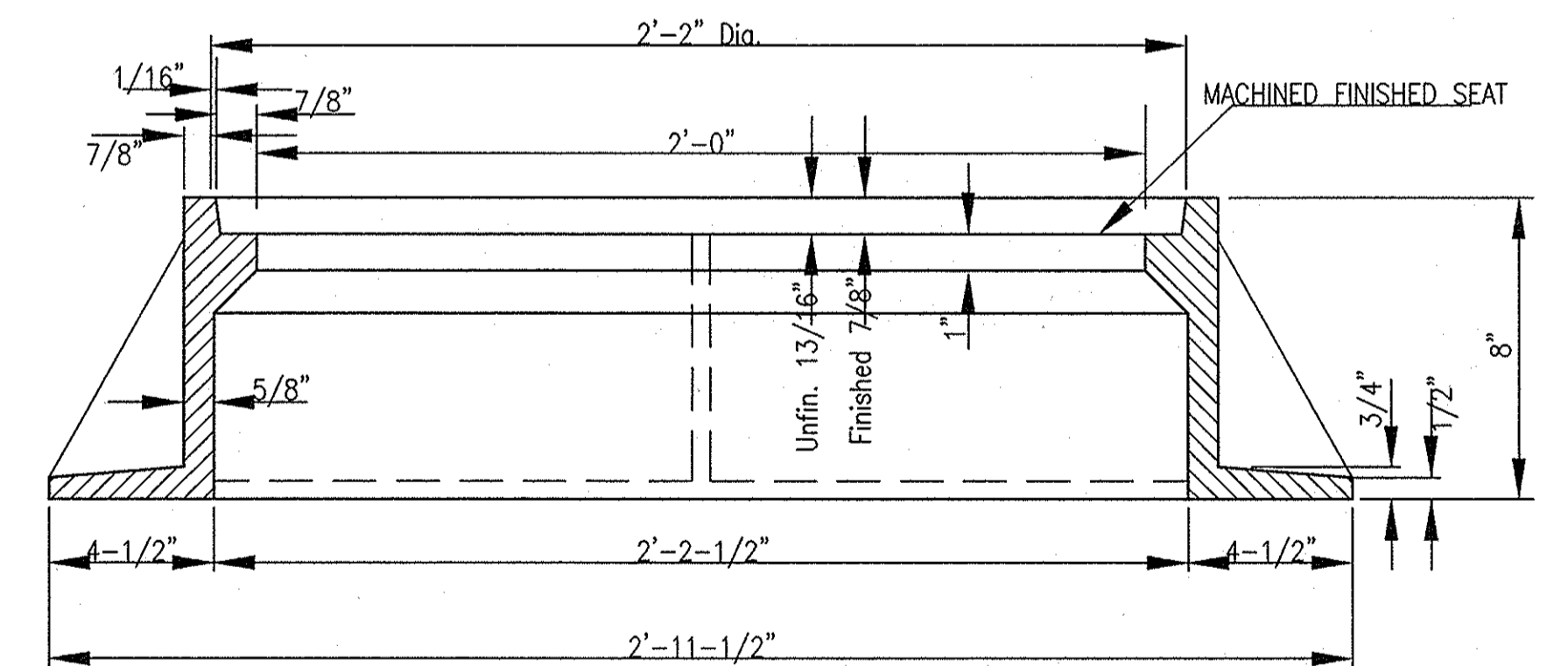
TOP VIEW

GENERAL NOTES

- MANHOLE CASTINGS SHALL BE MANUFACTURED USING GOOD QUALITY GRAY IRON CONFORMING TO CLASS 30 OF A.S.T.M. DESIGNATION A-48. DIMENSIONS AND WEIGHTS SHOWN ON THE DETAILED DRAWINGS SHALL BE CONSIDERED AS MINIMUM REQUIREMENTS AND ANY DEVIATIONS FROM THE DIMENSIONS SHOWN MUST BE SPECIFICALLY APPROVED. THE FINISHED CASTINGS SHALL BE OF UNIFORM QUALITY, FREE FROM BLOWHOLES, POROSITY, HARD SPOTS, SHRINKAGE DISTORTIONS OR OTHER DEFECTS.
- MANHOLE CASTINGS SHALL WEIGH A MINIMUM OF 180 POUNDS ON THE SOLID COVER AND 240 POUNDS ON THE MANHOLE RING. THIS IS A TOTAL OF 420 POUNDS ON A RING AND COVER SET. CASTINGS WEIGHING LESS THAN THE MINIMUM SPECIFICATIONS WILL NOT BE ACCEPTED.
- MANHOLE CASTINGS SHALL BE MANUFACTURED SUCH THAT A COVER MANUFACTURED BY ANY ONE FOUNDRY WILL FIT INTERCHANGEABLY INTO A FRAME MANUFACTURED BY ANOTHER FOUNDRY AND STILL MEET ALLOWABLE CLEARANCES AND NON-ROCKING REQUIREMENTS. THIS WILL REQUIRE MANUFACTURING OF THE MATCHING FACES ON THE COVER AND THE FRAME TO CLOSE TOLERANCES.
- THE OUTSIDE CIRCUMFERENCE OF THE VERTICAL FACE OF THE COVER AND THE INSIDE CIRCUMFERENCE OF THE VERTICAL FACE IN THE FRAME RECESS SHALL BE MANUFACTURED TO TOLERANCES SUCH THAT THE CLEARANCE BETWEEN THE COVER AND FRAME WILL NOT EXCEED 1/8" AT ANY POINT AROUND THE CIRCUMFERENCE OF THE COVER. THE SEATING SURFACES BETWEEN THE COVER AND FRAME SHALL BE MACHINED SUCH THAT THESE SEATING SURFACES SHALL MAKE FULL CONTACT FOR THEIR FULL CIRCUMFERENCE TO PRECLUDE THE COVER FROM ROCKING IN THE FRAME.
- THE MANHOLE FRAME AND COVER SHALL BE MARKED WITH LETTERING INDICATING THE NAME OF THE MANUFACTURER AND THE YEAR WHEN THE COVER OR FRAME WAS CAST. THE COVER SHALL BE FURTHER IDENTIFIED WITH REGARDS TO OWNERSHIP USING LETTERS AT LEAST 1 INCH IN HEIGHT. THIS IDENTIFICATION SHALL BE "CITY OF WICHITA SEWER DEPARTMENT". THE WORD DEPARTMENT MAY BE ABBREVIATED. THE TEXTURE OF THE TOP SURFACE OF THE COVER SHALL BE MANUFACTURED IN A CHECKERED PATTERN DESIGN AS INDICATED ON THE DRAWINGS. SMOOTH BLOCKOUTS SHALL BE UTILIZED TO HIGHLIGHT THE LETTERING ON THE COVER SURFACE. THE TOTAL AREA OF SMOOTH SURFACE BLOCKOUT SHALL NOT EXCEED THE AREA AS INDICATED ON THE DRAWING. POSITIONING OF SMOOTH BLOCKOUTS AND LETTERING MAY VARY FROM THAT SHOWN ON THE DETAILED DRAWING.

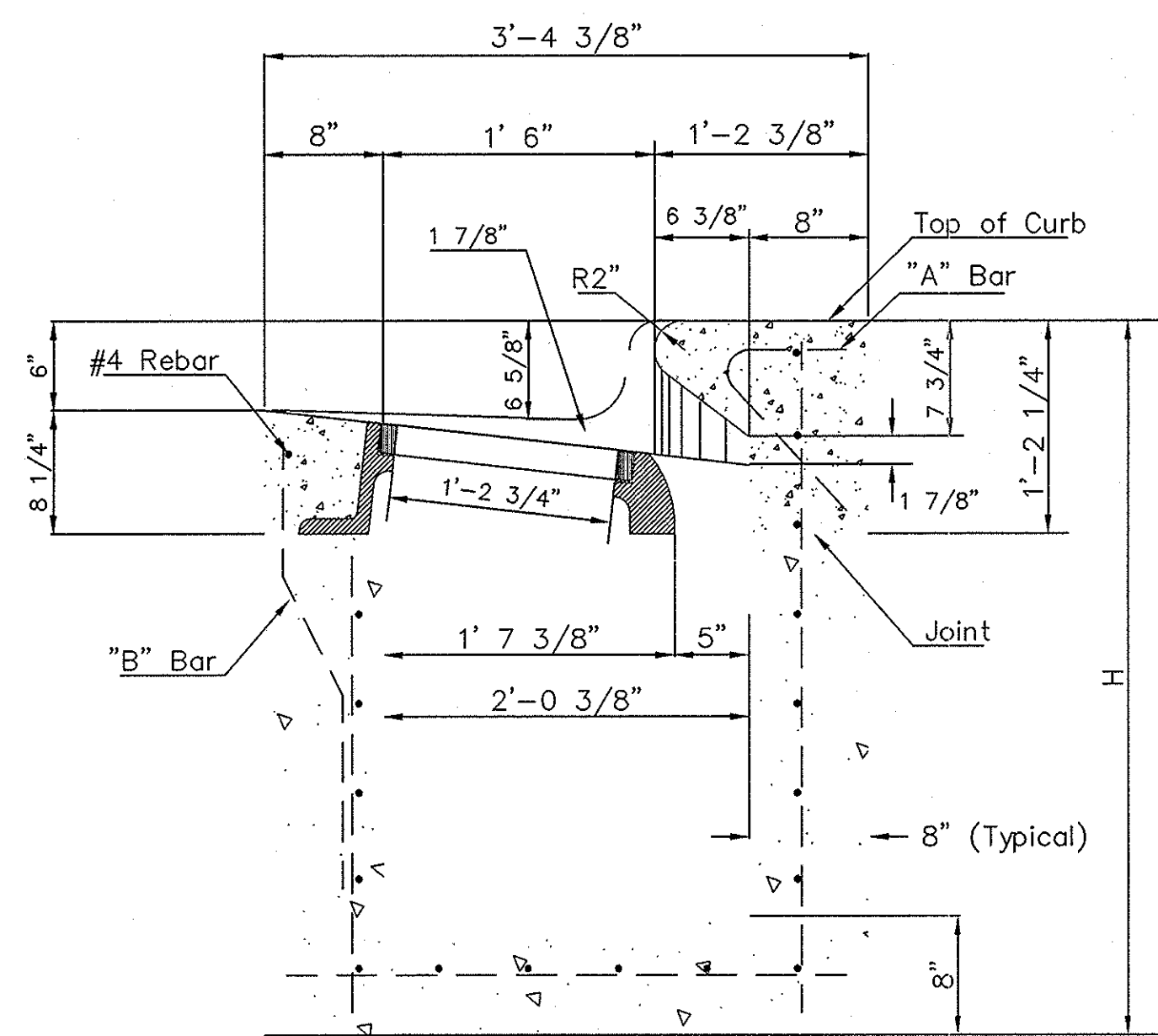


SECTION A-A
MUD RING

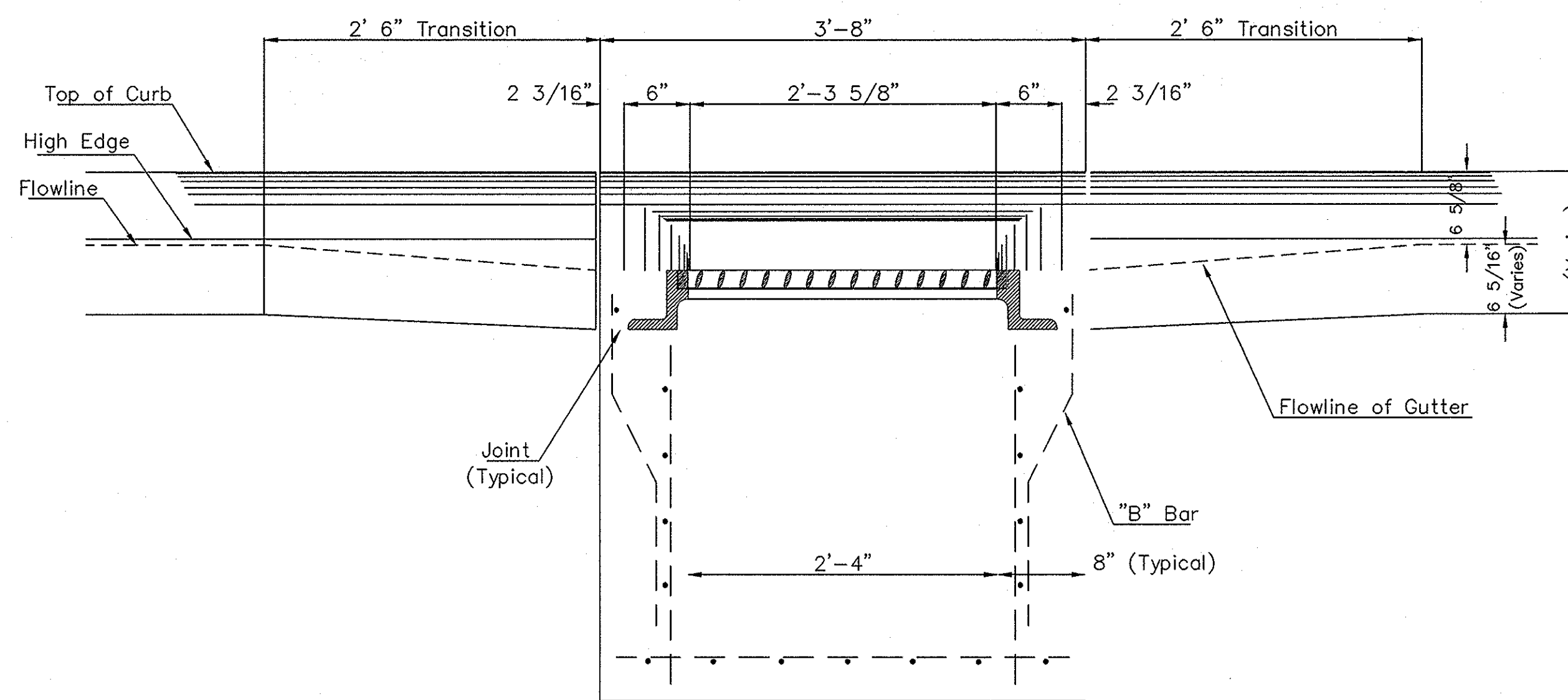


SECTION A-A

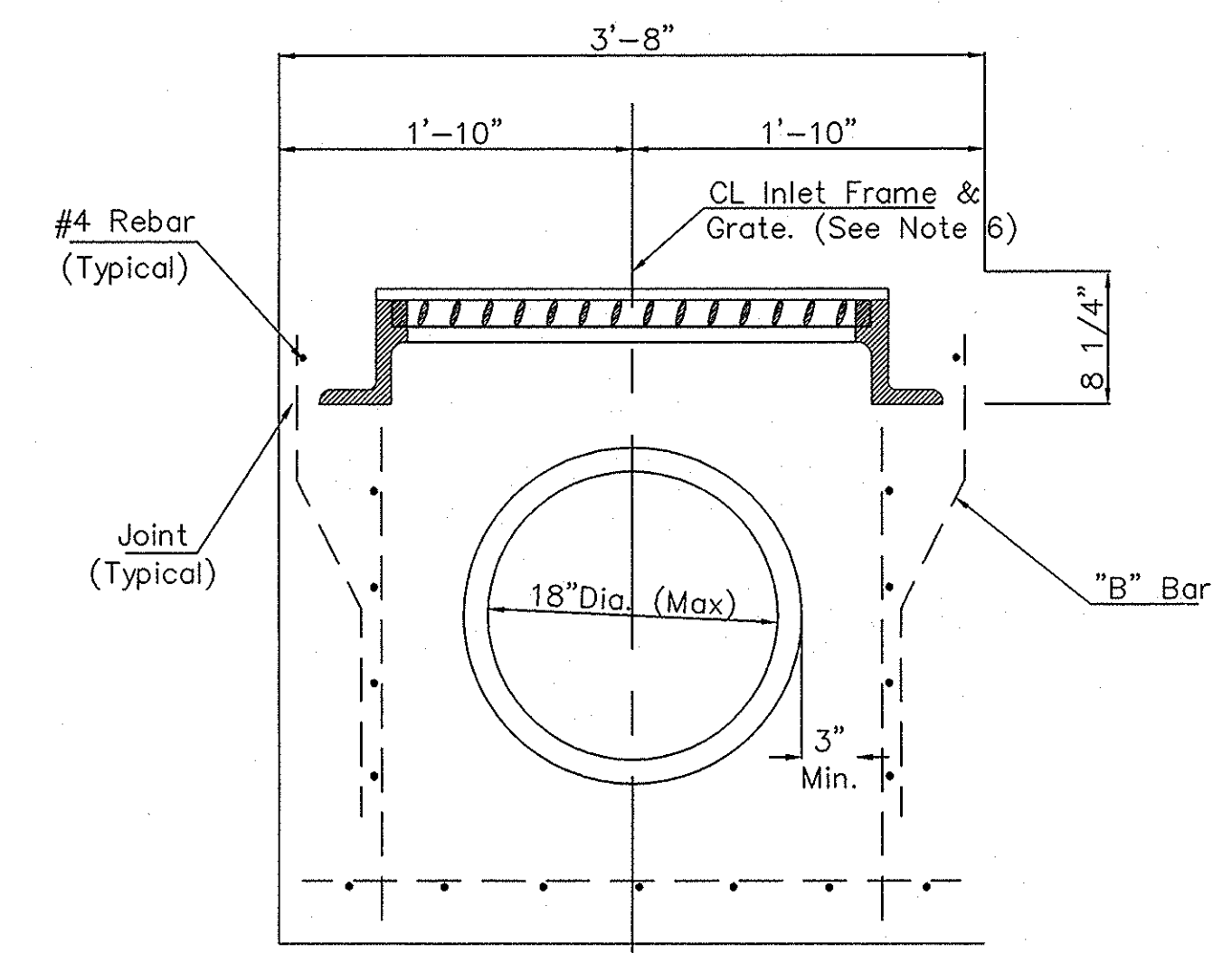
	MANHOLE FRAME AND COVER	
	CITY ENGINEER JAMES L. ARMOUR, P.E., L.S.	
	PROJECT NUMBER 21047-04	DATE 7/13
	CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501 (316) 268-4114 FAX	DESIGN C of WIC of W
		DRAWN SHEET 6 of 11



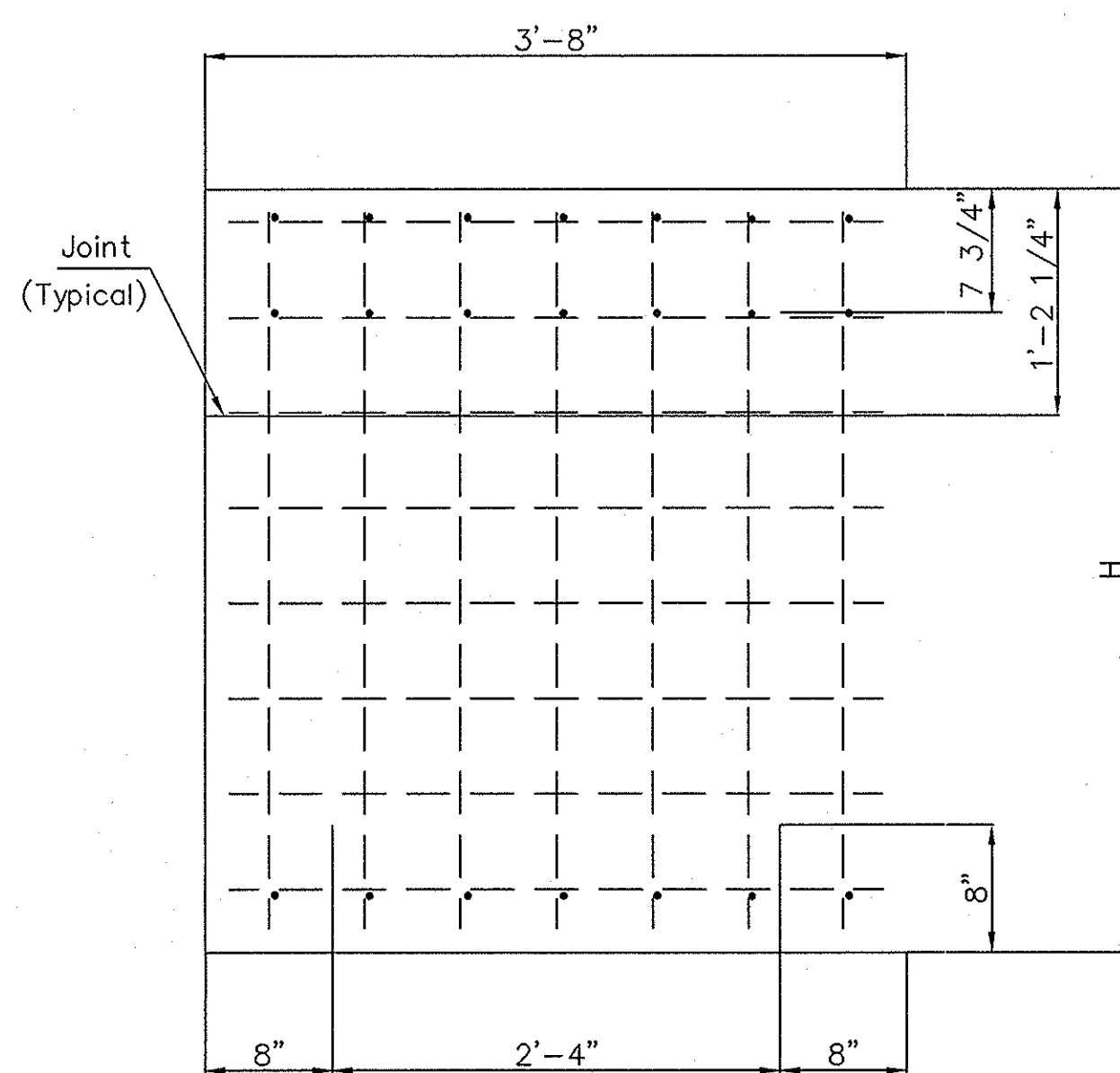
SECTION A-A



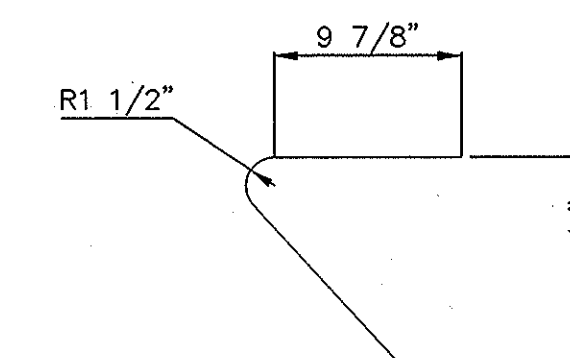
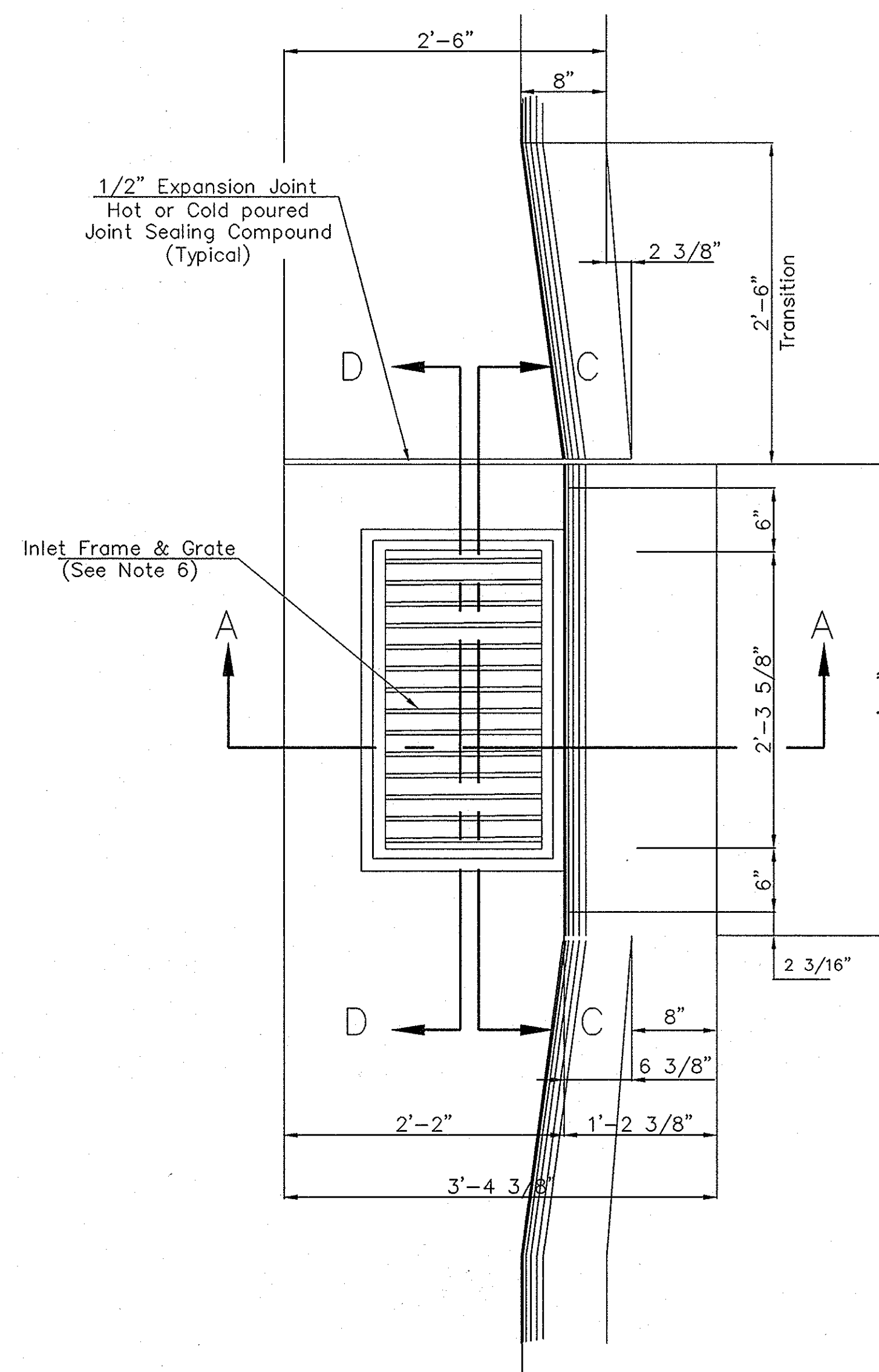
SECTION C-C



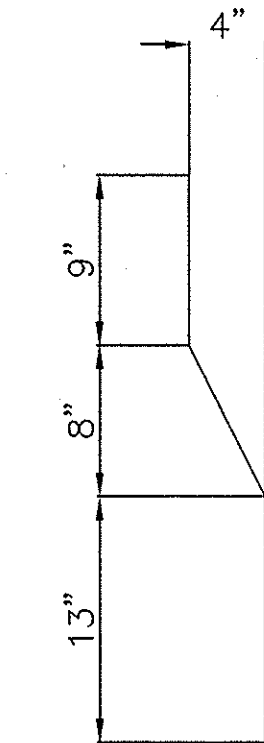
SECTION D-D



REAR WALL



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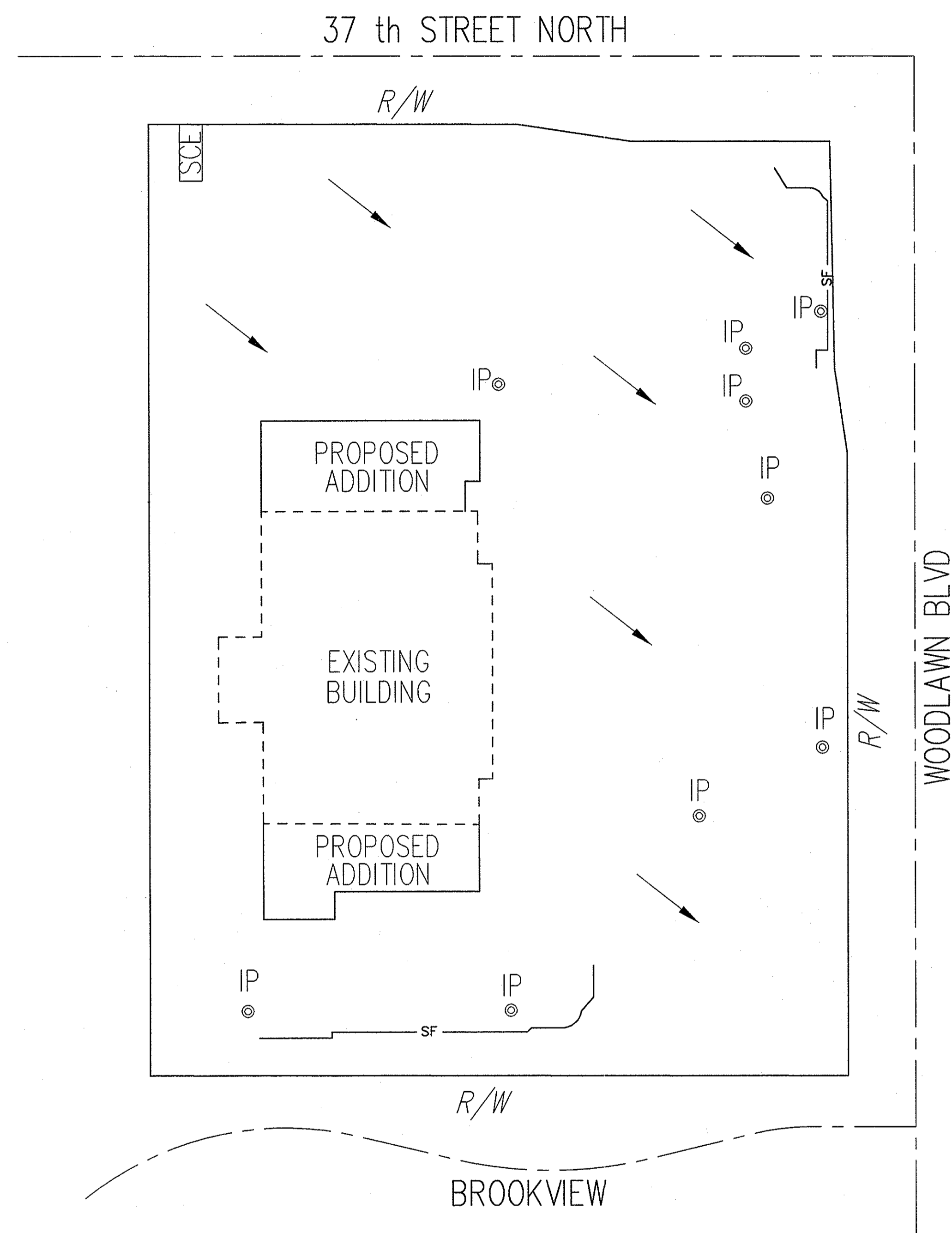


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General Notes

1. Use the concrete mix specified for the City of Wichita concrete pavement throughout. All exposed edges shall be finished with an edging tool. Reinforcing bars shall be bent around pipe.
2. Inlet invert shall be shaped with 8 sack mix concrete to create flow channels and to increase hydraulic efficiency such that the inlet will be self cleaning between all inlet and/or outlet pipes.
3. All bars are #4 with 6" spacing and shall have a minimum clearance of 1 1/2" inches unless otherwise noted on the plans.
4. When directed by the Engineer, a small opening may be required in the back of the inlet in order to drain a low area. Reinforcing bars will extend through the openings. No deductions in concrete quantities will be made for these openings.
5. No deductions will be made in pay length of curb, gutter, or curb and gutter through the inlet area.
6. Use Neenah R-3289 HV Single Inlet Frame and Grate or approved equal. Inlet frame to be proof load tested to 40,000 lbs. on unsupported side.
7. Reinforcing bars shall be cut or bent around pipes. No deduction in concrete quantities shall be made for pipe openings.
8. The vanes of the grate shall be oriented with respect to the flow arrows shown on the plans.

		STANDARD TYPE II CURB INLET OPENING = 6" x 2'-3 5/8"	
		CITY ENGINEER JAMES L. ARMOUR, P.E., L.S.	
PROJECT NUMBER	DCA NUMBER	DATE	
21047-04	-	07/13	
CITY ENGINEER'S OFFICE		DESIGN	DRAWN
CITY HALL - SEVENTH FLOOR		C of W	W of W
455 NORTH MAIN STREET		SHEET	
WICHITA, KANSAS 67202-1620		7 of 11	
(316) 268-4501			
(318) 268-4114 FAX			



- Flow Direction
- Inlet Protection - to be provided at all inlets subject to silt laden runoff.
- Silt Fence or Hay Bale Barrier - to be installed along property lines where runoff from construction site can run onto other properties.
- SCE Stabilized Construction Entrance - to be used at all locations where vehicles or equipment enter or exit property.
- Back of Curb Protection - to be installed whenever curb is backfilled to less than 3 inches from top and disturbed earth exists adjacent thereto. (See City Standard Details.)

General Notes

1. This standard detail sheet is a part of your building permit. The Erosion Control Devices shown on this sheet are considered minimum standards. Whenever sediment enters the streets, storm sewers, ditches, or ponds, contractor will install additional devices, as needed, to correct the problem.
2. Follow these general principals on all commercial building sites.
3. The Erosion Control Devices shown hereon must be in place at all times during construction until such time as the site is reestablished with paving or grass. Temporary or permanent seeding and mulch will be installed when earthwork activities cease in an area for 14 days or more.
4. Failure to install, protect, and maintain Erosion Control Devices are violations of Section 16.32 of the City Code and will subject the contractor to the penalties provided therein. Included with your permit is an orange "notice" sign that must be posted on-site in a conspicuous place at all times during construction. This sign is provided to assist you in the maintenance of Erosion Control Devices.
5. Back of Curb Protection: As shown on City standard details. These Devices must remain in place until the area between the curb and right-of-way line has been permanently stabilized.
6. The Owner and General Contractor are responsible for the installation and maintenance of all Erosion Control Devices.
7. Should the site abut a lake, Erosion Control Devices will be installed to prevent sediment from entering the lake.
8. Any mud inadvertently tracked onto any street will be cleaned up by the at the end of each day's work.



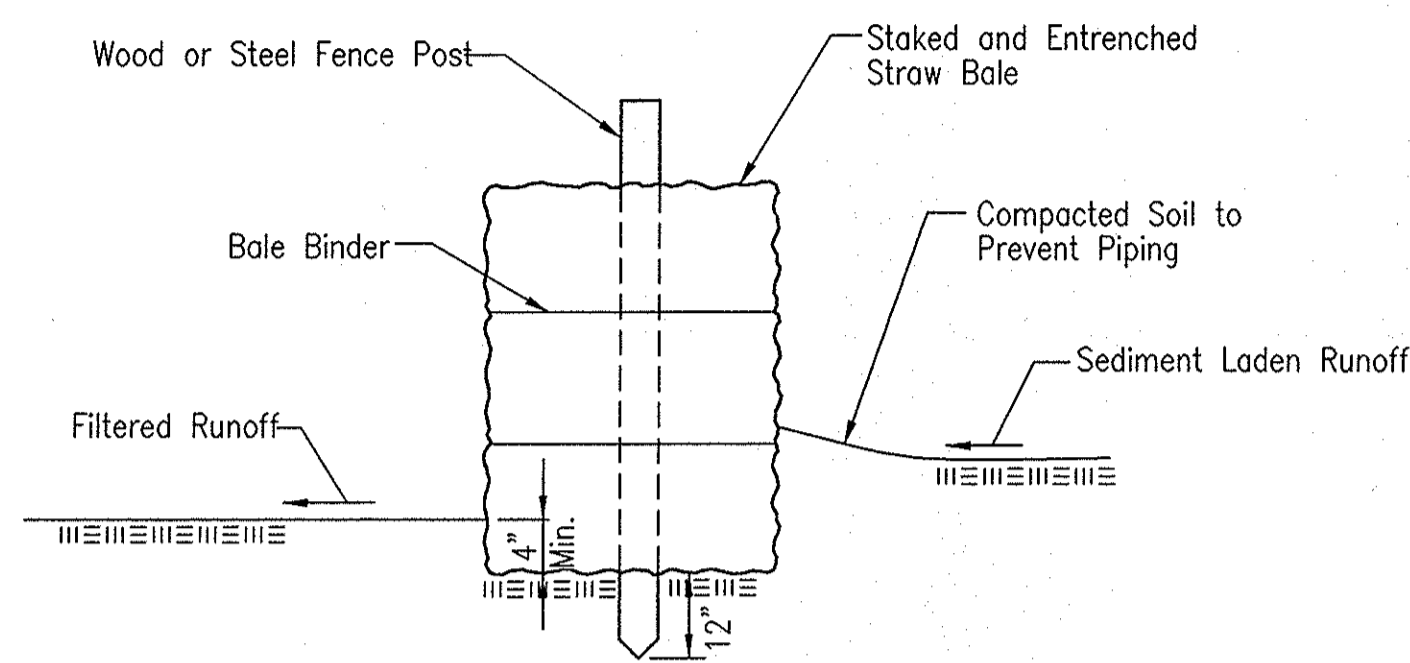
SOIL EROSION BMPs

COMMERCIAL
DEVELOPMENT SITES

JULY 2013

SHEET 8 OF 11

CHRISTOPHER M. CARRIER, P.E.
STORM WATER ENGINEER



STRAW BALE BARRIERS

Material Specification:

Bale slope barriers may be constructed of wheat straw, oat straw, prairie hay, or bromegrass hay that is free of weeds declared noxious by the Kansas State Board of Agriculture. The stakes used to anchor the bales should be a hardwood material with the following minimum dimensions: 2" square (nominal) by 4' long.

Placement:

A slope barrier should be used at the toe of a slope when a ditch does not exist. The slope barrier should be placed on nearly level ground 5' to 10' away from the toe of a slope. The barrier is placed away from the toe of the slope to provide adequate storage for setting out sediment. When practicable, bale slope barriers should be placed along contours to avoid a concentration of flow. Bale slope barriers can also be placed along right-of-way fence lines to keep sediment from crossing onto adjacent property. When placed in this manner, the slope barrier will not likely follow contours.

Proper installation method:

Excavate a trench the length of the planned slope barrier that is 4" deep and a bale's width wide. Make sure that the trench is excavated along a single contour. When practicable, slope barriers should be placed along contours to avoid a concentration of flow. Place the soil on the upslope side of the trench for later use. Place the bales in the trench, making sure that they are butted tightly. Two stakes should be driven through each bale along the centerline of the ditch check, approximately 6" to 8" in from the bale ends. Stakes should be driven at least 12" into the ground. Once all the bales have been installed and anchored, place the excavated soil against the upslope side of the check and compact it. The compacted soil should be no more than 3" to 4" deep.

List of common placement/installation mistakes to avoid:

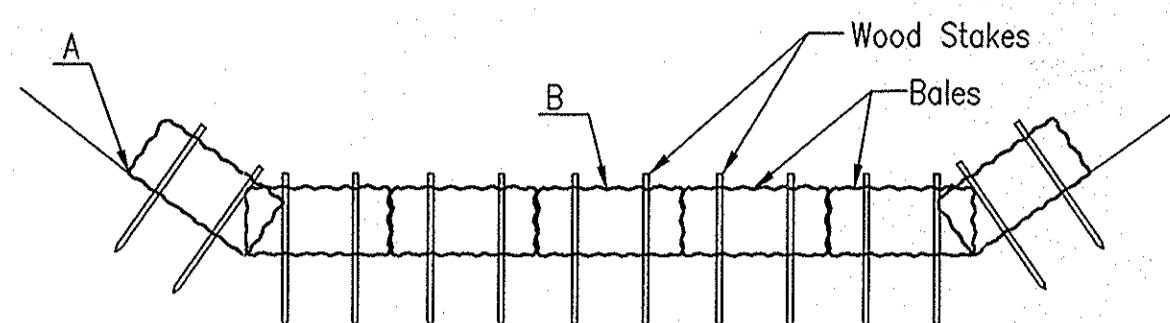
When practical, do not place bale slope barriers across contours. Slope barriers should be placed along contours to avoid a concentration of flow. Concentrated flow over a slope barrier creates a scour hole on the downslope side of the barrier. The scour hole eventually undermines the bales and the barrier fails. Do not place bale slope barriers in areas with shallow soils underlain by rock. If the barrier is not anchored sufficiently, it will wash out. Bale slope barriers must be dug into the ground. Bales at ground level do not work because they allow water to flow under the barrier.

Inspection and Maintenance:

Bale slope barriers should be inspected every 7 days and within 24 hours of a rainfall of 1/2" or more. The following is a list of questions that should be addressed during each inspection:

- Are there any points along the slope barrier where water is concentrating?
- Does water flow under the slope barrier?
- Does water flow through spaces between abutting bales?
- Are any bales dislodged?
- Are bales decomposing due to age and/or water damage?
- Does sediment need to be removed from behind the slope barrier?

NOTE: Point A must be higher than Point B so that water flows over the bales and not around them.



STRAW BALE DITCH CHECKS

Material Specification:

Bale ditch checks may be constructed of wheat straw, oat straw, prairie hay, or bromegrass hay that is free of weeds declared noxious by the Kansas State Board of Agriculture. The stakes used to anchor the bales should be a hardwood material with the following minimum dimensions: 2" square (nominal) by 4' long. Optional: The downstream scour apron should be constructed of a double-netted straw erosion-control blanket at least 6' wide. Optional: The metal landscape staples used to anchor the erosion-control blanket should be at least 8" long.

Placement:

Bale ditch checks should be placed perpendicular to the flowline of the ditch. The ditch check should extend far enough so that the ground level at the ends of the check is higher than the top of the lowest center bale. This prevents water from flowing around the check. Checks should not be placed in ditches where high flows are expected. Rock checks should be used instead. Bales should be placed in ditches with slopes of 6% or less. For slopes steeper than 6%, rock checks should be used. The following table provides check spacing for a given ditch grade:

Ditch grade (%)	Check Spacing (feet)
0.5	200
1.0	200
2.0	100
3.0	65
4.0	50
5.0	40
6.0	30

Proper installation method:

Excavate a trench perpendicular to the ditch flowline that is 4" deep and a bale's width wide. Extend the trench in a straight line along the entire length of the proposed ditch check. Place the soil on the upstream side of the trench—it will be used later. Optional: On the downstream side of the trench, roll out a length of erosion-control blanket (scour apron) equal to the length of the trench. Place the upstream edge of the erosion-control blanket along the bottom upstream edge of the trench. The erosion control blanket should be anchored in the trench with one row of 8" landscape staples placed on 18" centers. The remainder of the erosion-control blanket (the portion that is not lying in the trench) will serve as the downstream scour apron. This section of the blanket should be anchored to the ground with 8" landscape staples placed around the perimeter of the blanket on 18" centers. The remainder of the blanket should be anchored using two evenly spaced rows of 8" landscape staples on 18" centers placed perpendicular to the flowline of the ditch. Place the bales in the trench, making sure that they are butted tightly. Two stakes should be driven through each bale along the centerline of the ditch check, approximately 6" to 8" in from the bale ends. Stakes should be driven at least 12" into the ground. Once all the bales have been installed and anchored, place the excavated soil against the upstream side of the check and compact it. The compacted soil should be no more than 3" to 4" deep and extend upstream no more than 24".

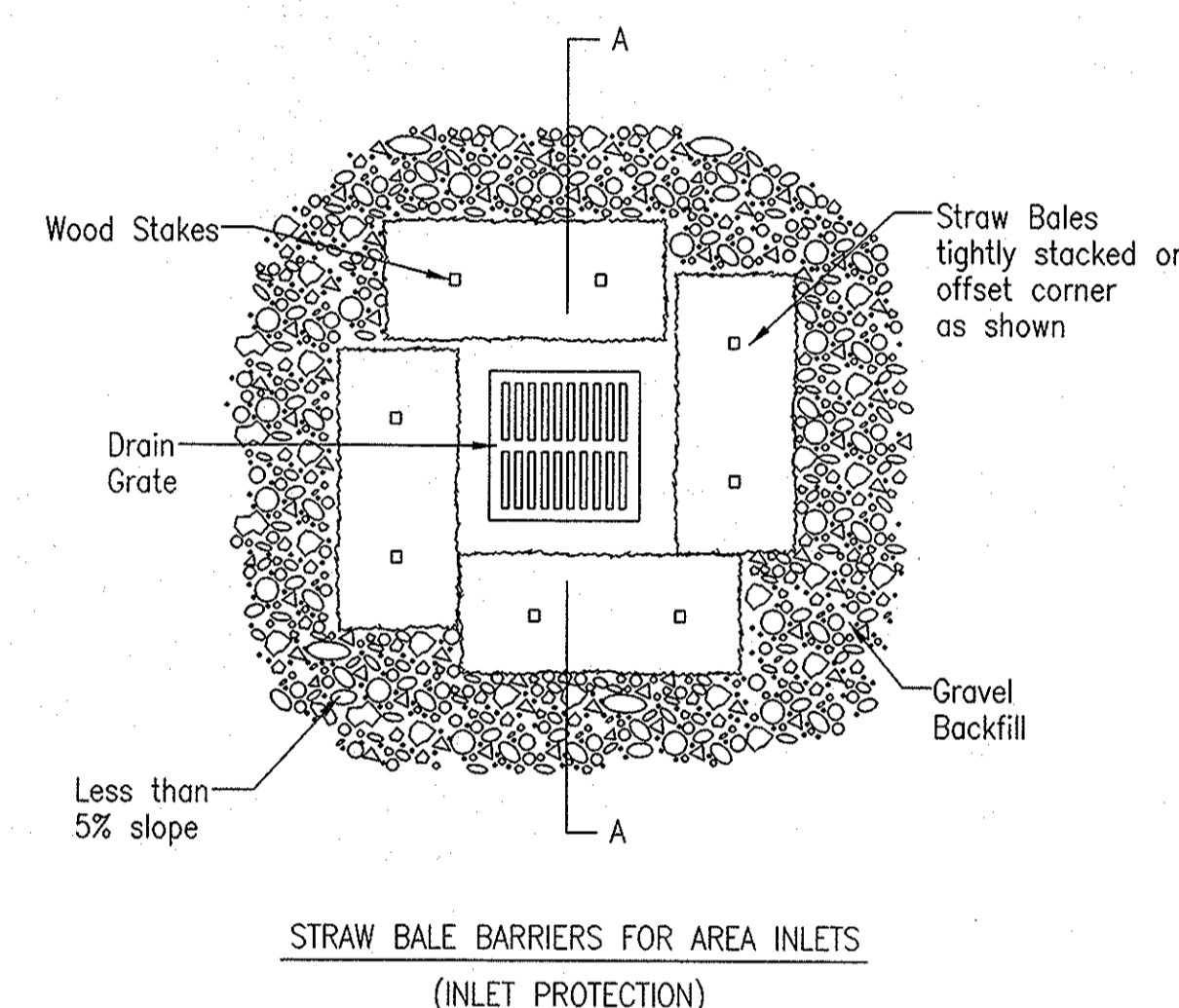
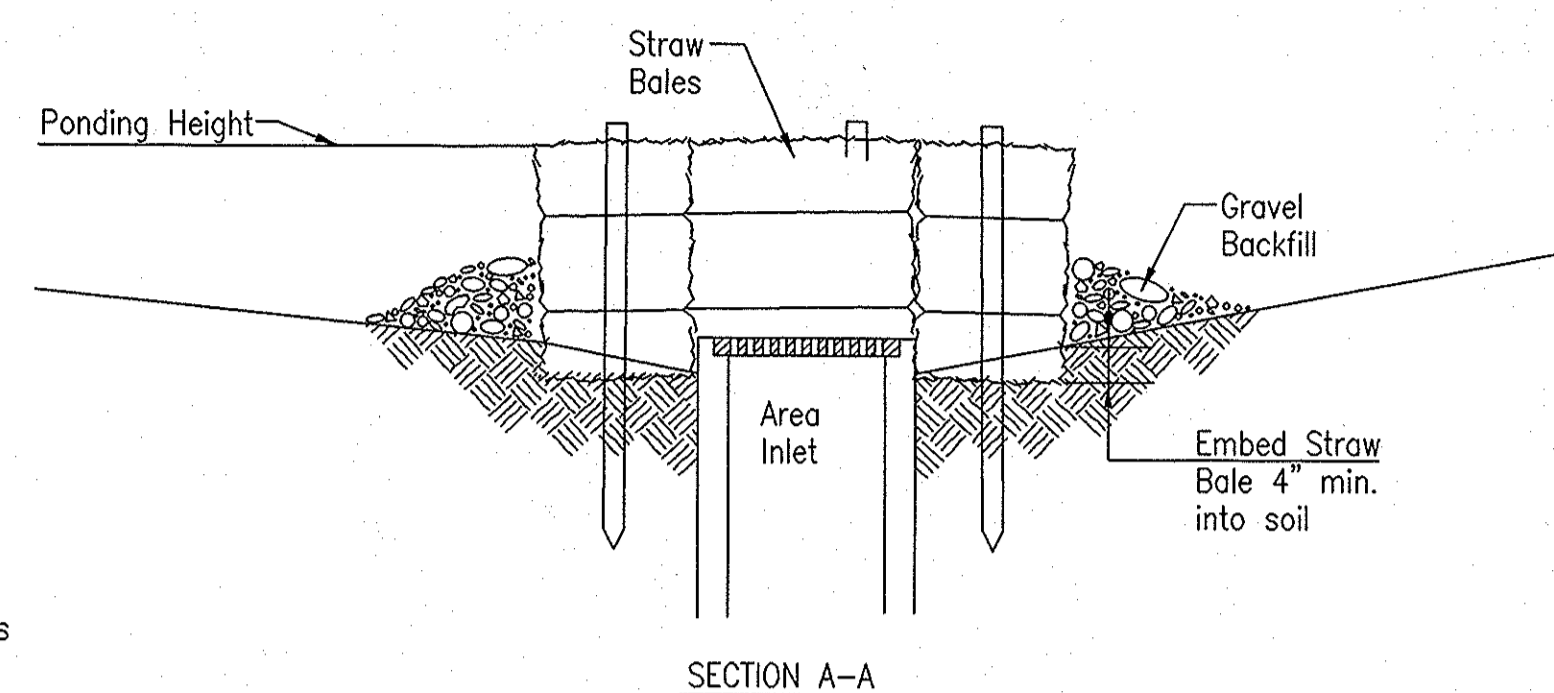
List of common placement/installation mistakes to avoid:

Do not place a bale ditch check directly in front of a culvert outlet. It will not stand up to the concentrated flow. Do not place bale ditch checks in ditches that will likely experience high flows. They will not stand up to concentrated flow. Follow prescribed ditch-check spacing guidelines. If spacing guidelines are exceeded, erosion will occur between the ditch checks. Do not allow water to flow around the ditch check. Make sure that the ditch check is long enough so that the ground level at the ends of the check is higher than the top of the lowest center bale. Do not place bale ditch checks in channels with shallow soils underlain by rock. If the check is not anchored sufficiently, it will wash out. Bale ditch checks must be dug into the ground. Bales at ground level do not work because they allow water to flow under the check.

Inspection and Maintenance:

Bale ditch checks should be inspected every 7 days and within 24 hours of a rainfall of 1/2" or more. The following is a list of questions that should be addressed during each inspection:

- Does water flow around the ditch check?
- Does water flow under the ditch check?
- Does water flow through spaces between abutting bales?
- Are any bales and/or scour aprons (optional) dislodged?
- Are bales decomposing due to age and/or water damage?
- Does sediment need to be removed from behind the ditch check?



Material Specification:

Bale area inlet barriers should be constructed of wheat straw, oat straw, prairie hay, or bromegrass hay that is free of weeds declared noxious by the Kansas State Board of Agriculture. The stakes used to anchor the bales should be a hardwood material with the following minimum dimensions: 2" square (nominal) by 4' long.

Placement:

Bale area inlet barriers should be placed directly around the perimeter of a drop inlet. When a bale area inlet barrier is located near an inlet that has steep approach slopes, the storage capacity behind the barrier is drastically reduced. Timely removal of sediment must occur for a barrier to operate properly in this location.

Proper Installation Method:

Excavate a trench around the perimeter of the area inlet that is at least 4" deep by a bale's width wide. Place the bales in the trench, making sure that they are butted tightly. Some bales may need to be shortened to fit into the trench around the area inlet. Two stakes should be driven through each bale, approximately 6" to 8" in from the bale ends. Stakes should be driven at least 12" into the ground. Once all the bales have been installed and anchored, place the excavated soil against the receiving side of the barrier and compact it. The compacted soil should be no more than 3" to 4" deep. Note: When a bale area inlet barrier is placed in a shallow median ditch, make sure that the top of the barrier is not higher than the paved road. In this configuration, water may spread onto the roadway causing a hazardous condition.

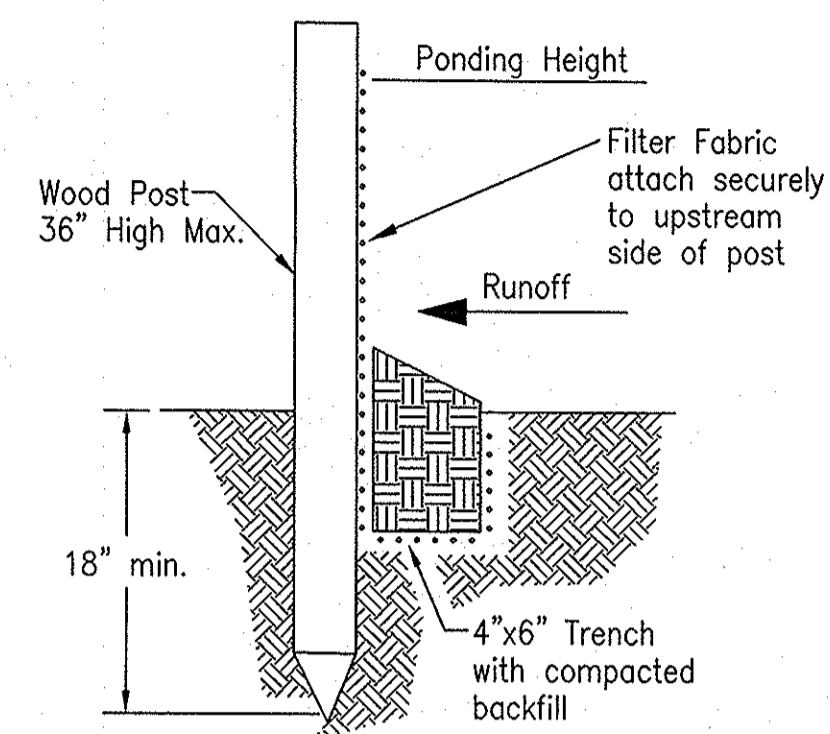
List of common placement installation mistakes to avoid:

Bales should be placed directly against the perimeter of the area inlet. This allows overtopping water to flow directly into the inlet instead of onto nearby soil causing scour. Bale area inlet barriers must be dug into the ground. Bales at ground level do not work because they allow water to flow under the barrier.

Inspection and Maintenance:

Bale area inlet barriers should be inspected every 7 days and within 24 hours of a rainfall of 1/2" or more. The following is a list of questions that should be addressed during each inspection:

- Does water flow under the area inlet barrier?
- Does water flow through spaces between abutting bales?
- Are any bales dislodged?
- Are bales decomposing due to age and/or water damage?
- Does sediment need to be removed from behind the area inlet barrier?



SILT FENCE BARRIERS

SILT FENCE BARRIERS

Material Specification:

Silt fence fabric should conform to the AASHTO M288 96 silt fence specification. The posts used to support the silt fence fabric should be a hardwood material with the following minimum dimensions: 2" square (nominal) by 4' long. Silt fence fabric should be attached to the wooden posts with staples, wire, zip ties, or nails.

Placement:

A slope barrier should be used at the toe of a slope when a ditch does not exist. The slope barrier should be placed on nearly level ground 5' to 10' away from the toe of a slope. The barrier is placed away from the toe of the slope to provide adequate storage for setting out sediment. When practicable, silt fence slope barriers should be placed along contours to avoid a concentration of flow. Silt fence slope barriers can also be placed along right-of-way fence lines to keep sediment from crossing onto adjacent property. When placed in this manner, the slope barrier will not likely follow contours.

Proper installation method:

Excavate a trench the length of the planned slope barrier that is 6" deep by 4" wide. Make sure that the trench is excavated along a single contour. When practicable, slope barriers should be placed along contours to avoid a concentration of flow. Place the soil on the upslope side of the trench for later use. Roll out a continuous length of silt fence fabric on the downslope side of the trench. Place the edge of the fabric in the trench starting at the top upslope edge. Line all three sides of the trench with the fabric. Backfill over the fabric in the trench with the excavated soil and compact. After filling the trench, approximately 24" to 36" of silt-fence fabric should remain exposed. Lay the exposed silt fence upslope of the trench to clear an area for driving in the posts. Just downslope of the trench, drive posts into the ground to a depth of at least 18". Place posts no more than 4' apart. Attach the silt fence to the anchored post with staples, wire, zip ties, or nails.

List of common placement/installation mistakes to avoid:

When practicable, do not place silt fence slope barriers across contours. Slope barriers should be placed along contours to avoid a concentration of flow. When the flow concentrates, it overtops the barrier and the silt fence slope barrier quickly deteriorates. Do not place silt-fence posts on the upslope side of the silt fence fabric. In this configuration, the force of the water is not restricted by the posts, but only by the staples (wire, zip ties, nails, etc.). The silt fence will rip and fail. Do not place silt fence slope barriers in areas with shallow soils underlain by rock. If the barrier is not sufficiently anchored, it will wash out. Silt fence slope barriers must be dug into the ground—silt fence at ground level does not work because water will flow underneath.

Inspection and Maintenance:

Silt fence slope barriers should be inspected every 7 days and within 24 hours of a rainfall of 1/2" or more. The following is a list of questions that should be addressed during each inspection:

- Are there any points along the slope barrier where water is concentrating?
- Does water flow under the slope barrier?
- Do the silt fences sag excessively?
- Has the silt fence torn or become detached from the posts?
- Does sediment need to be removed from behind the slope barrier?



SOIL EROSION BMP DETAILS

CHRISTOPHER M. CARRIER, P.E.
STORM WATER ENGINEER

PROJECT NUMBER: 21047-04 OCA NO.:

DATE: MAY 2013 SHEET 10 OF 11

WHISPERING BROOK COMMERCIAL 2ND ADDITION

(A REPLAT OF WHISPERING BROOK COMMERCIAL ADDITION)

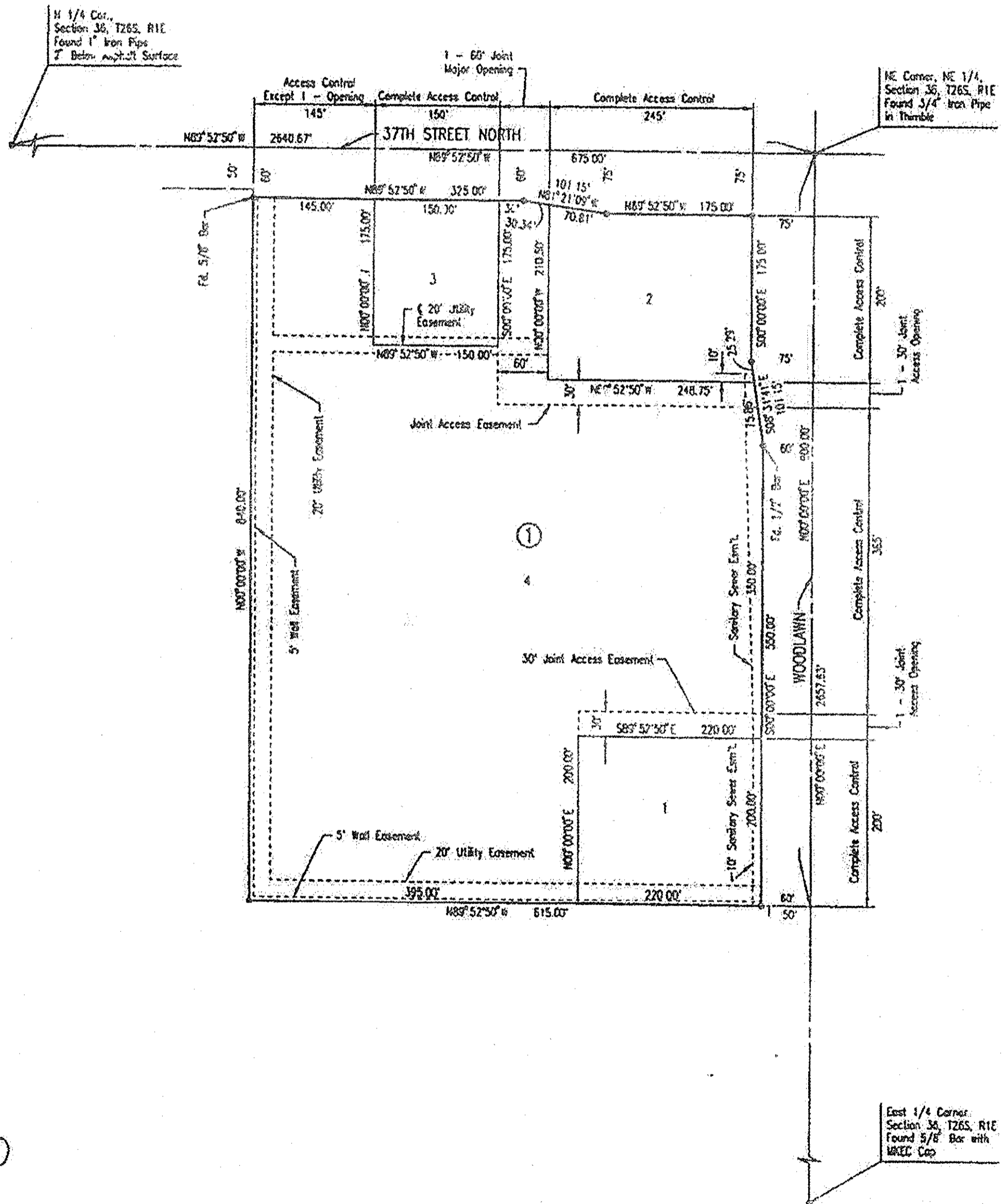
TO WICHITA, SEDGWICK COUNTY, KANSAS

LIBRARY COPY
SEDGWICK COUNTY, KANSAS
REGISTER OF DEEDS

B.M. Railroad Spike in East face Power Pole at SW Corner
Woodlawn and Brooklawn.
Elev = 183.42 (City Datum)
Elev = 1370.62 (N.G.V.D.)

SCALE: 1" = 100'

3/4" IRON PIPE WITH PEC CAP UNLESS NOTED OTHERWISE



STATE OF KANSAS }
COUNTY OF SEDGWICK } SS

WE, PROFESSIONAL ENGINEERING CONSULTANTS, P.A., ENGINEERS AND SURVEYORS IN AND FOR THE STATE AND COUNTY DO HEREBY CERTIFY THAT OF THIS 24TH DAY OF JANUARY, 2001, WE HAVE SURVEYED AND PLATTED WHISPERING BROOK COMMERCIAL 2ND ADDITION TO WICHITA, SEDGWICK COUNTY, KANSAS, INTO LOTS AND A BLOCK, THE SAME BEING DESCRIBED AS FOLLOWS:

ALL OF WHISPERING BROOK COMMERCIAL ADDITION TO WICHITA, SEDGWICK COUNTY, KANSAS.

ALL PORTIONS OF WHISPERING BROOK COMMERCIAL ADDITION AND AN EASEMENT FOR JOINT ACCESS AS PER FILE 1264, PAGE 471 AND FILE 473, LYING WITHIN THE ABOVE DESCRIBED TRACT ARE HEREBY VACATED AND REPLATED BY VIRTUE OF KSA 12-512(B) AMENDED.

JAMES R. BECKETT, R.L.S. NO. 837
PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

KNOW ALL MEN BY THESE PRESENTS THAT WE, THE UNDERSIGNED PROPERTY OWNERS OF THE LAND AS ABOVE SET FORTH IN THE SURVEYOR'S CERTIFICATE, HAVE CAUSED THE LAND TO BE SURVEYED AND PLATTED INTO LOTS AND A BLOCK, THE SAME TO BE KNOWN AS WHISPERING BROOK COMMERCIAL 2ND ADDITION TO WICHITA, SEDGWICK COUNTY, KANSAS.

EASEMENTS AS INDICATED FOR THE CONSTRUCTION AND MAINTENANCE OF PUBLIC UTILITIES ARE HEREBY GRANTED.

THE 5' WALL EASEMENT ALONG THE WEST AND SOUTH LINE OF BLOCK 1 IS HEREBY PLATTED FOR THE CONSTRUCTION AND MAINTENANCE OF A PRIVATE WALL. UTILITIES MAY CROSS THE WALL EASEMENT.

ALL ADJACENT RIGHT OF ACCESS TO AND FROM 37TH STREET NORTH AND WOODLAWN OVER AND ACROSS THE NORTH AND EAST LINES OF BLOCK 1 ARE HEREBY GRANTED TO THE CITY OF WICHITA, PROVIDED HOWEVER THAT BLOCK 1 SHALL HAVE ACCESS TO 37TH STREET NORTH AT TWO LOCATIONS AS SHOWN AND BLOCK 1 SHALL HAVE ACCESS TO WOODLAWN AT TWO LOCATIONS AS SHOWN. LOT 1 AND LOT 2 SHALL HAVE ACCESS TO WOODLAWN VIA THE JOINT ACCESS EASEMENTS. LOT 2 AND LOT 3 SHALL HAVE ACCESS TO 37TH STREET NORTH VIA THE JOINT ACCESS EASEMENT.

A DRAINAGE PLAN HAS BEEN APPROVED FOR THIS PLAT. ALL DRAINAGE EASEMENTS AND RIGHTS-OF-WAY SHALL REMAIN AS ESTABLISHED OR AS UNOBTAINED TO ALLOW FOR THE CONVEYANCE OF STORM WATER, UNLESS MODIFIED WITH THE APPROVAL OF THE CITY ENGINEER.

FOR ADDITIONAL INFORMATION AND BUILDING SETBACK LINES SEE CAP 2000-0000, 04-203 AMENDMENT #1 ON FILE AT THE WICHITA-SEDGWICK COUNTY METROPOLITAN AREA PLANNING DEPARTMENT, WICHITA, KANSAS.

DRIVERS:
ROSS C. TEDEMAN
KARMA C. TEDEMAN

LAWH HOLDING COMPANY, L.L.C.
GEORGE E. LAWAN, E. MANAGING PARTNER

THE KROGER CO.
THOMAS P. O'BRIEN, JR., SENIOR VICE PRESIDENT & ASSISTANT

STATE OF KANSAS }
COUNTY OF SEDGWICK } SS

THIS INSTRUMENT WAS ACKNOWLEDGED BEFORE ME ON THIS 24TH DAY OF JANUARY, 2001, BY ROSS C. TEDEMAN AND KARMA C. TEDEMAN, HUSBAND AND WIFE.

Cynthia A. Diffenbaugh, Notary Public
BY APPOINTMENT EXPIRES: 6-12-2001

STATE OF KANSAS }
COUNTY OF SEDGWICK } SS

THIS INSTRUMENT WAS ACKNOWLEDGED BEFORE ME ON THIS 24TH DAY OF JANUARY, 2001, BY GEORGE E. LAWAN, E. MANAGING PARTNER OF LAWAN HOLDING COMPANY, L.L.C.

Georgia A. Dotson, Notary Public
BY APPOINTMENT EXPIRES: 3-12-2003

THIS PLAT OF WHISPERING BROOK COMMERCIAL 2ND ADDITION HAS BEEN SUBMITTED TO AND APPROVED BY THE WICHITA-SEDGWICK COUNTY METROPOLITAN AREA PLANNING COMMISSION, WICHITA, KANSAS.

DATED THIS 30TH DAY OF NOVEMBER, 2000.

WICHITA-SEDGWICK COUNTY METROPOLITAN AREA PLANNING COMMISSION

CHRISTOPHER S. CASARER, CHAIRMAN
MARVIN S. KROGER, SECRETARY

REVIEWED IN ACCORDANCE WITH K.S.A. 50-2005 ON THIS 13TH DAY OF FEBRUARY, 2001.

TIMOTHY L. ROSELLO, L.S. #1746
DEPUTY COUNTY SURVEYOR
SEDGWICK COUNTY, KANSAS

THIS PLAT IS APPROVED AND ALL DEDICATIONS SHOWN HEREON, IF ANY ARE ACCEPTED BY THE CITY ENGINEER OF THE CITY OF WICHITA, KANSAS, THIS 27TH DAY OF FEBRUARY, 2001.

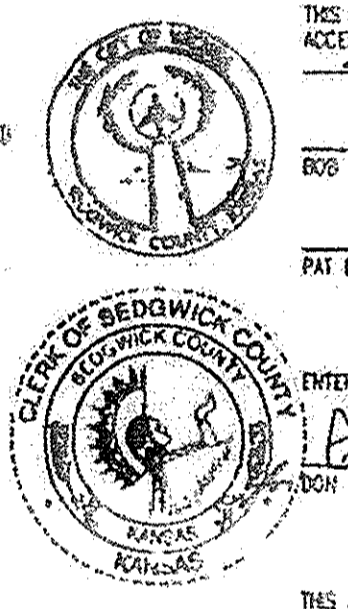
BOB KROGER, MAYOR
PAT BURGETT, CITY CLERK

ENTERED ON TRANSFER RECORD THIS 24TH DAY OF MARCH, 2001.
DOH BRUCE, COUNTY CLERK

THIS IS TO CERTIFY THAT THIS INSTRUMENT WAS FILED FOR RECORD IN THE REGISTER OF DEEDS OFFICE AT WICHITA, KANSAS, ON THE 24TH DAY OF JANUARY, 2001.

BILL BECK, REGISTER OF DEEDS
JULIA KIMMIE, DEPUTY

1957934



This digital plat record accurately reproduces in all details the original plat filed with the Sedgwick County Register of Deeds, by the Department of Register of Deeds Bill Beck by Sedgwick County Geographic Information Systems.