

GENERAL NOTES:

- ALL ELEVATIONS SHOWN ARE BASED ON NAVD 88
- CONTRACTOR WILL BE REQUIRED TO PROVIDE A MINIMUM ADVANCE NOTICE OF FORTY-EIGHT(48)HOURS TO UTILITY COMPANIES PRIOR TO STARTING ANY EXCAVATION AS FOLLOWS:

KANSAS ONE CALL	687-2470
-----------------	----------

THE CONTRACTOR MUST NOTIFY THE FOLLOWING IN CASE OF AN EMERGENCY:
 COX COMMUNICATIONS 262-4270 OR 263-2061
 AT&T 1-800-870-8390
 KANSAS GAS SERVICE 1-888-482-4950
 WESTAR 1-800-383-1183
 BLACK HILLS ENERGY 1-800-303-0752
 CITY OF WICHITA(WATER & SEWER) 268-4555

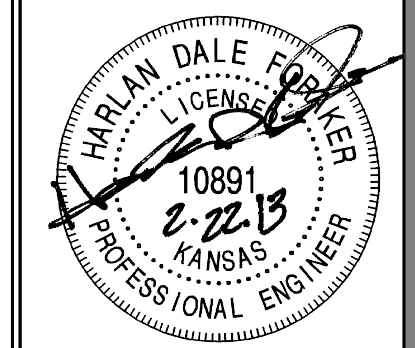
THE CONTRACTOR SHALL NOTIFY PIPELINE COMPANIES AT LEAST 24 HOURS IN ADVANCE OF ANY WORK BEING PERFORMED ACROSS AND/OR ADJACENT TO PIPELINES.
- COST OF EXCAVATION, HAULING AND DUMPING OF EXCESS EXCAVATION SHALL BE SUBSIDIARY TO OTHER ITEMS OF WORK.
- THE CONTRACTOR SHALL NOTIFY THE INSPECTOR FOR THIS PROJECT 48 HOURS PRIOR TO BEGINNING CONSTRUCTION. THE CONTRACTOR SHALL NOT START WORK ON THE PROJECT UNTIL THE PROJECT INSPECTOR ASSIGNED TO THE PROJECT IS PRESENT ON SITE. ANY WORK DONE WITHOUT INSPECTION WILL BE REQUIRED TO BE UNCOVERED FOR INSPECTION.
- THE CONTRACTOR SHALL GIVE ALL PROPERTY OWNERS AND/OR TENANTS OF DEVELOPED PROPERTY DIRECTLY ABUTTING THE CONSTRUCTION OF THIS PROJECT A MINIMUM OF TEN (10) DAYS ADVANCE NOTICE PRIOR TO START OF CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY IRONS. THE CONTRACTOR WILL BE REQUIRED TO REESTABLISH ANY PROPERTY IRONS WHICH ARE DAMAGED OR DESTROYED BY HIS CONSTRUCTION OPERATIONS SUCH IRONS SHALL BE REESTABLISHED BY A LICENSED LAND SURVEYOR IN ACCORDANCE WITH STATE LAWS.
- THE CONTRACTOR SHALL RESTORE ALL DITCHES, SWALES, ROAD SHOULDERS, ENTRANCES AND BANK LINES TO THEIR ORIGINAL SLOPES AND GRADES EXCEPT AS SHOWN OTHERWISE.
- INTERURBAN TRAFFIC GENERATED OUTSIDE THE PROJECT AREA SHALL BE CARRIED THROUGH CONSTRUCTION. LOCAL RESIDENTIAL TRAFFIC GENERATED WITHIN THE PROJECT AREA SHALL BE CARRIED THROUGH CONSTRUCTION AS FURTHER PROMULGATED BY PROJECT SPECIAL PROVISIONS.
- UNDERGROUND UTILITY SERVICE LINES AND OVERHEAD UTILITY POLE LINES 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. LOCATION INFORMATION HAS BEEN OBTAINED FROM THE VARIOUS UTILITY COMPANIES AND IS EITHER FROM COMPANY RECORD DRAWINGS OR COMPANY PROVIDED FIELD LOCATIONS. 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, 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 FLOODPLAIN WOULD 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 WOULD REQUIRE ADDITIONAL ARCHAEOLOGICAL INVESTIGATIONS UNLESS BURIED IN A PREVIOUSLY APPROVED BORROW LOCATION.
- PROPERTIES WITHIN THE PROJECT LIMITS MAY HAVE UNDERGROUND SPRINKLER SYSTEMS IN THE PUBLIC RIGHT-OF-WAY WHICH CONFLICT WITH NEW CONSTRUCTION. CONTRACTOR WILL BE REQUIRED TO REMOVE SUCH IMPROVEMENTS SHOULD THEY NOT BE REMOVED BY THEIR OWNER AT THE TIME OF CONSTRUCTION OF THE PROJECT. THE CONTRACTOR WILL BE REQUIRED TO SALVAGE ALL SPRINKLER HEADS AND/OR VALVES AND GIVE SUCH MATERIAL TO THEIR OWNER. PORTIONS OF UNDERGROUND SPRINKLER SYSTEMS NOT IN CONFLICT WITH NEW CONSTRUCTION SHALL BE PROTECTED FROM DAMAGE AND SHALL REMAIN IN PLACE. ALL WORK IN CONNECTION WITH UNDERGROUND SPRINKLER SYSTEMS SHALL BE CONSIDERED AS SUBSIDIARY TO THE CONTRACT PAY ITEMS OF WORK.
- ALL PROPOSED STUBS AND PLUGGED PIPES SHALL BE LOCATED WITH GREEN PLASTIC TAPE.
- PRIOR TO LAYING THE NEW SEWER LINES THE CONTRACTOR SHALL EXPOSE AND VERIFY THE ELEVATION, GRADE AND ALIGNMENT OF THE EXISTING SANITARY SEWER AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES FROM THE PLAN.
- THE CONTRACTOR MUST EXAMINE THE CONSTRUCTION SITE PRIOR TO BIDDING AND BE SATISFIED AS TO THE WORK SHOWN FOR COMPLETION. AFTER BIDS HAVE BEEN RECEIVED, THE CONTRACTOR SHALL NOT ASSERT THAT THERE WAS A MISUNDERSTANDING OF THE QUANTITIES OF WORK OR OF THE NATURE FOR THE WORK TO BE COMPLETED.
- EXISTING UTILITIES AND THEIR LOCATION, AS SHOWN ON THE PLANS, REPRESENT THE BEST INFORMATION AVAILABLE FOR DESIGN. LOCATION INFORMATION HAS BEEN OBTAINED FROM THE VARIOUS UTILITY COMPANIES AND IS EITHER FROM COMPANY RECORD DRAWINGS OR COMPANY PROVIDED FIELD LOCATIONS. THE PLAN LOCATIONS ARE NOT GUARANTEED. ADDITIONAL EXISTING UTILITIES MAY ALSO BE ENCOUNTERED. THE CONTRACTOR WILL BE REQUIRED TO WORK AROUND EXISTING UTILITIES WHICH ARE ENCOUNTERED ON THIS PROJECT. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION DURING TRENCHING OPERATIONS TO AVOID DAMAGING THESE LINES. ANY LINES DAMAGED SHALL BE REPLACED OR REPAIRED IMMEDIATELY AS DIRECTED BY THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
- ALL PIPE JOINTS SHALL BE LAID AND PUSHED "FULL HOME", WITH THE BEVELED END OF THE SPIGOT MAKING FULL CONTACT WITH THE CHAMFERED AREA AT THE THROAT OF THE BELL OR SOCKET, WITH NO SEPARATION BETWEEN THEM. IF SEPARATION IS DETERMINED, THE PIPE SHALL BE EXCAVATED AND RE-LAID

DRAINAGE PRIVATE PROJECT PLANS FOR BLK 1, ORME & PHILLIPS ADD. WICHITA, SEDGWICK COUNTY, KANSAS 0112 PPD (O.C.A. NO. 607861) GARY JANZEN, P.E., CITY ENGINEER FEBRUARY 2013

AS BUILT PLANS
CONTRACTOR: CK CONTRACTING
INSPECTOR: RANDY VOTH, C.E.D.
PDF BY: A.G., 9-16-2013

SHEET INDEX

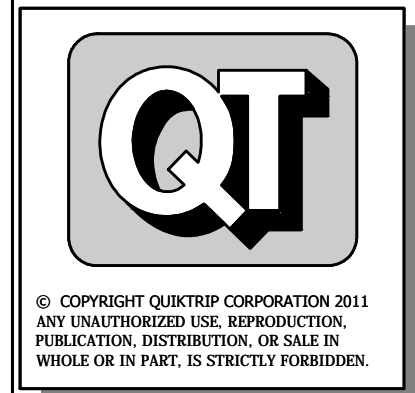
NO.	TITLE
1	COVER
2	EXISTING PLAT
3	PROPOSED PLAT
4	SITE PLAN
5	PRE DEV MAP
6	POST DEV MAP
7	GRADING
8	EROSION CONTROL PLAN PH. 1
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PROJECT NO.: 20122030

CEED
CERTIFIED ENGINEERING DESIGN, P.A.
1935 W. MAPLE STREET
WICHITA, KANSAS 67213
PH: (316)262-8808
FAX: (316)262-1669

QuikTrip No. 0326R
BLOCK 1, ORME & PHILLIPS ADDITION
750 S. BROADWAY
WICHITA, KANSAS



PROTOTYPE: P-73 (11/01/12)
DIVISION: WICHITA
VERSION: 001
DESIGNED BY: CKW
DRAWN BY: CKW
REVIEWED BY: MB

REV	DATE	DESCRIPTION
1	10/15/13	PRELIMINARY COMMENTS
2	10/15/13	FINAL REVIEW MEETING COMMENTS

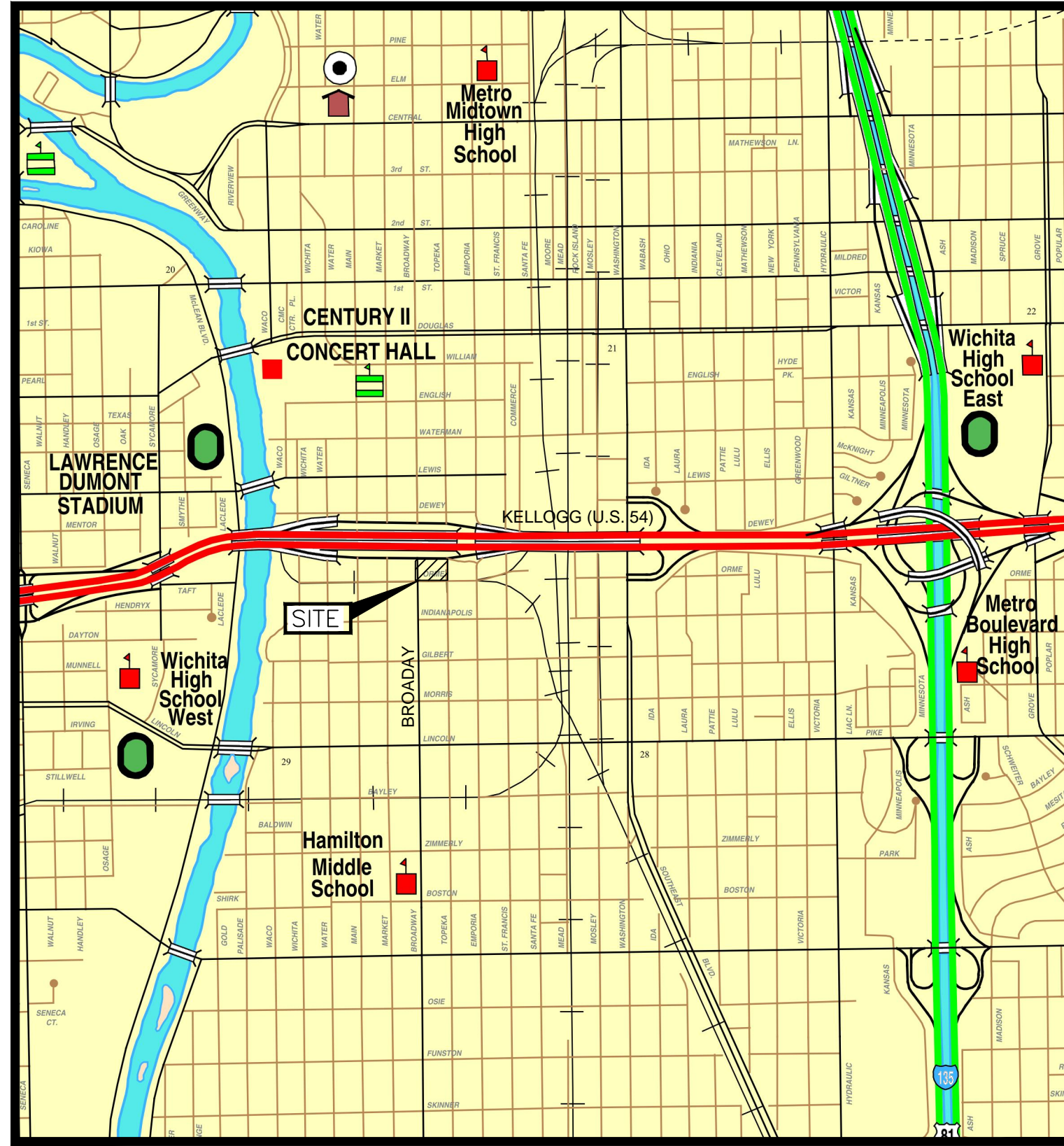
ORIGINAL ISSUE DATE: 11/15/2012

SHEET TITLE:
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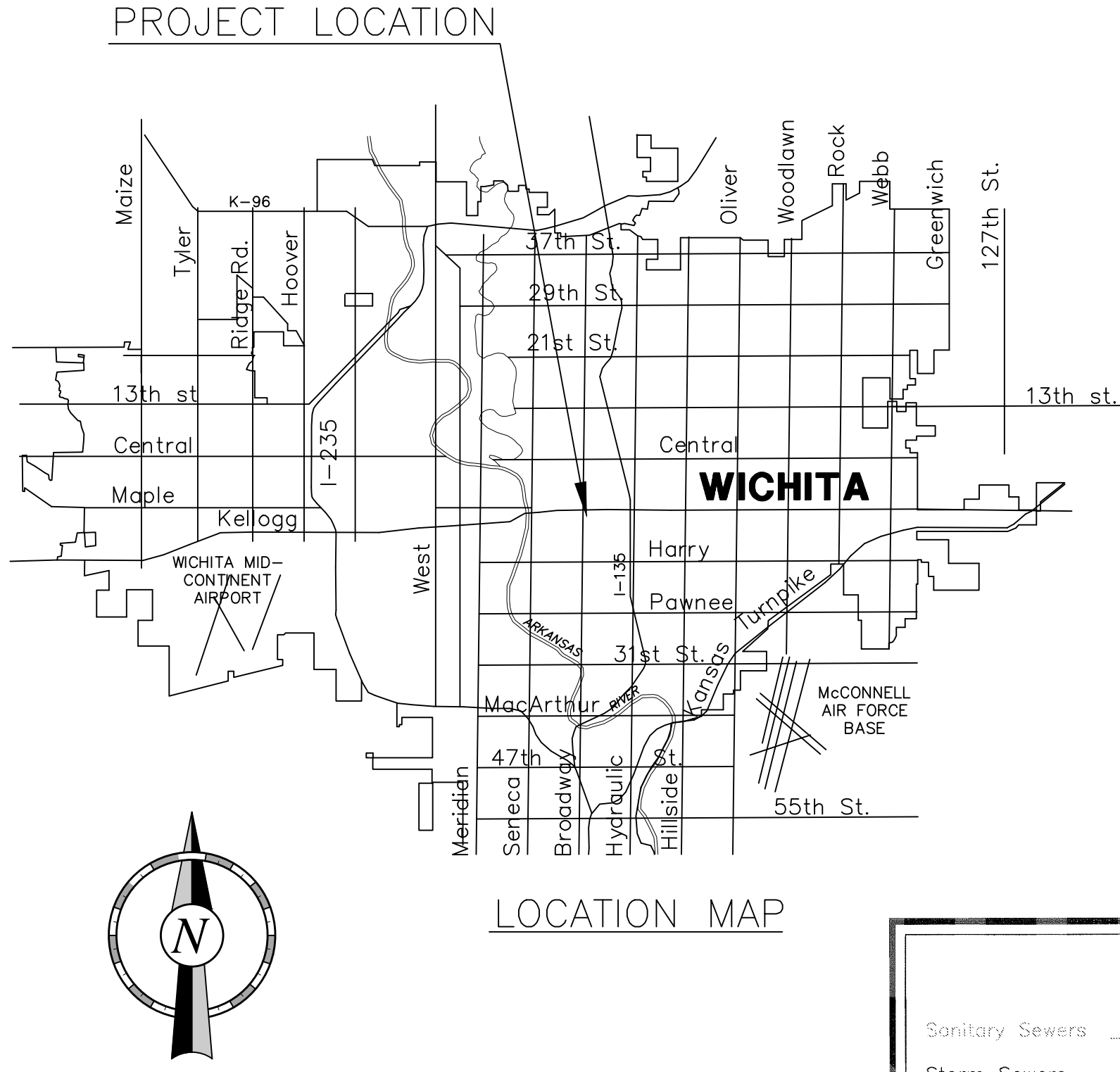
SHEET NUMBER:
1



KS: 1-800-344-7233
WICHITA: 316-687-2470



Vicinity Map
Not to Scale



LOCATION MAP

PROJECT LOCATED IN THE NW 1/4,
NW 1/4, SEC 28, T27S, R1W,
WICHITA, SEDGWICK COUNTY, KANSAS

PROJECT DISTURBED AREA
• 2.43 ACRES

STORMWATER QUALITY ACHIEVED BY
• FLOGARD DUAL-VORTEX HYDRODYNAMIC SEPERATOR DVS-60S, MANUFACTURED BY KRISTAR ENTERPRISES, INC.

BENCHMARKS:

- BM CHISELED SQUARE CUT ON SOUTHWEST CORNER OF CONCRETE TRAFFIC SIGNAL POLE BASE ON SOUTHEAST CORNER OF KELLOGG AND BROADWAY (NORTHWEST CORNER OF SITE). ELEV.=1295.41 NAVD 88.

ACCORDING TO SPECIFICATIONS AT THE CONTRACTOR'S EXPENSE.

- AT LEAST 24 HOURS BEFORE CONNECTING NEW SEWER PIPE TO THE EXISTING SEWAGE SYSTEM, THE CONTRACTOR SHALL CONTACT THE CITY OF WICHITA SEWER DEPARTMENT (268-4024). THE CONTRACTOR SHALL KEEP ANY CONSTRUCTION DEBRIS FROM ENTERING THE EXISTING SANITARY SEWER DURING CONSTRUCTION. TO PREVENT WATER OR DEBRIS FROM ENTERING THE EXISTING SEWER, A MECHANICAL PLUG SHALL BE INSTALLED AND MAINTAINED TO ISOLATE THE EXISTING SEWER FROM THE NEW CONSTRUCTION UNTIL THE NEW CONSTRUCTION IS CLEANED, TELEVIEWED AND HAS BEEN ACCEPTED. THE WATER USED FOR CLEANING SHALL NOT BE ADDED TO THE FLOW OF THE EXISTING SEWER. THE CLEANING OR OTHERWISE ACCUMULATED WATER SHALL BE PUMPED OR OTHERWISE REMOVED PRIOR TO TELEVIEWING.
- THE CONTRACTOR SHALL CONTAIN HIS OPERATIONS TO PERMIT TRAFFIC THROUGH AND ACROSS CONSTRUCTION AT EXISTING ROADWAYS AT ALL TIMES. THE CONTRACTOR SHALL ERECT WARNING SIGNS, FLASHING LIGHTS, AND BARRICADES IN COMPLIANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES TO ENSURE SAFETY AS DIRECTED IN THE GENERAL CONDITIONS. THE CONTRACTOR SHALL LIMIT THE EXTENT OF TRENCH TO REMAIN OPEN OVERNIGHT AND WEEKENDS TO LESS THAN 50 FEET.
- ALL SODDING, SEEDING, AND EROSION CONTROL OF THE AREAS DISTURBED BY CONSTRUCTION OF THE SANITARY SEWER AS SHOWN ON THE PLANS (SEE SHEET NO.3), SHALL BE SUBSIDIARY TO "SITE CLEARING & RESTORATION".
- THE CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE AWAY FROM ALL MANHOLE COVERS.

APPROVED AS NOTED
By CITY ENGINEER OF WICHITA

Sanitary Sewers _____
Storm Sewers _____
by City Engineer *[Signature]* 12-7-12
by Storm Water Engineer *[Signature]* 12-10-12

Driveway Approaches _____
Water Mains _____
Paving _____

NOTE TO CONTRACTOR

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. NO WORK SHALL BE PERFORMED IN DEDICATED EASEMENTS OR THE PUBLIC RIGHT-OF-WAY BY THE CONTRACTOR WITHOUT SUCH INSPECTION NOR SHALL ANY WORK BE COMMENCED IN DEDICATED EASEMENTS OR PUBLIC RIGHT-OF-WAY WITHOUT WRITTEN AUTHORIZATION BY THE CITY ENGINEER.

FILE LOCATION: \\Drawing Files\Project CKW 12-7-09\QT #0326R\DWG\0326R Civil-P73 (11-15-12)-PPD.dwg TAB NAME: Cover USER: cecervantes SAVED: 09/16/2013 5:13 PM PLOTTED: 09/23/2013 8:27 AM

CERTIFICATE OF SURVEY

I, Gregory J. Allison, a registered land surveyor in Kansas, do hereby certify that I have been in responsible charge of surveying and platting of "QUIKTRIP 12TH ADDITION" an addition to Wichita, Sedgwick County, Kansas, into Lots, and a Block, the same being accurately set forth in the accompanying plat and described herein:

Lots 25 thru 36, inclusive, Block 1, Orme & Phillips Addition, to the City of Wichita, TOGETHER WITH, the North 8 feet of the vacated street adjacent on the South, in Sedgwick County, Kansas, TOGETHER WITH,

Lots 8, 10, 12, 14, 16, 18, 20, 22, and 24, on Lawrence Avenue, now Broadway Avenue, and Lots 7, 9, 11, 13, 15, 17, 19, 21, and 23, on Topeka Avenue, in Block 1, Orme and Phillips Addition to the City of Wichita, in Sedgwick County, Kansas,

EXCEPT that part of said Lots 8, 10, 12, 14, and 16, on Lawrence Avenue, now Broadway Avenue, described as follows:

BEGINNING at the Northeast corner of said Lot 8; thence S00°46'04"E, 13.07 feet on an assumed bearing along the East line of said Lot 8; thence N89°09'34"W, 120.12 feet; thence S07°04'31"W, 117.22 feet to a point on the South line of said Lot 16, on Lawrence Avenue, now Broadway Avenue, said point being 4.00 feet East of the Southwest corner of said Lot 16; thence S88°53'57"W, 4.00 feet along the South line of said Lot 16; thence N00°46'12"E, 125.03 feet along the West line of said Lots, to the Northwest corner of said Lot 8; thence N88°53'57"E, 140.07 feet along the North line of said Lot 8 to the POINT OF BEGINNING, AND EXCEPT that part of Lot 7, on Topeka Avenue, described as follows:

BEGINNING at the Northeast corner of said Lot 7; thence S00°45'56"E, 18.50 feet on an assumed bearing along the East line of said Lot 7; thence N89°09'34"W, 140.13 feet to a point on the West line and 13.75 feet South of the Northwest corner of said Lot 7; thence N00°46'04"W, 13.75 feet to the Northwest corner of said Lot 7; thence N88°53'57"E, 140.07 feet along the North line of said Lot 7 to the POINT OF BEGINNING;

TOGETHER WITH, the south 17.00 feet of the North 25.00 feet of Orme Street right-of-way lying West of Topeka Avenue and East of Broadway Avenue.

All streets, alleys, easements, rights-of-way, building setbacks, access controls, together with all other public dedications within the above described property, are hereby vacated and replatted by virtue of K.S.A. 12-512b.

I hereby certify that the details of this plat are correct to the best of my knowledge and belief this ___ day of ___, 2012.

Gregory J. Allison, PE, LS #1257
MKEC Engineering Consultants, Inc.
411 North Webb Road
Wichita, Kansas 67206



OWNER'S CERTIFICATE

Know all men by these presents that we the undersigned property owners of the land above set forth in the Registered Land Surveyor's Certificate, have caused the same to be surveyed and platted into Lots, and a Block, the same to be known as "QUIKTRIP 12TH ADDITION" an addition to Wichita, Sedgwick County, Kansas.

All abutters rights of access to or from Broadway Avenue over and across the west line of "QUIKTRIP 12TH ADDITION," are hereby granted to the appropriate governing body, as indicated hereon. All abutters rights of access to or from Kellogg Drive over and across the north line of "QUIKTRIP 12TH ADDITION," are hereby granted to the appropriate governing body, as indicated hereon. All abutters rights of access to or from Topeka Avenue over and across the east line of "QUIKTRIP 12TH ADDITION," are hereby granted to the appropriate governing body, as indicated hereon. All abutters rights of access to or from Orme Street over and across the south line of "QUIKTRIP 12TH ADDITION," are hereby granted to the appropriate governing body, as indicated hereon.

Easements for the construction and maintenance of public utilities and drainage, as indicated hereon, are hereby granted to the public.

A drainage plan has been developed for this plat. All drainage easements, rights-of-way, or reserves shall remain at established grades or as modified with the approval of the applicable City or County Engineer, and unobstructed to allow for the conveyance of stormwater.

QuikTrip West, Incorporated

Chad M. Stanford, Vice President

STATE OF OKLAHOMA, TULSA COUNTY) ss:

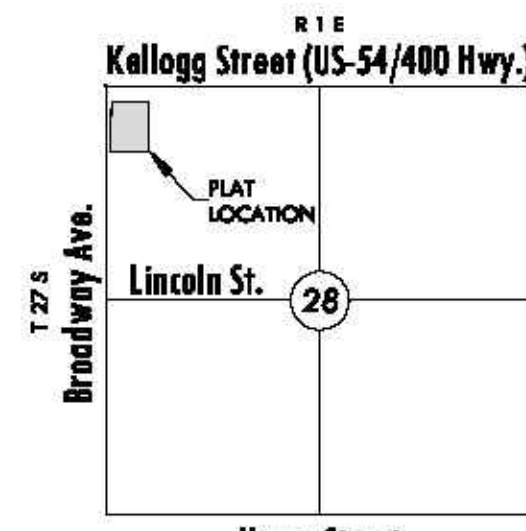
This instrument was acknowledged before me on ___ day of ___, 2012, by Chad M. Stanford, Vice President, QuikTrip West, Incorporated.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, the day and year last above written.

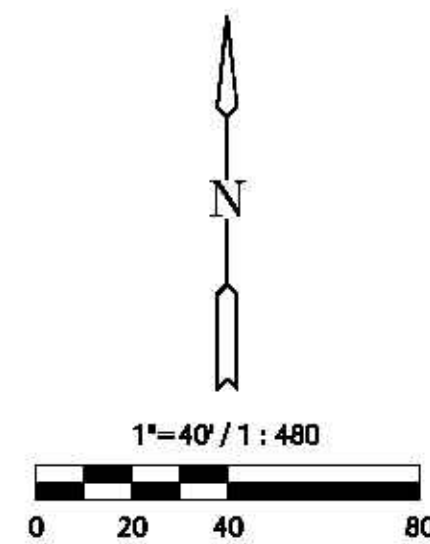
SEAL

_____, Notary Public

My Term Expires: _____



VICINITY MAP



Basis of Bearing: Kansas coordinate system of 1983 south zone grid bearing of S00°46'22"E along the W. line of NW ¼, Sec. 28, T27S, R1E, 6th P.M.

This plat is surveyed and platted on NAVD88-09 using Kansas state plane south zone coordinates, modified to the surface, having a combined adjustment scale factor of 1.000120014401728

BENCHMARK

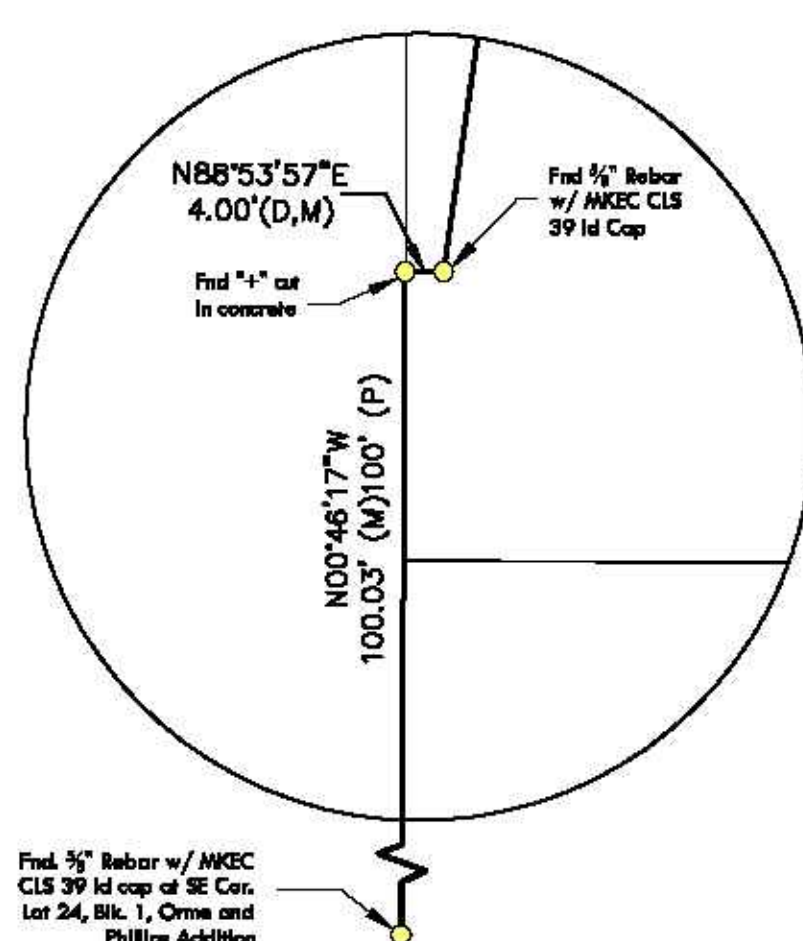
BM - Chiseled square cut on Southwest corner of concrete traffic signal pole base on Southeast corner of Kellogg and Broadway (Northwest corner of site). Elev. = 1295.41 NAVD 88.

LEGEND

Date of Survey: March, 2012

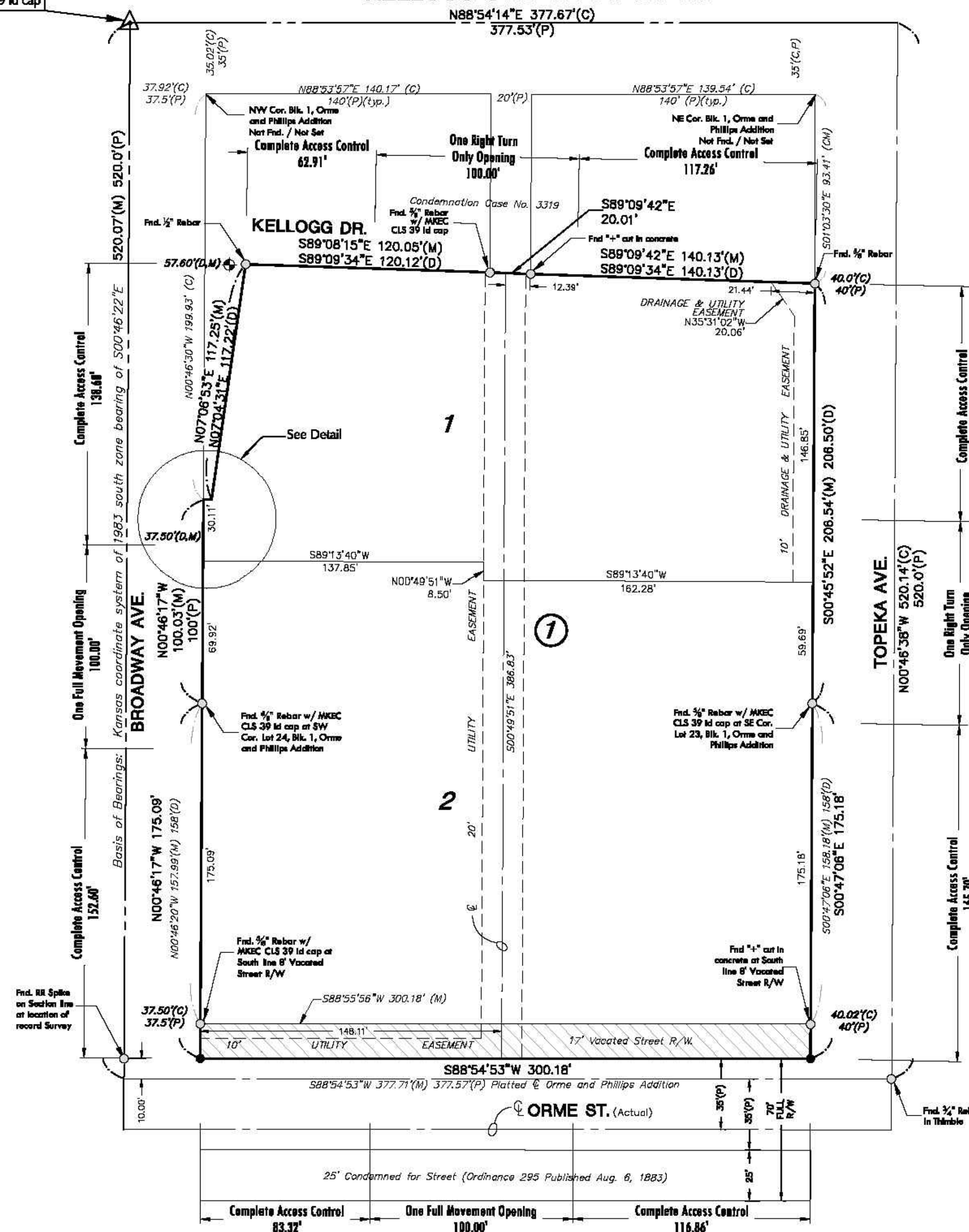
- △ = Section Corner Monument Found
- = Found survey monument see annotation for type
- = Set 3/8" rebar w/ MKEC CLS 39 id cap
- (M) = Measured
- (C) = Calculated from measured
- (D) = Described
- (P) = Platted
- ▭ = 17' Vacated Street R/W

DETAIL



FINAL PLAT
QUIKTRIP 12TH ADDITION
AN ADDITION TO WICHITA, SEDGWICK COUNTY, KANSAS

KELLOGG ST. / US-54/400 HWY.



NW cor., NW ¼, Sec. 28, T27S, R1E, 6th P.M.
Fnd. 3/8" Rebar w/ MKEC CLS 39 id cap

PLANNING COMMISSION CERTIFICATE

This plat of "QUIKTRIP 12TH ADDITION" has been submitted to and approved by the Wichita-Sedgwick County Metropolitan Area Planning Commission, Wichita, Kansas.

Dated this ___ day of ___, 2012

WICHITA-SEDGWICK COUNTY METROPOLITAN AREA PLANNING COMMISSION

_____, Chair
David Dennis, Chair

Attest: _____, Secretary
John L. Schlegel, Secretary

GOVERNING BODY CERTIFICATE

The dedications shown on this plat are hereby accepted and this plat is hereby approved by the governing body of the City of Wichita, Kansas.

Dated this ___ day of ___, 2013

At the direction of the City Council.

_____, Mayor
Carl Brewer, Mayor

Attest: _____, City Clerk
Karen Sublett, City Clerk

TRANSFER RECORD

STATE OF KANSAS, SEDGWICK COUNTY) ss:

Entered on transfer record this ___ day of ___, 2013

_____, County Clerk
Kelly B. Arnold, County Clerk

REGISTER OF DEEDS' CERTIFICATE

STATE OF KANSAS, SEDGWICK COUNTY) ss:

This is to certify that this instrument was filed for record in the Register of Deeds office this ___ day of ___, 201___, at ___ o'clock ___ M; and is duly recorded.

_____, Register of Deeds
Bill Meek, Register of Deeds

Attest: _____, Deputy
Tonya E. Buckingham, Deputy

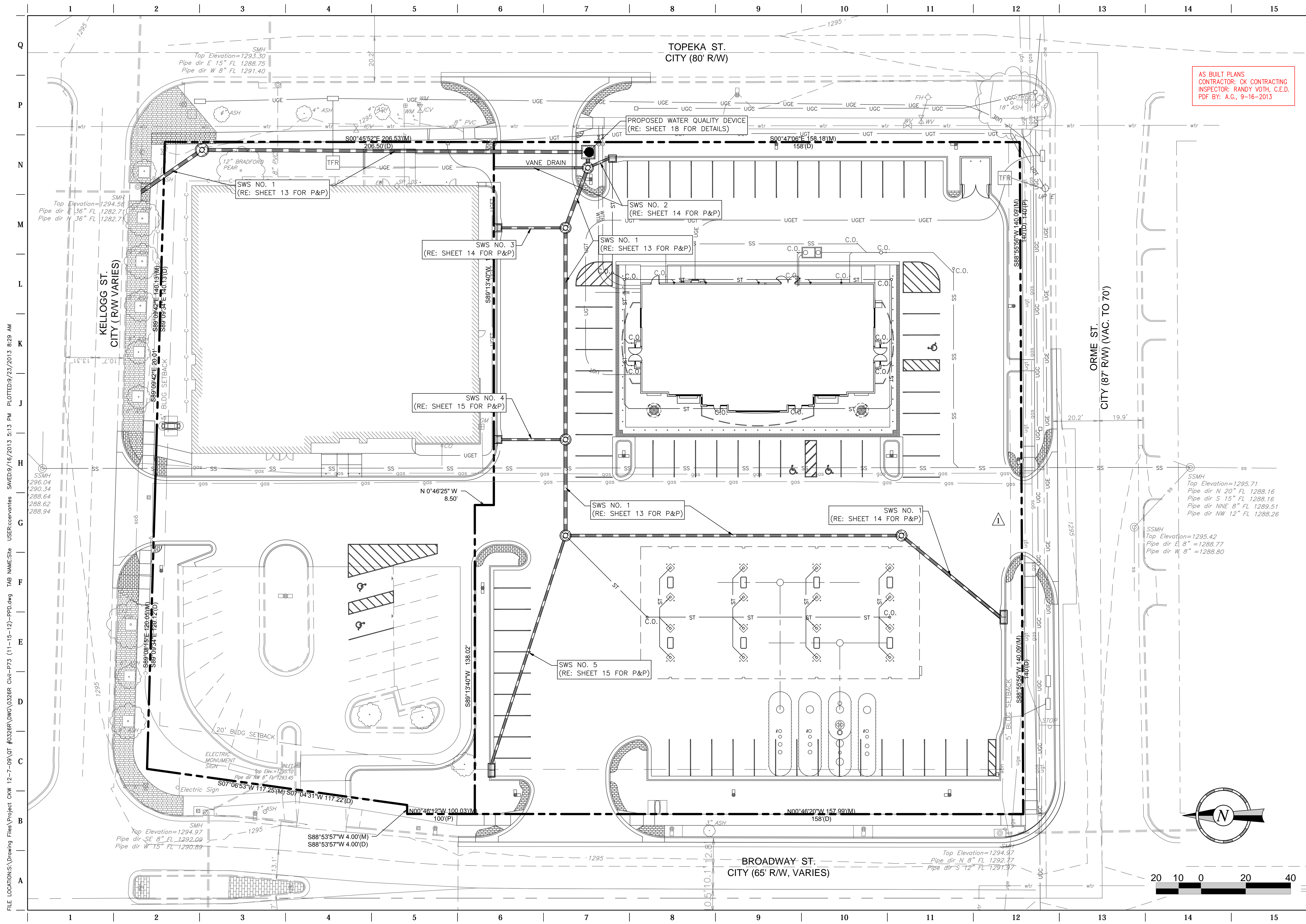
COUNTY SURVEYOR

STATE OF KANSAS, SEDGWICK COUNTY) ss:

Reviewed in accordance with K.S.A. 58-2005 on this ___ day of ___, 201___.

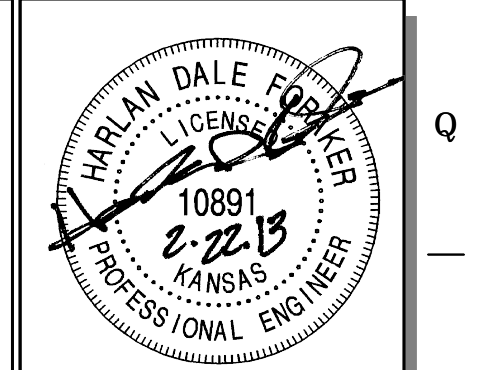
_____, Deputy County Surveyor
Tricia L. Robello, LS #1246
Deputy County Surveyor
Sedgwick County, Kansas





FILE LOCATION: S:\Drawing Files\Project CKW 12-7-09\QT #0326R\DWG\0326R-Civil-P73 (11-15-12)-PPD.dwg USER: cecconomas TAB MAKE: Site DATE: 11/15/12 PLOTTED: 9/23/2013 5:29 AM

AS BUILT PLANS
CONTRACTOR: CK CONTRACTING
INSPECTOR: RANDY VOTH, C.E.D.
PDF BY: A.G., 9-16-2013



PROJECT NO.: 20122030

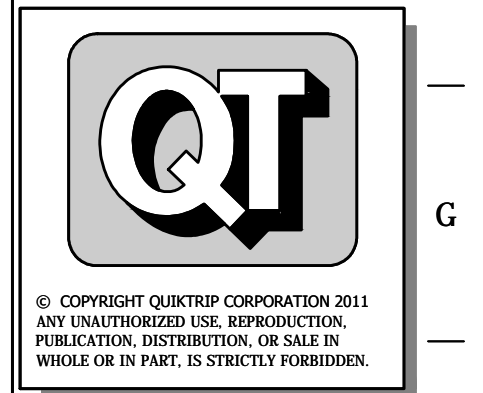
CEED

CERTIFIED ENGINEERING DESIGN, P.A.

1935 W. MAPLE STREET
WICHITA, KANSAS 67213
PH: (316)262-8808
FAX: (316)262-1669

QuikTrip No. 0326R

BLOCK 1, ORME & PHILLIPS ADDITION
750 S. BROADWAY
WICHITA, KANSAS



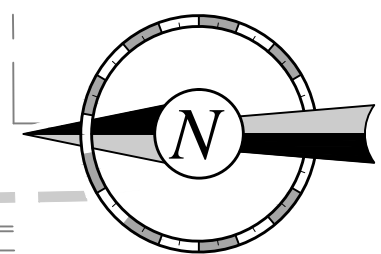
PROTOTYPE: P-73 (11/01/12)
DIVISION: WICHITA
VERSION: 001
DESIGNED BY: CKW
DRAWN BY: CKW
REVIEWED BY: MB

REV	DATE	DESCRIPTION
1	10/15/13	PTC REVIEW COMMENTS

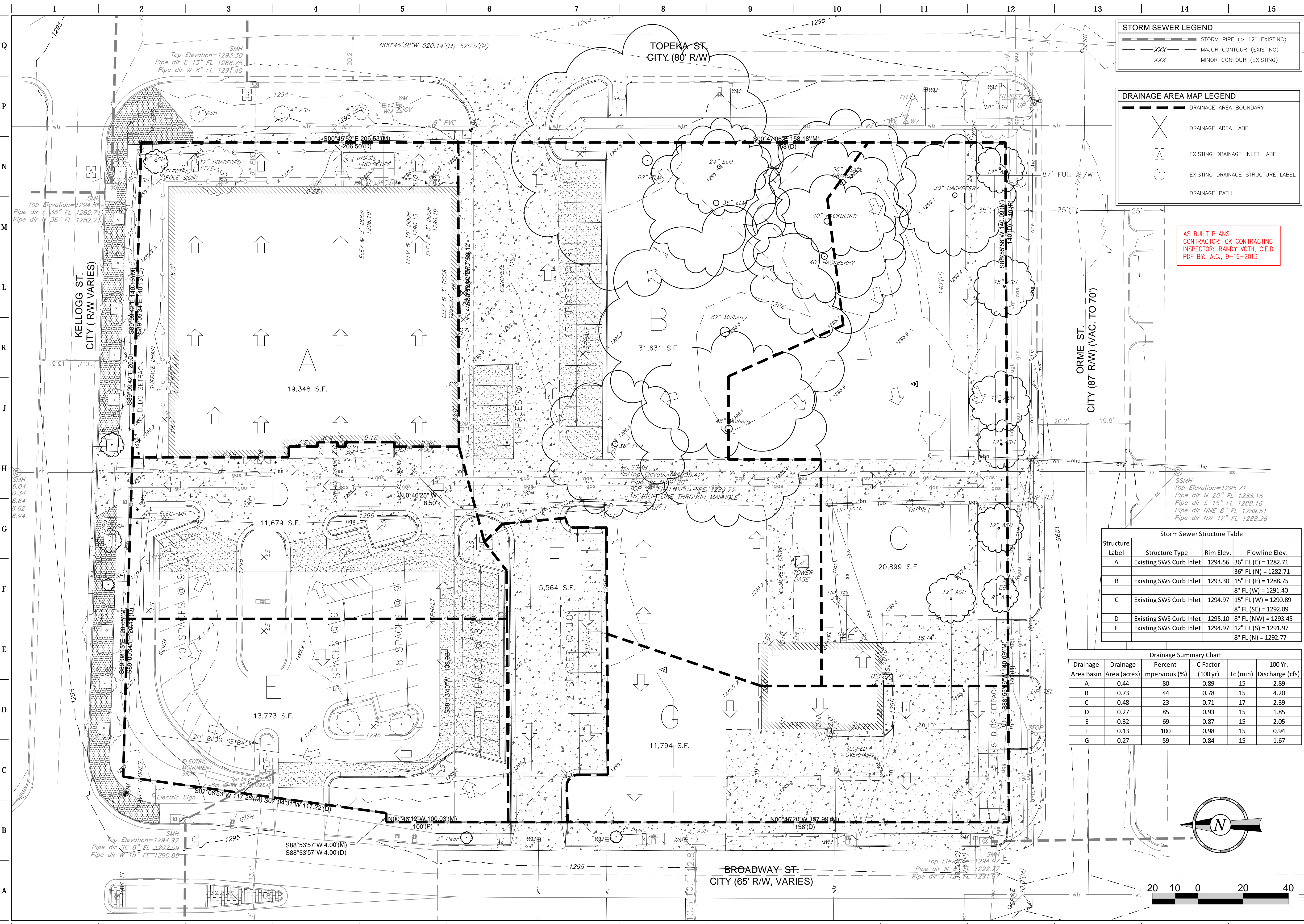
ORIGINAL ISSUE DATE: 11/15/2012

SHEET TITLE:
SITE PLAN

SHEET NUMBER:
4



FILE LOCATION: S:\Drawing Files\Project CKW 12-7-09\QT #0326R\DWG\0326R Civil-F73 (11-15-12).dwg TAB NAME: PRE DEV MAP USER: cecorvantes SAVED: 9/16/2013 5:13 PM PLOTTED: 9/23/2013 8:30 AM



STORM SEWER LEGEND

- STORM PIPE (> 12" EXISTING)
- - - - MAJOR CONTOUR (EXISTING)
- - - - MINOR CONTOUR (EXISTING)

DRAINAGE AREA MAP LEGEND

- - - - DRAINAGE AREA BOUNDARY
- X DRAINAGE AREA LABEL
- ⊕ EXISTING DRAINAGE INLET LABEL
- ⊕ EXISTING DRAINAGE STRUCTURE LABEL
- - - - DRAINAGE PATH

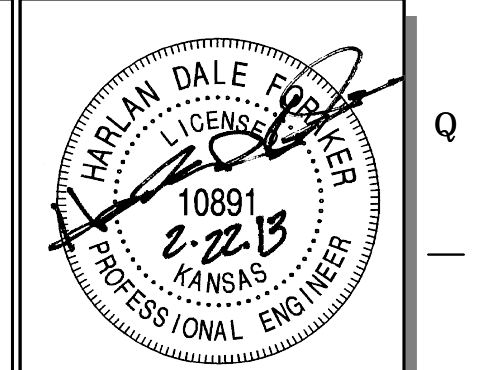
AS BUILT PLANS
 CONTRACTOR: CK CONTRACTING
 INSPECTOR: RANDY VOITH, C.E.D.
 PDF BY: A.G., 9-16-2013

Storm Sewer Structure Table

Structure Label	Structure Type	Rim Elev.	Flowline Elev.
A	Existing SWS Curb Inlet	1294.56	36" FL (E) = 1282.71 36" FL (N) = 1282.71
B	Existing SWS Curb Inlet	1293.30	15" FL (E) = 1288.75 8" FL (W) = 1291.40
C	Existing SWS Curb Inlet	1294.97	15" FL (W) = 1290.89 8" FL (SE) = 1292.09
D	Existing SWS Curb Inlet	1295.10	8" FL (NW) = 1293.45 12" FL (S) = 1291.97
E	Existing SWS Curb Inlet	1294.97	12" FL (S) = 1291.97 8" FL (N) = 1292.77

Drainage Summary Chart

Drainage Area Basin	Drainage Area (acres)	Percent Impervious (%)	C Factor (100 yr)	Tc (min)	100 Yr. Discharge (cfs)
A	0.44	80	0.89	15	2.89
B	0.73	44	0.78	15	4.20
C	0.48	23	0.71	17	2.39
D	0.27	85	0.93	15	1.85
E	0.32	69	0.87	15	2.05
F	0.13	100	0.98	15	0.94
G	0.27	59	0.84	15	1.67



PROJECT NO.: 20122030
CEED
 CERTIFIED ENGINEERING DESIGN, P.A.
 1935 W. MAPLE STREET
 WICHITA, KANSAS 67213
 PH: (316)262-8808
 FAX: (316)262-1669

QuikTrip No. 0326R
 BLOCK 1, ORME & PHILLIPS ADDITION
 750 S. BROADWAY
 WICHITA, KANSAS

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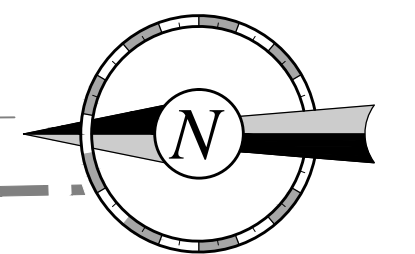
PROTOTYPE:	P-73 (11/01/12)
DIVISION:	WICHITA
VERSION:	001
DESIGNED BY:	CKW
DRAWN BY:	CKW
REVIEWED BY:	MB

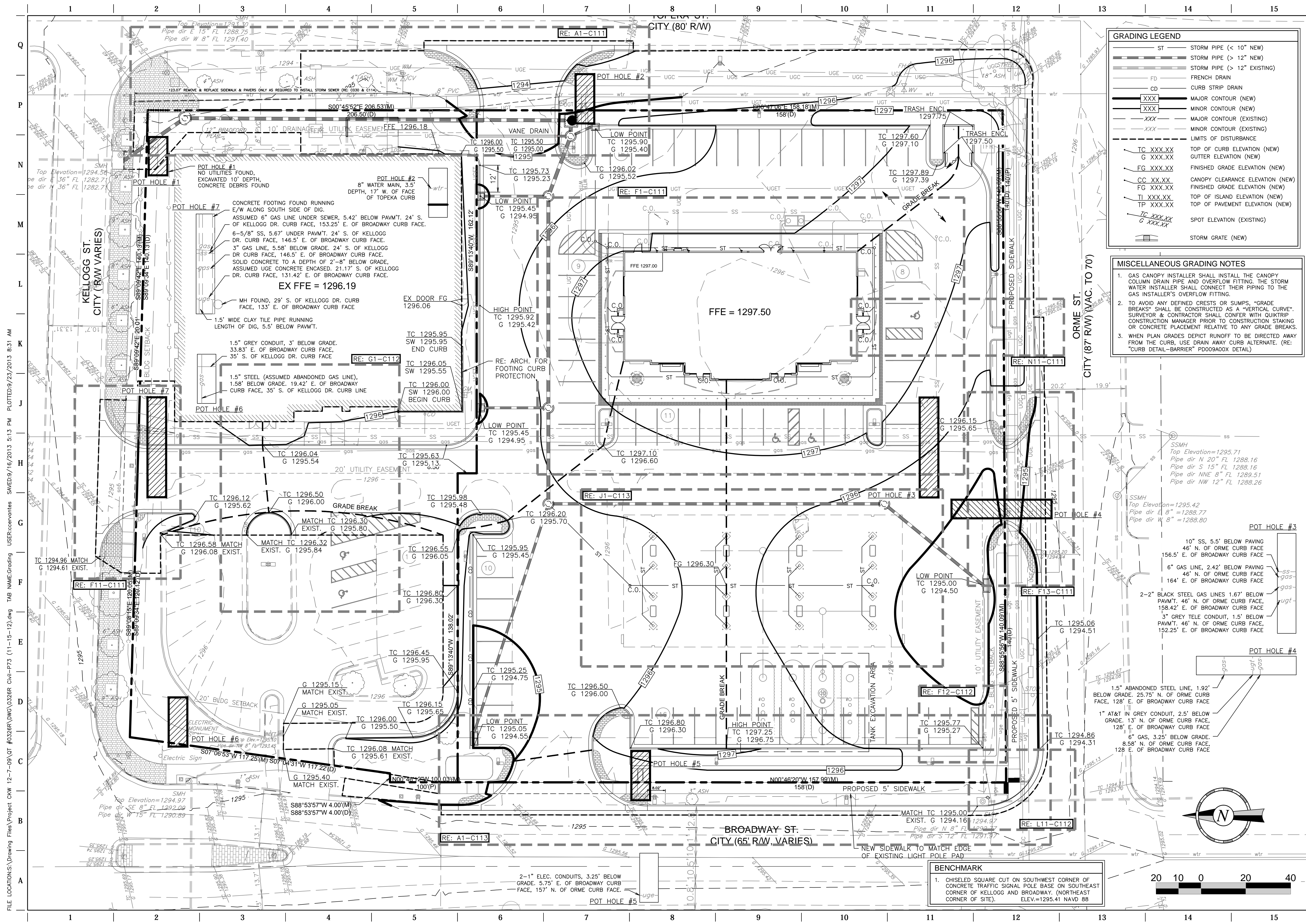
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SHEET TITLE:
 PRE DEV MAP

SHEET NUMBER:
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ORIGINAL ISSUE DATE: 11/15/2012

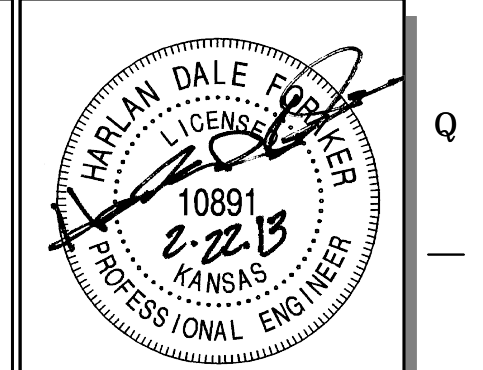




GRADING LEGEND

ST	STORM PIPE (< 10" NEW)
ST	STORM PIPE (> 12" NEW)
ST	STORM PIPE (> 12" EXISTING)
FD	FRENCH DRAIN
CD	CURB STRIP DRAIN
XXX	MAJOR CONTOUR (NEW)
XXX	MINOR CONTOUR (NEW)
XXX	MAJOR CONTOUR (EXISTING)
XXX	MINOR CONTOUR (EXISTING)
LIMITS OF DISTURBANCE	
TC XXX.XX	TOP OF CURB ELEVATION (NEW)
G XXX.XX	GUTTER ELEVATION (NEW)
FG XXX.XX	FINISHED GRADE ELEVATION (NEW)
CC XXX.XX	CANOPY CLEARANCE ELEVATION (NEW)
FG XXX.XX	FINISHED GRADE ELEVATION (NEW)
TI XXX.XX	TOP OF ISLAND ELEVATION (NEW)
TP XXX.XX	TOP OF PAVEMENT ELEVATION (NEW)
TC XXX.XX	SPOT ELEVATION (EXISTING)
G XXX.XX	SPOT ELEVATION (EXISTING)
SG	STORM GRATE (NEW)

- MISCELLANEOUS GRADING NOTES**
1. GAS CANOPY INSTALLER SHALL INSTALL THE CANOPY COLUMN DRAIN PIPE AND OVERFLOW FITTING. THE STORM WATER INSTALLER SHALL CONNECT THEIR PIPING TO THE GAS INSTALLER'S OVERFLOW FITTING.
 2. TO AVOID ANY DEFINED CRESTS OR SUMPS, "GRADE BREAKS" SHALL BE CONSTRUCTED AS A "VERTICAL CURVE". SURVEYOR & CONTRACTOR SHALL CONFER WITH QUIKTRIP CONSTRUCTION MANAGER PRIOR TO CONSTRUCTION STAKING OR CONCRETE PLACEMENT RELATIVE TO ANY GRADE BREAKS.
 3. WHEN PLAN GRADES DEPICT RUNOFF TO BE DIRECTED AWAY FROM THE CURB, USE DRAIN AWAY CURB ALTERNATE. (RE: "CURB DETAIL-BARRIER" P0009A00X DETAIL)



PROJECT NO.: 20122030
CED
 CERTIFIED ENGINEERING DESIGN, P.A.
 1935 W. MAPLE STREET
 WICHITA, KANSAS 67213
 PH: (316)262-8808
 FAX: (316)262-1669

QuikTrip No. 0326R
 BLOCK 1, ORME & PHILLIPS ADDITION
 750 S. BROADWAY
 WICHITA, KANSAS



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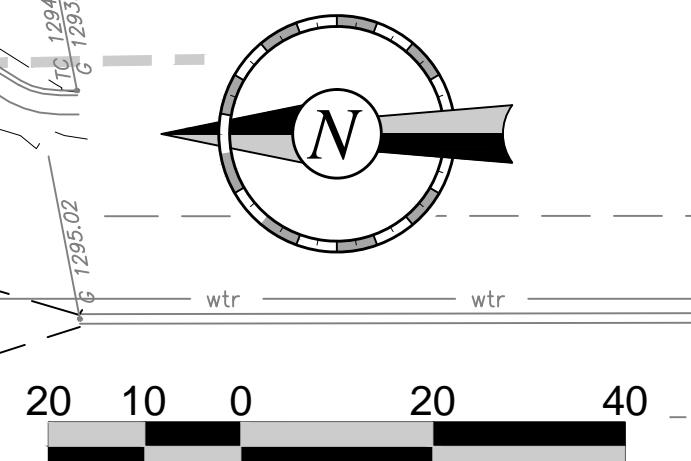
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 DIVISION: WICHITA
 VERSION: 001
 DESIGNED BY: CKW
 DRAWN BY: CKW
 REVIEWED BY: MB

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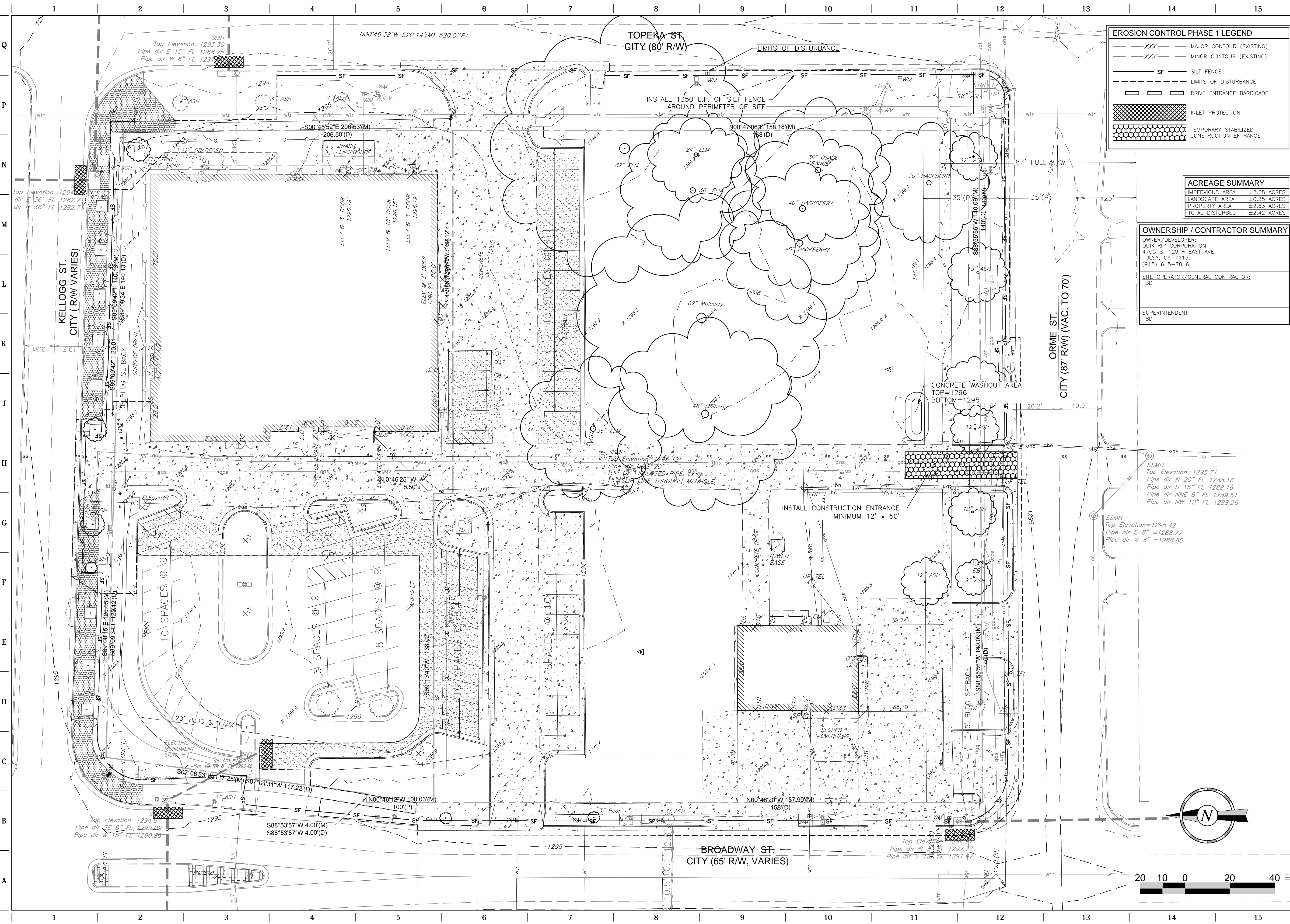
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GRADING PLAN

SHEET NUMBER:
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FILE LOCATION: \\Drawing Files\Project CKW 12-7-09\QT #0326R\DWG\0326R Civil-P73 (11-15-12).dwg TAB NAME: EROSION CONTROL PLAN PH. 1 USER: cecavantes SAVED: 9/23/2013 5:13 PM PLOTTED: 9/23/2013 8:31 AM



EROSION CONTROL PHASE 1 LEGEND

- XXX MAJOR CONTOUR (EXISTING)
- XXX MINOR CONTOUR (EXISTING)
- SF SILT FENCE
- LIMITS OF DISTURBANCE
- [Symbol] DRIVE ENTRANCE BARRICADE
- [Symbol] INLET PROTECTION
- [Symbol] TEMPORARY STABILIZED CONSTRUCTION ENTRANCE

ACREAGE SUMMARY

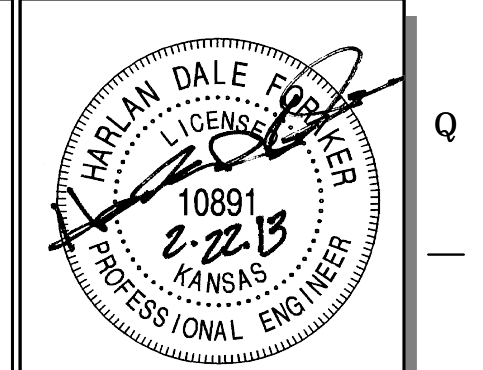
IMPERVIOUS AREA	±2.28 ACRES
LANDSCAPE AREA	±0.35 ACRES
PROPERTY AREA	±2.63 ACRES
TOTAL DISTURBED	±2.42 ACRES

OWNERSHIP / CONTRACTOR SUMMARY

OWNER/DEVELOPER:
 QUIKTRIP CORPORATION
 4705 S. 129TH EAST AVE.
 TULSA, OK 74135
 (918) 615-7816

SITE OPERATOR/GENERAL CONTRACTOR:
 TBD

SUPERINTENDENT:
 TBD



PROJECT NO.: 20122030

CEED
 CERTIFIED ENGINEERING DESIGN, P.A.

1935 W. MAPLE STREET
 WICHITA, KANSAS 67213
 PH: (316) 262-8808
 FAX: (316) 262-1669

QuikTrip No. 0326R
 BLOCK 1, ORME & PHILLIPS ADDITION
 750 S. BROADWAY
 WICHITA, KANSAS

QT

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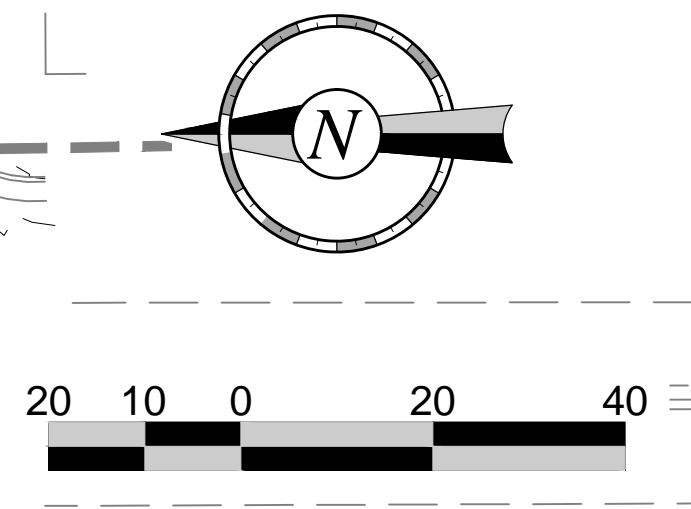
PROTOTYPE: P-73 (11/01/12)
 DIVISION: WICHITA
 VERSION: 001
 DESIGNED BY: CKW
 DRAWN BY: CKW
 REVIEWED BY: MB

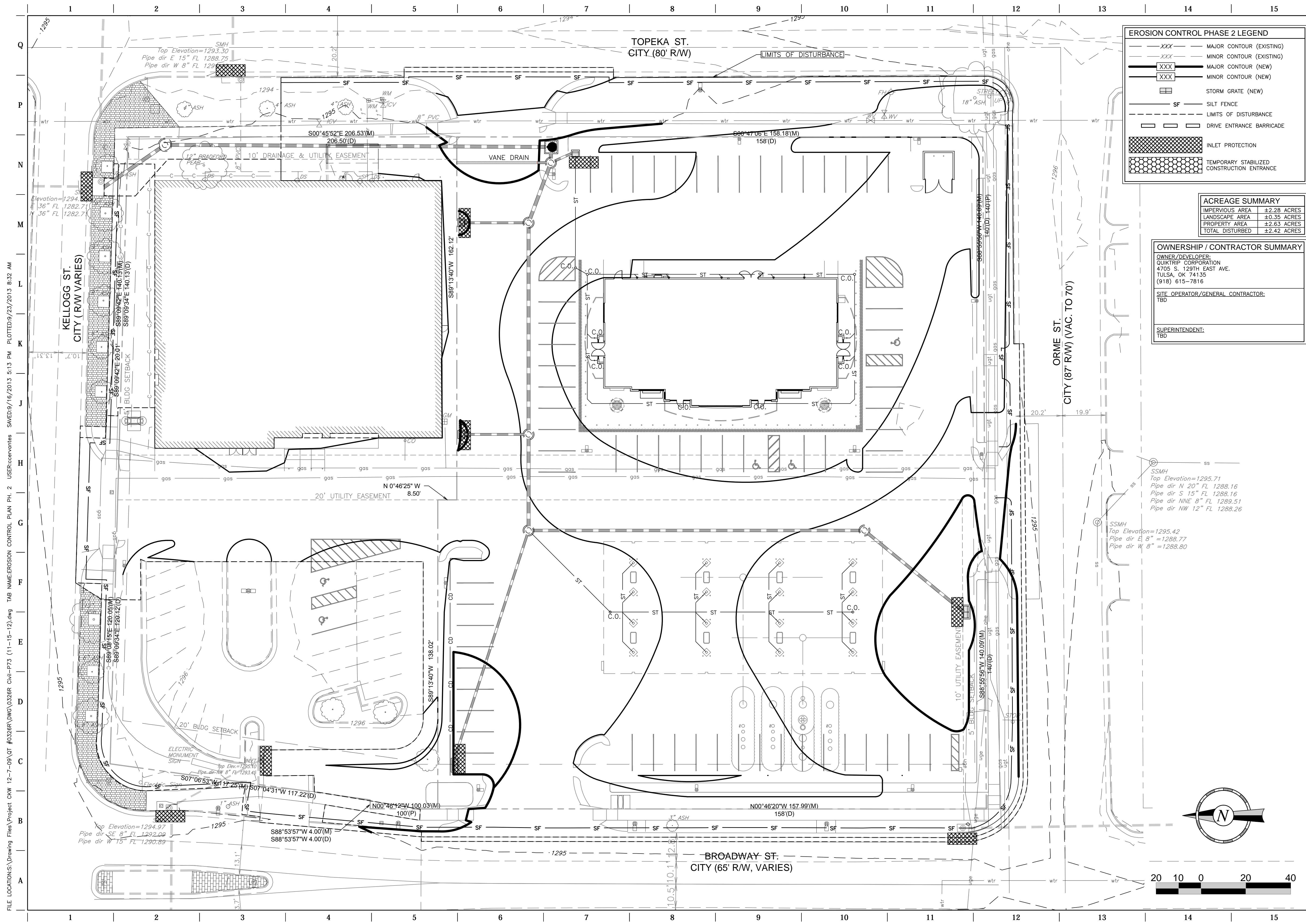
REV	DATE	DESCRIPTION

ORIGINAL ISSUE DATE: 11/15/2012

SHEET TITLE:
 EROSION CONTROL PLAN
 PH. 1

SHEET NUMBER:
 8





EROSION CONTROL PHASE 2 LEGEND

- XXX MAJOR CONTOUR (EXISTING)
- XXX MINOR CONTOUR (EXISTING)
- XXX MAJOR CONTOUR (NEW)
- XXX MINOR CONTOUR (NEW)
- Storm Grate (NEW)
- SF SILT FENCE
- LIMITS OF DISTURBANCE
- Drive Entrance Barricade
- Inlet Protection
- Temporary Stabilized Construction Entrance

ACREAGE SUMMARY

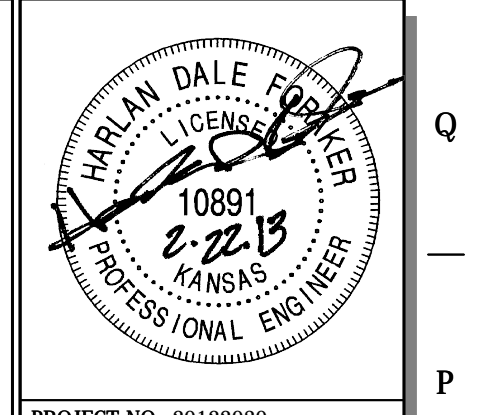
IMPERVIOUS AREA	±2.28 ACRES
LANDSCAPE AREA	±0.35 ACRES
PROPERTY AREA	±2.63 ACRES
TOTAL DISTURBED	±2.42 ACRES

OWNERSHIP / CONTRACTOR SUMMARY

OWNER/DEVELOPER:
 QUIKTRIP CORPORATION
 4705 S. 129TH EAST AVE.
 TULSA, OK 74135
 (918) 615-7816

SITE OPERATOR/GENERAL CONTRACTOR:
 TBD

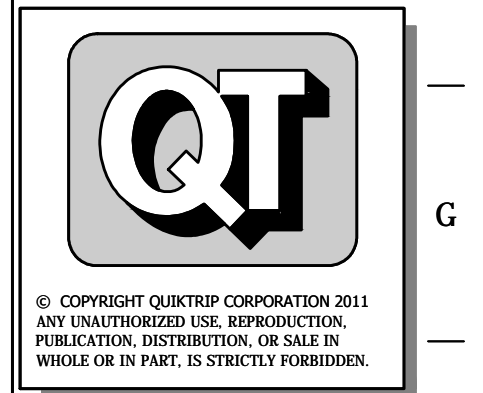
SUPERINTENDENT:
 TBD



PROJECT NO.: 20122030

CED
 CERTIFIED ENGINEERING DESIGN, P.A.
 1935 W. MAPLE STREET
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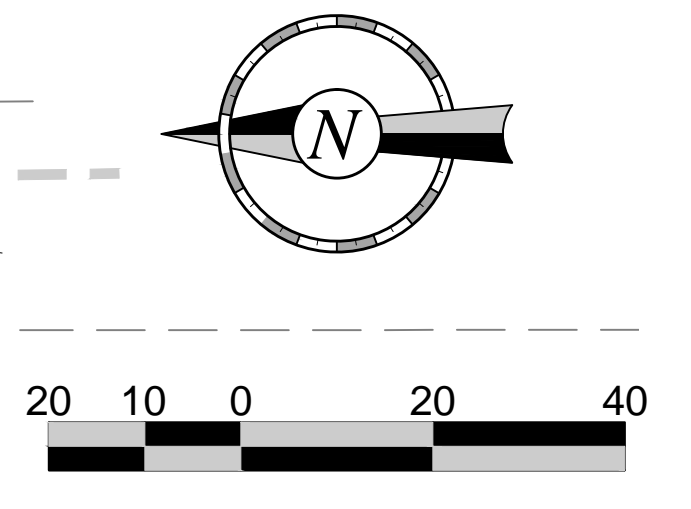
PROTOTYPE: P-73 (11/01/12)
 DIVISION: WICHITA
 VERSION: 001
 DESIGNED BY: CKW
 DRAWN BY: CKW
 REVIEWED BY: MB

REV	DATE	DESCRIPTION

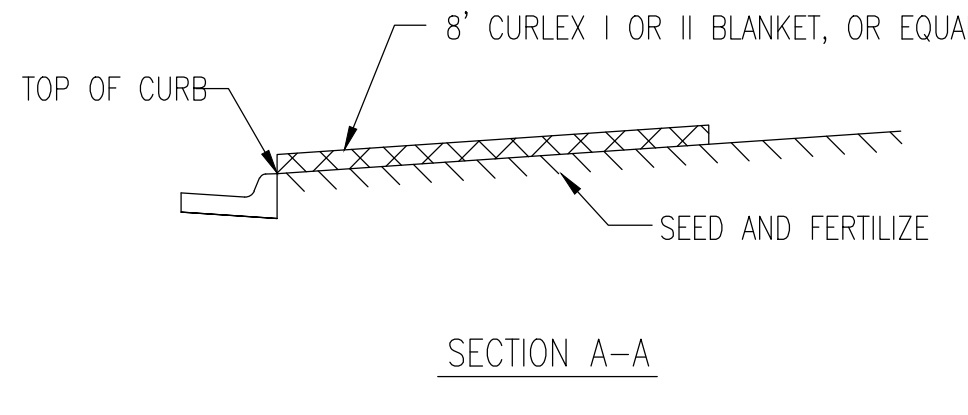
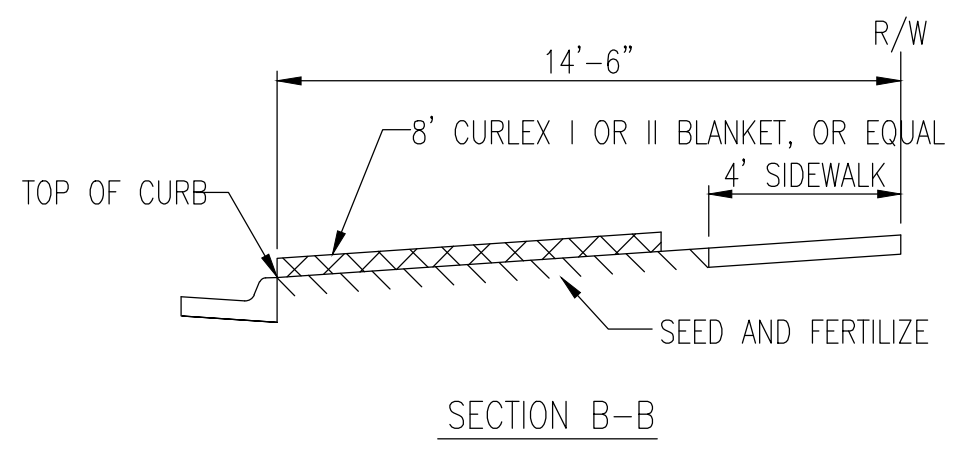
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SHEET TITLE:
 EROSION CONTROL PLAN
 PH. 2

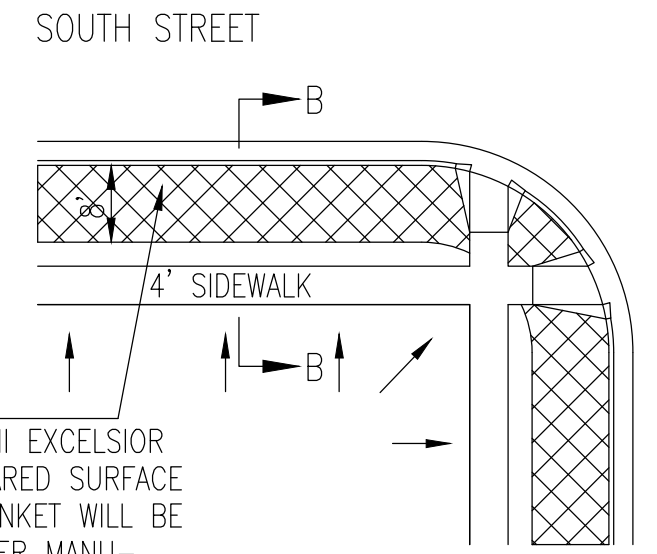
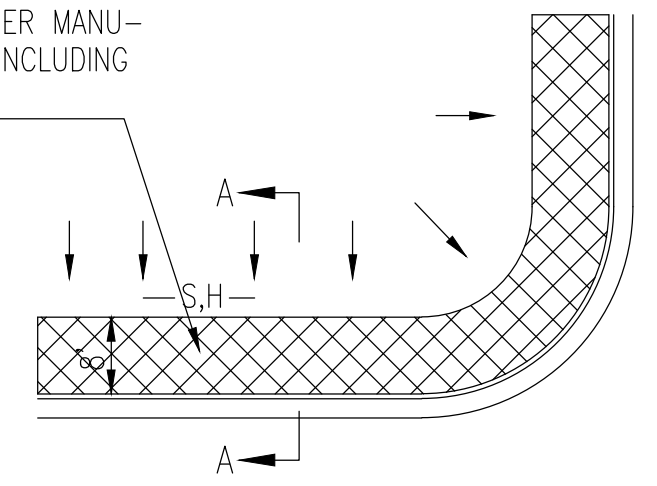
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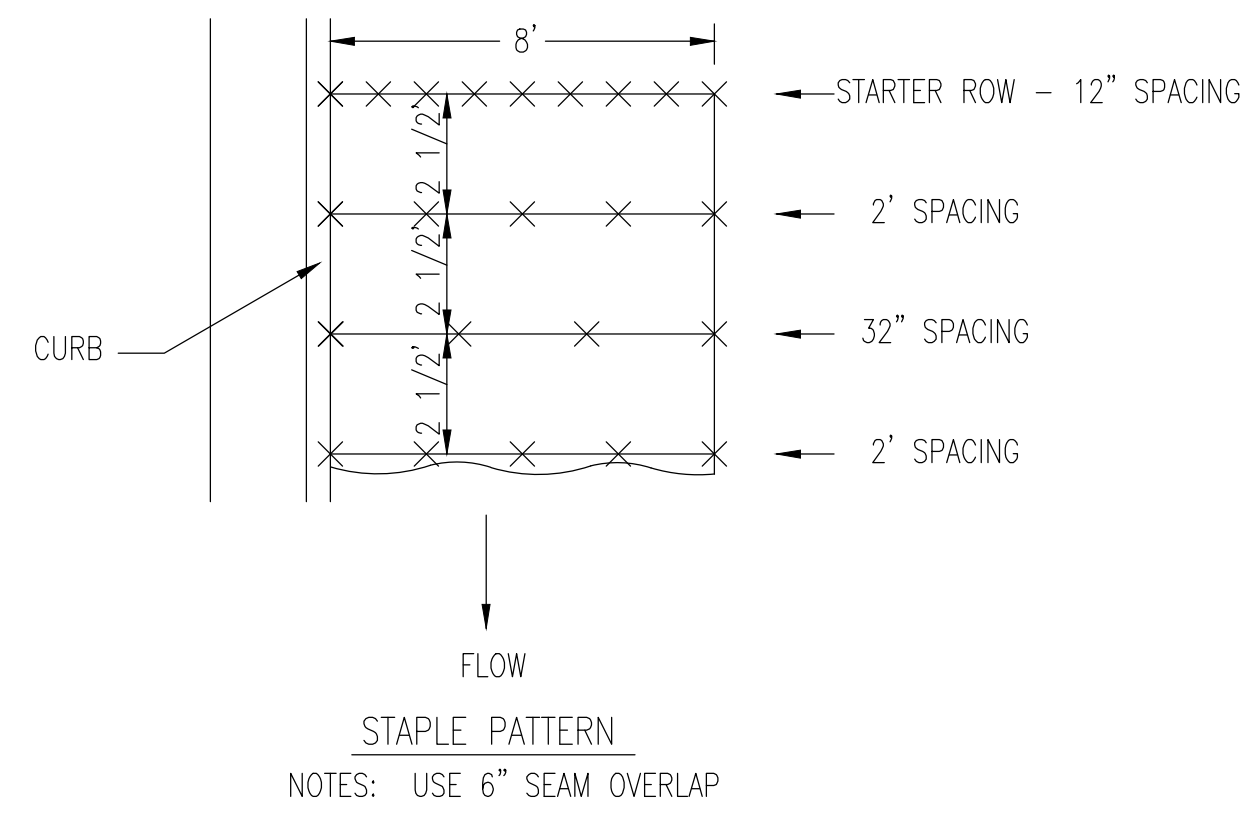
INSTALL 8' WIDE CURLEX I OR II EXCELSIOR BLANKET, OR EQUAL, ON PREPARED SURFACE BACK OF CURB. EDGE OF BLANKET WILL BE AT BACK OF CURB. INSTALL PER MANUFACTURER'S RECOMMENDATION, INCLUDING STAPLES. (SEE DETAIL)



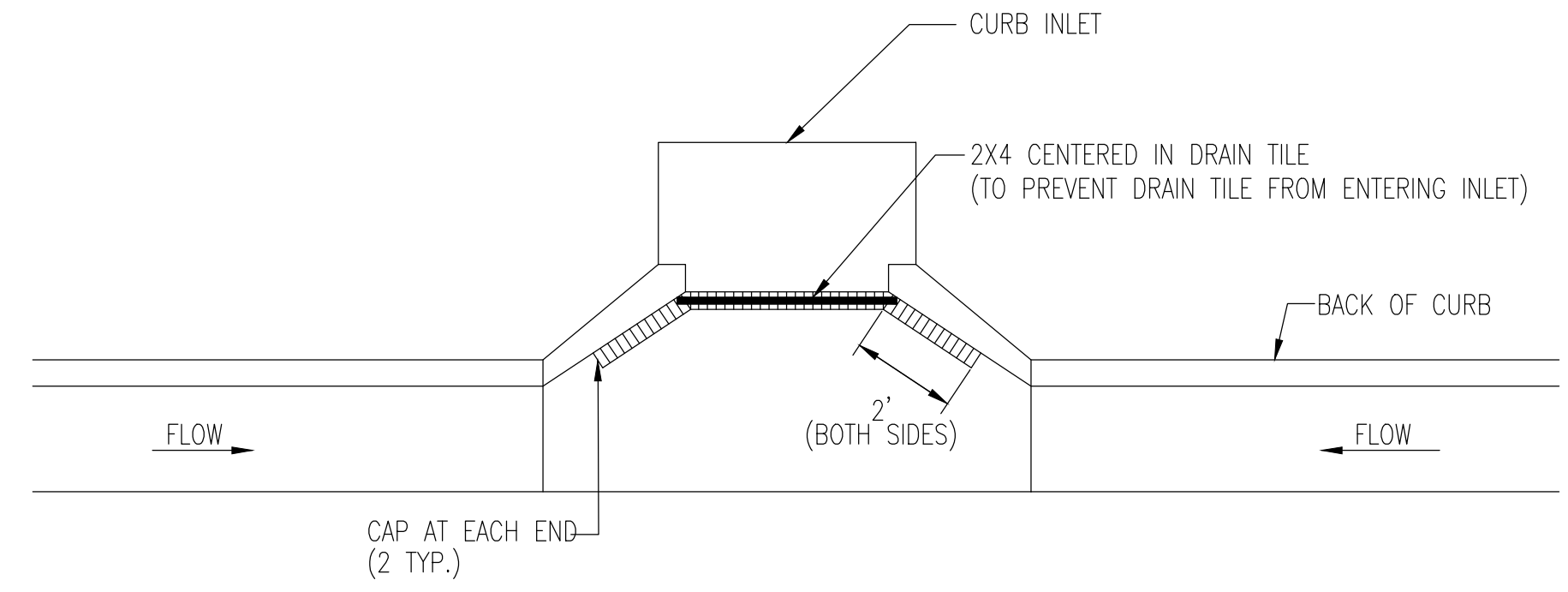
INSTALL 8' WIDE CURLEX I OR II EXCELSIOR BLANKET, OR EQUAL, ON PREPARED SURFACE BACK OF CURB. EDGE OF BLANKET WILL BE AT BACK OF CURB. INSTALL PER MANUFACTURER'S RECOMMENDATION, INCLUDING STAPLES. (SEE DETAIL)

- 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

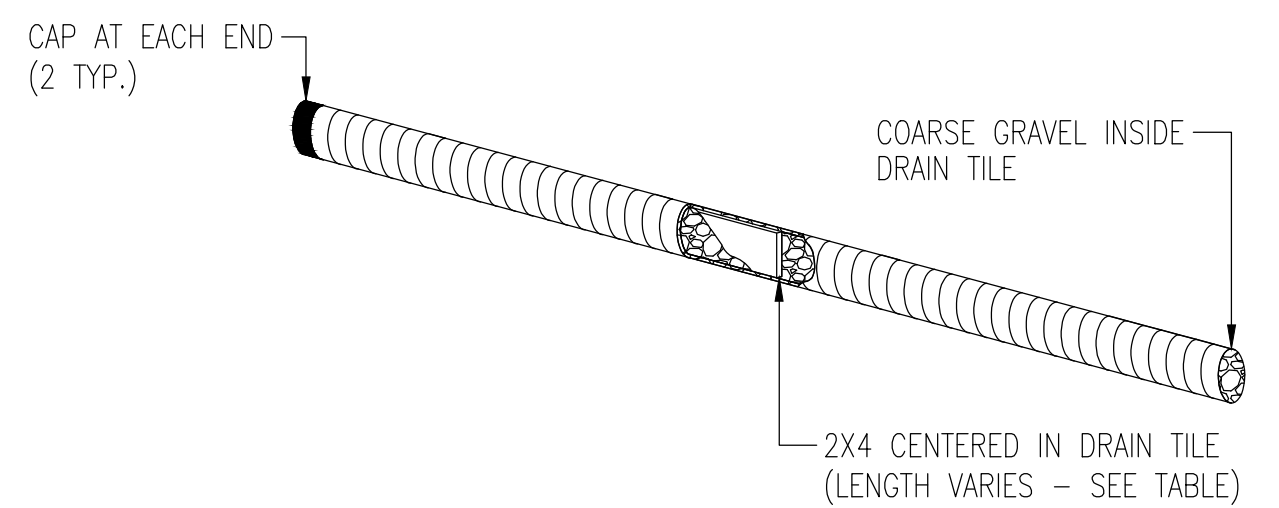


DETAILS FOR CURLEX I OR II BLANKETS

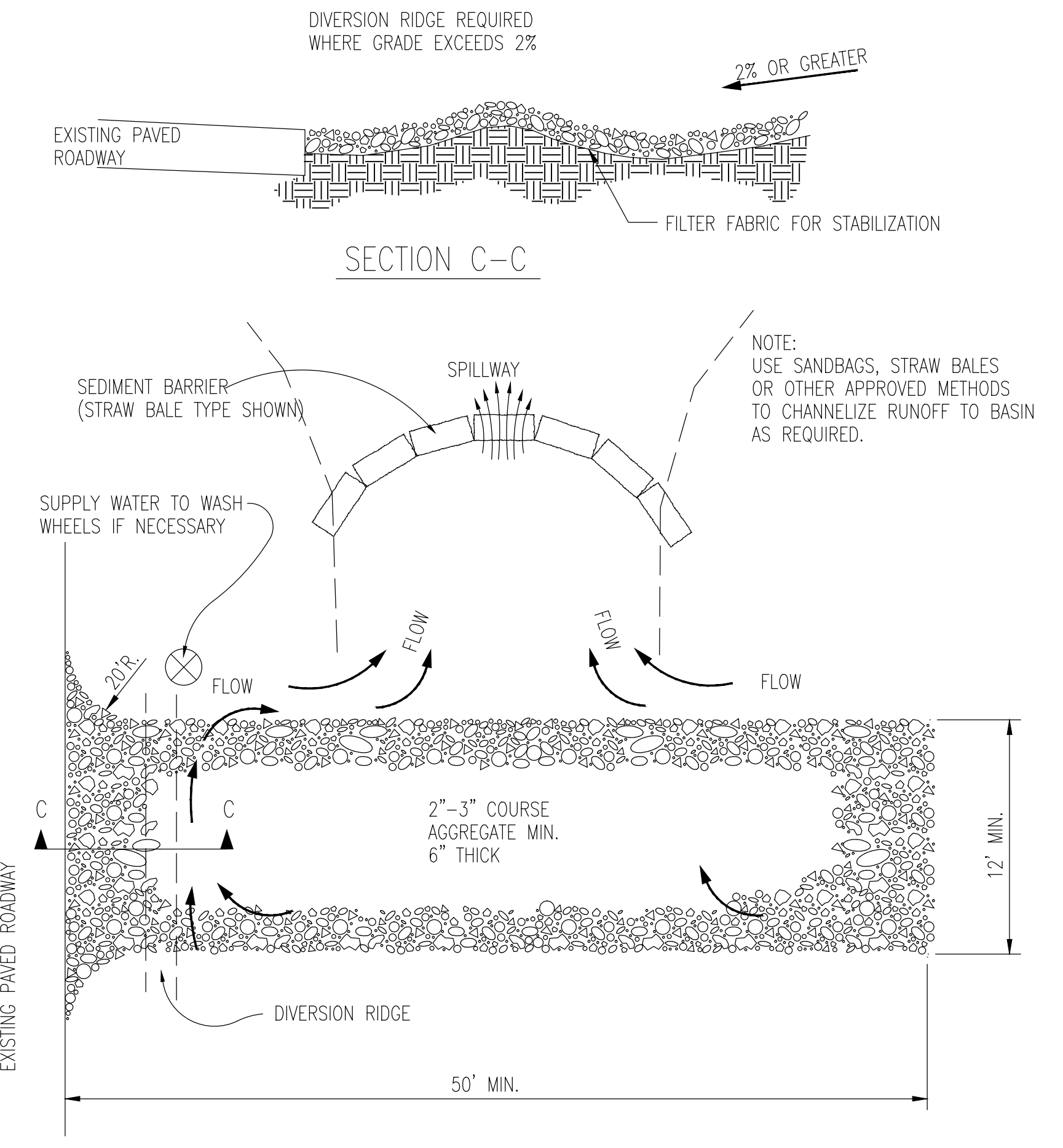


NOTE: PLACE 4" PERFORATED PVC PIPE, FILLED WITH 1/2"-1" DIA. GRAVEL, IN FRONT OF CURB INLET AS SHOWN.

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



STABILIZED CONSTRUCTION ENTRANCE

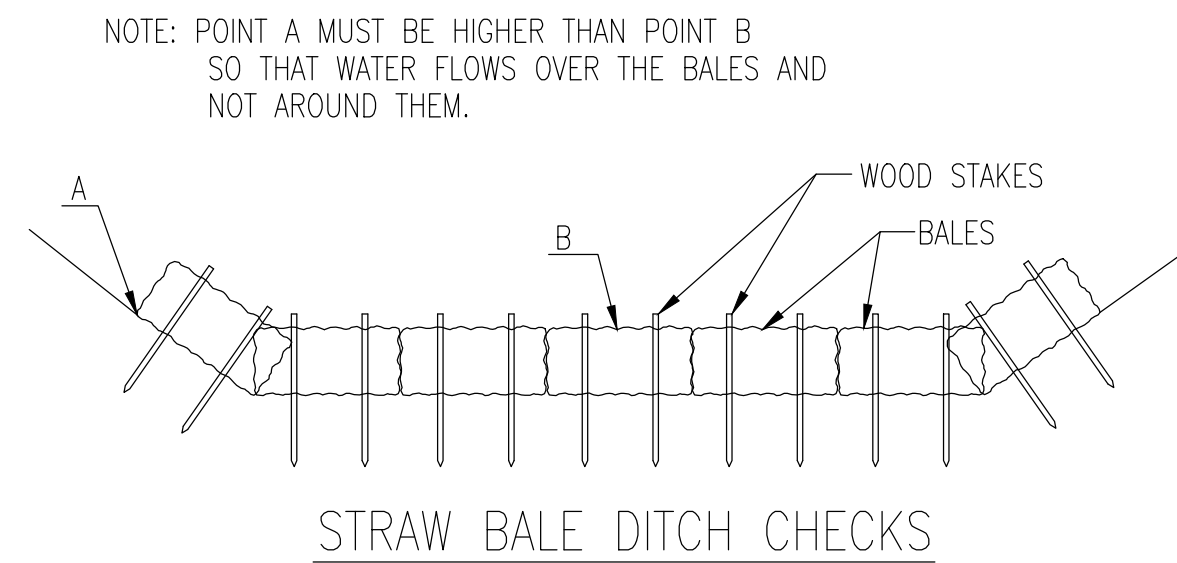
- GENERAL NOTES**
- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
 - WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO 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 0112 PPD	OCA NUMBER (607861)	DATE 11/2010
CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		DESIGN DRAWN SHEET 10

Sheet 09-16-2013 5:13:18 PM by: CCE/AMITES
 Plot Scale 1:1 09-23-2013 8:33:10 AM by: CARLOS GERVAZIO
 S:\Drawing Files\Project CDM 12-7-09\GT #6326R\DWG\0326R.cdw-P73 (11-15-12)-PPD



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. STRAW BALE DITCH 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 CHECK SPACING (%)	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".

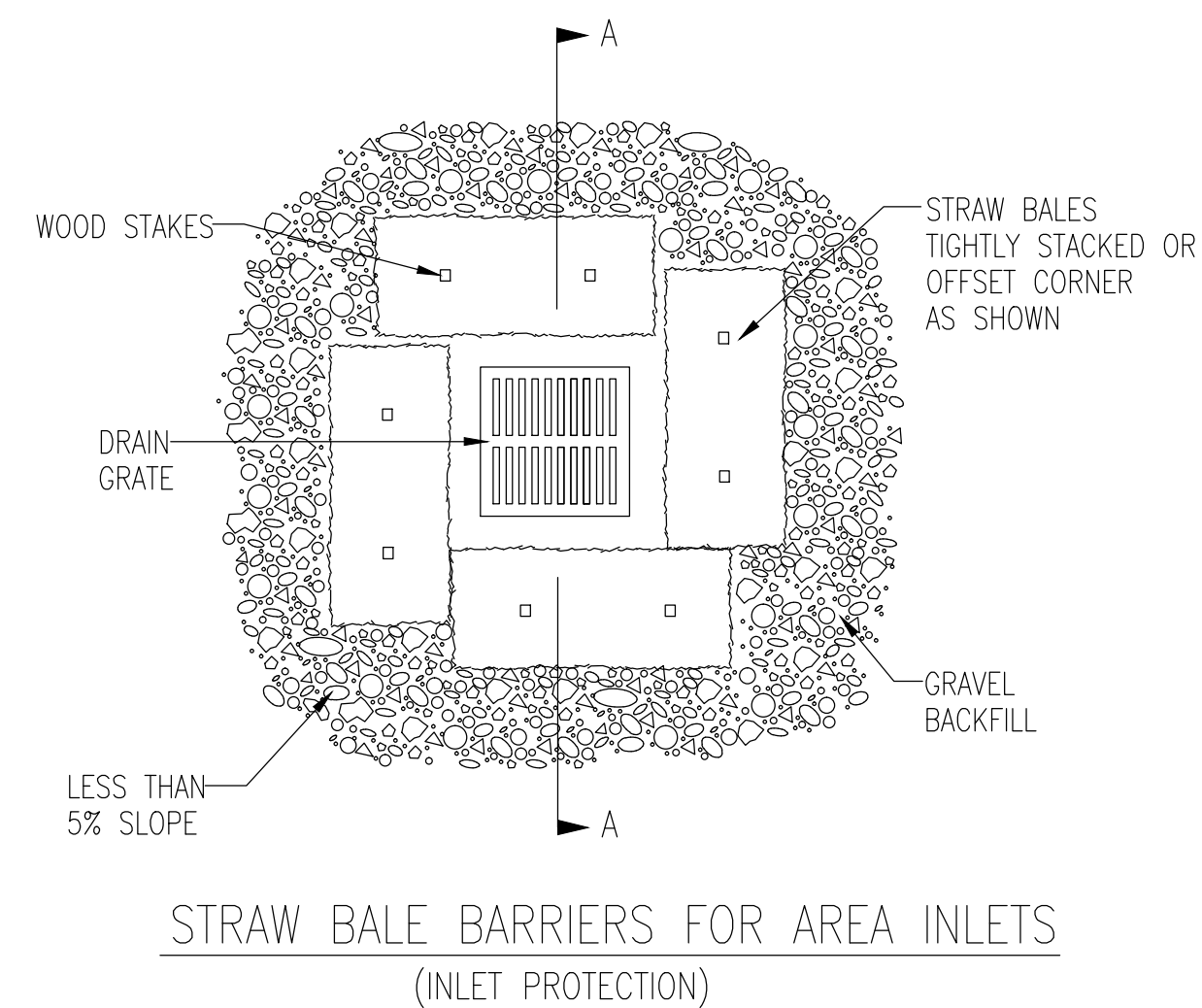
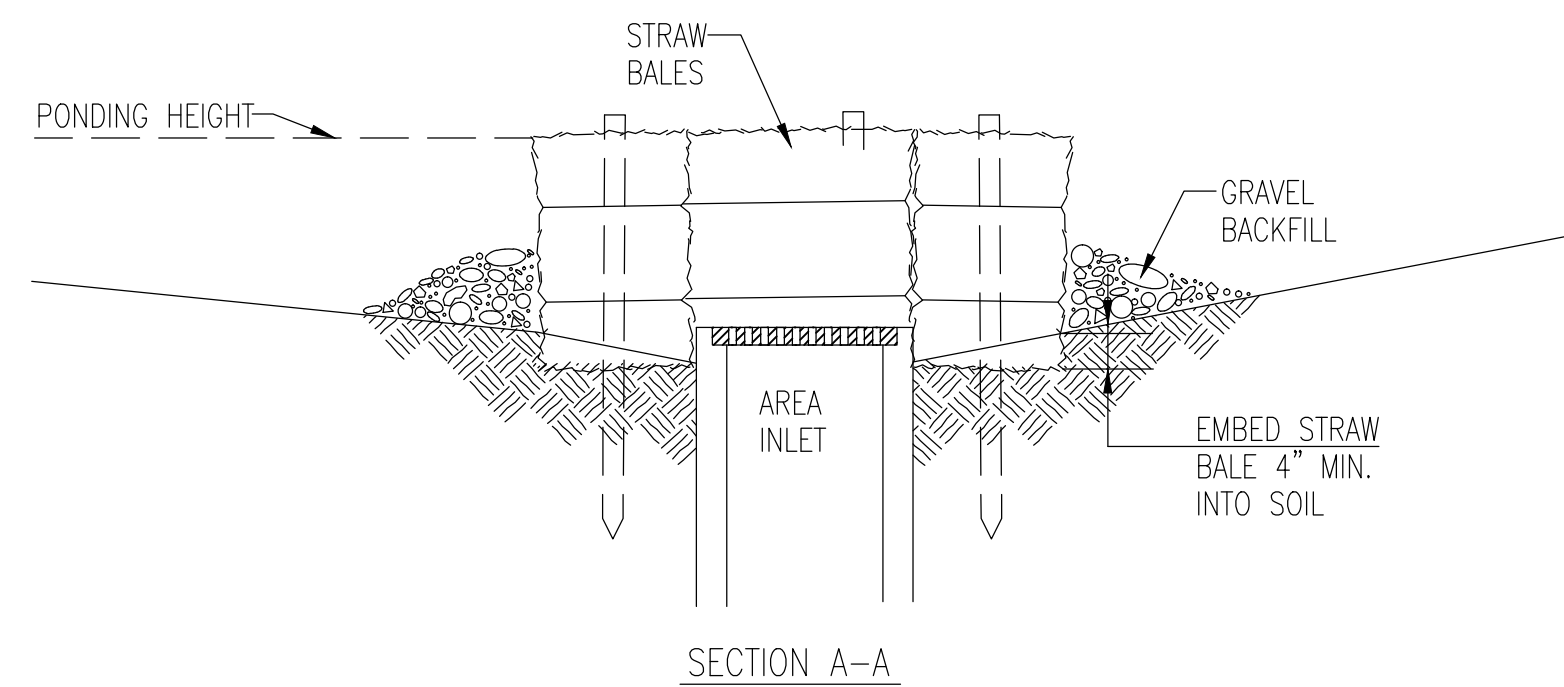
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

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. TWINE SHOULD BE USED TO BIND BALES. THE USE OF WIRE BINDING IS PROHIBITED BECAUSE IT DOES NOT BIODEGRADE READILY.

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.

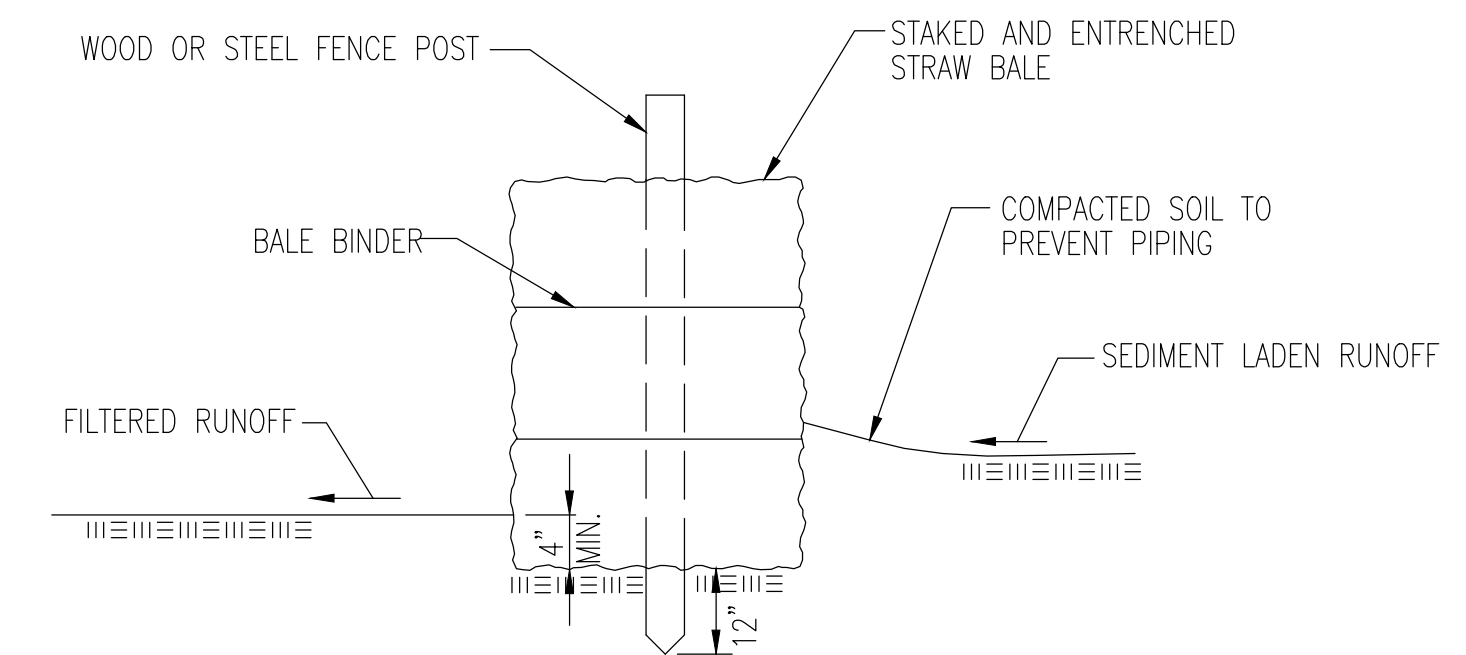
LIST OF COMMON PLACEMENT INSTALLATION MISTAKES TO AVOID:

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?



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. TWINE SHOULD BE USED TO BIND BALES. THE USE OF WIRE BINDING IS PROHIBITED BECAUSE IT DOES NOT BIODEGRADE READILY.

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 SETTLING 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:

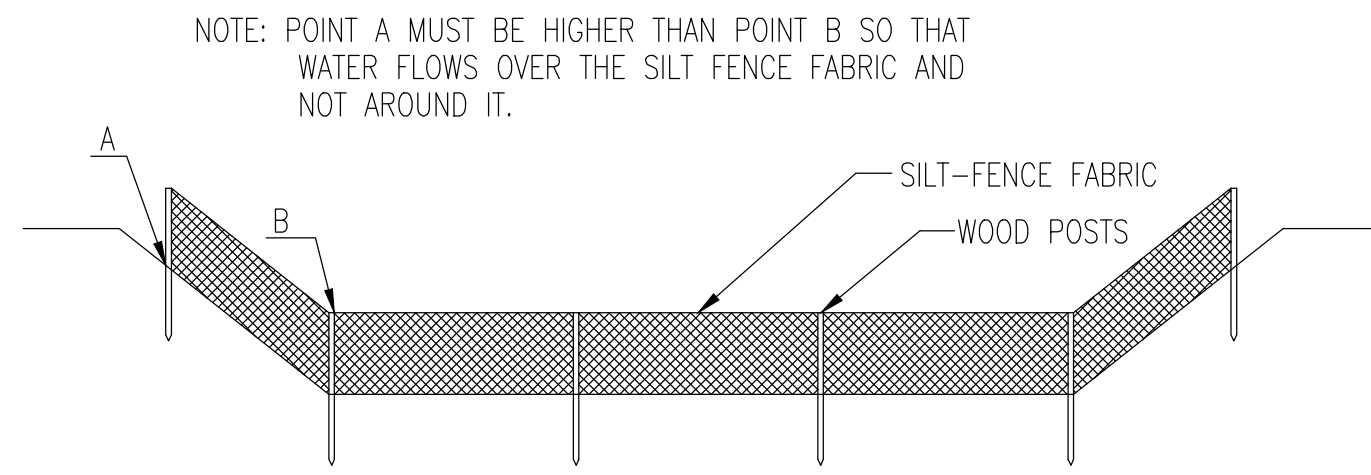
WHEN PRACTICAL, DO NOT PLACE BALE SLOPE BARRIERS ACROSS CONTOURS. SLOPE BARRIERS SHOULD BE PLACED ALONG CONTOURS TO AVOID A CONCENTRATION OF FLOW. CONCENTRATED FLOW OVER A SLOPE BARRIER CREATES A SCOUR HOLE ON THE DOWNSLOPE SIDE OF THE BARRIER. THE SCOUR HOLE EVENTUALLY UNDERMINES THE BALES AND THE BARRIER 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?

 <p>CITY OF WICHITA PUBLIC WORKS & UTILITIES ENGINEERING DIVISION</p>			STRAW BALE DITCH CHECK AND BARRIER DETAILS		
			CITY ENGINEER GARY JANZEN, P.E.		
PROJECT NUMBER	OCA NUMBER	DATE	DESIGN	DRAWN	
0112 PPD	(607861)	11/2010			
CITY ENGINEER'S OFFICE			SHEET		
CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501			11		



ELEVATION
SILT FENCE DITCH CHECKS
(STREAM PROTECTION)

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:

PLACE SILT FENCE IN DITCHES WHERE IT IS UNLIKELY THAT IT WILL BE OVERTOPPED. WATER SHOULD FLOW THROUGH A SILT FENCE DITCH CHECK, NOT OVER IT. SILT FENCE DITCH CHECKS OFTEN FAIL WHEN OVERTOPPED. SILT FENCE DITCH CHECKS SHOULD BE PLACED PERPENDICULAR TO THE FLOWLINE OF THE DITCH. THE SILT FENCE SHOULD EXTEND FAR ENOUGH SO THAT THE GROUND LEVEL AT THE ENDS OF THE FENCE IS HIGHER THAN THE TOP OF THE LOW POINT OF THE FENCE. THIS PREVENTS WATER FROM FLOWING AROUND THE CHECK. SILT FENCE DITCH CHECKS SHOULD NOT BE PLACED IN DITCHES WHERE HIGH FLOWS ARE EXPECTED. ROCK CHECKS SHOULD BE USED INSTEAD. SILT FENCE 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 CHECK DITCH GRADE (%)	SPACING 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 AT LEAST 12" DEEP BY 6" 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 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 UPSTREAM EDGE OF THE TRENCH. LINE TWO SIDES OF THE TRENCH WITH THE FABRIC AS SHOWN ON DETAIL. 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 ON THE UPSTREAM SIDE 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 24". PLACE POSTS NO MORE THAN 4' APART. ATTACH THE SILT FENCE TO THE ANCHORED POST WITH STAPLES, WIRE, ZIP TIES, OR NAILS.

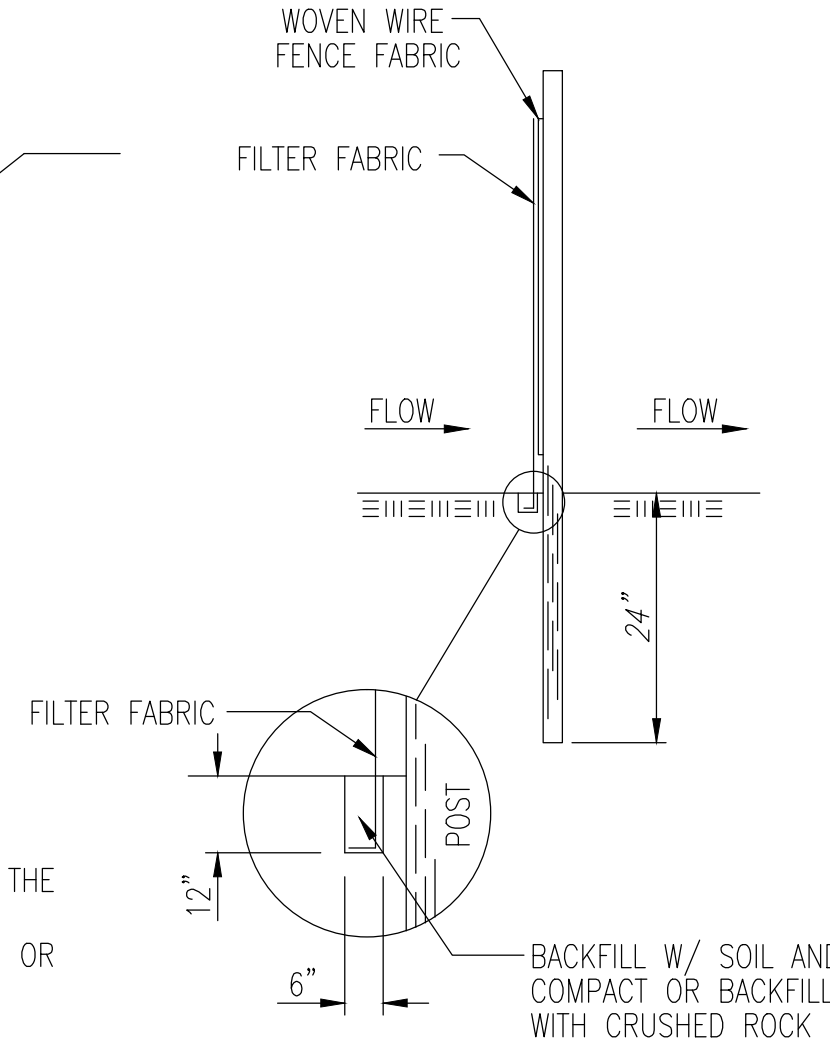
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

WATER SHOULD FLOW THROUGH A SILT FENCE DITCH CHECK—NOT OVER IT. PLACE SILT FENCE IN DITCHES WHERE IT IS UNLIKELY THAT IT WILL BE OVERTOPPED. SILT FENCE INSTALLATIONS QUICKLY DETERIORATE WHEN WATER OVERTOPS THEM. DO NOT PLACE SILT FENCE POSTS ON THE UPSTREAM 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 A SILT FENCE DITCH CHECK DIRECTLY IN FRONT OF A CULVERT OUTLET. IT WILL NOT STAND UP TO THE CONCENTRATED FLOW. DO NOT PLACE SILT FENCE 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 FENCE IS HIGHER THAN THE LOW POINT ON THE TOP OF THE FENCE. DO NOT PLACE SILT FENCE DITCH CHECKS IN CHANNELS WITH SHALLOW SOILS UNDERLAIN BY ROCK. IF THE CHECK IS NOT ANCHORED SUFFICIENTLY, IT WILL WASH OUT.

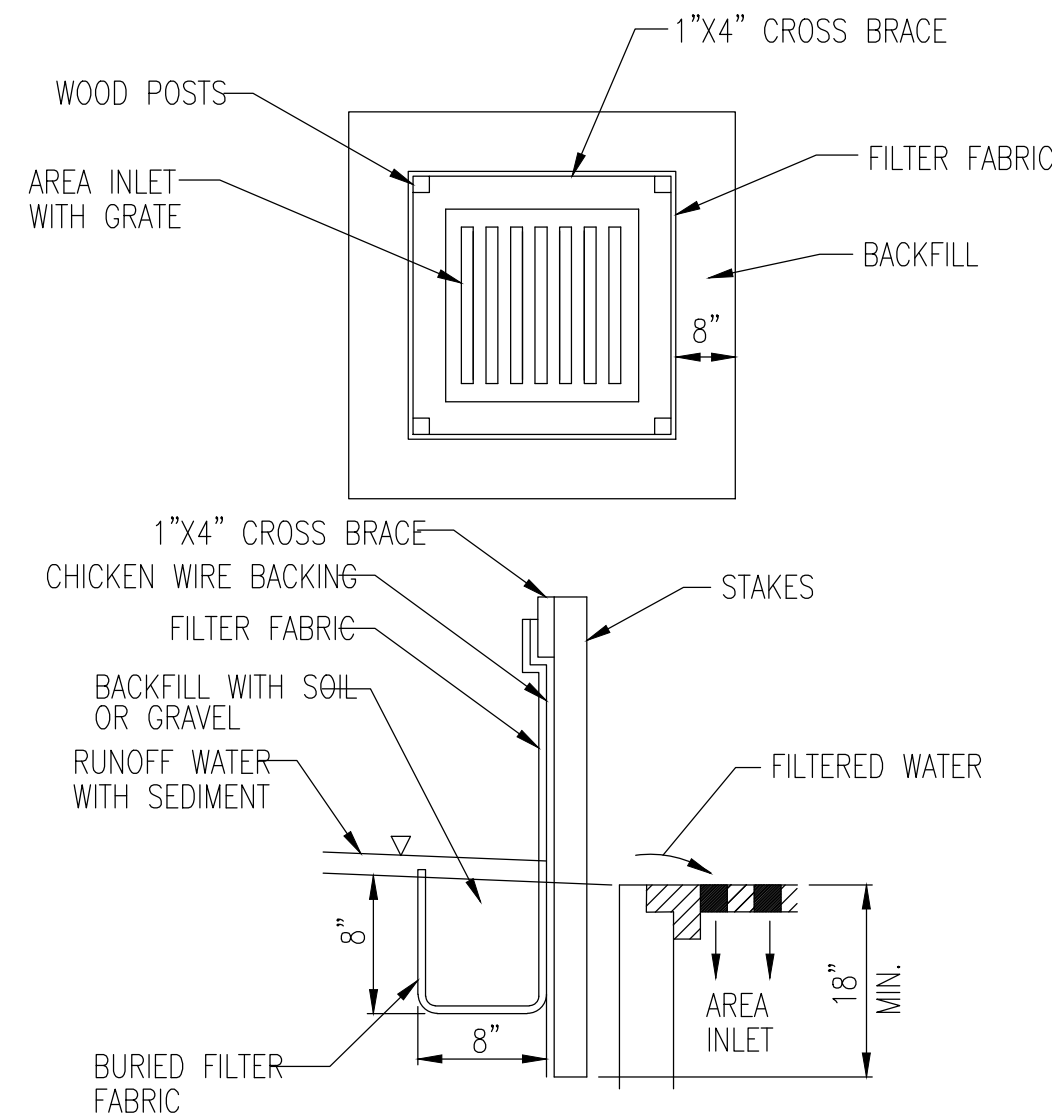
INSPECTION AND MAINTENANCE:

SILT FENCE 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 THE SILT FENCE SAG EXCESSIVELY?
- HAS THE SILT FENCE TORN OR BECOME DETACHED FROM THE POSTS?
- DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE DITCH CHECK?



ANCHOR TRENCH DETAIL



SILT FENCE BARRIERS FOR AREA INLETS
(INLET PROTECTION)

MATERIAL SPECIFICATION:

SILT FENCE FABRIC SHOULD CONFORM TO THE AASHTO M288 96 SILT FENCE SPECIFICATION. THE WIRE OR POLYMERIC MESH BACKING USED TO HELP SUPPORT THE 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. THE MATERIAL USED TO FRAME THE TOPS OF THE POSTS SHOULD BE 1" BY 4" BOARDS. SILT FENCE FABRIC AND SUPPORT BACKING SHOULD BE ATTACHED TO THE WOODEN POSTS AND FRAME WITH STAPLES, WIRE, ZIP TIES, OR NAILS.

PLACEMENT:

PLACE A SILT FENCE DROP INLET BARRIER IN A LOCATION WHERE IT IS UNLIKELY TO BE OVERTOPPED. WATER SHOULD FLOW THROUGH SILT FENCE, NOT OVER IT. SILT FENCE BARRIERS FOR AREA INLETS OFTEN FAIL WHEN REPEATEDLY OVERTOPPED. WHEN USED AS A BARRIER FOR AREA INLETS, SILT FENCE FABRIC AND POSTS MUST BE SUPPORTED AT THE TOP BY A WOODEN FRAME. WHEN A SILT FENCE BARRIER FOR AREA INLETS 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 8" DEEP BY 8" WIDE. DRIVE POSTS TO A DEPTH OF AT LEAST 18" AROUND THE PERIMETER OF THE AREA INLET. THE DISTANCE BETWEEN POSTS SHOULD BE 4' OR LESS. IF THE DISTANCE BETWEEN TWO ADJACENT CORNER POSTS IS MORE THAN 4', ADD ANOTHER POST(S) BETWEEN THEM. CONNECT THE TOPS OF ALL THE POSTS WITH A WOODEN FRAME MADE OF 1" BY 4" BOARDS. USE NAILS OR SCREWS FOR FASTENING. ATTACH THE WIRE OR POLYMERIC-MESH BACKING TO THE OUTSIDE OF THE POST/FRAME STRUCTURE WITH STAPLES, WIRE, ZIP TIES, OR NAILS. ROLL OUT A CONTINUOUS LENGTH OF SILT FENCE FABRIC LONG ENOUGH TO WRAP AROUND THE PERIMETER OF THE AREA INLET. ADD MORE LENGTH FOR OVERLAPPING THE FABRIC JOINT. PLACE THE EDGE OF THE FABRIC IN THE TRENCH, STARTING AT THE OUTSIDE EDGE OF THE TRENCH. 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. ATTACH THE SILT FENCE TO THE OUTSIDE OF THE POST/FRAME STRUCTURE WITH STAPLES, WIRE, ZIP TIES, OR NAILS. THE JOINT SHOULD BE OVERLAPPED TO THE NEXT POST.

NOTE: WHEN A SILT FENCE BARRIER FOR AREA INLET 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.

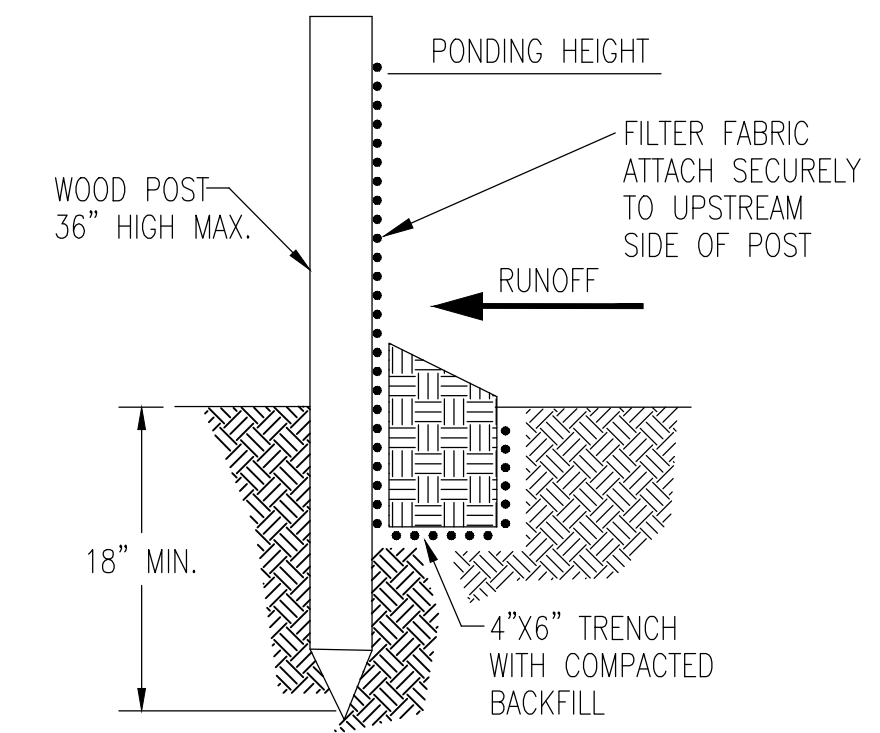
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

WATER SHOULD FLOW THROUGH A SILT FENCE BARRIER FOR AREA INLET—NOT OVER IT. PLACE A SILT FENCE BARRIER FOR AREA INLET IN A LOCATION WHERE IT IS UNLIKELY TO BE OVERTOPPED. SILT FENCE BARRIER FOR AREA INLETS OFTEN FAIL WHEN REPEATEDLY OVERTOPPED. DO NOT PLACE POSTS ON THE OUTSIDE OF THE SILT FENCE BARRIER FOR AREA INLET. 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 INSTALL SILT FENCE BARRIER FOR AREA INLETS WITHOUT FRAMING THE TOP OF THE POSTS. THE CORNER POSTS AROUND AREA INLETS ARE STRESSED IN TWO DIRECTIONS WHEREAS A NORMAL SILT FENCE IS ONLY STRESSED IN ONE DIRECTION. THIS ADDED STRESS REQUIRES MORE SUPPORT.

INSPECTION AND MAINTENANCE:

SILT FENCE BARRIER FOR AREA INLETS 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 SILT FENCE?
- DOES THE SILT FENCE SAG EXCESSIVELY?
- HAS THE SILT FENCE TORN OR BECOME DETACHED FROM THE POSTS?
- DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE AREA INLET BARRIER?



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 SETTLING 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:

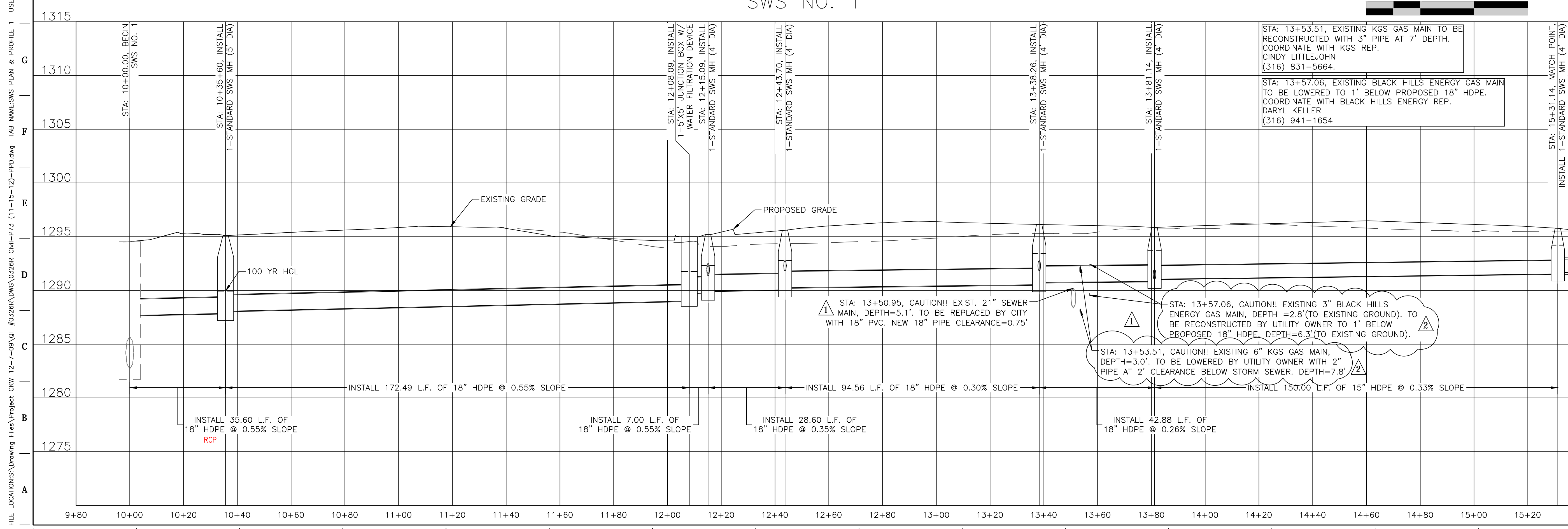
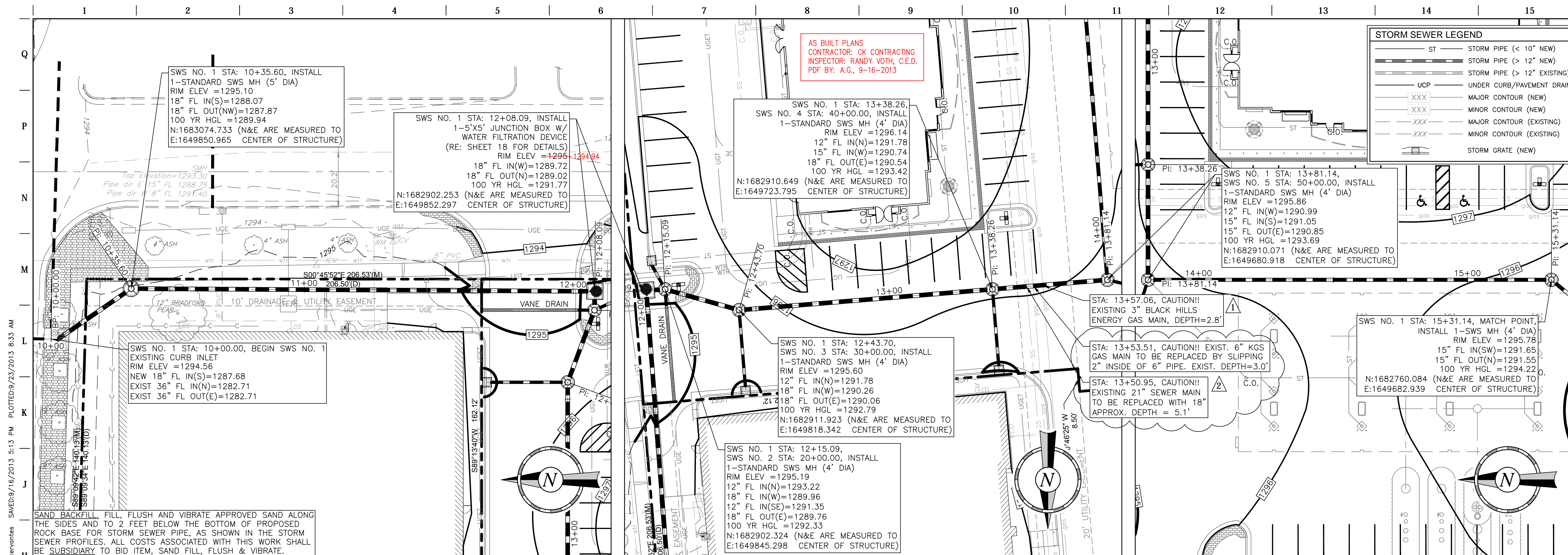
WHEN PRACTICABLE, DO NOT PLACE SILT FENCE SLOPE BARRIERS ACROSS CONTOURS. SLOPE BARRIERS SHOULD BE PLACED ALONG CONTOURS TO AVOID A CONCENTRATION OF FLOW. WHEN THE FLOW CONCENTRATES, IT OVERTOPS THE BARRIER AND THE SILT FENCE SLOPE BARRIER QUICKLY DETERIORATES. DO NOT PLACE SILT-FENCE POSTS ON THE UPSLOPE 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?

 <p>CITY OF WICHITA PUBLIC WORKS & UTILITIES ENGINEERING DIVISION</p>	SILT FENCE DITCH CHECK AND BARRIER DETAILS		
	CITY ENGINEER GARY JANZEN, P.E.		
	PROJECT NUMBER 0112 PPD	OCA NUMBER (607861)	DATE 11/2010
	CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		DESIGN DRAWN SHEET 12



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HARLAN DALE
 L. GENSER
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 222B
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 KANSAS

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VERSION:	001
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DRAWN BY:	CKW
REVIEWED BY:	MB

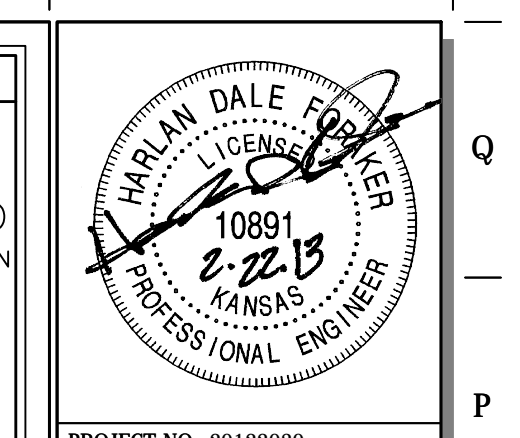
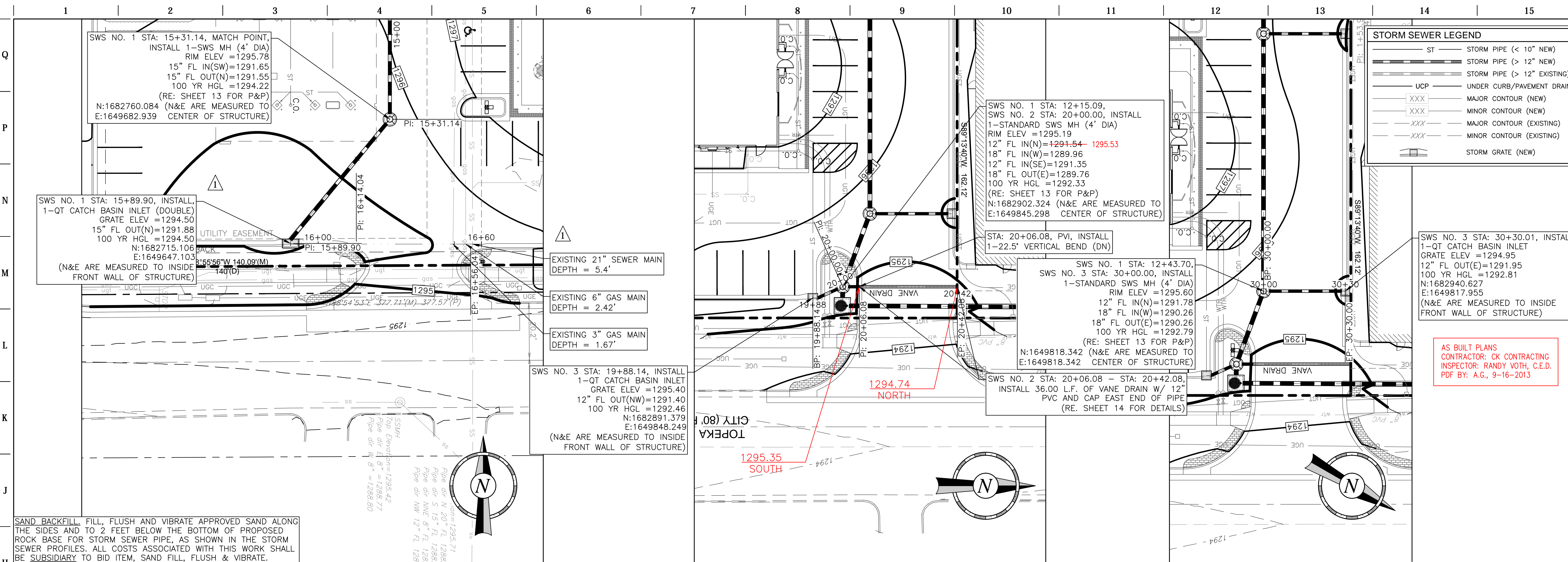
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2	10/21/13	FINAL REVIEW MEETING COMMENTS

ORIGINAL ISSUE DATE: 11/15/2012

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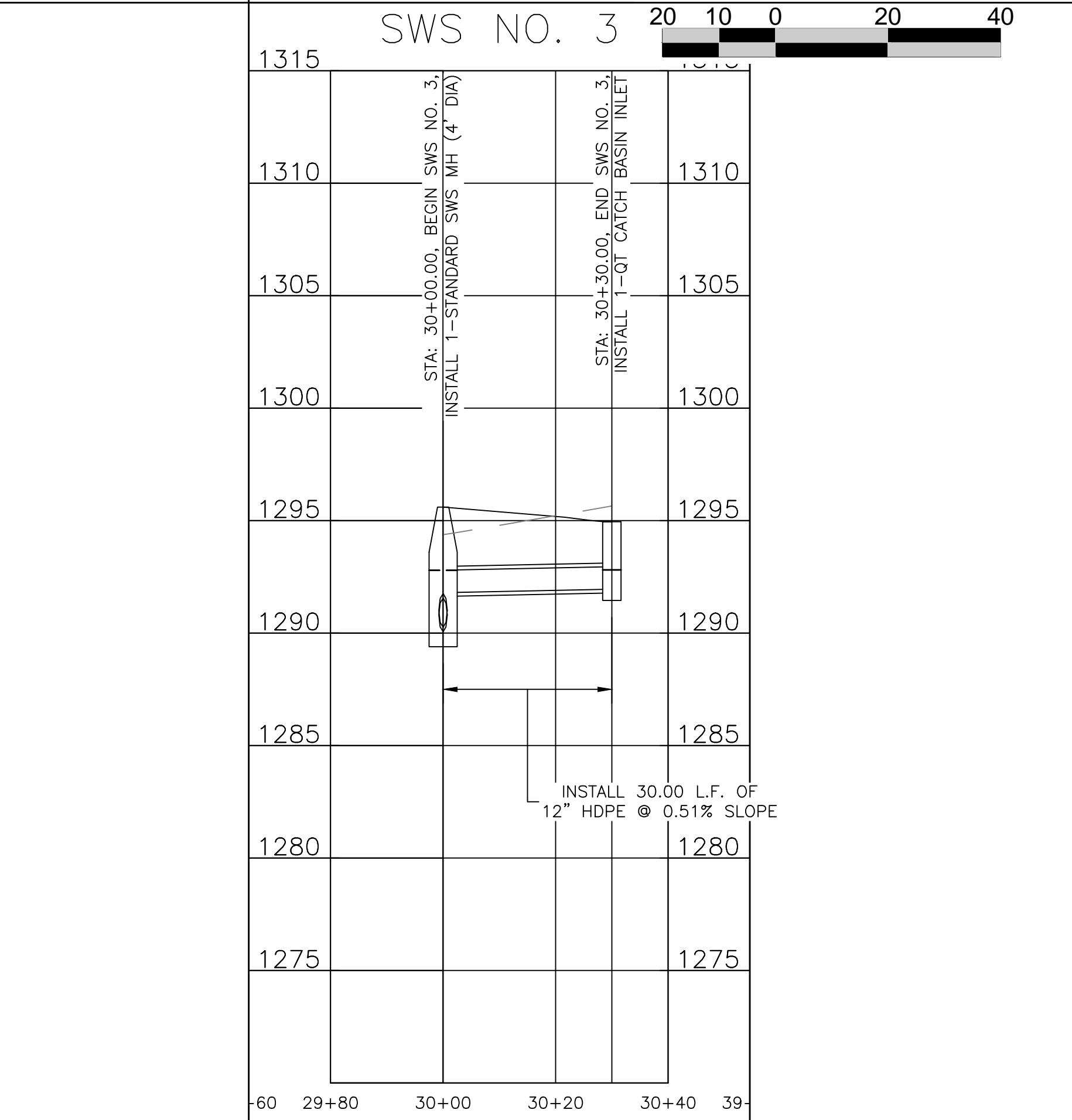
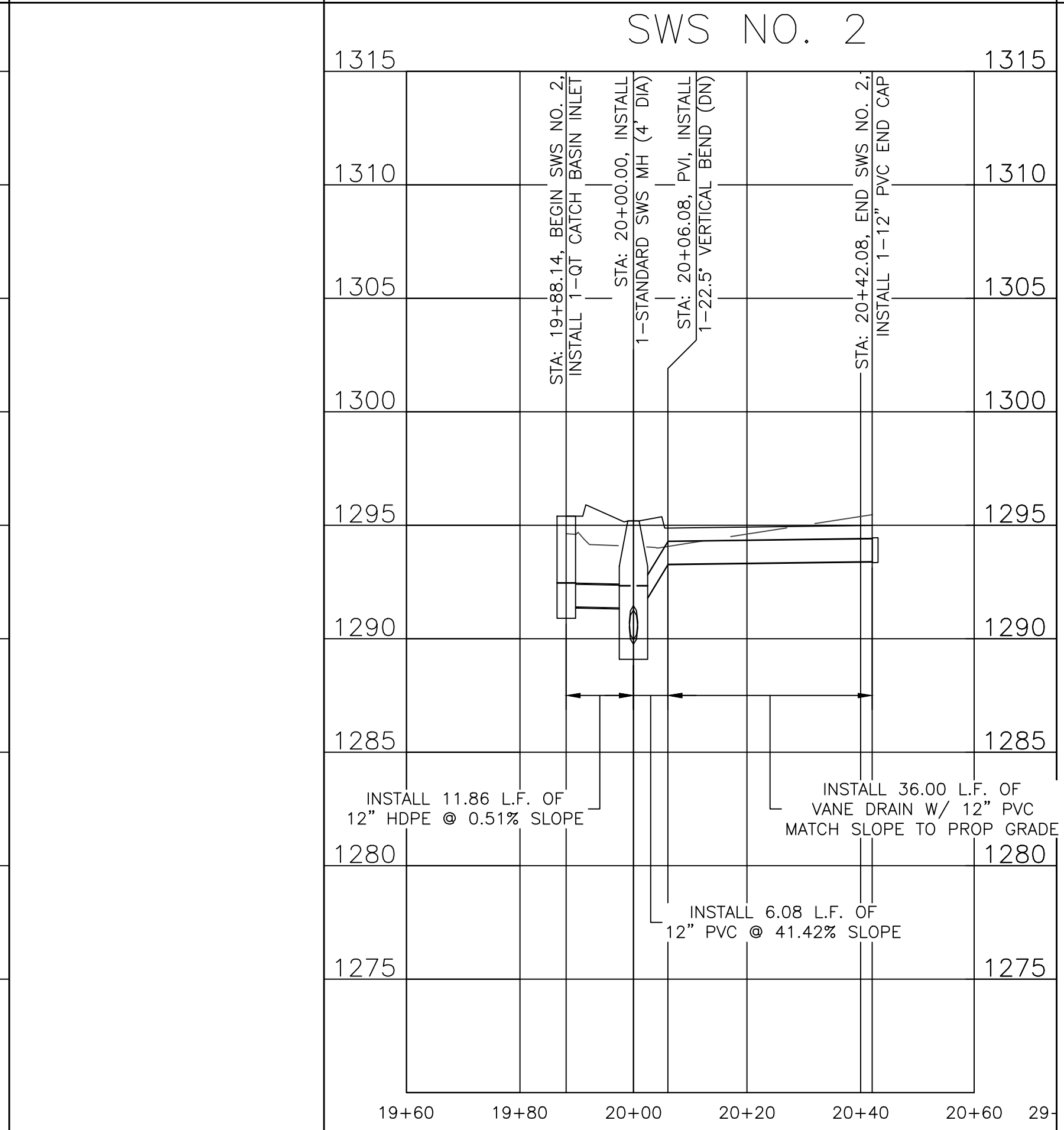
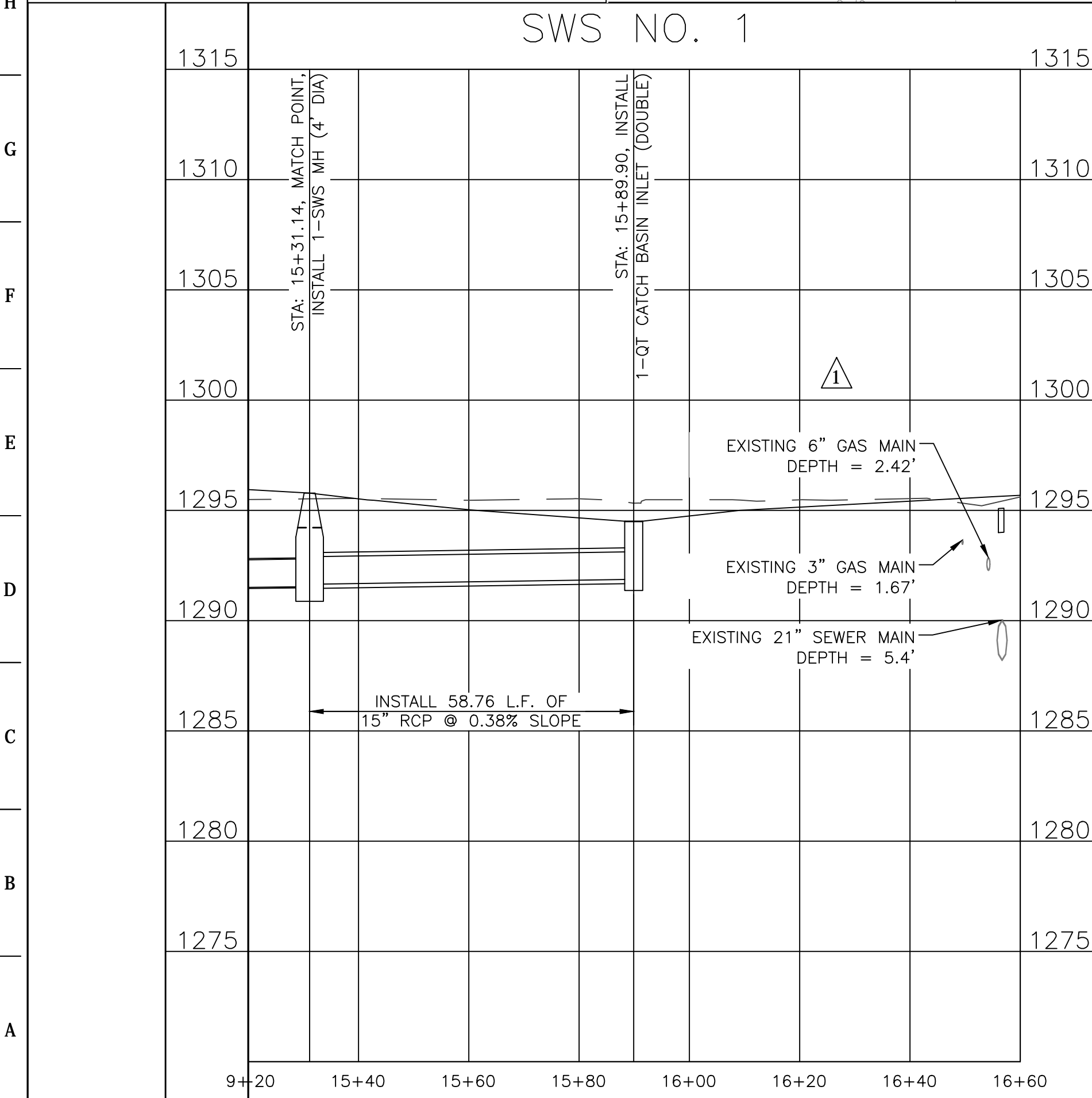
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VERSION:	001
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DRAWN BY:	CKW
REVIEWED BY:	MB

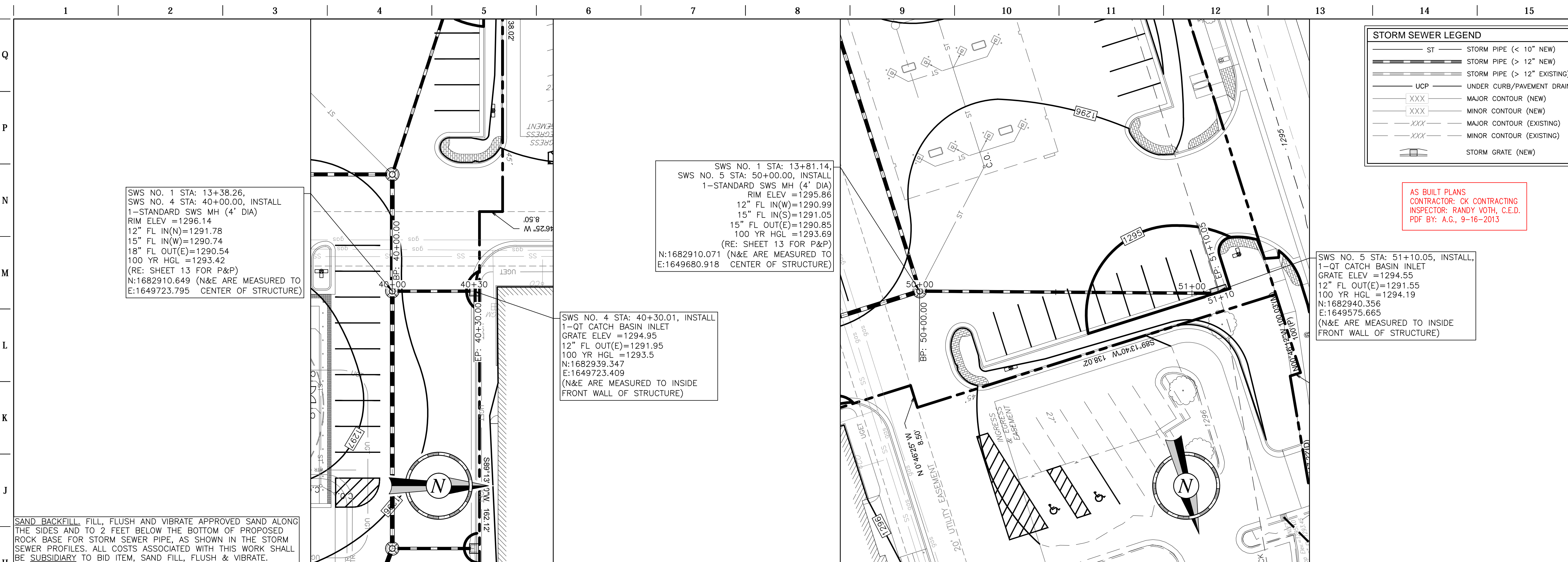
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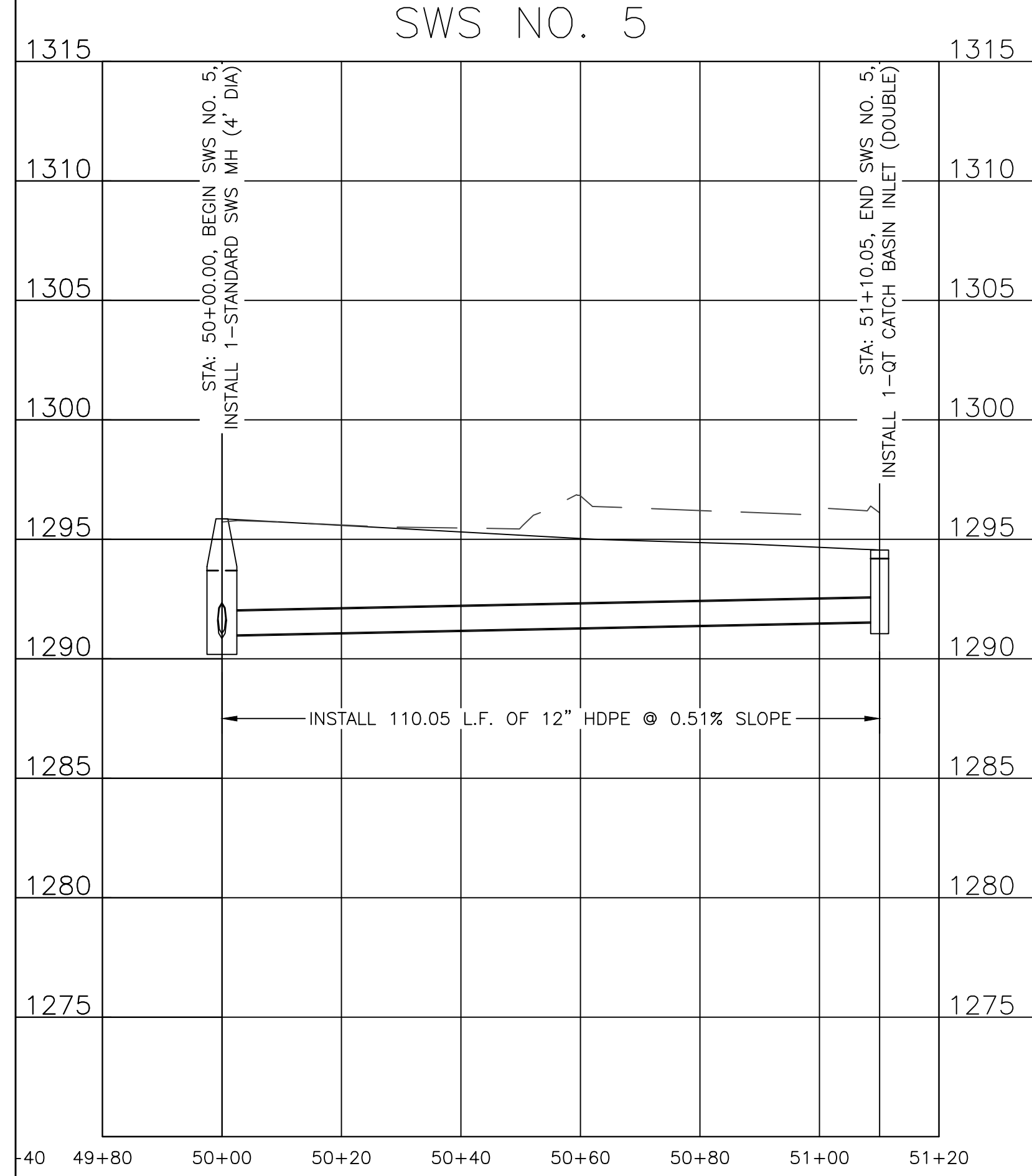
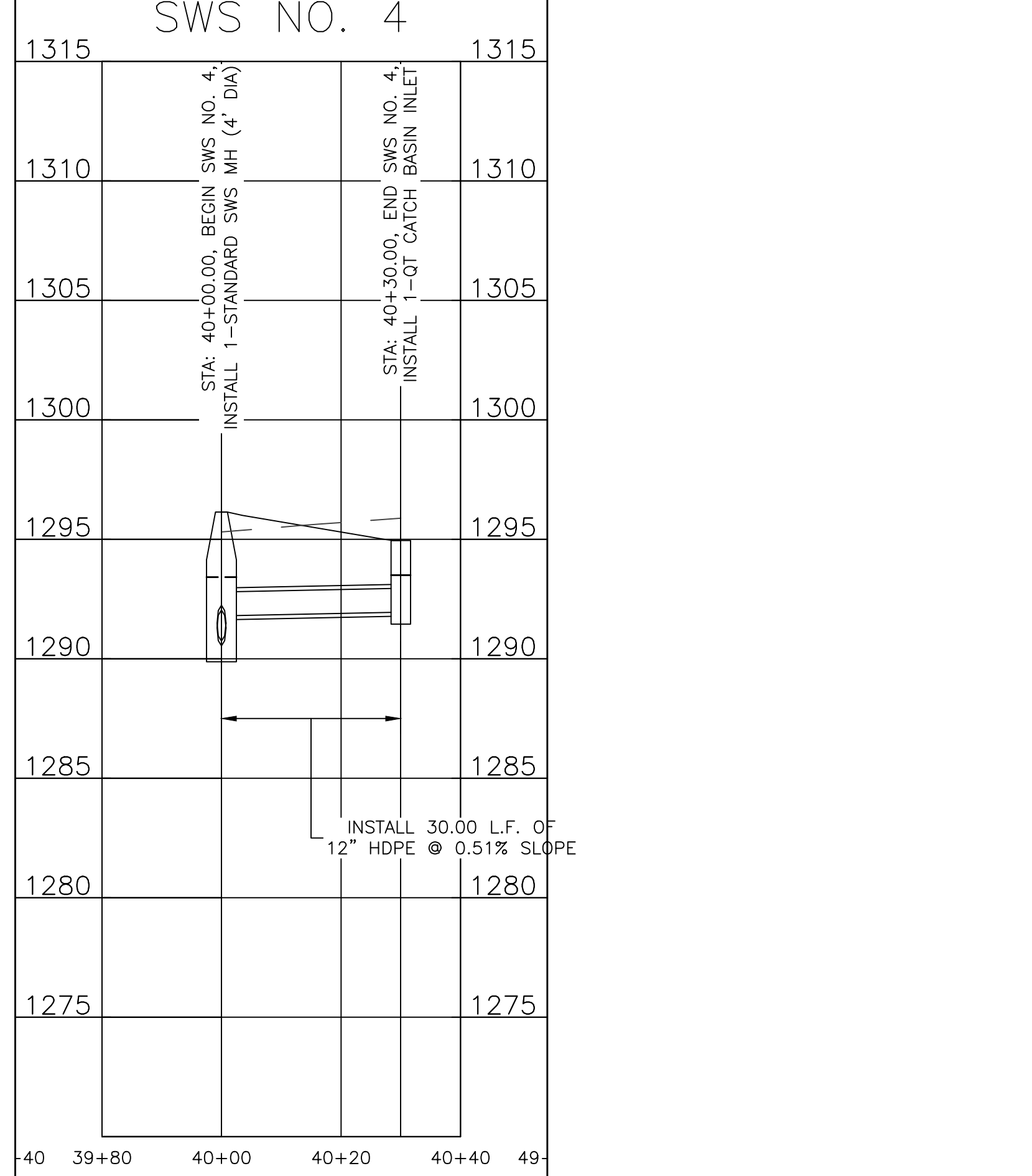
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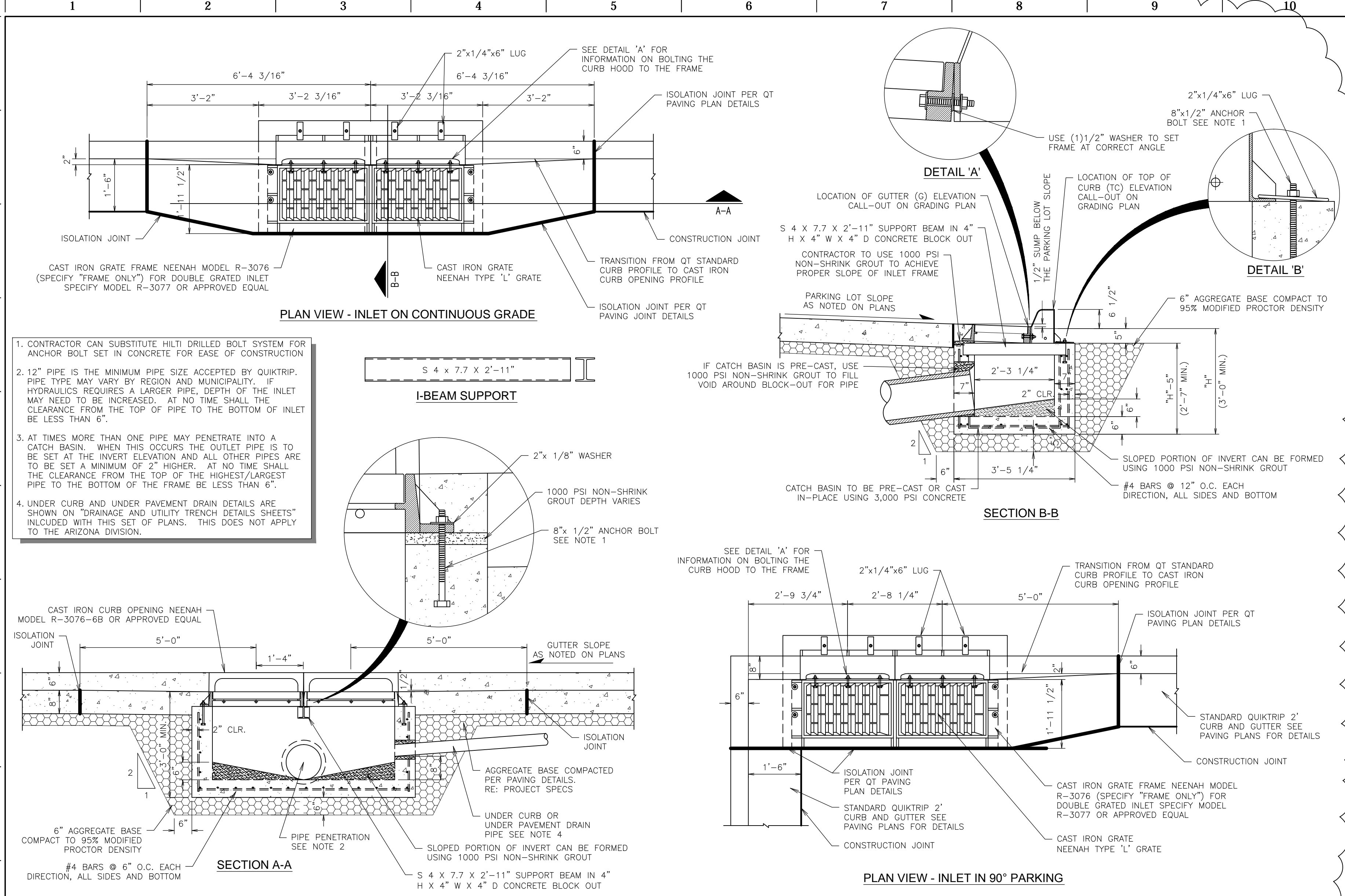
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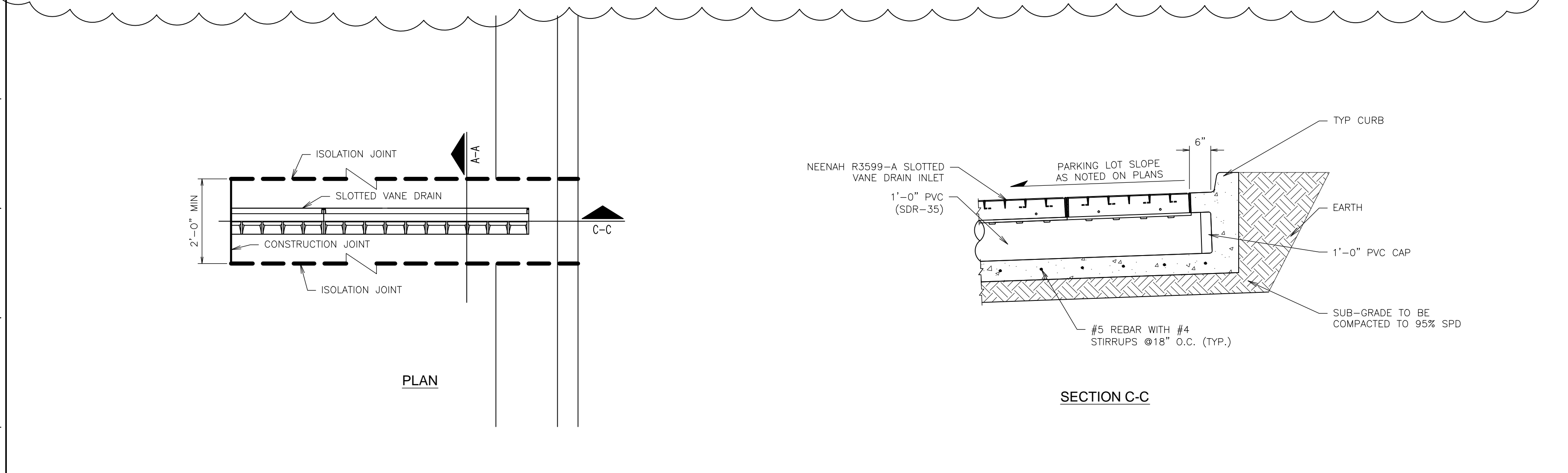
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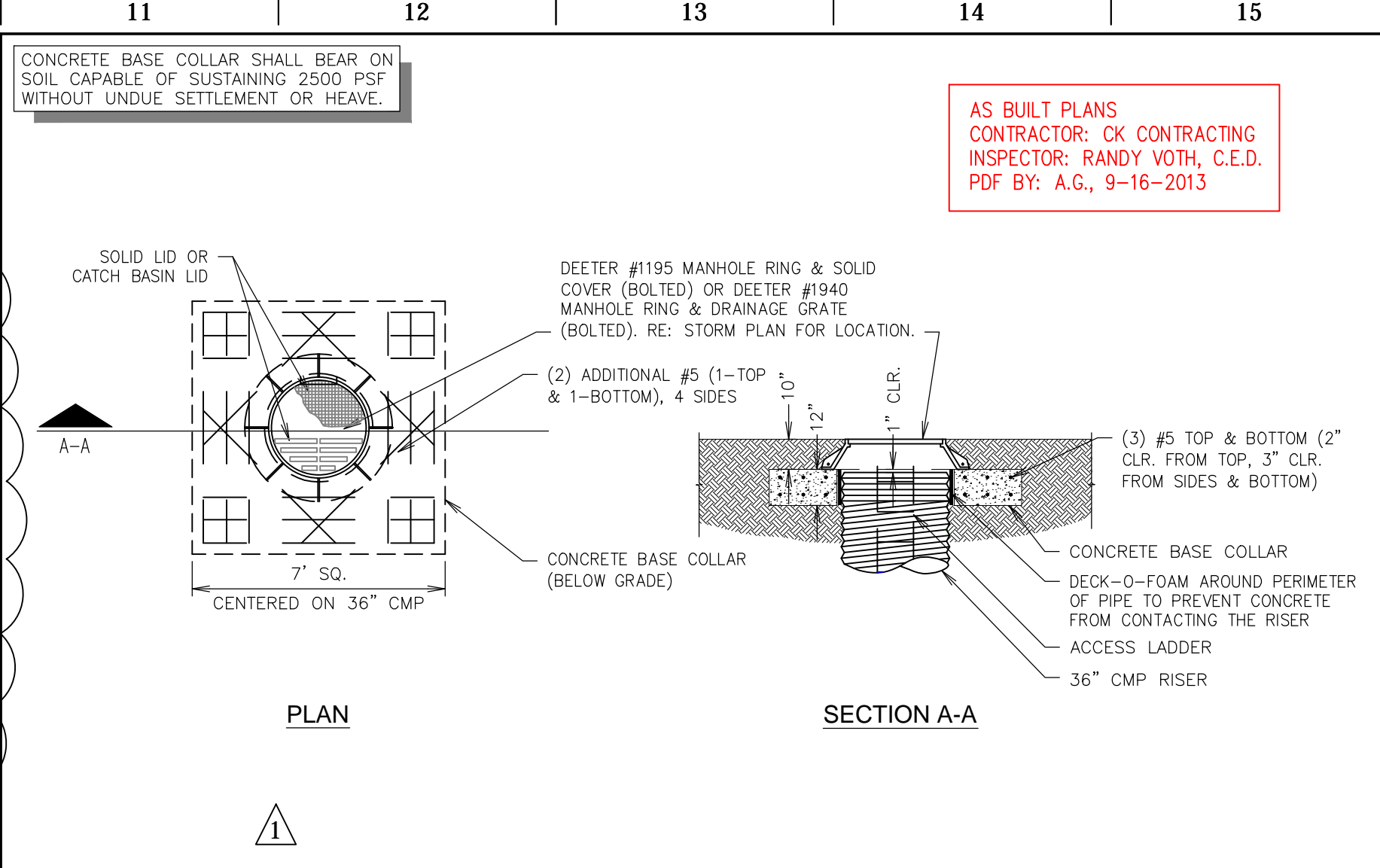
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 TAB NAME: QT DRAINAGE DETAILS 1 USER: cckw
 PLOTTED: 9/23/2013 8:35 AM
 SAVED: 9/16/2013 5:13 PM



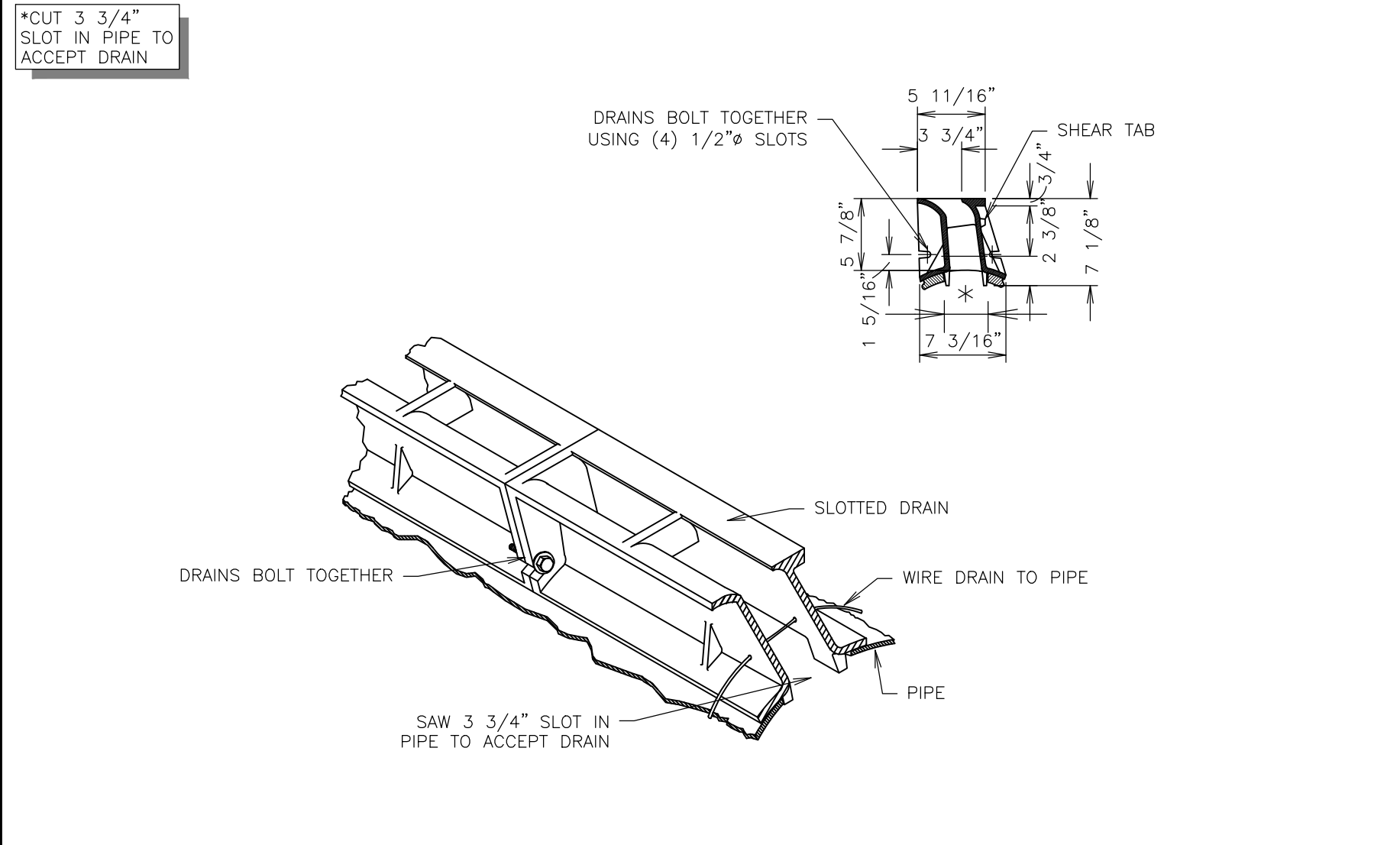
F1 CATCH BASIN INLET DETAIL (DOUBLE) Δ
 NTS SN: D00018007



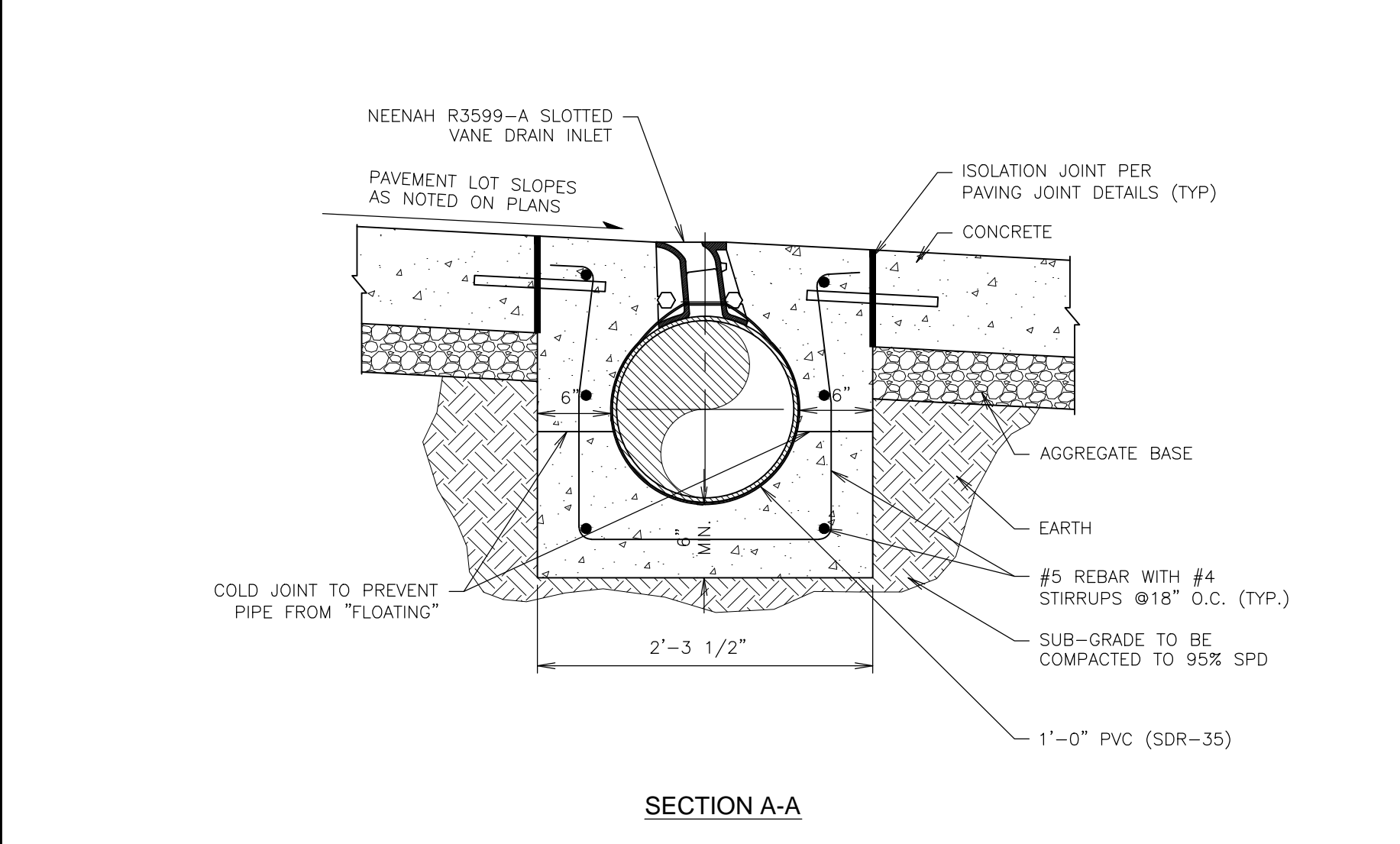
A1 SLOTTED VANE DRAIN INSTALLATION DETAIL
 NTS SN: D0005A003



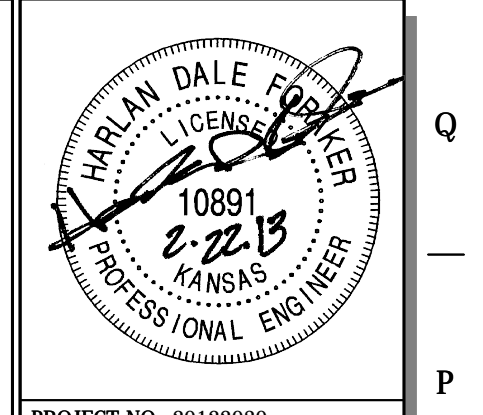
L11 DETENTION STRUCTURE RISER IN LANDSCAPED AREA DETAIL
 NTS SN: D0024B002



F11 SLOTTED VANE DRAIN (ISOMETRIC VIEW)
 NTS SN: D0007A003

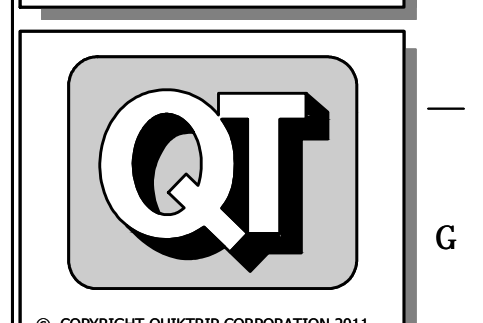


A11 SLOTTED VANE DRAIN INSTALLATION CROSS SECTION "A-A"
 NTS SN: D0006A004



PROJECT NO.: 20122030
CED
 CERTIFIED ENGINEERING DESIGN, P.A.
 1935 W. MAPLE STREET
 WICHITA, KANSAS 67213
 PH: (316)262-8809
 FAX: (316)262-1669

QuikTrip No. 0326R
 BLOCK 1, ORME & PHILLIPS ADDITION
 750 S. BROADWAY
 WICHITA, KANSAS



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PROTOTYPE: P-73 (11/01/12)
 DIVISION: WICHITA
 VERSION: 001
 DESIGNED BY: CKW
 DRAWN BY: CKW
 REVIEWED BY: MB

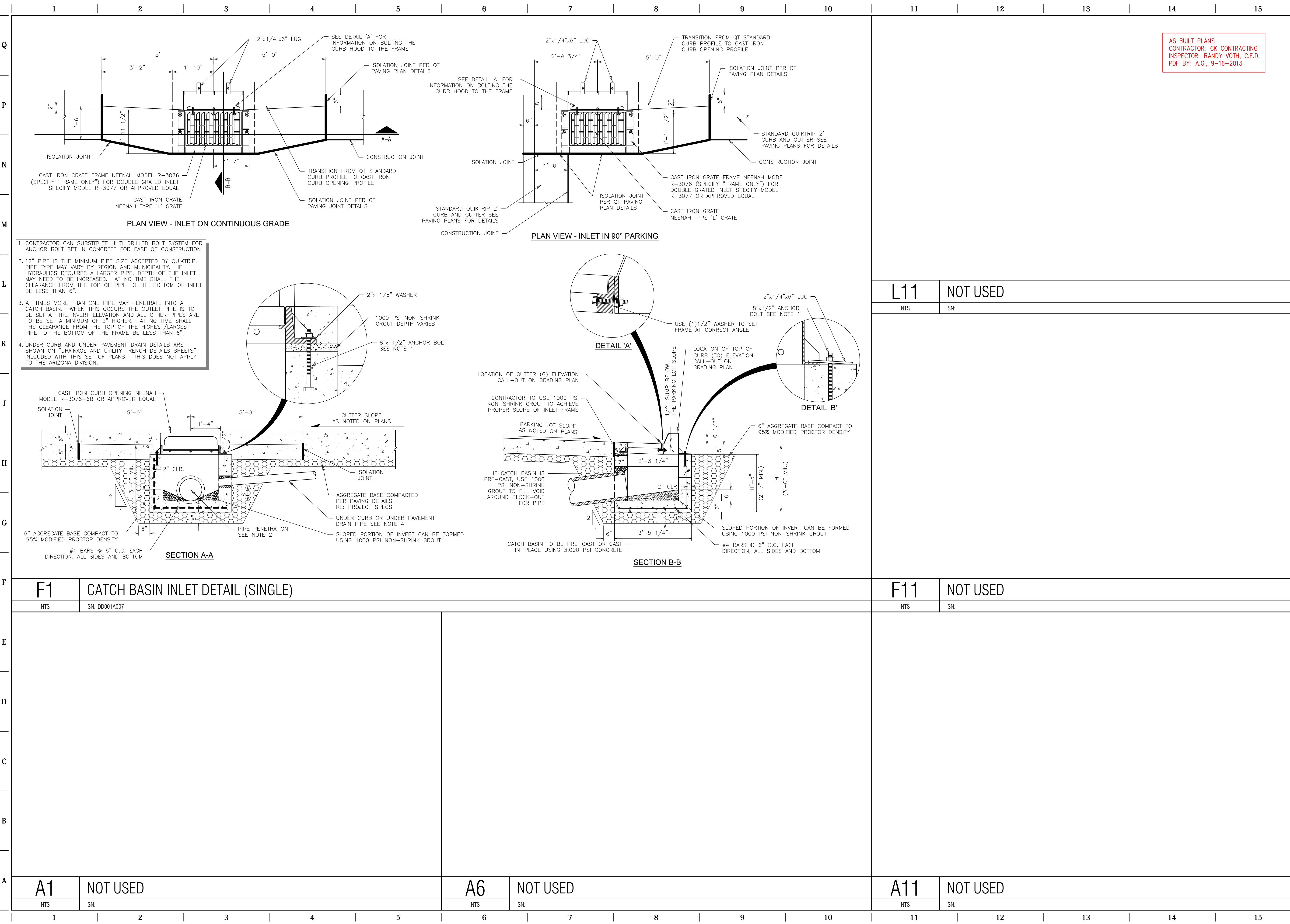
REV	DATE	DESCRIPTION
1	10/15/13	PK & CITY REVIEW COMMENTS
2	10/15/13	FINAL REVIEW MEETING COMMENTS

SHEET TITLE:
 QT DRAINAGE DETAILS 1

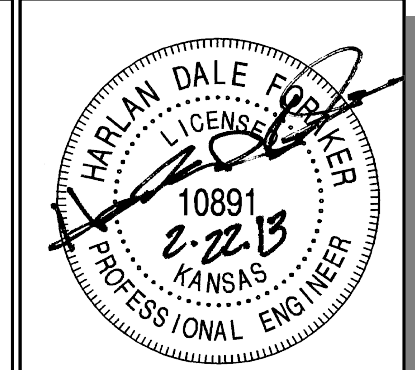
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ORIGINAL ISSUE DATE: 11/15/2012

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AS BUILT PLANS
 CONTRACTOR: CK CONTRACTING
 INSPECTOR: RANDY VOTH, C.E.D.
 PDF BY: A.G., 9-16-2013



PROJECT NO.: 20122030

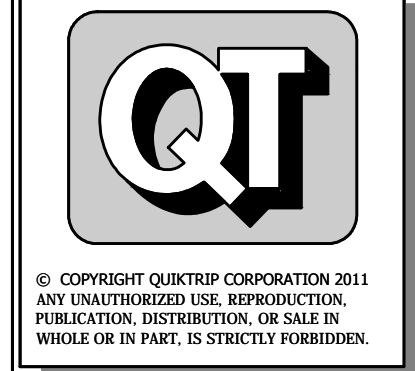
CED

CERTIFIED ENGINEERING DESIGN, P.A.

1935 W. MAPLE STREET
 WICHITA, KANSAS 67213
 PH: (316)262-8809
 FAX: (316)262-1669

QuikTrip No. 0326R

BLOCK 1, ORME & PHILLIPS ADDITION
 750 S. BROADWAY
 WICHITA, KANSAS



PROTOTYPE: P-73 (11/01/12)
 DIVISION: WICHITA
 VERSION: 001
 DESIGNED BY: CKW
 DRAWN BY: CKW
 REVIEWED BY: MB

REV	DATE	DESCRIPTION
2	10/21/13	FINAL REVIEW MEETING COMMENTS

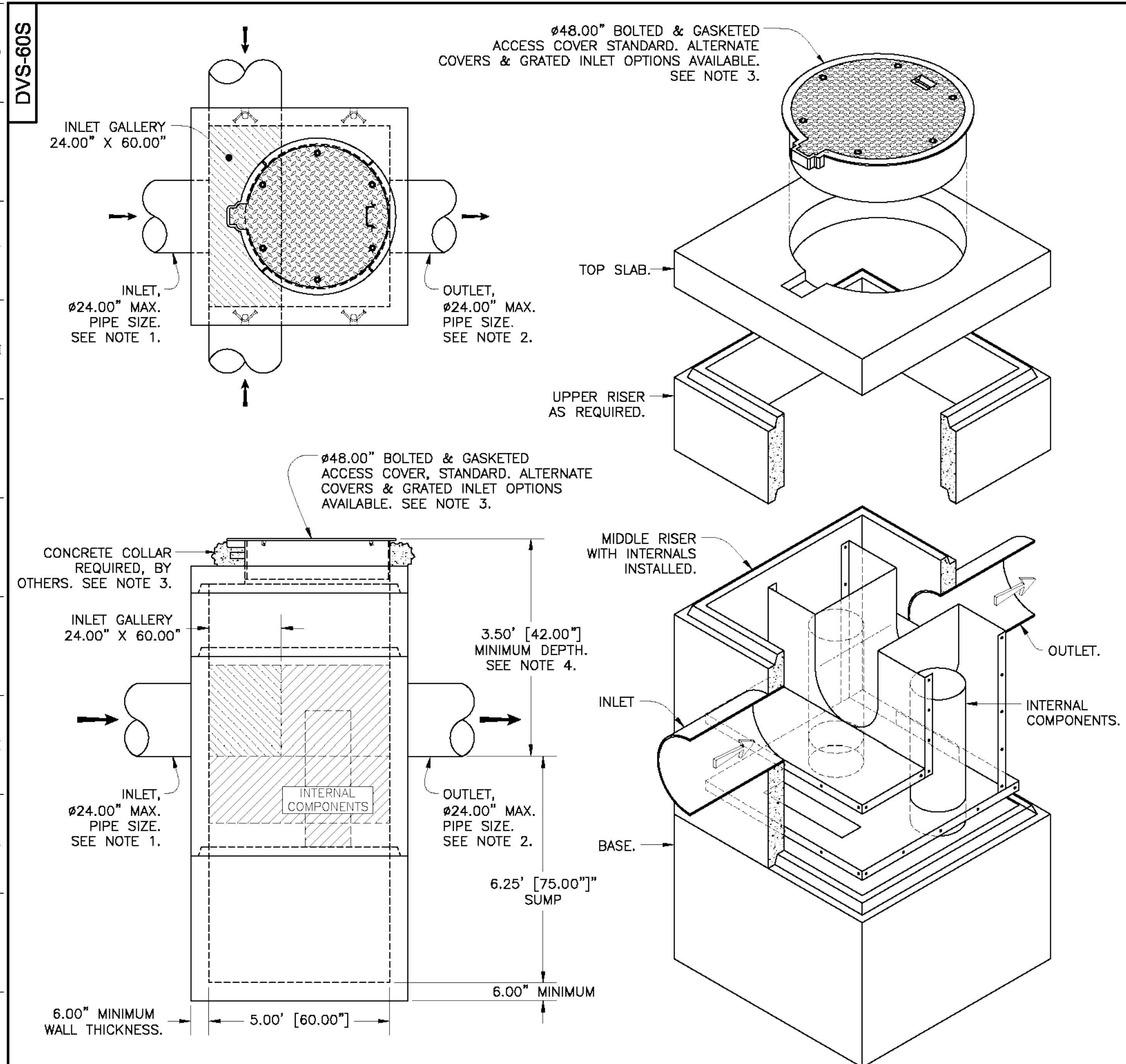
ORIGINAL ISSUE DATE: 11/15/2012

SHEET TITLE:
 QT DRAINAGE DETAILS 2

SHEET NUMBER:
 17

F1	CATCH BASIN INLET DETAIL (SINGLE)	F11	NOT USED
NTS	SN: DD001A007	NTS	SN:
A1	NOT USED	A6	NOT USED
NTS	SN:	NTS	SN:
A11	NOT USED	A11	NOT USED
NTS	SN:	NTS	SN:

FILE LOCATION: S:\Drawing Files\Project CKW 12-7-09\QT #0326R\DWG\0326R Civil-P73 (11-15-12)-PPD.dwg TAB NAME: WATER QUALITY STRUCTURE DETAILS USER: cckw Date: 5/13/2013 8:35 AM PLOTTED: 9/23/2013 8:35 AM



- NOTES:
1. ALL INLET PIPES MUST ENTER SEPARATOR AT INLET GALLERY, (OBLIQUE ANGLES ALLOWED).
 2. STANDARD OUTLET PIPE CONFIGURATION TO EXIT SEPARATOR AT THE CENTER LINE, (OBLIQUE ANGLES ALLOWED). CUSTOM OUTLET CONFIGURATIONS AVAILABLE UPON REQUEST.
 3. BOLTED & GASKETED MANHOLE ACCESS COVER ELEVATION MAY BE ADJUSTED TO GRADE. FIELD POURED CONCRETE COLLAR IS REQUIRED, BY OTHERS. INLET GRATES & ALTERNATE COVER OPTIONS AVAILABLE.
 4. FOR DEPTHS LESS THAN THE MINIMUM SHOWN CONTACT KRISTAR ENTERPRISES FOR ENGINEERING ASSISTANCE.
 5. CONCRETE COMPONENTS SHALL BE MANUFACTURED IN ACCORDANCE WITH ASTM DESIGNATION C858.
 6. REMOVABLE INTERNAL COMPONENTS MAY BE AVAILABLE TO FACILITATE MAINTENANCE. CONTACT KRISTAR ENTERPRISES FOR DETAILS.

TITLE FloGard DUAL-VORTEX HYDRODYNAMIC SEPARATOR SQUARE STRUCTURE DVS-60S		 KriStar Enterprises, Inc. 360 Sutton Place, Santa Rosa, CA 95407 Ph: 800.579.8819, Fax: 707.524.8186, www.kristar.com	
DRAWING NO.	REV	ECO	DATE
DVS-60S	A	0103 JPR	4/10/12
			JPR 4/25/11
SHEET 1 OF 1			

AS BUILT PLANS
 CONTRACTOR: CK CONTRACTING
 INSPECTOR: RANDY VOTH, C.E.D.
 PDF BY: A.G., 9-16-2013

PROJECT NO.: 20122030			
1935 W. MAPLE STREET WICHITA, KANSAS 67213 PH: (316)262-8809 FAX: (316)262-1669			
QuikTrip No. 0326R BLOCK 1, ORME & PHILLIPS ADDITION 750 S. BROADWAY WICHITA, KANSAS			
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PROTOTYPE: P-73 (11/01/12)	DIVISION: WICHITA		
VERSION: 001	DESIGNED BY: CKW		
DRAWN BY: CKW	REVIEWED BY: MB		
REV	DATE	DESCRIPTION	FINAL REVIEW MEETING COMMENTS
2	02/13/13		
			ORIGINAL ISSUE DATE: 11/15/2012
SHEET TITLE:			
WATER QUALITY STRUCTURE DETAILS			
SHEET NUMBER:			
18			