

LEGEND

△ SECTION SUBDIVISION CORNER FOUND	○ GAS METER
○ FOUND WITH PLASTIC CAP	○ MANHOLE
○ STAMPED "BAUGHMAN"	○ SANITARY SEWER MANHOLE
○ FOUND WITH PLASTIC CAP	○ CLEANOUT
○ STAMPED "R&B"	○ STORM WATER SEWER MANHOLE
○ FOUND WITH PLASTIC CAP	○ WATER METER
○ STAMPED "MKEC"	○ WATER VALVE
○ FOUND 3/4" PIPE UNKNOWN ORIGIN	○ FIRE HYDRANT
○ FOUND 1/2" PIPE UNKNOWN ORIGIN	○ MONITOR WELL
○ SET 1/2" REBAR WITH CAP	○ SPRINKLER HEAD
○ STAMPED "ALPHA CLS-184"	○ GUARD POST
○ POWER POLE	○ OVERHEAD ELECTRIC
○ TELEGRAPH POLE	○ UNDERGROUND ELECTRIC
○ LIGHT POLE	○ UNDERGROUND TELEPHONE
○ GUY ANCHOR	○ GAS LINE
○ UNDERGROUND ELECTRIC BOX	○ UNDERGROUND TELEVISION CABLE
○ UNDERGROUND TELEPHONE PEDESTAL	○ SANITARY SEWER LINE
○ UNDERGROUND CABLE TELEVISION PEDESTAL	○ WATER LINE
○ TREE / SHRUB	○ FENCE

N NORTH
 S SOUTH
 E EAST
 W WEST
 ° DEGREES
 ' FEET OR MINUTES
 " INCHES OR SECONDS
 SQ SQUARE
 FT FEET
 VOL VOLUME
 PG PAGE
 O.R. OFFICIAL RECORD
 C. CALCULATED
 R. RECORD

SCHEDULE B SECTION TWO EXCEPTIONS

EXCEPTIONS ACCORDING TO FIRST AMERICAN TITLE INSURANCE COMPANY COMMITMENT NO. 2082746 REVISION E DATED MARCH 4, 2014.

ITEMS 1 THRU 8 NOT SURVEY RELATED, THEREFOR NOT NOTED.

- THE FOLLOWING MATTERS SHOWN OR DISCLOSED BY THE FILED OR RECORDED MAP OF KENSINGTON GARDENS, SEDGWICK COUNTY, KANSAS REFERRED TO IN THE LEGAL DESCRIPTION AND FILED WITH THE SEDGWICK COUNTY CLERK AS PLAT NO. PGT4-B: BUILDING SETBACK LINES, EASEMENTS, ACCESS CONTROLS AND MINIMUM PAD ELEVATION.
- DELETED.
- DELETED.
- DELETED.
- SUBJECT PROPERTY MAY BECOME SUBJECT TO SPECIAL ASSESSMENTS FOR VARIOUS CAPITAL IMPROVEMENTS AS EVIDENCED BY NUMEROUS GOVERNMENTAL FILINGS OF NOTICE IN THE FORM OF RESOLUTION NO. 05-216 FILED DOC/FILM-PG: 28672684 AND REFLED AS DOC/FILM-PG: 28800801. (NOT SURVEY RELATED. UNABLE TO PLOT)
- DELETED.
- THE TERMS AND PROVISIONS CONTAINED IN THE DOCUMENT ENTITLED "DEVELOPMENT AGREEMENT" FILED AS DOC/FILM-PG: 29424599. (NOT SURVEY RELATED. UNABLE TO PLOT)
- THE TERMS AND PROVISIONS CONTAINED IN THE DOCUMENT ENTITLED "AN ORDINANCE OF THE CITY OF MOHTA ESTABLISHING THE K-96 STAR BOND COMMUNITY IMPROVEMENT DISTRICT" FILED AS DOC/FILM-PG: 29427884. (NOT SURVEY RELATED. UNABLE TO PLOT)
- THE FOLLOWING MATTERS DISCLOSED BY A SURVEY MADE BY ALPHA LAND SURVEYORS ON AUGUST 18, 2013, LAST UPDATED MARCH 2014, DESIGNATED JOB NO. 130200P:
 - RIGHTS OF OTHERS TO THE GRAVEL DRIVE ALONG THE SOUTHERLY BORDER OF SUBJECT PROPERTY FOR INGRESS, EGRESS, UTILITIES AND OTHER PURPOSES.
 - ENCROACHMENT OF WOVEN WIRE AND WOODEN FENCE ALONG THE SOUTH LINE OF SUBJECT PROPERTY, RIGHTS, IF ANY, OF THE OWNERS ADJACENT TO THE SOUTH OF SUBJECT PROPERTY TO THAT PORTION OF SUBJECT PROPERTY LYING SOUTH OF SAID WOVEN WIRE AND WOODEN FENCE.
- THE TERMS AND PROVISIONS CONTAINED IN THE DOCUMENT ENTITLED "MUTUAL ACCESS EASEMENT AGREEMENT" FILED AS DOC/FILM-PG: _____
- THE TERMS AND PROVISIONS CONTAINED IN THE DOCUMENT ENTITLED "MUTUAL ACCESS EASEMENT AGREEMENT" FILED AS DOC/FILM-PG: _____

SURVEYOR'S NOTES

- ACCORDING TO THE RECORDED PLAT OF KENSINGTON GARDENS LOT 1 AND RESERVE "A" HAVE A MINIMUM PAD FOR LOWEST OPENING OF 1367.1 M.S.L., 179.7 CITY DATUM AND A CONVERTED ELEVATION OF 1367.59 (NAVD88).
- AS RECORDED ON FILM 1896, PAGE 224 LOT 1 HAS A MINIMUM PAD (OPENING) ELEVATION FOR THE MAINTENANCE BUILDING OF 1377.4 M.S.L., 180.0 CITY DATUM AND A CONVERTED ELEVATION OF 1377.89 (NAVD88).
- AS RECORDED ON FILM 1896, PAGE 225 LOT 1 HAS A MINIMUM PAD (OPENING) ELEVATION FOR THE OFFICE BUILDING OF 1367.7 M.S.L., 180.3 CITY DATUM AND A CONVERTED ELEVATION OF 1368.19 (NAVD88).
- NO EVIDENCE OF ANY EARTH MOVING, BUILDING CONSTRUCTION OR BUILDING ADDITIONS ON THE SUBJECT PROPERTY.
- PROPOSED STREET RIGHT-OF-WAY AS SHOWN HEREON.
- NO EVIDENCE OF A SOLID WASTE DUMP, SLUMP OR SANITARY LANDFILL ON THE SUBJECT PROPERTY.
- THERE ARE NO WETLAND AREAS ON THE SUBJECT PROPERTY.

TITLE DESCRIPTION

EXCEPTIONS ACCORDING TO FIRST AMERICAN TITLE INSURANCE COMPANY COMMITMENT NO. 2082746 REVISION E DATED MARCH 4, 2014.

PARCEL 1:
A PORTION OF RESERVE "A", KENSINGTON GARDENS, SEDGWICK COUNTY, KANSAS DESCRIBED AS FOLLOWS:
BEGINNING AT THE NORTHWEST CORNER OF LOT 1 OF SAID KENSINGTON GARDENS; THENCE SOUTH 89°17'45" WEST (BASIS OF BEARING IS NAD83 GRID KANSAS SOUTH ZONE) ALONG THE SOUTH LINE OF SAID RESERVE "A" A DISTANCE OF 559.77 FEET (560.00 FEET RECORDED) TO THE EASTERLY RIGHT-OF-WAY LINE OF GREENWICH ROAD, SAID LINE ALSO BEING THE NORTH LINE OF SAID LOTS 10 AND 11, BLOCK 1, VILLAGE AT GREENWICH ADDITION, MOHTA, SEDGWICK COUNTY, KANSAS; THENCE NORTH 0°43'24" WEST ALONG THE EASTERLY RIGHT-OF-WAY LINE OF GREENWICH ROAD 574.37 FEET (574.73 FEET RECORDED); THENCE NORTH 58°27'27" EAST ALONG THE SOUTHERLY RIGHT-OF-WAY LINE OF K-96 HIGHWAY 114.13 FEET (114.17 FEET RECORDED); THENCE NORTH 87°05'55" EAST ALONG THE SOUTHERLY RIGHT-OF-WAY LINE OF K-96 HIGHWAY 411.65 FEET (411.71 FEET RECORDED); THENCE SOUTH 88°11'43" EAST ALONG THE SOUTHERLY RIGHT-OF-WAY LINE OF K-96 HIGHWAY 255.14 FEET (255.05 FEET RECORDED); THENCE SOUTH 79°21'28" EAST ALONG THE SOUTHERLY RIGHT-OF-WAY LINE OF K-96 HIGHWAY 273.04 FEET (273.06 FEET RECORDED); THENCE SOUTH 66°46'02" EAST ALONG THE SOUTHERLY RIGHT-OF-WAY LINE OF K-96 HIGHWAY 182.71 FEET (182.74 FEET RECORDED); THENCE NORTH 23°12'52" EAST ALONG THE SOUTHERLY RIGHT-OF-WAY LINE OF K-96 HIGHWAY 30.01 FEET (30.00 FEET RECORDED); THENCE SOUTH 66°46'02" EAST ALONG THE SOUTHERLY RIGHT-OF-WAY LINE OF K-96 HIGHWAY 52.55 FEET; THENCE SOUTH 10°00'53" EAST 515.78 FEET TO THE EXTENSION OF THE SOUTH LINE OF SAID RESERVE "A"; THENCE SOUTH 89°17'45" WEST ALONG THE SOUTH LINE OF SAID RESERVE "A" AND THE EXTENSIONS THEREOF 702.02 FEET TO THE POINT OF BEGINNING.

PARCEL 2:
A NON-EXCLUSIVE EASEMENT FOR THE BENEFIT OF PARCEL 1 AS CREATED BY THE "MUTUAL ACCESS EASEMENT AGREEMENT" FILED ON DOC/FILM-PG: _____ FOR INGRESS AND EGRESS OVER AND ACROSS THE FOLLOWING PROPERTY DESCRIBED THEREIN.

PARCEL 3:
A NON-EXCLUSIVE EASEMENT FOR THE BENEFIT OF PARCEL 1 AS CREATED BY THE "MUTUAL ACCESS EASEMENT AGREEMENT" FILED ON DOC/FILM-PG: _____ FOR INGRESS AND EGRESS OVER AND ACROSS THE FOLLOWING PROPERTY DESCRIBED THEREIN.

BENCH MARKS

SITE DATUM: CHISELED SQUARE IN TOP OF IN TOP OF CURB ON WEST END OF ISLAND 42.2 FEET NORTH AND 4.8 FEET EAST OF THE NORTHWEST CORNER OF LOT 7 AS RECORDED ON THE PLAT OF VILLAGE AT GREENWICH ADDITION AT THE REGISTER OF DEEDS, SEDGWICK COUNTY, KANSAS.
ELEVATION=1368.975(NAVD029)
ELEVATION=1367.46(NAVD88)

SBM-1: CHISELED SQUARE IN CENTER OF INLET ON THE EAST SIDE OF NORTH GREENWICH ROAD 12.8 FEET SOUTH AND 14.1 FEET WEST OF THE SOUTHWEST CORNER OF SUBJECT PROPERTY.
ELEVATION=1368.92(NAVD88)

SBM-2: CHISELED SQUARE IN CENTER OF INLET ON THE EAST SIDE OF NORTH GREENWICH ROAD 8.5 FEET NORTH AND 19.6 FEET WEST OF THE NORTHWEST CORNER OF SUBJECT PROPERTY.
ELEVATION=1367.72(NAVD88)

POSSIBLE ENCROACHMENTS

- ALONG THE SOUTH PROPERTY LINE OF THE SUBJECT PROPERTY IT APPEARS THE WOVEN WIRE AND WOODEN FENCE RUNNING ALONG SAID PROPERTY LINES MEANDER ON AND OFF THE PROPERTY.

SURVEYOR'S CERTIFICATE

ALTA/ACSM LAND TITLE SURVEY
FOR
SF-WOHTA-L.P., A TEXAS LIMITED PARTNERSHIP
BANK OF THE OZARKS AND ITS SUCCESSORS AND ASSIGNS
KENSINGTON GARDENS, L.L.C., A KANSAS LIMITED LIABILITY COMPANY
AND
FIRST AMERICAN TITLE INSURANCE COMPANY

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2011 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/ACSM LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 3, 4, 6(B), 8, 11(A), 13, 14, 16, 17, 18 AND 19 OF TABLE A THEREOF. THE FIELD WORK WAS COMPLETED ON AUGUST 19, 2013.

LLOYD P. DORNWELLER, LS 885, IN THE STATE OF KANSAS
216 WEST SECOND AVENUE
HUTCHINSON, KANSAS 67501
PH: (620)728-0012 FAX: (620) 728-0413
EMAIL: LLOYD@ALPHALANDSURVEYS.COM

2	03/21/2014	REVISIONS PER LEADERS REQUEST
1	03/19/2014	REVISIONS PER LEADERS REQUEST
REVISION NO.	DATE	DESCRIPTION
SURVEY FOR		
THE SEITZ GROUP, INC.		
SURVEY TYPE		
ALTA/ACSM LAND TITLE SURVEY		
Alpha Land Surveys, Inc. 216 WEST SECOND AVENUE HUTCHINSON, KANSAS 67501 PH: (620) 728-0012 FAX: (620) 728-0413		
SURVEY DATE:	08/19/2013	PLOT DATE: 09/27/2013
DRAWN BY:	RDB	PROJ. NO.: 130200P

UTILITY NOTES

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE BY KANSAS ONE-CALL TICKET NO.: 13324153, 13324154, 13324157, 13324162, AND 13324165 DATED APRIL 20, 2011. THIS SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

FLOOD INFORMATION

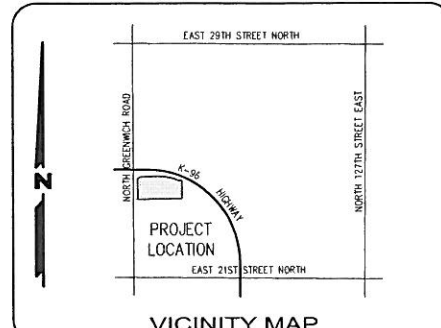
THE PROPERTY IS NOT LOCATED IN A 100 YEAR FLOOD PLAIN OR IN AN IDENTIFIED "FLOOD PRONE AREA" AS DEFINED BY THE U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT, PURSUANT TO THE FLOOD DISASTER PROTECTION ACT OF 1973, AS AMENDED, AS REFLECTED BY MOHTA, KANSAS FLOOD INSURANCE RATE MAP PANEL # 2017303377E, DATED FEBRUARY 2, 2007, WHICH SAID MAP PANEL COVERS THE AREA IN WHICH THE PROPERTY IS SITUATED. THE PROPERTY IS LOCATED WITHIN ZONE "X". THE ADDRESS OF THE PROPERTY IS UNKNOWN AT THIS TIME.

ZONING INFORMATION

GENERAL DESCRIPTION:
SF-5 SINGLE-FAMILY RESIDENTIAL DISTRICT

HEIGHT RESTRICTIONS:
35 FEET.

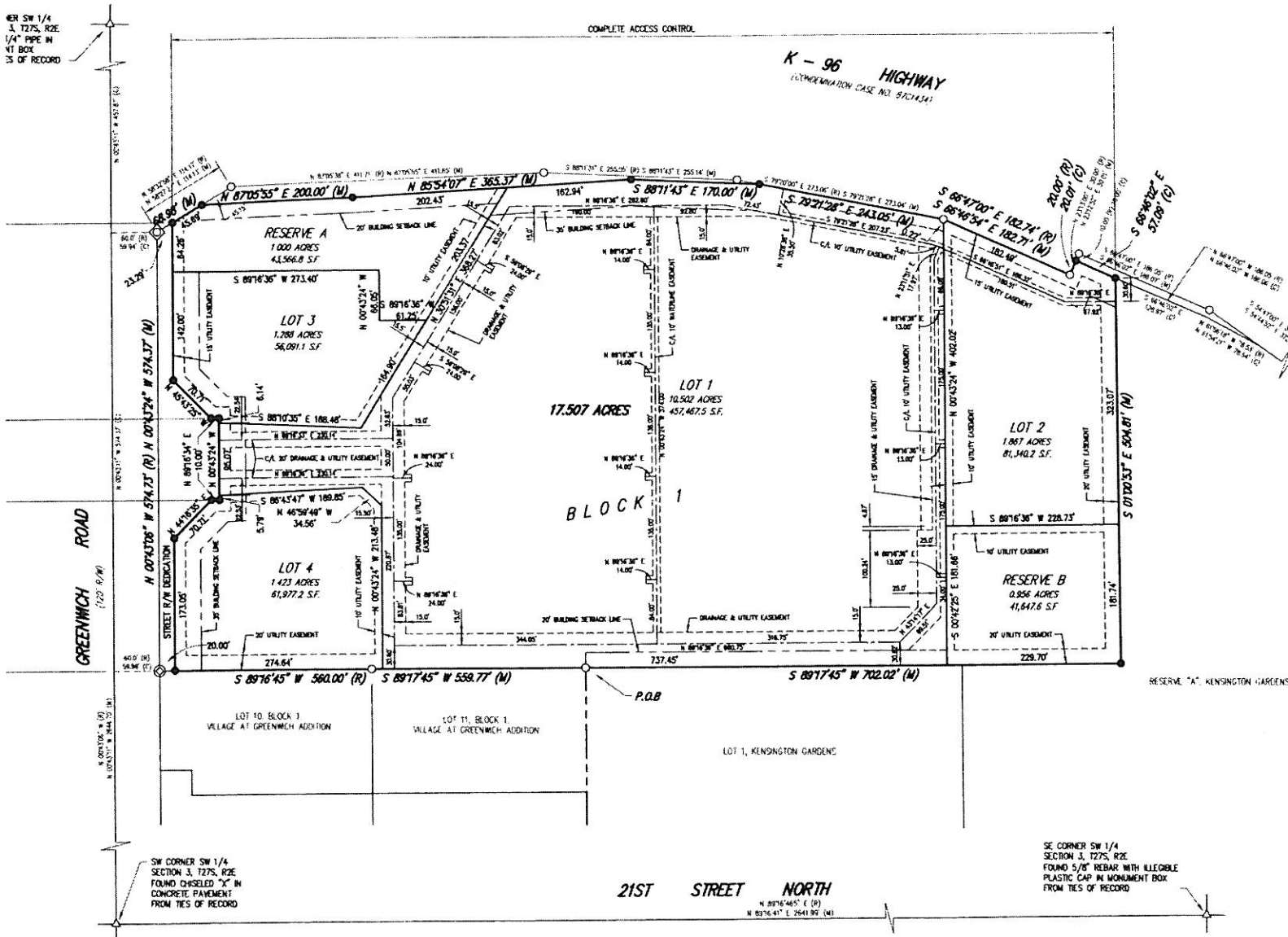
SETBACK REQUIREMENTS:
FRONT YARD SETBACK - 25 FEET PER ZONING CODE.
SIDE YARD SETBACK - 35 FEET PER RECORD SUBDIVISION.
REAR YARD SETBACK - 6 FEET.
REAR YARD SETBACK - 20 FEET.



FINAL PLAT

WICHITA CROSSING

AN ADDITION TO WICHITA, SEDGWICK COUNTY, KANSAS.



SURVEYOR'S CERTIFICATE AND DESCRIPTION

I, LLOYD P. DORZWEILER, A LICENSED LAND SURVEYOR OF THE STATE OF KANSAS, DO HEREBY CERTIFY THAT THE FOLLOWING DESCRIBED TRACT OF LAND WAS SURVEYED ON 23rd DAY OF September, 2014 AND THE ACCOMPANYING FINAL PLAT PREPARED AND THAT ALL MONUMENTS SHOWN HEREIN ACTUALLY EXIST AND THEIR POSITIONS ARE CORRECTLY SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF.

A PORTION OF RESERVE "A", KENSINGTON GARDENS, SEDGWICK COUNTY, KANSAS DESCRIBED AS FOLLOWS:
 BEGINNING AT THE NORTHWEST CORNER OF LOT 1 OF SAID KENSINGTON GARDENS, THENCE SOUTH 89°17'45" WEST (BASIS OF BEARING IS NAD83 GRID KANSAS SOUTH ZONE) ALONG THE SOUTH LINE OF SAID RESERVE "A" A DISTANCE OF 559.77 FEET (560.00 FEET RECORD) TO THE EASTERLY RIGHT-OF-WAY LINE OF GREENWICH ROAD, SAID LINE ALSO BEING THE NORTH LINE OF SAID LOTS 10 AND 11, BLOCK 1, VILLAGE AT GREENWICH ADDITION, WICHITA, SEDGWICK COUNTY, KANSAS; THENCE NORTH 00°42'24" WEST ALONG THE EASTERLY RIGHT-OF-WAY LINE OF GREENWICH ROAD 574.37 FEET (574.73 FEET RECORD) TO THE SOUTHERLY RIGHT-OF-WAY LINE OF K-96 HIGHWAY 68.98 FEET; THENCE NORTH 87°05'55" EAST ALONG THE SOUTHERLY RIGHT-OF-WAY LINE OF K-96 HIGHWAY 200.00 FEET; THENCE NORTH 85°54'07" EAST ALONG THE SOUTHERLY RIGHT-OF-WAY LINE OF K-96 HIGHWAY 165.37 FEET; THENCE SOUTH 88°11'43" EAST ALONG THE SOUTHERLY RIGHT-OF-WAY LINE OF K-96 HIGHWAY 170.00 FEET; THENCE SOUTH 79°21'28" EAST ALONG THE SOUTHERLY RIGHT-OF-WAY LINE OF K-96 HIGHWAY 243.05 FEET; THENCE SOUTH 66°46'54" EAST ALONG THE SOUTHERLY RIGHT-OF-WAY LINE OF K-96 HIGHWAY 182.71 FEET (182.74 FEET RECORD); THENCE NORTH 23°12'52" EAST ALONG THE SOUTHERLY RIGHT-OF-WAY LINE OF K-96 HIGHWAY 20.01 FEET; THENCE SOUTH 66°46'02" EAST ALONG THE SOUTHERLY RIGHT-OF-WAY LINE OF K-96 HIGHWAY 57.09 FEET; THENCE SOUTH 01°00'53" EAST 504.81 FEET TO THE EXTENSION OF THE SOUTH LINE OF SAID RESERVE "A"; THENCE SOUTH 89°17'45" WEST ALONG THE SOUTH LINE OF SAID RESERVE "A" AND THE EXTENSIONS THEREOF 702.02 FEET TO THE POINT OF BEGINNING, CONTAINING 17.507 ACRES.

EXISTING PUBLIC EASEMENTS AND DEDICATIONS ARE BEING VACATED BY VIRTUE OF K.S.A. 12-512B AS AMENDED.



OWNER'S CERTIFICATE AND DEDICATION

STATE OF KANSAS)
) SS
 SEDGWICK COUNTY)

THIS IS TO CERTIFY THAT THE UNDERSIGNED OWNER(S) OF THE LAND DESCRIBED IN THE SURVEYOR'S CERTIFICATE, HAVE CAUSED THE SAME TO BE SURVEYED AND SUBDIVIDED ON THE ACCOMPANYING PLAT INTO LOTS, BLOCKS, STREETS, AND RESERVES UNDER THE NAME OF WICHITA CROSSING AN ADDITION TO WICHITA, SEDGWICK COUNTY, KANSAS.

THIS PLAT SHALL CONFORM TO THE RECITALS OF THE K-96 AND GREENWICH SOUTH COMMUNITY UNIT PLAN (CUP2012-00026, DP-328).

LOTS 1, 2, 3 AND 4, BLOCK 1, ARE REQUIRED TO ADHERE TO THE MINIMUM PAD ELEVATIONS AS SHOWN ON THE "MINIMUM PAD ELEVATIONS" TABLE.

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

ALL STREETS ARE HEREBY DEDICATED TO AND FOR THE USE OF THE PUBLIC.

ACCESS CONTROLS SHALL BE AS DEPICTED ON THE FACE OF THE PLAT AND ARE HEREBY GRANTED TO THE APPROPRIATE GOVERNING BODY.

RESERVES A AND B ARE PLATTED FOR STORMWATER DETENTION, LANDSCAPING, AND IRRIGATION. RESERVES A AND B SHALL BE OWNED AND MAINTAINED BY THE LOT OWNER'S ASSOCIATION.

A DRAINAGE PLAN HAS BEEN DEVELOPED FOR THE PLAT. ALL DRAINAGE EASEMENTS, RIGHTS-OF-WAY, OR RESERVES SHALL REMAIN AT ESTABLISHED GRADES AND UNOBTSTRUCTED TO ALLOW FOR CONVEYANCE OF STORMWATER, UNLESS MODIFIED WITH THE APPROVAL OF THE APPLICABLE CITY OF COUNTY ENGINEER.

BY: SF-WICHITA-GP, L.P. GENERAL PARTNER OF SF-WICHITA-GP, L.P.
 R. Eric Seitz, President of SF-WICHITA GP, LLC

NOTARY CERTIFICATE

STATE OF KANSAS, COUNTY OF SEDGWICK) SS:
 THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME THIS 15th DAY OF October, 2014 BY R. Eric Seitz, PRESIDENT OF SF-WICHITA GP, LLC.

Lynette S. Rudkin, NOTARY PUBLIC
 MY COMMISSION EXPIRES: 12-16-14



LOT NUMBER	ELEVATION
1	1372.0 (NAVD88)
2	1372.0 (NAVD88)
3	1372.0 (NAVD88)
4	1372.0 (NAVD88)

BENCH MARKS

SITE DATUM: CHISELED SQUARE IN TOP OF CURB ON WEST END OF ISLAND 42.2 FEET NORTH AND 4.8 FEET EAST OF THE NORTHWEST CORNER OF LOT 7 AS RECORDED ON THE PLAT OF VILLAGE AT GREENWICH ADDITION AT THE REGISTER OF DEEDS, SEDGWICK COUNTY, KANSAS.
 ELEVATION=1366.975(NGVD29)
 ELEVATION=1367.46(NAVD88)

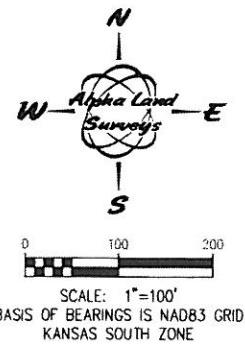
SBM-1: CHISELED SQUARE IN CENTER OF INLET ON THE EAST SIDE OF NORTH GREENWICH ROAD 12.8 FEET SOUTH AND 14.1 FEET WEST OF THE SOUTHWEST CORNER OF SUBJECT PROPERTY.
 ELEVATION=1368.92(NAVD88)

SBM-2: CHISELED SQUARE IN CENTER OF INLET ON THE EAST SIDE OF NORTH GREENWICH ROAD 63.5 FEET NORTH AND 19.6 FEET WEST OF THE NORTHWEST CORNER OF SUBJECT PROPERTY.
 ELEVATION=1367.72(NAVD88)

LEGEND OF SYMBOLS & ABBREVIATIONS

- △ SECTION SUBDIVISION CORNER FOUND
- FOUND WITH PLASTIC CAP STAMPED "BAUGHMAN"
- ⊙ FOUND WITH PLASTIC CAP STAMPED "R&B"
- ⊙ FOUND WITH PLASTIC CAP STAMPED "MKEC"
- ⊙ FOUND 3/4" PIPE UNKNOWN ORIGIN
- ⊙ FOUND 1/2" PIPE UNKNOWN ORIGIN
- ⊙ SET 1/2" REBAR WITH CAP STAMPED "ALPHA CLS-184"
- SET 1/2" REBAR WITH CAP STAMPED "ALPHA CLS-184" IN CONCRETE

N. NORTH
 S. SOUTH
 E. EAST
 W. WEST
 ° DEGREES
 ' FEET OR MINUTES
 " INCHES OR SECONDS
 SQ. SQUARE
 FT. FEET
 VOL. VOLUME
 PCL. PAGE
 O.R. OFFICIAL RECORD
 C. CALCULATED
 R. RECORD
 M. MEASURED



FLOOD NOTE

THIS PROPERTY IS LOCATED WITHIN FLOOD ZONE "X" (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) AS DETERMINED BY THE NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAP FOR SEDGWICK COUNTY, KANSAS, COMMUNITY PANEL NUMBER 20173C0377E. EFFECTIVE DATE: FEBRUARY 2, 2007.

MORTGAGE CERTIFICATE

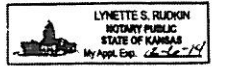
INTRUST BANK, N.A., HOLDER OF A MORTGAGE ON THE ABOVE DESCRIBED PROPERTY, DOES HEREBY CONSENT TO THE PLAT OF WICHITA CROSSING AN ADDITION TO WICHITA, SEDGWICK COUNTY, KANSAS.

INTRUST BANK, N.A.
 Dan Jones, COMMERCIAL REAL ESTATE LENDING RELATIONSHIP MANAGER
 STATE OF KANSAS, COUNTY OF SEDGWICK) SS:

THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME THIS 16th DAY OF October, 2014. DAN JONES, COMMERCIAL REAL ESTATE LENDING RELATIONSHIP MANAGER, INTRUST BANK, N.A.

IN WITNESS WHEREOF, I HAVE HEREUNTO SET MY HAND AND AFFIXED MY OFFICIAL SEAL, THE DAY AND YEAR FIRST ABOVE WRITTEN.

Lynette S. Rudkin, NOTARY PUBLIC
 MY COMMISSION EXPIRES: 12/16/14



PLANNING COMMISSION CERTIFICATE

STATE OF KANSAS, CITY OF WICHITA) SS:

THIS PLAT OF WICHITA CROSSING AN ADDITION TO WICHITA, SEDGWICK COUNTY, KANSAS HAS BEEN APPROVED BY THE WICHITA-SEDGWICK COUNTY METROPOLITAN AREA PLANNING COMMISSION, WICHITA, KANSAS.

DATED THIS 14th DAY OF SEPTEMBER, 2014.

WICHITA-SEDGWICK COUNTY METROPOLITAN AREA PLANNING COMMISSION

Matthew Croshby, CHAIR
John L. Schegel, SECRETARY



GOVERNING BODY CERTIFICATE

STATE OF KANSAS, CITY OF WICHITA) SS:

THIS PLAT APPROVED AND ALL DEDICATIONS SHOWN HEREON, IF ANY, ARE ACCEPTED BY CITY COUNCIL OF THE CITY OF WICHITA, KANSAS, THIS 23rd DAY OF November, 2014.

Carl Brewer, MAYOR
Karen Sublett, CITY CLERK

TRANSFER RECORD

ENTERED ON TRANSFER RECORD THIS 16th DAY OF December, 2014.

Kelly B. Arnold, COUNTY CLERK



REGISTER OF DEEDS

STATE OF KANSAS, CITY OF WICHITA) SS:

THIS IS TO CERTIFY THAT THIS INSTRUMENT WAS FILED FOR RECORD IN THE REGISTER OF DEEDS OFFICE, AT 4:14:15 (A.M.) (P.M.), ON THIS 16th DAY OF December, 2014.

Bill MEEK, REGISTER OF DEEDS
Tonya Buckingham, DEPUTY

COUNTY SURVEYOR CERTIFICATE

STATE OF KANSAS, SEDGWICK COUNTY) SS:

I HEREBY CERTIFY THAT THIS SURVEY HAS BEEN REVIEWED FOR FILING, PURSUANT TO K.S.A. 58-2005 AND K.S.A. 58-2001 FOR CONTENT ONLY AND IS IN COMPLIANCE WITH THOSE PROVISIONS. NO OTHER WARRANTIES ARE EXTENDED OR IMPLIED.

Tricia L. Robello, COUNTY SURVEYOR

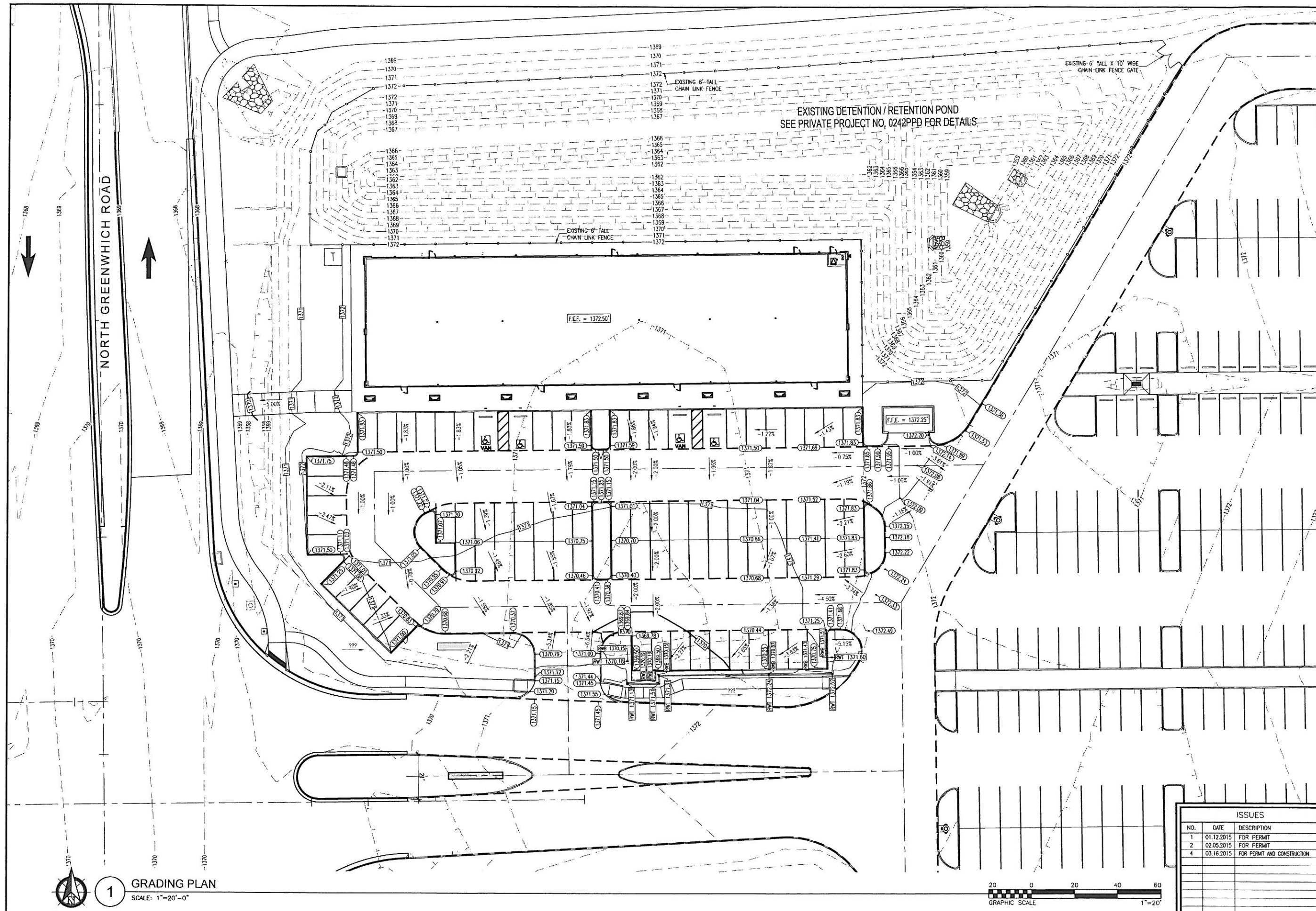


Register of Deeds - 311 West
 Doc #/File #/ 23495812
 Page Recorded: 1
 Recording Fee: \$20.00

Author: Jpeg
 Date Recorded: 12/16/2014 04:18:15 PM

Alpha Land Surveys, Inc.
 216 WEST SECOND AVENUE
 HUTCHINSON, KANSAS 67501
 PH: (620) 728-0012 FAX: (620) 728-0413

SURVEY DATE: 08/19/2013 PLOT DATE: 10/08/2014

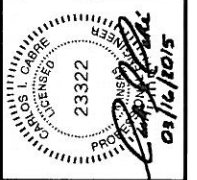


1 GRADING PLAN
SCALE: 1"=20'-0"



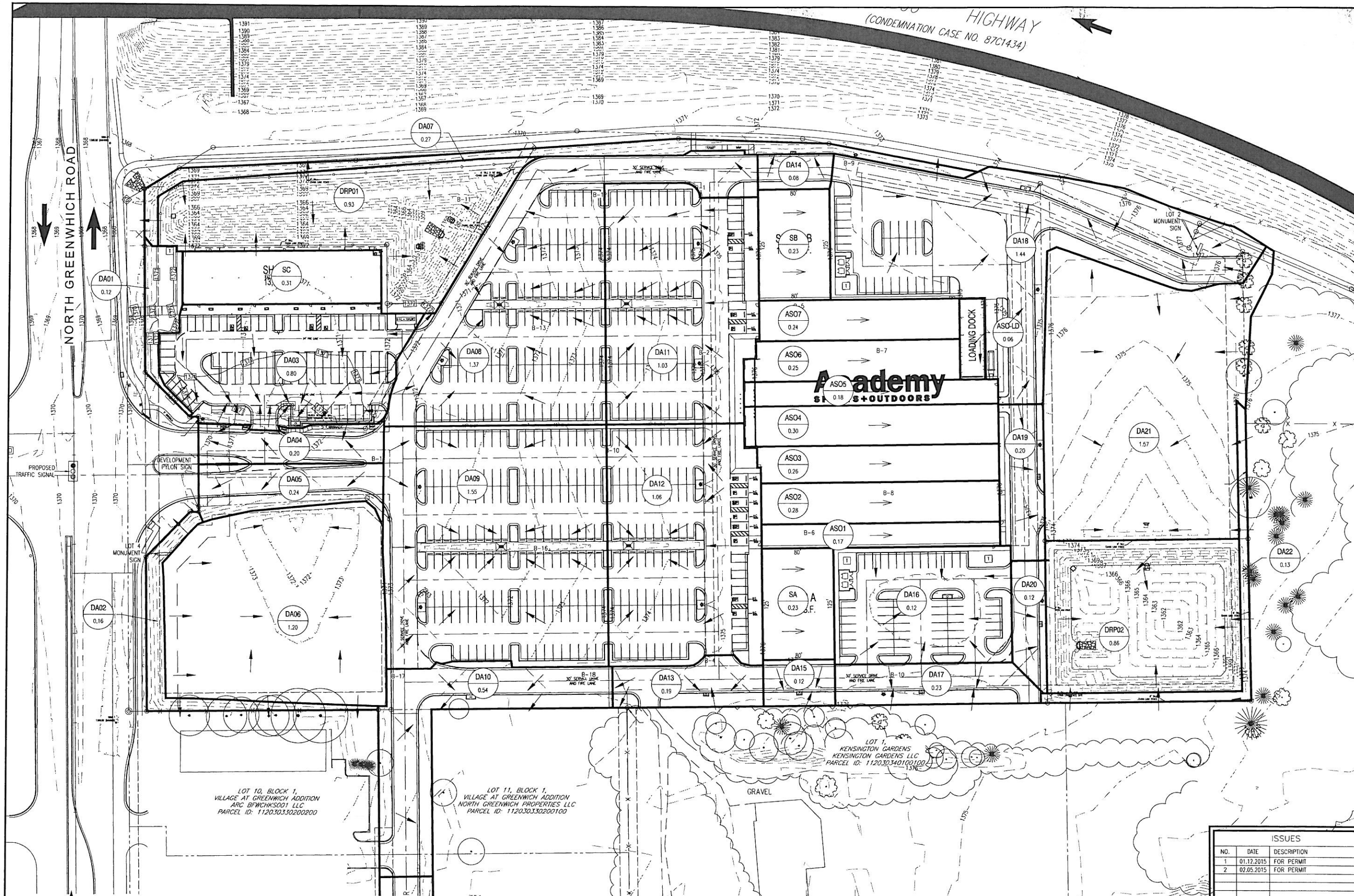
ISSUES		
NO.	DATE	DESCRIPTION
1	01.12.2015	FOR PERMIT
2	02.05.2015	FOR PERMIT
4	03.16.2015	FOR PERMIT AND CONSTRUCTION

DRAWING TITLE: GRADING PLAN
DATE: MARCH 16, 2015
SCALE: 1"=20'
JOB NUMBER: 12-09
DRAWING NUMBER: C-3.0



WICHITA CROSSING - LOT 3
LOT 3, BLOCK 1, WICHITA CROSSING
AN ADDITION TO WICHITA
SEDGWICK COUNTY, KANSAS

SPAIN SHIVA GROUP
HYDROLOGICAL & CIVIL ENGINEERS
5729 LEBANON ROAD, SUITE 144
FRISCO, TX 75034
T. 214-705-1078 F. 214-407-8912



HIGHWAY 144
(CONDEMNATION CASE NO. 87C1434)

NORTH GREENWICH ROAD

1 STORMWATER PROPOSED DRAINAGE AREA MAP
SCALE: 1"=50'-0"

LOT 10, BLOCK 1,
VILLAGE AT GREENWICH ADDITION
ARC BFWCHKS001 LLC
PARCEL ID: 112030330200200

LOT 11, BLOCK 1,
VILLAGE AT GREENWICH ADDITION
NORTH GREENWICH PROPERTIES LLC
PARCEL ID: 112030330200100

LOT 1,
KENSINGTON GARDENS
KENSINGTON GARDENS LLC
PARCEL ID: 112030340100100



ISSUES		
NO.	DATE	DESCRIPTION
1	01.12.2015	FOR PERMIT
2	02.05.2015	FOR PERMIT

DATE: FEBRUARY 05, 2015
SCALE: 1"=50'
JOB NUMBER: 12-09
DRAWING NUMBER: C-4.1



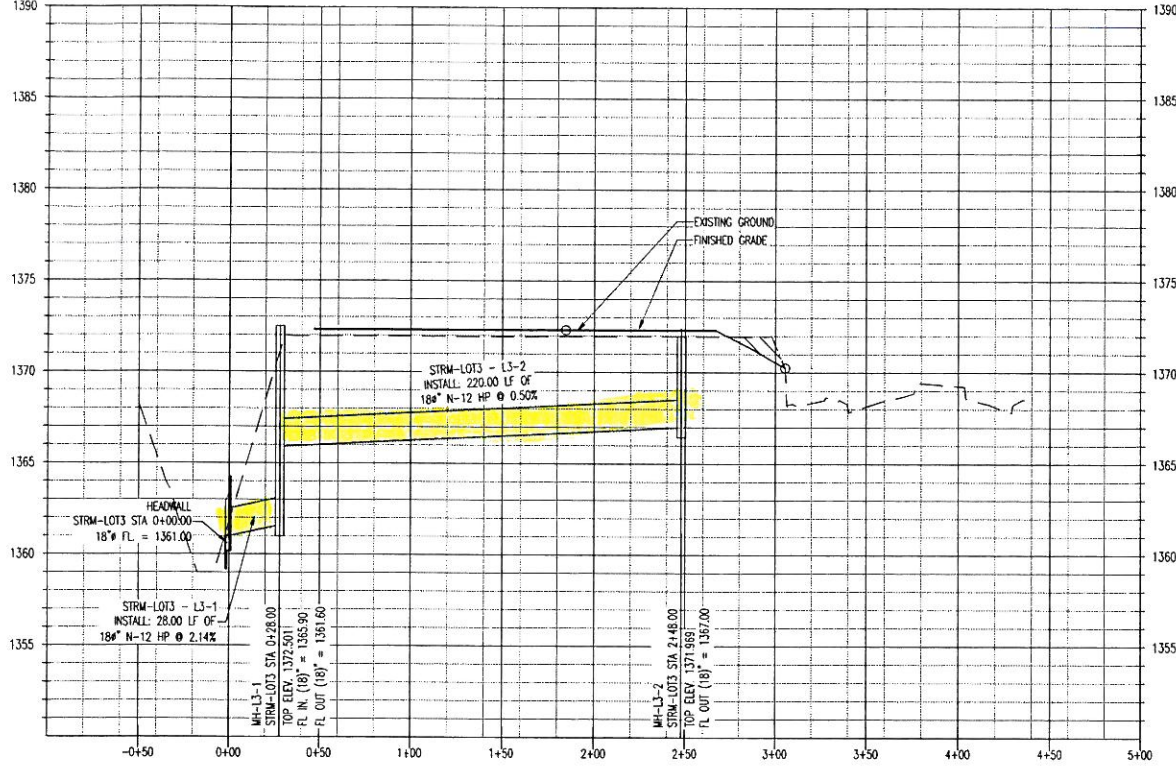
Carlos I. Cabré, P.E.
Development & Engineering Consultant
Professional Engineer License No. 23322
State of Kansas
www.carloscabre.com

DRAWING TITLE: STORMWATER PROPOSED DRAINAGE AREA MAP
THIS DOCUMENT REPRESENTS THE DESIGN EFFORT OF CARLOS I. CABRE, P.E. AND IS ISSUED AS AN INSTRUMENT OF SERVICE FOR THE SUBJECT PROJECT. IT IS NOT TO BE USED FOR ANY OTHER PROJECTS OR EXTENSIONS TO THIS PROJECT, UNLESS AUTHORIZED IN WRITING BY CARLOS I. CABRE, P.E.

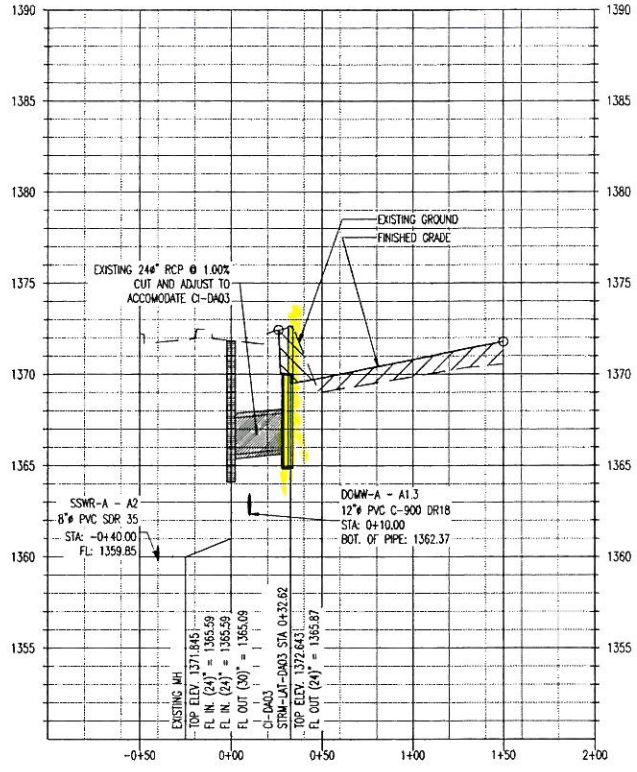
WICHITA CROSSING - LOT 3
LOT 3, BLOCK 1, WICHITA CROSSING
AN ADDITION TO WICHITA
SEDGWICK COUNTY, KANSAS

THE SHEZ GROUP
Development & Survey/Brokers/Planners
5729 LEBANON ROAD, SUITE 144
FRISCO, TX 75034
T. 214-705-1078 F. 214-407-8912

STRM-LOT3
STORM SEWER LOT 3



STRM-LAT-DA03 - STORM SEWER LATERAL DA03



THE SHIVA GROUP
 DEVELOPMENT & SURVEYING PROFESSIONALS
 5729 LEBANON ROAD, SUITE 144
 FRISCO, TX 75034
 T. 214-705-1078 F. 214-407-8912

WICHITA CROSSING - LOT 3
 LOT 3, BLOCK 1, WICHITA CROSSING
 AN ADDITION TO WICHITA
 SEDGWICK COUNTY, KANSAS



DRAWING TITLE:
STORMWATER DRAINAGE PROFILES

THIS DOCUMENT REPRESENTS THE DESIGN EFFORT OF CARLOS I. CABRÉ, P.E. AND IS ISSUED AS AN INSTRUMENT OF SERVICE FOR THE SUBJECT PROJECT. THE USER OF THIS DOCUMENT SHALL BE RESPONSIBLE FOR VERIFYING THE ACCURACY OF THE INFORMATION PROVIDED HEREIN AND FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.

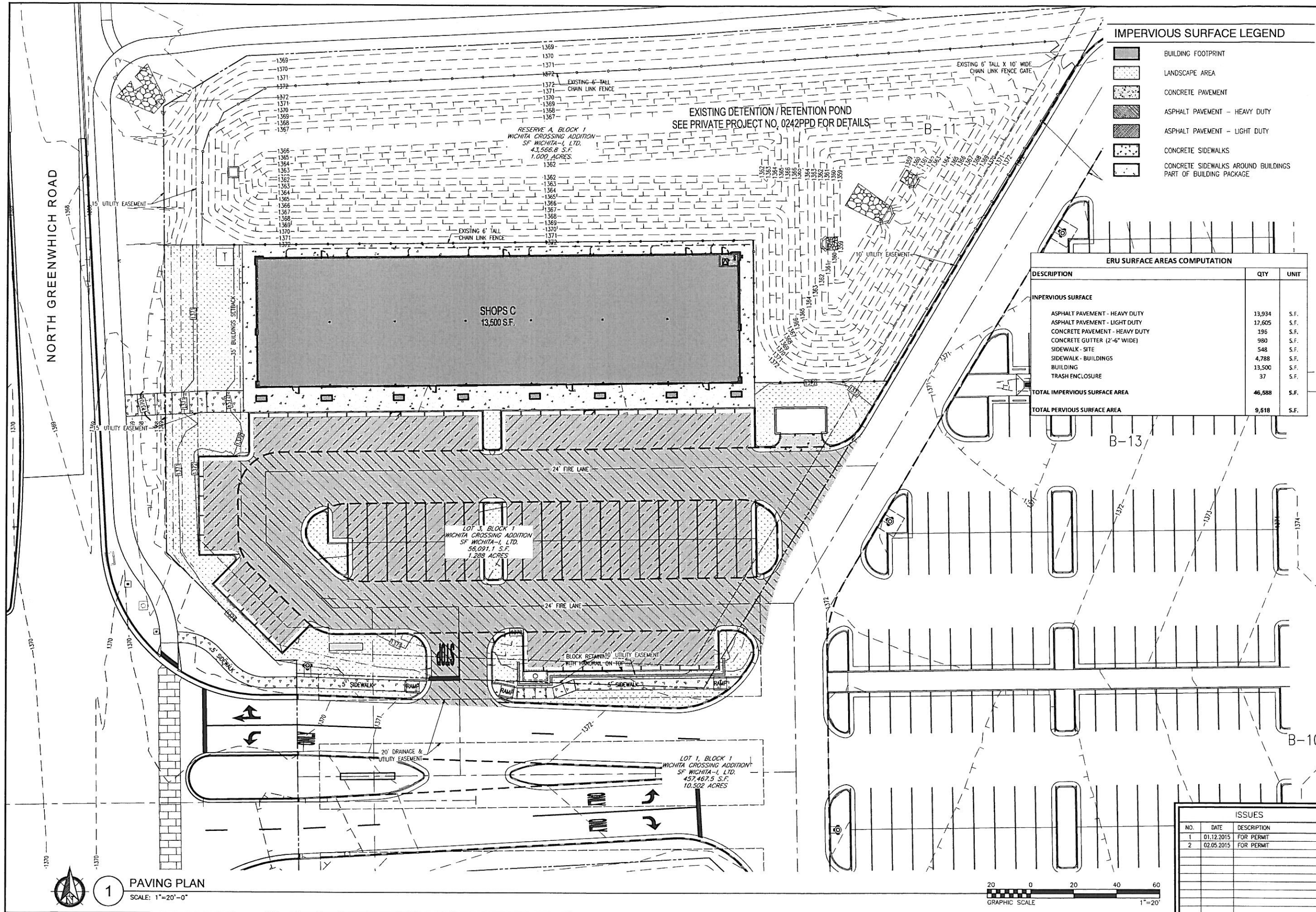
ISSUES		
NO.	DATE	DESCRIPTION
1	01.12.2015	FOR PERMIT
2	02.05.2015	FOR PERMIT

DATE:
FEBRUARY 05, 2015

SCALE:
1"=20'

JOB NUMBER:
12-09

DRAWING NUMBER:
C-4.3



IMPERVIOUS SURFACE LEGEND

- BUILDING FOOTPRINT
- LANDSCAPE AREA
- CONCRETE PAVEMENT
- ASPHALT PAVEMENT - HEAVY DUTY
- ASPHALT PAVEMENT - LIGHT DUTY
- CONCRETE SIDEWALKS
- CONCRETE SIDEWALKS AROUND BUILDINGS PART OF BUILDING PACKAGE

ERU SURFACE AREAS COMPUTATION		
DESCRIPTION	QTY	UNIT
IMPERVIOUS SURFACE		
ASPHALT PAVEMENT - HEAVY DUTY	13,934	S.F.
ASPHALT PAVEMENT - LIGHT DUTY	12,605	S.F.
CONCRETE PAVEMENT - HEAVY DUTY	196	S.F.
CONCRETE GUTTER (2'-6" WIDE)	980	S.F.
SIDEWALK - SITE	548	S.F.
SIDEWALK - BUILDINGS	4,788	S.F.
BUILDING	13,500	S.F.
TRASH ENCLOSURE	37	S.F.
TOTAL IMPERVIOUS SURFACE AREA	46,588	S.F.
TOTAL PERVIOUS SURFACE AREA	9,518	S.F.

SP
 INVESTMENT & SURVEILLANCE
 5729 LEBANON ROAD, SUITE 144
 FRISCO, TX 75034
 T. 214-705-1078 F. 214-407-8912

WICHITA CROSSING - LOT 3
 LOT 3, BLOCK 1, WICHITA CROSSING
 AN ADDITION TO WICHITA
 SEDGWICK COUNTY, KANSAS



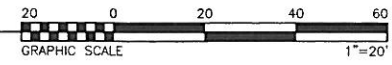
Carlos I. Cabré, P.E.
 Registered Professional Engineer
 State of Kansas
 License No. 23322

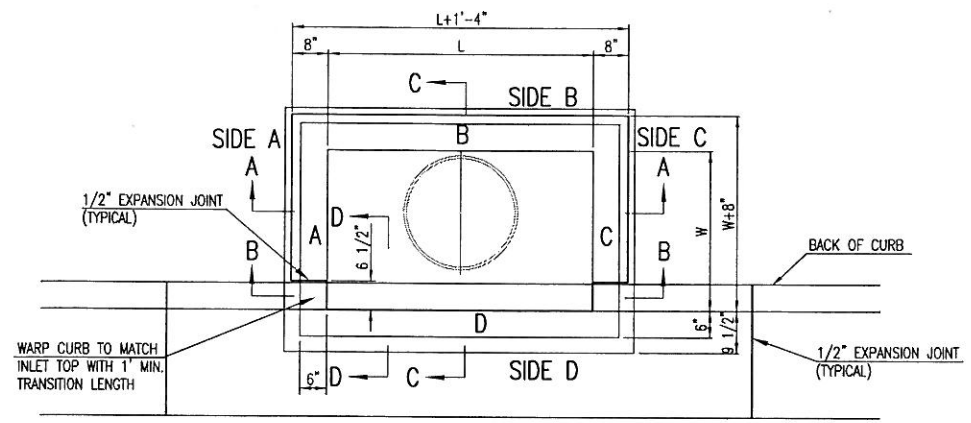
ERU PLAN
 THIS DOCUMENT REPRESENTS THE DESIGN EFFORT OF CARLOS I. CABRE, P.E. AND IS ISSUED AS AN INSTRUMENT OF SERVICE. THE USER SHALL BE RESPONSIBLE FOR VERIFYING THE ACCURACY OF THE INFORMATION AND DATA PROVIDED TO THE ENGINEER AND FOR DETERMINING WHETHER THE PRODUCT IS SUITABLE FOR THE INTENDED USE AND FOR OBTAINING NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES. THE ENGINEER'S LIABILITY IS LIMITED TO THE PROJECTS AND PRODUCTS SPECIFICALLY IDENTIFIED IN THIS DOCUMENT, UNLESS AUTHORIZED IN WRITING BY CARLOS I. CABRE, P.E.

ISSUES		
NO.	DATE	DESCRIPTION
1	01.12.2015	FOR PERMIT
2	02.05.2015	FOR PERMIT

DATE: FEBRUARY 05, 2015
 SCALE: 1"=20'
 JOB NUMBER: 12-09
 DRAWING NUMBER: ERU-1.0

1 PAVING PLAN
 SCALE: 1"=20'-0"





TOP VIEW

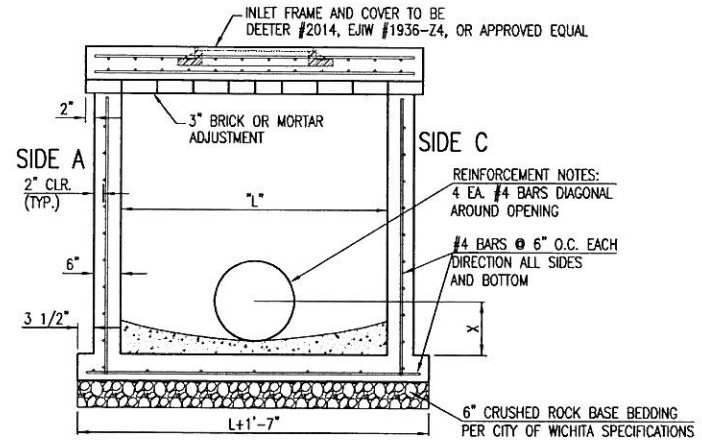
BAR SCHEDULE		
INLET OPENING	B1 BARS	SPACING
5'-0"	#4	4"
10'-0"	#6	3.5"

PRECAST CURB INLET WIDTHS				
W	PRE-CAST TOP SIZE			PIPE DIA.**
	WIDTH	LENGTH	TOP	
3'-0"	W+8"	L+1'-4"	7 1/2"	21" & SMALLER
4'-0"	W+8"	L+1'-4"	7 1/2"	24" & 30"
5'-0"	W+8"	L+1'-4"	7 1/2"	36" & 42"
6'-0"	W+8"	L+1'-4"	7 1/2"	48" & 54"
7'-0"	W+8"	L+1'-4"	7 1/2"	60" & 66"

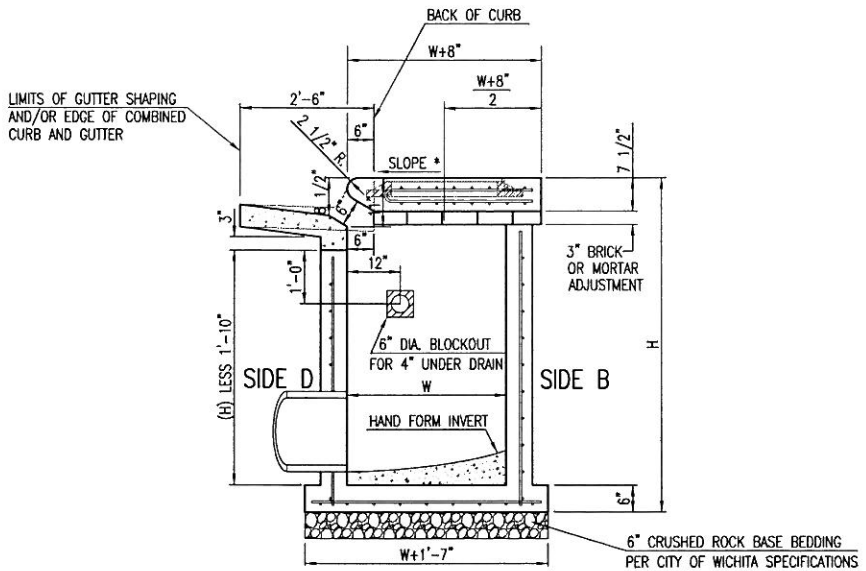
** FOR PIPES PERPENDICULAR TO INLET WALL

GENERAL NOTES

1. CONCRETE TOPS TO BE INSTALLED ON THIN MORTAR CUSHION TO INSURE FULL SUPPORT ALONG BRICK. CONCRETE TOPS MAY BE CAST IN PLACE OR PRECAST. CONCRETE USED FOR INLET CONSTRUCTION SHALL CONFORM TO CITY OF WICHITA SPECIFICATIONS FOR CONCRETE PAVEMENT MIX.
2. CONTRACTOR SHALL HAVE THE OPTION OF CONSTRUCTING 8" BRICK MASONRY WALLS BETWEEN THE CONCRETE INLET BASE AND TOP OF THIS INLET WHEN W=5'-0" AND H=7'-0" OR LESS.
3. INLET INVERT SHALL BE SHAPED WITH 8 SACK SAND 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.
4. THE ENDS OF ALL PIPES INSTALLED IN INLETS SHALL BE CUT OFF FLUSH WITH THE INSIDE FACE OF THE INLET WALL.
5. INLET FRAME AND COVER TO BE DEETER #2014, EJM #1936-24, OR APPROVED EQUAL.
6. CONTRACTOR SHALL REMOVE LIFTING HOOKS AFTER INSTALLATION. RECESSES IN INLET WALL SHALL BE GROUTED FLUSH TO THE INLET WALL WITH HYDRAULIC CEMENT AFTER THE INLET IS IN PLACE. LIFTING HOLES THRU THE INLET WALL WILL NOT BE ACCEPTED.

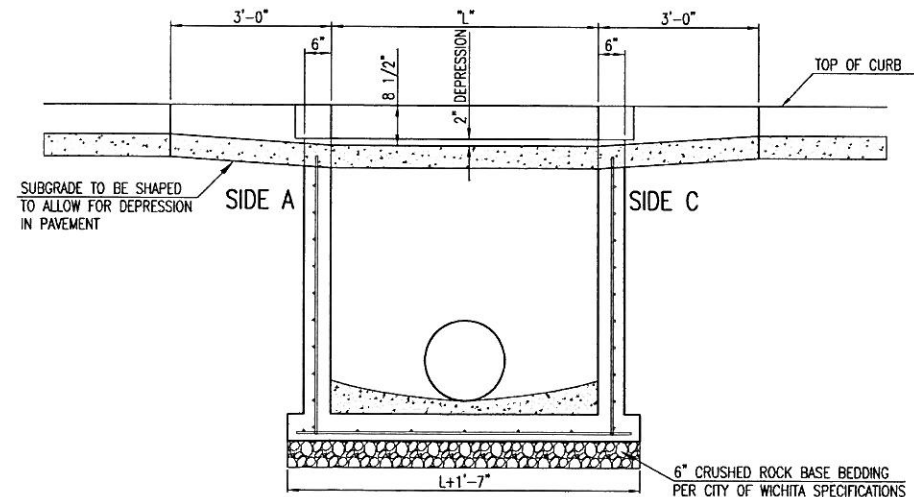
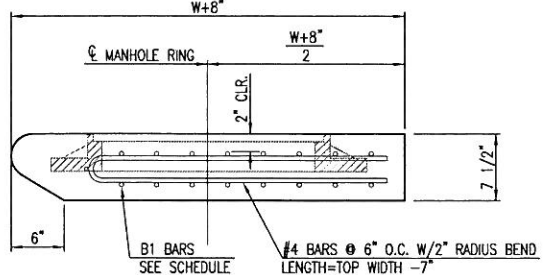


SECTION "A-A"

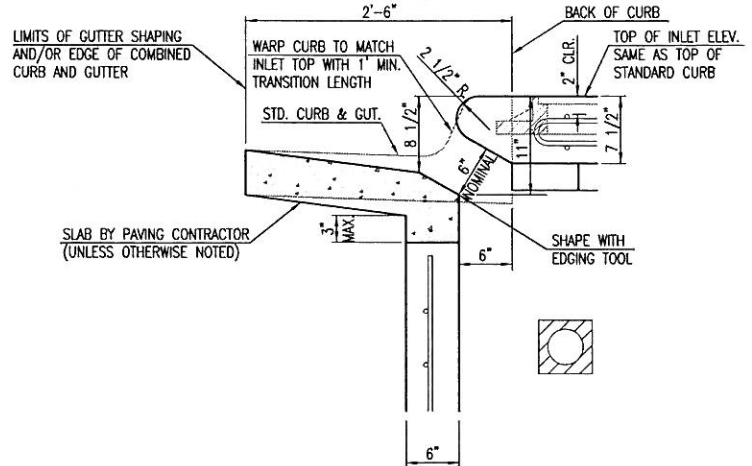


SECTION "C-C"

NOTES:
* SLOPE OF INLET TOP TO MATCH SIDEWALK OR PARKING SLOPES WITHIN LIMITS INDICATED.



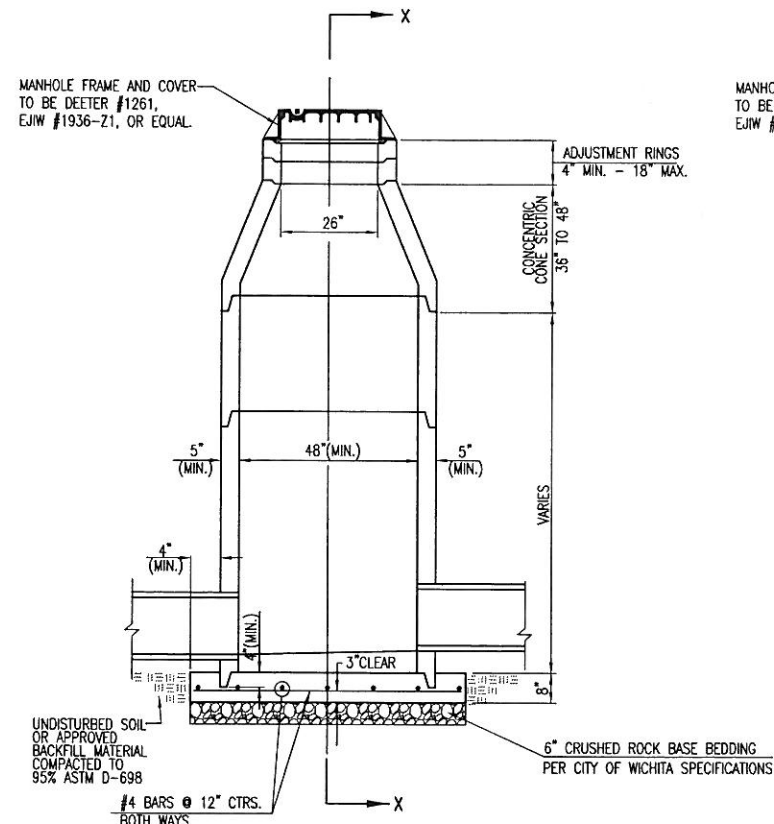
SECTION "B-B"



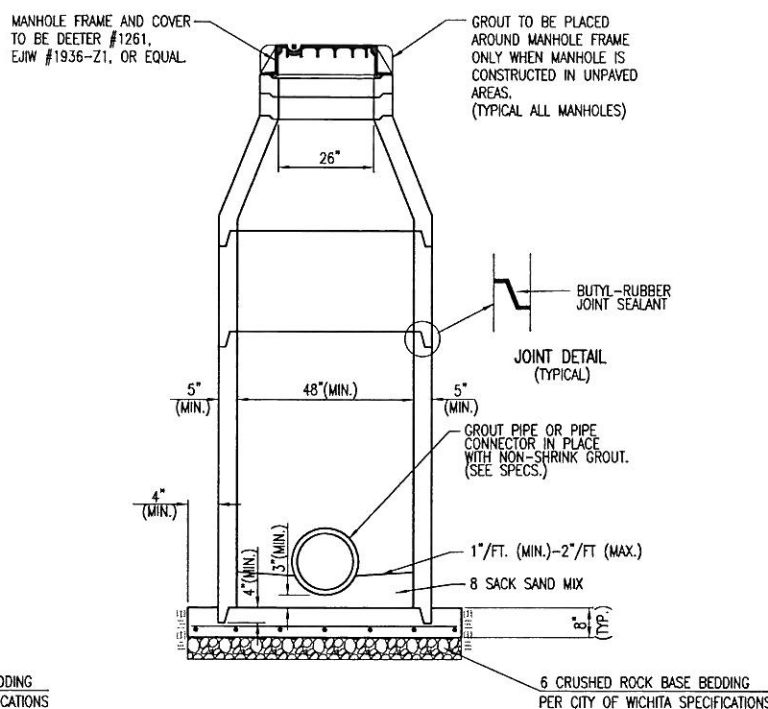
SECTION "D-D"



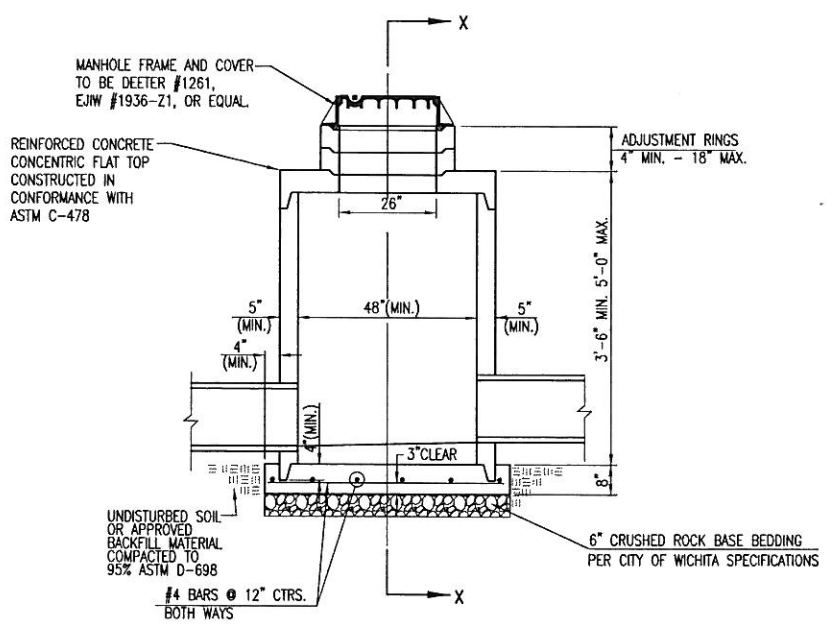
STANDARD TYPE 1 CURB INLET 5'-0" OR 10'-0" OPENING		
CITY ENGINEER GARY JANZEN, P.E.		
PROJECT NUMBER	OCA NUMBER	DATE
		11/2010
CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		SHEET 10



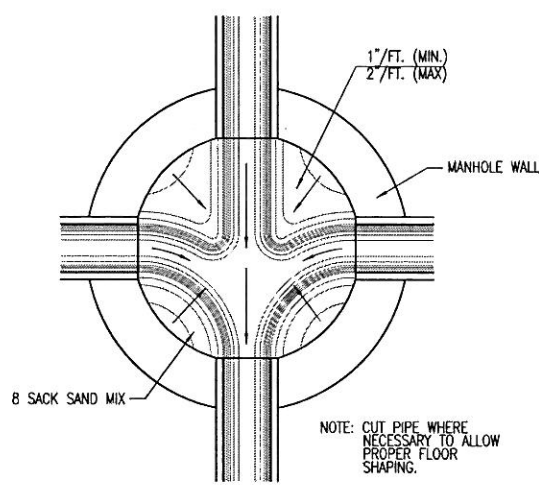
PRECAST STANDARD MANHOLE TYPE "A"



SECTION X-X (TYPICAL)



PRECAST SHALLOW MANHOLE TYPE "B"



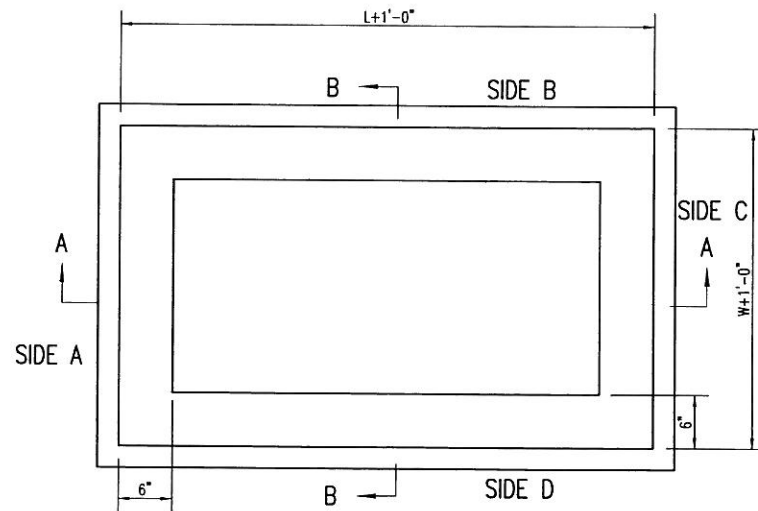
TYPICAL MANHOLE FLOOR SHAPING

GENERAL NOTES

- IF, IN THE OPINION OF THE ENGINEER, THE MANHOLE SUBGRADE APPEARS UNSTABLE, THE CONTRACTOR WILL HAVE THE OPTION TO COMPACT SUBGRADE AS SHOWN OR INCREASE THE THICKNESS OF THE MANHOLE BASE AS DIRECTED BY THE ENGINEER.
- STEEL REINFORCING WILL BE REQUIRED IN ALL MANHOLE BASES.
- ALL MANHOLE CONSTRUCTION SHALL BE WATER TIGHT.
- TOP OF MANHOLE FLOOR SLAB SHALL BE AT LEAST 3 INCHES BELOW THE FLOW LINE OF THE OUTLET PIPE TO INSURE SUFFICIENT MINIMUM THICKNESS OF SHAPED INVERT.
- ALL PRECAST CONCRETE MANHOLE SECTIONS SHALL CONFORM TO THE LATEST REVISION OF ASTM C-478 AS MODIFIED BY THE SPECIFICATIONS.
- CONCRETE USED FOR MANHOLE CONSTRUCTION SHALL CONFORM TO CITY OF WICHITA SPECIFICATIONS FOR CONCRETE PAVEMENT MIX.
- PRECAST MANHOLES SHALL BE SET AT LEAST 4 INCHES INTO MANHOLE BASE.
- MANHOLES WITH PIPE SIZES 24" AND LARGER SHALL HAVE 5 FOOT INSIDE DIAMETER (MIN.).
- MANHOLES WITH PRECAST BASES MAY BE USED AT THE CONTRACTORS OPTION. THESE MANHOLES SHALL HAVE AN 8" MINIMUM BASE THICKNESS AND SHALL BE PLACED ON AN 8" MIN. CRUSHED ROCK BASE. PIPES SHALL BE ENCASED WITH CRUSHED ROCK TO AT LEAST 3 FEET FROM THE MANHOLE WALL.
- CONTRACTOR SHALL REMOVE LIFTING HOOKS AFTER INSTALLATION. RECESSES IN MANHOLE WALL SHALL BE GROUTED FLUSH TO THE MANHOLE WALL WITH HYDRAULIC CEMENT AFTER THE MANHOLE IS IN PLACE. LIFTING HOLES THRU THE MANHOLE WALL WILL NOT BE ACCEPTED.
- THE ENDS OF ALL PIPES IN MANHOLES SHALL BE CUT OFF FLUSH WITH THE INSIDE FACE OF THE MANHOLE WALL.
- MANHOLE INVERT SHALL BE SHAPED WITH 8 SACK SAND MIX CONCRETE TO CREATE FLOW CHANNELS AND TO INCREASE HYDRAULIC EFFICIENCY SUCH THAT THE MANHOLE WILL BE SELF CLEANING BETWEEN ALL INLET AND/OR OUTLET PIPES.
- MANHOLE FRAME AND COVER TO BE DEETER #1261, EJM #1936-Z1, OR APPROVED EQUAL, SEE SW-303.
- FOR FLAT GRATED INLET APPLICATION, GRATE TO BE DEETER #1933, EJM #1205 MDI, OR APPROVED EQUAL.
- FOR BEEHIVE GRATE APPLICATION, GRATE TO BE DEETER #4495, EJM #120545, OR APPROVED EQUAL.

CITY OF WICHITA
PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

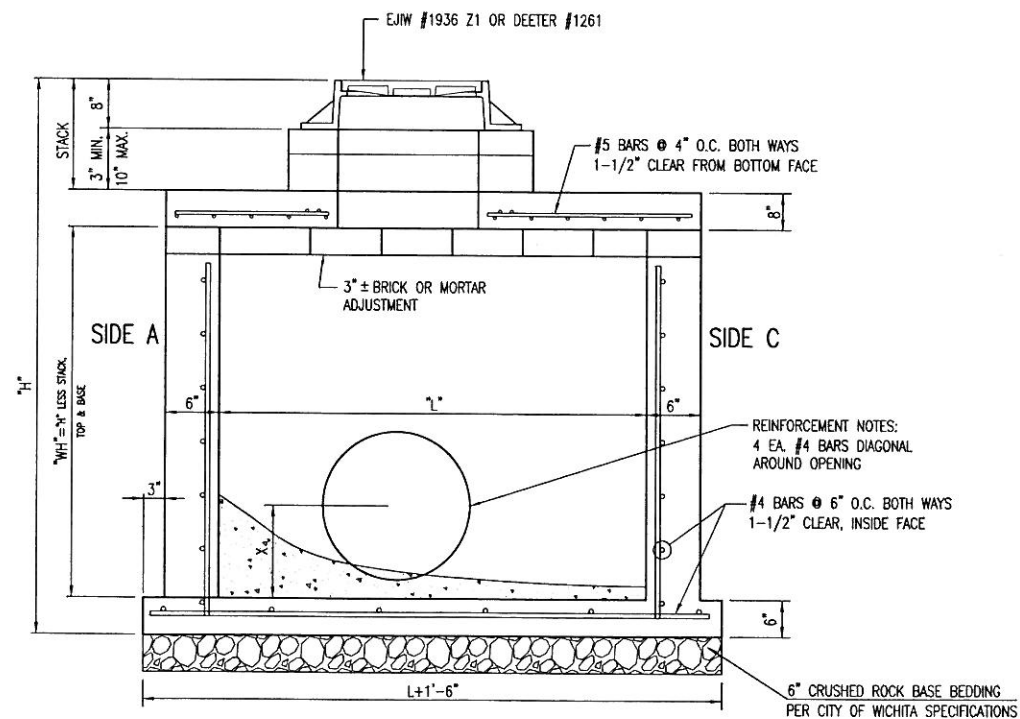
<p>PRECAST CONCRETE MANHOLE (STORM SEWER)</p> <p>CITY ENGINEER GARY JANZEN, P.E.</p>		
PROJECT NUMBER	OCA NUMBER	DATE
		11/2010
CITY ENGINEER'S OFFICE		SHEET
CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		11



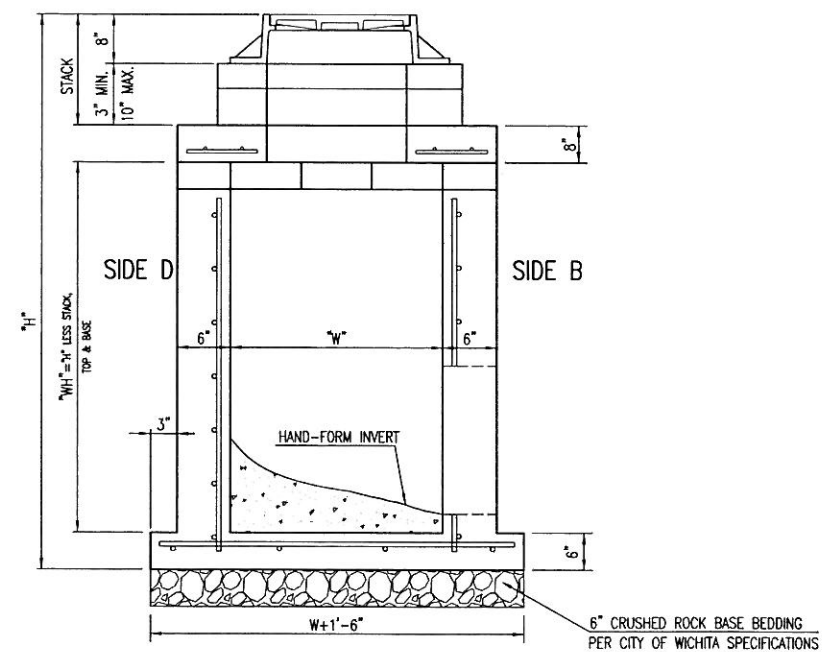
TOP VIEW

GENERAL NOTES

1. GRATE FRAME TO BE INSTALLED ON THIN MORTAR CUSHION TO INSURE FULL SUPPORT ALONG BRICK. CONCRETE USED FOR INLET CONSTRUCTION SHALL CONFORM TO CITY OF WICHITA SPECIFICATIONS FOR CONCRETE PAVEMENT MIX.
2. INLET INVERT SHALL BE SHAPED WITH 8 SACK SAND 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. THE ENDS OF ALL PIPES INSTALLED IN INLETS SHALL BE CUT OFF FLUSH WITH THE INSIDE FACE OF THE INLET WALL.
4. INLET FRAME AND GRATE TO BE DEETER #1261, EJM #1936-Z1 OR APPROVED EQUAL, SEE SW-303.
5. CONTRACTOR SHALL REMOVE LIFTING HOOKS AFTER INSTALLATION. RECESSES IN MANHOLE WALL SHALL BE GROUTED FLUSH TO THE MANHOLE WALL WITH HYDRAULIC CEMENT AFTER THE MANHOLE IS IN PLACE. LIFTING HOLES THRU THE MANHOLE WALL WILL NOT BE ACCEPTED.



SECTION "A-A"



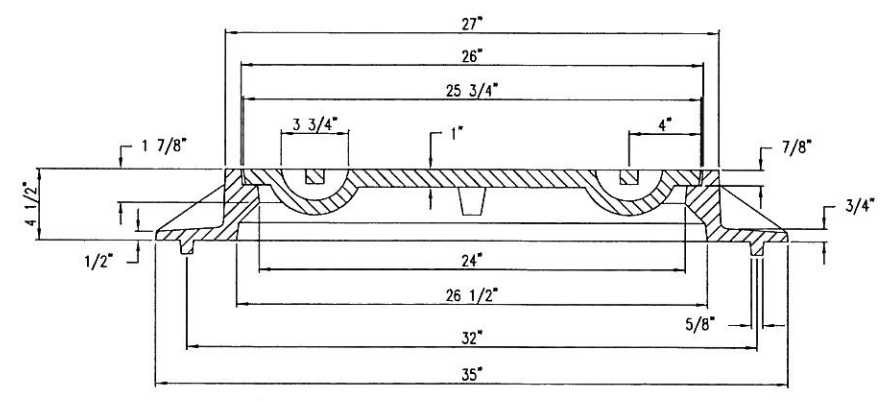
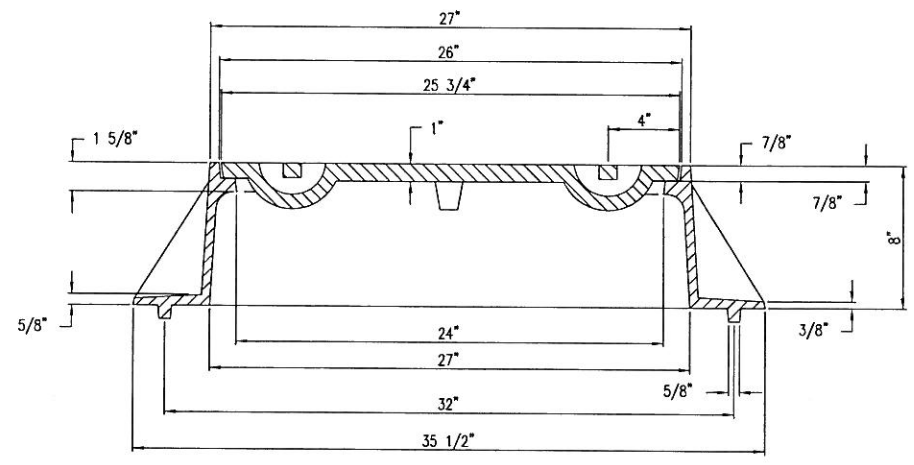
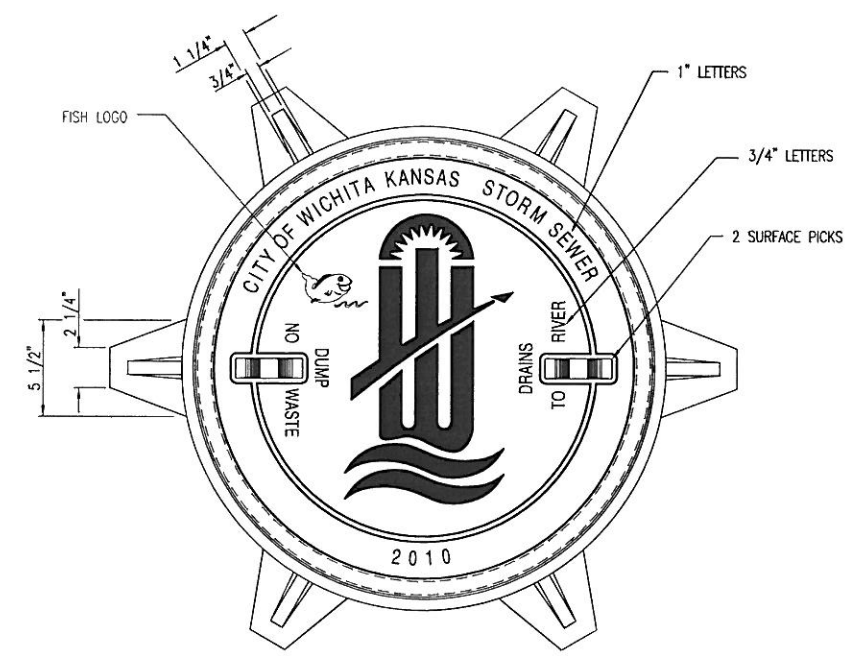
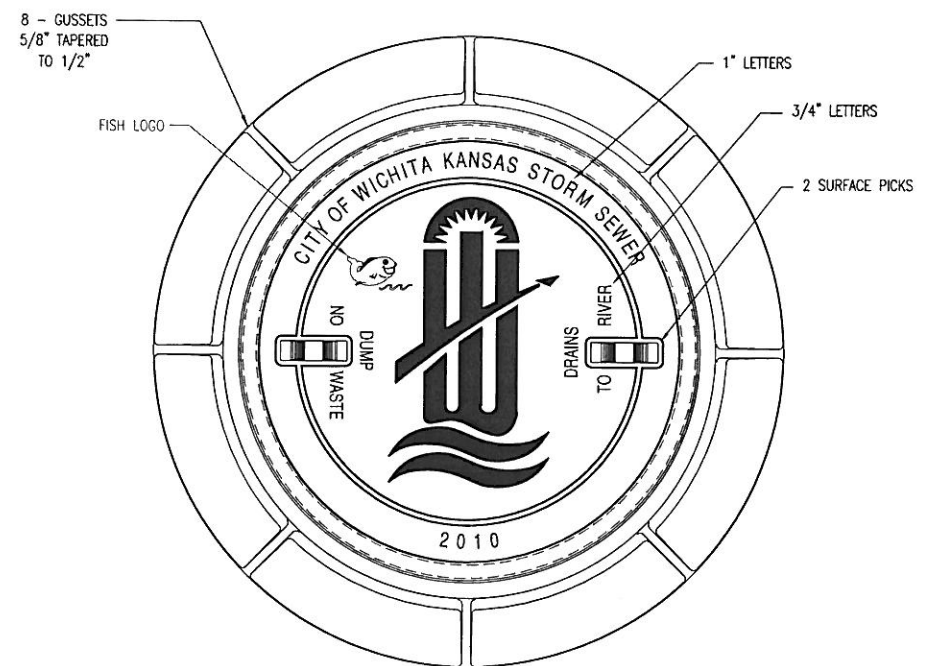
SECTION "B-B"



REINFORCED CONCRETE
MANHOLE
(STORM SEWER)

CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER	OCA NUMBER	DATE
		11/2010
CITY ENGINEER'S OFFICE		SHEET
CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		12

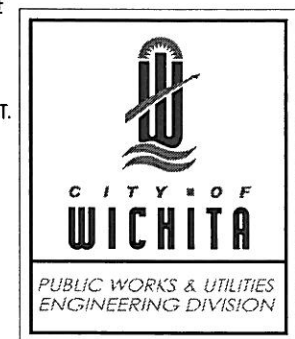


MANHOLE FRAME
DEETER #1261 OR EJIW #1936-Z1

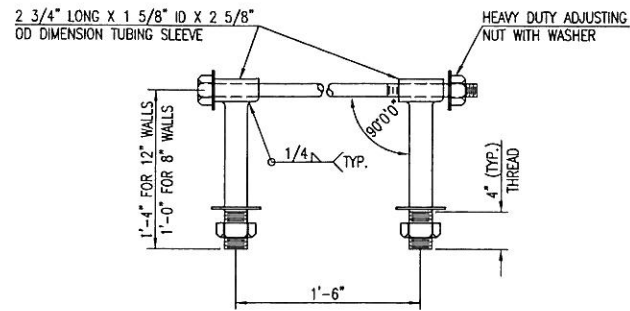
- NOTE:
1. FURNISHED WITH MACHINED HORIZONTAL BEARING SURFACE.
 2. COVER TO BE DEETER #1261 OR EJIW #1936A.

INLET FRAME
DEETER #2014 OR EJIW #1936-Z4

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



MANHOLE/INLET FRAME AND COVER (STORM SEWER)		
CITY ENGINEER GARY JANZEN, P.E.		
PROJECT NUMBER	DCA NUMBER	DATE
		11/2010
CITY ENGINEER'S OFFICE		SHEET
CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		128

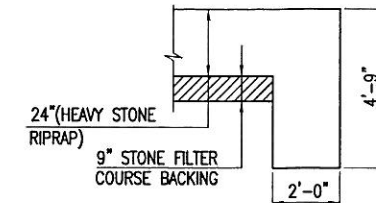


HEAVY DUTY (H.D.) COUPLER

NO SCALE

NOTES

1. BOLTS TO BE A-36 1 1/2" DIAMETER.
2. BOLTS, NUTS, WASHERS AND SLEEVES TO BE ZINC PLATED.
3. WASHERS TO BE 3 1/2" O.D. X 7 GAUGE.
4. SHIP WITH NUTS AND WASHERS PLACED ON BOLTS.



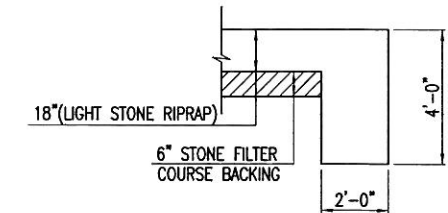
TYPICAL SECTION THRU TOEWALL

NO SCALE

NOTES

1. ALL RIPRAP FOR THIS PROJECT SHALL BE NATURAL STONE. NEITHER BROKEN CONCRETE, FABRIC ENVELOPE, NOR PREMIXED DRY PACKAGED CONCRETE BAG ALTERNATES WILL BE ALLOWED, UNLESS INDICATED OTHERWISE.
2. TOEWALLS SHALL BE INSTALLED ALONG ALL UNPROTECTED EDGES OF STONE RIPRAP.
3. GROUTING OF THE SURFACE OF THE RIPRAP SHALL NOT BE PERFORMED, UNLESS INDICATED OTHERWISE. GROUTING OF THE TOEWALLS SHALL BE PERFORMED PER CITY SPECIFICATIONS.

HEAVY STONE RIPRAP DETAILS



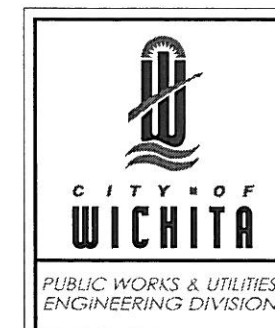
TYPICAL SECTION THRU TOEWALL

NO SCALE

NOTES

1. ALL RIPRAP FOR THIS PROJECT SHALL BE NATURAL STONE. NEITHER BROKEN CONCRETE, FABRIC ENVELOPE, NOR PREMIXED DRY PACKAGED CONCRETE BAG ALTERNATES WILL BE ALLOWED, UNLESS INDICATED OTHERWISE.
2. TOEWALLS SHALL BE INSTALLED ALONG ALL UNPROTECTED EDGES OF STONE RIPRAP.
3. GROUTING OF THE SURFACE OF THE RIPRAP SHALL NOT BE PERFORMED, UNLESS INDICATED OTHERWISE. GROUTING OF THE TOEWALLS SHALL BE PERFORMED PER CITY SPECIFICATIONS.

LIGHT STONE RIPRAP DETAILS



MISCELLANEOUS
DETAILS
(STORM SEWER)

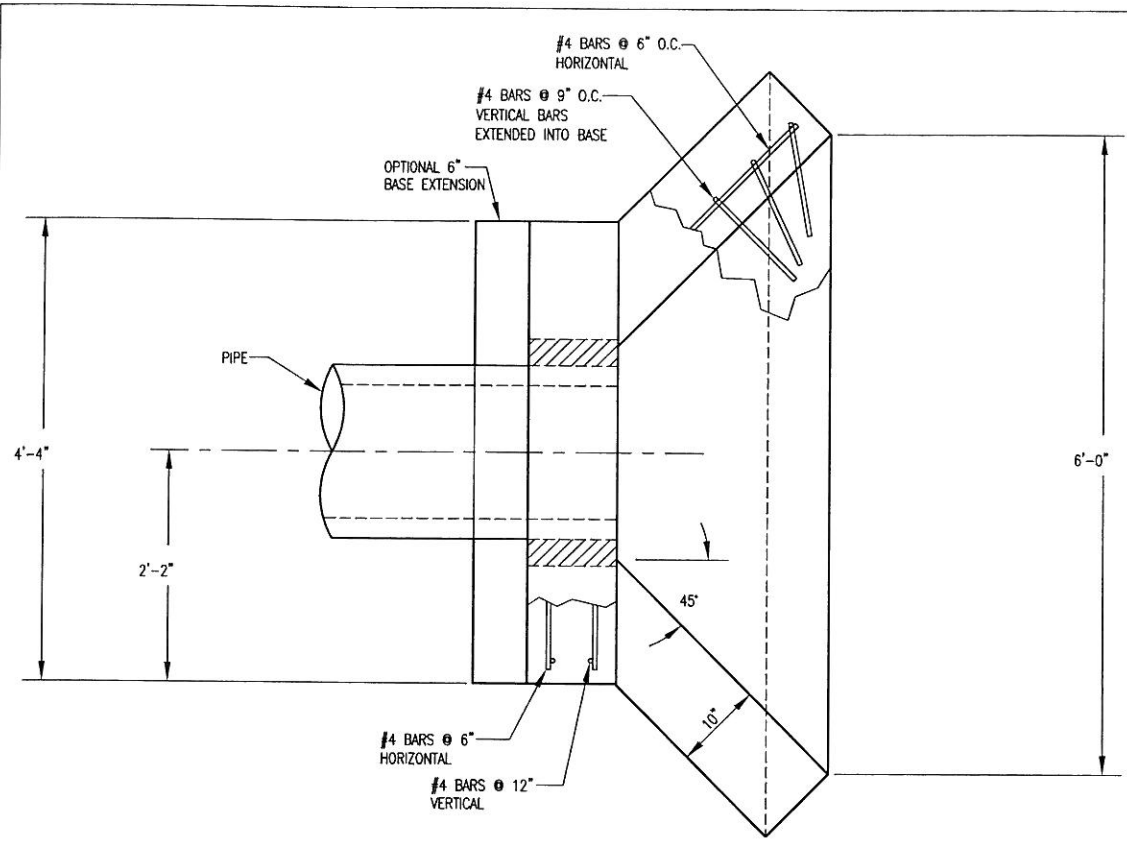
CITY ENGINEER

GARY JANZEN, P.E.

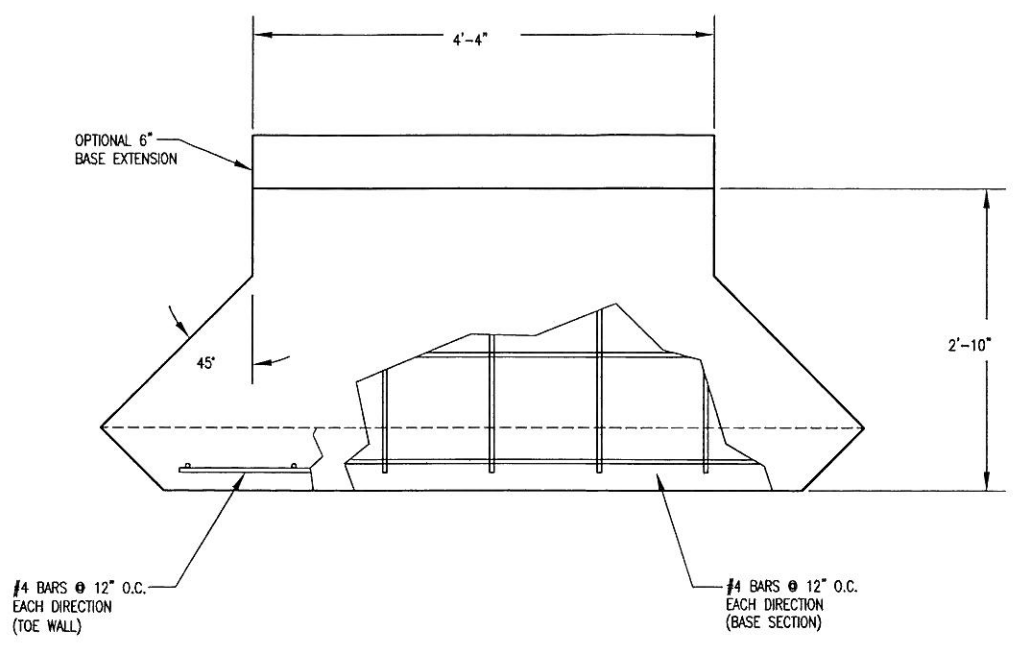
PROJECT NUMBER	OCA NUMBER	DATE
		11/2010

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

SHEET
14

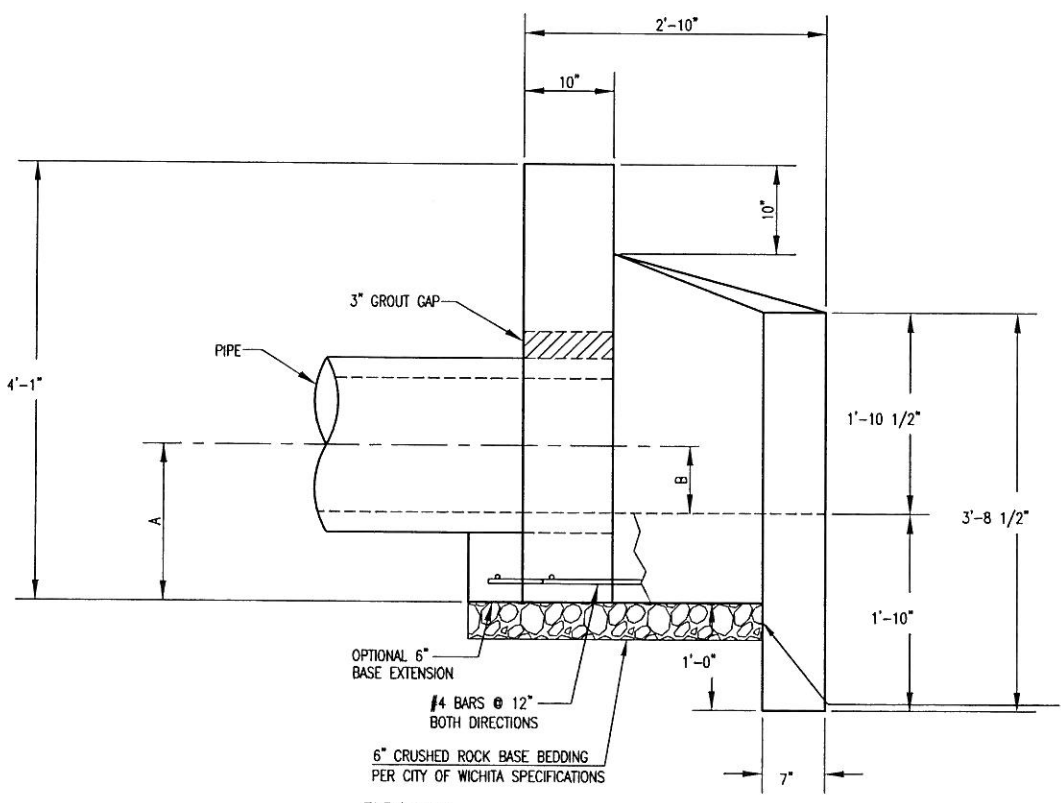


PLAN VIEW

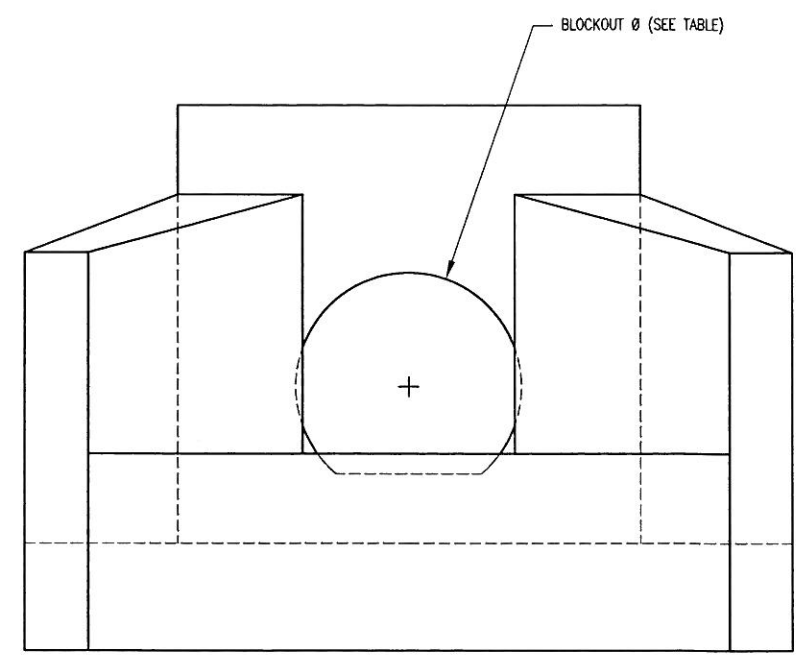


PLAN VIEW
BASE

PIPE Ø	A	B	BLOCKOUT Ø
15"	1'-5 1/2"	7 1/2"	2'-1 1/2"
18"	1'-7"	9"	2'-5"
24"	1'-10"	1'-0"	3'-0"




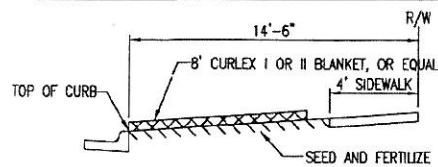
ELEVATION



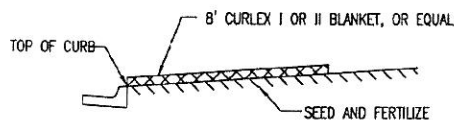
FRONT VIEW

HEADWALLS, AS SHOWN, WILL NOT SUPPORT FLAP GATE.

 <p>CITY OF WICHITA PUBLIC WORKS & UTILITIES ENGINEERING DIVISION</p>	<p>HEADWALL DETAILS FOR 15", 18", AND 24" PIPE</p>		
	<p>CITY ENGINEER GARY JANZEN, P.E.</p>		
	PROJECT NUMBER	OGA NUMBER	DATE
			11/2010
<p>CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 435 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501</p>		<p>SHEET 15</p>	

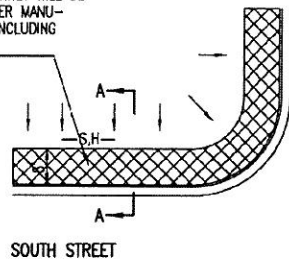


SECTION B-B

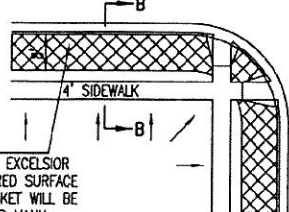


SECTION A-A

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



SOUTH STREET

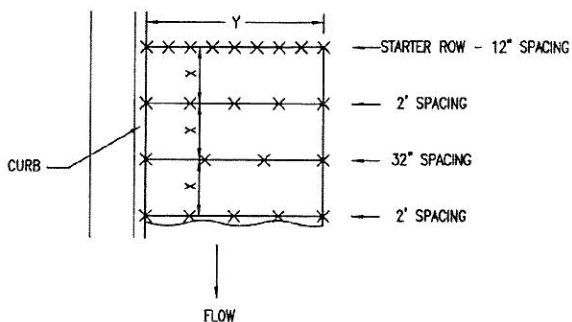


INSTALL 8' WIDE CURLEX I OR II EXCELSIOR BLANKET, OR EQUAL, ON PREPARED SURFACE BACK OF CURB. EDGE OF BLANKET WILL BE AT BACK OF CURB. INSTALL PER MANUFACTURERS RECOMMENDATION, INCLUDING STAPLES. (SEE DETAIL)

GENERAL NOTES

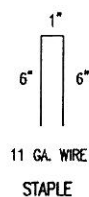
- EXCELSIOR MAT TO BE INSTALLED WHEN SOD IS NOT SPECIFIED ON PROJECT.
- EXCELSIOR BLANKET TO BE INSTALLED OVER SEED AND FERTILIZER, AS SPECIFIED IN THE PROJECT SPECIFICATIONS.
- AFTER INSTALLATION OF EXCELSIOR BLANKET, AT LOCATIONS WHERE CONCENTRATED FLOW CARRIES SEDIMENT OVER THE CURB AND INTO THE GUTTER,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

BACK OF CURB PROTECTION DETAIL

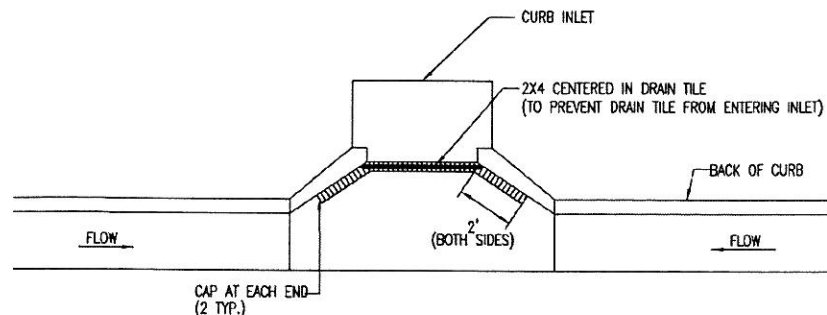


STAPLE PATTERN

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

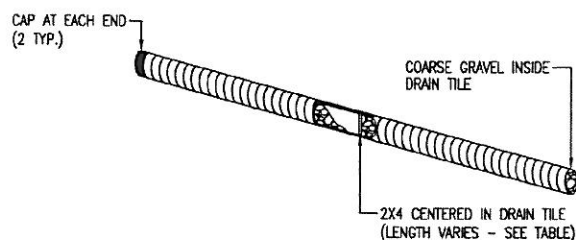


DETAILS FOR APPROVED EROSION CONTROL MAT

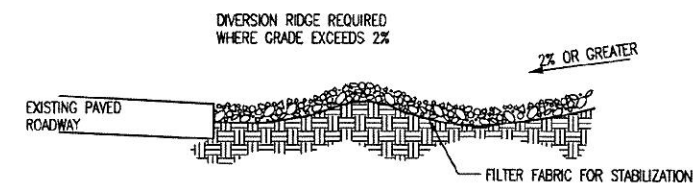


NOTE: PLACE 4" PERFORATED PVC PIPE, FILLED WITH 1/2"-1" DIA. GRAVEL, IN FRONT OF CURB INLET AS SHOWN.

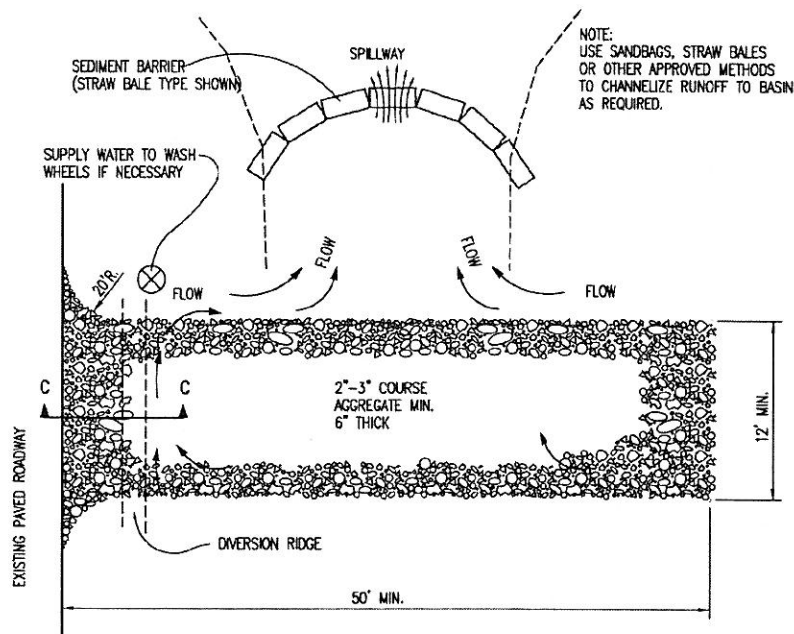
2X4 LENGTH	INLET TYPE	INLET OPENING
5'-6"	1-A	5'-0"
10'-6"	1-A	10'-0"
15'-6"	1-A	15'-0"



CURB INLET PROTECTION
4" PERFORATED PIPE W/ GRAVEL



SECTION C-C



STABILIZED CONSTRUCTION ENTRANCE

GENERAL NOTES

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

REVISION DATE: MAY 2013



05/13/13

CITY OF WICHITA
PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

BACK OF CURB PROTECTION,
CURB INLET PROTECTION AND
CONSTRUCTION ENTRANCE

CITY ENGINEER

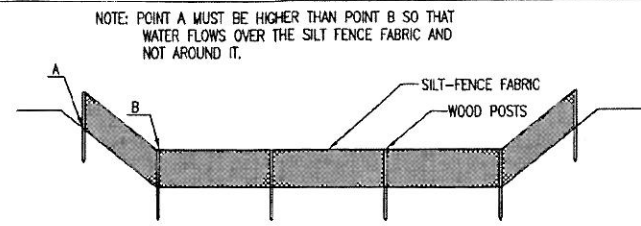
GARY JANZEN, P.E.

PROJECT NUMBER OCA NUMBER DATE

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

SHEET

16



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 DOWNSTREAM 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 DOWNSTREAM 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.

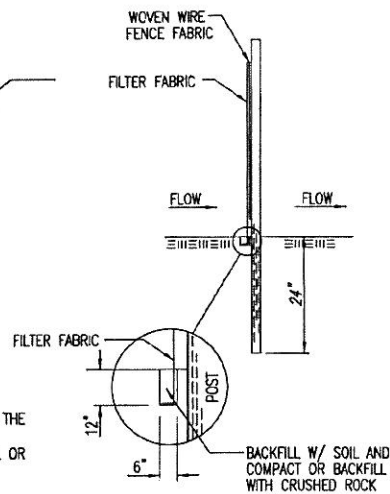
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

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.

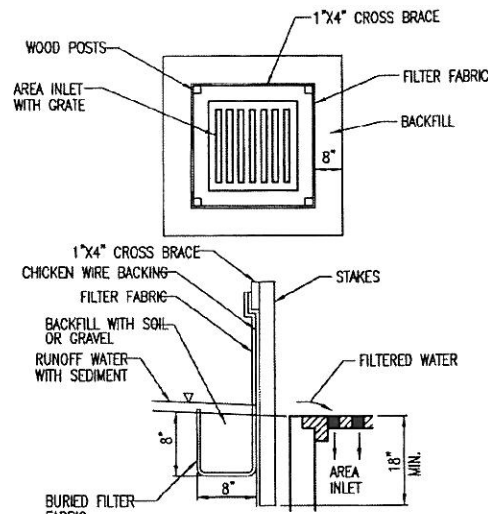
INSPECTION AND MAINTENANCE:

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.

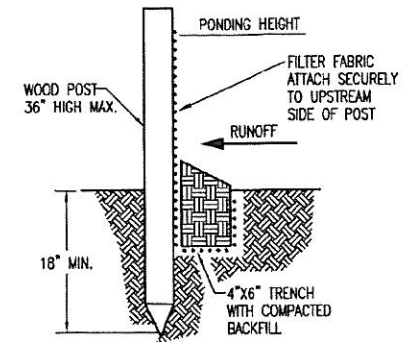
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

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:

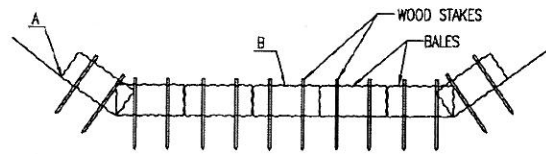
- ARE THERE ANY POINTS ALONG THE SLOPE BARRIER WHERE WATER IS CONCENTRATING?
- DOES WATER FLOW UNDER THE SLOPE BARRIER?
- DO THE SILT FENCES SAG EXCESSIVELY?
- HAS THE SILT FENCE TORN OR BECOME DETACHED FROM THE POSTS?
- DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE SLOPE BARRIER?

REVISION DATE: MAY 2013

<p>CITY OF WICHITA PUBLIC WORKS & UTILITIES ENGINEERING DIVISION</p>	<p>SILT FENCE DITCH CHECK AND BARRIER DETAILS</p>	
	<p>CITY ENGINEER GARY JANZEN, P.E.</p>	
PROJECT NUMBER	OCA NUMBER	DATE
<p>CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501</p>		<p>SHEET 17 19</p>



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.

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".

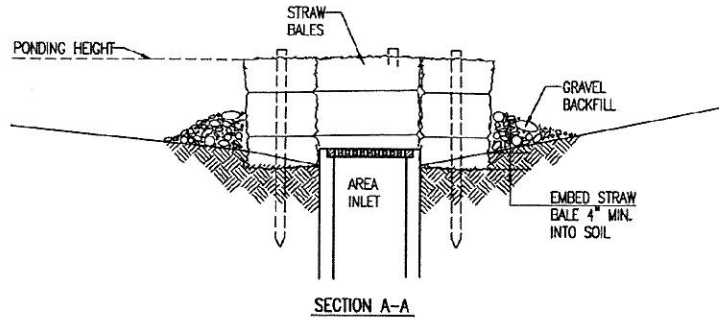
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

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.

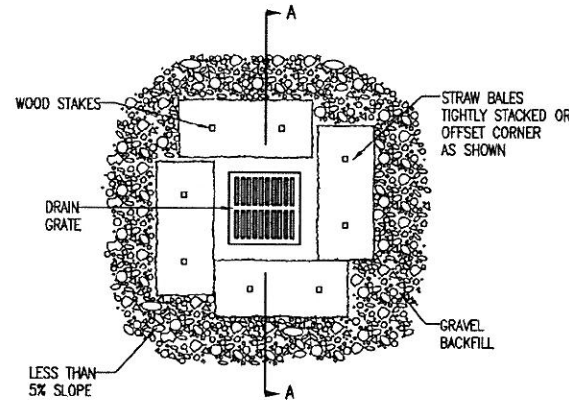
INSPECTION AND MAINTENANCE:

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?



SECTION A-A



STRAW BALE BARRIERS FOR AREA INLETS (INLET PROTECTION)

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.

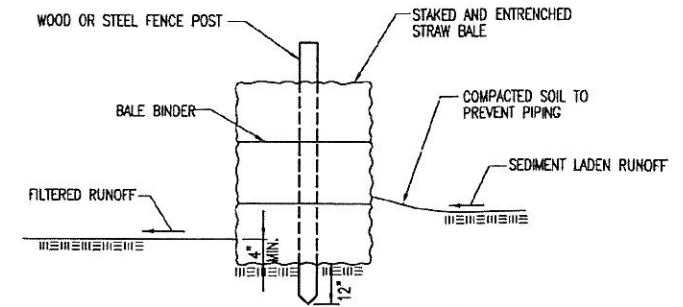
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

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?



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. 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.

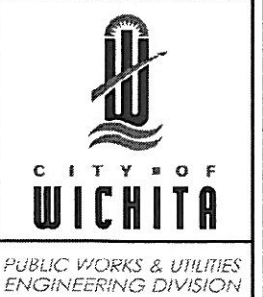
INSPECTION AND MAINTENANCE:

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?

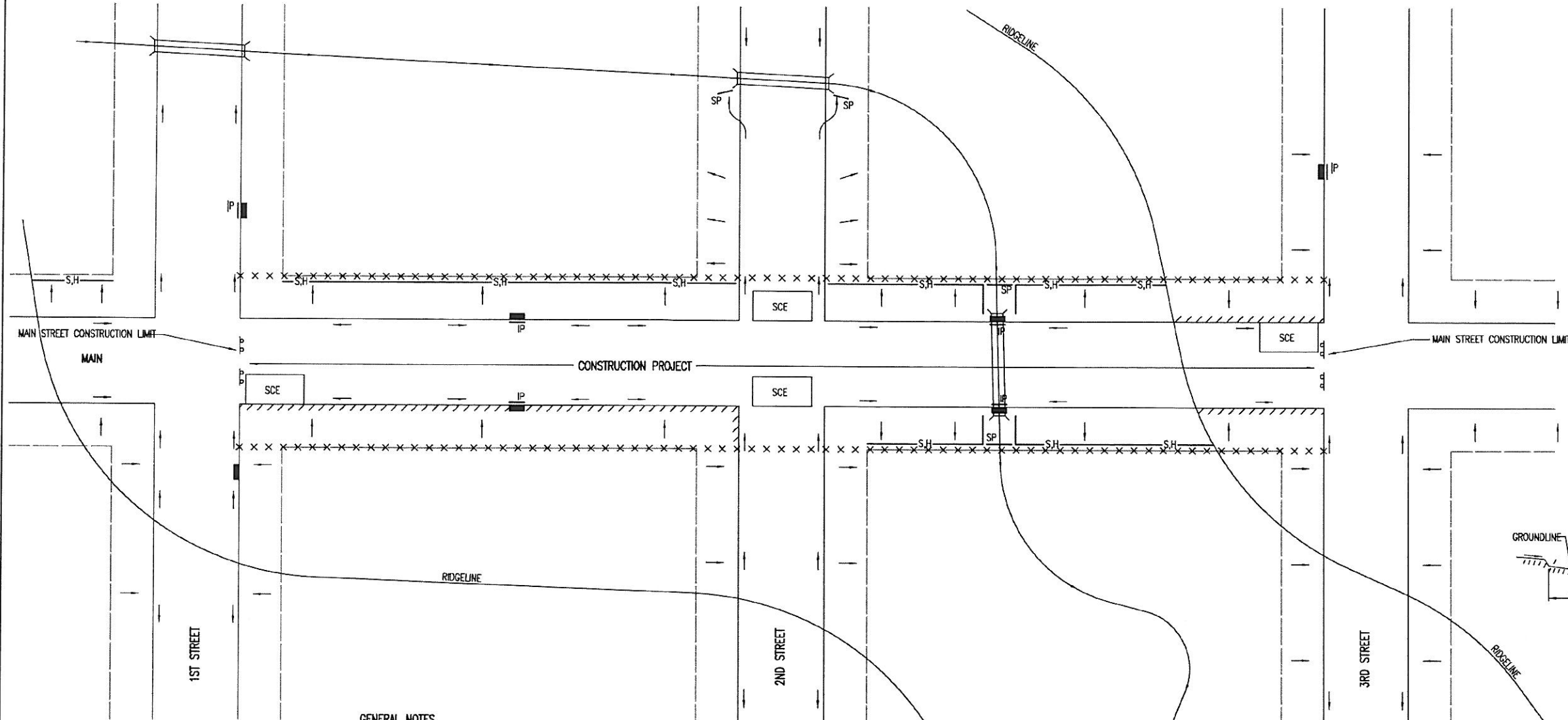
REVISION DATE: MAY 2013



 <p>CITY OF WICHITA PUBLIC WORKS & UTILITIES ENGINEERING DIVISION</p>			<p>STRAW BALE DITCH CHECK AND BARRIER DETAILS</p>		
			<p>CITY ENGINEER GARY JANZEN, P.E.</p>		
PROJECT NUMBER	OCA NUMBER	DATE	SHEET		
<p>CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501</p>			<p>18</p>		

GENERAL NOTES

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

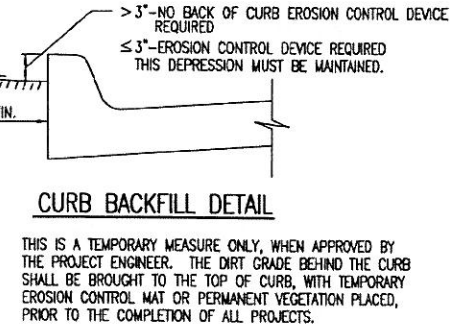


LEGEND

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

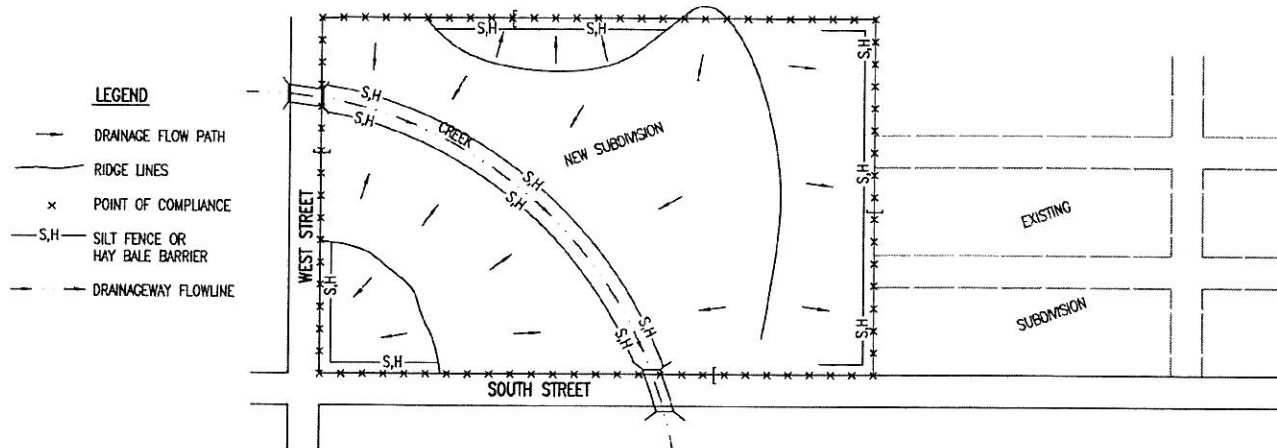
GENERAL NOTES

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



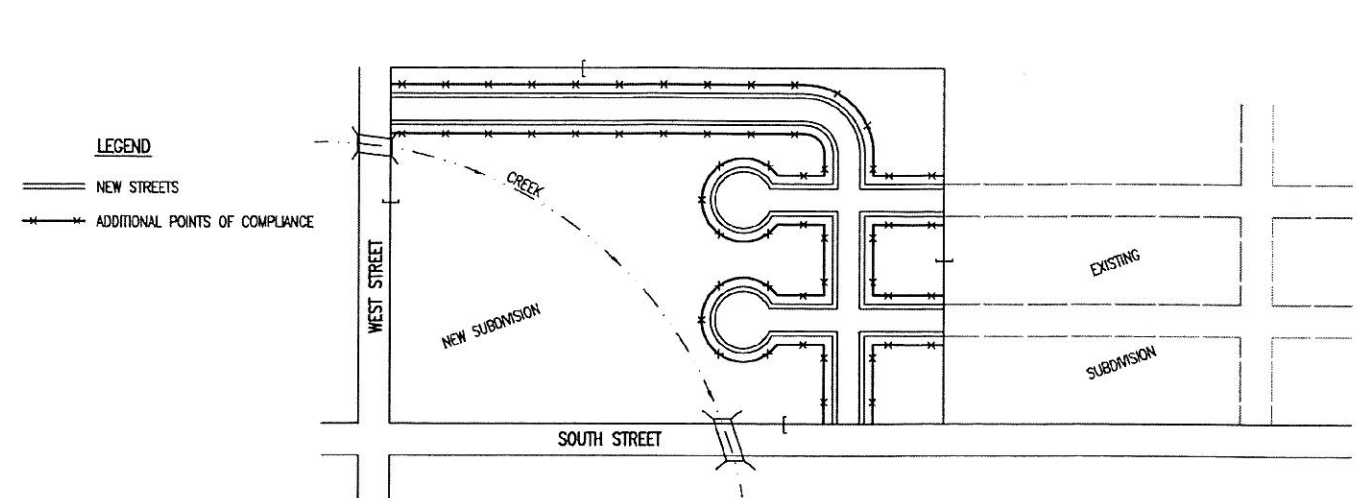
 CITY OF WICHITA PUBLIC WORKS & UTILITIES ENGINEERING DIVISION			REVISION DATE: 2015 STREET IMPROVEMENT PROJECTS CITY ENGINEER GARY JANZEN, P.E.
PROJECT NUMBER	OCA NUMBER	DATE	
CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1420 (316) 268-4501			SHEET 19

PHASE 1 - INITIAL EARTHWORK AND UTILITIES (EXCEPT STORM SEWER)



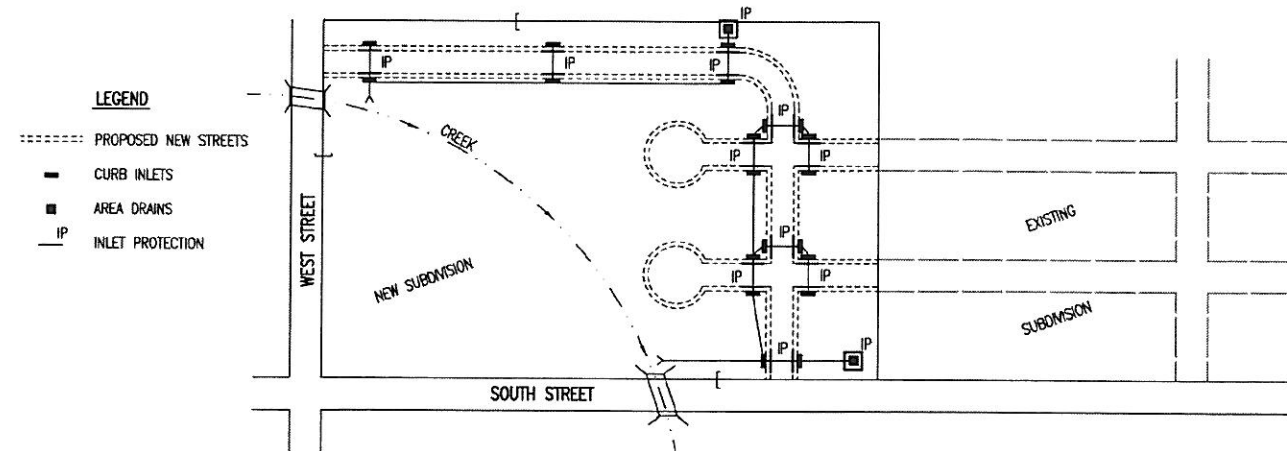
- DURING THIS PHASE OF SUBDIVISION CONSTRUCTION, THE POINTS OF COMPLIANCE ARE THE PERIMETER BOUNDARIES AND ANY DRAINAGE WAYS OR STORM SEWERS DRAINING THROUGH OR FROM THE SITE. SHOULD LAKES BE CONSTRUCTED WITHIN THE SUBDIVISION THAT WILL DISCHARGE DURING STORMS, THEY ARE ALSO A POINT OF COMPLIANCE.
- HAY BALES OR SILT FENCE MUST BE CONSTRUCTED ALONG THE PROPERTY LINE WHERE ON SITE WATER CAN DRAIN OFF THE PROPERTY. THESE EROSION CONTROL DEVICES WILL ALSO BE INSTALLED ALONG ANY DRAINAGE DITCH OR LAKE THAT CAN DISCHARGE.
- SHOULD SILT OR SEDIMENT ENTER THE DITCHES OR STREETS ON THE ADJACENT BOUNDARY STREETS, APPROPRIATE EROSION CONTROL DEVICES WILL BE PLACED WITHIN THE SUBDIVISION TO PREVENT THIS.
- ANY MUD TRACKED ONTO ADJACENT STREETS WILL BE REMOVED WITHIN 48 HOURS OR BY FRIDAY AT 6:00 PM, WHICHEVER IS EARLIER.
- CONTRACTORS WORKING WITHIN THE SITE WILL NOT BE REQUIRED TO USE INDIVIDUAL EROSION CONTROL DEVICES AS LONG AS THOSE SPECIFIED ABOVE ARE IN PLACE AND EFFECTIVE. CONTRACTORS WORKING ON THE BOUNDARY LINE STREETS OR ON ADJACENT PROPERTIES TO EXTEND UTILITIES ARE EXPECTED TO USE EROSION CONTROL DEVICES AT THEIR WORK LOCATIONS, AS NEEDED.
- UTILIZE STABILIZED CONSTRUCTION ENTRANCE AT ENTRANCE AND EXIT ONTO ANY EXISTING PUBLIC STREETS.
- IF THE INITIAL EARTH WORK AND UTILITIES ARE DONE AS PART OF A PUBLIC IMPROVEMENT PROJECT, THESE EROSION CONTROL DEVICES WILL BE INSTALLED BY THE CONTRACTOR AS SPECIFIED IN THE INDIVIDUAL PROJECT CONTRACTS. THE CONTRACTOR WILL MAINTAIN THE DEVICES UNTIL COMPLETION OF THE CONTRACT, AT WHICH TIME THE DEVELOPER WILL ASSUME MAINTENANCE RESPONSIBILITIES. IF THESE CONTRACTS ARE NOT PUBLIC IMPROVEMENT PROJECTS, THE DEVELOPER WILL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING THESE DEVICES.
- WITHIN 14 DAYS OF COMPLETION OF EARTHWORK ACTIVITIES IN ANY GIVEN AREA, THAT AREA SHALL BE TEMPORARILY OR PERMANENTLY SEEDED AND MULCHED.

PHASE 3 - STREET CONSTRUCTION



- DURING THIS PHASE OF SUBDIVISION CONSTRUCTION, NEW STREETS ARE INSTALLED. ALL EROSION CONTROL DEVICES INSTALLED DURING PHASE 1 AND 2 MUST STILL BE MAINTAINED. THE POINT OF COMPLIANCE NOW SHIFTS TO THE BACK OF CURB ALONG EACH STREET.
- CURB OPENING INLET PROTECTION:
 - SUMP AREAS - INLET PROTECTION SHALL BE PROVIDED WHEN STREET SUBGRADE WORK IS COMPLETED.
 - NON-SUMP LOCATIONS - PROVIDE INLET PROTECTION AS SOON AS BASE COURSE ASPHALT IS INSTALLED, BEFORE THE SURFACE COURSE LIFT.
- EROSION CONTROL DEVICES WILL BE REQUIRED BACK OF CURB WHEREVER WATER CAN FLOW OVER THE CURB AND THE CURB HAS BEEN BACKFILLED TO WITHIN 3" OR LESS OF THE TOP OF CURB (SEE CURB BACKFILL DETAIL). FOR CURBS NOT YET ENTIRELY BACKFILLED (3" OR MORE BELOW TOP OF CURB), ADDITIONAL DEVICES WILL BE REQUIRED AT POINTS WHERE WATER BREAKS OVER CURB WHICH COULD RESULT IN THE PLACEMENT OF SEDIMENT IN THE GUTTER.
- SEE DETAIL SHEET FOR BACK OF CURB PROTECTION.
- THE BACK OF CURB PROTECTION SPECIFIED ON THIS PLAN MAY HAVE TO BE SUPPLEMENTED WITH HAY BALE OR SILT FENCE EROSION CONTROL DEVICES AT LOCATIONS WHERE CONCENTRATED FLOW RESULTS IN SEDIMENT BEING CARRIED OVER THE EXCELSIOR MATS.
- THE STREET CONTRACTOR WILL BE RESPONSIBLE FOR INSTALLING BACK OF CURB EROSION CONTROL DEVICES.
- THE INDIVIDUAL LOT OWNERS WILL BE RESPONSIBLE FOR MAINTAINING THE BACK OF CURB EROSION CONTROL DEVICES IN FRONT OF THEIR LOTS UNTIL SUCH TIME AS ADJACENT DISTURBED EARTH IS STABILIZED WITH GRASS OR SOD.

PHASE 2 - INSTALLATION OF STORM SEWER

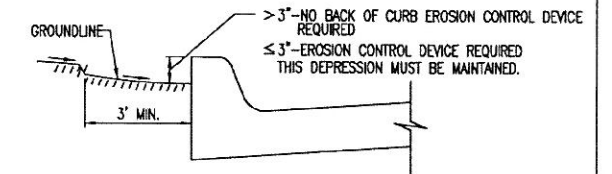


- DURING THIS PHASE OF SUBDIVISION DEVELOPMENT, ALL EROSION CONTROL DEVICES REQUIRED IN PHASE 1 SHALL REMAIN IN PLACE AND BE MAINTAINED.
- AS NEW STORM SEWERS, WITH INLETS, ARE INSTALLED, THE STORM SEWERS MUST NOW BE PROTECTED SO ALL NEW INLETS BECOME POINTS OF COMPLIANCE.
- AREA DRAINS - AS SOON AS WATER CAN FLOW INTO THESE DRAINS, HAY BALE OR SILT FENCE PROTECTION WILL BE INSTALLED AROUND THEM.
- CURB OPENING INLETS - AS SOON AS WATER CAN FLOW INTO THESE DRAINS, INLET PROTECTION DEVICES MUST BE INSTALLED. IF WATER CANNOT FLOW INTO CURB INLETS UNTIL STREET CONSTRUCTION IS COMPLETE, THEN STREET CONTRACTOR WILL INSTALL INLET PROTECTION. SEE PHASE 3 - STREET CONSTRUCTION.
- THE STORM SEWER CONTRACTOR WILL BE RESPONSIBLE FOR INSTALLING THESE DEVICES.
- THE SUBDIVISION DEVELOPER WILL MAINTAIN THESE EROSION CONTROL DEVICES ONCE INSTALLED.
- ALL DISTURBED GROUND WILL BE FINAL GRADED AND TEMPORARILY OR PERMANENTLY SEEDED WITHIN 14 DAYS OF COMPLETION OF WORK IN ANY GIVEN PART OF THE SUBDIVISION.
- ONCE ALL DISTURBED GROUND DRAINING TO AN INLET HAS BEEN RESTABILIZED WITH GRASS OR SOD, THE SUBDIVISION DEVELOPER WILL BE RESPONSIBLE FOR PERMANENTLY REMOVING THE INLET PROTECTION.

GENERAL NOTES

- THE INTENT OF ALL EROSION CONTROL DEVICES IS TO PREVENT ERODED SOIL FROM ENTERING DITCHES, STORM SEWERS, LAKES, STREETS OR ANY OTHER DRAINAGE FEATURE.
- THIS SHEET IS INTENDED TO PROVIDE GUIDELINES AS TO WHAT TYPE OF EROSION CONTROL DEVICES WILL BE INSTALLED DURING THE CONSTRUCTION PROCESS. CONTRACTORS ARE EXPECTED TO BID PROJECTS ACCORDINGLY.
- EROSION CONTROL DEVICES SHALL BE MAINTAINED DURING THE CONSTRUCTION PROCESS TO REMAIN EFFECTIVE. MAINTENANCE SHALL BE AS INDICATED ON SOIL EROSION BMP'S DETAIL SHEETS.
- PERSONS DESTROYING EROSION CONTROL DEVICES SHALL BE RESPONSIBLE FOR IMMEDIATELY REPAIRING THEM OR INSTALLING SUITABLE REPLACEMENT DEVICES.
- THE DEVELOPMENT OF ANY SUBDIVISION THAT DISTURBS 1 ACRE OR MORE WILL REQUIRE A FEDERAL/STATE NPDES STORMWATER PERMIT. THE PREPARATION OF A STORMWATER POLLUTION PREVENTION PLAN IS REQUIRED. EROSION CONTROL DEVICES ARE REQUIRED. THE DETAILS SHOWN ON THIS SHEET ARE THE MINIMUM STANDARDS TO BE SHOWN ON POLLUTION PREVENTION PLANS.
- FOR SUBDIVISIONS SMALLER THAN 1 ACRE, SOIL EROSION DEVICES ARE REQUIRED. ALSO, DEVELOPERS AND CONTRACTORS ARE ENCOURAGED TO DEVELOP POLLUTION PREVENTION PLANS FOR EACH PROJECT PRIOR TO CONSTRUCTION.
- FAILURE TO USE AND MAINTAIN SOIL EROSION DEVICES IS A VIOLATION OF SECTION 16.32 OF THE CITY CODE AND WILL SUBJECT THE SUBDIVISION DEVELOPER AND CONTRACTORS TO THE PENALTIES PROVIDED THEREIN.
- THE APPLICATION OF EROSION CONTROL DEVICES SHOWN ON THIS SHEET IS FOR SITUATIONS NORMALLY ENCOUNTERED. FROM TIME TO TIME, SITUATIONS WILL ARISE THAT MAY REQUIRE DEVICES OTHER THAN THAT SHOWN. EROSION CONTROL DEVICES, OTHER THAN THOSE SHOWN, MAY BE UTILIZED SO LONG AS THEY ARE EFFECTIVE AND MAINTAINED.
- A STABILIZED EARTH SURFACE IS DEFINED AS ONE THAT IS HARD SURFACED WITH CONCRETE, ASPHALT, OR THE LIKE, OR ONE ON WHICH 70% OF THE GRASS HAS GERMINATED ON THE ENTIRE SURFACE.

SEE DETAIL SHEET FOR BACK OF CURB PROTECTION DETAIL



CURB BACKFILL DETAIL (STREET CONSTRUCTION ONLY)

THIS IS A TEMPORARY MEASURE ONLY. WHEN APPROVED BY THE PROJECT ENGINEER, THE DIRT GRADE BEHIND THE CURB SHALL BE BROUGHT TO THE TOP OF CURB, WITH TEMPORARY EROSION CONTROL MAT OR PERMANENT VEGETATION PLACED, PRIOR TO THE COMPLETION OF ALL PROJECTS.

REVISION DATE: MAY 2013



CITY OF WICHITA
PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

SUBDIVISION DEVELOPMENT PROCESS		
CITY ENGINEER GARY JANZEN, P.E.		
PROJECT NUMBER	OGA NUMBER	DATE
CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		SHEET 20