

PRIVATE STORM WATER SEWER EXTENSION

TO SERVE

KOCH WICHITA CAMPUS EXPANSION

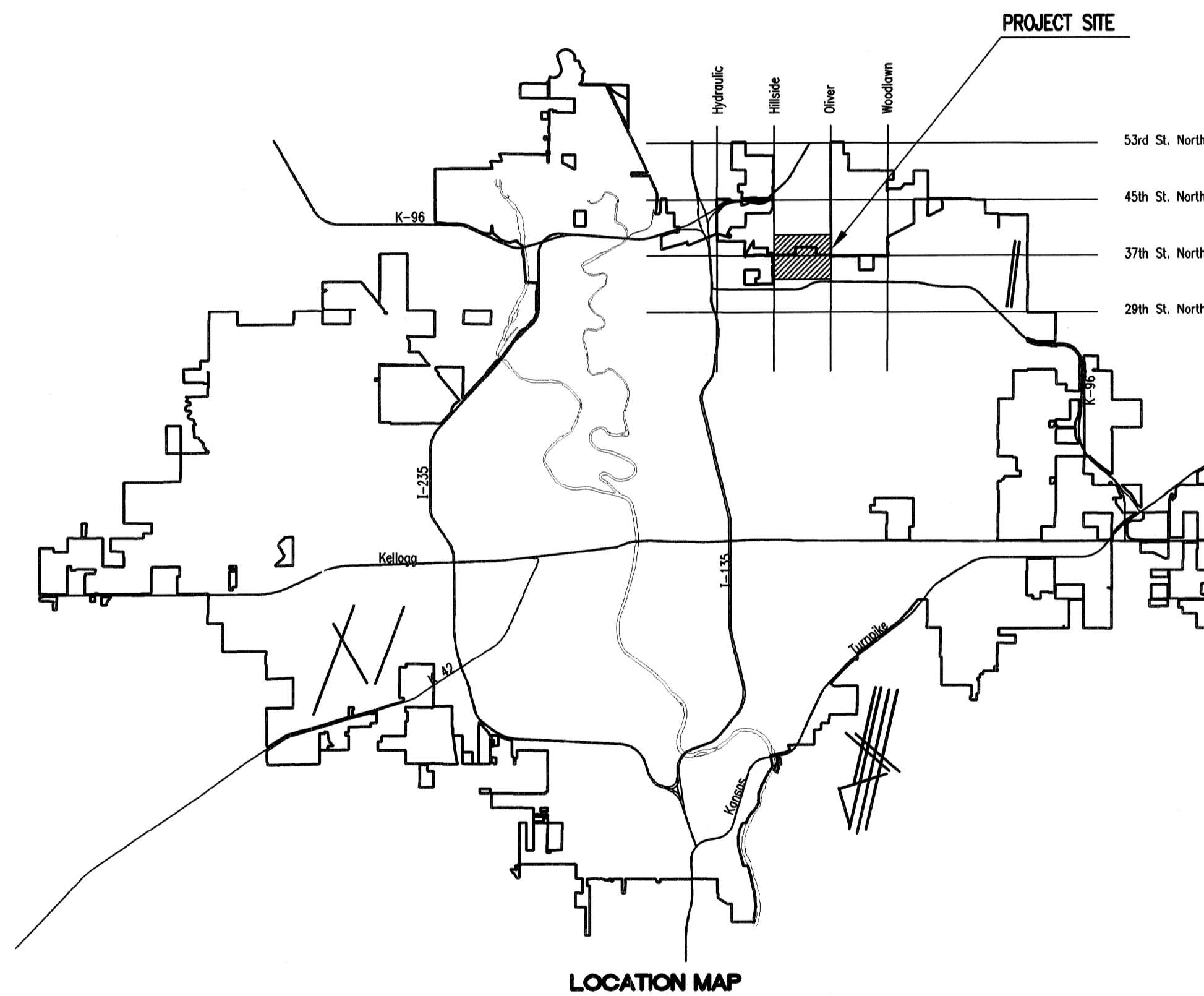
PRIVATE PROJECT NO. 0176 PPD (607861)

CITY OF WICHITA, KANSAS

GARY JANZEN, P.E.- CITY ENGINEER

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APPROVED AS NOTED
BY CITY ENGINEER OF WICHITA

Engineering Frank Tuck 6/7/13
Stormwater Jim Handberg 6-7-13

NOTE TO CONTRACTORS

Inspection and testing for this project are 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 public right-of-way by the Contractor without such inspection, nor shall any work be commenced without written authorization by the City Engineer.

AS BUILTS	
Contractor: Nowak Construction Co., LLC. 4/7/2014	Project Inspector: Larry Gann KEMILLER ENGINEERING PA 117 E. Lewis, Wichita, KS 67202 (316)264-0242

JUNE 2013

PLANS PREPARED BY

PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

ENGINEERS

WICHITA, KANSAS

Saved: 06-03-2013 4:07:23 PM by: JAW
Plot Scale: 1" = 100'-05-2013 4:00:32 PM by: CSL
C:\2012\12275\003\SITE\DWG\PHASE 1\PPD\12275-003-C-PPD_PPD Title Sheet



CONTROL POINTS:
CP 12:
 N:1709101.70 E:1660886.83
 1. 1/2" Rebar (no cap)
 2. 12.4' SE to centerline ditch.
 3. 8.0' NW to edge of cultivated field.
 4. 20.80' NE to Mag Nail in SW face of 4" tree.

CP 15:
 N:1707819.95 E:1660455.35
 1. 1/2" Rebar (no cap)
 2. 5.4' NE to centerline monitoring well.
 3. 6.3' NW to centerline monitoring well.
 4. 59.0' W. to flowline of drainage swale.

CP 26:
 N:1710079.70 E:1661209.42
 1. 5/8" Rebar with green GSS Cap.
 2. 31.75' SE to Mag Nail in NW face 6" Tree.
 3. 30.80' SSE to Mag Nail in N. face 10' Tree.
 4. 74.70' WSW to Mag Nail in East face of 10' Tree.

CP 27:
 N:1711177.01 E:1661281.68
 1. 5/8" Rebar with green GSS Cap.
 2. 5.0' N. to 8 foot tall brace post.
 3. 9.35' ENE to spike in fence West face of brace post for fence in East-West tree row North of 37th St.
 4. 1250' S. to North back of curb of 37th St.

BENCHMARKS:
 BM 1: (City of Wichita) Brass Disk in NW Corner traffic light conc. Base in SE quadrant of Hillside & 37th St. Elev: 1353.25

BM 2: 4" cut back of curb South side of median East of West Koch building entrance, 3.2' east of bullnose end, 71.3' West of Centerline West entrance median. Elev: 1365.27

BM 3: 5/8" Rebar with green GSS Cap. 11.6' SE to EOR in West curb & gutter for South bound traffic, West Koch building entrance. 12.3' West to NE Cor. of concrete sign base. 30.9' NW to top centerline fire hydrant. 28.8' E. to centerline West entrance median. Elev: 1364.97

BM 4: 5/8" Rebar, 33.4' N. to South back of curb of 37th St., 53.4' NE to West edge of conc. Pillar for West end of RCB handrail, 348' NE to cable pedestal. Elev: 1363.28

BM 5: 5/8" Rebar with red GSS Cap, 18.1' S. to North Back of curb of 37th St., 197.7' WSW to "4" cut in bullnose at West end of West median in 37th St. 391.4' E. to West end of North handrail to RCB. Elev: 1364.50

BM 6: 5/8" Rebar with purple GSS Cap, 18.3' S. to North Back of curb of 37th St., 109.8' W. to SE bolt for traffic light pole in NE quadrant of Hillside and 37th St., 130.0' SW to Brass Disk (BM 1) Elev: 1354.17

BM 7: Square Cut on the South Back of curb of 37th St., 288.2' West of the centerline of the West entrance to the front door of the main building, West side of expansion joint. Elev: 1365.78

BM 8: Square Cut on the South Back of curb of 37th St., 152' West of the centerline of the East entrance to the front door of the main Building, 4.5' SW to centerline of Koch emblem. Elev: 1371.80

BM 9: Square Cut on the South Back of curb of 37th St., 314.4' West from the centerline of median in the East entrance to main Building, East side of an expansion joint. Elev: 1376.87

BM 10: Square Cut on South side of median Back of curb 79.5' West of the bullnose which is West of the East entrance to the main building. Elev: 1380.73

BM 11: 1/2" Rebar with Red Cap in island for East entrance for Main Building, 4.0' West of centerline of San. Sewer manhole in island, 8.3' South of South Back of curb of 37th St. 254.0' South to Fire Hydrant. Elev: 1382.28

BM 12: 5/8" Rebar with Red Cap, 9.4' N. of North Back of curb of 37th St., 161.4' East of 2 telephone pedestals on the North side of 37th St., East of the main Building East entrance, 189.6' East of centerline concrete entrance. Elev: 1383.23

BM 13: Square Cut on back of curb on the North side of 37th St., 50.0' East of the centerline of the North entrance to Advance Pain Medicine Associates, 17.5' N. to edge of grass, 120.3' W. to base of 40 mph sign. Elev: 1374.35

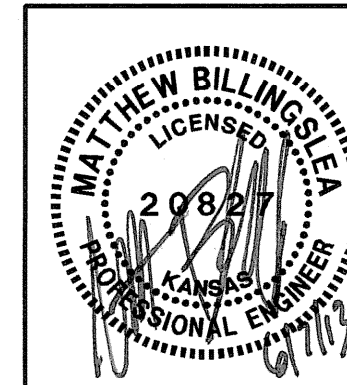
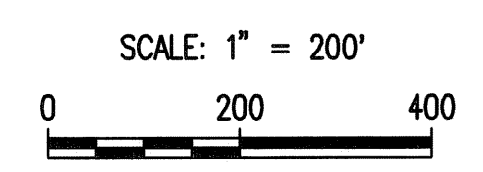
BM 14: Square Cut on the East end of the North headwall for RCB, NW quadrant of Oliver St. & 37th St., 15.4' S. to North Back of curb of 37th St., 29.2' E. to NW bolt of signal pole in NW quadrant of Oliver St. & 37th St., 35.18' SW to NE Corner of East curb inlet. Elev: 1374.09

BM 15: Square Cut on back of curb West side of median for East Main Building entrance, 65.2' N. of South bullnose between First & Second regular parking stalls for Invista building, 105.2' NNE to top centerline fire hydrant South of East entrance of main building. Elev: 1379.15

BM 16: Mag Nail in joint of curb Inlet, NW Corner of Inlet 36.4' W. to centerline of median East main Building entrance. 65.3' N. to Koch campus Exit, road running East & West East of East main Building. 153.5' South to a fire hydrant. Elev: 1371.08

BM 20: Square cut on South back of curb of South East-West paved access drive (Westerly end). 36.7' NNE to top of fire hydrant, 32.0' N. to S. Face of 14'0x12' Shed. Elev: 1361.05

BM 21: Mag Nail in expansion joint at West end of South East-West paved access drive. 5.5' SE to centerline of a flume, 58.2' NNE to most southerly bullnose for median in West main Building entrance, 42.3' NNW to top SE Corner of transformer. Elev: 1355.07



SURVEY PROVIDED BY:
 GARBER SURVEYING SERVICE, P.A.
 2908 NORTH PLUM STREET
 HUTCHINSON, KS. 67502
 620-665-7032
 www.garbersurveying.com
 FEBRUARY 2013

No.	Revision	By	Date
KOCH WICHITA CAMPUS EXPANSION PRIVATE STORM WATER SEWER EXTENSION HORIZONTAL AND VERTICAL CONTROL GARY JANZEN, P.E. - CITY ENGINEER PRIVATE PROJECT NO. 0176 PPD (607861) PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A. 303 SOUTH TOPEKA WICHITA, KS 67202 316-262-2691 www.pec1.com			
Designed by	MEB, JAG	Job No.	35-12275-3-7208
Drawn by	JAN	Date	FEBRUARY 2013
			Sht. C-6.02 of 50

Saved 05-28-2013 10:13:39 AM by CSI
 Plot Scale 1:200 06-06-2013 2:34:47 PM by JAN
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N: 1,710,211.5886, E: 1,661,255.1634
 Sta. 10+00.0, SWS Line No. 1
 Const. Reinf. Concrete Headwall
 See Sheet No. C-6.36 thru C-6.41
 Install 76.5 L.F. 10' x 4' RCB (Precast) (NE)
 First 3 Sections of RCB Shall have
 Restraining Joints.

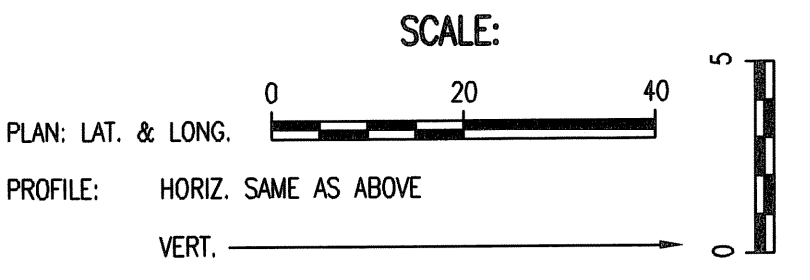
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 Sta. 10+76.5, SWS Line No. 1 =
 Sta. 10+00.0, SWS Line No. 1A
 Connect 24" RCP to 10' x 4' RCB
 Install 160.9 L.F. 10' x 4' RCB (Precast) (NE)
 Install 55.2 L.F. 24" RCP (NW) ⊕

N: 1,710,319.2876, E: 1,661,466.7173
 Sta. 12+37.4, SWS Line No. 1 =
 Sta. 10+00.0, SWS Line No. 1B
 Connect 24" RCP to 10' x 4' RCB
 Install 24.8 L.F. 10' x 4' RCB (Precast) (NE)
 Install 24.7 L.F. 24" RCP (SE) ⊕

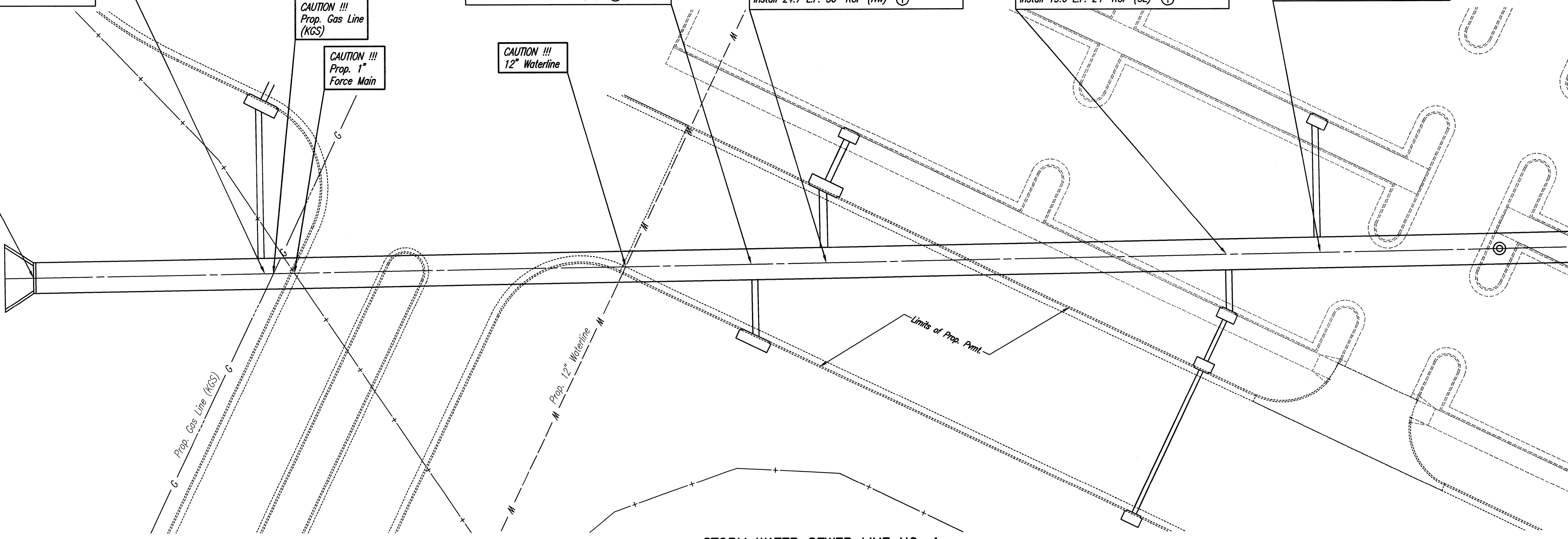
N: 1,710,330.5435, E: 1,661,488.8273
 Sta. 12+62.2, SWS Line No. 1 =
 Sta. 10+00.0, SWS Line No. 1C
 Connect 30" RCP to 10' x 4' RCB
 Install 132.3 L.F. 10' x 4' RCB (Precast) (NE)
 Install 24.7 L.F. 30" RCP (NW) ⊕

N: 1,710,390.5780, E: 1,661,606.7534
 Sta. 13+94.5, SWS Line No. 1 =
 Sta. 10+00.0, SWS Line No. 1D
 Connect 24" RCP to 10' x 4' RCB
 Install 31.1 L.F. 10' x 4' RCB (Precast) (NE)
 Install 19.6 L.F. 24" RCP (SE) ⊕

N: 1,710,404.6586, E: 1,661,634.4121
 Sta. 14+25.6, SWS Line No. 1 =
 Sta. 10+00.0, SWS Line No. 1E
 Connect 24" RCP to 10' x 4' RCB
 Install 43.1 L.F. 24" RCP (NW) ⊕



NO RIP-RAP YET

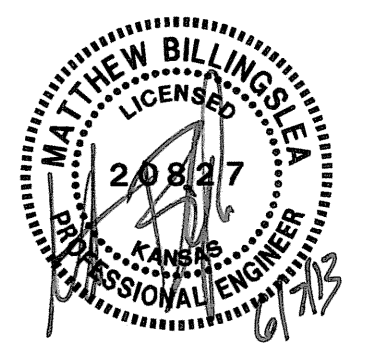


AS BUILTS

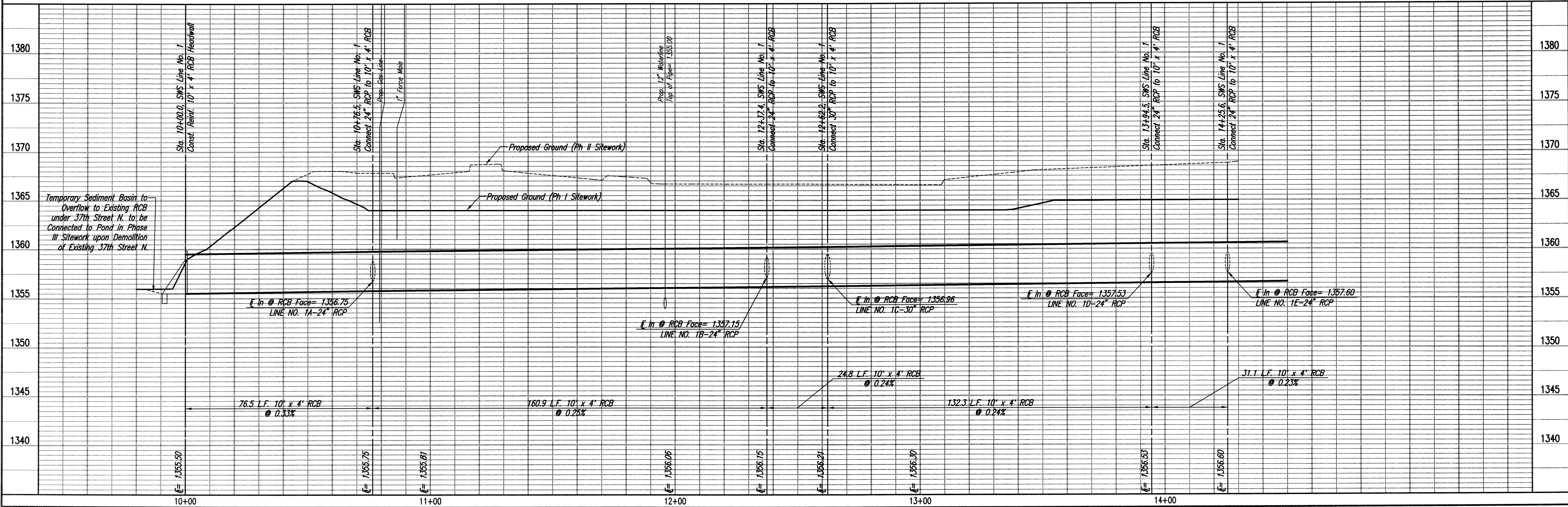
KEMILLER
ENGINEERING PA

117 E. Lewis,
Wichita, KS 67202 (316)264-0242

⊕ LENGTH PROVIDED FROM CENTER OF STRUCTURE TO CENTER OF RCB. ACTUAL LENGTH WILL VARY AND IS NOTED ON PROFILE VIEW OF RCB BRANCH LINES.



STORM WATER SEWER LINE NO. 1



PEC
PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
300 SOUTH TOPEKA, WICHITA, KS 67202
316-265-2881 www.pec.com

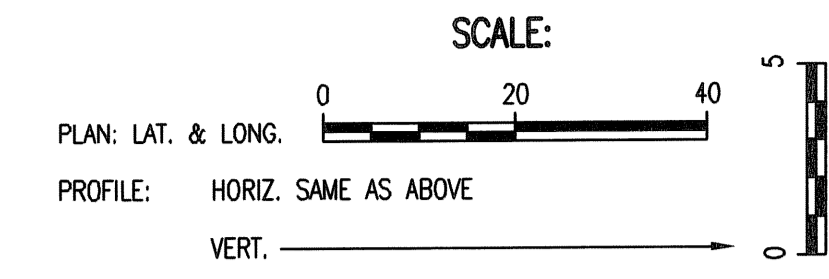
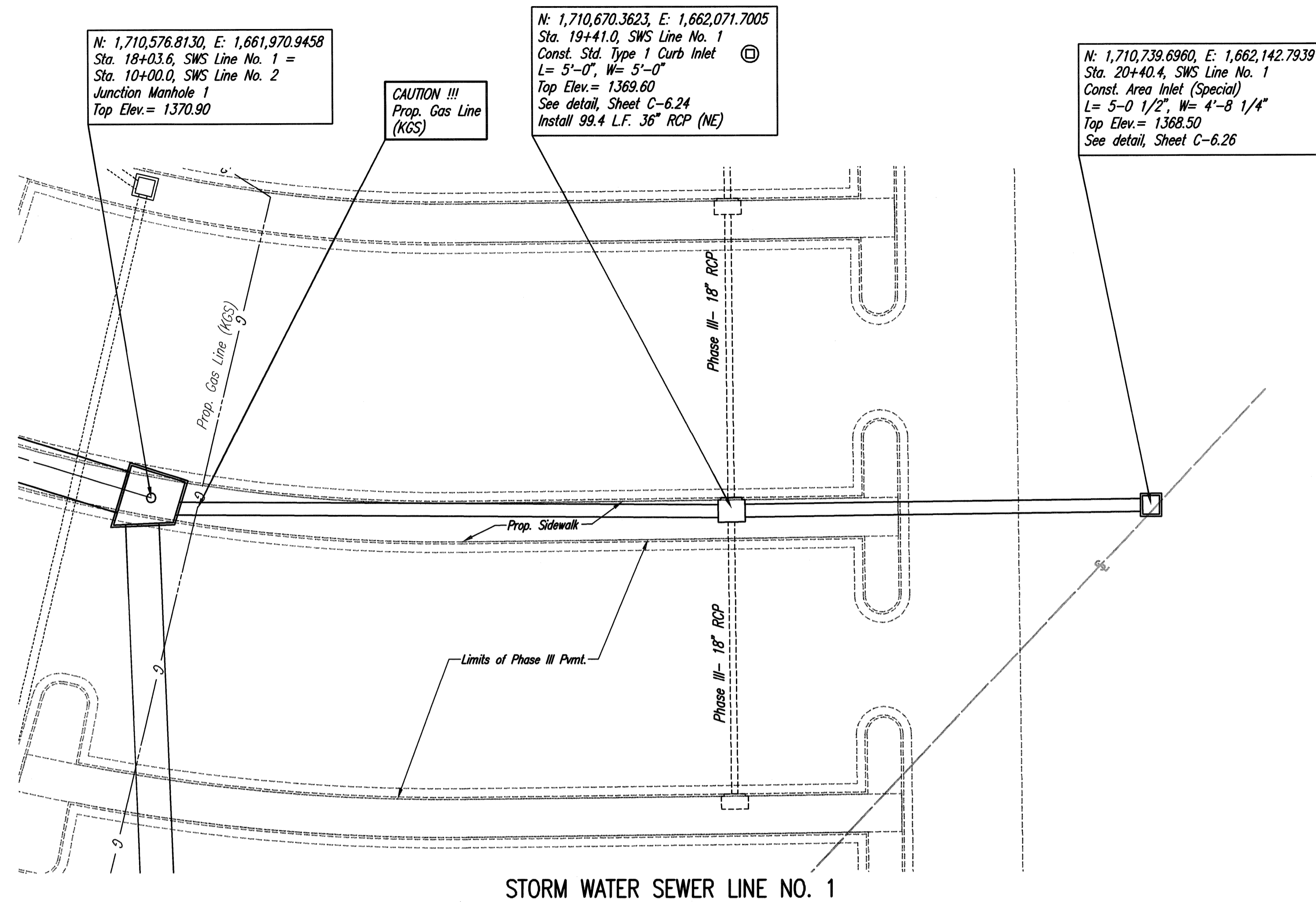
PEC
Koch Wichita Campus Expansion
Private Storm Water Sewer Extension
Storm Water Sewer Line No. 1

Designed By: MEB, JAG
Checked By: JAN

Job No. 35-12275-3-7208
Date: FEBRUARY 2013

GARY JANZEN, P.E. - CITY ENGINEER
PRIVATE PROJECT NO. 0176 PPD (607861)

Sheet C-6.03 of 50



STRUCTURE SHALL BE CAST WITH BLOCK-OUTS FOR PHASE III STORM SEWER PIPE. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION OF TEMPORARY CAPS FOR PHASE III BLOCK-OUTS TO PREVENT RUBBLE, SOIL, OR SEDIMENT FROM ENTERING THE STRUCTURE.

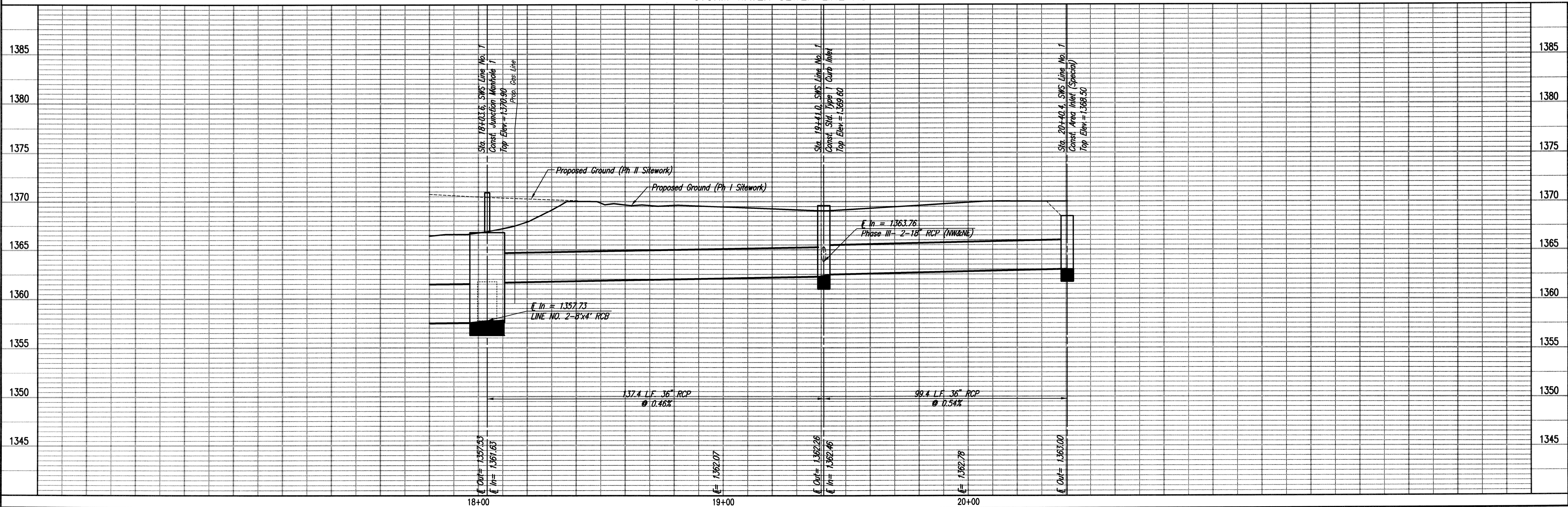
AS BUILTS

KEMILLER ENGINEERING PA

117 E. Lewis,
Wichita, KS 67202

(316)264-0242

STORM WATER SEWER LINE NO. 1



STORM WATER SEWER LINE NO. 1
 KOCH WICHITA CAMPUS EXPANSION
 PRIVATE STORM WATER SEWER EXTENSION
 GARY JANZEN, P.E. - CITY ENGINEER
 PRIVATE PROJECT NO. 0176_PFD (607861)

PEC

PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
 303 SOUTH TOPEKA WICHITA, KS 67202
 316-262-2881 www.pec1.com

Designed By: MEB, JAG
 Drawn By: JAN
 Job No.: 35-12275-3-7208
 Date: FEBRUARY 2013

Sheet C-6.05 of 50

Saved: 06-04-2013 1:55:05 PM by JAN
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N: 1,710,246.2804, E: 1,661,323.3088
Sta. 10+76.5, SWS Line No. 1 =
Sta. 10+00.0, SWS Line No. 1A
Connect 24" RCP to 10' x 4' RCB

CAUTION !!!
Prop. 1" Force Main

N: 1,710,295.4478, E: 1,661,298.2784
Sta. 10+55.2, SWS Line No. 1A
Const. Std. Type 1 Curb Inlet
L= 10'-0", W= 3'-0"
Top Elev.= 1367.72
See detail, Sheet C-6.24
Install 53.0 L.F. 24" RCP (N)

N: 1,710,350.4443, E: 1,661,297.6879
Sta. 11+10.2, SWS Line No. 1A
Const. Std. Type 1 Curb Inlet
L= 10'-0", W= 3'-0"
Top Elev.= 1367.88
See detail, Sheet C-6.24

N: 1,710,319.2876, E: 1,661,466.7173
Sta. 12+37.4, SWS Line No. 1 =
Sta. 10+00.0, SWS Line No. 1B
Connect 24" RCP to 10' x 4' RCB

N: 1,710,297.5225, E: 1,661,478.3163
Sta. 10+24.7, SWS Line No. 1B
Const. Std. Type 1 Curb Inlet
L= 10'-0", W= 3'-0"
Top Elev.= 1366.64
See detail, Sheet C-6.24

N: 1,710,330.5435, E: 1,661,488.8273
Sta. 12+62.2, SWS Line No. 1 =
Sta. 10+00.0, SWS Line No. 1C
Connect 30" RCP to 10' x 4' RCB

N: 1,710,352.5184, E: 1,661,477.6402
Sta. 10+43.7, SWS Line No. 1C
Const. Std. Type 1 Curb Inlet
L= 10'-0", W= 3'-0"
Top Elev.= 1366.64
See detail, Sheet C-6.24
Install 19.0 L.F. 24" RCP (N)

SCALE: 0 20 40
PLAN: LAT. & LONG.
PROFILE: HORIZ. SAME AS ABOVE
VERT. _____

N: 1,710,371.5176, E: 1,661,477.4635
Sta. 10+43.7, SWS Line No. 1C
Const. Std. Type 1 Curb Inlet
L= 5'-0", W= 3'-0"
Top Elev.= 1367.70
See detail, Sheet C-6.24

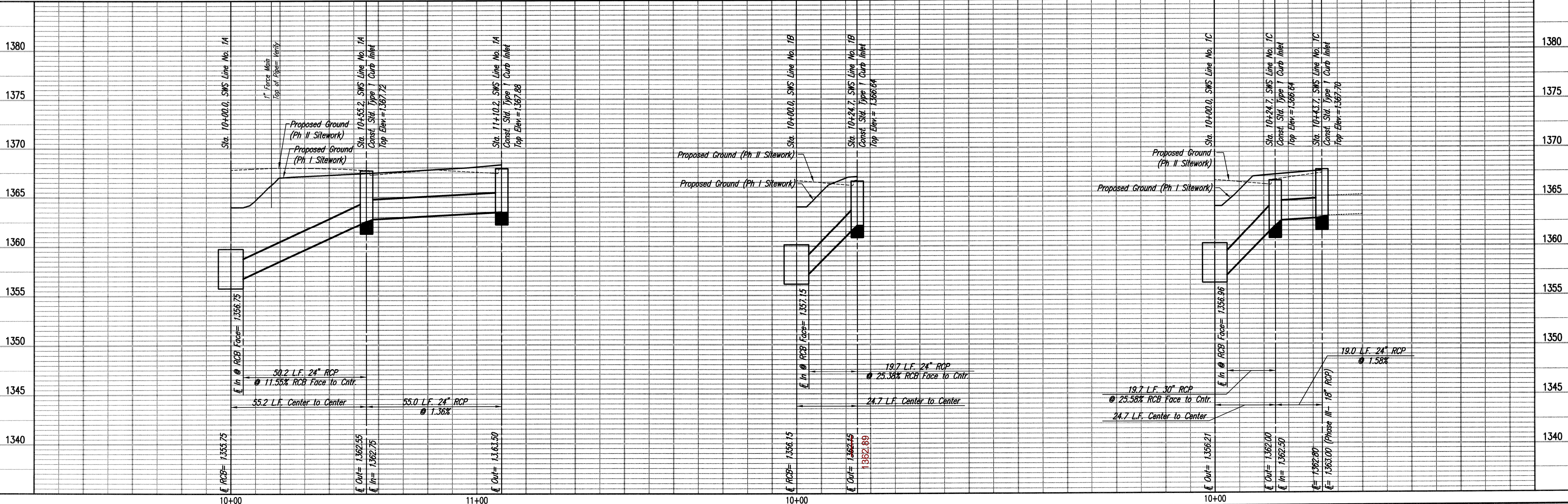
STRUCTURE SHALL BE CAST WITH BLOCK-OUTS FOR PHASE III STORM SEWER PIPE. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION OF TEMPORARY CAPS FOR PHASE III BLOCK-OUTS TO PREVENT RUBBLE, SOIL, OR SEDIMENT FROM ENTERING THE STRUCTURE.



STORM WATER SEWER LINE NO. 1A

STORM WATER SEWER LINE NO. 1B

STORM WATER SEWER LINE NO. 1C



KOCH WICHITA CAMPUS EXPANSION
PRIVATE STORM WATER SEWER EXTENSION
STORM WATER SEWER LINES NO. 1A,
NO. 1B, & NO. 1C

PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
303 SOUTH TOPEKA WICHITA, KS 67202
316-262-2691 www.pec.com

Designed By: MEB, JAG
Drawn By: JAN

Job No.: 35-12275-3-7208
Date: FEBRUARY 2013

GARY JANZEN, P.E. - CITY ENGINEER
PRIVATE PROJECT NO. 0176 PFD (607861)

Sheet C-6.06 of 50

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N: 1,710,390.5780, E: 1,661,606.7534
Sta. 13+94.5, SWS Line No. 1 =
Sta. 10+00.0, SWS Line No. 1D
Connect 24" RCP to 10' x 4' RCB

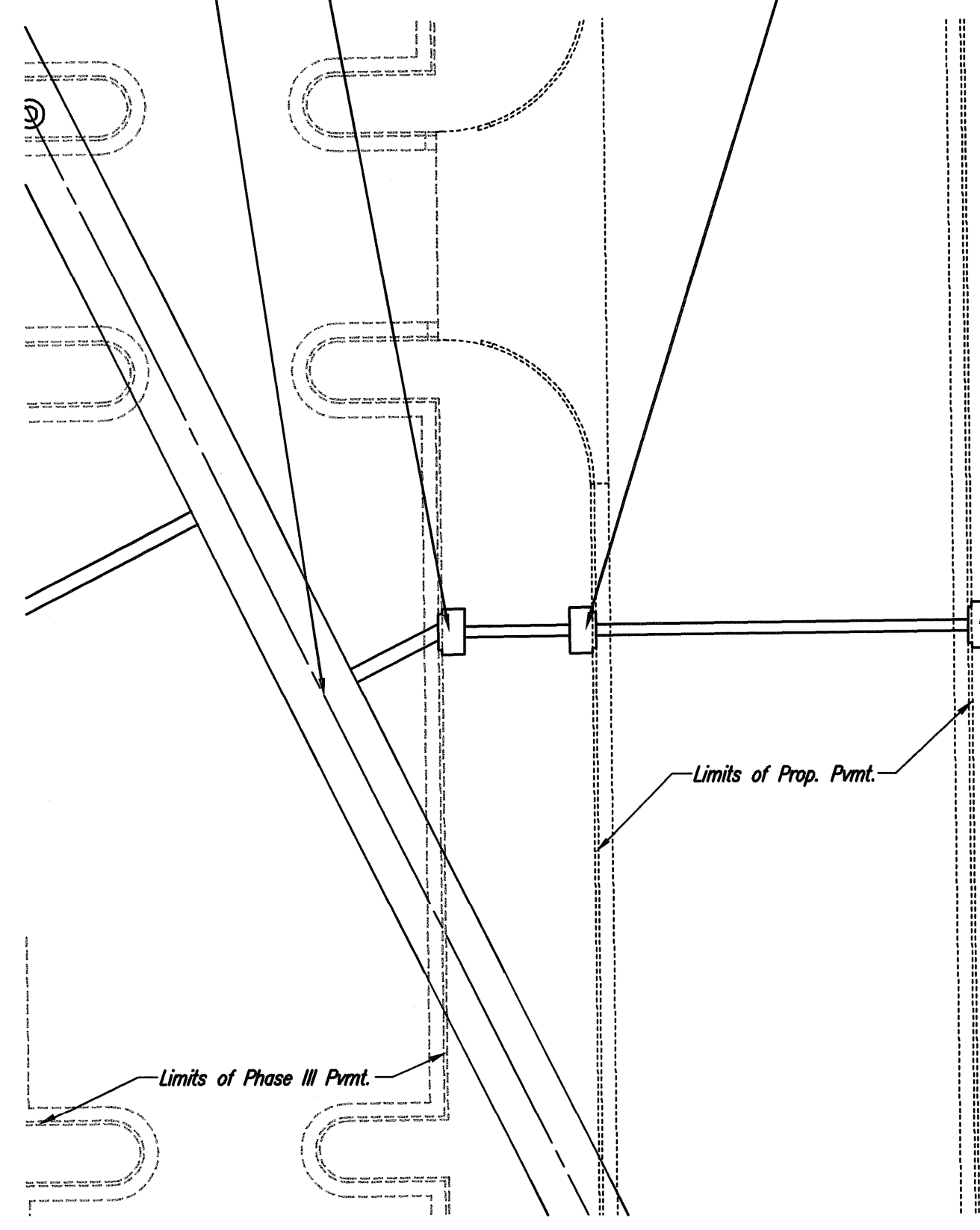
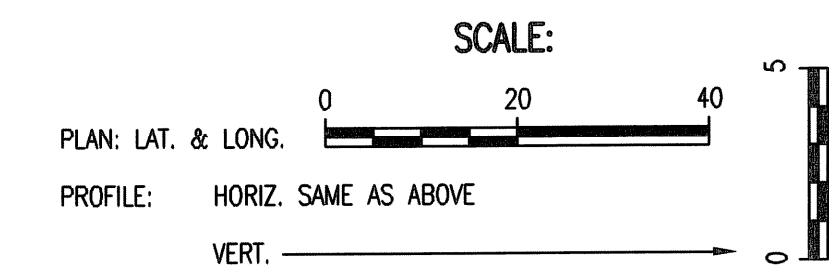
N: 1,710,373.1101, E: 1,661,615.6461
Sta. 10+19.6, SWS Line No. 1D
Const. Std. Type 1 Curb Inlet
L= 5'-0", W= 3'-0"
Top Elev.= 1368.30
See detail, Sheet C-6.24
Install 19.0 L.F. 18" RCP (S)

N: 1,710,354.1114, E: 1,661,615.8655
Sta. 10+38.6, SWS Line No. 1D
Const. Std. Type 1 Curb Inlet
L= 5'-0", W= 3'-0"
Top Elev.= 1367.75
See detail, Sheet C-6.24
Install 55.0 L.F. 18" RCP (S)

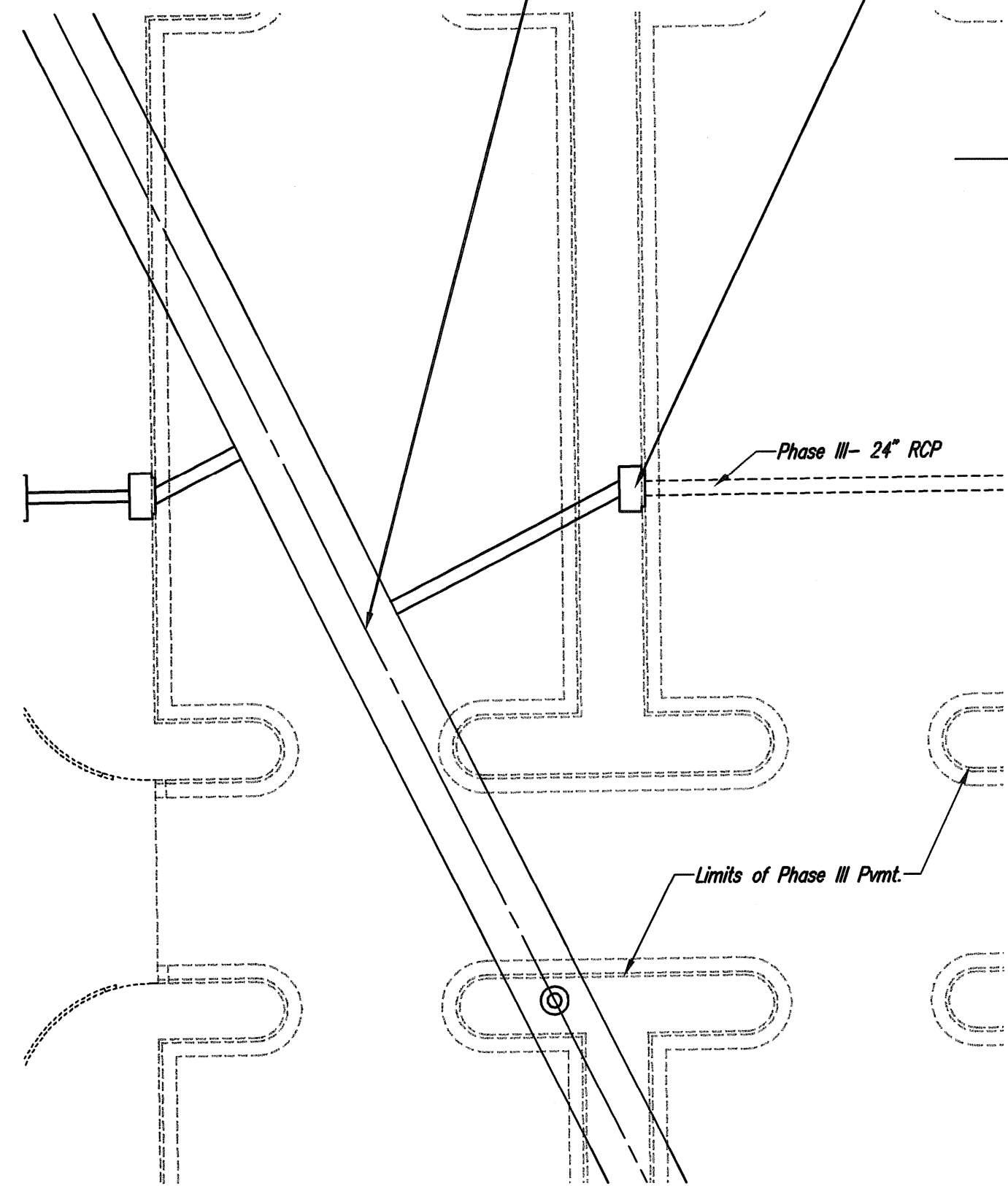
N: 1,710,299.1150, E: 1,661,616.4988
Sta. 10+93.6, SWS Line No. 1D
Const. Std. Type 1 Curb Inlet
L= 5'-0", W= 3'-0"
Top Elev.= 1367.75
See detail, Sheet C-6.24

N: 1,710,404.6586, E: 1,661,634.4121
Sta. 14+25.6, SWS Line No. 1 =
Sta. 10+00.0, SWS Line No. 1E
Connect 24" RCP to 10' x 4' RCB

N: 1,710,443.1055, E: 1,661,614.8394
Sta. 10+43.1, SWS Line No. 1E
Const. Std. Type 1 Curb Inlet
L= 5'-0", W= 3'-0"
Top Elev.= 1369.90
See detail, Sheet C-6.24



STORM WATER SEWER LINE NO. 1D

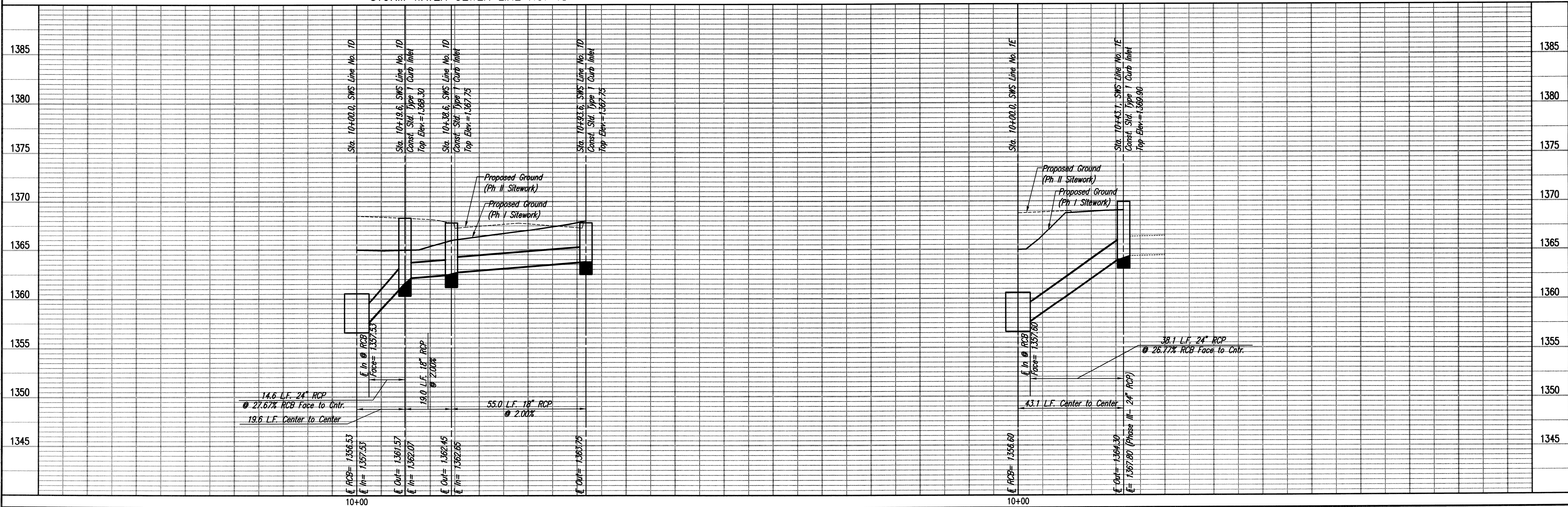


STORM WATER SEWER LINE NO. 1E

⊙ STRUCTURE SHALL BE CAST WITH BLOCK-OUTS FOR PHASE III STORM SEWER PIPE. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION OF TEMPORARY CAPS FOR PHASE III BLOCK-OUTS TO PREVENT RUBBLE, SOIL, OR SEDIMENT FROM ENTERING THE STRUCTURE.

AS BUILTS

117 E. Lewis,
Wichita, KS 67202 (316)264-0242



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Sheet C-6.07 of 50

DESIGNED BY: MEB, JAG
 DRAWN BY: JAW

Job No. 35-12275-3-7208
 Date: FEBRUARY 2013

PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
 303 SOUTH TOPEKA, WICHITA, KS 67202
 316-262-2881 www.pec.com

KOCH WICHITA CAMPUS EXPANSION
 PRIVATE STORM WATER SEWER EXTENSION
 STORM WATER SEWER LINES
 NO. 1D AND NO. 1E
 GARY JANZEN, P.E. - CITY ENGINEER
 PRIVATE PROJECT NO. 0176 PPD (607861)

N: 1,710,472.2979, E: 1,661,767.2764
Sta. 15+74.7, SWS Line No. 1F
Sta. 10+00.0, SWS Line No. 1F
Connect 24" RCP to 10' x 4' RCB

N: 1,710,445.5320, E: 1,661,780.9025
Sta. 10+30.0, SWS Line No. 1F
Const. Std. Type 1 Curb Inlet
L= 5'-0", W= 3'-0"
Top Elev.= ~~1369.30~~ 1368.97
See detail, Sheet C-6.24
Install 70.0 L.F. 18" RCP (S)

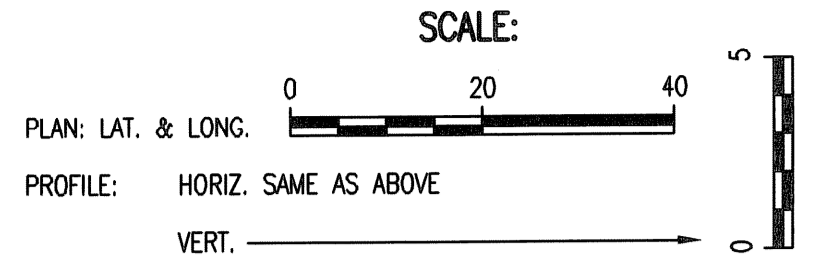
N: 1,710,375.6535, E: 1,661,785.0247
Sta. 11+00.0, SWS Line No. 1F
Const. Std. Type 1 Curb Inlet
L= 5'-0", W= 3'-0"
Top Elev.= ~~1368.40~~ 1368.15
See detail, Sheet C-6.24
Install 19.6 L.F. 18" RCP (S)

N: 1,710,356.0648, E: 1,661,785.3643
Sta. 11+19.6, SWS Line No. 1F
Const. Std. Type 1 Curb Inlet
L= 5'-0", W= 3'-0"
Top Elev.= 1368.22
See detail, Sheet C-6.24
Install 55.0 L.F. 18" RCP (S)

N: 1,710,301.0685, E: 1,661,785.9976
Sta. 11+74.6, SWS Line No. 1F
Const. Std. Type 1 Curb Inlet
L= 5'-0", W= 3'-0"
Top Elev.= 1368.22
See detail, Sheet C-6.24

N: 1,710,486.3970, E: 1,661,794.9714
Sta. 16+05.7, SWS Line No. 1G
Sta. 10+00.0, SWS Line No. 1G
Connect 24" RCP to 10' x 4' RCB

N: 1,710,515.6203, E: 1,661,780.0935
Sta. 10+32.8, SWS Line No. 1G
Const. Std. Type 1 Curb Inlet
L= 5'-0", W= 3'-0"
Top Elev.= ~~1369.90~~ 1369.67
See detail, Sheet C-6.24



Ⓢ STRUCTURE SHALL BE CAST WITH BLOCK-OUTS FOR PHASE III STORM SEWER PIPE. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION OF TEMPORARY CAPS FOR PHASE III BLOCK-OUTS TO PREVENT RUBBLE, SOIL, OR SEDIMENT FROM ENTERING THE STRUCTURE.

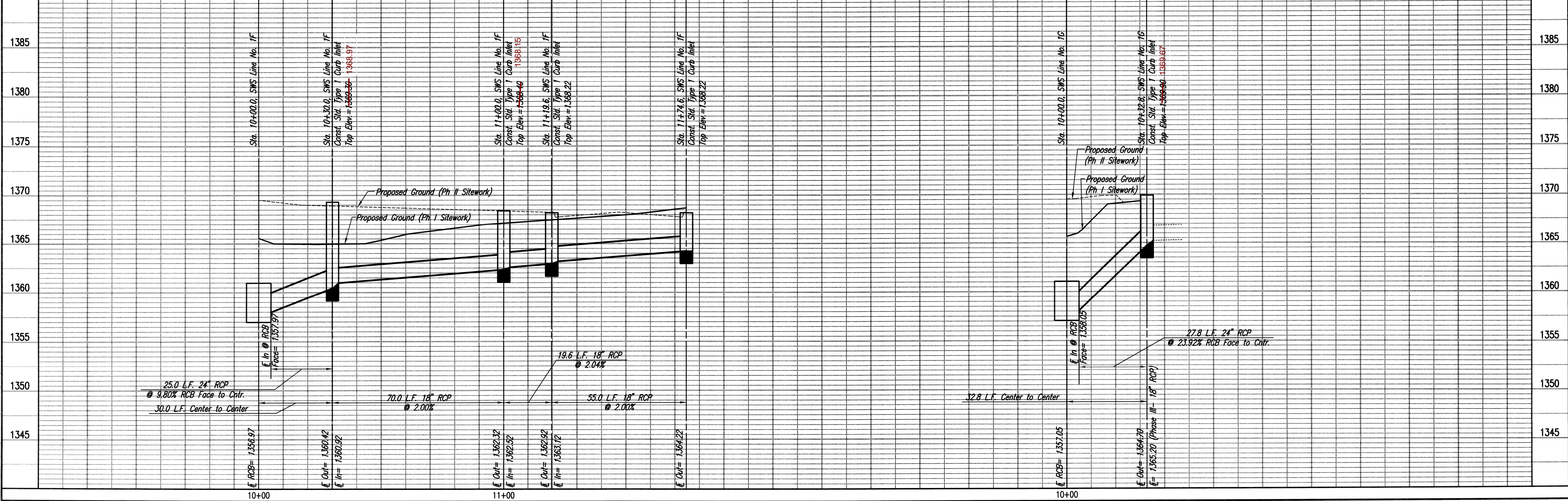
AS BUILTS

KEMILLER ENGINEERING PA

117 E. Lewis,
Wichita, KS 67202 (316)264-0242

STORM WATER SEWER LINE NO. 1F

STORM WATER SEWER LINE NO. 1G



Sheet 06-06-2013 2:02:37 PM by JAG
 Plot Scale 1:20 06-06-2013 2:03:09 PM by JAG
 Q:\2012\12275\003\SHE OVAL PHASE 1\PP0\12275-003-C-PP0_06 SWS no1F_1G

Sheet C-6.08 of 50

Designed By: MEB, JAG
 Date: JAN

Job No. 35-12275-3-708
 Date: FEBRUARY 2013

PRIVATE PROJECT NO. 0176 PPD (607861)

GARY JANZEN, P.E. - CITY ENGINEER

NO. 1F AND NO. 1G

STORM WATER SEWER LINES

PRIVATE STORM SEWER EXTENSION

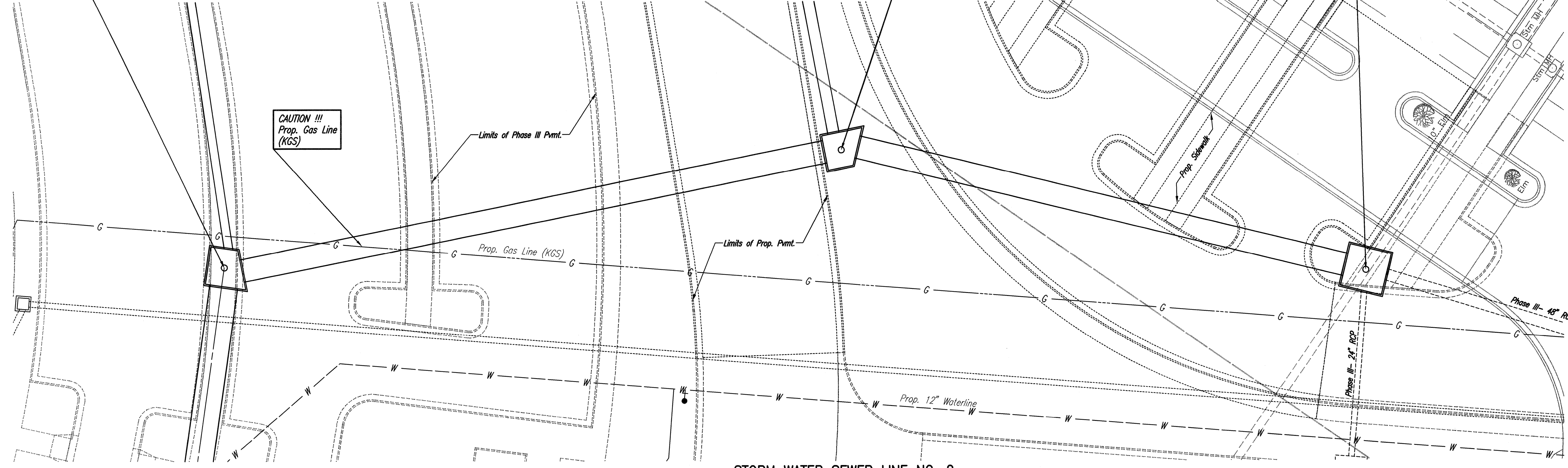
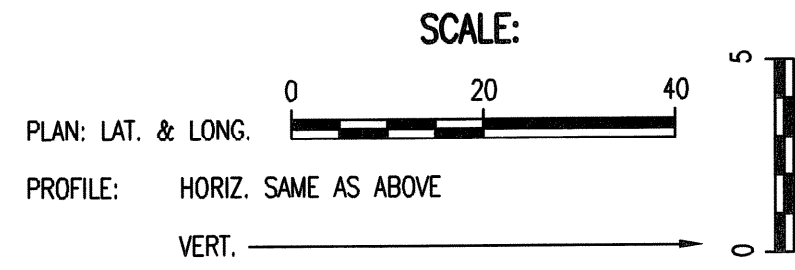
KOCH WICHITA CAMPUS EXPANSION

PROFESSIONAL ENGINEERING CONSULTANTS P.A.
 303 SOUTH TOPEKA WICHITA, KS 67202
 316-262-2881 www.pec1.com

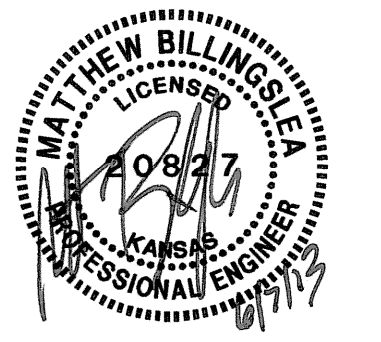
N: 1,710,576.8130, E: 1,661,970.9458
 Sta. 18+03.6, SWS Line No. 1 =
 Sta. 10+00.0, SWS Line No. 2
 Junction Manhole 1
 Top Elev. = 1370.90

N: 1,710,420.2938, E: 1,662,130.7764
 Sta. 12+23.7, SWS Line No. 2 =
 Sta. 9+98.8, SWS Line No. 3
 Construct Junction Manhole 2
 Top Elev. = 1368.25 1369.24
 See detail, Sheets C-6.30 & C-6.31
 Install 191.7 L.F. 8" x 4" RCB (Precast) (SE)
 Install 133.7 L.F. 48" RCP (NW)

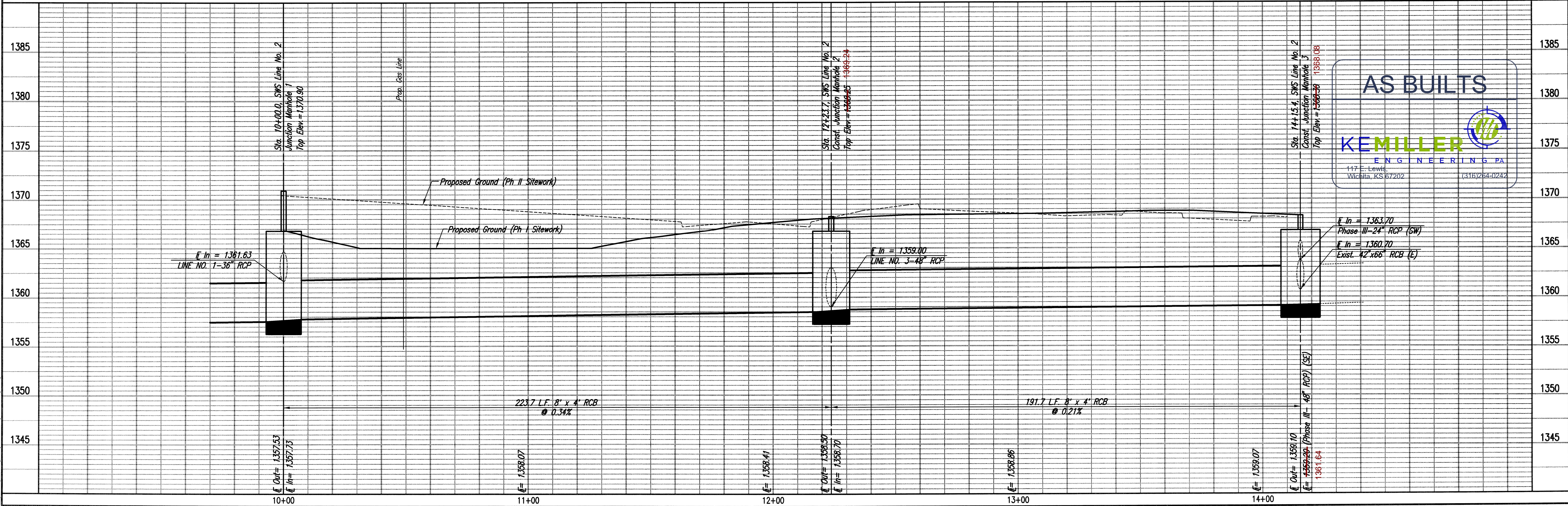
N: 1,710,242.6982, E: 1,662,202.9673
 Sta. 14+15.4, SWS Line No. 2
 Construct Junction Manhole 3
 Top Elev. = 1368.30 1368.08
 See detail, Sheet C-6.32 & C-6.33
 Connect existing 42" x 66" RCB
 Remove existing 42" x 66" RCB and
 End Section as necessary. Reference
 Demolition Plan, Sheet C-1.01



- ⓐ STRUCTURE SHALL BE CAST WITH BLOCK-OUTS FOR PHASE III STORM SEWER PIPE. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION OF TEMPORARY CAPS FOR PHASE III BLOCK-OUTS TO PREVENT RUBBLE, SOIL, OR SEDIMENT FROM ENTERING THE STRUCTURE.
- ⓑ PRIOR TO CONSTRUCTION CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATION AND SIZE OF EXISTING SWS PIPE AND REPORT THESE FINDINGS TO THE ENGINEER SO THAT ANY NECESSARY ADJUSTMENTS CAN BE MADE. INSTALL CONNECTION OF EXISTING SWS PIPE AND PROPOSED STRUCTURE, CUT FLUSH WITH INSIDE WALL OF STRUCTURE, AND GROUT IN PLACE WITH NON-SHRINK GROUT. SUBSIDIARY TO SWS STRUCTURE.



STORM WATER SEWER LINE NO. 2



AS BUILTS

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STORM WATER SEWER LINE NO. 2
 KOCH WICHITA CAMPUS EXPANSION
 PRIVATE STORM WATER SEWER EXTENSION
 GARY JANZEN, P.E. - CITY ENGINEER
 PRIVATE PROJECT NO. 0176 PPD (607861)

PECC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
 303 SOUTH TOPEKA WICHITA, KS 67202
 316-262-2881 www.pecc.com

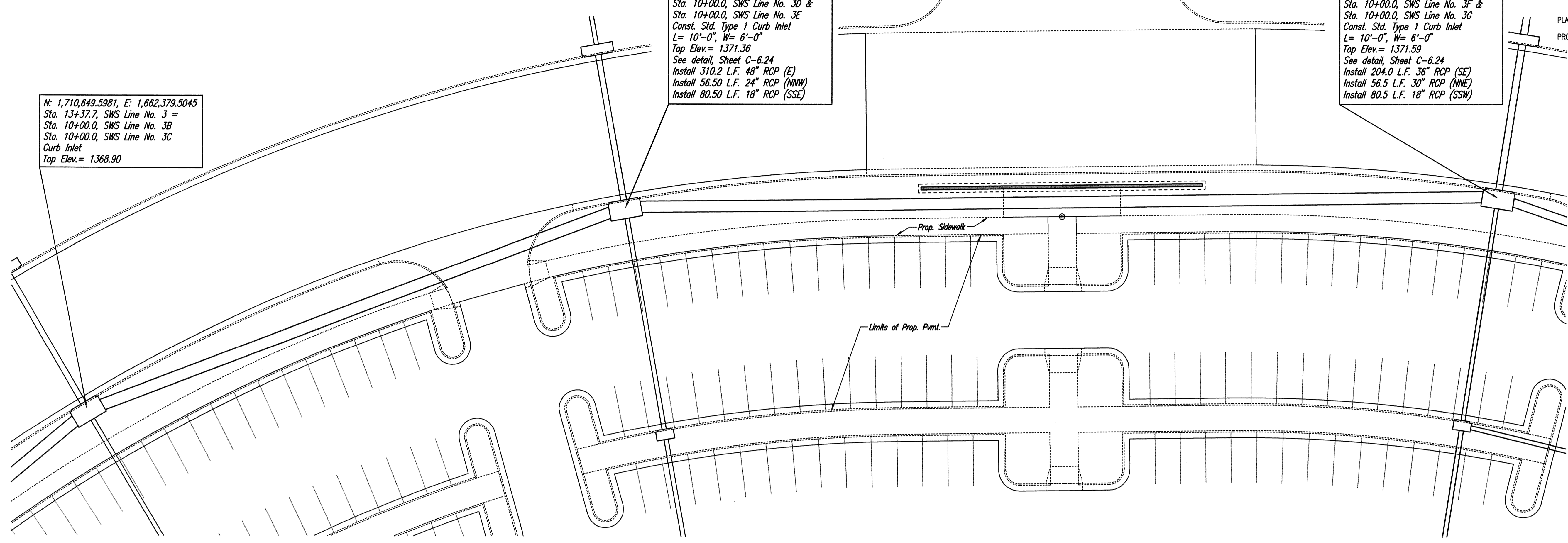
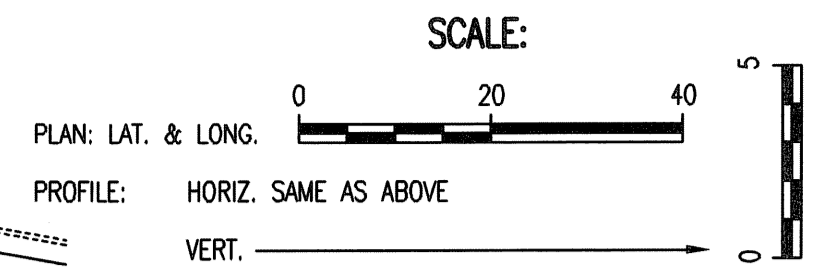
Designed By: MEB, JAG
 Date: JAN
 Job No.: 35-12275-3-7208
 Date: FEBRUARY 2013

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 0:201212275-003 SWE CIVIL PHASE 1 PPD12275-003-C-PPD_07 SWS no2

N: 1,710,649.5981, E: 1,662,379.5045
 Sta. 13+37.7, SWS Line No. 3 =
 Sta. 10+00.0, SWS Line No. 3B
 Sta. 10+00.0, SWS Line No. 3C
 Curb Inlet
 Top Elev. = 1368.90

N: 1,710,721.1024, E: 1,662,570.5542
 Sta. 15+41.7, SWS Line No. 3 =
 Sta. 10+00.0, SWS Line No. 3D &
 Sta. 10+00.0, SWS Line No. 3E
 Const. Std. Type 1 Curb Inlet
 L = 10'-0", W = 6'-0"
 Top Elev. = 1371.36
 See detail, Sheet C-6.24
 Install 310.2 L.F. 48" RCP (E)
 Install 56.50 L.F. 24" RCP (NNW)
 Install 80.50 L.F. 18" RCP (SSE)

N: 1,710,724.6778, E: 1,662,880.7774
 Sta. 18+51.9, SWS Line No. 3 =
 Sta. 10+00.0, SWS Line No. 3F &
 Sta. 10+00.0, SWS Line No. 3G
 Const. Std. Type 1 Curb Inlet
 L = 10'-0", W = 6'-0"
 Top Elev. = 1371.59
 See detail, Sheet C-6.24
 Install 204.0 L.F. 36" RCP (SE)
 Install 56.5 L.F. 30" RCP (NNE)
 Install 80.5 L.F. 18" RCP (SSW)

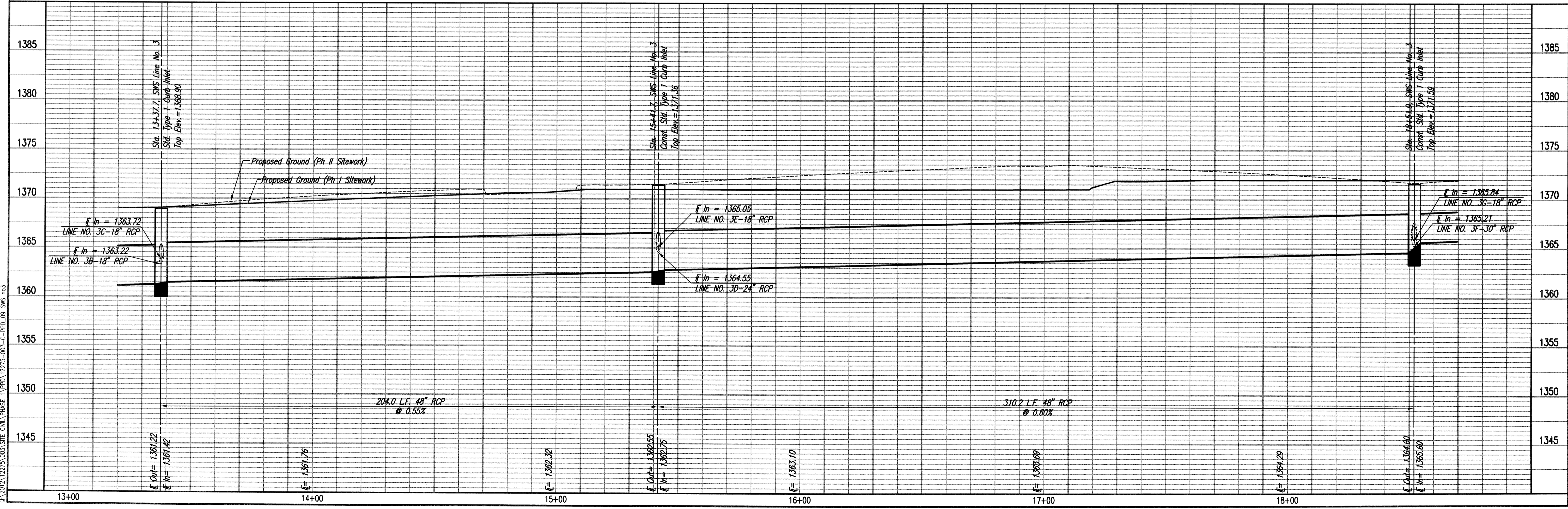


AS BUILTS

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Wichita, KS 67202 (316)264-0242



STORM WATER SEWER LINE NO. 3



MEPEC
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 316-262-2881 www.mepec.com

Job No. 35-12275-3-7208
 Date FEBRUARY 2013

Designed By: MEB, JAG
 Drawn By: JAN

KOCH WICHITA CAMPUS EXPANSION
 PRIVATE STORM WATER SEWER EXTENSION
STORM WATER SEWER LINE NO. 3

GARY JANZEN, P.E. - CITY ENGINEER
 PRIVATE PROJECT NO. 0176_PFD (607861)

Sheet C-6.11 of 50

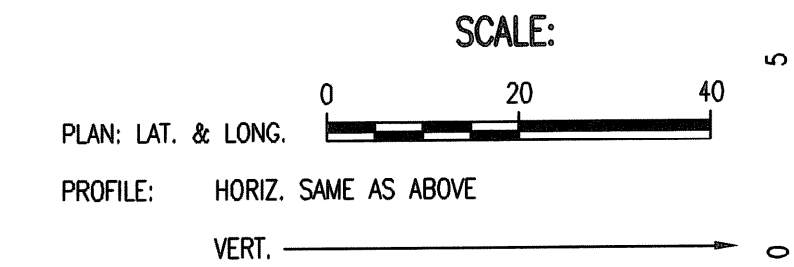
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N: 1,710,724.6778, E: 1,662,880.7774
 Sta. 18+51.9, SWS Line No. 3 =
 Sta. 10+00.0, SWS Line No. 3F &
 Sta. 10+00.0, SWS Line No. 3G
 Curb Inlet
 Top Elev. = 1371.59

N: 1,710,657.5886, E: 1,663,073.4393
 Sta. 20+55.9, SWS Line No. 3 =
 Sta. 10+00.0, SWS Line No. 3I
 Const. Type 1 Curb Inlet
 L = 10'-0", W = 6'-0"
 Top Elev. = 1373.74
 See detail, Sheet C-6.24
 Install 228.0 L.F. 36" RCP (SE)
 Install 56.50 L.F. 24" RCP (NE)

N: 1,710,514.0533, E: 1,663,250.4989
 Sta. 22+83.9, SWS Line No. 3 =
 Sta. 10+00.0, SWS Line No. 3J
 Const. Std. Type 1 Curb Inlet
 L = 10'-0", W = 5'-0"
 Top Elev. = 1376.10
 See detail, Sheet C-6.24
 Install 156.6 L.F. 30" RCP (SE)
 Install 56.0 L.F. 36" RCP (NE)

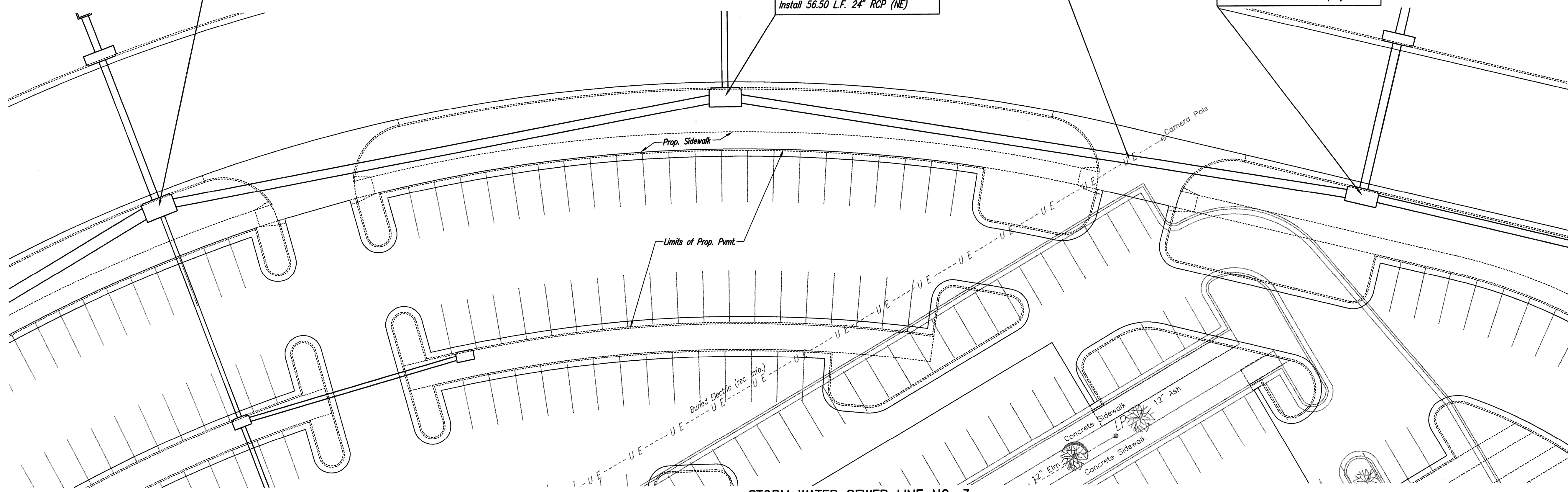
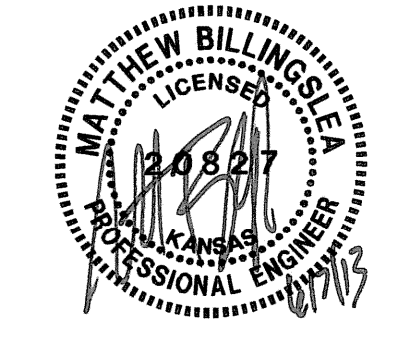
CAUTION !!!
 Buried Electric
 (Koch)



AS BUILTS

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 ENGINEERING PA

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STORM WATER SEWER LINE NO. 3



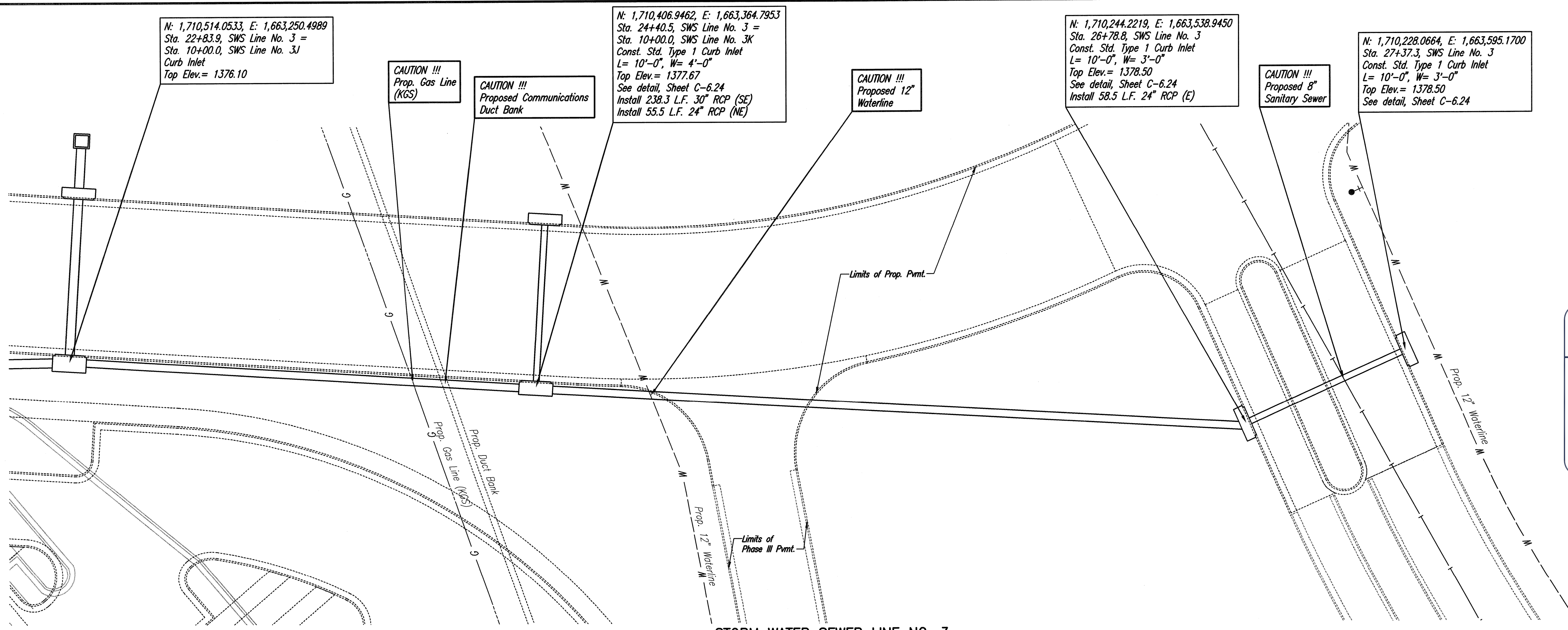
Sheet C-6.12 of 50
 Date: 01/20/21
 Drawn by: JAG
 Checked by: MEB
 Designated by: JAG
 Job No.: 35-12275-3-7208
 Date: FEBRUARY 2013
 Project: KOCH WICHITA CAMPUS EXPANSION PRIVATE STORM WATER SEWER EXTENSION
 Professional Engineering Consultants, P.A.
 303 SOUTH OPERA WICHITA, KS 67202
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Job No. 35-12275-3-7208
 Date: FEBRUARY 2013

Designed By: MEB, JAG
 Drawn By: JAG

Project: KOCH WICHITA CAMPUS EXPANSION
 PRIVATE STORM WATER SEWER EXTENSION
 STORM WATER SEWER LINE NO. 3
 GARY JANZEN, P.E. - CITY ENGINEER
 PRIVATE PROJECT NO. 0176 PPD (607861)

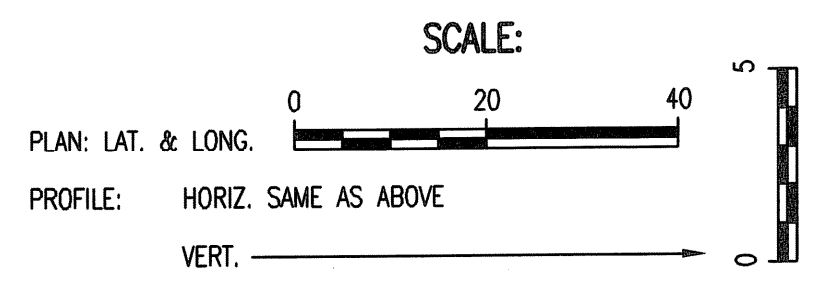


N: 1,710,514.0533, E: 1,663,250.4989
Sta. 22+83.9, SWS Line No. 3 =
Sta. 10+00.0, SWS Line No. 3J
Curb Inlet
Top Elev. = 1376.10

N: 1,710,406.9462, E: 1,663,364.7953
Sta. 24+40.5, SWS Line No. 3 =
Sta. 10+00.0, SWS Line No. 3K
Const. Std. Type 1 Curb Inlet
L = 10'-0", W = 4'-0"
Top Elev. = 1377.67
See detail, Sheet C-6.24
Install 238.3 L.F. 30" RCP (SE)
Install 55.5 L.F. 24" RCP (NE)

N: 1,710,244.2219, E: 1,663,538.9450
Sta. 26+78.8, SWS Line No. 3
Const. Std. Type 1 Curb Inlet
L = 10'-0", W = 3'-0"
Top Elev. = 1378.50
See detail, Sheet C-6.24
Install 58.5 L.F. 24" RCP (E)

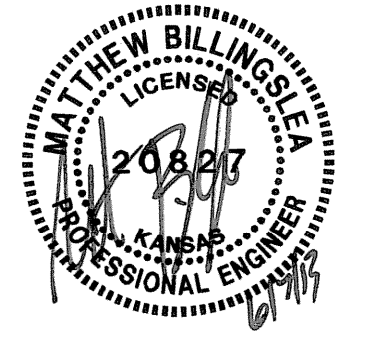
N: 1,710,228.0664, E: 1,663,595.1700
Sta. 27+37.3, SWS Line No. 3
Const. Std. Type 1 Curb Inlet
L = 10'-0", W = 3'-0"
Top Elev. = 1378.50
See detail, Sheet C-6.24



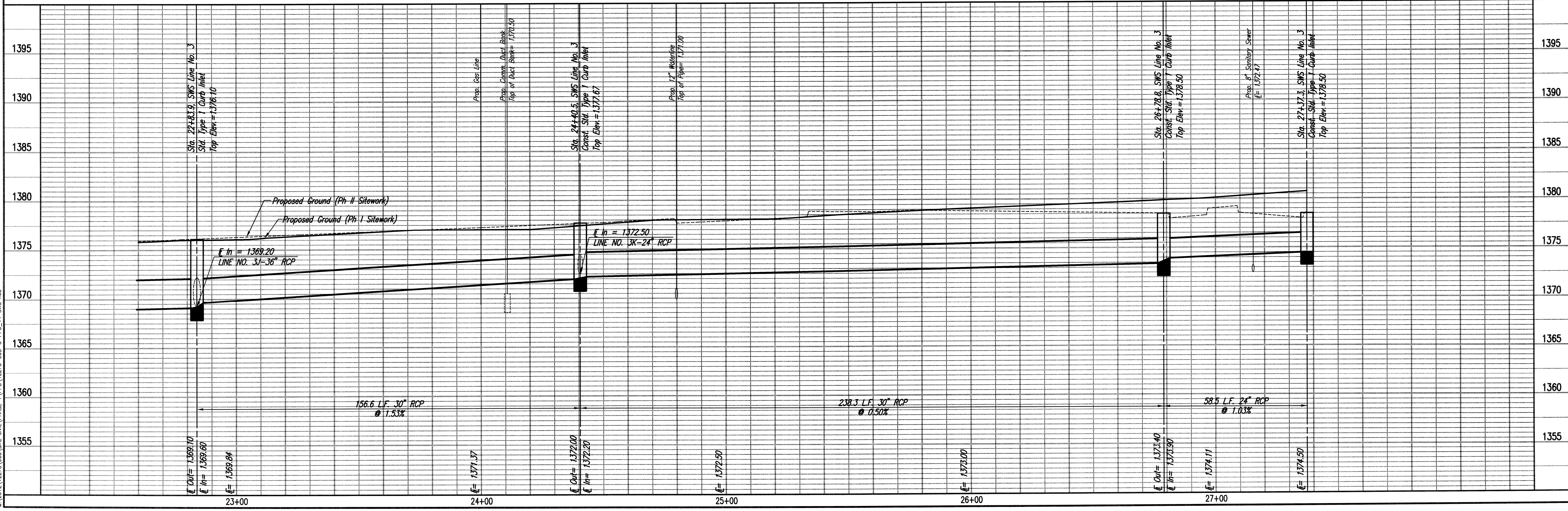
AS BUILTS

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ENGINEERING PA

117 E. Lewis,
Wichita, KS 67202 (316)264-0242



STORM WATER SEWER LINE NO. 3



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 316-262-2891 www.ppec.com

PEEC

Designed By: MEB, JAG
 Drawn By: JAW

Job No. 35-12275-3-7208
 Date: FEBRUARY 2013

KOCH WICHITA CAMPUS EXPANSION
 PRIVATE STORM WATER SEWER EXTENSION
STORM WATER SEWER LINE NO. 3

CARY, JANZEN, P.E. - CITY ENGINEER
 PRIVATE PROJECT NO. 0176 PPD (607861)

Sheet C-6.13 of 50

N: 1,710,517.6810, E: 1,662,222.3613
 Sta. 11+32.5, SWS Line No. 3 =
 Curb Inlet
 Top Elev. = 1366.48

N: 1,710,557.8802, E: 1,662,182.6590
 Sta. 10+56.5, SWS Line No. 3A
 Const. Std. Type 1 Curb Inlet
 L = 10'-0", W = 3'-0"
 Top Elev. = 1366.48
 See detail, Sheet C-6.24
 Install 19.0 L.F. 18" RCP (NW)

N: 1,710,571.3986, E: 1,662,169.3078
 Sta. 10+75.5, SWS Line No. 3A
 Const. Std. Type 1 Curb Inlet
 L = 5'-0", W = 3'-0"
 Top Elev. = 1367.20 1366.90
 See detail, Sheet C-6.24

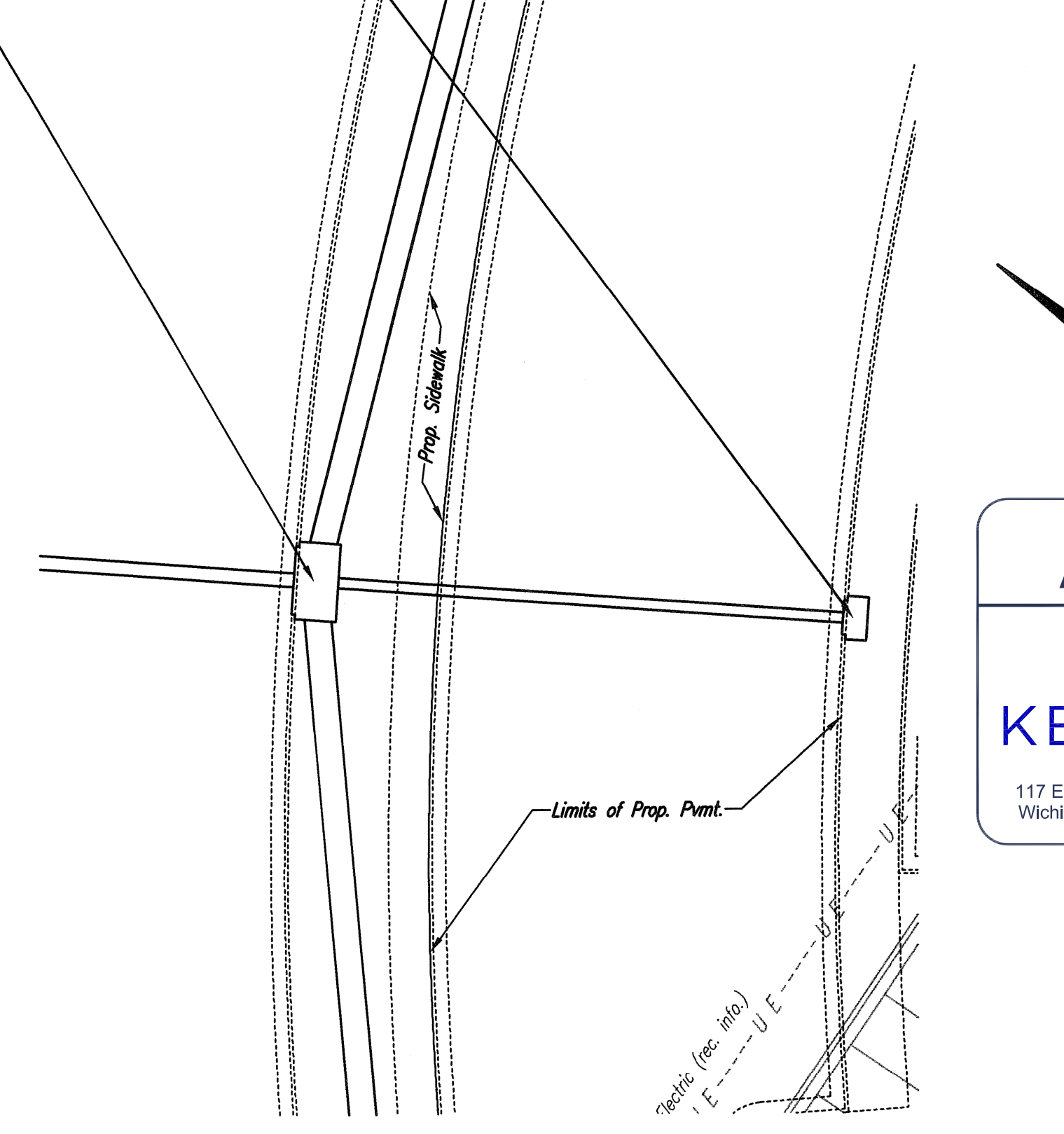
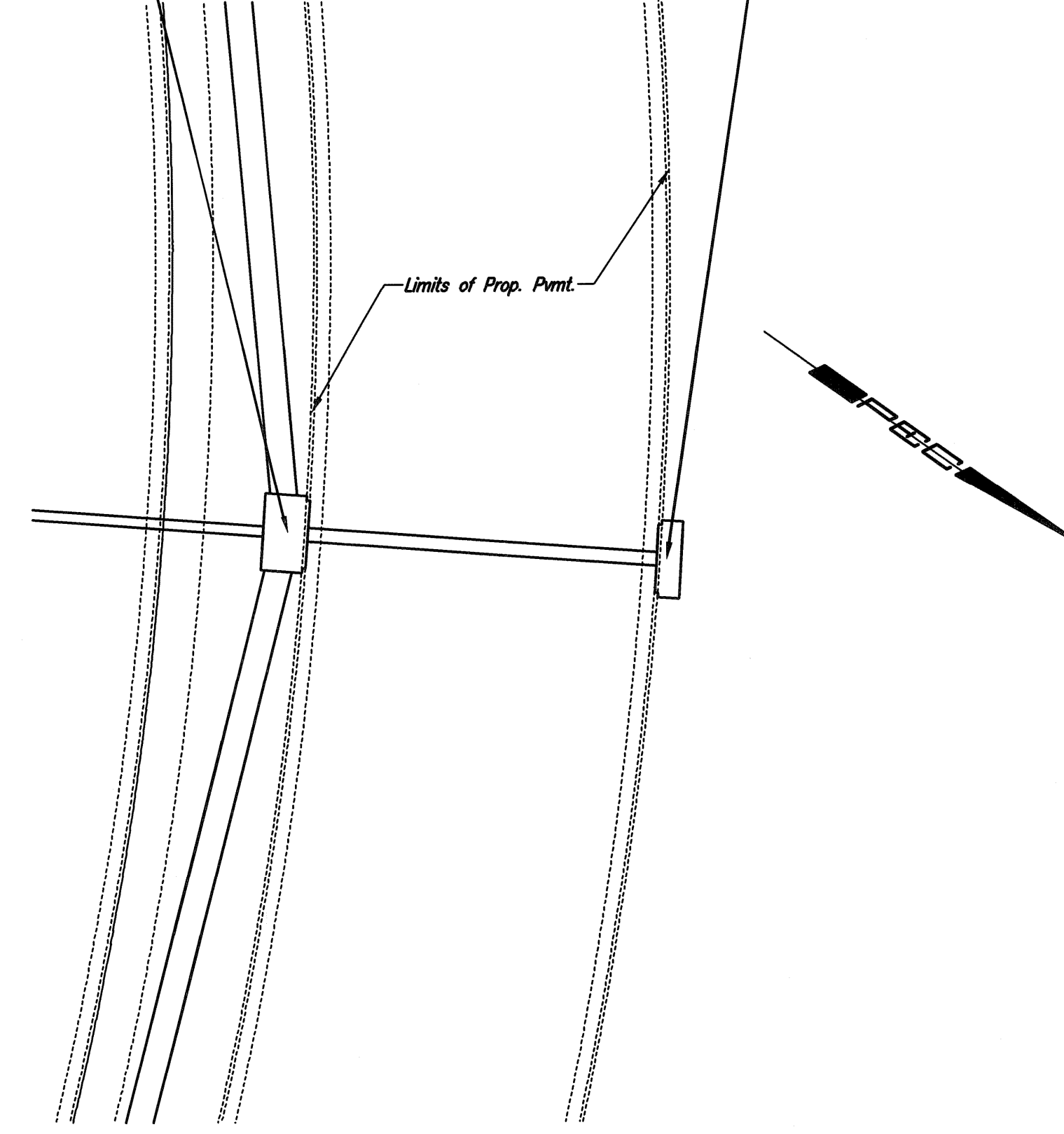
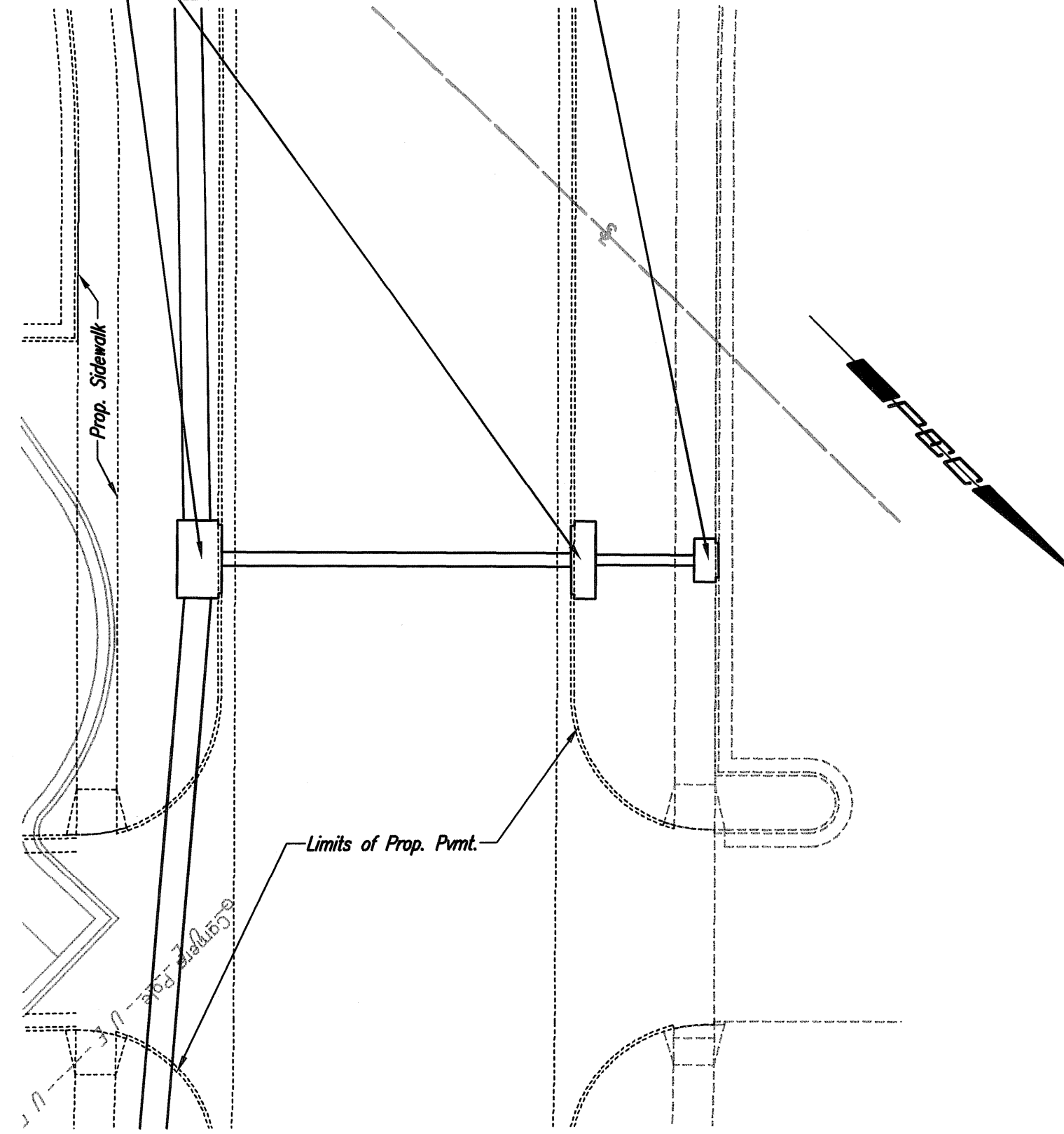
N: 1,710,649.5981, E: 1,662,379.5045
 Sta. 13+37.7, SWS Line No. 3 =
 Sta. 10+00.0, SWS Line No. 3B &
 Sta. 10+00.0, SWS Line No. 3C
 Curb Inlet
 Top Elev. = 1368.94

N: 1,710,698.1157, E: 1,662,350.5493
 Sta. 10+56.5, SWS Line No. 3B
 Const. Std. Type 1 Curb Inlet
 L = 10'-0", W = 3'-0"
 Top Elev. = 1368.94
 See detail, Sheet C-6.24

N: 1,710,649.5981, E: 1,662,379.5045
 Sta. 13+37.7, SWS Line No. 3 =
 Sta. 10+00.0, SWS Line No. 3B &
 Sta. 10+00.0, SWS Line No. 3C
 Curb Inlet
 Top Elev. = 1368.94

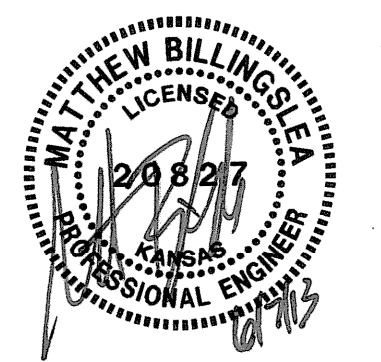
N: 1,710,580.4732, E: 1,662,420.7578
 Sta. 10+80.5, SWS Line No. 3C
 Const. Std. Type 1 Curb Inlet
 L = 5'-0", W = 3'-0"
 Top Elev. = 1368.34
 See detail, Sheet C-6.24

SCALE: 1" = 40'
 PLAN: LAT. & LONG.
 PROFILE: HORIZ. SAME AS ABOVE
 VERT. _____



AS BUILTS

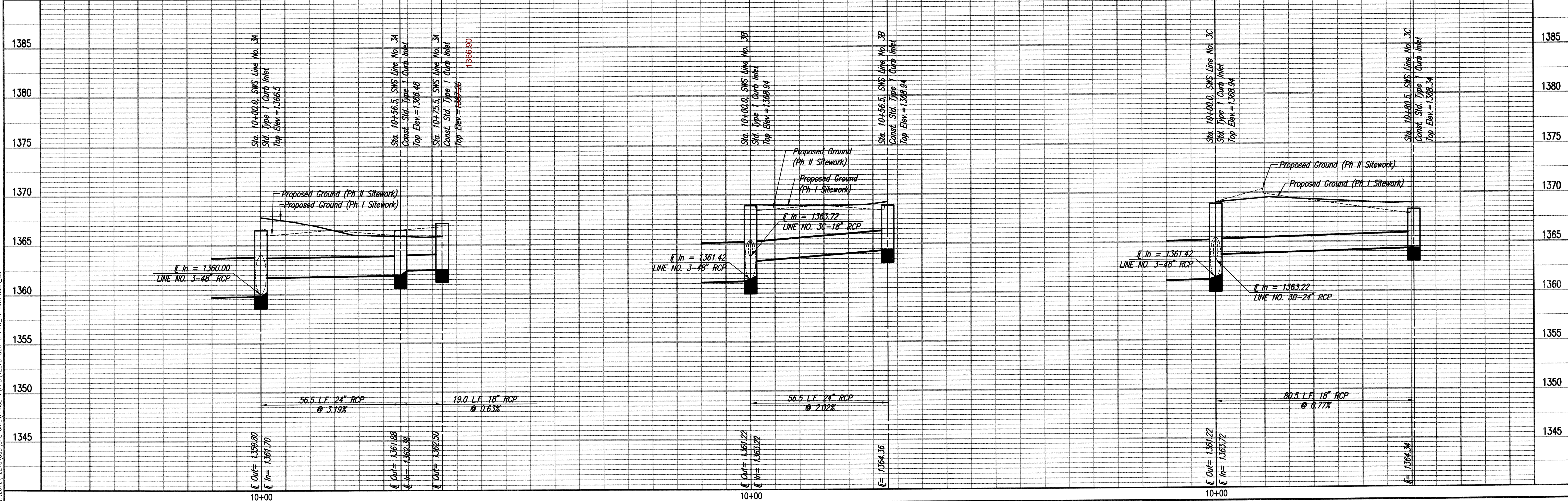
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 ENGINEERING PA
 117 E. Lewis,
 Wichita, KS 67202 (316)264-0242



STORM WATER SEWER LINE NO. 3A

STORM WATER SEWER LINE NO. 3B

STORM WATER SEWER LINE NO. 3C



Scaled 05-31-2013 4:29:27 PM by GSK
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KOCH WICHITA CAMPUS EXPANSION
 PRIVATE STORM WATER SEWER EXTENSION
**STORM WATER SEWER LINES
 NO. 3A, NO. 3B, NO. 3C**

DESIGNED BY: GARY JANZEN, P.E. - CITY ENGINEER
 PRIVATE PROJECT NO. 0176 PPD (607861)

PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
 303 SOUTH OPERA WICHITA, KS 67202
 316-262-2887 www.pec.com

Job No. 35-12275-3-7208
 Date: FEBRUARY 2013

Designed By: MEB, JAG
 Drawn By: JAN

Sheet C-6.14 of 50

N: 1,710,721.1024, E: 1,662,570.5542
Sta. 15+41.7, SWS Line No. 3 =
Sta. 10+00.0, SWS Line No. 3D &
Sta. 10+00.0, SWS Line No. 3E
Curb Inlet
Top Elev. = 1371.36

N: 1,710,776.7158, E: 1,662,560.5869
Sta. 10+56.5, SWS Line No. 3D
Const. Std. Type 1 Curb Inlet
L = 10'-0", W = 3'-0"
Top Elev. = 1370.36 1371.25
See detail, Sheet C-6.24
Install 18.0 L.F. 18" RCP (NW)

N: 1,710,721.1024, E: 1,662,570.5542
Sta. 15+41.7, SWS Line No. 3 =
Sta. 10+00.0, SWS Line No. 3D &
Sta. 10+00.0, SWS Line No. 3E
Curb Inlet
Top Elev. = 1371.36

N: 1,710,641.8938, E: 1,662,584.9146
Sta. 10+80.5, SWS Line No. 3E
Const. Std. Type 1 Curb Inlet
L = 5'-0", W = 3'-0"
Top Elev. = 1370.32
See detail, Sheet C-6.24
Install 70.0 L.F. 18" RCP (S)

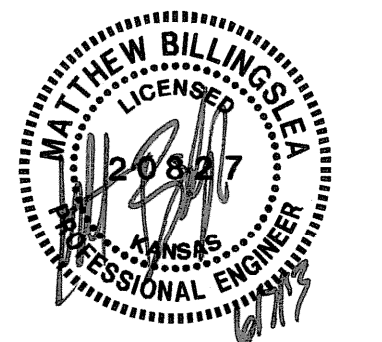
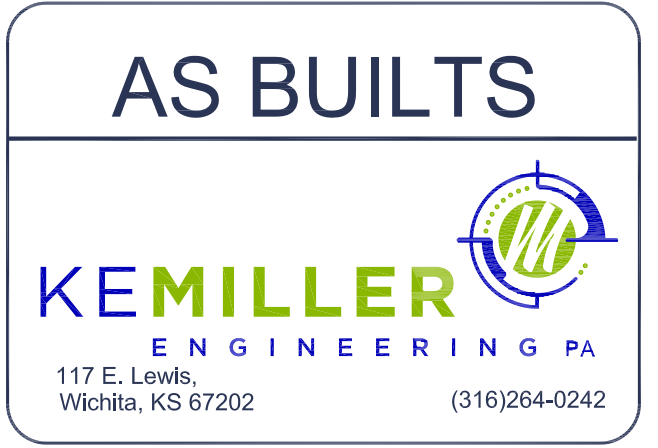
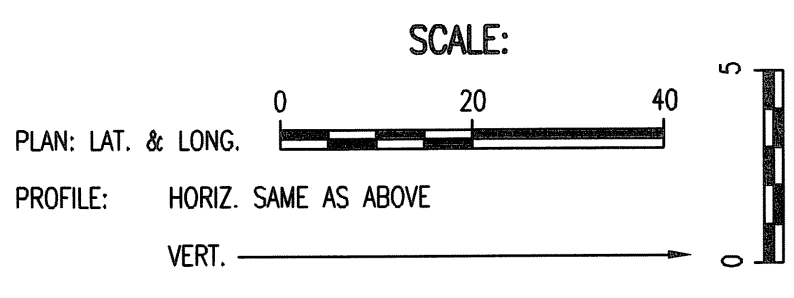
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Sta. 11+50.5, SWS Line No. 3E
Const. Std. Type 1 Curb Inlet
L = 5'-0", W = 3'-0"
Top Elev. = 1369.76
See detail, Sheet C-6.24

N: 1,710,724.6778, E: 1,662,880.7774
Sta. 18+51.9, SWS Line No. 3 =
Sta. 10+00.0, SWS Line No. 3F &
Sta. 10+00.0, SWS Line No. 3G
Curb Inlet
Top Elev. = 1371.59

N: 1,710,780.5132, E: 1,662,889.4170
Sta. 10+56.5, SWS Line No. 3F
Const. Std. Type 1 Curb Inlet
L = 10'-0", W = 3'-0"
Top Elev. = 1371.59
See detail, Sheet C-6.24
Install 18.0 L.F. 30" RCP (N)

N: 1,710,798.2903, E: 1,662,892.2459
Sta. 10+74.5, SWS Line No. 3F
Const. Area Inlet (Special)
L = 5'-0 1/2", W = 4'-8 1/4"
Top Elev. = 1370.29 1369.96
See detail, Sheet C-6.26
Install 108.5 L.F. 30" RCP (SE)

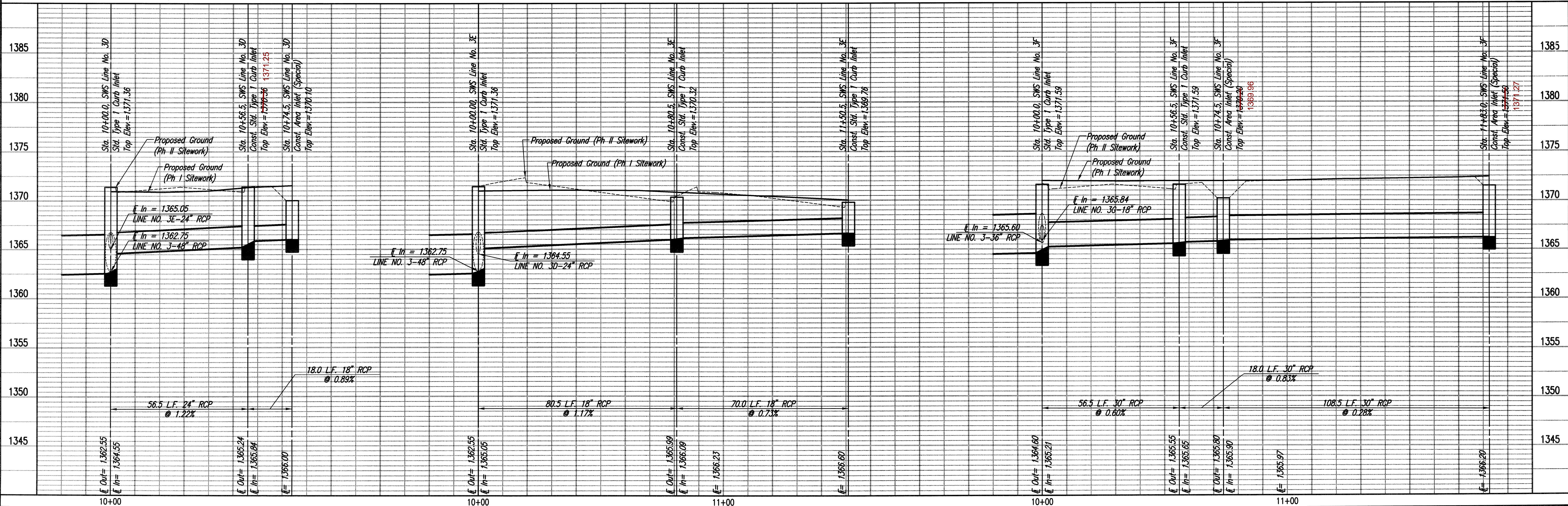
N: 1,710,772.5343, E: 1,662,997.6943
Sta. 11+83.0, SWS Line No. 3F
Const. Area Inlet (Special)
L = 5'-0 1/2", W = 4'-8 1/4"
Top Elev. = 1371.50 1371.27
See detail, Sheet C-6.26



STORM WATER SEWER LINE NO. 3D

STORM WATER SEWER LINE NO. 3E

STORM WATER SEWER LINE NO. 3F



KOCH WICHITA CAMPUS EXPANSION
PRIVATE STORM WATER SEWER EXTENSION
STORM WATER SEWER LINES
NO. 3D, NO. 3E, AND NO. 3F
GARY JANZEN, P.E. - CITY ENGINEER
PRIVATE PROJECT NO. 0176 PPD (607861)

PEC
PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
303 SOUTH TOPEKA WICHITA, KS 67202
316-262-2881 www.pec.com
Designed By: MEB, JAG
Date: FEBRUARY 2013
Job No.: 35-12275-3-7208
Sheet C-6.15 of 50

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Plot Scale: 1:20 06-06-2013 3:33:10 PM by: JAG
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N: 1,710,724.6778, E: 1,662,880.7774
 Sta. 18+51.9, SWS Line No. 3 =
 Sta. 10+00.0, SWS Line No. 3F
 Sta. 10+00.0, SWS Line No. 3G
 Curb Inlet
 Top Elev. = 1371.59

N: 1,710,645.1552, E: 1,662,868.2708
 Sta. 10+80.5, SWS Line No. 3G =
 Sta. 10+00.0, SWS Line No. 3H
 Const. Std. Type 1 Curb Inlet
 L = 5'-0", W = 3'-0"
 Top Elev. = 1370.79
 See detail, Sheet C-6.24
 Install 82.5 L.F. 18" RCP (SSW)
 Install 70.0 L.F. 18" RCP (SE)

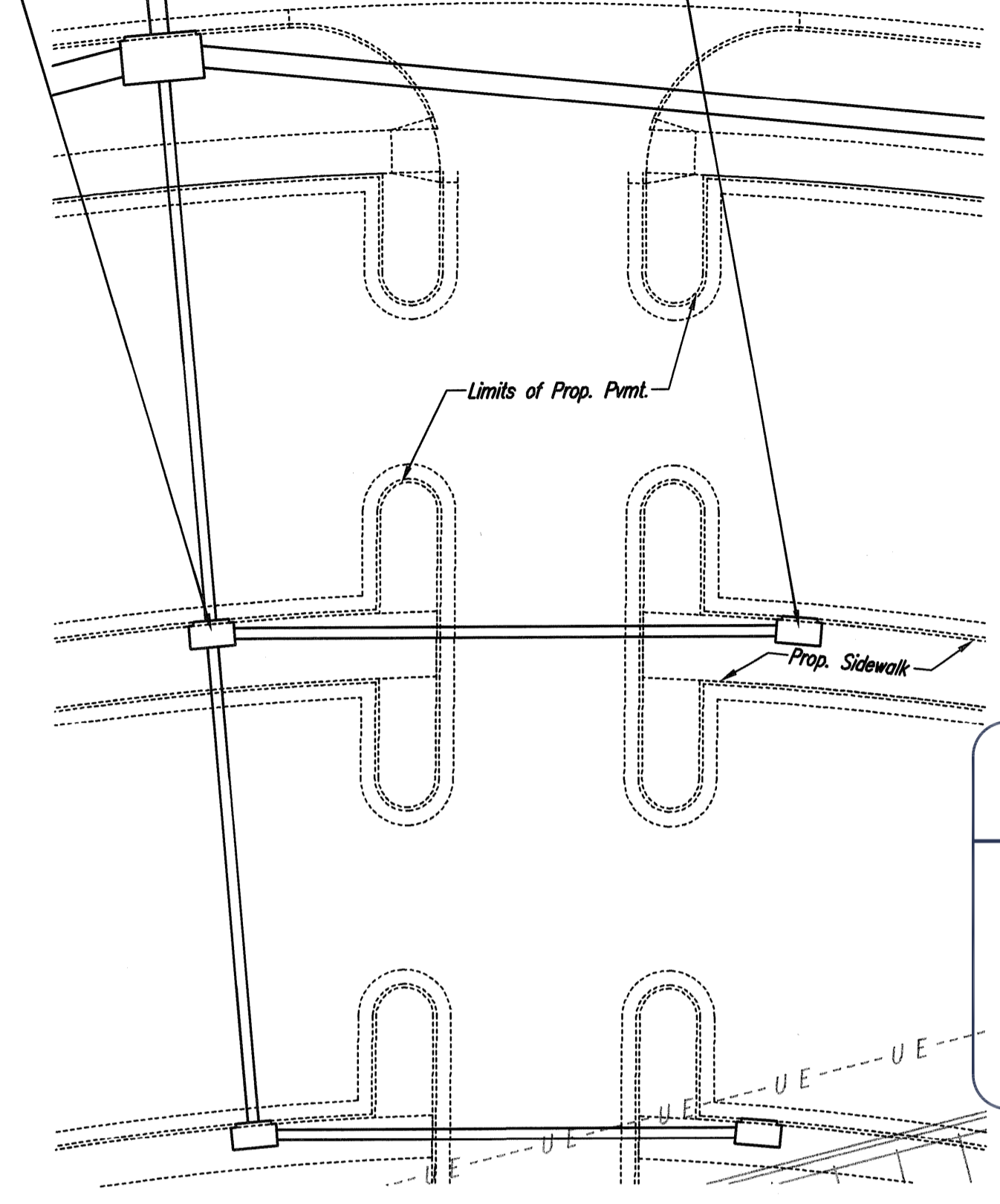
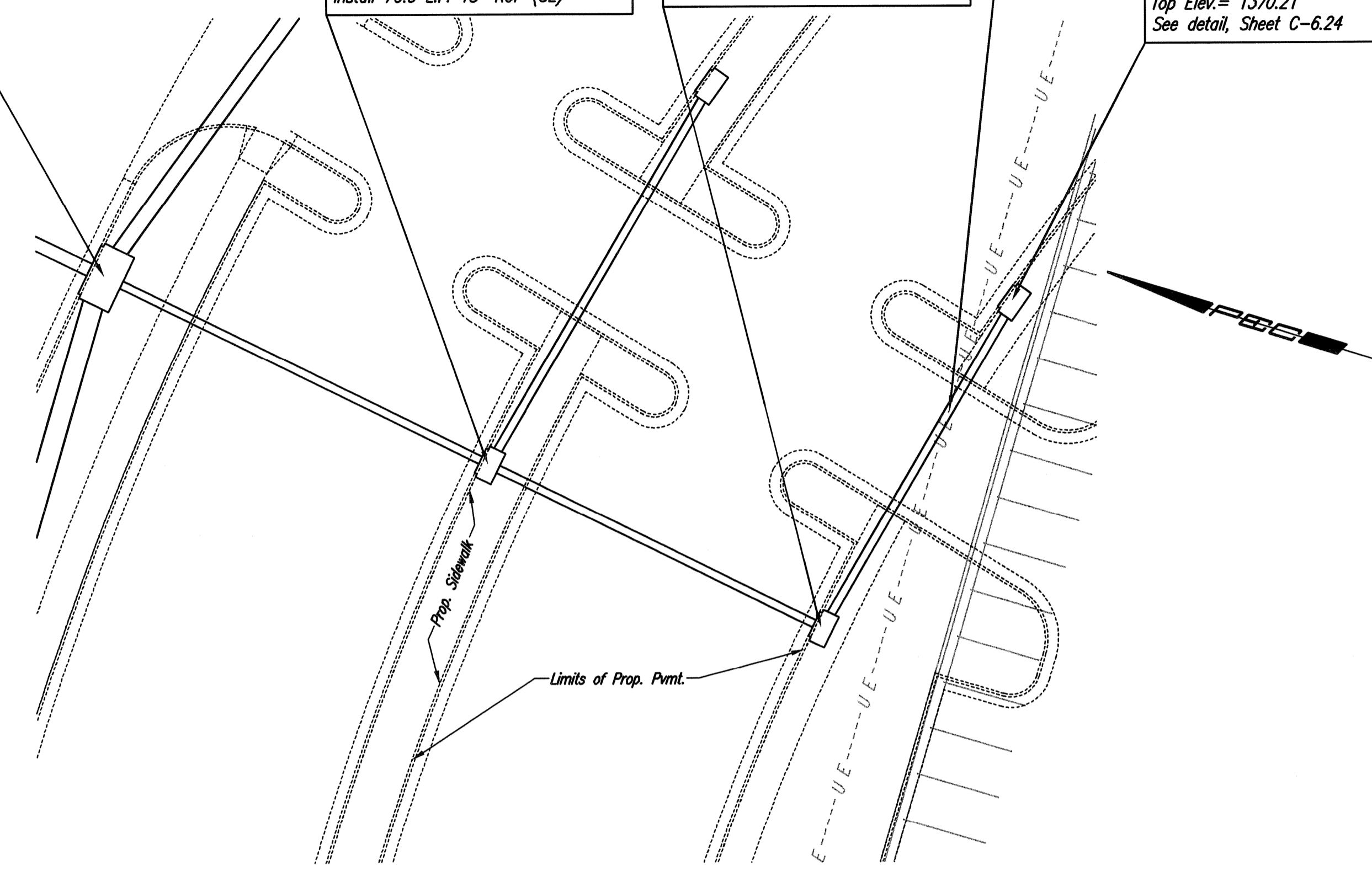
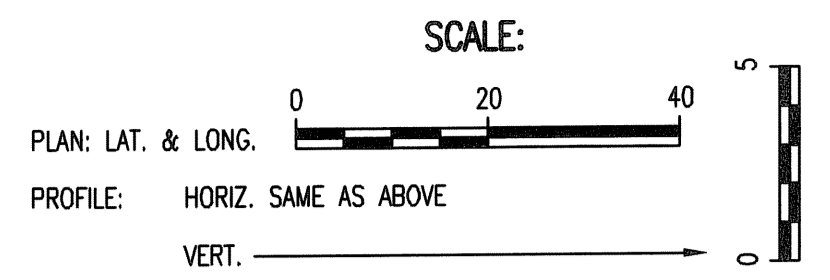
N: 1,710,575.9953, E: 1,662,857.3827
 Sta. 11+50.5, SWS Line No. 3G
 Const. Std. Type 1 Curb Inlet
 L = 5'-0", W = 3'-0"
 Top Elev. = 1370.05
 See detail, Sheet C-6.24
 Install 70.8 L.F. 18" RCP (SE)

CAUTION !!!
 Buried Electric
 (Koch)

N: 1,710,559.1998, E: 1,662,926.1862
 Sta. 12+21.3, SWS Line No. 3G
 Const. Std. Type 1 Curb Inlet
 L = 5'-0", W = 3'-0"
 Top Elev. = 1370.21
 See detail, Sheet C-6.24

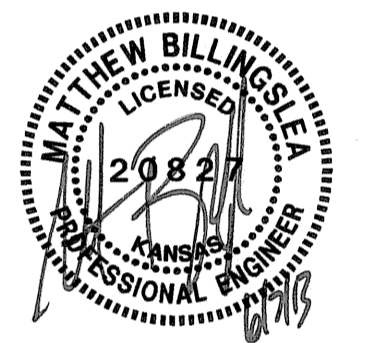
N: 1,710,645.1552, E: 1,662,868.2708
 Sta. 10+80.5, SWS Line No. 3G =
 Sta. 10+00.0, SWS Line No. 3H
 Curb Inlet
 Top Elev. = 1370.79

N: 1,710,625.5881, E: 1,662,948.3808
 Sta. 10+82.5, SWS Line No. 3H
 Const. Std. Type 1 Curb Inlet
 L = 5'-0", W = 3'-0"
 Top Elev. = 1371.46
 See detail, Sheet C-6.24



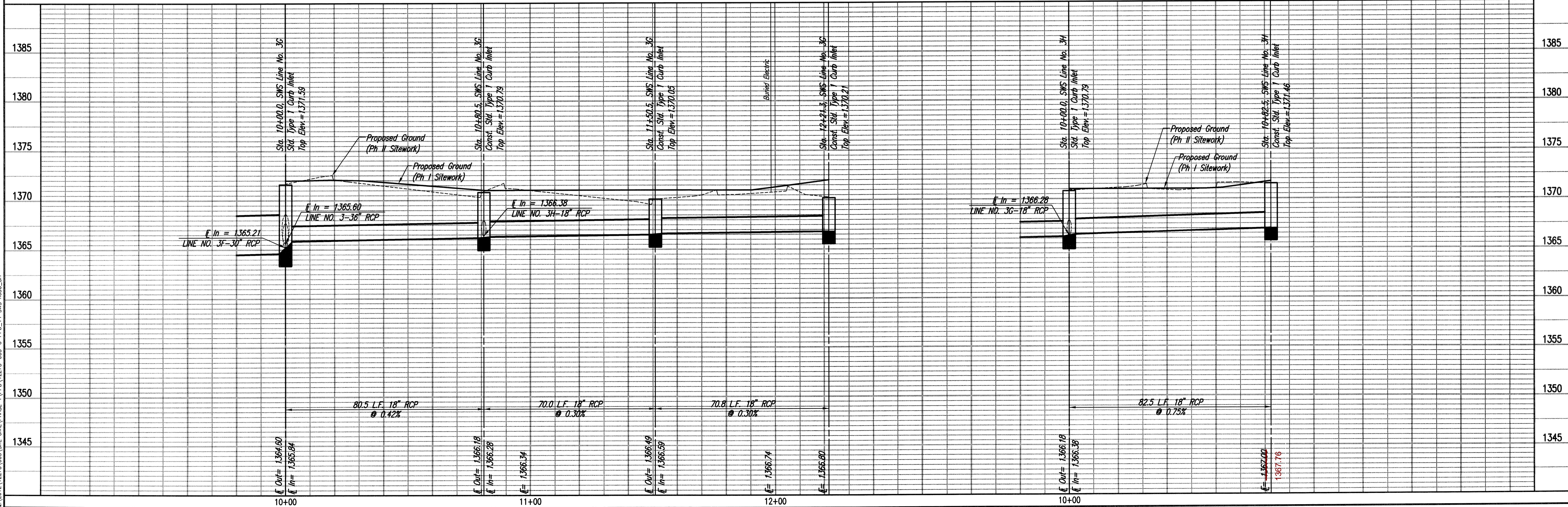
AS BUILTS

117 E. Lewis,
 Wichita, KS 67202 (316)264-0242



STORM WATER SEWER LINE NO. 3G

STORM WATER SEWER LINE NO. 3H



Sheet 05-31-2013 4:29:17 PM by GSK
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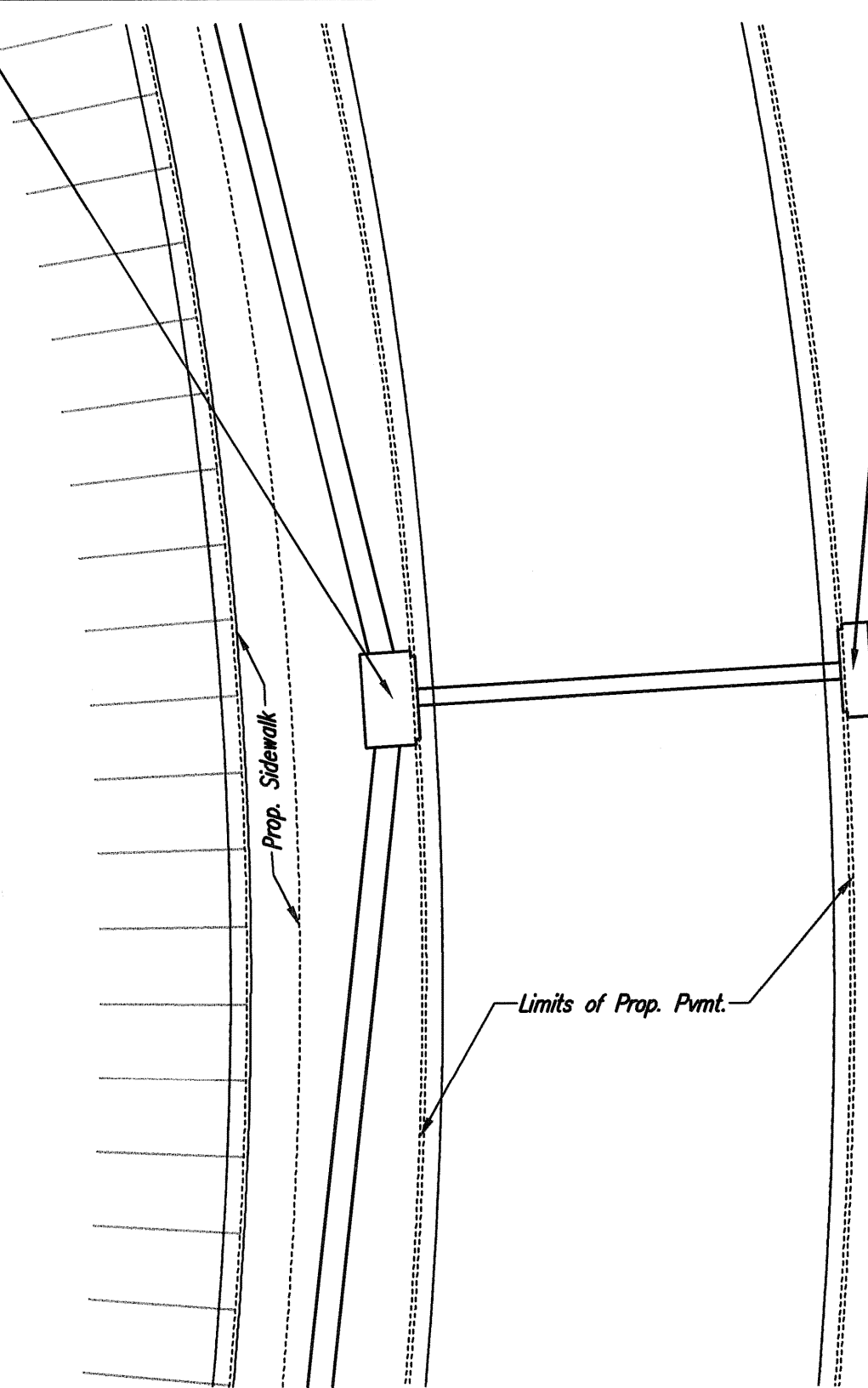
PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
 303 SOUTH OPERA WICHITA, KS 67202
 316-262-2891 www.ppec.com

PEPEC
 Designed by: MEB, JAG
 Drawn by: JAN
 Job No. 35-12275-3-7208
 Date: FEBRUARY 2013

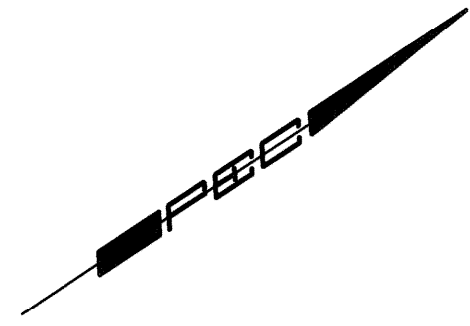
KOCH WICHITA CAMPUS EXPANSION
 PRIVATE STORM WATER SEWER EXTENSION
 STORM WATER SEWER LINES
 NO. 3G AND NO. 3H
 GARY JANZEN, P.E. - CITY ENGINEER
 PRIVATE PROJECT NO. 0176 PPD (607861)

Sheet C-6.16 of 50

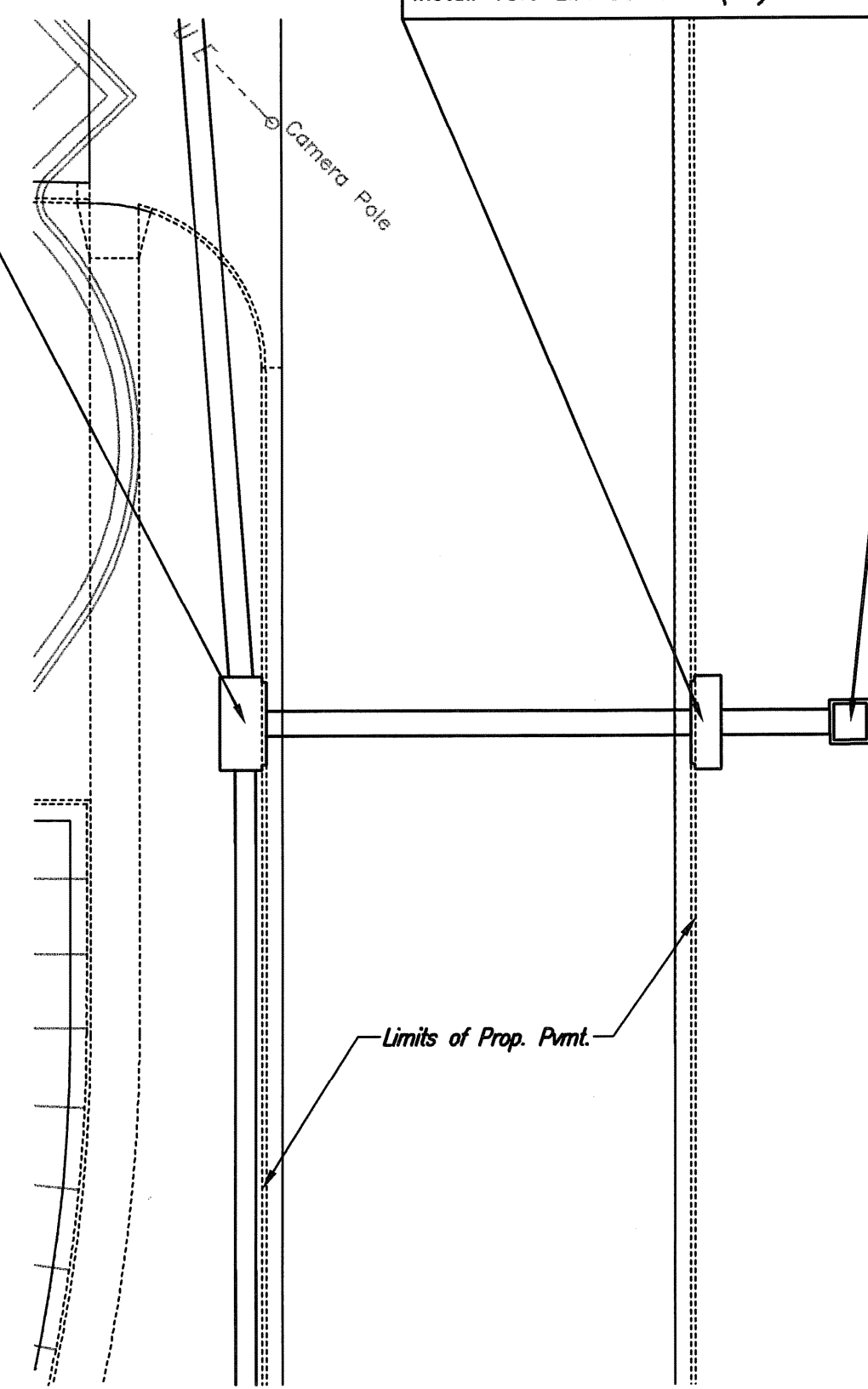
N: 1,710,657.5886, E: 1,663,073.4393
 Sta. 20+55.9, SWS Line No. 3J =
 Sta. 10+00.0, SWS Line No. 3J
 Curb Inlet
 Top Elev. = 1373.74



N: 1,710,706.7760, E: 1,663,101.2393
 Sta. 10+56.5, SWS Line No. 3J
 Const. Std. Type 1 Curb Inlet
 L = 10'-0", W = 3'-0"
 Top Elev. = 1373.74
 See detail, Sheet C-6.24



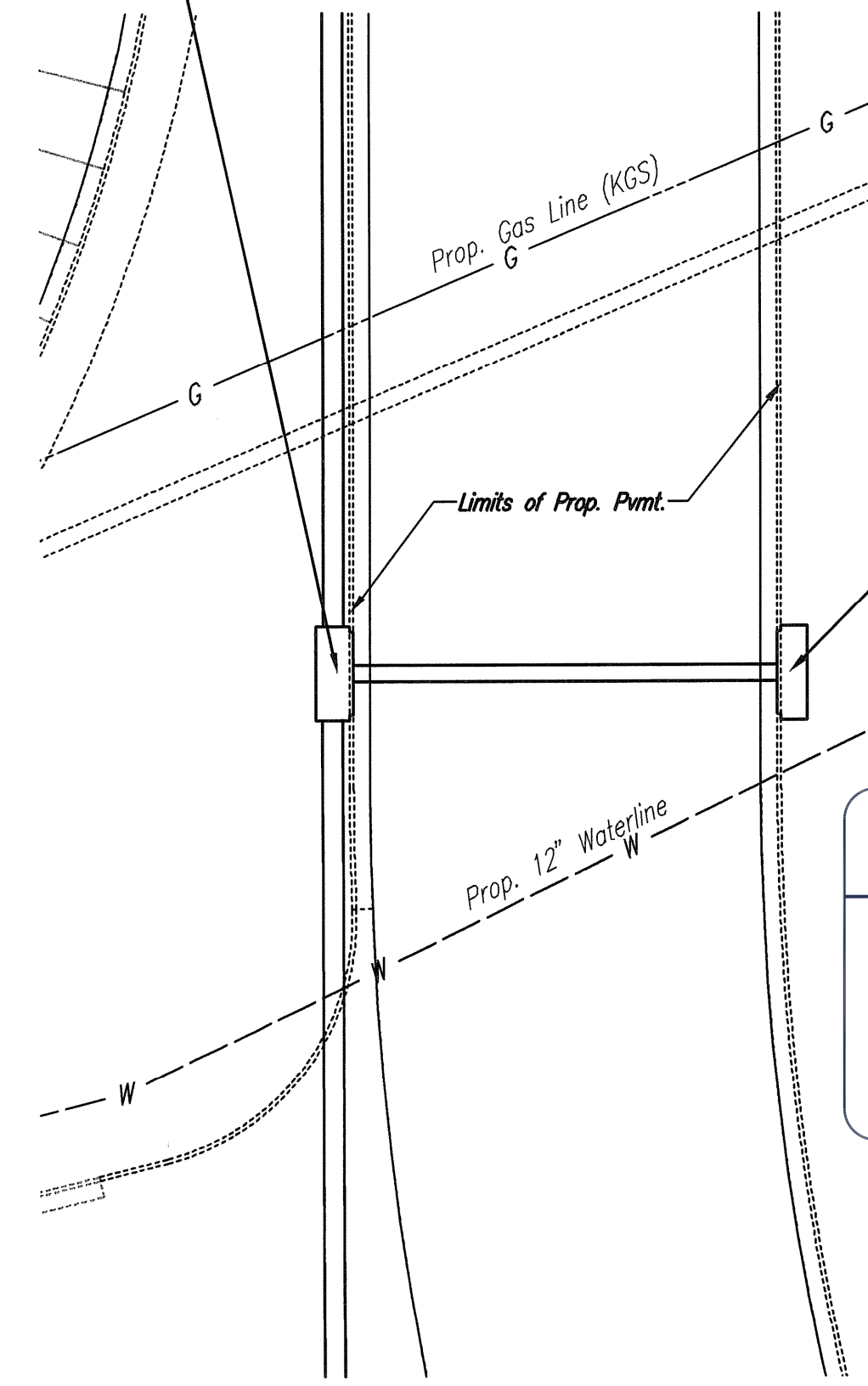
N: 1,710,514.0533, E: 1,663,250.4989
 Sta. 22+83.9, SWS Line No. 3J =
 Sta. 10+00.0, SWS Line No. 3J
 Curb Inlet
 Top Elev. = 1376.10



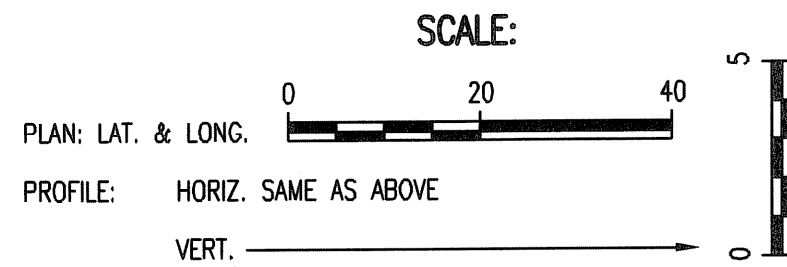
N: 1,710,554.7931, E: 1,663,288.9212
 Sta. 10+56.0, SWS Line No. 3J
 Const. Std. Type 1 Curb Inlet
 L = 10'-0", W = 3'-0"
 Top Elev. = 1376.10
 See detail, Sheet C-6.24
 Install 18.0 L.F. 36" RCP (NE)



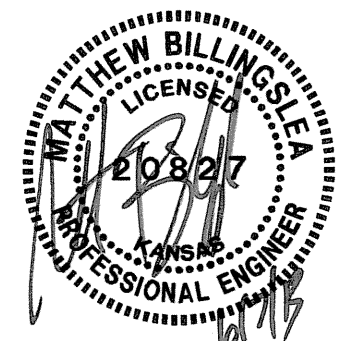
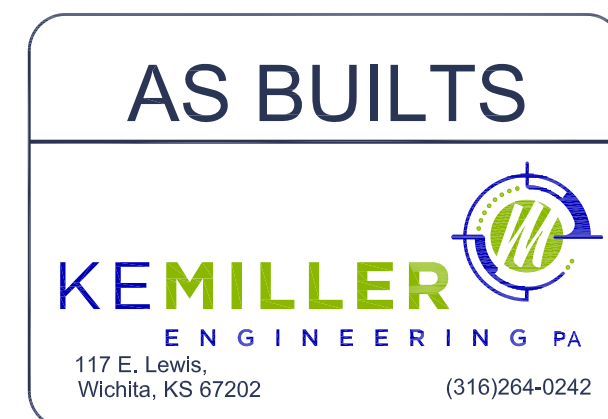
N: 1,710,567.8880, E: 1,663,301.2712
 Sta. 10+74.0, SWS Line No. 3J
 Const. Area Inlet (Special)
 L = 5'-0 1/2", W = 4'-8 1/4"
 Top Elev. = 1375.00
 See detail, Sheet C-6.26



N: 1,710,406.9462, E: 1,663,364.7953
 Sta. 24+40.5, SWS Line No. 3J =
 Sta. 10+00.0, SWS Line No. 3K
 Curb Inlet
 Top Elev. = 1377.67



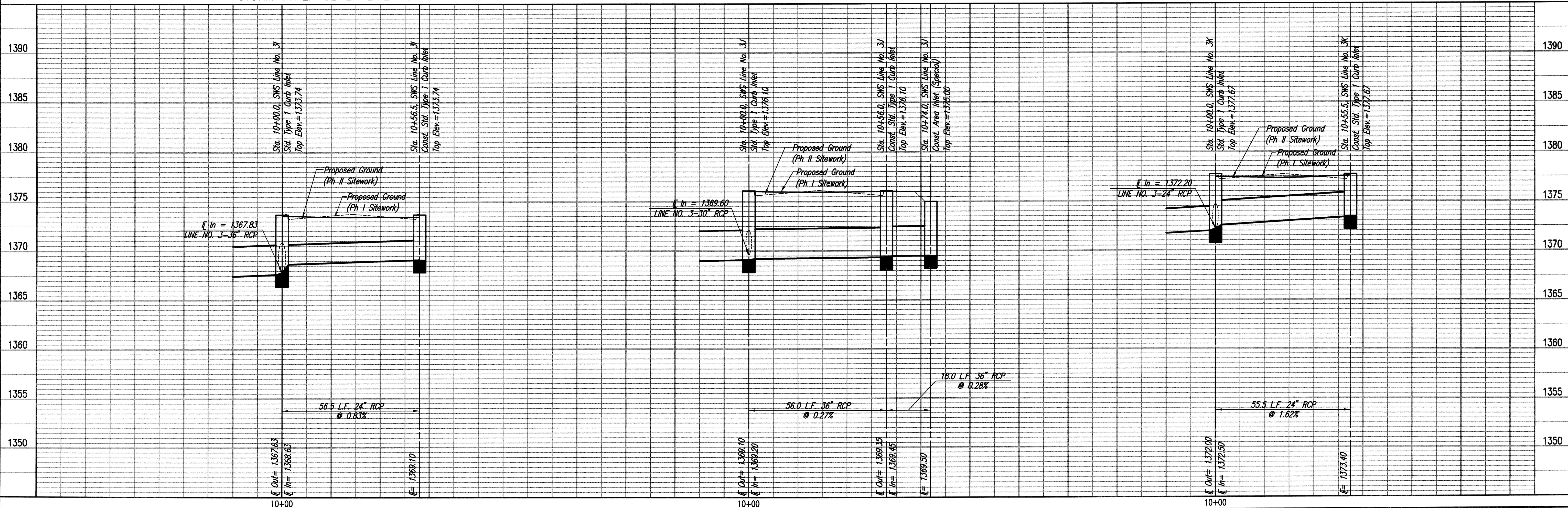
N: 1,710,447.3234, E: 1,663,402.8731
 Sta. 10+55.5, SWS Line No. 3K
 Const. Std. Type 1 Curb Inlet
 L = 10'-0", W = 3'-0"
 Top Elev. = 1377.67
 See detail, Sheet C-6.24



STORM WATER SEWER LINE NO. 3J

STORM WATER SEWER LINE NO. 3J

STORM WATER SEWER LINE NO. 3K



Saved: 05-31-2013 4:32:26 PM by CSI
 Plot Scale: 1:20 06-06-2013 2:13:40 PM by JAW
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PEC
 PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
 300 SOUTH TOPEKA WICHITA, KS 67202
 316-262-2891 www.pec.com
 Designed By: MEB, JAG
 Drawn By: JAN
 Job No.: 35-12275-3-7208
 Date: FEBRUARY 2013
 KCOH WICHITA CAMPUS EXPANSION
 PRIVATE STORM WATER SEWER EXTENSION
 STORM WATER SEWER LINES
 NO. 3J, NO. 3J, AND NO. 3K
 GARY JANZEN, P.E. - CITY ENGINEER
 PRIVATE PROJECT NO. 0176 PPD (607861)

N: 1,710,485.8163, E: 1,662,296.0840
 Sta. 10+00.0, SWS Line No. 4
 Const. Precast Conc. Manhole
 (Type A) (4' dia.)
 Top Elev. = 1368.20
 See Detail, Sheet No. C-6.23
 Install 42.1 L.F. 18" RCP (E)

N: 1,710,486.0216, E: 1,662,338.1582
 Sta. 10+42.1, SWS Line No. 4
 Const. Std. Type 1 Curb Inlet
 L= 5'-0", W= 3'-0"
 Top Elev. = 1367.20
 See detail, Sheet C-6.24

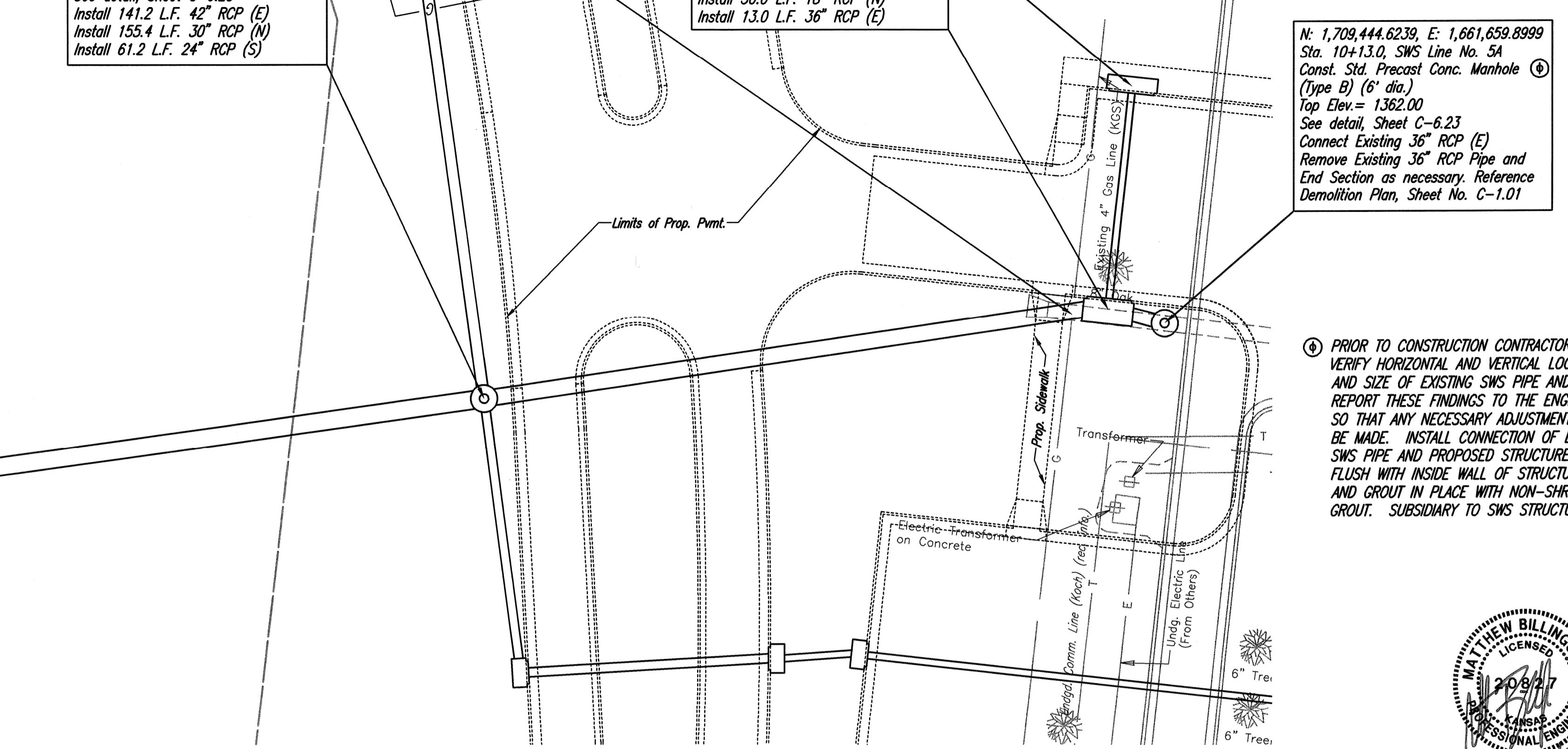
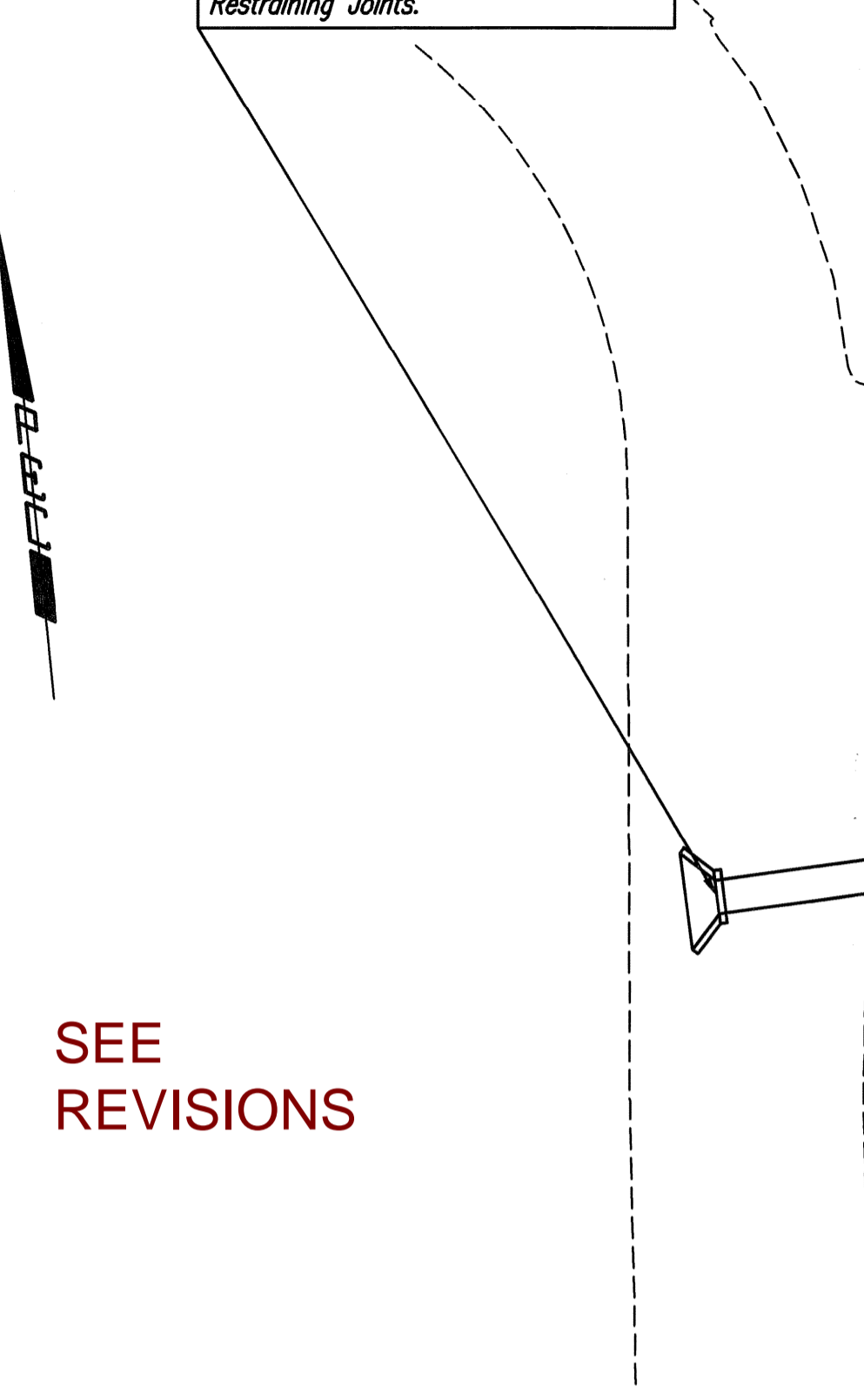
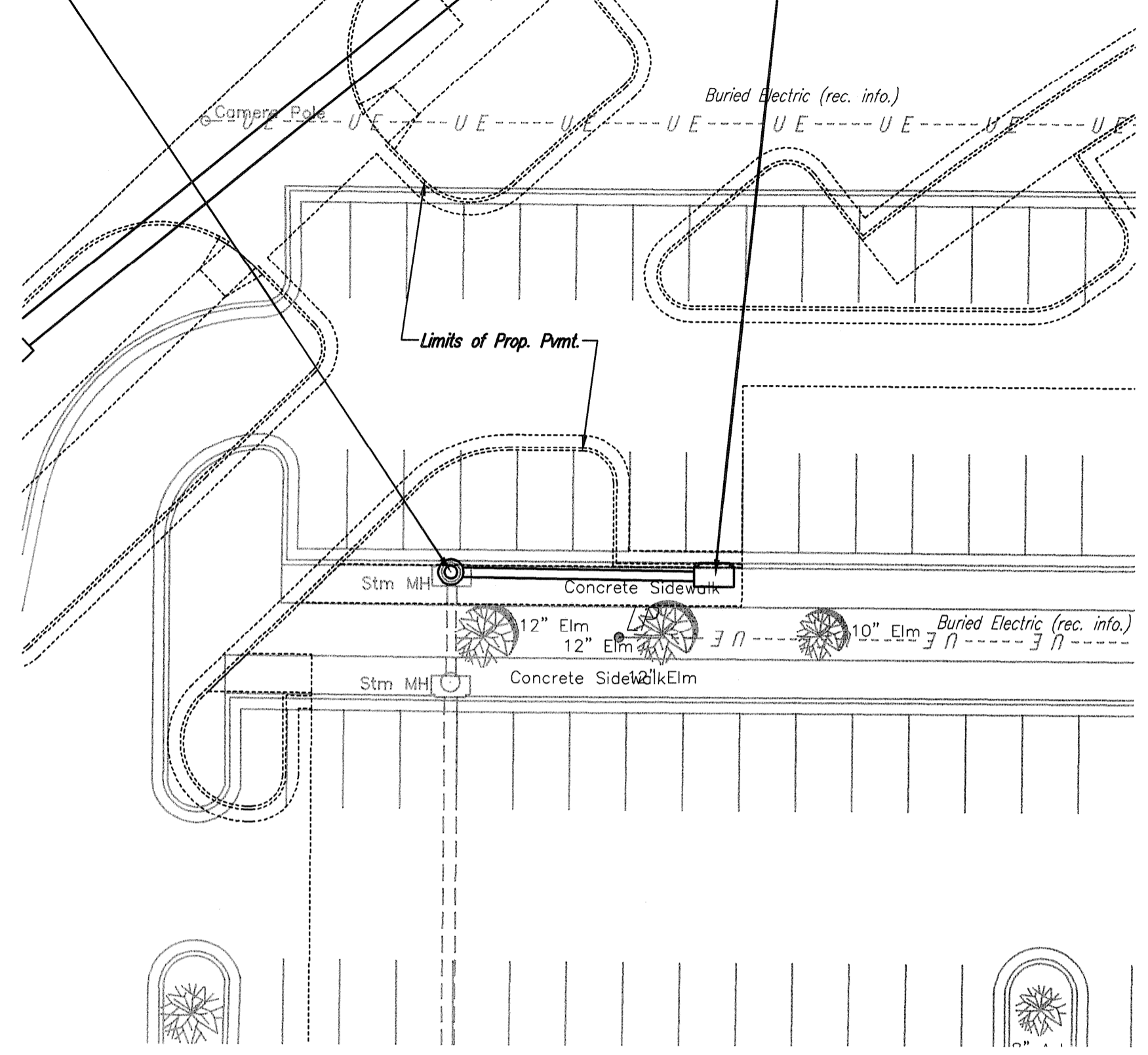
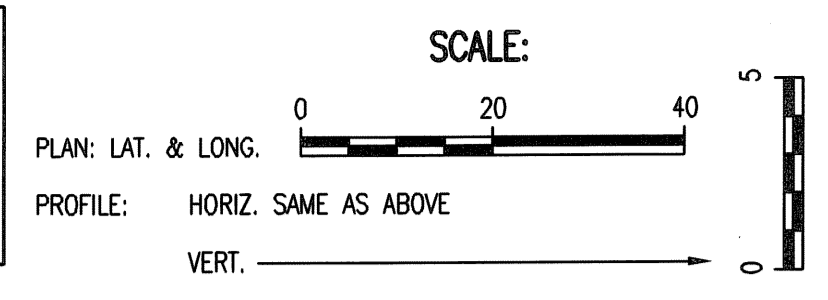
N: 1,709,375.9327, E: 1,661,382.5762
 Sta. 10+11.4, SWS Line No. 5
 Const. 48" Reinf. Concrete Headwall
 E Elev. = 1352.63
 See Sheet No. C-6.35
 Install 131.3 L.F. 48" RCP (NE)
 First 3 Sections of RCP Shall have
 Restraining Joints.

N: 1,709,409.8383, E: 1,661,510.5447
 Sta. 11+42.7, SWS Line No. 5 =
 Sta. 10+00.0, SWS Line No. 6 &
 Sta. 10+00.0, SWS Line No. 7
 Const. Std. Precast Conc. MH
 (Type A) (6' dia.)
 Top Elev. = 1362.08
 See detail, Sheet C-6.23
 Install 141.2 L.F. 42" RCP (E)
 Install 155.4 L.F. 30" RCP (N)
 Install 61.2 L.F. 24" RCP (S)

N: 1,709,446.1179, E: 1,661,646.9860
 Sta. 12+83.9, SWS Line No. 5 =
 Sta. 10+00.0, SWS Line No. 5A
 Const. Std. Type 1 Curb Inlet
 L= 10'-0", W= 5'-0"
 Top Elev. = 1361.59
 See detail, Sheet C-6.24
 Install 50.0 L.F. 18" RCP (N)
 Install 13.0 L.F. 36" RCP (E)

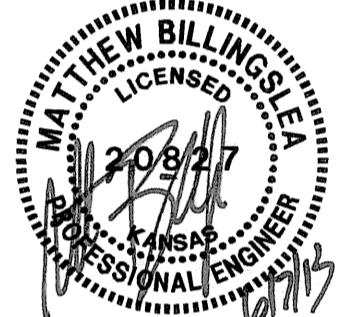
N: 1,709,496.1126, E: 1,661,646.2602
 Sta. 13+33.9, SWS Line No. 5
 Const. Std. Type 1 Curb Inlet
 L= 10'-0", W= 3'-0"
 Top Elev. = 1361.59
 See detail, Sheet C-6.24

N: 1,709,444.6239, E: 1,661,659.8999
 Sta. 10+13.0, SWS Line No. 5A
 Const. Std. Precast Conc. Manhole
 (Type B) (6' dia.)
 Top Elev. = 1362.00
 See detail, Sheet C-6.23
 Connect Existing 36" RCP (E)
 Remove Existing 36" RCP Pipe and
 End Section as necessary. Reference
 Demolition Plan, Sheet No. C-1.01



SEE REVISIONS

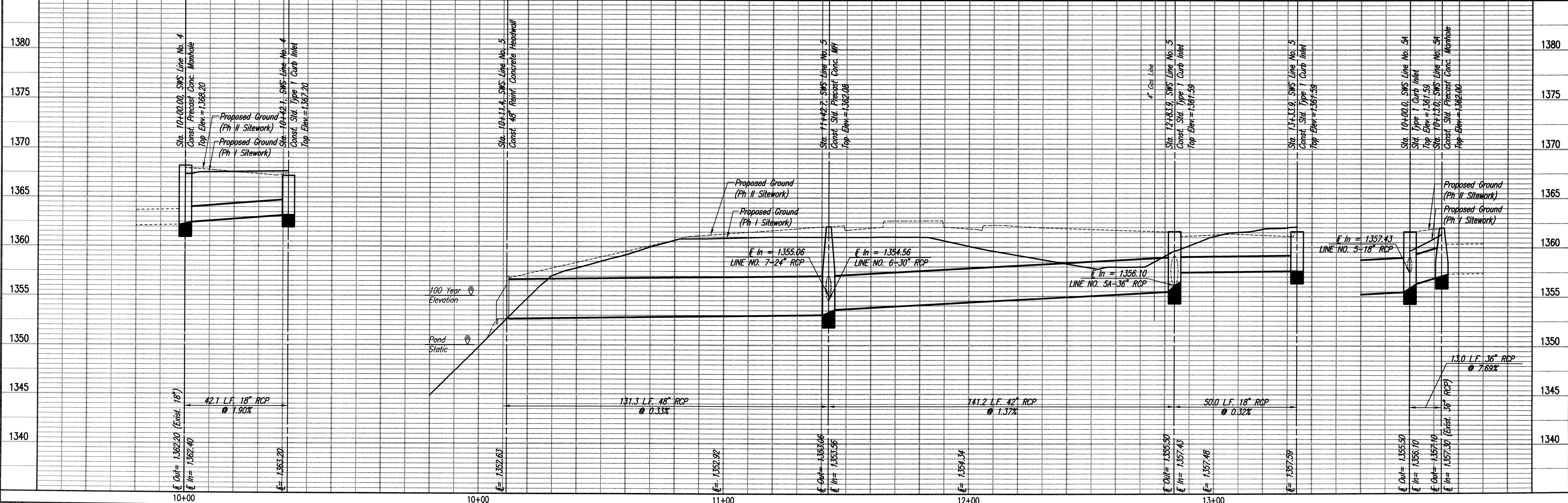
Ⓢ PRIOR TO CONSTRUCTION CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATION AND SIZE OF EXISTING SWS PIPE AND REPORT THESE FINDINGS TO THE ENGINEER SO THAT ANY NECESSARY ADJUSTMENTS CAN BE MADE. INSTALL CONNECTION OF EXISTING SWS PIPE AND PROPOSED STRUCTURE, CUT FLUSH WITH INSIDE WALL OF STRUCTURE, AND GROUT IN PLACE WITH NON-SHRINK GROUT. SUBSIDIARY TO SWS STRUCTURE.



STORM WATER SEWER LINE NO. 4

STORM WATER SEWER LINE NO. 5

STORM WATER SEWER LINE NO. 5A



Saved: 06-04-2013 2:04:57 PM by JAW
 Proj: 35-12275-3-7208
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Koch Wichita Campus Expansion
 Private Storm Water Sewer Extension
**STORM WATER SEWER LINE
 NO. 4, NO. 5, AND NO. 5A**

GARY JANZEN, P.E. - CITY ENGINEER
 PRIVATE PROJECT NO. 0176 PFD (607861)

PROFESSIONAL ENGINEERING CONSULTANTS P.A.
 303 SOUTH TOPEKA WICHITA, KS 67202
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Job No. 35-12275-3-7208
 Date FEBRUARY 2013
 Designed By MEB, JAG
 Drawn By JAN

Sheet C-6.18 of 50

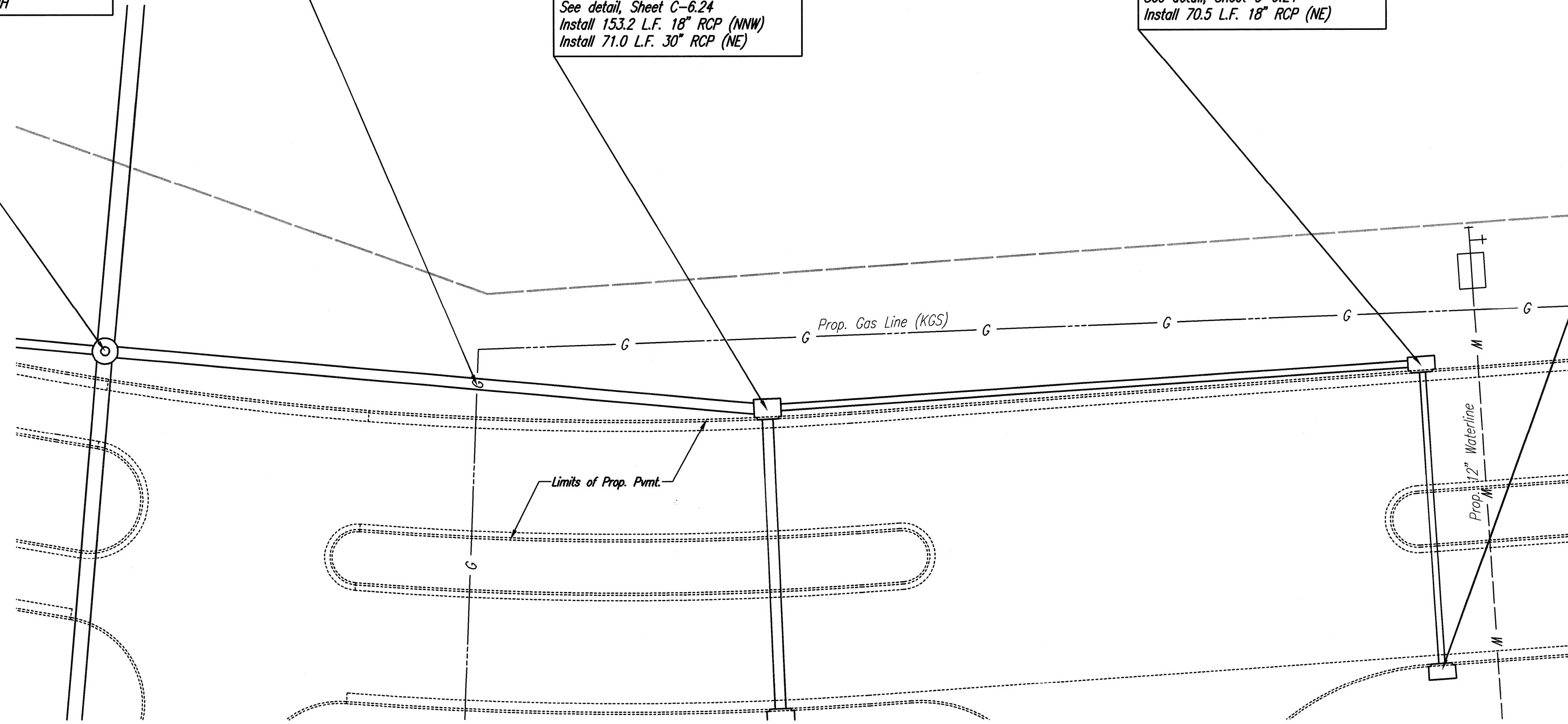
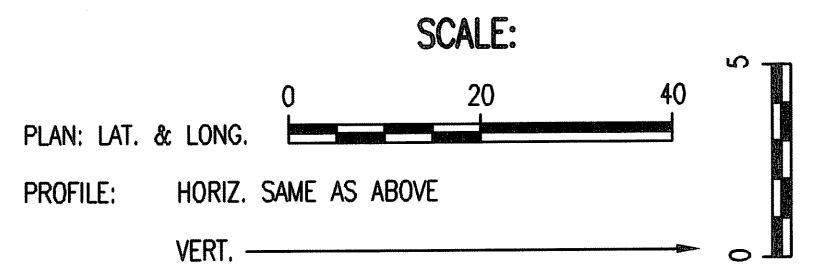
N: 1,709,409.8383, E: 1,661,510.5447
 Sta. 11+42.7, SWS Line No. 5 =
 Sta. 10+00.0, SWS Line No. 6 &
 Sta. 10+00.0, SWS Line No. 7
 Top Elev. = 1362.08
 Std. Precast Conc. MH

CAUTION !!!
 Prop. Gas Line
 (KGS)

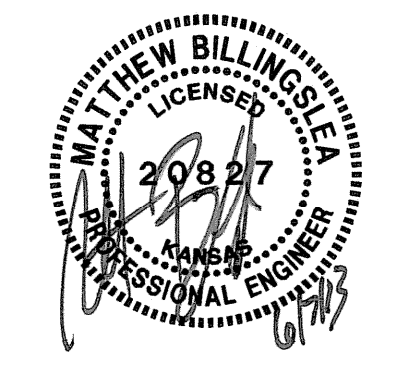
N: 1,709,560.0003, E: 1,661,470.4311
 Sta. 11+55.4, SWS Line No. 6 =
 Sta. 10+00.0, SWS Line No. 6A
 Const. Std. Type 1 Curb Inlet
 L = 5'-0", W = 4'-0"
 Top Elev. = 1362.14
 See detail, Sheet C-6.24
 Install 153.2 L.F. 18" RCP (NNW)
 Install 71.0 L.F. 30" RCP (NE)

N: 1,709,700.2994, E: 1,661,408.8805
 Sta. 13+08.6, SWS Line No. 6
 Const. Std. Type 1 Curb Inlet
 L = 5'-0", W = 3'-0"
 Top Elev. = 1364.90
 See detail, Sheet C-6.24
 Install 70.5 L.F. 18" RCP (NE)

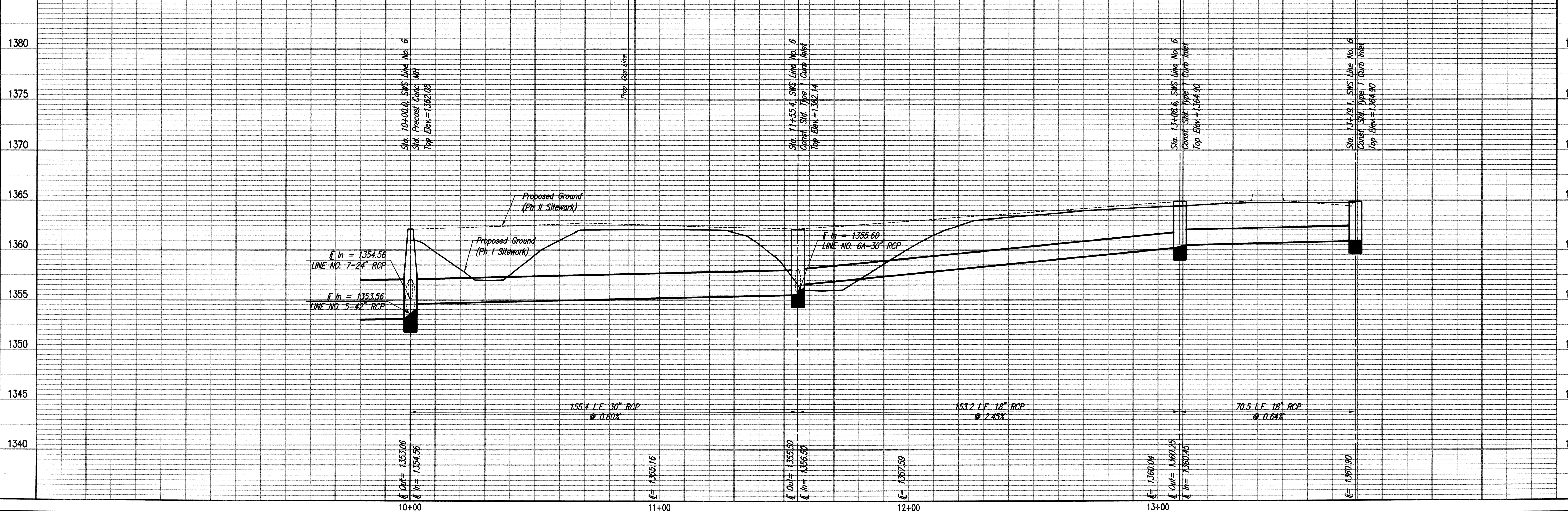
N: 1,709,728.9318, E: 1,661,473.3132
 Sta. 13+79.1, SWS Line No. 6
 Const. Std. Type 1 Curb Inlet
 L = 5'-0", W = 3'-0"
 Top Elev. = 1364.90
 See detail, Sheet C-6.24



SEE REVISIONS



STORM WATER SEWER LINE NO. 6



STORM WATER SEWER LINE NO. 6
 PRIVATE STORM WATER SEWER EXTENSION
 KOCH WICHITA CAMPUS EXPANSION

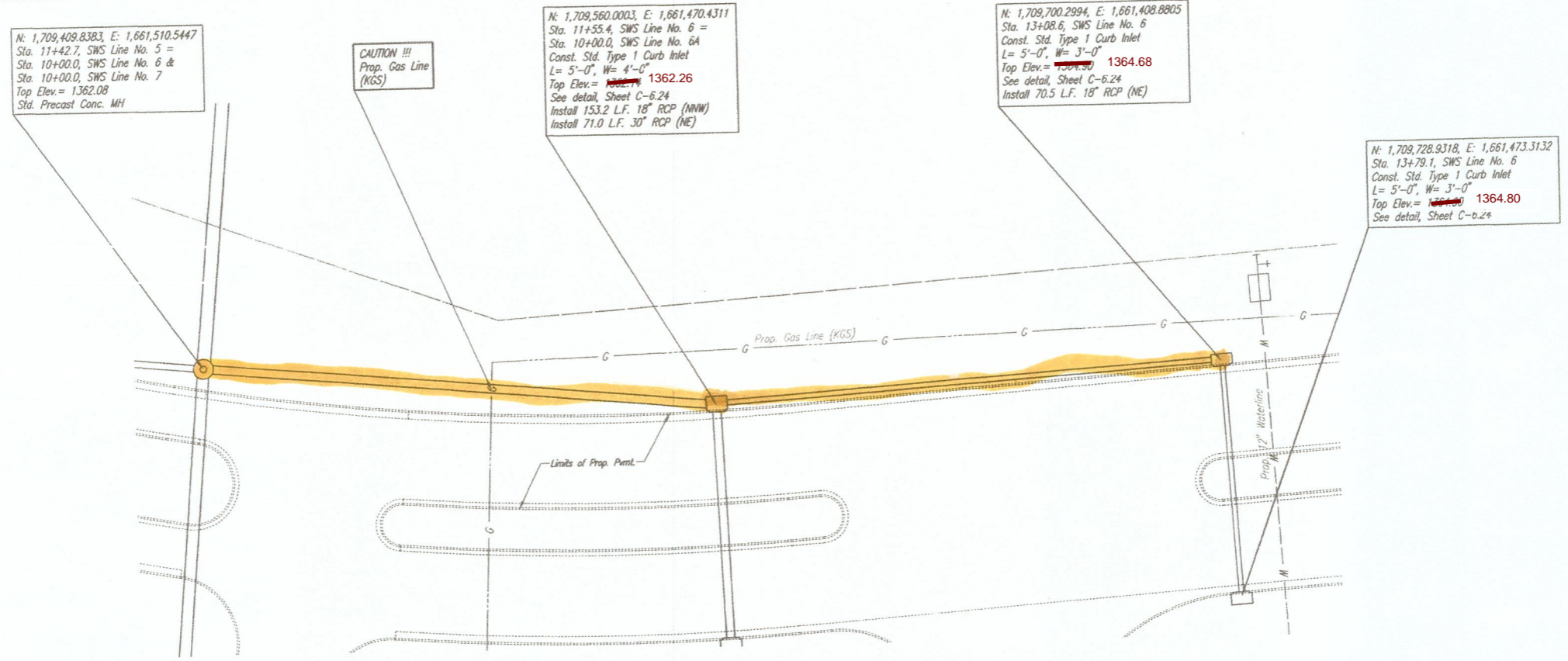
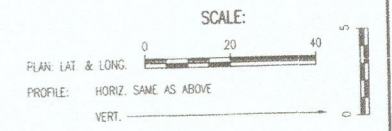
PEC
 PROFESSIONAL ENGINEERING CONSULTANTS P.A.
 303 SOUTH TOPEKA WICHITA, KS 67202
 316-262-2681 www.pec1.com

Designed By: MEB, JAG
 Drawn By: JAN

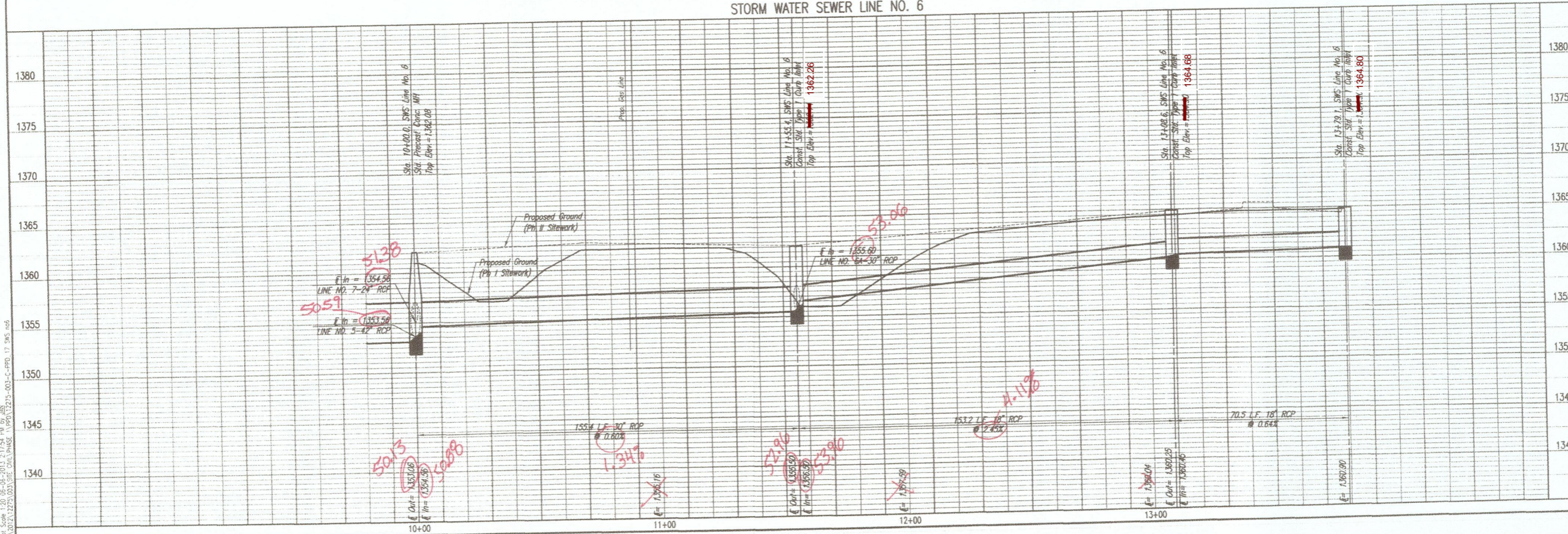
Job No.: 35-12275-3-7208
 Date: FEBRUARY 2013

GARY JANZEN, P.E. - CITY ENGINEER
 PRIVATE PROJECT NO. 0176 PPD (607861)

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STORM WATER SEWER LINE NO. 6



KOCH WICHITA CAMPUS EXPANSION
PRIVATE STORM WATER SEWER EXTENSION

STORM WATER SEWER LINE NO. 6

PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
303 SOUTH TOPEKA WICHITA, KS 67202
316-262-2891 www.pec.com

DESIGNED BY: MER, JAG
CHECKED BY: JAN

DATE: FEBRUARY 2013

PROJECT NO. 0176 PFD (607861)

GARY JANZEN, P.E. - CITY ENGINEER

Sheet C-6.19

Saved: 04-04-2013 2:08:23 PM by JAW
 Plot Scale: 1"=20'-00" (0.5000) 2013.2.17.54 PLO by JAW
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N: 1,709,560.0003, E: 1,661,470.4311
Sta. 11+55.4, SWS Line No. 6 =
Sta. 10+00.0, SWS Line No. 6A
Curb Inlet
Top Elev. = 1362.14

N: 1,709,587.2075, E: 1,661,536.0113
Sta. 10+71.0, SWS Line No. 6A
Const. Std. Type 1 Curb Inlet
L = 5'-0", W = 3'-0"
Top Elev. = 1362.14
See detail, Sheet C-6.24
Install 82.2 L.F. 24" RCP (NE)

N: 1,709,618.7196, E: 1,661,611.9679
Sta. 11+53.2, SWS Line No. 6A
Const. Std. Precast Conc. MH
(Type A) (4' dia.)
Top Elev. = 1362.80
See detail, Sheet C-6.23
Install 38.2 L.F. 18" RCP (N)

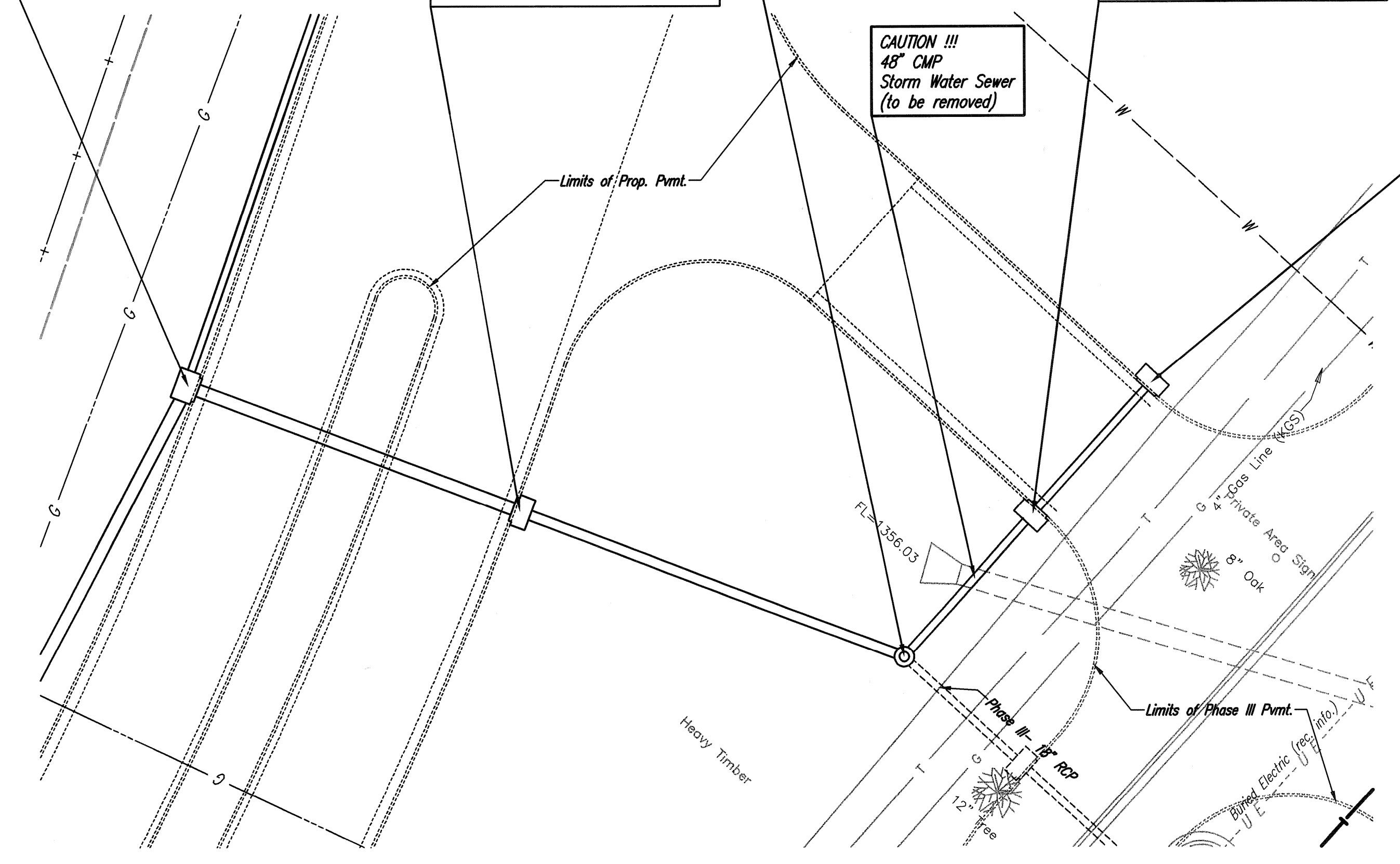
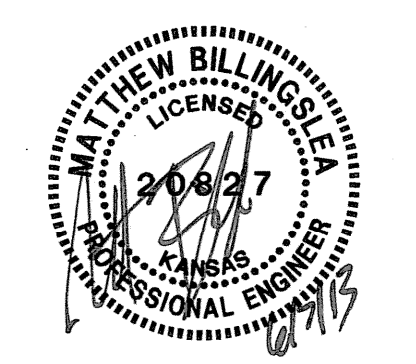
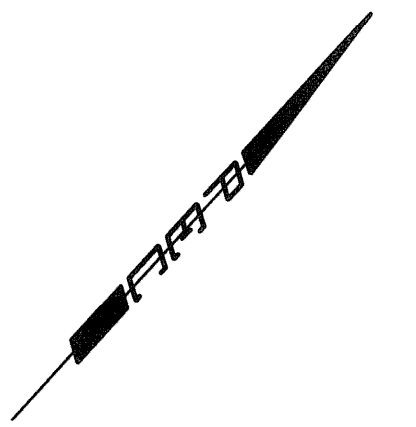
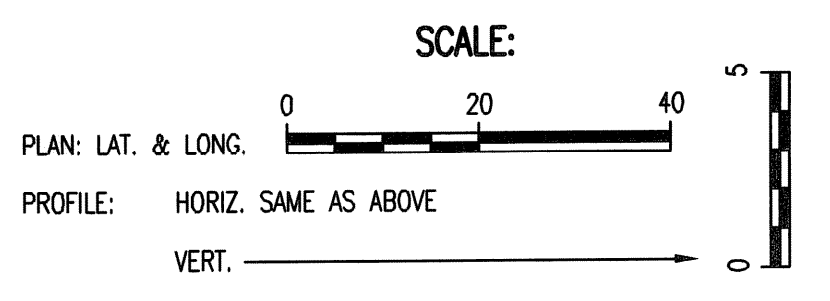
N: 1,709,656.9495, E: 1,661,611.6007
Sta. 11+91.4, SWS Line No. 6A
Const. Std. Type 1 Curb Inlet
(Type A) (4' dia.)
L = 5'-0", W = 3'-0"
Top Elev. = 1362.58
See detail, Sheet C-6.24
Install 35.0 L.F. 18" RCP (N)

N: 1,709,691.9475, E: 1,661,611.2269
Sta. 12+26.4, SWS Line No. 6A
Const. Std. Type 1 Curb Inlet
L = 5'-0", W = 3'-0"
Top Elev. = 1362.58
See detail, Sheet C-6.24

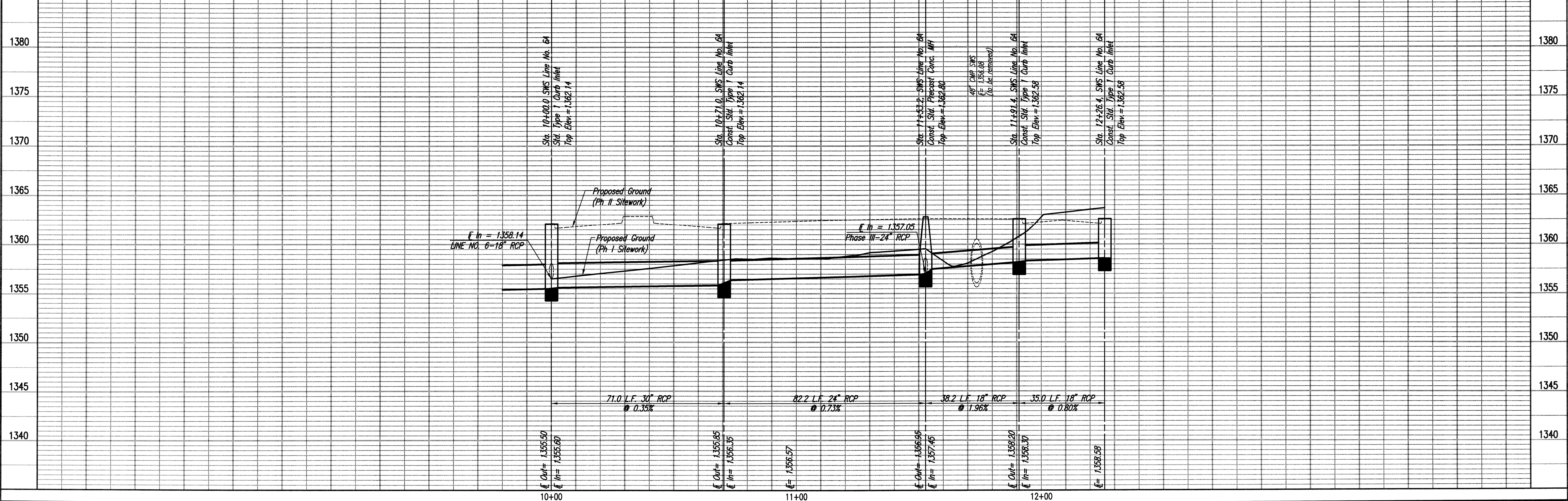
CAUTION !!!
48" CMP
Storm Water Sewer
(to be removed)

STRUCTURE SHALL BE CAST WITH
BLOCK-OUTS FOR PHASE III STORM
SEWER PIPE. CONTRACTOR SHALL BE
RESPONSIBLE FOR INSTALLATION OF
TEMPORARY CAPS FOR PHASE III
BLOCK-OUTS TO PREVENT RUBBLE, SOIL,
OR SEDIMENT FROM ENTERING THE
STRUCTURE.

SEE
REVISIONS



STORM WATER SEWER LINE NO. 6A



KOCH WICHITA CAMPUS EXPANSION
PRIVATE STORM WATER SEWER EXTENSION
STORM WATER SEWER LINE NO. 6A

PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
303 SOUTH TOPEKA WICHITA, KS 67202
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Designed By: MEB, JMG
Date: JAN

Job No.: 35-12275-3-7208
Date: FEBRUARY 2013

GARY JANZEN, P.E. - CITY ENGINEER
PRIVATE PROJECT NO. 0176 PPD (607861)

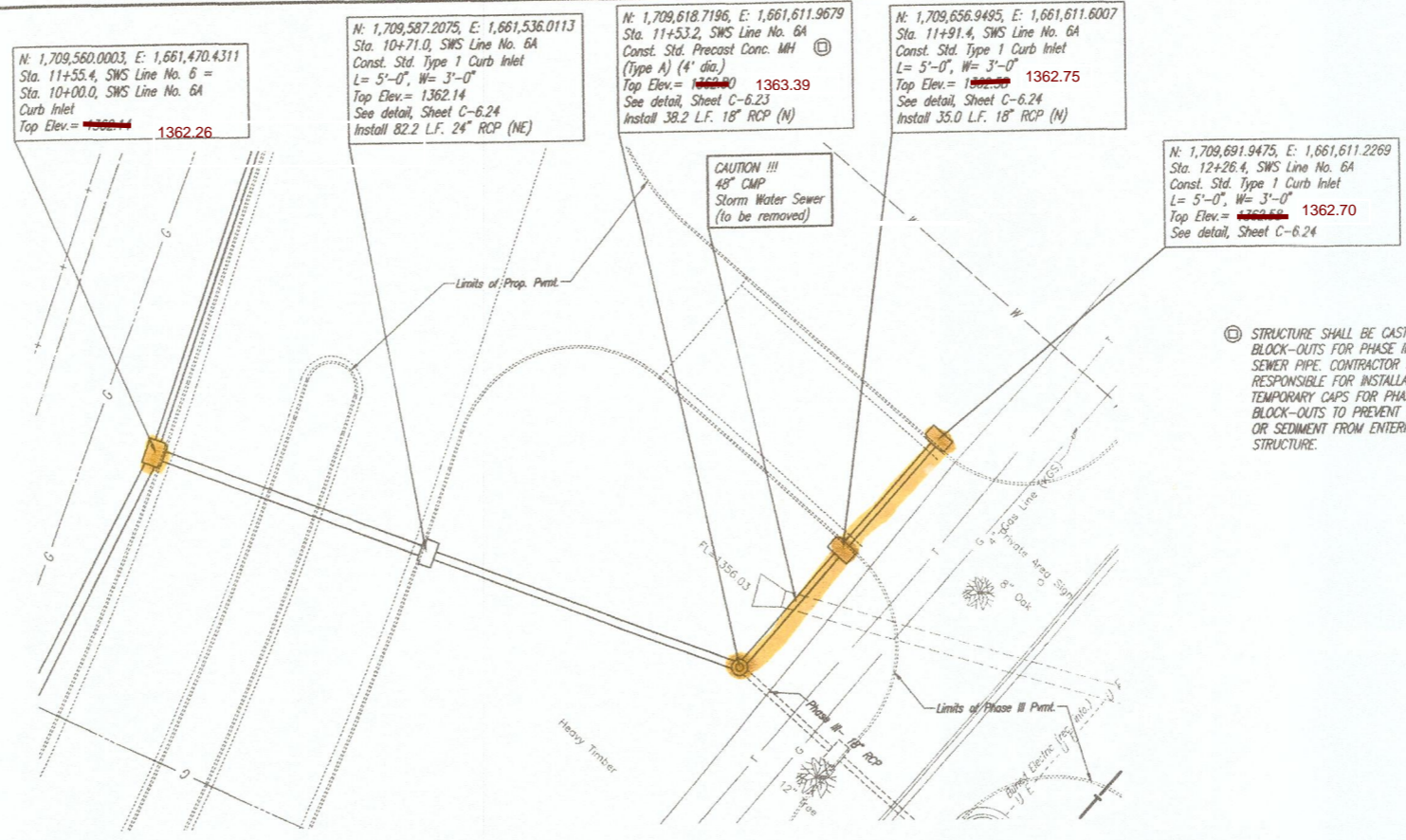
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AS BUILTS

kemiller
engineering

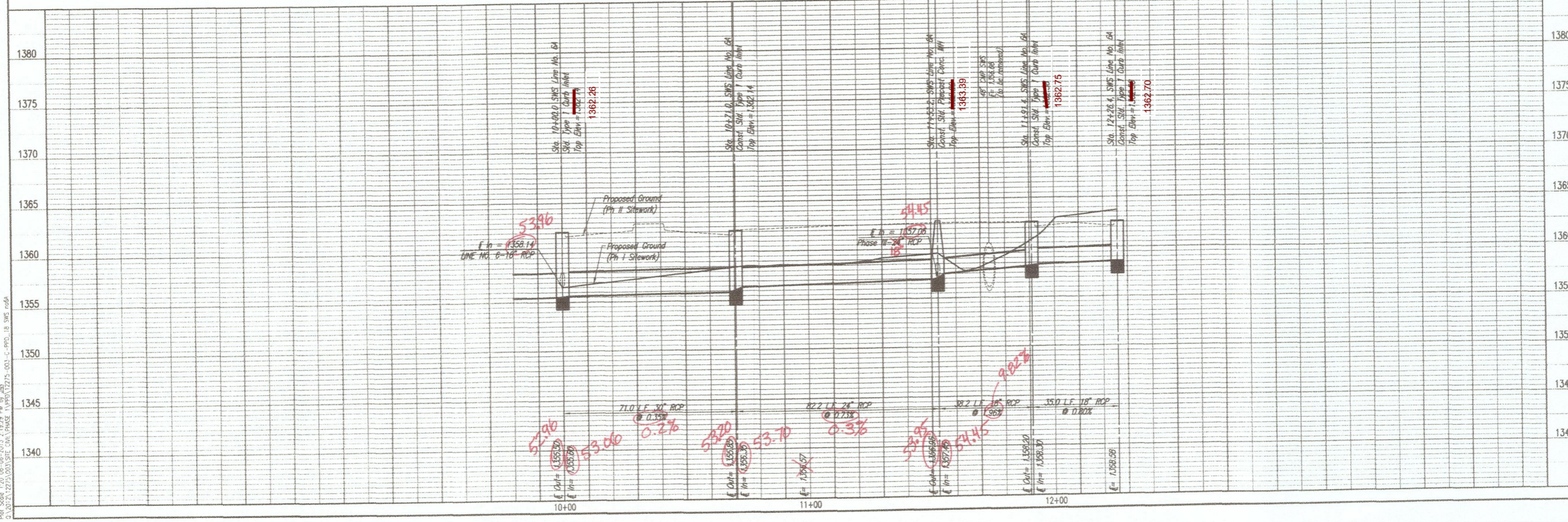
516 S. Market,
Wichita, KS 67202

(316)264-0242



STRUCTURE SHALL BE CAST WITH BLOCK-OUTS FOR PHASE III STORM SEWER PIPE. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION OF TEMPORARY CAPS FOR PHASE III BLOCK-OUTS TO PREVENT RUBBLE, SOIL, OR SEDIMENT FROM ENTERING THE STRUCTURE.

STORM WATER SEWER LINE NO. 6A



STORM WATER SEWER LINE NO. 6A

KOCH WICHITA CAMPUS EXPANSION
PRIVATE STORM WATER SEWER EXTENSION

GARY JANZEN, P.E. - CITY ENGINEER
PRIVATE PROJECT NO. 0176 PPD (602881)

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PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
303 SOUTH TOPEKA, WICHITA, KS 67202
316-262-2681 www.pec.com

Designed By: MEJ, JAC
Drawn By: JAN

Job No.: 35-12275-3-7208
Date: FEBRUARY, 2013

Sheet 06-04-2013 2:11:56 PM by JAW
Plot Scale: 1/20 06-06-2013 2:19:29 PM
C:\07\212275\003\SPEC\CON\WASTE\1\APPX\12275_003_C_PWD_IS_SWS.mxd

N: 1,709,409.8383, E: 1,661,510.5447
 Sta. 11+42.7, SWS Line No. 5 =
 Sta. 10+00.0, SWS Line No. 6 &
 Sta. 10+00.0, SWS Line No. 7
 Std. Precast Conc. MH
 Top Elev. = 1362.08

N: 1,709,350.7824, E: 1,661,526.5411
 Sta. 10+61.2, SWS Line No. 7
 Const. Std. Type 1 Curb Inlet
 L= 5'-0", W= 3'-0"
 Top Elev. = 1361.42
 See detail, Sheet C-6.24
 Install 56.8 L.F. 24" RCP (E)

N: 1,709,360.7934, E: 1,661,582.4254
 Sta. 11+18.0, SWS Line No. 7
 Const. Std. Type 1 Curb Inlet
 L= 5'-0", W= 3'-0"
 Top Elev. = 1361.51
 See detail, Sheet C-6.24
 Install 19.3 L.F. 18" RCP (E)

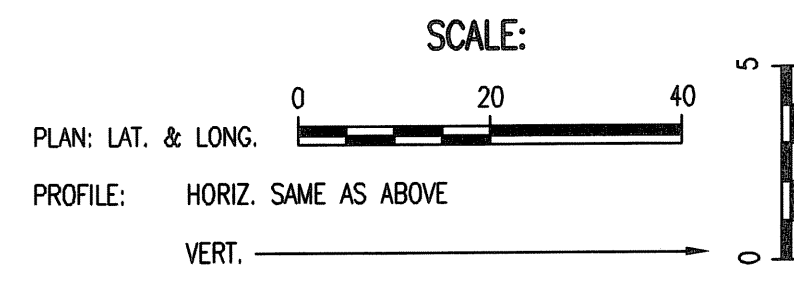
N: 1,709,363.9527, E: 1,661,601.4527
 Sta. 11+37.3, SWS Line No. 7
 Const. Std. Type 1 Curb Inlet
 L= 5'-0", W= 3'-0"
 Top Elev. = 1360.43
 See detail, Sheet C-6.24
 Install 123.0 L.F. 18" RCP (E)

N: 1,709,365.7314, E: 1,661,724.4398
 Sta. 12+60.3, SWS Line No. 7
 Const. Std. Type 1 Curb Inlet
 L= 5'-0", W= 3'-0"
 Top Elev. = 1360.43
 See detail, Sheet C-6.24

CAUTION !!!
 4" Gas Line
 (KGS)

CAUTION !!!
 Buried Comm.
 (Koch)

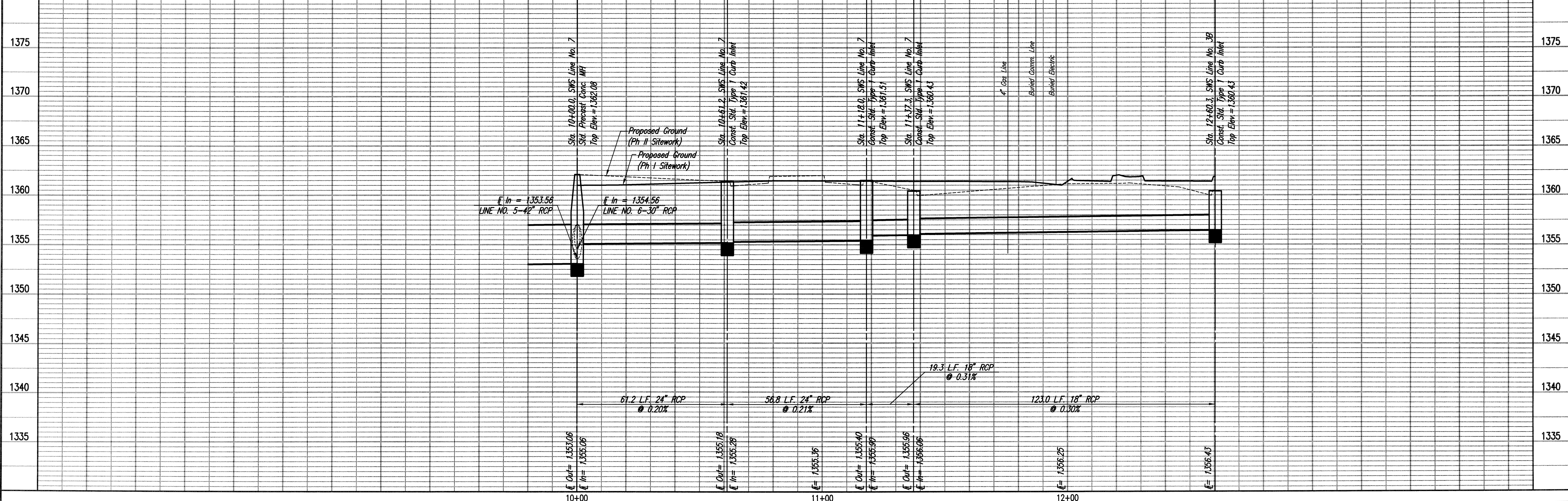
CAUTION !!!
 Buried Electric



SEE REVISIONS



STORM WATER SEWER LINE NO. 7



KOCH WICHITA CAMPUS EXPANSION
 PRIVATE STORM WATER SEWER EXTENSION
STORM WATER SEWER LINE NO. 7
 GARY JANZEN, P.E. - CITY ENGINEER
 PRIVATE PROJECT NO. 0176 PFD (607861)

PROFESSIONAL ENGINEERING CONSULTANTS P.A.
 303 SOUTH TOPEKA WICHITA, KS 67202
 316-262-2881 www.pcc.com
PEC
 Designed By: MEB, JAC
 Drawn By: JAN
 Job No.: 35-12275-3-7208
 Date: FEBRUARY 2013

Saved: 06-04-2013 2:13:21 PM By: JAN
 Plot Scale: 1:20 06-06-2013 2:21:35 PM By: JAN
 C:\2012\12275\003\SITE.CDW\PHASE 1\PPD\12275-003-C-PPD_19_SWS.mxd

AS BUILTS



KEMILLER
ENGINEERING PA
117 E. Lewis,
Wichita, KS 67202 (316)264-0242

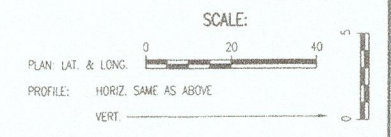
N: 1,709,350.7824, E: 1,661,526.5411
Sta. 10+61.2, SWS Line No. 7
Const. Std. Type 1 Curb Inlet
L = 5'-0", W = 3'-0"
Top Elev. = 1361.42
See detail, Sheet C-6.24
Install 56.8 L.F. 24" RCP (E)

N: 1,709,360.7934, E: 1,661,582.4254
Sta. 11+18.0, SWS Line No. 7
Const. Std. Type 1 Curb Inlet
L = 5'-0", W = 3'-0"
Top Elev. = 1361.51
See detail, Sheet C-6.24
Install 19.3 L.F. 18" RCP (E)

N: 1,709,363.9527, E: 1,661,601.4527
Sta. 11+37.3, SWS Line No. 7
Const. Std. Type 1 Curb Inlet
L = 5'-0", W = 3'-0"
Top Elev. = 1360.43
See detail, Sheet C-6.24
Install 123.0 L.F. 18" RCP (E)

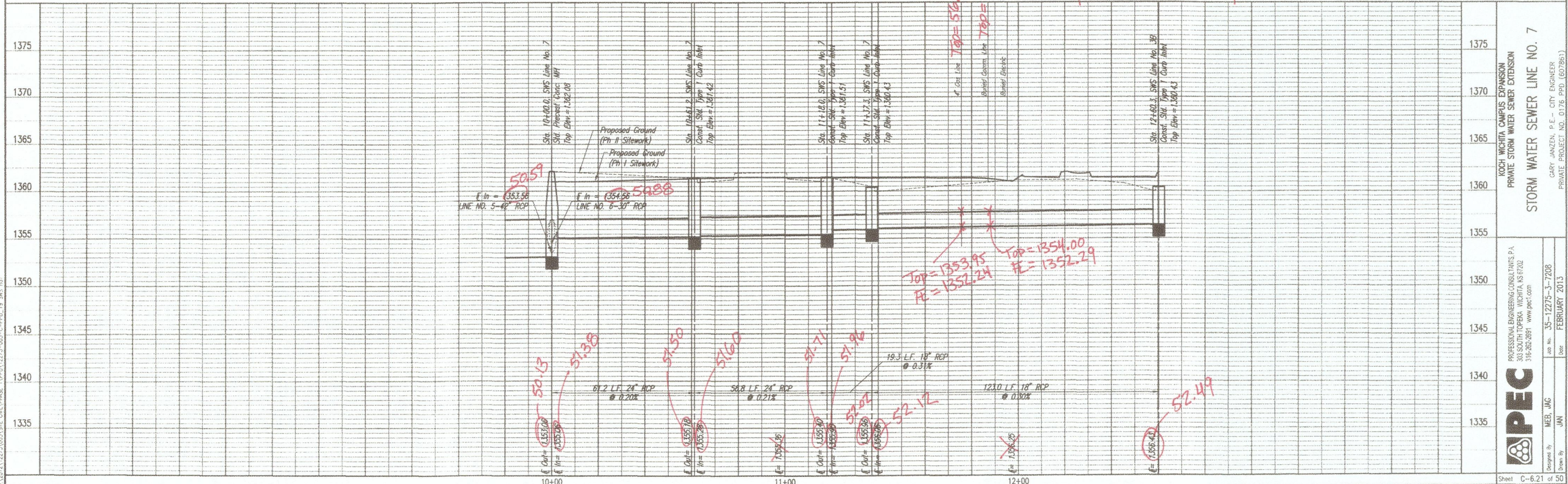
N: 1,709,365.7314, E: 1,661,724.4398
Sta. 12+60.3, SWS Line No. 7
Const. Std. Type 1 Curb Inlet
L = 5'-0", W = 3'-0"
Top Elev. = 1360.43
See detail, Sheet C-6.24

N: 1,709,409.8383, E: 1,661,510.5447
Sta. 11+42.7, SWS Line No. 5 =
Sta. 10+00.0, SWS Line No. 6 &
Sta. 10+00.0, SWS Line No. 7
Std. Precast Conc. MH
Top Elev. = 1362.08



STORM WATER SEWER LINE NO. 7

2' Clearance



Sheet C-6.21 of 50
 Date: FEBRUARY 2013
 Drawn By: JAN
 Checked By: JMC

APEC
PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
303 S. DOUGLASS ST., WICHITA, KS 67202
316-262-2881 www.apec.com

Designed By: MEB, JMC
 Drawn By: JAN
 Date: FEBRUARY 2013

KOCH WICHITA CAMPUS EXPANSION
 PRIVATE STORM WATER SEWER EXTENSION
 STORM WATER SEWER LINE NO. 7

GARY JANZEN, P.E. - CITY ENGINEER
 PRIVATE PROJECT NO. 0176.FPD. (607981)

START 9/23/2013

N: 1,708,959.0921, E: 1,661,432.9496
Sta. 10+05.7, SWS Line No. 8
Const. Std. Type 1 Curb Inlet
L= 5'-0", W= 3'-0"
Top Elev.= 1347.80
See Sheet No. C-6.24
Install 113.0 L.F. 36" RCP (E)
First 3 Sections of RCP Shall have Restraining Joints.

N: 1,708,967.0997, E: 1,661,545.7079
Sta. 11+18.7, SWS Line No. 8
Const. Std. Type 1 Curb Inlet
L= 5'-0", W= 3'-0"
Top Elev.= 1359.96
See detail, Sheet C-6.24
Install 46.5 L.F. 36" RCP (E)

N: 1,708,967.7003, E: 1,661,592.2041
Sta. 11+65.2, SWS Line No. 8
Const. Std. Type 1 Curb Inlet
L= 5'-0", W= 3'-0"
Top Elev.= 1359.96
See detail, Sheet C-6.24
Install 15.0 L.F. 36" RCP (E)

N: 1,708,967.7797, E: 1,661,607.2045
Sta. 11+80.2, SWS Line No. 8
Const. Std. Type 1 Curb Inlet
L= 5'-0", W= 3'-0"
Top Elev.= 1359.44
See detail, Sheet C-6.24
Install 123.0 L.F. 36" RCP (E)

CAUTION !!!
4" Gas Line (KGS)
CAUTION !!!
Buried Comm. (Koch)
CAUTION !!!
Buried Electric

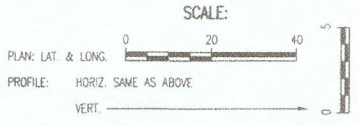
N: 1,708,969.7756, E: 1,661,730.1885
Sta. 13+03.2, SWS Line No. 8
Const. Std. Type 1 Curb Inlet
L= 5'-0", W= 4'-0"
Top Elev.= 1359.55
See detail, Sheet C-6.24
Install 33.5 L.F. 30" RCP (S)

N: 1,708,936.2864, E: 1,661,731.1748
Sta. 13+36.7, SWS Line No. 8
Const. Std. Type 1 Curb Inlet
L= 10'-0", W= 3'-0"
Top Elev.= 1358.85
See detail, Sheet C-6.24
Install 31.8 L.F. 24" RCP (S)

N: 1,708,904.5010, E: 1,661,731.6363
Sta. 13+68.5, SWS Line No. 8 =
Sta. 10+00.0, SWS Line No. 8A
Const. Std. Type 1 Curb Inlet
L= 5'-0", W= 3'-0"
Top Elev.= 1358.85
See detail, Sheet C-6.24
Install 84.3 L.F. 18" RCP (E)
Install 22.0 L.F. 15" RCP (S)

N: 1,708,882.5033, E: 1,661,731.9556
Sta. 10+22.0, SWS Line No. 8A
Const. Std. Type 1 Curb Inlet
L= 5'-0", W= 3'-0"
Top Elev.= 1358.45
See detail, Sheet C-6.24

N: 1,708,903.5559, E: 1,661,815.9480
Sta. 14+52.8, SWS Line No. 8A
Connect to Existing Curb Inlet
Break-in side wall and Shape invert to provide smooth flow.
Top Elev.= 1359.80



AS BUILTS

KEMILLER ENGINEERING PA

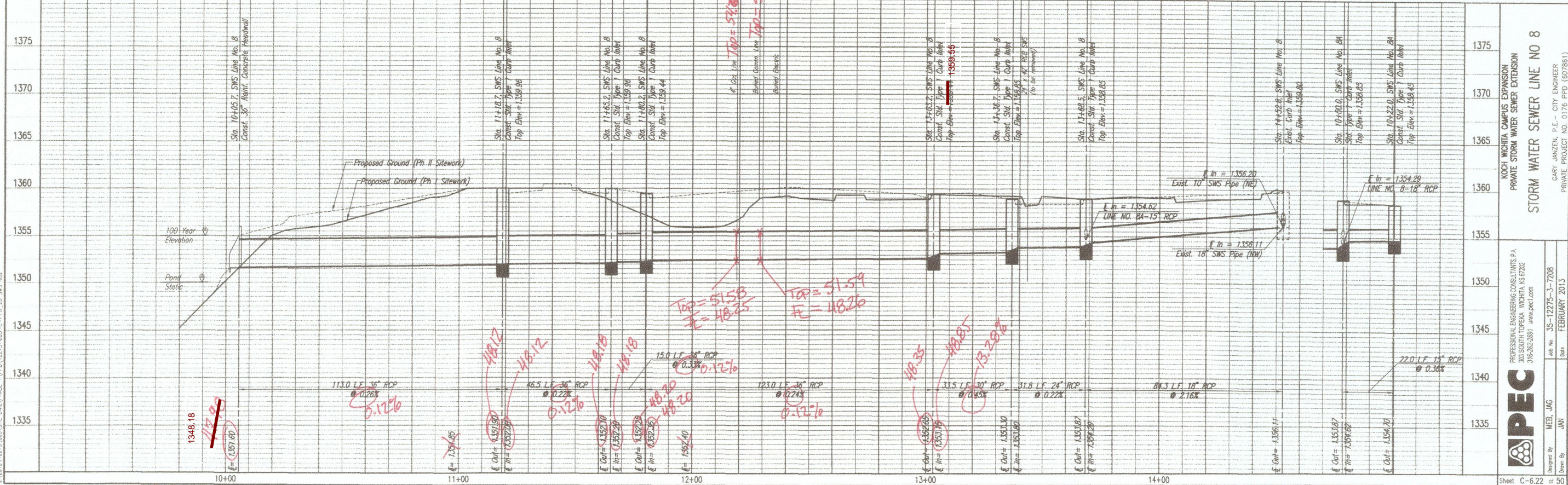
117 E. Lewis,
Wichita, KS 67202 (316)264-0242

Ⓢ PRIOR TO CONSTRUCTION CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATION AND SIZE OF EXISTING SWS PIPE AND REPORT THESE FINDINGS TO THE ENGINEER SO THAT ANY NECESSARY ADJUSTMENTS CAN BE MADE. INSTALL CONNECTION OF EXISTING SWS PIPE AND PROPOSED STRUCTURE. CUT FLUSH WITH INSIDE WALL OF STRUCTURE, AND GROUT IN PLACE WITH NON-SHRINK GROUT. SUBSIDIARY TO SWS STRUCTURE.



STORM WATER SEWER LINE NO. 8

STORM WATER SEWER LINE NO. 8A



Scale: 0.5" = 10'-0" (1:20)
 Date: 02/02/2013 11:41:45 AM by: JAG
 Plot Date: 02/06/2013 09:06:20 AM by: JAG
 Project: 35-12275-3-7008
 Sheet: C-6.22

PEPC PROFESSIONAL ENGINEERING CONSULTANTS P.A.
 300 SOUTH TOPEKA WICHITA, KS 67202
 316-262-2891 www.pepc.com

Designed By: MEB, JAG
 Drawn By: JAN

Job No: 35-12275-3-7008
 Date: FEBRUARY 2013

KOCH WICHITA CAMPUS EXPANSION
 PRIVATE STORM WATER SEWER EXTENSION
 STORM WATER SEWER LINE NO. 8

GARY JANZEN, P.E. - CITY ENGINEER
 PRIVATE PROJECT NO. 0176 PFD (607861)