

PRIVATE SANITARY SEWER EXTENSION

TO SERVE

WICHITA STATE UNIVERSITY RHATIGAN STUDENT CENTER

PRIVATE PROJECT NO. 2122 PPS (607861)

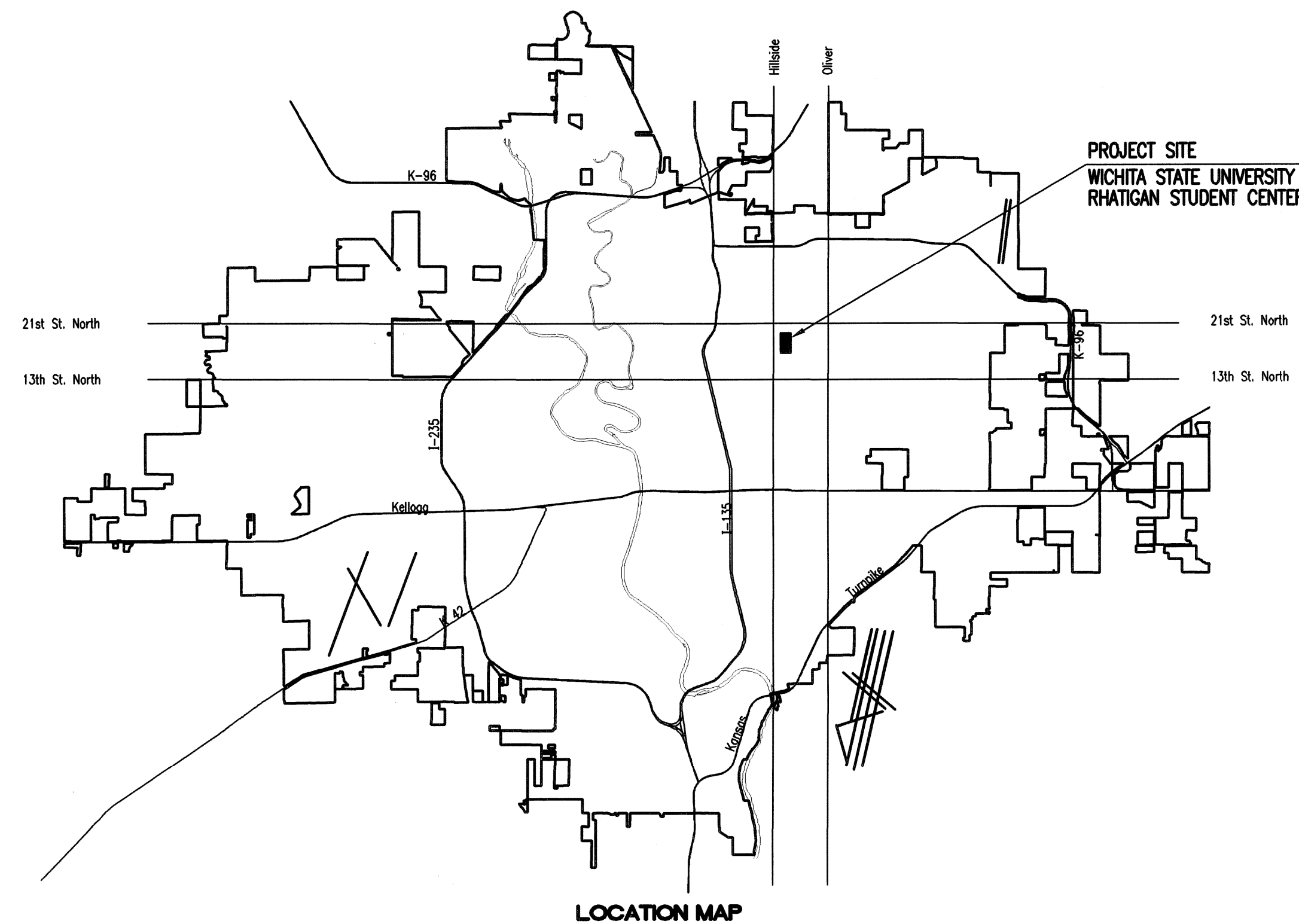
CITY OF WICHITA, KANSAS

JAMES L. ARMOUR, P.E. - CITY ENGINEER

T. Mason - City of Wichita, Inspector
Release Date: 10/26/2012
: APRos 10/26/2012

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APPROVED AS NOTED
BY CITY ENGINEER OF WICHITA

Engineering

Julian Kellman 2-7-12

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.

FEBRUARY 2012

PLANS PREPARED BY
PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
ENGINEERS
WICHITA, KANSAS



As-Built Plans

Contractor: Dondlinger & Sons Construction, Inc.

Inspector: Eric Strecker, Schwab-Eaton, P.A.

PDF by: ELS 10/16/12

BENCHMARK LIST

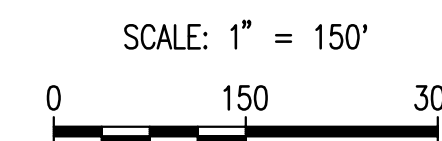
- BM #201 - CHISELED SQUARE SOUTH SIDE OF RHATIGAN STUDENT CENTER TOP OF NORTH SIDE OF CONCRETE BASE FOR LIGHT POLE IN CURB ISLAND AT NE CORNER OF PARKING LOT.
ELEV. = 206.08 (C.O.W.)
- BM #202 - CHISELED SQUARE AT NORTH EDGE OF SIDEWALK AND 3 FEET SOUTH OF A LIGHT POLE 45 FT. ± EAST OF THE NORTH-SOUTH SIDEWALK RUNNING ALONG EAST SIDE OF RHATIGAN STUDENT CENTER, NEXT TO IRRIGATION UTILITIES BETWEEN GEOLOGY BUILDING AND SOUTH OF CLINTON HALL, WEST OF NEFF HALL.
ELEV. = 204.57 (C.O.W.)
- BM #203 - CHISELED SQUARE IN TOP-CENTER OF HEADWALL FOR FLUME AND AREA INLET WITH METAL LID WEST OF RHATIGAN, EAST OF MAIN ENTRANCE TO JARDINE.
ELEV. = 208.68 (C.O.W.)
- BM #204 - CHISELED SQUARE IN SIDEWALK AT SE CORNER OF BRICK PLANTER AND TREE, SSW OF MAIN ENTRANCE TO WEST SIDE OF RHATIGAN, NE OF HUMAN RESOURCES BUILDING.
ELEV. = 207.55 (C.O.W.)
- BM "c" - FROM PEC JOB #05289 DUERKSEN FINE ARTS CENTER. CHISELED SQUARE ON CONCRETE UTILITY VAULT, EAST OF ALUMNI DRIVE NEAR SOUTHWEST CORNER OF JARDINE HALL.
ELEV. = 210.03 (C.O.W.)
- BM 8B - PROJECT DATUM BENCH MARK. FROM PEC JOB #01593-016. CHISELED SQUARE TOP OF RETAINING WALL AT NW CORNER OF CHAPEL.
ELEV. = 211.86 (C.O.W.)
- BM 8C - FROM PEC JOB #01593-016. CHISELED SQUARE TOP OF RETAINING WALL AT SE CORNER OF CHAPEL.
RECORD ELEV. = 211.86 (C.O.W.)
MEASURED ELEV. = 211.89 (C.O.W.)

GENERAL NOTES

1. ALL CONSTRUCTION AND MATERIALS TO COMPLY WITH CITY OF WICHITA SPECIFICATIONS AND STANDARDS.
2. CONTRACTOR WILL BE REQUIRED TO PROVIDE A MINIMUM ADVANCE NOTICE OF SEVENTY-TWO (72) HOURS TO UTILITY COMPANIES PRIOR TO STARTING ANY EXCAVATION AS FOLLOWS:

KANSAS ONE-CALL 687-2470
CITY OF WICHITA UTILITY LOCATES WWW.WICHITA.GOV\LOCATE (268-4260)
- THE CONTRACTOR MUST NOTIFY THE FOLLOWING IN CASE OF AN EMERGENCY:

WSU PHYSICAL PLANT 978-7913
COX COMMUNICATIONS 262-0661
KANSAS GAS SERVICE (888)-482-4950
WESTAR ENERGY 383-8600
BLACK HILLS ENERGY (800)-527-0357
AT&T (800)-870-8390
CITY OF WICHITA WATER DEPARTMENT 262-6000
CITY OF WICHITA SEWER MAINTENANCE 262-6000
3. ALL ELEVATIONS SHOWN ARE CITY OF WICHITA DATUM. (U.S.G.S. - 1187.4 = CITY DATUM)
4. THE CONTRACTOR SHALL LIMIT THE EXTENT OF TRENCH TO REMAIN OPEN OVERNIGHT AND WEEKENDS TO LESS THAN 50 FEET. ANY OPEN TRENCH SHALL BE BARRICADED/PROTECTED WITH ORANGE CONSTRUCTION FENCING.
5. AT LEAST 72 HOURS PRIOR TO BEGINNING EXCAVATION (EXCLUDING WEEKENDS AND HOLIDAYS), THE CONTRACTOR SHALL CONTACT THE KANSAS ONE-CALL SYSTEM, A UTILITY LOCATION SERVICE, AT (316) 687-2470 AND CITY OF WICHITA UTILITY LOCATES, WWW.WICHITA.GOV\LOCATE (268-4260) TO REQUEST THE LOCAL UTILITY COMPANIES MARK ANY EXISTING LINES WITHIN THE PROJECT AREA.
6. UNDERGROUND UTILITY SERVICE LINES AND OVERHEAD UTILITY POLE LINES ARE TO BE ADJUSTED AS NECESSARY BY OTHERS PRIOR TO CONSTRUCTION UNLESS THE PLANS SPECIFICALLY CALL FOR THEIR ADJUSTMENT BY THE CONTRACTOR OR UNLESS THE PLANS SPECIFICALLY IDENTIFY A UTILITY TO BE ADJUSTED BY ITS OWNER DURING CONSTRUCTION. EXISTING UTILITIES AND THEIR LOCATIONS, AS SHOWN ON THE PLANS, REPRESENT THE BEST INFORMATION OBTAINABLE FOR THE DESIGN. THE CONTRACTOR WILL BE REQUIRED TO WORK AROUND EXISTING UTILITIES WITHIN THE RIGHT-OF-WAY WHICH DO NOT CONFLICT WITH PROPOSED CONSTRUCTION.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY IRONS. THE CONTRACTOR WILL BE REQUIRED TO RE-ESTABLISH ANY PROPERTY IRONS WHICH ARE DAMAGED OR DESTROYED BY HIS CONSTRUCTION OPERATIONS. SUCH IRONS SHALL BE RE-ESTABLISHED BY A LICENSED LAND SURVEYOR IN ACCORDANCE WITH STATE LAWS. ALL COSTS FOR THIS WORK SHALL BE SUBSIDIARY TO THE LUMP SUM PRICE BID FOR "SITE RESTORATION".
8. CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE AWAY FROM ALL MANHOLE COVERS.
9. MANHOLES SHALL BE TYPE "P" MANHOLES. MANHOLES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS AND THE STANDARD DETAIL DRAWINGS.
10. RUBBLE FROM THE REMOVAL OF MISCELLANEOUS STRUCTURES INCLUDING ANY TREES REMOVED, TREE TRIMMINGS, AND EXCESS EXCAVATION WHICH IS TO BE WASTED SHALL BE DISPOSED OF ON SITES PROVIDED BY THE CONTRACTOR. THESE SITES SHALL ALSO BE APPROVED BY THE ENGINEER AS TO SUITABILITY, APPEARANCE, AND SITE LOCATION. LOCATIONS THAT, IN THE OPINION OF THE ENGINEER, WILL LEAVE AN UNSIGHTLY APPEARANCE WILL NOT BE APPROVED. ALL DISPOSAL SITES MUST BE APPROVED BY THE KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT. MATERIAL EITHER STOCKPILED OR DISPOSED OF IN A FLOOD PLAIN WILL REQUIRE A KANSAS STATE BOARD OF AGRICULTURE PERMIT. ANY MATERIAL DUMPED IN WATERS OF THE UNITED STATES OR WETLANDS IS SUBJECT TO U.S. CORPS OF ENGINEERS PERMITTING REGULATIONS. ANY MATERIAL BURIED OR STOCKPILED BEYOND APPROVED CONSTRUCTION LIMITS MAY REQUIRE ARCHAEOLOGICAL INVESTIGATIONS UNLESS BURIED IN A PREVIOUSLY APPROVED DISPOSAL LOCATION.
11. ALL APPROVED EXCESS EXCAVATION WHICH IS TO BE WASTED SHALL BE STOCKPILED AT NO ADDITIONAL COST TO THE OWNER. STOCKPILE LOCATIONS SHALL BE AS DIRECTED BY WSU AND IN ACCORDANCE WITH GENERAL NOTE NO. 9 ABOVE.
12. ALL LAWN/TURF AREAS DISTURBED BY CONSTRUCTION OF THE PROPOSED IMPROVEMENTS SHALL BE RESTORED WITH THE SAME GRASS/SOD AS EXISTING. RESTORATION OF DISTURBED AREAS SHALL INCLUDE, BUT NOT BE LIMITED TO, TOP SOIL PREPARATION, SEEDING, MULCH, AND/OR RESEEDING. ALL SEEDING/SODDING WORK SHALL BE IN ACCORDANCE WITH THE CITY OF WICHITA STANDARD SPECIFICATIONS AND THE CITY OF WICHITA ADMINISTRATIVE REGULATION NO. AR6.5 WHICH GOVERNS CLEANUP AND RESTORATION OR REPLACEMENT FOLLOWING CONSTRUCTION. ALL COSTS FOR THIS WORK SHALL BE SUBSIDIARY TO THE LUMP SUM PRICE BID FOR "SITE RESTORATION".
13. THE CONTRACTOR SHALL SEED ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES WITH TEMPORARY RYE GRASS. RYE GRASS SEED SHALL BE PLANTED AT A MINIMUM RATE OF SIX (6) POUNDS PER ONE THOUSAND (1,000) SQUARE FEET. THIS TEMPORARY SEEDING MAY BE OMITTED ONLY IF OTHER SEEDING IS REQUIRED IN ACCORDANCE WITH GENERAL NOTE NO. 11 ABOVE. TEMPORARY SEEDING OR PERMANENT SEEDING/SODDING SHALL BE APPLIED WITHIN 14 DAYS AFTER THE AREA HAS BEEN DISTURBED.
14. THE CONTRACTOR SHALL AVOID REMOVAL OR TRIMMING OF ANY TREES OR SHRUBS WHERE POSSIBLE. WHERE THE CONTRACTOR BELIEVES THE REMOVAL OR TRIMMING IS UNAVOIDABLE, HE SHALL COORDINATE SUCH WORK WITH THE ENGINEER. COSTS FOR TREE/SHRUB REMOVAL AND TRIMMING REGARDLESS OF SIZE SHALL BE CONSIDERED SUBSIDIARY TO THE LUMP SUM PRICE BID FOR "SITE CLEARING".
15. THE CONTRACTOR SHALL PREVENT ANY CONSTRUCTION DEBRIS FROM ENTERING THE EXISTING SANITARY SEWER DURING CONSTRUCTION.
16. THE CONTRACTOR SHALL GIVE ALL PROPERTY OWNERS AND/OR TENANTS OF DEVELOPED PROPERTY ABUTTING THE CONSTRUCTION OF THIS PROJECT A MINIMUM OF TEN (10) DAYS ADVANCE NOTICE PRIOR TO START OF CONSTRUCTION.
17. THE CONTRACTOR IS REQUIRED TO MAINTAIN CONTINUOUS FLOW OF SEWAGE IN EXISTING MAINS AT ALL TIMES.
18. THE CONTRACTOR SHALL NOT BURY MANHOLES THAT HAVE RIM ELEVATIONS WHICH ARE LOWER THAN EXISTING GROUND AT THE MANHOLE. THE GROUND AROUND SUCH MANHOLES AND ALONG THE SEWER ALIGNMENT SHALL BE BACKFILLED TO THE APPROXIMATE ELEVATION OF THE PROPOSED GROUND ELEVATION SHOWN ON THE PLAN/PROFILE SHEETS. THE CONTRACTOR SHALL PROVIDE DRAINAGE AWAY FROM THESE MANHOLES AND SEWER LINES BY CONSTRUCTION OF TEMPORARY DITCHES OR SLOPING THE GROUND AS REQUIRED. ALL COSTS FOR THIS WORK SHALL BE CONSIDERED SUBSIDIARY TO THE INSTALLED BID PRICE FOR MANHOLES OR PIPE.
19. THE CONTRACTOR SHALL PROVIDE MOUNDED EARTH AT MANHOLES AND CLEANOUTS THAT HAVE TOP ELEVATIONS GREATER THAN 1 FOOT ABOVE EXISTING GRADE, AS SHOWN ON THE PLANS. COSTS FOR MOUNDING SHALL BE CONSIDERED SUBSIDIARY TO THE PRICE BID PER EACH FOR MANHOLES.
20. INTERURBAN TRAFFIC GENERATED OUTSIDE THE PROJECT AREA AND LOCAL BUSINESS OR RESIDENTIAL TRAFFIC GENERATED WITHIN THE PROJECT AREA ARE TO BE CARRIED THROUGH CONSTRUCTION AS FURTHER PROMULGATED BY PROJECT SPECIAL PROVISIONS. THE CONTRACTOR SHALL UTILIZE BARRICADES, SIGNS, GUARDS, AND FLAGMEN IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
21. WHERE INDICATED IN THE PLANS, THE SANITARY SEWER EXCAVATION SHALL BE SAND FILLED AND FLUSHED (JETTED AND VIBRATED) WITH WATER PER THE REQUIREMENTS LISTED IN THE STANDARD SPECIFICATIONS FOR THE CITY OF WICHITA, UNLESS FLOWABLE FILL OR OTHER IMPROVED BACKFILL MATERIAL IS OTHERWISE SPECIFIED. ALL COSTS FOR SAND FILLING AND FLUSHING SHALL BE INCLUDED IN THE UNIT PRICE BID FOR "JETTED SAND BACKFILL".
22. THE CONTRACTOR SHALL INSTALL AND/OR MAINTAIN EROSION CONTROL METHODS AS SPECIFIED. THE GENERAL LOCATION OF THE REQUIRED EROSION CONTROL IS ILLUSTRATED ON THE EROSION CONTROL PLAN. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE EROSION CONTROL SHOWN THROUGH THE COMPLETION OF THIS PROJECT. INSTALLATION OF THESE BMP'S DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF ABATING SOIL EROSION.



LEGEND

- EXISTING SANITARY SEWER
- PROPOSED SANITARY SEWER
- EXISTING SANITARY SEWER w/MANHOLE
- PROPOSED SANITARY SEWER w/MANHOLE
- PROPOSED SANITARY SEWER w/CLEANOUT

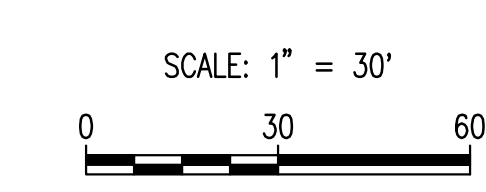
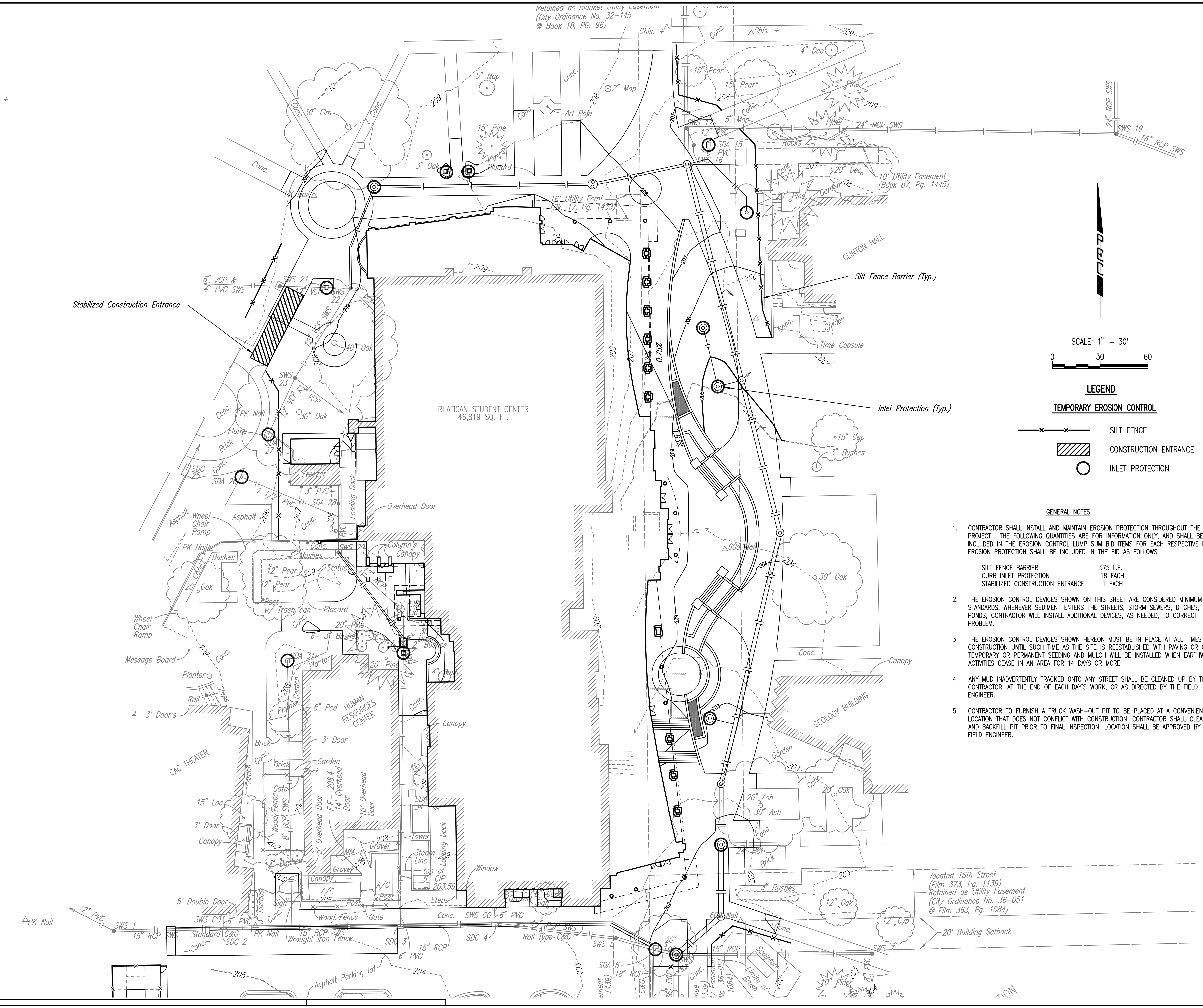
CONTROL POINTS

- Pt. No. 134
N: 1,697,480.9849, E: 1,660,849.5872
PK Nail
1. 23.95' ESE to chiseled square BM 203.
2. 16.40' WNW to corner of brick wall at N side of East entrance to Jardine Hall.
3. 20.20' WSW to center of K&E MH lid.
4. In concrete joint at edge of brick & concrete arc.
- Pt. No. 902
N: 1,697,721.8213, E: 1,661,119.3183
Chiseled "+"
1. 31.50' W to chiseled square BM 8C, at top of SE corner of Chapel Wall.
2. 3.28' E to E edge of sidewalk.
3. 53.22' E to chiseled "+" in sidewalk in center of concrete walk (CP. 137).
4. 19.63' SW to NE corner concrete pad for light pole.
5. NE of Rhatigan & SE of Chapel.
6. 1,184.25' S to PK Nail, CP. 805, at 17th Street.
7. 1,391.94' N to 4 Bar, CP. 811, at 21st Street.
- Pt. No. 912
N: 1,697,393.8251, E: 1,661,155.8590
60d Nail
1. 4.55' SSE to NW corner of concrete light pole base.
2. At East edge of 12 foot wide sidewalk.
3. 17.90' NNE to SW corner of pedestal for Eisenhower Bust.
4. East of East entrance to Rhatigan.
- Pt. No. 914
N: 1,697,160.2884, E: 1,661,165.6566
PK Nail in concrete joint in sidewalk.
1. 20.95' SSE to N corner of Oxen Statue base.
2. 0.7' SSW to S edge of sidewalk.
3. 6.75' WNW to P.I. in sidewalk going W & ESE.
4. 52.5' W to fire hydrant.
5. E of SE corner of Rhatigan.
- Pt. No. 915
N: 1,697,615.9923, E: 1,660,897.6774
PK Nail (AKA CP. 135)
1. 31.60' W to E corner of concrete pad for Man & Woman Statue.
2. 33.33' NE to center of high water meter lid.
3. 39.10' SE to center of storm MH by bench.
4. NW of Rhatigan.
5. At N end of W line of hexagon inside edge of brick pmt.
- Pt. No. 916
N: 1,697,157.2181, E: 1,660,860.8234
PK Nail in joint of back of curb.
1. 25.20' NE to center of light pole.
2. 9.82' NW to SE corner of C.A.C. theater building.
- Pt. No. 917
N: 1,697,160.8490, E: 1,660,716.2555
PK Nail
1. 28.40' NE to center of light pole.
2. 7.35' NW to NW edge of concrete sidewalk ramp.
3. 69.85' E to SW corner of C.A.C. theater.
4. At "T" joint in sidewalk intersection W of SW corner C.A.C. theater.
- Pt. No. 918
N: 1,697,199.2687, E: 1,660,927.5588
Temporary Magic Marker Plus on concrete
No Ties
- Pt. No. 919
N: 1,697,107.4137, E: 1,660,934.7491
Temporary Magic Marker Plus on concrete
No Ties
- Pt. No. 920
N: 1,697,107.7970, E: 1,660,975.3632
PK Nail in asphalt
1. 77.10' E to BM 201, Chiseled Square top of light pole base.
2. 4.53' SE to NW back of curb of curb island, no light pole.
3. 31.38' W to E nose back of curb of curb island with light pole.

Scaled 02-06-2012 10:42:26 AM by RFT
 Plot Scale 1:150 02-07-2012 2:31:07 PM by RFT
 02/2010\10405\Site Civil\PPS\10405-PPS-C-keymap and General Notes

No.	Revision	By	Date
PRIVATE SANITARY SEWER EXTENSION RHATIGAN STUDENT CENTER KEY MAP AND GENERAL NOTES JAMES L. ARMOUR, P.E. - CITY ENGINEER PRIVATE PROJECT NO. 2122 PPS (607861)			
		PROFESSIONAL ENGINEERING CONSULTANTS, P.A. 303 SOUTH TOPEKA WICHITA, KS 67202 316-262-2691 www.pec1.com	
Designed by	MEB	Job No.	35-10405-1353
Drawn by	RFT	Date	JANUARY 2011
			Sht. C-4.2

Retained as Barker Utility Easement
(City Ordinance No. 32-145
@ Book 18, Pg. 96)



LEGEND

- TEMPORARY EROSION CONTROL**
- x — x — SILT FENCE
 - ▨ CONSTRUCTION ENTRANCE
 - INLET PROTECTION

GENERAL NOTES

1. CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION PROTECTION THROUGHOUT THE ENTIRE PROJECT. THE FOLLOWING QUANTITIES ARE FOR INFORMATION ONLY, AND SHALL BE INCLUDED IN THE EROSION CONTROL LUMP SUM BID ITEMS FOR EACH RESPECTIVE PART. EROSION PROTECTION SHALL BE INCLUDED IN THE BID AS FOLLOWS:

SILT FENCE BARRIER	575 L.F.
CURB INLET PROTECTION	18 EACH
STABILIZED CONSTRUCTION ENTRANCE	1 EACH
2. THE EROSION CONTROL DEVICES SHOWN ON THIS SHEET ARE CONSIDERED MINIMUM STANDARDS. WHENEVER SEDIMENT ENTERS THE STREETS, STORM SEWERS, DITCHES, OR PONDS, CONTRACTOR WILL INSTALL ADDITIONAL DEVICES, AS NEEDED, TO CORRECT THE PROBLEM.
3. THE EROSION CONTROL DEVICES SHOWN HEREON MUST BE IN PLACE AT ALL TIMES DURING CONSTRUCTION UNTIL SUCH TIME AS THE SITE IS REESTABLISHED WITH PAVING OR GRASS. TEMPORARY OR PERMANENT SEEDING AND MULCH WILL BE INSTALLED WHEN EARTHWORK ACTIVITIES CEASE IN AN AREA FOR 14 DAYS OR MORE.
4. ANY MUD INADVERTENTLY TRACKED ONTO ANY STREET SHALL BE CLEANED UP BY THE CONTRACTOR, AT THE END OF EACH DAY'S WORK, OR AS DIRECTED BY THE FIELD ENGINEER.
5. CONTRACTOR TO FURNISH A TRUCK WASH-OUT PIT TO BE PLACED AT A CONVENIENT LOCATION THAT DOES NOT CONFLICT WITH CONSTRUCTION. CONTRACTOR SHALL CLEAN OUT AND BACKFILL PIT PRIOR TO FINAL INSPECTION. LOCATION SHALL BE APPROVED BY THE FIELD ENGINEER.

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No.	Revision	By	Date
PRIVATE SANITARY SEWER EXTENSION RHATICAN STUDENT CENTER EROSION CONTROL PLAN JAMES L. ARMOUR, P.E. - CITY ENGINEER PRIVATE PROJECT NO. 2122 PPS (607861)			
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A. 303 SOUTH TOPEKA WICHITA, KS 67202 316-262-2691 www.pec1.com			
Designed by	MEB	Job No.	35-10405-1353
Drawn by	RFT	Date	JANUARY 2011
			Sht. C-7.0