

WATER DISTRIBUTION SYSTEM IMPROVEMENTS

TO SERVE WICHITA MID-CONTINENT AIRPORT

PRIVATE PROJECT NO. 1522 PPW (607853)
CITY OF WICHITA, KANSAS
JAMES L. ARMOUR, P.E. - CITY ENGINEER

**PARTIAL
AS BUILT PLANS**
Lines 1-3, 5-8, 10-11

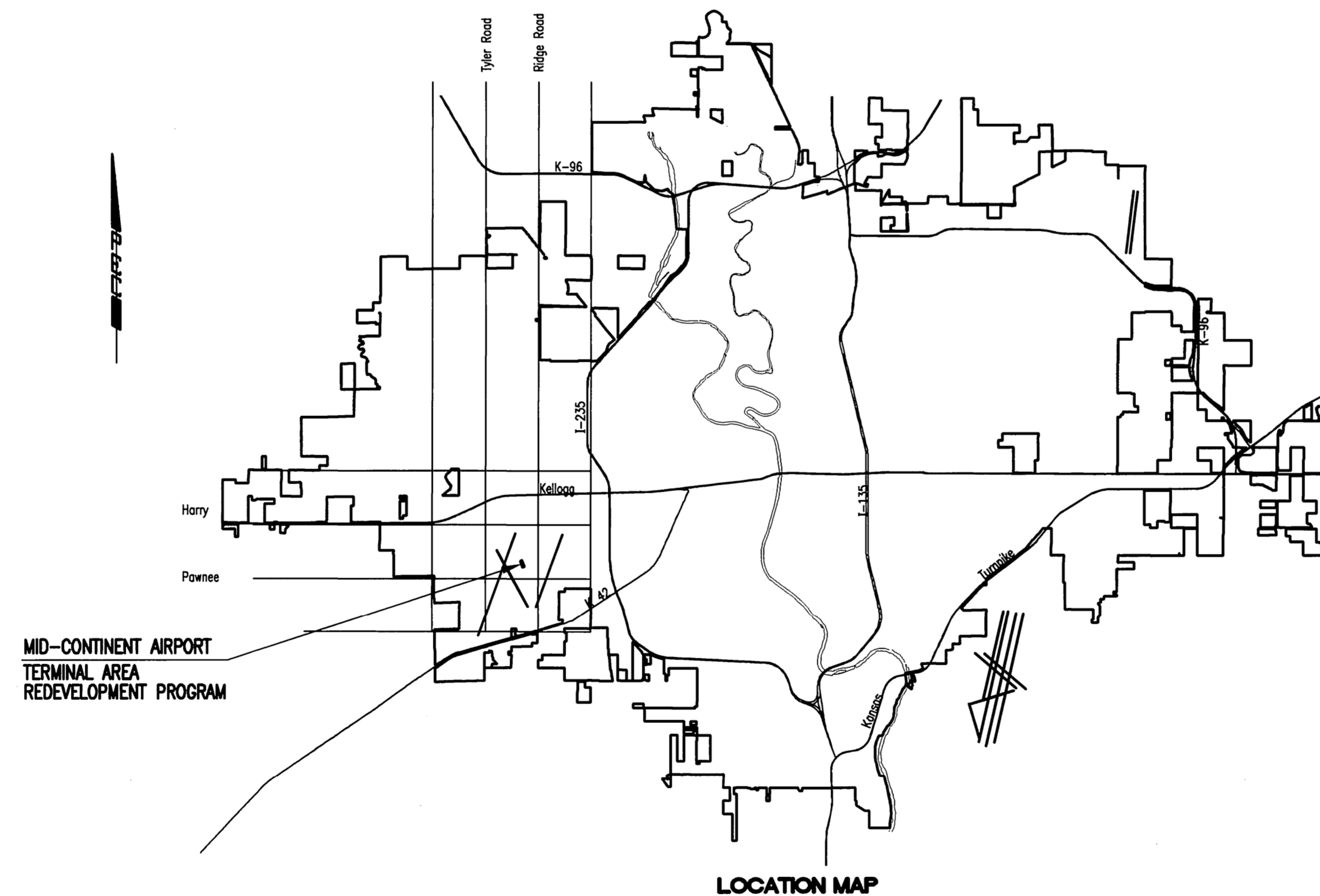
Contractor: Utilities Plus
Inspector: Fred Smith, Baughman Co.
pdf's by: KEK, 3/18/13

American Fire Hydrants & Gate Valves
Pratt Butterfly Valves

LINES 4, 9 INSPECTION BY COW

INDEX OF SHEETS

SHEET NO. CU100	WATERLINE TITLE SHEET
SHEET NO. CU101	WATERLINE KEY MAP AND GENERAL NOTES
SHEET NO. CU101A	WATERLINE HORIZONTAL AND VERTICAL CONTROL
SHEET NO. CU102	STANDARD WATER ASSEMBLY DETAILS
SHEET NO. CU103	STANDARD VAULT DETAILS
SHEET NO. CU104-CU111	WATERLINE PLAN/PROFILE
SHEET NO. CU500-CU502	SOIL EROSION BMP DETAILS



APPROVED AS NOTED
BY CITY ENGINEER OF WICHITA,
BY WICHITA WATER UTILITIES,
& BY WICHITA FIRE DEPARTMENT

Water Mains (Public Works) 3/10/10

Water Mains (Water Utilities) 3/11/10

Fire Prot. Line 3-15-2010

NOTE TO CONTRACTORS

PUBLIC PROPERTY:
Inspection and testing for the waterline is to be provided by a Licensed Consulting Engineering Firm under contract with the Owner/Developer. Said inspection to be in accordance with the City of Wichita standard construction engineering practices and certified by a Licensed Professional Engineer licensed in the State of Kansas. 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. All Construction and Materials shall comply with the City of Wichita Specifications and Standards (on file and available in the City Engineer's Office).

PRIVATE PROPERTY:
Installation and testing for the fire protection line is to be performed by a City of Wichita licensed fire protection contractor in accordance with the fire codes as adopted by the City of Wichita. All materials and construction practices for the fire protection line shall comply with the fire codes as adopted by the City of Wichita (available from the City of Wichita Fire Department). The Contractor shall not commence work without notification and approval of the Wichita Fire Department.
Inspection of the fire protection line is to be provided by the City of Wichita Fire Department and by a licensed Consulting Engineering Firm under contract with the Owner/Developer.
The contractor shall not start work until the project inspector is assigned to the project and present on the site. Any work done without inspection will be required to be uncovered for inspection.

MARCH 2010
PLANS PREPARED BY
PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
ENGINEERS
WICHITA, KANSAS



HNTB
HNTB Corporation
The HNTB Companies
715 Kirk Drive
Kansas City, Missouri 64105
(816) 472-1201 Fax: (816) 472-4063

GLMV Architecture
420 South Emporia Wichita, KS 67202
Tel: (316) 265-8387 Fax: (316) 265-5648
www.glmv.com

Professional Engineering Consultants, P.A.
303 S. TOPEKA • WICHITA, KANSAS 67202
316-262-2691 • FAX 316-262-3003
www.pcc1.com

MID-CONTINENT AIRPORT
Air Capital Terminal 3
PACKAGE #12
TERMINAL BUILDING

ISSUE: PERMIT / BID
CONSTRUCTION DOCUMENTS

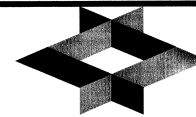
DATE: MARCH 26, 2010
HNTB PROJECT NO.: 34912
CLIENT PROJECT NO.: 06178
DRAWN BY:
CHECKED BY:
APPROVED BY:

REVISION	DATE	DESCRIPTION
▲		
▲		
▲		

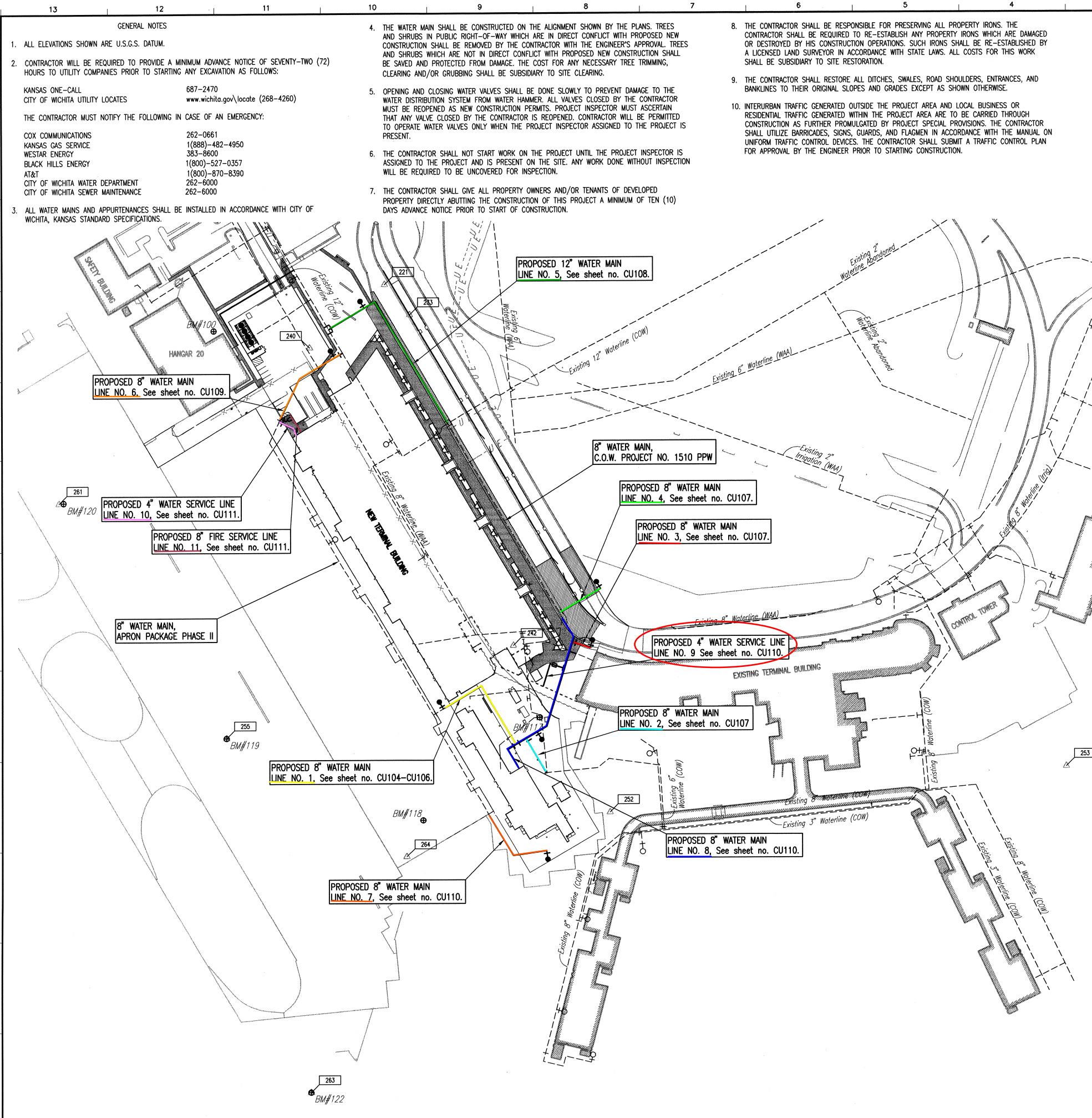
WATERLINE
TITLE SHEET

CU100

Saved 03-08-2010 11:13:08 AM by NCL
Plot Scale 1:1 03-08-2010 3:13:22 PM by NCL
C:\2005\0648\003\PACKAGE 12 NEW TERMINAL AREA



DRAWN BY:		
CHECKED BY:		
APPROVED BY:		
REVISION	DATE	DESCRIPTION
▲		
▲		
▲		
▲		



GENERAL NOTES

1. ALL ELEVATIONS SHOWN ARE U.S.G.S. DATUM.

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:

COX COMMUNICATIONS 262-0661
KANSAS GAS SERVICE 1(888)-482-4950
WESTAR ENERGY 383-8600
BLACK HILLS ENERGY 1(800)-527-0357
AT&T 1(800)-870-8390
CITY OF WICHITA WATER DEPARTMENT 262-6000
CITY OF WICHITA SEWER MAINTENANCE 262-6000

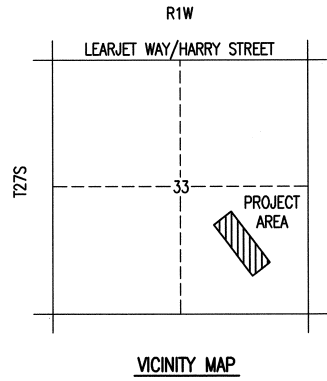
- THE WATER MAIN SHALL BE CONSTRUCTED ON THE ALIGNMENT SHOWN BY THE PLANS. TREES AND SHRUBS IN PUBLIC RIGHT-OF-WAY WHICH ARE IN DIRECT CONFLICT WITH PROPOSED NEW CONSTRUCTION SHALL BE REMOVED BY THE CONTRACTOR WITH THE ENGINEER'S APPROVAL. TREES AND SHRUBS WHICH ARE NOT IN DIRECT CONFLICT WITH PROPOSED NEW CONSTRUCTION SHALL BE SAVED AND PROTECTED FROM DAMAGE. THE COST FOR ANY NECESSARY TREE TRIMMING, CLEARING AND/OR GRUBBING SHALL BE SUBSIDIARY TO SITE CLEARING.
- OPENING AND CLOSING WATER VALVES SHALL BE DONE SLOWLY TO PREVENT DAMAGE TO THE WATER DISTRIBUTION SYSTEM FROM WATER HAMMER. ALL VALVES CLOSED BY THE CONTRACTOR MUST BE REOPENED AS NEW CONSTRUCTION PERMITS. PROJECT INSPECTOR MUST ASCERTAIN THAT ANY VALVE CLOSED BY THE CONTRACTOR IS REOPENED. CONTRACTOR WILL BE PERMITTED TO OPERATE WATER VALVES ONLY WHEN THE PROJECT INSPECTOR ASSIGNED TO THE PROJECT IS PRESENT.
- THE CONTRACTOR SHALL NOT START WORK ON THE PROJECT UNTIL THE PROJECT INSPECTOR IS ASSIGNED TO THE PROJECT AND IS PRESENT ON THE SITE. ANY WORK DONE WITHOUT INSPECTION WILL BE REQUIRED TO BE UNCOVERED FOR INSPECTION.
- THE CONTRACTOR SHALL GIVE ALL PROPERTY OWNERS AND/OR TENANTS OF DEVELOPED PROPERTY DIRECTLY ADJACENT TO THE CONSTRUCTION OF THIS PROJECT A MINIMUM OF TEN (10) DAYS ADVANCE NOTICE PRIOR TO START OF CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING ALL PROPERTY IRONS. THE CONTRACTOR SHALL BE REQUIRED TO RE-ESTABLISH ANY PROPERTY IRONS WHICH ARE DAMAGED OR DESTROYED BY HIS CONSTRUCTION OPERATIONS. SUCH IRONS SHALL BE RE-ESTABLISHED BY A LICENSED LAND SURVEYOR IN ACCORDANCE WITH STATE LAWS. ALL COSTS FOR THIS WORK SHALL BE SUBSIDIARY TO SITE RESTORATION.
- THE CONTRACTOR SHALL RESTORE ALL DITCHES, SWALES, ROAD SHOULDERS, ENTRANCES, AND BANKLINES TO THEIR ORIGINAL SLOPES AND GRADES EXCEPT AS SHOWN OTHERWISE.
- 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. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN FOR APPROVAL BY THE ENGINEER PRIOR TO STARTING CONSTRUCTION.

- RUBBLE FROM THE REMOVAL OF MISCELLANEOUS STRUCTURES INCLUDING ANY TREES REMOVED AND TREE TRIMMINGS AND EXCESS EXCAVATED MATERIAL SHALL BE DISPOSED OF ON THE 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, 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.
- 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. AR78 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".
- 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. 12 ABOVE. TEMPORARY SEEDING OR PERMANENT SEEDING/SODDING SHALL BE APPLIED WITHIN 14 DAYS AFTER THE AREA HAS BEEN DISTURBED.
- EACH BIDDER SHALL VISIT THE SITE OF THE PROJECT BEFORE SUBMITTING THE PROPOSAL FOR THIS WORK SO THAT HE WILL BE FULLY INFORMED OF THE EXISTING FIELD CONDITIONS AND THE OBSTACLES WHICH MIGHT BE ENCOUNTERED. UPON AWARD OF THE CONTRACT THE CONTRACTOR WILL NOT BE GRANTED ANY ADDITIONAL COMPENSATION WITH REGARDS TO TIME AND MONEY FOR CONDITIONS THAT MAY HAVE BEEN EVALUATED DURING ANY INSPECTION OF THE SITE.
- THE CONTRACTOR SHALL INSTALL AND/OR MAINTAIN EROSION CONTROL METHODS AS SPECIFIED ON SHEETS CU500-CU502. THE FOLLOWING QUANTITIES ARE ESTIMATED, AND SHOULD BE CONSIDERED THE MINIMUM EFFORT REQUIRED. THE GENERAL LOCATION OF THE REQUIRED EROSION CONTROL IS ILLUSTRATED ON THE PROJECT KEY MAP. THE WATERLINE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE EROSION CONTROL SHOWN THROUGHOUT THE COMPLETION OF THIS PROJECT. INSTALLATION OF THESE BMP'S DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF ABATING SOIL EROSION.
- EXISTING WATER MAINS SHOWN IN THE PLANS TO BE ABANDONED CAN BE REMOVED IN THEIR ENTIRETY AND BACKFILLED WITH JETTED SAND, OR CAN BE ABANDONED IN PLACE AND FILLED WITH SAND.
- CONTRACTOR SHALL PERFORM FINAL VALVE BOX ADJUSTMENTS AS REQUIRED TO MATCH PROPOSED GROUND AND/OR PROPOSED PAYMENT ELEVATIONS, AT NO ADDITIONAL COST TO THE PROJECT.
- ALL CONNECTIONS TO EXISTING WATERLINES SHALL BE MADE WITH CLEAN SWABBED PIPE. CONTRACTOR TO PROVIDE TEMPORARY BLOWOFFS TO TEST AND FLUSH PIPE PRIOR TO CONNECTING TO THE EXISTING SYSTEM. FITTINGS, ADAPTORS, AND OTHER INCIDENTALS AS NECESSARY.

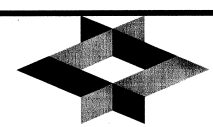
LEGEND

- EXISTING WATER MAIN
- PROPOSED WATER MAIN
- EXISTING WATER VALVE
- PROPOSED WATER VALVE
- EXISTING FIRE HYDRANT
- PROPOSED FIRE HYDRANT
- EXISTING BLOW OFF
- PROPOSED BLOW OFF
- PROPOSED HYDRANT TEE w/FUTURE FIRE HYDRANT
- PROPOSED PAVEMENT (BY OTHERS)

SCALE: 1" = 100'



Saved: 09-15-2011 3:14:54 PM by: CF
 PLO: 10/11/11 03:19:03
 C:\2006\06481\12 NEW TERMINAL (06481) - CU101 - PPW Key Map



MID-CONTINENT AIRPORT
Air Capital Terminal 3
PACKAGE #12
TERMINAL BUILDING



ISSUE:
PERMIT / BID / CONSTRUCTION

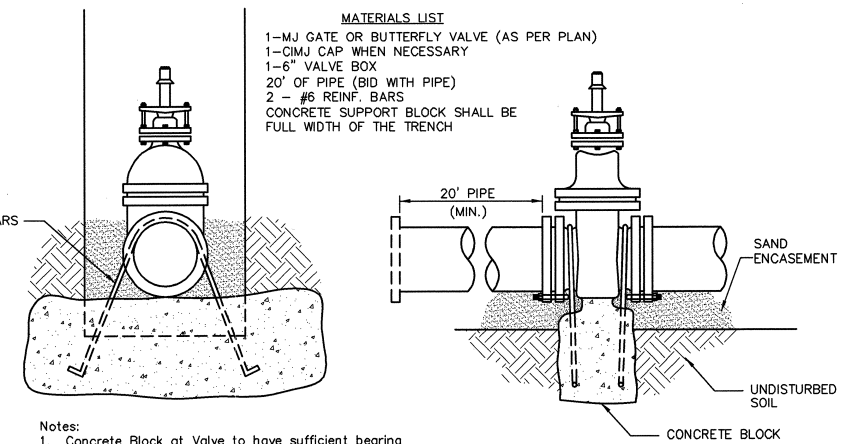
DATE: SEPTEMBER 15, 2011
HNTB PROJECT NO.: 34912
CLIENT PROJECT NO.: 06178

DRAWN BY:
CHECKED BY:
APPROVED BY:

REVISION	DATE	DESCRIPTION
△		
△		
△		
△		

STANDARD WATER ASSEMBLY DETAILS

CU102

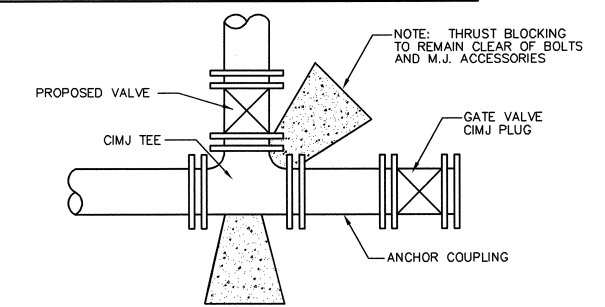


THRUST AT VALVES

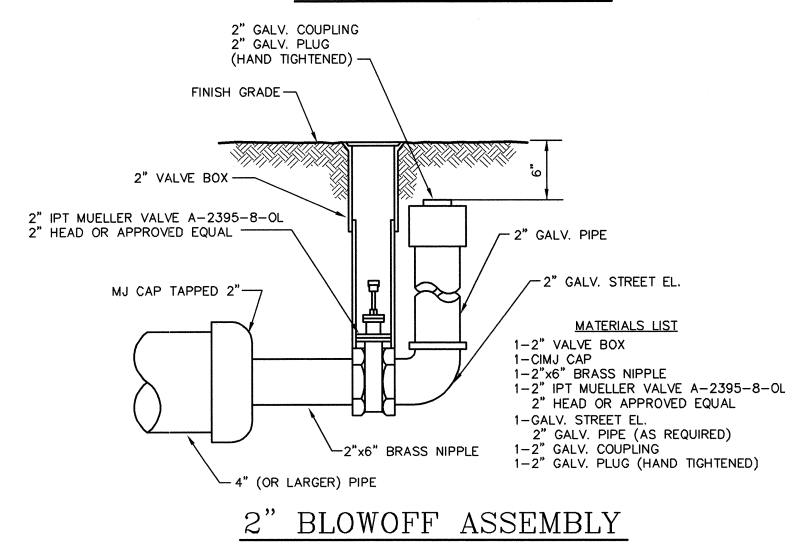
VALVE	THRUST AT 150 #/sq
4"	1809 lbs.
6"	4245 lbs.
8"	7540 lbs.
12"	16965 lbs.

Notes:
1. Concrete Block at Valve to have sufficient bearing in undisturbed soil to prevent thrust movement as shown in table at right. Field Engineer to determine thrust loading of undisturbed soil and final size of thrust block.
2. The thrust block shall be constructed such that bolts, nuts, and other MJ accessories are kept clear of concrete.
3. All valves at dead ends and at other locations as called out on the plans shall be blocked as shown here.

ANCHORED VALVE ASSEMBLY, SPECIAL



KEY BLOCK DETAIL



2" BLOWOFF ASSEMBLY

THE CITY OF WICHITA

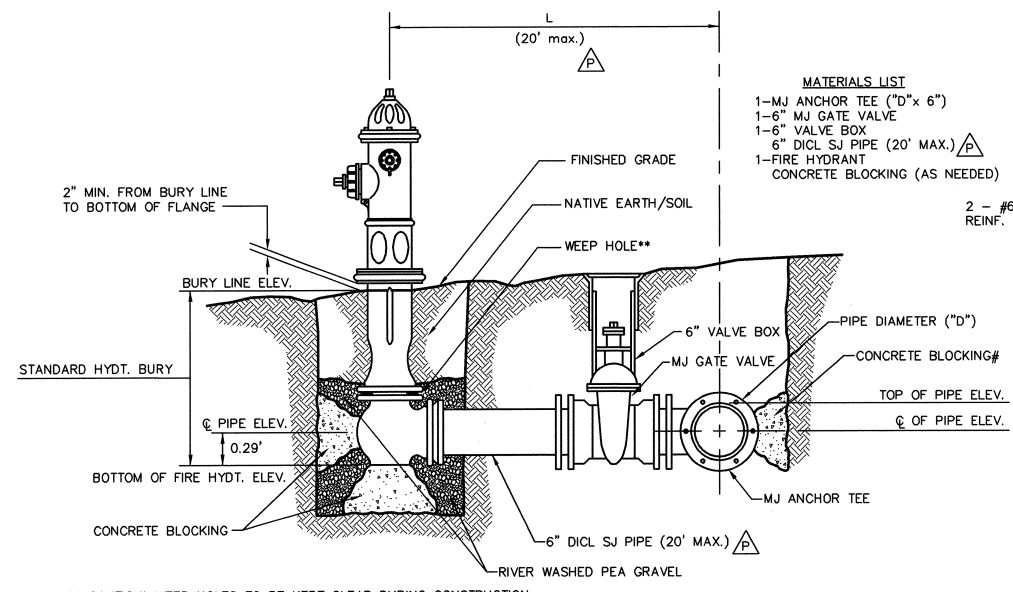
CITY ENGINEER'S OFFICE
CITY HALL - SEVENTH FLOOR
455 NORTH MAIN STREET
WICHITA, KANSAS 67202
(316) 268-4551
(316) 268-4114 FAX

STANDARD WATER ASSEMBLY DETAILS

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

PROJECT NUMBER	OCA NO.
1522 PPW	(607853)
DATE	SHEET CU102
DEC 98	

Revised: 01-07-05 per CITY
Revised: 10-06-04 by PEC
Revised: 08-14-01, CITY
Revised: 11-13-00, MCG
Revised: 6-7-00, MCG



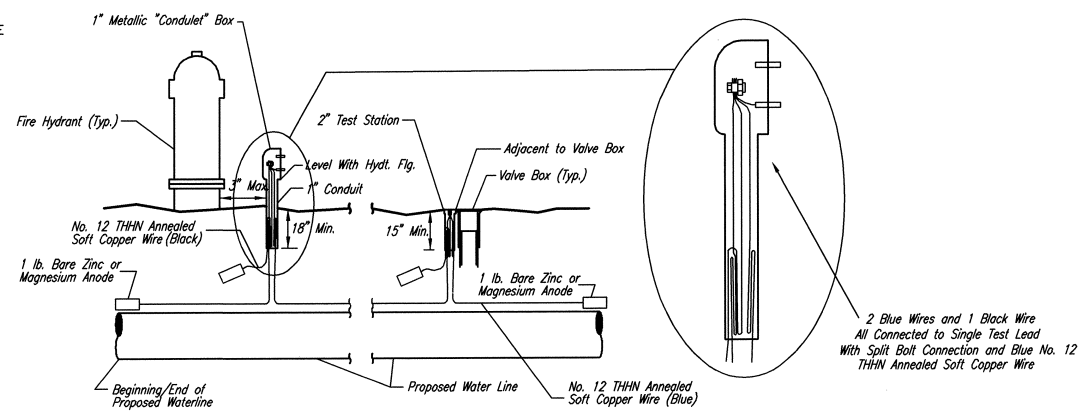
FIRE HYDRANTS REQUIRED

STATION	BURY LINE ELEVATION	TOP OF PIPE ELEVATION	FIRE HYDRANT BURY REQUIRED
WL 1, 9+96.75	1323.83	1319.50*	5.0'
WL 1, 12+53.86	1323.30	1318.97	5.0'
WL 3, 10+34.32	1324.65	1318.82	6.5'
WL 4, 10+85.25	1324.10	1320.27	4.5'
WL 5, 12+88.83	1323.92	1317.76	7.0'
WL 6, 10+17.16	1323.35	1318.52	5.5'
WL 7, 11+50.37	1322.60	1318.77	4.5'

*Existing Waterline

FIRE HYDRANT ASSEMBLY

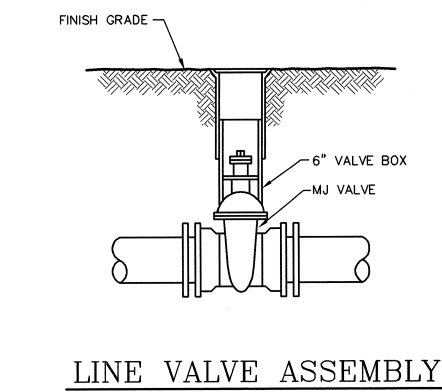
PER CITY OF WICHITA SPECIFICATIONS



TRACER WIRE DETAIL

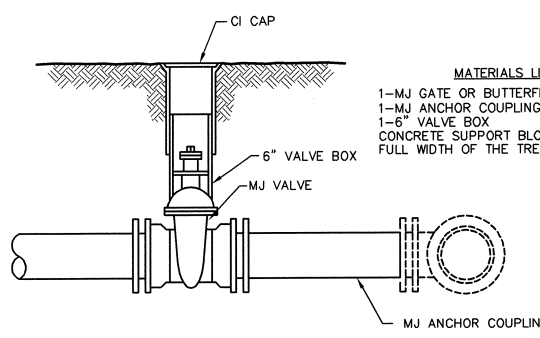
COST IS SUBSIDIARY TO PIPE INSTALLATION

MATERIALS LIST
1-MJ GATE OR BUTTERFLY VALVE (AS PER PLAN)
1-6" VALVE BOX
CONCRETE SUPPORT BLOCK SHALL BE FULL WIDTH OF THE TRENCH



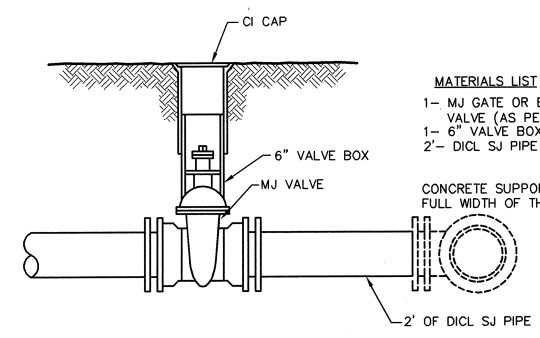
LINE VALVE ASSEMBLY

MATERIALS LIST
1-MJ GATE OR BUTTERFLY VALVE (AS PER PLAN)
1-MJ ANCHOR COUPLING (12" OR SMALLER)
1-6" VALVE BOX
CONCRETE SUPPORT BLOCK SHALL BE FULL WIDTH OF THE TRENCH

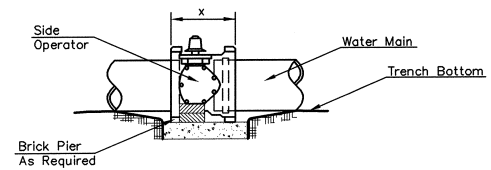


ANCHORED VALVE ASSEMBLY

MATERIALS LIST
1- MJ GATE OR BUTTERFLY VALVE (AS PER PLAN)
1- 6" VALVE BOX
2- 6" DICL SJ PIPE



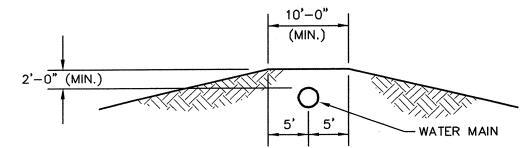
VALVE ASSEMBLY



NOTES

- This detail covers Butterfly Valve installation, inclusive, regardless of type of pipe or joint used. Larger lines to be detailed on plans.
- 6" Valve Box and Cover required per City of Wichita Std. Specifications.
- Conc. Support Block to be full width of trench.

CONCRETE SUPPORT BLOCKING FOR BUTTERFLY VALVE INSTALLATION



PROTECTIVE FILL DETAIL

MINIMUM PROTECTIVE FILL SHALL BE PROVIDED IN ALL INSTANCES WHERE COVER OVER THE WATER LINE IS LESS THAN (2) FEET. (COST SUBSIDIARY TO PIPE INSTALLATION)

Sawed 09-13-2011 9:48:10 AM by: DP
CU102E (1) 03/03/PACKAGE 12 NEW TERMINAL (0648)-003-CU102-Std Water Assembly Details

HNTB

HNTB Corporation
The HNTB Companies
715 Krik Drive
Kansas City, Missouri 64105
(816) 472-1201 Fax (816) 472-4063



GLMV Architecture

420 South Emporia Wichita, KS 67202
Tel: (316) 265-9367 Fax: (316) 265-5646
www.glmv.com



Professional
Engineering
Consultants, P.A.
303 S. TOPEKA • WICHITA, KANSAS 67202
316-262-2691 • FAX 316-262-3003
www.pec1.com

MID-CONTINENT AIRPORT
Air Capital Terminal 3
PACKAGE #12
TERMINAL BUILDING



ISSUE:
PERMIT / BID / CONSTRUCTION

DATE: SEPTEMBER 15, 2011

HNTB PROJECT NO.: 34912

CLIENT PROJECT NO.: 06178

DRAWN BY:

CHECKED BY:

APPROVED BY:

REVISION	DATE	DESCRIPTION
▲		
▲		
▲		
▲		

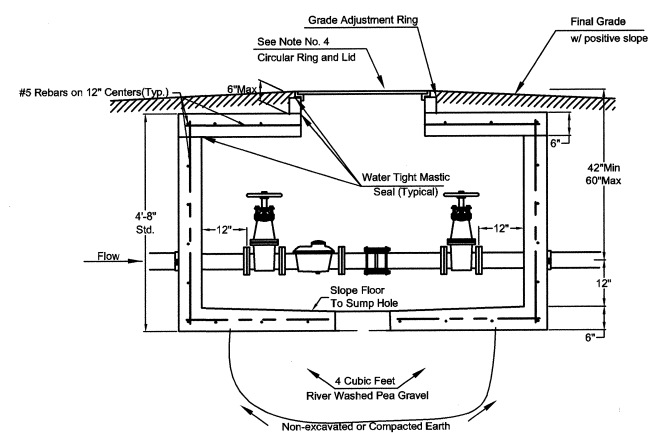
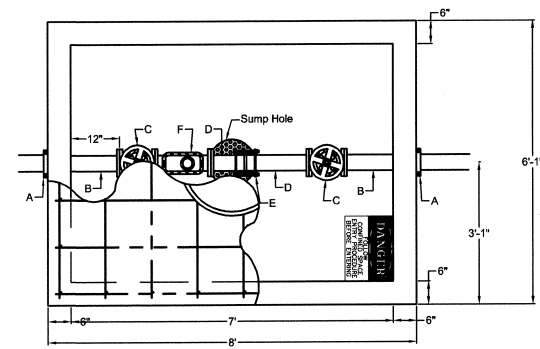
STANDARD VAULT
DETAILS AND
METER ASSEMBLIES

CU103

Copyright HNTB Corporation 2011

Notes For All Services - 2" thru 12":

- When the standard vault dimensions are not applicable, such as when additional space is required for special pipe, fittings, additional meters, etc., the design engineer shall design a vault with the required dimensions for Water & Sewer Dept. approval and Public Works approval.
- The vault shall be poured concrete, cement blocks (voids to be completely filled with 2500 P.S.I. concrete), or approved precast structure (such as Clutter Inc. vaults approved 8/1/2000). The intent of these details shall not be limited by drawings or standards of precast structures.
- Vault location to be determined by Wichita Water & Sewer prior to construction and approved by Department's field supervisor prior to installation. A final inspection will be required for acceptance. Vault location standards include but not limited to: not to be located where subjected to vehicular loads, not to be located in any right-of-way or utility easement, and must be located on the property being served. Contact for Vault Inspections:
Richard Suniga (316)-219-8929
Curtis Cummings (316)-219-8928
- The manhole ring and lid shall be Neenah R-6034 Frame with Type "C" Solid Lid and Drop Down Handle or US Foundry APS-30x30 (Aluminum). Where applicable the standard 10" Wichita Water & Sewer pattern meter reading lid and ring shall be located directly above water meter register. All meter registers shall have an approved lid directly vertical above. All joints of concrete to concrete or metal to concrete in the construction of the vault shall have an approved water tight mastic joint seal.
- Any fittings or appurtenances required to achieve proper elevation of pipe through the vault shall be provided by the contractor and appropriately noted on as-builts submitted by the inspecting engineer. Such fittings shall be a minimum of 2' from the exterior wall of vault.
- For all services larger than 2" the contractor shall provide an outlet flange connection as shown 12-inches from the inside wall. Inlet and outlet wall sleeves shall be provided and installed by the contractor and shall be in alignment with one another. The inlet and outlet pipe shall be ductile iron pipe, cement lined, Class 150 per Standard Specifications and shall be continuous through vault wall and joint no less than two(2) feet from the exterior wall of vault. Flanges of inlet and outlet pipes shall be in proper alignment and bolt pattern shall be rotated in such a way that valves and other fittings shall be in their proper vertical alignment when installed.
- For all services 4" and larger the contractor shall install a mega lug, restrained joint, or approved equal on the exterior walls of the vault, which shall be manufactured of ductile iron conforming to ASTM A 536-80, heat treated to a minimum hardness of 370 BHN and have a working pressure of at least 250 P.S.I. For all services smaller than 4" the contractor shall install an approved vault clamp on the exterior walls of the vault.
- All valves, meters, assemblies, and fittings shall be provided with sufficient concrete or other approved supports to the vault floor.
- The "Confined Space Warning" sign shall be fastened to the top of all vaults. If necessary for landscaping or site considerations, the sign may be fastened to the vault lid if it does not impede access to the handle. Acceptable materials: Aluminum 73415HH, Plastic 73439HH, or S.A. Vinyl 73463HH.
- Additional Notes For Fire Services:
 - A post indicator valve (PIV) is an option for the outlet valve and may be requested by the architect or owner. The PIV is not required by City of Wichita ordinance.
 - When Siamese connections are required by the Wichita Fire Department, refer to the current City Code Section 15.
 - If due to any reason the completed vault retains ground or drainage water in excess of 4" in depth from the floor of the vault, the property owner shall be responsible for providing and installing an appropriate automatic sump pump or approved equal, as well as any other appurtenances required to make such system function as intended.
 - The property owner is responsible for completing an "Application for Private Fire Protection" prior to final acceptance of the project.
 - Gallon meters shall not be accepted.



- A - 4" Vault Clamp*
 - B - Min. 3' Piece of 4" FL x PE DICL Pipe*
 - C - 4" Flange Non-rising Stem Gate Wheel Valve**
 - D - 4" FL x PE Pipe**
 - E - 4" Flex Coupling**
 - F - 4" Cubic Foot Meter**
- * = Contractor Installed
** = Installed By Wichita Water & Sewer

4"DS

THE CITY OF WICHITA
W
WATER & SEWER DEPT.
CITY HALL - EIGHTH FLOOR
455 NORTH MAIN STREET
WICHITA, KANSAS 67202
(316) 268-4514
(316) 268-4514 FAX

STANDARD VAULT DETAILS AND METER ASSEMBLIES

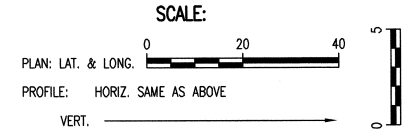
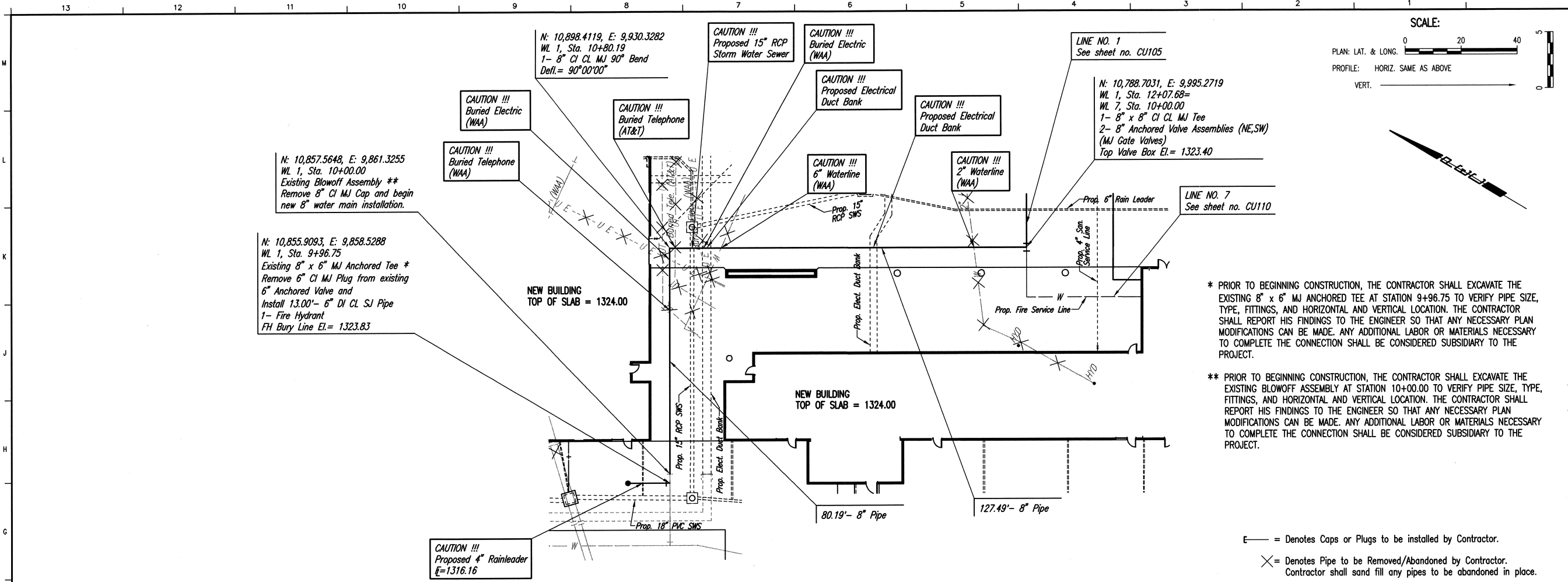
D. R. WARREN - DIRECTOR	
PROJECT NUMBER 1522 PPW	CCA NO. (607853)
DATE JULY 2000	REVISED DATE 3/23/01

Save: 03-09-2010 2:28:17 PM by: NCI
Plot Scale: 1" = 10'-0" 10/15/2011 4:03:43 PM by: CARLOS PEREZ

PLAN	CHECKED	CHECKED
BY		
DATE		

PROFILE	CHECKED	CHECKED
BY		
DATE		

Save: 03-15-2010 10:44:51 AM by: JDT
 C:\2008\06-03\003\PACKAGE 12 NEW TERMINAL\0481-003-CU104-MP.P01

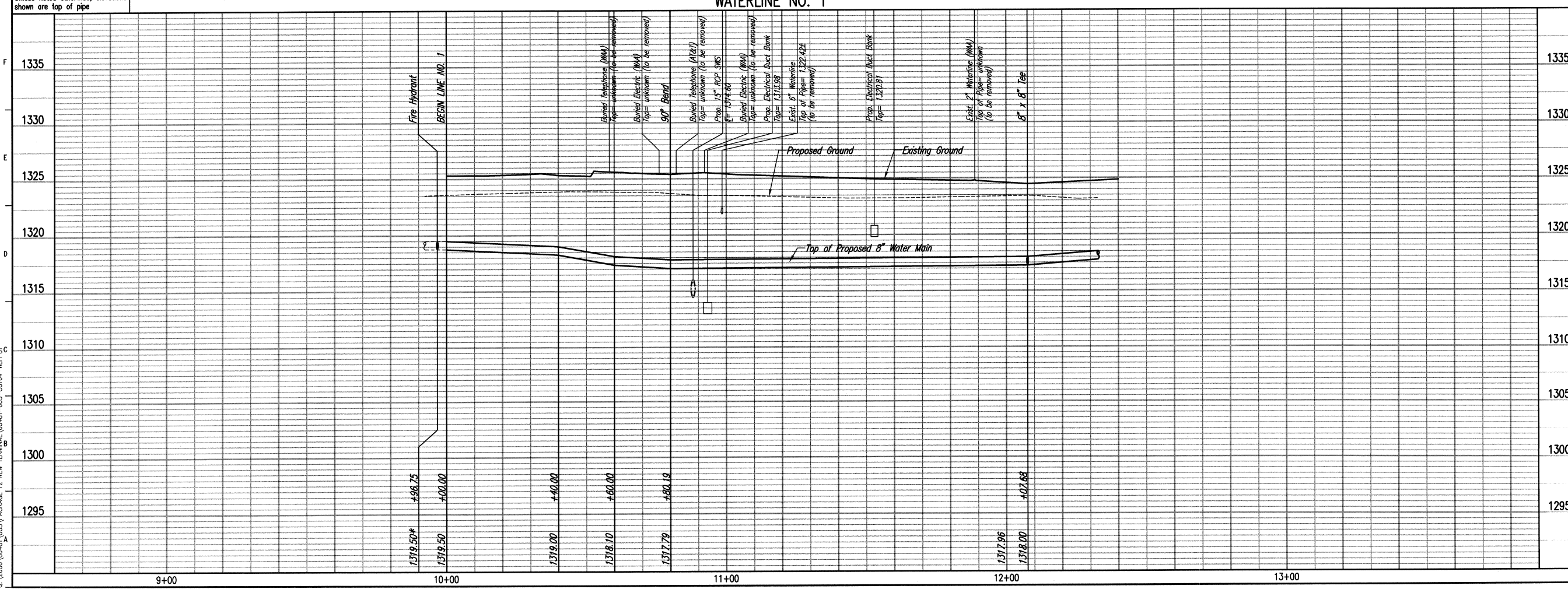


* PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE THE EXISTING 8" x 6" MJ ANCHORED TEE AT STATION 9+96.75 TO VERIFY PIPE SIZE, TYPE, FITTINGS, AND HORIZONTAL AND VERTICAL LOCATION. THE CONTRACTOR SHALL REPORT HIS FINDINGS TO THE ENGINEER SO THAT ANY NECESSARY PLAN MODIFICATIONS CAN BE MADE. ANY ADDITIONAL LABOR OR MATERIALS NECESSARY TO COMPLETE THE CONNECTION SHALL BE CONSIDERED SUBSIDIARY TO THE PROJECT.

** PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE THE EXISTING BLOWOFF ASSEMBLY AT STATION 10+00.00 TO VERIFY PIPE SIZE, TYPE, FITTINGS, AND HORIZONTAL AND VERTICAL LOCATION. THE CONTRACTOR SHALL REPORT HIS FINDINGS TO THE ENGINEER SO THAT ANY NECESSARY PLAN MODIFICATIONS CAN BE MADE. ANY ADDITIONAL LABOR OR MATERIALS NECESSARY TO COMPLETE THE CONNECTION SHALL BE CONSIDERED SUBSIDIARY TO THE PROJECT.

— = Denotes Caps or Plugs to be installed by Contractor.

× = Denotes Pipe to be Removed/Abandoned by Contractor.
 Contractor shall sand fill any pipes to be abandoned in place.



HNTB

HNTB Corporation
 The HNTB Companies
 715 K&A Drive
 Kansas City, Missouri 64105
 (816) 472-1201 Fax (816) 472-4063

GLMV Architecture

420 South Emporia Wichita, KS 67202
 Tel: (316) 265-8367 Fax: (316) 265-5646
 www.glmv.com

Professional Engineering Consultants, P.A.

303 S. TOPEKA • WICHITA, KANSAS 67202
 316-262-2691 • FAX 316-262-3003
 www.pect.com

MID-CONTINENT AIRPORT

Air Capital Terminal 3

PACKAGE #12

TERMINAL BUILDING

CITY OF WICHITA PRIVATE PROJECT NO. 1522 PPW (607853)



ISSUE: PERMIT / BID / CONSTRUCTION

DATE: SEPTEMBER 15, 2011
 HNTB PROJECT NO.: 34912
 CLIENT PROJECT NO.: 08178

DRAWN BY:
 CHECKED BY:
 APPROVED BY:

REVISION	DATE	DESCRIPTION
△		
△		
△		
△		

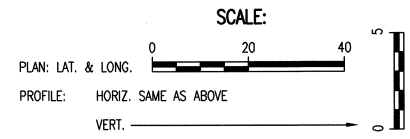
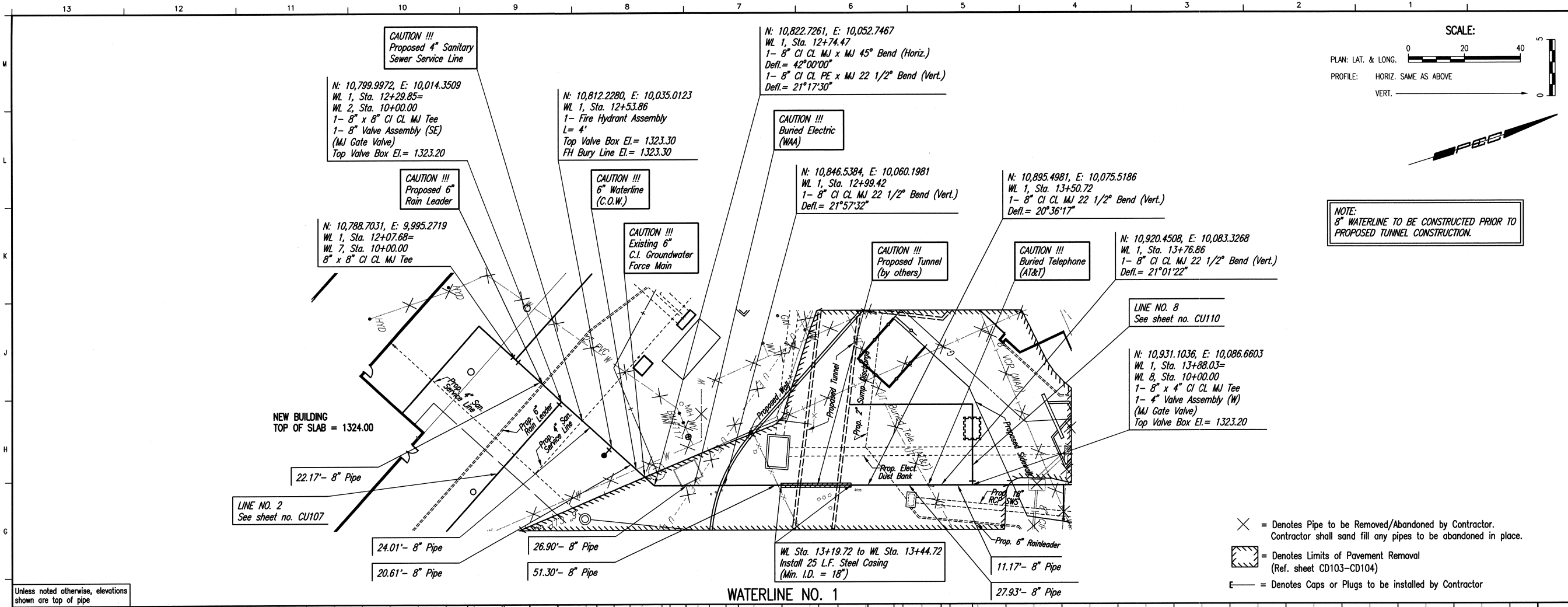
WATERLINE NO. 1
 STA. 10+00.00
 TO 12+07.68

CU104

PLAN	CHECKED	CHECKED
DATE		
BY		

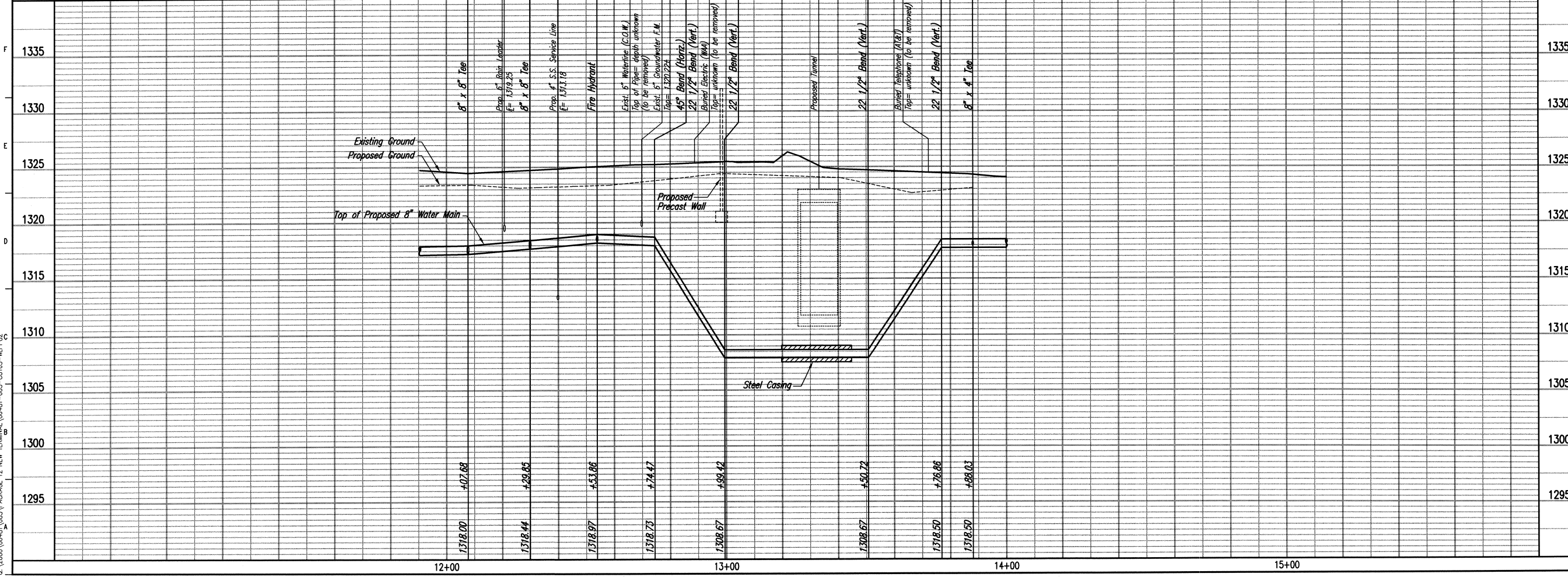
PROFILE	CHECKED	CHECKED
DATE		
BY		

Saved: 09-15-2011 8:56:31 AM by: CF
 C:\2008\06481\031\PACKAGE 12 NEW TERMINAL\06481-03-CU105-MR0202



NOTE:
 8" WATERLINE TO BE CONSTRUCTED PRIOR TO PROPOSED TUNNEL CONSTRUCTION.

- ✕ = Denotes Pipe to be Removed/Abandoned by Contractor. Contractor shall sand fill any pipes to be abandoned in place.
- ▨ = Denotes Limits of Pavement Removal (Ref. sheet CD103-CD104)
- = Denotes Caps or Plugs to be installed by Contractor



HNTB

HNTB Corporation
 The HNTB Companies
 715 Kirk Drive
 Kansas City, Missouri 64105
 (816) 472-1201 Fax: (816) 472-4063

GLW Architecture

420 South Emporia Wichita, KS 67202
 Tel: (316) 265-9367 Fax: (316) 265-9646
 www.glw.com

Professional Engineering Consultants, P.A.

303 S. TOPEKA • WICHITA, KANSAS 67202
 316-262-2691 • FAX 316-262-3003
 www.pcc1.com

MID-CONTINENT AIRPORT

Air Capital Terminal 3

PACKAGE #12

TERMINAL BUILDING

CITY OF WICHITA PRIVATE PROJECT NO. 1522 PPW (607853)



ISSUE: PERMIT / BID / CONSTRUCTION

DATE: SEPTEMBER 15, 2011
 HNTB PROJECT NO.: 34912
 CLIENT PROJECT NO.: 06178

DRAWN BY: _____
 CHECKED BY: _____
 APPROVED BY: _____

REVISION	DATE	DESCRIPTION
△		
△		
△		
△		

WATERLINE NO. 1
 STA. 12+07.68
 TO 13+88.03

CU105

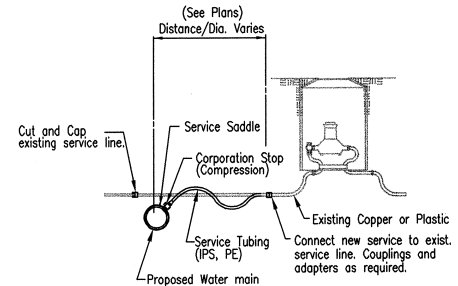
PLAN

CHECKED

CHECKED

BY

DATE



WATER SERVICE CONNECTION SCHEDULE

TAP LOCATION	WATERLINE	LOCATION	APPROXIMATE SERVICE LINE REQUIRED (FT.)
LINE NO.	STATION		
1	14+21	13' Rt.	13'

Note:
 Services will be bid on a per each basis.
 No adjustment in cost will be made for modifications to the approximate length as shown.
 Minimum depth of bury 42".
 Contractor shall verify existing service line Size prior to installing services.

PROFILE

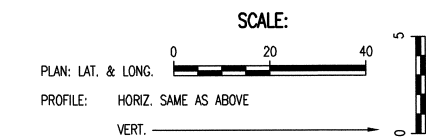
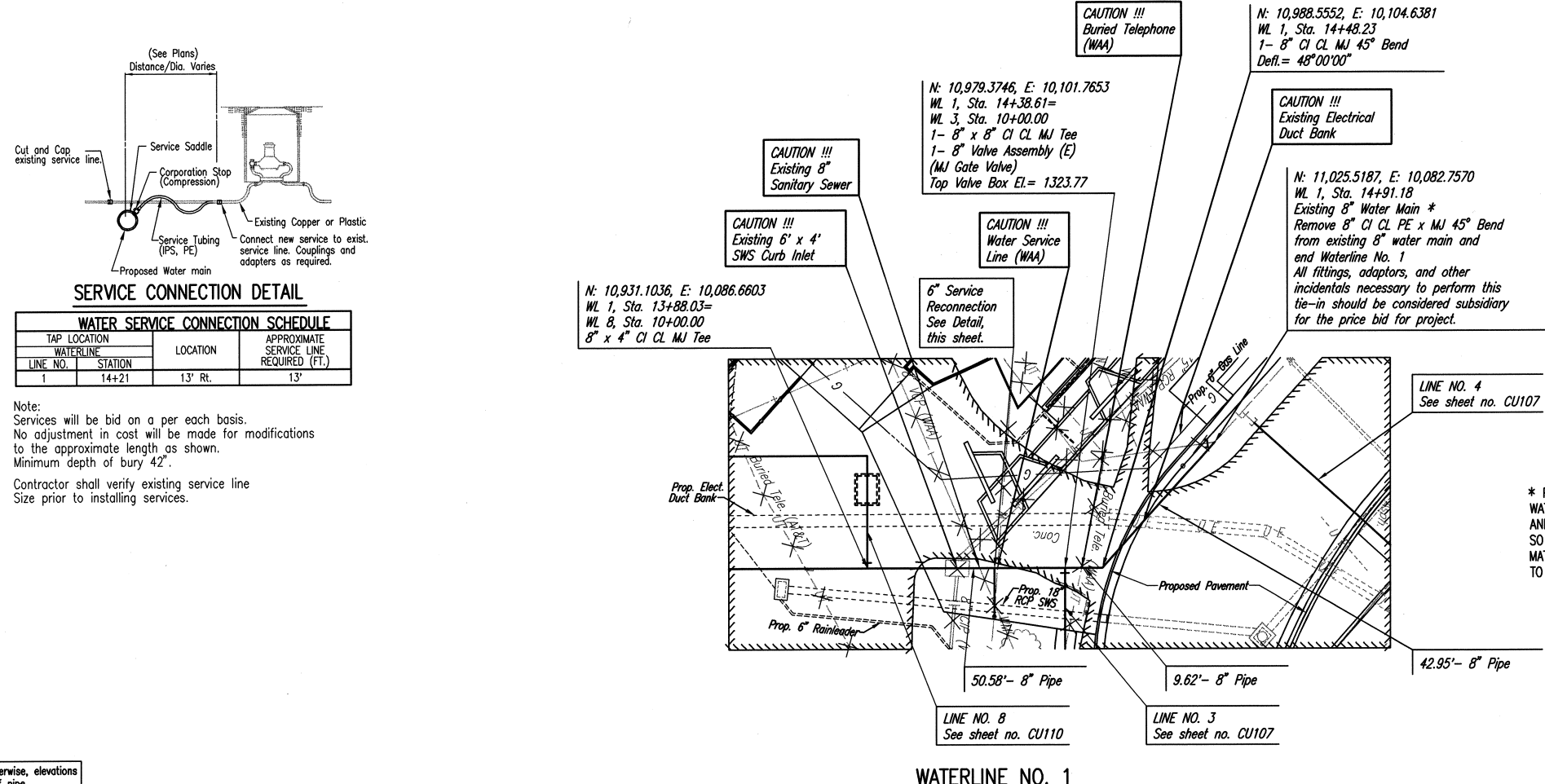
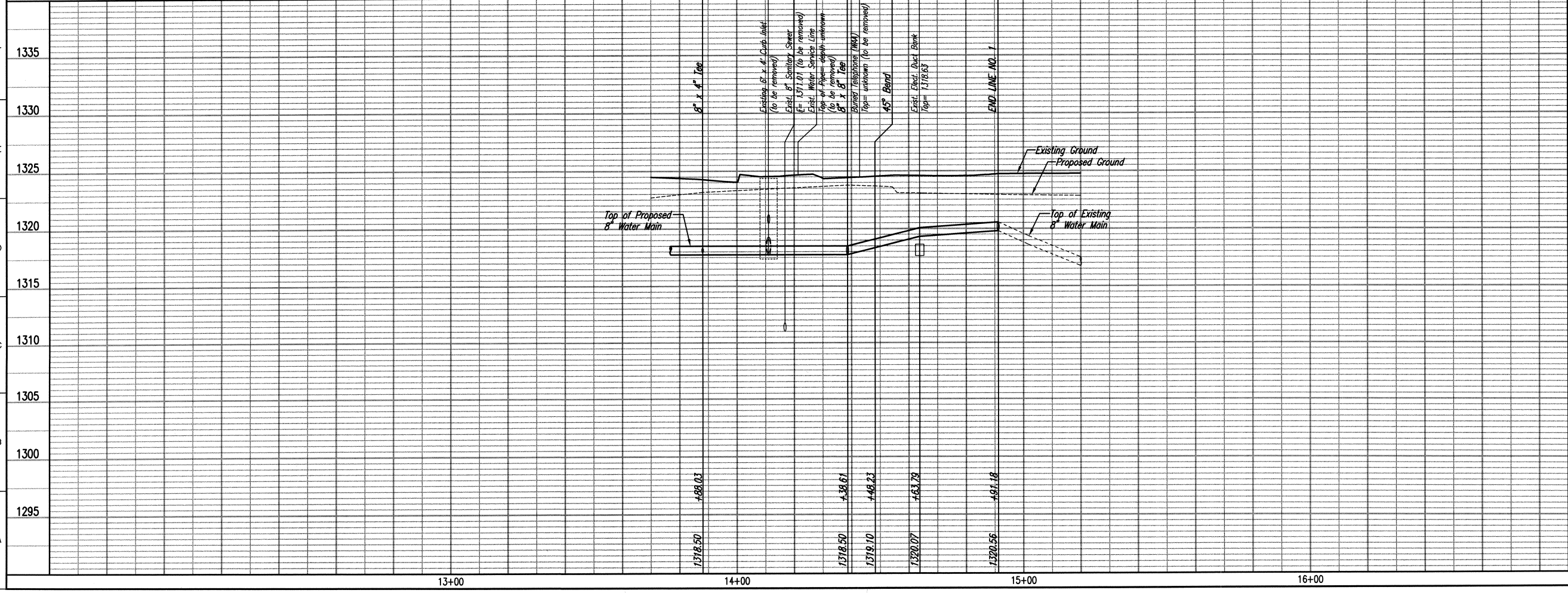
CHECKED

CHECKED

BY

DATE

Unless noted otherwise, elevations shown are top of pipe



CAUTION !!! Buried Telephone (WAA)

CAUTION !!! Existing Electrical Duct Bank

CAUTION !!! Existing 8" Sanitary Sewer

CAUTION !!! Existing 6" x 4" SWS Curb Inlet

CAUTION !!! Water Service Line (WAA)

6" Service Reconnection See Detail, this sheet.

CAUTION !!! Existing 8" Water Main *
 Remove 8" CI CL PE x MJ 45° Bend from existing 8" water main and end Waterline No. 1
 All fittings, adaptors, and other incidentals necessary to perform this tie-in should be considered subsidiary for the price bid for project.

LINE NO. 4 See sheet no. CU107

LINE NO. 8 See sheet no. CU110

LINE NO. 3 See sheet no. CU107

LINE NO. 1

Prop. 6" Rainleader

Prop. 18" RCP SWS

Prop. 6" Sanitary Sewer

Prop. 6" x 4" SWS Curb Inlet

Prop. 50.58'- 8" Pipe

Prop. 9.62'- 8" Pipe

Prop. 42.95'- 8" Pipe

Prop. 45° Bend

Prop. Pavement

Prop. 6" Rainleader

Prop. 18" RCP SWS

Prop. 6" Sanitary Sewer

Prop. 6" x 4" SWS Curb Inlet

Prop. 50.58'- 8" Pipe

Prop. 9.62'- 8" Pipe

Prop. 42.95'- 8" Pipe

Prop. 45° Bend

Prop. Pavement

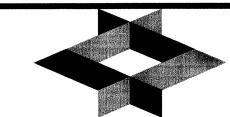
* PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE THE EXISTING 8" WATERLINE AT STATION 14+91.18 TO VERIFY PIPE SIZE, TYPE, FITTINGS, AND HORIZONTAL AND VERTICAL LOCATION. THE CONTRACTOR SHALL REPORT HIS FINDINGS TO THE ENGINEER SO THAT ANY NECESSARY PLAN MODIFICATIONS CAN BE MADE. ANY ADDITIONAL LABOR OR MATERIALS NECESSARY TO COMPLETE THE CONNECTION SHALL BE CONSIDERED SUBSIDIARY TO THE PROJECT.

- ✕ = Denotes Pipe to be Removed/Abandoned by Contractor. Contractor shall sand fill any pipes to be abandoned in place.
- ▨ = Denotes Limits of Pavement Removal (Ref. sheet CD103-CD104)
- = Denotes Caps or Plugs to be installed by Contractor

Saved 03-08-2010 2:46:24 PM by NCL
 Plot Scale: 1" = 40' (Horizontal) 1" = 10' (Vertical)
 C:\Users\NCL\Documents\Projects\2010\03\03\WATERLINE\03-CU106-WP.PRO3

HNTB

HNTB Corporation
 The HNTB Companies
 715 Kirk Drive
 Kansas City, Missouri 64105
 (816) 472-1201 Fax: (816) 472-4063

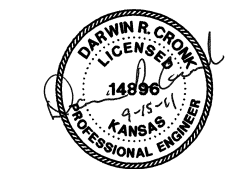


GLMV Architecture
 420 South Emporia Wichita, KS 67202
 Tel: (316) 265-9367 Fax: (316) 265-9646
 www.glmv.com



Professional Engineering Consultants, P.A.
 303 S. TOPEKA • WICHITA, KANSAS 67202
 316-262-2691 • FAX 316-262-3003
 www.pec1.com

MID-CONTINENT AIRPORT
 Air Capital Terminal 3
 PACKAGE #12
 TERMINAL BUILDING



ISSUE:
 PERMIT / BID / CONSTRUCTION

DATE: SEPTEMBER 15, 2011
 HNTB PROJECT NO.: 34912
 CLIENT PROJECT NO.: 06178

DRAWN BY:
 CHECKED BY:
 APPROVED BY:

REVISION	DATE	DESCRIPTION
△		
△		
△		
△		

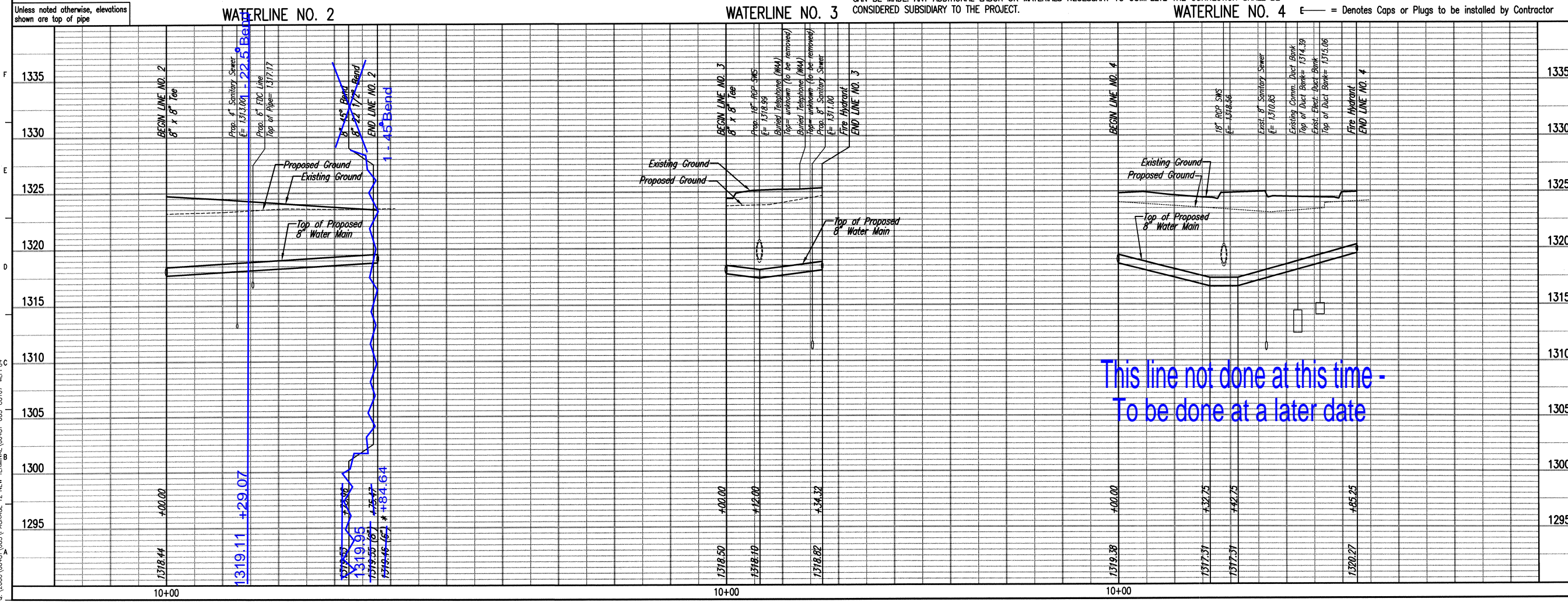
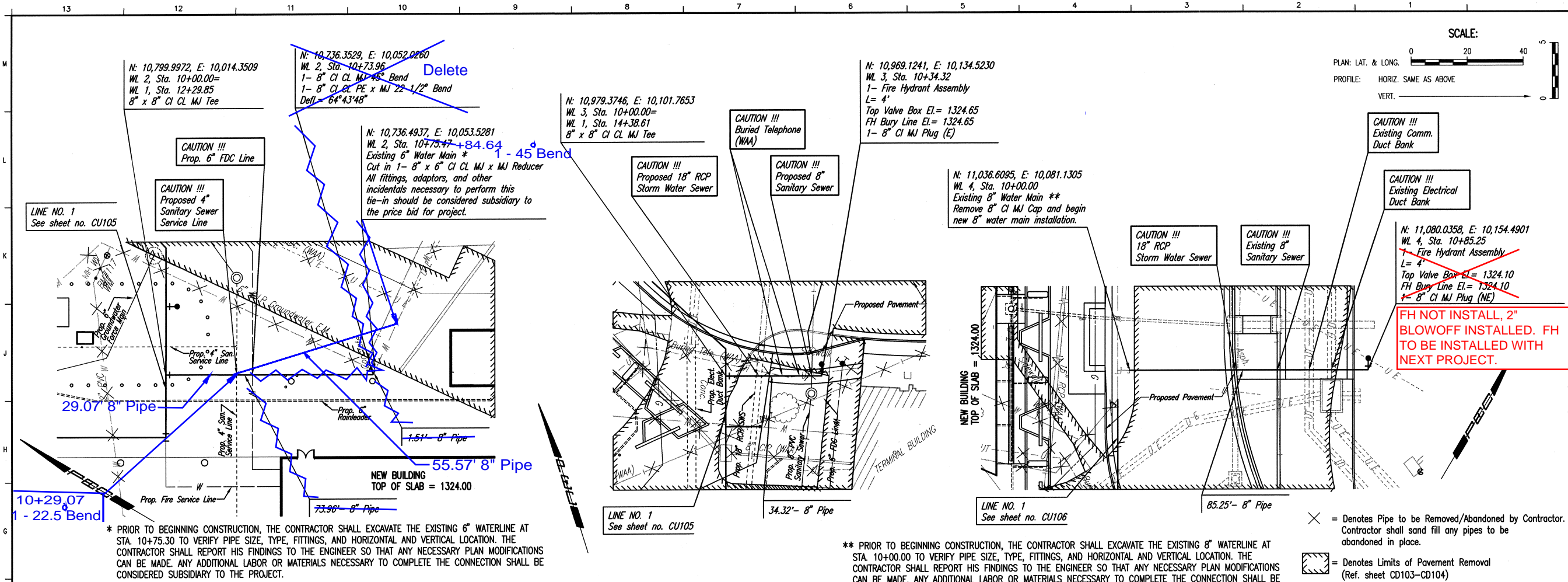
WATERLINE NO. 1
 STA. 13+88.03
 TO 14+91.18

CU106

PLAN	CHECKED	CHECKED
BY		
DATE		

PROFILE	CHECKED	CHECKED
BY		
DATE		

Save: 07-12-2010 11:27:47 AM by: NCS
 C:\2006\06481\003\PACKAGE 12 NEW TERMINAL\06481-003-CU107-WLPR04



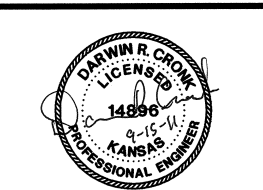
HNTB
 HNTB Corporation
 The HNTB Companies
 715 Kirk Drive
 Kansas City, Missouri 64105
 (816) 472-1201 Fax: (816) 472-0663

GLW Architecture
 420 South Emporia Wichita, KS 67202
 Tel: (316) 265-6367 Fax: (316) 265-6646
 www.glw.com

Professional Engineering Consultants, P.A.
 303 S. TOPEKA • WICHITA, KANSAS 67202
 316-262-2691 • FAX 316-262-3003
 www.pcc1.com

MID-CONTINENT AIRPORT
 Air Capital Terminal 3
 PACKAGE #12
 TERMINAL BUILDING

CITY OF WICHITA PRIVATE PROJECT NO. 1522 PPW (607853)



ISSUE: PERMIT / BID / CONSTRUCTION

DATE: SEPTEMBER 15, 2011
 HNTB PROJECT NO.: 34912
 CLIENT PROJECT NO.: 06178

DRAWN BY:
 CHECKED BY:
 APPROVED BY:

REVISION	DATE	DESCRIPTION
1	07/15/10	03 & MISS REVISIONS

WATERLINE NO. 2,
 NO. 3 AND NO. 4

CU107

