UTILITY LEGEND

CATV BOX		STORM DRAIN CLEANOUT	
CATV HANDBOX		STORM DRAIN DOWNSPOUT	
CATV PEDESTAL		STORM DRAIN MANHOLE	
ELECTRIC BOX		TELEPHONE BOX	
ELECTRIC HANDBOX		TELEPHONE HANDBOX	
ELECTRIC PEDESTAL		TELEPHONE MANHOLE	
ELECTRIC MANHOLE		TELEPHONE PEDESTAL	
ELECTRIC SWITCHGEAR		CALL BOX	
ELECTRIC TRANSFORMER		UNKNOWN MANHOLE	
STREET LIGHT		UNKNOWN CLEANOUT	
LANDSCAPE LIGHT		UTILITY POLE	
PEDESTRIAN SIGNAL POLE		POST INDICATOR VALVE	
TRAFFIC SIGNAL POLE		WATER MANHOLE	
TRAFFIC CONTROL HANDBOX		WATER METER	
FIBER OPTIC BOX		WATER VALVE	
FIBER OPTIC HANDBOX		WATER WELL	
FIBER OPTIC MANHOLE		IRRIGATION CONTROL VALVE	
FILL CAP		FIRE ALARM BOX	
FUEL TANK MANHOLE		FIRE HYDRANT	
GAS MANHOLE	ABAND	ABANDONED UTILITY	
GAS METER	CMP	CORRUGATED METAL PIPE	
GAS VALVE	EOI	END OF ELECTRONIC INFORMATION	
MONITORING WELL	NAU	NO ASSOCIATED UTILITY DETECTED	
SANITARY CLEANOUT	NFL	NOT FIELD LOCATABLE	
SANITARY MANHOLE	PL	PLASTIC	
STEAM MANHOLE	RCP	REINFORCED CONCRETE PIPE	

EXISTING PROPERTY LINE
EXISTING WATER LINE (NOT FIELD LOCATED)
EXISTING WATER LINE (FIELD LOCATED, QUALITY LEVEL "B")
EXISTING WATER LINE (QUALITY LEVEL "C" OR "D")
EX. FIRE DEPARTMENT CONNECTION (NOT FIELD LOCATED)
WATER VALVE (NOT FIELD LOCATED)
FUTURE WATER LINE
FUTURE FIRE DEPARTMENT CONNECTION
APPROXIMATE LOCATION OF TEST PIT (CORROSION TEST 9-8-2010)
PROPOSED CHECK VALVE
REPLACE VALVE M-4 * — PROPOSED IMPROVEMENT

UTILITY NOTES

1. Unless otherwise noted, all construction shall be in accordance with th latest Baltimore City Plumbing Code and Department of Public Works Standard Specifications and Details. In case of conflict or discrepancy, the plumbing code shall apply.
2. Existing site features and utilities shown have been based upon surveys and other sources believed to be reliable. The correctness or completeness of the information shown is not guaranteed. The contractor shall verify all information before commencing work.
3. The contractor shall notify Miss Utility at 1-800-257-7777 a minimum of five working days prior to construction.
5. The contractor shall obtain all necessary permits and inspections.
6. The contractor shall maintain traffic at all times.
7. The contractor shall determine the exact location and depth of all existing utilities, as necessary. Report any discrepancies from the plans to Century Engineering, Inc. All utilities shall be retained unless labeled otherwise. The contractor shall be responsible for all costs and work required to adjust existing and proposed utilities and appurtenances to finish grades within the limits of work. Damage to existing conditions and utilities shall be repaired to the owner's satisfaction at the expense of the contractor.
8. The contractor shall have all private utilities located prior to any construction.
9. Existing utilities which are not to be removed or abandoned shall remain operational at all times. Appropriate existing utilities shall remain in service until replacement/relocated utilities are operational.
10. Only Baltimore City personnel shall operate public water valves. The contractor shall notify the Baltimore City Inspector or area engineer (410-887-3531) to arrange a shutdown.
11. Unless otherwise noted, all proposed water lines shall have four feet minimum cover, 0.5 feet minimum vertical clearance from all storm drain lines, and 1.0 feet minimum vertical clearance above sanitary sewer lines.
12. Valves on fire hydrant leads will be tied to the main line tee or outlet with two 3/4" diameter threaded steel rods and nuts as directed by the Engineer.
13. The contractor will determine the location and depth of the existing main before laying any pipe.
14. Contractor shall ensure that existing valve is tied back before removing any part of the existing water line or buttresses.
15. All tops of all proposed valves located within existing road metal shall be built to existing grade elevations under this contract. Existing curb and gutter and/or sidewalk shall be removed to the nearest joint and be replaced as required with equal or better materials, as directed by the engineer in the field.

GENERAL NOTES

1. HORIZONTAL COORDINATES SHOWN HEREON ARE REFERRED TO THE MERIDIAN OF THE NORTH AMERICAN DATUM OF 1983 (NAD83) AS DETERMINED FROM THE GLOBAL POSITIONING SYSTEM (GPS)OBSERVATIONS AT THE FOLLOWING STATIONS:

   GPS STATION 1 N 607803.7400 E 1427057.2540
   GPS STATION 7 N 608614.4040 E 1425807.5220

2. EXISTING SITE FEATURES WERE COMPILED FROM THE FOLLOWING SITE PLANS: EXPANDED COMMUNITY BASED OUTPATIENT CLINIC;[1] 120 BED NHCU (BRECC)[2], NEW RESEARCH BUILDING[3], PARKING LOT EXPANSION[4](ASSOCIATED WITH THE NEW RESEARCH BUILDING), AND THE ADDITION TO THE BRECC BUILDING[5].

   ADDITIONAL TOPOGRAPHY WAS OBTAINED FROM BALTIMORE CITYS[6]TOPOGRAPHICAL BASE MAPS. DETAILED SURVEY INFORMATION FOR SPECIFIC AREAS OF CONCERN WAS PROVIDED BY CENTURY ENGINEERING. FIELD LOCATED WATER FEATURES WERE PROVIDED BY AUDATA DATED AUGUST 2010.

   [1] EXPANDED COMMUNITY BASED OUTPATIENT CLINIC; COCHRAN, STEPHENSON & DOKERVOET, INC., 2005
   [2] 120 BED NHCU; WHITNEY, BAILEY, COX & MAGNANI, 1994
   [3] NEW RESEARCH BUILDING; DERBY ENTERPRISES , 2009
   [4] PARKING LOT EXPANSION; DERBY ENTERPRISES, 2009
   [5] ADDITION TO BRECC; ERNEST BLAND ARCHITECTS, 2009
   [6] BALTIMORE CITY, 2000

3. THE WATER LINES WITHIN LOCH RAVEN BLVD AND THE ALAMEDA HAVE BEEN PROVIDED PER BALTIMORE CITY PUBLIC RECORD DRAWINGS.

UTILITY IMPROVEMENT NOTES

NOTIFY VA C.O.T.R., MAINTENANCE STAFF, AND SAFETY OFFICER 2 WEEKS PRIOR TO THE NECESSARY CLOSING OF ANY WATER VALVES DURING CONSTRUCTION. COORDINATE VALVE CLOSURES AND SCHEDULE WITH ABOVE MENTIONED PERSONNEL.

BALTIMORE CITY DEPARTMENT OF PUBLIC WORKS STANDARD DETAIL REFERENCES:
- HYDRANTS: BC 833.02
- VALVES & ROADWAY BOXES: BC 834.01 & BC 872.01

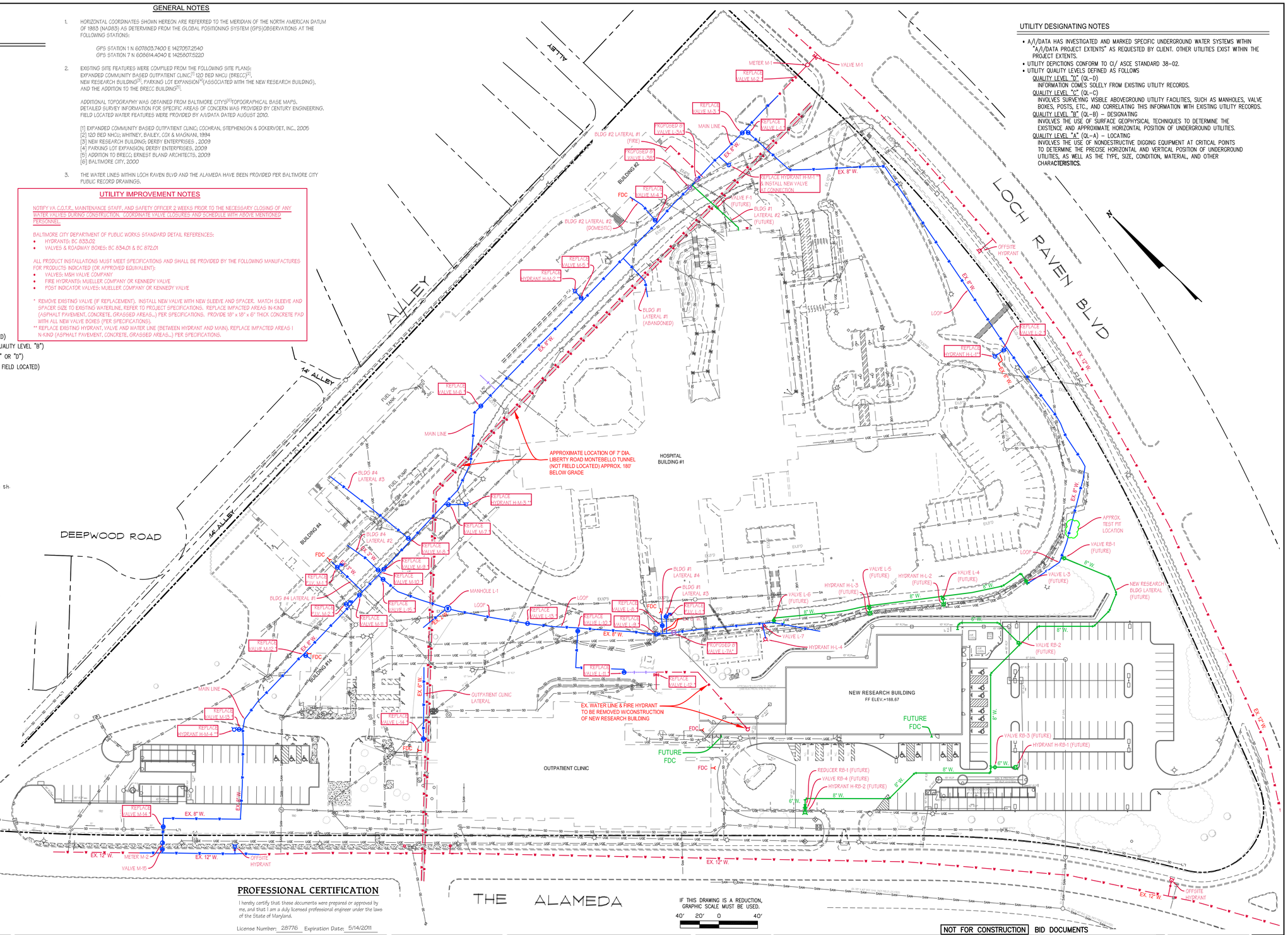
ALL PRODUCT INSTALLATIONS MUST MEET SPECIFICATIONS AND SHALL BE PROVIDED BY THE FOLLOWING MANUFACTURES FOR PRODUCTS INDICATED (OR APPROVED EQUIVALENT):
- VALVES: M&H VALVE COMPANY
- FIRE HYDRANTS: MUELLER COMPANY OR KENNEDY VALVE
- POST INDICATOR VALVES: MUELLER COMPANY OR KENNEDY VALVE

* REMOVE EXISTING VALVE (IF REPLACEMENT). INSTALL NEW VALVE WITH NEW SLEEVE AND SPACER. MATCH SLEEVE AND SPACER SIZE TO EXISTING WATERLINE. REFER TO PROJECT SPECIFICATIONS. REPLACE IMPACTED AREAS IN-KIND (ASPHALT PAVEMENT, CONCRETE, GRASSED AREAS...) PER SPECIFICATIONS. PROVIDE 18" x 18" x 6" THICK CONCRETE PAD WITH ALL NEW VALVE BOXES (PER SPECIFICATIONS).
** REPLACE EXISTING HYDRANT, VALVE AND WATER LINE (BETWEEN HYDRANT AND MAIN). REPLACE IMPACTED AREAS I N-KIND (ASPHALT PAVEMENT, CONCRETE, GRASSED AREAS...) PER SPECIFICATIONS.

UTILITY DESIGNATING NOTES

- A/I/DATA HAS INVESTIGATED AND MARKED SPECIFIC UNDERGROUND WATER SYSTEMS WITHIN "A/I/DATA PROJECT EXTENTS" AS REQUESTED BY CLIENT. OTHER UTILITIES EXIST WITHIN THE PROJECT EXTENTS.
- UTILITY DEPICTIONS CONFORM TO CI/ ASCE STANDARD 38-02.
- UTILITY QUALITY LEVELS DEFINED AS FOLLOWS

  QUALITY LEVEL "D" (QL-D)
  INFORMATION COMES SOLELY FROM EXISTING UTILITY RECORDS.
  QUALITY LEVEL "C" (QL-C)
  INVOLVES SURVEYING VISIBLE ABOVEGROUND UTILITY FACILITIES, SUCH AS MANHOLES, VALVE BOXES, POSTS, ETC., AND CORRELATING THIS INFORMATION WITH EXISTING UTILITY RECORDS.
  QUALITY LEVEL "B" (QL-B) – DESIGNATING
  INVOLVES THE USE OF SURFACE GEOPHYSICAL TECHNIQUES TO DETERMINE THE EXISTENCE AND APPROXIMATE HORIZONTAL POSITION OF UNDERGROUND UTILITIES.
  QUALITY LEVEL "A" (QL-A) – LOCATING
  INVOLVES THE USE OF NONDESTRUCTIVE DIGGING EQUIPMENT AT CRITICAL POINTS TO DETERMINE THE PRECISE HORIZONTAL AND VERTICAL POSITION OF UNDERGROUND UTILITIES, AS WELL AS THE TYPE, SIZE, CONDITION, MATERIAL, AND OTHER CHARACTERISTICS.



IF THIS DRAWING IS A REDUCTION, GRAPHIC SCALE MUST BE USED.
40' 20' 0 40'

PROFESSIONAL CERTIFICATION

I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.

License Number: 28776 Expiration Date: 5/14/2011

NOT FOR CONSTRUCTION | BID DOCUMENTS

Additions:	Date:
Revisions:	

Consultants

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Seal:

ARCHITECTURE PLANNING ENGINEERING
POLT DESIGN GROUP
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www.polt-design.com

Drawing Scale: 1"=40'	Drawing Title: WATER INFRASTRUCTURE IMPROVEMENTS EXHIBIT	Project Title: REPLACE WATER VALVE SYSTEM	Date: 03-28-2011
Drawing Start Date:	Approved: Associate Director for Operations:		Project No: 512-10-144
Drawing Finish Date:	Approved: Chief, Facilites Engineer:	Building No: N/A / Checked: BWJ / Drawn: RDT	DRAWING NO: WE-002
Drawing Approved:	Approved: Director, Medical Center:	Location: VAMHCS MEDICAL CENTER LOCH RAVEN	Dwg. 2 Of 2

DEPARTMENT OF VETERANS AFFAIRS

O:\DRAWING\LAND-DEV\2007\27284-10 VA Loch Raven Waterline project\CIVIL\CADD\Drawings\(WR02) Water Line Improvements Plan.dwg, 3/28/2011 9:18:23 AM, Adobe PDF 30x42.pc3,