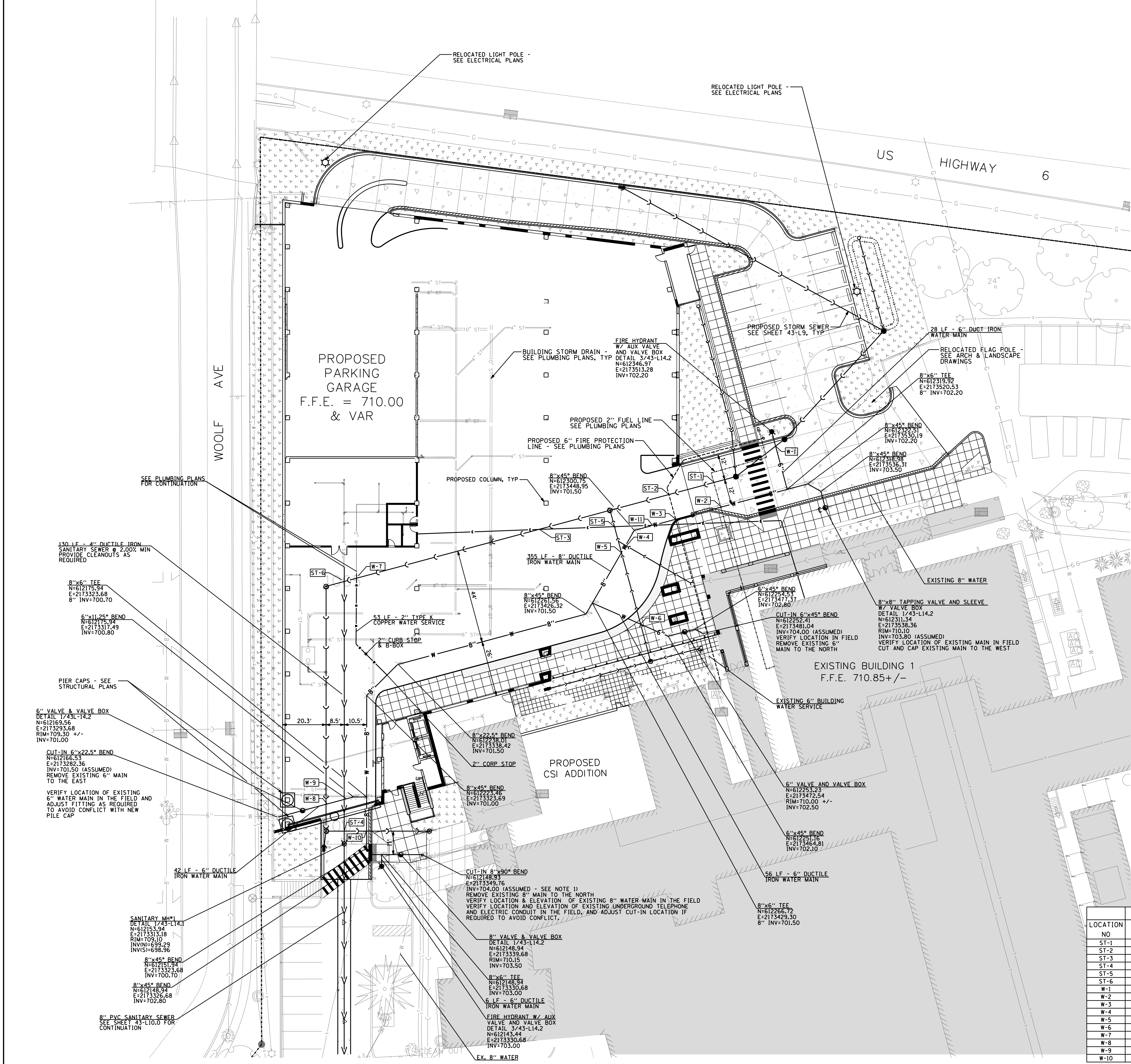


three inches = one foot
one and one half inches = one foot
one inch = one foot
three quarters inch = one foot
one half inch = one foot
three eighths inch = one foot
one quarter inch = one foot
one eighth inch = one foot



- ### SUGGESTED SEQUENCE OF OPERATION FOR WATER MAIN INSTALLATION
1. WATER MAIN INSTALLATION TO BE COMPLETED PRIOR TO INSTALLATION OF NEW STORM SEWER.
 2. EXISTING WATER MAIN SHALL REMAIN IN SERVICE UNTIL NEW MAIN HAS BEEN TESTED AND IS READY TO BE PLACED IN SERVICE. COORDINATE ANY REQUIRED TEMPORARY SHUT-DOWNS FOR NEW CONNECTIONS WITH THE PROJECT MANAGER.
 3. ALL FITTINGS, VALVES, AND WATER MAIN MATERIALS SHALL BE APPROVED PRIOR TO USE. ALL FITTINGS, VALVES, AND MAIN TO BE CONNECTED DIRECTLY TO EXISTING WATER MAIN SHALL BE SWABBED WITH AN APPROVED CHLORINE SOLUTION OF AT LEAST 50 MG/L PRIOR TO USE.
 4. LOCATE EXISTING WATER MAINS AT FOUR PROPOSED CONNECTION LOCATIONS. LOCATE EXISTING SHUT-OFF VALVES.
 5. INSTALL NEW TAPPING VALVE AND SLEEVE AT EAST LIMIT OF RELOCATION. VALVE TO REMAIN CLOSED FOLLOWING INSTALLATION.
 6. INSTALL NEW WATER MAIN INCLUDING 3 NEW GATE VALVES AND 2 NEW HYDRANTS.
 7. PRESSURE TEST, FLUSH, AND DISINFECT NEW WATER MAIN IN ACCORDANCE WITH SPECIFICATION SECTION 331000 AND IOWA CITY REQUIREMENTS.
 8. CLOSE EXISTING VALVES AS REQUIRED TO ISOLATE NEW TIE-IN LOCATIONS. COMPLETE REQUIRED CONNECTIONS AND RE-OPEN VALVES.
 9. REMOVE EXISTING WATER MAIN.

SHEET LEGEND

	- NEW CURB & GUTTER
	- DEPRESSED CURB & GUTTER
	- NEW SIDEWALK
	- NEW CONCRETE PAVEMENT
	- EXISTING BUILDING
	- NEW LANDSCAPE AREA
	- EXISTING WATER MAIN
	- PROPOSED WATER MAIN
	- PROPOSED BUILDING WATER SERVICE (SEE PLUMBING PLANS)
	- VALVE VAULT
	- FIRE HYDRANT
	- PROPOSED SANITARY SEWER
	- PROPOSED BUILDING SANITARY SEWER (SEE PLUMBING PLANS)
	- EXISTING STORM SEWER
	- PROPOSED STORM SEWER
	- PROPOSED BUILDING STORM DRAIN (SEE PLUMBING PLANS)
	- PROPOSED ELECTRICAL CONDUIT (SEE ELECTRICAL PLANS)
	- PROPOSED FIRE PROTECTION (SEE FIRE PROTECTION PLANS)
	- PROPOSED FUEL LINE (SEE PLUMBING PLANS)
	- PROPOSED INLET
	- PROPOSED MANHOLE
	- UTILITY CROSSING - SEE TABLE, THIS SHEET

SHEET NOTES:

1. SEE SHEET L-9 FOR ADDITIONAL STORM SEWER INFORMATION.
2. SEE SHEET L-10.0 FOR ADDITIONAL SANITARY SEWER INFORMATION.

UTILITY PLAN - NORTH

SCALE: 1"=20'-0"

UTILITY CROSSING SCHEDULE

LOCATION NO	UPPER PIPE		LOWER PIPE		CLEARANCE	NOTES
	TYPE	BOTTOM ELEVATION	TYPE	TOP ELEVATION		
ST-1	PROP 2" FUEL LINE	706.0 +/-	PROP 12" DIP STORM SEWER	705.25	0.75'	VERIFY DEPTH OF FUEL LINE WITH PLUMBING PLANS
ST-2	PROP 6" FIRE PROTECTION	705.6 +/-	PROP 12" DIP STORM SEWER	705.10	0.50'	VERIFY DEPTH OF FIRE PROTECTION LINE WITH PLUMBING PLANS
ST-3	PROP 5-UNIT ELECTRICAL DUCT BANK	705.75	PROP 16" DIP STORM SEWER	704.95	0.80'	VERIFY DEPTH OF DUCT BANK WITH ELECTRICAL PLANS
ST-4	PROP 16" DIP STORM SEWER	702.90	PROP 4" DIP SANITARY SEWER	699.75	3.15'	NO CONFLICT
ST-5	PROP 5-UNIT ELECTRICAL DUCT BANK	705.75	PROP 8" DIP STORM SEWER	704.50	1.25'	VERIFY DEPTH OF DUCT BANK WITH ELECTRICAL PLANS
ST-6	PROP 16" DIP STORM SEWER	703.25	PROP 4" DIP SANITARY SEWER	702.22	1.03'	COORDINATE SANITARY DEPTH WITH PLUMBING PLANS
W-1	PROP 12" DIP STORM SEWER	704.30	PROP 6" DIP WATER MAIN	702.70	1.60'	VERIFY DEPTH OF FUEL LINE WITH PLUMBING PLANS
W-2	PROP 2" FUEL LINE	706.0 +/-	PROP 8" DIP WATER MAIN	702.60	3.40'	VERIFY DEPTH OF FUEL LINE WITH PLUMBING PLANS
W-3	PROP 6" FIRE PROTECTION	705.6 +/-	PROP 8" DIP WATER MAIN	702.50	3.10'	VERIFY DEPTH OF FIRE PROTECTION LINE WITH PLUMBING PLANS
W-4	PROP 8" DIP STORM SEWER	703.85	PROP 8" DIP WATER MAIN	702.20	1.65'	MAINTAIN MIN 18" VERTICAL SEPARATION
W-5	PROP 8" DIP STORM SEWER	703.95	PROP 8" DIP WATER MAIN	702.20	1.75'	MAINTAIN MIN 18" VERTICAL SEPARATION
W-6	PROP 8" DIP STORM SEWER	704.00	PROP 8" DIP WATER MAIN	702.50	1.50'	MAINTAIN MIN 18" VERTICAL SEPARATION
W-7	PROP 2" COPPER WATER SERVICE	705.00	PROP 16" DIP STORM SEWER	704.70	0.30'	NO CONFLICT
W-8	PROP 16" DIP STORM SEWER	702.95	PROP 6" DIP WATER MAIN	701.40	1.55'	MAINTAIN MIN 18" VERTICAL SEPARATION
W-9	PROP 8" DIP WATER MAIN	700.85	PROP 4" DIP SANITARY SEWER	700.00	0.85'	NO CONFLICT
W-10	PROP 16" DIP STORM SEWER	702.90	PROP 8" DIP WATER MAIN	701.40	1.50'	MAINTAIN MIN 18" VERTICAL SEPARATION
W-11	PROP 5-UNIT ELECTRICAL DUCT BANK	705.75	PROP 8" DIP WATER MAIN	702.30	3.45'	VERIFY DEPTH OF DUCT BANK WITH ELECTRICAL PLANS

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Drawing Title: **UTILITY PLAN NORTH**

Project Title: **400 CAR PARKING GARAGE**

Project Number: **636-402**

Building Number: **43**

Location: **IOWA CITY, IA**

Date: **06/10/2011**

Checked: **MAY**

Drawn: **IN**

Approved: Project Director
**Iowa City VA Healthcare System
Department of Veterans Affairs Medical Center**

Drawing Number: **43-L10.1**

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Office of Construction and Facilities Management
Department of Veterans Affairs