

Asset Management System Works for Portland Water District

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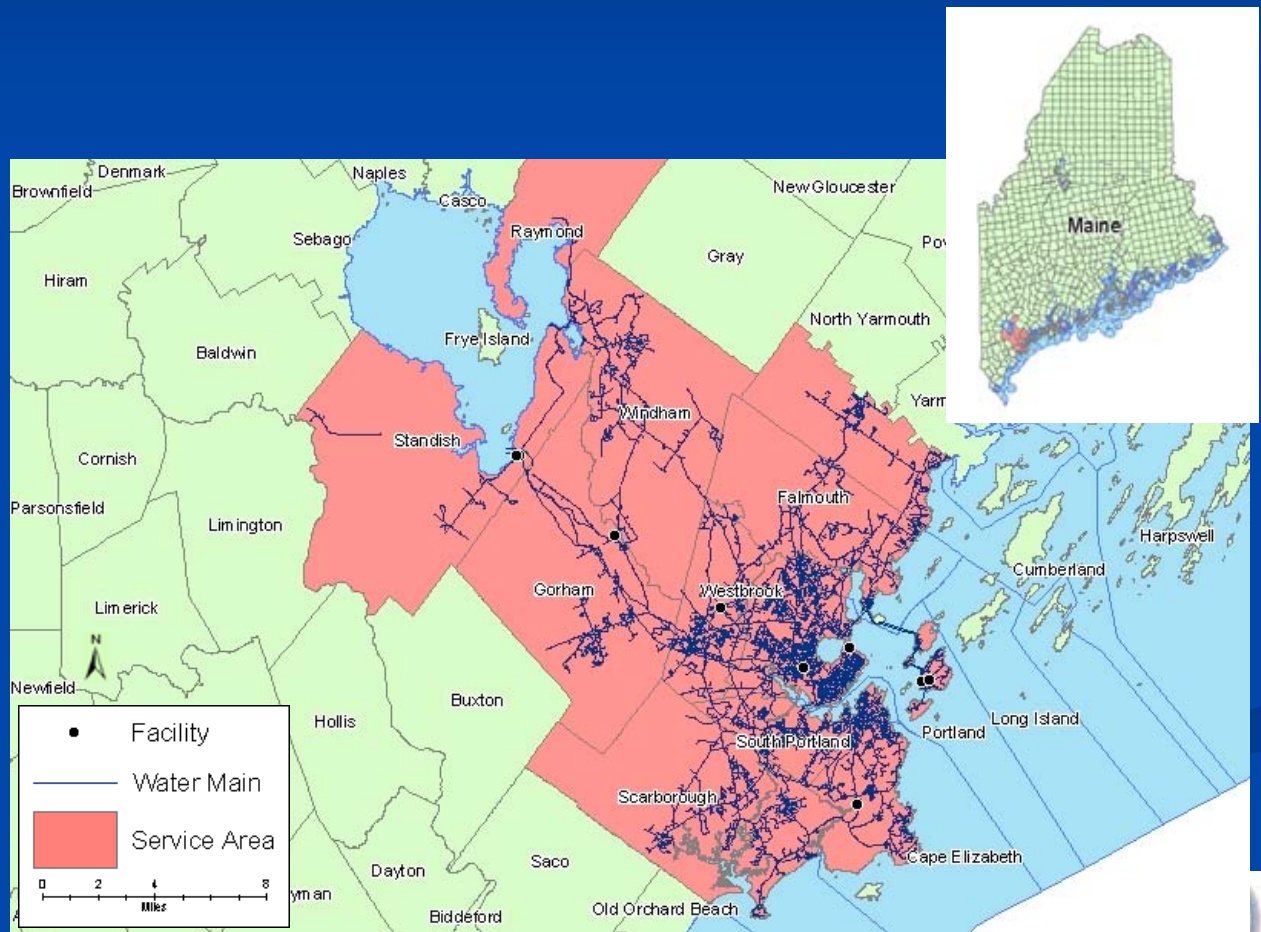
Asset Management System Works for Portland Water District

1. PWD Introduction
2. Work Order Management
3. Project Planning
4. ArcIMS in the Field



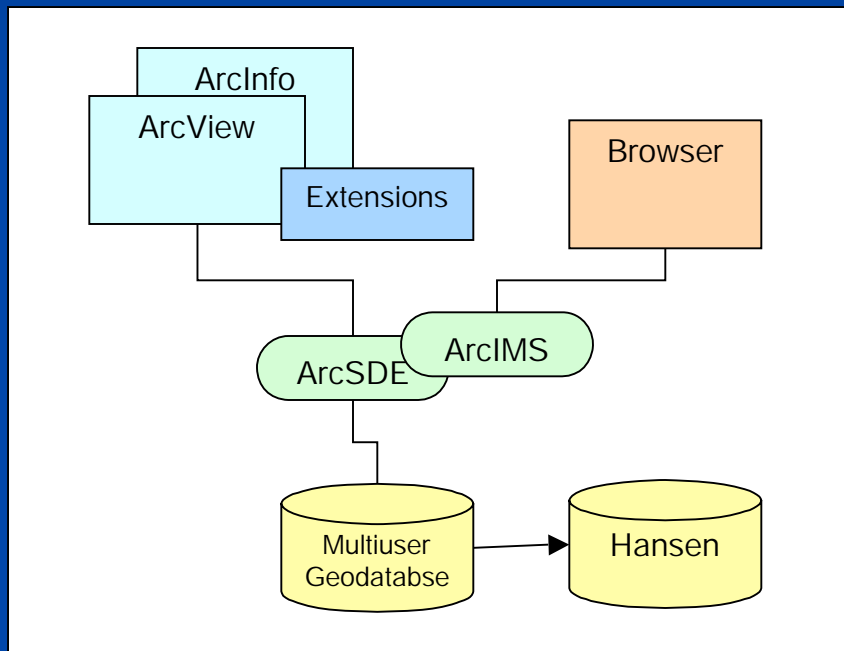
Asset Management System Works for Portland Water District

PWD serves 200,000 people in the Greater Portland area. Every day over 25 million gallons of water flow through 975 miles of pipe, and over 21 million gallons of sewage is processed at PWD's five sewage treatment plants.



Asset Management System Works for Portland Water District

Current Configuration



PWD's GIS is "attribute light". Only the data to create the linkages between GIS and the asset management system (Hansen) is maintained.



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Work Order Management

1. Visualize Work Order History
 - a. Flushing Program
 - b. Permalog Leak Detector Placement
2. Manage Work Flow
 - a. Valve Turning Program

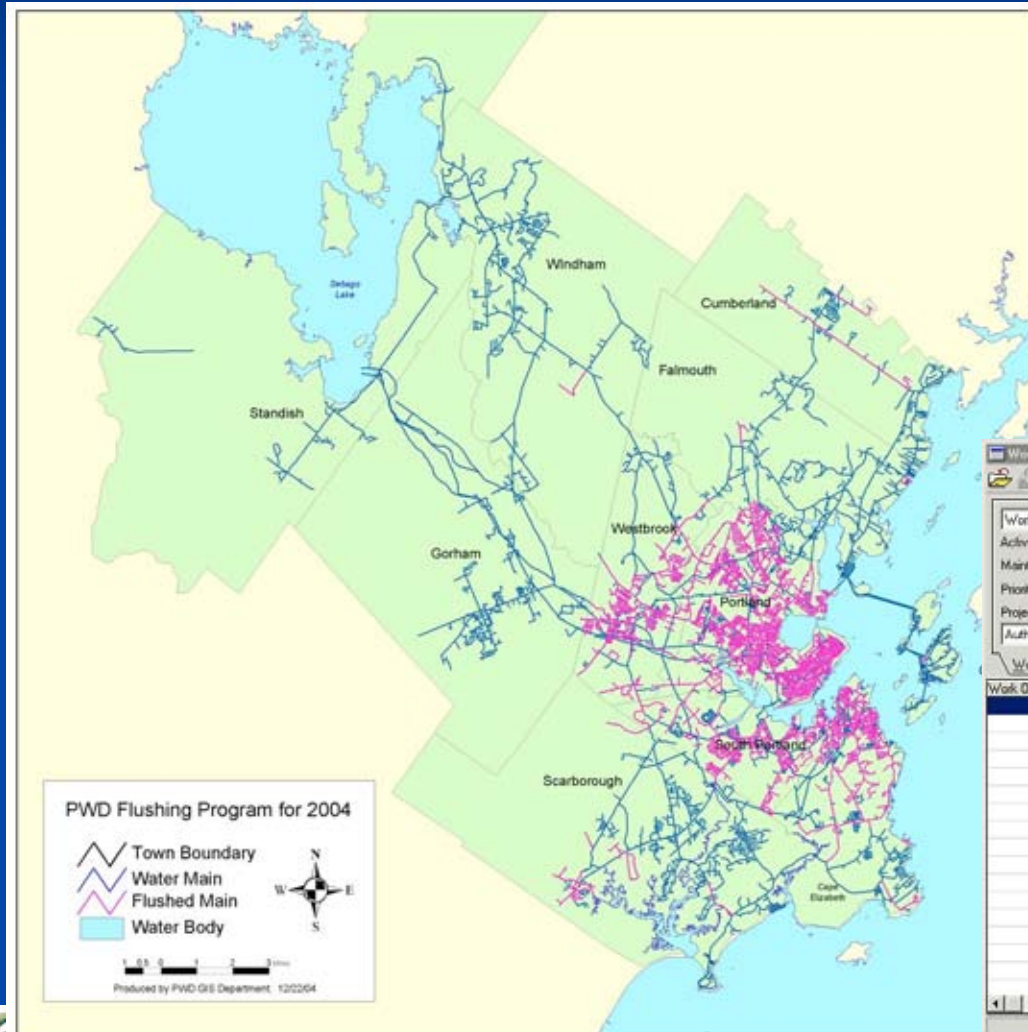


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Visualize Work Order History

Flushing Program

Any work order associated to an asset can be displayed within GIS. This allows PWD employees to quickly view work history.



Work Order Lookup

Work Order: WD Status: All

Activity: DMFLSH Assigned To:

Main Type: Completed: 01/01/2004 To 12/31/2004

Priority: Problems:

Project: Crew:

Auth:

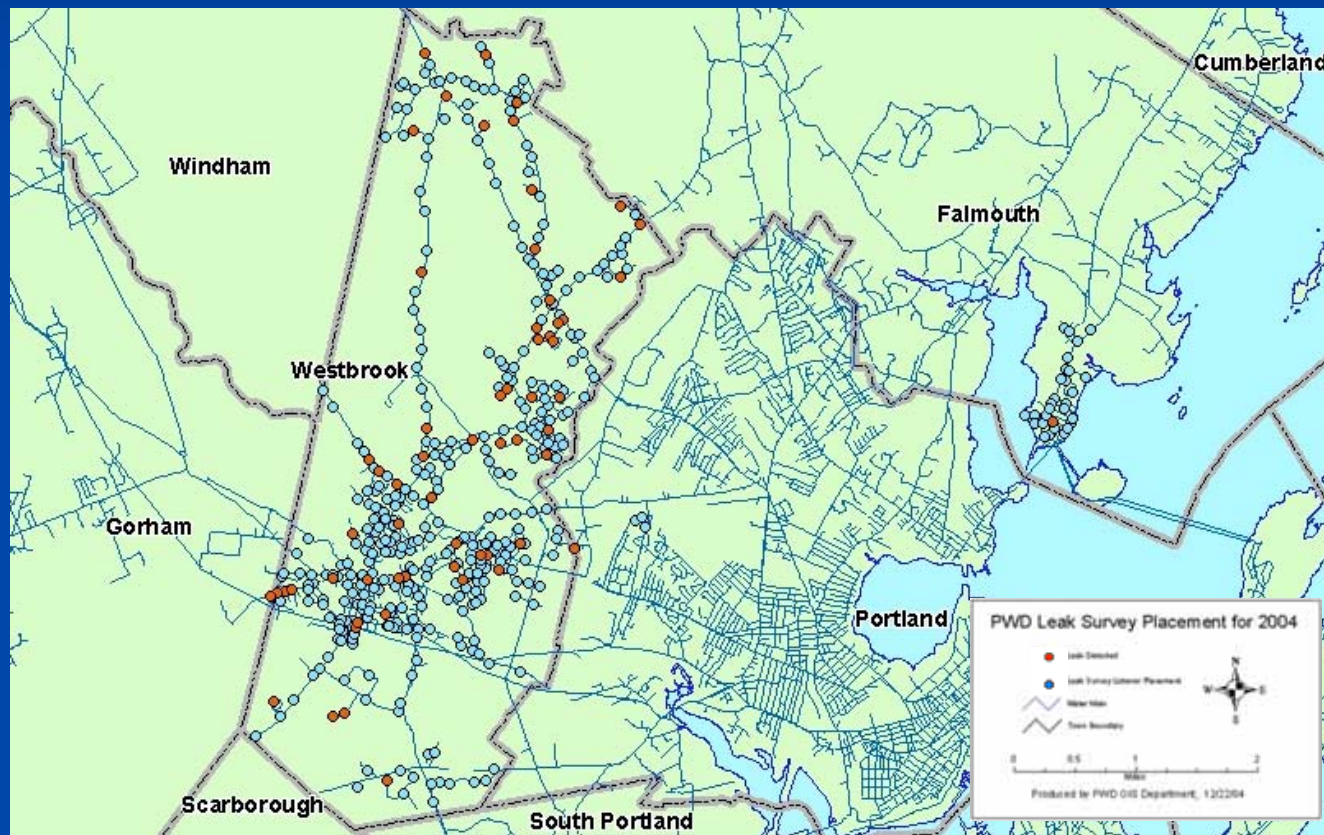
Work Order #	Status	Activity	Asset	Assigned	Initiated	Scheduled	Started	Due	Completed	Main
437542	Completed	DMFLSH	WMN	307	12/21/2004	12/21/2004	12/21/2004		12/21/2004	P
350730	Completed	DMFLSH	WMN	307	04/09/2002	04/15/2003			04/13/2004	P
350731	Completed	DMFLSH	WMN	307	04/09/2002	04/15/2003			04/13/2004	P
350732	Completed	DMFLSH	WMN	307	04/09/2002	04/15/2003			04/13/2004	P
350733	Completed	DMFLSH	WMN	307	04/09/2002	04/15/2003			04/13/2004	P
350734	Completed	DMFLSH	WMN	307	04/09/2002	04/15/2003			04/13/2004	P
350735	Completed	DMFLSH	WMN	307	04/09/2002	04/15/2003			04/13/2004	P
350736	Completed	DMFLSH	WMN	307	04/09/2002	04/15/2003			04/13/2004	P
350737	Completed	DMFLSH	WMN	307	04/09/2002	04/15/2003			04/13/2004	P
350738	Completed	DMFLSH	WMN	307	04/09/2002	04/15/2003			04/13/2004	P
350739	Completed	DMFLSH	WMN	307	04/09/2002	04/15/2003			04/13/2004	P
350740	Completed	DMFLSH	WMN	307	04/09/2002	04/15/2003			04/13/2004	P
355360	Completed	DMFLSH	WMN	307	06/19/2002	04/22/2002			04/13/2004	P
355361	Completed	DMFLSH	WMN	307	06/19/2002	04/22/2002			04/13/2004	P
355362	Completed	DMFLSH	WMN	307	06/19/2002	04/22/2002			04/13/2004	P
355366	Completed	DMFLSH	WMN	307	06/19/2002	04/22/2002			04/13/2004	P
355367	Completed	DMFLSH	WMN	307	06/19/2002	04/22/2002			04/13/2004	P

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Visualize Work Order History



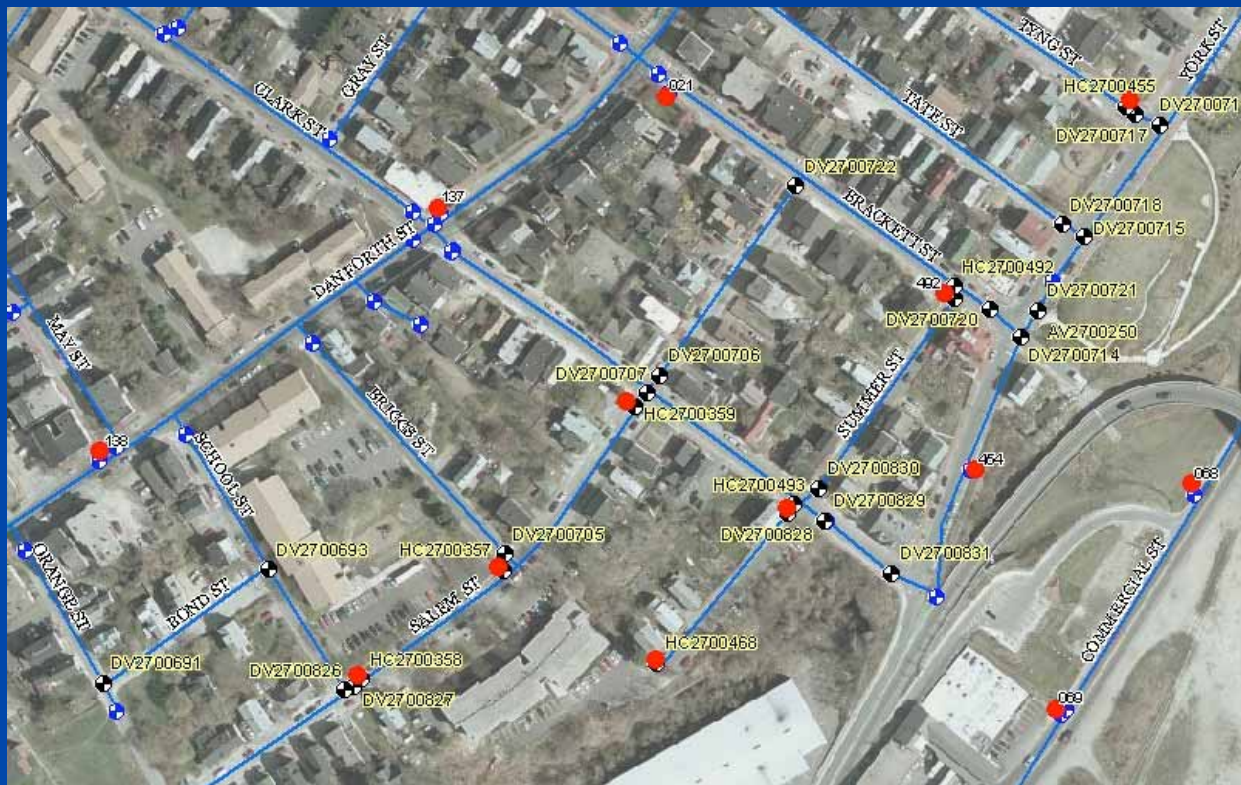
**Permalog Leak
Detector Placement**

**Detected leaks pinpoint
damaged infrastructure**



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Manage Work Flow



Valve Turning Program

Maps for field crews showing the location of scheduled work can be created quickly and easily.



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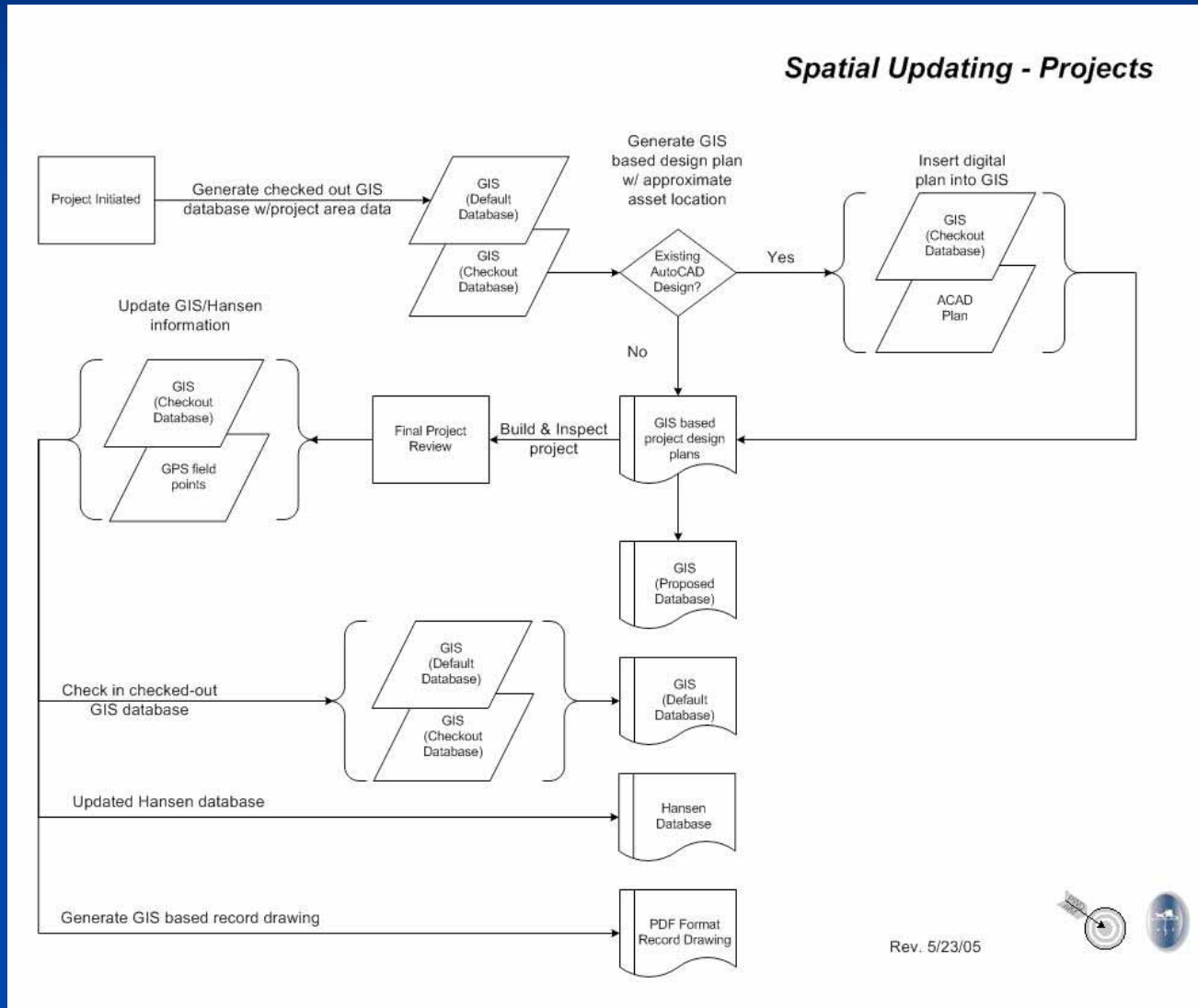
Project Planning

Using disconnected editing to
expedite the addition of new
data and to create as builts



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Project Planning



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Project Planning

GIS
As Built.



1 inch equals 50 feet

Street: Mackworth Ln					
Lines:	7 1/2" of vertical		Pipe Manufacturer:		Color:
Grade:	8 4"		Pipe Type:		SE - No text
Large Markers:	3-00 - 3-25				
STATION	FITTING	MANUFACTURER	FITTING TYPE	NOTES	ASSET ID #
0+00	12" x 8" TS Tapping Sleeve	APC	MS x FL	12" Main 7'-8" Deep	
0+02	8" TV	APC	MS x FL	2" Nut Extension	DV2000427
0+05	45° Bend	Accoco	MS x MS	Looking Left	
0+08	1" Air Valve and 3/4" angle valve w/ 1" PEP nut	MCD	3/4"CC x 1" MSP		AV2000077
2+55	Hydrant 8" x 6" Swivel Tee - Star, 6" APC GV - MS, 10'-4" of 6" BS Griffin Pipe	American	MSB1 - 6'-6"	HCV Measure = 11'-6"	HY2000011
3+30	11.25° Bend	Accoco	MS x MS	Looking Right	HC2000023
3+29	Hydrant 8" x 6" Swivel Tee - Star, 6" APC GV - MS, 10'-4" of 6" BS Griffin Pipe	American	MSB1 - 6'-6"	HCV Measure = 11'-2"	HY2000020
3+39	8" x 6" Reducer	Sigma	MS x MS		RD2001058
3+38	32.5° Bend	Sigma	MS x MS	Looking Left	
8+25	2" 60	APC	PEP x PEP	1/2" x 2" PG Cap - Star	BC2000080



PORTLAND WATER DISTRICT
225 Douglass Street
Portland, ME 04104

Asset Management and Planning Dept.

Drawn By: TEW
Date: 4/9/04

Project Completion
Date: 4/2/03

Mackworth Lane

Cumberland

RECORD DRAWING

Field Book: 23 Mackworth Ln 03

Cad Plan: 23 Rockwood-Condo-Yes

Sheet No. 1 of 1



PWD, 2005

Asset Management System Works for Portland Water District

ArcIMS in the Field

PWD GIS Viewer - Microsoft Internet Explorer provided by The Portland Water District

File Edit View Favorites Tools Help

Address <http://gis1/website/pwdgis/frame.htm>

PWD GIS Help

Hydrants

- Valves (SDE_W_VALVES:
 - Air Valve
 - Blow Off
 - By Pass
 - Distribution
 - End Of Main
 - Fire Service
 - Hydrant Control
 - Transmission
- Water Nodes (SDE_W_N
 - Attribute Change
 - Date Change
 - Material Change
 - Connection
 - Reducer
 - Sleeve
 - Tee
- Water Mains
- Lift Stations
- Man Hole

X: 2,878,964.435 Y: 307,564.951 1:4,500 One Inch = 375 Feet

Pan

The data is still under review. If you find any errors please click [here](#). [Map of reviewed towns](#).

Local intranet 2:49 PM

PWD field crews access live information from Hansen and GIS by connecting to an ArcIMS website using Citrix.



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Questions?

Thank you for your attention.

