

**GREEN BAY
WATER UTILITY**



Backflow Prevention and Cross Connection Tracking



ESRI UC
June 29, 2016

Introductions

Green Bay Water Utility

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GIS Specialist

POWER Engineers

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Senior Cityworks Consultant

Background

Green Bay Water Utility

Population: 104,500

Water Source: Lake Michigan

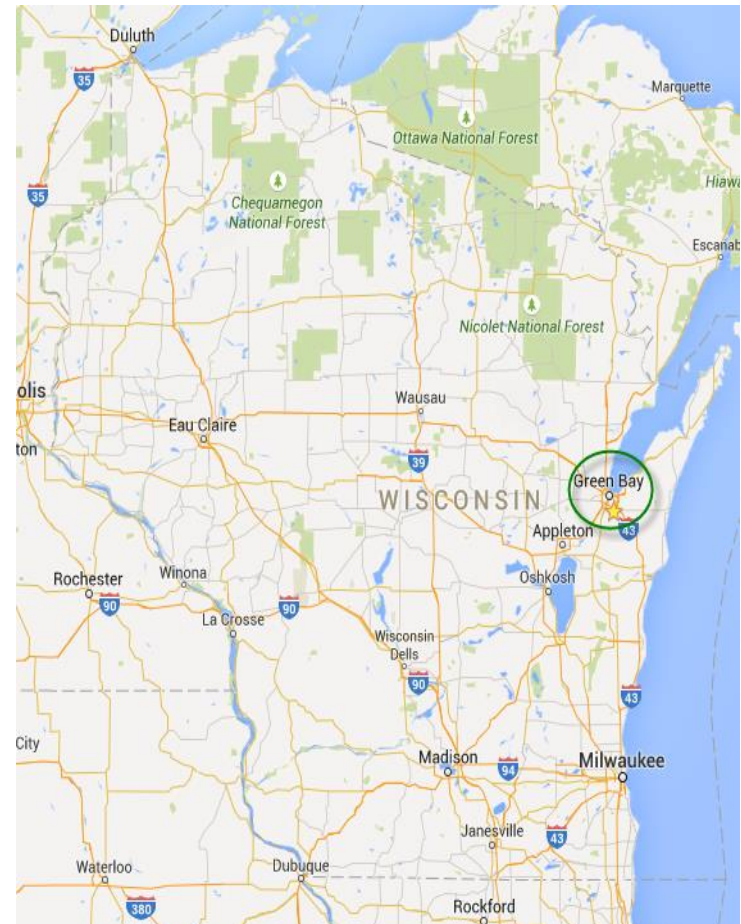
1 Filter Plant

36,000 Service Connections

40,000 Meters

33,000 Residential Surveys

3,000 Commercial Surveys



Cross Connections

Cross Connections?

What is a cross-connection?

A cross-connection occurs when a pipe designed to carry safe drinking water is connected at some point to a pipe containing unsafe water or other liquid material.

Why create a program?

WISCONSIN STATE LEGISLATURE NR 810.15

Cross Connections and Interconnections

NR 810.15 Cross connections and interconnections. Unprotected cross-connections are prohibited. Cross-connections shall be protected as required in s. SPS 382.41. Water system interconnections are prohibited except as provided in sub. (2). In addition the following requirements shall be met:

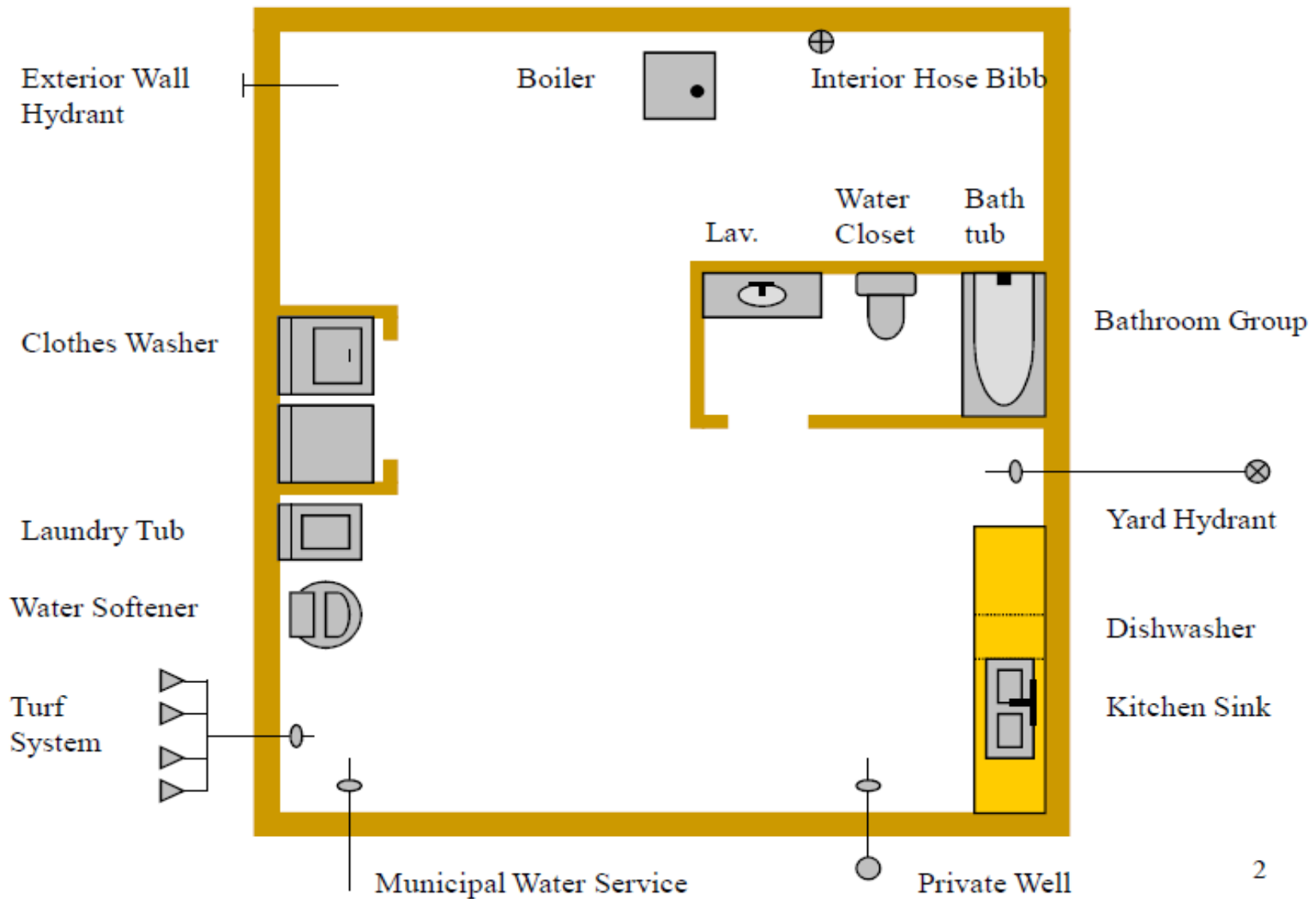
- ② (1) **CROSS CONNECTION CONTROL PROGRAM.** In order to protect the public water supply system, the water supplier for every municipal water system shall develop and implement a comprehensive cross connection control program for the elimination of all existing unprotected cross-connections and prevention of all future un-protected cross connections to the last flowing tap or end-use device. The program may include providing public education materials in lieu of inspections of low hazard portions of residential or commercial facilities. Low hazard areas consist of normal kitchen and bathroom fixtures. The water supplier shall keep a current record of the cross connection control program available for annual review by the department. The cross connection control program

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methods, devices and assemblies are listed in s. SPS 382.41.

- (e) Provisions for denial or discontinuance of water service, after reasonable notice, to any premises where an unprotected cross connection exists or where a survey could not be conducted due to denial.
- (f) Submission to the department of a copy of an ordinance establishing a cross connection control program, an annual report including a total number of all service connections by category, and a report indicating the number of surveys completed in each category for that year.

Residential Cross Connection Control



GBWU Cross Connection Program

- **Residential Inspections**
 - Every 20 Years
 - Verify Approved Devices
 - Scheduled Inspections
 - Completed 1 10 Year Cycle
- **Commercial Inspections**
 - Every 2 Years
 - Not Scheduled

Software Replacement

Tokay Software Replacement

Tokay Software Navigator - 5.9.20516 - C:\TOKAYDATA - 5.9.20521

Company: MICHAEL J LOCATELLI Site Type: [] Sites: Total 33972 Hazards: 1 35915
 Address: %ST GEORGE% Site Use: [] Filter: []
 Address 2: [] Site Level: [] user2: []
 City: GREEN BAY user1: [] user3: []
 State: WI Zip: [] Site Notes: Add Date [] Survey Due: 07/12/23 120
 Site ID: 1073481 user4: [] Re-Survey: [] []
 Last Survey: 07/12/13 PASS

Hazard Equip Survey Mailing

Walk # 1.0 Reset Quick Report Hazards List

Hazard ID 76628 Last Test / /

Contact		Due Dates	Test	/ /	Extend
Contact 2		Install	/ /		
user6		ResL1	/ /		

Account # 12719 Manager # []
 Meter # 0020130274 Link []
 Register # 041048084A Link On
 Service Status [] user22 []
 City Limits Size [] user23 []

Hazard Notes

Add Date []

user20 [] []
 user21 [] []

Bypass Send Notices to: []
 Photos (Default) Site Mailing 1 Link
 Mailing 2 Link
 Mailing 3 Link
 Manager # Link

Assembly List Lead Free Last Letter 07/01/13 R3
 Manufacturer Last Update 09/03/2014
 Model Update By TOKAY
 Type Last Link 09/10/2013
 Size Tests Web Test Fee []
 Orientation [] Do not print

Location: [] Mloc: 03 BASE E met: BADGER

Cell: 11 BLDG NE

e-mail: 10

pubs link [] user15 []
 Warn [] user16 []
 Type: Owner user17 []

Hazard: RGR gen res -owner occ 1 fam home

Location 2: inspection letter printed 03/27/13 + inspection appt 07/12/13 +

route [] Device Status [] Installed [] []
 Met Install: 20130712 Serial # [] Replaced [] []
 re-name 5: METER Retest: 12 Removed / Inactive [] []
 RegObj# [] Installer []

Special []

Recommend []

Add Undo Delete Site **Hazard** First Previous Next Last SEARCH FILTER Replace Quick Entry History STATS Order Address Exit

Three Options

- Upgrade Tokay
- Harris Northstar
- Cityworks



Cityworks Project

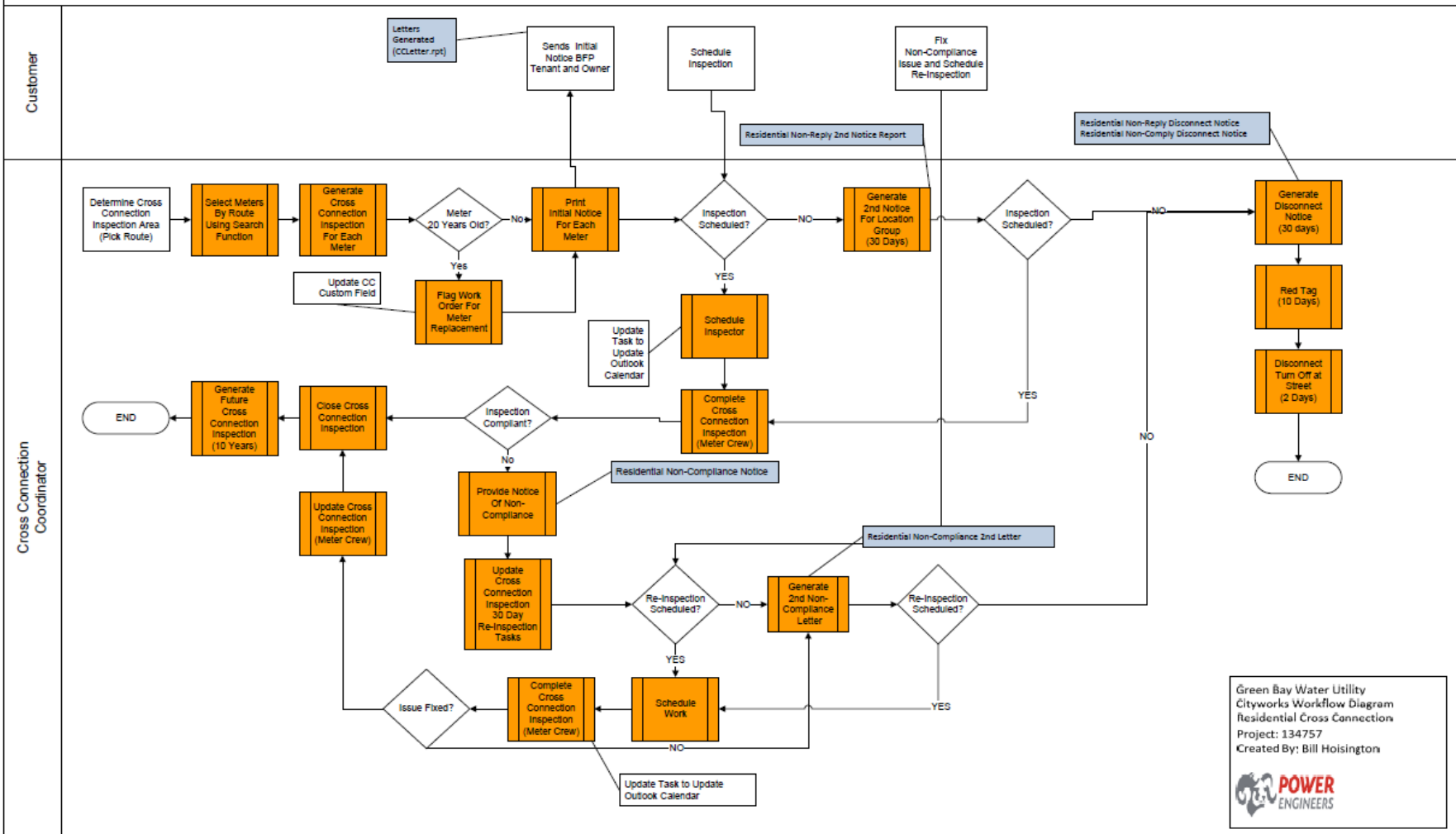
Cityworks Project

- Determine Work Flows
- Pilot Configuration
- Cityworks Configuration
- Tokay Data Migration
- Report and Letter Development
- Testing
- Training
- Deployment

Work Flows

Residential Work Flow

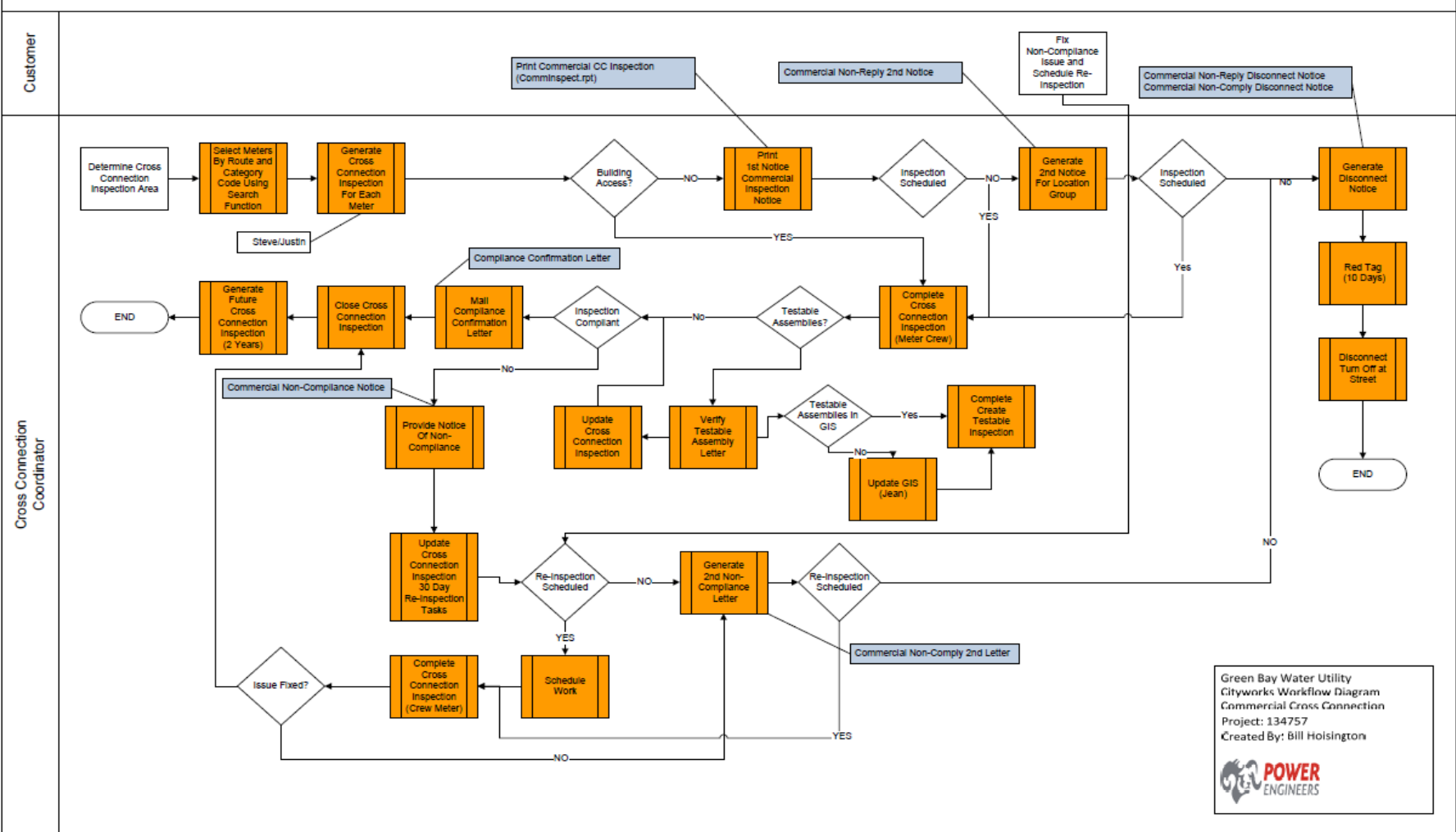
Cross Connection Residential Inspection – To Be Workflow Review



Green Bay Water Utility
 Cityworks Workflow Diagram
 Residential Cross Connection
 Project: 134757
 Created By: Bill Hoisington

Commercial Work Flow

Cross Connection Commercial Function Inspection – To Be Workflow Review



Green Bay Water Utility
 Cityworks Workflow Diagram
 Commercial Cross Connection
 Project: 134757
 Created By: Bill Hoisington

Cityworks Configuration

Cityworks Configuration

- **Cyclical Work Orders**
 - Materials used for devices
 - Tasks used for work flow tracking
 - Reports used for letters
- **Inspections for Testables and Meter Tests**
- **GIS**
 - wService (Lateral Line)
 - wMeter (Object-Related Table)
 - wTestable (Standalone Object)

GIS Design

GIS Design (Service and Meters)



Feature / Object Selection

- WSERVICE (2)
 - 268027
 - wMeters (1)
 - 0020140771
 - 270846
 - wMeters (1)
 - 0097837777

Expand Check Uncheck

Feature / Object Field Values

Field	Value
ServiceStreet	MASON ST
ServiceStreetMod	E
ServiceStreetNumber	1372
ServiceUnit	
ServiceZip	54301-3329
SewageDiscount	
TenantOwner	0
Walk	3620
WarningMessage	
Category	WC
NumberOfUnits	0
FullDescription	
MeterNumber	0097837777

wMeters

- Object Related to wService
- DB View NorthStar CIS Data
- Recreated Nightly
- Python Script
- Windows Task Scheduler

Column	Alias	Table	Output	Sort Type	Sort Order	Filter
a.account_no	Accoun...	<Unknown>	<input checked="" type="checkbox"/>			
a.status_	MeterS...	<Unknown>	<input checked="" type="checkbox"/>			= 'A'
a.meter_no	MeterN...	<Unknown>	<input checked="" type="checkbox"/>			
Location		c	<input checked="" type="checkbox"/>			
b.value1	Pressu...	<Unknown>	<input checked="" type="checkbox"/>			
b.value2	Lateral...	<Unknown>	<input checked="" type="checkbox"/>			
b.value3	Multipl...	<Unknown>	<input checked="" type="checkbox"/>			

SELECT a.account_no AS AccountNumber, a.status_ AS MeterStatus, a.meter_no AS MeterNumber, c.Location, b.value3 AS MultipleAccounts, a.serial_no AS SerialNumber, a.meter_type AS MeterType, a.manufact a.register_ AS Register, a.meter_data AS MeterData, a.install_date AS InstallDate, a.install_no AS In a.curr_reading_hi AS CurrentReadingHigh, a.init_reading_hi AS InitialReadingHigh, a.dials_hi AS Dialst a.multiplier_lo AS MultiplierLow, a.curr_reading_lo AS CurrentReadingLow, a.init_reading_lo AS InitialR a.inspectionnote AS InspectionNote, a.purchasecost, a.ismain, a.main_meter AS MainMeter, a.isdeduc LTRIM(RTRIM(c.name)) AS NAME, c.serv_street_no AS ServiceStreetNumber, LTRIM(RTRIM(c.serv_s c.serv_unit AS ServiceUnit, c.serv_region AS ServiceRegion, c.serv_city AS ServiceCity, c.serv_posta c.plan_no AS ServicePlanNumber, c.mail_addr 1 AS ServiceMailAddress1, c.mail_addr2 AS ServiceMailA c.mail_postal_zip AS ServiceMailZip, c.account_type AS AccountType, c.cycle_ AS Cycle, c.route, c.h c.business_phone AS BusinessPhone, c.tenant_owner AS TenantOwner, c.bill_copies AS BillCopies, c: c.meter_loc_wtr AS MeterLocationWater, c.meter_book_wtr AS MeterBookWater, c.read_comment1 / c.read_comment2 AS [ReadingComment 1], c.register_no AS RegisterNumber, c.housing AS Housing

Work Orders

Work Orders

Cityworks | [Inbox](#) | [Service Requests](#) | [Work Orders](#) | [Inspections](#) | [GIS Search](#) | [Reports](#) | [Storeroom](#) | [Recent Activity](#) | [Designer](#) |

Work Order | [View](#) | [Save](#) | [Close](#) | [Delete](#)

Work Order

Description: **Cross Connection Commercial Inspection**

MetersPerLateral: 1 | CIS Alert:

Number of Units: 1 | Account: WC

Category:

Number: 141000 | CIS Account: 10100

Meter Install: 10/10/2012 | Date:

Entity Type: WMETERS | [Change](#)

Category: Cross Connection

Initiated By: CWMETER, CWMETER A | Date: 5/14/2015 2:47 PM

Status: OPEN | Priority:

Requested By: | Supervisor:

Submit To: MORZ, KARIN | Date: 5/14/2015 2:47 PM

Projected Start: 5/14/2015 2:47 PM | Projected Finish:

Opened By: | Date:

Closed By: | Date:

Completed By:

Actual Start: | **Actual Finish:**

Stage: Actual | Expense Type: Maintenance

Add Comments:

Select

Existing Comments:

Instructions:

Resolution: | Reactive?

Location Information

WO Address:

Location Details:

Shop: E-11 | Map Page: John

Title Number: | District:

X Location: 101,582.71 | Y Location: 566,102.46

Assets

Type	Id	EntitySid	Feature Type	Feature Id	Legacy Id	Warra
<input type="checkbox"/>	WMETERS	0092057538	5005	WSERVICE	30532	

- Pink rows indicate inventory still under warranty.

Tasks

SeqID	Name	Description
1	CC - Sched Inspct	CC - Schedule Inspection
2	CC - Gen 2nd Notice	CC - Generate 2nd Notice for Location Group
3	CC - Comp CC Inspct	CC - Complete CC Inspection (Meter Crew)
4	CC - Test Assmb Insp	CC - Create Testable Assembly Inspection
5	CC - Mail Comp Ltr	CC - Mail Compliance Confirmation Letter
6	CC - Non-Comp Notice	CC - Provide Notice of Non-Compliance
7	CC - Update CC Insp	CC - Update CC Inspection 30-day Re-Inspect Tasks
8	CC - Gen 2nd Non-Com	CC - Generate 2nd Non-Compliance Letter
9	CC - Gen 3rd Notice	CC - Generated 3rd Notice For Location Group
10	CC - Gen Dis Non-Rep	CC - Generate Non-Reply Disconnect Notice
11	CC - Gen Dis Non-Com	CC - Generate Non-Compliance Disconnect Notice
12	CC - Sched Disconn	CC - Schedule Disconnect

Work Cycle

Repeat: Every | Interval: 2 Years

From: Actual Finish Date | Next Print Date: 5/18/2015

Date Printed: | Next Print Date: 5/18/2015

Tools

Legend

X: 101436.97895 | Y: 566158.37417

Device Tracking using Materials

Work Order Cost Summary - 137642 - Cityworks - Mozilla Firefox

water-cwsde/Cityworks_Dist/WorkManagement/WOCostSummary.aspx?lightenform=true

Work Order ID: 137642

Export All

Actual Material Costs

Description	Units	Cost	Source	Stock Updated	Entity Id	Entity Type
VDCV 0.75 UB Watts 9D	1	\$0.00	Tokay	False		
HBVB 0.75 HB Watts 8BI	1	\$0.00	Tokay	False		
AVB 0.5 HB Watts 288A	1	\$0.00	Tokay	False		
HBVB 0.75 HB Watts 8BI	1	\$0.00	Tokay	False		
HBVB 0.75 HB Watts 8BI	1	\$0.00	Tokay	False		
ASBC 0.375 WC Coast Foundry 1B1	1	\$0.00	Tokay	False		
ASBC 0.375 WC Korky 528	1	\$0.00	Tokay	False		
ASBC 0.375 WC Fluidmaster 400	1	\$0.00	Tokay	False		
ASBC 0.375 WC Fluidmaster 400	1	\$0.00	Tokay	False		
FVB 1 UR Sloan	1	\$0.00	Tokay	False		
HBVB 0.75 HB Watts 8BI	1	\$0.00	Tokay	False		
AFHBVB 0.75 OH Mansfield 1019-A	1	\$0.00	Tokay	False		
AFHBVB 0.75 OH Watts 8FR	1	\$0.00	Tokay	False		
Portable Supply	2	\$2.00	Tokay	False		
Boilers	2	\$1.00	Tokay	False		
Water Cooled A/C	1	\$1.00	Tokay	False		

InBox

InBox

Schedule Work CC Residential Non-Compliance CC - Apartments Meter Testing ← → +

Open Meter Work Completed Meter Work Large Meters 4" Meters Small Meters

Residential Meters Exchange Shut-Offs Res_CC_Crew_Inspections CC Residential Completed

Commercial Non-Compliance Testables Cross Connections Residential Commercial ⚙️

Junk/Restock Meters

Open Commercial Connections

⚙️ ← →

Open_COM_CC_WO (Domain) ⬆️ ⬇️ ⚙️

Open Print Expand Map (49 records)

<input type="checkbox"/>	Id	Description	Priority	Status	Submit To	Proj Start Date	Proj Finish Date	Actual
<input type="checkbox"/>	140900	Cross Connection Commercial Inspection	2	OPEN	MORZ, KAREN	6/20/2015 12:00 AM		
<input type="checkbox"/>	140914	Cross Connection Commercial Inspection		OPEN	MORZ, KAREN	4/17/2015 1:05 PM		
<input type="checkbox"/>	140921	Cross Connection Commercial Inspection		OPEN	MORZ, KAREN	4/17/2015 1:29 PM		
<input type="checkbox"/>	140922	Cross Connection Commercial Inspection		OPEN	MORZ, KAREN	4/17/2015 1:31 PM		
<input type="checkbox"/>	140924	Cross Connection Commercial Inspection		OPEN	MORZ, KAREN	4/23/2015 9:02 AM		
<input type="checkbox"/>	140925	Cross Connection Commercial Inspection		OPEN	MORZ, KAREN	4/23/2015 9:04 AM		
<input type="checkbox"/>	140926	Cross Connection Commercial Inspection		OPEN	MORZ, KAREN	4/23/2015 9:45 AM		
<input type="checkbox"/>	140945	Cross Connection Commercial Inspection	2	OPEN	MORZ, KAREN	2/5/2011 12:00 AM		
<input type="checkbox"/>	140946	Cross Connection Commercial Inspection	2	OPEN	MORZ, KAREN	2/5/2011 12:00 AM		
<input type="checkbox"/>	140947	Cross Connection Commercial Inspection	2	OPEN	MORZ, KAREN	2/5/2011 12:00 AM		
<input type="checkbox"/>	140948	Cross Connection Commercial Inspection	2	OPFN	MORZ, KAREN	2/5/2011 12:00 AM		

InBox

Completed Meter Work Large Meters 4 Meters Small Meters Residential Meters Exchange Shut-Offs
Res_CC_Crew_Inspections CC Residential Completed **Commercial Non-Compliance** Testables
Cross Connections Residential Commercial Junk/Restock Meters

Non-Compliance

Completed_CC_Com_Non_Compliant Resolution

Open Print Expand Map

<input type="checkbox"/> Id	Description	Status	Proj Start Date	Proj Finish Date	Actual Start	Actual Finish	Address	Location
<input type="checkbox"/> 140900	Cross Connection Commercial Inspection	OPEN	6/20/2015 12:00 AM				1315 W MASON ST UNT 2	02 BASE NE 11 BL

Open_CC_Com_1_NonComply (3 records)

<input type="checkbox"/> Id	Description	Status	Proj Start Date	Proj Finish Date	Actual Start	Actual Finish	Address	Location
<input type="checkbox"/> 140960	Cross Connection Commercial Inspection	OPEN	1/15/2015 12:00 AM				2278 BAY SETTLEMENT RD	12 BLDG E 98 RA
<input type="checkbox"/> 140991	Cross Connection Commercial Inspection	OPEN	5/13/2015 2:17 PM				2401 DECKNER AV	33 FURN RM 12
<input type="checkbox"/> 140995	Cross Connection Commercial Inspection	OPEN	5/14/2015 8:52 AM					

Open_CC_Com_2_NonComply

Open Print Expand

<input type="checkbox"/> Id	Description	Status	Proj Start Date	Proj Finish Date	Actual Start	Actual Finish	Address	Location	Account	Comments	Instructions	Inspection	Resolution
No records to display.													

Inspections

Meter Tests

Cityworks | [Inbox](#) | [Service Requests](#) | [Work Orders](#) | [Inspections](#) | [GIS Search](#) | [Reports](#) | [Storeroom](#) | [Recent Activity](#) | [Designer](#)

Inspection | [View](#) | | | Save | Close | | | |

Inspection | [Details](#)

Id: | Apply to All:

Location:

Status: | Resolution:

Insp. Date: | Inspected By:

Comments

Observation:

Repairs:

Recommendation:

Cond. Score: 0

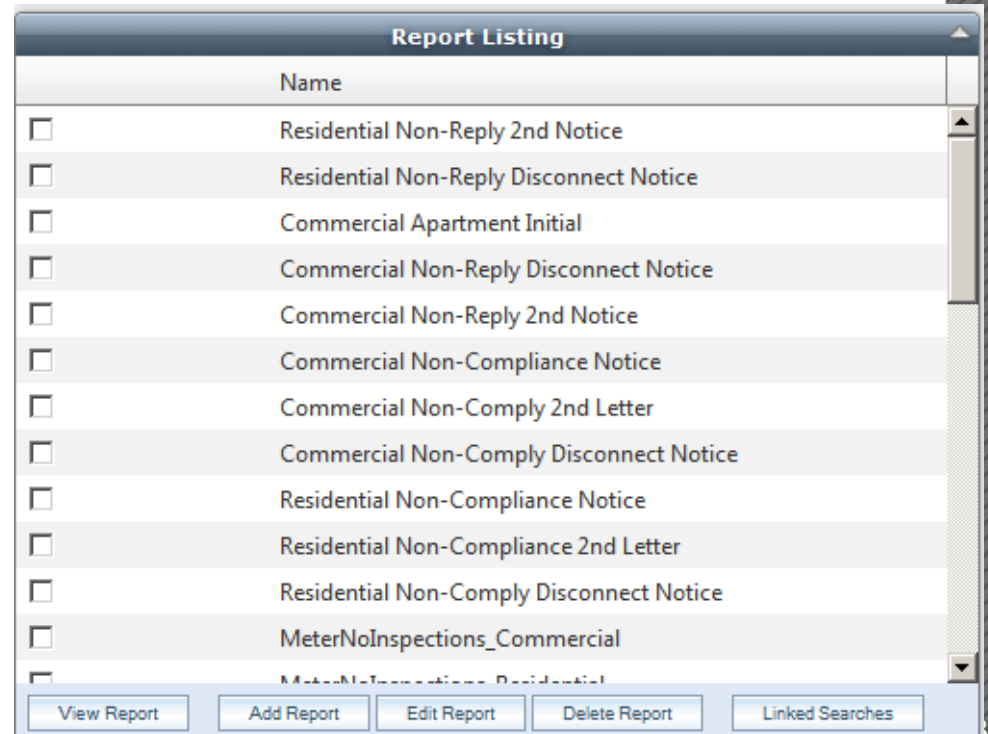
Observations

Observation	Result	Instruction	Explanation
Meter Reading - Before Repair	0451930		
Meter Size	Displacement - 1 1/2"		
50 GPM (%)	100.6		
8 GPM (%)	100.5		
1 1/2 GPM (%)	101.4		
Meter Reading - After Repair	SAME		
Meter Pass/Fail	Pass		
Meter Status	Junked		

Reports and Letters

Reports (Letters)

- Crystal Reports
- Reports Controlled by Tasks
- 1ST Ltr Print Template
- Notification Letters
- Disconnect Letters
- Compliance Reports



Report Listing	
	Name
<input type="checkbox"/>	Residential Non-Reply 2nd Notice
<input type="checkbox"/>	Residential Non-Reply Disconnect Notice
<input type="checkbox"/>	Commercial Apartment Initial
<input type="checkbox"/>	Commercial Non-Reply Disconnect Notice
<input type="checkbox"/>	Commercial Non-Reply 2nd Notice
<input type="checkbox"/>	Commercial Non-Compliance Notice
<input type="checkbox"/>	Commercial Non-Comply 2nd Letter
<input type="checkbox"/>	Commercial Non-Comply Disconnect Notice
<input type="checkbox"/>	Residential Non-Compliance Notice
<input type="checkbox"/>	Residential Non-Compliance 2nd Letter
<input type="checkbox"/>	Residential Non-Comply Disconnect Notice
<input type="checkbox"/>	MeterNoInspections_Commercial
<input type="checkbox"/>	MeterNoInspections_Residential

View Report Add Report Edit Report Delete Report Linked Searches

Reports: L

RITA THORNTON
714 N BROADWAY
GREEN BAY WI 54303-3420

May 18, 2015

Account #: 4

Type: Tenant

Reference:
714 N BROADWAY

CROSS CONNECTION SURVEY LETTER

Dear Owner/Manager:

The protection of the public water supply is a concern of both the Green Bay Water Utility and our customers. Our service person needs to obtain access to your residence to perform a cross connection control survey and possibly perform periodic maintenance on the water meter.

The survey is required by the Wisconsin Administrative Code NR 810.15 and the Green Bay Municipal Ordinance #21.09. We are required by the Department of Natural Resources to perform surveys on all residential buildings once every ten years. During the survey we will be verifying State approved cross connection protection on plumbing items such as, but not limited to, outside hose bibbs, utility sinks, hot water heat (boiler), toilets, hand held showers and lawn irrigation systems.

PLEASE NOTE:

We would appreciate your support in ensuring that your water meter be accessible to our customer service personnel. For safety purposes, please have a clear, unobstructed path to the meter in the basement.

Please call our office @ (920) 448-3480 at your earliest convenience to schedule your future appointment. Office hours are 8:00 a.m. to 4:30 p.m.

There will be no charge for this service. (Service hours are from 7:15 a.m. to 5:00 p.m.). Thank you for your time and understanding.

Sincerely,

Green Bay Water Utility

Reports: Compliance Example

5/18/2015

Residential Meters Without Cross Connection Inspections

1

<u>MeterNumber</u>	<u>LateralNumber</u>	<u>Location</u>	<u>Category</u>	<u>InstallDate</u>	<u>MeterSize</u>
0032982711	W18111	610 BORVAN AV	WR	May 09, 2006	18
0032982712	W18111	610 BORVAN AV	WR	May 18, 2007	18
0033511963	W18112	2070 ARGONNE DR	WR	May 18, 2007	6
0033488053	W18112	2070 ARGONNE DR	WR	May 18, 2007	6
0033488054	W18112	2319 SHADY LN	WR	May 18, 2007	6
0032996805	M15014	2400 BAY SETTLEMENT RD	WS	January 31, 2015	8
0043103319	W18133	1285 RIVERDALE DR	WH	April 29, 2011	8
0020073576		1265 LOMBARDI AV	WC	June 05, 2014	2
0006023179		1265 LOMBARDI AV	WC	May 28, 2014	15
0018046391		1265 LOMBARDI AV	WC	May 28, 2014	8
0020051799		1265 LOMBARDI AV	WC	January 13, 2015	1
0020100227		1265 LOMBARDI AV	WC	January 13, 2015	3
002000825H		1265 LOMBARDI AV	WC	May 27, 2014	6
002000825L		1265 LOMBARDI AV	WC	May 28, 2014	6

101

<u>MeterNumber</u>	<u>LateralNumber</u>	<u>Location</u>	<u>Category</u>	<u>InstallDate</u>	<u>MeterSize</u>
0020143876	W16220	1010 S MILITARY	CWM	February 05, 2015	1

Data Migration

Data Migration

- Tokay to Cityworks
 - Work Orders w/ Devices
 - Inspections (Testables)
- Tokay Paradox Based System
- FME Migration Tool
 - Graphic Data Mapping

Data Migration

	A	B	C	D	E	F	G	H
1	Cityworks Target				Tokay Source			
2	Table Name				Table Name			
3	Workorder				BFP, Survey			RECORD FILTER:
4								
5								
6	Attribute Mapping							
7	Column Name	Datatype	PK/FK/Index		Source Table	Column Name	Data Type	Data Mapping Comments
8	WorkorderID	nvarchar(60)	PK		Azteca.PWSYSID	ID	decimal(10,0)	Not used. WorkorderID will be automatically generated using the System ID. PWSYSID.SYSTYPE.WORKORDER+1
9	Description	nvarchar(60)	I2		BFP	HAZARDCODE	String(5)	If BFP.HAZARDCODE = RRA Or RGR THEN then Description = Cross Connection Residential Inspection Else Cross Connection Commercial Inspection
10	Supervisor	nvarchar(50)						Whitespace inserted by default
11	RequestedBy	nvarchar(50)						Whitespace inserted by default
12	InitiatedBy	nvarchar(50)	I6					"Tokay, Tokay" User will be created and displayed when work order created by Migration
13	InitiatedDate	datetime			BFP	SURVEYDATE	Date	
14	ProjectName	nvarchar(130)	FK3,I4					Whitespace inserted by default
15	Location	nvarchar(256)			BFP	UD2, UD3, UG6	Sting(30), Sting(30), Sting(30)	Concatenate UD2+" "+UD3+" "+UD6
16	ProjStartDate	datetime			BFP	SURVEYDATE	Date	
17	ProjFinishDate	datetime			BFP	SURVEYDATE	Date	
18	ActualStartDate	datetime			BFP	SURVEYDATE	Date	
19	ActualFinishDate	datetime			BFP	SURVEYDATE	Date	
20	WoClosedBy	nvarchar(50)						Whitespace inserted by default
21	Cancel	nvarchar(1)						N inserted by default
22	Priority	nvarchar(2)						2 inserted by default
23	NumDaysBefore	decimal(3,0)						2 inserted by default
24	DateToBePrinted	datetime	I1					NULL inserted by default
25	DatePrinted	datetime						NULL inserted by default
26	MapTemplateName	nvarchar(250)						Whitespace inserted by default
27	WoMapExtent	nvarchar(1)						A inserted by default
28	WoMapScale	decimal(6,0)						2 inserted by default
29	WoOutput	nvarchar(1)						C inserted by default
30	SourceWoID	nvarchar(20)	I5					Whitespace inserted by default
31	CycleType	nvarchar(1)						C inserted by default

FME

MSSQL_ADO -- VIEWER (MSSQL_ADO) (F:\Data\FME\ScarboroughFME\ServiceRequest.fmw) - FME Workbench

File Edit View Insert Readers Transformers Writers Inspection Tools Help

Navigator

- POWER_Interface [MSSQL...
- CityworksScarborough [M...
- Transformers
- Bookmark
- User Param
- Publis
- Private
- Workspac
- Workspac
- Workspac
- Workspac

Transformer Gallery

- All (460)
- Categories
- Embedded
- FME Store
- Recent (10)
- Search Res

ProbTempMapping

- Passed
- Failed

8987

Service...igrated

Report Service Requests Not Migrated

12564

Tester Parameters

Transformer

Transformer Name: ProbTempMapping

Test Description:

Pass Criteria

Pass Criteria: All Tests (AND)

Composite Expression: <Unused>

Test Clauses

	Left Value	Operator	Right Value	Negate	Mode
1	reqdate	>=	2010-01-01	<input type="checkbox"/>	Automatic
2	mgmtid	In	81,812,850,900,SED	<input checked="" type="checkbox"/>	Automatic
3	PROBLEMCODE	Attribute Is Null	<Unused>	<input checked="" type="checkbox"/>	Automatic

+ - ^ v x

Duplicate

Help

OK Cancel

Translation was SUCCESSFUL

Translation Aborted

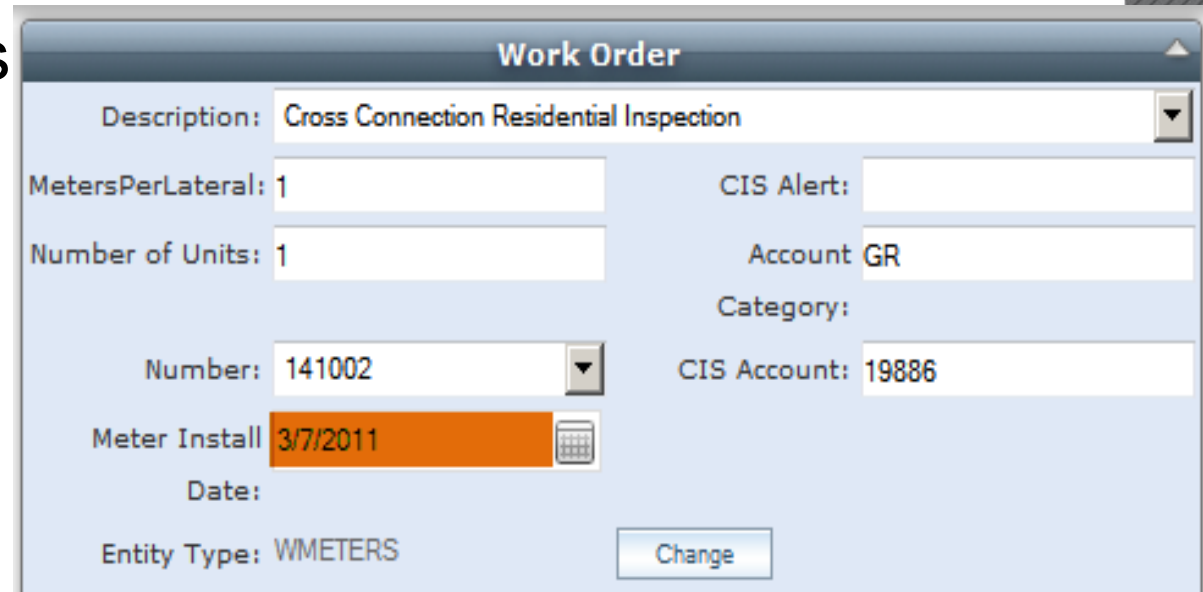
Customization

Customizations

- wMeter Update Process
- GIS Attributes on Work Order
- Clone Materials to Child Work Orders
- Outlook Calendar Link

GIS Attributes on Work Order

- Places GIS Attributes on Work Order Form
- Populates UCF
- Java Script and Map Feature Service
- Highlights Fields



The screenshot shows a 'Work Order' form with the following fields and values:

Field	Value
Description	Cross Connection Residential Inspection
MetersPerLateral	1
Number of Units	1
Number	141002
Meter Install Date	3/7/2011
Entity Type	WMETERS
CIS Alert	
Account	GR
Category	
CIS Account	19886

The 'Meter Install Date' field is highlighted in orange. A 'Change' button is located at the bottom right of the form.

Clone Materials Trigger

- Clone Materials for Child Work Orders
 - Devices
 - WO Template Specific
 - Database Trigger on Workorder Table

Outlook Calendar Interface

- Scheduling Tool
 - 6 CS Crew Members Calendars
- Outlook Connect Software
 - Database View
 - Linked to Task Response Code

Outlook Calendar Interface

The screenshot displays the Outlook calendar interface. On the left, the 'My Calendars' pane lists several calendars, including 'Jason Derpinghaus', 'Justin Destarkey', 'Dave Glodowski', 'Steve Koss', 'Marc Mc Govern', and 'Mike Michaels'. The main calendar view shows a grid for Monday, January 19, 2015, with a time slot from 11:00 AM to 12:00 PM highlighted in blue. An appointment titled 'CCRI #128530 DERPINGHAUS, JASON' is visible in this slot, with the location '708 N BROADWAY'. The appointment details pane on the right provides the following information:

- Subject:** CCRI #128530 DERPINGHAUS, JASON
- Location:** 708 N BROADWAY MULTI
- Start time:** Mon 1/19/2015 11:00 AM
- End time:** Mon 1/19/2015 12:00 PM
- Assigned To:** DERPINGHAUS, JASON
- Appointment Start Time:** Jan 19 2015 11:00AM
- Appointment Finish Time:** Jan 19 2015 12:00PM
- Task Description:** CC - Schedule Inspection
- Task Comments:**
 - Description: Cross Connection Residential Inspection
 - Work Order Address: Location: 708 N BROADWAY MULTI
 - WorkOrderID: 128530
 - Status: OPEN
 - Priority:
 - Requested By:
 - Initiated By: CWMETER, CWMETER A
 - Submit To: DERPINGHAUS, JASON
 - Grid: W-11
 - PressureZone: John
 - Initiate Date: 12/17/2014
 - Project Start Date: 12/17/2014
 - Project Finish Date:
 - Actual Start Date:
 - Actual Finish Date: 12/19/2014
 - Closed By:
 - Date to be Printed: 12/19/2014

Routing

Meter Routes



System Architecture

System Architecture

- Cityworks 2014 SP 3
- ArcGIS 10.2.1
- SQL Server 2014
- FireFox Browser
- NetMotion VPN Connections
 - Using Police Department System
- Toughbooks (30, 53, H1)
- Microsoft Surfaces
- 4G Connection (Cellcom)
 - Truck Mounted Power Antenna
 - AirLink Sierra Wireless

Project Status

- Project Started September 2014
- Went Live July 30th, 2015

Enhancements

- Update Future Work Order Meters
- Update Future Work Order Status
- Update Service Lines
 - Strip Malls
 - Condo Complexes
 - Apartments Complexes

Next Steps

- Northstar – Cityworks Interface
 - Automate Process

Questions?



Contact Information

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